2000-06 ENGINE PERFORMANCE

PGM-FI System - Insight

COMPONENT LOCATION INDEX

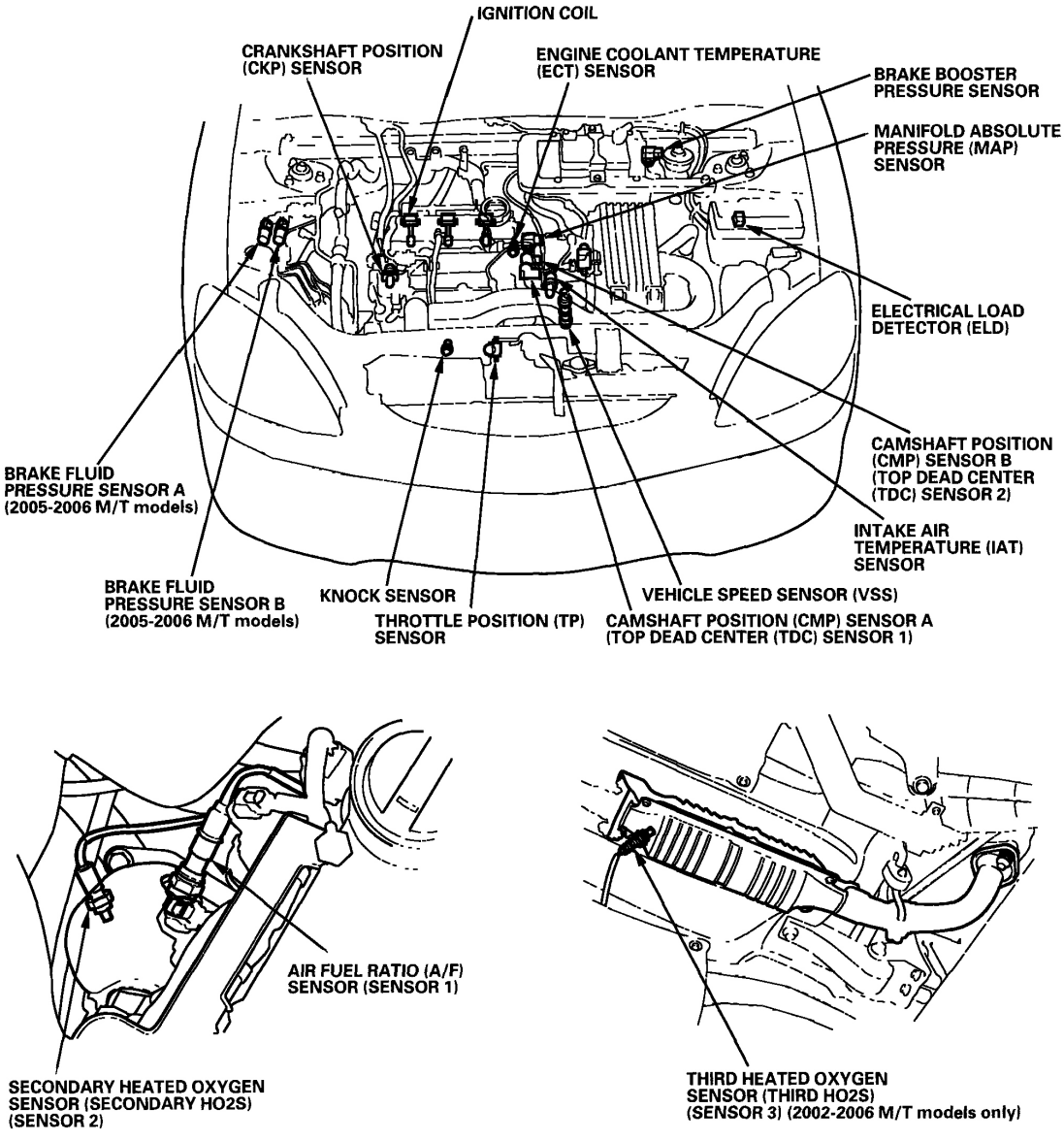


Fig. 1: Identifying PGM-FI Components Location (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

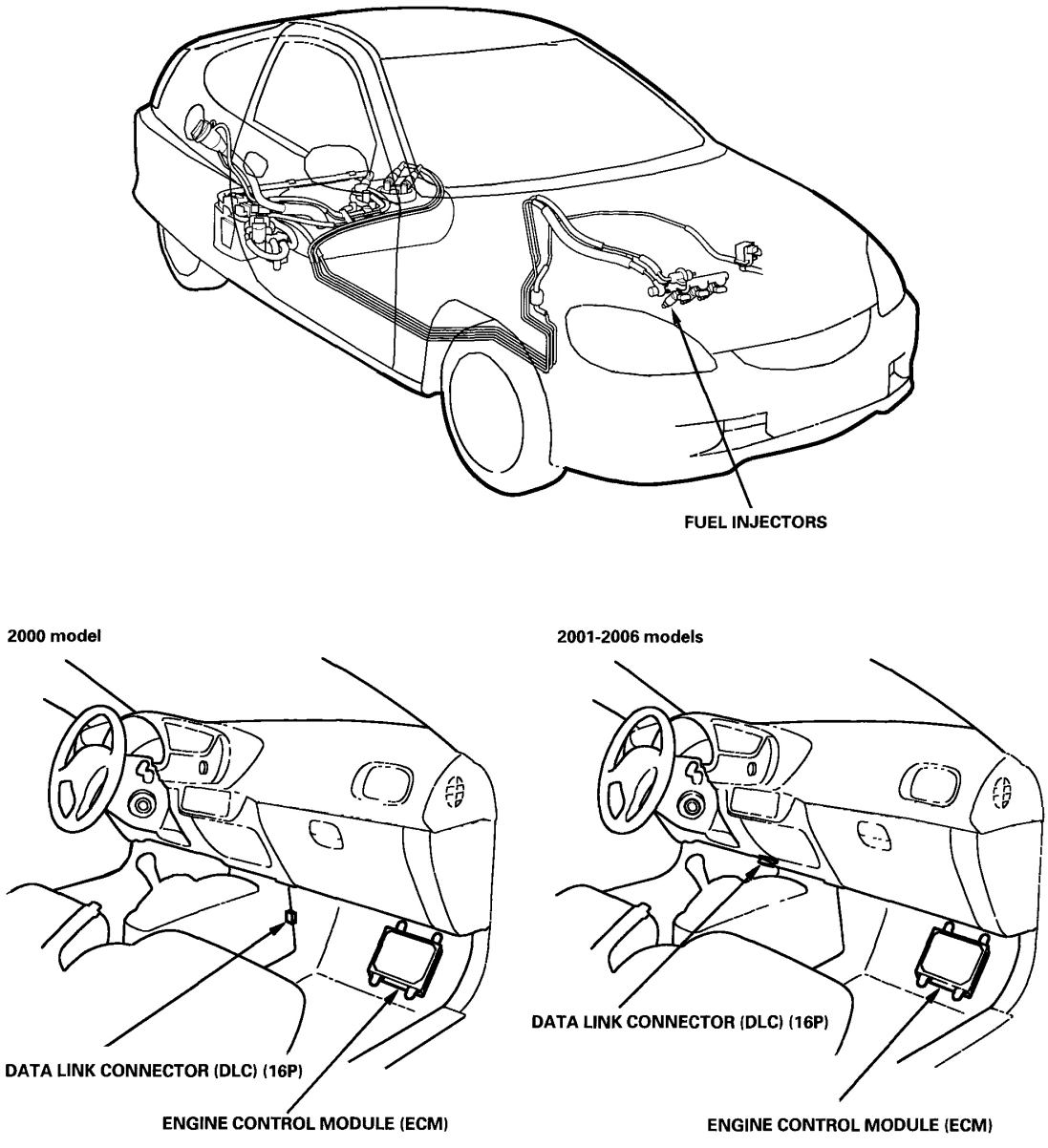


Fig. 2: Identifying PGM-FI Components Location (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC INDEX

DTC	Description

DTC P0106	MAP Sensor Vacuum Connection Problem
DTC P0107	MAP Sensor Circuit Low Voltage
DTC P0108	MAP Sensor Circuit High Voltage
DTC P0111	IAT Sensor Circuit Range/ Performance Problem (2006 model)
DTC P116	ECT Sensor Circuit Range/ Performance Problem (2006 model)
DTC P0112	IAT Sensor Circuit Low Voltage
DTC P0113	IAT Sensor Circuit High Voltage
DTC P0116	ECT Sensor Circuit Range/ Performance Problem (2000-2005 models)
DTC P0116	ECT Sensor Circuit Range/ Performance Problem (2006 model)
DTC P0117	ECT Sensor Circuit Low Voltage
DTC P0118	ECT Sensor Circuit High Voltage
DTC P0122	TP Sensor Circuit Low Voltage
DTC P0123	TP Sensor Circuit High Voltage
DTC P0125	ECT Sensor Malfunction/Slow Response (2004-2005 models)
DTC P0125	ECT Sensor Malfunction/Slow Response (2006 model)
DTC P0128	Cooling System Malfunction
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)
DTC P0134	A/F Sensor (Sensor 1) Signal Stuck Lean
DTC P0135	A/F Sensor (Sensor 1) Heater Circuit Malfunction (2002-2006 M/T models) (CVT models)
DTC P0137	Secondary HO2S (Sensor 2) Circuit Low Voltage
DTC P0138	Secondary HO2S (Sensor 2) Circuit High Voltage (2000-2004 models)
DTC P0138	Secondary HO2S (Sensor 2) Circuit High Voltage (2005-2006 models)

DTC P0139	Secondary HO2S (Sensor 2) Slow Response
DTC P0141	Secondary HO2S (Sensor 2) Heater Circuit Malfunction
DTC P0143	Third H02S (Sensor 3) Circuit Low Voltage (2002-2006 M/T models)
DTC P0144	Third H02S (Sensor 3) Circuit High Voltage (2002-2006 M/T models)
DTC P0145	Third H02S (Sensor 3) Slow Response (2002-2006 M/T models)
DTC P0147	Third H02S (Sensor 3) Heater Circuit Malfunction (2002-2006 M/T models)
DTC P0171	Fuel System Too Lean
DTC P0172	Fuel System Too Rich
DTC P0300	Random Misfire 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
DTC P0301	No. 1 Cylinder Misfire Detected
DTC P0302	No. 2 Cylinder Misfire Detected
DTC P0303	No. 3 Cylinder Misfire Detected
DTC P0325	Knock Sensor Circuit Malfunction
DTC P0335	CKP Sensor No Signal
DTC P0336	CKP Sensor Intermittent Interruption (2000-2003 models)
DTC P0339	CKP Sensor Intermittent Interruption (2004-2006 models)
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)
DTC P0500	VSS Circuit Malfunction
DTC P0560	ECM Power Source Circuit Unexpected Voltage (2001-2004 models)
DTC P0563	ECM Power Source Circuit Unexpected Voltage (2005-2006 models)
DTC P0607	ECM Internal Circuit Malfunction (2004-2006 models)
DTC P1607	ECM Internal Circuit Malfunction (2000-2003 models)
DTC P0630	VIN Not Programmed or Mismatch (2005-2006 models)
DTC P0685	ECM Power Control Circuit/Internal Circuit Malfunction (2006 model)
DTC P07xx	A/T Control System Malfunction
DTC P16xx	A/T Control System Malfunction
DTC P17xx	A/T Control System Malfunction
DTC P18xx	A/T Control System Malfunction
DTC P21xx	A/T Control System Malfunction
DTC P1106	BARO Sensor Range/Performance Problem (2000-2003 models)
DTC P2227	BARO Sensor Range/Performance Problem (2004-2006 models)
DTC P1107	BARO Sensor Circuit Low Voltage (2000-2003 models)
DTC P1108	BARO Sensor Circuit High Voltage (2000-2003 models)
DTC P2228	BARO Sensor Circuit Low Voltage (2004-2006 models)
DTC P2229	BARO Sensor Circuit High Voltage (2004-2006 models)
DTC P1109	BARO Sensor Circuit Out of Range High
DTC P1121	TP Sensor Signal Lower Than Expected
DTC P1122	TP Sensor Signal Higher Than Expected
DTC P1128	MAP Sensor Signal Lower Than Expected
DTC P1129	MAP Sensor Signal Higher Than Expected
DTC P1130	Secondary HO2S (Sensor 2) and Third HO2S (Sensor 3)

	Malfunction (2002-2006 M/T models)
DTC P1157	A/F Sensor (Sensor 1) AFS Circuit High Voltage (2002-2006 M/T models) (CVT model)
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)
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)
DTC P1162	A/F Sensor (Sensor 1) Circuit Malfunction (2000-2001 M/T models)
DTC P1163	A/F Sensor (Sensor 1) Slow Response (2000-2001 M/T models)
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)
DTC P1165	A/F sensor (Sensor 1) Circuit Range/Performance Problem (2000-2001 M/T models)
DTC P1166	A/F Sensor (Sensor 1) Heater Circuit Malfunction (2000-2001 M/T models)
DTC P1167	A/F Sensor (Sensor 1) Heater System Malfunction (2000-2002 M/T models)
DTC P1168	A/F Sensor (Sensor 1) LABEL Circuit Low Input (2000-2001 M/T models)
DTC P1169	A/F Sensor (Sensor 1) LABEL Circuit High Input (2000-2001 M/T models)
DTC P1172	A/F Sensor (Sensor 1) Circuit Out of Range High (2005-2006 models)
DTC P1297	ELD Circuit Low Voltage
DTC P1298	ELD Circuit High Voltage

DTC P1522	Brake Booster Pressure Sensor Circuit Low Voltage
DTC P1523	Brake Booster Pressure Sensor Circuit High Voltage
DTC P1541	HTRS Passenger Compartment Heater Standby Signal Circuit Low Input;
DTC P1542	HTRS Passenger Compartment Heater Standby Signal Circuit High Input
DTC P15B2	Brake Fluid Pressure Sensor A Circuit Low Voltage (2005-2006 M/T models)
DTC P15B3	Brake Fluid Pressure Sensor A Range/Performance Problem (2005-2006 M/T models)
DTC P15B4	Brake Fluid Pressure Sensor B Circuit Low Voltage (2005-2006 M/T models)
DTC P15B5	Brake Fluid Pressure Sensor B Range Performance Problem (2005-2006 M/T models)
DTC P15B6	Brake Fluid Pressure Sensor A/B Circuit Malfunction (2005-2006 M/T models)
DTC P1600	IMA System Malfunction
DTC P1601	IMA System Malfunction
DTC P1640	ACTTRQ Motor Torque Signal Circuit Low Input;
DTC P1641	ACTTRQ Motor Torque Signal Circuit High Input
DTC P1642	QBATT Battery Signal Circuit Low Input
DTC P1643	QBATT Battery Signal Circuit High Input
DTC P1644	MOTFSA Motor Control Module Signal Malfunction
DTC P1645	MOTFSB Motor Control Module Signal Malfunction
DTC P1646	MOTSTB Motor Control Module Signal Malfunction
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)
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)

DTC P2610 | ECM Ignition Off Internal Timer Malfunction (2006 model)

DTC P0106: MAP SENSOR VACUUM CONNECTION PROBLEM

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **HDS CLEAR COMMAND**).
2. Start the engine and keep the engine speed at 1,000 RPM for one minute with the transmission in Park or neutral position.
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0106 indicated?

   YES - Go to step 8 .

   NO - Go to step 4.
4. Turn the ignition switch OFF.
5. Turn the ignition switch ON (II).
6. Check the MAP SENSOR in the DATA LIST with the HDS.

   Does it indicate atmospheric pressure?

   YES - Go to step 7.

   NO - Replace the MAP sensor.
7. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then turn the ignition switch OFF.
8. Start the engine.
9. Check the MAP SENSOR in the DATA LIST with the HDS.

   Is about 40.0 kPa (12.0 in.Hg, 300 mmHg), or 1.23 V or less indicated within 1 second after starting the engine?

   YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the MAP sensor and the ECM.

NO - Go to step 10.

10. Check for a vacuum leak between the MAP sensor and the throttle body.

Is there a leak?

YES - Repair the vacuum leak.

NO - Go to step 11.

11. Turn the ignition switch OFF.
12. Turn the ignition switch ON (II).
13. Check the MAP SENSOR in the DATA LIST with the HDS.

Does it indicate atmospheric pressure?

YES - Go to step 14.

NO - Replace the MAP sensor.

14. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then turn the ignition switch OFF.
15. Start the engine.
16. Check the MAP SENSOR in the DATA LIST with the HDS.

Is about 40.0 kPa (12.0 in.Hg, 300 mmHg), or 1.23 V or less indicated within 1 second after starting the engine?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Replace the MAP sensor.

DTC P0107: MAP SENSOR CIRCUIT LOW VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the MAP SENSOR in the DATA LIST with the HDS.

   Is about 101 kPa (30 in.Hg, 760 mmHg) or 2.9 V indicated?

   YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the MAP sensor and the ECM.

   NO - Go to step 3.
3. Turn the ignition switch OFF.
4. Disconnect the MAP sensor 3P connector.
5. Turn the ignition switch ON (II).
6. Measure voltage between MAP sensor 3P connector terminals No. 1 and No. 2.

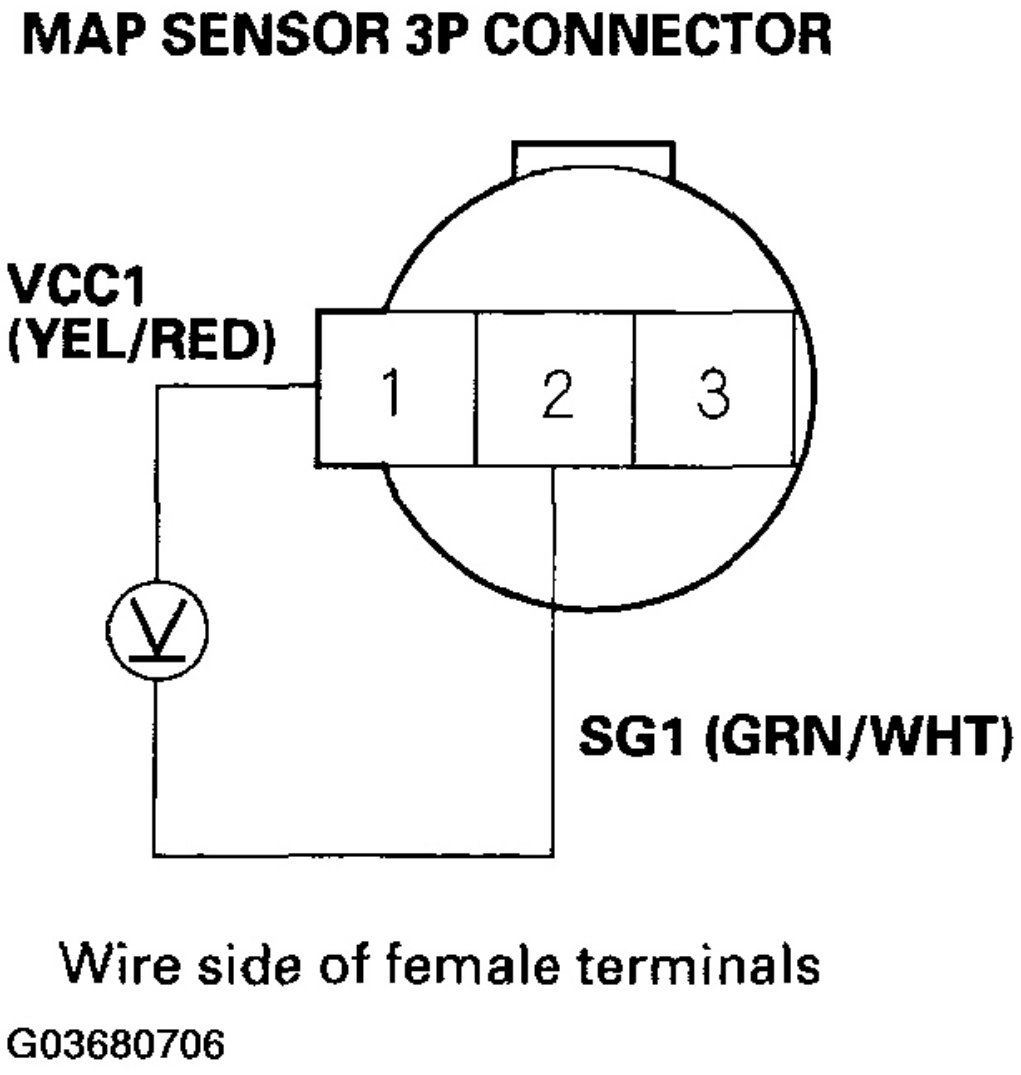


Fig. 3: Measuring Voltage Between Map Sensor 3P Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 8 .
NO - Go to step 7.

7. Measure voltage between ECM connector terminals C7 and C19.

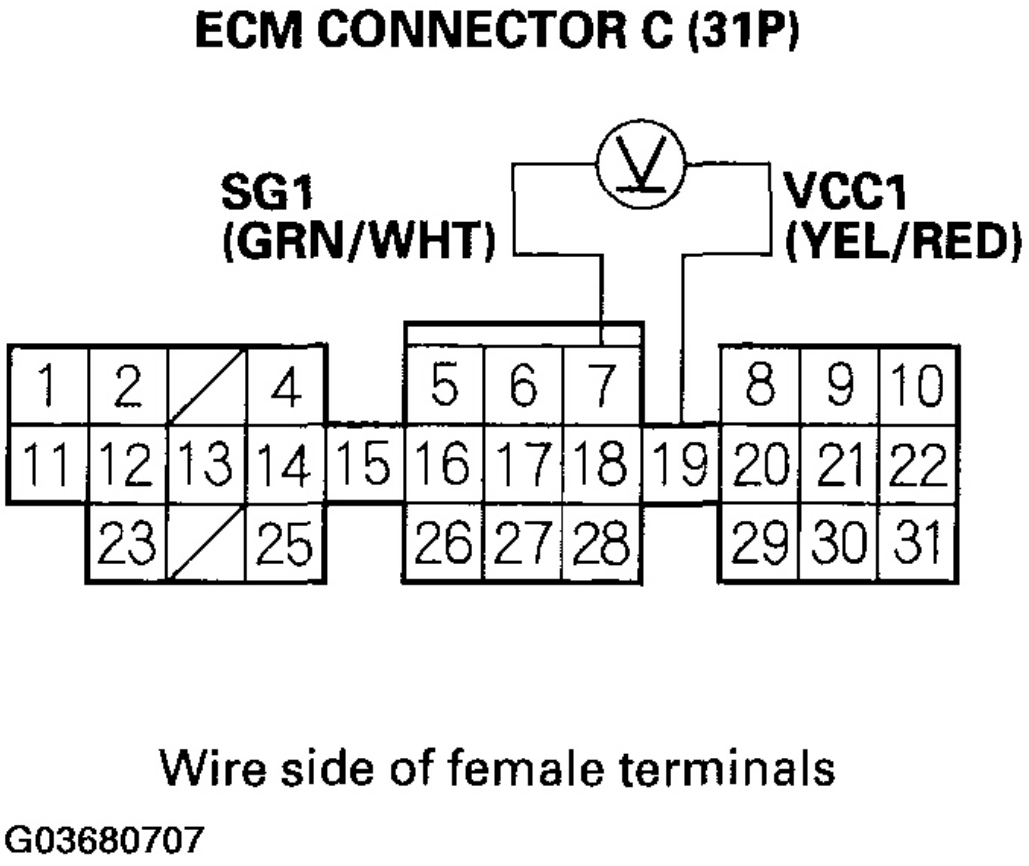


Fig. 4: Measuring Voltage Between ECM Connector Terminals C7 And C19
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the ECM (C19) and the MAP sensor.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001**

M/T MODELS)), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

8. Check the MAP SENSOR in the DATA LIST with the HDS.

   Is about 2 kPa (0.6 in.Hg, 15 mmHg), or 0.5 V or less indicated?

   YES - Go to step 9.

   NO - Replace the MAP sensor.

9. Turn the ignition switch OFF, and wait for 10 seconds.
10. Disconnect ECM connector C (31P).
11. Check for continuity between MAP sensor 3P connector terminal No. 3 and body ground.

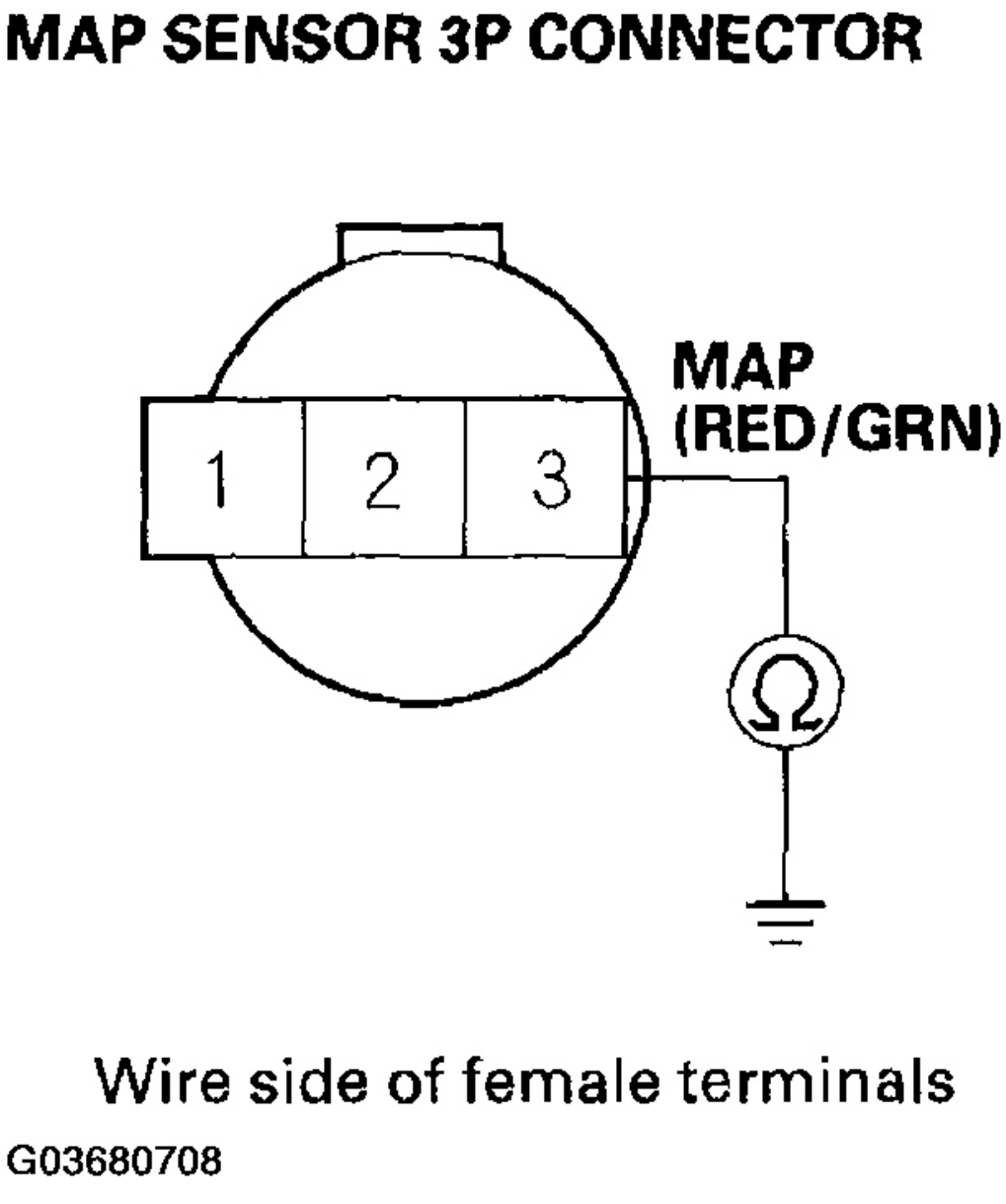


Fig. 5: Checking Continuity Between MAP Sensor 3P Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -

- Go to step 12 (CVT model).
- Repair short in the wire between the ECM (C17) and the MAP sensor (M/T model).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

12. Disconnect TCM connector B (22P).
13. Check for continuity between MAP sensor 3P connector terminal No. 3 and body ground.

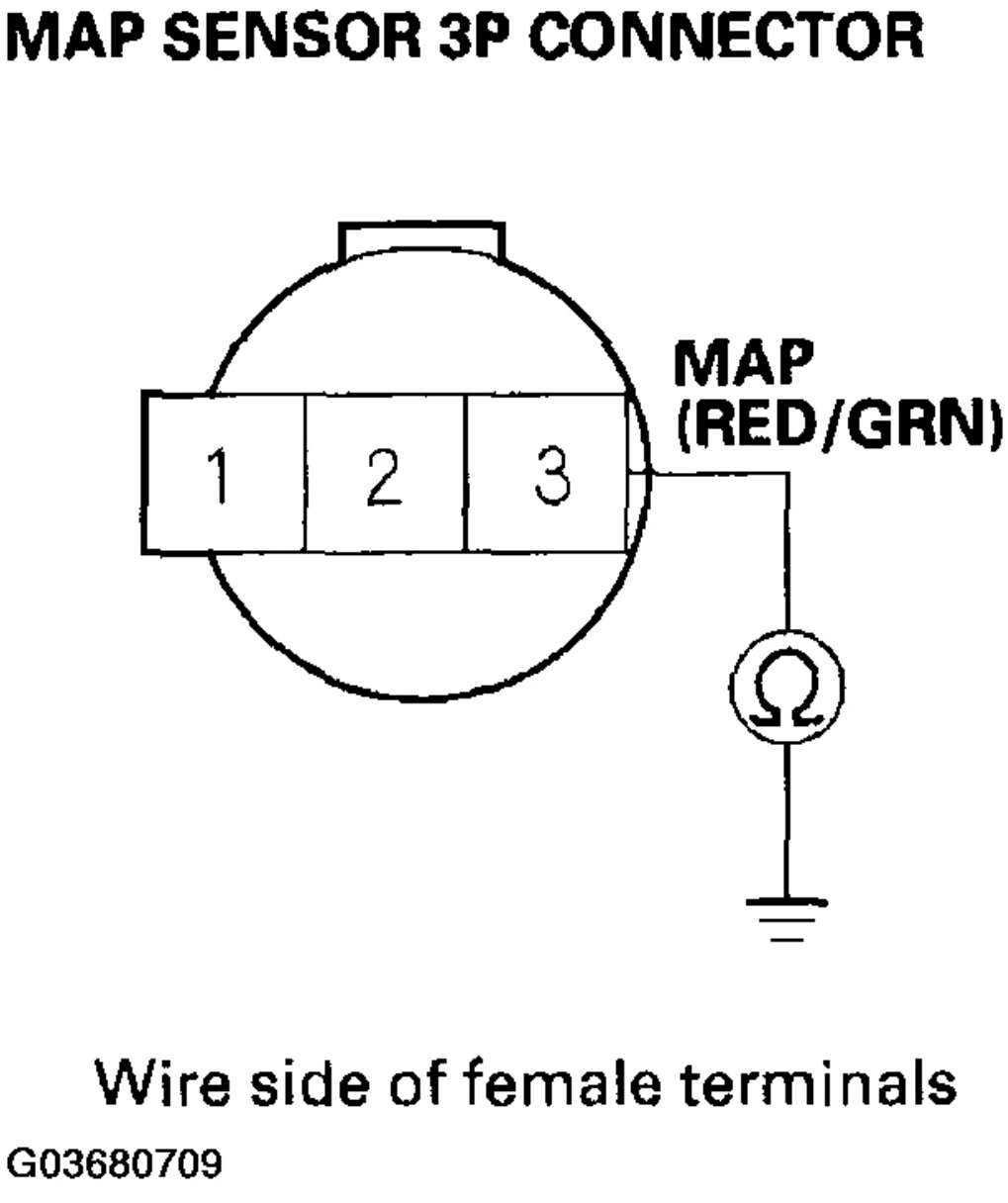


Fig. 6: Checking Continuity Between MAP Sensor 3P Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C17), the TCM (B2), and the MAP sensor.

NO - Substitute a known-good TCM, and recheck (see **HOW TO TROUBLESHOOT CIRCUIT AT THE TCM**). If the symptom/indication goes away, replace the original TCM.

DTC P0108: MAP SENSOR CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
2. Check the MAP SENSOR in the DATA LIST with the HDS.

   Is about 101 kPa (30 in.Hg, 760 mmHg), or 2.9 V or more indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the MAP sensor and the ECM.
3. Turn the ignition switch OFF.
4. Disconnect the MAP sensor 3P connector.
5. Connect MAP sensor 3P connector terminals No. 2 and No. 3 with a jumper wire.

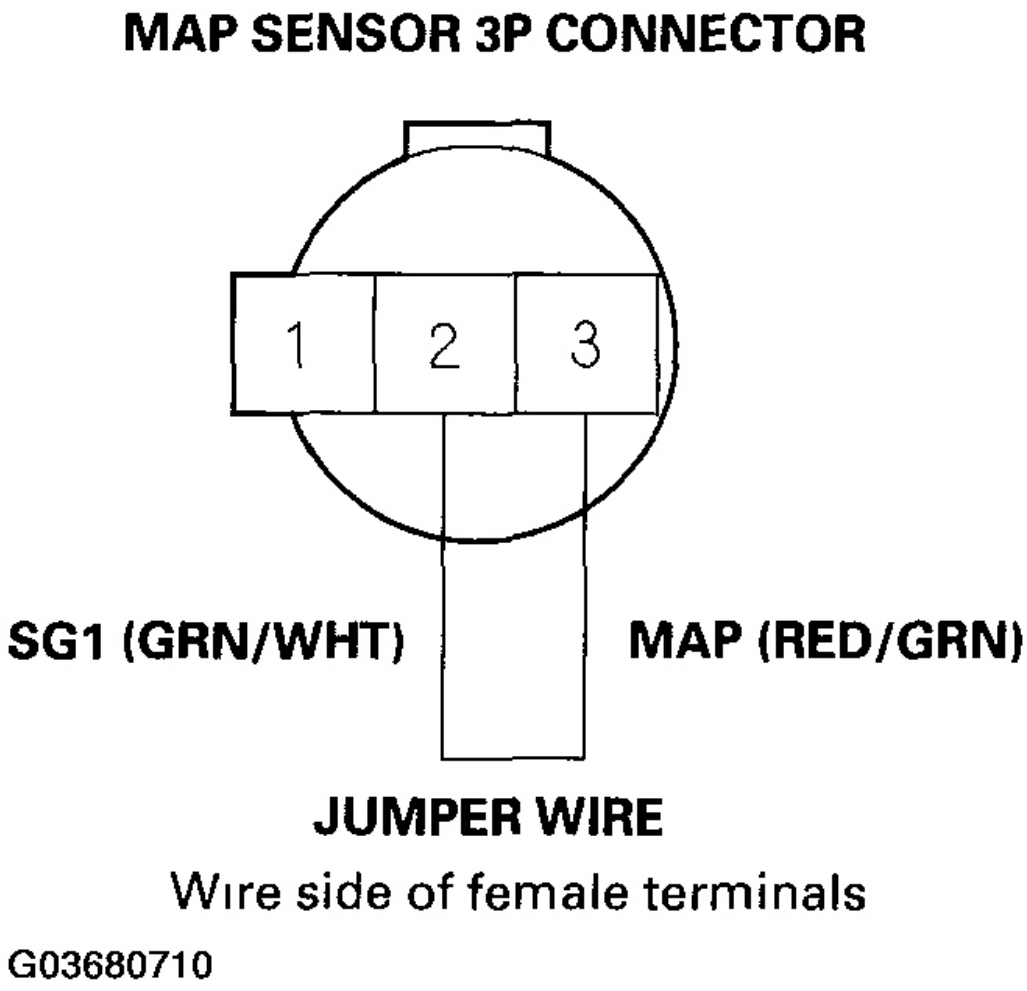


Fig. 7: Connecting MAP Sensor 3P Connector Terminals No. 2 And 3 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Turn the ignition switch ON (II).
7. Check the MAP SENSOR in the DATA LIST with the HDS.

Is about 101 kPa (30 in.Hg, 760 mmHg), or 2.9 V or more indicated?

YES - Go to step 8.

NO - Replace the MAP sensor.

8. Remove the jumper wire.
9. Measure voltage between MAP sensor 3P connector terminals No. 1 and No. 2.

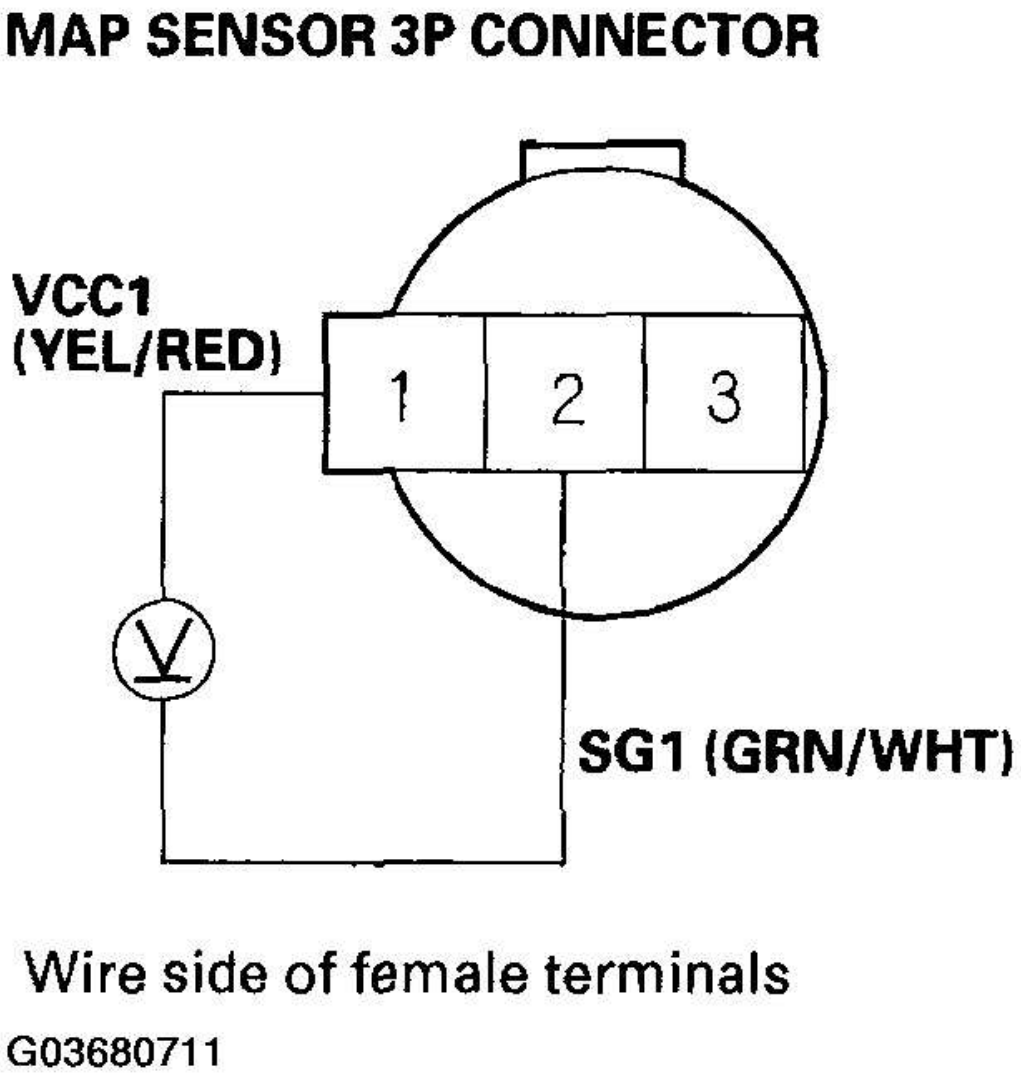


Fig. 8: Measuring Voltage Between MAP Sensor 3P Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 10.

NO - Go to step 14 .

10. Turn the ignition switch OFF.
11. Connect ECM connector terminals C7 and C17 with a jumper wire.

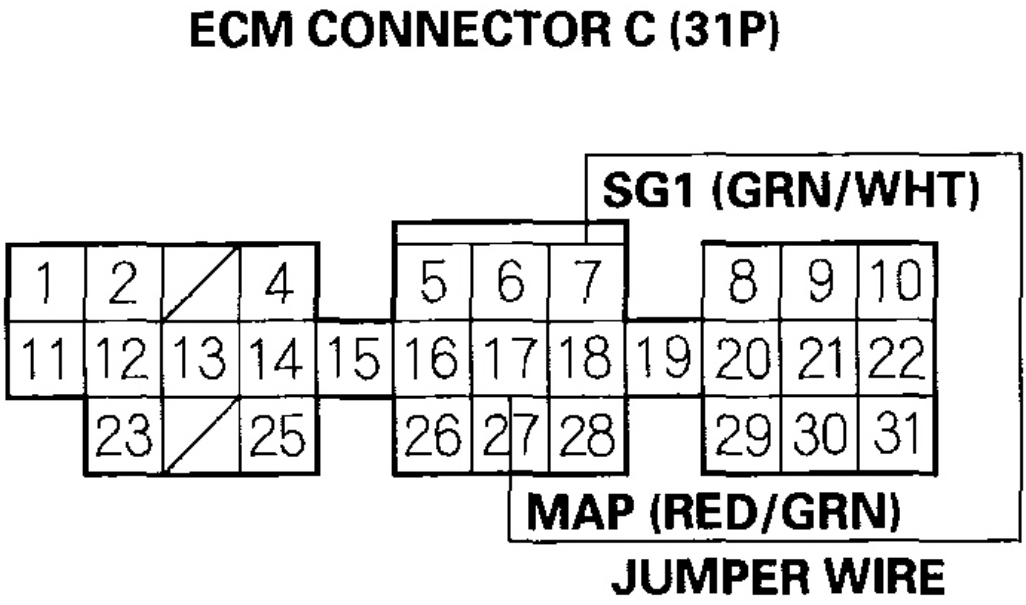


Fig. 9: Connecting ECM Connector Terminals C7 And C17 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Turn the ignition switch ON (II).
13. Check the MAP SENSOR in the DATA LIST with the HDS.

Is about 101 kPa (30 in.Hg, 760 mmHg), or 2.9 V or more indicated?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (C17) and the MAP sensor.

14. Turn the ignition switch OFF, and wait for 10 seconds.
15. Disconnect ECM connector C (31P).
16. Connect MAP sensor 3P connector terminal No. 2 to body ground with a jumper wire.

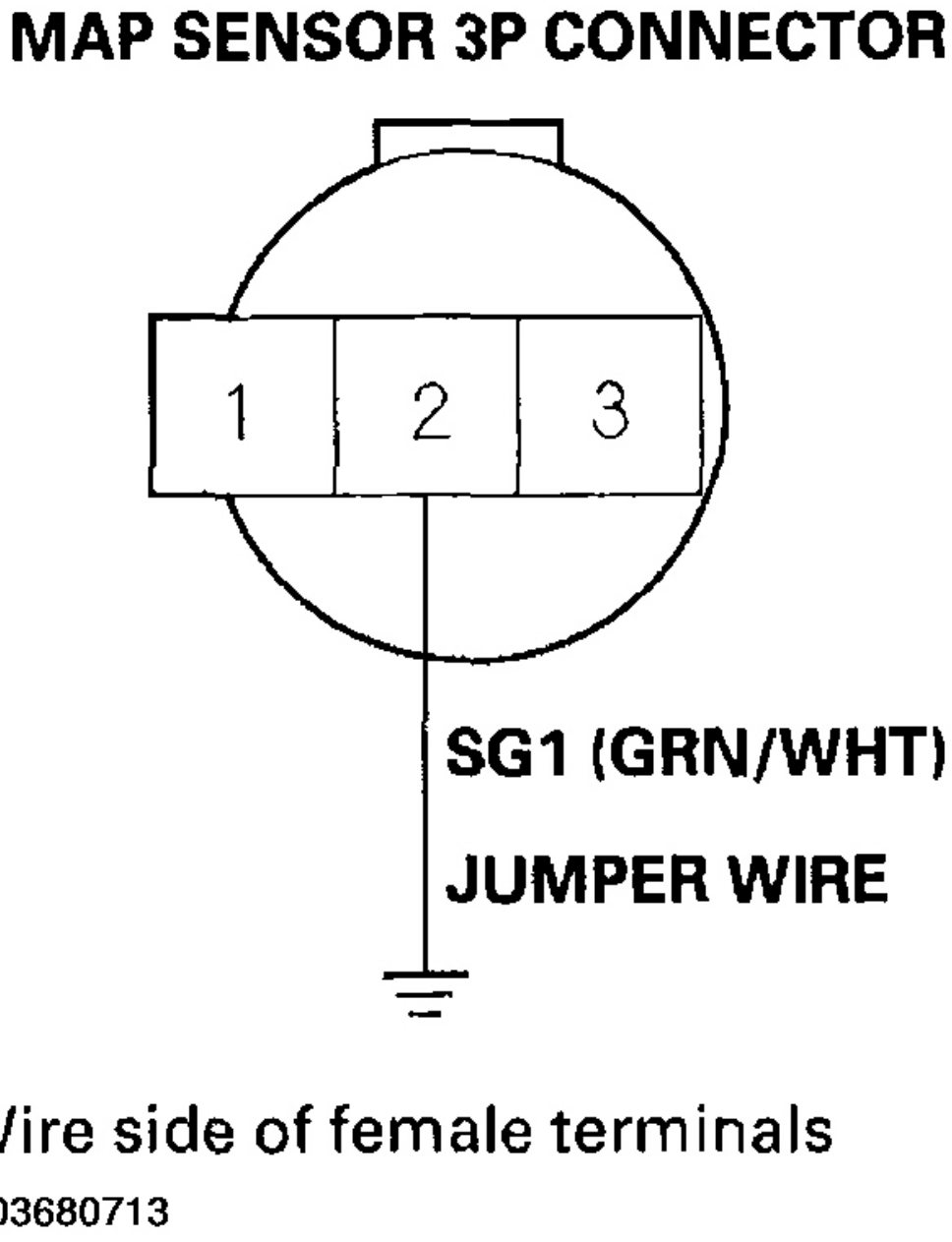


Fig. 10: Connecting MAP Sensor 3P Connector Terminal No. 2 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Check for continuity between ECM connector terminal C7 and body ground.

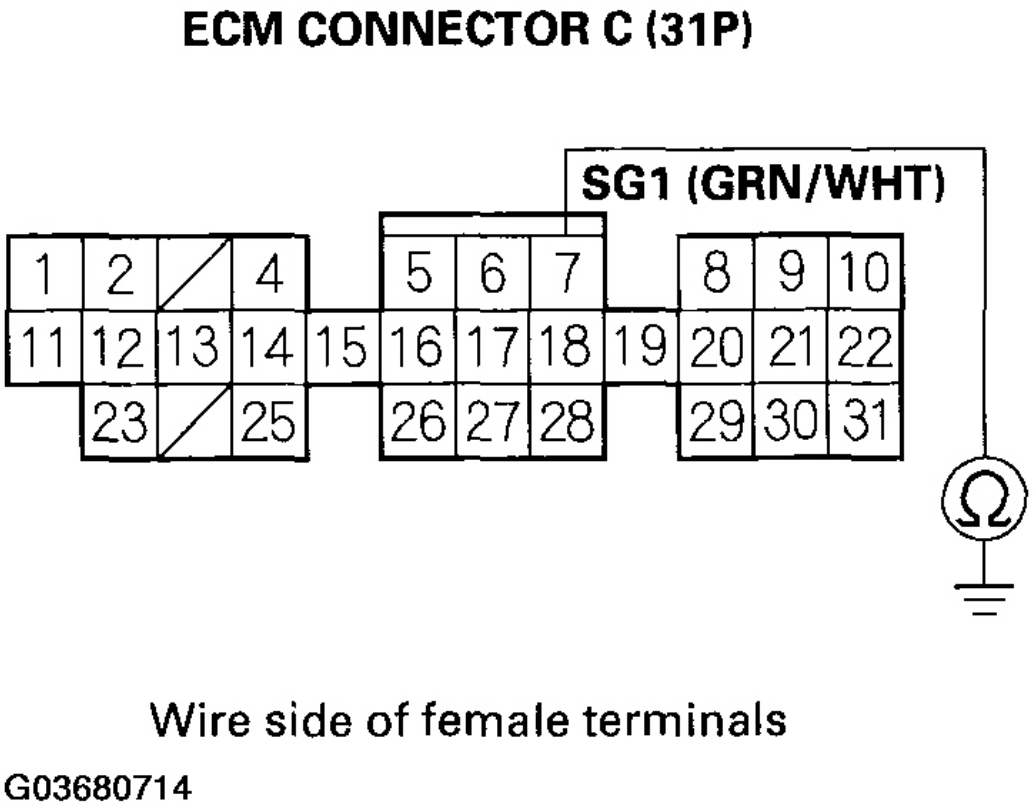


Fig. 11: Checking Continuity Between ECM Connector Terminal C7 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 MAT models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the

original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (C7) and the MAP sensor.

DTC P0111: IAT SENSOR CIRCUIT RANGE/ PERFORMANCE PROBLEM (2006 MODEL); DTC P1116: ECT SENSOR CIRCUIT RANGE/ PERFORMANCE PROBLEM (2006 MODEL)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Check for poor connections or loose terminals at the ECT sensor and the IAT sensor.

   Are the connections and terminals OK?

   YES - Go to step 2.

   NO - Repair the connections or terminals, then go to step 25 .
2. Start the engine, and let it idle for 10 minutes.
3. Check the ECT SENSOR in the DATA LIST with the HDS.

   Is about 129°F (54°C) or less, or 1.54 V or more indicated?

   YES - Replace the ECT sensor, then go to step 25 .

   NO - Go to step 4.
4. Turn the ignition switch OFF.
5. Remove the IAT sensor.
6. Allow the IAT sensor to cool to 77°F (25°C).
7. Note the ambient temperature.
8. Connect the IAT sensor to the 2P connector. But do not install the sensor on the intake air duct.
9. Turn the ignition switch ON (II).
10. Note the value of the IAT SENSOR quickly in the DATA LIST with the HDS.
11. Compare the IAT SENSOR and the ambient temperature.

    Does the IAT SENSOR differ 5.4°F (3°C) or more?

YES - Replace the IAT sensor, then go to step 25 .

NO - Go to step 12.

12. Disconnect the IAT sensor from the 2P connector.
13. Using a heat gun, below hot air on the IAT sensor for a few seconds. Do not apply the heat longer than a few seconds or you will damage the sensor.
14. Connect the IAT sensor to the 2P connector. Do not install it on the intake air duct.
15. Check the IAT SENSOR in the DATA LIST with the HDS.

Does the IAT SENSOR change 82°F (28°C) or more?

YES - Go to step 16.

NO - Replace the IAT sensor, then go to step 25 .

16. Turn the ignition switch OFF.
17. Drain the coolant (see **COOLANT REPLACEMENT**).
18. Remove the ECT sensor.
19. Allow the ECT sensor to cool to 77°F (25°C).
20. Note the ambient temperature.
21. Connect the ECT sensor to the 2P connector. Do not install the sensor on the engine.
22. Turn the ignition switch ON (II).
23. Note the value of ECT SENSOR quickly in the DATA LIST with the HDS.
24. Compare the ECT SENSOR and the ambient temperature.

Does the ECT SENSOR differ 5.4°F (3°C) or more?

YES - Replace the ECT sensor, then go to step 25.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the ECT sensor and the ECM.

25. Turn the ignition switch ON (II).
26. Reset the ECM with the HDS.
27. Do the ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**).

28. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P0111 and/or P1116 is indicated, check for poor connections or loose terminals at the ECT sensor, or the IAT sensor and the ECM, then go to step 1 . If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**

    NO - Troubleshooting is complete.

DTC P0112: IAT SENSOR CIRCUIT LOW VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the IAT SENSOR in the DATA LIST with the HDS.

   Is 302°F (150°C) or higher, or 0 V indicated?

   YES - Go to step 3.

   NO - Go to step 10 .
3. Disconnect the IAT sensor 2P connector.
4. Check the IAT SENSOR in the DATA LIST with the HDS.

   Is 302°F (150°C) or higher, or 0 V indicated?

   YES - Go to step 5.

   NO - Replace the IAT sensor.
5. Turn the ignition switch OFF, and wait for 10 seconds.
6. Disconnect ECM connector C (31P).
7. Check for continuity between IAT sensor 2P connector terminal No. 2 and body ground.

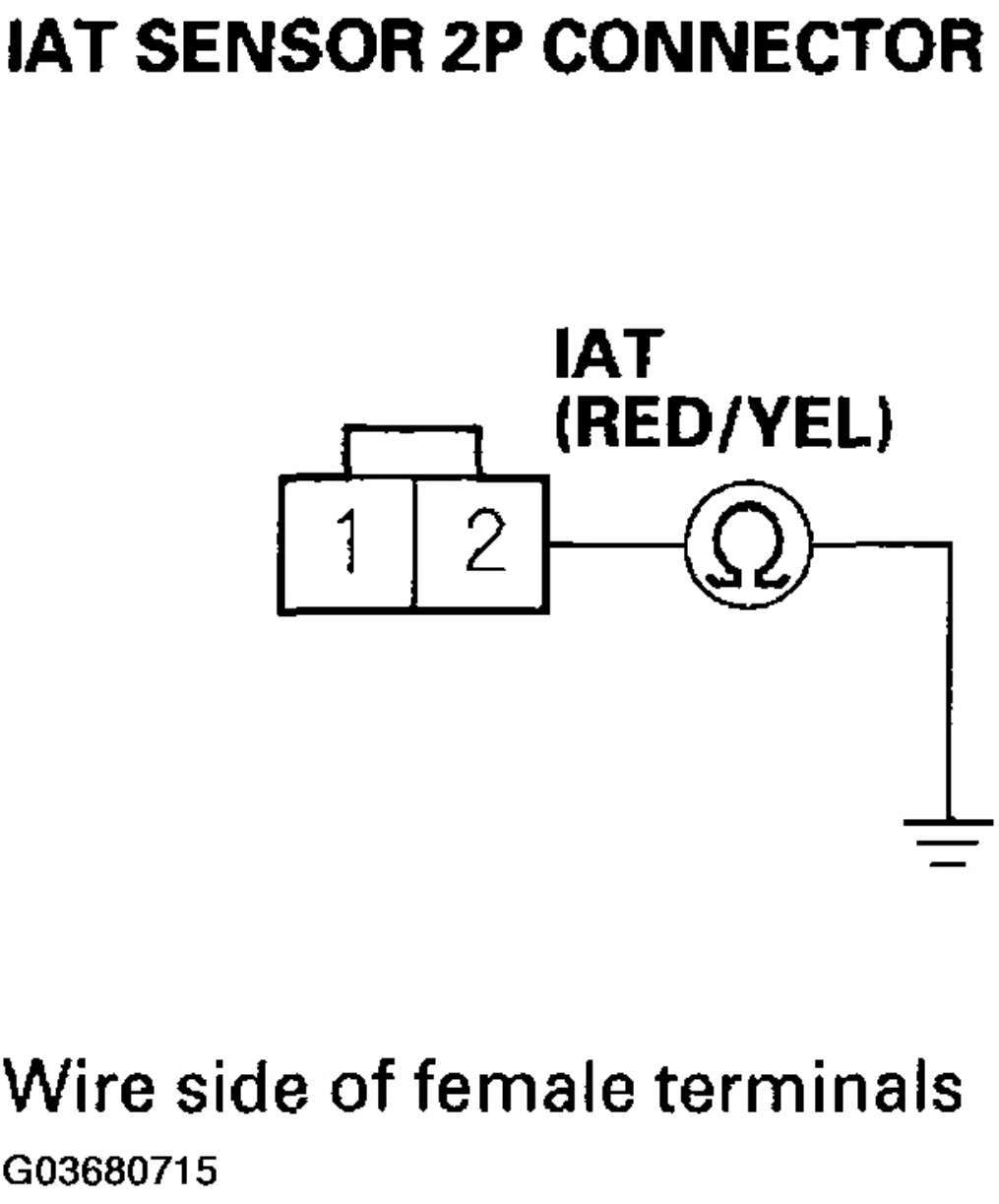


Fig. 12: Checking Continuity Between IAT Sensor Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -

- Go to step 8 (CVT model).
- Repair short in the wire between the ECM (C25) and the IAT sensor (M/T model).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

8. Disconnect TCM connector B (22P).
9. Check for continuity between IAT sensor 2P connector terminal No. 2 and body ground.

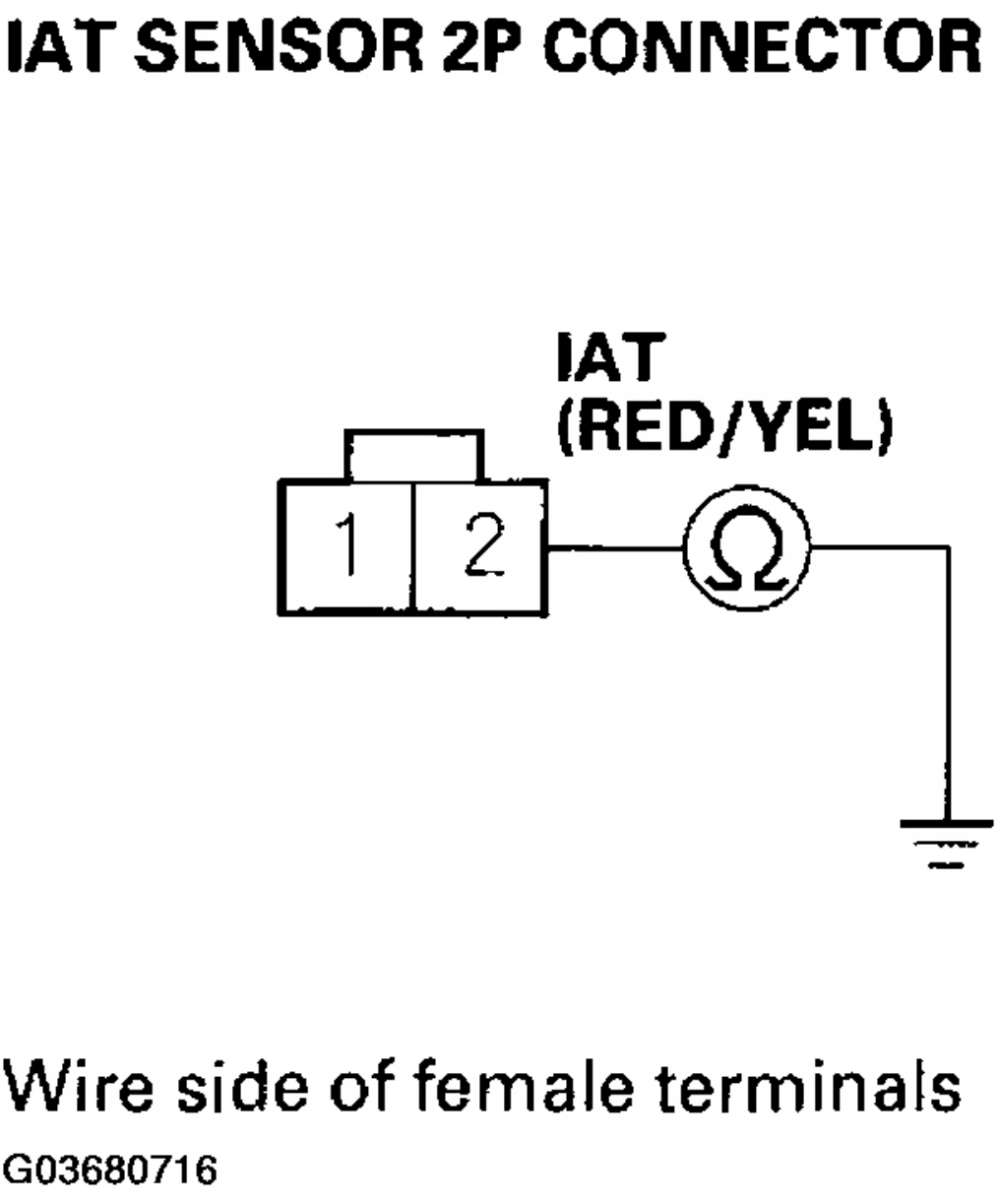


Fig. 13: Checking Continuity Between IAT Sensor 2P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C25), the TCM (B19) and the IAT sensor.

NO - Substitute a known-good TCM, and recheck (see **HOW TO TROUBLESHOOT CIRCUIT AT THE TCM**). If the symptom/indication goes away, replace the original TCM.

10. Check the temperature reading on the HDS.

Is the correct ambient temperature indicated? If the engine is warm, the reading will be higher than ambient temperature.

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the IAT sensor and the ECM.

NO - Replace the IAT sensor.

DTC P0113: IAT SENSOR CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the IAT SENSOR in the DATA LIST with the HDS.

Is -4°F (-20°C) or less, or 5 V indicated?

YES - Go to step 3.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the IAT sensor and the ECM.

3. Turn the ignition switch OFF.
4. Disconnect the IAT sensor 2P connector.
5. Connect IAT sensor 2P connector terminals No. 1 and No. 2 with a jumper wire.

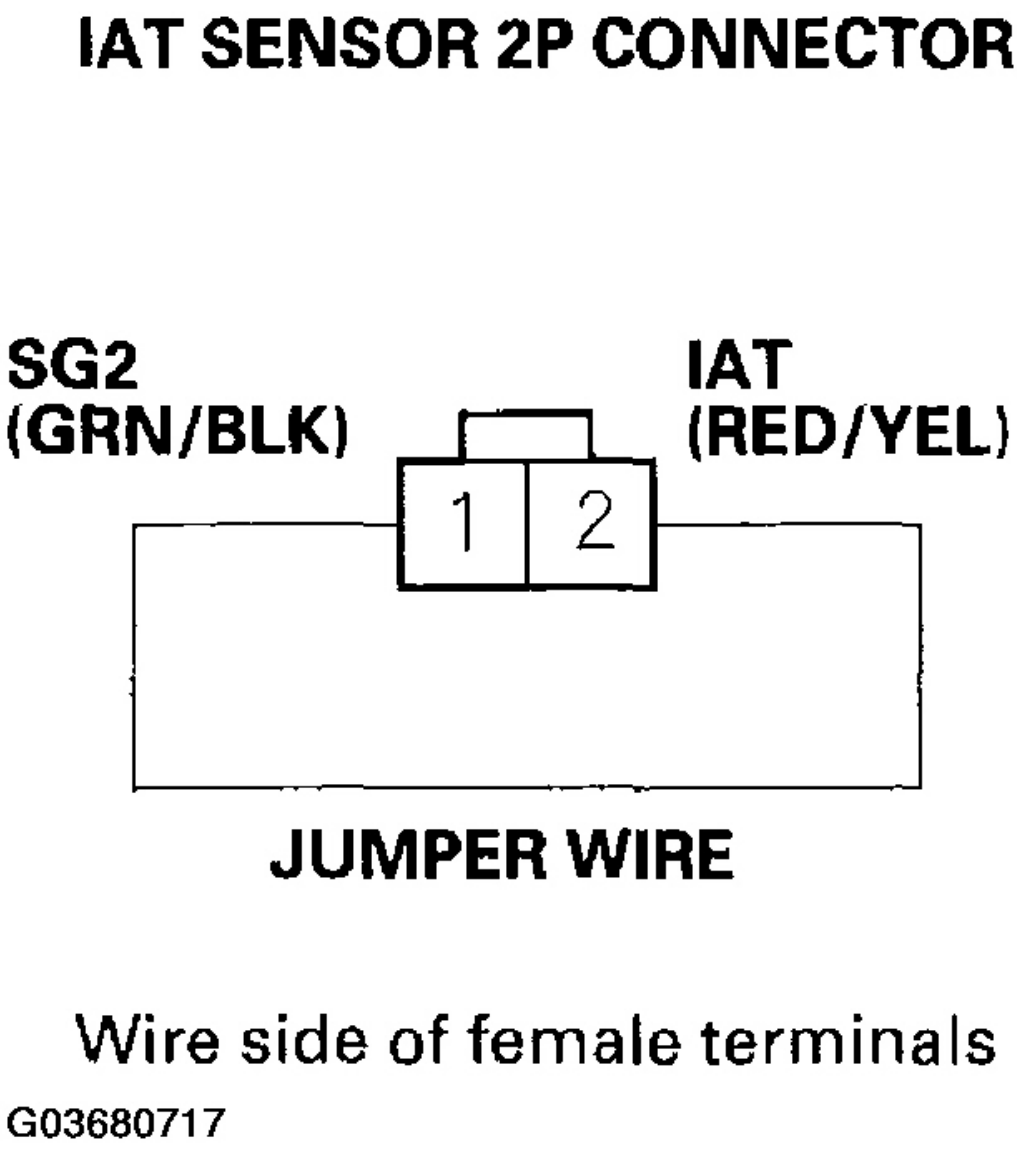


Fig. 14: Connecting IAT Sensor 2P Connector Terminals No. 1 And 2 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Turn the ignition switch ON (II).
7. Check the IAT SENSOR in the DATA LIST with the HDS.

Is -4°F(-20°C) or less, or 5 V indicated?

YES - Go to step 8.

NO - Replace the IAT sensor.

8. Turn the ignition switch OFF.
9. Remove the jumper wire.
10. Turn the ignition switch ON (II).
11. Measure voltage between IAT sensor 2P connector terminal No. 2 and body ground.

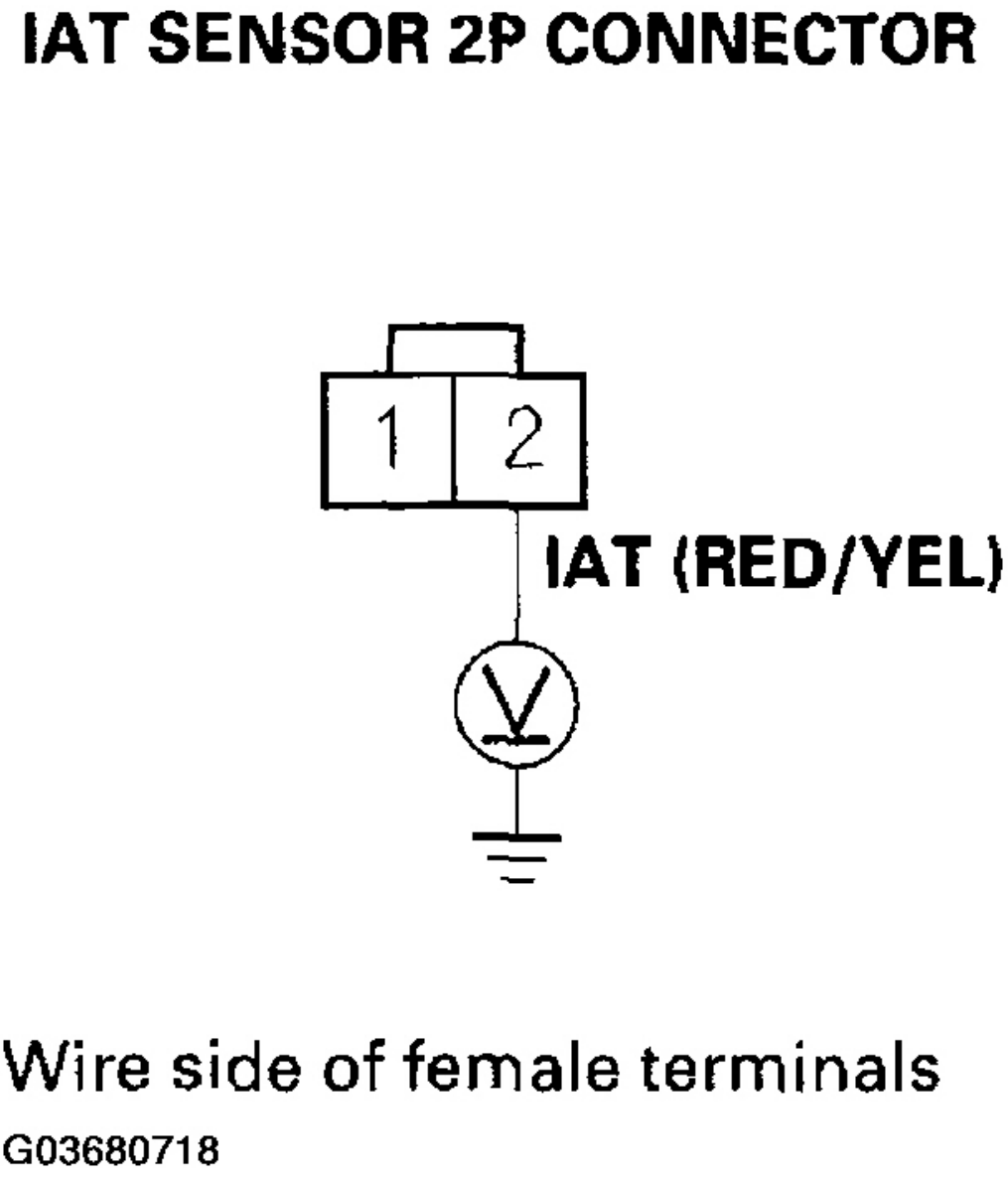


Fig. 15: Measuring Voltage Between IAT Sensor 2P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 12.

NO - Go to step 15 .

12. Turn the ignition switch OFF.
13. Connect IAT sensor 2P connector terminal No. 1 to body ground with a jumper wire.

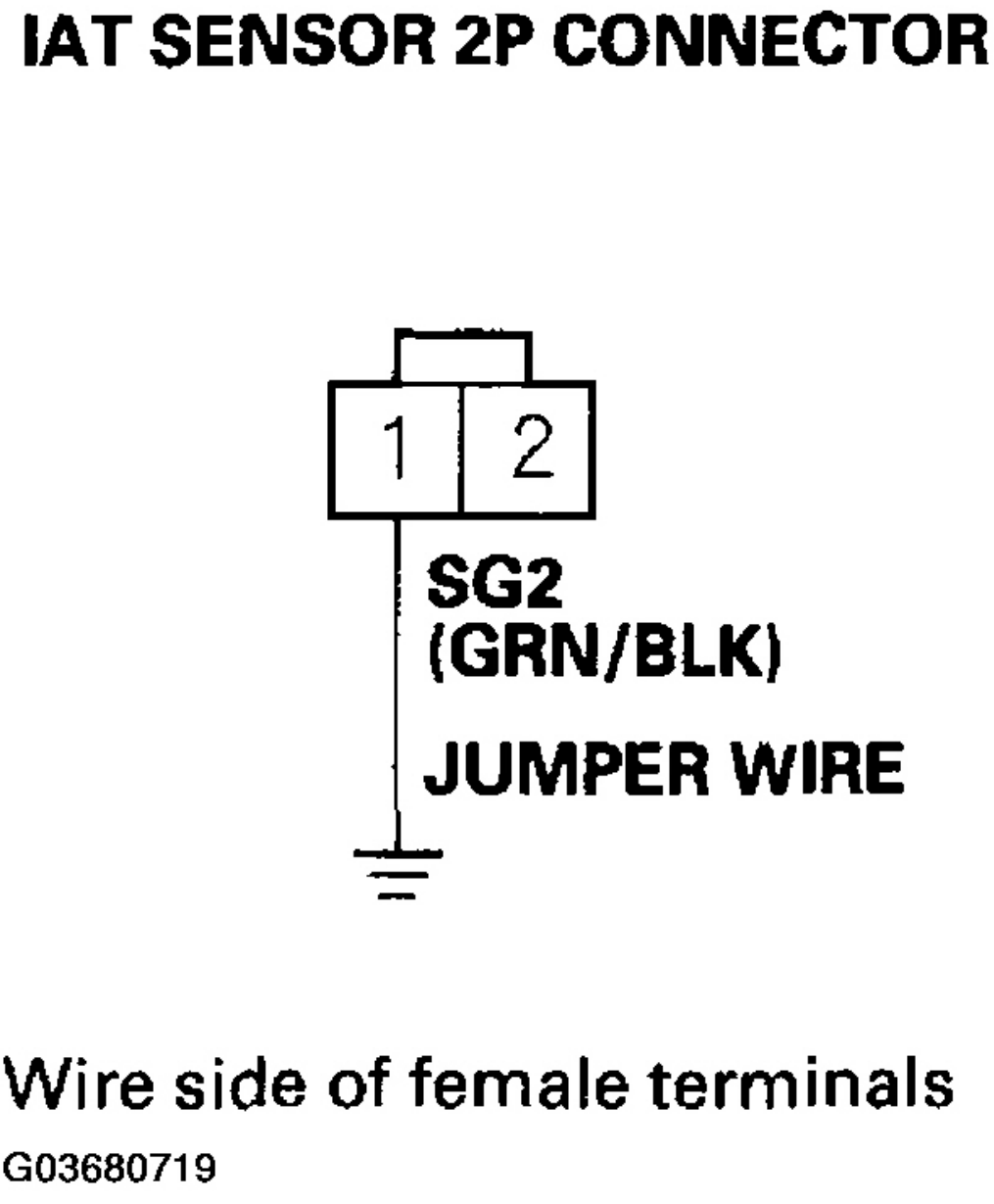


Fig. 16: Connecting IAT Sensor 2P Connector Terminal No. 1 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Check for continuity between ECM connector terminal C18 and body ground.

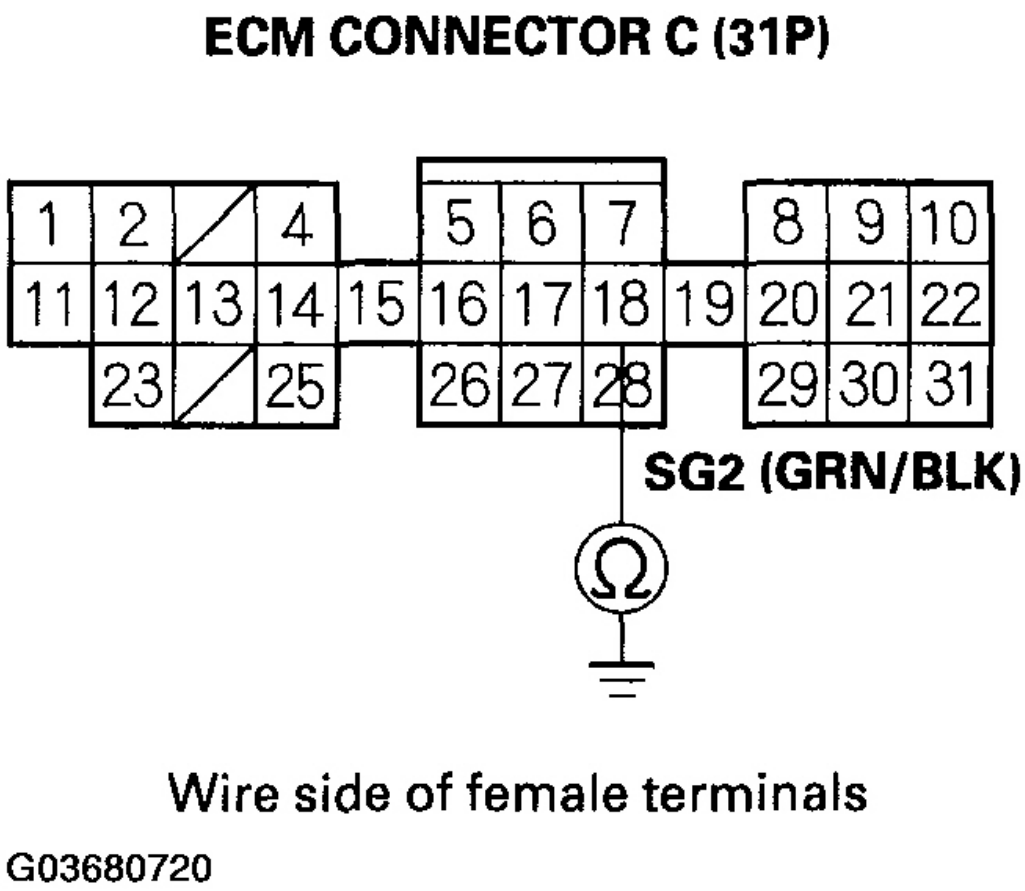


Fig. 17: Checking Continuity Between ECM Connector Terminal C18 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the

original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (C18) and the IAT sensor.

15. Measure voltage between ECM connector terminal C25 and body ground.

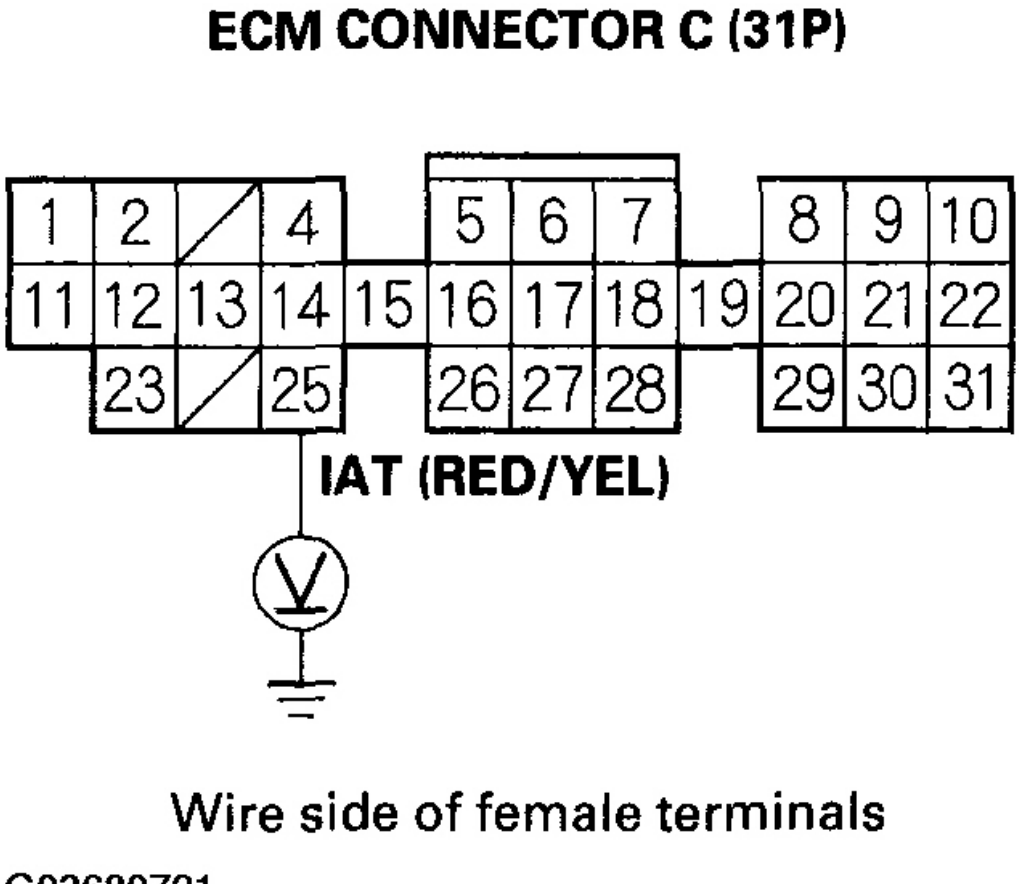


Fig. 18: Measuring Voltage Between ECM Connector Terminal C25 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the ECM (C25) and the IAT sensor.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

DTC P0116: ECT SENSOR CIRCUIT RANGE/ PERFORMANCE PROBLEM (2000-2005 MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the ECT SENSOR in the DATA LIST with the HDS.

   Is about 176°F (80°C) or higher, or 0.86 V or less indicated?

   YES - Go to step 3.

   NO - Go to step 7 .
3. Note the value of the ECT SENSOR in the DATA LIST with the HDS.
4. Turn the ignition switch OFF.
5. Cool the engine for 1 hour.
6. Check the ECT SENSOR in the DATA LIST with the HDS.

   Did the ECT change 3.6°F (2°C) or more?

   YES - Intermittent failure, system is OK at this time. Check the thermostat and the cooling system.

   NO - Replace the ECT sensor.
7. Note the value of the ECT SENSOR in the DATA LIST with the HDS.
8. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.

9. Does the ECT SENSOR in the DATA LIST with the HDS.

Does the ECT SENSOR change 3.6°F (2°C) or more?

YES - Intermittent failure, system is OK at this time. Check the thermostat and the cooling system.

NO - Replace the ECT sensor.

DTC P0116: ECT SENSOR CIRCUIT RANGE/ PERFORMANCE PROBLEM (2006 MODEL)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the ECT SENSOR in the DATA LIST with the HDS.

Is about 176°F (80°C) or higher, or 0.78 V or less indicated?

YES - Go to step 6 .

NO - Go to step 3.

3. Note the value of the ECT SENSOR in the DATA LIST with the HDS.
4. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
5. Check the ECT SENSOR in the DATA LIST with the HDS.

Does the ECT SENSOR change 18°F (10°C) or higher?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the ECT sensor and the ECM.

NO - Go to step 11 .

6. Note the value of the ECT SENSOR in the DATA LIST with the HDS.
7. Turn the ignition switch OFF.
8. Open the engine hood, and let the engine cool for 3 hours.
9. Turn the ignition switch ON (II).

10. Check the ECT SENSOR in the DATA LIST with the HDS.

Does the ECT SENSOR change 18°F (10°C) or more?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the ECT sensor and the ECM.

NO - Go to step 11.

11. Turn the ignition switch OFF.
12. Replace the ECT sensor.
13. Turn the ignition switch ON (II).
14. Reset the ECM with the HDS.
15. Do the ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**).
16. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs Indicated?

YES - If DTC P0116 is indicated, check for poor connections or loose terminals at the ECT sensor and the ECM, then go to step 1 . If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING** .

NO - Troubleshooting is complete.

DTC P0117: ECT SENSOR CIRCUIT LOW VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the ECT SENSOR in the DATA LIST with the HDS.

Is 302°F (150°C) or higher, or 0V indicated?

YES - Go to step 3.

NO - Intermittent failure, system is OK at this time. Check for poor

connections or loose terminals at the ECT sensor and the ECM.

3. Disconnect the ECT sensor 2P connector.
4. Check the ECT SENSOR in the DATA LIST with the HDS.

Is 302°F (150°C) or higher, or 0 V indicated?

YES - Go to step 5.

NO - Replace the ECT sensor.

5. Turn the ignition switch OFF, and wait for 10 seconds.
6. Disconnect ECM connector C (31P).
7. Check for continuity between ECT sensor 2P connector terminal No. 1 and body ground.

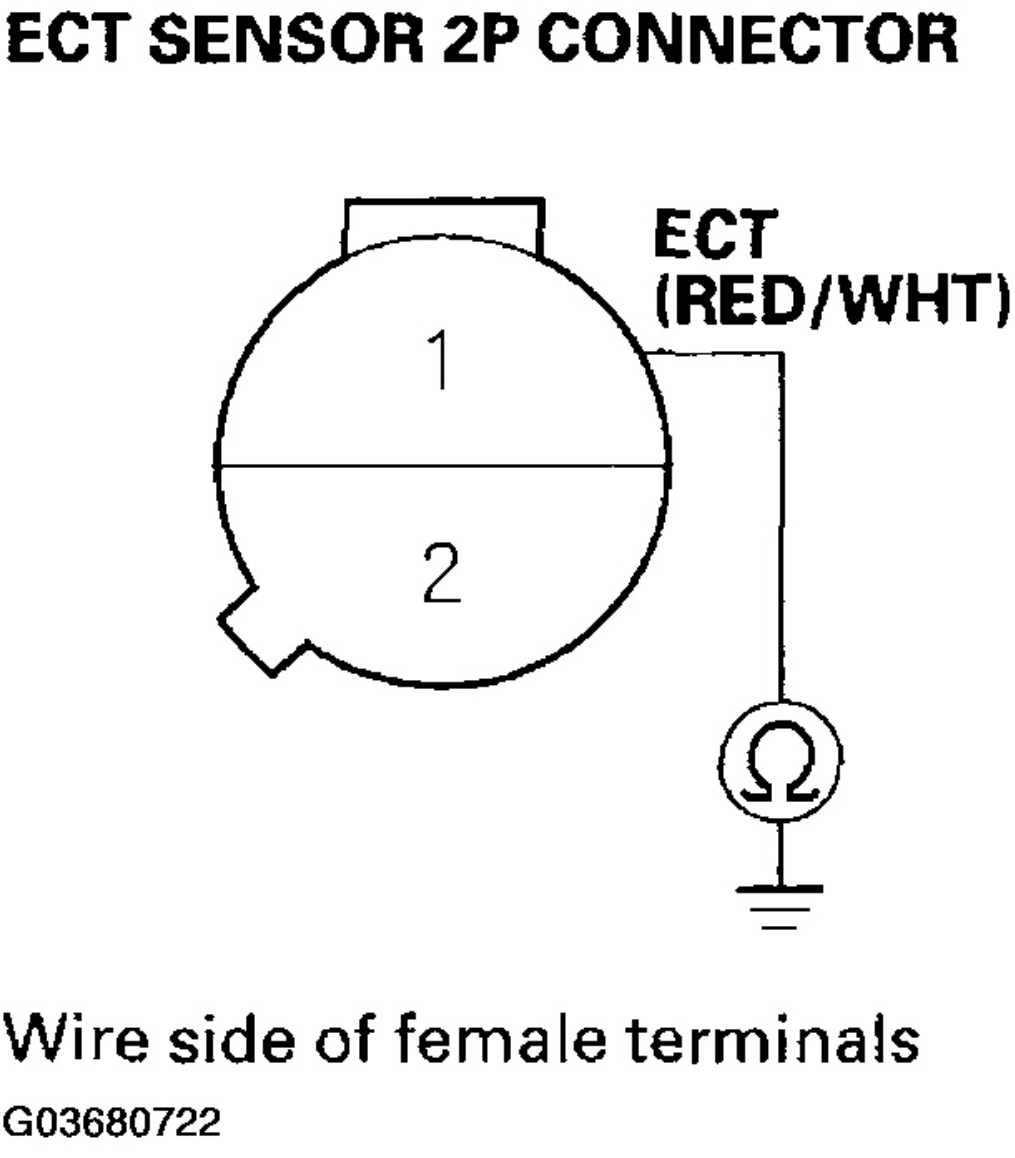


Fig. 19: Checking Continuity Between ECT Sensor 2P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -

- Go to step 8 (CVT model).
- Repair short in the wire between the ECM (C26) and the ECT sensor (M/T model).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

8. Disconnect TCM connector A (26P).
9. Check for continuity between ECT sensor 2P connector terminal No. 1 and body ground.

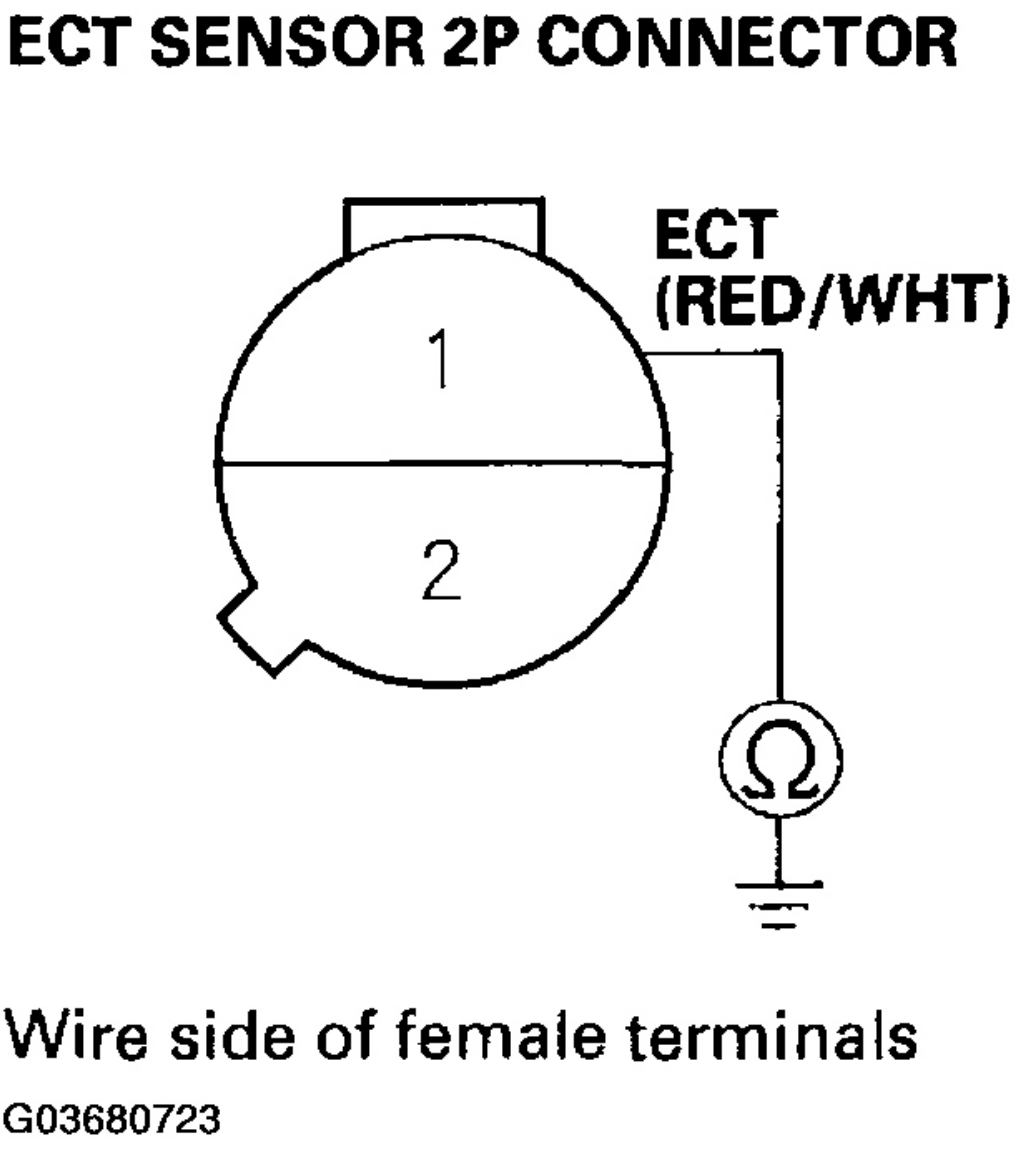


Fig. 20: Checking Continuity Between ECT Sensor 2P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C26), the TCM (A19)

and the ECT sensor.

