2000-06 ENGINE PERFORMANCE

Fuel & Emissions Systems - Insight

INTEGRATED MOTOR ASSIST (IMA) SYSTEM (IF FUEL AND EMISSIONS MAINTENANCE IS REQUIRED)

IMA components are located in this area. The IMA is a high-voltage system. The high voltage cables and their covers are identified by orange coloring. The safety labels are attached to high voltage and other related parts (see **DANGER/WARNING/CAUTION LABEL LOCATIONS**). You must be familiar with the IMA system before working on or around it. Make sure you have read the Service Precautions in the IMA section before performing repairs or service (see **SERVICE PRECAUTIONS**).

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07JAZ-001000B	Vacuum/Pressure Gauge, 0—4 in.Hg	1
②	07SAZ-001000A	Backprobe Set	2
③	07AAA-S0XA100	Fuel Sender Wrench	1
④	07406-004000B	Fuel Pressure Gauge	1
⑤	07AAJ-S6MA150	Fuel Pressure Gauge Attachment Set	1
⑥	07ZAJ-S7C0200	Fuel Joint Attachment	1

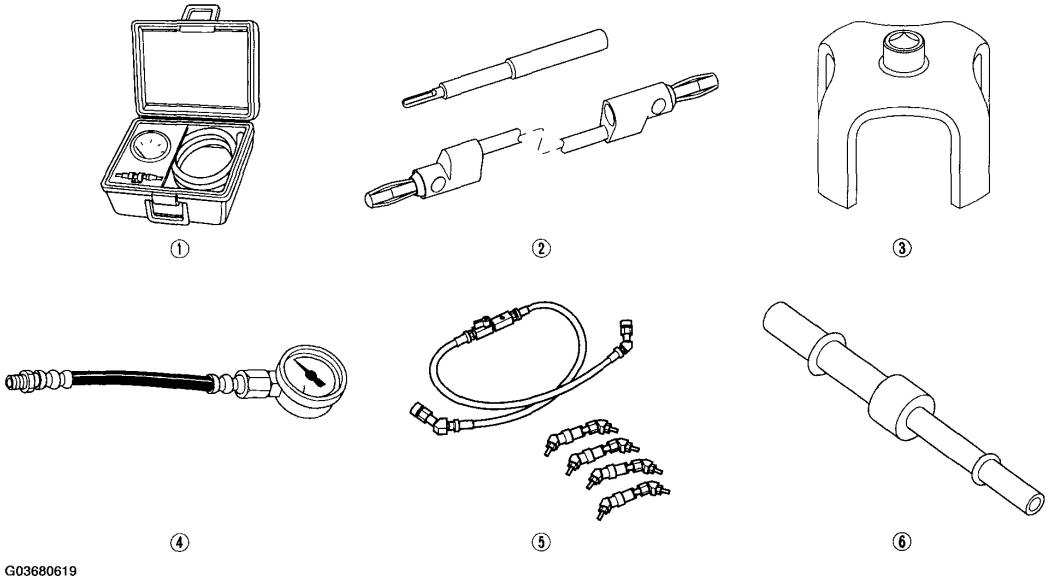


Fig. 1: Identifying Special Tools

Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

INTERMITTENT FAILURES

The term "intermittent failure" means a system may have had a failure, but it checks OK now. If the malfunction indicator lamp (MIL) on the dash does not come on, check for poor connections or loose pins at all connectors related to the circuit that you are troubleshooting. If the MIL was on, but then went out, the original problem may have been intermittent.

OPENS AND SHORTS

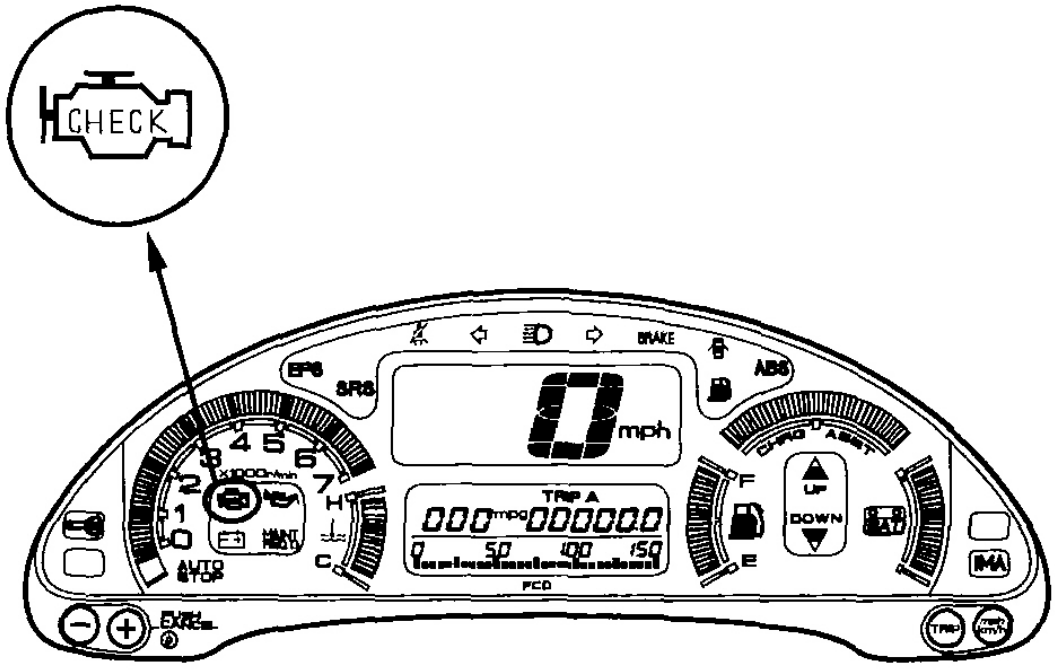
"Open" and "Short" are common electrical terms. An open is a break in a wire or at a connection. A short is an accidental connection of a wire to ground or to another wire. In simple electronics, this usually means something won't work at all. With complex electronics (such as ECMs), this can sometimes mean something works, but not the way it's supposed to.

HOW TO USE THE HDS (HONDA DIAGNOSTIC SYSTEM)

If the MIL (Malfunction Indicator Lamp) has come on

1. Start the engine, and check the MIL.

NOTE: If the ignition switch is turned ON (II), and the engine is not started, the MIL will stay on for 15-20 seconds (see HOW TO SET READINESS CODES).



G03680620

Fig. 2: Identifying Malfunctioning Indicator Lamp
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If the MIL stays on, connect the HDS to the data link connector (DLC) (A) located under the driver's (passenger's)* side of the dashboard.

   *: 2000 model

   2000 model

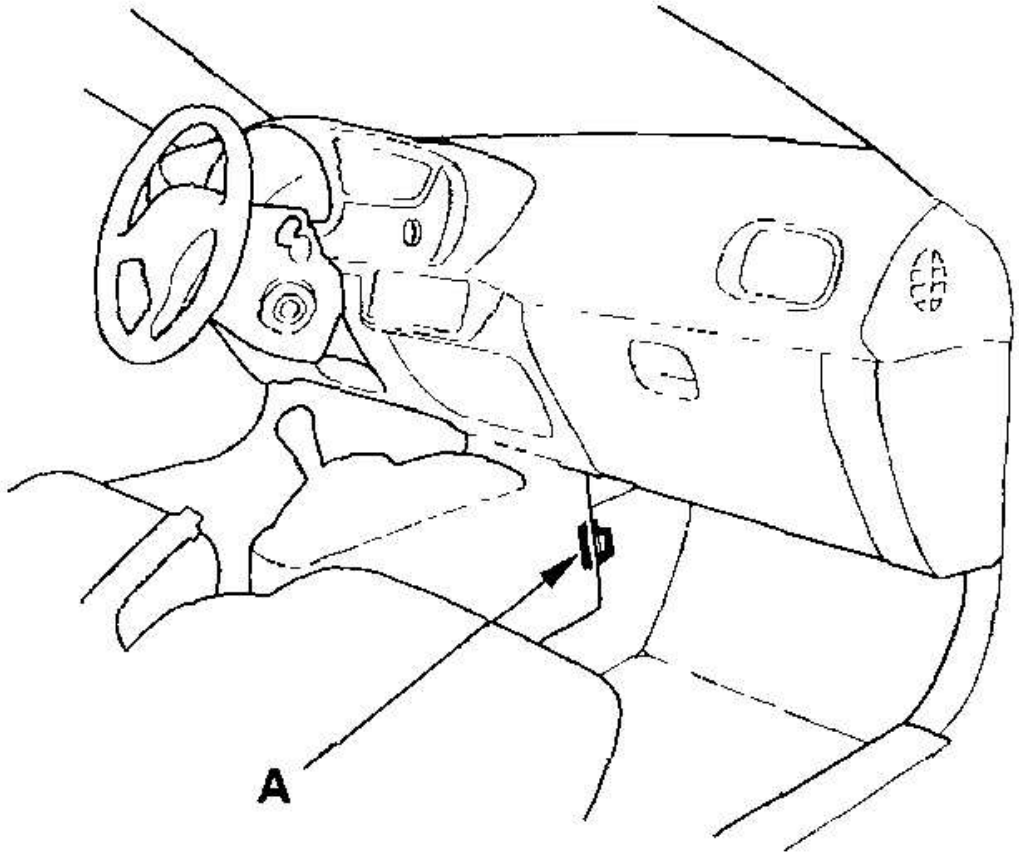


Fig. 3: Identifying DLC - 2000 Model
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2001-2006 models

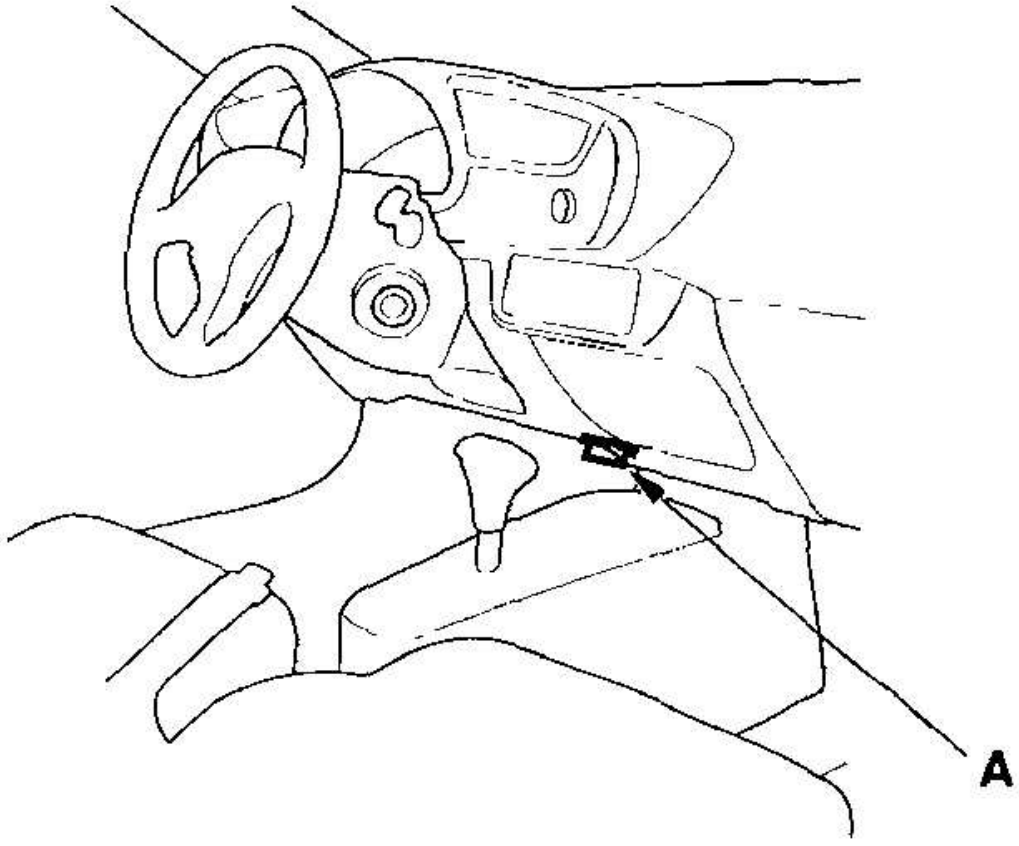


Fig. 4: Identifying DLC - 2001-2006 Model
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).
4. Check the diagnostic trouble code (DTC) and note it. Also check the freeze data and download any data found. Then refer to the indicated DTC's troubleshooting and begin the appropriate troubleshooting procedure.

NOTE:

- **Freeze data indicates the engine conditions when the first malfunction, misfire, or fuel trim malfunction was detected.**

- **The HDS can read the DTC, freeze data, current data, and other engine control module (ECM) data.**
- **For specific operations, refer to .**

5. If no DTCs are found, go to MIL circuit troubleshooting; 2000-2004 models (see **MIL CIRCUIT TROUBLESHOOTING**), 2005-2006 models (see **2005-2006 MODELS**).

If the MIL did not stay on

If the MIL did not stay on but there is a driveability problem, do the symptom troubleshooting.

If you can't duplicate the DTC

Some of the troubleshooting requires you to reset the ECM and try to duplicate the DTC. If the problem is intermittent and you can't duplicate the code, do not continue through the procedure. To do so will only result in confusion and possibly, a needlessly replaced ECM.

HDS CLEAR COMMAND

The ECM stores various specific data to correct the system even if there is no electrical power such as when the battery negative terminal or No. 18 (7.5 A) fuse from the under-dash fuse/relay box No. 7 (15 A) fuse from the under-hood fuse/relay box)* are disconnected. Stored data based on failure parts should be cleared by using the "CLEAR COMMAND" of the HDS, if parts are replaced.

The HDS has two kinds of clear commands to meet this purpose. They are DTC clear and ECM reset. DTC clear command erases all stored DTC codes, freeze data, and readiness codes. This must be done with the HDS after reproducing the DTC during troubleshooting. ECM reset command erases all stored DTC codes, freeze data, readiness codes, and all specific data to correct the system.

*: 2005-2006 models

SCAN TOOL CLEAR COMMAND

If you are using a generic scan tool to clear commands, be aware that there is only one setting for clearing the ECM, and it clears all commands at the same time (idle learn, readiness codes, freeze data, and DTCs). After you clear all commands, you then need to do these procedures, in this order: ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**); Test-drive to set readiness codes to complete (see **HOW TO SET READINESS CODES**).

DTC CLEAR

1. Clear the DTC with the HDS while the engine is stopped.
2. Turn the ignition switch OFF.
3. Turn the ignition switch ON (II), and wait 30 seconds.
4. Turn the ignition switch OFF, and disconnect the HDS from the DLC.

ECM RESET

This command clears stored specific data from each vehicle, such as DTCs, freeze data, and readiness codes.

1. Reset the ECM with the HDS while the engine is stopped.
2. Turn the ignition switch OFF.
3. Turn the ignition switch ON (II), and wait 30 seconds.
4. Turn the ignition switch OFF, and disconnect the HDS from the DLC.

HOW TO END A TROUBLESHOOTING SESSION (REQUIRED AFTER ANY TROUBLESHOOTING)

1. Reset the ECM with the HDS.
2. Do the ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**).
3. Turn the ignition switch OFF.
4. Disconnect the HDS from the DLC.

NOTE: The ECM is part of the immobilizer system. If you replace the ECM, it will have a different immobilizer code. In order for the engine to start, you must rewrite the immobililzer code with the HDS.

HOW TO TROUBLESHOOT CIRCUITS AT THE ECM

Special Tools Required

- Digital multimeter KS-AHM-32-003 0) or a commercially available digital multimeter
- Backprobe set 07SAZ-001000A (2)

1. Connect the backprobe adapters (A) to the stacking patch cords (B), and connect the cords to a digital multimeter (C).

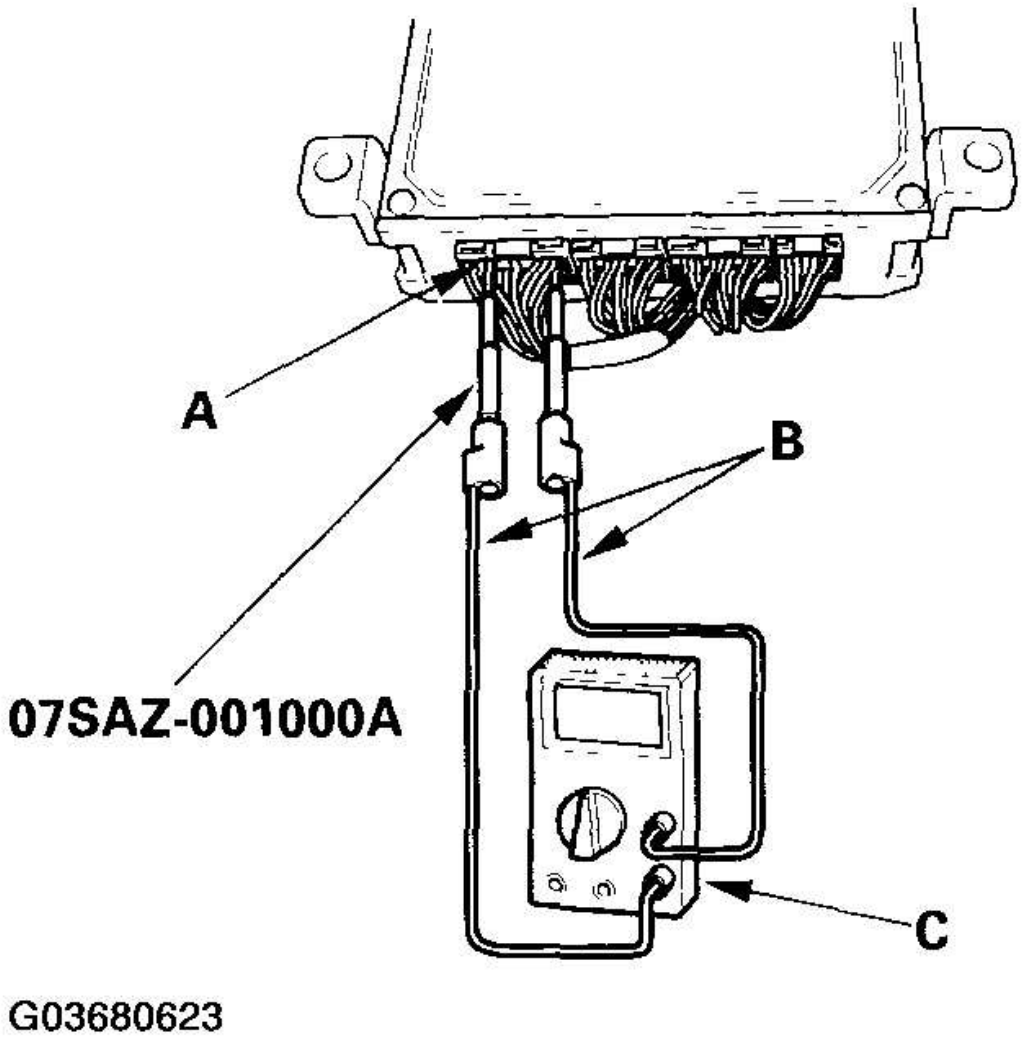


Fig. 5: Connecting Backprobe Adapters To Stacking Patch Cords
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Using the wire insulation as a guide for the contoured tip of the backprobe adapter, gently slide the tip into the connector from the wire side until it touches the end of the wire terminal.
3. If you cannot get to the wire side of the connector or the wire side is sealed (A), disconnect the connector and probe the terminals (B) from the terminal side. Do not force the probe into the connector.

NOTE: Do not puncture the insulation on a wire. Punctures can cause poor or intermittent electrical connections.

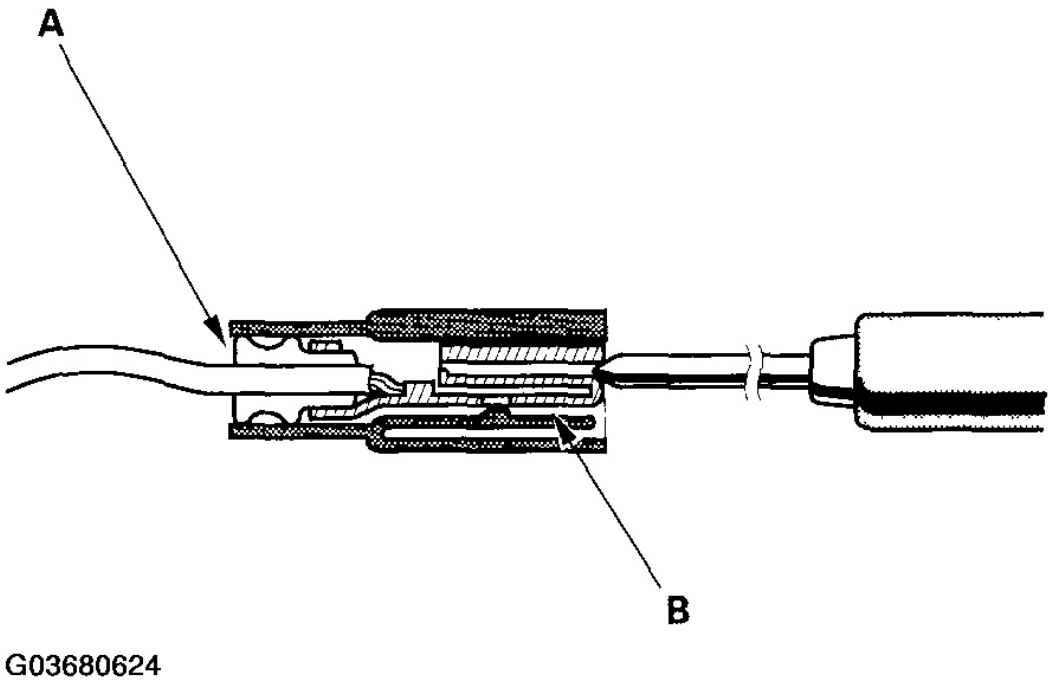


Fig. 6: Sliding Tip Into Connector From Wire Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)

Use this procedure if you need a known-good ECM to test a vehicle. It allows you to swap a ECM from a "donor" vehicle without having to program it to the test vehicle's ignition key.

1. Cut a temporary ignition key for the test vehicle with a non-immobilizer key blank.
2. Remove the ECM from the test vehicle.
3. Write the test vehicle's VIN on the ECM you just removed to avoid confusing it with the donor vehicle's ECM.
4. Remove the known-good ECM from the donor vehicle, and install it in the test

vehicle.

5. Tape the donor vehicle's ignition key head-to-head to the test vehicle's temporary key (A). The ECM will recognize the code from the donor vehicle's key (B) and allow you to start the engine with the temporary key.

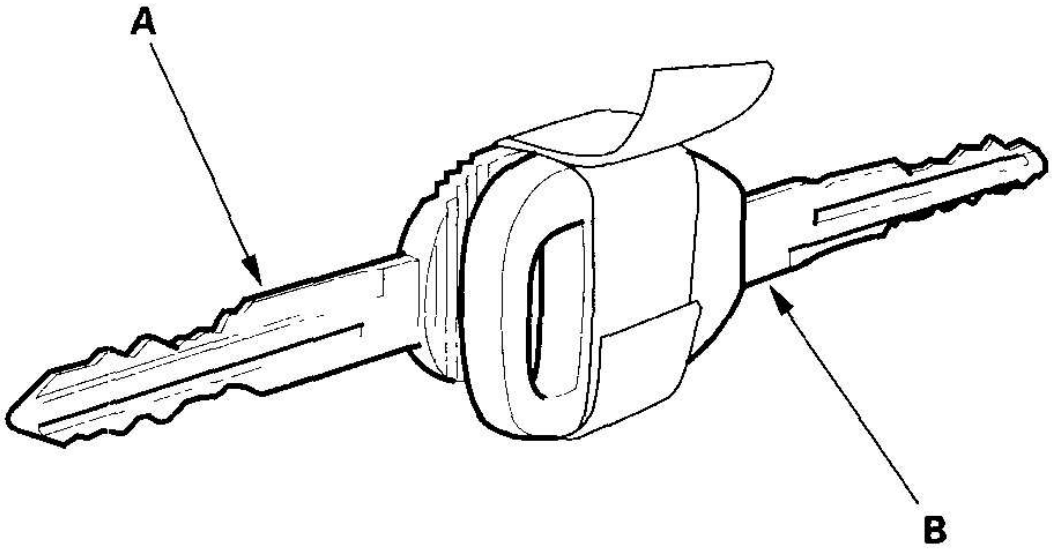


Fig. 7: Taping Donor Vehicle's Ignition Key Head-To-Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. After completing your tests, reinstall both ECMs, and destroy the temporary key.

ECM UPDATING AND SUBSTITUTION FOR TESTING (2002-2006 M/T MODELS AND CVT MODEL)

Special Tools Required

Honda interface module (HIM) EQS05A35570

Use this procedure when you have to substitute a known-good ECM in a troubleshooting procedure. Update the ECM only if the ECM does not have the latest software loaded.

NOTE: Do not turn the ignition switch OFF while updating the ECM. If you turn the ignition switch OFF before completion, the ECM can be damaged.

HOW TO UPDATE THE ECM

NOTE:

- **To ensure the latest program is installed, do an ECM update whenever the ECM is substituted or replaced.**
- **You can not update an ECM with the program it already has. It will only accept a new program.**
- **Before you update the ECM, make sure the vehicle's battery is fully charged.**
- **To prevent ECM damage, do not operate anything electrical (audio system, brakes, A/C, power windows, door locks, etc.) during the update.**
- **If you need to diagnose the Honda interface module (HIM) because the HIM's red (#3) light came on or was flashing during the update, leave the ignition switch in the ON (II) position when you disconnect the HIM from the data link connector (DLC). This will prevent ECM damage.**

1. Turn the ignition switch ON (II). Do not start the engine.
2. Connect the HDS or the Honda interface module (HIM) to the data link connector (DLC) (A) located under the driver's side of dashboard.

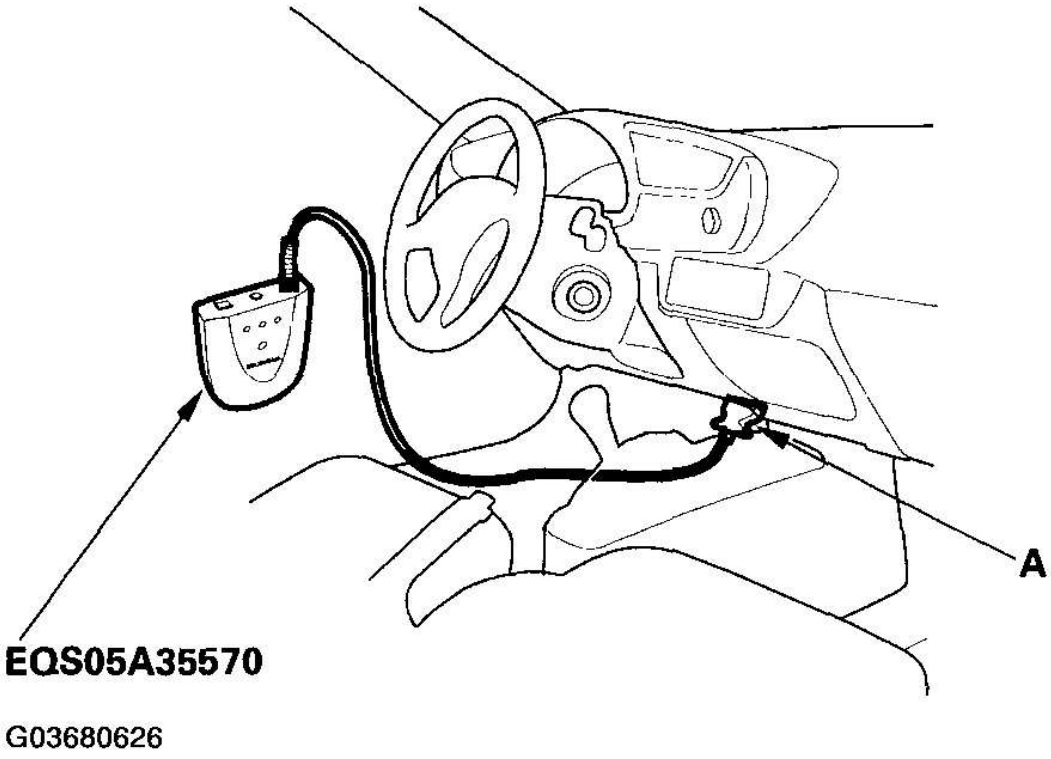


Fig. 8: Connecting HDS Or Honda Interface Module
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the HDS does not have the update function, disconnect the HDS from the vehicle and connect the Honda interface module (HIM).
4. If the software in the ECM is the latest, disconnect the HDS or the HIM from the DLC, and go back to the procedure that you were doing.

   If the software in the ECM is not the latest, do the ECM update procedure as described on the HIM label or in the ECM update system.

5. Do the ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**).

HOW TO SUBSTITUTE THE ECM

1. Make sure you have the anti-theft code for the radio, then write down the audio station presets.

2. Turn the ignition switch OFF.
3. Wait 1 minute. If the radiator fan is running, wait 1 minute after the radiator fan stops.
4. Disconnect the negative cable from the battery.
5. Pull the passenger's side carpet back to expose the ECM (A).

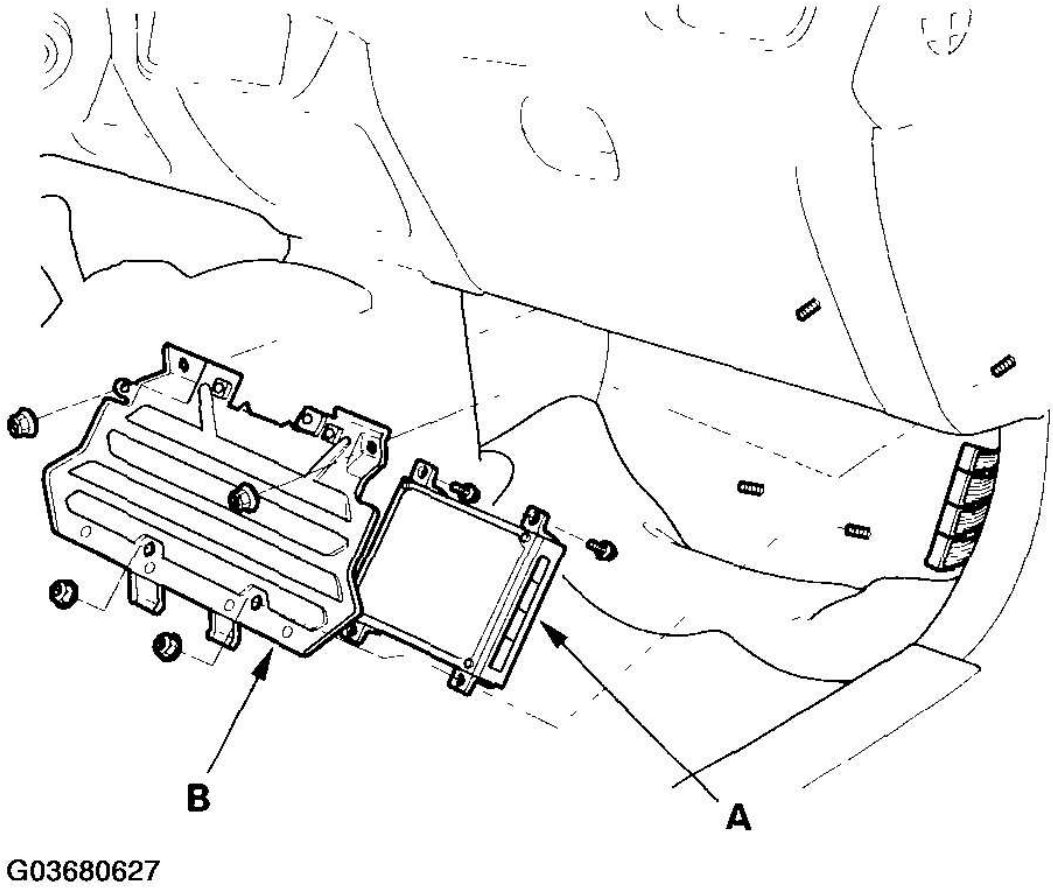


Fig. 9: Removing ECM Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the ECM cover (B).
7. Lift the lower edge of the ECM cover off of the lower studs. Make sure the ECM is not touching the studs.

8. Lift the upper edge of the ECM cover enough to clear the upper studs, then pull the cover down away from the evaporator drain tube.
9. Remove the ECM from the cover.
10. Disconnect the ECM connectors.
11. Install the ECM in the reverse order of removal.
12. Turn the ignition switch ON (II).

NOTE: For 2005-2006 models: DTC P0630 "VIN Not Programmed or Mismatch" may be stored because the VIN has not been programmed into the ECM; ignore it, and continue this procedure.

13. For 2005-2006 models: Input the VIN to the ECM with the HDS.
14. Rewrite the immobilizer code with the ECM replacement procedure in the HDS; it allows you to start the engine.
15. Do the ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**).
16. Remove the No. 15 (40 A) fuse from the under-hood fuse/relay box.
17. If the IMA battery level gauge (BAT) displays no segments, start the engine, and hold it between 3,500 RPM and 4,000 RPM without load (in Park or neutral) until the BAT displays at least three segments.
18. Reinstall the No. 15 (40 A) fuse.
19. Do the start clutch calibration procedure (see **START CLUTCH CALIBRATION PROCEDURES**).
20. Enter the anti-theft code for the radio, then enter the audio station presets, and the clock.

DTC TROUBLESHOOTING INDEX

DTC TROUBLESHOOTING INDEX

DTC (MIL indication (1))	Two Drive Cycle Detection	Detection Item	MIL	Note

P0106 (5)	No	Manifold Absolute Pressure (MAP) Sensor Vacuum Connection Problem	ON	(see **DTC TROUBLESHOOTING**)
P0107 (3)	No	Manifold Absolute Pressure (MAP) Sensor Circuit Low Voltage	ON	(see **DTC P0107: MAP SENSOR CIRCUIT LOW VOLTAGE**)
P0108 (3)	No	Manifold Absolute Pressure (MAP) Sensor Circuit High Voltage	ON	(see **DTC P0108: MAP SENSOR CIRCUIT HIGH VOLTAGE**)
P0111 (10)[8]	Yes	Intake Air Temperature (IAT) Sensor Circuit Range/Performance Problem	ON	(see **DTC P0111: IAT SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (2006 MODEL); DTC P1116: ECT SENSOR CIRCUIT RANGE/ PERFORMANCE PROBLEM (2006 MODEL)**)
P0112 (10)	No	Intake Air Temperature (IAT) Sensor Circuit Low Voltage	ON	(see **DTC P0112: IAT SENSOR CIRCUIT LOW VOLTAGE**)
P0113 (10)	No	Intake Air Temperature (IAT) Sensor Circuit High Voltage	ON	(see **DTC P0113: IAT SENSOR CIRCUIT HIGH VOLTAGE**)
P0116 (86)[4]	Yes	Engine Coolant Temperature (ECT) Sensor Circuit Range/Performance	ON	(see **DTC P0116: ECT SENSOR CIRCUIT RANGE/ PERFORMANCE**

		Problem		**PROBLEM (2000-2005 MODELS)**)
P0116 (86)[8]	Yes	Engine Coolant Temperature (ECT) Sensor Circuit Range/Performance Problem	ON	(see **DTC P0116: ECT SENSOR CIRCUIT RANGE/ PERFORMANCE PROBLEM (2006 MODEL)**)
P0117 (6)	No	Engine Coolant Temperature (ECT) Sensor Circuit Low Voltage	ON	(see **DTC P0117: ECT SENSOR CIRCUIT LOW VOLTAGE**)
P0118 (6)	No	Engine Coolant Temperature (ECT) Sensor Circuit High Voltage	ON	(see **DTC P0118: ECT SENSOR CIRCUIT HIGH VOLTAGE**)
P0122 (7)	No	Throttle Position (TP) Sensor Circuit Low Voltage	ON	(see **DTC P0122: TP SENSOR CIRCUIT LOW VOLTAGE**)
P0123 (7)	No	Throttle Position (TP) Sensor Circuit High Voltage	ON	(see **DTC P0123: TP SENSOR CIRCUIT HIGH VOLTAGE**)
P0125 (86)[5]	Yes	Engine Coolant Temperature (ECT) Sensor Malfunction/Slow Response	ON	(see **DTC P0125: ECT SENSOR MALFUNCTION/SLOW RESPONSE (2004-2005 MODELS)**)
P0125 (86)[8]	Yes	Engine Coolant Temperature (ECT) Sensor Malfunction/Slow Response	ON	(see **DTC P0125: ECT SENSOR MALFUNCTION/SLOW RESPONSE**)
P0128 (87)	Yes	Cooling System Malfunction	ON	(see **DTC P0128: COOLING SYSTEM**

				MALFUNCTION)
P0133 (61)[6]	Yes	Air Fuel Ratio (A/F) Sensor (Sensor 1) Circuit Slow Response	ON	(see **DTC P0133: A/F SENSOR (SENSOR 1) CIRCUIT SLOW RESPONSE (2004-2006 MODELS); DTC P1163: A/F SENSOR (SENSOR 1)) CIRCUIT SLOW RESPONSE (2002-2003 M/T MODELS) (2001-2003 CVT MODELS)**)
P0134 (41)	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) Signal Stuck Lean	ON	(see **DTC P0133: A/F SENSOR (SENSOR 1) CIRCUIT SLOW RESPONSE (2004-2006 MODELS); DTC P1163: A/F SENSOR (SENSOR 1)) CIRCUIT SLOW RESPONSE (2002-2003 M/T MODELS) (2001-2003 CVT MODELS)**)
P0135 (41)[2] ,[9]	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) Heater Circuit Malfunction	ON	(see **DTC P0135: A/F SENSOR (SENSOR 1) HEATER CIRCUIT MALFUNCTION (2002-2006 M/T MODELS) (CVT MODELS)**)
P0137 (63)	No	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Circuit Low Voltage	ON	(see **DTC P0137: SECONDARY HO2S (SENSOR 2) CIRCUIT LOW VOLTAGE**)
P0138 (63)[3]	No	Secondary Heated Oxygen Sensor (Secondary HO2S	ON	(see **DTC P0138: SECONDARY HO2S (SENSOR 2) CIRCUIT**

		(Sensor 2)) Circuit High Voltage		**HIGH VOLTAGE (2000-2004 MODELS)**)
P0138 (63)(7)	No	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Circuit High Voltage	ON	(see **DTC P0138: SECONDARY HO2S (SENSOR 2) CIRCUIT HIGH VOLTAGE (2005-2006 MODELS)**)
P0139 (63)	Yes	Secondary Heated Oxygen Sensor (Secondary H02S (Sensor 2)) Slow Response	ON	(see **DTC P0139: SECONDARY HO2S (SENSOR 2) SLOW RESPONSE**)

(1) The above DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.

(2) CVT model

(3) 2000-2004 models

(4) 2000-2005 models

(5) 2004-2005 models

(6) 2004-2006 models

(7) 2005-2006 models

(8) 2006 model

(9) 2002-2006 M/T models

DTC TROUBLESHOOTING INDEX (CONT.)

