Technical Bulletin Listing 2008

May, 2008

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Technical Bulletin # 1172

Transmission: *RE5R05A*
Subject: *Installing Low/Reverse Clutch Sealing Rings*
Application: *Nissan, Infinity*
Issue Date: *May, 2008*

RE5R05A

Installing the Low/Reverse Sealing Rings

This transmission uses Black Teflon seal rings in several locations. Some of the sealing rings have scallops cut into the inner edge of the rings. Some rings are plain. Pay attention to the rings on the high and low reverse clutch support. The 2 rings closest to the clutch hub are the plain type. The 2 outer rings have the scallops on the inside edge of the ring.

The High and Low Reverse clutch support with rings

Scallop Cut Seals

Closeup of rings compare smooth with scallops on inside

Technical Bulletin # 1173

Transmission: *096/01M/098/01P*
Subject: *3-4 Flare*
Application: *Audi, VW*
Issue Date: *May, 2008*

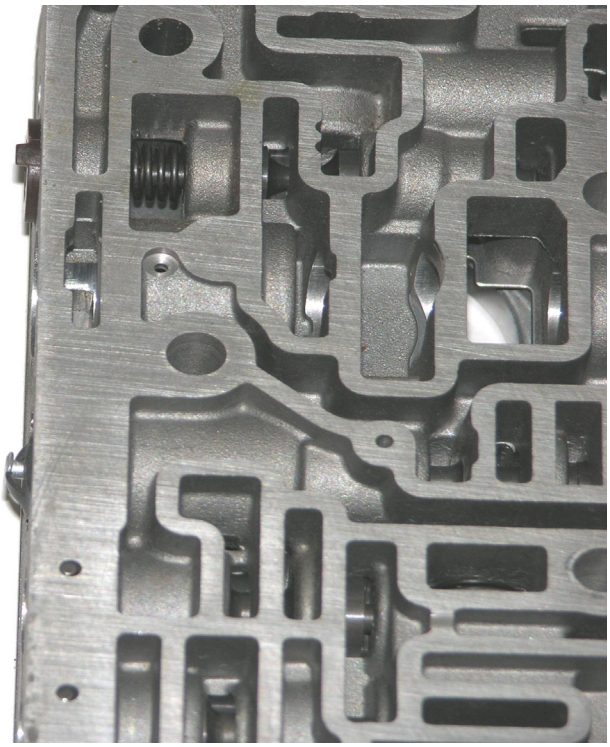
096/01M/098/01P

3-4 Flare

Some O96, O1M, 098, 01P transmissions may have a 3-4 flare. This may or may not be temperature sensitive. If no codes or no other shift problems are present, install a pressure gauge. During a test drive, see if the line pressure increases during the 3-4 flare (it is supposed to have a momentarily dip).

If the pressure increases, this may be due to a worn Pressure Regulator Bore or Worn Pressure Regulator Valve. Install a new or rebuilt valve body, or replace the pressure regulator valve with one from the aftermarket suppliers.

Pressure Regulator Valve



Technical Bulletin # 1174

Transmission: *450-43LE*
Subject: *Code Retrivial and Clearing the Codes*
Application: *2002-up Misubishi Fuso*
Issue Date: *May, 2008*

