# Technical Bulletin Listing

## December 2005

<table>
<thead>
<tr>
<th>Transmission</th>
<th>Page #</th>
<th>Pages</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>January</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4L30E</td>
<td>891</td>
<td>4</td>
<td>Computer pin chart (90-93 Rodeo &amp; Trooper)</td>
</tr>
<tr>
<td>4L30E</td>
<td>892</td>
<td>4</td>
<td>Computer pin chart (92-95 BMW)</td>
</tr>
<tr>
<td>4L30E</td>
<td>893</td>
<td>4</td>
<td>Computer pin chart (94-95 Rodeo, Trooper, Amigo &amp; Passport)</td>
</tr>
<tr>
<td>4L30E</td>
<td>894</td>
<td>4</td>
<td>Computer pin chart (97-98 Catera)</td>
</tr>
<tr>
<td><strong>February</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F4A40/50 Series</td>
<td>895</td>
<td>1</td>
<td>Vehicle moves forward or backward in park</td>
</tr>
<tr>
<td>4R100/E4OD</td>
<td>896</td>
<td>1</td>
<td>Clicking first only</td>
</tr>
<tr>
<td>5R55N/S/W</td>
<td>897</td>
<td>1</td>
<td>Tightening the valve body</td>
</tr>
<tr>
<td>4R55E &amp; 5R55E</td>
<td>898</td>
<td>2</td>
<td>2-3 flare, ratio codes</td>
</tr>
<tr>
<td>4L60/65E</td>
<td>899</td>
<td>3</td>
<td>No reverse, second gear or fourth gear</td>
</tr>
<tr>
<td>5R55N/S/W</td>
<td>900</td>
<td>1</td>
<td>Solenoid body</td>
</tr>
<tr>
<td>A541E</td>
<td>901</td>
<td>2</td>
<td>Direct clutch (C2) improvements</td>
</tr>
<tr>
<td>All</td>
<td>902</td>
<td>1</td>
<td>Drive-by-wire throttle system warning</td>
</tr>
<tr>
<td>Manual Transmission</td>
<td>903</td>
<td>2</td>
<td>Manual transmission operating characteristics</td>
</tr>
<tr>
<td>Aisin AF33/35</td>
<td>904</td>
<td>2</td>
<td>Automatic transaxle shift hesitation/engine flare during 2-3 shift at light throttle and/or harsh reverse to drive shift</td>
</tr>
<tr>
<td><strong>March</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5R55W/S</td>
<td>905</td>
<td>2</td>
<td>Normal operation</td>
</tr>
<tr>
<td>Torqshift</td>
<td>906</td>
<td>3</td>
<td>Normal operation</td>
</tr>
<tr>
<td>CD4E/LA4AEL</td>
<td>907</td>
<td>1</td>
<td>Valve body interchange</td>
</tr>
<tr>
<td>CD4E/LA4AEL</td>
<td>908</td>
<td>1</td>
<td>TCC slip codes, gear ratio error codes, TSS application</td>
</tr>
<tr>
<td>ZF4HP16</td>
<td>909</td>
<td>3</td>
<td>Transaxle fluid level check</td>
</tr>
<tr>
<td>4T65E</td>
<td>910</td>
<td>2</td>
<td>Transmission oil leaking from the vent</td>
</tr>
<tr>
<td>KM Series, A4AF2, A4BF1, A4BF2, F4A41, F4A42, F4A51</td>
<td>911</td>
<td>1</td>
<td>Automatic transaxle control module adaptive learning</td>
</tr>
<tr>
<td><strong>April</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>096, 097, 098, 01M, 01N, 01P</td>
<td>912</td>
<td>1</td>
<td>Binds in reverse</td>
</tr>
<tr>
<td>Auto 5 Spd, HMD, 5L40E</td>
<td>913</td>
<td>3</td>
<td>Launch shudder felt on hard acceleration</td>
</tr>
<tr>
<td>All Toyota Electronically Controlled Transmissions</td>
<td>914</td>
<td>1</td>
<td>No 4th gear; no 4th gear command</td>
</tr>
<tr>
<td>Transmission</td>
<td>Page</td>
<td># Pages</td>
<td>Subject</td>
</tr>
<tr>
<td>--------------</td>
<td>------</td>
<td>---------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>April</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>915</td>
<td>1</td>
<td>Driving in reverse, transmission neutralizes or engine bucks/cuts out</td>
</tr>
<tr>
<td>4T65E</td>
<td>916</td>
<td>3</td>
<td>Revised case side cover replacement procedure</td>
</tr>
<tr>
<td>F4A42</td>
<td>917</td>
<td>2</td>
<td>Accumulator piston identification</td>
</tr>
<tr>
<td>Automatic</td>
<td>918</td>
<td>1</td>
<td>Delayed upshift after cold start is normal</td>
</tr>
<tr>
<td>Transmissions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Toyota</td>
<td>919</td>
<td>3</td>
<td>ECM reset memory function</td>
</tr>
<tr>
<td>VT25E</td>
<td>920</td>
<td>4</td>
<td>Low speed grind noise and/or hesitation while driving</td>
</tr>
<tr>
<td>CVT</td>
<td>921</td>
<td>3</td>
<td>Product update - CVT shift solenoid</td>
</tr>
<tr>
<td>41TE</td>
<td>922</td>
<td>1</td>
<td>Reusable automatic transmission oil pan gasket</td>
</tr>
<tr>
<td>Allison LCT 1000</td>
<td>923</td>
<td>1</td>
<td>Transmission fluid leak diagnosis</td>
</tr>
<tr>
<td>MP1A, M6HA, 3 Shaft</td>
<td>924</td>
<td>1</td>
<td>MIL comes on with DTC P0740</td>
</tr>
<tr>
<td>096, 097, 098, 01M, 01N, 01P</td>
<td>925</td>
<td>4</td>
<td>Binds in reverse</td>
</tr>
<tr>
<td>June</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA4AEL</td>
<td>926</td>
<td>1</td>
<td>Input speed sensor wiring identification</td>
</tr>
<tr>
<td>Allison LCT 1000</td>
<td>927</td>
<td>1</td>
<td>Cannot clear codes</td>
</tr>
<tr>
<td>4T60/65E</td>
<td>928</td>
<td>1</td>
<td>No 4th</td>
</tr>
<tr>
<td>4R44E/5R55E</td>
<td>929</td>
<td>2</td>
<td>Flashing “OD OFF” lamp - DTC 645-648</td>
</tr>
<tr>
<td>FN4AEL</td>
<td>930</td>
<td>2</td>
<td>No shift from 2nd or 3rd - DTC P0732/P0733/P0734</td>
</tr>
<tr>
<td>450-43LE</td>
<td>931</td>
<td>2</td>
<td>Low line pressure</td>
</tr>
<tr>
<td>4L60E/4L65E</td>
<td>932</td>
<td>1</td>
<td>Second gear start, lack/loss of power when accelerating from a stop</td>
</tr>
<tr>
<td>4L60E/4L65E</td>
<td>933</td>
<td>1</td>
<td>2-3 shift clunk</td>
</tr>
<tr>
<td>42RE &amp; 45RFE</td>
<td>934</td>
<td>2</td>
<td>NV 247 transfer case shudder</td>
</tr>
<tr>
<td>July</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AX4N, 4F50N &amp; AX4S</td>
<td>935</td>
<td>5</td>
<td>Torque converter clutch not engaging and/or DTC P0741 or P1744</td>
</tr>
<tr>
<td>5R55N/W/S</td>
<td>936</td>
<td>1</td>
<td>Multiple solenoid codes</td>
</tr>
<tr>
<td>4L80E</td>
<td>937</td>
<td>2</td>
<td>Slips, flares when shifting into 3rd gear, damaged direct clutches</td>
</tr>
<tr>
<td>450-43LE</td>
<td>938</td>
<td>1</td>
<td>Erratic TCC operation</td>
</tr>
<tr>
<td>4R44E, 4R55E, 5R55E</td>
<td>939</td>
<td>1</td>
<td>Mainline and EPC pressure testing</td>
</tr>
<tr>
<td>TAAT, MP6, MP7</td>
<td>940</td>
<td>1</td>
<td>Fluid out the vent, slipping, erratic fluid level</td>
</tr>
<tr>
<td>TAAT, MP6, MP7</td>
<td>941</td>
<td>1</td>
<td>After rebuild slips forward or reverse, possible ratio codes</td>
</tr>
<tr>
<td>4T65E</td>
<td>942</td>
<td>1</td>
<td>Oil out vent</td>
</tr>
<tr>
<td>TAAT, MP6, MP7</td>
<td>943</td>
<td>1</td>
<td>Leak in bellhousing area</td>
</tr>
<tr>
<td>August</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4L60E</td>
<td>944</td>
<td>2</td>
<td>Burned 3-4 Clutch, Slip DTC’s Set</td>
</tr>
<tr>
<td>4T80E</td>
<td>945</td>
<td>1</td>
<td>Erractic VSS Signal</td>
</tr>
<tr>
<td>4L80E</td>
<td>946</td>
<td>1</td>
<td>Servo Updates</td>
</tr>
<tr>
<td>4L80E</td>
<td>947</td>
<td>1</td>
<td>Slip Codes</td>
</tr>
<tr>
<td>4T40E/4T45E</td>
<td>948</td>
<td>1</td>
<td>Lower Roller Clutch Rotation</td>
</tr>
<tr>
<td>4T40E/4T45E</td>
<td>949</td>
<td>4</td>
<td>Multiple Codes, Slips, Failsafe</td>
</tr>
</tbody>
</table>

