

2000 HONDA ACCORD

AUTOMATIC TRANSMISSIONS

B7XA, BAXA AND MAXA

ELECTRONIC CONTROLS

2000 AUTOMATIC TRANSMISSIONS**Honda B7XA Electronic Controls****APPLICATION****AUTOMATIC TRANSAXLE APPLICATIONS**

Application	Transaxle Model
Accord V6	B7XA

CAUTION: Vehicle is equipped with a Supplemental Restraint System (SRS). When servicing vehicle, use care to avoid accidental air bag deployment. All SRS electrical connections and wiring harnesses are covered with Yellow insulation. SRS-related components are located in steering column, center console, instrument panel and lower panel on instrument panel. DO NOT use electrical test equipment on these circuits. It may be necessary to deactivate SRS before servicing components. See AIR BAG DEACTIVATION PROCEDURES article in GENERAL INFORMATION.

NOTE: Obtain radio anti-theft code from vehicle owner before disconnecting negative battery cable. Radio anti-theft code must be re-entered into radio once negative battery cable is reconnected. To re-enter radio anti-theft code, turn ignition and radio on. When CODE is displayed on radio, re-enter radio anti-theft code by using radio station preset buttons.

DESCRIPTION & OPERATION**INTRODUCTION**

The B7XA is an electronically controlled 4-speed automatic transaxle. Transaxle contains hydraulically operated clutches, which are controlled by the Powertrain Control Module (PCM). PCM receives information from various inputs and uses this information to control solenoid assembly for proper transaxle operation.

The first step in diagnosing any driveability problem is verifying the customer's complaint with a test drive under the conditions the problem reportedly occurred. Before entering self-diagnostics, perform a careful and complete visual inspection. Most transaxle control problems result from mechanical breakdowns or poor electrical connections.

GRADE LOGIC CONTROL SYSTEM

The PCM compares actual driving conditions with driving conditions memorized in the PCM, based on input signals from countershaft speed sensor, Throttle Position (TP) sensor, Engine Coolant Temperature (ECT) sensor, brakelight switch signal and A/T gear position switch. The PCM uses these input signals to control shifting while vehicle is ascending or descending a slope, or during deceleration.

When the PCM determines vehicle is ascending a slope with shift lever in "D4" position, PCM extends engagement of 3rd gear to prevent transaxle from frequently shifting between 3rd and 4th gears. Shift points between 3rd and 4th gear are stored in PCM, which allows the most suitable gear selection depending on conditions.

When the PCM determines vehicle is descending a slope with shift lever in "D4" position, PCM changes upshift speed from 3rd to 4th gear when throttle is fully closed. This widens the 3rd gear operating range from that programmed for level surface operation and, in conjunction with engine braking from torque converter lock-up, provides smooth vehicle operation. When vehicle is decelerating on a gradual hill in 4th gear, or when applying brakes on a steep hill, the transaxle will downshift to 3rd gear. When vehicle accelerates, transaxle will upshift into 4th gear.

When vehicle decelerates from speeds greater than 30 MPH, PCM shifts transaxle from 4th gear to 2nd gear earlier than normal to reduce the number of times transaxle shifts. This allows smoother acceleration and vehicle operation.

SELF-DIAGNOSTIC SYSTEM

PCM monitors transaxle operation. PCM contains a self-diagnostic system which stores a DTC if a transaxle electronic control system failure is present. If a DTC is stored, PCM will illuminate and flash "D4" indicator light on A/T gear position indicator on instrument panel. See **Fig. 1** . If a transaxle electronic control system failure is suspected, and "D4" indicator light on A/T gear position indicator does not flash, see **"D4" INDICATOR LIGHT CIRCUIT CHECK** under DIAGNOSIS & TESTING. DTCs can be retrieved using an OBD-II scan tool connected to Data Link Connector (DLC) under left side of instrument panel. Flash code may also be retrieved for diagnosing transaxle electronic control system.

POWERTRAIN CONTROL MODULE

The PCM receives information from various input devices and uses this information to control shift, A/T clutch pressure and lock-up control solenoid valves. The PCM contains a self-diagnostic system which stores a DTC if a failure is present in transaxle electronic control system. Fault code may also be referred to as Diagnostic Trouble Code (DTC) or flash code. DTC or flash code may be retrieved to determine transaxle problem area. The PCM is located behind center of instrument panel. See **Fig. 2** .

PCM INPUT DEVICES

Brake Switch

Brakelight switch delivers an input signal to PCM, indicating vehicle braking. Brakelight switch is also used in determining grade logic control. Brakelight switch is located on brake pedal support. See **Fig. 2** .

Engine Speed

Engine speed signal (RPM) is delivered to PCM from ignition control module in distributor assembly.

Mainshaft & Countershaft Speed Sensors

Mainshaft and countershaft speed sensors deliver mainshaft and countershaft speed signals to PCM. Mainshaft speed sensor is located on side of transaxle and countershaft speed sensor is located on top of transaxle. See **Fig. 3** .

A/T Gear Position Switch

Gear range position signal is delivered to PCM by the A/T gear position switch located on left side of transaxle. See **Fig. 3** .

Throttle Position Sensor

Throttle Position (TP) sensor delivers an input signal to PCM to indicate throttle position. The TP sensor is mounted on throttle body. See **Fig. 3**.

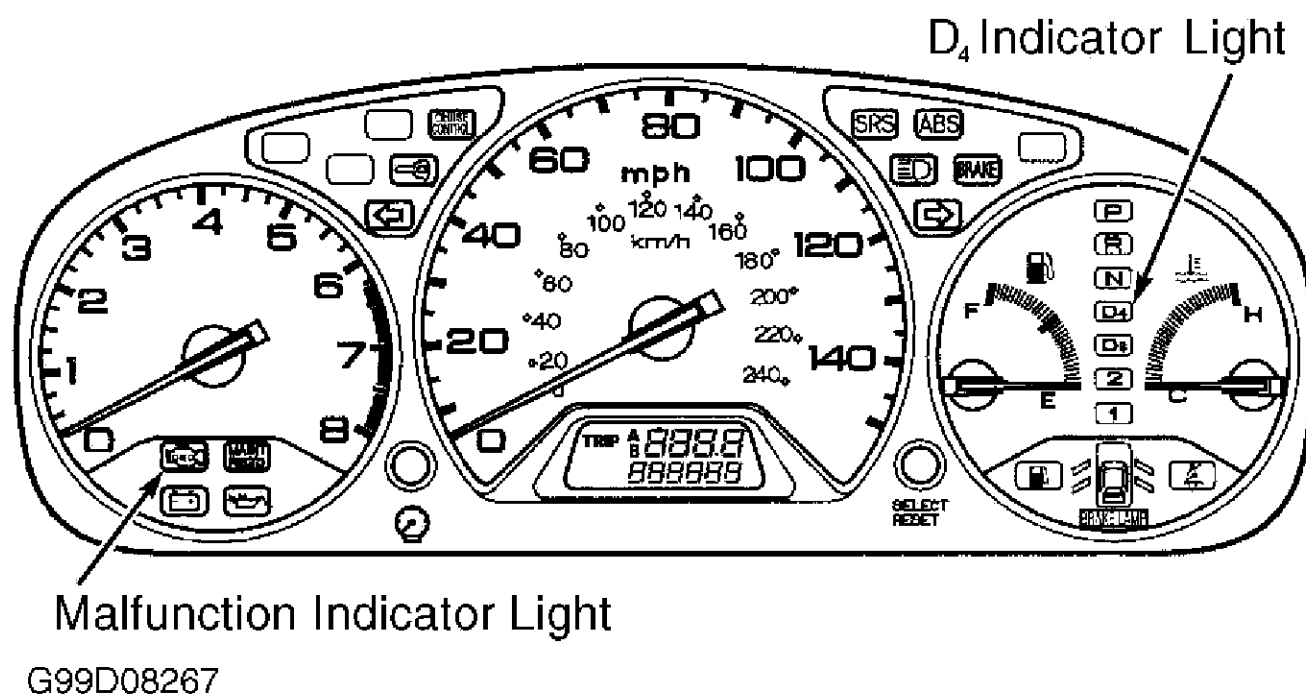


Fig. 1: Locating A/T Gear Position Indicator & MIL
Courtesy of AMERICAN HONDA MOTOR CO., INC.

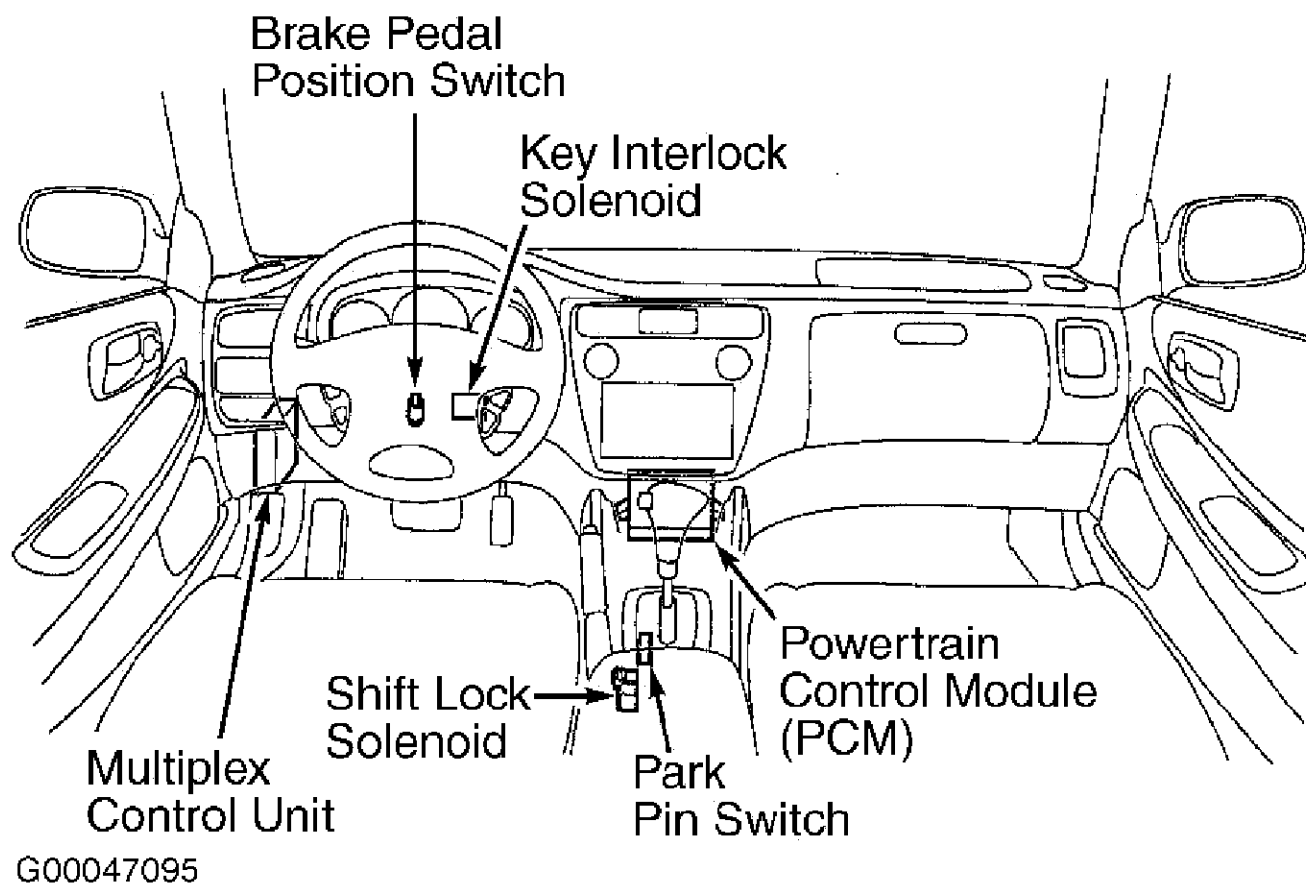
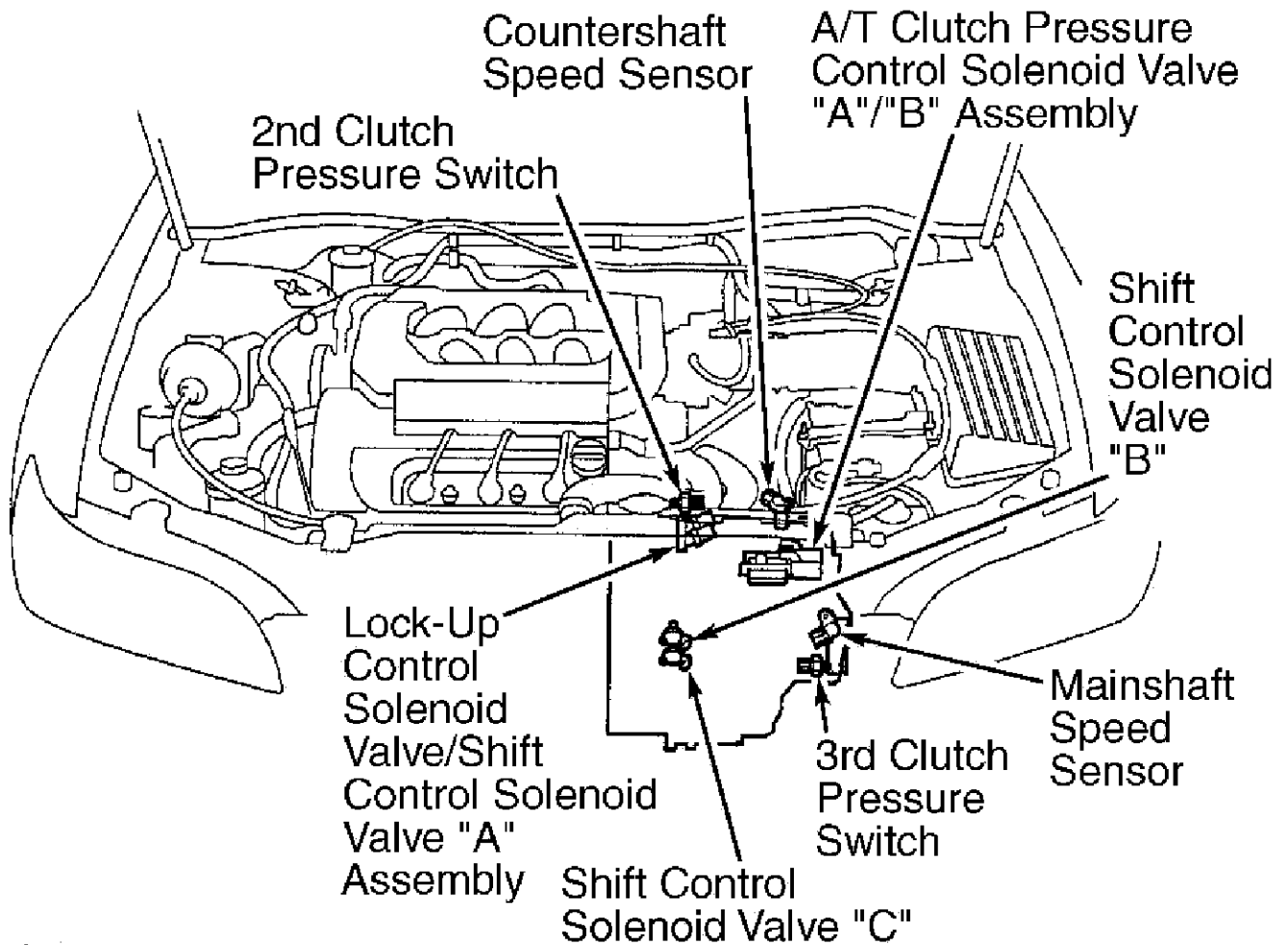


Fig. 2: Locating PCM & Electronic Controls
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 3: Locating Input & Output Devices

Courtesy of AMERICAN HONDA MOTOR CO., INC.

PCM OUTPUT DEVICES**Shift Control Solenoid Valves**

The PCM controls transaxle shifting by delivering an output signal to shift control solenoid valves "A", "B" and "C". Solenoid valves are operated in accordance with gear position. See **SHIFT CONTROL SOLENOID VALVE OPERATION** table. Shift control solenoid valves are located on transaxle. See **Fig. 3**. Shift control solenoid valve "A" has a Blue/Yellow wire, solenoid valve "B" has a Green/White wire and solenoid valve "C" has a Green wire.

SHIFT CONTROL SOLENOID VALVE OPERATION

Shift Lever Position	Solenoid Valve "A"	Solenoid Valve "B"	Solenoid Valve "C"
"D3" Or "D4" (Shifting From "N")	On	On	On
"D3" Or "D4" (1st Gear)	Off	On	On

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda B7XA Electronic Controls

"D3" Or "D4" (Shifting Between 1st & 2nd Gear)	On	On	On
"D3" Or "D4" (2nd Gear)	On	On	Off
"D3" Or "D4" (Shifting Between 2nd & 3rd Gear)	On	Off	Off
"D3" Or "D4" (3rd Gear)	On	Off	On
"D4" (Shifting Between 3rd & 4th Gear)	Off	Off	On
"D4" (4th Gear)	Off	Off	Off
"2" (2nd Gear)	On	On	Off
"1" (1st Gear)	Off	On	On
"R" (Reverse - Shifting from "P" Or "R")	Off	Off	On
"R" (Reverse)	Off	On	Off
"P" (Park)	Off	On	Off
"N" (Neutral)	Off	On	Off

Lock-Up Control System

The PCM controls torque converter lock-up by delivering an output signal to lock-up control solenoid valve and A/T clutch pressure control solenoid valves "A" and "B". Lock-up control solenoid valve is activated in accordance with lock-up condition. See **LOCK-UP CONTROL SYSTEM OPERATION** table. Lock-up control solenoid valve is located on converter housing. See **Fig. 3**. A/T clutch pressure control solenoid valves "A" and "B" are located on transaxle housing.

LOCK-UP CONTROL SYSTEM OPERATION

Lock-Up Condition	Lock-Up Control Solenoid Valve	A/T Clutch Pressure Control Solenoid "A" Or "B" Pressure
No Lock-Up	Off	Low
Partial Lock-Up	On	Low
Half Lock-Up	On	Medium
Full Lock-Up	On	High
Lock-Up During Deceleration	On	Medium

"D4" Indicator Light

The "D4" indicator light is located on A/T gear position indicator on instrument panel. See **Fig. 1**. When ignition is first turned on, "D4" indicator light should illuminate for about 2 seconds, then turn off, indicating light circuit is functioning properly. If a fault is present in transaxle electronic control system and a DTC is stored, PCM delivers an output signal to flash "D4" indicator light.

TROUBLE SHOOTING

NOTE: Driveability problems appearing to be transaxle related may be caused by a faulty engine component. Engine-related DTCs **MUST** be repaired before diagnosing transaxle. See appropriate **SELF-DIAGNOSTICS** article in **ENGINE PERFORMANCE**. Failure to diagnose and repair engine DTCs prior to transaxle diagnosis may result in incorrect diagnosis or component repair.

PRELIMINARY INSPECTION

Prior to diagnosing transaxle electronic control system, ensure throttle and shift cables are properly adjusted and fluid level is correct. Ensure engine starts with selector lever in Park and Neutral to ensure proper adjustment of A/T gear position switch. Ensure all system-related fuses are okay. Check system wire harnesses for proper routing. Verify all harness and component connections are clean and tight. See **CONNECTOR IDENTIFICATION** and **WIRING DIAGRAMS**. Repair as necessary. If area of fault cannot be located or repaired during preliminary inspection, begin diagnosis of self-diagnostic system. See **DIAGNOSIS & TESTING**.

DIAGNOSIS & TESTING

RETRIEVING DIAGNOSTIC TROUBLE CODES

NOTE: During diagnostics, ensure "D4" indicator light on A/T gear position indicator is not turned on by a fault in the PGM-FI system. The PGM-FI system controls fuel injection system. To repair PGM-FI system, see appropriate **SELF-DIAGNOSTICS** article in **ENGINE PERFORMANCE**. After PGM-FI system has been repaired, clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES**. After DTCs have been cleared, road test vehicle for several minutes at over 30 MPH and recheck for DTCs.

NOTE: Before any diagnostic procedure, obtain radio anti-theft code from customer. Note radio preset stations, as radio stations and clock setting will be cleared and must be reset. Radio anti-theft code must be re-entered for radio operation.

Retrieving DTCs Using Scan Tool

1. If a DTC is present, "D4" indicator light on A/T gear position indicator will flash when ignition is turned on for most DTCs. To retrieve DTCs using scan tool, turn ignition off.
2. Connect OBD-II scan tool to 16-pin Data Link Connector (DLC) located under left side of instrument panel. Turn ignition on. Scan tool will indicate DTCs. Follow scan tool manufacturer's instructions.
3. Once DTC is obtained, turn ignition off. Determine probable cause and symptom. See **DTC/FLASH CODE IDENTIFICATION** table. For trouble shooting of DTCs, see **DIAGNOSTIC TESTS**. If any other DTCs except those listed are displayed, see appropriate **SELF-DIAGNOSTICS** article in **ENGINE PERFORMANCE**. If "D4" indicator light does not flash or remains on, see **"D4" INDICATOR LIGHT CIRCUIT CHECK**.

Retrieving Flash Codes Using "D4" Indicator Light

NOTE: Flash codes can only be retrieved by connecting **SCS Service Connector (07WAZ-002010A)** to DLC.

1. If a flash code is present, "D4" indicator light on A/T gear position indicator will flash when ignition is turned on for most DTCs. To retrieve flash code, turn ignition off. Install SCS Service Connector (07WAZ-002010A) to DLC.
2. Turn ignition on. Flash codes will be displayed by short and long flashes of "D4" indicator light on A/T gear position indicator. If MIL is also flashing, see appropriate **SELF-DIAGNOSTICS** article in **ENGINE PERFORMANCE**. Repair MIL codes first.
3. A short flash indicates a single digit flash code. A long flash equals 10 short flashes. For example, if "D4" indicator light flashes once, this is a Flash Code No. 1. If "D4" indicator light flashes one long,

then 5 short flashes, this is a Flash Code No. 15. See **Fig. 4**.

- Once flash code is obtained, turn ignition off. Remove SCS Service Connector from DLC. Determine probable cause. See **DTC/FLASH CODE IDENTIFICATION** table. For trouble shooting of flash codes, see **DIAGNOSTIC TESTS**.

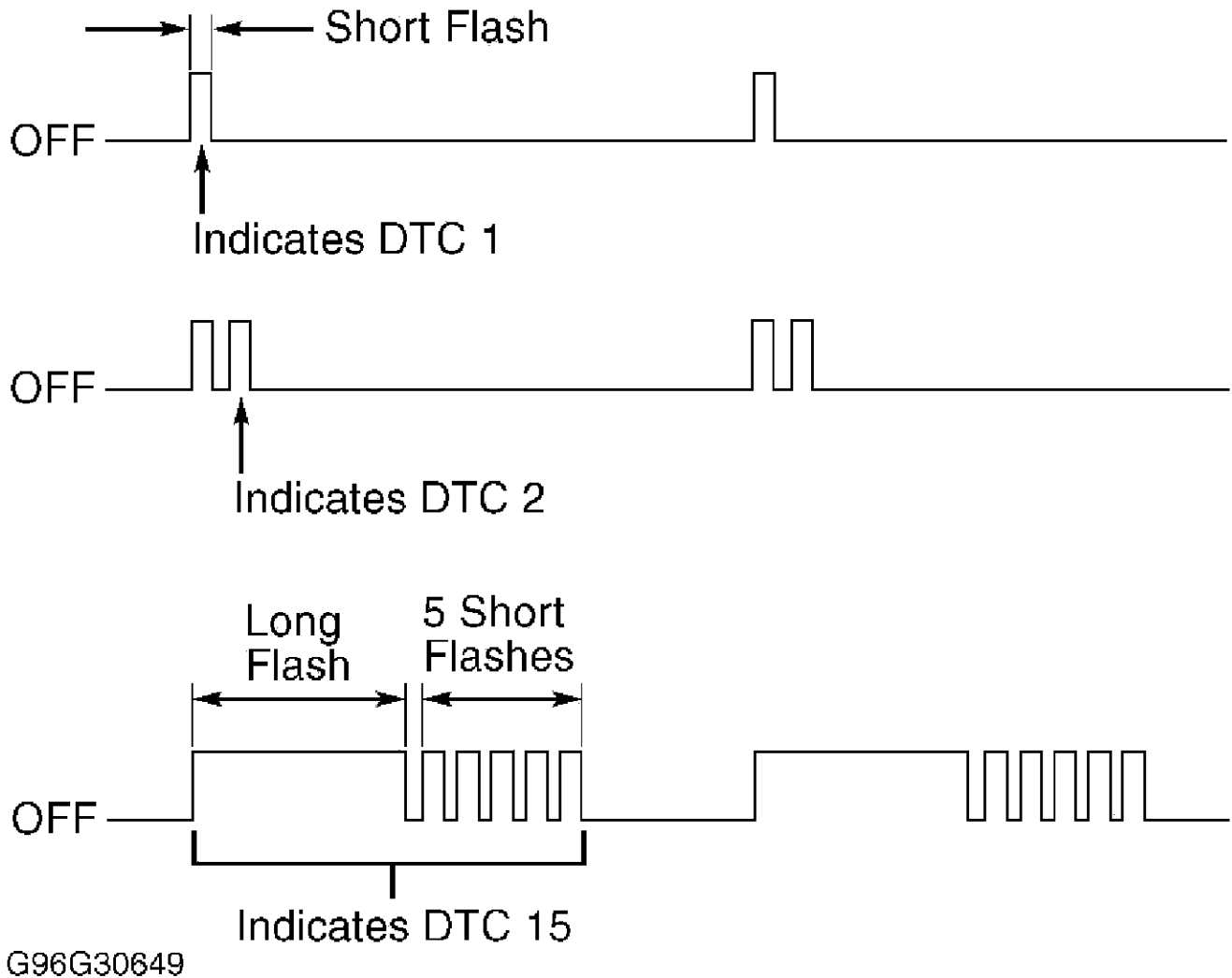


Fig. 4: Identifying Diagnostic Trouble Codes

Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC/FLASH CODE IDENTIFICATION

DTC/Flash Code	D4 Indicator Light ⁽¹⁾	MIL	⁽²⁾ Probable Cause
P0700	NA	NA	⁽³⁾
P0715/15	Off	On	Mainshaft Speed Sensor
P0720/9	Flashes	On	Countershaft Speed Sensor
P0730/41	Flashes	On	Shift Control System

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda B7XA Electronic Controls

<u>P0740/40</u>	Flashes	On	Lock-Up Control System
<u>P0753/7</u>	Flashes	On	Shift Control Solenoid "A"
<u>P0758/8</u>	Flashes	On	Shift Control Solenoid "B"
<u>P0763/22</u>	Flashes	On	Shift Control Solenoid "C"
<u>P0780/45</u>	Flashes	Off	Hydraulic System
<u>P1705/5</u>	Flashes	On	A/T Gear Position Switch
<u>P1706/6</u>	Off	On	A/T Gear Position Switch
<u>P1738/25</u>	Flashes	Off	2nd Clutch Pressure Switch
<u>P1739/26</u>	Flashes	Off	3rd Clutch Pressure Switch
<u>P1750/46</u>	Flashes	Off	Hydraulic System
<u>P1751/47</u>	Flashes	Off	Hydraulic System
<u>P1753/1</u>	Flashes	On	Lock-Up Control Solenoid "A"
<u>P1768/16</u>	Flashes	On	A/T Clutch Pressure Control Solenoid "A"
<u>P1773/23</u>	Flashes	On	A/T Clutch Pressure Control Solenoid "B"

- (1) Number of flashes from "D4" indicator light on A/T gear position indicator with service tool installed in DLC.
- (2) Specified component for probable cause. Also check wiring and connections for the specified component.
- (3) P0700 indicates there is one or more transaxle DTCs, and no fuel and emissions DTCs were detected.