NO - Substitute a known-good TCM, and recheck (see **HOW TO TROUBLESHOOT CIRCUIT AT THE TCM**). If the symptom/indication goes away, replace the original TCM.

DTC P0118: ECT SENSOR CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the ECT SENSOR in the DATA LIST with the HDS.

   Is -4°F (-20°C) or less, or 5 V indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the ECT sensor and the ECM.
3. Turn the ignition switch OFF.
4. Disconnect the ECT sensor 2P connector.
5. Connect ECT sensor 2P connector terminals No. 1 and No. 2 with a jumper wire.

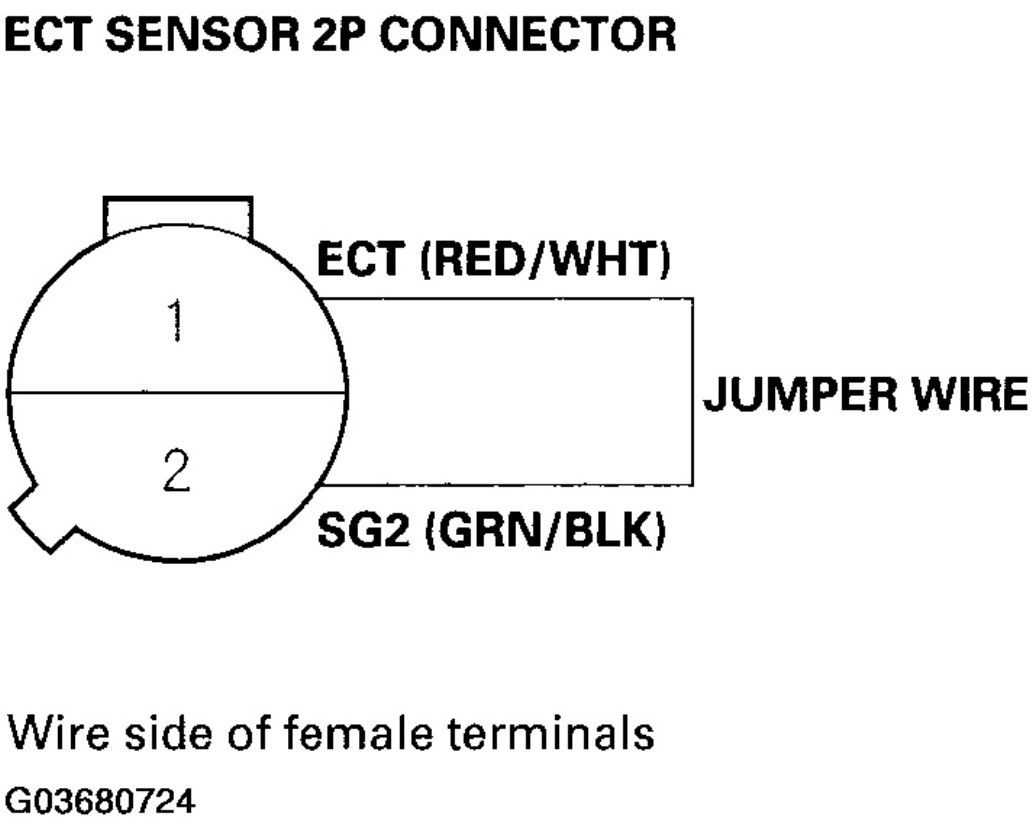


Fig. 21: Connecting ECT Sensor 2P Connector Terminals No. 1 & 2 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Turn the ignition switch ON (II).
7. Check the ECT SENSOR in the DATA LIST with the HDS.

Is -4°F (-20°C) or less, or 5 V indicated?

YES - Go to step 8.
NO - Replace the ECT sensor.

8. Turn the ignition switch OFF.
9. Remove the jumper wire.

10. Turn the ignition switch ON (II).
11. Measure voltage between ECT sensor 2P connector terminal No. 1 and body ground.

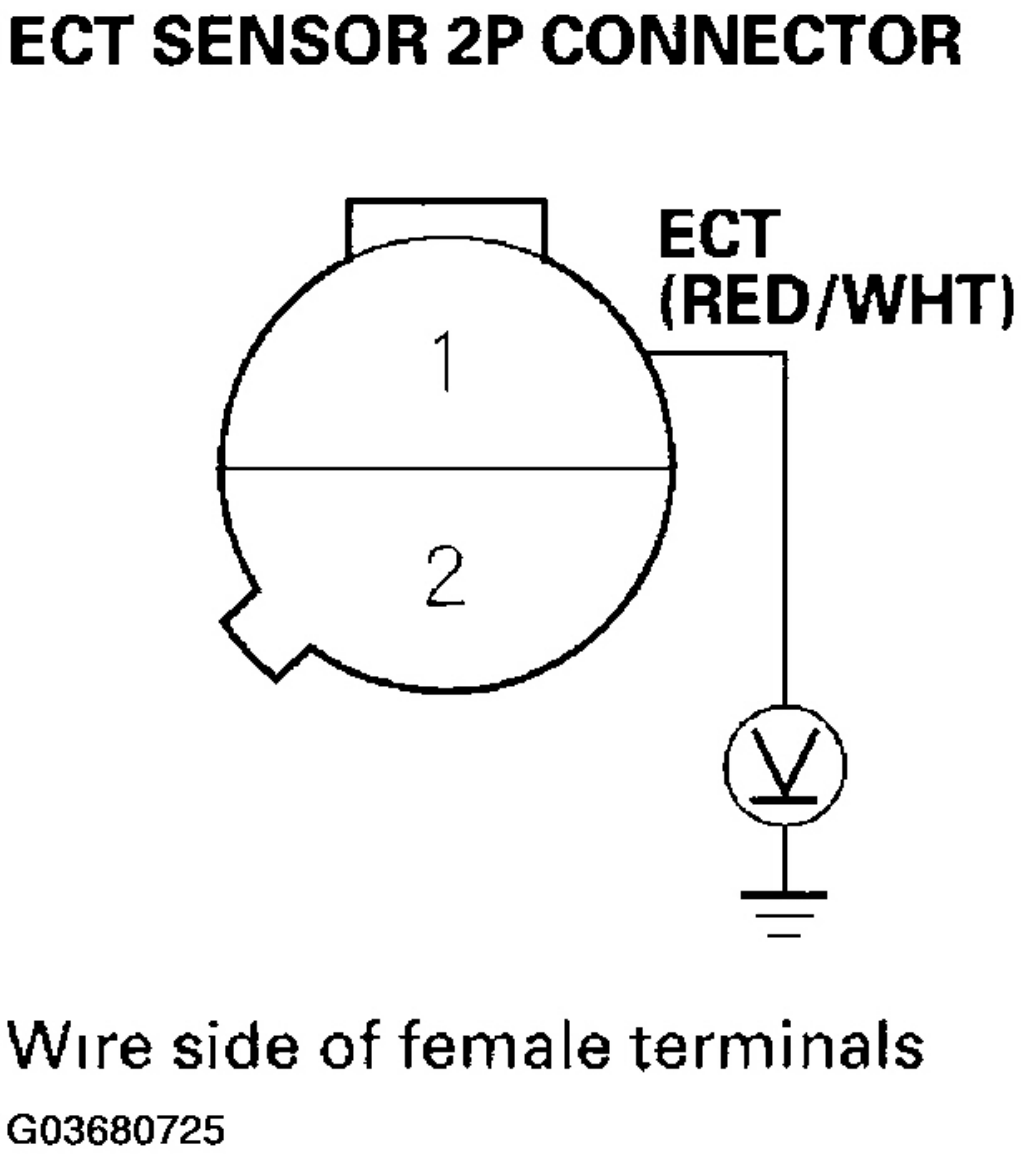


Fig. 22: Measuring Voltage Between ECT Sensor 2P Connector Terminal No. 1 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 12.

NO - Go to step 14 .

12. Connect ECT sensor 2P connector terminal No. 2 to body ground with a jumper wire.

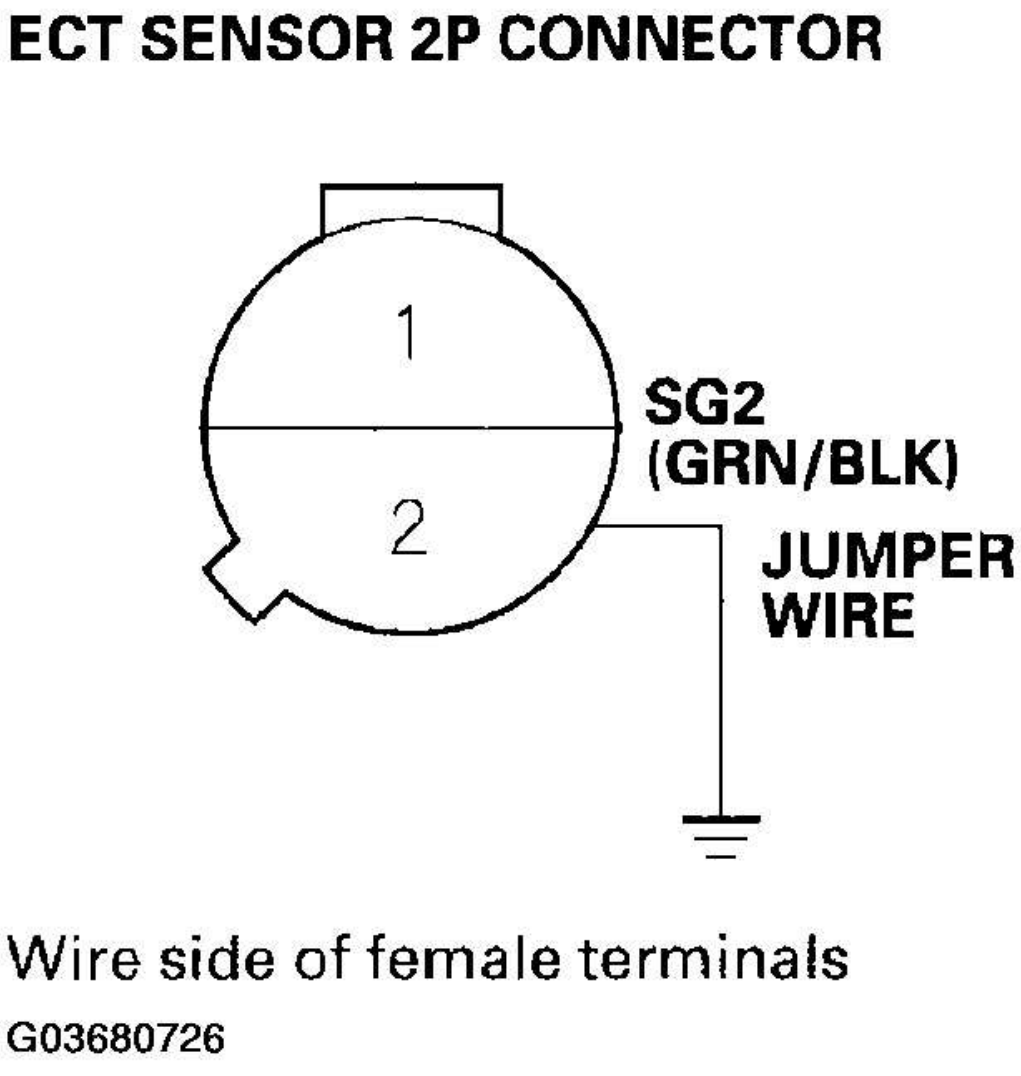


Fig. 23: Connecting ECT Sensor 2P Connector Terminal To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Check for continuity between ECM connector terminal C18 and body ground.

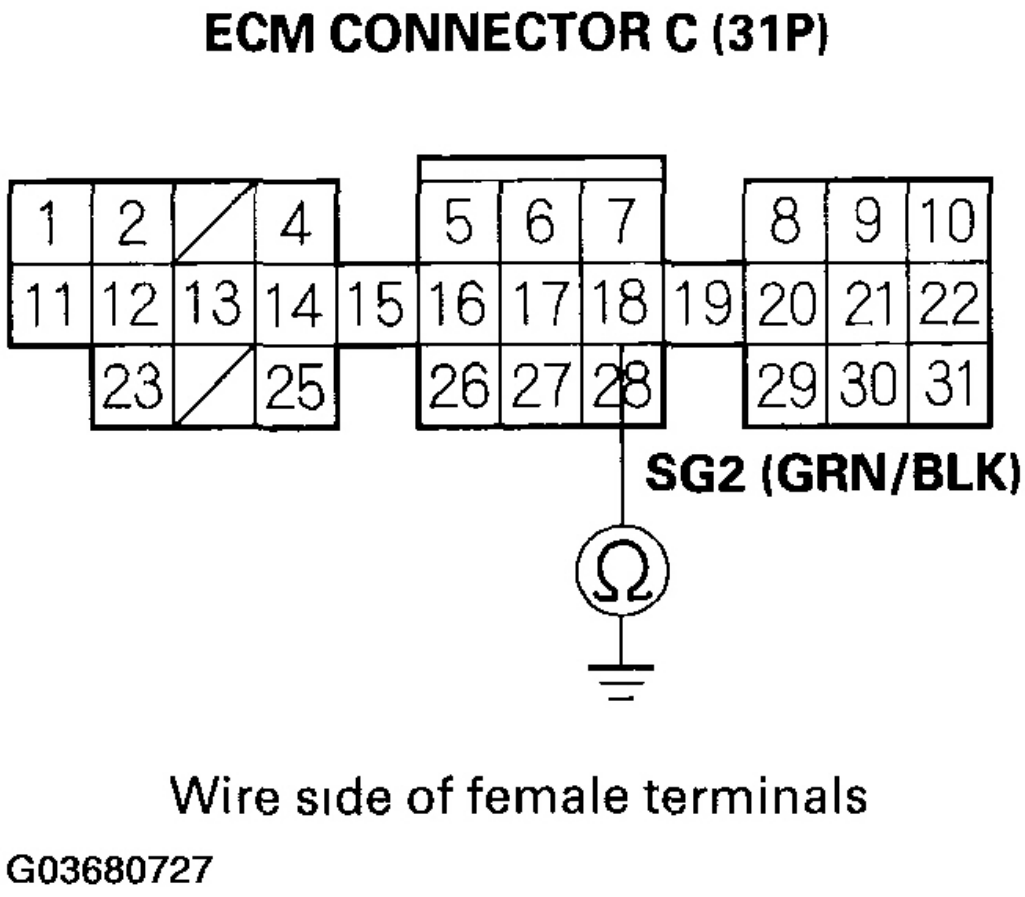


Fig. 24: Checking Continuity Between ECM Connector Terminal C18 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute

a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 MAT models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (C18) and the ECT sensor.

14. Measure voltage between ECM connector terminal C26 and body ground.

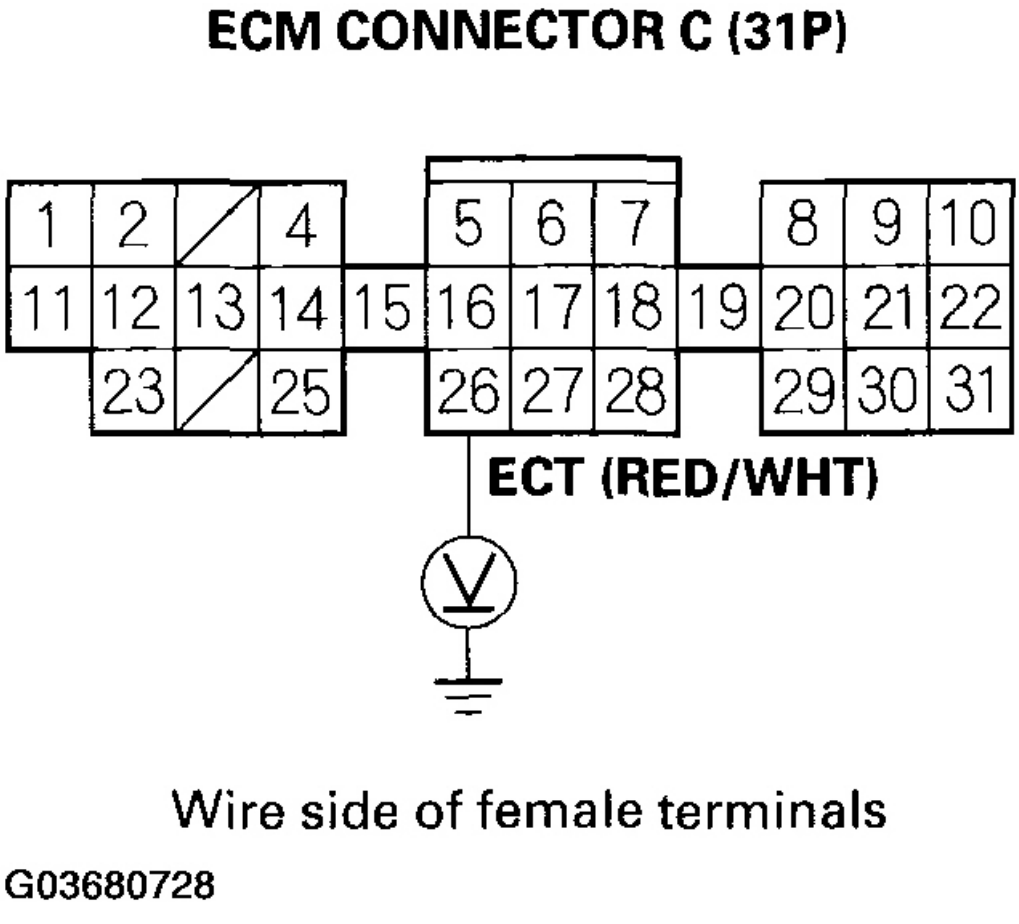


Fig. 25: Measuring Voltage Between ECM Connector Terminal C26 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the ECM (C26) and the ECT sensor.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

DTC P0122: TP SENSOR CIRCUIT LOW VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then turn the ignition switch OFF.
2. Turn the ignition switch ON (II).
3. Check the TP SENSOR in the DATA LIST with the HDS.

Is there about 10% or 0.5 V when the throttle is fully closed and about 90% or 4.5 V when the throttle is fully opened?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the TP sensor and the ECM.

NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Disconnect the TP sensor 3P connector.

6. Turn the ignition switch ON (II).
7. Measure voltage between TP sensor 3P connector terminals No. 1 and No. 3.

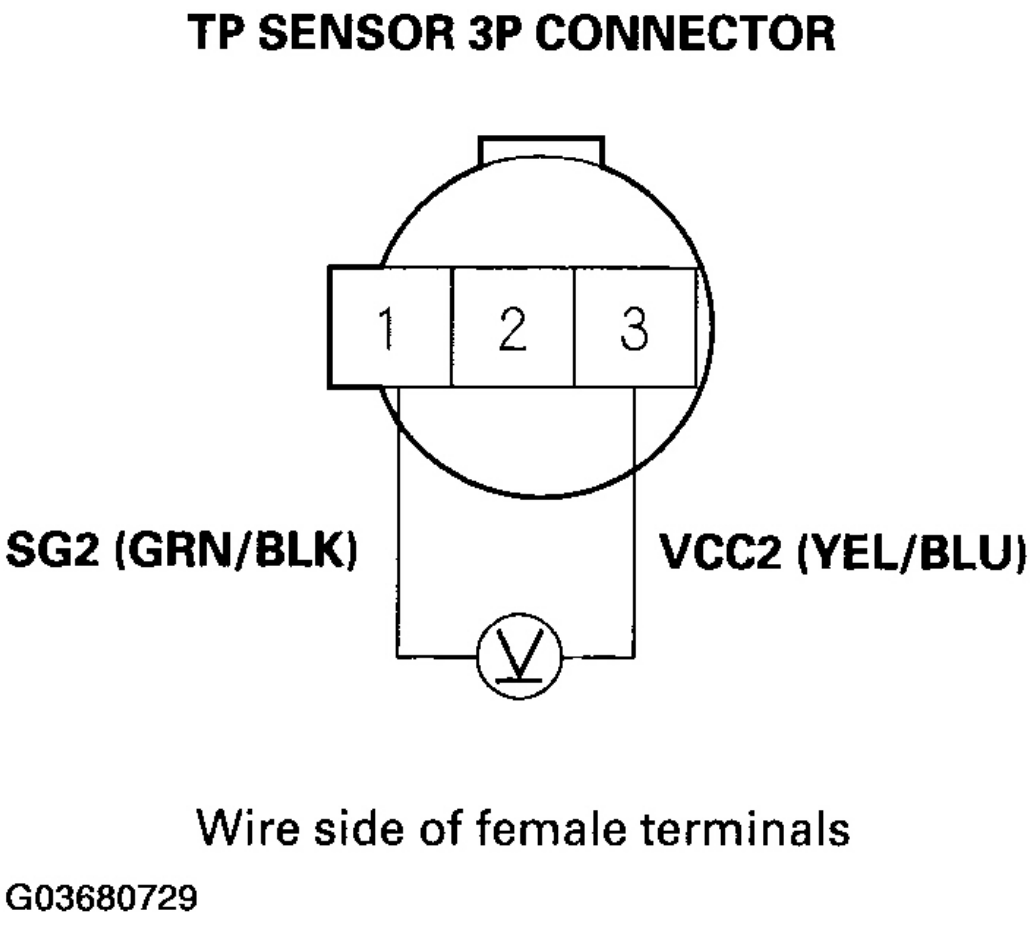


Fig. 26: Measuring Voltage Between TP Sensor 3P Connector Terminals No. 1 And 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 8.
NO - Go to step 17 .

8. Turn the ignition switch OFF.

9. At the sensor side, measure resistance between TP sensor 3P connector terminals No. 1 and No. 2 with the throttle fully closed.

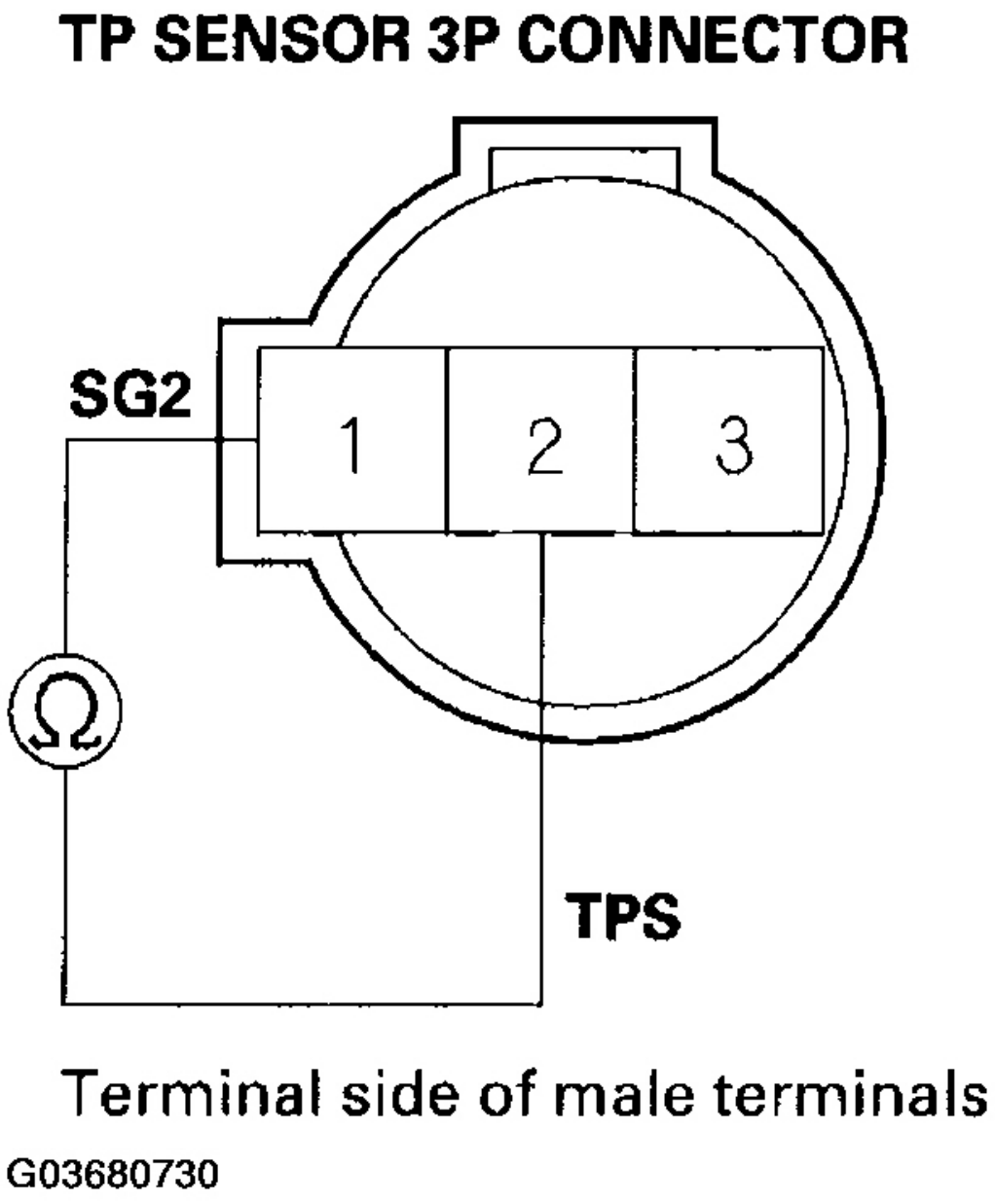


Fig. 27: Measuring Resistance Between TP Sensor 3P Connector Terminals No. 1 And 2

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 0.5- 0.9 k ohm?

YES - Go to step 10.

NO - Replace the throttle body (see **THROTTLE BODY REMOVAL/INSTALLATION**).

10. At the sensor side, measure resistance between TP sensor 3P connector terminals No. 2 and No. 3 with the throttle fully closed.

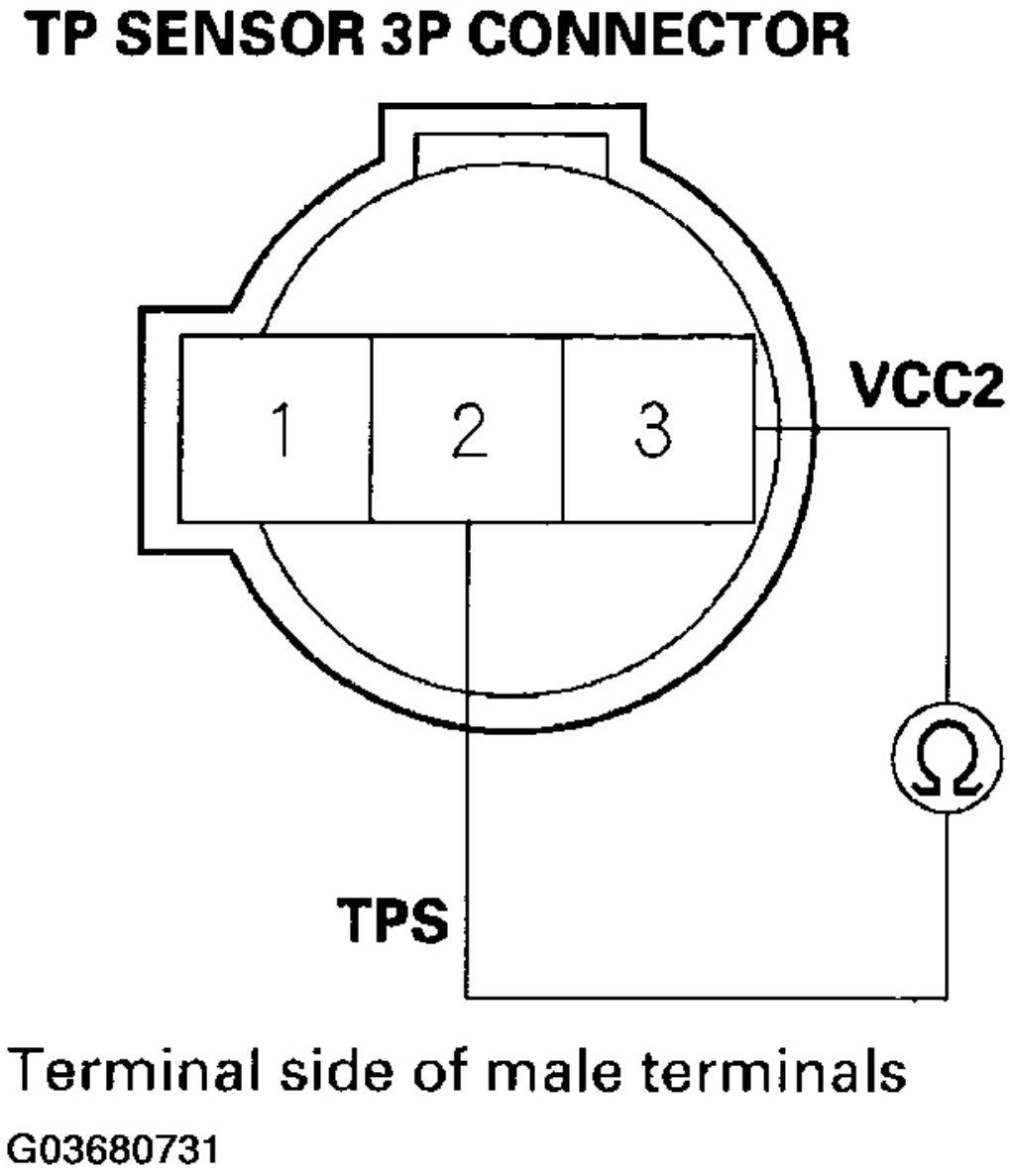


Fig. 28: Measuring Resistance Between TP Sensor 3P Connector Terminals No. 2 And 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 4.5 k ohm?

YES - Go to step 11.

NO - Replace the throttle body (see **THROTTLE BODY REMOVAL/INSTALLATION**).

11. Disconnect ECM connector C (31P).
12. Check for continuity between TP sensor 3P connector terminal No. 2 and body ground.

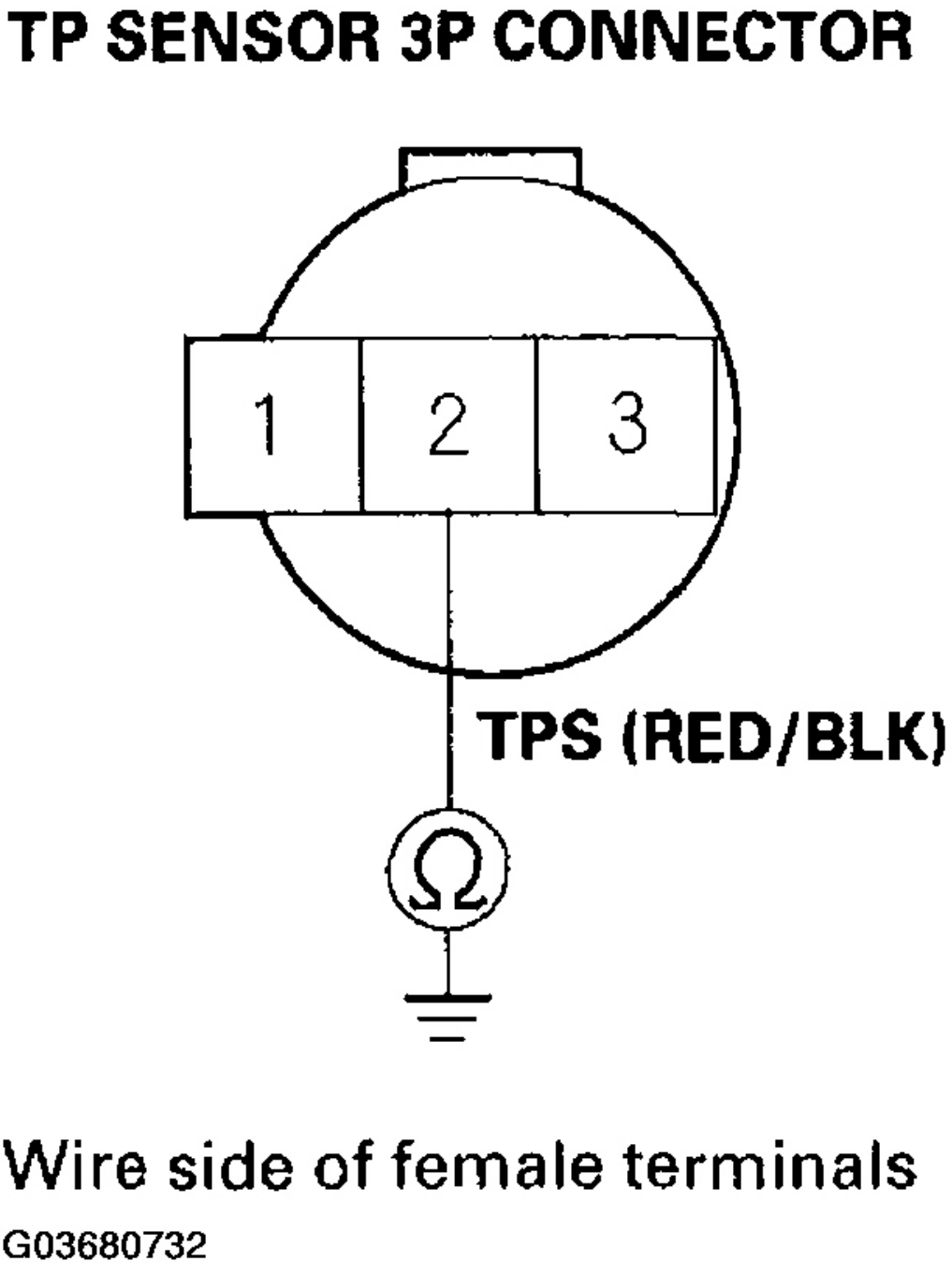


Fig. 29: Checking Continuity Between TP Sensor 3P Connector Terminal No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -

- Go to step 13 (CVT model).
- Repair short in the wire between the ECM (C27) and the TP sensor (M/T model).

NO -Go to step 15 .

13. Disconnect TCM connector B (22P).
14. Check for continuity between TP sensor 3P connector terminal No. 2 and body ground.

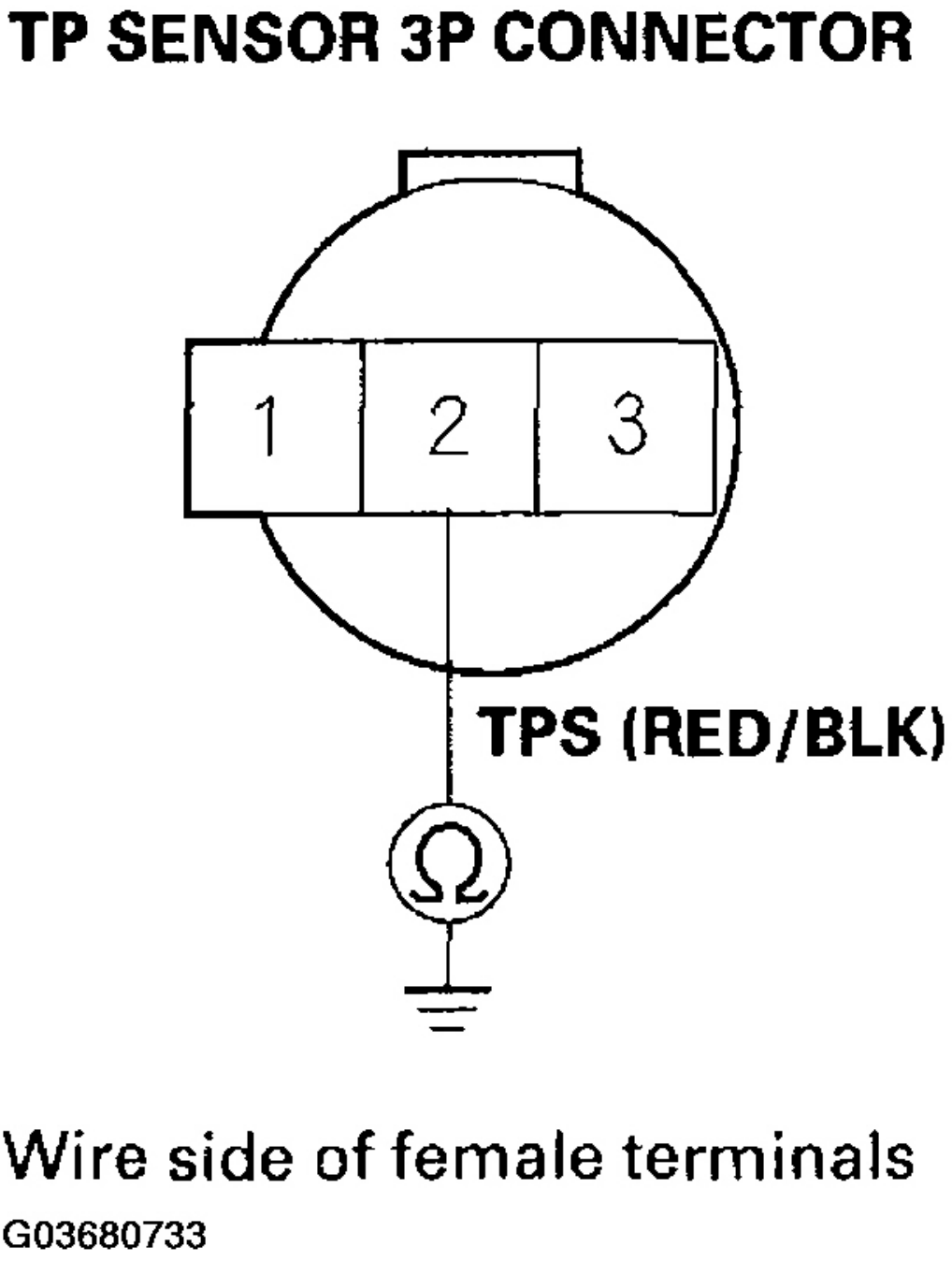


Fig. 30: Checking Continuity Between TP Sensor 3P Connector Terminal No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C27), the TCM (B4) and the TP sensor.

NO - Substitute a known-good TCM, and recheck (see **HOW TO TROUBLESHOOT CIRCUIT AT THE TCM**). If the symptom/indication goes away, replace the original TCM.

15. Connect ECM connector terminal C27 to body ground with a jumper wire.

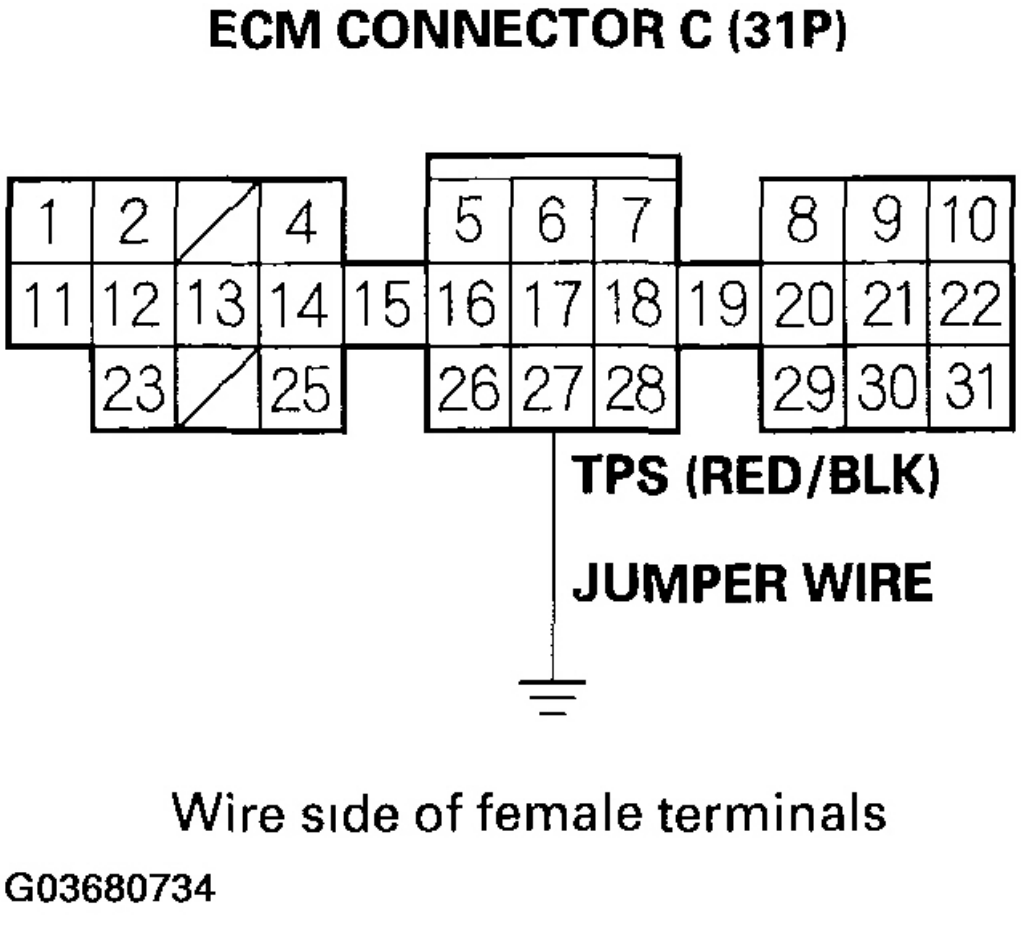


Fig. 31: Connecting ECM Connector Terminal C27 To Body Ground With

Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Check for continuity between TP sensor 3P connector terminal No. 2 and body ground.

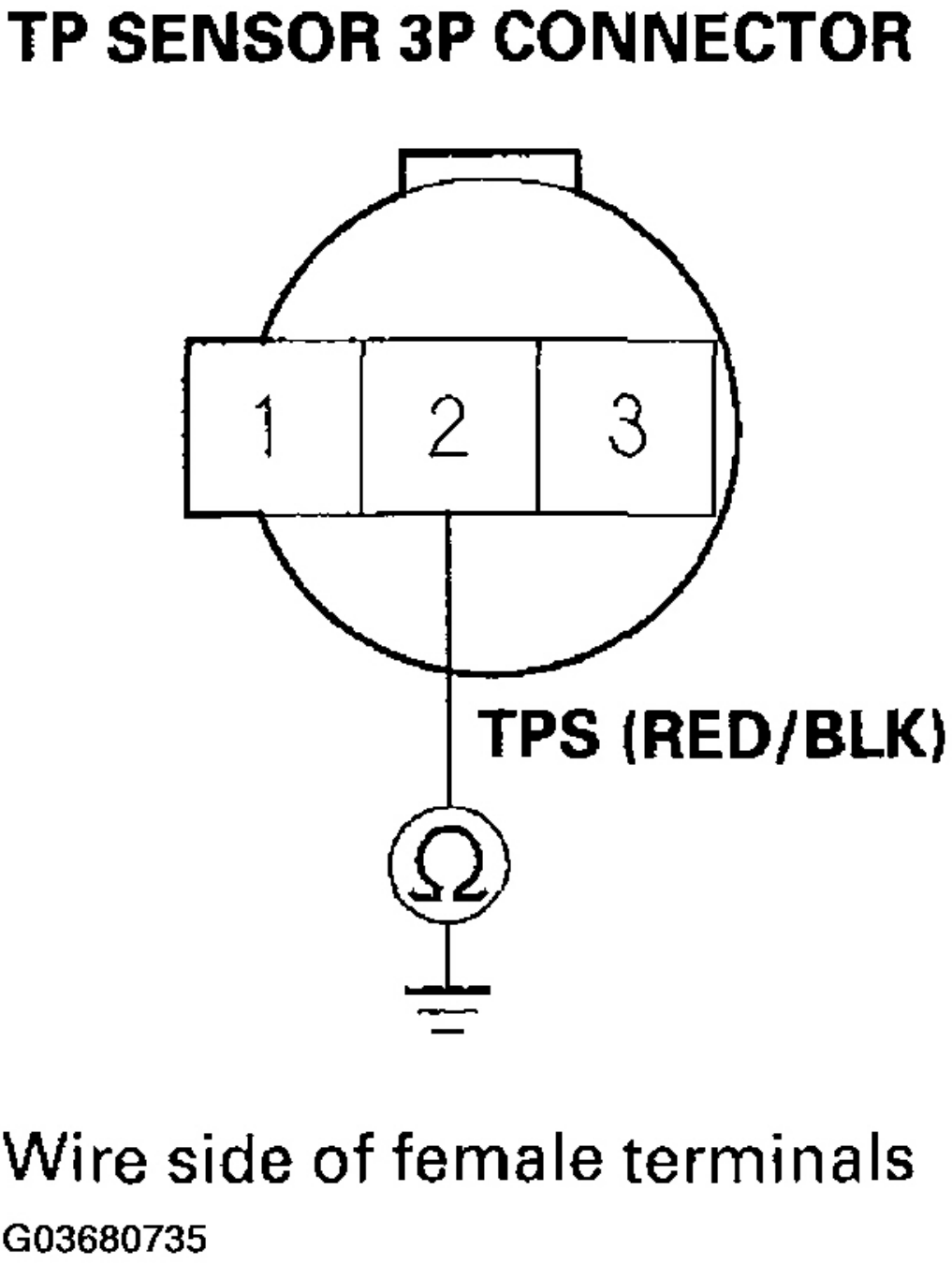


Fig. 32: Checking Continuity Between TP Sensor 3P Connector Terminal No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (C27) and the TP sensor.

17. Measure voltage between ECM connector terminals C18 and C28.

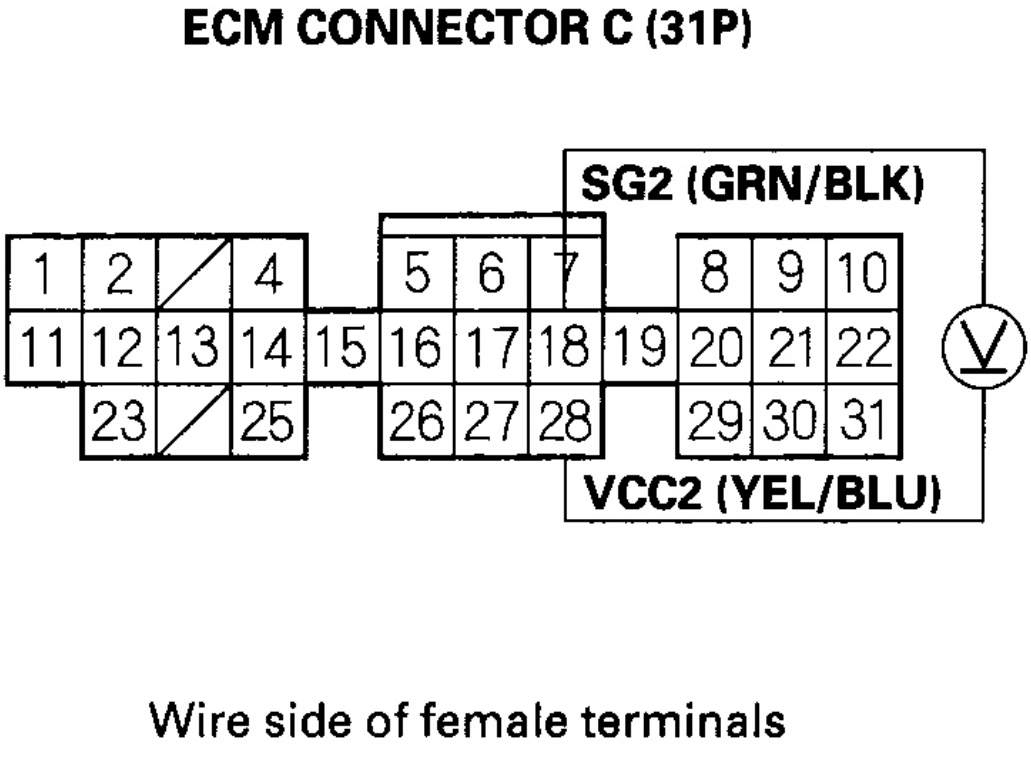


Fig. 33: Measuring Voltage Between ECM Connector Terminals C18 And C28
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the ECM (C28) and the TP sensor.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

DTC P0123: TP SENSOR CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then turn the ignition switch OFF.
2. Turn the ignition switch ON (II).
3. Check the TP SENSOR in the DATA LIST with the HDS.

Is there about 10% or 0.5 V when the throttle is fully closed and about 90% or 4.5 V when the throttle Is fully opened?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the TP sensor and the ECM.

NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Disconnect the TP sensor 3P connector.

6. Turn the ignition switch ON (II).
7. Measure voltage between TP sensor 3P connector terminals No. 1 and No. 3.

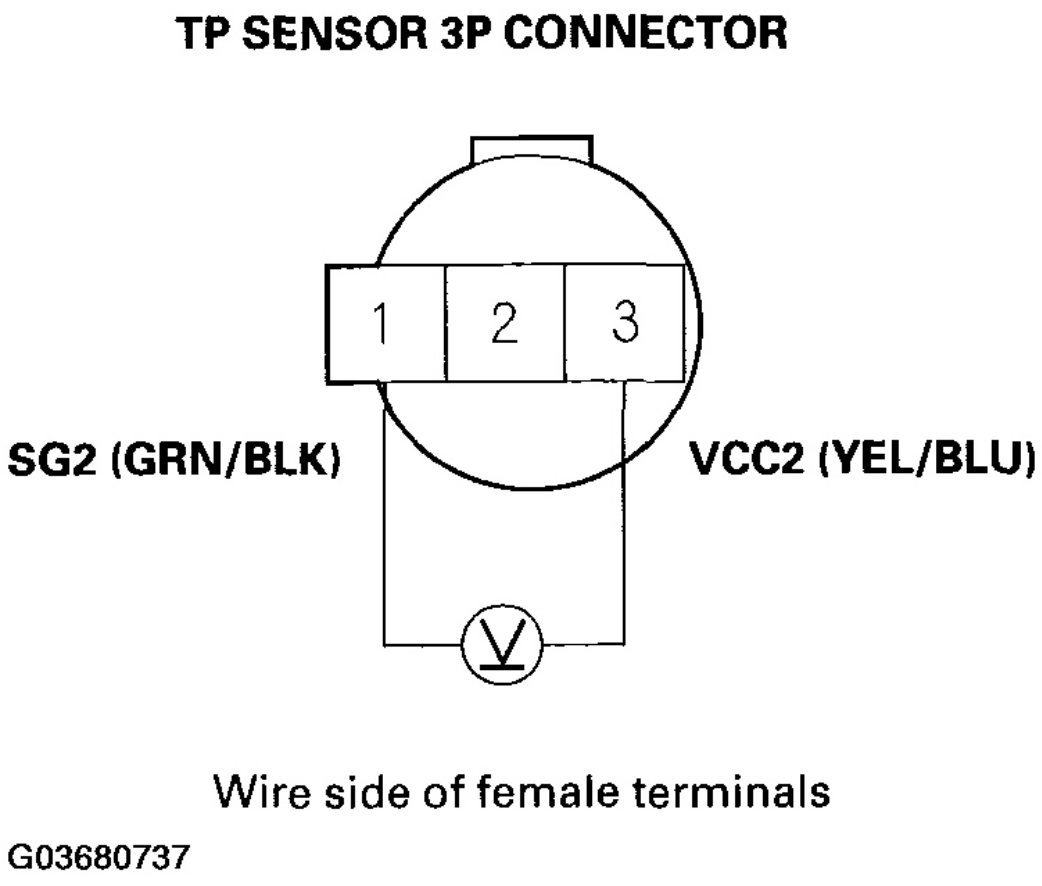


Fig. 34: Measuring Voltage Between TP Sensor 3P Connector Terminals No. 1 And 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the throttle body (see **THROTTLE BODY REMOVAL/INSTALLATION**).

NO - Go to step 8.

8. Measure voltage between ECM connector terminals C18 and C28.

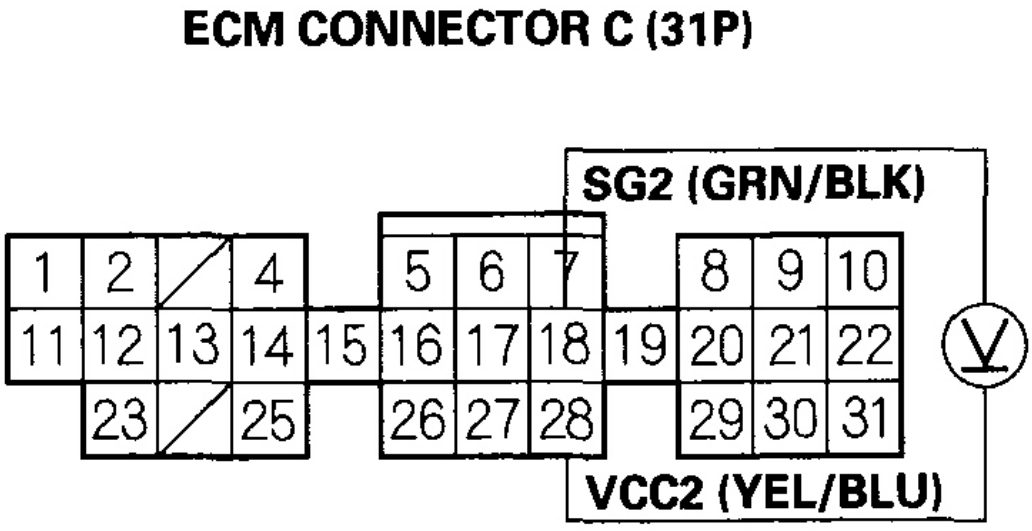


Fig. 35: Measuring Voltage Between ECM Connector Terminals C18 And C28
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the ECM (C18) and the TP sensor.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the

original ECM (see **ECM REPLACEMENT**).

DTC P0125: ECT SENSOR MALFUNCTION/SLOW RESPONSE (2004-2005 MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Start the engine, and let it idle.
2. Check the ECT SENSOR in the DATA LIST with the HDS.

   Is about 86°F (30°C) or less, or 2.61 V or more Indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Check the thermostat and the cooling system.
3. Let the engine idle 6 minutes.
4. Check the ECT SENSOR in the DATA LIST with the HDS.

   Is about 86°F (30°C) or less, or 2.61 V or more indicated?

   YES - Replace the ECT sensor.

   NO - Intermittent failure, system is OK at this time. Check the thermostat and the cooling system.

DTC P0125: ECT SENSOR MALFUNCTION/SLOW RESPONSE (2006 MODEL)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Start the engine, and let it idle.
2. Check the ECT SENSOR in the DATA LIST with the HDS.

   Is about 86°F (30°C) or less, or 2.61 V or more indicated?

   YES - Go to step 3.

NO - Intermittent failure, system is OK at this time. Check the thermostat and the cooling system.

3. Let the engine idle 6 minutes.
4. Check the ECT SENSOR in the DATA LIST with the HDS.

Is about 86°F (30°C) or less, or 2.61 V or more indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check the thermostat and the cooling system.

5. Turn the ignition switch OFF.
6. Replace the ECT sensor.
7. Turn the ignition switch ON (II).
8. Reset the ECM with the HDS.
9. Do the ECM idle learn procedure (see **ECM IDLE LEARN PROCEDURE**).
10. Allow the engine to cool to between 23°F (-5°C) and 77°F (25°C).
11. Start the engine, and let it idle 20 minutes.
12. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0125 is indicated, check for poor connections or loose terminals at the ECT sensor and the ECM, then go to step 1 . If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**

NO - Troubleshooting is complete.

DTC P0128: COOLING SYSTEM MALFUNCTION

NOTE:

- **If the DTCs listed below are stored at the same time as DTC P0128, troubleshoot those DTCs first, then recheck for P0128.**

***1: 2004 model**

***2: 2004-2006 models**

***3: 2005-2006 models**

P0106, P0107, P0108, P1128, P1129: MAP sensor

P1106, P1107, P1108 (P2227, P2228, P2229)[*2] :

Barometric pressure circuit

P1259 (P2646)[*1] (P2646, P2647)[*3] : VTEC system

P0401: EGR flow insufficient

P1491 (P0404)[*2] : EGR valve lift insufficient

P1498 (P0406)[*2] : EGR valve lift sensor high voltage

P0116, P0117, P0118 (P0125)[*2] : Engine coolant temperature circuit

P0112, P0113: Intake air temperature sensor

P0500: Vehicle speed sensor

P0335, P0336 (P0339)[*2] : Crankshaft position sensor

P0300: Random misfire

P0301, P0302, P0303: No. 1, No. 2, or No. 3 Cylinder misfire

P0505 (P0506, P0507)[*2] : Idle control system malfunction

P1519 (P0511)*2 : Idle air control valve

- **DTC P0128 can set occasionally when the hood is opened while the engine is at normal operating temperature.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check the engine coolant level.

   Is the engine coolant level low?

   YES - Refill the engine coolant. If necessary, check the cooling system.

   NO - Go to step 2.
2. Turn the ignition switch ON (II).
3. Check the radiator fan.

   Does the radiator fan keep running?

   YES - Refer to the radiator fan circuit diagram (see **CIRCUIT DIAGRAM**), and troubleshoot the radiator fan circuit; without A/C model (see **RADIATOR FAN CIRCUIT TROUBLESHOOTING**), with A/C model (see **WITH A/C**) and the radiator fan switch (see **RADIATOR FAN SWITCH TEST**).

   Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

   NO - Replace the thermostat (see **THERMOSTAT REPLACEMENT**).

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)

NOTE:

- **Information marked with an asterisk (*) applies to 2004-2006 models.**
- **Information marked with double asterisk (**) applies to 2002-2003 M/T models and 2001-2003 CVT models.**
- **If DTC P1162 is stored at the same time as DTC P1163, troubleshoot DTC P1162 first, then recheck for DTC P1163 (2002-2003 M/T and 2001-2003 CVT models).**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on.
3. Test-drive under these conditions:
   - 55 mph (89 km/n) steady speed
   - CVT in D position (M/T in 5th gear)
   - Until readiness code or DTC P0133* (P1163)** comes on
4. Check for a Temporary DTCs or DTCs with the HDS.

Is DTC P0133* (P1163) indicated?**

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.

DTC P0134: A/F SENSOR (SENSOR 1) SIGNAL STUCK LEAN

NOTE:

- **If the vehicle was out of fuel and the engine stalled before this DTC was stored, refuel and clear the DTC.**

- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check the installation of the A/F sensor (Sensor 1).

   Is it loose?

   YES - Reinstall the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

   NO - Go to step 2.
2. Reset the ECM with the HDS (see **ECM RESET**).
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle for 2 minute.
4. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0134 indicated?

   YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.

DTC P0135: A/F SENSOR (SENSOR 1) HEATER CIRCUIT MALFUNCTION (2002-2006 M/T MODELS) (CVT MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine.
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0135 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at C102 (located under the right side of the dash), the A/F sensor relay, the A/F sensor (Sensor 1), and the ECM.

4. Check these fuses:
   - No. 16 (30 A) fuse in the under-hood fuse/relay box.
   - No. 14 (30 A) fuse in the under-dash fuse/relay box.
   - No. 4 (7.5 A) in the under-dash fuse/relay box.

   Are any of the fuses blown?

   YES - Repair short in the wire between the A/F sensor relay and the fuses.

   NO - Go to step 5.
5. Measure voltage between ECM connector terminals D5 and B20, 30 seconds after the ignition switch is turned ON (II).

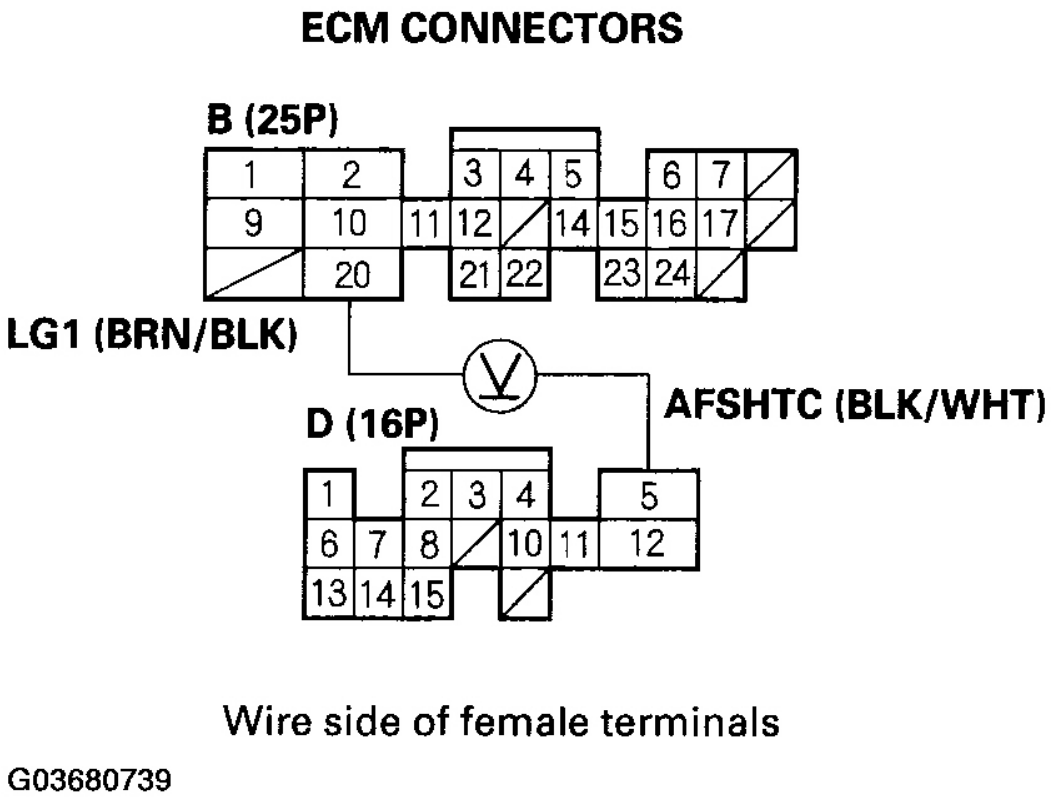


Fig. 36: Measuring Voltage Between ECM Connector Terminals D5 And B20
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Go to step 6.

6. Measure voltage between ECM connector terminals D11 and B20.

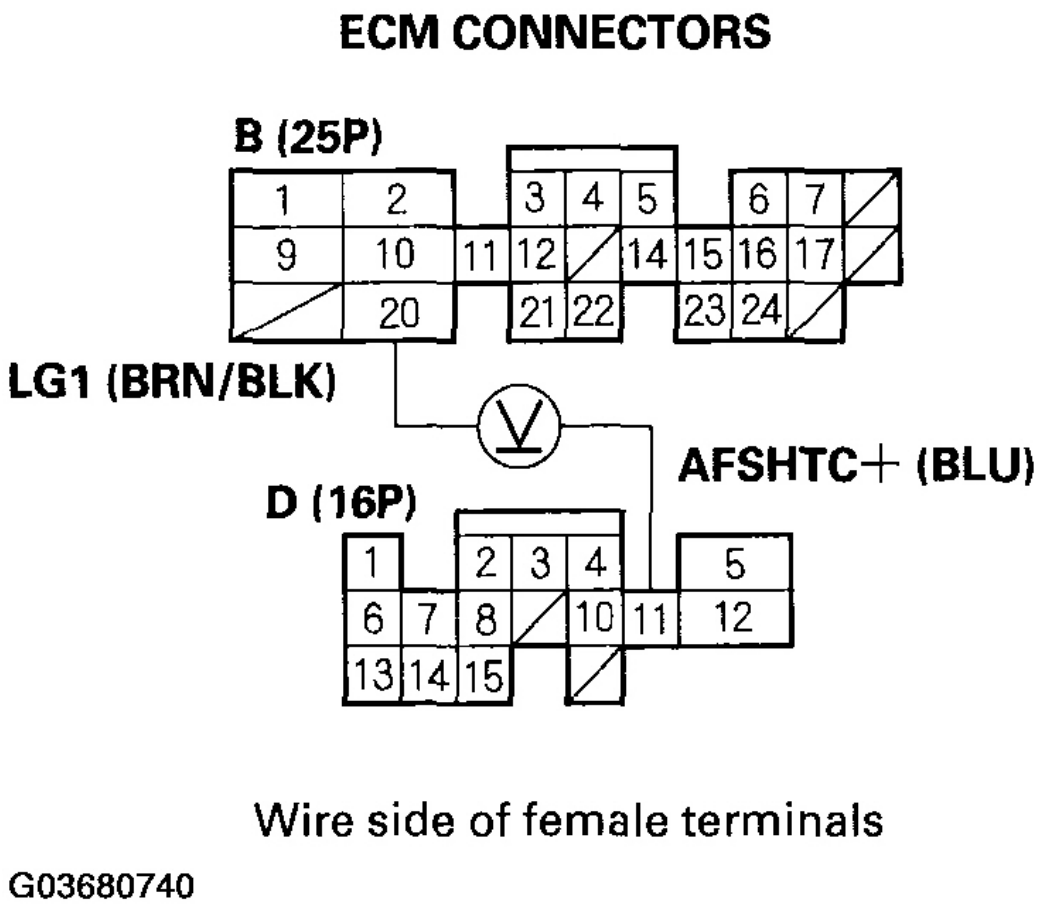


Fig. 37: Measuring Voltage Between ECM Connector Terminals D11 And B20
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 7.
NO - Go to step 11 .

7. Turn the ignition switch OFF, and wait for 10 seconds.
8. Disconnect ECM connector A (32P).

9. Turn the ignition switch ON (II).
10. Connect ECM connector terminal A11 to body ground with a jumper wire, then measure voltage between ECM connector terminals D5 and B20.

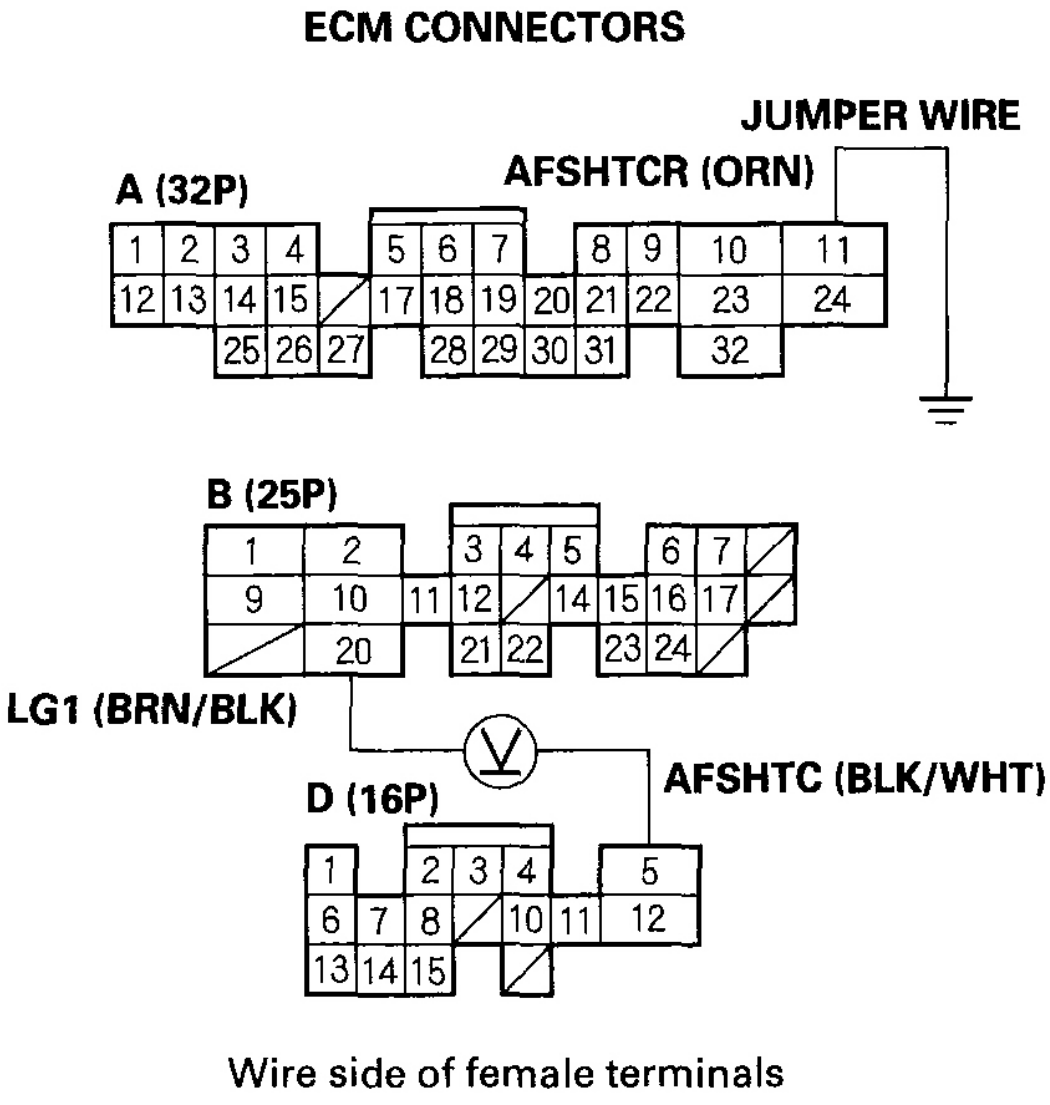


Fig. 38: Connecting ECM Connector Terminal A11 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open or short in the wire between the A/F sensor (Sensor 1) and the ECM (D5).

11. Turn the ignition switch OFF, and wait for 10 seconds.
12. Disconnect ECM connector D (16P) and the A/F sensor (Sensor 1) 4P connector.
13. Check for continuity between A/F sensor (Sensor 1) 4P connector terminal No. 4 and body ground.

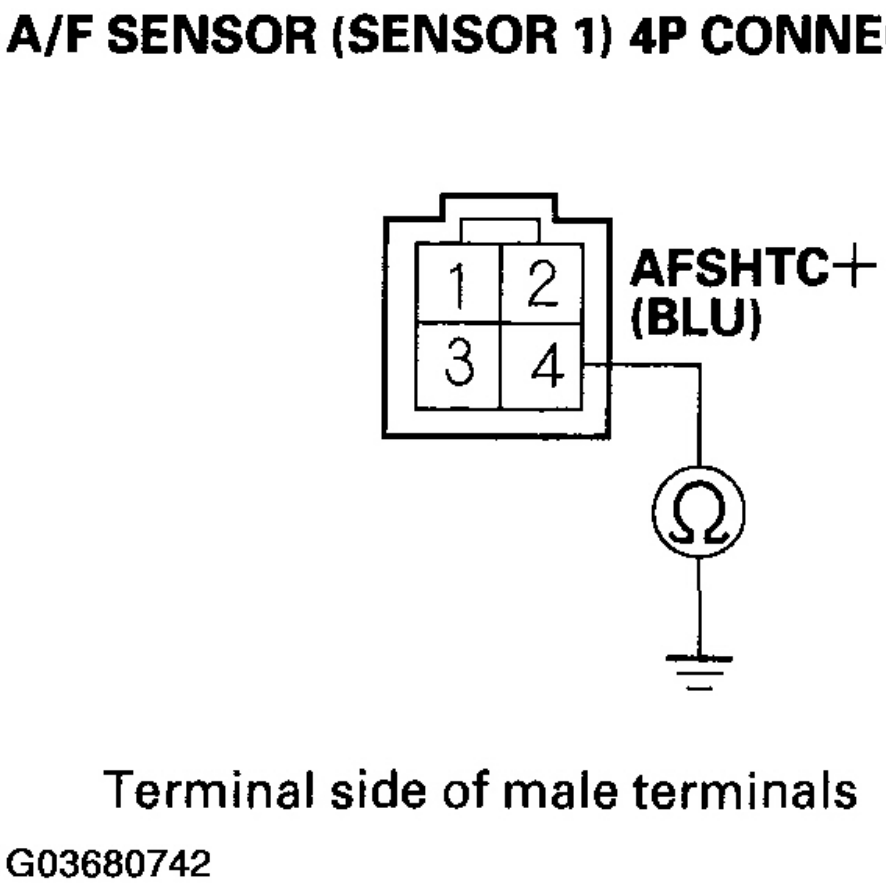


Fig. 39: Checking Continuity Between A/F Sensor 4P Connector Terminal No. 4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the A/F sensor relay, the A/F sensor (Sensor 1) and the ECM (D11).

NO - Go to step 14.

14. Turn the ignition switch ON (II).
15. Measure voltage between ECM connector terminals A11 and B20.

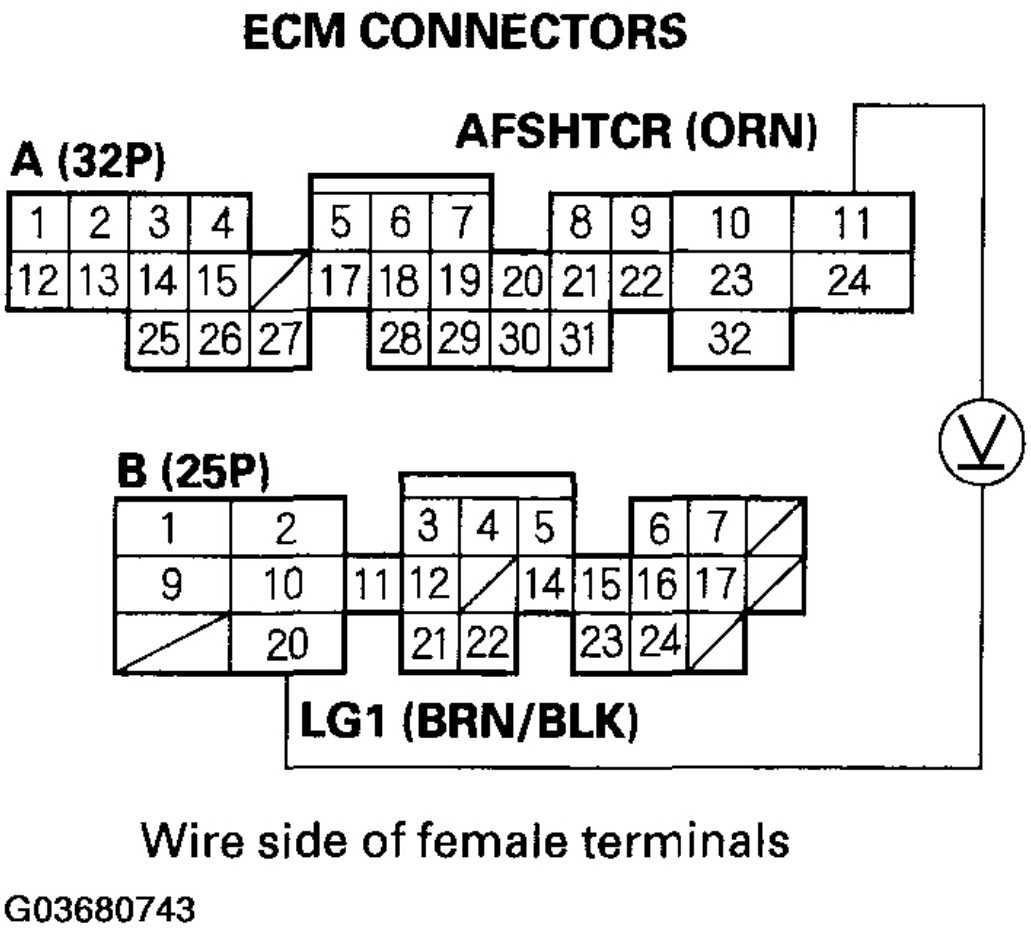


Fig. 40: Measuring Voltage Between ECM Connector Terminals A11 And B20
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair open in the wire between the ECM (D11) and the A/F sensor (Sensor 1).

NO - Go to step 16.

16. Check for continuity in the wires between the A/F sensor relay and the fuses.

Is there continuity?

YES - The wires are OK. Replace the A/F sensor relay.

NO - Repair open in the wire between the A/F sensor relay and the fuses.

DTC P0137: SECONDARY HO2S (SENSOR 2) CIRCUIT LOW VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on.
3. Check the HO2S S2 at 3,000 rpm in the DATA LIST with the HDS.

   Does the voltage stay at 0.3 V or less?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the secondary HO2S (Sensor 2) and the ECM.
4. Turn the ignition switch OFF.
5. Disconnect the secondary HO2S (Sensor 2) 4P connector.
6. Start the engine.
7. Check the HO2S S2 in the DATA LIST with the HDS.

   Does the voltage stay at 0.3 V or less?

   YES - Go to step 9 .

   NO - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** , and the third HO2S (Sensor 3)* (see **THIRD HO2S REPLACEMENT**).

   *: 2002-2006 M/T models
8. Turn the ignition switch OFF, and wait for 10 seconds.

9. Disconnect ECM connector C (31P).
10. Check for continuity between secondary HO2S (Sensor 2) 4P connector terminal No. 2 and body ground.

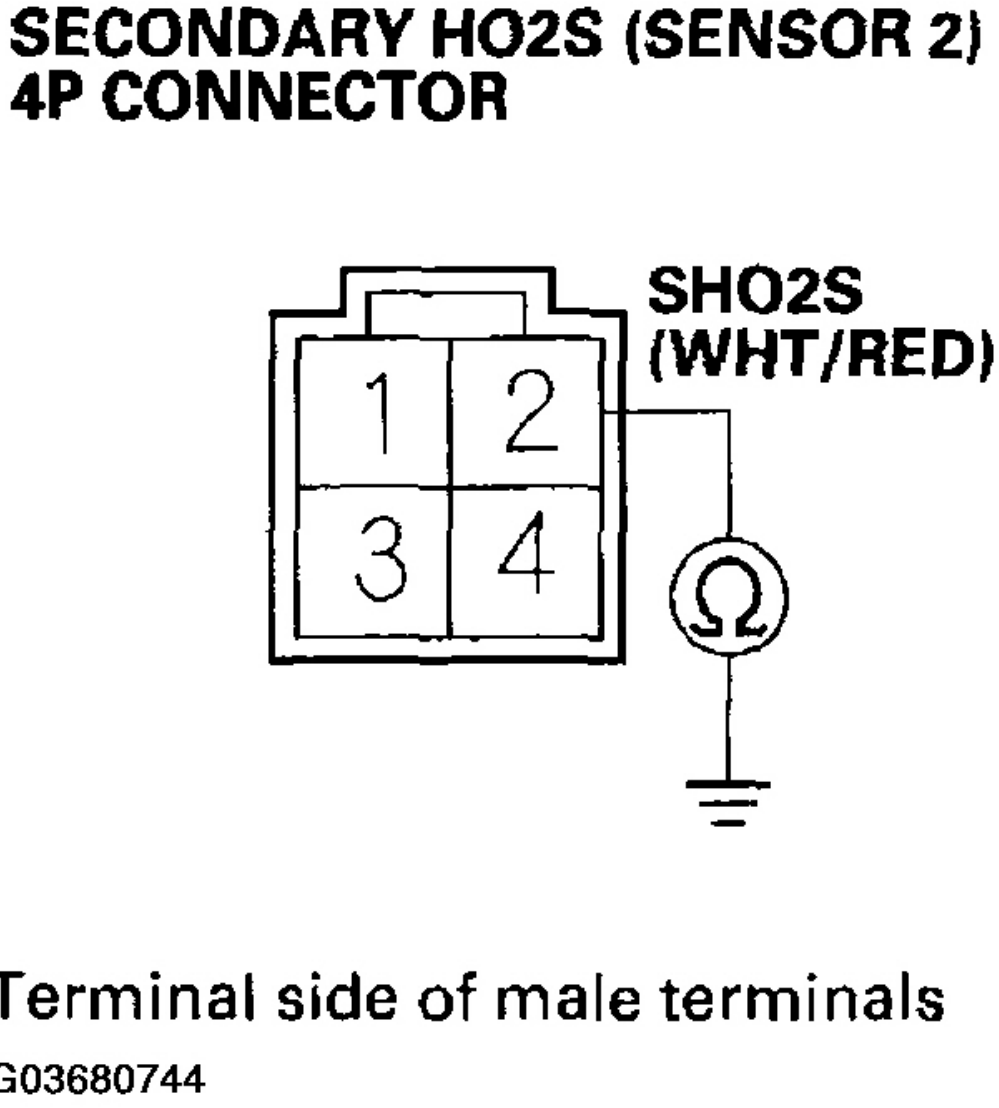


Fig. 41: Checking Continuity Between Secondary HO2S (Sensor 2) 4P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C31) and the secondary HO2S (Sensor 2).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)** **HOW TO TROUBLESHOOT CIRCUITS AT THE ECM**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

DTC P0138: SECONDARY HO2S (SENSOR 2) CIRCUIT HIGH VOLTAGE (2000-2004 MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **HDS CLEAR COMMAND**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on.
3. Check the HO2S S2 in the DATA LIST with the HDS.

   Does the voltage stay at 1.0 V or more?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the secondary HO2S (Sensor 2) and the ECM.
4. Turn the ignition switch OFF.
5. Disconnect the secondary HO2S (Sensor 2) 4P connector.
6. Connect secondary HO2S (Sensor 2) 4P connector terminals No. 1 and No. 2 with a jumper wire.

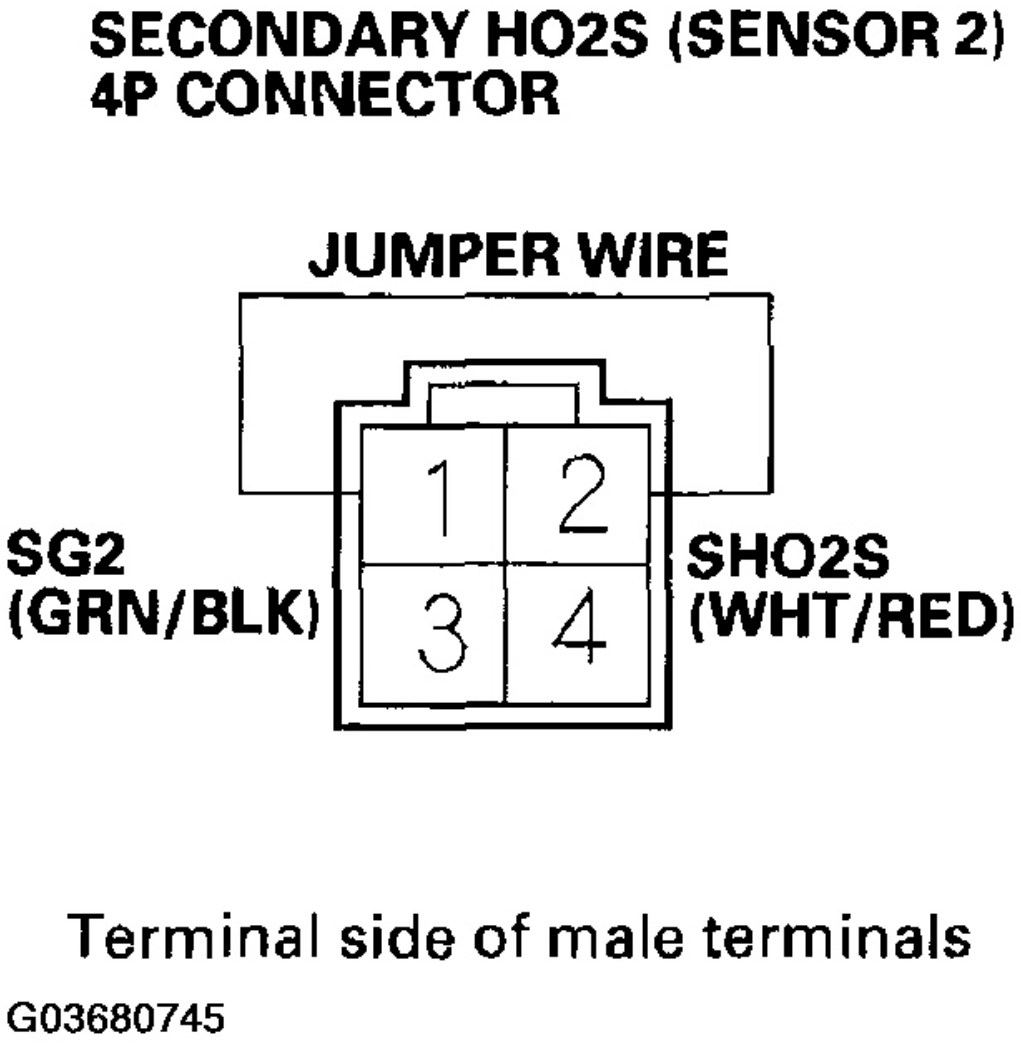


Fig. 42: Connecting Secondary HO2S Connector Terminals No. 1 And 2 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Turn the ignition switch ON (II).
8. Check the HO2S S2 in the DATA LIST with the HDS.

Is there 1.0 V or more?

YES - Go to step 9.

NO - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** , and the third HO2S (Sensor 3)* (see **THIRD HO2S REPLACEMENT**).

*: 2002-2004 M/T models

9. Turn the ignition switch OFF.
10. Connect ECM connector terminals C31 and C18 with a jumper wire.

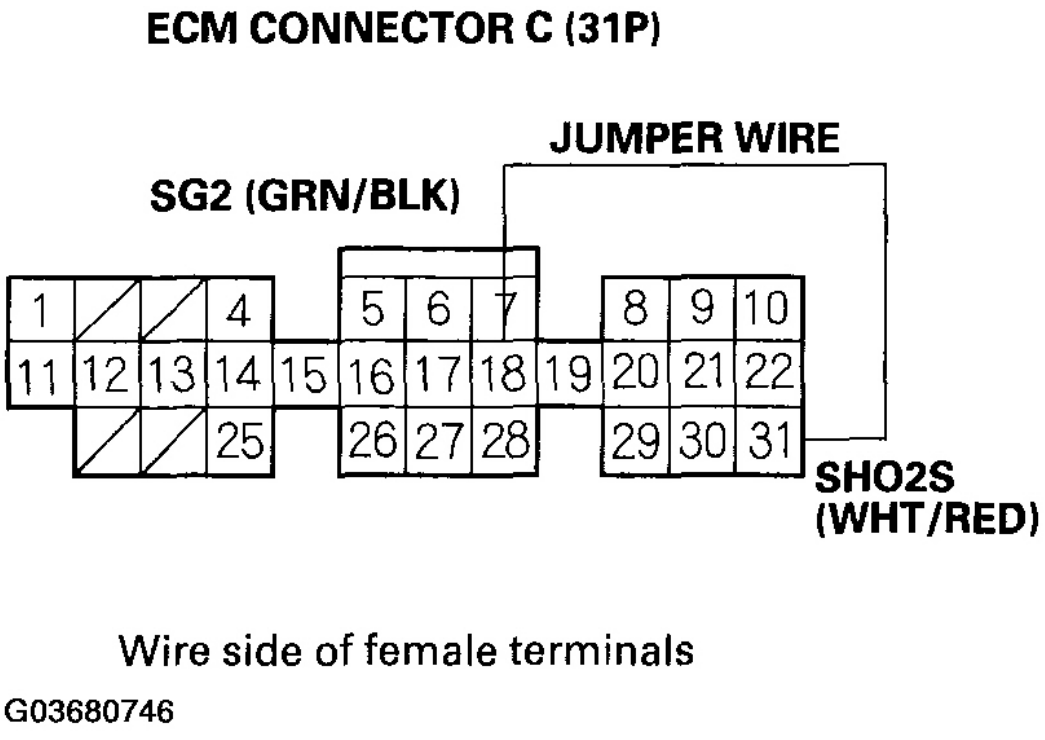


Fig. 43: Connecting ECM Connector Terminals C31 And C18 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Turn the ignition switch ON (II).
12. Check the HO2S S2 in the DATA LIST with the HDS.