450-43LE

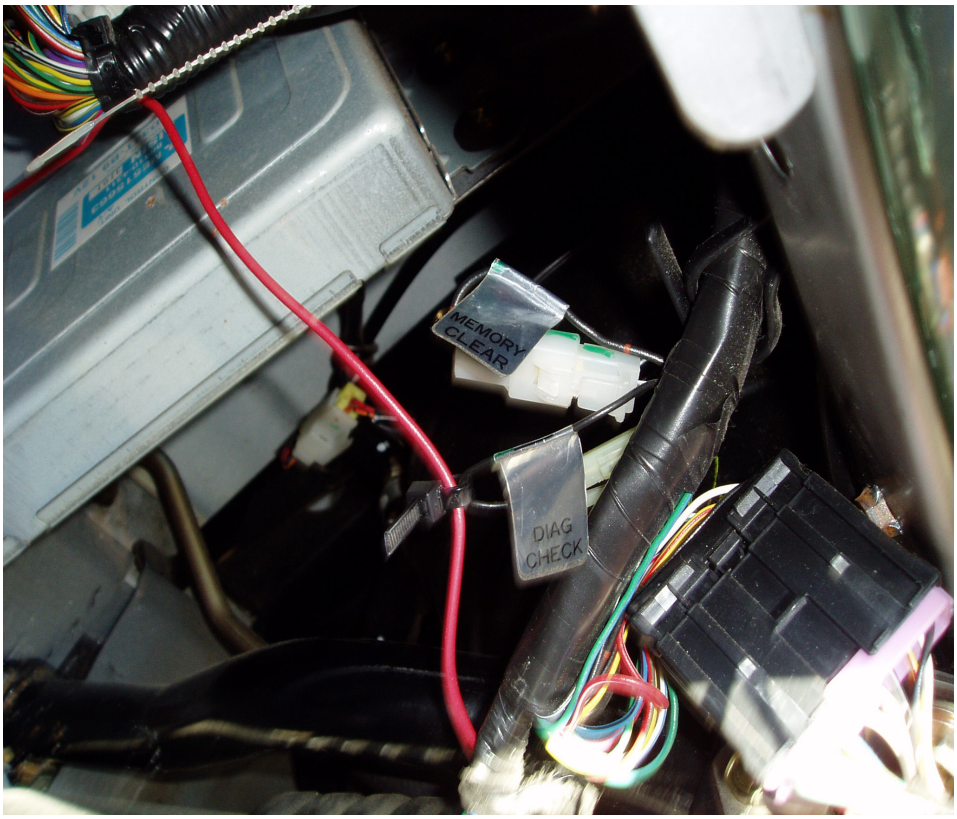
Code Retrivial and Clearing the Codes

Use the following procedure when retrieving codes on 2002 and up Mitsubishi Fusos.

To retrieve current codes:
1. Turn key on.
2. Unplug connector labeled “DIAG CHECK” (Lower left dash may have to be removed on some models.)
3. Use the chart on page three to read flashes from gear fault light at the bottom right of the instrument cluster.

To retrieve current and past codes:
1. Turn key on.
2. Unplug connector labeled “DIAG CHECK” & connector labeled “MEMORY CLEAR”.
3. Use the chart on page three below to read flashes from gear fault light at the bottom right of the instrument cluster.

To clear codes:
1. Turn the key off.
2. Connect both “DIAG CHECK” & “MEMORY CLEAR” connectors.
3. Turn the key on.
4. Disconnect the “MEMORY CLEAR” connector for 1 second then reconnect.
5. When the “MEMORY CLEAR” connector is reconnected for three seconds, the codes will clear from memory.



Locate the diagnostic connectors under the left side of the dash

Gear Fault Light

Read the flashes from the gear fault light at the bottom right of the instrument cluster.

"A Special thanks to Pedro at Quality Transmission in Chicago, IL"

