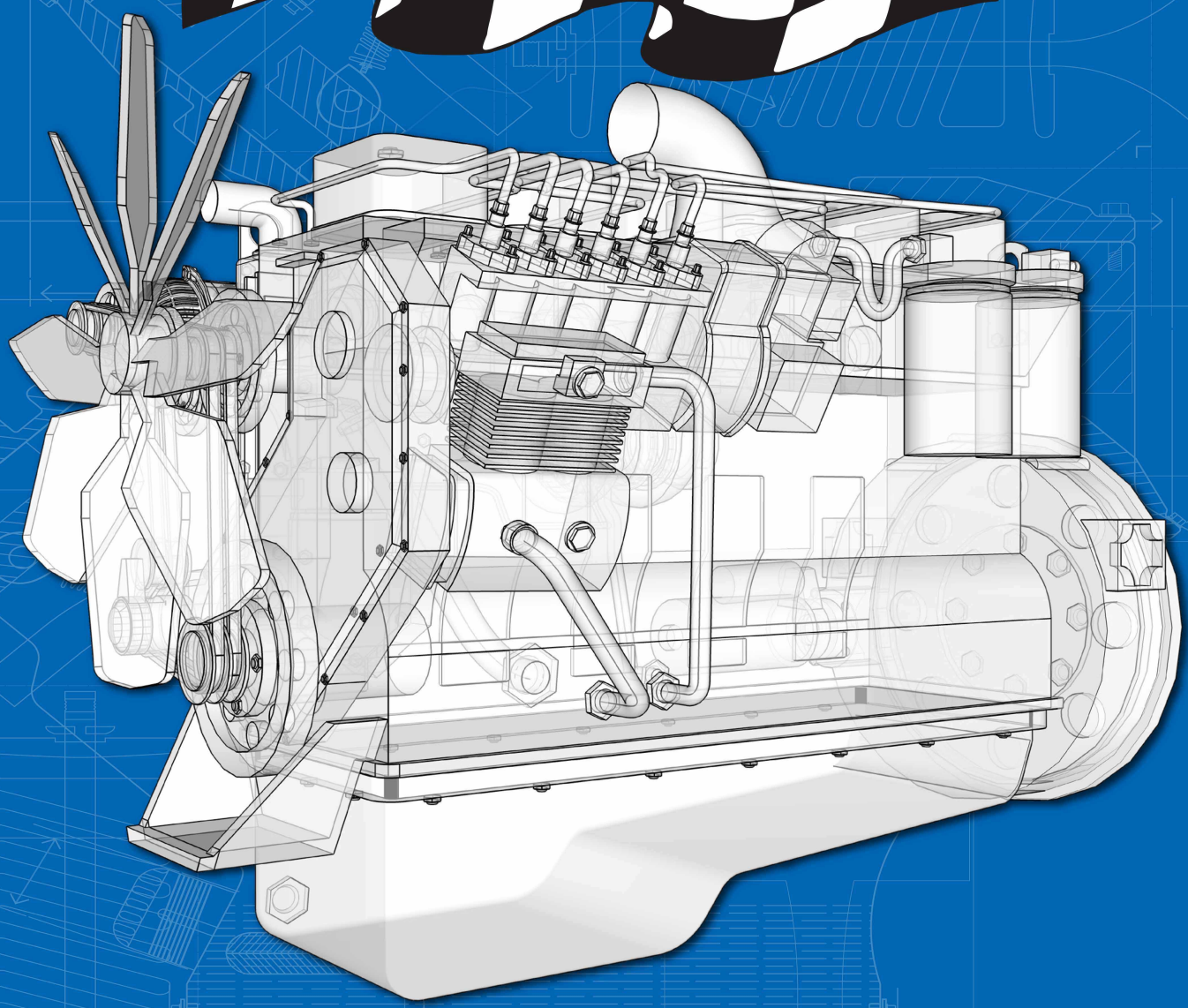
QUALITY ASSURED IN THE USA

QCHD-002

QualCast®



HEAVY DUTY

On Highway - Agricultural - Industrial

FRACTION	DECIMAL	MILLIMETERS
	.0098	.2500
1/64	.0156	.3969
	.0197	.5000
	.0295	.7500
1/32	.0313	.7938
	.0394	1.0000
3/64	.0469	1.1906
	.0591	1.5000
1/16	.0625	1.5875
5/64	.0781	1.9844
	.0787	2.0000
3/32	.0938	2.3813
7/64	.1094	2.7781
	.1181	3.0000
1/8	.1250	3.1750
9/64	.1406	3.5719
5/32	.1563	3.9688
	.1575	4.0000
11/64	.1719	4.3656
3/16	.1875	4.7625
	.1969	5.0000
13/64	.2031	5.1594
7/32	.2188	5.5563
15/64	.2344	5.9531
	.2362	6.0000
1/4	.2500	6.3500
17/64	.2656	6.7469
	.2756	7.0000
9/32	.2813	7.1438
19/64	.2969	7.5406
5/16	.3125	7.9375
	.3150	8.0000
21/64	.3281	8.3344
11/32	.3438	8.7313
	.3543	9.0000
23/64	.3594	9.1281
3/8	.3750	9.5250
25/64	.3906	9.9219
	.3937	10.0000
13/32	.4063	10.3188
27/64	.4219	10.7156
	.4331	11.0000
7/16	.4375	11.1125
29/64	.4531	11.5094
15/32	.4688	11.9063
	.4724	12.0000
31/64	.4844	12.3031
1/2	.5000	12.7000
	.5118	13.0000
33/64	.5156	13.0969
17/32	.5313	13.4938
35/64	.5469	13.8906
	.5512	14.0000
9/16	.5625	14.2875
37/64	.5781	14.6844
	.5906	15.0000
19/32	.5938	15.0813
39/64	.6094	15.4781
5/8	.6250	15.8750
	.6299	16.0000
41/64	.6406	16.2719
21/32	.6563	16.6688
	.6693	17.0000
43/64	.6719	17.0656
11/16	.6875	17.4625
45/64	.7031	17.8594
	.7087	18.0000
23/32	.7188	18.2563
47/64	.7344	18.6531
	.7480	19.0000
3/4	.7500	19.0500
49/64	.7656	19.4469
25/32	.7813	19.8438
	.7874	20.0000
51/64	.7969	20.2406
13/16	.8125	20.6375
	.8268	21.0000
53/64	.8281	21.0344
27/32	.8438	21.4313
55/64	.8594	21.8281
	.8661	22.0000
7/8	.8750	22.2250
57/64	.8906	22.6219
	.9055	23.0000
29/32	.9063	23.0188
59/64	.9219	23.4156
15/16	.9375	23.8125
	.9449	24.0000
61/64	.9531	24.2094
31/32	.9688	24.6063
	.9843	25.0000
63/64	.9844	25.0031
1	1.0000	25.4000

INCHES X 25.4 = MILLIMETERS
MILLIMETERS X .03937 = INCHES
CU. IN. X 16.38716 = C.C.
LITRES X 61.023 = CUBIC INCHES

All Rights Reserved
The information contained in this catalog has been gathered from the best available sources. Every effort has been made to ensure accuracy. However, QualCast, LLC does not assume responsibility for errors or omissions. We are constantly adding information to our database which is linked directly to our online catalog and can be accessed and downloaded through our website, http://qualcast.net/catalog or http://ymme.biz.

All manufacturers' names, numbers and descriptions are used for reference purposes only and do not imply that any part listed is the product of those manufacturers.

Heavy Duty Valve Train Kits



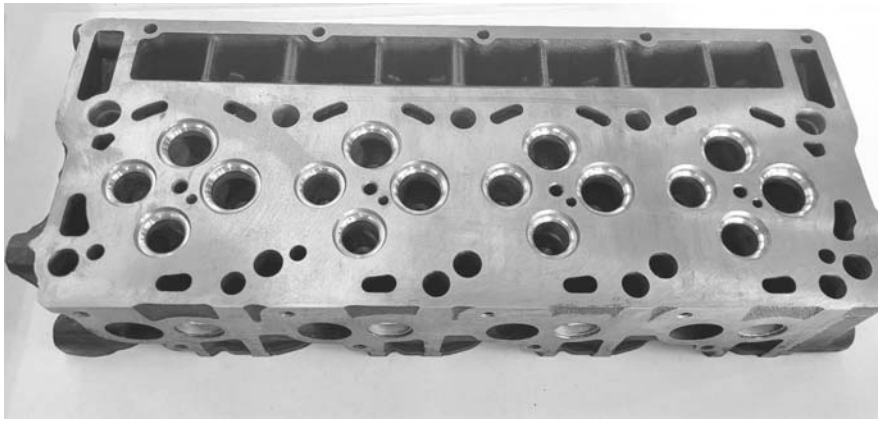
Heavy Duty Valve Train Kits Include
Valves, Guides, Keepers, and
Valve Stem Seals, and may also have
Springs or Injector Tubes with O-Rings
-5 Suffix Indicates 5 Product Types

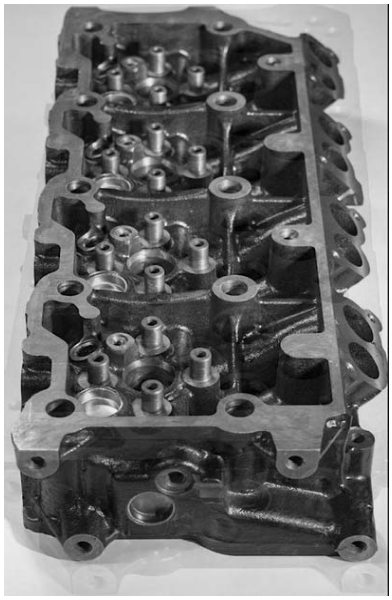
10-VKDDA60C-6
6 Product Types

One Part Number For One Engine with One Great Price!

See Page 166 for details

New Cylinder Heads





Cast Iron Ford 6.0L with Guides, Seats, and Injector Tubes Installed

16-260018 and 16-260020 18 and 20 mm dowel pins

See Page 168 for details

Black Lightning Diesel Performance Valves

Exhaust Valve Head Material - Inconel 751

Intake Valve One-Piece 21-4N Stainless

Fully Nitrided - All Surfaces

Except Machined Seat Face

For Diesel Truck Engines



Black Lightning Diesel Performance Valve Kits



BLDP Valves, Keepers, Performance Springs, Retainers, Stem Seals

See Page 191 for details

Table Of Contents

Catalog Guide

New Products ..... I,II
Table Of Contents III
Limited Warranty / Return Policy IV
Product Information V
Información del Producto VI

Applications by Engine Manufacturer

Allis-Chalmers 1
Case 5
Caterpillar 11
Chrysler Industrial 26
Continental 30
Cummins 35
Detroit Diesel 49
Deutz 55
Dodge Truck Diesel ..... See Engine Mfg.
Ford Diesel and Industrial 56
Ford Tractor 68
GM Diesel and Industrial 72
Hercules 79
Hino 80
I.H.C. Tractors & Power Units 81
I.H.C. Navistar Truck 92
Isuzu Diesel and Industrial 105
John Deere 108
Komatsu 118
Kubota 123
Lister-Petter 124
Mack 125
Massey Ferguson Tractor ..... See Engine Mfg.
Mazda Industrial 130
Mercedes Benz Truck 131
Minneapolis Moline / Oliver 133
Mitsubishi Diesel and Industrial 135
Nissan Industrial 138
Onan ..... See Cummins
PACCAR 140
Perkins 141
Toyota Industrial 146
Volvo Heavy Duty 148
Waukesha 150
Wisconsin 152
Yanmar 154

Numerical Listings, And Interchanges

Valve Numerical Listing 156
Valve Kit Listing 166
Cylinder Head Listing 168
Valve Seat Numerical Listing 169
Guide Numerical Listing 176
Spring Numerical Listing 180
Keeper Numerical Listing 183
Lifter Numerical Listing 184
Rotator / Retainer Listing 185
Valve Stem Seal Numerical Listing 186
Rocker Component Listing 188
Rocker Kit / HP Spring Listing 189
Push Rod Listing 190
Injector Component Listing 192
Expansion Plug Listing 194
Expansion Plug Kit Components / Listing 197
Interchanges 198
Non-Stocked Heads and Engine Components 210
Part Number Prefixes ..... Inside Back Cover

QualCast, LLC Limited Warranty

All products sold by QualCast, LLC are warranted to the consumer owner for one (1) year from the date of installation to be free from defects in materials or workmanship.

This warranty does not apply to any product that has been altered, misused, subject to excessive operating conditions, malfunctions because of foreign particles such as engine dirt or pieces of other deteriorating engine components, or products used in a vehicle that has been altered for other than intended purposes. Also, high performance products are not covered under this warranty including products used for off-road or racing purposes.

If a product fails to conform to this warranty, the product should be sent back, prepaid, to QualCast, LLC. If QualCast, LLC determines that the product fails to conform to the warranty, it will either replace the product or refund its original purchase price, at the option of QualCast, LLC.

THIS LIMITED EXPRESS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY IMPLIED WARRANTY OF MERCHANTABILITY, IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR WARRANTY OF QUALITY, WHETHER EXPRESS OR IMPLIED. ANY IMPLIED WARRANTY OF MERCHANTABLITY, IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR WARRANTY OF QUALITY, WHETHER EXPRESS OR IMPLIED, IS EXPRESSLY EXCLUDED AND DISCLAIMED. THE WARRANTY OF TITLE SHALL NOT BE AFFECTED BY THIS EXCLUSION AND DISCLAIMER. THE REMEDIES SET FORTH IN THIS EXPRESS LIMITED WARRANTY ARE EXCLUSIVE.

QUALCAST, LLC WILL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, PERSONAL INJURY, PROPERTY DAMAGE, LABOR CHARGES, DOWN TIME, ANTICIPATED OR EXPECTED PROFITS, ETC.

Some states do not allow exclusions or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This express limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Special, custom, and reverse-engineered parts either from customer samples, drawings or dimensions, materials, etc. provided by a customer are not covered by our warranty.

Return of Product Policy

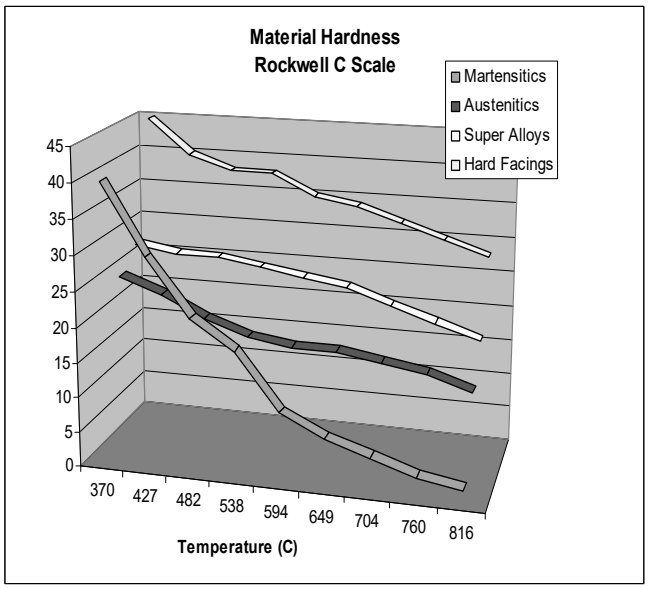
Any product to be returned for any reason, should be authorized by QualCast customer service or technical department, and will be given an RGA number to be noted on paperwork accompanying the return. All returned goods should be shipped “freight prepaid”. Returns may be subject to a restocking fee of up to 20%.

Engine Valves

QualCast valves are designed to meet or exceed the material and dimensional specifications of the Original Equipment Manufacturer. Valves are forged from either Martensitic steel, Austenitic Steel, or a Superalloy such as Inconel. Each material has a different strength and use depending on the environment in which it operates.

Martensitic Steels are magnetic, iron-based alloys with varying percentages of chromium, carbon, and other elements, and have a very high tensile strength (resistance to breaking). Their strength is increased by tempering and quench hardening. Because intake valves operate in lower temperatures than exhaust valves, they are usually forged in one piece from a Martensitic Steel.

Austenitic Steels are non-magnetic, iron-based alloys with carbon and higher percentages of chromium, nickel, and other higher elements which give the steel greater strength in hotter operating temperatures. All stainless steel valves are forged of Austenitic steel, such as 21-2N, 21-4N, or 23-8N, etc. It is important to note, however, that these steels can not be hardened in the same way as martensitic steels, and are actually not as hard at lower temperatures. For this reason, most light duty exhaust valves will be forged in one-piece stainless with a wafer of martensitic steel above the keeper groove, at the very tip, to keep the rocker pressure from deforming the tip of the valve. Most heavy duty exhaust valves will be 2-piece valves forged from Austenitic Steel at the head, and friction welded to the stem, made from Martensitic Steel.



Some Superalloys, such as Inconel, are nickel-based and used in exhaust valve heads instead of Austenitic Steel, where conditions require strength in extreme high temperatures.

Other Superalloys, such as Stellite, are cobalt-based and typically used only on the valve seat area of a valve because of their high cost and hot hardness. First the original seat material is removed, and then Stellite or a similar “Hard Facing” is plasma-welded onto the seat area, followed by a re-machining of the surface.

Because of the friction caused between the valve stem and valve guide when the valve opens and closes, most modern valves will have an additional surface treatment of chromium on the stem area, called “chrome plating”. An alternative surface hardening treatment is nitriding, where the complete surface is sodium nitrided, followed by a re-machining of the head area.



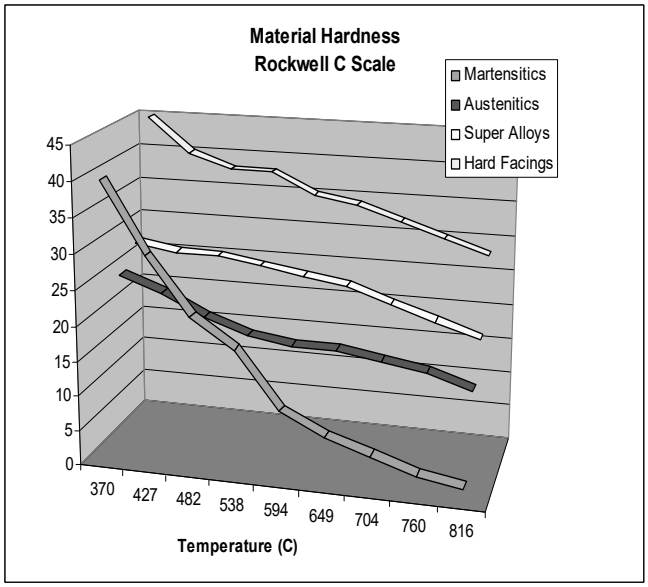
Información del Producto

Válvulas de Motor

Las válvulas QualCast son diseñadas para igualar o superar las especificaciónes dimensionales y en materiales de la fábrica de equipo original. Las válvulas son forjadas de acero Martensítico o Austenítico, o una aleación Fenomenal como el Inconel. Cada material tiene una resistencia y un uso diferente dependiendo de las condiciónes de operación.

Los aceros Martensíticos son magnéticos, con aleaciónes base de hierro con porcentajes variables de cromo, carbono, y otros elementos, y tiene maleabilidad muy alta (resistencia á romperse). La dureza puede aumentar mediante un proceso de templado. Como las válvulas de admisión operan en temperaturas más bajas que las válvulas de escape, estas son forjadas normalemente de una pieza de acero Martensítico.

Los aceros Austeníticos son no-magnéticos, son aleaciónes a base de hierro con carbon, y porcentajes más altas de cromo, níquel, y otros elementos, que le da el acero más dureza en altas temperaturas de operación. Todas las válvulas de acero inoxidable son forjadas de aceros Austeníticos como: 21-2N, 21-4N, o 23-8N, etc. Pero esos aceros no pueden ser endurecidos como el aceros Martensítico, y son menos duro a bajas temperatures. Por esta razón, la mayoría de válvulas de escape gasolina son forjada de una pieza de acero inoxidable con un área encima de la ranura en la punta, de acero Martensítico para evitar deformación por el balancín. La mayoría de válvulas de escape de equipo pesado son de dos piezas, la cabeza en acero Austenítico y el vástago de acero Martensítico, y los dos piezas son soldadas por fricción.



Unas aleaciónes Fenomenales, como Inconel, son a base de níquel y se usan en la cabeza de válvulas de escape en vez de acero Austenítico cuando las condiciónes exigen dureza en altas temperaturas extremas.



Otras aleaciónes Fenomenales, como Estelite, son a base de cobalto, y se usan solamente en el área del asiento por razón de alto costo y dureza caliente. También es nombrado “Hard Facings”, primeramente una parte del material original del asiento es removido, se suelda con plasma caliente el estelite o algún otro material “hard facing”. Siguiendo, el asiento tiene que ser maquinado a las especificaciónes originales.

Por razón de la fricción entre el vástago de la válvula y la guía cuando la válvula abre y cierra, las válvulas modernas tienen un tratamiento de cromo en la superficie del vástago llamada placa de cromo. Otra alternativa para endurecer la superficie es tratameinto de nitruro de sodio, y después rectificar el área de la cabeza.

ALLIS-CHALMERS HEAVY DUTY

ENGINE	YEAR	CYL.	LINE NO.
B125 Gas, Models BR,FC,B8,B15,CA,1B,RC,60H 8V		L4	**1**
G138, G160 8V		L4	**2**
G149 8V		L4	**3**
D153, DA153, D182, D230, DA230 8-12V		L4-6	**4**
4G153, 6G230, 6G262 8-12V		L4,6	**5**
D175, DA262, 6D262 8-12V		L4-6	**6**
G201 3.3L, G226 3.7L Gas, LPG 8V		L4	**7**
4.236, 4.248 Perkins 8V		L4	**8**
200 C.I. 433T 8V, G2500, D2800, D2900 12V		L4-6	**9**
D273 12V		L6	**10**
6000. 7000. 10000 Diesel		L4	**11**
HD344, HD516 Buda 8V		L4	**12**
7.0L D3400, D3500, D3750 12V		L6	**13**
8.5L 11000 12V		L6	**14**
15000H, 16000/H, 17000MK, 21000/H, 25000 12V		L6	**15**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**B125 Gas, Models BR,FC,B8,B15,CA,1B,RC,60H 8V**			**L4 BORE - 3.375" & Early 3.325"**
Valve	Exh		**10-154**	1.313 Head Dia. All w/o Rotators. OEM # 206878
	Int		**10-155**	1.438 Head Dia. OEM # 206877
Valve Seat Insert	Exh		**20-1375-4**	1-1/8 I.D. 1-3/8 O.D. 3/16 Depth.
	Int		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth.
Guide	Both		**30-1854**	2.250 OAL. OEM # 348241
Spring	Both		**32-414**	2.313 Free Length. OEM # 206879.
Keeper	Both		**34-555**	1 Square Groove. Heat Treated. OEM # 206880.
LINE 2	**G138, G160 8V**			**L4 BORE - 3.346"/85.7mm**
Valve	Exh		**10-154**	1.313 Head Dia. All w/o Rotators. OEM # 206878
	Int		**10-155**	1.438 Head Dia. OEM # 206877
Valve Seat Insert	Exh		**20-1375-4**	1-1/8 I.D. 1-3/8 O.D. 3/16 Depth, D10 To S/N 3501, D12 To S/N 3001
	Int		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth, D10 To S/N 3501, D12 To S/N 3001.
Guide	Both		**30-1854**	2.250 OAL. OEM # 348241
Spring	Both		**32-414**	2.313 Free Length. G138-D10 To S/N 3501, D12 To S/N 3001 OEM # 206879
Keeper	Both		**34-555**	1 Square Groove. Heat Treated. OEM # 206880.
LINE 3	**G149 8V**			**L4 BORE - 3.50"/88.9mm**
Valve	Exh		**10-154**	1.313 Head Dia. All w/o Rotators. OEM # 206878
	Int		**10-155**	1.438 Head Dia. OEM # 206877
Valve Seat Insert	Int		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth, D10 From S/N 3501, D12 From S/N 3001, D14, D15 To S/N 9001, H3,66,72,90,10.
Guide	Both		**30-1854**	2.250 OAL. OEM # 348241
	Exh		**30-1851**	2.250 OAL. 0.313 I.D. OEM # 4504475
Keeper	Both		**34-555**	1 Square Groove. Heat Treated. OEM # 206880.
LINE 4	**D153, DA153, D182, D230, DA230 8-12V**			**L4-6 BORE - 3.437"/87.3mm**
Valve Seat Insert	Exh		**20-1375-1**	1-1/8 I.D. 1-3/8 O.D. 7/32 Depth. w/ 1.300 1-1/8 I.D. 1-3/8 O.D. 7/32 Depth.
	Exh		**20-1375-4**	1-1/8 I.D. 1-3/8 O.D. 3/16 Depth.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
Guide	Both		**30-1703**	2.563 OAL

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 4	**D153, DA153, D182, D230, DA230 8-12V**			**L4-6 BORE - 3.437"/87.3mm**
Keeper	Both		**34-614**	Heat Treated. 1 Groove.
LINE 5	**4G153, 6G230, 6G262 8-12V**			**L4,6 BORE - 3.50"/88.9mm**
Valve	Int		**10-1073**	1.438 Head Dia. OEM # 4512459
	Int		**10-990**	1.500 Head Dia. OEM # 4512121
Valve Seat Insert	Exh		**20-1437-2**	1-7/32 I.D. 1-7/16 O.D. 7/32 Depth.
	Exh		**20-1437-2N**	1-7/32 I.D. 1-7/16 O.D. 7/32 Depth. Nickel.
	Int		**20-1562-1**	1-5/16 I.D 1-9/16 O.D. 7/32 Depth, w/ 1.460 Valve Head.
Guide	Int		**30-1943**	2.250 OAL. OEM # 4513115
Keeper	Both		**34-555**	1 Square Groove. Heat Treated. OEM # 206880.
LINE 6	**D175, DA262, 6D262 8-12V**			**L4-6 BORE - 3.56"/90.4mm**
Valve	Int		**10-1042**	1.480 Head Dia. OEM # 4514298
Valve Seat Insert	Exh		**20-1375-1N**	1-1/8 I.D. 1-3/8 O.D. 7/32 Depth. w/ 1.250 Valve Head Dia.
	Exh		**20-1437-2N**	1-7/32 I.D. 1-7/16 O.D. 7/32 Depth. w/ 1.376 Valve Head Dia. Nickel
	Int		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. w/ 1.375 Valve Head Dia.
	Int		**20-1562-4**	1-5/16 I.D. 1-9/16 O.D. 3/16 Depth. w/ 1.535 Valve Head Dia
	Int		**20-1562-5**	1-3/8 I.D. 1-9/16 O.D. 1/4 Depth
Guide	Exh		**30-1851**	2.250 OAL. OEM # 4504475
Keeper	Both		**34-614**	Heat Treated. OEM # 4356080.
Valve Stem Seal	Both		**38-921-15**	Nitrile. 2-Ring
	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 7	**G201 3.3L, G226 3.7L Gas, LPG 8V**			**L4 BORE - 4.00"/101.6mm**
Valve	Exh		**10-168**	1.500 Head Dia. All w/ Narrow Beads. OEM # 209134
	Int		**10-169**	1.688 Head Dia. All w/ Narrow Beads. OEM # 209132
	Int		**10-626**	1.688 Head Dia. 30 Deg. OEM # 241535
Valve Seat Insert	Exh		**20-1562-4+010**	1-5/16 I.D. 1.577 O.D. 1/4 Depth
	Int		**20-1750-1**	1-1/2 I.D. 1-3/4 O.D. 1/4 Depth
Guide	Both		**30-1421**	2.750 OAL. Exh. To S/N 84247. OEM # U3142
	Exh		**30-1853**	2.344 OAL. From S/N 84247. OEM # 229911
Spring	Both		**32-414**	2.313 Free Length. G138-D10 To S/N 3501, D12 To S/N 3001 OEM # 206879
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 209103
Valve Stem Seal	Both		**38-921-15**	Nitrile. 2-Ring
	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 8	**4.236, 4.248 Perkins 8V**			**L4 BORE - 3.875"/98.4mm**
Valve	Exh		**10-1784**	1.472 Head Dia. OEM # 3142A051
	Exh		**10-882**	1.440 Head Dia. OEM # 257363.
	Int		**10-883**	1.744 Head Dia. OEM # 31431315
Valve Seat Insert	Exh		**20-1562-6N**	1-1/4 I.D. 1-9/16 O.D. 7/32 Depth. Universal. Nickel
	Int		**20-1875-19**	1-9/16 I.D. 1-7/8 O.D. 7/32 Depth. Universal Size Insert For Heads w/o Factory Installed Seats
	Exh		**22-1681-3**	1-1/4 I.D. 1.681 O.D. 3/8 Depth. For Heads w/ Factory Installed Seats. OEM # 33152139
	Exh		**22-1690-1**	1-1/4 I.D. 1.690 O.D. 3/8 Depth. For Heads w/ Factory Installed Seats. OEM # 33152154

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 8	**4.236, 4.248 Perkins 8V**			**L4 BORE - 3.875"/98.4mm**
Valve Seat Insert	Int		**22-2020-1**	1-19/32 I.D. 2.018 O.D. 9/32 Depth. For Heads w/ Factory Installed Seats. OEM #
Guide	Exh		**30-1977**	2.406 OAL. 0.3755 I.D. 0.6265 O.D. OEM # 3343J002
	Int		**30-1976**	2.281 OAL. 0.3755 I.D. 0.6265 O.D. OEM # 3343F002
Spring	Both		**32-793**	1.959 Free Length. Inner 236. OEM # 31744131
	Both		**32-794**	2.590 Free Length. Outer 236. Both 248. OEM # 8662077
Keeper	Both		**34-217P**	Heat Treated. OEM # 33173108
Lifter	Both		**36-7014**	Mechanical. OEM # 31434163
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. Machine Guide To 0.562 O.D.
	Both		**38-7117-45**	Viton. Umbrella. OEM # 33817117
LINE 9	**200 C.I. 433T 8V, G2500, D2800, D2900 12V**			**L4-6 BORE - 3.75", 3.875"**
Valve	Exh		**10-1523S**	1.444 Head Dia. 30 Deg. OEM # 4023379
	Int		**10-1524**	1.620 Head Dia. OEM # 4023378
Guide	Both		**30-6730**	2.880 OAL. Old Style. 0.3742 I.D. One Undercut End. OEM # 4022595
	Both		**30-6730U**	Undersized I.D. 30-6730
	Both		**30-7813**	2.880 OAL. New Style. 0.3745 I.D. Both Undercut Ends. OEM # 4022595
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 209103
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber
LINE 10	**D273 12V**			**L6 BORE -**
Valve Seat Insert	Exh		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. w/ 1.375 Valve Head Dia.
	Int		**20-1812-1**	1-9/16 I.D. 1-13/16 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Both		**30-1703**	2.563 OAL
LINE 11	**6000. 7000. 10000 Diesel**			**L4 BORE - 4.44"/112.7mm**
Valve Seat Insert	Exh		**20-1687-8**	1-3/8 I.D. 1-11/16 O.D. 5/16 Depth. Early
	Int		**20-1875-11**	1-9/16 I.D. 1-7/8 O.D. 5/16 Depth. Early
Guide	Both		**30-5745**	3.500 OAL. Early Type. Nitrocarburized. OEM # 4336586
	Both		**30-5794**	3.500 OAL. Late Type. Nitrocarburized. OEM # 4336586
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 209103
LINE 12	**HD344, HD516 Buda 8V**			**L4 BORE - 4.40"/111.8mm**
Valve Seat Insert	Exh		**20-1687-7**	1-3/8 I.D. 1-11/16 O.D. 1/4 Depth.
	Int		**20-2187-13**	1-11/16 I.D. 2-3/16 O.D. 9/32 Depth
LINE 13	**7.0L D3400, D3500, D3750 12V**			**L6 BORE - 4.25"/107.95mm**
Valve	Exh		**10-1525S**	1.651 Head Dia. OEM # 4028643
Valve Seat Insert	Exh		**22-1670-1**	1.420 I.D. 1.670 O.D. 0.302 Depth
	Int		**22-1814-1**	1.600 I.D. 1.814 O.D. 0.315 Depth
Guide	Both		**30-6730**	2.880 OAL. Old Style. 0.3742 I.D. One Undercut End. OEM # 4022595
	Both		**30-6730U**	Undersize I.D. 30-6730
	Both		**30-7813**	2.880 OAL. New Style. 0.3745 I.D. Bothe Undercut Ends. OEM # 4022595
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 209103
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 14	**8.5L 11000 12V**			**L6** **BORE - 4.44"/112.7mm**
Valve Seat Insert	Exh		**20-1687-8**	1-3/8 I.D. 1-11/16 O.D. 5/16 Depth. Early
	Int		**20-1875-11**	1-9/16 I.D. 1-7/8 O.D. 5/16 Depth. Early
Guide	Both		**30-5745**	3.500 OAL. Early Type. Nitrocarburized. OEM # 4336586
	Int		**30-6760**	3.500 OAL. Late Type. OEM # 4359193
LINE 15	**15000H, 16000/H, 17000MK, 21000/H, 25000 12V**			**L6** **BORE - 5.25"/133.4mm**
Guide	Int		**30-6628**	3.875 OAL. OEM # 4390547

ENGINE	YEAR	CYL.	LINE NO.
F124, 209 Continental 8-12V		L4-6	**1**
G126 8V		L4	**2**
FC133 Waukesha 8V		L4	**3**
G148, G148B 8V		L4	**4**
G154 Gas 8V		L4	**5**
GD157, 300 Continental 8V		L4	**6**
G159 Gas, LPG 8V		L4	**7**
G164 Gas, LPG 8V		L4	**8**
G188/B Gas, LPG 8V		L4	**9**
G188D Diesel and 207 C.I. (4.3L) Diesel 8V		L4	**10**
3.9L 390 Ser. 8V 4BT, 5.9L 590 Ser. 12V 6BT Cummins		L4-6	**11**
251D, A251G/S, 251B/G 8V		L4	**12**
260 8V		L4	**13**
A267D, A401D Diesel 8V		L4	**14**
284 Gas & LPG 8V		L4	**15**
301D Diesel 8V		L4	**16**
301BD, 451BD Diesel, 451BDT TRB 12V		L6	**17**
A336BD 8V, A504BD/T 12V TRB Diesel		L4-6	**18**
377 Gas, LPG 12V		L6	**19**
377 Diesel 12V		L6	**20**
JD382 Continental 8V		L4	**21**
L		L4	**22**
6CT Cummins Diesel OHV 12V		L6	**23**
LTA10 Cummins Diesel OHV 24V		L6	**24**
NTA 855 Cummins OHV 24V D		L6	**25**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**F124, 209 Continental 8-12V**			**L4-6** **BORE - 3.00", 3.188"**
Valve	Exh		**10-170**	1.203 Head Dia. w/ Drilled Stem. OEM # F400T-296
	Exh		**10-210**	1.328 Head Dia. Use w/ Rotator. 1 Groove
	Int		**10-810**	1.516 Head Dia. w/ Drilled Stem. OEM # F600I-112
Valve Seat Insert	Exh		**20-1375-3**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth w/ 1.203 Valve Head Dia.
	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. w/ 1.328 Valve Head Dia.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
Guide	Both		**30-1620**	2.313 OAL. 0.6570 O.D. 0.3425 I.D.
	Exh		**30-1515**	2.563 OAL. w/ Roto Type-Valve. OEM # F600I235
Spring	Both		**32-466**	1.969 Free Length. F209 Eng. OEM # F600I232
	Both		**32-495**	2.063 Free Length. F124. OEM # Y-4001-215
Keeper	Both		**34-159**	Pin For 0.30 Drilled Stem. OEM # 12S1-207
	Both		**34-614**	Heat Treated. OEM # Z120I235.
	Exh		**34-555**	1 Groove. Heat Treated. OEM # VT3234
	Exh		**34-822**	Pin For 0.13 Drilled Stem. OEM # Y400I205
LINE 2	**G126 8V**			**L4** **BORE - 3.1250"/79.3mm**
Valve Seat Insert	Exh		**20-1375-25**	1-3/32 0.D. 1-3/8 O.D. 0.203 Depth. Seat For 1.375 Cutter
	Int		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Exh		**22-1348-1N**	1.087 I.D. 1.348 O.D. 0.200 Depth. Nickel
Guide	Exh		**30-1872**	2.438 OAL. OEM # A29955
	Int		**30-1673**	2.688 OAL. OEM # 830935M91.
Spring	Int		**32-480**	2.375 Free Length. OEM # VT3372
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # VT3234

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 3	**FC133 Waukesha 8V**			**L4 BORE - 3.25"/82.5mm**
Valve Seat Insert	Both		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
Guide	Both		**30-1458**	2.500 OAL. OEM # 68009S.
LINE 4	**G148, G148B 8V**			**L4 BORE - 3.375/85.7mm**
Valve Seat Insert	Exh		**20-1375-25**	1-3/32 I.D. 1-3/8 O.D. 0.203 Depth. Seat For 1.375 Cutter
	Int		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Int		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth.
	Exh		**22-1348-1N**	1.087 I.D. 1.348 O.D. 0.200 Depth. Nickel
Guide	Both		**30-1673**	2.688 OAL. OEM # 830935M91.
	Int		**30-1872**	2.438 OAL. OEM # A29955
Spring	Int		**32-480**	2.375 Free Length. OEM # VT3372
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # VT3234
LINE 5	**G154 Gas 8V**			**L4 BORE - 3.50"/88.9mm**
Valve Seat Insert	Exh		**20-1375-4**	1-1/8 I.D. 1-3/8 O.D. 3/16 Depth.
	Int		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth.
Guide	Both		**30-1577**	2.750 OAL. 3-5/8 Bore From S/N 8027114. OEM # A26130
LINE 6	**GD157, 300 Continental 8V**			**L4 BORE - 3.375"/85.7mm**
Valve Seat Insert	Exh		**20-1312-1**	1-1/16 I.D. 1-5/16 O.D. 3/16 Depth
	Int		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
Guide	Both		**30-1833**	1.813 OAL. OEM # 830762M91.
LINE 7	**G159 Gas, LPG 8V**			**L4 BORE - 3.50"/88.9mm**
Valve Seat Insert	Exh		**20-1375-1**	1-1/8 I.D. 1-3/8 O.D. 7/32 Depth.
	Int		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth.
	Exh		**22-1348-1N**	1.087 I.D. 1.348 O.D. 0.200 Depth. Nickel For LPG.
Guide	Exh		**30-1673**	2.688 OAL. OEM # 830935M91
	Int		**30-1872**	2.438 OAL. OEM # A29955
Spring	Int		**32-480**	2.375 Free Length. OEM # VT3372
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # VT3234
LINE 8	**G164 Gas, LPG 8V**			**L4 BORE - 3.56"/90.4mm**
Valve Seat Insert	Int		**20-1562-1**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. +5, 10 O/S Avail.
	Int		**20-1562-6**	1-1/4 I.D. 1-9/16 O.D. 7/32 Depth.
	Exh		**22-1348-1N**	1.087 I.D. 1.348 O.D. 0.200 Depth. Nickel For LPG or Gas.
Guide	Exh		**30-1673**	2.688 OAL. For LPG. OEM # 830935M91.
	Exh		**30-1873**	2.844 OAL. OEM # G2033
	Int		**30-1872**	2.438 OAL. OEM # A29955
Spring	Int		**32-480**	2.375 Free Length. OEM # VT3372
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # VT3234
LINE 9	**G188/B Gas, LPG 8V**			**L4 BORE - 3.81"/96.8mm**
Valve Seat Insert	Exh		**20-1500-1N**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth. Nickel
	Exh		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. For Gas.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. For Gas and LPG.
Guide	Exh		**30-1873**	2.844 OAL. OEM # G2033
	Int		**30-1874**	3.125 OAL. OEM # G2069
Spring	Int		**32-480**	2.375 Free Length. OEM # VT3372

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 9	**G188/B Gas, LPG 8V**			**L4** **BORE - 3.81"/96.8mm**
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # VT3234
LINE 10	**G188D Diesel and 207 C.I. (4.3L) Diesel 8V**			**L4** **BORE - 3.81"/96.8mm**
Valve	Exh		**10-690**	1.403 Head Dia. OEM # G47111 and G11948 and A-38423
	Int		**10-691**	1.604 Head Dia. OEM # G47110 and G11947 and A-38422
Valve Seat Insert	Exh		**20-1500-1N**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth. Nickel
	Int		**20-1687-1**	1-13/32 I.D. 1-11/16 O.D. 1/4 Depth
	Int		**20-1687-2**	For G188D Diesel. 1-7/16 I.D. 1-11/16 O.D. 7/32 Depth. w/ 1.600 Valve Head Dia. Hi-Perf. & Spec. Hi-Perf.
Guide	Exh		**30-1874**	3.125 OAL. OEM # G2069
	Int		**30-1875**	3.250 OAL. OEM # G2068
Spring	Int		**32-480**	2.375 Free Length. OEM # VT3372
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # VT3234
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber.
LINE 11	**3.9L 390 Ser. 8V 4BT, 5.9L 590 Ser. 12V 6BT Cummins**			**L4-6** **BORE - 4.02"/102mm**
Valve	Exh		**10-1664**	1.654 Head Dia. 45 Deg. Seat. OEM # 3802356, 3920868
	Exh		**10-1862**	1.654 Head Dia. Natl. Gas. 20 Deg. Seat. OEM# 3922714
	Int		**10-1665**	1.772 Head Dia. 30 Deg. Seat. OEM # 3802355, 3920867.
	Int		**10-2257**	1.772 Head Dia. 5.085 OAL Natl. Gas 20 Deg. Seat OEM # 3802658, 3922713
Valve Seat Insert	Exh		**20-1750-7**	1-3/8 I.D. 1-3/4 O.D. 7/32 Depth. Universal Size For Heads w/o OEM Insert
	Int		**20-1875-8**	1-1/2T I.D. 1-7/8 O.D. 7/32 Depth. Universal Size For Heads w/o OEM Insert
	Exh		**22-1722-1**	1.357T I.D. 1.722 O.D. 0.265 Depth. OEM # 3904105
	Int		**22-1853-1**	1.498T I.D. 1.853 O.D. 0.273 Depth. OEM # 3925177
Guide	Both		**30-8277**	2.500 OAL. 0.3162 I.D. 0.4395 O.D. OEM # 3906206
	Exh		**30-8178**	2.052 OAL. 0.5527 O.D. OEM # J904409
	Int		**30-8177**	2.397 OAL. 0.5527 O.D. OEM # J904408
Spring	Both		**32-00276**	2.235 Free Length. 30 PSI. OEM # 3900276
	Both		**32-02061**	2.385 Free Length. 36 PSI. OEM # 3926700, 3932453
	Both		**32-04049**	2.194 Free Length. OEM # 3925667. B Version 30Lbs.
Keeper	Both		**34-00250**	1 Round Bead. OEM # 3900250
Lifter	Both		**36-2302**	Mechanical. OEM # 3931623, 3925031
Rotator	Both		**37-5666**	Rotator. OEM # 3925666, 3957914
Valve Stem Seal	Both		**38-535-45**	Viton. Ring And Band. For 5/16 Stem.
	Both		**38-6114-55**	Viton. Top Hat. OEM # 3957912
Performance Spring	Both		**52-4049**	2.75 Free Length. 75 Lb. Drop-In Perf. 250 @1.38 Open Load
Push Rod	Both		**74-6448**	10.910 Length. OEM # 3923262
LINE 12	**251D, A251G/S, 251B/G 8V**			**L4** **BORE - 4.00"/101.6mm**
Valve Seat Insert	Exh		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. Diesel
	Exh		**20-1625-2**	1-3/8 I.D. 1-5/8 O.D. 1/4 Depth. Gas.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Diesel. +5, 10, 15, 20, 30 O/S Avail.
	Int		**20-1812-1**	1-9/16 I.D. 1-13/16 O.D. 1/4 Depth. Gas
Guide	Int		**30-1829**	4.375 OAL. OEM # 6321A

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 13	**260 8V**			**L4** **BORE - 3.875"/98.4mm**
Valve Seat Insert	Both		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Exh		**30-1813**	3.125 OAL. OEM # C5549A.
LINE 14	**A267D, A401D Diesel 8V**			**L4** **BORE - 4.125"/104.8mm**
Valve Seat Insert	Int		**20-1812-4**	1-9/16 I.D. 1-13/16 O.D. 7/32 Depth
	Exh		**22-1630-1**	1.335 I.D. 1.630 O.D. 0.312 Depth.
Guide	Ext		**30-1865**	3.219 OAL. OEM # A11803
	Int		**30-1829**	4.375 OAL. OEM # 6321A
Spring	Both		**32-1158**	2.200 Free Length. 401D. OEM # A66444
Keeper	Both		**34-221**	OEM # A27872
LINE 15	**284 Gas & LPG 8V**			**L4** **BORE - 4.25"/107.9mm**
Valve Seat Insert	Exh		**20-1812-5N**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth. Nickel
	Int		**20-1875-2**	1-9/16 I.D. 1-7/8 O.D. 1/4 Depth. Use w/ 1-7/8 Cutter.
Guide	Both		**30-1830**	3.594 OAL. OEM # 6529A
LINE 16	**301D Diesel 8V**			**L4** **BORE - 4.37"/111mm**
Valve Seat Insert	Exh		**20-1750-5**	1-7/16 I.D. 1-3/4 O.D. 5/16 Depth.
	Int		**20-1937-1**	1-11/16 I.D. 1-15/16 O.D. 1/4 Depth.
Guide	Exh		**30-1865**	3.219 OAL. OEM # A11803
	Int		**30-1829**	4.375 OAL
Spring	Both		**32-1158**	2.200 Free Length. w/ 504. OEM # A66444.
Keeper	Both		**34-221**	OEM # A27872
LINE 17	**301BD, 451BD Diesel, 451BDT TRB 12V**			**L6** **BORE - 4.37"/111mm**
Valve Seat Insert	Exh		**20-1750-9**	1-3/8 I.D. 1-3/4 O.D. 5/16 Depth.
	Int		**20-1937-1**	1-11/16 I.D. 1-15/16 O.D. 1/4 Depth.
Guide	Both		**30-1830**	3.594 OAL. OEM # 6529A
	Exh		**30-1865**	3.219 OAL. OEM # A11803
	Int		**30-1829**	4.375 OAL
Spring	Both		**32-1158**	2.234 Free Length. w/ 451. OEM # A66444.
Keeper	Both		**34-217**	0.314 Stem Dia. 1 Round Groove. Heat Treated
	Both		**34-221**	OEM # A27872
LINE 18	**A336BD 8V, A504BD/T 12V TRB Diesel**			**L4-6** **BORE - 4.625"/117.5mm**
Valve	Exh		**10-1650S**	1.750 Head Dia. OEM# A150225. 2-Piece w/ Stellite For Turbo.
	Int		**10-1512**	2.000 Head Dia. OEM # A41754
Valve Seat Insert	Int		**20-2062-29**	1-13/16 I.D. 2-1/16 O.D. 7/32 Depth. w/o Factory Installed Insert
	Exh		**22-1946-1N**	1.574 I.D. 1.946 O.D. 0.315 Depth. +10,20,30 O/S Avail.
	Int		**22-2100-1**	1.782 I.D. 2.100 O.D. 0.267 Depth. +10,20,30 O/S Avail.
Guide	Both		**30-7444**	3.219 OAL. OEM # A41783
Spring	Both		**32-1158**	2.200 Free Length. w/ 504. OEM # A66444.
Keeper	Both		**34-221**	OEM # A27872
LINE 19	**377 Gas, LPG 12V**			**L6** **BORE - 4.00"/101.6mm**
Valve Seat Insert	Exh		**20-1625-2**	1-3/8 I.D. 1-5/8 O.D. 1/4 Depth. Gas.
	Exh		**20-1625-2N**	1-3/8 I.D. 1-5/8 O.D. 1/4 Depth. Nickel
	Int		**20-1812-1**	1-9/16 I.D. 1-13/16 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Both		**30-1830**	3.594 OAL. OEM # 6529A

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 19	**377 Gas, LPG 12V**			**L6** **BORE - 4.00"/101.6mm**
Keeper	Both		**34-221**	OEM # A27872
LINE 20	**377 Diesel 12V**			**L6** **BORE - 4.00"/101.6mm**
Valve Seat Insert	Exh		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. +3, +30 O/S
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
Guide	Exh		**30-1865**	3.219 OAL. 930, 940. OEM # A11803
	Int		**30-1829**	4.375 OAL. OEM # 6321A
Keeper	Both		**34-221**	OEM # A27872
LINE 21	**JD382 Continental 8V**			**L4** **BORE - 4.50"/114.2mm**
Valve Seat Insert	Exh		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Int		**20-1812-1**	1-9/16 I.D. 1-13/16 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Int		**30-1701**	2.875 OAL. OEM # 760181M1
Spring	Both		**32-480**	2.375 Free Length. OEM # VT3372
Keeper	Both		**34-802**	1 Groove. Heat Treated
LINE 22	**L**			**L4** **BORE - 4.625"/117.4mm**
Valve Seat Insert	Both		**20-2125-10**	1-3/4 I.D. 2-1/8 O.D. 9/32 Depth
LINE 23	**6CT Cummins Diesel OHV 12V**			**L6** **BORE - 4.49"/114mm**
Valve	Exh		**10-1666**	1.811 Head Dia. 5.942 OAL. OEM # 3921444, 3802085, 3902254
	Int		**10-1667**	2.047 Head Dia. 5.946 OAL. OEM#s 3924492, 3802463, 3902253
Valve Seat Insert	Exh		**22-1857-1**	1.575T I.D. 1.857 O.D. 0.229 Depth. OEM # 3929005, 3928174
	Exh		**22-1857-3**	1.575T I.D. 1.857 O.D. 0.250 Depth, .020 Thicker than 22-1857-1. OEM # 3928174
	Int		**22-2129-2**	1.752T I.D. 2.129 O.D. 0.306 Depth OEM # 3908830, 3924582
Guide	Both		**30-8122**	2.835 OAL. OEM # 3901187, 3923564
Spring	Both		**32-06412**	2.545 Free Length. OEM # 3906412, 3991085
	Exh		**32-6669**	3.070 Free Length. W/ Dampner OEM # 3916588. 70 Lbs. More Pressure.
Keeper	Both		**34-01177**	1 Round Groove. OEM # 3901177
Valve Stem Seal	Both		**38-5707-45**	Viton. Top Hat. OEM # 3915707
LINE 24	**LTA10 Cummins Diesel OHV 24V**			**L6** **BORE - 4.92"/125mm**
Valve	Exh		**10-1531**	1.673 Head Dia. 6.94 OAL. w/ Dual Spring, Up To 250 HP. To 1991. OEM #s 3033235, 3801357, 3803995, 3895477
	Int		**10-1532**	1.673 Head Dia. 6.94 OAL. Dual Spring, Single Spring Industrial Appls. To 1991. OEM #'s 3033234, 3801356
Valve Seat Insert	Both		**22-1812-6**	1.450 I.D. 1.812 O.D. 0.186 Depth. Revised 22-1812-4
Guide	Both		**30-7625**	2.934 OAL. OEM # 3033314
	Both		**30-8210**	2.633 OAL. Machined For Seal - Guide Must Protrude 1.079 Above The Top Surface Of The Head. +2 O/S Avail. OEM # 3073512, 3328785
Spring	Both		**32-1296**	3.296 Free Length. Outer. OEM # 3033232
	Both		**32-1298**	3.100 Free Length. Inner. OEM # 3033233
Keeper	Both		**34-05354**	1 Round Bead. OEM # 3275354
Valve Stem Seal	Both		**38-8781-55**	Viton. Metal Clad. OEM # 3328781
LINE 25	**NTA 855 Cummins OHV 24V D**			**L6** **BORE - 5.50"/140mm**
Valve	Both		**10-3040830**	1.870 Head Dia. Bi-Metallic. OEM # 3040830 w/ Letter "N" In Head. Replaces 10-602

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 25	**NTA 855 Cummins OHV 24V D**			**L6 BORE - 5.50"/140mm**
Valve	Exh		**10-602S**	1.870 Head Dia. Bi-Metallic w/ Stellite. OEM # 145701 w/ Letter "S" In Head
	Int		**10-603**	1.870 Head Dia. Mono-metallic. OEM # 135957
Valve Seat Insert	Both		**22-2003-1**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 3107759 w/ Std. O.D.
	Both		**22-2003-1N**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 127930 w/ Std. O.D. Nickel For TRB and High Heat Appls.
	Both		**22-2003-6N**	1.625 I.D. 2.003 O.D. 0.280 Depth. Nickel Alloy Version of 22-2006-6S. Can Be Used w/ 15 And 20 Deg. Valves
	Both		**22-2006-1**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. +3 For Aftermarket Press Fit 3107759. +5, 10, 20, 30, 40 O/S Avail.
	Both		**22-2006-1N**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. Nickel For TRB & High Heat Appl. Aftermarket +3 O.D.
	Both		**22-2006-6S**	1.630 I.D. 2.006 O.D. 0.280 Depth, OEM #'s 80610016 & 90210014, Stellite # 3 Matl., Can Be Used w/ Natl. Gas 15 & 20 Deg. Valves
Guide	Both		**30-7994**	3.400 OAL. w/o Sharp Edge. +2 O/S Avail. OEM # 3050369. Can Be Used For OEM # 3006456
	Both		**30-7994SA**	Same Dimension As 30-7994 in Special Alloy.
Spring	Both		**32-1014**	2.685 Free Length. Early Eng. OEM # 211999
Keeper	Both		**34-803**	2 Groove. Heat Treated. w/o Rotocaps. OEM # 93914-H
Injector Component			**87-0486K**	Injector Tube 87-0486 and 87-7759 Ring Kit. Copper. OEM # 3070486
			87-1147	Injector Tube, Thick Nose. Copper. OEM # 3011935, 3071147
			87-1147K	Injector Tube Kit w/ O-Ring. Copper. Thick Nose
			87-7759	Injector O-Ring. OEM # 3007759

ENGINE	YEAR	CYL.	LINE NO.
1.1L, 1.5L 3013 6V N.A.,TRB Shibaura		L3	**1**
1.7L, 2.0L 3014, 2.2L C2.2T 3024 D TRB 8V Shibauru		L4	**2**
2.7L G1600 Gas, LPG Hercules 8V		L4	**3**
3.0L 3034 8V TRB Perkins		L4	**4**
3.3L C3.3 N.A., TRB 6V Perkins		L3	**5**
3.4L C3.4B, 4.4L C4.4 ACERT 16V TRB		L4	**6**
4.0L 3054 D 8V N.A., TRB Perkins 4.401		L4	**7**
4.25L C4.2 16V, 6.4L C6.4 24V ACERT D		L4-6	**8**
4.3L 3064 D 8V, 6.4L 3066 D 12V		L4-6	**9**
4.4L 3114 D 8V		L4	**10**
4.4L C4.4 ACERT D 16V TRB		L4	**11**
4.4L 3054C/E 8V N.A.,TRB Perkins		L4	**12**
5.2L 3204 N.A., TRB		L4	**13**
5.7L 1670, D4C/D, D312, D330A, D330B 8V		L4	**14**
5.7L D315, D315G 8V D		L4	**15**
6.0L 3056 D 12V N.A.,TRB Perkins		L6	**16**
6.6L 3116, 7.2L 3126 D 12V		L6	**17**
6.6L C6.6, 7.0L C7.1 ACERT D 24V TRB		L6	**18**
7.0L 3304 D330C 8V D N.A.,TRB		L4	**19**
7.2L 3126B C7 18V (12 Int, 6 Exh) ACERT TRB		L6	**20**
8.6L 1673, D333/A D6B D 12V		L6	**21**
8.6L D318, D318G 12V D		L6	**22**
8.8L C9 ACERT D 24V TRB		L6	**23**
9.3L C9.3 ACERT 24V D TRB		L6	**24**
10.3L 3176, C10, 12.0L 3196, C12 24V D TRB		L6	**25**
10.5L 1674, D334 12V, 11.5L 1676, D336 16V D TRB		L6	**26**
10.5L 1673C 3306 D333C D12V		L6	**27**
11.1L C11, 12.5L C13A ACERT 24V D TRB		L6	**28**
13.6L D339, D342, D364, D375, D386, D397, D8 8-24V		4-12	**29**
14.6L 3406 3406B, 3408, 3412 D, Natl. Gas		6-12	**30**
14.6L 3406C, 3408C, 3412C 24V		6-12	**31**
14.6L 3406E, 3408E, 3412E, 3456 24-48V D TRB		6-12	**32**
14.6L 1693, D343/A, D346, D348, D349 12-64V TRB		6-16	**33**
15.2L C15, C16, C18, C27, C32 24V-48V		L6-12	**34**
3508, 3512, 3516, 3508B, 3516B, 3520, 3160, G3500		V8-24	**35**
D353, D379, D398, G353, G379, G398, D9, D399, G399		L6-V12	**36**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.1L, 1.5L 3013 6V N.A.,TRB Shibaura**		**L3**	**BORE - 3.30"/77mm**
Valve	Exh		**10-13327**	1.299 Head Dia. 1.5L, 3013. OEM # 1540889, 3081861
	Int		**10-13326**	1.457 Head Dia. 1.5L, 3013. OEM # 1540888, 3081860
Guide	Both		**30-3202**	1.460 OAL. 0.2756 I.D. 0.502 O.D.
Spring	Both		**32-6638**	1.382 Free Length. OEM # 1535558
Keeper	Both		**34-5556**	1 Round Bead. 0.274 Stem. OEM # 153-5556
Valve Stem Seal	Both		**38-6141-55**	Viton. Metal Clad 0.275 Stem OEM # 1535559, 1535554
LINE 2	**1.7L, 2.0L 3014, 2.2L C2.2T 3024 D TRB 8V Shibauru**		**L4**	**BORE - 3.30"/84mm**
Valve	Exh		**10-13327**	1.299 Head Dia. 2.2L OEM # 120176380
	Int		**10-13326**	1.457 Head Dia. 2,2L OEM # 120166380
	Int		**10-13494**	1.339 Hed Dia. 2.0L. OEM # 160-3529
Guide	Both		**30-3202**	1.460 OAL. 0.2756 I.D. 0.502 O.D.
Spring	Both		**32-6638**	1.382 Free Length. OEM # 1535558

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 2	**1.7L, 2.0L 3014, 2.2L C2.2T 3024 D TRB 8V Shibauru**		**L4**	**BORE - 3.30"/84mm**
Keeper	Both		**34-5556**	1 Round Bead. 0.274 Stem. OEM # 153-5556
Valve Stem Seal	Both		**38-6141-55**	Viton. Metal Clad 0.275 Stem OEM # 1535559, 1535554
LINE 3	**2.7L G1600 Gas, LPG Hercules 8V**		**L4**	**BORE - 4.00"/101.6mm**
Valve	Exh		**10-1881**	Gas 45 Deg. Seat OEM # 40-2022508
	Int		**10-1880**	Gas & LPG OEM # 40-2022507
Guide	Both		**30-9872**	w/ 0.439 O.D. Must Be Cut For Installed Height. Spiral I.D. 30-6872 Plain I.D. Also Avail.
	Both		**30-9977**	2.281 OAL. 0.3120 Spiral I.D. 0.502 O.D.
	Both		**30-9977H**	2.281 OAL. 0.3120 Spiral I.D. 0.502 O.D. Hardened
	Both		**30-9977U**	2.281 OAL. Undersized Spiral 0.3070 I.D. 0.502 O.D.
Keeper	Exh		**34-510**	1 Round Groove. OEM # 22531220
LINE 4	**3.0L 3034 8V TRB Perkins**		**L4**	**BORE - 3.82"/97mm**
Valve	Exh		**10-13142**	1.465 Head Dia. 0.2736 Stem Dia. 4.185 OAL OEM # 1529857
	Int		**10-13143**	1.735 Head Dia. 0.2747 Stem 4.191 OAL OEM # 1888640
Valve Seat Insert	Exh		**22-1518-1**	1.245T I.D. 1.518 O.D. 0.2450 Depth OEM #
	Int		**22-1782-2**	1.535T I.D. 1.782 O.D. 0.2450 Depth OEM # 1888637
Guide	Both		**30-3105**	1.790 OAL. 0.474 O.D. 0.275 I.D. OEM # 3318A702
Keeper	Both		**34-281**	3 Round Beads. 0.275 Stem Dia.
Valve Stem Seal	Both		**38-6147-55**	Viton. Metal Clad. 7mm Stem. OEM # 2418M508
LINE 5	**3.3L C3.3 N.A., TRB 6V Perkins**		**L3**	**BORE - 4.1"/104mm**
Valve	Exh		**10-13138**	1.634 Head Dia. 0.3518 Stem 5.086 OAL OEM # 2255499
	Int		**10-13137**	1.823 Head Dia. 0.3529 Stem 5.086 OAL OEM # 2255495
Guide	Both		**30-3059**	0.3543 I.D. 0.5140 O.D. 2.017 OAL OEM # 1850882
Spring	Both		**32-8519**	1.700 Free Length. OEM # 4360519
Keeper	Both		**34-2004**	1 Round Bead. OEM # 3142W004. Use w/ 10-5001, 10-5002S
Lifter	Both		**36-7014**	2.980 OAL 0.7475 O.D. OEM # 1382053
Valve Stem Seal	Exh		**38-3954-45**	Viton. Top Hat. OEM # 2523954
	Int		**38-6438-45**	Viton. Top Hat. 0.3346 Stem OEM # 2526438
LINE 6	**3.4L C3.4B, 4.4L C4.4 ACERT 16V TRB**		**L4**	**BORE - 3.89"/99mm**
Valve	Exh		**10-13330**	1.299 Head Dia. 0.2337 Stem. 4.249 OAL OEM # 3399637
	Int		**10-13329**	1.378 Head Dia. 0.2343 Stem. 4.258 OAL OEM # 3096678
Valve Seat Insert	Exh		**22-1322-1**	1.114 I.D. 1.135 O.D. 0.2360 Depth OEM # 3770400
	Int		**22-1381-1**	1.161 I.D. 1.381 O.D. 0.255 Depth, OEM # 3770399
Guide	Both		**30-3164**	1.820 OAL. 0.2364 I.D. 0.3952 O.D. OEM # 3802073
	Both		**30-4217**	1.737 OAL. 0.4345 O.D. 0.2763 I.D. OEM # 3569640
Spring	Both		**32-4530**	1.590 Free Length. OEM # 2984530, 4360524
Keeper	Both		**34-5021**	3 Round Beads. 0.236 Stem Dia.
Valve Stem Seal	Both		**38-6140-55**	Top Hat. Viton. 6mm Stem Dia. OEM # 2995511
LINE 7	**4.0L 3054 D 8V N.A., TRB Perkins 4.401**		**L4**	**BORE - 3.94"/100mm**
Valve	Exh		**10-13219**	1.616 Head Dia. 30 Deg. OEM # 1456857
	Int		**10-13136**	1.693 Head Dia. 30 Deg. OEM # 1456855
Guide	Exh		**30-3060**	2.018 OAL 0.3547 I.D. 0.5527 O.D. OEM # 1639256
	Int		**30-3059**	2.018 OAL. 0.3555 I.D. 0.5135 O.D. OEM # 1850882
Spring	Both		**32-4127**	1.847 Free Length. OEM # 2064127

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 7	**4.0L 3054 D 8V N.A., TRB Perkins 4.401**			**L4 BORE - 3.94"/100mm**
Keeper	Both		**34-2004**	1 Round Bead. OEM # 1471979
Lifter	Both		**36-7014**	Mechanical. OEM # 1382053
Valve Stem Seal	Int		**38-507-45**	Viton. Umbrella. OEM # 1456856
LINE 8	**4.25L C4.2 16V, 6.4L C6.4 24V ACERT D**			**L4-6 BORE - 4.02"/102mm**
Valve	Exh		**10-13444**	1.083 Head Dia. OEM # 2941685
	Int		**10-13443**	1.358 Head Dia. OEM # 2941684
Valve Seat Insert	Exh		**22-1184-1**	0.983 I.D. 1.184 O.D. 0.2365 Depth. OEM # 3054884
	Int		**22-1420-2**	1.185T I.D. 1.4200 O.D. 0.2365 Depth. OEM # 3054883
Guide	Both		**30-3208**	2.365 OAL. 0.261 I.D. 0.474 O.D. OEM # 1992189
Spring	Both		**32-1688**	1.700 Free Lenth. OEM # 2941688
Valve Stem Seal	Both		**38-6498-55**	Viton. Metal Clad. OEM # 1992189
LINE 9	**4.3L 3064 D 8V, 6.4L 3066 D 12V**			**L4-6 BORE - 4.02"/102mm**
Valve	Exh		**10-13394**	1.457 Head Dia. OEM # 5I7739
	Int		**10-13392**	1.732 Head Dia. OEM # 5I7738
	Int		**10-13393**	1.811 Head Dia. OEM # 2128477
Valve Seat Insert	Exh		**22-1540-1**	1.295 I.D. 1.540 O.D. 0.261 Depth. OEM # 5I8012
	Int		**22-1815-2**	1.570 I.D. 1.815 O.D. 0.2610 Depth. Use w/ 10-13392. OEM # 5I8011
	Int		**22-1894-4**	1.580T I.D. 1.894 O.D. 0.2410 Depth. Use w/ 10-13393. OEM # 2128474
Guide	Exh		**30-3193**	1.970 OAL. 0.3155 I.D. OEM # 1838173
	Int		**30-3192**	2.200 OAL. 0.3155 I.D. OEM # 1838172
Spring	Both		**32-6657**	2.200 Free Length. OEM # 5I7740
Valve Stem Seal	Both		**38-7624-55**	Viton. Metal Clad. OEM # 5I7624
LINE 10	**4.4L 3114 D 8V**			**L4 BORE - 4.136"/105mm**
Valve	Exh		**10-1579S**	1.575 Head Dia. Stellite Faced. OEM #s 105-1779, 136-0819
	Int		**10-1580**	1.850 Head Dia. OEM #s 7W-8064, 161-4280
Valve Seat Insert	Exh		**22-1693-8N**	1.458 I.D. 1.6935 O.D. 0.234 Depth. Nickel. OEM # 1W-2713
	Int		**22-1969-3**	1.704 I.D. 1.969 O.D. 0.234 Depth. OEM # 7W-8065
	Int		**22-1969-4N**	1.726 I.D. 1.969 O.D. 0.248 Depth. Nickel. OEM #s 130-9004, 163-9063
Guide	Both		**30-8590**	2.955 OAL. +2 O/S Avail. OEM # 9Y-8848
	Both		**30-8590U**	2.955 OAL. 0.3179 Undersized I.D.
Spring	Both		**32-04008**	2.806 Free Length. Both w/o Eng. Brake. Int. w/ Eng. Brake. OEM # 7C4273
	Exh		**32-04022**	3.199 Free Length. w/ Eng. Brake. OEM # 6I2307
Keeper	Both		**34-00250**	1 Round Bead. OEM # 1W2715
Valve Stem Seal	Both		**38-3036-45**	Viton. Top Hat. OEM # 1193036
Injector Component			**87-3061**	Injector Tube. OEM # 1193061
LINE 11	**4.4L C4.4 ACERT D 16V TRB**			**L4 BORE - 4.13"/105mm**
Valve	Exh		**10-13330**	1.299 Head Dia. 0.2336 Stem. 4.250 OAL. OEM # 3399637
	Exh		**10-13491**	1.299 Head Dia. 0.2739 Stem. OEM # 3365447
	Int		**10-13329**	1.378 Head Dia. 0.2341 Stem. 4.258 OAL. OEM # 3096678
	Int		**10-13490**	1.378 Head Dia. 0.2748 Stem. OEM # 3365446
Valve Seat Insert	Exh		**22-1322-1**	1.114 I.D. 1.135 O.D. 0.2360 Depth OEM # 3770400
	Int		**22-1381-1**	1.161 I.D. 1.381 O.D. 0.255 Depth. OEM # 3770399

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 11	**4.4L C4.4 ACERT D 16V TRB**			**L4 BORE - 4.13"/105mm**
Valve Seat Insert	Int		**22-1381-2**	1.161T I.D. 1.381 O.D. Depth 0.2250 OEM # 3770399
	Int		**22-1456-1**	1.145R I.D. 1.456 O.D. 0.255 Depth. OEM # 3224120
Guide	Both		**30-3164**	1.820 OAL 0.3952 O.D. 0.2364 I.D. OEM # 3802073
	Both		**30-4217**	1.737 OAL. 0.4345 O.D. 0.2763 I.D. OEM # 3569640
Keeper	Both		**34-281**	3 Round Beads. 0.275 Stem Dia.
	Both		**34-5021**	3 Round Beads. 0.236 Stem Dia.
Valve Stem Seal	Both		**38-6140-55**	Top Hat. Viton. 6mm Stem Dia. OEM # 2995511
	Both		**38-6515-55**	Top Hat. Viton. OEM # 3879503
LINE 12	**4.4L 3054C/E 8V N.A.,TRB Perkins**			**L4 BORE - 4.13"/105mm**
Valve	Exh		**10-13138**	1.634 Head Dia. 0.3518 Stem 5.086 OAL OEM # 2255499
	Int		**10-13137**	1.823 Head Dia. 0.3529 Stem 5.086 OAL OEM # 2255495
Guide	Both		**30-3059**	0.3543 I.D. 0.5140 O.D. 2.017 OAL OEM # 1850882
Spring	Both		**32-8519**	1.700 Free Length. OEM # 4360519
Keeper	Both		**34-2004**	1 Round Bead. OEM # 3142W004. Use w/ 10-5001, 10-5002S
Lifter	Both		**36-7014**	2.980 OAL 0.7475 O.D. OEM # 1382053
Valve Stem Seal	Exh		**38-3954-45**	Viton. Top Hat. OEM # 2523954
	Int		**38-6438-45**	Viton. Tops Hat. 0.3346 Stem OEM # 2526438
LINE 13	**5.2L 3204 N.A., TRB**			**L4 BORE - 4.50"/114.3mm**
Valve	Exh		**10-1378**	1.804 Head Dia. OEM # 9L7683
	Exh		**10-1497S**	1.804 Head Dia. Turbo & H.O. OEM # 9N5125, 119-6772
	Int		**10-1379**	2.094 Head Dia. OEM # 9L7682, & 9L8368
Valve Seat Insert	Exh		**22-1912-1**	1-5/8 I.D. 1.912 O.D. 9/32 Depth. +10 O/S Avail. OEM # 9N2837
	Int		**22-2150-1**	1-55/64 I.D. 2.150 O.D. 0.292 Depth +10, 20, 40 O/S Avail. OEM # 2N8943
Guide	Exh		**30-7448**	3.000 OAL. 0.564 O.D. Conversion Guide.
	Exh		**30-7682**	3.000 OAL. 0.502 O.D. Optional Plain I.D. OEM # 4W3779, 6I2865
	Exh		**30-8356**	3.000 OAL. 0.502 O.D. Recommended. Spiral I.D. TRB
	Int		**30-7447**	2.925 OAL. 0.564 O.D. Conversion Guide.
	Int		**30-7681**	2.598 OAL. 0.502 O.D. Optional Plain I.D. OEM # 4W3778, 6I2864
	Int		**30-8357**	2.598 OAL. 0.502 O.D. Recommended. Spiral I.D. TRB
Spring	Both		**32-1240**	1.996 Free Length. Single Spring, Replaces All Early Des. May Need To Machine Spring Seat to 1.660 Dia.. OEM # 1W4259.
	Both		**32-1292**	Inner. OEM # 9N5495. 1.920 Free Length
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Lifter	Both		**36-2073**	Mechanical. OEM # 9N5786
Valve Stem Seal	Both		**38-403-45**	Viton. Metal Clad. OEM # 7W9143
Expansion Plug Kit			**97-79SS**	Stainless Steel Kit
LINE 14	**5.7L 1670, D4C/D, D312, D330A, D330B 8V**			**L4 BORE - 4.50"/114.3mm**
Valve	Int		**10-755**	1.895 Head Dia. OEM # 7M7358
Valve Seat Insert	Int		**20-2000-13**	1-5/8 I.D. 2.000 O.D. 1/4 Depth
	Int		**20-2250-8**	1-7/8 I.D. 2-1/4 O.D. 1/4 Depth
	Int		**22-2006-2**	1-11/16T I.D. 2.0055 O.D. 7/16 Depth. +2 For Aftermarket Press Fit 5S7221 +10, 30 O/S Avail.
Guide	Both		**30-1906N**	3.220 OAL. Old Style Flanged. OEM # 5S4507
	Both		**30-7242**	3.180 OAL. New Style - Nitrocarburized. OEM # 4N3668

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 14	**5.7L 1670, D4C/D, D312, D330A, D330B 8V**			**L4 BORE - 4.50"/114.3mm**
Spring	Both		**32-817**	2.650 Free Length. OEM # 2S5627, 9H9164.
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Lifter	Both		**36-2212**	Mechanical. OEM # 7S3161
LINE 15	**5.7L D315, D315G 8V D**			**L4 BORE - 4.50"/114.3mm**
Valve	Exh		**10-319**	1.840 Head Dia. OEM# 4F212
	Int		**10-318**	2.028 Head Dia. OEM#s 4F213, 6H3026
Valve Seat Insert	Exh		**22-1912-1**	1-5/8 I.D. 1.912 O.D. 9/32 Depth. +10 O/S Avail. OEM # 9N2837
	Int		**22-2150-1**	1-55/64 I.D. 2.150 O.D. 0.292 Depth +10, 20, 40 O/S Avail. OEM # 2N8943
LINE 16	**6.0L 3056 D 12V N.A.,TRB Perkins**			**L6 BORE - 3.94"/100mm**
Valve	Exh		**10-13219**	1.616 Head Dia. 30 Deg. OEM # 1456857
	Int		**10-13136**	1.693 Head Dia. 30 Deg. OEM # 1456855
Guide	Exh		**30-3060**	2.018 OAL 0.3547 I.D. 0.5527 O.D. OEM # 1639256
	Int		**30-3059**	2.018 OAL. 0.3555 I.D. 0.5135 O.D. OEM # 1850882
Spring	Both		**32-4127**	1.847 Free Length. OEM # 2064127
Keeper	Both		**34-2004**	1 Round Bead. OEM # 1471979
Lifter	Both		**36-7014**	Mechanical. OEM # 1382053
Valve Stem Seal	Exh		**38-507-45**	Viton. Umbrella. OEM # 1456856
LINE 17	**6.6L 3116, 7.2L 3126 D 12V**			**L6 BORE - 4.33"/ 110mm**
Valve	Exh		**10-1579S**	1.575 Head Dia. OEM# 105-1779, 136-0819
	Int		**10-1580**	1.850 Head Dia. OEM #s 7W-8064, 161-4280
Valve Seat Insert	Exh		**22-1693-8N**	1.458 I.D. 1.6935 O.D. 0.234 Depth. Nickel. OEM # 1W2713
	Int		**22-1969-3**	1.704 I.D. 1.969 O.D. 0.234 Depth. OEM # 7W8065
	Int		**22-1969-4N**	1.726 I.D. 1.969 O.D. 0.248 Depth. Nickel. OEM # 1309004
Guide	Both		**30-8590**	2.955 OAL. +2 O/S Avail. OEM # 9Y8848
	Both		**30-8590U**	2.955 OAL. 0.3179 Undersized I.D.
Spring	Both		**32-04008**	2.806 Free Length. Both w/o Eng. Brake. Int. w/ Eng. Brake. OEM # 7C4273
	Exh		**32-04022**	3.199 Free Length. w/ Eng. Brake. OEM # 6I2307
Keeper	Both		**34-00250**	1 Round Groove. OEM # 1W2715
Valve Stem Seal	Both		**38-3036-45**	Viton. Top Hat. OEM # 1193036
Injector Component			**87-3061**	Injector Tube. OEM # 1193061
LINE 18	**6.6L C6.6, 7.0L C7.1 ACERT D 24V TRB**			**L6 BORE - 4.13"/105mm**
Valve	Exh		**10-13330**	1.299 Head Dia. 0.2337 Stem. 4.249 OAL OEM # 3399637
	Exh		**10-13491**	1.299 Head Dia. 0.2739 Stem. OEM # 3365447
	Int		**10-13329**	1.378 Head Dia. 0.2343 Stem. 4.258 OAL OEM # 3096678
	Int		**10-13490**	1.378 Head Dia. 0.2748 Stem. OEM # 3365446
Valve Seat Insert	Exh		**22-1322-1**	1.114 I.D. 1.322 O.D. 0.2360 Depth. OEM # 3770400
	Int		**22-1381-1**	1.161 I.D. 1.381 O.D. 0.255 Depth. OEM # 3770399
	Int		**22-1456-1**	1.145R I.D. 1.456 O.D. 0.255 Depth. OEM # 3224120
Guide	Both		**30-3164**	1.820 OAL 0.3952 O.D. 0.2364 I.D. OEM # 3802073
	Both		**30-4217**	1.737 OAL. 0.4345 O.D. 0.2763 I.D. OEM # 3569640
Spring	Exh		**32-8523**	2.085 Free Length. OEM # 4360523
	Int		**32-4530**	1.590 Free Length. OEM # 2984530, 4360524

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 18	**6.6L C6.6, 7.0L C7.1 ACERT D 24V TRB**			**L6 BORE - 4.13"/105mm**
Keeper	Both		**34-281**	3 Round Beads. 0.275 Stem Dia.
	Both		**34-5021**	3 Round Beads. 0.236 Stem Dia.
Valve Stem Seal	Both		**38-6140-55**	Top Hat. Viton. 6mm Stem Dia. OEM # 2995511
	Both		**38-6515-55**	Top Hat. Viton. OEM # 3879503
LINE 19	**7.0L 3304 D330C 8V D N.A.,TRB**			**L4 BORE - 4.75"/120.7mm**
Valve	Exh		**10-1203**	1.896 Head Dia. Indirect Injection N.A. OEM # 5S6449
	Exh		**10-1205S**	1.896 Head Dia. Indirect Injection Turbo OEM # 8N0875
	Exh		**10-1489S**	1.896 Head Dia. Direct Injection Turbo OEM # 6N9916
	Exh		**10-1576**	1.896 Head Dia. Direct Injection N.A. OEM # 7N0573
	Int		**10-1204**	2.020 Head Dia. Indirect Injection N.A. OEM # 5S6452
	Int		**10-1314S**	2.020 Head Dia. 5.510 OAL. Indirect Injection Turbo. OEM # 2W2621, 9N6117
	Int		**10-1490S**	2.020 Head Dia. Direct Injection Turbo OEM # 2W2620
	Int		**10-1760S**	2.020 Head Dia. 5.350 OAL. Small Margin Valve. OEM # 100-7860
Valve Seat Insert	Exh		**22-2004-2**	1-11/16T I.D. 2.0035 O.D. 7/16 Depth. OEM Std. O.D. OEM #'s 5S7221, 1W5321
	Exh		**22-2004-3N**	1.685T I.D. 2.004 O.D. 0.317 Depth. Nickel. Direct Injection. OEM # 2W4837, 1070265
	Exh		**22-2006-2**	1-11/16T I.D. 2.0055 O.D. 7/16 Depth. +2 For Aftermarket Press Fit 5S7221 +10, 30 O/S Avail.
	Int		**22-2049-1**	1-25/32T I.D. 2.0485 O.D. 11/32 Depth, +10, +20, +30 & 40 O/S Avail. OEM # 7N4448, 1070268
	Int		**22-2129-1**	1-13/16T I.D. 2.129 O.D. 7/16 Depth OEM Replacement w/ Std. O.D. For OEM # 5S7218
	Int		**22-2131-1**	1-13/16T I.D. 2.131 O.D. 7/16 Depth. +2 Aftermarket Press Fit 5S7218
Guide	Both		**30-3037**	2.780 OAL. 0.658 O.D. w/ Step For Seal. 0.3743 I.D. OEM # 1621589, 1487425
	Both		**30-7194**	2.781 OAL. 0.375 I.D. Nitrocarburized. +2 O/S Avail. OEM # 2P1262
	Both		**30-7194SA**	Special Alloy 30-7194
	Both		**30-8220**	3.700 OAL. Gas Eng. Long Valve Eng. OEM # 9Y7895, 7W7489
	Both		**30-8408**	2.775 OAL. Natl. Gas Cut For Seal & I.D. Counterbored. OEM # 7N4310 & 4W9176N
	Both		**30-8531**	2.781 OAL. 0.3741 I.D. +2 O/S Avail. OEM # 1090390
	Both		**30-8594**	2.640 OAL. Use w/ Short Valve Engs. Improved Cooling. OEM # 7E1551
Spring	Both		**32-948**	2.050 Free Length. w/ Both Long And Short Valves. OEM # 7S7144
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Lifter	Both		**36-2212**	Mechanical. OEM # 7S3161
Rotator	Both		**37-7782**	Rotator. OEM # 1031800, 8N7782
Valve Stem Seal	Both		**38-2882-35**	Glass Filled Nylon. Umbrella. Use w/ Single Spring. OEM # 6N7174
Expansion Plug Kit			**97-80SS**	3304 Stainless Steel Kit
			97-81SS	3306 Stainless Steel Kit
LINE 20	**7.2L 3126B C7 18V (12 Int, 6 Exh) ACERT TRB**			**L6 BORE - 4.33"/110mm**
Valve Kit			**10-VKCAT26B-5**	3126B 18V Kit w/ 18 Valves, 18 Guides, 36 Keepers, 18 Stem Seals, 6 Inj. Tubes w/ O-Ring
			10-VKCAT26B-6	3126B 18V Kit w/ 18 Valves, 18 Guides, 36 Keepers, 18 Springs, 18 Stem Seals, 6 Inj. Tubes w/ O-Ring
			10-VKCATC78-5	C7 18V Kit w/ 18 Valves, 18 Guides, 36 Keepers, 18 Stem Seals, 6 Inj. Tubes w/ O-Ring

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 20	**7.2L 3126B C7 18V (12 Int, 6 Exh) ACERT TRB**			**L6 BORE - 4.33"/110mm**
Valve Kit			**10-VKCATC78-6**	C7 18V Kit w/ 18 Valves, 18 Guides, 36 Keepers, 18 Springs, 18 Stem Seals, 6 Inj. Tubes w/ O-Ring
Valve	Exh		**10-2160**	1.693 Head Dia. 2 Groove. No Stellite
	Exh		**10-2160S**	1.693 Head Dia. 2 Groove. OEM # 147-8211
	Int		**10-2161S**	1.575 Head Dia. 1 Groove. OEM # 145-7390
Valve Seat Insert	Exh		**22-1814-4S**	1.550 I.D. 1.814 O.D. 0.240 Depth. OEM # 1478218
	Int		**22-1656-1**	1.410 I.D. 1.656 O.D. 0.258 Depth. OEM # 1559504
	Int		**22-1656-3**	1.410 I.D. 1.656 O.D. 0.218 Depth. OEM # 217-5213, 264-6157
Guide	Exh		**30-3039**	3.350 OAL. 0.630 O.D. 0.3745 I.D. OEM # 1478220
	Int		**30-3038**	3.175 OAL. 0.513 O.D. 0.3178 I.D. OEM # 1409670
Spring	Exh		**32-04021**	3.650 Free Length. OEM # 1376718
	Int		**32-04020**	2.690 Free Length. OEM # 1406188
Keeper	Exh		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
	Int		**34-00250**	1 Round Groove. OEM# 1W2715
Valve Stem Seal	Exh		**38-229-45**	Viton. Metal Clad. OEM # 1026229
	Int		**38-3036-45**	Viton. Top Hat. OEM # 1193036
Injector Component			**87-0563**	Injector O-Ring. For 87-2911. OEM # 8C0563
			87-1200	Injector Tube. Stainless. C7. OEM # 2271200
			87-1200K	Injector Tube 87-1200 and 87-7257 (2) Ring Kit
			87-2911	Injector Tube. Stainless. 3126B. OEM # 2272911.
			87-2911K	Injector Tube 87-2911 and 87-0563 Ring Kit
			87-6193	Injector Tube. Stainless. C7. OEM # 2610193
			87-6257	Injector O-Ring. Top for 87-6193. C7 OEM # 3107258
			87-7257	Injector O-Ring, Both. For 87-1200. OEM # 3107257
			87-7259	Injector O-Ring. Bottom for 87-6193. C7 OEM # 3107259
LINE 21	**8.6L 1673, D333/A D6B D 12V**			**L6 BORE - 4.50"/114.3mm**
Valve	Int		**10-755**	1.895 Head Dia. OEM # 7M7358
Valve Seat Insert	Int		**22-2006-2**	1-11/16T I.D. 2.0055 O.D. 7/16 Depth. +2 For Aftermarket Press Fit 5S7221 +10, 30 O/S Avail.
Guide	Both		**30-1906N**	3.220 OAL. Old Style Flanged. OEM # 5S4507
	Both		**30-7194**	2.781 OAL. 0.375 I.D. Nitrocarburized. +2 O/S Avail. OEM # 2P1262
	Both		**30-7194SA**	Special Alloy 30-7194
	Both		**30-7242**	3.180 OAL. New Style - Nitrocarburized. OEM # 4N3668
Spring	Both		**32-817**	2.650 Free Length. OEM # 2S5627, 9H9164.
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Lifter	Both		**36-2212**	Mechanical. OEM # 7S3161
LINE 22	**8.6L D318, D318G 12V D**			**L6 BORE - 4.50"/114.3mm**
Valve	Exh		**10-319**	1.840 Head Dia. OEM # 4F212
	Int		**10-318**	2.028 Head Dia. OEM #s 4F213 & 6H3026
Valve Seat Insert	Exh		**22-1912-1**	1-5/8 I.D. 1.912 O.D. 9/32 Depth. +10 O/S Avail. OEM # 9N2837
	Int		**22-2150-1**	1-55/64 I.D. 2.150 O.D. 0.292 Depth +10, 20, 40 O/S Avail. OEM # 2N8943
LINE 23	**8.8L C9 ACERT D 24V TRB**			**L6 BORE - 4.41"/112mm**
Valve	Exh		**10-13193**	1.417 Head Dia. 0.3717 Stem. ACERT. OEM # 2418383
	Exh		**10-2261**	1.417 Head Dia. 0.3717 Stem. OEM# 1883122

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 23	**8.8L C9 ACERT D 24V TRB**			**L6 BORE - 4.41"/112mm**
Valve	Int		**10-13192S**	1.535 Head Dia. 0.315 Stem. ACERT. OEM # 2418382
	Int		**10-2260S**	1.417 Head Dia. 0.3717 Stem. OEM# 1632442
Valve Seat Insert	Exh		**22-1479-1S**	1.212T I.D. 1.479 O.D. 0.257 Depth. OEM # 2128917
	Int		**22-1459-1**	1.200 I.D. 1.459 O.D. 0.217 Depth. For 1.417 Head Dia. OEM # 2128918
	Int		**22-1577-1**	1.340T I.D. 1.577 O.D. 0.220 Depth. For 1.535 Head Dia. OEM # 2418338
Guide	Both		**30-3058**	3.155 OAL. 0.3745 I.D. 0.6298 O.D. OEM # 1632444, 2604856
	Both		**30-3123**	3.155 OAL. 0.318 I.D. For 0.315 Stem. OEM # 2418389, 2595829
	Both		**30-3194**	2.165 OAL. OEM# 2558665
Spring	Both		**32-04027**	2.320 Free Length. Inner. Exh Only ACERT. OEM # 1906115
	Both		**32-04028**	2.341 Free Lengh. Outer. Exh Only ACERT. OEM # 1906117
	Int		**32-5004**	2.371 Free Length. Inner. ACERT. OEM # 2418386
	Int		**32-5005**	2.903 Free Length. Outer. ACERT. OEM # 2418385
Keeper	Both		**34-00250**	1 Round Bead. OEM # 1W2715
	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Valve Stem Seal	Both		**38-229-45**	Viton. Metal Clad. 0.372 Nom. Stem. OEM # 1632478
	Both		**38-6124-55**	Viton. Metal Clad. 0.315 Nom. Stem. OEM # 2418390
Injector Component			**87-1200**	Injector Tube. Stainless. OEM # 2271200
			87-1200K	Injector Tube 87-1200 and 87-7257 (2) Ring Kit
			87-7257	Injector O-Ring, Both. OEM # 3107257
LINE 24	**9.3L C9.3 ACERT 24V D TRB**			**L6 BORE - 4.53"/115mm**
Valve	Exh		**10-13421**	1.476 Head Dia. Inconel. OEM # 4901730, 4901728, 2695921, 2558676. Incl. Marine
	Int		**10-13420**	1.634 Head Dia. OEM # 4901729, 2622957. Incl. Marine
Valve Seat Insert	Exh		**22-1538-3**	1.280T I.D. 1.5378 O.D. 0.256 Depth. OEM # 2622959
	Int		**22-1676-2**	1.437 I.D. 1.6756 O.D. 0.219 Depth. OEM # 2558666
Guide	Both		**30-3194**	2.407 OAL. 0.3178 I.D. 0.513 O.D. OEM # 2558665. Incl. Marine
Spring		Both	**32-5303**	2.985 Free Length. Inner. Incl. Marine. OEM #3495303
	Both		**32-5307**	3.097 Free Length. Outer. Incl. Marine. OEM # 3495307
	Both		**32-8677**	2.981 Free Length. Inner. OEM # 2558677
	Both		**32-8678**	3.174 Free Length. Outer. OEM # 2558678
Keeper	Both		**34-00250**	1 Round Bead. OEM # 1W2715. Incl. Marine
Valve Stem Seal	Both		**38-6124-55**	Viton. Metal Clad. w/ Garter Spring. OEM # 2418390
	Both		**38-6487-55**	Viton. Top Hat. w/o Garter Spring. OEM # 3128619
Injector Component			**87-6257**	Injector O-Ring. Top. OEM # 3107258
			87-6575	Injector Tube. Stainless. OEM # 3256575
			87-7259	Injector O-Ring. Bottom. OEM # 3107259
LINE 25	**10.3L 3176, C10, 12.0L 3196, C12 24V D TRB**			**L6 BORE - 4.92"/125mm**
Valve	Exh		**10-1581S**	1.654 Head Dia. OEM # 7C-1586
	Int		**10-1582**	1.772 Head Dia. OEM # 7E-9578
	Int		**10-1582S**	1.772 Head Dia. OEM # 124-2692. Stellite For 280 - 370 HP.
Valve Seat Insert	Exh		**22-1711-1N**	1.416T I.D. 1.711 O.D. 0.378 Depth. Nickel Same Dim. As -1S
	Exh		**22-1711-1S**	1.416T I.D. 1.711 O.D. 0.378 Depth. Stellite Matl. OEM # 138-1997-179-9453
	Int		**22-1812-8**	1.530T I.D. 1.812 O.D.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 25	**10.3L 3176, C10, 12.0L 3196, C12 24V D TRB**			**L6 BORE - 4.92"/125mm**
Guide	Both		**30-8592**	2.785 OAL. +2, 5 O/S Avail. OEM # 100-8150
Spring	Both		**32-07082**	2.420 Free Length. Inner. OEM# 7W7083, 224-4441
	Both		**32-07083**	2.525 Free Length. Outer. OEM # 2140586
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Rotator	Both		**37-7977**	Rotator. OEM # 7E7977
Valve Stem Seal	Both		**38-0234-35**	GF Nylon. Umbrella. OEM # 7E7978
Injector Component			**87-1102**	Injector Tube. Stainless. OEM # 1161102
			87-4232	Injector Tube. Copper. 3176. OEM # 1054232, 4P4735
LINE 26	**10.5L 1674, D334 12V, 11.5L 1676, D336 16V D TRB**			**L6 BORE - 4.50"/114.3mm**
Valve	Exh		**10-1350S**	1.370 Head Dia. OEM # 1S2903
	Int		**10-1351S**	1.430 Head Dia. OEM # 7S2514
Valve Seat Insert	Int		**22-1505-1**	1-1/4 I.D. 1.5045 O.D. 11/32 Depth +10, +20, & +30 O/S Avail. OEM # 1S2894
Guide	Both		**30-6881**	3.031 OAL. +2 O/S Avail. OEM # 5S9291
Spring	Both		**32-1240**	1.996 Free Length. OEM # 1W4259.
Keeper	Both		**34-614**	1 Square Groove. Heat Treated. OEM # 1S2898.
LINE 27	**10.5L 1673C 3306 D333C D12V**			**L6 BORE - 4.75"/120.7mm**
Valve	Exh		**10-1203**	1.896 Head Dia. Indirect Injection N.A. OEM # 5S6449
	Exh		**10-1205S**	1.896 Head Dia. Pre-Chamber Turbo Eng. OEM # 8NO875
	Exh		**10-1489S**	1.896 Head Dia. Direct Injection Turbo OEM # 6N9916
	Int		**10-1204**	2.020 Head Dia. Indirect Injection N.A. OEM # 5S6452
	Int		**10-1314S**	2.020 Head Dia. Pre-Chamber Turbo Eng. OEM # 2W2621 & 9N6117
	Int		**10-1760S**	2.020 Head Dia. 5.350 OAL. Small Margin Valve. OEM # 100-7860
Valve Seat Insert	Exh		**22-2004-2**	1-11/16T I.D. 2.0035 O.D. 7/16 Depth. OEM Std. O.D. OEM #'s 5S7221, 1W5321
	Exh		**22-2006-2**	1-11/16T I.D. 2.0055 O.D. 7/16 Depth. +2 For Aftermarket Press Fit 5S7221 +10, 30 O/S Avail.
	Int		**22-2129-1**	1-13/16T I.D. 2.129 O.D. 7/16 Depth OEM Std. O.D. OEM # 5S7218
	Int		**22-2131-1**	1-13/16T I.D. 2.131 O.D. 7/16 Depth. +2 Aftermarket Press Fit 5S7218
Guide	Both		**30-7194**	2.781 OAL. 0.375 I.D. Nitrocarburized. +2 O/S Avail. OEM # 2P1262
	Both		**30-7194SA**	Special Alloy 30-7194
Spring	Both		**32-948**	2.050 Free Length. OEM # 7S7144
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Lifter	Both		**36-2212**	Mechanical. OEM # 7S3161
Rotator	Both		**37-7782**	Rotator. OEM # 1031800, 8N7782
Valve Stem Seal	Both		**38-2882-35**	Glass Filled Nylon. Umbrella. Use w/ Single Spring. OEM # 6N7174
LINE 28	**11.1L C11, 12.5L C13A ACERT 24V D TRB**			**L6 BORE - 5.12"/130mm**
Valve	Exh		**10-13033**	1.634 Head Dia. Thin Margin. OEM # 2481467, 2243030
	Exh		**10-13280**	1.634 Head Dia. Thick Margin. OEM # 2243030
	Int		**10-13032**	1.752 Head Dia. OEM # 2527802
	Int		**10-13151**	1.752 Head Dia. Inconel. OEM # 2243028
Valve Seat Insert	Exh		**22-1669-2N**	1.415T I.D. 1.669 O.D. 0.276 Depth. OEM # 2241270
	Int		**22-1792-1**	1.535T I.D. 1.792 O.D. 0.257 Depth. OEM # 2604855
Guide	Both		**30-3058**	3.155 OAL. 0.3745 I.D. 0.6298 O.D. OEM # 1632444, 2604856
Spring	Both		**32-07082**	2.420 Free Length. Inner. OEM# 7W7083, 224-4441

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 28	**11.1L C11, 12.5L C13A ACERT 24V D TRB**			**L6 BORE - 5.12"/130mm**
Spring	Both		**32-07083**	2.525 Free Length. Outer. OEM # 2140586
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Rotator	Both		**37-7977**	Rotator. OEM # 7E7977
Valve Stem Seal	Both		**38-0234-35**	Glass Filled Nylon. Umbrella. OEM # 7E7978
	Both		**38-229-45**	Viton. Metal Clad. OEM # 1632478
Injector Component			**87-0262**	Injector Tube, Stainless OEM # 2260262. Does not use external O-Rings.
			87-2903	Injector O-Ring, Large, Top for 87-4239. OEM # 1662903
			87-2904	Injector O-Ring. Middle for 87-4239, Middle/Top for 87-4920. OEM # 1662904
			87-4239	Injector Tube, Stainless. OEM # 2274239
			87-4239K	Injector Kit, Stainless w/ 3 O-Rings
			87-4920	Injector Tube. Stainless. OEM # 2634920.
			87-4920K	Injector Tube Kit, Stainless w/ 2 87-2904, 1 87-7430
			87-7430	Injector O-Ring, Small, Bottom. OEM# 9X7430
LINE 29	**13.6L D339, D342, D364, D375, D386, D397, D8 8-24V**			**4-12 BORE - 5.75"/146mm**
Valve	Exh		**10-1458S**	2.282 Head Dia. 0.3717 Stem Dia. 2 Groove. Stellite. OEM # 1W1819
	Exh		**10-574S**	2.282 Head Dia. 0.4955 Stem Dia. Tapered Groove. Stellite. OEM # 8H1994
	Int		**10-1459S**	2.343 Head Dia. 0.3717 Stem Dia. 2 Groove. Stellite. OEM # 1W1818
	Int		**10-852S**	2.343 Head Dia. 0.4955 Stem Dia. Tapered Groove. Stellite. OEM # 8H1993
Valve Seat Insert	Exh		**22-2503-1**	2.000 I.D. 2.503 O.D. 1/2 Depth. OEM Replacement For 8M9810
	Exh		**22-2506-1**	2.000 I.D. 2.506 O.D. 1/2 Depth. OEM # 8M9810 +10, +20 & +30 O/S Avail.
	Int		**22-2503-2**	2-1/16T I.D. 2.503 O.D. 1/2 Depth. OEM Replacement For 9M8745
	Int		**22-2506-2**	2-1/16T I.D. 2.506 O.D. 1/2 Depth. OEM # 8M8745. +10, +20 & +30 O/S Avail.
Guide	Both		**30-7338**	5.219 OAL. Non-Flanged Tufftrided & Counterbored w/ 0.4955 Valve Stem Dia. OEM # 7N2051
	Both		**30-7604**	5.250 OAL. Non-Flanged w/ 0.3717 Valve Stem Dia. +2 O/S Avail. OEM # 1W1816
	Exh		**30-6469**	5.250 OAL. Flanged w/o Valve Rotator w/ 0.4955 Valve Stem Dia. OEM # 1S6654
	Int		**30-6470**	5.250 OAL. Flanged w/o Valve Rotator w/ 0.4955 Valve Stem Dia. OEM # 2S0893
Spring	Both		**32-944**	2.179 Free Lengh. Inner. OEM # 9M5349
	Both		**32-945**	2.574 Free Length. Outer. OEM # 9M5350
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
	Both		**34-816**	Tapered Groove. 3 Required. OEM # 3B1143
Rotator	Exh		**37-7639**	Rotator. OEM # 4S7468, 7N7639.
LINE 30	**14.6L 3406 3406B, 3408, 3412 D, Natl. Gas**			**6-12 BORE - 5.40"/137.2mm**
Valve	Exh		**10-13431S**	1.646 Head Dia. 7.766 OAL. 20 Deg. Inconel, Stellite. OEM # 3581230. Late Model Long
	Exh		**10-1468S**	1.646 Head Dia. 7.140 OAL. 45 Deg. Stellite. OEM # 7N4580, 1W3860, 1152367
	Exh		**10-1632S**	1.640 Head Dia. 7.140 OAL. 20 Deg. Stellite. OEM # 1018314
	Exh		**10-2258S**	1.646 Head Dia. 7.621 OAL. 20 Deg. Inconel, Stellite. OEM# 212-0933

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 30	**14.6L 3406 3406B, 3408, 3412 D, Natl. Gas**			**6-12 BORE - 5.40"/137.2mm**
Valve	Int		**10-13430S**	1.771 Head Dia. 7.766 OAL. 20 Deg. Inconel, Stellite. OEM # 3581229. Late Model Long
	Int		**10-1462S**	1.771 Head Dia. 7.140 OAL. 30 Deg. Stellite. OEM # 4W5374, 2W2622, 1152368
	Int		**10-2259S**	1.771 Head Dia. 7.621 OAL. 20 Deg. Inconel, Stellite. OEM# 212-0932
Valve Seat Insert	Exh		**22-1687-1N**	1-7/16T I.D. 1.687 O.D. 0.365 Depth. OEM Replacement w/ Std. O.D. For OEM #'s 9S9699, 1W5283. O/S Use 22-1693-1N
	Exh		**22-1687-3N**	1.400 I.D. 1.687 O.D. 0.365 Depth. Natl. Gas OEM # 4W4325
	Exh		**22-1687-4N**	1.410 I.D. 1.6875 O.D. 0.365 Depth. Natl. Gas. Use w/ 10-1632S. OEM # 6I4014 +10,20,30 O/S Avail.
	Exh		**22-1687-5S**	1.318T I.D. 1.687 O.D. 0.315 Depth. Spark Ignited. +10, +20 O/S Avail. OEM # 2120936
	Exh		**22-1693-1N**	1-7/16T I.D. 1.693 O.D. 0.365 Depth +5,+10, +20,+30,+40 O/S Avail.
	Int		**22-1812-3**	1.540T I.D. 1.812 O.D. 0.365 Depth, OEM Replacement w/ Std. O.D. For OEM # 4N5893. O/S Use 22-1817-3
	Int		**22-1812-6N**	1.540 I.D. 1.8125 O.D. 0.365 Depth. Natl. Gas.
	Int		**22-1812-7**	1.540 I.D. 1.812 O.D. 0.365 Depth Late Style w/ Swirl Plate. OEM # 1152358 +10 O/S Avail.
	Int		**22-1813-1**	1.540 I.D. 1.813 O.D. 0.315 Depth. Spark Ignited. +10,20 O/S Avail. OEM # 2143286
	Int		**22-1817-3**	1.540T I.D. 1.812 O.D. 0.365 Depth. +10,+20, +30,+40 O/S Avail.
Guide	Both		**30-3014**	3.050 OAL. Use w/ Dual Spring, 38-229-45 Seal. OEM # 122-7374
	Both		**30-3138**	3.255 OAL. 0.374 I.D. 0.689 O.D. OEM # 1511330
	Both		**30-3174**	3.075 OAL. 0.3740 I.D. 0.3890 O.D.
	Both		**30-7216**	3.250 OAL. 0.375 I.D. Nitrocarburized - Recommended. +2 O/S Avail. OEM # 4N2803
	Both		**30-7216SA**	Special Alloy 30-7216
	Both		**30-7216U**	3.250 OAL. Undersize 0.374 I.D.
	Both		**30-7736**	3.250 OAL. Same As 30-7216 w/ 0.001 Smaller I.D.
	Both		**30-8319**	3.250 OAL. Natl. Gas. CounterBored. OEM # 7W1636
	Both		**30-8485**	3.250 OAL. Natl. Gas. Heat Treated. Counterbored Both Ends. +2 O/S Avail. OEM # 1511329
	Exh		**30-3052**	4.130 OAL Taller for Natl. Gas. OEM # 2137537
	Int		**30-3051**	3.730 OAL Taller for Natl. Gas. OEM # 2137536
Spring	Both		**32-1173**	A Model. 2.500 Free Length. Single. OEM # 4N5906
	Both		**32-1293**	B Model. Outer. 2.341 Free Length Dual. OEM # 4W2471.
	Both		**32-1294**	B Model. Inner. 2.678 Free Length. Dual. OEM # 4W2472
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Rotator	Both		**37-2474**	Rotator. w/ Dual Spring. OEM # 4W2474
	Both		**37-7175**	Rotator. Sold With Oil Shield. Use w/ Single Spring. OEM # 6N7175, 6N7154
Valve Stem Seal	Both		**38-229-45**	Viton. Metal Clad. Use w/ Dual Spring, 30-3014 Guide. OEM# 102-6229 3406B
	Both		**38-2882-35**	Glass Filled Nylon. Umbrella. Use w/ Single Spring. OEM # 6N7174
	Both		**38-3044-45**	Viton. Top Hat. OEM # 2146051, 2503044
Expansion Plug Kit			**97-82SS**	3406, 3408 Stainless Steel Kit
LINE 31	**14.6L 3406C, 3408C, 3412C 24V**			**6-12 BORE - 5.40"/137.16mm**
Valve	Exh		**10-1468S**	1.646 Head Dia. 7.140 OAL. 45 Deg. Stellite. OEM # 7N4580, 1W3860, 1152367

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 31	**14.6L 3406C, 3408C, 3412C 24V**			**6-12 BORE - 5.40"/137.16mm**
Valve	Exh		**10-1831S**	1.646 Head Dia. w/ Hyd. Electronic Injection Stellite. OEM # 122-0321
	Int		**10-1462S**	1.771 Head Dia. 7.140 OAL. 30 Deg. Stellite. OEM # 4W5374, 2W2622, 1152368
	Int		**10-1830S**	1.771 Head Dia. w/ Hyd. Electronic Injection Stellite. OEM # 122-0322
Valve Seat Insert	Exh		**22-1687-1N**	1-7/16T I.D. 1.687 O.D. 0.365 Depth. OEM Replacement w/ Std. O.D. For OEM #'s 9S9699 & 1W5283. O/S Use 22-1693-1N
	Exh		**22-1693-1N**	1-7/16T I.D. 1.693 O.D. 0.365 Depth +5,+10, +20,+30,+40 O/S Avail.
	Int		**22-1812-3**	1.540T I.D. 1.812 O.D. 0.365 Depth, OEM Replacement w/ Std. O.D. For OEM # 4N5893. O/S Use 22-1817-3
	Int		**22-1817-3**	1.540T I.D. 1.812 O.D. 0.365 Depth. +10,+20, +30,+40 O/S Avail.
Guide	Both		**30-3014**	3.050 OAL. OEM # 122-7374
	Both		**30-7216**	3.250 OAL. 0.375 I.D. Nitrocarburized - Recommended. +2 O/S Avail. OEM # 4N2803
	Both		**30-7216SA**	Special Alloy 30-7216
	Both		**30-7216U**	3.250 OAL. Undersize 0.374 I.D.
Spring	Both		**32-1173**	2.500 Free Length. Single Spring OEM # 4N5906
	Both		**32-1293**	2.341 Free Length. Dual Spring. Outer. OEM # 4W2471
	Both		**32-1294**	2.678 Free Length. Dual Spring. Inner. OEM # 4W2472
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Rotator	Both		**37-2474**	Rotator. w/ Dual Spring. OEM # 4W2474
	Both		**37-7175**	Rotator. Sold With Oil Shield. Use w/ Single Spring. OEM # 6N7175, 6N7154
Valve Stem Seal	Both		**38-229-45**	Viton. Metal Clad
	Both		**38-2882-35**	Glass Filled Nylon. Umbrella. Use w/ Single Spring. OEM # 6N7174
LINE 32	**14.6L 3406E, 3408E, 3412E, 3456 24-48V D TRB**			**6-12 BORE - 5.40"/137.2mm**
Valve	Exh		**10-1912**	1.646 Head Dia. 2 Groove, Replaces Earlier 1 Groove. OEM # 1085911, 1537024, 1527585. Must Replace Rocker Bridge w/ New Valves
	Int		**10-1911**	1.850 Head Dia. 2 Groove, Replaces Earlier 1 Groove. OEM # 1085910, 1537023, 1528380. Must Replace Rocker Bridge w/ New Valves
Valve Seat Insert	Exh		**22-1687-1N**	1-7/16T I.D. 1.687 O.D. 0.365 Depth. OEM Replacement w/ Std. O.D. For OEM #'s 9S9699, 1W5283. O/S Use 22-1693-1N
	Exh		**22-1687-6S**	1.437T I.D. 1.687 O.D. 0.365 Depth. OEM # 2265561
	Exh		**22-1693-1N**	1-7/16T I.D. 1.693 O.D. 0.365 Depth +5,+10, +20,+30,+40 O/S Avail
	Int		**22-1891-1**	1.615T I.D. 1.891 O.D. 0.306 Depth. +5, 10 O/S Avail. OEM # 1564168, 1753617, 1085912
	Int		**22-1891-2**	1.615T I.D. 1.891 O.D. 0.306 Depth. OEM # 2803979, 2243983
Guide	Both		**30-3007**	3.358 OAL. OEM # 1227375. +2, +5 O/S Avail.
Spring	Both		**32-04000**	3.285 Length. Outer. OE# 211-3123
	Both		**32-04001**	2.980 Free Length. Inner. OEM # 2113122
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Rotator	Both		**37-2001**	Rotator. OEM # 186-2001
Valve Stem Seal	Both		**38-229-45**	Viton. Metal Clad. OEM # 1026229, 1632478
Rocker Component	Both		**42-3400**	Rocker Bridge. OEM # 3487743, 3633731, 6I1458
Injector Component			**87-2903**	Injector O-Ring, Large, Top for 87-4239. OEM # 1662903
			87-2904	Injector O-Ring. Middle for 87-4239, Middle/Top for 87-4920. OEM # 1662904
			87-4239	Injector Tube, Stainless. OEM # 2274239
			87-4239K	Injector Kit, Stainless w/ 3 O-Rings

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 32	**14.6L 3406E, 3408E, 3412E, 3456 24-48V D TRB**		**6-12**	**BORE - 5.40"/137.2mm**
Injector Component			**87-4920**	Injector Tube. Stainless. OEM # 2634920
			87-4920K	Injector Tube Kit, Stainless w/ 2 87-2904, 1 87-7430
			87-7430	Injector O-Ring, Small, Bottom. OEM# 9X7430
LINE 33	**14.6L 1693, D343/A, D346, D348, D349 12-64V TRB**		**6-16**	**BORE - 5.40"/137.16mm**
Valve	Exh		**10-1145S**	1.646 Head Dia. Stellite. OEM # 7E7830
	Int		**10-1146S**	1.771 Head Dia. Stellite. OEM # 1N4885, 4N9623
Valve Seat Insert	Exh		**22-1687-1N**	1-7/16T I.D. 1.687 O.D. 0.365 Depth. OEM Replacement w/ Std. O.D. For OEM #'s 9S9699 & 1W5283. O/S Use 22-1693-1N
	Exh		**22-1693-1N**	1-7/16T I.D. 1.693 O.D. 0.365 Depth. +5,+10, +20,+30,+40 O/S Avail.
	Exh		**22-1693-2**	1-7/16T I.D. 1.693 O.D. 3/8 Depth. +10, +20 & +30 O/S Avail. w/ +10 Larger Depth
	Int		**22-1812-1**	1-9/16T I.D. 1.812 O.D. 0.365 Depth, OEM Replacement w/ Std. O.D. For OEM # 9M3205 O/S Use 22-1818-1
	Int		**22-1812-2**	1-9/16T I.D. 1.812 O.D. 3/8 Depth, OEM Replacement w/ +10 Larger Depth O/S Use 22-1818-2
	Int		**22-1818-1**	1-9/16T I.D. 1.818 O.D. 0.365 Depth, +10, +20 & +30 O/S Avail.
	Int		**22-1818-2**	1-9/16T I.D. 1.818 O.D. 3/8 Depth, +10, +20 & +30 O/S Avail., w/ +10 Larger Depth
Guide	Both		**30-7255**	2.815 OAL. Nitrocarburized. +2 O/S Avail. OEM # 6N2236
Spring	Both		**32-950**	D343, D343A, 1693. OEM # 2S4213. 2.310 Free Length
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Rotator	Both		**37-6761**	Rotator. OEM # 4N6761
Expansion Plug Kit			**97-78SS**	Stainless Steel Kit
LINE 34	**15.2L C15, C16, C18, C27, C32 24V-48V**		**L6-12**	**BORE - 5.40"/137.0mm**
Valve Kit	Both		**10-VKCATC15-5**	24V Kit with 24 Valves, 24 Guides, 48 Keepers, 24 Stem Seals, and 6 Injector Tubes with O-Rings
	Both		**10-VKCATC15-6**	24V Kit with 24 Valves, 24 Guides, 24 Springs, 48 Keepers, 24 Stem Seals, and 6 Injector Tubes with O-Rings
Valve	Exh		**10-1912**	1.646 Head Dia. OEM# 153-7024. Must Replace Rocker Bridge w/ New Valves.
	Int		**10-1911**	1.850 Head Dia. OEM# 153-7023. Must Replace Rocker Bridge w/ New Valves.
Valve Seat Insert	Exh		**22-1687-1N**	1-7/16T I.D. 1.687 O.D. 0.365 Depth. OEM 1-7/16T I.D. 1.687 O.D. OEM # 1527582. O/S Use 22-1693-1N
	Exh		**22-1687-6S**	1.437T I.D. 1.687 O.D. 0.365 Depth. OEM # 2265561
	Exh		**22-1693-1N**	1-7/16T I.D. 1.693 O.D. 0.365 Depth +5,+10, +20,+30,+40 O/S Avail.
	Int		**22-1891-1**	1.615T I.D. 1.891 O.D. 0.306 Depth. +5, 10 O/S Avail. OEM # 1564168, 1753617, 1085912
	Int		**22-1891-2**	1.615T I.D. 1.891 O.D. 0.306 Depth. OEM # 2803979, 2243983
Guide	Both		**30-3007**	3.358 OAL. OEM # 1227375. +2, +5 O/S Avail.
	Both		**30-3174**	3.075 OAL. 0.3740 I.D. 0.3890 O.D.
Spring	Both		**32-04000**	3.205 Free Length. Outer. OEM # 211-3123
	Both		**32-04001**	2.980 Free Length. Inner. OEM # 211-3122
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Rotator	Both		**37-2001**	Rotator. OEM # 186-2001
Valve Stem Seal	Both		**38-229-45**	Viton. Metal Clad. OEM # 1026229, 1632478
Rocker Component			**42-3400**	Rocker Bridge. OEM # 3487743, 3633731, 6I1458
Injector Component			**87-2903**	Injector O-Ring, Large, Top for 87-4239. OEM # 1662903

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 34	**15.2L C15, C16, C18, C27, C32 24V-48V**			**L6-12 BORE - 5.40"/137.0mm**
Injector Component			**87-2904**	Injector O-Ring. Middle for 87-4239, Middle/Top for 87-4920. OEM # 1662904
			87-4239	Injector Tube, Stainless. OEM # 2274239
			87-4239K	Injector Kit, Stainless w/ 3 O-Rings
			87-4920	Injector Tube. Stainless. OEM # 2634920
			87-4920K	Injector Tube Kit, Stainless w/ 2 87-2904, 1 87-7430
			87-7430	Injector O-Ring, Small, Bottom. OEM# 9X7430
LINE 35	**3508, 3512, 3516, 3508B, 3516B, 3520, 3160, G3500**			**V8-24 BORE - 6.70"/170.2mm**
Valve	Both		**10-1498S**	2.205 Head Dia. 0.3717 Stem. 30 Deg. Stellite. OEM #'s 7E4609 & 7C6217
	Both		**10-1584S**	2.205 Head Dia. 0.3717 Stem. 20 Deg. Stellite. Spark Ignited. OEM # 104-7184
	Both		**10-3228S**	2.205 Head Dia. Stellite. For G3500, Natl. Gas. OEM # 3074641
	Exh		**10-2168S**	2.205 Head Dia. 45 Deg. 0.495 Stem. OEM# 1944897
	Int		**10-1804**	2.205 Head Dia. 0.3717 Stem. 20 Deg. OEM # 121-1028, 210-2542
Valve Seat Insert	Both		**22-2388-1N**	1.890 I.D. 2.388 O.D. 0.460 Depth. OEM # 2064442
	Both		**22-2388-1N**	1.890 I.D. 2.388 O.D. 0.460 Depth. OEM # 2064442
	Exh		**22-2366-2N**	1.977 I.D. 2.3665 O.D. 0.392 Depth OEM # 130-2608
	Exh		**22-2367-1**	2.045 I.D. 2.367 O.D. 0.382 Depth. Exc. Natl. Gas
	Int		**22-2368-3N**	1.870 I.D. 2.368 O.D. 0.460 Depth. Natl. Gas Late Style w/ Swirl Plate. OEM # 1225963
	Int		**22-2387-1**	1.970 I.D. 2.387 O.D. 0.382 Depth. Exc. Natl. Gas.
	Int		**22-2387-2**	1.890 I.D. 2.3875 O.D. 0.361 Depth. OEM # 130-2607
	Int		**22-2388-2N**	1.890T I.D. 2.388 O.D. 0.460 Depth. OEM # 2668718
Guide	Both		**30-7632**	4.060 OAL. 0.689 O.D. 0.3745 I.D.
	Both		**30-8118**	4.060 OAL. 0.689 O.D. 0.3745 I.D. w/ Chamfer Both Ends. Natl. Gas. OEM # 9Y1847
	Both		**30-8679**	4.060 OAL. 0.3735 I.D. Use w/ 3/8 Stem. Late Style w/ Step for Stem Seal. OEM #s 7N1819, 133-9306
	Exh		**30-3035**	4.050 OAL. 0.6885 O.D. w/ Step For Seal. 0.3715 I.D. w/ Oil Baffle. OEM # 1845494
	Exh		**30-3042**	4.055 OAL. 0.4977 I.D. Use w/ 0.495 Stem. OEM # 1976995
	Exh		**30-3140**	3.620 OAL. 0.689 O.D. 0.373 I.D. OEM # 2061541
	Exh		**30-3195**	3.625 OAL. 0.3733 I.D. 0.6888 O.D. OEM # 255-0897. W/ Step Fro Stem Seal. W/ Oil Baffle
	Exh		**30-8383**	3.600 OAL (Short Version). 0.689 O.D. 0.3745 I.D. w/ Chamfer Both Ends. Natl. Gas. OEM # 9Y1846
	Int		**30-3036**	4.050 OAL. 0.6885 O.D. w/ Step for Seal. 0.3715 I.D. w/ Oil Baffle.
	Int		**30-3139**	4.055 OAL. 0.689 O.D. 0.373 I.D. OEM # 1916766
Spring	Both		**32-04901**	3.030 Free Length. Outer. OEM # 1944901
	Both		**32-04902**	2.466 Free Length. Inner OEM # 1944902
	Both		**32-2470**	2.075 Free Length. Inner. OEM # 7N-1903
	Both		**32-2471**	2.500 Free Length. Outer. OEM # 7N-1904
	Both		**32-5976**	Outer. 2.840 Free Length. OEM # 3165977
	Both		**32-5977**	Inner. 3.017 Free Length. OEM # 3165976
Keeper	Both		**34-5019**	1 Square Groove. OEM # 1977055
	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
Rotator	Both		**37-6999**	Rotator. OEM # 1976999

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 35	**3508, 3512, 3516, 3508B, 3516B, 3520, 3160, G3500**			**V8-24 BORE - 6.70"/170.2mm**
Rotator	Both		**37-7062**	Rotator. 0.372 Stem. OEM # 1977062
	Exh		**37-5979**	OEM # 3165979. Updated for Head Group 2014257, 3172440. Use w/ 32-5976, 32-5977
	Exh		**37-7063**	Rotator. 0.495 Stem. OEM # 1977063
	Int		**37-5978**	OEM # 3165978. Updated for Head Group 2014257, 3172440. Use w/ 32-5976, 32-5977
Valve Stem Seal	Both		**38-6139-55**	Top Hat. Viton. OEM # 2289673
	Both		**38-6490-55**	Top Hat. Viton. OEM # 3165980. Updated for Head Group 2014257, 3172440. Use w/ 32-5976, 32-5977
	Both		**38-856-45**	Top Hat. Viton. Use w/ 30-8679. OEM # 137-6856
LINE 36	**D353, D379, D398, G353, G379, G398, D9, D399, G399**			**L6-V1 BORE - 6.25"/158.75mm**
Valve	Exh		**10-1460S**	2.350 Head Dia. OEM # 1W1822. Late Style 2 Groove
	Exh		**10-1476S**	2.350 Head Dia. Stellite. OEM# 2W-3211
	Exh		**10-751S**	2.350 Head Dia. 0.4955 Stem Dia. OEM # 8N3723 Tapered Groove
	Int		**10-1461S**	2.350 Head Dia. 0.3717 Stem Dia. OEM # 1W1822. Late Style 2 Groove
	Int		**10-752S**	2.505 Head Dia. 0.4955 Stem Dia. OEM # 7M7817 Tapered Groove
Valve Seat Insert	Int		**22-2590-1**	2-9/32T I.D. 2.590 O.D. 5/8 Depth, +10, +20, +30 & +40 O/S Avail., OEM # 5S1757
Guide	Exh		**30-7073**	5.450 OAL. w/ 0.3717 Stem Dia. +2 O/S Avail. OEM # 2N9299
	Exh		**30-7073H**	5.450 OAL. w/ 0.3717 Stem Dia. +5 O/S Avail. OEM # 2N9299. Hardened
	Exh		**30-7357**	5.438 OAL. Nitrocarburized Counterbored w/ 0.4955 Stem Dia. +2 O/S Avail. OEM # 6N8847
	Int		**30-7074H**	5.065 OAL. w/ 0.3717 Stem Dia. +5 O/S Avail. OEM # 2N9298. Hardened
	Int		**30-7083**	5.045 OAL. Non-Flanged. Nitrocarburized. w/ 0.4955 Stem Dia. OEM # 4N3664
Spring	Both		**32-944**	2.179 Free Length. Inner. OEM # 9M5349
	Both		**32-945**	2.574 Free Length. Outer. OEM # 9M5350
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
	Both		**34-816**	Tapered Groove. 3 Required. OEM # 3B1143
Lifter	Both		**36-7013**	Mechanical. OEM # 2H3069
Rotator	Exh		**37-7639**	Rotator. OEM # 4S7468, 7N7639.