DTC (MIL indication (1))	Two Drive Cycle Detection	Detection Item	MIL	Note
P0141	No	Secondary Heated	ON	(see **DTC P0141:**

(65)		Oxygen Sensor (Secondary HO2S (Sensor 2)) Heater Circuit Malfunction		**SECONDARY HO2S (SENSOR 2) HEATER CIRCUIT MALFUNCTION**)
P0143 (103)[6]	Yes	Third Heated Oxygen Sensor (Third HO2S (Sensor 3)) Circuit Low Voltage	ON	(see **DTC P0143: THIRD H02S (SENSOR 3) CIRCUIT LOW VOLTAGE (2002-2006 M/T MODELS)**)
P0144 (103)[6]	Yes	Third Heated Oxygen Sensor (Third H02S (Sensor 3)) Circuit High Voltage	ON	(see **DTC P0144: THIRD H02S (SENSOR 3) CIRCUIT HIGH VOLTAGE (2002-2006 M/T MODELS)**)
P0145 (103)[6]	Yes	Third Heated Oxygen Sensor (Third H02S (Sensor 3)) Circuit Slow Response	ON	(see **DTC P0145: THIRD H02S (SENSOR 3) SLOW RESPONSE (2002-2006 M/T MODELS)**)
P0147 (104)[6]	No	Third Heated Oxygen Sensor (Third HO2S (Sensor 3)) Heater Circuit Malfunction	ON	(see **DTC P0147: THIRD H02S (SENSOR 3) HEATER CIRCUIT MALFUNCTION (2002-2006 M/T MODELS)**)
P0171 (45)	Yes	Fuel System Too Lean	ON	(see **DTC P0171: FUEL SYSTEM TOO LEAN; DTC P0172: FUEL SYSTEM TOO RICH**)
P0172 (45)	Yes	Fuel System Too Rich	ON	(see **DTC P0171: FUEL SYSTEM TOO LEAN; DTC P0172: FUEL SYSTEM TOO RICH**)
P0300 and some of	Yes Yes	Random Misfire Detected	ON	(see **DTC P0300: RANDOM MISFIRE**

P0301 (71) P0302 (72) P0303 (73)	Yes Yes			**AND ANY COMBINATION OF THE FOLLOWING:; DTC P0301: NO. 1 CYLINDER MISFIRE DETECTED; DTC P0302: NO. 2 CYLINDER MISFIRE DETECTED; DTC P0303: NO. 3 CYLINDER MISFIRE DETECTED**)
P0301 (71)	Yes	No. 1 Cylinder Misfire Detected	ON	(see **DTC P0301: NO. 1 CYLINDER MISFIRE DETECTED; DTC P0302: NO. 2 CYLINDER MISFIRE DETECTED; DTC P0303: NO. 3 CYLINDER MISFIRE DETECTED**)
P0302 (72)	Yes	No. 2 Cylinder Misfire Detected	ON	(see **DTC P0301: NO. 1 CYLINDER MISFIRE DETECTED; DTC P0302: NO. 2 CYLINDER MISFIRE DETECTED; DTC P0303: NO. 3 CYLINDER MISFIRE DETECTED**)
P0303 (73)	Yes	No. 3 Cylinder Misfire Detected	ON	(see **DTC P0301: NO. 1 CYLINDER MISFIRE DETECTED; DTC P0302: NO. 2 CYLINDER MISFIRE**

				DETECTED; DTC P0303: NO. 3 CYLINDER MISFIRE DETECTED)
P0325 (23)	No	Knock Sensor Circuit Malfunction	ON	(see **DTC P0325: KNOCK SENSOR CIRCUIT MALFUNCTION**)
P0335 (4)	No	Crankshaft Position (CKP) Sensor No Signal	ON	(see **DTC P0335: CKP SENSOR NO SIGNAL; DTC P0336: CKP SENSOR INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P0339: CKP SENSOR INTERMITTENT INTERRUPTION (2004-2006 MODELS)**)
P0336 (4) (2)	No	Crankshaft Position (CKP) Sensor Intermittent Interruption	ON	(see **DTC P0335: CKP SENSOR NO SIGNAL; DTC P0336: CKP SENSOR INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P0339: CKP SENSOR INTERMITTENT INTERRUPTION (2004-2006 MODELS)**)
P0339 (4) (4)	No	Crankshaft Position (CKP) Sensor Intermittent Interruption	ON	(see **DTC P0335: CKP SENSOR NO SIGNAL; DTC P0336: CKP SENSOR INTERMITTENT**

				INTERRUPTION (2000-2003 MODELS); DTC P0339: CKP SENSOR INTERMITTENT INTERRUPTION (2004-2006 MODELS))
P0340 (8) (4)	No	Camshaft Position (CMP) Sensor A (Top Dead Center (TDC1) Sensor 1) No Signal	ON	(see **DTC P0340: CMP SENSOR A (TDC 1) NO SIGNAL (2004-2006 MODELS); DTC P0344: CMP SENSOR A (TDC 1) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P0365: CMP SENSOR B (TDC 2) NO SIGNAL (2004-2006 MODELS); DTC P0369: CMP SENSOR B (TDC 2) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P1361: CMP SENSOR A (TDC 1) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1362: CMP SENSOR A (TDC 1) NO SIGNAL (2000-2003 MODELS); DTC P1366: CMP SENSOR B (TDC 2) CIRCUIT INTERMITTENT INTERRUPTION (2000-**

				2003 MODELS); DTC P1367: CMP SENSOR B (TDC 2) NO SIGNAL (2000-2003 MODELS))
P0344 (8) (4)	No	Camshaft Position (CMP) Sensor A (Top Dead Center (TDC1) Sensor 1) Intermittent Interruption	ON	(see **DTC P0340: CMP SENSOR A (TDC 1) NO SIGNAL (2004-2006 MODELS); DTC P0344: CMP SENSOR A (TDC 1) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P0365: CMP SENSOR B (TDC 2) NO SIGNAL (2004-2006 MODELS); DTC P0369: CMP SENSOR B (TDC 2) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P1361: CMP SENSOR A (TDC 1) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1362: CMP SENSOR A (TDC 1) NO SIGNAL (2000-2003 MODELS); DTC P1366: CMP SENSOR B (TDC 2) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1367: CMP SENSOR B**

				(TDC 2) NO SIGNAL (2000-2003 MODELS))
P0365 (58)[4]	No	Camshaft Position (CMP) Sensor B (Top Dead Center (TDC2) Sensor 2) No Signal	ON	(see **DTC P0340: CMP SENSOR A (TDC 1) NO SIGNAL (2004-2006 MODELS); DTC P0344: CMP SENSOR A (TDC 1) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P0365: CMP SENSOR B (TDC 2) NO SIGNAL (2004-2006 MODELS); DTC P0369: CMP SENSOR B (TDC 2) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P1361: CMP SENSOR A (TDC 1) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1362: CMP SENSOR A (TDC 1) NO SIGNAL (2000-2003 MODELS); DTC P1366: CMP SENSOR B (TDC 2) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1367: CMP SENSOR B (TDC 2) NO SIGNAL (2000-2003 MODELS)**)

P0369 (58)[4]	No	Camshaft Position (CMP) Sensor B (Top Dead Center (TDC2) Sensor 2) Intermittent Interruption	ON	(see **DTC P0340: CMP SENSOR A (TDC 1) NO SIGNAL (2004-2006 MODELS); DTC P0344: CMP SENSOR A (TDC 1) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P0365: CMP SENSOR B (TDC 2) NO SIGNAL (2004-2006 MODELS); DTC P0369: CMP SENSOR B (TDC 2) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P1361: CMP SENSOR A (TDC 1) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1362: CMP SENSOR A (TDC 1) NO SIGNAL (2000-2003 MODELS); DTC P1366: CMP SENSOR B (TDC 2) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1367: CMP SENSOR B (TDC 2) NO SIGNAL (2000-2003 MODELS)**)
P0401 (80)	Yes	Exhaust Gas Recirculation	ON	(see **DTC TROUBLESHOOTING**)

		Insufficient Flow		
P0404 (12)[2]	No	Exhaust Gas Recirculation (EGR) Control Circuit Range/Performance Problem	ON	(see **DTC P0404: EGR CONTROL CIRCUIT RANGE PERFORMANCE PROBLEM (2004-2006 MODELS); DTC P1491: EGR VALVE INSUFFICIENT LIFT DETECTED (2000-2003 MODELS)**)
P0406 (12)[4]	No	Exhaust Gas Recirculation (EGR) Valve Position Sensor Circuit High Voltage	ON	(see **DTC P0406: EGR VALVE POSITION SENSOR CIRCUIT HIGH VOLTAGE (2004-2006 MODELS); DTC P1498: EGR VALVE POSITION SENSOR CIRCUIT HIGH VOLTAGE (2000-2003 MODELS)**)
P0420 (67)	No [3] Yes [5]	Catalyst System Efficiency Below Threshold	ON	(see **DTC TROUBLESHOOTING**)

(1) The above DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.

(2) 2000-2003 models

(3) 2000-2005 models

(4) 2004-2006 models

(5) 2006 model

(6) 2002-2006 M/T models

DTC TROUBLESHOOTING INDEX (CONT.)

DTC (MIL indication (1))	Two Drive Cycle Detection	Detection Item	MIL	Note
P0442 (90) (6)	Yes	Evaporative Emission (.EVAP) System Small Leak Detected	ON	(see **DTC TROUBLESHOOTING**)
P0443 (92) (6)	No	Evaporative Emission (EVAP) Canister Purge Valve Circuit Malfunction	ON	(see **DTC P0443: EVAP CANISTER PURGE VALVE CIRCUIT MALFUNCTION (2006 MODEL)**)
P0451 (91) (3)	Yes	Fuel Tank Pressure (FTP) Sensor Circuit Range/ Performance Problem	ON	(see **DTC P0451: FTP SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (2000-2005 MODELS)**)
P0451 (91) (6)	Yes	Fuel Tank Pressure (FTP) Sensor Circuit Range/ Performance Problem	ON	(see **DTC P0451: FTP SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (2006 MODEL)**)
P0452 (91) (3)	Yes	Fuel Tank Pressure (FTP) Sensor Circuit Low Voltage	ON	(see **DTC P0452: FTP SENSOR CIRCUIT LOW VOLTAGE (2000-2005 MODELS)**)
P0452 (91)	No	Fuel Tank	ON	(see **DTC P0452: FTP**

(6)		Pressure (FTP) Sensor Circuit Low Voltage		**SENSOR CIRCUIT LOW VOLTAGE (2006 MODEL)**)
P0453 (91) (3)	Yes	Fuel Tank Pressure (FTP) Sensor Circuit High Voltage	ON	(see **DTC P0453: FTP SENSOR CIRCUIT HIGH VOLTAGE (2000-2005 MODELS)**)
P0453 (91) (6)	No	Fuel Tank Pressure (FTP) Sensor Circuit High Voltage	ON	(see **DTC P0453: FTP SENSOR CIRCUIT HIGH VOLTAGE (2006 MODEL)**)
P0456 (90) (6)	Yes	Evaporative Emission (EVAP) System Very Small Leak Detected	ON	(see **DTC TROUBLESHOOTING**)
P0457 (90) (6)	Yes	Evaporative Emission (EVAP) System Leak Detected/Fuel Fill Cap Loose or Missing	ON	(see **DTC P0457: EVAP SYSTEM LEAK DETECTED/FUEL FILL CAP LOOSE OR MISSING (2006 MODEL)**)
P0496 (92) (6)	Yes	Evaporative Emission (EVAP) System High Purge Flow	ON	(see **DTC P0496: EVAP SYSTEM HIGH PURGE FLOW (2006 MODEL)**)
P0497 (90) (4)	Yes	Evaporative Emission (EVAP)	ON	(see **DTC P0497: EVAP SYSTEM LOW PURGE FLOW (2004-2005**

		System Low Purge Flow		**MODELS)**)
P0497 (90) (6)	Yes	Evaporative Emission (EVAP) System Low Purge Flow	ON	(see **DTC P0497: EVAP SYSTEM LOW PURGE FLOW (2006 MODEL)**)
P0498 (117)(6)	No	Evaporative Emission (EVAP) Canister Vent Shut Valve Circuit Low Voltage	ON	(see **DTC P0498: EVAP CANISTER VENT SHUT VALVE CIRCUIT LOW VOLTAGE (2006 MODEL)**)
P0499 (117)(6)	No	Evaporative Emission (EVAP) Canister Vent Shut Valve Circuit High Voltage	ON	(see **DTC P0499: EVAP CANISTER VENT SHUT VALVE CIRCUIT HIGH VOLTAGE (2006 MODEL)**)
P0500 (17)	No	Vehicle Speed Sensor (VSS) Circuit Malfunction	ON	(see **DTC P0500: VSS CIRCUIT MALFUNCTION**)
P0505 (14) (2)	Yes	Idle Control System Malfunction	ON	(see **DTC TROUBLESHOOTING**)
P0506 (14) (5)	Yes	Idle Control System RPM Lower Than Expected	ON	(see **DTC P0506: IDLE CONTROL SYSTEM RPM LOWER THAN EXPECTED (2004-2006 MODELS)**)
P0507 (14)	Yes	Idle Control	ON	(see **DTC P0507: IDLE**

(5)		System RPM Higher Than Expected		**CONTROL SYSTEM RPM HIGHER THAN EXPECTED (2004-2006 MODELS)**)
P0511 (14) (5)	No	Idle Air Control (IAC) Valve Circuit Malfunction	ON	(see **DTC P0511: IAC VALVE CIRCUIT MALFUNCTION (2004-2006 MODELS); DTC P1519: IAC VALVE CIRCUIT MALFUNCTION (2000-2003 MODELS)**)

(1) The above DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.

(2) 2000-2003 models

(3) 2000-2005 models

(4) 2004-2005 models

(5) 2004-2006 models

(6) 2006 model

DTC TROUBLESHOOTING INDEX (CONT.)

DTC (MIL indication (1))	Two Drive Cycle Detection	Detection Item	MIL	Note
P0560 (34)(6)	No	Engine Control Module (ECM) Power Source Circuit Unexpected Voltage	ON	(see **DTC P0560: ECM POWER SOURCE CIRCUIT UNEXPECTED VOLTAGE (2001-2004 MODELS)**)
P0563	No	Engine Control Module (ECM)	OFF	(see **DTC P0563: ECM POWER SOURCE**

(34)[9]		Power Source Circuit Unexpected Voltage		**CIRCUIT UNEXPECTED VOLTAGE (2005-2006 MODELS)**)
P0607 (-) (8)	No	Engine Control Module (ECM) Internal Circuit Malfunction	ON	(see **DTC P0607: ECM INTERNAL CIRCUIT MALFUNCTION (2004-2006 MODELS); DTC P1607: ECM INTERNAL CIRCUIT MALFUNCTION (2000-2003 MODELS)**)
P0630 (139)[9]	No	VIN Not Programmed or Mismatch	ON	(see **DTC P0630: VIN NOT PROGRAMMED OR MISMATCH (2005-2006 MODELS)**)
P0685 (135)[10]	Yes	Engine Control Module (ECM) Power Control Circuit/Internal Circuit Malfunction	ON	(see **DTC P0685: ECM POWER CONTROL CIRCUIT/INTERNAL CIRCUIT MALFUNCTION (2006 MODEL)**)
P07xx (70)[3] , (2)	No	Automatic Transaxle System Malfunction	ON/ OFF	(see **DTC P0685: ECM POWER CONTROL CIRCUIT/INTERNAL CIRCUIT MALFUNCTION (2006 MODEL)**)
P1106 (13)[4]	Yes	Barometric Pressure (BARO) Sensor Range/ Performance Problem	ON	(see **DTC P1106: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2000-2003 MODELS); DTC P2227: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2004-2006**

				MODELS))
P1107 (13)[4]	No	Barometric Pressure (BARO) Sensor Circuit Low Voltage	ON	(see **DTC P1106: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2000-2003 MODELS); DTC P2227: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2004-2006 MODELS)**)
P1108 (13)[4]	No	Barometric Pressure (BARO) Sensor Circuit High Voltage	ON	(see **DTC P1106: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2000-2003 MODELS); DTC P2227: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2004-2006 MODELS)**)
P1109 (13)[10]	No	Barometric Pressure (BARO) Sensor Circuit Out of Range High	ON	(see **DTC P1109: BARO SENSOR CIRCUIT OUT OF RANGE HIGH**)
P1116 (86)[10]	Yes	Engine Coolant Temperature (ECT) Sensor Circuit Range/Performance Problem	ON	(see **DTC P0111: IAT SENSOR CIRCUIT RANGE/ PERFORMANCE PROBLEM (2006 MODEL); DTC P1116: ECT SENSOR CIRCUIT RANGE/ PERFORMANCE PROBLEM (2006 MODEL)**)
P1121 (7)	Yes	Throttle Position	ON	(see **DTC P1121:TP**

		(TP) Sensor Signal Lower Than Expected		**SENSOR SIGNAL LOWER THAN EXPECTED**)
P1122 (7)	Yes	Throttle Position (TP) Sensor Signal Higher Than Expected	ON	(see **DTC P1121:TP SENSOR SIGNAL LOWER THAN EXPECTED**)
P1128 (5)	Yes	Manifold Absolute Pressure (MAP) Sensor Signal Lower Than Expected	ON	(see **DTC P1128: MAP SENSOR SIGNAL LOWER THAN EXPECTED**)
P1129 (5)	Yes	Manifold Absolute Pressure (MAP) Sensor Signal Higher Than Expected	ON	(see **DTC P1128: MAP SENSOR SIGNAL LOWER THAN EXPECTED**)
P1130 (111)[11]	No	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) and Third Heated Oxygen Sensor (Third H02S (Sensor 3)) Malfunction	ON	(see **DTC P1130: SECONDARY HO2S (SENSOR 2) AND THIRD HO2S (SENSOR 3) MALFUNCTION (2002-2006 M/T MODELS)**)

(1) The above DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.

(2) The D indicator and the MIL may come on at the same time. If using the HDS, you must select the A/T mode to read these DTCs.

(3) CVT model

(4) 2000-2003 models

2000-2004 models

(5)

(6) 2001-2004 models

(7) 2004-2005 models

(8) 2004-2006 models

(9) 2005-2006 models

(10) 2006 model

(11) 2002-2006 M/T models

DTC TROUBLESHOOTING INDEX (CONT.)

DTC (MIL indication (1))	Two Drive Cycle Detection	Detection Item	MIL	Note
P1157 (48)(2) , (10)	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) AFS Circuit High Voltage	ON	(see **DTC P1157: A/F SENSOR (SENSOR 1) AFS CIRCUIT HIGH VOLTAGE (2002-2006 M/T MODELS) (CVT MODEL)**)
P1158 (48)(8) , (9)	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) AFS-Circuit Low Voltage	ON	(see **DTC P1158: A/F SENSOR (SENSOR 1) AFS--CIRCUIT LOW VOLTAGE (2002-2003 M/T MODELS) (2001-2003 CVT MODELS); DTC P2252: A/F SENSOR (SENSOR 1) AFS-CIRCUIT LOW VOLTAGE (2004-2006 MODELS)**)

P1159 (48)[8] , [9]	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) AFS+ Circuit Low Voltage	ON	(see **DTC P1159: A/F SENSOR (SENSOR 1) AFS+ CIRCUIT LOW VOLTAGE (2002-2003 M/T MODELS) (2001-2003 CVT MODELS); DTC P2238: A/F SENSOR (SENSOR 1) AFS+ CIRCUIT LOW VOLTAGE (2004-2006 MODELS)**)
P1162 (48)[5]	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) Circuit Malfunction	ON	(see **DTC P1162: A/F SENSOR (SENSOR 1) CIRCUIT MALFUNCTION (2000-2001 M/T MODELS)**)
P1163 (61)[5]	Yes	Air Fuel Ratio (A/F) Sensor (Sensor 1) Slow Response	ON	(see **DTC P1163: A/F SENSOR (SENSOR 1) SLOW RESPONSE (2000-2001 M/T MODELS)**)
P1163 (61)[8] , [9]	Yes	Air Fuel Ratio (A/F) Sensor (Sensor 1) Slow Response	ON	(see **DTC P0133: A/F SENSOR (SENSOR 1) CIRCUIT SLOW RESPONSE (2004-2006 MODELS); DTC P1163: A/F SENSOR (SENSOR 1)) CIRCUIT SLOW RESPONSE (2002-2003 M/T MODELS) (2001-2003 CVT MODELS)**)
P1164 (61)[7] , [8]	Yes	Air Fuel Ratio (A/F) Sensor (Sensor 1) Range/ Performance Problem	ON	(see **DTC P1164: A/F SENSOR (SENSOR 1) RANGE/PERFORMANCE PROBLEM (2000-2003 M/T MODELS) (2001-2003**

				CVT MODELS); DTC P2A00: A/F SENSOR (SENSOR 1) RANGE/PERFORMANCE PROBLEM (2004-2006 MODELS))
P1165 (61)[5]	Yes	Air Fuel Ratio (A/F) Sensor (Sensor 1) Circuit Range/Performance Problem	ON	(see **DTC P1164: A/F SENSOR (SENSOR 1) RANGE/PERFORMANCE PROBLEM (2000-2003 M/T MODELS) (2001-2003 CVT MODELS); DTC P2A00: A/F SENSOR (SENSOR 1) RANGE/PERFORMANCE PROBLEM (2004-2006 MODELS)**)
P1166 (41)[5]	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) Heater Circuit Malfunction	ON	(see **DTC P1166:A/F SENSOR (SENSOR 1) HEATER CIRCUIT MALFUNCTION (2000-2001 M/T MODELS)**)
P1167 (41)[6]	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) Heater System Malfunction	ON	(see **DTC P1167: A/F SENSOR (SENSOR 1) HEATER SYSTEM MALFUNCTION (2000-2002 M/T MODELS)**)
P1168 (48)[5]	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) LABEL Circuit Low Input	ON	(see **DTC P1168: A/F SENSOR (SENSOR 1) LABEL CIRCUIT LOW INPUT (2000-2001 M/T MODELS)**)
P1169 (48)[5]	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) LABEL	ON	(see **DTC P1169: A/F SENSOR (SENSOR 1) LABEL CIRCUIT HIGH**

		Circuit High Input		**INPUT (2000-2001 M/T MODELS)**)
P1172 (61)(4)	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) Circuit Out of Range High	ON	(see **DTC P1172: A/F SENSOR (SENSOR 1) CIRCUIT OUT OF RANGE HIGH (2005-2006 MODELS)**)
P1259 (22)(3)	No	VTEC System Malfunction	ON	(see **DTC TROUBLESHOOTING**)
P1297 (20)	No	Electrical Load Detector (ELD) Circuit Low Voltage	OFF	(see **DTC P1297: ELD CIRCUIT LOW VOLTAGE**)
P1298 (20)	No	Electrical Load Detector (ELD) Circuit High Voltage	OFF	(see **DTC P1298: ELD CIRCUIT HIGH VOLTAGE**)
P1361 (8) (3)	No	Camshaft Position (CMP) Sensor A (Top Dead Center (TDC1) Sensor 1) Intermittent Interruption	ON	(see **DTC P0340: CMP SENSOR A (TDC 1) NO SIGNAL (2004-2006 MODELS); DTC P0344: CMP SENSOR A (TDC 1) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P0365: CMP SENSOR B (TDC 2) NO SIGNAL (2004-2006 MODELS); DTC P0369: CMP SENSOR B (TDC 2) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P1361: CMP SENSOR A**

				(TDC 1) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1362: CMP SENSOR A (TDC 1) NO SIGNAL (2000-2003 MODELS); DTC P1366: CMP SENSOR B (TDC 2) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1367: CMP SENSOR B (TDC 2) NO SIGNAL (2000-2003 MODELS))
P1362 (8) (3)	No	Camshaft Position (CMP) Sensor A (Top Dead Center (TDC1) Sensor 1) No Signal	ON	(see **DTC P0340: CMP SENSOR A (TDC 1) NO SIGNAL (2004-2006 MODELS); DTC P0344: CMP SENSOR A (TDC 1) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P0365: CMP SENSOR B (TDC 2) NO SIGNAL (2004-2006 MODELS); DTC P0369: CMP SENSOR B (TDC 2) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P1361: CMP SENSOR A (TDC 1) CIRCUIT INTERMITTENT**

				INTERRUPTION (2000-2003 MODELS); DTC P1362: CMP SENSOR A (TDC 1) NO SIGNAL (2000-2003 MODELS); DTC P1366: CMP SENSOR B (TDC 2) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1367: CMP SENSOR B (TDC 2) NO SIGNAL (2000-2003 MODELS))
P1366 (58)[3]	No	Camshaft Position (CMP) Sensor B (Top Dead Center (TDC2) Sensor 2) Intermittent Interruption	ON	(see **DTC P0340: CMP SENSOR A (TDC 1) NO SIGNAL (2004-2006 MODELS); DTC P0344: CMP SENSOR A (TDC 1) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P0365: CMP SENSOR B (TDC 2) NO SIGNAL (2004-2006 MODELS); DTC P0369: CMP SENSOR B (TDC 2) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P1361: CMP SENSOR A (TDC 1) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC**

				P1362: CMP SENSOR A (TDC 1) NO SIGNAL (2000-2003 MODELS); DTC P1366: CMP SENSOR B (TDC 2) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1367: CMP SENSOR B (TDC 2) NO SIGNAL (2000-2003 MODELS))
P1367 (58)[3]	No	Camshaft Position (CMP) Sensor B (Top Dead Center (TDC2) Sensor 2) No Signal	ON	(see **DTC P0340: CMP SENSOR A (TDC 1) NO SIGNAL (2004-2006 MODELS); DTC P0344: CMP SENSOR A (TDC 1) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P0365: CMP SENSOR B (TDC 2) NO SIGNAL (2004-2006 MODELS); DTC P0369: CMP SENSOR B (TDC 2) INTERMITTENT INTERRUPTION (2004-2006 MODELS); DTC P1361: CMP SENSOR A (TDC 1) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1362: CMP SENSOR A (TDC 1) NO SIGNAL**

				(2000-2003 MODELS); DTC P1366: CMP SENSOR B (TDC 2) CIRCUIT INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P1367: CMP SENSOR B (TDC 2) NO SIGNAL (2000-2003 MODELS))

(1) The above DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.

(2) CVT model

(3) 2000-2003 models

(4) 2005-2006 models

(5) 2000-2001 M/T models

(6) 2000-2002 M/T models

(7) 2000-2003 M/T models

(8) 2001-2003 CVT models

(9) 2002-2003 M/T models

(10) 2002-2006 M/T models

DTC TROUBLESHOOTING INDEX (CONT.)

DTC (MIL indication (1))	Two Drive Cycle Detection	Detection Item	MIL	Note
P1420	Yes	NOx Adsorptive	ON	(see **DTC**

(105)[6]		Catalyst System Efficiency Below Threshold		**TROUBLESHOOTING**)
P1454 (91)[4]	Yes	Fuel Tank Pressure (FTP) Sensor Circuit Range/ Performance Problem	ON	(see **DTC P1454: FTP SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (2006 MODEL); DTC P2422: EVAP CANISTER VENT SHUT VALVE CLOSE MALFUNCTION (2006 MODEL)**)
P1456 (90)[3]	Yes	Evaporative Emission Control System Leakage (Fuel Tank System)	ON	(see **DTC P1456: EVAP CONTROL SYSTEM LEAKAGE (FUEL TANK SYSTEM) (2000-2005 MODELS)**)
P1457 (90)[3]	Yes	Evaporative Emission Control System Leakage (EVAP Canister System)	ON	(see **DTC P1457: EVAP CONTROL SYSTEM LEAKAGE (EVAP CANISTER SYSTEM) (2000-2005 MODELS)**)
P1491 (12)[2]	No	Exhaust Gas Recirculation (EGR) Valve Insufficient Lift Detected	ON	(see **DTC P0404: EGR CONTROL CIRCUIT RANGE PERFORMANCE PROBLEM (2004-2006 MODELS); DTC P1491: EGR VALVE INSUFFICIENT LIFT DETECTED (2000-2003 MODELS)**)
P1498 (12)[2]	No	Exhaust Gas Recirculation (EGR) Valve Position Sensor	ON	(see **DTC P0406: EGR VALVE POSITION SENSOR CIRCUIT HIGH VOLTAGE (2004-2006**

		Circuit High Voltage		**MODELS); DTC P1498: EGR VALVE POSITION SENSOR CIRCUIT HIGH VOLTAGE (2000-2003 MODELS)**)
P1519 (14)[2]	No	Idle Air Control (IAC) Valve Circuit Malfunction	ON	(see **DTC P0511: IAC VALVE CIRCUIT MALFUNCTION (2004-2006 MODELS); DTC P1519: IAC VALVE CIRCUIT MALFUNCTION (2000-2003 MODELS)**)
P1522 (49)	No	Brake Booster Pressure Sensor Circuit Low Voltage	ON	(see **DTC P1522: BRAKE BOOSTER PRESSURE SENSOR CIRCUIT LOW VOLTAGE**)
P1523 (49)	No	Brake Booster Pressure Sensor Circuit High Voltage	ON	(see **DTC P1523: BRAKE BOOSTER PRESSURE SENSOR CIRCUIT HIGH VOLTAGE**)
P1541 (94)	No	HTRS Passenger Compartment Heater Standby Signal Circuit Low Input	OFF	(see **DTC P1541: HTRS PASSENGER COMPARTMENT HEATER STANDBY SIGNAL CIRCUIT LOW INPUT; DTC P1542: HTRS PASSENGER COMPARTMENT HEATER STANDBY SIGNAL CIRCUIT HIGH INPUT**)
P1542 (94)	No	HTRS Passenger Compartment Heater Standby	OFF	(see **DTC P1541: HTRS PASSENGER COMPARTMENT**

		Signal Circuit High Input		**HEATER STANDBY SIGNAL CIRCUIT LOW INPUT; DTC P1542: HTRS PASSENGER COMPARTMENT HEATER STANDBY SIGNAL CIRCUIT HIGH INPUT**)
P15B2 (110)[7]	No	Brake Fluid Pressure Sensor A Circuit Low Voltage	OFF	(see **DTC P15B2: BRAKE FLUID PRESSURE SENSOR A CIRCUIT LOW VOLTAGE (2005-2006 M/T MODELS);**)
P15B3 (110)[7]	No	Brake Fluid Pressure Sensor A Range/Performance Problem	OFF	(see **DTC P15B3: BRAKE FLUID PRESSURE SENSOR A RANGE/PERFORMANCE PROBLEM (2005-2006 M/T MODELS)**)
P15B4 (110)[7]	No	Brake Fluid Pressure Sensor B Circuit Low Voltage	OFF	(see **DTC P15B4: BRAKE FLUID PRESSURE SENSOR B CIRCUIT LOW VOLTAGE (2005-2006 M/T MODELS)**)
P15B5 (110)[7]	No	Brake Fluid Pressure Sensor B Range/Performance Problem	OFF	(see **DTC P15B5: BRAKE FLUID PRESSURE SENSOR B RANGE PERFORMANCE PROBLEM (2005-2006 M/T MODELS)**)
P15B6 (110)[7]	No	Brake Fluid Pressure Sensor A/B Circuit Malfunction	OFF	(see **DTC P15B6: BRAKE FLUID PRESSURE SENSOR A/B CIRCUIT MALFUNCTION (2005-2006 M/T MODELS)**)

P1600 (69)	No	IMA System Malfunction	ON	(see **DTC P1600: IMA SYSTEM MALFUNCTION; DTC P1601: IMA SYSTEM MALFUNCTION**)
P1601 (69)	No	IMA System Malfunction	OFF	(see **DTC P1600: IMA SYSTEM MALFUNCTION; DTC P1601: IMA SYSTEM MALFUNCTION**)
P1607(-) (2)	No	Engine Control Module (ECM) Internal Circuit Malfunction	ON	(see **DTC P0607: ECM INTERNAL CIRCUIT MALFUNCTION (2004-2006 MODELS); DTC P1607: ECM INTERNAL CIRCUIT MALFUNCTION (2000-2003 MODELS)**)
P1640 (88)	No	ACTTRQ Motor Torque Signal Circuit Low Input	ON	(see **DTC P1640: ACTTRQ MOTOR TORQUE SIGNAL CIRCUIT LOW INPUT; DTC P1641: ACTTRQ MOTOR TORQUE SIGNAL CIRCUIT HIGH INPUT**)
P1641 (88)	No	ACTTRQ Motor Torque Signal Circuit High Input	ON	(see **DTC P1640: ACTTRQ MOTOR TORQUE SIGNAL CIRCUIT LOW INPUT; DTC P1641: ACTTRQ MOTOR TORQUE SIGNAL CIRCUIT HIGH INPUT**)
P1642 (88)	No	QBATT Battery Signal Circuit Low Input	ON	(see **DTC P1642: QBATT BATTERY SIGNAL CIRCUIT LOW INPUT;**

				DTC P1643: QBATT BATTERY SIGNAL CIRCUIT HIGH INPUT)
P1643 (88)	No	QBATT Battery Signal Circuit High Input	ON	(see **DTC P1642: QBATT BATTERY SIGNAL CIRCUIT LOW INPUT; DTC P1643: QBATT BATTERY SIGNAL CIRCUIT HIGH INPUT**)
P1644 (69)	No	MOTFSA Signal Malfunction	ON	(see **DTC P1644: MOTFSA MOTOR CONTROL MODULE SIGNAL MALFUNCTION; DTC P1645: MOTFSB MOTOR CONTROL MODULE SIGNAL MALFUNCTION; DTC P1646: MOTSTB MOTOR CONTROL MODULE SIGNAL MALFUNCTION**)
P1645 (69)	No	MOTFSB Signal Malfunction	ON	(see **DTC P1644: MOTFSA MOTOR CONTROL MODULE SIGNAL MALFUNCTION; DTC P1645: MOTFSB MOTOR CONTROL MODULE SIGNAL MALFUNCTION; DTC P1646: MOTSTB MOTOR CONTROL MODULE SIGNAL MALFUNCTION**)
P1646 (36)	No	MOTSTB Signal Malfunction	ON	(see **DTC P1644: MOTFSA MOTOR CONTROL**

				MODULE SIGNAL MALFUNCTION; DTC P1645: MOTFSB MOTOR CONTROL MODULE SIGNAL MALFUNCTION; DTC P1646: MOTSTB MOTOR CONTROL MODULE SIGNAL MALFUNCTION)
P1655 (30)[5]	No	A/T Fl Signal A/B Circuit Malfunction	ON	(see **DTC P1655: A/T FL SIGNAL A/B CIRCUIT MALFUNCTION (2001-2003 CVT MODELS); DTC U0101: A/T FL SIGNAL A/B CIRCUIT MALFUNCTION (2004-2006 CVT MODELS)**)

(1) The above DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.

(2) 2000-2003 models

(3) 2000-2005 models

(4) 2006 model

(5) 2001-2003 CVT models

(6) 2002-2003 M/T models

(7) 2005-2006 M/T models

DTC TROUBLESHOOTING INDEX (CONT.)

DTC (MIL indication	Two Drive			

(1))	Cycle Detection	Detection Item	MIL	Note
P16xx (70) (3), (2)	No	Automatic Transaxle System Malfunction	ON/ OFF	(see **DTC P0685: ECM POWER CONTROL CIRCUIT/INTERNAL CIRCUIT MALFUNCTION (2006 MODEL)**)
P17xx (70) (3), (2)	No	Automatic Transaxle System Malfunction	ON/ OFF	(see **DTC P0685: ECM POWER CONTROL CIRCUIT/INTERNAL CIRCUIT MALFUNCTION (2006 MODEL)**)
P18xx (70) (3), (2)	No	Automatic Transaxle System Malfunction	ON/ OFF	(see **DTC P0685: ECM POWER CONTROL CIRCUIT/INTERNAL CIRCUIT MALFUNCTION (2006 MODEL)**)
P2000 (105)(9)	Yes	NOx Adsorptive Catalyst System Efficiency Below Threshold	ON	(see **DTC TROUBLESHOOTING**)
P21xx (70) (3), (2)	No	Automatic Transaxle System Malfunction	ON/ OFF	(see **DTC P0685: ECM POWER CONTROL CIRCUIT/INTERNAL CIRCUIT MALFUNCTION (2006 MODEL)**)
P2227 (13) (6)	Yes	Barometric Pressure (BARO) Sensor Range/ Performance	ON	(see **DTC P1106: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2000-2003 MODELS); DTC P2227: BARO SENSOR**

		Problem		**RANGE/PERFORMANCE PROBLEM (2004-2006 MODELS)**)
P2228 (13) (6)	No	Barometric Pressure (BARO) Sensor Circuit Low Voltage	ON	(see **DTC P1106: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2000-2003 MODELS); DTC P2227: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2004-2006 MODELS)**)
P2229 (13) (6)	No	Barometric Pressure (BARO) Sensor Circuit High Voltage	ON	(see **DTC P1106: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2000-2003 MODELS); DTC P2227: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2004-2006 MODELS)**)
P2238 (48) (6)	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) AFS+ Circuit Low Voltage	ON	(see **DTC P1159: A/F SENSOR (SENSOR 1) AFS+ CIRCUIT LOW VOLTAGE (2002-2003 M/T MODELS) (2001-2003 CVT MODELS); DTC P2238: A/F SENSOR (SENSOR 1) AFS+ CIRCUIT LOW VOLTAGE (2004-2006 MODELS)**)
P2252 (48) (6)	No	Air Fuel Ratio (A/F) Sensor (Sensor 1) AFS- Circuit	ON	(see **DTC P1158: A/F SENSOR (SENSOR 1) AFS-- CIRCUIT LOW VOLTAGE (2002-2003 M/T MODELS) (2001-2003 CVT MODELS);**

		Low Voltage		**DTC P2252: A/F SENSOR (SENSOR 1) AFS-CIRCUIT LOW VOLTAGE (2004-2006 MODELS)**)
P2270 (63) (7)	Yes	Secondary Heated Oxygen Sensor (Secondary H02S (Sensor 2)) Circuit Signal Stuck Lean	ON	(see **DTC P2270: SECONDARY HO2S (SENSOR 2) CIRCUIT SIGNAL STUCK LEAN (2005-2006 MODELS); DTC P2271: SECONDARY HO2S (SENSOR 2) CIRCUIT SIGNAL STUCK RICH (2005-2006 MODELS)**)
P2271 (63) (7)	Yes	Secondary Heated Oxygen Sensor (Secondary H02S (Sensor 2)) Circuit Signal Stuck Rich	ON	(see **DTC P2270: SECONDARY HO2S (SENSOR 2) CIRCUIT SIGNAL STUCK LEAN (2005-2006 MODELS); DTC P2271: SECONDARY HO2S (SENSOR 2) CIRCUIT SIGNAL STUCK RICH (2005-2006 MODELS)**)
P2279 (109)(7)	Yes	Intake Air System Leak	ON	(see **DTC TROUBLESHOOTING**)
P2422 (117)(8)	Yes	Evaporative Emission (EVAP) Canister Vent Shut Valve Stuck Closed Malfunction	ON	(see **DTC P1454: FTP SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (2006 MODEL); DTC P2422: EVAP CANISTER VENT SHUT VALVE CLOSE MALFUNCTION (2006**

				MODEL))
P2610 (132)[8]	No	Engine Control Module (ECM) Ignition Off Internal Timer Malfunction	ON	(see **DTC P2610: ECM IGNITION OFF INTERNAL TIMER MALFUNCTION (2006 MODEL)**)
P2646 (22) (4)	No	VTEC System Malfunction	ON	(see **DTC TROUBLESHOOTING**)
P2646 (22) (7)	No	Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) Circuit Low Voltage	ON	(see **DTC P2646: ROCKER ARM OIL PRESSURE SWITCH (VTEC OIL PRESSURE SWITCH) CIRCUIT LOW VOLTAGE; - 2005-2006 MODELS**)
P2647 (22) (5)	No	Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) Circuit High Voltage	ON	(see **DTC P2647: ROCKER ARM OIL PRESSURE SWITCH (VTEC OIL PRESSURE SWITCH) CIRCUIT HIGH VOLTAGE; - 2005-2006 MODELS**)
P2A00 (61)[6]	Yes	Air Fuel Ratio (A/F) Sensor (Sensor 1) Range/ Performance Problem	ON	(see **DTC P1164: A/F SENSOR (SENSOR 1) RANGE/PERFORMANCE PROBLEM (2000-2003 M/T MODELS) (2001-2003 CVT MODELS); DTC P2A00: A/F SENSOR (SENSOR 1)**

				RANGE/PERFORMANCE PROBLEM (2004-2006 MODELS))
U0101 (30)(10)	No	A/T Fl Signal A/B Circuit Malfunction	ON	(see **DTC P1655: A/T FL SIGNAL A/B CIRCUIT MALFUNCTION (2001-2003 CVT MODELS); DTC U0101: A/T FL SIGNAL A/B CIRCUIT MALFUNCTION (2004-2006 CVT MODELS)**)

(1) The above DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.

(2) The D indicator and the MIL may come on at the same time. If using the HDS, you must select the A/T mode to read these DTCs.

(3) CVT model

(4) 2004 model

(5) 2004-2005 models

(6) 2004-2006 models

(7) 2005-2006 models

(8) 2006 model

(9) 2004-2006 M/T models

(10) 2004-2006 CVT models

SYMPTOM TROUBLESHOOTING INDEX

When the vehicle has one of these symptoms, check the diagnostic trouble code (DTC) with a scan tool or the HDS. If there is no DTC, do the diagnostic procedure for the symptom, in the sequence listed, until you find the cause.

Symptom Troubleshooting Index

Symptom	Diagnostic procedure	Also check for
Engine will not start (MIL works OK, no DTCs set, IMA motor works OK)	1. Test the battery (see **12 VOLT BATTERY TEST**). 2. Test the starter (see **STARTER PERFORMANCE TEST**). 3. Check the fuel pressure; 2000-2003 M/T models (see **2000-2003 M/T MODELS**), 2001-2003 CVT models (see **2001-2003 CVT MODELS**), 2004-2005 M/T models (see **2004-2005 M/T MODELS**), 2004-2005 CVT models (see **2004-2005 CVT MODELS**), 2006 model (see **2006 MODEL**). 4. Troubleshoot the fuel pump circuit; 2000-2004 models (see **PGM-FI MAIN RELAY CIRCUIT TROUBLESHOOTING**), 2005-2006 models (see **2005-2006 MODELS**).	• Low compression • No ignition spark • Intake air leaks • Locked up engine • Broken cam chain • Contaminated fuel
Engine will not start (MIL comes on and stays on, or never comes on at all, no DTCs set, starter or IMA motor works OK)	Troubleshoot the MIL circuit; 2000-2004 models (see **MIL CIRCUIT TROUBLESHOOTING**), 2005-2006 models (see **2005-2006 MODELS**).	
Engine will not start (immobilizer indicator stays	Troubleshoot the immobilizer system (see **TROUBLESHOOTING**).	

on or flashes)		
Engine is hard to start (MIL works OK, no DTCs set)	• Test the battery (see **12 VOLT BATTERY TEST**). • Check the fuel pressure; 2000-2003 M/T models (see **2000-2003 M/T MODELS**), 2001-2003 CVT models (see **2001-2003 CVT MODELS**), 2004-2005 M/T models (see **2004-2005 M/T MODELS**), 2004-2005 CVT models (see **2004-2005 CVT MODELS**), 2006 model (see **2006 MODEL**).	• Low compression • Intake air leaks • Contaminated fuel Weak spark
Cold fast idle too low (MIL works OK, no DTCs set)	1. Do the ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**). 2. Check the idle speed (see **IDLE SPEED ADJUSTMENT**).	
Cold fast idle too high (MIL works OK, no DTCs set)	1. Do the ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**). 2. Check the idle speed (see **IDLE SPEED ADJUSTMENT**). 3. Inspect/adjust the throttle cable (see **THROTTLE CABLE ADJUSTMENT**). 4. Inspect and test the throttle body (see **THROTTLE BODY TEST**).	
Idle speed fluctuates (MIL	1. Do the ECM idle learn procedure (see **ECM IDLE**	Intake vacuum leaks

works OK, no DTCs set)	**LEARN PROCEDURE**). 2. Check the idle speed (see **IDLE SPEED ADJUSTMENT**). 3. Inspect/adjust the throttle cable (see **THROTTLE CABLE ADJUSTMENT**). 4. Inspect and test the throttle body (see **THROTTLE BODY TEST**).	
After warming up, idle speed is below specification without load (MIL works OK, no DTCs set)	1. Do the ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**). 2. Inspect and test the throttle body (see **THROTTLE BODY TEST**). 3. Troubleshoot the A/C signal circuit (see **A/C SIGNAL CIRCUIT TROUBLESHOOTING**).	Vacuum hose clogged/cracked/ poor connection
After warming up, idle speed is above specification without load (MIL works OK, no DTCs set)	1. Do the ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**). 2. Inspect/adjust the throttle cable (see **THROTTLE CABLE ADJUSTMENT**). 3. Inspect and test the throttle body (see **THROTTLE BODY TEST**). 4. Inspect the TP sensor (see **THROTTLE POSITION SENSOR SIGNAL INSPECTION**).	