CLEARING DIAGNOSTIC TROUBLE CODES

NOTE: Before clearing DTCs, obtain radio anti-theft code from customer. Note radio preset stations, as radio stations and clock setting will be cleared and must be reset. Radio anti-theft code must be reset for radio operation.

1. Once repairs have been performed, DTCs must be cleared from PCM memory. A/T control system memory can be cleared 2 ways: DTCs can be cleared using scan tool, following scan tool instructions. To clear DTCs without using scan tool, go to next step.
2. Ensure ignition is off. Remove back-up fuse (7.5-amp) from underdash fuse/relay box for at least 10 seconds. This will clear PCM memory.
3. Reinstall fuse. To re-enter radio anti-theft code, turn radio on. When CODE is displayed on radio, re-enter radio anti-theft code by using radio station preset buttons. Reset clock and radio stations.

"D4" INDICATOR LIGHT CIRCUIT CHECK

1. Turn ignition on. If "D4" indicator light comes on and stays on, go to next step. If "D4" indicator light comes on and goes out after 2 seconds, system is okay. If "D4" indicator light does not come on, go to step 4.
2. Ensure scan tool or SCS service connector is not connected to DLC. Turn ignition off. Disconnect PCM harness connector "A". See **Fig. 5**. Turn ignition on. Measure voltage between PCM harness connector "A" terminal No. 14 (Green/Black wire) and ground. If voltage exists, repair short to voltage in Green/Black wire between PCM and instrument cluster. If no voltage was indicated, go to next step.
3. Turn ignition off. Reconnect PCM harness connector "A". Turn ignition on. Shift to any position except "D4". Measure voltage (backprobe) between PCM harness connector "D" terminal No. 9 (Yellow wire) and ground. If voltage is present, replace PCM or instrument cluster. If no voltage is present, check Yellow wire between PCM harness connector "D" terminal No. 9 and A/T gear position switch for short to ground. Repair as necessary. If wire is okay, check A/T gear position switch. See **A/T GEAR POSITION SWITCH** under COMPONENT TESTS. Repair as necessary.
4. Ensure scan tool or SCS service connector is not connected to DLC. Turn ignition on. Shift to "D4" position. If "D4" indicator light does not illuminate, go to next step. If "D4" indicator light illuminates, check for loose PCM harness connections. Replace PCM with a known-good unit if necessary and retest.
5. Turn ignition off. Disconnect PCM harness connector "B". Check for continuity between PCM harness connector "B" terminals No. 20 and 22 (Brown/Black wires) and ground. See **Fig. 6**. If continuity is present, go to next step. If continuity is not present, repair open or poor connection in appropriate Brown/Black wire.
6. Turn ignition on. Measure voltage at PCM harness connector "B" between terminals No. 1 (Yellow/Black wire) and No. 22 (Brown/Black wire), then between terminals No. 9 (Yellow/Black wire) and No. 20 (Brown/Black wire). If battery voltage is present, go to next step. If battery voltage is not present, repair open or short in appropriate Yellow/Black wire between PCM and PGM-FI relay.
7. Turn ignition off. Reconnect PCM harness connector. Connect a DVOM (backprobe) between PCM harness connector "A" terminal No. 14 (Green/Black wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). Turn ignition on. Battery voltage should be present for 2 seconds. If voltage is as specified, check for open or short in Green/Black wire between PCM and gauge assembly. Repair as necessary. If wire is okay, check for faulty "D4" indicator bulb or gauge assembly printed circuit board. If no voltage was indicated, go to next step.
8. Turn ignition off. Disconnect PCM harness connector "A". Check Green/Black wire for continuity between PCM harness connector "A" terminal No. 14 and ground. If continuity is present, repair short to ground in Green/Black wire between PCM harness connector "A" and gauge assembly. If continuity is not present, check for loose PCM harness connectors or faulty A/T gear position switch. See **A/T GEAR POSITION SWITCH** under COMPONENT TESTS. Repair as necessary. If no problem is found, replace PCM with a known-good unit and retest.

MIL INOPERATIVE

See appropriate SELF DIAGNOSTICS article in ENGINE PERFORMANCE.

SUMMARY

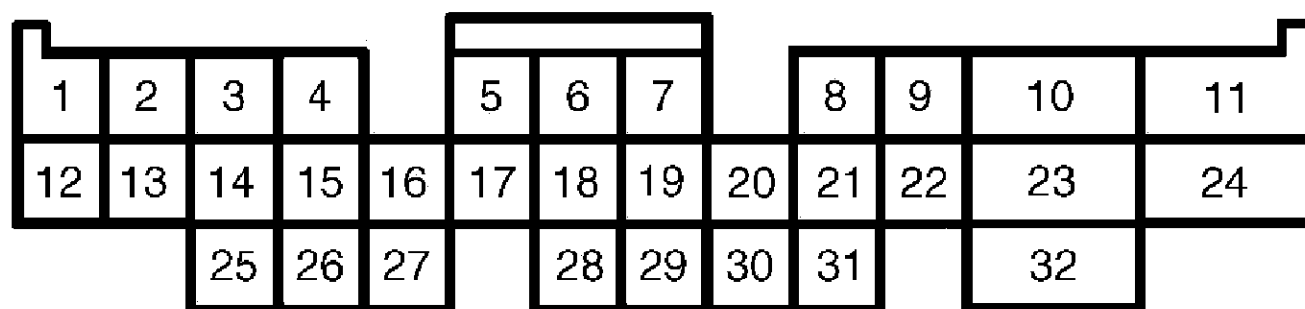
If no hard DTCs are present, and driveability symptoms or intermittent DTCs exist, attempt diagnosis by symptom, or by testing individual components related to system fault. See **COMPONENT TESTS**. If no problem is found, verify proper electronic control system circuit operation. See **PIN VOLTAGE TESTS**.

NOTE: Always clear DTCs once repairs are complete. See **CLEARING DIAGNOSTIC**

TROUBLE CODES . Test drive vehicle and retrieve DTCs to determine if complaint or DTC is repaired.

CONNECTOR IDENTIFICATION

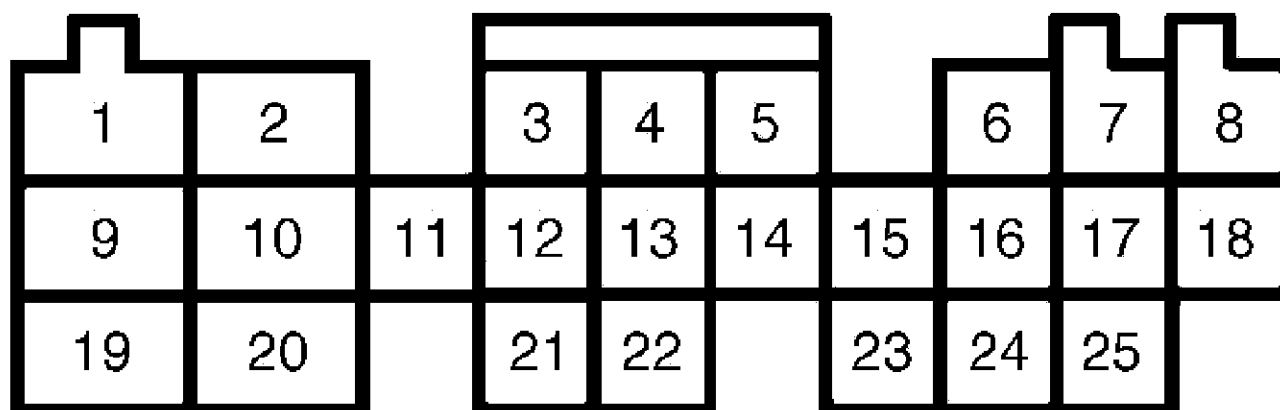
NOTE: For connector identification, refer to illustrations. See Fig. 5 -Fig. 12 .



WIRE SIDE OF FEMALE TERMINALS

G98A04116

Fig. 5: Identifying PCM 32-Pin Harness Connector "A" Terminals
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

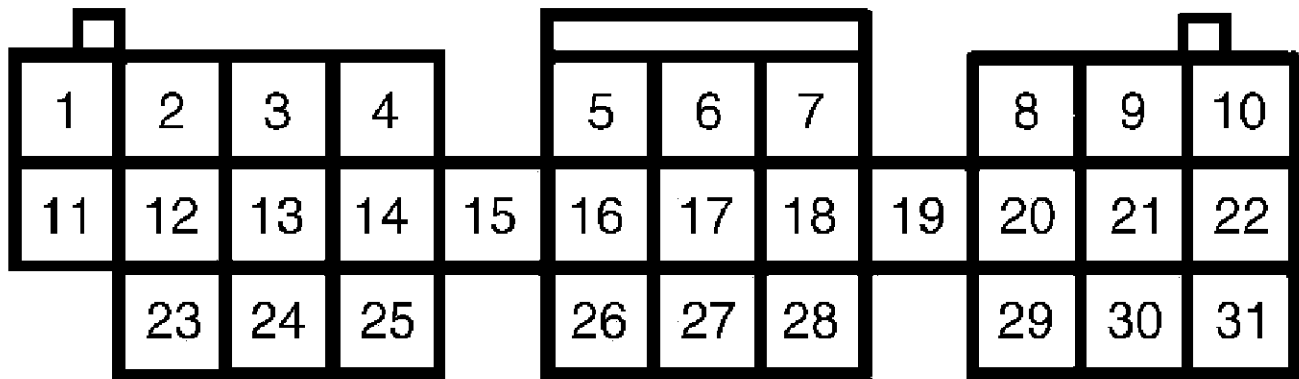


WIRE SIDE OF FEMALE TERMINALS

G98C04117

Fig. 6: Identifying PCM 25-Pin Harness Connector "B" Terminals

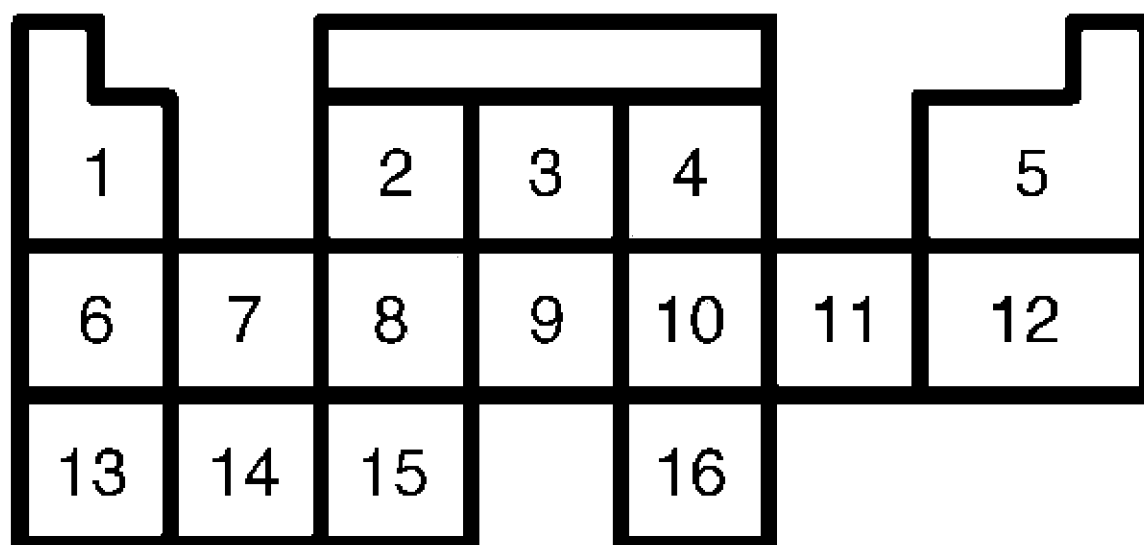
Courtesy of AMERICAN HONDA MOTOR CO., INC.



WIRE SIDE OF FEMALE TERMINALS

G98E04118

Fig. 7: Identifying PCM 31-Pin Harness Connector "C" Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.



WIRE SIDE OF FEMALE TERMINALS

G98G04119

Fig. 8: Identifying PCM 16-Pin Harness Connector "D" Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

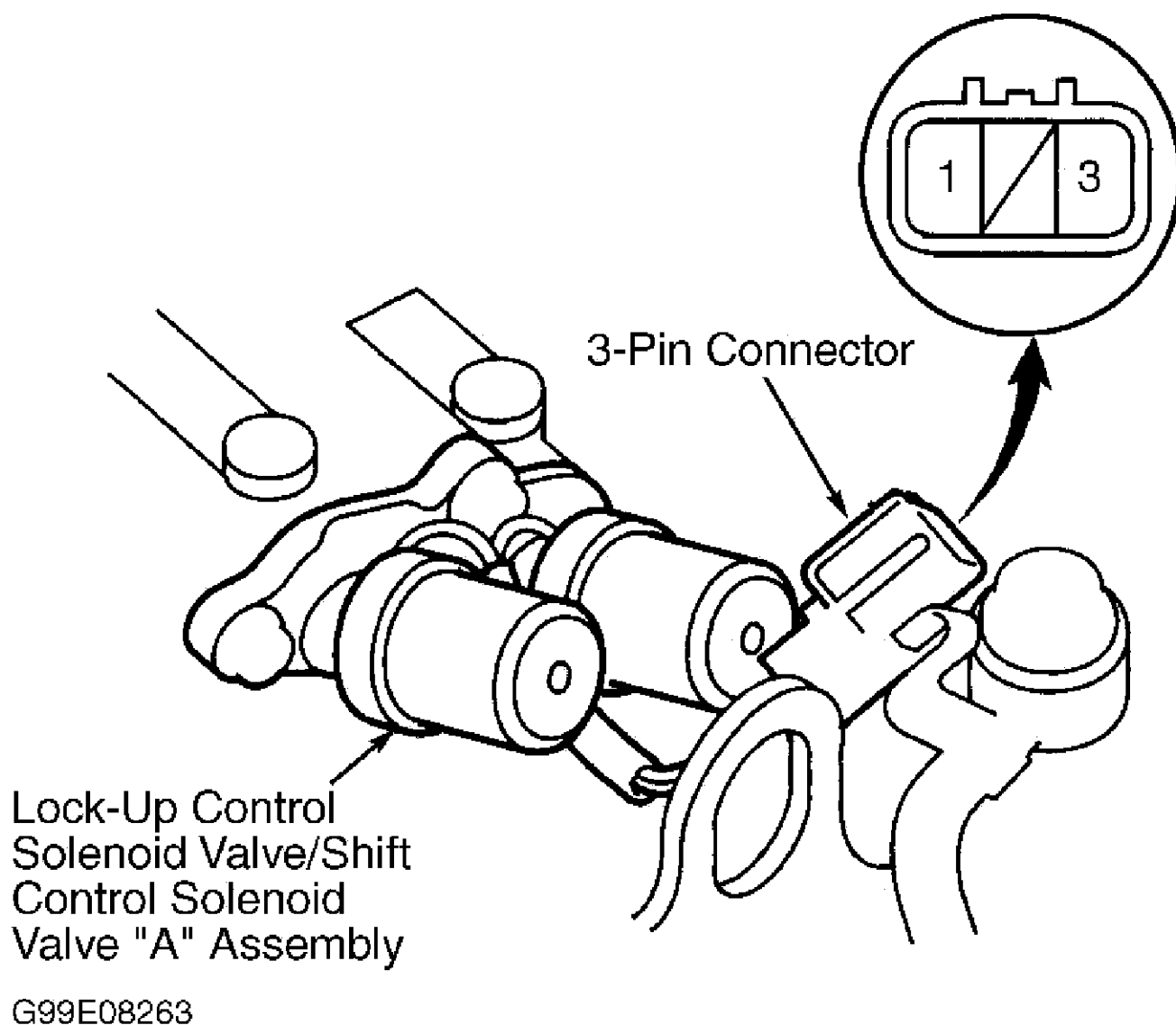


Fig. 9: Identifying Lock-Up Control Solenoid Valve Harness Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

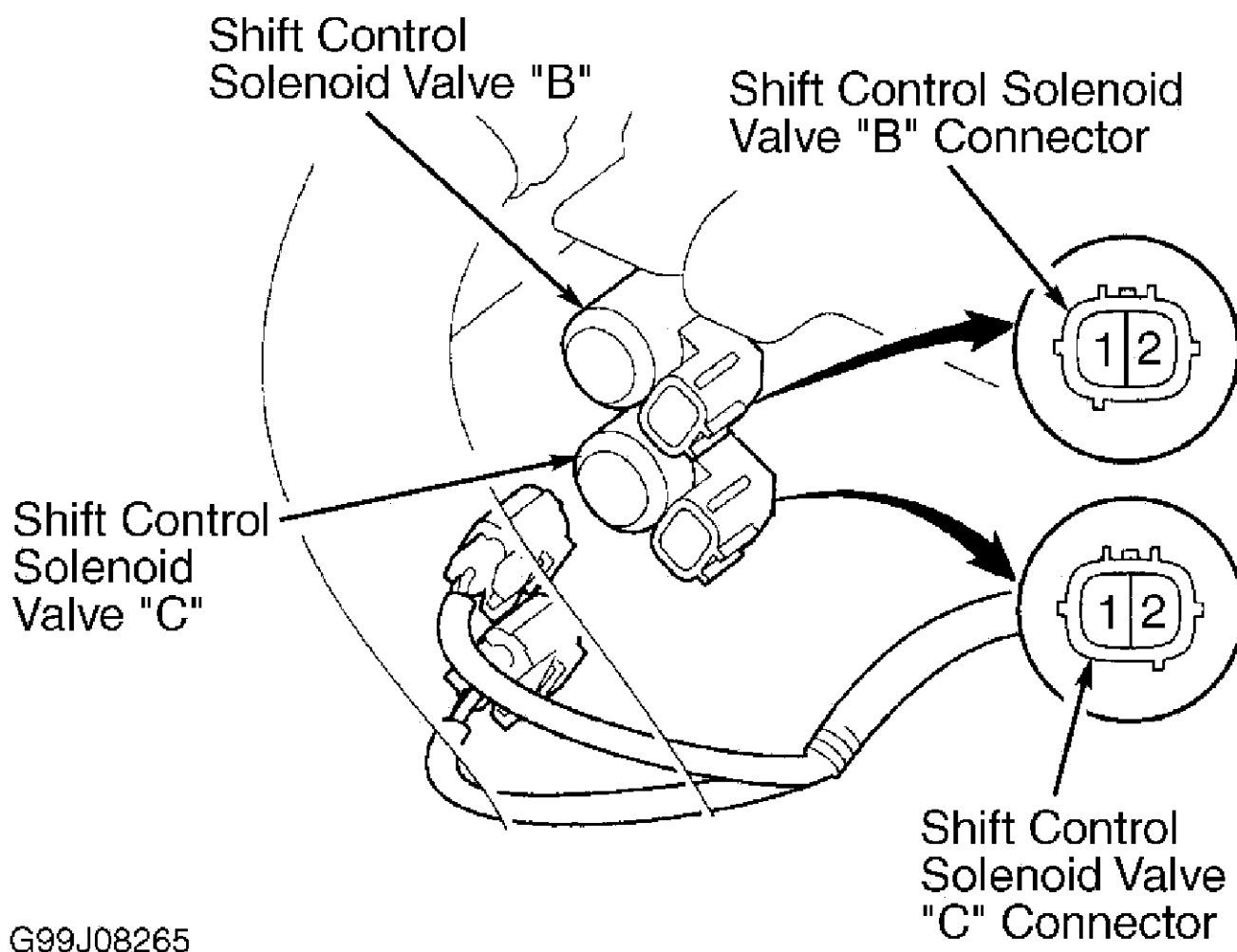
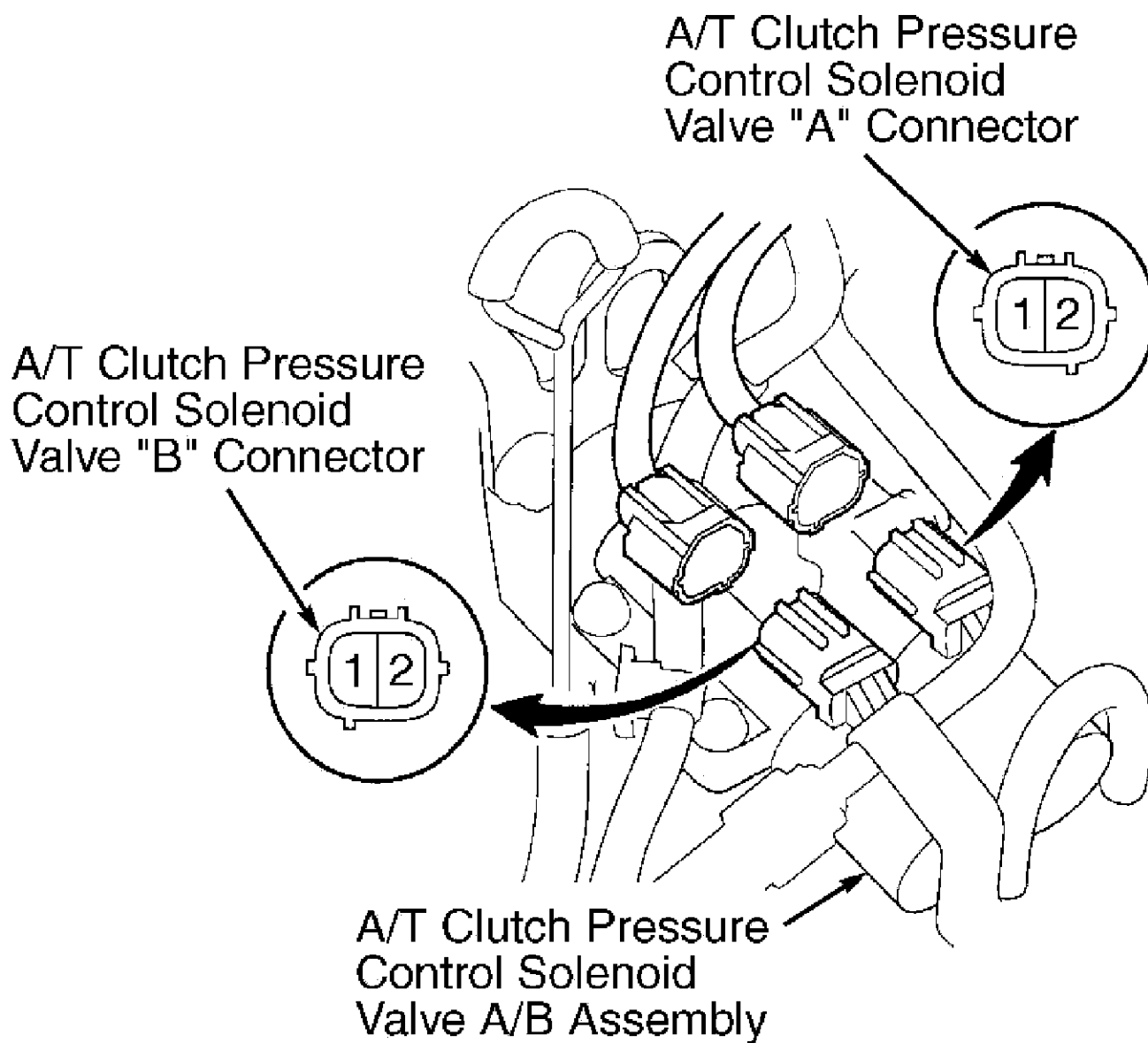
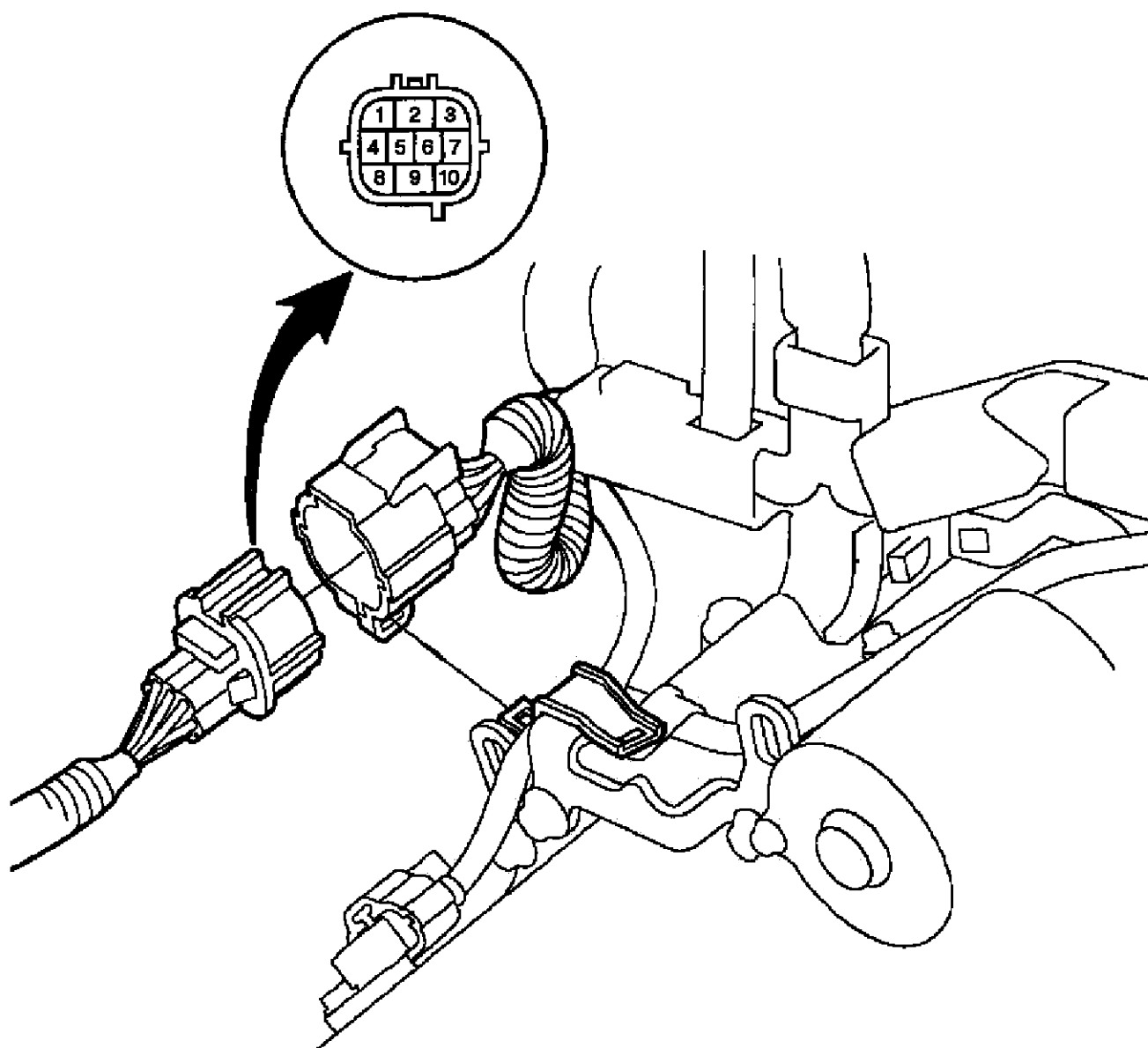


Fig. 10: Identifying Shift Control Solenoid Valve Harness Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G99A08261

Fig. 11: Identifying A/T Clutch Pressure Control Solenoid Harness Connector Terminals
 Courtesy of AMERICAN HONDA MOTOR CO., INC.