Is there 1.0 V or more?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Go to step 13.

13. Remove the jumper wire.
14. Connect secondary HO2S (Sensor 2) 4P connector terminal No. 2 to body ground with a jumper wire.

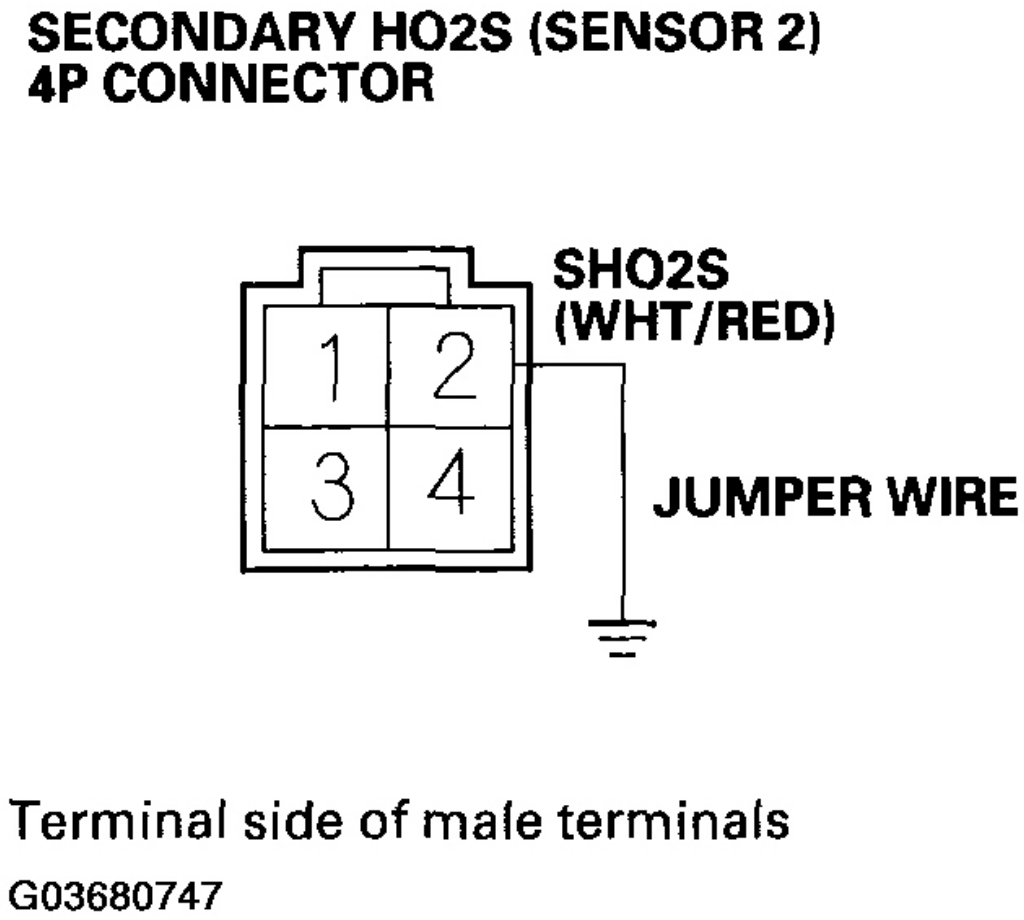


Fig. 44: Connecting Secondary HO2S Connector Terminal No. 2 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Check for continuity between ECM connector terminal C31 and body ground.

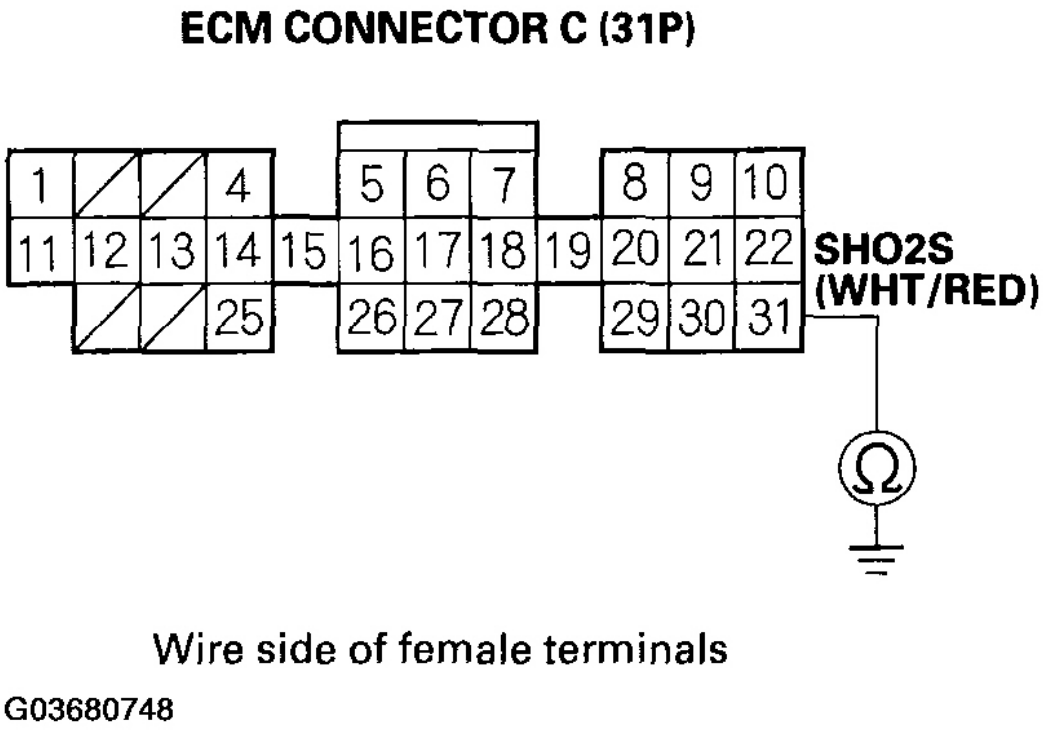


Fig. 45: Checking Continuity Between ECM Connector Terminal C31 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 16.

NO - Repair open in the wire between the ECM (C31) and the secondary HO2S (Sensor 2).

16. Turn the ignition switch OFF.
17. Disconnect the jumper wire.
18. Disconnect ECM connector C (31P).
19. Connect secondary HO2S (Sensor 2) 4P connector terminal No. 1 to body ground with a jumper wire.

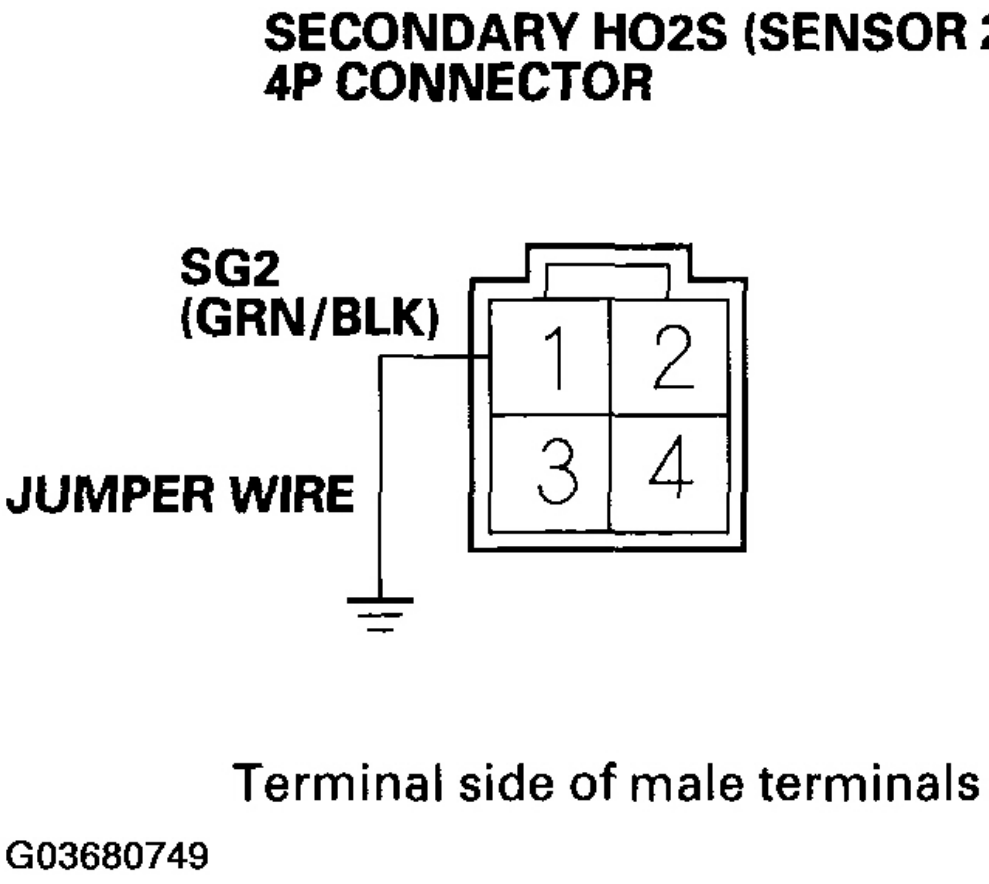


Fig. 46: Connecting Secondary HO2S Connector Terminal No. 1 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Check for continuity between ECM connector terminal C18 and body ground.

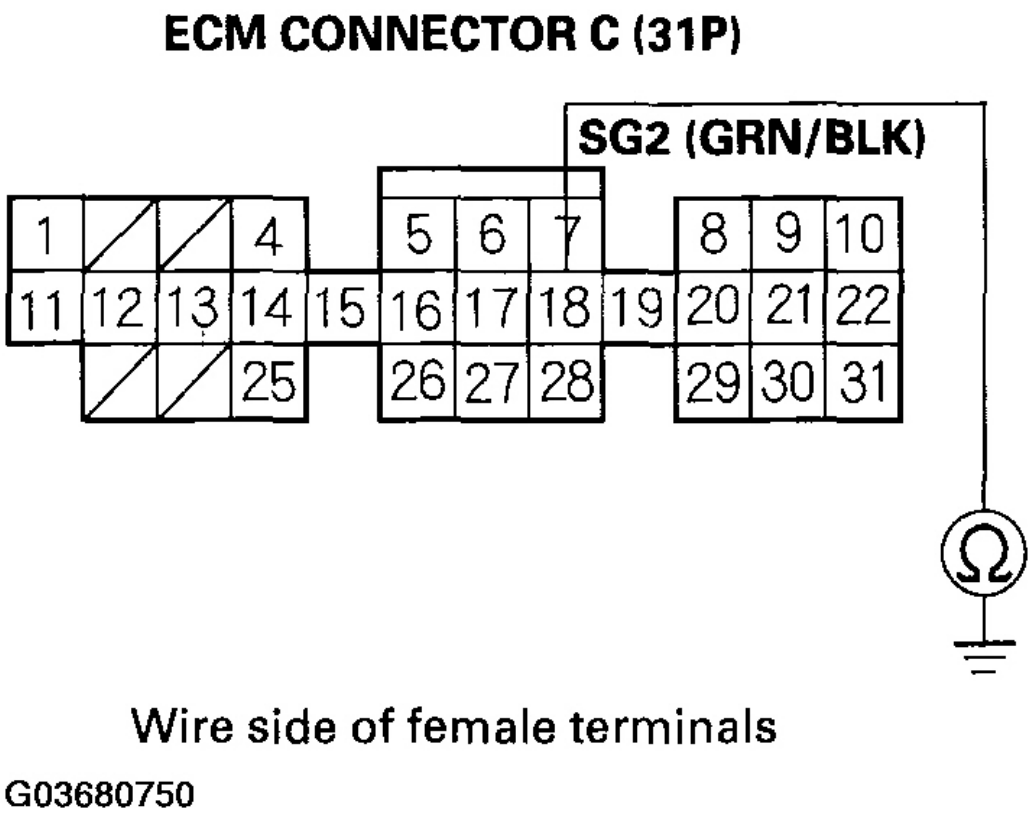


Fig. 47: Checking Continuity Between ECM Connector Terminal C18 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (C18) and the secondary

HO2S (Sensor 2).

DTC P0138: SECONDARY HO2S (SENSOR 2) CIRCUIT HIGH VOLTAGE (2005-2006 MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on.
3. Check the HO2S S2 at 3,000 rpm in the DATA LIST with the HDS.

   Does the voltage stay at 4.0 V or more?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the secondary HO2S (Sensor 2) and the ECM.
4. Turn the ignition switch OFF.
5. Disconnect the secondary HO2S (Sensor 2) 4P connector.
6. Connect secondary HO2S (Sensor 2) 4P connector terminals No. 1 and No. 2 with a jumper wire.

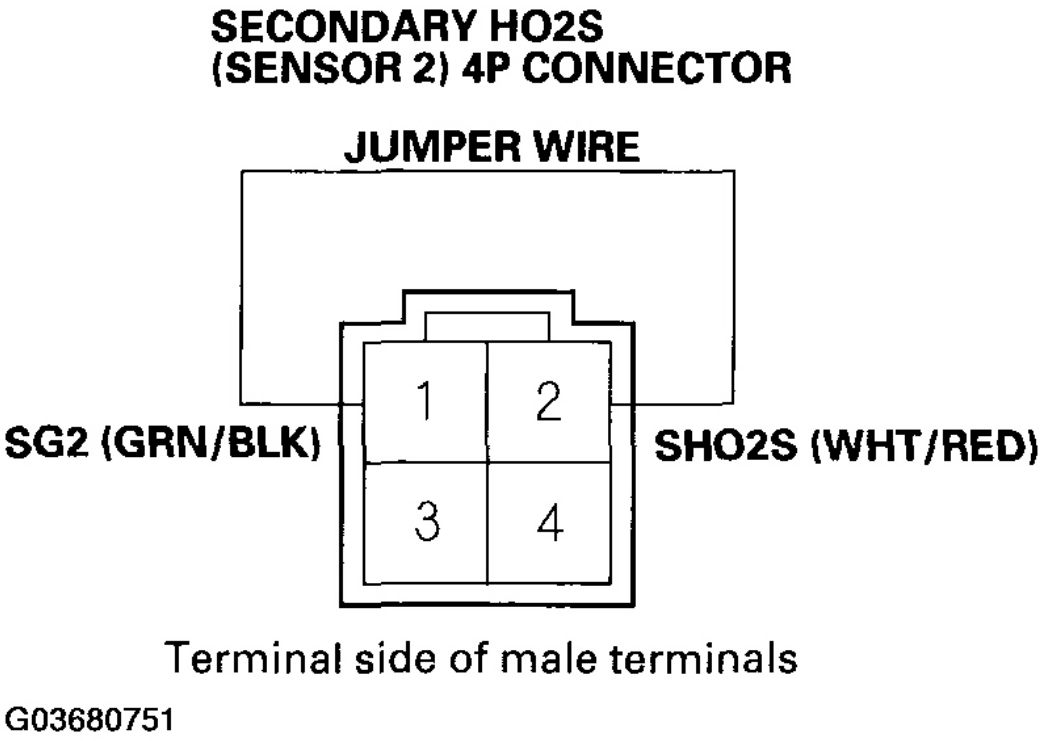


Fig. 48: Connecting Secondary HO2S Connector No. 1 And 2 Terminals With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Turn the ignition switch ON (II).
8. Check the HO2S S2 in the DATA LIST with the HDS.

   Is there 4.0 V or more?

   YES - Go to step 9.

   NO - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** .
9. Turn the ignition switch OFF.
10. Disconnect the jumper wire.
11. Connect ECM connector terminals C31 and C18 with a jumper wire.

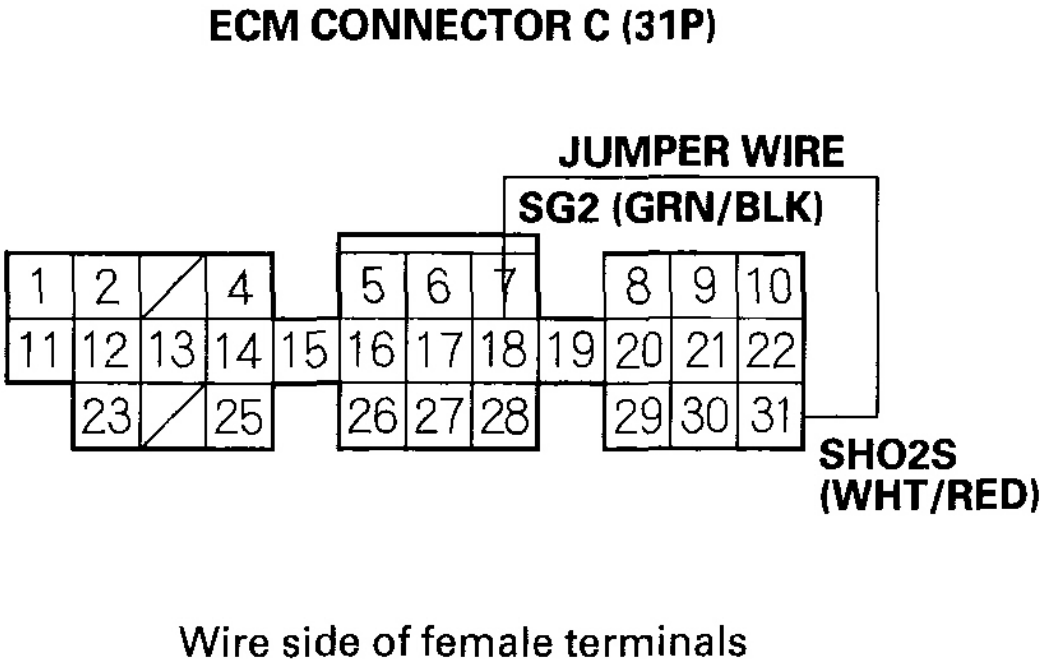


Fig. 49: Connecting ECM Connector Terminals C31 And C18 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Turn the ignition switch ON (II).
13. Check the HO2S S2 in the DATA LIST with the HDS.

Is there 4.0 V or more?

YES - Substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

NO - Go to step 14.

14. Turn the ignition switch OFF.
15. Disconnect the jumper wire.

16. Connect secondary HO2S (Sensor 2) 4P connector terminal No. 2 to body ground with a jumper wire.

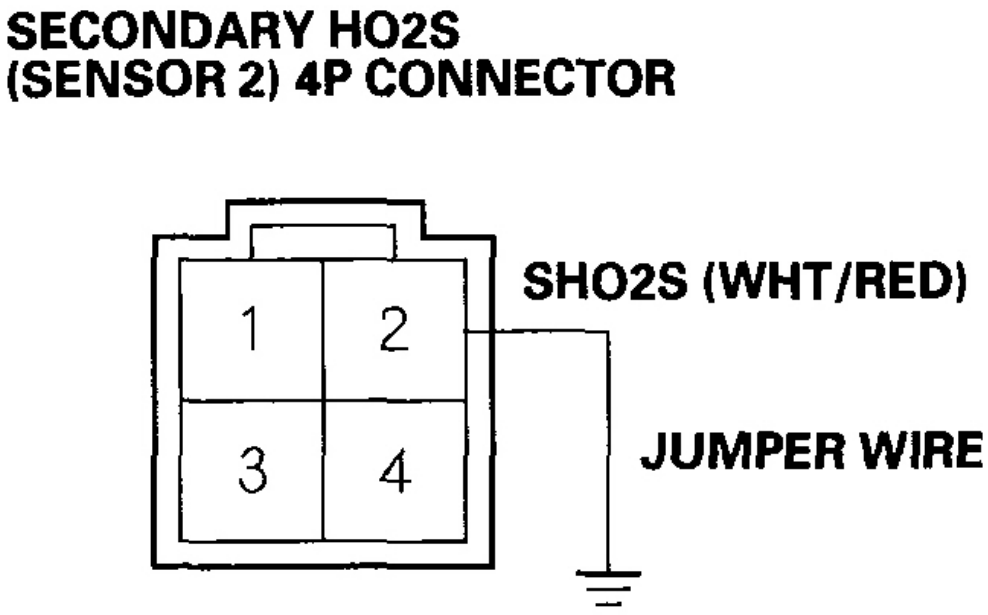


Fig. 50: Connecting Secondary HO2S Connector Terminal No. 2 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Check the HO2S S2 in the DATA LIST with the HDS.

Is there 4.0 V or more?

YES - Repair open in the wire between the ECM (C31) and the secondary HO2S (Sensor 2).

NO - Go to step 18.

18. Turn the ignition switch OFF.
19. Disconnect the jumper wire.
20. Disconnect ECM connector C (31P), and wait for 10 seconds.
21. Connect secondary HO2S (Sensor 2) 4P connector terminal No. 1 to body ground with a jumper wire.

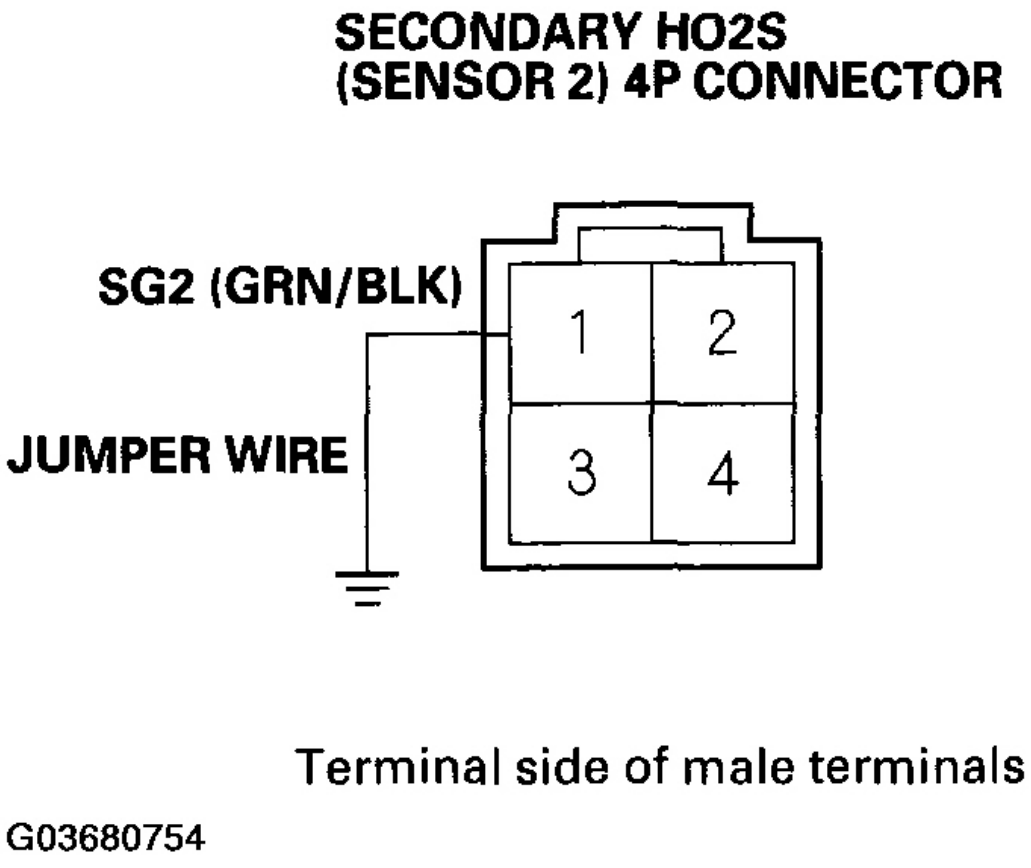


Fig. 51: Connecting Secondary HO2S Connector Terminal No. 1 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Check for continuity between ECM connector terminal C18 and body ground.

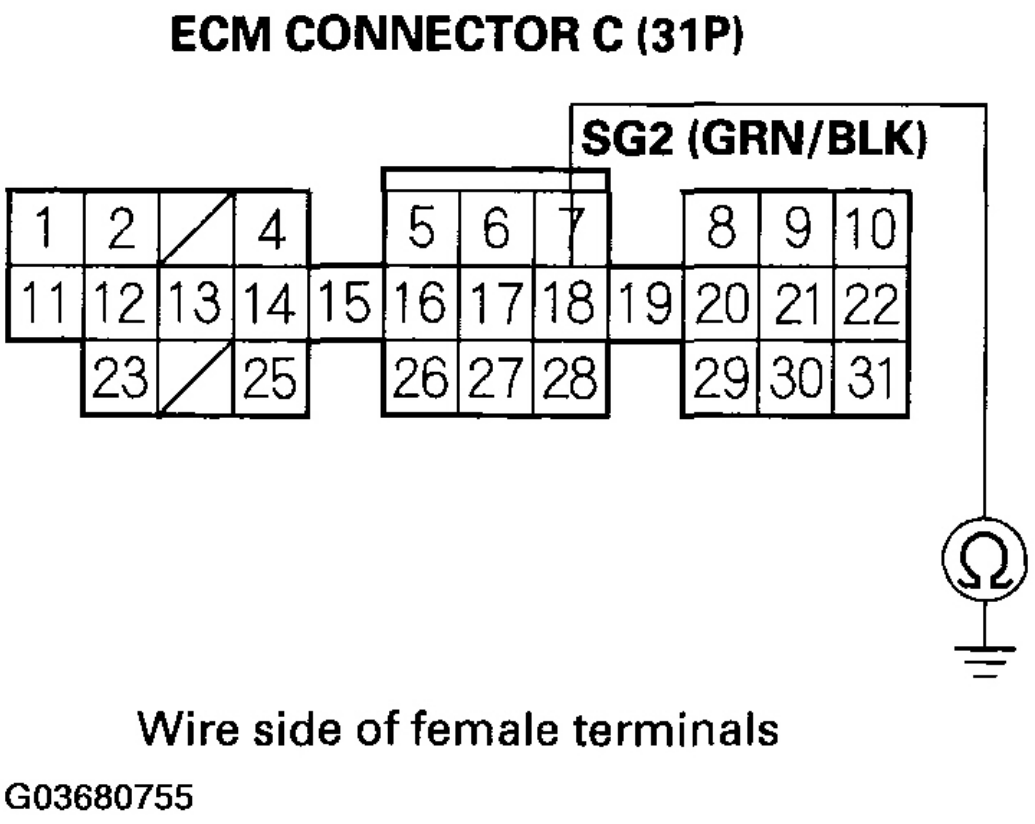


Fig. 52: Checking For Continuity Between ECM Connector Terminal C18 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (C18) and the secondary HO2S (Sensor 2).

DTC P0139: SECONDARY HO2S (SENSOR 2) SLOW RESPONSE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on.
3. Check the HO2S S2 at 3,000 rpm in the DATA LIST with the HDS.

Does the voltage stay within 0.3- 0.6 V for 2 minutes?

YES - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** , and the third HO2S (Sensor 3)* (see **THIRD HO2S REPLACEMENT**).

*: 2002-2006 M/T models

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the secondary HO2S (Sensor 2) and the ECM.

DTC P0141: SECONDARY HO2S (SENSOR 2) HEATER CIRCUIT MALFUNCTION

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0141 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the secondary HO2S (Sensor 2) and the

ECM.

4. Check the No. 4 (7.5 A) fuse in the under-dash fuse/ relay box.

   Is the fuse OK?

   YES - Go to step 11 .

   NO - Replace the fuse and retest.
5. Turn the ignition switch OFF.
6. Disconnect the secondary HO2S (Sensor 2) 4P connector.
7. At the secondary HO2S (Sensor 2) side, measure resistance between secondary HO2S (Sensor 2) 4P connector terminals No. 3 and No. 4.

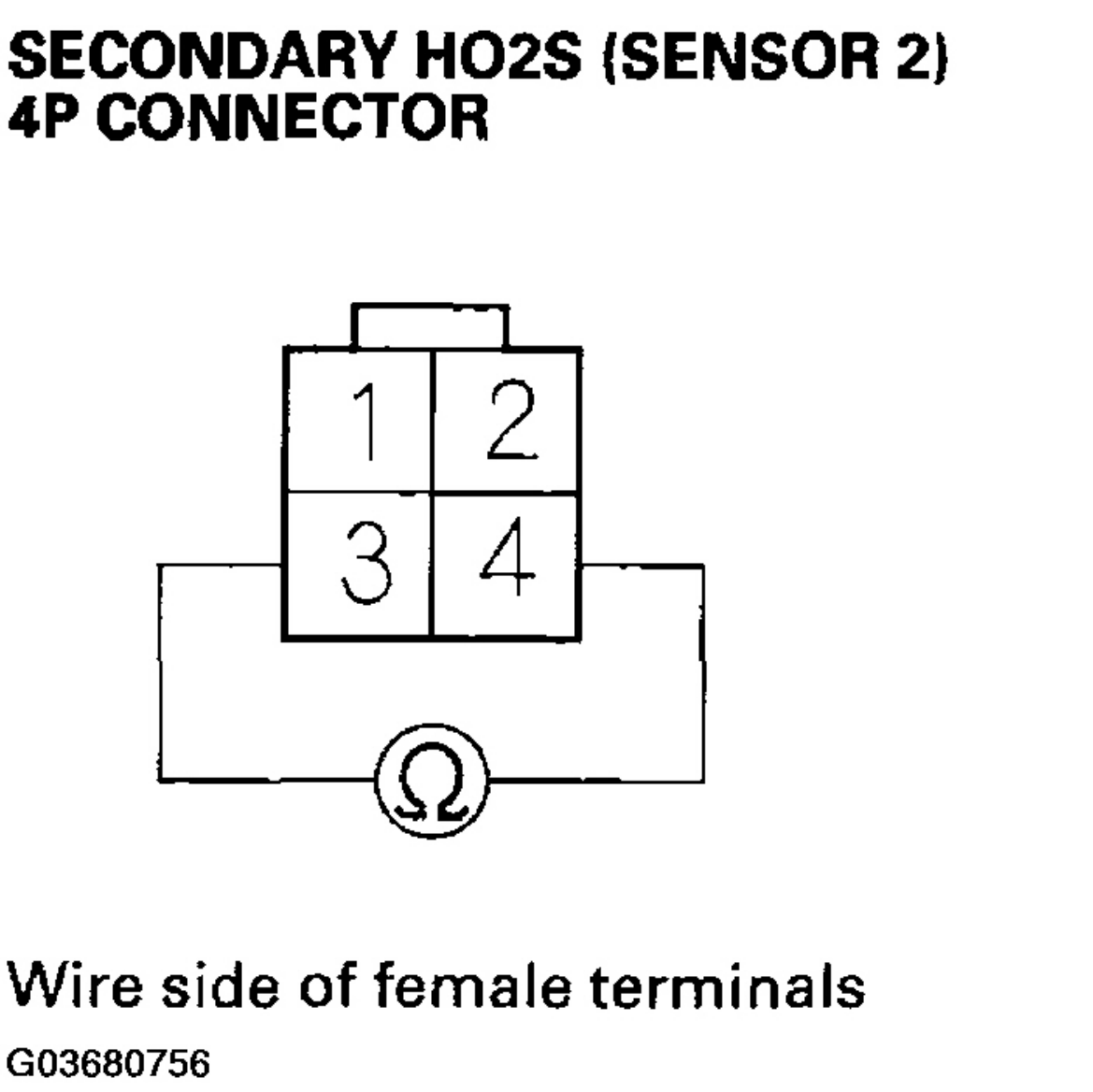


Fig. 53: Measuring Resistance Between Secondary HO2S (Sensor 2) 4P Connector Terminals No. 3 And 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 10-40 ohm ?

YES - Go to step 8.

NO - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** , and the third HO2S (Sensor 3)* (see **THIRD HO2S REPLACEMENT**).

*: 2002-2006 M/T models

8. At the secondary HO2S (Sensor 2) side, check for continuity between body ground and secondary HO2S (Sensor 2) 4P connector terminals No. 3 and No. 4 individually.

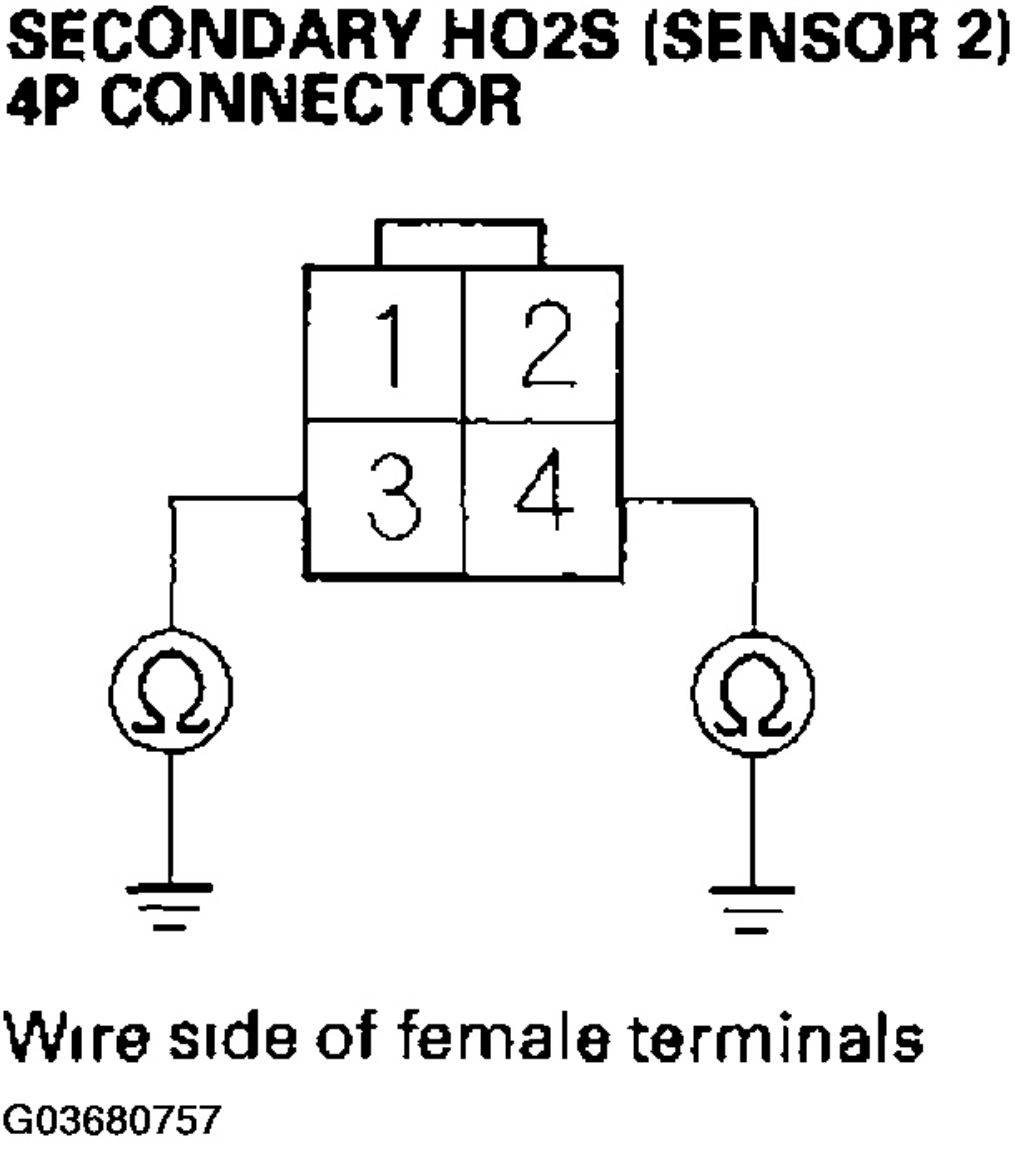


Fig. 54: Checking Continuity Between Body Ground And Secondary HO2S (Sensor 2) 4P Connector Terminals No. 3 And 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the secondary HO2S (Sensor 2) (see **SECONDARY**

HO2S REPLACEMENT , and the third HO2S (Sensor 3)* (see **THIRD HO2S REPLACEMENT**).

*: 2002-2006 M/T models

NO - Go to step 9.

9. Turn the ignition switch ON (II).
10. Measure voltage between secondary HO2S (Sensor 2) 4P connector terminals No. 3 and No. 4.

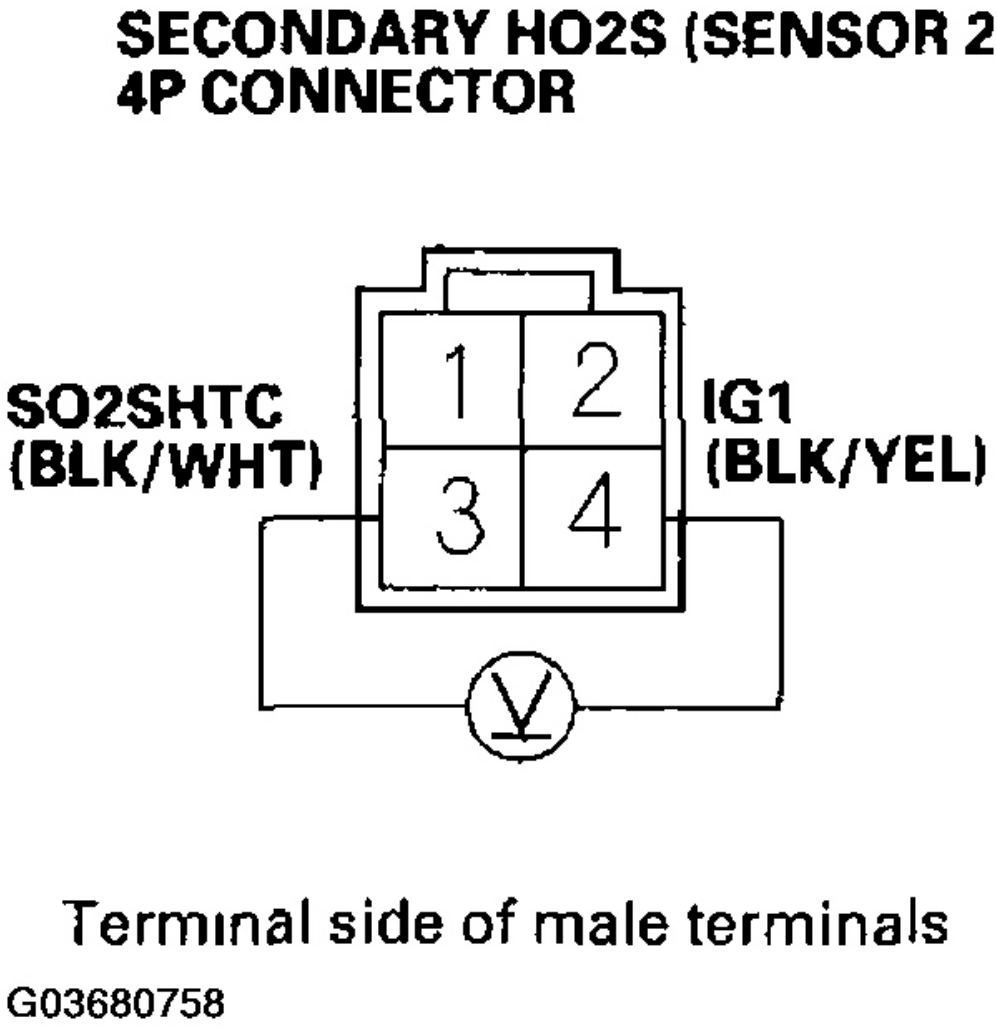


Fig. 55: Measuring Voltage Between Secondary HO2S (Sensor 2) 4P Connector Terminals No. 3 And 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 11.

NO - Go to step 14 .

11. Turn the ignition switch OFF, and wait for 10 seconds.

12. Disconnect ECM connector C (31P).
13. Check for continuity between ECM connector terminal C12 and body ground.

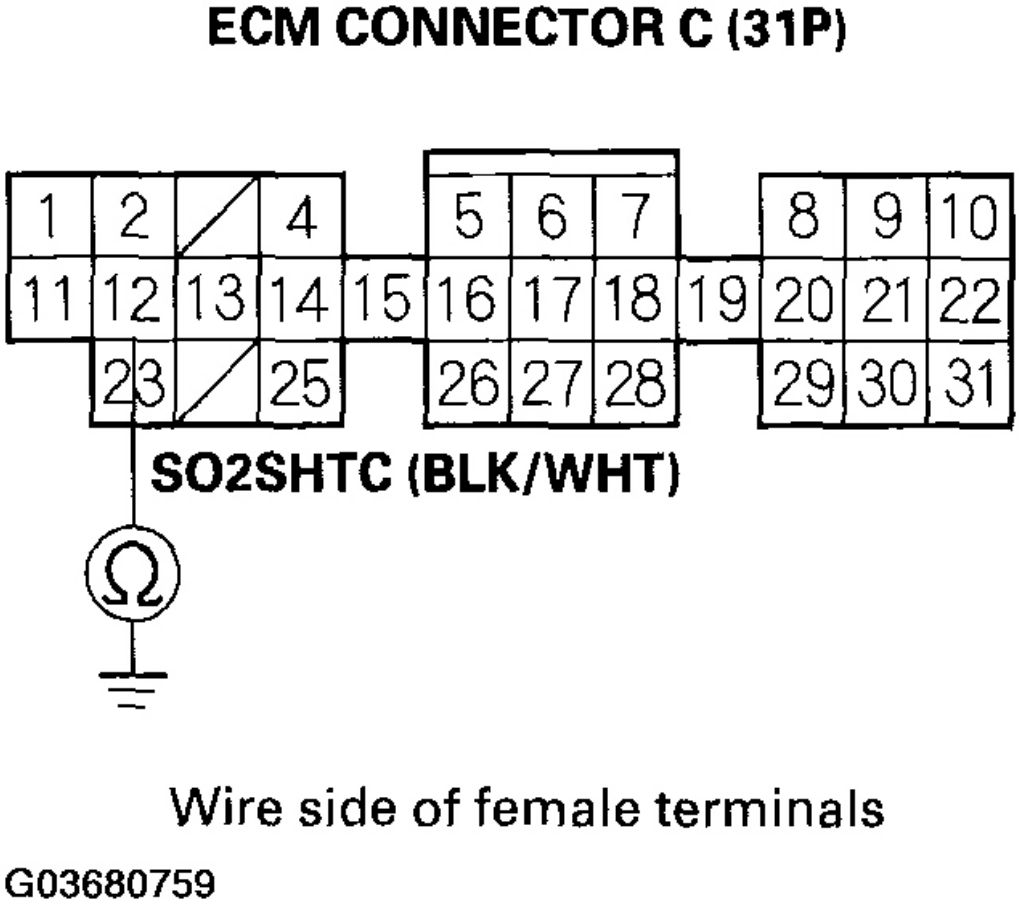


Fig. 56: Checking Continuity Between ECM Connector Terminal C12 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C12) and the secondary HO2S (Sensor 2).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

14. Measure voltage between secondary HO2S (Sensor 2) 4P connector terminal No. 4 and body ground.

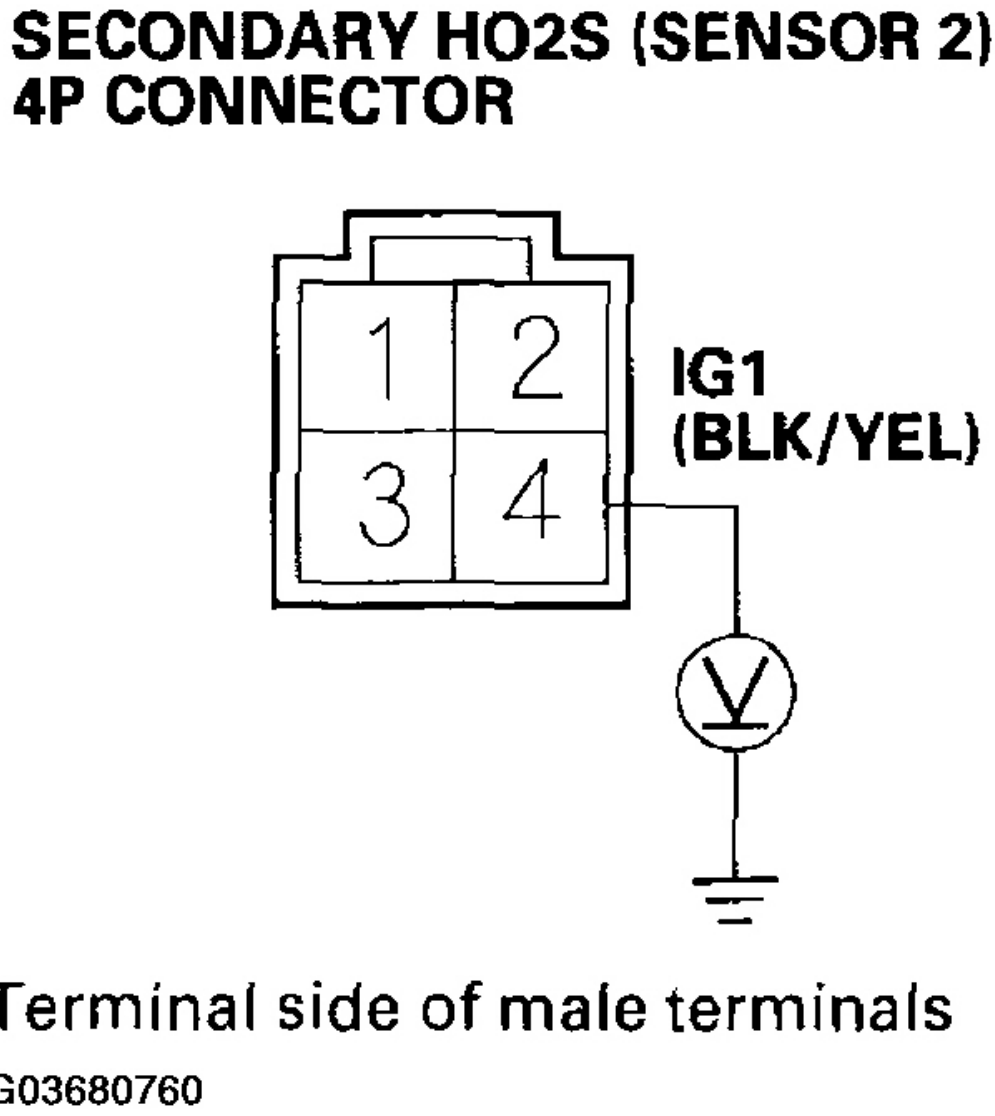


Fig. 57: Measuring Voltage Between Secondary HO2S (Sensor 2) 4P Connector Terminal No. 4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 15.

NO - Repair open in the wire between the secondary HO2S (Sensor 2) and the No. 4 (7.5 A) fuse.

15. Turn the ignition switch OFF, and wait for 10 seconds.
16. Reconnect the secondary HO2S (Sensor 2) 4P connector.
17. Disconnect ECM connector C (31P).
18. Turn the ignition switch ON (II).
19. Measure voltage between ECM connector terminals B2 and C12.

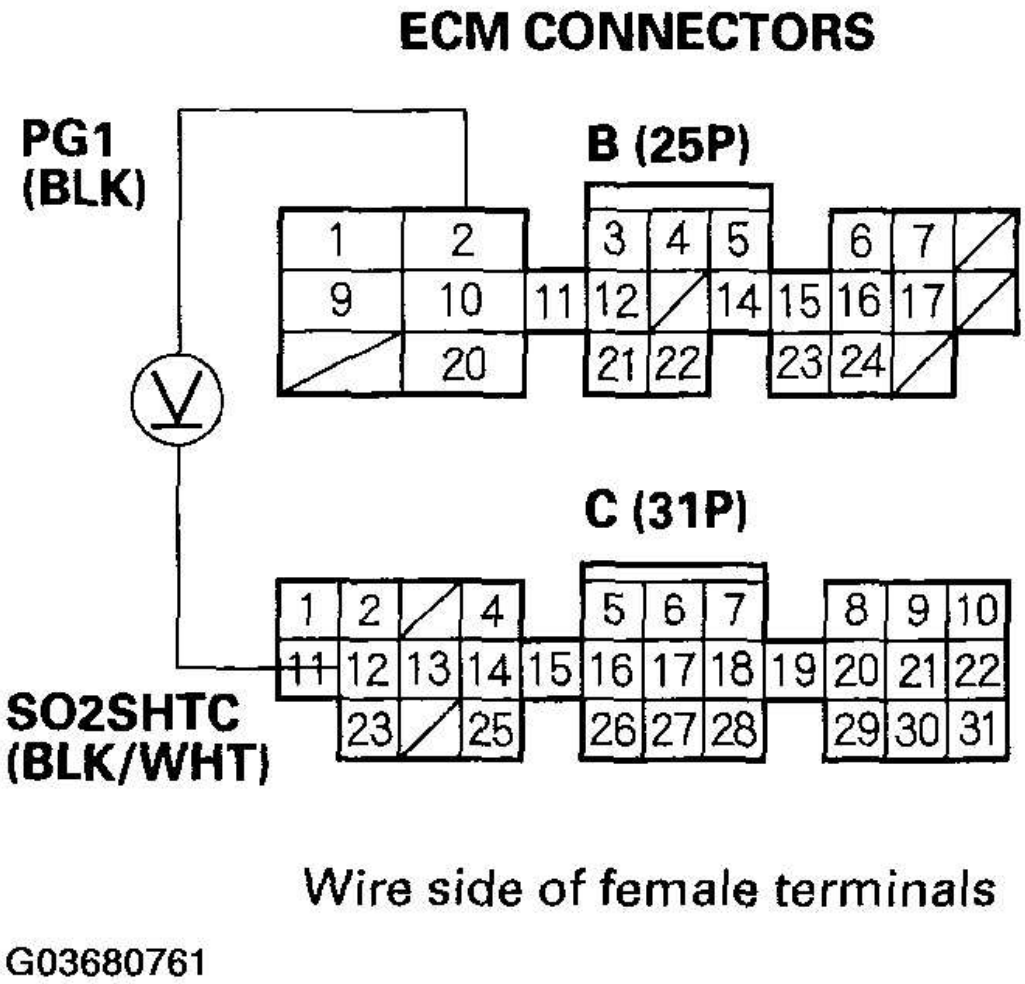


Fig. 58: Measuring Voltage Between ECM Connector Terminals B2 And

C12
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 0.1 V or less?

YES - Repair open in the wire between the ECM (C12) and the secondary HO2S (Sensor 2).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

DTC P0143: THIRD HO2S (SENSOR 3) CIRCUIT LOW VOLTAGE (2002-2006 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **HDS CLEAR COMMAND**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in neutral) until the radiator fan comes on.
3. Test-drive under these conditions:
   - 55-65 mph (89-105 km/h) steady speed
   - Transmission in 4th or 5th gear
   - Until the readiness code or Temporary DTC P0143 and/or P0143 is set
4. Check for a Temporary DTCs or DTCs with the HDS.

Is Temporary DTC P0143 and/or P0143 indicated?

YES - Go to step 6 .

NO - Go to step 5.

5. Check the HO2S S3 at 3,000 rpm in the DATA LIST with the HDS.

   Does the voltage stay at 0.3 V or less?

   YES - Go to step 6.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the third HO2S (Sensor 3) and the ECM.
6. Turn the ignition switch OFF.
7. Disconnect the third HO2S (Sensor 3) 4P connector.
8. Start the engine.
9. Check the HO2S S3 in the DATA LIST with the HDS.

   Does the voltage stay at 0.3 V or less?

   YES - Go to step 10.

   NO - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** , and the third HO2S (Sensor 3) (see **THIRD HO2S REPLACEMENT**).
10. Turn the ignition switch OFF.
11. Disconnect ECM connector C (31P).
12. Check for continuity between third HO2S (Sensor 3) 4P connector terminal No. 2 and body ground.

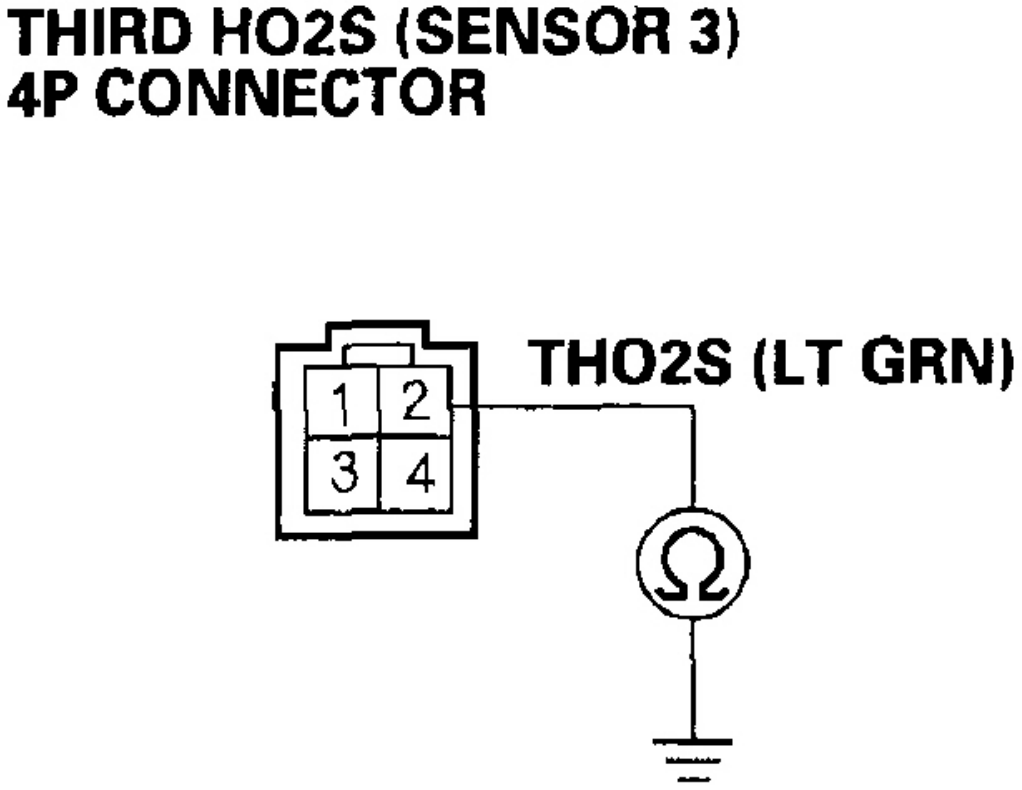


Fig. 59: Checking Continuity Between Third HO2S (Sensor 3) 4P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C16) and the third HO2S (Sensor 3).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

DTC P0144: THIRD HO2S (SENSOR 3) CIRCUIT HIGH VOLTAGE (2002-2006 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in neutral) until the radiator fan comes on.
3. Test-drive under these conditions:
   - 55-65 mph (89 - 105 km/h) steady speed
   - Transmission in 4th or 5th gear
   - Until the readiness code or Temporary DTC P0144 and/or P0144 is set
4. Check for Temporary DTCs or DTCs with the HDS.

   Is Temporary DTC P0144 and/or P0144 indicated?

   YES - Go to step 6 .

   NO - Go to step 5.
5. Check the HO2S S3 at 3,000 rpm in the DATA LIST with the HDS.

   Does the voltage stay at 1.0 V or more?

   YES - Go to step 6.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the third HO2S (Sensor 3) and the ECM.
6. Turn the ignition switch OFF.
7. Disconnect the third HO2S (Sensor 3) 4P connector.

8. Connect third HO2S (Sensor 3) 4P connector terminals No. 1 and No. 2 with a jumper wire.

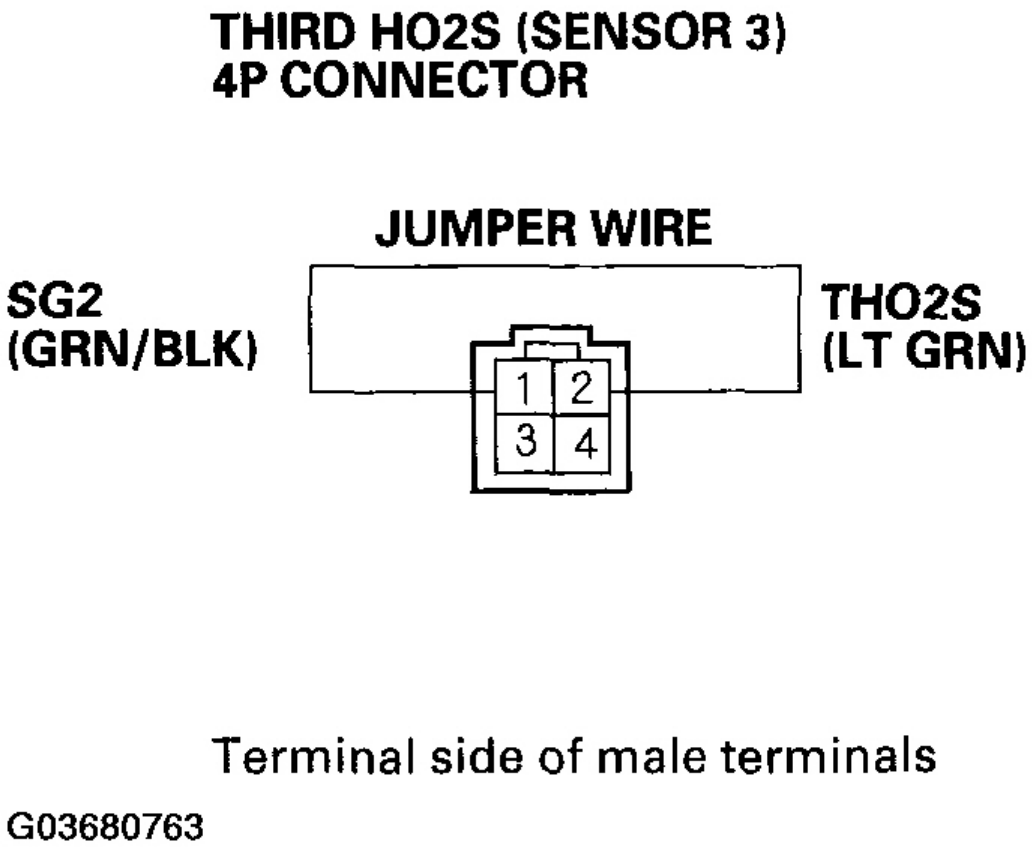


Fig. 60: Connecting Third HO2S (Sensor 3) 4P Connector Terminals No. 1 And 2 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Turn the ignition switch ON (II).
10. Check the HO2S S3 in the DATA LIST with the HDS.

Is there 1.0 V or more?

YES - Go to step 11.

NO - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** , and the third HO2S (Sensor 3) (see **THIRD HO2S REPLACEMENT**).

11. Turn the ignition switch OFF.
12. Connect ECM connector terminals C16 and C18 with a jumper wire.

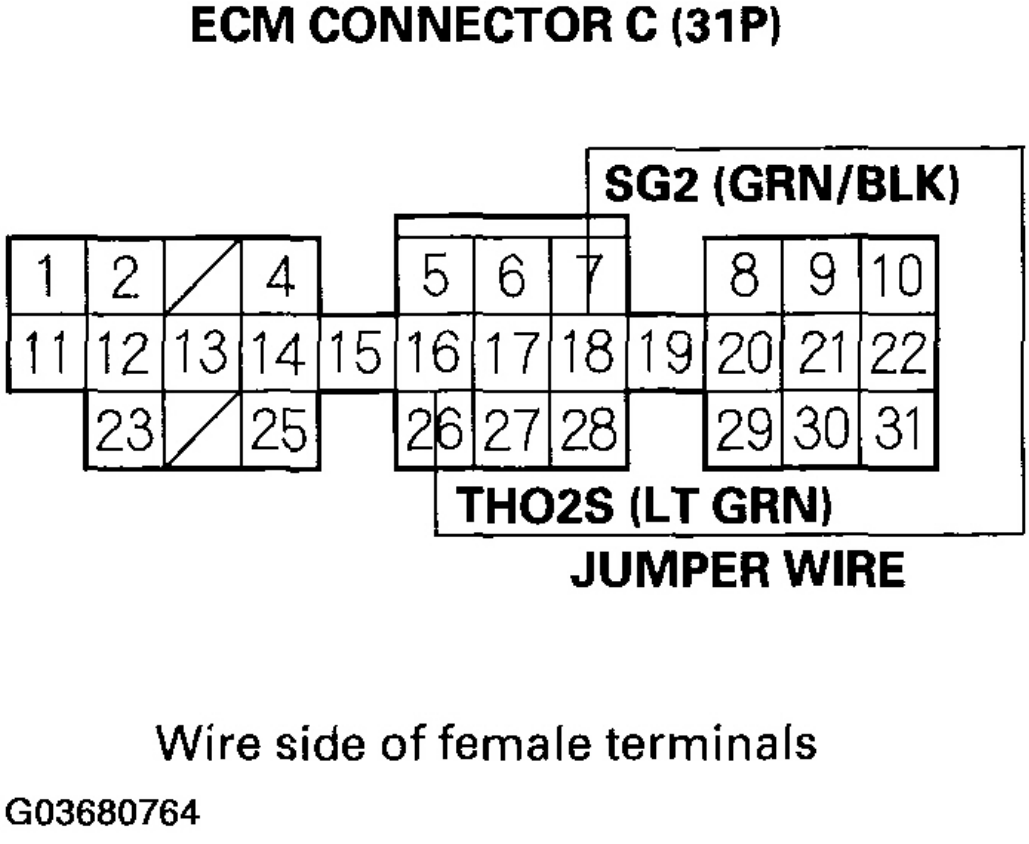


Fig. 61: Connecting ECM Connector Terminals C16 And C18 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Turn the ignition switch ON (II).
14. Check the HO2S S3 in the DATA LIST with the HDS.

Is there 1.0 V or more?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/ indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Go to step 15.

15. Remove the jumper wire.
16. Connect third HO2S (Sensor 3) 4P connector terminal No. 2 to body ground with a jumper wire.

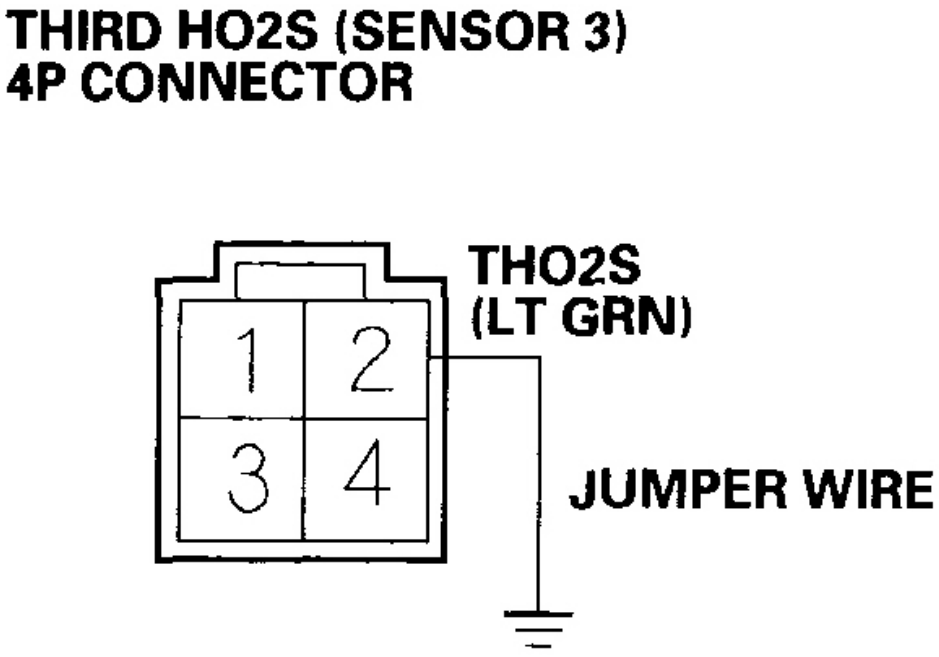


Fig. 62: Connecting Third HO2S (Sensor 3) 4P Connector Terminal No. 2 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Check for continuity between ECM connector terminal C16 and body ground.

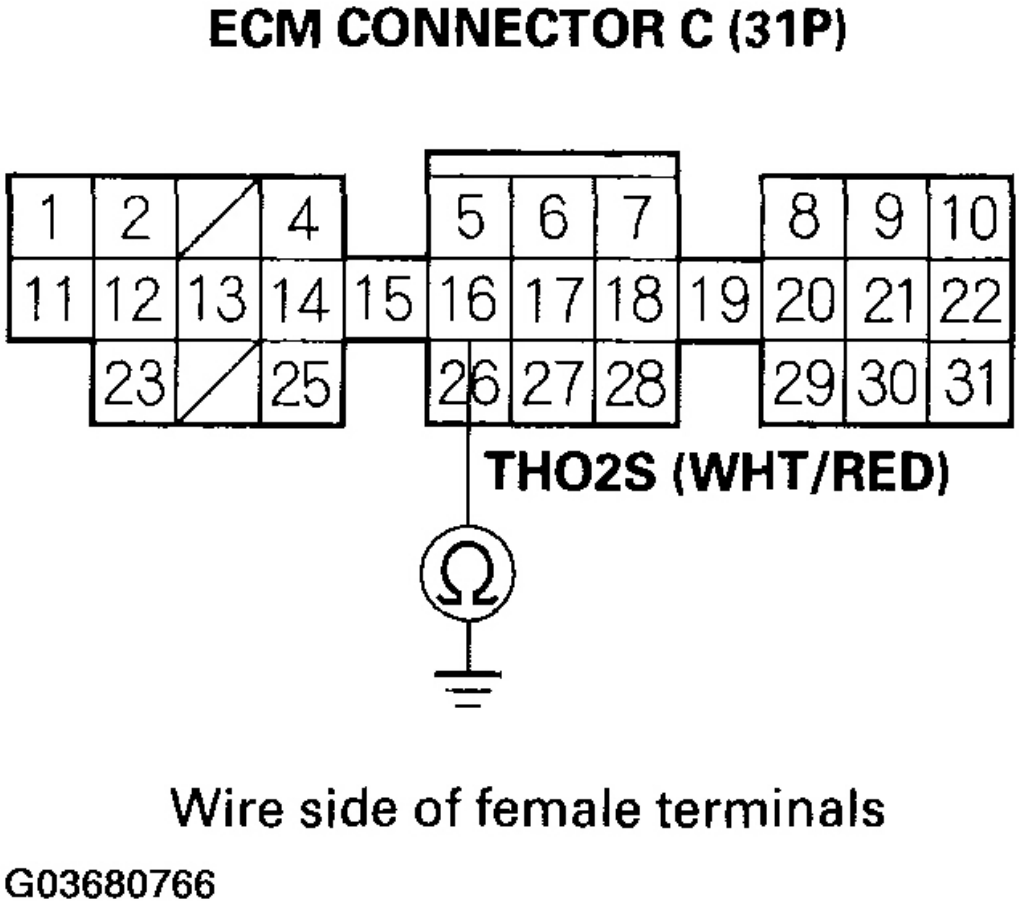


Fig. 63: Checking Continuity Between ECM Connector Terminal C16 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the wire between the ECM (C18) and the third HO2S (Sensor 3).

NO - Repair open in the wire between the ECM (C16) and the third HO2S (Sensor 3).

DTC P0145: THIRD HO2S (SENSOR 3) SLOW RESPONSE (2002-2006 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in neutral) until the radiator fan comes on.
3. Test-drive under these conditions:
   - 55-65 mph (89-105 km/h) steady speed
   - Transmission in 4th or 5th gear
   - Until the readiness code or Temporary DTC P0145 and/or P0145 is set
4. Check for a Temporary DTCs or DTCs with the HDS.

   Is Temporary DTC P0145 and/or P0145 indicated?

   YES - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** , and the third HO2S (Sensor 3) (see **THIRD HO2S REPLACEMENT**).

   NO - Go to step 5.
5. Check the HO2S S3 at 3,000 rpm in the DATA LIST with the HDS.

   Does the voltage stay within 0.3-0.6 V for 2 minutes?

   YES - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** , and the third HO2S (Sensor 3) (see **THIRD HO2S REPLACEMENT**).

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the third HO2S (Sensor 3) and the ECM.

DTC P0147: THIRD HO2S (SENSOR 3) HEATER CIRCUIT MALFUNCTION (2002-2006 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine.
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0147 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the third HO2S (Sensor 3) and the ECM.
4. Check the No. 4 (7.5 A) fuse in the under-dash fuse/ relay box.

   Is the fuse OK?

   YES - Go to step 5.

   NO - Replace the fuse and retest.
5. Turn the ignition switch OFF.
6. Disconnect the third HO2S (Sensor 3) 4P connector.
7. At the third HO2S (Sensor 3) side, measure resistance between third HO2S (Sensor 3) 4P connector terminals No. 3 and No. 4.

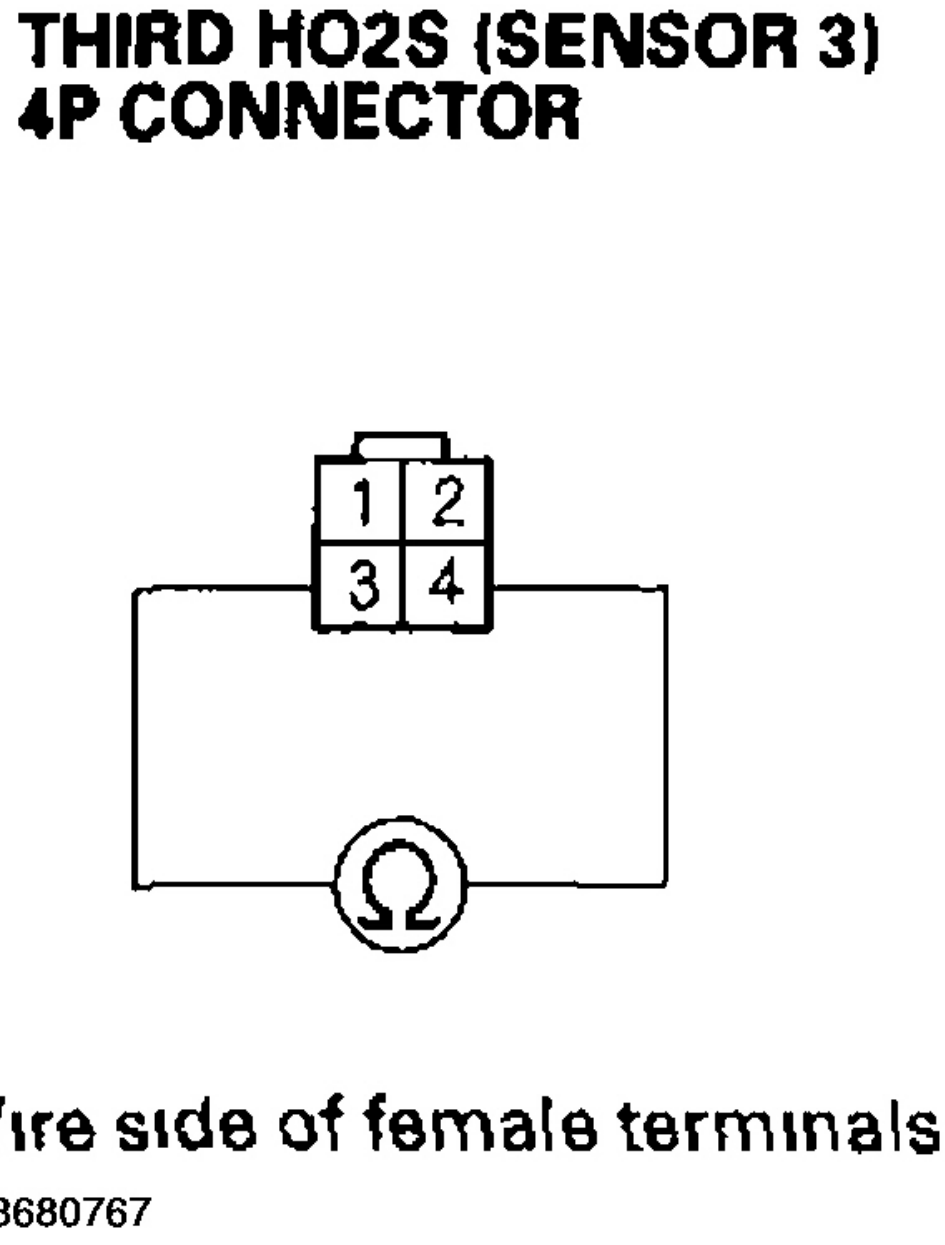


Fig. 64: Measuring Resistance Between Third HO2S (Sensor 3) 4P Connector Terminals No. 3 And 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 10-40 ohm ?

YES - Go to step 8.

NO - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** , and the third HO2S (Sensor 3) (see **THIRD HO2S REPLACEMENT**).

8. At the third HO2S (Sensor 3) side, check for continuity between body ground and third HO2S (Sensor 3) 4P connector terminals No. 3 and No. 4 individually.

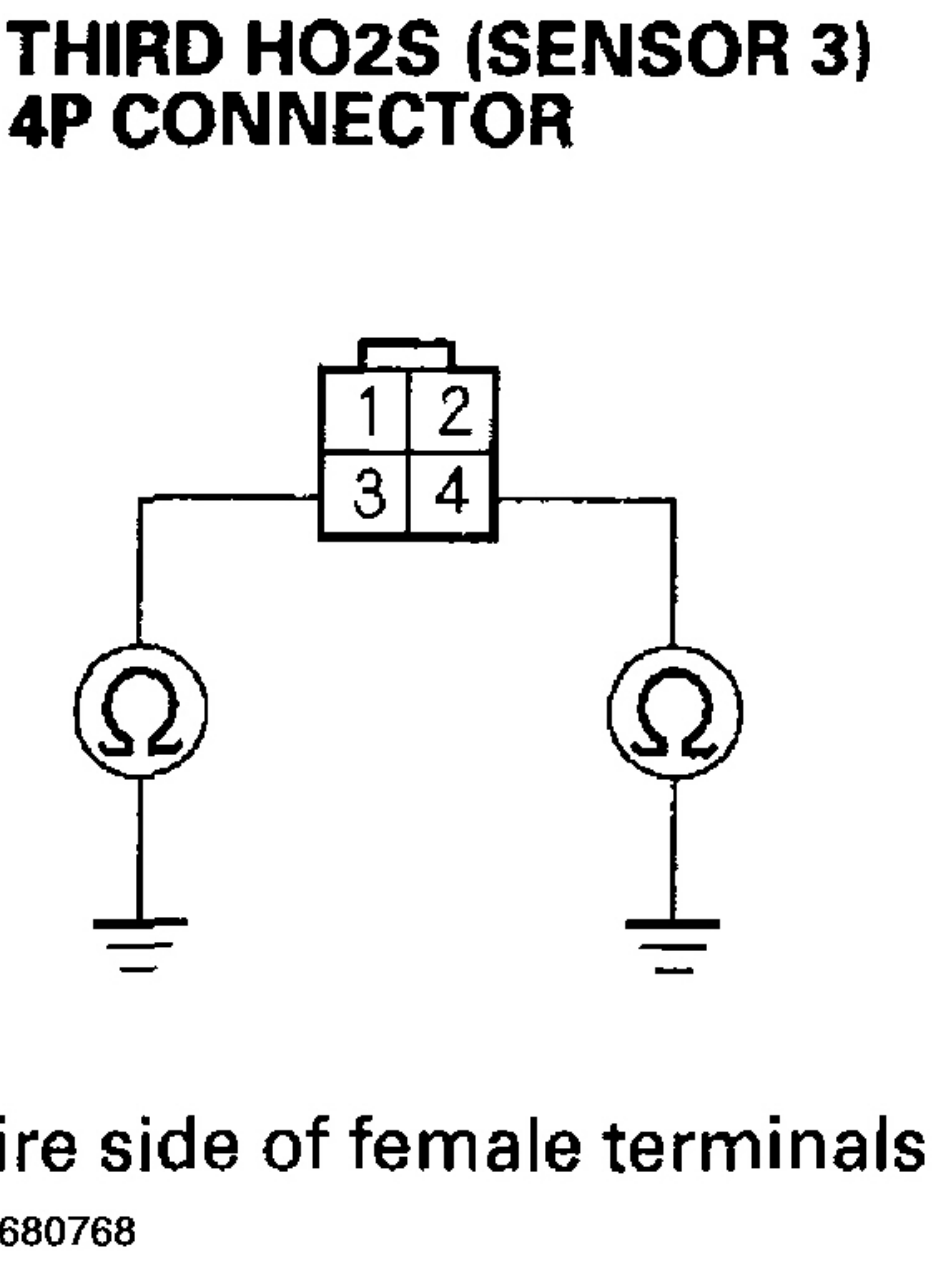


Fig. 65: Checking Continuity Between Body Ground And Third HO2S (Sensor 3) 4P Connector Terminals No. 3 And 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT** , and the third HO2S (Sensor 3) (see **THIRD HO2S REPLACEMENT**).

NO - Go to step 9.

9. Turn the ignition switch ON (II).
10. Measure voltage between third HO2S (Sensor 3) 4P connector terminals No. 3 and No. 4.

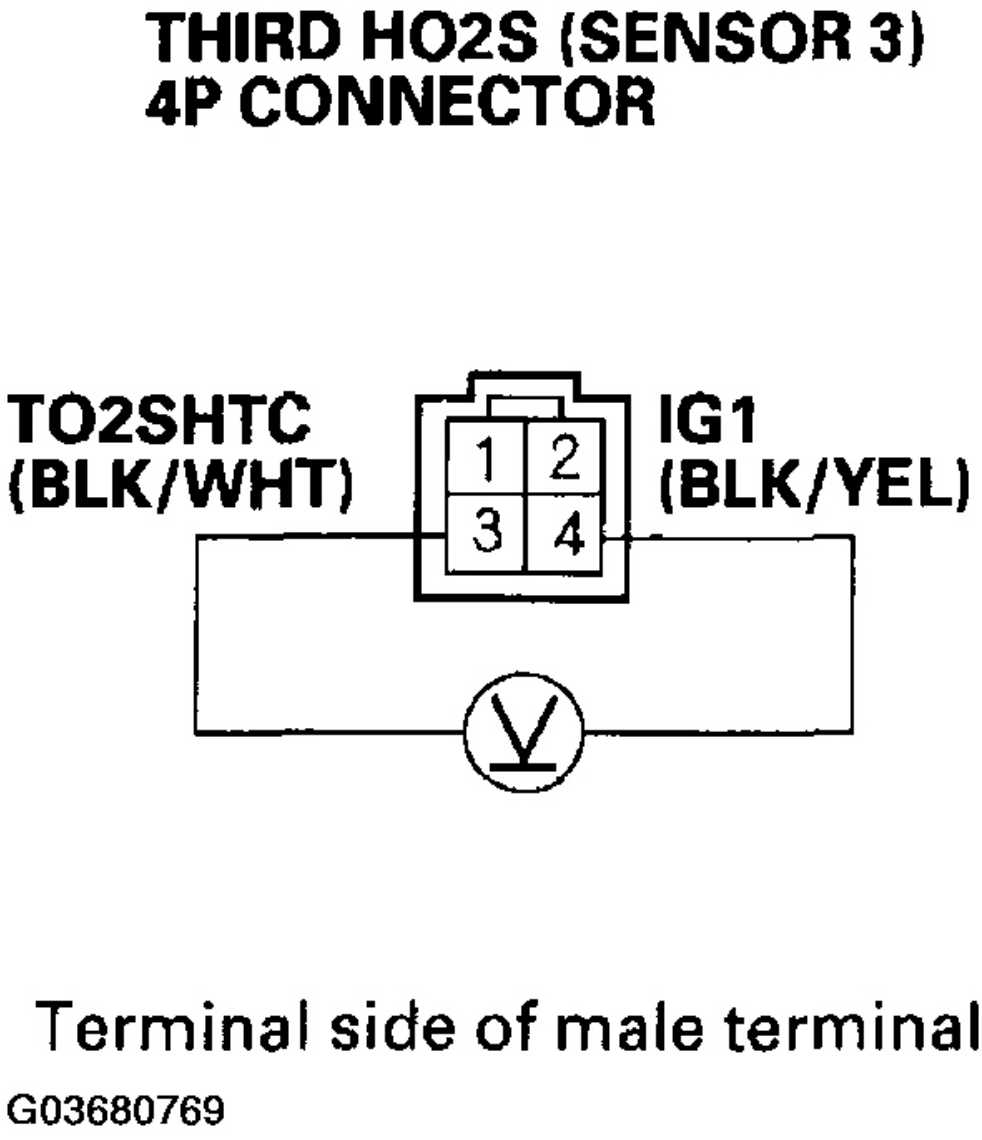


Fig. 66: Measuring Voltage Between Third HO2S (Sensor 3) 4P Connector Terminals No. 3 And 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 11.

NO - Go to step 15 .

11. Turn the ignition switch OFF, and wait for 10 seconds.
12. Disconnect ECM connector C (31P).
13. Check for continuity between ECM connector terminal C1 and body ground.

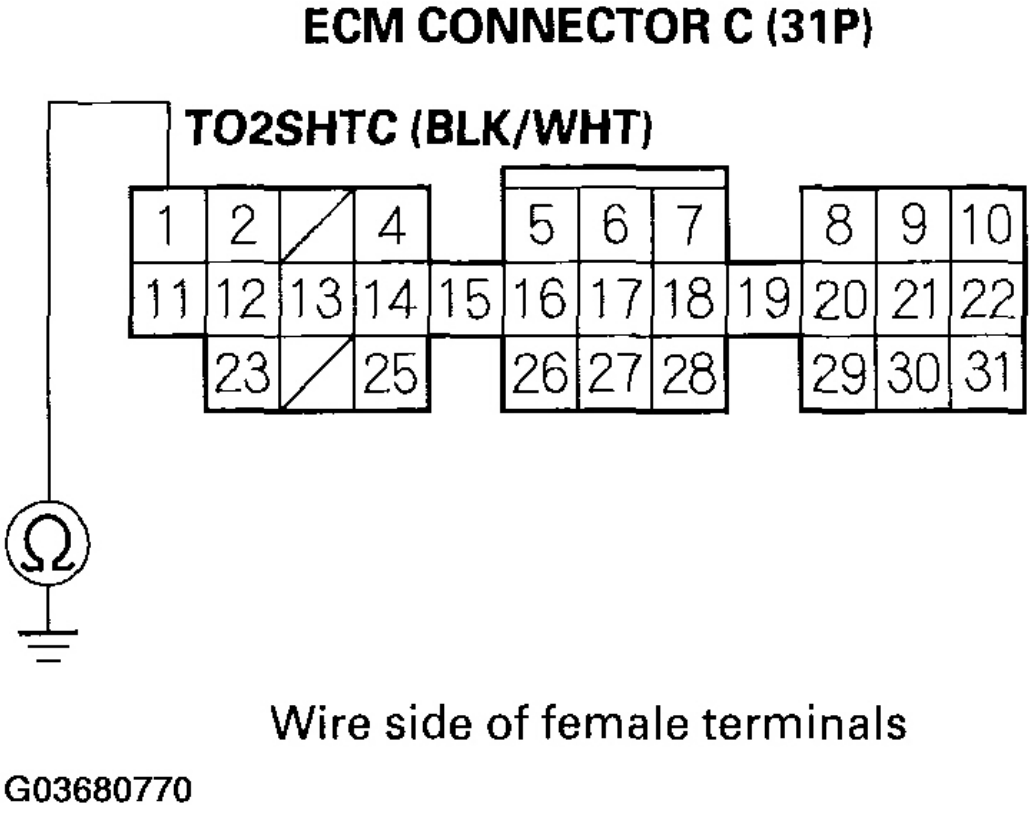


Fig. 67: Checking Continuity Between ECM Connector Terminal C1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C1) and the third HO2S (Sensor 3).

NO - Update the ECM if it does not have the latest software, or substitute

a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

14. Measure voltage between third HO2S (Sensor 3) 4P connector terminal No. 4 and body ground.

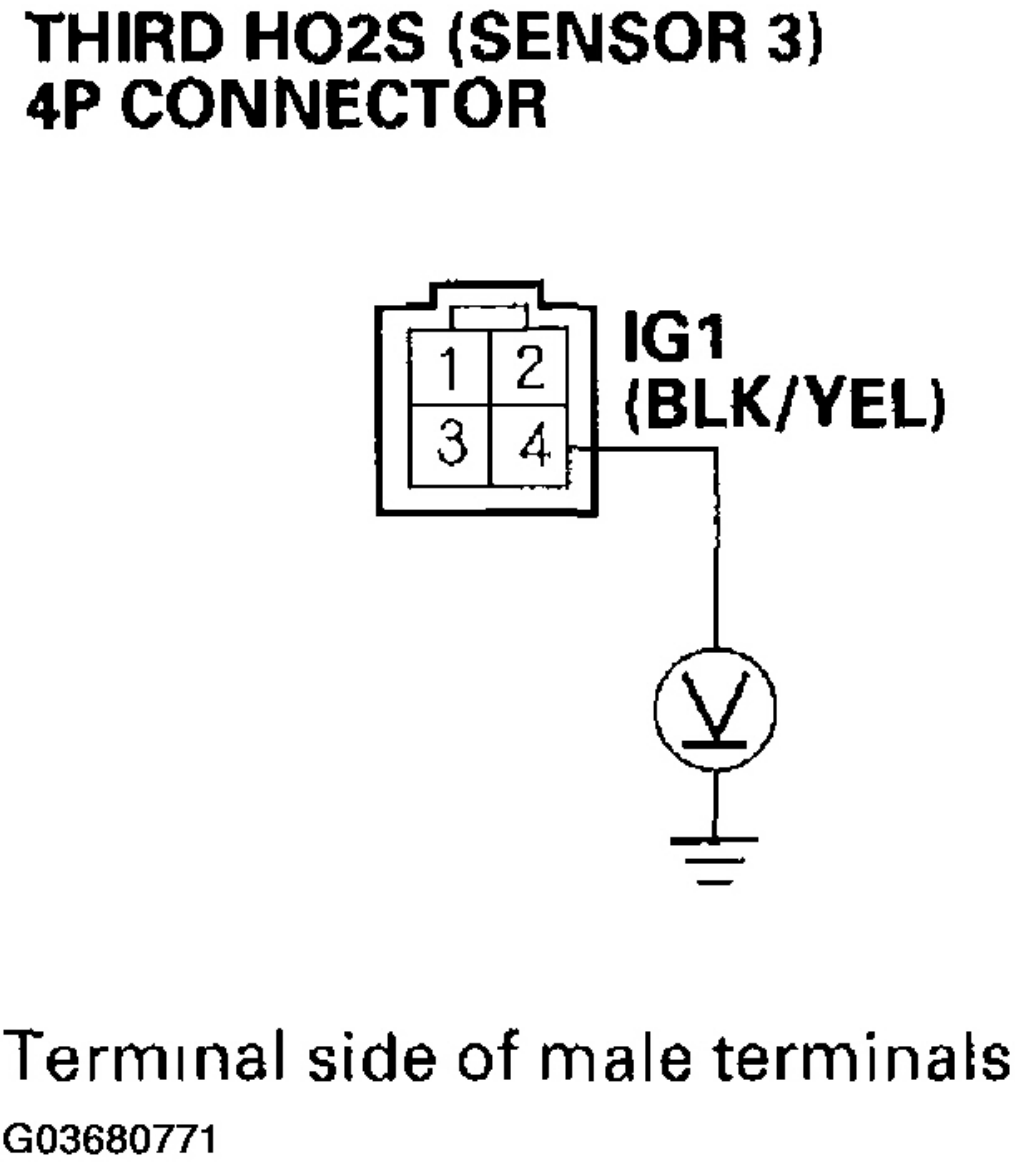


Fig. 68: Measuring Voltage Between Third HO2S (Sensor 3) 4P Connector Terminal No. 4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 15.

NO - Repair open in the wire between the third HO2S (Sensor 3) and the No. 4 (7.5 A) fuse.

15. Turn the ignition switch OFF, and wait for 10 seconds.
16. Reconnect the third HO2S (Sensor 3) 4P connector.
17. Disconnect ECM connector C (31P).
18. Turn the ignition switch ON (II).
19. Measure voltage between ECM connector terminals B2 and C1.

