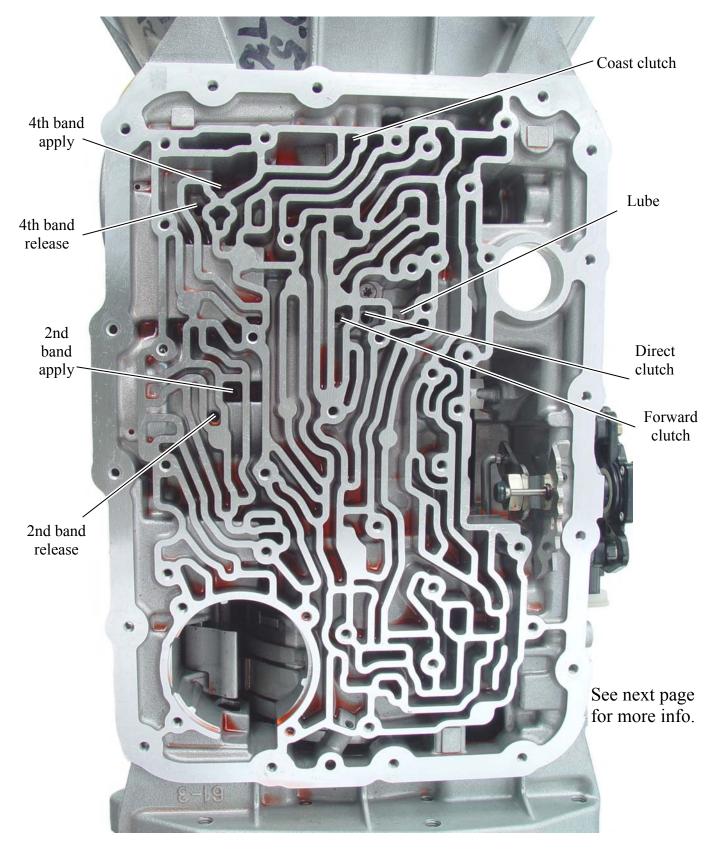
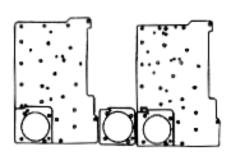


Pressure control tap

Pressure control pressures min. 0-15 PSI max. 112-134 PSI.

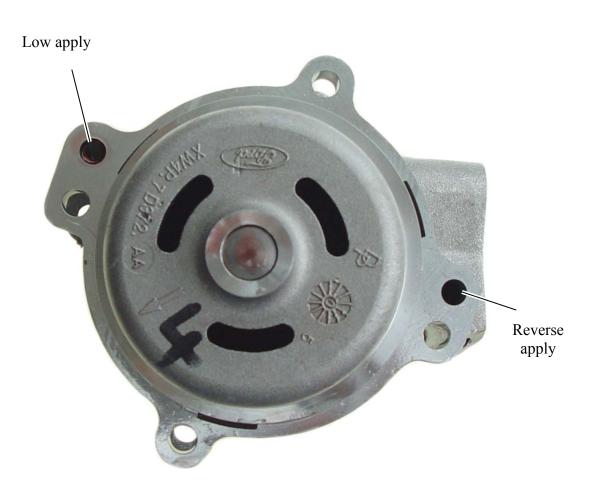
Air Checks



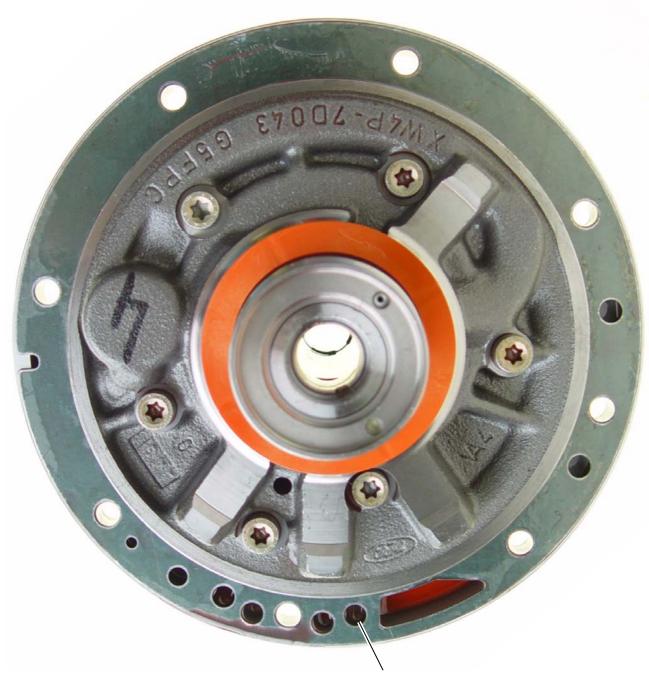


Transmission Test Plate and Gasket 307-433-01, 307-433-02, 307-433-03

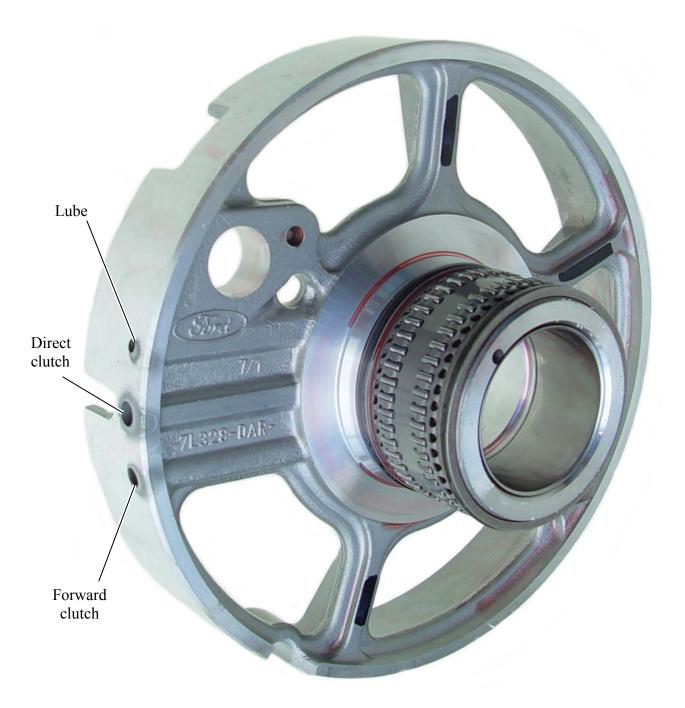
To air check the case area use the test plate shown below or use cut off pieces of hose to reach the bottom of the web areas and—or flat metal plates with holes in them on the passages that the rubber tip air guns will not fit.



ST2538-A



Coast clutch



Oil Pan & Oil Levels



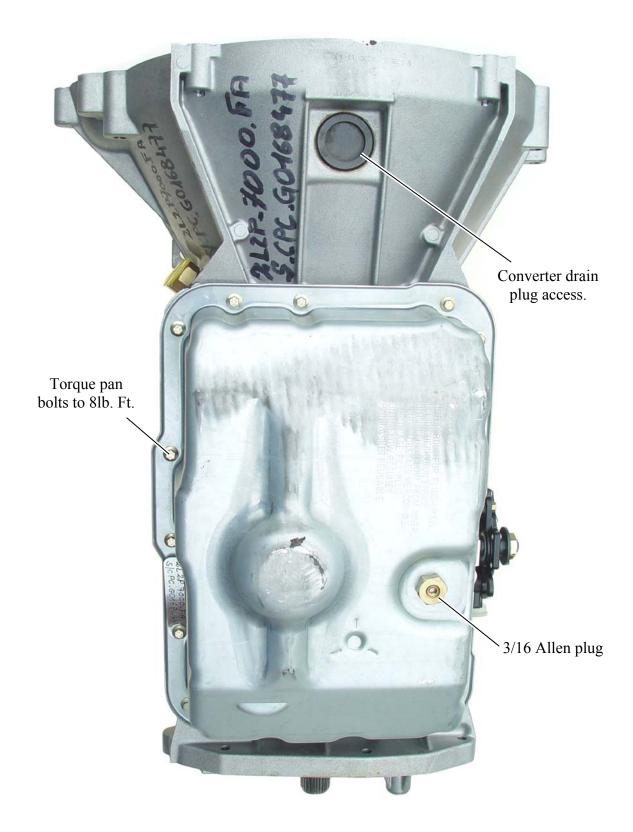


Oil level pipe establishes oil level in transmission oil pan. Remove plug from the bottom side of the pan using 3/16 Allen wrench, let run out what will, then replace plug.

No dipstick Fill through the fill plug shown or the speed sensor locations When oil comes out level pipe, transmission it is full. Check when warm.



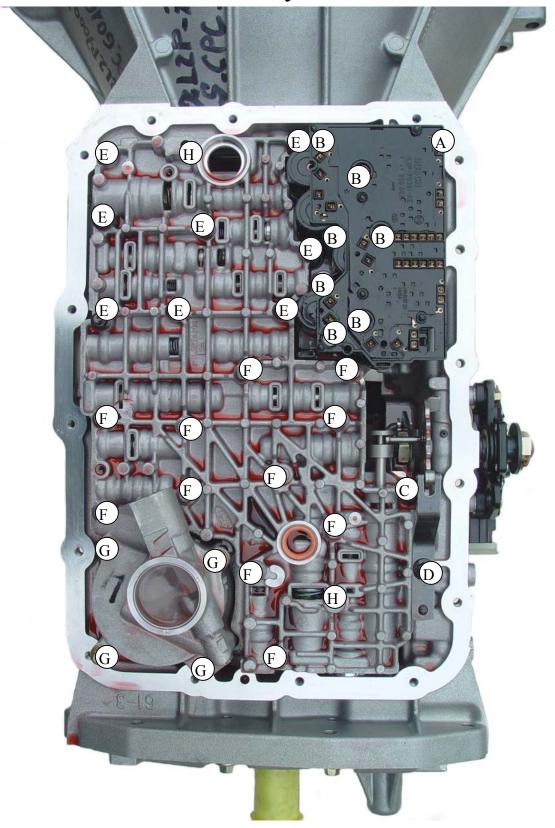
Total capacity is 12.7 quarts of Mercon V fluid. Using other fluids may cause chatters and squawks.