G98H04676

Fig. 12: Identifying A/T Gear Position Switch Harness Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DIAGNOSTIC TESTS

NOTE: For circuit and terminal identification, see CONNECTOR IDENTIFICATION , PIN VOLTAGE TESTS and WIRING DIAGRAMS .

NOTE: Diagnostic codes are identified by "P" series code and then flash code, example: P0715/15 (DTC code/flash code).

DTC P0715/15: MAINSHAFT SPEED SENSOR

NOTE: **DTC P0715 does NOT confirm an electrical problem in mainshaft speed sensor or circuit. This DTC can also be caused by a mechanical problem in transaxle. Any problem causing irregular countershaft to mainshaft speed difference can cause this code.**

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check mainshaft speed sensor and PCM connections.
2. Ensure mainshaft and countershaft speed sensors are installed properly. See **COUNTERSHAFT SPEED SENSOR** or **MAINSHAFT SPEED SENSOR** under REMOVAL & INSTALLATION. Disconnect mainshaft speed sensor harness connector. Measure resistance between sensor terminals. See **MAINSHAFT SPEED SENSOR** under COMPONENT TESTS. If resistance is not 400-600 ohms, replace mainshaft speed sensor. If resistance is 400-600 ohms, go to next step.
3. Disconnect PCM harness connector "D". Check for continuity between PCM harness connector "D" terminals No. 11 (Red wire) and No. 12 (White wire) and ground. If continuity is present, repair short to ground in Red wire or White wire between PCM and mainshaft speed sensor. If continuity is not present, go to next step.
4. Reconnect mainshaft speed sensor harness connector. Measure resistance between PCM harness connector "D" terminals No. 11 (Red wire) and No. 12 (White wire). If resistance is not 400-600 ohms, go to next step. If resistance is 400-600 ohms, see DTC **P0720/9: COUNTERSHAFT SPEED SENSOR**. Check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary.
5. Disconnect mainshaft speed sensor harness connector. Check Red wire for continuity between PCM harness connector "D" terminal No. 11 and mainshaft speed sensor harness connector. If continuity is present, go to next step. If continuity is not present, repair open in Red wire between PCM harness connector "D" and mainshaft speed sensor harness connector.
6. Check White wire for continuity between PCM harness connector "D" terminal No. 12 and mainshaft speed sensor harness connector. If continuity is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If continuity is not present, repair open in White wire between PCM harness connector "D" and mainshaft speed sensor harness connector.

DTC P0720/9: COUNTERSHAFT SPEED SENSOR

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check countershaft speed sensor and PCM connections.
2. Ensure countershaft speed sensor is installed properly. See **COUNTERSHAFT SPEED SENSOR** under REMOVAL & INSTALLATION. Repair as necessary. If no problem is found, go to next step.
3. Disconnect countershaft speed sensor harness connector. Measure resistance between sensor terminals. See **COUNTERSHAFT SPEED SENSOR** under COMPONENT TESTS. If resistance is not 400-600 ohms, replace countershaft speed sensor. If resistance is 400-600 ohms, disconnect PCM harness connector "D". Check for continuity between PCM harness connector "D" terminals No. 16 (Green wire) and No. 10 (Blue wire) and ground. If continuity is present, repair short to ground in Green wire or Blue wire between PCM and countershaft speed sensor. If continuity is not present, go to next step.
4. Reconnect countershaft speed sensor harness connector. Measure resistance between PCM harness connector "D" terminals No. 16 (Green wire) and No. 10 (Blue wire). If resistance is 400-600 ohms, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If

resistance is not 400-600 ohms, repair loose connection or open in Green wire or Blue wire between PCM harness connector "D" and countershaft speed sensor harness connector.

DTC P0730/41: SHIFT CONTROL SYSTEM

NOTE: DO NOT perform this DTC test until all other DTCs have been repaired first.

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Road test vehicle at greater than 12 MPH for more than 30 seconds in 2nd, 3rd and 4th gear. Using scan tool, check for any other DTCs. If any other DTCs are present, repair those DTCs first, then recheck for DTC P0730/41. If no other DTCs are present, go to next step.
3. Test clutch pressure. See **HYDRAULIC PRESSURE TESTS** under **PERFORMANCE TESTS** in **HONDA B7TA & B7XA OVERHAUL** article. If clutch pressure is within specification, go to next step. If clutch pressure is not within specification, repair hydraulic system as necessary.
4. Replace lock-up control solenoid valve/shift control solenoid valve "A" assembly and shift control solenoid valves "B" and "C". See **LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY** and **SHIFT CONTROL SOLENOID VALVES "B" & "C"** under **REMOVAL & INSTALLATION**. Turn ignition off and clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under **DIAGNOSIS & TESTING**. Road test vehicle at greater than 12 MPH for more than 30 seconds in 2nd, 3rd and 4th gear. Recheck DTCs. If DTC P0730/41 returns, replace transaxle. If DTC P0730/41 does not return, system is okay.

DTC P0740/40: LOCK-UP CONTROL SYSTEM

NOTE: DO NOT perform this DTC test until all other DTCs have been repaired first.

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Using scan tool, check for any other DTCs. If any other DTCs are present, repair those DTCs first, then recheck for DTC P0740/40. If no other DTCs are present, go to next step.
3. Test line pressure. See **HYDRAULIC PRESSURE TESTS** under **PERFORMANCE TESTS** in **HONDA B7TA & B7XA OVERHAUL** article. If line pressure is within specification, go to next step. If line pressure is not within specification, repair hydraulic system as necessary.
4. Replace lock-up control solenoid valve/shift control solenoid valve "A" assembly and A/T clutch pressure control solenoid valve "A"/"B" assembly. See **LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY** and **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under **REMOVAL & INSTALLATION**. Turn ignition off and clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under **DIAGNOSIS & TESTING**. Ensure engine coolant temperature is more than 176°F (80°C). Road test vehicle at greater than 55 MPH for more than one minute. Recheck DTCs. If DTC P0740/40 returns, replace transaxle and torque converter. If DTC P0740/40 does not return, system is okay.

DTC P0753/7: SHIFT CONTROL SOLENOID VALVE "A"

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent.

Check transaxle and PCM connections.

2. Disconnect PCM harness connectors "B" and "D". Turn ignition on. Check for voltage between PCM harness connector "D" terminal No. 7 (Blue/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is not present, go to next step. If voltage is present, repair Blue/Yellow wire for a short to power.
3. Turn ignition off. Measure resistance between PCM harness connector "D", terminal No. 7 (Blue/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If resistance is not 12-25 ohms, go to next step. If resistance is 12-25 ohms, go to step 7.
4. Check for continuity between PCM harness connector "B" terminal No. 20 or 22 (Brown/Black wires) and ground. If continuity is not present, repair open Brown/Black wires. If continuity is present, go to next step.
5. Disconnect lock-up control solenoid valve/shift control solenoid valve "A" assembly harness connector. Check for continuity between PCM harness connector "D" terminal No. 7 (Blue/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If continuity is not present, go to next step. If continuity is present, repair short to ground in Blue/Yellow wire between PCM harness connector "D" and shift control solenoid valve "A".
6. Measure resistance between Light Green/White wire at lock-up control solenoid/shift control solenoid valve "A" harness connector (solenoid side) and ground. If resistance is not 12-25 ohms, replace shift control solenoid valve assembly. If resistance is 12-25 ohms, repair open in Light Green/White wire between shift control solenoid valve "A" and PCM harness connector "D".
7. Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If battery voltage is not present, check for blown fuse No. 6 (15-amp) in underdash fuse relay box. If fuse is okay, repair open between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and fuse relay box.

DTC P0758/8: SHIFT CONTROL SOLENOID VALVE "B"

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Disconnect PCM harness connectors "B" and "D". Turn ignition on. Check for voltage between PCM harness connector "D" terminal No. 2 (Green/White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is not present, go to next step. If voltage is present, repair short to power in Green/White wire.
3. Turn ignition off. Measure resistance between PCM harness connector "D" terminal No. 2 (Green/White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If resistance is not 12-25 ohms, go to next step. If resistance is 12-25 ohms, go to step 7.
4. Check for continuity between PCM harness connector "B" terminal No. 20 or 22 (Brown/Black wires) and ground. If continuity is not present, repair open Brown/Black wires. If continuity is present, go to next step.
5. Disconnect shift control solenoid valve "B" harness connector. Check for continuity between PCM harness connector "D" terminal No. 2 (Green/White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If continuity is not present, go to next step. If continuity is present, repair short to ground in Green/White wire between PCM harness connector "B" and shift control solenoid valve "B".
6. Measure resistance between shift control solenoid valve "B" harness connector (solenoid side) terminals. If resistance is not 12-25 ohms, replace shift control solenoid valve "B". If resistance is 12-

25 ohms, repair open in Green/White wire between shift control solenoid valve "B" and PCM harness connector or in Black wire between shift control solenoid valve "B" connector and ground.

7. Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If battery voltage is not present, check for blown fuse No. 6 (15-amp) in underdash fuse relay box. If fuse is okay, repair open between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and fuse relay box.

DTC P0763/22: SHIFT CONTROL SOLENOID VALVE "C"

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Disconnect PCM harness connectors "B" and "D". Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 3 (Green wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is not present, go to next step. If voltage is present, repair short to voltage in Green wire between PCM harness connector "D" and shift control solenoid valve harness connector.
3. Turn ignition off. Measure resistance between PCM harness connector "D" terminal No. 3 (Green wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If resistance is not 12-25 ohms, go to next step. If resistance is 12-25 ohms, go to step 7.
4. Check for continuity between PCM harness connector "B" terminal No. 20 or 22 (Brown/Black wires) and ground. If continuity is not present, repair open Brown/Black wires. If continuity is present, go to next step.
5. Disconnect shift control solenoid valve harness connector. Check for continuity between PCM harness connector "D" terminal No. 3 (Green wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If continuity is not present, go to next step. If continuity is present, repair short to ground in Green wire between PCM harness connector "D" and shift control solenoid valve "C".
6. Measure resistance between shift control solenoid valve "C" harness connector (solenoid side). If resistance is not 12-25 ohms, replace shift control solenoid valve assembly. If resistance is 12-25 ohms, repair open Green wire between shift control solenoid valve "C" and PCM harness connector, or in Black wire between shift control solenoid valve "C" connector and ground.
7. Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If battery voltage is not present, check for blown fuse No. 6 (15-amp) in underdash fuse relay box. If fuse is okay, repair open between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and fuse relay box.

DTC P0780/45: MECHANICAL FAULT IN HYDRAULIC SYSTEM

NOTE: DO NOT perform this DTC test until all other DTCs have been repaired first.

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Using scan tool, check for any other DTCs. If any other DTCs are present, repair those DTCs first, then recheck for DTC P0780/45. If no other DTCs are present, go to next step.

3. Replace lock-up control solenoid valve/shift control solenoid valve "A" assembly and A/T clutch pressure control solenoid valve "A"/"B" assembly. See **LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY** and **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION.
4. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under DIAGNOSIS & TESTING. Road test for several minutes in "D4". Ensure transaxle shifts into all gears. Recheck DTCs. If DTC P0780/45 returns, replace transaxle. If DTC P0780/45 does not return, system is okay.

DTC P1705/5: A/T GEAR POSITION SWITCH (SHORT)

NOTE: **DTC P1705 is set when PCM receives 2 gear position signals at the same time.**

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Turn ignition on. Observe gear position indicator lights while moving selector lever to each position. If any indicator light stays illuminated when selector lever is not in indicated position, go to next step. If gear position indicator lights illuminate in appropriate selector lever position, system is okay. Check for loose or damaged harness connectors.
3. Disconnect A/T gear position switch connector. If all A/T gear position switch indicators are not illuminated, replace A/T gear position switch. See **A/T GEAR POSITION SWITCH** under REMOVAL & INSTALLATION. If any A/T gear position switch indicators are illuminated, go to next step.
4. Turn ignition off. Connect A/T gear position switch connector. Turn ignition on. Move selector lever through all positions except "R". Measure voltage between PCM harness connector "D" terminal No. 6 (White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, inspect the following items. Repair as needed.
 - Check for short in wire between PCM harness connector "D" terminal No. 6 and A/T gear position indicator.
 - Inspect A/T gear position switch. See **A/T GEAR POSITION SWITCH** under COMPONENT TESTS.
 - Check for continuity between PCM harness connector "B" terminal No. 20 and 22 and ground.
 - Check for loose PCM harness.
 - If no problems are found, replace PCM with a known-good unit and retest system.
5. Move selector lever through all positions except "N" and "P". Measure voltage between PCM harness connector "B" terminal No. 14 (Blue/White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, inspect the following items. Repair as needed.
 - Check for short in wire between PCM harness connector "B" terminal No. 14 and A/T gear position switch.
 - Check for short in signal wire between A/T gear position switch and A/T gear position indicator.
 - Check for loose PCM harness connectors.
 - If no problems are found, replace PCM with a known-good unit and retest system.

6. Move selector lever through all positions except "D4". Measure voltage between PCM harness connector "D" terminal No. 9 (Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If about 5 volts is present, go to next step. If about 5 volts is not present, inspect the following items. Repair as needed.
 - Check for short in wire between PCM harness connector "D" terminal No. 9 and A/T gear position switch.
 - Check for short in signal wire between A/T gear position switch and A/T gear position indicator.
 - Check for loose PCM harness connectors.
 - If no problems are found, replace PCM with a known-good unit and retest system.
7. Move selector lever through all positions except "D3". Measure voltage between PCM harness connector "D" terminal No. 8 (Pink wire) and PCM harness connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, inspect the following items. Repair as needed.
 - Check for short in wire between PCM harness connector "D" terminal No. 8 and A/T gear position switch.
 - Check for short in signal wire between A/T gear position switch and A/T gear position indicator.
 - Check for loose PCM harness connectors.
 - If no problems are found, replace PCM with a known-good unit and retest system.
8. Move selector lever through all positions except "2". Measure voltage between PCM harness connector "D" terminal No. 14 (Blue wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, inspect the following items. Repair as needed.
 - Check for short in wire between PCM harness connector "D" terminal No. 14 and A/T gear position switch.
 - Check for short in signal wire between A/T gear position switch and A/T gear position indicator.
 - Check for loose PCM harness connectors.
 - If no problems are found, replace PCM with a known-good unit and retest system.
9. Move selector lever through all positions except "1". Measure voltage between PCM harness connector "D" terminal No. 15 (Brown wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, inspect the following items. Repair as needed.
 - Check for short in wire between PCM harness connector "D" terminal No. 15 and A/T gear position switch.
 - Check for short in signal wire between A/T gear position switch and A/T gear position indicator.
 - Check for loose PCM harness connectors.
 - If no problems are found, replace PCM with a known-good unit and retest system.
10. Inspect PCM for loose connectors or damaged terminals. Repair as needed. If connectors are clean and tight, replace PCM with a known-good unit and retest system. If DTC P1705 is still present, repeat diagnostic procedure.

DTC P1706/6: A/T GEAR POSITION SWITCH (OPEN)

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Test A/T gear position switch. See **A/T GEAR POSITION SWITCH** under COMPONENT TESTS. If switch is okay, go to next step. If switch fails test, replace A/T gear position switch.
3. Turn ignition off. Place selector lever in "R" position. Measure voltage between PCM harness connector "D" terminal No. 6 (White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is not present, go to next step. If voltage is present, repair open in White wire between PCM harness connector "D" and A/T gear position switch.
4. Place selector lever in "N" or "P" position. Measure voltage between PCM harness connector "B" terminal No. 14 (Blue/White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is not present, go to next step. If voltage is present, repair open in Blue/White wire between PCM harness connector "D" and A/T gear position indicator.
5. Place selector lever in "D4" position. Measure voltage between PCM harness connector "D" terminal No. 9 (Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is not present, go to next step. If voltage is present, repair open in Yellow wire between PCM harness connector "D" and A/T gear position switch.
6. Place selector lever in "D3" position. Measure voltage between PCM harness connector "D" terminal No. 8 (Pink wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is not present, go to next step. If voltage is present, repair open in Pink wire between PCM harness connector "D" and A/T gear position switch.
7. Place selector lever in "2" position. Measure voltage between PCM harness connector "D" terminal No. 14 (Blue wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is not present, go to next step. If voltage is present, repair open in Blue wire between PCM harness connector "D" and A/T gear position switch.
8. Place selector lever in "1" position. Measure voltage between PCM harness connector "D" terminal No. 15 (Brown wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is not present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If voltage is present, repair open in Brown wire between PCM harness connector "D" and A/T gear position switch.

DTC P1738/25: 2ND CLUTCH PRESSURE SWITCH

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 13 (Blue/Black wire) and terminals No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, go to step 4.
3. Turn ignition off. Disconnect PCM harness connector "D". Check for continuity between PCM harness connector "D" terminal No. 13 (Blue/Black wire) and ground. If continuity is not present, replace PCM with a known-good unit and recheck. If continuity is present, repair short to ground in Blue/Black wire.
4. Raise and support front of vehicle. Set parking brake and block rear wheels. Start engine and place selector lever in "2" position. Run in "2" position for more than 5 seconds. Measure voltage between PCM harness connector "D" terminal No. 13 (Blue/Black wire) and terminal No. 20 or 22 (Brown/Black wires). If voltage is about zero volts, check connections and replace PCM with a known-good unit as necessary. Recheck system. If voltage is not about zero volts, go to next step.
5. Turn ignition off. Disconnect 2nd clutch pressure switch connector. See **Fig. 3**. Turn ignition on.

Measure voltage between 2nd clutch pressure switch connector and ground. If battery voltage is present, go to next step. If battery voltage is not present, repair open or short in Blue/Black wire between PCM harness connector "D" and 2nd clutch pressure switch connector.

6. Measure resistance between 2nd clutch pressure switch connector and ground. If resistance is 10 megohms or more, check for loose PCM or 2nd clutch pressure switch harness connectors. Replace PCM or 2nd clutch pressure switch with a known-good unit if necessary. If resistance is less than 10 megohms, replace 2nd clutch pressure switch.

DTC P1739/26: 3RD CLUTCH PRESSURE SWITCH

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Turn ignition on. Measure voltage between PCM harness connector "B" terminal No. 24 (Blue/White wire) and terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, go to step 4.
3. Turn ignition off. Disconnect PCM harness connector "B". Check for continuity between PCM harness connector "B" terminal No. 24 (Blue/White wire) and ground. If continuity is not present, check for loose connections, replace PCM with a known-good unit if necessary. Recheck system. If continuity is present, repair short to ground in Blue/White wire.
4. Raise and support front of vehicle. Set parking brake and block rear wheels. Start engine and place selector lever in "2" position. Run in "2" position for more than 5 minutes. Measure voltage between PCM harness connector "B" terminal No. 24 (Blue/White wire) and terminal No. 20 or 22 (Brown/Black wires). If voltage is about zero volts, check connections and replace PCM with a known-good unit as necessary. Recheck system. If voltage is not about zero volts, go to next step.
5. Turn ignition off. Disconnect 3rd clutch pressure switch connector. See **Fig. 3**. Turn ignition on. Measure voltage between 3rd clutch pressure switch connector and ground. If battery voltage is present, go to next step. If battery voltage is not present, repair open or short in Blue/White wire between PCM harness connector "B" and 3rd clutch pressure switch connector.
6. Measure resistance between 3rd clutch pressure switch connector and ground. If resistance is 10 megohms or more, check for loose PCM or 3rd clutch pressure switch harness connectors. Check connections and replace PCM with a known-good unit if necessary. If resistance is less than 10 megohms, replace 3rd clutch pressure switch.

DTC P1750/46: MECHANICAL FAULT IN HYDRAULIC SYSTEM

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Using scan tool, check for any other DTCs. If any other DTCs are present, repair those DTCs first, then recheck for DTC P1750/46. If no other DTCs are present, go to next step.
3. Replace A/T clutch pressure control solenoid valve "A"/"B" assembly. See **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION.
4. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under DIAGNOSIS & TESTING. Road test for several minutes in "D4". Ensure transaxle shifts into all gears. Recheck DTCs. If DTC P1750/46 returns, replace transaxle. If DTC P1750/46 does not return, system is okay.

DTC P1751/47: MECHANICAL FAULT IN HYDRAULIC SYSTEM

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Using scan tool, check for any other DTCs. If any other DTCs are present, repair those DTCs first, then recheck for DTC P1751/47. If no other DTCs are present, go to next step.
3. Replace shift control solenoid valve "B" and A/T clutch pressure control solenoid valve "A"/"B" assembly. See **SHIFT CONTROL SOLENOID VALVES "B" & "C" and A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION.
4. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under DIAGNOSIS & TESTING. Road test for several minutes in "D4". Ensure transaxle shifts into all gears. Recheck DTCs. If DTC P1751/47 returns, replace transaxle. If DTC P1751/47 does not return, system is okay.

DTC P1753/1: LOCK-UP CONTROL SOLENOID VALVE

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Disconnect PCM harness connectors "B" and "D". Check for voltage between PCM harness connector "D" terminal No. 1 (Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is not present, go to next step. If voltage is present, repair short to voltage in Yellow wire between PCM harness connector "D" and lock-up control solenoid valve.
3. Turn ignition off. Measure resistance between PCM harness connector "D" terminal No. 1 (Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If resistance is not 12-25 ohms, go to next step. If resistance is 12-25 ohms, go to step 7.
4. Check for continuity between PCM harness connector "B" terminals No. 20 or 22 (Brown/Black wires) and ground. If continuity is not present, repair open Brown/Black wires. If continuity is present, go to next step.
5. Disconnect lock-up control solenoid valve/shift control solenoid valve "A" harness connector. Check for continuity between PCM harness connector "D" terminal No. 1 (Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If continuity is not present, go to next step. If continuity is present, repair short to ground in Yellow wire between PCM harness connector "D" and lock-up control solenoid valve.
6. Measure resistance of Blue/Yellow wire between lock-up control solenoid valve harness connector (solenoid side) and ground. If resistance is not 12-25 ohms, replace lock-up control solenoid valve assembly. If resistance is 12-25 ohms, repair open in Yellow wire between lock-up control solenoid valve and harness connector.
7. Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If battery voltage is not present, check for blown fuse No. 6 (15-amp) in underdash fuse relay box. If fuse is okay, repair open between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and fuse relay box.

DTC P1768/16: A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.

2. Disconnect A/T clutch pressure control solenoid valve "A" harness connector. Measure resistance between terminals of A/T clutch pressure control solenoid valve "A". If resistance is about 5 ohms, go to next step. If resistance is not about 5 ohms, replace A/T clutch pressure control solenoid valve "A"/"B" assembly. See **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION.
3. Disconnect PCM harness connector "B". Check for continuity between PCM harness connector "B" terminal No. 17 (Red wire) and ground, then between terminal No. 8 (White wire) and ground. If continuity is not present, go to next step. If continuity is present, repair short to ground between terminal No. 17 (Red wire) or terminal No. 8 (White wire) and A/T clutch pressure control solenoid valve "A".
4. Reconnect A/T clutch pressure control solenoid harness connector. Measure resistance between PCM harness connector "B" terminal No. 17 (Red wire) and terminal No. 8 (White wire). If resistance is about 5 ohms, go to next step. If resistance is not as specified, repair open or poor connection between terminal No. 17 (Red wire) or terminal No. 8 (White wire) and A/T clutch pressure control solenoid valve "A".
5. Disconnect PCM harness connector "D". Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, check for blown fuse No. 6 (15-amp) in underdash fuse relay box. If fuse is okay, repair open between PCM harness connector "D" terminal No. 5 and fuse relay box.
6. Check for continuity between PCM harness connector "B" terminal No. 20 or 22 (Brown/Black wires) and ground. If continuity is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If continuity is not present, repair open Brown/Black wires.

DTC P1773/23: A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "B"

1. Using scan tool, retrieve freeze data. Clear DTCs and road test vehicle under same conditions freeze data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Disconnect A/T clutch pressure control solenoid valve "B" harness connector. Measure resistance between terminals of A/T clutch pressure control solenoid valve "B". If resistance is about 5 ohms, go to next step. If resistance is not about 5 ohms, replace A/T clutch pressure control solenoid valve "A"/"B" assembly. See **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION.
3. Disconnect PCM harness connector "B". Check for continuity between PCM harness connector "B" terminal No. 25 (Orange wire) and ground, then between terminal No. 18 (Green wire) and ground. If continuity is not present, go to next step. If continuity is present, repair short to ground between PCM harness connector "B" terminal No. 25 or terminal No. 18 and A/T clutch pressure control solenoid valve "B".
4. Reconnect A/T clutch pressure control solenoid "B" harness connector. Measure resistance between PCM harness connector "B" terminals No. 25 (Orange wire) and No. 18 (Green wire). If resistance is about 5 ohms, go to next step. If resistance is not about 5 ohms, repair open or poor connection between PCM harness connector "B" terminal No. 25 or No. 18 and A/T clutch pressure control solenoid valve "B".
5. Disconnect PCM harness connector "D". Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and harness connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, check for blown fuse No. 6 (15-amp) in underdash fuse relay box. If fuse is okay, repair open between ignition switch and fuse relay box.