Copyright © 2005 ATRA. All Rights Reserved.
## Technical Bulletin List

<table>
<thead>
<tr>
<th>Transmissions</th>
<th>Page #</th>
<th># Pages</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>August</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4T40E/4T45E</td>
<td>950</td>
<td>1</td>
<td>Slips in Forward, Cracked Oil Feed Tube</td>
</tr>
<tr>
<td>4T65E</td>
<td>951</td>
<td>2</td>
<td>P0741, Excessive TCC Slip</td>
</tr>
<tr>
<td><strong>September</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4T80E</td>
<td>952</td>
<td>1</td>
<td>Refill Procedures</td>
</tr>
<tr>
<td>5L40E</td>
<td>953</td>
<td>1</td>
<td>No Reverse</td>
</tr>
<tr>
<td>5R55N</td>
<td>954</td>
<td>1</td>
<td>No 4th and No 5th</td>
</tr>
<tr>
<td>5R55N/W/S</td>
<td>955</td>
<td>4</td>
<td>No and/or Slow Engagement</td>
</tr>
<tr>
<td>AX4N</td>
<td>956</td>
<td>2</td>
<td>5R55N/W/S Flow Control Valve</td>
</tr>
<tr>
<td>AX4S</td>
<td>957</td>
<td>3</td>
<td>Delayed Engagement</td>
</tr>
<tr>
<td>AX4S</td>
<td>958</td>
<td>1</td>
<td>No Rear Lube Tube</td>
</tr>
<tr>
<td>LCT 1000</td>
<td>959</td>
<td>2</td>
<td>No Movement</td>
</tr>
<tr>
<td>LCT 1000</td>
<td>960</td>
<td>3</td>
<td>Pump Noise</td>
</tr>
<tr>
<td><strong>October</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF23/33-5 &amp; AW5</td>
<td>961</td>
<td>1</td>
<td>MIL ON or No Shift After Service</td>
</tr>
<tr>
<td>41TE</td>
<td>962</td>
<td>1</td>
<td>Code 28 and P0705</td>
</tr>
<tr>
<td>4R100</td>
<td>963</td>
<td>1</td>
<td>#8 Thrust Washer Removed</td>
</tr>
<tr>
<td>ZF5HP19</td>
<td>964</td>
<td>1</td>
<td>No TSS signal/B Clutch Drum Change</td>
</tr>
<tr>
<td>5R55N</td>
<td>965</td>
<td>1</td>
<td>Ticking Noise in P&amp;N at Idle</td>
</tr>
<tr>
<td>4T40/45E</td>
<td>966</td>
<td>1</td>
<td>No 3rd or Direct Clutch Burned</td>
</tr>
<tr>
<td>5R55N</td>
<td>967</td>
<td>1</td>
<td>No 3rd</td>
</tr>
<tr>
<td><strong>November</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4T60/4T60E/4T65E</td>
<td>968</td>
<td>2</td>
<td>Driven Sprocket Support Interchange/Lube Problems</td>
</tr>
<tr>
<td>4T60/4T60E/4T65E</td>
<td>969</td>
<td>1</td>
<td>No Reverse, No Forward, No Upshifts, No 2nd, No 3rd, No 4th</td>
</tr>
<tr>
<td>4T40E/4T45E</td>
<td>970</td>
<td>1</td>
<td>Input Sprag Rotation</td>
</tr>
<tr>
<td>AXOD-AXODE/AX4S</td>
<td>971</td>
<td>1</td>
<td>Proper Torque Sequence on Valve Body</td>
</tr>
<tr>
<td>-AX4N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>325-4L</td>
<td>972</td>
<td>1</td>
<td>Pin Location in Case</td>
</tr>
<tr>
<td>01M/096</td>
<td>973</td>
<td>1</td>
<td>Rebuilding Tips</td>
</tr>
<tr>
<td><strong>December</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4L30E</td>
<td>974</td>
<td>1</td>
<td>Wrong gear start / wrong shift pattern</td>
</tr>
<tr>
<td>4L60E</td>
<td>975</td>
<td>1</td>
<td>Upshifts to 2nd in Manual Low</td>
</tr>
<tr>
<td>E4OD</td>
<td>976</td>
<td>1</td>
<td>No 3rd &amp; Rev. After Overhaul</td>
</tr>
<tr>
<td>F4E-III</td>
<td>977</td>
<td>1</td>
<td>After Rebuild, Slipping 2nd and 4th, No 2nd and 4th</td>
</tr>
<tr>
<td>F4E-III</td>
<td>978</td>
<td>3</td>
<td>Accumulator Reference</td>
</tr>
<tr>
<td>F4E-III</td>
<td>979</td>
<td>1</td>
<td>No Line Rise w/ Good EPC Command</td>
</tr>
<tr>
<td>ALL</td>
<td>980</td>
<td>14</td>
<td>OBDII Codes</td>
</tr>
</tbody>
</table>
4L30E
Wrong gear start/wrong shift pattern

Unlike the other GM transmissions which use a pair of normally open shift solenoids, the 4L30-E uses one normally open and one normally closed solenoid. It is critical that each solenoid is in its proper place. Although there are tabs on the solenoids to ensure proper location (fig 1.) these tabs can be easily bent allowing them to be installed incorrectly. When installed correctly the tabs will face each other (fig 2.) It is almost impossible to tell the two solenoids apart other than by the alignment tabs, the normally closed 1-2/3-4 has its tab at 10 o'clock and the normally open 2-3 solenoid is at the 4 o'clock position (fig 1.)
4L60E

Upshifts to 2nd in Manual Low

Some customers may express a concern about how their vehicle shifts in the Manual Low or Manual 2 Range. Be aware that the PCM will upshift the transmission to 2nd gear in the Manual Low range. This is normal if the PCM detects a vehicle speed in excess of 30-35 mph.