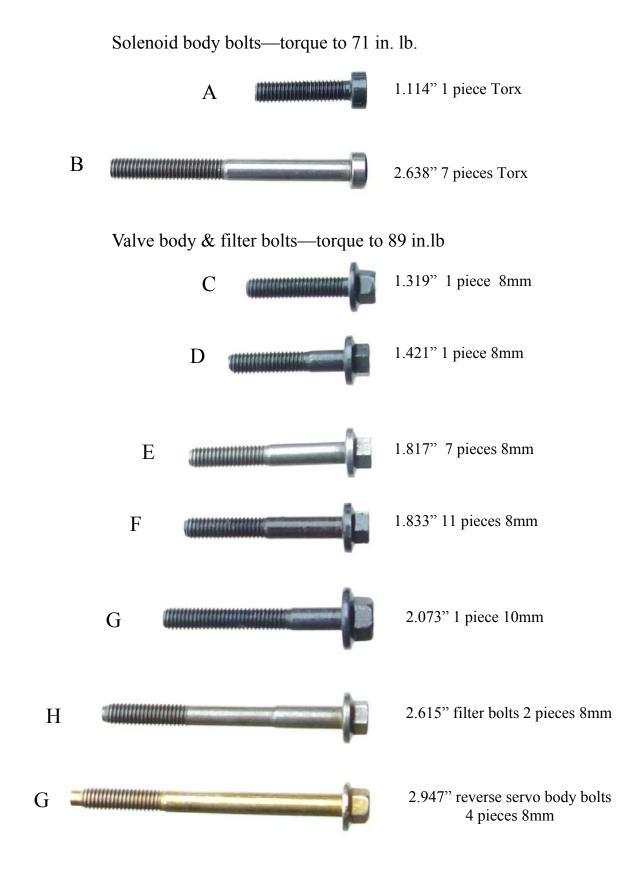


Filter and Pan Gasket

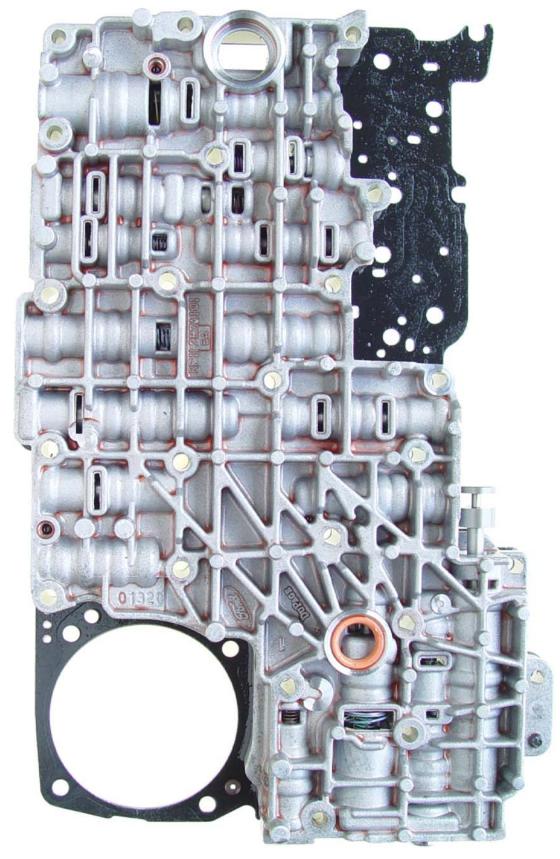


Valve Body Bolts



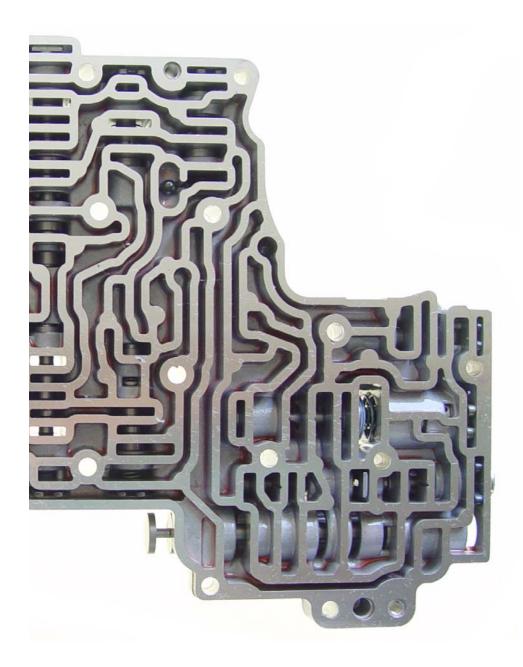


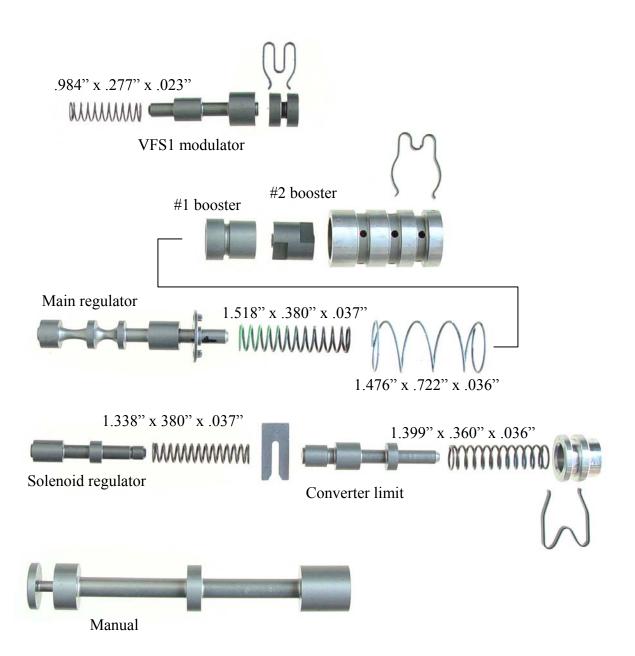
Valve Body

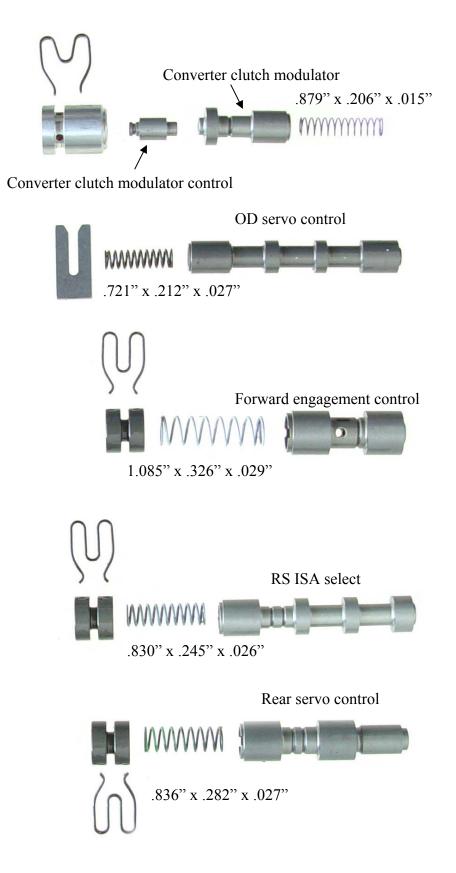


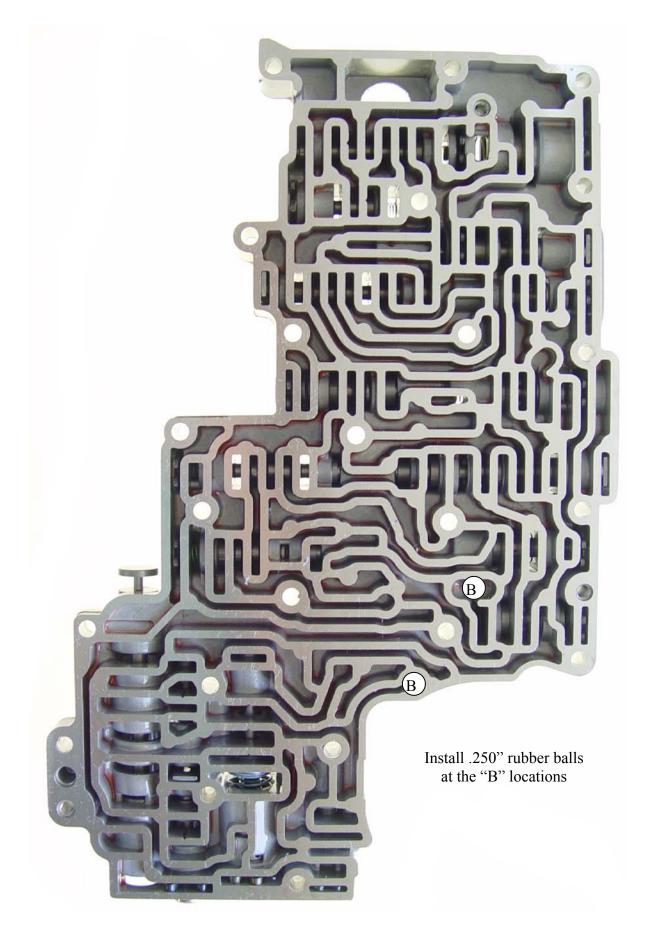


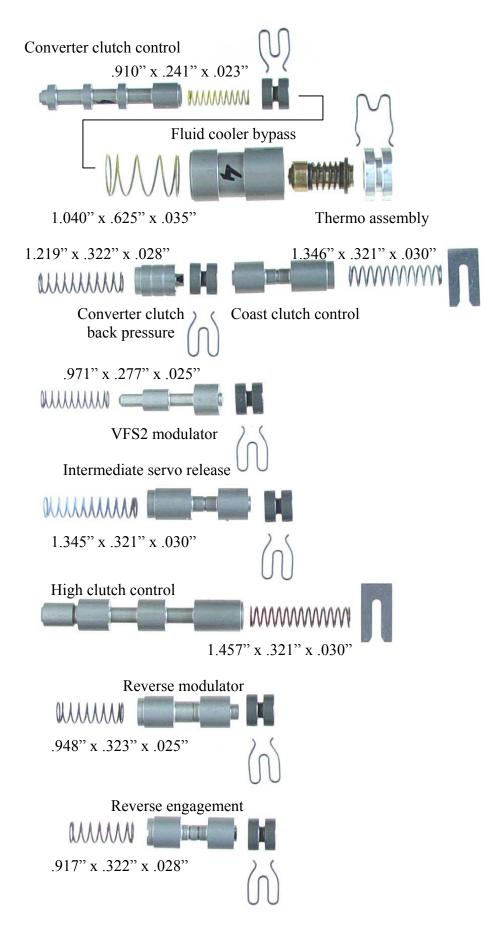
Valve Body





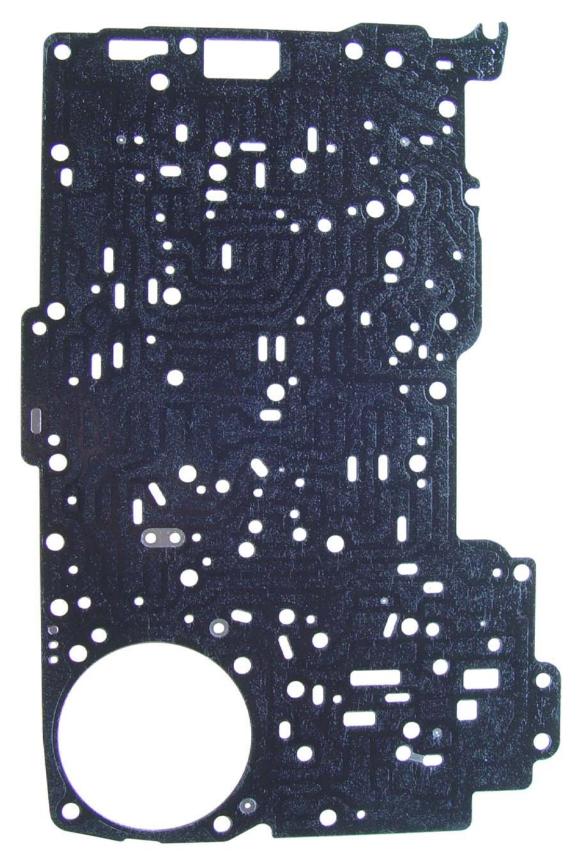




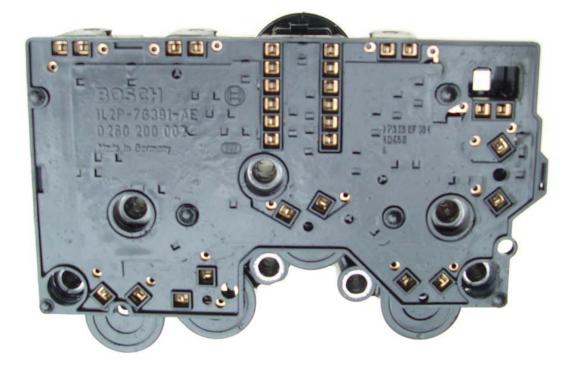


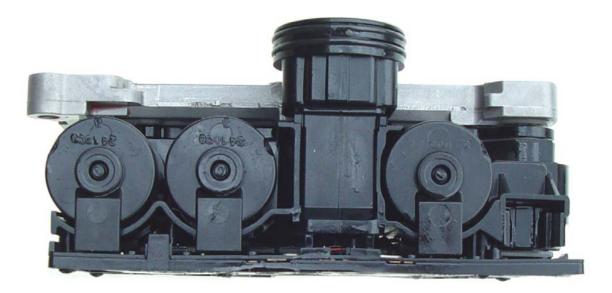
Separator Plate



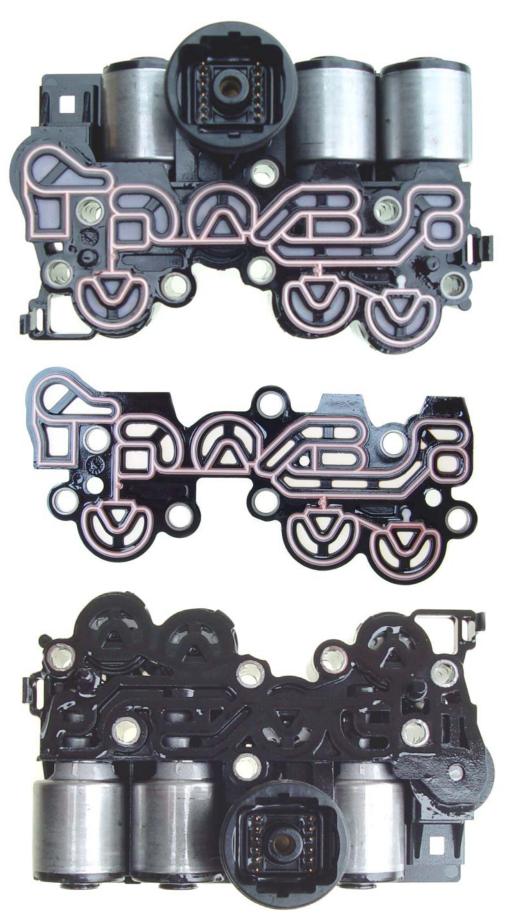


Solenoid Body



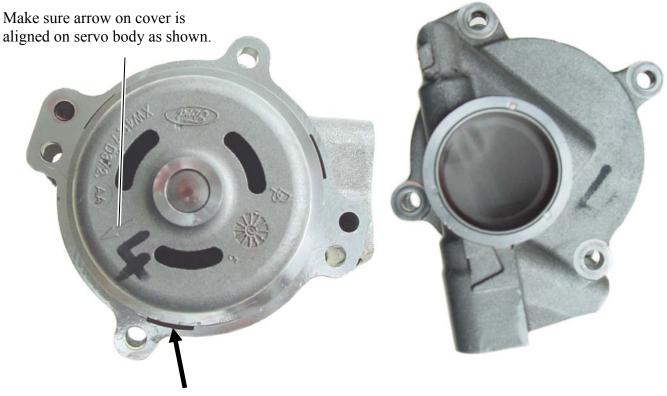






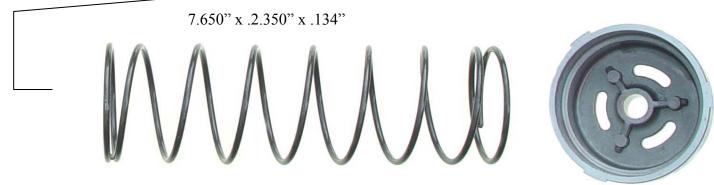
Low / Reverse Servo & Band

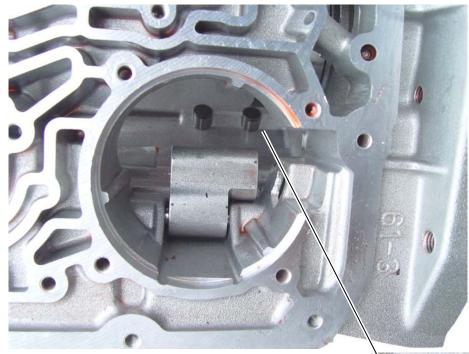




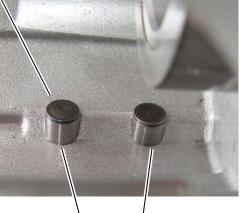
To remove cover align arrow on cover with one of the three slots.







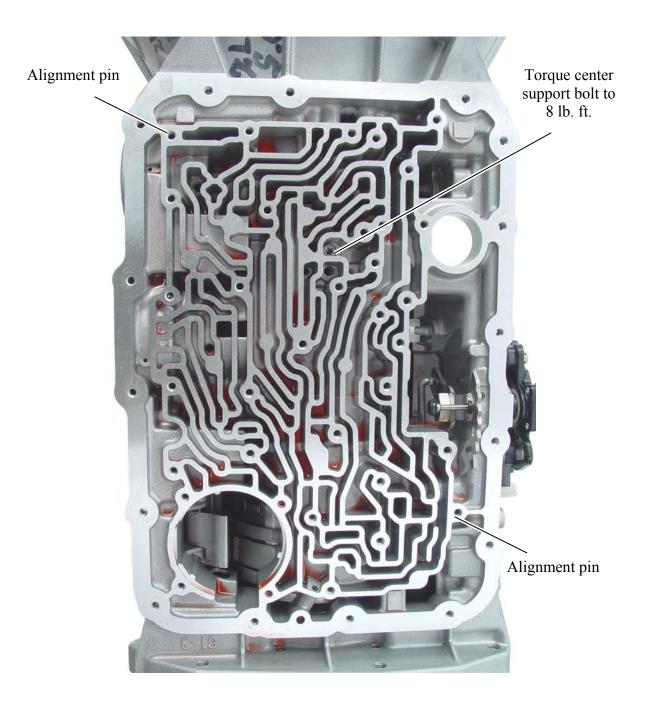




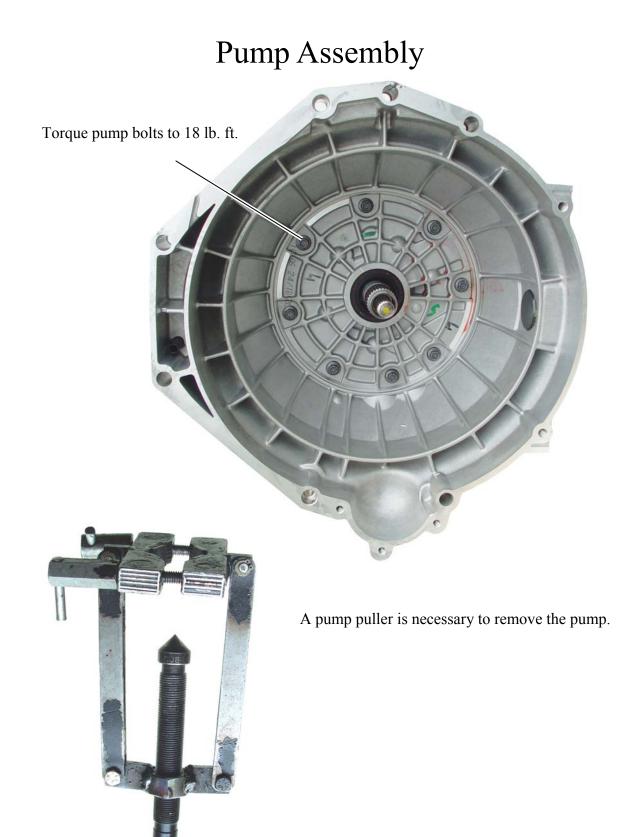
Check band anchor pins for looseness in the case.

Low & reverse band

Valve Body Alignment Pins and Center Support Bolt



Use Ford alignment pins #307-334 at locations shown.

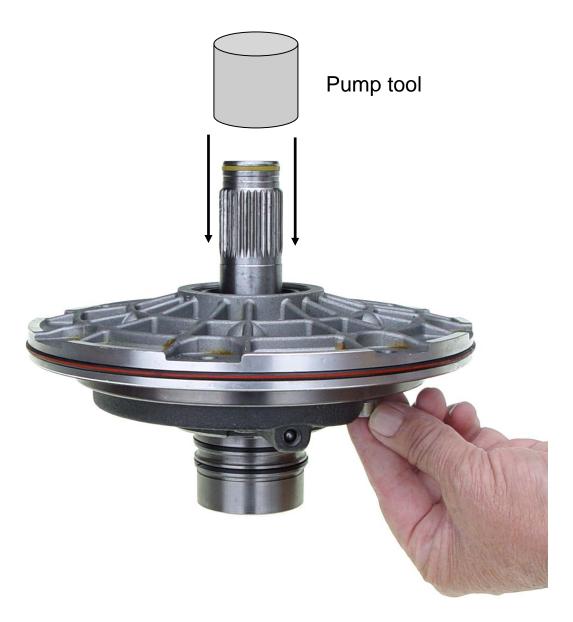


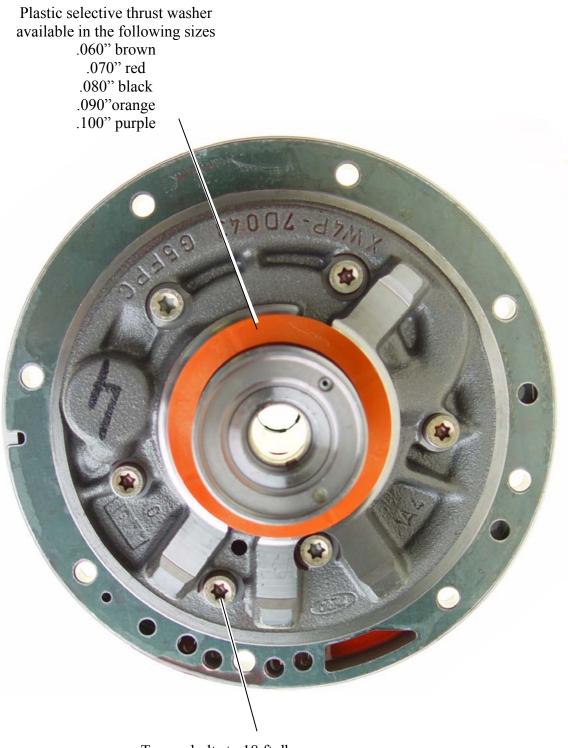
Pump Alignment & Tool

1. Assemble & Align Pump

Start bolts, leave pump halves loose. Slide **Pump Tool** over stator spline. Push tool, while wiggling pump body making sure tool enters and snugs in the pump bushing.