ENGINE	YEAR	CYL.	LINE NO.
2.8L 170, 3.2L 198 12V		L6	**1**
2.8L H170, IND170, 3.7L H225, IND225 12V		L6	**2**
201 C.I. (3.3L) IND201 12V		L6	**3**
3.6L IND5/A, IND218, T112, 3.8L IND230, 31, 6/A, 116		L6	**4**
3.9L 7/A, 4.1L 8/A 4.3L IND16/A, 32, 33, 237 12V		L6	**5**
3.8L IND10, 3.9L IND18/A, 4.5L 19/A, 5.4L 54 16V		V8	**6**
4.4L IND52 16V		V8	**7**
5.2L H/HA/HB/HC/HT318, LH/LT318 16V		V8	**8**
IND-24/A, IND56/A 16V		V8	**9**
361 C.I. (5.9L) LPG 16V	1960-77	V8	**10**
HB361, HC361, HT361, HB413, HC413 16V		V8	**11**
H361, H383, HA383, HB383, H413 16V		V8	**12**
H400, H440 16V		V8	**13**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**2.8L 170, 3.2L 198 12V**			**L6** **BORE - 3.40"/86.4mm**
Valve Seat Insert	Exh		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth.
	Exh		**20-1500-1N**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth. Nickel
	Int		**20-1750-1**	1-1/2 I.D. 1-3/4 O.D. 1/4 Depth.
	Int		**20-1750-1N**	1-1/2 I.D. 1-3/4 O.D. 1/4 Depth. Nickel
Spring	Int		**32-672**	2.000 Free Length
Keeper	Exh		**34-766**	4 Groove. Heat Treated
	Int		**34-746**	2 Round Beads. OEM # 381875.
LINE 2	**2.8L H170, IND170, 3.7L H225, IND225 12V**			**L6** **BORE - 3.40"/86.4mm**
Valve	Exh		**10-1265**	1.360 Head Dia. 4 Groove. +5, +30 O/S Stem Avail.
	Int		**10-567**	1.620 Head Dia. 2 Groove. +15 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Int		**20-1750-1**	1-1/2 I.D. 1-3/4 O.D. 1/4 Depth.
Guide	Exh		**30-6108**	2.375 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Exh		**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Exh		**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D. Hardened
	Int		**30-6113**	2.375 OAL 0.3745 Plain I.D. 0.5020 O.D.
	Int		**30-9113**	2.375 OAL. 0.3745 Spiral I.D. 0.502 O.D.
Spring	Int		**32-672**	1.394/1.414 O.D. 2.000 Free Length. OEM # 1739534
Keeper	Exh		**34-766**	4 Groove. Heat Treated. OEM # 1614666
	Int		**34-746**	2 Round Beads. OEM # 381875.
Lifter	Both		**36-2084**	Mechanical High Performance
	Both		**36-2089**	Hydraulic
Valve Stem Seal	Both		**38-530-15**	Nitrile. Umbrella.
	Both		**38-530-45**	Viton. Umbrella.
	Both		**38-780-15**	Nitrile. Umbrella.
	Exh		**38-780-25**	Polyacrylic. Umbrella.
	Int		**38-530-25**	Polyacrylic. Umbrella.
Rocker Component	Both		**40-2844**	Rocker Arm. Stamped
LINE 3	**201 C.I. (3.3L) IND201 12V**			**L6** **BORE - 3.25"/82.5mm**
Valve Seat Insert	Exh		**20-1562-4+010**	1-5/16 I.D. 1.577 O.D. 1/4 Depth
	Int		**20-1562-1**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. +5, 10 O/S Avail.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 3	**201 C.I. (3.3L) IND201 12V**			**L6 BORE - 3.25"/82.5mm**
Guide	Exh		**30-1337**	2.813 OAL. 0.3445 I.D. 0.6575 O.D.
	Int		**30-1338**	2.813 OAL
LINE 4	**3.6L IND5/A, IND218, T112, 3.8L IND230, 31, 6/A, 116**			**L6 BORE - 3.25"/82.5mm**
Valve	Exh		**10-185**	1.407 Head Dia.
	Int		**10-349**	1.531 Head Dia. +15 O/S Avail.
Valve Seat Insert	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Int		**20-1812-1**	1-9/16 I.D. 1-13/16 O.D. 1/4 Depth. +20 O/S Avail.
	Exh		**22-1516-1**	1-1/4 I.D. 1.516 O.D. 1/4 Depth
Guide	Exh		**30-1337**	2.813 OAL. 0.3445 I.D. 0.6575 O.D.
	Int		**30-1338**	2.813 OAL
LINE 5	**3.9L 7/A, 4.1L 8/A 4.3L IND16/A, 32, 33, 237 12V**			**L6 BORE - 3.40"/87.3mm**
Valve Seat Insert	Exh		**20-1625-2**	1-3/8 I.D. 1-5/8 O.D. 1/4 Depth. +10 O/S Avail.
	Int		**20-1812-1**	1-9/16 I.D. 1-13/16 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Exh		**30-1337**	2.813 OAL. 0.3445 I.D. 0.6575 O.D.
	Int		**30-1338**	2.813 OAL
LINE 6	**3.8L IND10, 3.9L IND18/A, 4.5L 19/A, 5.4L 54 16V**			**V8 BORE - 3.437"/87.3mm**
Valve Seat Insert	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. +10 O/S Avail.
	Int		**20-1812-1**	1-9/16 I.D. 1-13/16 O.D. 1/4 Depth. +20 O/S Avail.
	Exh		**22-1516-1**	1-1/4 I.D. 1.516 O.D. 1/4 Depth
LINE 7	**4.4L IND52 16V**			**V8 BORE - 3.62"/92mm**
Valve Seat Insert	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. +10 O/S Avail.
	Exh		**22-1516-1**	1-1/4 I.D. 1.516 O.D. 1/4 Depth
Guide	Exh		**30-6108**	2.375 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Exh		**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Exh		**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D. Hardened
	Int		**30-6113**	2.375 OAL 0.3745 Plain I.D. 0.5020 O.D.
	Int		**30-9113**	2.375 OAL. 0.3745 Spiral I.D. 0.502 O.D.
Spring	Int		**32-672**	2.000 Free Length. OEM # 1739534
Keeper	Exh		**34-766**	4 Groove. Heat Treated. OEM # 1614666
	Int		**34-746**	2 Round Beads. OEM # 381875.
LINE 8	**5.2L H/HA/HB/HC/HT318, LH/LT318 16V**			**V8 BORE - 3.91"/99.3mm**
Valve	Exh		**10-1329**	1.500 Head Dia. 4 Groove. +5, 15, 30 O/S Avail.
	Exh		**10-518**	1.563 Head Dia. 4 Groove
	Int		**10-514**	1.844 Head Dia. 2 Groove
	Int		**10-938**	1.780 Head Dia. 2 Groove. +5, 15, 30 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Exh		**20-1687-2**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth
	Int		**20-1750-1**	1-1/2 I.D. 1-3/4 O.D. 1/4 Depth.
Guide	Exh		**30-6108**	2.375 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Exh		**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Exh		**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D. Hardened
	Int		**30-5610**	2.625 OAL 0.3750 Plain I.D. 0.5020 O.D.
	Int		**30-9610**	2.625 OAL. 0.375 Spiral I.D. 0.502 O.D.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 8	**5.2L H/HA/HB/HC/HT318, LH/LT318 16V**			**V8 BORE - 3.91"/99.3mm**
Spring	Both		**32-672**	2.000 Free Length. OEM # 1739534
	Both		**32-991**	2.068 Free Length
Keeper	Exh		**34-766**	4 Groove. Heat Treated. OEM # 1614666
	Int		**34-746**	2 Round Beads. OEM # 381875.
Lifter	Both		**36-2011CCI**	Hydraulic Flat. 1-pc. Chilled Cast Iron
	Both		**36-2084**	Mechanical High Performance
Valve Stem Seal	Both		**38-530-15**	Nitrile. Umbrella.
	Both		**38-530-45**	Viton. Umbrella.
	Both		**38-780-15**	Nitrile. Umbrella.
	Exh		**38-780-25**	Polyacrylic. Umbrella.
	Int		**38-530-25**	Polyacrylic. Umbrella.
Rocker Component	Both		**40-2892**	Rocker Arm, LH. Stamped
	Both		**40-2893**	Rocker Arm, RH. Stamped
			42-2661	Rocker Shaft. 2 Required w/ Hyd. Lifter
LINE 9	**IND-24/A, IND56/A 16V**			**V8 BORE - 3.8125"/96.8mm**
Guide	Exh		**30-1740**	2.813 OAL. 0.6895 O.D. 0.3745 I.D.
	Int		**30-1803**	2.938 OAL. After S/N 5001
LINE 10	**361 C.I. (5.9L) LPG 16V**			**1960-77 V8 BORE - 4.125"/104.8mm**
Valve	Exh		**10-1017S**	1.500 Head Dia. Stellite Faced. 2 Groove. +5 O/S Avail.
	Exh		**10-576**	1.500 Head Dia. 2 Groove
	Int		**10-577**	1.880 Head Dia. 4 Groove. +15 O/S Stem Avail.
Valve Seat Insert	Int		**20-2000-1**	1-3/4 I.D. 2.000 O.D. 7/32 Depth. Nickel (-N) Also Avail.
	Exh		**22-1624-1N**	1-21/64 I.D. 1.6245 O.D. 3/8 Depth. LPG, Propane, Natl. Gas
Guide	Exh		**30-1839**	3.090 OAL. OEM # 1851674. Plain I.D.
Keeper	Exh		**34-746**	2 Round Beads. OEM # 381875.
	Int		**34-766**	4 Groove. Heat Treated. OEM # 1614666
Rocker Component	Both		**40-2850**	Rocker Arm. Stamped. LH
	Both		**40-2851**	Rocker Arm. Stamped. RH
			42-2701	Rocker Shaft. 2 Required
LINE 11	**HB361, HC361, HT361, HB413, HC413 16V**			**V8 BORE - 4.125"/104.8mm**
Valve	Exh		**10-1017S**	1.500 Head Dia. Stellite Faced. 2 Groove. +5 O/S Avail.
	Exh		**10-576**	1.500 Head Dia. 2 Groove
	Int		**10-577**	1.880 Head Dia. 4 Groove. +15 O/S Stem Avail.
Valve Seat Insert	Int		**20-2000-1**	1-3/4 I.D. 2.000 O.D. 7/32 Depth. +20 O/S, Nickel (-N) Also Avail.
	Exh		**22-1624-1N**	1-21/64 I.D. 1.6245 O.D. 3/8 Depth
Guide	Exh		**30-1839**	3.090 OAL. OEM # 1851674. Plain I.D.
Keeper	Exh		**34-746**	2 Round Beads. OEM # 381875.
	Int		**34-766**	4 Groove. Heat Treated. OEM # 1614666
Lifter	Both		**36-976**	HB413
Rocker Component	Both		**40-2850**	Rocker Arm. Stamped. LH
	Both		**40-2851**	Rocker Arm. Stamped. RH
			42-2701	Rocker Shaft. 2 Required
LINE 12	**H361, H383, HA383, HB383, H413 16V**			**V8 BORE - 4.125"/104.8mm**
Valve	Exh		**10-520**	1.600 Head Dia. 4 Groove

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 12	**H361, H383, HA383, HB383, H413 16V**			**V8 BORE - 4.125"/104.8mm**
Valve	Int		**10-548**	2.080 Head Dia. 2 Groove. +15 O/S Stem May Be Avail.
Valve Seat Insert	Exh		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. +10 O/S Avail.
Guide	Exh		**30-1839**	3.090 OAL. OEM # 1851674. Plain I.D.
	Exh		**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Exh		**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D. Hardened
	Int		**30-9113**	2.375 OAL. 0.3745 Spiral I.D. 0.502 O.D.
Keeper	Exh		**34-766**	4 Groove. Heat Treated. OEM # 1614666
	Int		**34-746**	2 Round Beads. OEM # 381875.
Lifter	Both		**36-976**	Hydraulic
Rocker Component	Both		**40-2850**	Rocker Arm. Stamped. LH
	Both		**40-2851**	Rocker Arm. Stamped. RH
			42-2701	Rocker Shaft. 2 Required
Push Rod	Both		**74-6321**	8.575 Length. Trucks Exc. Motor Homes
LINE 13	**H400, H440 16V**			**V8 BORE - 4.32"/109.7mm**
Valve	Exh		**10-1156**	1.740 Head Dia. 4 Groove, +15 O/S Stem Avail. +15 O/S Stem May Be Avail.
	Int		**10-548**	2.080 Head Dia. 2 Groove. +15 O/S Stem May Be Avail.
Valve Seat Insert	Exh		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
	Int		**20-2250-1**	1-15/16 I.D. 2-1/4 O.D. 3/16 Depth. +10 O/S Avail.
Guide	Both		**30-6113**	2.375 OAL 0.3745 Plain I.D. 0.5020 O.D.
	Both		**30-9113**	2.375 OAL. 0.3745 Spiral I.D. 0.502 O.D.
Keeper	Exh		**34-766**	4 Groove. Heat Treated. OEM # 1614666
	Int		**34-746**	2 Round Beads. OEM # 381875.
Lifter	Both		**36-976**	Hydraulic
Rocker Component	Both		**40-2850**	Rocker Arm. Stamped. LH
	Both		**40-2851**	Rocker Arm. Stamped. RH
			42-2701	Rocker Shaft. 2 Required
Push Rod	Both		**74-6321**	8.575 Length. Trucks Exc. Motor Homes
	Both		**74-6323**	9.315 Length. '68-78 Pass. '74-79 Trucks. '73-77 Motor Homes

ENGINE	YEAR	CYL.	LINE NO.
1.0L N4062, N62 8V		L4	**1**
1.1L Y4069, LY/PY/Y69, 1.5L LY/PY/Y91 Y4091 8V		L4	**2**
1.3L TM13, 2.0L TM/TMD20, 2.7L TM27 4-8V		L2-4	**3**
1.8L PY112, Y112, Y4112 8V		L4	**4**
2.0L Z120 8V		L4	**5**
2.1L F/LF/PF124, F4124, 2.3L F/LF/PF140, F4140 8V		L4	**6**
2.1L Z129, 2.2L Z134, 2.1L Z145 8V		L4	**7**
2.2L F135, F163 8V		L4	**8**
2.6L F162, F4162, LF162, PF162 8V		L4	**9**
2.9L G176, G176 LPG 8V		L4	**10**
3.0L F186, F6186 12V		L6	**11**
3.2L G193, G4193		L4	**12**
3.3L E201, E208/ LPG, E223/LPG, E242/LPG 8V		L4	**13**
3.3L DS202 Diesel 12V		L6	**14**
3.4L 24B, F209, F6209, PF209 12V		L6	**15**
3.7L F226, F6226, PF226 12V		L6	**16**
3.7L F227, F245 12V		L6	**17**
4.3L HD260, HD277 Diesel 8V		L4	**18**
4.3L H260, H277 8V		L4	**19**
4.4L M271, 4.7L M290, 5.4L M330 12V		L6	**20**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.0L N4062, N62 8V**			**L4** **BORE - 2.375"/60.3mm**
Valve Seat Insert	Both		**20-1000-1**	3/4 I.D. 1 O.D. 3/16 Depth
Guide	Both		**30-1678**	1.658 OAL. OEM # N62I200
LINE 2	**1.1L Y4069, LY/PY/Y69, 1.5L LY/PY/Y91 Y4091 8V**			**L4** **BORE - 2.50"/63.5mm**
Valve	Exh		**10-489**	1.015 Head Dia. Use w/ Rotator & Late Style Valve Keeper. OEM # Z120T-161
Valve Seat Insert	Exh		**20-1125-1**	7/8 I.D. 1-1/8 O.D. 7/32 Depth
	Int		**20-1312-1**	1-1/16 I.D. 1-5/16 O.D. 3/16 Depth
Guide	Both		**30-1619**	2.281 OAL. OEM # Y400I209, Y400I232.
Spring	Both		**32-495**	2.063 Free Length. OEM # Y400I215
Keeper	Both		**34-614**	Heat Treated. OEM # Z120I235.
	Both		**34-822**	Pin For 0.13 Drilled Stem. OEM # Y400I205
LINE 3	**1.3L TM13, 2.0L TM/TMD20, 2.7L TM27 4-8V**			**L2-4** **BORE - 3.58"/91mm**
Guide	Both		**30-1962**	2.375 OAL. Nitrocarburized. OEM # F400I-251
Keeper	Both		**34-555**	1 Square Groove. Heat Treated.
LINE 4	**1.8L PY112, Y112, Y4112 8V**			**L4** **BORE - 3.188"/81mm**
Valve	Exh		**10-489**	1.015 Head Dia. Use w/ Rotator & Late Style Valve Keeper. OEM # Z120T-161
Valve Seat Insert	Exh		**20-1125-1**	7/8 I.D. 1-1/8 O.D. 7/32 Depth
	Int		**20-1312-1**	1-1/16 I.D. 1-5/16 O.D. 3/16 Depth
Guide	Both		**30-1619**	2.281 OAL. OEM # Y400I209, Y400I232.
Spring	Both		**32-495**	2.063 Free Length. OEM # Y400I215
Keeper	Both		**34-822**	Pin For 0.13 Drilled Stem. OEM # Y400I205
	Exh		**34-614**	Heat Treated. OEM # Z120I235.
Expansion Plug Kit			**97-49**	Steel Kit.
			97-49B	Brass Kit

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 5	**2.0L Z120 8V**			**L4 BORE - 3.188"/81mm**
Valve	Both		**10-489**	1.015 Head Dia. Use w/ Rotator & Late Style Valve Keeper. OEM # Z120T-161
Valve Seat Insert	Both		**20-1125-1**	7/8 I.D. 1-1/8 O.D. 7/32 Depth
Guide	Both		**30-1717**	1.813 OAL. OEM # Z129I-204
Spring	Both		**32-495**	2.063 Free Length. OEM # Y400I215
Keeper	Exh		**34-614**	Heat Treated. OEM # Z120I235.
	Int		**34-822**	Pin For 0.13 Drilled Stem. OEM # Y400I205
Valve Stem Seal	Both		**38-1046-75**	All Teflon. Machine Guide To 0.531 O.D.
LINE 6	**2.1L F/LF/PF124, F4124, 2.3L F/LF/PF140, F4140 8V**			**L4 BORE - 3.00"/76.2mm**
Valve	Exh		**10-170**	1.203 Head Dia. w/ Drilled Stem. OEM # F400T-296
	Int		**10-810**	1.516 Head Dia. w/ Drilled Stem. OEM # F600I-112
Valve Seat Insert	Exh		**20-1375-3N**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth. w/ 1.203 Valve Head Dia. LPG. Nickel
	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. w/ 1.328 Valve Head Dia.
	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. LPG. w/ 1.328 Valve Head Dia.
	Exh.		**20-1375-3**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth, w/ 1.203 Valve Head Dia.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
Guide	Both		**30-1620**	2.313 OAL. OEM # F400I-213
Spring	Both		**32-495**	2.063 Free Length. OEM # Y400I215
Keeper	Both		**34-159**	Pin For 0.30 Drilled Stem
	Exh		**34-822**	Pin For 0.13 Drilled Stem. OEM # Y400I205
LINE 7	**2.1L Z129, 2.2L Z134, 2.1L Z145 8V**			**L4 BORE - 3.25"/82.55mm**
Valve	Exh		**10-486**	1.140 Head Dia. Use w/ Rotator
	Int		**10-343**	1.278 Head Dia.
Valve Seat Insert	Exh		**20-1250-1**	1.000 I.D. 1-1/4 O.D. 7/32 Depth.
	Int		**20-1375-4**	1-1/8 I.D. 1-3/8 O.D. 3/16 Depth.
Guide	Both		**30-1717**	1.813 OAL. OEM # Z129I-204
Spring	Both		**32-495**	2.063 Free Length. OEM # Y400I215
Keeper	Exh		**34-614**	Heat Treated. OEM # Z120I235.
	Int		**34-822**	Pin For 0.13 Drilled Stem. OEM # Y400I205
Valve Stem Seal	Both		**38-1046-75**	All Teflon. Machine Guide To 0.531 O.D.
LINE 8	**2.2L F135, F163 8V**			**L4 BORE - 3.125"/79.375mm**
Valve	Exh		**10-1147**	1.203 Head Dia. Exc. LPG
	Int		**10-1148**	1.516 Head Dia. All
Valve Seat Insert	Exh		**20-1375-3**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth
	Exh		**20-1375-3N**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth. w/ 1.203 Valve Head Dia. LPG. Nickel
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Exh		**22-1348-1N**	1.087 I.D. 1.348 O.D. 0.200 Depth. Nickel
Guide	Both		**30-1962**	2.375 OAL. Nitrocarburized. OEM # F400I-251
Spring	Both		**32-495**	2.063 Free Length. OEM # Y400I215
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # CVT3234
Expansion Plug Kit			**97-50**	Steel Kit.
			97-50B	Brass Kit

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 9	**2.6L F162, F4162, LF162, PF162 8V**			**L4 BORE - 3.437"/87.3mm**
Valve	Exh		**10-170**	1.203 Head Dia. w/ Drilled Stem. OEM # F400T-296
	Int		**10-810**	1.516 Head Dia. w/ Drilled Stem. OEM # F600I-112
Valve Seat Insert	Exh		**20-1375-3**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth, w/ 1.203 Valve Head Dia.
	Exh		**20-1375-3N**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth. w/ 1.203 Valve Head Dia. LPG. Nickel
	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. w/ 1.328 Valve Head Dia.
	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. LPG. Nickel. w/ 1.328 Valve Head Dia.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
Guide	Int		**30-1620**	2.313 OAL. Exc. w/ Roto-Type Valve. OEM # F400I-213
Spring	Both		**32-495**	2.063 Free Length. OEM # Y400I215
Keeper	Both		**34-159**	Pin For 0.30 Drilled Stem
	Exh		**34-822**	Pin For 0.13 Drilled Stem. OEM # Y400I205
LINE 10	**2.9L G176, G176 LPG 8V**			**L4 BORE - 3.57"/90.8mm**
Valve	Int		**10-597**	1.328 Head Dia. OEM # G176I304, 830761M91
Valve Seat Insert	Int		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Exh		**22-1348-1N**	1.087 I.D. 1.348 O.D. 0.200 Depth. Nickel. LPG.
Guide	Both		**30-1833**	1.813 OAL. OEM # G176I200
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # CVT3234
LINE 11	**3.0L F186, F6186 12V**			**L6 BORE - 3.00"/76.2mm**
Valve	Int		**10-810**	1.516 Head Dia. w/ Drilled Stem. OEM # F600I-112
Valve Seat Insert	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
Guide	Both		**30-1515**	2.563 OAL
Spring	Both		**32-466**	1.969 Free Length. OEM # F600I232
Keeper	Both		**34-159**	Pin For 0.30 Drilled Stem
LINE 12	**3.2L G193, G4193**			**L4 BORE - 3.75"/95.2mm**
Valve	Exh		**10-210**	1.328 Head Dia. 1 Groove. Use w/ Rotator
Valve Seat Insert	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. Nickel
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # CVT3234
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber. Guide O.D. 0.562
LINE 13	**3.3L E201, E208/ LPG, E223/LPG, E242/LPG 8V**			**L4 BORE - 3.62"/92mm**
Valve Seat Insert	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. LPG. Nickel
	Int		**20-1562-1**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. +5, 10 O/S Avail.
	Int		**20-1687-1**	1-13/32 I.D. 1-11/16 O.D. 1/4 Depth
Guide	Both		**30-1673**	2.688 OAL. Plain I.D. Old Style. OEM # 1005916M1
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # CVT3234
LINE 14	**3.3L DS202 Diesel 12V**			**L6 BORE - 3.1250"/79.3mm**
Valve Seat Insert	Exh		**20-1375-3**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 15	**3.4L 24B, F209, F6209, PF209 12V**			**L6 BORE - 3.188"/81mm**
Valve	Exh		**10-170**	1.203 Head Dia. w/ Drilled Stem. OEM # F400T-296
	Exh		**10-210**	1.328 Head Dia.
	Int		**10-810**	1.516 Head Dia. w/ Drilled Stem. OEM # F600I-112
Valve Seat Insert	Exh		**20-1375-3**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth. w/ 1.203 Valve Head Dia.
	Exh		**20-1375-3N**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth. w/ 1.203 Valve Head Dia. LPG. Nickel
	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. LPG. w/ 1.328 Valve Head Dia.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
Guide	Both		**30-1515**	2.563 OAL. Exc. w/ Roto-Type Valve. OEM # F600I-235
Spring	Both		**32-466**	1.969 Free Length. OEM # F600I232
Keeper	Both		**34-159**	Pin For 0.30 Drilled Stem
	Exh		**34-555**	1 Square Groove. Heat Treated
	Exh		**34-822**	Pin For 0.13 Drilled Stem. OEM # Y400I205
LINE 16	**3.7L F226, F6226, PF226 12V**			**L6 BORE - 3.3125"/84.1mm**
Valve	Exh		**10-210**	1.328 Head Dia. Use w/ Rotator
	Int		**10-211**	1.520 Head Dia. Use w/ Rotocap
	Int		**10-810**	1.516 Head Dia. w/ Drilled Stem. OEM # F600I-112
Valve Seat Insert	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. LPG. Nickel. w/ 1.328 Valve Head Dia.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
Guide	Both		**30-1515**	2.563 OAL. Exc. w/ Roto-Type Valve. OEM # F600I-235
	Both		**30-1620**	2.313 OAL. 0.6570 O.D. 0.3425 I.D.
Spring	Both		**32-466**	1.969 Free Length. OEM # F600I232
	Both		**32-672**	2.000 Free Length
Keeper	Both		**34-159**	Pin For 0.30 Drilled Stem
	Exh		**34-555**	1 Groove. Heat Treated. OEM # CVT3234
LINE 17	**3.7L F227, F245 12V**			**L6 BORE - 3.3125"/84.14mm**
Valve	Exh		**10-1147**	1.203 Head Dia. Exc. LPG
	Int		**10-1148**	1.516 Head Dia. All
Valve Seat Insert	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Exh		**22-1348-1N**	1.087 I.D. 1.348 O.D. 0.200 Depth. Nickel
Guide	Both		**30-1620**	2.313 OAL. OEM # F400I-213
	Both		**30-1962**	2.375 OAL. Nitrocarburized. OEM # F400I-251
Spring	Both		**32-495**	2.063 Free Length. OEM # Y400I215
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # CVT3234
Expansion Plug Kit			**97-51**	Steel Kit. 6 1-5/8 plugs and 1 1-1/2 CC
			97-51B	Brass Kit. 6 1-5/8 Brass plugs and 1 1-1/2 CC
			97-52	Steel Kit. 5 1-5/8 plugs and 1 1-1/2 CC
			97-52B	Brass Kit. 5 1-5/8 Brass plugs and 1 1-1/2 CC
LINE 18	**4.3L HD260, HD277 Diesel 8V**			**L4 BORE - 3.875"/98.4mm**
Valve Seat Insert	Exh		**20-1562-6N**	1-1/4 I.D. 1-9/16 O.D. 7/32 Depth. Universal. Nickel
	Int		**20-1687-3**	1-7/16 I.D. 1-11/16 O.D. 1/4 Depth.
Guide	Int		**30-1701**	2.875 OAL. OEM # H260I200

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 19	**4.3L H260, H277 8V**			**L4** **BORE - 3.875"/98.4mm**
Valve Seat Insert	Exh		**20-1625-3**	1-5/16 I.D. 1-5/8 O.D. 1/4 Depth.
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Both		**30-1701**	2.875 OAL. OEM # H260I200
	Exh		**30-1533**	2.875 OAL. OEM # M600I256
Spring	Both		**32-480**	2.375 Free Length. OEM # A600I338
Keeper	Both		**34-802**	Heat Treated. OEM # E6041202
LINE 20	**4.4L M271, 4.7L M290, 5.4L M330 12V**			**L6** **BORE - 3.62"/92mm**
Valve Seat Insert	Exh		**20-1687-7**	1-3/8 I.D. 1-11/16 O.D. 1/4 Depth.
	Int		**20-2000-3**	1-5/8 I.D. 2.000 O.D. 19/64 Depth
Guide	Exh		**30-1533**	2.875 OAL. OEM # M600I256

ENGINE	YEAR	CYL.	LINE NO.
140 C.I. (2.3L) 4A2.3 6AT TRB 12V Onan		L6	**1**
2.8L ISF 16V D TRB (non-USA Foton)		L4	**2**
3.3L QSB3.3 8V D TRB		L4	**3**
3.3L QSB3.3 16V D TRB		L4	**4**
3.8L ISF, 4.5L QSB4.5 16V D TRB		L4	**5**
3.9L 4BT, 4.5L B4.5 8V D N.A.,TRB		L4	**6**
4.0L VFA, W4A D Onan		L4	**7**
C90, C105, C140, C160, C175, C180, C190B, CS/T464		L4,6	**8**
5.8L V352, V378, V6-140, V6-155 12V D		V6	**9**
5.9L 6BT, GTA5.9 12V D TRB		L6	**10**
5.9L ISB, QSB, 6.7L ISB 24V D TRB		L6	**11**
J Series 401 C.I. 12V		L6	**12**
7.2L HB-4 8V, 11.0L HB-6 12V, HBS, HR D		L4-6	**13**
V470, V504, V555, V8-185/210/225, VT225/555 16V D		V8	**14**
8.3L 6C Series 12V D TRB		L6	**15**
8.3L ISC/QSC, 8.9L ISL/ QSL 24V D TRB		L6	**16**
9.6L V588, VT588, V6-200 24V D TRB		V6	**17**
10.0L L10, 11.0L M11, ISM, QSM 24V D TRB		L6	**18**
11.9L ISX, QSX OHV 24V D TRB		L6	**19**
11.9L ISX12, ISZ/QSZ13, ISX/QSX15 SOHC 24V D TRB		L6	**20**
N/H743, NH, NH180, NH195, NR, NT Series 743 C.I.		L6	**21**
12.9L V/T785, V/T903, V/T903M, V8-265 32V		V8	**22**
14.0L 855 C.I. NH, NT Series, GTA855 24V D TRB		L6	**23**
855 C.I. (14.8L) N-14 24V D TRB		L6	**24**
15.0L ISX, QSX DOHC D TRB 24V	1996-10	L6	**25**
19.0L K Series 24V D TRB		L6	**26**
23.0L QSK23 24V D TRB		L6	**27**
24L NVH450, V/T1486, VT600 48V N.A., TRB		V12	**28**
28.0L VT12/1710/V28 Series 48V D N.A., TRB		V12	**29**
3069 C.I. (50.3L) QSK50 64V D TRB		V16	**30**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**140 C.I. (2.3L) 4A2.3 6AT TRB 12V Onan**			**L6** **BORE - 3.50"/88.9mm**
Valve Seat Insert	Exh		**22-1460-2N**	1.236 I.D. 1.4605 O.D. 0.236 Depth. OEM # C0110278101
LINE 2	**2.8L ISF 16V D TRB (non-USA Foton)**			**L4** **BORE- 94mm/3.70"**
Valve	Exh		**10-30170**	1.142 Head Dia. OEM # 5308265
	Int		**10-30169**	1.299 Head Dia. OEM # 5308264
Valve Seat Insert	Exh		**22-1180-1**	0.945T I.D. 1.1755 O.D. 0.221 Depth. OEM # A6110530032
	Int		**22-1130-1**	OEM # 5262813
Guide	Both		**30-3304**	Replaces Integral Guide
Valve Stem Seal	Both		**38-6170-55**	Viton. Top Hat. OEM # 4976170
LINE 3	**3.3L QSB3.3 8V D TRB**			**L4** **BORE - 3.74"/95mm**
Valve	Exh		**10-13384**	1.482 Head Dia. OEM # C6204414210
	Exh		**10-13388S**	1.492 Head Dia. OEM # C6209414210
	Int		**10-13383**	1.728 Head Dia. OEM # C6207414130
Valve Seat Insert	Exh		**22-1538-2**	1.240T I.D. 1.538 O.D. 0.2550 Depth. OEM # 4982908
	Int		**22-1775-3**	1.450T I.D. 1.775 O.D. 0.3330 Depth. OEM # C6207111431
Guide	Both		**30-3181**	2.040 OAL. 0.3150 I.D. 0.4740 O.D. OEM # 4982846
Valve Stem Seal	Both		**38-6144-55**	Metal Clad Viton. 8mm Stem Dia. OEM # C6204414541

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 4	**3.3L QSB3.3 16V D TRB**			**L4 BORE - 3.74"/95mm**
Valve	Exh		**10-13484S**	1.175 Head Dia. OEM # 5309399
	Int		**10-13483**	1.333 Head Dia. OEM # 5271471
Valve Seat Insert	Exh		**22-1223-1**	0.9810 I.D. 1.2235 O.D. 0.225 Depth. OEM # 5271475
	Int		**22-1381-2**	1.161T I.D. 1.381 O.D. 0.225 Depth. OEM # 3770399
Guide	Both		**30-4216**	1.800 OAL. OEM # 5271476
Spring	Both		**32-7204**	1.910 Free Length. OEM # 5297204
Valve Stem Seal	Both		**38-2080-45**	Viton. Metal Clad. OEM # 5272080
LINE 5	**3.8L ISF, 4.5L QSB4.5 16V D TRB**			**L4 BORE - 4.02"/102mm**
Valve	Exh		**10-13006**	1.299 Head Dia. Hi-Output. 45 Deg. OEM # 3979602
	Exh		**10-13161**	1.299 Head Dia. Inconel. 45 Deg. Oem # 3968183, 4089672
	Exh		**10-2015**	1.299 Head Dia. 45 Deg. OEM # 3940734, 3802967
	Int		**10-2014**	1.299 Head Dia. 30 Deg. OEM # 3940735, 3802924
Valve Seat Insert	Exh		**22-1375-2N**	1.100 I.D. 1.375 O.D. 0.227 Depth. +5, 10, 20 O/S Avail. OEM # 3942299
	Int		**22-1375-1**	1.100 I.D. 1.375 O.D. 0.227 Depth. +010 O/S Avail. OEM # 3942298
Guide	Exh		**30-3022**	2.018 OAL. O.D. 0.5015. Boss O.D. 0.510. Seal boss length 0.362
	Exh		**30-3034**	2.018 OAL. O.D. 0.5015. Boss O.D. 0.510. Seal boss length 0.335
	Exh		**30-3081**	2.020 OAL. 0.4395 Optional Straight O.D. (No Flange). No Special Tooling Req.
	Int		**30-3021**	1.937 OAL. O.D. 0.5015. Boss O.D. 0.510. Seal boss length 0.362
	Int		**30-3033**	1.937 OAL. O.D. 0.5015. Boss O.D. 0.510. Seal Boss length 0.335
	Int		**30-3080**	1.937 OAL. 0.4395 Optional Straight O.D. (No Flange). No Special Tooling Req.
Spring	Both		**32-04053**	1.824 Free Length. OEM # 4936080
	Both		**32-3406**	1.812 Free Length. OEM # 5303406. Replaces 4936080, 5292628
Keeper	Both		**34-5020**	1 Round Bead. OEM # 3940123
Lifter	Both		**36-7097**	Mechanical. 1998.5-'02. OEM # 3942565
	Both		**36-7098**	Mechanical. '03-Up. OEM # 3947759
Valve Stem Seal	Both		**38-9191-45**	Viton. Top Hat. OEM # 3955393/4
	Exh		**38-0438-45**	Viton. Metal Clad. OEM # 3945438
	Int		**38-0989-45**	Viton. Metal Clad. OEM # 3942989
Performance Spring	Both		**52-4053**	1.852 Free Length. Ovate Wire. 87 @1.380. 170 @1.030
Retainer	Both		**55-3198**	1.065 O.D. 0.275 Stem. OEM # 3943198
Push Rod	Both		**74-6554**	11.435 Length OEM # 3941253
Black Lightning R. Valve	Exh		**77-129017**	Black Lightning Nitrided Inconel. 1.299 Head Dia. 0.2746 Stem 4.893 OAL. 45 Deg. Seat
	Int		**77-129007**	Black Lightning Nitrided Stainless. 1.299 Head Dia. 0.2756 Stem 4.907 OAL. 30 Deg. Seat
Expansion Plug Kit			**97-302SS**	Stainless Steel Kit
LINE 6	**3.9L 4BT, 4.5L B4.5 8V D N.A.,TRB**			**L4 BORE - 4.21"/107mm**
Valve	Exh		**10-1664**	1.654 Head Dia. 45 Deg. Seat. OEM # 3802356, 3920868
	Exh		**10-1801**	1.654 Head Dia. Marine Appls. 45 Deg. Seat. Inconel. OEM # 3925175.
	Exh		**10-1862**	1.654 Head Dia. Natl. Gas. 20 Deg. Seat. OEM# 3922714
	Int		**10-1665**	1.772 Head Dia. 30 Deg. Seat. OEM # 3802355, 3920867.
	Int		**10-2257**	1.772 Head Dia. 5.085 OAL Natl. Gas 20 Deg. Seat OEM # 3802658, 3922713

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 6	**3.9L 4BT, 4.5L B4.5 8V D N.A.,TRB**			**L4 BORE - 4.21"/107mm**
Valve Seat Insert	Exh		**20-1750-7**	1-3/8 I.D. 1-3/4 O.D. 7/32 Depth. Universal For Heads w/o OEM Inserts
	Int		**20-1875-8**	1-1/2T I.D. 1-7/8 O.D. 7/32 Depth. Universal For Heads w/o OEM Inserts
	Exh		**22-1722-1**	1.357T I.D. 1.722 O.D. 0.265 Depth. OEM # 3904105
	Exh		**22-1722-3**	1.382T I.D. 1.722 O.D. 0.265 Depth. 20 Deg. Natl. Gas. OEM # 3395612
	Int		**22-1853-1**	1.498T I.D. 1.853 O.D. 0.273 Depth. OEM # 3925177
	Int		**22-1853-2**	1.495T I.D. 1.853 O.D. 0.271 Depth. 20 Deg. Natl. Gas. OEM # 3030211
Guide	Both		**30-8277**	2.500 OAL. 0.3162 I.D. 0.4395 O.D. OEM # 3906206
	Exh		**30-8178**	2.052 OAL. 0.5527 O.D. 0.3162 I.D. Thick Wall. OEM # 3904409
	Int		**30-8177**	2.397 OAL. 0.5527 O.D. 0.3162 I.D. Thick Wall. OEM # 3904408
Spring	Both		**32-00276**	2.235 Free Length. OEM # 3900276
	Both		**32-02061**	2.385 Free Length. Marine Int. OEM # 3926700, 4882061
	Both		**32-04049**	2.194 Free Length. OEM # 3925667. B Version 30Lbs. Both Natl. Gas. Exh. Marine
	Both		**32-2453**	2.518 Free Length. OEM # 3932453. IND and non-TRB only. Repl. Early Heads w/ 3926700. Must Repl. In Sets.
	Both		**32-6691**	2.875 Free Length. w/ Exh. Brake. 60 Lbs. Addl. Seat Pressure. OEM # 3916691
Keeper	Both		**34-00250**	1 Round Bead. OEM # 3900250
Lifter	Both		**36-2302**	Mechanical. OEM # 3931623, 3925031
	Both		**36-7098**	Mechanical. '03-Up. OEM # 3947759
Rotator	Both		**37-5666**	Rotator. OEM # 3925666, 3957914
Valve Stem Seal	Both		**38-535-45**	Viton. Ring and Band. OEM # 3901097, 3921640
	Both		**38-6114-55**	Viton. Top Hat. After April '03. OEM # 3957912
Performance Spring	Both		**52-4049**	2.780 Free Length. 75 Lb. Drop-In Perf. 250 @1.38 Open Load
Retainer	Both		**55-2299**	Chrome Moly 1.343 O.D. 0.313 Stem Dia OEM # 3900299
Push Rod	Both		**74-6448**	10.910 Length. OEM # 3923262
Black Lightning R. Valve	Exh		**77-165008**	Black Lightning Nitrided Inconel. 1.654 Head Dia. 0.3132 Stem 5.081 OAL.
	Int		**77-177008**	Black Lightning Nitrided Stainless. 1.772 Head Dia. 0.3138 Stem 5.084 OAL.
LINE 7	**4.0L VFA, W4A D Onan**			**L4 BORE - 3.00"/76.5mm**
Valve Seat Insert	Exh		**22-1460-2N**	1.236 I.D.,1.4605 O.D.,0.2360 Depth
LINE 8	**C90, C105, C140, C160, C175, C180, C190B, CS/T464**			**L4,6 BORE - 4.44"/112.7mm**
Valve	Exh		**10-515S**	1.310 Head Dia. OEM #'s 100687, 113447 & 144910
Valve Seat Insert	Both		**22-1431-1**	1-5/32 I.D. 1.4305 O.D. 0.160 Depth, OEM # 70843
Guide	Both		**30-1823**	2.820 OAL. OEM # 2105293
Valve Stem Seal	Both		**38-5707-45**	Viton. Top Hat. OEM # 3915707
LINE 9	**5.8L V352, V378, V6-140, V6-155 12V D**			**V6 BORE - 4.625"/117.5mm**
Valve	Both		**10-1420S**	1.605 Head Dia. Late Style With Tip to Groove Length Of 0.200, OEM 3275355
	Int		**10-1228**	1.605 Head Dia. OEM # 166774
Valve Seat Insert	Exh		**22-1691-2**	1-7/16 I.D. 1.6905 O.D. 0.200 Depth, +5, 10, 20, 30 O/S Avail. OEM # 154390
	Int		**22-1691-1**	1-7/16 I.D. 1.6905 O.D. 0.181 Depth, +5, 10, 20 O/S Avail., OEM # 195000

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 9	**5.8L V352, V378, V6-140, V6-155 12V D**			**V6 BORE - 4.625"/117.5mm**
Guide	Both		**30-6169**	2.500 OAL. OEM # 154946
	Both		**30-8420**	2.500 OAL. Combustion End I.D. Chamfer. OEM # 3278173
Spring	Both		**32-1185**	1.985 Free Length. OEM # 163037
Keeper	Both		**34-05354**	Use w/ 10-1420S. 1 Round Bead
	Both		**34-613**	Use w/ 10-1228. 1 Groove. Heat Treated. OEM # 166772
Rocker Component			**42-3679**	Valve Cam Roller. OEM # 153679
			42-4223	Injector Roller Pin. OEM # 114223
			42-4571	Injector Cam Roller. OEM # 154571
			42-9154	Valve Roller Pin. OEM # 169154
Injector Component			**87-7759**	Injector O-Ring. OEM # 3007759
			87-9630	Injector Tube. Copper. OEM # 169630
LINE 10	**5.9L 6BT, GTA5.9 12V D TRB**			**L6 BORE - 4.02"/102mm**
Valve	Exh		**10-1664**	1.654 Head Dia. 45 Deg. Seat. OEM # 3802356, 3920868
	Exh		**10-1801**	1.654 Head Dia. Marine Appls. 45 Deg. Seat. Inconel. OEM # 3925175.
	Exh		**10-1862**	1.654 Head Dia. Natl. Gas. 20 Deg. Seat. OEM# 3922714
	Int		**10-1665**	1.772 Head Dia. 30 Deg. Seat. OEM # 3802355, 3920867.
	Int		**10-2257**	1.772 Head Dia. 5.085 OAL Natl. Gas 20 Deg. Seat OEM # 3802658, 3922713
Valve Seat Insert	Exh		**20-1750-7**	1-3/8 I.D. 1-3/4 O.D. 7/32 Depth. Universal For Heads w/o OEM Inserts
	Int		**20-1875-8**	1-1/2T I.D. 1-7/8 O.D. 7/32 Depth. Universal For Heads w/o OEM Inserts
	Exh		**22-1722-1**	1.357T I.D. 1.722 O.D. 0.265 Depth. Incl. HO Marine. OEM # 3904105
	Exh		**22-1722-3**	1.382T I.D. 1.722 O.D. 0.265 Depth. 20 Deg. Natl. Gas. OEM # 3395612
	Int		**22-1853-1**	1.498 I.D. 1.853 O.D. 0.273 Depth. Incl. HO Marine. OEM # 3906854
	Int		**22-1853-2**	1.495T I.D. 1.853 O.D. 0.271 Depth. 20 Deg. Natl. Gas. OEM # 3030211
Guide	Both		**30-8277**	2.500 OAL. 0.3162 I.D. 0.4395 O.D. OEM # 3906206
	Exh		**30-8178**	2.052 OAL. 0.5527 O.D. 0.3162 I.D. Thick Wall. OEM # 3904409
	Int		**30-8177**	2.397 OAL. 0.5527 O.D. 0.3162 I.D. Thick Wall. OEM # 3904408
Spring	Both		**32-00276**	2.235 Free Length. 30 PSI. Non-Marine. OEM # 3900276
	Both		**32-02061**	2.385 Free Length. 36 PSI. Both Non-Marine, Int. Marine. OEM # 3926700
	Both		**32-04049**	2.194 Free Length. OEM # 3925667. B Version 30Lbs. Both Natl. Gas. Exh. Marine
	Both		**32-2453**	2.518 Free Length. OEM # 3932453. IND and non-TRB only. Repl. Early Heads w/ 3926700. Must Repl. In Sets.
	Both		**32-6691**	2.875 Free Length. w/ Exh. Brake. 60 Lbs. Addl. Seat Pressure. OEM # 3916691
Keeper	Both		**34-00250**	1 Round Bead. OEM # 3900250
Lifter	Both		**36-2302**	Mechanical. OEM # 3931623, 3925031
	Both		**36-7098**	Mechanical. '03-Up. OEM # 3947759
Rotator	Both		**37-5666**	Rotator. OEM # 3925666, 3957914
Valve Stem Seal	Both		**38-535-45**	Viton. Ring and Band. Before April '03. OEM # 3901097, 3921640
	Both		**38-6114-55**	Viton. Top Hat. After April '03. OEM # 3957912
Performance Spring	Both		**52-4049**	2.780 Free Length. 75 Lb. Drop-In Perf. 250 @1.38 Open Load
Retainer	Both		**55-2299**	Chrome Moly 1.343 O.D. 0.313 Stem Dia OEM # 3900299

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 10	**5.9L 6BT, GTA5.9 12V D TRB**			**L6 BORE - 4.02"/102mm**
Push Rod	Both		**74-6448**	10.910 Length. OEM # 3923262
Black Lightning R. Valve	Both		**77-VKCU591-5**	Kit, 12 BLDP Valves, 24 keepers, 12 HP springs, retainers, stem seals
	Exh		**77-165008**	Black Lightning Nitrided Inconel. 1.654 Head Dia. 0.3132 Stem 5.081 OAL.
	Int		**77-177008**	Black Lightning Nitrided Stainless. 1.772 Head Dia. 0.3138 Stem 5.084 OAL.
Expansion Plug Kit			**97-163SS**	Stainless Steel Kit
LINE 11	**5.9L ISB, QSB, 6.7L ISB 24V D TRB**			**L6 BORE - 107mm/4.21"**
Valve	Exh		**10-13006**	1.299 Head Dia. 45 Deg. OEM # 3979602
	Exh		**10-13161**	1.299 Head Dia. Inconel. 45 Deg. Oem # 3968183, 4089672
	Exh		**10-2015**	1.299 Head Dia. 45 Deg. OEM # 3940734
	Int		**10-2014**	1.299 Head Dia. 30 Deg. OEM # 3940735
Valve Seat Insert	Exh		**22-1375-2N**	1.100 I.D. 1.375 O.D. 0.227 Depth. +5, 10, 20 O/S Avail. OEM # 3942299
	Int		**22-1375-1**	1.100 I.D. 1.375 O.D. 0.227 Depth. +010 O/S Avail. OEM # 3942298
Guide	Exh		**30-3022**	2.018 OAL. O.D. 0.5015. Boss O.D. 0.510. Seal Boss length 0.362
	Exh		**30-3034**	2.018 OAL. O.D. 0.5015. Boss O.D. 0.510. Seal Boss length 0.335
	Exh		**30-3081**	2.020 OAL. 0.4395 Optional Straight O.D. (No Flange). No Special Tooling Req.
	Int		**30-3021**	1.937 OAL. O.D. 0.5015. Boss O.D. 0.510. Seal Boss length 0.362
	Int		**30-3033**	1.937 OAL. O.D. 0.5015. Boss O.D. 0.510. Seal Boss length 0.335
	Int		**30-3080**	1.937 OAL. 0.4395 Optional Straight O.D. (No Flange). No Special Tooling Req.
Spring	Both		**32-04053**	1.824 Free Length. OEM # 4936080
	Both		**32-3406**	1.812 Free Length. OEM # 5303406. Replaces 4936080, 5292628
Keeper	Both		**34-5020**	1 Round Bead. OEM # 3940123
Lifter	Both		**36-7097**	Mechanical. To 2002. w/ 1.300 Cam Face Dia. OEM # 3942565
	Both		**36-7098**	Mechanical. w/ 1.496 Cam Face Dia. OEM # 3947759, 4891226
Valve Stem Seal	Both		**38-9191-45**	Viton. Top Hat. OEM # 3955393/4
	Exh		**38-0438-45**	Viton. Metal Clad. OEM # 3945438
	Int		**38-0989-45**	Viton. Metal Clad. OEM # 3942989
Performance Spring	Both		**52-4053**	1.852 Free Length. Ovate Wire. 87 @1.380. 170 @1.030. Use Only w/ OE cam profile.
Retainer	Both		**55-3198**	1.065 O.D. 0.275 Stem. OEM # 3943198
Push Rod	Both		**74-6554**	11.435 Length OEM # 3941253
Black Lightning R. Valve	Both		**77-VKCU592-5**	Kit, 24 BLDP Valves, 48 keepers, 24 HP springs, retainers, stem seals
	Exh		**77-129017**	Black Lightning Nitrided Inconel. 1.299 Head Dia. 0.2746 Stem 4.893 OAL. 45 Deg. Seat
	Int		**77-129007**	Black Lightning Nitrided Stainless. 1.299 Head Dia. 0.2756 Stem 4.907 OAL. 30 Deg. Seat
Expansion Plug Kit			**97-302SS**	Stainless Steel Kit
LINE 12	**J Series 401 C.I. 12V**			**L6 BORE - 4.125"/104.8mm**
Valve	Exh		**10-515S**	1.310 Head Dia. OEM #'s 100687, 113447 & 144910
Valve Seat Insert	Both		**22-1431-1**	1-5/32 I.D. 1.4305 O.D. 0.160 Depth, OEM # 70843
Guide	Both		**30-1823**	0.3429 I.D. 0.5633 O.D. 2.810 OAL
Keeper	Both		**34-746**	2 Groove. Heat Treated. OEM # S-2037

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 13	**7.2L HB-4 8V, 11.0L HB-6 12V, HBS, HR D**			**L4-6 BORE - 4.875"/123.8mm**
Guide	Both		**30-1800**	3.656 OAL. Late Type Non-Flanged
Valve Stem Seal	Both		**38-535-45**	Viton. Ring and Band. OEM # 3901097, 3921640
LINE 14	**V470, V504, V555, V8-185/210/225, VT225/555 16V D**			**V8 BORE - 4.625"/117.5mm**
Valve	Both		**10-1420S**	1.605 Head Dia. Late Style With Tip to Groove Length Of 0.200 Stellite. OEM 3275356
	Int		**10-1228**	1.605 Head Dia. OEM # 166774
Valve Seat Insert	Exh		**22-1691-2**	1-7/16 I.D. 1.6905 O.D. 0.200 Depth, +5, 10, 20, 30 O/S Avail. OEM # 154390
	Int		**22-1691-1**	1-7/16 I.D. 1.6905 O.D. 0.181 Depth, +5, 10, 20 O/S Avail., OEM # 195000
Guide	Both		**30-6169**	2.500 OAL. OEM # 154946
	Both		**30-8420**	2.500 OAL. Combustion End I.D. Chamfer. OEM # 3278173
Spring	Both		**32-1185**	1.985 Free Length. OEM # 163037
Keeper	Both		**34-05354**	Not for use with 10-1228. 1 Round Bead
	Both		**34-613**	1 Groove. Heat Treated. OEM # 166772
Rocker Component			**42-3679**	Valve Cam Roller. OEM # 153679
			42-4223	Injector Roller Pin. OEM # 114223
			42-4571	Injector Cam Roller. OEM # 154571
			42-9154	Valve Roller Pin. OEM # 169154
Injector Component			**87-7759**	Injector O-Ring. OEM # 3007759
			87-9630	Injector Tube. Copper. OEM # 169630
Expansion Plug Kit			**97-83SS**	Stainless Steel Kit
LINE 15	**8.3L 6C Series 12V D TRB**			**L6 BORE - 4.49"/114mm**
Valve	Exh		**10-1666**	1.811 Head Dia. 5.942 OAL. OEM # 3921444, 3802085, 3902254
	Exh		**10-2254**	1.811 Head Dia. 5.942 OAL. Natl. Gas. OEM #s 3802813, 3927255
	Int		**10-1667**	2.047 Head Dia. 5.946 OAL. OEM#s 3924492, 3802463, 3902253
	Int		**10-2255**	2.047 Head Dia. 5.952 OAL. Natl. Gas. OEM #s 3802812, 3922713
Valve Seat Insert	Exh		**22-1857-1**	1.575T I.D. 1.857 O.D. 0.229 Depth. OEM # 3929005, 3928174
	Exh		**22-1857-2**	1.573T I.D. 1.855 O.D. 0.229 Depth. 20 Deg. Natl. Gas. OEM # 3933088
	Exh		**22-1857-3**	1.575T I.D. 1.857 O.D. 0.250 Depth, .020 Thicker than 22-1857-1. OEM # 3928174
	Int		**22-2126-2**	1.751T I.D. 2.126 O.D. 0.322 Depth. 20 Deg. Natl. Gas. OEM # 3927256
	Int		**22-2129-2**	1.752T I.D. 2.129 O.D. 0.306 Depth OEM # 3908830, 3924582
Guide	Both		**30-3068**	2.835 OAL. 0.376 I.D. 0.630 O.D. OEM # 3925863. Natl. Gas
	Both		**30-8122**	2.835 OAL. OEM # 3901187, 3923564
	Both		**30-8715**	1.949 OAL. 6CT Encore Eng., OEM #'s 3945249, 3948102
Spring	Both		**32-06412**	2.545 Free Length. OEM # 3906412, 3991085
	Both		**32-6629**	2.445 Free Length. OEM # 3925272. Natl. Gas. Some Marine Appl. Use w/ Rotator 37-5273
	Exh		**32-6669**	3.070 Free Length. W/ Dampner OEM # 3916588. 70 Lbs. More Pressure.
Keeper	Both		**34-01177**	1 Round Groove. OEM # 3901177
Lifter	Both		**36-2302**	Mechanical. OEM # 3931623, 3925031
Rotator	Both		**37-5273**	Rotator. OEM # 3925273
Valve Stem Seal	Both		**38-0057-45**	OEM # 3930057. Natl. Gas
	Both		**38-5707-45**	Viton. Top Hat. OEM # 3915707, 3927642

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 15	**8.3L 6C Series 12V D TRB**			**L6 BORE - 4.49"/114mm**
Retainer	Both		**55-2757**	Retainer. OEM # 3972757
Injector Component			**87-9886**	Injector Seal. OEM # 3909886
LINE 16	**8.3L ISC/QSC, 8.9L ISL/ QSL 24V D TRB**			**L6 BORE - 4.49"/114mm**
Valve	Exh		**10-13163**	1.496 Head Dia. Inconel Head. OEM # 4981795
	Exh		**10-2187**	1.496 Head Dia. 45 Deg. OEM # 3942589
	Int		**10-2188**	1.496 Head Dia. 30 Deg. OEM # 3942588
Valve Seat Insert	Both		**22-1554-3N**	1.303T I.D. 1.554 O.D. 0.197 Depth. 20 Deg. Nickel
	Exh		**22-1554-2**	1.301T I.D. 1.554 O.D. 0.190 Depth. 45 Deg. +10, 13, 20 O/S Avail. OEM # 3940153, 3968074
	Int		**22-1554-1**	1.280T I.D. 1.554 O.D. 0.236 Depth. 30 Deg. +10, 13, 20 O/S Avail. OEM # 3940152, 3969704
Guide	Both		**30-8715**	1.949 OAL. OEM # 3942645, 4934063
Spring	Both		**32-6172**	2.205 Free Length. OEM # 5316172. Replaces 4936076, 5292626. Use w/o Rotator
	Both		**32-6173**	1.947 Free Length. Use w/ Rotator. OEM # 5316173. Replaces 4936079, 5292627.
Keeper	Both		**34-00250**	1 Round Bead. OEM # 3900250
Lifter	Both		**36-7097**	Mechanical. Use w/ 10mm Pushrod Ball End. OEM # 3942565
	Both		**36-7099**	Mechanical. OEM # 3965966, 3945866.
Valve Stem Seal	Both		**38-3888-45**	Viton. Top Hat. OEM # 3943888, 3948578
Retainer	Both		**55-4452**	Retainer. OEM # 3944452 Use with 32-6172
LINE 17	**9.6L V588, VT588, V6-200 24V D TRB**			**V6 BORE - 5.50"/139.7mm**
Valve	Exh		**10-702**	1.870 Head Dia. OEM # 138887
	Int		**10-703**	1.870 Head Dia. OEM # 216707
Valve Seat Insert	Both		**22-2003-1**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 3107759 w/ Std. O.D.
	Both		**22-2003-1N**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 127930 w/ Std. O.D. Nickel For TRB and High Heat Appls.
	Both		**22-2006-1**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. +3 For Aftermarket Press Fit 3107759. +5, 10, 20, 30, 40 O/S Avail.
	Both		**22-2006-1N**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. Nickel For TRB & High Heat Appl. Aftermarket +3 O.D.
Guide	Both		**30-1941**	3.010 OAL. Std. O.D. Nitrocarburized. OEM # 138937
Keeper	Both		**34-803**	2 Groove. Heat Treated. OEM # 127554
Valve Stem Seal	Both		**38-1055-70**	Teflon And Rubber. 1 Ring
LINE 18	**10.0L L10, 11.0L M11, ISM, QSM 24V D TRB**			**L6 BORE - 4.921"/125mm**
Valve	Exh		**10-1531**	1.673 Head Dia. 6.94 OAL. w/ Dual Spring, Up To 250 HP. To 1991. OEM #s 3033235, 3801357, 3803995, 3895477
	Exh		**10-1658S**	1.673 Head Dia. 6.94 OAL. 250 HP. Letter "S" In Head, 1988-91. OEM #s 3417713, 3803996, 3803348.
	Exh		**10-1662S**	1.673 Head Dia. 7.69 OAL. Single Spring. Letter "S" In Head, From 1991. OEM #s 3803311, 3418021, 3800639, 3417779
	Exh		**10-1720S**	1.673 Head Dia. 6.94 OAL. Natl. Gas. OEM # 3884005.
	Int		**10-1532**	1.673 Head Dia. 6.94 OAL. Dual Spring, Single Spring Industrial Appls. To 1991. OEM #'s 3033234, 3801356
	Int		**10-1663**	1.673 Head Dia. 7.69 OAL. Single Spring. From 1991. OEM # 3803310, 3418020, 3800638
Valve Seat Insert	Both		**22-1812-4**	1.520 I.D. 1.812 O.D. 0.197 Depth, +5, +10, +20, & +30 O/S Avail., OEM # 3028070, 3418040
	Both		**22-1812-5**	Special 0.224 O/S Depth. OEM # 3820700

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 18	**10.0L L10, 11.0L M11, ISM, QSM 24V D TRB**			**L6 BORE - 4.921"/125mm**
Valve Seat Insert	Both		**22-1812-6**	1.450 I.D. 1.812 O.D. 0.186 Depth. Revised 22-1812-4
	Both		**22-1812-9**	1.430 I.D. 1.812 O.D. 0.186 Depth. OEM # 3090704
Guide	Both		**30-3008**	3.374 OAL. Cut For Seal. OEM # 3328786
	Both		**30-7625**	2.934 OAL. OEM # 3033314
	Both		**30-8167**	2.633 OAL. Same As 30-8210 Exc. +.0206 O.D. OEM # 3074118
	Both		**30-8210**	2.633 OAL. Machined For Seal - Guide Must Protrude 1.079 Above The Top Surface Of The Head. +2 O/S Avail. OEM # 3073512, 3328785
Spring	Both		**32-05860**	4.067 Free Length. 91 L-10. OEM # 3895860, 3070174.
	Both		**32-1014**	2.685 Free Length. Early Eng. OEM # 211999
	Both		**32-1296**	3.296 Free Length. Outer. OEM # 3033232
	Both		**32-1298**	3.100 Free Length. Inner. OEM # 3033233
Keeper	Both		**34-05354**	1 Round Bead. OEM# 3275354
	Both		**34-803**	2 Groove. Heat Treated. Early Eng. OEM # 127554
Rotator	Both		**37-03231**	Rotator. OEM # 3033231
Valve Stem Seal	Both		**38-3966-45**	Viton. Metal Clad. Fits 30-3008. OEM # 4003966
	Both		**38-6791-45**	Viton. Metal Clad. 0.465 Height. OEM # 4026791
	Both		**38-8781-55**	Viton. Metal Clad. OEM # 3328781
Rocker Component			**42-5487**	Cam Roller. OEM # 3895487
			42-5488	Cam Roller. OEM # 3895488
			42-5956	Injector Cam Roller. OEM # 4025956
Retainer	Both		**55-3512**	1.421 O.D. OEM # 3883512
Injector Component			**87-0486K**	Injector Tube 87-0486 and 87-7759 Ring Kit. Copper. OEM # 3070486
			87-1147	Injector Tube, Thick Nose. Copper. OEM # 3011935, 3071147
			87-1147K	Injector Tube Kit w/ O-Ring. Copper. Thick Nose
			87-5026	Injector O-Ring For Stainless. OEM # 3035026
			87-7717	Injector Tube. Stainless. OEM # 3417717
			87-7759	Injector O-Ring For Copper. OEM # 3007759
LINE 19	**11.9L ISX, QSX OHV 24V D TRB**			**L6 BORE - 5.11"/130mm**
Valve	Exh		**10-13473**	1.672 Head Dia. 0.3789 Stem. 20 Deg. OEM # 2887954
	Exh		**10-13474**	1.675 Head Dia. 0.3789 Stem. 45 Deg. OEM # 2892034, 4352542.
	Int		**10-13471**	1.752 Head Dia. 0.3789 Stem Dia. OEM # 4311992
	Int		**10-13472**	1.752 Head Dia. 0.378 Stem. 20 Deg. OEM # 2869887
Valve Seat Insert	Exh		**22-1756-1**	1.445T I.D. 1.7565 O.D. 0.217 Depth. 20 Deg. OEM # 2887957
	Exh		**22-1756-2S**	1.445T I.D. 1.7565 O.D. 0.237 Depth. 45 Deg. Use w/ 10-13474. OEM # 2884750
	Int		**22-1835-3S**	1.515T I.D. 1.8350 O.D. 0.188 Depth. 20 Deg. Use w/ 10-13471. OEM # 4374017
	Int		**22-1835-4**	1.515T I.D. 1.8350 O.D. 0.188 Depth. 20 Deg. Use w/ 10-13472. OEM # 2869832
Guide	Both		**30-3008**	3.374 OAL. 0.3819 I.D. Cut For Seal. OEM # 3328786
Spring	Both		**32-3660**	2.874 Free Length OEM # 2883660
Keeper	Both		**34-04644**	1 Round Groove. OEM # 3680883
Valve Stem Seal	Both		**38-3966-45**	Viton. Metal Clad. Fits 30-3008. OEM # 4003966
Injector Component			**87-6178**	Injector Tube, Stainless. Aftermarket Version. Req. 2 Orings. OEM # 2870178.
			87-6206	O-Ring. Viton. Use w/ 87-9516. OEM # 4960206

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 19	**11.9L ISX, QSX OHV 24V D TRB**			**L6 BORE - 5.11"/130mm**
Injector Component			**87-6659**	Injector Tube O-Ring. Viton. Use w/ 87-6178
			87-9516	Injector Tube. Stainless. Natl. Gas. OEM # 2899516
LINE 20	**11.9L ISX12, ISZ/QSZ13, ISX/QSX15 SOHC 24V D TRB**			**L6 BORE - 5.40"/137mm**
Valve Kit			**10-VKCUMISXS-5**	Kit w/ 24 Valves, 24 Guides, 48 Keepers, 24 Stem Seals, 6 Inj. Tubes w/ O-Ring & Retaining Ring
			10-VKCUMISXS-6	Kit w/ 24 Valves, 24 Guides, 48 Keepers, 24 Springs, 24 Stem Seals, 6 Inj. Tubes w/ O-Ring & Retaining Ring
Valve	Exh		**10-13309S**	1.790 Head Dia. Inconel. 45 Deg. OEM # 3686661
	Exh		**10-2263S**	1.790 Head Dia. 45 Deg. OEM#s 4101454, 3680759
	Int		**10-13308**	1.870 Head Dia. Inconel. 20 Deg. OEM # 3685996
	Int		**10-2262**	1.870 Head Dia. 20 Deg. OEM#s 3680760, 4965868, 4059326
Valve Seat Insert	Exh		**22-1874-2**	1.555T I.D. 1.874 O.D. 0.238 Depth 45 Deg. OEM # 3683349, 3679537
	Exh		**22-1874-2N**	1.555T I.D. 1.874 O.D. 0.238 Depth. 45 Deg. Nickel
	Int		**22-1953-3**	1.640T I.D. 1.9535 O.D. 0.195 Depth. 20 Deg. +5, 10 O/S Avail. OEM# 3104445, 3681071
	Int		**22-1953-4**	1.640T I.D. 1.9535 O.D. 0.195 Depth. 20 Deg. OEM # 4059215
	Int		**22-1953-4N**	1.640T I.D. 1.9535 O.D. 0.195 Depth. 20 Degree. Nickel. OEM # 4393425
Guide	Both		**30-3061**	4.106 OAL. 0.3821 I.D. OEM# 4026657 +2 O/S May Be Avail.
	Both		**30-3061U**	Undersized 0.3801 I.D. 30-3061
Spring	Both		**32-04050**	3.886 Free Length. OEM # 3679551, 4965891
Keeper	Both		**34-04644**	1 Round Groove. OEM # 3680883
Valve Stem Seal	Both		**38-6366-55**	Viton. Top Hat. 2.024 Height. OEM # 4356366
	Both		**38-6791-45**	Viton. Metal Clad. 0.465 Height. OEM # 4026791
Retainer	Both		**55-2884**	1.343 O.D. OEM # 3680884
Injector Component			**87-5966**	Injector Tube. Stainless. OEM # 3685966
			87-5966K	Injector Tube Kit w/ O-Ring 87-8536.
			87-5966RK	Injector Tube Kit w/ O-Ring 87-8536, Retaining Ring 87-6883
			87-6883	Injector Retaining Ring. OEM # 3686883
			87-8536	Injector O-Ring. OEM # 3678536
LINE 21	**N/H743, NH, NH180, NH195, NR, NT Series 743 C.I.**			**L6 BORE - 5.125"/130.2mm**
Valve	Both		**10-1656S**	1.740 Head Dia. 15 Deg. Natl. Gas. OEM # 90210008
	Both		**10-326S**	1.745 Head Dia. Stellite Face. OEM #'s 70671 & 144911
Valve Seat Insert	Both		**22-1847-1**	1-9/16 I.D. 1.8465 O.D. 9/32 Depth. +5, 10, 30 O/S Avail. OEM # 69965, Exc. Natl. Gas
Guide	Both		**30-1969**	3.438 OAL. +3 O/S Avail. OEM # 66890.
Spring	Both		**32-5020**	2.420 Free Length. OEM # 90210010. Natl. Gas
Keeper	Both		**34-746**	2 Groove. Heat Treated. OEM # S-2037
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber
Rocker Component			**42-3558**	Rocker Bridge Guide. OEM # 123558
	Both		**42-8939**	Rocker Roller Pin. OEM # 118939
Injector Component			**87-7759**	Injector O-Ring. OEM # 3007759
LINE 22	**12.9L V/T785, V/T903, V/T903M, V8-265 32V**			**V8 BORE - 5.50"/139.7mm**
Valve	Exh		**10-702**	1.870 Head Dia. OEM # 138887
	Int		**10-703**	1.870 Head Dia. OEM # 216707

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 22	**12.9L V/T785, V/T903, V/T903M, V8-265 32V**			**V8 BORE - 5.50"/139.7mm**
Valve Seat Insert	Int		**20-2000-14**	1-5/8 I.D. 2.000 O.D. 5/16 Depth. OE# 212217. 45 Deg. Starter Angle Must Be Machined to 30 Deg.
	Both		**22-2003-1**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 3107759 w/ Std. O.D.
	Both		**22-2003-1N**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 127930 w/ Std. O.D. Nickel For TRB and High Heat Appls.
	Both		**22-2006-1**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. +3 For Aftermarket Press Fit 3107759. +5, 10, 20, 30, 40 O/S Avail.
	Both		**22-2006-1N**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. Nickel For TRB & High Heat Appl. Aftermarket +3 O.D.
	Both		**22-2006-3N**	1-11/16 I.D. 2.006 O.D. 0.234 Depth. Nickel
Guide	Both		**30-1941**	3.010 OAL. Std. O.D. Nitrocarburized. OEM # 138937
Keeper	Both		**34-803**	2 Groove. Heat Treated. OEM # 127554
Valve Stem Seal	Both		**38-1055-70**	Teflon And Rubber. 1 Ring
Rocker Component			**42-3558**	Rocker Bridge Guide. OEM # 123558
LINE 23	**14.0L 855 C.I. NH, NT Series, GTA855 24V D TRB**			**L6 BORE - 5.50"/139.7mm**
Valve	Both		**10-13292S**	1.874 Head Dia. Stellite. 20 Deg. OEM # 3394112
	Both		**10-1721S**	1.875 Head Dia. Natl. Gas. Stellite Face 20 Deg. Seat. Also Replaces 15 Deg. OEM # 3226068
	Both		**10-3040830**	1.870 Head Dia. Bi-Metallic. OEM # 3040830 w/ Letter "N" In Head. Replaces 10-602
	Both		**10-602S**	1.870 Head Dia. Bi-Metallic w/ Stellite. OEM # 145701 w/ Letter "S" In Head
	Int		**10-603**	1.870 Head Dia. Mono-metallic. OEM # 135957
Valve Seat Insert	Both		**22-2003-1**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 3107759 w/ Std. O.D.
	Both		**22-2003-1N**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 127930 w/ Std. O.D. Nickel For TRB and High Heat Appls.
	Both		**22-2003-6N**	1.625 I.D. 2.003 O.D. 0.280 Depth. Nickel Alloy Version of 22-2006-6S. Can Be Used w/ 15 And 20 Deg. Valves
	Both		**22-2006-1**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. +3 For Aftermarket Press Fit 3107759. +5, 10, 20, 30, 40 O/S Avail.
	Both		**22-2006-1N**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. Nickel For TRB & High Heat Appl. Aftermarket +3 O.D.
	Both		**22-2006-5**	1.690 I.D. 2.006 O.D. 0.214 Depth. 30 Deg. OEM #'s 3054590, 3054600, +5, 10, 20, 30 O/S Avail.
	Both		**22-2006-6S**	1.630 I.D. 2.006 O.D. 0.280 Depth, OEM #'s 80610016 & 90210014, Stellite # 3 Matl., Can Be Used w/ Natl. Gas 15 & 20 Deg. Valves
Guide	Both		**30-1942**	3.400 OAL. w/ Sharp Edge (Otherwise Same As 30-7994). +3, +5 O/S Avail. OEM # 3006456
	Both		**30-3158SA**	3.167 OAL. 0.4528 I.D. 0.7518 O.D. 0.627 Seal O.D. Natl. Gas. Special Alloy.
	Both		**30-6452**	3.195 OAL. Machined For Seal. OEM # 174214
	Both		**30-7264**	Same as 30-1942+10 O.D. 30-7265 Same as 30-1942+15 O.D.
	Both		**30-7990**	3.400 OAL. Natl. Gas Eng. w/ Black, Coated I.D. OEM # 174213, 80610018
	Both		**30-7994**	3.400 OAL. w/o Sharp Edge. +2 O/S Avail. OEM # 3050369. Can Be Used For OEM # 3006456
	Both		**30-7994SA**	Same Dimension As 30-7994 in Special Alloy.
	Exh		**30-1941**	3.010 OAL. OEM # 138937
	Int		**30-3158**	3.167 OAL. 0.4528 I.D. 0.7518 O.D. 0.627 Seal O.D. Natl. Gas. OEM # 3394115
Spring	Both		**32-04015**	2.335 OAL. Natl. Gas. Short Used w/ Rotator. OEM # 4062872, 4957806, 90210012

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 23	**14.0L 855 C.I. NH, NT Series, GTA855 24V D TRB**			**L6 BORE - 5.50"/139.7mm**
Spring	Both		**32-1014**	2.685 Free Length. OEM # 211999
	Both		**32-1332**	2.635 Free Length. OEM # 3035996, 3081212
	Both		**32-5020**	2.420 Free Length. OEM # 90210010. Natl. Gas
Keeper	Both		**34-803**	2 Groove. Heat Treated. OEM # 127554
Rotator	Both		**37-2870**	Lower Rotator. Natl. Gas. OEM # 219091, 4062870, 90210011
Valve Stem Seal	Both		**38-1055-70**	Teflon And Rubber. 1 Ring. OEM # 156641
	Exh		**38-6143-55**	Viton. Metal Clad. OEM # 4000643
Rocker Component			**42-3558**	Rocker Bridge Guide. OEM # 123558
			42-8939	Rocker Roller Pin. OEM # 118939
	Both		**42-3330**	Injector Roller Pin, Big Cam. OEM # 3013330
	Both		**42-3331**	Valve Roller Pin. OEM # 3013331
	Both		**42-6933**	Valve Cam Roller, Big Cam. OEM # 3036933
	Both		**42-6934**	Injector Cam Roller, Big Cam. OEM # 3036934
Injector Component			**87-0486K**	Injector Tube 87-0486 and 87-7759 Ring Kit. Copper. OEM # 3070486
			87-1147	Injector Tube, Thick Nose. Copper. OEM # 3011935, 3071147
			87-1147K	Injector Tube Kit w/ O-Ring. Copper. Thick Nose
			87-7759	Injector O-Ring. OEM # 3007759
LINE 24	**855 C.I. (14.8L) N-14 24V D TRB**			**L6 BORE - 5.50"/139.7mm**
Valve	Exh		**10-1659S**	1.870 Head Dia. 30 Deg. Seat. Select. OEM # 3070473, 3078399, 3069672, 3803770, 3803726
	Exh		**10-1847S**	1.870 Head Dia. Plus. 45 Deg. Seat. OEM # 3083991, 3084980, 3800891
	Int		**10-1660**	1.870 Head Dia. 30 Deg. Seat. OEM # 3803360, 3068519
	Int		**10-1756**	1.870 Head Dia. Plus & Select. 20 Deg. Seat. OEM # 3084045, 3803854
Valve Seat Insert	Exh		**22-1953-2S**	1.640 I.D. 1.9535 O.D. 0.215 Depth. 45 Deg. Select And Plus. OEM # 3076515, 3084041. Can Be Used w/ 30 And 45 Deg. Valves
	Exh		**22-2006-7S**	1.690 I.D. 2.006 O.D. 0.215 Depth. 30 Deg. OEM # 3069692
	Int		**22-1953-3**	1.640T I.D. 1.9535 O.D. 0.195 Depth. 20 Deg. +5, 10 O/S Avail. OEM# 3104445, 3681071
	Int		**22-2006-5**	1.690 I.D. 2.006 O.D. 0.214 Depth. 30 Deg. OEM #'s 3054590, 3054600, +5, 10, 20, 30 O/S Avail.
Guide	Both		**30-8134**	3.400 OAL. Std. O.D. OEM # 3064312
	Both		**30-8136**	Same As 30-8134 +.010 O.D. OEM # 3072321
Spring	Both		**32-04004**	3.420 Free Length.. OEM # 3070460.
Keeper	Both		**34-05354**	1 Round Bead. OEM # 3275354
Valve Stem Seal	Both		**38-4281-45**	Viton. Top Hat. OEM # 3064281
Rocker Component			**42-3331**	Valve Lever Pin. 91N14. OEM # 3013331
			42-5237	Valve Lever Roller, 94N14. OEM # 3865237
			42-5956	Injector Lever Roller. 91N14. OEM # 4025956
			42-6388	Injector Lever Pin, 94N14. OEM # 3166388
			42-6428	Valve Lever Pin, 94N14. OEM # 3166428
			42-6933	Valve Lever Roller. 91N14. OEM # 3036933
			42-7423	Injector Lever Roller. 94N14. OEM # 3161423
			42-7922	Injector Lever Pin. 91N14. OEM # 3412922
Injector Component			**87-0486K**	Injector Tube 87-0486 and 87-7759 Ring Kit. Copper. OEM # 3070486
			87-1147	Injector Tube, Thick Nose. Copper. OEM # 3011935, 3071147

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 24	**855 C.I. (14.8L) N-14 24V D TRB**			**L6 BORE - 5.50"/139.7mm**
Injector Component			**87-1147K**	Injector Tube Kit w/ O-Ring. Copper. Thick Nose
			87-7759	Injector O-Ring. OEM # 3007759
LINE 25	**15.0L ISX, QSX DOHC D TRB 24V**			**1996-10 L6 BORE - 5.40"/137mm**
Valve Kit	Both		**10-VKCUMISX-5**	Kit w/ 24 Valves, 24 Guides, 48 Keepers, 24 Stem Seals, 6 Inj. Tubes w/ O-Ring
	Both		**10-VKCUMISX-6**	Kit w/ 24 Valves, 24 Guides, 32 Springs, 48 Keepers, 24 Stem Seals, 6 Inj. Tubes w/ O-Ring
Valve	Exh		**10-13309S**	1.790 Head Dia. Inconel. 45 Deg. OEM # 3686661
	Exh		**10-2263S**	1.790 Head Dia. 45 Deg. OEM#s 4101454, 3680759
	Int		**10-13308**	1.870 Head Dia. Inconel. 20 Deg. OEM # 3685996
	Int		**10-2262**	1.870 Head Dia. 20 Deg. OEM#s 3680760, 4965868, 4059326
Valve Seat Insert	Exh		**22-1874-2**	1.555T I.D. 1.874 O.D. 45 Deg. OEM # 3683349, 3679537
	Exh		**22-1874-2N**	1.555T I.D. 1.874 O.D. 45 Deg. Nickel
	Int		**22-1953-3**	1.640T I.D. 1.9535 O.D. 0.195 Depth. 20 Deg. +5, 10 O/S Avail. OEM# 3104445, 3681071
	Int		**22-1953-4**	1.640T I.D. 1.9535 O.D. 0.195 Depth. 20 Deg. OEM # 4059215
	Int		**22-1953-4N**	1.640T I.D. 1.953 O.D. 0.195 Depth. Nickel. 20 Deg. OEM# 3104445, 3681071
Guide	Both		**30-3061**	4.106 OAL. 0.3821 I.D. OEM# 4026657 +2 O/S May Be Avail.
	Both		**30-3061U**	Undersized 0.3801 I.D. 30-3061
Spring	Both		**32-04050**	3.886 Free Length. OEM # 3679551, 4965891
Keeper	Both		**34-04644**	1 Round Groove. OEM # 3680883
Valve Stem Seal	Both		**38-3966-45**	Viton. Metal Clad. Fits 30-3008. OEM # 4003966
	Both		**38-6366-55**	Viton. Top Hat. 2.024 Height. OEM # 4356366
	Both		**38-6791-45**	Viton. Metal Clad. 0.472 Height. OEM # 4026791, 4026660
Retainer	Both		**55-2884**	Retainer. OEM # 3680884
Injector Component			**87-0873C**	Injector Tube. Copper Version of 87-0873
			87-0873CK	Injector Tube 87-0873C and Ring 85-8536 Kit
			87-0873K	Injector Tube Kit 87-0873 Stainless and Ring 87-8536
			87-8536	Injector O-Ring. OEM # 3678536
LINE 26	**19.0L K Series 24V D TRB**			**L6 BORE - 6.25"/158.75mm**
Valve	Exh		**10-1533S**	2.220 Head Dia. Std. Engs. OEM # 3024395, 3035110, 3803529, 3088391
	Exh		**10-1734**	2.220 Head Dia. Premium #1 & #2 Engs. Inconel. OEM # 3034827, 3803528
	Int		**10-1534**	2.220 Head Dia. Std & Premium #2 Engs. OEM # 207241, 3803515, 3088393
	Int		**10-1738S**	Premium #1 Engs. Special Tribaloy Matl. OEM # 3052820, 3803518, 3088389
Valve Seat Insert	Exh		**22-2381-2**	2.030 I.D. 2.381 O.D. 0.3225 Depth, Standard Engs. OEM # 205093
	Exh		**22-2381-2S**	2.030 I.D. 2.381 O.D. 0.3225 Depth, Premium #1 & #2 Engs. OEM # 205093
	Int		**22-2381-1**	1.930 I.D. 2.381 O.D. 0.3225 Depth, Standard & Premium #2 Engs. OEM # 3026296
	Int		**22-2381-1S**	1.930 I.D. 2.381 O.D. 0.3255 Depth. Premium #1 Engs. Tribaloy Matl. OEM # 3052819
Guide	Both		**30-7373**	3.805 OAL. Cut For Seal. Nitrocarburized. OEM # 3018818
	Both		**30-7425**	3.785 OAL. No Sharp Edge. Nitrocarburized. OEM # 3021693
	Both		**30-7610**	3.585 OAL. Nitrocarburized. w/ Sharp Edge. OEM # 3202210

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 26	**19.0L K Series 24V D TRB**			**L6 BORE - 6.25"/158.75mm**
Guide	Both		**30-8496**	4.000 OAL. QSK19 Engine. OEM #'s 3090372, 3170135
Spring	Both		**32-04052**	2.650 Free Length OEM # 3633840
Keeper	Both		**34-222**	1 Square Groove. Heat Treated. OEM # 205091
Rotator	Both		**37-1081**	Rotator. Lower. OEM # 3065936, 3081081, 3640315
LINE 27	**23.0L QSK23 24V D TRB**			**L6 BORE - 6.69" / 170mm**
Valve	Exh		**10-13448S**	2.323 Head Dia. OEM # 4007180, 4089090
	Int		**10-13447**	2.402 Head Dia. OEM # 4007179, 4089089
LINE 28	**24L NVH450, V/T1486, VT600 48V N.A., TRB**			**V12 BORE - 5.125"/130.2mm**
Valve	Both		**10-326S**	1.745 Head Dia. Stellite Face. OEM # 70671, 144911
Valve Seat Insert	Both		**22-1847-1**	1-9/16 I.D. 1.8465 O.D. 9/32 Depth. +5, 10, 30 O/S Avail. OEM # 69965, Exc. Natl. Gas
Guide	Both		**30-1969**	3.438 OAL. +3 O/S Avail. OEM # 66890.
Keeper	Both		**34-746**	2 Groove. Heat Treated. OEM # S-2037
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber. Guide O.D. 0.562
LINE 29	**28.0L VT12/1710/V28 Series 48V D N.A., TRB**			**V12 BORE - 5.50"/139.7mm**
Valve	Both		**10-1721S**	1.875 Head Dia. Natl. Gas. Stellite Face. 20 Deg. Seat. OEM # 3226068
	Both		**10-602S**	1.870 Head Dia. Bi-Metallic w/ Stellite. OEM # 145701 w/ Letter "S" In Head
Valve Seat Insert	Both		**22-2003-1**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 3107759 w/ Std. O.D.
	Both		**22-2003-1N**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 127930 w/ Std. O.D. Nickel For TRB and High Heat Appls.
	Both		**22-2006-1**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. +3 For Aftermarket Press Fit 3107759. +5, 10, 20, 30, 40 O/S Avail.
	Both		**22-2006-1N**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. Nickel For TRB & High Heat Appl. Aftermarket +3 O.D.
Guide	Both		**30-1942**	3.400 OAL. w/ Sharp Edge (Otherwise Same As 30-7994). +3, +5 O/S Avail. OEM # 3006456
	Both		**30-7264**	Same As 30-1942+10 O.D. OEM # 3006457. 30-7265 Same As 30-1942+15 O.D. OEM # 3006458
	Both		**30-7990**	3.400 OAL. Natl. Gas Eng. OEM # 3006456.
	Both		**30-7994**	3.400 OAL. w/o Sharp Edge. +2 O/S Avail. OEM # 3050369. Can Be Used For OEM # 3006456
	Both		**30-7994SA**	Same Dimension As 30-7994 in Special Alloy.
Spring	Both		**32-1014**	2.685 Free Length. OEM # 211999
Keeper	Both		**34-803**	2 Groove. Heat Treated. OEM # 127554
Valve Stem Seal	Both		**38-1055-70**	Teflon And Rubber. 1 Ring
Rocker Component			**42-3558**	Rocker Bridge Guide. OEM # 123558
Injector Component			**87-0486K**	Injector Tube 87-0486 and 87-7759 Ring Kit. Copper. OEM # 3070486
			87-1147	Injector Tube, Thick Nose. Copper. OEM # 3011935, 3071147
			87-1147K	Injector Tube Kit w/ O-Ring. Copper.
			87-7759	Injector O-Ring. OEM # 3007759
LINE 30	**3069 C.I. (50.3L) QSK50 64V D TRB**			**V16 BORE - 6.25"/159mm**
Valve	Exh		**10-1734**	2.220 Head Dia. Inconel. OEM # 3034827, 3803528
	Int		**10-1738S**	2.220 Head Dia. Chrome stem version of 2881836, 3631950, 4986317.
Valve Seat Insert	Exh		**22-2381-2S**	2.030 I.D. 2.381 O.D. 0.3225 Depth, OEM # 205093
	Int		**22-2381-1S**	1.930 I.D. 2.381 O.D. 0.3255 Depth. Tribaloy Matl. OEM # 3052819

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 30	**3069 C.I. (50.3L) QSK50 64V D TRB**			**V16** **BORE - 6.25"/159mm**
Spring	Both		**32-04052**	2.650 Free Length OEM # 3633840
Keeper	Both		**34-222**	1 Square Groove. Heat Treated. OEM # 205091
Rotator	Both		**37-1081**	Rotator. Lower. OEM # 3065936, 3081081, 3640315

ENGINE	YEAR	CYL.	LINE NO.
1.7L 53 Series 2V Head D		L2-8	**1**
3.5L 53 Series 4V Head D TRB		L2-6	**2**
4.3L MBE904, 4.8L MBE924 OHV 12V D TRB		L4	**3**
2.3L 71 Series 2V Head		L2-16	**4**
6.4L MBE906, 7.2L MBE926 18V D TRB		L6	**5**
4.7L 71 Series 4V Head 8-32V		L2-16	**6**
8.2L 16V D N.A., TRB		V8	**7**
60 Ser. 11.0L/12.7L/14L D 50 Ser. Natl. Gas 24V		L6	**8**
12.8L OM460 24V Dir. Inj. D TRB MBE4000		L6	**9**
12.8L DD13 SOHC 24V TRB ACRS		L6	**10**
14.8L DD15, 15.6L DD16 DOHC 24V	2009-14	L6	**11**
92 Series 4V Head 12-32V		6-16	**12**
110 Series 2V Head		L6	**13**
149 Series 32V		12-16	**14**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.7L 53 Series 2V Head D**			**L2-8** **BORE - 3.875"/98.4mm**
Valve	Exh		**10-758**	1.400 Head Dia. OEM # 5195948
Valve Seat Insert	Exh		**22-1441-1**	1-13/64T I.D. 1.441 O.D. 0.215 Depth, +10, 30 O/S Avail. OEM # 5116196
Guide	Exh		**30-1832**	2.500 OAL. OEM # 5119992ND
	Exh		**30-1946**	2.380 OAL. Cut For Seal +2, 5, 10 O/S Avail. OEM # 5129919.
	Exh		**30-6254**	2.360 OAL. Cut For Seal. +2, 5 O/S Avail. OEM # 5131961
Keeper	Exh		**34-614**	Heat Treated. 1 Groove.
Valve Stem Seal	Exh		**38-1053-75**	All Teflon.
	Exh		**38-1209-80**	Metal Clad. Blue Viton. OEM # 8921209
	Exh		**38-1209-80A**	Black Viton Silver Metal. OE Style. # 8921209
Injector Component			**87-4701**	Injector Tube O-Ring. OEM # 5104701, 5160037
			87-5606K	Injector Tube Kit, Copper w/ 87-4701 O-Ring. OEM # 8925606
			87-5981	Injector Tube, Thick Nose Copper. OEM #8925981, 5150041
			87-5981K	Injector Tube Kit 87-5981 w/ Oring 87-4701
Expansion Plug Kit			**97-84SS**	Stainless Steel Kit
LINE 2	**3.5L 53 Series 4V Head D TRB**			**L2-6** **BORE - 3.875"/98.4mm**
Valve	Exh		**10-1018**	1.090 Head Dia. Turbo. OEM # 5197176
	Exh		**10-759**	1.090 Head Dia. Non-Turbo. OEM # 5199323
Valve Seat Insert	Both		**22-1161-1**	0.910T I.D. 1.161 O.D. 0.222 Depth. Nickel. +10, 20, 30, 40, 62 O/S Avail. OEM # 8921502
Guide	Exh		**30-6254**	2.360 OAL. Cut For Seal. +2, 5 O/S Avail. OEM # 5131961
Spring	Both		**32-1189**	Lo-Lift Cam. 2.051 Free Length. OEM # 5147424
	Exh		**32-939**	Hi-Lift Cam. 2.101 Free Length. OEM # 5144019
Keeper	Exh		**34-309**	1 Groove. OEM # 5116341
Valve Stem Seal	Exh		**38-1741-80**	Metal Clad. Blue Viton. OEM # 8921741
	Exh		**38-1741-80A**	Black Viton. Silver Metal. OE Stye # 8921741
Rocker Component			**42-4439**	Cam Follower Assembly. OEM # 8924439
	Both		**42-3814**	Cam Follower Roller Set. Roller and Pin. OEM # 8923814
Injector Component			**87-4701**	Injector O-Ring. OEM # 5104701, 5160037
			87-5606K	Injector Tube Kit, Copper w/ 87-4701 O-Ring. OEM # 8925606
			87-5981	Injector Tube, Thick Nose. Copper. OEM #8925981, 5150041
			87-5981K	Injector Tube Kit 87-5981 w/ Oring 87-4701

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 2	**3.5L 53 Series 4V Head D TRB**			**L2-6 BORE - 3.875"/98.4mm**
Expansion Plug Kit			**97-84SS**	Stainless Steel Kit
LINE 3	**4.3L MBE904, 4.8L MBE924 OHV 12V D TRB**			**L4 BORE - 4.02"/102mm**
Valve	Exh		**10-3189**	1.496 Head Dia. 0.3123 Stem 6.006 OAL. 1 per Cyl. OEM # A9060500327
	Int		**10-3188**	1.338 Head Dia. 0.3127 Stem 5.069 OAL. 2 per Cyl. OEM # A9060500326
Valve Seat Insert	Exh		**22-1578-1**	1.233T I.D. 1.578 O.D. 0.315. Depth. 1 per Cyl. OEM # A9060530132
	Int		**22-1382-2**	1.100 I.D. 1.382 O.D. 0.300 Depth. 2 per Cyl. OEM # A9060530131
Guide	Both		**30-3276**	2.362 OAL. 0.3146 Finished I.D. 0.5524 O.D. OEM # A9060530129
	Both		**30-3276SA**	2.362 OAL. 0.3146 ID. Special Harder Alloy.
Spring	Exh		**32-6644**	2.466 Free Length 0.786 I.D. 1.116 O.D. OEM # A9060530020
	Int		**32-6643**	1.961 Free Length 0.785 I.D. 1.052 O.D. OEM # A9060530120
Keeper	Both		**34-5132**	1 Round Bead. OEM # A102530026
Valve Stem Seal	Both		**38-812-45**	Metal Clad. Viton. OEM # A9060530358
Injector Component			**87-0488**	Injector Tube. Stainless. OEM # A9060170488
			87-0488K	Injector Tub Kit, Stainless w/ 87-1345 O-Ring
			87-1345	Injector Tube O-Ring. OEM # A5419970345
LINE 4	**2.3L 71 Series 2V Head**			**L2-16 BORE - 4.125"/104.8mm**
Valve	Exh		**10-327**	1.584 Head Dia. Exc. H.O. OEM # 5193187
	Exh		**10-411**	1.584 Head Dia. H.O. OEM # 5193666
Valve Seat Insert	Exh		**22-1628-2**	1-11/32T I.D. 1.628 O.D. 1/4 Depth. +10, 20, 40 O/S Avail., OEM # 5131096, 8927920
Guide	Exh		**30-1680**	3.250 OAL. +2 O/S Avail. OEM # 5120930
Keeper	Exh		**34-555**	1 Groove. Heat Treated. OEM # 8927953
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber. Guide O.D. 0.562
	Exh		**38-4800-80A**	Black Viton and Silver Metal. OE Style 23500480
Rocker Component			**42-3814**	Cam Follower Roller Set. Roller and Pin. OEM # 8923814
Injector Component			**87-4701**	Injector O-Ring. OEM # 5104701, 5160037
			87-5606K	Injector Tube Kit, Copper w/ 87-4701 O-Ring. OEM # 8925606
			87-5981K	Injector Tube Kit 87-5981 w/ O-Ring 87-4701
Expansion Plug Kit			**97-85SS**	Stainless Steel Kit
LINE 5	**6.4L MBE906, 7.2L MBE926 18V D TRB**			**L6 BORE - 102mm/4.02"**
Valve	Exh		**10-3189**	1.496 Head Dia. 0.3123 Stem 6.006 OAL. 1 per Cyl. OEM # A9060500327
	Int		**10-3188**	1.338 Head Dia. 0.3127 Stem 5.069 OAL. 2 per Cyl. OEM # A9060500326
Valve Seat Insert	Exh		**22-1578-1**	1.233T I.D. 1.578 O.D. 0.315. Depth. 1 per Cyl. OEM # A9060530132
	Int		**22-1382-2**	1.100 I.D. 1.382 O.D. 0.300 Depth. 2 per Cyl. OEM # A9060530131
Guide	Both		**30-3276**	2.362 OAL. 0.3146 Finished I.D. 0.5524 O.D. OEM # A9060530129
	Both		**30-3276SA**	2.362 OAL. 0.3146 ID. Special Harder Alloy.
	Both		**30-3285**	2.363 OAL. Unfinished 0.295 I.D. OEM # 9060530130
Spring	Exh		**32-6644**	2.466 Free Length 0.786 I.D. 1.116 O.D. OEM # A9060530020
	Int		**32-6643**	1.961 Free Length 0.785 I.D. 1.052 O.D. OEM # A9060530120
Keeper	Both		**34-5132**	1 Round Bead. OEM # A102530026
Valve Stem Seal	Both		**38-812-45**	Metal Clad. Viton. OEM # A9060530358
Injector Component			**87-0488**	Injector Tube. Stainless. OEM # 9060170488

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 5	**6.4L MBE906, 7.2L MBE926 18V D TRB**			**L6 BORE - 102mm/4.02"**
Injector Component			**87-0488K**	Injector Tub Kit, Stainless w/ 87-1345 O-Ring
			87-1345	Injector Tube O-Ring. OEM # A5419970345
LINE 6	**4.7L 71 Series 4V Head 8-32V**			**L2-16 BORE - 4.125"/104.78mm**
Valve	Exh		**10-1429S**	1.180 Head Dia. Intercooled Off-Highway Marine. OEM # 5149386
	Exh		**10-1500**	1.180 Head Dia. N.A., TRB OEM # 23500501
Valve Seat Insert	Both		**22-1262-1**	0.975T I.D. 1.262 O.D. 1/4 Depth, +10, 20, 30, 40, 62 O/S Avail. Use 1-5/16 Cutter, OEM # 5101101 Non-Magnetic
Guide	Exh	1957-63	**30-1832**	2.500 OAL. OEM # 5119992ND
	Exh	1964-UP	**30-1946**	2.380 OAL. Cut For Seal +2, 5, 10 O/S Avail. OEM # 5129919.
Spring	Exh		**32-769**	1.970 Free Length. OEM # 5147347
Keeper	Exh		**34-614**	Heat Treated. OEM # 5111337
Valve Stem Seal	Exh		**38-1053-75**	All Teflon.
	Exh		**38-1209-80**	Metal Clad. Blue Viton. OEM # 8921209
	Exh		**38-1209-80A**	Black Viton Silver Metal. OE Style. # 8921209
Rocker Component			**42-3814**	Cam Follower Roller Set. Roller and Pin. OEM # 8923814
			42-4439	Cam Follower Assembly. OEM # 8924439
Push Rod	Both		**74-6858S**	Push Rod Spring. OEM # 5186858
Injector Component			**87-4701**	Injector Tube O-Ring. OEM # 5104701, 5160037
			87-5606K	Injector Tube Kit, Copper w/ 87-4701 O-Ring. OEM # 8925606
			87-5981	Injector Tube, Thick Nose. Copper. OEM #8925981, 5150041
			87-5981K	Injector Tube Kit 87-5981 w/ Oring 87-4701
Expansion Plug Kit			**97-85SS**	Stainless Steel Kit
LINE 7	**8.2L 16V D N.A., TRB**			**V8 BORE - 4.25"/107.95mm**
Valve	Exh		**10-1455**	1.660 Head Dia. OEM # 23502067
	Int		**10-1456**	1.811 Head Dia. OEM # 23502068
Valve Seat Insert	Exh		**20-1750-12**	1.438T I.D. 1-3/4 O.D. 0.203 Depth. Repair Insert.
	Int		**20-1937-12**	1.578T I.D. 1-15/16 O.D. 0.203 Depth. Repair Insert
Guide	Both		**30-7552**	2.875 OAL. 0.564 O.D. Conversion Guide
Keeper	Both		**34-555**	Heat Treated. 1 Groove.
Valve Stem Seal	Both		**38-4800-80A**	Black Viton and Silver Metal. OE Style 23500480
Rocker Component	Both		**42-3814**	Cam Follower Roller Set. Roller and Pin. OEM # 8923814
Injector Component			**87-0390**	Injector O-Ring. OEM # 8920390
			87-9724	Injector Tube. Copper. OEM # 5149724
LINE 8	**60 Ser. 11.0L/12.7L/14L D 50 Ser. Natl. Gas 24V**			**L6 BORE - 5.120"/129.94mm**
Valve Kit	Both		**10-VKDDA60C-5**	Kit w/ 24 non-EGR Valves, 24 Guides, 48 Keepers, 24 Stem Seals, 6 Copper Inj. Tubes w/ O-Ring
	Both		**10-VKDDA60C-6**	Kit w/ 24 non-EGR Valves, 24 Guides, 48 Keepers, 24 Short Springs, 24 Stem Seals, 6 Copper Inj. Tubes w/ O-Ring
	Both		**10-VKDDA60S-5**	Kit w/ 24 EGR Valves, 24 Guides, 48 Keepers, 24 Stem Seals, 6 SS Inj. Tubes w/ O-Ring
	Both		**10-VKDDA60S-6**	Kit w/ 24 EGR Valves, 24 Guides, 48 Keepers, 24 Short Springs, 24 Stem Seals, 6 SS Inj. Tubes w/ O-Ring
	Both		**10-VKDDE60C-6**	Kit 14L w/ EGR Valves, 24 Guides, 48 Keepers, 12 Exh/12 Int Springs, 24 Stem Seals, 6 Copper Inj. Tubes w/ O-Ring
	Both		**10-VKDDE60S-6**	Kit 14L w/ EGR Valves, 24 Guides, 48 Keepers, 12 Exh/12 Int Springs, 24 Stem Seals, 6 SS Inj. Tubes w/ O-Ring