	5. Troubleshoot the A/C signal circuit (see **A/C SIGNAL CIRCUIT TROUBLESHOOTING**).	
Low power (MIL works OK, no DTCs set)	1. Check the fuel pressure; 2000-2003 M/T models (see **2000-2003 M/T MODELS**), 2001-2003 CVT models (see **2001-2003 CVT MODELS**), 2004-2005 M/T models (see **2004-2005 M/T MODELS**), 2004-2005 CVT models (see **2004-2005 CVT MODELS**), 2006 model (see **2006 MODEL**). 2. Inspect and test the throttle body (see **THROTTLE BODY TEST**). 3. Inspect/adjust the throttle cable (see **THROTTLE CABLE ADJUSTMENT**).	• Low compression • Incorrect Camshaft timing • Incorrect Engine oil level
Engine stalls (MIL works OK, no DTCs set)	1. Check the fuel pressure; 2000-2003 M/T models (see **2000-2003 M/T MODELS**), 2001-2003 CVT models (see **2001-2003 CVT MODELS**), 2004-2005 M/T models (see **2004-2005 M/T MODELS**), 2004-2005 CVT models (see **2004-2005 CVT MODELS**), 2006 model (see **2006 MODEL**). 2. Check the idle speed (see **IDLE SPEED ADJUSTMENT**). 3. Troubleshoot the brake pedal	• Intake air leaks • Faulty harness and sensor connections

	position switch signal circuit (see **BRAKE PEDAL POSITION SWITCH SIGNAL CIRCUIT TROUBLESHOOTING**).	
Auto idle stop system does not work	1. Troubleshoot the brake pedal position switch signal circuit (see **BRAKE PEDAL POSITION SWITCH SIGNAL CIRCUIT TROUBLESHOOTING**). 2. M/T model: Troubleshoot the clutch pedal position switch signal circuit (see **CLUTCH PEDAL POSITION SWITCH SIGNAL CIRCUIT TROUBLESHOOTING**). 3. M/T model: Troubleshoot the neutral position switch signal circuit (see **NEUTRAL POSITION SWITCH SIGNAL CIRCUIT TROUBLESHOOTING**). 4. CVT model: Troubleshoot the idle stop switch signal circuit (see **IDLE STOP SWITCH SIGNAL CIRCUIT TROUBLESHOOTING**). 5. CVT model: Troubleshoot the A/T gear position signal circuit (see **A/T GEAR POSITION SIGNAL CIRCUIT TROUBLESHOOTING**).	• Climate control/ outside temperature sensor • Brake booster vacuum hose clogged/cracked/ poor connection
Difficult to	1. 2000-2005 models: Test the	• Malfunctioning gas

refuel (MIL works OK, no DTCs set)	fuel tank vapor control valve (see **FUEL TANK VAPOR CONTROL VALVE REPLACEMENT**). 2. 2000-2005 models: Inspect the fuel tank vapor control signal tube between the fuel pipe and the fuel tank vapor control valve. 3. 2000-2005 models: Inspect the fuel tank vapor vent tube between the EVAP canister and the fuel tank vapor control valve. 4. 2000-2005 models: Check the EVAP canister. 5. 2006 model: Check the fuel vent tube between the EVAP canister and the fuel tank. 6. 2006 model: Check the fuel tank vapor recirculation tube between the fuel pipe and the fuel tank. 7. 2006 model: Replace the fuel tank (see **2006 MODEL**).	station filling nozzle. • Restricted fuel filler neck
Fuel overflows during refueling (No DTCs set)	1. 2000-2005 models: Replace the fuel tank vapor control valve (see **FUEL TANK VAPOR CONTROL VALVE REPLACEMENT**). 2. 2006 model: Replace the fuel tank (see **2006 MODEL**).	• Malfunctioning gas station filling nozzle. • Restricted fuel filler neck

SYSTEM DESCRIPTION

ELECTRONIC CONTROL SYSTEM

The functions of the fuel and emission control systems are managed by the engine control module (ECM).

Fail-safe Function

When an abnormality occurs in a signal from a sensor, the ECM ignores that signal and assumes a pre-programmed value for that sensor that allows the engine to continue to run.

Back-up Function

When an abnormality occurs in the ECM, the fuel injectors are controlled by a back-up circuit in the ECM in order to permit minimal driving.

Self-diagnosis

When an abnormality occurs in the signal from a sensor, the ECM supplies ground for the malfunction indicator lamp (MIL) and stores the diagnostic trouble code (DTC) in erasable memory. When the ignition is first turned on, the ECM supplies ground to the MIL for 15 to 20 seconds to check the MIL bulb condition. If all readiness code are not set, the MIL will flash five times. If all readiness codes are set to complete, the MIL will go out. If the MIL was on but then went out, the original problem may have been an intermittent one.

Two Driving Cycle Detection Method

To prevent false indications, the "two driving cycle detection method" is used for some self-diagnostic functions. When an abnormality occurs, the ECM stores it in its memory. When the same abnormality recurs after the ignition switch is turned OFF and ON (II) again, the ECM turns on the MIL.

Self Shut Down (SSD) Mode (2006 model)

After the ignition switch is turned off, the ECM stays on.

If the ECM connector is disconnected during this mode, the ECM may be damaged.

To cancel this mode, disconnect the negative cable from the battery or jump the

SCS line with the HDS after the key is turned off.

ECM Electrical Connections - 2000-2004 Models

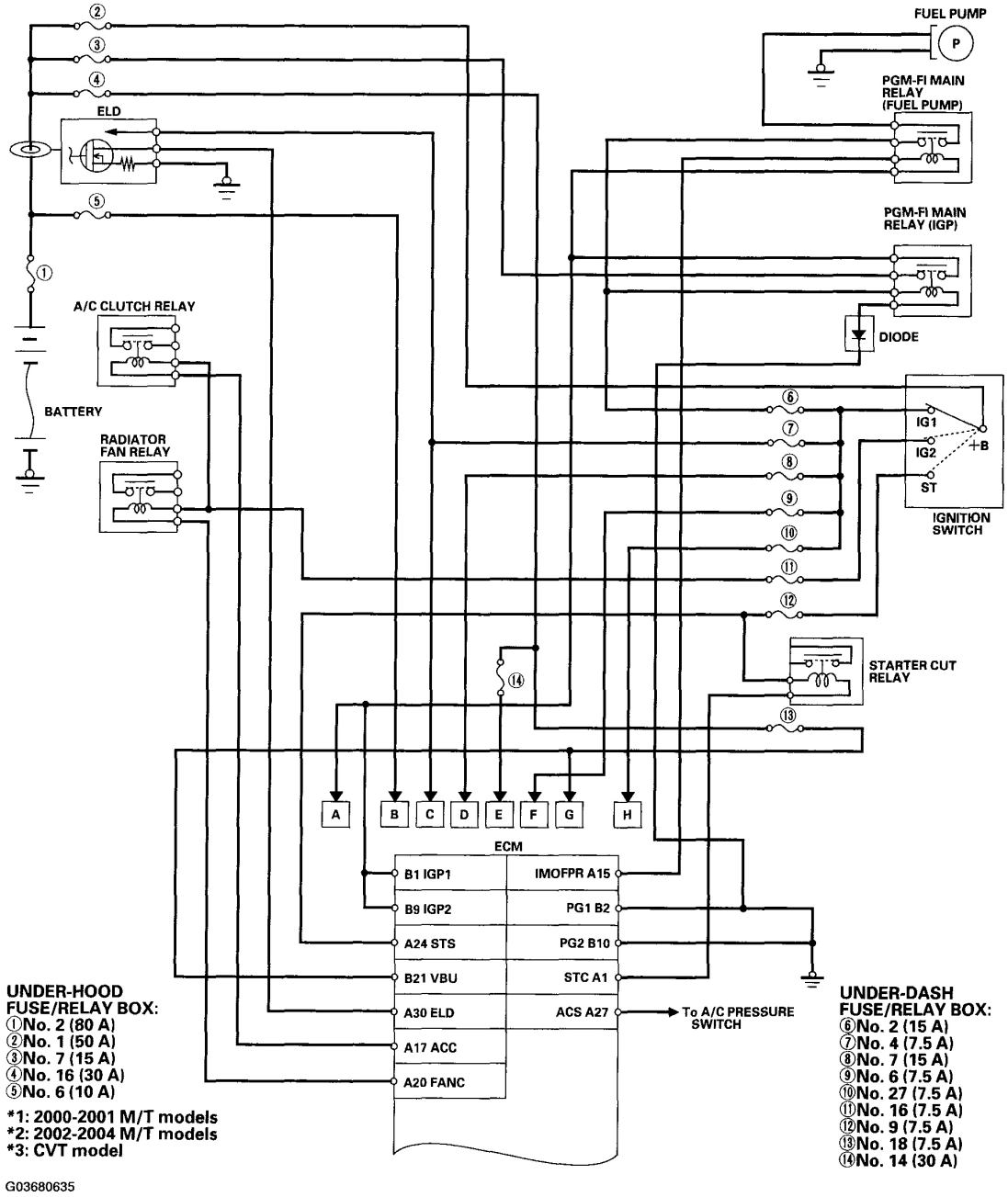


Fig. 10: ECM Electrical Connections Description (2000-2004 Models) (1 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

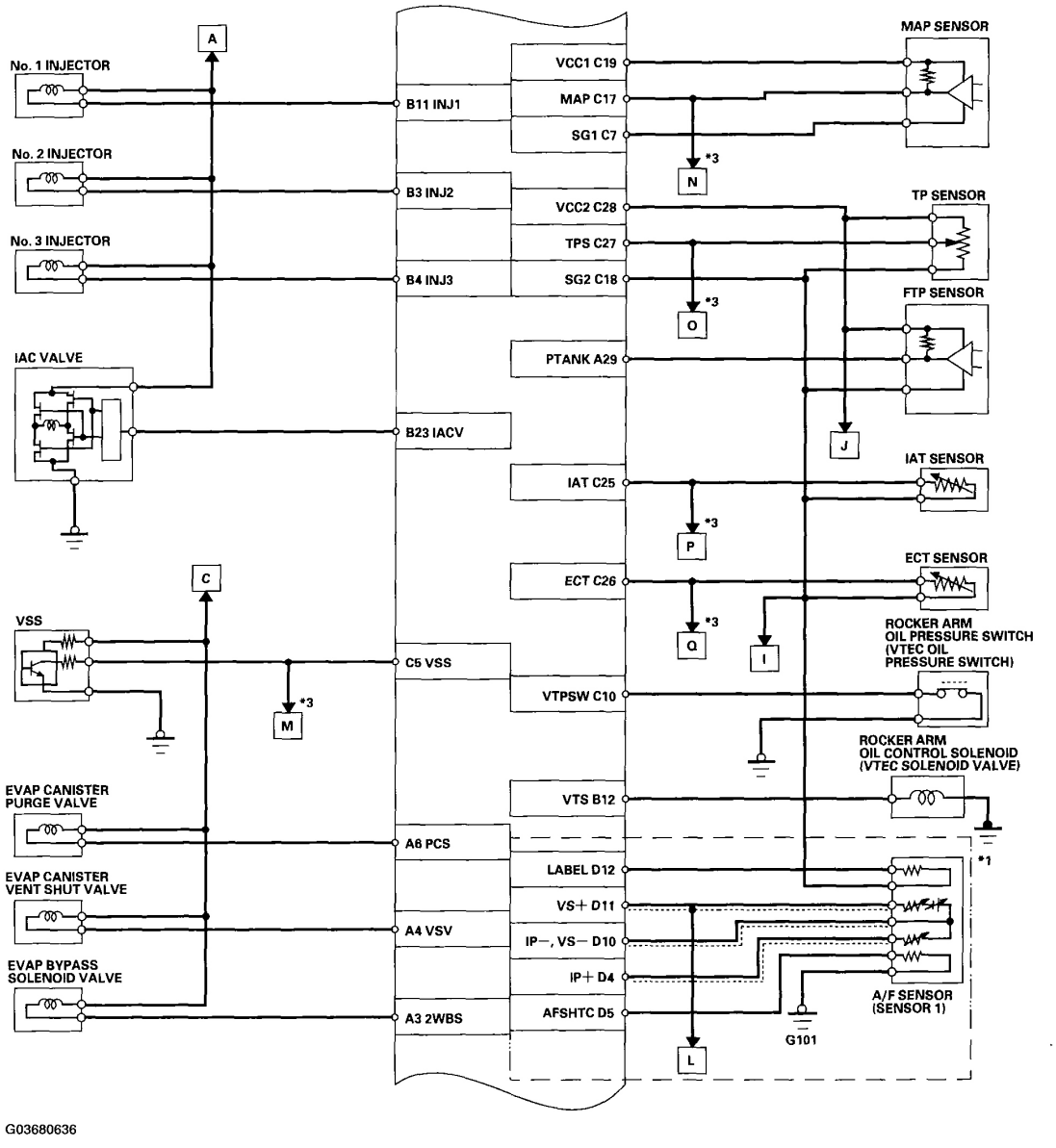


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Fig. 11: ECM Electrical Connections Description (2000-2004 Models) (2 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

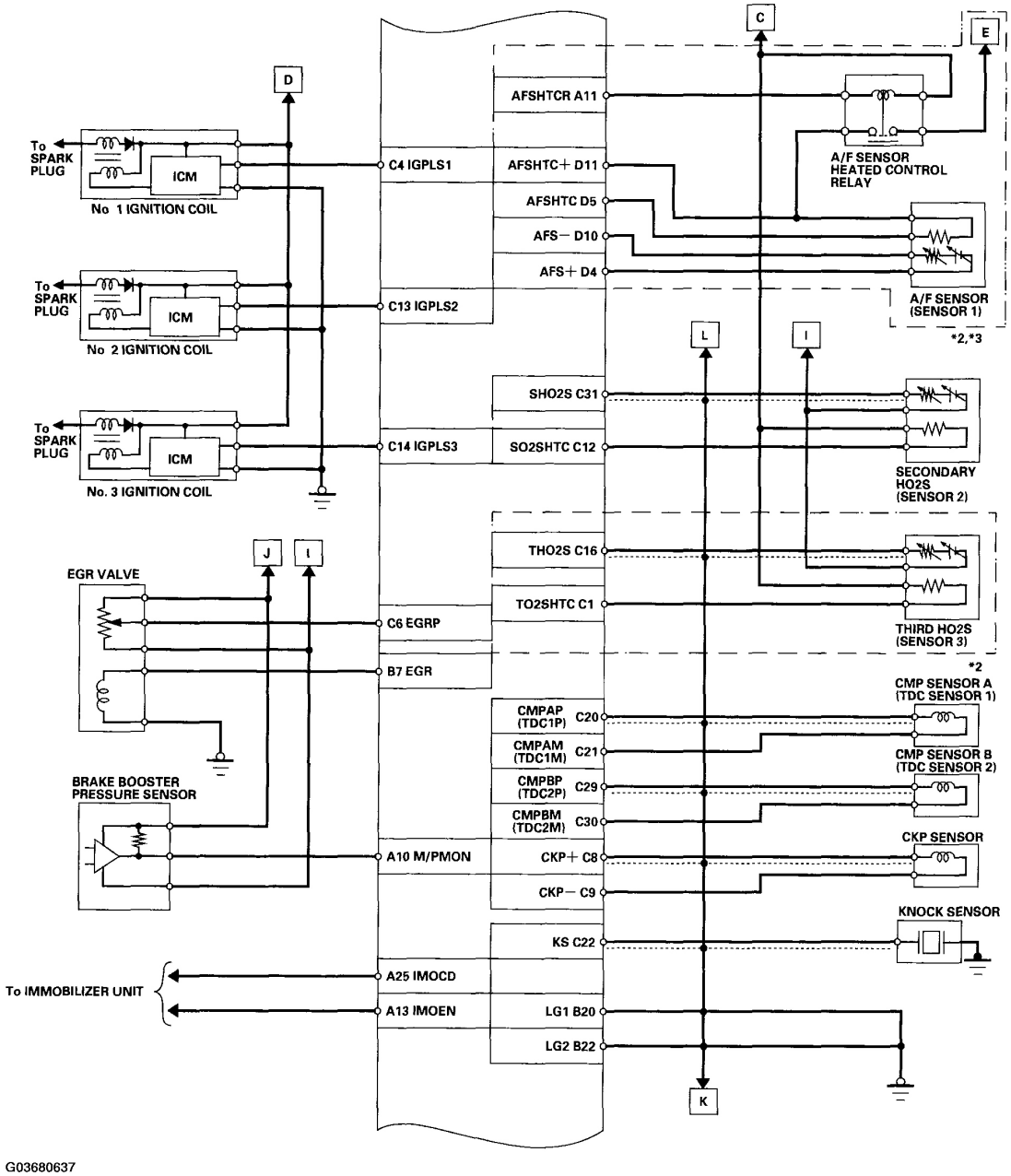


Fig. 12: ECM Electrical Connections Description (2000-2004 Models) (3 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

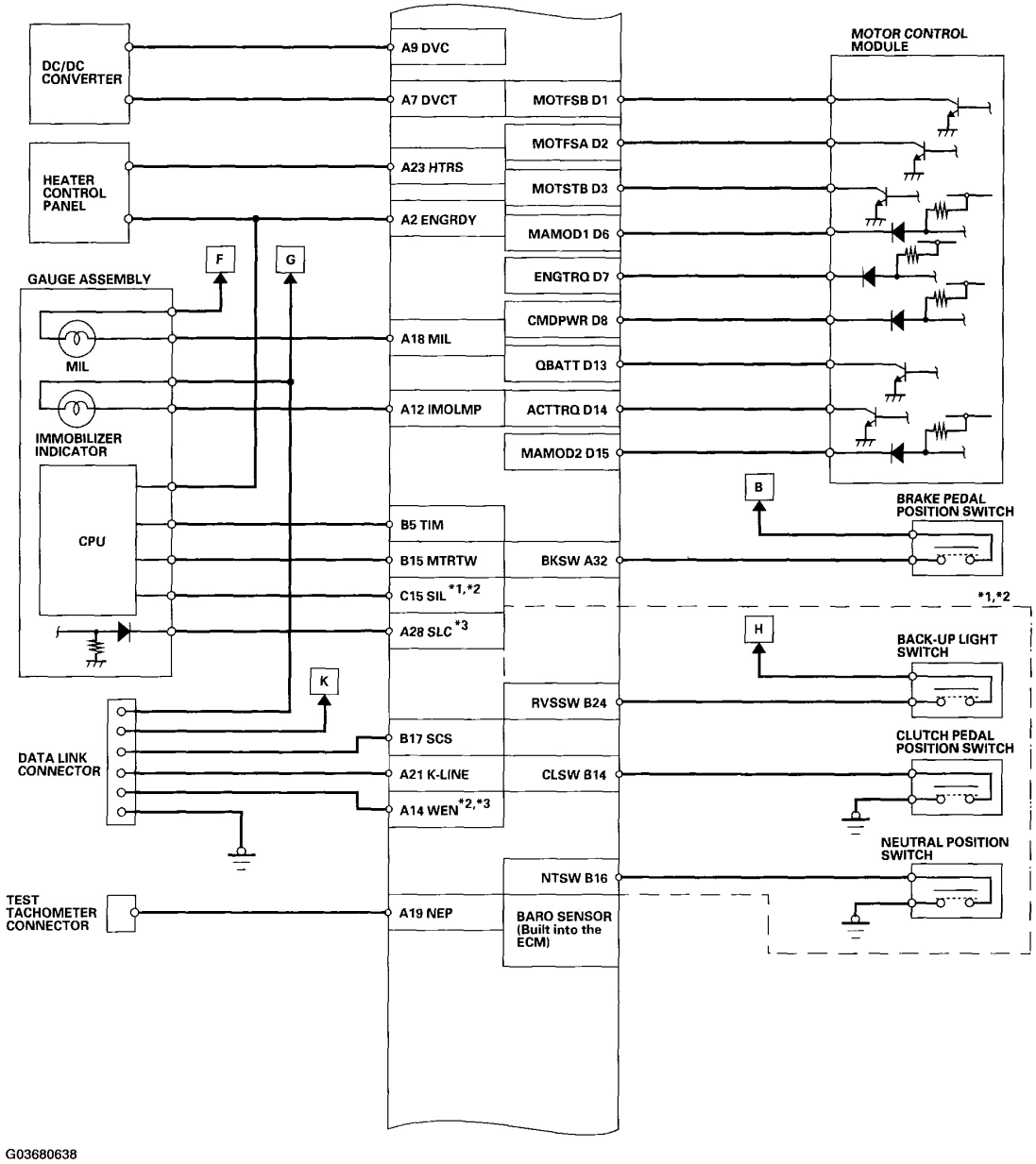
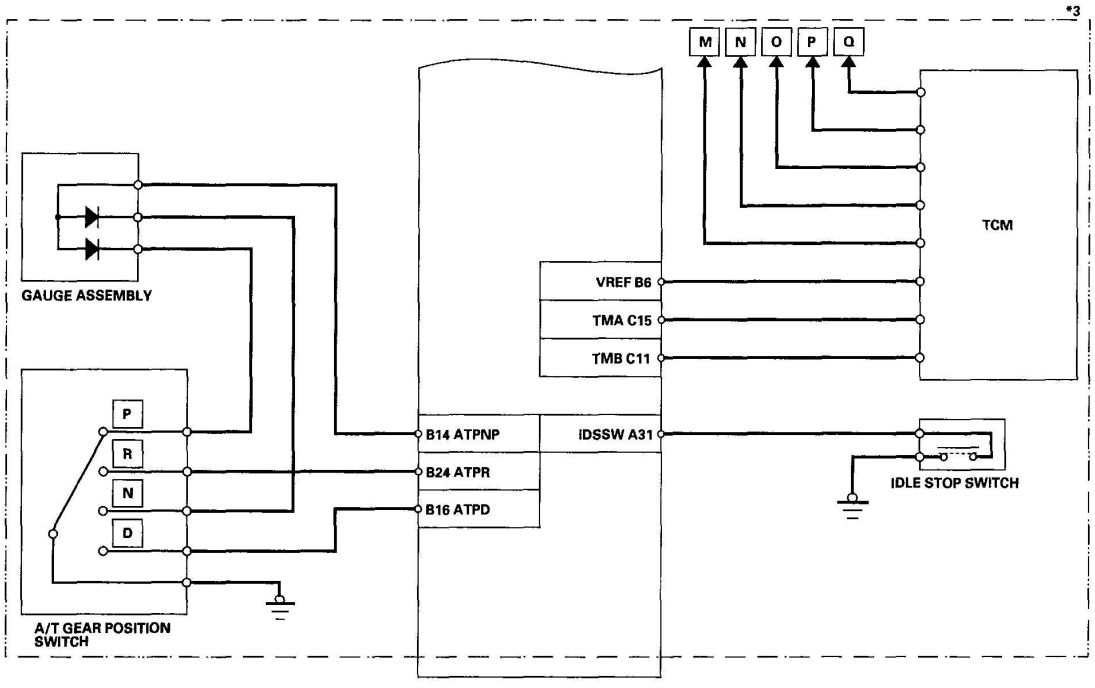


Fig. 13: ECM Electrical Connections Description (2000-2004 Models) (4 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



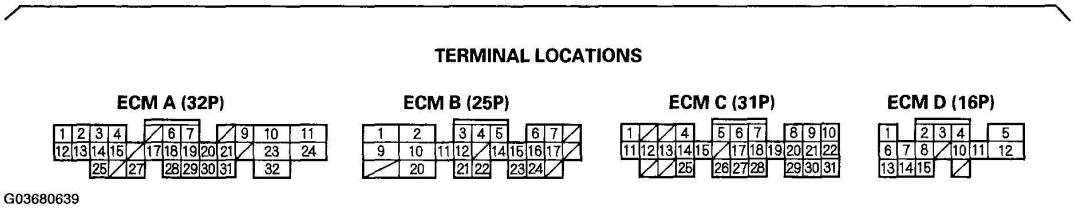


Fig. 14: ECM Electrical Connections Description (2000-2004 Models) (5 Of 5) Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM Electrical Connections-2005-2006 Models

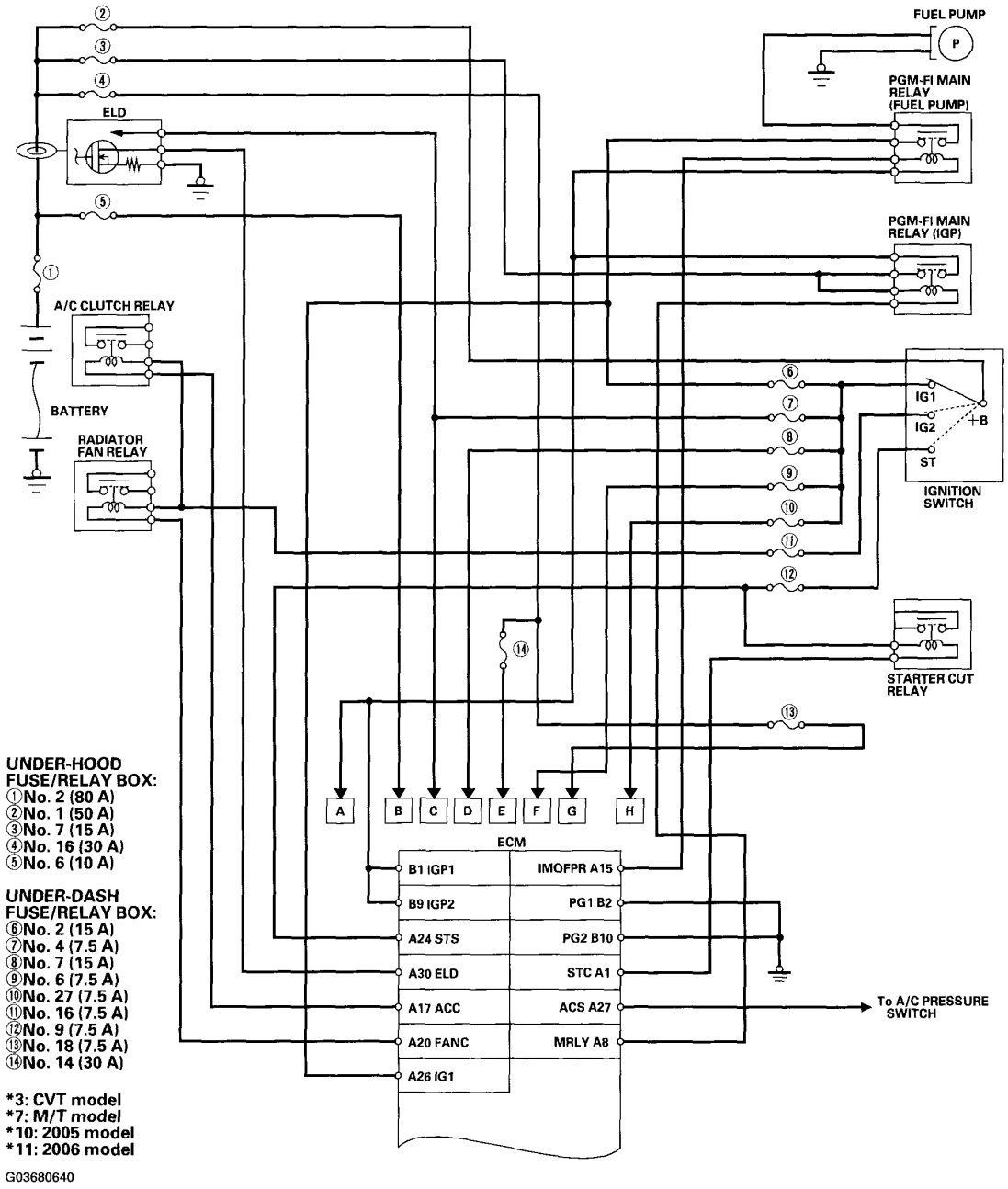


Fig. 15: ECM Electrical Connections Description (2005-2006 Models) (1 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

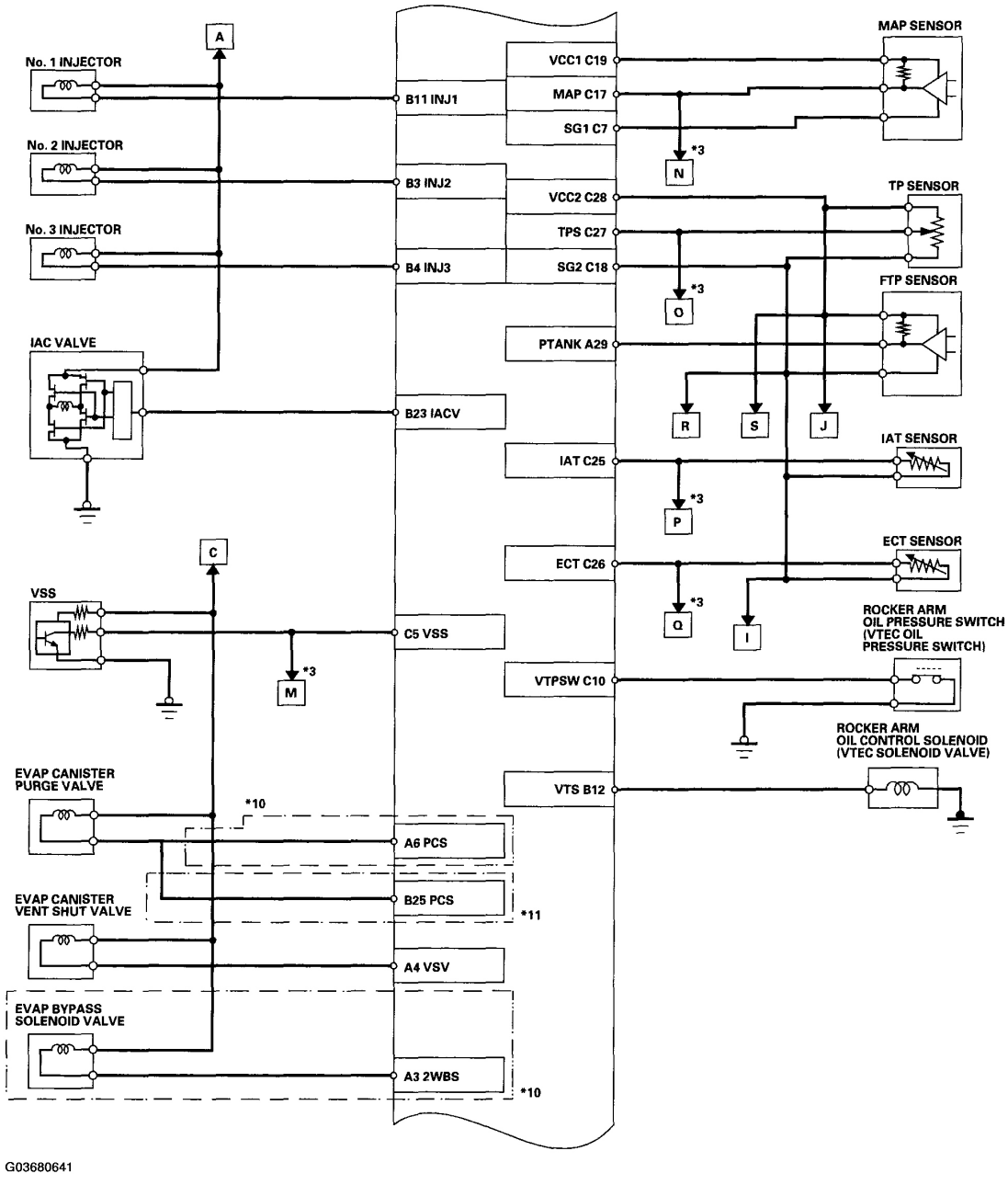


Fig. 16: ECM Electrical Connections Description (2005-2006 Models) (2 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

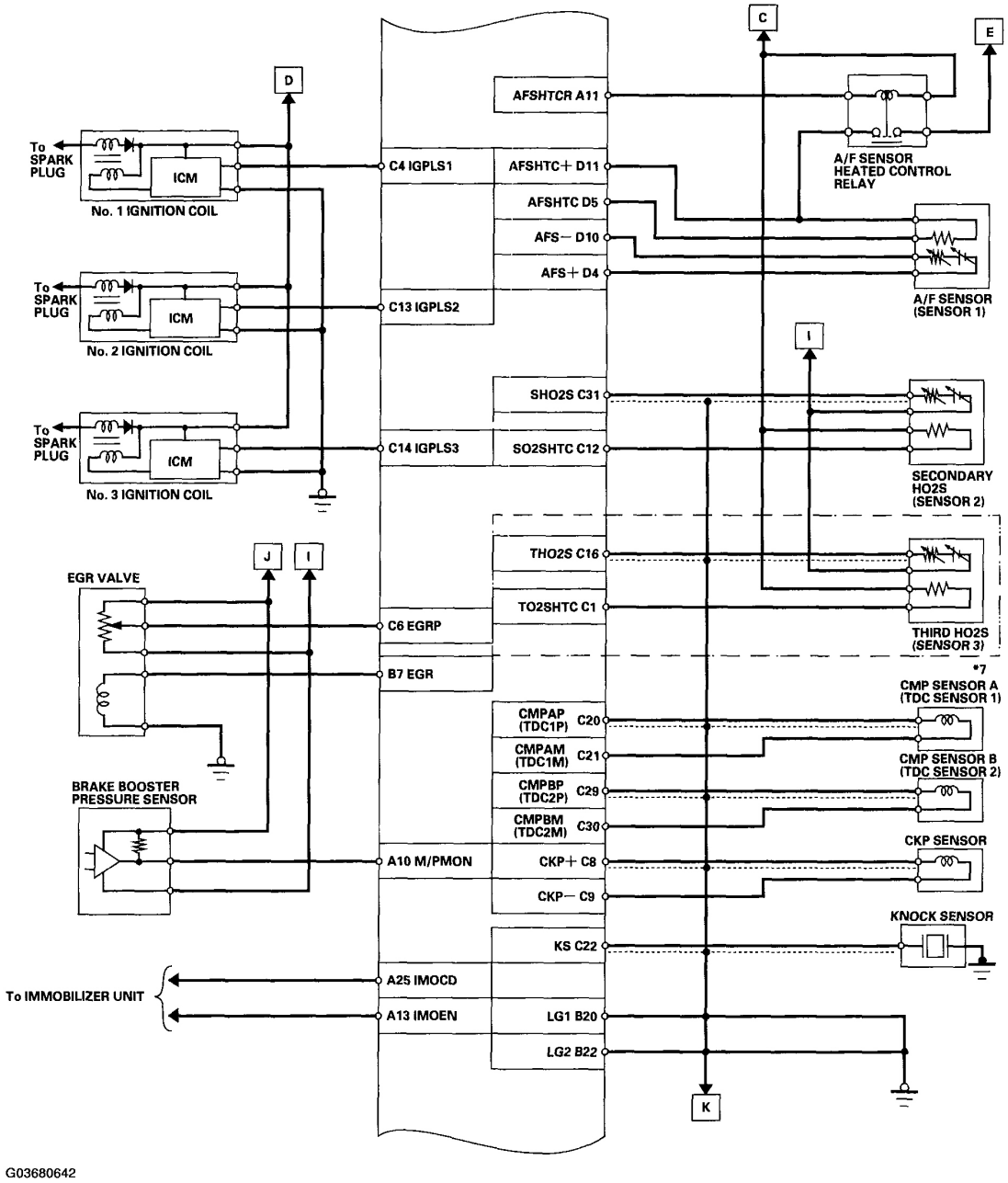


Fig. 17: ECM Electrical Connections Description (2005-2006 Models) (3 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

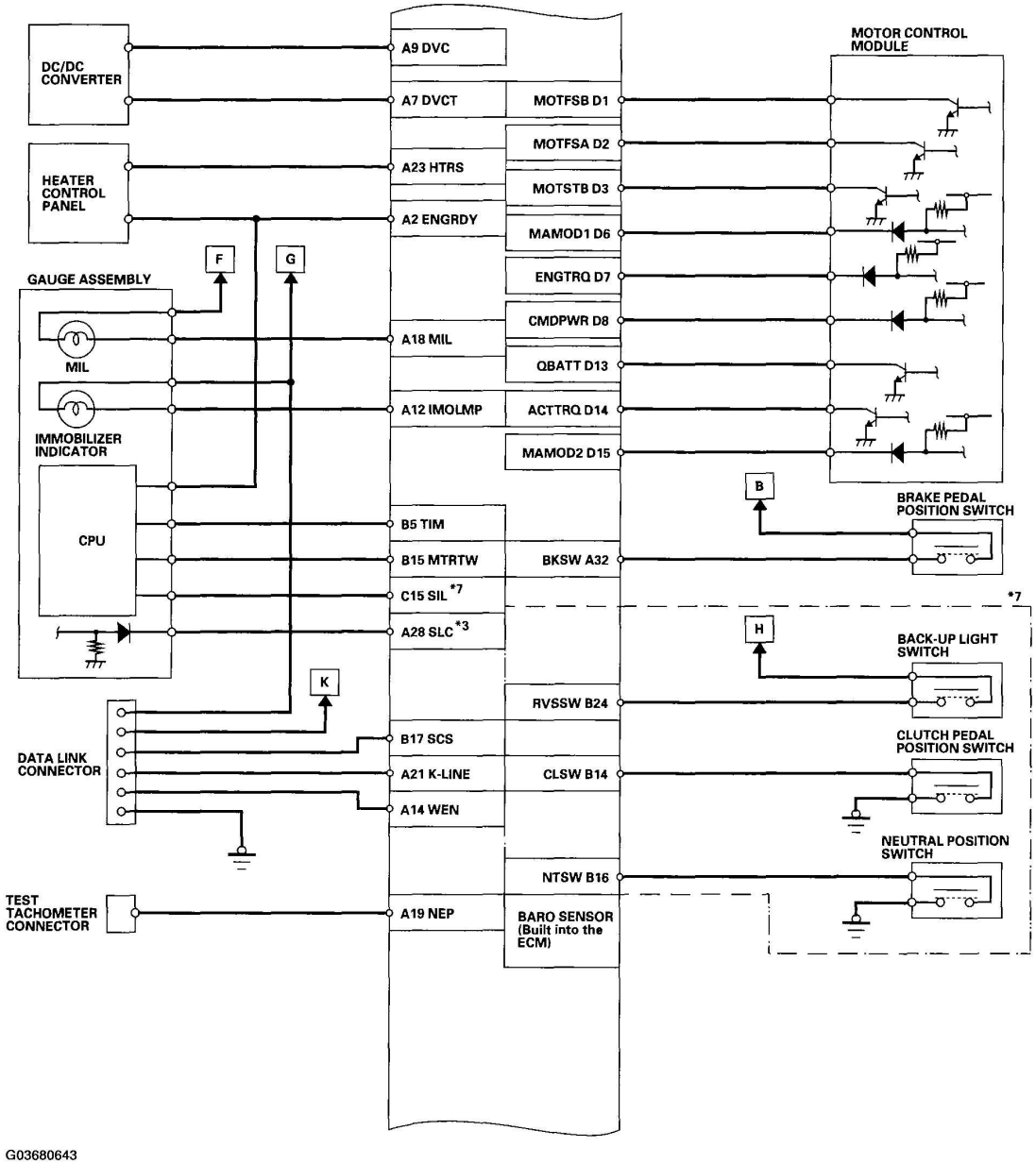


Fig. 18: ECM Electrical Connections Description (2005-2006 Models) (4 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

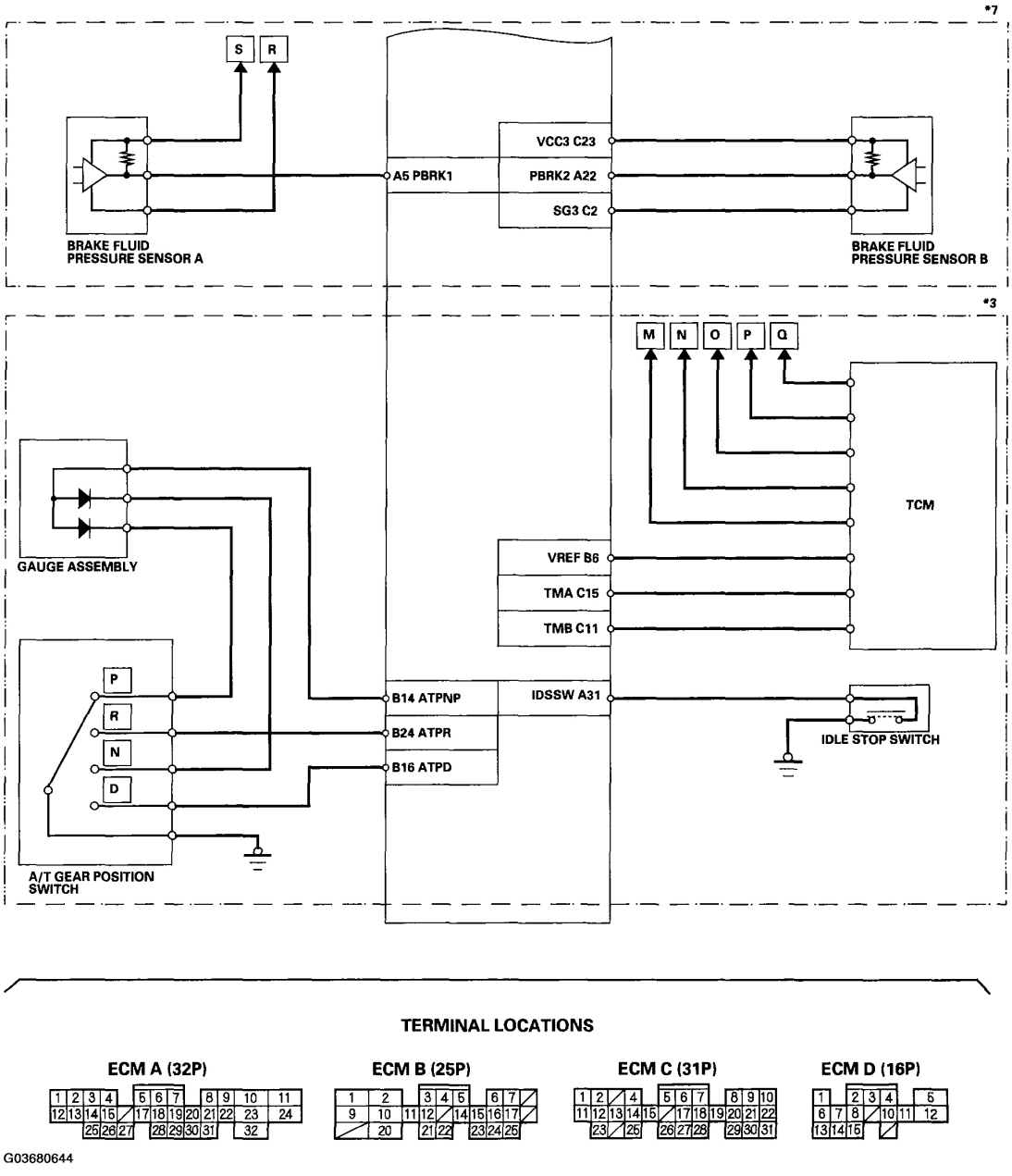
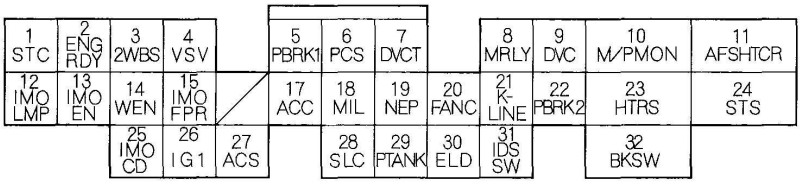


Fig. 19: ECM Electrical Connections Description (2005-2006 Models) (5 Of 5) Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM INPUTS AND OUTPUTS AT CONNECTOR A (32P)



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	BLU/WHT	STC (STARTER CUT RELAY)	Drives starter cut relay	With ignition switch in START Position: battery voltage
2	BLK/YEL	ENGRDY (ENGINE READY SIGNAL)	Sends engine ready signal to heater control panel	Without auto engine stop: battery voltage With auto engine stop: below 1.0 V
3*9	BLU	2WBS (EVAP BYPASS SOLENOID VALVE)	Drives EVAP bypass solenoid valve	With ignition switch ON (II): battery voltage
4	LT GRN/ RED	VSV (EVAP CANISTER VENT SHUT VALVE)	Drives EVAP canister vent shut valve	With ignition switch ON (II): battery voltage
5*5	LT BLU	PBRK1 (BRAKE FLUID PRESSURE SENSOR A)	Detects brake fluid pressure sensor A signal	With brake pedal released: 0.5 V With brake pedal pressed: 4.5 V (depending on brake fluid pressure)
6*9	RED/YEL	PCS (EVAP CANISTER PURGE VALVE)	Drives EVAP canister purge valve	With engine running, engine coolant below 149 °F (65 °C): battery voltage With engine running, engine coolant above 149 °F (65 °C): duty controlled
7	RED/YEL	DVCT (DC/DC CONVERTER ECT SIGNAL)	Sends ECT signal to DC/DC converter	With ignition switch ON (II): about 0.1—4.8 V
8*4	BLK	MRLY (PGM-FI MAIN RELAY 1)	Drives PGM-FI main relay 1 (IGP) power source for the DTC memory	With ignition switch ON (II): about 0 V With ignition switch OFF: battery voltage
9	WHT/GRN	DVC (DC/DC CONVERTER CONTROL SIGNAL)	Sends control signal to DC/DC converter	With ignition switch ON (II): pulses
10	WHT/RED	M/PMON (BRAKE BOOSTER PRESSURE MONITOR)	Detects brake booster pressure sensor signal	With ignition switch ON (II): about 1.0—3.0 V (depending on brake booster vacuum)
11*8, *3	ORN	AFSHTCR (AIR FUEL RATIO SENSOR HEATER CONTROL RELAY)	Drives A/F sensor heater relay	With ignition switch ON (II): about 0 V
12	PNK	IMOLMP (IMMOBILIZER INDICATOR)	Drives immobilizer indicator	With immobilizer indicator ON: about 0 V With immobilizer indicator OFF: battery voltage
13	BLU/YEL	IMOEN (IMMOBILIZER ENABLE SIGNAL)	Sends immobilizer enable signal	—
14*8, *3	RED/WHT	WEN (WRITE ENABLE SIGNAL)	Detects write enable signal	With ignition switch ON (II): about 0 V

* 3: CVT model
* 4: 2005-2006 models
* 5: 2005-2006 M/T models
* 8: 2002-2006 M/T models
* 9: 2000-2005 models

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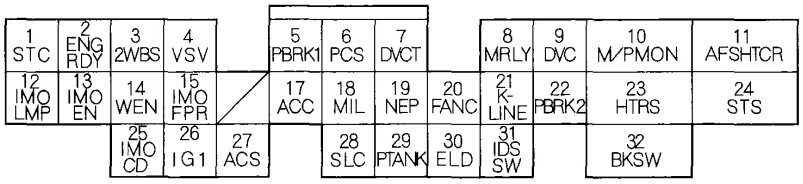
Fig. 20: Identifying ECM Inputs And Outputs Connector A (32P) (1 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.