Diagnostic Code Chart				
Diagnostic Code #		Definition	Cause	Failsafe
01				
11		Power supply voltage.	Powers supply voltage remains below 7.5V for longer than 1 second with range selector in in any position other than Park or Neutral.	
12		Vehicle speed sensor 1.	Vehicle speed sensor 1 signal shows sudden drop in speed.	1. Maintains gear selected just before malfunction. 2. Turns off shift solenoids 1 & 2 when engine speed sensor detects a value less than 1000 RPM.
13		Fluid temperature sensor fault.	Transmission fluid temperature indicates higher than 275 F (135 C) or lower than -58 F (50 C).	None
15		Engine speed sensor fault.	Engine speed sensor signal indicates a speed lower than 300 RPM when range selector shows any gear other than Park or Neutral and output shaft speed sensor indicates 1000 RPM or higher.	Prohibits 2-3 shift timing control.
24	Except FE640	Accelerator position sensor circuit fault.	When accelerator position sensor is less than 0.4 V or higher than 4.6V.	1. Stacked shifts. 2. Line pressure at maximum. 3. Lock up control change.
	FE640	Accelerator position sensor circuit fault.	When accelerator position sensor signal to ECM is faulty.	1. Stacked shifts. 2. Line pressure at maximum. 3. Lock up prohibited except at high speeds.
25		Vehicle speed sensor 2.	Vehicle speed sensor 2 signal shows sudden drop in speed.	1. Maintains gear selected just before malfunction. 2. Turns off shift solenoids 1 & 2 when engine speed sensor detects a value less than 1000 RPM.
31		Shift solenoid 1 circuit fault.	When open or short is detected in shift solenoid 1 circuit.	1. Malfunctioning shift solenoid is turned off. 2.Lock up and timing solenoids are turned off.
32		Shift solenoid 2 circuit fault.	When open or short is detected in shift solenoid 1 circuit.	1. Malfunctioning shift solenoid is turned off. 2. Lock up and timing solenoids are turned off.
34		Line pressure control solenoid circuit.	Solenoid/wiring open or shorted.	Line pressure commanded to maximum.
35		Lock up solenoid circuit fault.	When open or short is detected in lock up solenoid circuit.	Lock up solenoid is commanded off at all times.
43		Inhibitor switch fault.	No signal is read by TCM.	Operates as if in D range and prohibits 4th gear.
			Two or more signals or implausible signal read by TCM.	Shift strategy will vary based on signals received.
50		PTO solenoid circuit fault.	When open or short is detected in PTO solenoid circuit.	PTO solenoid is commanded off.
51		Timing solenoid circuit fault.	When open or short is detected in 2-3 timing solenoid circuit.	Timing solenoid is commanded off.
54		Exhaust brake cut off signal fault.	Exhaust brake activated when cut off signal is activated.	1. Prohibits exhaust brake cut off control. 2. Lock up allowed only at high speeds.
58		PWM signal fault.	Internal computer fault or wire breakage or short.	1. Stacked shifts. 2. Line pressure at maximum. 3. Prohibits 2-3 timing solenoid operation.

Technical Bulletin # 1175

Transmission: *A245E/A246E*
Subject: *Harsh Shift and MIL "ON" Code P2716*
Application: *2005-2007 Toyota Corolla nd Matrix*
Issue Date: *May, 2008*

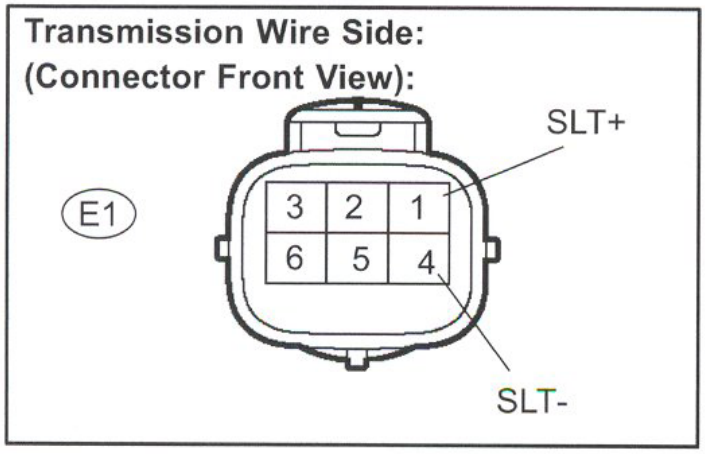
A245E/A246E

Harsh Shift and MIL "ON" Code P2716

Some 2005-2007 model year Corollas and Matrix vehicles equipped with the A245/A246 transaxle and 1.8L (1ZZ-FE) engine may come into your shop with a harsh shifting condition and code P2716-Pressure control solenoid D circuit fault. (SLT solenoid). A known fault in the Powertrain Control Module has been addressed by Toyota for this problem and requires PCM hardware replacement. Only after a proper SLT solenoid diagnoses has been performed should the PCM be replaced. Refer to the diagnostic procedures below for SLT solenoid diagnoses and the chart to see if your vehicles PCM numbers are affected by this bulletin.