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 8	**60 Ser. 11.0L/12.7L/14L D 50 Ser. Natl. Gas 24V**		**L6**	**BORE - 5.120"/129.94mm**
Valve	Exh		**10-13001**	1.556 Head Dia. w/ EGR. 30 Deg. Higher-Temp Head Matl. OEM # 23529596
	Exh		**10-13001VK**	Kit Incl. Exh. Valve, 2 Keepers, Rotator, Stem Seal
	Exh		**10-1566**	1.556 Head Dia. w/o EGR. 30 Deg. OEM # 23506350.
	Exh		**10-23501577**	Kit Incl. 10-1566 Exh. Valve, 2 Keepers, Rotator, Stem Seal
	Exh		**10-3192**	1.534 Head Dia. 20 Deg. For Natl. Gas. OEM # 23520148, 23519093
	Int		**10-13000**	1.732 Head Dia. From '03 w/ EGR. 30 Deg. OEM # 23529629
	Int		**10-13000VK**	Kit Incl. Int. Valve, 2 Keepers, Rotator, Stem Seal
	Int		**10-1567**	1.732 Head Dia. w/o EGR. 30 Deg. OEM # 23501576
	Int		**10-23501576**	Kit Incl. 10-1567 Int. Valve, 2 Keepers, Rotator, Stem Seal
	Int		**10-3193**	1.732 Head Dia. 20 Deg. For Natl. Gas. OEM # 23520149, 23518745
Valve Seat Insert	Exh		**22-1628-3**	1.357 I.D. 1.6285 O.D. 0.249 Depth. +5, 10, 20, 30 O/S OEM # 8929126
	Exh		**22-1628-3D**	1.357 I.D. 1.6285 O.D. 0.270 Alternate Depth. OEM # 8929126
	Exh		**22-1628-4**	1.309T I.D. 1.6285 O.D. 0.237 Depth. 20 Deg. Nickel For Natl. Gas
	Int		**22-1819-1**	1.571 I.D. 1.8195 O.D. 0.283 Depth. +5, 10, 20, 30 O/S Avail. OEM # 8929127
	Int		**22-1819-2**	1.500T I.D. 1.8195 O.D. 0.268 Depth. 20 Deg. Nickel For Natl. Gas
Guide	Both		**30-8591**	4.006 OAL 0.3453 I.D. OEM # 23518571
	Both		**30-8591U**	4.006 OAL. 0.3145 Undersized I.D.
Spring	Both		**32-09415**	2.866 Free Length. Both Exc. Int. 14.0L. OEM # 8929415
	Exh		**32-04054**	3.262 Free Length. Exh 14.0L. OEM # 23535122
Valve Spring Insert	Both		**33-9076**	Spring Seat. OEM # 5111467
Keeper	Both		**34-09573**	1 Round Groove. OEM # 8929573
Rotator	Both		**37-09105**	Rotator. OEM # 8929105
Valve Stem Seal	Both		**38-502-55**	Viton. Metal Clad. OEM # 8929072, 23523930
Injector Component			**87-1028**	Injector Tube. Copper. Thick Nose. Shorter and Wider Than 87-1580.
			87-1580K	Injector Tube Kit w/ O-Ring 87-5470. Copper. OEM # 23501580, 8929078
		2004-	**87-3147**	O-Ring. Use w/ 87-3148 or 87-8840. OEM # 23533147
		2004-	**87-3148**	Injector Tube. Stainless Steel w/ Threaded Nose. Upper O.D. 1.245. Lower O.D. 1.160 OEM # 23533148
			87-3148K	Injector Kit, 87-3148 Tube and 87-3147 O-Ring
			87-4743	Injector Tube O-Ring. Use w/ 87-8829. OEM # 23534743
			87-5470	Injector Tube O-Ring. Use w/ 87-1580. OEM # 23515470
			87-8829	Injector Tube, Threaded, Stainless. Upper O.D. 1.375. Lower O.D. 1.010. OEM # 23534745, 23538829
			87-8829K	Injector Tube Kit, SS w/ 87-4743 O-Ring
			87-8840	Injector Tube, Threaded, Stainless. Upper O.D. 1.245. Lower O.D. 1.080. OEM # 23538840
LINE 9	**12.8L OM460 24V Dir. Inj. D TRB MBE4000**		**L6**	**BORE - 5.04"/128mm**
Valve	Exh		**10-13380**	1.661 Head Dia. OEM # A4570500327. 36 Deg.
	Int		**10-13379**	1.791 Head Dia. OEM # A4600530001. 30 Deg.
Valve Seat Insert	Exh		**22-1696-3**	1.350R I.D. 1.6965 O.D. 0.3190 Depth. 45 Deg. OEM # 5410530532
	Int		**22-1882-1S**	1.595 I.D. 1.882 O.D. 0.319 Depth. 30 Deg. OEM # 5410532531
Guide	Both		**30-3175**	2.402 OAL. 0.3547 I.D. 0.5920 O.D. OEM # A5410532730
Spring	Both		**32-6648**	2.788 Free Length 0.972 I.D. 1.302 O.D. OEM # A5410530020
Keeper	Both		**34-5142**	1 Round Groove 0.352 Stem Dia. OEM # A5410530126

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 9	**12.8L OM460 24V Dir. Inj. D TRB MBE4000**			**L6 BORE - 5.04"/128mm**
Valve Stem Seal	Both		**38-6492-55**	Viton. Metal Clad. OEM # 40000533558
Injector Component			**87-0488**	Injector Tube. Stainless. OEM # 9060170488
			87-0488K	Injector Tub Kit, Stainless w/ 87-1345 O-Ring
			87-1345	Injector Tube O-Ring. OEM # A5419970345
LINE 10	**12.8L DD13 SOHC 24V TRB ACRS**			**L6 BORE - 132mm/5.20"**
Valve	Exh		**10-13382**	1.697 Head Dia. OEM # A471500527
	Int		**10-13381**	1.780 Head Dia. OEM # A4710500426
Guide	Both		**30-3178**	3.860 OAL. 0.374 I.D. 0.592 O.D. OEM # A4720531130
Spring	Exh		**32-5025**	3.860 Free Length OEM # A4720530520
	Int		**32-5026**	3.930 Free Length. OEM # A4720530420
Keeper	Both		**34-01177**	1 Round Groove. OEM # 3901177
Valve Stem Seal	Both		**38-6134-55**	Viton. Metal Clad. 0.372 Stem
Injector Component			**87-3400**	Injector Tube. Stainless. OEM # A4720780273
			87-3400K	Injector Tube Kit, Stainless w/ 87-3401 O-Ring
			87-3401	Injector Tube O-Ring. OEM # A0269978245, A0249976445
LINE 11	**14.8L DD15, 15.6L DD16 DOHC 24V**			**2009-14 L6 BORE - 139mm/5.47"**
Valve Kit	Both		**10-VKDDAD15-5**	Kit w/ 24 Valves, 24 Guides, 48 Keepers, 24 Stem Seals, 6 Inj. Tubes w/ O-Ring
	Both		**10-VKDDAD15-6**	Kit w/ 24 Valves, 24 Guides, 24 Springs, 48 Keepers, 24 Stem Seals, 6 Inj. Tubes w/ O-Ring
Valve	Exh		**10-3221S**	1.774 Head Dia. OEM # 4730500127
	Int		**10-3220**	1.856 Head Dia. OEM # 4730500126
Valve Seat Insert	Exh		**22-1856-2**	1.325T I.D. 1.856 O.D. 0.310 Depth. Nickel
	Exh		**22-1856-2+010**	1.325T I.D. 1.866 O.D. 0.310 Depth. Nickel
	Int		**22-1934-1**	1.562 I.D. 1.934 O.D. 0.310 Depth. Nickel
	Int		**22-1934-1+010**	1.562 I.D. 1.944 O.D. 0.310 Depth. Nickel
Guide	Both		**30-3178**	3.860 OAL. 0.374 I.D. 0.592 O.D. OEM # A4720531130
Spring	Exh		**32-5025**	3.860 Free Length OEM # A4720530520
	Exh		**32-6679**	4.220 Free Length. OEM # A4720530220
	Int		**32-5026**	3.930 Free Length. OEM # A4720530420
	Int		**32-6678**	4.010 Free Length. OEM # A4720530020
Keeper	Both		**34-01177**	1 Round Groove. Nom. Stem 0.374. OEM # A4720530026
Valve Stem Seal	Both		**38-6134-55**	Viton. Metal Clad. 0.372 Stem. OEM # A4700530158
Injector Component			**87-3400**	Injector Tube. OEM # A4720780273
			87-3400K	Injector Tube with O-Ring
			87-3401	Injector Tube O-Ring. OEM # A0269978245, A0249976445
LINE 12	**92 Series 4V Head 12-32V**			**6-16 BORE - 4.84"/122.94mm**
Valve	Exh		**10-1366**	1.380 Head Dia. Turbo & Non-Turbo. OEM # 5149771
	Exh		**10-1366K**	Valve Kit 10-1366 2 Keepers 34-614
Valve Seat Insert	Exh		**22-1442-1**	1-9/64T I.D. 1.442 O.D. 1/4 Depth, +5, +10, +20, +30, +40, & +63 O/S Avail., OEM # 5148490 Non-Magnetic
Guide	Exh		**30-1946**	2.380 OAL. Cut For Seal +2, 5, 10 O/S Avail. OEM # 5129919.
Spring	Exh		**32-769**	1.970 Free Length. OEM # 5147347
Keeper	Exh		**34-614**	Heat Treated. OEM # 5111337.
Valve Stem Seal	Exh		**38-1053-75**	All Teflon.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 12	**92 Series 4V Head 12-32V**			**6-16 BORE - 4.84"/122.94mm**
Valve Stem Seal	Exh		**38-1209-80**	Metal Clad. Blue Viton. OEM # 8921209
	Exh		**38-1209-80A**	Black Viton Silver Metal. OE Style. # 8921209
Rocker Component			**42-4439**	Cam Follower Assembly. OEM # 8924439
	Both		**42-3814**	Cam Follower Roller Set. Roller and Pin. OEM # 8923814
Injector Component			**87-4701**	Injector O-Ring. OEM # 5104701, 5160037
			87-5606K	Injector Tube Kit, Copper w/ 87-4701 O-Ring. OEM # 8925606
			87-5981K	Injector Tube Kit 87-5981 w/ Oring 87-4701
Expansion Plug Kit			**97-86SS**	Stainless Steel Kit
LINE 13	**110 Series 2V Head**			**L6 BORE - 5.00"/127mm**
Keeper	Exh		**34-613**	1 Groove. Heat Treated.
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. Machine Guide To 0.562 O.D.
LINE 14	**149 Series 32V**			**12-16 BORE - 5.750"/145.9mm**
Guide	Exh		**30-6546**	3.150 OAL. OEM # 5138653
	Exh		**30-8133**	3.150 OAL. 0.3755 I.D. Cut For 0.0600 Dia. Seal
	Exh		**30-8431**	2.940 OAL. Non-Knurled 0.574" Dia. Seal End. OEM # 23515391
Spring	Both		**32-04003**	OEM # 23512120
Keeper	Both		**34-05203**	OEM # 8925203 Heat Treated

ENGINE	YEAR	CYL.	LINE NO.
1.8L to 5.6L F2-6L912		L2-6	1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.8L to 5.6L F2-6L912**			**L2-6** **BORE - 3.937"/100mm**
Guide	Both		**30-3205**	2.283 OAL. OEM # 2232528

ENGINE	YEAR	CYL.	LINE NO.
134 C.I. (2.2L) B8PE, E, JE 8V		L4	**1**
172 (2.8L), 192 C.I. Gas 8V		L4	**2**
172 (2.8L), 192 C.I. Diesel 8V		L4	**3**
200 (3.3L), 200GP (3.3L) 12V		L6	**4**
223 C.I. (3.7L) 12V		L6	**5**
240 C.I. (3.9L) (C5PF) 12V		L6	**6**
262 C.I. (4.3L) (C1PG) 12V		L6	**7**
4.5L VT275 Vin Z, LCF MaxxForce 24V D TRB		V6	**8**
292 C.I. (4.8L) B8PK, K292 16V		V8	**9**
300 C.I. (4.9L) (C5PG, CSG649) 12V		L6	**10**
330 C.I. (5.4L) 16V		V8	**11**
330 C.I. (5.4L) Medium Duty 16V		V8	**12**
330 Heavy Duty, 361 C.I. C4PB 16V		V8	**13**
332 C.I. (5.4L) B6PL, L 16V		V8	**14**
363 C.I. (6.0L) 32V Vin P, Powerstroke D TRB	2003-10	V8	**15**
6.4L MaxxForce OHV 32V Vin R, D TRB	2008-10	V8	**16**
391 C.I. (6.4L) (C4PC) 16V	1964-78	V8	**17**
401, 477, 534 C.I. 16V		V8	**18**
401 C.I. (6.6L) OHV Brazil Vin P 12V D TRB	1986-94	V8	**19**
6651cc (6.7L) OHV 32V Powerstroke D TRB	2010-22	V8	**20**
420 C.I. (6.9L) Navistar 16V Vin 1 D	1983-87	V8	**21**
428 C.I. (7.0L) G 16V		V8	**22**
7.3L Vin CFKM Powerstroke Incl. Dir. Inj . D 16V	1988-05	V8	**23**
460 C.I. (7.5L) G 16V	1976-94	V8	**24**
474 C.I. (7.8L) Brazil 12V D TRB	1987-94	L6	**25**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**134 C.I. (2.2L) B8PE, E, JE 8V**			**L4** **BORE - 3.437"/87.3mm**
Valve	Exh		**10-348**	1.510 Head Dia. Rototype
	Int		**10-376**	1.647 Head Dia. 0.341 Stem +30 O/S Stem Avail.
Valve Seat Insert	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Both		**30-1726**	2.470 OAL. OEM # EAF-6510-C
Spring	Int		**32-611**	2.090 Free Length
Keeper	Int		**34-555**	1 Square Groove. Heat Treated
Push Rod	Both		**74-6080**	9.605 Length
LINE 2	**172 (2.8L), 192 C.I. Gas 8V**			**L4** **BORE - 3.9"/99mm**
Valve	Exh		**10-348**	1.510 Head Dia.
	Int		**10-376**	1.647 Head Dia. 0.341 Stem +30 O/S Stem Avail.
Valve Seat Insert	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Both		**30-1726**	2.470 OAL. OEM # EAF-6510-C
Spring	Both		**32-04014**	2.208 Length, From 1990
	Both		**32-611**	2.090 Free Length
Keeper	Int		**34-555**	1 Square Groove. Heat Treated.
Valve Stem Seal	Both		**38-530-15**	Viton. Umbrella.
	Both		**38-530-45**	Nitrile. Umbrella.
	Int		**38-530-25**	Polyacrylic. Umbrella.
Push Rod	Both		**74-6080**	9.605 Length

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 3	**172 (2.8L), 192 C.I. Diesel 8V**			**L4 BORE - 3.9"/99mm**
Valve Seat Insert	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Exh		**30-1726**	2.470 OAL. OEM # EAF-6510-C
	Int		**30-1966**	2.938 OAL. OEM # 0311411
Spring	Both		**32-611**	2.090 Free Length
Keeper	Exh		**34-555**	1 Square Groove. Heat Treated.
Valve Stem Seal	Both		**38-530-15**	Nitrile. Umbrella.
	Both		**38-530-45**	Viton. Umbrella.
	Int		**38-530-25**	Polyacrylic. Umbrella.
Push Rod	Both		**74-6080**	9.605 Length
LINE 4	**200 (3.3L), 200GP (3.3L) 12V**			**L6 BORE - 3.68"/93.4mm**
Valve	Exh		**10-1266**	1.390 Head Dia. +3, 15, 30 O/S Stem Avail.
	Int		**10-1268**	1.651 Head Dia. +3, +30 O/S Stem Avail.
	Int		**10-1357**	1.751 Head Dia. +3, +15, +30 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1437-2**	1-7/32 I.D. 1-7/16 O.D. 7/32 Depth.
	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. w/ 1.649 Valve Head Dia.
	Int		**20-1812-4**	1-9/16 I.D. 1-13/16 O.D. 3/16 Depth. w/ 1.753 Head Dia.
Guide	Both		**30-6869**	1.875 OAL 0.3125 I.D. 0.4390 O.D.
	Both		**30-6977**	2.281 OAL 0.3120 I.D. 0.5020 O.D.
	Both		**30-9869**	1.875 OAL. 0.439 O.D. Spiral I.D. 30-6869 Plain I.D. Also Avail.
	Both		**30-9977**	2.281 OAL. 0.3120 Spiral I.D. 0.502 O.D.
	Both		**30-9977H**	2.281 OAL. 0.3120 Spiral I.D. 0.502 O.D. Hardened
	Both		**30-9977U**	2.281 OAL. Undersized Spiral 0.3070 I.D. 0.502 O.D.
Spring	Both		**32-778**	1.828 Free Length Exc. 1968-69
Keeper	Both		**34-614**	Heat Treated. 1 Groove.
Lifter	Both		**36-2083**	Hydraulic
Valve Stem Seal	Both		**38-1062-70**	Teflon And Rubber. 1 Ring
	Both		**38-766-15**	Nitrile. Umbrella.
	Both		**38-766-25**	Polyacrylic. Umbrella.
Expansion Plug Kit			**97-14**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 5	**223 C.I. (3.7L) 12V**			**L6 BORE - 3.62"/92mm**
Valve	Exh		**10-375**	1.510 Head Dia. +3, 30 O/S Stem Avail.
	Int		**10-373**	1.780 Head Dia. +15 O/S Avail.
Valve Seat Insert	Int		**20-1812-3**	1-1/2T I.D. 1-13/16 O.D. 7/32 Depth.
	Exh		**22-1630-1**	1.335 I.D. 1.630 O.D. 0.312 Depth. Also Avail. In Nickel (-N) Matl.
Guide	Both		**30-6105**	2.500 OAL. 0.3440 Plain I.D. 0.5020 O.D.
	Both		**30-9105**	2.500 OAL. Spiral 0.344 I.D.
	Exh		**30-6105U**	2.500 OAL. 0.3390 Undersize Plain I.D. 0.5020 O.D.
Spring	Both		**32-611**	2.090 Free Length
Keeper	Both		**34-555**	1 Square Groove. Heat Treated.
Valve Stem Seal	Both		**38-530-15**	Nitrile. Umbrella.
	Both		**38-530-25**	Polyacrylic. Umbrella. Nitrile Matl. 38-530-15, Viton -45 Also Avail.
	Both		**38-530-45**	Viton. Umbrella.
	Both		**38-731-15**	Nitrile. 2-Ring
	Both		**38-731-25**	Polyacrylic. 2-Ring.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 5	**223 C.I. (3.7L) 12V**			**L6 BORE - 3.62"/92mm**
Valve Stem Seal	Both		**38-951-25**	Polyacrylic. 2-Ring. w/ 0.341 Stem Dia.
Push Rod	Both		**74-6080**	9.605 Length
Expansion Plug Kit			**97-15**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 6	**240 C.I. (3.9L) (C5PF) 12V**			**L6 BORE - 4.00"/101.6mm**
Valve	Exh		**10-1358**	1.560 Head Dia. 4.810 OAL. +3, 15, 30 O/S Stem Avail.
	Exh		**10-965S**	1.560 Head Dia. Stellite. +15 O/S Stem Avail.
	Int		**10-1120**	1.780 Head Dia. H.D. +3, 15, 30 O/S Stem Avail.
	Int		**10-963**	1.781 Head Dia. +3, 15, 30 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Int		**20-1812-3**	1-1/2T I.D. 1-13/16 O.D. 7/32 Depth. w/ 1.720 Valve Head Dia.
Guide	Exh		**30-5607**	2.250 OAL 0.3440 I.D. 0.5020 O.D.
	Exh		**30-9607**	2.250 OAL. Spiral 0.344 I.D. 30-5607 Plain I.D. Also Avail.
	Int		**30-9867**	2.125 OAL. Spiral 0.344 I.D. 30-6867 Plain I.D. Also Avail.
Spring	Both		**32-807**	1.990 Free Length. Use w/o Rotator
	Both		**32-812**	1.875 Free Length. Use w/ Rotator
Keeper	Both		**34-555**	1 Square Groove. Heat Treated
Lifter	Both		**36-900CCI**	Hydraulic Flat. 1-pc. Chilled Cast Iron
Valve Stem Seal	Both		**38-925-25**	Polyacrylic. Ring And Band. 38-925-15 Nitrile Matl. Also Avail.
Rocker Component	Both		**42-1772**	Rocker Comp. Grooved Ball
	Both		**42-1786**	Rocker Comp. Nut 3/8x24 Adj.
Push Rod	Both		**74-6306**	10.136 Length
Expansion Plug Kit			**97-16**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 7	**262 C.I. (4.3L) (C1PG) 12V**			**L6 BORE - 3.70"/94.4mm**
Valve Seat Insert	Int		**20-1812-3**	1-1/2T I.D. 1-13/16 O.D. 7/32 Depth.
	Exh		**22-1630-1**	1.335 I.D. 1.630 O.D. 0.312 Depth.
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel
Guide	Exh		**30-7298**	2.375 OAL 0.3730 Plain I.D. 0.5020 O.D.
	Exh		**30-9298**	2.375 OAL. 0.373 Spiral I.D. 0.5020 O.D.
	Int		**30-9964**	2.250 OAL. Spiral 0.373 I.D. 0.5020 O.D.
	Int		**30-9964H**	2.250 OAL. Spiral 0.373 I.D. 0.5020 O.D. Hardened
Push Rod	Both		**74-6080**	9.605 Length
Expansion Plug Kit			**97-15**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 8	**4.5L VT275 Vin Z, LCF MaxxForce 24V D TRB**			**V6 BORE - 3.74"/94.9mm**
Valve			**10-2179**	1.339 Head Dia. 0.2737 Stem
			10-2180	1.102 Head Dia.
Valve Seat Insert			**20-1250-15N**	0.905 I.D. 1.2550 O.D. 0.250 Depth. Nickel. May Need Machining
			20-1250-3	1.000 I.D. 1-1/4 O.D. 1/4 Depth.
	Int		**20-1375-2**	1.125 I.D. 1.3795 Exact O.D. 0.250 Depth. May Need Machining
Guide			**30-3055**	2.331 OAL 0.2765 I.D.
Spring	Both		**32-04040**	2.076 Free Length
Keeper	Both		**34-5009**	1 Round Bead. 0.274 Stem
Lifter	Both		**36-2104**	Hydraulic Roller. OEM # 3C3Z6500AA
Valve Stem Seal	Both		**38-160-55**	Viton. Top Hat.
Push Rod	Both		**74-6662**	9.795 Length. 11/32 x 0.060. Install Bronze End at Rocker Arm. OEM # 8C3Z6565B

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 8	**4.5L VT275 Vin Z, LCF MaxxForce 24V D TRB**			**V6** **BORE - 3.74"/94.9mm**
Injector Component			**87-8320**	Injector Tube. Stainless. OEM# 3C3Z-9F538-AA
LINE 9	**292 C.I. (4.8L) B8PK, K292 16V**			**V8** **BORE - 3.75"/95.2mm**
Valve	Exh		**10-375**	1.510 Head Dia. +3, 30 O/S Stem Avail.
	Int		**10-376**	1.647 Head Dia. 0.341 Stem +30 O/S Stem Avail.
	Int		**10-494**	1.925 Head Dia.
Valve Seat Insert	Exh		**20-1562-2**	1-5/16T I.D. 1-9/16 O.D. 1/4 Depth.
	Int		**20-1750-3**	1-7/16 I.D. 1-3/4 O.D. 7/32 Depth.
	Int		**20-2000-1**	1-3/4 I.D. 2.000 O.D. 7/32 Depth. +20 O/S, Nickel (-N) Also Avail.
Guide	Exh		**30-6105**	2.500 OAL. 0.3440 Plain I.D. 0.5020 O.D.
	Exh		**30-6105U**	2.500 OAL. 0.3390 Undersize Plain I.D. 0.5020 O.D.
	Exh		**30-9105**	2.500 OAL. Spiral I.D. 30-6105 Plain I.D. Also Avail.
	Int		**30-5606**	2.375 OAL. Plain I.D. Conversion Guide
	Int		**30-9606**	2.375 OAL. Spiral I.D. 30-5606 Plain I.D. Also Avail.
Spring	Both		**32-611**	2.090 Free Length
Keeper	Both		**34-555**	1 Square Groove. Heat Treated
Valve Stem Seal	Both		**38-1045-70**	Teflon And Rubber.
	Both		**38-810-45**	Viton. Ring And Band.
Expansion Plug Kit			**97-20**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 10	**300 C.I. (4.9L) (C5PG, CSG649) 12V**			**L6** **BORE - 4.00"/101.6mm**
Valve	Exh		**10-1358**	1.560 Head Dia. 4.810 OAL. To 1983. +3, 15, 30 O/S Stem Avail.
	Exh		**10-1504S**	1.560 Head Dia. 4.750 OAL. Stellite And Chrome Plated. 1984-96.
	Exh		**10-965S**	1.560 Head Dia. 4.810 OAL. Stellite Faced To '83, No Chrome. +15 O/S Stem Avail.
	Int		**10-1120**	1.780 Head Dia. 4.810 OAL. 1965-83 HD, 1984 To Mid 1996 All. Chrome Plated. +3, 15, 30 O/S Stem Avail.
	Int		**10-963**	1.781 Head Dia. 4.810 OAL. No Chrome. +3, 15, 30 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1687-4N**	1-11/32 I.D. 1-11/16 O.D. 5/16 Depth. OEM Replacement
	Exh		**20-1687-5N**	1-3/8 I.D. 1-11/16 O.D. 7/32 Depth, w/o OEM Replacement
	Int		**20-1812-3**	1-1/2T I.D. 1-13/16 O.D. 7/32 Depth.
Guide	Exh		**30-5607**	2.250 OAL Plain 0.3440 I.D. 0.5020 O.D.
	Exh		**30-9607**	2.250 OAL. Spiral 0.344 I.D.
	Exh		**30-9607H**	2.250 OAL. Spiral 0.344 I.D. Hardened
	Int		**30-6867**	2.125 OAL Plain 0.3440 I.D. 0.5020 O.D.
	Int		**30-9867**	2.125 OAL. Spiral 0.344 I.D.
Spring	Both		**32-807**	1.990 Free Length. Use w/o Rotator
	Both		**32-812**	1.875 Free Length. Use w/ Rotator
Keeper	Both		**34-555**	1 Square Groove. Heat Treated
Lifter	Both		**36-900CCI**	Hydraulic Flat. 1-pc. Chilled Cast Iron
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-253-45**	Viton. Umbrella.
	Both		**38-259-35**	Glass Filled Nylon. Umbrella.
	Exh		**38-937-15**	Nitrile. Ring And Band.
Rocker Component	Both		**40-2710**	Rocker Arm. Stamped
	Both		**42-1741**	Rocker Comp. 5/16 Bolt w/ Washer
	Both		**42-1772**	Rocker Comp. Grooved Ball

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 10	**300 C.I. (4.9L) (C5PG, CSG649) 12V**			**L6 BORE - 4.00"/101.6mm**
Rocker Component	Both		**42-1776**	Rocker Comp. Fulcrum
	Both		**42-1786**	Rocker Comp. Nut 3/8x24 Adj.
	Both		**42-1791**	Rocker Comp. Nut 5/16
Push Rod	Both		**74-5312**	9.590 Length
	Both		**74-6306**	10.136 Length
Expansion Plug Kit			**97-117**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 11	**330 C.I. (5.4L) 16V**			**V8 BORE - 3.875"/98.4mm**
Valve	Int		**10-949**	1.753 Head Dia. +15 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1687-4**	1-11/32 I.D. 1-11/16 O.D. 5/16 Depth. Use w/ 1-11/16 Cutter.
	Int		**20-1875-2**	1-9/16 I.D. 1-7/8 O.D. 1/4 Depth. Use w/ 1-7/8 Cutter.
	Exh		**22-1630-1**	1.335 I.D. 1.630 O.D. 0.312 Depth. OEM # C4TZ-6057A & D1TZ-6057A
	Int		**22-1815-1**	1.595 I.D. 1.815 O.D. 1/4 Depth, OEM # C8TZ-6057A
Guide	Exh		**30-9298**	2.375 OAL. 0.373 Spiral I.D. 30-7298 Plain I.D. Also Avail.
	Int		**30-9109**	2.500 OAL. Spiral 0.374 I.D. 30-6109 Plain I.D. Also Avail.
Spring	Both		**32-677-D**	2.260 Free Length. w/ Damper
Keeper	Both		**34-613**	1 Groove. Heat Treated
Lifter	Both	1970-76	**36-2083**	Hydraulic
Valve Stem Seal	Both		**38-905-25**	Polyacrylic. Umbrella. Nitrile Matl. 38-905-15 Also Avail.
	Both		**38-921-25**	Polyacrylic. 2-Ring.
Rocker Component	Both		**40-2859**	Rocker Arm. Cast
		1970-76	**42-2641**	Rocker Shaft. 2 Required. w/ Hyd. Lifter
Push Rod	Both		**74-5311**	9.620 Length
	Both	1970-76	**74-5312**	9.590 Length
Expansion Plug Kit			**97-19**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 12	**330 C.I. (5.4L) Medium Duty 16V**			**V8 BORE - 3.875"/98.4mm**
Valve	Exh		**10-1332**	1.508 Head Dia. +3, 15 O/S Stem Avail.
	Int		**10-949**	1.753 Head Dia. +15 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1687-4**	1-11/32 I.D. 1-11/16 O.D. 5/16 Depth. Use w/ 1-11/16 Cutter.
	Int		**20-1875-2**	1-9/16 I.D. 1-7/8 O.D. 1/4 Depth. Use w/ 1-7/8 Cutter.
	Exh		**22-1630-1**	1.335 I.D. 1.630 O.D. 0.312 Depth. OEM # C4TZ-6057A & D1TZ-6057A
	Int		**22-1815-1**	1.595 I.D. 1.815 O.D. 1/4 Depth, OEM # C8TZ-6057A
Guide	Exh		**30-7298**	2.375 OAL 0.3730 I.D. 0.5020 O.D.
	Exh		**30-9298**	2.375 OAL. 0.373 Spiral I.D. 30-7298 Plain I.D. Also Avail.
	Int		**30-6109**	2.250 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Int		**30-9109**	2.500 OAL. Spiral 0.374 I.D. 30-6109 Plain I.D. Also Avail.
Spring	Both		**32-677-D**	2.260 Free Length
Keeper	Both		**34-613**	1 Groove. Heat Treated
Lifter	Both		**36-2083**	Hydraulic
Valve Stem Seal	Both		**38-905-25**	Polyacrylic. Umbrella. Nitrile Matl. 38-905-15 Also Avail.
	Both		**38-921-25**	Polyacrylic. 2-Ring.
Rocker Component	Both		**40-2859**	Rocker Arm. Cast
			42-2641	Rocker Shaft. 2 Required. w/ Hyd. Lifter
Push Rod	Both		**74-5311**	9.620 Length

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 12	**330 C.I. (5.4L) Medium Duty 16V**			**V8** **BORE - 3.875"/98.4mm**
Push Rod	Both		**74-5312**	9.590 Length
Expansion Plug Kit			**97-19**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 13	**330 Heavy Duty, 361 C.I. C4PB 16V**			**V8** **BORE - 3.875"/98.4mm**
Valve	Exh		**10-917**	1.505 Head Dia. +3, 15,30 O/S Stem Avail. Non-Sodium Requires Addl. 0.002 Reaming Of Guide.
	Int		**10-1057**	1.753 Head Dia. 0.3714 Stem. To S/N 025,001.
	Int		**10-1057S**	1.753 Head Dia. Stellite. 10-1057 Non-Stellite Avail.
Valve Seat Insert	Exh		**20-1687-4**	1-11/32 I.D. 1-11/16 O.D. 5/16 Depth. Use w/ 1-11/16 Cutter.
	Int		**20-1875-2**	1-9/16 I.D. 1-7/8 O.D. 1/4 Depth. Use w/ 1-7/8 Cutter.
	Exh		**22-1630-1**	1.335 I.D. 1.630 O.D. 0.312 Depth. OEM # C4TZ-6057A & D1TZ-6057A
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel
	Int		**22-1815-1**	1.595 I.D. 1.815 O.D. 1/4 Depth, OEM # C8TZ-6057A
Guide	Exh		**30-6119**	2.500 OAL 0.4375 I.D. 0.6270 O.D.
	Exh		**30-9119**	2.500 OAL. 0.627 O.D. 0.434 Spiral I.D. 30-6119 Plain I.D. Also Avail.
	Int		**30-6109**	2.250 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Int		**30-9109**	2.500 OAL. Spiral 0.374 I.D. 30-6109 Plain I.D. Also Avail.
Spring	Both		**32-1016**	1.960 Free Length.
	Both		**32-798**	2.000 Free Length.
Keeper	Both		**34-613**	1 Groove. Heat Treated
Lifter	Both		**36-2083**	Hydraulic
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
Rocker Component	Both		**40-2859**	Rocker Arm. Cast
			42-2641	Rocker Shaft. 2 Required. w/ Hyd. Lifter
Push Rod	Both		**74-5311**	9.620 Length
	Both		**74-5312**	9.590 Length
Expansion Plug Kit			**97-19**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 14	**332 C.I. (5.4L) B6PL, L 16V**			**V8** **BORE - 3.80"/96.5mm**
Valve Seat Insert	Int		**20-2125-1**	1-13/16 I.D. 2-1/8 O.D. 1/4 Depth.
	Exh		**22-1630-1**	1.335 I.D. 1.630 O.D. 0.312 Depth. Replaces OEM # C4TZ-6057-A & D1TZ-6057-A.
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel
Guide	Exh		**30-6119**	2.500 OAL 0.4375 Plain I.D. 0.6270 O.D.
	Exh.		**30-9119**	2.500 OAL. 0.4375 Spiral I.D. 0.627 O.D.
	Int		**30-5606**	2.375 OAL. Plain 0.3440 I.D. 0.5020 O.D.
	Int		**30-6108**	2.375 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Int		**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Int		**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D. Hardened
	Int		**30-9606**	2.375 OAL. Spiral 0.3440 I.D. 0.5020 O.D
Spring	Both		**32-611**	2.090 Free Length
Keeper	Both		**34-555**	1 Square Groove. Heat Treated
Push Rod	Both		**74-6080**	9.605 Length
Expansion Plug Kit			**97-19**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 15	**363 C.I. (6.0L) 32V Vin P, Powerstroke D TRB**			**2003-10 V8** **BORE - 3.74"/94.9mm**
Valve Kit	Both	2003-10	**10-VKFOR60I-5**	Kit w/ 32 Valves, 32 Springs, 64 Keepers, 32 Stem Seals, 32 Retainers

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 15	**363 C.I. (6.0L) 32V Vin P, Powerstroke D TRB**		**2003-10 V8**	**BORE - 3.74"/94.9mm**
Valve Kit	Both	2003-10	**10-VKFOR60S-5**	Kit w/ 32 Valves, 32 Guides, 64 Keepers, 32 Stem Seals, 8 SS Inj. Tubes
	Both	2003-10	**10-VKFOR60S-6**	Kit w/ 32 Valves, 32 Guides, 64 Keepers, 32 Springs, 32 Stem Seals, 8 SS Inj. Tubes
Valve	Exh	2003-10	**10-2180**	1.102 Head Dia.
	Int	2003-10	**10-2179**	1.339 Head Dia. 0.2737 Stem
Cylinder Head, Stock		2003-10	**16-260018**	Cast Iron. 18mm Dowell. Seats, Guides, and Inj. Tubes Installed
		2003-10	**16-260020**	Cast Iron. 20mm Dowell. Seats, Guides, and Inj. Tubes Installed
Valve Seat Insert	Exh	2003-10	**20-1250-15N**	0.905 I.D. 1.2550 O.D. 0.250 Depth. Nickel. May Need Machining
	Exh	2003-10	**20-1250-3**	1.000 I.D. 1-1/4 O.D. 1/4 Depth.
	Int	2003-10	**20-1375-2**	1.125 I.D. 1.3795 Exact O.D. 0.250 Depth. May Need Machining
	Exh	2003-10	**21-1187-52**	0.934T I.D. 1-3/16 O.D. 0.257 Depth. May Need Machining
	Exh	2003-10	**22-1161-1+030**	0.910T I.D. 1.191 O.D. 0.222 Depth. Nickel. May Need Machining. +10, 20, 30, 40, 50, 63 Avail.
	Exh	2003-10	**22-1221-2N**	0.906 I.D. 1.221 O.D. 0.335 Depth. Nickel
	Exh	2003-10	**22-1260-1N**	0.945 I.D. 1.2598 O.D. 0.335 Depth. May Need Machining. Nickel
	Int	2003-10	**22-1375-1**	1.100 I.D. 1.375 O.D. 0.227 Depth. +010 O/S Avail. OEM # 3942298
	Int	2003-10	**22-1375-2N**	1.100 I.D. 1.375 O.D. 0.227 Depth. +5, 10, 20 O/S Avail. OEM # 3942299
Guide	Both	2003-10	**30-3055**	2.331 OAL. 0.2765 I.D. +2, 5 O/S Avail.
Spring	Both	2003-10	**32-04040**	2.076 Free Length
Keeper	Both	2003-10	**34-5009**	1 Round Bead. 0.274 Stem
Lifter	Both	2003-10	**36-2104**	Hydraulic Roller. OEM # 3C3Z6500AA
Valve Stem Seal	Both	2003-10	**38-160-55**	Viton. Top Hat.
Performance Spring	Both	2003-10	**52-4040**	2.160 Free Length. 84 @ 1.880 (+20 closed). 252 @ 1.400 (+50 open)
Retainer	Both	2003-10	**55-6328**	Retainer. 0.912 O.D.
Push Rod	Both	2003-10	**74-6662**	9.795 Length. 2nd Des. 11/32 x 0.060. OEM # 8C3Z6565B
Black Lightning R. Valve	Both	2003-10	**77-VKFO601-5**	Kit, 32 BLDP Valves, 64 keepers, 32 HP springs, retainers, stem seals
	Exh	2003-10	**77-110007**	Black Lightning Nitrided Inconel. 1.102 Head 0.2735 Stem 5.059 OAL
	Int	2003-10	**77-133008**	Black Lightning Nitrided Stainless. 1.339 Head Dia. 0.2738 Stem 5.059 OAL
Injector Component		2003-10	**87-8320**	Injector Tube. Stainless. OEM# 3C3Z-9F538-AA
Expansion Plug Kit		2003-10	**97-300SS**	Stainless Steel
LINE 16	**6.4L MaxxForce OHV 32V Vin R, D TRB**		**2008-10 V8**	**BORE - 98mm/3.86"**
Valve	Exh	2008-10	**10-13183**	1.161 Head Dia. 0.2738 Stem
	Int	2008-10	**10-13182**	1.339 Head Dia. 0.2738 Stem
Valve Seat Insert	Exh	2008-10	**20-1250-15N**	0.905 I.D. 1.2550 O.D. 0.250 Depth. Nickel. May Need Machining
	Exh	2008-10	**20-1250-3**	1.000 I.D. 1-1/4 O.D. 1/4 Depth.
	Int	2008-10	**20-1375-2**	1.125 I.D. 1.3795 Exact O.D. 0.250 Depth. May Need Machining.
	Exh	2008-10	**21-1187-52**	0.934T I.D. 1-3/16 O.D. 0.257 Depth. May Need Machining
	Exh	2008-10	**22-1161-1+030**	0.910T I.D. 1.191 O.D. 0.222 Depth. May Need Machining.
	Exh	2008-10	**22-1221-2N**	0.906 I.D. 1.221 O.D. 0.335 Depth. Nickel
	Exh	2008-10	**22-1260-1N**	0.945 I.D. 1.2598 O.D. 0.335 Depth. May Need Machining. Nickel
	Int	2008-10	**22-1375-1**	1.100 I.D. 1.375 O.D. 0.227 Depth. +010 O/S Avail. OEM # 3942298
	Int	2008-10	**22-1375-2N**	1.100 I.D. 1.375 O.D. 0.227 Depth. +5, 10, 20 O/S Avail. Nickel. OEM # 3942299
Guide	Both	2008-10	**30-3055**	2.331 OAL 0.2765 I.D.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 16	**6.4L MaxxForce OHV 32V Vin R, D TRB**			**2008-10 V8 BORE - 98mm/3.86"**
Spring	Both	2008-10	**32-04040**	2.076 Free Length
Keeper	Both	2008-10	**34-5009**	1 Round Bead. 0.274 Stem
Lifter	Both	2008-10	**36-2104**	Hydraulic Roller. OEM # 3C3Z6500AA
Valve Stem Seal	Both	2008-10	**38-160-55**	Viton. Top Hat.
Performance Spring	Both	2008-10	**52-4040**	2.160 Free Length. 84 @ 1.880 (+20 closed). 252 @ 1.400 (+50 open)
Retainer	Both	2008-10	**55-6328**	Retainer. 0.912 O.D.
Push Rod	Both	2008-10	**74-6662**	9.795 Length. 11/32 x 0.060. OEM # 8C3Z6565B
Black Lightning R. Valve	Both	2008-10	**77-VKFO641-5**	Kit, 32 BLDP Valves, 64 keepers, 32 HP springs, retainers, stem seals
	Exh	2008-10	**77-116007**	Black Lightning Nitrided Inconel. 1.161 Head Dia. 0.2734 Stem 5.138 OAL
	Int	2008-10	**77-133007**	Black Lightning Nitrided Stainless. 1.339 Head Dia. 0.2738 Stem 5.138 OAL
Injector Component		2008-10	**87-6951**	Injector Tube, Stainless. OEM # 8C3Z9N951A
LINE 17	**391 C.I. (6.4L) (C4PC) 16V**			**1964-78 V8 BORE - 4.05"/102.87mm**
Valve	Exh	1964-78	**10-917**	1.505 Head Dia. +3, 15,30 O/S Stem Avail. Non-Sodium Requires Addl. 0.002 Reaming Of Guide.
	Int		**10-1057**	1.753 Head Dia. 0.3714 Stem. w/o Stellite
	Int		**10-1057S**	1.753 Head Dia. 0.3714 Stem. Stellite.
Valve Seat Insert	Exh		**20-1687-4N**	1-11/32 I.D. 1-11/16 O.D. 5/16 Depth. Use w/ 1-11/16 Cutter. Nickel
	Int		**20-1875-2**	1-9/16 I.D. 1-7/8 O.D. 1/4 Depth. Use w/ 1-7/8 Cutter.
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel. OEM # C4TZ-6057A, D1TZ-6057A, +10, 20, 30 O/S Avail.
	Int		**22-1815-1**	1.595 I.D. 1.815 O.D. 1/4 Depth, OEM # C8TZ-6057A
Guide	Exh		**30-6119**	2.500 OAL 0.4375 Plain I.D. 0.6270 O.D.
	Exh		**30-9119**	2.500 OAL. 0.627 O.D. 0.434 Spiral I.D.
	Int	1967-76	**30-9109**	2.500 OAL. Spiral 0.374 I.D. 30-6109 Plain I.D. Also Avail.
	Int		**30-9964**	2.250 OAL. Spiral I.D.
Spring	Both		**32-1016**	1968-69 Exc. F-85 Toronado & Police - 1970 Exc. F-85 & Performance Eng. - 1971 Exc. Toronado - 1972 Toronado - 1973 w/ Auto. - 1974 All Exc. w/ 30-1975-76 All, 1.960 Free Length w/o Damper
	Both	1965-77	**32-798**	2.000 Free Length.
	Both	1977-78	**32-909-D**	2.120 Free Length. w/ Damper
Keeper	Both		**34-613**	1 Groove. Heat Treated
Lifter	Both		**36-2083**	Hydraulic
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-938-45**	Viton. Ring And Band. Use w/ 0.552 O.D. Valve Guide
	Exh	1967-76	**38-240-25**	Polyacrylic. O-Ring.
Rocker Component	Both		**40-2859**	Rocker Arm. Cast
		1964-78	**42-2641**	Rocker Shaft. 2 Required. w/ Hyd. Lifter
Push Rod	Both	1964-69	**74-5311**	9.620 Length
	Both	1964-76	**74-5312**	9.590 Length
Expansion Plug Kit		1964-78	**97-19**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 18	**401, 477, 534 C.I. 16V**			**V8 BORE - 4.125"/104.775mm**
Valve Seat Insert	Exh		**22-1744-1N**	1.445 I.D. 1.744 O.D. 0.312 Depth. Nickel. OEM # B8QH-6057A
Guide	Both		**30-9609**	2.625 OAL. 58-69: Both. 70 & Up: Int. Spiral I.D. 30-5609 w/ Plain I.D. Also Avail.
	Exh		**30-9197**	3.000 OAL. 1970 & Up

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 18	**401, 477, 534 C.I. 16V**			**V8 BORE - 4.125"/104.775mm**
Keeper	Both		**34-802**	1 Groove. Heat Treated
Valve Stem Seal	Both		**38-713-15**	Nitrile. Umbrella Style.
Expansion Plug Kit			**97-27**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 19	**401 C.I. (6.6L) OHV Brazil Vin P 12V D TRB**			**1986-94 V8 BORE - 4.40"/111.76mm**
Valve	Exh	1986-94	**10-1740**	1.580 Head Dia. Indirect Injection
	Exh	1986-94	**10-1758**	1.693 Head Dia. Direct Injection
	Int	1986-94	**10-1694**	1.842 Head Dia. Indirect Injection
	Int	1986-94	**10-1757**	1.870 Head Dia. Direct Injection
Valve Seat Insert	Exh	1987-94	**22-1733-2N**	1.455T I.D. 1.733 O.D. 0.365 Depth. +30 O/S Avail. CF600/800 Series
Guide	Both	1986-94	**30-8409**	2.680 OAL
Keeper	Both	1986-94	**34-613**	1 Groove. Heat Treated
Valve Stem Seal	Both	1986-94	**38-403-45**	Viton. Metal Clad.
Expansion Plug Kit		1986-94	**97-27**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 20	**6651cc (6.7L) OHV 32V Powerstroke D TRB**			**2010-22 V8 BORE - 99.1mm/3.90"**
Valve Kit	Both		**10-VKFOR67L-4**	Kit w/ 32 Valves, 32 Guides, 64 Keepers, 32 Stem Seals
	Both		**10-VKFOR67L-5**	Kit w/ 32 Valves, 32 Guides, 32 Springs, 64 Keepers, 32 Stem Seals
Valve	Exh	2011-22	**10-13266**	1.195 Head Dia. 0.2748 Stem. 5.242 Length. 44.5 Deg. Seat
	Int	2011-22	**10-13265**	1.331 Head Dia. 0.2748 Stem. 5.242 Length. 29.5 Deg. Seat
Guide	Both	2011-22	**30-3163**	2.150 OAL. 0.2764 I.D. 0.4725 O.D.
Spring	Both	2011-22	**32-5015**	1.979 Free Length. Conical
Keeper	Both	2010-22	**34-281**	3 Round Beads. 0.275 Stem Dia.
Lifter	Both	2011-22	**36-2315**	Hydraulic Roller
Valve Stem Seal	Both	2011-22	**38-6129-55**	Viton. Top Hat
Performance Spring	Both	2011-22	**52-5015**	1.800 Free Length. 1.110T O.D. 0.532 Max Lift. Open 206 @1.191" Conical.
Retainer	Both	2011-22	**55-5715**	Chrome Moly. 0.865 O.D.
	Both	2011-22	**55-6715**	Chrome Moly. 0.779 O.D. 0.275 Stem. Use w/ 52-5015
Push Rod	Both	2011-22	**74-6685**	9.534 Length
Black Lightning R. Valve	Both	2011-22	**77-VKFO671-5**	Kit, 32 BLDP Valves, 64 keepers, 32 HP springs, Retainers, Stem Seals
	Exh	2011-22	**77-119007**	Black Lightning Nitrided Inconel. 1.195 Head Dia. 0.2748 Stem 5.242 OAL
	Int	2011-22	**77-133017**	Black Lightning Nitrided Stainless. 1.331 Head Dia. 0.2744 Stem 5.242 OAL
LINE 21	**420 C.I. (6.9L) Navistar 16V Vin 1 D**			**1983-87 V8 BORE - 4.00"/101.6mm**
Valve	Exh	1983-87	**10-1542**	1.595 Head Dia. 0.372T Stem. +10 Thicker Margin
	Int	1983-87	**10-1543**	1.877 Head Dia. 0.3719 Stem. +10 Margin
Valve Seat Insert	Int	1983-87	**20-1875-38**	1-5/8 I.D. 1-7/8 O.D. 3/16 Depth. To Be Used In Early A & B Castings Due To Thin Wall Sections
	Int	1983-87	**20-1937-23**	1-11/16 I.D. 1-15/16 O.D. 3/16 Depth, Cannot Be Used In Early Year A & B Castings Because Of Thin Casting.
	Exh	1983-87	**22-1669-1**	1.372T I.D. 1.669 O.D. 0.272 Depth. OEM # E3TZ-6057B. +15 & +30 O/S Avail.
	Int	1983-87	**22-1957-1**	Dual O.D. Seat Recommended For All Castings.
Guide	Both	1983-87	**30-7689**	2.600 OAL. OEM Repair Version Check O.D. 0.6252 O.D.
	Both	1983-87	**30-7712**	5/8 Reamer Option 0.372 Stem: 2.600 OAL. 0.627 O.D. 0.374 I.D.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 21	**420 C.I. (6.9L) Navistar 16V Vin 1 D**			**1983-87 V8 BORE - 4.00"/101.6mm**
Spring	Both	1983-87	**32-887-D**	2.050 Free Length. w/ Rotocaps. OEM # 317365-C11
Keeper	Both	1983-87	**34-613**	1 Groove. Heat Treated
Lifter	Both	1983-87	**36-2104**	Hydraulic Roller. OEM # 3C3Z6500AA
Valve Stem Seal	Both	1983-87	**38-844-45**	Viton. Ring And Spring.
	Both	1983-87	**38-910-25**	Polyacrylic. Umbrella.
Push Rod	Both	1983-87	**74-6608**	10.013 Length. OEM # E3TZ6565A
Expansion Plug Kit		1983-87	**97-97SS**	Avail. In Stainless Steel Only - Specially Ground Concave Plugs To OEM Specs.
LINE 22	**428 C.I. (7.0L) G 16V**			**V8 BORE - 4.125"/104.8mm**
Valve	Exh		**10-917**	1.505 Head Dia. +3, 15,30 O/S Stem Avail. Non-Sodium Requires Addl. 0.002 Reaming Of Guide.
	Int		**10-949**	1.753 Head Dia. From S/N 42OB61 (3/15/71). +15 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1687-4N**	1-11/32 I.D. 1-11/16 O.D. 5/16 Depth. Use w/ 1-11/16 Cutter. Nickel
	Int		**20-1875-2**	1-9/16 I.D. 1-7/8 O.D. 1/4 Depth. Use w/ 1-7/8 Cutter.
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth, OEM # C4TZ-6057A & D1TZ-6057A, +10, 20, 30 O/S Avail.
	Int		**22-1815-1**	1.595 I.D. 1.815 O.D. 1/4 Depth, OEM # C8TZ-6057A
Guide	Exh		**30-7260**	2.875 OAL. Plain 0.373 I.D. 0.502 O.D.
	Exh		**30-9116**	3.125 OAL. To 3/71.
	Exh		**30-9260**	2.875 OAL. Spiral 0.373 I.D. 0.502 O.D.
	Int		**30-6108**	2.375 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Int		**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Int		**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D. Hardened
Spring	Both		**32-1016**	1968-69 Exc. F-85 Toronado & Police - 1970 Exc. F-85 & Performance Eng. - 1971 Exc. Toronado - 1972 Toronado - 1973 w/ Auto. - 1974 All Exc. w/ 30-1975-76 All, 1.960 Free Length w/o Damper
	Both		**32-907-D**	2.120 Free Length. w/ Damper
Keeper	Both		**34-613**	1 Groove. Heat Treated
Lifter	Both		**36-2083**	Hydraulic
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
	Both		**38-905-25**	Polyacrylic. Umbrella. Nitrile Matl. 38-905-15 Also Avail.
Push Rod	Both		**74-5311**	9.620 Length
	Both		**74-5312**	9.590 Length
Expansion Plug Kit			**97-19**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 23	**7.3L Vin CFKM Powerstroke Incl. Dir. Inj . D 16V**			**1988-05 V8 BORE - 4.1095"/104.38mm**
Valve Kit	Both	1988-05	**10-VKFOR73L-5**	Kit with 16 Dir. Inj. Valves, 16 Guides, 32 Keepers, 16 Stem Seals, 6 Brass Injector Tubes
	Both	1988-05	**10-VKFOR73L-6**	Kit with 16 Dir. Inj. Valves, 16 Guides, 16 Springs, 32 Keepers, 16 Stem Seals, 6 Brass Injector Tubes
Valve	Exh	1988-95	**10-1542**	1.595 Head Dia. 0.372T Stem. +10 Thicker Margin
	Exh	1988-95	**10-1754**	1.595 Head Dia. 0.3719 Stem. Hi-Nickel Head Matl. +10 Margin. OEM # F3TZ6505B
	Exh	1994-05	**10-1786**	1.680 Head Dia. 0.3122 Stem. Dir. Inj.
	Int	1988-95	**10-1543**	1.877 Head Dia. 0.3719 Stem. +10 Margin
	Int	1994-05	**10-1785**	1.680 Head Dia. 0.3122 Stem. Dir. Inj.
Valve Seat Insert	Exh	1994-05	**20-1750-4N**	1-7/16 I.D. 1-3/4 O.D. 1/4 Depth. Must cut seat angle to 37.5 Deg. Dir. Inj.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 23	**7.3L Vin CFKM Powerstroke Incl. Dir. Inj . D 16V**			**1988-05 V8 BORE - 4.1095"/104.38mm**
Valve Seat Insert	Int	1994-05	**20-1750-4**	1-7/16 I.D. 1-3/4 O.D. 1/4 Depth. Must cut seat angle to 30 Deg. Dir. Inj.
	Int	1988-95	**20-1875-38**	1-5/8 I.D. 1-7/8 O.D. 3/16 Depth. To Be Used In 1988-89 Castings Due To Thin Wall Sections. .
	Int	1988-95	**20-1937-23**	1-11/16 I.D. 1-15/16 O.D. 3/16 Depth.
	Exh	1988-95	**22-1669-1**	1.372T I.D. 1.669 O.D. 0.272 Depth. OEM # E3TZ-6057B. +15, 30 O/S Avail.
	Int	1988-95	**22-1957-1**	Dual O.D. Seat Recommended For All Castings.
Guide	Both	1994-05	**30-3257**	1/2" Reamer Option 0.312 Stem: 2.440 OAL. 0.3145 I.D. 0.502 O.D. w/ Seal Boss O.D. 0.564. Type: 21-SR
	Both	1994-05	**30-6587**	7/16 Reamer Option 0.312 Stem: 2.500 OAL. 0.3135 I.D., Check Stem Fit. 0.439 O.D. Type 1-SR
	Both	1988-95	**30-7689**	2.600 OAL. OEM Repair Version Check O.D. 0.6252 O.D.
	Both	1988-95	**30-7712**	5/8 Reamer Option 0.372 Stem: 2.600 OAL. 0.627 O.D. 0.374 I.D.
	Both	1988-05	**30-8476**	9/16 Reamer Option 0.312 Stem: 2.440 OAL. 0.565 O.D. 0.3146 I.D.
	Both	1988-05	**30-8476SA**	2.440 OAL. Special Alloy
	Both	1988-05	**30-8562**	9/16 Reamer Option 0.312 Stem: 2.440 OAL. 0.564 O.D. 0.3145 I.D.
Spring	Both	1988-05	**32-887-D**	2.050 Free Length. OEM # 317365-C11
Keeper	Both	1988-95	**34-613**	1 Groove. Heat Treated. 3/8 Stem.
	Both	1994-05	**34-614**	1 Square Groove. Heat Treated. 5/16 Stem.
Lifter	Both	1988-05	**36-2104**	Hydraulic Roller. OEM # 3C3Z6500AA
Valve Stem Seal	Both	1994-05	**38-173-45**	Viton. Top Hat. 0.312 Stem
	Both	1988-95	**38-910-25**	Polyacrylic. Umbrella.
Push Rod	Both	1988-95	**74-6608**	10.013 Length. Vin C,K,M. OEM # E3TZ6565A
	Both	1994-03	**74-6611**	10.258 Length. Vin F. OEM # F4TZ6565A
Injector Component		1988-05	**87-4376**	Injector Tube. Brass. OEM # F4TZ9F538A
Expansion Plug Kit		1988-05	**97-136SS**	Stainless Steel Kit
		1988-05	**97-173**	Steel Kit. Brass Kit Avail. in -B Suffix.
LINE 24	**460 C.I. (7.5L) G 16V**			**1976-94 V8 BORE - 4.358"/110.7mm**
Valve	Exh	1976-94	**10-1271**	1.654 Head Dia. Marine. +3, +15 O/S Stem May Be Avail.
	Exh	1976-94	**10-1368S**	1.508 Head Dia. Stellite Faced
	Exh	1988-94	**10-1547**	1.654 Head Dia. EFI & LPG. Inconel Head. +15 O/S Avail.
	Int	1976-94	**10-1272**	2.083 Head Dia. Industrial & Marine +3, +15 O/S Stem Avail.
	Int	1988-92	**10-1548**	1.977 Head Dia. +15 O/S Stem May Be Avail. EFI
	Int	1976-94	**10-1548S**	1.977 Head Dia. LPG, Stellite. +3 O/S Avail.
	Int	1993-94	**10-1723**	2.083 Head Dia. EFI. +15 O/S Stem May Be Avail.
Valve Seat Insert	Exh	1976-94	**20-1625-3N**	1-5/16 I.D. 1-5/8 O.D. 1/4 Depth. Industrial, Use w/ 1.508 Valve Head Dia.
	Exh		**20-1750-2N**	1 1/2 I.D.,1 3/4 O.D.,7/32 Depth +20 O/S Available,
	Exh	1976-94	**20-1812-21N**	1-15/32 I.D. 1-13/16 O.D. 5/16 Depth. Use w/ 1-13/16 Cutter. Nickel
	Int	1976-94	**20-2062-30**	1-13/16 I.D. 2-1/16 O.D. 3/16 Depth. EFI & LPG, Use w/ 1.978 Valve Head Dia.
	Int	1976-94	**20-2250-1**	1-15/16 I.D. 2-1/4 O.D. 3/16 Depth. Industrial, Marine & EFI. Use w/ 2.083 Valve Head Dia.
	Exh	1976-94	**22-1781-1N**	1.476 I.D. 1.781 O.D. 0.311 Depth w/ OEM Insert & w/ 1.654 Valve Head Dia.
Guide	Both	1976-94	**30-9606**	2.375 OAL. Spiral I.D. 30-5606 Plain I.D. Also Avail.
Spring	Both	1989-94	**32-1420**	2.114 Free Length

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 24	**460 C.I. (7.5L) G 16V**			**1976-94 V8 BORE - 4.358"/110.7mm**
Spring	Both	1976-88	**32-991**	2.068 Free Length
Keeper	Both	1976-94	**34-555**	1 Square Groove. Heat Treated
Lifter	Both	1976-94	**36-900CCI**	Hydraulic Flat. 1-pc. Chilled Cast Iron
Valve Stem Seal	Both	1976-94	**38-1045-70**	Teflon And Rubber.
	Both		**38-530-15**	Nitrile. Umbrella.
	Both	1976-94	**38-530-25**	Polyacrylic. Umbrella.
	Both		**38-530-45**	Viton. Umbrella.
	Both		**38-810-45**	Viton. Ring And Band.
	Exh		**38-400-55**	Viton. Ring and Band. 0.310 Stem OEM # E6TZ6571E
	Exh	1976-94	**38-937-15**	Nitrile. Ring And Band.
	Int	1976-94	**38-827-45**	Viton. Metal Clad.
Rocker Component	Both	1976-94	**40-2888**	Rocker Arm, Stamped w/ Oil Deflector
Rocker Kit	Both		**41-2547**	1 40-2888, 1 42-1740 5/16 Bolt, 1 42-1776 Pivot
Rocker Component	Both		**42-1776**	Rocker Comp. Fulcrum
	Both	1976-94	**42-2940**	Rocker Stud. 7/16-20 x 7/16-14 x 2.6700
Retainer		1976-94	**55-4000**	1.321 O.D. 11/32 Stem
Push Rod	Both	1976-94	**74-6274**	8.550 Length
Expansion Plug Kit		1976-94	**97-21**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 25	**474 C.I. (7.8L) Brazil 12V D TRB**			**1987-94 L6 BORE - 4.40"/111.76mm**
Valve	Exh	1987-94	**10-1758**	1.693 Head Dia.
	Int	1987-94	**10-1757**	1.870 Head Dia.
Valve Seat Insert	Exh	1987-94	**22-1733-2N**	1.455T I.D. 1.733 O.D. 0.365 Depth. +30 O/S Avail. CF600/800 Series
Guide	Both	1987-94	**30-8409**	2.680 OAL
Keeper	Both	1987-94	**34-613**	1 Groove. Heat Treated
Valve Stem Seal	Both	1987-94	**38-403-45**	Viton. Metal Clad.
Expansion Plug Kit		1987-94	**97-121SS**	Stainless Steel Kit

ENGINE	YEAR	CYL.	LINE NO.
120 C.I. (2.0L) 8V	1939-52	L4	**1**
134 C.I. (2.2L) Gas, LPG, Kerosene	1953-64	L4	**2**
144 C.I. (2.4L) Diesel 8V	1958-64	L4	**3**
158 C.I. (2.6L) Gas, Diesel, LPG 6V		L3	**4**
172 C.I. (2.8L) Gas, Kerosene, LPG	1955-64	L4	**5**
172 C.I. (2.8L) Diesel	1958-64	L4	**6**
175 C.I. (2.9L) 6V	1965-74	L3	**7**
192 C.I. (3.1L) 6V		L3	**8**
201 C.I. (3.3L) Gas, Diesel 6V		L3	**9**
220 C.I. (3.6L) Diesel		L4	**10**
223 C.I. (3.7L) 12V	1961-69	L6	**11**
233 C.I. (3.8L) Gas, Diesel		L4	**12**
242 C.I. (4.0L) Diesel 12V		L6	**13**
256 C.I. (4.2L) Diesel, Gas / 268 C.I Diesel 8V		L4	**14**
330 C.I. (5.4L) Diesel 12V		L6	**15**
401 C.I. (6.6L) Diesel 12V TRB		L6	**16**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**120 C.I. (2.0L) 8V**			**1939-52 L4** **BORE - 3.188"/81mm**
Valve	Exh	1948-52	**10-220**	1.281 Head Dia. w/o Rototype. OEM # 8N6505A
	Exh	1939-52	**10-270**	1.283 Head Dia. Rototype
	Int	1939-52	**10-212**	1.510 Head Dia. OEM # 8BA6505A
Valve Seat Insert	Int	1939-52	**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Exh	1939-52	**22-1348-1N**	1.087 I.D. 1.348 O.D. 0.200 Depth. Nickel
Guide	Both	1939-52	**30-1614**	2.210 OAL. 48-52: From S/N 42162. May Also Be Used w/ Rototype Valves From '39-48.
Spring	Both		**32-497**	2.313 Free Length. Models 8N, 8NAN, o Serial # 42161
Keeper	Both	1939-52	**34-555**	1 Square Groove. Heat Treated
LINE 2	**134 C.I. (2.2L) Gas, LPG, Kerosene**			**1953-64 L4** **BORE - 3.437"/87.3mm**
Valve	Exh		**10-348**	1.510 Head Dia. 0.341 Stem. Rototype
	Int		**10-376**	1.647 Head Dia. 0.341 Stem +30 O/S Stem Avail.
Valve Seat Insert	Int		**20-1812-2**	1-1/2 I.D. 1-13/16 O.D. 7/32 Depth.
Guide	Both		**30-1726**	2.470 OAL
Spring	Int		**32-611**	2.090 Free Length. 1.364 OD. Can use 55-6179
Keeper	Int		**34-555**	1 Square Groove. Heat Treated
Push Rod	Both	1953-64	**74-6080**	9.605 Length
LINE 3	**144 C.I. (2.4L) Diesel 8V**			**1958-64 L4** **BORE - 3.5625"/90.5mm**
Valve Seat Insert	Exh		**20-1250-1**	1.000 I.D. 1-1/4 O.D. 7/32 Depth.
	Int		**20-1625-11**	1-11/32 I.D. 1-5/8 O.D. 7/32 Depth
Guide	Exh		**30-1726**	2.470 OAL
	Int		**30-1966**	2.938 OAL.
Push Rod	Both		**74-6080**	9.605 Length
LINE 4	**158 C.I. (2.6L) Gas, Diesel, LPG 6V**			**L3** **BORE - 4.20"/106.7mm**
Valve	Exh		**10-1695S**	1.510 Head Dia.
	Int		**10-1654**	1.805 Head Dia.
Valve Seat Insert	Exh		**22-1600-1**	1.340 I.D. 1.600 O.D. 0.300 Depth +30 Avail. OEM # C9NN6057J +30 O/S Avail

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 4	**158 C.I. (2.6L) Gas, Diesel, LPG 6V**			**L3 BORE - 4.20"/106.7mm**
Valve Seat Insert	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Alternate +30 O/S & Greater Depth
	Int		**22-1900-1**	1.650 I.D. 1.900 O.D. 0.300 Depth. Alternate w/ Greater Depth
Guide	Both		**30-6905**	3.969 OAL. Universal
Spring	Both		**32-04014**	2.208 OAL. To 1991
Keeper	Both		**34-613**	1 Groove. Heat Treated
LINE 5	**172 C.I. (2.8L) Gas, Kerosene, LPG**			**1955-64 L4 BORE - 3.90"/99mm**
Valve	Exh		**10-348**	1.510 Head Dia.
	Int		**10-376**	1.647 Head Dia. 0.341 Stem +30 O/S Stem Avail.
Valve Seat Insert	Int		**20-1812-2**	1-1/2 I.D. 1-13/16 O.D. 7/32 Depth.
Guide	Both		**30-1726**	2.470 OAL
Spring	Both		**32-611**	2.090 Free Length
Keeper	Int		**34-555**	1 Square Groove. Heat Treated
Push Rod	Both	1955-64	**74-6080**	9.605 Length
LINE 6	**172 C.I. (2.8L) Diesel**			**1958-64 L4 BORE - 3.90"/99mm**
Valve Seat Insert	Exh		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Exh		**30-1726**	2.470 OAL
	Int		**30-1966**	2.938 OAL
Spring	Both		**32-611**	2.090 Free Length
Keeper	Exh		**34-555**	1 Square Groove. Heat Treated
Push Rod	Both	1958-64	**74-6080**	9.605 Length
LINE 7	**175 C.I. (2.9L) 6V**			**1965-74 L3 BORE - 4.20"/106.7mm**
Valve	Exh		**10-1695S**	1.510 Head Dia. Stellite Face.
	Int		**10-1654**	1.805 Head Dia.
Valve Seat Insert	Exh		**22-1600-1**	1.340 I.D. 1.600 O.D. 0.300 Depth +30 Avail. OEM # C9NN6057J +30 O/S Avail
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel
	Int		**22-1900-1**	1.650 I.D. 1.900 O.D. 0.300 Depth
Guide	Both		**30-6905**	3.969 OAL. Universal
Spring	Both		**32-04014**	2.2.08 OAL. To 1991
Keeper	Both		**34-613**	1 Groove. Heat Treated
LINE 8	**192 C.I. (3.1L) 6V**			**L3 BORE - 4.40"/111.7mm**
Valve	Exh		**10-1695S**	1.510 Head Dia. Stellite Face.
	Int		**10-1654**	1.800 Head Dia.
	Int		**10-1694**	1.842 Head Dia.
Valve Seat Insert	Exh		**22-1600-1**	1.340 I.D. 1.600 O.D. 0.300 Depth +30 Avail. OEM # C9NN6057J +30 O/S Avail
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel
	Int		**22-1900-1**	1.650 I.D. 1.900 O.D. 0.300 Depth
Guide	Both		**30-6905**	3.969 OAL. Universal
Spring	Both		**32-04014**	2.208 OAL. To 1991
Keeper	Both		**34-613**	1 Groove. Heat Treated

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 9	**201 C.I. (3.3L) Gas, Diesel 6V**			**L3 BORE - 4.40"/111.8mm**
Valve	Exh		**10-1695S**	1.510 Head Dia.
	Int		**10-1654**	1.805 Head Dia.
Valve Seat Insert	Exh		**22-1600-1**	1.340 I.D. 1.600 O.D. 0.300 Depth +30 Avail. OEM # C9NN6057J +30 O/S Avail
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel
	Exh.		**22-1630-1**	1.335 I.D. 1.630 O.D. 0.312 Depth.
	Int		**22-1900-1**	1.650 I.D. 1.900 O.D. 0.300 Depth
Guide	Both		**30-6905**	3.969 OAL. Universal
	Both		**30-6907**	3.000 OAL
Spring	Both		**32-04014**	2.208 Length, From 1990
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # F2NN6518AA.
LINE 10	**220 C.I. (3.6L) Diesel**			**L4 BORE - 3.937"/100mm**
Valve Seat Insert	Exh		**20-1750-7**	1-3/8 I.D. 1-3/4 O.D. 7/32 Depth.
	Int		**20-1875-19**	1-9/16 I.D. 1-7/8 O.D. 7/32 Depth.
Guide	Both		**30-6907**	3.000 OAL
LINE 11	**223 C.I. (3.7L) 12V**			**1961-69 L6 BORE - 3.625"/92mm**
Valve Seat Insert	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. +10 O/S Avail.
	Exh		**22-1600-1**	1.340 I.D. 1.600 O.D. 0.300 Depth +30 Avail. OEM # C9NN6057J +30 O/S Avail
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel
Guide	Both		**30-6105**	2.500 OAL. 0.3440 Plain I.D. 0.5020 O.D.
	Both		**30-6105U**	2.500 OAL. 0.3390 Undersize Plain I.D. 0.5020 O.D.
Push Rod	Both		**74-6080**	9.605 Length
LINE 12	**233 C.I. (3.8L) Gas, Diesel**			**L4 BORE - 4.20"/106.68mm**
Valve	Exh		**10-1695S**	1.510 Head Dia.
	Int		**10-1654**	1.805 Head Dia.
Valve Seat Insert	Exh		**22-1600-1**	1.340 I.D. 1.600 O.D. 0.300 Depth +30 Avail. OEM # C9NN6057J +30 O/S Avail
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel
	Int		**22-1900-1**	1.650 I.D. 1.900 O.D. 0.300 Depth
Guide	Both		**30-6905**	3.969 OAL. Universal
	Both		**30-9105**	2.500 OAL. Spiral I.D. 30-6105 Plain I.D. Also Avail.
	Both		**30-9109**	2.500 OAL. Spiral 0.374 I.D. 30-6109 Plain I.D. Also Avail.
Spring	Both		**32-04014**	2.208 OAL. To 1991
	Both		**32-611**	2.090 Free Length Model 6000
Keeper	Both		**34-613**	1 Groove. Heat Treated
LINE 13	**242 C.I. (4.0L) Diesel 12V**			**L6 BORE - 3.62"/92mm**
Valve Seat Insert	Exh		**20-1437-4**	1-1/8 I.D. 1-7/16 O.D. 7/32 Depth.
	Int		**20-1750-3**	1-7/16 I.D. 1-3/4 O.D. 7/32 Depth.
Guide	Both		**30-6907**	3.000 OAL
LINE 14	**256 C.I. (4.2L) Diesel, Gas / 268 C.I Diesel 8V**			**L4 BORE - 4.40"/111.76mm**
Valve	Exh		**10-1695S**	1.510 Head Dia. Turbo
	Int		**10-1654**	1.805 Head Dia. Exc. Turbo
	Int		**10-1694**	1.842 Head Dia. Turbo

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 14	**256 C.I. (4.2L) Diesel, Gas / 268 C.I Diesel 8V**			**L4 BORE - 4.40"/111.76mm**
Valve Seat Insert	Exh		**22-1600-1**	1.340 I.D. 1.600 O.D. 0.300 Depth +30 Avail. OEM # C9NN6057J +30 O/S Avail
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel
	Int		**22-1900-1**	1.650 I.D. 1.900 O.D. 0.300 Depth
Guide	Both		**30-6905**	3.969 OAL. Universal
Spring	Both		**32-04014**	2.208 OAL. To 1991
Keeper	Both		**34-613**	1 Groove. Heat Treated
LINE 15	**330 C.I. (5.4L) Diesel 12V**			**L6 BORE - 3.937"/100mm**
Valve Seat Insert	Exh		**20-1750-7**	1-3/8 I.D. 1-3/4 O.D. 7/32 Depth.
	Int		**20-1875-19**	1-9/16 I.D. 1-7/8 O.D. 7/32 Depth.
Guide	Both		**30-6907**	3.000 OAL
LINE 16	**401 C.I. (6.6L) Diesel 12V TRB**			**L6 BORE - 4.40"/111.8mm**
Valve	Exh		**10-1695S**	1.510 Head Dia.
	Int		**10-1654**	1.805 Head Dia. Exc. Turbo
	Int		**10-1694**	1.842 Head Dia.
Valve Seat Insert	Exh		**22-1600-1**	1.340 I.D. 1.600 O.D. 0.300 Depth +30 Avail. OEM # C9NN6057J +30 O/S Avail
	Exh		**22-1630-1N**	1.335 I.D. 1.630 O.D. 0.312 Depth. Nickel
	Int		**22-1900-1**	1.650 I.D. 1.900 O.D. 0.300 Depth
Guide	Both		**30-6905**	3.969 OAL. Universal
Spring	Both		**32-04014**	2.208 OAL. To 1990
Keeper	Both		**34-613**	1 Groove. Heat Treated
Expansion Plug Kit			**97-21**	Steel Kit. Brass Kit Avail. In Suffix B
			97-27	Steel Kit. Brass Kit Avail. In Suffix B. TRB

ENGINE	YEAR	CYL.	LINE NO.
2.8L DOHC 16V Vin 1 LWN D TRB	2016-22	L4	**1**
3.9L 4BT Vin L 8V D TRB Cummins	1989-91	L4	**2**
262 C.I. (4.3L) OHV 12V Industrial	1985-14	V6	**3**
4.8L SOHC 16V 4HE1 Isuzu D TRB		L4	**4**
5.2L (317 C.I.) SOHC 16V 4HK1 Isuzu D TRB		L4	**5**
350 C.I. (5.7L) Chev. 16V Industrial	1967-05	V8	**6**
6.2L (381 C.I.) Diesel 16V Vin C, J OHV	1982-93	V8	**7**
395 C.I. (6.5L) OHV 16V Vin F,P,S,Y,Z D TRB	1992-04	V8	**8**
400 C.I. (6.6L) Duramax Diesel Vin 12368DL OHV 32V	2001-21	V8	**9**
435 C.I. (7.1L) SOHC 12V 6HE1 Isuzu D TRB		L6	**10**
454 C.I. (7.4L) 16V Industrial	1970-00	V8	**11**
7780cc (7.8L) SOHC 6HK1 Isuzu 24V D TRB		L6	**12**
496 C.I. (8.1L) 16V Vortec OHV Industrial	2001-09	V8	**13**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**2.8L DOHC 16V Vin 1 LWN D TRB**			**2016-22 L4** **BORE - 3.70" /94mm**
Keeper	Both	2016-22	**34-5021**	3 Round Beads. 0.236 Stem Dia.
Valve Stem Seal	Both	2016-22	**38-1329-45**	Viton. Metal Clad.
LINE 2	**3.9L 4BT Vin L 8V D TRB Cummins**			**1989-91 L4** **BORE - 4.21"/107mm**
Valve	Exh	1989-91	**10-1664**	1.654 Head Dia. 45 Deg. Seat. OEM # 3802356, 3920868
	Int	1989-91	**10-1665**	1.772 Head Dia. 30 Deg. Seat. OEM # 3802355, 3920867.
	Int	1989-91	**10-2257**	1.772 Head Dia. 5.085 OAL Natl. Gas 20 Deg. Seat OEM # 3802658, 3922713
Valve Seat Insert	Exh	1989-91	**22-1722-1**	1.357T I.D. 1.722 O.D. 0.265 Depth. OEM # 3904105
	Int	1989-91	**22-1853-1**	1.498T I.D. 1.853 O.D. 0.273 Depth. OEM # 3925177
Guide	Both	1989-91	**30-8277**	2.500 OAL. 0.3162 I.D. 0.4395 O.D. OEM # 3906206
	Exh	1989-91	**30-8178**	2.052 OAL. 0.5527 O.D. 0.3162 I.D. Thick Wall. OEM # 3904409
	Int	1989-91	**30-8177**	2.397 OAL. 0.5527 O.D. 0.3162 I.D. Thick Wall. OEM # 3904408
Spring	Both	1989-91	**32-00276**	2.235 Free Length. 30 PSI. OEM # 3900276
Keeper	Both	1989-91	**34-00250**	1 Round Bead. OEM # 3900250
Lifter	Both	1989-91	**36-2302**	Mechanical. OEM # 3931623, 3925031
Valve Stem Seal	Both	1989-91	**38-535-45**	Viton. Ring and Band. OEM # 3901097, 3921640
Push Rod	Both	1989-91	**74-6448**	10.910 Length. OEM # 3923262
LINE 3	**262 C.I. (4.3L) OHV 12V Industrial**			**1985-14 V6** **BORE - 4.00"/101.6mm**
Valve	Exh		**10-1192SP**	1.600 Head Dia. 0.371 Stem. 4.925 Length. 0.341 SG Keeper. Stellite. Inconel Head
	Exh		**10-1294S**	1.500 Head Dia. 0.3718T Stem. 4.923 Length. Stellite. 2G Keeper
	Exh		**10-1807S**	1.500 Head Dia. 0.3413T Stem. 4.920 Length. Stellite. SG
	Int		**10-1193SP**	2.020 Head Dia. 0.371 Stem. 4.9133 Length. 0.341 SG Keeper. Stellite. Stainless Head
Valve Seat Insert	Exh		**20-1562-1N**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. Nickel For 1.500 Head
	Exh		**20-1687-2N**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth. Nickel For 1.600 Head
	Int		**20-2000-36**	1-3/4 I.D. 2.000 O.D. 3/16 Depth. For 1.940 Head
	Int		**20-2125-34**	1-7/8 I.D. 2-1/8 O.D. 7/32 Depth. For 2.020 Head
	Exh		**22-1635-1**	1.358T I.D. 1.635 O.D. 0.251 Depth. Tungsten Alloy 30 Deg. For 1.600 head
	Int		**22-2107-1**	1.809T I.D. 2.107 O.D. 0.216 Depth. Tungsten Alloy. 30 Deg. For 2.020 Head
Guide	Both		**30-9107**	2.250 OAL. Spiral 0.374 I.D. 0.502 O.D.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 3	**262 C.I. (4.3L) OHV 12V Industrial**			**1985-14 V6 BORE - 4.00"/101.6mm**
Guide	Both		**30-9607**	2.250 OAL. Spiral 0.344 I.D. 0.502 O.D.
	Exh		**30-8407**	2.220 OAL. Replaceable Exh. Guide - Caution When Removing Stepped O.D. The Bottom Of The Guide Is The 0.620" End. Drive Out Toward Valve Seat.
	Exh		**30-9946**	2.250 OAL. 0.343 Spiral I.D. 0.502 O.D. +2 O/S Avail.
	Int		**30-9867**	2.125 OAL. Spiral 0.344 I.D. 0.502 O.D.
Spring	Both		**32-1038-D**	1.910 Free Length. w/ Damper
	Both		**32-1680**	2.059 Free Length
	Both		**32-1943-D**	2.140 Free Length. Hi-Perf. w/ 0.100" Addl. Free Length, Damper
	Both		**32-880-D**	2.030 Free Length. w/ Damper
	Both		**32-943-D**	2.040 Free Length. w/ Damper, Hi-Perf.
Keeper	Both		**34-555**	1 Square Groove. Heat Treated. 0.341 Stem
Lifter	Both		**36-2148**	Hydraulic Roller. Rotate Oil Hole Up to Install
	Both		**36-2148G**	Lifter Guide, Dogbone Type
	Both		**36-817CCI**	Hydraulic Flat. 2-pc. Chilled Cast Iron Wafer Bottom
Rotator	Both		**37-4003**	Rotator. OEM # 14042575
Valve Stem Seal	Both		**38-371-45**	Viton. Metal Clad. 11/32 Stem
	Both		**38-938-45**	Viton. Ring And Band.
Rocker Component	Both		**40-2736**	Rocker Arm, SBC 1.5 Self-Aligning Stamped
Rocker Kit	Both		**41-1736**	1 40-2736, 1 42-1731 Smooth Ball, 1 42-1786 3/8 Nut. Use w/ 42-2921 Stud
Rocker Component	Both		**42-2920**	Rocker Stud. 3/8x24 x2.500 Press-In
	Both		**42-2921**	Rocker Stud. +3 O/S 3/8x24 x 2.300 Press-In Adj.
Retainer	Both		**55-6105**	Chrome Moly. 1.200 O.D. 11/32 Stem
	Both		**55-6906**	Chrome Moly. 1.130 O.D. 11/32 Stem. Use w/ 32-1680
Push Rod	Both		**74-6034**	7.798 Length
	Both		**74-6373**	7.195 Length
	Both		**74-6385**	5/16" Dia. x 7.894"
	Both		**74-6615**	7.192 Length. '87-03.
Expansion Plug Kit			**97-87B**	Brass Kit
			97-99-2B	Brass Kit. For Balance Shaft Engines Only.
			97-99B	Brass Kit
LINE 4	**4.8L SOHC 16V 4HE1 Isuzu D TRB**			**L4 BORE - 110.6mm/4.33"**
Valve Seat Insert	Exh		**22-1697-1**	1.450T I.D. 1.697 O.D. 0.276 Depth. OEM # 8943961720
	Int		**22-1894-1**	1.570T I.D. 1.894 O.D. 0.292 Depth. OEM # 8943944620
	Int		**22-2013-1**	1.770T I.D. 2.013 O.D. 0.288 Depth. OEM # 8970884600
Guide	Both		**30-3054**	0.3547 I.D. 2.365 OAL OEM 8943965980
Valve Stem Seal	Both		**38-6115-55**	Viton. Top Hat. OEM # 8943966092
LINE 5	**5.2L (317 C.I.) SOHC 16V 4HK1 Isuzu D TRB**			**L4 BORE - 4.53"/115mm**
Valve	Exh		**10-13122**	1.456 Head Dia. 0.312 Stem. 5.134 OAL. FSR, FTR, FVR (Mexico Elf 400-600). OEM # 8972098763
	Int		**10-13121**	1.457 Head Dia. 0.313 Stem. 5.140 OAL. FSR, FTR, FVR (Mexico Elf 400-600). OEM # 8943958822
Valve Seat Insert	Exh		**22-1502-2**	1.232 I.D. 1.502 O.D. 0.2569 Depth. OEM # 8972165110
	Int		**22-1502-1**	1.224 I.D. 1.502 O.D. 0.2378 Depth. OEM # 8943958880
Guide	Both		**30-3101**	2.245 OAL. 0.3150 I.D. 0.5526 O.D. OEM # 8943907800

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 5	**5.2L (317 C.I.) SOHC 16V 4HK1 Isuzu D TRB**			**L4 BORE - 4.53"/115mm**
Guide	Both		**30-3297**	2.245 OAL. 0.316 I.D. 0.553 O.D. OEM # 8973767191
Valve Stem Seal	Both		**38-7002-55**	Viton. Metal Clad.
	Both		**38-962-45**	Viton. Ring And Spring.
Injector Component			**87-4620**	Injector Tube, Brass. OEM # 8980184620
LINE 6	**350 C.I. (5.7L) Chev. 16V Industrial**			**1967-05 V8 BORE - 4.00"/101.6mm**
Valve	Exh		**10-1192SP**	1.600 Head Dia. 0.371 Stem. 4.925 Length. 0.341 SG Keeper. Stellite. Inconel Head
	Exh		**10-1294S**	1.500 Head Dia. 0.3718T Stem. 4.923 Length. Stellite. 2G Keeper
	Exh		**10-1807S**	1.500 Head Dia. 0.3413T Stem. 4.920 Length. Stellite. SG
	Int		**10-1193SP**	2.020 Head Dia. 0.371 Stem. 4.9133 Length. 0.341 SG Keeper. Stellite. Stainless Head
Valve Seat Insert	Exh		**20-1562-1N**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. Nickel For 1.500 Head
	Exh		**20-1687-2N**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth. Nickel For 1.600 Head
	Int		**20-2000-36**	1-3/4 I.D. 2.000 O.D. 3/16 Depth. For 1.940 Head
	Int		**20-2125-34**	1-7/8 I.D. 2-1/8 O.D. 7/32 Depth. For 2.020 Head
	Exh		**22-1635-1**	1.358T I.D. 1.635 O.D. 0.251 Depth. Tungsten Alloy 30 Deg. For 1.600 head
	Int		**22-2107-1**	1.809T I.D. 2.107 O.D. 0.216 Depth. Tungsten Alloy. 30 Deg. For 2.020 Head
Guide	Both		**30-9607**	2.250 OAL. Spiral 0.344 I.D. 0.502 O.D.
	Exh		**30-9107**	2.250 OAL. Spiral 0.374 I.D. 0.502 O.D.
	Exh		**30-9946**	2.250 OAL. 0.343 Spiral I.D. 0.502 O.D. +2 O/S Avail.
	Int		**30-9867**	2.125 OAL. Spiral 0.344 I.D. 0.502 O.D.
Spring	Both		**32-1680**	2.059 Free Length
	Both		**32-1943-D**	2.140 Free Length. Hi-Perf. w/ 0.100" Addl. Free Length, Damper
	Both		**32-880-D**	2.030 Free Length. w/ Damper
	Both		**32-943-D**	2.040 Free Length. w/ Damper, Hi-Perf.
Keeper	Both		**34-555**	1 Square Groove. Heat Treated. 0.341 Stem
Lifter	Both		**36-2148**	Hydraulic Roller. Rotate Oil Hole Up to Install
Rotator	Both		**37-4003**	Rotator. OEM # 14042575
Valve Stem Seal	Both		**38-371-45**	Viton. Metal Clad. 11/32 Stem
	Both		**38-938-45**	Viton. Ring And Band.
Rocker Component	Both		**40-2736**	Rocker Arm, SBC 1.5 Self-Aligning Stamped
Rocker Kit	Both		**41-1736**	1 40-2736, 1 42-1731 Smooth Ball, 1 42-1786 3/8 Nut. Use w/ 42-2921 Stud
Rocker Component	Both		**42-2920**	Rocker Stud. 3/8x24 x2.500 Press-In
	Both		**42-2921**	Rocker Stud. +3 O/S 3/8x24 x 2.300 Press-In Adj.
	Both		**42-2941**	Rocker Stud. 7/16-14x7/16-20 x2.560
Retainer	Both		**55-6100**	Chrome Moly. 1.240 O.D. 11/32 Stem
	Both		**55-6105**	Chrome Moly. 1.200 O.D. 11/32 Stem
	Both		**55-6906**	Chrome Moly. 1.130 O.D. 11/32 Stem. Use w/ 32-1680
Push Rod	Both		**74-6034**	7.798 Length
	Both		**74-6373**	7.195 Length
	Both		**74-6385**	5/16" Dia. x 7.894"
	Both		**74-6615**	7.192 Length. '87-96, VIN K
Expansion Plug Kit			**97-100B**	Brass Kit.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 7	**6.2L (381 C.I.) Diesel 16V Vin C, J OHV**			**1982-93 V8 BORE - 3.976"/101 mm**
Valve	Exh	1984-93	**10-1482S**	1.496 Head Dia. J Eng.
	Exh	1982-87	**10-1483S**	1.653 Head Dia. 1982-83 All & 1984-87 C Eng.
	Exh	1988-93	**10-1780S**	1.535 Head Dia. C Eng.
	Int	1982-93	**10-1484**	1.811 Head Dia. 1982-83 C Eng. & 1984-93 All
	Int	1982-83	**10-1518**	1.968 Head Dia. J Eng.
Valve Seat Insert	Exh	1982-93	**20-1562-36N**	1-5/16 I.D. 1-9/16 O.D. 3/16 Depth. w/ 1.535 Valve Head Dia. Nickel
	Exh	1982-87	**20-1687-15**	1-7/16 I.D. 1-11/16 O.D. 5/32 Depth. w/ 1.653 Valve Head Dia.
	Int	1982-93	**20-1937-23**	1-11/16 I.D. 1-15/16 O.D. 3/16 Depth.
	Int	1982-83	**20-2000-22**	1-3/4 I.D. 2.000 O.D. 5/32 Depth. w/ 1.968 Valve Head Dia.
Guide	Exh	1982-93	**30-9716**	2.188 OAL
	Int	1982-93	**30-9715**	2.125 OAL
Spring	Both	1982-93	**32-1220-D**	2.035 Free Length. w/ Damper
Keeper	Both	1982-93	**34-555**	1 Square Groove. Heat Treated
Lifter	Both	1982-93	**36-2104**	Hydraulic Roller
Rotator	Both	1988-93	**37-4003**	Rotator. OEM # 14042575
Valve Stem Seal	Both	1982-93	**38-240-25**	Polyacrylic. O-Ring.
	Both	1982-93	**38-450-15**	Nitrile. Umbrella.
	Both	1982-93	**38-450-25**	Polyacrylic. Umbrella. 38-450-15 Nitrile Matl., -45 Viton Matl. Also Avail.
	Both	1982-93	**38-450-45**	Viton. Umbrella.
	Both	1982-93	**38-552-45**	Viton. Metal Clad
	Both	1982-93	**38-925-25**	Polyacrylic. Ring And Band. 38-925-15 Nitrile Matl. Also Avail.
	Exh	1982-93	**38-921-25**	Polyacrylic. 2-Ring.
Retainer	Both	1982-93	**55-6115**	Retainer. For OE Stock Spring. 1.200x0.740
Push Rod	Both	1982-93	**74-6609**	8.822 Length. OEM # 23503994
Expansion Plug Kit		1982-93	**97-98B**	Brass Kit
LINE 8	**395 C.I. (6.5L) OHV 16V Vin F,P,S,Y,Z D TRB**			**1992-04 V8 BORE - 4.05"/102.87mm**
Valve	Exh	1992-04	**10-1780S**	1.535 Head Dia. 0.372 Stem Dia.
	Int	1992-04	**10-1484**	1.811 Head Dia. 0.341 Stem Dia. OEM # 14033927
Valve Seat Insert	Exh	1992-04	**20-1562-36N**	1-5/16 I.D. 1-9/16 O.D. 3/16 Depth. w/ 1.535 Valve Head Dia. Nickel
	Int	1992-04	**20-1937-23**	1-11/16 I.D. 1-15/16 O.D. 3/16 Depth.
Guide	Exh	1992-04	**30-9716**	2.188 OAL
	Int	1992-04	**30-9715**	2.125 OAL
Spring	Both	1992-04	**32-1220-D**	2.035 Free Length. w/ Damper
Keeper	Both	1992-04	**34-555**	1 Square Groove. Heat Treated
Lifter	Both	1992-04	**36-2104**	Hydraulic Roller
Rotator	Both	1992-04	**37-4003**	Rotator. OEM # 14042575
Valve Stem Seal	Both	1992-04	**38-240-25**	Polyacrylic. O-Ring.
	Both	1992-04	**38-450-25**	Polyacrylic. Umbrella. 38-450-15 Nitrile Matl., -45 Viton Matl. Also Avail.
	Both	1992-04	**38-552-45**	Viton. Metal Clad
	Both	1992-04	**38-921-25**	Polyacrylic. 2-Ring.
Retainer	Both	1992-04	**55-6105**	Retainer. For QC Springs. 1.200x0.860
	Both	1992-04	**55-6115**	Retainer. For OE Stock Spring. 1.200x0.740
Push Rod	Both	1992-04	**74-6609**	8.822 Length. OEM # 23503994
Expansion Plug Kit		1992-04	**97-98B**	Brass Kit

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 9	**400 C.I. (6.6L) Duramax Diesel Vin 12368DL OHV 32V**	**2001-21**	**V8**	**BORE - 103mm/4.06"**
Valve	Exh	2017-21	**10-13470**	1.220 Head Dia. Nitrided
	Exh	2001-16	**10-2176**	1.220 Head Dia.
	Int	2017-21	**10-13469**	1.299 Head Dia. Nitrided
	Int	2001-16	**10-2175**	1.299 Head Dia.
Valve Seat Insert	Exh	2001-16	**22-1264-1**	0.977T I.D. 1.264 O.D. 0.237 Depth. OEM # 97212572
	Int	2001-16	**22-1343-1**	1.069T I.D. 1.343 O.D. 0.237 Depth.
Guide	Both	2001-10	**30-3049**	1.967 OAL. 0.455 O.D. 0.2755 I.D. 4-P
	Both	2011-16	**30-3142**	1.967 OAL. 0.455 O.D. 0.2755 I.D. 1-P
Spring	Both	2001-16	**32-04041**	2.200 Free Length
Keeper	Both	2001-16	**34-5001**	1 Round Groove
Lifter	Both	2001-16	**36-2298**	Mechanical Roller
Valve Stem Seal	Both	2001-10	**38-299-45**	Viton. Metal Clad
	Both	2011-16	**38-6132-55**	Viton. Metal Clad
	Both	2017-21	**38-6510-55**	Viton. Top Hat
Performance Spring	Both	2001-16	**52-4041**	2.44 Free Length. 75 @ 1.900. 150 @ 1.400. Optional Performance
Retainer	Both	2001-16	**55-6066**	Retainer. 1.175 O.D.
Black Lightning R. Valve	Both	2001-21	**77-VKGM651-5**	Kit, 32 BLDP Valves, 64 keepers, 32 HP springs, retainers, stem seals
	Exh	2001-21	**77-122007**	Black Lightning Nitrided Inconel. 1.220 Head Dia. 0.273 Stem 4.965 OAL
	Int	2001-21	**77-129057**	Black Lightning Nitrided Stainless. 1.299 Head Dia. 0.2735 Stem 4.975 OAL
Injector Component		2001-06	**87-8463**	Injector Tube. OEM # 97188463
	Both	2001-06	**87-1259**	Injector O-Ring. OEM # 94051259
Expansion Plug Kit		2001-13	**97-301SS**	Stainless
LINE 10	**435 C.I. (7.1L) SOHC 12V 6HE1 Isuzu D TRB**		**L6**	**BORE - 4.22"/107.2mm**
Valve Seat Insert	Exh		**22-1697-1**	1.450T I.D. 1.697 O.D. 0.276 Depth. OEM # 8943961720
	Int		**22-1894-1**	1.570T I.D. 1.894 O.D. 0.292 Depth. OEM # 8943944620
	Int		**22-2013-1**	1.770T I.D. 2.013 O.D. 0.288 Depth. OEM # 8970884600
Guide	Both		**30-3054**	0.3547 I.D. 2.365 OAL OEM 8943965980
Valve Stem Seal	Both		**38-6115-55**	Viton. Top Hat. OEM # 8943966092
LINE 11	**454 C.I. (7.4L) 16V Industrial**		**1970-00**	**V8** **BORE - 4.25"/108mm**
Valve	Exh	1987-00	**10-1235S**	1.660 Head Dia. 0.3716 Stem. 5.367 Length. Stellite. SG. 46 Deg
	Exh	1971-00	**10-1261S**	1.720 Head Dia. 0.3716 Stem. 5.355 Length. Stainless Head. SG. 45 Deg
	Exh	1985-90	**10-1578S**	1.720 Head Dia. 0.3716 Stem. 5.355 Length. Inconel Head. SG. 45 Deg
	Exh	1985-90	**10-1578SP**	1.720 Head Dia. 0.3716 Stem. 5.355 Length. Inconel Head. Stellite. Nitrided. SG. 45 Deg
	Exh	1987-00	**10-21235S**	1.660 Head Dia. 0.3716 Stem. 5.367 Length. Stellite. Nitrided. SG. 20 Deg
	Int	1970-00	**10-1107S**	2.065 Head Dia. 0.372 Stem. 5.230 Length. Stellite. SG. 45 Deg
	Int	1970-76	**10-1164**	2.190 Head Dia. 0.372 Stem. 5.225 Length. Stainless Head. SG. 45 Deg
Valve Seat Insert	Exh	1970-00	**20-1812-4N**	1-9/16 I.D. 1-13/16 O.D. 7/32 Depth. Nickel
	Exh	1971-00	**20-1812-9N**	1-1/2 I.D. 1-13/16 O.D. 5/16 Depth. O/S Replacement For Late Heads w/ Factory Installed Exh. Seat
	Int	1970-00	**20-2125-38**	1-13/16 I.D. 2-1/8 O.D. 3/16 Depth. w/ 2.065 Valve Head Dia.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 11	**454 C.I. (7.4L) 16V Industrial**			**1970-00 V8 BORE - 4.25"/108mm**
Valve Seat Insert	Int	1970-76	**20-2312-9**	2.000 I.D. 2-5/16 O.D. 1/4 Depth
	Exh	1971-00	**22-1784-1N**	1.417T I.D. 1.7845 O.D. 0.292 Depth. w/ Factory Installed Exh. Seat
	Exh	1971-00	**22-1784-2N**	Same as 22-1781-1N w/ straight I.D.
Guide	Exh	1985-00	**30-8113**	New Style. 2.435 OAL. 0.6205 O.D. Drive Guide Out Toward Valve Seat.
	Exh	1985-00	**30-8256**	2.755 OAL. 0.6163 O.D. Same As 30-8113 But Not Cut For Seal
	Exh	1970-00	**30-9972**	2.630 OAL. +3 O/S Avail.
	Exh	1970-00	**30-9972H**	2.630 OAL. Hardened. Drive Out Toward Spring Seat.
	Int	1970-00	**30-9973**	2.420 OAL. 0.3735 Spiral I.D. 0.6255 O.D. +10 O/S Avail.
Spring	Both	1996-00	**32-04013**	2.050 Free Length. Conical.
	Both	1971-72	**32-1009**	2.120 Free Length. Double Spring
	Both	1970-00	**32-5010**	2.520 Free Length. Use instead of Rotator or Rotator eliminator.
	Both	1970-70	**32-816-D**	Single w/ Damper. 2.180 Free Length
	Both	1975-85	**32-864-D**	2.050 Free Length. w/ Damper
Keeper	Both	1970-00	**34-613**	Heat Treated. 1 Groove.
Lifter	Both	1997-00	**36-2279**	Hydraulic Roller
	Both	1970-76	**36-2279G**	Lifter Guide, Dogbone Type
	Both	1991-96	**36-6005**	Hydraulic
	Both	1970-90	**36-817CCI**	Hydraulic Flat. 2-pc. Chilled Cast Iron Wafer Bottom
	Both	1970-76	**36-992**	Mechanical High Performance
Rotator	Both	1971-95	**37-1046**	Rotator. OEM # 14081046
	Both	1996-00	**37-2899**	Rotator. OEM # 10240899
Valve Stem Seal	Both	1970-00	**38-1068-70**	Teflon And Rubber. 0.372 Stem
	Both	1996-00	**38-119-35**	Glass-Filled Nylon. Umbrella
	Both	1987-00	**38-844-45**	Viton. Ring And Spring.
Rocker Component	Both	1992-98	**40-2754**	Rocker Arm. Larger Stud Hole.
	Both	1970-91	**40-2867**	Rocker Arm. Stamped. 1.72 Ratio
	Both	1970-00	**40-2868**	Rocker Arm. 1.72 Long Slot w/.560 Lift
Rocker Kit	Both	1970-90	**41-2504**	1 40-2867, 1 42-1793 7/16 Nut, 1 42-1797 Grooved Ball
	Both	1970-90	**41-2507**	1 40-2868, 1 42-1793 7/16 Nut, 1 42-1797 Grooved Ball
	Both	1991-00	**41-2673**	1 40-2754, 1 42-1861 Ball, 1 42-2971 Stud Bolt
Rocker Component	Both	1970-00	**42-2971**	Rocker Bolt, 3/8-16 Thread. Gen. V
Retainer	Both	1970-00	**55-4250**	Retainer. Use w/ 32-5010
	Both	1973-74	**55-6304**	Chrome Moly. 1.400 O.D. 3/8 Stem
	Both	1970-76	**55-6305**	Chrome Moly. 1.490 O.D. 3/8 Stem
Push Rod	Both	1991-95	**74-6231**	9.162 Length. 5/16 Dia.
	Both	1970-90	**74-6380**	9.200 Length 5/16 Dia.
	Exh	1970-76	**74-6442**	9.252 Length. 1st Des. 3/8 Dia.
	Int	1970-76	**74-6230**	2nd Des. 8.230 Length. 5/16
	Int	1970-76	**74-6441**	8.280 Length. 1st Des. 3/8 Dia.
Expansion Plug Kit		1970-90	**97-10B**	Brass Kit
		1991-00	**97-135B**	Brass Kit
LINE 12	**7780cc (7.8L) SOHC 6HK1 Isuzu 24V D TRB**			**L6 BORE - 4.53"/115mm**
Valve	Exh		**10-13122**	1.456 Head Dia. 0.312 Stem. 5.134 OAL. FSR, FTR, FVR (Mexico Elf 400-600). OEM # 8972098763

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 12	**7780cc (7.8L) SOHC 6HK1 Isuzu 24V D TRB**			**L6 BORE - 4.53"/115mm**
Valve	Int		**10-13121**	1.457 Head Dia. 0.313 Stem. 5.140 OAL. FSR, FTR, FVR (Mexico Elf 400-600). OEM # 8943958822
Guide	Both		**30-3101**	2.245 OAL. 0.3150 I.D. 0.5526 O.D. OEM # 8943907800
Valve Stem Seal	Both		**38-7002-55**	Viton. Metal Clad.
Injector Component			**87-4620**	Injector Tube, Brass. OEM # 8980184620
LINE 13	**496 C.I. (8.1L) 16V Vortec OHV Industrial**			**2001-09 V8 BORE - 4.25"/108mm**
Valve	Exh	2001-09	**10-2126S**	1.720 Head Dia. 0.372 Stem. 5.400 Length. Inconel Head. Stellite. SG. 45 Deg
	Int	2001-09	**10-1164**	2.190 Head Dia. 0.372 Stem. 5.225 Length. Stainless Head. SG. 45 Deg
Valve Seat Insert	Int	2001-09	**20-2250-1**	1-15/16 I.D. 2-1/4 O.D. 3/16 Depth. +10 O/S Avail.
	Exh	2001-09	**22-1784-1N**	1.417T I.D. 1.7845 O.D. 0.292 Depth. May Need Depth Change.
	Exh	2001-09	**22-1784-2N**	Same as 22-1784-1N w/ straight I.D.
Guide	Exh	2001-09	**30-3024**	2.610 OAL. Replaces Integral Guide. Remove From Combustion Side.
	Exh	2001-09	**30-3024SA**	0.3735 I.D. 0.6203 O.D. 2.620 OAL. Special Alloy
	Int	2001-09	**30-3025**	2.250 OAL. Replaces Integral Guide.
Spring	Both	2001-09	**32-04042**	2.180 Free Length. Conical. Gasoline
	Both	2001-09	**32-2522**	2.212 Free Length. Conical
Keeper	Both	2001-09	**34-613**	1 Groove. Heat Treated.
Lifter	Both	2001-09	**36-2279**	Hydraulic Roller
	Both	2001-09	**36-2279G**	Lifter Guide, Dogbone Type
Rotator	Both	2001-09	**37-2899**	Rotator. OEM # 10240899
Valve Stem Seal	Both	2001-09	**38-811-55**	Viton. Metal Clad.
Rocker Component	Both	2001-09	**40-9111**	Rocker Arm, Stamped
Push Rod	Exh	2001-09	**74-6639**	9.132 Length
	Int	2001-09	**74-6638**	8.190 Length.

ENGINE	YEAR	CYL.	LINE NO.
66-141 C.I. IX Series, NXA, NXB 8V		L4	**1**
130 C.I. (2.1L) D, DD, G, GO Series 6V		L3	**2**
191 C.I. (3.1L) QX Series 12V		L6	**3**

COMPONENT	I/E/B	YEARS	PART No.	NOTES		
LINE 1	**66-141 C.I. IX Series, NXA, NXB 8V**				**L4**	**BORE - 2.75 - 3.25"**
Guide	Both		**30-1568**	2.094 OAL. 0.3120 I.D. 0.4859 O.D. Check O.D.		
	Both		**30-1697**	2.093 OAL. 0.3120 I.D. 0.5328 O.D. Check O.D.		
LINE 2	**130 C.I. (2.1L) D, DD, G, GO Series 6V**				**L3**	**BORE - 3.50 - 4.00"**
Guide	Both		**30-1843**	Both - D, G Series. Int - DD, GO Series		
LINE 3	**191 C.I. (3.1L) QX Series 12V**				**L6**	**BORE - 3.125-3.4375"**
Guide	Both		**30-1697**	2.093 OAL. 0.312 I.D. 0.5328 O.D.		