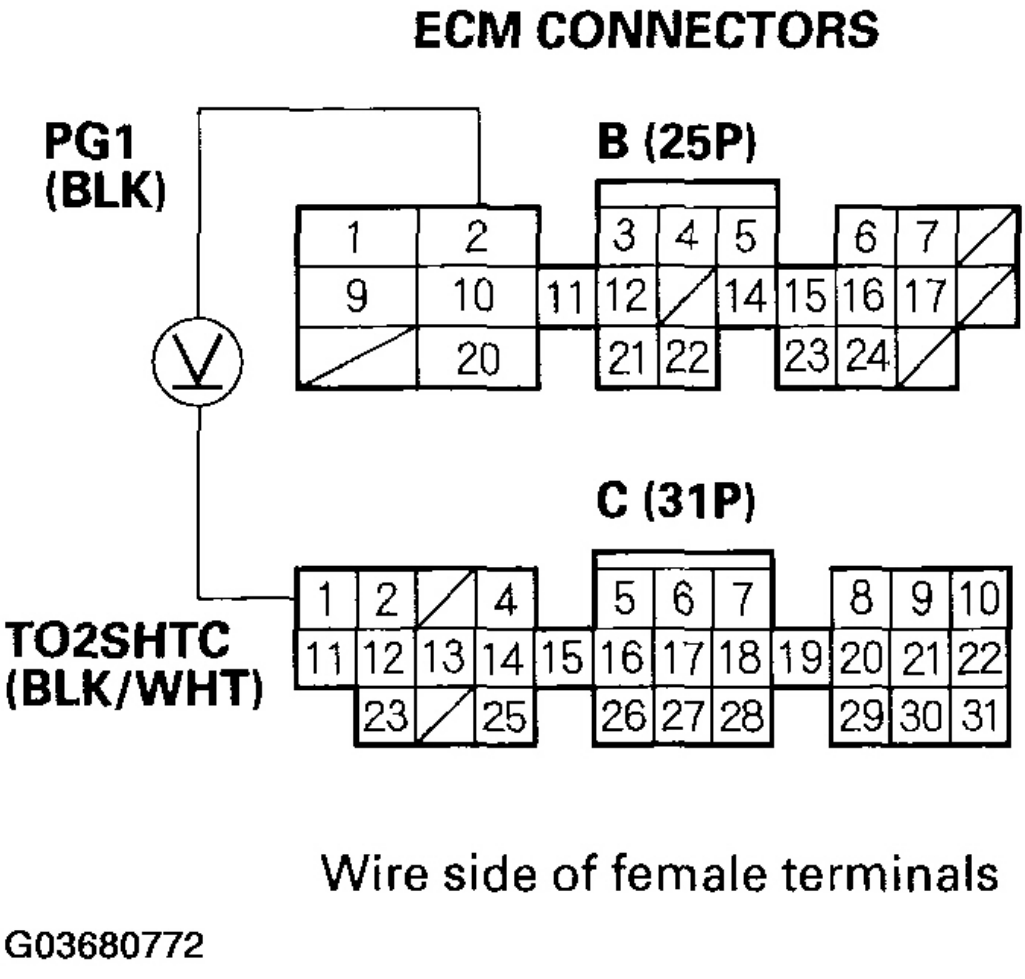


Fig. 69: Measuring Voltage Between ECM Connector Terminals B2 And C1
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 0.1 V or less?

YES - Repair open in the wire between the ECM (C1) and the third HO2S (Sensor 3).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

DTC P0171: FUEL SYSTEM TOO LEAN; DTC P0172: FUEL SYSTEM TOO RICH

Special Tools Required

Vacuum pump/gauge, 0-30 in.Hg, Snap-on YA4000A or equivalent, commercially available

NOTE:

- **If some of the DTCs listed below are stored at the same time as DTC P0171 and/or P0172, troubleshoot those DTCs first, then recheck for P0171 and/or P0172.**

  P0106, P0107, P0108, P1128, P1129: MAP sensor

  P1162, P1163, P1164, P1165: A/F sensor (Sensor 1)*1

  P1166, P1167, P1168, P1169: A/F sensor (Sensor 1) heater*1

  P1149, P1157, P1158, P1159, P1162, P1163, P1164: A/F sensor (Sensor 1)*2

  P0134, P1166, P1167: A/F sensor (Sensor 1) heater*2

P0133, P1157, P2238, P2252, P2A00: A/F sensor (Sensor 1)*3

P0134, P0135: A/F sensor (Sensor 1) heater*3

P0137, P0138: Secondary HO2S (Sensor 2)

P0141: Secondary HO2S (Sensor 2) heater

P1259 (P2646)*4 (P2646, P2647)*5 : VTEC system

***1: 2000-2001 M/T models**

***2: 2002-2003 models**

***3: 2004-2006 models**

***4: 2004 model**

***5: 2005-2006 models**

- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

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 **2001-2003 CVT MODELS**)
   - 2004-2005 CVT models (see **2004-2005 CVT MODELS**)
   - 2006 model (see **2006 MODEL**)

   Is fuel pressure OK?

   YES - Go to step 2.

NO - Check these items:

- If the pressure is too high, check the fuel pressure regulator and the fuel return line.
- If the pressure is too low, check the fuel level, the fuel pump, the fuel feed line, the fuel filter, and the fuel pressure regulator.

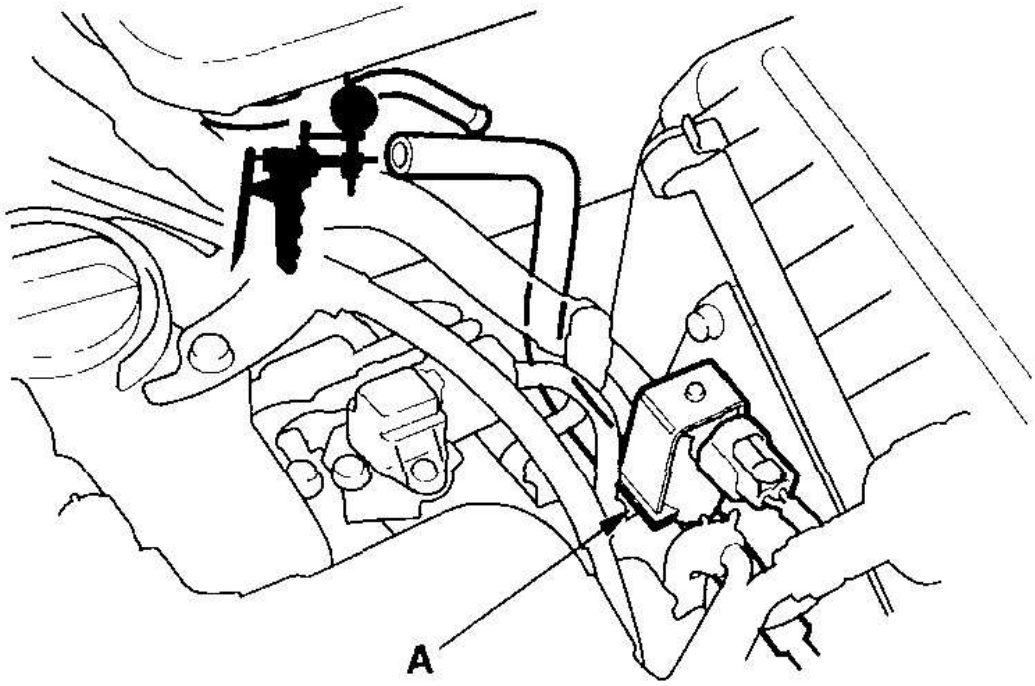
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on.
3. Check the A/F sensor (Sensor 1) output with the HDS.

Does it stay at less than 0.3 V or more than 1.0 V?

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

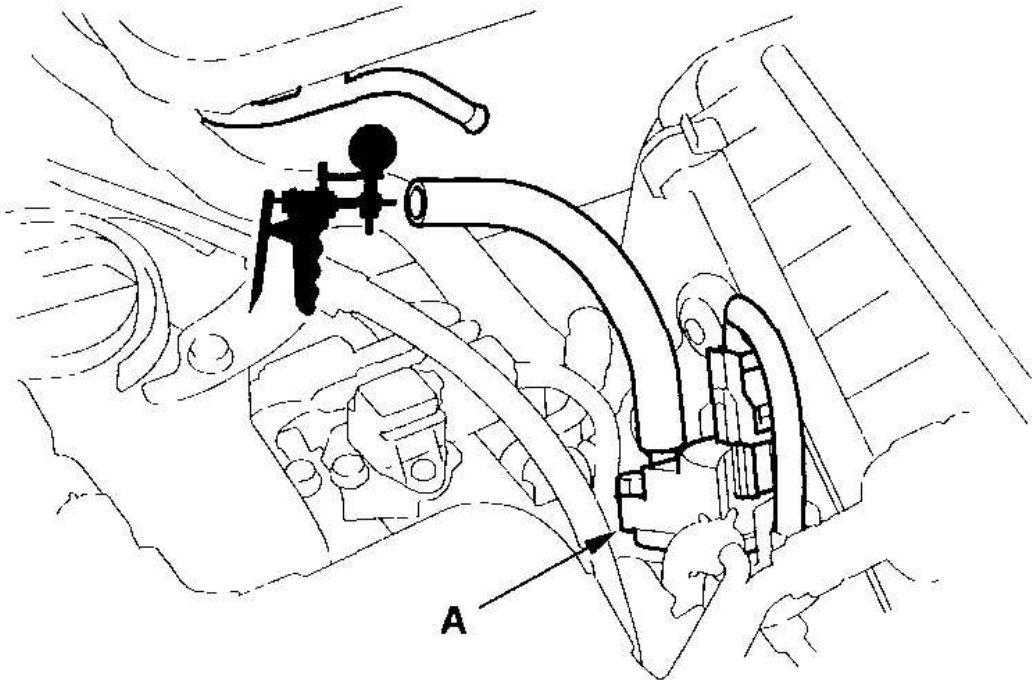
NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Disconnect the vacuum hose from the EVAP canister purge valve (A), and connect a vacuum pump/gauge, 0-30 in.Hg, to the hose.



G03680773

Fig. 70: Disconnecting Vacuum Hose From EVAP Canister Purge Valve (2000-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G03680774

Fig. 71: Disconnecting Vacuum Hose From EVAP Canister Purge Valve (2006 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does it hold vacuum?

YES - Check the valve clearances and adjust if necessary. If the valve clearances are OK, replace the fuel injectors.

NO - Replace the EVAP canister purge valve.

DTC P0300: RANDOM MISFIRE 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

NOTE:

- **If the misfiring is frequent enough to trigger detection of increased emissions during two consecutive driving**

cycles, the MIL will come on, and DTC P0300 (and some combination of P0301 through P0303) will be stored.

- **If the misfiring is frequent enough to damage the catalyst, the MIL will blink whenever the misfiring occurs, and DTC P0300 (and some combination of P0301 through P0303) will be stored. When the misfiring stops, the MIL will remain on.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Troubleshoot the following DTCs first, if any of them were stored along with the random misfire DTC(s):

   P0106, P0107, P0108, P1128, P1129: Manifold absolute pressure (MAP) sensor

   P1162-P1169: Air fuel ratio (A/F) sensor (Sensor 1)*1

   P1157, P1158, P1159, P1162-P1167: Air fuel ratio (A/F) sensor (Sensor 1)*2

   P0133, P1157, P2238, P2252, P2A00: A/F sensor (Sensor 1)*3

   P0171,P0172: Fuel system

   P0335, P0336 (P0335, P0339)*3 : Crankshaft position (CKP) sensor

   P0401, P1491, P1498 (P0401, P0404, P0406)*3 : Exhaust gas recirculation (EGR) system

   P0505 (P0506, P0507)*4 : Idle control system

   P1259 (P2646)*4 (P2646, P2647)*5 : VTEC system

P1361, P1362, P1366, P1367 (P0340, P0344, P0365, P0369)*3 : Camshaft position A/B (CMP A/B) sensor

(Top Dead Center 1/2 (TDC 1/2) Sensor)

P1519 (P0511)*3 : Idle air control (IAC) valve

*1: 2000-2001 M/T models

*2: 2002-2003 models

*3: 2004-2006 models

*4: 2004 model

*5: 2005-2006 models

2. Test-drive the vehicle to verify the symptom.
3. Find the symptom in the chart below, and do the related procedures to find the cause.

CYLINDER MISFIRE CHART

Symptom	Procedure(s)	Also check for:
Random misfire only at low RPM and under load	Check 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**	• Low compression. • Low quality fuel.

	MODELS) • 2004-2005 CVT models (see **2004-2005 CVT MODELS**) • 2006 model (see **2006 MODEL**)	
Random misfire only during acceleration	Check 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**)	Malfunction in the VTEC system (see **VTEC ROCKER ARM TEST**).
	Check fuel pressure. • 2000-2003 M/T models (see **2000-2003 M/T MODELS**) • 2001-2003 CVT	

Random misfire at high RPM, under load, or under random conditions	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**)	Correct valve clearances (see **VALVE CLEARANCE ADJUSTMENT**).

DTC P0301: NO. 1 CYLINDER MISFIRE DETECTED; DTC P0302: NO. 2 CYLINDER MISFIRE DETECTED; DTC P0303: NO. 3 CYLINDER MISFIRE DETECTED

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. After checking and recording the freeze data, reset the ECM (see **ECM RESET**). If there is no freeze data of the misfire, just clear the DTC.
2. Start the engine, and listen for a clicking sound at the injector at the problem cylinder.

   Does it click?

   YES - Go to step 3.

   NO - Go to step 30 .
3. Turn the ignition switch OFF, and reset the ECM.
4. Exchange the ignition coil from the problem cylinder with one from another cylinder.
5. Test-drive the vehicle several times in the range of the freeze data or under various conditions if there was no freeze data.

6. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0301, P0302 or P0303 indicated?

   YES - Go to step 7.

   NO - Intermittent misfire due to poor contact at the ignition coil connector (no misfire at this time).
7. Determine which cylinder(s) had the misfire.

   Does the misfire occur in the cylinder where the ignition coil was exchanged?

   YES - Replace the faulty ignition coil.

   NO - Go to step 8.
8. Turn the ignition switch OFF, and reset the ECM with the HDS.
9. Exchange the spark plug from the problem cylinder with one from another cylinder.
10. Test-drive the vehicle several times in the range of the freeze data or under various conditions if there was no freeze data.
11. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0301, P0302 or P0303 indicated?

    YES - Go to step 12.

    NO - Intermittent misfire due to spark plug fouling, etc. (no misfire at this time).
12. Determine which cylinder(s) had the misfire.

    Does the misfire occur in the cylinder where the spark plug was exchanged?

    YES - Replace the faulty spark plug.

    NO - Go to step 13.
13. Turn the ignition switch OFF, and reset the ECM with the HDS.

14. Exchange the injector from the problem cylinder with one from another cylinder.
15. Let the engine idle 2 minutes.
16. Test-drive the vehicle several minutes in the range of the freeze data or under various conditions if there was no freeze data.
17. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0301, P0302 or P0303 indicated?

    YES - Go to step 18.

    NO - Intermittent misfire due to bad contact at the injector connector (no misfire at this time).
18. Determine which cylinder(s) had the misfire.

    Does the misfire occur in the cylinder where the injector was exchanged?

    YES - Replace the faulty injector (see **INJECTOR REPLACEMENT**).

    NO - Go to step 19.
19. Turn the ignition switch OFF.
20. Disconnect the ignition coil 3P connector from the problem cylinder.
21. Turn the ignition switch ON (II).
22. Measure voltage between ignition coil 3P connector terminal No. 3 and body ground.

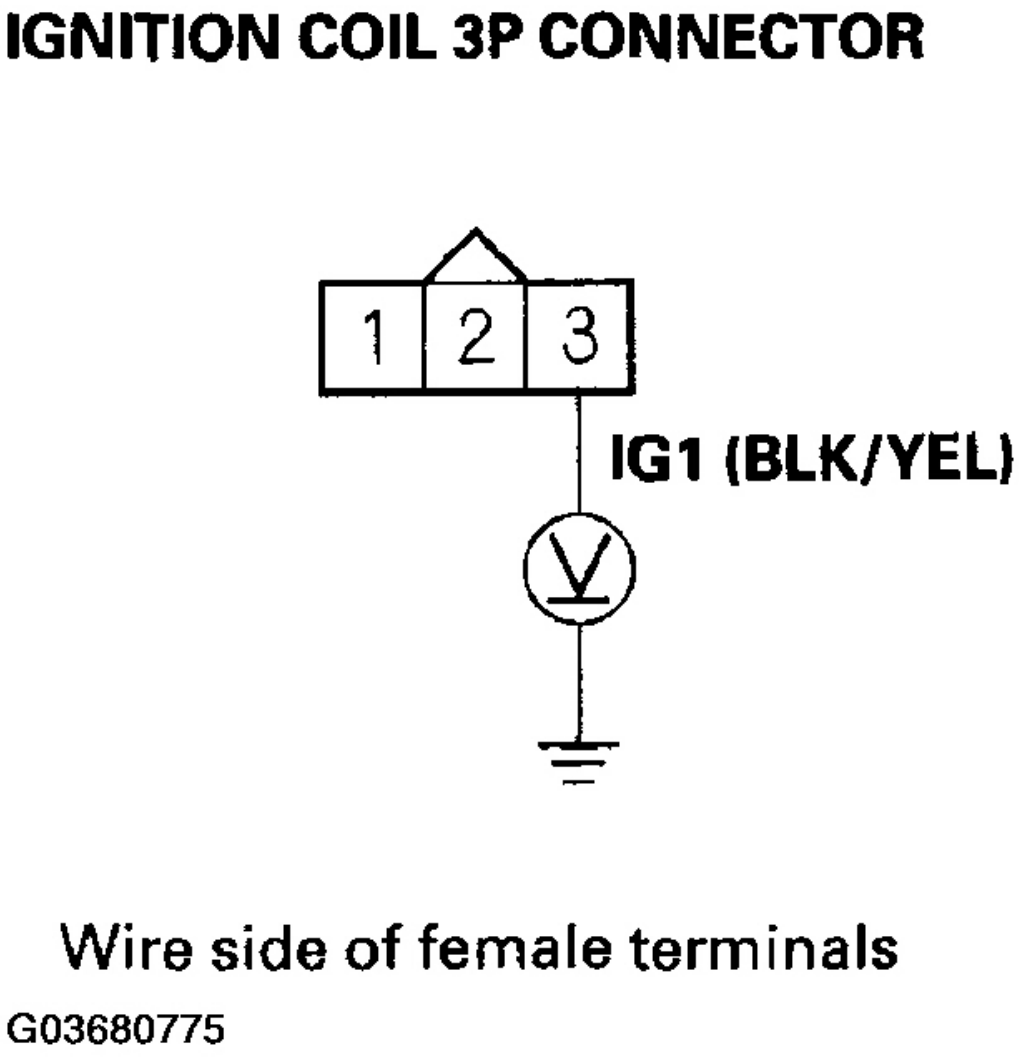


Fig. 72: Measuring Voltage Between Ignition Coil 3P Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 23.

NO - Repair open or short in the wire between the No. 7 (15 A) fuse and the ignition coil.

23. Turn the ignition switch OFF.
24. Check for continuity between ignition coil 3P connector terminal No. 2 and body ground.

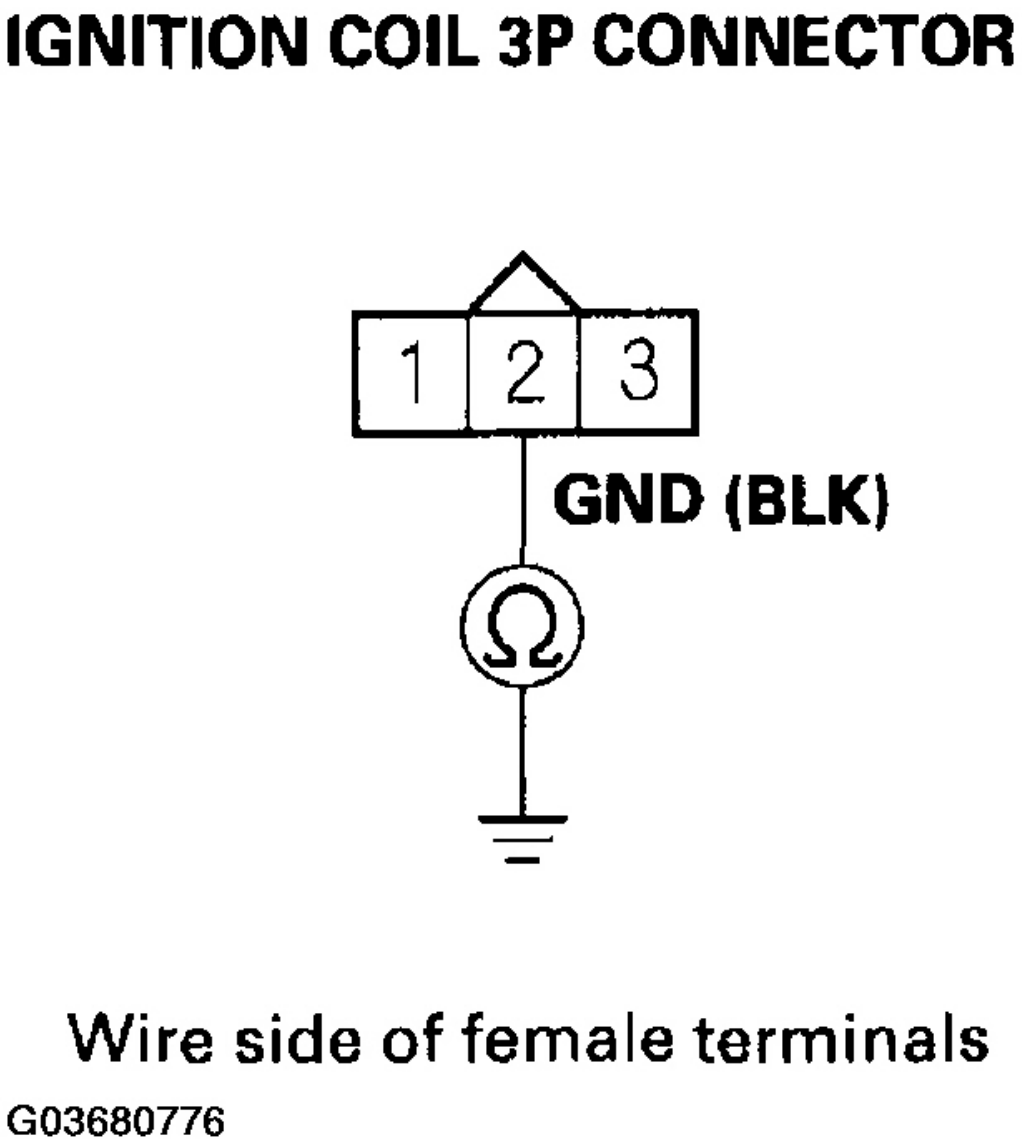


Fig. 73: Checking Continuity Between Ignition Coil 3P Connector Terminal No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 25.

NO - Repair open in the wire between the ignition coil and G101.

25. Disconnect ECM connector C (31P).
26. Check for continuity between body ground and the appropriate ECM connector terminal (see **BODY GROUND AND ECM CONNECTOR TERMINAL**).

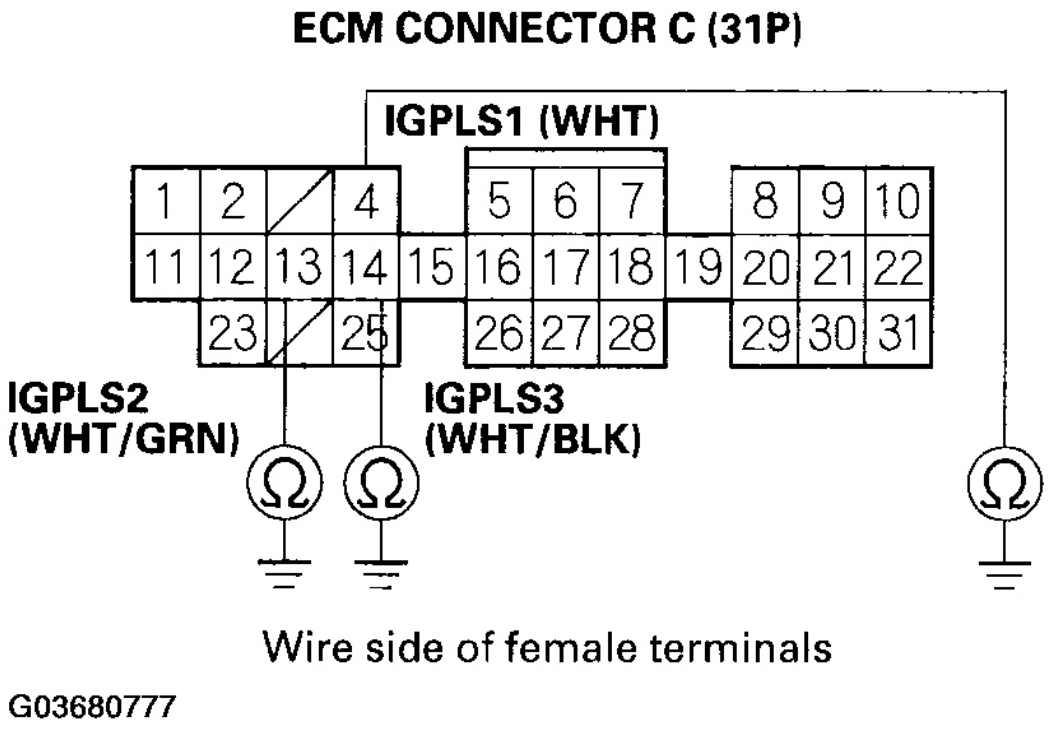


Fig. 74: Checking Continuity Between Body Ground And Appropriate ECM Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BODY GROUND AND ECM CONNECTOR TERMINAL

PROBLEM		**ECM**	

CYLINDER	DTC	TERMINAL	WIRE COLOR
No. 1	P0301	C4	WHT
No. 2	P0302	C13	WHT/GRN
No. 3	P0303	C14	WHT/BLK

Is there continuity?

YES - Repair short in the wire between the ECM and the ignition coil.

NO - Go to step 27.

27. Connect appropriate ignition coil 3P connector terminal No. 1 to body ground with a jumper wire (see **IGNITION COIL 3P CONNECTOR TO BODY GROUND**).

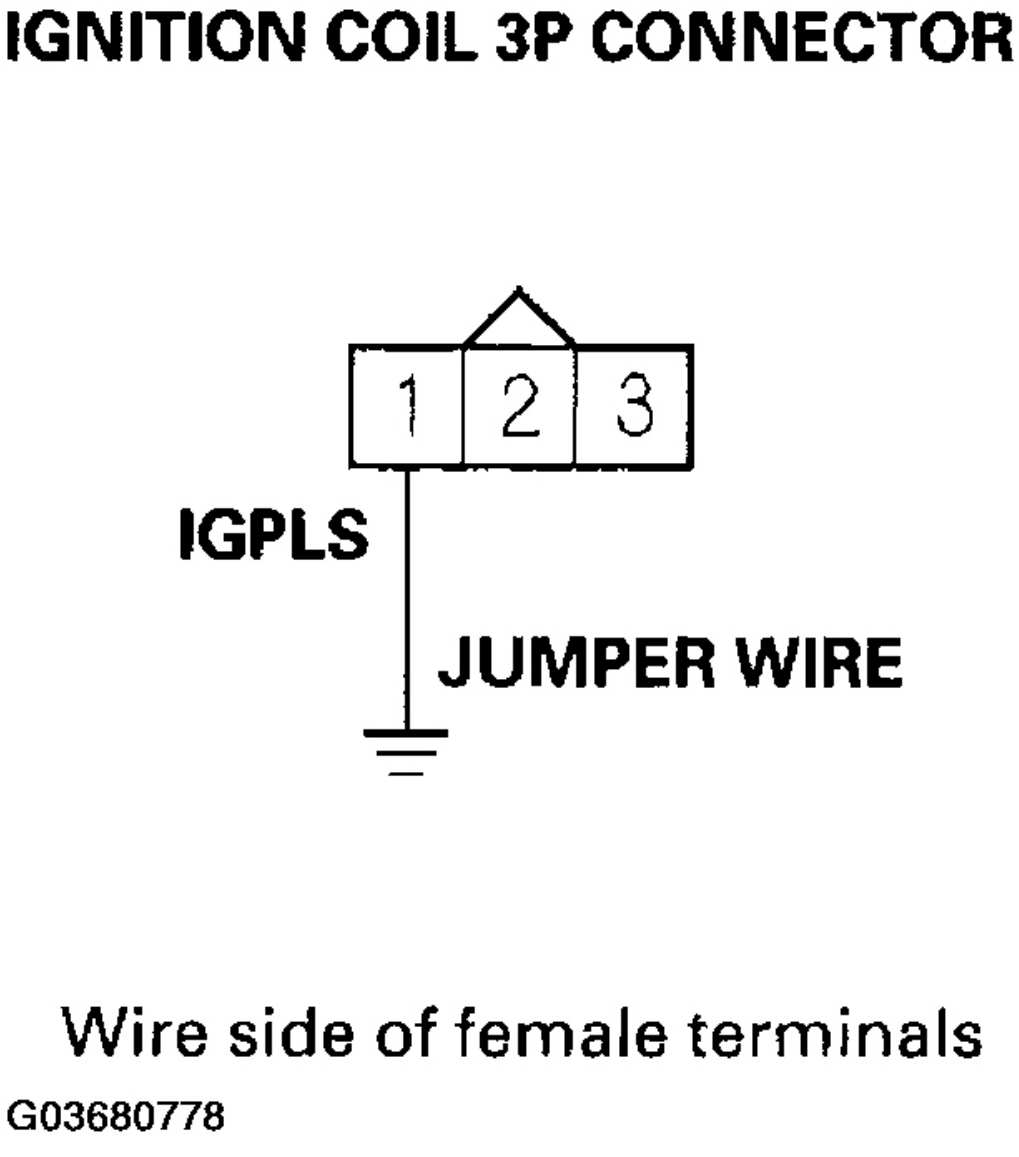


Fig. 75: Connecting Appropriate Ignition Coil 3P Connector Terminal No. 1 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

IGNITION COIL 3P CONNECTOR TO BODY GROUND

PROBLEM CYLINDER	DTC	WIRE COLOR

No. 1	P0301	WHT
No. 2	P0302	WHT/GRN
No. 3	P0303	WHT/BLK

28. Check for continuity between body ground and the appropriate ECM connector terminal (see **BODY GROUND AND ECM CONNECTOR**).

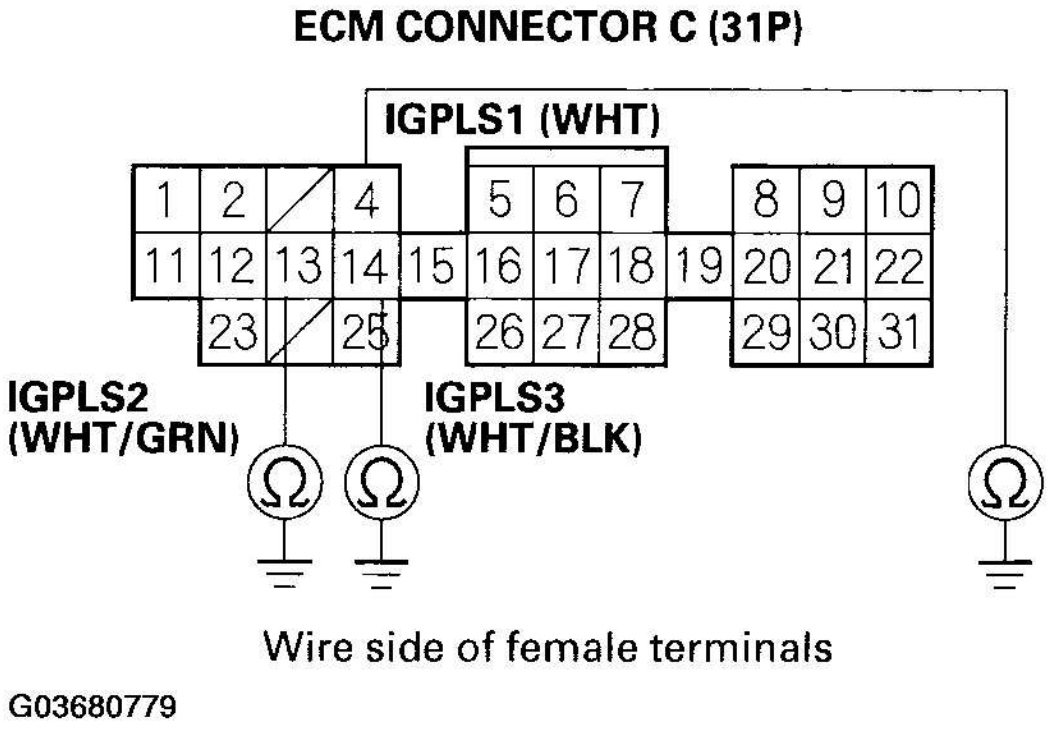


Fig. 76: Checking Continuity Between Body Ground And Appropriate ECM Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BODY GROUND AND ECM CONNECTOR TERMINAL

PROBLEM CYLINDER	DTC	ECM TERMINAL	WIRE COLOR
No. 1	P0301	C4	WHT
No. 2	P0302	C13	WHT/GRN

No. 3	P0303	C14	WHT/BLK

Is there continuity?

YES - Go to step 29.

NO - Repair open in the wire between the ECM and the ignition coil.

29. Check the engine compression.

Is the engine compression OK?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair the engine.

30. Turn the ignition switch OFF, and wait for 10 seconds.
31. Disconnect ECM connector B (25P).
32. Turn the ignition switch ON (II).
33. Measure voltage between body ground and the appropriate ECM connector terminal (see **BODY GROUND AND ECM CONNECTOR TERMINAL**).

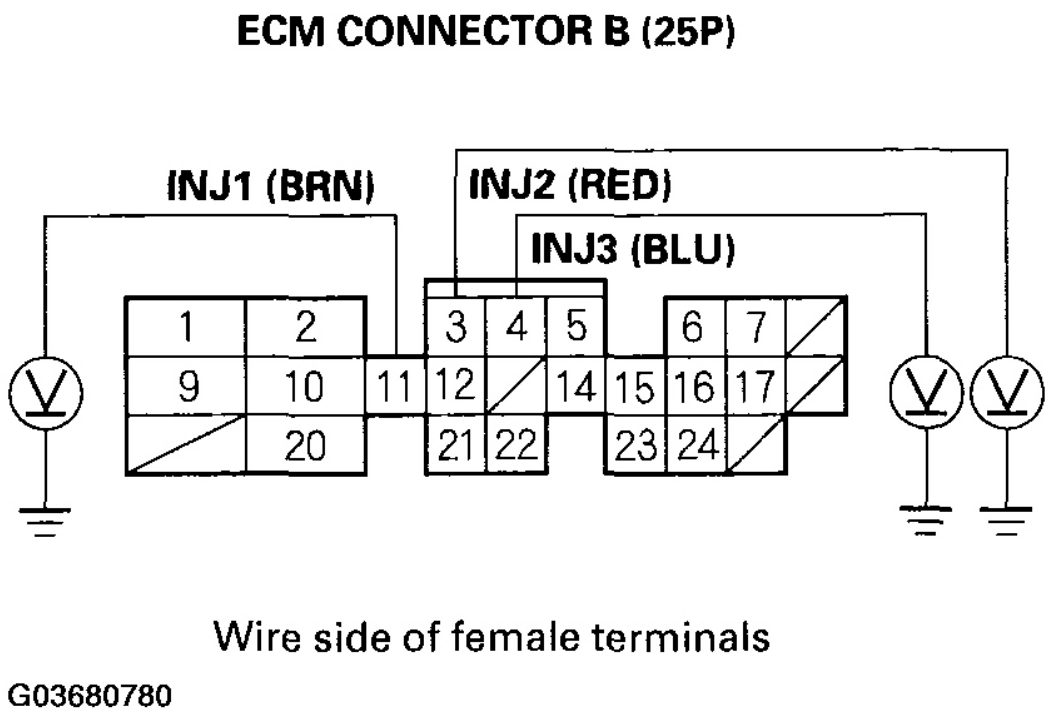


Fig. 77: Measuring Voltage Between Body Ground And Appropriate ECM Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BODY GROUND AND ECM CONNECTOR TERMINAL

PROBLEM CYLINDER	DTC	ECM TERMINAL	WIRE COLOR
No. 1	P0301	B11	BRN
No. 2	P0302	B3	RED
No. 3	P0303	B4	BLU

Is there battery voltage?

YES - Go to step 34.
NO - Go to step 43 .

34. Turn the ignition switch OFF.

35. Disconnect the injector 2P connector from the problem cylinder.
36. At the injector side, measure resistance between injector 2P connector terminals No. 1 and No. 2.

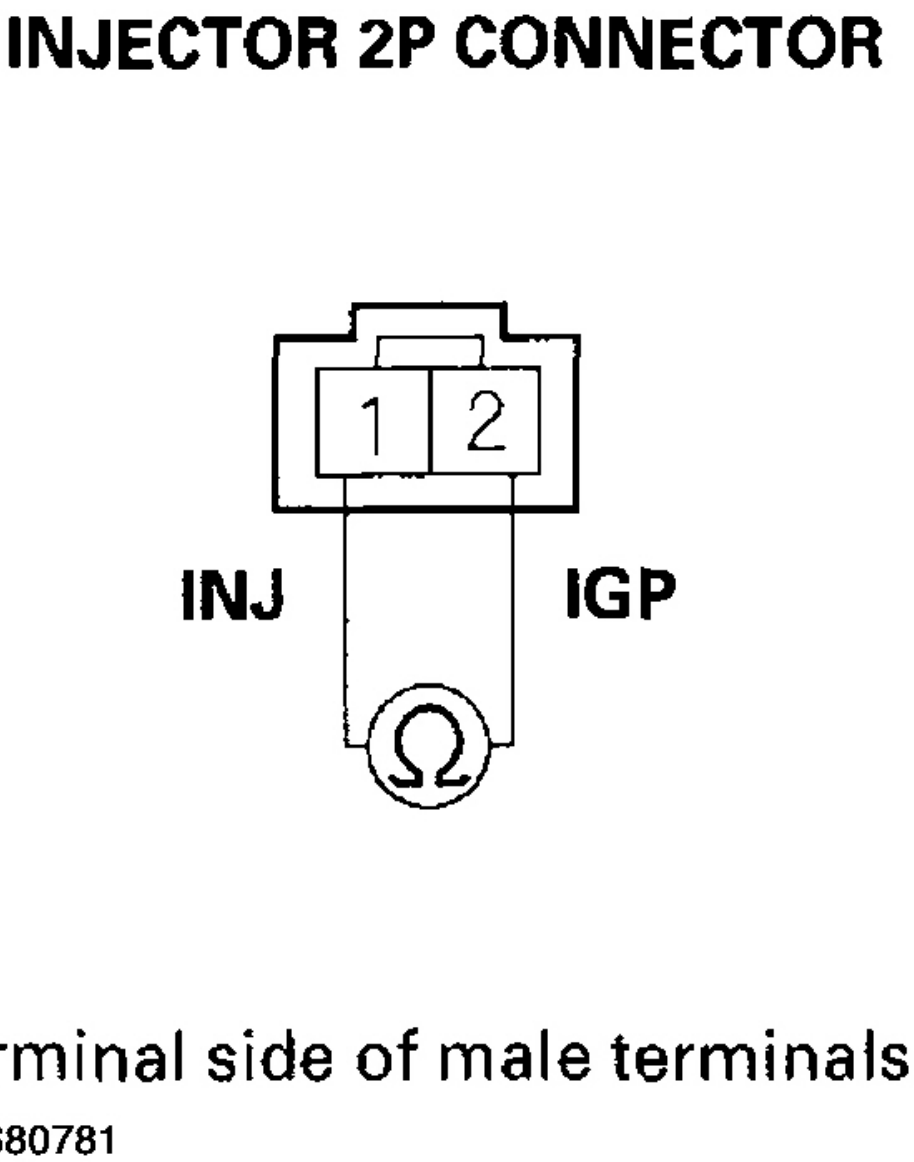


Fig. 78: Measuring Resistance Between Injector 2P Connector Terminals No. 1 And 2

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 10 - 13ohm?

YES - Go to step 37.

NO - Replace the injector (see **INJECTOR REPLACEMENT**).

37. Exchange the injector from the problem cylinder with one from another cylinder.
38. Reset the ECM with the HDS (see **ECM RESET**).
39. Let the engine idle 2 minutes.
40. Test-drive the vehicle several minutes in the range of the freeze data or under various conditions if there was no freeze data.
41. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0301, P0302 or P0303 indicated?

YES - Go to step 42.

NO - Intermittent misfire due to injector malfunction, etc.

42. Determine which cylinder(s) had the misfire.

Does the misfire occur in the cylinder where the injector was exchanged?

YES - Replace the faulty injector.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

43. Turn the ignition switch OFF.
44. Disconnect the injector 2P connector from the problem cylinder.
45. Turn the ignition switch ON (II).

46. Measure voltage between injector 2P connector terminal No. 2 and body ground.

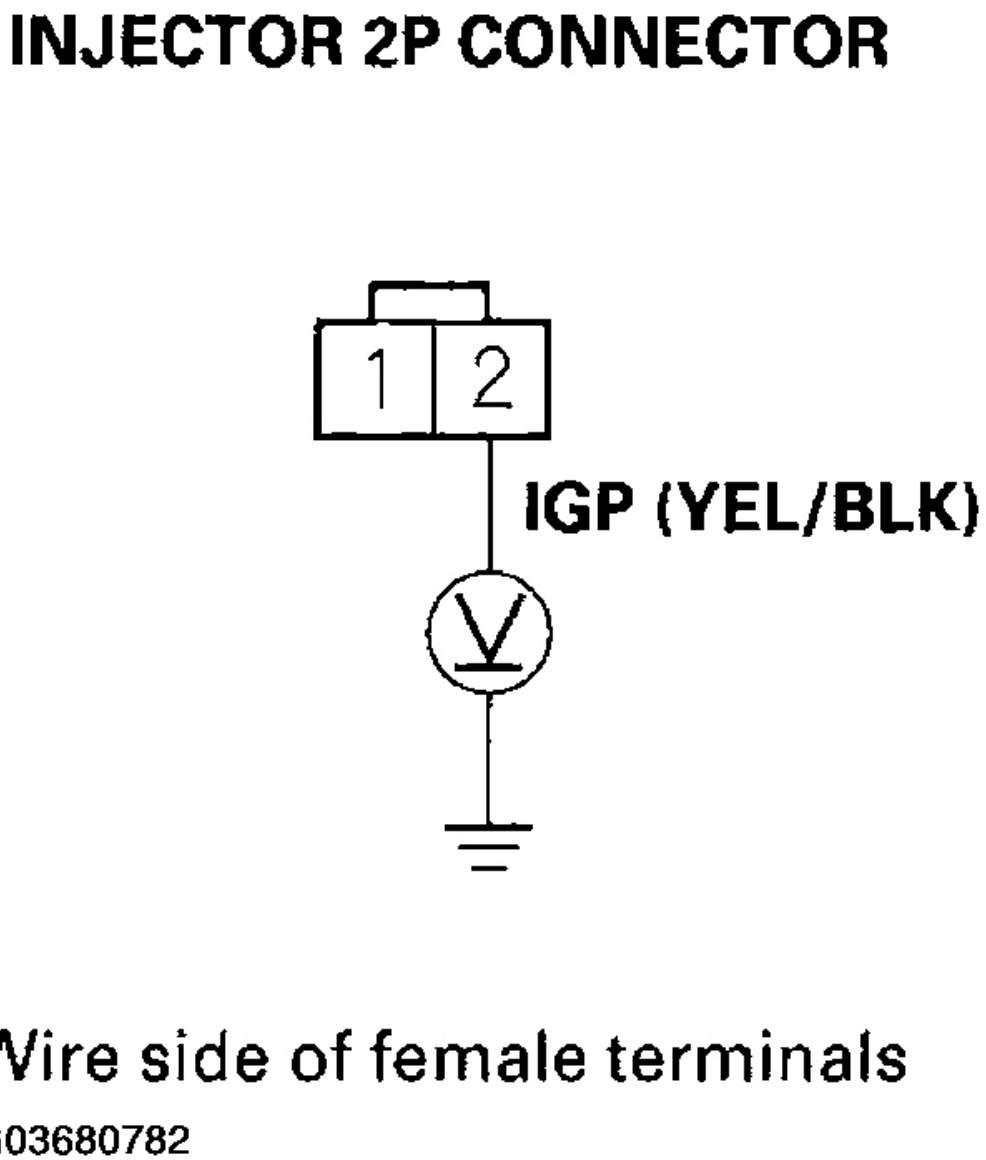


Fig. 79: Measuring Voltage Between Injector 2P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 47.

NO - Repair open in the wire between the injector and the PGM-FI main relay.

47. Turn the ignition switch OFF.
48. Check for continuity between body ground and the appropriate ECM connector terminal (see **BODY GROUND AND ECM CONNECTOR TERMINAL**).

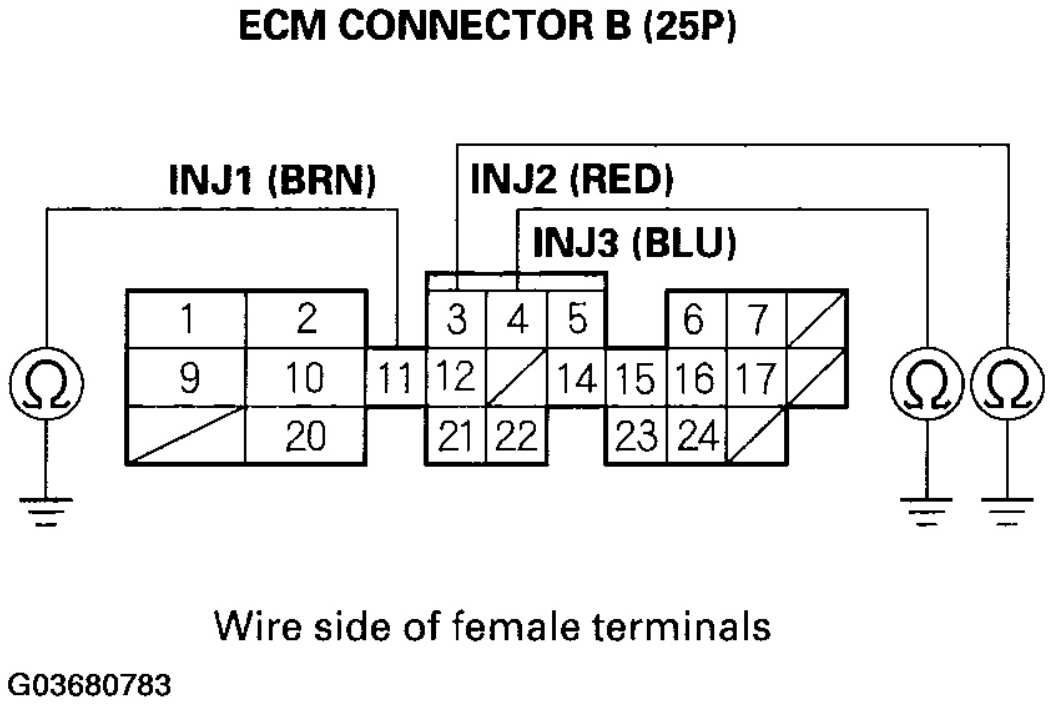


Fig. 80: Checking Continuity Between Body Ground And Appropriate ECM Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BODY GROUND AND ECM CONNECTOR TERMINAL

PROBLEM CYLINDER	DTC	ECM TERMINAL	WIRE COLOR
No. 1	P0301	B11	BRN

No. 2	P0302	B3	RED
No. 3	P0303	B4	BLU

Is there continuity?

YES - Repair short in the wire between the ECM and the injector.

NO - Go to step 49.

49. Connect appropriate injector 2P connector terminal No. 1 to body ground with a jumper wire (see **INJECTOR 2P CONNECTOR TERMINAL TO BODY GROUND**).

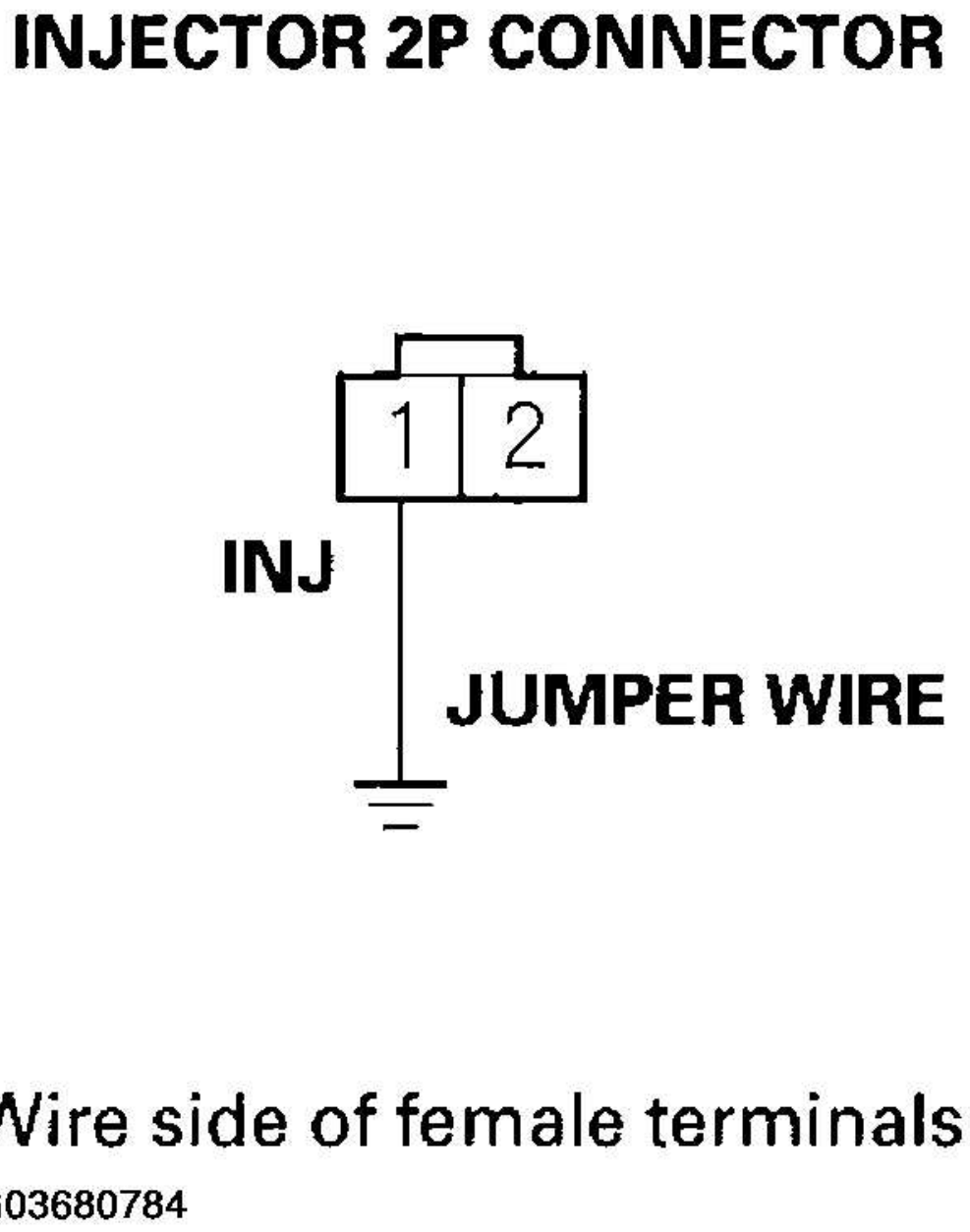


Fig. 81: Connecting Appropriate Injector 2P Connector Terminal To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INJECTOR 2P CONNECTOR TERMINAL TO BODY GROUND

PROBLEM CYLINDER	DTC	WIRE COLOR
No.1	P0301	BRN
No. 2	P0302	RED
No. 3	P0303	BLU

50. Check for continuity between body ground and the appropriate ECM connector terminal (see **BODY GROUND AND ECM CONNECTOR TERMINAL**).

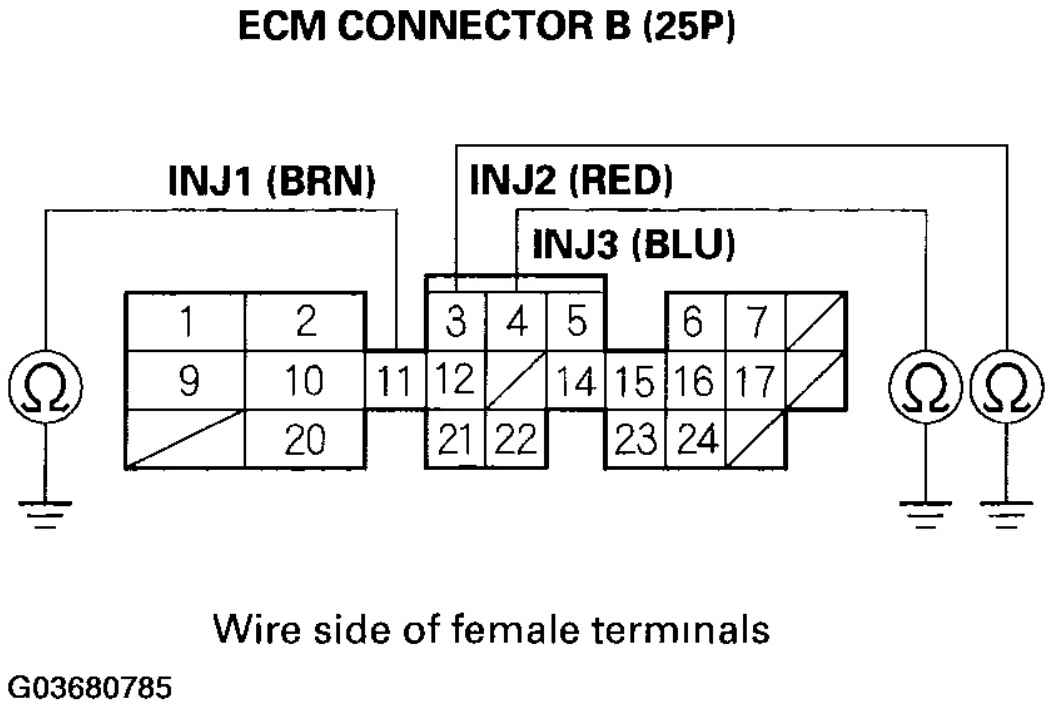


Fig. 82: Checking Continuity Between Body Ground And Appropriate ECM Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BODY GROUND AND ECM CONNECTOR TERMINAL

PROBLEM CYLINDER	DTC	ECM TERMINAL	WIRE COLOR

No.1	P0301	B11	BRN
No. 2	P0302	B3	RED
No. 3	P0303	B4	BLU

Is there continuity?

YES - Replace the injector, then recheck.

NO - Repair open in the wire between the ECM and the injector.

DTC P0325: KNOCK SENSOR CIRCUIT MALFUNCTION

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
3. Hold the engine speed at 3,000-4,000 rpm for 10 seconds.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0325 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the knock sensor and the ECM.

5. Turn the ignition switch OFF, and wait for 10 seconds.
6. Disconnect the knock sensor 1P connector.
7. Disconnect ECM connector C (31P), then check for continuity between ECM connector terminal C22 and body ground.

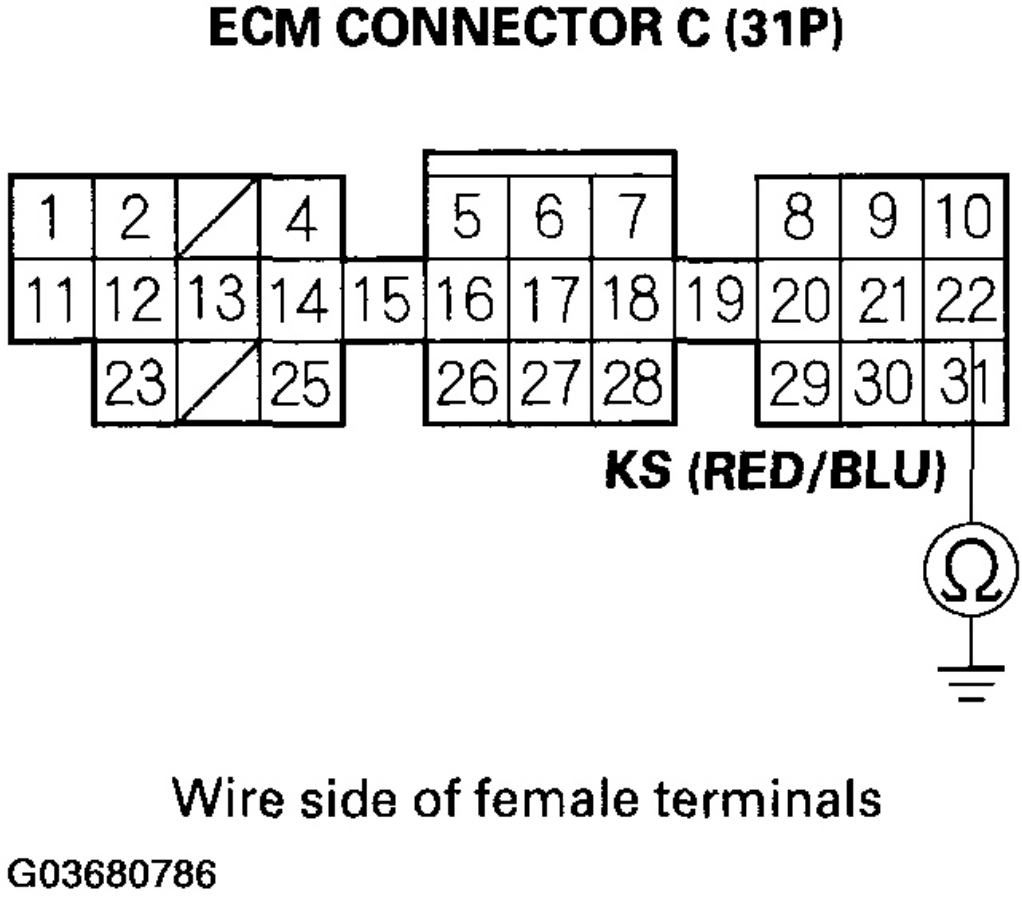


Fig. 83: Checking Continuity Between ECM Connector Terminal C22 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C22) and the knock sensor.

NO - Go to step 8.

8. Connect the knock sensor 1P connector terminal to body ground with a jumper wire.

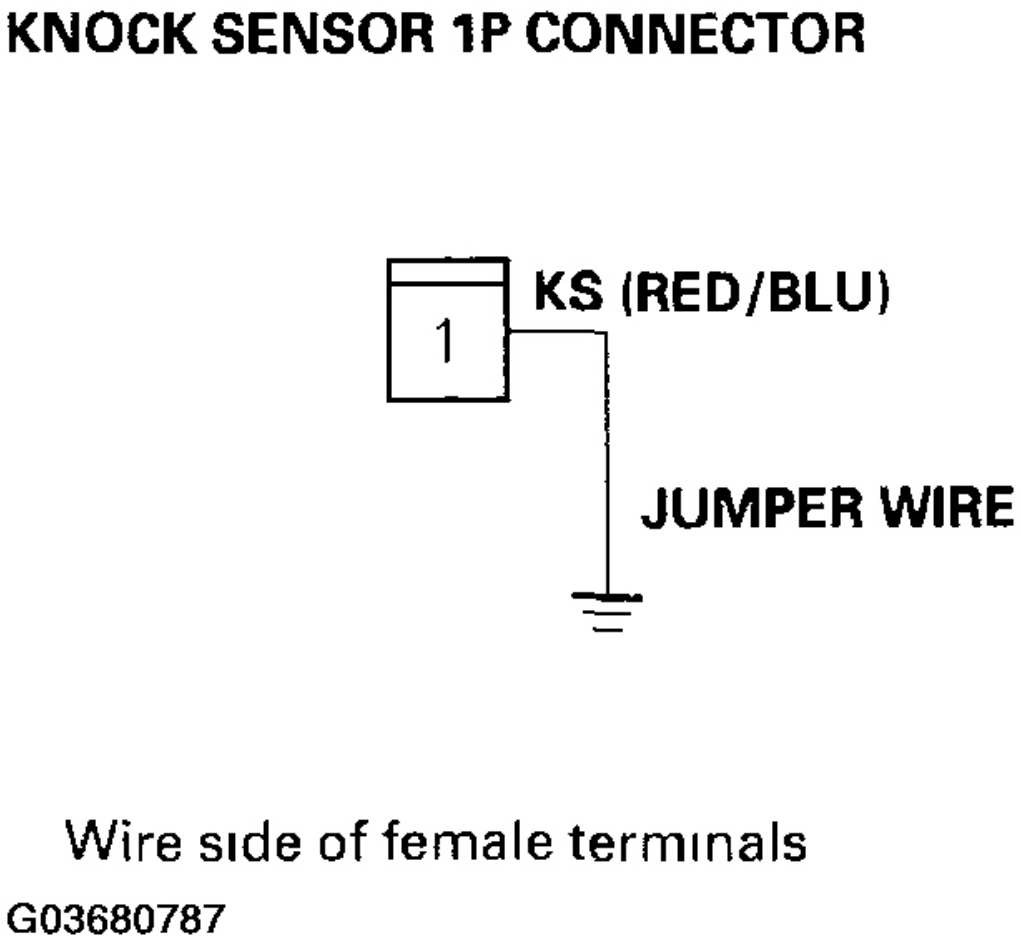


Fig. 84: Connecting Knock Sensor 1P Connector Terminal To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Check for continuity between ECM connector terminal C22 and body ground.

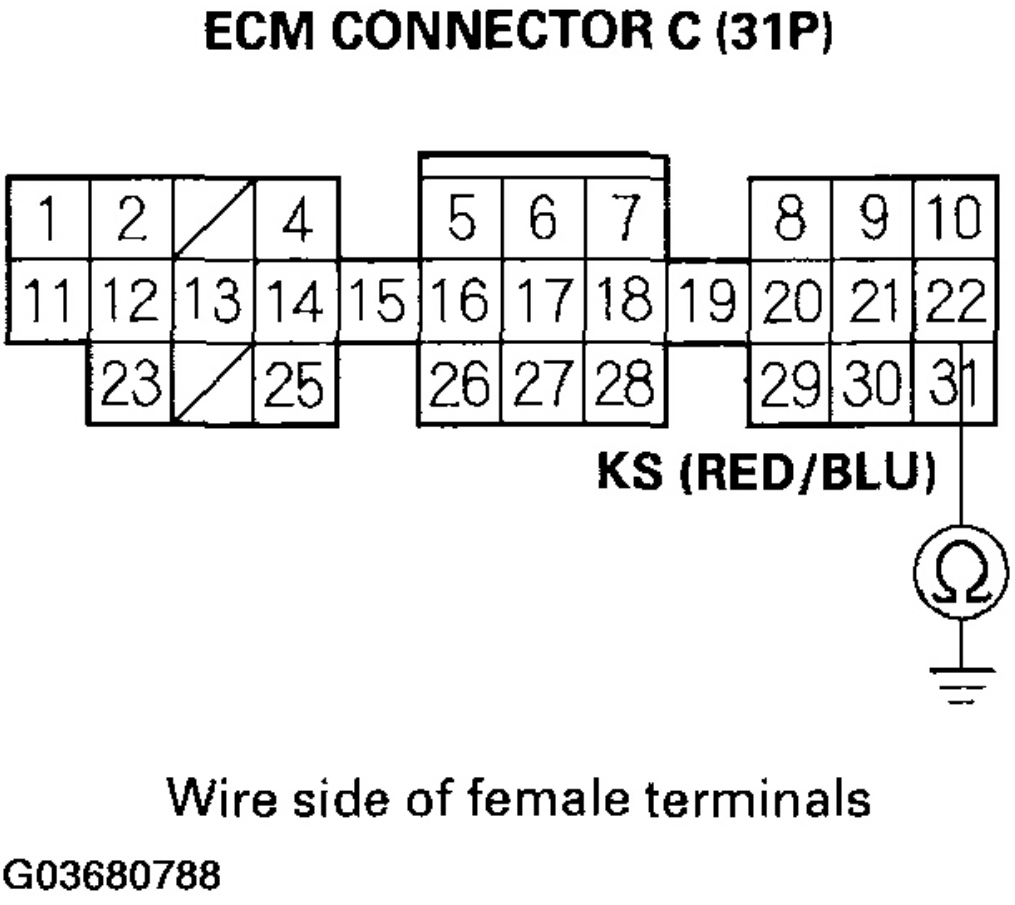


Fig. 85: Checking Continuity Between ECM Connector Terminal C22 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire between the ECM (C22) and the knock sensor.

10. Substitute a known-good knock sensor.
11. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0325 indicated?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Replace the original knock sensor (see **KNOCK SENSOR REPLACEMENT**).

DTC P0335: CKP SENSOR NO SIGNAL; DTC P0336: CKP SENSOR INTERMITTENT INTERRUPTION (2000-2003 MODELS); DTC P0339: CKP SENSOR INTERMITTENT INTERRUPTION (2004-2006 MODELS)

NOTE:

- **Information marked with an asterisk (*) applies to 2000-2003 models.**
- **Information marked with double asterisk (**) applies to 2004-2006 models.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0335, P0336*, and/or (P0339) Indicated?**

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the CKP sensor and the ECM.

4. Turn the ignition switch OFF.

5. Disconnect the CKP sensor 2P connector, and at the sensor side, measure resistance between CKP sensor 2P connector terminals No. 1 and No. 2.

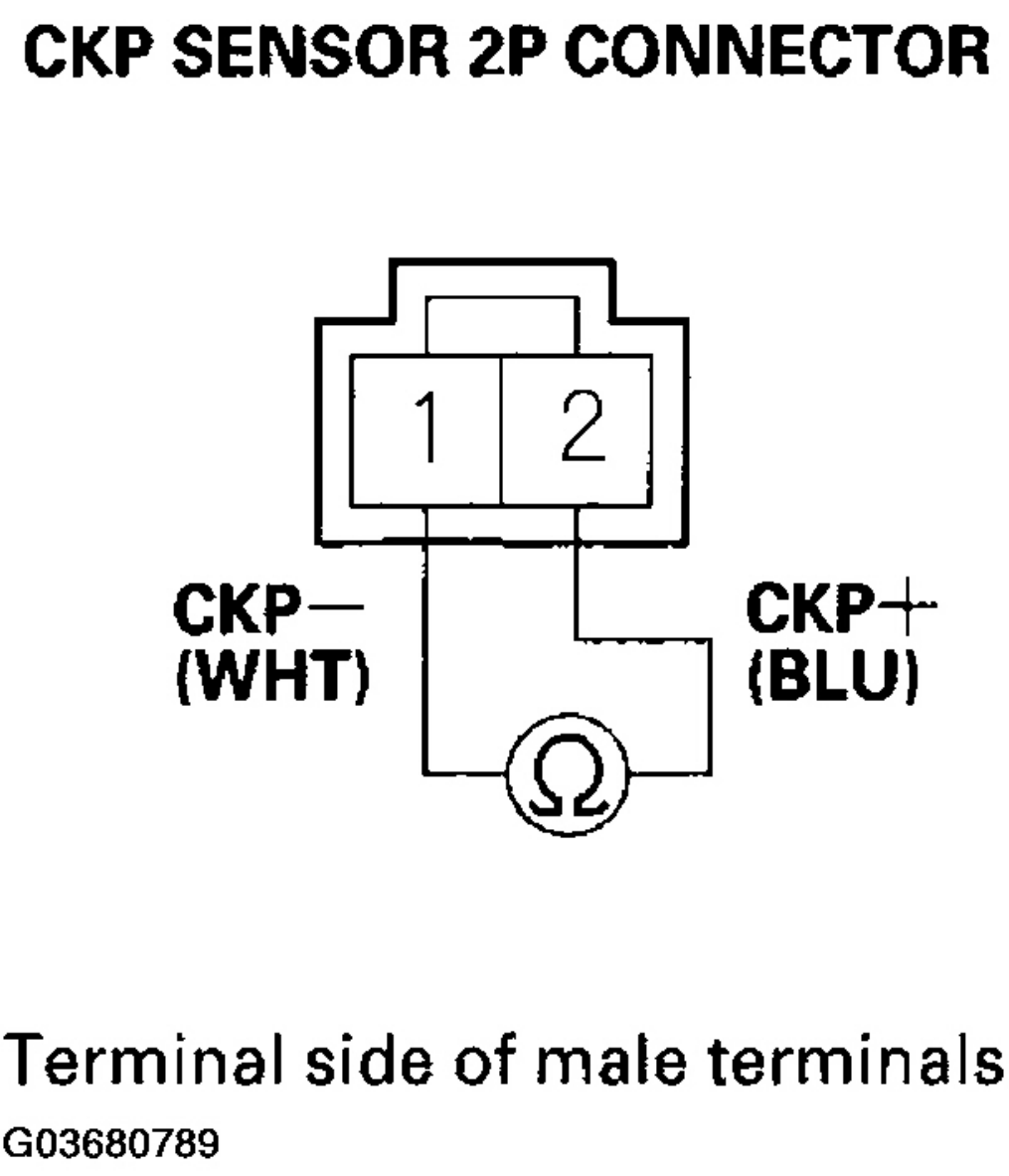


Fig. 86: Measuring Resistance Between CKP Sensor 2P Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 1,850-2,450 ohm?

YES - Go to step 6.

NO - Replace the CKP sensor (see **CKP SENSOR REPLACEMENT**).

6. At the sensor side, check for continuity between CKP sensor 2P connector terminal No. 1 and body ground and terminal No. 2 and body ground individually.

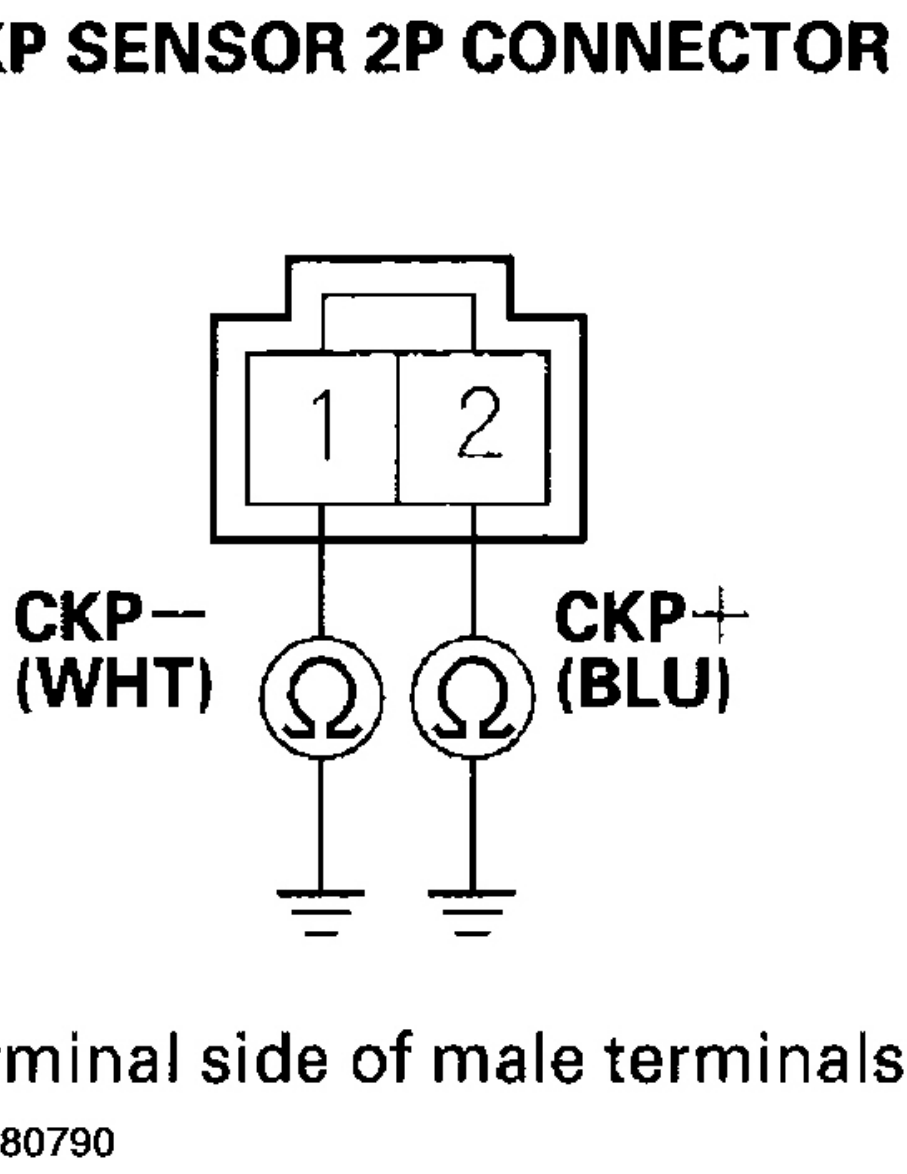


Fig. 87: Checking Continuity Between CKP Sensor 2P Connector Terminal No. 1 & Body Ground And No. 2 & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the CKP sensor (see **CKP SENSOR REPLACEMENT**).

NO - Go to step 7.

7. Reconnect the CKP sensor 2P connector.
8. Disconnect ECM connector C (31P), and measure resistance between ECM connector terminals C8 and C9.

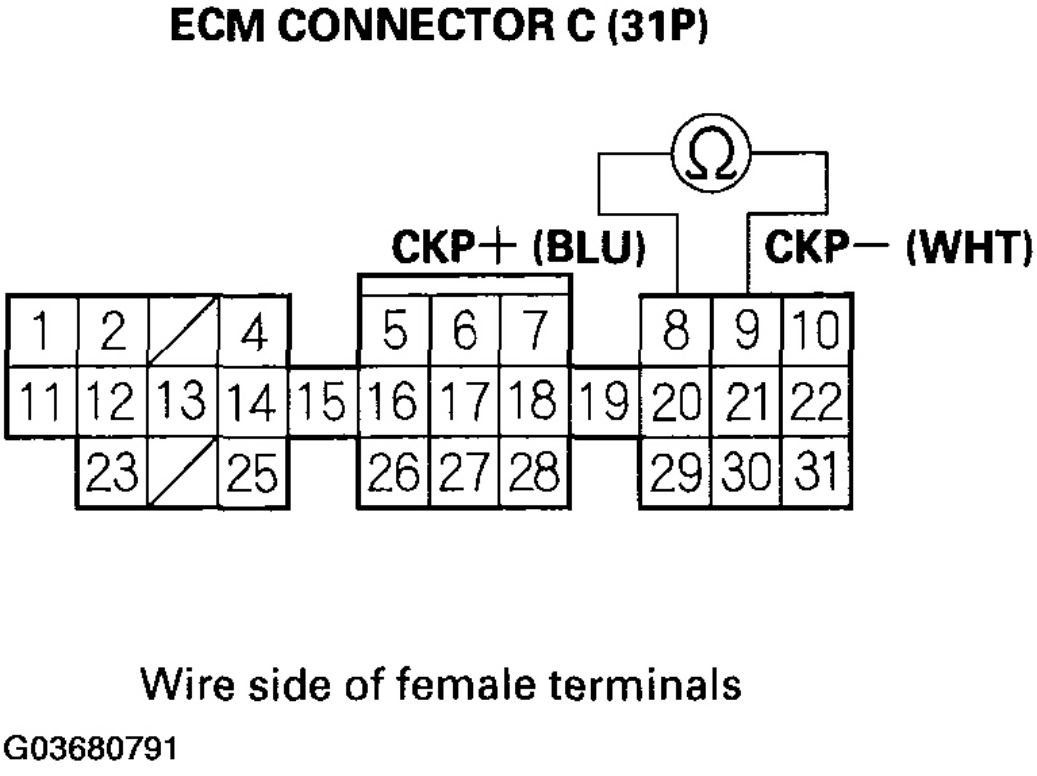


Fig. 88: Measuring Resistance Between ECM Connector Terminals C8 And C9
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 1,850-2,450 ohm?

YES - Go to step 9.

NO - Repair open in the wire between the ECM (C8, C9) and the CKP sensor.

9. Check for continuity between ECM connector terminal C8 and body ground.

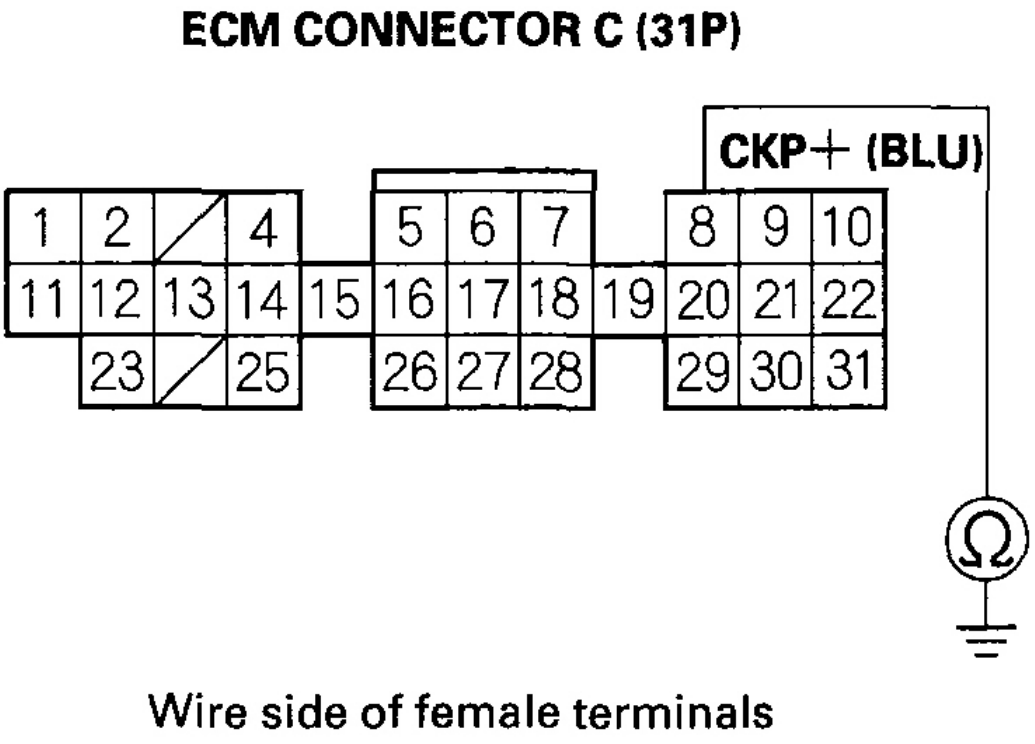


Fig. 89: Checking Continuity Between ECM Connector Terminal C8 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between ECM terminal C8 and the CKP sensor.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the

original ECM (see **ECM REPLACEMENT**).

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)

NOTE:

- **Information marked with an asterisk (*) applies to 2004-2006 models.**
- **Information marked with double asterisk (**) applies to 2000-2003 models.**
- **Information marked with an asterisk (*1) applies to DTC P0365*, P0369*, (P1366) **, or (P1367) ****
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine.
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0340*, P0344*, P0365*, P0369*, (P1361) **, (P1362) **, (P1366) **, and/or (P1367) ** indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at CMP (TDC 1) sensor A, CMP (TDC 2) sensor B *1 and the ECM.
4. Turn the ignition switch OFF.
5. Disconnect CMP (TDC 1) sensor A and CMP (TDC 2) sensor B *1 2P connectors.

6. At the sensor side, measure resistance between CMP (TDC) sensor 2P connector terminals No. 1 and No. 2.

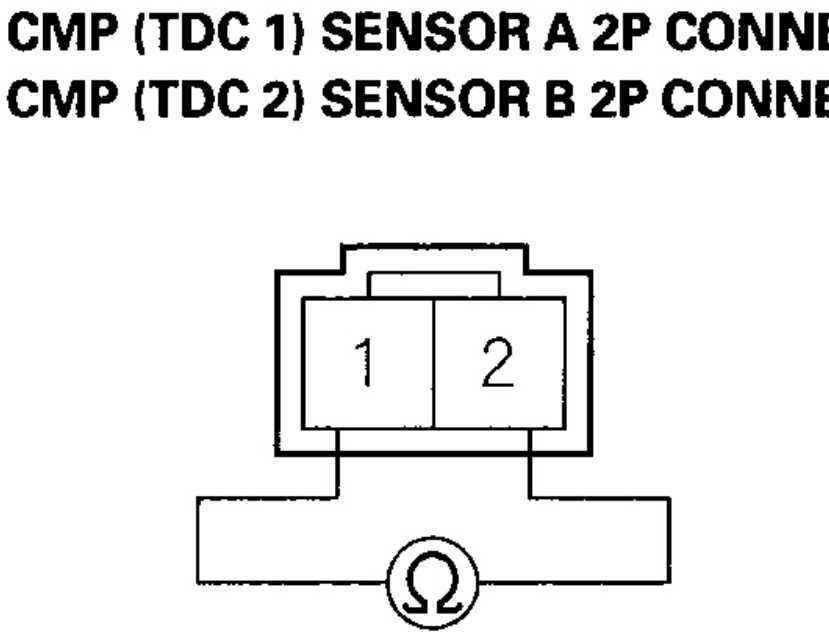


Fig. 90: Measuring Resistance Between CMP (TDC) Sensor 2P Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 1,850-2,450 ohm at 68°F (20°C)?

YES - Go to step 7.

NO - Replace CMP (TDC 1) sensor A and/or CMP (TDC 2) sensor B *1 (see **CMP SENSOR A/B (TDC SENSOR 1/2) REPLACEMENT**).

7. At the sensor side, check for continuity to body ground on each terminal individually.

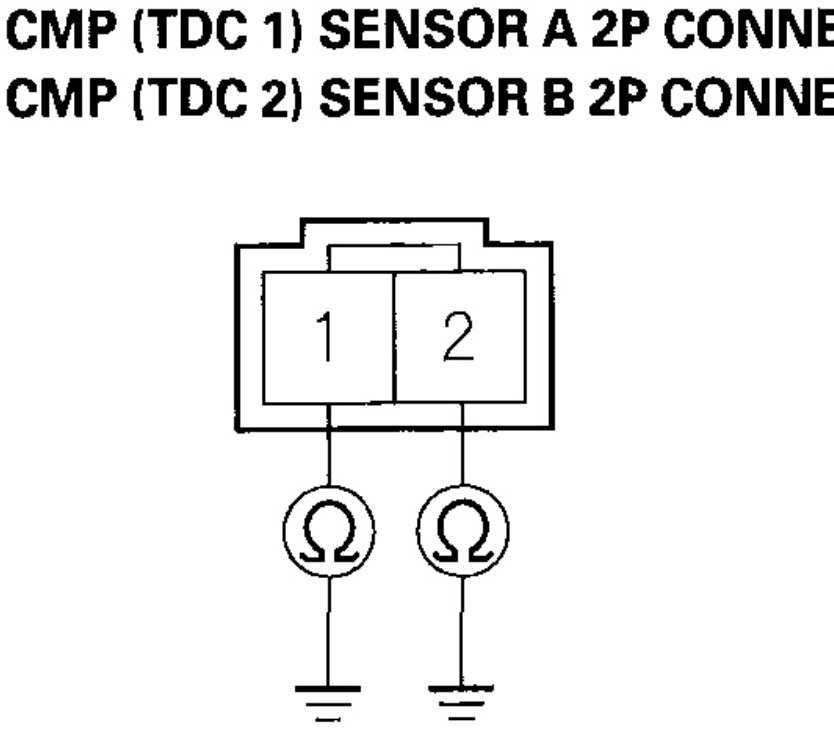


Fig. 91: Checking Continuity To Body Ground On Each Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace CMP (TDC 1) sensor A and/or CMP (TDC 2) sensor B*1 (see **CMP SENSOR A/B (TDC SENSOR 1/2) REPLACEMENT**).

NO - Go to step 8.

8. Reconnect CMP (TDC 1) sensor A and CMP (TDC 2) sensor B*1 2P

connectors.

9. Disconnect ECM connector C (31P).
10. Measure resistance between ECM connector terminals C20 and C21 (C29 and C30) *1 .

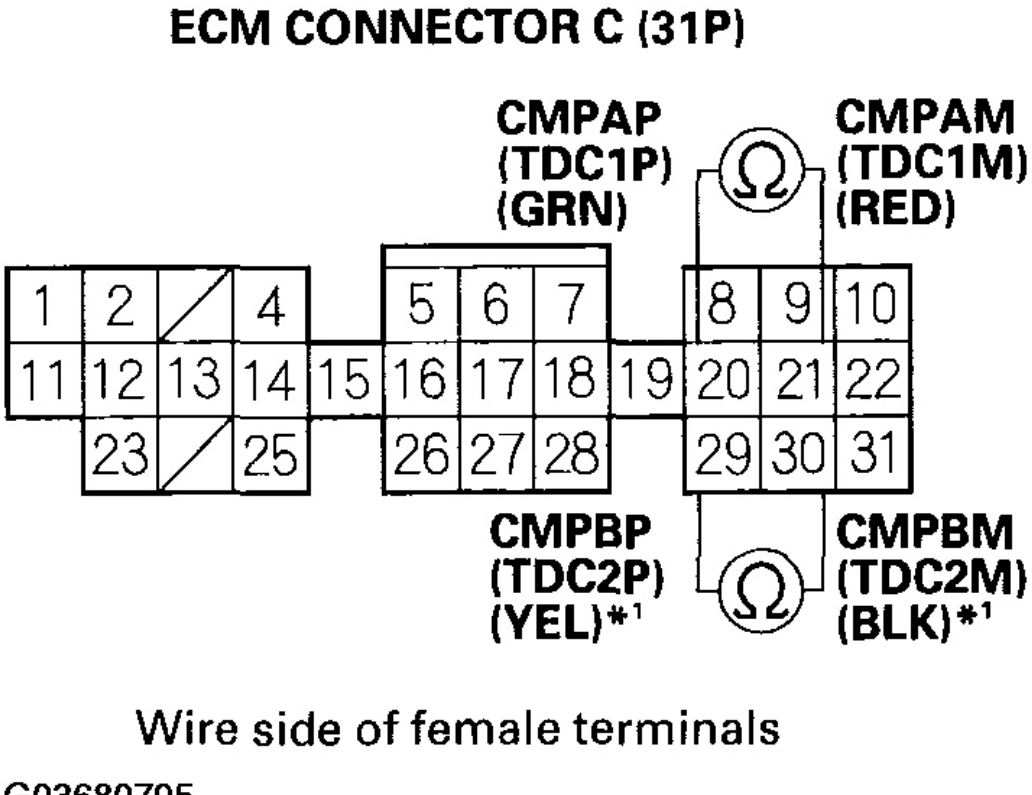


Fig. 92: Measuring Resistance Between ECM Connector Terminals C20 And C21 (C29 And C30) *1
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 1,850-2,450 ohm?

YES -Go to step 11.
NO -Repair open or short in the faulty sensor wire(s).

11. Check for continuity between body ground and ECM connector terminal C20 (C29)* individually.

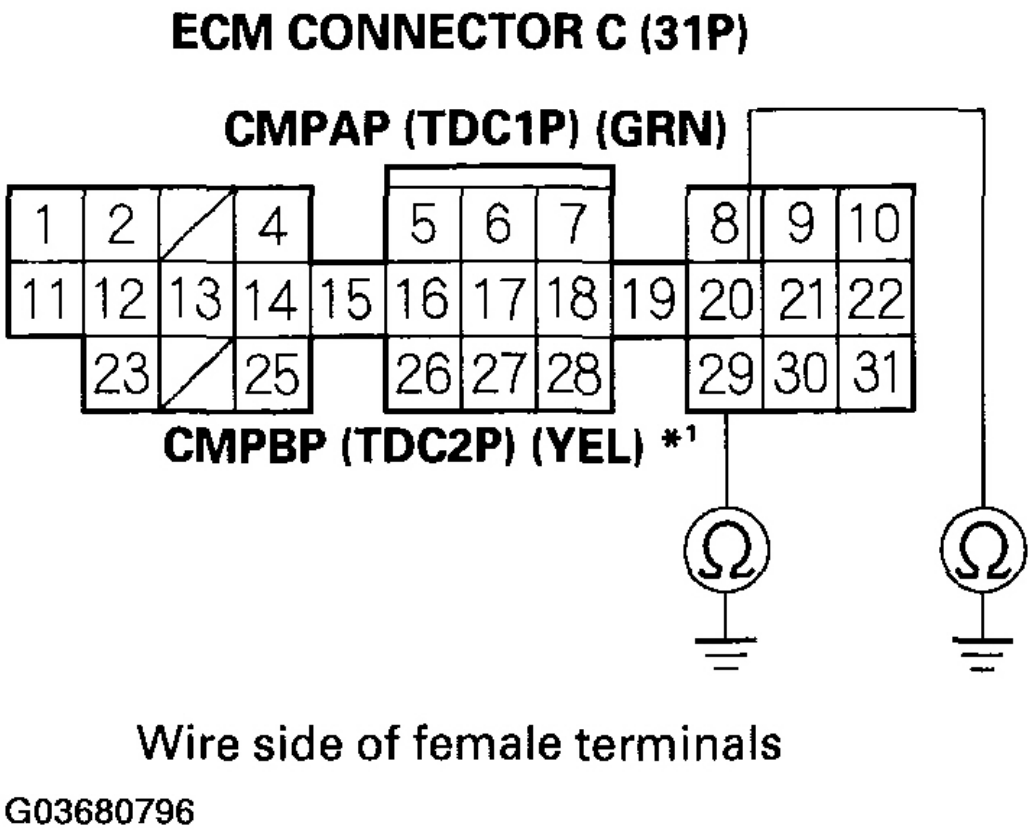


Fig. 93: Checking Continuity Between Body Ground And ECM Connector Terminal C20 (C29)*
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the faulty sensor wire(s).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM**

UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

DTC P0500: VSS CIRCUIT MALFUNCTION

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Test-drive the vehicle.
2. Check the VSS with the HDS.