Some vehicles will not be shifted to First gear (even at a stop) when the selector is in the Manual 2 range. The PCM does this to create additional traction when on ice or slick roads.
E4OD

No 3rd & Rev. After Overhaul

Some vehicles with the E4OD transmission may loose 3rd and reverse after overhaul. This condition may be caused by a stuck direct accumulator, a leak in the direct clutch circuit or a missing feed hole in the direct drum support. If the direct drum is replaced, inspect and make sure the clutch feed hole is present.
F4E-III

After Rebuild, Slipping 2nd and 4th, No 2nd and 4th

A clogged orifice can cause a slipping 2nd and 4th, No 2nd and 4th

The Orifice size is .020” in

Always take the time to remove the servo apply orifice.
F4E-III
Accumulator Reference

1-2 Accumulator (Red)

N-D Accumulator (Green)

2-3 Accumulator (Green)

N- R Accumulator (Blue)
Accumulators - 1-2
The 1-2 accumulator reduces shift shock when shifting from first to second gear. The accumulator piston is normally pressed to the right by line pressure. When there is a shift from first to second gear, the 2-4 band engagement pressure pushes the accumulator piston slowly to the left. As a result, the 2-4 band engagement pressure builds up slowly, reducing the shift shock when there is a shift from first to second gear.

Accumulators - 2-3
The 2-3 accumulator reduces shift shock when shifting from second to third gear. The accumulator piston is normally pressed to the left by line pressure. When there is a shift from second to third gear, 3-4 clutch engagement pressure pushes the accumulator piston slowly to the right. As a result, the 3-4 clutch engagement pressure builds up slowly, reducing the shift shock when there is a shift from second to third gear.

<table>
<thead>
<tr>
<th>Spring Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>3.425</td>
</tr>
<tr>
<td>Diameter</td>
<td>0.630</td>
</tr>
<tr>
<td>Coil</td>
<td>0.080</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer Length</td>
<td>2.729</td>
</tr>
<tr>
<td>Outer Diameter</td>
<td>0.580</td>
</tr>
<tr>
<td>Outer Coil</td>
<td>0.078</td>
</tr>
<tr>
<td>Inner Length</td>
<td>2.665</td>
</tr>
<tr>
<td>Inner Diameter</td>
<td>0.396</td>
</tr>
<tr>
<td>Inner Coil</td>
<td>0.052</td>
</tr>
</tbody>
</table>
Accumulators - N-D
The NEUTRAL-DRIVE (N-D) accumulator moderates a rapid increase in hydraulic pressure during forward clutch engagement. This reduces shift shock when the D range is selected from NEUTRAL. In the NEUTRAL position, line pressure is constantly applied to the right side of the accumulator piston, pushing it to the left. When the D range is selected from NEUTRAL, line pressure which engages the forward clutch is applied to the left side of the N-D accumulator by the manual valve. As a result, the combination of line pressure and spring force overcome the line pressure on the right, moving the accumulator piston gradually to the right. This movement of the piston moderates a rapid increase in line pressure.

Accumulators - N-R
The NEUTRAL-REVERSE (N-R) accumulator reduces shift shock when shifting from NEUTRAL to the REVERSE range (R). The accumulator piston is normally pressed to the left by spring force and line pressure. When there is a shift from NEUTRAL to REVERSE, the accumulator piston is pushed slowly to the right by the reverse clutch pressure. As a result, the reverse clutch pressure builds up slowly, reducing the shift shock when there is a shift to REVERSE.
F4E-III
No Line Rise w/ Good EPC Command

No line rise can be caused by a sticking pressure modifier valve or damaged spring. The Line Pressure Modulator Valve is responsible for modulating the EPC pressure and distributing it to the appropriate valves.

Check the valve for scoring and make sure the valve bore is clean of debris.
All OBDII Codes

When the federal government introduced the OBDII laws, one of the things they created was specific code definitions that all manufacturers must follow. OBDII Codes P0001 through P0999 were defined as follows and must be used by all manufactures. OBDII codes P1000 through P1999 can be defined by the manufacturers any way they choose.