Tighten the pump bolts to 18 ft lbs.





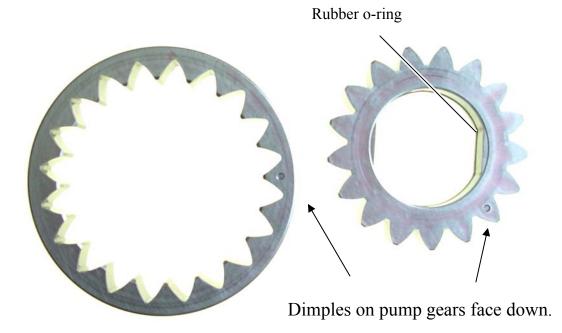
Torque bolts to 18 ft. lb.

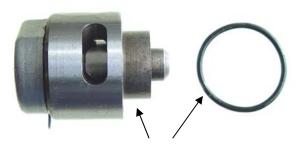




Pump wear plate should be scratch free.







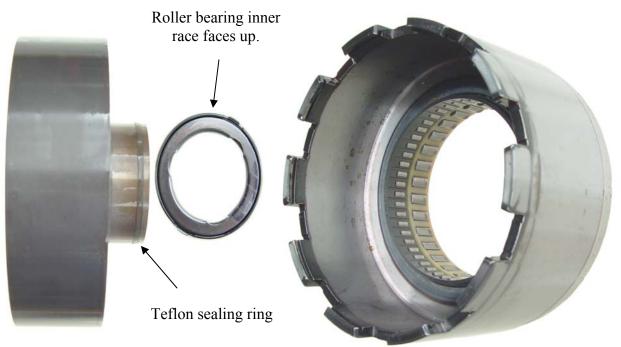
Pump valve and o-ring





Forward planetary ring gear



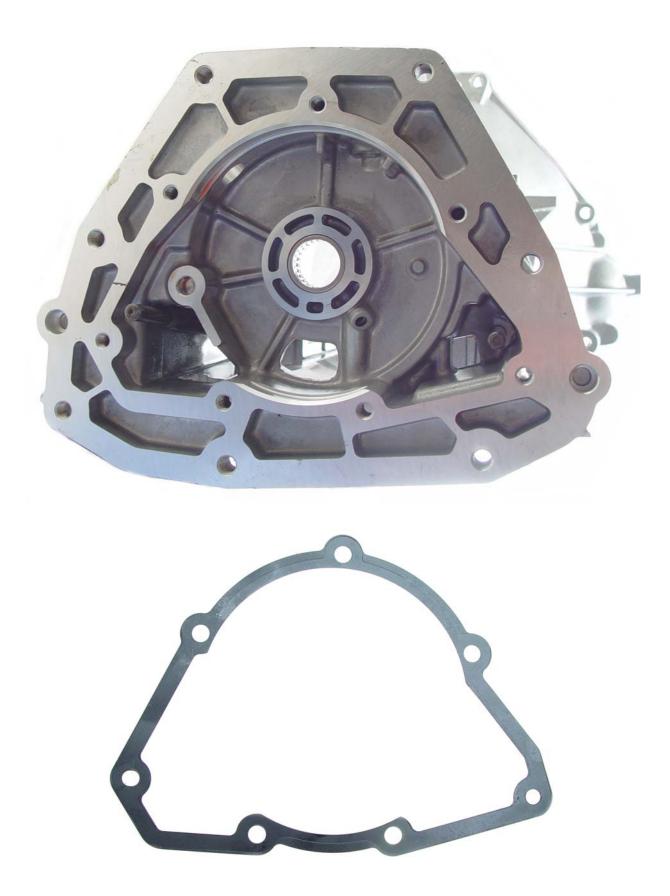


Output shaft ring gear

Low and reverse brake drum.





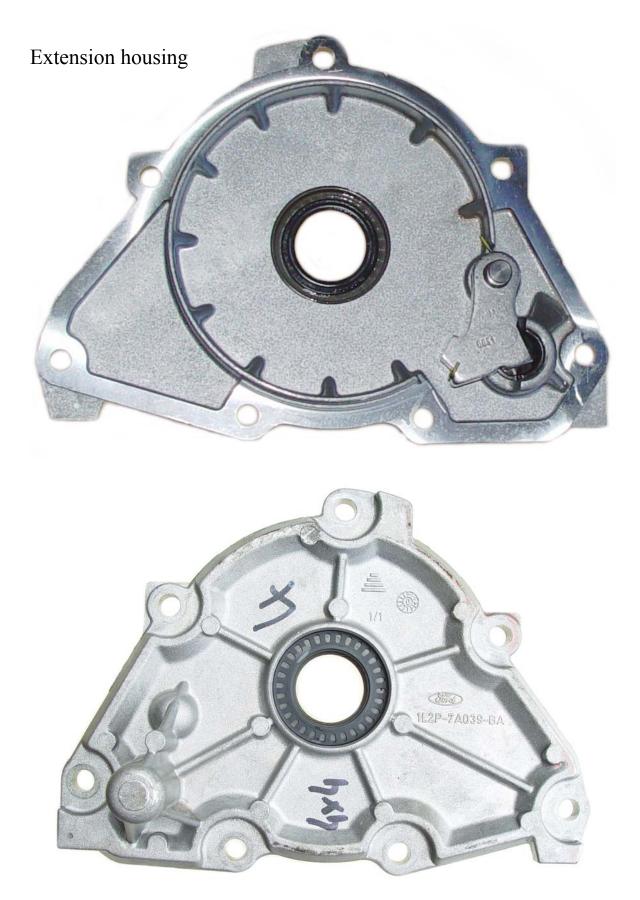






Output shaft





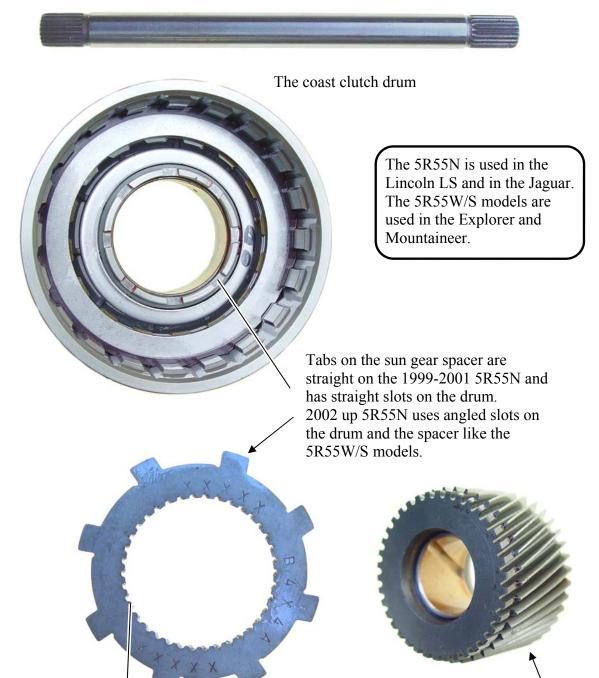
Center Support Snap Ring



Snap ring openings are positioned as shown. Tapered side of the snap ring faces up. Snap ring is .141 thick.

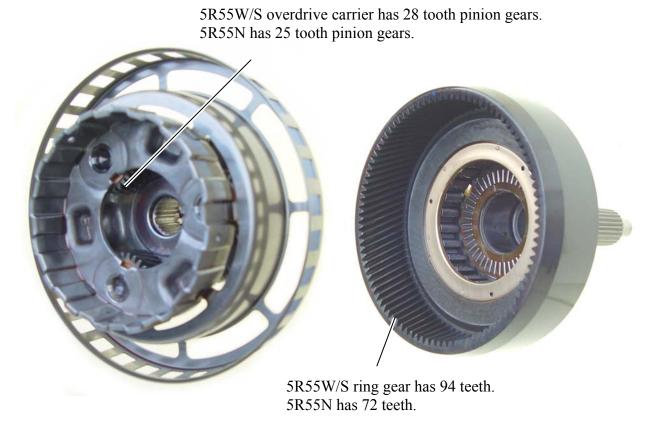
Internal parts differences in the 5R55N,W&S series

Turbine shafts are 10.230" in the 5R55W/S models. The 5R55N use a 10.030" length shaft from 1999-2001. 2002 and later 5R55N uses the 10.230" shaft



5R55W/S sun gear spacer is shown actual size. 5R55N has a small inside diameter and only has 24 teeth.

5R55W/S sun gear has 38 teeth. 5R55N has 24 teeth.





The retaining snap ring is also different.

5R55W/S measures .050 thickness .194 on wall thickness

5R55N measures .060 thickness .155 on wall thickness

Forward clutch drum & piston





5R55W/S uses a stamped steel piston and spring retainer. The 5R55N uses an aluminum piston and has a spacer ring 1999-01. 2002 and later is the same as 5R55W/S



5R55W/S forward ring gear uses 101 teeth. The 5R55N has 85 teeth from 1999-01and then in 2002 and later is the same as 5R55W/S models.



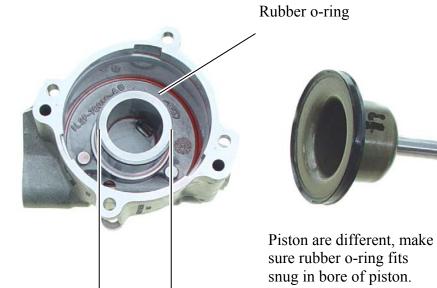
5R55W/S forward planetary is also different having 23 tooth pinion gears. The 5R55N uses 19 tooth gears until 2002 and then is the same as 5R55W/S models.



Uses wide spacer. 5R55N uses a sprag assembly.

5R55W/S sun gear has 55 teeth and no roller bearing in bore. The 5R55N has 47 teeth with a roller bearing in the bore until 1999 and then is the same as the 5R55W/S

Reverse servo housing, piston and valve are different see dimensions below.

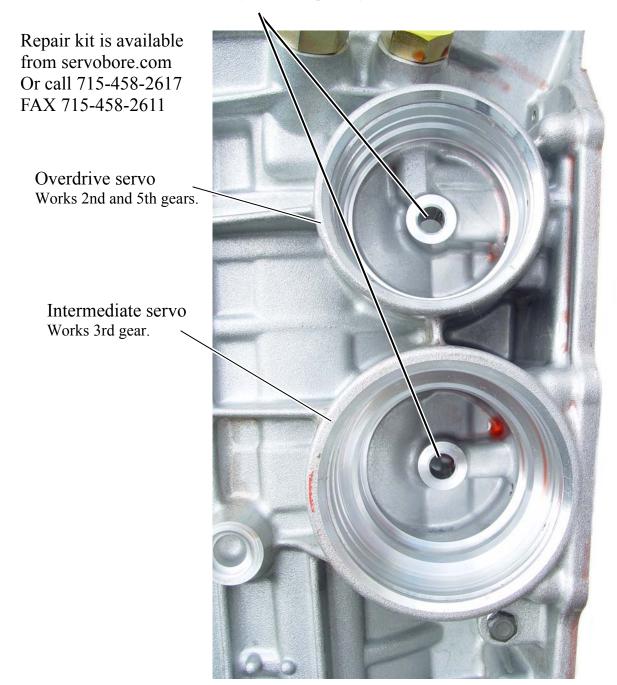


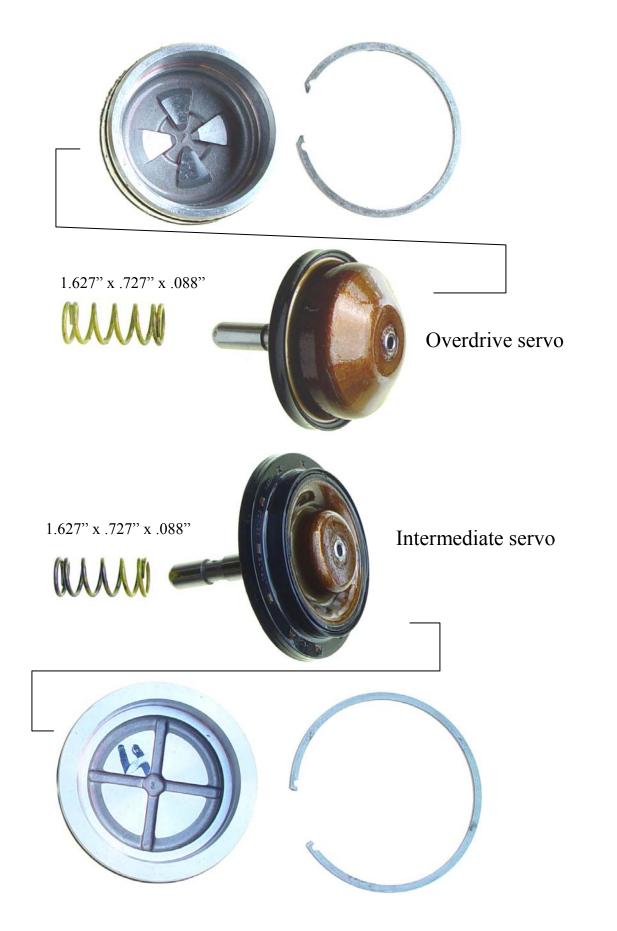


1.640" 5R55W/S 1.170" 5R55N

Servo Assemblies and Band Adjustment

Servo pins wear the case bore causing a slip in 2nd, 3rd and 5th gear. The case usually needs repair by 70,000 miles.



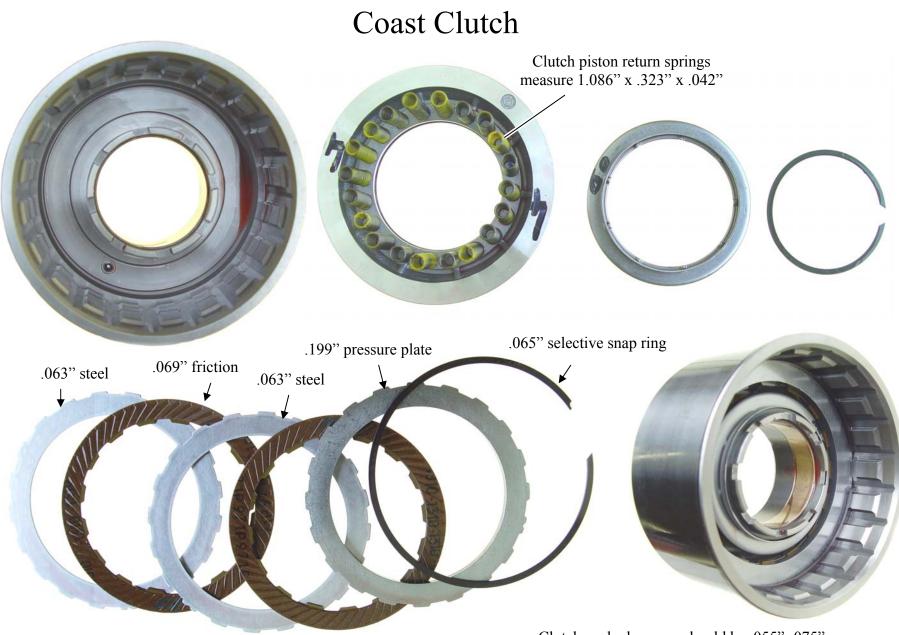






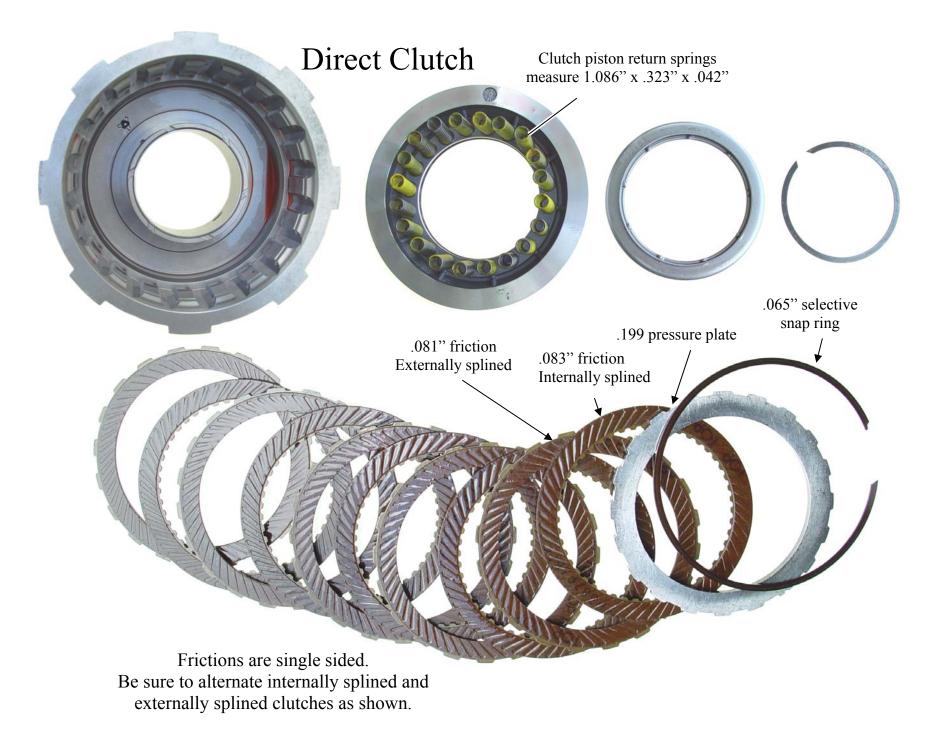
Overdrive band adjustment Tighten band adjusting screw to 120 in. lb. then back off two turns. Then tighten lock nut to 40 ft. lb.