ENGINE	YEAR	CYL.	LINE NO.
4.7L, 5.1L, 5.3L J05C/D/E SOHC 16V D TRB		L4	**1**
6.4L EH700 D		L6	**2**
7.7L 24V J08C/E TRB Diesel		L6	**2**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**4.7L, 5.1L, 5.3L J05C/D/E SOHC 16V D TRB**			**L4 BORE - 112mm/4.41"**
Valve	Exh		**10-30160**	1.457 Head Dia. 0.2730 Stem. OEM # 13715-1730
	Int		**10-30159**	1.531 Head Dia. 0.2738 Stem. OEM # 13711-1830
Valve Seat Insert	Exh		**22-1540-2**	1.278 I.D. 1.619 O.D. 0.236 Depth. OEM # 11135-E0061
	Int		**22-1619-1**	1.338 I.D. 1.619 O.D. 0.287 Depth. OEM # 11131-E0030
Guide	Both		**30-3300**	2.380 OAL OEM # 11122-1220
Keeper	Both		**34-5010**	1 Round Top Bead
Valve Stem Seal	Both		**38-7005-55**	Viton. Metal Clad. OEM # 13719-1360
Injector Component			**87-4433**	Injector Tube. Chrome w/ Copper Tip. OEM # 11176-1190
LINE 2	**6.4L EH700 D**			**L6 BORE - 4.33"/110mm**
Valve Seat Insert	Exh		**22-1796-2**	1.437T I.D. 1.7967 O.D. 0.3175 Depth. OEM # 11135-1420
LINE 3	**7.7L 24V J08C/E TRB Diesel**			**L6 BORE - 112mm/4.41"**
Valve	Exh		**10-30160**	1.457 Head Dia. 0.2730 Stem. OEM # 13715-1730
	Int		**10-30159**	1.531 Head Dia. 0.2738 Stem. OEM # 13711-1830
Valve Seat Insert	Exh		**22-1540-2**	1.278 I.D. 1.619 O.D. 0.236 Depth. OEM # 11135-E0061
	Int		**22-1619-1**	1.338 I.D. 1.619 O.D. 0.287 Depth. OEM # 11131-E0030
Guide	Both		**30-3300**	2.380 OAL OEM # 11122-1220
Keeper	Both		**34-5010**	1 Round Top Bead
Valve Stem Seal	Both		**38-7005-55**	Viton. Metal Clad. OEM # 13719-1360
Injector Component			**87-4433**	Injector Tube. Chrome w/ Copper Tip. OEM # 11176-1190

ENGINE	YEAR	CYL.	LINE NO.
C60 (1.0L) 8V		L4	**1**
C113 (1.8L) 8V		L4	**2**
C123, U123 (2.0L) Power Unit, Tractor, LPG 8V		L4	**3**
C/UC135, C146, C153 8V		L4	**4**
C152, C/U164 8V		L4	**5**
C157 8V		L4	**6**
D166, D188 Diesel 8V		L4	**7**
C/U169, C/U175 w/ 3-5/8" Bore 8V		L4	**8**
C175 w/ 3-9/16" Bore, C200, C301 8-12V		L4,6	**9**
C221, C282, C291, C301 12V		L6	**10**
232 C.I. (3.8L) 12V (AMC)		L6	**11**
D236 C.I. (3.9L) 12V D		L6	**12**
Neuss Engs. D155,D179,D206,D239,D246,D268,D310,D358		L3-4	**13**
C248 (4.0L), U6 8V		L4	**14**
C263 C.I. (4.3L) 12V		L6	**15**
C/U264 C.I. (4.3L) Gas		L4	**16**
264 C.I. (4.3L) LPG 8V		L4	**17**
D264 Diesel 8V		L4	**18**
281 C.I. (4.6L) 8V		L4	**19**
282 C.I. (4.6L) Diesel 12V		L6	**20**
301 C.I. (4.9L) Diesel 12V		L6	**21**
5.0L V304, V345 16V		V8	**22**
310 C.I. (5.1L) Diesel 12V		L6	**23**
5.1L D312, 5.9L D360, DT360 12V		L6	**24**
D335, D350, D370, D503, D525, D554, UD16/9/9A		V6	**25**
5.5L C335, C350 8V		L4	**26**
5.9L D361, DT361 12V D		L6	**27**
6.4L V392 16V		V8	**28**
6.7L D407, DT407 12V D TRB		L6	**29**
6.8L D/T414, 7.1L D/T436 12V D TRB		L6	**30**
DT429, DT573, DVT573B, UD573, UDT429		V8	**31**
7.6L D466, DT466, DT466B, DTI466B 12V D TRB		L6	**32**
530 C.I. (8.7L) Mechanical Injection 12V		L6	**33**
530 C.I. (8.7L) Electrical Injection 12V		L6	**34**
DV550B (9.0L) 16V D		V8	**35**
C605 (9.9L) Power Unit 16V		V8	**36**
11.3L 691 C.I. D 12V		L6	**37**
13.4L 817 C.I. 12V D		L6	**38**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**C60 (1.0L) 8V**			**L4** **BORE - 2.625"/66.7mm**
Valve Seat Insert	Exh		**20-1000-1**	3/4 I.D. 1 O.D. 3/16 Depth
	Int		**20-1187-1**	1.000 I.D. 1-3/16 O.D. 3/16 Depth
Guide	Both		**30-1636**	1.500 OAL. OEM # 352973-R2
Keeper	Both		**34-614**	1 Groove. Heat Treated. OEM # 46209-D.
LINE 2	**C113 (1.8L) 8V**			**L4** **BORE - 3.00"/76.2mm**
Valve	Exh		**10-312**	1.156 Head Dia. Gasoline. C113 From S/N 255418. OEM # 57798-D
	Int		**10-313**	1.342 Head Dia. Gasoline. C113 From S/N 255418. OEM # 57797-D
Valve Seat Insert	Exh		**20-1187-1**	1.000 I.D. 1-3/16 O.D. 3/16 Depth. w/ 1.156 Valve Head Dia.
	Exh		**20-1312-1**	1-1/16 I.D. 1-5/16 O.D. 3/16 Depth. w/ 1.218 Valve Head Dia.
	Int		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 2	**C113 (1.8L) 8V**			**L4 BORE - 3.00"/76.2mm**
Guide	Both		**30-1543**	2.688 OAL. Early Type. OEM # 6088D
	Both		**30-1804**	2.656 OAL. Late Type. OEM # 356583-R1
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # 42026-D
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber. Guide O.D. 0.562
	Both		**38-1065-70**	Teflon And Rubber.
LINE 3	**C123, U123 (2.0L) Power Unit, Tractor, LPG 8V**			**L4 BORE - 3.125"/79.4mm**
Valve	Exh		**10-312**	1.156 Head Dia. Gasoline, To S/N 36000. 57798-D
	Int		**10-313**	1.342 Head Dia. To S/N 36000, Gasoline. OEM # 57797-D
	Int		**10-504**	1.500 Head Dia. Gasoline & LPG, From S/N 36001. OEM # 366302-R1
Valve Seat Insert	Exh		**20-1187-1**	1.000 I.D. 1-3/16 O.D. 3/16 Depth. To S/N 36000
	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. Gasoline From S/N 36000.
	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. Nickel. LPG
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Gasoline From S/N 36000. +5, 10, 15, 20, 30 O/S Avail.
Guide	Both		**30-1543**	2.688 OAL. Early Type. OEM # 6088D
	Both		**30-1804**	2.656 OAL. Late Type. OEM # 356583-R1
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # 42026-D
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber. Guide O.D. 0.562
LINE 4	**C/UC135, C146, C153 8V**			**L4 BORE - 3.25"/82.6mm**
Valve	Int		**10-504**	1.500 Head Dia. OEM # 366302-R1
Valve Seat Insert	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
Guide	Both		**30-1804**	2.656 OAL. OEM # 356583-R1
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # 42026-D
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber. Guide O.D. 0.562
	Both		**38-530-15**	Nitrile. Umbrella.
	Both		**38-530-25**	Polyacrylic. Umbrella.
	Both		**38-530-45**	Viton. Umbrella.
LINE 5	**C152, C/U164 8V**			**L4 BORE - 3.346"/85.7mm**
Valve	Exh		**10-205**	1.375 Head Dia. Gasoline. OEM # 50707-DA
	Int		**10-193**	1.500 Head Dia. Gasoline. OEM # 50706-DA
Valve Seat Insert	Exh		**20-1437-1**	1-1/4 I.D. 1-7/16 O.D. 7/32 Depth.
	Exh		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. +3, +30 O/S
	Int		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth
	Int		**20-1562-1**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. +5, 10 O/S Avail.
Guide	Both		**30-1545N**	2.938 OAL. Gasoline Eng. OEM # 8049DR
	Both		**30-7432**	2.625 OAL
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # 42026-D
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber. Guide O.D. 0.562
Expansion Plug Kit			**97-55**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 6	**C157 8V**			**L4 BORE - 3.346"/85.7mm**
Valve	Exh		**10-1075S**	1.516 Head Dia. OEM # 372699-R1
	Int		**10-601**	1.781 Head Dia. OEM # 234276-R1
Valve Seat Insert	Exh		**20-1562-8**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 6	**C157 8V**			**L4** **BORE - 3.346"/85.7mm**
Valve Seat Insert	Int		**20-1875-6**	1-5/8 I.D. 1-7/8 O.D. 7/32 Depth.
Guide	Exh		**30-1747**	2.440 OAL. Hardened. OEM # 237248R1.
	Int		**30-6990**	2.240 OAL. Special Iron. OEM # 535229-R1
Spring	Both		**32-726**	2.438 Free Length
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
LINE 7	**D166, D188 Diesel 8V**			**L4** **BORE - 3.60"/93.7mm**
Valve	Exh		**10-592**	1.300 Head Dia. OEM # 328300-R1
	Int		**10-593**	1.652 Head Dia. OEM # 278301-R1
Valve Seat Insert	Exh		**20-1375-1**	1-1/8 I.D. 1-3/8 O.D. 7/32 Depth. Also Avail. In Nickel, -N Suffix
	Int		**20-1687-2**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth
Guide	Both		**30-1881**	2.844 OAL. +2 O/S Avail. OEM # 278370-R1
Spring	Both		**32-646**	2.266 Free Length. w/ D188
	Both		**32-726**	2.438 Free Length. w/ D166
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 8	**C/U169, C/U175 w/ 3-5/8" Bore 8V**			**L4** **BORE - 3.5625"/90.4mm**
Valve	Exh		**10-1075S**	1.516 Head Dia. OEM # 372699-R1
	Int		**10-601**	1.781 Head Dia. OEM # 234276-R1
Valve Seat Insert	Exh		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth w/ 1.375 Valve Head Dia.
	Exh		**20-1562-8**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. w/ 1.516 Valve Head Dia.
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. w/ 1.500 Valve Head Dia +5, 10, 15, 20, 30 O/S Avail.
	Int		**20-1875-6**	1-5/8 I.D. 1-7/8 O.D. 7/32 Depth. w/ 1.781 Valve Head Dia.
Guide	Both		**30-1545N**	2.938 OAL. OEM # 8049DR.
	Both		**30-1747**	2.440 OAL. Hardened. OEM # 237248R1.
Spring	Both		**32-726**	2.438 Free Length. w/ D166
Keeper	Both		**34-613**	Use w/ 1.871 & 1.516 Valve Head Dia. Heat Treated. OEM # 76951-R1
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber. 0.341 Stem Dia.
LINE 9	**C175 w/ 3-9/16" Bore, C200, C301 8-12V**			**L4,6** **BORE - 3.8125"/96.8mm**
Valve	Exh		**10-1075S**	1.516 Head Dia. OEM # 372699-R1
	Int		**10-601**	1.781 Head Dia. OEM # 234276-R1
Valve Seat Insert	Exh		**20-1562-8**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth.
	Int		**20-1875-6**	1-5/8 I.D. 1-7/8 O.D. 7/32 Depth.
Guide	Exh		**30-1747**	2.440 OAL. Hardened. w/ Farmall 460. Use For Both Int & Exh. OEM # 237248R1.
	Int		**30-6990**	2.240 OAL. Special Iron. OEM # 535229-R1
Spring	Both		**32-726**	2.438 Free Length
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber. Guide O.D. 0.562

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 10	**C221, C282, C291, C301 12V**			**L6 BORE - 3.563"/90.5mm**
Valve	Exh		**10-1075S**	1.516 Head Dia. OEM # 372699-R1
	Int		**10-601**	1.781 Head Dia. 205, 315 & 3616. OEM # 234276-R1
Valve Seat Insert	Exh		**20-1562-8**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth.
	Exh		**20-1687-2**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth. w/ 1.600 Valve Head.
	Int		**20-1687-3**	1-7/16 I.D. 1-11/16 O.D. 1/4 Depth. w/ 1.656 Valve Head Dia.
	Int		**20-1875-6**	1-5/8 I.D. 1-7/8 O.D. 7/32 Depth. w/ 1.781 Valve Head Dia.
Guide	Exh		**30-1747**	2.440 OAL. Hardened. OEM # 237248R1.
	Int		**30-6990**	2.240 OAL. OEM # 535229-R1
Spring	Both		**32-726**	2.438 Free Length. w/ C221
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
LINE 11	**232 C.I. (3.8L) 12V (AMC)**			**L6 BORE - 3.75"/95.2mm**
Valve	Exh		**10-1325**	1.406 Head Dia. 4 Groove. 0.1825 Tip to Groove. +3, 15, 30 O/S Stem Avail.
	Exh		**10-1441**	1.406 Head Dia. 1 Groove. +15 O/S Stem Avail.
	Exh		**10-549**	1.406 Head Dia. 0.3720T Stem. 4 Groove. 0.0875 Tip to Groove.
	Int		**10-1260**	1.787 Head Dia. 4 Groove. 0.1825 Tip to Groove. +3, 15, 30 O/S Stem Avail.
	Int		**10-1442**	1.787 Head Dia. 1 Groove. +15 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth.
	Int		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Both		**30-6108**	2.375 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Both		**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Both		**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D. Hardened
Spring	Both		**32-1082**	2.035 Free Length
Keeper	Both		**34-613**	1 Groove. 3/8 Stem
	Both		**34-766**	4 Groove. Heat Treated
Lifter	Both		**36-2011CCI**	Hydraulic Flat. 1-pc. Chilled Cast Iron
Valve Stem Seal	Both		**38-910-25**	Polyacrylic. Umbrella.
	Both		**38-938-45**	Viton. Ring And Band.
Expansion Plug Kit			**97-1**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 12	**D236 C.I. (3.9L) 12V D**			**L6 BORE - 3.60"/93.7mm**
Valve	Exh		**10-592**	1.300 Head Dia. 460,UD236 To S/N 2839. OEM #328300-R1
	Exh		**10-921**	1.375 Head Dia. 315, 606, 2606, 3616 From S/N 2840. OEM # 349381-R1
	Int		**10-593**	1.652 Head Dia. 460, UD236 To S/N 2839. OEM # 278301-R1
	Int		**10-922**	1.679 Head Dia. 315, 606, 2606, 3616 From S/N 2840. OEM # 323774-R1
Valve Seat Insert	Exh		**20-1375-1**	1-1/8 I.D. 1-3/8 O.D. 7/32 Depth. w/ 1.300 Valve Head Dia.
	Exh		**20-1375-1N**	1-1/8 I.D. 1-3/8 O.D. 7/32 Depth. Nickel.
	Exh		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. w/ 1.375 Valve Head Dia.
	Int		**20-1687-2**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth. w/ 1.652 Valve Head Dia.
	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. w/ 1.679 Valve Head Dia.
Guide	Both		**30-1881**	2.844 OAL. +2 O/S Avail. OEM # 278370-R1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 12	**D236 C.I. (3.9L) 12V D**			**L6** **BORE - 3.60"/93.7mm**
Spring	Both		**32-646**	2.266 Free Length. From S/N 10984.
	Both		**32-726**	2.438 Free Length. From S/N 5611 To S/N 10983
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 13	**Neuss Engs. D155,D179,D206,D239,D246,D268,D310,D3**			**L3-4** **BORE - 3.875"/98.4mm**
Valve	Exh		**10-10767S**	1.610 Head Dia. Turbo
	Int		**10-10766**	1.689 Head Dia.
Valve Seat Insert	Exh		**20-1687-1**	1-13/32 I.D. 1-11/16 O.D. 1/4 Depth.
	Exh		**20-1687-1N**	1-13/32 I.D. 1-11/16 O.D. 1/4 Depth. Nickel
	Int		**20-1750-4**	1-7/16 I.D. 1-3/4 O.D. 1/4 Depth.
	Int		**20-1750-4N**	1-7/16 I.D. 1-3/4 O.D. 1/4 Depth. Nickel
Guide	Both		**30-7548**	3.040 OAL. Plain I.D. OEM # 3055022-R2. I.D. Must Be Reamed To Size.
Spring	Both		**32-04056**	2.175 Free Length. OEM # 3055060R1
Injector Component			**87-5344**	Injector Tube. Copper. OEM # 3055344
LINE 14	**C248 (4.0L), U6 8V**			**L4** **BORE - 3.875"/98.4mm**
Valve	Exh		**10-203**	1.656 Head Dia. Gasoline. OEM # 50732-DA
	Int		**10-204**	1.812 Head Dia. Gasoline. OEM # 50731-DA
	Int		**10-207**	1.812 Head Dia. OEM # 57698-D
Valve Seat Insert	Exh		**20-1812-7**	1-7/16 I.D. 1-13/16 O.D. 1/4 Depth
	Int		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Both		**30-1546**	2.750 OAL. Distillate
	Both		**30-1547N**	3.219 OAL. Gasoline Only. OEM # 8044D
	Both		**30-7410**	1.340 OAL
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Valve Stem Seal	Both		**38-921-15**	Nitrile. 2-Ring
	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 15	**C263 C.I. (4.3L) 12V**			**L6** **BORE - 3.5625"/90.5mm**
Valve	Exh		**10-1075S**	1.516 Head Dia. 50, 403, 560, 615, 656, 660, 706, UC263, 2656, 2706, 3600A, 3800A, 3850
	Int		**10-601**	1.781 Head Dia. 403 Combine To S/N 7087, UC263 From S/N 56635, 615 Combine, 50 Harvester. OEM # 234276-R1
Valve Seat Insert	Exh		**20-1562-8**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. w/ 1.516 Valve Head Dia.
	Int		**20-1875-6**	1-5/8 I.D. 1-7/8 O.D. 7/32 Depth. w/ 1.781 Valve Head Dia.
Guide	Both		**30-1747**	2.440 OAL. Hardened. Both For 560, 660, UC263 To S/N 95245. OEM # 237248R1.
	Int		**30-6990**	2.240 OAL. Special Iron. 403, 615, 50, UC263 From S/N 95245. OEM # 535229-R1
Spring	Both		**32-726**	2.438 Free Length.
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 16	**C/U264 C.I. (4.3L) Gas**			**L4 BORE - 4.00"/101.6mm**
Valve	Exh		**10-203**	1.656 Head Dia. 5.844 OAL, Super M, MV, W6, U264 Gasoline. OEM # 50732-DA
	Int		**10-204**	1.812 Head Dia. 5.848 OAL. Super M, MV, W6, U264, Gasoline. OEM # 50731-DA
	Int		**10-428**	1.812 Head Dia. 6.083 OAL, 400, W400 To S/N 161365, T6-61 Gasoline. OEM # 362435-R1
Valve Seat Insert	Exh		**20-1812-7**	1-7/16 I.D. 1-13/16 O.D. 1/4 Depth
	Int		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
	Int		**20-1937-4**	1-9/16 I.D. 1-15/16 O.D. 1/4 Depth
Guide	Both		**30-1546**	2.750 OAL
	Both		**30-1547N**	3.219 OAL. Farmall 400, W400 To S/N 161365. OEM # 8044D.
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Valve Stem Seal	Both		**38-921-15**	Nitrile. 2-Ring
	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 17	**264 C.I. (4.3L) LPG 8V**			**L4 BORE - 4.00"/101.6mm**
Valve	Int		**10-428**	1.812 Head Dia. To S/N 161408. OEM # 362435-R1
Valve Seat Insert	Exh		**20-1812-7**	1-7/16 I.D. 1-13/16 O.D. 1/4 Depth
	Int		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
	Int		**20-1937-4**	1-9/16 I.D. 1-15/16 O.D. 1/4 Depth
Guide	Both		**30-1547N**	3.219 OAL. To S/N 161408. OEM # 8044D
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1
Valve Stem Seal	Both		**38-921-15**	Nitrile. 2-Ring
	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 18	**D264 Diesel 8V**			**L4 BORE - 4.00"/101.6mm**
Valve Seat Insert	Exh		**20-1562-1**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. +5, 10 O/S Avail.
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Both		**30-4941**	2.063 OAL
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
LINE 19	**281 C.I. (4.6L) 8V**			**L4 BORE - 4.125"/104.8mm**
Valve	Int		**10-428**	1.812 Head Dia. Gasoline. OEM # 362435-R1
Valve Seat Insert	Exh		**20-1812-7**	1-7/16 I.D. 1-13/16 O.D. 1/4 Depth
	Int		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Both		**30-1546**	2.750 OAL
	Both		**30-1547N**	3.219 OAL. Gas. OEM # 8044D
	Both		**30-7410**	2.781 OAL. Machined for Seal.
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Valve Stem Seal	Both		**38-921-15**	Nitrile. 2-Ring
	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 20	**282 C.I. (4.6L) Diesel 12V**			**L6 BORE - 3.60"/93.4mm**
Valve	Exh		**10-592**	1.300 Head Dia. H50A, H50B, H50C, UD282 To S/N 3623, 560, 660, TD6, TD9-62 Series To S/N 40698. OEM # 328300-R1
	Exh		**10-921**	1.375 Head Dia. 403, 416, 422, 615, 656, 706, 2656, 2706, 3600A, 3800, 3850 All, H50A, H50B, H50C, UD282 From S/N 3624, 560, 660, TD6, TC9-62 Series From S/N 40699. OEM # 349381-R1
	Int		**10-593**	1.652 Head Dia. H50A, H50B, H50C, UD282 To S/N 3623, 560, 660, TD6, TD9-62 Series To S/N 40698. OEM # 278301-R1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 20	**282 C.I. (4.6L) Diesel 12V**			**L6 BORE - 3.60"/93.4mm**
Valve	Int		**10-922**	1.679 Head Dia. 403, 416, 422, 615, 656, 706, 2656, 2706, 3600A, 3800, 3850 All, H50A, H50B, H50C, UD282 From S/N 3624, 560, 660, TD6, TC9-62. OEM # 323774-R1
Valve Seat Insert	Exh		**20-1375-1**	1-1/8 I.D. 1-3/8 O.D. 7/32 Depth. w/ 1.300 Valve Head Dia.
	Exh		**20-1375-1N**	1-1/8 I.D. 1-3/8 O.D. 7/32 Depth. Nickel.
	Exh		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. w/ 1.375 Valve Head Dia.
	Int		**20-1687-2**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth. w/ 1.652 Valve Head Dia.
	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. w/ 1.679 Valve Head Dia.
Guide	Both		**30-1881**	2.844 OAL. +2 O/S Avail. OEM # 278370-R1
Spring	Both		**32-646**	2.266 Free Length. From From Eng. No. 3229
	Both		**32-726**	2.438 Free Legnth. Int. w/ Rotocaps And Exh.
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-915-15**	Nitrile. Umbrella
	Both		**38-915-25**	Polyacrylic. Umbrella.
	Both		**38-921-15**	Nitrile. 2-Ring
	Both		**38-921-25**	Polyacrylic. 2-Ring.
Expansion Plug Kit			**97-24**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 21	**301 C.I. (4.9L) Diesel 12V**			**L6 BORE - 3.8125"/96.84mm**
Valve	Exh		**10-921**	1.375 Head Dia. OEM # 349381-R1
	Int		**10-922**	1.679 Head Dia. OEM # 323774-R1
Valve Seat Insert	Exh		**20-1375-4**	1-1/8 I.D. 1-3/8 O.D. 3/16 Depth.
	Exh		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. +3, +30 O/S
	Exh		**20-1687-2**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth. w/ 1.600 Valve Head.
	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. +10 O/S Avail.
Guide	Both		**30-1881**	2.844 OAL. +2 O/S Avail. OEM # 278370-R1
Spring	Both		**32-726**	2.438 Free Length.
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-530-15**	Nitrile. Umbrella.
	Both		**38-530-25**	Polyacrylic. Umbrella.
	Both		**38-530-45**	Viton. Umbrella.
LINE 22	**5.0L V304, V345 16V**			**V8 BORE - 3.875"/98.4mm**
Valve	Exh		**10-559S**	1.609 Head Dia. OEM # 151443-R3
	Int		**10-560**	1.969 Head Dia. +15 O/S Stem Avail. OEM # 151269-R2
Valve Seat Insert	Int		**22-2015-1**	1-53/64 I.D. 2.015 O.D. 3/16 Depth. +10, & +20 O/S Avail.
Guide	Both		**30-1836**	2.906 OAL. Hardened. OEM # 151798-R1
	Both		**30-7876**	2.906 OAL. Same As 30-1836 w/ 0.002 Smaller I.D.
Spring	Both		**32-887-D**	2.050 Free Length
Lifter	Both		**36-855**	Hydraulic
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem
	Both		**38-240-25**	Polyacrylic. O-Ring.
Expansion Plug Kit			**97-23**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 23	**310 C.I. (5.1L) Diesel 12V**			**L6 BORE - 3.875"/98.4mm**
Guide	Both		**30-7548**	3.040 OAL. Plain I.D. OEM # 3055022-R2

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 24	**5.1L D312, 5.9L D360, DT360 12V**			**L6 BORE - 4.01"/101.9mm**
Valve	Exh		**10-1519**	1.455 Head Dia. Non-Turbo. OEM # 675573-C2,3
	Int		**10-1520**	1.710 Head Dia. OEM # 676687-C1-4
Valve Seat Insert	Exh		**22-1536-2N**	1.255T I.D. 1.5365 O.D. 0.3585 Depth, +15 O/S Avail., OEM # 671599CI & 675576CI
	Int		**22-1782-1**	1.490T I.D. 1.7825 O.D. 0.3400 Depth, +15 O/S Avail., OEM # 671602CI & 675441 CI
Guide	Both		**30-7431**	2.750 OAL. +2 O/S Avial. OEM # 675439-C1
	Both		**30-7431SA**	2.750 OAL. Special Alloy
Spring	Both		**32-1178**	2.400 Free Length. OEM # 682064C1
Keeper	Both		**34-613**	1 Groove. Heat Treated. .375 Stem. OEM # 76951-R1.
Valve Stem Seal	Both		**38-466-45**	Viton. Top Hat. OEM # 1815374C1. Use with long guide, 30-7431.
Injector Component			**87-5442**	Injector Tube. OEM # 675442C1
LINE 25	**D335, D350, D370, D503, D525, D554, UD16/9/9A**			**V6 BORE - 4.4, 4.5, 4-5/8"**
Valve Seat Insert	Exh		**20-1687-3N**	1-7/16 I.D. 1-11/16 O.D. 1/4 Depth. w/ 1.656 Valve Head Dia. Nickel
	Int		**20-2000-2**	1-11/16 I.D. 2.000 O.D. 9/32 Depth
Guide	Both		**30-1578**	3.970 OAL. OEM # 6608DR
	Both		**30-4941**	2.063 OAL. Starting Engine Guide
Keeper	Both		**34-614**	Heat Treated. 1 Groove.
LINE 26	**5.5L C335, C350 8V**			**L4 BORE - 4.40"/111.8mm**
Valve Seat Insert	Exh		**20-2062-8**	1-11/16 I.D. 2-1/16 O.D. 9/32 Depth
	Int		**20-2250-1**	1-15/16 I.D. 2-1/4 O.D. 3/16 Depth. +10 O/S Avail. Cast Iron Heads
Guide	Both		**30-1727**	3.750 OAL
LINE 27	**5.9L D361, DT361 12V D**			**L6 BORE - 4.125"/104.8mm**
Valve	Exh		**10-923**	1.625 Head Dia. OEM # 612313-C1
	Int		**10-924**	1.940 Head Dia. OEM # 670308-C1
Valve Seat Insert	Int		**20-2000-18**	1-3/4 I.D. 2.000 O.D. 5/16 Depth
	Exh		**22-1657-1**	1.312T I.D. 1.657 O.D. 0.395 Depth
	Exh		**22-1727-2N**	1.310T I.D. 1.727 O.D. 0.380 Depth.
Guide	Both		**30-1957**	3.172 OAL. OEM # 326505-R3
Keeper	Both		**34-803**	2 Groove. Heat Treated. w/o Rotocaps. OEM # 93914-H
LINE 28	**6.4L V392 16V**			**V8 BORE - 4.125"/104.8mm**
Valve	Exh		**10-1133S**	1.734 Head Dia. +3 O/S Avail.
Valve Seat Insert	Exh		**22-1803-1**	1.571 I.D. 1.8035 O.D. 0.312 Depth
Guide	Exh		**30-1968**	2.906 OAL. O.E. Style. OEM # 874913-R2
	Exh		**30-8223**	Same As 30-1968 Exc. Counterbored. Recommended.
	Int		**30-1836**	2.906 OAL. Hardened. OEM # 151798-R1
	Int		**30-7859**	Same As 30-1836 w/ 0.001 Smaller I.D.
Keeper	Both		**34-613**	1 Groove. Heat Treated.
Lifter	Both		**36-855**	Hydraulic
Valve Stem Seal	Both		**38-240-25**	Polyacrylic. O-Ring.
Expansion Plug Kit			**97-23**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 29	**6.7L D407, DT407 12V D TRB**			**L6 BORE - 4.32"/109.8mm**
Valve	Exh		**10-923**	1.625 Head Dia. OEM # 612313-C1
	Int		**10-924**	1.940 Head Dia. OEM # 670308-C1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 29	**6.7L D407, DT407 12V D TRB**			**L6 BORE - 4.32"/109.8mm**
Valve Seat Insert	Int		**20-2000-18**	1-3/4 I.D. 2.00 O.D. 5/16 Depth.
	Exh		**22-1727-2N**	1.310T I.D. 1.727 O.D. 0.380 Depth. OEM # 670301C1
Guide	Both		**30-1957**	3.172 OAL. OEM # 326505-R3
Keeper	Both		**34-803**	2 Groove. Heat Treated. w/o Rotocaps. OEM # 93914-H
Rotator	Both		**37-1581**	Rotator. OEM # 1811581C91
LINE 30	**6.8L D/T414, 7.1L D/T436 12V D TRB**			**L6 BORE - 4.30"/109.2mm**
Valve	Exh		**10-1422**	1.600 Head Dia. No Stellite
	Exh		**10-1422S**	1.600 Head Dia. Stellite. OEM # 676865-C2,4.
	Int		**10-1423**	1.970 Head Dia. OEM # 675046-C2,4.
Valve Seat Insert	Exh		**22-1628-1N**	1.348T I.D. 1.6285 O.D. 0.365 Depth. +10, 13, 20, 30 O/S Avail.
	Int		**22-2001-1**	1.712T I.D. 2.001 O.D. 0.385 Depth. +10, +13, +20 & +30 O/S Avail.
Guide	Both		**30-7431**	2.750 OAL. +2 O/S Avial. OEM # 675439-C1
	Both		**30-7431SA**	2.750 OAL. Special Alloy
	Both		**30-7431U**	2.750 OAL. 0.3735 Undersized I.D.
	Both		**30-8188**	From 1990. 2.610 OAL. OEM # 1815264-C1
	Both		**30-8188SAP**	Special Alloy. Plain 0.3749 I.D. 2.610 OAL. 0.6264 O.D.
	Both		**30-8188U**	2.610 OAL. 0.3735 Undersized I.D.
Spring	Both		**32-1178**	2.400 Free Length. OEM # 682064C1
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Rotator	Both		**37-1581**	Rotator. OEM # 1811581C91
Valve Stem Seal	Both		**38-0234-35**	GF Nylon. Umbrella
Injector Component			**87-5442**	Injector Tube. OEM # 675442C1
LINE 31	**DT429, DT573, DVT573B, UD573, UDT429**			**V8 BORE - 4.50"/114.3mm**
Keeper	Both		**34-802**	1 Groove. Heat Treated
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
LINE 32	**7.6L D466, DT466, DT466B, DTI466B 12V D TRB**			**L6 BORE - 4.30"/109.2mm**
Valve	Exh		**10-1422**	1.600 Head Dia. w/o Stellite. OEM # 676865-C2,4.
	Exh		**10-1422S**	1.600 Head Dia. w/ Stellite. OEM # 676865-C2,4.
	Int		**10-1423**	1.970 Head Dia. OEM # 675046-C2,4.
Valve Seat Insert	Exh		**22-1628-1N**	1.348T I.D. 1.6285 O.D. 0.365 Depth. +10, 13, 20, 30 O/S Avail.
	Int		**22-2001-1**	1.712T I.D. 2.001 O.D. 0.385 Depth. +10, 13, 20, 30 O/S Avail.
Guide	Both		**30-7431**	2.750 OAL. +2 O/S Avial. OEM # 675439-C1
	Both		**30-7431SA**	2.750 OAL. Special Alloy
	Both		**30-7431U**	2.750 OAL. 0.3735 Undersized I.D.
	Both		**30-8188**	2.610 OAL. OEM # 1815264-C1
	Both		**30-8188SAP**	Special Alloy. Plain 0.3749 I.D. 2.610 OAL. 0.6264 O.D.
	Both		**30-8188U**	2.610 OAL. 0.3735 Undersized I.D.
Spring	Both		**32-1178**	2.400 Free Length. OEM # 682064C1
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. S/N 140086 and Below. OEM # 911776
	Both		**36-2082**	Mechanical. 1.120 Dia. S/N 140087 To 532980 w/o Valve Train Improvement Package. OEM # 1802340
	Both		**36-7096**	Mechanical Roller. OEM # 1809570 C1-4.
Rotator	Both		**37-1581**	Rotator. OEM # 1811581C91

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 32	**7.6L D466, DT466, DT466B, DTI466B 12V D TRB**		**L6**	**BORE - 4.30"/109.2mm**
Valve Stem Seal	Both		**38-0234-35**	GF Nylon. Umbrella
	Both		**38-3295-45**	Viton. Top Hat. 3/8 Stem. OEM # 1823925C1. Use with short guide, 30-8188.
	Both		**38-466-45**	Viton. Top Hat. OEM # 1815374C1. Use with long guide, 30-7431.
Injector Component			**87-5442**	Injector Tube. OEM # 675442C1
Expansion Plug Kit			**97-111S**	Stainless Steel Kit
LINE 33	**530 C.I. (8.7L) Mechanical Injection 12V**		**L6**	**BORE - 4.59"/116.6mm**
Valve	Exh		**10-1900S**	5/16 Stem Dia. 1.600 Head Dia. OEM # 1818579-C1, 1824838-C1
	Exh		**10-1944S**	3/8 Stem Dia. 1.600 Head Dia. OEM # 1824842-C1
	Int		**10-1899**	5/16 Stem Dia. 1.970 Head Dia. OEM # 1818580-C1
	Int		**10-1943**	3/8 Stem Dia. 1.970 Head Dia. OEM # 1824642-C1,2
Valve Seat Insert	Exh		**22-1626-1N**	1.348T I.D. 1.626 O.D. 0.365 Depth. OEM # 675450-C3
	Int		**22-1999-1**	1.712T I.D. 1.999 O.D. 0.386 Depth. OEM # 675043-C1
Guide	Both		**30-3006**	For 3/8 Stem. 3.377 OAL. OEM # 4824646-C1
	Both		**30-3006SA**	3.377 OAL. Special Alloy
	Both		**30-8476**	9/16 Reamer Option 0.312 Stem: 2.440 OAL. 0.565 O.D. 0.3146 I.D.
	Both		**30-8476SA**	2.440 OAL. Special Alloy
Spring	Exh		**32-04009**	2.580 Free Length. OEM # 1825540-C1
	Int		**32-04010**	2.357 Free Length. OEM # 677349-C1
Keeper	Both		**34-04644**	1 Round Groove. 3/8 Stem. OEM # 1824644C1
	Both		**34-614**	1 Bead. 5/16 Stem. OEM # 1810944C1
Lifter	Both		**36-7096**	Mechanical Roller. OEM # 1809570 C1-4.
Rotator	Both		**37-4680**	Rotator. Incl. Oil Shield. OEM # 1824680C1
Valve Stem Seal	Both		**38-2245-45**	For 5/16 Stem Dia. OEM # 1822245-C1. Top Hat Style. Viton
	Both		**38-3295-45**	Viton. Top Hat. 3/8 Stem. OEM # 1823925C1
Injector Component			**87-5442**	Injector Tube. OEM # 675442C1
LINE 34	**530 C.I. (8.7L) Electrical Injection 12V**		**L6**	**BORE - 4.59"/116.6mm**
Valve	Exh		**10-1946S**	1.786 Head Dia. 45 Deg. Seat. OEM # 1824840-C1
	Int		**10-1945**	1.786 Head Dia. 30 Deg. Seat. OEM # 1823875-C1
	Int		**10-2131**	1.970 Head Dia. OEM # 18226471-C2
Valve Seat Insert	Exh		**22-1811-2N**	1.548T I.D. 1.811 O.D. 0.334 Depth OEM # 1821903-C3
	Exh		**22-1811-3**	1.548T I.D. 1.811 O.D. 0.334 Depth. OEM # 1830711.
	Int		**22-1823-1**	1.560T I.D. 1.823 O.D. 0.273 Depth OEM # 1821901-C1
	Int		**22-2001-1**	1.712T I.D. 2.001 O.D. 0.385 Depth. OEM # 1827121-C2. Use w/ 10-2131. Depth May Need Machining
Guide	Both		**30-8188**	2.610 OAL. OEM # 1815264-C1
	Both		**30-8188SAP**	Special Alloy. Plain 0.3749 I.D. 2.610 OAL. 0.6264 O.D.
	Both		**30-8188U**	2.610 OAL. 0.3735 Undersized I.D.
Spring	Exh		**32-04009**	2.580 Free Length. OEM # 1825540-C1
	Int		**32-04010**	2.357 Free Length. OEM # 677349-C1
Keeper	Both		**34-04644**	1 Round Groove. OEM # 1824644C1
Lifter	Both		**36-7096**	Mechanical Roller. OEM # 1809570 C1-4.
Rotator	Both		**37-4680**	Rotator. Incl. Oil Shield. OEM # 1824680C1
Valve Stem Seal	Both		**38-3295-45**	Viton. Top Hat. 3/8 Stem
Injector Component			**87-8778**	Injector Tube. OEM # 1818778C2,C3.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 35	**DV550B (9.0L) 16V D**			**V8** **BORE - 4.50"/114.3mm**
Guide	Both		**30-7336**	2.960 OAL. Check O.D. Size. 0.689 O.D. OEM # 428046-C1
LINE 36	**C605 (9.9L) Power Unit 16V**			**V8** **BORE - 4.625"/117mm**
Valve Seat Insert	Exh		**20-2000-3N**	1-5/8 I.D. 2.000 O.D. 19/64 Depth. Nickel
	Int		**20-2250-1**	1-15/16 I.D. 2-1/4 O.D. 3/16 Depth. +10 O/S Avail.
Guide	Exh		**30-7456**	3.060 OAL. OEM # 448229-C1
	Int		**30-7457**	3.090 OAL. OEM # 448219-C2
Spring	Both		**32-887-D**	2.050 Free Length. w/ Rotocaps. OEM # 317365C11
Keeper	Both		**34-802**	1 Groove. Heat Treated
LINE 37	**11.3L 691 C.I. D 12V**			**L6** **BORE - 4.75"/120.7mm**
Guide	Both		**30-4944**	2.688 OAL. OEM # 251103-R1
Keeper	Both		**34-803**	2 Groove. Heat Treated.
LINE 38	**13.4L 817 C.I. 12V D**			**L6** **BORE - 5.375"/136.5mm**
Guide	Both		**30-6913**	3.438 OAL. OEM # 277577-R1

ENGINE	YEAR	CYL.	LINE NO.
D150, D170, D190, DV462/B, DV550/B 12-16V		L6,V8	**1**
2.5L 4-152 8V, 5.0L V304/A, V345/A 16V		L4,V8	**2**
3.2L 4-196 8V		L4	**3**
3.5L GRD214/A, GRD233A, HD213/A, HD232/A/C 12V	1937-49	L6	**4**
3.6L BD220/240, BG220/240, BG241, SD220/240 12V		L6	**5**
3.8L 6-232, 6-258 AMC 12V	1969-78	L6	**6**
4.1L BLD250, FAB241, FAB259 12V	1937-40	L6	**7**
258 C.I. (4.2L) 12V AMC	1971-78	L6	**8**
4.3L BD264, BG264, BG265 12V		L6	**9**
4.4L BD269, BLD269 & BLD269A 12V	1942-56	L6	**10**
4.5L VT275 24V MaxxForce 5 D TRB		V6	**11**
4.6L BD282, BD308 12V	1953-69	L6	**12**
4.9L D301 12V		L6	**13**
5.2L RED318, RED318A 12V		L6	**14**
360 C.I. (5.9L) D TRB 12V		L6	**15**
5.9L FBB361, FBC361, FBC401, RED361/A, RED401/A,	1938-49	L6	**16**
6.0L (365 C.I.) 32V Powerstroke D TRB		V8	**17**
6.0L RD372 12V		L6	**18**
6.4L Vin R MaxxForce 7 32V D TRB		V8	**19**
392 C.I. (6.4L) V392 16V		V8	**20**
6.6L V400 16V	1974-75	V8	**21**
6.6L V/S401, V461, V/S478, V/S549, FTV/S549 16V		V8	**22**
6.6L MV404, MV446 16V		V8	**23**
6.6L RD406, RD450, RD501 12V		L6	**24**
6.7L D407, DT407 12V D TRB		L6	**25**
6.9L (420 C.I.) D 16V	1971-90	V8	**26**
7.3L (444 C.I.) 444TE Powerstroke 16V D TRB	1988-05	V8	**27**
7.4L RED450, RED450A 12V		L6	**28**
7.6L (466), 9.3L (570) Elec. Inj. 24V MaxxForce		L6	**29**
D466 C.I. (7.6L) DT/I466/B, DT414, DT436 12V		L6	**30**
466 C.I. (7.6L) Mech. Inj., DT408 (6.7L) 12V TRB		L6	**31**
466 C.I. (7.6L) Electrical Inj. HEUI 12V		L6	**32**
530 C.I. (8.7L) Mechanical Injection 12V		L6	**33**
530 C.I. (8.7L) Electrical Injection 12V		L6	**34**
8.8L V537, V605 16V		V8	**35**
551 C.I. (9.0L) Diesel 16V		V8	**36**
758 C.I. (12.4L) SOHC 24V TRB Dir. Inj. MaxxForce-13		L6	**37**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**D150, D170, D190, DV462/B, DV550/B 12-16V**			**L6,V8** **BORE - 4.125"/104.8mm**
Guide	Int		**30-7336**	Both Special Iron. Smaller O.D. 0.689. OEM # 428046-C1
Keeper	Both		**34-613**	1 Groove. Heat Treated
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
LINE 2	**2.5L 4-152 8V, 5.0L V304/A, V345/A 16V**			**L4,V8** **BORE - 3.875"/98.4mm**
Valve	Exh		**10-559S**	1.609 Head Dia. OEM # 151443-R3
	Int		**10-560**	1.969 Head Dia. +15 O/S Stem Avail. OEM # 151269-R2
Valve Seat Insert	Int		**22-2015-1**	1-53/64 I.D. 2.015 O.D. 3/16 Depth. +10, & +20 O/S Avail.
Guide	Both		**30-1836**	2.906 OAL. Hardened. OEM # 151798-R1
	Both		**30-7876**	Same As 30-1836 w/ 0.002 Smaller I.D.
Spring	Both		**32-887-D**	2.050 Free Length. OEM # 317365-C11

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 2	**2.5L 4-152 8V, 5.0L V304/A, V345/A 16V**			**L4,V8 BORE - 3.875"/98.4mm**
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-855**	Hydraulic.
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem Dia.
	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
Expansion Plug Kit			**97-23**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 3	**3.2L 4-196 8V**			**L4 BORE - 4.125"/104.8mm**
Valve	Exh		**10-1133S**	1.734 Head Dia. +3 O/S Avail.
Valve Seat Insert	Exh		**22-1803-1**	1.571 I.D. 1.8035 O.D. 0.312 Depth
Guide	Both		**30-7876**	2.906 OAL. Same As 30-1836 w/ 0.002 Smaller I.D.
	Exh		**30-1968**	2.906 OAL. Special Iron - O.E. Style. OEM # 874913-R2
	Exh		**30-8223**	2.906 OAL. Same As 30-1968 Exc. Counterbored. Recommended.
	Int		**30-1836**	2.906 OAL. Hardened. OEM # 151798-R1
	Int		**30-7859**	Same As 30-1836 w/ 0.001 Smaller I.D.
	Int		**30-8456**	2.906 OAL. Same As 30-1836 Exc. Counterbored.
Spring	Both		**32-887-D**	2.050 Free Length. OEM # 317365-C11
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-855**	Hydraulic
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
Expansion Plug Kit			**97-55**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 4	**3.5L GRD214/A, GRD233A, HD213/A, HD232/A/C 12V**			**1937-49 L6 BORE - 3.3125"/84.1mm**
Valve Seat Insert	Exh		**20-1562-6**	1-1/4 I.D. 1-9/16 O.D. 7/32 Depth.
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Both		**30-6108**	2.375 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Both		**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Both		**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.5020 O.D. Hardened
LINE 5	**3.6L BD220/240, BG220/240, BG241, SD220/240 12V**			**L6 BORE - 3.58"/91mm**
Valve Seat Insert	Exh		**20-1562-8**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth.
	Int		**20-1687-3**	1-7/16 I.D. 1-11/16 O.D. 1/4 Depth. w/ 1.656 Valve Head Dia.
	Int		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Both		**30-1747**	2.440 OAL. Hardened. OEM # 237248R1.
Spring	Both		**32-646**	2.266 Free Length. w/ Rotocaps
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
	Both		**38-921-15**	Nitrile. 2-Ring
	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 6	**3.8L 6-232, 6-258 AMC 12V**			**1969-78 L6 BORE - 3.75"/95.3mm**
Valve	Exh	1969-78	**10-1325**	1.406 Head Dia. 4 Groove From S/N 507AO1. +3, 15, 30 O/S Stem Avail.
	Exh	1969-78	**10-1441**	1.406 Head Dia. 1 Groove. +15 O/S Stem May Be Avail.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 6	**3.8L 6-232, 6-258 AMC 12V**			**1969-78 L6 BORE - 3.75"/95.3mm**
Valve	Int	1969-78	**10-1260**	1.787 Head Dia. 4 Groove From S/N 507AO1. +3, 15, 30 O/S Stem Avail.
	Int	1969-78	**10-1442**	1.787 Head Dia. 1 Groove. +15 O/S Stem Avail.
Valve Seat Insert	Exh	1969-78	**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth.
	Int	1969-78	**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Both	1969-78	**30-6108**	2.375 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Both	1969-78	**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Both	1969078	**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D. Hardened
Spring	Both	1969-78	**32-1082**	w/o Rotator 2.035 Free Length
Keeper	Both	1969-78	**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
	Both	1969-78	**34-766**	4 Groove. Heat Treated
	Exh	1969-78	**34-555**	11/32 Stem. 1 Square Groove. Heat Treated. OEM # 42026-D.
Lifter	Both	1969-78	**36-2011CCI**	Hydraulic Flat. 1-pc. Chilled Cast Iron
Valve Stem Seal	Both	1969-78	**38-1068-70**	Teflon And Rubber. 0.372 Stem Dia.
	Both	1969-78	**38-910-15**	Nitrile. Umbrella
	Both	1969-78	**38-910-25**	Polyacrylic. Umbrella.
Rocker Component	Both		**40-2740**	Rocker Arm, Stamped. '88-89 Eagle, '97-98 Jeep.
Expansion Plug Kit		1969-78	**97-1**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 7	**4.1L BLD250, FAB241, FAB259 12V**			**1937-40 L6 BORE - 3.375"/85.7mm**
Valve Seat Insert	Exh		**20-1562-1**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. +5, 10 O/S Avail.
	Int		**20-1750-1**	1-1/2 I.D. 1-3/4 O.D. 1/4 Depth, w/ 1.625 Valve Head Dia.
	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. +10 O/S Avail.
LINE 8	**258 C.I. (4.2L) 12V AMC**			**1971-78 L6 BORE - 3.75"/95.3mm**
Valve	Exh		**10-1325**	1.406 Head Dia. 0.3721T Stem 4.892 OAL +3, 15, 30 O/S Avail. OEM # 3218813
	Int		**10-1260**	1.787 Head Dia. 0.3720 Stem 4.899 OAL OEM # 444829C1 +3, 15, 30 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth OEM # 12339070
	Int		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth
Guide	Both		**30-6108**	2.375 OAL 0.3740 Plain I.D. 0.5020 O.D.
	Both		**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Both		**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D. Hardened
Lifter	Both		**36-2011CCI**	0.9040 O.D. 1.900 OAL OEM # 387095C1
Valve Stem Seal	Both		**38-910-15**	Nitrile. Umbrella
	Both		**38-910-25**	Polyacrylic. Umbrella.
LINE 9	**4.3L BD264, BG264, BG265 12V**			**L6 BORE - 3.685"/93.6mm**
Valve	Int		**10-601**	1.781 Head Dia. OEM # 234276R1
Valve Seat Insert	Exh		**20-1562-8**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth.
	Int		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Both		**30-1747**	2.440 OAL. Hardened. OEM # 237248R1.
Spring	Both		**32-646**	2.266 Free Length. w/ Rotocaps
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 9	**4.3L BD264, BG264, BG265 12V**			**L6 BORE - 3.685"/93.6mm**
Valve Stem Seal	Both		**38-921-15**	
	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 10	**4.4L BD269, BLD269 & BLD269A 12V**			**1942-56 L6 BORE - 3.5625"/90.5mm**
Valve Seat Insert	Exh		**20-1562-1**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. +5, 10 O/S Avail.
	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. +10 O/S Avail.
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber. 0.341 Stem Dia.
	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
Expansion Plug Kit		1942-56	**97-24**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 11	**4.5L VT275 24V MaxxForce 5 D TRB**			**V6 BORE - 3.74"/69.6mm**
Valve	Exh		**10-2180**	1.102 Head Dia.
	Int		**10-2179**	1.339 Head Dia. 0.2737 Stem
Valve Seat Insert	Exh		**20-1250-15N**	0.905 I.D. 1.2550 O.D. 0.250 Depth. Nickel. May Need Machining
	Exh		**20-1250-3**	1.000 I.D. 1-1/4 O.D. 1/4 Depth.
	Int		**20-1375-2**	1.125 I.D. 1.3795 Exact O.D. 0.250 Depth. May Need Machining.
	Int		**22-1375-1**	1.100 I.D. 1.375 O.D. 0.227 Depth. +010 O/S Avail.
Guide	Both		**30-3055**	2.331 OAL
Spring	Both		**32-04040**	2.076 Free Length
Keeper	Both		**34-5009**	1 Round Bead. 0.274 Stem
Lifter	Both		**36-2104**	Hydraulic Roller. OEM # 3C3Z6500AA
Valve Stem Seal	Both		**38-160-55**	Viton. Top Hat.
Performance Spring	Both		**52-4040**	2.160 Free Length. 84 @ 1.880 (+20 closed). 252 @ 1.400 (+50 open)
Retainer	Both		**55-6328**	Retainer. 0.912 O.D.
Push Rod	Both		**74-6662**	9.795 Length. 11/32 x 0.060. Install Bronze End at Rocker Arm. OEM # 8C3Z6565B
Black Lightning R. Valve	Exh		**77-110007**	Black Lightning Nitrided Inconel. 1.102 Head 0.2735 Stem 5.059 OAL
	Int		**77-133008**	Black Lightning Nitrided Stainless. 1.339 Head Dia. 0.2738 Stem 5.059 OAL
Injector Component			**87-8320**	Injector Tube. Stainless. OEM# 3C3Z-9F538-AA
LINE 12	**4.6L BD282, BD308 12V**			**1953-69 L6 BORE - 3.80"/96.8mm**
Valve Seat Insert	Exh		**20-1750-3**	1-7/16 I.D. 1-3/4 O.D. 7/32 Depth. -N Nickel Also Avail.
	Int		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
Keeper	Int		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
	Both		**38-921-15**	Nitrile. 2-Ring
	Both		**38-921-25**	Polyacrylic. 2-Ring.
Expansion Plug Kit			**97-24**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 13	**4.9L D301 12V**			**L6 BORE - 3.80"/96.8mm**
Valve	Exh		**10-592**	1.300 Head Dia. To eng. No. 3228. OEM # 328300R1
	Exh		**10-921**	1.375 Head Dia. From Eng. No. 3229. OEM # 349381R1
	Int		**10-593**	1.652 Head Dia. To Eng. No. 3228. OEM # 278301-R1
	Int		**10-922**	1.679 Head Dia. From Eng. No 3229. OEM # 323774R1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 13	**4.9L D301 12V**			**L6 BORE - 3.80"/96.8mm**
Valve Seat Insert	Exh		**20-1375-4**	1-1/8 I.D. 1-3/8 O.D. 3/16 Depth.
	Int		**20-1687-2**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth
Guide	Both		**30-1881**	2.844 OAL. +2 O/S Avail. OEM # 278370-R1
Spring	Both		**32-646**	2.266 Free Length. From From Eng. No. 3229
	Both		**32-726**	2.438 Free Length. To S/N 3228
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. OEM # 911776
Valve Stem Seal	Both		**38-915-15**	Nitrile. Umbrella
	Both		**38-915-25**	Polyacrylic. Umbrella.
	Both		**38-921-15**	Nitrile. 2-Ring
	Both		**38-921-25**	Polyacrylic. 2-Ring.
LINE 14	**5.2L RED318, RED318A 12V**			**L6 BORE - 3.875"/98.4mm**
Valve Seat Insert	Exh		**20-1625-3**	1-5/16 I.D. 1-5/8 O.D. 1/4 Depth.
Guide	Exh		**30-1936**	2.813 OAL. New Style, Machined For Seal. OEM # 90316R3
Keeper	Both		**34-803**	2 Groove. Heat Treated. w/o Rotocaps. OEM # 93914-H
LINE 15	**360 C.I. (5.9L) D TRB 12V**			**L6 BORE - 3.80"/98.4mm**
Valve	Exh		**10-1519**	1.455 Head Dia. Non-Turbo. OEM # 675573-C2,3
	Exh		**10-1574S**	1.455 Head Dia. Turbo. OEM # 1810086-C1,2
	Int		**10-1520**	1.710 Head Dia. OEM # 676687-C1-4
Valve Seat Insert	Exh		**22-1536-2N**	1.255T I.D. 1.5365 O.D. 0.3585 Depth, +15 O/S Avail., OEM # 671599CI & 675576CI
	Int		**22-1782-1**	1.490T I.D. 1.7825 O.D. 0.3400 Depth, +15 O/S Avail., OEM # 671602CI & 675441 CI
Guide	Both		**30-7431**	2.750 OAL. +2 O/S Avial. OEM # 675439-C1
	Both		**30-7431SA**	2.750 OAL. Special Alloy
	Both		**30-7431U**	2.750 OAL. 0.3735 Undersized I.D.
Spring	Both		**32-1178**	2.400 Free Length. OEM # 682064C1
Keeper	Both		**34-613**	1 Groove. Heat Treated
Valve Stem Seal	Both		**38-466-45**	Viton. Top Hat. OEM # 1815374C1. Use with long guide, 30-7431.
Injector Component			**87-5442**	Injector Tube. OEM # 675442C1
LINE 16	**5.9L FBB361, FBC361, FBC401, RED361/A, RED401/A,**			**1938-49 L6 BORE - 4.125"/104.7mm**
Valve Seat Insert	Exh		**20-1750-8**	1-3/8 I.D. 1-3/4 O.D. 1/4 Depth.
	Int		**20-2375-2**	2.000 I.D. 2-3/8 O.D. 9/32 Depth
Guide	Exh		**30-1936**	2.813 OAL. New Style, Machined For Seal. OEM # 90316R3
Keeper	Both		**34-803**	2 Groove. Heat Treated. w/o Rotocaps. OEM # 93914-H
Expansion Plug Kit			**97-92**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 17	**6.0L (365 C.I.) 32V Powerstroke D TRB**			**V8 BORE - 3.74"/94.9mm**
Valve Kit	Both		**10-VKFOR60I-5**	Kit w/ 32 Valves, 32 Springs, 64 Keepers, 32 Stem Seals, 32 Retainers
	Both		**10-VKFOR60S-5**	Kit w/ 32 Valves, 32 Guides, 64 Keepers, 32 Stem Seals, 8 SS Inj. Tubes
	Both		**10-VKFOR60S-6**	Kit w/ 32 Valves, 32 Guides, 64 Keepers, 32 Springs, 32 Stem Seals, 8 SS Inj. Tubes
Valve	Exh		**10-2180**	1.102 Head Dia.
	Int		**10-2179**	1.339 Head Dia.
Cylinder Head, Stock			**16-260018**	Cast Iron. 18mm Dowell. Seats, Guides, and Inj. Tubes Installed

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 17	**6.0L (365 C.I.) 32V Powerstroke D TRB**			**V8 BORE - 3.74"/94.9mm**
Cylinder Head, Stock			**16-260020**	Cast Iron. 20mm Dowell. Seats, Guides, and Inj. Tubes Installed
Valve Seat Insert	Exh		**20-1250-15N**	0.905 I.D. 1.2550 O.D. 0.250 Depth. Nickel. May Need Machining
	Exh		**20-1250-3**	1.000 I.D. 1-1/4 O.D. 1/4 Depth.
	Int		**20-1375-2**	1.125 I.D. 1.3795 Exact O.D. 0.250 Depth. May Need Machining. -N Suffix Nont Magnetic Also Avail.
	Exh		**21-1187-52**	0.934T I.D. 1-3/16 O.D. 0.257 Depth. May Need Machining
	Exh		**22-1161-1+030**	0.910T I.D. 1.191 O.D. 0.222 Depth. May Need Machining. +10, 20, 30, 40, 50, 63 Avail. Non-Magnetic
	Exh		**22-1221-2N**	0.906 I.D. 1.221 O.D. 0.335 Depth. Nickel
	Exh		**22-1260-1N**	0.945 I.D. 1.2598 O.D. 0.335 Depth. May Need Machining
	Int		**22-1375-1**	1.100 I.D. 1.375 O.D. 0.227 Depth. +010 O/S Avail. OEM # 3942298
	Int		**22-1375-2N**	1.100 I.D. 1.375 O.D. 0.227 Depth. +5, 10, 20 O/S Avail. OEM # 3942299
Guide	Both		**30-3055**	2.331 OAL. 0.2765 I.D. +2, 5 O/S Avail.
Spring	Both		**32-04040**	2.076 Free Length
Keeper	Both		**34-5009**	1 Round Bead. 0.274 Stem
Lifter	Both		**36-2104**	Hydraulic Roller. OEM # 3C3Z6500AA
Valve Stem Seal	Both		**38-160-55**	Viton. Top Hat.
Performance Spring	Both		**52-4040**	2.160 Free Length. 84 @ 1.880 (+20 closed). 252 @ 1.400 (+50 open)
Retainer	Both		**55-6328**	Retainer. 0.912 O.D.
Push Rod	Both		**74-6662**	9.795 Length. OEM # 1873916
Black Lightning R. Valve	Both		**77-VKFO601-5**	Kit, 32 BLDP Valves, 64 keepers, 32 HP springs, retainers, stem seals
	Exh		**77-110007**	Black Lightning Nitrided Inconel. 1.102 Head 0.2735 Stem 5.059 OAL
	Int		**77-133008**	Black Lightning Nitrided Stainless. 1.339 Head Dia. 0.2738 Stem 5.059 OAL
Injector Component			**87-8320**	Injector Tube. Stainless. OEM# 1828320C1
Expansion Plug Kit			**97-300SS**	Stainless
LINE 18	**6.0L RD372 12V**			**L6 BORE - 4.37"/111 mm**
Valve Seat Insert	Exh		**20-1875-1**	1-5/8 I.D. 1-7/8 O.D. 1/4 Depth. +20 O/S Avail.
Guide	Exh		**30-1936**	2.813 OAL. New Style, Machined For Seal. OEM # 90316R3
Keeper	Both		**34-803**	2 Groove. Heat Treated. w/o Rotocaps. OEM # 93914-H
Valve Stem Seal	Both		**38-240-25**	Polyacrylic. O-Ring.
Expansion Plug Kit			**97-24**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 19	**6.4L Vin R MaxxForce 7 32V D TRB**			**V8 BORE - 98mm/3.86"**
Valve	Exh		**10-13183**	1.161 Head Dia. 0.2738 Stem
	Int		**10-13182**	1.339 Head Dia. 0.2738 Stem
Valve Seat Insert	Exh		**20-1250-15N**	0.905 I.D. 1.2550 O.D. 0.250 Depth. Nickel. May Need Machining
	Int		**20-1375-2**	1.125 I.D. 1.3795 Exact O.D. 0.250 Depth. May Need Machining
	Exh		**21-1187-52**	0.934T I.D. 1-3/16 O.D. 0.257 Depth. May Need Machining
	Exh		**22-1161-1+030**	0.910T I.D. 1.191 O.D. 0.222 Depth. May Need Machining. +10, 20, 30, 40, 50, 63 Avail.
	Exh		**22-1221-2N**	0.906 I.D. 1.221 O.D. 0.335 Depth. Nickel
	Exh		**22-1260-1N**	0.945 I.D. 1.2598 O.D. 0.335 Depth. May Need Machining. Nickel
	Int		**22-1375-1**	1.100 I.D. 1.375 O.D. 0.227 Depth. +010 O/S Avail. OEM # 3942298
	Int		**22-1375-2N**	1.100 I.D. 1.375 O.D. 0.227 Depth. +5, 10, 20 O/S Avail. OEM # 3942299

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 19	**6.4L Vin R MaxxForce 7 32V D TRB**			**V8 BORE - 98mm/3.86"**
Guide	Both		**30-3055**	2.331 OAL
Spring	Both		**32-04040**	2.076 Free Length
Keeper	Both		**34-5009**	1 Round Bead. 0.274 Stem
Lifter	Both		**36-2104**	Hydraulic Roller. OEM # 3C3Z6500AA
Valve Stem Seal	Both		**38-160-55**	Viton. Top Hat.
Performance Spring	Both		**52-4040**	2.160 Free Length. 84 @ 1.880 (+20 closed). 252 @ 1.400 (+50 open)
Retainer	Both		**55-6328**	Retainer. 0.912 O.D.
Push Rod	Both		**74-6662**	9.795 Length. OEM # 8C3Z6565B
Black Lightning R. Valve	Both		**77-VKFO641-5**	Kit, 32 BLDP Valves, 64 keepers, 32 HP springs, retainers, stem seals
	Exh		**77-116007**	Black Lightning Nitrided Inconel. 1.161 Head Dia. 0.2734 Stem 5.138 OAL
	Int		**77-133007**	Black Lightning Nitrided Stainless. 1.339 Head Dia. 0.2738 Stem 5.138 OAL
Injector Component			**87-6951**	Injector Tube, Stainless. OEM # 8C3Z9N951A
LINE 20	**392 C.I. (6.4L) V392 16V**			**V8 BORE - 4.125"/104.8mm**
Valve	Exh		**10-1133S**	1.734 Head Dia. +3 O/S Avail.
Valve Seat Insert	Exh		**22-1803-1**	1.571 I.D. 1.8035 O.D. 0.312 Depth
Guide	Exh		**30-1968**	2.906 OAL. O.E. Style. OEM # 874913-R2
	Exh		**30-8223**	2.906 OAL. 0.419 I.D. 0.689 O.D. Counterbored
	Int		**30-1836**	2.906 OAL. 0.3765 I.D. 0.689 O.D. Hardened. OEM # 151798-R1
	Int		**30-7859**	Same As 30-1836 w/ 0.001 Smaller I.D. 0.3755
	Int		**30-7876**	2.906 OAL. 0.3745 I.D. 0.689 O.D.
	Int		**30-8456**	2.906 OAL. 0.3765 I.D. 0.689 O.D.
Spring	Both		**32-887-D**	2.050 Free Length
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-855**	Hydraulic. OEM # 217158R91,92
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
Expansion Plug Kit			**97-23**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 21	**6.6L V400 16V**			**1974-75 V8 BORE - 4.165"/105.8mm**
Valve	Exh		**10-1257**	1.680 Head Dia. +15 O/S Stem May Be Avail.
	Int		**10-1258**	2.025 Head Dia. 0.372 Stem 4 Groove, +15 O/S Stem Avail.
Valve Seat Insert	Exh		**20-1750-3N**	1-7/16 I.D. 1-3/4 O.D. 7/32 Depth
	Int		**20-2125-1**	1-13/16 I.D. 2-1/8 O.D. 1/4 Depth.
Guide	Both		**30-9108**	2.375 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Both		**30-9108H**	2.375 OAL. 0.374 Spiral I.D. 0.5020 O.D. Hardened
	Int		**30-6108**	2.375 OAL 0.3740 Plain I.D. 0.5020 O.D.
Spring	Both		**32-1292**	Inner. OEM # 9N5495. 1.920 Free Length
Keeper	Both		**34-555**	1 Groove. Heat Treated. OEM # 42026-D
	Exh		**34-766**	4 Groove, For 1981-89 Int To Be Used w/ 01273
Valve Stem Seal	Both		**38-910-15**	Nitrile. Umbrella
	Both		**38-910-25**	Polyacrylic. Umbrella.
Push Rod	Both		**74-6034**	7.798 Length

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 22	**6.6L V/S401, V461, V/S478, V/S549, FTV/S549 16V**			**V8 BORE - 4.125"/104.8mm**
Valve Seat Insert	Exh		**20-2000-3N**	1-5/8 I.D. 2.000 O.D. 19/64 Depth. Nickel
	Int		**20-2250-1**	1-15/16 I.D. 2-1/4 O.D. 3/16 Depth. +10 O/S Avail. Cast Iron Heads
Guide	Exh		**30-8224**	3.250 OAL. Same As 30-1816 w/ Counterbore - Recommended
	Int		**30-1817**	3.063 OAL. Hardened. OEM # 133670-R1
Spring	Both		**32-887-D**	2.050 Free Length. OEM # 317365-C11
Keeper	Both		**34-802**	w/.137 Wide Groove. OEM # 60437-R1
Lifter	Both		**36-855**	Hydraulic
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
Expansion Plug Kit			**97-92**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 23	**6.6L MV404, MV446 16V**			**V8 BORE - 4.125"/104.8mm**
Valve	Int		**10-1432**	2.054 Head Dia.
Valve Seat Insert	Int		**20-2125-1**	1-13/16 I.D. 2-1/8 O.D. 1/4 Depth.
	Exh		**22-1654-1N**	1.367 I.D. 1.6544 O.D. 0.312 Depth, +10 O/S Avail., OEM # 1805249C1
Guide	Both		**30-7174**	2.600 OAL. O.E. Style. OEM # 446723-C1
	Both		**30-8222**	2.600 OAL. Same As 30-7174 Exc. Counterbored, Recommended.
Spring	Both		**32-887-D**	2.050 Free Length. OEM # 317365-C11
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2011CCI**	Hydraulic Flat. 1-pc. Chilled Cast Iron
Valve Stem Seal	Both		**38-921-25**	Polyacrylic. 2-Ring.
Expansion Plug Kit			**97-92**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 24	**6.6L RD406, RD450, RD501 12V**			**L6 BORE - 4.37"/111 mm**
Valve Seat Insert	Exh		**20-1625-3N**	1-5/16 I.D. 1-5/8 O.D. 1/4 Depth
Guide	Exh		**30-1936**	2.813 OAL. New Style, Machined For Seal. OEM # 90316R3
Keeper	Both		**34-803**	2 Groove. Heat Treated. w/o Rotocaps. OEM # 93914-H
Expansion Plug Kit			**97-24**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 25	**6.7L D407, DT407 12V D TRB**			**L6 BORE - 4.32"/109.8mm**
Valve	Exh		**10-923**	1.625 Head Dia. OEM # 612313-C1
	Int		**10-924**	1.940 Head Dia. OEM # 670308-C1
Valve Seat Insert	Int		**20-2000-18**	1-3/4 I.D. 2.00 O.D. 5/16 Depth.
	Exh		**22-1727-2N**	1.310T I.D. 1.727 O.D. 0.380 Depth. OEM # 670301C1
Guide	Both		**30-1957**	3.172 OAL. OEM # 326505-R3
Keeper	Both		**34-803**	2 Groove. Heat Treated. w/o Rotocaps. OEM # 93914-H
Rotator	Both		**37-1581**	Rotator. OEM # 1811581C91
LINE 26	**6.9L (420 C.I.) D 16V**			**1971-90 V8 BORE - 4.00"/101.6mm**
Valve	Exh	1971-90	**10-1542**	1.595 Head Dia. 0.372T Stem. +10 Thicker Margin
	Int	1971-90	**10-1543**	1.877 Head Dia. 0.3719 Stem. +10 Margin
Valve Seat Insert	Int	1971-90	**20-1875-38**	1-5/8 I.D. 1-7/8 O.D. 3/16 Depth. To Be Used In Early A & B Castings Due To Thin Wall Sections.
	Int	1971-90	**20-1937-23**	1-11/16 I.D. 1-15/16 O.D. 3/16 Depth, Cannot Be Used In Early A & B Castings Due To Thin Wall Sections.
	Exh	1971-90	**22-1669-1**	1.372T I.D. 1.669 O.D. 0.272 Depth. OEM # E3TZ-6057B. +15 & +30 O/S Avail.
	Int	1971-90	**22-1957-1**	Dual O.D. Seat Recommended For All Castings.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 26	**6.9L (420 C.I.) D 16V**			**1971-90 V8 BORE - 4.00"/101.6mm**
Guide	Both	1971-90	**30-7689**	2.600 OAL. OEM Repair Version Check O.D. 0.6252 O.D.
	Both	1971-90	**30-7712**	5/8 Reamer Option 0.372 Stem: 2.600 OAL. 0.627 O.D. 0.374 I.D.
Spring	Both	1971-90	**32-887-D**	2.050 Free Length. w/ Rotocaps. OEM # 317365-C11
Keeper	Both	1971-90	**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both	1971-90	**36-2104**	Hydraulic Roller
Valve Stem Seal	Exh	1971-90	**38-910-25**	Polyacrylic. Umbrella.
	Int	1971-90	**38-844-45**	Viton. Ring And Spring.
Push Rod	Both		**74-6608**	10.013 Length. OEM # E3TZ6565A
Expansion Plug Kit			**97-97SS**	Avail. In Stainless Steel Only - Specially Ground Concave Plugs To OEM Specs.
LINE 27	**7.3L (444 C.I.) 444TE Powerstroke 16V D TRB**			**1988-05 V8 BORE - 4.1095"/104.4mm**
Valve Kit	Both		**10-VKFOR73L-5**	Kit with 16 Dir. Inj. Valves, 16 Guides, 32 Keepers, 16 Stem Seals, 6 Brass Injector Tubes
	Both		**10-VKFOR73L-6**	Kit with 16 Dir. Inj. Valves, 16 Guides, 16 Springs, 32 Keepers, 16 Stem Seals, 6 Brass Injector Tubes
Valve	Exh		**10-1542**	1.595 Head Dia. Exc. TRB. 0.372T Stem. +10 Thicker Margin
	Exh		**10-1754**	1.595 Head Dia. 0.3719 Stem. Hi-Nickel Head Matl. For TRB. +10 Margin. OEM # F3TZ6505B
	Exh		**10-1786**	1.680 Head Dia. 0.3122 Stem. Dir. Inj.
	Int		**10-1543**	1.877 Head Dia. 0.3719 Stem. +10 Margin
	Int		**10-1785**	1.680 Head Dia. 0.3122 Stem. Dir. Inj.
Valve Seat Insert	Exh		**20-1750-4N**	1-7/16 I.D. 1-3/4 O.D. 1/4 Depth. Must cut seat angle to 37.5 Deg.
	Int		**20-1750-4**	1-7/16 I.D. 1-3/4 O.D. 1/4 Depth. Must cut seat angle to 30 Deg.
	Int		**20-1875-38**	1-5/8 I.D. 1-7/8 O.D. 3/16 Depth. For Thin Wall Castings.
	Int		**20-1937-23**	1-11/16 I.D. 1-15/16 O.D. 3/16 Depth. Not For Thin Wall Castings
	Exh		**22-1669-1**	1.372T I.D. 1.669 O.D. 0.272 Depth. OEM # E3TZ-6057B. +15, 30 O/S Avail. Not For Thin Wall Castings
	Int		**22-1957-1**	Dual O.D. Seat Recommended For All Castings.
Guide	Both		**30-3257**	New Repair Option: 2.440 OAL. 0.3145 I.D. 0.502 O.D. For 1/2" Reamer w/ Seal Boss O.D. 0.564. Type: 21-SR
	Both		**30-7689**	2.600 OAL. OEM Repair Version Check O.D. 0.6252 O.D.
	Both		**30-7712**	5/8 Reamer Option 0.372 Stem: 2.600 OAL. 0.627 O.D. 0.374 I.D.
	Both		**30-8476**	9/16 Reamer Option 0.312 Stem: 2.440 OAL. 0.565 O.D. 0.3146 I.D.
	Both		**30-8476SA**	2.440 OAL. Special Alloy
	Exh		**30-8562**	9/16 Reamer Option 0.312 Stem: 2.440 OAL. 0.564 O.D. 0.3145 I.D.
Spring	Both		**32-887-D**	2.050 Free Length. Use w/ Rotocaps. OEM # 317365-C11
Keeper	Both		**34-613**	1 Groove. Heat Treated. .375 Stem. OEM # 76951-R1.
	Both		**34-614**	Heat Treated. 1 Groove. 0.310 Stem
Lifter	Both		**36-2104**	Hydraulic Roller
Valve Stem Seal	Both		**38-173-45**	Viton. Top Hat. OEM # 1816179C91
	Both		**38-910-15**	Nitrile. Umbrella
	Exh		**38-910-25**	Polyacrylic. Umbrella.
	Int		**38-844-45**	Viton. Ring And Spring.
Push Rod	Both		**74-6608**	10.013 Length. OEM # E3TZ6565A
	Both		**74-6611**	10.258 Length. Vin F. OEM # F4TZ6565A
Injector Component			**87-4376**	Injector Tube. Brass. OEM # 1814376C1
Expansion Plug Kit			**97-97SS**	Incl. Block Plugs Only. Head : 96-697SC A/R. Avail. In Stainless Steel Only - Specially Ground Concave Plugs To OEM Specs.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 28	**7.4L RED450, RED450A 12V**			**L6 BORE - 4.37"/111 mm**
Valve Seat Insert	Exh		**20-1625-3N**	1-5/16 I.D. 1-5/8 O.D. 1/4 Depth
Guide	Exh		**30-1936**	2.813 OAL. New Style, Machined For Seal. OEM # 90316R3
Keeper	Both		**34-803**	2 Groove. Heat Treated. w/o Rotocaps. OEM # 93914-H
Expansion Plug Kit			**97-24**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 29	**7.6L (466), 9.3L (570) Elec. Inj. 24V MaxxForce**			**L6 BORE - 4.30"/109.2mm**
Valve	Exh		**10-13003S**	1.439 Head Dia. Stellite. OEM # 1839970C1
	Int		**10-13002**	1.564 Head Dia. OEM # 1839968C1
Valve Seat Insert	Exh		**22-1480-2**	1.288T I.D. 1.480 O.D. 0.250 Depth. OEM # 1842138, 1835852
	Int		**22-1584-1**	1.328T I.D. 1.584 O.D. 0.250 Depth. OEM # 1842137, 1835851
Guide	Both		**30-3079**	2.585 OAL 0.314 I.D. 0.567 O.D. OEM # 1841538C1, 1850019C1
	Both		**30-3079U**	Undersized 0.312 I.D. 30-3079
Spring	Both		**32-04047**	2.060 Free Length. OEM # 1835858C1, 1842146C1
Keeper	Both		**34-5005**	1 Round Groove. OEM # 1841588C1
Lifter	Both		**36-0160**	Roller. OEM # 1850160C3
Rotator	Both		**37-5655**	Rotator. OEM # 1835655C1
Valve Stem Seal	Both		**38-3432-55**	Top Hat. Viton. OEM # 1833432.
Injector Component			**87-1095**	Stainless. OEM # 1841095C1
LINE 30	**D466 C.I. (7.6L) DT/I466/B, DT414, DT436 12V**			**L6 BORE - 4.30"/109.2mm**
Valve	Exh		**10-1422**	1.600 Head Dia. w/o Stellite. OEM # 676865-C2,4.
	Exh		**10-1422S**	1.600 Head Dia. w/ Stellite. OEM # 676865-C2,4.
	Int		**10-1423**	1.970 Head Dia. OEM # 675046-C2,4.
Valve Seat Insert	Exh		**22-1628-1N**	1.348T I.D. 1.6285 O.D. 0.365 Depth. +10, 13, 20, 30 O/S Avail. OEM # 671563-C1.
	Int		**22-2001-1**	1.712T I.D. 2.001 O.D. 0.385 Depth. +10, 13, 20, 30 O/S Avail. OEM # 671559-C1
Guide	Both		**30-7431**	2.750 OAL. Before 5/89. +2 O/S Avail. OEM # 675439-C1
	Both		**30-7431SA**	2.750 OAL. Special Alloy
	Both		**30-7431U**	2.750 OAL. 0.3735 Undersized I.D.
	Both		**30-8188**	2.610 OAL. Use w/ Engs. Manufactured After 6/89, New Style, Cut For Seal. OEM # 1815264C1.
	Both		**30-8188SAP**	Special Alloy. Plain 0.3749 I.D. 2.610 OAL. 0.6264 O.D.
	Both		**30-8188U**	2.750 OAL. 0.3735 Undersized I.D.
Spring	Both		**32-1178**	2.400 Free Length. OEM # 682064C1
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.
Lifter	Both		**36-2041**	Mechanical. 0.997 Dia. S/N 140086 and Below. OEM # 911776
	Both		**36-2082**	1.120 Dia. S/N 140087 To 532980 w/o Valve Train Improvement Package. OEM # 1802340
	Both		**36-7096**	Mechanical Roller. OEM # 1809570 C14
Rotator	Both		**37-1581**	Rotator. OEM # 1811581C91
Valve Stem Seal	Both		**38-3295-45**	Viton. Top Hat. Use w/ 30-8188. OEM # 1823295C1
	Both		**38-466-45**	Viton. Top Hat. Use w/ 30-7431. OEM # 1815374C1
Injector Component			**87-5442**	Injector Tube. OEM # 675442C1
Expansion Plug Kit			**97-111S**	Stainless Steel Kit
LINE 31	**466 C.I. (7.6L) Mech. Inj., DT408 (6.7L) 12V TRB**			**L6 BORE - 4.30"/109.2mm**
Valve	Exh		**10-1900S**	5/16 Stem Dia. 1.600 Head Dia. OEM # 1818579-C1, 1824838-C1
	Exh		**10-1944S**	3/8 Stem Dia. 1.600 Head Dia. OEM # 1824842-C1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 31	**466 C.I. (7.6L) Mech. Inj., DT408 (6.7L) 12V TRB**		**L6**	**BORE - 4.30"/109.2mm**
Valve	Int		**10-1899**	5/16 Stem Dia. 1.970 Head Dia. OEM # 1818580-C1
	Int		**10-1943**	3/8 Stem Dia. 1.970 Head Dia. OEM # 1824642-C1,2
Valve Seat Insert	Exh		**22-1626-1N**	1.348T I.D. 1.626 O.D. 0.365 Depth. OEM # 675450-C3
	Int		**22-1999-1**	1.712T I.D. 1.999 O.D. 0.386 Depth. OEM # 675043-C1
Guide	Both		**30-3006**	For 3/8 Stem. 3.377 OAL. OEM # 4824646-C1
	Both		**30-3006SA**	For 3/8 Stem. 3.377 OAL. OEM # 4824646-C1. Harder Special Alloy
	Both		**30-8476**	9/16 Reamer Option 0.312 Stem: 2.440 OAL. 0.565 O.D. 0.3146 I.D.
	Both		**30-8476SA**	2.440 OAL. Special Alloy
Spring	Exh		**32-04009**	2.580 Free Length. OEM # 1825540-C1
	Int		**32-04010**	2.357 Free Length. OEM # 677349C1
Keeper	Both		**34-04644**	1 Round Groove. 3/8 Stem. OEM # 1824644C1
	Both		**34-614**	1 Groove. 5/16 Stem. OEM # 1810944C1
Lifter	Both		**36-7096**	Mechanical Roller. OEM # 1809570 C1-4. Prior to 11-04
Rotator	Both		**37-4680**	Rotator. 3/8 Stem. Incl. Oil Shield. OEM # 1824680C1
	Both		**37-9826**	Rotator. 5/16 Stem. OEM # 1820826C91
Valve Stem Seal	Both		**38-2245-45**	For 5/16 Stem. Top Hat. Viton. OEM # 1822245C1.
	Both		**38-3295-45**	For 3/8 Stem. Top Hat. Viton. OEM # 1823925C1
LINE 32	**466 C.I. (7.6L) Electrical Inj. HEUI 12V**		**L6**	**BORE - 4.30"/109.2mm**
Valve	Exh		**10-1946S**	1.786 Head Dia. 45 Deg. Seat. OEM # 1824840-C1
	Int		**10-1945**	1.786 Head Dia. 30 Deg. Seat. OEM # 1823875-C1
	Int		**10-2131**	1.970 Head Dia. 30 Deg. Seat. OEM # 1826471C
Valve Seat Insert	Exh		**22-1811-2N**	1.548T I.D. 1.811 O.D. 0.334 Depth OEM # 1821903
	Exh		**22-1811-3**	1.548T I.D. 1.811 O.D. 0.334 Depth. OEM # 1830711.
	Int		**22-1823-1**	1.560T I.D. 1.823 O.D. 0.273 Depth OEM # 1821901
	Int		**22-2001-1**	1.712T I.D. 2.001 O.D. 0.385 Depth. +10, 13, 20, 30 O/S Avail. OEM # 671559-C1 Machine To Depth.
	Int		**22-2001-2**	1.712T I.D. 2.001 O.D. 0.355 Depth. OEM # 1827121C2
Guide	Both		**30-8188**	2.610 OAL. OEM # 1815264-C1
	Both		**30-8188SAP**	Special Alloy. Plain 0.3749 I.D. 2.610 OAL. 0.6264 O.D.
	Both		**30-8188U**	2.610 OAL. 0.3735 Undersized I.D.
Spring	Exh		**32-04009**	2.580 Free Length. OEM # 1825540-C1
	Int		**32-04010**	2.357 Free Length. OEM # 677349-C1
Keeper	Both		**34-04644**	1 Round Groove. OEM # 1824644C1
Lifter	Both		**36-7096**	Mechanical Roller. OEM # 1809570 C1-5. Prior to 11-2004
Rotator	Both		**37-4680**	Rotator. Incl. Oil Shield. OEM # 1824680C1
Valve Stem Seal	Both		**38-0234-35**	GF Nylon. Umbrella
	Both		**38-3295-45**	Viton. Top Hat. 3/8 Stem. OEM # 1823925C1
Injector Component			**87-8778**	Injector Tube. OEM # 1818778C2,C3.
LINE 33	**530 C.I. (8.7L) Mechanical Injection 12V**		**L6**	**BORE - 4.59"/116.6mm**
Valve	Exh		**10-1900S**	5/16 Stem Dia. 1.600 Head Dia. OEM # 1818579-C1, 1824838-C1
	Exh		**10-1944S**	3/8 Stem Dia. 1.600 Head Dia. OEM # 1824842-C1
	Int		**10-1899**	5/16 Stem Dia. 1.970 Head Dia. OEM # 1818580-C1
	Int		**10-1943**	3/8 Stem Dia. 1.970 Head Dia. OEM # 1824642-C1,2
Valve Seat Insert	Exh		**22-1626-1N**	1.348T I.D. 1.626 O.D. 0.365 Depth. OEM # 675450-C3
	Int		**22-1999-1**	1.712T I.D. 1.999 O.D. 0.386 Depth. OEM # 675043-C1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 33	**530 C.I. (8.7L) Mechanical Injection 12V**			**L6 BORE - 4.59"/116.6mm**
Guide	Both		**30-3006**	For 3/8 Stem. 3.377 OAL. OEM # 4824646-C1
	Both		**30-3006SA**	For 3/8 Stem. 3.377 OAL. OEM # 4824646-C1
	Both		**30-8476**	9/16 Reamer Option 0.312 Stem: 2.440 OAL. 0.565 O.D. 0.3146 I.D.
	Both		**30-8476SA**	2.440 OAL. Special Alloy
Spring	Exh		**32-04009**	2.580 Free Length. OEM # 1825540-C1
	Int		**32-04010**	2.357 Free Length. OEM # 677349-C1
Keeper	Both		**34-04644**	1 Round Groove. 3/8 Stem. OEM # 1824644C1
	Both		**34-614**	1 Groove. 5/16 Stem. OEM # 1810944C1
Rotator	Both		**37-4680**	Rotator. Incl. Oil Shield. OEM # 1824680C1
Valve Stem Seal	Both		**38-2245-45**	For 5/16 Stem Dia. OEM # 1822245-C1. Top Hat Style. Viton.
	Both		**38-3295-45**	For 3/8 Stem Dia. Viton. Top Hat. OEM # 1823925C1
Injector Component			**87-5442**	Injector Tube. OEM # 675442C1
LINE 34	**530 C.I. (8.7L) Electrical Injection 12V**			**L6 BORE - 4.59"/116.6mm**
Valve	Exh		**10-1946S**	1.786 Head Dia. 45 Deg. Seat. OEM # 1824840-C1
	Int		**10-1945**	1.786 Head Dia. 30 Deg. Seat. OEM # 1823875-C1
	Int		**10-2131**	1.970 Head Dia. OEM # 1826471C
Valve Seat Insert	Exh		**22-1811-2N**	1.548T I.D. 1.811 O.D. 0.334 Depth OEM # 1821903-C3
	Exh		**22-1811-3**	1.548T I.D. 1.811 O.D. 0.334 Depth. OEM # 1830711
	Int		**22-1823-1**	1.560T I.D. 1.823 O.D. 0.273 Depth OEM # 1821901-C1
	Int		**22-2001-1**	1.712T I.D. 2.001 O.D. 0.385 Depth. +10, 13, 20, 30 O/S Avail. OEM # 671559-C1
Guide	Both		**30-8188**	2.610 OAL. OEM # 1815264-C1
	Both		**30-8188SAP**	Special Alloy. Plain 0.3749 I.D. 2.610 OAL. 0.6264 O.D.
	Both		**30-8188U**	2.610 OAL. 0.3735 Undersized I.D.
Spring	Exh		**32-04009**	2.580 Free Length. OEM # 1825540-C1
	Int		**32-04010**	2.357 Free Length. OEM # 677349-C1
Keeper	Both		**34-04644**	1 Round Groove. OEM # 1824644C1
Lifter	Both		**36-7096**	Mechanical Roller. OEM # 1809570 C1-4.
Rotator	Both		**37-4680**	Rotator. Incl. Oil Shield. OEM # 1824680C1
Valve Stem Seal	Both		**38-3295-45**	Viton. Top Hat. OEM # 1823925C1
Injector Component			**87-8778**	Injector Tube. OEM # 1833382, 1818778
LINE 35	**8.8L V537, V605 16V**			**V8 BORE - 4.625"/117.5mm**
Valve Seat Insert	Exh		**20-2000-3N**	1-5/8 I.D. 2.000 O.D. 19/64 Depth. Nickel
	Int		**20-2250-1**	1-15/16 I.D. 2-1/4 O.D. 3/16 Depth. +10 O/S Avail. Cast Iron Heads
Guide	Exh		**30-7456**	3.060 OAL. OEM # 448229-C1
	Int		**30-7457**	3.090 OAL. OEM # 448219-C2
Spring	Both		**32-887-D**	2.050 Free Length. w/ Rotocaps. OEM # 317365-C11
Keeper	Both		**34-802**	1 Groove. Heat Treated. w/ 0.137 Wide Groove. OEM # 60437-R1
LINE 36	**551 C.I. (9.0L) Diesel 16V**			**V8 BORE - 4.50"/114.6mm**
Valve	Int		**10-1649**	1.924 Head Dia.
Valve Seat Insert	Exh		**22-1775-1**	1.458T I.D. 1.775 O.D. 0.300 Depth
	Int		**22-1973-1**	1.658T I.D. 1.973 O.D. 0.300 Depth
Guide	Both		**30-7336**	2.960 OAL. OEM # 428046-C1
Spring	Both		**32-887-D**	2.050 Free Length. OEM # 317365-C11
Keeper	Both		**34-613**	1 Groove. Heat Treated. OEM # 76951-R1.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 36	**551 C.I. (9.0L) Diesel 16V**			**V8** **BORE - 4.50"/114.6mm**
Valve Stem Seal	Both		**38-240-15**	Nitrile. O-Ring
	Both		**38-240-25**	Polyacrylic. O-Ring.
LINE 37	**758 C.I. (12.4L) SOHC 24V TRB Dir. Inj. MaxxForce-13**			**L6** **BORE - 4.96"/126mm**
Valve	Exh		**10-13371**	1.496 Head Dia.
	Int		**10-13370**	1.575 Head Dia.
Valve Seat Insert	Exh		**22-1578-2**	1.300T I.D. 1.578 O.D. 0.317 Depth
	Int		**22-1656-2**	1.273T I.D. 1.656 O.D. 0.317 Depth.
Guide	Both		**30-3177**	2.620 OAL. Use w/ Top Hat Seal
Spring	Both		**32-5028**	2.455 Free Length. Use w/ Top Hat Seal
Keeper	Both		**34-5036**	3 Round Beads
Valve Stem Seal	Both		**38-6136-55**	Top Hat. Viton. OEM # 3015752C1

ENGINE	YEAR	CYL.	LINE NO.
2.4L C240 Forklift 8V D		L4	**1**
2.5L 4JA1/T, 2.8L 4JB1/T 8V D		L4	**2**
3.0L 4JJ1, 4JK1 DOHC 16V D TRB		L4	**3**
3.9L 4BD1T/2T SOHC 8V D TRB		L4	**4**
4.3L 4BG1 8V, 6.5L 6BG1 SOHC 12V D		L4-6	**5**
4.6L 4HG1T Dir. Inj. 8V D TRB	2016	L4	**6**
4.8L 4HE1 SOHC 8V D TRB		L4	**7**
5.2L 4HK1 SOHC 16V D TRB		L4	**8**
5.8L 6BD1T, 6BD2T Vin N 24V D TRB		L6	**9**
7.1L 6HE1 SOHC 12V D TRB Dir. Inj.		L6	**10**
7.8L 6HK1 SOHC 24V D TRB		L6	**11**
8.4L 6SA1T/C SOHC 24V D TRB		L6	**12**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**2.4L C240 Forklift 8V D**			**L4** **BORE - 86mm/3.39"**
Valve	Exh		**10-10217**	1.339 Head Dia.
	Int		**10-10216**	1.575 Head Dia.
Valve Seat Insert	Int		**21-1625-55**	1.333T I.D. 1-5/8 O.D. 0.237 Depth
Guide	Both		**30-7656**	1.970 OAL. OEM # 5-11721-016-0
Valve Stem Seal	Both		**38-7002-55**	Viton. Metal Clad. OEM # 8973767200
LINE 2	**2.5L 4JA1/T, 2.8L 4JB1/T 8V D**			**L4** **BORE - 93mm/3.66**
Valve	Exh		**10-30152**	1.401 Head Dia. 0.312 Stem. OEM # 8942478751
	Int		**10-30151**	1.575 Head Dia. 0.313 Stem. OEM # 8941332751
Valve Seat Insert	Exh		**22-1450-1**	1.194 I.D. 1.450 O.D. 0.279 Depth. OEM # 8944315210
	Int		**22-1627-1**	1.351 I.D. 1.627 O.D. 0.279 Depth. OEM # 8944315220
Guide	Both		**30-3302**	1.971 OAL. 0.553 O.D. 0.3145 I.D. OEM # 5117210010
Valve Stem Seal	Both		**38-7002-55**	Viton. Metal Clad. OEM # 8973797200
LINE 3	**3.0L 4JJ1, 4JK1 DOHC 16V D TRB**			**L4** **BORE - 3.76"/95.4mm**
Valve	Exh		**10-3201**	1.183 Head Dia. NPR Eco-Max (Mexico Elf 200-300). OEM # 8980169741
	Int		**10-3200**	1.300 Head Dia. NPR Eco-Max (Mexico Elf 200-300). OEM # 8980169730
LINE 4	**3.9L 4BD1T/2T SOHC 8V D TRB**			**L4** **BORE - 4.02"/102mm**
Valve	Exh		**10-10726**	1.476 Head Dia. OEM # 8943331140
	Exh		**10-10728S**	1.476 Head Dia. Stellite. OEM # 8970850662
	Int		**10-10725**	1.772 Head Dia. OEM # 1125510500
Valve Seat Insert	Exh		**20-1562-46N**	1-1/4 I.D. 1-9/16 O.D. 9/32 Depth. Alternate Universal Oversize. Nickel
	Exh		**22-1539-1**	1.294T I.D. 1.5395 O.D. 0.277 Depth.
	Exh		**22-1539-2**	1.297T I.D. 1.5395 O.D. 0.276 Depth. OEM # 9117118030
	Exh		**22-1542-1**	1.270 I.D. 1.542 O.D. 0.277 Depth. OEM # 8117118030
	Int		**22-1854-1**	1.610T I.D. 1.8545 O.D. 0.277 Depth
	Int		**22-1857-4**	1.543 I.D. 1.8573 O.D. 0.2827 Depth. OEM # 5117156070
Valve Stem Seal	Both		**38-7120-45**	Viton. Metal Clad. OEM # 1125690150
LINE 5	**4.3L 4BG1 8V, 6.5L 6BG1 SOHC 12V D**			**L4-6** **BORE - 4.13"/105mm**
Valve	Exh		**10-10726**	1.476 Head Dia. 0.3513 Stem. OEM # 8943331140
Valve Seat Insert	Exh		**22-1539-1**	1.294T I.D. 1.5395 O.D. 0.277 Depth.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 5	**4.3L 4BG1 8V, 6.5L 6BG1 SOHC 12V D**			**L4-6 BORE - 4.13"/105mm**
Valve Seat Insert	Exh		**22-1539-2**	1.297T I.D. 1.5395 O.D. 0.276 Depth. OEM # 9117118030
Guide	Both		**30-3298**	2.369 OAL. 0.356 I.D. OEM # 5117210010
Valve Stem Seal	Both		**38-7120-45**	Viton. Metal Clad. OEM # 1125690150
LINE 6	**4.6L 4HG1T Dir. Inj. 8V D TRB**			**2016 L4 BORE - 4.41"/112mm**
Valve	Exh		**10-30156**	1.653 Head Dia. 0.348 Stem. OEM # 8971713990
	Int		**10-30155**	1.982 Head Dia. 0.351 Stem. OEM # 8971713980
Valve Seat Insert	Exh		**22-1698-1**	1.452 I.D. 1.698 O.D. OEM # 8943941270
	Int		**22-2052-2**	1.805 I.D. 2.052 O.D. OEM # 8943941270
Guide	Both		**30-3299**	2.357 OAL. 0.355 I.D. 0.553 O.D. OEM # 8943965980
Valve Stem Seal	Both		**38-7003-55**	Viton. Metal Clad. OEM # 8943966092
LINE 7	**4.8L 4HE1 SOHC 8V D TRB**			**L4 BORE - 110.6mm/4.3"**
Guide	Both		**30-3054**	0.3547 I.D. 2.365 OAL OEM 8943965980
LINE 8	**5.2L 4HK1 SOHC 16V D TRB**			**L4 BORE - 4.53"/115mm**
Valve	Exh		**10-13122**	1.456 Head Dia. 0.312 Stem. 5.134 OAL. FSR, FTR, FVR (Mexico Elf 400-600). OEM # 8972098763
	Exh		**10-13464**	1.456 Head Dia. 0.3120 Stem Dia. 5.520 OAL. OEM # 8981583761
	Int		**10-13121**	1.457 Head Dia. 0.313 Stem. 5.140 OAL. FSR, FTR, FVR (Mexico Elf 400-600). OEM # 8943958822
	Int.		**10-13463**	1.457 Head Dia. 0.3130 Stem Dia. 5.530 OAL. OEM # 8980388700
Valve Seat Insert	Exh		**22-1502-2**	1.232 I.D. 1.502 O.D. 0.2569 Depth. OEM # 8972165110
	Int		**22-1502-1**	1.224 I.D. 1.502 O.D. 0.2378 Depth. OEM # 8943958880
Guide	Both		**30-3101**	2.245 OAL. 0.3150 I.D. 0.5526 O.D. OEM # 8943907800
	Both		**30-3297**	2.245 OAL. 0.316 I.D. 0.553 O.D. OEM # 8973767191
Valve Stem Seal	Both		**38-7002-55**	Viton. Metal Clad. OEM # 8973767200
Injector Component			**87-4620**	Injector Tube, Brass. OEM # 8980184620
LINE 9	**5.8L 6BD1T, 6BD2T Vin N 24V D TRB**			**L6 BORE - 4.02"/102mm**
Valve	Exh		**10-10726**	1.476 Head Dia. OEM # 8943331140
	Exh		**10-10728S**	1.476 Head Dia. Stellite. OEM # 8970850662
	Int		**10-10725**	1.772 Head Dia. OEM # 1125510500
Valve Seat Insert	Exh		**20-1562-46N**	1-1/4 I.D. 1-9/16 O.D. 9/32 Depth. Alternate Universal Oversize. Nickel
	Exh		**22-1539-1**	1.294T I.D. 1.5395 O.D. 0.277 Depth.
	Exh		**22-1539-2**	1.297T I.D. 1.5395 O.D. 0.276 Depth. OEM # 9117118030
	Exh		**22-1542-1**	1.270 I.D. 1.542 O.D. 0.277 Depth. OEM # 8117118030
	Int		**22-1854-1**	1.610T I.D. 1.8545 O.D. 0.277 Depth OEM # 9117156070
	Int		**22-1857-4**	1.543 I.D. 1.8573 O.D. 0.2827 Depth. OEM # 5117156070
Valve Stem Seal	Both		**38-7120-45**	Viton. Metal Clad. OEM # 1125690150
LINE 10	**7.1L 6HE1 SOHC 12V D TRB Dir. Inj.**			**L6 BORE - 4.22"/107.2mm**
Valve Seat Insert	Exh		**22-1697-1**	1.450T I.D. 1.697 O.D. 0.276 Depth. OEM # 8943961720
	Int		**22-1894-1**	1.570T I.D. 1.894 O.D. 0.292 Depth. OEM # 8943944620
	Int		**22-2013-1**	1.770T I.D. 2.013 O.D. 0.288 Depth. OEM # 8970884600
Guide	Both		**30-3054**	0.3547 I.D. 2.365 OAL OEM 8943965980

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 11	**7.8L 6HK1 SOHC 24V D TRB**			**L6 BORE - 4.53"/115mm**
Valve	Exh		**10-13122**	1.456 Head Dia. 0.312 Stem. 5.134 OAL. FSR, FTR, FVR (Mexico Elf 400-600). OEM # 8972098763
	Int		**10-13121**	1.457 Head Dia. 0.313 Stem. 5.140 OAL. FSR, FTR, FVR (Mexico Elf 400-600). OEM # 8943958822
Valve Seat Insert	Exh		**22-1502-2**	1.232 I.D. 1.502 O.D. 0.2569 Depth. OEM # 8972165110
	Int		**22-1502-1**	1.224 I.D. 1.502 O.D. 0.2378 Depth. OEM # 8943958880
Guide	Both		**30-3101**	2.245 OAL. 0.3150 I.D. 0.5526 O.D. OEM # 8943907800
	Both		**30-3297**	2.245 OAL. 0.316 I.D. 0.553 O.D. OEM # 8973767191
Valve Stem Seal	Both		**38-7002-55**	Viton. Metal Clad. OEM # 8973767200
Injector Component			**87-4620**	Injector Tube, Brass. OEM # 8980184620
LINE 12	**8.4L 6SA1T/C SOHC 24V D TRB**			**L6 BORE - 115mm/4.53"**
Valve Seat Insert	Exh		**22-1894-3**	1.575T I.D. 1.894 O.D. 0.375 Depth 200 H.P.

ENGINE	YEAR	CYL.	LINE NO.
1.5L 3TNE84 (3015D), 1.6L 3TNE88 6V D Yanmar		L3	**1**
1.5L 3TNV84/T, 1.6L 3TNV88/T 6V D N.A.,TRB Yanmar		L3	**2**
1.6L 100, 100.5 Gas 1.6L 4V		V2	**3**
1.9L 113 Gas 4V		L2	**4**
1.9L 115 Gas 8V		L4	**5**
2.0L 4TNV84T 16V D TRB Yanmar		L4	**6**
2.0L 4TNE84/T 4TNV84 8V D TRB Yanmar		L4	**7**
2.2L 4TNE88 4TNV88 8V D Yannmar		L4	**8**
2.2L 135, 2.7L 164 6V, 3.0L 180 8V Gas		L3-4	**9**
2.4L 145 8V, 2.7L 165, 3.7L 217 12V D/Gas/LPG		L4-6	**10**
2.4L 4024 8V, 3.0L 5030 10V PowerTech D TRB		L4	**11**
2.5L 152, 2.7L 164, 2.9L 179D/T, 3179D/T 6V D TRB		L3	**12**
2.9L 3029D/T/H PowerTech 6V D TRB		L3	**13**
3.1L 190 C.I. 190B 4V D/Gas		H2	**14**
3.3L 201, 3.7L 227 Gas/LPG 8V		L4	**15**
3.6L 219, 3.9L 4/239D/T, 4.5L 4/276D/T 8V D TRB		L4	**16**
3.9L 4039, 4.5L 4045D/T/H 8V PowerTech D TRB		L4	**17**
3.9L 4241 8V, 362, 6362 12V Gas/ LPG		L4-6	**18**
4.2L 254 8V, 6.2L 381 12V D		L4-6	**19**
4.4L 270 4270 8V D		L4	**20**
4.5L 4045 16V Tier 2-3 PowerTech Plus		L4	**21**
4.5L 4045 16V Tier 4 PowerTech Plus D TRB		L4	**22**
5.0L 303, 329, 6/359D/T, 6/414D/T 12V D TRB		L6	**23**
308, 5.3L 321 4V Gas		L2	**24**
5.9L 6059, 6.8L 6068D/T/H 12V PowerTech D TRB		L6	**25**
6.6L 404, 7.6L 466D 6466D 12V D		L6	**26**
6.6L 404A/T, 6/466A/T Intercooled D TRB		L6	**27**
6.8L 6068 24V Tier 2-3 PowerTech Plus D TRB		L6	**29**
6.8L 6068 24V Tier 4 PowerTech Plus D TRB		L6	**28**
7.6L 6076A/T, 8.1L 6081 12V D TRB		L4	**30**
8.7L 6531D 12V D		L6	**31**
8.7L 6531A Intercooled D TRB		L6	**32**
9.0L 6090 24V PowerTech Plus D TRB		L6	**33**
10.1L 6101A 12V 500 Series D TRB		L6	**34**
10.1L 6619T Intercooled 12V D TRB		L6	**35**
10.5L 6105A, 12.5L 6125A PowerTech 24V D TRB		L6	**36**
13.5L 6135 24V PowerTech Plus D TRB		L6	**37**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.5L 3TNE84 (3015D), 1.6L 3TNE88 6V D Yanmar**		**L3**	**BORE - 3.30"/84mm**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM# T110649
	Int		**10-13415**	1.378 Head Dia. OEM # M801220
Guide	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # M801228
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # M801227
Valve Stem Seal	Exh		**38-6152-55**	Viton. Metal Clad. 8mm Stem. OEM # T110650
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # CH10450
LINE 2	**1.5L 3TNV84/T, 1.6L 3TNV88/T 6V D N.A.,TRB Yanmar**		**L3**	**BORE - 3.46"/88mm**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM # T110649
	Int		**10-13414**	1.417 Head Dia. OEM # MIU800446
Guide	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # M801228
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # M801227

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 2	**1.5L 3TNV84/T, 1.6L 3TNV88/T 6V D N.A.,TRB Yanmar**		**L3**	**BORE - 3.46"/88mm**
Valve Stem Seal	Exh		**38-6152-55**	Viton. Metal Clad. 8mm Stem. OEM # T110650
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # CH10450
LINE 3	**1.6L 100, 100.5 Gas 1.6L 4V**		**V2**	**BORE - 4.00"/101.6mm**
Valve	Int		**10-663**	1.805 Head Dia. OEM # M100T
Valve Seat Insert	Exh		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Both		**30-1858**	3.344 OAL. OEM # M40T
Keeper	Both		**34-746**	2 Groove. Heat Treated. OEM # B-367-R
LINE 4	**1.9L 113 Gas 4V**		**L2**	**BORE - 4.25"/108mm**
Valve Seat Insert	Exh		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
	Int		**20-1812-3**	1-1/2T I.D. 1-13/16 O.D. 7/32 Depth.
Guide	Both		**30-1859**	2.797 OAL. OEM # M3036T
Keeper	Both		**34-746**	2 Groove. Heat Treated. OEM # B-367-R
LINE 5	**1.9L 115 Gas 8V**		**L4**	**BORE - 3.50"/88.8mm**
Valve	Int		**10-657**	1.687 Head Dia. OEM # T12356T
Valve Seat Insert	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Int		**20-1687-2**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth
Guide	Both		**30-1860**	2.375 OAL. 0.344 I.D. 0.628 O.D. OEM # T556T
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber.
LINE 6	**2.0L 4TNV84T 16V D TRB Yanmar**		**L4**	**BORE - 3.30"/84mm**
Valve	Exh		**10-13408**	0.965 Head Dia. 0.2343 Stem. 3.947 OAL OEM # MIU800392
	Int		**10-13407**	1.102 Head Dia. 0.2347 Stem. 3.953 OAL OEM # MIU800391
Guide	Both		**30-3188**	1.378 OAL. 0.2365 I.D. 0.3945 O.D. OEM # M811855
Valve Stem Seal	Exh		**38-6149-55**	Viton. Metal Clad. 6mm Stem. OEM # M811851
	Int		**38-6148-55**	Viton. Metal Clad. 6mm Stem. OEM # M811850
LINE 7	**2.0L 4TNE84/T 4TNV84 8V D TRB Yanmar**		**L4**	**BORE - 3.30"/84mm**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM # T110649
	Int		**10-13414**	1.417 Head Dia. OEM # MIU800446
	Int		**10-13415**	1.378 Head Dia. OEM # M801220
Guide	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # M801228
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # M801227
Valve Stem Seal	Exh		**38-6152-55**	Viton. Metal Clad. 8mm Stem. OEM # T110650
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # CH10450
LINE 8	**2.2L 4TNE88 4TNV88 8V D Yannmar**		**L4**	**BORE - 3.46"/88mm**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM # T110649
	Int		**10-13413**	1.496 Head Dia. OEM # M811557
	Int		**10-13415**	1.378 Head Dia. OEM # M801220
Guide	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # M801228
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # M801227
Valve Stem Seal	Exh		**38-6152-55**	Viton. Metal Clad. 8mm Stem. OEM # T110650
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # CH10450

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 9	**2.2L 135, 2.7L 164 6V, 3.0L 180 8V Gas**		**L3-4**	**BORE - 3.875"/98.4mm**
Valve Seat Insert	Exh		**20-1562-4**	1-5/16 I.D. 1-9/16 O.D. 1/4 Depth. OEM # 70843.
	Int		**20-1812-4**	1-9/16 I.D. 1-13/16 O.D. 7/32 Depth. OEM # 70843.
Guide	Both		**30-6115**	2.750 OAL. 0.375 Plain I.D. 0.5020 O.D.
	Both		**30-7248**	2.750 OAL. 0.375 Spiral I.D. 0.564 O.D. Recommended.
	Both		**30-9115**	2.750 OAL. 0.375 Sprial I.D. 0.5020 O.D.
Spring	Both		**32-757**	2.125 Free Length. OEM # R26125
Keeper	Both		**34-613**	3/8 Stem Dia. Heat Treated
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem Dia.
LINE 10	**2.4L 145 8V, 2.7L 165, 3.7L 217 12V D/Gas/LPG**		**L4-6**	**BORE - 3.62"/92mm**
Valve	Int		**10-657**	1.687 Head Dia. From S/N 30000
Valve Seat Insert	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. Nickel. LPG
	Int		**20-1687-2**	1-7/16 I.D. 1-11/16 O.D. 7/32 Depth
Guide	Both		**30-1860**	2.375 OAL. 0.344 I.D. 0.628 O.D. OEM # T556T
	Both		**30-1899**	2.969 OAL. To S/N 13071. OEM # T11211T
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber.
LINE 11	**2.4L 4024 8V, 3.0L 5030 10V PowerTech D TRB**		**L4**	**BORE - 3.39"/86mm**
Valve	Exh		**10-13374**	1.339 Head Dia. OEM # R502455
	Int		**10-13373**	1.457 Head Dia. OEM # R502454
Valve Seat Insert	Exh		**22-1358-1**	1.022R I.D. 1.358 O.D. 0.2165 Depth. OEM # R526672
	Int		**22-1470-1**	1.220R I.D. 1.470 O.D. 0.2440 Depth. OEM # R526671
Spring	Both		**32-6649**	1.810 Free Length. OEM # R502368
Valve Stem Seal	Both		**38-6142-55**	Viton. Top Hat. 7mm Stem. OEM # RE532712
LINE 12	**2.5L 152, 2.7L 164, 2.9L 179D/T, 3179D/T 6V D TRB**		**L3**	**BORE - 3.875"/98.4mm**
Valve	Exh		**10-1233**	1.575 Head Dia. Late Style w/ Seal Groove Replaces Early Style w/o Seal Groove. OEM # R-79624
	Int		**10-1234**	1.772 Head Dia. Late Style w/ Seal Groove Replaces Early Style w/o Seal Groove. OEM # R-79623
Valve Seat Insert	Exh		**20-1687-5N**	1-3/8 I.D. 1-11/16 O.D. 7/32 Depth. Nickel
	Int		**20-1875-6**	1-5/8 I.D. 1-7/8 O.D. 7/32 Depth.
	Exh		**22-1638-1N**	1.412 I.D. 1.638 O.D. 0.218 Depth OEM # R51734
	Int		**22-1858-1N**	1.608 I.D. 1.858 O.D. 0.209 Depth. +10 O/S Avail. OEM # R73064
Guide	Both		**30-1857**	3.875 OAL 0.5015 I.D. 0.7525 O.D. Fits 5.50" Bore Only
	Both		**30-6115**	2.750 OAL 0.3750 Plain I.D. 0.5020 O.D.
	Both		**30-7248**	2.750 OAL. 0.375 Spiral I.D. 0.564 O.D. Recommended.
	Both		**30-9115**	2.750 OAL. 0.375 Spiral I.D. 0.5020 O.D.
Spring	Both		**32-757**	2.125 Free Length. OEM # R26125
Keeper	Both		**34-613**	1 Groove. Heat Treated
Rotator	Both		**37-1410**	Rotator. OEM # RE11410
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem Dia.
LINE 13	**2.9L 3029D/T/H PowerTech 6V D TRB**		**L3**	**BORE - 4.17"/106mm**
Valve Kit	Both		**10-VKJDRPT3-6**	6V Kit w/ 6 Valves, 6 Seats, 12 Keepers, 6 Rotators, 6 Stem Seals
Valve	Exh		**10-1588**	1.673 Head Dia. 0.3095 Stem 5.257 OAL OEM # R90692
	Int		**10-1589**	1.835 Head Dia. 0.3100 Stem 5.278 OAL OEM # R98062

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 13	**2.9L 3029D/T/H PowerTech 6V D TRB**			**L3 BORE - 4.17"/106mm**
Valve Seat Insert	Exh		**22-1695-1**	1.345T I.D. 1.695 O.D. 0.242 Depth OEM # R106829
	Int		**22-1856-1**	1.550T I.D. 1.856 O.D. 0.257 Depth OEM # R106831
Guide	Exh		**30-8673**	0.3120 I.D. 0.5020 O.D. 2.390 OAL
	Int		**30-8674**	0.3120 I.D. 0.5020 O.D. 2.209 OAL
	Int		**30-8674U**	2.209 OAL. 0.311 Undersized I.D.
Spring	Both		**32-757**	2.125 Free Length 1.021 I.D. 1.375 O.D. OEM # R26125R
Keeper	Both		**34-01889**	1 Round Bead. OEM # R91889
Rotator	Both		**37-9005**	Rotator. OEM # RE60005
Valve Stem Seal	Both		**38-830-45**	Viton. Ring and Band. OEM # RE31617
Injector Component			**87-3609**	Injector O-Ring, Bottom. OEM # RE530609
			87-7456	Injector Tube, Stainless. OEM # RE527456
LINE 14	**3.1L 190 C.I. 190B 4V D/Gas**			**H2 BORE - 4.688"/119mm**
Valve Seat Insert	Exh		**20-1625-1N**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Nickel
	Int		**20-1875-2**	1-9/16 I.D. 1-7/8 O.D. 1/4 Depth.
Guide	Both		**30-1600**	3.875 OAL. OEM # AB2859R, B1927R
	Both		**30-7705**	2.000 OAL. 0.3155 Plainl I.D. 0.5020 O.D. 50 Ser. From S/N 96000
	Both		**30-9705**	2.000 OAL. 0.3155 Spiral I.D. 0.5020 O.D. 50 Ser. From S/N 96000
Keeper	Both		**34-746**	2 Groove. Heat Treated. OEM # B367R
LINE 15	**3.3L 201, 3.7L 227 Gas/LPG 8V**			**L4 BORE - 4.00"/101.6mm**
Valve	Exh		**10-658**	1.500 Head Dia.
Valve Seat Insert	Exh		**20-1562-1N**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. Nickel
	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. +10 O/S Avail.
Guide	Both		**30-1897**	2.938 OAL. OEM # R-28653-R
Keeper	Both		**34-746**	2 Groove. Heat Treated. OEM # B367R
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem Dia.
LINE 16	**3.6L 219, 3.9L 4/239D/T, 4.5L 4/276D/T 8V D TRB**			**L4 BORE - 4.02"/102.1mm**
Valve	Exh		**10-1233**	1.575 Head Dia. Exc. 300 Series RCP, Late Style w/ Seal Groove Replaces Early Style w/o Seal Groove. OEM # R-79624
	Int		**10-1234**	1.772 Head Dia. Exc. 300 Series RCP, Late Style w/ Seal Groove Replaces Early Style w/o Seal Groove. OEM # R-79623
	Int		**10-1471S**	1.821 Head Dia. Stellite. Late Style w/ Seal Groove. OEM # R83071
Valve Seat Insert	Exh		**22-1638-1N**	1.412 I.D. 1.638 O.D. 0.218 Depth OEM # R51734
	Int		**22-1858-1N**	1.608 I.D. 1.858 O.D. 0.209 Depth. +10 O/S Avail. OEM # R73064
Guide	Both		**30-6115**	2.750 OAL 0.3750 Plain I.D. 0.5020 O.D.
	Both		**30-7248**	2.750 OAL. 0.375 Spiral I.D. 0.564 O.D. Recommended.
	Both		**30-9115**	2.750 OAL. 0.375 Spiral I.D. 0.5020 O.D.
Spring	Both		**32-757**	2.125 Free Length. OEM # R26125
Keeper	Both		**34-613**	1 Groove. 3/8 Stem Dia. Heat Treated
Rotator	Both		**37-1410**	Rotator. OEM # RE11410
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem
LINE 17	**3.9L 4039, 4.5L 4045D/T/H 8V PowerTech D TRB**			**L4 BORE - 4.20"/106mm**
Valve Kit	Both		**10-VKJDRPT4-6**	8V Kit w/ 8 Valves, 8 Seats, 16 Keepers, 8 Rotators, 8 Stem Seals
Valve	Exh		**10-1588**	1.673 Head Dia. OEM # R-90692
	Int		**10-1589**	1.835 Head Dia. OEM # R-98062