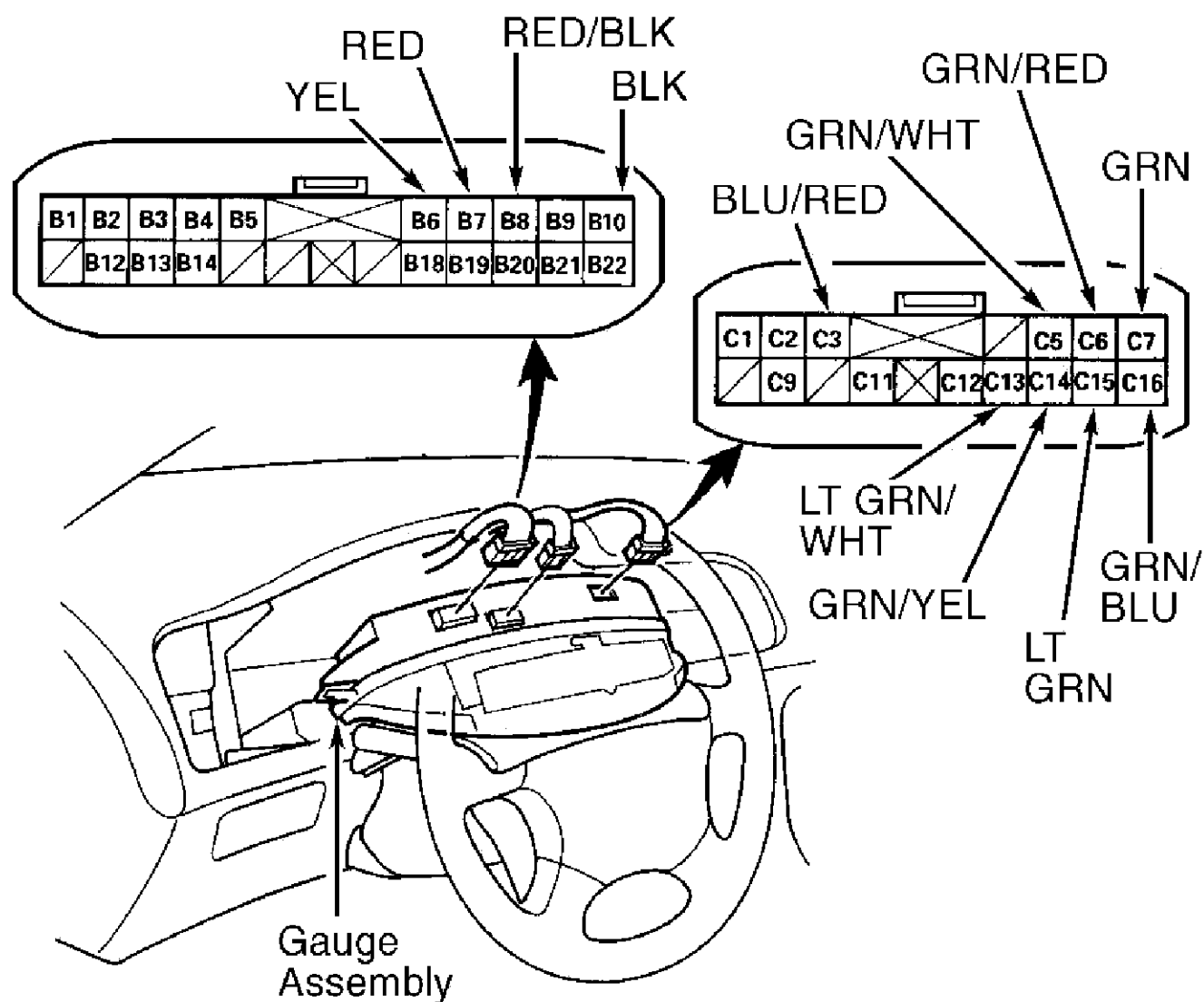
6. Check for continuity between PCM harness connector "B" terminal No. 20 or 22 (Brown/Black wires) and ground. If continuity is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If continuity is not present, repair open Brown/Black wires.

SYSTEM TESTS

A/T GEAR POSITION INDICATOR

NOTE: **If necessary, refer to wiring schematic when checking component wiring.
See WIRING DIAGRAMS .**

1. Remove instrument panel gauge assembly from instrument panel. Disconnect harness connectors from rear of instrument panel gauge assembly. See **Fig. 13** .
2. Check for voltage and continuity at specified harness connectors and terminals. See **Fig. 14** . If all tests are okay, but indicator is faulty, replace printed circuit board.



G96B31816

Fig. 13: Identifying Instrument Panel Gauge Assembly Harness Connectors
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda B7XA Electronic Controls

Cavity	Wire Color	Test Condition	Test: Desired Result	Possible Cause (If result is not obtained)
B11	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none">• Blown No. 9 (7.5 A) fuse in the driver's under-dash fuse/relay box• An open in the wire• Poor ground (G501)• An open in the wire• Faulty A/T gear position switch• An open in the wire
B16	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	
C4	WHT	Ignition switch ON (II) and shift lever in R	Check for voltage to ground: There should be 1 V or less. There should be battery voltage in any other shift lever position.	
C5	BRN	Ignition switch ON (II) and shift lever in 1		
C6	PNK	Ignition switch ON (II) and shift lever in D		
C7	BLU	Ignition switch ON (II) and shift lever in 2		
C12	GRN/BLK	Ignition switch ON (II) and shift lever in D	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none">• Faulty A/T gear position switch• Faulty PCM• An open in the wire• Faulty A/T gear position switch• An open in the wire
C15	BLK/BLU	Shift lever in P	Check for continuity to ground: There should be no continuity in any other shift lever position.	
C16	RED/BLK	Ignition switch ON (II) and shift lever in N	Check for voltage to ground: There should be 1 V or less. There should be battery voltage in any other shift lever position.	

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Fig. 14: Testing A/T Gear Position Indicator

Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT TESTS**A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY**

1. A/T clutch pressure control solenoid valve "A"/"B" assembly is located on transaxle. See **Fig. 3**. Disconnect harness connector at A/T clutch pressure control solenoid valves "A" and "B".
2. Measure resistance between solenoid terminals. Resistance should be about 5 ohms. Replace A/T clutch pressure control solenoid valve "A"/"B" assembly if resistance is not as specified.
3. Check A/T clutch pressure control solenoid operation. Apply battery voltage to terminal No. 1 and ground terminal No. 2. See **Fig. 11**. A clicking sound should be heard for each solenoid, indicating solenoid operation. Replace A/T clutch pressure control solenoid valve "A"/"B" assembly if solenoid fails to operate.

A/T GEAR POSITION SWITCH

1. Disconnect harness connectors from A/T gear position switch. Note harness connector terminal identification. See **Fig. 12**.

NOTE: Check for continuity while moving shift lever back and forth in free play

area of each gear position.

2. Check for continuity between specified terminal(s) with shift lever in indicated positions. See **A/T GEAR POSITION SWITCH CONTINUITY** table.
3. If continuity is not as specified, A/T gear position switch may require adjustment. If correct continuity cannot be obtained by adjusting A/T gear position switch, replace switch assembly. See **A/T GEAR POSITION SWITCH** under REMOVAL & INSTALLATION.

A/T GEAR POSITION SWITCH CONTINUITY

Shift Lever Position	Continuity Between Terminals No.
"P"	1, 3 & 10
"R"	3 & 9
"N"	1, 3 & 8
"D4"	2, 3 & 7
"D3"	2, 3 & 6
"2"	2, 3 & 5
"1"	3 & 4

COUNTERSHAFT SPEED SENSOR

Disconnect harness connector from countershaft speed sensor located on top of transaxle. See **Fig. 3** . Measure resistance between sensor terminals. Replace countershaft speed sensor if resistance is not 400-600 ohms.

LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY

1. Lock-up control solenoid valve/shift control solenoid valve "A" assembly is located on transaxle. Disconnect harness connector at valve assembly. See **Fig. 3** .
2. Measure resistance between ground and terminal No. 1 (lock-up control solenoid valve), then between ground and terminal No. 3 (shift control solenoid valve "A"). See **Fig. 9** . Resistance should be 12-25 ohms. Replace lock-up control solenoid valve/shift control solenoid valve "A" assembly if resistance of either solenoid valve is not within specification.
3. Check lock-up control solenoid valve/shift control solenoid valve "A" operation. Ensure solenoid valve body is grounded. Apply battery voltage to terminal No. 1 (lock-up control solenoid valve), or terminal No. 3 (shift control solenoid valve "A").
4. A clicking sound should be heard, indicating solenoid valve operation. Replace lock-up control solenoid valve/shift control solenoid valve "A" assembly if either solenoid valve fails to operate.

MAINSHAFT SPEED SENSOR

Disconnect harness connector from mainshaft speed sensor located on side of transaxle. See **Fig. 3** . Measure resistance between sensor terminals. Replace mainshaft speed sensor if resistance is not 400-600 ohms.

SHIFT CONTROL SOLENOID VALVES "B" & "C"

1. Shift control solenoid valves are located on transaxle. See **Fig. 3** . Disconnect harness connector at shift control solenoid valves.
2. Measure resistance between ground and terminals No. 1 and 2 of each solenoid valve. See **Fig. 10** . Resistance should be 12-25 ohms. Replace shift control solenoid valve "B" or "C" if resistance of

either solenoid valve is not within specification.

3. Check shift control solenoid valve operation. Apply battery voltage to terminal No. 2 of each solenoid valve. Connect terminal No. 1 of each solenoid to negative battery terminal. A clicking sound should be heard, indicating solenoid valve operation. Replace shift control solenoid valve "B" or "C" assembly if either solenoid valve fails to operate.

THROTTLE POSITION SENSOR

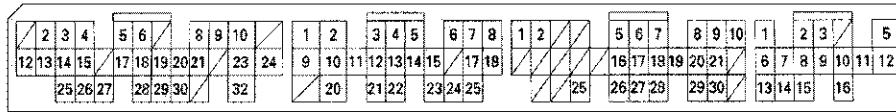
TP sensor should input a .5-volt signal to PCM at closed throttle. At full throttle, signal should be about 4.5 volts. Voltage should change smoothly as throttle valve is opened and closed. If voltage is not as specified, check throttle position sensor wiring circuit. See **WIRING DIAGRAMS** .

PIN VOLTAGE TESTS

NOTE: Only terminals related to transaxle control system are listed. See **Fig. 15** and **Fig. 16** . For complete listing of terminals, see appropriate **SELF-DIAGNOSTICS** article in **ENGINE PERFORMANCE**.

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda B7XA Electronic Controls



"A" (32-PIN)

"B" (25-PIN)

"C" (31-PIN)

"D" (16-PIN)

Terminal Number	Signal	Description	Measuring Conditions/Terminal Voltage
A5	CRS	Downshift signal input from cruise control unit	When cruise control is used: Pulsing signal
A9	VSS OUT	Vehicle speed signal detected from countershaft speed sensor and sent to the gauge assembly by the PCM	Depending on vehicle speed: Pulsing signal When vehicle is stop: 0 V or 5 V
A10	SCS	Timing and adjustment service check signal (5 V from PCM)	With ignition switch ON (II) and service check connector open: 5 V With ignition switch ON (II) and service check connector jumped with special tool: 0 V
A14	D4 IND	D4 indicator light control (Voltage from PCM turns D4 light ON)	When ignition switch is first turned ON (II): Battery voltage for two seconds In position: Battery voltage
A28	ILU	Interlock control (Voltage from PCM)	When ignition switch ON (II), brake pedal depressed, and accelerator pedal released: Battery voltage
A32	STOP SW	Brake switch signal input	Brake pedal depressed: Battery voltage With ignition switch ON (II) and brake pedal released: 0 V
B1	IGP1	Power supply circuit from main relay	With ignition switch ON (II): Battery voltage With ignition switch OFF: 0 V
B2	PG1	Ground (G101)	
B8	LS A-	A/T clutch pressure control solenoid valve A power supply negative electrode	
B9	IGP2	Power supply circuit from main relay	With ignition switch ON (II): Battery voltage With ignition switch OFF: 0 V
B10	PG2	Ground (G101)	
B14	OP2SW	A/T 2nd clutch pressure switch signal input	With ignition switch ON (II): Battery voltage (No 2nd clutch pressure)
B17	LS A+	A/T clutch pressure control solenoid valve A power supply positive electrode	With ignition switch ON (II): Pulsing signal
B18	LS B-	A/T clutch pressure control solenoid valve B power supply negative electrode	
B20	LG1	Ground (G101)	
B21	VBU	Back-up power supply	Always battery voltage
B22	LG2	Ground (G101)	
B24	OP3SW	A/T 3rd clutch pressure switch signal input	With ignition switch ON (II): Battery voltage (No 3rd clutch pressure)
B25	LS B+	A/T clutch pressure control solenoid valve B power supply positive electrode	With ignition switch ON (II): Pulsing signal

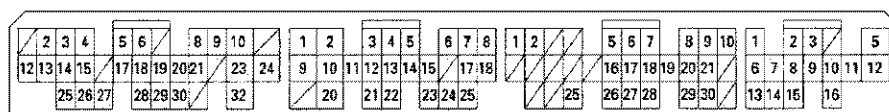
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Fig. 15: Pin Voltages & Terminal Identification (32-Pin PCM Connector "A" & 25-Pin PCM Connector "B")

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda B7XA Electronic Controls



"A" (32-PIN)

"B" (25-PIN)

"C" (31-PIN)

"D" (16-PIN)

Terminal Number	Signal	Description	Measuring Conditions/Terminal Voltage
D1	LC	Lock-up control solenoid valve control	During lock-up conditions: Battery voltage During no lock-up condition: 0 V
D2	SH B	Shift control solenoid valve B control	Battery voltage in following positions: • 1, 2 and positions • D ₄ , and D ₅ positions in 1st and 2nd gear • P, R, and N positions 0 V in following positions: • D ₄ , and D ₅ positions in 3rd gear • D ₄ position in 4th gear
D3	SH C	Shift control solenoid valve C control	Battery voltage in following positions: • 1 position • D ₄ , and D ₅ positions in 1st and 3rd gear 0 V in following positions: • 2 position • D ₄ , and D ₅ positions in 2nd gear • D ₄ position in 4th gear • P, R and N positions
D4	—	Not used	
D5	VB SOL	Power supply for solenoid valves	With ignition switch ON (II): Battery voltage With ignition switch OFF: 0 V
D6	ATP R	A/T gear position switch R position input	In R position: 0 V In other than R position: Battery voltage
D7	SH A	Shift control solenoid valve A control	Battery voltage in following positions: • 2 position • D ₄ , and D ₅ positions in 2nd and 3rd gear 0 V in following positions: • 1 position • D ₄ , and D ₅ positions in 1st gear • D ₄ position in 4th gear • P, R and N positions
D8	ATP D3	A/T gear position switch D ₃ position input	In D ₃ position: 0 V In other than D ₃ position: Battery voltage
D9	ATP D4	A/T gear position switch D ₄ position input	In D ₄ position: 0 V In other than D ₄ position: 5 V
D10	NC	Countershaft speed sensor input	Depending on vehicle speed: Pulsing signal When vehicle is stopped: Approx. 0 V
D11	NM	Mainshaft speed sensor input	Depending on vehicle speed: Pulsing signal When engine is stopped: Approx. 0 V
D12	NMSG	Mainshaft speed sensor ground	
D13	ATP NP	A/T gear position switch P and N positions input	In P and N positions: 0 V In other than P and N position: 5 V
D14	ATP 2	A/T gear position switch 2 position input	In 2 position: 0 V In other than 2 position: Battery voltage
D15	ATP 1	A/T gear position switch 1 position input	In 1 position: 0 V In other than 1 position: Battery voltage
D16	NCSG	Countershaft speed sensor ground	

Fig. 16: Pin Voltages & Terminal Identification (16-Pin PCM Connector "D")
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REMOVAL & INSTALLATION

A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY

Removal & Installation

1. A/T clutch pressure control solenoid valve "A"/"B" assembly is located on transaxle. See **Fig. 3** . Disconnect harness connector at A/T clutch pressure control solenoid valve "A"/"B" assembly.
2. Remove bolts, A/T clutch pressure control solenoid valve "A"/"B" assembly and gasket. To install, reverse removal procedure using a NEW gasket. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** .

A/T GEAR POSITION SWITCH

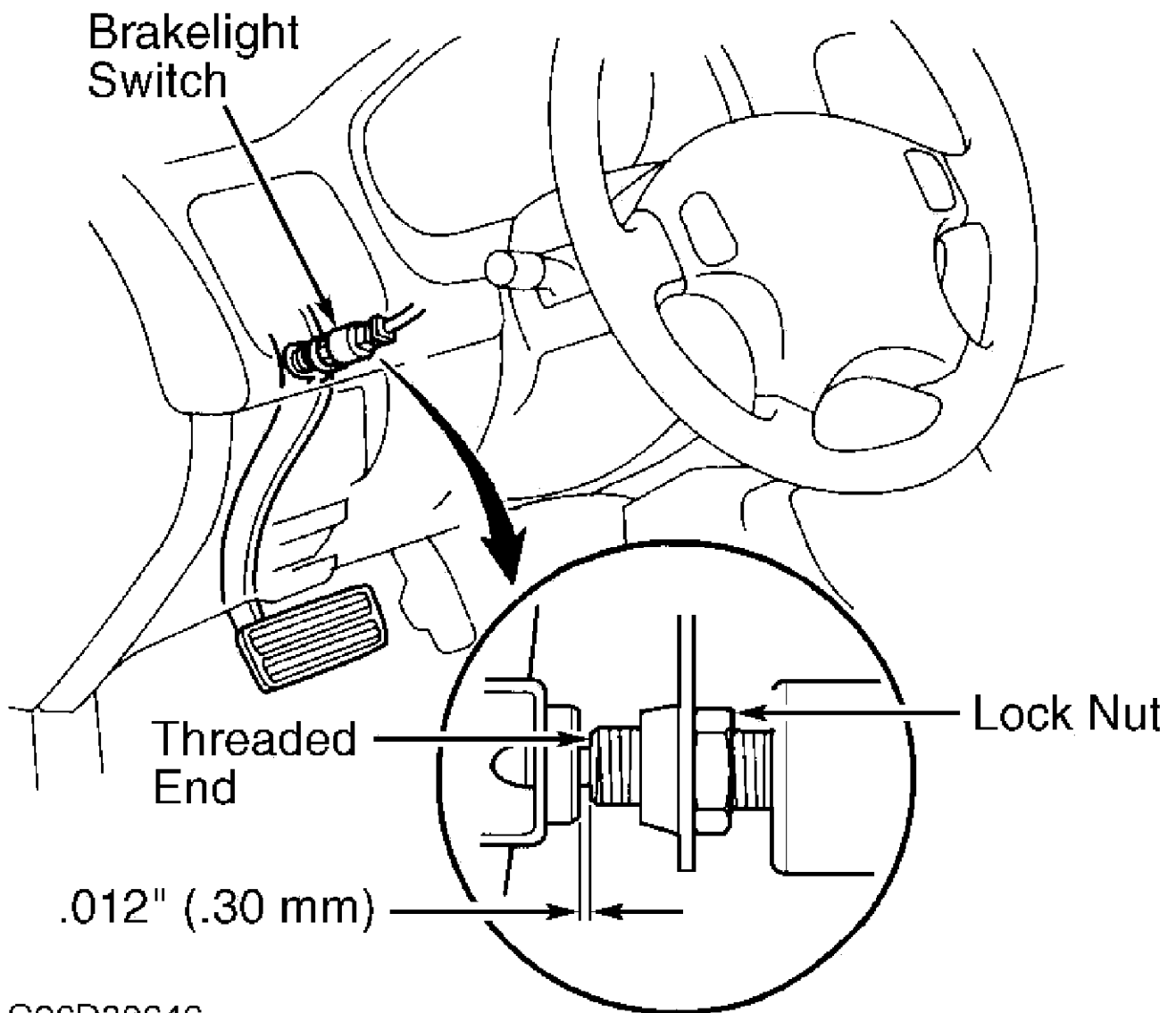
Removal & Installation

1. Raise and support front of vehicle. Apply parking brake and block rear wheels. Place selector lever in "N" position. Disconnect A/T gear position switch connector.
2. Remove harness clamp from right side cover. Remove A/T gear position switch cover and switch. To install, ensure A/T gear position switch is in "N" position. Ensure transaxle control shaft is still in "N" position.
3. To complete installation, reverse removal procedure. Verify switch operation in all positions. See **A/T GEAR POSITION SWITCH** under COMPONENT TESTS.

BRAKELIGHT SWITCH

Removal & Installation

1. Disconnect harness connector from brakelight switch. Remove lock nut from brakelight switch. Unscrew brakelight switch and remove. To install, screw brakelight switch inward until brakelight plunger is fully depressed.
2. Back off brakelight switch 1/4 turn. Ensure .010" (.30 mm) clearance is present between threaded end of brakelight switch and pad area on brake pedal. See **Fig. 17** . Install and tighten lock nut. Install harness connector. Ensure brakelights and cruise control operate properly.



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Fig. 17: Adjusting Brakelight Switch

Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT SPEED SENSOR**Removal & Installation**

1. Disconnect harness connector at countershaft speed sensor. Countershaft speed sensor is located on top of transaxle. See **Fig. 3**.
2. Remove clamp for wiring harness. Remove bolt, countershaft speed sensor and "O" ring. To install, reverse removal procedure using a NEW "O" ring. Install and tighten bolt to specification. See **TORQUE SPECIFICATIONS**.

LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY**Removal & Installation**

1. Lock-up control solenoid valve/shift control solenoid valve "A" assembly is located on transaxle. See **Fig. 3** . Disconnect harness connector at lock-up control solenoid valve/shift control solenoid valve "A" assembly.
2. Remove bolts, valve assembly and gasket. To install, reverse removal procedure using a NEW gasket. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** .

MAINSHAFT SPEED SENSOR**Removal & Installation**

1. Disconnect harness connector at mainshaft speed sensor. Mainshaft speed sensor is located on side of transaxle. See **Fig. 3** .
2. Remove clamp for wiring harness. Remove bolt, mainshaft speed sensor and "O" ring. To install, reverse removal procedure using a NEW "O" ring. Install and tighten bolt to specification. See **TORQUE SPECIFICATIONS** .

SHIFT CONTROL SOLENOID VALVES "B" & "C"**Removal & Installation**

1. Shift control solenoid valves "B" and "C" are located on transaxle. See **Fig. 3** . Remove starter. Disconnect harness connectors at shift control solenoid valves.
2. Remove bolts, shift control solenoid valves and gasket. To install, reverse removal procedure using NEW "O" rings. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** .

THROTTLE POSITION SENSOR**Removal & Installation**

TP sensor is part of throttle body. To replace throttle body, disconnect cruise control and throttle cables. Disconnect electrical connectors. Remove nuts and retaining bolts. Remove throttle body and gasket. Remove MAP sensor and IAC valve from throttle body. To install, reverse removal procedure.

2ND CLUTCH PRESSURE SWITCH**Removal & Installation**

1. Disconnect harness connector from 2nd clutch pressure switch located on top of transaxle. See **Fig. 3** .
2. Remove switch and sealing washer. To install, reverse removal procedure. Install and tighten switch to 15 ft. lbs. (20 N.m).

3RD CLUTCH PRESSURE SWITCH**Removal & Installation**

1. Disconnect harness connector from 3rd clutch pressure switch located on top of transaxle. See **Fig. 3** .
2. Remove switch and sealing washer. To install, reverse removal procedure. Install and tighten switch to 15 ft. lbs. (20 N.m).