Intermediate band adjustment Tighten band adjusting screw to 120 in. lb. then back off two turns. Then tighten lock nut to 40 ft. lb.



Notice direction of grooves on friction plates.

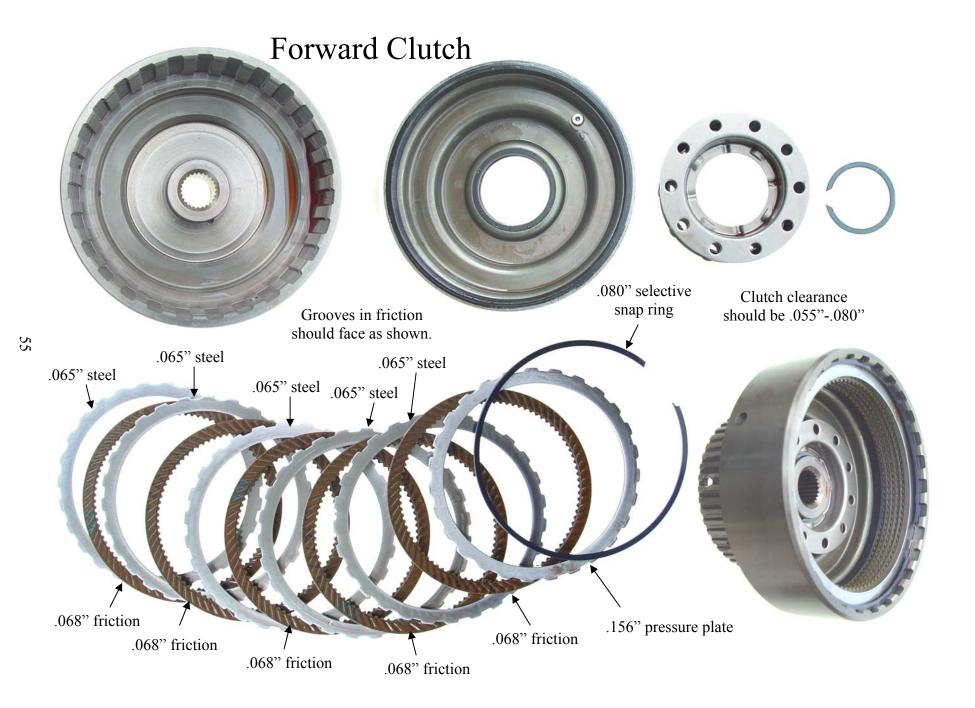
Clutch pack clearance should be .055"-.075".





Clutch pack clearance should be .055"-.065".

The back side of frictions operate as a steel plate.



Clutch Pack Selective Snap Rings

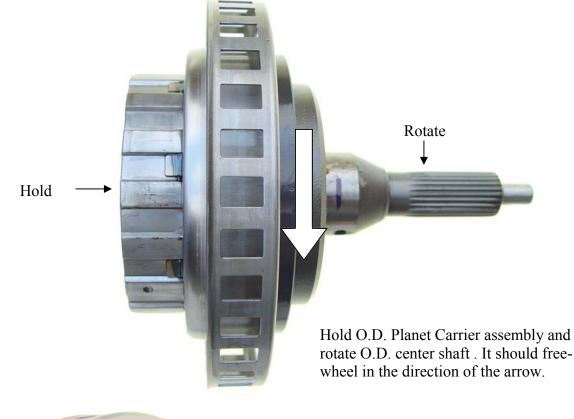
Coast Clutch and Direct Clutch Selective Snap Ring Chart

Thickness	Part #
.054"	E8601126-S
.068"	E8601127-S
.082"	E8601128-S
.096"	E8601129-S

Forward Clutch Selective Snap Ring Chart

Thickness	Part#
.068"	XW4Z-7D483-AB
.082"	XW4Z-7D483-AC
.096"	XW4Z-7D483-AD

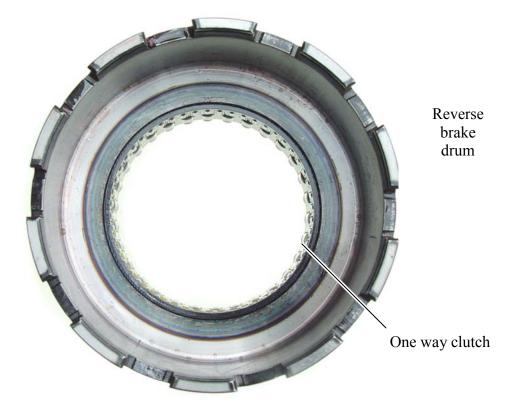
Overdrive One Way Clutch Rotation



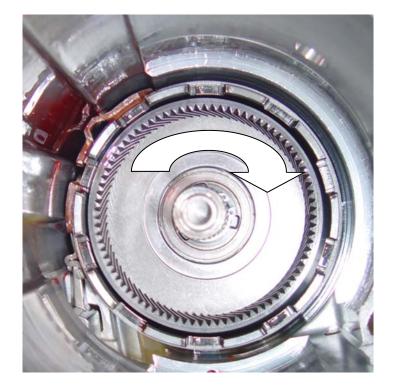


Overdrive One Way Clutch

Low/Reverse One Way Clutch

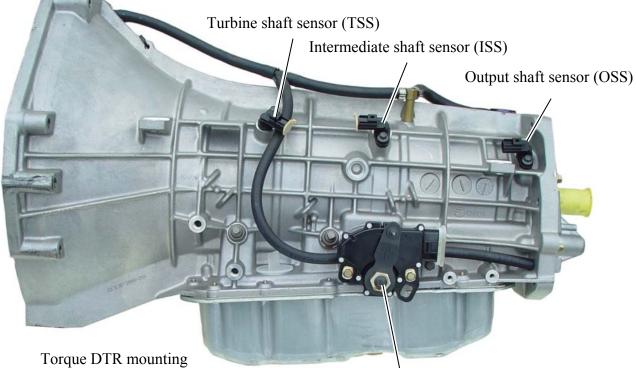


Low/Reverse brake drum should rotate clockwise when installed in the case as shown.



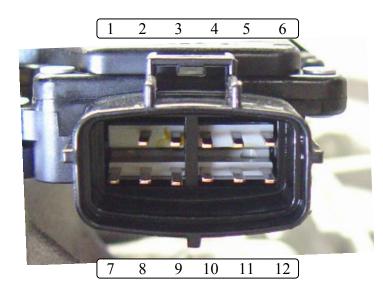
58

Digital Transmission Range (DTR) Sensor and Speed Sensors



Torque DTR mounting bolts to 90 in lbs. Torque manual lever nut to 35 ft .lbs.

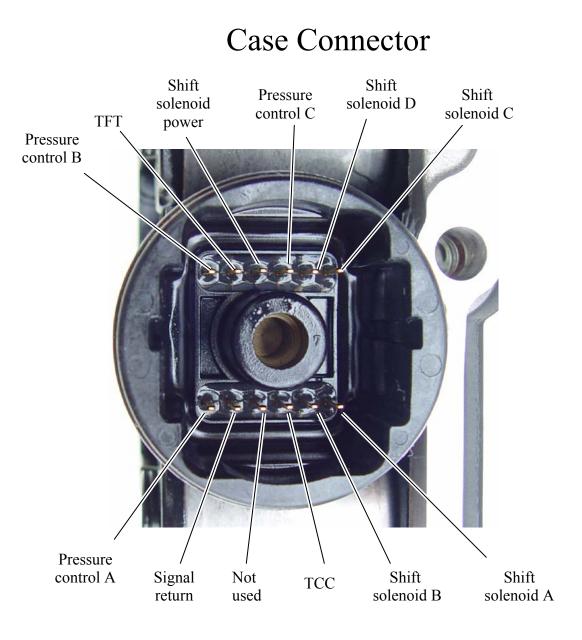
Digital Transmission Range (DTR) Sensor



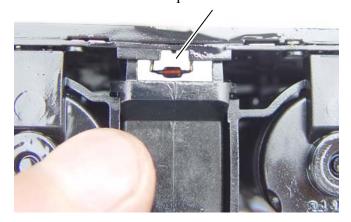
Pin Number	Function

- 1 Not used
- 2 Signal Return
- 3 TR3A
- 4 TR1
- 5 TR2
- 6 TR4
- 7 Ground
- 8 Neutral
- 9 Power Feed
- 10 Starter Control
- 11 Back-up
- 12 Starter to Interrupt relay





TFT transmission fluid temperature sensor.



Gear Ratios & Clutch, Band Application Chart

5R55S Gear Ratios 5R55W Gear Ratios

2nd 2.41

Rev. 3.07

1st

3rd

4th

5th

3.22

1,55

1.00

0.75

1st	3.22	
2nd	2.29	
3rd	1,55	
4th	1.00	
5th	0.71	
Rev.	3.07	

Band & Clutch Application Chart

Applied Band or Clutch Gear

1st	Forward Clutch & low One way "Low Sprag"
2nd	*, Forward Clutch & Overdrive Band
3rd	*, Forward Clutch & Intermediate Band
4th	*, Forward Clutch & Direct Clutch
5th	Forward Clutch, Direct Clutch & Overdrive Band
Reverse	Reverse Band, Direct Clutch & Coast Clutch

* = Direct One Way "Overdrive Sprag"

Torque Converter



Torque the converter drain plug to 89 in. lb.







Scan Tools

Available from Ford



Worldwide Diagnostic System (WDS) 418-F224 New Generation Star (NGS) Tester 418-F205 or equivalent scan tool

Aftermarket scan tools:

SnapOn www.snapon.com or local dealer

Or

Ease Diagnostics www.obd2.com or 888-366-3273

Abbreviations

A	Ampere(s)/Amp(s)
ABS	Antilock Brake System
A/C	Air Conditioning
AC	Alternating Current
ACC	Automatic Climate Control
ACL	Air Cleaner
ACR4	Air Conditioning Refrigerant, Recovery,
	Recycling, Recharging
A/D	Analog to Digital
ADL	Automatic Door Lock
A/F	Air/Fuel Ratio
AIR	Secondary Air Injection
ALC	Automatic Level Control
AM/FM	1 1 5
• •	Modulation
Ant	Antenna
AP	Accelerator Pedal
API	American Protection Institute
APP	Accelerator Pedal Position
APT	Adjustable Part Throttle
ARS	Automatic Restraint System
A/T	Automatic Transmission/ Transaxle
ATC	Automatic Temperature Control
ATDC	After Top Dead Center
Auto	Automatic
avg	Average
AWD	All Wheel Drive
AWG	American Wire Gage
B+	Battery Positive Voltage
B	Battery Negative Voltage
BARO	Barometric Pressure sensor
batt	Battery
BBV	Brake Booster Vacuum
BCM	Body Control Module
BHP	Brake Horsepower
BLK	Black
BLU	Blue
BOO	Brake on / off switch
BP	Back Pressure
BPM	Brake Pressure Modulator
BPMV	Brake Pressure Modulator Valve
BPP	Brake Pedal Position
BRN	Brown
BTDC	Before Top Dead Center
BTSI	Brake Transmission Shift Interlock

67

Btu	British Thermal Units
С	Degrees Celsius
CAC	Charge Air Cooler
CAFÉ	Corporate Average Fuel Economy
Cal	Calibration
Cam	Camshaft
CARB	Calif Air Resources Board
сс	cubic centimeters
CCM	Central Control Module
CCOT	Cycling Clutch Orifice Tube
CCP	Climate Control Panel
CD	Compact Disc
CE	Commutator End
CEAB	Cold Engine Air Bleed
CEMF	Counter Electromotive Force
cfm	cubic feet per minute
cg	center of gravity
CID	Cubic Inch Displacement
СКР	Crankshaft Position sensor
CKT	Circuit
CL	Closed Loop
C/Ltr	Cigar Lighter
CMP	Camshaft Position sensor
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO2	Carbon Dioxide
Coax	Coaxial
COMM	Communication
Conn	Connector
CPA	Connector Position Assurance
CPP	Clutch Pedal Position
CPS	Central Power Supply
CPU	Central Processing Unit
CRT	Cathode Ray Tube
CRTC	Cathode Ray Tube Controller
CS	Charging System
CTP	Closed Throttle Position
cu ft	Cubic foot/feet
cu in	Cubic inch/inches
CV	Constant Velocity (Joint)
Cyl	Cylinder(s)
DAB	Delayed Accessory Bus
DB	Decibels on A-weighted Scale
DC	Direct Current

DCM	Door Control Module
DE	Drive End
DEC	Digital Electronic Controller
-	
DERM	Diagnostic Energy Reserve Module
DI	Distributor Ignition
dia	diameter
DIC	Driver Information Center
Diff	Differential
DK	Dark
DLC	Data Link Connector
DMM	Digital Multimeter
DOHC	Dual Overhead Camshafts
DR	Driver
DRL	Daytime Running Lamps
DTC	Diagnostic Trouble Code
DTM	Diagnostic test mode
EBCM	Electronic Brake Control Module
EBTCM	Electronic Brake & Traction Control Module
EC	Electrical Center
ECC	Electronic Climate Control
ECI	
-	Extended Compressor at Idle
ECL	Engine Coolant Level
ECM	Engine Control Module
ECS	Emission Control System
ECT	Engine Coolant Temperature
FEPROM	1 Electronically Erasable Programmable Read
LLI KON	Only Memory
EEVIR	Evaporator Equalized Values in Receiver
EFE	Early Fuel Evaporation
EGR	Exhaust Gas Recirculation
EGRTVV	/ Exhaust Gas Recirculation Thermal
	Vacuum Valve
EI	Electronic Ignition
ELAP	Elapsed
ELC	Electronic Level Control
E/M	English/Metric
EMF	Electromotive Force
Eng	Engine
EOP	Engine Oil Pressure
EOT	
	Engine Oil Temperature
EPA	Environmental Protection Agency
EPR	Exhaust Pressure Regulator
EPROM	Erasable Programmable Read Only Memory
ESC	Electronic Suspension Control
ESD	Electrostatic Discharge
ETC	Electronic Throttle Control or Electronic
-	
	Femperature Control