P0001 - Fuel Volume Regulator Control Circuit/Open
P0002 - Fuel Volume Regulator Control Circuit Range/Performance
P0003 - Fuel Volume Regulator Control Circuit Low
P0004 - Fuel Volume Regulator Control Circuit High
P0005 - Fuel Shutoff Valve "A" Control Circuit/Open
P0006 - Fuel Shutoff Valve "A" Control Circuit Low
P0007 - Fuel Shutoff Valve "A" Control Circuit High
P0008 - Engine Positions System Performance Bank 1
P0009 - Engine Position System Performance Bank 2
P0010 - "A" Camshaft Position Actuator Circuit Bank 1
P0011 - "A" Camshaft Position - Timing Over - Advanced or System Performance Bank 1
P0012 - "A" Camshaft Position - Time Over - Retarded Bank 1
P0013 - "B" Camshaft Position - Actuator Circuit Bank 1
P0014 - "B" Camshaft Position - Timing Over - Advanced or System Performance Bank 1
P0015 - "B" Camshaft Position - Timing Over - Retarded Bank 1
P0016 - Crankshaft Position - Camshaft Position Correlation Bank 1 Sensor A
P0017 - Crankshaft Position - Camshaft Position Correlation Bank 1 Sensor B
P0018 - Crankshaft Position - Camshaft Position Correlation Bank 2 Sensor A
P0019 - Crankshaft Position - Camshaft Position Correlation Bank 2 Sensor B
P0020 - "A" Camshaft Position Actuator Circuit Bank 2
P0021 - "A" Camshaft Position - Timing Over - Advanced or System Performance Bank 2
P0022 - "A" Camshaft Position - Timing Over - Retarded Bank 2
P0023 - "B" Camshaft Position - Actuator Circuit Bank 2
P0024 - "B" Camshaft Position - Timing Over - Advanced or System Performance Bank 2
P0025 - "B" Camshaft Position - Timing Over - Retarded Bank 2
P0026 - Intake Valve Control Solenoid Circuit Range/Performance Bank 1
P0027 - Exhaust Valve Control solenoid Circuit Range/Performance Bank 1
P0028 - Intake valve Control Solenoid Circuit Range/Performance Bank 2
P0029 - Exhaust Valve Control Solenoid Circuit Range/Performance Bank 2
P0030 - HO2S Heater Control Circuit Bank 1 Sensor 1
P0031 - HO2S Heater Circuit Low Voltage Bank 1 Sensor 1
P0032 - HO2S Heater Circuit High Voltage Bank 1 Sensor 1
P0033 - Turbo Charger Bypass Valve Control Circuit
P0034 - Turbo Charger Bypass Valve Control Circuit Low
P0035 - Turbo Charger Bypass Valve Control Circuit High
P0036 - HO2S Heater Control Circuit Bank 1 Sensor 2
P0037 - HO2S Heater Circuit Low Voltage Bank 1 Sensor 2
P0038 - HO2S Heater Control Circuit High Bank 1 Sensor 2
P0039 - Turbo/Super Charger Bypass Valve Control Circuit Range/Performance
P0040 - O2 Sensor Signals Swapped Bank 1 Sensor /Bank 2 Sensor 1
P0043 - HO2S Heater Control Circuit Low (bank 1, sensor 3)
P0044 - HO2S Heater Control Circuit High (bank 1, sensor 3)
P0050 - HO2S Heater Control Circuit Bank 2 Sensor 1
P0051 - HO2S Heater Control Circuit Low Bank 2 Sensor 1
P0052 - HO2S Heater Control Circuit High Bank 2 Sensor 1
P0053 - HO2S Heater Resistance Bank 1 Sensor 1
P0054 - HO2S Heater Resistance Bank 1 Sensor 2
P0055 - HO2S Heater Resistance Bank 1 Sensor 3
P0056 - HO2S Heater Control Circuit Bank 2 Sensor 2
P0057 - HO2S Heater Control Circuit Low Bank 2 Sensor 2
P0058 - HO2S Heater Control Circuit High Bank 2 Sensor 2
P0059 - HO2S Heater Resistance Bank 2 Sensor 1
P0060 - HO2S Heater Resistance Bank 2 Sensor 2
P0061 - HO2S Heater Resistance Bank 2 Sensor 3
P0062 - HO2S Heater Control Circuit Bank 2 Sensor 3
P0063 - HO2S Heater Control Circuit Low Bank 2 Sensor 3
P0064 - HO2S Heater Control Circuit High Bank 2 Sensor 3
P0065 - Air Assisted Injector Control Range/Performance
P0066 - Air Assisted Injector Control Circuit or Circuit Low
P0067 - Air Assisted Injector Control Circuit High
P0068 - MAP/MAF - Throttle Position Correlation
P0069 - Manifold Absolute Pressure - Barometric Pressure Correlation
P0070 - Ambient Air Temperature Sensor Circuit
P0071 - Ambient Air Temperature Sensor Range/Performance
P0072 - Ambient Air Temperature Sensor Circuit Low
P0073 - Ambient Air Temperature Sensor Circuit High
P0074 - Ambient Air Temperature Sensor Intermittent
P0075 - Intake Valve Control Solenoid Circuit Bank 1
P0076 - Intake valve Control Solenoid Circuit Low Bank 1
P0077 - Intake Valve Control Solenoid Circuit High Bank 1
P0078 - Exhaust Valve Control Solenoid Circuit Bank 1
P0079 - Exhaust Valve Control Solenoid Circuit Low Bank 1
P0080 - Exhaust Valve Control Solenoid Circuit High Bank 1
P0081 - Intake Valve Control Solenoid Circuit Bank 2
P0082 - Intake Valve Control Solenoid Circuit Low Bank 2
P0083 - Intake Valve Control Solenoid Circuit High Bank 2
P0084 - Exhaust Valve Control Solenoid Circuit Bank 2
P0085 - Exhaust Valve Control Solenoid Circuit Low Bank 2
P0086 - Exhaust Valve Control Solenoid Circuit High Bank 2
P0087 - Fuel Rail/System Pressure - Too Low
P0088 - Fuel Rail/System Pressure - Too High
P0089 - Fuel Pressure Regulator 1 Performance
P0090 - Fuel Pressure Regulator 1 Control Circuit
P0091 - Fuel Pressure Regulator 1 Control Circuit Low
P0092 - Fuel Pressure Regulator 1 Control Circuit High
P0093 - Fuel System Leak Detected - Large Leak
P0094 - Fuel System Leak Detected - Small Leak
P0095 - Intake Air Temperature Sensor 2 Circuit
P0096 - Intake Air Temperature Sensor 2 Circuit Range/Performance
P0097 - Intake Air Temperature Sensor 2 Circuit Low
P0098 - Intake Air Temperature Sensor 2 Circuit High
P0099 - Intake Air Temperature Sensor 2 Circuit Intermittent/Erratic
P0100 - MAF Sensor Circuit Insufficient Activity
P0101 - Mass Air Flow System Performance
P0102 - Mass Air Flow Sensor Circuit Low Frequency
P0103 - Mass Air Flow Sensor Circuit High Frequency
P0104 - Mass Air Flow Circuit Intermittent
P0105 - Manifold Absolute Pressure Sensor Circuit Insufficient Activity
P0106 - Manifold Absolute Pressure System Performance
P0107 - Manifold Absolute Pressure [MAP] Sensor Circuit Low Voltage
P0108 - Manifold Absolute Pressure [MAP] Sensor Circuit High Voltage
P0109 - Manifold Absolute Pressure Circuit Intermittent
P0110 - Intake Air Temperature Circuit
P0111 - Intake Air Temperature Circuit Range/Performance
P0112 - Intake Air Temperature [IAT] Sensor Circuit Low Voltage
P0113 - Intake Air Temperature [IAT] Sensor Circuit High Voltage
P0114 - Intake Air Temperature Circuit Intermittent
P0115 - ECT Sensor Circuit
P0115 - Engine Coolant Temperature Sensor Circuit
P0116 - Engine Coolant Temperature Sensor Circuit Performance
P0117 - Engine Coolant Temperature [ECT] Sensor Circuit Low Voltage
P0118 - Engine Coolant Temperature [ECT] Sensor Circuit High Voltage
P0119 - Engine Coolant Temperature Circuit Intermittent
P0120 - Throttle Position [TP] Sensor Circuit
P0121 - Throttle Position Sensor A Circuit Range/Performance
P0122 - Throttle Position Sensor Circuit Low Voltage
P0123 - Throttle Position Sensor Circuit High Voltage
P0124 - Throttle Position Sensor A Intermittent
P0125 - Engine Coolant Temperature [ECT] Excessive Time To Closed Loop Fuel Control
P0126 - Insufficent Engine Coolant Temperature for Stable Operation
P0127 - Intake Air Temperature Too High
P0128 - Coolant Thermostat (Coolant Temp Below Thermostat Regulating Temperature)