   Is the correct speed indicated?

   YES - Intermittent failure, system is OK at this time. Check for poor connections or loose wires at the VSS and the ECM.

   NO - Go to step 3.
3. Turn the ignition switch OFF.
4. Block the rear wheels, and set the parking brake.
5. Raise the front of the vehicle, and make sure it is securely supported.
6. Turn the ignition switch ON (II).
7. Block the right front wheel, and slowly rotate the left front wheel.
8. Measure voltage between ECM connector terminals C5 and B20.

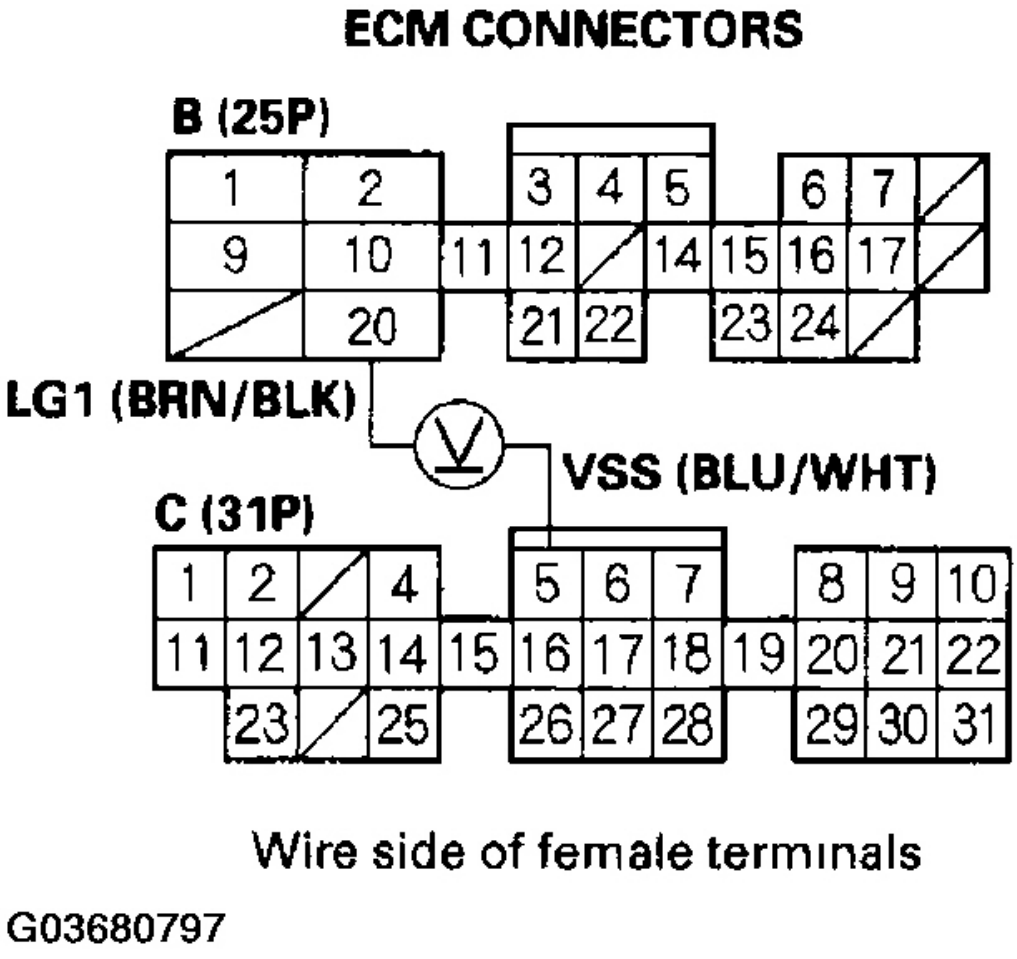


Fig. 94: Measuring Voltage Between ECM Connector Terminals C5 And B20
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the voltage change between 0 V and 5 V?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T**

MODELS AND CVT MODEL), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Go to step 9.

9. Turn the ignition switch OFF, and wait for 10 seconds.
10. Disconnect ECM connector C (31P).
11. Turn the ignition switch ON (II).
12. Block the right front wheel, and slowly rotate the left front wheel.
13. Measure voltage between ECM connector terminals C5 and B20.

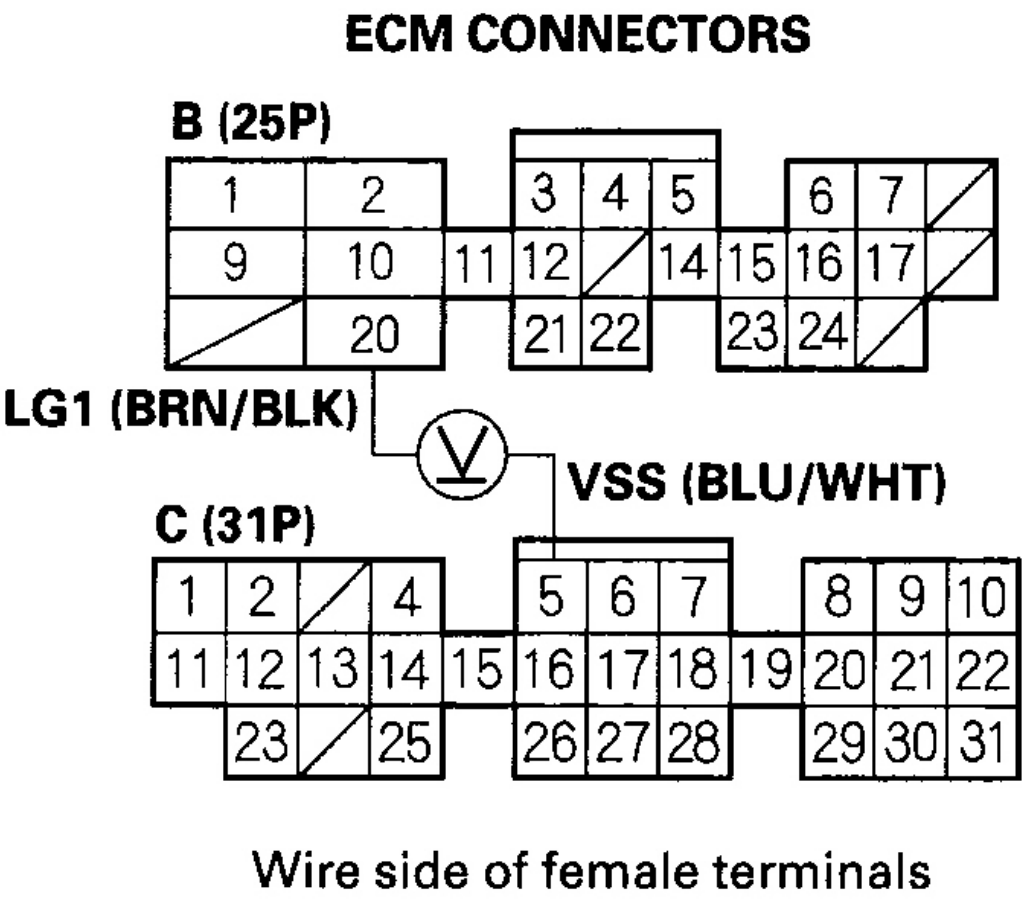


Fig. 95: Measuring Voltage Between ECM Connector Terminals C5 And B20
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the voltage change between 0 V and 5 V?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Check these items:

- A short or an open in the wire between the ECM (C5), the TCM (CVT model) and the VSS.
- If the wire is OK, test the VSS (see **GAUGE ASSEMBLY REPLACEMENT**).
- Substitute a known-good TCM and recheck (see **HOW TO TROUBLESHOOT CIRCUIT AT THE TCM**). If the symptom/indication goes away, replace the original TCM (CVT model).

DTC P0560: ECM POWER SOURCE CIRCUIT UNEXPECTED VOLTAGE (2001-2004 MODELS)

NOTE:

- **If the No. 18 (7.5 A) fuse in the under-dash fuse/relay box is removed and the engine is started, the MIL will come on, and the ECM will store DTC P0560.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine.

3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0560 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the No. 18 (7.5 A) fuse in the under-dash fuse/relay box and the ECM.
4. Turn the ignition switch OFF.
5. Inspect the No. 18 (7.5 A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES - Go to step 6.

   NO - Check for these problems:
   - A short in the wire between the ECM (B21) and the No. 18 (7.5 A) fuse in the under-dash passenger's fuse/relay box.
   - A short in the wire in the back up circuit (see **FUSE TO COMPONENTS INDEX**).
   - A blown No. 18 (7.5 A) fuse in the under-dash passenger's fuse/relay box.
6. Measure voltage between ECM connector terminal B21 and body ground.

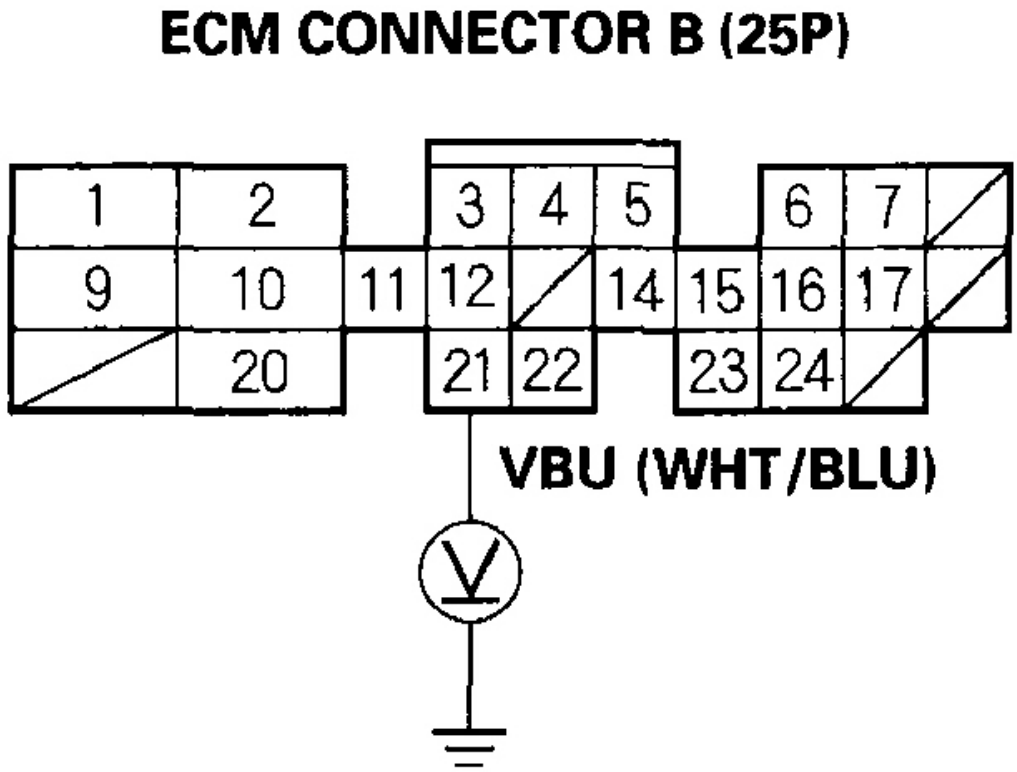


Fig. 96: Measuring Voltage Between ECM Connector Terminal B21 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT model (see **ECM**

UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (B21) and the No. 18 (7.5 A) fuse in the under-dash passenger's fuse/relay box.

DTC P0563: ECM POWER SOURCE CIRCUIT UNEXPECTED VOLTAGE (2005-2006 MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Turn the ignition switch OFF.
3. Wait 5 seconds.
4. Turn the ignition switch ON (II).
5. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0563 indicated?

YES - Go to step 6.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the No. 7 (15 A) fuse in the under-hood fuse/relay box and the ECM.

6. Turn the ignition switch OFF, and wait for 10 seconds.
7. Disconnect ECM connector A (32P).
8. Measure voltage between ECM connector terminal A8 and body ground.

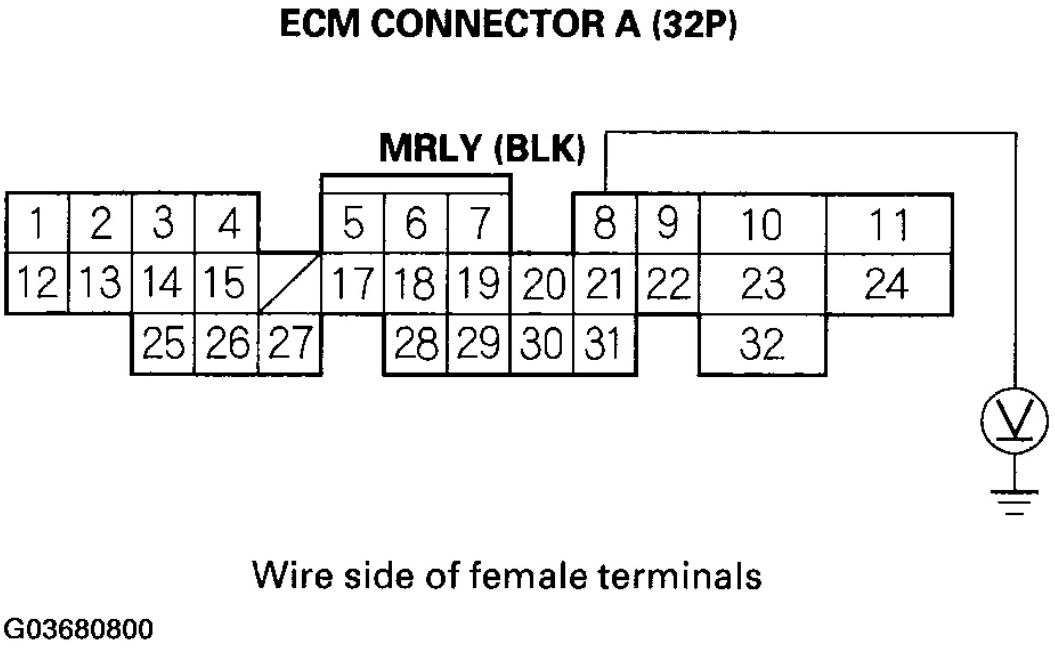


Fig. 97: Measuring Voltage Between ECM Connector Terminal A8 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 12 .
NO - Go to step 9.

9. Remove the glove box (see **GLOVE BOX REMOVAL/INSTALLATION**).
10. Remove PGM-FI main relay 1 (IGP).
11. Check for continuity between ECM connector terminal A8 and body ground.

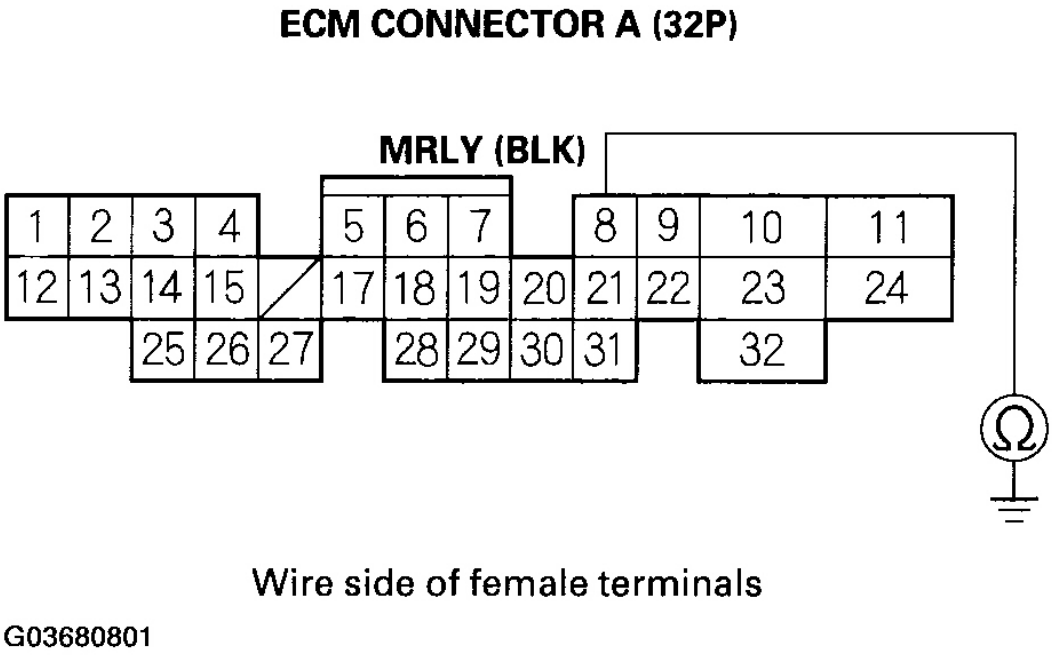


Fig. 98: Checking Continuity Between ECM Connector Terminal A8 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (A8) and PGM-FI main relay 1 (IGP).

NO - Replace PGM-FI main relay 1 (IGP).

12. Reconnect ECM connector A (32P).
13. Measure voltage between ECM connector terminal A8 and body ground.

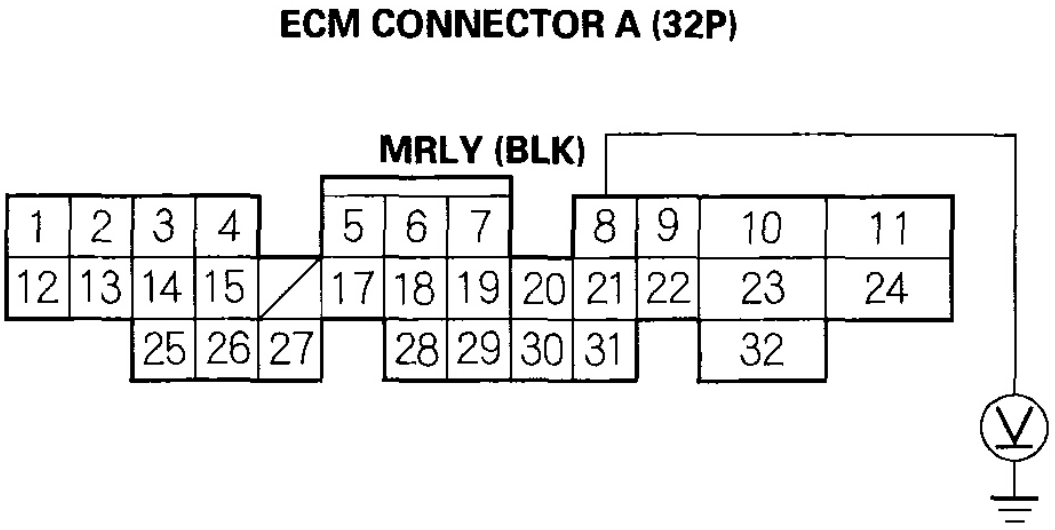


Fig. 99: Measuring Voltage Between ECM Connector Terminal A8 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 14.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

14. Disconnect ECM connector B (25P).
15. Measure voltage between body ground and ECM connector terminals B1 and B9 individually.

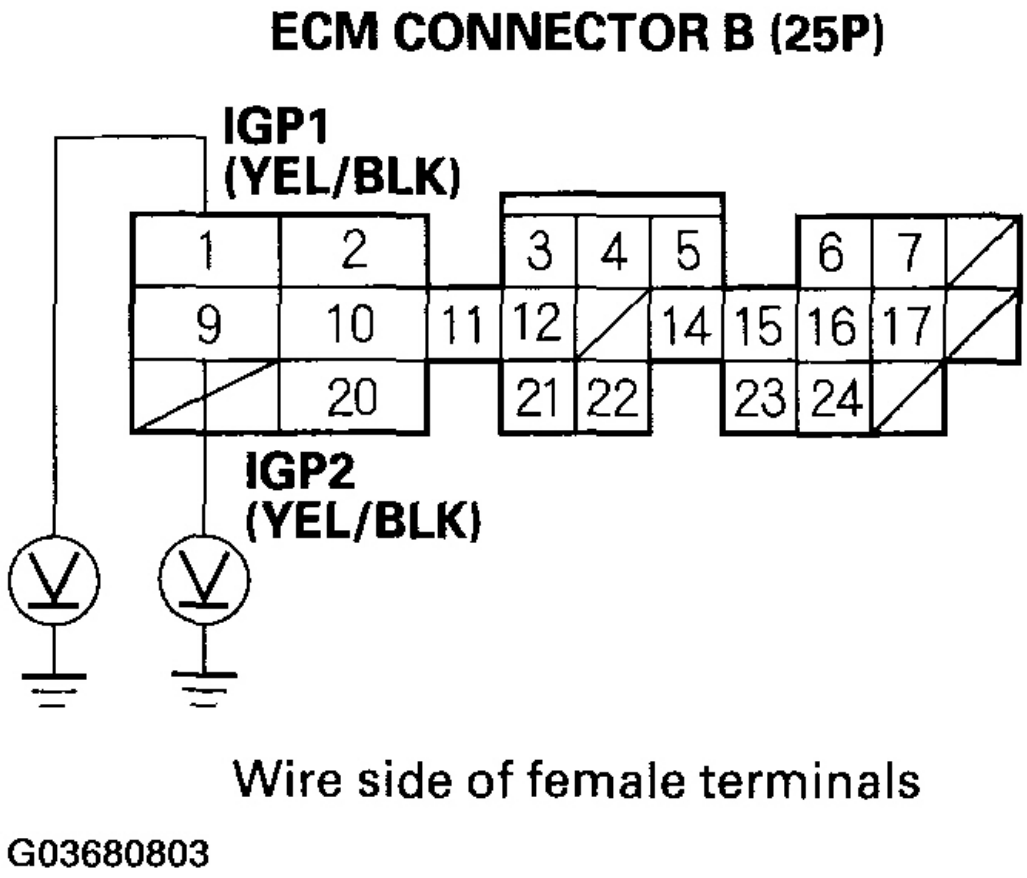


Fig. 100: Measuring Voltage Between Body Ground And ECM Connector Terminals B1 And B9
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 16.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

16. Remove PGM-FI main relay 1 (IGP).
17. Measure voltage between body ground and ECM connector terminals B1 and B9 individually.

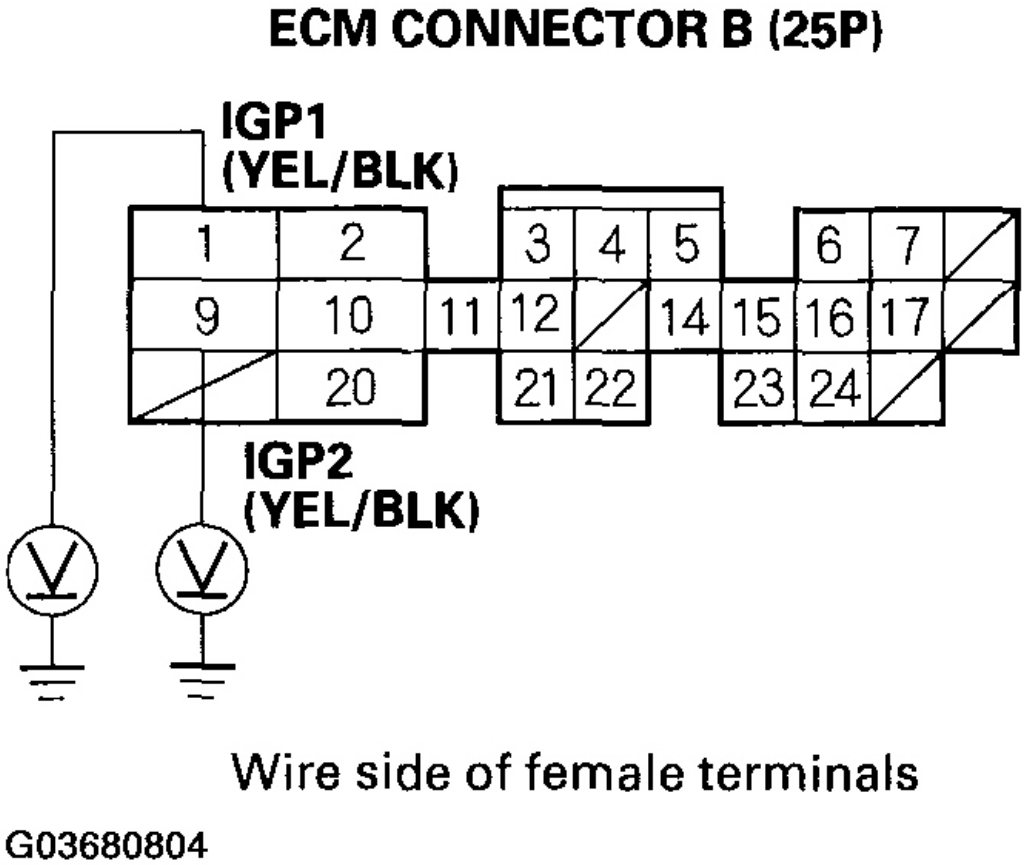


Fig. 101: Measuring Voltage Between Body Ground And ECM Connector Terminals B1 And B9
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair short to power in the wire between the ECM (B1, B9) and PGM-FI main relay 1 (IGP).

NO - Replace PGM-FI main relay 1 (IGP).

DTC P0607: ECM INTERNAL CIRCUIT MALFUNCTION (2004-2006 MODELS); DTC P1607: ECM INTERNAL CIRCUIT MALFUNCTION (2000-2003 MODELS)

NOTE:

- **Information marked with an asterisk (*) applies to 2004-2006 models.**
- **Information marked with double asterisk (**) applies to 2000-2003 models.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Turn the ignition switch ON (II).
3. Wait 30 seconds.
4. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0607* (P1607) ** indicated?

   YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

   NO - Go to step 5.
5. Turn the ignition switch OFF.
6. Turn the ignition switch ON (II).
7. Wait 10 seconds.
8. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0607* (P1607) ** indicated?

   YES - Update the ECM if it does not have the latest software, or substitute

a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Intermittent failure, system is OK at this time.

DTC P0630: VIN NOT PROGRAMMED OR MISMATCH (2005-2006 MODELS)

NOTE:

- **This DTC is stored only when the ECM does not have the VIN information of the vehicle. Use the HDS to input the missing VIN information.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Turn the ignition switch ON (II).
2. Check the VIN with the HDS.

   Does the HDS show the vehicle's VIN?

   YES - Go to step 5 .

   NO - Go to step 3.
3. Input the VIN into the ECM with the HDS.

   Does the screen show COMPLETE?

   YES - Go to step 5 .

   NO - Go to step 4.
4. Check for DTCs with the HDS.

   Is DTC P0603 indicated?

   YES - Go to the DTC P0603 troubleshooting.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

5. Clear the DTC with the HDS.
6. Turn the ignition switch OFF.
7. Turn the ignition switch ON (II), and wait 5 seconds.
8. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0630 is indicated, update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING** .

NO - Intermittent failure, system is OK at this time.

DTC P0685: ECM POWER CONTROL CIRCUIT/INTERNAL CIRCUIT MALFUNCTION (2006 MODEL)

NOTE:

- **If the problem doesn't return after you clear the DTC, or if this DTC is stored intermittently, check for loose terminals at the IGP line connections before you replacing the ECM.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine, and let it idle for 30 seconds.
4. Turn the ignition switch OFF.

5. Start the engine, and let it idle for 30 seconds.
6. Turn the ignition switch OFF.
7. Turn the ignition switch ON (II).
8. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0685 indicated?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Intermittent failure, system is OK at this time.

DTC P07XX: A/T CONTROL SYSTEM MALFUNCTION; DTC P16XX: A/T CONTROL SYSTEM MALFUNCTION; DTC P17XX: A/T CONTROL SYSTEM MALFUNCTION; DTC P18XX: A/T CONTROL SYSTEM MALFUNCTION; DTC P21XX: A/T CONTROL SYSTEM MALFUNCTION;

NOTE:

- **This DTC is stored when there is a problem in the A/T control system. Check for A/T DTCs with the HDS, and go to the indicated DTC TROUBLESHOOTING .**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

DTC P1106: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2000-2003 MODELS); DTC P2227: BARO SENSOR RANGE/PERFORMANCE PROBLEM (2004-2006 MODELS)

NOTE:

- **Information marked with an asterisk (*) applies to 2000-2003 models.**
- **Information marked with double asterisk (**) applies to 2004-2006 models.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
3. Test-drive with the CVT in D position (M/T in 4th gear).
4. Accelerate for 5 seconds using wide open throttle.
5. Check for a Temporary DTCs or DTCs with the HDS.

Is DTC P1106* (P2227) indicated?**

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Intermittent failure, system is OK at this time.

DTC P1107: BARO SENSOR CIRCUIT LOW VOLTAGE (2000-2003 MODELS); DTC P1108: BARO SENSOR CIRCUIT HIGH VOLTAGE (2000-2003 MODELS); DTC P2228: BARO SENSOR CIRCUIT LOW VOLTAGE (2004-2006 MODELS); DTC P2229: BARO SENSOR CIRCUIT HIGH VOLTAGE (2004-2006 MODELS)

NOTE:

- **Information marked with an asterisk (*) applies to 2000-2003 models.**
- **Information marked with double asterisk (**) applies to 2004-2006 models.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **HDS CLEAR COMMAND**).
2. Turn the ignition switch ON (II).
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1107* (P2228) ** or P1108* (P2229) ** indicated?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Intermittent failure, system is OK at this time.

DTC P1109: BARO SENSOR CIRCUIT OUT OF RANGE HIGH

(2005-2006 models)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS.
2. Start the engine.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1109 indicated?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Intermittent failure, system is OK at this time.

DTC P1121:TP SENSOR SIGNAL LOWER THAN EXPECTED

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL

TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the TP SENSOR in the DATA LIST with the HDS.

Is 12.1% or higher indicated when the throttle is fully opened?

YES - Intermittent failure, system is OK at this time.

NO - Replace the throttle body (see **THROTTLE BODY REMOVAL/INSTALLATION**).

DTC P1122: TP SENSOR SIGNAL HIGHER THAN EXPECTED

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the TP SENSOR in the DATA LIST with the HDS.

Is 18.9% or less indicated when the throttle is fully closed?

YES - Intermittent failure, system is OK at this time.

NO - Replace the throttle body (see **THROTTLE BODY REMOVAL/INSTALLATION**).

DTC P1128: MAP SENSOR SIGNAL LOWER THAN EXPECTED

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the MAP SENSOR in the DATA LIST with the HDS.

Is 64.4 kPa (19.0 in.Hg, 483 mmHg) or more indicated?

YES - Intermittent failure, system is OK at this time.

NO - Replace the MAP sensor.

DTC P1129: MAP SENSOR SIGNAL HIGHER THAN EXPECTED

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
2. Check the MAP SENSOR in the DATA LIST with the HDS.

Is 47.2 kPa (13.9 in.Hg, 354 mmHg) or less indicated?

YES - Intermittent failure, system is OK at this time.

NO - Replace the MAP sensor.

DTC P1130: SECONDARY HO2S (SENSOR 2) AND THIRD HO2S (SENSOR 3) MALFUNCTION (2002-2006 M/T MODELS)

NOTE:

- **This DTC is only stored when one or a combination of the DTCs listed are stored. Troubleshoot these DTCs, and this DTC will go away.**

  P0137, P0138, P0139: Secondary HO2S (Sensor 2)

  P0137, P0138, P0139: Secondary HO2S (Sensor 2)

  P0143, P0144, P0145: Third HO2S (Sensor 3)

  P0147: Third HO2S (Sensor 3) heater

- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

DTC P1157: A/F SENSOR (SENSOR 1) AFS CIRCUIT HIGH VOLTAGE (2002-2006 M/T MODELS)

(CVT MODEL)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine.
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P1157 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.
4. Turn the ignition switch OFF, and wait for 10 seconds.
5. Disconnect the A/F sensor (Sensor 1) 4P connector and ECM connector D (16P).
6. Connect A/F sensor (Sensor 1) 4P connector terminals No. 1 and No. 2 with a jumper wire.

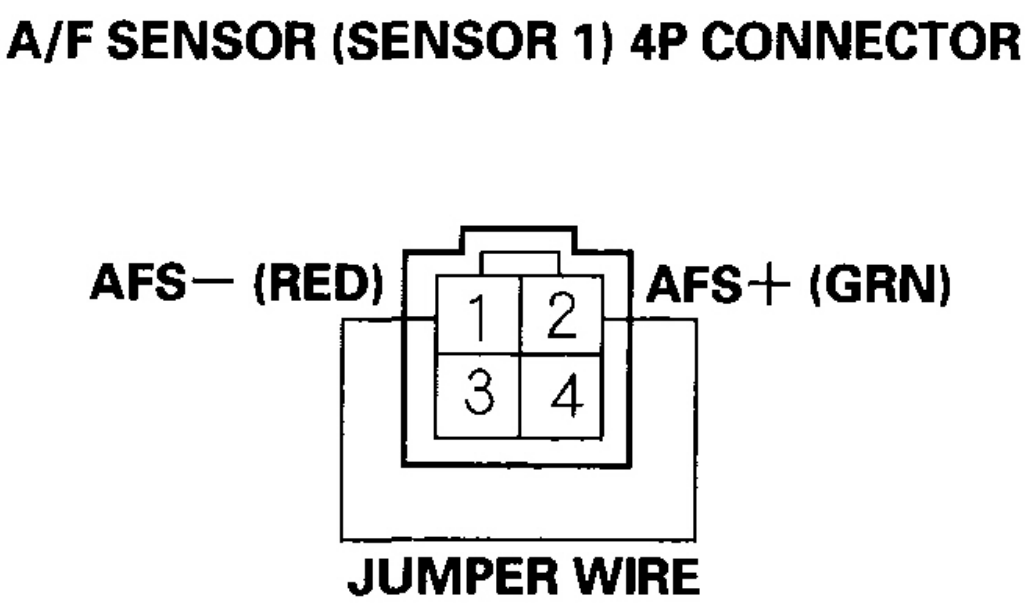


Fig. 102: Connecting A/F Sensor (Sensor 1) 4P Connector Terminals With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Check for continuity between ECM connector terminals D4 and D10.

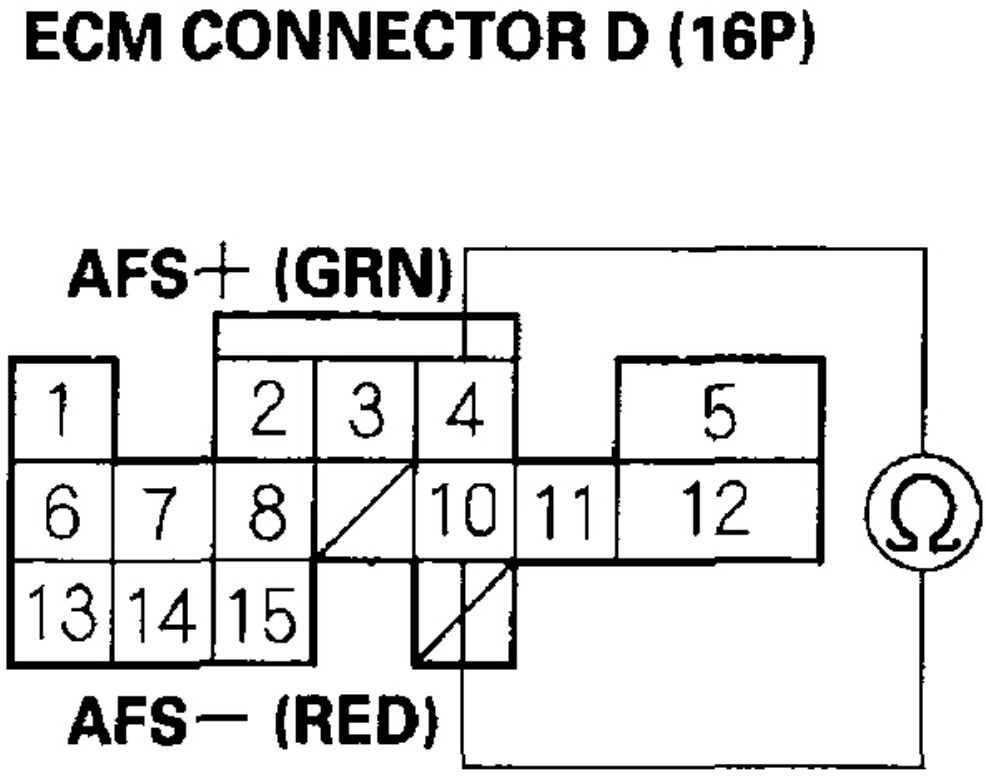


Fig. 103: Checking For Continuity Between ECM Connector Terminals D4 And D10
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10 .

NO - Go to step 8.

8. Connect A/F sensor (Sensor 1) 4P connector terminal No. 2 to body ground with a jumper wire.

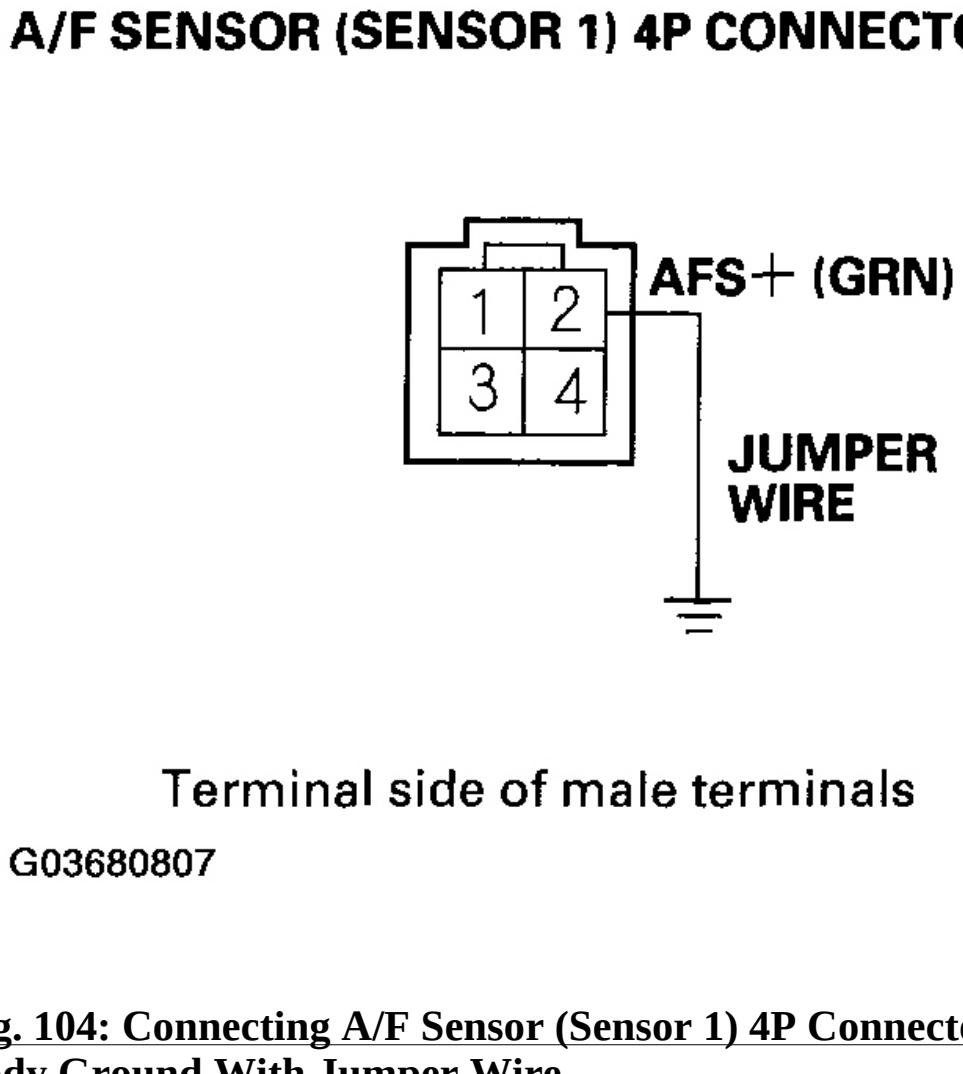


Fig. 104: Connecting A/F Sensor (Sensor 1) 4P Connector Terminal To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Check for continuity between ECM connector terminal D4 and body ground.

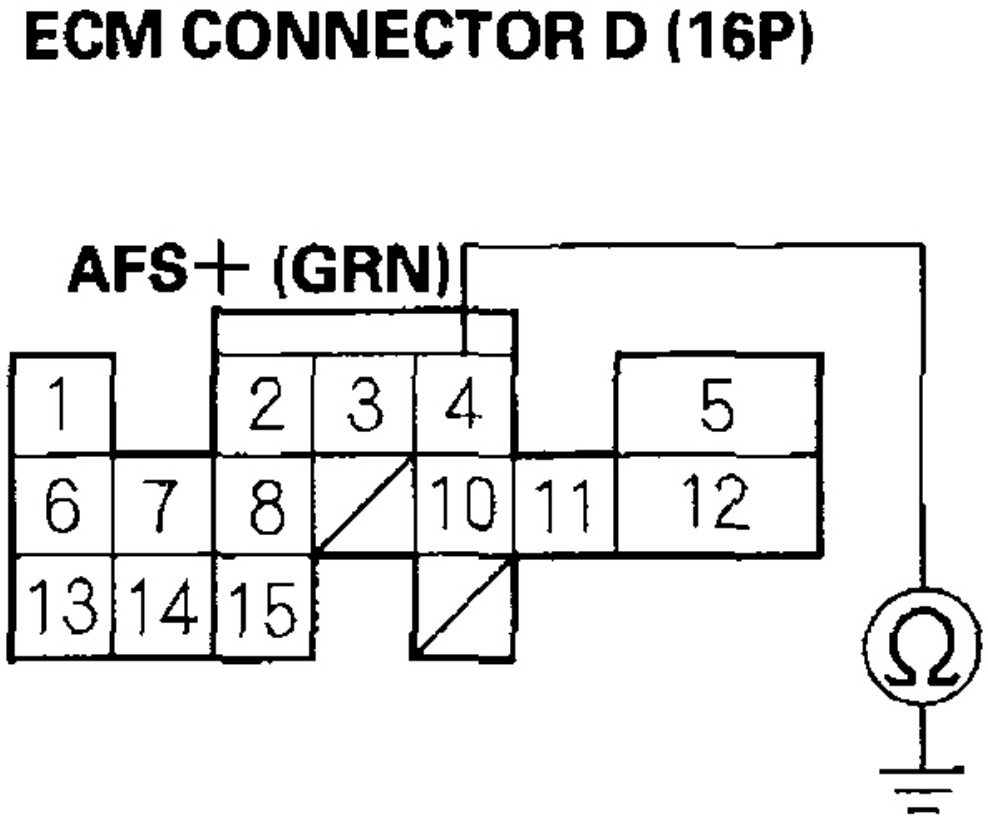


Fig. 105: Checking Continuity Between ECM Connector Terminal D4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the wire between the A/F sensor (Sensor 1) and the ECM (D10).

NO - Repair open in the wire between the A/F sensor (Sensor 1) and the ECM (D4).

10. Substitute a known-good A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT**).
11. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1157 indicated?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

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)

NOTE:

- **Information marked with an asterisk (*) applies to 2001-2003 CVT models and 2002-2003 M/T models.**
- **Information marked with a double asterisk (**) applies to 2004-2006 models.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine, and wait at least 2 minutes.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1158* (P2252) indicated?**

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.

4. Turn the ignition switch OFF, and wait for 10 seconds.
5. Disconnect the A/F sensor (Sensor 1) 4P connector, and ECM connector D (16P).
6. Check for continuity between A/F sensor (Sensor 1) 4P connector terminal No. 1 and body ground.

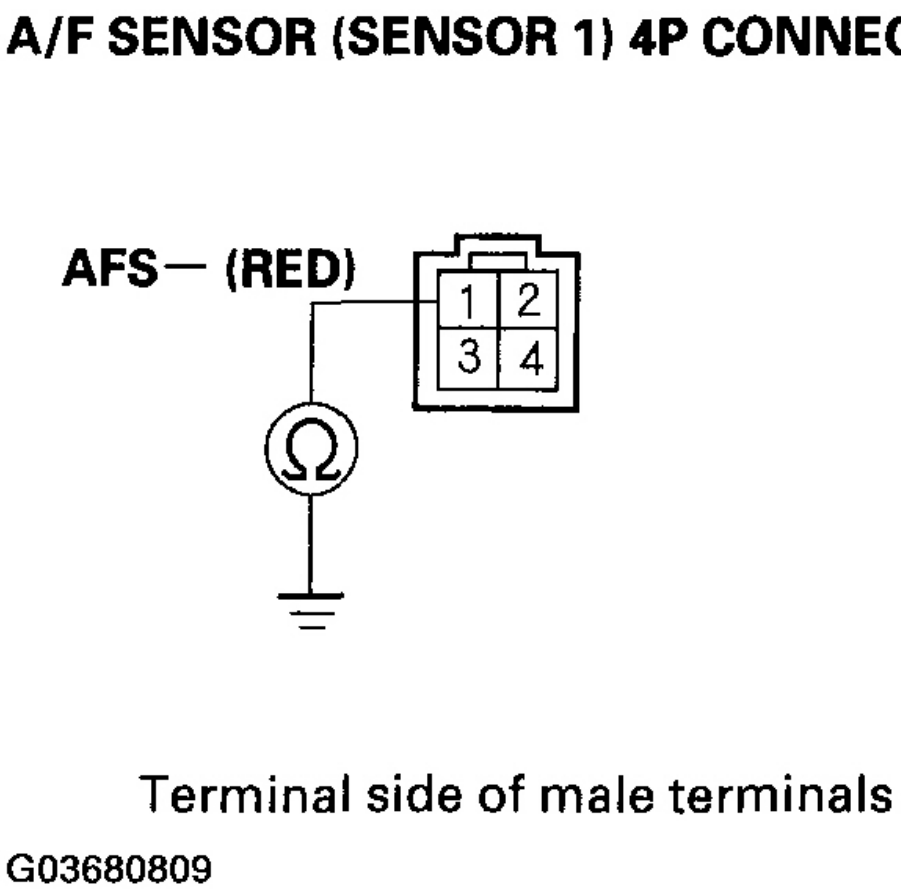


Fig. 106: Checking Continuity Between A/F Sensor (Sensor 1) 4P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the A/F sensor (Sensor 1) and the ECM (D10).

NO - Go to step 7.

7. Substitute a known-good A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .
8. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1158* (P2252) indicated?**

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Replace the original A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

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)

NOTE:

- **Information marked with an asterisk (*) applies to 2001-2003 CVT models and 2002-2003 M/T models.**
- **Information marked with double asterisk (**) applies to 2004-2006 models.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine, and wait at least 2 minutes.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1159* (P2238) indicated?**

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.

4. Turn the ignition switch OFF, and wait for 10 seconds.
5. Disconnect the A/F sensor (Sensor 1) 4P connector and ECM connector D (16P).
6. Check for continuity between A/F sensor (Sensor 1) 4P connector terminal No. 2 and body ground.

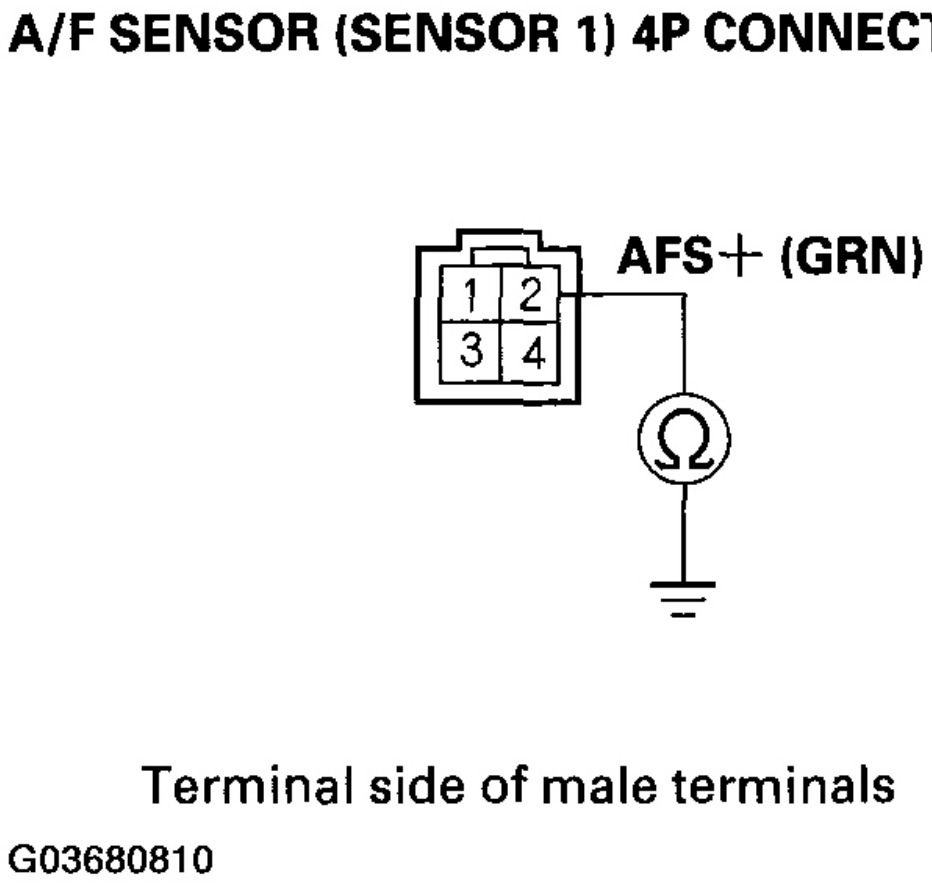


Fig. 107: Checking Continuity Between A/F Sensor (Sensor 1) 4P Connector Terminal No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the A/F sensor (Sensor 1) and the ECM (D4).

NO - Go to step 7.

7. Substitute a known-good A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .
8. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1159* (P2238) indicated?**

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

DTC P1162: A/F SENSOR (SENSOR 1) CIRCUIT MALFUNCTION (2000-2001 M/T MODELS)

NOTE:

- **If DTC P1162 is stored at the same time as DTC P1167, troubleshoot DTC P1162 first, then recheck for DTC P1167.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine, and wait at least 2 minutes.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1162 indicated?

YES - Go to step 4.

NO - Go to step 17 .

4. Turn the ignition switch OFF.
5. Turn the ignition switch ON (II).
6. Measure voltage between ECM connector terminals D10 and C18.

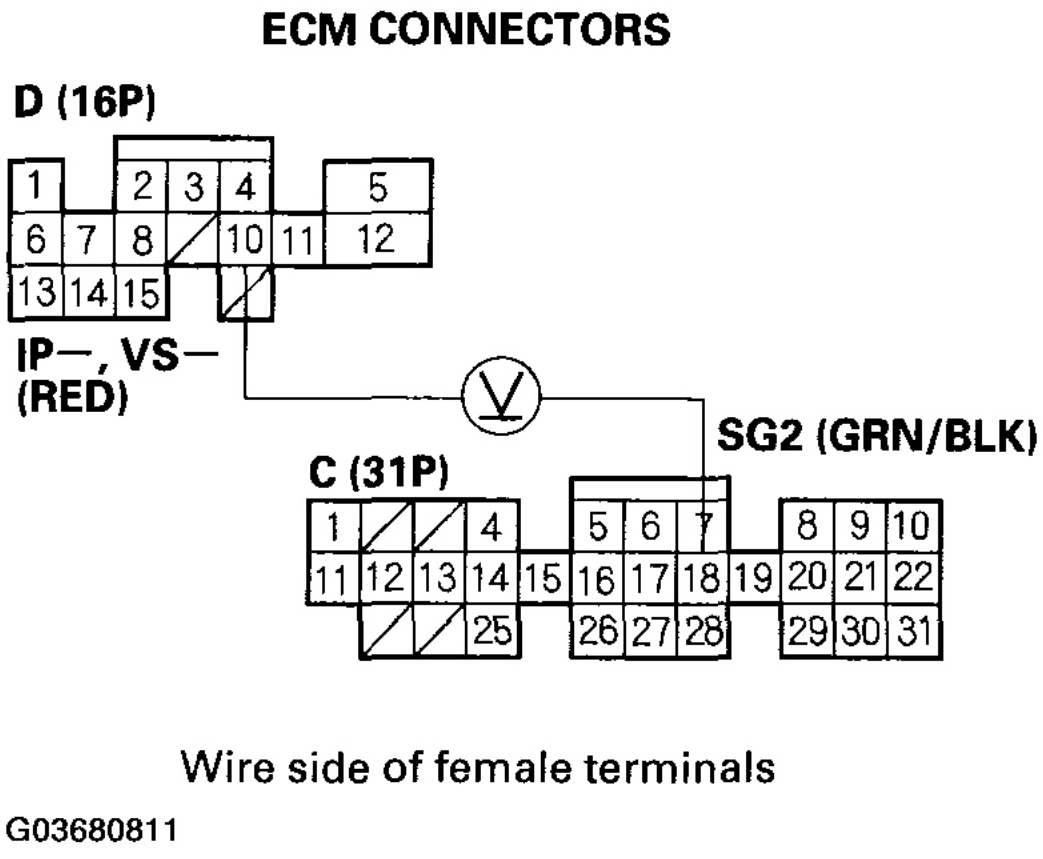


Fig. 108: Measuring Voltage Between ECM Connector Terminals D10 And C18
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 0.5 V?

YES - Go to step 7.

NO - Go to step 23 .

7. Measure voltage between ECM connector terminals D11 and C18.

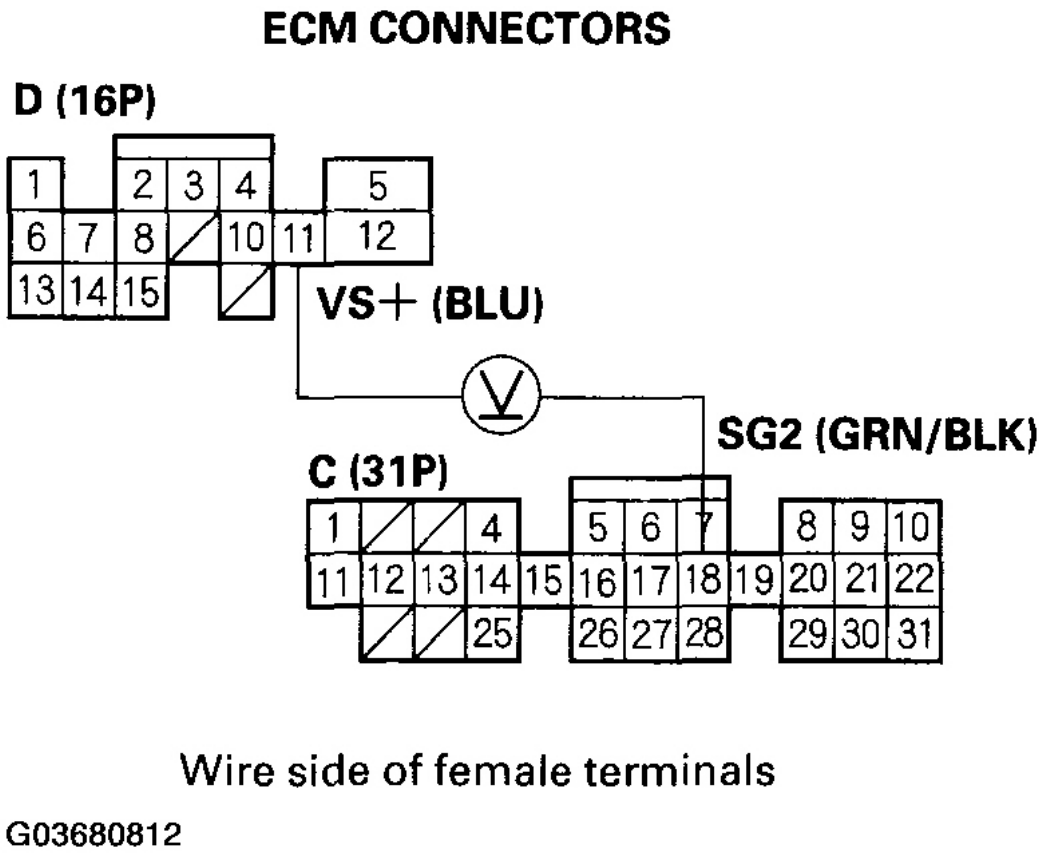


Fig. 109: Measuring Voltage Between ECM Connector Terminals D11 And C18
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 0.5 V?

YES - Go to step 8.
NO - Go to step 28 .

8. Measure voltage between ECM connector terminals D11 and C18.

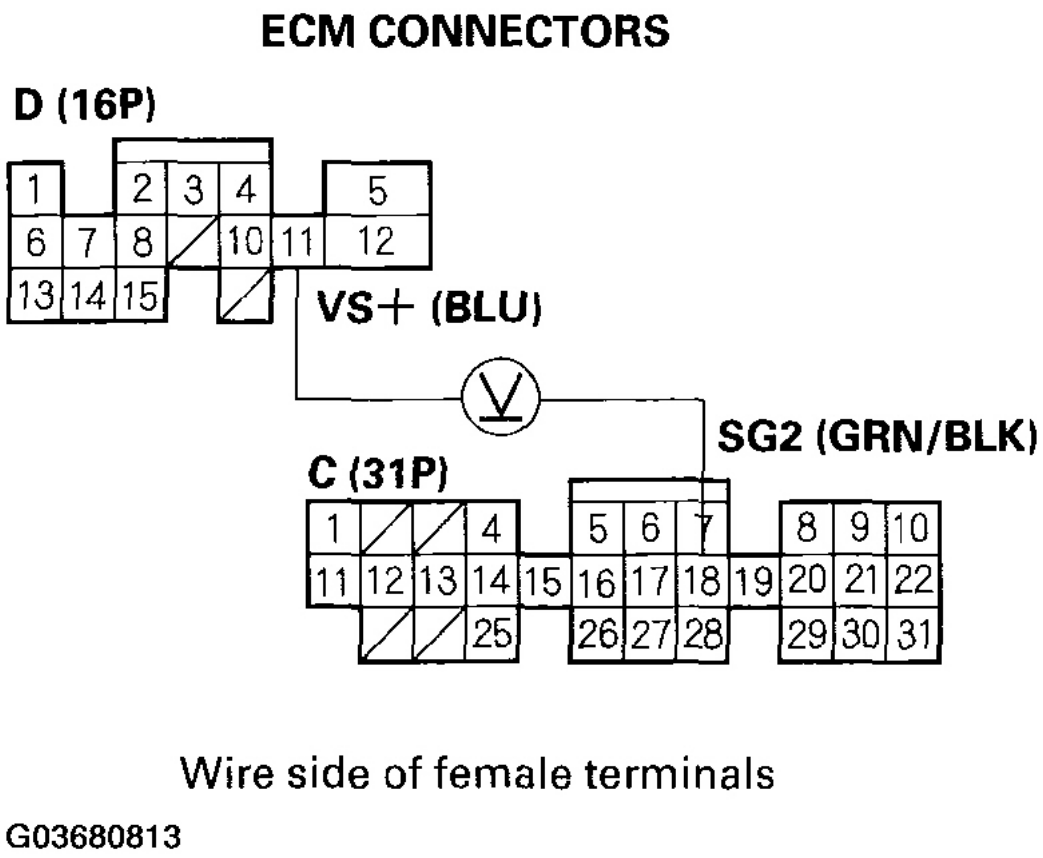


Fig. 110: Measuring Voltage Between ECM Connector Terminals D11 And C18
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 5.0 V?

YES - Go to step 9.

NO - Go to step 33 .

9. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
10. Measure voltage between ECM connector terminals D10 and C18.

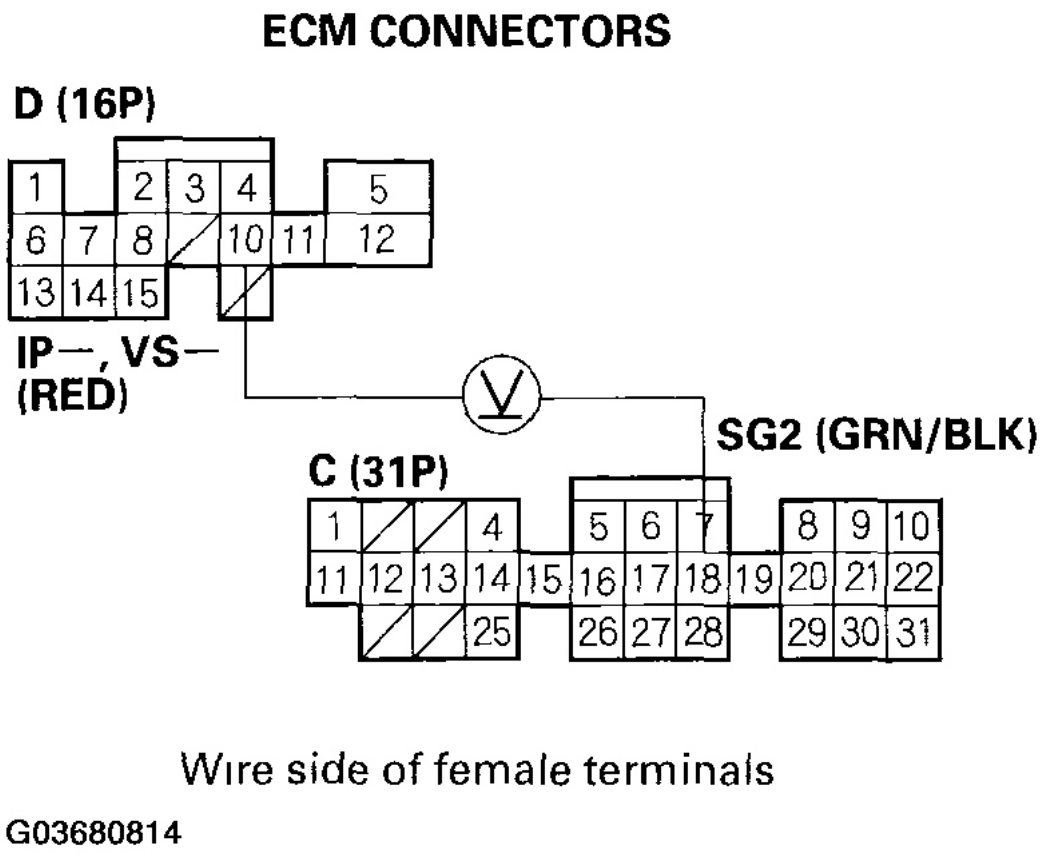


Fig. 111: Measuring Voltage Between ECM Connector Terminals D10 And C18
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 2.6-2.8 V?

YES - Go to step 11.
NO - Go to step 37 .

11. Measure voltage between ECM connector terminals D4 and C18.

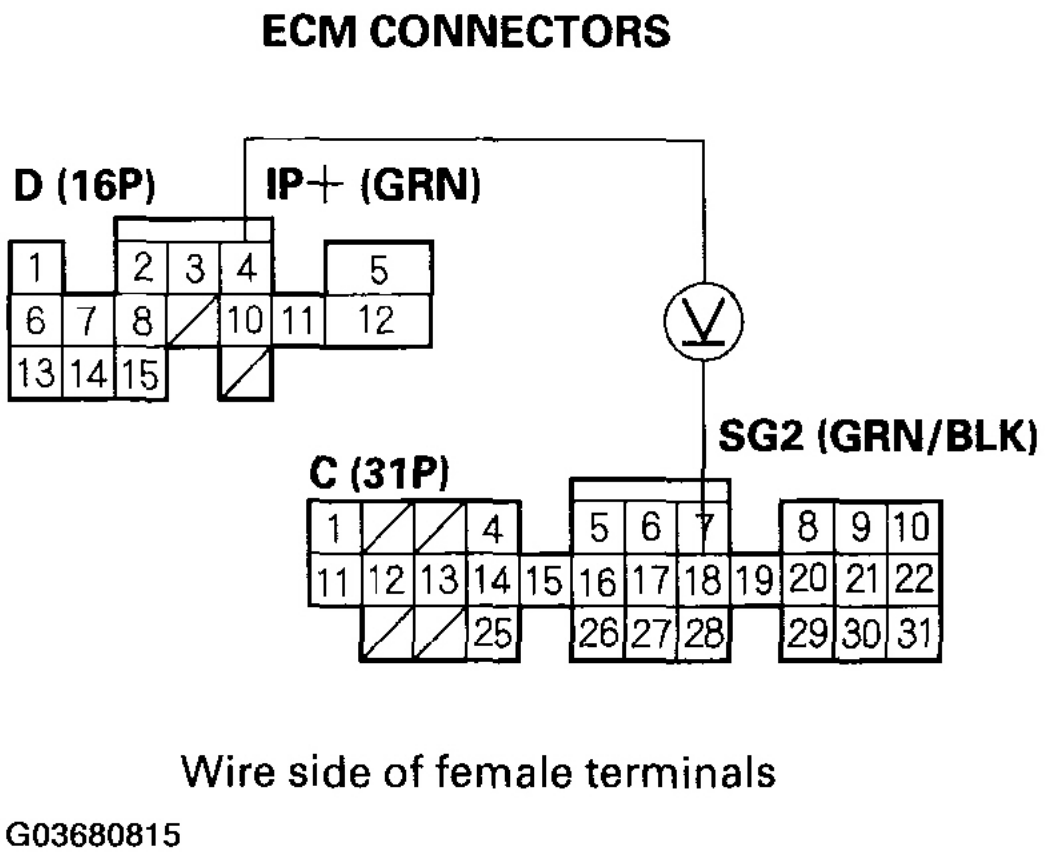


Fig. 112: Measuring Voltage Between ECM Connector Terminals D4 And C18
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 0.4 V?

YES - Substitute a known-good ECM (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

NO - Go to step 12.

12. Turn the ignition switch OFF.
13. Disconnect ECM connector D (16P).

14. Check for continuity between ECM connector terminal D4 and body ground.

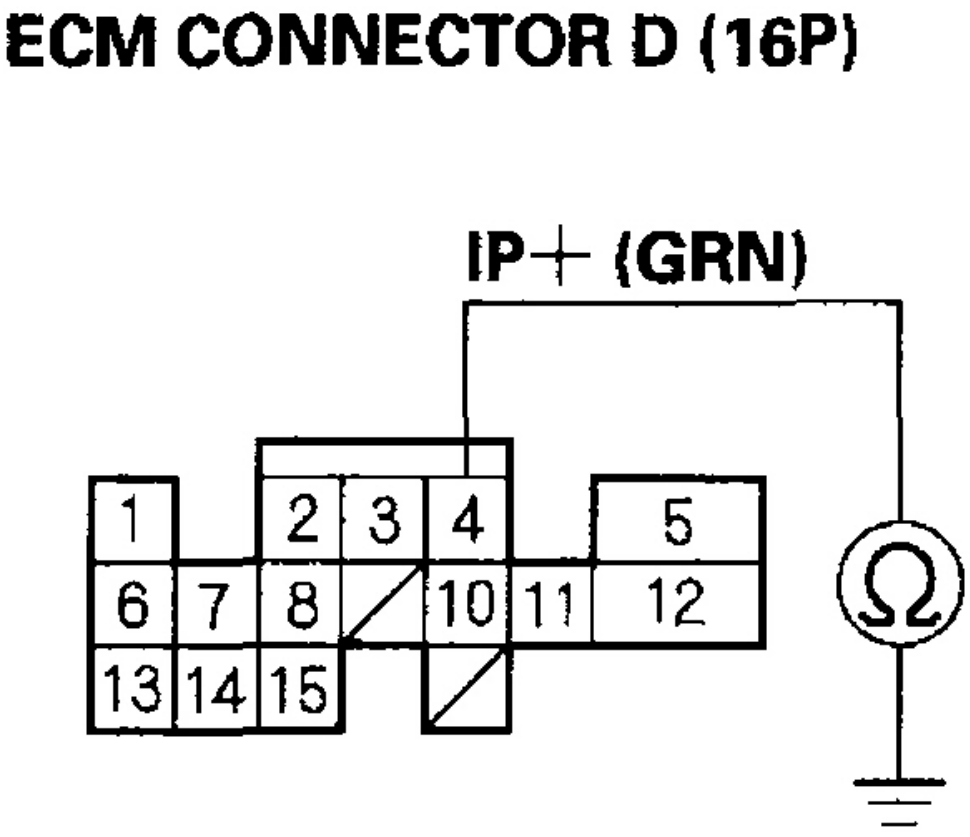


Fig. 113: Checking Continuity Between ECM Connector Terminal D4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 15.

NO - Go to step 38 .

15. Disconnect the A/F sensor (Sensor 1) 8P connector.
16. Check for continuity between ECM connector terminal D4 and body ground.

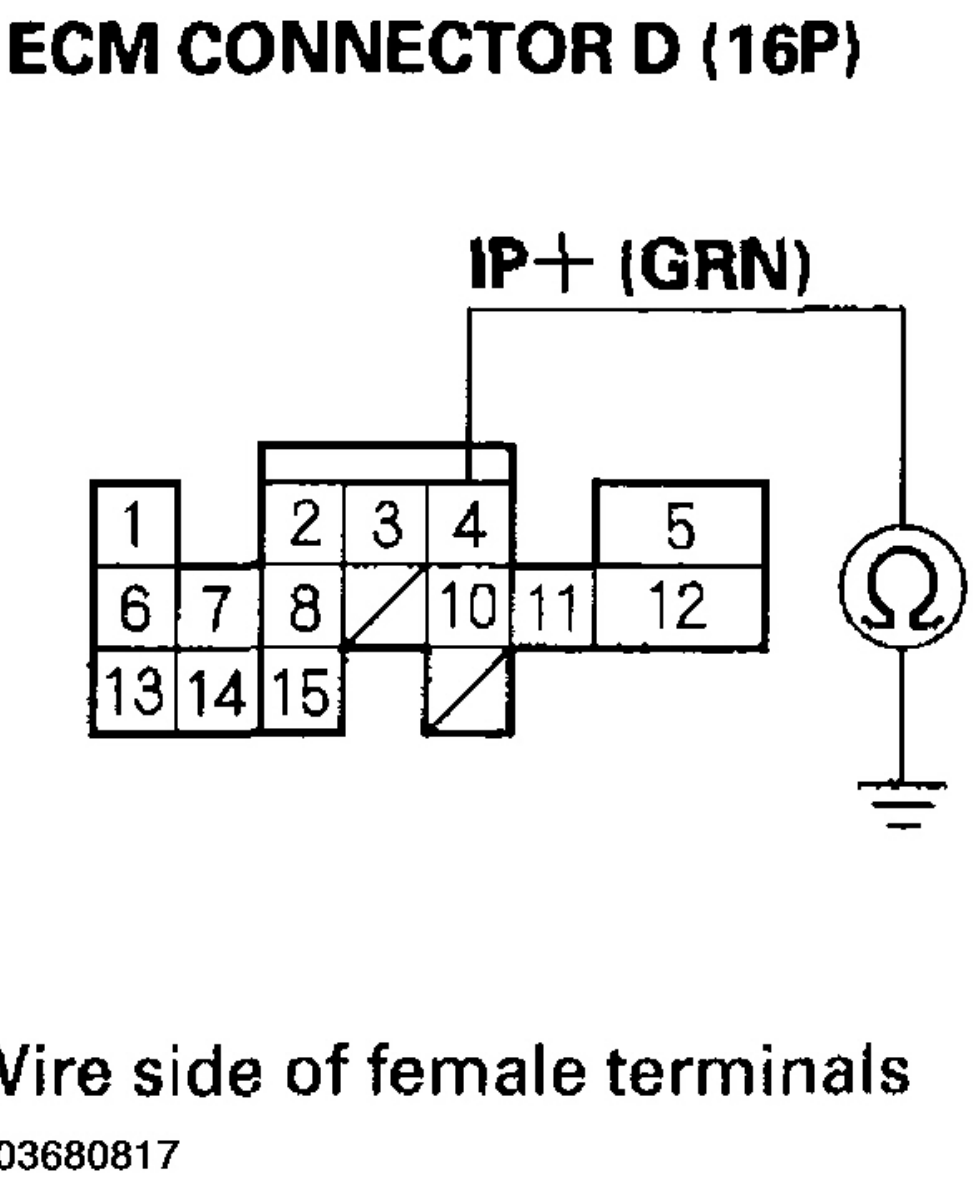


Fig. 114: Checking Continuity Between ECM Connector Terminal D4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (D4) and the A/F sensor (Sensor 1).

NO - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

17. Test-drive for several miles with the transmission in 3rd gear. Hold the engine speed at 1,500 rpm.

Is DTC P1162 indicated?

YES - Go to step 18.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.

18. Turn the ignition switch OFF.
19. Disconnect ECM connector D (16P).
20. Disconnect the A/F sensor (Sensor 1) 8P connector.
21. Connect ECM connector terminal D4 to body ground with a jumper wire.

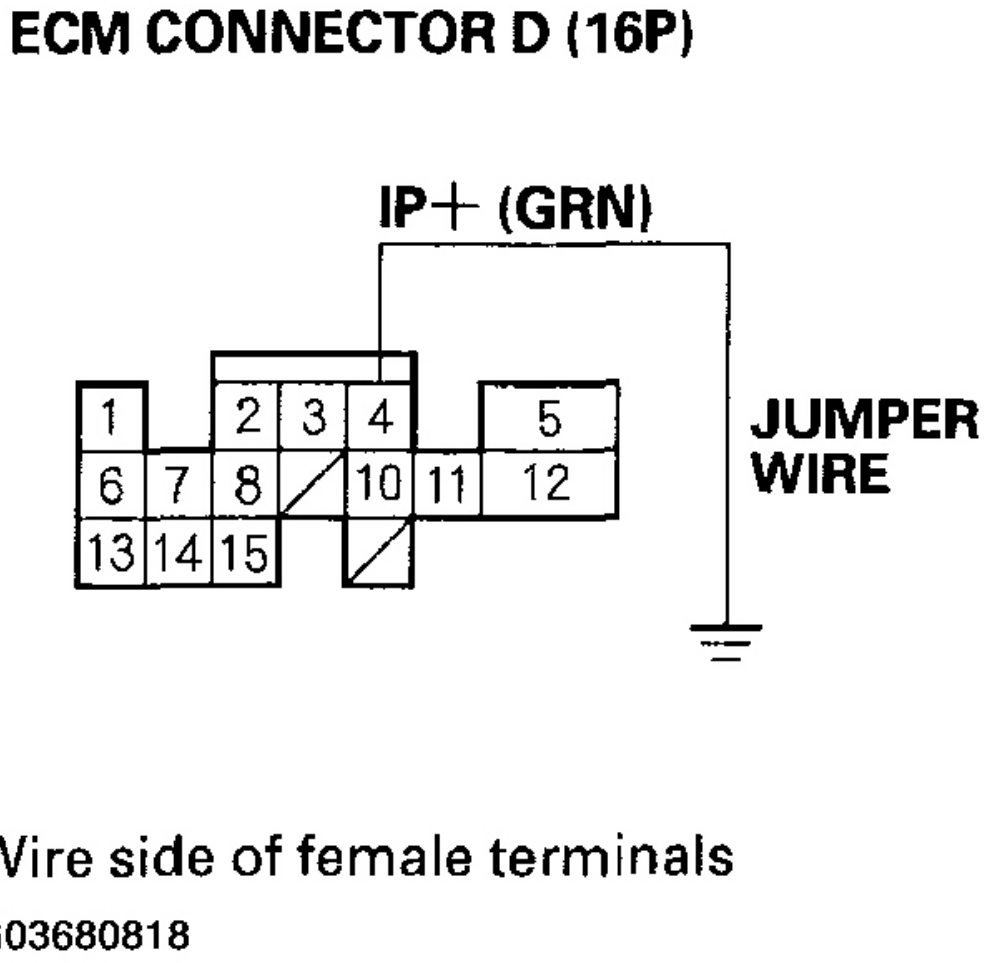


Fig. 115: Connecting ECM Connector Terminal D4 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Check for continuity between A/F sensor (Sensor 1) 8P connector terminal No. 7 and body ground.

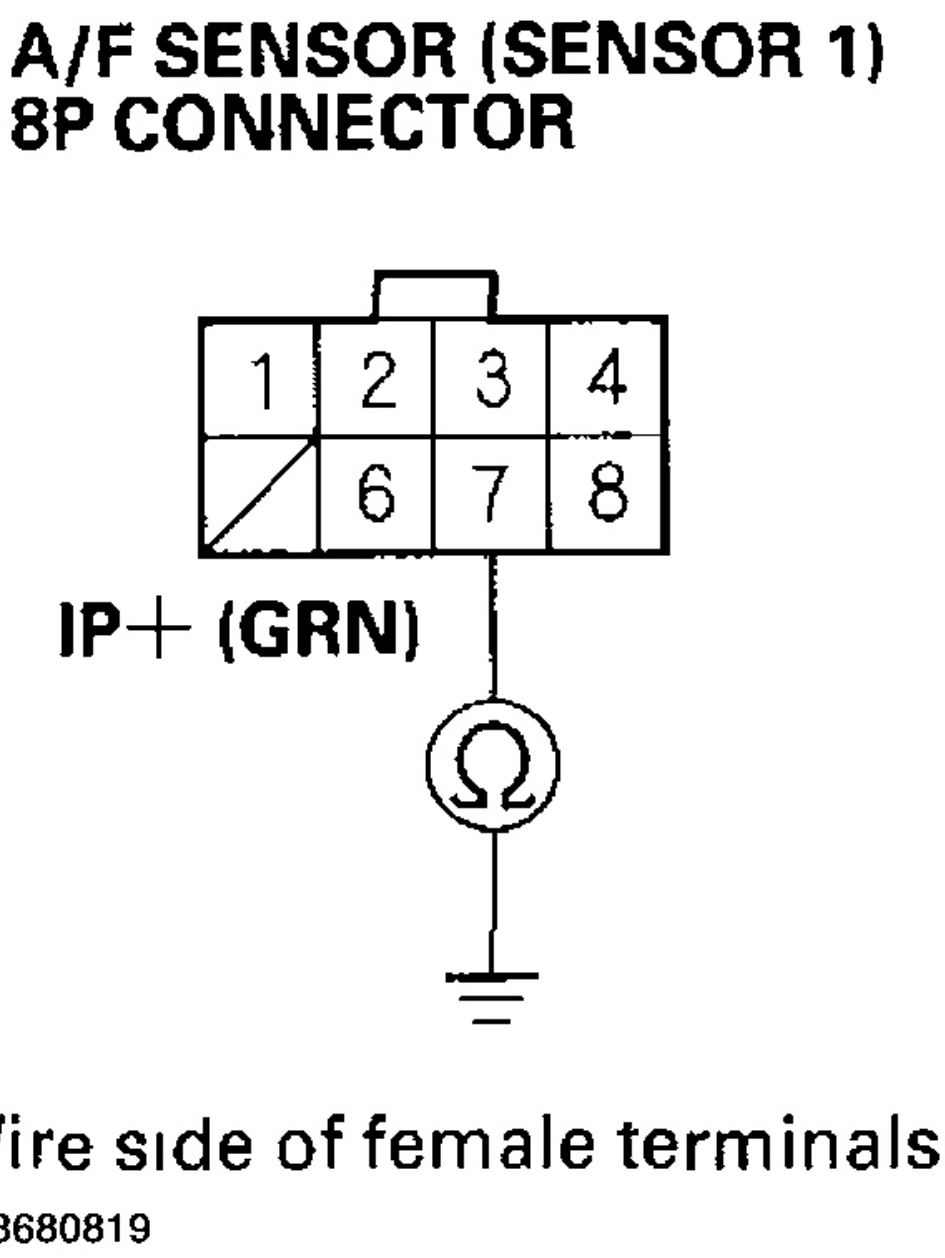


Fig. 116: Checking Continuity Between A/F Sensor (Sensor 1) 8P Connector Terminal No. 7 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for a poor connection at the A/F sensor (Sensor 1) connector and at the ECM. If the connections are OK, replace the A/F sensor (Sensor 1).

NO - Repair open in the wire between the ECM (D4) and the A/F sensor (Sensor 1).

23. Turn the ignition switch OFF.
24. Disconnect ECM connector D (16P).
25. Check for continuity between ECM connector terminal D10 and body ground.

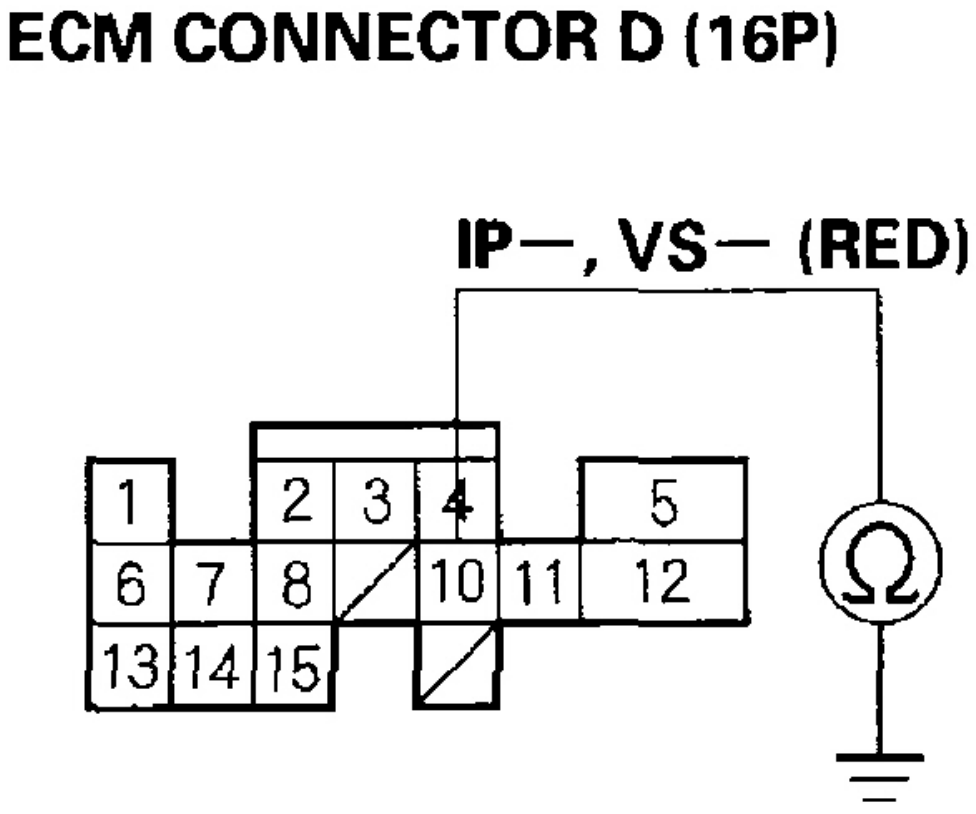


Fig. 117: Checking Continuity Between ECM Connector Terminal D10 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 26.

NO - Repair open in the wire between the ECM (D4) and the A/F sensor (Sensor 1).

26. Disconnect the A/F sensor (Sensor 1) 8P connector.
27. Check for continuity between ECM connector terminal D10 and body ground.

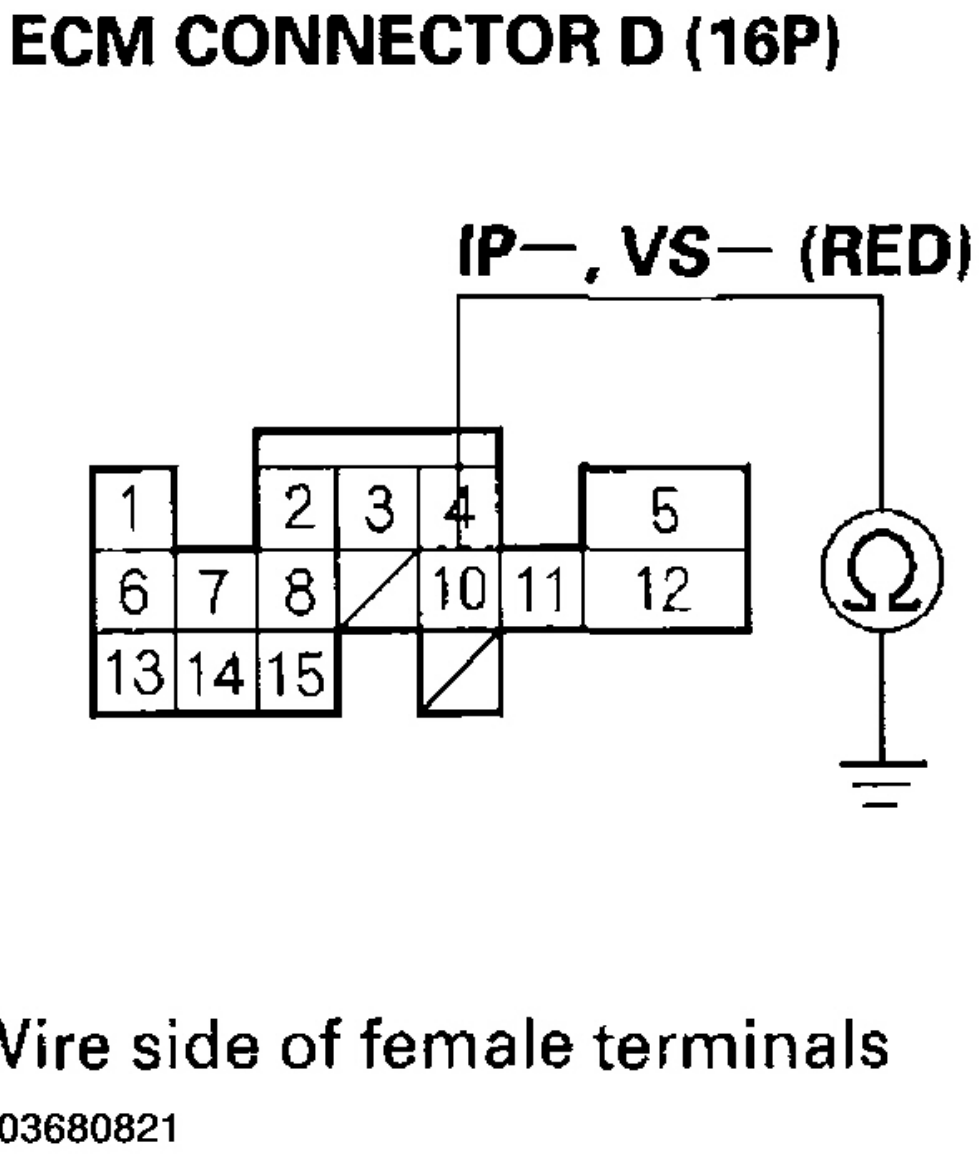


Fig. 118: Checking For Continuity Between ECM Connector Terminal

D10 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (D4) and the A/F sensor (Sensor 1).

NO - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

28. Turn the ignition switch OFF.
29. Disconnect ECM connector D (16P).
30. Check for continuity between ECM connector terminal D11 and body ground.