EVAPEvaporative EmissionHttEVOElectronic Variable OrificeHTExhExhaustHTFDegrees FarenheitHTFCFan ControlHVFDCFuel Data CenterHVFEDFederal (all United States except Calif)HzFEDSFuel Enable Data StreamIA4FFFlexible FuelIA4FIFuel InjectionICFMEMFailure management effects modeICIFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpID2Ftfoot/feetignFTFuel TrimILCF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WALFour Wheel DriveIPPFWDFront Wheel DriveIPPFWDFront Wheel DriveIPPGAGageISGgalgallon(s)ISGgasgasolineISSGCWGross Combination WeightKAGen General MotorsKHGM SPO General Motors Service Parts Operationskmgmgallons per minutekmgmdgroundkmgpmgallons per minutekmGRNGreanL6H2OWaterL4HarnHarnessL6HCHydrocarbonsIbHDCHeavy DutyIbHDHeavy DutyIbHgMercuryL			
EVAPEvaporative EmissionHttEVOElectronic Variable OrificeHTExhExhaustHUFDegrees FarenheitHVFCFan ControlHVFDCFuel Data CenterHVFEDFederal (all United States except Calif)HzFEDSFuel Enable Data StreamIA4FFFlexible FuelIA7FIFuel InjectionICFMEMFailure management effects modeICFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpIDFtfoot/feetignFTFuel TrimILCFWDFour Wheel AntilockIN.4WDFull Time Four Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveISGgalgallon(s)ISGgasgasolineISGGAGageISGgalgallon(s)ISGgasgasolineISGGCWGross Combination WeightKAGenGeneral Motors Service Parts Operationskmgmmgallons per minutekmGRNGreenL4HarnHarnessL6HCHydrogenLH2OWaterL4HarnHarnessL6HCHydrogrossionIbHDHeavy DutyIbHDHeavy DutyIbHDHeavy DutyIb <td< td=""><td>ETR</td><td></td><td>HPV</td></td<>	ETR		HPV
EVOElectronic Variable OrificeHTExhExhaustHUFDegrees FarenheitHVFCFan ControlHVFDCFuel Data CenterHVFDDFederal (all United States except Calif)HzFEDFuel Enable Data StreamIA4FFFlexible FuelIA4FIFuel InjectionICFMEMFailure management effects modeICIFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpIDFtfoot/feetignFTFuel TrimILCF4WDFull Time Four Wheel Drivein4WALFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPggram(s) or Gravitational AccelerationI/PGAGageISGgalgallon(s)ISGgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGMGreenkpGRNGreenkPGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH20WaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHarnHarnessL6HCHydr	EVAP	Evaporative Emission	Htd
FDegrees FarenheitHVFCFan ControlHVFDCFuel Data CenterHVFDCFuel Data CenterHVFEDFederal (all United States except Calif)HzFEDSFuel Enable Data StreamIA4FFFlexible FuelIA4FIFuel InjectionICFMEMFailure management effects modeICIFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpIDFtfoot/feetignFTFuel TrimILCFWDFour Wheel AntilockIN4WALFour Wheel AntilockIN4WDFour Wheel DriveinsFWFlat WireIPFWDFront Wheel DriveISGgasgasolineISGgalgallon(s)ISGgasgasolineISGGCWGross Combination WeightKAGenGeneratorKHGM General MotorskHGM Greneral MotorskHGRNGreenkPGRNGreenkPGRNGreayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDCHeavy DutyIbHi AltHigh AltitudeLE	EVO		HTR
FCFan ControlHWFDCFuel Data CenterHWFDCFuel Data CenterHWFEDFederal (all United States except Calif)HzFEDSFuel Enable Data StreamIAGFFFlexible FuelIAGFIFuel InjectionICFMEMFailure management effects modeICIFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpIDIFtfoot/feetignFTFuel TrimILGF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WDFour Wheel DriveIPFWFlat WireIPFWDFront Wheel DriveIPggram(s) or Gravitational AccelerationI/PGAGageISGgalgallon(s)ISGgasgasolineISGGCWGross Combination WeightKAGenGeneratorKEGMGeneral MotorsKHGM SPO General Motors Service Parts Operationskmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrocarbonsIbH/CMPRHigh CompressionIbHDCHeavy DutyIbHDHeavy DutyIbHi AltHigh AltitudeLE	Exh	Exhaust	HUD
FCFan ControlHWFDCFuel Data CenterHWFDCFuel Data CenterHWFEDFederal (all United States except Calif)HzFEDSFuel Enable Data StreamIAGFFFlexible FuelIAGFIFuel InjectionICFMEMFailure management effects modeICIFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpIDIFtfoot/feetignFTFuel TrimILGF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WDFour Wheel DriveIPFWFlat WireIPFWDFront Wheel DriveIPggram(s) or Gravitational AccelerationI/PGAGageISGgalgallon(s)ISGgasgasolineISGGCWGross Combination WeightKAGenGeneratorKEGMGeneral MotorsKHGM SPO General Motors Service Parts Operationskmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrocarbonsIbH/CMPRHigh CompressionIbHDCHeavy DutyIbHDHeavy DutyIbHi AltHigh AltitudeLE	F	Degrees Farenheit	HVAC
FDCFuel Data CenterHWFEDFederal (all United States except Calif)HzFEDSFuel Enable Data StreamIA4FFFlexible FuelIA4FIFuel InjectionICFMEMFailure management effects modeICIFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpID1Ftfoot/feetignFTFuel PrimeILCF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISGgalgallon(s)ISGgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral Motors Service Parts Operationskmgpmgallons per minutekmGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDCHeavy DutyIbHDHeavy Duty CoolingLChex AgonLDHeavLDHi AltHigh AltitudeLD <td>FC</td> <td></td> <td>HVAC</td>	FC		HVAC
FEDFederal (all United States except Calif)HzFEDSFuel Enable Data StreamIA4FFFlexible FuelIA4FIFuel InjectionICFMEMFailure management effects modeICIFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpIDFtfoot/feetignFTFuel TrimILCF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISGgalgallon(s)ISGgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral Motors Service Parts Operationskmgpmgallons per minutekmGRNGreenL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbH/DCHeavy DutyIbHDHeavy DutyIbHiHigh AltitudeLE	-		HVM
FEDSFuel Enable Data StreamIA4FFFlexible FuelIA7FIFuel InjectionIC7FMEMFailure management effects modeIC7FMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpID7Ftfoot/feetignFTFuel PumpID7F4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN74WALFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIP6ggram(s) or Gravitational AccelerationI/PGAGageIS6galgallon(s)IS6gasgasolineIS8GCWGross Combination WeightKAGen GeneratorKIGLGear LubricantkgGMGeneral MotorskHGRNGreenkP2GRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbHDHeavy DutyIbHDHeavy DutyIbHDHeavy DutyIbHiHigh AltitudeLE			Hz
FFFlexible FuelIAFIFuel InjectionICFMEMFailure management effects modeICIFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpIDFtfoot/feetignFTFuel TrimILCF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbHDHeavy DutyIbHDHeavy DutyIbHDHeavy DutyIbHiAltHigh AltitudeLE			IAC
FIFuel InjectionICFMEMFailure management effects modeICIFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpIDFtfoot/feetignFTFuel TrimILCF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISCGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDCHeavy DutyIbHBMercuryLDHi AltHigh AltitudeLE			IAT
FMEMFailuremanagement effects modeICIFMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpIDFtfoot/feetignFTFuel TrimILOF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPOggram(s) or Gravitational AccelerationI/PGAGageISOgalgallon(s)ISOgasgasolineISOGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGNSPO General Motors Service Parts Operationskmgpmgallons per minutekmGRNGreenLH2OWaterLH2OWaterLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDHeavy DutyIbH3High AltitudeLE			
FMVSSFederal Motor Vehicle Safety StandardsIDF/PFuel PumpIDFtfoot/feetignFTFuel TrimILCF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorsKHGNSPOGeneral Motors Service Parts Operationskmgpmgallons per minutekmgRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDHeavy DutyIbHDCHeavy DutyIbHaHigh AltitudeLE			ICM
F/PFuel PumpIDFtfoot/feetignFTFuel TrimILCF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDHeavy DutyL0Hi AltHigh AltitudeLE		Federal Motor Vehicle Safety Standards	
Ftfoot/feetignFTFuel TrimILCF4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDHeavy DutylbHDCHeavy Duty CoolingLChex agonLDHgMercuryHi AltHigh AltitudeLE			IDI
FTFuel TrimLLCF4WDFuel TrimLLCF4WDFour Wheel AntilockIN.4WALFour Wheel AntilockIN.4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDHeavy DutyIbHDCHeavy Duty CoolingLChex agonLDHgMercuryHi AltHigh AltitudeLE			
F4WDFull Time Four Wheel Drivein4WALFour Wheel AntilockIN.4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDHeavy Duty CoolingLChexhexagonLDHi AltHigh AltitudeLE	- •		ILC
4WALFour Wheel AntilockIN.4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDHeavy Duty CoolingLChexhexagonLDHi AltHigh AltitudeLE			
4WDFour Wheel DriveinsFWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDHeavy DutylbHDHeavy Duty CoolingLChexhexagonLDHi AltHigh AltitudeLE			INJ
FWFlat WireI/PFWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDHeavy Duty CoolingLChexhexagonLDHi AltHigh AltitudeLE			inst
FWDFront Wheel DriveIPCggram(s) or Gravitational AccelerationI/PGAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			
ggram(s) or Gravitational AccelerationI/PGAGageISGgalgallon(s)ISGgasgasolineISGGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			IPC
GAGageISCgalgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			I/PEC
galgallon(s)ISCgasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE	-		
gasgasolineISSGCWGross Combination WeightKAGenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE	-		
GCWGross Combination WeightKAGenGeneratorKLGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE	•		
GenGeneratorKIGLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			KAM
GLGear LubricantkgGMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE		-	KDD
GMGeneral MotorskHGM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			
GM SPO General Motors Service Parts Operationskmgndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE	-		kHZ
gndgroundkmgpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE	-		
gpmgallons per minutekmGRNGreenkPGRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE		-	km/h
GRNGreenkP.GRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE	-		
GRYGrayKSGVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE	U 1		kPA
GVWRGross Vehicle Weight RatingkVHHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE		-	
HHydrogenLH2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			
H2OWaterL4HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			
HarnHarnessL6HCHydrocarbonslbH/CMPRHigh CompressionlbHDHeavy DutylbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			
HCHydrocarbonsIbH/CMPRHigh CompressionIbHDHeavy DutyIbHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			
H/CMPRHigh CompressionIb tHDHeavy DutyIb tHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			
HDHeavy DutyIb itHDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE	-		
HDCHeavy Duty CoolingLChexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			
hexhexagonLDHgMercuryLDHi AltHigh AltitudeLE			LCD
HgMercuryLDHi AltHigh AltitudeLE	-		LDCL
Hi Alt High Altitude LE			LDCL
			LED
11025 Heated Oxygen Sensor LF			
	-		LF LH
1 1	1		Lп Lm
			LM
IFS Fight Performance System LK	nrs	righ renormance system	LK

HPV	High Pressure Vapor
Htd	Heated
HTR	Heater
HUD	Head-up Display
HVAC	Heater-Vent-Air Conditioning
	Heater-Vent-Air Conditioning Module
HVM	Heater Vent Module
Hz	Hertz
IAC	Idle Air Control
IAC	Intake Air Temperature
	Integrated Circuit or Ignition Control
IC	Integrated Circuit or Ignition Control
ICM	Ignition Control Module
ID	Identification or Inside Diameter
IDI	Integrated Direct Ignition
ign	ignition
ILC	Idle Load Compensator
in	inch(es)
INJ	Injection
inst	instantaneous
I/P	Instrument Panel
IPC	Instrument Panel Cluster
I/PEC	Instrument Panel Electrical Center
ISC	Idle Speed Control
ISO	International Standards Organization
ISS	Input Speed Shaft
KAM	Keep Alive Memory
KDD	Keyboard Display Driver
	kilogram
kg kHZ	kilohertz
km	kilometer
km/h	kilometers per hour
km/l	kilometers per liter
kPA	kilopascals
KS	Knock Sensor
kV	kilovolts
L	Liter
L4	In-Line Four Cylinder Engine
L6	In-Line Six Cylinder Engine
lb	pound
lb ft	pound feet (torque)
lb in	pound inch (torque)
LCD	Liquid Crystal Display
LDCL	Left Door Closed Locking
LDCM	Left Door Control Module
LED	Light Emitting Diode
LED	Left Front
LH	Left Hand
Lm	lumens
LIII LR	
LK	Left Rear

lt	left
LT	Light
MAF	Mass Air Flow
Man	Manual
MAP	Manifold Absolute Pressure
MAT	Manifold Absolute Temperature
max	maximum
M/C	Mixture Control
MDP	Manifold Differential Pressure
MFI	Multiport Fuel Injection
mi	mile(s)
MIL	Malfunction Indicator Lamp
min	minimum
ml	milliliter
MLP	Manual lever position sensor
mm	millimeter
mpg	miles per gallon
mph	miles per hour
ms	millisecond
MST	Manifold Surface Temperature
M/T	Manual Transmission/Transaxle
MV	Megavolt
mV	millivolt
NAES	North American Export Sales
NC	Normally Closed
NEG	Negative
Neu	Neutral
NLGI	National Lubricating Grease Institute
N-m	Newton-meter (torque)
NO	Normally Open
NOx	Nitrogen Oxides
NPTC	National Pipe Thread-Course
NPTF	National Pipe Thread-Fine
NVRAM	I Non-volatile Random Access Memory
O2	Oxygen
O2S	Oxygen Sensor
OBD II	On-board Diagnostics II
OC	Oxidation Converter (Catalytic)
OD	Outside Diameter
ODO	Odometer
OE	Original Equipment
OEM	Original Equipment Manufacturer
OHC	Overhead Camshaft
OL	Open Loop
ORN	Orange
OSS	Output Shaft Speed
OZ	ounce(s)
PAG	Polyalkylene Glycol
PASS	Passenger

P/B	Power Brakes
PC	Pressure Control
PCB	Printed Circuit Board
PCM	Powertrain Control Module
PCS	Pressure Control Solenoid
PCV	Positive Crankcase Ventilation
PM	Permanent Magnet (Generator)
P/N	Part Number
PNK	Pink
PNP	Park/Neutral Position
PRNDL	Park, Reverse, Neutral, Drive, Low
POA	Pilot Operated Absolute (Valve)
POS	Positive
POT	Potentiometer (Variable Resistor)
PPL	Purple
ppm	parts per million
PROM	Programmable Read Only Memory
P/S	Power Steering
PSD	Power Sliding Door
PSP	Power Steering Pressure
psi	pounds per square inch
psia	pounds per square inch absolute
psig	pounds per square inch guage
pt	pint
PWM	Pulse Width Modulated
qt	quart(s)
R-12	Refrigerant-12
R-134a	Refrigerant-134a
RAM	Random Access Memory (impermanent
	memory device; memory contents lost
	when power removed)
RAP	Retained Accessory Power
RAV	Remote Activation Verification
RCDLR	
RDCM	Right Door Control Module
Ref	Reference
Rev	Reverse
RF	Right Front or Radio Frequency
RFA	Remote Function Actuation
RFI	Radio Frequency Interference
RH	Right Hand
Rly	relay
RM	Relay module
ROM	Read Only Memory (permanent memory
	device) Revolutions Per Minute Engine Speed
RPM	Revolutions Per Minute—Engine Speed
RPO	Regular Production Option
RR •••	Right Rear
rt	right

RTD	Real Time Damping
RTV	Room Temperature Vulcanizing (Sealer)
RWAL	Rear Wheel Antilock
RWD	Rear Wheel Drive
S	second(s)
SAE	Society of Automotive Engineers
SAL	Supercharger
SCB	Supercharger Bypass
SCM	Seat Control Module
SDM	Sensing & Diagnostic Module
SEO	Special Equipment Option
SFI	Sequential Multiport Fuel Injection
SI	System International (modern version of
	metric system)
SIR	Supplemental Inflatable Restraint
SLA	Short/Long Arm
sol	solenoid
SO2	Sulfur Dioxide
SP2	Splice Pack
SPO	Service Parts Operations
sq ft	square foot/feet
sq in	square inch(es)
SRC	Service Ride Control
SRI	Service Reminder Indicator
ST	Scan Tool
S4WD	Selectable Four Wheel Drive
SW	Switch
syn	synchronizer
Tach	Tachometer
TB	Throttle body
TBI	Throttle Body Fuel Injection
TC	Turbocharger
TCC	Torque Converter Clutch
TCIL	Transmission control indicator lamp
TCS	Transmission control switch
TDC	Top Dead Center
TEMP	Temperature
Term	Terminal
TFP	Transmission Fluid Pressure
TFT	
	Transmission Fluid Temperature
TOC	Transmission Oil Cooler
TP	Throttle Position
TPA	Terminal Positive Assurance
TPM	Tire Pressure Monitoring
TR	Transmission Range / Sensor
TRANS	Transmission/Transaxle
TSS	Turbine shaft sensor
TVRS	Television & Radio Suppression

TVV

Thermal Vacuum Valve

TWC Three-way Converter (Catalytic) TWC+OC Three-way + Oxidation Converter (Catalytic) Thermal Expansion Valve TXV Universal Asynchronous Receive & Transmit UART Under Hood U/H U/HEC Under Hood Electrical Center U-Joint Universal Joint Universal Theft Deterrent UTD UV Ultraviolet V Volt(s) or Voltage V6 V-type 6 Cylinder Engine V8 V-type 8 Cylinder Engine Vac Vacuum VAC Vehicle Access Code Vehicle Anti-theft System VATS VCM Vehicle Control Module VDOT Variable Displacement Orifice Tube VDV Vacuum Delay Valve velocity vel VES Variable Effort Steering Vacuum Fluorescent VF VIO Violet VIN Vehicle Identification Number Vacuum Modulator Valve VMV VR Voltage Regulator V ref Voltage reference VSS Vehicle Speed Sensor – also called OSS sensor W/ with W/B Wheel Base WHL Wheel WHT White W/o without WOT Wide Open Throttle W/P Water Pump W/S Windshield WSS Wheel Speed Sensor WU-OC Warm-up Oxidation Converter (Catalytic) WU-TWC Warm-up Three-way Converter (Catalytic) X-valve Expansion Valve yd yard(s) YEL Yellow