P0130 - HO2S Circuit Bank 1 Sensor 1
P0131 - HO2S Circuit Low Voltage Bank 1 Sensor 1
P0132 - HO2S Circuit High Voltage Bank 1 Sensor 1
P0133 - HO2S Slow Response Bank 1 Sensor 1
P0134 - HO2S Circuit Insufficient Activity Bank 1 Sensor 1
P0135 - HO2S Heater Circuit Bank 1 Sensor 1
P0137 - HO2S Circuit Low Voltage Bank 1 Sensor 2
P0138 - HO2S Circuit High Voltage Bank 1 Sensor 2
P0139 - HO2S Slow Response Bank 1 Sensor 2
P0140 - HO2S Circuit Insufficient Activity Bank 1 Sensor 2
P0141 - HO2S Heater Circuit Bank 1 Sensor 2
P0142 - HO2S Circuit Bank 1 Sensor 3
P0143 - HO2S Circuit Low Voltage Bank 1 Sensor 3
P0144 - HO2S Circuit High Voltage Bank 1 Sensor 3
P0145 - HO2S Circuit Bank 1 Sensor 2 Slow Response
P0146 - HO2S Circuit Insufficient Activity Bank 1 Sensor 3
P0147 - HO2S Heater Circuit Bank 1 Sensor 3
P0150 - HO2S Circuit Bank 2 Sensor 1
P0151 - HO2S Circuit Low Voltage Bank 2 Sensor 1
P0152 - HO2S Circuit High Voltage Bank 2 Sensor 1
P0153 - HO2S Slow Response Bank 2 Sensor 1
P0154 - HO2S Circuit Insufficient Activity Bank 2 Sensor 1
P0155 - Heated Oxygen Sensor Heater Circuit (bank 2, sensor 1)
P0156 - HO2S Circuit Bank 2 Sensor 2
P0157 - HO2S Circuit Low Voltage Bank 2 Sensor 2
P0158 - HO2S Circuit High Voltage Bank 2 Sensor 2
P0159 - HO2S Slow Response Bank 2 Sensor 2
P0160 - HO2S Circuit Insufficient Activity Bank 2 Sensor 2
P0161 - HO2S Heater Circuit Bank 2 Sensor 2
P0162 - HO2S Circuit Bank 2 Sensor 3
P0163 - HO2S Circuit Bank 2 Sensor 3 Low Voltage
P0164 - HO2S Circuit Bank 2 Sensor 3 High Voltage
P0165 - HO2S Circuit Bank 2 Sensor 3 Slow Response
P0166 - HO2S Circuit Bank 2 Sensor 3 No Activity
P0167 - HO2S Heater Circuit Bank 2 Sensor 3
P0169 - Fuel Composition Sensor
P0170 - Fuel Trim Bank 1
P0171 - Fuel Trim System Lean Bank 1
P0172 - Fuel Trim System Rich Bank 1
P0174 - Fuel Trim System Lean Bank 2
P0175 - Fuel Trim System Rich Bank 2
P0176 - Fuel Composition Sensor Circuit
P0177 - Fuel Composition Sensor Circuit Performance
P0178 - Fuel Composition Sensor Circuit Low Voltage
P0179 - Fuel Composition Sensor Circuit High Voltage
P0180 - Fuel Temperature Sensor A Circuit
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 1 Circuit Intermittent
P0185 - Fuel Temperature Sensor 2 Circuit
P0186 - Fuel Temperature Sensor B Circuit Range/Performance
P0187 - Fuel Temperature Sensor B Circuit Low Input
P0189 - Fuel Temperature Sensor 2 Circuit Intermittent
P0190 - Fuel Rail Pressure Sensor Circuit
P0191 - Fuel Rail Pressure Sensor Circuit Performance
P0192 - Fuel Rail Pressure Sensor Circuit Low Voltage
P0193 - Fuel Rail Pressure Sensor Circuit High Voltage
P0194 - Fuel Rail Pressure Sensor Circuit Intermittent
P0195 - Engine Oil Temperature Sensor Circuit
P0196 - Engine Oil Temperature Sensor Performance
P0197 - Engine Oil Temperature Sensor Low Voltage
P0198 - Engine Oil Temperature Sensor High Voltage
P0199 - Engine Oil Temperature Sensor Intermittent
P0200 - Injector Control Circuit Voltage
P0201 - Injector 1 Control Circuit
P0202 - Injector 2 Control Circuit
P0203 - Injector 3 Control Circuit
P0204 - Injector 4 Control Circuit
P0205 - Injector 5 Control Circuit
P0206 - Injector 6 Control Circuit
P0207 - Injector 7 Control Circuit
P0208 - Injector 8 Control Circuit
P0209 - Injector 9 Control Circuit
P0210 - Injector 10 Control Circuit
P0211 - Injector 11 Control Circuit
P0212 - Injector 12 Control Circuit
P0213 - Cold Start Injector 1
P0214 - Cold Start Injector 2
P0215 - Engine Shutoff Control Circuit
P0216 - Injection Timing Control Circuit
P0217 - Engine Over Temperature - Hot Light Requested
P0218 - Transmission Fluid Over Temperature
P0219 - Engine Overspeed Condition
P0220 - Throttle Position Sensor 2 Circuit
P0222 - Throttle Position Sensor B Circuit Low Voltage
P0223 - Throttle Position Sensor B Circuit High Input
P0224 - Throttle Position Sensor B Circuit Intermittent
P0225 - Throttle Position Sensor 3 Circuit
P0226 - Throttle Position Sensor 3 Circuit Performance
P0227 - Throttle/Pedal Position Sensor/Switch "C Circuit Low"
P0228 - Throttle/Pedal Position Sensor/Switch "C Circuit High"
P0228 - APP Sensor 3 Circuit High Voltage
P0229 - Throttle Position Sensor C Circuit Intermittent
P0230 - Fuel Pump Relay Control Circuit
P0231 - Fuel Pump Feedback Circuit Low Voltage
P0232 - Fuel Pump Feedback Circuit High Voltage
P0232 - Fuel Pump Feedback Circuit High Voltage
P0234 - Turbocharger Engine Overboost
P0235 - Turbocharger Boost Sensor 1 Circuit
P0236 - Turbocharger Boost Sensor 1 Performance
P0237 - Turbocharger Boost Sensor 1 Circuit Low Voltage
P0238 - Turbocharger Boost Sensor 1 Circuit High Voltage
P0239 - Turbocharger Boost Sensor 2 Circuit
P0240 - Turbocharger Boost Sensor 2 Performance
P0241 - Turbocharger Boost Sensor 2 Circuit Low Voltage
P0242 - Turbocharger Boost Sensor 2 Circuit High Voltage
P0243 - Turbocharger Boost Solenoid Control Circuit
P0244 - Turbocharger Wastegate Solenoid 1 Performance
P0245 - Turbocharger Wastegate Solenoid 1 Low Voltage
P0246 - Turbocharger Wastegate Solenoid 1 High Voltage
P0247 - Turbocharger Wastegate Solenoid 2
P0248 - Turbocharger Wastegate Solenoid 2 Performance
P0249 - Turbocharger Wastegate Solenoid 2 Low Voltage
P0250 - Turbocharger Wastegate Solenoid 2 High Voltage
P0251 - Injection Pump Fuel Metering Control A
P0252 - Injector Pump 1 Rotor/Cam Performance
P0253 - Injector Pump 1 Rotor/Cam Low Voltage
P0254 - Injector Pump 1 Rotor/Cam High Voltage
P0255 - Injector Pump 1 Rotor/Cam Intermittent
P0256 - Injector Pump 2 Rotor/Cam
P0257 - Injector Pump 2 Rotor/Cam Performance
P0258 - Injector Pump 2 Rotor/Cam Low Voltage
P0259 - Injector Pump 2 Rotor/Cam High Voltage
P0260 - Injector Pump 2 Rotor/Cam Intermittent
P0261 - Cylinder #1 Injector Circuit Low
P0262 - Cylinder #1 Injector Circuit High
P0263 - Cylinder #1 Contribution/Balance
P0264 - Cylinder #2 Injector Circuit Low
P0265 - Cylinder #2 Injector Circuit High
P0266 - Cylinder #2 Contribution/Balance
P0267 - Cylinder #3 Injector Circuit Low
P0268 - Cylinder #3 Injector Circuit High
P0269 - Cylinder #3 Contribution/Balance
P0270 - Cylinder #4 Injector Circuit Low
P0271 - Cylinder #4 Injector Circuit High
P0272 - Cylinder #4 Contribution/Balance
P0273 - Cylinder #5 Injector Circuit Low
P0274 - Cylinder #5 Injector Circuit High
P0275 - Cylinder #5 Contribution/Balance
P0276 - Cylinder #6 Injector Circuit Low
P0277 - Cylinder #6 Injector Circuit High
P0278 - Cylinder 6 Contribution/Balance
P0279 - Cylinder #7 Injector Circuit Low
P0280 - Cylinder #7 Injector Circuit High
P0281 - Cylinder 7 Contribution/Balance
P0282 - Cylinder #8 Injector Circuit Low
P0283 - Cylinder #8 Injector Circuit High
P0284 - Cylinder 8 Contribution/Balance
P0285 - Injector Circuit Cylinder 9 Low Voltage
P0286 - Injector Circuit Cylinder 9 High Voltage
P0287 - Cylinder 9 Balance System
P0288 - Injector Circuit Cylinder 10 Low Voltage
P0289 - Injector Circuit Cylinder 10 High Voltage
P0290 - Cylinder 10 Balance System
P0291 - Injector Circuit Cylinder 11 Low Voltage