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda B7XA Electronic Controls

TORQUE SPECIFICATIONS**TORQUE SPECIFICATIONS**

Application	INCH Lbs. (N.m)
A/T Clutch Pressure Control Solenoid Valve "A"/"B" Assembly Bolt	106 (12.0)
A/T Gear Position Switch Nut	84 (9.5)
Countershaft Speed Sensor Bolt	106 (12.0)
Lock-Up Control Solenoid Valve Assembly Bolt	106 (12.0)
Mainshaft Speed Sensor Bolt	106 (12.0)
Shift Control Solenoid Valve Assembly Bolt	106 (12.0)
Shift Lock Solenoid Nut	87 (9.8)

WIRING DIAGRAMS

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda B7XA Electronic Controls

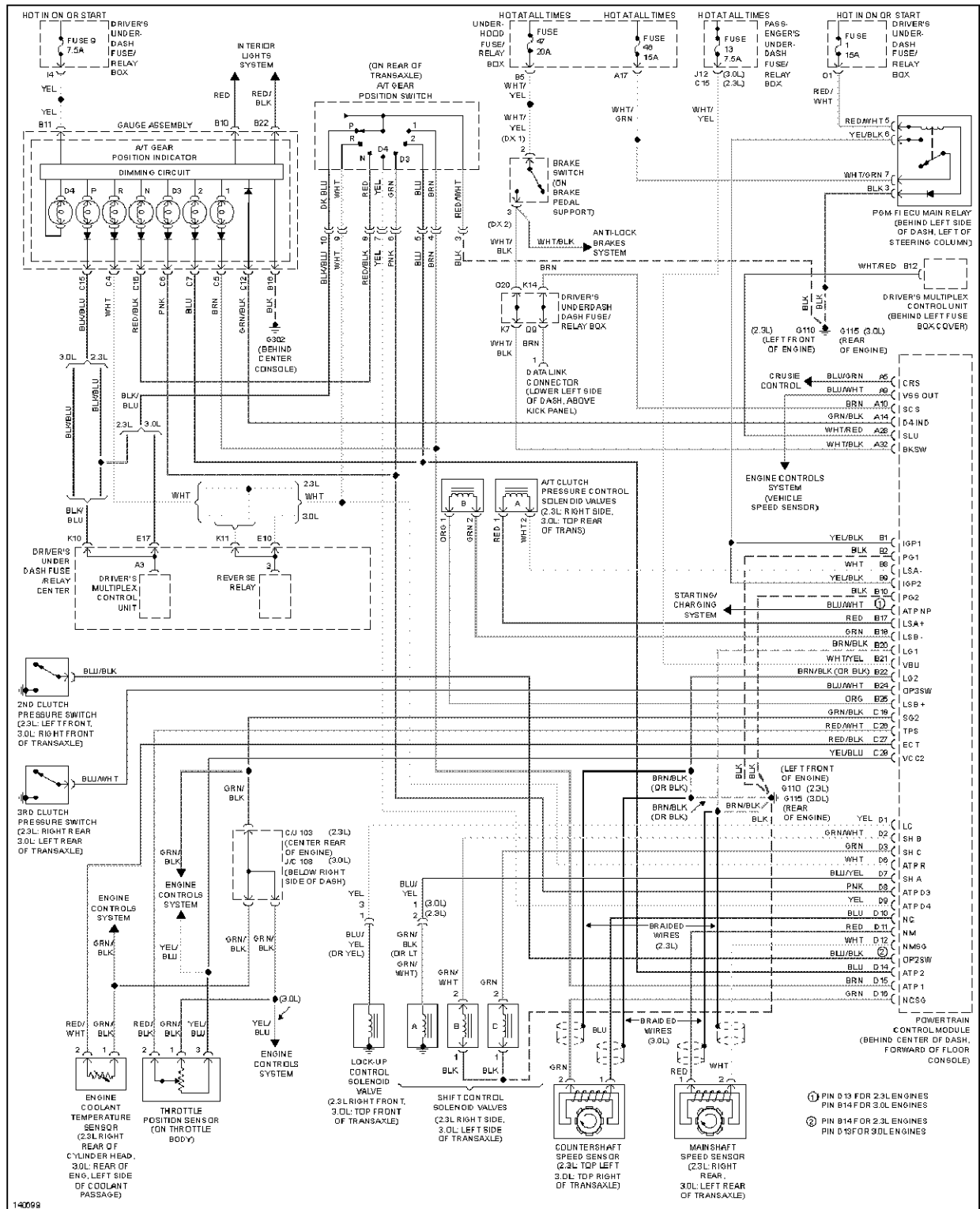


Fig. 18: Transaxle Electronic Control System Wiring Diagram (Accord V6)

BAXA AND MAXA

ELECTRONIC CONTROLS

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda BAXA & MAXA Electronic Controls

2000 AUTOMATIC TRANSMISSIONS

Honda BAXA & MAXA Electronic Controls

APPLICATION

AUTOMATIC TRANSAXLE APPLICATIONS

Application	Transaxle Model
Accord 2.3L	BAXA & MAXA

DESCRIPTION & OPERATION

CAUTION: Vehicle is equipped with a Supplemental Restraint System (SRS). When servicing vehicle, use care to avoid accidental air bag deployment. All SRS electrical connections and wiring harnesses are covered with Yellow insulation. SRS-related components are located in steering column, center console, instrument panel and lower panel on instrument panel. DO NOT use electrical test equipment on these circuits. It may be necessary to deactivate SRS before servicing components. See AIR BAG DEACTIVATION PROCEDURES article in GENERAL INFORMATION.

NOTE: Obtain radio anti-theft code from vehicle owner before disconnecting negative battery cable. Radio anti-theft code must be re-entered into radio once negative battery cable is reconnected. To re-enter radio anti-theft code, turn ignition and radio on. When CODE is displayed on radio, re-enter radio anti-theft code by using radio station preset buttons.

INTRODUCTION

The BAXA/MAXA is an electronically controlled 4-speed transaxle. Transaxle contains hydraulically operated clutches, which are controlled by the Powertrain Control Module (PCM). PCM receives information from various inputs and uses this information to control solenoid assembly for proper transaxle operation.

The first step in diagnosing any driveability problem is verifying the customer's complaint with a test drive under the conditions the problem reportedly occurred. Before entering self-diagnostics, perform a careful and complete visual inspection. Most transaxle control problems result from mechanical breakdowns or poor electrical connections.

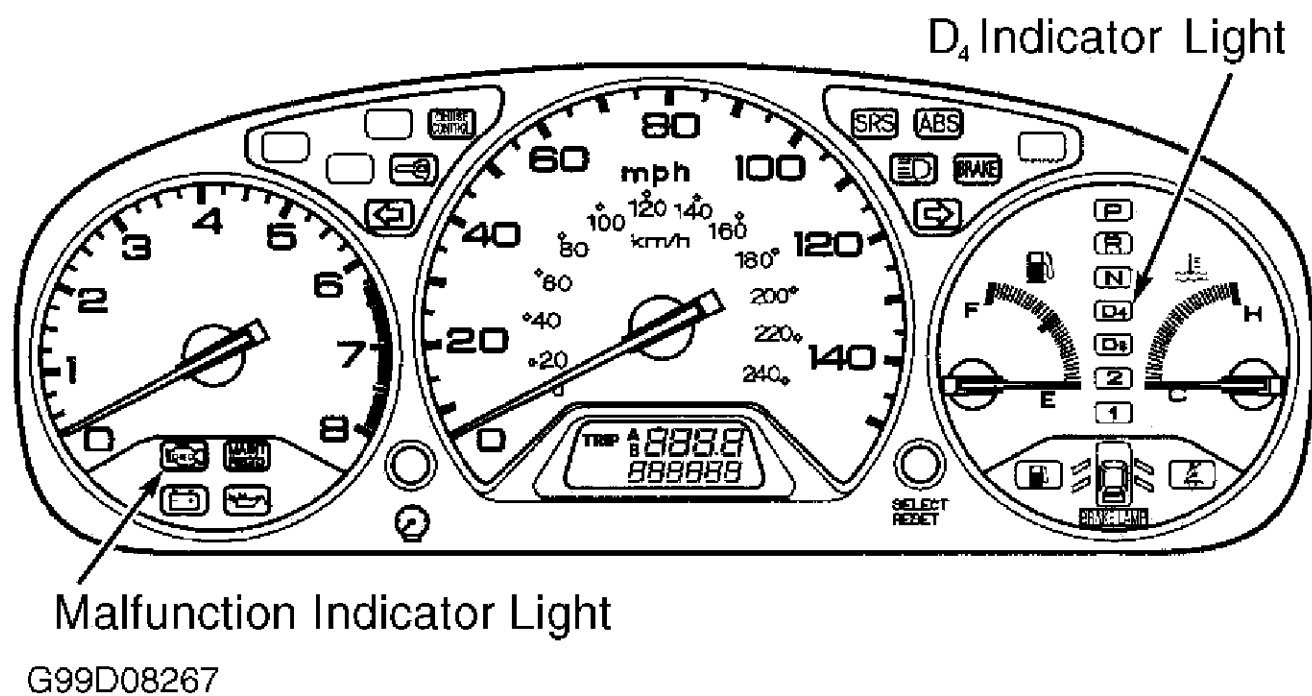
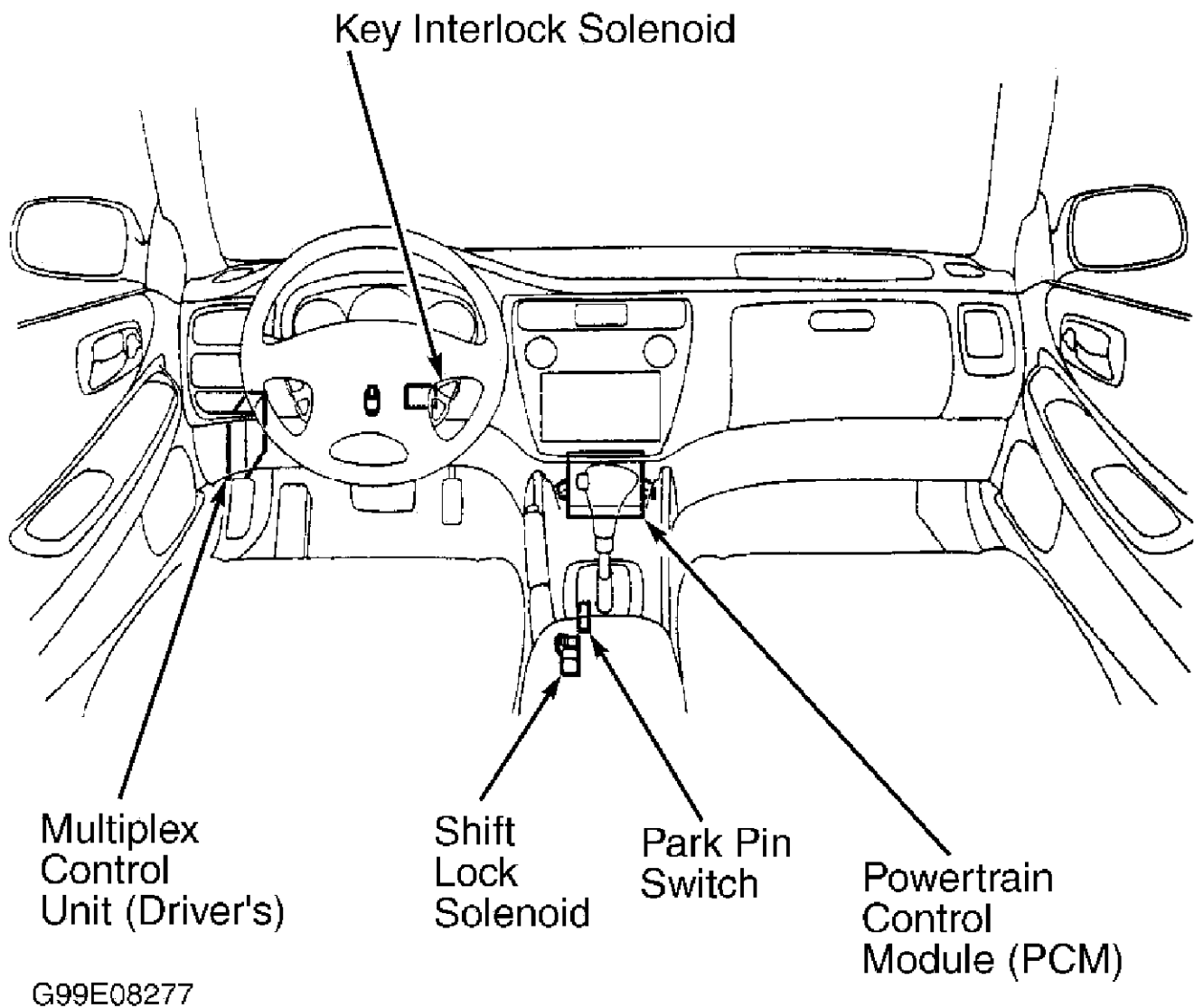


Fig. 1: Locating A/T Gear Position Indicator & MIL
Courtesy of AMERICAN HONDA MOTOR CO., INC.

**Fig. 2: Locating PCM**

Courtesy of AMERICAN HONDA MOTOR CO., INC.

GRADE LOGIC CONTROL SYSTEM

The PCM compares actual driving conditions with driving conditions memorized in the PCM, based on input signals from countershaft speed sensor, Throttle Position (TP) sensor, Engine Coolant Temperature (ECT) sensor, brakelight switch signal and A/T gear position switch. The PCM uses these input signals to control shifting while vehicle is ascending or descending a slope, or during deceleration.

When the PCM determines vehicle is ascending a slope with selector lever in "D4" position, PCM extends

engagement of 3rd gear to prevent transaxle from frequently shifting between 3rd and 4th gears. Shift points between 3rd and 4th gear are stored in PCM, which allows the most suitable gear selection depending on conditions.

When the PCM determines vehicle is descending a slope with selector lever in "D4" position, PCM changes upshift speed from 3rd to 4th gear when throttle is fully closed. This widens the 3rd gear operating range from that programmed for level surface operation and, in conjunction with engine braking from torque converter lock-up, provides smooth vehicle operation. When vehicle is decelerating on a gradual hill in 4th gear, or when applying brakes on a steep hill, the transaxle will downshift to 3rd gear. When vehicle accelerates, transaxle will upshift into 4th gear.

When vehicle decelerates from speeds greater than 30 MPH, PCM shifts transaxle from 4th gear to 2nd gear earlier than normal to reduce the number of times transaxle shifts. This allows smoother acceleration and vehicle operation.

SELF-DIAGNOSTIC SYSTEM

The PCM monitors transaxle operation. PCM contains a self-diagnostic system which stores a DTC if a transaxle electronic control system failure or problem exists. If DTC is stored, PCM will turn on and flash/blink "D4" indicator light on A/T gear position indicator on instrument panel. If a transaxle electronic control system failure or problem is suspected and "D4" indicator light on A/T gear position indicator does not flash, perform diagnostic circuit check to ensure proper operation of "D4" indicator light. DTC can be retrieved using scan tool connected to Data Link Connector (DLC) located under steering column lower cover. Flash code may also be retrieved for diagnosing transaxle electronic control system, using "D4" indicator light.

POWERTRAIN CONTROL MODULE

The PCM receives information from various input devices and uses this information to control shift, A/T clutch pressure and lock-up control solenoid valves. See **Fig. 2**. The PCM contains a self-diagnostic system which stores a Diagnostic Trouble Code (DTC) if a failure is present in transaxle electronic control system. DTC may also be referred to as "flash code". DTC or flash code may be retrieved to determine transaxle problem area. See **DIAGNOSIS & TESTING**. The PCM is located below instrument panel, under front lower panel in center console area. See **Fig. 2**.

PCM INPUT DEVICES

Engine Speed

Engine speed signal (RPM) is delivered to PCM from ignition control module in distributor assembly.

Mainshaft & Countershaft Speed Signal

Mainshaft and countershaft speed sensors deliver mainshaft and countershaft speed signals to PCM. Mainshaft speed sensor is located on side of transaxle and countershaft speed sensor is located on top of transaxle. See **Fig. 3**.

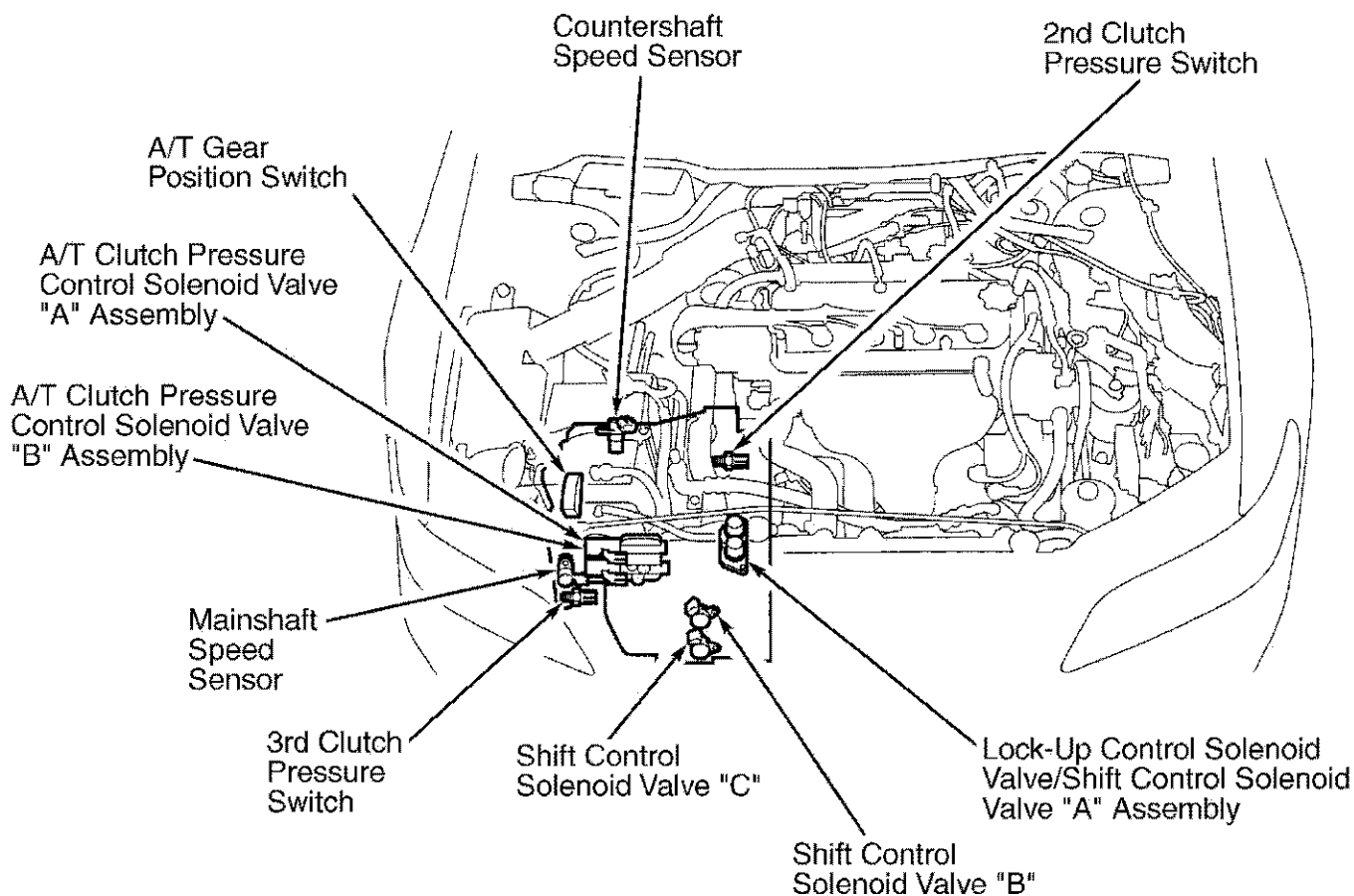
A/T Gear Position Switch

Gear range position signal is delivered to PCM by the A/T gear position switch, located on left side of transaxle.

See **Fig. 3**.

Throttle Position Sensor Signal

Throttle Position (TP) sensor delivers an input signal to PCM to indicate throttle position. The TP sensor is mounted on throttle body.



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Fig. 3: Locating Input & Output Devices

Courtesy of AMERICAN HONDA MOTOR CO., INC.

PCM OUTPUT DEVICES

Shift Control Solenoid Valves

The PCM controls transaxle shifting by delivering an output signal to shift control solenoid valves "A", "B" and "C". Solenoid valves are operated in accordance with gear position. See **SHIFT CONTROL SOLENOID VALVE OPERATION** table. Shift control solenoid valves are located on transaxle. See **Fig. 3**.

SHIFT CONTROL SOLENOID VALVE OPERATION

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda BAXA & MAXA Electronic Controls

Selector Lever Position	Solenoid Valve "A "	Solenoid Valve "B"	Solenoid Valve "C"
"D3" Or "D4" (Shifting From "N")	On	On	On
"D3" Or "D4" (1st Gear)	Off	On	On
"D3" Or "D4" (Shifting Between 1st & 2nd Gear)	On	On	On
"D3" Or "D4" (2nd Gear)	On	On	Off
"D3" Or "D4" (Shifting Between 2nd & 3rd Gear)	On	Off	Off
"D3" Or "D4" (3rd Gear)	On	Off	On
"D4" (Shifting Between 3rd & 4th Gear)	Off	Off	On
"D4" (4th Gear)	Off	Off	Off
"2" (2nd Gear)	On	On	Off
"1" (1st Gear)	Off	On	On
"R" (Shifting from "P" Or "R")	Off	On	On
"R" (Reverse)	Off	On	Off
"P" (Park)	Off	On	Off
"N" (Neutral)	Off	On	Off

Lock-Up Control System

The PCM controls torque converter lock-up by delivering an output signal to lock-up control solenoid valve and A/T clutch pressure control solenoid valves "A" and "B". Lock-up control solenoid valve is activated in accordance with lock-up condition. Lock-up control mechanism works in 3rd and 4th gear in "D4" position and in 3rd gear in "D3" position. Lock-up control solenoid valve is located on converter housing. See **Fig. 3** .

"D4" Indicator Light

The "D4" indicator light is located on A/T gear position indicator on instrument panel. See **Fig. 1** . When ignition is first turned on, "D4" indicator light should illuminate for about 2 seconds, then turn off, indicating light circuit is functioning properly. If a fault is present in transaxle electronic control system and a DTC is stored, PCM delivers an output signal to flash "D4" indicator light.

TROUBLE SHOOTING

PRELIMINARY INSPECTION

Prior to diagnosing transaxle electronic control system, ensure throttle and shift cables are properly adjusted and fluid level is correct. Ensure engine starts with selector lever in Park and Neutral to ensure proper adjustment of A/T gear position switch. Ensure all system-related fuses are okay. Check system wire harnesses for proper routing. Verify all harness and component connections are clean and tight. See **CONNECTOR IDENTIFICATION** and **WIRING DIAGRAMS** . Repair as necessary. If area of fault cannot be located or repaired during preliminary inspection, begin diagnosis of self-diagnostic system. See **DIAGNOSIS & TESTING** .

DIAGNOSIS & TESTING

RETRIEVING DIAGNOSTIC TROUBLE CODES

NOTE: During diagnostics, ensure "D4" indicator light on A/T gear position indicator is not turned on by a fault in the PGM-FI system. The PGM-FI system controls the fuel injection system. To repair PGM-FI system, see appropriate **SELF-DIAGNOSTICS** article in **ENGINE PERFORMANCE**. After PGM-FI system has been repaired, clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES**. After DTCs have been cleared, road test vehicle for several minutes at greater than 30 MPH and recheck for DTCs.

NOTE: Before performing any diagnostic procedure, obtain radio anti-theft code from customer. Note radio preset stations, as radio stations and clock setting will be cleared and must be reset. Radio anti-theft code must be re-entered for radio operation.

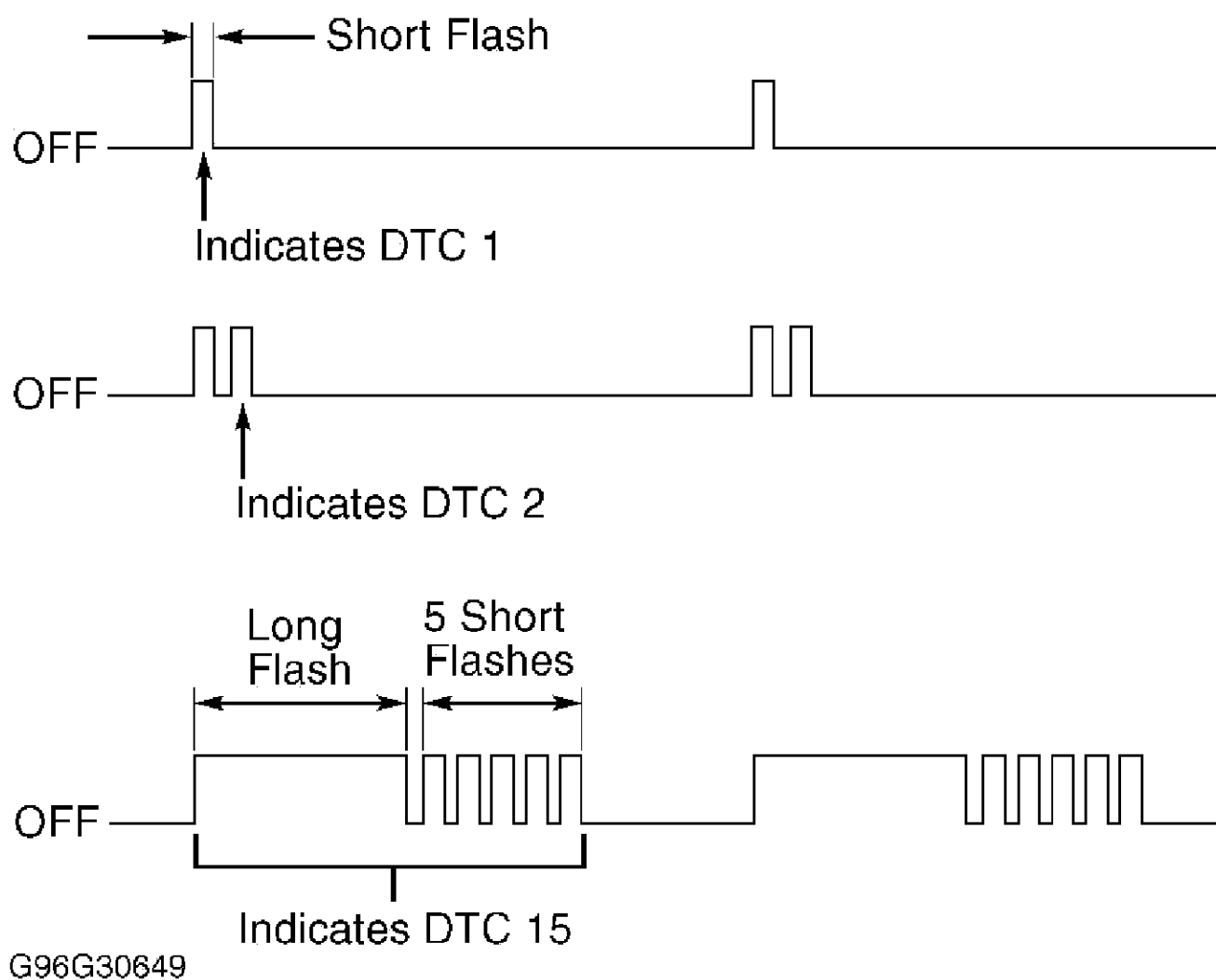
Retrieving DTCs Using Scan Tool

1. If a DTC is present, "D4" indicator light on A/T gear position indicator will flash when ignition is turned on for most DTCs. To retrieve DTCs using scan tool, turn ignition off.
2. Connect OBD-II scan tool to 16-pin Data Link Connector (DLC) located under left side of instrument panel. Turn ignition on. Scan tool will indicate DTCs. Follow scan tool manufacture's instructions.
3. Once DTC is obtained, turn ignition off. Determine probable cause and symptom. See **DTC/FLASH CODE IDENTIFICATION** table. If any other DTCs except those listed are displayed, see appropriate **SELF-DIAGNOSTICS** article in **ENGINE PERFORMANCE**. For trouble shooting of DTCs, see **DIAGNOSTIC TESTS**. If "D4" indicator light does not flash or remains on, diagnose "D4" indicator light circuit. See **"D4" INDICATOR LIGHT CIRCUIT CHECK**.

Retrieving Flash Codes Using "D4" Indicator Light

NOTE: Flash codes can only be retrieved by connecting **SCS Service Connector (07WAZ-002010A)** to DLC.