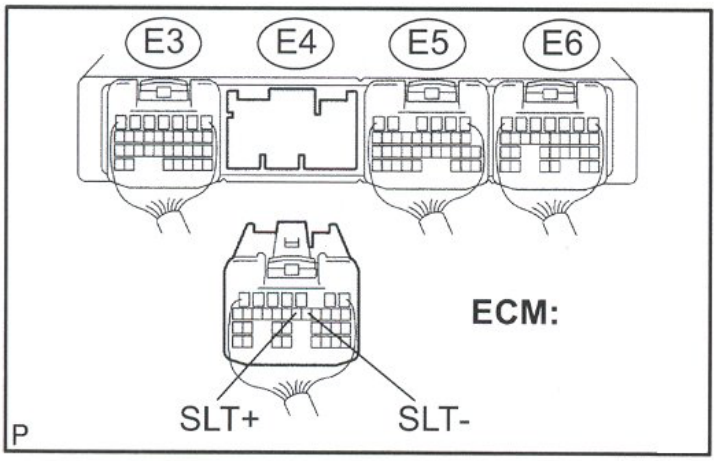
1. Disconnect the transaxle harness connector.
2. Measure resistance between terminals 1 & 4 on the transaxle side of the harness connector. (Figure 1)
3. Is resistance between 5.0 and 5.6 OHMS? If yes, go to step 4. If no, repair transaxle internal wiring or SLT solenoid.
4. Reconnect transaxle harness connector.
5. Disconnect PCM harness connector E4. (Figure 2)
6. Measure resistance between terminals 13 (SLT +) & 12 (SLT -). (Figure 2)
7. Is resistance between 5.0 & 5.6 OHMS? If yes go to step 8. If no, repair open circuit or bad connections.
8. Measure resistance between terminal 13 (SLT +) & body ground.
9. Is resistance above 10k OHMS or open? If no, go to step 10. If yes, repair short to ground on SLT + circuit.
10. Measure resistance between terminal 12 (SLT -) & body ground.
11. Is resistance above 10k OHMS or open? If no, go to step 12. If yes, repair short to ground on SLT – circuit
12. Use the chart in Figure 3 to see if your PCM's part numbers match those affected by this bulletin and replace PCM.

Figure 1



Measure resistance between terminals 1 & 4 on the transaxle side of the harness connector.

Figure 2



Disconnect PCM harness connector E4.

Figure 3

MODEL YEAR	MODEL	TRANS	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
2005, 2006, 2007	Corolla	A/T	89661–02C0# 89661–02C9# 89661–02K10	89661–02K11	Computer, Engine Control (ECM/PCM)	1
			89661–02C1# 89661–02D0# 89661–02K20	89661–02K21		1
	Matrix		89661–0112# 89661–02D4# 89661–02K30	89661–02K31		1
			89661–0113# 89661–02D5# 89661–02K40	89661–02K41		1

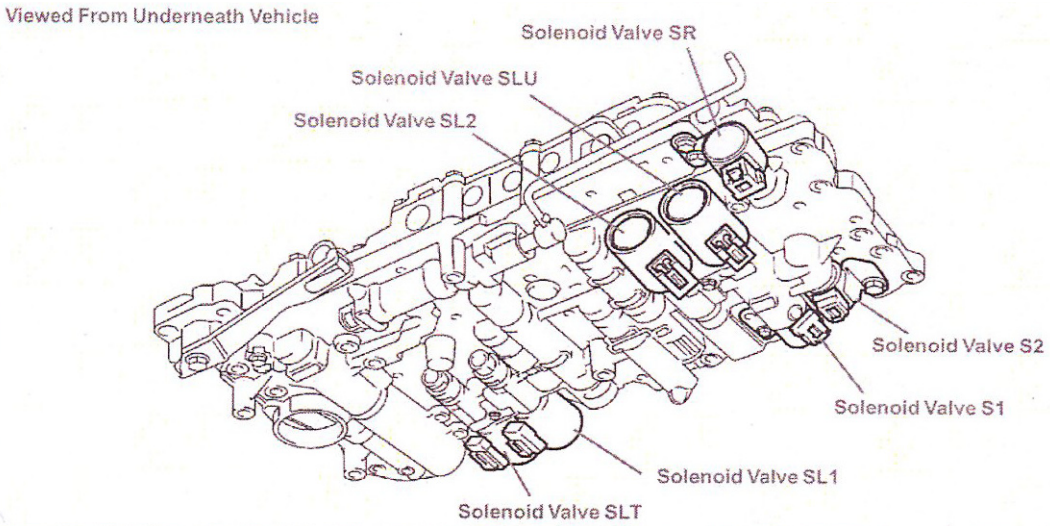
Technical Bulletin # 1176

Transmission: *A750*
Subject: *Solenoid ID*
Application: *Toyota*
Issue Date: *May, 2008*

A750

Solenoid ID

Use this illustration to identify the solenoids and their proper names.