P0292 - Injector Circuit Cylinder 11 High Voltage
P0293 - Cylinder 11 Balance System
P0294 - Injector Circuit Cylinder 12 Low Voltage
P0295 - Injector Circuit Cylinder 12 High Voltage
P0296 - Cylinder 12 Balance System
P0298 - Engine Oil Overtemperature Condition
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
P0310 - Cylinder 10 Misfire Detected
P0311 - Cylinder 11 Misfire Detected
P0312 - Cylinder 12 Misfire Detected
P0320 - Ignition/Distributor Engine Speed Input Circuit
P0321 - Ignition/Distributor Eng. Speed Ckt. Performance
P0322 - Ignition/Distributor Engine Speed Circuit No Signal
P0323 - Ignition/Distributor Engine Speed Circuit Intermittent
P0325 - Knock Sensor 1 Circuit Bank 1
P0326 - Knock Sensor 1 Circuit Range/Performance (Bank 1)
P0327 - Knock Sensor 1 Circuit Low Input (Bank1)
P0328 - Knock Sensor 1 Circuit High Input (Bank 1)
P0329 - Knock Sensor 1 Circuit Bank 1 Intermittent
P0330 - Knock Sensor 2 Circuit Bank 2
P0331 - Knock Sensor 2 Circuit Range/Performance (Bank 2)
P0332 - Knock Sensor 2 Circuit Low Input
P0333 - Knock Sensor 2 Circuit High Input
P0334 - Knock Sensor 2 Circuit Bank 2 Intermittent
P0335 - Crankshaft Position [CKP] Sensor A Circuit
P0336 - Crankshaft Position Sensor Circuit A Range/Performance
P0337 - CKP Sensor Circuit Low Frequency
P0338 - CKP Sensor Circuit High Frequency
P0339 - CKP Sensor Circuit Intermittent
P0340 - Camshaft Position Sensor A Circuit (Bank 1 or single sensor)
P0341 - Camshaft Position Sensor A Circuit Range/Performance (Bank 1 or single sensor)
P0342 - Camshaft Position Sensor Circuit Low Voltage
P0343 - Camshaft Position Sensor Circuit High Voltage
P0344 - Camshaft Position Sensor Circuit Intermittent
P0350 - Ignition Coil Primary/Secondary Circuit
P0351 - Ignition Coil A Primary/Secondary Circuit
P0352 - Ignition Coil B Primary/Secondary Circuit
P0353 - Ignition Coil C Primary/Secondary Circuit
P0354 - Ignition Coil D Primary/Secondary Circuit
P0355 - Ignition Coil E Primary/Secondary Circuit
P0356 - Ignition Coil F Primary/Secondary Circuit
P0357 - Ignition Coil G Primary/Secondary Circuit
P0358 - Ignition Coil H Primary/Secondary Circuit
P0360 - Ignition Coil J Primary/Secondary Circuit
P0361 - Ignition Coil K Primary/Secondary Circuit
P0362 - Ignition Coil L Primary/Secondary Circuit
P0370 - Timing Reference High Resolution System Performance
P0371 - Too Many High Resolution Signal 1 Pulses
P0372 - Too Few High Resolution Signal 1 Pulses
P0373 - Intermittent High Resolution Signal 1 Pulse
P0374 - No High Resolution Signal 1 Pulses
P0375 - Timing Reference Signal 2 High Resolution
P0376 - Too Many High Resolution Signal 2 Pulses
P0377 - Too Few High Resolution Signal 2 Pulses
P0378 - Intermittent High Resolution Signal 2 Pulse
P0380 - Glow Plug/Heater Circuit A
P0381 - Glow Plug/Heater Indicator Circuit
P0385 - Crankshaft Position Sensor Circuit B
P0386 - CKP Sensor B Circuit Performance
P0387 - Crankshaft Position Sensor 2 Circuit Low Voltage
P0388 - Crankshaft Position Sensor 2 Circuit High Voltage
P0389 - Crankshaft Position Sensor 2 Circuit Intermittent
P0400 - Exhaust Gas Recirculation Flow
P0401 - Exhaust Gas Recirculation Flow Insufficient Detected
P0402 - Exhaust Gas Recirculation Flow Excessive Detected
P0403 - Exhaust Gas Recirculation Control Circuit
P0404 - Exhaust Gas Recirculation Control Circuit Range/Performance
P0405 - Exhaust Gas Recirculation Sensor A Circuit Low
P0406 - Exhaust Gas Recirculation Sensor A Circuit High
P0407 - EGR Sensor 2 Circuit Low Voltage
P0408 - EGR Sensor 2 Circuit High Voltage
P0410 - Secondary Air Injection System
P0411 - Secondary Air Injection Incorrect Upstream Flow Detected
P0412 - Secondary Air Injection Switching Valve A Circuit
P0413 - Secondary Air Injection Switching Valve A Circuit Open
P0414 - Secondary Air Injection Switching Valve A Circuit Shorted
P0416 - Secondary Air Injection Switching Valve B Circuit Open
P0417 - Secondary Air Injection Switching Valve B Circuit Shorted
P0418 - Secondary Air Injection System Relay A Circuit
P0419 - Secondary Air Injection System Relay B Circuit
P0420 - Catalyst System Efficiency Below Threshold (Bank 1)
P0421 - Warm Up Catalyst Efficiency Below Threshold (Bank 1)
P0422 - Main TWC Efficiency Bank 1 Below Threshold
P0423 - Heated TWC Efficiency Bank 1 Below Threshold
P0424 - Heated TWC Temperature Bank 1 Below Threshold
P0426 - Catalyst Temperature Sensor Range/Performance (Bank 1)
P0427 - Catalyst Temperature Sensor Low Input (Bank 1)
P0428 - Catalyst Temperature Sensor High Input (Bank 1)
P0430 - Catalyst System Low Efficiency Bank 2
P0431 - Warm Up Catalyst Efficiency Below Threshold (Bank 2)
P0432 - Main TWC Efficiency Bank 2 Below Threshold
P0433 - Heated TWC Efficiency Bank 2 Below Threshold
P0434 - Heated TWC Temperature Bank 2 Below Threshold
P0436 - Catalyst Temperature Sensor Range/Performance (Bank 2)
P0437 - Catalyst Temperature Sensor Low Input (Bank 2)
P0438 - Catalyst Temperature Sensor High Input (Bank 2)
P0440 - Evaporative Emission Control System
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
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
P0447 - EVAP Vent Valve Control Circuit Open
P0448 - EVAP Vent Valve Control Circuit Shorted
P0449 - EVAP Canister Vent Solenoid Valve Control Circuit
P0450 - Evaporative Emission Control System Pressure Sensor
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
P0455 - Evaporative Emission Control System Leak Detected (gross leak/no flow)
P0456 - Evaporative Emission Control System Leak Detected (very small leak)
P0460 - Fuel Level Sensor Circuit
P0461 - Fuel Level Sensor Circuit Range/Performance
P0462 - Fuel Level Sensor Circuit Low Voltage
P0463 - Fuel Level Sensor Circuit High Voltage
P0464 - Fuel Level Sensor Circuit Intermittent
P0465 - Purge Flow Sensor Circuit
P0466 - Purge Flow Sensor Circuit Performance
P0467 - Purge Flow Sensor Circuit Low Voltage
P0468 - Purge Flow Sensor Circuit High Voltage
P0469 - Purge Flow Sensor Circuit Intermittent
P0470 - Exhaust Pressure Sensor
P0471 - Exhaust Pressure Sensor Range/Performance
P0472 - Exhaust Pressure Sensor Low Input
P0473 - Exhaust Pressure Sensor High Input
P0474 - Exhaust Pressure Sensor Circuit Intermittent
P0475 - Exhaust Pressure Control Valve
P0476 - Exhaust Pressure Control Valve Range/Performance
P0477 - Exhaust Pressure Control Valve Circuit Low Voltage
P0478 - Exhaust Pressure Control Valve High Input
P0479 - Exhaust Pressure Control Valve Intermittent
P0480 - Coolant Fan 1 Control Circuit
P0481 - Coolant Fan Relay 2 Control Circuit
P0500 - Vehicle Speed Sensor
P0501 - Vehicle Speed Sensor Range/Performance
P0502 - Vehicle Speed Sensor Circuit Low Input
P0503 - Vehicle Speed Sensor Intermittent
P0505 - Idle Control System
P0506 - Idle Control System RPM Lower Than Expected
P0507 - Idle Control System RPM Higher Than Expected
P0508 - Idle Control System Circuit Low
P0509 - Idle Control System Circuit High
P0510 - Closed Throttle Position Switch