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 17	**3.9L 4039, 4.5L 4045D/T/H 8V PowerTech D TRB**			**L4 BORE - 4.20"/106mm**
Valve Seat Insert	Exh		**22-1695-1**	1.345T I.D. 1.695 O.D. 0. 242 Depth. 30 Deg Seat. OEM #R85687
	Int		**22-1856-1**	1.550T I.D. 1.856 O.D. 0.257 Depth. 30 Deg. Seat. OEM #R98063
Guide	Exh		**30-8673**	2.390 OAL
	Int		**30-8674**	2.209 OAL. 0.312 I.D.
	Int		**30-8674U**	2.209 OAL. 0.311 Undersized I.D.
Spring	Both		**32-757**	2.125 Free Length. OEM # R26125
Keeper	Both		**34-01889**	1 Round Groove
Rotator	Both		**37-9005**	Rotator. OEM # RE60005
Valve Stem Seal	Both		**38-830-45**	Viton. Ring And Band. OEM # RE31617
Injector Component			**87-3609**	Injector O-Ring, Bottom
			87-7456	Injector Tube, Stainless. OEM # RE527456
LINE 18	**3.9L 4241 8V, 362, 6362 12V Gas/ LPG**			**L4-6 BORE - 4.25"/108mm**
Valve Seat Insert	Exh		**20-1562-1N**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. Nickel
	Exh		**20-1625-1N**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Nickel
	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. +10 O/S Avail.
	Int		**20-1812-4**	1-9/16 I.D. 1-13/16 O.D. 3/16 Depth. w/ 1.750 Head Dia.
Guide	Both		**30-1897**	2.938 OAL. OEM # R-28653-R
	Both		**30-1898**	3.313 OAL. 0.375 I.D. 0.626 O.D. OEM # R-28654-R
Spring	Both		**32-757**	2.125 Free Length. OEM # R26125
Keeper	Both		**34-613**	1 Groove. 3/8 Stem Dia. Heat Treated
	Int		**34-746**	2 Groove. Heat Treated
LINE 19	**4.2L 254 8V, 6.2L 381 12V D**			**L4-6 BORE - 4.125"/104.7mm**
Valve	Exh		**10-660**	1.590 Head Dia. OEM # R26123R
Valve Seat Insert	Exh		**20-1625-1N**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Nickel
	Int		**20-1812-4**	1-9/16 I.D. 1-13/16 O.D. 7/32 Depth
Guide	Both		**30-1898**	3.313 OAL. OEM # R-28654-R
Spring	Both		**32-757**	2.125 Free Length. OEM # R26125
Keeper	Both		**34-746**	2 Groove. Heat Treated. OEM # B367R
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem
LINE 20	**4.4L 270 4270 8V D**			**L4 BORE - 4.25"/108mm**
Valve	Exh		**10-1288**	1.715 Head Dia. 6.227 OAL. 2 Groove. OEM #'s R32035 & R44175
	Exh		**10-1375**	1.715 Head Dia. 6.133 OAL. 1 Groove. OEM #'s R41411 & R43679
	Int		**10-1289**	1.902 Head Dia. 6.245 OAL. 2 Groove. OEM #'s R32034 & R44174
	Int		**10-1336S**	1.902 Head Dia. 6.148 OAL. 1+Oil Groove. OEM #'s R41410 & R43883
Valve Seat Insert	Exh		**20-1750-1N**	1-1/2 I.D. 1-3/4 O.D. 1/4 Depth. Nickel
	Int		**20-1937-1**	1-11/16 I.D. 1-15/16 O.D. 1/4 Depth. w/ 1.902 Valve Head Dia.
Guide	Both		**30-1898**	3.313 OAL. OEM # R-28654-R
Spring	Both		**32-757**	2.125 Free Length. OEM # R26125
Keeper	Both		**34-613**	1 Groove. Heat Treated. 3/8 Stem
	Both		**34-746**	2 Groove. Heat Treated. OEM # B-367-R
Lifter	Both		**36-7015**	Mechanical. OEM # R52773
Rotator	Both		**37-1410**	Rotator. Use w/ 10-1336S and 10-1375 only. OEM # RE11410
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem Dia.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 21	**4.5L 4045 16V Tier 2-3 PowerTech Plus**			**L4 BORE - 4.17"/106mm**
Valve	Exh		**10-13247**	1.417 Head Dia. OEM # R502370
	Int		**10-13246**	1.457 Head Dia. OEM # R518806
Valve Seat Insert	Exh		**22-1437-2**	1.125T I.D. 1.437 O.D. 0.2365 Depth. OEM # RE518083, R504968
	Int		**22-1476-2**	1.200T I.D. 1.476 O.D. 0.2445 Depth. OEM # RE518082, R504969
Guide	Both		**30-3141**	2.347 OAL.
	Both		**30-3197**	2.345 OAL. 0.2775 I.D. .04725 O.D. OEM # R54673
Spring	Both		**32-3906**	1.975 Free Length. OEM # R503906, RE516486
	Both		**32-6602**	1.908 Free Length 0.747T I.D. 1.017T O.D.
Valve Stem Seal	Both		**38-6133-55**	Viton. Metal Clad. OEM # RE526519
Injector Component			**87-3609**	Injector O-Ring, Bottom
			87-3935	Injector Tube. Stainless Steel. OEM # RE543935, RE517435
			87-8349	Injector O-Ring, Top
LINE 22	**4.5L 4045 16V Tier 4 PowerTech Plus D TRB**			**L4 BORE - 4.17"/106mm**
Valve	Exh		**10-13437**	1.398 Head Dia. OEM # R534237
	Exh		**10-13439**	1.398 Head Dia. OEM # R527334
	Int		**10-13436**	1.437 Head Dia. OEM # R534238
	Int		**10-13438**	1.437 Head Dia. OEM # R532100, R527333
Valve Seat Insert	Exh		**22-1437-2**	1.125T I.D. 1.437 O.D. 0.2365 Depth. OEM # RE518083, R504968
	Int		**22-1476-2**	1.200T I.D. 1.476 O.D. 0.2445 Depth. OEM # RE518082, R504969
Guide	Both		**30-3196**	0.4725 O.D. 0.2775 I.D. 2.345 Length. OEM # R537044, R529030
Spring	Both		**32-6674**	1.998 Free Length. OEM # R528300
	Both		**32-6675**	1.988 Free Length. OEM # R534236
Valve Stem Seal	Exh		**38-6489-55**	Top Hat. Viton. OEM # RE541360
	Int		**38-6488-55**	Top Hat. Viton. OEM # RE536919
Injector Component			**87-3609**	Injector O-Ring, Bottom
			87-3935	Injector Tube. Stainless Steel. OEM # RE543935, RE517435
			87-8349	Injector O-Ring, Top
LINE 23	**5.0L 303, 329, 6/359D/T, 6/414D/T 12V D TRB**			**L6 BORE - 4.19"/106.4mm**
Valve	Exh		**10-1233**	1.575 Head Dia. Late Style w/ Seal Groove Replaces Early Style w/o Seal Groove. OEM # R-79624
	Int		**10-1234**	1.772 Head Dia. Late Style w/ Seal Groove Replaces Early Style w/o Seal Groove. OEM # R-79623
	Int		**10-1471S**	1.821 Head Dia. Stellite. Late Style w/ Seal Groove. OEM # R83071
Valve Seat Insert	Exh		**22-1638-1N**	1.412 I.D. 1.638 O.D. 0.218 Depth OEM # R51734
	Int		**22-1858-1N**	1.608 I.D. 1.858 O.D. 0.209 Depth. +10 O/S Avail. OEM # R73064
Guide	Both		**30-6115**	2.750 OAL. 0.375 Plain I.D. 0.5020 O.D.
	Both		**30-7248**	2.750 OAL. 0.375 Spiral I.D. 0.564 O.D. Recommended.
	Both		**30-9115**	2.750 OAL. 0.375 Spiral I.D. 0.5020 O.D.
Spring	Both		**32-757**	2.125 Free Length. OEM # R26125
Keeper	Both		**34-613**	1 Groove. 3/8 Stem Dia. Heat Treated
Rotator	Both		**37-1410**	Rotator. OEM # RE11410
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem
LINE 24	**308, 5.3L 321 4V Gas**			**L2 BORE - 5.50"/139.7mm**
Valve	Exh		**10-2635**	A, AN, AW & 60 Ser. (After S/N 488000); AO Ser. After S/N 260000. OEM # A2635BPL

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 24	**308, 5.3L 321 4V Gas**			**L2 BORE - 5.50"/139.7mm**
Guide	Both		**30-1644**	4.750 OAL. A, AN, AW & 60 Ser. (After S/N 488000); AO Ser. After S/N 260000
LINE 25	**5.9L 6059, 6.8L 6068D/T/H 12V PowerTech D TRB**			**L6 BORE - 4.19"/106.5mm**
Valve Kit	Both		**10-VKJDRPT6-6**	12V Kit w/ 12 Valves, 12 Seats, 24 Keepers, 12 Rotators, 12 Stem Seals
Valve	Exh		**10-1588**	1.673 Head Dia. 0.3095 Stem 5.257 OAL OEM # R90692
	Int		**10-1589**	1.835 Head Dia. 0.3100 Stem 5.278 OAL OEM # R98062
Valve Seat Insert	Exh		**22-1695-1**	1.345T I.D. 1.695 O.D. 0.242 Depth OEM # R106829
	Int		**22-1856-1**	1.550T I.D. 1.856 O.D. 0.257 Depth OEM # R106831
Guide	Exh		**30-8673**	0.3120 I.D. 0.5020 O.D. 2.390 OAL
	Int		**30-8674**	0.3120 I.D. 0.5020 O.D. 2.209 OAL
	Int		**30-8674U**	2.209 OAL. 0.311 Undersized I.D.
Spring	Both		**32-757**	2.125 Free Length 1.021 I.D. 1.375 O.D. OEM # R26125R
Keeper	Both		**34-01889**	1 Round Groove
Rotator	Both		**37-9005**	Rotator. OEM # RE60005
Valve Stem Seal	Both		**38-830-45**	Viton. Ring and Band. OEM # RE31617
Injector Component			**87-3609**	
			87-7456	Injector Tube, Stainless. OEM # RE527456
LINE 26	**6.6L 404, 7.6L 466D 6466D 12V D**			**L6 BORE - 4.50"/115.9mm**
Valve	Exh		**10-1288**	1.715 Head Dia. 6.227 OAL. 2 Groove. OEM # R32035, R44175
	Exh		**10-1375**	1.715 Head Dia. OEM # R41411, R43679
	Int		**10-1289**	1.902 Head Dia. 6.245 OAL. 2 Groove. OEM # R32034, R44174
	Int		**10-1336S**	1.902 Head Dia. Stellite Faced. OEM # R41410, R43883
Valve Seat Insert	Exh		**20-1750-2N**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. Nickel
	Int		**20-1937-17**	1-11/16 I.D. 1-15/16 O.D. 7/32 Depth.
Guide	Both		**30-1898**	3.313 OAL. 0.375 I.D. 0.626 O.D. OEM # R28654R
	Both		**30-7248**	2.750 OAL. 0.375 Spiral I.D. 0.564 O.D. Recommended.
	Both		**30-7448**	3.000 OAL. 0.564 O.D. Conversion Guide.
	Both		**30-9458**	3.063 OAL. 0.374 Spiral I.D. 0.502 O.D.
Spring	Both		**32-757**	2.125 Free Length. OEM # R26125
Keeper	Both		**34-613**	1 Groove. 3/8 Stem Dia. Heat Treated
Lifter	Both		**36-7015**	Mechanical. OEM # R52773
Rotator	Both		**37-1410**	Rotator. OEM # RE11410
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem Dia.
	Both		**38-240-25**	Polyacrylic. O-Ring.
LINE 27	**6.6L 404A/T, 6/466A/T Intercooled D TRB**			**L6 BORE - 4.25"/108mm**
Valve	Exh		**10-1377**	1.715 Head Dia. 6.208 OAL. 1 Groove. OEM # R50357
	Int		**10-1403**	1.715 Head Dia. 6.192 OAL. 2 Groove. OEM # R50358
	Int		**10-1404**	1.750 Head Dia. 6.128 OAL. 2 Groove. OEM # R43914
Valve Seat Insert	Exh		**20-1750-1N**	1-1/2 I.D. 1-3/4 O.D. 1/4 Depth. Nickel
	Exh		**20-1750-2N**	1 1/2 I.D.,1 3/4 O.D.,7/32 Depth +20 O/S Available,
	Int		**20-1750-2**	1-1/2 I.D. 1-3/4 O.D. 7/32 Depth. +10 O/S Avail.
	Int		**20-1937-1**	1-11/16 I.D. 1-15/16 O.D. 1/4 Depth.
Guide	Both		**30-1898**	3.313 OAL. OEM # R-28654-R
Spring	Both		**32-757**	2.125 Free Length. OEM # R26125

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 27	**6.6L 404A/T, 6/466A/T Intercooled D TRB**			**L6 BORE - 4.25"/108mm**
Keeper	Both		**34-613**	1 Groove. Heat Treated. 3/8 Stem
Rotator	Both		**37-1410**	Rotator. OEM # RE11410
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem Dia.
	Both		**38-403-45**	Viton. Metal Clad
LINE 28	**6.8L 6068 24V Tier 2-3 PowerTech Plus D TRB**			**L6 BORE - 4.17"/106mm**
Valve	Exh		**10-13247**	1.417 Head Dia. OEM # R502370
	Int		**10-13246**	1.457 Head Dia. OEM # R518806
Valve Seat Insert	Exh		**22-1437-2**	1.125T I.D. 1.437 O.D. 0.2365 Depth. OEM # RE518083, R504968
	Int		**22-1476-2**	1.200T I.D. 1.476 O.D. 0.2445 Depth. OEM # RE518082, R504969
Guide	Both		**30-3141**	2.347 OAL.
	Both		**30-3197**	2.345 OAL. 0.2775 I.D. .04725 O.D. OEM # R54673
Spring	Both		**32-3906**	1.975 Free Length. OEM # R503906, RE516486
	Both		**32-6602**	1.908 Free Length 0.747T I.D. 1.017T O.D.
Valve Stem Seal	Both		**38-6133-55**	Viton. Metal Clad. OEM # RE526519
Injector Component			**87-3609**	Injector O-Ring, Bottom
			87-3935	Injector Tube. Stainless Steel. OEM # RE543935, RE517435
			87-8349	Injector O-Ring, Top
LINE 29	**6.8L 6068 24V Tier 4 PowerTech Plus D TRB**			**L6 BORE - 4.17"/106mm**
Valve	Exh		**10-13437**	1.398 Head Dia. OEM # R534237
	Exh		**10-13439**	1.398 Head Dia. OEM # R527334
	Int		**10-13436**	1.437 Head Dia. OEM # R534238
	Int		**10-13438**	1.437 Head Dia. OEM # R532100, R527333
Guide	Both		**30-3196**	0.4725 O.D. 0.2775 I.D. 2.345 Length. OEM # R537044, R529030
Spring	Both		**32-6674**	1.998 Free Length. OEM # R528300
	Both		**32-6675**	1.988 Free Length. OEM # R534236
Valve Stem Seal	Exh		**38-6489-55**	Top Hat. Viton. OEM # RE541360
	Int		**38-6488-55**	Top Hat. Viton. OEM # RE536919
Injector Component			**87-3609**	Injector O-Ring, Bottom
			87-3935	Injector Tube. Stainless Steel. OEM # RE543935, RE517435
			87-8349	Injector O-Ring, Top
LINE 30	**7.6L 6076A/T, 8.1L 6081 12V D TRB**			**L4 BORE - 4.57"/116mm**
Valve	Exh		**10-1586**	1.850 Head Dia. 0.372 Stem. +3, 15 O/S Stem Avail. OEM # R84619
	Int		**10-1587**	2.008 Head Dia. OEM # R84618.
Valve Seat Insert	Exh		**22-1933-2**	1.744T I.D. 1.933 O.D. 0.241 Depth OEM # R84976
	Int		**22-2051-4**	1.744T I.D. 2.051 O.D. 0.241 Depth. 30 Deg. OEM # R84977
Guide	Both		**30-9458**	3.063 OAL. 0.374 Spiral I.D. 0.502 O.D.
	Both		**30-9458H**	3.063 OAL. 0.374 Spiral I.D. 0.502 O.D. Hardened
Spring	Both		**32-04012**	2.560 Free Length OEM# R91822
	Both		**32-5012**	2.330 Free Length. w/o Rotator Use w/ Shield. OEM # R502187
Keeper	Both		**34-613**	1 Groove. Heat Treated
Rotator	Both		**37-1410**	Rotator. OEM # RE11410
LINE 31	**8.7L 6531D 12V D**			**L6 BORE - 4.75"/120.7mm**
Valve	Exh		**10-1406**	1.875 Head Dia. OEM # R-45823
Guide	Both		**30-1967**	3.188 OAL. OEM # R-40357

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 31	**8.7L 6531D 12V D**			**L6 BORE - 4.75"/120.7mm**
Guide	Both		**30-8004**	3.188 OAL. Undercut For Rototype Valves. OEM # R-53192
Spring	Both		**32-04037**	2.320 Free Length. Inner. OEM # R49569
	Both		**32-04038**	2.520 Free Length. Outer. OEM # R49571
Keeper	Both		**34-802**	1 Groove. Heat Treated
LINE 32	**8.7L 6531A Intercooled D TRB**			**L6 BORE - 4.75"/120.7mm**
Valve Seat Insert	Exh		**22-1991-1N**	1.991 O.D. 1.616 I.D. 0.309 Depth. OEM # R48314, R60537
	Int		**22-2136-1N**	2.136 O.D. 1.705 I.D. 0.319 Depth. OEM # R48313, R59894
Guide	Both		**30-1967**	3.188 OAL. OEM # R-40357
	Both		**30-8004**	3.188 OAL. Undercut For Rototype Valves. OEM # R-53192
Spring	Both		**32-04037**	2.320 Free Length. Inner. OEM # R49569
	Both		**32-04038**	2.520 Free Length. Outer. OEM # R49571
Keeper	Both		**34-802**	1 Groove. Heat Treated
LINE 33	**9.0L 6090 24V PowerTech Plus D TRB**			**L6 BORE - 4.66"/118.4mm**
Valve	Exh		**10-13178S**	1.575 Head Dia. OEM # R520224
	Int		**10-13177S**	1.575 Head Dia. OEM # R520223
Valve Seat Insert	Both		**22-1638-2N**	1.400 I.D. 1.638 O.D. 0.218 Depth. Nickel. OEM # R527285
	Both		**22-1638-2T**	1.400 I.D. 1.638 O.D. 0.237 Depth. OEM # R522049
	Both		**22-1676-1**	1.400T I.D. 1.676 O.D. 0.237 Depth. OEM # R527447
Guide	Both		**30-3131**	2.465 OAL. OEM # R527286
Spring	Both		**32-5002**	2.185 Free Length. OEM # R504235
Keeper	Both		**34-01889**	1 Round Groove
Rotator	Both		**37-3075**	Rotator. OEM # 530750
Valve Stem Seal	Both		**38-6122-55**	Viton. Top Hat. OEM # RE529187
Injector Component			**87-3609**	Injector O-Ring, Bottom
			87-3935	Injector Tube. Stainless Steel. OEM # RE543935, RE517435
			87-8349	Injector O-Ring, Top
LINE 34	**10.1L 6101A 12V 500 Series D TRB**			**L6 BORE - 5.12"130mm**
Guide	Both		**30-3027**	3.189 OAL. 0.3750 I.D. 0.7833 O.D. Use w/ 3/8 Stem. OEM # R108988
Spring	Both		**32-04012**	2.560 Free Length OEM# R91822
Keeper	Both		**34-613**	1 Square Groove. Heat Treated
Rotator	Both		**37-1410**	Rotator. OEM # RE11410
LINE 35	**10.1L 6619T Intercooled 12V D TRB**			**L6 BORE - 5.12"/130mm**
Valve	Int		**10-1590S**	2.031 Head Dia. OEM # R81087, R75690 & R63981. From S/N 021562 To 499,999
Valve Seat Insert	Exh		**22-1991-1N**	1.991 O.D. 1.616 I.D. 0.309 Depth. OEM # R48314, R60537
	Int		**22-2136-1N**	2.136 O.D. 1.705 I.D. 0.319 Depth. OEM # R48313, R59894
Guide	Both		**30-1967**	3.188 OAL. OEM # R-40357
	Both		**30-3027**	3.189 OAL. 0.3750 I.D. 0.7833 O.D. Use w/ 3/8 Stem. OEM # R108988
	Both		**30-8004**	3.188 OAL. 0.4375 I.D. 0.7835 O.D. Rototype. Up To S/N 499,999. Use with 7/16 Valve Stem Dia.
Spring	Both		**32-04037**	2.320 Free Length. Inner. OEM # R49569
	Both		**32-04038**	2.520 Free Length. Outer. OEM # R49571

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 35	**10.1L 6619T Intercooled 12V D TRB**			**L6 BORE - 5.12"/130mm**
Keeper	Both		**34-802**	1 Groove. Heat Treated
Rotator	Both		**37-1086**	Rotator. Up to S/N 499,999. Use with 0.432 Stems. OEM # R81086
LINE 36	**10.5L 6105A, 12.5L 6125A PowerTech 24V D TRB**			**L6 BORE - 138mm/5.43"**
Valve	Both		**10-1889**	1.830 Head Dia. Inconel Head. OEM # R122035
Valve Seat Insert	Both		**22-1951-1**	1.510T I.D. 1.951 O.D. 0.290 Depth. OEM # R502401, R504713
Guide	Both		**30-3050**	3.355 OAL. 0.5905 O.D. 0.3570 I.D. OEM # R517011
Spring	Both		**32-04039**	2.760 Free Length. OEM # R133891
Keeper	Both		**34-01889**	1 Round Groove
Valve Stem Seal	Both		**38-6635-45**	Top Hat. Viton. OEM # RE66635
Injector Component			**87-1559**	Injector Tube, Stainless. For Dual Rail. OEM # R501559, RE528634
			87-2075	Injector O-Ring. Top for Both 87-1559, 87-8339. OEM # T122075
			87-2076	Injector O-Ring. Bottom for 87-1559.
			87-8339K	Injector Tube. Stainless. For Single Rail. OEM # RE518339, RE531334
LINE 37	**13.5L 6135 24V PowerTech Plus D TRB**			**L6 BORE - 5.2"/132mm**
Valve	Both		**10-13176**	1.732 Head Dia. OEM # R518328
Valve Seat Insert	Both		**22-1832-1**	1.510T I.D. 1.832 O.D. 0.241 Depth. OEM # R518327
Guide	Both		**30-3050**	3.355 OAL. 0.5905 O.D. 0.3570 I.D. OEM # R517011
Spring	Both		**32-04039**	2.760 Free Length. OEM # R133891
Keeper	Both		**34-01889**	1 Round Groove
Valve Stem Seal	Both		**38-6121-55**	Viton. Top Hat. OEM # RE523985
	Both		**38-6499-55**	Viton. Top Hat. Use w/ EGR. OEM # R528548
Injector Component			**87-2075**	Injector O-Ring. Top for Both 87-1559, 87-8339. OEM # T122075
			87-2076	Injector O-Ring. Bottom for 87-1559.
			87-7257	Injector O-Ring, Both Top and Bottom. Use for Both 87-8339 and 87-9446
			87-8339K	Injector Tube. Stainless. OEM # RE518339, RE531334
			87-9446	Injector Tube, Stainless. OEM# RE539446, RE548489.

ENGINE	YEAR	CYL.	LINE NO.
1.5L 3D84E, 1FB, 2FB, 3FB 6V D Yanmar		L3	**1**
2.0L 4D84E, 3FB, 8V D Yanmar		L4	**2**
2.8L 4D94E, 3.3L 4D98E 8V D Yanmar		L4	**3**
3.3L S/4D95L/E-2A/E-3 8V D TRB		L4	**4**
3.9L S4D102E/SA4D102E 8V D TRB Cummins 4BT		L4	**5**
4.4L 4D106/T 8V D Yanmar		L4	**6**
4.9L S/SA/6D95L 12V D TRB		L6	**7**
5.9L S/SA/SAA/6D102E 12V D TRB Cummins 6BT		L6	**8**
8.1L KOM495 16V D Cummins		L4	**9**
11.0L S6D125-1,2,3 24V D N.A./TRB		L6	**10**
12.2L KOM743 12V D Cummins		L6	**11**
14.0L KOM855T 24V D TRB Cummins		L6	**12**
19.2L SA/S6D155 Intercooled 12V D TRB		L6	**13**
23.0L 6D170E 24V D TRB		6	**14**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.5L 3D84E, 1FB, 2FB, 3FB 6V D Yanmar**			**L3** **BORE - 3.30"/84mm**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM # M12910011130
	Int		**10-13415**	1.378 Head Dia. OEM # M12910011100
Guide	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # M12915011810
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # M12013011860
Valve Stem Seal	Exh		**38-6152-55**	Metal Clad. Viton. 8mm Stem Dia. OEM # M12140011340
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # 12446011340
LINE 2	**2.0L 4D84E, 3FB, 8V D Yanmar**			**L4** **BORE - 3.30"/84mm**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM # M12910011130
	Int		**10-13415**	1.378 Head Dia. OEM # M12910011100
Guide	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # M12915011810
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # M12013011860
Valve Stem Seal	Exh		**38-6152-55**	Metal Clad. Viton. 8mm Stem Dia. OEM # M12140011340
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # 12446011340
LINE 3	**2.8L 4D94E, 3.3L 4D98E 8V D Yanmar**			**L4** **BORE - 3.70"/94mm**
Valve	Exh		**10-13412**	1.378 Head Dia. OEM # YM12990011110
	Int		**10-13411**	1.614 Head Dia. OEM # YM12990011100
Guide	Both		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # M12915011810
Valve Stem Seal	Both		**38-6152-55**	Metal Clad. Viton. 8mm Stem Dia. OEM # M12140011340
LINE 4	**3.3L S/4D95L/E-2A/E-3 8V D TRB**			**L4** **BORE - 3.74"/95mm**
Valve	Exh		**10-13384**	1.492 Head Dia. OEM # 6204414210
	Exh		**10-13388S**	1.492 Head Dia. OEM # 6209414210
	Int		**10-13383**	1.728 Head Dia. OEM # 6207414130
	Int		**10-13387**	1.728 Head Dia. OEM # 6209414110
Valve Seat Insert	Exh		**22-1538-2**	1.240T I.D. 1.538 O.D. 0.2550 Depth. OEM # 4982908
	Exh		**22-1539-5**	1.240R I.D. 1.538 O.D. 0.254 Depth. OEM # 6207111440
	Int		**22-1775-3**	1.450T I.D. 1.775 O.D. 0.333 Depth. OEM # 6207111430
	Int		**22-1775-4**	1.450R I.D. 1.775 O.D. 0.333 Depth. OEM # 6209111430
Guide	Both		**30-3181**	2.040 OAL. 0.3150 I.D. 0.4740 O.D. OEM # 6204191310
Valve Stem Seal	Both		**38-6144-55**	Viton. Metal Clad. 8mm Stem. OEM # C6204414541

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 5	**3.9L S4D102E/SA4D102E 8V D TRB Cummins 4BT**			**L4 BORE - 4.72"/120mm**
Valve	Exh		**10-1664**	1.654 Head Dia. 45 Deg. Seat. OEM # 3802356, 3920868
	Exh		**10-1801**	1.654 Head Dia. Marine Appls. 45 Deg. Seat. Inconel. OEM # 3925175.
	Exh		**10-1862**	1.654 Head Dia. Natl. Gas. 20 Deg. Seat. OEM# 3922714
	Int		**10-1665**	1.772 Head Dia. 30 Deg. Seat. OEM # 3802355, 3920867.
	Int		**10-2257**	1.772 Head Dia. 5.085 OAL Natl. Gas 20 Deg. Seat OEM # 3802658, 3922713
Valve Seat Insert	Exh		**22-1722-1**	1.357T I.D. 1.722 O.D. 0.265 Depth. OEM # 3904105
	Exh		**22-1722-3**	1.382T I.D. 1.722 O.D. 0.265 Depth. 20 Deg. Natl. Gas. OEM # 3395612
	Int		**22-1853-1**	1.498 I.D. 1.853 O.D. 0.273 Depth. Incl. HO Marine. OEM # 3906854
	Int		**22-1853-2**	1.495T I.D. 1.853 O.D. 0.271 Depth. 20 Deg. Natl. Gas. OEM # 3030211
Guide	Both		**30-8159**	3.265 OAL. OEM # 6110131311
	Both		**30-8277**	2.500 OAL. 0.3162 I.D. 0.4395 O.D. OEM # 3906206
	Exh		**30-8178**	2.052 OAL. 0.5527 O.D. 0.3162 I.D. Thick Wall. OEM # 3904409
	Int		**30-8177**	2.397 OAL. 0.5527 O.D. 0.3162 I.D. Thick Wall. OEM # 3904408
Spring	Both		**32-00276**	2.235 Free Length. 30 PSI. Non-Marine. OEM # 3900276
	Both		**32-02061**	2.385 Free Length. 36 PSI. Both Non-Marine, Int. Marine. OEM # 3926700
	Both		**32-04049**	2.194 Free Length. OEM # 3925667. B Version 30Lbs.
	Both		**32-2453**	2.518 Free Length. OEM # 3932453. IND and non-TRB only. Repl. Early Heads w/ 3926700. Must Repl. In Sets.
	Both		**32-6691**	2.875 Free Length. w/ Exh. Brake. 60 Lbs. Addl. Seat Pressure. OEM # 3916691
Keeper	Both		**34-00250**	1 Round Bead. OEM # 3900250
Lifter	Both		**36-2302**	Mechanical. OEM # 3931623, 3925031
	Both		**36-7098**	Mechanical. OEM # 3947759
Rotator	Both		**37-5666**	Rotator. OEM # 3925666, 3957914
Valve Stem Seal	Both		**38-535-45**	Viton. Ring And Band. For 5/16 Stem.
	Both		**38-6114-55**	Viton. Top Hat. OEM # 3957912
Performance Spring	Both		**52-4049**	2.780 Free Length. 75 Lb. Drop-In Perf. 250 @1.38 Open Load
Retainer	Both		**55-2299**	Chrome Moly 1.343 O.D. 0.313 Stem Dia
Push Rod	Both		**74-6448**	10.910 Length. OEM # 3923262
Black Lightning R. Valve	Exh		**77-165008**	Black Lightning Nitrided Inconel. 1.654 Head Dia. 0.3132 Stem 5.081 OAL.
	Int		**77-177008**	1.772 Head Dia. 0.3138 Stem 5.084 OAL
LINE 6	**4.4L 4D106/T 8V D Yanmar**			**L4 BORE - 4.17"/106mm**
Valve	Exh		**10-13410**	1.535 Head Dia. OEM # M12390011110
	Int		**10-13409**	1.752 Head Dia. OEM # M12390011100
Guide	Both		**30-3189**	1.990 OAL. 0.3545 I.D. 0.5325 O.D. OEM # M11900011810
Valve Stem Seal	Both		**38-6150-55**	Viton. Metal Clad. 9mm Stem. OEM # M12185011150
LINE 7	**4.9L S/SA/6D95L 12V D TRB**			**L6 BORE - 3.74"/95mm**
Valve	Exh		**10-13384**	1.492 Head Dia. OEM # 6204414210
	Exh		**10-13388S**	1.492 Head Dia. OEM # 6209414210
	Int		**10-13383**	1.728 Head Dia. OEM # 6207414130
	Int		**10-13387**	1.728 Head Dia. OEM # 6209414110
Valve Seat Insert	Exh		**22-1538-2**	1.240T I.D. 1.538 O.D. 0.2550 Depth. OEM # 4982908

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 7	**4.9L S/SA/6D95L 12V D TRB**			**L6 BORE - 3.74"/95mm**
Valve Seat Insert	Exh		**22-1539-5**	1.240R I.D. 1.538 O.D. 0.254 Depth. OEM # 6207111440
	Int		**22-1775-3**	1.450T I.D. 1.775 O.D. 0.333 Depth. OEM # 6207111430
	Int		**22-1775-4**	1.450R I.D. 1.775 O.D. 0.333 Depth. OEM # 6209111430
Guide	Both		**30-3181**	2.040 OAL. 0.3150 I.D. 0.4740 O.D. OEM # 6204191310
Valve Stem Seal	Both		**38-6144-55**	Metal Clad Viton. 8mm Stem Dia. OEM # C6204414541
LINE 8	**5.9L S/SA/SAA/6D102E 12V D TRB Cummins 6BT**			**L6 BORE - 4.02"/102mm**
Valve	Exh		**10-1664**	1.654 Head Dia. 45 Deg. Seat. OEM # 3802356, 3920868
	Exh		**10-1801**	1.654 Head Dia. Marine Appls. 45 Deg. Seat. Inconel. OEM # 3925175.
	Exh		**10-1862**	1.654 Head Dia. Natl. Gas. 20 Deg. Seat. OEM# 3922714
	Int		**10-1665**	1.772 Head Dia. 30 Deg. Seat. OEM # 3802355, 3920867.
	Int		**10-2257**	1.772 Head Dia. 5.085 OAL Natl. Gas 20 Deg. Seat OEM # 3802658, 3922713
Valve Seat Insert	Exh		**20-1750-7**	1-3/8 I.D. 1-3/4 O.D. 7/32 Depth. Universal For Heads w/o OEM Inserts
	Int		**20-1875-8**	1-1/2T I.D. 1-7/8 O.D. 7/32 Depth. Universal For Heads w/o OEM Inserts
	Exh		**22-1722-1**	1.357T I.D. 1.722 O.D. 0.265 Depth. Incl. HO Marine. OEM # 3904105
	Exh		**22-1722-3**	1.382T I.D. 1.722 O.D. 0.265 Depth. 20 Deg. Natl. Gas. OEM # 3395612
	Int		**22-1853-1**	1.498 I.D. 1.853 O.D. 0.273 Depth. Incl. HO Marine. OEM # 3906854
	Int		**22-1853-2**	1.495T I.D. 1.853 O.D. 0.271 Depth. 20 Deg. Natl. Gas. OEM # 3030211
Guide	Both		**30-8277**	2.500 OAL. 0.3162 I.D. 0.4395 O.D. OEM # 3906206
	Exh		**30-8178**	2.052 OAL. 0.5527 O.D. 0.3162 I.D. Thick Wall. OEM # 3904409
	Int		**30-8177**	2.397 OAL. 0.5527 O.D. 0.3162 I.D. Thick Wall. OEM # 3904408
Spring	Both		**32-00276**	2.235 Free Length. 30 PSI. Non-Marine. OEM # 3900276
	Both		**32-02061**	2.385 Free Length. 36 PSI. Both Non-Marine, Int. Marine. OEM # 3926700
	Both		**32-04049**	2.194 Free Length. OEM # 3925667. B Version 30Lbs. Both Natl. Gas. Exh. Marine
	Both		**32-2453**	2.518 Free Length. OEM # 3932453. IND and non-TRB only. Repl. Early Heads w/ 3926700. Must Repl. In Sets.
	Both		**32-6691**	2.875 Free Length. w/ Exh. Brake. 60 Lbs. Addl. Seat Pressure. OEM # 3916691
Keeper	Both		**34-00250**	1 Round Bead. OEM # 3900250
Lifter	Both		**36-2302**	Mechanical. OEM # 3931623, 3925031
	Both		**36-7098**	Mechanical. '03-Up. OEM # 3947759
Rotator	Both		**37-5666**	Rotator. OEM # 3925666, 3957914
Valve Stem Seal	Both		**38-535-45**	Viton. Ring and Band. Before April '03. OEM # 3901097, 3921640
	Both		**38-6114-55**	Viton. Top Hat. After April '03. OEM # 3957912
Retainer	Both		**55-2299**	Chrome Moly 1.343 O.D. 0.313 Stem Dia OEM # 3900299
Push Rod	Both		**74-6448**	10.910 Length. OEM # 3923262
Expansion Plug Kit			**97-163SS**	Stainless Steel Kit
LINE 9	**8.1L KOM495 16V D Cummins**			**L4 BORE - 5.125"/130mm**
Valve	Both		**10-326S**	1.745 Head Dia. Stellite Face. OEM #'s 70671 & 144911
Valve Seat Insert	Both		**22-1847-1**	1-9/16 I.D. 1.8465 O.D. 9/32 Depth. +5, 10, 30 O/S Avail. OEM # 69965. Exc. Natl. Gas
Guide	Both		**30-1969**	3.438 OAL. +3 O/S Avail. OEM # 66890.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 9	**8.1L KOM495 16V D Cummins**			**L4 BORE - 5.125"/130mm**
Keeper	Both		**34-746**	2 Bead. OEM # 381875
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber.
LINE 10	**11.0L S6D125-1,2,3 24V D N.A./TRB**			**L6 BORE - 4.92"/125mm**
Valve	Exh		**10-13386S**	1.736 Head Dia. S6D125-1 OEM # 6150414210
	Exh		**10-13390S**	1.736 Head Dia. S6D125-2,3 OEM # 6150424210
	Exh		**10-13391S**	1.736 Head Dia. S6D125-1 OEM # 6150414230
	Int		**10-13385**	1.776 Head Dia. S6D125-1 OEM # 6150414111
	Int		**10-13389**	1.776 Head Dia. S6D125-2,3 OEM # 6150424110
Valve Seat Insert	Exh		**22-1835-1**	1.490R I.D. 1.835 O.D. 0.295 Depth. OEM # 6150111320
	Int		**22-1874-3**	1.525R I.D. 1.874 O.D. 0.295 Depth. OEM # 6151111330
	Int		**22-1874-4N**	1.525R I.D. 1.874 O.D. 0.295 Depth. OEM # 6150121380
Guide	Both		**30-3181**	2.670 OAL. 0.3542 I.D. 0.6312 O.D. OEM # 6150121351
	Both		**30-3183**	2.670 OAL. 0.3542 I.D. 0.6312 O.D. OEM # 6150121341
	Both		**30-3184**	2.670 OAL. 0.3540 I.D. 0.6312 O.D. OEM # 6150121370
	Both		**30-8134**	2.670 OAL. 0.3540 I.D. 0.6312 O.D. OEM # 6150121370
Valve Stem Seal	Both		**38-6145-55**	Viton. Metal Clad. ACM. 9mm Stem. OEM # 6140414540
	Both		**38-6146-55**	Viton. Metal Clad. 9mm Stem. OEM # 6150414570
LINE 11	**12.2L KOM743 12V D Cummins**			**L6 BORE - 5.125"/130mm**
Valve	Both		**10-326S**	1.745 Head Dia. Stellite Face. OEM #'s 70671 & 144911
Valve Seat Insert	Both		**22-1847-1**	1-9/16 I.D. 1.8465 O.D. 9/32 Depth. +5, 10, 30 O/S Avail. OEM # 69965, Exc. Natl. Gas
Guide	Both		**30-1969**	3.438 OAL. +3 O/S Avail. OEM # 66890.
Keeper	Both		**34-746**	2 Groove. OEM # 381875
Valve Stem Seal	Both		**38-1054-70**	Teflon And Rubber.
LINE 12	**14.0L KOM855T 24V D TRB Cummins**			**L6 BORE - 5.50"/140mm**
Valve	Both		**10-3040830**	1.870 Head Dia. Bi-Metallic. OEM # 3040830 w/ Letter "N" In Head. Replaces 10-602
	Exh		**10-602S**	1.870 Head Dia. Bi-Metallic w/ Stellite. OEM # 145701 w/ Letter "S" In Head
	Int		**10-603**	1.870 Head Dia. Mono-metallic. OEM # 135957
Valve Seat Insert	Both		**22-2003-1**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 3107759 w/ Std. O.D.
	Both		**22-2003-1N**	1-11/16 I.D. 2.003 O.D. 9/32 Depth. OEM # 127930 w/ Std. O.D. Nickel For TRB and High Heat Appls.
	Both		**22-2006-1**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. +3 For Aftermarket Press Fit 3107759. +5, 10, 20, 30, 40 O/S Avail.
	Both		**22-2006-1N**	1-11/16 I.D. 2.006 O.D. 9/32 Depth. Nickel For TRB & High Heat Appl. Aftermarket +3 O.D.
	Both		**22-2006-5**	1.690 I.D. 2.006 O.D. 0.214 Depth. 30 Deg. OEM #'s 3054590, 3054600, +5, 10, 20, 30 O/S Avail.
	Both		**22-2006-6S**	1.630 I.D. 2.006 O.D. 0.280 Depth, OEM #'s 80610016 & 90210014, Stellite # 3 Matl., Can Be Used w/ Natl. Gas 15 & 20 Deg. Valves
Guide	Both		**30-6452**	3.195 OAL. Machined For Seal. OEM # 174214
	Both		**30-7264**	Same As 30-1942+10 O.D. OEM # 3006457. 30-7265 Same As 30-1942+15 O.D. OEM # 3006458
	Both		**30-7994**	3.400 OAL. w/o Sharp Edge. +2 O/S Avail. OEM # 3050369. Can Be Used For OEM # 3006456
	Both		**30-7994SA**	Same Dimension As 30-7994 in Special Alloy.
Spring	Both		**32-1014**	2.685 Free Length. OEM # 211999

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 12	**14.0L KOM855T 24V D TRB Cummins**			**L6 BORE - 5.50"/140mm**
Spring	Both		**32-1332**	2.635 Free Length. OEM # 3035996, 3081212
Keeper	Both		**34-803**	2 Groove. Heat Treated. OEM # 127554
Valve Stem Seal	Both		**38-1055-70**	Teflon And Rubber. 1 Ring
Rocker Component			**42-3330**	Injector Roller Pin, Big Cam. OEM # 3013330
			42-3331	Valve Roller Pin Big Cam. OEM # 3013331
			42-3558	Rocker Bridge Guide. OEM # 123558
			42-6933	Valve Cam Roller, Big Cam. OEM # 3036933
			42-6934	Injector Cam Roller, Big Cam. OEM # 3036934
			42-8939	Rocker Roller Pin. OEM # 118939
Injector Component			**87-0486K**	Injector Tube 87-0486 and 87-7759 Ring Kit. Copper. OEM # 3070486
			87-1147	Injector Tube, Thick Nose. Copper. OEM # 3011935, 3071147
			87-1147K	Injector Tube Kit w/ O-Ring. Copper.
			87-7759	Injector O-Ring. OEM # 3007759
LINE 13	**19.2L SA/S6D155 Intercooled 12V D TRB**			**L6 BORE - 6.107"/155mm**
Valve Seat Insert	Exh		**22-2247-1**	1.895 I.D. 2.2475 O.D. 0.3525 Depth. OEM # 6127-11-1325
	Int		**22-2366-1**	2.010 I.D. 2.3665 O.D. 0.3525 Depth. OEM # 6127-11-1335
Guide	Both		**30-8160**	3.360 OAL. OEM # 6127-11-1341
LINE 14	**23.0L 6D170E 24V D TRB**			**6 BORE - 6.69"/170mm**
Valve	Exh		**10-13448S**	2.323 Head Dia.
	Int		**10-13447**	2.402 Head Dia.

ENGINE	YEAR	CYL.	LINE NO.
1.4L D1403 6V, 1.7L D1703, 1.9L V1903 8V D		L3-4	**1**
1.4L 1402 6V, 1.7L 1702/B, 1.9L 1902/B 8V D		L3-4	**2**
2.0L V2003, 2.2L V2203 8V D TRB		L4	**3**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.4L D1403 6V, 1.7L D1703, 1.9L V1903 8V D**		**L3-4**	**BORE - 3.15"/80mm**
Guide	Exh		**30-8348**	1.850 OAL. +2 O/S Avail. OEM # 15221-13560
	Int		**30-8347**	1.890 OAL. +2 O/S Avail. OEM # 15221-13540
LINE 2	**1.4L 1402 6V, 1.7L 1702/B, 1.9L 1902/B 8V D**		**L3-4**	**BORE - 3.23"/82mm**
Guide	Exh		**30-8348**	1.850 OAL. +2 O/S Avail. OEM # 15221-13560
	Int		**30-8347**	1.890 OAL. +2 O/S Avail. OEM # 15221-13540
Spring	Both		**32-5000**	1.668 Free Length. OEM # 15221-13240
LINE 3	**2.0L V2003, 2.2L V2203 8V D TRB**		**L4**	**BORE - 3.27"/83mm**
Guide	Exh		**30-8348**	1.850 OAL. +2 O/S Avail. OEM # 15221-13560
	Int		**30-8347**	1.890 OAL. +2 O/S Avail. OEM # 15221-13540
Spring	Both		**32-5000**	1.668 Free Length. OEM # 15221-13240

ENGINE	YEAR	CYL.	LINE NO.
HR2, HR3, HR4, HR6 Diesel 4-12V		L2-6	1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**HR2, HR3, HR4, HR6 Diesel 4-12V**			**L2-6** **BORE - 4.25"/108mm**
Guide	Exh		**30-8400**	2.500 OAL. 0.3745 Plain I.D. 0.627 O.D.
	Int		**30-8399**	2.500 OAL. 0.3745 Plain I.D. 0.627 O.D.

ENGINE	YEAR	CYL.	LINE NO.
3.4L EN-11, 3.7L EN-12 12V Gas		L6	**1**
10.8L MP7 SOHC 24V D TRB		L6	**2**
11.0L E6-2V, E6350-2V 12V D TRB		L6	**3**
11.0L E6-4V, E7-4V, E6350 24V D TRB		L6	**4**
11.0L EN672, EN673 Ser. 12V D N.A.,TRB		L6	**5**
11.1L ENDT675, ETSX675, ET-675 12V D TRB		L6	**6**
11.1L ENDT676, ETSX676 12V D TRB		L6	**7**
11.6L E9, EM9 12V D		L6	**8**
11.6L EN707 Ser., EN711 Ser. 12V D		L6	**9**
12.1L E7-ETECH, ASET 4V 24V D TRB		L6	**10**
12.8L MP8 SOHC 24V D TRB		L6	**11**
14.2L EN-864 16V S		L8	**12**
16.1L MP10 SOHC 24V D TRB		L6	**13**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**3.4L EN-11, 3.7L EN-12 12V Gas**		L6	**BORE - 3.188"/81mm**
Valve	Exh		**10-210**	1.328 Head Dia. Use w/ Rotator
	Int		**10-810**	1.516 Head Dia. w/ Drilled Stem. Exc. 140
Valve Seat Insert	Exh		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. Nickel
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. +5, 10, 15, 20, 30 O/S Avail.
Guide	Both		**30-1515**	2.563 OAL. OEM # 714GB199A
Spring	Both		**32-466**	1.969 Free Length. w/o Rotocaps. Exc. 140. OEM # 575-GC-14A
Keeper	Both		**34-159**	Pin For 0.30 Drilled Stem.
	Exh		**34-555**	1 Square Groove. Heat Treated
LINE 2	**10.8L MP7 SOHC 24V D TRB**		L6	**BORE - 4.84"/123mm**
Valve	Exh		**10-13376S**	1.496 Head Dia. Inconel. Stellite. OEM # 20564020, 21430918
	Int		**10-13375S**	1.575 Head Dia. Stellite. OEM # 20540017, 20737856
Valve Seat Insert	Exh		**22-1579-1S**	1.210R I.D. 1.5795 O.D. 0.2525 Depth. OEM # 20732758
	Int		**22-1658-1S**	1.300R I.D. 1.6585 O.D. 0.288 Depth. OEM # 20737849
Guide	Both		**30-3157**	3.285 OAL. w/ EGR. May Require Extra Clearance / Reaming. OEM # 1546437, 20904074
Spring	Both		**32-5013**	2.765 Free Length. Inner For Exh. 12 per Eng. OEM # 3183211
	Both		**32-5014**	3.035 Free Length. Single Int. Outer Exh. 24 per Eng. OEM # 3183210, 21310068
Keeper	Both		**34-619**	0.313 Stem Dia. 3 Round Beads.
Valve Stem Seal	Both		**38-812-45**	Viton. Metal Clad. 0.315 Stem. 0.472 Guide OD
Injector Component			**87-1136K**	Injector Tube w/ O-Ring, Stainless. OEM # 21401136, 85137065
			87-6487	Injector Tube O-Ring, Viton. OEM # 20536487
			87-8621	Injector Tube, Copper. Must Use Internal Washer. OEM # 21351717, 3183368, 21098621
			87-8621K	Injector Tube Kit, Copper w/ O-Ring 87-6487
LINE 3	**11.0L E6-2V, E6350-2V 12V D TRB**		L6	**BORE - 4.875"/123.7mm**
Valve	Exh		**10-1446**	1.889 Head Dia. 2V Head, Late Style w/ 0.137 Wide Lock Groove. OEM # 688GC337A
	Int		**10-1415S**	2.245 Head Dia. 0.497 Stem. w/ 0.137 Wide Lock Groove. OEM # 690GC2193
Valve Seat Insert	Exh		**22-2088-1**	1.692 I.D. 2.088 O.D. 0.299 Depth. +10,15,20,30, 43, 62 O/S Avail. OEM #13GC2247P1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 3	**11.0L E6-2V, E6350-2V 12V D TRB**			**L6 BORE - 4.875"/123.7mm**
Valve Seat Insert	Int		**22-2444-1**	2.046 I.D. 2.444 O.D. 0.299 Depth. +5,10,15,20,30,62 O/S Avail. OEM # 13GC2234P1
Guide	Both		**30-1810**	Use w/ 0.4975 Stem Valve. 0.5015 I.D. 3.500 OAL. OEM # 714GB1309
	Both		**30-7592**	3.500 OAL. 0.494 I.D. 0.6886 O.D.
Spring	Both		**32-1216**	3.543 Free Length. Outer. OEM # 575GC1100
	Both		**32-1217**	3.030 Free Length. Inner. OEM # 575GC199, 575GC31
Keeper	Both		**34-802**	1 Groove. OEM # 54-GC-126
Rotator	Both		**37-9226**	Rotator. OEM # 722GC226, 722GC219A
Valve Stem Seal	Both		**38-545-45**	Viton. Metal Clad. Late Style. OEM # 446GC279
LINE 4	**11.0L E6-4V, E7-4V, E6350 24V D TRB**			**L6 BORE - 4.875"/123.7mm**
Valve	Exh		**10-1570**	1.573 Head Dia. 6.872 OAL. Late Style w/ 0.375 Stem. This Valve Can Be Used To Replace Early 7/16 Stems. Replace Valves, Guides, Spring Retainers And Keepers With 3/8 Components. OEM # 688GC2378
	Exh		**10-1750**	1.573 Head Dia. 0.3715 Stem. 6.887 OAL. OEM # 688GC2389
	Exh		**10-3041**	1.575 Head Dia. 20 Deg. Natl. Gas. OEM # 688GC416
	Int		**10-1571S**	1.694 Head Dia. Late Style w/ 0.375 Stem. This Valve Can Be Used To Replace Early 7/16 Stem. Replace The Valves, Guides, Spring Retainers And Keepers With 3/8 Components. OEM # 690GC2210
	Int		**10-1928S**	1.694 Head Dia. 0.3725 Stem. 7.056 OAL. 20 Deg. OEM # 690GC410, 690GC432
	Int		**10-3042**	1.693 Head Dia. 7.051 OAL 20 Deg. Natl. Gas. OEM # 690GC342
Valve Seat Insert	Exh		**22-1692-1N**	1.430 I.D. 1.6925 O.D. 0.248 Depth. 30 Deg. +5, 15, 30 O/S Avail. OEM # 13GC2264
	Exh		**22-1692-2N**	1.430 I.D. 1.6925 O.D. 0.248 Depth. 20 Deg. For 10-3041 Natl. Gas.
	Int		**22-1831-1**	1.555 I.D. 1.8315 O.D. 0.280 Depth. 30 Deg. +5, 15, 30 O/S Avail. OEM # 13GC2257
	Int		**22-1831-3N**	1.555 I.D. 1.8315 O.D. 0.280 Depth. 20 Deg. For 10-3042
Guide	Both		**30-8008**	3.146 OAL. 0.4375 I.D. Use w/ Early Style 0.4375 Valve Stem
	Both		**30-8008**	3.146 OAL. 0.4375 I.D. Use w/ Early Style 0.4375 Valve Stem
	Both		**30-8009**	3.155 OAL. 0.3695 Unfinished I.D. Ream To Size
	Both		**30-8010**	3.155 OAL. 0.375 I.D. Check I.D. & Length. +2 O/S Avail. 714GB222P2
Spring	Both		**32-04011**	2.717 Free Length. OEM # 575GC213
	Both		**32-04023**	2.875 Free Length. Inner. Dual. OEM # 575GC1115
	Both		**32-04024**	2.940 Free Length. Outer Dual, Single. OEM# 575GC36
Keeper	Both		**34-05425**	1 Square Groove. OEM # 54GC25
Rotator	Both		**37-2313**	Rotator. OEM # 722GC313A. Use w/ 32-04024 Single Spring
Valve Stem Seal	Both		**38-6328-55**	Metal Clad. Viton. OEM # 466GC296, 446GC328
Injector Component			**87-212A**	Injector Tube, Cast Iron. OEM # 12GC212A
LINE 5	**11.0L EN672, EN673 Ser. 12V D N.A.,TRB**			**L6 BORE - 4.875"/123.7mm**
Valve	Exh		**10-1037**	1.889 Head Dia. Early Style w/ 0.293 Wide Lock Groove. OEM # 688GC2352A
	Exh		**10-1446**	1.889 Head Dia. Late Style w/ 0.137 Wide Lock Groove. OEM # 688GC337A
	Int		**10-1036S**	2.245 Head Dia. Early Style w/ 0.293 Wide Lock Groove. OEM # 690GC2187A,B
	Int		**10-1415S**	2.245 Head Dia. 0.497 Stem. w/ 0.137 Wide Lock Groove. OEM # 690GC2193

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 5	**11.0L EN672, EN673 Ser. 12V D N.A.,TRB**			**L6 BORE - 4.875"/123.7mm**
Valve Seat Insert	Exh		**22-2088-1**	1.692 I.D. 2.088 O.D. 0.299 Depth. +10,15,20,30, 43, 62 O/S Avail. OEM #13GC2247P1
	Int		**22-2444-1**	2.046 I.D. 2.444 O.D. 0.299 Depth. +5,10,15,20,30,62 O/S Avail. OEM # 13GC2234P1
Guide	Both		**30-1809**	3.500 OAL. Plain I.D. OEM # 714GB1308P2
	Both		**30-7592**	3.500 OAL. 0.494 I.D. OEM # 714GB210P2
	Both		**30-7903**	Same As 30-1809 w/ Spiral Ream I.D.
	Exh		**30-1810**	Use w/ 0.4975 Stem Valve. 0.5015 I.D. 3.500 OAL. OEM # 714GB1309
Spring	Both		**32-1216**	3.543 Free Length. Outer. Late Style. OEM # 575GC1100
	Both		**32-1217**	3.03 Free Length. Inner. Late Style. OEM # 575GC31
Keeper	Both		**34-802**	w/.137 Wide Groove. OEM # 54-GC-126
	Both		**34-810**	w/ 0.293 Wide Groove. OEM # 54-GC-19
Valve Stem Seal	Both		**38-545-45**	Viton. Metal Clad. Late Style. OEM # 446GC279
Injector Component			**87-0129**	Injector Tube, Cast Iron. OEM # 12GC129
LINE 6	**11.1L ENDT675, ETSX675, ET-675 12V D TRB**			**L6 BORE - 4.875"/123.7mm**
Valve	Exh		**10-1037**	1.889 Head Dia. 2V Head, Early Style w/ 0.293 Wide Lock Groove. OEM # 688GC2352A
	Exh		**10-1446**	1.889 Head Dia. 2V Head, Late Style w/ 0.137 Wide Lock Groove. OEM # 688GC337A
	Int		**10-1036S**	2.245 Head Dia. 2V Head, Early Style w/ 0.293 Wide Lock Groove. OEM # 690GC2187A,B
	Int		**10-1415S**	2.245 Head Dia. 2V Head, Late Style w/ 0.137 Wide Lock Groove. OEM # 690GC2193
Valve Seat Insert	Exh		**22-2088-1**	1.692 I.D. 2.088 O.D. 0.299 Depth. +10,15,20,30, 43, 62 O/S Avail. OEM #13GC2247P1
	Int		**22-2444-1**	2.046 I.D. 2.444 O.D. 0.299 Depth. +5,10,15,20,30,62 O/S Avail. OEM # 13GC2234P1
Guide	Both		**30-1809**	3.500 OAL. Plain I.D. OEM # 714GB1308P2
	Both		**30-7592**	3.500 OAL. 0.494 I.D. OEM # 714-GB-210-P2
	Both		**30-7903**	Same As 30-1809 w/ Spiral Ream I.D.
	Exh		**30-1810**	Use w/ 0.4975 Stem Valve. 0.5015 I.D. 3.500 OAL. OEM # 714GB1309
Spring	Both		**32-1216**	3.543 Free Length. Outer. OEM # 575-GC-1100
	Both		**32-1217**	3.030 Free Length. Inner. Not for Seal. OEM # 575-GC-199
Keeper	Both		**34-802**	1 Square Groove
	Both		**34-810**	w/ 0.293 Wide Groove. OEM # 54-GC-19
Rotator	Both		**37-9226**	Rotator. OEM # 722GC226, 722GC219A
Valve Stem Seal	Both		**38-545-45**	Viton. Metal Clad. Late Style. OEM # 446GC279
Injector Component			**87-0129**	Injector Tube. OEM # 12GC129
LINE 7	**11.1L ENDT676, ETSX676 12V D TRB**			**L6 BORE - 4.875"/123.7mm**
Valve	Exh		**10-1446**	1.889 Head Dia. 2V Head, Late Style w/ 0.137 Wide Lock Groove. OEM # 688GC337A
	Int		**10-1415S**	2.245 Head Dia. 2V Head, Late Style w/ 0.137 Wide Lock Groove. OEM # 690GC2193
Valve Seat Insert	Exh		**22-2088-1**	1.692 I.D. 2.088 O.D. 0.299 Depth. +10,15,20,30, 43, 62 O/S Avail. OEM #13GC2247P1
	Int		**22-2444-1**	2.046 I.D. 2.444 O.D. 0.299 Depth. +5,10,15,20,30,62 O/S Avail. OEM # 13GC2234P1
Guide	Both		**30-1809**	3.500 OAL. Plain I.D. OEM # 714-GB-1308-P2

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 7	**11.1L ENDT676, ETSX676 12V D TRB**			**L6 BORE - 4.875"/123.7mm**
Guide	Both		**30-7592**	3.500 OAL. 0.494 I.D. OEM # 714-GB-210-P2
	Both		**30-7903**	Same As 30-1809 w/ Spiral Ream I.D.
	Exh		**30-1810**	3.500 OAL
Spring	Both		**32-1216**	3.543 Free Length. Outer. OEM # 575-GC-1100
	Both		**32-1217**	3.030 Free Length. Inner. OEM # 575-GC-199
Keeper	Both		**34-802**	w/.137 Wide Groove. OEM # 54-GC-126
Rotator	Both		**37-9226**	Rotator. OEM # 722GC226, 722GC219A
Valve Stem Seal	Both		**38-545-45**	Viton. Metal Clad. Late Style. OEM # 446GC279
Injector Component			**87-0129**	Injector Tube. OEM # 12GC129
LINE 8	**11.6L E9, EM9 12V D**			**L6 BORE - 5.00"/126.9mm**
Guide	Both		**30-8009**	3.155 OAL. Unfinished I.D. Ream To Size
	Both		**30-8010**	3.155 OAL. 0.375 I.D. Check I.D. & Length. +2 O/S Avail. 714GB222P2
Spring	Both		**32-04011**	2.717 Free Length. OEM # 575GC213
LINE 9	**11.6L EN707 Ser., EN711 Ser. 12V D**			**L6 BORE - 5.00"/126.9mm**
Valve	Exh		**10-1037**	1.889 Head Dia. 2V Head, Early Style w/ 0.293 Wide Lock Groove. OEM # 688GC2352A
	Exh		**10-1446**	1.889 Head Dia. 2V Head, Late Style w/ 0.137 Wide Lock Groove. OEM # 688GC337A
	Int		**10-1036S**	2.245 Head Dia. 2V Head, Early Style w/ 0.293 Wide Lock Groove. OEM # 690GC2187A,B
Valve Seat Insert	Exh		**22-2088-1**	1.692 I.D. 2.088 O.D. 0.299 Depth. +10,15,20,30, 43, 62 O/S Avail. OEM #13GC2247P1
	Int		**22-2444-1**	2.046 I.D. 2.444 O.D. 0.299 Depth. +5,10,15,20,30,62 O/S Avail. OEM # 13GC2234P1
Guide	Both		**30-1809**	3.500 OAL. Plain I.D. OEM # 714-GB-1308-P2
	Both		**30-7592**	3.500 OAL. 0.494 I.D. 0.6886 O.D.
	Both		**30-7903**	Same As 30-1809 w/ Spiral Ream I.D.
Spring	Both		**32-1216**	3.543 Free Length. Outer. OEM # 575-GC-1100
	Both		**32-1217**	3.03 Free Length. Inner. Late Style. OEM # 575GC31
Keeper	Both		**34-810**	w/ 0.293 Wide Groove. OEM # 54-GC-19
Valve Stem Seal	Both		**38-545-45**	Viton. Metal Clad. Late Style. OEM # 446GC279
LINE 10	**12.1L E7-ETECH, ASET 4V 24V D TRB**			**L6 BORE - 4.875"/124mm**
Valve	Exh		**10-2095**	1.573 Head Dia. 6.992 OAL. Inconel. 30 Deg. OEM # 688GC344
	Int		**10-1928S**	1.694 Head Dia. 7.055 OAL. 20 Deg. OEM # 690GC410, 690GC432
Valve Seat Insert	Exh		**22-1692-1N**	1.430 I.D. 1.6925 O.D. 0.248 Depth. +15, 30 O/S Avail. OEM # 13GC2264
	Int		**22-1831-2**	1.550 I.D. 1.831 O.D. 0.253 Depth. +5, 15, 30 O/S Avail. OEM # 13GC316
Guide	Both		**30-3043**	3.110 OAL. ASET. OEM # 714GC3113A
	Both		**30-8010**	3.155 OAL. +2 O/S Avail. OEM # 714GB-222P2
Spring	Both		**32-04023**	2.875 Free Length. Inner. Dual. OEM # 575GC1115
	Both		**32-04024**	2.940 Free Length. Outer Dual, Single. OEM# 575GC36
Keeper	Both		**34-05425**	1 Square Groove. OEM # 54GC25
Rotator	Both		**37-2313**	Rotator. Bottom of Spring. OEM # 722GC313A. Use w/ 32-04024 Single Spring
	Both		**37-9320**	Rotator. Bottom of Spring. OEM # 722GC320. Use w/ Dual Spring

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 10	**12.1L E7-ETECH, ASET 4V 24V D TRB**			**L6 BORE - 4.875"/124mm**
Valve Stem Seal	Both		**38-2000-55**	Metal Clad. Viton. Use w/ 30-3043. OEM # 446GC332.
	Both		**38-6328-55**	Metal Clad. Viton. Use w/ 30-8010. OEM # 446GC328
Retainer	Both		**55-2311**	Retainer. Replaces Early Style Top Rotator. OEM # 25502378, 722GC311.
Injector Component			**87-0411**	Injector Tube, Cast Iron. OEM # 12GC411
			87-0412	Injector Tube, Cast Iron. OEM # 12GC412. ASET
LINE 11	**12.8L MP8 SOHC 24V D TRB**			**L6 BORE - 5.16" / 131mm**
Valve	Exh		**10-13378S**	1.575 Head Dia. 3 Groove. 39.5 Deg. OEM # 20768519
	Int		**10-13377S**	1.654 Head Dia. 3 Groove. 24.5 Deg. OEM # 20740798
Valve Seat Insert	Exh		**22-1697-2**	1.300R I.D. 1.6975 O.D. 0.2950 Depth. 40 Deg. OEM# 20530103.
	Exh		**22-1697-3**	1.300 I.D. 1.6975 O.D. 0.237 Depth. 30 Deg.
	Int		**22-1776-1S**	1.340R I.D. 1.7765 O.D. 0.2975 Depth. 25 Deg. OEM # 20740804
	Int		**22-1776-2S**	1.338 I.D. 1.7765 O.D. 0.238 Depth. 30 Deg. OEM # 21405770
Guide	Both		**30-3157**	3.285 OAL. w/ EGR. May Require Extra Clearance / Reaming. OEM # 1546437, 20904074
Spring	Both		**32-5013**	2.765 Free Length. Inner For Exh. 12 per Eng. OEM # 3183211
	Both		**32-5014**	3.035 Free Length. Single Int. Outer Exh. 24 per Eng. OEM # 3183210, 21310068
Keeper	Both		**34-619**	3 Round Beads. 0.313 Stem Dia.
Valve Stem Seal	Both		**38-812-45**	Viton. Metal Clad. 0.315 Stem. 0.472 Guide OD
Injector Component			**87-1136K**	Injector Tube, Stainless. OEM # 21401136, 85137065
			87-6487	Injector O-Ring, Viton. OEM # 20536487
			87-8621	Injector Tube, Copper. Must Use Internal Washer. OEM # 21351717, 3183368, 21098621
			87-8621K	Injector Tube Kit, Copper w/ O-Ring 87-6487
LINE 12	**14.2L EN-864 16V S**			**L8 BORE - 5.00"/126.9mm**
Valve	Exh		**10-1037**	1.889 Head Dia. 2V Head, Early Style w/ 0.293 Wide Lock Groove. OEM # 688GC2352A
Valve Seat Insert	Exh		**22-2088-1**	1.692 I.D. 2.088 O.D. 0.299 Depth. +10,15,20,30, 43, 62 O/S Avail. OEM #13GC2247P1
	Int		**22-2444-1**	2.046 I.D. 2.444 O.D. 0.299 Depth. +5,10,15,20,30,62 O/S Avail. OEM # 13GC2234P1
Spring	Both		**32-1216**	3.543 Free Length. Outer. OEM # 575GC1100
	Both		**32-1217**	3.030 Free Length. Inner. OEM # 575-GC-199
Keeper	Both		**34-810**	w/ 0.293 Wide Groove. OEM # 54-GC-19
LINE 13	**16.1L MP10 SOHC 24V D TRB**			**L6 BORE - 5.66"/144mm**
Valve	Exh		**10-13435S**	1.813 Head Dia. Inconel, Stellite. OEM # 20513285
	Int		**10-13434S**	1.931 Head Dia. Inconel, Stellite. OEM # 20739057

ENGINE	YEAR	CYL.	LINE NO.
1.5L D5, E5 Forklift 8V		L4	**1**
2.0L VA Forklift 8V Gas		L4	**2**
2.0L FE, 2.2L F2 Forklift SOHC 8V Gas		L4	**3**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.5L D5, E5 Forklift 8V**			**L4** **BORE - 3.03"/77mm**
Valve Seat Insert	Int		**21-1562-67**	1.255T I.D. 1-9/16 O.D. 0.319 Depth.
Valve Stem Seal	Both		**38-966-55**	Viton. Metal Clad.
LINE 2	**2.0L VA Forklift 8V Gas**			**L4** **BORE - 3.23"/82mm**
Valve Seat Insert	Exh		**20-1375-3N**	1-1/16 I.D. 1-3/8 O.D. 3/16 Depth. w/ 1.203 Valve Head Dia. LPG. Nickel
	Int		**20-1625-2**	1-3/8 I.D. 1-5/8 O.D. 1/4 Depth. +10 O/S Avail.
LINE 3	**2.0L FE, 2.2L F2 Forklift SOHC 8V Gas**			**L4** **BORE - 3.39"/86mm**
Valve	Exh		**10-10237**	1.417 Head Dia. Incl. Turbo
	Int		**10-10236**	1.732 Head Dia. Incl. Turbo
Valve Seat Insert	Int		**21-1812-50**	1.490T I.D. 1-13/16 O.D. 0.307 Depth.
Guide	Both		**30-8172**	2.177 OAL. +2 O/S Avail. Incl. Lock Ring
Spring	Both		**32-1368**	1.720 Free Length. Inner
	Both		**32-1370**	2.041 Free Length. Outer
Keeper	Both		**34-212**	0.109 Groove Dia. 1 Groove. Heat Treated
Valve Stem Seal	Both		**38-966-55**	Viton. Metal Clad.
Expansion Plug Kit			**97-0224**	Steel Kit. Brass Kit Avail. In Suffix B

ENGINE	YEAR	CYL.	LINE NO.
1.8L OM636 D		L4	**1**
2.7L DOHC 20V OM612/OM647 D	2002-07	L5	**2**
3.0L OM642 24V DOHC D TRB	2006-20	V6	**3**
4.3L OM904,OM924 12V, 6.3L OM906, OM926 18V D	1995-13	L4,6	**4**
5.7L Dir. Inj. OM352 12V D		L6	**5**
12.8L OM460 24V Dir. Inj. EGR D TRB MBE4000		L6	**6**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.8L OM636 D**			**L4** **BORE - 2.95"/75mm**
Guide	Exh		**30-7875**	2.223 OAL. 0.3555 I.D. OEM # 11-3281
LINE 2	**2.7L DOHC 20V OM612/OM647 D**			**2002-07 L5** **BORE - 3.46"/88mm**
Valve	Exh	2004-06	**10-13074**	1.032 Head Dia. 0.274 Stem. OEM # A6280530005
	Exh	2002-03	**10-2235**	1.120 Head Dia. 0.2756 Stem. OEM # A6110530105
	Int	2004-06	**10-13073**	1.130 Head Dia. 0.274 Stem. OEM # A6460530001
	Int	2002-03	**10-2234**	1.189 Head Dia. 0.274 Stem. OEM # A6110530401
Valve Seat Insert	Exh	2004-06	**22-1088-1**	0.890T I.D. 1.088 O.D. 0.221 Depth.
	Exh	2002-03	**22-1175-1**	0.945T I.D. 1.1755 O.D. 0.221 Depth. OEM # A6110530032
	Int	2004-06	**22-1160-1**	0.960T I.D. 1.160 O.D. 0.221 Depth
	Int	2002-03	**22-1218-1**	1.020T I.D. 1.2185 O.D. 0.221 Depth. OEM # A6110530531
Guide	Both	2002-07	**30-3255**	1.476 OAL. 0.275 I.D. 0.4940 O.D. OEM # A6110530329
Keeper	Both	2002-07	**34-5026**	1 Round Bead
Valve Stem Seal	Both	2002-07	**38-5080-55**	Viton. Metal Clad.
LINE 3	**3.0L OM642 24V DOHC D TRB**			**2006-20 V6** **BORE - 3.23"/82mm**
Valve	Exh	2006-20	**10-13357**	1.000 Head Dia. 0.2346 Stem
	Int	2006-20	**10-13356**	1.122 Head Dia. 0.2349 Stem
Keeper	Both	2006-20	**34-5021**	3 Round Beads. 0.236 Stem Dia.
Lifter	Both	2006-20	**36-7561**	Hydraulic Lash Adjuster
Valve Stem Seal	Both	2006-20	**38-9675-45**	Viton. Metal Clad. 0.234 Stem.
LINE 4	**4.3L OM904,OM924 12V, 6.3L OM906, OM926 18V D**			**1995-13 L4,6** **BORE - 4.02"/102mm**
Valve	Exh	1995-13	**10-3189**	1.496 Head Dia. 1 per Cyl. OEM # 9060500327
	Int	1995-13	**10-3188**	1.339 Head Dia. 0.3127 Stem. 2 per Cyl. OEM # 9060500326
Valve Seat Insert	Exh	1995-	**22-1578-1**	1.233T I.D. 1.578 O.D. 0.315 Depth. OEM # 9060531232
	Int	1995-	**22-1382-2**	1.100 I.D. 1.382 O.D. 0.300 Depth. OEM # 9060530131
Guide	Both	1995-	**30-3276**	2.362 OAL. 0.3146 Finished I.D. 0.5524 O.D. OEM # A9060530129
	Both		**30-3276SA**	2.362 OAL. 0.3146 ID. Special Harder Alloy.
	Both	1995-	**30-3285**	2.363 OAL. Unfinished 0.295 I.D. OEM # 9060530130
Spring	Exh	1995-	**32-6644**	1.961 Free Length 0.7850 I.D. 1.052 I.D. OEM # A9060530120
	Int	1995-	**32-6643**	1.961 Free Length 0.785 I.D. 1.052 O.D. OEM # A9060530120
Keeper	Both		**34-5132**	1 Round Bead. OEM # 102530026
Valve Stem Seal	Both	1995-	**38-812-45**	Metal Clad. Viton. OEM # 9060530358
Injector Component			**87-0488**	Injector Tube. Stainless. OEM # 9060170488
			87-0488K	Injector Tube Kit Stainless w/ O-Ring 87-1345
			87-1345	Injector Tube O-Ring. OEM # 5419970345
LINE 5	**5.7L Dir. Inj. OM352 12V D**			**L6** **BORE - 3.82"/97mm**
Guide	Exh		**30-3072**	2.640 OAL. OEM # 3660530230

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 5	**5.7L Dir. Inj. OM352 12V D**			**L6** **BORE - 3.82"/97mm**
Guide	Int		**30-3071**	2.835 OAL. OEM # 3520531229
LINE 6	**12.8L OM460 24V Dir. Inj. EGR D TRB MBE4000**			**L6** **BORE - 5.04"/128mm**
Valve	Exh		**10-13380**	1.661 Head Dia. OEM # A4570500327. 36 Deg.
	Int		**10-13379**	1.791 Head Dia. OEM # A4600530001. 30 Deg.
Valve Seat Insert	Exh		**22-1696-3**	1.350R I.D. 1.6965 O.D. 0.3190 Depth. 45 Deg. OEM # 5410530532
	Int		**22-1882-1S**	1.595 I.D. 1.882 O.D. 0.319 Depth. 30 Deg. OEM # 5410532531
Guide	Both		**30-3175**	2.402 OAL. 0.3547 I.D. 0.5920 O.D. OEM # A5410532730
Spring	Both		**32-6648**	2.788 Free Length 0.972 I.D. 1.302 O.D. OEM # A5410530020
Keeper	Both		**34-5142**	1 Round Groove 0.352 Stem Dia. OEM # A5410530126
Valve Stem Seal	Both		**38-6492-55**	Viton. Metal Clad. OEM # 40000533558
Injector Component			**87-0488**	Injector Tube. Stainless. OEM # 9060170488
			87-0488K	Injector Tub Kit, Stainless w/ 87-1345 O-Ring
			87-1345	Injector Tube O-Ring. OEM # 5419970345

ENGINE	YEAR	CYL.	LINE NO.
66-141 C.I. NXB, IXB/C/B3/B5, IXLB Hercules		L2-4	1
2.4L 144 8V, 3.5L 216 12V		L4-6	2
2.7L 165, 206H/L, D206 C.I. 8V		L4	3
3.7L 231, 265 C.I. Gas/LPG 12V		L6	4
3.8L 231 C.I. D Waukesha		L6	5
4.6L 283/A4, 336-4, 403-4 8V, 425-6A, 605-6A 16V		L4-6	6
4.6L D283-4A D		L4	7
13.1L HD800-6A 12V LPG		L6	8
19.8L 1210-12A 24V Gas		V12	9

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**66-141 C.I. NXB, IXB/C/B3/B5, IXLB Hercules**		**L2-4**	**BORE - 3.25"/82.6mm**
Valve Seat Insert	Exh		**20-1375-4**	1-1/8 I.D. 1-3/8 O.D. 3/16 Depth.
	Int		**20-1500-1**	1-1/4 I.D. 1-1/2 O.D. 7/32 Depth.
Guide	Both		**30-1568**	2.094 OAL. 0.4859 O.D.
	Both		**30-1697**	2.093 OAL. 0.5328 O.D.
LINE 2	**2.4L 144 8V, 3.5L 216 12V**		**L4-6**	**BORE - 3.50"/88.9mm**
Valve	Int		**10-323**	1.313 Head Dia. 66HC, 66KD, 77HC, 77KD
Valve Seat Insert	Exh		**20-1187-1**	1.000 I.D. 1-3/16 O.D. 3/16 Depth. Kerosene 66KD, 77KD
	Exh		**20-1375-4**	Gasoline. 1-1/8 I.D. 1-3/8 O.D. 3/16 Depth.
Guide	Both		**30-1947**	2.500 OAL. Gasoline & Kerosene
	Exh		**30-1953**	Super 55D, 66D, 77D, 770D. 2.313 OAL
	Int		**30-1954**	Super 55D, 66D, 77D, 770D. 3.188 OAL
Keeper	Both		**34-746**	2 Groove. Heat Treated
LINE 3	**2.7L 165, 206H/L, D206 C.I. 8V**		**L4**	**BORE - 3.625"/92mm**
Valve	Exh		**10-283**	1.468 Head Dia. 206 R & Z Series
	Exh		**10-861**	1.375 Head Dia. Exc. LPG. 165, 335 Wheel Tractors, 206 Exc. R & Z Series, D206. OEM # 10A6397
Valve Seat Insert	Both		**20-1562-6**	1-1/4 I.D. 1-9/16 O.D. 7/32 Depth. R & Z Series. +10 O/S Avail.
	Both		**20-1562-6N**	1-1/4 I.D. 1-9/16 O.D. 7/32 Depth. Nickel
Guide	Both		**30-1891**	Flanged. 2.310 OAL. OEM # 10A5988
LINE 4	**3.7L 231, 265 C.I. Gas/LPG 12V**		**L6**	**BORE - 3.50" & 3.75"**
Guide	Exh		**30-1927**	2.625 OAL. OEM # 106620A
	Int		**30-1951**	2.781 OAL. OEM # 156159A
LINE 5	**3.8L 231 C.I. D Waukesha**		**L6**	**BORE - 3.50"/90mm**
Guide	Exh		**30-1927**	2.625 OAL. OEM # 106620A
	Exh		**30-1953**	2.313 OAL. OEM # 106609A
	Int		**30-1954**	3.188 OAL. OEM # 180009D
LINE 6	**4.6L 283/A4, 336-4, 403-4 8V, 425-6A, 605-6A 16V**		**L4-6**	**BORE - 4.25" & 4.625"**
Valve	Exh		**10-159**	1.594 Head Dia. From S/N 334000
	Exh		**10-887**	1.513 Head Dia. 1800B Wheel Tractors S/N 124396 To 134683. 1800C S/N 134684-Up. OEM # 155731A Oliver
	Int		**10-160**	1.718 Head Dia.
Valve Seat Insert	Exh		**20-1625-1N**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Nickel
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth.
	Int		**20-1812-5N**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth. Nickel

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 6	**4.6L 283/A4, 336-4, 403-4 8V, 425-6A, 605-6A 16V**			**L4-6 BORE - 4.25" & 4.625"**
Guide	Both		**30-1914**	3.125 OAL 0.437 I.D. 0.7515 O.D. OEM # 10A6912
	Both		**30-7371**	3.000 OAL. Machined For Seal
Keeper	Both		**34-803**	2 Groove. Heat Treated
Valve Stem Seal	Both		**38-1055-70**	Teflon And Rubber. 1 Ring
LINE 7	**4.6L D283-4A D**			**L4 BORE - 4.25"/108mm**
Valve	Exh		**10-159**	1.594 Head Dia.
	Int		**10-160**	1.718 Head Dia. To S/N 27000000
Valve Seat Insert	Exh		**20-1625-1N**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Nickel
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
	Int		**20-1812-5N**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth. Nickel
Guide	Both		**30-1914**	3.125 OAL
	Both		**30-1965**	3.500 OAL. OEM # 164028A
	Both		**30-7371**	3.000 OAL. Machined For Seal
Keeper	Both		**34-803**	2 Groove. Heat Treated. w/o Rotocaps. OEM # 93914-H
LINE 8	**13.1L HD800-6A 12V LPG**			**L6 BORE - 5.312"/134.9mm**
Valve	Int		**10-160**	1.718 Head Dia. To S/N 27000000
Valve Seat Insert	Int		**20-2562-1**	2-3/16 I.D. 2-9/16 O.D. 1/4 Depth
Guide	Both		**30-7372**	3.000 OAL. S/N 27000100 & Up
Keeper	Both		**34-222**	Single Bead.
	Both		**34-803**	2 Bead. Heat Treated. For 10-160
LINE 9	**19.8L 1210-12A 24V Gas**			**V12 BORE - 4.625"/117.4mm**
Valve	Exh		**10-159**	1.594 Head Dia.
	Int		**10-160**	1.718 Head Dia.
Valve Seat Insert	Exh		**20-1625-1N**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Nickel
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Both		**30-1914**	3.125 OAL
	Both		**30-7371**	3.000 OAL. Machined For Seal
Keeper	Both		**34-803**	2 Groove. Heat Treated
Valve Stem Seal	Both		**38-1055-70**	Teflon And Rubber. 1 Ring

ENGINE	YEAR	CYL.	LINE NO.
1.4L 4G33, 4G32 Forklift 8V		L4	**1**
2.0L (122 C.I.) 4G52 12V Forklift		L4	**2**
2.0L (122 C.I.) 4G63 Forklift 8V		L4	**3**
2.3L SOHC 4D55T D 8V		L4	**4**
2.4L (143 C.I.) 4G64 Forklift 8V		L4	**5**
2.5L 4D56T SOHC 8V D TRB		L4	**6**
2.6L (156 C.I.) 4G54 Forklift 8V		L4	**7**
3.0L (181 C.I.) 6G72 12V Forklift		V6	**8**
3.3L S4S 8V, 5.0L S6S 12V Forklift D		L4,6	**9**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.4L 4G33, 4G32 Forklift 8V**			**L4** **BORE - 2.874"/73mm**
Valve	Exh		**10-10064**	1.376 Head Dia. Square Groove 4G32
	Exh		**10-10083**	1.220 Head Dia. Square Groove
Valve Seat Insert	Exh		**21-1375-51**	1.060T I.D. 1-3/8 O.D. 0.280 Depth
	Int		**21-1562-50**	1.260T I.D. 1-9/16 O.D. 0.280 Depth
Guide	Exh		**30-7577**	1.890 OAL. +2 O/S Avail. Incl. Lock Ring
	Int		**30-7576**	1.735 OAL. 0.5145 O.D. +2 O/S Avail.
Keeper	Both		**34-716**	1 Round Groove. Heat Treated
	Both		**34-813**	1 Square Groove. Heat Treated
Valve Stem Seal	Both		**38-938-45**	Viton. Ring and Band.
	Both		**38-964-55**	Viton. Metal Clad.
LINE 2	**2.0L (122 C.I.) 4G52 12V Forklift**			**L4** **BORE - 3.31"/84mm**
Valve	Exh		**10-10064**	1.376 Head Dia. Square Groove
	Exh		**10-10142**	1.378 Head Dia.
	Int		**10-10065**	1.689 Head Dia. Square Groove
	Int		**10-10141**	1.693 Head Dia.
Valve Seat Insert	Exh		**21-1500-62**	1.220T I.D. 1-1/2 O.D. 0.310 Depth.
	Int		**21-1750-61**	1.445T I.D. 1-3/4 O.D. 0.310 Depth.
Guide	Exh		**30-7575**	2.046 OAL. 0.5145 O.D. +2 O/S Avail. Incl. Lock Ring
	Int		**30-7574**	1.848 OAL. 0.5145 O.D. +2 O/S Avail.
Keeper	Both		**34-716**	1 Round Groove. Heat Treated
	Both		**34-813**	1 Square Groove. Heat Treated
Valve Stem Seal	Both		**38-938-45**	Viton. Ring And Band.
	Both		**38-964-55**	Viton. Metal Clad.
Expansion Plug Kit			**97-0216**	w/ 28mm Block Plug. Steel Kit. Brass Kit Avail. In Suffix B
			97-32	Steel Kit. Brass Kit Avail. In Suffix B
LINE 3	**2.0L (122 C.I.) 4G63 Forklift 8V**			**L4** **BORE - 3.346"/85mm**
Valve	Exh		**10-10142**	1.378 Head Dia.
	Exh		**10-10144**	1.496 Head Dia.
	Int		**10-10141**	1.693 Head Dia.
	Int		**10-10143**	1.811 Head Dia.
Guide	Exh		**30-7575**	2.046 OAL. 0.5145 O.D. +2 O/S Avail. Incl. Lock Ring
	Int		**30-7574**	1.848 OAL. 0.5145 O.D. +2 O/S Avail.
Keeper	Both		**34-716**	1 Round Groove. Heat Treated
Valve Stem Seal	Both		**38-964-55**	Viton. Metal Clad.

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 4	**2.3L SOHC 4D55T D 8V**			**L4 BORE - 3.80"/97mm**
Valve	Exh		**10-10416**	1.339 Head Dia.
	Int		**10-10415**	1.575 Head Dia. Round Groove
Guide	Exh		**30-7851**	2.920 OAL. OEM # MD050527
	Int		**30-7850**	2.800 OAL. OEM # MD050523
Keeper	Both		**34-716**	1 Round Groove. Heat Treated
Valve Stem Seal	Both		**38-964-55**	Viton. Metal Clad.
LINE 5	**2.4L (143 C.I.) 4G64 Forklift 8V**			**L4 BORE - 3.40"/86.4**
Valve	Exh		**10-10144**	1.496 Head Dia.
	Int		**10-10143**	1.811 Head Dia.
Guide	Exh		**30-7575**	2.046 OAL. 0.5145 O.D. +2 O/S Avail. Incl. Lock Ring
	Int		**30-7574**	1.848 OAL. 0.5145 O.D. +2 O/S Avail.
Lifter	Both		**36-6000**	Hydraulic Lash Adjuster
Valve Stem Seal	Both		**38-964-55**	Viton. Metal Clad.
LINE 6	**2.5L 4D56T SOHC 8V D TRB**			**L4 BORE - 91.1mm/3.59"**
Valve	Exh		**10-3186**	1.338 Head Dia. OEM # MD198406
	Int		**10-3187**	1.571 Head Dia. OEM # MD198406
Guide	Exh		**30-7851**	2.920 OAL. OEM # MD050527
	Int		**30-7850**	2.800 OAL. OEM # MD050523
LINE 7	**2.6L (156 C.I.) 4G54 Forklift 8V**			**L4 BORE - 3.50"/91mm**
Valve	Exh		**10-10091S**	1.495 Head Dia. Square Groove
	Exh		**10-10146S**	1.493 Head Dia. Round Groove.
	Int		**10-10092**	1.810 Head Dia. Square Groove
	Int		**10-10145**	1.810 Head Dia. Round Groove.
Valve Seat Insert	Exh		**21-1500-62**	1.220T I.D. 1-1/2 O.D. 0.310 Depth.
	Exh		**21-1625-56**	1.298T I.D. 1-5/8 O.D. 0.317 Depth
	Exh		**21-1875-51**	1.575T I.D, 1-7/8 O.D. 0.317 Depth.
	Int		**21-1750-61**	1.445T I.D. 1-3/4 O.D. 0.310 Depth.
Guide	Exh		**30-7575**	2.046 OAL. 0.5145 O.D. +2 O/S Avail. Incl. Lock Ring
	Int		**30-7574**	1.848 OAL. 0.5145 O.D. +2 O/S Avail.
Keeper	Both		**34-716**	1 Round Groove. Heat Treated
	Both		**34-813**	1 Square Groove. Heat Treated
Lifter	Both		**36-6000**	Hydraulic Lash Adjuster
Valve Stem Seal	Both		**38-964-55**	Viton. Metal Clad.
LINE 8	**3.0L (181 C.I.) 6G72 12V Forklift**			**V6 BORE - 3.50"/91mm**
Valve	Exh		**10-10625**	1.378 Head Dia.
	Int		**10-10624**	1.693 Head Dia.
Valve Seat Insert	Exh		**21-1562-69**	1.219 I.D. 1-9/16 O.D. 0.317 Depth.
	Exh		**21-1562-69N**	1.219 I.D. 1-9/16 O.D. 0.317. Nickel
	Int		**21-1750-61**	1.445T I.D. 1-3/4 O.D. 0.310 Depth.
Guide	Exh		**30-7577**	1.890 OAL. +2 O/S Avail. Incl. Lock Ring
	Int		**30-7576**	1.735 OAL. +2 O/S Avail.
Spring	Both		**32-1289**	1.960 Free Length
Keeper	Both		**34-716**	1 Round Groove. Heat Treated
Lifter	Both		**36-6000**	Hydraulic Lash Adjuster

COMPONENT	I/E/B	YEARS	PART No.	NOTES		
LINE 8	**3.0L (181 C.I.) 6G72 12V Forklift**				**V6**	**BORE - 3.50"/91mm**
Valve Stem Seal	Both		**38-964-55**	Viton. Metal Clad.		
Expansion Plug Kit			**97-155**	Steel Kit. Brass Kit Avail. In Suffix B		
LINE 9	**3.3L S4S 8V, 5.0L S6S 12V Forklift D**				**L4,6**	**BORE - 3.70"/94mm**
Valve Stem Seal	Both		**38-961-55**	Viton. Metal Clad.		

ENGINE	YEAR	CYL.	LINE NO.
1.1L D11, 1.2L A12 Forklift 8V Gas		L4	**1**
1.5L J15 Forklift 8V Gas		L4	**2**
1.5L (91 C.I.) A15 Forklift 8V		L4	**3**
2.0L H20, H20-2 Forklift 8V Gas		L4	**4**
2.1L K21, 2.5L K25 Forklift 8V Gas		L4	**5**
2.2L SD22 8V Forklift D		L4	**6**
2.4L SOHC Z24 Forklift 8V Gas		L4	**7**
2.5L SD25 Forklift 8V D		L4	**8**
2.5L H25 Forklift 8V Gas		L4	**9**
3.0L H30 Forklift 12V Gas		L6	**10**
3.3L SD33 12V D		L6	**11**
4.2L TB42 Forklift 12V Gas		L6	**12**
4.5L TB45 Forklift 12V Gas		L6	**13**
6.9L FD6T, FE6T 24V D		L6	**14**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.1L D11, 1.2L A12 Forklift 8V Gas**			**L4** **BORE - 2.953"/75mm**
Guide	Exh		**30-7542**	1.930 OAL.
	Int		**30-7545**	1.930 OAL.
Valve Stem Seal	Both		**38-961-55**	Viton. Metal Clad.
LINE 2	**1.5L J15 Forklift 8V Gas**			**L4** **BORE - 3.07"/78mm**
Valve Seat Insert	Both		**20-1625-4**	1-5/16 I.D. 1-5/8 O.D. 7/32 Depth
	Both		**20-1625-4N**	1-5/16 I.D. 1-5/8 O.D. 7/32 Depth. Nickel
Guide	Int		**30-7495**	1.870 OAL. 0.344 I.D. 0.565 O.D.
LINE 3	**1.5L (91 C.I.) A15 Forklift 8V**			**L4** **BORE - 2.992"/76mm**
Valve	Int		**10-10031**	1.462 Head Dia.
Valve Seat Insert	Both		**21-1312-52**	1.060T I.D. 1-5/16 O.D. 0.240 Depth
Guide	Exh		**30-7542**	1.930 OAL.
	Int		**30-7545**	1.930 OAL.
Valve Stem Seal	Both		**38-961-55**	Viton. Metal Clad.
LINE 4	**2.0L H20, H20-2 Forklift 8V Gas**			**L4** **BORE - 3.433"/87.2mm**
Valve	Exh		**10-10753**	1.262 Head Dia. 0.3397 Stem Dia. OEM # 13202P5100
	Exh		**10-2244**	1.185 Head Dia. 0.2735 Stem Dia. H20-2 OEM # 1320250K00
	Int		**10-10752**	1.657 Head Dia. 0.3403 Stem Dia. OEM # 13201P0500
	Int		**10-2243**	1.384 Head Dia. 0.2745 Stem Dia. H20-2. OEM # 1320110B00
Valve Seat Insert	Exh		**20-1437-6**	1-1/8 I.D. 1-7/16 O.D. 5/16 Depth.
	Int		**20-1687-1**	1-13/32 I.D. 1-11/16 O.D. 1/4 Depth.
Guide	Exh		**30-3001**	1.990 OAL. 0.439 O.D. 0.277 I.D.
	Int		**30-3000**	1.660 OAL. 0.439 O.D. 0.2770 I.D.
	Int		**30-7495**	1.870 OAL. 0.3440 I.D. 0.565 O.D.
Valve Stem Seal	Both		**38-667-45**	Viton. Top Hat.
LINE 5	**2.1L K21, 2.5L K25 Forklift 8V Gas**			**L4** **BORE - 3.5"/ 88.9mm**
Valve	Exh		**10-13085**	1.267 Head Dia. OEM # 13202FU400
	Int		**10-13084**	1.503 Head Dia. OEM # 13201FY500
Guide	Both		**30-7826**	1.770 OAL. Pre Cut For Seal, Plain Port End
Valve Stem Seal	Both		**38-985-55**	Viton. Metal Clad. 0.276 Stem

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 6	**2.2L SD22 8V Forklift D**			**L4 BORE - 3.27"/83mm**
Guide	Both		**30-8209**	2.045 OAL
Valve Stem Seal	Both		**38-962-45**	Viton. Ring And Spring.
LINE 7	**2.4L SOHC Z24 Forklift 8V Gas**			**L4 BORE - 3.50"/89mm**
Valve	Exh		**10-10269**	1.500 Head Dia.
	Int		**10-10268**	1.658 Head Dia.
Valve Seat Insert	Exh		**21-1625-60**	1-1/4T I.D. 1-5/8 O.D. 0.293 Depth
	Int		**21-1812-56**	1.535 I.D. 1-13/16 O.D. 0.293 Depth.
Guide	Both		**30-7828**	2.660 OAL.
Valve Stem Seal	Both		**38-962-45**	Viton. Ring And Spring.
LINE 8	**2.5L SD25 Forklift 8V D**			**L4 BORE - 3.50"/89mm**
Guide	Both		**30-8209**	2.045 OAL
Valve Stem Seal	Both		**38-962-45**	Viton. Ring And Spring.
Expansion Plug Kit			**97-35**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 9	**2.5L H25 Forklift 8V Gas**			**L4 BORE -3.628"/92mm**
Valve	Exh		**10-2244**	1.185 Head Dia.
	Int		**10-2243**	1.384 Head Dia. 0.2745 Stem
Guide	Exh		**30-3001**	1.990 OAL. 0.439 O.D. 0.277 I.D.
	Int		**30-3000**	1.660 OAL. 0.439 O.D. 0.2770 I.D.
Spring	Both		**32-813**	Inner. 1.760 Free Length
Keeper	Both		**34-5007**	1 Groove
Valve Stem Seal	Both		**38-985-55**	Viton. Metal Clad. 0.276 Stem
LINE 10	**3.0L H30 Forklift 12V Gas**			**L6 BORE - 3.433"/87.2mm**
Valve	Exh		**10-10753**	1.262 Head Dia. 0.3397 Stem Dia. OEM # 13202P5100
	Int		**10-10752**	1.657 Head Dia. 0.3403 Stem Dia. OEM # 13201P0500
Valve Seat Insert	Exh		**20-1437-6**	1-1/8 I.D. 1-7/16 O.D. 5/16 Depth.
	Int		**20-1687-1**	1-13/32 I.D. 1-11/16 O.D. 1/4 Depth.
Guide	Int		**30-7495**	1.870 OAL
Valve Stem Seal	Both		**38-667-45**	Top Hat. Viton
LINE 11	**3.3L SD33 12V D**			**L6 BORE - 3.27"/83mm**
Guide	Both		**30-8209**	2.045 OAL
LINE 12	**4.2L TB42 Forklift 12V Gas**			**L6 BORE - 3.78"/ 96mm**
Valve Stem Seal	Both		**38-962-45**	Viton. Ring And Spring.
LINE 13	**4.5L TB45 Forklift 12V Gas**			**L6 BORE - 3.92"/99.5mm**
Valve Stem Seal	Both		**38-961-55**	Viton. Metal Clad.
	Both		**38-962-45**	Viton. Ring And Spring.
LINE 14	**6.9L FD6T, FE6T 24V D**			**L6 BORE - 108mm/4.25"**
Valve	Exh		**10-30158**	1.554 Head Dia. 0.351 Stem. OEM # 13202-Z5501K
	Int		**10-30157**	1.912 Head Dia. 0.351 Stem. OEM # 13201-Z5501K
Guide	Both		**30-3301**	2.365 OAL. 0.357 I.D. OEM # 13211-Z5500
Valve Stem Seal	Both		**38-7004-55**	Metal Clad, Viton
Injector Component			**87-3322**	2.772 Length 0.9890 O.D. OEM # 11070-Z5504

ENGINE	YEAR	CYL.	LINE NO.
10.8L MX11, 12.9L 24V MX13 D TRB		L6	1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**10.8L MX11, 12.9L 24V MX13 D TRB**			**L6 BORE - 5.12"/130mm**
Valve	Exh		**10-13460**	1.610 Head Dia. 0.3898 Stem Dia. 1 Groove. OEM # 2015131
	Exh		**10-13486S**	1.614 Head Dia. 0.3902 Stem. 4 Groove. OEM # 2189943
	Int		**10-13459**	1.732 Head Dia. 0.3907 Stem Dia. 1 Groove. OEM # 2015130
	Int		**10-13485**	1.732 Head Dia. 0.3911 Stem. 4 Groove. OEM # 2189942
Valve Seat Insert	Exh		**22-1717-1**	1.355T I.D. 1.717 O.D. 0.240 Depth.
	Int		**22-1835-2**	1.470T I.D. 1.835 O.D. 0.240 Depth.
Guide	Both		**30-3211**	2.850 OAL. 0.3920 I.D. 0.6313 O.D.
Spring	Exh		**32-6696**	2.460 Free Length. Inner. OEM # 1819063
	Exh		**32-6697**	2.779 Free Length. Outer. OEM # 1821685
	Int		**32-6695**	2.556 Free Length. 1.191 O.D. OEM # 1813104
	Int		**32-6702**	2.500 Free Length. 1.105 O.D. OEM # 1850087
Keeper	Both		**34-4697**	4 Round Beads. OEM # 1874697PE
	Both		**34-6145**	1 Round Bead - Top. OEM # 1440834PE
Lifter	Exh		**36-7257**	Roller. OEM # 1867257
	Int		**36-5642**	Roller. OEM # 1645642
Valve Stem Seal	Both		**38-6506-55**	Metal Clad. Viton. OEM # 1819065
	Exh		**38-2785-55**	Top Hat. Viton. Exh. Valve Brake Only. OEM # 2162785
Injector Component			**87-3147**	O-Ring. OEM # 1629458
			87-6056	Injector Tube, Stainless
			87-6056K	Injector Tube Kit w/ O-Ring, Stainless

ENGINE	YEAR	CYL.	LINE NO.
1.5L 403C.15 6V D Shibauru		L3	**1**
1.8L A4.107, 4.108 8V D		L4	**2**
2.2L 404C.22/T 8V Shibauru D		L4	**3**
2.5L 3.152, D3.152, 3A152, 3AD152 6V D		L3	**4**
2.6L 704.26, 3.0L 704.30 8V D TRB		L4	**5**
3.3L 1103-33T/TA, 1104 T 6V D TRB .		L3	**6**
3.3L 4A203, 4AD203 8V D		L4	**7**
3.5L 4.212, A4.236 4.248 D, G4.236 Gas 8V		L4	**8**
4.0L 1004.40/T 4.401 8V D N.A., TRB		L4	**9**
4.4L 1104C-E44, 1100C 8V N.A., D		L4	**10**
4.4L 1104D-44 1100D Ser.8V D		L4	**11**
5.0L 6.305 12V D		L6	**12**
5.2L 4.318, A4.318 8V D		L4	**13**
5.8L A/AT/ATC/T6.354.1-4, 6.372 D 12V		L6	**14**
6.0L 1006.60/T, 6.601, 1106-E60TA 12V D TRB		L6	**15**
8.8L 540 D		V8	**16**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.5L 403C.15 6V D Shibauru**			**L3** **BORE - 3.30"/77mm**
Valve	Exh		**10-13327**	1.299 Head Dia. OEM # 120176380
	Int		**10-13326**	1.457 Head Dia. OEM # 120166380
Guide	Both		**30-3202**	1.460 OAL. 0.2756 I.D. 0.502 O.D.
Keeper	Both		**34-5556**	1 Round Bead. 0.274 Stem. OEM # 153-5556
Valve Stem Seal	Both		**38-6141-55**	Viton. Metal Clad 0.275 Stem OEM # 1535559, 1535554
LINE 2	**1.8L A4.107, 4.108 8V D**			**L4** **BORE - 3.125"/79.4mm**
Valve Seat Insert	Exh		**20-1312-4**	1.000 I.D. 1-5/16 1.317 Oversize O.D. 1/4 Depth. Machine to Correct Depth
	Int		**20-1562-7**	1-1/4 I.D. 1-9/16 1.567 Oversize O.D. 1/4 Depth. Machine to Correct Depth
Guide	Exh		**30-1956**	2.438 OAL. OEM # 33261723
	Int		**30-8013**	2.250 OAL. OEM # 3313E001, 33261741
Keeper	Both		**34-225**	1 Groove. Heat Treated. OEM # 0230001
LINE 3	**2.2L 404C.22/T 8V Shibauru D**			**L4** **BORE - 3.31" / 84mm**
Valve	Exh		**10-13327**	1.299 Head Dia. Late. OEM # 120176380
	Int		**10-13326**	1.457 Head Dia. Late. OEM # 120166380
Guide	Both		**30-3202**	1.460 OAL. 0.2756 I.D. 0.502 O.D.
Spring	Both		**32-6638**	1.382 Free Length. OEM # 1535558
Keeper	Both		**34-5556**	1 Round Bead. 0.274 Stem. OEM # 153-5556
Valve Stem Seal	Both		**38-6141-55**	Viton. Metal Clad 0.275 Stem OEM # 1535559, 1535554
LINE 4	**2.5L 3.152, D3.152, 3A152, 3AD152 6V D**			**L3** **BORE - 3.60"/91.4mm**
Valve	Exh		**10-873**	1.315 Head Dia. 45 Deg. Magnetic. OEM # 31431271, 31431591
	Int		**10-874**	1.534 Head Dia. 45 Deg. OEM # 31431261, 31431281
Valve Seat Insert	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. Universal. Nickel
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Universal. +5, 10, 15, 20, 30 O/S Avail.
	Exh		**22-1681-1N**	1-13/64 I.D. 1.681 O.D. 5/16 Depth, OEM Replacement. Nickel
	Int		**22-1880-1**	1-13/32 I.D. 1.880 O.D. 7/32 Depth. OEM Replacement
Guide	Exh		**30-1956**	2.438 OAL. 0.3150 I.D. 0.5025 O.D. OEM # 33261723, 732445M1

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 4	**2.5L 3.152, D3.152, 3A152, 3AD152 6V D**			**L3 BORE - 3.60"/91.4mm**
Guide	Int		**30-3100**	2.227 OAL. 0.3148 I.D. 0.5025 O.D. OEM # 33261727, 745533M1
Spring	Both		**32-1068**	1.782 Free Length. Outer. OEM # 0780006
	Both		**32-1069**	1.375 Free Length. Inner. OEM # 780007
Keeper	Both		**34-225**	1 Groove. Heat Treated. OEM # 0230001
Lifter	Both		**36-0012**	Mechanical. OEM # 0860012
Valve Stem Seal	Both		**38-1046-75**	All Teflon.
LINE 5	**2.6L 704.26, 3.0L 704.30 8V D TRB**			**L4 BORE - 3.58"/91mm**
Valve	Exh		**10-13142**	1.465 Head Dia. 0.2736 Stem Dia. 4.185 OAL OEM # 1529857
	Int		**10-13143**	1.735 Head Dia. 0.2747 Stem 4.191 OAL OEM # 1888640
Valve Seat Insert	Exh		**22-1518-1**	1.245T I.D. 1.518 O.D. 0.2450 Depth OEM #
	Int		**22-1782-2**	1.535T I.D. 1.782 O.D. 0.2450 Depth OEM # 1888637
Guide	Both		**30-3105**	1.790 OAL. 0.474 O.D. 0.275 I.D. OEM # 3318A702
Keeper	Both		**34-281**	3 Round Beads. 0.275 Stem Dia.
Valve Stem Seal	Both		**38-6147-55**	Viton. Metal Clad. 7mm Stem. OEM # 2418M508
LINE 6	**3.3L 1103-33T/TA, 1104 T 6V D TRB .**			**L3 BORE - 4.13"/105mm**
Valve	Exh		**10-13138**	1.634 Head Dia. OEM # 3142A151
	Int		**10-13137**	1.823 Head Dia. OEM # 3142H071
Guide	Both		**30-3059**	2.018 OAL. 0.3555 I.D. 0.5135 O.D. OEM # 3313A0123
Keeper	Both		**34-2004**	1 Round Bead. OEM # 3142W004.
Lifter	Both		**36-7014**	Mechanical. OEM # 31434163
Valve Stem Seal	Both		**38-3954-45**	Viton. Top Hat. 0.3248 Stem OEM # 2418M517
LINE 7	**3.3L 4A203, 4AD203 8V D**			**L4 BORE - 3.60"/91.4mm**
Valve	Exh		**10-873**	1.315 Head Dia. Magnetic. OEM # 31431271
	Int		**10-874**	1.534 Head Dia. OEM # 31431261
Valve Seat Insert	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. Universal. Nickel
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Universal. +5, 10, 15, 20, 30 O/S Avail.
	Exh		**22-1681-1N**	1-13/64 I.D. 1.681 O.D. 5/16 Depth, OEM Replacement. Nickel
	Int		**22-1880-1**	1-13/32 I.D. 1.880 O.D. 7/32 Depth. OEM Replacement
Guide	Both		**30-1956**	2.438 OAL. 0.3150 I.D. 0.5025 O.D. OEM # 33261723, 732445M1
	Int		**30-3100**	2.227 OAL. 0.3148 I.D. 0.5025 O.D. OEM # 33261727, 745533M1
Spring	Both		**32-1068**	1.782 Free Length. Outer. OEM # 780006
	Both		**32-1069**	1.375 Free Length. Inner. OEM # 780007
Keeper	Both		**34-225**	1 Groove. Heat Treated. OEM # 0230001
Lifter	Both		**36-0012**	Mechanical. OEM # 0860012
Valve Stem Seal	Both		**38-1046-75**	All Teflon.
LINE 8	**3.5L 4.212, A4.236 4.248 D, G4.236 Gas 8V**			**L4 BORE - 3.875"/98.4mm**
Valve	Exh		**10-1784**	1.472 Head Dia. OEM # 3142A051
	Exh		**10-882**	1.440 Head Dia. OEM # 31431109.
	Int		**10-13135**	1.740 Head Dia. OEM # 3142H002
	Int		**10-883**	1.744 Head Dia. OEM# 31431641.
Valve Seat Insert	Exh		**20-1562-6N**	1-1/4 I.D. 1-9/16 O.D. 7/32 Depth. Universal. Nickel
	Int		**20-1875-19**	1-9/16 I.D. 1-7/8 O.D. 7/32 Depth. Universal

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 8	**3.5L 4.212, A4.236 4.248 D, G4.236 Gas 8V**			**L4 BORE - 3.875"/98.4mm**
Valve Seat Insert	Exh		**22-1681-3**	1-1/4 I.D. 1.681 O.D. 3/8 Depth. OEM Replacement. OEM # 33152139
	Exh		**22-1690-1**	1-1/4 I.D. 1.690 O.D. 3/8 Depth. OEM Replacement
	Int		**22-2020-1**	1-19/32 I.D. 2.018 O.D. 9/32 Depth. OEM Replacement
Guide	Exh		**30-1977**	2.406 OAL. 0.3755 I.D. 0.6265 O.D. OEM # 3343J002
	Int		**30-1976**	2.281 OAL. 0.3755 I.D. 0.6265 O.D. OEM # 3343F002
Spring	Both		**32-793**	1.959 Free Length. Inner From S/N 236UA-19817
	Both		**32-794**	2.590 Free Length. Single Spring To S/N 236UA-19816. Outer From S/N 236UA-19817
Keeper	Both		**34-217P**	1 Round Groove. Heat Treated. OEM # 33173108
Lifter	Both		**36-7014**	Mechanical. OEM # 31434163
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. Machine Guide To 0.562 O.D.
	Both		**38-7117-45**	Viton. Umbrella. OEM # 33817117
LINE 9	**4.0L 1004.40/T 4.401 8V D N.A., TRB**			**L4 BORE - 3.937"/100mm**
Valve	Exh		**10-13219**	1.616 Head Dia. 30 Deg. OEM # 3142D051
	Exh		**10-1784**	1.472 Head Dia. OEM # 3142A051
	Int		**10-13136**	1.693 Head Dia. 30 Deg. OEM # 3142L081
Guide	Exh		**30-1977**	2.406 OAL. 0.3755 I.D. 0.6265 O.D. OEM # 3343J002
	Exh		**30-3060**	2.018 OAL 0.3547 I.D. 0.5527 O.D. OEM # 3318A705
	Int		**30-1976**	2.281 OAL. 0.3755 I.D. 0.6265 O.D. OEM # 3343F002
	Int		**30-3059**	2.018 OAL. 0.3555 I.D. 0.5135 O.D. OEM # 3313A012
Spring	Both		**32-04043**	Inner. 1.630 Free Length. OEM # 31744133
	Both		**32-04044**	Outer. 1.808 Free Length. OEM # 31745122
	Both		**32-4127**	1.847 Free Length. OEM # 3174P409
Keeper	Both		**34-2004**	Use w/ 10-5001, 10-5002S. OEM # 3142W004.
	Both		**34-217P**	1 Round Groove. Heat Treated. OEM # 33173108
Lifter	Both		**36-7014**	Mechanical. OEM # 31434163
Valve Stem Seal	Both		**38-507-45**	Viton. Umbrella. OEM # 2418M507
	Both		**38-7117-45**	Viton. Umbrella. OEM # 33817117
LINE 10	**4.4L 1104C-E44, 1100C 8V N.A., D**			**L4 BORE - 4.13"/105mm**
Valve	Exh		**10-13138**	1.634 Head Dia. 0.3518 Stem 5.086 OAL OEM # 3142A151
	Int		**10-13137**	1.823 Head Dia. 0.3529 Stem 5.086 OAL OEM # 3142H071
Guide	Both		**30-3059**	0.3543 I.D. 0.5140 O.D. 2.017 OAL OEM # 3313A012
Spring	Both		**32-8519**	1.700 Free Length. OEM # 4360519
Keeper	Both		**34-2004**	1 Round Bead. OEM # 3142W004. Use w/ 10-5001, 10-5002S
Lifter	Both		**36-7014**	2.980 OAL 0.7475 O.D. OEM # 31434163
Valve Stem Seal	Exh		**38-3954-45**	Viton. Top Hat. OEM # 2523954
	Int		**38-6438-45**	Viton. Top Hat. 0.3346 Stem OEM # 2418M519
LINE 11	**4.4L 1104D-44 1100D Ser.8V D**			**L4 BORE - 4.13"/105mm**
Valve	Exh		**10-13364**	1.638 Head Dia. OEM # 3142A171
	Int		**10-13363**	1.831 Head Dia. OEM # 3142H101
Guide	Int		**30-3059**	2.018 OAL. 0.3555 I.D. 0.5135 O.D. OEM # 1850882
Keeper	Both		**34-5036**	3 Round Beads
Valve Stem Seal	Both		**38-3954-45**	Viton. Top Hat. 0.3248 Stem OEM # 2418M517
	Int		**38-6438-45**	Viton. Top Hat. 0.3346 Stem OEM # 2526438