REPAIR MANUAL SOLENOID NAME	PART CATALOG PART DESCRIPTION
S1	3 Way Transmission Solenoid
S2	Transmission Solenoid #3
SL1	Clutch Control Solenoid #1
SL2	Clutch Control Solenoid #2
SLT	Line Pressure Control Solenoid
SLU	Lock Up Control Solenoid
SR	3 Way Transmission Solenoid #2

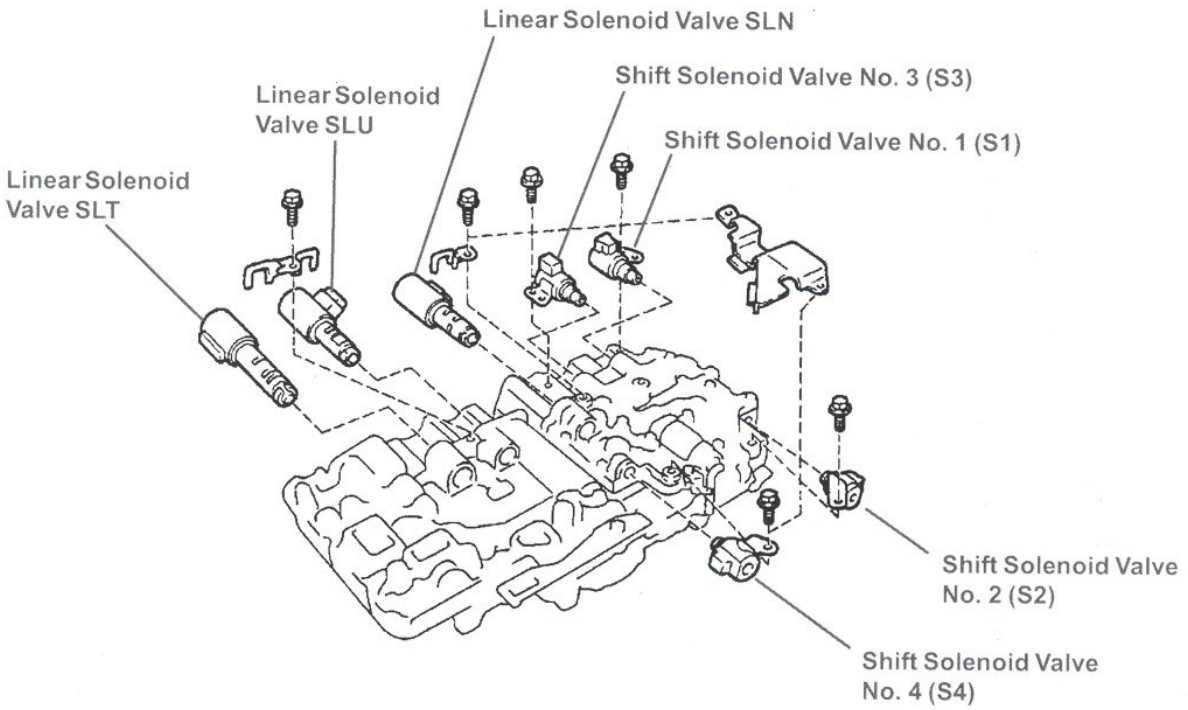
Technical Bulletin # 1177

Transmission: *A650E*
Subject: *Solenoid ID*
Application: *Lexus*
Issue Date: *May, 2008*

A650E

Solenoid ID

Use the following illustration to properly identify the solenoids and their names.



REPAIR MANUAL SOLENOID NAME	PART CATALOG DESCRIPTION
S1	Solenoid Assembly, Automatic Transmission 3–Way No. 1
S2	Solenoid Assembly, Transmission No. 3 (No. 1)
S3	Solenoid Assembly, Automatic Transmission 3–Way No. 2
S4	Solenoid Assembly, Transmission No. 3 (No. 2)
SLN	Solenoid Assembly, Shift Control
SLT	Solenoid Assembly, Line Pressure Control
SLU	Solenoid Assembly, Lock–up Control