P0512 - Starter Request Circuit Performance
P0522 - Engine Oil Pressure Sensor Circuit Low Voltage
P0523 - Engine Oil Pressure Sensor Circuit High Voltage
P0530 - A/C Refrigerant Pressure Sensor Circuit
P0532 - Air Conditioning [A/C] Refrigerant Pressure Sensor Circuit Low Voltage
P0533 - A/C Refrigerant Pressure Sensor Circuit High Voltage
P0534 - Air Conditioner Refrigerant Charge Loss
P0541 - Intake Air Heater Circuit Low
P0542 - Intake Air Heater Circuit High
P0550 - Power Steering Pressure Sensor Circuit
P0551 - Power Steering Pressure Sensor Circuit Range/Performance
P0552 - Power Steering Pressure Sensor Circuit Low Voltage
P0553 - Power Steering Pressure Sensor Circuit High Voltage
P0554 - Power Steering Pressure Sensor Circuit Intermittent
P0560 - System Voltage
P0561 - System Voltage Unstable
P0562 - System Voltage Low
P0563 - System Voltage High
P0565 - Cruise Control ON Signal
P0566 - Cruise Control OFF Signal
P0567 - Cruise Control RESUME Signal
P0568 - Cruise Control SET Signal
P0569 - Cruise Control COAST Signal
P0570 - Cruise Control ACCEL Signal
P0571 - Cruise Control Brake Switch A Circuit
P0572 - Cruise Brake Switch 1 Circuit Low Voltage
P0573 - Cruise Brake Switch 1 Circuit High Voltage
P0574 - Cruise Control System - Vehicle Speed Too High
P0600 - Serial Communication Link
P0601 - Internal Control Module Memory Check Sum Error
P0602 - Powertrain Control Module Programming Error
P0603 - Powertrain Control Module Keep Alive Memory (KAM) Error
P0604 - Internal Control Module Random Access Memory Error
P0605 - Powertrain Control Module Read Only Memory (ROM) Error
P0606 - ECM/PCM Processor
P0608 - Vehicle Speed Output Circuit
P0615 - Starter Relay Control Circuit
P0620 - Generator Control Circuit
P0621 - GEN Lamp 'L' Control Circuit
P0622 - GEN Field 'F' Control Circuit
P0636 - Power Steering Control Circuit Low
P0640 - Intake Air Heater Control Circuit
P0645 - A/C Clutch Relay Control Circuit
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P0646</td>
<td>A/C Clutch Relay Circuit Low Voltage</td>
</tr>
<tr>
<td>P0647</td>
<td>A/C Clutch Relay Circuit High Voltage</td>
</tr>
<tr>
<td>P0650</td>
<td>Malfunction Indicator Lamp (MIL) Control Circuit</td>
</tr>
<tr>
<td>P0654</td>
<td>Engine Speed Output Circuit</td>
</tr>
<tr>
<td>P0656</td>
<td>Fuel Level Output Circuit</td>
</tr>
<tr>
<td>P0660</td>
<td>Intake Manifold Tuning Valve Control Circuit - Bank 1</td>
</tr>
<tr>
<td>P0661</td>
<td>Intake Manifold Tuning Valve Control Circuit Low - Bank 1</td>
</tr>
<tr>
<td>P0662</td>
<td>Intake Manifold Tuning Valve Control Circuit High - Bank 1</td>
</tr>
<tr>
<td>P0666</td>
<td>PCM/ECM/TCM Internal Temperature Sensor Circuit</td>
</tr>
<tr>
<td>P0670</td>
<td>Glow Plug Module Control Circuit</td>
</tr>
<tr>
<td>P0671</td>
<td>Cylinder 1 Glow Plug Circuit</td>
</tr>
<tr>
<td>P0672</td>
<td>Cylinder 2 Glow Plug Circuit</td>
</tr>
<tr>
<td>P0673</td>
<td>Cylinder 3 Glow Plug Circuit</td>
</tr>
<tr>
<td>P0674</td>
<td>Cylinder 4 Glow Plug Circuit</td>
</tr>
<tr>
<td>P0675</td>
<td>Cylinder 5 Glow Plug Circuit</td>
</tr>
<tr>
<td>P0676</td>
<td>Cylinder 6 Glow Plug Circuit</td>
</tr>
<tr>
<td>P0677</td>
<td>Cylinder 7 Glow Plug Circuit</td>
</tr>
<tr>
<td>P0678</td>
<td>Cylinder 8 Glow Plug Circuit</td>
</tr>
<tr>
<td>P0683</td>
<td>Glow Plug Control Module to PCM Communication Circuit</td>
</tr>
<tr>
<td>P0684</td>
<td>Glow Plug Control Module to PCM Communication Circuit Range/Performance</td>
</tr>
<tr>
<td>P0700</td>
<td>Transmission Control System (MIL Request)</td>
</tr>
<tr>
<td>P0701</td>
<td>Transmission Control System Performance</td>
</tr>
<tr>
<td>P0702</td>
<td>Transmission Control System Electrical</td>
</tr>
<tr>
<td>P0703</td>
<td>Brake Switch B Input Circuit</td>
</tr>
<tr>
<td>P0704</td>
<td>Clutch Switch Input Circuit</td>
</tr>
<tr>
<td>P0705</td>
<td>Transmission Range Sensor Circuit (PRNDL Input)</td>
</tr>
<tr>
<td>P0706</td>
<td>Transmission Range Sensor Circuit Range/Performance</td>
</tr>
<tr>
<td>P0707</td>
<td>Transmission Range Sensor Circuit Low Input</td>
</tr>
<tr>
<td>P0708</td>
<td>Transmission Range Sensor Circuit High Input</td>
</tr>
<tr>
<td>P0709</td>
<td>Transmission Range Sensor Circuit Intermittent</td>
</tr>
<tr>
<td>P0710</td>
<td>Transmission Fluid Temperature Sensor Circuit</td>
</tr>
<tr>
<td>P0711</td>
<td>Transmission Fluid Temperature Sensor Circuit Range/Performance</td>
</tr>
<tr>
<td>P0712</td>
<td>Transmission Fluid Temperature Sensor Circuit Low Input</td>
</tr>
<tr>
<td>P0713</td>
<td>Transmission Fluid Temperature Sensor Circuit High Input</td>
</tr>
<tr>
<td>P0714</td>
<td>Transmission Fluid Temperature Sensor Circuit Intermittent</td>
</tr>
<tr>
<td>P0715</td>
<td>Turbine Shaft Speed Sensor Circuit</td>
</tr>
<tr>
<td>P0716</td>
<td>Input/Turbine Speed Sensor Circuit Performance</td>
</tr>
<tr>
<td>P0717</td>
<td>Input/Turbine Speed Sensor Circuit No Signal</td>
</tr>
<tr>
<td>P0718</td>
<td>Turbine Shaft Speed Sensor Circuit Intermittent</td>
</tr>
<tr>
<td>P0719</td>
<td>Brake Switch 2 Circuit Low Voltage</td>
</tr>
<tr>
<td>P0720</td>
<td>Output Shaft Speed Sensor Circuit</td>
</tr>
<tr>
<td>P0721</td>
<td>Output Shaft Speed Sensor Circuit Range/Performance</td>
</tr>
<tr>
<td>P0722</td>
<td>Output Shaft Speed Sensor Circuit No Signal</td>
</tr>
<tr>
<td>P0723</td>
<td>Output Shaft Speed Sensor Circuit Intermittent</td>
</tr>
</tbody>
</table>
P0724 - Brake Switch 2 Circuit High Voltage
P0725 - Engine Speed Input Circuit
P0726 - Engine Speed Input Circuit Performance
P0727 - Engine Speed 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 Ratio
P0740 - Torque Converter Clutch Circuit
P0741 - Torque Converter Clutch Circuit Performance Stuck Off
P0742 - Torque Converter Clutch Circuit Stuck On
P0743 - Torque Converter Clutch Circuit Electrical
P0744 - Torque Converter Clutch Circuit Intermittent
P0745 - Pressure Control Solenoid A
P0746 - Pressure Control Solenoid A Performance or Stuck Off
P0747 - Pressure Control Solenoid Stuck On
P0748 - Pressure Control Solenoid Electrical
P0749 - Pressure Control Solenoid Circuit Intermittent
P0750 - Shift Solenoid A
P0751 - Shift Solenoid A Performance or Stuck Off
P0752 - Shift Solenoid A Stuck On
P0753 - Shift Solenoid A Electrical
P0754 - 1-2 Shift Solenoid Intermittent
P0755 - Shift Solenoid B
P0756 - Shift Solenoid B Performance or Stuck Off
P0757 - Shift Solenoid B Stuck On
P0758 - Shift Solenoid B Electrical
P0761 - Shift Solenoid C Performance or Stuck Off
P0762 - 3-4 Shift Solenoid Stuck On
P0763 - Shift Solenoid C Electrical
P0764 - 3-4 Shift Solenoid Intermittent
P0765 - Shift Solenoid D
P0766 - Shift Solenoid D Performance or Stuck Off
P0767 - 4-5 Shift Solenoid Stuck On
P0768 - Shift Solenoid D Electrical
P0769 - 4-5 Shift Solenoid Intermittent
P0770 - Shift Solenoid E
P0772 - Shift Solenoid E Stuck On
P0773 - Shift Solenoid E Electrical
P0774 - Shift Solenoid 5 Intermittent
P0775 - Pressure Control Solenoid B
Technical Bulletin #980