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 12	**5.0L 6.305 12V D**			**L6 BORE - 3.60"/91.4mm**
Valve	Exh		**10-873**	1.315 Head Dia. Magnetic. OEM # 31431271
	Int		**10-874**	1.534 Head Dia. OEM # 31431261
Valve Seat Insert	Exh		**20-1437-3N**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth. Universal. Nickel
	Int		**20-1625-1**	1-3/8 I.D. 1-5/8 O.D. 7/32 Depth. Universal. +5, 10, 15, 20, 30 O/S Avail.
	Exh		**22-1681-1N**	1-13/64 I.D. 1.681 O.D. 5/16 Depth, OEM Replacement For Heads w/ Factory Installed Seats
	Int		**22-1880-1**	1-13/32 I.D. 1.880 O.D. 7/32 Depth. OEM Replacement
Guide	Both		**30-1956**	2.438 OAL. OEM # 33261723
Spring	Both		**32-1068**	Outer. OEM # 780006. 1.782 Free Length
	Both		**32-1069**	Inner. OEM # 780007. 1.375 Free Length
Keeper	Both		**34-225**	1 Groove. Heat Treated. OEM # 0230001
Valve Stem Seal	Both		**38-1046-75**	All Teflon.
LINE 13	**5.2L 4.318, A4.318 8V D**			**L4 BORE - 4.50"/114.3mm**
Valve	Exh		**10-2166**	1.594 Head Dia. OEM # 31431671
	Int		**10-2167**	1.845 Head Dia. OEM# 31431154
Guide	Both		**30-7450**	2.650 OAL. OEM # 33432532.
Spring	Both		**32-793**	1.959 Free Length. Inner. OEM # 31744131
	Both		**32-794**	2.590 Free Length. Outer. OEM # 2236132
Keeper	Both		**34-217P**	1 Round Groove. Heat Treated. OEM # 33173108
LINE 14	**5.8L A/AT/ATC/T6.354.1-4, 6.372 D 12V**			**L6 BORE - 3.875"/98.4mm**
Valve	Exh		**10-1784**	1.472 Head Dia. OEM # 3142A051
	Exh		**10-882**	All Exc. Phase IV. 1.440 Head Dia. OEM # 31431881, 31431109.
	Int		**10-883**	All Exc. Phase IV. 1.744 Head Dia. OEM # 31431641.
Valve Seat Insert	Exh		**20-1562-6N**	1-1/4 I.D. 1-9/16 O.D. 7/32 Depth. Universal. Nickel
	Int		**20-1875-19**	1-9/16 I.D. 1-7/8 O.D. 7/32 Depth. Universal
	Exh		**22-1681-3**	1-1/4 I.D. 1.681 O.D. 3/8 Depth. OEM Replacement. OEM # 33152139
	Exh		**22-1690-1**	1-1/4 I.D. 1.690 O.D. 3/8 Depth. OEM Replacement
	Int		**22-2020-1**	1-19/32 I.D. 2.018 O.D. 9/32 Depth. OEM Replacement
Guide	Exh		**30-1977**	2.406 OAL. 0.3755 I.D. 0.6265 O.D. OEM # 3343J002
	Int		**30-1976**	2.281 OAL. 0.3755 I.D. 0.6265 O.D. OEM # 3343F002
Spring	Both		**32-793**	1.959 Free Length. Inner. OEM # 2236131
	Both		**32-794**	2.590 Free Length. Outer. OEM # 2236132
Keeper	Both		**34-217P**	1 Round Groove. Heat Treated. OEM # 33173108
Lifter	Both		**36-7014**	Mechanical. OEM # 31434163
Valve Stem Seal	Both		**38-450-25**	Polyacrylic. Umbrella.
	Both		**38-7117-45**	Viton. Umbrella. OEM # 33817117
LINE 15	**6.0L 1006.60/T, 6.601, 1106-E60TA 12V D TRB**			**L6 BORE - 3.937"/100mm**
Valve	Exh		**10-13219**	1.616 Head Dia. 30 Deg. OEM # 3142D051
	Exh		**10-1784**	1.472 Head Dia. OEM # 3142A051. 1006.60
	Int		**10-13136**	1.693 Head Dia. 30 Deg. OEM # 3142L081
Guide	Exh		**30-1977**	2.406 OAL. 0.3755 I.D. 0.6265 O.D. OEM # 3343J002
	Exh		**30-3060**	2.018 OAL 0.3547 I.D. 0.5527 O.D. OEM # 3318A705
	Int		**30-1976**	2.281 OAL. 0.3755 I.D. 0.6265 O.D. OEM # 3343F002

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 15	**6.0L 1006.60/T, 6.601, 1106-E60TA 12V D TRB**			**L6 BORE - 3.937"/100mm**
Guide	Int		**30-3059**	2.018 OAL. 0.3555 I.D. 0.5135 O.D. OEM # 3313A012
Spring	Both		**32-04043**	Inner. 1.630 Free Length. OEM # 31744133
	Both		**32-04044**	Outer. 1.808 Free Length. OEM # 31745122
	Both		**32-4127**	1.847 Free Length. OEM # 3174P409
Keeper	Both		**34-2004**	1 Round Bead. OEM # 3142W004. Use w/ 10-5001, 10-5002S
	Both		**34-217P**	1 Round Groove. Heat Treated. OEM # 33173108
Lifter	Both		**36-7014**	Mechanical. OEM # 31434163
Valve Stem Seal	Both		**38-7117-45**	Viton. Umbrella. OEM # 33817117
	Int		**38-507-45**	Viton. Umbrella. OEM # 2418M507
LINE 16	**8.8L 540 D**			**V8 BORE - 4.25"/108mm**
Guide	Both		**30-3203**	2.600 OAL

ENGINE	YEAR	CYL.	LINE NO.
1345cc (1.3L) 3P Industrial 8V		L4	**1**
1486cc (1.5L) 5K Forklift 8V		L4	**2**
1490cc (1.5L) 2R Forklift 8V		L4	**3**
1493cc (1.5L) 4P Forklift 8V		L4	**4**
1994cc (2.0L) 5R Forklift 8V		L4	**5**
2237cc (2.2L) 4Y Forklift		L4	**6**
2771cc (2.8L) 5P Forklift 8V		L4	**7**
3576cc (3.6L) H Industrial 12V		L6	**8**
3878 (3.9L) 1F Industrial 12V		L6	**9**
4230cc (4.2L) 2F Industrial 12V		L6	**10**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1345cc (1.3L) 3P Industrial 8V**			**L4** **BORE - 76.6mm/3.02"**
Keeper	Both		**34-811**	1 Square Groove. Heat Treated
LINE 2	**1486cc (1.5L) 5K Forklift 8V**			**L4** **BORE - 80.5mm/3.170"**
Valve	Exh		**10-10308**	1.142 Head Dia. 0.3137 Stem.
	Int		**10-10307**	1.417 Head Dia. 0.3137 Stem.
Valve Seat Insert	Exh		**21-1250-50**	0.965T I.D. 1-1/4 O.D. 1/4 Depth.
Keeper	Both		**34-811**	1 Square Groove. Heat Treated
Valve Stem Seal	Both		**38-967-55**	Viton. Metal Clad.
	Both		**38-982-25**	Polyacrylic. Metal Clad.
LINE 3	**1490cc (1.5L) 2R Forklift 8V**			**L4** **BORE - 78mm/3.071"**
Keeper	Both		**34-811**	1 Square Groove. Heat Treated
LINE 4	**1493cc (1.5L) 4P Forklift 8V**			**L4** **BORE - 76.6mm/3.016"**
Valve Seat Insert	Both		**20-1625-4**	1-5/16 I.D. 1-5/8 O.D. 7/32 Depth
Keeper	Both		**34-811**	1 Square Groove. Heat Treated
LINE 5	**1994cc (2.0L) 5R Forklift 8V**			**L4** **BORE - 88mm/3.40"**
Valve	Exh		**10-10755**	Late w/ 2 Groove. 1.457 Head Dia.
	Int		**10-10754**	Late w/ 2 Groove. 1.691 Head Dia.
Valve Seat Insert	Exh		**20-1562-7**	1-1/4 I.D. 1-9/16 O.D. 1/4 Depth
	Int		**20-1812-5**	1-1/2 I.D. 1-13/16 O.D. 1/4 Depth
Guide	Both		**30-7538**	Early. 2.415 OAL
LINE 6	**2237cc (2.2L) 4Y Forklift**			**L4** **BORE - 81mm/3.189"**
Valve	Exh		**10-10323**	1.417 Head Dia. 0.314 Stem
	Int		**10-10322**	1.575 Head Dia. 0.314 Stem
Valve Seat Insert	Int		**21-1687-55**	1.340 I.D. 1-11/16 O.D. 0.315 Depth
Guide	Int		**30-8201**	1.970 OAL. Incl. Lock Ring
Keeper	Both		**34-5005**	0.314 Stem. Round Bead in Middle.
Lifter	Both		**36-6005**	Hydraulic.
Valve Stem Seal	Both		**38-967-55**	Viton. Metal Clad.
Expansion Plug Kit			**97-132**	Steel Kit. Brass Kit Avail. In Suffix B
LINE 7	**2771cc (2.8L) 5P Forklift 8V**			**L4** **BORE - 93mm/3.66"**
Valve Seat Insert	Exh		**20-1562-7**	1-1/4 I.D. 1-9/16 O.D. 1/4 Depth
	Int		**20-1750-9**	1-3/8 I.D. 1-3/4 O.D. 5/16 Depth

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 8	**3576cc (3.6L) H Industrial 12V**			**L6 BORE - 88mm/3.40"**
Valve Stem Seal	Both		**38-450-15**	Nitrile. Umbrella.
	Both		**38-450-25**	Polyacrylic. Umbrella.
	Both		**38-450-45**	Viton. Umbrella.
LINE 9	**3878 (3.9L) 1F Industrial 12V**			**L6 BORE - 90mm/3.50"**
Valve	Exh		**10-10069**	1.478 Head Dia. 3 Groove
	Int		**10-10070**	1.811 Head Dia. 0.314 Stem. 3 Groove
Valve Seat Insert	Exh		**21-1625-58**	1.280T I.D. 1-5/8 O.D. 0.315 Depth.
Guide	Exh		**30-7529**	2.322 OAL.
	Int		**30-7532**	2.130 OAL
Keeper	Exh		**34-811**	1 Square Groove. Heat Treated
LINE 10	**4230cc (4.2L) 2F Industrial 12V**			**L6 BORE - 94mm/3.70"**
Valve	Exh		**10-10069**	1.478 Head Dia.
	Int		**10-10070**	1.811 Head Dia. 0.314 Stem. 3 Groove
Valve Seat Insert	Exh		**21-1625-58**	1.280T I.D. 1-5/8 O.D. 0.315 Depth.
Guide	Exh		**30-7527**	2.360 OAL
	Int		**30-7528**	2.765 OAL
Expansion Plug Kit			**97-69**	Steel Kit. Brass Kit Avail. In Suffix B

ENGINE	YEAR	CYL.	LINE NO.
10.8L D11 24V D TRB		L6	**1**
12.1L VED12D SOHC 24V D TRB		L6	**2**
12.8L D13 SOHC 24V D TRB		L6	**3**
16.1L D16 24V SOHC D TRB		L6	**4**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**10.8L D11 24V D TRB**			**L6 BORE - 4.84"/123mm**
Valve	Exh		**10-13376S**	1.496 Head Dia. Stellite. OEM # 20564020, 21430918
	Int		**10-13375S**	1.575 Head Dia. Inconel, Stellite. OEM # 20737856
Valve Seat Insert	Exh		**22-1579-1S**	1.210R I.D. 1.5795 O.D. 0.2525 Depth. OEM # 20732758
	Int		**22-1658-1S**	1.300R I.D. 1.6585 O.D. 0.288 Depth. OEM # 20737849
Guide	Both		**30-3157**	3.285 OAL. w/ EGR. May Require Extra Clearance / Reaming. OEM # 1546437, 20904074
Spring	Both		**32-5014**	3.035 Free Length. Single Int. Outer Exh. 24 per Eng. OEM # 3183210, 21310068
	Exh		**32-5013**	2.765 Free Length. Inner For Exh. 12 per Eng. OEM # 3183211
Keeper	Both		**34-619**	3 Round Beads. 0.313 Stem Dia.
Valve Stem Seal	Both		**38-812-45**	Viton. Metal Clad. 0.315 Stem. 0.472 Guide OD
Injector Component			**87-1136K**	Injector Tube, Stainless. OEM # 21401136, 85137065
			87-6487	Injector O-Ring, Viton. OEM # 20536487
			87-8621	Injector Tube, Copper. Must Use Internal Washer. OEM # 21351717, 3183368, 21098621
			87-8621K	Injector Tube Kit, Copper w/ O-Ring 87-6487
LINE 2	**12.1L VED12D SOHC 24V D TRB**			**L6 BORE - 5.16"/131mm**
Valve	Exh		**10-13301S**	1.575 Head Dia. 0.3132 Stem. Inconel. Stellite. OEM # 8148574, 20441945, 20441486
	Exh		**10-3197**	1.409 Head Dia. OEM # 20833936
	Int		**10-13300S**	1.575 Head Dia. 0.3137 Stem. Inconel. Stellite. OEM # 3169490, 20463800
	Int		**10-3196**	1.504 Head Dia. OEM # 20833932
Valve Seat Insert	Exh		**22-1696-2S**	1.295T I.D. 1.696 O.D. 0.316 Depth. OEM # 3169366, 20412798, 21484834
	Int		**22-1696-1S**	1.260T I.D. 1.696 O.D. 0.286 Depth. OEM # 20482579
Guide	Both		**30-3157**	3.285 OAL. w/ EGR. May Require Extra Clearance / Reaming. OEM # 1546437, 20904074
Spring	Both		**32-5014**	3.035 Free Length. Single Int. Outer Exh. 24 per Eng. OEM # 3183210, 21310068
	Exh		**32-5013**	2.765 Free Length. Inner For Exh. 12 per Eng. OEM # 3183211
Keeper	Both		**34-5061**	1 Rd Top Bead. OEM # 1677875
Valve Stem Seal	Both		**38-812-45**	Viton. Metal Clad. 0.315 Stem. 0.472 Guide OD
Injector Component			**87-1136K**	Injector Tube, Stainless. OEM # 21401136, 85137065
			87-6487	Injector O-Ring, Viton. OEM # 20536487, 3165747
			87-8621	Injector Tube, Copper. Must Use Internal Washer. OEM # 21351717, 3183368, 21098621
			87-8621K	Injector Tube Kit, Copper w/ O-Ring 87-6487
LINE 3	**12.8L D13 SOHC 24V D TRB**			**L6 BORE - 5.16" / 131mm**
Valve Kit	Both		**10-VKVOH13C-5**	Kit w/ 24 Valves, 24 Guides, 48 Keepers, 24 Stem Seals, 6 Copper Inj. Tubes w/ O-Ring
	Both		**10-VKVOH13C-6**	Kit w/ 24 Valves, 24 Guides, 48 Keepers, 24 Springs, 24 Stem Seals, 6 Copper Inj. Tubes w/ O-Ring

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 3	**12.8L D13 SOHC 24V D TRB**			**L6 BORE - 5.16" / 131mm**
Valve Kit	Both		**10-VKVOH13S-5**	Kit w/ 24 Valves, 24 Guides, 48 Keepers, 24 Stem Seals, 6 SS Inj. Tubes w/ O-Ring
	Both		**10-VKVOH13S-6**	Kit w/ 24 Valves, 24 Guides, 48 Keepers, 24 Springs, 24 Stem Seals, 6 SS Inj. Tubes w/ O-Ring
Valve	Exh		**10-13378S**	1.575 Head Dia. 3 Groove. 39.5 Deg. OEM # 20768519
	Int		**10-13377S**	1.654 Head Dia. 3 Groove. OEM # 20740798
Valve Seat Insert	Exh		**22-1697-2**	1.300R I.D. 1.6975 O.D. 0.2950 Depth. OEM# 20530103.
	Exh		**22-1697-3**	1.300 I.D. 1.6975 O.D. 0.237 Depth. 30 Deg.
	Int		**22-1776-1S**	1.340R I.D. 1.7765 O.D. 0.2975 Depth. OEM# 20740804
	Int		**22-1776-2S**	1.338 I.D. 1.7765 O.D. 0.238 Depth. 30 Deg. OEM # 21405770
Guide	Both		**30-3157**	3.285 OAL. w/ EGR. May Require Extra Clearance / Reaming. OEM # 1546437, 20904074
Spring	Both		**32-5014**	3.035 Free Length. Single Int. Outer Exh. 24 per Eng. OEM # 3183210, 21310068
	Exh		**32-5013**	2.765 Free Length. Inner For Exh. 12 per Eng. OEM # 3183211
Keeper	Both		**34-619**	3 Round Beads. 0.313 Stem Dia.
Valve Stem Seal	Both		**38-812-45**	Viton. Metal Clad. 0.315 Stem. 0.472 Guide OD
Injector Component			**87-1136K**	Injector Tube, Stainless. OEM # 21401136, 85137065
			87-6487	Injector O-Ring, Viton. OEM # 20536487
			87-8621	Injector Tube, Copper. Must Use Internal Washer. OEM # 21351717, 3183368, 21098621
			87-8621K	Injector Tube Kit, Copper w/ O-Ring 87-6487
LINE 4	**16.1L D16 24V SOHC D TRB**			**L6 BORE - 5.16"/131mm**
Valve	Exh		**10-13435S**	1.813 Head Dia. Inconel, Stellite. OEM # 20513285
	Int		**10-13434S**	1.931 Head Dia. Inconel, Stellite. OEM # 20739057
Valve Seat Insert	Exh		**22-1932-1**	1.555R I.D. 1.932 O.D. 0.3075 Depth. OEM # 20564028
	Int		**22-2051-6**	1.650T I.D. 2.051 O.D. 0.300 Depth. OEM # 20709467
Guide	Both		**30-3207**	3.285 OAL. 0.3932 I.D. 0.6297 O.D. OEM # 20916916, 21067953
Spring	Exh		**32-4296**	2.515 Free Length. Inner. OEM # 23803425
	Exh		**32-8332**	2.742 Free Length. Outer. OEM # 21448332
	Int		**32-6667**	2.683 Free Length. OEM # 21326667, 22527820
Keeper	Both		**34-01177**	1 Round Groove. OEM # 8170995
Valve Stem Seal	Both		**38-6504-55**	Viton. Metal Clad. OEM # 20787121, 20924435
Injector Component			**87-1136K**	Injector Tube w/ O-Ring, Stainless. OEM # 21401136, 85137065
			87-6487	Injector O-Ring, Viton. OEM # 20536487
			87-8621	Injector Tube, Copper. Must Use Internal Washer. OEM # 21351717
			87-8621K	Injector Tube Kit, Copper w/ O-Ring 87-6487

ENGINE	YEAR	CYL.	LINE NO.
1.9L (113 C.I.), 2.2L (133 C.I.) F Ser.		L4	**1**
2.4L (144 C.I.) 180GKB, 180GLB 8V		L4	**2**
2.5L (155 C.I.) VRG155 8V		L4	**3**
3.5L (216 C.I.) 185GL,GLB,GS,KL, 190GS		L6	**4**
4.6L (283 C.I.) VRD283, 5.1L (310 C.I.) VRD/G310		V8	**5**
9.1L (554 C.I.) 140GZB 12V		L6	**6**
13.4L (818 C.I.) F817G 12V		L6	**7**
13.4L (818 C.I.) 145GZB 12V		L6	**8**
19.6L (1196 C.I.) 6WAKB/C, F1197G 12V		L6	**9**
47.4L (2895 C.I.) F2895D, L7042G, P9390G		L6,V12,	**10**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1.9L (113 C.I.), 2.2L (133 C.I.) F Ser.**			**L4** **BORE - 3", 3.25"**
Guide	Both		**30-1458**	2.500 OAL. 0.5018 O.D. OEM # 68009S
LINE 2	**2.4L (144 C.I.) 180GKB, 180GLB 8V**			**L4** **BORE - 3.60"/92.075mm**
Valve	Int		**10-323**	1.313 Head Dia. OEM # 936022
Valve Seat Insert	Exh		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. +3, +30 O/S
	Int		**20-1562-1**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. +5, 10 O/S Avail.
Guide	Exh		**30-1953**	2.313 OAL. OEM # 181109-K
	Int		**30-1947**	2.500 OAL. OEM # 106608-A
Keeper	Both		**34-746**	2 Groove. Heat Treated. OEM # B6466-A
LINE 3	**2.5L (155 C.I.) VRG155 8V**			**L4** **BORE - 3.63"/92.075mm**
Valve Seat Insert	Exh		**20-1500-3**	1-1/4 I.D. 1-1/2 O.D. 1/4 Depth. +3, +30 O/S
	Int		**20-1562-1**	1-5/16 I.D. 1-9/16 O.D. 7/32 Depth. +5, 10 O/S Avail.
Guide	Exh		**30-1953**	2.313 OAL. OEM # 106609-A
	Int		**30-1952**	2.406 OAL. w/ Old Style Seal. OEM # 222209
	Int		**30-7398**	2.406 OAL. w/ New Style Seal. OEM # 224609-C
Keeper	Both		**34-746**	2 Groove. Heat Treated. OEM # B-367-R
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem
LINE 4	**3.5L (216 C.I.) 185GL,GLB,GS,KL, 190GS**			**L6** **BORE - 3.50"/89mm**
Valve	Int		**10-323**	1.313 Head Dia. OEM # 936022
Valve Seat Insert	Int		**20-1437-3**	1-3/16 I.D. 1-7/16 O.D. 7/32 Depth.
Guide	Both		**30-1947**	2.500 OAL. OEM # 106608A
	Both		**30-1952**	2.406 OAL. OEM # 222209
	Exh		**30-1953**	2.313 OAL. OEM # 181109K, 106609A
	Int		**30-1954**	3.188 OAL. OEM # 180009D
Keeper	Both		**34-746**	2 Round Beads. Heat Treated. OEM # 2A4429
LINE 5	**4.6L (283 C.I.) VRD283, 5.1L (310 C.I.) VRD/G310**			**V8** **BORE - 3.875"/98.4mm**
Guide	Exh		**30-1927**	2.625 OAL. OEM # 106620A
	Int		**30-1965**	3.500 OAL. OEM #s 164904A, 223009A
Keeper	Both		**34-613**	1 Groove. Heat Treated.
Valve Stem Seal	Both		**38-1068-70**	Teflon And Rubber. 0.372 Stem
LINE 6	**9.1L (554 C.I.) 140GZB 12V**			**L6** **BORE - 4.50"/114.2mm**
Valve Seat Insert	Exh		**20-1750-0**	1-3/8 I.D. 1-3/4 O.D. 3/8 Depth

COMPONENT	I/E/B	YEARS	PART No.	NOTES		
LINE 7	**13.4L (818 C.I.) F817G 12V**				**L6**	**BORE - 5.375"/136.42mm**
Guide	Exh		**30-1592**	4.313 OAL. OEM # 145109T.		
LINE 8	**13.4L (818 C.I.) 145GZB 12V**				**L6**	**BORE - 5.375"/136.4mm**
Guide	Exh		**30-1592**	4.313 OAL. Also 4-3/4 Bore. OEM # 145109T		
	Int		**30-1593**	5.3438 OAL. Also 4-3/4 Bore. OEM # 145009		
LINE 9	**19.6L (1196 C.I.) 6WAKB/C, F1197G 12V**				**L6**	**BORE - 6.25"/158.75mm**
Guide	Both		**30-7476**	4.325 OAL. New, Machined For Seal, Also 5-3/4" Bore. OEM # 125009J; Non Flanged		
	Exh		**30-7886**	Flanged. 4.500 OAL. OEM # 123109		
LINE 10	**47.4L (2895 C.I.) F2895D, L7042G, P9390G**				**L6,V1**	**BORE - 8.50"/215.9mm**
Guide	Exh		**30-7892**	Late Type, Cut For Seal. Ream Guide In Place. OEM # 204109-C		
	Int		**30-8011**	Late Type, Cut For Seal. Ream Guide In Place. OEM # 204109-E		

ENGINE	YEAR	CYL.	LINE NO.
0.2L (15 C.I.) ACN, 0.3L (18 C.I.) AK/M/N/S 2v		L1	**1**
0.3L (19 C.I.) AD, ADH 2V		L1	**2**
0.4L (23 C.I.) AE, AEH, AEM, AEN 2V		L1	**3**
39,154 C.I. AG/H/HD/M/N/ND, VG/4D, VM4/D, VP4/D		L1,4	**4**
46, 92 C.I. TE, TED, VE4, VE41, VE4D WIS		L2,4	**5**
54 C.I. TF, TFD, TH, THD, TJD WIS		L2	**6**
108 C.I. VF4, VF4D, VH4, VH4D, VH4DM 8V		L4	**7**
2.5L (154 C.I.) V460D, 461D 8V		L4	**8**
2.9L (177 C.I.) V465		L4	**9**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**0.2L (15 C.I.) ACN, 0.3L (18 C.I.) AK/M/N/S 2v**		**L1**	**BORE - 2.625, 2.875"**
Valve Seat Insert	Both		**20-1375-5**	1-1/8 I.D. 1-3/8 O.D. 17/64 Depth.
Guide	Both		**30-1907**	1.813 OAL. OEM # AD47, AD41E
Keeper	Both		**34-614**	Heat Treated. 1 Groove. OEM # AH9
LINE 2	**0.3L (19 C.I.) AD, ADH 2V**		**L1**	**BORE - 2.75"/69.85mm**
Valve	Both		**10-249**	1.313 Head Dia. OEM # AE-75-C
	Exh		**10-598S**	1.250 Head Dia. OEM # AE-75-D
Valve Seat Insert	Both		**20-1375-5**	1-1/8 I.D. 1-3/8 O.D. 17/64 Depth.
Guide	Both		**30-1723**	2.500 OAL. 0.500 O.D. Repair Guide. MG-12154
	Both		**30-1909**	2.064 OAL. OEM # AD43
Keeper	Both		**34-614**	1 Groove. Heat Treated. OEM # AH-9.
LINE 3	**0.4L (23 C.I.) AE, AEH, AEM, AEN 2V**		**L1**	**BORE - 3.00"/76.2mm**
Valve	Both		**10-249**	1.313 Head Dia. OEM # AE-75-C
	Exh		**10-598S**	1.250 Head Dia. OEM # AE-75-D
Valve Seat Insert	Both		**20-1375-5**	1-1/8 I.D. 1-3/8 O.D. 17/64 Depth.
Guide	Both		**30-1723**	2.500 OAL. 0.5018 O.D. Repair Guide. MG-12154
	Both		**30-1909**	2.064 OAL. OEM # AD43
Keeper	Both		**34-614**	1 Groove. Heat Treated. OEM # AH-9.
LINE 4	**39,154 C.I. AG/H/HD/M/N/ND, VG/4D, VM4/D, VP4/D**		**L1,4**	**BORE - 3.50"/88.8mm**
Guide	Both		**30-1458**	2.500 OAL. 0.5018 O.D. When Block Is Worn It May Be Bored For This Guide
	Both		**30-1908**	2.500 OAL. 0.4385 O.D. Length Also Fits AG, AGN, VM4/D, VP4/D
Keeper	Both		**34-614**	Heat Treated. 1 Groove.
LINE 5	**46, 92 C.I. TE, TED, VE4, VE41, VE4D WIS**		**L2,4**	**BORE - 3.00"/76.2mm**
Valve	Both		**10-249**	1.313 Head Dia. OEM # AE-75-C
	Exh		**10-598S**	1.250 Head Dia. OEM # AE-75-D
Valve Seat Insert	Both		**20-1375-5**	1-1/8 I.D. 1-3/8 O.D. 17/64 Depth.
Guide	Both		**30-1723**	2.500 OAL. 0.5018 O.D. Repair Guide. MG-12154
	Both		**30-1907**	1.813 OAL
Keeper	Both		**34-614**	1 Groove. Heat Treated. OEM # AH-9.
LINE 6	**54 C.I. TF, TFD, TH, THD, TJD WIS**		**L2**	**BORE - 3.25"/82.55mm**
Valve	Both		**10-249**	1.313 Head Dia. OEM # AE-75-C
	Exh		**10-598S**	1.250 Head Dia. OEM # AE-75-D
Valve Seat Insert	Both		**20-1375-5**	1-1/8 I.D. 1-3/8 O.D. 17/64 Depth.
Guide	Both		**30-1723**	2.500 OAL. 0.5018 O.D. Repair Guide. MG-12154

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 6	**54 C.I. TF, TFD, TH, THD, TJD WIS**			**L2** **BORE - 3.25"/82.55mm**
Guide	Both		**30-1909**	2.064 OAL. OEM # AD43
Keeper	Both		**34-614**	1 Groove. Heat Treated. OEM # AH-9.
LINE 7	**108 C.I. VF4, VF4D, VH4, VH4D, VH4DM 8V**			**L4** **BORE - 3.25"/82.55mm**
Valve	Both		**10-249**	1.313 Head Dia. OEM # AE-75-C
	Exh		**10-598S**	1.250 Head Dia. OEM # AE-75-D
Valve Seat Insert	Both		**20-1375-5**	1-1/8 I.D. 1-3/8 O.D. 17/64 Depth.
Guide	Both		**30-1723**	2.500 OAL. 0.5018 O.D. Repair Guide. MG-12154
	Both		**30-1909**	2.064 OAL. OEM # AD43
Keeper	Both		**34-614**	1 Groove. Heat Treated. OEM # AH-9.
LINE 8	**2.5L (154 C.I.) V460D, 461D 8V**			**L4** **BORE - 3.50"/88.9mm**
Valve Seat Insert	Exh		**20-1375-5**	1-1/8 I.D. 1-3/8 O.D. 17/64 Depth.
	Int		**20-1625-2**	1-3/8 I.D. 1-5/8 O.D. 1/4 Depth. +10 O/S Avail.
LINE 9	**2.9L (177 C.I.) V465**			**L4** **BORE - 3.75"/95.2mm**
Valve Seat Insert	Exh		**20-1375-5**	1-1/8 I.D. 1-3/8 O.D. 17/64 Depth.
	Int		**20-1625-2**	1-3/8 I.D. 1-5/8 O.D. 1/4 Depth. +10 O/S Avail.

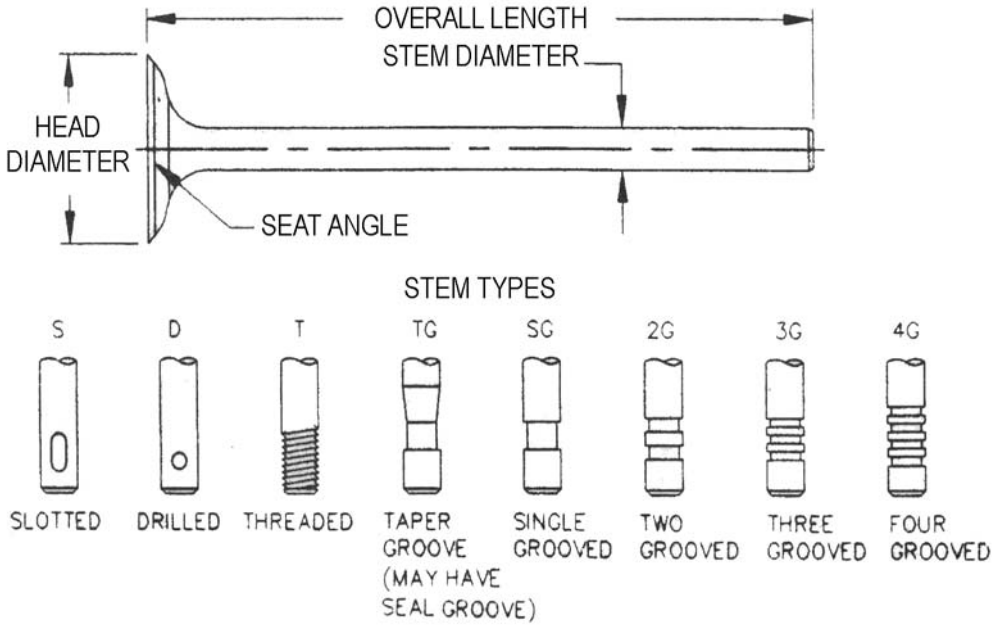
ENGINE	YEAR	CYL.	LINE NO.
1491cc (1.5L) 3TNE/V84 6V D N.A., TRB		L3	**1**
1639cc (1.6L) 3TNE/V88 6V D		L3	**2**
1999cc (2.0L) 4TNE84 8V D TRB		L4	**3**
1999cc (2.0L) 4TNV84T 16V D		L4	**4**
2098cc (2.1L) TK486/V 8V D		L4	**5**
2196cc (2.2L) 4TNEV88 8V D		L4	**6**
2769cc (2.8L) 4TNE94 8V D		L4	**7**
3048cc (3.1L) 4TNV94 16V D		L4	**8**
3310cc (3.3L) 4TNE98 8V D		L4	**9**
3327cc (3.3L) 4TNV98 16V D		L4	**10**
4408cc (4.4L) 4TNE106D 8V D		L4	**11**
4408cc (4.4L) 4TNV106D 16V D		L4	**12**

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 1	**1491cc (1.5L) 3TNE/V84 6V D N.A., TRB**			**L3** **BORE - 84mm/3.307"**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM # 12910011130
	Int		**10-13414**	1.417 Head Dia. OEM # 12900411130
	Int		**10-13415**	1.378 Head Dia. OEM # 12910011100
Guide	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12915011810
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12013011860
Valve Stem Seal	Exh		**38-6152-55**	Metal Clad. Viton. 8mm Stem Dia. OEM # M12140011340
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # 12446011340
LINE 2	**1639cc (1.6L) 3TNE/V88 6V D**			**L3** **BORE - 84mm/3.307"**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM # 12910011130
	Int		**10-13413**	1.496 Head Dia. OEM # 12900511100
	Int		**10-13415**	1.378 Head Dia. OEM # 12910011100
Guide	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12915011810
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12013011860
Valve Stem Seal	Exh		**38-6152-55**	Metal Clad. Viton. 8mm Stem Dia. OEM # M12140011340
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # 12446011340
LINE 3	**1999cc (2.0L) 4TNE84 8V D TRB**			**L4** **BORE - 84mm/3.307"**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM # 12910011130
	Int		**10-13414**	1.417 Head Dia. OEM # 12900411130
	Int		**10-13415**	1.378 Head Dia. OEM # 12910011100
Guide	Both		**30-3188**	1.378 OAL. 0.2365 I.D. 0.3945 O.D. OEM # 11971711800
	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12915011810
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12013011860
Valve Stem Seal	Exh		**38-6152-55**	Metal Clad. Viton. 8mm Stem Dia. OEM # M12140011340
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # 12446011340
LINE 4	**1999cc (2.0L) 4TNV84T 16V D**			**L4** **BORE - 84mm/3.307**
Valve	Exh		**10-13408**	0.965 Head Dia. 0.2343 Stem. 3.947 OAL OEM # 12950811110
	Int		**10-13407**	1.102 Head Dia. 0.2347 Stem. 3.953 OAL OEM # 12950811100
Guide	Both		**30-3188**	1.378 OAL. 0.2365 I.D. 0.3945 O.D. OEM # 11971711800
Valve Stem Seal	Exh		**38-6149-55**	Viton. Metal Clad. 6mm Stem. OEM # M811851
	Int		**38-6148-55**	Viton. Metal Clad. 6mm Stem. OEM # M811850

COMPONENT	I/E/B	YEARS	PART No.	NOTES
LINE 5	**2098cc (2.1L) TK486/V 8V D**			**L4 BORE - 86mm/3.386"**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM # 12910011130
	Int		**10-13414**	1.417 Head Dia. OEM # 12900411130
	Int		**10-13415**	1.378 Head Dia. OEM # 12910011100
Guide	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12915011810
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12013011860
Valve Stem Seal	Exh		**38-6152-55**	Metal Clad. Viton. 8mm Stem Dia. OEM # M12140011340
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # 12446011340
LINE 6	**2196cc (2.2L) 4TNEV88 8V D**			**L4 BORE - 88mm/3.464"**
Valve	Exh		**10-13416**	1.181 Head Dia. OEM # 12910011130
	Int		**10-13413**	1.496 Head Dia. OEM # 12900511100
	Int		**10-13415**	1.378 Head Dia. OEM # 12910011100
Guide	Exh		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12915011810
	Int		**30-3190**	1.930 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12013011860
Valve Stem Seal	Exh		**38-6152-55**	Metal Clad. Viton. 8mm Stem Dia. OEM # M12140011340
	Int		**38-6151-55**	Viton. Metal Clad. 8mm Stem. OEM # 12446011340
LINE 7	**2769cc (2.8L) 4TNE94 8V D**			**L4 BORE - 94mm/3.701"**
Valve	Exh		**10-13412**	1.378 Head Dia. OEM # 12990011110
	Int		**10-13411**	1.614 Head Dia. OEM # 12990011100
Guide	Both		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # 12915011810
LINE 8	**3048cc (3.1L) 4TNV94 16V D**			**L4 BORE - 94mm/3.701"**
Valve	Exh		**10-13406**	1.102 Head Dia. OEM # 12990711110
	Int		**10-13405**	1.299 Head Dia. OEM # 12990711100
Guide	Both		**30-3187**	1.695 OAL. 0.2760 I.D. 0.4735 O.D. OEM # 12990711800
LINE 9	**3310cc (3.3L) 4TNE98 8V D**			**L4 BORE - 98mm/3.858"**
Valve	Exh		**10-13412**	1.378 Head Dia. OEM # 12990011110
	Int		**10-13411**	1.614 Head Dia. OEM # 12990011100
Guide	Both		**30-3191**	1.810 OAL 0.3158 I.D. 0.5128 O.D. OEM # M801228
Valve Stem Seal	Both		**38-6152-55**	Metal Clad. Viton. 8mm Stem Dia. OEM # M12140011340
LINE 10	**3327cc (3.3L) 4TNV98 16V D**			**L4 BORE - 98mm/3.858"**
Valve	Exh		**10-13406**	1.102 Head Dia. 0.2737 Stem 4.045 OAL OEM # 12990711110
	Int		**10-13405**	1.299 Head Dia. 0.2741 Stem 4.045 OAL OEM # 12990711100
Guide	Both		**30-3187**	0.2760 I.D. 0.4735 O.D. 1.695 OAL OEM # 12990711800
LINE 11	**4408cc (4.4L) 4TNE106D 8V D**			**L4 BORE - 106mm/4.173"**
Valve	Exh		**10-13410**	1.535 Head Dia. OEM # 12390011110
	Int		**10-13409**	1.752 Head Dia. OEM # 12390011100
Guide	Both		**30-3189**	1.990 OAL. 0.3545 I.D. 0.5325 O.D. OEM # M11900011810
Valve Stem Seal	Both		**38-6150-55**	Viton. Metal Clad. 9mm Stem. OEM # M12185011150
LINE 12	**4408cc (4.4L) 4TNV106D 16V D**			**L4 BORE - 106mm/4.173"**
Valve	Exh		**10-13404**	1.220 Head Dia. OEM # 12390711110
	Int		**10-13403**	1.437 Head Dia. OEM # 12390711100
Guide	Exh		**30-3186**	1.770 OAL. 0.2760 I.D. 0.4735 O.D. OEM # 1403186
	Int		**30-3185**	1.910 OAL. 0.2760 I.D. 0.4735 O.D. OEM # 12390711800

MANUFACTURER ABBREVIATIONS FOR NUMERICAL LISTINGS

Engine Manufacturer	Abbr.	Engine Manufacturer	Abbr.
Allis-Chalmers	ALL	John Deere	JDR
Case	CAS	Komatsu	KOM
Caterpillar	CAT	Kubota	KUB
Chrysler Industrial	CHI	Lister-Petter	LIS
Continental	CON	Mack	MAC
Cummins	CUM	Mazda Industrial	MAI
Detroit Diesel	DDA	Mercedes Benz Truck	MBT
Deutz	DEU	Minneapolis, Oliver	MIN
Ford Diesel and Industrial	FDI	Mitsubishi Diesel and Industrial	MDI
Ford Tractor	FTA	Nissan Industrial	NII
GM Diesel and Industrial	GDI	Perkins	PER
Hercules	HER	Toyota Industrial	TOI
Hino	HIN	Volvo Heavy Duty	VOH
I.H.C. Tractors / Power Units	IHC	Waukesha	WAU
International / Navistar Truck	IHN	Wisconsin	WIS
Isuzu Diesel and Industrial	IDI		



VALVE NUMERICAL LISTING

QC #	Head Dia.	Stem Dia.	Overall Length	Tip To Groove	Seat Angle	Stem Type	Chrome / Nitride Stem	Wafer / Stellite Tip	Application / Line Number
10-13460	1.610	0.3898	6.679	0.3800	30	SG	☑	☐	
10-13463	1.457	0.3130	5.530	0.4173	29.5	1G	☐	☐	
10-13464	1.456	0.3120	5.520	0.4173	45	1G	☐	☐	
10-13469	1.299	0.2738	4.976	0.4902	44.5	SG	☑	☐	
10-13470	1.220	0.2737	4.967	0.4902	44.5	SG	☑	☐	
10-13471	1.752	0.3789	7.677	0.5590	20	1G	☐	☐	
10-13473	1.672	0.3789	7.677	0.5590	20	1G	☐	☐	
10-1586+15	1.850	0.3870	6.178	0.3248	30	SG	☑	☐	
10-154	1.313	0.3412	4.906	0.4220	45	SG	☐	☐	ALL 1,2,3
10-155	1.438	0.3412	4.906	0.3591	45	SG	☐	☐	ALL 1,2,3
10-159	1.594	0.4340	6.700	0.4840	45	2G	☐	☐	MIN 6,7,9
10-160	1.718	0.4340	6.670	0.4840	45	2G	☐	☐	MIN 6,7,8,9

VALVE NUMERICAL LISTING

QC #	Head Dia.	Stem Dia.	Overall Length	Tip To Groove	Seat Angle	Stem Type	Chrome / Nitride Stem	Wafer / Stellite Tip	Application / Line Number
10-168	1.500	0.3715	5.156	0.4220	45	SG	☐	☐	ALL 7
10-169	1.688	0.3715	5.161	0.4220	45	2G	☐	☐	ALL 7
10-170	1.203	0.3381	5.174	0.4530	45	D	☐	☐	CAS 1 CON 6,9,15
10-185	1.407	0.3405	4.905	0.3031	45	2G	☐	☐	CHI 4,56,63
10-193	1.500	0.3410	5.363	0.2430	45	2G	☐	☐	IHC 5
10-203	1.656	0.3715	5.844	0.2500	45	2G	☐	☐	IHC 14,16
10-204	1.812	0.3715	5.848	0.2500	45	2G	☐	☐	IHC 14,16
10-205	1.375	0.3410	5.359	0.2430	45	2G	☐	☐	IHC 5
10-207	1.812	0.3715	5.515	0.2500	44	2G	☐	☐	IHC 14
10-210	1.328	0.339	5.198	0.4150	44	SG	☐	☐	CAS 1 CON 12,15,16 MAC 1
10-211	1.520	0.3406	5.177	0.4215	30	SG	☐	☐	CON 16
10-212	1.510	0.3410	4.819	0.2565	45	SG	☐	☐	FTA 1
10-220	1.281	0.3410	4.807	0.2565	45	SG	☐	☐	FTA 1
10-249	1.313	0.3085	4.771	0.2449	45	SG	☐	☐	WIS 2,3,5,6,7
10-270	1.283	0.3410	4.700	0.4025	45	SG	☐	☐	FTA 1
10-283	1.468	0.3410	4.937	0.3120	45	SG	☐	☐	MIN 3
10-312	1.156	0.3410	4.942	0.2059	45	SG	☐	☐	IHC 2,3
10-313	1.342	0.3410	4.941	0.2059	45	2G	☐	☐	IHC 2,3
10-318	2.028	0.4365	7.788	0.5450	44.	TG	☐	☐	CAT 15,22
10-319	1.840	0.4365	7.781	0.5390	44	TG	☐	☐	CAT 15,22
10-323	1.313	0.3725	5.156	0.3150	44	2G	☐	☐	MIN 2 WAU 2,4
10-326S	1.745	0.4025	7.058	0.4010	30	2G	☐	☐	CUM 21,28 KOM 9,11
10-327	1.584	0.3421	6.443	0.3583	30	SG	☐	☐	DDA 4
10-343	1.278	0.3146	3.977	0.2660	30	D	☐	☐	CON 7
10-348	1.510	0.3410	4.978	0.2020	45	TG	☐	☐	FDI 1,2 FTA 2,5
10-349	1.531	0.3405	4.845	0.2500	45	2G	☐	☐	CHI 4
10-373	1.780	0.3421	5.110	0.2000	45	SG	☐	☐	FDI 5
10-375	1.510	0.3418	5.089	0.2000	45	SG	☐	☐	FDI 5,9
10-376	1.647	0.3420	5.090	0.2000	45	SG	☐	☐	FDI 1,2,9 FTA 2,5
10-411	1.584	0.3420	6.444	0.3585	30	SG	☐	☐	DDA 4
10-428	1.812	0.3715	6.083	0.2485	45	2G	☐	☐	IHC 16,17,19
10-486	1.140	0.3128	3.989	0.2000	44	SG	☐	☐	CON 7
10-489	1.015	0.3128	4.077	0.2000	44	SG	☐	☐	CON 2,4,5
10-494	1.925	0.3421	5.110	0.2000	44	SG	☐	☐	FDI 9
10-504	1.500	0.3410	5.280	0.2060	44	2G	☐	☐	IHC 3,4
10-514	1.844	0.3725	4.599	0.2130	45	2G	☐	☐	CHI 8
10-515S	1.310	0.3405	5.983	0.3455	30	2G	☐	☐	CUM 8,12
10-518	1.563	0.3715	4.539	0.0989	45	4G	☐	☐	CHI 8
10-520	1.600	0.3725	4.889	0.2235	45	4G	☐	☐	CHI 12
10-548	2.080	0.3725	4.869	0.3365	45	2G	☐	☐	CHI 12,13
10-549	1.406	0.3720	4.892	0.0875	44	4G	☐	☐	IHC 11
10-559S	1.609	0.3720	5.473	0.5181	45	2G	☐	☐	IHC 22 IHN 2
10-560	1.969	0.3725	5.223	0.2840	45	2G	☐	☐	IHC 22 IHN 2
10-560+15	1.969	0.3875	5.223	0.2840	45	2G	☐	☐	IHC 22, IHN 2
10-567	1.620	0.3725	4.774	0.3365	45	2G	☐	☐	CHI 2
10-574S	2.282	0.4955	9.266	0.6790	44	TG	☐	☐	CAT 29
10-576	1.500	0.4335	5.690	0.3630	45	2G	☑	☐	CHI 10,11
10-577	1.880	0.3725	5.668	0.2260	45	4G	☐	☐	CHI 10,11
10-592	1.300	0.3720	6.063	0.2772	45	SG	☐	☐	IHC 7,12,20 IHN 13
10-593	1.652	0.3720	6.063	0.2772	45	SG	☐	☐	IHC 7,12,20 IHN 13
10-597	1.328	0.341	4.330		30	SG	☐	☐	CON 10
10-598S	1.250	0.3075	4.771	0.2450	45	SG	☐	☐	WIS 2,3,5,6,7
10-601	1.781	0.3720	5.072	0.2772	30	2G	☐	☐	IHC 6,8,9,10,15 IHN 9
10-602S	1.870	0.4505	7.063	0.4010	30	2G	☐	☐	CAS 25 CUM 23,29 KOM 12
10-603	1.870	0.4505	7.063	0.4010	30	2G	☐	☐	CAS 25 CUM 23 KOM 12
10-626	1.687	0.3710	5.160	0.4220	30	SG	☐	☐	ALL 7
10-657	1.690	0.3415	4.777	0.3840	30	2G	☐	☐	JDR 5,10
10-658	1.500	0.3720	5.731	0.3280	44	2G	☐	☐	JDR 15
10-660	1.590	0.3720	6.248	0.3282	45	2G	☐	☑	JDR 19
10-663	1.805	0.3720	5.741	0.3450	30	2G	☐	☐	JDR 3
10-690	1.403	0.3404	6.352	0.3130	44	2G	☑	☐	CAS 10
10-691	1.604	0.3414	6.352	0.3130	45	2G	☑	☐	CAS 10
10-702	1.870	0.4505	6.605	0.3976	30	2G	☐	☐	CUM 17,22

VALVE NUMERICAL LISTING

QC #	Head Dia.	Stem Dia.	Overall Length	Tip To Groove	Seat Angle	Stem Type	Chrome / Nitride Stem	Wafer / Stellite Tip	Application / Line Number
10-703	1.870	0.4505	6.605	0.3970	30	2G	☐	☐	CUM 17,22
10-751S	2.350	0.4955	9.390	0.3930	29	TG	☐	☐	CAT 36
10-752S	2.505	0.4955	9.390	0.3945	29	TG	☐	☐	CAT 36
10-755	1.895	0.3717	6.563	0.2730	29	2G	☐	☐	CAT 14,21
10-758	1.400	0.3103	6.408	0.3583	30	SG	☐	☐	DDA 1
10-759	1.090	0.2484	5.552	0.3100	30	SG	☐	☐	DDA 2
10-810	1.516	0.3410	5.157	0.4528	30	D	☐	☐	CAS 1 CON 6,9,11,15,16 MAC 1
10-852S	2.343	0.4955	9.297	0.6590	44	TG	☐	☐	CAT 29
10-861	1.375	0.3410	4.937	0.3120	46	SG	☐	☐	MIN 3
10-873	1.315	0.3115	4.499	0.1800	45	SG	☐	☐	PER 4,7,12
10-874	1.534	0.3115	4.500	0.1803	45	SG	☐	☐	PER 4,7,12
10-882	1.440	0.3725	4.855	0.2028	45	SG	☐	☑	ALL 8 PER 8,14
10-883	1.744	0.3730	4.829	0.1930	45	SG	☐	☐	ALL 8 PER 8,14
10-887	1.513	0.3715	5.446	0.2660	45	2G	☐	☐	MIN 6
10-917	1.505	0.4343	5.373	0.3225	44	2G	☐	☐	FDI 13,17,22
10-917+3	1.505	0.4373	5.373	0.3225	44	2G	☐	☐	FDI 13,17,22
10-917+15	1.505	0.4358	5.373	0.3225	44	2G	☐	☐	FDI 13,17,22
10-917+30	1.505	0.4403	5.373	0.3225	44	2G	☐	☐	FDI 13,17,22
10-921	1.375	0.3720	6.060	0.2770	45	SG	☐	☐	IHC 12,20,21 IHN 13
10-922	1.679	0.3720	6.035	0.2772	45	SG	☐	☐	IHC 12,20,21 IHN 13
10-923	1.625	0.4350	6.238	0.2984	45	2G	☐	☐	IHC 27,29 IHN 25
10-924	1.940	0.4350	6.150	0.2984	45	2G	☐	☐	IHC 27,29 IHN 25
10-938	1.780	0.3725	4.979	0.3365	45	2G	☐	☐	CHI 8
10-938+15	1.780	0.3875	4.979	0.3365	45	2G	☐	☐	CHI 8
10-938+30	1.780	0.4025	4.979	0.3365	45	2G	☐	☐	
10-949	1.753	0.3715	5.393	0.3030	44	SG	☐	☐	FDI 11,12,22
10-963	1.781	0.3420	4.810	0.2402	45	SG	☐	☐	FDI 6,10
10-963+3	1.781	0.3450	4.810	0.2402	45	SG	☐	☐	FDI 6,10
10-963+15	1.781	0.3570	4.810	0.2402	45	SG	☐	☐	FDI 6,10
10-963+30	1.781	0.3720	4.810	0.2402	45	SG	☐	☐	FDI 6,10
10-965S	1.560	0.3420	4.810	0.2453	44	SG	☐	☐	FDI 6,10
10-965S+15	1.560	0.3570	4.810	0.2453	44	2G	☐	☐	FDI 6,10
10-990	1.500	0.3428	4.942	0.3430	45	SG	☐	☐	ALL 5
10-1017S	1.500	0.4335	5.690	0.3630	45	2G	☑	☐	CHI 10,11
10-1017S+5	1.500	0.4385	5.690	0.3630	45	2G	☑	☐	CHI 10,11
10-1018	1.090	0.2484	5.556	0.3100	30	SG	☐	☐	DDA 2
10-1036S	2.245	0.4970	6.864	0.2660	30	SG	☑	☐	MAC 5,6,9
10-1037	1.889	0.4960	6.864	0.2660	30	SG	☐	☐	MAC 5,6,9,12
10-1042	1.480	0.3095	5.356	0.3663	30	SG	☐	☐	ALL 6
10-1057	1.753	0.3714	5.393	0.4730	44	SG	☑	☐	
10-1057S	1.753	0.3714	5.393	0.4730	44	SG	☑	☐	FDI 12,16
10-1073	1.438	0.3425	4.952	0.3430	45	SG	☐	☐	ALL 5
10-1075S	1.516	0.3705	5.053	0.2770	30	SG	☐	☐	IHC 7,9,10,11,16
10-1107S	2.065	0.3720	5.230	0.2201	45	SG	☑	☐	GDI 9
10-1120	1.780	0.3420	4.810	0.2402	45	SG	☑	☐	FDI 6,9
10-1120+3	1.780	0.3450	4.810	0.2402	45	SG	☑	☐	FDI 6,9
10-1120+15	1.780	0.3570	4.810	0.2402	45	SG	☑	☐	FDI 6,9
10-1120+30	1.780	0.3720	4.810	0.2402	45	SG	☑	☐	FDI 6,9
10-1133S	1.734	0.4145	5.479	0.5181	45	2G	☑	☑	IHC 29 IHN 3,18
10-1133S+3	1.734	0.4175	5.479	0.5181	45	2G	☑	☑	IHC 29 IHN 3,18
10-1145S	1.646	0.3717	5.997	0.3160	44	2G	☐	☐	CAT 25
10-1146S	1.771	0.3717	5.997	0.3160	44	2G	☐	☐	CAT 25
10-1147	1.203	0.3381	5.190	0.2882	45	SG	☐	☐	CON 7,16
10-1148	1.516	0.3409	5.167	0.2882	30	SG	☐	☐	CON 7,16
10-1156	1.740	0.3722	4.885	0.2235	45	4G	☑	☑	CHI 13
10-1164	2.190	0.3720	5.225	0.2201	45	SG	☑	☐	GDI 11,13
10-1192SP	1.600	0.371	4.925	0.525	45	SG	☑	☐	GDI 3,6
10-1193SP	2.020	0.371	4.9133	0.525	45	SG	☑	☐	GDI 3,6
10-1203	1.896	0.3717	5.469	0.2770	29	2G	☐	☐	CAT 19,27
10-1204	2.020	0.3716	5.510	0.3080	29	2G	☐	☐	CAT 19,27
10-1205S	1.896	0.3717	5.469	0.2772	29	2G	☐	☐	CAT 19,27
10-1228	1.605	0.3788	5.565	0.3300	30	SG	☐	☐	CUM 9,14
10-1233	1.575	0.3720	5.157	0.3386	44	2G	☑	☐	JDR 12,16,23

VALVE NUMERICAL LISTING

QC #	Head Dia.	Stem Dia.	Overall Length	Tip To Groove	Seat Angle	Stem Type	Chrome / Nitride Stem	Wafer / Stellite Tip	Application / Line Number
10-1234	1.772	0.3720	5.157	0.3385	44	SG	☑	☐	JDR 12,16,23
10-1235S	1.660	0.3716	5.367	0.2200	46	SG	☑	☐	GDI 11
10-1257	1.680	0.3720	4.930	0.2551	44	SG	☐	☑	IHN 21
10-1258	2.025	0.3720	4.899	0.1825	29	4G	☐	☐	IHN 21
10-1258+15	2.025	0.3870	4.899	0.1825	29	4G	☐	☐	IHN 21
10-1260	1.787	0.3720	4.899	0.1825	29	4G	☐	☐	IHC 11 IHN 6,8
10-1260+3	1.787	0.3750	4.899	0.1825	29	4G	☐	☐	IHC 11 IHN 6,8
10-1260+15	1.787	0.3870	4.899	0.1825	29	4G	☐	☐	IHC 11 IHN 6,8
10-1260+30	1.787	0.4020	4.899	0.1825	29	4G	☐	☐	IHC 11 IHN 6,8
10-1261S	1.720	0.3716	5.355	0.2201	45	SG	☐	☑	GDI 11
10-1265	1.360	0.3715	4.796	0.2235	43	4G	☑	☐	CHI 2
10-1265+5	1.360	0.3765	4.796	0.2235	43	4G	☑	☐	CHI 2
10-1265+30	1.360	0.4015	4.796	0.2235	43	4G	☑	☐	CHI 2
10-1266	1.390	0.3101	4.260	0.1902	45	SG	☑	☐	FDI 4
10-1266+3	1.390	0.3131	4.260	0.1902	45	SG	☑	☐	FDI 4
10-1266+15	1.390	0.3251	4.260	0.1902	45	SG	☑	☐	FDI 4
10-1266+30	1.390	0.3401	4.260	0.1902	45	SG	☑	☐	FDI 4
10-1268	1.651	0.3103	4.260	0.1902	44	SG	☑	☐	FDI 4
10-1268+3	1.651	0.3133	4.260	0.1902	44	SG	☑	☐	FDI 4
10-1268+30	1.651	0.3403	4.260	0.1902	44	SG	☑	☐	FDI 4
10-1271	1.654	0.3419	4.983	0.4000	45	SG	☑	☑	FDI 24
10-1271+3	1.654	0.3449	4.983	0.4000	45	SG	☑	☑	FDI 24
10-1271+15	1.654	0.3569	4.983	0.4000	45	SG	☑	☑	FDI 24
10-1272	2.083	0.3419	5.198	0.3398	45	SG	☑	☐	FDI 24
10-1272+3	2.083	0.3449	5.198	0.3398	45	SG	☑	☐	FDI 24
10-1272+15	2.083	0.3569	5.198	0.3398	45	SG	☑	☐	FDI 24
10-1288	1.715	0.3720	6.227	0.3250	44	2G	☑	☐	JDR 20,26
10-1289	1.902	0.3720	6.245	0.3250	44	2G	☑	☐	JDR 20,26
10-1294S	1.500	0.3718	4.923	0.2890	45	2G	☑	☑	GDI 3,6
10-1314S	2.020	0.3717	5.510	0.3079	29	2G	☐	☐	CAT 19,27
10-1325	1.406	0.3721	4.892	0.1825	44	4G	☑	☑	IHC 11 IHN 6,8
10-1325+3	1.406	0.3751	4.892	0.1825	44	4G	☑	☑	IHC 11 IHN 6,8
10-1325+15	1.406	0.3871	4.892	0.1825	44	4G	☑	☑	IHC 11 IHN 6,8
10-1325+30	1.406	0.4021	4.892	0.1825	44	4G	☑	☑	IHC 11 IHN 6,8
10-1329	1.500	0.3715	5.003	0.2235	43	4G	☑	☐	CHI 8
10-1329+5	1.500	0.3769	5.003	0.2235	43	4G	☑	☐	CHI 8
10-1329+15	1.500	0.3865	5.003	0.2235	43	4G	☑	☐	CHI 8
10-1329+30	1.500	0.4019	5.003	0.2235	43	4G	☑	☐	CHI 8
10-1332	1.508	0.3704	5.373	0.3030	44	SG	☑	☐	FDI 12
10-1332+3	1.508	0.3734	5.373	0.3030	44	SG	☑	☐	FDI 12
10-1332+15	1.508	0.3854	5.373	0.3030	44	SG	☑	☐	FDI 12
10-1336S	1.902	0.3720	6.148	0.3250	44	2G	☑	☐	JDR 20,26
10-1350S	1.370	0.3100	5.800	0.1890	44	SG	☐	☐	CAT 26
10-1351S	1.430	0.3100	5.800	0.1890	44	SG	☐	☐	CAT 26
10-1357	1.751	0.3103	4.260	0.1902	45	SG	☑	☐	FDI 4
10-1357+3	1.751	0.3133	4.260	0.1902	45	SG	☑	☐	FDI 4
10-1357+15	1.751	0.3253	4.260	0.1902	45	SG	☑	☐	FDI 4
10-1357+30	1.751	0.3403	4.260	0.1902	45	SG	☑	☐	FDI 4
10-1358	1.560	0.3419	4.810	0.2449	45	SG	☑	☑	FDI 6,10
10-1358+3	1.560	0.3449	4.810	0.2449	45	SG	☑	☑	FDI 6,10
10-1358+15	1.560	0.3569	4.810	0.2449	45	SG	☑	☑	FDI 6,10
10-1358+30	1.560	0.3719	4.810	0.2449	45	SG	☑	☑	FDI 6,10
10-1366	1.380	0.3104	5.528	0.3100	30	SG	☐	☐	DDA 12
10-1366K	1.380	0.3104	5.528				☐	☐	DDA 12
10-1368S	1.508	0.3419	4.983	0.4000	44	SG	☑	☑	FDI 24
10-1375	1.715	0.3720	6.133	0.3250	44	SG	☑	☐	JDR 20,26
10-1377	1.715	0.3720	6.208	0.3250	29	SG	☑	☐	JDR 27
10-1378	1.804	0.3715	5.693	0.3217	45	2G	☐	☐	CAT 13
10-1379	2.094	0.3725	5.698	0.3220	30	2G	☐	☐	CAT 13
10-1403	1.715	0.3720	6.192	0.3200	29	2G	☑	☐	JDR 27
10-1404	1.750	0.3720	6.128	0.3200	29	2G	☑	☐	JDR 27
10-1406	1.875	0.4340	6.569	0.3500	44	SG	☑	☐	JDR 31
10-1415S	2.245	0.4970	6.864	0.2913	30	SG	☑	☐	MAC 3,5,6,7

VALVE NUMERICAL LISTING

QC #	Head Dia.	Stem Dia.	Overall Length	Tip To Groove	Seat Angle	Stem Type	Chrome / Nitride Stem	Wafer / Stellite Tip	Application / Line Number
10-1420S	1.605	0.3788	5.565	0.2433	30	SG	☐	☐	CUM 9,14
10-1422	1.600	0.3721	5.803	0.2252	45	SG	☑	☑	IHC 30,32 IHN 30
10-1422S	1.600	0.3721	5.803	0.2252	45	SG	☑	☑	IHC 30,32 IHN 30
10-1423	1.970	0.3721	5.806	0.2248	30	SG	☑	☑	IHC 30,32 IHN 30
10-1429S	1.180	0.3104	5.529	0.3100	30	SG	☐	☐	DDA 6
10-1432	2.054	0.3725	5.467	0.4831	44	SG	☐	☐	IHN 23
10-1441	1.406	0.3720	4.892	0.2453	44	SG	☑	☑	IHC 11 IHN 6
10-1441+15	1.406	0.3870	4.892	0.2453	44	SG	☑	☑	IHC 11 IHN 6
10-1442	1.787	0.3720	4.899	0.2453	29	SG	☐	☐	IHC 11 IHN 6
10-1442+15	1.787	0.3870	4.899	0.2453	29	SG	☐	☐	IHC 11 IHN 6
10-1446	1.889	0.4955	6.864	0.2920	30	SG	☑	☐	MAC 3,5,6,7,9
10-1455	1.665	0.3413	5.932	0.2591	45	SG	☐	☐	DDA 7
10-1456	1.811	0.3413	5.932	0.2591	30	SG	☐	☐	DDA 7
10-1458S	2.282	0.3717	9.266	0.7900	45	2G	☐	☐	CAT 29
10-1459S	2.343	0.3717	9.297	0.7700	45	2G	☐	☐	CAT 29
10-1460S	2.350	0.3717	9.391	0.5045	30	2G	☐	☐	CAT 36
10-1461S	2.505	0.3717	9.390	0.5045	30	2G	☐	☐	CAT 36
10-1462S	1.771	0.3717	7.140	0.4902	29	2G	☐	☐	CAT 30,31
10-1468S	1.646	0.3717	7.140	0.4900	44	2G	☐	☐	CAT 30,31
10-1471S	1.821	0.3720	5.167	0.3385	30	2G	☑	☐	JDR 16,23
10-1476S	2.350	0.3717	9.392	0.5045	30	2G	☐	☐	CAT 36
10-1482S	1.496	0.3718	5.108	0.2760	45	2G	☑	☐	GDI 7
10-1483S	1.653	0.3719	5.108	0.2750	45	2G	☑	☐	GDI 7
10-1484	1.811	0.3413	5.108	0.2752	45	2G	☑	☐	GDI 7,8
10-1489S	1.896	0.3717	5.308	0.2772	30	2G	☐	☐	CAT 19, 27
10-1490S	2.020	0.3717	5.371	0.3079	30	2G	☐	☐	CAT 19
10-1497S	1.804	0.3715	5.683	0.3217	45	2G	☐	☐	CAT 13
10-1498S	2.205	0.3717	8.622	0.6910	30	2G	☐	☐	CAT 35
10-1500	1.180	0.3104	5.529	0.3100	30	SG	☐	☐	DDA 6
10-1504S	1.560	0.3420	4.750	0.2898	44	SG	☑	☑	FDI 10
10-1512	2.000	0.4025	6.428	0.2500	45	2G	☑	☐	CAS 18
10-1518	1.968	0.3413	5.104	0.2760	45	2G	☑	☐	GDI 7
10-1519	1.455	0.3721	5.640	0.1840	45	SG	☐	☐	IHC 24 IHN 15
10-1520	1.710	0.3721	5.689	0.2252	30	SG	☐	☐	IHC 24 IHN 15
10-1523S	1.444	0.3708	5.997	0.4010	30	SG	☐	☐	ALL 9
10-1524	1.620	0.3718	5.996	0.4008	29	SG	☐	☐	ALL 9
10-1525S	1.651	0.3708	6.018	0.4010	29	SG	☐	☐	ALL 13
10-1531	1.673	0.3789	6.940	0.4122	30	SG	☑	☐	CUM 18,25
10-1532	1.673	0.3789	6.945	0.4122	30	SG	☐	☐	CUM 18,25
10-1533S	2.220	0.4948	7.550	0.4600	30	SG	☐	☐	CUM 26
10-1534	2.220	0.4950	7.545	0.4600	30	SG	☐	☐	CUM 26
10-1542	1.595	0.3720	5.677	0.2469	37	SG	☑	☑	FDI 21,23 IHN 26,27
10-1543	1.877	0.3719	5.687	0.2740	30	SG	☑	☑	FDI 21,23 IHN 26,27
10-1547	1.654	0.3421	4.984	0.4000	45	SG	☑	☐	FDI 24
10-1548	1.976	0.3419	5.197	0.3398	45	SG	☑	☐	FDI 24
10-1548S	1.976	0.3419	5.197	0.3398	45	SG	☑	☑	FDI 24
10-1548S+3	1.976	0.3449	5.197	0.3398	45	SG	☑	☑	FDI 24
10-1566	1.559	0.3430	8.498	0.6171	30	SG	☑	☐	DDA 8
10-1567	1.732	0.3435	8.496	0.5945	30	SG	☑	☐	DDA 8
10-1570	1.573	0.3715	6.872	0.4095	30	SG	☑	☐	MAC 4
10-1571S	1.694	0.3725	6.955	0.4095	30	SG	☑	☐	MAC 4
10-1574S	1.455	0.3713	5.678	0.2252	45	SG	☐	☑	IHN 15
10-1576	1.896	0.3717	5.308	0.2772	30	2G	☐	☐	CAT 19
10-1578S	1.720	0.3716	5.355	0.2200	45	SG	☑	☐	GDI 11
10-1578SP	1.720	0.3716	5.355	0.220	45	SG	☑	☐	GDI 11
10-1579S	1.575	0.3150	6.961	0.2830	45	SG	☐	☐	CAT 10,17
10-1580	1.850	0.3150	6.976	0.2830	30	SG	☐	☐	CAT 10,17
10-1581S	1.654	0.3717	6.850	0.6330	45	2G	☐	☐	CAT 25
10-1582	1.772	0.3717	6.850	0.5720	30	2G	☐	☐	CAT 25
10-1582S	1.772	0.3717	6.850	0.5720	30	2G	☐	☐	CAT 25
10-1584S	2.205	0.3717	8.622	0.6910	20	2G	☑	☐	CAT 35
10-1586	1.850	0.3720	6.178	0.3248	30	SG	☑	☐	JDR 30
10-1586+3	1.850	0.3750	6.178	0.3248	30	SG	☑	☐	JDR 30

VALVE NUMERICAL LISTING

QC #	Head Dia.	Stem Dia.	Overall Length	Tip To Groove	Seat Angle	Stem Type	Chrome / Nitride Stem	Wafer / Stellite Tip	Application / Line Number
10-1587	2.008	0.3730	6.060	0.3591	30	SG	☑	☐	JDR 30
10-1588	1.673	0.3095	5.257	0.2567	30	SG	☑	☑	JDR 13,17,25
10-1589	1.835	0.3100	5.278	0.2567	30	SG	☑	☐	JDR 13,17,25
10-1590S	2.031	0.4342	6.661	0.3750	20	SG	☑	☐	JDR 35
10-1632S	1.646	0.3717	7.140	0.4900	20	2G	☑	☐	CAT 30
10-1649	1.924	0.3728	6.0245	0.7030	45	2G	☑	☐	IHN 36
10-1650S	1.750	0.4025	6.428	0.2500	45	2G	☑	☐	CAS 18
10-1654	1.805	0.3714	5.743	0.2449	45	SG	☐	☐	FTA 4,7,8,9,12,14,16
10-1656S	1.745	0.4025	7.109	0.4010	15	2G	☑	☐	CUM 21
10-1658S	1.673	0.3789	6.940	0.4122	30	SG	☑	☐	CUM 18
10-1659S	1.870	0.3789	7.726	0.4120	30	SG	☐	☐	CUM 24
10-1660	1.874	0.3787	7.7244	0.3583	30	SG	☐	☐	CUM 24
10-1662S	1.673	0.3787	7.690	0.4122	30	SG	☑	☐	CUM 18
10-1663	1.673	0.3789	7.690	0.4122	30	SG	☐	☐	CUM 18
10-1664	1.654	0.3138	5.081	0.2362	45	SG	☑	☑	CAS 11 CUM 5,10 GDI 2 KOM 5,8
10-1665	1.772	0.3138	5.084	0.2360	30	SG	☑	☑	CAS 11 CUM 5,10 GDI 2 KOM 5,8
10-1666	1.811	0.3736	5.942	0.2220	45	SG	☑	☑	CAS 23 CUM 15
10-1667	2.047	0.3736	5.946	0.2224	30	SG	☑	☐	CAS 23 CUM 15
10-1694	1.842	0.3718	5.742	0.2449	30	SG	☑	☐	FDI 19 FTA 8,14,16
10-1695S	1.510	0.3705	5.742	0.2449	45	2G	☐	☐	FTA 4,7,8,9,12,14,16
10-1720S	1.673	0.3789	6.945	0.4120	30	SG	☑	☐	CUM 18
10-1721S	1.875	0.4505	7.117	0.4010	20	2G	☑	☐	CUM 23,29
10-1723	2.083	0.3419	5.175	0.3400	44	SG	☑	☐	FDI 24
10-1734	2.220	0.4948	7.545	0.4598	30	SG	☐	☐	CUM 26,30
10-1738S	2.220	0.4950	7.545	0.4600	30	SG	☑	☐	CUM 26,30
10-1740	1.580	0.3704	5.742	0.2449	44	SG	☑	☑	FDI 19
10-1750	1.573	0.3715	6.887	0.4095	30	SG	☑	☐	MAC 4
10-1754	1.595	0.3719	5.670	0.2470	38	SG	☑	☐	FDI 23 IHN 27
10-1756	1.870	0.3789	7.750	0.4120	20	SG	☑	☐	CUM 24
10-1757	1.870	0.3715	6.160	0.2831	30	SG	☑	☐	FDI 19,25
10-1758	1.693	0.3704	6.160	0.2831	44	SG	☑	☑	FDI 19,25
10-1760S	2.020	0.3717	5.350	0.3079	30	2G	☐	☐	CAT 19,27
10-1780S	1.535	0.3718	5.112	0.2759	45	2G	☑	☐	GDI 7,8
10-1784	1.472	0.3718	4.855	0.2028	45	SG	☑	☑	ALL 8 PER 8,9,15
10-1785	1.680	0.3122	5.805	0.3409	30	SG	☑	☐	FDI 23 IHN 27
10-1786	1.680	0.3122	5.799	0.2909	37	SG	☑	☑	FDI 23 IHN 27
10-1801	1.654	0.3138	5.135	0.2950	45	SG	☑	☐	CUM 5,10 KOM 5,8
10-1804	2.205	0.3717	8.622	0.6910	20	2G	☑	☐	CAT 35
10-1807S	1.500	0.3413	4.920	0.2890	45	SG	☑	☑	GDI 3,6
10-1830S	1.771	0.3717	7.250	0.6080	30	2G	☑	☐	CAT 31
10-1831S	1.646	0.3717	7.250	0.6080	45	2G	☑	☐	CAT 31
10-1847S	1.870	0.3789	7.726	0.4120	45	SG	☐	☐	CUM 23
10-1862	1.654	0.3137	5.081	0.2440	20	SG	☑	☐	CAS 11 CUM 5,10 KOM 5,8
10-1880	1.812	0.3103	4.502	0.2950	60	SG	☐	☐	CAT 3
10-1881	1.602	0.3093	4.502	0.1882	45	SG	☐	☑	CAT 3
10-1889	1.830	0.3543	7.716	0.3010	30	SG	☑	☐	JDR 36
10-1899	1.970	0.3124	5.789	0.272	30	SG	☑	☐	IHC 33 IHN 31,33
10-1900S	1.600	0.3112	5.790	0.2744	45	SG	☑	☐	IHC 33 IHN 31,33
10-1911	1.850	0.3717	7.953	0.5610	30	2G	☑	☐	CAT 32,34
10-1912	1.646	0.3717	7.953	0.600	45	2G	☑	☐	CAT 32,34
10-1928S	1.693	0.3717	7.055	0.510	20	SG	☑	☐	MAC 4,10
10-1943	1.970	0.3722	5.787	0.2440	30	SG	☑	☐	IHC 33 IHN 31,33
10-1944S	1.600	0.3714	5.787	0.2440	45	SG	☑	☐	IHC 33 IHN 31,33
10-1945	1.786	0.3722	5.992	0.2420	30	SG	☑	☐	IHC 34 IHN 32,34
10-1946S	1.786	0.3709	5.990	0.2420	45	SG	☑	☐	IHC 34 IHN 32,34
10-2014	1.299	0.2755	4.907	0.2990	30	SG	☑	☐	CUM 7,11
10-2015	1.299	0.2750	4.892	0.2980	45	SG	☑	☐	CUM 7,11
10-2095	1.573	0.3715	6.992	0.5095	30	SG	☑	☐	MAC 10
10-2126S	1.720	0.3711	5.395	0.2181	45	SG	☑	☐	GDI 13
10-2131	1.970	0.3722	5.992	0.2440	30	SG	☑	☐	IHC 34 IHN 32,34
10-2160	1.693	0.3717	7.839	0.2500	45	2G	☑	☐	CAT 20
10-2160S	1.693	0.3717	7.839	0.2500	45	2G	☑	☐	CAT 20
10-2161S	1.575	0.3150	7.209	0.4330	30	SG	☑	☐	CAT 20

VALVE NUMERICAL LISTING

QC #	Head Dia.	Stem Dia.	Overall Length	Tip To Groove	Seat Angle	Stem Type	Chrome / Nitride Stem	Wafer / Stellite Tip	Application / Line Number
10-2166	1.594	0.3724	5.205	0.2250	45	SG	☐	☐	PER 13
10-2167	1.845	0.3734	5.215	0.2200	45	SG	☐	☐	PER 13
10-2168S	2.205	0.4950	8.622	0.7440	45	SG	☑	☐	CAT 35
10-2175	1.299	0.2738	4.975	0.5210	45	SG	☑	☑	GDI 9
10-2176	1.220	0.2730	4.963	0.5200	45	SG	☑	☑	GDI 9
10-2179	1.339	0.2737	5.058	0.3570	30	SG	☑	☐	FDI 8,15 IHN 11,17
10-2180	1.102	0.2737	5.059	0.3600	37	SG	☑	☐	FDI 8,15 IHN 17
10-2187	1.496	0.3135	5.423	0.3300	45	SG	☑	☐	CUM 16
10-2188	1.496	0.3135	5.423	0.3300	30	SG	☑	☐	CUM 16
10-2234	1.189	0.2740	4.095	0.1181	45.5	SG	☑	☐	MBT 2
10-2235	1.120	0.2756	4.108	0.1201	45.5	SG	☑	☐	MBT 2
10-2243	1.384	0.2745	4.319	0.1970	45	SG	☑	☐	NII 4,9
10-2244	1.185	0.2735	4.299	0.1790	45	SG	☑	☐	NII 4,9
10-2254	1.811	0.3736	5.942	0.2220	20	SG	☑	☐	CUM 15
10-2255	2.042	0.3736	5.586	0.2222	20	2G	☑	☐	CUM 15
10-2257	1.772	0.3138	5.085	0.2360	20	SG	☑	☐	CAS 11 CUM 5,10 GDI 2 KOM 5,8
10-2258S	1.646	0.3717	7.621	0.4900	20	2G	☑	☐	CAT 30
10-2259S	1.771	0.3717	7.621	0.4900	20	2G	☑	☐	CAT 30
10-2260S	1.417	0.3717	7.264	0.6150	24	2G	☑	☐	CAT 23
10-2261	1.417	0.3717	7.205	0.6150	45	2G	☑	☐	CAT 23
10-2262	1.870	0.3789	8.502	0.4690	20	SG	☑	☐	CUM 20,25
10-2263S	1.790	0.3789	8.810	0.7610	45	SG	☑	☐	CUM 20,25
10-2635	1.985	0.4965	7.803	0.4995	45	SG	☐	☐	JDR 24
10-3041	1.575	0.372	6.874	0.411	20	SG	☐	☐	MAC 4
10-3042	1.693	0.3723	7.051	0.515	20	SG	☐	☐	MAC 4
10-3187	1.571	0.3138	5.118		45	SG	☑	☐	
10-3186	1.338	0.313	5.106	0.118	45	SG	☑	☐	
10-3188	1.338	0.3127	5.069	0.441	20	SG	☑	☐	DDA 3,5 MBT 4
10-3189	1.496	0.3123	6.006	0.323	45	SG	☑	☐	DDA 3,5 MBT 4
10-3192	1.534	0.3421	8.498	0.6150	20	SG	☑	☐	DDA 8
10-3193	1.732	0.3421	8.498	0.5950	20	SG	☐	☐	DDA 8
10-3196	1.504	0.315	5.736	0.4995	30	3G	☑	☐	VOH 2
10-3197	1.409	0.315	5.740		45	3G	☐	☐	VOH 2
10-3200	1.300	0.2735	4.237	0.355	45	SG	☑	☐	IDI 3
10-3201	1.183	0.273	4.234	0.353	45	SG	☑	☐	IDI 3
10-3220	1.8563	0.3726	9.449	1.319	20	SG	☑	☐	DDA 11
10-3221S	1.774	0.3718	9.707	1.575	30	SG	☑	☐	DDA 11
10-3228S	2.205	0.372	8.628	0.156	30	2G	☑	☐	CAT 35
10-10031	1.462	0.3141	4.089	0.1590	45	SG	☑	☐	NII 3
10-10064	1.376	0.3124	4.394	0.1240	45	SG	☐	☐	MDI 1,2
10-10065	1.689	0.3140	4.432	0.1280	45	SG	☐	☐	MDI 2
10-10069	1.478	0.3142	4.922	0.1831	45	3G	☑	☐	TOI 9,10
10-10070	1.811	0.3142	4.917	0.1748	45	3G	☐	☐	TOI 9,10
10-10083	1.220	0.3126	4.028	0.1180	45	SG	☐	☐	MDI 1
10-10091S	1.495	0.3125	4.252	0.1180	45	SG	☑	☐	MDI 7
10-10092	1.810	0.3135	4.331	0.1180	45	SG	☐	☐	MDI 7
10-10141	1.693	0.3136	4.323	0.1390	45	SG	☑	☐	MDI 2,3
10-10142	1.378	0.3126	4.277	0.1386	45	SG	☑	☐	MDI 2,3
10-10143	1.811	0.3137	4.195	0.1378	45	SG	☑	☐	MDI 3,5
10-10144	1.496	0.3126	4.141	0.1390	45	SG	☑	☐	MDI 3,5
10-10145	1.810	0.3134	4.250	0.1528	45	SG	☑	☐	MDI 7
10-10146S	1.493	0.3120	4.170	0.1941	45	SG	☑	☐	MDI 7
10-10216	1.575	0.3125	4.560	0.1783	45	SG	☑	☐	IDI 1
10-10217	1.339	0.3115	4.560	0.1783	45	SG	☑	☑	IDI 1
10-10236	1.732	0.3164	4.405	0.2476	45	SG	☑	☐	MAI 3
10-10237	1.417	0.3162	4.397	0.2492	45	SG	☑	☐	MAI 3
10-10268	1.658	0.3140	4.899	0.2228	45	SG	☑	☐	NII 7
10-10269	1.500	0.3130	4.940	0.2291	45	SG	☑	☑	NII 7
10-10307	1.417	0.3137	3.933	0.1618	45	SG	☑	☐	TOI 2
10-10308	1.142	0.3137	3.934	0.1630	45	SG	☑	☑	TOI 2
10-10322	1.575	0.3140	4.262	0.2787	45	SG	☑	☐	TOI 6
10-10323	1.417	0.3140	4.272	0.2811	45	SG	☑	☑	TOI 6
10-10415	1.575	0.3131	5.378	0.2555	45	SG	☑	☐	MDI 4

VALVE NUMERICAL LISTING

QC #	Head Dia.	Stem Dia.	Overall Length	Tip To Groove	Seat Angle	Stem Type	Chrome / Nitride Stem	Wafer / Stellite Tip	Application / Line Number
10-10416	1.339	0.3122	5.379	0.2567	45	SG	☑	☐	MDI 4
10-10624	1.693	0.3137	4.054	0.1540	45	SG	☑	☐	MDI 8
10-10625	1.378	0.3126	4.042	0.1390	45	SG	☑	☐	MDI 8
10-10725	1.772	0.3524	5.034	0.2200	45	SG	☑	☐	IDI 4,9
10-10726	1.476	0.3513	5.030	0.2200	45	SG	☑	☑	IDI 4,5,9
10-10728S	1.476	0.3514	5.028	0.2200	45	SG	☑	☑	IDI 4,9
10-10752	1.657	0.3403	4.353	0.2221	45	SG	☐	☐	NII 4,10
10-10753	1.262	0.3397	4.355	0.2230	45	SG	☐	☐	NII 4,10
10-10754	1.691	0.3340	4.318	0.1450	45	2G	☑	☐	TOI 5
10-10755	1.457	0.3331	4.337	0.1470	45	2G	☑	☐	TOI 5
10-10766	1.689	0.3921	5.748	0.2400	45	SG	☑	☐	IHC 13
10-10767S	1.610	0.3913	5.748	0.2400	45	SG	☑	☐	IHC 13
10-13000	1.732	0.3435	8.498	0.5950	30	SG	☑	☐	DDA 8
10-13000VK	1.732	0.3421	8.498	0.5950	30	SG	☑	☐	DDA 8
10-13001	1.555	0.322	8.496	0.618	30	SG	☑	☐	DDA 8
10-13001VK	1.556	0.3421	8.498	0.6150	30	SG	☑	☐	DDA 8
10-13002	1.564	0.3121	5.826	0.4681	30	SG	☑	☐	IHN 29
10-13003S	1.439	0.3113	5.811	0.4681	45	SG	☑	☐	IHN 29
10-13006	1.299	0.2756	4.893	0.300	45	SG	☑	☐	CUM 7,11
10-13032	1.752	0.3716	7.411	0.5677	29.5	2G	☑	☐	CAT 28
10-13033	1.634	0.3717	7.362	0.5953	45	2G	☑	☐	CAT 28
10-13073	1.130	0.274	4.095	0.1181	45	SG	☑	☐	MBT 2
10-13074	1.032	0.274	4.114	0.1181	45	SG	☑	☐	MBT 2
10-13084	1.503	0.2745	3.909	0.1397	45	SG	☑	☐	NII 5
10-13085	1.267	0.2735	3.909	0.1397	45	SG	☑	☐	NII 5
10-13121	1.461	0.3130	5.140	0.4173	45	SG	☑	☐	GDI 5,12 IDI 8,11
10-13122	1.457	0.3120	5.128	0.4173	45	SG	☑	☐	GDI 5,12 IDI 8,11
10-13135	1.740	0.3729	4.838	0.2031	30	SG	☑	☐	PER 8
10-13136	1.693	0.3527	4.842	0.2204	30	SG	☑	☐	CAT 7,16 PER 9,15
10-13137	1.823	0.3529	5.086	0.2381	29.5	SG	☑	☐	CAT 5,12 PER 6,10
10-13138	1.634	0.3518	5.086	0.2381	29.5	SG	☑	☐	CAT 5,12 PER 6,10
10-13142	1.465	0.2736	4.185	0.1476	44.5	3G	☑	☐	CAT 4, PER 5
10-13143	1.735	0.2747	4.191	0.1476	44.5	3G	☑	☐	CAT 4, PER 5
10-13151	1.752	0.3716	7.411	0.565	29.5	2G	☑	☐	CAT 28
10-13161	1.299	0.2756	4.893	0.300	45	SG	☑	☐	CUM 7,11
10-13163	1.496	0.3138	5.424	0.3355	45	SG	☑	☐	CUM 16
10-13176	1.732	0.3543	7.717	0.3012	29.5	SG	☑	☐	JDR 37
10-13177S	1.575	0.3142	6.398	0.3543	29	SG	☑	☐	JDR 33
10-13178S	1.575	0.3142	6.398	0.3543	29	SG	☑	☐	JDR 3
10-13182	1.339	0.2738	5.138	0.4366	37	SG	☑	☑	FDI 16, IHN 19
10-13183	1.161	0.2738	5.138	0.4366	39.5	SG	☑	☐	FDI 16, IHN 19
10-13192S	1.535	0.315	7.264	0.4583	29.5	SG	☑	☐	CAT 23
10-13193	1.417	0.3717	7.269	0.6141	44.25	2G	☑	☐	CAT 23
10-13219	1.616	0.3524	4.843	0.2165	30	SG	☑	☐	CAT 7,16 PER 9,15
10-13246	1.457	0.2756	5.337	0.2657	29	SG	☑	☐	JDR 21,29
10-13247	1.417	0.2753	5.337	0.2657	29	SG	☑	☐	JDR 21,29
10-13265	1.331	0.2748	5.242	0.6988	29.5	3G	☑	☐	FDI 20
10-13266	1.195	0.2748	5.242	0.6988	44.5	3G	☑	☐	FDI 20
10-13280	1.634	0.3717	7.372	0.5953	45	2G	☑	☐	CAT 28
10-13292S	1.874	0.4504	7.880	0.512	20	2G	☑	☐	CUM 22
10-13300S	1.575	0.3137	7.559	0.5295	29.5	SG	☑	☐	VOH 2
10-13301S	1.575	0.3132	7.547	0.5295	44.5	SG	☑	☐	VOH 2
10-13308	1.870	0.3789	8.503	0.4669	20	SG	☑	☐	CUM 20,25
10-13309S	1.790	0.3789	8.810	0.7579	45	SG	☑	☐	CUM 20,25
10-13326	1.457	0.2741	3.920	0.4528	45	SG	☑	☐	CAT 1,2 PER 1,3
10-13327	1.299	0.2734	3.920	0.4528	45	SG	☑	☐	CAT 1,2 PER 1,3
10-13329	1.378	0.2341	4.258	0.2913	30	3G	☑	☐	CAT 6,11,18
10-13330	1.299	0.2336	4.250	0.2913	45	3G	☑	☐	CAT 6,11,18
10-13356	1.122	0.2349	4.028	0.3602	45	3G	☑	☐	MBT 3
10-13357	1.000	0.2346	4.028	0.3681	45	3G	☑	☐	MBT 3
10-13363	1.831	0.3529	5.083	0.3228	45	3G	☑	☐	PER 11
10-13364	1.638	0.3523	5.055	0.2937	29.5	3G	☑	☐	PER 11
10-13370	1.575	0.3531	6.315	0.4429	30	3G	☑	☐	IHN 37

VALVE NUMERICAL LISTING

QC #	Head Dia.	Stem Dia.	Overall Length	Tip To Groove	Seat Angle	Stem Type	Chrome / Nitride Stem	Wafer / Stellite Tip	Application / Line Number
10-13371	1.496	0.3526	6.315	0.4429	45	SG	☑	☐	IHN 37
10-13373	1.457	0.2756	4.862	0.2618	29.5	SG	☑	☐	JDR 11
10-13374	1.339	0.2750	4.797	0.1909	29.25	SG	☑	☐	JDR 11
10-13375S	1.575	0.3136	7.560	0.4882	30	3G	☑	☐	MAC 2 VOH 1
10-13376S	1.496	0.3133	7.587	0.4882	29.5	3G	☑	☐	MAC 2 VOH 1
10-13377S	1.654	0.3136	7.555	0.4882	24.5	3G	☑	☐	MAC 11 VOH 3
10-13378S	1.575	0.3133	7.543	0.4882	39.5	3G	☑	☐	MAC 11 VOH 3
10-13379	1.793	0.3520	5.705	0.4880	30	SG	☑	☐	DDA 9, MBT 6
10-13380	S96	0.3518	5.709	0.4880	36	SG	☑	☐	DDA 9, MBT 6
10-13381	1.781	0.3726	9.449	1.378	19.5	SG	☑	☐	DDA 10
10-13382	1.699	0.3719	9.705	1.634	29.5	SG	☑	☐	DDA 10
10-13383	1.728	0.3134	5.039	0.1378	45	SG	☑	☐	CUM 3 KOM 4,7
10-13384	1.492	0.3127	5.039	0.1378	44.75	SG	☑	☐	CUM 3 KOM 4,7
10-13385	1.776	0.3523	6.673	0.3740	30	SG	☑	☐	KOM 10
10-13386S	1.736	0.3521	6.673	0.3740	45	SG	☑	☑	KOM 10
10-13387	1.728	0.3132	5.039	0.1378	29.75	SG	☑	☐	KOM 4,7
10-13388S	1.492	0.3126	5.039	0.1378	44.75	SG	☑	☑	CUM 3 KOM 4,7
10-13389	1.776	0.3522	6.697	0.4724	30	SG	☑	☐	KOM 10
10-13390S	1.736	0.3522	6.724	0.4724	45	SG	☑	☐	KOM 10
10-13391S	1.736	0.3521	6.770	0.4724	45	SG	☑	☑	KOM 10
10-13392	1.732	0.3128	5.276	0.1969	30	SG	☑	☐	CAT 9
10-13393	1.811	0.3128	5.276	0.1969	30	SG	☑	☐	CAT 9
10-13394	1.457	0.3123	5.276	0.1969	30	SG	☑	☐	CAT 9
10-13403	1.437	0.2741	4.632	0.2146	30	SG	☑	☐	YAN 12
10-13404	1.220	0.2737	4.626	0.2146	45	SG	☑	☐	YAN 12
10-13405	1.299	0.2741	4.045	0.1594	30	SG	☑	☐	YAN 10
10-13406	1.102	0.2737	4.045	0.1594	45	SG	☑	☐	YAN 8,10
10-13407	1.102	0.2347	3.953	0.1988	30	SG	☑	☐	JDR 6 YAN 4
10-13408	0.965	0.2343	3.947	0.1988	45	SG	☑	☐	JDR 6 YAN 4
10-13409	1.752	0.3527	4.965	0.1654	30	SG	☑	☐	KOM 6 YAN 11
10-13410	1.535	0.3524	4.957	0.1654	45	SG	☑	☐	KOM 6 YAN 11
10-13411	1.614	0.3140	4.528	0.1594	30	SG	☑	☐	KOM 3 YAN 7,9
10-13412	1.378	0.3135	4.528	0.1594	45	SG	☑	☐	KOM 3 YAN 7,9
10-13413	1.496	0.3140	4.291	0.1555	30	SG	☑	☐	JDR 8 YAN 2,6
10-13414	1.417	0.3140	4.291	0.1575	30	SG	☑	☐	JDR 2,7 YAN 1,3,5
10-13415	1.378	0.3140	4.291	0.1575	30	SG	☑	☐	JDR 1,2,7,8 KOM 1,2 YAN 1,2,3,5,6
10-13416	1.181	0.3135	4.285	0.1555	45	SG	☑	☑	JDR 1,2,7,8 KOM 1,2 YAN 1,2,3,5,6
10-13420	1.634	0.3150	5.886	0.4583	29.5	SG	☑	☐	CAT 24
10-13421	1.476	0.3150	5.886	0.4583	44.25	SG	☑	☐	CAT 24
10-13430S	1.771	0.3717	7.766	0.6287	20	2G	☑	☐	CAT 30
10-13431S	1.646	0.3717	7.766	0.6287	20	2G	☑	☐	CAT 30
10-13434S	1.931	0.3920	7.594	0.4402	24.5	SG	☑	☐	MAC 13, VOH 4
10-13435S	1.813	0.3910	7.537	0.4469	44.5	SG	☑	☐	MAC 13, VOH 4
10-13436	1.437	0.2756	5.555	0.2697	29.5	SG	☑	☐	JDR 22,28
10-13437	1.398	0.2753	5.555	0.2697	29.5	SG	☑	☐	JDR 22,28
10-13438	1.437	0.2756	5.337	0.2697	29.5	SG	☑	☐	JDR 22,28
10-13439	1.398	0.2753	5.333	0.2697	29.5	SG	☑	☐	JDR 22,28
10-13443	1.358	0.2586	5.669	0.3268	30	SG	☑	☐	CAT 8
10-13444	1.083	0.2572	5.669	0.3268	45	SG	☑	☐	CAT 8
10-13447	2.402	0.4697	9.724	0.6299	30	SG	☑	☐	CUM 27, KOM 14
10-13448S	2.323	0.4685	9.724	0.6299	45	SG	☑	☐	CUM 27, KOM 14
10-13459	1.732	0.3907	6.689	0.3800	20	SG	☑	☐	PAC 1
10-13472	1.752	0.378	7.674	0.560	20	1G	☐	☐	PAC 1
10-13474	1.675	0.3789	7.677	0.5590	45	1G	☐	☐	CUM 19
10-13483	1.333	0.2739	4.600	0.2933	45	SG	☑	☐	CUM 4
10-13484S	1.175	0.2735	4.600	0.2933	45	SG	☑	☐	CUM 4
10-13485	1.732	0.3911	6.689	0.3543	19.5	4G	☑	☐	PAC 1
10-13486S	1.614	0.3902	6.677	0.3543	29.5	4G	☑	☐	PAC 1
10-13490	1.378	0.2748	4.333	0.3382	30		☑	☐	CAT 11,18
10-13491	1.299	0.2739	4.334	0.3386	45		☑	☐	CAT 11,18
10-13494	1.339	0.274	3.858	0.3937	45	SG	☑	☐	CAT 2
10-21235S	1.660	0.3716	5.367	0.220	20	SG	☑	☐	GDI 11
10-30151	1.579	0.3130	4.650	0.346	45	SG	☐	☐	IDI 2

VALVE NUMERICAL LISTING

QC #	Head Dia.	Stem Dia.	Overall Length	Tip To Groove	Seat Angle	Stem Type	Chrome / Nitride Stem	Wafer / Stellite Tip	Application / Line Number
10-30152	1.402	0.3120	4.650	0.343	45	SG	☐	☐	IDI 2
10-30155	2.008	0.352	5.551	0.382	45	1G	☐	☐	IDI 6
10-30156	1.654	0.3514	5.535	0.382	45	1G	☐	☐	IDI 6
10-30157	1.912	0.3518	5.159	0.134	45	1G	☐	☐	NII 14
10-30158	1.553	0.3510	5.154	0.127	45	1G	☐	☐	NII 14
10-30159	1.531	0.2738	5.236	0.201	30	SG	☑	☐	HIN 1,2
10-30160	1.457	0.2736	5.207	0.189	45	1G	☐	☐	HIN 1,2
10-30169	1.299	0.236	4.173				☐	☐	CUM 1
10-30170	1.142	0.236	4.173			SG	☑	☐	CUM 1
10-3040830	1.870	0.4505	7.063	0.4010	30	2G	☐	☐	CAS 25 CUM 23 KOM 12
10-23501576	1.732						☐	☐	DDA 8
10-23501577	1.559						☐	☐	DDA 8

VALVE KITS / COMPONENTS NUMERICAL LISTING

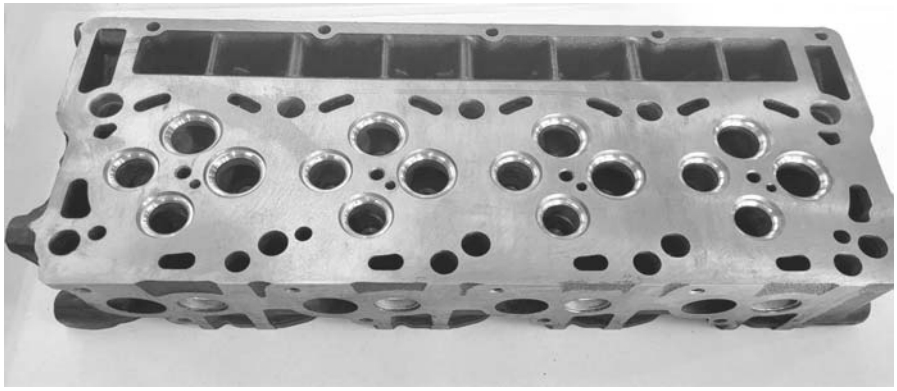
QC #	Components	Qty.	Application
10-VKCAT26B-5	10-2160S	6	CAT 3126B 18V w/o Springs
	10-2161S	12	
	30-3038	12	
	30-3039	6	
	34-00250	24	
	34-746	12	
	38-229-45	6	
	38-3036-45	12	
	87-2911K	6	
10-VKCAT26B-6	10-2160S	6	CAT 3126B 18V w/ Springs
	10-2161S	12	
	30-3038	12	
	30-3039	6	
	32-04020	12	
	32-04021	6	
	34-00250	24	
	34-746	12	
	38-229-45	6	
	38-3036-45	12	
	87-2911K	6	
10-VKCATC15-5	10-1911	12	CAT C15 24V w/o Springs
	10-1912	12	
	30-3007	24	
	34-746	48	
	38-229-45	24	
	87-4239K	6	
10-VKCATC15-6	10-1911	12	CAT C15 24V w/ Springs
	10-1912	12	
	30-3007	24	
	32-04000	24	
	32-04001	24	
	34-746	48	
	38-229-45	24	
	87-4239K	6	
10-VKCATC78-5	10-2160S	6	CAT C7 18V w/o Springs
	10-2161S	12	
	30-3038	12	
	30-3039	6	
	34-00250	24	
	34-746	12	
	38-229-45	6	
	38-3036-45	12	
	87-1200K	6	
10-VKCATC78-6	10-2160S	6	CAT C7 18V w/ Springs
	10-2161S	12	
	30-3038	12	
	30-3039	6	
	32-04020	12	
	32-04021	6	
	34-00250	24	
	34-746	12	
	38-229-45	6	
	38-3036-45	12	
	87-1200K	6	
10-VKCUMISX-5	10-2262	12	CUM ISX DOHC 24V w/o Springs
	10-2263S	12	
	30-3061	24	
	34-04644	48	
	38-6791-45	24	
	87-0873K	6	
10-VKCUMISX-6	10-2262	12	CUM ISX DOHC 24V w/ Springs
	10-2263S	12	
	30-3061	24	
	32-04050	24	
	34-04644	48	
	38-6781-45	24	
	87-0873K	6	
10-VKCUMISXS-5			CUM ISX SOHC w/o Springs
	10-2262	12	
	10-2263S	12	
	30-3061	24	
	34-04644	48	
	38-6366-55	24	
	87-5966K	6	
10-VKCUMISXS-6	10-2262	12	CUM ISX SOHC w/ Springs
	10-2263S	12	
	30-3061	24	
	32-04050	24	
	34-04644	48	
	38-6366-55	24	
	87-5966K	6	
10-VKDDA60C-5	10-1566	12	DD 60 Ser. 24V w/o EGR, Springs Copper IJT
	10-1567	12	
	30-8591	24	
	34-09573	48	
	38-502-55	24	
	87-1580K	6	
10-VKDDA60C-6	10-1566	12	DD 60 Ser. 24V w/o EGR, w/ Springs Copper IJT
	10-1567	12	
	30-8591	24	
	32-09415	24	
	34-09573	48	
	38-502-55	24	
	87-1580K	6	
10-VKDDA60S-5	10-13000	12	DD 60 Ser. 24V w/ EGR, w/o Springs SS IJT
	10-13001	12	
	30-8591	24	
	34-09573	48	
	38-502-55	24	
	87-3148K	6	
10-VKDDA60S-6	10-13000	12	DD 60 Ser. 24V w/ EGR, Springs SS IJ
	10-13001	12	
	30-8591	24	
	32-09415	24	
	34-09573	48	
	38-502-55	24	
	87-3148K	6	
10-VKDDAD15-5	10-3220	12	DD DD15 24V w/o Springs
	10-3221S	12	
	30-3178	24	
	34-01177	48	
	38-6134-55	24	
	87-3400K	6	
10-VKDDAD15-6	10-3220	12	DD DD15 24V Kit w/ Springs
	10-3221S	12	
	30-3178	24	
	32-5025	12	
	32-5026	12	
	34-01177	48	
	38-6134-55	24	
	87-3400K	6	
10-VKDDE60C-6	10-13000	12	DD 60 Ser. 14L w/ EGR, Springs Copper IJT
	10-13001	12	

VALVE KITS / COMPONENTS NUMERICAL LISTING

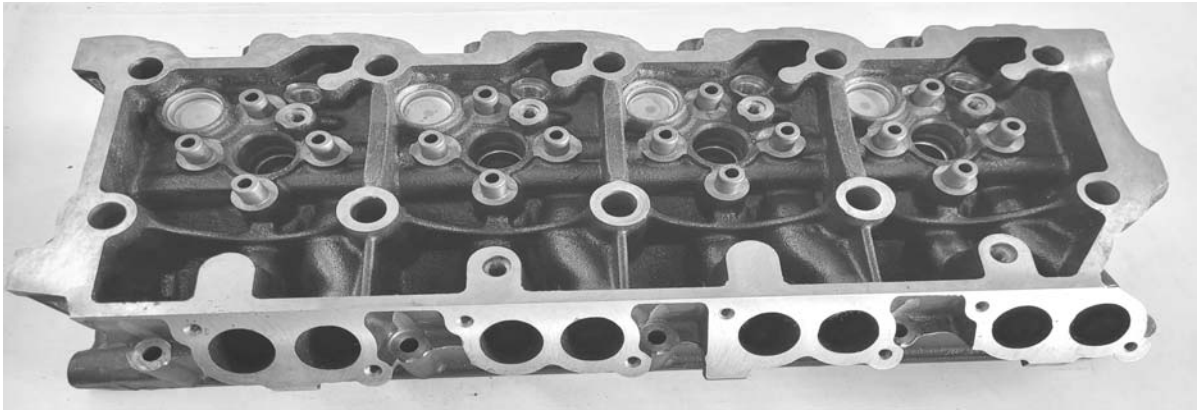
QC #	Components	Qty.	Application
10-VKDDE60C-6	30-8591	24	DD 60 Ser. 14L w/ EGR, Springs Copper IJT
	32-04054	12	
	32-09415	12	
	34-09573	48	
	38-502-55	55	
	87-1580K	6	
10-VKDDE60S-6	10-13000	12	DD 60 Ser. 14L w/ EGR, Spring SS IJT
	10-13001	12	
	30-8591	24	
	32-04054	12	
	32-09415	12	
	34-09573	48	
	38-502-55	24	
	87-3148K	6	
10-VKFOR60I-5	10-2179	16	FOR 6.0L 32V Assembly
	10-2180	16	
	32-04040	32	
	34-5009	64	
	55-6328	32	
10-VKFOR60S-5	10-2179	16	FOR 6.0L 32V w/o Springs
	10-2180	16	
	30-3055	32	
	34-5009	64	
	38-160-55	32	
	87-8320	8	
10-VKFOR60S-6	10-2179	16	FOR 6.0L 32V w/ Springs
	10-2180	16	
	30-3055	32	
	32-04040	32	
	34-5009	64	
	38-160-55	32	
	87-8320	8	
10-VKFOR67L-4	10-13265	16	FOR 6.7L 32V w/o Springs or IJT
	10-13266	16	
	30-3163	32	
	34-281	64	
	38-6129-55	32	
10-VKFOR67L-5	10-13265	16	FOR 6.7L 32V w/ Springs w/o IJT
	10-13266	16	
	30-3163	32	
	32-5015	32	
	34-281	64	
	38-6129-55	32	
10-VKFOR73L-5	10-1785	8	FOR 7.3L Dir. Inj. 16V w/o Springs
	10-1786	8	
	30-6587	16	
	34-614	32	
	38-173-45	16	
	87-4376	6	
10-VKFOR73L-6	10-1785	8	FOR 7.3L Dir. Inj. 16V w/ Springs
	10-1786	8	
	30-6587	16	
	32-887-D	16	
	34-614	32	
	38-173-45	16	
	87-4376	6	
10-VKGMD66S-5	10-2175	16	GM 6.6L 32V w/o Springs
	10-2176	16	
	30-3049	32	
	34-5001	64	
	38-6132-55	32	
	87-8463K	6	
10-VKGMD66S-6	10-2175	16	GM 6.6L 32V w/ Springs
	10-2176	16	
	30-3049	32	
	32-04041	32	
	34-5001	64	
	38-6132-55	32	
	87-8463K	6	
10-VKJDRPT3-6	10-1588	3	JDR PowerTech 3 Cyl. 6V
	10-1589	3	
	22-1695-1	3	
	22-1856-1	3	
	32-757	6	
	34-01889	12	
	37-9005	6	
	38-830-45	6	
10-VKJDRPT4-6	10-1588	4	JDR PowerTech 4 Cyl. 8V
	10-1589	4	
	22-1695-1	4	
	22-1856-1	4	
	32-757	8	
	34-01889	16	
	37-9005	8	
	38-830-45	8	
10-VKJDRPT6-6	10-1588	6	JDR PowerTech 6 Cyl. 12V
	10-1589	6	
	22-1695-1	6	
	22-1856-1	6	
	32-757	12	
	34-01889	24	
	37-9005	12	
	38-830-45	12	
10-VKVOH13C-5	10-13377S	12	VOH D13 24V w/o Springs Copper IJT
	10-13378S	12	
	30-3157	24	
	34-619	48	
	38-812-45	24	
	87-8621K	6	
10-VKVOH13C-6	10-13377S	12	VOH D13 24V w/ Springs Copper IJT
	10-13378S	12	
	30-3157	24	
	32-5013	12	
	32-5014	24	
	34-619	48	
	38-812-45	24	
	87-8621K	6	
10-VKVOH13S-5	10-13377S	12	VOH D13 24V w/o Springs SS IJT
	10-13378S	12	
	30-3157	24	
	32-5013	12	
	32-5014	24	
	34-619	48	
	38-812-45	24	
	87-1136K	6	
10-VKVOH13S-6	10-13377S	12	VOH D13 24V w/ Springs SS IJT
	10-13378S	12	
	30-3157	24	
	32-5013	12	
	32-5014	24	
	34-619	48	
	38-812-45	24	
	87-1136K	6	

QUALCAST CYLINDER HEADS

New Cylinder Heads are individually cast using the latest techniques. All machined surfaces are performed by CNC, including bolt holes, to achieve extreme accuracy in finishing.







Part No 16-260018 - Cast Iron Ford 6.0L with 18mm Dowel Pins

Part No 16-260020- Cast Iron Ford 6.0L with 20mm Dowel Pins

Valve Seats, Guides, and Injector Tubes Installed

VALVE SEAT INSERT NUMBERING SYSTEM AND NOTES

20- Prefix denotes the four digit number is the estimated cutter size. The actual O.D. includes a press fit for a cast iron head of between .0045" and .006" depending on size.

e.g. 20-1562-1 suggests the use of a 1-9/16" cutter and allows for .0045" press fit. Actual O.D. is 1.5670".

21- Prefix is specifically for aluminum cylinder heads. The part number also includes the estimated cutter size and allows for .007" press fit.

e.g. 21-1625-59 suggests the use of a 1-5/8" cutter and allows for .007" press fit. Actual O.D. is 1.6320"

22- Prefix denotes the part number is the exact O.D. Used for factory Installed seats.

e.g. 22-2006-1 shows the actual O.D. 2.006".

All our valve seat inserts have a finished I.D. and geometry on the lead-in edge to ease the press fit. We use a variety of alloys to suit the applications listed in our catalog. For example very special alloys are used for heavy duty applications. We also feature the QualCast "N" series inserts manufactured using a non-magnetic nickel based alloy, which provides superior high temperature hardness and corrosion resistance. As with all our products, we "quality assure" their suitability at our test lab in Nashville.

VALVE SEAT INSERT LISTING BY EXACT O.D.

QC #	Nominal O.D.	Exact O.D.	I.D.	I.D. Top Taper	Depth	Seat Angle	Application	Oversizes Available
22-1130-1						0	CUM	
22-1180-1						0	CUM	
20-1000-1	1.000	1.0045	3/4		3/16	45	UNIVERSAL	
22-1088-1	1.088	1.0888	0.890T	0.955	0.221	45	CHC, MBT, MBZ	
20-1125-1	1-1/8	1.1295	7/8		7/32	45	UNIVERSAL	
22-1160-1	1.160	1.1600	0.960T	1.032	0.221	45	CHC, MBT, MBZ	
22-1161-1	1.161	1.1610	0.910T	0.975	0.222	30	DDA	010,020,030,040,062
22-1175-1	1.175	1.1755	0.945T	1.032	0.2210	45	MBT, MBZ	
22-1184-1	1.184	1.1840	0.983		0.2365	45	CAT	
20-1187-1	1-3/16	1.1920	1.000		3/16	45	UNIVERSAL	
21-1187-52	1-3/16	1.1945	0.934T	0.995	0.257	45	FDI, FOR, GM, HON, ISU, SUZ, TOY	
22-1218-1	1.218	1.2185	1.020T	1.123	0.2210	45	CHC, MBZ	
22-1221-2N	31mm	1.2205	0.906		0.335	45	METRIC "N" SERIES	
22-1223-1	1.2235	1.2235	0.9810	1.1108	0.2250	45	CUM	
20-1250-1	1-1/4	1.2545	1.000		7/32	45	UNIVERSAL	
20-1250-3	1-1/4	1.2545	1.000		1/4	45	UNIVERSAL	
20-1250-15N	1-1/4	1.2550	0.905		0.250	45	FDI, FOR	
21-1250-50	1-1/4	1.2570	0.965T	1.060	1/4	45	GM, NIS, TOI, TOY	
22-1260-1N	32mm	1.2598	0.945		0.335	45	METRIC "N" SERIES	
22-1262-1	1.262	1.2620	0.975T	1.045	1/4	30	DDA	010,020,030,040,062
22-1264-1	1.264	1.2645	0.977T	1.098	0.237	45	GDI, GM, ISU	
20-1312-1	1-5/16	1.3170	1-1/16		3/16	45	UNIVERSAL	
20-1312-4	1-5/16	1.3170	1.000		1/4	45	UNIVERSAL	
21-1312-52	1-5/16	1.3195	1.060T	1.087	0.240	45	GM, ISU, NII, NIS	
22-1322-1	1.322	1.3220	1.114	1.135	0.2360	45	CAT	
22-1343-1	1.343	1.3430	1.069T	1.180	0.237	45	GDI, GM	
22-1348-1N	1.348	1.3480	1.087		0.200	45	CAS, CON, FTA	030
22-1358-1	1.358	1.3580	1.022R	1.185	0.2165	30	JDR	
22-1375-1	1.3750	1.3750	1.100	1.140	0.227	30	CHC, CUM, FDI, FOR, GM, IHN	010
22-1375-2N	1.375	1.3750	1.100	1.125	0.227	45	CHC, CUM, FDI, FOR, IHN	005,010,020
20-1375-1	1-3/8	1.3795	1-1/8		7/32	45	UNIVERSAL	
20-1375-1N	1-3/8	1.3795	1-1/8		7/32	45	"N" SERIES	
20-1375-2	1-3/8	1.3795	1-1/8		1/4	45	UNIVERSAL	
20-1375-25	1-3/8	1.3795	1-3/32		0.203	45	CAS	
20-1375-3	1-3/8	1.3795	1-1/16		3/16	45	CON	
20-1375-3N	1-3/8	1.3795	1-1/16		3/16	45	"N" SERIES	
20-1375-4	1-3/8	1.3795	1-1/8		3/16	45	UNIVERSAL	
20-1375-5	1-3/8	1.3795	1-1/8		17/64	45	UNIVERSAL	
22-1381-1	1.381	1.3810	1.161	1.240	0.255	30	CAT	
22-1381-2	1.381	1.3810	1.161T	1.240	0.2250	30	CUM	
21-1375-51	1-3/8	1.3820	1.060T	1.150	0.280	45	CHC, FOR, GM, ISU, MDI, MIT, NIS	
22-1382-2	1.382	1.3820	1.100		0.300	45	MBT	
22-1420-2	1.420	1.4200	1.185T	1.272	0.2365	30	CAT	

VALVE SEAT INSERT LISTING BY EXACT O.D.