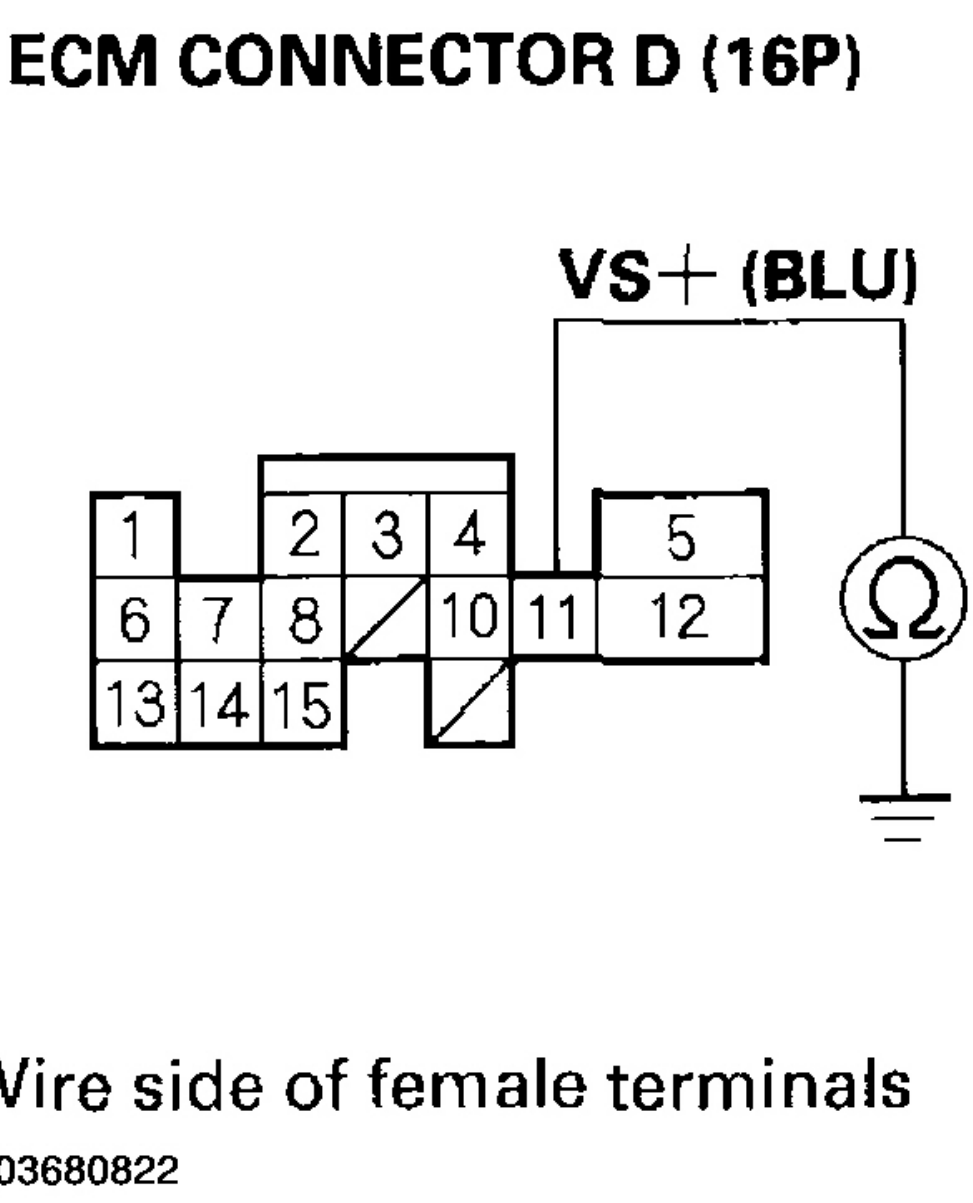


Fig. 119: Checking Continuity Between ECM Connector Terminal D11 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 31.

NO - Substitute a known-good ECM (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

31. Disconnect the A/F sensor (Sensor 1) 8P connector.
32. Check for continuity between ECM connector terminal D11 and body ground.

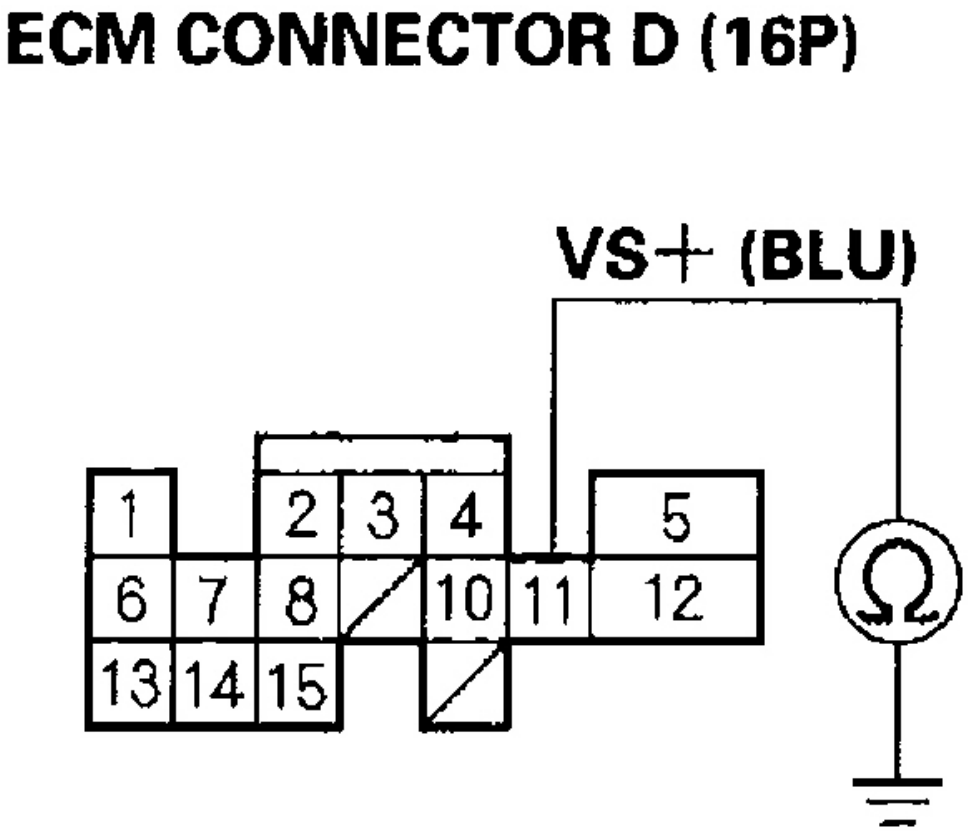


Fig. 120: Checking Continuity Between ECM Connector Terminal D11 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (D11) and the A/F sensor (Sensor 1).

NO - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

33. Turn the ignition switch OFF.
34. Disconnect the A/F sensor (Sensor 1) 8P connector.
35. Turn the ignition switch ON (II).
36. Measure voltage between ECM connector terminals D11 and C18.

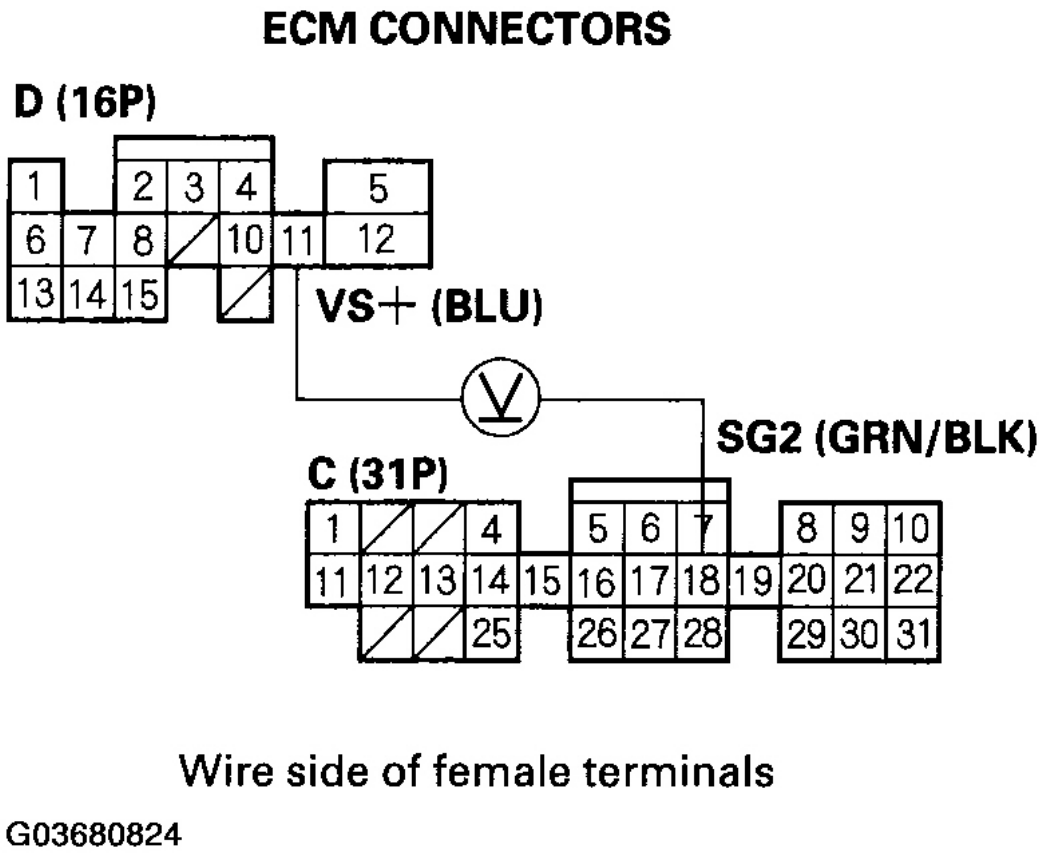


Fig. 121: Measuring Voltage Between ECM Connector Terminals D11 And C18
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 5.0 V?

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

NO - Substitute a known-good ECM (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

37. Measure voltage between ECM connector terminals D11 and C18.

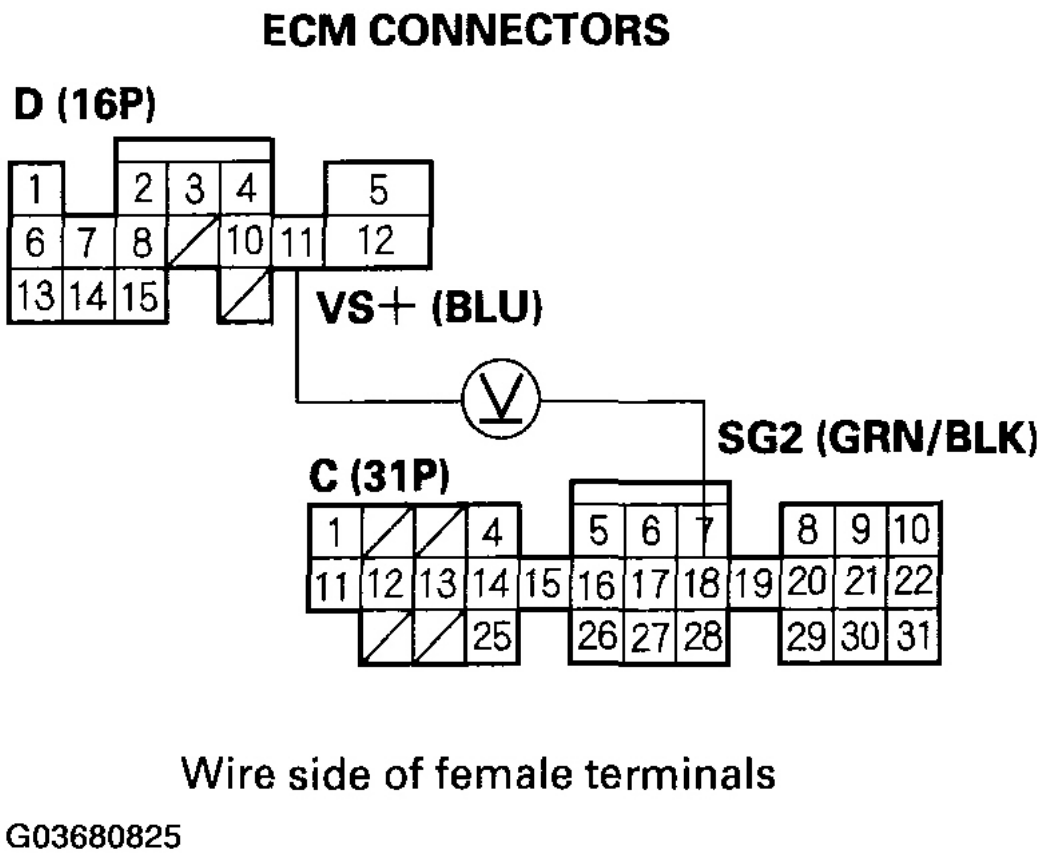


Fig. 122: Measuring Voltage Between ECM Connector Terminals D11 And C18
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than 2.8 V?

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

NO - Substitute a known-good ECM (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

38. Disconnect the A/F sensor (Sensor 1) 8P connector.
39. Connect ECM connector terminal D4 to body ground with a jumper wire.

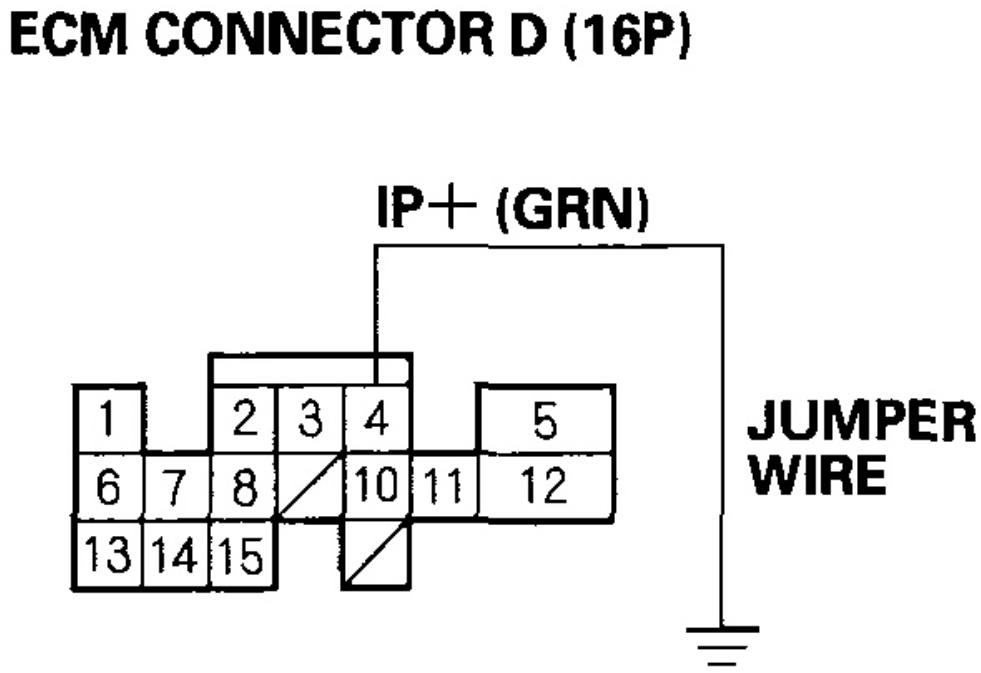


Fig. 123: Connecting ECM Connector Terminal D4 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

40. Check for continuity between A/F sensor (Sensor 1) 8P connector terminal No. 7 and body ground.

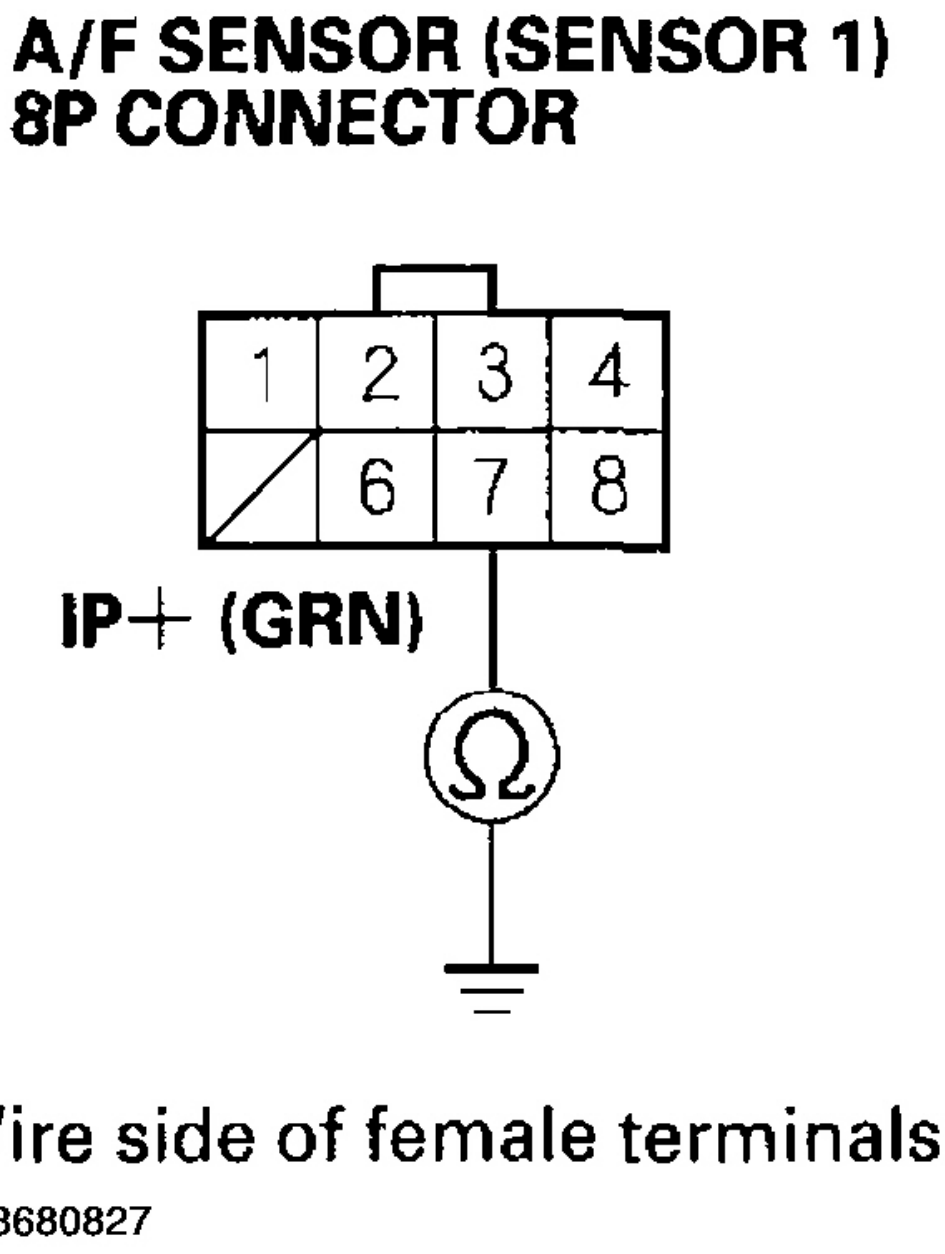


Fig. 124: Checking Continuity Between A/F Sensor (Sensor 1) 8P Connector Terminal No. 7 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Substitute a known-good ECM (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (D4) and the A/F sensor (Sensor 1).

DTC P1163: A/F SENSOR (SENSOR 1) SLOW RESPONSE (2000-2001 M/T MODELS)

NOTE:

- **If DTC P1162, P1168, and/or P1169 are stored at the same time as DTC P1163, troubleshoot those DTCs first, then recheck for DTC P1163.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on.
3. Test-drive at 40-55 mph (64-88 km/h) for about 2 minutes. Try to keep the engine speed between 1,500 to 2,500 rpm. Then decelerate for at least 3 seconds with the throttle completely closed.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1163 indicated?

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor and the ECM.

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)

NOTE:

- **Information marked with an asterisk (*) applies to 2000-**

2003 M/T models and 2001-2003 CVT models.

- **Information marked with a double asterisk (**) applies to 2004-2006 models.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on.
3. Test-drive in D position (M/T in 5th gear). Starting at 1,600 rpm, accelerate using wide open throttle for at least 5 seconds. Then decelerate for at least 5 seconds with the throttle completely closed until the readiness code or DTC P2A00 (P1164)* comes on.
4. Check for a Temporary DTCs or DTCs with the HDS.

Is DTC P1164* (P2A00) indicated?**

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at C102 (located under the right side of the dash), the A/F sensor relay, the A/F sensor (Sensor 1) and the ECM.

DTC P1165: A/F SENSOR (SENSOR 1) CIRCUIT RANGE/PERFORMANCE PROBLEM (2000-2001 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in neutral) until the radiator fan comes on, then let it idle.
3. Test-drive in 4th gear. Starting at 1,600 rpm, accelerate for at least 5 seconds.

Then decelerate for at least 5 seconds with the throttle completely closed.

4. Check the Temporary DTCs or DTCs with the HDS.

Is DTC P1165 indicated?

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.

DTC P1166:A/F SENSOR (SENSOR 1) HEATER CIRCUIT MALFUNCTION (2000-2001 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1166 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.

4. Turn the ignition switch OFF.
5. Disconnect the A/F sensor (Sensor 1) 8P connector.
6. At the sensor side, measure resistance between A/F sensor (Sensor 1) 8P connector terminals No. 1 and No. 2.

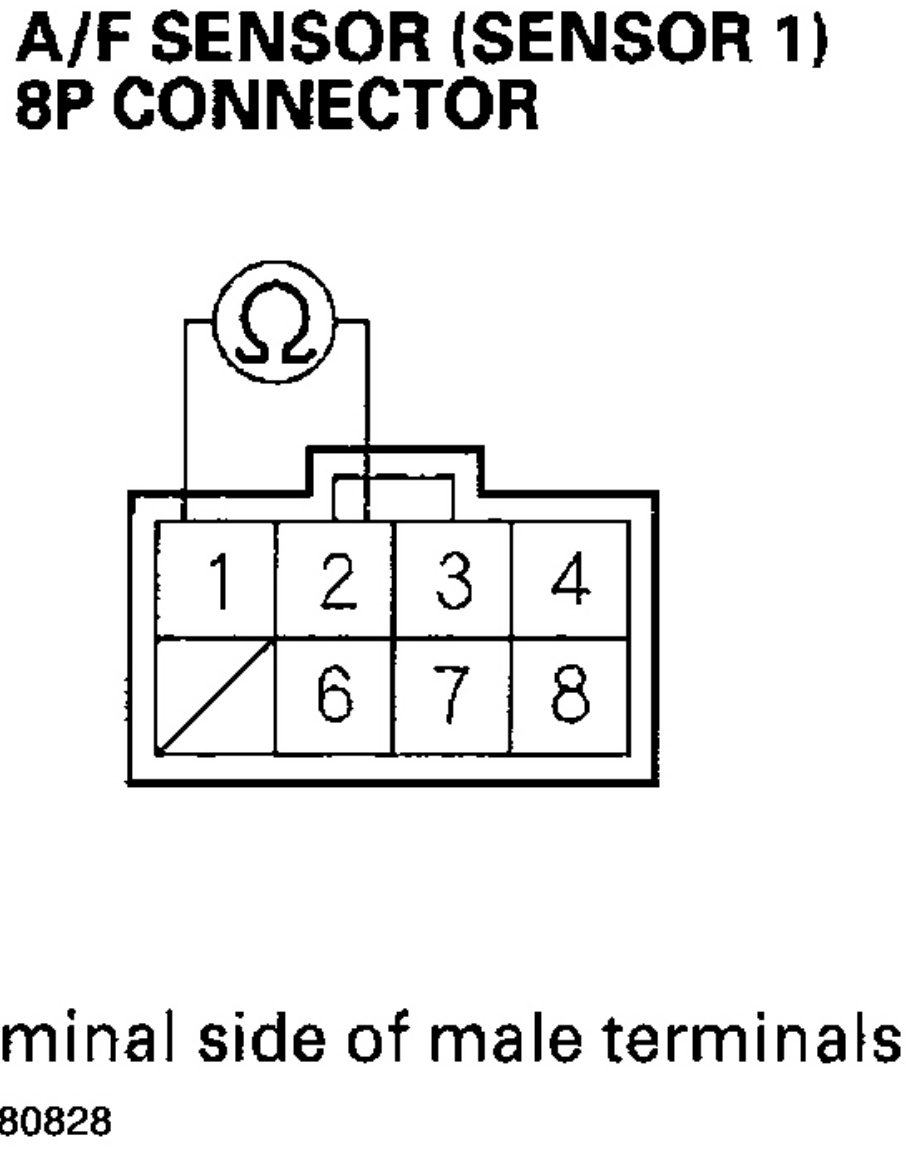


Fig. 125: Measuring Resistance Between A/F Sensor (Sensor 1) 8P Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 2-13ohm?

YES - Go to step 7.

NO - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

7. At the sensor side, check for continuity between each terminal at the A/F sensor (Sensor 1) 8P connector and body ground.

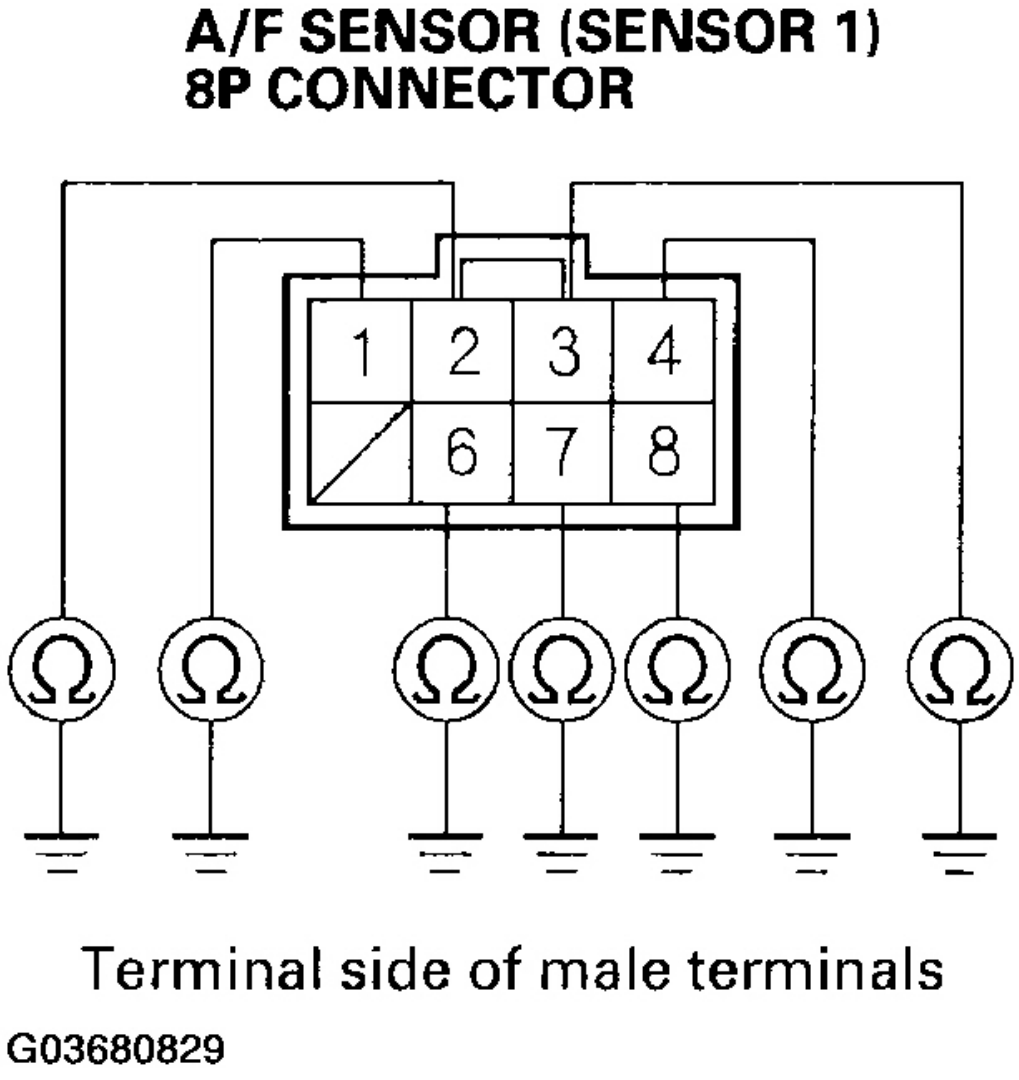


Fig. 126: Checking Continuity Between Terminal At A/F Sensor (Sensor 1) 8P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

NO - Go to step 8.

8. At the sensor side, check for continuity between A/F sensor (Sensor 1) 8P connector terminals No. 1, No. 3, No. 4, No. 6, No. 7, and No. 8 individually.

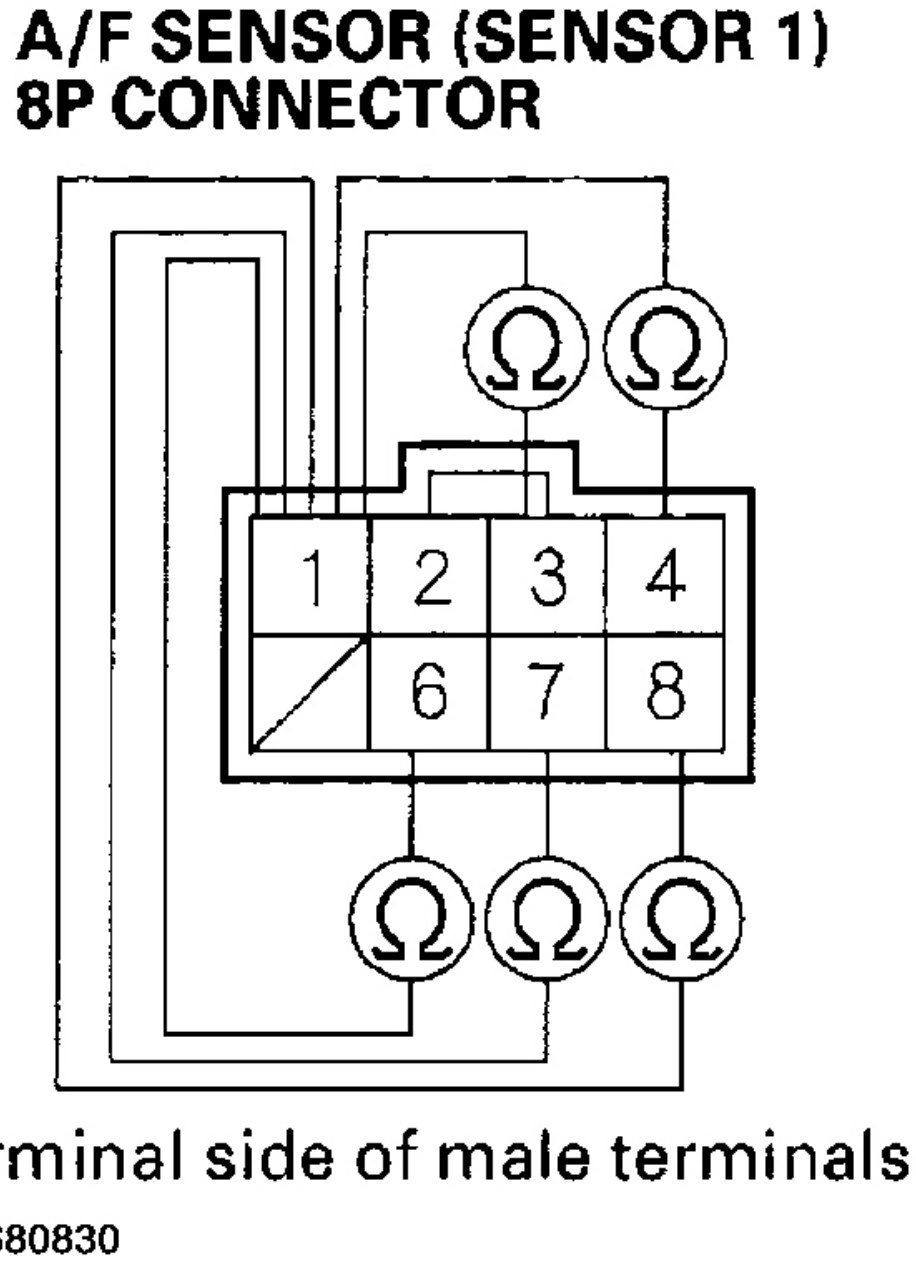


Fig. 127: Checking For Continuity Between A/F Sensor (Sensor 1) 8P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

NO - Go to step 9.

9. Start the engine, and let it idle.
10. Measure voltage between A/F sensor (Sensor 1) 8P connector terminal No. 1 and body ground.

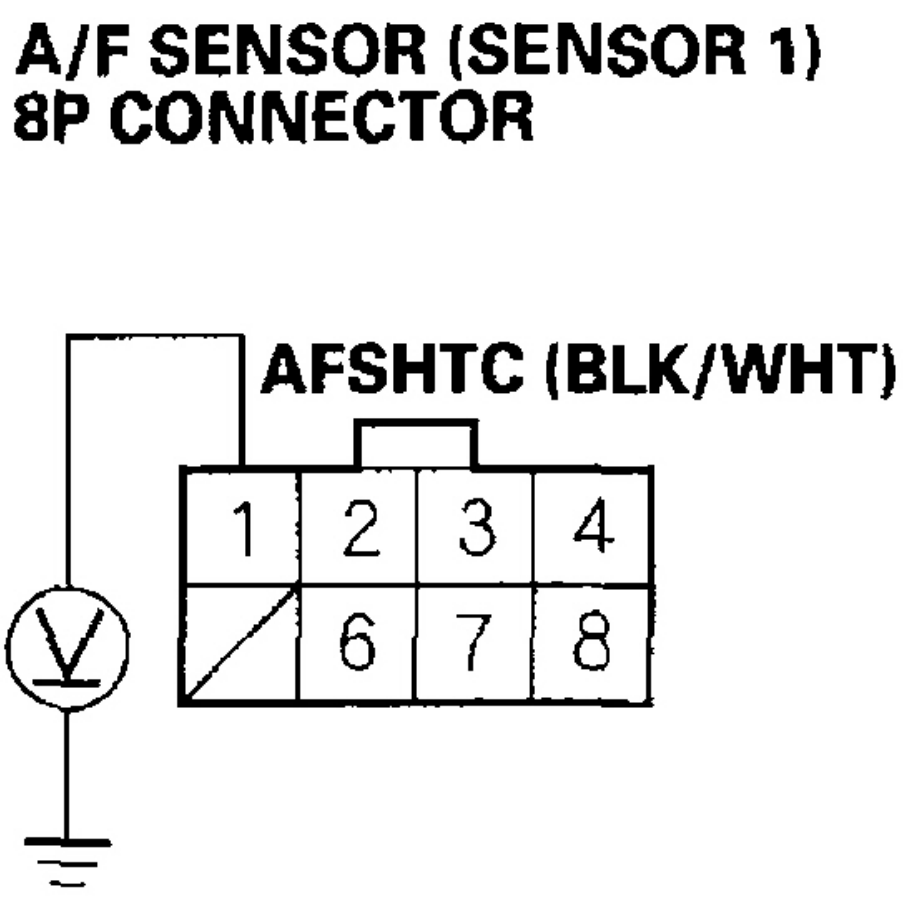


Fig. 128: Measuring Voltage Between A/F Sensor (Sensor 1) 8P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 5.0 V?

YES - Go to step 16 .

NO - Go to step 11.

11. Turn the ignition switch OFF.
12. Disconnect ECM connector D (16P).
13. Check for continuity between ECM connector terminal D5 and body ground.

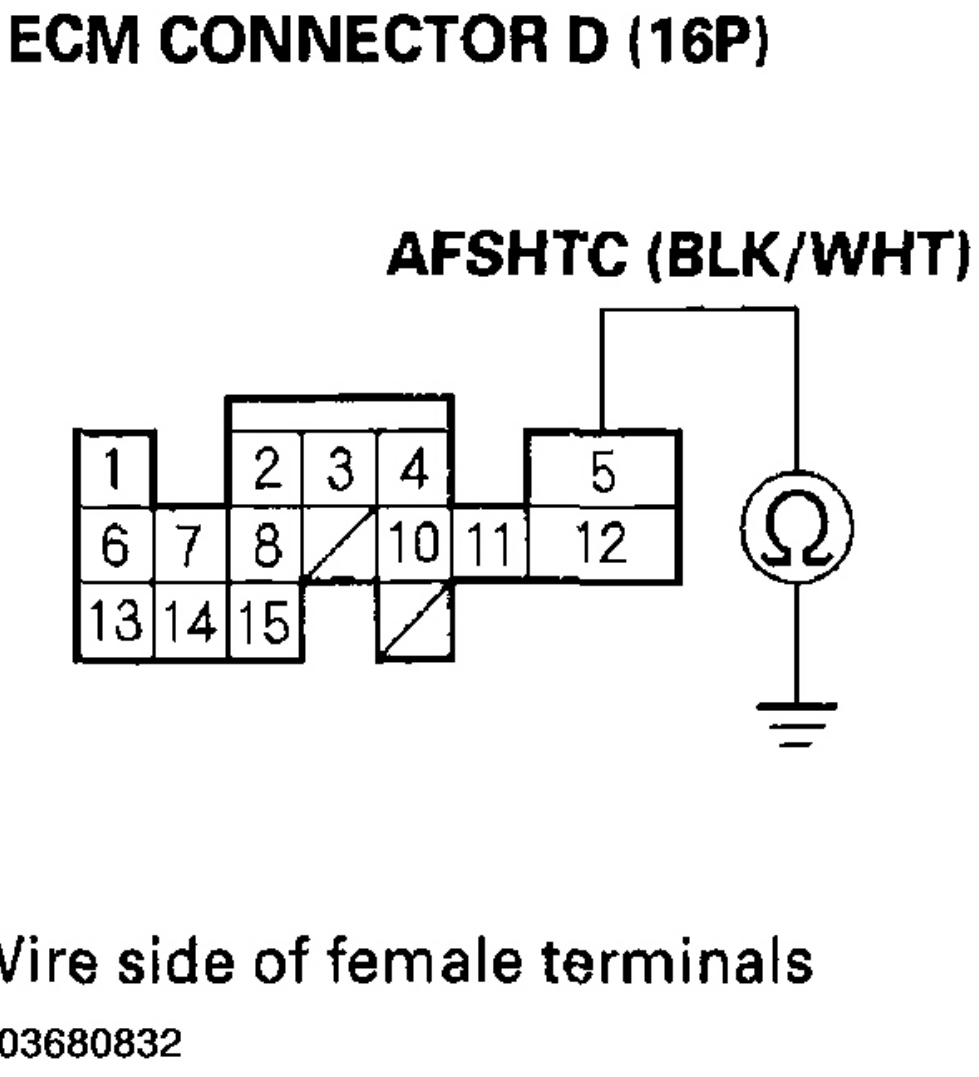


Fig. 129: Checking Continuity Between ECM Connector Terminal D5 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (D5) and the A/F sensor (Sensor 1).

NO - Go to step 14.

14. Connect ECM connector terminal D5 to body ground with a jumper wire.

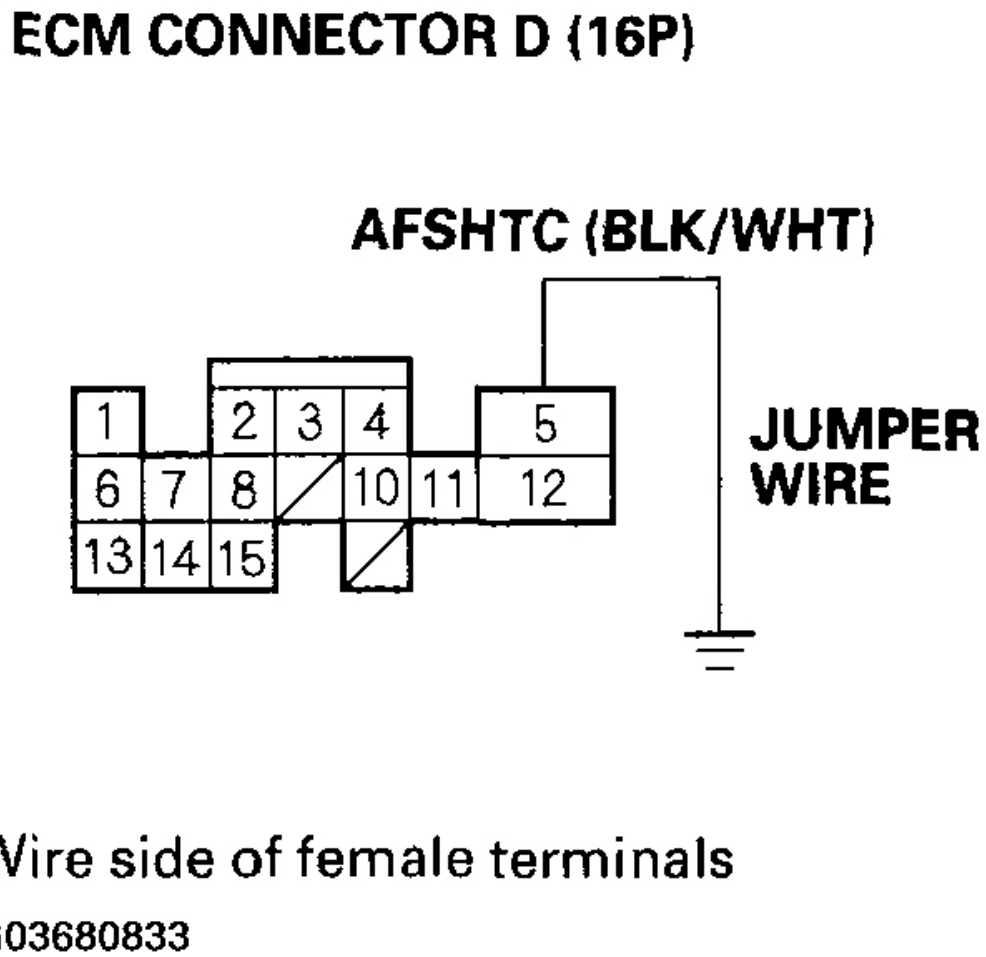


Fig. 130: Connecting ECM Connector Terminal D5 To Body Ground With Jumper Wire

Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Check for continuity between A/F sensor (Sensor 1) 8P connector terminal No. 1 and body ground.

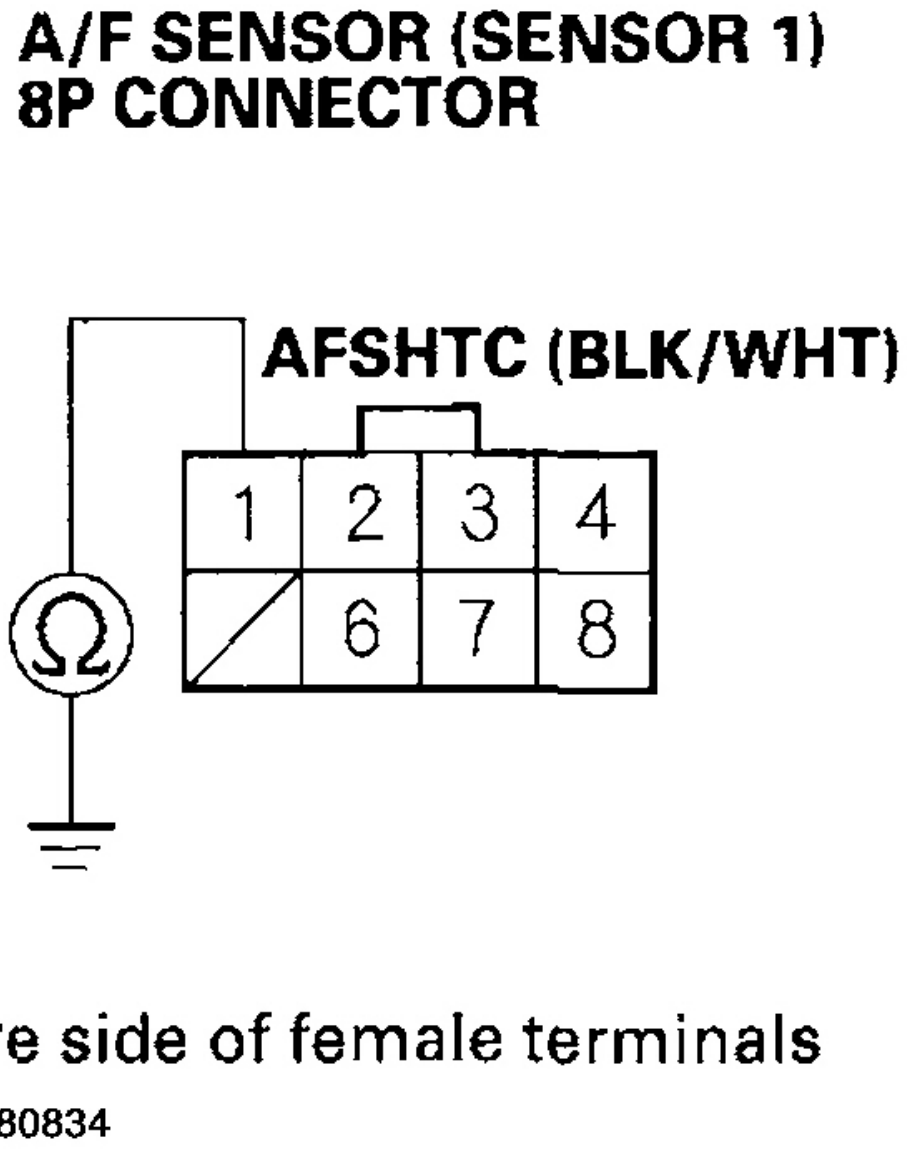


Fig. 131: Checking Continuity Between A/F Sensor (Sensor 1) 8P Connector Terminal No. 1 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Substitute a known-good ECM (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (D5) and the A/F sensor (Sensor 1).

16. Measure voltage between A/F sensor (Sensor 1) 8P connector terminals No. 1 and No. 2.

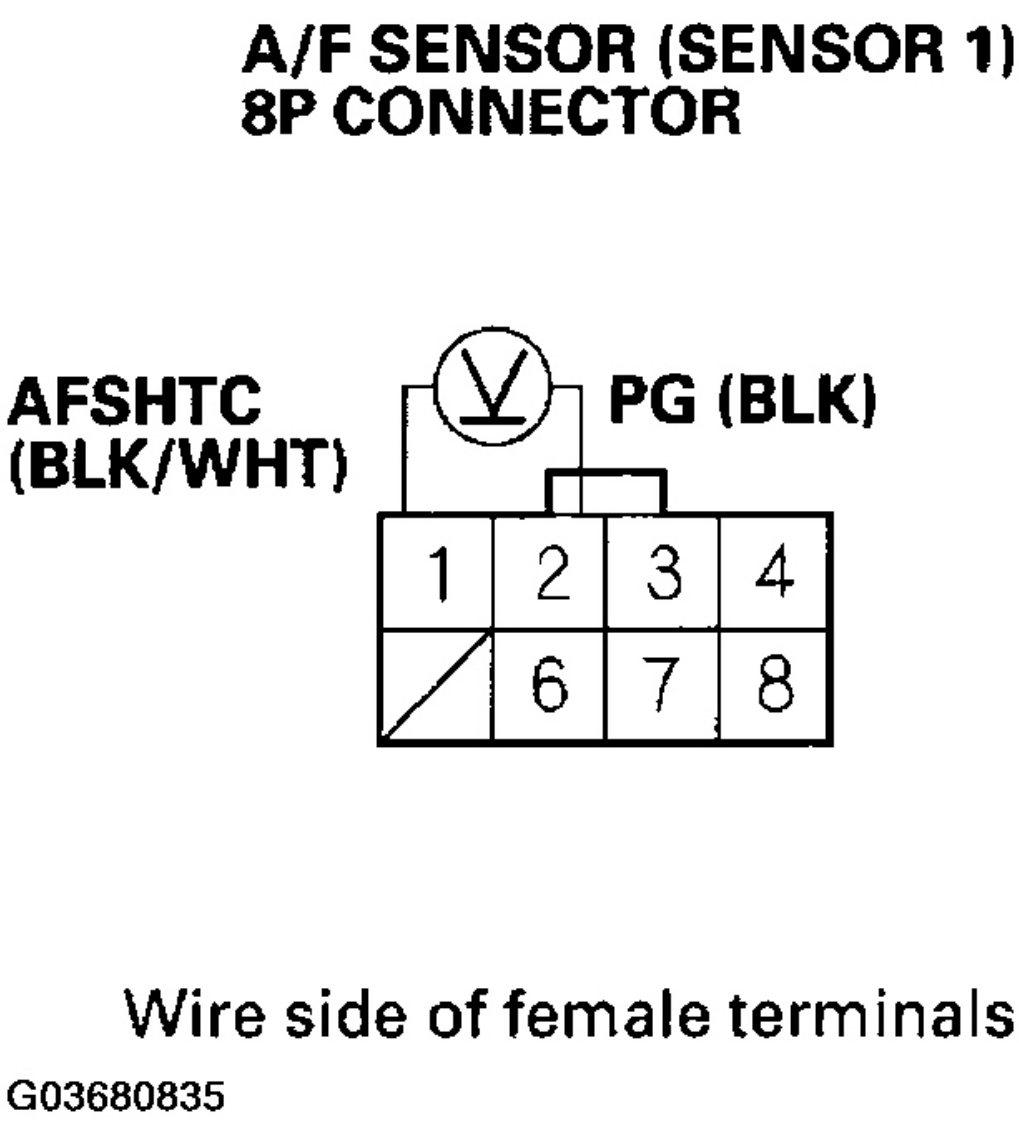


Fig. 132: Measuring Voltage Between A/F Sensor (Sensor 1) 8P Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 5.0 V?

YES -Substitute a known-good ECM (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T**

MODELS)), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the A/F sensor (Sensor 1) and G101.

DTC P1167: A/F SENSOR (SENSOR 1) HEATER SYSTEM MALFUNCTION (2000-2002 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on.
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P1167 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.
4. Turn the ignition switch OFF.
5. Disconnect the A/F sensor (Sensor 1) 8P connector.
6. Turn the ignition switch ON (II).
7. Measure voltage between A/F sensor (Sensor 1) 8P connector terminal No. 6 and body ground.

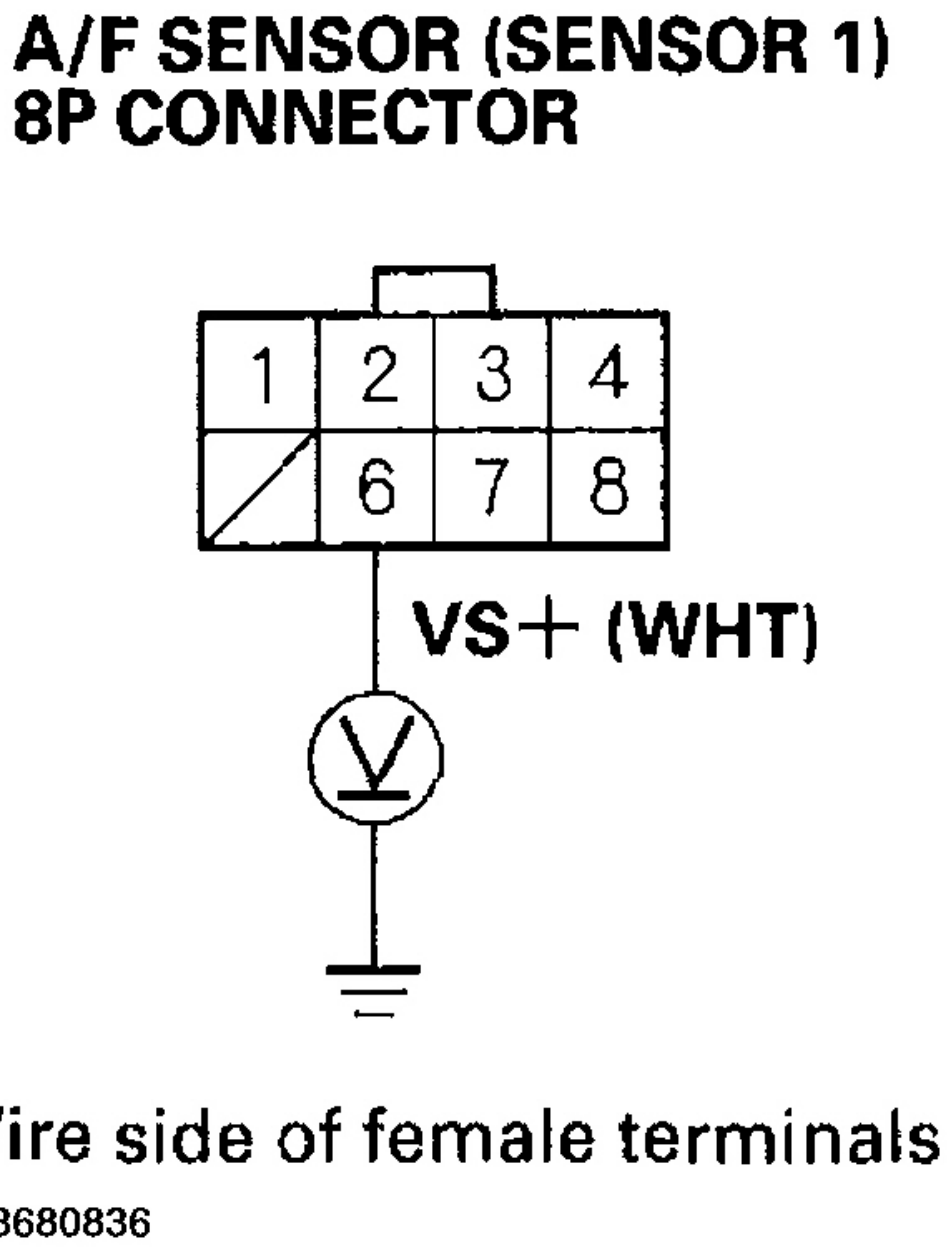


Fig. 133: Measuring Voltage Between A/F Sensor (Sensor 1) 8P Connector Terminal No. 6 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 5.0 V?

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

NO - Go to step 8.

8. Measure voltage between ECM connector terminal D11 and body ground.

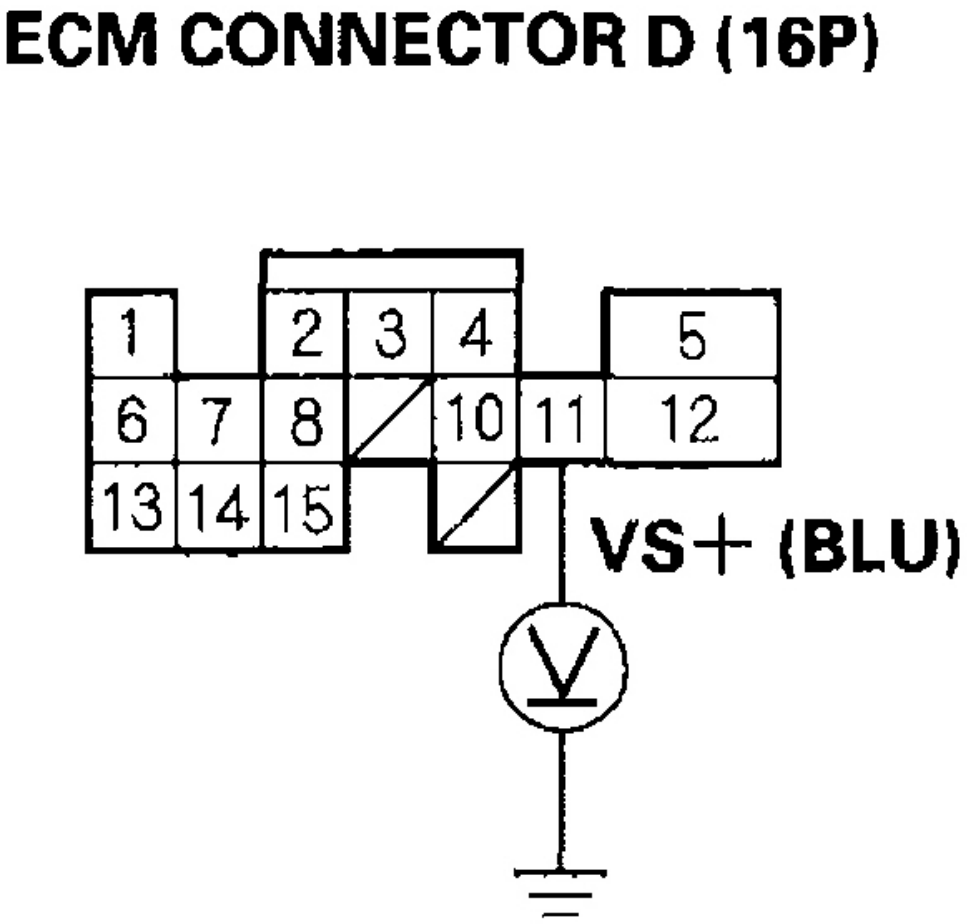


Fig. 134: Measuring Voltage Between ECM Connector Terminal D11 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 5.0 V?

YES - Repair open in the wire between the ECM (D11) and the A/F sensor (Sensor 1).

NO - Substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002 M/T model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

DTC P1168: A/F SENSOR (SENSOR 1) LABEL CIRCUIT LOW INPUT (2000-2001 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine, and let it idle.
3. Wait at least 2 minutes.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1168 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.

5. Turn the ignition switch OFF.
6. Disconnect ECM connector D (16P).
7. Check for continuity between ECM connector terminal D12 and body ground.

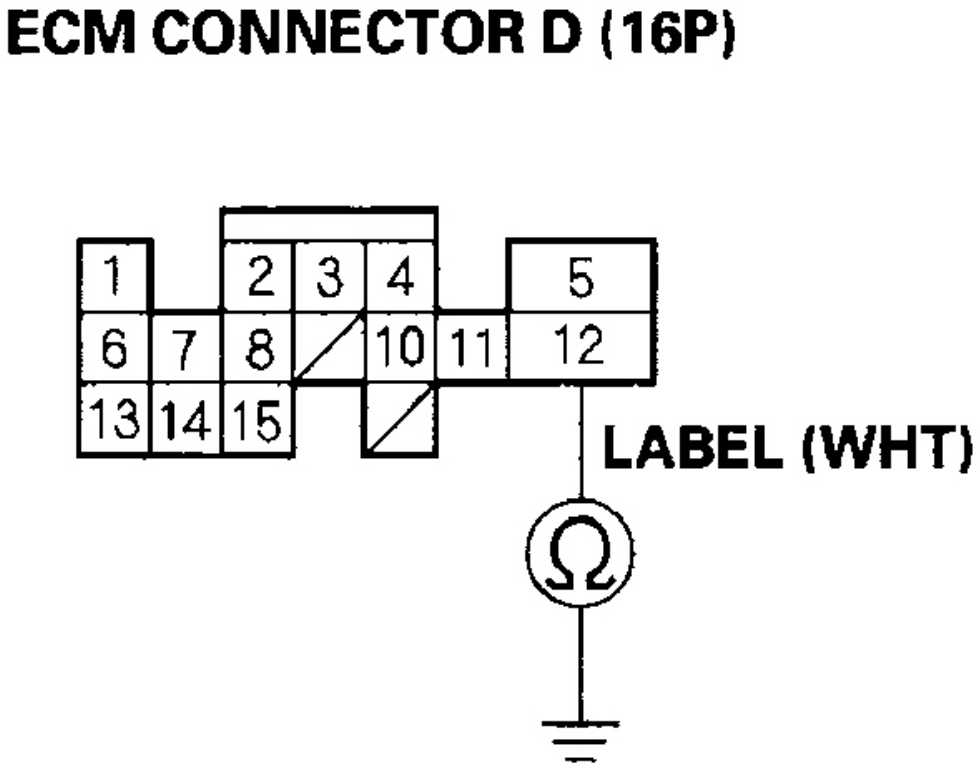


Fig. 135: Checking Continuity Between ECM Connector Terminal D12 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 8.

NO - Substitute a known-good ECM (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T**

MODELS)), and recheck. If the symptom/indication goes away, replace the original ECM (see **ECM REPLACEMENT**).

8. Disconnect the A/F sensor (Sensor 1) 8P connector.
9. Check for continuity between ECM connector terminal D12 and body ground.

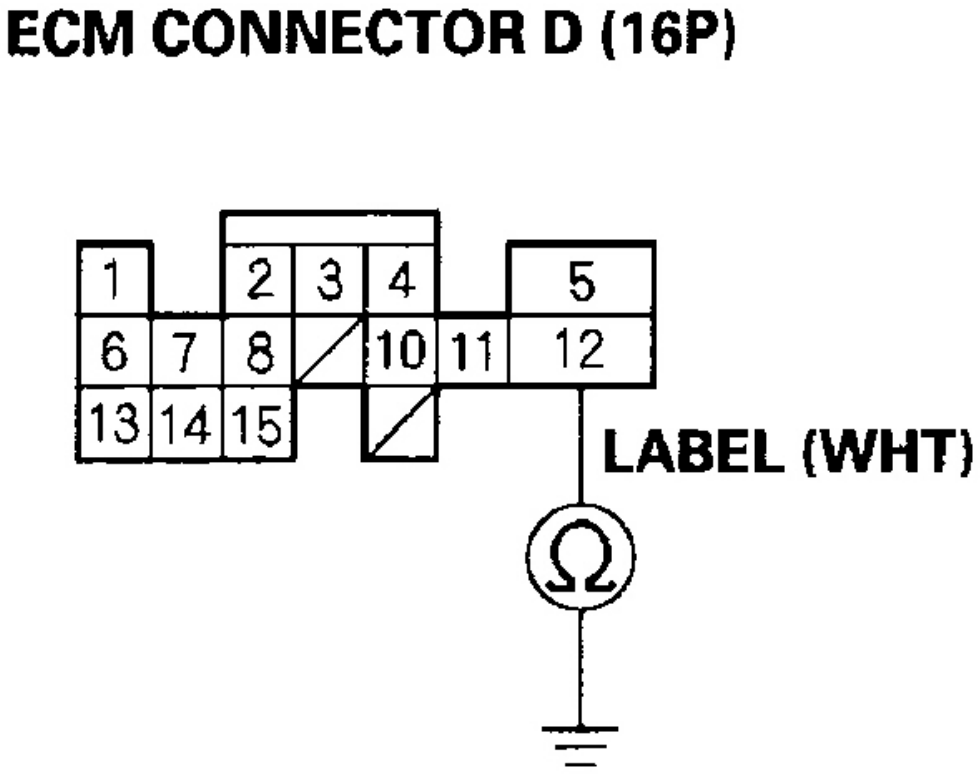


Fig. 136: Checking Continuity Between ECM Connector Terminal D12 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (D12) and the A/F sensor (Sensor 1).

NO - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

DTC P1169: A/F SENSOR (SENSOR 1) LABEL CIRCUIT HIGH INPUT (2000-2001 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine, and let it idle.
3. Wait at least 2 minutes.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1169 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.

5. Turn the ignition switch OFF.
6. Disconnect the A/F sensor (Sensor 1) 8P connector.
7. Turn the ignition switch ON (II).
8. Measure voltage between A/F sensor (Sensor 1) 8P connector terminal No. 4 and body ground.

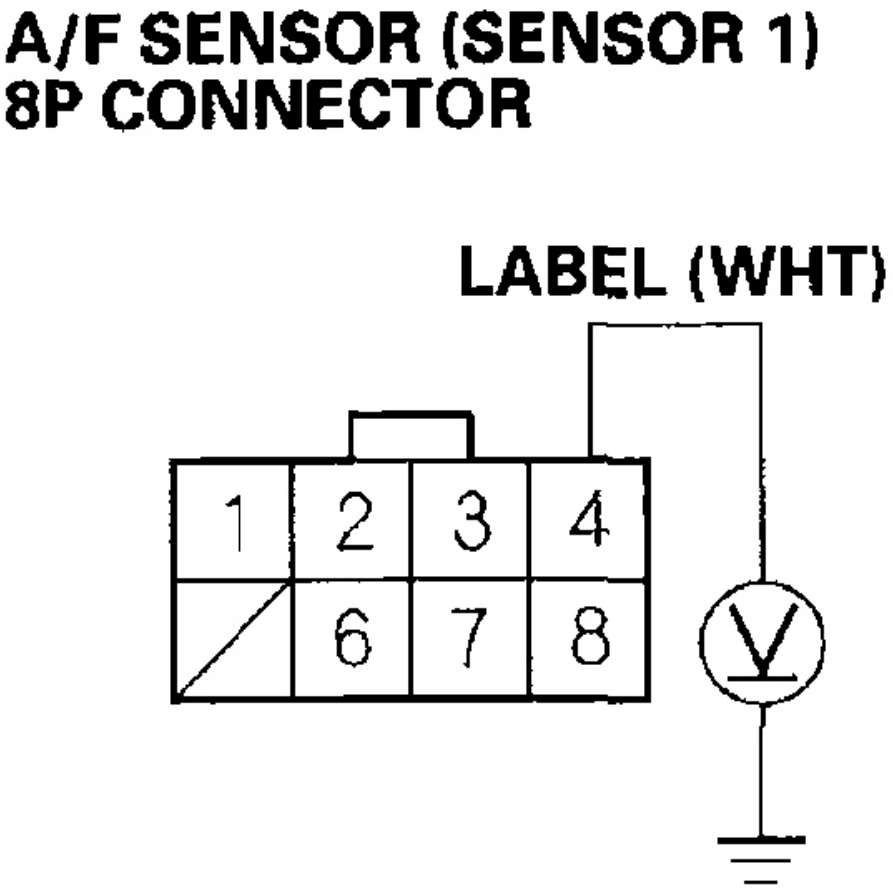


Fig. 137: Measuring Voltage Between A/F Sensor (Sensor 1) 8P Connector Terminal No. 4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 9.

NO - Repair open in the wire between the ECM (D12) and the A/F sensor (Sensor 1).

9. Turn the ignition switch OFF.
10. Disconnect ECM connector C (31P).
11. Connect ECM connector terminal C18 to body ground with a jumper wire.

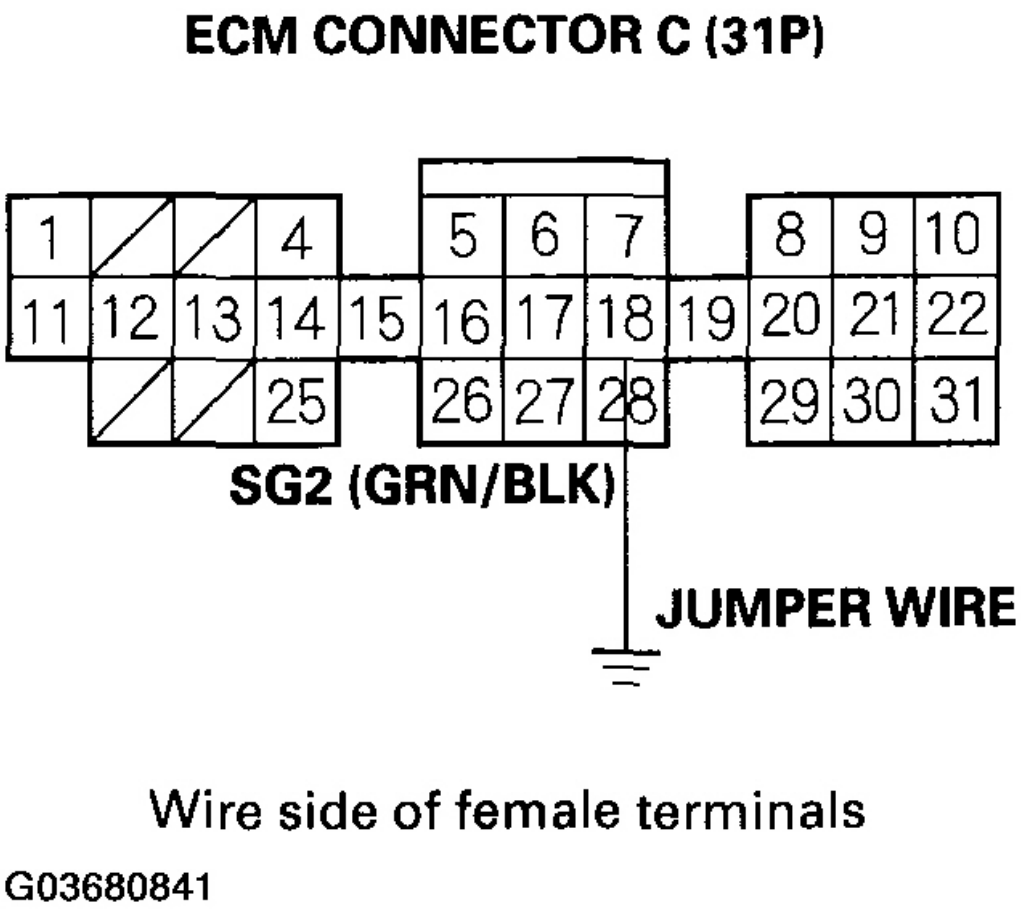


Fig. 138: Connecting ECM Connector Terminal C18 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Check for continuity between A/F sensor (Sensor 1) 8P connector terminal No. 3 and body ground.

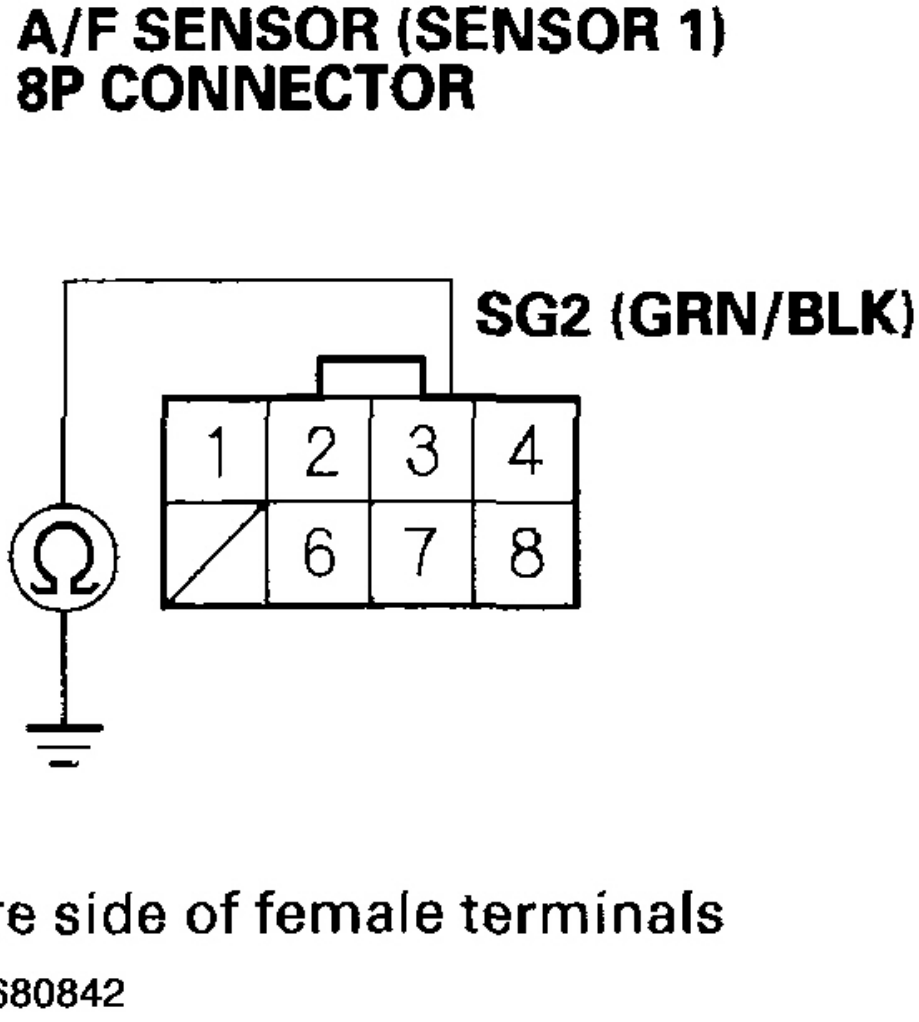


Fig. 139: Checking Continuity Between A/F Sensor (Sensor 1) 8P Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

NO - Repair open in the wire between the ECM (C18) and the A/F sensor (Sensor 1).

DTC P1172: A/F SENSOR (SENSOR 1) CIRCUIT OUT OF RANGE HIGH (2005-2006 MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Reset the ECM with the HDS (see **ECM RESET**).
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1172 indicated?

YES - Replace the A/F sensor (Sensor 1) (see **A/F SENSOR REPLACEMENT** .

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the A/F sensor (Sensor 1) and the ECM.

DTC P1297: ELD CIRCUIT LOW VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine.
3. Turn on the headlights.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1297 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the ELD and the ECM.

5. Turn the ignition switch and headlights OFF.
6. Disconnect the ELD 3P connector.
7. Turn the ignition switch ON (II).
8. Measure voltage between ELD 3P connector terminal No. 3 and body ground.

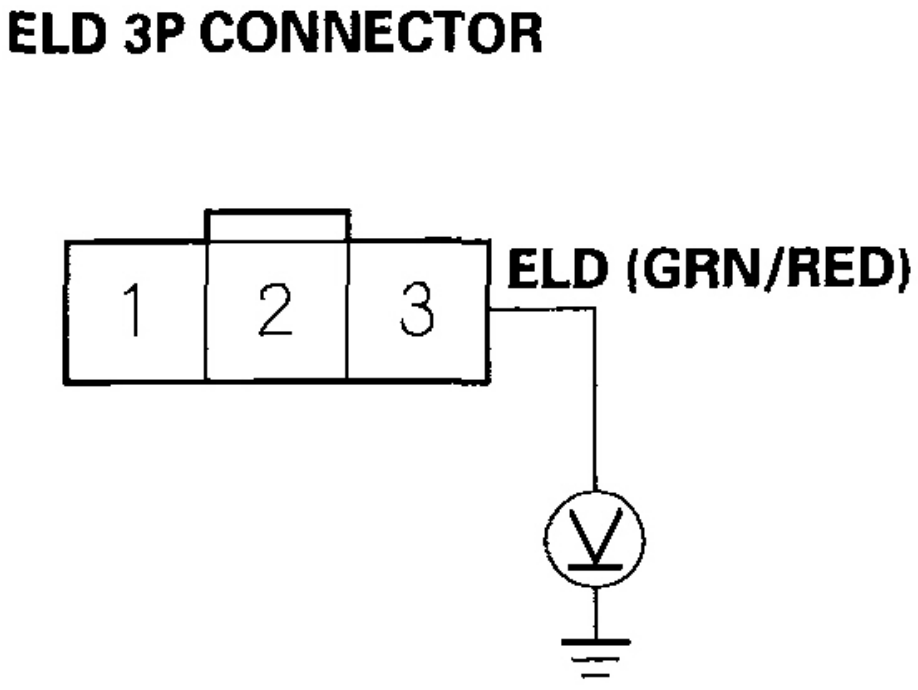


Fig. 140: Measuring Voltage Between ELD 3P Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the under-hood fuse/relay box.
NO - Go to step 9.

9. Turn the ignition switch OFF, and wait for 10 seconds.
10. Disconnect ECM connector A (32P).
11. Check for continuity between ECM connector terminal A30 and body ground.

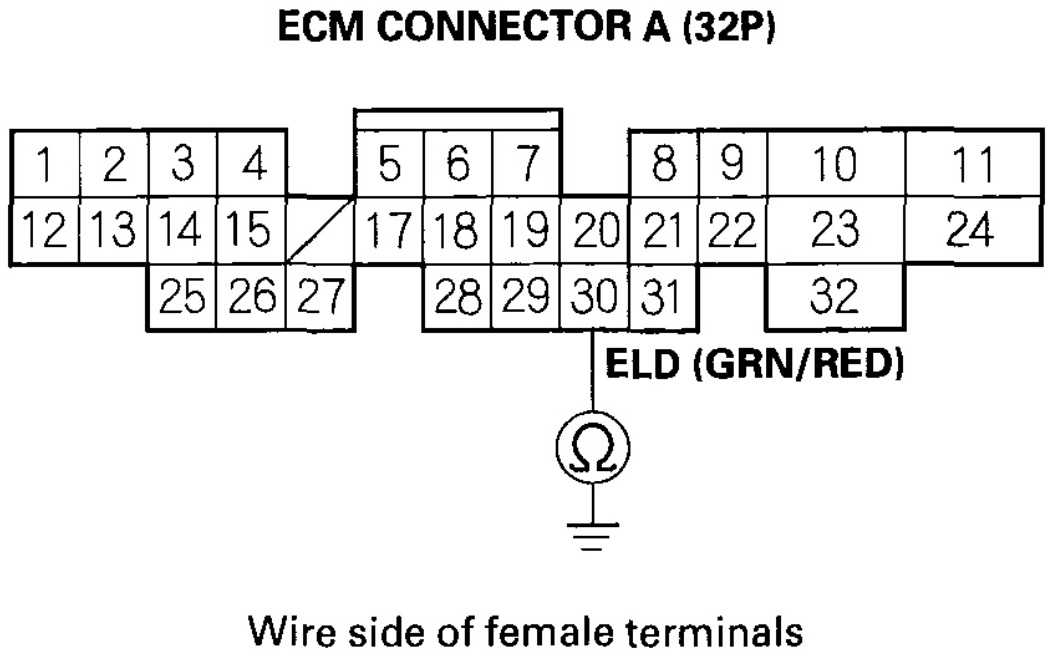


Fig. 141: Checking Continuity Between ECM Connector Terminal A30 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (A30) and the ELD.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

DTC P1298: ELD CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine.
3. Turn on the headlights.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1298 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the ELD and the ECM.

5. Turn the ignition switch and headlights OFF.
6. Disconnect the ELD 3P connector.
7. Turn the ignition switch ON (II).
8. Measure voltage between ELD 3P connector terminal No. 1 and body ground.

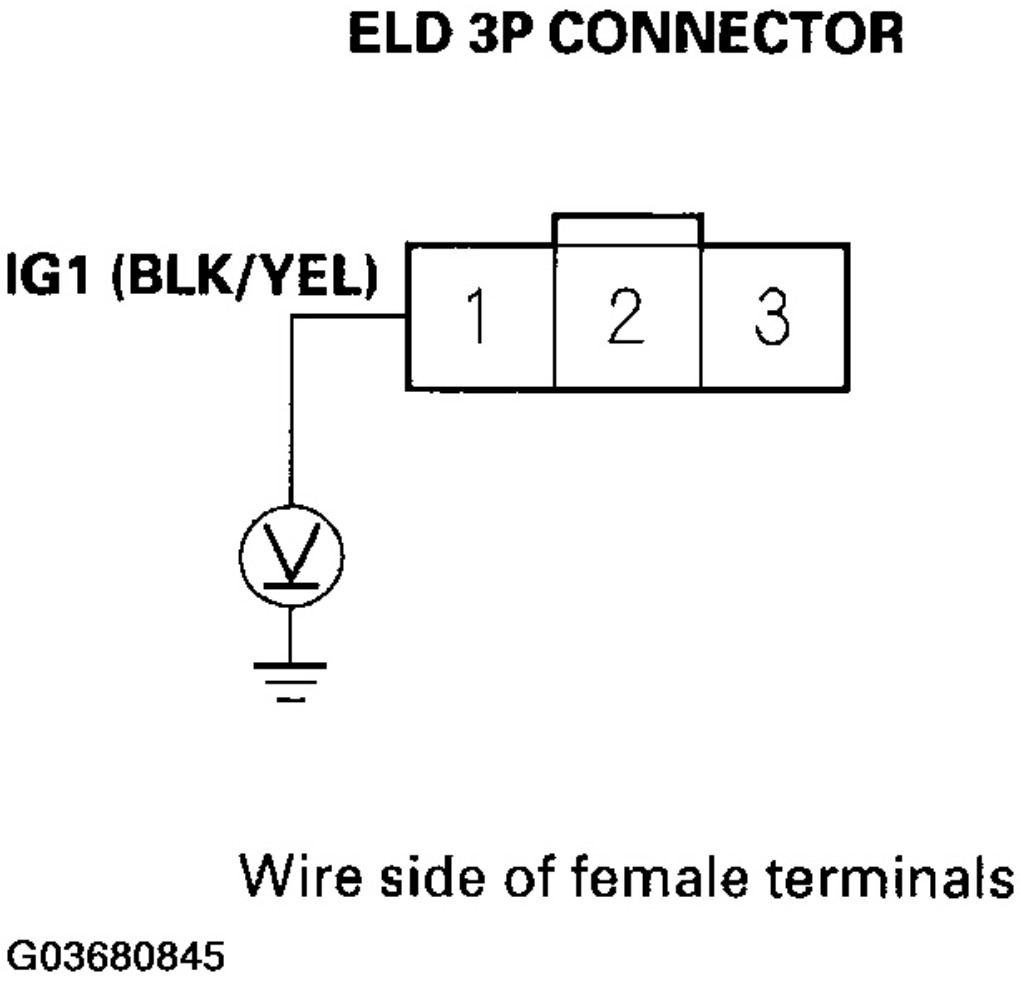


Fig. 142: Measuring Voltage Between ELD 3P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.
NO - Repair open in the wire between the No. 4 (7.5 A) fuse and the ELD.

9. Turn the ignition switch OFF.
10. Connect ELD 3P connector terminal No. 3 to body ground with a jumper wire.

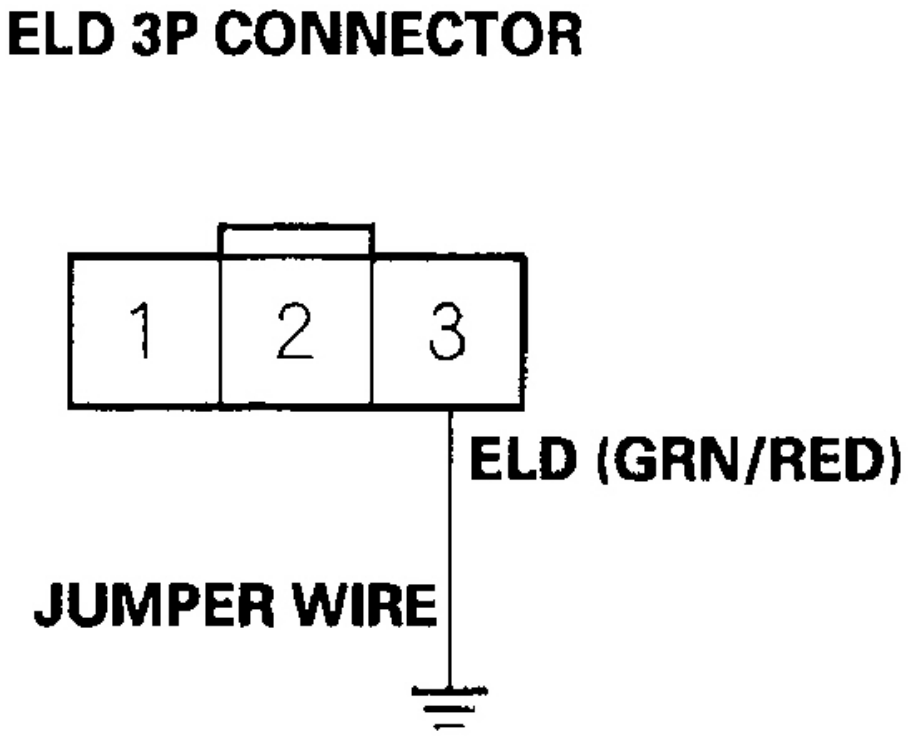


Fig. 143: Connecting ELD 3P Connector Terminal No. 3 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Disconnect ECM connector A (32P).
12. Check for continuity between ECM connector terminal A30 and body ground.

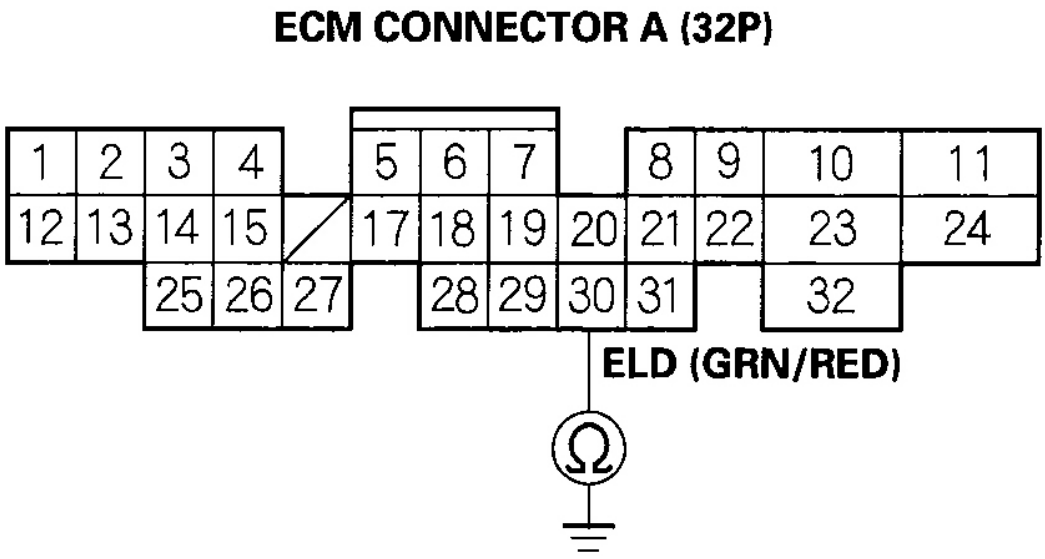


Fig. 144: Checking Continuity Between ECM Connector Terminal A30 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 13.

NO - Repair open in the wire between the ECM (A30) and the ELD.

13. Check for continuity between ELD 3P connector terminal No. 2 and body ground.

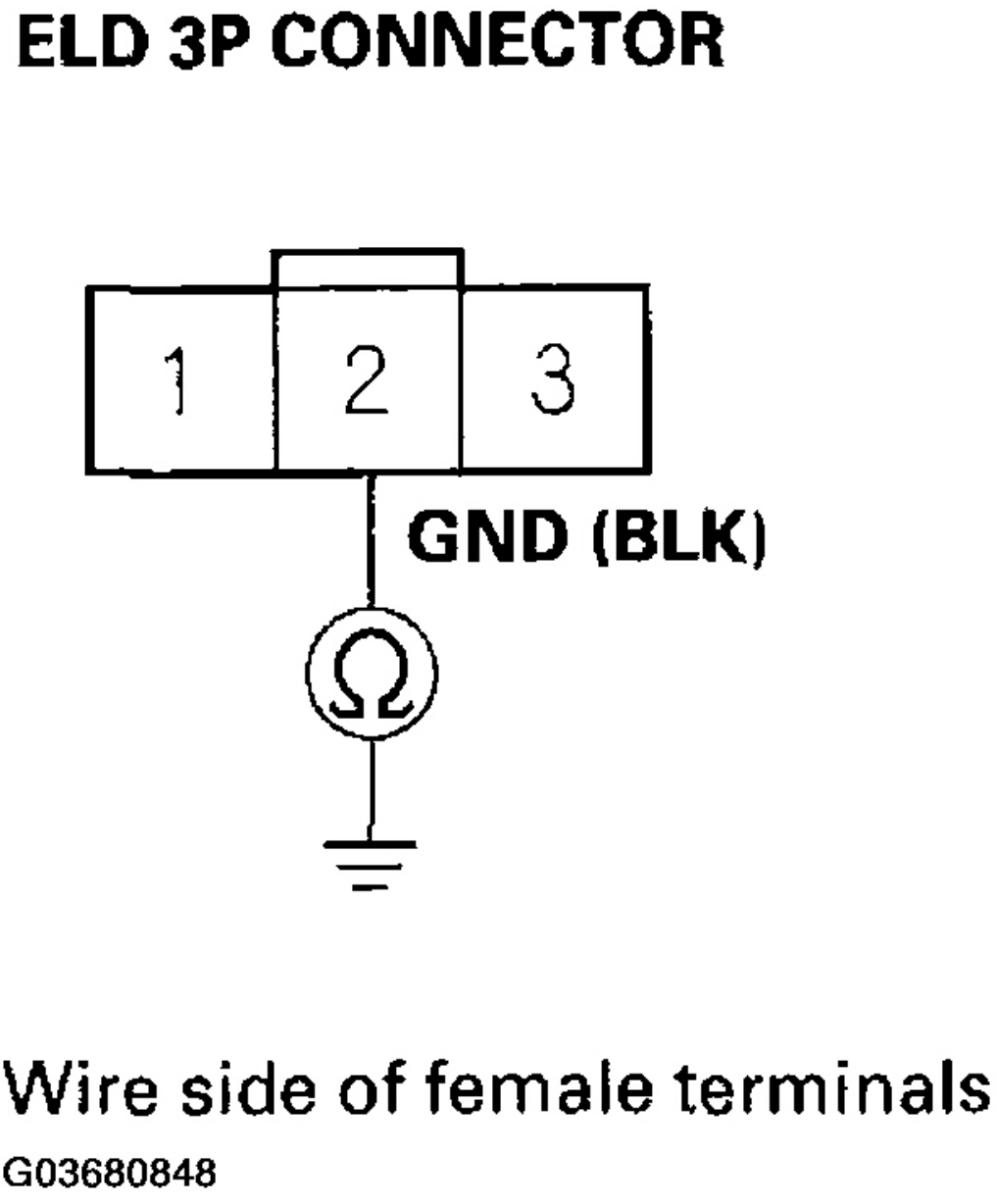


Fig. 145: Checking Continuity Between ELD 3P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 14.

NO - Repair open in the wire between ELD connector terminal No. 2 and G301.

14. Reconnect the ELD 3P connector.
15. Start the engine, and let it idle.
16. While measuring voltage between ECM connector terminals A30 and B20, turn the headlights on (low).

