

2020 Technical Seminar Topics



GENERAL

All Vehicles

- Glycol or Water Contamination
- Shudder, P0300 and/or Individual Cylinder Misfire DTCs

Hoist Pads

Dynamic Fuel Management

- Introduction
- Lifter Operation
- Torque Converter Dampening System

Allison LCT1000/2000 and 10L1000

- Operating Characteristic 2017 and Later Applications

GM 2500/3500 Pickups

- Lack of Communication, Lack of Power Issues

6T and 9T Series

- Driveability and Transmission Shift Issues, DTCs May Be Set

6L80/90, 8L90

- Torque Converter Bolt Hole Fails to Align with the Flexplate Holes

6L, 8L or 10L Series

- Engine May Experience Driveability Related Issues

6L80, 6L90

- Intermittent No Upshifts In Tow Haul Mode, Possible DTCs

6L50 Applications

- Lack of Communication, Multiple DTCs Possible, Transmission and Driveability Related Concerns

All Ford Applications

- No DTCs, Sluggish Engine Operation, Late Shifts

Chrysler, Dodge, Jeep

- Miss, Surge, Shudder, Electric Intake Valves

Chrysler

- J6.01 J2534 Application Sundown

Chrysler Limited Slip Differentials

- Groan/Moan Type Noise or Shudder Concerns During Slow Speed Turns

VW, Toyota, Nissan, Ford, Mercedes, Dodge and ZF Applications

- Shift Feel Related Issues

VW, Audi, GM

- Variable Lift Camshaft Design

Toyota, Lexus, BMW, Mazda

- Computer Failures

GENERAL MOTORS

All GM 2018 and Later

- RPO Codes

6L50

- Lack of Power, No Downshift

6L45, 6L50, 6L80, 6L90

- Clutch Leakage During the Air Test Process
- Air Testing the Pump TCC Valve
- Pressure and Pump Performance Issues

6T70/75/80

- Accumulator Issues, Burnt Clutches, Shift Related Issues

6T70/9T65

- Transmission Shudder, TCC Fishbite, Possible Reduced Power and Possible DTCs P034B, P0506, P0557

8L90

- Shift Concerns

9T Series

- Solenoid Location
- VFS and On/OFF Solenoid Location, Operation, Buzzing Noise When Key is Turned Off
- Check Balls
- Start/Stop System
- Start/Stop Accumulator
- Start/Stop Accumulator Update
- Shifter Design
- Shift Lever Park Button
- Shift Lever "Car Wash Mode"
- Push Button Shifter
- Shifter Mode/Park Solenoid and Sensors
- Shifter Design Park Inhibit and Park Servo Switch
- Shifter Design Transmission Range Control Switch
- Shifter Design Mode Range
- Shifter Wiring Diagram

- Running Change 2018 Production
- Burnt 3-8 Clutches, Transmission HOT, Idle Vehicle Message
- Torrington Bearing Failure
- No Upshifts, Stuck in Second Gear, Possible P2821 Set
- Transmission Will Not Shift into Higher Gears During Cold Ambient Temperature
- PRNDL “D” Range Indicator Flashes, Flare/Slip on the 1-2 Shift
- P2731, 1st and Reverse Gears Only, 1-2 Shift Tie-up

9T Series, VT40

- Shift to Park Error Message

9T50

- Running Change 2018 Production

10L60, 10L80, 10L90

- Introduction
- Internal Brake and Clutch Illustration
- Layout
- Clutches and End Play
- Range Reference
- Fluid and Filter
- TCM Location
- Transmission Pass Thru Connector
- Transmission Speed Sensors
- Internal Mode Switch, Range Sensor
- Shift Solenoids

8L, 9T, 10L

- PUN/TUN Solenoid Characterization (MCVM)

FORD

AX4N/4F50N

- No Turbine Speed at Low RPM, After Repair

5R55S/W

- Explorer Applications, Multiple DTCs Set

5R110W

- Drops Out of Gear, Various Symptoms
- Fluid Leaking from the Front Case Area
- Hard Shift Concerns