QC #	Nominal O.D.	Exact O.D.	I.D.	I.D. Top Taper	Depth	Seat Angle	Application	Oversizes Available
22-1431-1	1.431	1.4305	1-5/32		0.160	30	CUM	
22-1437-2	1.437	1.4370	1.125T	1.219	0.2365	30	JDR	
22-1441-1	1.441	1.4410	1-13/64	1.245	0.215	30	DDA	010,030
20-1437-1	1-7/16	1.4420	1-1/4		7/32	45	UNIVERSAL	
20-1437-2	1-7/16	1.4420	1-7/32		7/32	45	UNIVERSAL	
20-1437-2N	1-7/16	1.4420	1-7/32		7/32	45	"N" SERIES	
20-1437-3	1-7/16	1.4420	1-3/16		7/32	45	UNIVERSAL	
20-1437-3N	1-7/16	1.4420	1-3/16		7/32	45	"N" SERIES	
20-1437-4	1-7/16	1.4420	1-1/8		7/32	45	UNIVERSAL	
20-1437-6	1-7/16	1.4420	1-1/8		5/16	45	UNIVERSAL	
22-1442-1	1.442	1.4420	1-9/64T	1.200	1/4	30	DDA	010,020,030,040,063
22-1450-1	1.450	1.450	1.194	1.295	0.279	0	ISU	
22-1456-1	1.456	1.4560	1.145R	1.220	0.2555	30	CAT	
22-1459-1	1.459	1.4595	1.200		0.217	24	CAT	
22-1460-2N	1.461	1.4605	1.236		0.236	45	CUM	
22-1470-1	1.470	1.4700	1.220R	1.260	0.244	30	JDR	
22-1476-2	1.476	1.4760	1.200T	1.277	0.2445	30	JDR	
22-1479-1S	1.479	1.4790	1.212T	1.295	0.257	45	CAT	
22-1480-2	1.480	1.4800	1.288T	1.299	0.250	45	IHN	
22-1502-1	1.502	1.502	1.224		0.2378	0	ISU 4HK1	
22-1502-2	1.502	1.502	1.232		0.2569		ISU 4HK1	
20-1500-1	1-1/2	1.5045	1-1/4		7/32	45	UNIVERSAL	
20-1500-1N	1-1/2	1.5045	1-1/4		7/32	45	"N" SERIES	
20-1500-3	1-1/2	1.5045	1-1/4		1/4	45	UNIVERSAL	003,030
22-1505-1	1.505	1.5045	1-1/4		11/32	45	CAT	010,020,030
21-1500-62	1-1/2	1.5070	1.220T	1.284	0.310	45	BMW, CHC, GM, MDI, MIT, VOK	
22-1516-1	1.516	1.5160	1-1/4		1/4	45	CHI, CHC	
22-1518-1	1.518	1.5180	1.245T	1.325	0.2450	45	CAT, PER	
22-1536-2N	1.536	1.5365	1.255T	1.405	0.359	45	IHC	015
22-1538-3	1.538	1.5378	1.280T	1.347	0.256	45	CAT	
22-1538-2	1.538	1.5385	1.240T	1.395	0.2550	45	CUM, KOM	
22-1539-5	1.5385	1.5385	1.240R	1.345	0.2540	45	KOM	
22-1539-1	1.539	1.5395	1.294T	1.390	0.277	45	ISU	
22-1539-2	1.539	1.5395	1.297T	1.390	0.276	45	IDI	
22-1540-1	1.540	1.5400	1.295		0.261	30	CAT	
22-1540-2	1.540	1.5403	1.278		0.236		HIN	
22-1542-1	1.542	1.542	1.270		0.277		ISU 4BD1	
22-1554-3N	1.554	1.5540	1.303T	1.445	0.197	20	CUM	
22-1554-1	1.554	1.5545	1.280T	1.324	0.236	30	CUM	010,013
22-1554-2	1.554	1.5545	1.301T	1.348	0.190	45	CUM	010,013,020
20-1562-1	1-9/16	1.5670	1-5/16		7/32	45	UNIVERSAL	005,010
20-1562-1N	1-9/16	1.5670	1-5/16		0.216	45	"N" SERIES	
20-1562-2	1-9/16	1.5670	1-5/16T	1-3/8	0.248	45	UNIVERSAL	010
20-1562-36N	1-9/16	1.5670	1-5/16		3/16	45	"N" SERIES	
20-1562-4	1-9/16	1.5670	1-5/16		1/4	45	UNIVERSAL	010
20-1562-5	1-9/16	1.5670	1-3/8		1/4	45	UNIVERSAL	
20-1562-6	1-9/16	1.5670	1-1/4		7/32	45	UNIVERSAL	010
20-1562-6N	1-9/16	1.5670	1-1/4		7/32	45	"N" SERIES	
20-1562-7	1-9/16	1.5670	1-1/4		1/4	45	UNIVERSAL	
20-1562-8	1-9/16	1.5670	1-5/16		7/32	30	IHC, IHN	
20-1562-46N	1-9/16	1.5680	1-1/4		9/32	45	IDI	
21-1562-50	1-9/16	1.5695	1.260T	1.412	0.280	45	CHC, MDI, MIT	
21-1562-67	1-9/16	1.5695	1.255T	1.307	0.319	45	GM, TOY	
21-1562-69	1-9/16	1.5695	1.219		0.317	45	CHC, HYU, MIT	
21-1562-69N	1-9/16	1.5695	1.219		0.317	45	CHC, HYU, MDI, MIT	
22-1577-1	1.577	1.5775	1.340T	1.412	0.220	30	CAT	
22-1578-2	1.578	1.5775	1.300T	1.331	0.317	45	IHN	
22-1578-1	1.578	1.5780	1.233T	1.323	0.315	45	MBT	
22-1579-1S	1.5795	1.5795	1.210R	1.369	0.2525	30	MAC,VOH	
22-1584-1	1.584	1.5840	1.328T	1.397	0.250	30	IHN	
22-1600-1	1.600	1.6000	1.340		0.300	45	FTA	030
22-1619-1	1.619	1.619	1.3375		0.287		Hino J05	
22-1624-1N	1.624	1.6245	1-21/64		3/8	45	CHI, CHM, CHC	

VALVE SEAT INSERT LISTING BY EXACT O.D.

QC #	Nominal O.D.	Exact O.D.	I.D.	I.D. Top Taper	Depth	Seat Angle	Application	Oversizes Available
22-1626-1N	1.626	1.6260	1.348T	1.406	0.365	45	IHC, IHN	
22-1627-1	1.627	1.627	1.351	1.499	0.279	0	ISU	
22-1628-2	1.628	1.6280	1-11/32	1.380	1/4	30	DDA	010,020,040
22-1628-1N	1.628	1.6285	1.348T	1.492	0.365	45	IHC	010,013,020,030
22-1628-3	1.628	1.6285	1.357T	1.414	0.249	30	DDA	005,010,020,030
22-1628-3D	1.628	1.6285	1.357T	1.414	0.270	30	DDA	
22-1628-4	1.628	1.6285	1.309T		0.237	20	DDA	
20-1625-1	1-5/8	1.6300	1-3/8		7/32	45	UNIVERSAL	005,010,015,020,030
20-1625-11	1-5/8	1.6300	1-11/32		7/32	45	UNIVERSAL	
20-1625-1N	1-5/8	1.6300	1-3/8		7/32	45	"N" SERIES	
20-1625-2	1-5/8	1.6300	1-3/8		0.248	45	UNIVERSAL	010,020
20-1625-2N	1-5/8	1.6300	1-3/8		1/4	45	"N" SERIES	
20-1625-3	1-5/8	1.6300	1-5/16		1/4	45	UNIVERSAL	
20-1625-3N	1-5/8	1.6300	1-5/16		0.248	45	"N"SERIES	
20-1625-4	1-5/8	1.6300	1-5/16		7/32	45	UNIVERSAL	
20-1625-4N	1-5/8	1.6300	1-5/16		7/32	45	"N" SERIES	020
21-1625-58	1-5/8	1.6300	1.280T	1.361	0.315	45	TOI, TOY	
22-1630-1	1.630	1.6300	1.335		0.312	45	FDI, FOR, FTA	
22-1630-1N	1.630	1.6300	1.335		0.312	45	"N" SERIES	010,020,030
21-1625-54	1-5/8	1.6320	1.329		0.280	45	FOR, FTU, HON, ISU	
21-1625-55	1-5/8	1.6320	1.333T	1.495	0.237	45	GM, IDI, ISU	
21-1625-56	1-5/8	1.6320	1.298T	1.382	0.317	45	BMW, CHC, HYU, MAZ, MDI, MIT	
21-1625-60	1-5/8	1.6320	1-1/4T	1.408	0.293	45	NII, NIS	
22-1635-1	1.635	1.6349	1.3583	1.5118	0.251	30	GDI	
22-1638-1N	1.638	1.6380	1.412		0.218	45	JDR	
22-1638-2N	1.638	1.6380	1.400		0.218	30	JDR	
22-1638-2T	1.638	1.6380	1.400		0.2370	30	JDR	
22-1654-1N	1.654	1.6544	1.367		0.312	45	IHN	
22-1656-1	1.656	1.6560	1.410		0.258	30	CAT	
22-1656-2	1.656	1.6560	1.273T	1.387	0.317	30	IHN	
22-1656-3	1.656	1.6560	1.410		0.2180	30	CAT	
22-1657-1	1.657	1.6570	1.312T	1.500	0.395	45	IHC	
22-1658-1S	1.6585	1.6585	1.300R	1.433	0.2880	30	MAC,VOH	
22-1669-1	1.669	1.6690	1.372T	1.429	0.272	37	FDI, FOR, IHN	015,030
22-1669-2N	1.669	1.6690	1.415T	1.530	0.2765	45	CAT	
22-1670-1	1.670	1.6700	1.420		0.302	30	ALL	
22-1676-2	1.676	1.6756	1.437		0.219	30	CAT	
22-1676-1	1.676	1.6760	1.400T	1.486	0.237	30	JDR	
22-1681-1N	1.681	1.6810	1-13/64		5/16	45	PER	
22-1681-3	1.681	1.6810	1.250		0.375	45	ALL, PER	
22-1687-1N	1.687	1.6870	1-7/16	1.546	0.365	45	CAT	See 22-1693-1N
22-1687-3N	1.687	1.6870	1.400		0.365	30	CAT	
22-1687-5S	1.687	1.6870	1.318T	1.358	0.3150	20	CAT	
22-1687-6S	1.687	1.6870	1.437T	1.546	0.3650	45	CAT	
22-1687-4N	1.687	1.6875	1.410		0.365	20	CAT	020
22-1690-1	1.690	1.6900	1-1/4		3/8	45	ALL, PER	
22-1691-1	1.691	1.6905	1-7/16		0.181	30	CUM	005,010,020
22-1691-2	1.691	1.6905	1-7/16		0.200	30	CUM	005,010,020,030
20-1687-1	1-11/16	1.6925	1-13/32		1/4	45	UNIVERSAL	
20-1687-15	1-11/16	1.6925	1-7/16		5/32	45	UNIVERSAL	
20-1687-1N	1-11/16	1.6925	1-13/32		0.248	45	"N" SERIES	
20-1687-2	1-11/16	1.6925	1-7/16		7/32	45	UNIVERSAL	
20-1687-2N	1-11/16	1.6925	1-7/16		7/32	45	"N" SERIES	
20-1687-3	1-11/16	1.6925	1-7/16		1/4	45	UNIVERSAL	
20-1687-3N	1-11/16	1.6925	1-7/16		1/4	45	"N" SERIES	
20-1687-4	1-11/16	1.6925	1-11/32		5/16	45	UNIVERSAL	
20-1687-4N	1-11/16	1.6925	1-11/32		5/16	45	"N" SERIES	
20-1687-5N	1-11/16	1.6925	1-3/8		7/32	45	"N" SERIES	
20-1687-7	1-11/16	1.6925	1-3/8		1/4	45	UNIVERSAL	
20-1687-8	1-11/16	1.6925	1-3/8		5/16	45	UNIVERSAL	
22-1692-1N	1.692	1.6925	1.430	1.496	0.248	30	MAC	015,030
22-1692-2N	1.692	1.6925	1.430		0.248	20	MAC	
22-1693-1N	1.693	1.6930	1-7/16T	1.546	0.365	45	CAT	005,010,020,030,040

VALVE SEAT INSERT LISTING BY EXACT O.D.

QC #	Nominal O.D.	Exact O.D.	I.D.	I.D. Top Taper	Depth	Seat Angle	Application	Oversizes Available
22-1693-2	1.693	1.6930	1-7/16T	1.546	3/8	45	CAT	010,020,030
22-1693-8N	1.693	1.6935	1.458		0.234	45	CAT	
21-1687-55	1-11/16	1.6945	1.340		0.315	45	CHC,TOI, TOY	
22-1695-1	1.695	1.6950	1.345T	1.482	0.242	30	JDR	
22-1696-1S	1.696	1.6960	1.260T	1.359	0.2860	30	VOH	
22-1696-2S	1.696	1.6960	1.295T	1.439	0.3160	30	VOH	
22-1696-3	1.697	1.6965	1.350R	1.452	0.3190	45	MBZ	
22-1697-1	1.697	1.6975	1.450T	1.542	0.276	45	GDI, GM, IDI, ISU	
22-1697-2	1.6975	1.6975	1.300R	1.4255	0.2950	40	MAC, VOH	
22-1697-3	1.697	1.6975	1.3000		0.237	30	MAC,VOH	
22-1698-1	1.698	1.6979	1.452		0.277		4HG1	
22-1711-1S	1.711	1.7110	1.416T	1.525	0.3780	45	CAT	
22-1711-1N	1.711	1.7111	1.416T	1.525	0.3780	45	CAT	
22-1717-1	1.717	1.7175	1.355T	1.415	0.240	30	PAC	
22-1722-1	1.722	1.7220	1.357T	1.574	0.265	45	CAS, CHC, CUM, GM	
22-1722-3	1.722	1.7220	1.382T	1.455	0.2650	20	CUM	
22-1727-2N	1.727	1.7270	1.310T	1.421	0.3800	45	IHC, IHN	
22-1733-2N	1.733	1.7330	1.455T	1.597	0.365	45	FDI, FOR	030
22-1744-1N	1.744	1.7440	1.445		0.312	45	FDI, FOR	
20-1750-0	1-3/4	1.7550	1-3/8		3/8	45	UNIVERSAL	
20-1750-1	1-3/4	1.7550	1-1/2		1/4	45	UNIVERSAL	005
20-1750-12	1-3/4	1.7550	1.438T	1.610	0.203	45	DDA	
20-1750-1N	1-3/4	1.7550	1-1/2		1/4	45	"N" SERIES	
20-1750-2	1-3/4	1.7550	1-1/2		7/32	45	UNIVERSAL	010
20-1750-2N	1-3/4	1.7550	1-1/2		7/32	45	"N" SERIES	020
20-1750-3	1-3/4	1.7550	1-7/16		7/32	45	UNIVERSAL	010,020
20-1750-3N	1-3/4	1.7550	1-7/16		7/32	45	"N" SERIES	
20-1750-4	1-3/4	1.7550	1-7/16		1/4	45	UNIVERSAL	
20-1750-4N	1-3/4	1.7550	1-7/16		1/4	45	"N" SERIES	
20-1750-5	1-3/4	1.7550	1-7/16		5/16	45	UNIVERSAL	
20-1750-7	1-3/4	1.7550	1-3/8		7/32	45	UNIVERSAL	
20-1750-8	1-3/4	1.7550	1-3/8		1/4	45	UNIVERSAL	
20-1750-9	1-3/4	1.7550	1-3/8		5/16	45	UNIVERSAL	
22-1756-1	1.756	1.7565	1.445T	1.618	0.217	20	CUM	
22-1756-2S	1.756	1.7565	1.445T	1.697	0.2370	45	CUM	
21-1750-61	1-3/4	1.7570	1.445T	1.617	0.310	45	CHC, MDI, MIT	
22-1775-1	1.775	1.7750	1.458T	1.680	0.300	45	IHN	
22-1775-3	1.775	1.7755	1.450T	1.555	0.3330	45	CUM KOM	
22-1775-3	1.775	1.7755	1.450T	1.555	0.3330	45	CUM, KOM	
22-1775-4	1.775	1.7755	1.450R	1.573	0.3330	30	KOM	
22-1776-1S	1.7765	1.7765	1.340R	1.470	0.2975	25	MAC, VOH	
22-1776-2S	1.776	1.7765	1.3380		0.238	30	MAC,VOH	
22-1781-1N	1.781	1.7810	1.476		0.311	45	FDI, FOR	
22-1782-2	1.782	1.7820	1.535T	1.595	0.2450	45	CAT, PER	
22-1782-1	1.7825	1.7825	1.490T	1.623	0.340	30	IHC	015
22-1784-1N	1.7845	1.7845	1.417T	1.563	0.292	45	GDI, GM	
22-1784-2N	1.784	1.7845	1.417		0.292	45	GDI, GM	
22-1792-1	1.792	1.7925	1.535		0.2570	30	CAT	
22-1796-2	1.7967	1.7967	1.437T	1.475	0.318	45	HIN	
22-1803-1	1.8035	1.8035	1.571		0.312	45	IHC, IHN	
22-1811-2N	1.811	1.8110	1.548T	1.650	0.334	45	IHC, IHN	
22-1811-3	1.811	1.8110	1.548T	1.650	0.334	45	IHN	
22-1812-6	1.812	1.812	1.450		0.186	30	CUM	
22-1812-1	1.812	1.8120	1-9/16T	1.662	0.365	45	CAT	See 22-1818-1
22-1812-2	1.812	1.8120	1-9/16T	1.662	3/8	45	CAT	See 22-1818-2
22-1812-3	1.812	1.8120	1.540T	1.610	0.365	30	CAT	See 22-1817-3
22-1812-4	1.812	1.8120	1.520		0.197	30	CUM	005,010,020,030
22-1812-5	1.812	1.8120	1.520		0.225	30	CUM	010,030,040
22-1812-7	1.812	1.8120	1.535		0.365	45	CAT	
22-1812-8	1.812	1.8120	1.530T	1.580	0.365	30	CAT	
22-1812-6N	1.8125	1.8125	1.540		0.365	20	CAT	
22-1812-9	1.812	1.8125	1.430		0.186	30	CUM	010
22-1813-1	1.813	1.8130	1.540		0.3150	20	CAT	

VALVE SEAT INSERT LISTING BY EXACT O.D.

QC #	Nominal O.D.	Exact O.D.	I.D.	I.D. Top Taper	Depth	Seat Angle	Application	Oversizes Available
22-1814-1	1.814	1.8140	1.600		0.315	45	ALL	
22-1814-4S	1.814	1.8140	1.550		0.240	45	CAT	
22-1815-1	1.815	1.8150	1.595		1/4	45	FDI, FOR	
22-1815-2	1.815	1.8150	1.570		0.261	30	CAT	
22-1817-3	1.817	1.8170	1.540T	1.610	0.365	30	CAT	020,030
20-1812-1	1-13/16	1.8175	1-9/16		1/4	45	UNIVERSAL	020
20-1812-2	1-13/16	1.8175	1-1/2		7/32	45	UNIVERSAL	
20-1812-21N	1-13/16	1.8175	1-15/32		5/16	45	"N" SERIES	
20-1812-3	1-13/16	1.8175	1.500T	1-5/8	7/32	45	UNIVERSAL	
20-1812-4	1-13/16	1.8175	1-9/16		7/32	45	UNIVERSAL	
20-1812-4N	1-13/16	1.8175	1-9/16		7/32	45	"N" SERIES	
20-1812-5	1-13/16	1.8175	1-1/2		1/4	45	UNIVERSAL	
20-1812-5N	1-13/16	1.8175	1-1/2		1/4	45	"N" SERIES	
20-1812-7	1-13/16	1.8175	1-7/16		1/4	45	UNIVERSAL	
20-1812-9N	1-13/16	1.8175	1-1/2		5/16	45	"N" SERIES	
22-1818-1	1.818	1.8180	1-9/16T	1.662	0.365	45	CAT	010
22-1818-2	1.818	1.8180	1-9/16T	1.662	3/8	45	CAT	020
21-1812-50	1-13/16	1.8195	1.490T	1.588	0.307	45	KIA, MAI, MAZ, NIS	
21-1812-56	1-13/16	1.8195	1.535		0.293	45	FOR, NII, NIS	
22-1819-1	1.819	1.8195	1.571T	1.6665	0.283	30	DDA	005,010,020,030
22-1819-2	1.819	1.8195	1.500T		0.268	20	DDA	
22-1823-1	1.823	1.8230	1.560T	1.569	0.273	30	IHC, IHN	
22-1831-1	1.8315	1.8315	1.555		0.280	30	MAC	015,030
22-1831-2	1.831	1.8315	1.550		0.253	20	MAC	015
22-1831-3N	1.8315	1.8315	1.555		0.280	20	MAC	
22-1832-1	1.832	1.8320	1.510T	1.585	0.241	30	JDR	
22-1835-1	1.835	1.8345	1.490R	1.631	0.2950	45	KOM	
22-1835-3S	1.835	1.8350	1.515T	1.558	0.188	20	CUM	
22-1835-4	1.835	1.8350	1.515T	1.558	0.188	20	CUM	
22-1835-2	1.835	1.8355	1.470T	4.562	0.240	20	PAC	
22-1847-1	1.8465	1.8465	1-9/16		9/32	30	CUM	
22-1853-1	1.853	1.8530	1.498T	1.700	0.273	30	CAS, CHC, CUM, GM	
22-1853-2	1.853	1.8530	1.495T	1.566	0.271	20	CUM	
22-1854-1	1.8545	1.8545	1.610T	1.680	0.277	45	IDI	
22-1856-1	1.856	1.8560	1.550T		0.257	30	JDR	
22-1856-2	1.856	1.8560	1.325T	1.530	0.3100	30	DDA	
22-1857-1	1.857	1.8570	1.575T	1.660	0.229	45	CUM	
22-1857-3	1.857	1.8570	1.575T	1.660	0.250	45	CUM	
22-1857-2	1.857	1.8571	1.573T	1.617	0.229	20	CUM	
22-1857-4	1.857	1.8573	1.543		0.2827		ISU 4/6BD1	
22-1858-1N	1.858	1.8580	1.608		0.209	30	JDR	010
22-1874-2	1.874	1.8740	1.555T	1.725	0.238	45	CUM	
22-1874-2N	1.874	1.8740	1.555T	1.725	0.238	45	CUM	
22-1874-3	1.874	1.8740	1.525R	1.603	0.2950	30	KOM	
22-1874-4N	1.874	1.8740	1.525R	1.603	0.2950	30	KOM	
20-1875-1	1-7/8	1.8800	1-5/8		1/4	45	UNIVERSAL	
20-1875-11	1-7/8	1.8800	1-9/16		5/16	45	UNIVERSAL	
20-1875-19	1-7/8	1.8800	1-9/16		7/32	45	UNIVERSAL	
20-1875-2	1-7/8	1.8800	1-9/16		1/4	45	UNIVERSAL	
20-1875-38	1-7/8	1.8800	1-5/8		3/16	45	UNIVERSAL	
20-1875-6	1-7/8	1.8800	1-5/8		7/32	45	UNIVERSAL	
20-1875-8	1-7/8	1.8800	1-1/2T	1-5/8	7/32	45	UNIVERSAL	
22-1880-1	1.880	1.8800	1-13/32		7/32	45	PER	
21-1875-51	1-7/8	1.8820	1.575T	1.692	0.317	45	CHC, HYU, MAZ, MDI, MIT	
22-1882-1S	1.882	1.8820	1.595		0.3190	30	DDA, MBT	
22-1891-1	1.891	1.8910	1.615	1.6370	0.3060	30	CAT	005,010
22-1891-2	1.891	1.8910	1.615T	1.655	0.3060	30	CAT	
22-1894-3	1.894	1.8940	1.575T	1.692	0.375	45	IDI	
22-1894-4	1.894	1.8940	1.643T	1.580T	0.2410	30	CAT	
22-1894-1	1.894	1.8945	1.570T	1.660	0.292	30	GDI, GM, IDI, ISU	
22-1900-1	1.900	1.9000	1.650		0.300	45	FTA	
22-1912-1	1.912	1.9120	1-5/8		9/32	45	CAT	010
22-1932-1	1.932	1.9325	1.555R	1.650	0.3075	45	VOH D16 Exh	

VALVE SEAT INSERT LISTING BY EXACT O.D.

QC #	Nominal O.D.	Exact O.D.	I.D.	I.D. Top Taper	Depth	Seat Angle	Application	Oversizes Available
22-1933-2	1.933	1.9330	1.454T	1.778	0.241	30	JDR	
20-1937-1	1-15/16	1.9430	1-11/16		1/4	45	UNIVERSAL	
20-1937-12	1-15/16	1.9430	1.578T	1.720	0.203	30	DDA	
20-1937-17	1-15/16	1.9430	1-11/16		7/32	45	UNIVERSAL	
20-1937-23	1-15/16	1.9430	1-11/16		3/16	45	UNIVERSAL	
20-1937-4	1-15/16	1.9430	1-9/16		1/4	45	UNIVERSAL	
22-1934-1+010	1.944	1.944	1.562		0.310	0	DDA	
22-1946-1N	1.9465	1.9465	1.574		0.315	45	CAS	
22-1951-1	1.951	1.9515	1.510T	1.642	0.290	20	JDR	
22-1953-2S	1.9535	1.9535	1.640T	1.670	0.215	45	CUM	
22-1953-3	1.954	1.9535	1.640T	1.828	0.195	20	CUM	005,010
22-1953-4	1.953	1.9535	1.640T	1.819	0.1950	20	CUM	
22-1953-4N	1.9535	1.9535	1.640T	1.819	0.195	20	CUM	
22-1957-1	1.957	1.9570	1.563T	1.658	0.313	30	IHN	
22-1969-3	1.969	1.9690	1.704		0.234	30	CAT	
22-1969-4N	1.969	1.9690	1.656	1.728	0.248	45	CAT	
22-1973-1	1.973	1.9730	1.658T	1.875	0.300	45	IHN	
22-1991-1N	1.9910	1.9910	1.616		0.309	45	JDR	
22-1999-1	1.999	1.9990	1.712T	1.767	0.386	30	IHC, IHN	
22-2001-1	2.001	2.0010	1.712T	1.870	0.385	30	IHC	013,020,030
22-2001-2	2.001	2.0010	1.712T	1.870	0.355	30	IHN	
22-2003-1	2.003	2.0030	1-11/16		9/32	30	CUM	See 22-2006-1
22-2003-1N	2.003	2.0030	1-11/16		9/32	30	CUM	See 22-2006-1N
22-2003-6N	2.003	2.0030	1.625		0.280	45	CUM	
22-2004-2	2.004	2.0035	1-11/16	1.748	7/16	30	CAT	See 22-2006-2
22-2004-3N	2.004	2.0040	1.685T	1.735	0.317	30	CAT	
20-2000-1	2	2.0055	1-3/4		7/32	45	UNIVERSAL	
20-2000-13	2	2.0055	1-5/8		1/4	45	UNIVERSAL	
20-2000-14	2	2.0055	1-5/8		5/16	45	UNIVERSAL	
20-2000-18	2	2.0055	1-3/4		5/16	45	UNIVERSAL	
20-2000-2	2	2.0055	1-11/16		9/32	45	HAR, IHC	
20-2000-22	2	2.0055	1-3/4		5/32	45	UNIVERSAL	
20-2000-3	2	2.0055	1-5/8		19/64	45	CON	
20-2000-36	2	2.0055	1-3/4		3/16	45	UNIVERSAL	
20-2000-3N	2	2.0055	1-5/8		19/64	45	"N" SERIES	
22-2006-2	2.006	2.0055	1-11/16	1.748	7/16	30	CAT	010,030
22-2006-1	2.006	2.0060	1-11/16		9/32	30	CUM	005,010,020,030,040
22-2006-1N	2.006	2.0060	1-11/16		9/32	30	CUM	
22-2006-3N	2.006	2.0060	1-11/16		0.234	30	CUM	
22-2006-5	2.006	2.0060	1.690		0.214	30	CUM	005,010,020,030
22-2006-6S	2.006	2.0060	1.630		0.280	45	CUM	
22-2006-7S	2.006	2.0060	1.690		0.215	30	CUM	
22-2013-1	2.013	2.0130	1.770T	1.801	0.288	45	GDI, GM, IDI, ISU	
22-2015-1	2.015	2.0150	1-53/64		3/16	45	IHC, IHN	
22-2020-1	2.020	2.0200	1-19/32		9/32	45	ALL, PER	
22-2049-1	2.049	2.0485	1-25/32	1.827	11/32	30	CAT	005,010,020
22-2051-4	2.051	2.0510	1.744T	1.957	0.241	30	JDR	
22-2051-6	2.051	2.0510	1.650T	1.749	0.300	25	VOH DD16 Int	
22-2052-2	2.052	2.0525	1.805		0.289		ISU 4HG1	
20-2062-29	2-1/16	2.0680	1-13/16		7/32	45	UNIVERSAL	
20-2062-30	2-1/16	2.0680	1-13/16		3/16	45	UNIVERSAL	
20-2062-8	2-1/16	2.0680	1-11/16		9/32	45	UNIVERSAL	
22-2088-1	2.088	2.0880	1.692		0.299	30	MAC	010,015,020,030,043,062
22-2100-1	2.100	2.1000	1.782		0.267	30	CAS	
22-2107-1	2.107	2.1074	1.8091	1.9843	0.2155	30	GDI	
22-2126-2	2.126	2.1265	1.751T	1.817	0.3220	20	CUM	
22-2129-1	2.129	2.1290	1-13/16	1.863	7/16	30	CAT	See 22-2131-1
22-2129-2	2.129	2.1290	1.752T	1.868	0.306	30	CUM	010
20-2125-1	2-1/8	2.1305	1-13/16		1/4	45	UNIVERSAL	
20-2125-10	2-1/8	2.1305	1-3/4		9/32	45	UNIVERSAL	
20-2125-34	2-1/8	2.1305	1-7/8		7/32	45	UNIVERSAL	
20-2125-38	2-1/8	2.1305	1-13/16		3/16	45	GDI, GM	
22-2131-1	2.131	2.1310	1-13/16	1.863	7/16	30	CAT	

VALVE SEAT INSERT LISTING BY EXACT O.D.

QC #	Nominal O.D.	Exact O.D.	I.D.	I.D. Top Taper	Depth	Seat Angle	Application	Oversizes Available
22-2136-1N	2.1360	2.1360	1.705T	1.785	0.319	45	JDR	
22-2150-1	2.150	2.1500	1-55/64		0.292	30	CAT	010,020
20-2187-13	2-3/16	2.1930	1-11/16		9/32	45	UNIVERSAL	
22-2247-1	2.2475	2.2475	1.895		0.353	45	KOM	
20-2250-1	2-1/4	2.2555	1-15/16		3/16	45	UNIVERSAL	
20-2250-8	2-1/4	2.2555	1-13/16		1/4	45	UNIVERSAL	
20-2312-9	2-5/16	2.3180	2.000		1/4	45	GDI, GM	
22-2366-1	2.3665	2.3665	2.010		0.353	30	KOM	
22-2366-2N	2.3665	2.3665	1.977		0.392	45	CAT	
22-2367-1	2.367	2.3670	2.045		0.382	30	CAT	
22-2368-3N	2.368	2.3680	1.870		0.460	20	CAT	
20-2375-2	2-3/8	2.3805	2.000		9/32	45	UNIVERSAL	
22-2381-1	2.381	2.3810	1.930		0.323	30	CUM	010
22-2381-1S	2.381	2.3810	1.930		0.323	30	CUM	
22-2381-2	2.381	2.3810	2.030		0.323	30	CUM	
22-2381-2S	2.381	2.3810	2.030	2.0889	0.323	30	CUM	
22-2387-1	2.387	2.3870	1.970		0.382	30	CAT	
22-2387-2	2.3875	2.3875	1.890		0.361	20	CAT	
22-2388-1N	2.388	2.3880	1.890	1.932	0.4600	20	CAT	
22-2388-1N	2.388	2.3880	1.890T	1.932	0.4600	20	CAT	
22-2388-2N	2.388	2.3880	1.890T	1.935	0.4600	20	CAT	
22-2444-1	2.444	2.4440	2.046		0.299	30	MAC	005,010,015,020,030,062
22-2503-1	2.503	2.5030	2.000		1/2	45	CAT	See 22-2506-1
22-2503-2	2.503	2.5030	2-1/16T	2.160	1/2	45	CAT	See 22-2506-2
22-2506-1	2.506	2.5060	2.000		1/2	45	CAT	010
22-2506-2	2.506	2.5060	2-1/16T	2.160	1/2	45	CAT	040
20-2562-1	2-9/16	2.5685	2-3/16		1/4	30	MIN	
22-2590-1	2.590	2.5900	2-9/32T	2.360	5/8	30	CAT	

VALVE GUIDE NUMERICAL LISTING

QC #	I.D.	O.D	Length	Type	Application
30-1337	0.3445	0.6575	2.813	11-P	CHI, CHM, CHC
30-1338	0.3425	0.6575	2.813	11-P	CHI, CHM, CHC
30-1421	0.3750	0.6895	2.750	8-P	ALL
30-1458	0.3135	0.5018	2.500	1-P	CAS, WAU
30-1515	0.3427	0.6575	2.563	11-P	CAS, CHC, CON, MAC
30-1533	0.4055	0.7520	2.875	11-P	CON, MAC
30-1543	0.3435	0.5650	2.688	25-P	IHC
30-1545N	0.3430	0.5955	2.938	8-P	IHC
30-1546	0.3745	0.6895	2.750	1-P	IHC
30-1547N	0.3745	0.6895	3.219	8-P	IHC
30-1568	0.3120	0.4859	2.094	8-P	MIN
30-1577	0.3130	0.5645	2.750	11-P	CAS
30-1578	0.4050	0.7520	3.970	1-P	IHC
30-1592	0.5005	0.8770	4.313	26-SR	WAU
30-1593	0.4995	0.8770	5.438	26-P	WAU
30-1600	0.4390	0.8780	3.875	8-P	JDR
30-1614	0.3435	1.0305	2.210	36-P	FOR, FTA
30-1619	0.3163	0.5645	2.281	11-P	CON
30-1620	0.3425	0.6570	2.313	11-P	CON, CAS
30-1636	0.3120	0.6265	1.500	8-P	IHC
30-1644	0.5010	0.8785	4.750	11-P	JDR
30-1673	0.3434	0.6573	2.688	8-P	CAS
30-1678	0.3161	0.5645	1.658	8-P	ALL, CON
30-1680	0.3450	0.5639	3.250	1-SR	DDA
30-1680+2	0.3450	0.5659	3.250	1-SR	DDA
30-1697	0.3120	0.5328	2.093	11-P	MIN
30-1701	0.4365	0.7520	2.875	8-P	CAS, CON
30-1703	0.3125	0.5640	2.563	8-P	ALL
30-1717	0.3170	0.5640	1.813	1-SR	CON
30-1723	0.3115	0.5018	2.500	8-P	WIS
30-1726	0.3440	0.7515	2.547	3-P	FDI, FTA
30-1727	0.4050	0.7515	3.750	2-P	IHN
30-1740	0.3745	0.6895	2.813	1-P	CHC, CHI
30-1747	0.3760	0.6270	2.440	8-P	IHC, IHN
30-1800	0.4995	0.8140	3.656	1-SR	CUM
30-1803	0.3745	0.6895	2.938	13-P	CHC, CHI
30-1804	0.3440	0.5645	2.656	1-P	IHC
30-1809	0.5000	0.6886	3.500	9-P	MAC
30-1810	0.5015	0.6886	3.500	9-P	MAC
30-1813	0.4380	0.8140	3.125	13-P	CAS
30-1817	0.4385	0.6265	3.063	8-P	IHN
30-1823	0.3430	0.5635	2.820	1-SR	CUM
30-1829	0.4050	0.7520	4.375	11-P	CAS
30-1830	0.4050	0.7520	3.594	11-P	CAS
30-1832	0.3130	0.5000	2.500	1-SR	DDA
30-1833	0.3432	0.6575	1.813	1-SR	CAS
30-1836	0.3765	0.6890	2.906	8-P	IHC, IHN
30-1839	0.4385	0.6890	3.090	1-P	CHI, CHC
30-1843	0.3745	0.6270	2.938	8-P	HER
30-1851	0.3130	0.5640	2.250	8-P	ALL
30-1853	0.3750	0.6890	2.344	1-P	ALL
30-1854	0.3445	0.5665	2.250	1-SR	ALL
30-1857	0.5015	0.7525	3.875	9-P	JDR
30-1858	0.3750	0.6900	3.344	8-P	JDR
30-1859	0.3750	0.6900	2.797	9-P	JDR
30-1860	0.3437	0.6277	2.375	8-P	JDR
30-1865	0.4050	0.7520	3.219	8-P	CAS
30-1872	0.3427	0.6575	2.438	8-P	CAS
30-1873	0.3427	0.6575	2.844	14-P	CAS
30-1874	0.3440	0.6575	3.125	8-P	CAS
30-1875	0.3440	0.6575	3.250	13-P	CAS
30-1881	0.3745	0.6265	2.844	1-P	IHC, IHN
30-1881+2	0.3745	0.6285	2.844	1-P	IHN
30-1891	0.3435	0.6263	2.310	25-P	MIN
30-1897	0.3745	0.6255	2.938	11-P	JDR
30-1898	0.3750	0.6255	3.313	11-P	JDR
30-1899	0.3440	0.6277	2.969	8-P	JDR
30-1906N	0.3771	0.6579	3.220	16-P	CAT
30-1907	0.3135	0.4390	1.813	1-SR	WIS
30-1908	0.3135	0.4385	2.500	1-P	WIS
30-1909	0.3135	0.4385	2.064	1-P	WIS
30-1914	0.4370	0.7515	3.125	24-P	MIN
30-1927	0.3745	0.6260	2.625	1-SR	MIN, WAU
30-1936	0.4385	0.6910	2.813	8-P	IHN
30-1941	0.4525	0.7520	3.010	7-SR	CUM
30-1942	0.4530	0.7520	3.400	3-SR	CUM
30-1942+3	0.4530	0.7550	3.400	3-SR	CUM
30-1942+5	0.4530	0.7570	3.400	3-SR	CUM
30-1943	0.3445	0.5645	2.250	9-P	ALL
30-1946	0.3130	0.5000	2.381	11-SR	DDA
30-1946+10	0.3130	0.5100	2.380	11-SR	DDA
30-1946+2	0.3130	0.5020	2.380	11-SR	DDA
30-1946+5	0.3130	0.5050	2.380	11-SR	DDA
30-1947	0.3745	0.6265	2.500	1-SR	WAU
30-1951	0.3745	0.6260	2.781	1-SR	MIN
30-1952	0.3745	0.6260	2.406	8-SR	WAU
30-1953	0.3745	0.6260	2.313	1-SR	MIN, WAU
30-1954	0.3745	0.6260	3.188	1-SR	WAU
30-1956	0.3150	0.5025	2.438	1-P	PER
30-1957	0.4375	0.6890	3.172	8-SR	IHC
30-1962	0.3440	0.6575	2.375	8-P	CON
30-1965	0.3745	0.6260	3.500	3-P	WAU
30-1966	0.3440	0.7510	2.938	3-P	FDI, FTA
30-1967	0.4385	0.7835	3.188	8-P	JDR
30-1968	0.4190	0.6890	2.906	8-P	IHC
30-1969	0.4042	0.7520	3.438	3-SR	CUM
30-1976	0.3755	0.6265	2.281	8-P	ALL, PER
30-1977	0.3755	0.6265	2.406	8-P	ALL, CAT, PER
30-3000	0.2770	0.4390	1.660	1-SR	NII
30-3001	0.2770	0.4390	1.990	1-SR	NII
30-3006	0.3745	0.6265	2.395	3-P	IHN
30-3006SA	0.3745	0.6265	2.395	3-P	IHN
30-3007	0.3745	0.6295	3.358	7-SR	CAT
30-3007+2	0.3745	0.6319	3.358	7-SR	CAT
30-3007+5	0.3745	0.6348	3.358	7-SR	CAT
30-3008	0.3819	0.6506	3.374	8-SR	CUM
30-3014	0.3740	0.6890	3.050	7-SR	CAT
30-3021	0.2776	0.5015	1.937	21-SR	CHC, CUM
30-3022	0.2776	0.5015	2.018	21-SR	CHC, CUM
30-3024	0.3735	0.6203	2.620	9-SR	GDI, GM
30-3024SA	0.3735	0.6203	2.620	9-SR	GM
30-3025	0.3735	0.6265	2.250	9-SR	GDI, GM
30-3027	0.3750	0.7833	3.189	1-SR	JDR
30-3033	0.2776	0.5015	1.937	21-SR	CHC, CUM
30-3034	0.2776	0.5015	2.020	21-SR	CHC, CUM
30-3035	0.3715	0.6883	4.050	8-SR	CAT
30-3036	0.3715	0.6885	4.050	8-SR	CAT
30-3037	0.3743	0.6580	2.780	7-SR	CAT
30-3038	0.3178	0.5130	3.175	12-SR	CAT
30-3039	0.3740	0.6299	3.350	12-SR	CAT
30-3042	0.4977	0.6886	4.055	1-SR	CAT
30-3043	0.3750	0.6884	3.110	6-SR	MAC
30-3049	0.2755	0.4547	1.967	4-P	GDI, GM
30-3050	0.3570	0.5905	3.355	1-SR	JDR
30-3051	0.3740	0.6890	3.730	8-SR	CAT
30-3052	0.3740	0.6890	4.130	8-SR	CAT

P = Plain (Smooth) I.D. **SR = Spiral Reamed I.D.**

-H Suffix Denotes Hardened Guide

VALVE GUIDE NUMERICAL LISTING

QC #	I.D.	O.D	Length	Type	Application
30-3054	0.3547	0.5526	2.365	1-P	GDI, GM, IDI, ISU
30-3055	0.2765	0.4395	2.331	21-P	FDI, FOR, IHN
30-3058	0.3745	0.6298	3.155	7-SR	CAT
30-3059	0.3543	0.5140	2.017	2-P	PER
30-3060	0.3550	0.5520	2.015	2-P	PER
30-3061	0.3821	0.6504	4.106	7-SR	CUM
30-3061U	0.3801	0.6504	4.106	7-SR	CUM
30-3068	0.3761	0.6297	2.835	1-P	CUM
30-3071	0.3550	0.5920	2.835	5-P	MBT
30-3072	0.3940	0.5920	2.640	5-P	MBT
30-3079	0.3140	0.5655	2.585	1-P	IHN
30-3079U	0.3140	0.5655	2.585	1-P	IHN
30-3080	0.2775	0.4395	1.937	1-SR	CHC, CUM
30-3081	0.2775	0.4395	2.020	1-SR	CHC, CUM
30-3100	0.3148	0.5025	2.227	3-P	PER
30-3101	0.3150	0.5526	2.245	11-P	GM,ISU
30-3105	0.2752	0.474	1.790	2-P	PER
30-3123	0.318	0.5135	3.155	7-SR	CAT
30-3131	0.3162	0.5335	2.465	1-SR	JDR
30-3138	0.3740	0.6890	3.255	8-SR	CAT
30-3139	0.3730	0.6890	4.055	8-SR	CAT
30-3140	0.3730	0.6890	3.620	1-SR	CAT
30-3141	0.2777	0.502	2.347	8-SR	JDR
30-3142	0.2755	0.4547	1.967	1-P	GDI, GM
30-3157	0.3157	0.5905	3.285	8-P	MAC, VOV
30-3158	0.4528	0.7518	3.167	8-SR	CUM
30-3158SA	0.4528	0.7518	3.167	8-SR	CUM
30-3163	0.2764	0.4725	2.150	1-P	FDI, FOR
30-3164	0.2364	0.3952	1.820	21-P	CAT
30-3174	0.3740	0.3890	3.075	8-P	CAT
30-3175	0.3547	0.5920	2.402	8-P	MBT
30-3177	0.3547	0.5920	2.620	1-P	IHN
30-3178	0.374	0.592	3.860	8-P	DDC
30-3181	0.3150	0.4740	2.040	1-P	CUM, KOM
30-3183	0.3542	0.6312	2.670	8-SR	KOM
30-3184	0.3540	0.6312	2.670	1-SR	KOM
30-3185	0.2760	0.4735	1.910	2-P	YAN
30-3186	0.2760	0.4735	1.770	2-P	YAN
30-3187	0.2760	0.4735	1.695	2-P	YAN
30-3188	0.2365	0.3945	1.378	2-P	YAN, JDR
30-3189	0.3545	0.5325	1.990	2-P	KOM, YAN
30-3190	0.3158	0.5128	1.930	2-P	JDR, KOM, YAN
30-3191	0.3158	0.5128	1.810	2-P	JDR, KOM, YAN
30-3192	0.3155	0.5130	2.200	5-P	CAT
30-3193	0.3155	0.5130	1.970	5-P	CAT
30-3194	0.3178	0.5130	2.407	12-SR	CAT
30-3195	0.3733	0.6888	3.625	8-SR	CAT
30-3196	0.2775	0.4725	2.345	4-SR	
30-3197	0.2775	0.4725	2.345	1-P	
30-3202	0.2756	0.502	1.460	8-P	CAT
30-3203	0.3755	0.6270	2.600	8-P	PER
30-3205	0.3150	0.5906	2.283	2-P	DEU
30-3207	0.3932	0.6297	3.285	8-P	VOH
30-3208	0.2610	0.474	2.365	4-P	CAT
30-3211	0.3920	0.6313	2.850	8-P	PAC
30-3255	0.2750	0.4940	1.476	8-P	CHC, MBT, MBZ
30-3257	0.3145	0.502	2.440	21-SR	FOR, IHN
30-3276	0.3146	0.5524	2.362	8-P	DDA, MBT
30-3276SA	0.3146	0.5524	2.362	8-P	DDA, MBT
30-3285	0.2950	0.5525	2.363	8-P	MER
30-3297	0.316	0.553	2.245	2-P	ISU
30-3298	0.356	0.553	2.369	2-P	ISU
30-3299	0.355	0.553	2.357	1-P	ISU
30-3300	0.318/0.	0.5138	2.380	7-P	Hino J05
30-3301	0.3570	0.5535	2.360	2-P	NIS FD6T,FE6T
30-3302	0.3145	0.5528	1.971	8-P	ISU 4JB1
30-3304					CUM
30-4216	0.2759	0.4346	1.800	4-SR	CUM
30-4217	0.2763	0.4345	1.737	1-P	CAT
30-4941	0.3120	0.5645	2.063	2-P	IHC
30-4944	0.3120	0.6270	2.688	2-P	IHN
30-5606	0.3440	0.5020	2.375	1-P	FOR, GM
30-5607	0.3440	0.5020	2.250	1-P	Conversion
30-5610	0.3750	0.5020	2.625	1-P	Conversion
30-5745	0.3730	0.6270	3.500	8-SR	ALL
30-5794	0.5650	0.9385	5.063	1-SR	WAU
30-6105	0.3440	0.5020	2.500	1-P	Conversion
30-6105U	0.3390	0.5020	2.500	1-P	Conversion
30-6108	0.3740	0.5020	2.375	1-P	Conversion
30-6109	0.3740	0.5020	2.500	1-P	Conversion
30-6113	0.3745	0.5020	2.375	1-P	Conversion
30-6115	0.3750	0.5020	2.750	1-P	Conversion
30-6119	0.4375	0.6270	2.500	1-P	Conversion
30-6169	0.3812	0.6268	2.500	2-SR	CUM
30-6254	0.2510	0.5000	2.360	11-SR	DDA
30-6254+2	0.2510	0.5020	2.360	11-SR	DDA
30-6254+5	0.2510	0.5050	2.360	11-SR	DDA
30-6452	0.4528	0.7520	3.195	7-SR	CUM
30-6469	0.5020	0.9390	5.250	25-P	CAT
30-6470	0.5005	0.9386	5.250	25-P	CAT
30-6546	0.3755	0.7100	3.150	11-SR	DDA
30-6587	0.3135	0.4390	2.500	1-SR	Conversion
30-6628	0.3739	0.6265	3.875	13-SR	ALL
30-6730	0.3739	0.6265	2.880	13-SR	ALL
30-6730U	0.3659	0.6265	2.880	13-SR	ALL
30-6760	0.3739	0.6265	3.500	11-SR	ALL
30-6869	0.3125	0.4390	1.875	1-P	Conversion
30-6881	0.3140	0.5660	3.031	1-P	CAT
30-6881+2	0.3140	0.5680	3.031	1-P	CAT
30-6905	0.3750	0.6270	3.969	1-SR	Conversion
30-6907	0.3755	0.6265	3.000	10-P	FTA
30-6913	0.4375	0.6890	3.438	1-SR	IHN
30-6977	0.3120	0.5020	2.281	1-P	Conversion
30-6990	0.3760	0.6270	2.240	8-P	IHC
30-7073	0.3745	0.8780	5.450	8-SR	CAT
30-7073+2	0.3745	0.8800	5.450	8-SR	CAT
30-7073H	0.3745	0.8780	5.450	8-SR	CAT
30-7073H+5	0.3745	0.8830	5.450	8-SR	CAT
30-7074H	0.3745	0.8780	5.065	8-SR	CAT
30-7074H+5	0.3745	0.8830	5.065	8-SR	CAT
30-7083	0.5020	0.8771	5.045	8-P	CAT
30-7174	0.3745	0.6252	2.600	3-P	IHN
30-7194	0.3750	0.6580	2.781	1-SR	CAT
30-7194+2	0.3750	0.6600	2.781	1-SR	CAT
30-7194SA	0.3750	0.6580	2.781	1-SR	CAT
30-7216	0.3750	0.6890	3.250	2-SR	CAT
30-7216+2	0.3750	0.6910	3.250	2-SR	CAT
30-7216SA	0.3750	0.6910	3.250	2-SR	CAT
30-7216U	0.3740	0.6890	3.250	2-SR	CAT
30-7242	0.3750	0.6585	3.180	13-SR	CAT
30-7248	0.3750	0.5640	2.750	1-SR	Conversion, JDR
30-7255	0.3750	0.6892	2.815	13-SR	CAT
30-7255+2	0.3750	0.6912	2.815	13-SR	CAT
30-7260	0.3730	0.5020	2.875	1-P	Conversion
30-7264	0.4530	0.7620	3.400	4-SR	CUM
30-7298	0.3730	0.5020	2.375	1-P	Conversion

P = Plain (Smooth) I.D. **SR = Spiral Reamed I.D.**

-H Suffix Denotes Hardened Guide

VALVE GUIDE NUMERICAL LISTING

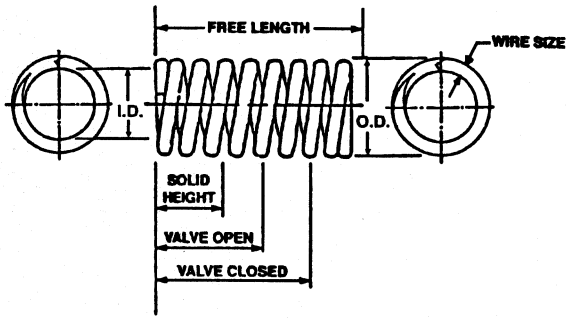
QC #	I.D.	O.D	Length	Type	Application
30-7336	0.3753	0.6890	2.960	8-SR	IHN
30-7338	0.5010	0.9385	5.219	8-P	CAT
30-7357	0.5020	0.8771	5.438	8-P	CAT
30-7357+2	0.5020	0.8791	5.438	8-P	CAT
30-7371	0.4365	0.7510	3.000	26-SR	MIN
30-7372	0.4990	0.8140	3.500	26-SR	MIN
30-7373	0.4972	0.8461	3.585	7-SR	CUM
30-7398	0.3745	0.6260	2.406	1-SR	WAU
30-7410	0.3745	0.6890	2.781	8-P	IHN
30-7425	0.4977	0.8461	3.785	10-SR	CUM
30-7431	0.3745	0.6265	2.750	3-SR	IHC
30-7431+2	0.3745	0.6285	2.750	3-SR	IHN
30-7431SA	0.3745	0.6265	2.750	3-SR	IHC, IHN
30-7431U	0.3735	0.6265	2.750	3-SR	IHC
30-7432	0.3440	0.5960	2.625	8-P	IHN
30-7444	0.4050	0.7515	3.219	11-P	CAS
30-7447	0.3740	0.5640	2.625	1-SR	Conversion, CAT
30-7448	0.3750	0.5640	3.000	1-SR	Conversion, CAT
30-7450	0.3750	0.6270	2.650	26-P	PER
30-7456	0.4385	0.6890	3.060	1-SR	IHN
30-7457	0.4385	0.6890	3.090	1-P	IHN
30-7476	0.5005	0.8770	4.325	8-SR	WAU
30-7495	0.3440	0.5650	1.870	3-SR	NII
30-7527	0.3160	0.5640	2.360	8-SR	TOI, TOY
30-7528	0.3160	0.5640	2.765	8-SR	TOI, TOY
30-7529	0.3160	0.5525	2.322	8-SR	TOI, TOY
30-7532	0.3155	0.5525	2.130	5-SR	TOI, TOY
30-7538	0.3555	0.5535	2.415	1-SR	TOI, TOY
30-7542	0.3155	0.4745	1.930	2-SR	NII, NIS
30-7545	0.3160	0.4745	1.930	2-SR	NII, NIS
30-7548	0.3885	0.6330	3.040	12-P	IHC, IHN
30-7552	0.3440	0.5640	2.875	1-SR	Conversion, DDA
30-7574	0.3160	0.5145	1.848	5-SR	CHC, MAZ, MII, MIT
30-7574+2	0.3160	0.5165	1.848	5-SR	CHC, MAZ, MII, MIT
30-7575	0.3160	0.5145	2.046	5-SR	CHC, MAZ, MII, MIT
30-7575+2	0.3160	0.5165	2.046	5-SR	CHC, MAZ, MII, MIT
30-7576	0.3160	0.5145	1.735	5-SR	CHC, HYU, MII, MIT
30-7576+2	0.3160	0.5165	1.735	5-SR	CHC, HYU, MII, MIT
30-7577	0.3160	0.5145	1.890	5-SR	CHC, HYU, MII, MIT
30-7577+2	0.3160	0.5165	1.890	5-SR	CHC, HYU, MII, MIT
30-7592	0.4940	0.6886	3.500	9-P	MAC
30-7604	0.3725	0.9390	5.250	8-SR	CAT
30-7604+2	0.3725	0.9410	5.250	8-SR	CAT
30-7610	0.4976	0.8461	3.585	3-SR	CUM
30-7625	0.3819	0.6506	2.934	10-SR	CUM
30-7632	0.3745	0.6890	4.060	1-SR	CAT
30-7656	0.3145	0.5530	1.970	2-P	GM, IDI, ISU
30-7681	0.3735	0.5020	2.598	1-P	Conversion, CAT
30-7682	0.3735	0.5020	3.000	1-P	Conversion, CAT
30-7689	0.3745	0.6252	2.600	1-P	FDI, FOR, IHN
30-7705	0.3155	0.5020	2.000	1-P	Conversion
30-7712	0.3740	0.6270	2.600	1-P	Conversion
30-7736	0.3740	0.6890	3.250	8-SR	CAT
30-7813	0.3740	0.6265	2.880	13-SR	ALL
30-7826	0.2760	0.4350	1.770	3-SR	NII, NIS
30-7828	0.3155	0.4745	2.660	5-SR	NII, NIS
30-7850	0.3155	0.5145	2.800	5-SR	CHC, FOR, HYU, MII, MIT
30-7851	0.3155	0.5145	2.920	5-SR	CHC, FOR, HYU, MII, MIT
30-7859	0.3755	0.6890	2.906	8-P	IHN
30-7875	0.3555	0.5535	2.341	4-P	THE
30-7876	0.3745	0.6890	2.906	8-SR	IHC, IHN
30-7886	0.5005	0.8770	4.500	26-P	WAU
30-7892	0.5550	1.0025	5.188	34-SR	WAU
30-7903	0.5000	0.6886	3.500	9-SR	MAC
30-7990	0.4528	0.7520	3.400	1-SR	CUM
30-7994	0.4530	0.7520	3.400	3-SR	CUM
30-7994+2	0.4530	0.7540	3.400	3-SR	CUM
30-7994SA	0.4530	0.7520	3.400	3-SR	CUM
30-8004	0.4375	0.7835	3.188	8-SR	JDR
30-8008	0.4375	0.6886	3.146	8-SR	MAC
30-8009	0.3695	0.6886	3.155	7-P	MAC
30-8010	0.3750	0.6886	3.155	6-SR	MAC
30-8010+2	0.3750	0.6906	3.155	6-SR	MAC
30-8011	0.5550	1.0025	5.188	14-SR	WAU
30-8013	0.3150	0.5020	2.250	1-P	Conversion
30-8113	0.3740	0.6205	2.435	18-SR	GDI, GM
30-8118	0.3745	0.6890	4.060	1-SR	CAT
30-8122	0.3761	0.6299	2.835	4-SR	CUM
30-8133	0.3755	0.7100	3.150	8-SR	DDA
30-8134	0.3819	0.7520	3.400	8-SR	CUM
30-8136	0.3819	0.7620	3.400	8-SR	CUM
30-8159	0.4350	0.7100	3.265	29-SR	KOM
30-8160	0.4335	0.7100	3.350	1-SR	KOM
30-8167	0.3819	0.6712	2.633	8-SR	CUM
30-8172	0.3173	0.5533	2.177	1-SR	MAZ
30-8177	0.3162	0.5525	2.382	1-SR	CAS, CHC, CUM, GM
30-8178	0.3162	0.5525	2.037	1-SR	CAS, CHC, CUM, GM
30-8188	0.3745	0.6265	2.610	3-SR	IHC
30-8188SAP	0.3749	0.6264	2.610	3-P	IHC, IHN
30-8188U	0.3735	0.6265	2.610	3-SR	IHC
30-8201	0.3160	0.5145	1.970	4-SR	TOI, TOY
30-8209	0.3155	0.4680	2.045	1-SR	NII, NIS
30-8210	0.3819	0.6506	2.633	8-SR	CUM
30-8210+2	0.3819	0.6526	2.633	8-SR	CUM
30-8220	0.3750	0.6580	3.700	8-SR	CAT
30-8222	0.3745	0.6252	2.600	3-P	IHN
30-8223	0.4190	0.6890	2.906	8-P	IHN
30-8224	0.4385	0.6870	3.250	33-P	IHN
30-8256	0.3740	0.6163	2.755	19-SR	GDI, GM
30-8277	0.3162	0.4395	2.500	1-SR	CUM
30-8319	0.3741	0.6894	3.250	9-SR	CAT
30-8347	0.3140	0.5160	1.890	5-SR	KUB
30-8347+2	0.3140	0.5180	1.890	5-SR	KUB
30-8348	0.3145	0.5160	1.850	4-SR	KUB
30-8348+2	0.3145	0.5180	1.850	4-SR	KUB
30-8356	0.3735	0.5020	3.000	1-SR	Conversion, CAT
30-8357	0.3735	0.5020	2.598	1-SR	Conversion, CAT
30-8383	0.3745	0.6890	3.600	1-SR	CAT
30-8399	0.3745	0.6270	2.500	30-P	LIS
30-8400	0.3745	0.6270	2.500	25-P	LIS
30-8407	0.3730	0.6205	2.220	33-SR	GDI, GM
30-8408	0.3750	0.6580	2.775	12-SR	CAT
30-8409	0.3730	0.6270	2.680	1-SR	FDI, FOR
30-8420	0.3812	0.6268	2.500	4-SR	CUM
30-8431	0.3425	0.7100	2.940	7-SR	DDA
30-8456	0.3765	0.6890	2.906	8-P	IHN
30-8476	0.3146	0.5650	2.440	1-P	FDI, FOR, IHC, IHN
30-8476SA	0.3146	0.5650	2.440	1-P	FDI, FOR, IHC, IHN
30-8485	0.3750	0.6890	3.250	8-SR	CAT
30-8485+2	0.3750	0.6910	3.250	8-SR	CAT
30-8496	0.4164	0.8459	4.000	7-SR	CUM
30-8531	0.3741	0.6583	2.781	12-P	CAT
30-8531+2	0.3741	0.6603	2.781	12-P	CAT
30-8562	0.3145	0.5640	2.440	1-SR	Conversion

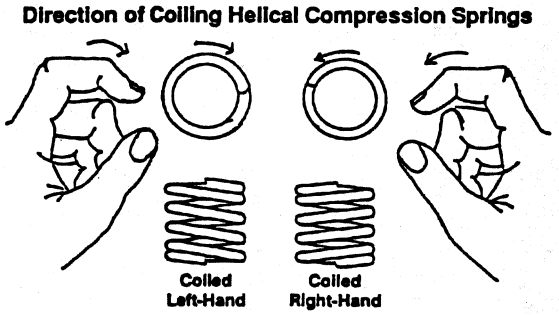
P = Plain (Smooth) I.D. **SR = Spiral Reamed I.D.**

-H Suffix Denotes Hardened Guide

VALVE GUIDE NUMERICAL LISTING

QC #	I.D.	O.D	Length	Type	Application
30-8590	0.3180	0.5132	2.955	13-SR	CAT
30-8590+2	0.3180	0.5134	2.955	13-SR	CAT
30-8590U	0.3179	0.5132	2.955	13-SR	CAT
30-8591	0.3453	0.5635	4.006	4-SR	DDA
30-8591U	0.3145	0.5635	4.000	4-SR	DDA
30-8592	0.3745	0.6305	2.785	11-SR	CAT
30-8592+2	0.3745	0.6325	2.785	11-SR	CAT
30-8592+5	0.3745	0.6355	2.785	12-SR	CAT
30-8594	0.3750	0.6580	2.640	2-SR	CAT
30-8663	0.2760	0.4725	1.740	2-SR	FOR
30-8673	0.3120	0.5020	2.390	1-SR	JDR
30-8674	0.3120	0.5020	2.209	1-SR	JDR
30-8674U	0.3110	0.5020	2.209	1-SR	JDR
30-8679	0.3735	0.6885	4.040	8-SR	CAT
30-8715	0.3163	0.5512	1.949	1-P	CUM
30-9105	0.3440	0.5020	2.500	1-SR	Conversion
30-9107	0.3740	0.5020	2.250	1-SR	GDI, GM
30-9108	0.3740	0.5020	2.375	1-SR	Conversion
30-9108H	0.374	0.502	2.375	1-SR	Conversion
30-9109	0.3740	0.5020	2.500	1-SR	FOR, FDI
30-9113	0.3745	0.5020	2.375	1-SR	Conversion
30-9115	0.3750	0.5020	2.750	1-SR	Conversion
30-9116	0.4375	0.6270	3.125	1-SR	Conversion
30-9119	0.4375	0.6270	2.500	1-SR	Conversion
30-9197	0.4375	0.6270	3.000	1-SR	Conversion
30-9260	0.3730	0.5020	2.875	1-SR	Conversion
30-9298	0.3730	0.5020	2.375	1-SR	Conversion
30-9458	0.3740	0.5020	3.063	1-SR	Conversion
30-9458H	0.374	0.502	3.063	1-SR	Conversion
30-9606	0.3440	0.5020	2.375	1-SR	Conversion
30-9607	0.3440	0.5020	2.250	1-SR	Conversion
30-9607H	0.3440	0.5020	2.250	1-SR	Conversion
30-9609	0.4378	0.6270	2.625	1-SR	FDI, FOR
30-9610	0.3750	0.5020	2.625	1-SR	Conversion
30-9705	0.3155	0.5020	2.000	1-SR	Conversion
30-9715	0.3430	0.5020	2.125	1-SR	Conversion
30-9716	0.3730	0.5020	2.188	1-SR	Conversion
30-9867	0.3440	0.5020	2.125	1-SR	Conversion
30-9869	0.3125	0.4390	1.875	1-SR	Conversion
30-9872	0.3120	0.4390	2.281	1-SR	Conversion, CAT
30-9946	0.3430	0.5020	2.250	1-SR	Conversion
30-9946+2	0.3430	0.5040	2.250	1-SR	Conversion
30-9964	0.3730	0.5020	2.625	1-SR	Conversion
30-9964H	0.3730	0.5020	2.625	1-SR	Conversion
30-9972	0.3740	0.6205	2.630	12-SR	GDI, GM
30-9972+3	0.3740	0.6235	2.630	12-SR	GDI, GM
30-9972H	0.374	0.621	2.630	12-SR	Conversion
30-9973	0.3735	0.6255	2.420	8-SR	GDI, GM
30-9973+10	0.3735	0.6355	2.420	8-SR	GDI, GM
30-9977	0.3120	0.5020	2.281	1-SR	Conversion
30-9977H	0.3120	0.5020	2.281	1-SR	Conversion
30-9977U	0.3070	0.5020	2.281	1-SR	Conversion





Illustrations Are For Reference Only And Are NOT Drawn To Scale.

SPRING NUMERICAL LISTING

QC #	Free Length	Solid Height	Wire Size	O.D.	I.D.	Closed Position Pressure @ Length	Open Position Pressure @ Length	# Of Coils Left Or Right Hand	Application
32-6173	1.947	0.975	0.158 x	1.313	0.919	77 @1.600	221 21.05	6.10 RH	CUM
32-00276	2.235	1.350	0.192	1.325	0.942	59 @ 2.000	180 @ 1.550	7.10 RH	CUM
32-414	2.313	1.110	0.148	1.296	1.000/1.020	37-43 @ 1.8125	65-75 @ 1.4375	7.50 RH	ALL
32-466	1.969	1.250	0.156	1.130	0.818/0.838	47-53 @ 1.6562	103-110 @ 1.375	8.00 RH	CAS, CON, MAC
32-480	2.375	1.344	0.162	1.292	0.958/0.978	58-64 @ 1.875	115-123 @ 1.521	8.25 RH	CAS, CON
32-495	2.063	1.313	0.142	0.969	0.685	47-53 @ 1.7031	96-104 @ 1.4219	9.00 RH	CAS, CON
32-497	2.313	1.280	0.128	0.969	0.713	30-33 @ 1.9375	63-69 @ 1.625	10.00 RH	FTA
32-5028	2.455	1.260	0.167	1.280	0.946	80 @1.900	171 @1.300	7.30 RH	IHN
32-611	2.090	1.300	0.177	1.364	1.000/1.020	71-79 @ 1.780	161-177 @ 1.390	7.00 LH	FOR, FDI, FTA
32-646	2.266	1.360	0.177	1.261	0.907/0.927	71-79 @ 1.867	142.5-157.5 @ 1.477	7.63 LH	IHC, IHN
32-6691	2.875	1.316	0.187	1.434	0.947	150 @1.928	230 @1.473	7.00 RH	CUM
32-672	2.000	1.203	0.192	1.404	1.010/1.030	78-88 @ 1.687	172-184 @ 1.3125	6.25 LH	CHC, CHI
32-677-D	2.300	1.250	0.188	1.438	1.052/1.072	94-104 @ 1.820	179.5-198.5 @ 1.42	6.50 LH	FDI, FOR
32-726	2.438	1.370	0.177	1.281	0.927	125 @1.742	151 @1.592	7.75 RH	IHC, IHN
32-757	2.125	1.240	0.177	1.375	1.021	52-64 @ 1.8125	129-157 @ 1.3594	7.00 RH	JDR
32-769	1.970	1.300	0.148	0.951	0.655	35@ 1.800	115@ 1.397	8.80 RH	DDA
32-778	1.828	1.062	0.177	1.360	1.006	59-65 @ 1.586	149-159 @ 1.222	6.00 LH	FDI, FOR
32-793	1.959	0.830	0.105	1.016	0.805	17 @ 1.488	38 @ 1.106	8.20 RH	PER
32-794	2.590	1.065	0.142	1.431	1.141	54 @ 1.656	92 @ 1.256	7.50 LH	ALL
32-798	2.000	1.140	0.188	1.438	1.052/1.072	76-84 @ 1.670	175-194 @ 1.240	6.00 LH	FDI, FOR
32-807	1.990	1.152	0.192	1.400	1.016	76-84 @ 1.700	187-207 @ 1.300	6.00 LH	CHC, FOR, FDI
32-812	1.875	1.120	0.188	1.400	1.024	81 @1.580	192 @1.180	6.00 LH	FDI, FOR
32-813	1.760	0.950	0.141	1.060	0.776	31 @ 1.566	102 @ 1.114	6.75 LH	GM, NII
32-816-D	2.180	1.340	0.207	1.504	1.090	90@ 1.880	220@ 1.460	6.50 LH	GDI, GM
32-817	2.678	1.770	0.188	1.282	0.896/0.916	53.2-58.8 @ 2.34	166 @ 1.830	9.50 RH	CAT
32-864-D	2.050	1.340	0.207	1.504	1.090	90@ 1.800	220@ 1.400	6.50 LH	GDI, GM, GMM
32-880-D	2.030	1.150	0.177	1.222	0.878	80 @ 1.700	200 @ 1.250	6.60 RH	FDI, FOR, GDI, GMM, GM
32-887-D	2.050	1.260	0.200	1.390	0.990/1.010	72-80 @ 1.800	191-203 @ 1.400	6.50 RH	FDI, FOR, IHC, IHN
32-907-D	2.060	1.260	0.218	1.503	1.067	85@ 1.820	270@ 1.320	6.00 LH	FDI, FOR
32-909-D	2.120	1.320	0.200	1.462	1.062	90 @ 1.82	220 @ 1.380	6.63 LH	FDI, FOR
32-939	2.090	1.380	0.135	0.796	0.533	32 @ 1.930	110 @ 1.527	10.25 RH	DDA
32-943-D	2.040	1.16	0.192	1.266	0.884	110 @ 1.700	285 @ 1.210	6.50 RH	GDI, GM, GMM
32-944	2.201	1.106	0.125	1.125	0.882	18-22 @ 1.790	48.5-53.5 @ 1.187	9.10 LH	CAT
32-945	2.574	1.531	0.218	1.703	1.267/1.295	58.5-71.5 @ 2.219	167-185 @ 1.614	7.35 RH	CAT
32-948	2.050	1.201	0.185	1.373	1.016	52.2-63.4 @ 1.766	151.3-167.1 @ 1.271	6.74 LH	CAT
32-950	2.310	1.340	0.188	1.486	1.110	51.5-58.5 @ 1.950	180 @ 1.400	7.38 RH	CAT
32-991	2.068	1.275	0.200	1.400	1.000	76-84 @ 1.810	218-240 @ 1.330	6.375 LH	CHC, FOR, FDI, FOM
32-1009	2.130	1.280	0.207	1.500	0.803	90 @ 1.880	280 @ 1.380	6.50 RH	GDI, GM, GMM
32-1014	2.685	1.610	0.177	1.245	0.891/0.915	67-74 @ 2.250	147-163 @ 1.724	9.00 RH	CUM
32-1016	1.960	1.110	0.192	1.437	1.053	76-84 @ 1.670	180-194 @ 1.270	5.85 RH	GM
32-1038-D	1.910	1.130	0.177	1.230	0.876	76-84 @ 1.610	194-206 @ 1.160	6.60 RH	GDI, GM, GMM
32-1068	1.782	0.961	0.135	1.200	0.914/0.934	21-25 @ 1.500	48-52 @ 1.156	7.12 RH	PER
32-1069	1.375	0.649	0.091	0.843	0.656	8 @ 1.200	30@ 0.725	7.13 LH	PER

-D Suffix Denotes Spring With Damper

SPRING NUMERICAL LISTING

QC #	Free Length	Solid Height	Wire Size	O.D.	I.D.	Closed Position Pressure @ Length	Open Position Pressure @ Length	# Of Coils Left Or Right Hand	Application
32-1082	2.035	1.225	0.200	1.370	0.970	65-75 @ 1.800	190-225 @ 1.400	6.50 RH	CHC, IHC
32-1158	2.200	1.392	0.192	1.365	0.981/1.001	60-72 @ 1.900	145-170 @ 1.50	7.25 RH	CAS
32-1173	2.500	1.632	0.192	1.236	0.854/0.878	70-86 @ 2.200	165-200 @ 1.800	8.50RH	CAT
32-1178	2.400	1.296	0.192	1.455	1.060/1.080	85-100 @ 1.900	185-215 @ 1.400	6.75 LH	IHC
32-1185	1.985	1.250	0.192	1.260	0.876/0.906	73-81 @ 1.750	202-222 @ 1.350	6.50 LH	CUM
32-1189	2.060	1.554	0.148	0.822	0.526/0.540	30-35 @ 1.930	90-110 @ 1.700	10.50 RH	DDA
32-1216	3.543	1.964	0.185	1.576	1.206	53@ 2.772	134@ 2.154	11.00 RH	MAC
32-1217	3.030	1.800	0.148	1.058	0.762	29@ 2.660	101@ 2.030	12.50 LH	MAC
32-1220-D	2.035	1.278	0.192	1.250	0.866/0.886	80 @ 1.811	230 @ 1.390	6.60 RH	GDI, GM
32-1240	1.996	1.152	0.206	1.546	1.134/1.162	43.5-53.5 @1.802	165-183 @1.302	6.16 RH	CAT
32-1289	1.960	1.150	0.163	1.346	0.960	70 @1.600	178 @1.200	6.80 RH	CHC, HYU, MAZ, MDI, MIT
32-1292	1.920	0.988	0.128	1.037	0.781/0.807	18-23 @ 1.67	66-74 @ 1.072	7.97 RH	CAT
32-1293	2.341	1.434	0.200	1.469	1.069	50-61 @ 2.100	171-189 @ 1.530	7.42 RH	CAT
32-1294	2.678	1.316	0.125	0.989	0.739	44 @ 1.978	83 @ 1.416	10.30 LH	CAT
32-1296	3.300	1.954	0.207	1.428	1.026	132 @2.589	230 @2.073	9.40 RH	CUM
32-1298	3.100	1.663	0.135	0.971	0.701/0.725	56-64 @ 2.308	93.7-105.9 @ 1.783	12.32 LH	CUM
32-1332	2.635	1.552	0.207	1.492	1.076	89 @ 2.240	240 @ 1.670	7.40 RH	CUM
32-1368	1.720	1.060	0.125	0.960	0.710	37 @ 1.350	62 @ 1.100	8.00 RH	KIA, MAI, MAZ
32-1370	1.958	1.048	0.156	1.317	1.005	62 @ 1.450	101 @ 1.200	7.20 LH	KIA, MAI, MAZ
32-1420	2.114	1.200	0.200	1.410	1.010	129 @ 1.650	225 @ 1.350	6.300 LH	FDI, FOR
32-1680	2.050	1.200	0.177	1.240	0.893	85 @ 1.700	205 @ 1.270	6.70 RH	GDI, GM
32-1688	1.928	1.160	0.131	0.949	0.687	24 @ 1.700	80 @1.200	8.80 RH	CAT
32-1943-D	2.140	1.160	0.192	1.260	0.876	110 @ 1.800	325 @ 1.200	6.00 RH	GDI, GM
32-02061	2.385	1.400	0.187	1.320	0.948	78 @ 2.000	174 @ 1.650	7.60 RH	CAS, CHC,CUM
32-2453	2.518	1.370	0.162	1.275	0.947	74@1.930	144@1.504	8.25 RH	CUM
32-2470	2.075	1.075	0.148	1.154	0.858	30 @ 1.790	96 @ 1.230	7.50 LH	CAT
32-2471	2.500	1.377	0.226	1.740	1.290	65 @ 2.220	198 @ 1.660	6.50 RH	CAT
32-2522	2.212	1.220	0.187	1.398T	1.020T	90 @ 1.808	226 @ 1.338	6.60 RH	GDI, GM, GMM
32-3406	1.812	0.930	0.134 x	1.077	0.742	47 @1.550	180 @0.975	6.95 RH	CUM
32-3660	2.874	1.528	0.212x	1.279	0.854	87 @2.512	215 @1.980	9.00 RH	CUM
32-3906	1.975	0.925	0.120	0.988T	0.748T	32 @1.550	88 @1.000	8.10 RH	JDR
32-04000	3.205	1.657	0.192	1.440	1.056	81 @ 2.643	222 @ 2.008	9.00 RH	CAT
32-04001	2.980	1.437	0.126	0.991	0.739	37 @2.368	96 @1.733	11.25 LH	CAT
32-04003	2.218	1.375	0.225	1.510	1.060			6.00 RH	DDA
32-04004	3.420	2.066	0.207	1.383	0.969	120 @ 2.810	255 @ 2.240	10.50 RH	CUM
32-04008	2.806	1.967	0.191	1.135	0.761	52 @ 2.593	198 @ 2.000	10.50 LH	CAT
32-04009	2.580	1.370	0.207	1.482	1.068	145 @ 1.980	262 @ 1.530	6.90 LH	IHC, IHN
32-04010	2.357	1.370	0.207	1.477	1.063	83 @ 2.007	215 @ 1.497	6.90 LH	IHC, IHN
32-04011	2.717	1.350	0.177	1.410	1.056	117 @ 1.850	160 @ 1.530	7.50 RH	MAC
32-04012	2.560	1.430	0.192	1.435	1.030	85 @ 2.067	191 @ 1.500	7.50 RH	JDR
32-04013	2.050	1.270	0.207	1.424T	1.010T	75 @ 1.840	250 @ 1.348	6.300 RH	GDI, GM
32-04014	2.208	1.130	0.177	1.420	1.067	69 @ 1.740	145 @ 1.320	6.75 LH	FTA
32-04015	2.335	1.360	0.177	1.275	0.920	46 @ 2.096	162 @ 1.534	7.12 RH	CUM
32-04020	2.690	1.748	0.182	1.130	0.766	93 @ 2.300	217 @ 1.800	9.50 LH	CAT
32-04021	3.650	2.511	0.207	1.138	0.724	129 @ 3.250	290 @ 2.750	12.25 LH	CAT
32-04022	3.199	2.246	0.197	1.132	0.738	139 @ 2.787	317 @ 2.323	9.00 LH	CAT
32-04023	2.875	1.200	0.118	1.044	0.808	17 @ 2.500	54 @ 1.700	10.00 LH	MAC
32-04024	2.940	1.410	0.182	1.430	1.066	48 @ 2.600	159 @ 1.800	8.00 RH	MAC
32-04027	2.320	0.870	0.104	0.922	0.702	36 @1.600	74 @0.940	8.35 RH	CAT
32-04028	2.341	0.910	0.145	1.257	0.975	70 @1.600	138 @1.012	6.50 LH	CAT
32-04037	2.320	1.080	0.135	1.125	0.855	44 @ 1.770	92 @ 1.240	7.50 RH	JDR
32-04038	2.520	1.250	0.192	1.574	1.190	100 @ 1.890	165 @ 1.510	6.50 LH	JDR
32-04039	2.755	1.758	0.200	1.235	0.835	126 @ 2.34	281 @ 1.828	9.00 RH	JDR
32-04040	2.076	1.377	0.169	0.995	0.657	64 @ 1.880	207 @ 1.440	8.15 RH	FDI, FOR, IHN
32-04041	2.216	1.137	0.156	1.177	0.865	34 @1.941	134 @ 1.291	7.50 RH	GDI, GM
32-04042	2.180	1.130	0.178	1.365T	1.015T	75 @ 1.808	205 @ 1.338	6.50 RH	GDI, GM
32-04043	1.630	0.695	0.122	1.105	0.859	15@1.456	56@0.941	6.50 RH	PER

-D Suffix Denotes Spring With Damper

SPRING NUMERICAL LISTING

QC #	Free Length	Solid Height	Wire Size	O.D.	I.D.	Closed Position Pressure @ Length	Open Position Pressure @ Length	# Of Coils Left Or Right Hand	Application
32-04044	1.808	0.875	0.162	1.487	1.164	25@1.567	106@1.02	5.50 LH	PER
32-04047	2.060	1.063	0.170	1.315	0.975	92@1.575	172@1.155	6.60 RH	IHN
32-04049	2.194	1.280	0.187	1.342	0.968	38@2.010	184@1.440	7.00 RH	CUM
32-04050	3.886	2.275	0.218	1.393	0.957	94@3.464	324@2.535	10.65 RH	CUM
32-04052	2.795	1.350	0.225	1.775	1.325	67@2.500	313@1.450	6.250 RH	CUM
32-04053	1.824	0.995	0.140 X	1.076	0.720	30.5@ 1.658	133@ 1.161	7.35 RH	CHC,CUM
32-04054	3.262	2.057	0.178 x	1.190	0.766	50@3.006	241@2.236	11.78 RH	DDA
32-04056	2.175	1.140	0.1850	1.488	1.118	35@1.984	150@1.346	6.20 RH	IHC
32-4127	1.847	0.948	0.177	1.400	1.046	40@1.658	177@1.050	5.40 RH	CAT, PER
32-4296	2.515	1.199	0.165	1.197	0.866	67 @2.140	164 @1.602	7.25 LH	VOH
32-4530	1.590	0.732	0.122	1.024	0.780	25 @1.358	63 @1.000	6.00 RH	CAT
32-04901	3.030	1.602	0.224	1.720	1.272	102 @ 2.500	197 @ 2.000	7.150 LH	CAT
32-04902	2.446	1.136	0.142	1.217	0.933	48 @ 1.800	95 @ 1.300	8.00 RH	CAT
32-5000	1.668	0.720	0.135	1.239	0.969	17@1.485	76@0.937	5.30 RH	KUB
32-5002	2.185	1.210	0.162	1.115	0.791	74 @1.770	168 @1.300	7.65 RH	JDR
32-5004	2.371	1.150	0.105	0.838	0.628	32 @1.685	62 @1.213	10.90 RH	CAT
32-5005	2.903	1.175	0.128	1.119	0.863	67 @1.732	99 @1.260	9.10 LH	CAT
32-5010	2.520			1.425	0.905	80@2.15	204@1.60	8.00 RH	GDI, GM
32-5012	2.330	1.185	0.152x	1.238	0.838	74@ 1.900	215@ 1.225	8.00 RH	JDR
32-5013	2.942	1.460	0.197	1.384	0.996	166@ 2.200	156@ 1.550	10.40 RH	MAC, VOH
32-5014	2.770	1.570	0.196	1.382	0.988	130 @ 2.363	263 @ 1.812	7.90 LH	MAC, VOH
32-5015	1.970	0.905	0.123x	1.015T	0.714T	89@ 1.338	146@ 0.964	7.55 RH	FDI, FOR
32-5020	2.420	1.12	0.1575	1.150	0.850			7.40 RH	CUM 855 Ntl. Gas
32-5025	3.860	2.380	0.192	1.138	0.755	123@3.300	325@2.450	12.50 RH	DDA
32-5026	3.930	2.350		1.109	0.755	81@3.400	241@2.450	13.40 RH	DDA
32-5303	2.985	1.265	0.105	0.826	0.616	36 @2.200	79 @1.350	11.90 LH	CAT
32-5307	3.097	1.325	0.148	1.162	0.866	86 @2.100	157 @1.375	9.05 RH	CAT
32-05860	4.067	2.678	0.207	1.194	0.780	190 @ 3.338	339 @ 2.814	12.80 RH	CUM
32-5976	3.017	1.555	0.218	1.720	1.284	122 @2.300	263 @1.600	7.30 RH	CAT
32-5977	2.840	1.455	0.156	1.210	0.898	62 @2.200	139 @1.500	9.25 LH	CAT
32-6172	2.205	1.080	0.158 x	1.310	0.916	104 @ 1.700	231 @ 1.146	7.00 RH	CUM
32-06412	2.545	1.373	0.192	1.388	1.004	109 @ 2.00	227@1.492	7.50 RH	CUM
32-6602	1.908	0.965	0.135	1.017T	0.747T	44 @ 1.550	120 @ 1.000	7.35 RH	JDR
32-6629	2.445	1.319	0.1915	1.390	1.007	110 @ 1.920	235 @ 1.413	7.20 RH	CUM
32-6638	1.382	0.700	0.114	0.966	0.738	17 @1.197	61 @0.750	6.00 RH	CAT
32-6648	2.788	1.385	0.165	1.302	0.972	73 @ 2.100	154 @ 1.450	8.50 RH	MBT
32-6649	1.810	0.930	0.122	0.858	0.613	45 @1.500	124 @0.975	7.75 RH	JDR
32-6657	2.200	1.255	0.148	1.109	0.813	39 @1.850	120 @1.300	8.50 RH	CAT
32-6667	2.683	1.587	0.205	1.366	0.957	88 @2.370	214 @1.922	7.75 RH	VOH
32-6669	3.070	1.430	0.187	1.436	1.062	172 @2.000	260 @1.492	8.00 RH	CUM
32-6674	1.998	0.980	0.135	1.019T	0.749T	48@1.600	125 @1.025	7.55RH	JDR
32-6675	1.988	0.980	0.142	1.043T	0.759T	57 @ 1.600	142 @1.07	7.26 RH	JDR
32-6678	4.010	2.355	0.177	1.140	0.786	100 @3.300	245 @2.400	13.40 RH	DD D15
32-6679	4.220	2.375	0.177	1.140	0.786	132 @3.300	268 @2.450	13.40 RH	DD D15
32-6695	2.556	1.323	0.157	1.191	0.876	42 @2.170	115 @1.685	8.40 RH	PAC
32-6696	2.460	1.213	0.138	1.037	0.762	37 @2.102	89 @1.596	8.80 RH	PAC
32-6697	2.779	1.332	0.185	1.455	1.085	64 @2.362	154 @1.778	7.20 RH	PAC
32-6702	2.500	1.323	0.157	1.105	0.791	48 @2.170	125 @1.658	8.30 RH	PAC
32-07082	2.550	1.281	0.120	0.920	0.680	50 @ 1.800	104 @ 1.300	10.50 LH	CAT
32-07083	2.550	1.375	0.182	1.340	0.976	90 @ 2.00	191 @ 1.500	7.50 RH	CAT
32-7204	1.910	0.827	0.118	1.075	0.839	22 @1.59	52 @1.16	7.00 RH	CUM
32-8332	2.742	1.465	0.236	1.713	1.240	110 @2.40	281 @1.864	6.20 RH	VOH
32-8519	1.700	0.866	0.150	1.267T	0.965T	40 @1.427	87 @1.110	5.80 RH	CAT, PER
32-8523	2.085	0.805	0.118	1.016	0.780	29 @1.713	70 @1.189	6.80 RH	CAT
32-8677	2.981	1.290	0.105	0.817	0.607	42 @2.100	75 @1.450	12.10 LH	CAT
32-8678	3.174	1.345	0.142	1.151	0.867	85 @2.100	148 @1.400	9.20 RH	CAT
32-09415	2.910	1.841	0.200	1.153	0.753	103 @ 2.608	275 @ 2.165	9.80 RH	DDA

-D Suffix Denotes Spring With Damper

KEEPER NUMERICAL LISTING

QC #	Heat Treated	Application	No. Of Grooves
34-159	Yes	CAS, CON	Pin
34-212	Yes	FOR, MAI, MAZ	1
34-217P	Yes	ALL, PER	1
34-217	Yes	CHC, GM 8mm	1
34-221	No	CAS	2
34-222	Yes	CUM	1
34-225	Yes	PER	1
34-00250	Yes	CUM	1
34-281	Yes	FDI, FOR, LAN, MAZ	3
34-309	No	DDA	1
34-510	Yes	CAT, GM	1
34-555	Yes	Universal 11/32	1
34-613	Yes	Universal 3/8	1
34-614	Yes	Universal 5/16	1
34-619	Yes	CHR, FOR, MAZ, VOK	3
34-716	Yes	CHC, FOR, HYU, MAZ, MDI, MIT	1
34-746	Yes	CAT, CHI, CHM, CHC, CUM, JDR, WAU	2
34-766	Yes	CHI, CHM, CHC, IHC, IHN	4
34-802	Yes	CAS, CON, FDI, FOR, IHN, JDR, MAC	1
34-803	Yes	CUM, IHN, IHC, MIN	2
34-810	Yes	MAC	0
34-811	Yes	TOI, TOY	1
34-813	Yes	CHC, MDI, MIT	1
34-816	No	CAT	0
34-822	Yes	CAS, CON	PIN
34-01177	Yes	CUM, DDA, VOH	1
34-01889	Yes	JDR	1
34-2004	Yes	PER	1
34-04644	Yes	CUM, IHC, IHN, ISU	1
34-4697	Yes	PAC	4
34-5001	Yes	GM, ISU	1
34-5005	Yes	GM LS, TOY 8mm	1
34-5007	Yes	FOR, NIS	1
34-5009	Yes	FOR, GM, SUZ	1
34-5010	Yes	HIN,NIS	1
34-5019	Yes	CAT	1
34-5020	Yes	CHC, CUM	1
34-5021	Yes	Various	3
34-5036	Yes	IHN, PER	PER
34-5061	Yes	MAC, VOH	1
34-5132	YES	MBT	1
34-5142	Yes	MBT	1
34-05203	Yes	DDA	1
34-05354	Yes	CUM	1
34-05425	Yes	MAC	1
34-5556	Yes	CAT, PER	1
34-6145	Yes	PAC	1
34-09573	Yes	DDA	1

LIFTER NUMERICAL LISTING

QC #	Type	Length	O.D.	Application
36-0160	Hydraulic			IHN
36-817CCI	Hydraulic	2.000	0.8425	GM Flat Chilled Cast Iron
36-855	Hydraulic	2.000	0.9968	IHC
36-900CCI	Hydraulic	2.000	0.8743	FOR Flat Chilled Cast Iron
36-6005	Hydraulic	2.000	0.8425	GM
36-976	Hydraulic	1.900	0.9380	CHC
36-992	Mechanical	2.000	0.8425	GM Early
36-0012	Mechanical	4.450	1.1280	PER
36-2011CCI	Hydraulic	1.900	0.9040	CHC Chilled Cast Iron
36-2041	Mechanical	2.437	0.9968	IHC
36-2073	Mechanical	2.052	1.1575	CAT
36-2082	Mechanical	2.437	1.1198	IHC
36-2083	Hydraulic	1.830	0.8743	FOR
36-2084	Mechanical	1.830	0.9043	CHC
36-2089	Hydraulic	1.830	0.9043	CHC
36-2104	Hydraulic	2.602	0.9210	GM,FOR,IHC
36-2148	Hydraulic	2.600	0.8425	GM Vortec Roller
36-2148G	Guide			GM Vortec Dogbone Guide
36-2212	Mechanical	2.500	1.3150	CAT
36-2279	Hydraulic	2.603	0.8421	GM BBC Roller
36-2279G	Guide			GM BB Dogbone Guide
36-2298	Mechanical	3.330	1.180	GM, GDI
36-2302	Mechanical	2.375	0.6265	CUM
36-5642				PAC
36-6000	Hydraulic	1.024	0.5110	CHC, HYU, MAZ, MIT
36-6005	Hydraulic	2.000	0.8425	GM,TOI,TOY
36-7013	Mechanical	6.318	0.9960	CAT
36-7014	Mechanical	2.980	0.7475	PER
36-7015	Mechanical	2.580	0.6825	JDR
36-7096	Mechanical Roller	2.945	1.1200	IHN
36-7097	Mechanical	2.240	1.1300	CUM
36-7098	Mechanical	2.118	1.496	CUM
36-7099	Mechanical	2.240	1.496	CUM
36-2315	Hydraulic		1.173	FOR
36-7257				PAC
36-7561	Hydraulic	0.990	0.472	CHC, MBT

ROTATOR / RETAINER NUMERICAL LISTING

QC #	Application
37-1046	GDI, GM, GMM
37-1081	CUM
37-1086	JDR
37-1410	JDR
37-1581	IHN
37-2001	CAT
37-2313	MAC
37-2474	CAT
37-2870	CUM
37-2899	GDI, GM, GMM
37-3075	JDR
37-03231	CUM
37-4003	GDI, GM, GMM
37-4680	IHN
37-5273	CUM
37-5655	IHN
37-5666	CHC, CUM
37-5978	CAT
37-5979	CAT
37-6761	CAT
37-6999	CAT
37-7062	CAT

QC #	Application
37-7063	CAT
37-7175	CAT
37-7639	CAT
37-7782	CAT
37-7977	CAT
37-9005	JDR
37-09105	DDA
37-9226	MAC
37-9320	MAC
37-9826	IHN

QC #	Application
55-2299	CUM 5.9L 12V
55-2311	MAC E7
55-2757	CUM 6C
55-2884	CUM ISX
55-3198	CUM ISB 5.9L
55-3512	CUM M11
55-4000	FOR BB
55-4250	GM BBC
55-4452	CUM ISC,ISL
55-5715	FOR Stock 6.7L
55-6066	GM 6.6 Duramax
55-6100	GM SBC
55-6105	GM SBC
55-6115	GM SBC
55-6304	GM
55-6305	GM BBC
55-6328	FOR 6.0, 6.4L
55-6715	Ford HP 6.7L
55-6906	GM Vortec 86-Up

VALVE STEM SEAL NUMERICAL LISTING

QC #	Type	Application
38-0057-45	TH	CUM
38-119-35	UM	GDI, GM
38-160-55	TH	FDI, FOR, IHN
38-173-45	TH	FDI, FOR, IHN
38-229-45	MC	CAT
38-240-15	OR	CHC,
38-240-25	OR	CHC, GM
38-253-45	UM	CHC, FDI, FOR
38-259-35	UM	FDI, FOR
38-292-45	TH	FOR
38-299-45	MC	GDI, GM
38-371-45	MC	GDI, GM
38-400-55	RB	FOR
38-403-45	MC	CAT, FDI, FOR, JDR
38-450-15	UM	GM
38-450-25	UM	CHI, FOR, GDI, GM, PER, TOI
38-450-45	UM	Universal
38-466-45	TH	IHC, IHN
38-502-55	MC	DDA
38-507-45	UM	PER
38-530-15	UM	CHC, FOR
38-530-25	UM	CHC, CHI, FDI, FOR, GM, IHC
38-530-45	UM	CHC
38-535-45	RB	CAS, CHC, CUM, GM
38-545-45	MC	MAC
38-552-45	MC	GDI, GM
38-667-45	TH	NII
38-713-15	UM	CHC, FDI, FOR
38-731-15	2R	GM, FOR
38-731-25	2R	GM
38-766-15	UM	FOR
38-766-25	UM	FOR
38-780-15	UM	CHC
38-780-25	UM	CHC, CHI, CHM
38-810-45	RB	FOR
38-811-55	MC	GDI, GM, GMM
38-812-45	MC	CHC, FOR
38-827-45	MC	FDI, GM, ISU
38-830-45	RB	GM, JDR
38-844-45	RS	FDI, FOR, GM, IHN
38-856-45	TH	CAT
38-905-25	UM	FDI, FOR
38-910-25	UM	CHC, FDI, FOR, GM, GMM, IHC, IHN, VOK
38-910-15	UM	GM
38-915-15	UM	FOR
38-915-25	UM	CHC, FOR, FOM, GM, IHC, IHN
38-921-15	2R	CHC, GM
38-921-25	2R	Universal
38-925-25	RB	Universal
38-937-15	RB	FDI, FOR, GM
38-938-45	RB	Universal
38-951-25	2R	FDI, FOR, GM, GMM
38-961-55	MC	MDI, NII, NIS, VOK
38-962-45	RS	Universal
38-964-55	MC	Universal
38-966-55	MC	KIA, MAI, MAZ
38-967-55	MC	GM, TOI, TOY

QC #	Type	Application
38-982-25	MC	TOY
38-985-55	MC	FOR, NII, NIS
38-0234-35	UM	CAT, IHN
38-0438-45	MC	CUM
38-0989-45	MC	CUM
38-1045-70	TR	FDI, GMM
38-1046-75	TE	CON, PER
38-1053-75	TE	DDA
38-1054-70	TR	Universal
38-1055-70	TR	CUM, KOM, MIN
38-1062-70	TR	FDI, FOR
38-1065-70	TR	FOR, GM, IHC
38-1068-70	TR	Universal
38-1209-80	MC	DDA
38-1209-80A	TM	DDA
38-1329-45	MC	DAE, GM, ISU, SAA
38-1741-80	MC	DDA
38-1741-80A	TM	DDA
38-2000-55	MC	MAC
38-2080-45	MC	CUM
38-2245-45	TH	IHC
38-2785-55	TH	PAC
38-2882-35	UM	CAT
38-3036-45	TH	CAT
38-3044-45	TH	CAT
38-3295-45	TH	IHC, IHN
38-3432-55	TH	IHN
38-3888-45	TH	CUM
38-3954-45	TH	CAT, PER
38-3966-45	MC	CUM
38-4281-45	TH	CUM
38-4800-80A	TM	DDA
38-5080-55	MC	CHC, MBT, MER
38-5707-45	TH	CUM
38-6105-55	TH	FOR, MAZ
38-6114-55	TH	CUM
38-6115-55	TH	GDI, GM, IDI, ISU
38-6121-55	TH	JDR
38-6122-55	TH	JDR
38-6124-55	MC	CAT
38-6129-55	TH	FDI, FOR
38-6132-55	MC	GDI, GM 6.6L Late
38-6133-55	MC	JDR
38-6134-55	MC	DDA DD13, DD15
38-6136-55	TH	IHN
38-6139-55	TH	CAT
38-6140-55	TH	CAT
38-6141-55	MC	CAT
38-6142-55	TH	JDR
38-6143-55	MC	CUM
38-6144-55	MC	CUM, KOM
38-6145-55	MC	KOM
38-6146-55	MC	KOM
38-6147-55	MC	CAT, PER
38-6148-55	MC	JDR, YAN
38-6149-55	MC	JDR, YAN
38-6150-55	MC	KOM, YAN

Material Denoted by Suffix:

-15 Nitrile
-25 Polyacrylic
-35 Glass Filled Nylon
-45 Viton
-55 Metal Clad
-65 Silicone
-70 Teflon And Rubber
-75 All Teflon
-80 Teflon And Metal

VALVE STEM SEAL NUMERICAL LISTING

QC #	Type	Application
38-6151-55	MC	JDR, KOM, YAN
38-6152-55	MC	JDR, KOM, YAN
38-6170-55	TH	CUM
38-6328-55	MC	MAC
38-6366-55	TH	CUM
38-6438-45	TH	CAT, PER
38-6487-55	MC	CAT
38-6488-55	TH	JDR
38-6489-55	TH	JDR
38-6490-55	TH	CAT
38-6492-55	MC	DDA, MBT
38-6498-55	MC	CAT
38-6499-55	TH	JDR
38-6504-55	MC	VOH
38-6506-55	MC	PAC
38-6510-55	TH	GM 6.6L
38-6515-55	TH	CAT
38-6635-45	TH	JDR
38-6791-45	MC	CUM
38-7002-55	MC	ISU 4JB1, 4/6HK1
38-7003-55	MC	ISU 4HG1
38-7004-55	MC	NIS FD6T/FE6T NV200
38-7005-55	MC	HIN J05
38-7117-45	MC	CAT, PER
38-7120-45	MC	IDI
38-7624-55	MC	CAT
38-8781-55	MC	CUM
38-9191-45	TH	CUM
38-9675-45	MC	CHC, MBT, VOK

ROCKER COMPONENT NUMERICAL LISTING

QC #	Application	Description
40-2710	FOR	Rocker Arm. Stamped
40-2736	GM	Rocker Arm, Self-Aligning Stamped 3/8"
40-2740	CHC	Rocker Arm, Jeep 2.5,4.0,4.2L
40-2754	GDI, GM	Rocker Arm, GM 7.0, 7.4L
40-2844	CHI, GM, GMM	Rocker Arm
40-2850	CHC, CHI, CHM	Rocker Arm, Stamped LH
40-2851	CHC, CHI	Rocker Arm, Stamped RH
40-2859	FDI, FOR	Rocker Arm. Cast
40-2867	GDI, GM	Rocker Arm, Stamped
40-2868	GDI, GM	Rocker Arm, Stamped For >0.560 Lift
40-2888	FDI, FOR, FOM	Rocker Arm, Stamped
40-2892	CHC, CHI, CHM	Rocker Arm, CHC 239, 340, 360 LH
40-2893	CHC, CHI, CHM	Rocker Arm, CHC 239, 340, 360 RH
40-9111	GDI, GM, GMM	Rocker Arm
42-1741	FOR	Rocker Comp., 5/16 Bolt w/ Washer
42-1772	FOR	Rocker Comp., Grooved Ball
42-1776	FOR	Rocker Comp., Fulcrum
42-1786	GM	Rocker Comp., Nut 3/8x24 Adj.
42-1791	FOR	Rocker Comp., Nut 5/16
42-2641	FDI, FOR	Rocker Shaft. 18 x 0.84
42-2661	CHC	Rocker Shaft
42-2701	CHC, CHI, CHM	Rocker Shaft
42-2920	GDI, GM	Rocker Stud, 3/8-24 x 2.500 Press-In
42-2921	GDI, GM, GMM	Rocker Stud. +3 O/S 3/8-24 x 2.300 Press-In Adj.
42-2940	FDI, FOR	Stud, 7/16-20 x 7/16-14 Hex x 2.6700
42-2941	GDI, GM	Stud, 7/16-14x7/16-20x2.560
42-2971	GDI, GM	Rocker Bolt 3/8-16
42-3330	CUM	Injector Roller Pin, Big Cam
42-3331	CUM	Valve Roller Pin Big Cam
42-3400	CAT	CAT 3400 Rocker Bridge
42-3558	CUM	Rocker Bridge Guide
42-3679	CUM	Valve Cam Roller, Small V
42-3814	DDA	Cam Follower Roller Set
42-4223	CUM	Injector Roller Pin, Small V
42-4439	DDA	Cam Follower Assembly
42-4571	CUM	Injector Roller, Small V
42-5237	CUM	Valve Lever Roller, 94N14
42-5487	CUM	Cam Roller, L10, M11
42-5488	CUM	Cam Roller, L10, M11
42-5956	CUM	Injector Cam Roller, L10
42-6388	CUM	Injector Lever Pin, 94N14
42-6428	CUM	Valve Lever Pin, 94N14
42-6933	CUM	Valve Cam Roller, Big Cam
42-6934	CUM	Injector Cam Roller, Big Cam
42-7423	CUM	Injector Cam Roller, N14
42-7922	CUM	Injector Cam Roller Pin, N14
42-8939	CUM	Rocker Roller Pin
42-9154	CUM	Valve Roller Pin, Small V

DIESEL PERFORMANCE SPRINGS / ROCKER KITS

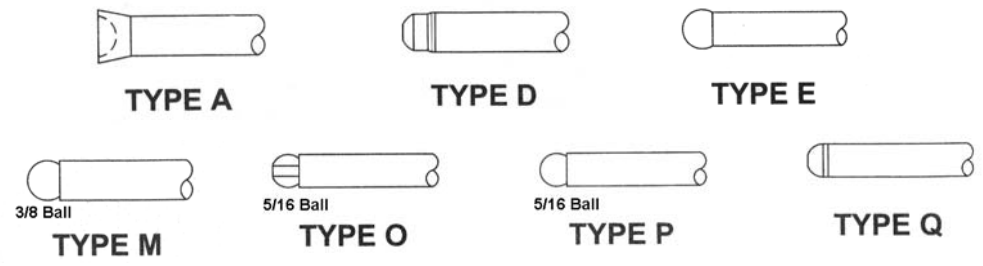
Manufactured by the industry-leading high performance valve spring factory, QualFast high performance springs employ the latest materials and manufacturing processes. All QualFast springs are wound using super-clean chrome silicon or new Alpha1 or 3 alloy wires. Our springs are engineered for high performance, giving optimum lift and preventing valve float.