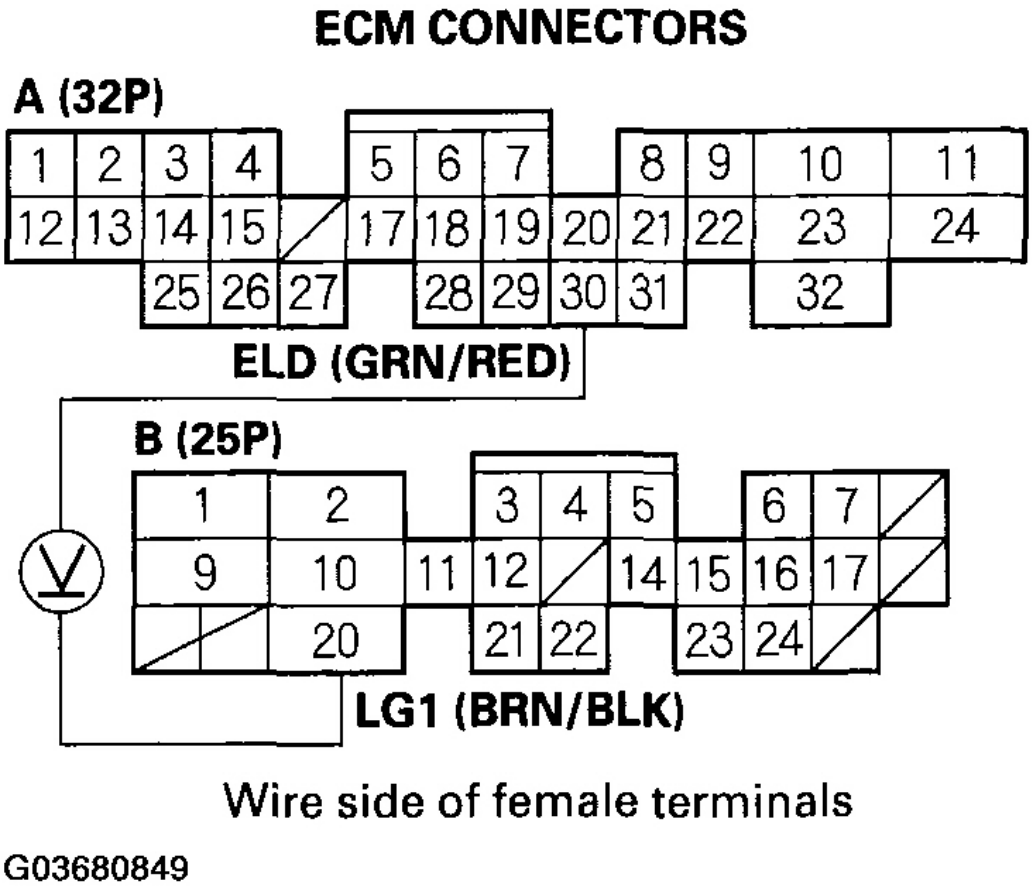


Fig. 146: Measuring Voltage Between ECM Connector Terminals A30 And B20
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the voltage drop?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Replace the under-hood fuse/relay box.

DTC P1522: BRAKE BOOSTER PRESSURE SENSOR CIRCUIT LOW VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine, and let it idle.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1522 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the brake booster pressure sensor and the ECM.

4. Turn the ignition switch OFF.
5. Disconnect the brake booster pressure sensor 3P connector.
6. Turn the ignition switch ON (II).
7. Measure voltage between brake booster pressure sensor 3P connector terminals No. 1 and No. 2.

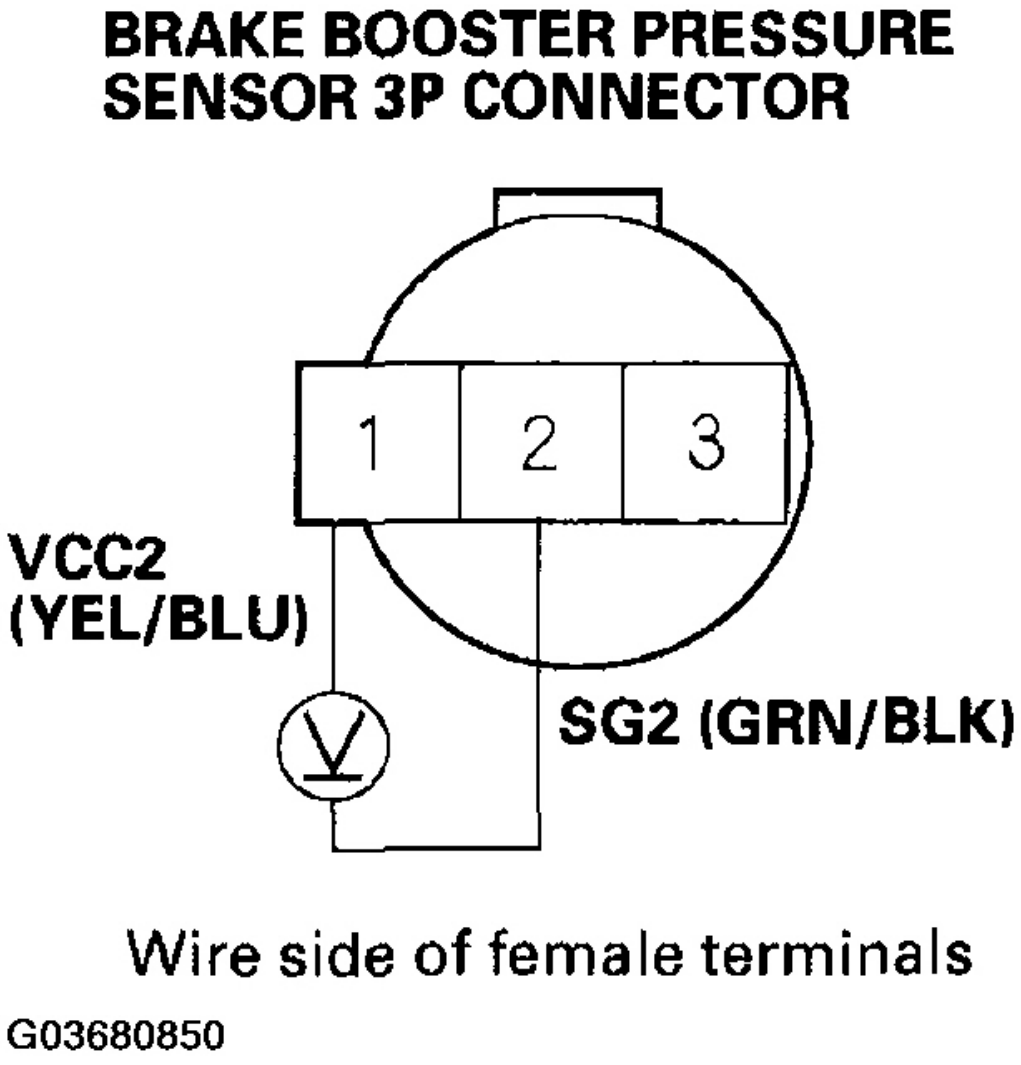


Fig. 147: Measuring Voltage Between Brake Booster Pressure Sensor 3P Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 9 .
NO - Go to step 8.

8. Measure voltage between ECM connector terminals C18 and C28.

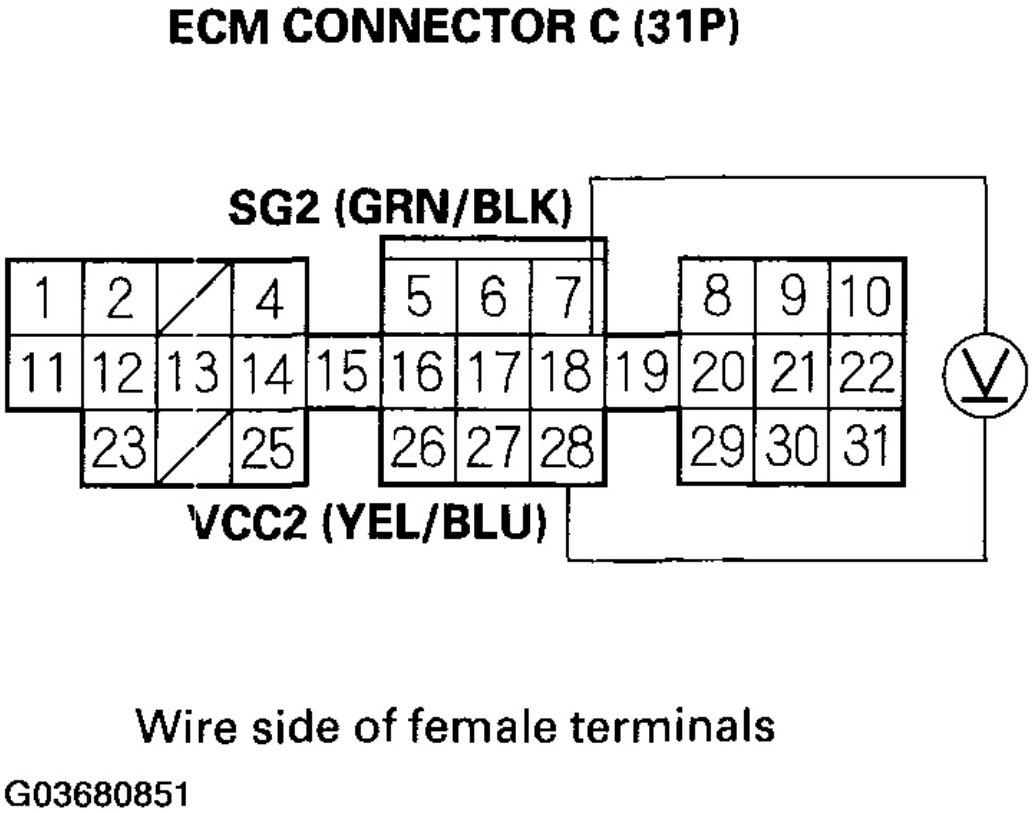


Fig. 148: Measuring Voltage Between ECM Connector Terminals C18 And C28
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the ECM (C28) and the brake booster pressure sensor.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM**

UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

9. Turn the ignition switch OFF.
10. Wait for 1 minute. If the radiator fan is running, wait for 1 minute after the radiator fan stops.
11. Disconnect ECM connector A (32P).
12. Check for continuity between brake booster pressure sensor 3P connector terminal No. 3 and body ground.

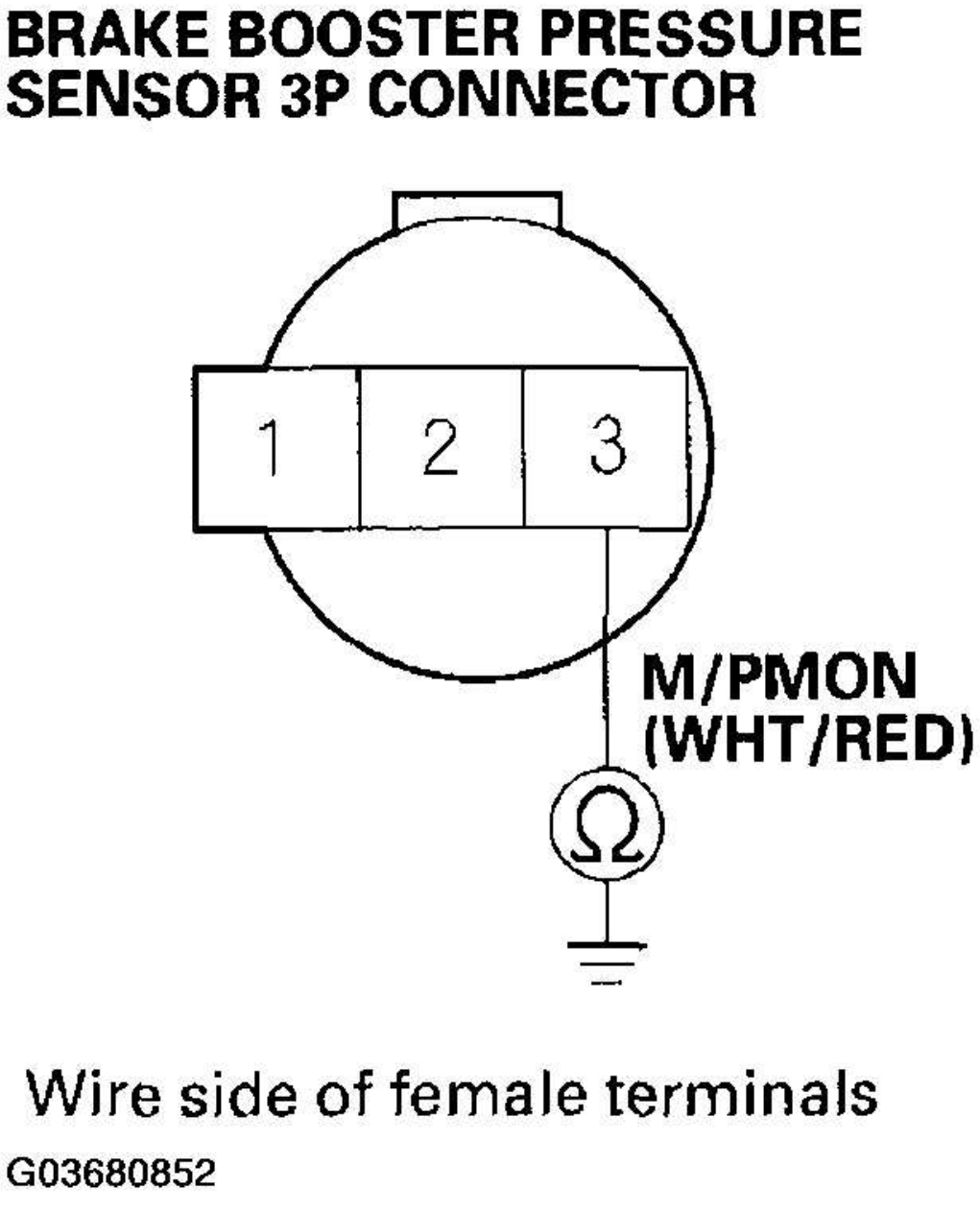


Fig. 149: Checking Continuity Between Brake Booster Pressure Sensor 3P Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (A10) and the brake booster pressure sensor.

NO - Go to step 13.

13. Substitute a known-good brake booster pressure sensor, then recheck.
14. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1522 indicated?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Check the brake vacuum line. If the line is OK, replace the original brake booster pressure sensor.

DTC P1523: BRAKE BOOSTER PRESSURE SENSOR CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Start the engine, and let it idle.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1523 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the brake booster pressure sensor and the

ECM.

4. Turn the ignition switch OFF.
5. Disconnect the brake booster pressure sensor 3P connector.
6. Turn the ignition switch ON (II).
7. Measure voltage between brake booster pressure sensor 3P connector terminal No. 3 and body ground.

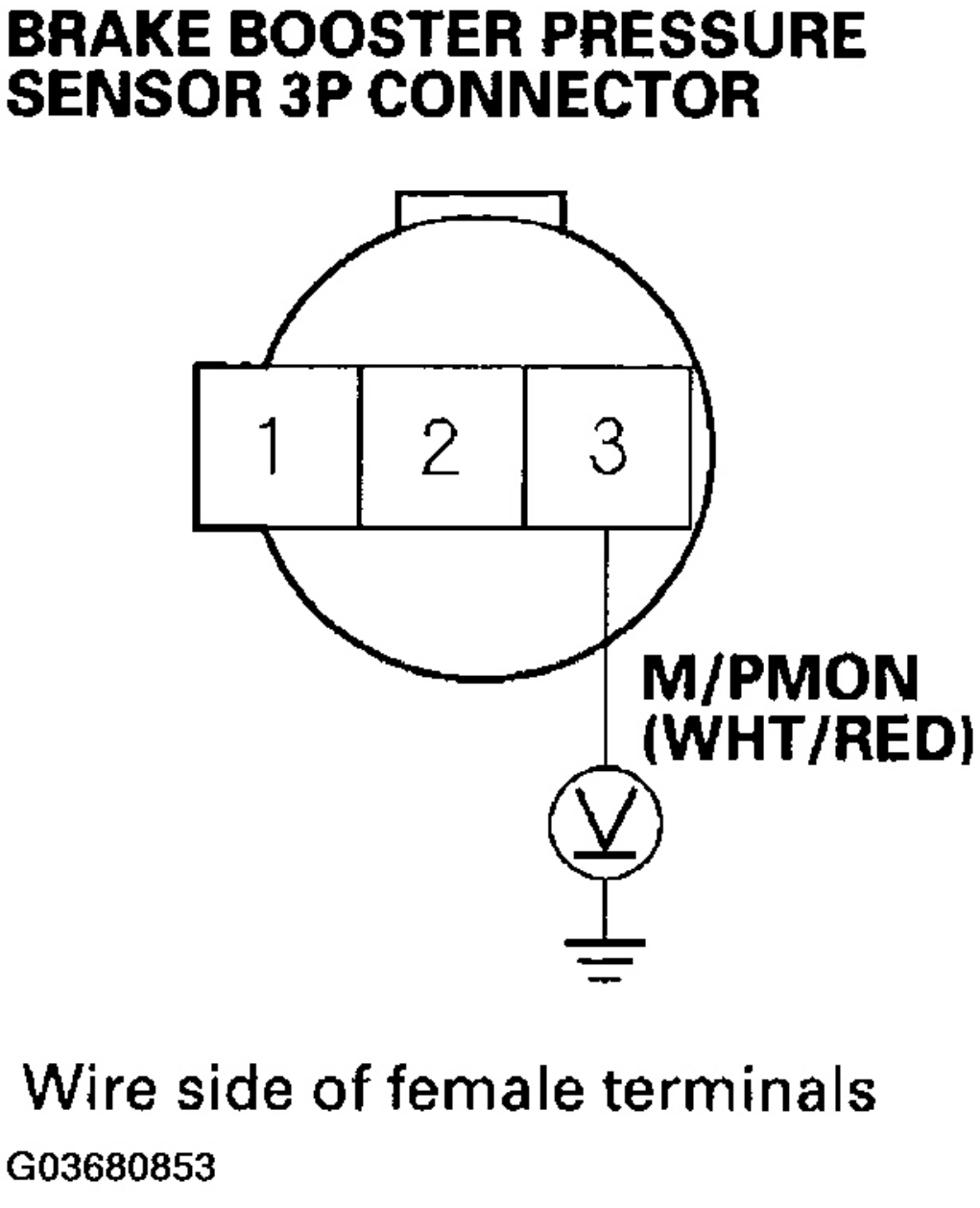


Fig. 150: Measuring Voltage Between Brake Booster Pressure Sensor 3P Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 8.

NO - Go to step 9 .

8. Measure voltage between brake booster pressure sensor 3P connector terminals No. 1 and No. 2.

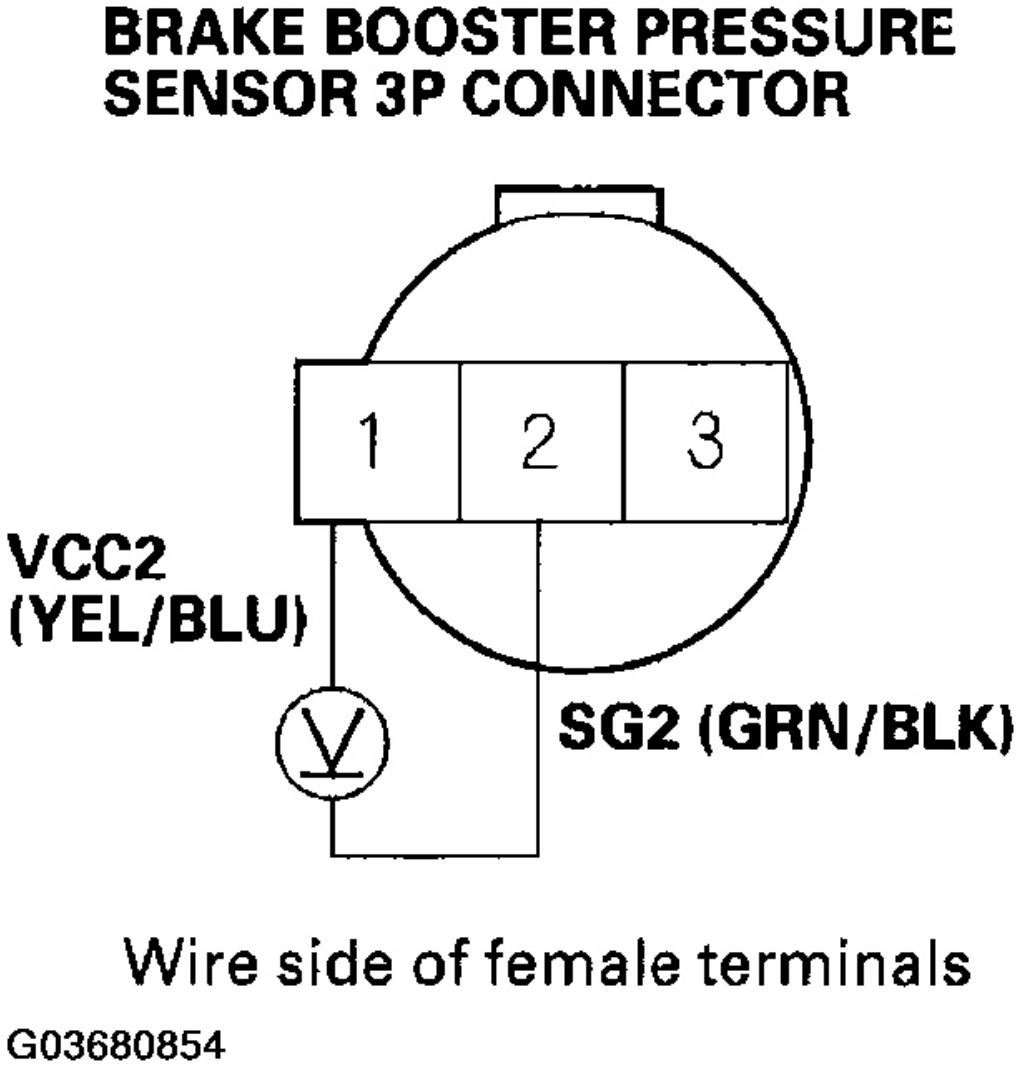


Fig. 151: Measuring Voltage Between Brake Booster Pressure Sensor 3P Connector Terminals No. 1 And 2

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 14 .

NO - Repair open in the wire between the ECM (C18) and the brake booster pressure sensor.

9. Turn the ignition switch OFF.
10. Wait for 1 minute. If the radiator fan is running, wait for 1 minute after the radiator fan stops.
11. Disconnect ECM connector A (32P).
12. Connect brake booster pressure sensor 3P connector terminal No. 3 to body ground with a jumper wire.

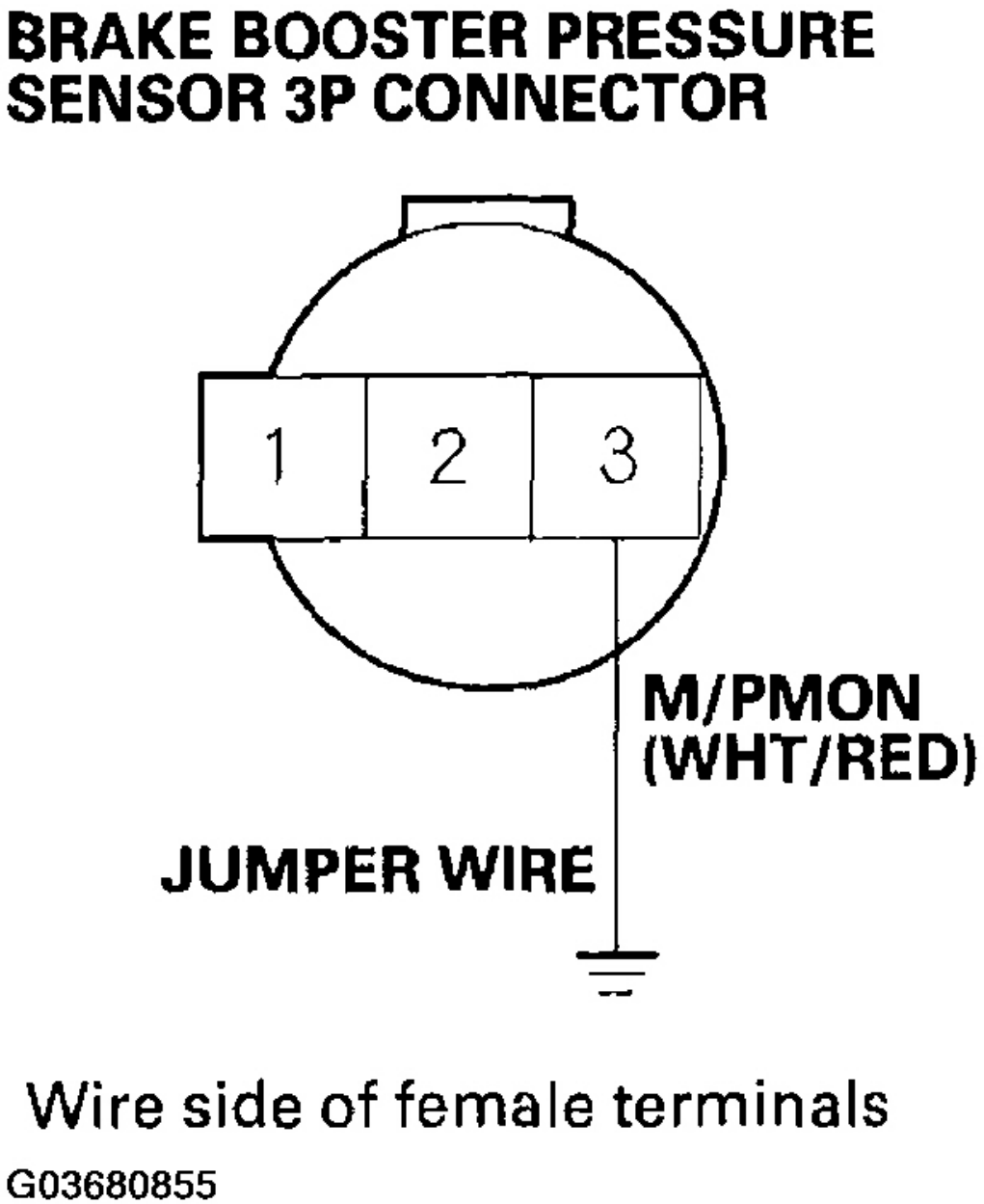


Fig. 152: Connecting Brake Booster Pressure Sensor 3P Connector Terminal No. 3 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Check for continuity between ECM connector terminal A10 and body ground.

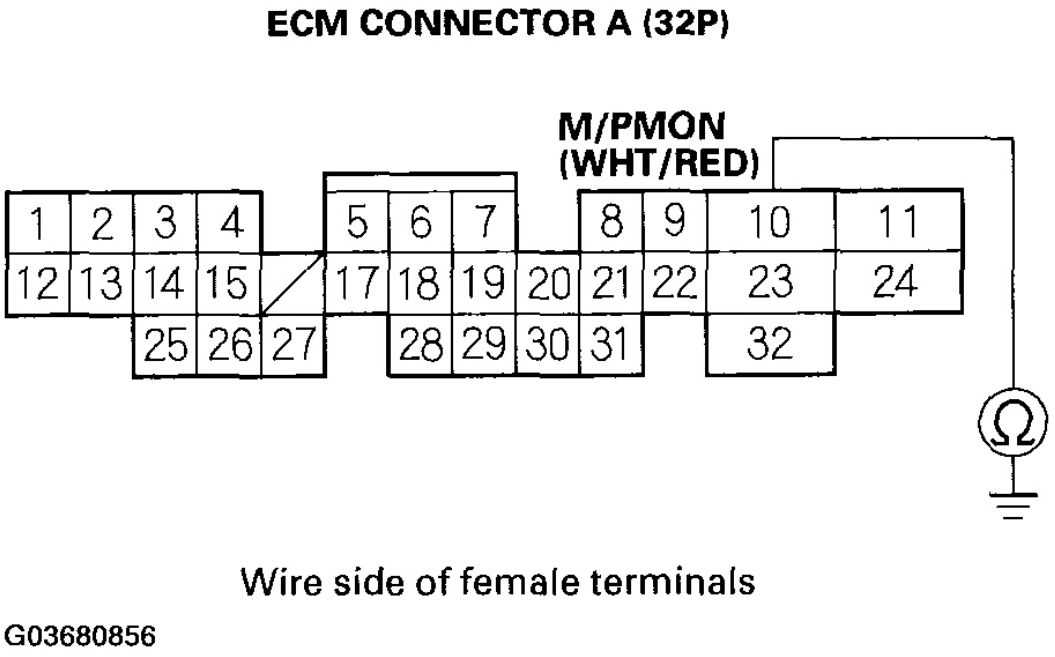


Fig. 153: Checking For Continuity Between ECM Connector Terminal A10 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (A10) and the brake booster pressure sensor.

14. Substitute a known-good brake booster pressure sensor, then recheck.
15. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1523 indicated?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Check the brake vacuum line. If the line is OK, replace the original brake booster pressure sensor.

DTC P1541: HTRS PASSENGER COMPARTMENT HEATER STANDBY SIGNAL CIRCUIT LOW INPUT; DTC P1542: HTRS PASSENGER COMPARTMENT HEATER STANDBY SIGNAL CIRCUIT HIGH INPUT

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Turn the ignition switch ON (II).
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P1541 or P1542 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the heater control panel and the ECM.

4. Turn the ignition switch OFF.
5. Disconnect the heater control panel 22P connector.
6. Turn the ignition switch ON (II).

7. Measure voltage between ECM connector terminal A23 and body ground.

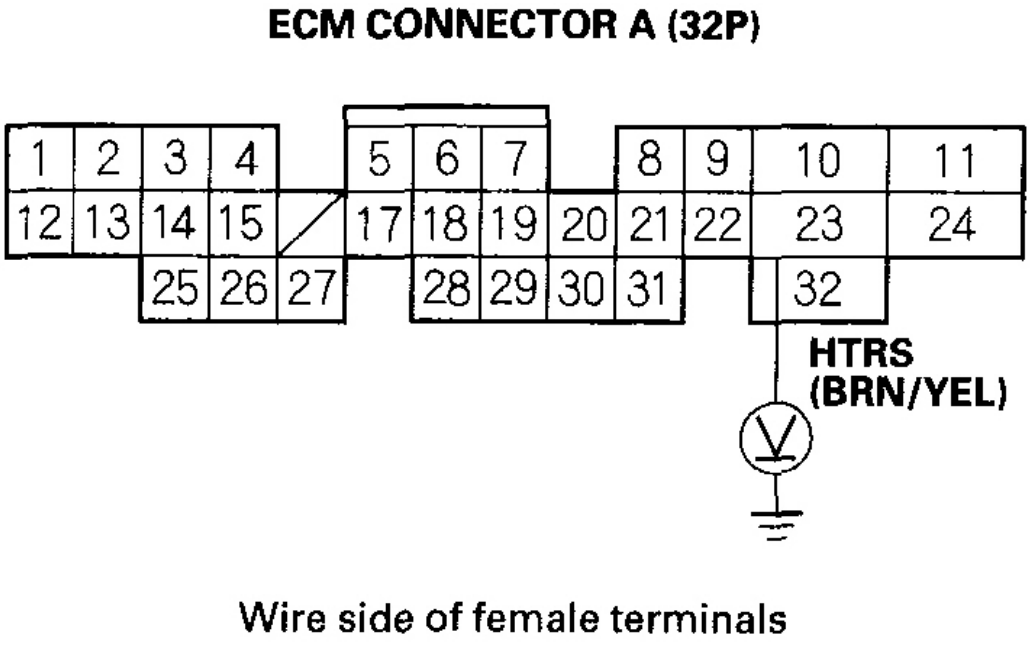


Fig. 154: Measuring Voltage Between ECM Connector Terminal A23 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 11 .
NO - Go to step 8.

8. Turn the ignition switch OFF, and wait for 10 seconds.
9. Disconnect ECM connector A (32P).
10. Check for continuity between ECM connector terminal A23 and body ground.

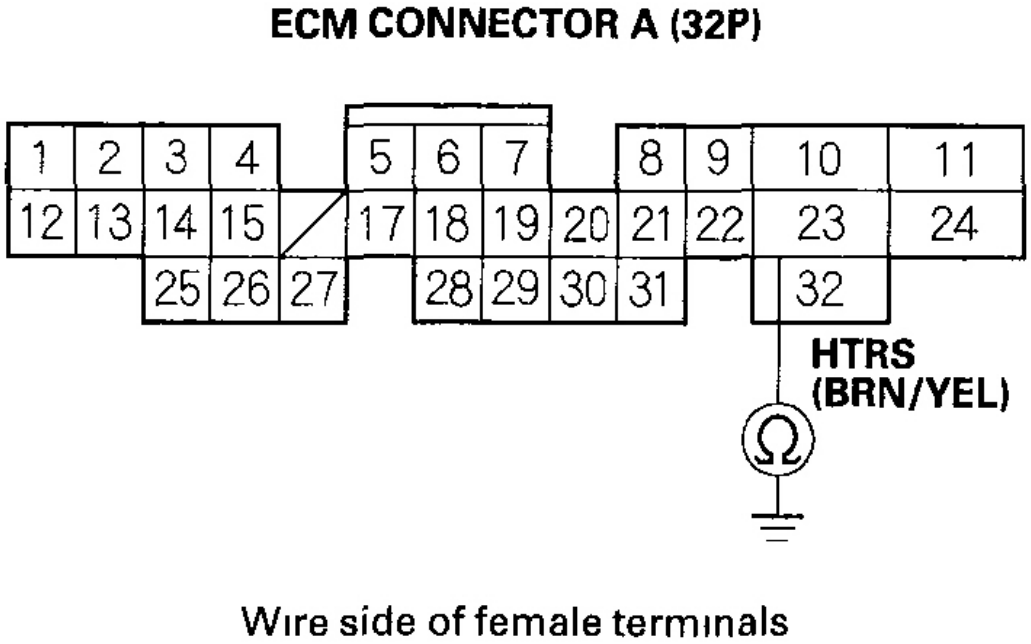


Fig. 155: Checking Continuity Between ECM Connector Terminal A23 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (A23) and the heater control panel.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

11. Turn the ignition switch OFF, and wait for 10 seconds.
12. Disconnect ECM connector A (32P).
13. Check for continuity between ECM connector terminal A23 and heater control panel 22P connector terminal No. 8.

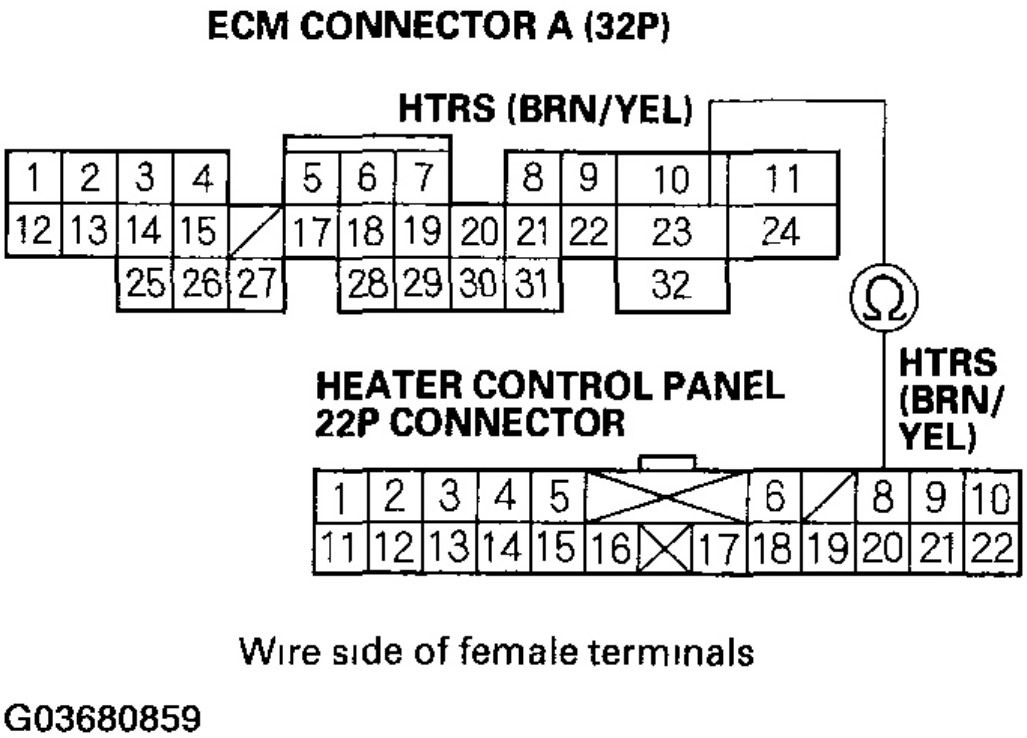


Fig. 156: Checking Continuity Between ECM Connector Terminal A23 And Heater Control Panel 22P Connector Terminal No. 8
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the heater control panel.

NO - Repair open in the wire between the ECM (A23) and the heater control panel.

DTC P15B2: BRAKE FLUID PRESSURE SENSOR A CIRCUIT LOW VOLTAGE (2005-2006 M/T

MODELS);

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check BRAKE FLUID PRESSURE SENSOR A with the HDS.

   Is there 0.08 V or less?

   YES - Go to step 3.

   NO - The system is OK at this time. Check for poor connections or loose terminals at brake fluid pressure sensor A and the ECM.
3. Turn the ignition switch OFF.
4. Disconnect the brake fluid pressure sensor A 3P connector.
5. Turn the ignition switch ON (II).
6. Measure voltage between brake fluid pressure sensor A 3P connector terminals No. 1 and No. 2.

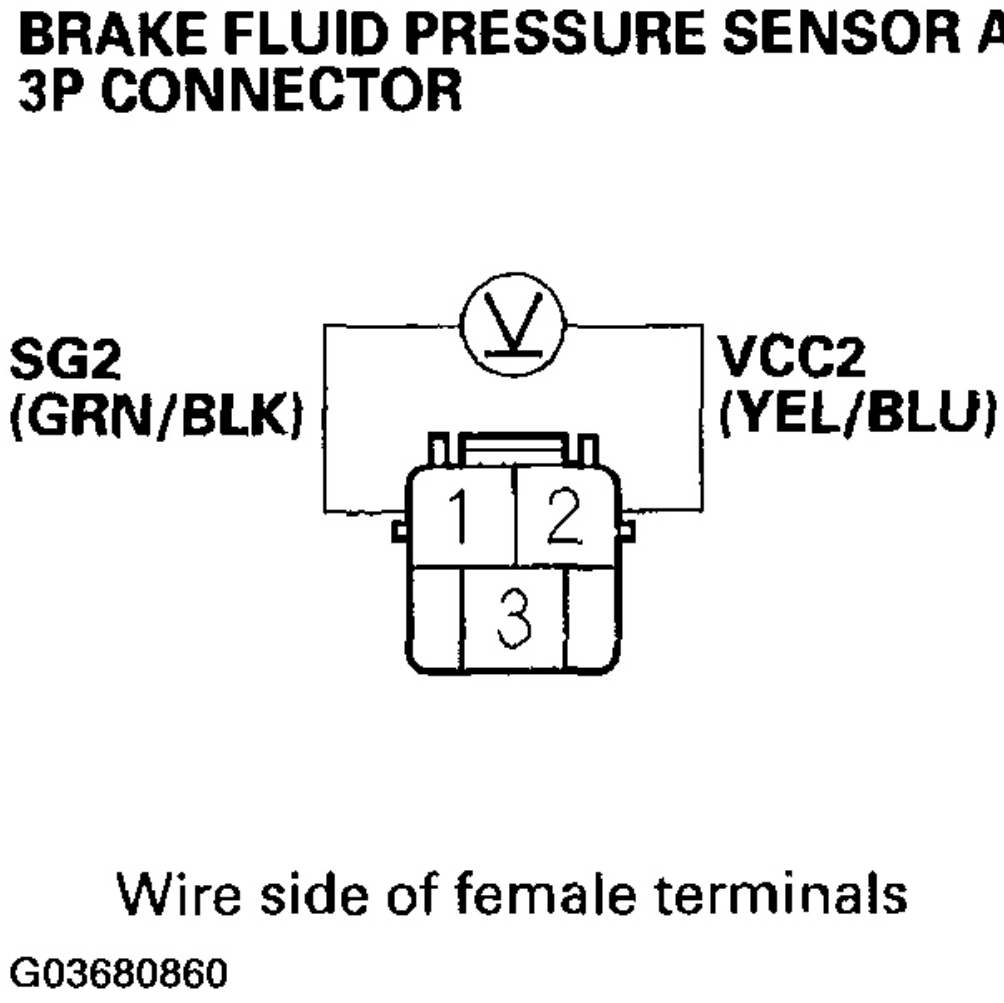


Fig. 157: Measuring Voltage Between Brake Fluid Pressure Sensor 3P Connector Terminals No. And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5.0 V?

YES - Go to step 11 .

NO - Go to step 7.

7. Turn the ignition switch OFF, and wait for 10 seconds.

8. Disconnect ECM connector C (31P).
9. Connect ECM connector terminal C28 to body ground with a jumper wire.

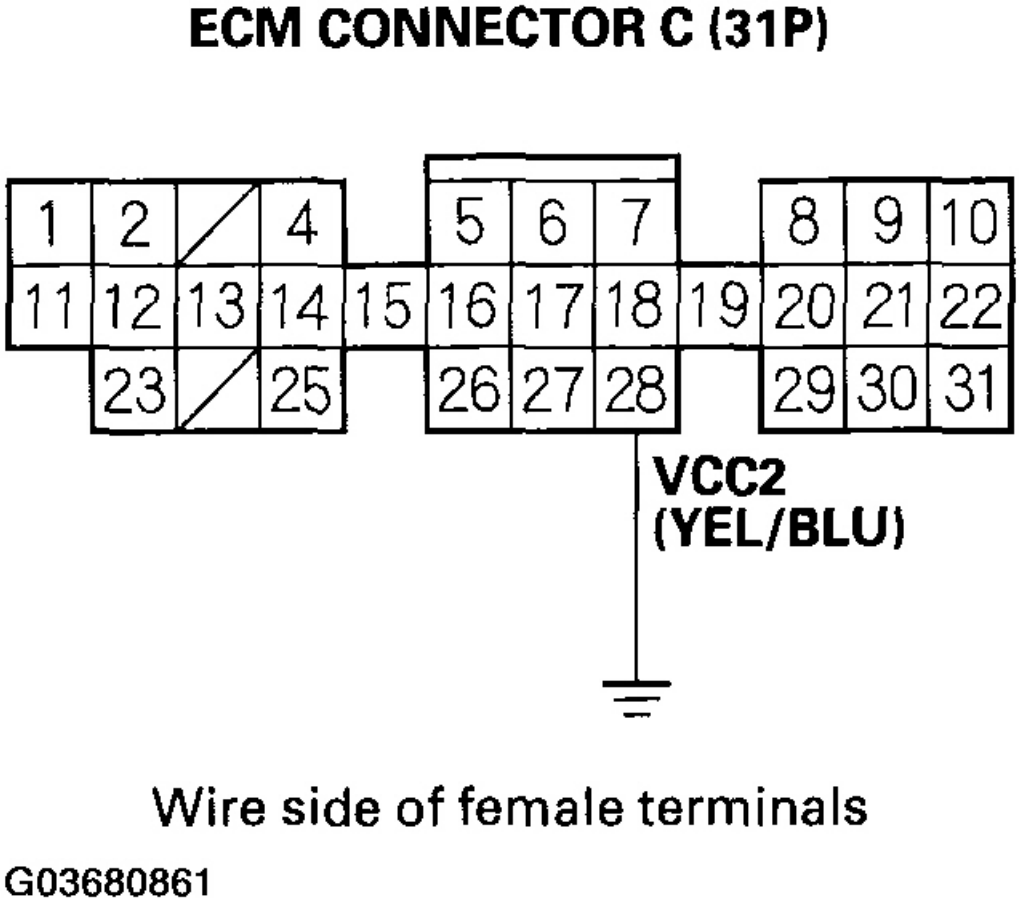


Fig. 158: Connecting ECM Connector Terminal C28 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Check for continuity between brake fluid pressure sensor A 3P connector terminal No. 2 and body ground.

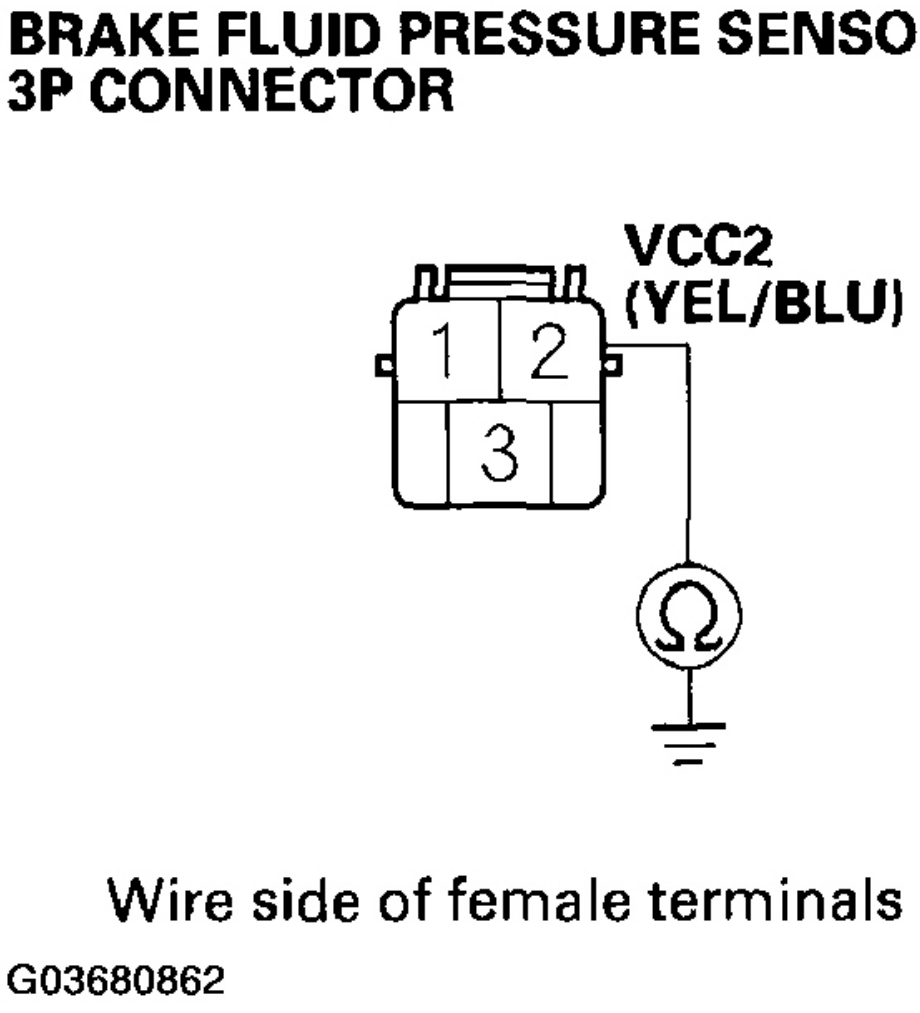


Fig. 159: Checking Continuity Between Brake Fluid Pressure Sensor 3P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/ indication goes away with a known-good ECM,

replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (C28) and brake fluid pressure sensor A.

11. Turn the ignition switch OFF, and wait for 10 seconds.
12. Disconnect ECM connector A (32P).
13. Check for continuity between brake fluid pressure sensor A 3P connector terminal No. 3 and body ground.

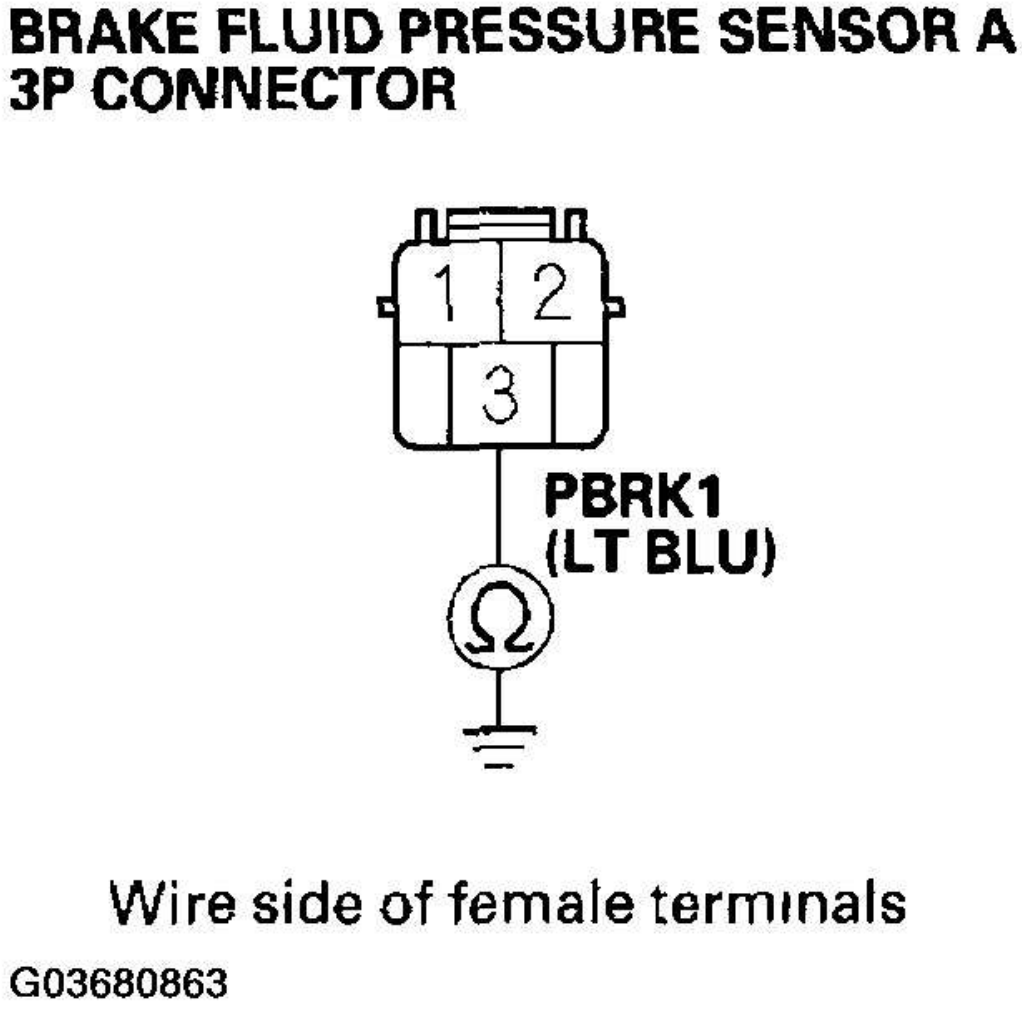


Fig. 160: Checking Continuity Between Brake Fluid Pressure Sensor 3P

Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground between the ECM (A5) and brake fluid pressure sensor A.

NO - Go to step 14.

14. Connect ECM connector terminal A5 to body ground with a jumper wire.

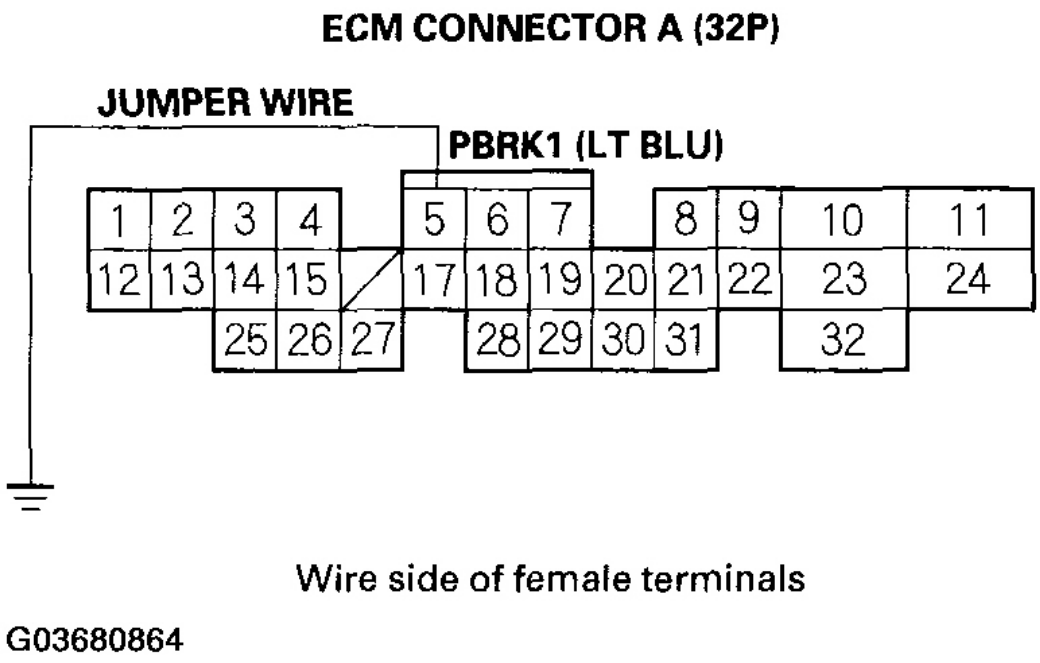


Fig. 161: Connecting ECM Connector Terminal A5 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Check for continuity between brake fluid pressure sensor A 3P connector terminal No. 3 and body ground.

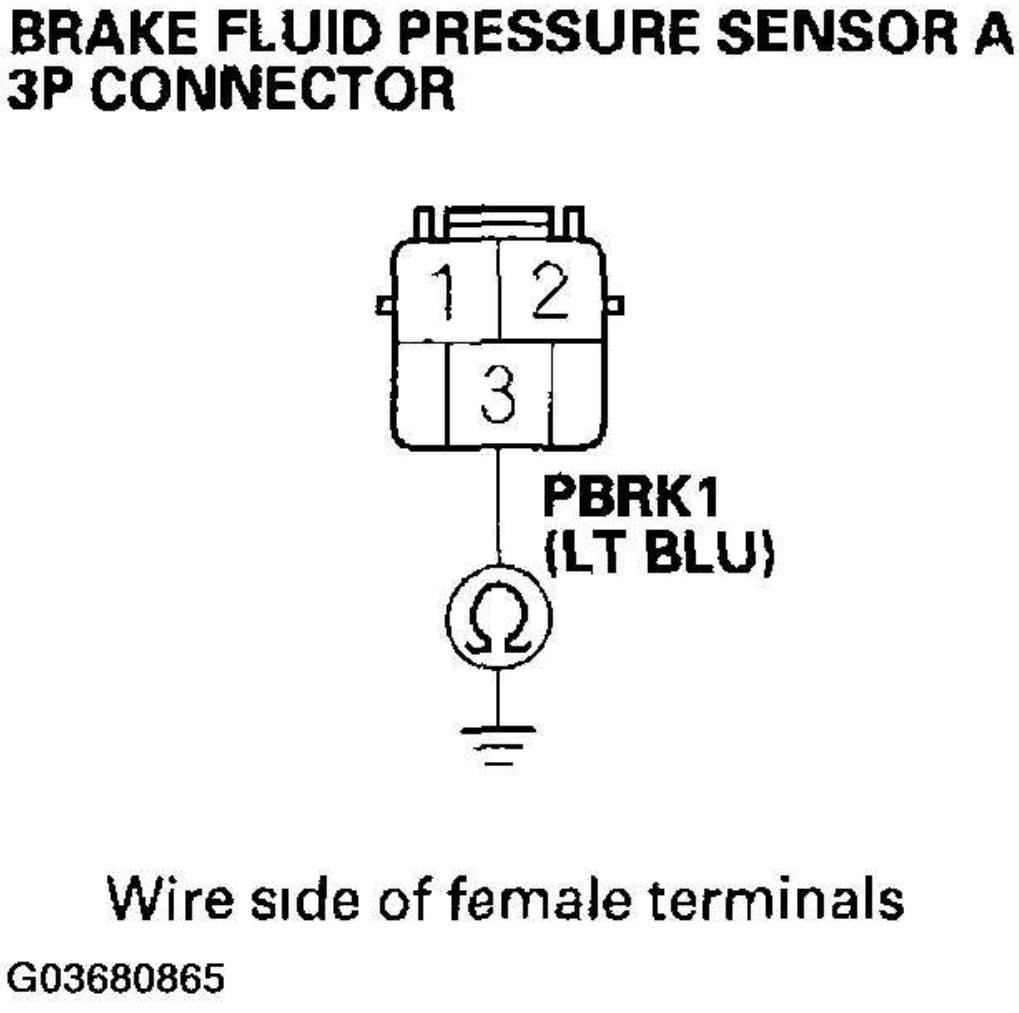


Fig. 162: Checking Continuity Between Brake Fluid Pressure Sensor 3P Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 16.

NO - Repair open in the wire between the ECM (A5) and brake fluid pressure sensor A.

16. Connect ECM connector A (32P).
17. Connect brake fluid pressure sensor A 3P connector terminals No. 2 and No. 3 with a jumper wire.

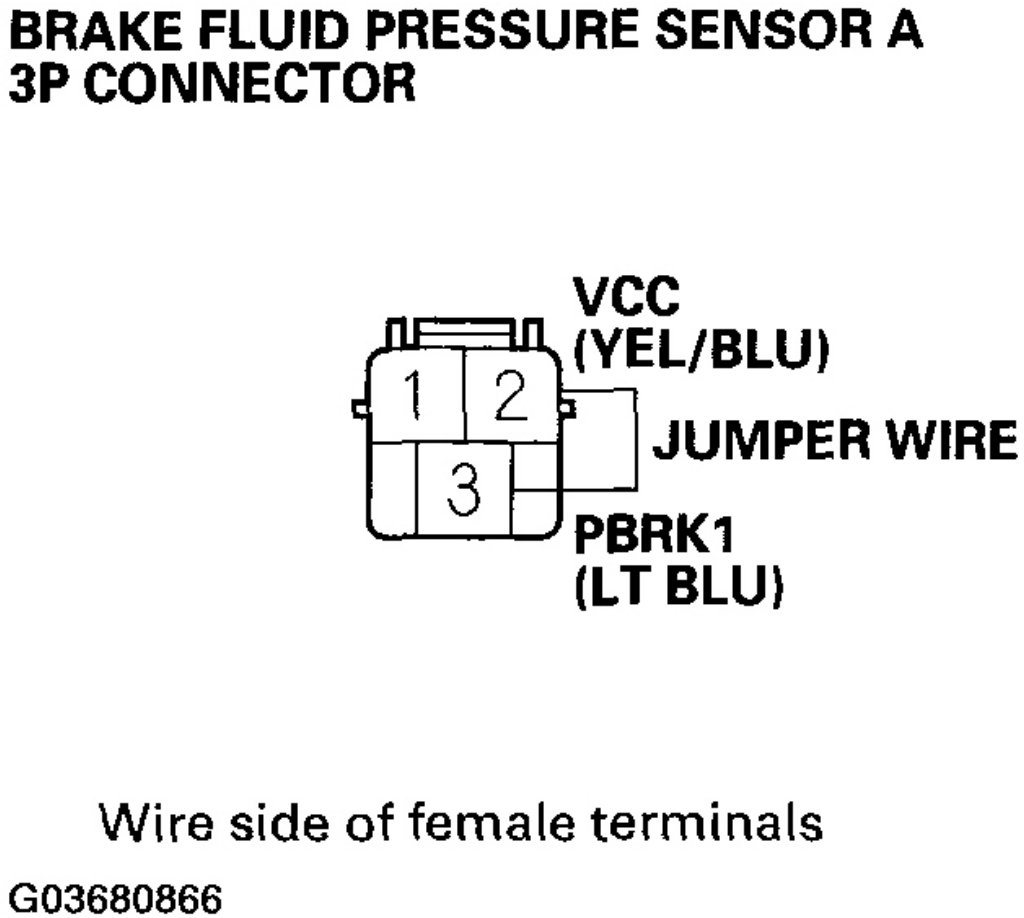


Fig. 163: Connecting Brake Fluid Pressure Sensor 3P Connector Terminals No. 2 And 3 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Turn the ignition switch ON (II).
19. Check BRAKE FLUID PRESSURE SENSOR A with the HDS.

Is there 0.08 V or less?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Replace brake fluid pressure sensor A (see **BRAKE FLUID PRESSURE SENSOR REPLACEMENT**).

DTC P15B3: BRAKE FLUID PRESSURE SENSOR A RANGE/PERFORMANCE PROBLEM (2005-2006 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check BRAKE FLUID PRESSURE SENSOR A with the HDS without pressing the brake pedal.

   Is there 2.45 MPa or more?

   YES - Go to step 3.

   NO - The system is OK at this time. Check for poor connections or loose terminals at brake fluid pressure sensor A and the ECM.
3. Turn the ignition switch OFF.
4. Disconnect the brake fluid pressure sensor A 3P connector.
5. Turn the ignition switch ON (II).
6. Measure voltage between brake fluid pressure sensor A 3P connector terminals No. 1 and No. 2.

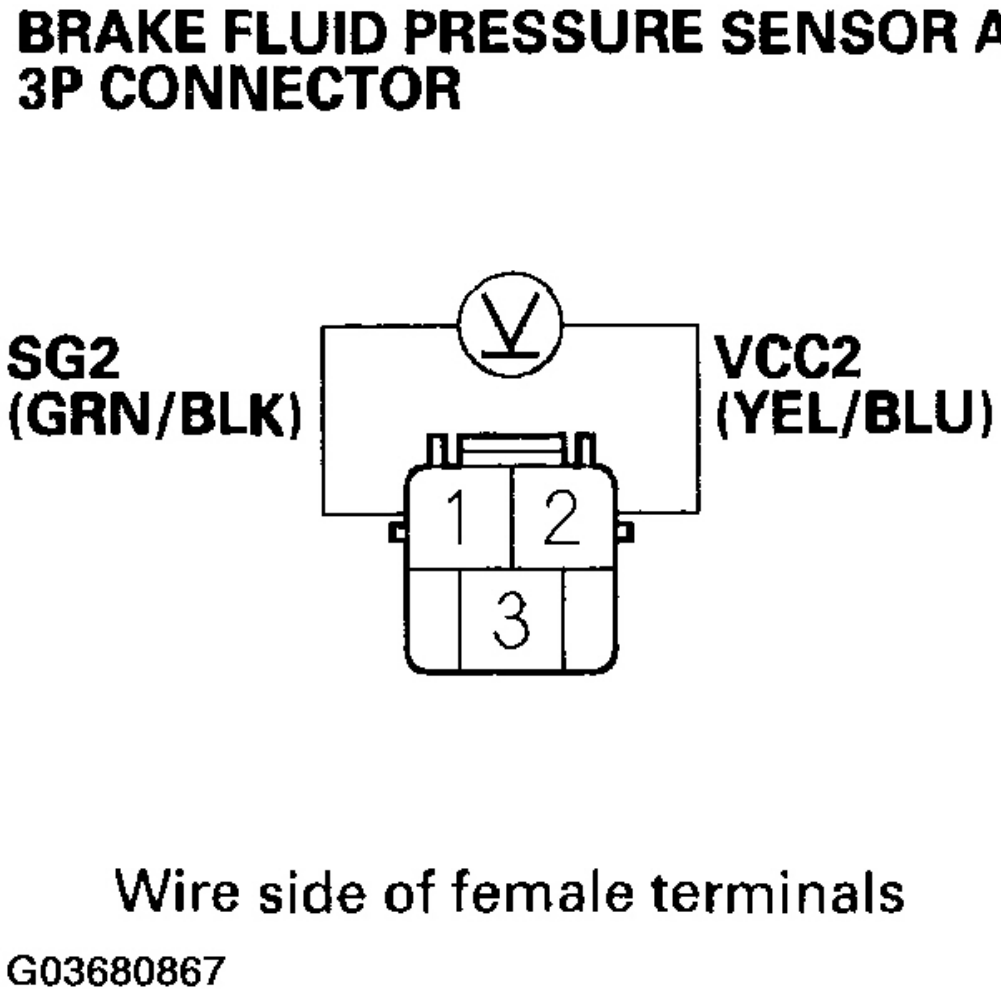


Fig. 164: Measuring Voltage Between Brake Fluid Pressure Sensor 3P Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5.0 V?

YES - Replace brake fluid pressure sensor A (see **BRAKE FLUID PRESSURE SENSOR REPLACEMENT**).

NO - Go to step 7.

7. Turn the ignition switch OFF, and wait for 10 seconds.
8. Disconnect ECM connector C (31P).
9. Connect ECM connector terminal C18 to body ground with a jumper wire.

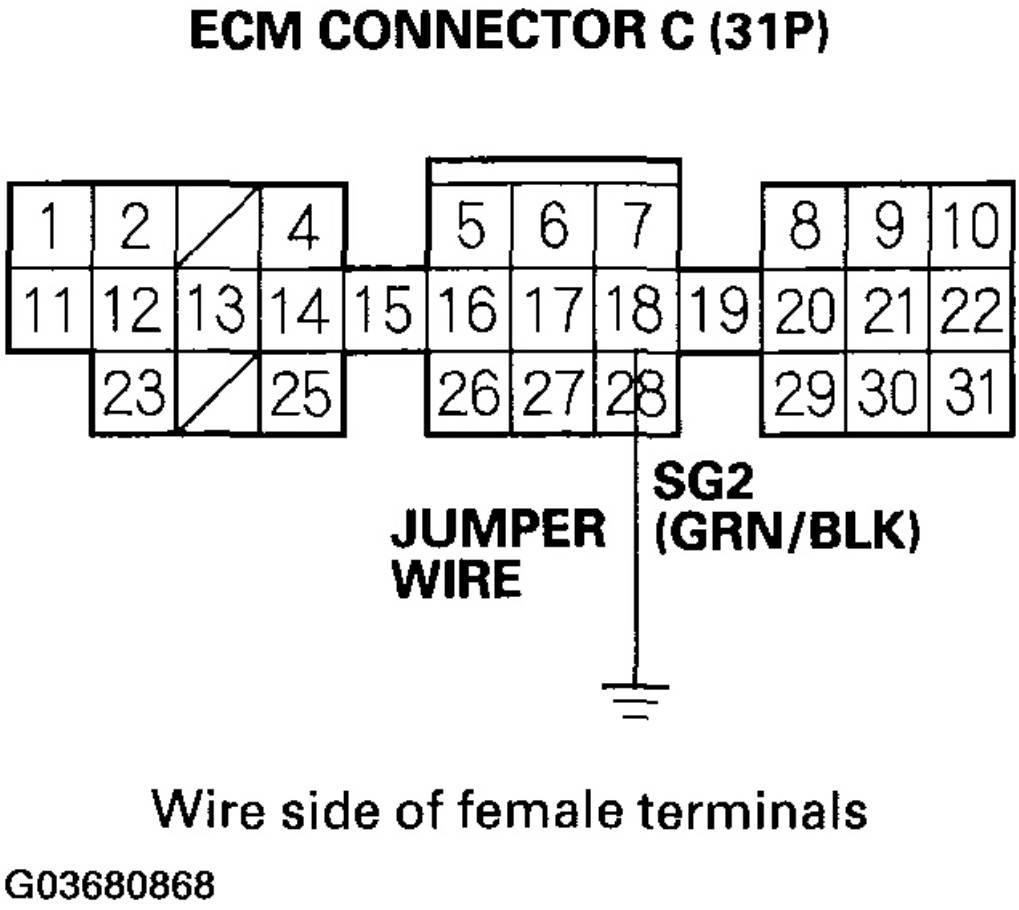


Fig. 165: Connecting ECM Connector Terminal C18 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Check for continuity between brake fluid pressure sensor A 3P connector terminal No. 1 and body ground.

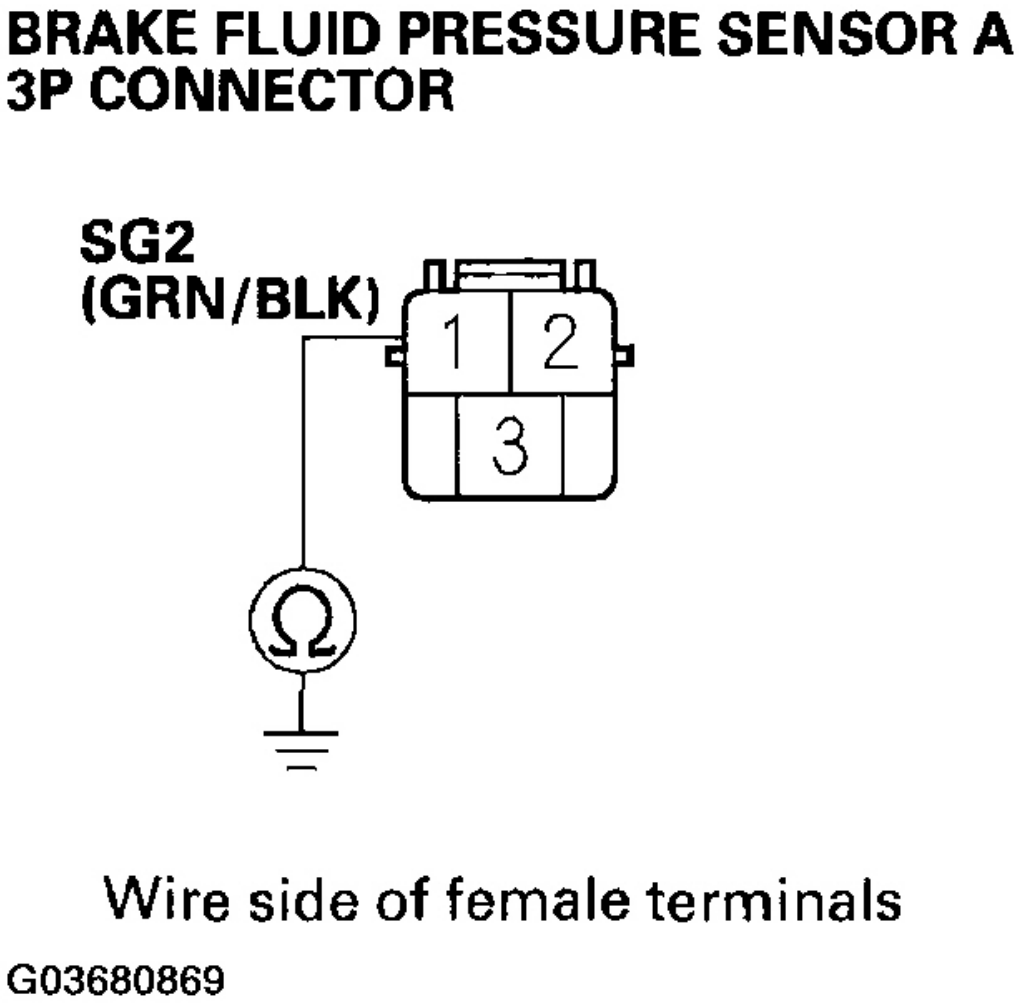


Fig. 166: Checking Continuity Between Brake Fluid Pressure Sensor 3P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM,

replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between brake fluid pressure sensor A and the ECM (C18).

DTC P15B4: BRAKE FLUID PRESSURE SENSOR B CIRCUIT LOW VOLTAGE (2005-2006 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check BRAKE FLUID PRESSURE SENSOR B with the HDS.

   Is there 0.08 V or less?

   YES - Go to step 3.

   NO - The system is OK at this time. Check for poor connections or loose terminals at brake fluid pressure sensor B and the ECM.
3. Turn the ignition switch OFF.
4. Disconnect the brake fluid pressure sensor B 3P connector.
5. Turn the ignition switch ON (II).
6. Measure voltage between brake fluid pressure sensor B 3P connector terminals No. 1 and No. 2.

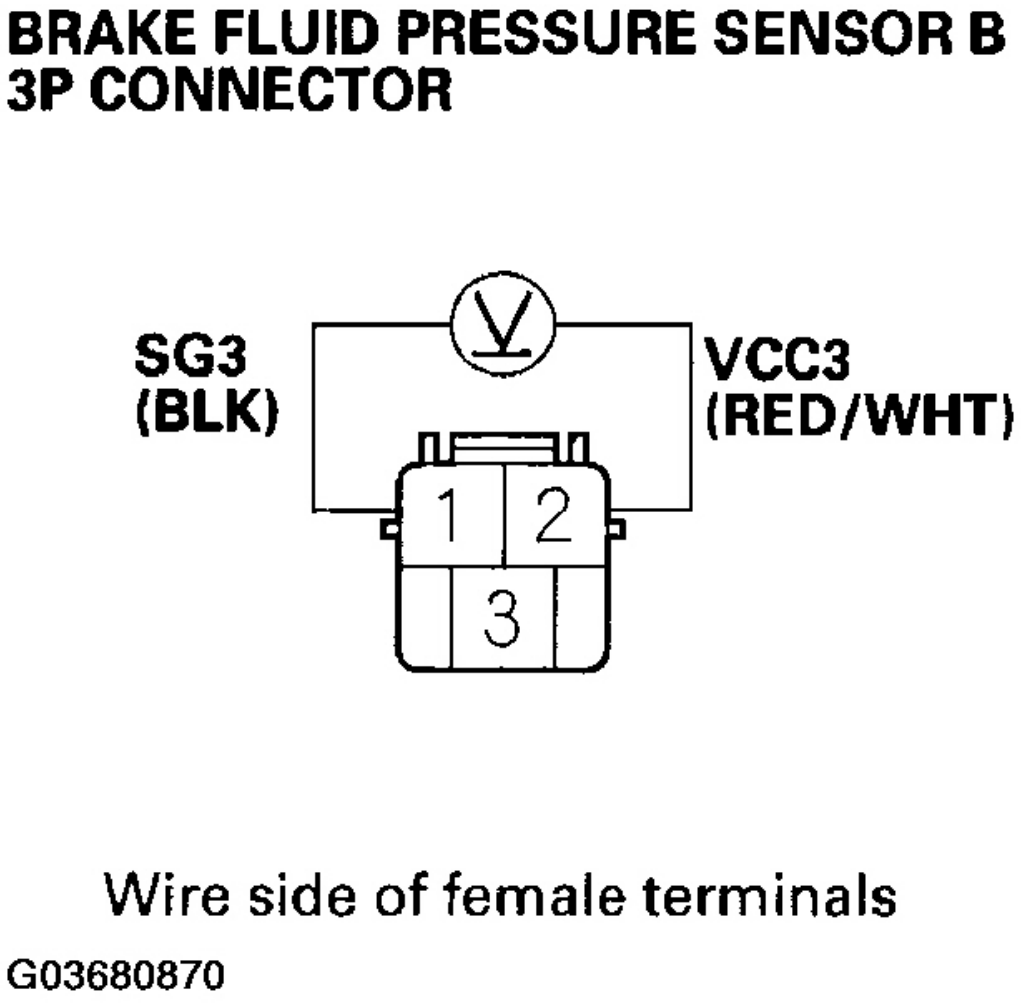


Fig. 167: Measuring Voltage Between Brake Fluid Pressure Sensor Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5.0 V?

YES - Go to step 11 .

NO - Go to step 7.

7. Turn the ignition switch OFF, and wait for 10 seconds.

8. Disconnect ECM connector C (31P).
9. Connect ECM connector terminal C23 to body ground with a jumper wire.

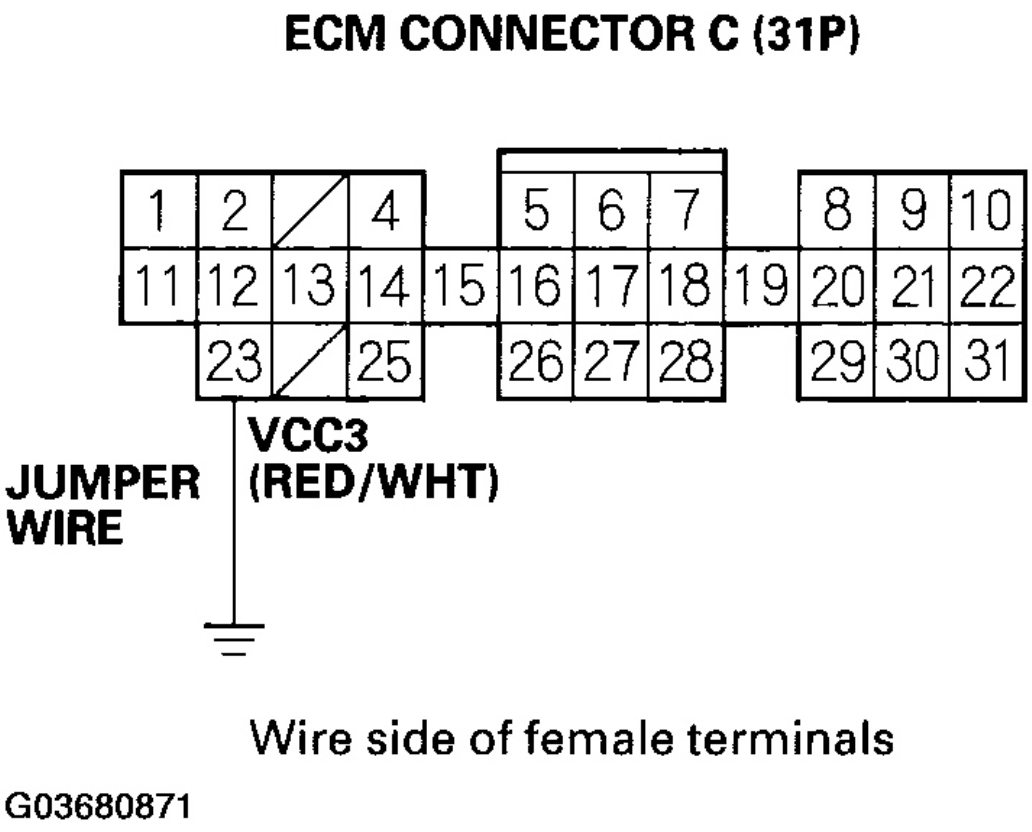


Fig. 168: Connecting ECM Connector Terminal C23 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Check for continuity between brake fluid pressure sensor B 3P connector terminal No. 2 and body ground.

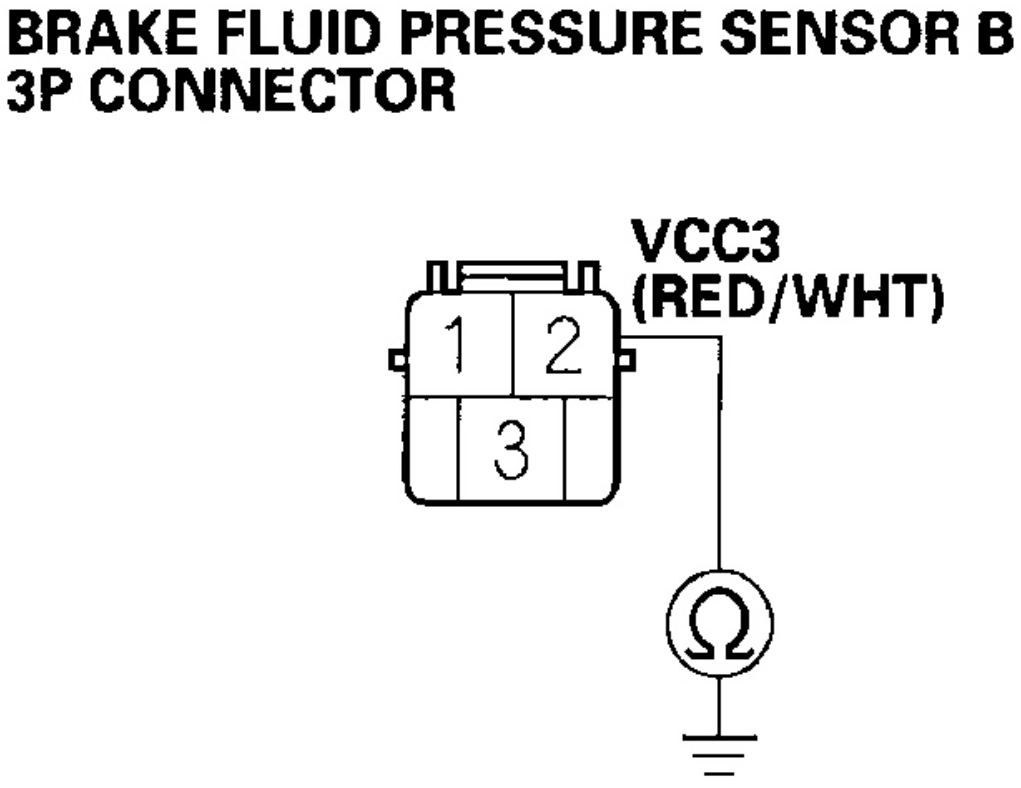


Fig. 169: Checking Continuity Between Brake Fluid Pressure Sensor Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM,

replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between the ECM (C23) and brake fluid pressure sensor B.

11. Turn the ignition switch OFF, and wait for 10 seconds.
12. Disconnect ECM connector A (32P).
13. Check for continuity between brake fluid pressure sensor B 3P connector terminal No. 3 and body ground.

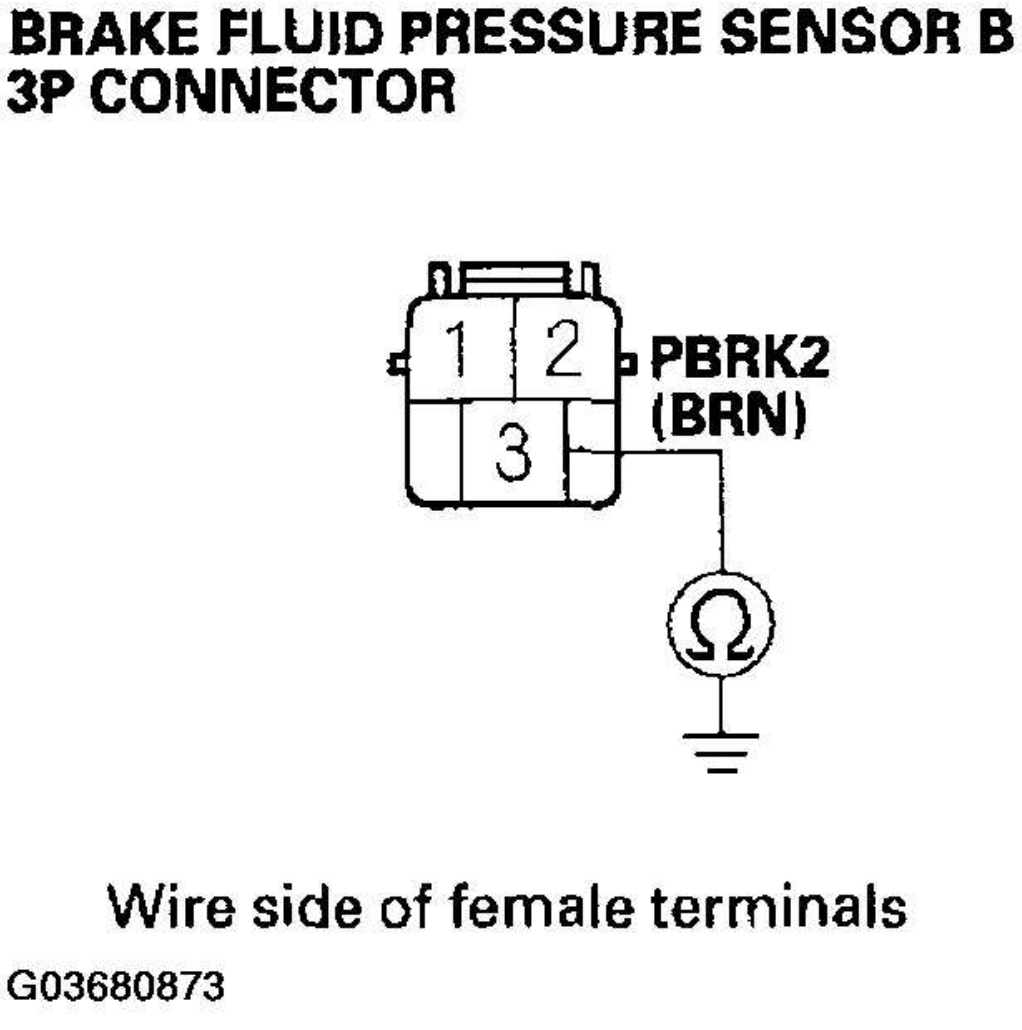


Fig. 170: Checking Continuity Between Brake Fluid Pressure Sensor

Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground between the ECM (A14) and brake fluid pressure sensor B.

NO - Go to step 14.

14. Connect ECM connector terminals A22 to body ground with a jumper wire.

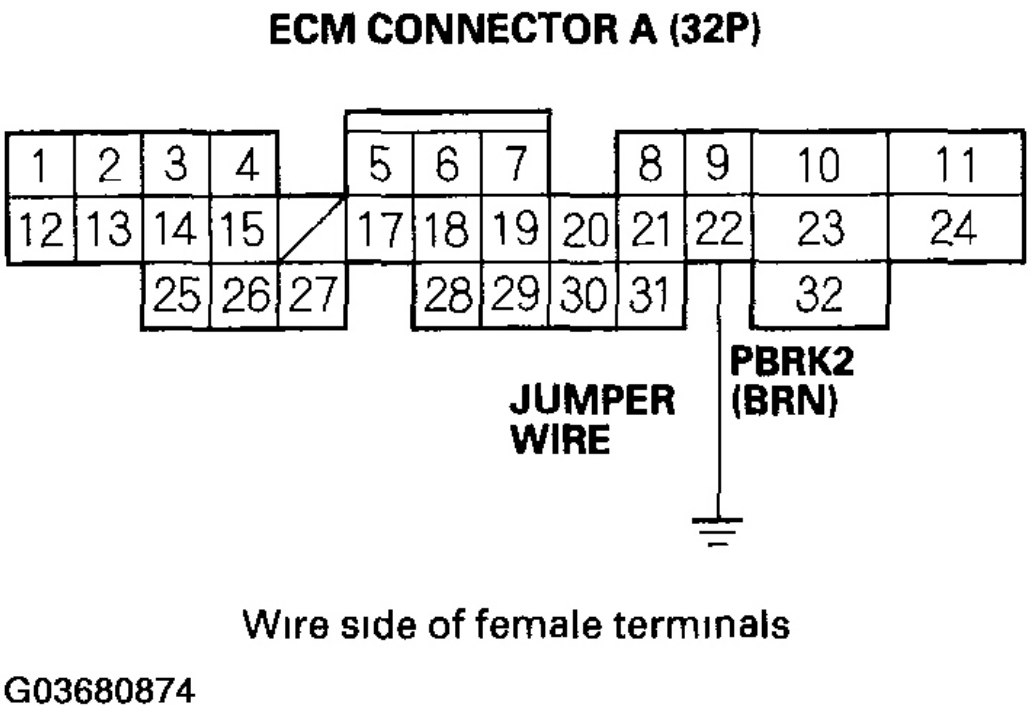


Fig. 171: Connecting ECM Connector Terminals A22 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Check for continuity between brake fluid pressure sensor B 3P connector terminal No. 3 and body ground.

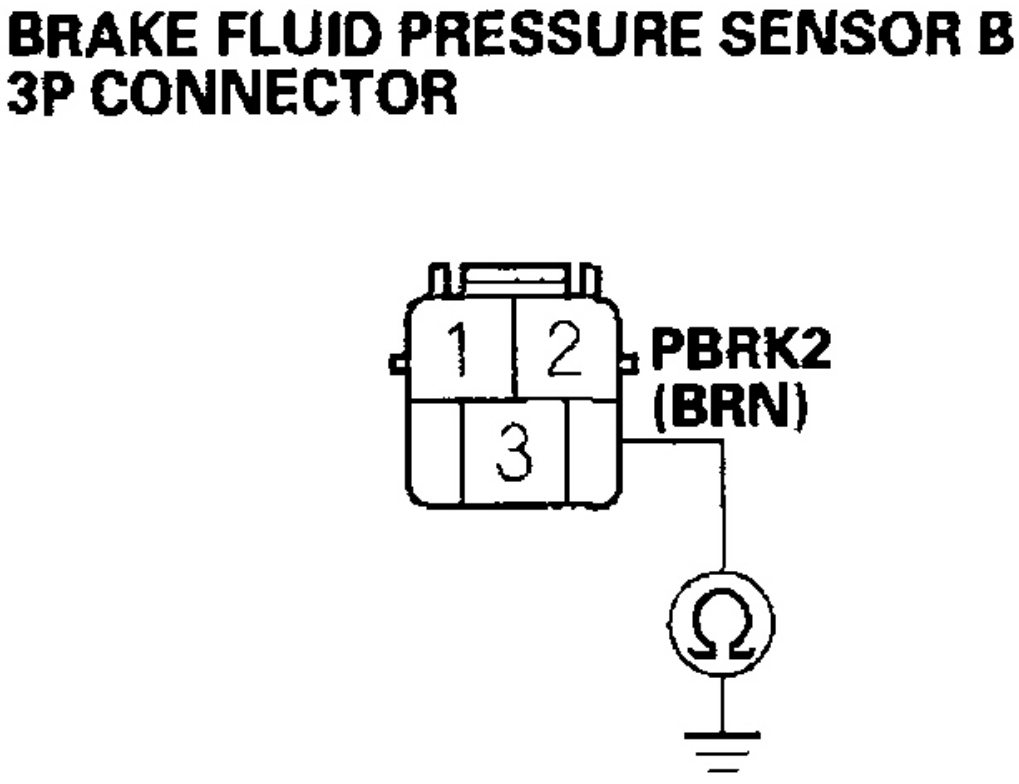


Fig. 172: Checking Continuity Between Brake Fluid Pressure Sensor Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 16.