SAE OBDII Code Listing

P0100 Mass or Volume Air Flow Circuit Malfunction P0101 Mass or Volume Air Flow Circuit Range/Performance Problem P0102 Mass or Volume Air Flow Circuit Low Input P0103 Mass or Volume Air Flow Circuit High Input P0104 Mass or Volume Air Flow Circuit Intermittent P0105 Manifold Absolute Pressure/Barometric Pressure Circuit Malfunction P0106 Manifold Absolute Pressure/Barometric Pressure Circuit Range/Performance P0107 Manifold Absolute Pressure/Barometric Pressure Circuit Low Input P0108 Manifold Absolute Pressure/Barometric Pressure Circuit High Input P0109 Manifold Absolute Pressure/Barometric Pressure Circuit Intermittent P0109 Intake Air Temperature Circuit Malfunction P0111 Intake Air Temperature Circuit Range/Performance Problem P0112 Intake Air Temperature Circuit Low Input P0113 Intake Air Temperature Circuit High Input P0114 Intake Air Temperature Circuit Intermittent P0115 Engine Coolant Temperature Circuit Malfunction P0116 Engine Coolant Temperature Circuit Range/Performance Problem P0117 Engine Coolant Temperature Circuit Low Input P0118 Engine Coolant Temperature Circuit High Input P0119 Engine Coolant Temperature Circuit Intermittent P0120 Throttle/Petal Position Sensor/Switch A Circuit Malfunction P0121 Throttle/Petal Position Sensor/Switch A Circuit Range/Performance Problem P0122 Throttle/Petal Position Sensor/Switch A Circuit Low Input P0123 Throttle/Petal Position Sensor/Switch A Circuit High Input P0124 Throttle/Petal Position Sensor/Switch A Circuit Intermittent P0125 Insufficient Coolant Temperature for Closed Loop Fuel Control P0126 Insufficient Coolant Temperature for Stable Operation P0130 02 Sensor Circuit Malfunction (Bank 1 Sensor 1) P0131 02 Sensor Circuit Low Voltage (Bank 1 Sensor 1) P0132 02 Sensor Circuit High Voltage (Bank 1 Sensor 1) P0133 02 Sensor Circuit Slow Response (Bank 1 Sensor 1) P0134 02 Sensor Circuit No Activity Detected (Bank 1 Sensor 1) P0135 02 Sensor Heater Circuit Malfunction (Bank 1 Sensor 1) P0136 02 Sensor Circuit Malfunction (Bank 1 Sensor 2) P0137 02 Sensor Circuit Low Voltage (Bank 1 Sensor 2) P0138 02 Sensor Circuit High Voltage (Bank 1 Sensor 2) P0139 02 Sensor Circuit Slow Response (Bank 1 Sensor 2) P0140 02 Sensor Circuit No Activity Detected (Bank 1 Sensor 2) P0141 02 Sensor Heater Circuit Malfunction (Bank 1 Sensor 2) P0142 02 Sensor Circuit Malfunction (Bank 1 Sensor 3) P0143 02 Sensor Circuit Low Voltage (Bank 1 Sensor 3) P0144 02 Sensor Circuit High Voltage (Bank 1 Sensor 3) P0145 02 Sensor Circuit Slow Response (Bank 1 Sensor 3) P0146 02 Sensor Circuit No Activity Detected (Bank 1 Sensor 3) P0147 02 Sensor Heater Circuit Malfunction (Bank 1 Sensor 3) P0150 02 Sensor Circuit Malfunction (Bank 2 Sensor 1) P0151 02 Sensor Circuit Low Voltage (Bank 2 Sensor 1) P0152 02 Sensor Circuit High Voltage (Bank 2 Sensor 1) P0153 02 Sensor Circuit Slow Response (Bank 2 Sensor 1) P0154 02 Sensor Circuit No Activity Detected (Bank 2 Sensor 1) P0155 02 Sensor Heater Circuit Malfunction (Bank 2 Sensor 1)

P0156 02 Sensor Circuit Malfunction (Bank 2 Sensor 2) P0157 02 Sensor Circuit Low Voltage (Bank 2 Sensor 2) P0158 02 Sensor Circuit High Voltage (Bank 2 Sensor 2) P0159 02 Sensor Circuit Slow Response (Bank 2 Sensor 2) P0160 02 Sensor Circuit No Activity Detected (Bank 2 Sensor 2) P0161 02 Sensor Heater Circuit Malfunction (Bank 2 Sensor 2) P0162 02 Sensor Circuit Malfunction (Bank 2 Sensor 3) P0163 02 Sensor Circuit Low Voltage (Bank 2 Sensor 3) P0164 02 Sensor Circuit High Voltage (Bank 2 Sensor 3) P0165 02 Sensor Circuit Slow Response (Bank 2 Sensor 3) P0166 02 Sensor Circuit No Activity Detected (Bank 2 Sensor 3) P0167 02 Sensor Heater Circuit Malfunction (Bank 2 Sensor 3) P0170 Fuel Trim Malfunction (Bank 1) P0171 System too Lean (Bank 1) P0172 System too Rich (Bank 1) P0173 Fuel Trim Malfunction (Bank 2) P0174 System too Lean (Bank 2) P0175 System too Rich (Bank 2) P0176 Fuel Composition Sensor Circuit Malfunction P0177 Fuel Composition Sensor Circuit Range/Performance P0178 Fuel Composition Sensor Circuit Low Input P0179 Fuel Composition Sensor Circuit High Input P0180 Fuel Temperature Sensor A Circuit Malfunction P0181 Fuel Temperature Sensor A Circuit Range/Performance P0182 Fuel Temperature Sensor A Circuit Low Input P0183 Fuel Temperature Sensor A Circuit High Input P0184 Fuel Temperature Sensor A Circuit Intermittent P0185 Fuel Temperature Sensor B Circuit Malfunction P0186 Fuel Temperature Sensor B Circuit Range/Performance P0187 Fuel Temperature Sensor B Circuit Low Input P0188 Fuel Temperature Sensor B Circuit High Input P0189 Fuel Temperature Sensor B Circuit Intermittent P0190 Fuel Rail Pressure Sensor Circuit Malfunction P0191 Fuel Rail Pressure Sensor Circuit Range/Performance P0192 Fuel Rail Pressure Sensor Circuit Low Input P0193 Fuel Rail Pressure Sensor Circuit High Input P0194 Fuel Rail Pressure Sensor Circuit Intermittent P0195 Engine Oil Temperature Sensor Malfunction P0196 Engine Oil Temperature Sensor Range/Performance P0197 Engine Oil Temperature Sensor Low P0198 Engine Oil Temperature Sensor High P0199 Engine Oil Temperature Sensor Intermittent P0200 Injector Circuit Malfunction P0201 Injector Circuit Malfunction - Cylinder 1 P0202 Injector Circuit Malfunction - Cylinder 2 P0203 Injector Circuit Malfunction - Cylinder 3 P0204 Injector Circuit Malfunction - Cylinder 4 P0205 Injector Circuit Malfunction - Cylinder 5 P0206 Injector Circuit Malfunction - Cylinder 6 P0207 Injector Circuit Malfunction - Cylinder 7 P0208 Injector Circuit Malfunction - Cylinder 8 P0209 Injector Circuit Malfunction - Cylinder 9 P0210 Injector Circuit Malfunction - Cylinder 10

P0211 Injector Circuit Malfunction - Cylinder 11 P0212 Injector Circuit Malfunction - Cylinder 12 P0213 Cold Start Injector 1 Malfunction P0214 Cold Start Injector 2 Malfunction P0215 Engine Shutoff Solenoid Malfunction P0216 Injection Timing Control Circuit Malfunction P0217 Engine Overtemp Condition P0218 Transmission Over Temperature Condition P0219 Engine Overspeed Condition P0220 Throttle/Petal Position Sensor/Switch B Circuit Malfunction P0221 Throttle/Petal Position Sensor/Switch B Circuit Range/Performance Problem P0222 Throttle/Petal Position Sensor/Switch B Circuit Low Input P0223 Throttle/Petal Position Sensor/Switch B Circuit High Input P0224 Throttle/Petal Position Sensor/Switch B Circuit Intermittent P0225 Throttle/Petal Position Sensor/Switch C Circuit Malfunction P0226 Throttle/Petal Position Sensor/Switch C Circuit Range/Performance Problem P0227 Throttle/Petal Position Sensor/Switch C Circuit Low Input P0228 Throttle/Petal Position Sensor/Switch C Circuit High Input P0229 Throttle/Petal Position Sensor/Switch C Circuit Intermittent P0230 Fuel Pump Primary Circuit Malfunction P0231 Fuel Pump Secondary Circuit Low P0232 Fuel Pump Secondary Circuit High P0233 Fuel Pump Secondary Circuit Intermittent P0234 Engine Overboost Condition P0235 Turbocharger Boost Sensor A Circuit Malfunction P0236 Turbocharger Boost Sensor A Circuit Range/Performance P0237 Turbocharger Boost Sensor A Circuit Low P0238 Turbocharger Boost Sensor A Circuit High P0239 Turbocharger Boost Sensor B Malfunction P0240 Turbocharger Boost Sensor B Circuit Range/Performance P0241 Turbocharger Boost Sensor B Circuit Low P0242 Turbocharger Boost Sensor B Circuit High P0243 Turbocharger Wastegate Solenoid A Malfunction P0244 Turbocharger Wastegate Solenoid A Range/Performance P0245 Turbocharger Wastegate Solenoid A Low P0246 Turbocharger Wastegate Solenoid A High P0247 Turbocharger Wastegate Solenoid B Malfunction P0248 Turbocharger Wastegate Solenoid B Range/Performance P0249 Turbocharger Wastegate Solenoid B Low P0250 Turbocharger Wastegate Solenoid B High P0251 Injection Pump Fuel Metering Control "A" Malfunction (Cam/Rotor/Injector) P0252 Injection Pump Fuel Metering Control "A" Range/Performance (Cam/Rotor/Injector) P0253 Injection Pump Fuel Metering Control "A" Low (Cam/Rotor/Injector) P0254 Injection Pump Fuel Metering Control "A" High (Cam/Rotor/Injector) P0255 Injection Pump Fuel Metering Control "A" Intermittent (Cam/Rotor/Injector) P0256 Injection Pump Fuel Metering Control "B" Malfunction (Cam/Rotor/Injector) P0257 Injection Pump Fuel Metering Control "B" Range/Performance (Cam/Rotor/Injector) P0258 Injection Pump Fuel Metering Control "B" Low (Cam/Rotor/Injector) P0259 Injection Pump Fuel Metering Control "B" High (Cam/Rotor/Injector) P0260 Injection Pump Fuel Metering Control "B" Intermittent (Cam/Rotor/Injector) P0261 Cylinder 1 Injector Circuit Low P0262 Cylinder 1 Injector Circuit High P0263 Cylinder 1 Contribution/Balance Fault

P0264 Cylinder 2 Injector Circuit Low P0265 Cylinder 2 Injector Circuit High P0266 Cylinder 2 Contribution/Balance Fault P0267 Cylinder 3 Injector Circuit Low P0268 Cylinder 3 Injector Circuit High P0269 Cylinder 3 Contribution/Balance Fault P0270 Cylinder 4 Injector Circuit Low P0271 Cylinder 4 Injector Circuit High P0272 Cylinder 4 Contribution/Balance Fault P0273 Cylinder 5 Injector Circuit Low P0274 Cylinder 5 Injector Circuit High P0275 Cylinder 5 Contribution/Balance Fault P0276 Cylinder 6 Injector Circuit Low P0277 Cylinder 6 Injector Circuit High P0278 Cylinder 6 Contribution/Balance Fault P0279 Cylinder 7 Injector Circuit Low P0280 Cylinder 7 Injector Circuit High P0281 Cylinder 7 Contribution/Balance Fault P0282 Cylinder 8 Injector Circuit Low P0283 Cylinder 8 Injector Circuit High P0284 Cylinder 8 Contribution/Balance Fault P0285 Cylinder 9 Injector Circuit Low P0286 Cylinder 9 Injector Circuit High P0287 Cylinder 9 Contribution/Balance Fault P0288 Cylinder 10 Injector Circuit Low P0289 Cylinder 10 Injector Circuit High P0290 Cylinder 10 Contribution/Balance Fault P0291 Cylinder 11 Injector Circuit Low P0292 Cylinder 11 Injector Circuit High P0293 Cylinder 11 Contribution/Balance Fault P0294 Cylinder 12 Injector Circuit Low P0295 Cylinder 12 Injector Circuit High P0296 Cylinder 12 Contribution/Range Fault P0300 Random/Multiple Cylinder Misfire Detected P0301 Cylinder 1 Misfire Detected P0302 Cylinder 2 Misfire Detected P0303 Cylinder 3 Misfire Detected P0304 Cylinder 4 Misfire Detected P0305 Cylinder 5 Misfire Detected P0306 Cylinder 6 Misfire Detected P0307 Cylinder 7 Misfire Detected P0308 Cylinder 8 Misfire Detected P0309 Cylinder 9 Misfire Detected P0311 Cylinder 11 Misfire Detected P0312 Cylinder 12 Misfire Detected P0320 Ignition/Distributor Engine Speed Input Circuit Malfunction P0321 Ignition/Distributor Engine Speed Input Circuit Range/Performance P0322 Ignition/Distributor Engine Speed Input Circuit No Signal P0323 Ignition/Distributor Engine Speed Input Circuit Intermittent P0325 Knock Sensor 1 Circuit Malfunction (Bank 1 or Single Sensor) P0326 Knock Sensor 1 Circuit Range/Performance (Bank 1 or Single Sensor) P0327 Knock Sensor 1 Circuit Low Input (Bank 1 or Single Sensor)

P0328 Knock Sensor 1 Circuit High Input (Bank 1 or Single Sensor)

P0329 Knock Sensor 1 Circuit Intermittent (Bank 1 or Single Sensor) P0330 Knock Sensor 2 Circuit Malfunction (Bank 2) P0331 Knock Sensor 2 Circuit Range/Performance (Bank 2) P0332 Knock Sensor 2 Circuit Low Input (Bank 2) P0333 Knock Sensor 2 Circuit High Input (Bank 2) P0334 Knock Sensor 2 Circuit Intermittent (Bank 2) P0335 Crankshaft Position Sensor A Circuit Malfunction P0336 Crankshaft Position Sensor A Circuit Range/Performance P0337 Crankshaft Position Sensor A Circuit Low Input P0338 Crankshaft Position Sensor A Circuit High Input P0339 Crankshaft Position Sensor A Circuit Intermittent P0340 Camshaft Position Sensor Circuit Malfunction P0341 Camshaft Position Sensor Circuit Range/Performance P0342 Camshaft Position Sensor Circuit Low Input P0343 Camshaft Position Sensor Circuit High Input P0344 Camshaft Position Sensor Circuit Intermittent P0350 Ignition Coil Primary/Secondary Circuit Malfunction P0351 Ignition Coil A Primary/Secondary Circuit Malfunction P0352 Ignition Coil B Primary/Secondary Circuit Malfunction P0353 Ignition Coil C Primary/Secondary Circuit Malfunction P0354 Ignition Coil D Primary/Secondary Circuit Malfunction P0355 Ignition Coil E Primary/Secondary Circuit Malfunction P0356 Ignition Coil F Primary/Secondary Circuit Malfunction P0357 Ignition Coil G Primary/Secondary Circuit Malfunction P0358 Ignition Coil H Primary/Secondary Circuit Malfunction P0359 Ignition Coil I Primary/Secondary Circuit Malfunction P0360 Ignition Coil J Primary/Secondary Circuit Malfunction P0361 Ignition Coil K Primary/Secondary Circuit Malfunction P0362 Ignition Coil L Primary/Secondary Circuit Malfunction P0370 Timing Reference High Resolution Signal A Malfunction P0371 Timing Reference High Resolution Signal A Too Many Pulses P0372 Timing Reference High Resolution Signal A Too Few Pulses P0373 Timing Reference High Resolution Signal A Intermittent/Erratic Pulses P0374 Timing Reference High Resolution Signal A No Pulses P0375 Timing Reference High Resolution Signal B Malfunction P0376 Timing Reference High Resolution Signal B Too Many Pulses P0377 Timing Reference High Resolution Signal B Too Few Pulses P0378 Timing Reference High Resolution Signal B Intermittent/Erratic Pulses P0379 Timing Reference High Resolution Signal B No Pulses P0380 Glow Plug/Heater Circuit "A" Malfunction P0381 Glow Plug/Heater Indicator Circuit Malfunction P0382 Exhaust Gas Recirculation Flow Malfunction P0385 Crankshaft Position Sensor B Circuit Malfunction P0386 Crankshaft Position Sensor B Circuit Range/Performance P0387 Crankshaft Position Sensor B Circuit Low Input P0388 Crankshaft Position Sensor B Circuit High Input P0389 Crankshaft Position Sensor B Circuit Intermittent P0400 Exhaust Gas Recirculation Flow Malfunction P0401 Exhaust Gas Recirculation Flow Insufficient Detected P0402 Exhaust Gas Recirculation Flow Excessive Detected P0403 Exhaust Gas Recirculation Circuit Malfunction P0404 Exhaust Gas Recirculation Circuit Range/Performance P0405 Exhaust Gas Recirculation Sensor A Circuit Low