Type: SGL = Single, SWD = Single with Damper, CON = Conical, DUA = Dual, DWD = Dual with Damper

Part No	Max Lift	O.D.	Closed Load	Open Load	Retainers	Note
52-5015	0.532	1.110T	46 @1.623	206 @1.091	55-6715	FOR 6.7L 32V
52-4049	0.420	1.344	178 @1.800	250 @1.380	55-2299	CUM 5.9L 12V
52-4040	0.480	0.995	84 @1.880	252 @1.400	55-6328	FOR 6.0L, 6.4L 32V
52-4053	0.350	1.085	87 @1.380	170 @1.030	55-3198	CUM 5.9L 24V Only use with OE cam profile
52-4041	0.500	1.250	75 @1.900	150 @1.400		GM 6.6L 32V

QC #	Components	Qty.	Application
41-1736	40-2736	1	GM SBC
	42-1731	1	GM SBC
	42-1786	1	GM SBC
41-2504	40-2867	1	GM BBC
	42-1793	1	GM BBC
	42-1797	1	GM BBC
41-2507	40-2868	1	GM BBC
	42-1793	1	GM BBC
	42-1797	1	GM BBC
41-2547	40-2888	1	FOR
	42-1740	1	FOR
	42-1776	1	FOR
41-2673	40-2754	1	GDI, GM
	42-1861	1	GDI, GM
	42-2971	1	GDI, GM



Type: P = Pressed S = Swedged W = Welded

PUSH ROD NUMERICAL LISTING

QC #	Length	Type	Tip 1	Tip2	O.D.	Application
74-5311	9	W	M	M	5/16X .060	FDI, FOR, GM
74-5312	9.59	W	M	M	5/16X .060	FDI, FOR
74-6034	7.793	W	O	O	5/16X .060	GM SB, AMC
74-6080	9	P	A	E	5/16x0.060	FOR
74-6230	8.279	W	O	O	5/16X .075	GM BB Int
74-6231	9.252	W	O	O	5/16X .075	GM BB Exh
74-6274	8.55	W	O	O	5/16X .060	FDI, FOR
74-6306	10.136	W	O	O	5/16X .060	FOR 240, 300
74-6321	8	W	P	P	5/16X .060	CHC
74-6323	9	W	P	P	5/16X .060	CHC
74-6373	7.195	W	O	O	5/16X .060	GM SB
74-6380	9.2	W	O	O	5/16X .075	GM BB Exh
74-6385	7	W	O	O	5/16X .060	CHC, GM
74-6441	8.281	S	O	O	3/8X .060	GM BB Int
74-6442	9.254	S	O	O	3/8X .060	GM BB Exh
74-6448	10	P	A	D	3/8X .060	CUM
74-6554	11.435				375 x0.075	CHC,CUM
74-6608	10	W	O	O	0.344X .060	FDI, FOR, IHN
74-6609	8	W	A	R	.371X .075	GDI, GM
74-6611	10	W			0.344X .060	FOR, IHN
74-6615	7.192	W	O	O	5/16X .060	GM
74-6638	8	W	O	O	0.375X .060	GM, GDI
74-6639	9	W	O	O	0.375X .060	GM, GDI
74-6662	9.795	W	O	O	0.344X .060	FOR, IHN
74-6685	9.534	W	N	AB	5/16 x0.75	FOR
74-6858S						DDA PR Spring

Exhaust Valve Head Material - Inconel 751
Intake Valve Head Material - 21-4N Nitrided

Part No	Head Diameter	Length	Stem Diameter	I/E	Tip	
			Dodge/CUM 5.9L 12V			
77-165008	1.654	5.081	0.3132	Exh	0.236	45 Deg. Seat
77-177008	1.772	5.084	0.3138	Int	0.236	30 Deg. Seat
			Dodge/CUM 5.9L 24V ISB			
77-129017	1.299	4.893	0.2746	Exh	0.300	45 Deg. Seat
77-129007	1.299	4.907	0.2756	Int	0.299	30 Deg. Seat
			Ford 6.0L Powerstroke			
77-110007	1.102	5.059	0.2735	Exh	0.358	37 Deg. Seat
77-133008	1.339	5.059	0.2738	Int	0.358	30 Deg. Seat
			Ford 6.4L Powerstroke			
77-116007	1.161	5.138	0.2734	Exh	0.433	39.3 Deg. Seat
77-133007	1.339	5.138	0.2738	Int	0.433	37 Deg. Seat
			Ford 6.7L Powerstroke			
77-119007	1.195	5.242	0.2748	Exh	0.699	30.3 Deg. Seat
77-133017	1.331	5.242	0.2744	Int	0.699	29.3 Deg. Seat
			GM 6.6L Duramax			
77-122007	1.220	4.965	0.2730	Exh	0.519	45 Deg. Seat
77-129057	1.299	4.975	0.2735	Int	0.519	45 Deg. Seat

BLACK LIGHTNING DIESEL PERFORMANCE VALVE KITS

77-VKCU591-5	***Dodge/CUM 5.9L 12V***	
77-165008	6	BLDP Valve, Exh
77-177008	6	BLDP Valve, Int
34-00250	24	Keeper
52-4049	12	HP Spring, Both
55-2299	12	Retainer
38-6114-55	12	Stem Seal, Top Hat

77-VKFO641-5	***Ford 6.4L 32V Powerstroke***	
77-116007	16	BLDP Valve, Exh
77-133007	16	BLDP Valve, Int
34-5009	64	Keeper
52-4040	32	HP Spring, Both
55-6328	32	Retainer
38-160-55	32	Stem Seal, Top Hat

77-VKCU592-5	***Dodge/CUM 5.9L 24V ISB***	
77-129017	12	BLDP Valve, Exh
77-129007	12	BLDP Valve, Int
34-5020	48	Keeper
52-4053	24	HP Spring, Both
55-3198	24	Retainer
38-9191-45	24	Stem Seal, Top Hat

77-VKFO671-5	***Ford 6.7L 32V Powerstroke***	
77-119007	16	BLDP Valve, Exh
77-133017	16	BLDP Valve, Int
34-281	64	Keeper
52-5015	32	HP Spring, Both
55-6715	32	Retainer
38-6129-55	32	Stem Seal, Top Hat

77-VKFO601-5	***Ford 6.0L 32V Powerstroke***	
77-110007	16	BLDP Valve, Exh
77-133008	16	BLDP Valve, Int
34-5009	64	Keeper
52-4040	32	HP Spring, Both
55-6328	32	Retainer
38-160-55	32	Stem Seal, Top Hat

77-VKGM651-5	***GM 6.6L 32V Duramax***	
77-122007	16	BLDP Valve, Exh
77-129057	16	BLDP Valve, Int
34-5001	64	Keeper
52-4041	32	HP Spring, Both
55-6066	32	Retainer
38-6132-55	32	Stem Seal, Top Hat

INJECTOR COMPONENT NUMERICAL LISTING

QC #	Application	Description
87-0129	MAC	Injector Tube
87-0262	CAT C11,C13A	Injector Tube
87-0390	DDA	Injector O-Ring, 8.2L
87-0411	MAC	Injector Tube
87-0412	MAC	Injector Tube
87-0486K	CUM	Injector Tube Kit with Ring
87-0488	MBT	Injector Tube
87-0488K	DDA, MBT	Injector Tube Kit, MBT 904, 906
87-0563	CAT	Injector O-Ring, 3126B
87-0873C	DDC	Injector Tube
87-0873CK	CUM	Injector Tube and Ring Kit
87-0873K	CUM	Injector Tube and Ring Kit
87-1028	DDA	Injector Tube
87-1095	IHN	Injector Tube
87-1102	CAT	Injector Tube, C10, C12
87-1136K	MAC, VOH	Injector Tube w/Oring
87-1147	CUM	Injector Tube, Thick Nose
87-1147K	CUM	Injector Tube Kit w/ O-Ring
87-1200	CAT	Injector Tube, C7, C9
87-1200K	CAT	Injector Tube and Ring Kit
87-1259	GDI, GM	Injector O-Ring, 6.6L
87-1345	DDA, MBT	Injector O Ring
87-1559	JDR	Injector Tube, Stainless
87-1580K	DDA	Injector Tube and Ring Kit
87-2075	JDR	Injector O-Ring, Black
87-2076	JDR	Injector O-Ring, Purple
87-212A	MAC	E6-4V, E7-4V, E6350-4V
87-2903	CAT	Injector O-Ring, Large, Top, 3400E Blue
87-2904	CAT	Injector O-Ring, Middle, 3400E Green
87-2911	CAT	Injector Tube, 3126B
87-2911K	CAT	Injector Tube and Ring Kit
87-3061	CAT	Injector Tube, 3114, 3116, 3126
87-3147	DDA	Injector O-Ring, 60 Ser. From '04
87-3148	DDA	Injector Tube, 60 Ser. From '04 Stainless
87-3148K	DDA	DDA 60 Ser. Stainless Kit, Tube + Oring
87-3322	NIS FE6	Injector Tube
87-3400	DDA	Injector Tube
87-3400K	DDC	Injector Tube and O-Ring
87-3401	DDA	O-Ring DD13,15,16
87-3609	JDR	Injector Ring, Bottom
87-3935	JDR	Injector Tube
87-4232	CAT	Injector Tube, 3176
87-4239	CAT	Injector Tube, 3400E
87-4239K	CAT	CAT C15 Kit, Injector + 3 Orings
87-4376	FDI, FOR, IHN	Injector Tube, 7.3L
87-4433	HINO J05, J08	Injector tube
87-4620	ISU 4HK1, 6HK1	Injector Tube
87-4701	DDA	Injector O-Ring
87-4743	DDA	Injector O-Ring
87-4920	CAT	Injector Tube.
87-4920K	CAT	CAT Kit, Injector + 3 Orings
87-5026	CUM	Injector O-Ring
87-5344	IHC, IHN	Injector Tube
87-5442	IHN	Injector Tube, 360, 466
87-5470	DDA	Injector O-Ring, 60 Ser.
87-5606K	DDA	DDA Kit, Injector + Oring
87-5966	CUM	Injector Tube
87-5966K	CUM	CUM ISX
87-5966RK	CUM	CUM ISX Kit RR and OR
87-5981	DDA	Injector Tube, Thick Nose, 53, 71, 92 Ser.
87-5981K	DDA	Injector Tube and Ring Kit
87-6056	PAC	Injector Tube
87-6056K	PAC	Injector Tube Kit w/ O-Ring
87-6178	CUM	Injector Tube
87-6193	CAT	Injector Tube
87-6206	CUM	Oring
87-6257	CAT	O-Ring Top
87-6487	MAC, VOH	Injector O-Ring, Black
87-6575	CAT	Injector Tube, CAT C9.3
87-6659	CUM	Injector Oring.
87-6883	CUM	Injector Retaining Ring
87-6951	FDI, FOR, IHN	Injector Tube
87-7257	CAT	Injector O-Ring 3126B, C7, C9
87-7259	CAT	O-Ring Bottom
87-7430	CAT	Injector O-Ring, Small, Bottom, 3400E
87-7456	JDR	Injector Tube
87-7717	CUM	Injector Tube
87-7759	CUM	Injector O-Ring
87-8320	FDI, FOR, IHN	Injector Tube, 6.0L
87-8339K	JDR	Injector Tube
87-8349	JDR	Injector Ring, Top
87-8463	GDI, GM	Injector Tube, 6.6L
87-8463K	GM 6.6L	Injector Kit, Tube and Oring
87-8536	CUM	Injector O-Ring
87-8621	VOH	Injector Tube
87-8621K	MAC, VOH	Injector Tube w/ Oring
87-8778	IHC, IHN	Injector Tube, 466 Electric
87-8829	DDA	Injector Tube, Threaded
87-8829K	DDA	Injector Tube Kit w/ Oring
87-8840	DDA	Injector Tube,
87-9446	JDR	Injector Tube
87-9516	CUM	Injector Tube

INJECTOR COMPONENT NUMERICAL LISTING

QC #	Application	Description
87-9630	CUM	Injector Tube, Small V
87-9724	DDA	Injector Tube, 8.2L
87-9886	CUM	Injector Seal, 6C

EXPANSION PLUG SIZE LISTING BY TYPE AND O.D.

Brass Concave Cup

QC #	Hole Dia.	O.D
96-500CCB	1/2"	0.500
96-750CCB	3/4"	0.750
96-875CCB	7/8"	0.875
96-937CCB	15/16"	0.937
96-1000CCB	1"	1.000
96-1031CCB	1-1/32"	1.031
96-1062CCB	1-1/16"	1.062
96-1125CCB	1-1/8"	1.125
96-1250CCB	1-1/4"	1.250
96-1375CCB	1-3/8"	1.375
96-1483CCB	1-31/64"	1.483
96-1500CCB	1-1/2"	1.500
96-1562CCB	1-9/16"	1.562
96-1625CCB	1-5/8"	1.625
96-1734CCB	1-47/64"	1.734
96-1750CCB	1-3/4"	1.750
96-1875CCB	1-7/8"	1.875
96-1937CCB	1-15/16"	1.937
96-2000CCB	2"	2.000
96-2062CCB	2-1/16"	2.062

Brass Cup

QC #	Hole Dia.	O.D
96-572CB	9/16	0.573
96-760CB	3/4"	0.760
96-885CB	7/8"	0.885
96-916CB	29/32"	0.916
96-947CB	15/16"	0.947
96-1010CB	1"	1.010
96-1062CB	1-1/16"	1.062
96-1135CB	1-1/8"	1.135
96-1192CB	1-3/16"	1.192
96-1226CB	1-7/32"	1.226
96-1260CB	1-1/4"	1.260
96-1385CB	1-3/8"	1.385
96-1510CB	1-1/2"	1.510
96-1572CB	1-9/16"	1.572
96-1635CB	1-5/8"	1.635
96-1648CB	1-5/8-0"	1.648
96-1760CB	1-3/4"	1.760
96-1762CB	1-49/64"	1.762
96-1885CB	1-7/8"	1.885
96-1943CB	1-15/16"	1.943
96-1953CB	1-61/64"	1.953
96-2005CB	2"	2.005
96-2017CB	2-1/64"	2.017
96-2070CB	2-1/16"	2.070
96-2150CB	2-1/8"	2.150
96-2260CB	2-1/4"	2.260

Brass Metric Concave Cup

QC #	Hole Dia.	O.D
96-21MMCCB	21mm	21mm
96-24MMCCB	24mm	24mm
96-45MMCCB	45mm	45mm

Brass Metric Cup

QC #	Hole Dia.	O.D
96-18MMCB	18mm	18.14mm
96-20MMCB	20mm	20.24mm
96-22MMCB	22mm	22.17mm
96-25MMCB	25mm	25.27mm
96-26MMCB	26mm	26.2mm
96-28MMCB	28mm	28.32mm
96-30MMCB	30mm	30.25mm
96-31.5MMCB	31.5mm	31.98mm
96-32MMCB	32mm	32.23mm
96-34.3MMCB	34mm	34.24mm
96-35MMCB	35mm	35.38mm
96-36MMCB	36mm	36.22mm
96-36.5MMCB	36.5mm	36.75mm
96-38MMCB	38mm	38.23mm
96-40MMCB	40mm	40.41mm
96-41.5MMCB	41mm	41.43mm
96-42.3MMCB	42mm	42.27mm
96-45MMCB	45mm	45.42mm
96-47MMCB	46.5mm	46.76mm
96-47.2MMCB	47mm	47.22mm
96-50MMCB	50mm	50.42mm
96-51.05MMCB	51mm	51.05mm

Brass Shallow Cup

QC #	Hole Dia.	O.D
96-1010SCB	1"	1.010
96-1135SCB	1-1/8"	1.135
96-1260SCB	1-1/4"	1.260
96-1385SCB	1-3/8"	1.385
96-1510SCB	1-1/2"	1.510
96-1640SCB	1-5/8"	1.640
96-1642SCB	1-41/64"	1.642
96-1703SCB	1-45/64"	1.703
96-1760SCB	1-3/4"	1.760
96-1762SCB	1-49/64"	1.762
96-2005SCB	2"	2.005
96-2070SCB	2-1/16"	2.070
96-2109SCB	2-7/64"	2.112
96-2193SCB	2-3/16"	2.193
96-2260SCB	2-1/4"	2.259
96-2510SCB	2-1/2"	2.510

Concave Cup

QC #	Hole Dia.	O.D
96-375CC	3/8"	0.375
96-437CC	7/16"	0.437
96-500CC	1/2"	0.500
96-562CC	9/16"	0.562
96-625CC	5/8"	0.625
96-687CC	11/16"	0.687
96-750CC	3/4"	0.750
96-812CC	13/16"	0.812
96-875CC	7/8"	0.875
96-937CC	15/16"	0.937
96-1000CC	1"	1.000

Concave Cup

QC #	Hole Dia.	O.D
96-1031CC	1-1/32"	1.031
96-1062CC	1-1/16"	1.062
96-1125CC	1-1/8"	1.125
96-1187CC	1-3/16"	1.187
96-1250CC	1-1/4"	1.250
96-1312CC	1-5/16"	1.312
96-1375CC	1-3/8"	1.375
96-1437CC	1-7/16"	1.437
96-1484CC	1-31/64"	1.484
96-1500CC	1-1/2"	1.500
96-1562CC	1-9/16"	1.562
96-1625CC	1-5/8"	1.625
96-1687CC	1-11/16"	1.683
96-1734CC	1-47/64"	1.734
96-1750CC	1-3/4"	1.750
96-1812CC	1-13/16"	1.807
96-1875CC	1-7/8"	1.875
96-1937CC	1-15/16"	1.937
96-2000CC	2"	2.000
96-2062CC	2-1/16"	2.062
96-2125CC	2-1/8"	2.125
96-2250CC	2-1/4"	2.250
96-2375CC	2-3/8"	2.375
96-2500CC	2-1/2"	2.500
96-2750CC	2.745	2.750
96-3000CC	2.995	3.00

Concave Special Ground

QC #	Hole Dia.	O.D
96-1500CCSG	1.500"	1.500

Cup

QC #	Hole Dia.	O.D
96-322C	5/16"	0.322
96-385C	3/8"	0.385
96-0385CRT	3/8"	0.395
96-447C	7/16"	0.447
96-461C	29/64"	0.480
96-523C	1/2"	0.523
96-572C	9/16"	0.572
96-603C	19/32"	0.603
96-635C	5/8"	0.635
96-641C	41/64	0.640
96-666C	43/64"	0.666
96-760C	3/4"	0.760
96-885C	7/8"	0.885
96-916C	29/32"	0.916
96-947C	15/16"	0.947
96-1010C	1"	1.010
96-1062C	1-1/16"	1.062
96-1135C	1-1/8"	1.135
96-1192C	1-3/16"	1.192
96-1226C	1-7/32"	1.226
96-1260C	1-1/4"	1.260
96-1385C	1-3/8"	1.385

EXPANSION PLUG SIZE LISTING BY TYPE AND O.D.

Cup

QC #	Hole Dia.	O.D
96-1510C	1-1/2"	1.510
96-1572C	1-9/16"	1.572
96-1635C	1-5/8"	1.635
96-1648C	1-5/8-0"	1.648
96-1760C	1-3/4"	1.760
96-1762C	1-49/64"	1.762
96-1885C	1-7/8"	1.885
96-1888CRT	1-7/8	1.885
96-1943C	1-15/16"	1.943
96-1953C	1-61/64"	1.953
96-2005C	2"	2.005
96-2017C	2-1/64"	2.017
96-2070C	2-1/16"	2.070
96-2098C	2 3/32	2.098
96-2150C	2-1/8"	2.150
96-2194CRT	2-3/16	2.194
96-2260C	2-1/4"	2.260
96-2390CRT	2-25/64	2.390
96-2497CRT	2-1/2	2.497
96-2635C	2-5/8"	2.635
96-2697C	2-11/16"	2.697

Metric Concave Cup

QC #	Hole Dia.	O.D
96-18MMCC	18mm	18mm
96-21MMCC	21mm	21mm
96-24MMCC	24mm	24mm
96-40MMCC	40mm	40mm
96-42MMCC	42mm	42mm
96-45MMCC	45mm	45mm
96-52MMCC	52mm	52mm

Metric Cup

QC #	Hole Dia.	O.D
96-56.7MMFP	56.7mm	
96-10MMC	10mm	10.06mm
96-12.7MMC	12.67mm	12.67mm
96-12.9MMC	12.9mm	12.95mm
96-14.4MMC	14.4mm	14.42mm
96-14.7MMC	14.7mm	14.7mm
96-15.8MMC	15.8mm	15.88mm
96-16MMC	16mm	16.51mm
96-18MMC	18mm	18.14mm
96-18.7MMC	18.7mm	18.7mm
96-20MMC	20mm	20.24mm
96-21.4MMC	21.4mm	21.44mm
96-22MMC	22mm	22.17mm
96-25MMC	25mm	25.27mm
96-26MMC	26mm	26.16mm
96-28MMC	28mm	28.32mm
96-30MMC	30mm	30.25mm
96-31.5MMC	31.5mm	31.98mm
96-32MMC	32mm	32.23mm
96-34.3MMC	34mm	34.24mm
96-35MMC	35mm	35.38mm

Metric Cup

QC #	Hole Dia.	O.D
96-36.5MMC	36.5mm	36.75mm
96-38MMC	38mm	38.23mm
96-40MMC	40mm	40.41mm
96-41.5MMC	41mm	41.43mm
96-42.3MMC	42mm	42.27mm
96-44MMC	44mm	44.86mm
96-45MMC	45mm	45.42mm
96-47MMC	46.5mm	46.76mm
96-47.2MMC	47mm	47.2mm
96-49.5MMC	49.5mm	49.63mm
96-50MMC	50mm	50.42mm
96-56MMC	56mm	56.42mm

Metric Shallow Cup

QC #	Hole Dia.	O.D
96-11.5MMSC	11.5mm	11.5mm
96-35MMSC	35mm	35mm

Pipe Plug

QC #	Hole Dia.	O.D
96-375-1HCPP	3/8"	Hex C.S.
96-62HCPP	1/16"	Hex C.S.
96-750HCPP	3/4"	Hex C.S.
96-125HCPP	1/8"	Hex C.S.
96-250HCPP	1/4"	Hex C.S.
96-375HCPP	3/8"	Hex C.S.
96-500HCPP	1/2"	Hex C.S.
96-62HCPT	1/16"	Hex C.S. (Teflon)
96-125HCPT	1/8"	Hex C.S. (Teflon)
96-250HCPT	1/4"	Hex C.S. (Teflon)
96-375HCPT	3/8"	Hex C.S. (Teflon)
96-500HCPT	1/2 "	Hex C.S. (Teflon)
96-750HCPT	3/4"	Hex C.S. (Teflon)
96-1000HCPT	1"	Hex C.S. (Teflon)
96-375HPPS	3/8"	Hex C.S. Special
96-125-1HCPP	1/8"	Hex C.S.-Short
96-250-1HCPP	1/4"	Hex C.S.-Short
96-125-1HCPT	1/8"	Hex Teflon Short
96-250-1HCPT	1/4"	Hex Teflon Short
96-375-1HCPT	3/8"	Hex Teflon Short
96-125SLPP	1/8"	Slotted Head
96-125SHPP	1/8"	Square Head
96-750SHPP	3/4"	Square Head

Shallow Cup

QC #	Hole Dia.	O.D
96-461SC	29/64"	0.449
96-510SC	1/2"	0.510
96-541SC	17/32"	0.541
96-697SC	11/16"	0.697
96-731SC	47/64	0.731
96-823SC	13/16"	0.823
96-1010SC	1"	1.010
96-1135SC	1-1/8"	1.135

Shallow Cup

QC #	Hole Dia.	O.D
96-1260SC	1-1/4"	1.260
96-1320SC	1-21/64"	1.338
96-1385SC	1-3/8"	1.385
96-1510SC	1-1/2"	1.510
96-1640SC	1-5/8"	1.640
96-1642SC	1-41/64"	1.642
96-1703SC	1-45/64"	1.703
96-1745SC	1-47/64"	1.745
96-1760SC	1-3/4"	1.760
96-1762SC	1 49/64	1.762
96-1802SC	1-51/64"	1.802
96-1808SC	1-13/16"	1.825
96-1885SC	1 7/8"	1.885
96-1902SC	1-29/32"	1.902
96-1931SC	1-59/64"	1.931
96-1953SC	1-61/64"	1.953
96-1978SC	1-31/32"	1.978
96-2005SC	2"	2.005
96-2017SC	2-1/64"	2.017
96-2070SC	2-1/16"	2.070
96-2098SC	2-3/32"	2.098
96-2109SC	2-7/64"	2.109
96-2135SC	2-1/8"	2.135
96-2140SC	2-9/64"	2.140
96-2156SC	2-5/32"	2.156
96-2193SC	2-3/16"	2.193
96-2228SC	2-7/32"	2.228
96-2260SC	2-1/4"	2.260
96-2353SC	2-11/32"	2.353
96-2386SC	2-3/8"	2.386
96-2386SCRT	2-3/8"RT	2.386
96-2510SC	2-1/2"	2.510
96-2760SC	2-3/4"	2.760

Stainless Steel Cup

QC #	Hole Dia.	O.D
96-760CSS	3/4"	0.760
96-885CSS	7/8"	0.885
96-947CSS	15/16"	0.947

Stainless Steel Metric Cup

QC #	Hole Dia.	O.D
96-16MMCSS	16mm	
96-40MMCSS	40MM	
96-14.4MMCSS	14.4mm	14.42mm
96-18MMCSS	18mm	18.2mm
96-19MMCSS	19mm	19.2mm
96-20MMCSS	20mm	20.24mm
96-22MMCSS	22mm	22.2mm
96-25MMCSS	25mm	25.3mm
96-28MMCSS	28mm	28.35mm
96-30MMCSS	30mm	30.25mm
96-32MMCSS	32mm	32.23mm
96-38.6MMCSS	38mm	38.58mm

EXPANSION PLUG SIZE LISTING BY TYPE AND O.D.

Stainless Steel Shallow Cup

QC #	Hole Dia.	O.D
96-823SCSS	13/16"	0.823
96-1010SCSS	1"	1.010
96-1135SCSS	1-1/8"	1.138
96-1260SCSS	1-1/4"	1.260
96-1320SCSS	1-21/64"	1.320
96-1385SCSS	1-3/8"	1.385
96-1510SCSS	1-1/2"	1.510
96-1640SCSS	1-5/8"	1.640
96-1703SCSS	1-45/64"	1.703
96-1745SCSS	1-47/64"	1.745
96-1760SCSS	1-3/4"	1.760
96-1885SCSS	1-7/8"	1.885
96-2005SCSS	2"	2.005
96-2135SCSS	2-1/8"	2.137
96-2260SCSS	2-1/4"	2.262
96-2285SCSS	2-9/32	2.286
96-2386SCSS	2-3/8"	2.386
96-2510SCSS	2-1/2"	2.510

EXPANSION PLUG KITS / COMPONENTS NUMERICAL LISTING

QC #	Components	Qty.	Application
97-10B	96-1760CB	8	GDI, GMM, GM
	96-2228SC	1	GDI, GMM, GM
	96-250HCPP	7	GDI, GMM, GM
97-49B	96-1250CCB	4	CON
	96-1500CC	1	CON
97-50B	96-1260SC	1	CON
	96-1500CCB	3	CON
97-51B	96-1500CC	1	CON
	96-1635CB	6	CON
97-52B	96-1500CC	1	CON
	96-1635CB	5	CON
97-78SS	96-1010SCSS	11	CAT
	96-1510SCSS	11	CAT
	96-760CSS	1	CAT
97-79SS	96-1135SCSS	4	CAT
	96-1885SCSS	1	CAT
97-80SS	96-1010SCSS	4	CAT
	96-1260SCSS	4	CAT
97-81SS	96-1010SCSS	6	CAT
	96-1260SCSS	7	CAT
97-82SS	96-1010SCSS	10	CAT
	96-1260SCSS	12	CAT
	96-1510SCSS	1	CAT
97-83SS	96-947CSS	8	CUM
97-84SS	96-823SC	2	DDA
	96-947CSS	4	DDA
97-85SS	96-1010SCSS	4	DDA
	96-1640SCSS	2	DDA
	96-2005SCSS	12	DDA
97-86SS	96-1010SCSS	2	DDA
	96-1640SCSS	2	DDA
	96-2510SCSS	8	DDA
97-87B	96-1635CB	8	GDI
	96-16MMC	1	GDI
	96-2109SC	1	GDI
	96-250HCPP	1	GDI
	96-375HCPP	1	GDI
	96-523C	1	GDI
97-97SS	96-1385SC	2	FDI, FOR, IHN
	96-1500CCSG	7	FDI, FOR, IHN
97-98B	96-16MMC	2	GDI, GM
	96-2228SC	1	GDI, GM
	96-250HCPP	5	GDI, GM
	96-375HCPP	1	GDI, GM
	96-41.5MMCB	6	GDI, GM
97-99B	96-1635CB	8	GDI, GM
	96-16MMC	1	GDI, GM
	96-2098SC	1	GDI, GM
	96-250HCPP	2	GDI, GM
	96-461C	1	GDI, GM
97-99-2B	96-1635CB	8	GDI, GM
	96-16MMC	1	GDI, GM
	96-2098SC	2	GDI, GM
	96-250HCPP	2	GDI, GM
	96-461C	1	GDI, GM
97-100B	96-1635CB	8	CHC, GMM, GM
	96-2109SC	1	CHC, GMM, GM
	96-250HCPP	5	CHC, GMM, GM
	96-461C	3	CHC, GMM, GM
	96-523C	3	CHC, GMM, GM
97-121SS	96-1510SCSS	5	FDI, FOR
	96-1760SCSS	1	FDI, FOR
	96-500HCPP	1	FDI, FOR
	96-823SC	1	FDI, FOR

QC #	Components	Qty.	Application
97-135B	96-125HCPP	3	GDI, GM
	96-1635CB	6	GDI, GM
	96-2228SC	1	GDI, GM
	96-250HCPP	9	GDI, GM
	96-375HCPP	5	GDI, GM
97-136SS	96-1510SCSS	7	FDI, FOR
97-163SS	96-1010SCSS	4	CHC, CUM
	96-1260SCSS	1	CHC, CUM
	96-2285SCSS	6	CHC, CUM
	96-2375CC	1	CHC, CUM
	96-697SC	2	CHC, CUM
97-300SS	96-1510SCSS	8	FDI, FOR, IHN
	96-16MMC	4	FDI, FOR, IHN
97-301SS	96-19MMCSS	4	GDI, GM
	96-40MMCSS	7	GDI, GM
97-302SS	96-1010SCSS	4	CUM
	96-2285SCSS	5	CUM
	96-2375CC	1	CUM

O.E. AND COMPETITOR INTERCHANGE

Allis-Chalmers

205215	30-1853
206875	30-1854
206877	10-155
206878	10-154
206879	32-414
206880	34-555
209103	34-613
209132	10-169
209134	10-168
218126	30-1854
226000	30-1854
228589	10-154
229143	10-168
229405	10-626
229911	30-1853
231671	10-626
231672	10-155
2348241	30-1854
234829	10-155
241527	10-168
241535	10-626
241536	30-1421
257363	10-882
4020080	10-1524
4020682	30-6730
4022595	30-7813
4022595	30-6730
4023378	10-1524
4023379	10-1523S
4028641	22-1814-1
4028642	22-1670-1
4028643	10-1525S
4036609	10-1525S
420030	30-1956
4336586	30-5745
4356080	34-614
4359193	30-6760
4390547	30-6628
4500166	30-1703
4504475	30-1851
4512121	10-990
4512459	10-1073
4513115	30-1943
4514298	10-1042
5120930	30-1680
5178590	30-1680
7324451M1	30-1956
800324	30-1678
8BA6510	30-1614
957E6510B	30-1956
U3142	30-1421

Case

1019739M1	30-1833
251103R1	30-4944
3900250	34-00250
4761971	36-2302
4A41726 (SET)	10-691
4A41727 (SET)	10-690
5619A	30-1577
57765H	30-1458
6321A	30-1829
6529A	30-1830
675574C3	10-1520
68009S	30-1458
830762M91	30-1833
8744	30-4941
A11803	30-1865
A150225	10-1650S
A26130	30-1577
A27872	34-221

Case

A29954	30-1673
A29954	30-1873
A29955	30-1872
A30270	30-1673
A38422	10-691
A38423	10-690
A41726	10-691
A41727	10-690
A41754	10-1512
A41783	30-7444
A58619	22-1946-1N
A58626	10-1512
A66191	22-2100-1
A66192	22-1946-1N
A66444	32-1158
C5549A	30-1813
F600I235	30-1515
G11947	10-691
G11948	10-690
G176I200	30-1833
G2033	30-1873
G2068	30-1875
G2069	30-1874
G47110	10-691
G47111	10-690
J901187	30-8122
J904408	30-8177
J904409	30-8178
J920867	10-1665
J920868	10-1664
J921444	10-1666
J924492	10-1667
J936080	32-04053
VT131	30-1673
VT3234	34-555
VT3372	32-480
VT366	30-1872
Y4001215	32-495

Caterpillar

1799453	22-1711-1S
2289673	38-6139-55
0676834	34-217P
1007860	10-1760S
1008150	30-8592
1018314	10-1632S
1026229	38-229-45
1026229N	38-229-45
1031800	37-7782
1036304	10-1911
1039260	38-961-55
1045536	87-4239
1047184	10-1584S
1051779	10-1579S
1054232	87-4232
1061111	10-1468S
1070265	22-2004-3N
1070268	22-2049-1
1085902	10-1462S
1085910	10-1911
1085911	10-1912
1085912	22-1891-1
1090390	30-8531
1090390	30-3037
1136180	10-1580
1152358	22-1812-7
1152367	10-1468S
1152368	10-1462S
1161102	87-1102
1167553	30-3037
1185569	30-3007

Caterpillar

1191036	38-3036-45
1193036	38-3036-45
1193061	87-3061
1196772	10-1497S
1212028	10-1804
1220321	10-1831S
1220322	10-1830S
1225963	22-2368-3N
1227352	22-1812-6N
1227374	30-3014
1227375	30-3007
1228612	30-3007+5
1233984	30-8485
1240811	87-2911
1242692	10-1582S
1242693	10-1581S
1302607	22-2387-2
1302608	22-2366-2N
1302613	30-8679
1309004	22-1969-4N
1314340	22-2366-2N
1323214	30-8592
1336997	22-1711-1S
1336997	22-1711-1N
1337029	10-1581S
1339306	30-8679
1360819	10-1579S
1369630	22-2387-1
1376718	32-04021
1376856	38-856-45
1381997	22-1711-1N
1381997	22-1711-1S
1381999	22-1812-8
1382053	36-7014
1403039	32-04021
1406188	32-04020
1409670	30-3038
1456855	10-13136
1456856	38-507-45
1456857	10-13219
1457390	10-2161S
1471979	34-2004
1478211	10-2160S
1478214	38-3036-45
1478218	22-1814-4S
1478220	30-3039
1479220	30-3039
1487425	30-3037
1487502	30-3037
1511329	30-8485
1511330	30-3138
1516235	30-3174
1527582	22-1687-1N
1527585	10-1912
1528380	10-1911
1529857	10-13142
1529860	34-281
1535554	38-6141-55
1535556	34-5556
1535558	32-6638
1535559	38-6141-55
1537023	10-1911
1537024	10-1912
1540888	10-13326
1540889	10-13327
1559504	22-1656-1
1564168	22-1891-1
1578373	87-2911
1590300	87-2911
1603529	10-13494
1605436	30-1976
1605438	30-1977

Caterpillar

1614280	10-1580
1621589	30-3037
1632432	10-1579S
1632442	10-2260S
1632444	30-3058
1632478	38-229-45
1639063	22-1969-4N
1639256	30-3060
1662903	87-2903
1662904	87-2904
1663739	87-4239
1737188	30-7216
1753617	22-1891-1
1757523	32-04001
1757526	32-04000
1767688	22-1459-1
1767690	22-1479-1S
1799453	22-1711-1N
1799454	22-1812-8
1838172	30-3014
1838172	30-3192
1838173	30-3193
1838809	22-2387-2
1845494	30-3035
1845495	30-3036
1850882	30-3059
1862001	37-2001
1883122	10-2261
1888636	22-1518-1
1888637	22-1782-2
1888640	10-13143
1906115	32-04027
1906117	32-04028
1916766	30-3139
1920509	10-1911
1926335	38-6147-55
1929213	10-1582S
1944897	10-2168S
1944901	32-04901
1944902	32-04902
1976995	30-3042
1976999	37-6999
1977006	38-856-45
1977055	34-5019
1977062	37-7062
1977063	37-7063
1986529	22-1687-4N
1992189	38-6498-55
1N4885	10-1146S
1N4886	10-1146S
1P1081	10-1145S
1P2629	10-1145S
1P407	10-1146S
1P6837	22-2004-2
1S2894	22-1505-1
1S2898	34-614
1S2903	10-1350S
1S6653	30-7338
1S6654	30-6469
1S8143	10-1351S
1S9910	30-7338
1W1801	22-2367-1
1W1816	30-7604
1W1817	10-1459S
1W1818	10-1459S
1W1819	10-1458S
1W1822	10-1460S
1W2713	22-1693-8N
1W2715	34-00250
1W3359	10-1498S
1W3859	10-1462S
1W3860	10-1468S

O.E. AND COMPETITOR INTERCHANGE

Caterpillar	
1W4259	32-1240
1W5283	22-1687-1N
1W5300	37-7782
1W5321	22-2004-2
1W5849	38-7117-45
1W8606	10-1461S
1Y4025	38-229-45
2061541	30-3140
2064127	32-4127
2064442	22-2388-1N
2064442	22-2388-1N
2102542	10-1804
2113122	32-04001
2113123	32-04000
2120932	10-2259S
2120933	10-2258S
2120936	22-1687-5S
2128474	22-1894-4
2128477	10-13393
2128917	22-1479-1S
2128918	22-1459-1
2137536	30-3051
2137537	30-3052
2140586	32-07083
2143286	22-1813-1
2146051	38-3044-45
2175213	22-1656-1
2175213	22-1656-3
2241270	22-1669-2N
2242410	22-1792-1
2243028	10-13151
2243030	10-13280
2243983	22-1891-2
2244441	32-07082
2255495	10-13137
2255499	10-13138
2260262	87-0262
2265561	22-1687-6S
2271200	87-1200
2272911	87-2911
2274239	87-4239
2321285	22-1814-4S
2365605	10-1911
2418382	10-13192S
2418383	10-13193
2418385	32-5005
2418386	32-5004
2418388	22-1577-1
2418389	30-3123
2418390	38-6124-55
2479908	32-04000
2481467	10-13033
2503044	38-3044-45
2526438	38-6438-45
2527801	10-2161S
2527802	10-13032
2543954	38-3954-45
2550897	30-3195
2558665	30-3194
2558666	22-1676-2
2558676	10-13421
2558677	32-8677
2558678	32-8678
2595829	30-3123
2604855	22-1792-1
2604856	30-3058
2610193	87-6193
2622957	10-13420
2622959	22-1538-3
2634920	87-4920
2646157	22-1656-3
2646157	22-1656-1

Caterpillar	
2668718	22-2388-2N
2682953	30-3058
2695921	10-13421
2768123	34-5021
2768124	10-13330
2803979	22-1891-2
2816157	32-04901
2899745	22-2366-2N
2941684	10-13443
2941685	10-13444
2941688	32-1688
2984530	32-4530
2995511	38-6140-55
2A4429	34-746
2H3069	36-7013
2M6402	10-1146S
2M6403	10-1145S
2N8943	22-2150-1
2N9298	30-7074H
2N9299	30-7073
2N9300	10-1461S
2N9301	10-1476S
2P1262	30-7194
2S0893	30-6470
2S4213	32-950
2S5627	32-817
2S8143	10-1351S
2W2620	10-1490S
2W2621	10-1314S
2W2622	10-1462S
2W3211	10-1476S
2W4837	22-2004-3N
3054883	22-1420-2
3054884	22-1184-1
3054885	30-3208
3074641	10-3228S
3081860	10-13326
3081861	10-13327
3096678	10-13329
3107257	87-7257
3107258	87-6257
3107259	87-7259
3128619	38-6487-55
3165976	32-5976
3165977	32-5977
3165978	37-5979
3165978	37-5978
3165980	38-6490-55
3224120	22-1456-1
3256575	87-6575
3322152	32-07083
3365446	10-13490
3365447	10-13491
3399637	10-13330
3487743	42-3400
3495303	32-5303
3495307	32-5307
3569640	30-4217
3581229	10-13430S
3581230	10-13431S
3613926	38-229-45
3633731	42-3400
3661338	30-3035
3770399	22-1381-1
3770400	22-1322-1
3802073	30-3164
3879503	38-6515-55
3B1143	34-816
402022507	10-1880
402022508	10-1881
4360519	32-8519
4360523	32-8523

Caterpillar	
4360524	32-4530
4405104	38-6141-55
4432712	10-2168S
4688824	10-1804
4688825	10-2168S
4901728	10-13421
4901729	10-13420
4901730	10-13421
4907198	10-1911
4907199	10-1911
4907200	10-1912
4F212	10-319
4F213	10-318
4H9804	10-751S
4H9805	10-752S
4M4320	22-2590-1
4N2803	30-7216
4N3664	30-7083
4N3665	30-7255
4N3667	30-7357
4N3668	30-7242
4N3669	30-7338
4N5653	10-1468S
4N5654	10-1462S
4N5893	22-1812-3
4N5906	32-1173
4N6761	37-6761
4N9623	10-1146S
4P4735	87-4232
4P7135	87-4232
4S7468	37-7639
4S8898	22-1812-3
4S8902	22-1687-1N
4W1300	10-1498S
4W1670	10-1314S
4W2471	32-1293
4W2472	32-1294
4W2474	37-2474
4W3778	30-7681
4W3778 (SR)	30-8357
4W3779	30-7682
4W3779 (SR)	30-8356
4W4325	22-1687-3N
4W5374	10-1462S
4W6802	10-1498S
4W9176	30-8408
4W9176N	30-8408
5H1464	22-2590-1
5I7624	38-7624-55
5I7738	10-13392
5I7739	10-13394
5I7740	32-6657
5I8011	22-1815-2
5I8012	22-1540-1
5M1889	22-1687-1N
5M5828	10-574S
5M8023	30-1906N
5S1757	22-2590-1
5S2921	30-6881
5S4507	30-1906N
5S5874	37-7782
5S6449	10-1203
5S6452	10-1204
5S7218	22-2129-1
5S7221	22-2004-2
5S7232	10-1205S
5S9291	30-6881
6H3026	10-318
6I1390	10-1912
6I1458	42-3400
6I2307	32-04022
6I2662	38-0234-35

Caterpillar	
6I2663	37-7977
6I2864	30-7681
6I2864 (SR)	30-8357
6I2865	30-7682
6I2865 (SR)	30-8356
6I4014	22-1687-4N
6I4019	22-1812-6N
6N2236	30-7255
6N7154	37-7175
6N7174	38-2882-35
6N7175	37-7175
6N8847	30-7357
6N9916	10-1489S
7C1586	10-1581S
7C2353	10-1461S
7C2354	10-1461S
7C4273	32-04008
7C5215	10-1582
7C6217	10-1498S
7C8581	37-7977
7E1551	30-8594
7E3413	30-8485
7E4609	10-1498S
7E4610	10-1584S
7E5862	22-2387-1
7E7830	10-1145S
7E7977	37-7977
7E7978	38-0234-35
7E9577	10-1581S
7E9578	10-1582
7F4784	10-574S
7F5310	10-852S
7M7358	10-755
7M7817	10-752S
7N0359	10-1880
7N0572	10-1760S
7N0573	10-1576
7N1819	30-8679
7N1903	32-2470
7N1904	32-2471
7N2051	30-7338
7N4310	30-8408
7N4448	22-2049-1
7N4580	10-1468S
7N7639	37-7639
7N8855	22-2004-3N
7S2514	10-1351S
7S3161	36-2212
7S6322	30-7357
7S6366	30-7357
7S6767	10-1205S
7S7144	32-948
7S8809	10-1314S
7W1636	30-8319
7W2699	10-1579S
7W4602	10-1784
7W5554	22-1711-1S
7W5554	22-1711-1N
7W6878	30-8592
7W6884	10-1584S
7W7082	32-07083
7W7083	32-07082
7W7489	30-8220
7W8064	10-1580
7W8065	22-1969-3
7W8809	10-1314S
8C0563	87-0563
8C563	87-0563
8H1993	10-852S
8H1994	10-574S
8H7097	10-751S
8M9810	22-2503-1

 Interchanges Are For Reference Purposes Only

O.E. AND COMPETITOR INTERCHANGE

Caterpillar

8N0875	10-1205S
8N3723	10-751S
8N3725	10-1145S
8N5645	10-1379
8N7782	37-7782
9H9164	32-817
9L7682	10-1379
9L7683	10-1378
9L8368	10-1379
9L9630	36-2073
9M3204	22-2004-2
9M3205	22-1812-1
9M5349	32-944
9M5350	32-945
9M8745	22-2503-2
9N2837	22-1912-1
9N5125	10-1497S
9N5495	32-1292
9N5786	36-2073
9N6117	10-1314S
9S9699	22-1687-1N
9X7430	87-7430
9Y1846	30-8383
9Y1847	30-8118
9Y6882	30-3035
9Y6883	30-3036
9Y7895	30-8220
9Y8847	38-3036-45
9Y8848	30-8590
9Y9803	10-1632S

Chrysler

04536513	34-281
04536513AB	34-281
05080044AB	30-3255
05117402AA	10-2235
1109911	10-349
1124659	30-1338
1124959	30-1337
133595R1	30-8224
133670R1	30-1817
1486911	30-1740
1614666	34-766
1614730	36-2084
1618636	10-518
1634790	30-1803
1737645	40-2850
17376746	40-2851
1737698	10-520
1739356	36-2084
1739534	32-672
1821238	10-514
1828240	22-1516-1
1851674	30-1839
1851767	10-548
1852247	10-185
1852248	10-518
1859623	22-1624-1N
1859793	10-577
1945318	10-514
1947231	10-185
1947623	10-567
1947718	10-1017S
1947718Z	10-1017S
1954291	36-2084
2071103	34-613
2128829	10-567
2203250	36-2084
2205958	38-530-15
2206103	10-548
2211432901	30-7576

Chrysler

2211511050	30-7577
2211532901	30-7575
2236132	32-794
2236146	10-883
2236147	10-882
2264658	34-613
2402312	34-613
2402714	10-576
24027140	10-1017S
2465335	10-938
2465339	10-1329
2468038	36-2084
2469501	36-2084
2532149	42-2661
2536979	10-1017S
2536979	10-576
2843014	36-2084
2899036	10-1156
2899856	36-2011CCI
2899860	36-976
2899864	36-976
2899872	36-976
3004643	36-2011CCI
3004647	36-976
3004718	40-2851
3004719	40-2850
310458	34-613
3144974	34-555
3151444	36-2084
3156155	10-549
3156157	34-766
3160304	36-2011CCI
3172303	36-2011CCI
3172328	10-549
3180454	36-2011CCI
3180609	36-2011CCI
3189883	36-2011CCI
3190810	36-2011CCI
3190895	36-2011CCI
3190901	36-2011CCI
3190935	36-2011CCI
3218732	10-1260
3218733	10-1258
3218809	10-1260
3218810	10-1260
3218813	10-1325
3219896	10-1257
3222276	36-2011CCI
3224597	10-1325
3224602	10-1325
3224603	10-1325
3228192	32-1082
3229657	10-1258
3237464	10-1441
3237465	10-1442
3240767	10-1441
3240768	10-1442
3242393	40-2740
33002400	20-1562-1
33002729	38-925-25
33003521	34-217
33007142	20-1562-1
3418239	36-2011CCI
3418411	36-2011CCI
3418424	40-2892
3418479	10-1156
3420039	36-2011CCI
3512095	10-1156
3549971	10-567
3549975 (PKG)	10-548
3549979 (PKG)	10-548
3577836	10-548

Chrysler

3614320	36-2011CCI
3614321	36-2011CCI
3671902	10-1265
3751252	36-2011CCI
3751262	36-976
3751267	36-976
381875	34-746
3830705	10-1329
3830715	10-1156
3830721	10-1156
3904408	30-8177
3904409	30-8178
3906206	30-8277
4006767	36-976
4049338	36-2011CCI
4071003	38-1068-70
4071006	38-1068-70
4095897	36-2089
4100774	40-2893
4105979	10-1265
4106028	36-2089
4186155	36-2084
4201349	34-614
4227660	36-2089
4429097	38-535-45
4429105	10-1665
4429109	10-1664
4429111	22-1722-1
4429251	34-00250
4429277	32-00276
4429408	30-8177
4429409	30-8178
4429854	22-1853-1
4448305	32-672
446723C1	30-7174
4536513	34-281
4694185	30-8177
4713216	10-1665
4713994	10-1664
4740269	36-2011CCI
4740353	74-6448
4761971	36-2302
4882061	32-02061
5003595AA	36-2302
5011441AA	32-04053
5011441AB	32-04053
5011455AA	55-3198
5011877AA	10-2015
5011878AA	34-5020
5011879AA	10-2014
5011880AA	38-0438-45
5011881AA	38-0989-45
5011892AA	74-6554
5015552AA	74-6448
5073735AA	10-2234
5073738AA	10-2235
5080042AA	22-1218-1
5080043AA	22-1175-1
5080057AA	38-5080-55
5086290AA	38-5080-55
5086736AA	36-7098
5086861AA	38-9191-45
5086862AA	38-9191-45
5117399AA	10-2234
5117399AA	10-13073
5117402AA	10-13074
5117410AA	22-1088-1
5140913AA	10-13161
5175396AA	10-13356
5175397AA	10-13357
5175438AA	38-9675-45
5175440AA	36-7561

Chrysler

5177407AA	22-1160-1
5184168AB	38-9675-45
5184332AA	36-7561
53006677	20-1687-5N
53022090AB	38-812-45
600746	30-1337
600746I	30-1338
643334	34-555
68002237AA	10-13006
68210104AA	38-9191-45
711045	10-210
711829	32-466
8122755	10-1260
8122756	10-1258
8122761	10-1325
8122929	36-2011CCI
8123287	34-766
8127694	10-1258
8132235	34-555
8350066	36-2011CCI
925437	10-210
954302	10-185
AW321739	10-10625
J3189833	36-2011CCI
J3218976	38-921-25
J3218976	38-938-45
J3222276	36-2011CCI
J3228192	32-1082
J3229657	10-1258
J3229657	10-1258
J3237464	10-1441
J3237465	10-1442
J3240767	10-1441
J3240768	10-1442
J3242664	38-450-25
J3242864	38-925-25
MD000441	21-1562-50
MD000461	30-7576
MD000471	30-7577
MD000481	10-10083
MD002465	21-1375-51
MD002481	10-10083
MD007783	10-10083
MD008760	34-813
MD020551	30-7574
MD020561	30-7575
MD020580	10-10065
MD020583	10-10064
MD020587	10-10064
MD020588	10-10064
MD024414	21-1750-61
MD024441	21-1500-62
MD024518	10-10092
MD024519	10-10091S
MD024546	21-1625-56
MD024547	21-1625-56
MD024548	10-10091S
MD026514	21-1875-51
MD026515	21-1875-51
MD026517	21-1625-56
MD026518	21-1625-56
MD040539	10-10064
MD061895	34-716
MD070691	10-10141
MD070693	10-10142
MD070694	10-10142
MD072177	36-6000
MD072298	32-1289
MD073398	32-1289
MD083657	10-10415
MD083659	10-10416
MD083661	10-10415

O.E. AND COMPETITOR INTERCHANGE

Chrysler

MD083662	10-10416
MD083848	10-10145
MD083850	10-10146S
MD083851	10-10146S
MD083887	10-10141
MD085253	10-10143
MD085254	10-10144
MD088811	10-10624
MD088812	10-10625
MD093714	36-6000
MD108468	21-1375-51
MD110451	21-1562-69
MD124739	36-900CCI
MD128114	21-1562-69
MD149309	36-900CCI
MD151382	36-6000
MD185850	30-7577
MD197467	38-964-55
MD301640	21-1562-69
MD301712	21-1750-61
MD301714	21-1562-69
MM115880	32-1289

Continental

1005916M1	30-1673
1019739M1	30-1833
12S1207	34-159
1750069M1	30-1717
760181M1	30-1701
761648M1	30-1678
800324	30-1678
830762M91	30-1833
830935M91	30-1673
83490M91	30-1717
840210M91	30-1620
A600I338	32-480
C00407M91	30-1678
CVT3234	34-555
E6041202	34-802
F140A216	22-1348-1N
F400I213	30-1620
F400I251	30-1962
F400T296	10-170
F600I112	10-810
F600I228	10-170
F600I229	10-810
F600I232	32-466
F600I235	30-1515
F600I242	10-170
F600I248	10-210
F600I249	10-210
F600I265	30-1515
F600I302	10-1148
F600I351	10-170
F600I354	10-210
F6011303	10-1147
G176I200	30-1833
G176I304	10-597
H260I200	30-1701
M600I256	30-1533
N62I200	30-1678
TM27I00316	30-1962
VT131	30-1673
Y400I205	34-822
Y400I209	30-1619
Y400I215	32-495
Y400I232	30-1619
Z120I235	34-614
Z120I326	10-489
Z120T161	10-489
Z129I108	10-486

Continental

Z129I204	30-1717
Z129I205	10-343
Z129I208	10-486
Z129T107	10-486
Z129T117	10-343

Cummins

4982846	30-3181
C6204191310	30-3181
100687	10-515S
10212373	10-1721S
105984	30-1800
113447	10-515S
114223	42-4223
118939	42-8939
123542	10-603
123558	42-3558
123659	10-602S
127554	34-803
127930	22-2003-1N
127930A	22-2006-1N
127930B	22-2006-1N
13484S	10-13484S
135957	10-603
138886	10-703
138887	10-702
138937	30-1941
144910	10-515S
144911	10-326S
145701	10-602S
147967	30-7994
147967	30-1942
150288	10-326S
153679	42-3679
154390	22-1691-2
154571	42-4571
154946	30-6169
156641	38-1055-70
163037	32-1185
166772	34-613
166774	10-1228
169154	42-9154
169630	87-9630
174213	30-7990
174214	30-6452
178869	32-1014
195000	22-1691-1
200354	22-2003-1
202013	87-7759
205091	34-222
205093	22-2381-2
205093	22-2381-2S
207241	10-1534
2105293	30-1823
211999	32-1014
212217	20-2000-14
216707	10-703
218847	10-1721S
219091	37-2870
2869832	22-1835-4
2869887	10-13472
286988700	10-13472
2870178	87-6178
2883660	32-3660
2884750	22-1756-2S
2887954	10-13473
2887957	22-1756-1
2892034	10-13474
2899516	87-9516
3000926	10-603
3006456	30-1942

Cummins

3006456	30-7994
3006457	30-7264
3007225	10-1533S
3007759	87-7759
3011935	87-1147
3013330	42-3330
3013331	42-3331
3017759	22-2003-1
3018818	30-7373
3020211	22-1853-2
3021693	30-7425
3024333	10-602S
3024395	10-1533S
3026296	22-2381-1
3028070	22-1812-4
3032285	22-2006-1
3032287	22-2006-1+010
3032291	22-2006-1+005
3033231	37-03231
3033232	32-1296
3033233	32-1298
3033234	10-1532
3033235	10-1531
3033314	30-7625
3033315	30-7625
3034827	10-1734
3035026	87-5026
3035110	10-1533S
3035996	32-1332
3036933	42-6933
3036934	42-6934
3050369	30-7994
3052819	22-2381-1S
3052820	10-1738S
3054590	22-2006-5
3054600	22-2006-5
3064247	34-05354
3064281	38-4281-45
3064312	30-8134
3065934	32-04052
3065934	32-04052
3065936	37-1081
3068519	10-1660
3068828	10-1663
3069692	22-2006-7S
3070159	10-1662S
3070174	32-05860
3070460	32-04004
3070473	10-1659S
3070484	34-05354
3071147	87-1147
3072321	30-8136
3072369	34-05354
3073509	38-8781-55
3073510	38-8781-55
3073512	30-8210
3074118	30-8167
3076515	22-1953-2S
3078399	10-1659S
3080975	10-1663
3080976	10-1662S
3081081	37-1081
3081212	32-1332
3083991	10-1847S
3084020	22-1953-3
3084041	22-1953-2S
3084045	10-1756
3084980	10-1847S
3086192	22-2381-2
3086436	10-602S
3088389	10-1734
3088391	10-1533S

Cummins

3088393	10-1534
3088405	10-1532
3088978	22-1812-4
3088980	22-1812-4
3090372	30-8496
3090703	22-1812-9
3090704	22-1812-9
3104445	22-1953-4
3161423	42-7423
3166388	42-6388
3166410	10-1847S
3166428	42-6428
3170135	30-8496
3201311	30-7610
3202210	30-7610
3226064	10-1656S
3226068	10-1721S
3275354	34-05354
3275355	10-1420S
3275356	10-1420S
3275779	10-1420S
3278173	30-8420
3281508	36-2302
3284377	74-6448
3328781	38-8781-55
3328785	30-8210
3328786	30-3008
3394112	10-13292S
3394115	30-3158
3394116	22-2003-6N
3395612	22-1722-3
3406657	10-1659S
3406659	10-602S
3412922	42-7922
3417713	10-1658S
3417714	10-1662S
3417717	87-7717
3417778	10-1663
3417779	10-1662S
3418020	10-1663
3418021	10-1662S
3418040	22-1812-4
3418052	22-1812-5
3553870	30-8122
3606766	38-3966-45
3606856	10-1720S
3629007	32-04052
3630628	32-04052
3633840	32-04052
3640315	37-1081
3643725	32-04052
3678536	87-8536
3679537	22-1874-2
3679551	32-04050
3679659	22-1874-2
3680759	10-2263S
3680760	10-2262
3680867	30-3061
3680883	34-04644
3680884	55-2884
3681071	22-1953-4
3681071	22-1953-3
3683349	22-1874-2
3685966	87-5966
3685996	10-13308
3685997	38-6791-45
3686661	10-13309S
3686883	87-6883
3686961	87-5966
3686962	87-5966K
3770399	22-1381-2
3800340	10-2188

O.E. AND COMPETITOR INTERCHANGE

Cummins

3800341	10-2187
3800636	10-1663
3800637	10-1662S
3800638	10-1663
3800639	10-1662S
3800891	10-1847S
3801356	10-1532
3801357	10-1531
3802005	10-1665
3802006	10-1664
3802083	10-1667
3802085	10-1666
3802275	10-1667
3802355	10-1665
3802356	10-1664
3802463	10-1667
3802481	10-1801
3802658	10-2257
3802659	10-1862
3802812	10-2255
3802813	10-2254
3802924	10-2014
3802967	10-2015
3803310	10-1663
3803311	10-1662S
3803348	10-1658S
3803359	10-1659S
3803360	10-1660
3803427	10-1659S
3803512	10-603
3803513 (Kit)	10-703
3803515	10-1534
3803517	10-326S
3803518	10-1738S
3803519	10-602S
3803520 (Kit)	10-702
3803522	10-326S
3803524	10-602S
3803528	10-1734
3803529	10-1533S
3803726	10-1659S
3803730	10-1662S
3803770	10-1659S
3803854	10-1756
3803995	10-1531
3803996	10-1658S
3804555	10-1847S
3818520	10-1531
3820180	22-1812-4
3820700	22-1812-5
3821234	30-8167
3865237	42-5237
3883287	10-1658S
3883512	55-3512
3884005	10-1720S
3895110	10-1662S
3895477	10-1531
3895478	10-1658S
3895487	42-5487
3895488	42-5488
3895860	32-05860
3900250	34-00250
3900276	32-00276
3900299	55-2299
3901097	38-535-45
3901117	10-1665
3901177	34-01177
3901187	30-8122
3901607	10-1664
3901898	74-6448
3902253	10-1667
3902254	10-1666

Cummins

3904105	22-1722-1
3904364	74-6448
3904408	30-8177
3904409	30-8178
3904679	74-6448
3904716	22-1857-1
3906206	30-8277
3906412	32-06412
3906854	22-1853-1
3907240	36-2302
3908055	32-6669
3908830	22-2129-2
3909886	87-9886
3912976	55-2757
3913038	38-5707-45
3915506	10-1667
3915707	38-5707-45
3916587	32-6669
3916588	32-6669
3916691	32-6691
3920867	10-1665
3920868	10-1664
3921444	10-1666
3921639	38-535-45
3921640	38-535-45
3922713	10-2257
3922714	10-1862
3922715	22-1853-2
3922716	22-1722-3
3923262	74-6448
3923564	30-8122
3924492	10-1667
3924582	22-2129-2
3924583	22-1857-1
3925031	36-2302
3925175	10-1801
3925176	22-1722-1
3925177	22-1853-1
3925272	32-6629
3925273	37-5273
3925666	37-5666
3925667	32-04049
3925863	30-8122
3925863	30-3068
3926700	32-02061
3927254	10-2255
3927255	10-2254
3927256	22-2126-2
3927257	22-1857-2
3927642	38-5707-45
3928174	22-1857-3
3928174	22-1857-1
3929005	22-1857-1
3930057	38-0057-45
3931623	36-2302
3932453	32-2453
3933088	22-1857-2
3934063	30-8715
3940123	34-5020
3940152	22-1554-1
3940153	22-1554-2
3940279	32-6172
3940734	10-2015
3940735	10-2014
3941253	74-6554
3942298	22-1375-1
3942299	22-1375-2N
3942565	36-7097
3942571	38-0989-45
3942572	38-0438-45
3942588	10-2188
3942589	10-2187

Cummins

3942645	30-8715
3942989	38-0989-45
3943161	32-04053
3943198	55-3198
3943449	22-1375-1
3943450	22-1375-2N
3943888	38-3888-45
3943889	38-3888-45
3944452	55-4452
3944711	32-6172
3945249	30-8715
3945438	38-0438-45
3945866	36-7099
3947759	36-7098
3948102	30-8715
3948578	38-3888-45
3948888	38-3888-45
3955393	38-9191-45
3955394	38-9191-45
3957912	38-6114-55
3957914	37-5666
3965966	36-7099
3968074	22-1554-2
3968183	10-13161
3969637	10-13163
3969704	22-1554-1
3970727	10-2188
3972757	55-2757
3979602	10-13006
3991085	32-06412
3991267	38-3888-45
4000643	38-6143-55
4003965	38-3966-45
4003966	38-3966-45
4007179	10-13447
4007180	10-13448S
4025956	42-5956
4026069	10-1663
4026657	30-3061
4026660	38-6791-45
4026791	38-6791-45
4059215	22-1953-4
4059215	22-1953-3
4059326	10-2262
4059327	10-2263S
4062870	37-2870
4062872	32-04015
4089089	10-13447
4089090	10-13448S
4089672	10-13161
4089762	10-13163
4101454	10-2263S
4311992	10-13471
4312008	38-6791-45
4352542	10-13474
4356366	38-6366-55
4374017	22-1835-3S
4393425	22-1953-4N
4429206	30-8277
4429408	30-8177
4429409	30-8178
4761971	36-2302
4891226	36-7098
4895187	10-1665
4895188	10-1664
4923471	30-3008
4926069	10-1663
4934063	30-8715
4936076	32-6172
4936080	32-04053
4944492	22-1775-3
4944492	22-1775-3

Cummins

4945025	22-1538-2
4955212	10-13006
4955239	10-1663
4955698	10-603
4957806	32-04015
4960206	87-6206
4965868	10-2262
4965891	32-04050
4976170	38-6170-55
4981795	10-13163
4982847	22-1775-3
4982847	22-1775-3
4982895	10-13384
4982899	38-6144-55
4982907	10-13383
4982908	22-1538-2
4982909	10-13388S
4986317	10-1738S
4991571	38-9191-45
4994143	10-1664
4995554	10-1665
5253590	38-3888-45
5256949	10-30170
5259419	10-13163
5261320	10-30169
5262173	22-1180-1
5262813	22-1130-1
5271471	10-13483
5271475	22-1223-1
5271476	30-4216
5272080	38-2080-45
5272082	10-13484S
5292625	32-06412
5292626	32-6172
5292628	32-04053
5297204	32-7204
5303406	32-3406
5308264	10-30169
5308265	10-30170
5309399	10-13484S
5316172	32-6172
5316173	32-6173
5448124	38-3888-45
66890	30-1969
69965	22-1847-1
70671	10-326S
70843	22-1431-1
80610016	22-2006-6S
80610017	10-1721S
80610018	30-7990
90210008	10-1656S
90210010	32-5020
90210011	37-2870
90210012	32-04015
90210013	10-1721S
90210014	22-2006-6S
90210014	22-2003-6N
93914H	34-803
C0110278101	22-1460-2N
C42336	10-1721S
C6204111440	22-1538-2
C6204414210	10-13384
C6204414541	38-6144-55
C6207111431	22-1775-3
C6207111431	22-1775-3
C6207414130	10-13383
C6209414210	10-13388S
MCB7243	87-5966RK
S2037	34-746

Daewoo

O.E. AND COMPETITOR INTERCHANGE

Daewoo

90354648	34-5021

Detroit Diesel

10137454	10-1482S
14025510	10-1518
14025511	10-1483S
14033927	10-1484
14033928	10-1482S
14050661	10-1482S
23500054	10-1482S
23500056	10-1483S
23500058	10-1484
23500061	10-1483S
23500480	38-4800-80A
23500501	10-1500
23501576	10-23501576
23501576	10-1567
23501577	10-13001
23501577	10-23501577
23502067	10-1455
23502068	10-1456
23505104	30-8133
23506350	10-1566
23507238	34-555
23507504	10-1566
23512120	32-04003
23515391	30-8431
23515470	87-5470
23517058	22-1819-2
23518571	30-8591
23518572	30-8591
23518745	10-3193
23519090	22-1628-4
23519093	10-3192
23520148 (KIT)	10-3192
23520149 (KIT)	10-3193
23523930	38-502-55
23524521	10-1566
23529596	10-13001
23529629	10-1567
23529629	10-13000
23533147	87-3147
23533148	87-3148
23533552	30-8591
23534743	87-4743
23534745	87-8829
23535122	32-04054
23535296	32-09415
23538829	87-8829
23538840	87-8840
4710500426	10-13381
4710500427	10-13382
4730500126	10-3220
4730500127	10-3221S
5101101	22-1262-1
5101102	22-1262-1
5104280	10-1429S
5104701	87-4701
5106136	10-1366
5109925	10-1018
5111336	10-1500
5111337	34-614
5111467	33-9076
5114288	10-1500
5116137	10-758
5116196	22-1441-1
5116341	34-309
5116361	22-1161-1
5116363	22-1161-1+030
5117561	32-769
5119992	30-1832

Detroit Diesel

5120930	30-1680
5125917	10-759
5129919	30-1946
5131096	22-1628-2
5131614	22-1161-1
5131961	30-6254
5131973	38-1053-75
5138653	30-6546
5142777	10-1500
5142960	10-411
5144019	32-939
5144379	32-04003
5145172	10-759
5147347	32-769
5147424	32-1189
5148489	10-1366
5148490	22-1442-1
5148493	22-1442-1+020
5148494	22-1442-1+030
5149042	10-1366
5149386	10-1429S
5149724	87-9724
5149742	10-1455
5149743	10-1456
5149771	10-1366
5150041	87-5981
5160037	87-4701
5178590	30-1680
5185327	10-327
5186381	10-411
5186858	74-6858S
5193197	10-327
5193198	10-411
5193666	10-411
5194968	10-1500
5195167	10-1500
5195948	10-758
5196606	10-759
5197176	10-1018
5199323	10-759
5199938	10-1366
8380291	34-555
8920119	10-1456
8920390	87-0390
8920404	87-9724
8921209	38-1209-80
8921209	38-1209-80A
8921347	10-1455
8921501	22-1161-1
8921502	22-1161-1
8921741	38-1741-80
8921741	38-1741-80A
8922516	10-1500
8923814	42-3814
8924439	42-4439
8925203	34-05203
8925981	87-5981
8927794	32-769
8927920	22-1628-2
8927953	34-555
8929072	38-502-55
8929105	37-09105
8929126	22-1628-3
8929127	22-1819-1
8929415	32-09415
8929573	34-09573
8929589	10-1567
8929590	10-1566
8929627	22-1819-1+030
A0249976445	87-3401
A0269978245	87-3401
A102530026	34-5132

Detroit Diesel

A40000533558	38-6492-55
A4570500327	10-13380
A4570530001	10-13379
A4600530001	10-13379
A4700530158	38-6134-55
A4710500426	10-13381
A4710500527	10-13382
A47200530158	38-6134-55
A4720530020	32-6678
A4720530026	34-01177
A4720530220	32-6679
A4720530420	32-5026
A4720530520	32-5025
A4720530558	38-6134-55
A4720531130	30-3178
A4720780273	87-3400
A5410530532	22-1696-3
A5410532531	22-1882-1S
A5419970345	87-1345
A9060170488	87-0488
A9060500326	10-3188
A9060500327	10-3189
A9060530129	30-3276
A9060530131	22-1382-2
A9060530132	22-1578-1
A9060530358	38-812-45
MCB7141	87-0873C

Deutz

2232528	30-3205

Ferguson

1001525M01	10-249
100550M91	10-210
11501A	10-810
1508789M01	10-170
1750070M01	10-343
1750072M01	10-486
3142A151	10-13138
31431281	10-874
712010236	10-489
731151M01	10-874
731152M1	10-873
731704M91	10-874
731705M91	10-873
731769M91	10-874
731770M91	10-873
732812M01	10-873
732867M91	10-874
732868M91	10-873
733818M01	10-882
739027M01	10-883
740671M1	36-7014
745533M1	30-3100
830487M91	10-343
830488M91	10-486
830489M91	10-486
830725M91	10-489
830845M91	10-170
840197M91	10-810
840199M91	10-810
840913M91	10-210

Ford

0311411	30-1966
1S7Z6571FA	38-6105-55
311411	30-1966
388480	42-1741
3C3Z6500AA	36-2104
3C3Z6505AA	10-2180
3C3Z6507AA	10-2179

Ford

3C3Z6513AA	32-04040
3C3Z6514AA	55-6328
3C3Z6518AA	34-5009
3C3Z6571AA	38-160-55
3C3Z9F538AA	87-8320
3S4Z6571AA	38-6105-55
5232855	36-900CCI
5750692	36-2083
5751554	10-494
5751559	10-373
7HA6518A	34-555
85TM6500AA	36-2083
8702143	10-1695S
87800340	10-1695S
8BA6505A	10-212
8BA6505A2	10-212
8BA6510	30-1614
8C3Z6505A	10-13183
8C3Z6507A	10-13182
8C3Z6565B	74-6662
8C3Z9N951A	87-6951
8N6505A	10-220
8N6505A1	10-220
8N6505C	10-270
8N6513	32-497
B4A6507A	10-376
B506500A	36-2083
B5A6056A	20-1875-6
B6A6057A	20-1562-1N
B7T6507A	10-494
B8A6513B	32-677-D
B8A6518A	34-613
B8AZ6563D	42-2641
B8AZ6564C	40-2859
B8QH6057A	22-1744-1N
B8QH6518A	34-802
B8S6500A	36-2083
BC3Q6500AD	36-2315
BC3Z6500A	36-2315
BC3Z6500C	36-2315
BC3Z6505A	10-13266
BC3Z6505AA	10-13266
BC3Z6507A	10-13265
BC3Z6513A	32-5015
BC3Z6514A	55-5715
BC3Z6565A	74-6685
BC3Z6571A	38-6129-55
C0AE6500A	36-2083
C0AE6505J	10-375
C0AE6507AI	10-376
C0AE6507J	10-373
C0DE6057A	20-1375-4
C0ME6507N	10-376
C0TE6507A	10-376
C0TE6507E	10-376
C20E6500A	36-900CCI
C20Z6500A	36-900CCI
C20Z6500B	36-900CCI
C20Z6500C	36-900CCI
C20Z6500D	36-900CCI
C20Z6A528CHP	42-1772
C2AE6505E	10-375
C3AZ6505A	10-375
C3AZ6513B	32-907-D
C3DE6500B	36-2083
C3DZ6500B	36-2083
C3DZ6513A	32-778
C3TE6505A	10-375
C40E6500A	36-900CCI
C4TE6507A MD	10-949
C4TE6507M	10-949
C4TZ6057A	22-1630-1

O.E. AND COMPETITOR INTERCHANGE

Ford	
C4TZ6505J	10-1332
C4TZ6507J	10-949
C4TZ6507R	10-1057S
C4TZ6513A	32-798
C5AE6500E	36-900CCI
C5AE6505A	10-1358
C5AE6505E	10-1358
C5AE6507A	10-963
C5AE6507A2	10-963
C5AZ6507A	10-963
C5NN6507B	10-1654
C5TE6505E	10-965S
C5TZ6505A	10-965S
C5TZ6505E	10-965S
C5TZ6507A	10-1120
C5TZ6507C	10-1120+15
C5TZ6507E	10-1120
C5TZ6513Z	32-812
C6AZ6513A,D	32-909-D
C6CZ6513A,AA	32-677-D
C6CZ6513B	32-611
C7AE6500A	36-900CCI
C7TE6505E	10-1332
C7TE6507A	10-1057S
C7TE6507E	10-949
C7TE6507F	10-949
C8AE6500A	36-2083
C8AZ6500A	36-2083
C8AZ6500B	36-2083
C8SZ6057A	20-1750-1
C8SZ6513B	32-991
C8TE6507A	10-1120
C8TZ6057A	22-1815-1
C9AE6500A	36-2083
C9AE6507N HD	10-1120
C9AE6507N LD	10-963
C9AE6507S	10-963
C9NN6057J	22-1600-1
C9NN6057J	22-1630-1N
C9TE6507A	10-1120
C9ZZ6518A	34-555
CC3Z6505A	10-13266
CE2DZ6500A	36-900CCI
D0AE6500A	36-900CCI
D0AE6500E	36-900CCI
D0AZ6500A	36-900CCI
D0AZ6A529A	42-1791
D0OZ6500A	36-900CCI
D0TE6505A	10-1358
D1AZ6500A	36-900CCI
D1AZ6500B	36-900CCI
D1FZ6518A	34-619
D1TZ6057A	22-1630-1
D27Z6518A	34-212
D2DE6505AA	10-1266
D2DE6507AA	10-1268
D2DE6507EA	10-1268
D2DZ65053	10-1266
D2DZ6505A	10-1266
D2DZ6505C	10-1266
D2DZ6507A	10-1268
D2DZ6507E	10-1268
D2DZ6571A,B	38-766-15
D2RY6518A	34-614
D3NN6507A	10-1654
D3VE6505AA	10-1271
D3VE6507A	10-1272
D3VZ6505A	10-1271
D3VZ6505C	10-1271+15
D3VZ6507A	10-1272
D3VZ6507C	10-1272+15
D4NN6056A	22-1900-1

Ford	
D4NN6056E	22-1900-1
D4NN6057A	22-1630-1N
D5AZ6057A	20-1687-1
D5JE6505AA	10-1368S
D5TE6505NA	10-1332
D5TZ6505J	10-1332
D6AZ6510B	30-5607
D6NN6505A	10-1695S
D6NN6507A	10-1654
D6NN6513A	32-04014
D7AZ6505E	10-1271
D7AZ6507E	10-1272
D7AZ6507F	10-1272+15
D7AZ6A528A	42-1776
D7BE6507AA	10-1357
D7BZ6507A2A	10-1357
D7JE6505AA	10-1271
D7JE6507AA	10-1272
D7TE6505AA	10-1358
D7TE6505EA	10-1358
D7TZ6505A	10-1358
D8AE6500A	36-900CCI
D8AZ6564B	40-2888
D8AZ6A527A	42-1741
D8NN6505AA	10-1695S
D8NN6507AA	10-1694
D97Z6571A	38-966-55
D97Z6571B	38-966-55
D9HZ6057A	22-1781-1N
D9HZ6500A	36-900CCI
D9HZ6565A	74-6274
D9TZ6514A	32-1016
E1AE6505EA	10-1266
E1AZ6505A	10-1266
E1FZ6518A	34-619
E27Z6571A	38-966-55
E2DZ6057C	21-1625-54
E2TE6505DA	10-1358
E2TN6507AB	10-1694
E2TZ6505A	10-1358
E3BZ6571A	38-766-25
E3DZ6571A	38-810-45
E3HN6505AB	10-1740
E3TZ6057B	22-1669-1
E3TZ6500A	36-2104
E3TZ6505D	10-1542
E3TZ6507D	10-1543
E3TZ6510A	30-8013
E3TZ6510B	30-7689
E3TZ6565A	74-6608
E3TZ6571A	38-844-45
E4DZ6057A(.)	22-1630-1
E4TZ6505A	10-1542
E4TZ6513C	32-887-D
E5HN6505AA	10-1758
E5HN6507AA	10-1757
E5HN6507AB	10-1757
E5JE6505AA	10-1504S
E5JE6507A	10-1120
E5TZ6505E	10-10416
E5TZ6507E	10-10415
E6HZ6507A	10-1694
E6TZ6500A	36-2083
E6TZ6571A	38-812-45
E6TZ6571E	38-400-55
E7GZ6513A	32-1293
E7HZ6057E	22-1733-2N
E7HZ6505A	10-1758
E7HZ6507A	10-1757
E7HZ6510A	30-8409
E7TE6505AB	10-1547
E7TE6507BA	10-1548S

Ford	
E7TN6505AA	10-1695S
E7TZ6057A	22-1781-1N
E7TZ6505D	10-1547
E7TZ6507D	10-1548S
E8AZ6571A	38-925-25
E8TZ6505B	10-1542
E8TZ6505C	10-1542
E9TZ6513A	32-1420
E9TZ6513A	32-991
EAD6500	36-2083
EAF6505D	10-348
EAF6505D2	10-348
EAF6510C	30-1726
EBJ6500A	36-2083
EBP6505A	10-375
EBP6507E	10-373
EBP6507N	10-373
EBU6507A	10-376
EBU6514A	34-555
ECK6505A	10-375
ECR6507F	10-494
ECU6500A	36-2083
ECV6500A	36-2083
EDB6507A	10-494
EDG6500A	36-2083
F0HZ6507A	10-1757
F1AE6518BA	34-281
F1AZ6518A	34-281
F1DZ6500A	36-900CCI
F1HZ6057A	38-403-45
F1HZ6571B	38-403-45
F1JE6505AA	10-1504S
F1JE6507AA	10-1120
F1TE6507HA	10-1548
F2NN6518AA	34-613
F2TZ6507A	10-1548
F3TE6507JA	10-1723
F3TZ6505B	10-1754
F3TZ6507D	10-1723
F3TZ6507E	10-1723
F4TE6505EB	10-1504S
F4TZ6505A	10-1786
F4TZ6505B	10-1504S
F4TZ6505C	10-1786
F4TZ6507A	10-1785
F4TZ6507B	10-1785
F4TZ6518A	34-614
F4TZ6565A	74-6611
F4TZ6571A	38-173-45
F4TZ9F538A	87-4376
F5RZ6518B	34-281
F5TZ6510A	30-8476
F6JL6505AA	10-1504S
F77Z6510AE	30-8663
F77Z6571AB	38-844-45
F77Z6571AB	38-292-45
F77Z6571AB	38-812-45
FODE6500AA	36-900CCI
PB8M6500A	36-2083

General Motors	
10045251	10-1294S
10069213	10-1261S
10070125	38-830-45
10089648	41-1736
10112680	40-2867
10114116	10-1235S
10114119	38-119-35
10114123	42-2971
101321082	38-827-45
10137454	10-1482S

General Motors	
10149663	10-1780S
10166345	34-5005
10212810	38-371-45
10212811	32-1680
10214034	38-240-15
10240896	10-1261S
10240898	32-04013
10240899	37-2899
10241740	74-6373
10241744	55-6906
12338014	38-830-45
12338631	20-1375-2
12339069	20-1750-2
12339070	20-1500-1
12350995	20-2125-38
12350996	20-1937-17
12350997	20-1812-4N
12350998	20-1812-9N
12350999	20-1812-5N
12523971	40-2754
12529742	30-9946
12550002	36-2148G
12551397	36-2279G
12552289	10-1807S
12555601	38-811-55
12556295	74-6638
12556296	74-6639
12556298	40-9111
12556320	32-04042
12557928	30-3024
12558674	38-371-45
12558849	10-2126S
12564012	36-2148
12564852	38-371-45
12565763	32-2522
12576400	36-2148
12576400	36-2148
12624396	38-6132-55
12633926	38-6510-55
12636187	10-13470
12636188	10-13469
12636193	34-5001
12636393	55-6066
12855396	38-9675-45
14025512	32-1220-D
14033927	10-1484
14033928	10-1482S
14042575	37-4003
14045145	10-1261S
14075629	74-6230
14075631	74-6380
14081040	10-1578S
14081046	37-1046
14087525	10-1235S
14091408	10-1578S
14095256	74-6034
14096684	10-1164
14097045	10-1164
14103192	10-1261S
1625100	20-1625-1
1632056	30-5606
17085565	36-6005
17085566	36-817CCI
17089852	36-2148
17102660	36-6005
17109057	36-2148
17120060	36-2279
17120061	36-2279
17120090	36-2148
17120735	36-2148
17121905	36-2148
17121905	36-2148

Interchanges Are For Reference Purposes Only

O.E. AND COMPETITOR INTERCHANGE

General Motors

17122490	36-2148
18120004	20-1812-4
22531217	38-827-45
22531220	34-510
23500061	10-1483S
23500283	10-1780S
23502552	38-552-45
23503994	74-6609
24503856	34-555
24503888	34-217
2465337	10-938+15
25341990	36-2148
25342148	36-2104
25518390	38-450-25
33002729	38-535-45
336733	10-1294S
340226	10-1294S
360506	38-535-45
3744341	42-1786
3764389	38-731-15
3779410	36-6005
3799644	36-817CCI
3814692	42-2921
3835333	38-240-15
3836006	42-2941
3856860	32-816-D
3864808	10-1164
3866612	38-910-25
3869997	36-817CCI
3887125	32-864-D
3896931	32-880-D
3904295	42-2941
3911068	32-880-D
3921912	42-2941
3947770	34-555
3947880	34-613
3969815	10-1164
3970627	32-1009
3973186	10-1235S
411226	32-1016
460483	38-925-25
460483	38-938-45
460527	38-910-25
465934	42-1786
477292	32-1038-D
5117561	32-769
5144019	32-939
5147347	32-769
5147424	32-1189
5231315	36-992
5231430	36-6005
5231465	36-6005
5231475	36-817CCI
5231585	36-992
5232100	36-6005
5232110	36-6005
5232215	36-992
5232280	36-817CCI
5232439	36-992
5232445	36-6005
5232450	36-817CCI
5232510	36-6005
5232550	36-992
5232565	36-6005
5232660	36-817CCI
5232670	36-817CCI
5232695	36-992
5232700	36-817CCI
5232720	36-817CCI
5232765	36-6005
5232810	36-6005
5233410	36-6005

General Motors

5233465	36-2104
5233515	36-6005
5233645	36-2104
5233745	36-2148
5234200	36-6005
5234295	36-2104
5234305	36-6005
5234315	36-6005
5234330	36-6005
5234360	36-6005
5234464	36-2104
5234470	36-2104
5234530	36-2104
5234625	36-2104
5234670	36-2148
5234680	36-2104
5234755	36-2104
5234890	36-2148
5234890	36-2148
5234935	36-6005
5235498	36-2148
536264	38-450-25
538343	42-1786
6263732	10-1261S
6263796	32-1038-D
8132248	36-6005
838029	34-555
90354648	34-5021
90410741	38-1329-45
94029346	21-1625-55
94029351	10-10216
94030688	10-10216
94030689	10-10217
94032687	30-3298
94051259	87-1259
94239501	34-5001
94325528	21-1187-52
94450950	21-1187-52
94450951	21-1375-51
96051659	34-5009
97188463	87-8463
97188746	55-6066
97212571	22-1343-1
97212572	22-1264-1
97212994	38-299-45
97216511	22-1502-2
97225124	32-04041
97225507	10-2175
97225508	10-2176
97250340	30-3049
97325546	36-2298
97329105	32-04041
97329106	55-6066
9779008	32-813
98025825	32-04041
98028875	22-1502-2

Hercules

225014	30-1843
29288A	30-1568
402022507	10-1880
402022508	10-1881
47018A	30-1697

Hino

111221220	30-3300
111311380	22-1619-1
11131E0030	22-1619-1
111351420	22-1796-2
111351580	22-1540-2
111351720	22-1540-2

Hino

11135E0061	22-1540-2
111761190	87-4433
137111631	10-30159
137111632	10-30159
137111830	10-30159
137151730	10-30160
137151732	10-30160
137151733	10-30160
137191360	38-7005-55
137191470	38-7005-55
900126122	34-5010
S111761190	87-4433

Honda

8941742050	21-1625-54

International/Navistar

124476R1	10-601
129597R1	10-601
133670R1	30-1817
151269R2	10-560
151443R2	10-559S
151443R3	10-559S
151798R1	30-1836
1700591C1	22-1973-1
1700609C1	22-1775-1
1802340C1	36-2082
1804330C1	10-1543
1804330C2	10-1543
1804338C1	74-6608
1804353C1	36-2104
1804420C91	38-844-45
1804468C1	10-1542
1804535	36-2104
1805249C1	22-1669-1
1805250C1	22-1957-1
1805407C1	30-7689
1805917C1	10-1542
1809323C1	10-1542
1809570	36-7096
1809570C5	36-7096
1810086C1	10-1574S
1810086C2	10-1574S
1810944C1	34-614
1811191C1	10-1542
1811191C2	10-1542
1811191C3	10-1542
1811581C91	37-1581
1814280C1	10-1786
1814376C1	87-4376
1814424C1	10-1785
1815264C1	30-8188
1815374C1	38-466-45
1815474C1	38-466-45
1816179C91	38-173-45
1816638C2	10-1754
1818579C1	10-1900S
1818580C1	10-1899
1818778C1	87-8778
1818778C2	87-8778
1818778C3	87-8778
1820264C1	30-8476
1820826C91	37-9826
1821900C1	22-1823-1
1821901C1	22-1823-1
1821903C1	22-1811-2N
1821903C3	22-1811-2N
1822245C1	38-2245-45
1822862C1	30-8476
1823452C1	10-1786
1823453C1	10-1785

International/Navistar

1823875C1	10-1945
1823925C1	38-3295-45
1824642C1	10-1943
1824642C2	10-1943
1824644C1	34-04644
1824646C1	30-3006
1824647C1	30-8188
1824680C1	37-4680
1824683C1	38-0234-35
1824838C1	10-1900S
1824840C1	10-1946S
1824840C2	10-1946S
1824842C1	10-1944S
1825540C1	32-04009
1826471C1	10-2131
1826471C2	10-2131
1827121C2	22-2001-2
1828289	34-5009
1828320C1	87-8320
1830711C1	22-1811-3
1833382	87-8778
1833432C1	38-3432-55
1835655C1	37-5655
1835851C1	22-1584-1
1835852C1	22-1480-2
1835858C1	32-04047
1837731C1	10-2179
1837732C1	10-2180
1838034	32-04040
1839968C1	10-13002
1839970C1	10-13003S
1841095C1	87-1095
1841538C1	30-3079
1841566	34-5005
1842137C1	22-1584-1
1842138C1	22-1480-2
1842146C1	32-04047
1842912C1	10-1946S
1842913C1	10-2131
1850019C1	30-3079
1850160C3	36-0160
1854006C1	10-13182
1854007C1	10-13183
1873916C2	74-6662
1889589C1	38-3432-55
217158R91	36-855
217158R92	36-855
223717R11	32-887-D
232717R11	32-887-D
234276R1	10-601
237248R1	30-1747
251103R1	30-4944
277577R1	30-6913
278301R1	10-593
278302R1	10-592
278370R1	30-1881
3015752C1	30-3177
3055022R2	30-7548
3055055R2	10-10766
3055056R2	10-10767S
3055060R1	32-04056
3055344R1	87-5344
3136915R2	10-10767S
313774R1	10-922
3156157	34-766
317365C1	32-1178
317365C11	32-887-D
323774R1	10-922
323800R1	10-921
326505R3	30-1957
328300R1	10-592
341350R1	10-923

 Interchanges Are For Reference Purposes Only

O.E. AND COMPETITOR INTERCHANGE

International/Navistar

343433R1	10-924
343433R2	10-924
349025R1	22-1657-1
349381R1	10-921
352973R2	30-1636
356583R1	30-1804
362435R1	10-428
366302R1	10-504
366302R2	10-504
367191R1	10-1075S
372699R1	10-1075S
372699R2	10-1075S
372699R3	10-1075S
379089C1	20-2000-3N
387095C1	36-2011CCI
41338	34-613
41339D	34-613
42026D	34-555
428046C1	30-7336
444829C1	10-1260
446418C1	10-1432
446571C1	36-2011CCI
446723C1	30-7174
446856C1	22-1654-1N
448219C2	30-7457
448229C1	30-7456
46209D	34-614
488428C1	10-1432
489101C4	10-1649
50706DA	10-193
50707DA	10-205
50731DA	10-204
50732DA	10-203
535229R1	30-6990
57698D	10-207
57797D	10-313
57798D	10-312
60437R1	34-802
6088D	30-1543
612312C1	10-921
612313C1	10-923
6169DR	30-7432
61868R11	34-802
6338D	30-1546
6608DR	30-1578
670301C1	22-1727-2N
670308C1	10-924
671559C1	22-2001-1
671563C1	22-1628-1N
671599C1	22-1536-2N
671602C1	22-1782-1
675043C1	22-1999-1
675043C1	22-2001-1
675046C2	10-1423
675046C4	10-1423
675439C1	30-7431
675441C1	22-1782-1
675442C1	87-5442
675450C1	22-1628-1N
675450C3	22-1626-1N
675573C2	10-1519
675573C3	10-1519
675574C2	10-1520
675576C1	22-1536-2N
676687C1	10-1520
676687C2	10-1520
676687C4	10-1520
676865C2	10-1422S
676865C3	10-1422S
676865C4	10-1422S
677349C1	32-04010
681234C1	38-0234-35

International/Navistar

682064C1	32-1178
684729C1	36-2041
71339D	34-613
76951R1	34-613
795713R1	30-1976
796122R1	30-1977
8044D	30-1547N
8049DR	30-1545N
8322DR	30-1727
8744	30-4941
874913R2	30-1968
874918R2	10-1133S
90316R3	30-1936
911776R3	36-2041

Isuzu

1117110370	22-1894-3
1117110430	22-1539-2
1125510500	10-10725
1125520250	10-10726
1125520520	10-10726
1125521110	10-10726
1125690150	38-7120-45
125690060	38-7002-55
5117150230	21-1625-55
5117156070	22-1857-4
5117210010	30-3302
5117210010	30-3298
5117210160	30-7656
5125510240	10-10725
5125510280	10-10216
5125510282	10-10216
5125510300	10-10216
5125520340	10-10217
51255203401	10-10217
5125520342	10-10217
5125520380	10-10217
5125520480	10-10726
8117118030	22-1542-1
8126363930	55-6066
8245038560	34-555
890354680	34-5021
8904107410	38-1329-45
8940512590	87-1259
8941105590	38-967-55
894129550	10-10725
8941332750	10-30151
8941332751	10-30151
8941338751	10-30152
8941742050	21-1625-54
8942395010	34-5001
8942478750	10-30152
8942478751	10-30152
8943255280	21-1187-52
8943331140	10-10726
8943907800	30-3101
8943941270	22-1698-1
8943941270	22-2052-2
8943944620	22-1894-1
8943956250	22-1502-2
8943958820	10-13121
8943958822	10-13121
8943958830	10-13122
8943958880	22-1502-1
8943958881	22-1502-1
8943958882	22-1502-1
8943961720	22-1697-1
8943965980	30-3299
8943965980	30-3054
8943966092	38-6115-55
8943966092	38-7003-55

Isuzu

8944284660	38-962-45
8944315210	22-1450-1
8944315220	22-1627-1
8944332450	10-30152
8944509500	21-1187-52
8944509510	21-1375-51
8944619570	10-10725
8944619580	10-10726
8970104630	10-30152
8970287020	10-10725
8970287060	10-10726
8970336730	38-962-45
8970343790	10-10725
8970427240	10-10728S
8970850662	10-10728S
8970884600	22-2013-1
8971201670	38-7120-45
8971203070	38-7002-55
8971713980	10-30155
8971713990	10-30156
8971884630	87-8463
8971887460	55-6066
8972098762	10-13122
8972098763	10-13122
8972098764	10-13122
897212571	22-1343-1
8972125720	22-1264-1
8972129940	38-299-45
8972165110	22-1502-2
8973096751	10-3200
8973096753	10-3201
8973096771	10-3201
8973255462	36-2298
8973291060	55-6066
897343790	10-10725
8973767191	30-3297
8973767200	38-7002-55
8973797200	38-7002-55
8976066610	87-4620
8980169730	10-3200
8980169741	10-3201
8980184620	87-4620
8980258250	32-04041
8980288740	22-1502-1
8980288750	22-1502-2
8980388700	10-13463
8981583761	10-13464
9117118030	22-1539-2
9117156070	22-1854-1
9125518010	10-10725
94029347	30-7656
98016973	10-3200
9944649210	10-30151
9970104640	10-30151

John Deere

M811851	38-6149-55
RE520980	38-6142-55
T110650	38-6152-55
A2467R	30-1644
A3618R	10-2635
A5707R	30-1857
AA2333R	10-2635
AA4332	10-2635
AB2859R	30-1600
AM675T	10-663
B1927R	30-1600
B367R	34-746
CH10450	38-6151-55
M100T	10-663
M3036T	30-1859

John Deere

M40T	30-1858
M801220	10-13415
M801227	30-3190
M801228	30-3191
M811557	10-13413
M811850	38-6148-55
M811855	30-3188
MIU800391	10-13407
MIU800392	10-13408
MIU800446	10-13414
MIU800494	10-13416
R106829	22-1695-1
R106831	22-1856-1
R108988	30-3027
R119132	22-1933-2
R121193	22-2051-4
R121193	22-2051-4
R121812	10-1889
R121813	10-1889
R122035	10-1889
R133891	32-04039
R26108R	10-658
R26123R	10-660
R26125R	32-757
R28653R	30-1897
R28654R	30-1898
R32034	10-1289
R32035	10-1288
R32035R	10-1288
R35431	34-802
R40357	30-1967
R40363	10-1406
R41410	10-1336S
R41411	10-1375
R43679	10-1375
R43680	20-1937-1
R43681	20-1750-1N
R43883	10-1336S
R43914	10-1404
R44174	10-1289
R44175	10-1288
R45823	10-1406
R48313	22-2136-1N
R48314	22-1991-1N
R49569	32-04037
R49571	32-04038
R501559	87-1559
R502187	32-5012
R502368	32-6649
R502369	10-13246
R502370	10-13247
R502401	22-1951-1
R502454	10-13373
R502455	10-13374
R50356	20-1750-2N
R50357	10-1377
R50358	10-1403
R503906	32-3906
R503971	30-3050
R504060	10-1587
R504061	10-1586
R504235	32-5002
R504713	22-1951-1
R504968	22-1437-2
R504969	22-1476-2
R515033	22-1437-2
R516892	10-1889
R517011	30-3050
R51734	22-1638-1N
R518327	22-1832-1
R518328	10-13176
R518806	10-13246

Interchanges Are For Reference Purposes Only

O.E. AND COMPETITOR INTERCHANGE

John Deere

R518872	32-6602
R520223	10-13177S
R520224	10-13178S
R520798	34-01889
R522049	22-1638-2T
R522049	22-1638-2N
R52251	10-1234
R52252	10-1233
R522728	32-6649
R526671	22-1470-1
R526672	22-1358-1
R527285	22-1638-2N
R527286	30-3131
R527333	10-13438
R527334	10-13439
R527447	22-1676-1
R52773	36-7015
R527845	10-13247
R528300	32-6674
R528548	38-6499-55
R529030	30-3196
R530750	37-3075
R530920	87-3935
R53192	30-8004
R532049	10-13247
R532100	10-13438
R534236	32-6675
R534237	10-13437
R534238	10-13436
R536135	10-13246
R536136	10-13247
R537044	30-3196
R54673	30-3197
R59894	22-2136-1N
R60537	22-1991-1N
R63981	10-1590S
R72611	10-1471S
R73064	22-1858-1N
R75690	10-1590S
R78702	20-1750-2
R79623	10-1234
R79624	10-1233
R81086	37-1086
R81087	10-1590S
R83071	10-1471S
R83071B	10-1471S
R84618	10-1587
R84619	10-1586
R84976	22-1933-2
R84977	22-2051-4
R85687	22-1695-1
R90692	10-1588
R91822	32-04012
R91889	34-01889
R93311	10-1586+3
R93313	10-1586+15
R98062	10-1589
R98063	22-1856-1
RE11410	37-1410
RE31617	38-830-45
RE516486	32-3906
RE517435	87-3935
RE518080	10-13246
RE518081	10-13247
RE518082	22-1476-2
RE518083	22-1437-2
RE518339	87-8339K
RE523985	38-6121-55
RE526519	38-6133-55
RE527456	87-7456
RE528349	87-8349
RE528634	87-1559

John Deere

RE529187	38-6122-55
RE530609	87-3609
RE531221	10-13246
RE531223	32-6602
RE531334	87-8339K
RE532712	38-6142-55
RE536919	38-6488-55
RE539446	87-9446
RE541360	38-6489-55
RE543935	87-3935
RE548489	87-9446
RE557890	10-13246
RE557891	10-13247
RE60005	37-9005
RE66635	38-6635-45
T110649	10-13416
T11211T	30-1899
T122075	87-2075
T12356T	10-657
T20077	34-613
T20174T	10-1234
T20175T	10-1233
T556T	30-1860

Komatsu

6140414540	38-6145-55
3006457	30-7264
6110131311	30-8159
6127111325	22-2247-1
6127111335	22-2366-1
6127111341	30-8160
6150111320	22-1835-1
6150121341	30-3183
6150121351	30-3183
6150121370	30-3184
6150121380	22-1874-4N
6150414111	10-13385
6150414210	10-13386S
6150414230	10-13391S
6150414570	38-6146-55
6150424110	10-13389
6150424210	10-13390S
6151111330	22-1874-3
6204111440	22-1538-2
6204191310	30-3181
6204414210	10-13384
6204414540	38-6144-55
6204414541	38-6144-55
6207111430	22-1775-3
6207111440	22-1539-5
6207414110	10-13383
6207414130	10-13383
6209111430	22-1775-4
6209414110	10-13387
6209414210	10-13388S
6610414210	10-326S
6712414110	10-603
6732111170	22-1722-1
6732111180	22-1853-1
6732414430	32-2453
6736414110	10-1665
6736414210	10-1664
M11900011810	30-3189
M12013011860	30-3190
M12140011340	38-6152-55
M12185011150	38-6150-55
M12390011100	10-13409
M12390011110	10-13410
M12446011340	38-6151-55
M12910011100	10-13415
M12910011130	10-13416

Komatsu

M12915011810	30-3191
YM12990011100	10-13411
YM12990011110	10-13412

Kubota

1522113240	32-5000
1523113540	30-8347
1523113560	30-8348
1551113580	30-8347
1552113580	30-8347
1560113560	30-8348
1731113560	30-8348
17321131560	30-8348
1732113580	30-8347
66535	30-8347
6653587	30-8348

Mack

20530103	22-1697-2
12GC129	87-0129
12GC129P1	87-0129
12GC212A	87-212A
12GC411	87-0411
12GC412	87-0412
13GC1238P1	22-2088-1
13GC1239P1	22-2444-1
13GC1239P30	22-2444-1+030
13GC2233	22-2088-1
13GC2234P1	22-2444-1
13GC2234P30	22-2444-1+030
13GC2237	22-2444-1
13GC2247P1	22-2088-1
13GC2251P1	22-1831-1
13GC2264P1	22-1692-1N
13GC2290	22-1692-1N
13GC2292	22-1692-1N
13GC316	22-1831-2
13GC317	22-1692-1N
20510747	34-619
20513285	10-13435S
20536487	87-6487
20540013	10-13375S
20540017	10-13375S
20564020	10-13376S
20704947	87-0129
20732758	22-1579-1S
20737586	10-13375S
20737849	22-1658-1S
20737856	10-13375S
20739057	10-13434S
20740798	10-13377S
20740804	22-1776-1S
20768519	10-13378S
20864662	38-961-55
20900319	22-1697-3
20904074	30-3157
21016539	10-13378S
21405770	22-1776-2S
21427620	10-13375S
21430918	10-13376S
25096282	10-3042
25502378	55-2311
3183210	32-5014
3183211	32-5013
446GC279	38-545-45
446GC296	38-6328-55
446GC328	38-6328-55
446GC332	38-2000-55
54GC120	34-802
54GC126	34-802
54GC19	34-810

Mack

54GC25	34-05425
575GC1100	32-1216
575GC1115	32-04023
575GC14A	32-466
575GC199	32-1217
575GC213	32-04011
575GC31	32-1217
575GC35	32-04024
575GC36	32-04024
688GC185	10-1037
688GC2325	10-1037
688GC2325A	10-1037
688GC2352	10-1037
688GC2352A	10-1037
688GC2361A	10-1037
688GC2364	10-1446
688GC2378	10-1570
688GC2389	10-1750
688GC337	10-1446
688GC337A	10-1446
688GC344	10-2095
688GC416	10-3041
690GC122	10-1036S
690GC2114B	10-1036S
690GC2187	10-1036S
690GC2187A	10-1036S
690GC2187B	10-1036S
690GC2193	10-1415S
690GC2210	10-1571S
690GC331	10-1415S
690GC331A	10-1415S
690GC342	10-3042
690GC410	10-1928S
690GC411	10-1928S
690GC425	10-1928S
690GC432	10-1928S
714GB118	30-1533
714GB1308P2	30-1809
714GB1309	30-1810
714GB199A	30-1515
714GB210P2	30-7592
714GB217P2	30-8008
714GB222P2	30-8009
714GB222P2	30-8010
714GB3103P2	30-8010
714GC3111	30-3043
714GC3113A	30-3043
722GC219A	37-9226
722GC226	37-9226
722gc311	55-2311
722GC312	55-2311
722GC313A	37-2313
722GC320	37-9320
722GC321	55-2311
7421310068	32-5014

Mercedes Benz

102530026	34-5132
3520531229	30-3071
3660530230	30-3072
40000533558	38-6492-55
4570530001	10-13379
4600530001	10-13379
4730500126	10-3220
4730500127	10-3221S
5410500227	10-13380
541050026	10-13379
5410530532	22-1696-3
5410532531	22-1882-1S
5419970345	87-1345
6110530329	30-3255

O.E. AND COMPETITOR INTERCHANGE

Mercedes Benz

9060170488	87-0488
9060500226	10-3188
9060500326	10-3188
9060500327	10-3189
9060500626	10-3188
9060500627	10-3189
9060500726	10-3188
9060500727	10-3189
9060530129	30-3276
9060530130	30-3285
9060530131	22-1382-2
9060530358	38-812-45
9060531232	22-1578-1
A0000535158	38-9675-45
A0000535658	38-9675-45
A4730500126	10-3220
A4730500127	10-3221S
A5410530020	32-6648
A5410530126	34-5142
A5410532730	30-3175
A6110500127	10-2235
A6110530032	22-1175-1
A6110530101	10-2234
A6110530105	10-2235
A6110530232	22-1088-1
A6110530329	30-3255
A6110530401	10-2234
A6110530431	22-1160-1
A6110530531	22-1218-1
A6120500058	38-5080-55
A6280530001	10-13073
A6280530005	10-13074
A6420500080	36-7561
A6420500527	10-13357
A6420530401	10-13356
A6460530001	10-13073
A9060500326	10-3188
A9060500327	10-3189

Mercury Marine

483481	55-6906

Minneapolis Moline

10A10073	10-159
10A26421	30-7371
10A26467	30-7372
10A27215	38-1055-70
10A5988	30-1891
10A6397	10-861
10A6467	30-7372
10A6555	34-803
10A6912	30-1914
10A9108	10-160
10R34	10-283
10R35	10-160
10R36	10-159
29288A	30-1568
KE283B	10-160
KE284B	10-159
RE103B	10-283

Mitsubishi

2211411050	30-7576
2211432901	30-7576
2211511050	30-7577
2211532901	30-7575
2461032824	36-6000
MD024499	10-10091S
MD024539	10-10091S
MD024638	10-10092
MD050523	30-7850

Mitsubishi

MD050527	30-7851
MD061895	34-813
MD083849	10-10145
MD096219	10-10625
MD197467	38-964-55
MD198404	10-3187
MD198406	10-3186
MD198406	10-3187
MD301339	10-10624
MD301340	10-10625
MD339767	36-6000
MD85253	10-10143
MD85254	10-10144
MN980085	38-9675-45

Nissan

11070Z5504	87-3322
1109810W10	21-1812-56
1109877A60	21-1250-50
11098K0400	21-1812-50
11098N6810	21-1812-50
1109910W10	21-1625-60
1109953F60	21-1312-52
1109984A60	21-1375-51
1109988A60	21-1375-51
1109997E60	21-1312-52
11099H6210	21-1312-52
1201030W01	30-7828
1201083W01	30-7828
1320101B00	10-2243
1320110B00	10-2243
1320150K00	10-2243
13201F1800	10-10752
13201FY500	10-13084
13201FY525	10-13084
13201H6200	10-10031
13201N8501	10-10268
13201P0500	10-10752
13201Z5501	10-30157
13201Z5501K	10-30157
1320250K00	10-2244
13202FU400	10-13085
13202FY525	10-13085
13202N8500	10-10269
13202P5100	10-10753
13202Z5501K	10-30158
132070B000	38-985-55
1320721002	38-962-45
1320753F00	38-985-55
1320766700	38-667-45
1320781W00	38-962-45
13207D0100	38-985-55
13207D0111	38-985-55
13207H7200	38-961-55
1321001M00	34-5007
1321001M01	34-5007
1321040F00	34-5010
13210D4200	34-5010
1321101W10	30-7495
1321130001	30-7495
13211V1700	30-8209
13211Z5500	30-3301
13212D0110	30-7826
13212D0111	30-7826
13212H2311	30-7545
13212H8510	30-7545
13212W0510	30-7828
13213H2311	30-7542
13213W0410	30-7828
13213W0510	30-7828

Oliver

106608A	30-1947
106609A	30-1953
106612A	30-1954
106620A	30-1927
155731A	10-887
156159A	30-1951
159187A	10-882
159188A	10-883
164028A	30-1965
180036A	10-323
222209	30-1952
222536	10-887
736296M91	30-1977
736297M91	30-1976
840210M91	30-1620

Onan

C0110278101	22-1460-2N

PACCAR

1440834PE	34-6145
1629458	87-3147
1645642	36-5642
1813104	32-6695
1819063	32-6696
1819065	38-6506-55
1821685	32-6697
1850087	32-6702
1867257	36-7257
1874697	34-4697
1874697PE	34-4697
1912976	10-13459
2015130	10-13459
2015131	10-13460
2112206	10-13486S
2162785	38-2785-55
2189942	10-13485
2189943	10-13486S

Perkins

0230001	34-225
0780006	32-1068
0780007	32-1069
0860012	36-0012
120166290	10-13494
120166350	10-13326
120166380	10-13326
120176360	10-13327
120176380	10-13327
120226070	34-5556
120406050	38-6141-55
120406070	38-6141-55
198216700	32-6638
2230001	34-225
2236131	32-793
2236132	32-794
2236556	30-1976
2236557	30-1977
2418M506	38-507-45
2418M507	38-507-45
2418M508	38-6147-55
2418M517	38-3954-45
2418M519	38-6438-45
2510378	30-1956
2714A002	34-5036
3142A051	10-1784
3142A052	10-882
3142A101	10-13142
3142A151	10-13138
3142A171	10-13364
3142A181	10-13330

Perkins

3142D051	10-13219
3142H002	10-13135
3142H051	10-13143
3142H071	10-13137
3142H091	10-13329
3142H101	10-13363
3142L081	10-13136
3142W004	34-2004
31431103	10-883
31431104	10-882
31431109	10-882
31431154	10-2167
31431261	10-874
31431271	10-873
31431281	10-874
31431591	10-873
31431641	10-883
31431671	10-2166
31431741	10-874
31431881	10-882
31431961	10-1784
31434163	36-7014
31744131	32-793
31744133	32-04043
31745121	32-794
31745122	32-04044
3174P409	32-4127
33125121	22-2020-1
3313A012	30-3059
3313E001	30-8013
3313E735	30-8013
3314A031	22-1518-1
3314A041	22-1782-2
33152139	22-1681-3
33152154	22-1690-1
3316A032	30-3100
33173108	34-217P
3318A702	30-3105
3318A705	30-3060
33261723	30-1956
33261725	30-8013
33261727	30-3100
33261732	30-1976
33261741	30-8013
33261752	30-1977
33432532	30-7450
3343F002	30-1976
3343F041	30-1976
3343J002	30-1977
3343J021	30-1977
33817117	38-7117-45
58261	10-874
58262	10-873
58288	10-874
58289	10-873
70910002	10-873
70910003	10-874
70910010	10-882
70910013	10-1784
70910016	10-883
70910018	10-882
723812M1	10-873
7324451M1	30-1956
736296M91	30-1977
736297M91	30-1976
795713R1	30-1976
796122R1	30-1977
830761M91	10-597
8662077	32-794
8862107	34-217P
U20406140	38-6141-55

O.E. AND COMPETITOR INTERCHANGE

Renault

7700109840	38-9675-45

Suzuki

1291984A00	38-9675-45
1293282000	34-5009

Thermo-King

113280	30-7875
12013011860	30-3190
12140011340	38-6152-55
12446011340	38-6151-55
12900411130	10-13414
12910011100	10-13415
12910011130	10-13416
12915011810	30-3191

Toyota

1112240010	30-7538
1112260020	30-7528
1112260020	30-7532
1112261011	30-7532
1112261011	30-7528
1112271020	30-8201
1112660021	30-7529
1112660021	30-7527
1112660021U10	30-7529
1112661011	30-7529
1113111020	21-1187-52
1113163010	21-1687-55
1113513010	21-1250-50
1113535010	21-1562-67
1113542010	21-1187-52
1113560010	21-1625-58
1371124011	10-10307
1371144012	10-10754
1371160021	10-10070
1371161010	10-10070
1371161020	10-10070
1371171010	10-10322
1371524012	10-10308
1371524013	10-10308
1371524030	10-10308
1371544012	10-10755
1371560032	10-10069
1371561010	10-10069
1371561030	10-10069
1371571010	10-10323
1375071010	36-6005
1375071020	36-6005
9091302053	38-967-55
9091302064	38-967-55
9091302096	38-967-55
9091302105	38-967-55
9091303005	34-811
9091303014	34-5005

Volkswagen/Audi

036109651A	34-5021
036109675	38-9675-45
036109675A	38-9675-45
057109675	38-9675-45
113109651A	34-619
36109675A	38-9675-45

Volvo

20530103	22-1697-2
1546437	30-3157
1546437	30-3157
1547210	32-5013
1677875	34-5061

Volvo

20412798	22-1696-2S
20441486	10-13301S
20441945	10-13301S
20463800	10-13300S
20482579	22-1696-1S
20513285	10-13435S
20536487	87-6487
20561997	22-1776-1S
20564020	10-13376S
20564028	22-1932-1
20709467	22-2051-6
20732758	22-1579-1S
20737849	22-1658-1S
20737856	10-13375S
20739057	10-13434S
20740798	10-13377S
20740804	22-1776-1S
20768519	10-13378S
20787121	38-6504-55
20789674	30-3157
20817645	30-3157
20833932	10-3196
20833936	10-3197
20900319	22-1697-3
20904074	30-3157
20905400	30-3157
20916916	30-3207
20919484	30-3157
20924435	38-6504-55
20980413	10-3196
20997871	10-3197
21016539	10-13378S
21067953	30-3207
21098621	87-8621
21310068	32-5014
21324296	32-4296
21326667	32-6667
21351717	87-8621
21401136	87-1136K
21405770	22-1776-2S
21430918	10-13376S
21448332	32-8332
21484834	22-1696-2S
21564308	32-8332
21591053	32-8332
22527820	32-6667
23803425	32-4296
3165303	30-3157
3165747	87-6487
3169366	22-1696-2S
3169490	10-13300S
3183210	32-5014
3183211	32-5013
3183283	30-3157
3183368	87-8621
7403183211	32-5013
7421310068	32-5014
8148574	10-13301S
8170995	34-01177
85104134	87-8621
85124276	87-8621
85137065	87-1136K
859171	38-812-45
8631652	38-9675-45

Waukesha

106608A	30-1947
106609A	30-1953
117159	20-1437-6
117738	20-2062-8
118654	20-1625-1

Waukesha

118664C	20-1625-1
118665	20-1375-1
118679	20-1250-1
118680	20-1500-1
118941	20-1687-2
119453	20-1750-2
119917	20-2000-14
119984	20-2000-14
11999	20-2000-1
120507	20-1562-7
123109	30-7886
125009J	30-7476
145009	30-1593
145109T	30-1592
151241	20-1812-4
151255	20-1875-6
152511	20-2312-9
164904A	30-1965
180009D	30-1954
181109K	30-1953
204109C	30-7892
204109E	30-8011
222209	30-1952
223009A	30-1965
224609	30-1927
224609C	30-7398
41177	20-1250-3
64009	30-1421
68009S	30-1458
73597	22-2506-1
74592	20-1750-0
76408	20-2000-13
936022	10-323
B5685A	20-1625-1
B5746	20-2000-13
B6466A	34-746

Wisconsin

AA91	30-1909
AD41E	30-1907
AD43	30-1908
AD43	30-1909
AD47	30-1907
AE75B	10-249
AE75C	10-249
AE75D	10-598S
AH9	34-614
MG12154	30-1723

Yanmar

11971711340	38-6148-55
11900011810	30-3189
11971711350	38-6149-55
11971711800	30-3188
12013011860	30-3190
12140011340	38-6152-55
12185011150	38-6150-55
12390011100	10-13409
12390011110	10-13410
12390711100	10-13403
12390711110	10-13404
12390711800	30-3185
12390711810	30-3186
12446011340	38-6151-55
12900411130	10-13414
12900511100	10-13413
12910011100	10-13415
12910011130	10-13416
12915011810	30-3191
12950811100	10-13407
12950811110	10-13408

Yanmar

12990011100	10-13411
12990011110	10-13412
12990711100	10-13405
12990711110	10-13406
12990711800	30-3187

NON-STOCKED PRODUCTS

QualCast has many years of experience and a large network of factories that we partner with to produce an extensive range of engine parts, some of which are listed below. We accept special orders subject to minimum production order quantites and lead times. We welcome your enquires.

Special Order Valve Train Components

Automotive and Heavy Duty Cylinder Heads - Bare and with Valves

- Engine Blocks
- Crankshafts
- Camshafts
- Balance Shafts
- Flywheels
- Connecting Rods
- Tinware
- Cylinder Sleeves (Centrifugally Cast)
- Pistons with Pins
- Bearings
- Various High Tensile Bolts and Studs
- Intake Manifolds

Aluminum Castings





Part Number Prefixes

10-	**Valve, Stock**
10-VK*	**Valve Kit**
15-	**Cylinder Head, Aluminum***
15-*K	**Head Kit, HP***
16-	**Cylinder Head, Cast Iron**
20-	**Seat For Cast Iron Head**
21-	**Seat For Aluminum Head**
22-	**Seat, Factory Installed (Exact O.D.)**
30-	**Cast Iron Guide**
31-	**Manganese-Bronze Guide***
32-	**Spring**
33-	**Valve Spring Insert**
34-	**Keeper**
36-	**Lifter**
37-	**Rotator**
38-	**Valve Stem Seal**
40-	**Rocker Arm**
41-	**Rocker Kit**
42-	**Rocker Component**
45	**Roller Rocker Set***
52-	**High Performance Spring**
52-*K	**Spring Kit, HP***
53-	**Street Performance Valve***
55-	**Retainer**
74-	**Push Rod**
75-	**Guide Plate***
77-	**Black Lightning Racing Valve**
77-VK*	**Valve Kit, BL**
87-	**Injector Component**
96-	**Bulk Expansion Plug**
97-	**Expansion Plug Kit**

***See the latest QualFast Performance Catalog!**

For Automotive Light Duty and Marine applications, see the latest QualCast Light Duty Catalog or visit http://www.qualcast.com

QualCast is constantly reviewing its warehouse distribution locations to best serve the market. For current locations, please check our website, http://qualcast.net/distribution for the most up-to-date listing.

QualCast®



1854 Air Lane Drive, Unit 10
Nashville, TN 37210-3816
USA

Telephone
(615) 777-3863
Toll Free US/Canada
(888) 432-4552

qualcast.net