1. If a flash code is present, "D4" indicator light on A/T gear position indicator will flash when ignition is turned on for most DTCs. To retrieve flash code, turn ignition off.
2. Install SCS Service Connector (07WAZ-002010A) to DLC.
3. Turn ignition on. Flash codes will be displayed by short and long flashes of "D4" indicator light on A/T gear position indicator. If the Malfunction Indicator Light (MIL) is also flashing, see appropriate **SELF-DIAGNOSTICS** article in **ENGINE PERFORMANCE**. Repair MIL codes first.
4. A short flash indicates a single digit flash code. A long flash equals 10 short flashes. For example, if "D4" indicator light flashes once, this is a flash code No. 1. If "D4" indicator light flashes one long, then 5 short flashes, this is a flash code No. 15. See **Fig. 4**.
5. Once flash code is obtained, turn ignition off. Remove SCS Service Connector from DLC. Determine probable cause. See **DTC/FLASH CODE IDENTIFICATION** table. For trouble shooting of flash codes, see **DIAGNOSTIC TESTS**.

**Fig. 4: Identifying Flash Code Displays**

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DTC/FLASH CODE IDENTIFICATION

DTC/Flash Code	D4 Indicator Light ⁽¹⁾	Malfunction Indicator Light	Probable Cause ⁽²⁾
P0700	NA	NA	⁽³⁾
P0715/15	Flashes	On	Mainshaft Speed Sensor
P0720/9	Flashes	On	Countershaft Speed Sensor
P0730/41	Off	On	Shift Control System
P0740/40	Off	On	Lock-Up Control System

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<u>P0753/7</u>	Flashes	On	Shift Control Solenoid "A"
<u>P0758/8</u>	Flashes	On	Shift Control Solenoid "B"
<u>P0763/22</u>	Flashes	On	Shift Control Solenoid "C"
<u>P0780/45</u>	Flashes	Off	Hydraulic System
<u>P1705/5</u>	Flashes	On	A/T Gear Position Switch
<u>P1706/6</u>	Off	On	A/T Gear Position Switch
<u>P1738/25</u>	Off	Off	2nd Clutch Pressure Switch
<u>P1739/26</u>	Off	Off	3rd Clutch Pressure Switch
<u>P1750/46</u>	Flashes	Off	Hydraulic System
<u>P1751/47</u>	Flashes	Off	Hydraulic System
<u>P1753/1</u>	Flashes	On	Lock-Up Control Solenoid "A"
<u>P1768/16</u>	Flashes	On	A/T Clutch Pressure Control Solenoid "A"
<u>P1773/23</u>	Flashes	On	A/T Clutch Pressure Control Solenoid "B"

- (1) Number of flashes from "D4" indicator light on A/T gear position indicator with service tool installed in DLC
- (2) Specified component for probable cause. Also check wiring and connections for the specified component.
- (3) P0700 indicates there is one or more transaxle DTCs, and no fuel and emissions DTCs were detected.

CLEARING DIAGNOSTIC TROUBLE CODES

NOTE: Before clearing DTCs, obtain radio anti-theft code from customer. Note radio preset stations, as radio stations and clock setting will be cleared and must be reset. Radio anti-theft code must be reset for radio operation.

1. Once repairs have been performed, DTCs must be cleared from PCM memory. A/T control system memory can be cleared 2 ways: DTCs can be cleared using scan tool. Follow scan tool manufacturer's instructions. To clear DTCs without using scan tool, go to next step.
2. Ensure ignition is off. Remove back-up fuse (7.5-amp) located in underdash fuse/relay box for at least 10 seconds. This will clear PCM memory.
3. Reinstall fuse. To re-enter radio anti-theft code, turn radio on. When CODE is displayed on radio, re-enter radio anti-theft code by using radio station preset buttons. Reset clock and radio stations.

"D4" INDICATOR LIGHT CIRCUIT CHECK

NOTE: For circuit and terminal identification, see CONNECTOR IDENTIFICATION and WIRING DIAGRAMS.

1. Turn ignition on. If "D4" indicator illuminates and remains on, go to next step. If "D4" indicator illuminates and turns off after 2 seconds, system is okay. If "D4" indicator light does not illuminate, go to step 4.
2. Turn ignition off. Disconnect PCM harness connector "A". Turn ignition on. Check for voltage between PCM harness connector "A" terminal No. 14 (Green/Black wire) and ground. If voltage is present, repair short to voltage in Green/Black wire between PCM and instrument cluster. If voltage is not present, go to next step.
3. Turn ignition off. Reconnect PCM harness connector "A". Turn ignition on. Shift to any gear position except "D4". Measure voltage (backprobe) between PCM harness connector "D" terminal No. 9 (Yellow wire) and ground. If voltage is present, replace PCM or instrument cluster. If voltage is not present, check Yellow wire between PCM harness "D" terminal No. 9 and A/T gear position switch for short to ground. Repair as necessary. If wire is okay, check A/T gear position switch. See A/T GEAR POSITION SWITCH under COMPONENT TESTS. Repair as necessary.
4. Ensure scan tool is not connected to Data Link Connector (DLC). Shift to "D4" position. If "D4" indicator light illuminates, check for loose PCM harness connections. Replace PCM with a known-good unit if necessary and retest. If "D4" indicator light does not illuminate, go to next step.
5. Turn ignition off. Disconnect PCM harness connector "B". Check for continuity between PCM harness connector "B" terminals No. 20 and 22 (Brown/Black wires) and ground. If continuity is present, go to next step. If continuity is not present, repair open or poor connection in appropriate Brown/Black wire.
6. Turn ignition on. Measure voltage at PCM harness connector "B" between terminals No. 1 (Yellow/Black wire) and No. 22 (Brown/Black wire), and then between terminals No. 9 (Yellow/Black wire) and No. 20 (Brown/Black wire). If battery voltage is present, go to next step. If battery voltage is not present, repair open or short in appropriate Yellow/Black wire between PCM and PGM-FI relay.
7. Turn ignition off. Reconnect PCM harness connector "B". Connect DVOM (backprobe) between PCM harness connector "A" terminal No. 14 (Green/Black wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). Turn ignition on. Voltage should be present for 2 seconds. If voltage as specified, check for open or short in Green/Black wire between PCM and gauge assembly. Repair as necessary. If no problem is found, repair faulty "D4" indicator light bulb or gauge assembly printed circuit board. If no voltage was indicated, go to next step.
8. Turn ignition off. Disconnect PCM harness connector "A". Check Green/Black wire for continuity between PCM harness connector "A" terminal No. 14 and gauge assembly harness connector "C" terminal No. 12. If continuity is present, check for loose PCM harness connectors or faulty A/T gear position switch. Repair as necessary. If no problem is found, replace PCM with a known-good unit and retest. If continuity is not present, repair open in Green/Black wire.

MIL INOPERATIVE

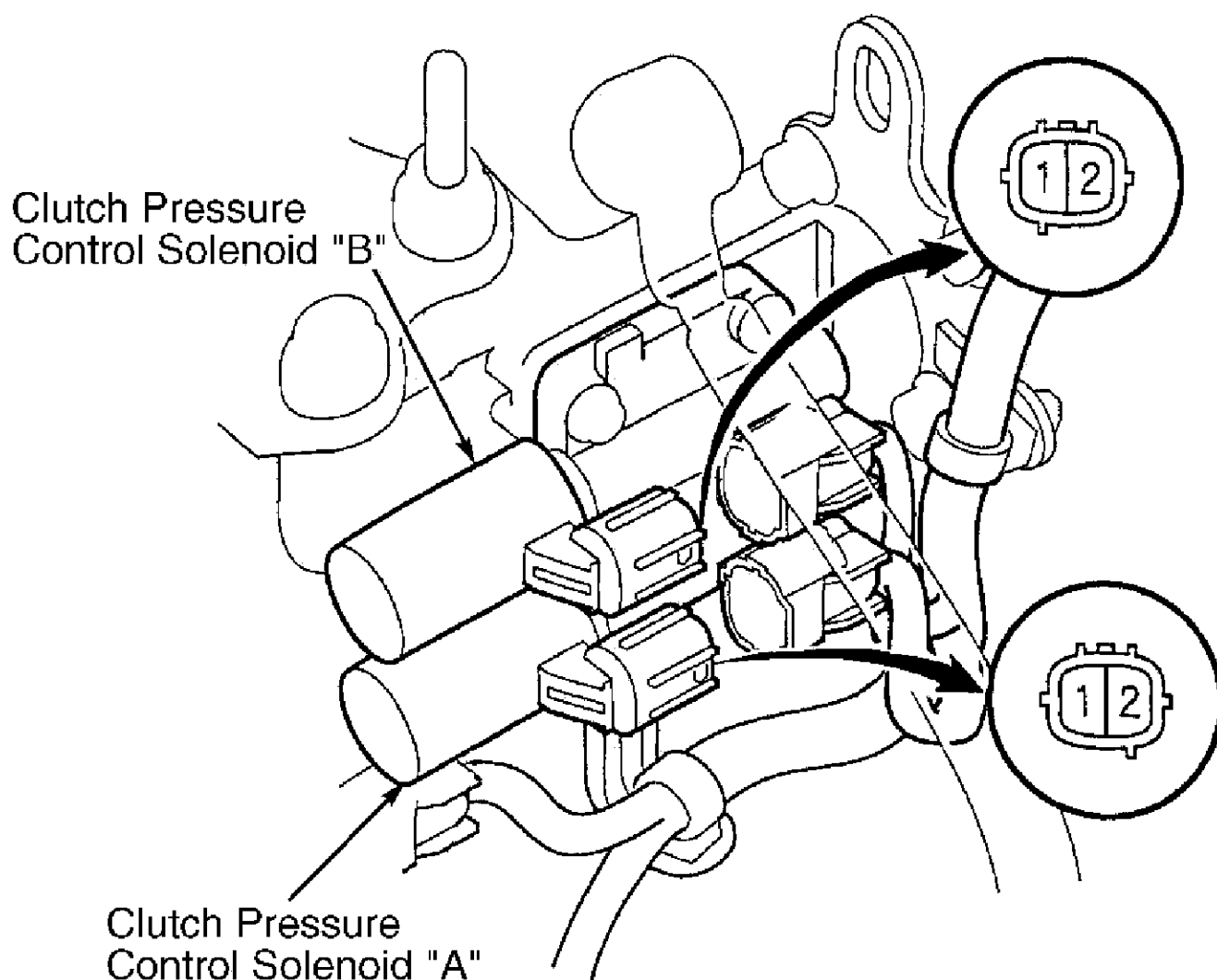
See appropriate SELF DIAGNOSTICS article in ENGINE PERFORMANCE.

SUMMARY

If no hard DTCs are present, and driveability symptoms or intermittent DTCs exist, attempt diagnosis by symptom, or by testing individual components related to system fault. See **COMPONENT TESTS** . If no problem is found, verify proper electronic control system circuit operation. See **PIN VOLTAGE TESTS** .

NOTE: Always clear DTCs once repairs are complete. See **CLEARING DIAGNOSTIC TROUBLE CODES** . Test drive vehicle and retrieve DTCs to determine if complaint or DTC is repaired.

CONNECTOR IDENTIFICATION



G00047102

Fig. 5: Identifying A/T Clutch Pressure Control Solenoid "A"/"B" Harness Connector Terminals

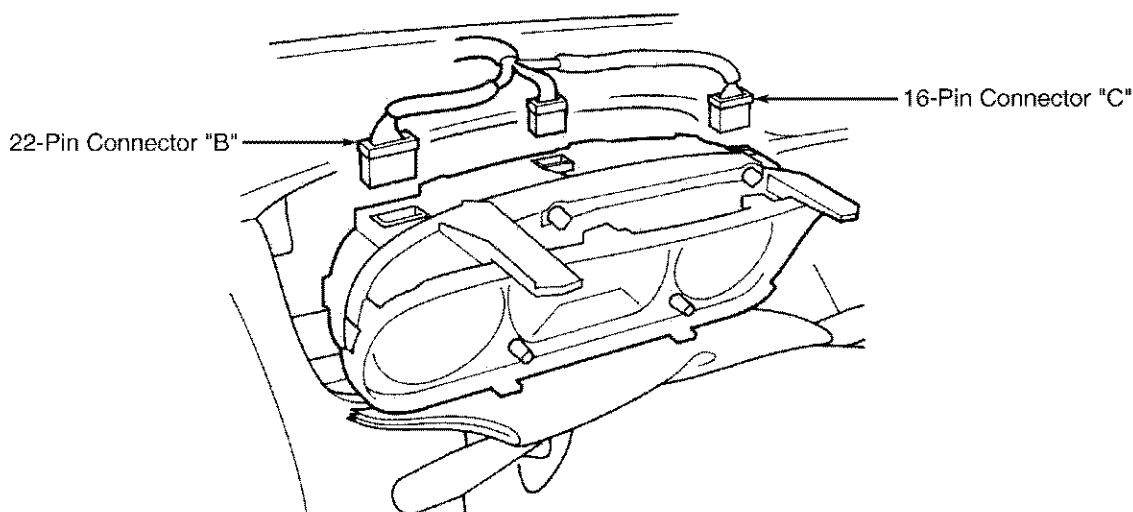
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1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

22-PIN CONNECTOR "B"

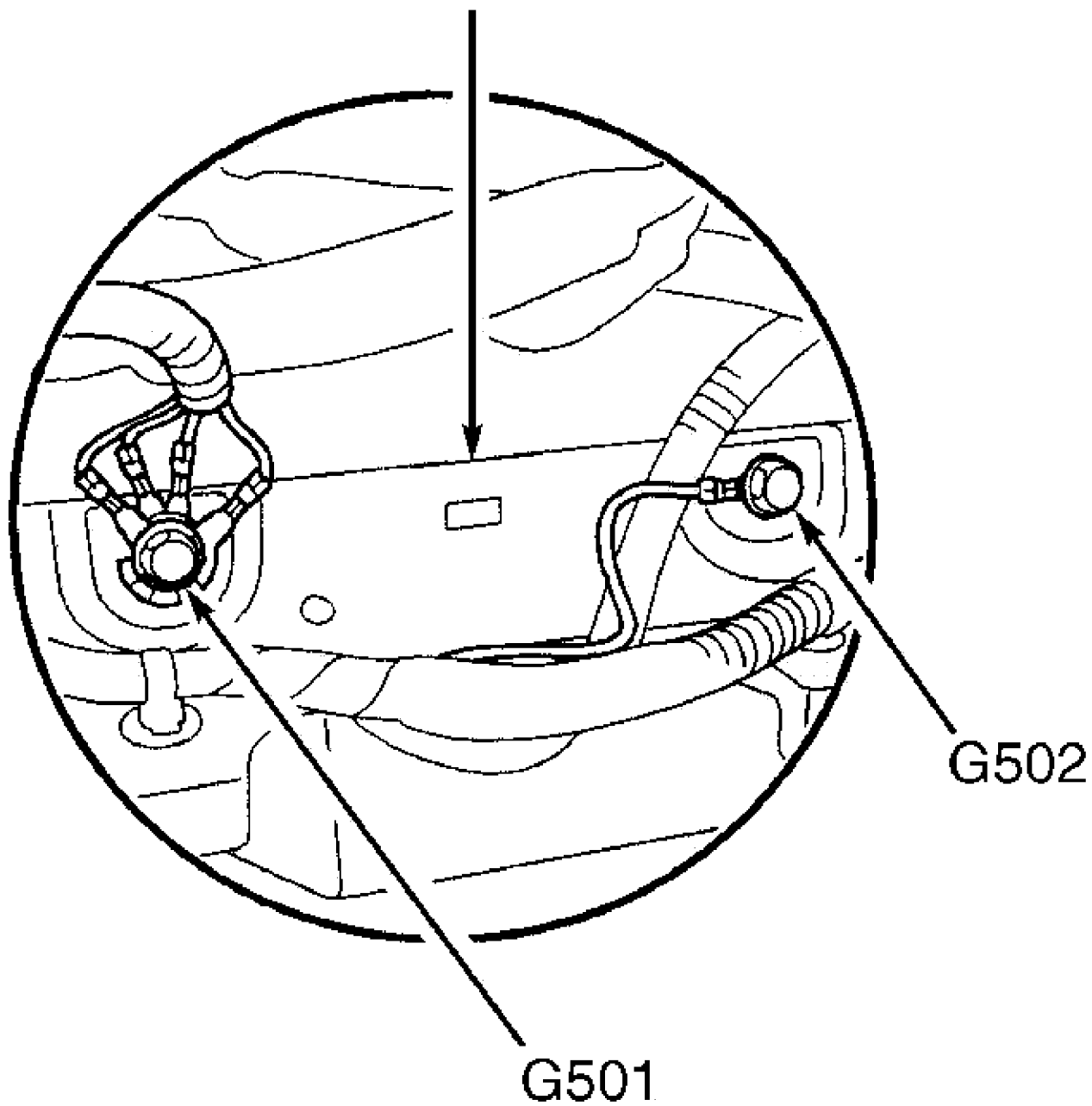
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21

16-PIN CONNECTOR "C"

Cavity	Wire Color	Test Condition	Test: Desired Result	Possible Cause (If result is not obtained)
B11	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none">• Blown No. 9 (7.5 A) fuse in the driver's under-dash fuse/relay box• An open in the wire
B16	BLK	Under all conditions	Check for voltage to ground: There should be continuity.	<ul style="list-style-type: none">• Poor ground (G501)• An open in the wire
C4	WHT	Ignition switch ON (II) and shift lever in R	Check for voltage to ground: There should be 1 V or less. NOTE: There should be no battery voltage in any other shift lever position.	<ul style="list-style-type: none">• Faulty A/T gear position switch• An open in the wire
C5	BRN	Ignition switch ON (II) and shift lever in 1		
C6	PNK	Ignition switch ON (II) and shift lever in D_s		
C7	BLU	Ignition switch ON (II) and shift lever in 2		
C12	GRN/BLK	Ignition switch ON (II) and shift lever in D_s	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none">• Faulty A/T gear position switch• Faulty PCM• An open in the wire
C15	BLK/BLU	Shift lever in P	Check for continuity to ground: There should be no continuity in any other shift lever position.	<ul style="list-style-type: none">• Faulty A/T gear position switch• An open in the wire
C16	RED/BLK	Ignition switch ON (II) and shift lever in N	Check for voltage to ground: There should be 1 V or less. NOTE: There should be battery voltage in any other shift lever position.	

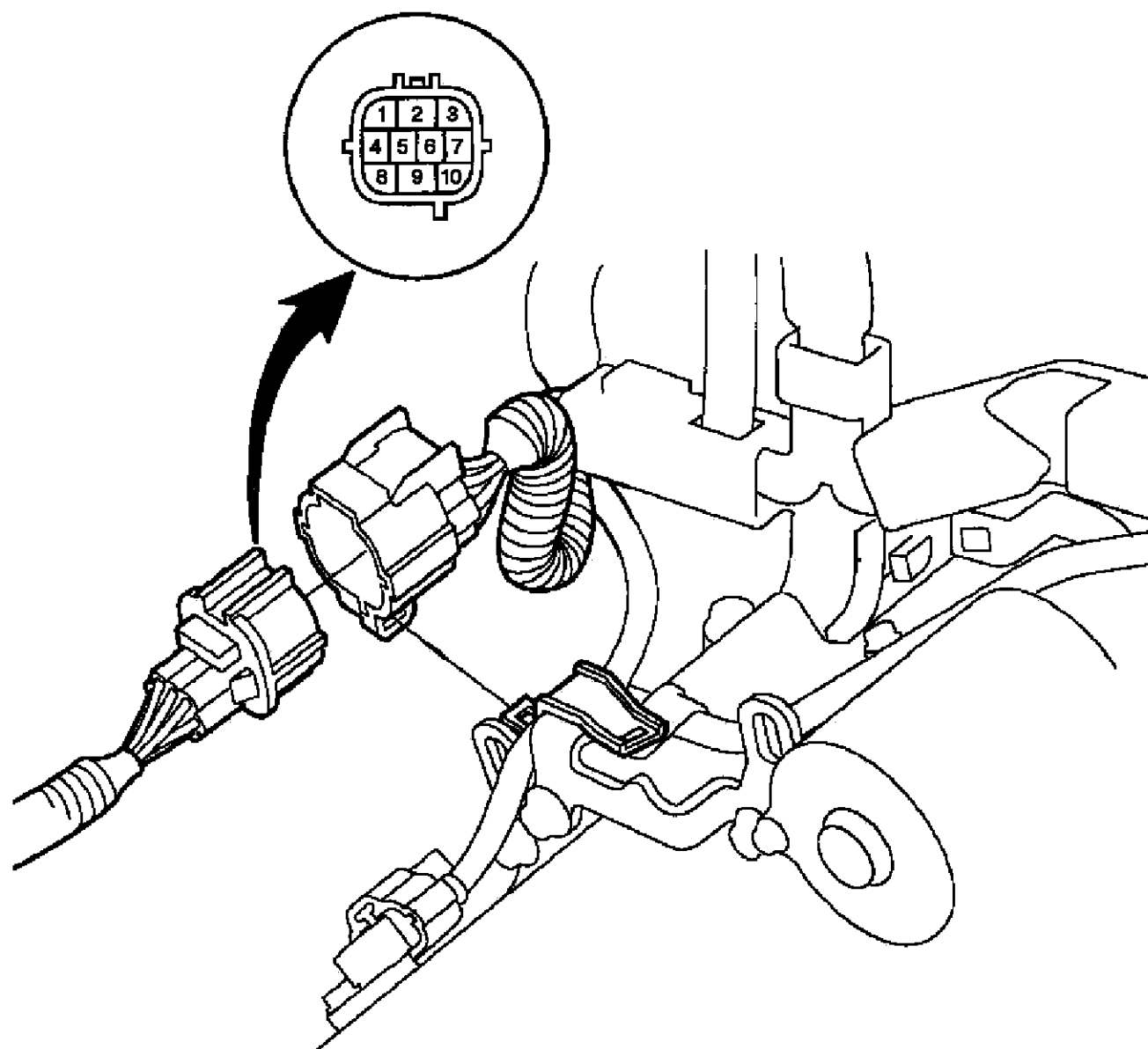
Fig. 6: Testing Instrument Panel Gauge Assembly, Harness Connectors & A/T Gear Position Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Under Center Of Dash



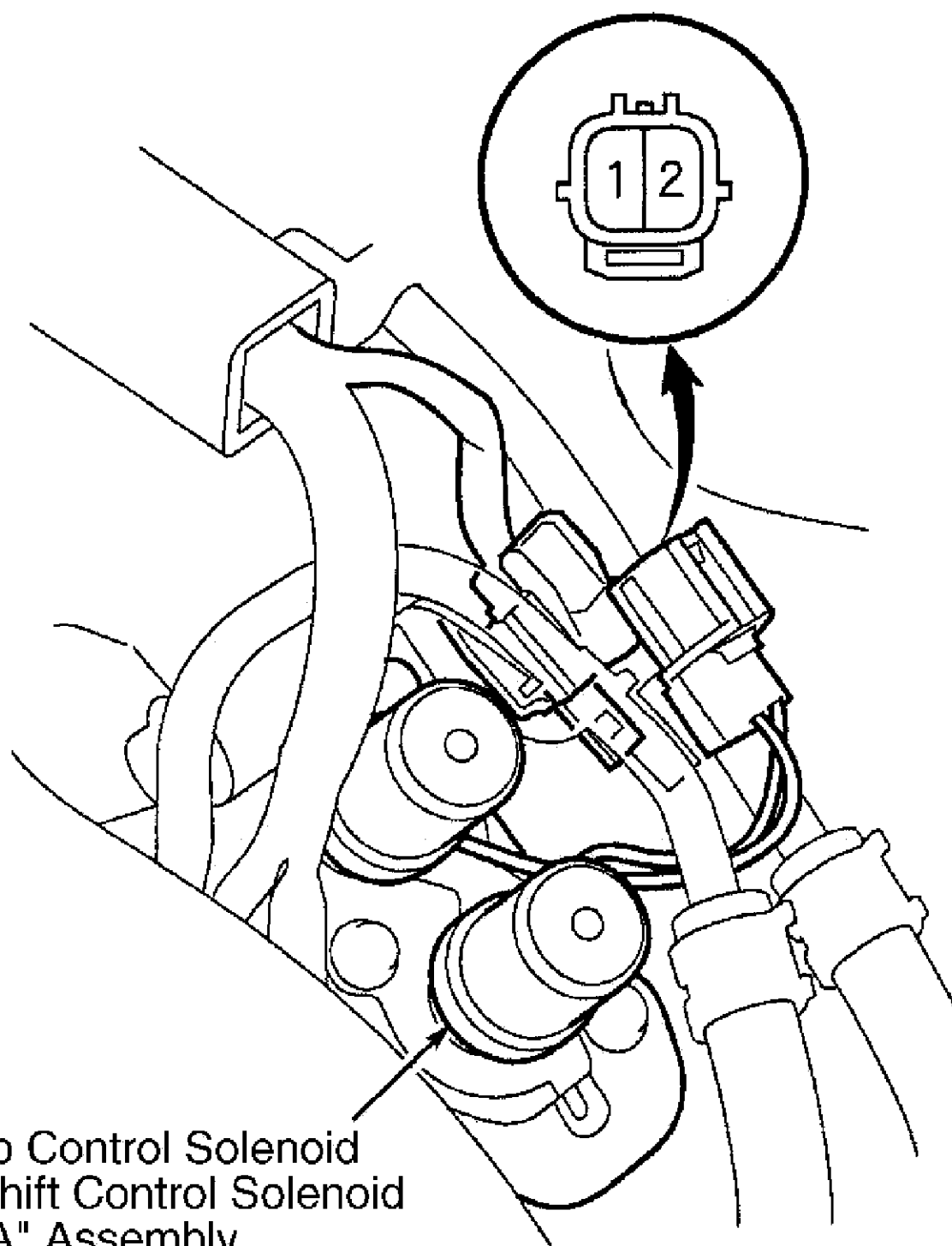
G99I05964

Fig. 7: Locating Ground Connections G501
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G98H04676

Fig. 8: Identifying A/T Gear Position Switch Harness Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.