P0406 Exhaust Gas Recirculation Sensor A Circuit High P0407 Exhaust Gas Recirculation Sensor B Circuit Low P0408 Exhaust Gas Recirculation Sensor B Circuit High P0410 Secondary Air Injection System Malfunction P0411 Secondary Air Injection System Incorrect Flow Detected P0412 Secondary Air Injection System Switching Valve A Circuit Malfunction P0413 Secondary Air Injection System Switching Valve A Circuit Open P0414 Secondary Air Injection System Switching Valve A Circuit Shorted P0415 Secondary Air Injection System Switching Valve B Circuit Malfunction P0416 Secondary Air Injection System Switching Valve B Circuit Open P0417 Secondary Air Injection System Switching Valve B Circuit Shorted P0418 Secondary Air Injection System Relay "A" Circuit Malfunction P0419 Secondary Air Injection System Relay "B" Circuit Malfunction P0420 Catalyst System Efficiency Below Threshold (Bank 1) P0421 Warm Up Catalyst Efficiency Below Threshold (Bank 1) P0422 Main Catalyst Efficiency Below Threshold (Bank 1) P0423 Heated Catalyst Efficiency Below Threshold (Bank 1) P0424 Heated Catalyst Temperature Below Threshold (Bank 1) P0430 Catalyst System Efficiency Below Threshold (Bank 2) P0431 Warm Up Catalyst Efficiency Below Threshold (Bank 2) P0432 Main Catalyst Efficiency Below Threshold (Bank 2) P0433 Heated Catalyst Efficiency Below Threshold (Bank 2) P0434 Heated Catalyst Temperature Below Threshold (Bank 2) P0440 Evaporative Emission Control System Malfunction P0441 Evaporative Emission Control System Incorrect Purge Flow P0442 Evaporative Emission Control System Leak Detected (small leak) P0443 Evaporative Emission Control System Purge Control Valve Circuit Malfunction P0444 Evaporative Emission Control System Purge Control Valve Circuit Open P0445 Evaporative Emission Control System Purge Control Valve Circuit Shorted P0446 Evaporative Emission Control System Vent Control Circuit Malfunction P0447 Evaporative Emission Control System Vent Control Circuit Open P0448 Evaporative Emission Control System Vent Control Circuit Shorted P0449 Evaporative Emission Control System Vent Valve/Solenoid Circuit Malfunction P0450 Evaporative Emission Control System Pressure Sensor Malfunction P0451 Evaporative Emission Control System Pressure Sensor Range/Performance P0452 Evaporative Emission Control System Pressure Sensor Low Input P0453 Evaporative Emission Control System Pressure Sensor High Input P0454 Evaporative Emission Control System Pressure Sensor Intermittent P0455 Evaporative Emission Control System Leak Detected (gross leak) P0460 Fuel Level Sensor Circuit Malfunction P0461 Fuel Level Sensor Circuit Range/Performance P0462 Fuel Level Sensor Circuit Low Input P0463 Fuel Level Sensor Circuit High Input P0464 Fuel Level Sensor Circuit Intermittent P0465 Purge Flow Sensor Circuit Malfunction P0466 Purge Flow Sensor Circuit Range/Performance P0467 Purge Flow Sensor Circuit Low Input P0468 Purge Flow Sensor Circuit High Input P0469 Purge Flow Sensor Circuit Intermittent P0470 Exhaust Pressure Sensor Malfunction P0471 Exhaust Pressure Sensor Range/Performance P0472 Exhaust Pressure Sensor Low

P0473 Exhaust Pressure Sensor High

P0474 Exhaust Pressure Sensor Intermittent P0475 Exhaust Pressure Control Valve Malfunction P0476 Exhaust Pressure Control Valve Range/Performance P0477 Exhaust Pressure Control Valve Low P0478 Exhaust Pressure Control Valve High P0479 Exhaust Pressure Control Valve Intermittent P0480 Cooling Fan 1 Control Circuit Malfunction P0481 Cooling Fan 2 Control Circuit Malfunction P0482 Cooling Fan 3 Control Circuit Malfunction P0483 Cooling Fan Rationality Check Malfunction P0484 Cooling Fan Circuit Over Current P0485 Cooling Fan Power/Ground Circuit Malfunction P0500 Vehicle Speed Sensor Malfunction P0501 Vehicle Speed Sensor Range/Performance P0502 Vehicle Speed Sensor Low Input P0503 Vehicle Speed Sensor Intermittent/Erratic/High P0505 Idle Control System Malfunction P0506 Idle Control System RPM Lower Than Expected P0507 Idle Control System RPM Higher Than Expected P0510 Closed Throttle Position Switch Malfunction P0520 Engine Oil Pressure Sensor/Switch Circuit Malfunction P0521 Engine Oil Pressure Sensor/Switch Circuit Range/Performance P0522 Engine Oil Pressure Sensor/Switch Circuit Low Voltage P0523 Engine Oil Pressure Sensor/Switch Circuit High Voltage P0530 A/C Refrigerant Pressure Sensor Circuit Malfunction P0531 A/C Refrigerant Pressure Sensor Circuit Range/Performance P0532 A/C Refrigerant Pressure Sensor Circuit Low Input P0533 A/C Refrigerant Pressure Sensor Circuit High Input P0534 Air Conditioner Refrigerant Charge Loss P0550 Power Steering Pressure Sensor Circuit Malfunction P0551 Power Steering Pressure Sensor Circuit Range/Performance P0552 Power Steering Pressure Sensor Circuit Low Input P0553 Power Steering Pressure Sensor Circuit High Input P0554 Power Steering Pressure Sensor Circuit Intermittent P0560 System Voltage Malfunction P0561 System Voltage Unstable P0562 System Voltage Low P0563 System Voltage High P0565 Cruise Control On Signal Malfunction P0566 Cruise Control Off Signal Malfunction P0567 Cruise Control Resume Signal Malfunction P0568 Cruise Control Set Signal Malfunction P0569 Cruise Control Coast Signal Malfunction P0570 Cruise Control Accel Signal Malfunction P0571 Cruise Control/Brake Switch A Circuit Malfunction P0572 Cruise Control/Brake Switch A Circuit Low P0573 Cruise Control/Brake Switch A Circuit High P0574 Cruise Control Related Malfunction P0575 Cruise Control Related Malfunction P0576 Cruise Control Related Malfunction P0576 Cruise Control Related Malfunction P0578 Cruise Control Related Malfunction P0579 Cruise Control Related Malfunction

P0580 Cruise Control Related Malfunction P0600 Serial Communication Link Malfunction P0601 Internal Control Module Memory Check Sum Error P0602 Control Module Programming Error P0603 Internal Control Module Keep Alive Memory (KAM) Error P0604 Internal Control Module Random Access Memory (RAM) Error P0605 Internal Control Module Read Only Memory (ROM) Error P0606 PCM Processor Fault P0608 Control Module VSS Output "A" Malfunction P0609 Control Module VSS Output "B" Malfunction P0620 Generator Control Circuit Malfunction P0621 Generator Lamp "L" Control Circuit Malfunction P0622 Generator Field "F" Control Circuit Malfunction P0650 Malfunction Indicator Lamp (MIL) Control Circuit Malfunction P0654 Engine RPM Output Circuit Malfunction P0655 Engine Hot Lamp Output Control Circuit Malfunction P0656 Fuel Level Output Circuit Malfunction P0700 Transmission Control System Malfunction P0701 Transmission Control System Range/Performance P0702 Transmission Control System Electrical P0703 Torque Converter/Brake Switch B Circuit Malfunction P0704 Clutch Switch Input Circuit Malfunction P0705 Transmission Range Sensor Circuit malfunction (PRNDL Input) P0706 Transmission Range Sensor Circuit Range/Performance P0707 Transmission Range Sensor Circuit Low Input P0708 Transmission Range Sensor Circuit High Input P0709 Transmission Range Sensor Circuit Intermittent P0710 Transmission Fluid Temperature Sensor Circuit Malfunction P0711 Transmission Fluid Temperature Sensor Circuit Range/Performance P0712 Transmission Fluid Temperature Sensor Circuit Low Input P0713 Transmission Fluid Temperature Sensor Circuit High Input P0714 Transmission Fluid Temperature Sensor Circuit Intermittent P0715 Input/Turbine Speed Sensor Circuit Malfunction P0716 Input/Turbine Speed Sensor Circuit Range/Performance P0717 Input/Turbine Speed Sensor Circuit No Signal P0718 Input/Turbine Speed Sensor Circuit Intermittent P0719 Torque Converter/Brake Switch B Circuit Low P0720 Output Speed Sensor Circuit Malfunction P0721 Output Speed Sensor Range/Performance P0722 Output Speed Sensor No Signal P0723 Output Speed Sensor Intermittent P0724 Torque Converter/Brake Switch B Circuit High P0725 Engine Speed input Circuit Malfunction P0726 Engine Speed Input Circuit Range/Performance P0727 Engine Speed Input Circuit No Signal P0728 Engine Speed Input Circuit Intermittent P0730 Incorrect Gear Ratio P0731 Gear 1 Incorrect ratio P0732 Gear 2 Incorrect ratio P0733 Gear 3 Incorrect ratio P0734 Gear 4 Incorrect ratio P0735 Gear 5 Incorrect ratio

P0736 Reverse incorrect gear ratio

P0740 Torgue Converter Clutch Circuit Malfunction P0741 Torque Converter Clutch Circuit Performance or Stuck Off P0742 Torque Converter Clutch Circuit Stuck On P0743 Torgue Converter Clutch Circuit Electrical P0744 Torque Converter Clutch Circuit Intermittent P0745 Pressure Control Solenoid Malfunction P0746 Pressure Control Solenoid Performance or Stuck Off P0747 Pressure Control Solenoid Stuck On P0748 Pressure Control Solenoid Electrical P0749 Pressure Control Solenoid Intermittent P0750 Shift Solenoid A Malfunction P0751 Shift Solenoid A Performance or Stuck Off P0752 Shift Solenoid A Stuck On P0753 Shift Solenoid A Electrical P0754 Shift Solenoid A Intermittent P0755 Shift Solenoid B Malfunction P0756 Shift Solenoid B Performance or Stuck Off P0757 Shift Solenoid B Stuck On P0758 Shift Solenoid B Electrical P0759 Shift Solenoid B Intermittent P0760 Shift Solenoid C Malfunction P0761 Shift Solenoid C Performance or Stuck Off P0762 Shift Solenoid C Stuck On P0763 Shift Solenoid C Electrical P0764 Shift Solenoid C Intermittent P0765 Shift Solenoid D Malfunction P0766 Shift Solenoid D Performance or Stuck Off P0767 Shift Solenoid D Stuck On P0768 Shift Solenoid D Electrical P0769 Shift Solenoid D Intermittent P0770 Shift Solenoid E Malfunction P0771 Shift Solenoid E Performance or Stuck Off P0772 Shift Solenoid E Stuck On P0773 Shift Solenoid E Electrical P0774 Shift Solenoid E Intermittent P0780 Shift Malfunction P0781 1-2 Shift Malfunction P0782 2-3 Shift Malfunction P0783 3-4 Shift Malfunction P0784 4-5 Shift Malfunction P0785 Shift/Timing Solenoid Malfunction P0786 Shift/Timing Solenoid Range/Performance P0787 Shift/Timing Solenoid Low P0788 Shift/Timing Solenoid High P0789 Shift/Timing Solenoid Intermittent P0790 Normal/Performance Switch Circuit Malfunction P0801 Reverse Inhibit Control Circuit Malfunction

- P0803 1-4 Upshift (Skip Shift) Solenoid Control Circuit Malfunction
- P0804 1-4 Upshift (Skip Shift) Lamp Control Circuit Malfunction

Ford OBDII Code Listing

- B1231 Longitudinal acceleration threshold exceeded
- B1318 Battery voltage low
- B1342 ECU internal failure
- B1342B ECU is defective
- B1485 Stop lamp switch input circuit battery short
- B1676 Battery voltage out of range
- B1869 Lamp air bag warning indicator circuit open
- B1870 Lamp air bag warning indicator circuit short to battery
- B1871 Passenger air bag disable module fault
- B1877 Seatbelt driver pretensioner circuit open
- B1878 Seatbelt driver pretensioner circuit short to battery
- B1879 Seatbelt driver pretensioner circuit short to ground
- B1881 Seatbelt passenger pretensioner circuit open
- B1882 Seatbelt passenger pretensioner circuit short to battery
- B1883 Seatbelt passenger pretensioner circuit short to ground
- B1884 PAD warning lamp inoperative
- B1885 Seatbelt driver pretensioner circuit resistance low on squib
- B1886 Seatbelt passenger pretensioner circuit resistance low on squib
- B1887 Air bag driver circuit short to ground
- B1888 Air bag passenger circuit short to ground
- B1889 Passenger air bag disable module module sensor obstructed
- B1890 PAD warning lamp circuit short to battery
- B1891 Air bag tone warning indicator circuit short to battery
- B1892 Air bag tone warning indicator circuit failure
- B1900 Driver side air bag fault
- B1901 Air bag crash sensor #1 feed/return circuit short to ground
- B1916 Air bag driver circuit short to battery
- B1921 Air bag diagnostic monitor ground circuit open
- B1925 Air bag passenger circuit short to battery
- B1927 Passenger side air bag fault
- B1932 Air bag driver circuit open
- B1933 Air bag passenger circuit open
- B1934 Air bag driver inflator circuit resistance low on squib
- B1935 Air bag passenger inflator circuit resistance low on squib
- B1941 Air bag crash sensor #1 feed/return circuit open
- B2141 NVM configuration failure
- C1095 Hydraulic pump motor circuit failure

- C1102 Acceleration switch circuit failure
- C1145 Wheel speed RF input circuit failure
- C1155 Wheel speed LF input circuit failure
- C1165 Wheel speed RR input circuit failure
- C1175 Wheel speed LR input circuit failure
- C1230 Rear wheel speed sensor input circuit fault
- C1233 LF wheel speed signal comparison fault
- C1234 RF wheel speed signal comparison fault
- C1235 Speed wheel RR input signal missing
- C1236 Speed wheel RR input signal missing
- C1237 Rear wheel speed signal comparison fault
- C1414 Incorrect module design level
- P1000 OBDII drive cycle not complete
- P1001 KOER not able to complete, KOER aborted
- P1039 Vehicle speed signal missing or improper
- P1051 Brake switch signal missing or improper
- P1100 Mass air flow sensor intermittent
- P1101 Mass air flow (MAF) sensor out of self test range
- P1112 Intake air temperature sensor intermittent
- P1116 Engine coolant temperature (ECT) sensor out of self test range
- P1117 Engine coolant temperature (ECT) sensor intermittent
- P1118 Manifold air temperature sensor (MAT) (ACT)
- P1119 Manifold air temperature sensor (MAT) (ACT)
- P1120 Throttle position circuit out of range low
- P1121 Throttle position sensor inconsistent with MAF sensor
- P1124 Throttle position sensor out of self test range
- P1125 Throttle position sensor intermittent
- P1127 Exhaust not warm enough downstream oxygen sensor not tested
- P1128 Upstream oxygen sensors swapped from bank to bank
- P1129 Downstream oxygen sensors swapped from bank to bank
- P1130 Lack of HO2S11 switch adaptive fuel at limit (bank 1 upstream)
- P1131 Lack of HO2S11 switch sensor indicates lean (Bank 1 upstream)
- P1132 Lack of HO2S11 switch sensor indicates rich (Bank 1 upstream)
- P1133 HO2S11 fuel control shifted lean (Bank 1upstream)
- P1134 HO2S11 fuel control shifted rich (Bank 1upstream)
- P1135 Ignition switch signal missing or improper
- P1137 Lack of HO2S12 switch sensor indicates lean (Bank 1 downstream)
- P1138 Lack of HO2S12 switch sensor indicates rich (Bank 1 downstream)
- P1139 Water in fuel circuit malfunction
- P1140 Water in fuel condition fail