P0779 - Pressure Control Solenoid B Intermittent
P0780 - Shift
P0781 - 1-2 Shift
P0782 - 2-3 Shift
P0783 - 3-4 Shift
P0784 - 4-5 Shift
P0785 - Shift Timing Solenoid
P0786 - Shift Timing Solenoid Performance
P0787 - Shift Timing Solenoid Low Voltage
P0788 - Shift Timing Solenoid High Voltage
P0789 - Shift Timing Solenoid Intermittent
P0790 - Normal/Performance Switch Circuit
P0791 - Intermediate Shaft Speed Sensor Circuit
P0794 - Intermediate Shaft Speed Sensor Circuit Intermittent
P0795 - Pressure Control Solenoid C
P0796 - Pressure Control Solenoid C Performance or Stuck Off
P0797 - Pressure Control Solenoid C Stuck On
P0799 - Pressure Control Solenoid C Intermittent
P0801 - Reverse Inhibit Control Circuit
P0803 - 1-4 Upshift (Skip Shift) Solenoid Control Circuit
P0804 - 1-4 Upshift (Skip Shift) Lamp Control Circuit
P0812 - Reverse Input Circuit
P0814 - Transmission Range Display Circuit
P0815 - Upshift Switch Circuit
P0816 - Downshift Switch Circuit
P0818 - Driveline Disconnect Switch Input Circuit
P0840 - Transmission Fluid Pressure Sensor/Switch A Circuit
P0841 - Transmission Fluid Pressure Sensor/Switch A Circuit Range/Performance
P0844 - Transmission Fluid Pressure Sensor/Switch A Circuit Intermittent
P0846 - Transmission Fluid Pressure Sensor/Switch B Circuit Range/Performance

© 2005 B&B Electronics