Lock-Up Control Solenoid
Valve/Shift Control Solenoid
Valve "A" Assembly

G00047103

Fig. 9: Lock-Up Control Solenoid Valve Harness Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

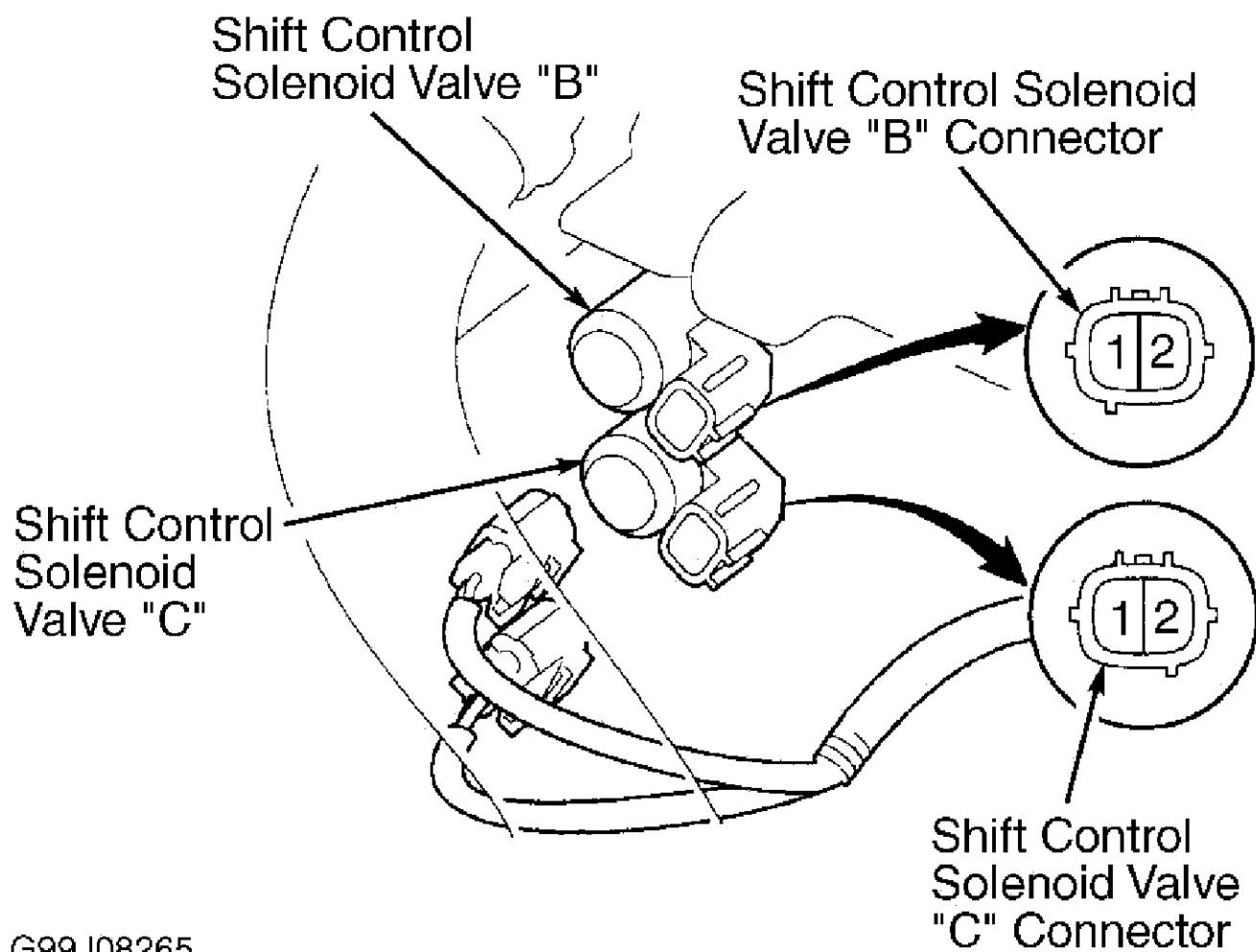
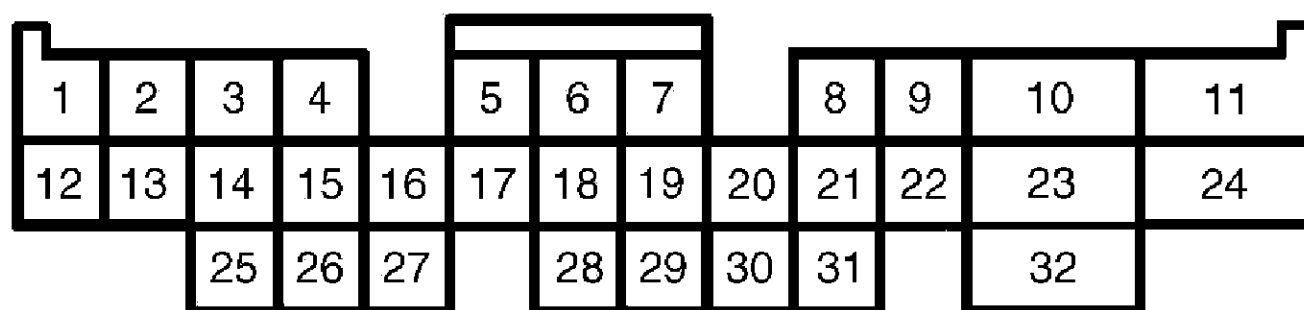


Fig. 10: Shift Control Solenoid "B"/"C" Valve Harness Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

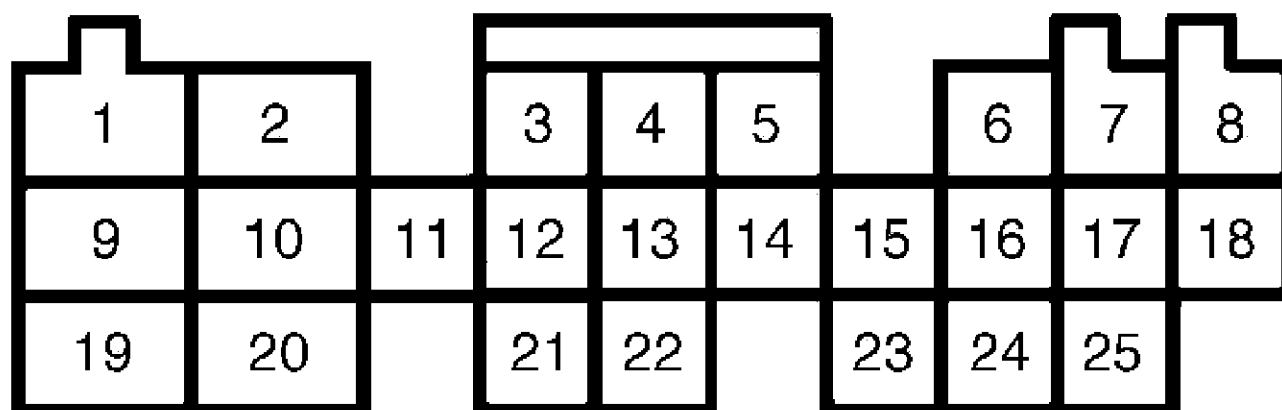


WIRE SIDE OF FEMALE TERMINALS

G98A04116

Fig. 11: Identifying PCM 32-Pin Harness Connector "A" Terminals

Courtesy of AMERICAN HONDA MOTOR CO., INC.

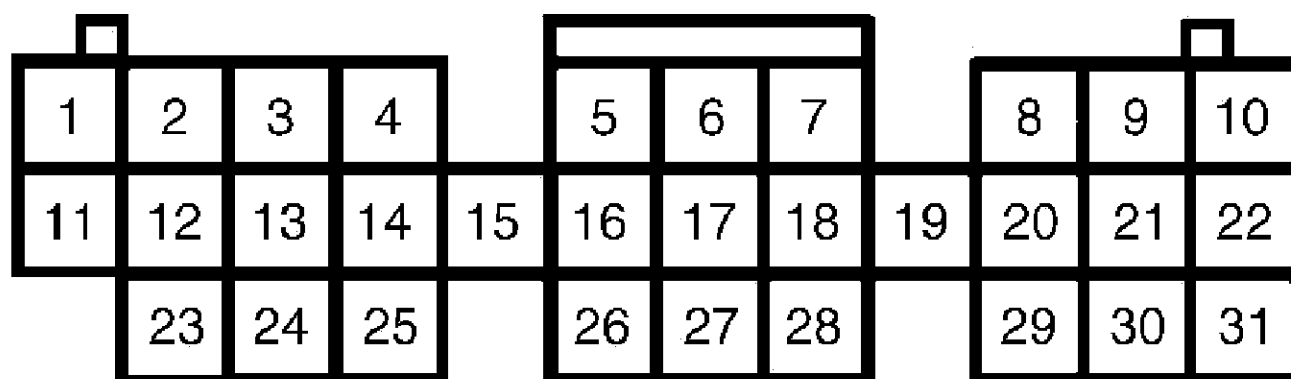


WIRE SIDE OF FEMALE TERMINALS

G98C04117

Fig. 12: Identifying PCM 25-Pin Harness Connector "B" Terminals

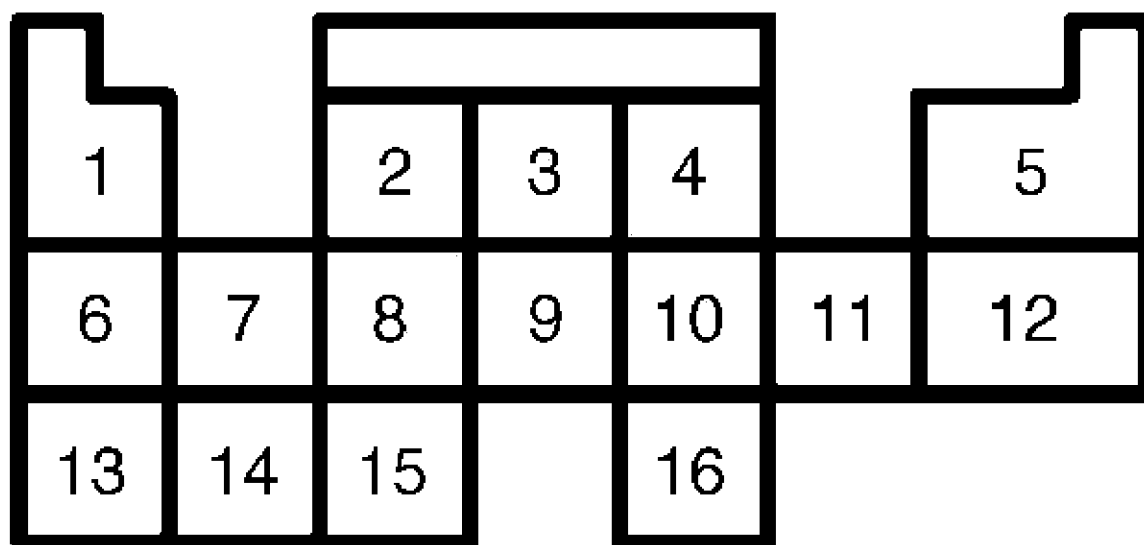
Courtesy of AMERICAN HONDA MOTOR CO., INC.



WIRE SIDE OF FEMALE TERMINALS

G98E04118

Fig. 13: Identifying PCM 31-Pin Harness Connector "C" Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.



WIRE SIDE OF FEMALE TERMINALS

G98G04119

Fig. 14: Identifying PCM 16-Pin Harness Connector "D" Terminals

Courtesy of AMERICAN HONDA MOTOR CO., INC.

DIAGNOSTIC TESTS

NOTE: For circuit and terminal identification, see CONNECTOR IDENTIFICATION , PIN VOLTAGE TESTS and WIRING DIAGRAMS .

NOTE: Trouble codes are identified by "P" series (DTC) and then flash code. Example: P0715/15 (DTC/flash code).

DTC P0715/15: MAINSHAFT SPEED SENSOR

NOTE: DTC P0715 does NOT confirm an electrical problem in mainshaft speed sensor or circuit. This DTC can also be caused by a mechanical problem in transaxle. Any problem causing irregular countershaft to mainshaft speed difference can cause this code.

1. Using scan tool, retrieve freeze frame data. Clear DTC and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent, check mainshaft speed sensor and PCM harness connections.
2. Ensure mainshaft and countershaft speed sensors are properly installed. See **COUNTERSHAFT SPEED SENSOR** or **MAINSHAFT SPEED SENSOR** under REMOVAL & INSTALLATION. If mainshaft and countershaft speed sensors are properly installed, go to next step. If mainshaft and countershaft speed sensors are not properly installed, reinstall and road test.
3. Disconnect mainshaft speed sensor harness connector. Measure resistance between sensor terminals. See **MAINSHAFT SPEED SENSOR** under COMPONENT TESTS. If resistance is 400-600 ohms, go to next step. If resistance is not 400-600 ohms, replace mainshaft speed sensor. See **MAINSHAFT SPEED SENSOR** under REMOVAL & INSTALLATION.
4. Disconnect PCM harness connector "D". Check for continuity between PCM harness connector "D" terminal No. 11 (Red wire) and ground, and then terminal No. 12 (White wire) and ground. If continuity is present, repair short to ground in Red wire or White wire between PCM and mainshaft speed sensor. If continuity is not present, go to next step.
5. Reconnect mainshaft speed sensor harness connector. Measure resistance between PCM harness connector "D" terminals No. 11 (Red wire) and No. 12 (White wire). If resistance is 400-600 ohms, see DTC **P0720/9: COUNTERSHAFT SPEED SENSOR**. Check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary and retest. If resistance is not 400-600 ohms, go to next step.
6. Disconnect mainshaft speed sensor harness connector. Check for continuity between PCM harness connector "D" terminal No. 11 and mainshaft speed sensor harness connector. If continuity is present, go to next step. If continuity is not present, repair open in circuit between PCM harness connector "D" and mainshaft speed sensor connector.
7. Check for continuity between PCM harness connector "D" terminal No. 12 and mainshaft speed sensor harness connector. If continuity is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary and retest. If continuity is not present, repair open between PCM harness connector "D" and mainshaft speed sensor connector.

DTC P0720/9: COUNTERSHAFT SPEED SENSOR

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check mainshaft speed sensor and PCM connections.
2. Ensure countershaft speed sensor is installed properly. See **COUNTERSHAFT SPEED SENSOR** under REMOVAL & INSTALLATION. If countershaft speed sensor is properly installed, go to next step. If countershaft speed sensor is not properly installed, reinstall and road test.
3. Disconnect countershaft speed sensor harness connector. Measure resistance between sensor terminals. See **COUNTERSHAFT SPEED SENSOR** under COMPONENT TESTS. If resistance is 400-600 ohms, go to next step. If resistance is not 400-600 ohms, replace countershaft speed sensor.
4. Disconnect PCM harness connector "D". Check for continuity between PCM harness connector "D" terminal No. 16 (Green wire) and ground, and then check continuity between terminal No. 10 (Blue wire) and ground. If continuity is present, repair short to ground in Green wire or Blue wire between PCM and countershaft speed sensor. If continuity is not present, go to next step.
5. Reconnect countershaft speed sensor harness connector. Measure resistance between PCM harness

connector "D" terminals No. 16 (Green wire) and No. 10 (Blue wire). If resistance is 400-600 ohms, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary and retest. If resistance is not 400-600 ohms, repair loose connection or open in Green wire or Blue wire between PCM harness connector "D" and countershaft speed sensor harness connector.

DTC P0730/41: SHIFT CONTROL SYSTEM

NOTE: Do not perform this DTC test until all other DTCs have been repaired first.

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Road test vehicle at greater than 12 MPH for more than 30 seconds in 2nd, 3rd and 4th gear. Using scan tool, check for any other DTCs. If any other DTCs are present, repair those DTCs first, and then recheck for DTC P0730/41. If no other DTCs are present, go to next step.
3. Test clutch pressure. See HONDA BAXA, MAXA & M6HA OVERHAUL article. If clutch pressure is within specification, go to next step. If clutch pressure is not within specification, repair hydraulic system as necessary.
4. Replace lock-up control solenoid valve/shift control solenoid valve "A" assembly and shift control solenoid valves "B" and "C". See **LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY** and **SHIFT CONTROL SOLENOID VALVE "B"/"C" ASSEMBLY** under REMOVAL & INSTALLATION. Turn ignition off and clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under DIAGNOSIS & TESTING. Road test vehicle at greater than 12 MPH for more than 30 seconds in 2nd, 3rd and 4th gear. Recheck DTCs. If DTC P0730/41 returns, replace transaxle. If DTC P0730/41 does not return, system is okay.

DTC P0740/40: LOCK-UP CONTROL SYSTEM

NOTE: DO NOT perform this DTC test until all other DTCs have been repaired first.

1. Using scan tool, retrieve freeze frame data. Clear DTC and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent, check transaxle and PCM connections.
2. Using scan tool, check for any other DTCs. If any other DTCs are present, repair those DTCs first, then recheck for DTC P0740/40. If no other DTCs are present, go to next step.
3. Test line pressure. See HONDA BAXA, MAXA & M6HA OVERHAUL article. If line pressure is within specification, go to next step. If line pressure is not within specification, repair hydraulic system as necessary.
4. Replace lock-up control solenoid valve/shift control solenoid valve "A" assembly and A/T clutch pressure control solenoid valve "A"/"B" assembly. See **LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY** and **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION. Turn ignition off and clear DTC. See **CLEARING DIAGNOSTIC TROUBLE CODES** under DIAGNOSIS & TESTING. Ensure engine coolant temperature is above 176° F (80° C). Road test vehicle at greater than 55 MPH for more than one minute. Recheck DTCs. If P0740/40 returns, replace transaxle and torque converter. If P0740/40 does not return, system is okay.

DTC P0753/7: SHIFT CONTROL SOLENOID VALVE "A"

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Disconnect PCM harness connectors "B" and "D". Turn ignition on. Check for voltage between PCM harness connector "D" terminal No. 7 (Blue/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is present, repair Blue/Yellow wire for a short to voltage. If voltage is not present, go to next step.
3. Turn ignition off. Measure resistance between PCM harness connector "D" terminal No. 7 (Blue/Yellow wire) and connector "B", terminal No. 20 or 22 (Brown/Black wires). If resistance is 12-25 ohms, go to step 7. If resistance is not 12-25 ohms, go to next step.
4. Check for continuity between PCM harness connector "B" terminals No. 20 or 22 (Brown/Black wires) and ground. If continuity is present, go to next step. If continuity is not present, repair open Brown/Black wires.
5. Disconnect lock-up control solenoid valve/shift control solenoid valve "A" harness connector. Check for continuity between PCM harness connector "D" terminal No. 7 (Blue/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If continuity is present, repair short to ground in Blue/Yellow wire between PCM harness connector "D" and shift control solenoid valve "A". If continuity is not present, go to next step.
6. Disconnect shift control solenoid valve harness connector. Measure resistance between Green/White wire at lock-up control solenoid/shift control solenoid valve "A" harness connector (solenoid side) and ground. If resistance is 12-25 ohms, repair open between PCM harness connector "D" terminal No. 7 and shift control solenoid valve "A" harness connector. If resistance is not 12-25 ohms, replace shift control solenoid valve assembly.
7. Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If battery voltage is not present, check for open fuse No. 6 (15-amp) in underdash fuse relay box. If fuse is okay, repair open between PCM harness connector "D" terminal No. 5 and fuse relay box.

DTC P0758/8: SHIFT CONTROL SOLENOID VALVE "B"

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Disconnect PCM harness connectors "B" and "D". Turn ignition on. Check for voltage between PCM harness connector "D" terminal No. 2 (Green/White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is present, repair short to voltage in Green/White wire. If voltage is not present, go to next step.
3. Turn ignition off. Measure resistance between PCM harness connector "D" terminal No. 2 (Green/White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If resistance is 12-25 ohms, go to step 7. If resistance is not 12-25 ohms, go to next step.
4. Check for continuity between PCM harness connector "B" terminals No. 20 and 22 (Brown/Black wires) and ground. If continuity is present, go to next step. If continuity is not present, repair open Brown/Black wires.

5. Disconnect shift control solenoid valve "B" harness connector. Check for continuity between PCM harness connector "D" terminal No. 2 (Green/White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If continuity is present, repair short to ground in Green/White wire between PCM harness connector "B" and shift control solenoid valve "B". If continuity is not present, go to next step.
6. Measure resistance between shift control solenoid valve "B" harness connector (solenoid side) terminals. If resistance is 12-25 ohms, repair open in Green/White wire between shift control solenoid valve "B" and PCM harness connector, or in Black wire between shift control solenoid valve "B" connector and ground. If resistance is not 12-25 ohms, replace shift control solenoid valve "B". See **SHIFT CONTROL SOLENOID VALVE "B"/"C" ASSEMBLY** under REMOVAL & INSTALLATION.
7. Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary and retest. If battery voltage is not present, check for open fuse No. 6 (15 amp) in underdash fuse relay box. If fuse is okay, repair open between PCM harness connector "D" terminal No. 5 and fuse relay box.

DTC P0763/22: SHIFT CONTROL SOLENOID VALVE "C"

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Disconnect PCM harness connectors "B" and "D". Turn ignition on. Check voltage between PCM harness connector "D" terminal No. 3 (Green wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is present, repair short to voltage in Green wire between PCM harness connector "D" and shift control solenoid valve harness connector. If voltage is not present, go to next step.
3. Turn ignition off. Measure resistance between PCM harness connector "D" terminal No. 3 (Green wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If resistance is 12-25 ohms, go to step 7. If resistance is not 12-25 ohms, go to next step.
4. Check for continuity between PCM harness connector "B" terminals No. 20 and 22 (Brown/Black wires) and ground. If continuity is present, go to next step. If continuity is not present, repair open Brown/Black wires.
5. Disconnect shift control solenoid valve harness connector. Check for continuity between PCM harness connector "D" terminal No. 3 (Green wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If continuity is present, repair short to ground in Green wire between PCM harness connector "D" and shift control solenoid valve "C". If continuity is not present, go to next step.
6. Measure resistance between shift control solenoid valve "C" harness connector (solenoid side). If resistance is 12-25 ohms, repair open in Green wire between shift control solenoid valve "C" and shift control solenoid valve "C" harness connector, or in Black wire between shift control solenoid valve "C" connector and ground. If resistance is not 12-25 ohms, replace shift control solenoid valve assembly. See **SHIFT CONTROL SOLENOID VALVE "B"/"C" ASSEMBLY** under REMOVAL & INSTALLATION.
7. Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary and retest. If battery voltage is not present, check for open fuse No. 6 (15 amp) in underdash fuse relay box. If fuse is okay, repair open between PCM harness connector "D" terminal No. 5 and fuse relay box.

DTC P0780/45: MECHANICAL FAULT IN HYDRAULIC SYSTEM

NOTE: DO NOT perform this DTC test until all other DTCs have been repaired first.

1. Using scan tool, retrieve freeze frame data. Clear DTC and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent, check transaxle and PCM connections.
2. Using scan tool, check for any other DTCs. If any other DTCs are present, repair those DTCs first, then recheck for DTC P0780/45. If no other DTCs are present, go to next step.
3. Replace lock-up control solenoid valve/shift control solenoid valve "A" and A/T clutch pressure control solenoid valve "A"/"B" assembly. See **LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY** and **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION.
4. Clear DTC. See **CLEARING DIAGNOSTIC TROUBLE CODES** under DIAGNOSIS & TESTING. Road test for several minutes in "D4", ensure transaxle shifts into all gears. Recheck DTCs. If P0780/45 returns, replace transaxle. If DTC does not return, system is okay.

DTC P1705/5: A/T GEAR POSITION SWITCH (SHORT)

NOTE: DTC P1705 is set when PCM receives 2 gear position signals at the same time.

1. Using scan tool, retrieve freeze frame data. Clear DTC and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent, check transaxle and PCM connections.
2. Turn ignition on. Observe gear position indicator lights while moving selector lever to each gear position. If any indicator light stays illuminated when selector lever is not in indicated position, go to next step. If gear position indicator lights illuminate in appropriate selector lever position, system is okay. Check for loose or damaged harness connectors.
3. Disconnect A/T gear position switch connector. If all A/T gear position switch indicators are not illuminated, replace A/T gear position switch. See **A/T GEAR POSITION SWITCH** under REMOVAL & INSTALLATION. If any A/T gear position switch indicators are illuminated, go to next step.
4. Turn ignition off. Connect A/T gear position switch connector. Turn ignition on. Move selector lever through all positions except Reverse. Measure voltage between PCM harness connector "D" terminal No. 6 (White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, inspect the following items. Repair as needed.
 - Check for short in wire between PCM harness connector "D" terminal No. 6 and A/T gear position indicator.
 - Inspect A/T gear position switch. See **A/T GEAR POSITION SWITCH** under COMPONENT TESTS.
 - Check continuity between PCM harness connector "B" terminal No. 20 and 22 and ground.
 - Check for loose PCM harness.
 - If no problems are found, replace PCM with a known-good unit and retest system.
5. Move selector lever through all positions except Neutral and Park. Measure voltage between PCM harness connector "B" terminal No. 14 (Blue/White wire) and connector "B" terminal No. 20 or 22

(Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, inspect the following items. Repair as needed.

- Check for short in wire between PCM harness connector "B" terminal No. 14 and A/T gear position switch.
 - Check for short in signal wire between A/T gear position switch and A/T gear position indicator.
 - Check for loose PCM harness connectors.
 - If no problems are found, replace PCM with a known-good unit and retest system.
6. Move selector lever through all positions except "D4". Measure voltage between PCM harness connector "D" terminal No. 9 (Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If about 5 volts is present, go to next step. If about 5 volts is not present, inspect the following items. Repair as needed.
- Check for short in wire between PCM harness connector "D" terminal No. 9 and A/T gear position switch.
 - Check for short in signal wire between A/T gear position switch and A/T gear position indicator.
 - Check for loose PCM harness connectors.
 - If no problems are found, replace PCM with a known-good unit and retest system.
7. Move selector lever through all positions except "D3". Measure voltage between PCM harness connector "D" terminal No. 8 (Pink wire) and PCM harness connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, inspect following items. Repair as needed.
- Check for short in wire between PCM harness connector "D" terminal No. 8 and A/T gear position switch.
 - Check for short in signal wire between A/T gear position switch and A/T gear position indicator.
 - Check for loose PCM harness connectors.
 - If no problems are found, replace PCM with a known-good unit and retest system.
8. Move selector lever through all positions except "2". Measure voltage between PCM harness connector "D" terminal No. 14 (Blue wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, inspect following items. Repair as needed.
- Check for short in wire between PCM harness connector "D" terminal No. 14 and A/T gear position switch.
 - Check for short in signal wire between A/T gear position switch and A/T gear position indicator.
 - Check for loose PCM harness connectors.
 - If no problems are found, replace PCM with a known-good unit and retest system.
9. Move selector lever through all positions except "1". Measure voltage between PCM harness connector "D" terminal No. 15 (Brown wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, inspect following items. Repair as needed.
- Check for short in wire between PCM harness connector "D" terminal No. 15 and A/T gear position switch.
 - Check for short in signal wire between A/T gear position switch and A/T gear position indicator.
 - Check for loose PCM harness connectors.