Wire side of female terminals

NOTE: Standard battery voltage is 12 V

Terminal number	Wire color	Terminal name	Description	Signal
15	GRN/YEL	IMOFPR (IMMOBILIZER FUEL PUMP RELAY)	Drives fuel pump relay	0 V for 2 seconds after turning ignition switch ON (II), then battery voltage
17	RED	ACC (A/C CLUTCH RELAY)	Drives A/C clutch relay	With A/C compressor ON: about 0 V With A/C compressor OFF: battery voltage
18	GRN/ORN	MIL (MALFUNCTION INDICATOR LIGHT)	Drives MIL	With MIL ON: about 0 V With MIL OFF: battery voltage
19	BLU	NEP (ENGINE SPEED PULSE)	Outputs engine speed pulse	With engine running: pulses
20	BLU/RED	FANC (RADIATOR FAN CONTROL)	Drives radiator fan relay	With radiator fan running: about 0 V With radiator fan stopped: battery voltage
21	GRY	K-LINE	Sends and receives scan tool signal	With ignition switch ON (II): battery voltage
22*5	BRN	PBRK2 (BRAKE FLUID PRESSURE SENSOR B)	Detects brake fluid pressure sensor B signal	With brake pedal released: 0.5 V With brake pedal pressed: 4.5 V (depending on brake fluid pressure)
23	BRN/YEL	HTRS (HEATER STAND BY SIGNAL)	Detects heater stand by signal	With ignition switch ON (II): pulses
24	BLU/ORN	STS (STARTER SWITCH SIGNAL)	Detects starter switch signal	With starter switch ON (III): battery voltage With starter switch OFF: about 0 V
25	RED	IMOCD (IMMOBILIZER CODE)	Detects immobilizer signal	———
26*4	BLK/RED	IG1 (IGNITION SIGNAL)	Detects ignition signal	With ignition switch ON (II): battery voltage
27	BLU/BLK	ACS (A/C SWITCH SIGNAL)	Detects A/C switch signal	With A/C switch ON: about 0 V With A/C switch OFF: about 5.0 V
28*3	YEL/GRN	SLC (SHIFT LOCK CONTROL)	Sends shift lock Control Signal	With brake pedal released: about 0 V With brake pedal pressed and throttle fully closed: battery voltage
29	LT GRN	PTANK (FUEL TANK PRESSURE SENSOR)	Detects fuel tank pressure sensor signal	With ignition switch ON (II) and fuel fill cap removal: about 2.5 V
30	GRN/RED	ELD	Detects ELD signal	With parking lights on at idle: about 2.5—3.5 V With high beam headlights on at idle: about 1.5—2.5 V
31*3	WHT	IDSSW (IDLE STOP SWITCH)	Detects idle stop switch signal	With brake pedal released: about 0 V With brake pedal pressed: battery voltage
32	GRN/WHT	BKSW (BRAKE PEDAL POSITION SWITCH)	Detects brake pedal position switch signal	With brake pedal released: about 0 V With brake pedal pressed: battery voltage

* 3: CVT model
* 4: 2005-2006 models
* 5: 2005-2006 M/T models

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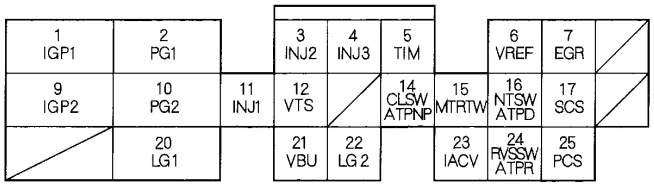
Fig. 21: Identifying ECM Inputs And Outputs Connector A (32P) (2 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM INPUTS AND OUTPUTS AT CONNECTOR B (25P)



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	YEL/BLK	IGP1 (POWER SOURCE)	Power source for ECM control circuit	With ignition switch ON (II): battery voltage
2	BLK	PG1 (POWER GROUND)	Ground for ECM control circuit	Less than 1.0 V at all times
3	RED	INJ2 (No. 2 FUEL INJECTOR)	Drives No. 2 fuel injector	With ignition switch ON (II): battery voltage
4	BLU	INJ3 (No. 3 FUEL INJECTOR)	Drives No. 3 fuel injector	With engine running: duty controlled
5	GRN	TIM (TI SIGNAL)	Sends TI signal to gauge assembly	With ignition switch ON (II): pulses
6*3	WHT/RED	VREF (REFERENCE VOLTAGE)	Provides reference voltage to TCM	With ignition switch ON (II): about 5.0 V
7	PNK	EGR (EXHAUST GAS RECIRCULATION (EGR) VALVE)	Drives EGR valve	With EGR operating and fully warmed up engine (vehicle running): duty controlled With EGR not operating: about 0 V
9	YEL/BLK	IGP2 (POWER SOURCE)	Power source for ECM control circuit	With ignition switch ON (II): battery voltage
10	BLK	PG2 (POWER GROUND)	Ground for ECM control circuit	Less than 1.0 V at all times
11	BRN	INJ1 (No. 1 FUEL INJECTOR)	Drives No. 1 fuel injector	With ignition switch ON (II): battery voltage With engine running: duty controlled
12	GRN/YEL	VTS (ROCKER ARM OIL CONTROL SOLENOID (VTEC SOLENOID VALVE))	Drives rocker arm oil control solenoid (VTEC solenoid valve)	With engine at low rpm: about 0 V With engine at high rpm (vehicle running): battery voltage
14*7	RED	CLSW (CLUTCH PEDAL POSITION SWITCH)	Detects clutch pedal position switch signal	With clutch pedal released: about 5.0 V With clutch pedal pressed: about 0 V
14*3	LT GRN	ATPNP (TRANSMISSION RANGE SWITCH N/P POSITION)	Detects transmission range switch N/P position signal	In P or N position: about 0 V In any other position: about 5.0 V or battery voltage
15	RED/GRN	MTRTW (ENGINE COOLANT TEMPERATURE SIGNAL OUTPUT)	Sends ECT signal to ECT gauge	With ignition switch ON (II): duty controlled

* 3: CVT model
* 7: M/T model

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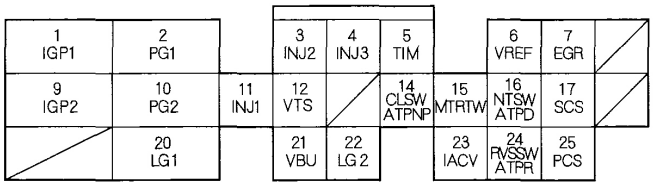
Fig. 22: Identifying ECM Inputs And Outputs Connector B (25P) (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
16*7	RED/BLK	NTSW (NEUTRAL POSITION SWITCH)	Detects neutral position	With transmission in neutral position: about 0 V With transmission in all other positions: battery voltage
16*3	PNK	ATPD (TRANSMISSION RANGE SWITCH D POSITION)	Detects transmission range switch D position signal	In D position: about 0 V In any other position: battery voltage
17	BRN	SCS (SERVICE CHECK SIGNAL)	Detects service check connector signal (the signal causing a DTC indication)	With the service check signal shorted using HDS: about 0 V With the service check signal opened: about 5.0 V or battery voltage
20	BRN/BLK	LG1 (LOGIC GROUND)	Ground for ECM control circuit	Less than 1.0 V at all times
21*6	WHT/BLU	VBU (VOLTAGE BACK UP)	Power source for ECM control circuit Power source for DTC memory	Battery voltage at all times
22	BRN/BLK	LG2 (LOGIC GROUND)	Ground for ECM control circuit.	Less than 1.0 V at all times
23	BLK/BLU	IACV (IDLE AIR CONTROL VALVE)	Drives IAC valve	With engine running: duty controlled
24*7	GRN/BLK	RVSSW (BACK-UP LIGHT SWITCH)	Detects reverse position	With transmission in reverse position: battery voltage With transmission in all other positions: about 0 V
24*3	GRN/BLK	ATPR (TRANSMISSION RANGE SWITCH R POSITION)	Detects transmission range switch R position signal	In R position: about 0 V In any other position: battery voltage
25*11	RED/YEL	PCS (EVAP CANISTER PURGE VALVE)	Drives EVAP canister purge valve	With engine running, engine coolant below 149 °F (65 °C): battery voltage With engine running, engine coolant above 149 °F (65 °C): duty controlled

* 3: CVT model
* 6: 2000-2004 models
* 7: M/T model
* 11: 2006 model

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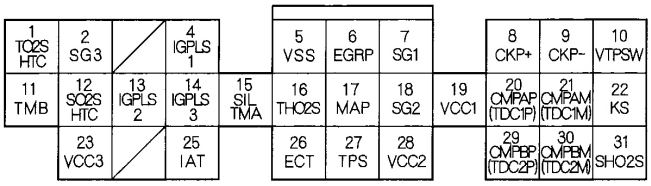
Fig. 23: Identifying ECM Inputs And Outputs Connector B (25P) (2 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM INPUTS AND OUTPUTS AT CONNECTOR C (31P)



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1*8	BLK/WHT	TO2SHTC (THIRD HEATED OXYGEN SENSOR (THIRD HO2S) HEATER CONTROL)	Drives third HO2S heater	With ignition switch ON (II): battery voltage With fully warmed up engine running: duty controlled
2*5	BLK	SG3 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
4	WHT	IGPLS1 (No. 1 IGNITION COIL PULSE)	Drives No. 1 ignition coil	With ignition switch ON (II): about 0 V With engine running: pulses
5	BLU/WHT	VSS (VEHICLE SPEED SENSOR)	Detects VSS signal	With ignition switch ON (II) and front wheels rotating: cycles 0—5.0 V
6	WHT/BLK	EGRP (EGR VALVE POSITION SENSOR)	Detects EGR valve position sensor signal	With engine running: 1.2—2.0 V (depending on EGR valve lift)
7	GRN/WHT	SG1 (SENSOR GROUND)	Ground for MAP sensor	Less than 1.0 V at all times
8	BLU	CKP+ (CKP SENSOR +SIDE)	Detects CKP sensor	With engine running: pulses
9	WHT	CKP− (CKP SENSOR −SIDE)	Ground for CKP sensor	——
10	BLU/BLK	VTPSW (ROCKER ARM OIL PRESSURE SWITCH (VTEC OIL PRESSURE SWITCH))	Detects rocker arm oil pressure switch (VTEC oil pressure switch signal)	With engine at low engine speed: about 0 V With engine at high engine speed (vehicle running): battery voltage
11*3	PNK	TMB	Data communication with TCM—ECM control data input	With ignition switch ON (II): pulses
12	BLK/WHT	SO2SHTC (SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) HEATER CONTROL)	Drives secondary HO2S heater	With ignition switch ON (II): battery voltage With fully warmed up engine running: duty controlled
13	WHT/GRN	IGPLS2 (No. 2 IGNITION COIL PULSE)	Drives No. 2 ignition coil	With ignition switch ON (II): about 0 V With engine running: pulses
14	WHT/BLK	IGPLS3 (No. 3 IGNITION COIL PULSE)	Drives No. 3 ignition coil	
15*7	WHT/RED	SIL (SHIFT INDICATOR LAMP)	Sends shift position signal	With engine running: pulses
15*3	GRY	TMA	Data communication with TCM—ECM control data output	With ignition switch ON (II): pulses
16*8	WHT/RED	THO2S (THIRD HEATED OXYGEN SENSOR, SENSOR 3)	Detects third HO2S (sensor 3) signal	With throttle fully opened from idle with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
17	RED/GRN	MAP (MANIFOLD ABSOLUTE PRESSURE SENSOR)	Detects MAP sensor signal	With ignition switch ON (II): about 3.0 V At idle: about 1.0 V (depending on engine speed)

* 3: CVT model
* 5: 2005-2006 M/T models
* 7: M/T model
* 8: 2002-2006 M/T models

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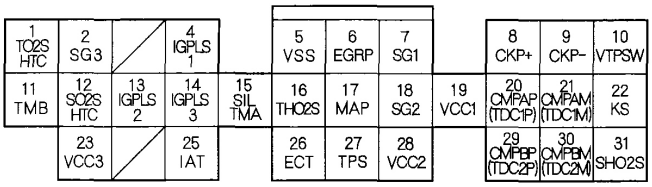
Fig. 24: Identifying ECM Inputs And Outputs Connector C (31P) (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
18	GRN/BLK	SG2 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
19	YEL/RED	VCC1 (SENSOR VOLTAGE)	Power source to MAP sensor	With ignition switch ON (II): about 5.0 V
20	GRN	CMPAP (TDC1P) (CMPA (TDC1) SENSOR P SIDE)	Detects CMPA (TDC1) sensor	With engine running: pulses
21	RED	CMPAM (TDC1M) (CMPA (TDC1) SENSOR M SIDE)	Ground for CMPA (TDC1) sensor.	With engine running: pulses
22	RED/BLU	KS (KNOCK SENSOR)	Detects KS signal	With engine knocking: pulses
23*5	RED/WHT	VCC3 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5.0 V With ignition switch OFF: about 0 V
25	RED/YEL	IAT (INTAKE AIR TEMPERATURE SENSOR)	Detects IAT sensor signal	With ignition switch ON (II): about 0.1—4.8 V (depending on intake air temperature)
26	RED/WHT	ECT (ENGINE COOLANT TEMPERATURE SENSOR)	Detects ECT sensor signal	With ignition switch ON (II): about 0.1—4.8 V (depending on engine coolant temperature)
27	RED/BLK	TPS (THROTTLE POSITION SENSOR)	Detects TP sensor signal	With throttle fully open: about 4.8 V With throttle fully closed: about 0.5 V
28	YEL/BLU	VCC2 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5.0 V With ignition switch OFF: about 0 V
29	YEL	CMPBP (TDC2P) (CMPB (TDC2) SENSOR P SIDE)	Detects CMPB (TDC2) sensor	With engine running: pulses
30	BLK	CMPBM (TDC2M) (CMPB (TDC2) SENSOR M SIDE)	Ground for CMPB (TDC2) sensor	With engine running: pulses
31	WHT/RED	SHO2S (SECONDARY HEATED OXYGEN SENSOR, SENSOR 2)	Detects secondary HO2S (sensor 2) signal	With throttle fully opened from idle with fully, warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V

* 5: 2005-2006 M/T models

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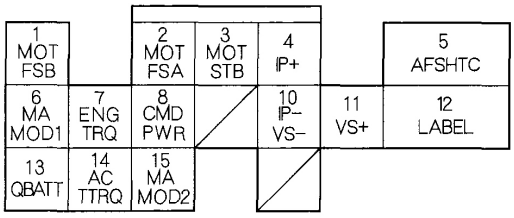
Fig. 25: Identifying ECM Inputs And Outputs Connector C (31P) (2 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM INPUTS AND OUTPUTS AT CONNECTOR D (16P)*1 , *3, *8



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	BLU/WHT	MOTFSB (MOTOR CONTROL MODULE FSB SIGNAL)	Data communication with MCM—ECM control data input	With ignition switch ON (II): pulses
2	BLU/RED	MOTFSA (MOTOR CONTROL MODULE FSA SIGNAL)	Data communication with MCM—ECM control data input	With ignition switch ON (II): pulses
3	YEL/RED	MOTSTB (MOTOR CONTROL MODULE STAND-BY SIGNAL)	Data communication with MCM—ECM control data input	With ignition switch ON (II): pulses
4	GRN	IP+ (AIR FUEL RATIO (A/F) SENSOR PUMP CELL +)	Controls A/F sensor (sensor 1) pump cell	With ignition switch ON (II): about 0.5—5.3 V
5	BLK/WHT	AFSHTC (AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL)	Drives A/F sensor (sensor 1) heater	With ignition switch ON (II): battery voltage With fully warmed up engine running: duty controlled
6	RED/YEL	MAMOD1 (MOTOR CONTROL MODULE MODE 1 SIGNAL)	Data communication with MCM—ECM control data output	With ignition switch ON (II): pulses
7	BLU	ENGTRQ (ENGINE TORQUE SIGNAL)	Data communication with MCM—ECM control data output	With ignition switch ON (II): pulses
8	BLU/BLK	CMDPWR (MOTOR POWER SIGNAL)	Data communication with MCM—ECM control data output	With ignition switch ON (II): pulses
10	RED	IP—, VS— (HO2S COMMON)	Reference voltage supply	With fully warmed up engine at idle: about 2.6—2.8 V
11	BLU	VS+ (VS CELL VOLTAGE)	Detects VS cell voltage	With ignition switch ON (II): about 7.0 V
12	WHT	LABEL	Detects LABEL resistance	With engine running: about 0.3—4.9 V
13	PNK	QBATT (Q BATTERY SIGNAL)	Data communication with MCM—ECM control data input	With ignition switch ON (II): pulses
14	YEL	ACTTRQ (MOTOR TORQUE SIGNAL)	Data communication with MCM—ECM control data input	With ignition switch ON (II): pulses
15	WHT/RED	MAMOD2 (MOTOR CONTROL MODULE MODE 2 SIGNAL)	Data communication with MCM—ECM control data output	With ignition switch ON (II): pulses

* 1: 2000-2001 M/T models

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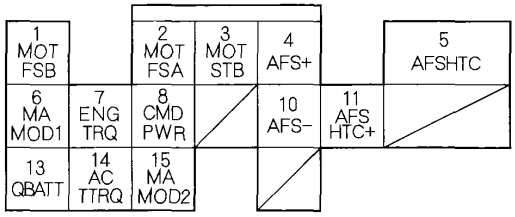
Fig. 26: Identifying ECM Inputs And Outputs Connector D (16P) (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	BLU/WHT	MOTFSB (MOTOR CONTROL MODULE FSB SIGNAL)	Data communication with ECM—MCM control data input	With ignition switch ON (II): pulses
2	BLU/RED	MOTFSA (MOTOR CONTROL MODULE FSA SIGNAL)	Data communication with ECM—MCM control data input	With ignition switch ON (II): pulses
3	YEL/RED	MOTSTB (MOTOR CONTROL MODULE STAND-BY SIGNAL)	Data communication with ECM—MCM control data input	With ignition switch ON (II): pulses
4	GRN	AFS+ (AIR FUEL RATIO (A/F) SENSOR, SENSOR 1 +SIDE)	Data A/F sensor (sensor 1) signal	——
5	BLK/WHT	AFSHTC (AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL)	Drives A/F sensor (sensor 1) heater	With ignition switch ON (II): battery voltage With fully warmed up engine running: about 0 V
6	RED/YEL	MAMOD1 (MOTOR CONTROL MODULE MODE 1 SIGNAL)	Data communication with MCM—ECM control data output.	With ignition switch ON (II): pulses
7	BLU	ENGTRQ (ENGINE TORQUE SIGNAL)	Data communication with MCM—ECM control data output.	With ignition switch ON (II): pulses
8	BLU/BLK	CMDPWR (MOTOR POWER SIGNAL)	Data communication with MCM—ECM control data output.	With ignition switch ON (II): pulses
10	RED	AFS− (AIR FUEL RATIO (A/F) SENSOR, SENSOR 1 −SIDE)	Detects A/F sensor (sensor 1) signal	——
11	BLU	AFSHTC+ (AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL +SIDE)	Detects A/F sensor (sensor 1) heater voltage	With ignition switch ON (II): battery voltage
13	PNK	QBATT (Q BATTERY SIGNAL)	Data communication with ECM—MCM control data input	With ignition switch ON (II): pulses
14	YEL	ACTTRQ (MOTOR TORQUE SIGNAL)	Data communication with ECM—MCM control data input	With ignition switch ON (II): pulses
15	WHT/RED	MAMOD2 (MOTOR CONTROL MODULE MODE 2 SIGNAL)	Data communication with ECM—MCM control data output	With ignition switch ON (II): pulses

* 8: 2002-2006 M/T models
* 3: CVT model

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Fig. 27: Identifying ECM Inputs And Outputs Connector D (16P) (2 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

VACUUM HOSE ROUTING

2000-2005 M/T models

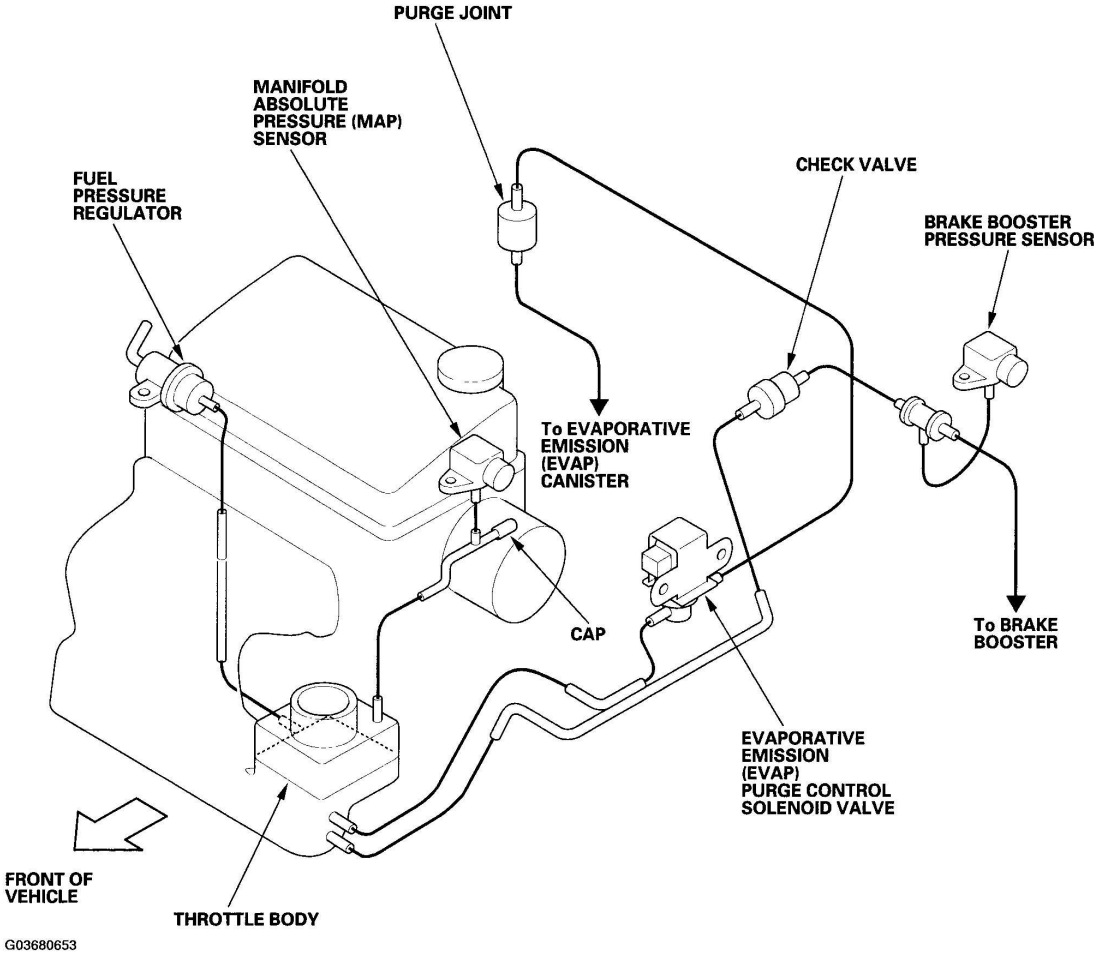


Fig. 28: Identifying Vacuum Hose Routing (2000-2005 M/T Models) Courtesy of AMERICAN HONDA MOTOR CO., INC.

CVT model, 2006 M/T model

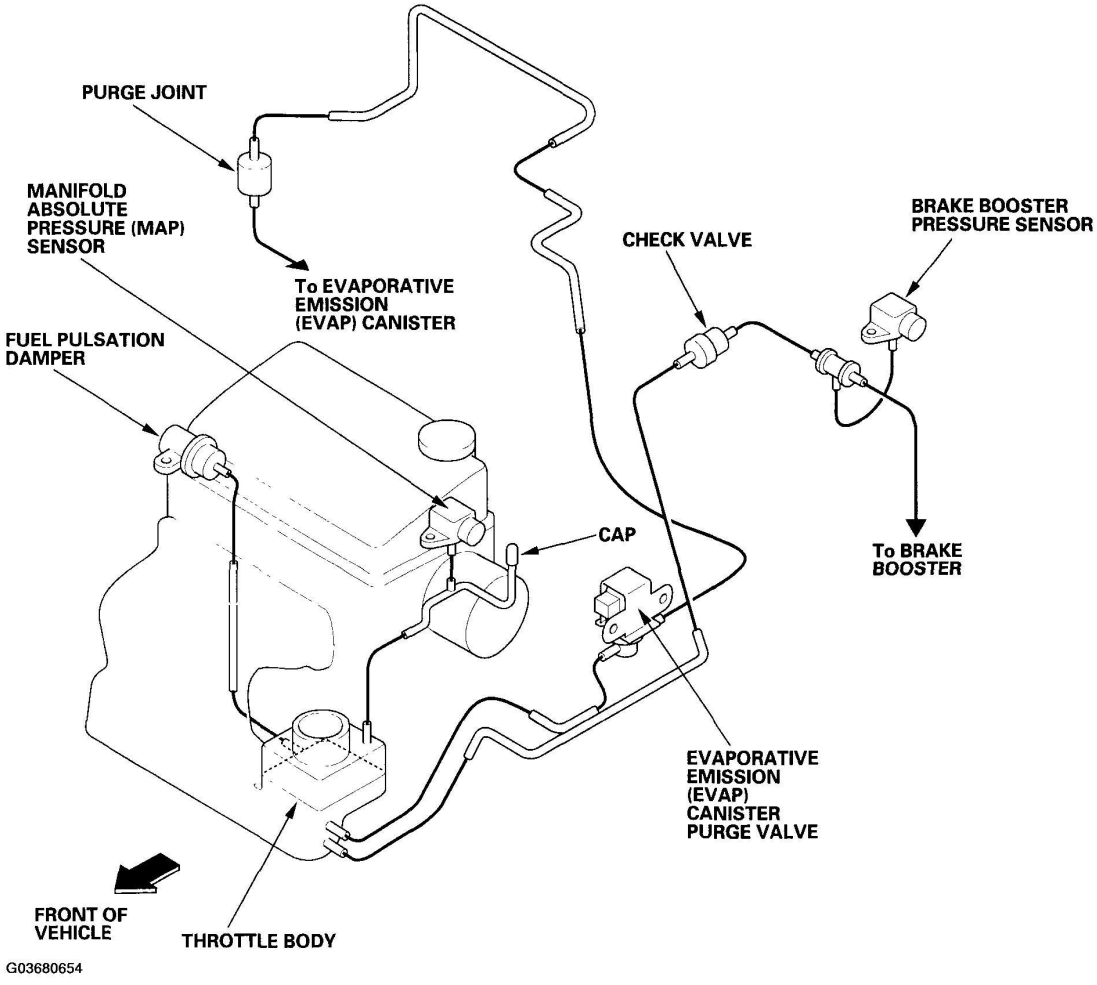
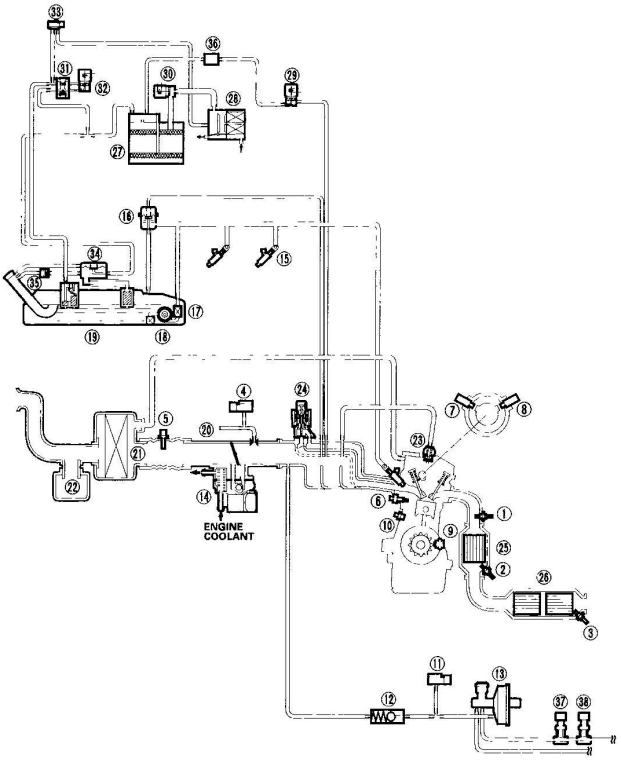


Fig. 29: Identifying Vacuum Hose Routing (CVT Model, 2006 M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VACUUM DISTRIBUTION

2000-2005 M/T models



① AIR FUEL RATIO SENSOR (A/F SENSOR) (SENSOR 1)
② SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) (SENSOR 2)
③ THIRD HEATED OXYGEN SENSOR (THIRD HO2S) (SENSOR 3) *1
④ MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR
⑤ INTAKE AIR TEMPERATURE (IAT) SENSOR
⑥ ENGINE COOLANT TEMPERATURE (ECT) SENSOR
⑦ CAMSHAFT POSITION (CMP) (TDC2) SENSOR B
⑧ CAMSHAFT POSITION (CMP) (TDC1) SENSOR A
⑨ CRANKSHAFT POSITION (CKP) SENSOR
⑩ KNOCK SENSOR (KS)
⑪ BRAKE BOOSTER PRESSURE SENSOR
⑫ CHECK VALVE
⑬ BRAKE BOOSTER
⑭ IDLE AIR CONTROL (IAC) VALVE
⑮ FUEL INJECTOR
⑯ FUEL PRESSURE REGULATOR
⑰ FUEL FILTER
⑱ FUEL PUMP (FP)
⑲ FUEL TANK
⑳ THROTTLE BODY (TB)
㉑ AIR CLEANER
㉒ RESONATOR
㉓ POSITIVE CRANKCASE VENTILATION (PCV) VALVE
㉔ EXHAUST GAS RECIRCULATION (EGR) VALVE
㉕ THREE WAY CATALYTIC CONVERTER (TWC)
㉖ NOX ADSORPTIVE THREE WAY CATALYST (NOX ADSORPTIVE TWC)
㉗ EVAPORATIVE EMISSION (EVAP) CANISTER
㉘ EVAPORATIVE EMISSION (EVAP) CANISTER FILTER
㉙ EVAPORATIVE EMISSION (EVAP) CANISTER PURGE VALVE
㉚ EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE
㉛ EVAPORATIVE EMISSION (EVAP) TWO WAY VALVE
㉜ EVAPORATIVE EMISSION (EVAP) BYPASS SOLENOID VALVE
㉝ FUEL TANK PRESSURE SENSOR
㉞ FUEL TANK VAPOR CONTROL VALVE
㉟ FUEL TANK VAPOR RECIRCULATION VALVE
㊱ PURGE JOINT
㊲ BRAKE FLUID PRESSURE SENSOR A*4
㊳ BRAKE FLUID PRESSURE SENSOR B*4

*1: 2002-2005 models
*4: 2005 model

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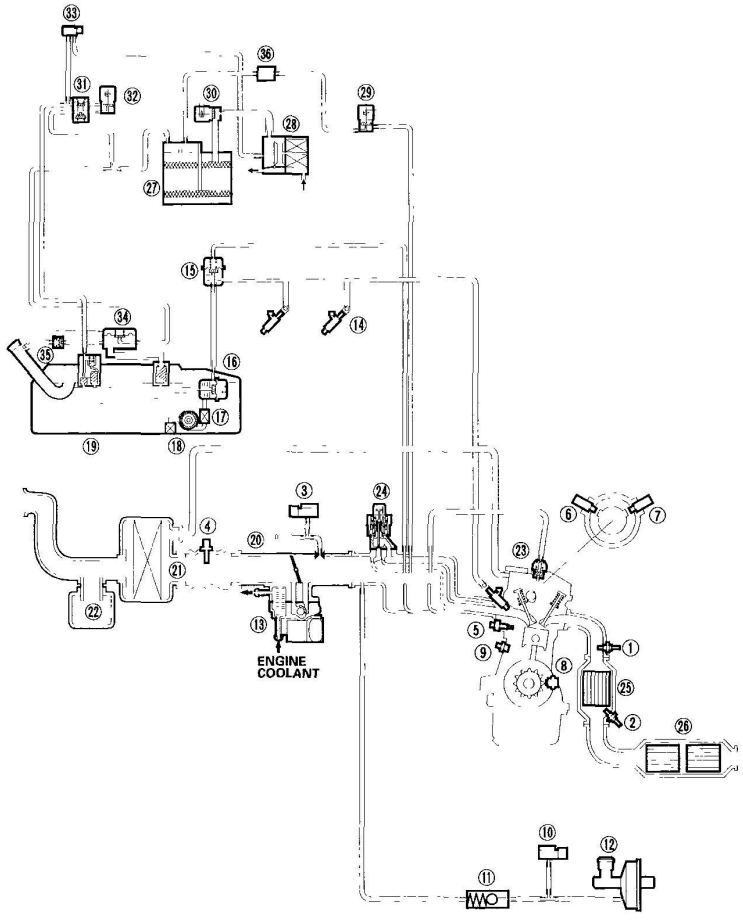
Fig. 30: Identifying Vacuum Distribution (2000-2005 M/T Models) Courtesy of AMERICAN HONDA MOTOR CO., INC.

