



2022 Technical Seminar Table of Contents

General

CVT, 6L, 9L Units

- P0171, Surge, Shudder with TCC Applied

All Applications

- Driveability/Engine Mechanical Issues
- Surge, Shudder, Driveability Issues
- Lean Misfires with TCC Related Surge/Shudder

GM Transfer Case

- Popping Noise in 4WD, Intermittent Loss of 4WD

GM Full Size Trucks/SUVs

- Popping/Snapping Noise from Bellhousing/Starter

GM and Dodge

- Intermittent Misfire Issues
- Popping/Snapping Noises from Bellhousing

GM

- Intermittent Whirring or Popping Noise

GM

GM All Models

- GM Programming Vehicle Configuration Index Number

4L60E, 6L80

- Broken Shift Cable

9T50

- Valve Body Installation

6T40

- Surge Vibration at Stop

6T70/75/80

- Flares, Bumps, Tie-Ups, Burnt Clutches

VT40 (CVT 250)

- Code P2714, Slipping During Forward Operation

GM Calibration

- PUN/TUN Updated Process

6L80

- Cooler Bypass Update

6L50/80/90

- P0741 TCC Slip Code

6L80, 8L90, 10L80

- Wiring Harness Related Issues Full Size C/K Trucks, SUVs
- Shudder/Surge

10L80

- Shudder During Low-Speed Deceleration

8L90

- TCC Shudder
- New RPO Process
- Features
- Tag Info
- Fluid Pump Design
- TCM Delphi T87 and T87A Gen 1 Controllers
- TCM Bosch T93 Controller
- Input, Clutch Input and Output Speed Sensors
- Transmission Temperature Sensor
- Internal Mode Switch 10 Pin, Early Design
- Internal Mode Switch 4-Pin, Late Design
- Internal Mode Switch Updates
- Case Connector Identification
- Internal Harness Updates
- Solenoid Identification and Strategy
- Solenoid Identification, Location and Function
- Solenoid Function and Clutch Apply Chart
- Master Splines
- Check Ball & Accumulator Locations

- Check Ball Locations
- Fluid Pump/Gasket Changes/Interchange
- Return Spring – 1-2-7-8-R (C4)
- Clutch Drum – 1-3-5-6-7 (C1)
- Return Spring 2019 Update – 1-3-5-6-7 (C1)
- Piston, Seal and Wave Plate Update – 2-3-4-6-8 (C4)
- Valve Body, 2018 Valving Update – 2-3-4-6-8 (C4)
- Clutch Disk Update 2019 – 4-5-6-7-8-R (C5)
- Front Cover and Stator Support Updates
- Planetary Updates
- Solenoid Update 2019
- TCM Updates
- Torque Converter Update 2019 RPO MQE

8L90/8L45

- Spacer Plates

TR9080

- Introduction

Ford

6R80

- Speed Sensor and Ratio Error DTCs

8F35

- Introduction
- Vehicle Applications
- Clutch Apply Chart and Solenoid Apply Chart
- Line Pressure Checks
- Air Check Locations
- Case Connector Identification
- Auto Start/Stop Connector Identification
- Gear Ratios
- Fluid Level Checking Procedures
- Lower Valve Body Small Parts Locations
- Solenoid Identification
- Torque Specifications
- Selectable One Way Clutch
- Possible DTCs, Bangs Into Gear, Possible Planet Noise
- Range Sensor Issues, Codes

10R60

- A Clutch Issues, Hard 6-7 Shift

10R80

- Shift Issues, Clutch Codes, Ratio Codes
- Case Damage After Repair

10R140

- Introduction
- Vehicle Applications
- Transmission Tag Information
- Fluid Level Check Procedure
- Clutch & Solenoid Apply Chart
- Line Pressure Test and Specifications
- Air Check Locations
- Case Connector Identification
- Solenoid Identification
- Solenoid Operation
- Solenoid Replacement
- Valve Body ID
- Front End Clearance Procedure
- Front Support Unit
- Geartrain Removal

Chrysler

62TE

- DTC P06DD, No 6th Gear, Reduced Engine Power, No Passing Gear
- P0791 Transfer Speed Sensor

BW48-11 Transfer Case

- Service 4WD Message

948TE

- Neutraling Condition

C635 DCT

- Dual Mass Flywheel Reset

BW 44-46 Transfer Case

- Whine/Whistle While in 4WD

NV241 Gen II Transfer Case

- DTC C1405 Transfer Case Range Sensor Circuit High

M40MTA

- Introduction, Vehicle Applications
- Solenoid Operation
- Hydraulic System Depressurization
- Operational Strategies
- Operational “Wake Up” Strategy
- Electrohydraulic Components
- Power Unit
- Clutch Actuator
- Clutch Hydraulic System Relearn
- Clutch Adjustment

Import

A6 Series Hyundai/Kia

- Vehicle Applications

A6LF1/2/3, A6MF1/2

- Gear Ratios and Specifications
- Gear Ratios
- Unit Comparison
- Clutch Apply Chart
- Solenoid Firing Chart
- Improvements
- Connector Pin Assignment and Testing
- Solenoid and Sensor Identification
- Valve Body Identification
- Speed Sensors
- Servicing

A6MF1, A6GF1

- Valve Body Identification – 2WD vs 4WD
- Valve Bolt Identification
- Upper Valve Body Accumulator Identification
- Upper Valve Body Valve Identification
- Middle Valve Body Valve Identification
- Lower Valve Body Small Parts Identification
- Lower Valve Body Valve and Solenoid Identification
- Solenoid Function

A6MF, A6LF, A6GF

- One Way Clutch Rotation

- Pressure Tap Identification
- Air Check Locations
- Servicing
- Delay or Slip in Drive
- Axle Seal Leak

Subaru

- Application Chart

TR580/TR690

- Ratio, Shift Strategies and Servicing
- Chain Design
- TR580 Layout
- TR690 Layout
- Solenoid Operation
- Secondary Operation
- Forward/Reverse Operation
- Forward and Reverse Clutches
- AWD System Default Actions
- Secondary Pressure
- Differential Failure
- TCC Failing to Release
- Hard Garage Shifts