- If no problems are found, replace PCM with a known-good unit and retest system.
10. Inspect PCM for loose connectors or damaged terminals. Repair as needed. If connectors are clean and tight, replace PCM with a known-good unit and retest system. If DTC P1705 is still present, repeat diagnostic procedure.

DTC P1706/6: A/T GEAR POSITION SWITCH (OPEN)

1. Using scan tool, retrieve freeze frame data. Clear DTC and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent, check transaxle and PCM connections.
2. Test A/T gear position switch. See A/T GEAR POSITION SWITCH under COMPONENT TESTS. If switch is okay, go to next step. If switch fails test, replace A/T gear position switch.
3. Shift to Reverse. Measure voltage between PCM harness connector "D" terminal No. 6 (White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is present, repair open in White wire between PCM harness connector "D" and A/T gear position switch. If voltage is not present, go to next step.
4. Shift to Neutral or Park. Measure voltage between PCM harness connector "D" terminal No. 14 (Blue/White wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is present, repair open in Blue/White wire between PCM harness connector "D" and A/T gear position indicator. If voltage is not present, go to next step.
5. Shift to "D4" position. Measure voltage between PCM harness connector "D" terminal No. 9 (Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is present, repair open in Yellow wire between PCM harness connector "D" and A/T gear position switch. If voltage is not present, go to next step.
6. Shift to "D3" position. Measure voltage between PCM harness connector "D" terminal No. 8 (Pink wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is present, repair open in Pink wire between PCM harness connector "D" and A/T gear position switch. If voltage is not present, go to next step.
7. Shift to "2" position. Measure voltage between PCM harness connector "D" terminal No. 14 (Blue wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is present, repair open in Blue wire between PCM harness connector "D" and A/T gear position switch. If voltage is not present, go to next step.
8. Shift to "1" position. Measure voltage between PCM harness connector "D" terminal No. 15 (Brown wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). Replace PCM with a known-good unit if necessary and retest. If voltage is present, repair open in Brown wire between PCM harness connector "D" and A/T gear position switch. If voltage is not present, check for loose PCM harness connectors.

DTC P1738/25: 2ND CLUTCH PRESSURE SWITCH

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Turn ignition on. Measure voltage between PCM harness connector "B" terminal No. 14 (Blue/Black wire) and terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to step 4. If battery voltage is not present, go to next step.

3. Turn ignition off. Disconnect PCM harness connector "B". Check for continuity between PCM harness connector "B" terminal No. 14 (Blue/Black wire) and ground. If continuity is present, repair short to ground in Blue/Black wire. If continuity is not present, replace PCM with a known-good unit and retest.
4. Raise and support front of vehicle. Set parking brake and block rear wheels. Start engine and shift to "2" position. Run in "2" position for more than 5 seconds. Measure voltage between PCM harness connector "B" terminal No. 14 (Blue/Black wire) and terminal No. 20 or 22 (Brown/Black wires). If voltage is about zero volts, check connections and replace PCM with a known-good unit if necessary and retest. If voltage is not about zero volts, go to next step.
5. Turn ignition off. Disconnect 2nd clutch pressure switch connector. See **Fig. 3**. Turn ignition on. Measure voltage between 2nd clutch pressure switch connector and ground. If battery voltage is present, go to next step. If battery voltage is not present, repair open in Blue/Black wire between PCM harness connector "B" and 2nd clutch pressure switch connector.
6. Measure resistance between 2nd clutch pressure switch connector (switch side) and ground. If resistance is 10 megohms or more, check for loose PCM or 2nd clutch pressure switch harness connectors. Replace PCM with a known-good unit if necessary and retest. If resistance is less than 10 megohms, replace 2nd clutch pressure switch. See **2ND CLUTCH PRESSURE SWITCH** under REMOVAL & INSTALLATION.

DTC P1739/26: 3RD CLUTCH PRESSURE SWITCH

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Turn ignition on. Measure voltage between PCM harness connector "B" terminal No. 24 (Blue/White wire) and terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, go to step 4.
3. Turn ignition off. Disconnect PCM harness connector "B". Check for continuity between PCM harness connector "B" terminal No. 24 (Blue/White wire) and ground. If continuity is present, repair short to ground in Blue/White wire. If continuity is not present, check for loose connections. Replace PCM with a known-good unit if necessary and retest.
4. Raise and support front of vehicle. Set parking brake and block rear wheels. Start engine and shift to "D3" position. Run in 3rd gear for more than 5 seconds. Measure voltage between PCM harness connector "B" terminal No. 24 (Blue/White wire) and terminal No. 20 or 22 (Brown/Black wires). If voltage is about zero volts, check connections. Replace PCM with a known-good unit as necessary and retest. If voltage is not about zero volts, go to next step.
5. Turn ignition off. Disconnect 3rd clutch pressure switch connector. See **Fig. 3**. Turn ignition on. Measure voltage between 3rd clutch pressure switch connector and ground. If battery voltage is present, go to next step. If battery voltage is not present, repair open in Blue/White wire between PCM harness connector "B" and 3rd clutch pressure switch connector.
6. Measure resistance between 3rd clutch pressure switch connector (switch side) and ground. If resistance is 10 megohms or more, check for loose PCM or 3rd clutch pressure switch harness connectors. Check connections and replace PCM with a known-good unit if necessary and retest. If resistance is less than 10 megohms, replace 3rd clutch pressure switch. See **3RD CLUTCH PRESSURE SWITCH** under REMOVAL & INSTALLATION.

DTC P1750/46: MECHANICAL FAULT IN HYDRAULIC SYSTEM

1. Using scan tool, retrieve freeze frame data. Clear DTC and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent, check transaxle and PCM connections.
2. Using scan tool, check for any other DTCs. If any other DTCs are present, repair those DTCs first, then recheck for DTC P1750/46. If no other DTCs are present, go to next step.
3. Replace A/T clutch pressure control solenoid valve "A"/"B" assembly. See **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION.
4. Clear DTC. See **CLEARING DIAGNOSTIC TROUBLE CODES** under DIAGNOSIS & TESTING. Road test for several minutes in "D4", ensure transaxle shifts into all gears. Recheck DTCs. If P1750/46 returns, replace transaxle. If DTC does not return, system is okay.

DTC P1751/47: MECHANICAL FAULT IN HYDRAULIC SYSTEM

1. Using scan tool, retrieve freeze frame data. Clear DTC and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent, check transaxle and PCM connections.
2. Using scan tool, check for any other DTCs. If any other DTCs are present, repair those DTCs first, then recheck for DTC P1751/47. If no other DTCs are present, go to next step.
3. Replace shift control solenoid valve "B" and A/T clutch pressure control solenoid valve "A"/"B" assembly. See **SHIFT CONTROL SOLENOID VALVE "B"/"C" ASSEMBLY** and **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION.
4. Clear DTC. See **CLEARING DIAGNOSTIC TROUBLE CODES** under DIAGNOSIS & TESTING. Road test for several minutes in "D4", ensure transaxle shifts into all gears. Recheck DTCs. If P1751/47 returns, replace transaxle. If DTC does not return, system is okay.

DTC P1753/1: LOCK-UP CONTROL SOLENOID VALVE "A"

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Disconnect PCM harness connectors "B" and "D". Check for voltage between PCM harness connector "D" terminal No. 1 (Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If voltage is present, repair short to voltage in Yellow wire between PCM harness connector "D" and lock-up control solenoid valve "A". If voltage is not present, go to next step.
3. Turn ignition off. Measure resistance between PCM harness connector "D" terminal No. 1 (Yellow wire) and connector "B" terminals No. 20 or 22 (Brown/Black wires). If resistance is 12-25 ohms, go to step 7. If resistance is not 12-25 ohms, go to next step.
4. Check for continuity between PCM harness connector "B" terminal No. 20 and 22 (Brown/Black wires) and ground. If continuity is not present, repair open Brown/Black wires. If continuity is present, go to next step.
5. Disconnect lock-up control solenoid valve/shift control solenoid valve "A" harness connector. Check for continuity between PCM harness connector "D" terminal No. 1 (Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If continuity is present, repair short to ground in Yellow wire between PCM harness connector "B" and lock-up control solenoid valve "A". If continuity is not present, go to

next step.

6. Measure resistance of Blue/Yellow wire between lock-up control solenoid valve harness connector (solenoid side) and ground. If resistance is 12-25 ohms, repair open in Yellow wire between lock-up control solenoid valve "A" and harness connector. If resistance is not 12-25 ohms, replace lock-up control solenoid valve assembly. See **LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY** under REMOVAL & INSTALLATION.
7. Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary and retest. If battery voltage is not present, check for open fuse No. 6 (15 amp) in underdash fuse relay box. If fuse is okay, repair open between PCM harness connector "D" terminal No. 5 and fuse relay box.

DTC P1768/16: A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Disconnect A/T clutch pressure control solenoid harness connector. Measure resistance between terminals of A/T clutch pressure control solenoid valve "A". If resistance is about 5 ohms, go to next step. If resistance is not about 5 ohms, replace A/T clutch pressure control solenoid valve "A"/"B" assembly. See **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION.
3. Disconnect PCM harness connector "B". Check for continuity between PCM harness connector "B" terminal No. 17 (Red wire) and ground, and then between terminal No. 8 (White wire) and ground. If continuity is present, repair Red wire and/or White wire for short to ground. If continuity is not present, go to next step.
4. Reconnect A/T clutch pressure control solenoid harness connector. Measure resistance between PCM harness connector "B" terminal No. 17 (Red wire) and terminal No. 8 (White wire). If resistance is about 5 ohms, go to next step. If resistance is not about 5 ohms, repair open or poor connection in Red wire or White wire between A/T clutch pressure control solenoid and PCM harness connector "B".
5. Disconnect PCM harness connector "D". Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, check for open fuse No. 6 (15 amp) in underdash fuse relay box. If fuse is okay, repair open in circuit between PCM harness connector "D" terminal No. 5 and fuse relay box.
6. Check for continuity between PCM harness connector "B" terminal No. 20 or 22 (Brown/Black wires) and ground. If continuity is not present, repair open Brown/Black wires. If continuity is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary and retest.

DTC P1773/23: A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "B"

1. Using scan tool, retrieve freeze frame data. Clear DTCs and road test vehicle under same conditions freeze frame data was recorded. If DTC returns, go to next step. If DTC does not return, problem is intermittent. Check transaxle and PCM connections.
2. Disconnect A/T clutch pressure control solenoid harness connector. Measure resistance between terminals of A/T clutch pressure control solenoid valve "B". If resistance is about 5 ohms, go to next step. If

resistance is not about 5 ohms, replace A/T clutch pressure control solenoid valve "A" and "B" assembly. See **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY** under REMOVAL & INSTALLATION.

3. Disconnect PCM harness connector "B". Check for continuity between PCM harness connector "B" terminal No. 25 (Orange wire) and ground, and then between terminal No. 18 (Green wire) and ground. If continuity is present, repair Orange wire and/or Green wire for short to ground. If continuity is not present, go to next step.
4. Reconnect A/T clutch pressure control solenoid harness connector. Measure resistance between PCM harness connector "B" terminal No. 25 (Orange wire) and terminal No. 18 (Green wire). If resistance is about 5 ohms, go to next step. If resistance is not about 5 ohms, repair open or poor connection in Orange wire or Green wire between A/T clutch pressure control solenoid and PCM harness connector "B".
5. Disconnect PCM harness connector "D". Turn ignition on. Measure voltage between PCM harness connector "D" terminal No. 5 (Black/Yellow wire) and connector "B" terminal No. 20 or 22 (Brown/Black wires). If battery voltage is present, go to next step. If battery voltage is not present, check for open fuse No. 6 (15 amp) in underdash fuse relay box. If fuse is okay, repair open in circuit between PCM harness connector "D" terminal No. 5 and fuse relay box.
6. Check for continuity between PCM harness connector "B" terminal No. 20 or 22 (Brown/Black wires) and ground. If continuity is present, check for loose PCM harness connectors. Replace PCM with a known-good unit if necessary. If continuity is not present, repair open Brown/Black wires.

COMPONENT TESTS

A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY

1. A/T clutch pressure control solenoid valve "A" and "B" assembly is located on transaxle. See **Fig. 3** . Disconnect harness connector at A/T clutch pressure control solenoid valves "A" and "B".
2. Measure resistance between solenoid terminals. Resistance should be about 5 ohms. Replace A/T clutch pressure control solenoid valve "A"/"B" assembly if resistance is not as specified.
3. Check A/T clutch pressure control solenoid operation. Apply battery voltage to terminal No. 1, and ground terminal No. 2. See **Fig. 5** . A clicking sound should be heard from each solenoid, indicating solenoid operation. Replace A/T clutch pressure control solenoid valve "A"/"B" assembly if either solenoid fails to operate.

A/T GEAR POSITION INDICATOR

NOTE: For terminal identification, see **WIRING DIAGRAMS** .

1. Remove instrument panel gauge assembly from instrument panel. Disconnect harness connectors from rear of instrument panel gauge assembly. See **Fig. 6** .
2. Check for voltage and continuity at specified harness connectors and terminals. If necessary, check ground connection. For ground connection location, refer to illustration. See **Fig. 7** .
3. If necessary, check condition of related fuses as per testing charts. See **Fig. 6** .

A/T GEAR POSITION SWITCH

1. Disconnect harness connectors from A/T gear position switch. Note harness connector terminal

identification. See **Fig. 8**.

NOTE: Check for continuity while moving selector lever back and forth in free play area of each gear position.

2. Check for continuity between specified terminal(s) with selector lever in indicated positions. See **A/T GEAR POSITION SWITCH CONTINUITY** table.
3. If continuity is not as specified, A/T gear position switch may require adjustment. If correct continuity cannot be obtained by adjusting A/T gear position switch, replace switch assembly. See **A/T GEAR POSITION SWITCH** under REMOVAL & INSTALLATION.

A/T GEAR POSITION SWITCH CONTINUITY

Shift Lever Position	Continuity Between Terminals No.
"P"	1, 3 & 10
"R"	3 & 9
"N"	1, 3 & 8
"D4"	2, 3 & 7
"D3"	2, 3 & 6
"2"	2, 3 & 5
"1"	3 & 4

COUNTERSHAFT SPEED SENSOR

Disconnect harness connector from countershaft speed sensor located on top of transaxle. See **Fig. 3**. Measure resistance between sensor terminals. Replace countershaft speed sensor if resistance is not 400-600 ohms.

LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY

1. Disconnect harness connector at valve assembly. See **Fig. 3**.
2. Measure resistance between terminal No. 1 (lock-up control solenoid valve) and ground, and then between terminal No. 3 (shift control solenoid valve "A") and ground. See **Fig. 9**.
3. Resistance should be 12-25 ohms. Replace lock-up control solenoid valve/shift control solenoid valve "A" assembly if resistance of either solenoid valve is not within specification.
4. Check lock-up control solenoid valve/shift control solenoid valve "A" operation. Ensure solenoid valve body is grounded. Apply battery voltage to terminal No. 1 or terminal No. 3. A clicking sound should be heard, indicating solenoid valve operation. Replace lock-up control solenoid valve/shift control solenoid valve "A" assembly if either solenoid valve fails to operate as specified.

MAINSHAFT SPEED SENSOR

Disconnect harness connector from mainshaft speed sensor located on side of transaxle. See **Fig. 3**. Measure resistance between sensor terminals. Replace mainshaft speed sensor if resistance is not 400-600 ohms.

SHIFT CONTROL SOLENOID VALVE "B"/"C" ASSEMBLY

1. Shift control solenoid valves are located on transaxle. See **Fig. 3** . Disconnect harness connector at shift control solenoid valves.
2. Measure resistance between terminal No. 1 and 2 of each solenoid valve. See **Fig. 10** .
3. Resistance should be 12-25 ohms. Replace shift control solenoid valve "B"/"C" assembly if resistance of either solenoid valve is not within specification.
4. Check shift control solenoid valve operation. Apply battery voltage to terminal No. 2 of each solenoid valve. Connect terminal No. 1 of each solenoid to negative battery terminal. A clicking sound should be heard, indicating solenoid valve operation. Replace shift control solenoid valve "B"/"C" assembly if either solenoid valve fails to operate as specified.

THROTTLE POSITION SENSOR

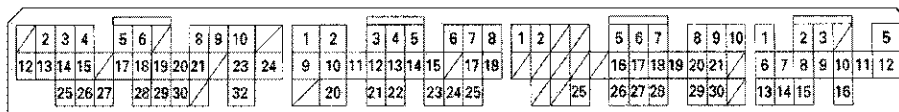
Throttle Position (TP) sensor should input a .5-volt signal to PCM at closed throttle. At full throttle, signal should be about 4.5 volts. Voltage should change smoothly as throttle valve is opened and closed. If voltage is not as specified, check throttle position sensor wiring circuit. See **WIRING DIAGRAMS** .

PIN VOLTAGE TESTS

NOTE: Only terminals related to transaxle control system are listed. See **Fig. 15** and **Fig. 16** . For complete listing of terminals, see appropriate **SELF-DIAGNOSTICS** article in **ENGINE PERFORMANCE**.

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda BAXA & MAXA Electronic Controls



"A" (32-PIN)

"B" (25-PIN)

"C" (31-PIN)

"D" (16-PIN)


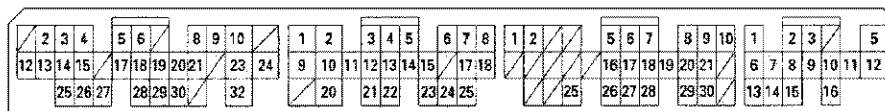
Terminal Number	Signal	Description	Measuring Conditions/Terminal Voltage
A5	CRS	Downshift signal input from cruise control unit	When cruise control is used: Pulsing signal
A9	VSS OUT	Vehicle speed signal detected from countershaft speed sensor and sent to the gauge assembly by the PCM	Depending on vehicle speed: Pulsing signal When vehicle is stop: 0 V or 5 V
A10	SCS	Timing and adjustment service check signal (5 V from PCM)	With ignition switch ON (II) and service check connector open: 5 V With ignition switch ON (II) and service check connector jumped with special tool: 0 V
A14	D4 IND	D4 indicator light control (Voltage from PCM turns D4 light ON)	When ignition switch is first turned ON (II): Battery voltage for two seconds In  position: Battery voltage
A28	ILU	Interlock control (Voltage from PCM)	When ignition switch ON (II), brake pedal depressed, and accelerator pedal released: Battery voltage
A32	STOP SW	Brake switch signal input	Brake pedal depressed: Battery voltage With ignition switch ON (II) and brake pedal released: 0 V
B1	IGP1	Power supply circuit from main relay	With ignition switch ON (II): Battery voltage With ignition switch OFF: 0 V
B2	PG1	Ground (G101)	
B8	LS A-	A/T clutch pressure control solenoid valve A power supply negative electrode	
B9	IGP2	Power supply circuit from main relay	With ignition switch ON (II): Battery voltage With ignition switch OFF: 0 V
B10	PG2	Ground (G101)	
B14	OP2SW	A/T 2nd clutch pressure switch signal input	With ignition switch ON (II): Battery voltage (No 2nd clutch pressure)
B17	LS A+	A/T clutch pressure control solenoid valve A power supply positive electrode	With ignition switch ON (II): Pulsing signal
B18	LS B-	A/T clutch pressure control solenoid valve B power supply negative electrode	
B20	LG1	Ground (G101)	
B21	VBU	Back-up power supply	Always battery voltage
B22	LG2	Ground (G101)	
B24	OP3SW	A/T 3rd clutch pressure switch signal input	With ignition switch ON (II): Battery voltage (No 3rd clutch pressure)

Fig. 15: Pin Voltages & Terminal Identification (PCM Connectors "A" & "B")
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda BAXA & MAXA Electronic Controls



"A" (32-PIN)

"B" (25-PIN)

"C" (31-PIN)

"D" (16-PIN)

Terminal Number	Signal	Description	Measuring Conditions/Terminal Voltage
D1	LC	Lock-up control solenoid valve control	During lock-up conditions: Battery voltage During no lock-up condition: 0 V
D2	SH B	Shift control solenoid valve B control	Battery voltage in following positions: • 1, 2 and positions • D ₂ , and D ₃ positions in 1st and 2nd gear • P, R, and N positions 0 V in following positions: • D ₂ , and D ₃ positions in 3rd gear • D ₂ position in 4th gear
D3	SH C	Shift control solenoid valve C control	Battery voltage in following positions: • 1 position • D ₂ , and D ₃ positions in 1st and 3rd gear 0 V in following positions: • 2 position • D ₂ , and D ₃ positions in 2nd gear • D ₂ position in 4th gear • P, R and N positions
D4	—	Not used	
D5	VB SOL	Power supply for solenoid valves	With ignition switch ON (II): Battery voltage With ignition switch OFF: 0 V
D6	ATP R	A/T gear position switch R position input	In R position: 0 V In other than R position: Battery voltage
D7	SH A	Shift control solenoid valve A control	Battery voltage in following positions: • 2 position • D ₂ , and D ₃ positions in 2nd and 3rd gear 0 V in following positions: • 1 position • D ₂ , and D ₃ positions in 1st gear • D ₂ position in 4th gear • P, R and N positions
D8	ATP D3	A/T gear position switch D ₂ position input	In D ₂ position: 0 V In other than D ₂ position: Battery voltage
D9	ATP D4	A/T gear position switch D ₃ position input	In D ₃ position: 0 V In other than D ₃ position: 5 V
D10	NC	Countershaft speed sensor input	Depending on vehicle speed: Pulsing signal When vehicle is stopped: Approx. 0 V
D11	NM	Mainshaft speed sensor input	Depending on vehicle speed: Pulsing signal When engine is stopped: Approx. 0 V
D12	NMSG	Mainshaft speed sensor ground	
D13	ATP NP	A/T gear position switch P and N positions input	In P and N positions: 0 V In other than P and N position: 5 V
D14	ATP 2	A/T gear position switch 2 position input	In 2 position: 0 V In other than 2 position: Battery voltage
D15	ATP 1	A/T gear position switch	In 1 position: 0 V

Fig. 16: Pin Voltages & Terminal Identification (PCM Connector "D")
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REMOVAL & INSTALLATION

A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE "A"/"B" ASSEMBLY

Removal & Installation

1. Disconnect harness connector at A/T clutch pressure control solenoid valve "A" and "B" assembly. See **Fig. 3** .
2. Remove bolts, A/T clutch pressure control solenoid valve "A"/"B" assembly and gasket. To install, reverse removal procedure using NEW gasket. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** .

A/T GEAR POSITION SWITCH

Removal & Installation

1. Raise and support front of vehicle. Apply parking brake and block rear wheels. Place selector lever in "N" position. Disconnect A/T gear position switch connector.
2. Remove harness clamp from right side cover. Remove A/T gear position switch cover and switch. To install, ensure A/T gear position switch is in "N" position. Ensure transaxle control shaft is still in "N" position.
3. To complete installation, reverse removal procedure. Verify switch operation in all positions. See **A/T GEAR POSITION SWITCH** under COMPONENT TESTS.

COUNTERSHAFT SPEED SENSOR

Removal & Installation

1. Disconnect harness connector at countershaft speed sensor. See **Fig. 3** .
2. Remove clamp for wiring harness. Remove bolt, countershaft speed sensor and "O" ring. To install, reverse removal procedure using NEW "O" ring. Install and tighten bolt to specification. See **TORQUE SPECIFICATIONS** .

LOCK-UP CONTROL SOLENOID VALVE/SHIFT CONTROL SOLENOID VALVE "A" ASSEMBLY

Removal & Installation

1. Disconnect harness connector at lock-up control solenoid valve/shift control solenoid valve "A" assembly. See **Fig. 3** .
2. Remove bolts, valve assembly and gasket. To install, reverse removal procedure using NEW gasket. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** .

MAINSHAFT SPEED SENSOR

Removal & Installation

1. Disconnect harness connector at mainshaft speed sensor. See **Fig. 3**.
2. Remove clamp for the wiring harness. Remove bolt, mainshaft speed sensor and "O" ring. To install, reverse removal procedure using NEW "O" ring. Install and tighten bolt to specification. See **TORQUE SPECIFICATIONS**.

SHIFT CONTROL SOLENOID VALVE "B"/"C" ASSEMBLY

Removal & Installation

1. Disconnect harness connectors at shift control solenoid valves. See **Fig. 3**.
2. Remove bolts, shift control solenoid valves and gasket. To install, reverse removal procedure using NEW "O" rings. Tighten bolts to specification. See **TORQUE SPECIFICATIONS**.

THROTTLE POSITION SENSOR

Removal & Installation

Throttle Position (TP) sensor is part of throttle body. To replace throttle body, disconnect cruise control and throttle cables. Disconnect electrical connectors. Remove nuts and retaining bolts. Remove throttle body and gasket. Remove MAP sensor and IAC valve from throttle body. To install, reverse removal procedure.

2ND CLUTCH PRESSURE SWITCH

Removal & Installation

1. Disconnect harness connector from 2nd clutch pressure switch. See **Fig. 3**.
2. Remove switch and sealing washer. To install, reverse removal procedure. Install switch and tighten to specification. See **TORQUE SPECIFICATIONS**.

3RD CLUTCH PRESSURE SWITCH

Removal & Installation

1. Disconnect harness connector from 3rd clutch pressure switch located on top of transaxle. See **Fig. 3**.
2. Remove switch and sealing washer. To install, reverse removal procedure. Install and tighten switch to specification. See **TORQUE SPECIFICATIONS**.

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS

Application	Ft. Lbs. (N.m)
2nd Clutch Pressure Switch	15 (20)
3rd Clutch Pressure Switch	15 (20)
INCH Lbs. (N.m)	
A/T Clutch Pressure Control Solenoid "A"/"B" Assembly Bolt	106 (12.0)
A/T Gear Position Switch Bolt	106 (12)
Countershaft Speed Sensor Bolt	106 (12)

2000 Honda Accord DX

2000 AUTOMATIC TRANSMISSIONS Honda BAXA & MAXA Electronic Controls

Lock-Up Control Solenoid Valve Assembly Bolt	106 (12)
Mainshaft Speed Sensor Bolt	106 (12)
Shift Control Solenoid Valve Assembly Bolt	106 (12)

WIRING DIAGRAMS

SOLENOID VALVE ASSEMBLY

(9 lb.-ft.)

GASKET

Replace..

TRANSMISSION

Location 1

Location 2

TRANSMISSION

Clean

12-24 Ω
Standard