2000-2005 CVT models



① AIR FUEL RATIO SENSOR (A/F SENSOR) (SENSOR 1)
② SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) (SENSOR 2)
③ MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR
④ INTAKE AIR TEMPERATURE (IAT) SENSOR
⑤ ENGINE COOLANT TEMPERATURE (ECT) SENSOR
⑥ CAMSHAFT POSITION (CMP) (TDC2) SENSOR B
⑦ CAMSHAFT POSITION (CMP) (TDC1) SENSOR A
⑧ CRANKSHAFT POSITION (CKP) SENSOR
⑨ KNOCK SENSOR (KS)
⑩ BRAKE BOOSTER PRESSURE SENSOR
⑪ CHECK VALVE
⑫ BRAKE BOOSTER
⑬ IDLE AIR CONTROL (IAC) VALVE
⑭ FUEL INJECTOR
⑮ FUEL PULSATION DAMPER
⑯ FUEL PRESSURE REGULATOR
⑰ FUEL FILTER
⑱ FUEL PUMP (FP)
⑲ FUEL TANK
⑳ THROTTLE BODY (TB)
㉑ AIR CLEANER
㉒ RESONATOR
㉓ POSITIVE CRANKCASE VENTILATION (PCV) VALVE
㉔ EXHAUST GAS RECIRCULATION (EGR) VALVE
㉕ THREE WAY CATALYTIC CONVERTER (TWC)
㉖ NOX ADSORPTIVE THREE WAY CATALYST (NOX ADSORPTIVE TWC)
㉗ EVAPORATIVE EMISSION (EVAP) CANISTER
㉘ EVAPORATIVE EMISSION (EVAP) CANISTER FILTER
㉙ EVAPORATIVE EMISSION (EVAP) CANISTER PURGE VALVE
㉚ EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE
㉛ EVAPORATIVE EMISSION (EVAP) TWO WAY VALVE
㉜ EVAPORATIVE EMISSION (EVAP) BYPASS SOLENOID VALVE
㉝ FUEL TANK PRESSURE SENSOR
㉞ FUEL TANK VAPOR CONTROL VALVE
㉟ FUEL TANK VAPOR RECIRCULATION VALVE
㊱ PURGE JOINT

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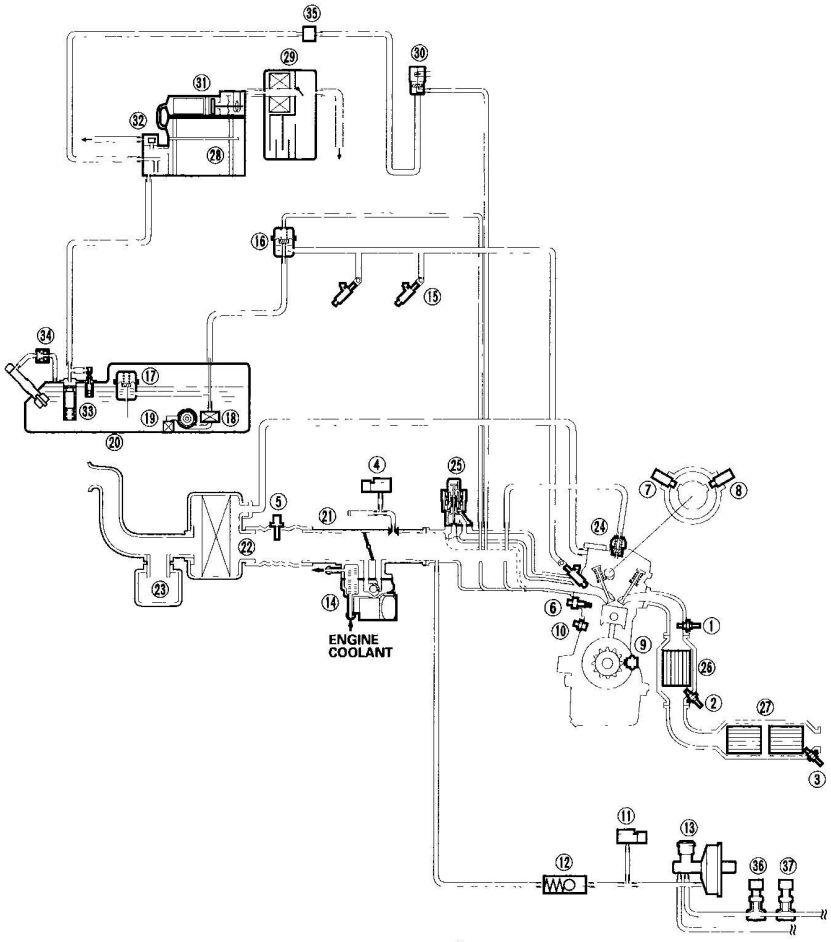
Fig. 31: Identifying Vacuum Distribution (2000-2005 CVT Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006 M/T models



① AIR FUEL RATIO SENSOR (A/F SENSOR) (SENSOR 1)
② SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) (SENSOR 2)
③ THIRD HEATED OXYGEN SENSOR (THIRD HO2S) (SENSOR 3)
④ MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR
⑤ INTAKE AIR TEMPERATURE (IAT) SENSOR
⑥ ENGINE COOLANT TEMPERATURE (ECT) SENSOR
⑦ CAMSHAFT POSITION (CMP) (TDC2) SENSOR B
⑧ CAMSHAFT POSITION (CMP) (TDC1) SENSOR A
⑨ CRANKSHAFT POSITION (CKP) SENSOR
⑩ KNOCK SENSOR (KS)
⑪ BRAKE BOOSTER PRESSURE SENSOR
⑫ CHECK VALVE
⑬ BRAKE BOOSTER
⑭ IDLE AIR CONTROL (IAC) VALVE
⑮ FUEL INJECTOR
⑯ FUEL PULSATION DAMPER
⑰ FUEL PRESSURE REGULATOR
⑱ FUEL FILTER
⑲ FUEL PUMP (FP)
⑳ FUEL TANK
㉑ THROTTLE BODY (TB)
㉒ AIR CLEANER
㉓ RESONATOR
㉔ POSITIVE CRANKCASE VENTILATION (PCV) VALVE
㉕ EXHAUST GAS RECIRCULATION (EGR) VALVE
㉖ THREE WAY CATALYTIC CONVERTER (TWC)
㉗ NOX ADSORPTIVE THREE WAY CATALYST (NOX ADSORPTIVE TWC)
㉘ EVAPORATIVE EMISSION (EVAP) CANISTER
㉙ EVAPORATIVE EMISSION (EVAP) CANISTER FILTER
㉚ EVAPORATIVE EMISSION (EVAP) CANISTER PURGE VALVE
㉛ EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE
㉜ FUEL TANK PRESSURE SENSOR
㉝ FUEL TANK VAPOR CONTROL VALVE
㉞ FUEL TANK VAPOR RECIRCULATION VALVE
㉟ PURGE JOINT
㊱ BRAKE FLUID PRESSURE SENSOR A
㊲ BRAKE FLUID PRESSURE SENSOR B

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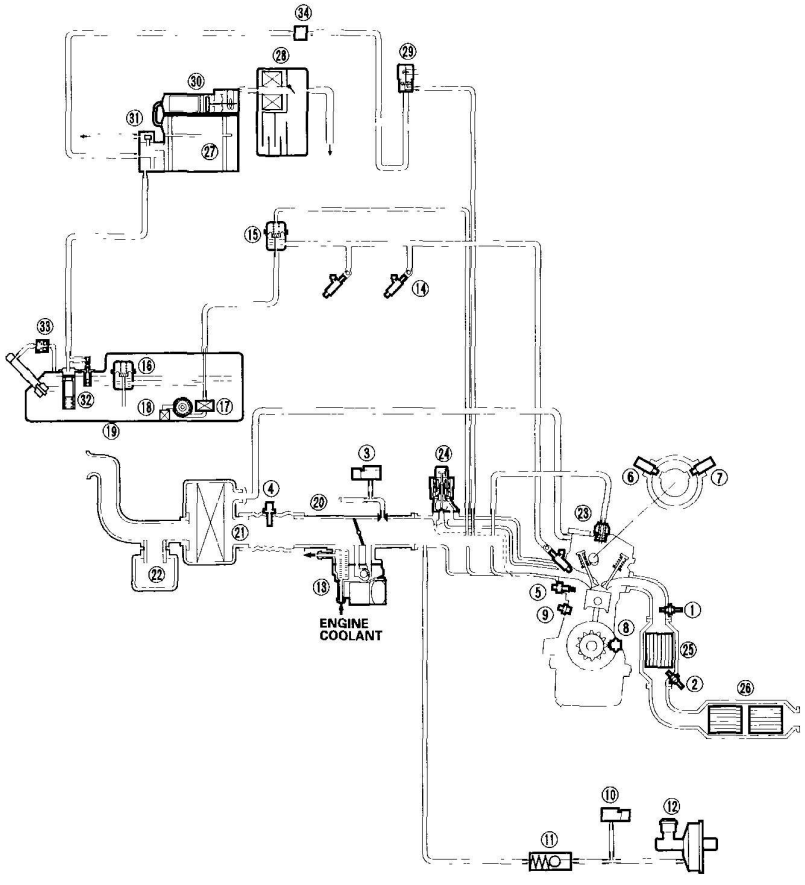
Fig. 32: Identifying Vacuum Distribution (2006 M/T Models) Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006 CVT model



① AIR FUEL RATIO SENSOR (A/F SENSOR) (SENSOR 1)
② SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) (SENSOR 2)
③ MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR
④ INTAKE AIR TEMPERATURE (IAT) SENSOR
⑤ ENGINE COOLANT TEMPERATURE (ECT) SENSOR
⑥ CAMSHAFT POSITION (CMP) (TDC2) SENSOR B
⑦ CAMSHAFT POSITION (CMP) (TDC1) SENSOR A
⑧ CRANKSHAFT POSITION (CKP) SENSOR
⑨ KNOCK SENSOR (KS)
⑩ BRAKE BOOSTER PRESSURE SENSOR
⑪ CHECK VALVE
⑫ BRAKE BOOSTER
⑬ IDLE AIR CONTROL (IAC) VALVE
⑭ FUEL INJECTOR
⑮ FUEL PULSATION DAMPER
⑯ FUEL PRESSURE REGULATOR
⑰ FUEL FILTER
⑱ FUEL PUMP (FP)
⑲ FUEL TANK
⑳ THROTTLE BODY (TB)
㉑ AIR CLEANER
㉒ RESONATOR
㉓ POSITIVE CRANKCASE VENTILATION (PCV) VALVE
㉔ EXHAUST GAS RECIRCULATION (EGR) VALVE
㉕ THREE WAY CATALYTIC CONVERTER (TWC)
㉖ NOX ADSORPTIVE THREE WAY CATALYST (NOX ADSORPTIVE TWC)
㉗ EVAPORATIVE EMISSION (EVAP) CANISTER
㉘ EVAPORATIVE EMISSION (EVAP) CANISTER FILTER
㉙ EVAPORATIVE EMISSION (EVAP) CANISTER PURGE VALVE
㉚ EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE
㉛ FUEL TANK PRESSURE SENSOR
㉜ FUEL TANK VAPOR CONTROL VALVE
㉝ FUEL TANK VAPOR RECIRCULATION VALVE
㉞ PURGE JOINT

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Fig. 33: Identifying Vacuum Distribution (2006 CVT Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PGM-FI SYSTEM

The programmed fuel injection (PGM-FI) system is a sequential multiport fuel injection system.

Air Conditioning (A/C) Compressor Clutch Relay

When the ECM receives a demand for cooling from the A/C system, it delays the compressor from being energized, and enriches the mixture to assure smooth transition to the A/C mode.

Air Fuel Ratio (A/F) Sensor

The A/F sensor operates over a wide air/fuel range. The A/F sensor is installed in the exhaust manifold, and sends signals to the ECM which varies the duration of fuel injection accordingly.

2000-2001 M/T models

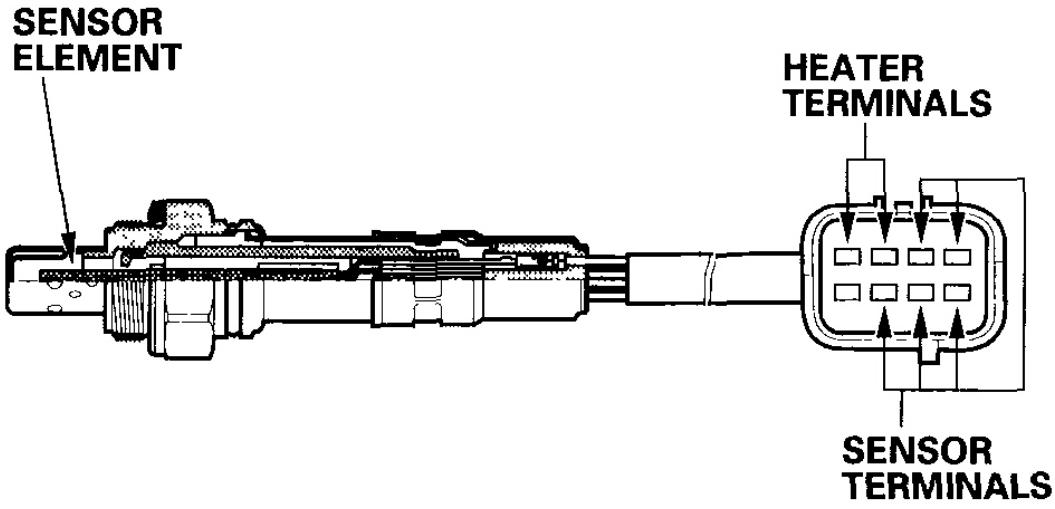

Fig. 34: Identifying Sensor Element 2000-2001 M/T Models
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2002-2006 M/T models and CVT model

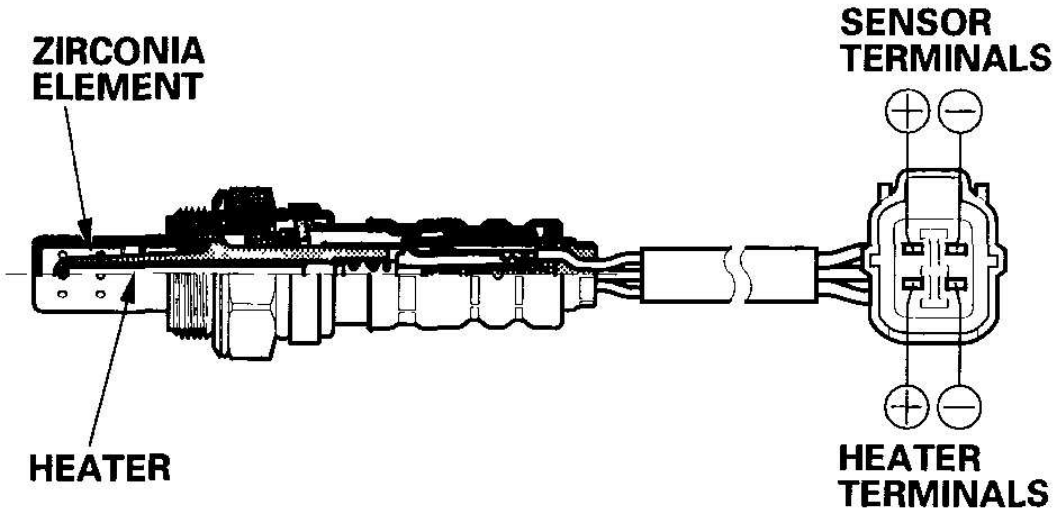

Fig. 35: Identifying Zirconia Element 2002-2006 M/T Models And CVT Model
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Barometric Pressure (BARO) Sensor

The BARO sensor is inside the ECM. It converts atmospheric pressure into a voltage signal that modifies the basic duration of the fuel injection discharge.

Engine Coolant Temperature (ECT) Sensor

The ECT sensor is a temperature dependent resistor (thermistor). The resistance of the thermistor decreases as the engine coolant temperature increases.

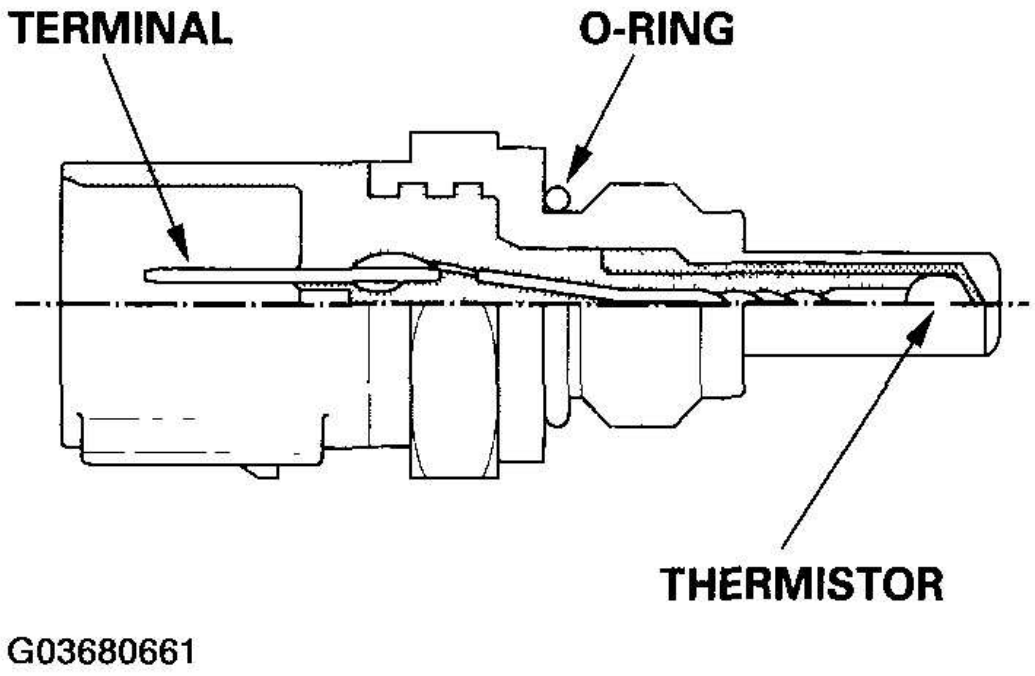

Fig. 36: Identifying Engine Coolant Temperature Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Ignition Timing Control

The ECM contains the memory for basic ignition timing at various engine speeds and manifold absolute pressures. It also adjusts the timing according to engine coolant temperature.

Injector Timing and Duration

The ECM contains the memory for basic discharge duration at various engine speeds and manifold pressures. The basic discharge duration, after being read out from the memory, is further modified by signals sent from various sensors to obtains the final discharge duration.

By monitoring long term fuel trim, the ECM detects long term malfunctions in the fuel system and set a diagnostic trouble code (DTC).

Intake Air Temperature (IAT) Sensor

The IAT sensor is a temperature dependent resistor (thermistor). The resistance of the thermistor decreases as the intake air temperature increases.

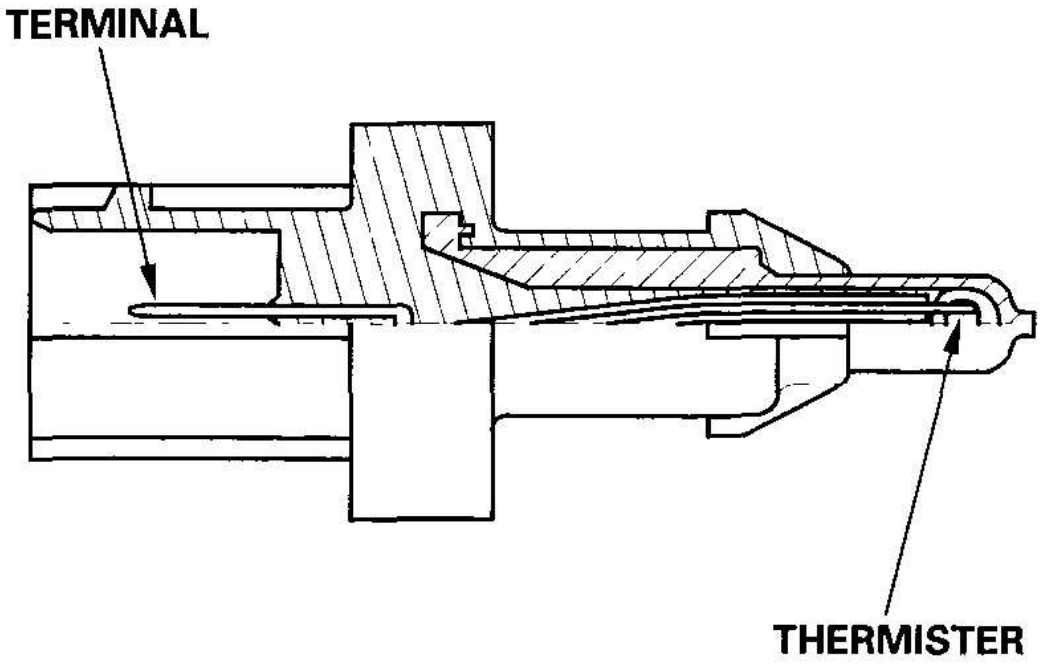

Fig. 37: Identifying Intake Air Temperature Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Knock Sensor

The knock control system adjusts the ignition timing to minimize knock using signals from the knock sensor.

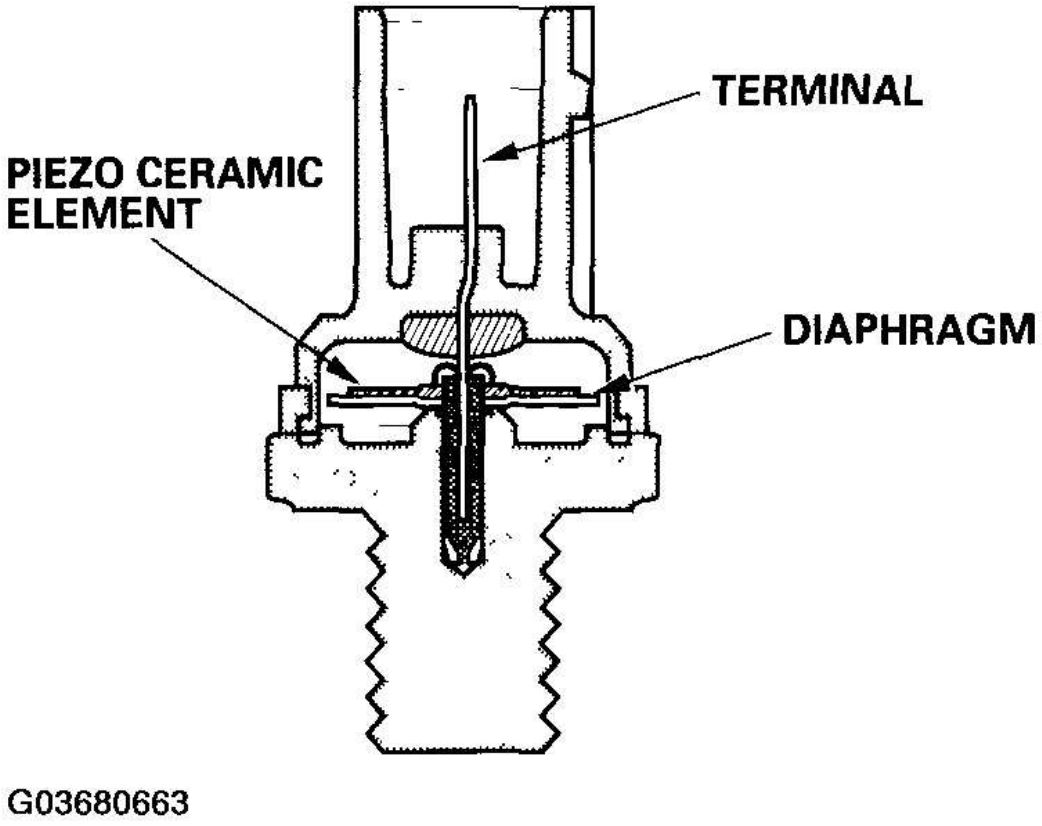

Fig. 38: Identifying Knock Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Malfunction Indicator Lamp (MIL) Indication (In relation to Readiness Codes)

The vehicle has certain "readiness codes" that are part of the on-board diagnostics for the emissions systems. If the vehicle's battery has been disconnected or gone dead, if the DTCs have been cleared, or if the ECM has been reset, these codes are reset. In some states, part of the emissions testing is to make sure these codes are set to complete. If all of them are not set to complete, the vehicle may fail the test, or the test cannot be finished.

To check if the readiness codes are set to complete, turn the ignition switch ON (II), but do not start the engine. The MIL will come of for 15-20 seconds. If it then goes off, the readiness codes are complete. If it flashes several times, one or more

readiness codes are not set to complete. To set each code, drive the vehicle or run the engine as described in the procedures (see **HOW TO SET READINESS CODES**).

Manifold Absolute Pressure (MAP) Sensor

The MAP sensor converts manifold absolute pressure into electrical signals to the ECM.

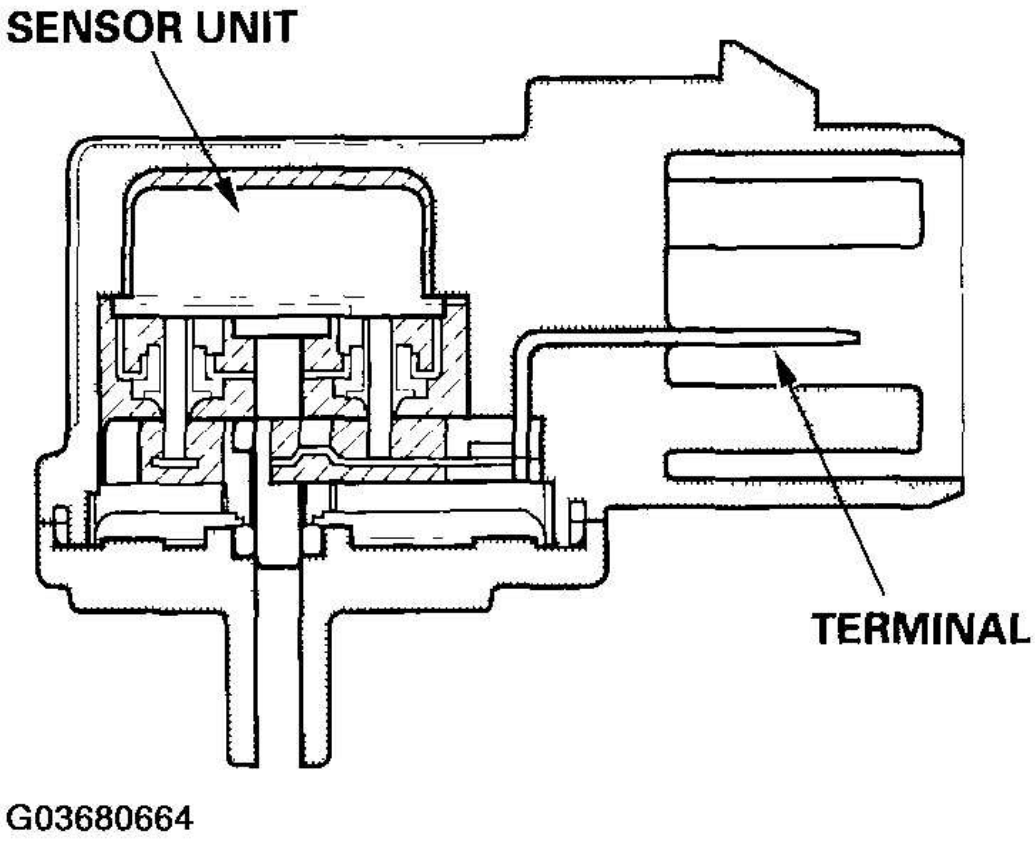

Fig. 39: Identifying Manifold Absolute Pressure Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Secondary Heated Oxygen Sensor (Secondary HO2S)

The secondary HO2S detects the oxygen content in the exhaust gas downstream of

the three way catalytic converter (TWC) and sends signals to the ECM which varies the duration of fuel injection accordingly. To stabilize its output, the sensor has an internal heater. The ECM compares the HO2S output with the A/F sensor output to determine catalyst efficiency. The secondary HO2S is installed behind the TWC.

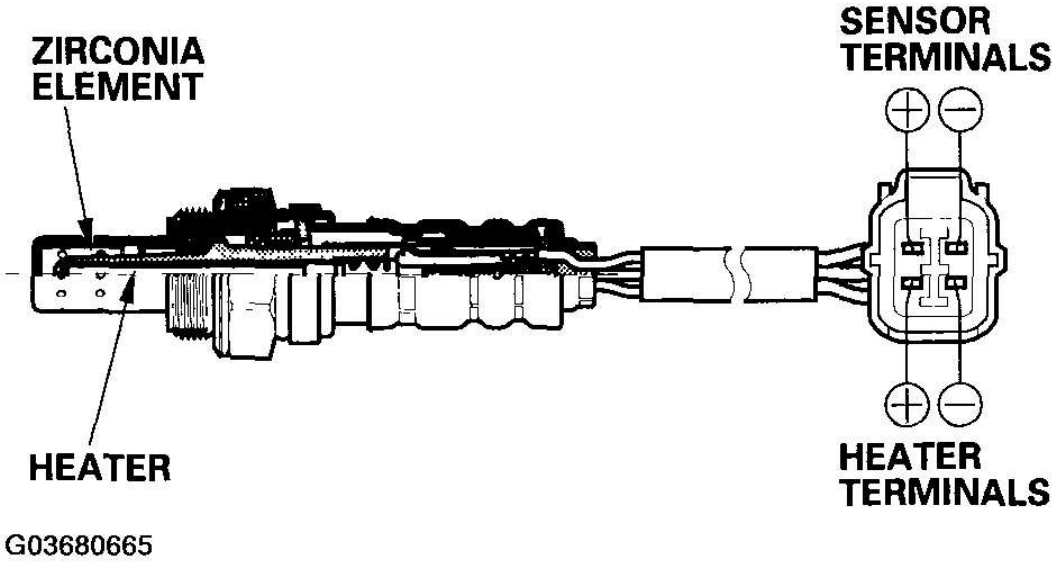

Fig. 40: Identifying Secondary Heated Oxygen Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Starting Control

When the engine is started, the ECM provides a rich mixture by increasing injector duration.

Throttle Position (TP) Sensor

The TP sensor is a potentiometer connected to the throttle valve shaft. As the throttle position changes, the sensor varies the signal voltage to the ECM. The TP sensor is not replaceable apart from the throttle body.

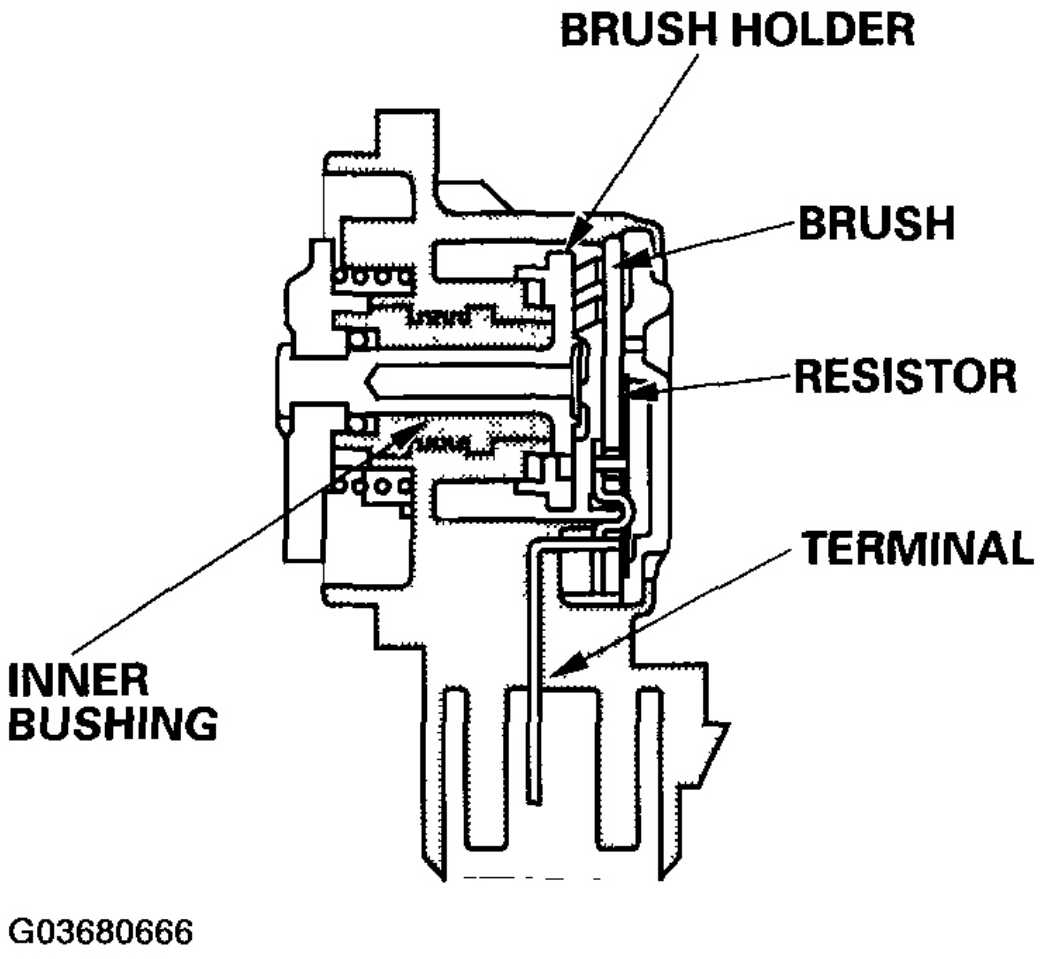

Fig. 41: Identifying Throttle Position Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Third Heated Oxygen Sensor (Third HO2S) (2002-2006 M/T models)

The third HO2S detects the oxygen content in the exhaust gas downstream of the NOx adsorptive three way catalytic converter (NOx Adsorptive TWC) and sends signals to the ECM which varies the duration of fuel injection accordingly. To stabilize its output, the sensor has an internal heater. The third HO2S is installed behind the NOx adsorptive TWC.

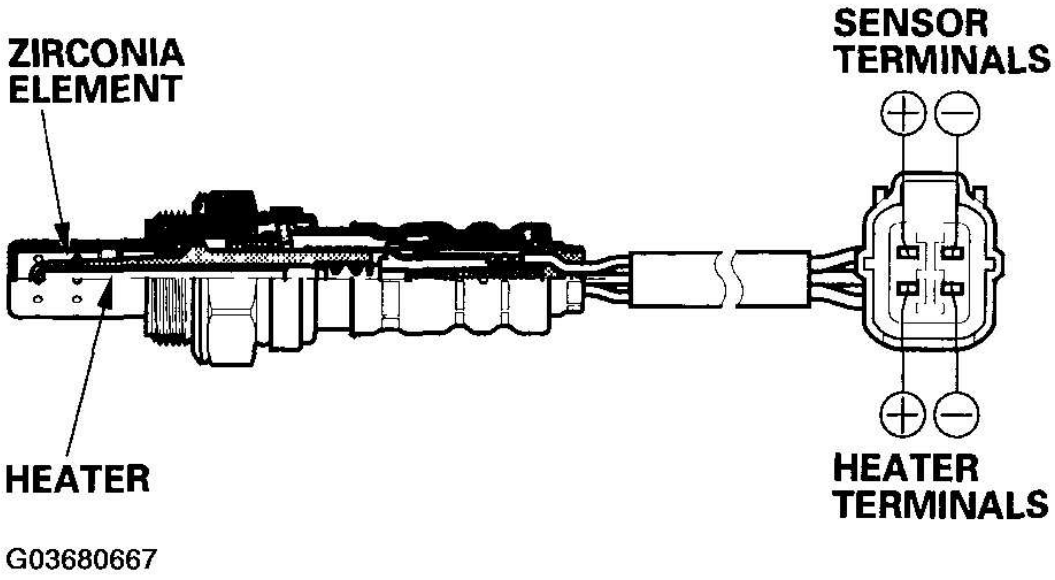

Fig. 42: Identifying Third Heated Oxygen Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Camshaft Position (CMP) A and B (Top Dead Center (TDC) 1 and 2), and Crankshaft Position (CKP) Sensors

The CMP A (TDC 1) and CMP B (TDC 2) sensors detects the position of the No. 1 cylinder as a reference for sequential fuel injection to each cylinder. The CKP sensor detects engine speed and is used as one input to determine ignition timing and timing for fuel injection of each cylinder.

CMP SENSOR A and B (TDC SENSOR 1 and 2)

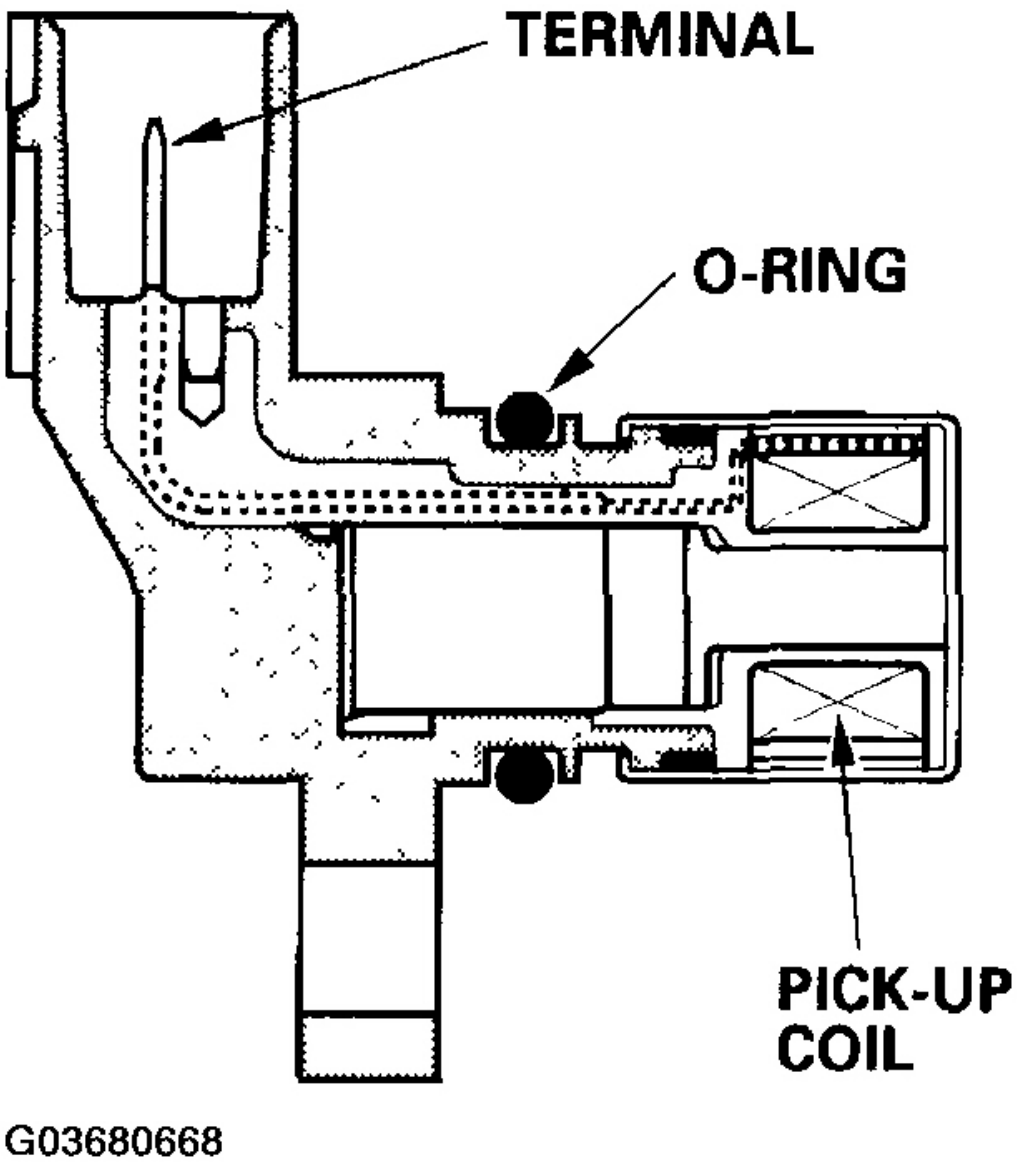

Fig. 43: Identifying Camshaft Position Sensor (TDC Sensor 1 And 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

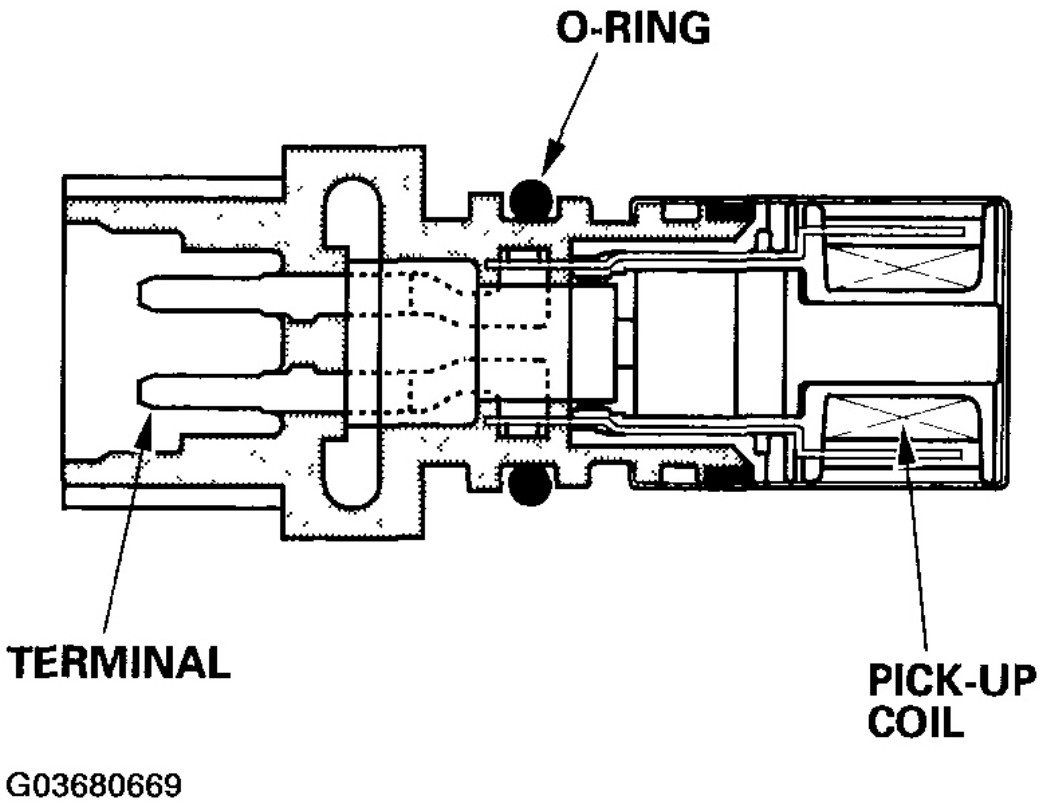

Fig. 44: Identifying Crankshaft Position Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Vehicle Speed Sensor (VSS)

The VSS is driven by the differential. It generates a pulsed signal from an input of 5 volts. The number of pulses per minute increases/decreases with the speed of the vehicle.

IDLE CONTROL SYSTEM

When the engine is cold, the A/C compressor is on, the transmission is in gear, or the brake pedal is pressed, the ECM controls current to the idle air control (IAC) valve to maintain the correct idle speed. Refer to the system to see diagram the functional layout of the system.

Brake Pedal Position Switch

The brake pedal position switch signals the ECM when the brake pedal is pressed.

Clutch Pedal Position Switch (M/T model)

The clutch pedal position switch signals the ECM when the clutch pedal is pressed.

Engine Start Switch

The engine start switch signals the ECM when the engine is cranking.

IAC (Idle Air Control) Valve

To maintain the proper idle speed, the IAC valve changes the amount of air bypassing the throttle body in response to an electrical signal from the ECM.

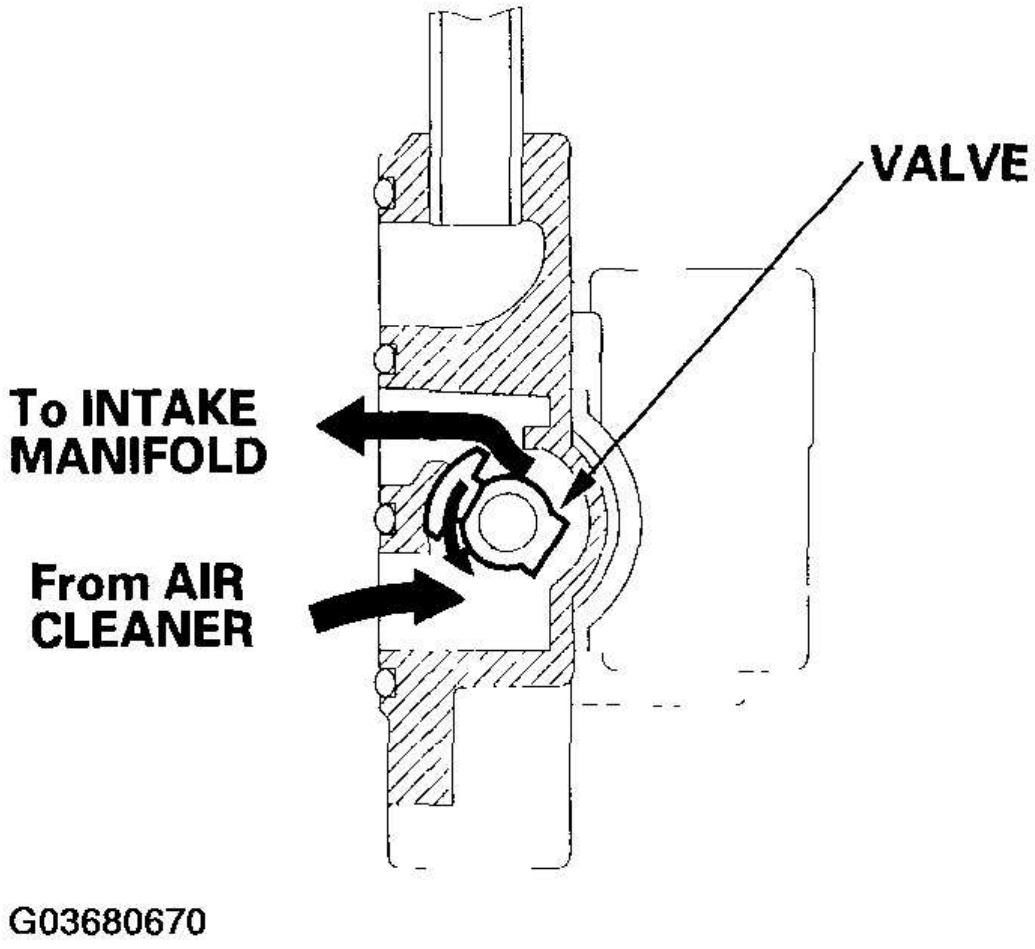

Fig. 45: Identifying Idle Air Control Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Idle Stop Switch (CVT model)

The idle stop switch signals the ECM when the brake pedal is pressed.