6R80

- Various DTCs Set, Loss of Drive, Slipping, Flares, Tie-Ups
- Fluid Additive to Address 5-3 Downshift Squawk
- No Communication/Solenoid Codes After a Leak Repair

6R140

- Neutral Only After Installation
- Intermittent Transmission Operation

6R140/Torqshift 6

- Delayed Forward Engagement/Slips Forward

6F35

- Broken Case

6F55

- Shift to Park Message Displayed, or Discharged Battery

6F50

- 5th Gear Start, Slips P0751

DPS6/DC250

- P06B8 and/or P0884 DTC Set, Various Other Symptoms

6DCT450

- Rattle/Leaks

8F57

- Introduction
- Ratios
- Sensor Specifications
- Clutch Apply Chart
- Speed Sensors
- Pressure Sensors Clutch A/B
- Range Sensor, TRS, TRSA, TRSB, Park by Wire System Shown
- Shift by Wire System
- Start/Stop System
- Valve Body

10R80

- Rattling Noise from Bellhousing

CHRYSLER

62TE

- Stumble When Coming to a Stop, Engine Stalls When Coming to a Stop, No DTCs Set
- No Movement

AS68RC

- All Applications, Possible P0796 or Other Pressure Switch DTCs

AS69RC

- Drops Out of Gear, TCC Cycles On/Off, Possible P07BF-00 and P0716
- P0560, P0706 DTCs May be Set
- Drone Noise During TCC Operation

42RLE

- P0888 Relay Output Always Off

42RLE, 545RFE and 68RFE

- Shift Concerns

722.6

- Transmission Shift Concerns, Possible P0730 (Ratio Code)

66RFE

- Transmission Slip Under High Engine Loads

845RE

- Introduction
- TCM
- Whirring or Whining Noise in Reverse
- 1-2 Neutral Shift
- Mistaken TCC Shudder, Possible ABS DTC

62TE

- Harsh Shifts, P0108 MAP Sensor Circuit

45/545/65/66/68RFE

- Valve Body Interchange

IMPORT

Free Nissan CVT Repair Information

Jatco Nissan CVT Applications

Nissan CVT

- DTCs Set, Engine May Not Crank

REF011A, CVT7, FICJB, JF015E

- Pressure Switch Failure, Possible DTCs set

JF015E

- Upper Valve Body
- Lower Valve Body

JF017E, RE0F10E, RE0F10H, RE0F10J

- Valve Body Layout, Solenoid Identification

TR690 Gen 1, TR580 Gen 2

- Lock-Up Solenoid Interchange

RE7R01A

- Introduction
- Vehicle Applications
- Tag Identification
- Gear Ratios
- Fluid Servicing and Specifications
- Solenoid Identification
- Valve Body Exploded View
- Check Ball Locations
- Air Checks
- Solenoid Application Chart
- Clutch and Band Apply Chart
- One Way Clutches
- Brake Clutch Anti-Clunk Springs
- Adaptive Shift Strategy
- Flare on the 3-4 Shift
- Harsh 4-3 Downshift on Deceleration

OB5/DL501Q/S-Tronic

- 7 Speed Wet Clutch DSG, Audi/VW
- Geartrain
- Service Tips
- Valve Body
- K1/K2 Bearing, Service Tips
- K1, K2 Clutch Plates are Directional
- Pump Sleeve Issues, Service Tips
- Inspect Pump Pickup, Service Tips
- Bearing, Service Tips

Honda

- No Movement After Repair
- Grounds That Can Kill a Job

A6LF1

- Shift Issues

A6LF1-3, A6MF1/2/2H, A6GF1

- Center Support Bearing Failure

U660

- Bearing Failure

A750, A760, AB60

- P2714 Set, Shift Related Concerns

A750

- Intermittent No 5th Gear, No DTCs

U760E

- Snap Ring Placement

Mercedes 722.9

- Fluid and Filter Update
- Shift Related Issues, Slippage Possible Clutch Damage

722.6

- DTCs P2108 and/or P0730, 3-4 Neutral Shift
- OEM Solenoid Identification