- P1141 Fuel restriction indicator circuit malfunction
- P1142 Fuel restriction switch condition fault
- P1150 Lack of HO2S12 switch adaptive fuel at limit (Bank 2 upstream)
- P1151 Lack of HO2S21 switch sensor indicates lean (Bank 2 upstream)
- P1152 Lack of HO2S21 switch sensor indicates rich (Bank 2 upstream)
- P1153 HO2S21 fuel control shifted lean (Bank 2 upstream)
- P1154 HO2S21 fuel control shifted rich (Bank 2 upstream)
- P1157 Lack of HO2S21 switch sensor indicates lean (Bank 2 downstream)
- P1158 Lack of HO2S21 switch sensor indicates rich (Bank 2 downstream)
- P1184 KOER fail engine oil temperature out of self test range
- P1190 Throttle position sensor B control circuit malfunction
- P1191 Throttle position sensor B out of range
- P1192 Throttle position sensor circuit low input
- P1193 Throttle position sensor circuit high input
- P1194 Throttle position sensor B out of self test range
- P1195 Throttle position sensor B inconsistent
- P1209 Injection control pressure peak delta test fail
- P1210 Injection control pressure fail maximum pressure test at no-start
- P1211 KOER fail injection control pressure steady state
- ∞ P1212 Injection control pressure fail minimum pressure test at crank
- P1220 Throttle position sensor B out of range
- P1224 Throttle position sensor B out of self test range
- P1227 Waste gate failed closed (Over pressure)
- P1228 Waste gate failed open (Under pressure)
- P1229 Intercooler pump driver fault
- P1230 Fuel pump low speed malfunction (VLCM)
- P1231 Fuel pump secondary circuit low high speed (VLCM)
- P1232 Fuel pump secondary circuit high high speed (VLCM)
- P1233 Fuel system disabled or offline
- P1234 Fuel system failed or offline
- P1235 Fuel pump control out of range (VLCM)
- P1236 Fuel pump control out of range (VLCM)
- P1237 Fuel pump secondary circuit malfunction
- P1238 Fuel pump secondary circuit malfunction
- P1244 Alternator load input failed high
- P1245 Alternator load input failed low
- P1247 Manifold air pressure fail turbocharger hose off
- P1248 Manifold air pressure fail connection hose off
- P1249 Waste-gate fail steady state test
- P1250 Lack of power to FPRC solenoid

- P1260 Theft detected engine disabled
- P1270 Engine RPM or vehicle speed limiter reach
- P1280 Injection control pressure sensor out of range low
- P1281 Injection control pressure sensor out of range high
- P1282 Injection control pressure excessive
- P1283 KOEO injection control regulator fail
- P1284 KOER fail due to injection control pressure failures
- P1285 Cylinder head over temperature sensed
- P1288 Cylinder head temperature sensor out of self test range
- P1289 Cylinder head temperature sensor high input
- P1290 Cylinder head temperature sensor low input
- P1299 Cylinder head over temperature protection active
- P1309 Misfire monitor failure
- P1316 IDM codes detected retrieve IDM codes
- P1317 IDM codes not retrieved
- P1351 Ignition diagnostic monitor (IDM) circuit malfunction
- P1352 Ignition coil A primary malfunction
- P1353 Ignition coil B primary malfunction
- P1354 Ignition coil C primary malfunction
- P1355 Ignition coil D primary malfunction
- P1356 PIP's occurred while IDM pulse width indicates engine not turning
- P1357 Ignition diagnostic monitor pulse width not detected
- P1358 IDM signal out of self test range
- P1359 Spark output circuit malfunction
- P1364 Ignition coil circuit malfunction
- P1369 Engine temperature light monitor failure
- P1380 Variable cam timing solenoid A malfunction
- P1381 Variable cam timing over advanced (Bank A)
- P1383 Variable cam timing over retarded (Bank A)
- P1385 Variable cam timing solenoid B malfunction
- P1386 Variable cam timing over advanced (Bank B)
- P1388 Variable cam timing over retarded (Bank B)
- P1389 Glow plug high side out of range low
- P1390 Octane adjust service pin out of self test range
- P1391 Glow plug Bank #1 out of range high
- P1392 Glow plug Bank #1 out of range low
- P1393 Glow plug Bank #2 out of range high
- P1394 Glow plug Bank #2 out of range low
- P1395 Glow plug monitor fail bank #1 absolute test
- P1396 Glow plug monitor fail bank #2 absolute test

- P1141 Fuel restriction indicator circuit malfunction
- P1142 Fuel restriction switch condition fault
- P1150 Lack of HO2S12 switch adaptive fuel at limit (Bank 2 upstream)
- P1151 Lack of HO2S21 switch sensor indicates lean (Bank 2 upstream)
- P1152 Lack of HO2S21 switch sensor indicates rich (Bank 2 upstream)
- P1153 HO2S21 fuel control shifted lean (Bank 2 upstream)
- P1154 HO2S21 fuel control shifted rich (Bank 2 upstream)
- P1157 Lack of HO2S21 switch sensor indicates lean (Bank 2 downstream)
- P1158 Lack of HO2S21 switch sensor indicates rich (Bank 2 downstream)
- P1184 KOER fail engine oil temperature out of self test range
- P1190 Throttle position sensor B control circuit malfunction
- P1191 Throttle position sensor B out of range
- P1192 Throttle position sensor circuit low input
- P1193 Throttle position sensor circuit high input
- P1194 Throttle position sensor B out of self test range
- P1195 Throttle position sensor B inconsistent
- P1209 Injection control pressure peak delta test fail
- P1210 Injection control pressure fail maximum pressure test at no-start
- P1211 KOER fail injection control pressure steady state
- P1212 Injection control pressure fail minimum pressure test at crank
 - P1220 Throttle position sensor B out of range
 - P1224 Throttle position sensor B out of self test range
 - P1227 Waste gate failed closed (Over pressure)
 - P1228 Waste gate failed open (Under pressure)
 - P1229 Intercooler pump driver fault

8

- P1230 Fuel pump low speed malfunction (VLCM)
- P1231 Fuel pump secondary circuit low high speed (VLCM)
- P1232 Fuel pump secondary circuit high high speed (VLCM)
- P1233 Fuel system disabled or offline
- P1234 Fuel system failed or offline
- P1235 Fuel pump control out of range (VLCM)
- P1236 Fuel pump control out of range (VLCM)
- P1237 Fuel pump secondary circuit malfunction
- P1238 Fuel pump secondary circuit malfunction
- P1244 Alternator load input failed high
- P1245 Alternator load input failed low
- P1247 Manifold air pressure fail turbocharger hose off
- P1248 Manifold air pressure fail connection hose off
- P1249 Waste-gate fail steady state test
- P1250 Lack of power to FPRC solenoid

- P1260 Theft detected engine disabled
- P1270 Engine RPM or vehicle speed limiter reach
- P1280 Injection control pressure sensor out of range low
- P1281 Injection control pressure sensor out of range high
- P1282 Injection control pressure excessive
- P1283 KOEO injection control regulator fail
- P1284 KOER fail due to injection control pressure failures
- P1285 Cylinder head over temperature sensed
- P1288 Cylinder head temperature sensor out of self test range
- P1289 Cylinder head temperature sensor high input
- P1290 Cylinder head temperature sensor low input
- P1299 Cylinder head over temperature protection active
- P1309 Misfire monitor failure
- P1316 IDM codes detected retrieve IDM codes
- P1317 IDM codes not retrieved
- P1351 Ignition diagnostic monitor (IDM) circuit malfunction
- P1352 Ignition coil A primary malfunction
- P1353 Ignition coil B primary malfunction
- P1354 Ignition coil C primary malfunction
- P1355 Ignition coil D primary malfunction
- P1356 PIP's occurred while IDM pulse width indicates engine not turning
- P1357 Ignition diagnostic monitor pulse width not detected
- P1358 IDM signal out of self test range
- P1359 Spark output circuit malfunction
- P1364 Ignition coil circuit malfunction
- P1369 Engine temperature light monitor failure
- P1380 Variable cam timing solenoid A malfunction
- P1381 Variable cam timing over advanced (Bank A)
- P1383 Variable cam timing over retarded (Bank A)
- P1385 Variable cam timing solenoid B malfunction
- P1386 Variable cam timing over advanced (Bank B)
- P1388 Variable cam timing over retarded (Bank B)
- P1389 Glow plug high side out of range low
- P1390 Octane adjust service pin out of self test range
- P1391 Glow plug Bank #1 out of range high
- P1392 Glow plug Bank #1 out of range low
- P1393 Glow plug Bank #2 out of range high
- P1394 Glow plug Bank #2 out of range low
- P1395 Glow plug monitor fail bank #1 absolute test
- P1396 Glow plug monitor fail bank #2 absolute test

	P1397	KOER glow plug test aborted	P1502
		Glow plug high side out of range high	P1504
		DPFE sensor circuit low voltage detected	P1505
		DPFE sensor circuit high voltage detected	P1506
		DPFE sensor hoses reversed	P1507
		DPFE sensor upstream hose off or plugged	P1512
		DPFE sensor downstream hose off or plugged	P1513
		Exhaust gas recirculation no flow detected	P1516
		EGR flow out of self test range	P1517
		EGR control circuit malfunction	P1518
		EGR barometric pressure sensor VREF voltage	P1519
	P1411		P1520
	P1413	5 5 5	P1525
	P1414		P1527
		Evaporative emission control system leak detected (small leak)	P1528
		Evaporative emission control system purge control valve malfunction	P1529
		Purge flow sensor circuit low input	P1530
82	P1445	5	P1531
		Unable to bleed up fuel tank vacuum	P1536
		Evaporative emission control system vent control valve circuit mal-	P1537
	function		P1538
		Unable to bleed up vacuum in tank	P1539
		Evaporative emission control system purge control leak detected	P1540
	(gross l		P1549
	, e	Unable to pull vacuum in tank	P1550
		Wide open throttle A/C cutout circuit malfunction	P1601
		A/C pressure sensor circuit high input	P1602
			P1605
		A/C pressure sensor circuit low input A/C pressure sensor insufficient pressure shapes	P1608
		A/C pressure sensor insufficient pressure change KOEP A/C shutch fail A/C domand out of solf test range	P1610
		KOER A/C clutch fail – A/C demand out of self test range	P1611
		Low A/C cycling period	P1612
		Fan secondary high with fan(s) off (VLCM)	P1613
		Low fan control primary circuit malfunction	P1614
		High fan control primary circuit malfunction	P1615
		Fan secondary low with low fan on	P1616
		Fan secondary low with high fan on	P1617
		Open power ground to VLCM (VLCM)	P1618
		VSS intermittent	P1619
	P1501	KOER fail vehicle speed seen during KOER test	P1620
			11020

502	KOER fail due to auxiliary powertrain control module active
504	Idle air control circuit malfunction
505	Idle air control system at adaptive clip
506	Idle air control overspeed error
507	Idle air control underspeed error
512	Inlet manifold runner control malfunction (Bank #1 stuck closed)
513	Inlet manifold runner control malfunction (Bank #2 stuck closed)
516	Inlet manifold runner control input error (Bank #1)
517	Inlet manifold runner control input error (Bank #2)
518	Inlet manifold runner control malfunction (stuck open)
519	Inlet manifold runner control malfunction (stuck closed)
520	Inlet manifold runner control circuit malfunction
525	KOER or cont. mon. fail charge air bypass valve
527	AWS solenoid circuit malfunction
528	PONLY solenoid circuit malfunction
529	SCAIR solenoid circuit malfunction
530	A/C clutch circuit malfunction
531	KOER fail pedal position sensor moved
536	PBA fail
537	Inlet manifold runner control malfunction (bank 2 stuck open)
538	Inlet manifold runner control malfunction (bank 1 stuck open)
539	Power to A/C clutch circuit overcurrent (VLCM)
540	Air bypass valve circuit malfunction
549	Intake manifold communication control circuit malfunction
550	Power steering pressure switch out of self test range
601	ECM/TCM serial communication error
602	Imm/TCM serial communication error
605	Keep alive memory test fail
608	Internal control module malfunction
610	Flash EPROM reprogramming error
611	Flash EPROM reprogramming error
612	Flash EPROM reprogramming error
613	Flash EPROM reprogramming error
614	Flash EPROM reprogramming error
615	Flash EPROM reprogramming error
616	Flash EPROM reprogramming error
617	Flash EPROM reprogramming error
618	Flash EPROM reprogramming error
610	Elash EDDOM reprogramming arror

P1619Flash EPROM reprogramming errorP1620Flash EPROM reprogramming error

- P1621 Immobilizer code word / ID write failure
- P1622 Immobilizer ID unmatched
- P1623 Immobilizer code word / ID write failure
- P1625 B+ supply to VLCM fan circuit malfunction (VLCM)
- P1625 B+ supply to VLCM A/C circuit malfunction (VLCM)
- P1630 Alternator #1 circuit malfunction
- P1631 Alternator #2 circuit malfunction
- P1634 Data output link failure flag
- P1645 F/P resistor switch circuit malfunction
- P1650 Power steering pressure switch out of self test range
- P1651 Power steering pressure switch input malfunction
- P1662 KOEO fail injector driver unit relay test
- P1663 FDCS fail
- P1667 CI fail
- P1668 EEC/IDM communications fault
- P1670 EF fail
- P1680 Metering oil pump malfunction
- P1681 Metering oil pump malfunction
- P1682 Metering oil pump malfunction
- P1683 MOP thermosensor circuit malfunction
- P1684 MOP position sensor circuit malfunction
- P1685 MOP stepping motor circuit malfunction
- P1686 MOP stepping motor circuit malfunction
- P1687 MOP stepping motor circuit malfunction
- P1688 MOP stepping motor circuit malfunction
- P1689 MOP stepping motor circuit malfunction
- P1690 KOEO waste gate fail
- P1691 SPCNT solenoid circuit malfunction
- P1692 SEXEC solenoid circuit malfunction
- P1693 SINEC solenoid circuit malfunction
- P1694 SINLF solenoid circuit malfunction
- P1700 Transmission concern
- P1701 Reverse engagement error
- P1702 Transmission concern
- P1703 Brake switch out of range
- P1704 Digital TRS failed to transition state
- P1705 MLPS fail out of range
- P1706 E4OD fail vehicle speed excessive in park
- P1708 Clutch switch circuit malfunction
- P1709 PNP switch out of range

- P1710 Transmission concern
- P1711 KOER fail transmission oil temperature higher or lower than expected
- P1714 SS1 inductive signature malfunction
- P1715 SS2 inductive signature malfunction
- P1720 VSS (meter) circuit malfunction
- P1727 CCS inductive signature malfunction
- P1728 E4OD converter clutch control excessive slippage
- P1729 4x4 fail
- P1730 4x4 low error
- P1731 1-2 shift error
- P1732 2-3 shift error
- P1733 3-4 shift error
- P1735 1st gear switch circuit malfunction
- P1736 2nd gear switch circuit malfunction
- P1738 Shift time error
- P1740 TCC inductive signature malfunction
- P1741 TCC control error
- P1742 TCC mechanical failure solenoid struck on
- P1743 LOOP solenoid circuit malfunction
- P1744 Excessive slip across CC
- P1745 Transmission concern
- P1746 ETV circuit open
- P1747 ETV circuit shorted
- P1748 EPC fail
- P1749 EPC solenoid failed low
- P1751 SSB shift solenoid 1 fault
- P1754 CCS fail
- P1756 SSB shift solenoid 2 fault
- P1760 Transmission concern
- P1761 Shift solenoid C performance
- P1762 Transmission concern
- P1765 Solenoid 5 circuit malfunction
- P1766 Shift solenoid D performance
- P1767 Transmission concern
- P1770 Clutch solenoid circuit malfunction
- P1775 Shift 1 circuit malfunction
- P1776 Shift 2 circuit malfunction
- P1779 OCIL fail
- P1780 E4OD transmission control switch fail

- P1781 4x4 circuit out of range
- P1783 Transmission oil temperature over temperature
- P1784 Transmission 1st and Reverse mechanical fail
- P1785 Transmission 1st and 2nd mechanical failure
- P1887 Transmission 3rd or 4th gear electrical fault
- P1788 VFS #2 open circuit
- P1788b Transmission 2-3 timing or CCS circuit open
- P1789 VFS #2 short circuit
- P1789b Transmission 2-3 timing or CCS circuit shorted
- P1790 TPS (mechanical) circuit malfunction
- P1791 TPS (electrical) circuit malfunction
- P1792 Atmospheric pressure circuit malfunction
- P1793 Intake air volume circuit malfunction
- P1794 Battery voltage circuit malfunction
- P1795 Idle switch circuit malfunction
- P1796 Kick down switch circuit malfunction
- P1797 Neutral switch circuit malfunction
- P1798 Water thermosensor circuit malfunction
- P1799 Hold switch circuit malfunction
- P1900 Transmission concern
 - U1020 Module communications network concern
 - U1021 SCP indicates lack of A/C clutch status input
 - U1039 SCP indicates VSS signal missing or incorrect
 - U1051 SCP indicates brake switch signal missing
 - U1073 SCP indicates lack of engine coolant fan status
 - U1131 SCP indicates lack of fuel pump status response
 - U1135 SCP indicates ignition switch signal missing
 - U1256 SCP indicates A communications error
 - U1451 Lack of response at PATS module engine off
 - U1850 Invalid or missing fuel system data