Neutral Position Switch (M/T model)

The neutral position switch signals the ECM when the transmission is shifted out of neutral.

Back-up Light Switch (M/T model)

The back-up light switch signals the ECM when the transmission is shifted into reverse.

FUEL SUPPLY SYSTEM

Fuel Cutoff Control

During deceleration with the throttle valve closed, current to the fuel injectors is cut off to improve fuel economy at speeds over 1,050 RPM (1,250 RPM)*. Fuel cutoff control also occurs when the engine speed exceeds 6,000 RPM, regardless of the position of the throttle valve, to protect the engine from over-revving.

*: CVT model

Fuel injector

The fuel injectors are a solenoid-actuated constant-stroke, pintleless-type consisting of a solenoid, plunger needle valve, and housing. When current is applied to the solenoid coil, the valve lifts up, and pressurized fuel is injected. Because the needle valve lift and the fuel pressure are constant, the injection quantity is determined by the length of time that the valve is open (the duration the current is supplied to the solenoid coil). The fuel injector is sealed by an O-ring and seal ring at the top and bottom. These seals also reduce operating noise.

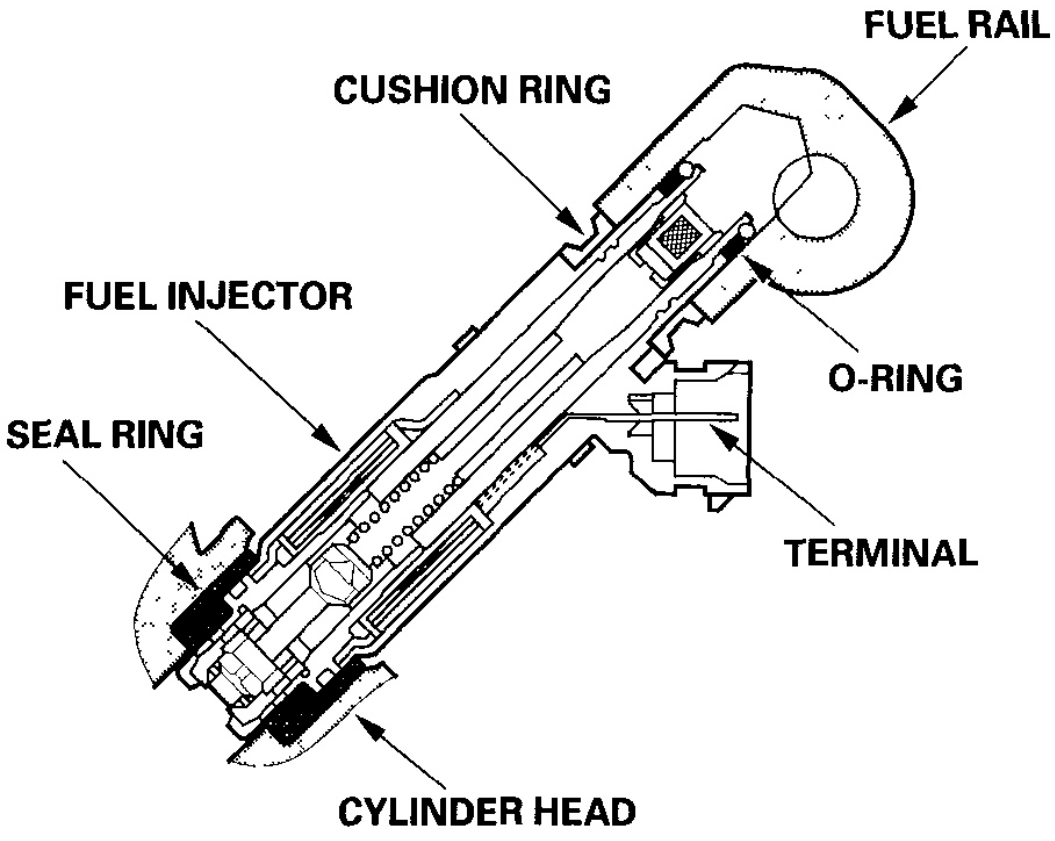

Fig. 46: Identifying Components Fuel Injector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fuel Pump Control

When the ignition is turned on, the ECM grounds PGM-FI main relay (FUEL PUMP) which feeds current to the fuel pump for 2 seconds to pressurize the fuel system. With the engine running, the ECM grounds PGM-FI main relay (FUEL PUMP) and feeds current to the fuel pump. When the engine is not running and the ignition is on, the ECM cuts ground to PGM-FI main relay (FUEL PUMP) which cuts current to the fuel pump.

PGM-FI Main Relay

The PGM-FI main relay contains two separate relays. One is energized whenever

the ignition is ON (II) to supply battery voltage to the ECM, power to the fuel injectors, and power for the PGM-FI main relay (FUEL PUMP). The PGM-FI main relay (FUEL PUMP) is energized to supply power to the fuel pump for 2 seconds when the ignition is switched ON (II), and when the engine is running.

INTAKE AIR SYSTEM

Refer to the system diagram to see the functional layout of the system .

Throttle Body

The throttle body is a single-barrel down draft type. The lower portion of the throttle valve is heated by engine coolant from the cylinder head.

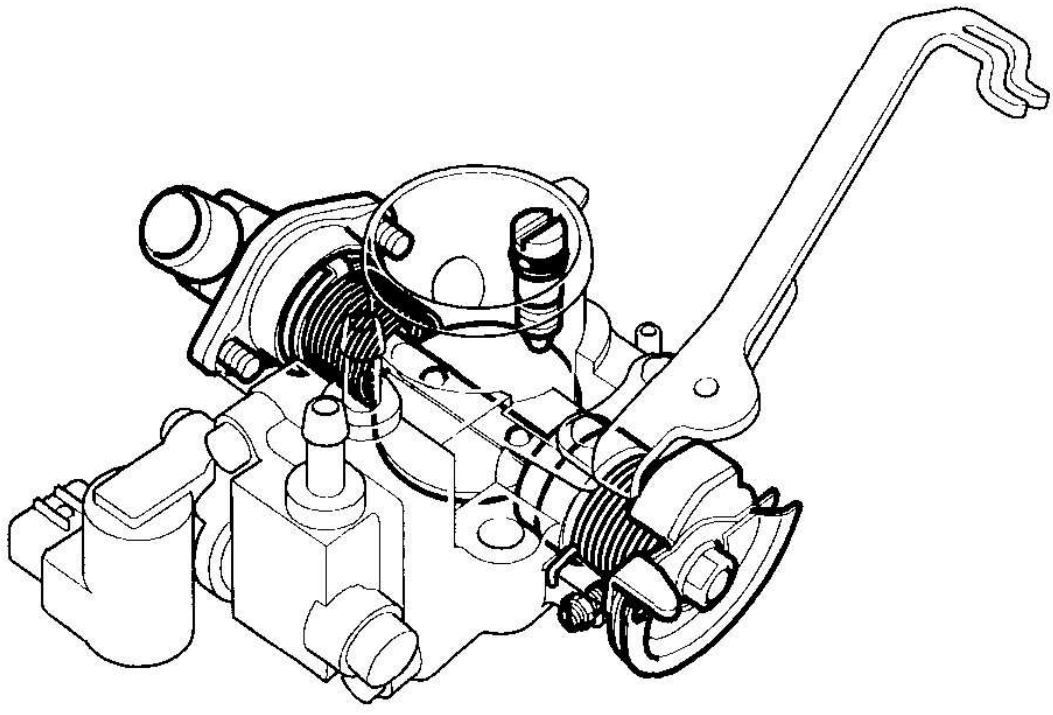

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Fig. 47: Identifying Throttle Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CATALYTIC CONVERTER SYSTEM

NOx Adsorptive Three Way Catalyst (NOx Adsorptive TWC)

The NOx adsorptive TWC absorbs NOx created during lean burn running when the oxygen concentration is high. Then the engine is put into a richer running mode where the oxygen concentration and NOx levels are low, and the absorbed NOx is released, keeping the average NOx emissions low.

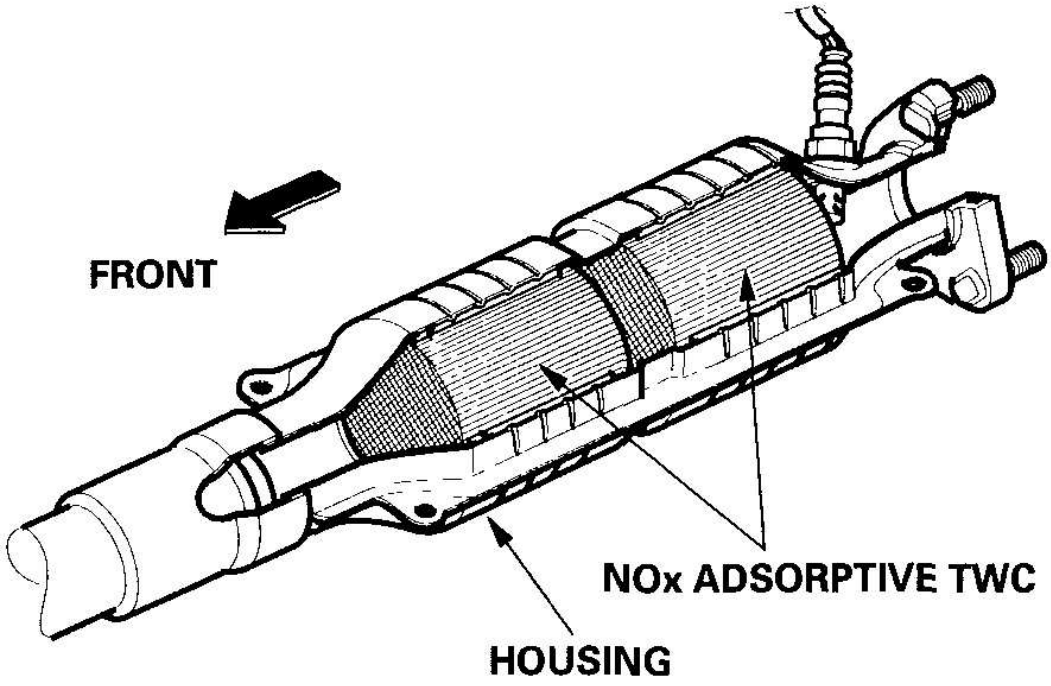


Fig. 48: Identifying Catalytic Converter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Three Way Catalytic Converter (TWC)

The TWC converts hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) in the exhaust gas to carbon dioxide (CO_2), nitrogen (N_2), and water vapor.

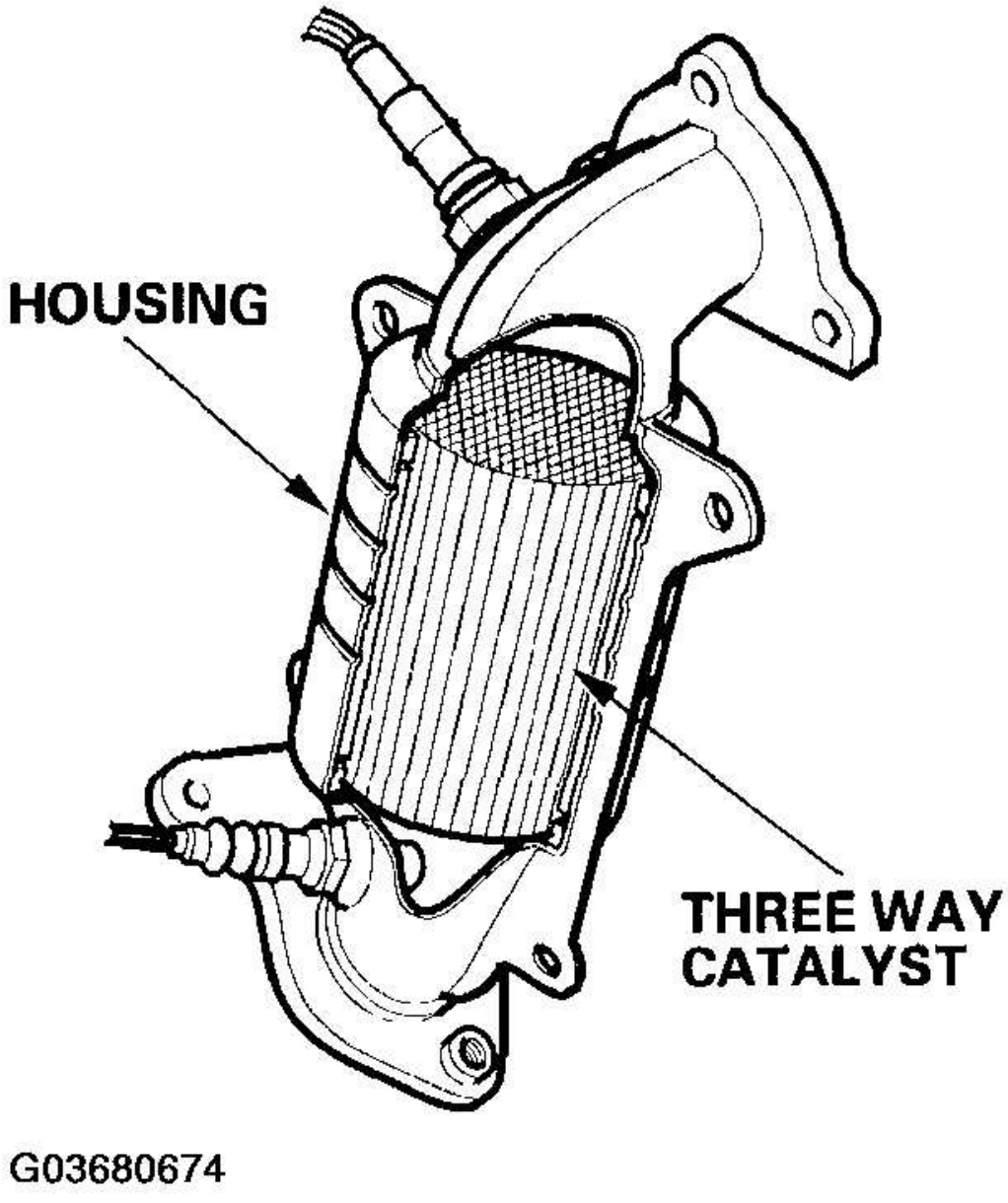


Fig. 49: Identifying Three Way Catalytic Converter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EXHAUST GAS RECIRCULATION (EGR) SYSTEM

Refer to the system diagram to see the functional layout of the system.

EGR Valve

The EGR valve lowers peak combustion temperatures and reduces oxides of nitrogen emissions (NOx) by recirculating exhaust gas through the intake manifold and into the combustion chambers.

Positive Crankcase Ventilation (PCV) System

The PCV valve prevents blow-by gasses from escaping into the atmosphere by venting them into the intake manifold.

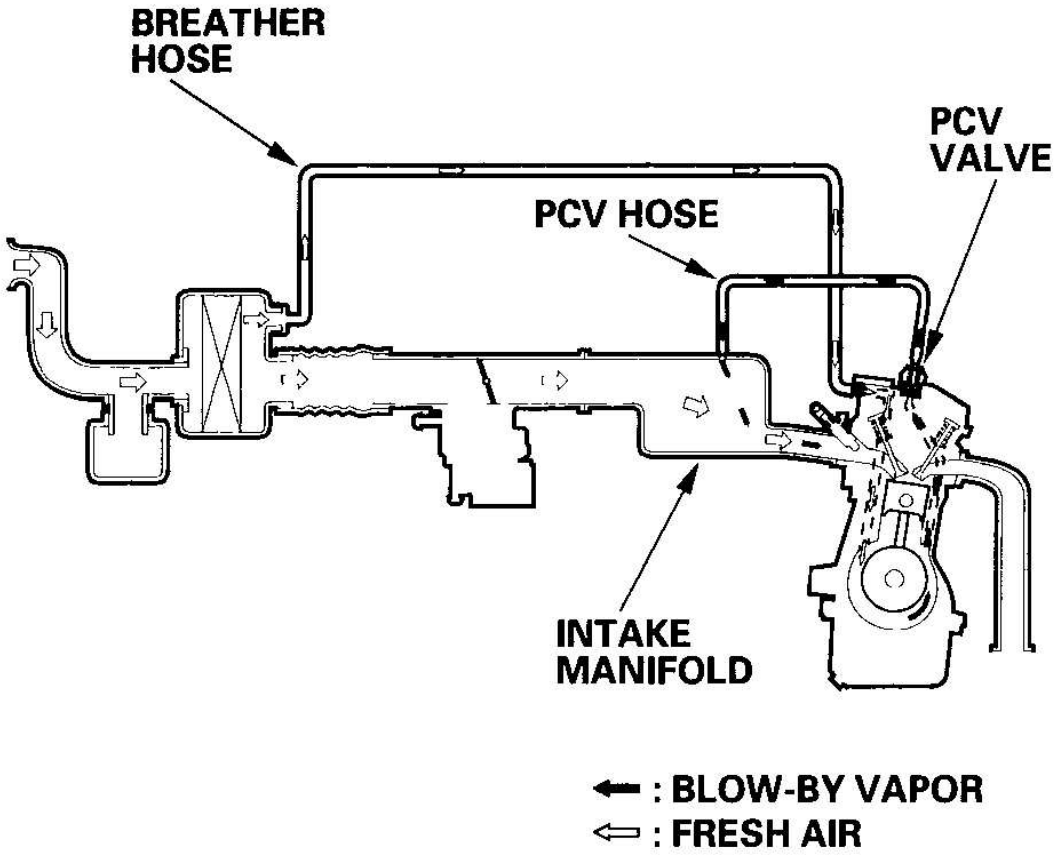


Fig. 50: Identifying Components Positive Crankcase Ventilation System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EVAPORATIVE EMISSION (EVAP) CONTROL SYSTEM

Refer to the system diagram to see the functional layout of the system.

EVAP Canister

The EVAP canister temporarily stores fuel vapor from the fuel tank until it can be purged from the EVAP canister into the engine and burned.

EVAP Canister Purge Valve

When the engine coolant temperature is below 149°F (65°C), the ECM turns off the EVAP canister purge valve which cuts vacuum to the EVAP canister.

Fuel Tank Pressure (FTP) Sensor

The FTP sensor converts fuel tank absolute pressure into an electrical input to the ECM during the EVAP leak check.

EVAP Two Way Valve and EVAP Bypass Solenoid Valve (2000-2005 models)

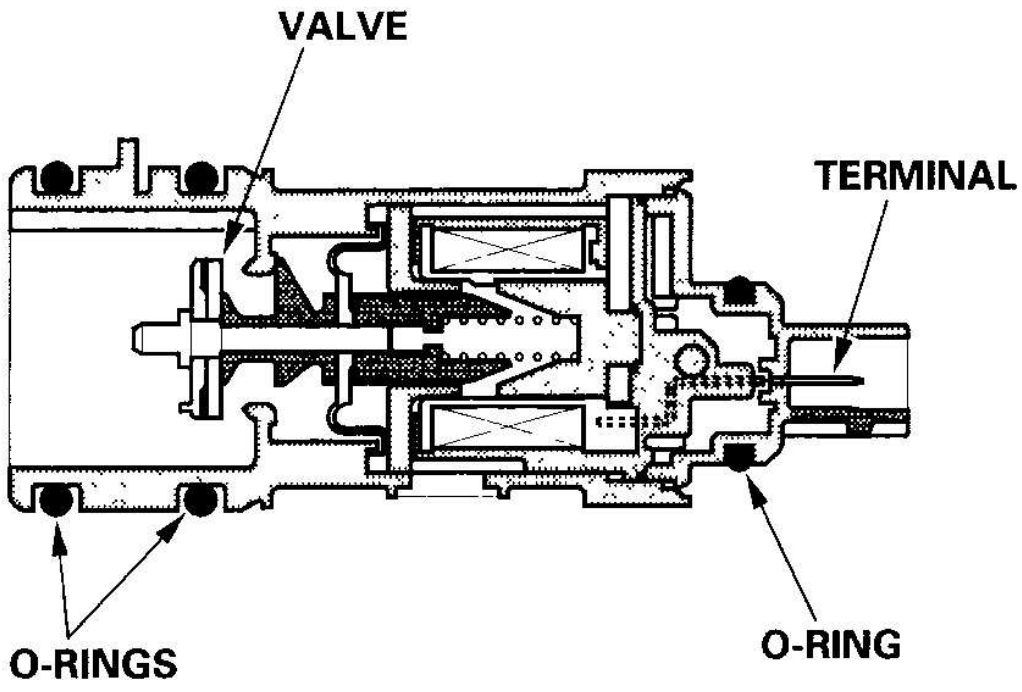
The EVAP two way valve is installed between the fuel tank and the EVAP canister.

The EVAP two way valve sends fuel vapor to the EVAP canister corresponding to the pressure inside the fuel tank and prevents excessive vacuum in the fuel tank by drawing in fresh air through the EVAP canister. The EVAP bypass solenoid valve opens to bypass the two way valve when doing the EVAP leak check.

EVAP Canister Vent Shut Valve

The EVAP canister vent shut valve is on the EVAP canister.

The EVAP canister vent shut valve controls the venting of the EVAP canister.



*: This illustration shows 2006 model.

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Fig. 51: Identifying EVAP Canister Vent Shut Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BRAKE BOOSTER PRESSURE SENSOR SYSTEM

The brake booster pressure sensor converts brake booster vacuum into an electrical input to the ECM. The ECM uses this signal to control the engine auto idle stop.

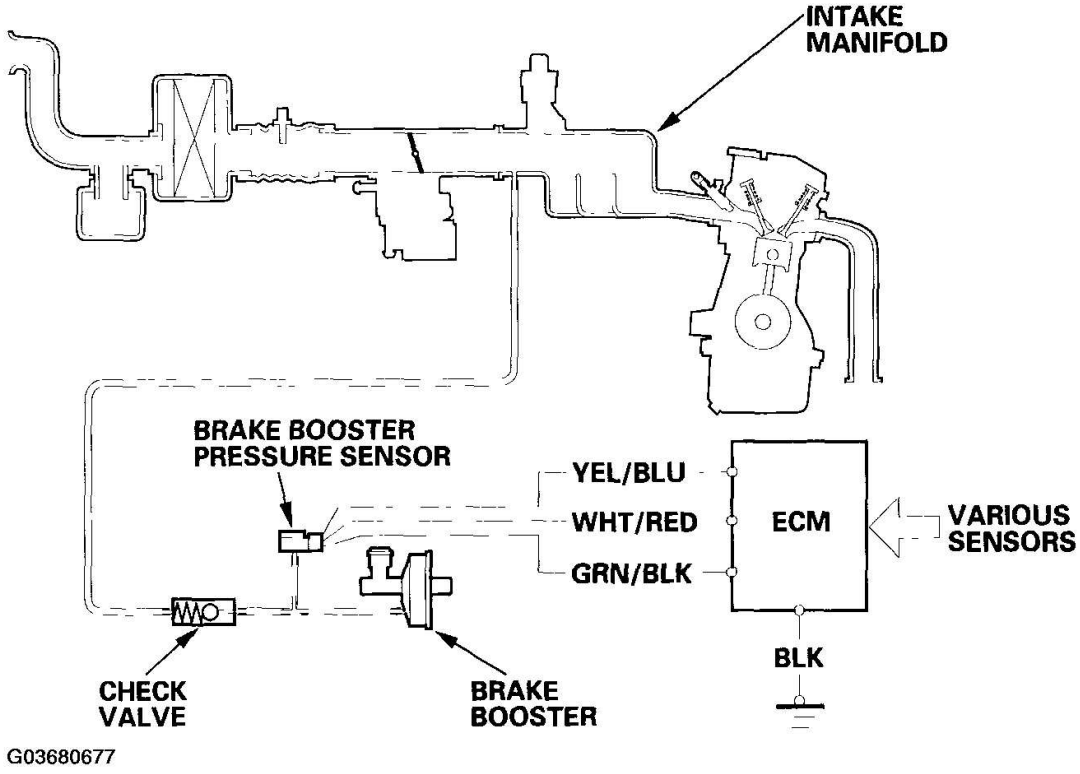


Fig. 52: Identifying Brake Booster Pressure Sensor System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BRAKE FLUID PRESSURE SENSOR SYSTEM (2005-2006 M/T MODELS)

The brake fluid pressure sensors convert brake fluid pressure into an electrical input to the ECM.

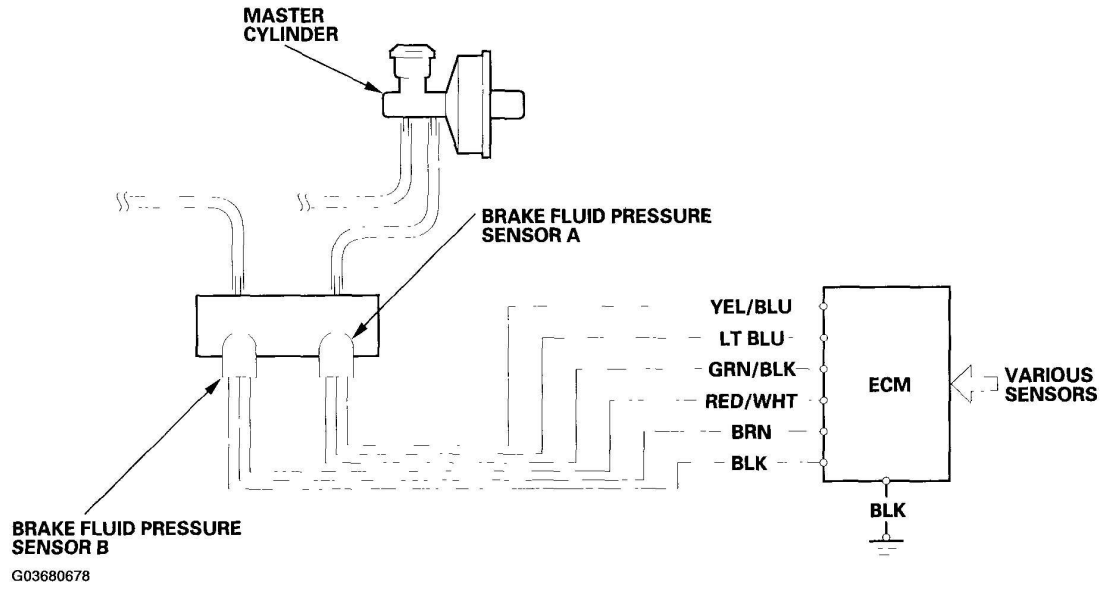


Fig. 53: Identifying Brake Fluid Pressure Sensor System Components (2005-2006 M/T Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

IDLE CONTROL SYSTEM DIAGRAM

The idle speed of idle air control by the idle air control (IAC) valve:

- After the engine starts, the IAC valve opens for a certain amount of time. The amount of air is increased to raise the idle speed.
- When the engine coolant temperature is low, the IAC valve is opened to obtain the proper fast idle speed. The amount of bypassed air is controlled in relation to engine coolant temperature.

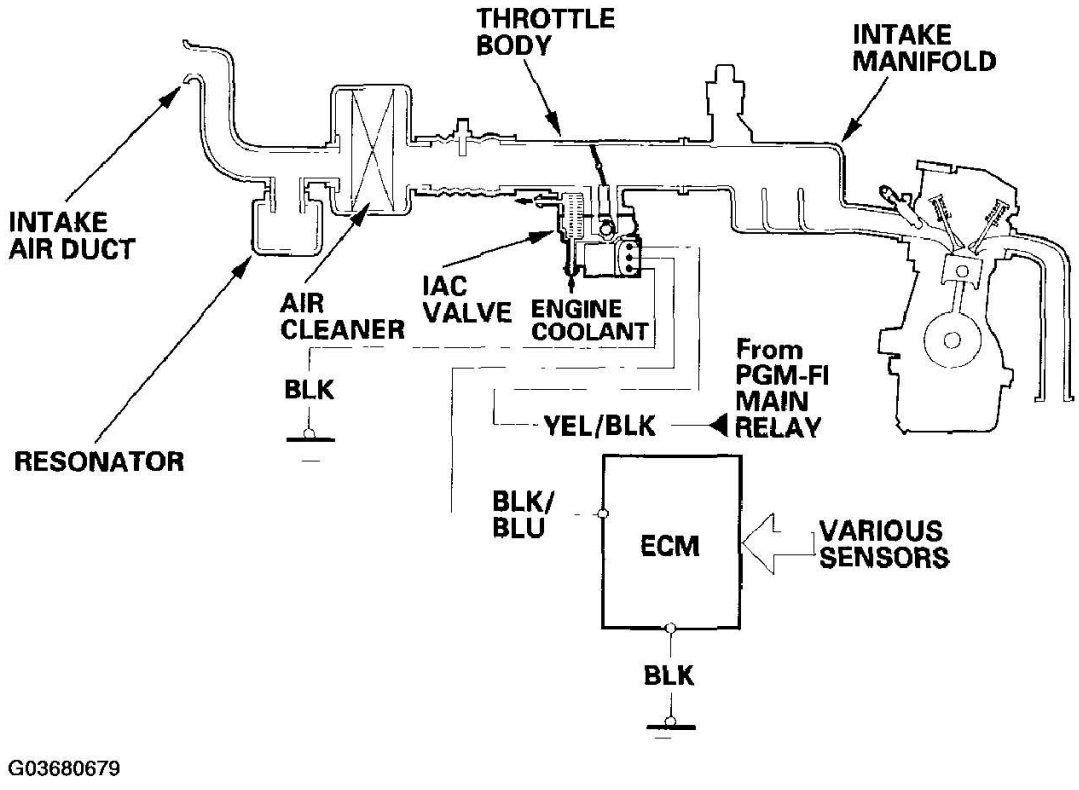


Fig. 54: Identifying Idle Control System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INTAKE AIR SYSTEM DIAGRAM

This system supplies air for engine needs. A resonator in the intake air duct provides additional silencing as air is drawn into the system.

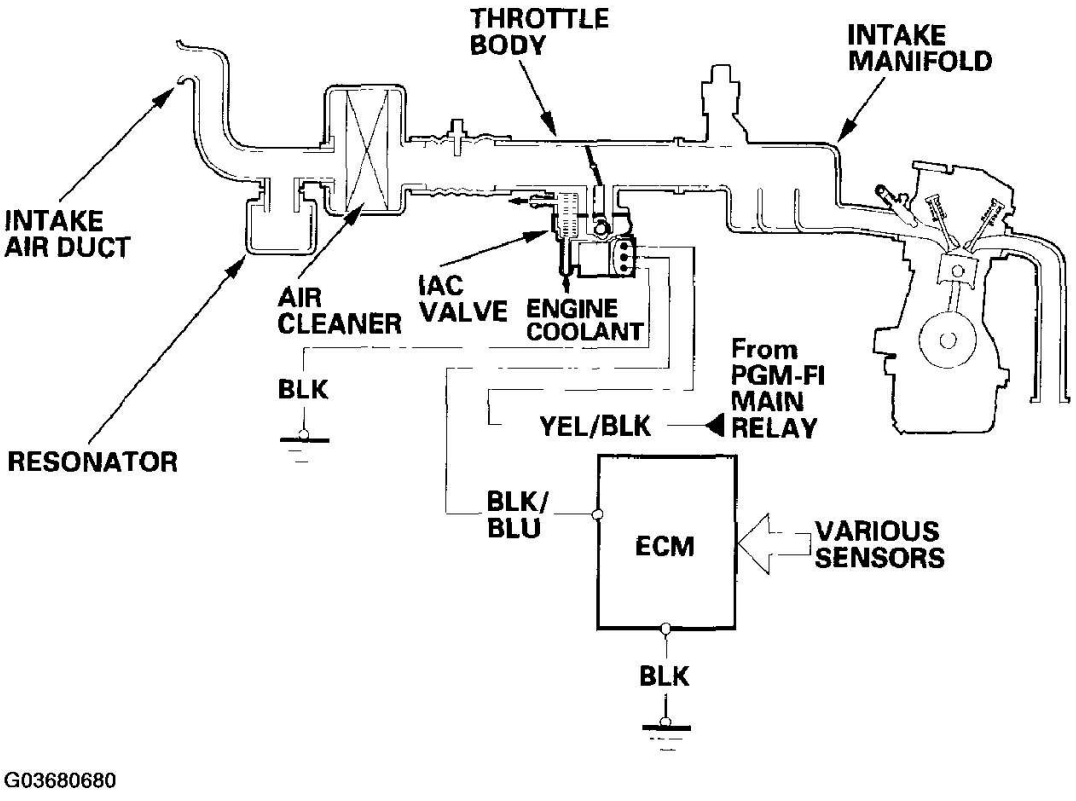


Fig. 55: Identifying Intake Air System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EXHAUST GAS RECIRCULATION (EGR) SYSTEM DIAGRAM

The EGR system reduces oxides of nitrogen (NOx) emissions by recirculating exhaust gas through the EGR valve and the intake manifold into the combustion chambers. The ECM memory includes the ideal EGR valve position for varying operating conditions.

The EGR valve position sensor detects the amount of EGR valve lift, and sends it to the ECM. The ECM then compares it with the ideal lift in its memory (based on signals sent from other sensors). If there is any difference between the two, the ECM cuts current to the EGR valve.

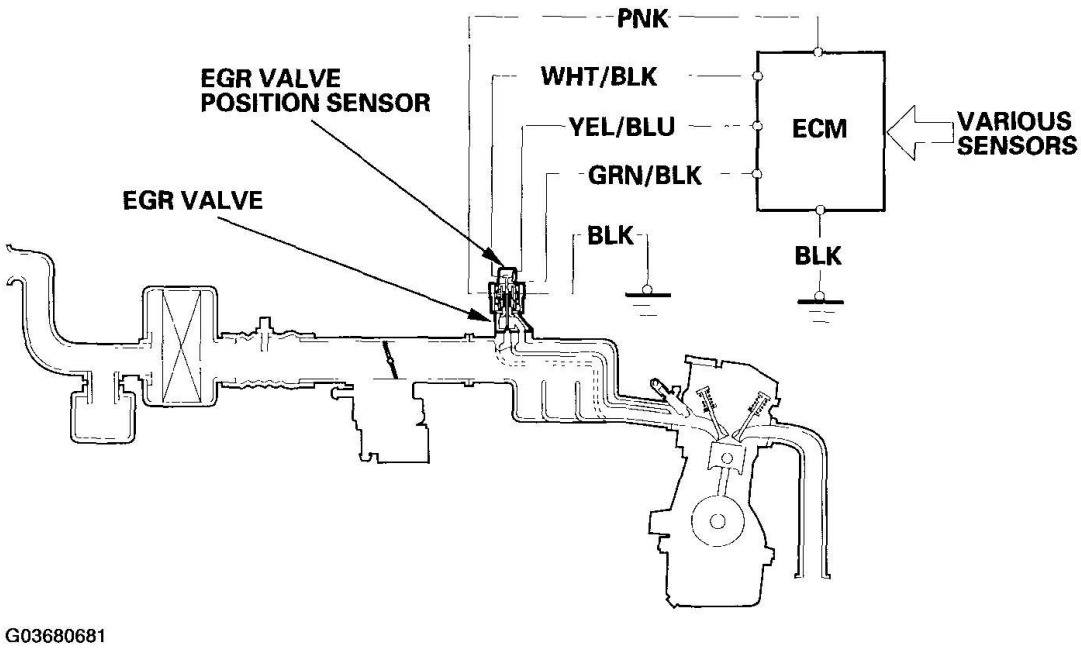


Fig. 56: Identifying Exhaust Gas Recirculation System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EVAPORATIVE EMISSION (EVAP) CONTROL DIAGRAM

2000-2005 models

The EVAP controls minimize the amount of fuel vapor escaping to the atmosphere. Vapor from the fuel tank is temporarily stored in the EVAP canister until it can be purged from the canister into the engine and burned.

- The EVAP canister is purged by drawing fresh air through it and into a port on the intake manifold. The purging vacuum is controlled by the EVAP canister purge valve, which operates whenever engine coolant temperature is above 149°F (65°C).
- When vapor pressure in the fuel tank is higher than the set value of the EVAP two way valve, the valve opens and regulates the flow of fuel vapor to the EVAP canister.
- During refueling, the fuel tank vapor control valve opens with the pressure in the fuel tank, and feeds the fuel vapor to the EVAP canister.

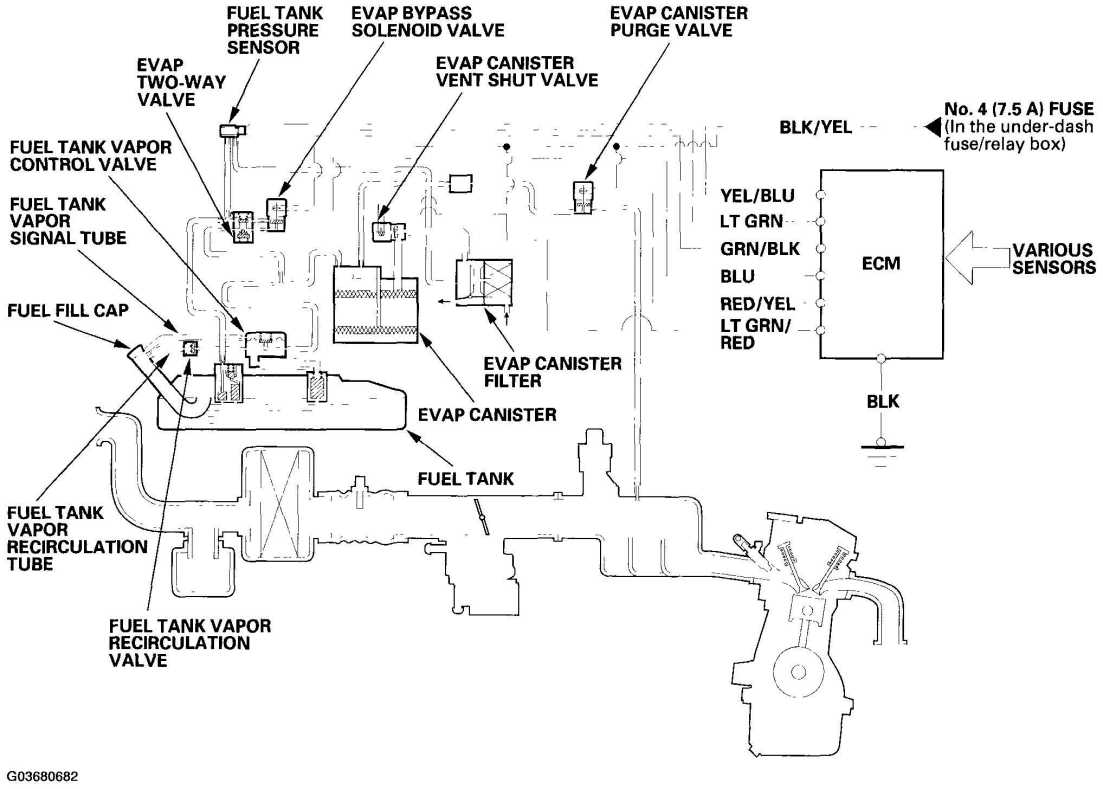


Fig. 57: Identifying Evaporative Emission Control Components (2000-2005) Models
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006 model

The EVAP controls minimize the amount of fuel vapor escaping to the atmosphere. Vapor from the fuel tank is temporarily stored in the EVAP canister until it can be purged from the canister into the engine and burned.

- The EVAP canister is purged by drawing fresh air through it and into a port on the intake manifold. The purging vacuum is controlled by the EVAP canister purge valve, which operates whenever engine coolant temperature is above 149°F (65°C).
- During refueling, the fuel tank vapor control valve opens with the pressure in the fuel tank, and feeds the fuel vapor to the EVAP canister.

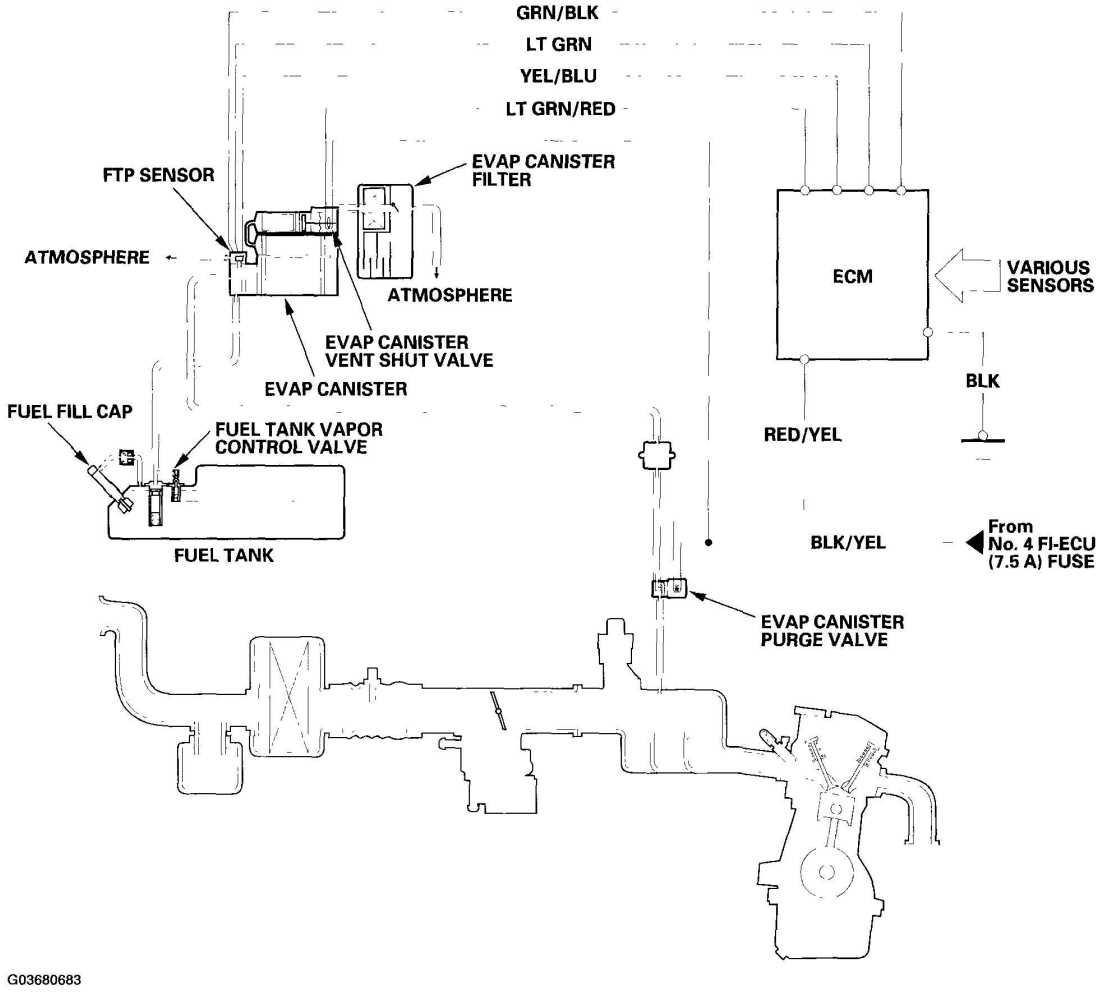


Fig. 58: Identifying Evaporative Emission Control Components (2006) Models

Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM Circuit Diagram - (2000-04 Models)

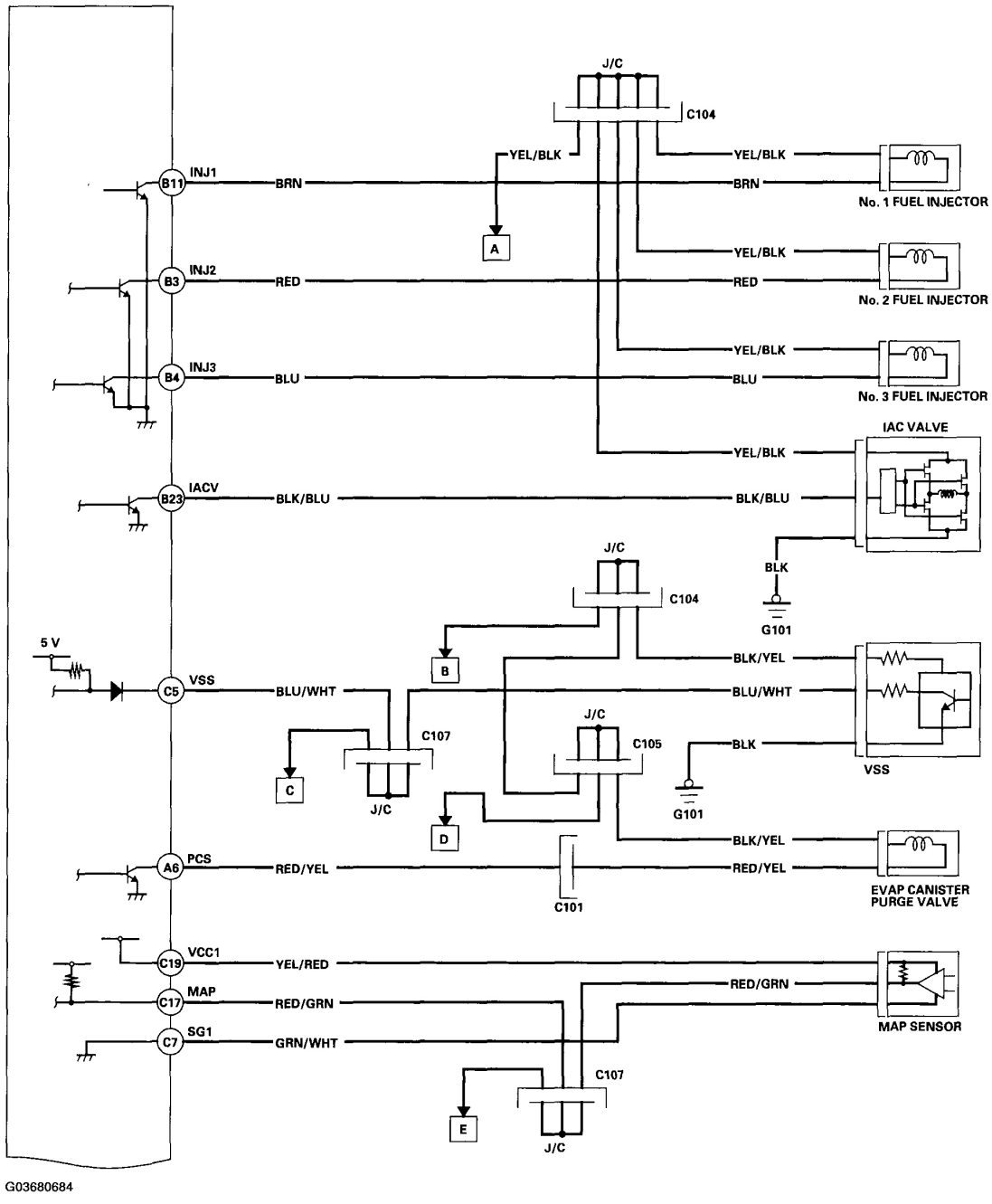


Fig. 59: ECM Circuit Diagram (2000-04 Models) (1 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

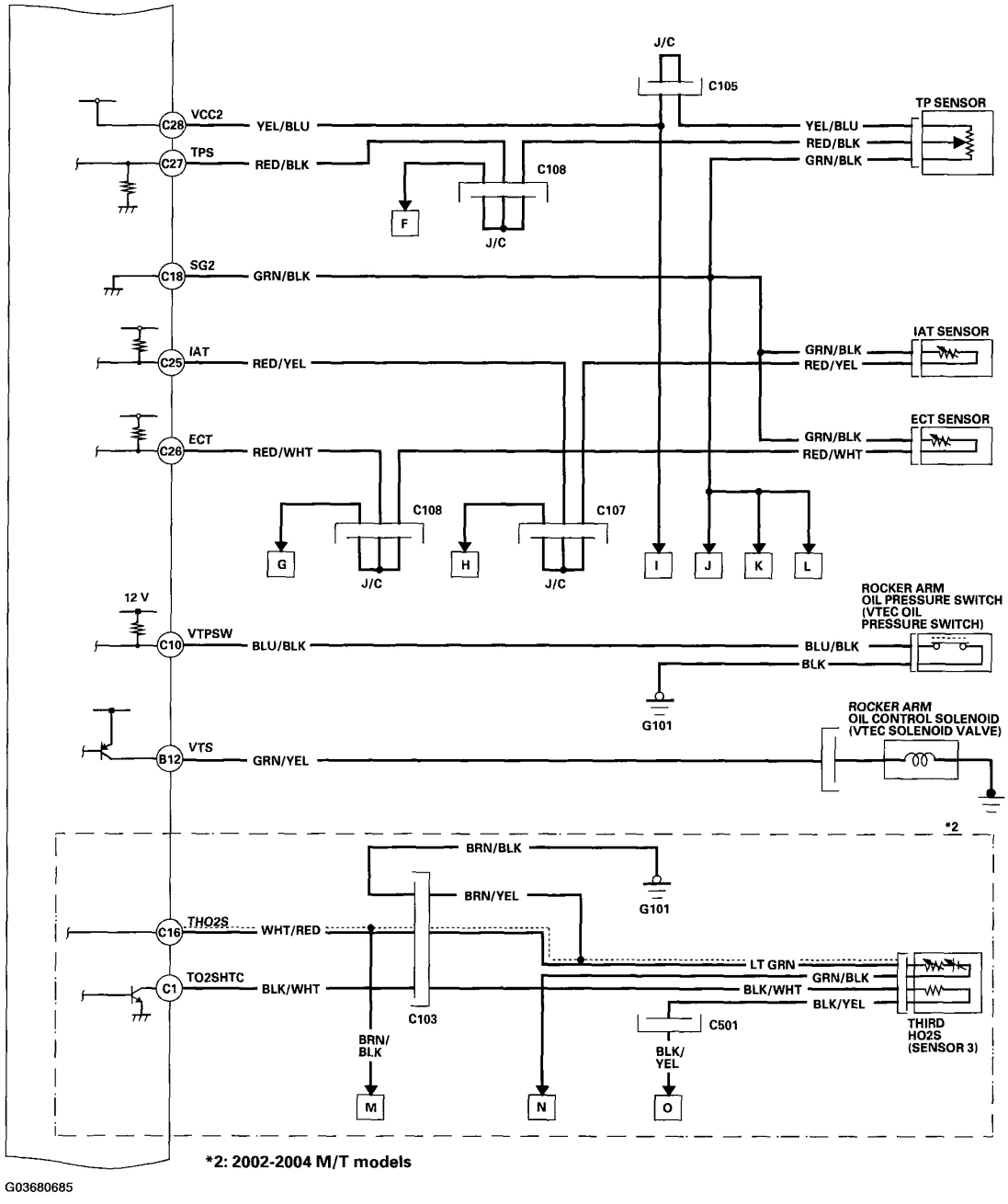


Fig. 60: ECM Circuit Diagram (2000-04 Models) (2 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

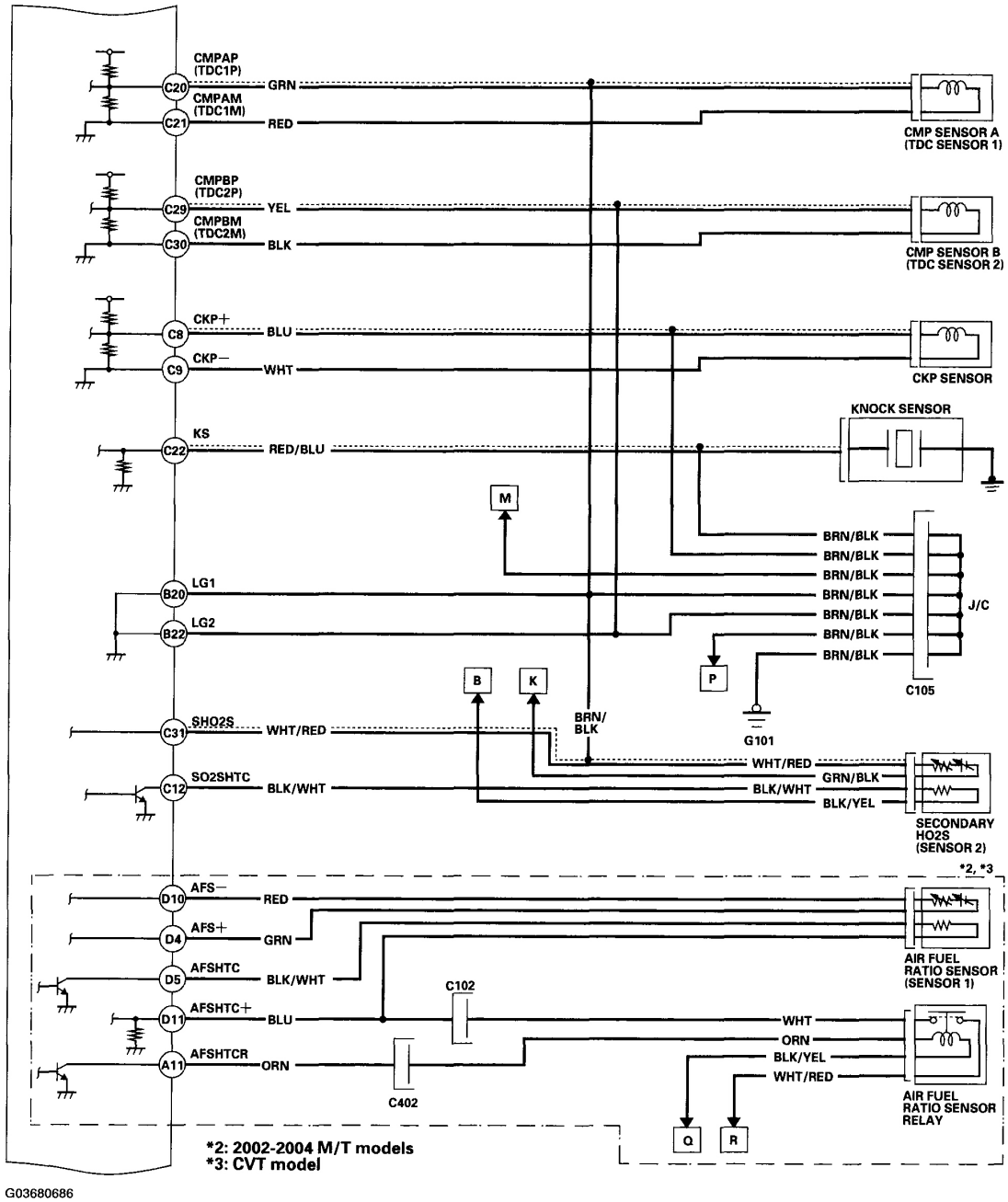


Fig. 61: ECM Circuit Diagram (2000-04 Models) (3 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

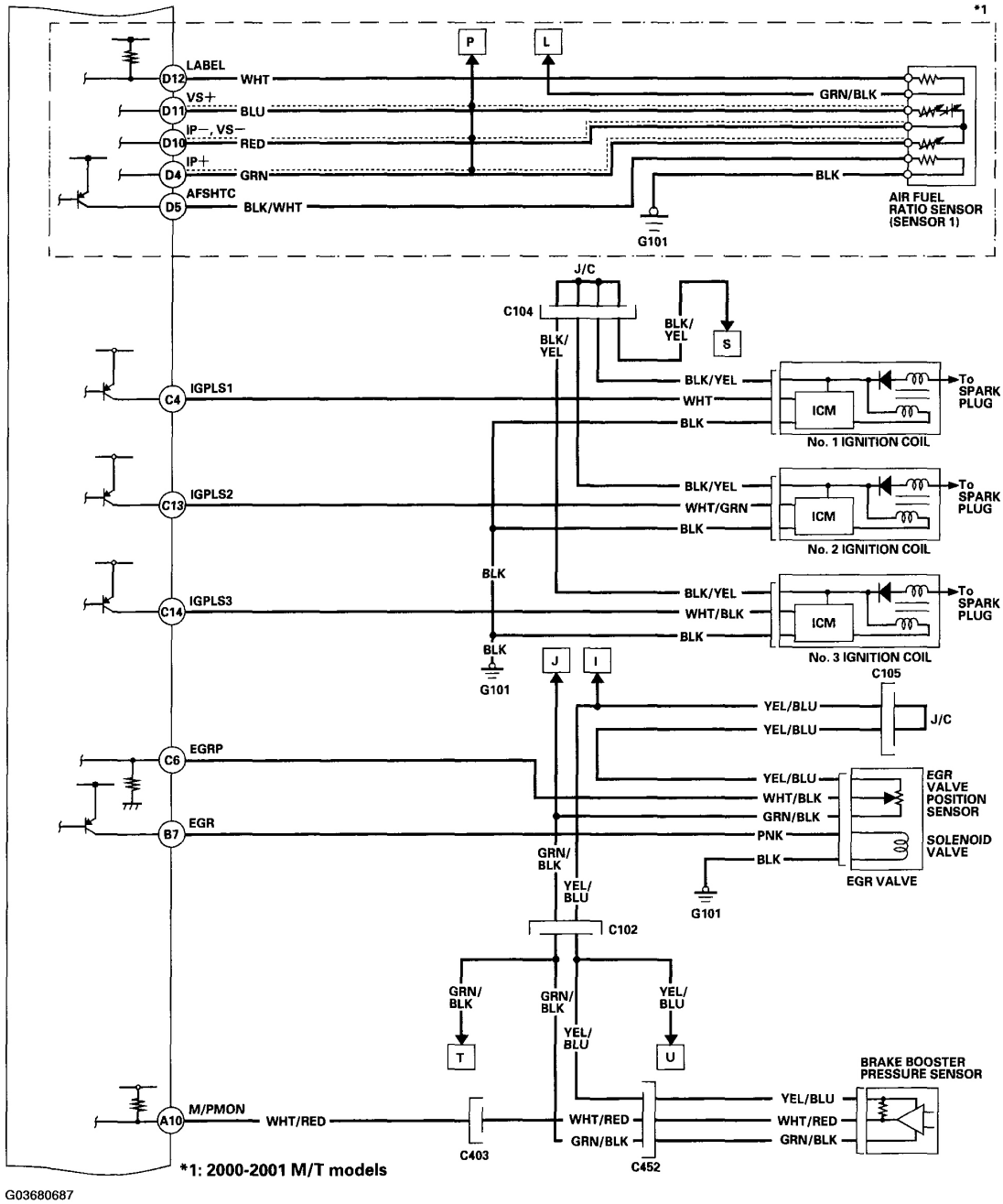


Fig. 62: ECM Circuit Diagram (2000-04 Models) (4 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

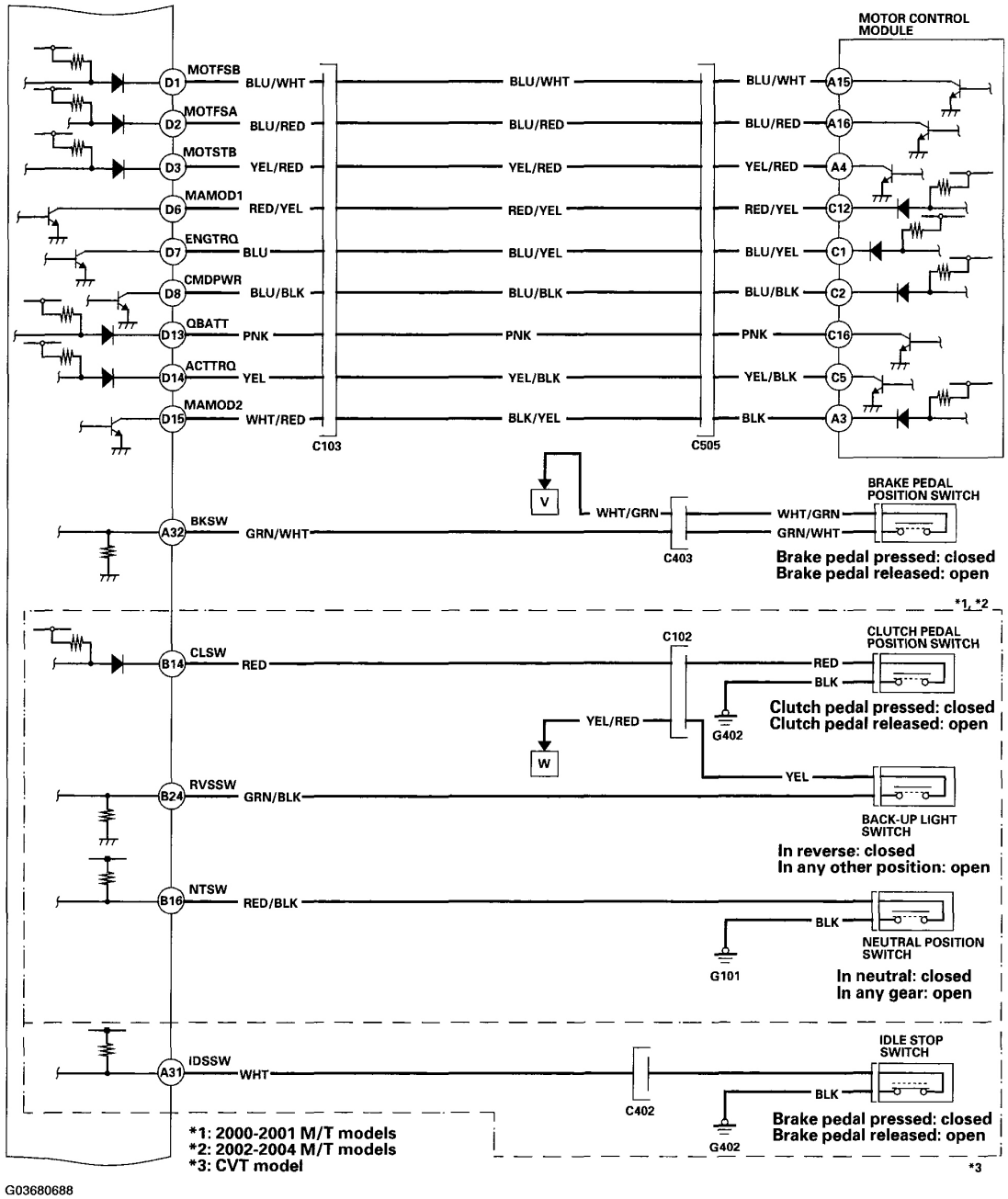


Fig. 63: ECM Circuit Diagram (2000-04 Models) (5 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

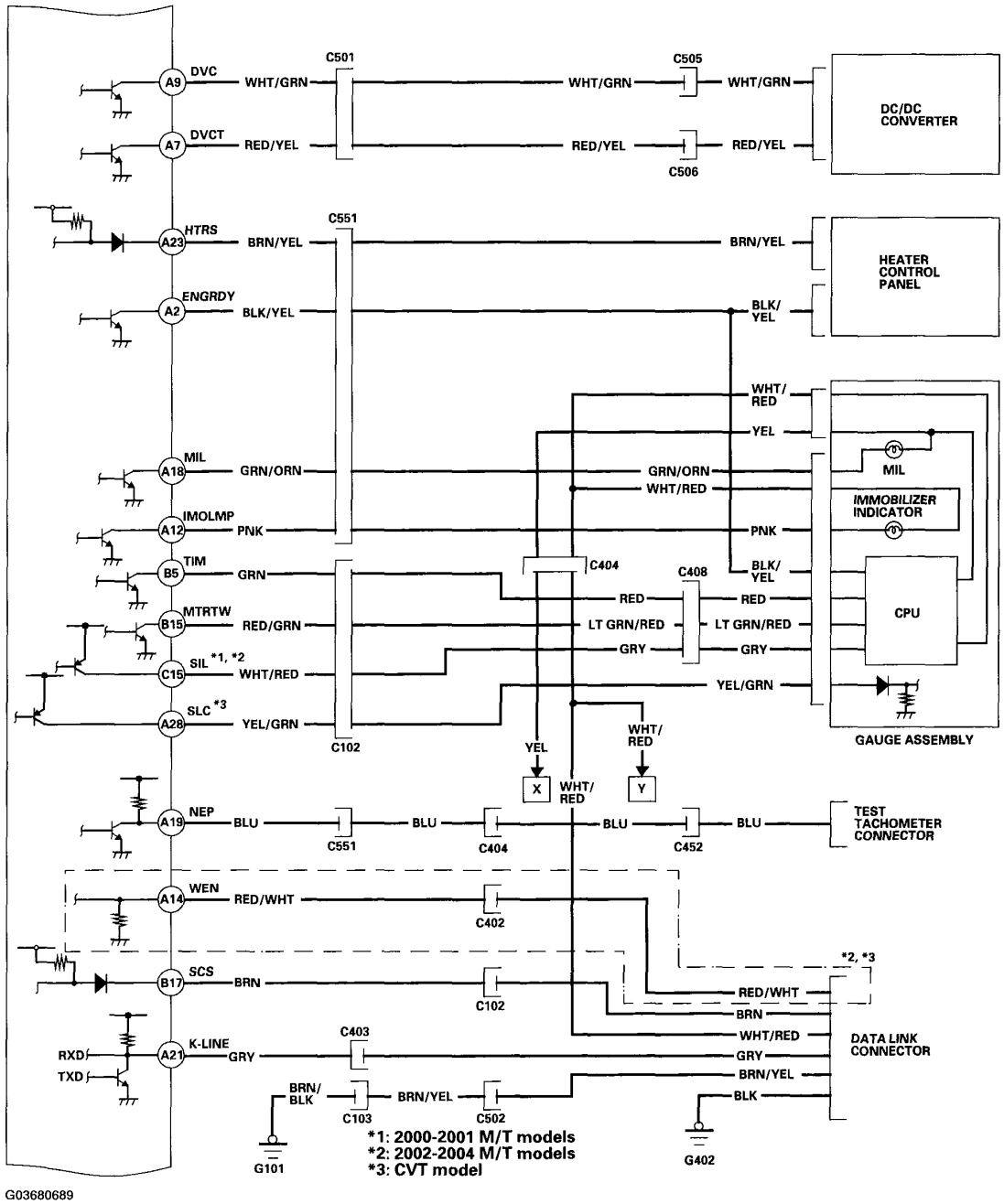
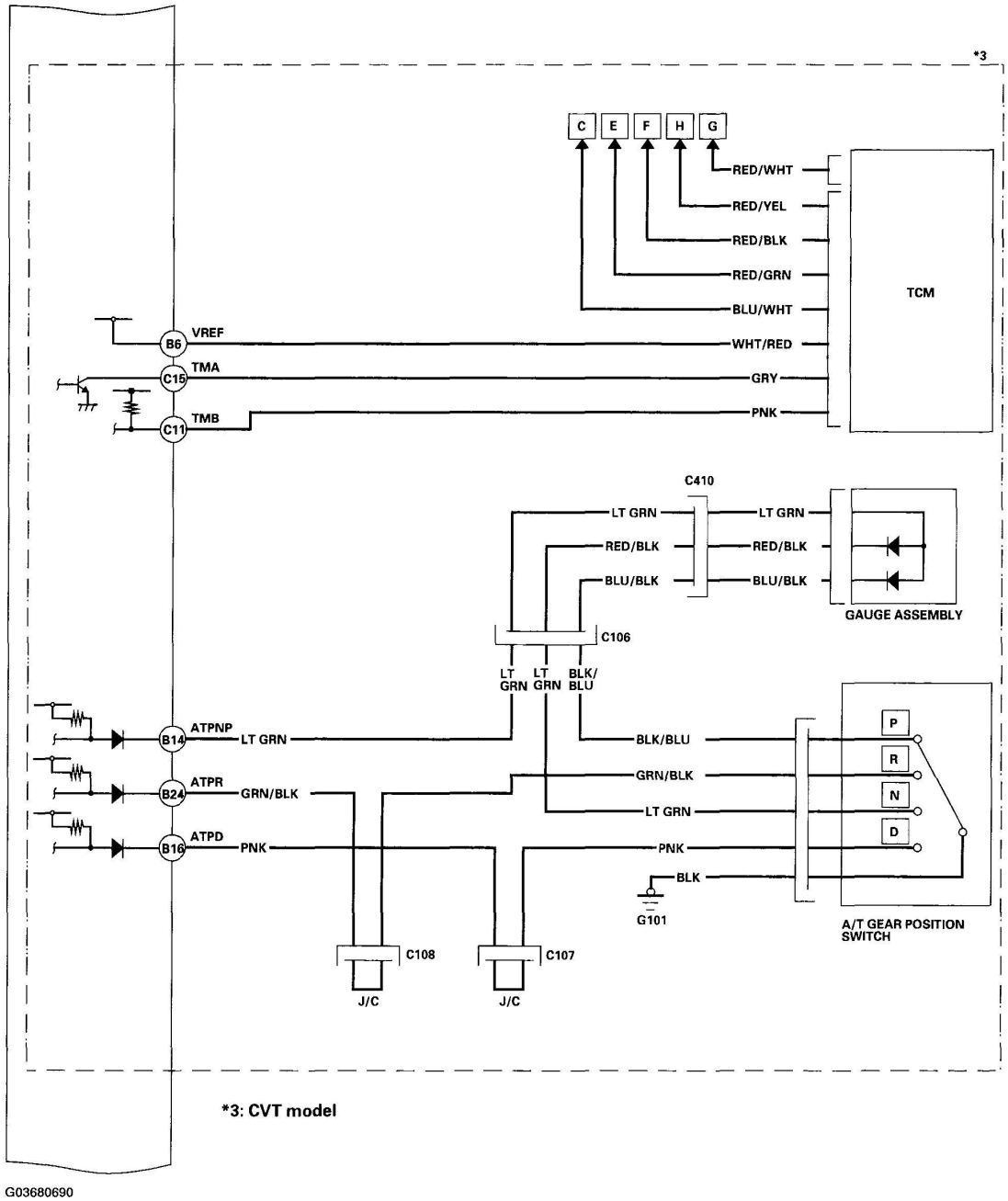


Fig. 64: ECM Circuit Diagram (2000-04 Models) (6 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G03680690

Fig. 65: ECM Circuit Diagram (2000-04 Models) (7 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

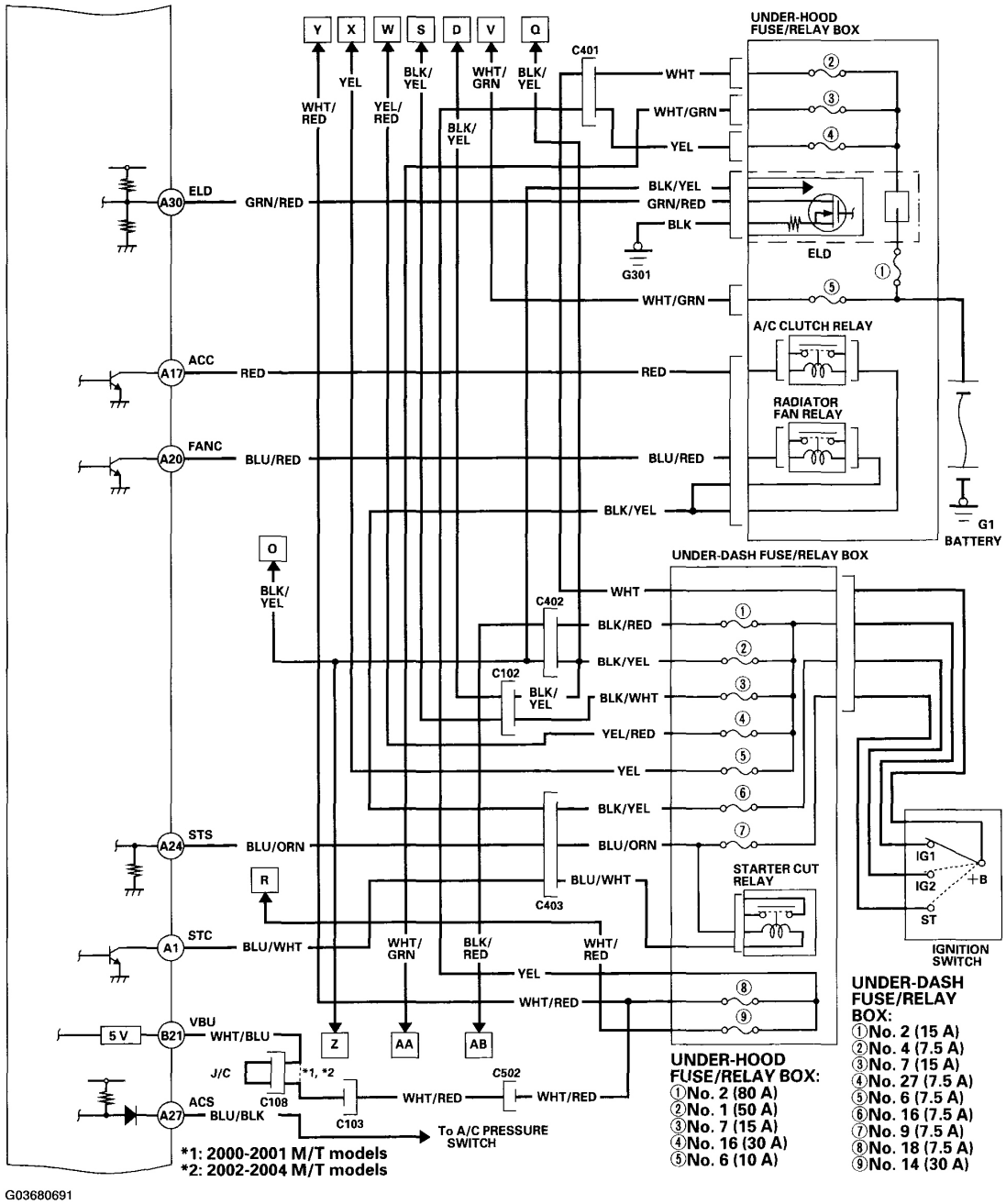


Fig. 66: ECM Circuit Diagram (2000-04 Models) (8 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

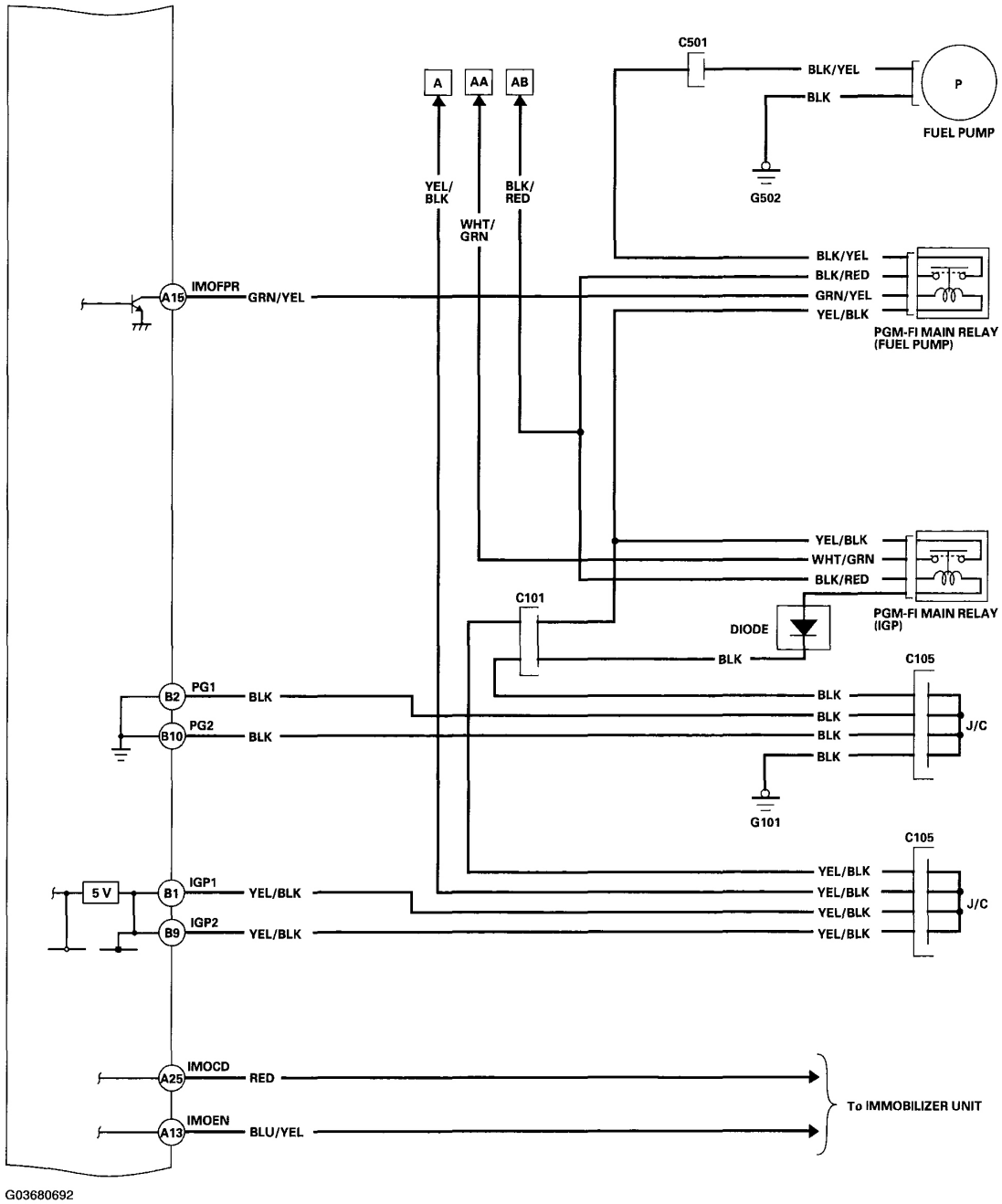


Fig. 67: ECM Circuit Diagram (2000-04 Models) (9 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

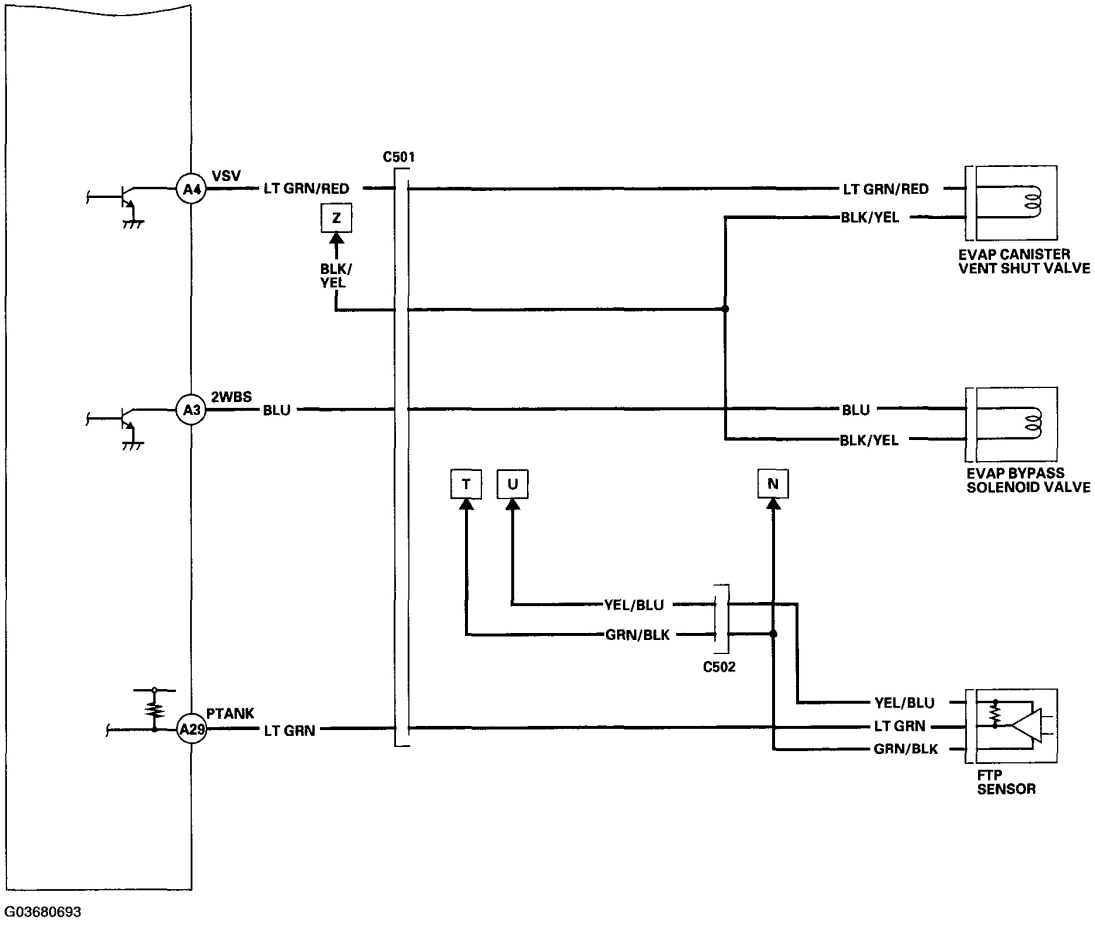


Fig. 68: ECM Circuit Diagram (2000-04 Models) (10 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM Circuit Diagram - (2005-2006 Models)

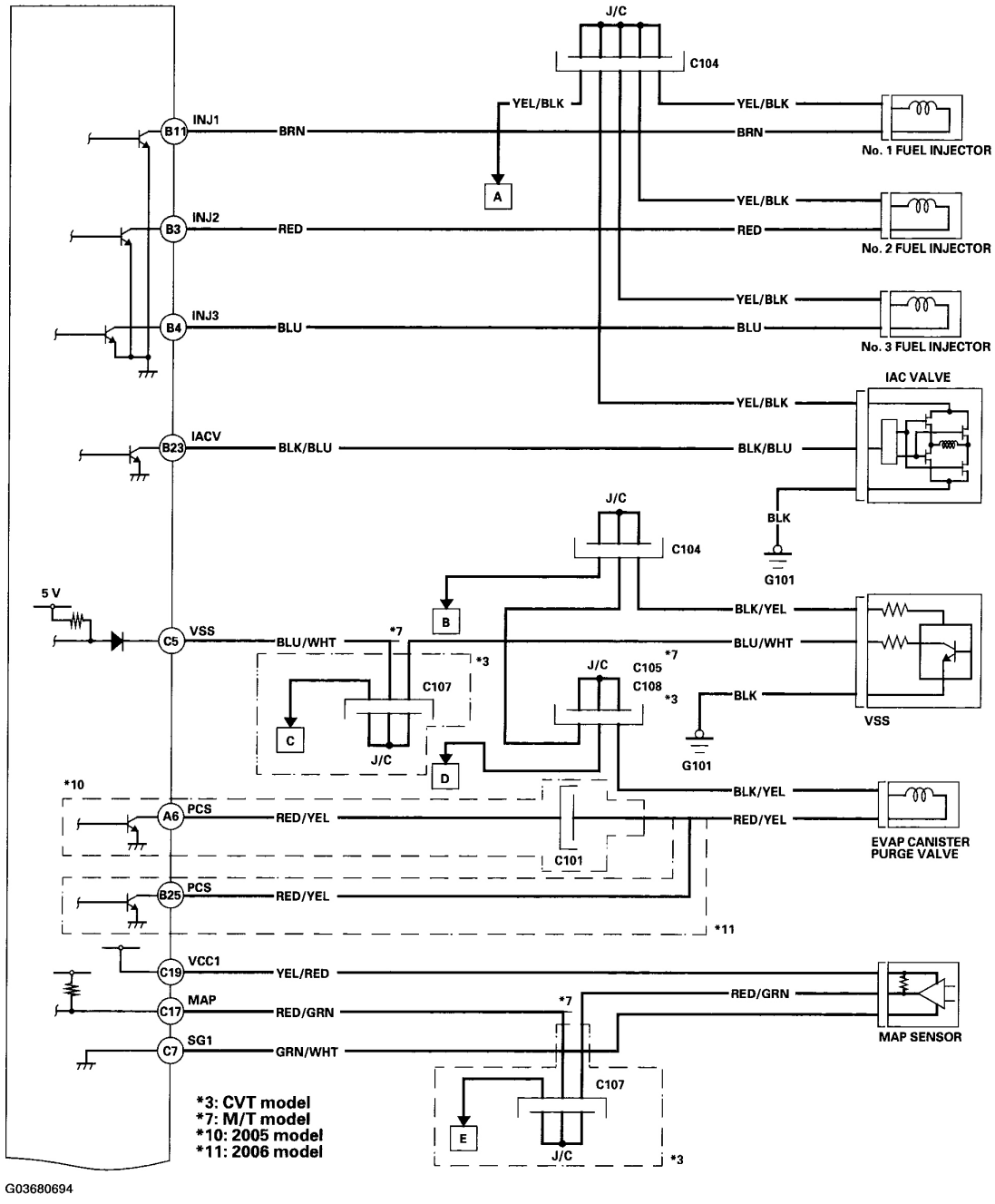


Fig. 69: ECM Circuit Diagram (2005-2006 Models) (1 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

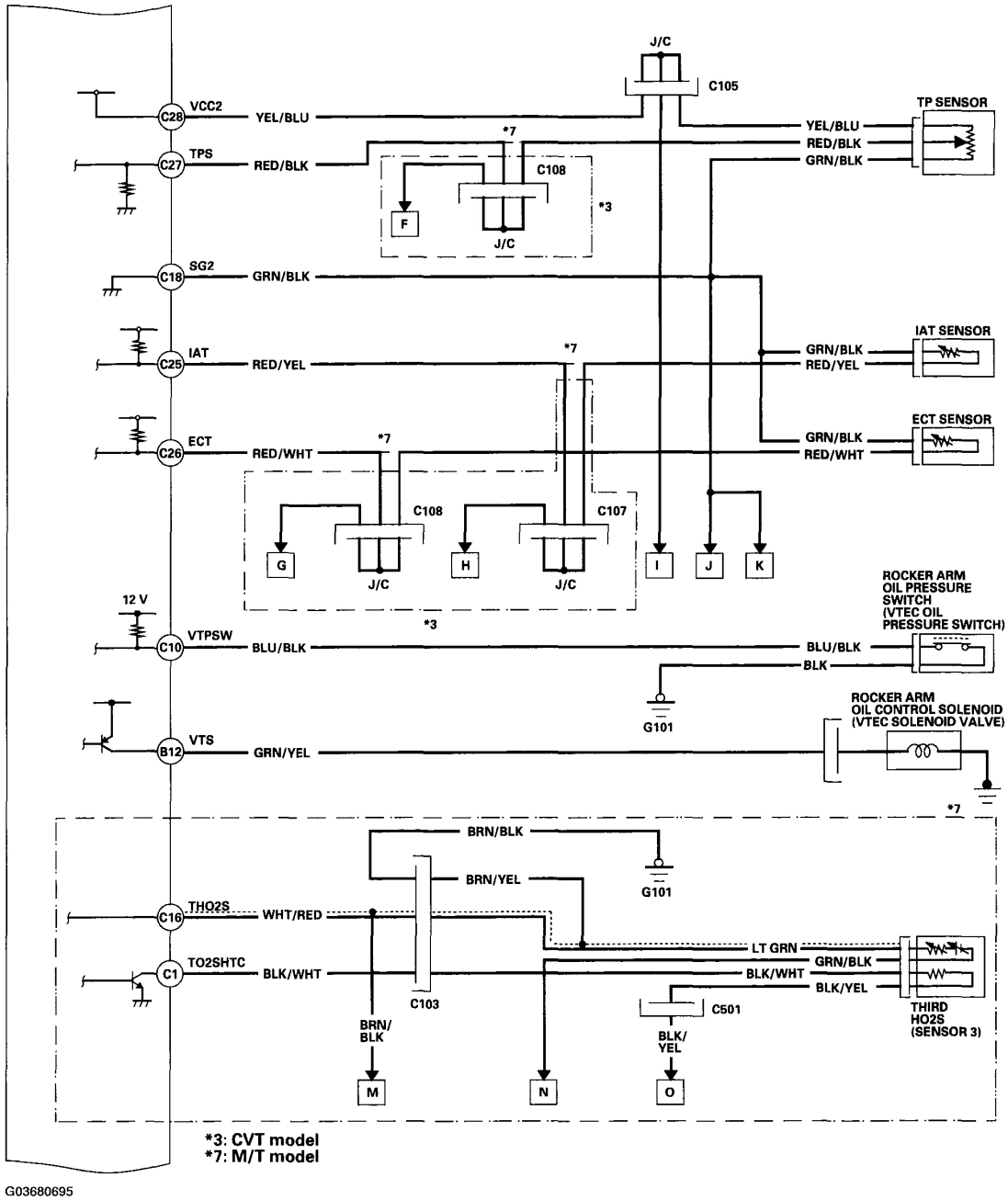


Fig. 70: ECM Circuit Diagram (2005-2006 Models) (2 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

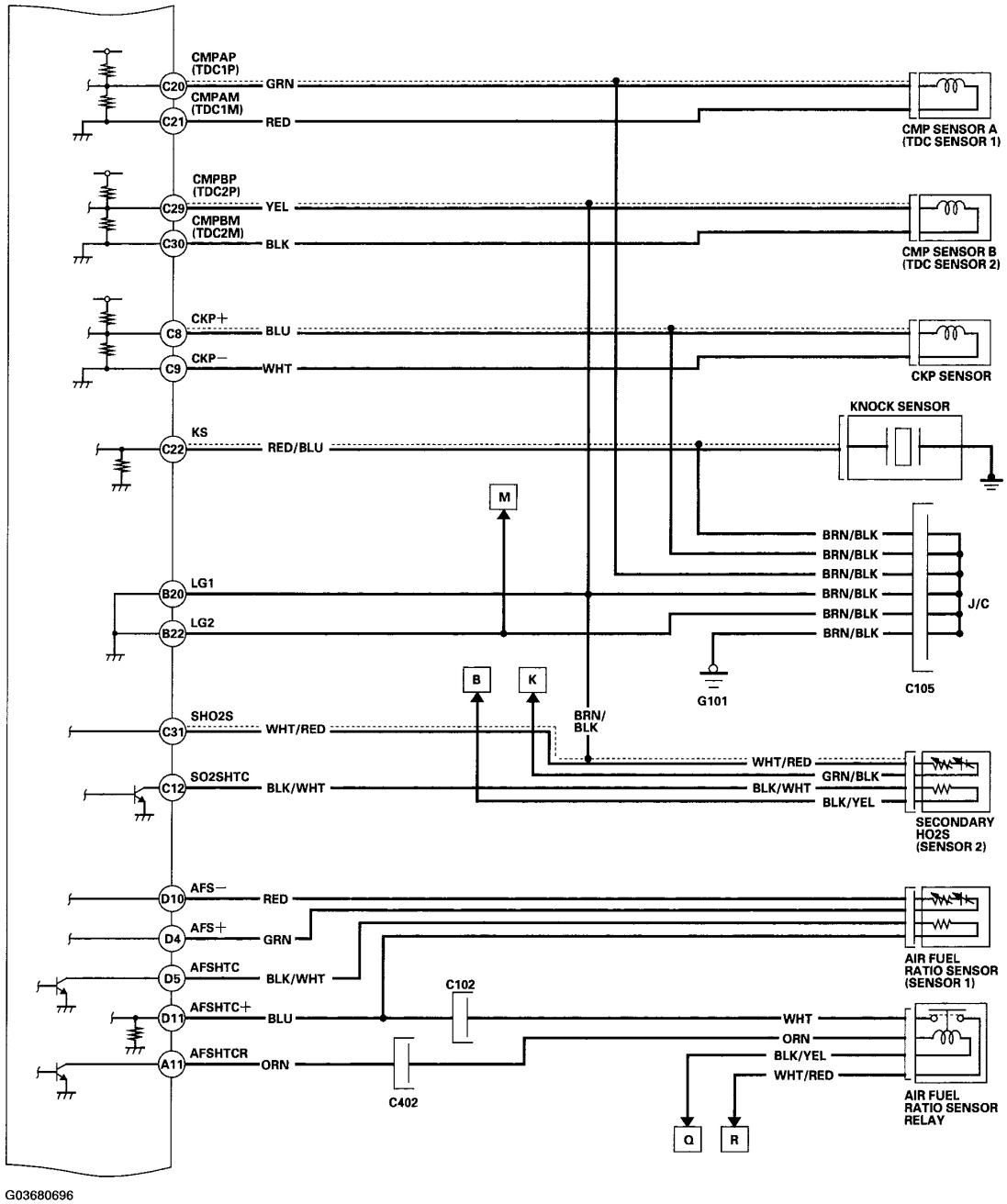


Fig. 71: ECM Circuit Diagram (2005-2006 Models) (3 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

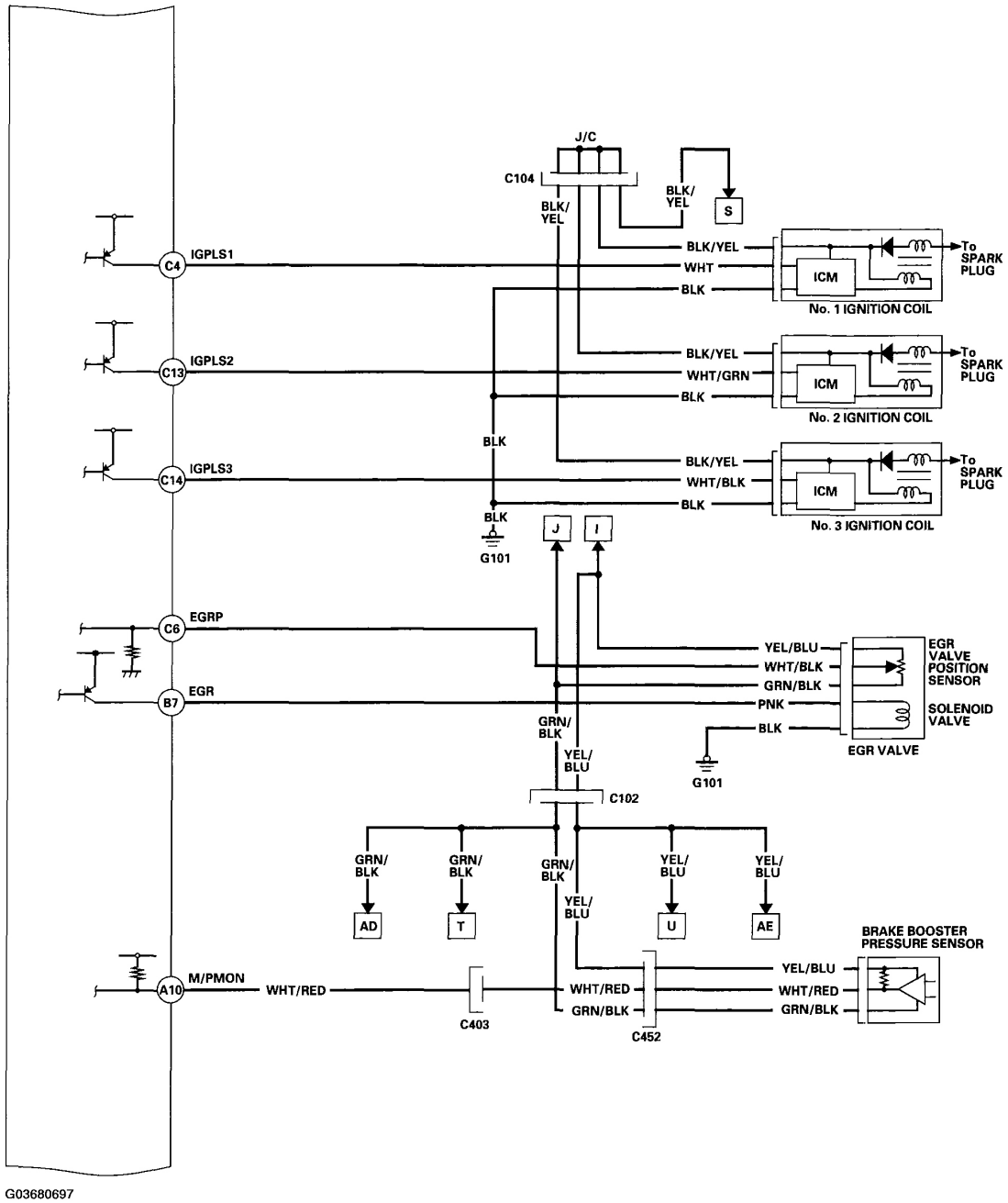


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Fig. 72: ECM Circuit Diagram (2005-2006 Models) (4 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

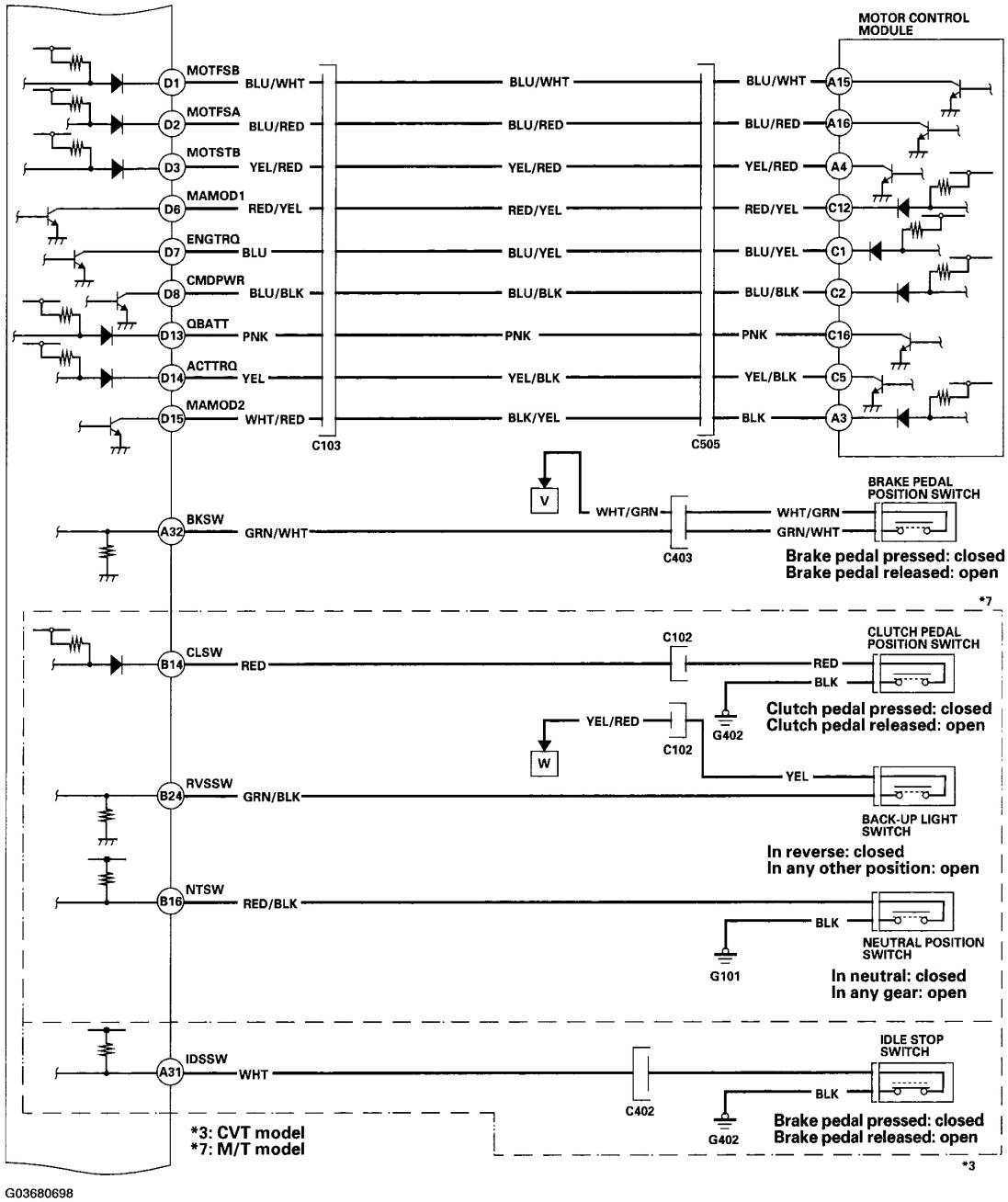


Fig. 73: ECM Circuit Diagram (2005-2006 Models) (5 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

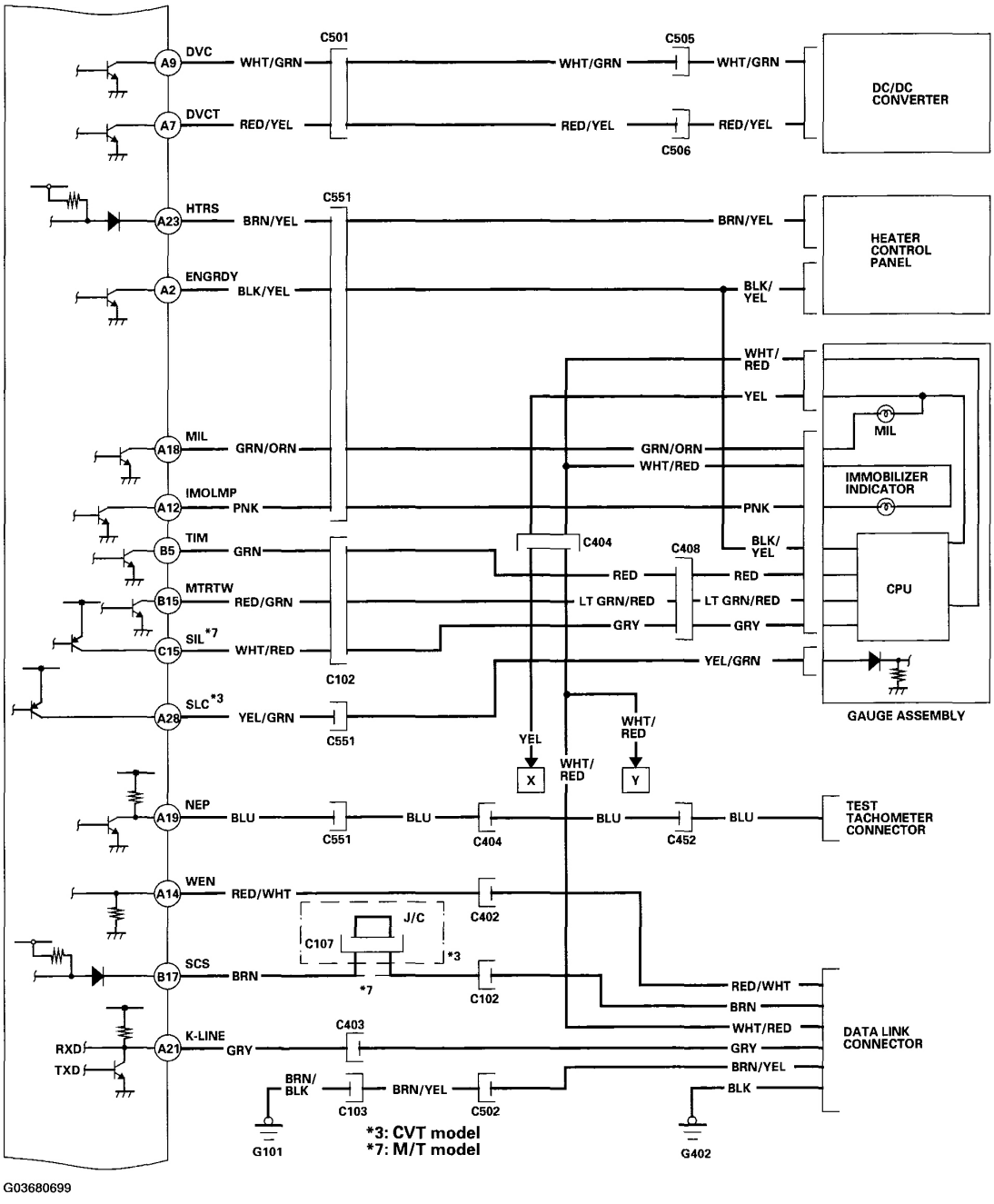
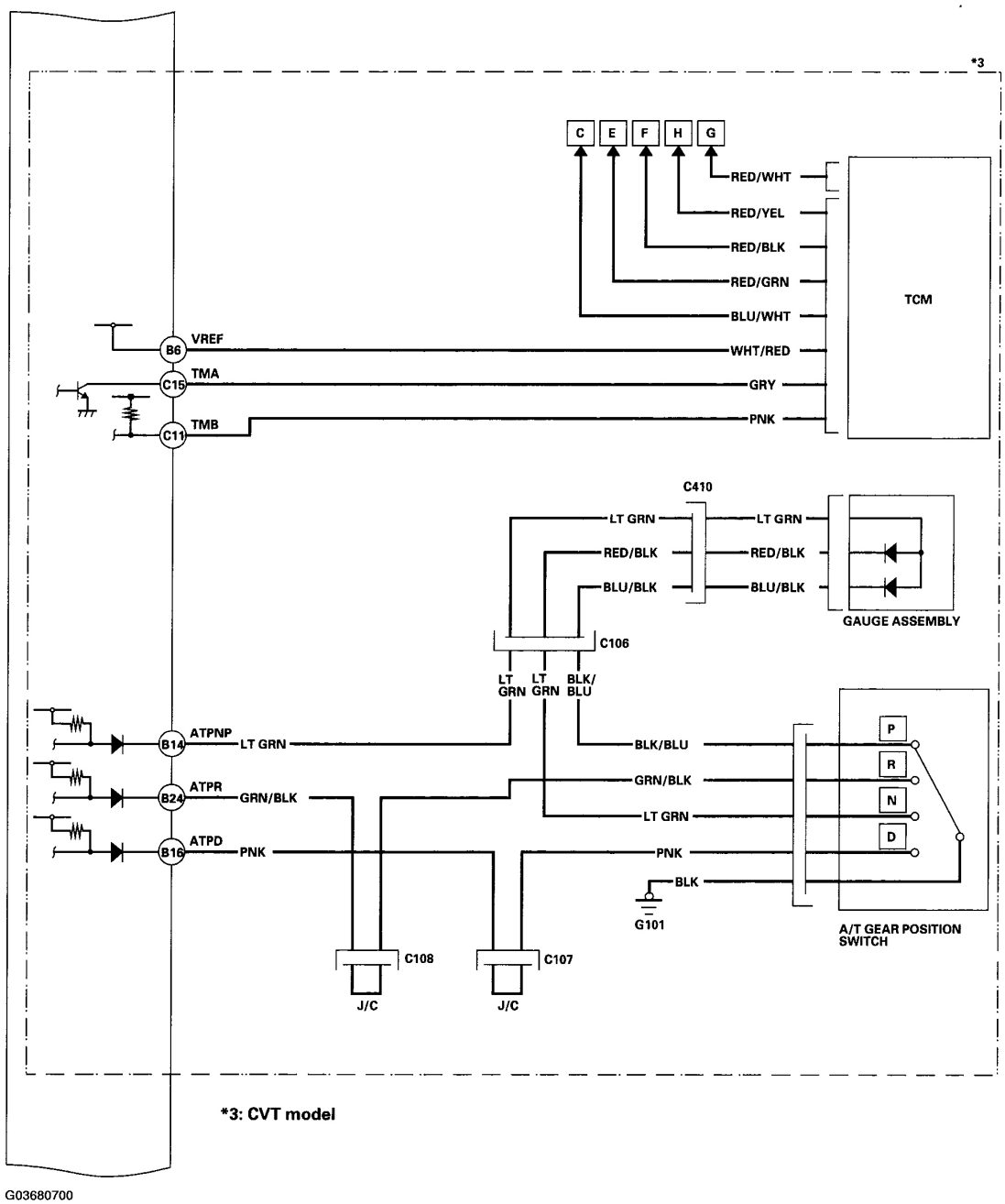


Fig. 74: ECM Circuit Diagram (2005-2006 Models) (6 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G03680700

Fig. 75: ECM Circuit Diagram (2005-2006 Models) (7 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

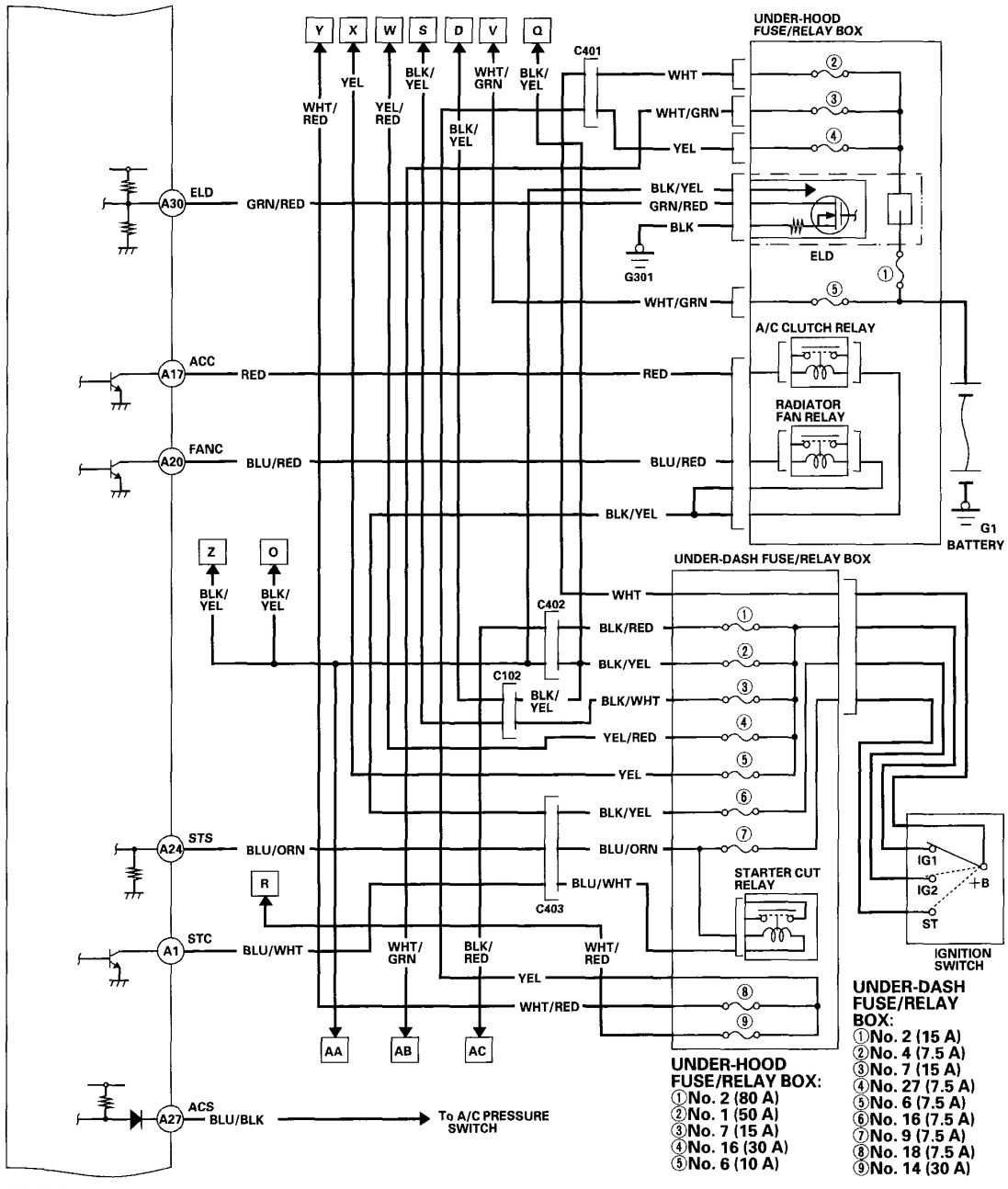


Fig. 76: ECM Circuit Diagram (2005-2006 Models) (8 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

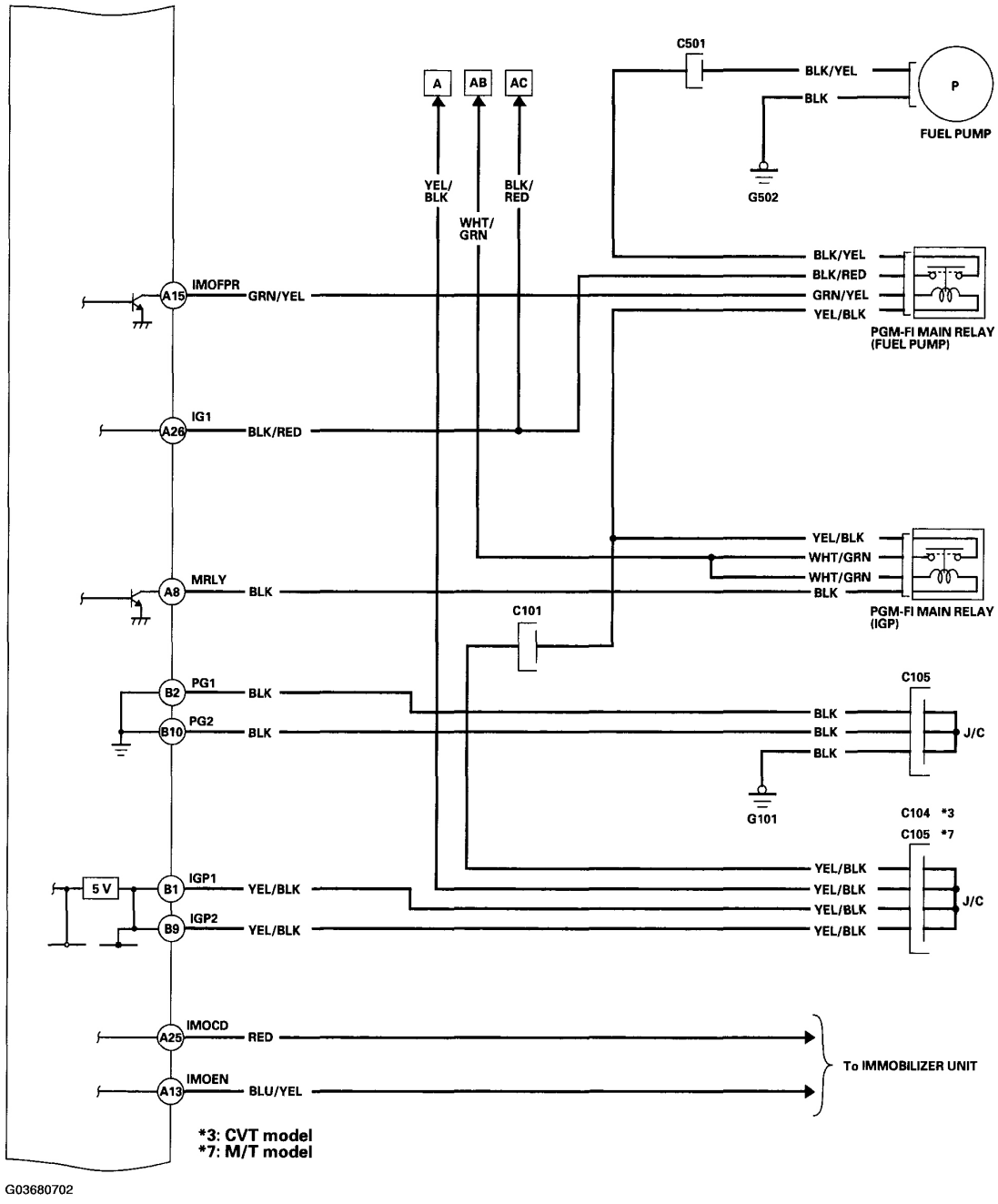


Fig. 77: ECM Circuit Diagram (2005-2006 Models) (9 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

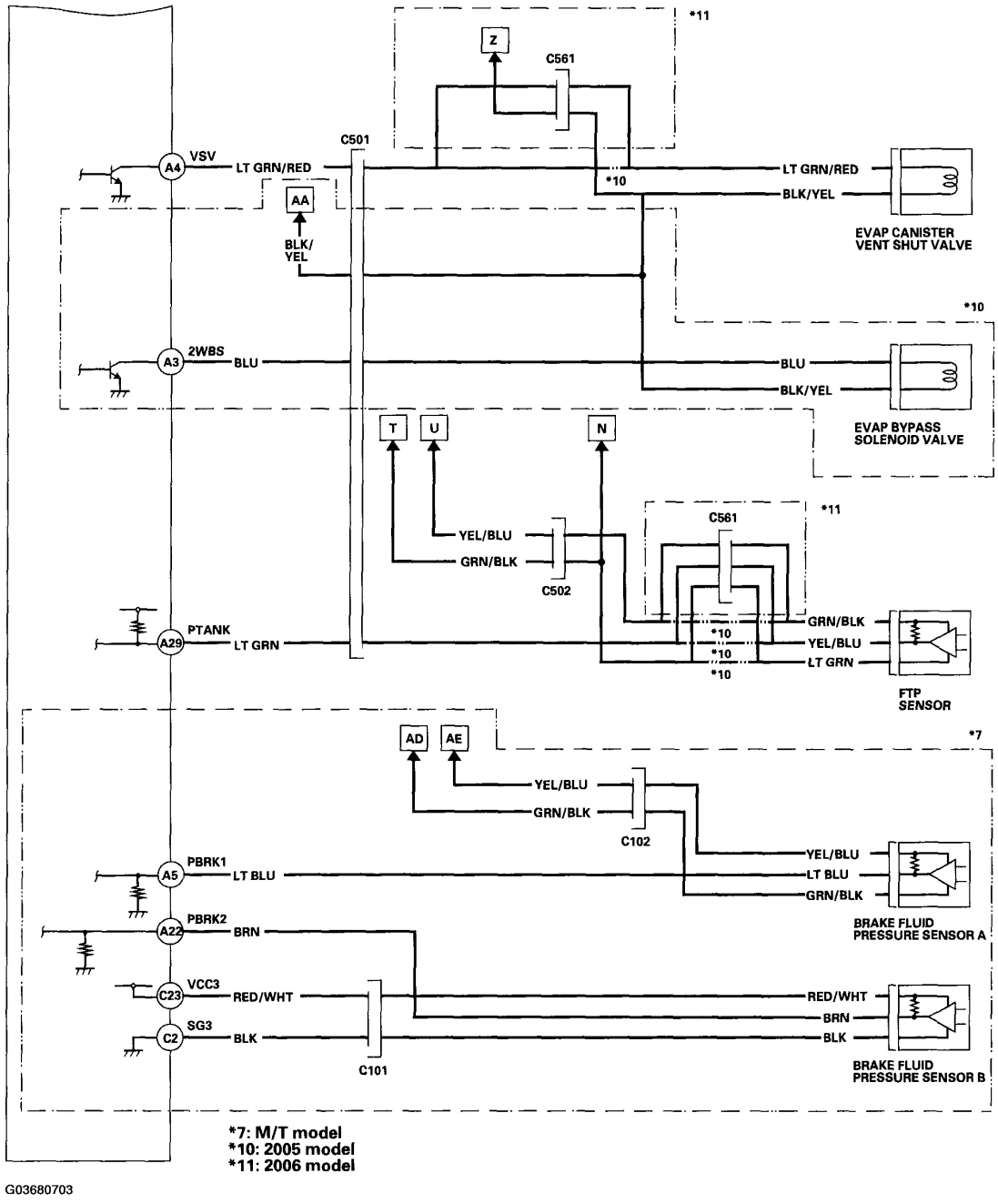


Fig. 78: ECM Circuit Diagram (2005-2006 Models) (10 Of 10)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HOW TO SET READINESS CODES

MALFUNCTION INDICATOR LAMP (MIL) INDICATION (IN RELATION TO READINESS CODES)

The vehicle has certain "readiness codes" that are part of the on-board diagnostics for the emissions systems. If the vehicle's battery has been disconnected or gone dead, if the DTCs have been cleared, or if the ECM has been reset, these readiness codes are reset to incomplete. In some states, part of the emissions testing is to make sure these codes are set to complete. If all of them are not set to complete, the vehicle may fail the emission test, or the test cannot be finished.

To check if the readiness codes are set to complete, turn the ignition switch ON (II), but do not start the engine. The MIL will come on for 15-20 seconds. If it then goes off, the readiness codes are set to complete. If it flashes several times, one or more readiness codes are not set to complete. To set readiness codes from incomplete to complete, do the procedure for the appropriate code.

CATALYTIC CONVERTER MONITOR AND READINESS CODE

NOTE:

- **Do not turn the ignition switch off during the procedure.**
- **All readiness codes are cleared when the 12 V battery is disconnected if the DTC has been cleared, or if the ECM is reset with the HDS.**
- **Low ambient temperatures or excessive stop-and-go traffic may increase the drive time needed to switch the readiness code from incomplete to complete.**
- **The readiness code will not switch to complete until all the enable criteria are met.**
- **If a fault in the secondary HO2S system caused the MIL to come on, the readiness code cannot be set to complete until you correct the fault.**

ENABLE CRITERIA

- ECT at 158°F(70°C) or higher.
- Intake air temperature (IAT) at 20°F (-7°C) or higher.
- Vehicle speed sensor (VSS) reads more then 25 mph (40km/h).

PROCEDURE

1. Connect the HDS to the vehicle's data link connector (DLC), and bring up the READINESS CODEs screen for Catalyst in the DTCs MENU.
2. Start the engine.
3. Test-drive the vehicle under stop-and-go conditions with short periods of steady cruise. After about 5 miles (8 km), the readiness code should switch to complete.
4. If the readiness code is still not set to complete, check for a Temporary DTC with the HDS. If there is no DTC, one or more of the enable criteria were probably not met; repeat the procedure.

EVAPORATIVE EMISSIONS (EVAP) CONTROL SYSTEM MONITOR AND READINESS CODE

NOTE:

- **All readiness code are cleared when the 12 V battery is disconnected, if the DTC has been cleared, or if the ECM is reset with the HDS.**
- **The enable criteria must be repeated if the intake air temperature (IAT) drops lower then 36℉ (2℃) from its value at engine start up.**

ENABLE CRITERIA

- At engine start up, ECT and IAT are higher then 32°F (0°C), but lower then 95°F (35°C).
- At engine start up, the ECT and IAT are within 13°F (7°C) of each other.

PROCEDURE

1. Connect the HDS to the vehicle's data link connector (DLC).
2. Start the engine.
3. Select EVAP TEST in the INSPECTION MENU with the HDS, then select the FUNCTION TEST in the EVAP TEST MENU.
   - If the result is normal, readiness is complete.
   - If the result is not normal, go to the next step.
4. Check for a Temporary DTC. If there is no DTC, one or more of the enable criteria were probably not met; repeat the procedure.

AIR FUEL RATIO (A/F) SENSOR MONITOR AND READINESS CODE

NOTE:

- **Do not turn the ignition switch off during the procedure.**
- **All readiness codes are cleared when the 12 V battery is disconnected, if the DTC has been cleared, or if the ECM is reset with the HDS.**

ENABLE CRITERIA

ECT at 140°F (60°C) or higher.

PROCEDURE

1. Start the engine.
2. Test-drive the vehicle under stop-and-go conditions with short periods of steady cruise. During the drive, decelerate (with the throttle fully closed) for 5 seconds. After about 3.5 miles (5.6 km), the readiness code should switch from incomplete to complete.
3. Check the readiness codes screen for the AIR FUEL RATIO (A/F) SENSOR in the DTCs MENU with the HDS.
   - If the screen shows complete, readiness is complete.
   - If the screen shows not complete, go to the next step.
4. Check for a temporary DTC. If there is no DTC, the enable criteria was probably not met. Select the DATA LIST Menu. Check the ECT in the ALL DATA LIST with the HDS. If the ECT is lower than 140°F (60°C), run the engine until it is higher than 140°F (60°C), then repeat the procedure.

AIR/FUEL RATIO (A/F) SENSOR HEATER MONITOR READINESS CODE

NOTE: All readiness codes are cleared when the 12 V battery is disconnected, if the DTC has been cleared, or if the ECM is reset with the HDS.

PROCEDURE

1. Connect the HDS to the vehicle's data link connector (DLC).

2. Start the engine, and let it idle for 1 minute. The readiness code should switch from incomplete to complete.
3. If the readiness code is still set to incomplete, check for a Temporary DTC. If there is no DTC, repeat the procedure.

MISFIRE MONITOR AND READINESS CODE

- This readiness code is always set to available because misfiring is continuously monitored.
- Monitoring pauses, and the misfire counter resets, if the vehicle is driven over a rough road.
- Monitoring also pauses, and the misfire counter holds at its current value, if the throttle position changes more than a predetermined value, or if driving conditions fall outside the range of any related enable criteria.

FUEL SYSTEM MONITOR AND READINESS CODE

- This readiness code is always set to available because the fuel system is continuously monitored during closed loop operation.
- Monitoring pauses when the catalytic converter, EVAP control system, and A/F sensor monitors are active.
- Monitoring also pauses when any related enable criteria are not being met. Monitoring resumes when the enable criteria is again being met.

COMPREHENSIVE COMPONENT MONITOR AND READINESS CODE

This readiness code is always set to available because the comprehensive component monitor is continuously running whenever the engine is cranking or running.

EGR MONITOR AND READINESS CODE

NOTE:

- **Do not turn the ignition switch off during the procedure.**
- **All readiness codes are cleared when the 12 V battery is disconnected, if the DTC has been cleared, or if the ECM is reset with the HDS.**

ENABLE CRITERIA

ECT at 176°F (80°C)or higher

PROCEDURE

1. Connect the HDS to the vehicle's data link connector (DLC).
2. Start the engine.
3. Drive at a steady speed with the CVT in D position or M/T in 4th gear, 50-62 mph (80-100 km/h), or above for more than 10 seconds.
4. With the CVT in D position or M/T in 4th gear, decelerate from 62 mph (100 km/h) or above by completely releasing the throttle for at least 5 seconds. If the engine is stopped during this procedure, go to step 3 and do the procedure again.
5. Check the OBD status for DTC P0401 in the DTCs MENU with the HDS.
    - If it is passed, readiness is complete.
    - If it is not passed, go to step 3 and retest.