NO - Repair open in the wire between the ECM (A22) and brake fluid pressure sensor B.

16. Connect ECM connector A (32P).
17. Connect brake fluid pressure sensor B 3P connector terminals No. 2 and No. 3 with a jumper wire.

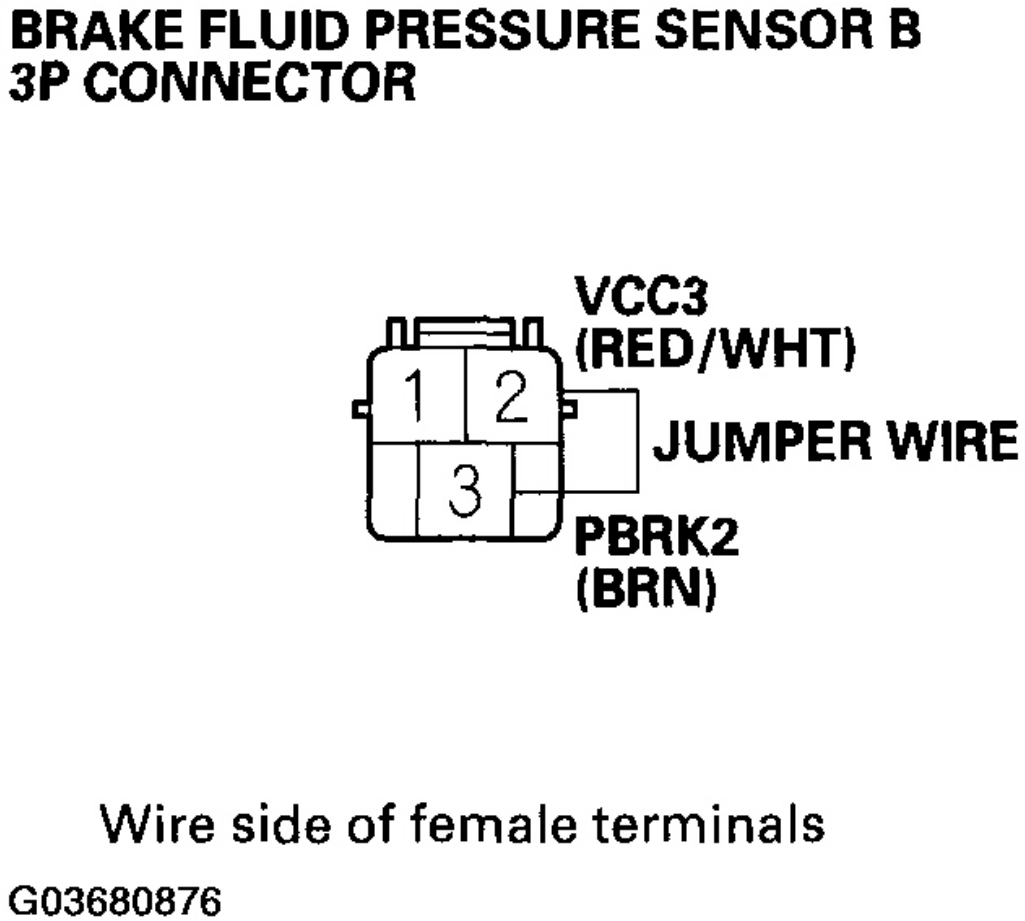


Fig. 173: Connecting Brake Fluid Pressure Sensor Connector Terminals No. 2 And 3 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Turn the ignition switch ON (II).
19. Check BRAKE FLUID PRESSURE SENSOR B with the HDS.

Is there 0.08 V or less?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Replace brake fluid pressure sensor B (see **BRAKE FLUID PRESSURE SENSOR REPLACEMENT**).

DTC P15B5: BRAKE FLUID PRESSURE SENSOR B RANGE PERFORMANCE PROBLEM (2005-2006 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check BRAKE FLUID PRESSURE SENSOR B with the HDS without pressing the brake pedal.

   Is there 2.45 MPa or more?

   YES - Go to step 3.

   NO - The system is OK at this time. Check for poor connections or loose terminals at brake fluid pressure sensor B and the ECM.
3. Turn the ignition switch OFF.
4. Disconnect the brake fluid pressure sensor B 3P connector.
5. Turn the ignition switch ON (II).
6. Measure voltage between brake fluid pressure sensor B 3P connector terminals No. 1 and No. 2.

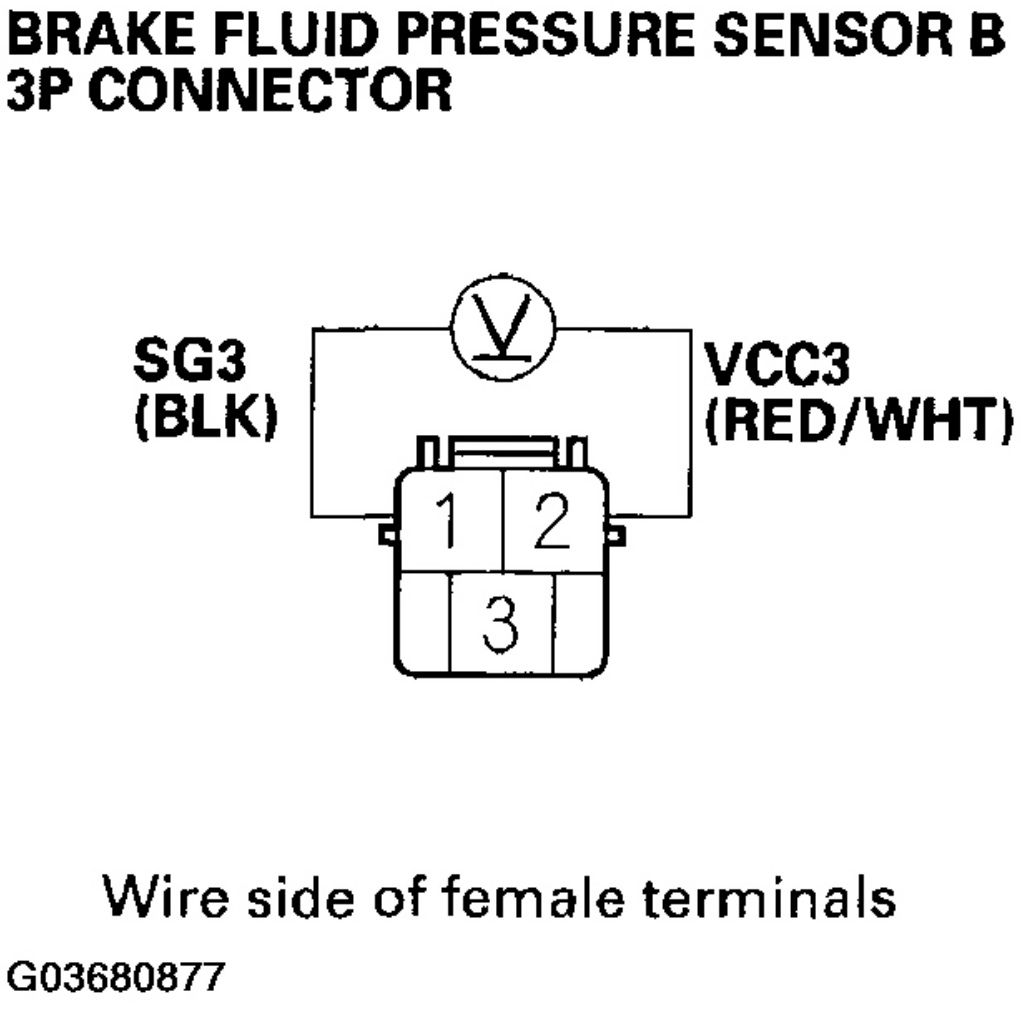


Fig. 174: Measuring Voltage Between Brake Fluid Pressure Sensor Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5.0 V?

YES - Replace brake fluid pressure sensor B (see **BRAKE FLUID PRESSURE SENSOR REPLACEMENT**).

NO - Go to step 7.

7. Turn the ignition switch OFF, and wait for 10 seconds.
8. Disconnect ECM connector C (31P).
9. Connect ECM connector terminal C2 to body ground with a jumper wire.

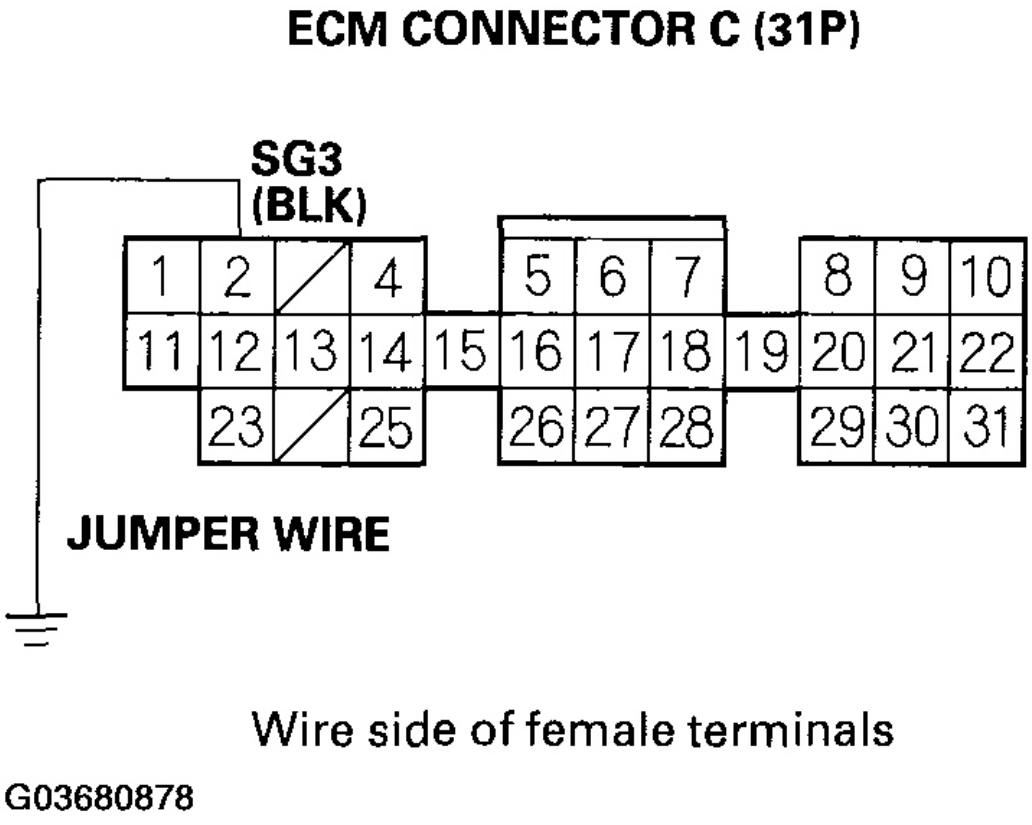


Fig. 175: Connecting ECM Connector Terminal C2 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Check for continuity between brake fluid pressure sensor B 3P connector terminal No. 1 and body ground.

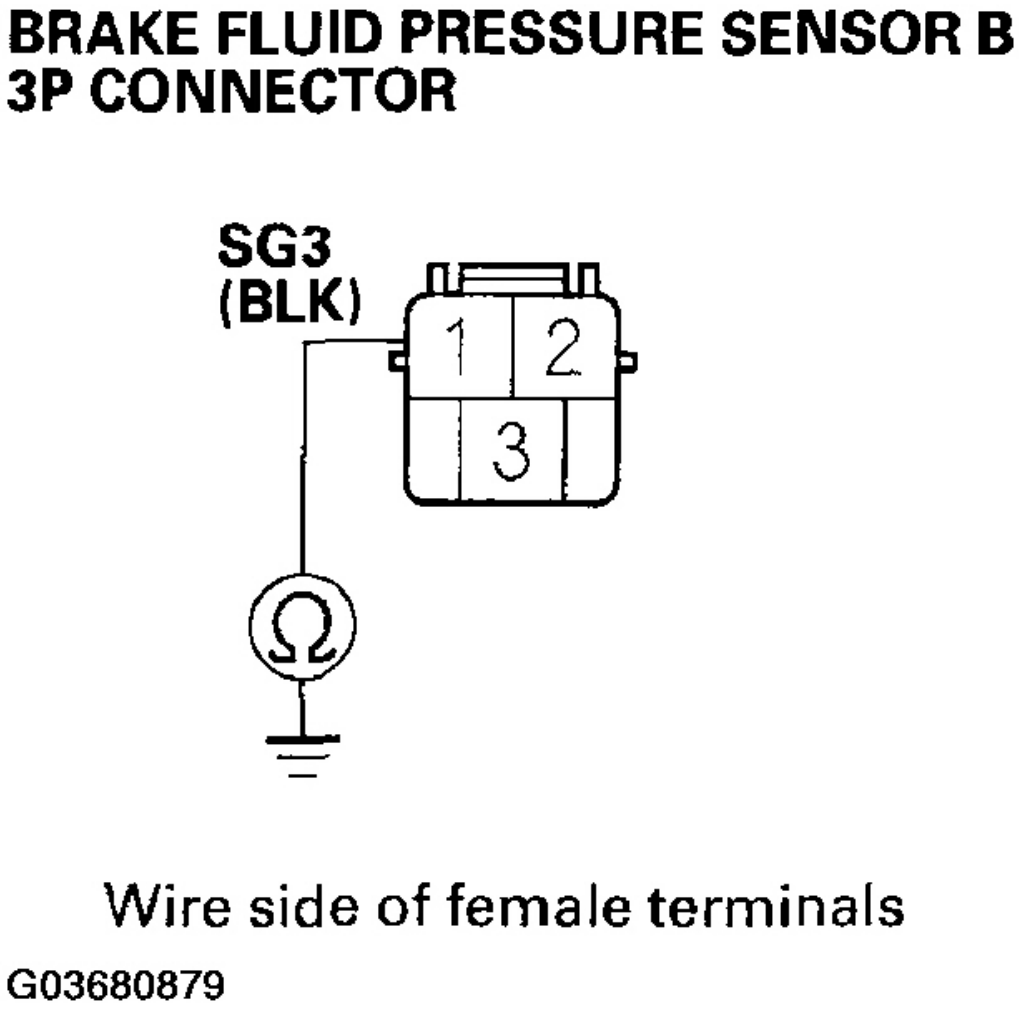


Fig. 176: Checking Continuity Between Brake Fluid Pressure Sensor Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM,

replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between brake fluid pressure sensor B and the ECM (C2).

DTC P15B6: BRAKE FLUID PRESSURE SENSOR A/B CIRCUIT MALFUNCTION (2005-2006 M/T MODELS)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check BRAKE FLUID PRESSURE SENSOR B with the HDS without pressing the brake pedal.

   Is there between 0.26 V and 0.74 V?

   YES - Go to step 11 .

   NO - Go to step 3.
3. Turn the ignition switch OFF.
4. Change connectors between brake fluid pressure sensor A and B.
5. Turn the ignition switch ON (II).
6. Check BRAKE FLUID PRESSURE SENSOR B with the HDS without pressing the brake pedal.

   Is there between 0.26 V and 0.74 V?

   YES - Go to step 7.

   NO - Replace brake fluid pressure sensor A (see **BRAKE FLUID PRESSURE SENSOR REPLACEMENT**).
7. Turn the ignition switch OFF, and wait for 10 seconds.
8. Disconnect ECM connector C (31P).
9. Connect ECM connector terminal C18 to body ground with a jumper wire.

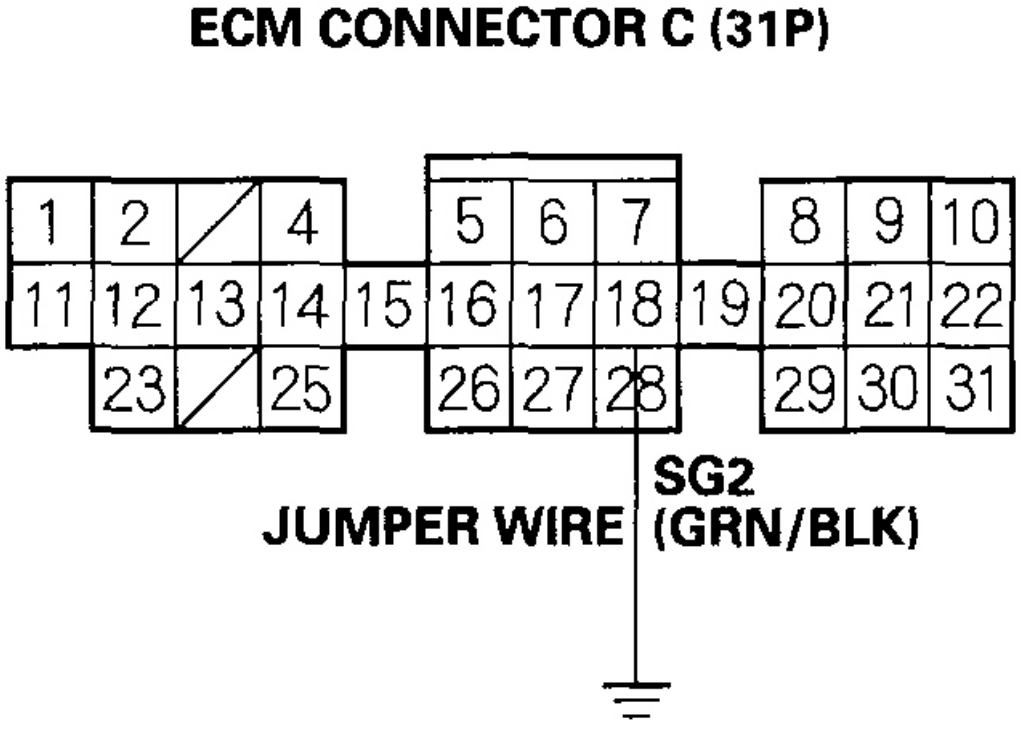


Fig. 177: Connecting ECM Connector Terminal C18 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Check for continuity between brake fluid pressure sensor A 3P connector terminal No. 1 and body ground.

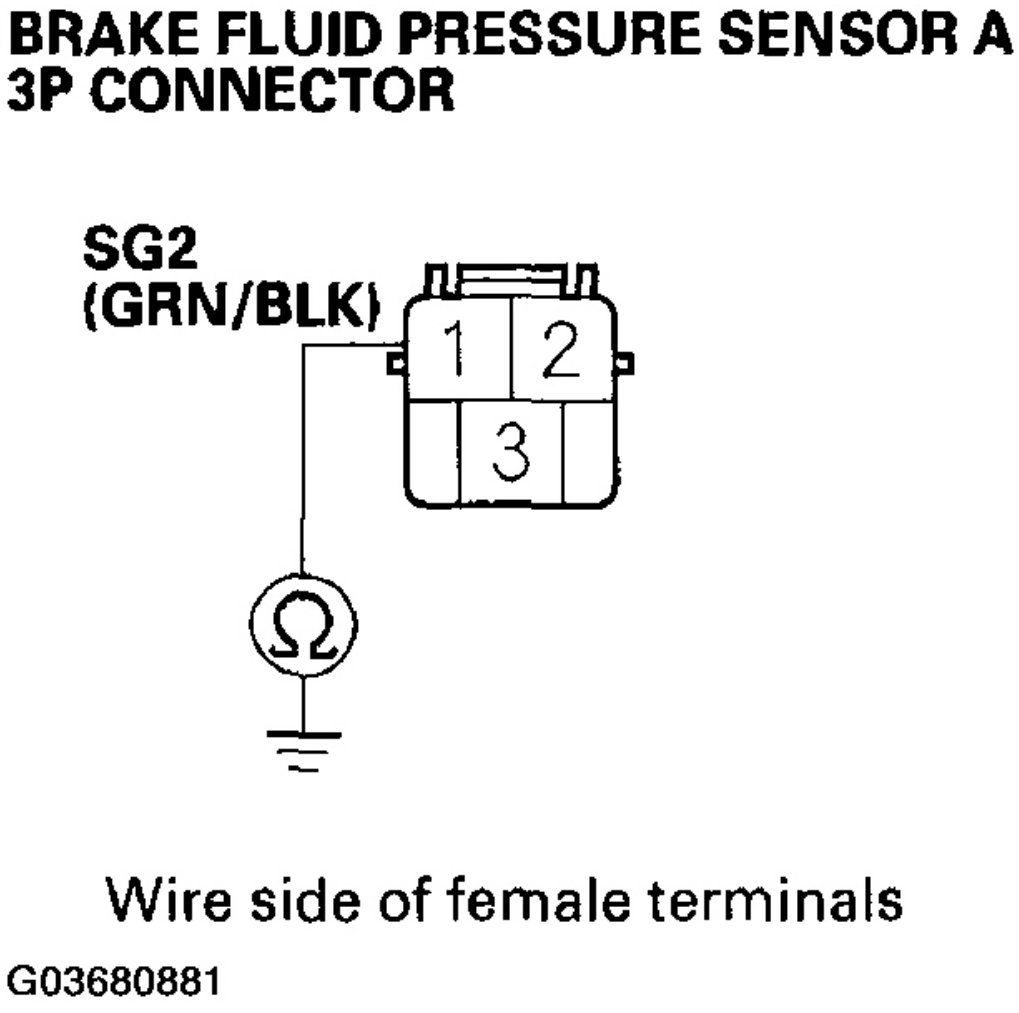


Fig. 178: Checking Continuity Between Brake Fluid Pressure Sensor Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM,

replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between brake fluid pressure sensor A and the ECM (C18).

11. Check BRAKE FLUID PRESSURE SENSOR B with the HDS without pressing the brake pedal.

Is there between 0.26 V and 0.74 V?

YES - Go to step 12.

NO - Go to step 17 .

12. Clear the DTC with the HDS.
13. Start the engine.
14. Test-drive the vehicle twice at 3 mph (5 km/h) or more with the throttle position at 9 degrees, or more.
15. Stop the vehicle, press the brake pedal, and hold it 10 seconds.
16. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P15B6 indicated?

YES - Replace brake fluid pressure sensor A and B (see **BRAKE FLUID PRESSURE SENSOR REPLACEMENT**).

NO - The system is OK at this time. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**

17. Turn the ignition switch OFF.
18. Change connectors between brake fluid pressure sensor A and B.
19. Turn the ignition switch ON (II).
20. Check the PBRKS1 with the HDS without pressing the brake pedal.

Is there between 0.26 V and 0.74 V?

YES - Go to step 21.

NO -Replace brake fluid pressure sensor B (see .

21. Turn the ignition switch OFF, and wait for 10 seconds.

22. Disconnect ECM connector C (31P).
23. Connect ECM connector terminal C2 to body ground with a jumper wire.

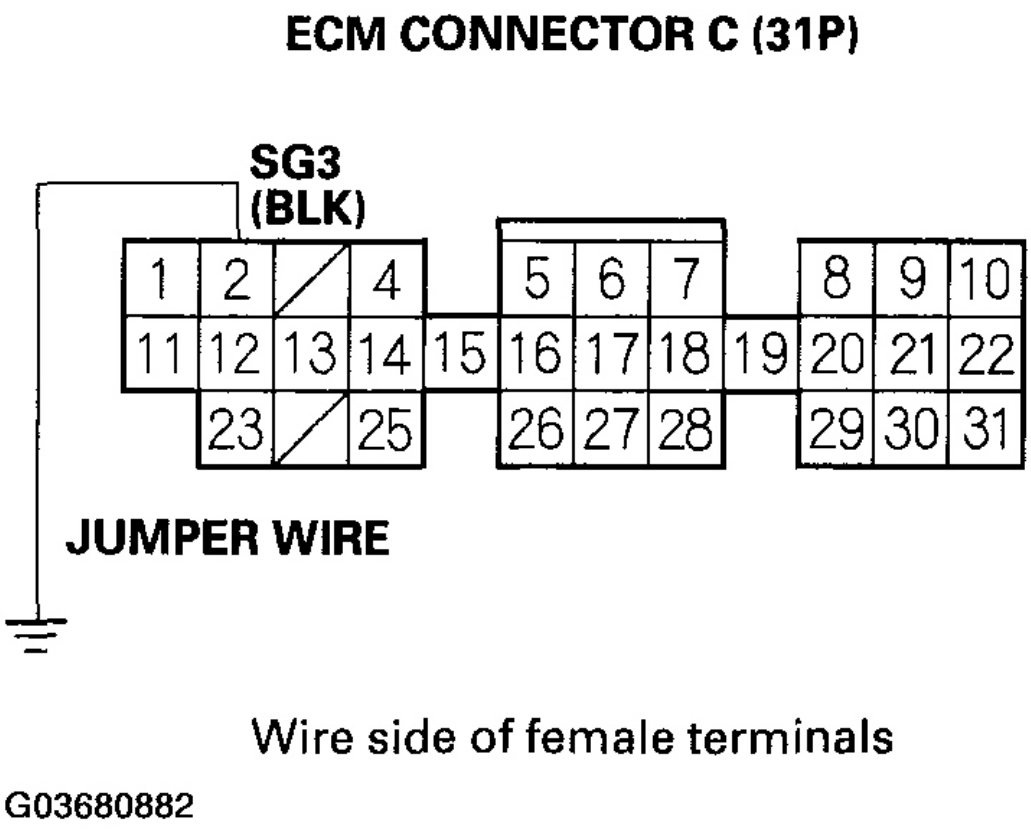


Fig. 179: Connecting ECM Connector Terminal C2 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Check for continuity between brake fluid pressure sensor B 3P connector terminal No. 1 and body ground.

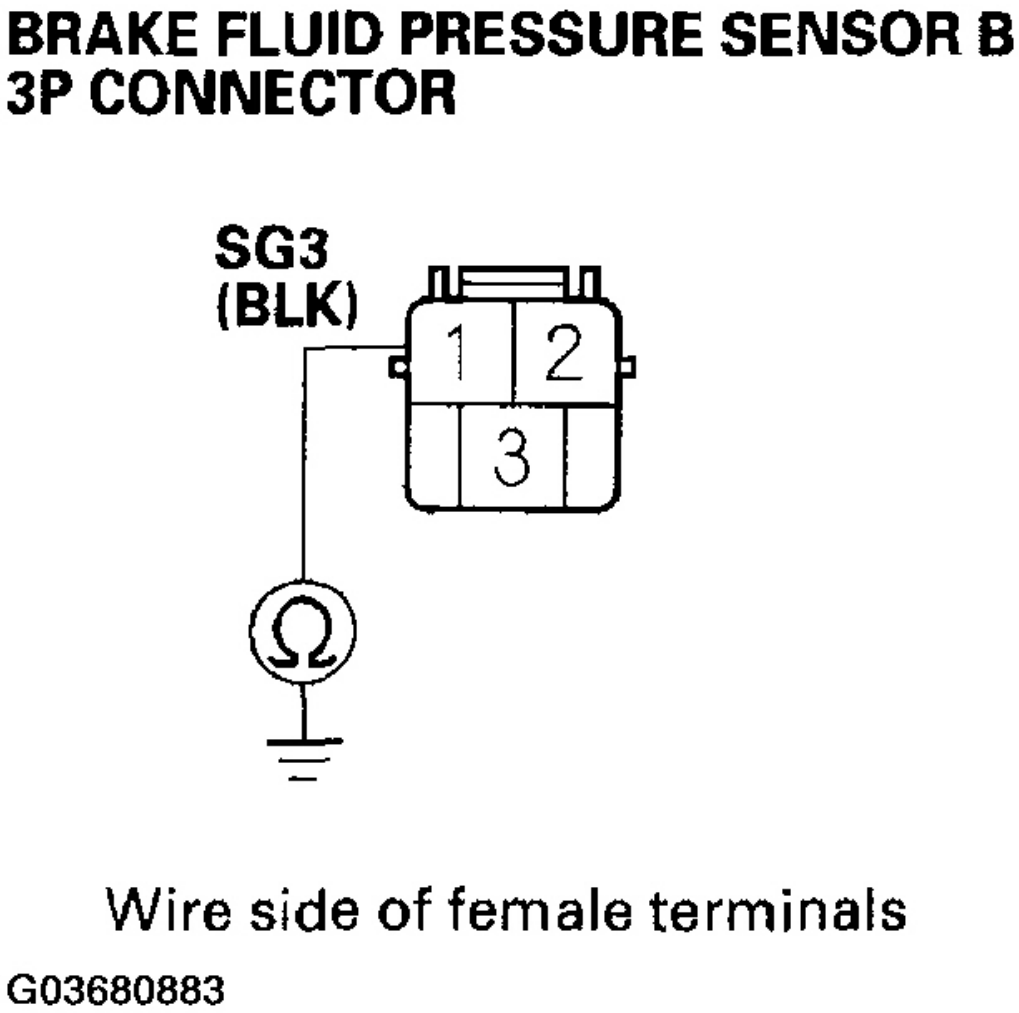


Fig. 180: Checking Continuity Between Brake Fluid Pressure Sensor B 3P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM,

replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between brake fluid pressure sensor B and the ECM (C2).

DTC P1600: IMA SYSTEM MALFUNCTION; DTC P1601: IMA SYSTEM MALFUNCTION

NOTE:

- **This DTC is stored when there is a problem in the IMA system. Check for IMA DTCs with the HDS and go to the indicated DTC TROUBLESHOOTING**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

DTC P1640: ACTTRQ MOTOR TORQUE SIGNAL CIRCUIT LOW INPUT; DTC P1641: ACTTRQ MOTOR TORQUE SIGNAL CIRCUIT HIGH INPUT

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information {see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Turn the ignition switch ON (II).
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTCP1640 or P1641 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the motor control module and the ECM.
4. Turn the ignition switch OFF.
5. Remove the IPU cover (see **POWER CONTROL UNIT (PCU) REMOVAL/INSTALLATION**), and disconnect motor control module connector C (31P).
6. Turn the ignition switch ON (II).
7. Measure voltage between ECM connector terminal D14 and body ground.

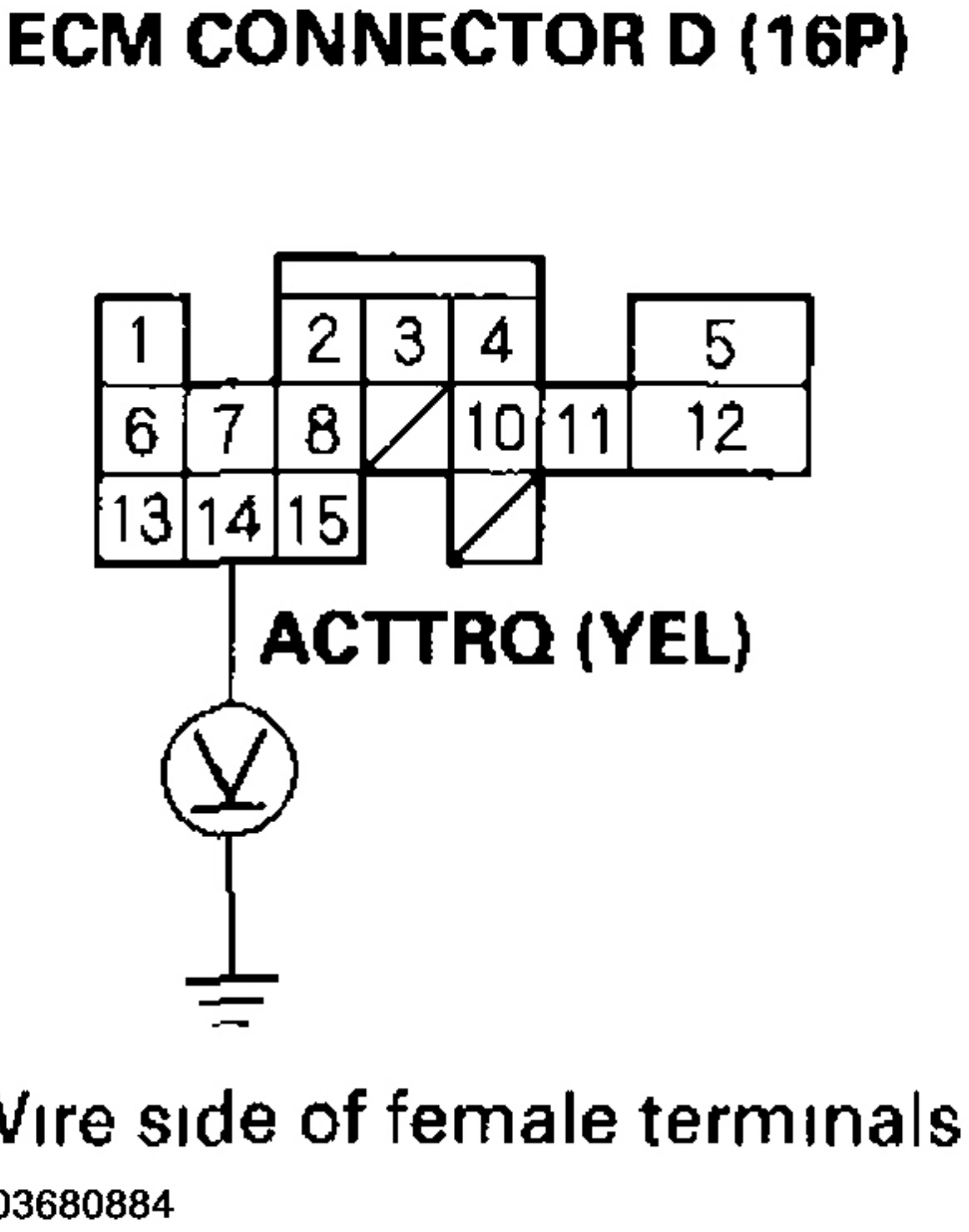


Fig. 181: Measuring Voltage Between ECM Connector Terminal D14 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 11 .

NO - Go to step 8.

8. Turn the ignition switch OFF, and wait for 10 seconds.
9. Disconnect ECM connector D (16P).
10. Check for continuity between ECM connector terminal D14 and body ground.

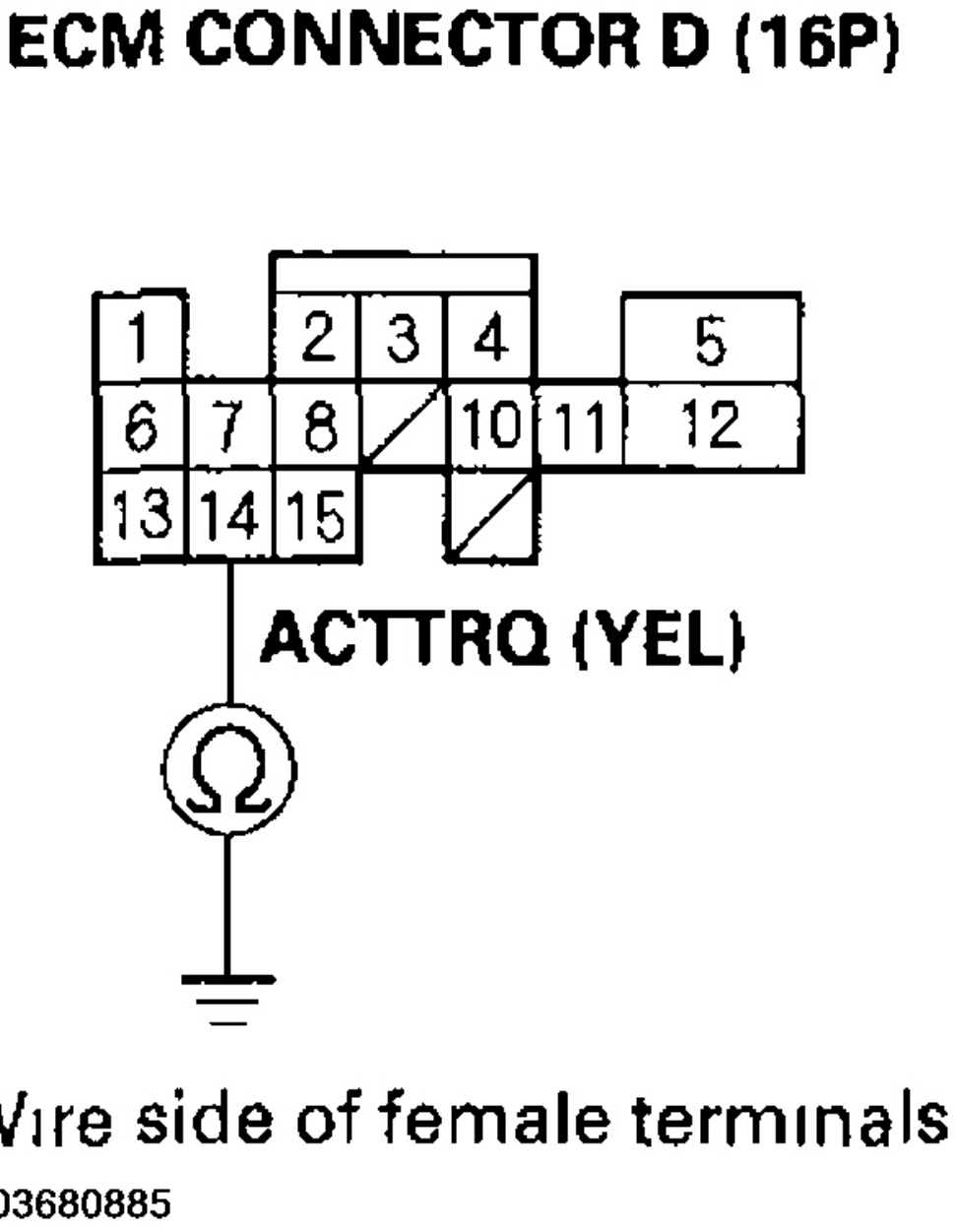


Fig. 182: Checking Continuity Between ECM Connector Terminal D14 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (D14) and the motor control module.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

11. Turn the ignition switch OFF, and wait for 10 seconds.
12. Disconnect ECM connector D (16P).
13. Check for continuity between ECM connector terminal D14 and motor control module connector terminal C5.

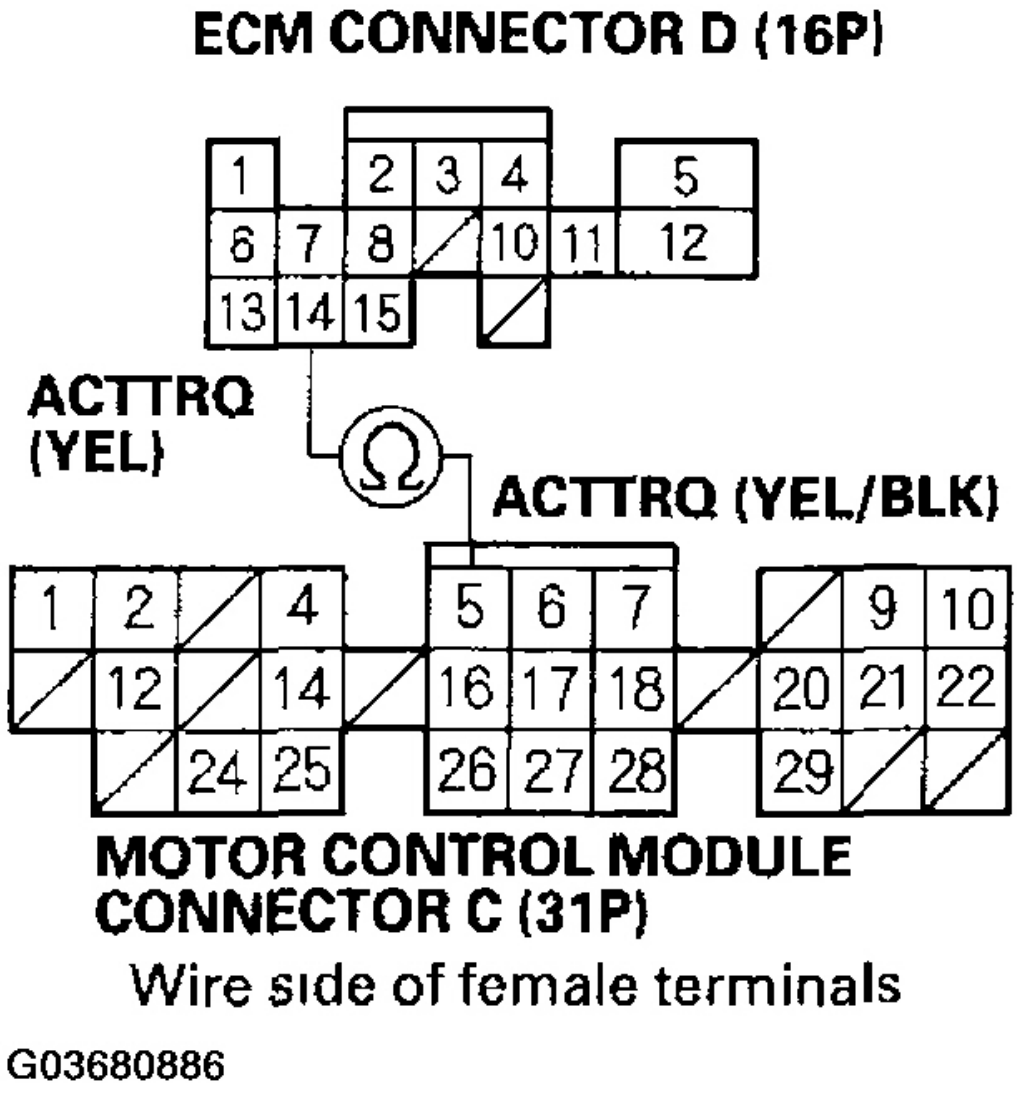


Fig. 183: Checking Continuity Between ECM Connector Terminal D14 And Motor Control Module Connector Terminal C5
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the battery module.

NO - Repair open in the wire between the ECM (D14) and the motor

control module.

DTC P1642: QBATT BATTERY SIGNAL CIRCUIT LOW INPUT; DTC P1643: QBATT BATTERY SIGNAL CIRCUIT HIGH INPUT

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Turn the ignition switch ON (II).
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P1642 or P1643 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the motor control module and the ECM.
4. Turn the ignition switch OFF.
5. Remove the IPU cover (see **POWER CONTROL UNIT (PCU) REMOVAL/INSTALLATION**), and disconnect motor control module connector C (31P).
6. Turn the ignition switch ON (II).
7. Measure voltage between ECM connector terminal D13 and body ground.

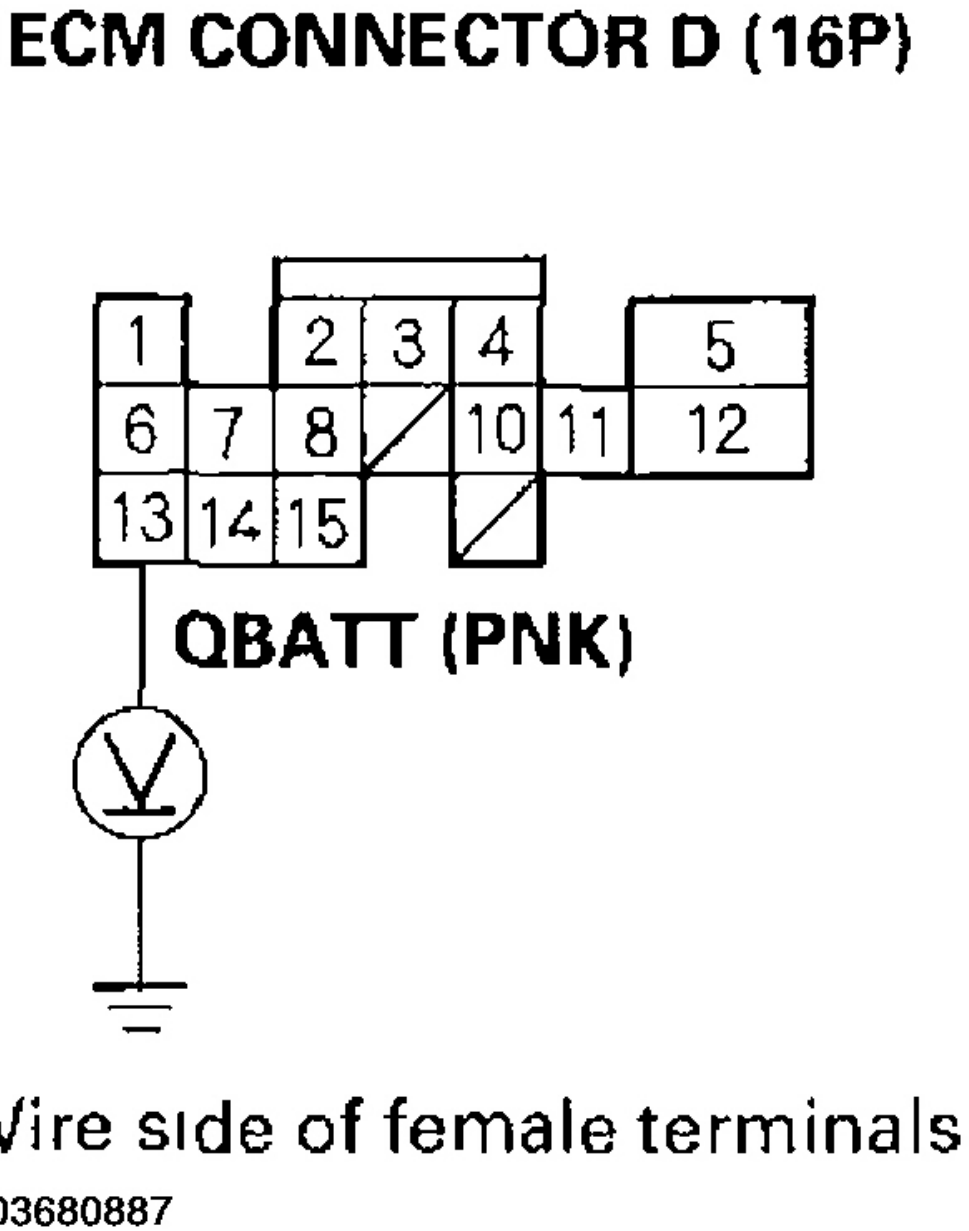


Fig. 184: Measuring Voltage Between ECM Connector Terminal D13 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 11 .

NO - Go to step 8.

8. Turn the ignition switch OFF, and wait for 10 seconds.
9. Disconnect ECM connector D (16P).
10. Check for continuity between ECM connector terminal D13 and body ground.

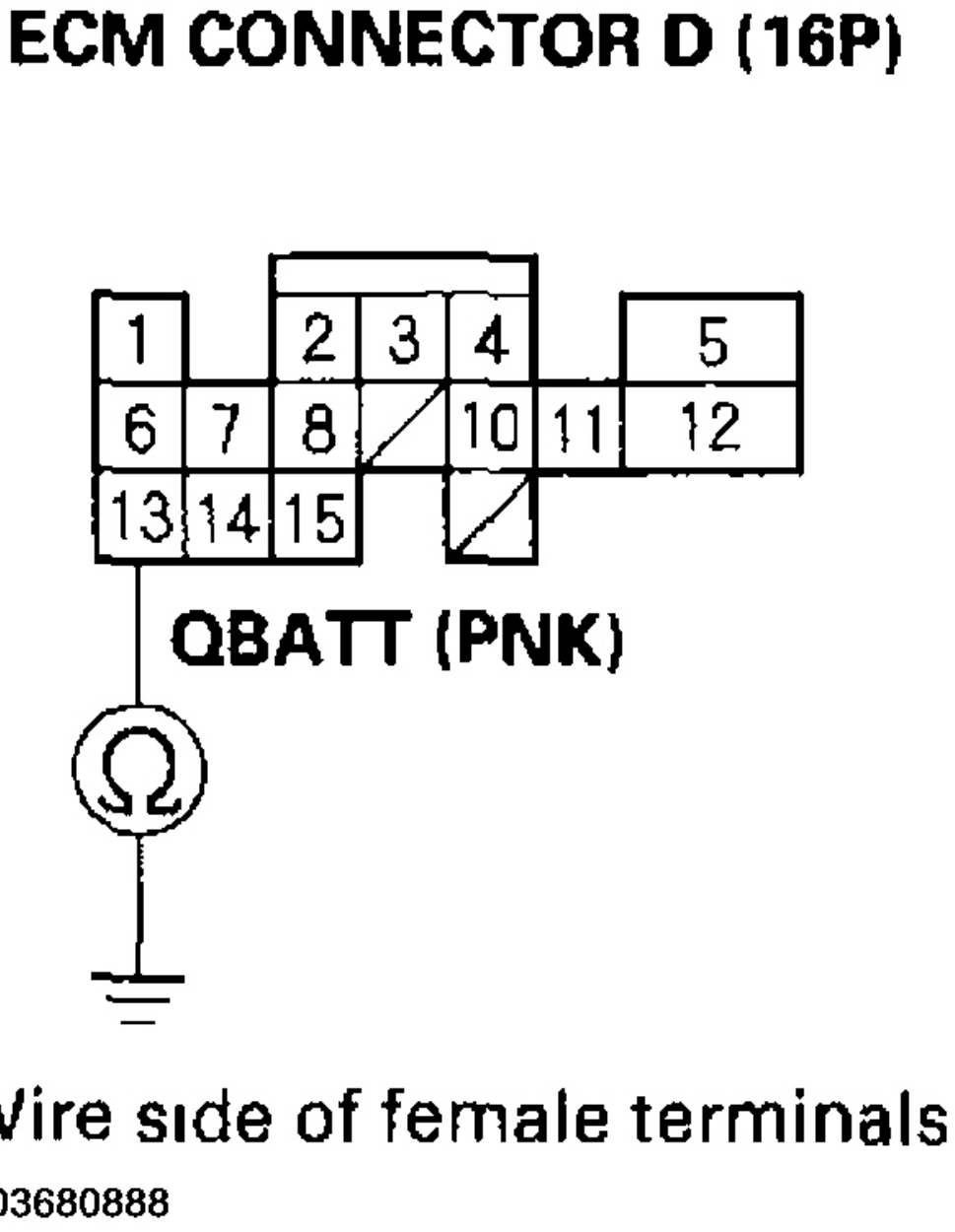


Fig. 185: Checking Continuity Between ECM Connector Terminal D13 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (D13) and the motor control module.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

11. Turn the ignition switch OFF, and wait for 10 seconds.
12. Disconnect ECM connector D (16P).
13. Check for continuity between ECM connector terminal D13 and motor control module connector terminal C16.

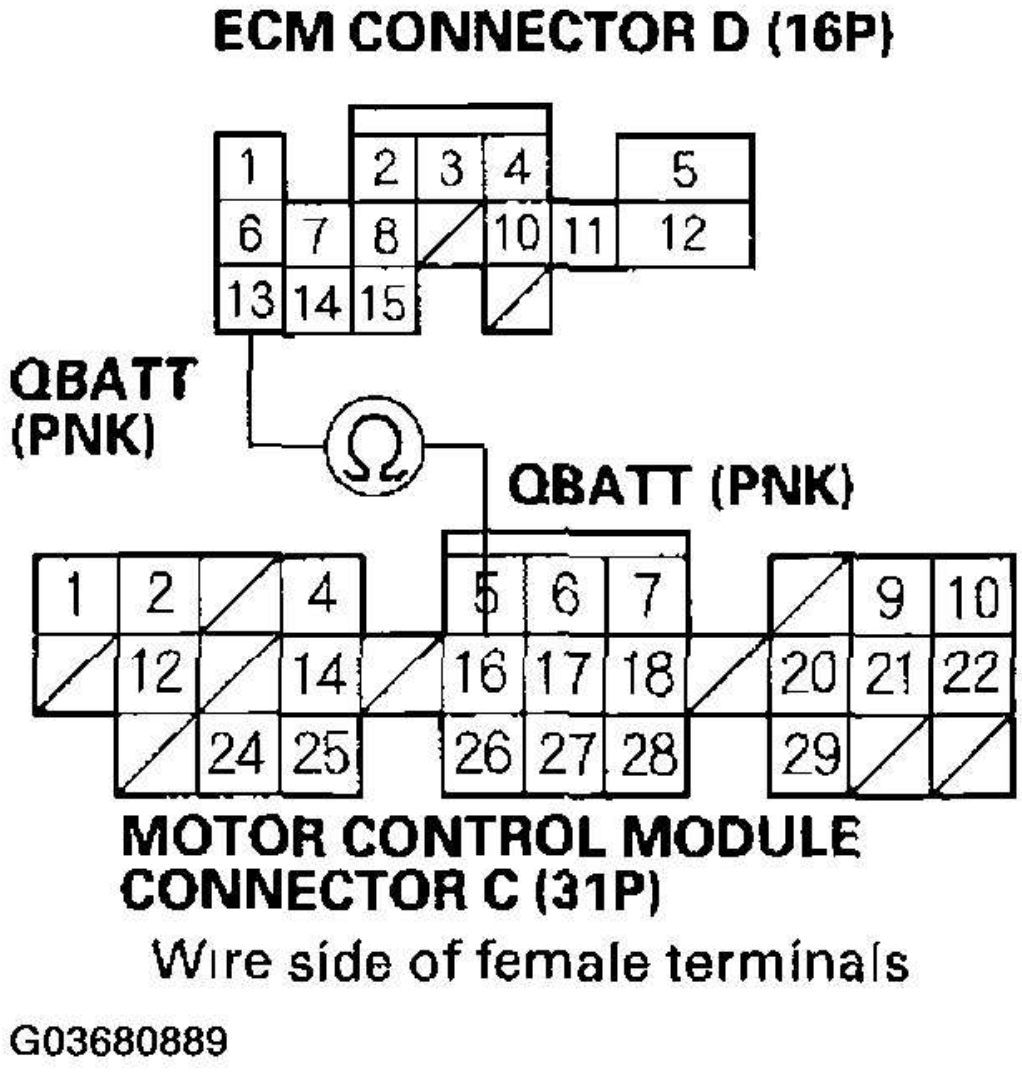


Fig. 186: Checking Continuity Between ECM Connector Terminal D13 And Motor Control Module Connector Terminal C16
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the battery module.

NO - Repair open in the wire between the ECM (D13) and the motor

control module.

DTC P1644: MOTFSA MOTOR CONTROL MODULE SIGNAL MALFUNCTION; DTC P1645: MOTFSB MOTOR CONTROL MODULE SIGNAL MALFUNCTION; DTC P1646: MOTSTB MOTOR CONTROL MODULE SIGNAL MALFUNCTION

NOTE:

- **Information marked with an asterisk (*1) applies to DTC P1645; information marked with (*2) applies to DTC P1646.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Turn the ignition switch ON (II).
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P1644, P1645, or P1646 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the motor control module and the ECM.
4. Turn the ignition switch OFF.
5. Remove the IPU cover (see **POWER CONTROL UNIT (PCU) REMOVAL/INSTALLATION**), and disconnect motor control module connector A (32P).
6. Turn the ignition switch ON (II).
7. Measure voltage between ECM connector terminal D2, (D1) *1 , (D3) *2 and body ground.

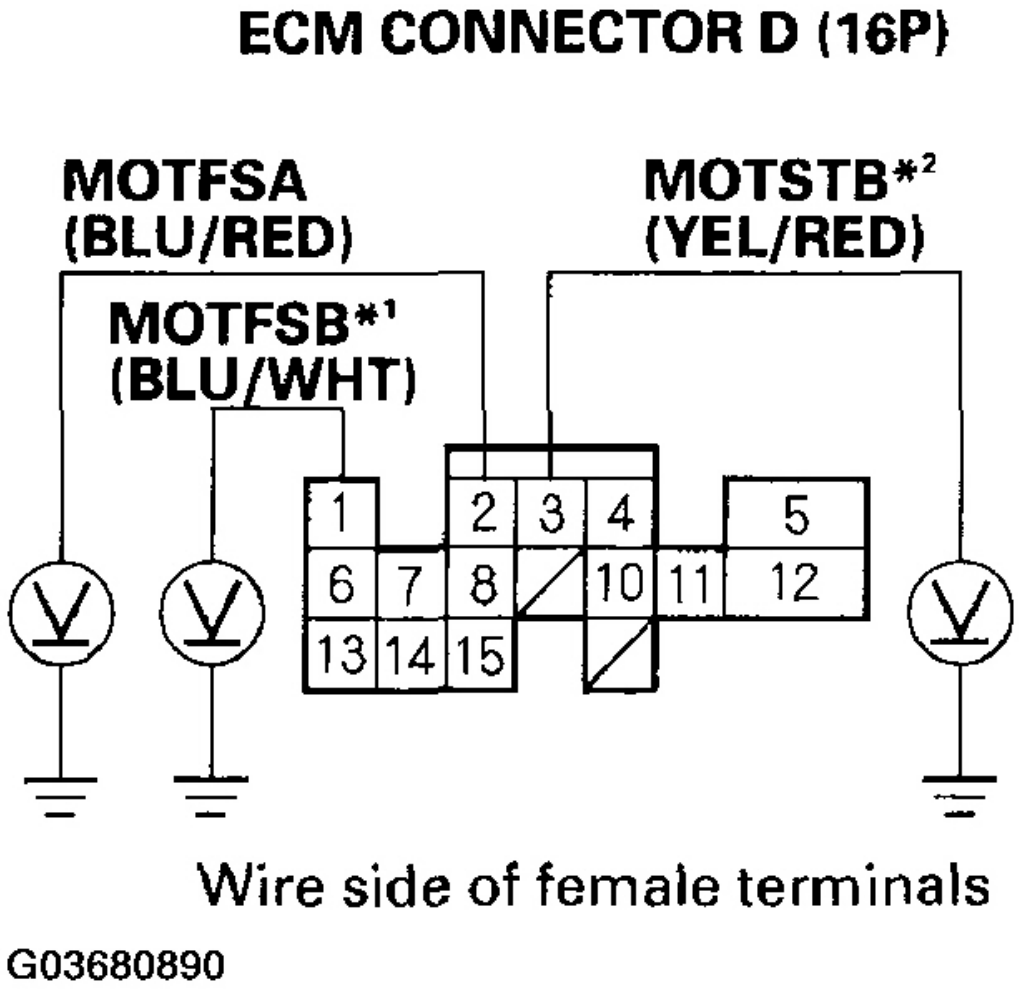


Fig. 187: Measuring Voltage Between ECM Connector Terminal D2, (D1) *1 , (D3) *2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 11 .
NO - Go to step 8.

8. Turn the ignition switch OFF, and wait for 10 seconds.

9. Disconnect ECM connector D (16P).
10. Check for continuity between ECM connector terminals D2, (D1) *1 , (D3) *2 and body ground.

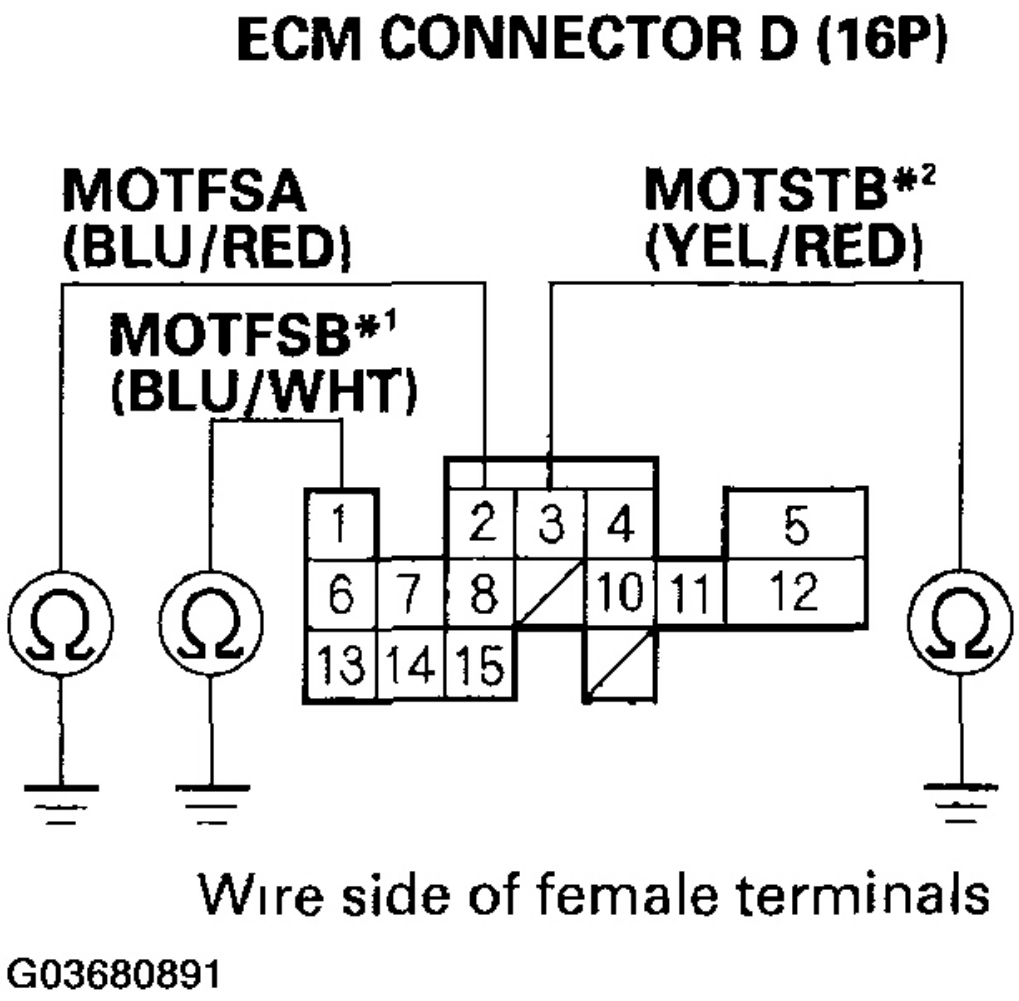


Fig. 188: Checking Continuity Between ECM Connector Terminals D2, (D1) *1 , (D3) *2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (D2, (D1) *1 , (D3) *2) and the motor control module.

NO -Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

11. Turn the ignition switch OFF, and wait for 10 seconds.
12. Disconnect ECM connector D (16P).
13. Check for continuity between ECM connector terminal D2, (D1) *1 , (D3) *2 and motor control module connector terminal A16 (A15) *1 (A4) *2 .

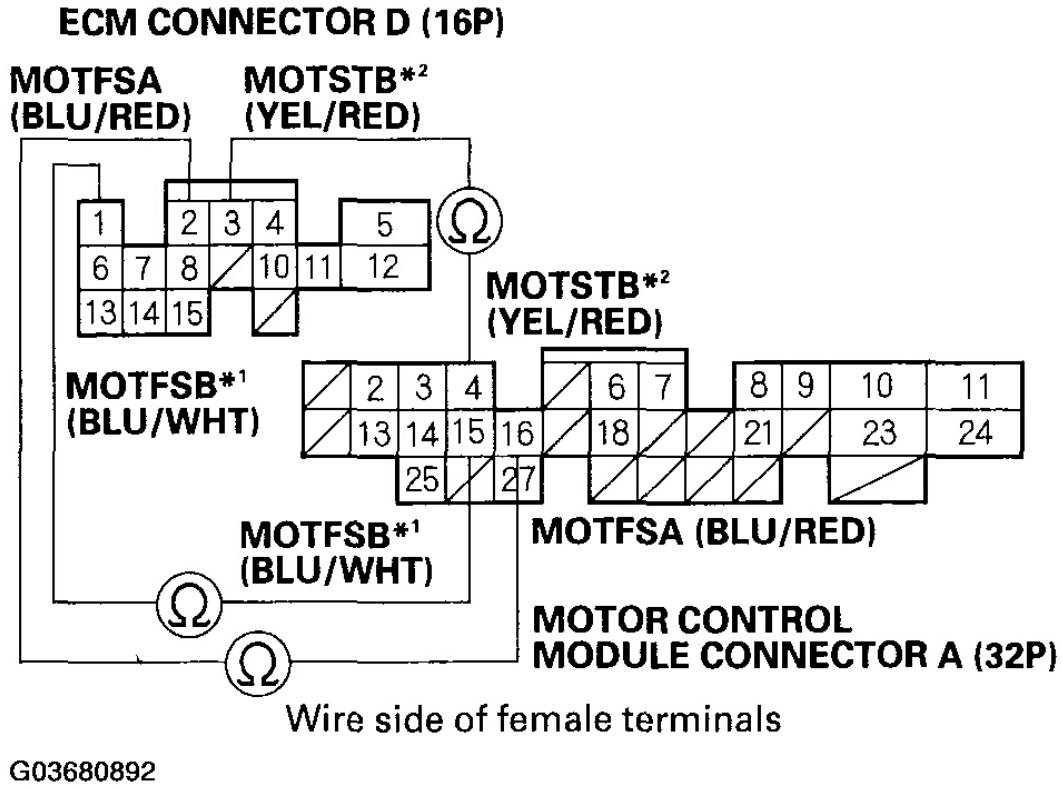


Fig. 189: Checking Continuity Between ECM Connector Terminals D2, (D1) *1, (D3) *2 And Motor Control Module Connector Terminals A16 (A15) *1 (A4) *2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the battery module.

NO - Repair open in the wire between ECM connector terminal D2 (D1) *1 (D3) *2 and the motor control module.

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)

NOTE:

- **Information marked with an asterisk (*) applies to 2001-**

2003 CVT models.

- **Information marked with double asterisk (**) applies to 2004-2006 CVT models.**
- **Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Reset the ECM with the HDS (see **ECM RESET**).
2. Drive the vehicle several minutes until so the transmission upshifts and downshifts several times.
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P1655* (U0101) indicated?**

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the TCM and the ECM.
4. Turn the ignition switch OFF, and wait for 10 seconds.
5. Disconnect ECM connector C (31P).
6. Disconnect TCM connector B (22P).
7. Check for continuity between body ground and ECM connector terminals C15 and C11.

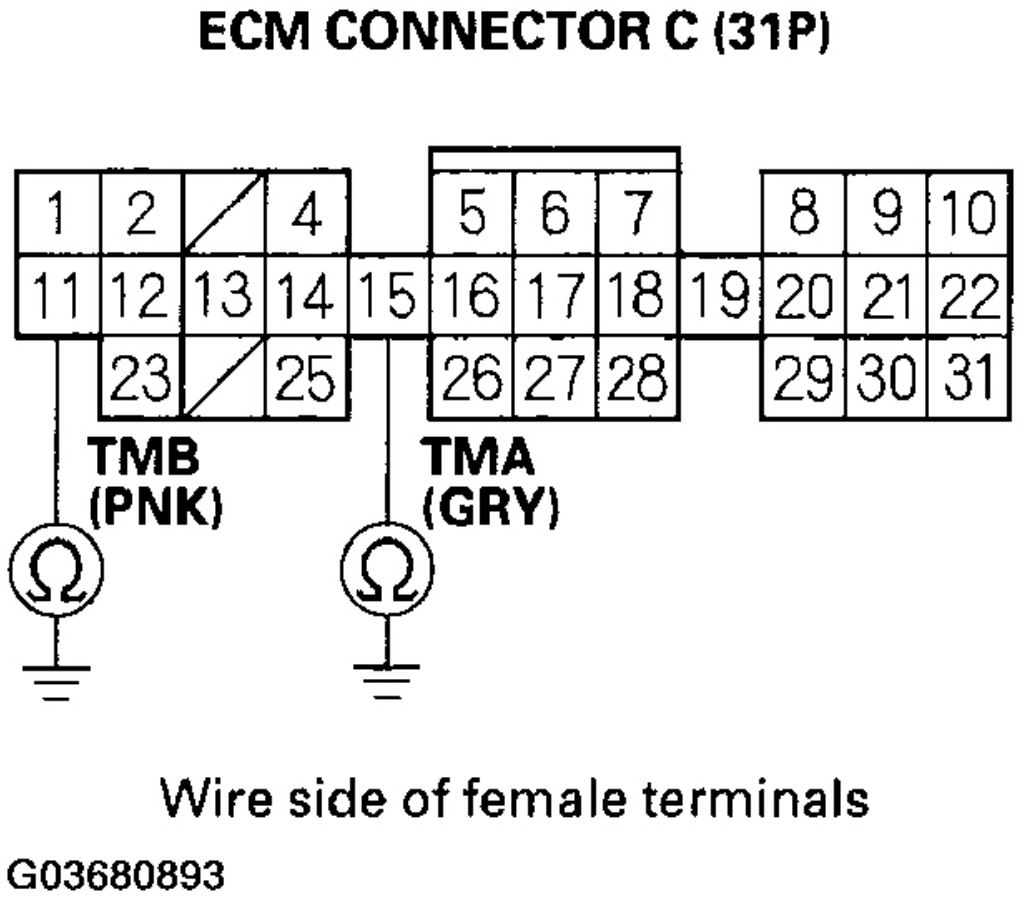


Fig. 190: Checking Continuity Between Body Ground And ECM Connector Terminals C15 And C11
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C15, C11) and the TCM (B6, B7).

NO - Go to step 8.

8. Check for continuity between ECM connector terminal C15 and TCM connector terminal B7, and between ECM connector terminal C11 and TCM connector terminal B6.

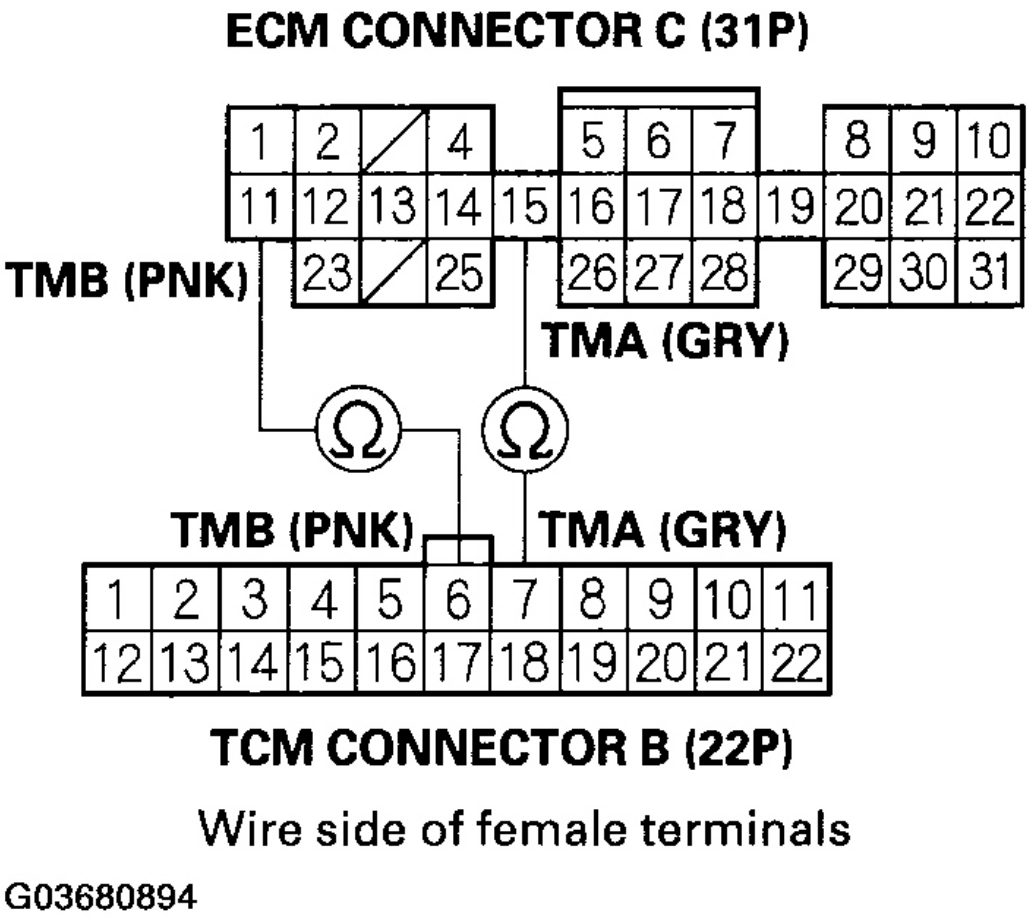


Fig. 191: Checking Continuity Between ECM Connector Terminal C15 & TCM Connector Terminal B7 And Between ECM Connector Terminal C11 & TCM Connector Terminal B6
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check the these items:

- Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-

good ECM, replace the original ECM (see **ECM REPLACEMENT**).

- Substitute a known-good TCM (see **HOW TO TROUBLESHOOT CIRCUIT AT THE TCM**), and recheck. If the symptom/indication goes away, replace the original TCM.

NO - Repair open in the wire between the ECM (C15, C11) and the TCM (B6, B7).

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)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Reset the ECM with the HDS (see **ECM RESET**).
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Test-drive under these conditions:
   - Engine coolant temperature above 176°F (80°C)
   - Vehicle speed between 35 mph (56 km/h) or more
   - Drive 1 minute or more
5. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P2270 or P2271 indicated?

YES - Replace the secondary HO2S (Sensor 2) (see **SECONDARY HO2S REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the secondary HO2S (Sensor 2) and the ECM.

DTC P2610: ECM IGNITION OFF INTERNAL TIMER MALFUNCTION (2006 MODEL)

NOTE: Before you troubleshoot, record all freeze data and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS (see **DTC CLEAR**).
3. Check for Temporary DTCs or DTCs with the HDS.

Is P2610 indicated?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the ECM.

MIL CIRCUIT TROUBLESHOOTING

2000-2004 MODELS

1. Connect the HDS (see **HOW TO USE THE HDS (HONDA DIAGNOSTIC SYSTEM)**).
2. Turn the ignition switch ON (II), and check the HDS.

Does the HDS communicate with the ECM?

YES - Go to step 3.

NO - Go to "DLC Circuit Troubleshooting" (see **DLC CIRCUIT TROUBLESHOOTING**).

3. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - Go to the indicated **DTC TROUBLESHOOTING**

NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Turn the ignition switch ON (II), and watch the malfunction indicator lamp (MIL).

Does the MIL come on and stay on for more than 20 seconds after turning the ignition switch ON (II)?

YES - If the MIL always comes on and stays on, Go to step 61 . But if the MIL sometimes works normally, first check for these problems:

- An intermittent short in the wire between the ECM (B17) and the data link connector (DLC).
- An intermittent short in the wire between the ECM (A18) and the gauge assembly.
- The readiness codes are not set (see **HOW TO SET READINESS CODES**). (This is indicated if the MIL blinks five times after you turn the ignition switch ON (II) and wait about 20 seconds.)

NO -If the MIL is always off, Go to step 6. But if the MIL sometimes works normally, first check for these problems.

- A loose No. 6 (7.5 A) fuse in the under-dash fuse/relay box.
- A loose No. 1 (50 A) fuse in the under-hood fuse/relay box.
- A loose No. 7 (15 A) fuse in the under-hood fuse/relay box.
- A loose No. 2 (15 A) fuse in the under-dash fuse/relay box.
- A poor connection at ECM terminal A18.
- An intermittent open in the GRN/ORN wire between the ECM (A18) and the gauge assembly.
- An intermittent short in the wire between the ECM (C19) and the manifold absolute pressure (MAP) sensor.
- An intermittent short in the wire between the ECM (C28) and the throttle position (TP) sensor, the brake booster pressure sensor, the fuel tank pressure (FTP) sensor, or the exhaust gas recirculation (EGR) valve position sensor.
- An intermittent short in the wire between the ECM (B6) and the

TCM.

6. Turn the ignition switch OFF.
7. Turn the ignition switch ON (II).

Is the low oil pressure indicator on?

YES - Go to step 10 .

NO - Go to step 8.

8. Inspect the No. 6 (7.5 A) fuse in the under-dash fuse/relay box.

Is the fuse OK?

YES - Go to step 9.

NO - Repair short in the wire between the No. 6 (7.5 A) fuse and the gauge assembly. Also replace the No. 6 (7.5 A) fuse.

9. Inspect the No. 1 (50 A) fuse in the under-hood fuse/relay box.

Is the fuse OK?

YES - Repair open in the wire between the No. 1 (50 A) fuse and the gauge assembly. If the wires are OK, test the ignition switch (see **IGNITION KEY SWITCH TEST**).

NO - Repair short in the wire between the No. 1 (50 A) fuse and the under-dash fuse/relay box. Also replace the No. 1 (50 A) fuse.

10. Try to start the engine.

Does the engine start?

YES - Go to step 11.

NO - Go to step 14 .

11. Turn the ignition switch OFF.
12. Connect ECM connector terminal A18 to body ground with a jumper wire.

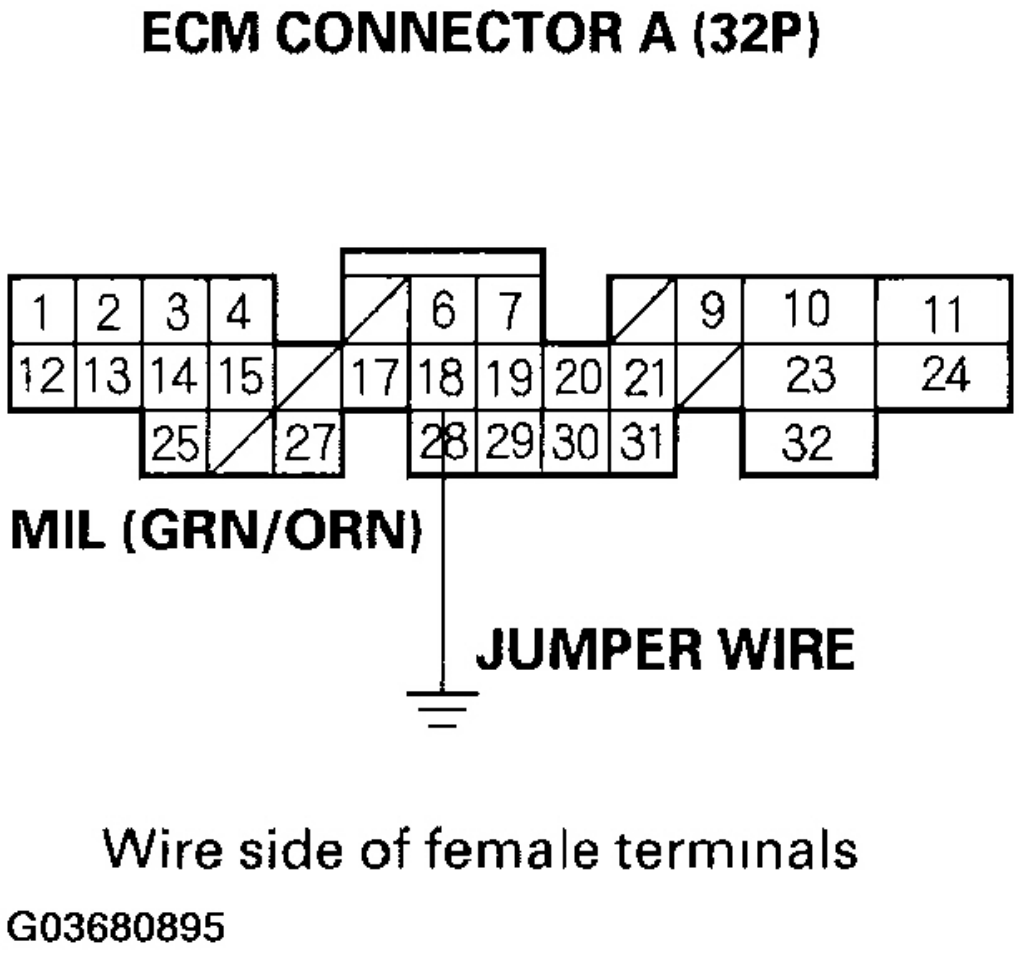


Fig. 192: Connecting ECM Connector Terminal A18 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Turn the ignition switch ON (II).

Is the MIL on?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001**

M/T MODELS)), 2002-2004 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Check for an open in the wire between the ECM (A18) and the gauge assembly. Also check for a blown MIL bulb. If the wires and the bulb are OK, replace the gauge assembly.

14. Turn the ignition switch OFF.
15. Inspect the No. 7 (15 A) fuse in the under-hood fuse/relay box.

Is the fuse OK?

YES - Go to step 22 .

NO - Go to step 16.

16. Remove the blown No. 7 (15 A) fuse in the under-dash fuse/relay box.
17. Remove the PGM-FI main relay (IGP).
18. Check for continuity between body ground and PGM-FI main relay (IGP) 4P connector terminal No. 2.

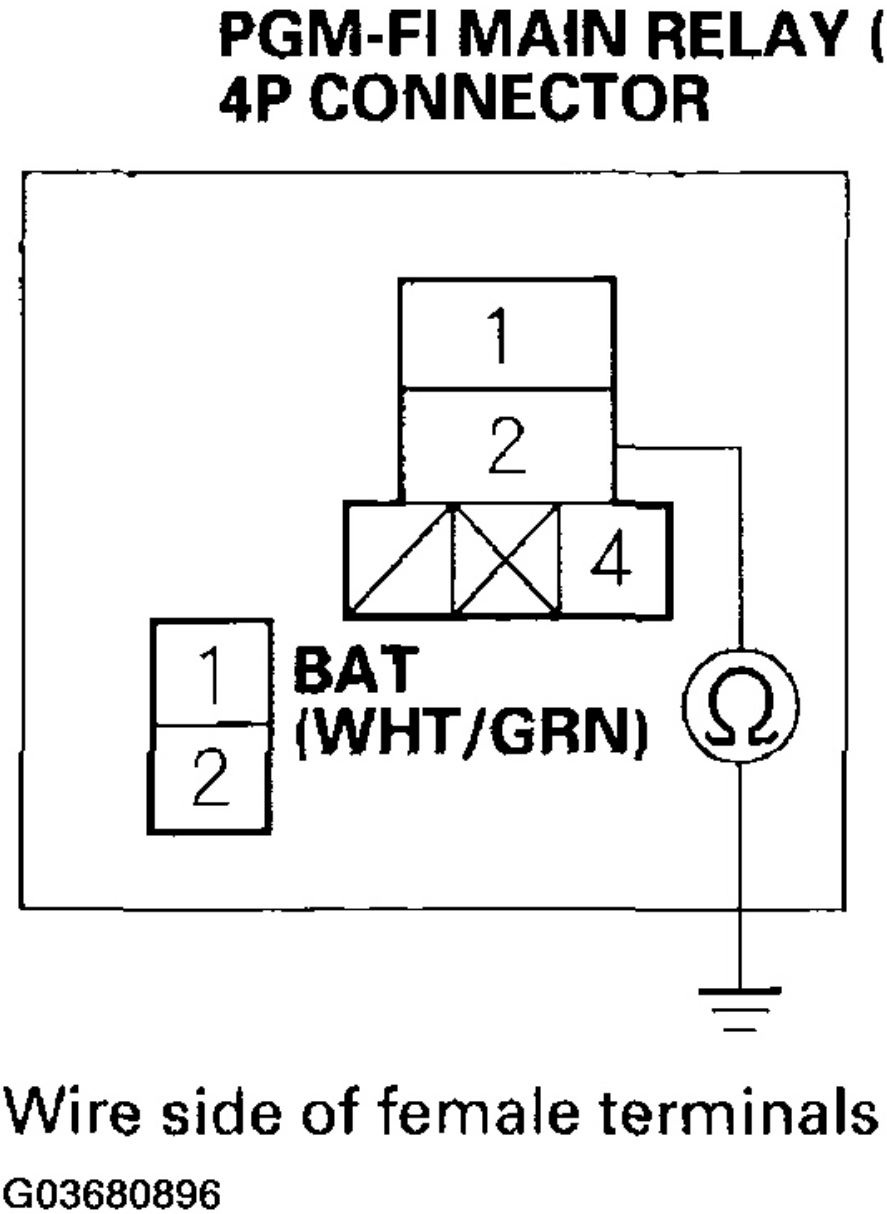


Fig. 193: Checking Continuity Between Body Ground And PGM-FI Main Relay (IGP) 4P Connector Terminal No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the No. 7 (15 A) fuse and the PGM-FI main relay (IGP). Also replace the No. 7 (15 A) fuse.

NO - Go to step 19.

19. Disconnect each of the components or connectors below, one at a time, and check for continuity between PGM-FI main relay (IGP) 4P connector terminal No. 1 and body ground.
    - PGM-FI main relay (FUEL PUMP)
    - ECM connector B (25P)
    - Each injector 2P connector
    - Idle air control (IAC) valve 3P connector

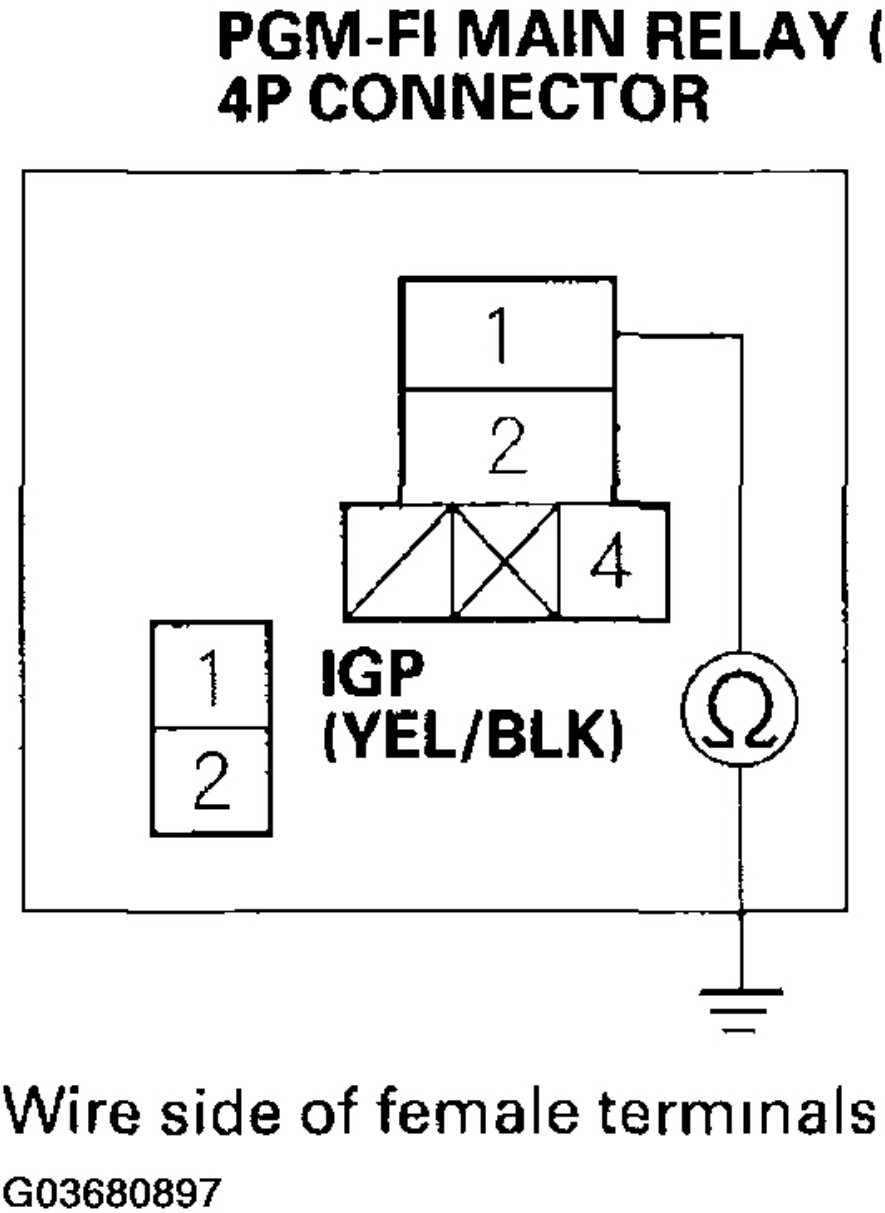


Fig. 194: Checking Continuity Between PGM-FI Main Relay (IGP) 4P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 20.

NO - Replace the component that made continuity to body ground go away when disconnected. If the item is the ECM, update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

Also replace the No. 7 (15 A) fuse.

20. Disconnect the connectors from these components:
    - PGM-FI main relay (FUEL PUMP)
    - ECM connector B (25P)
    - Injectors
    - Idle air control (IAC) valve
21. Check for continuity between PGM-FI main relay (IGP) 4P connector terminal No. 2 and body ground.

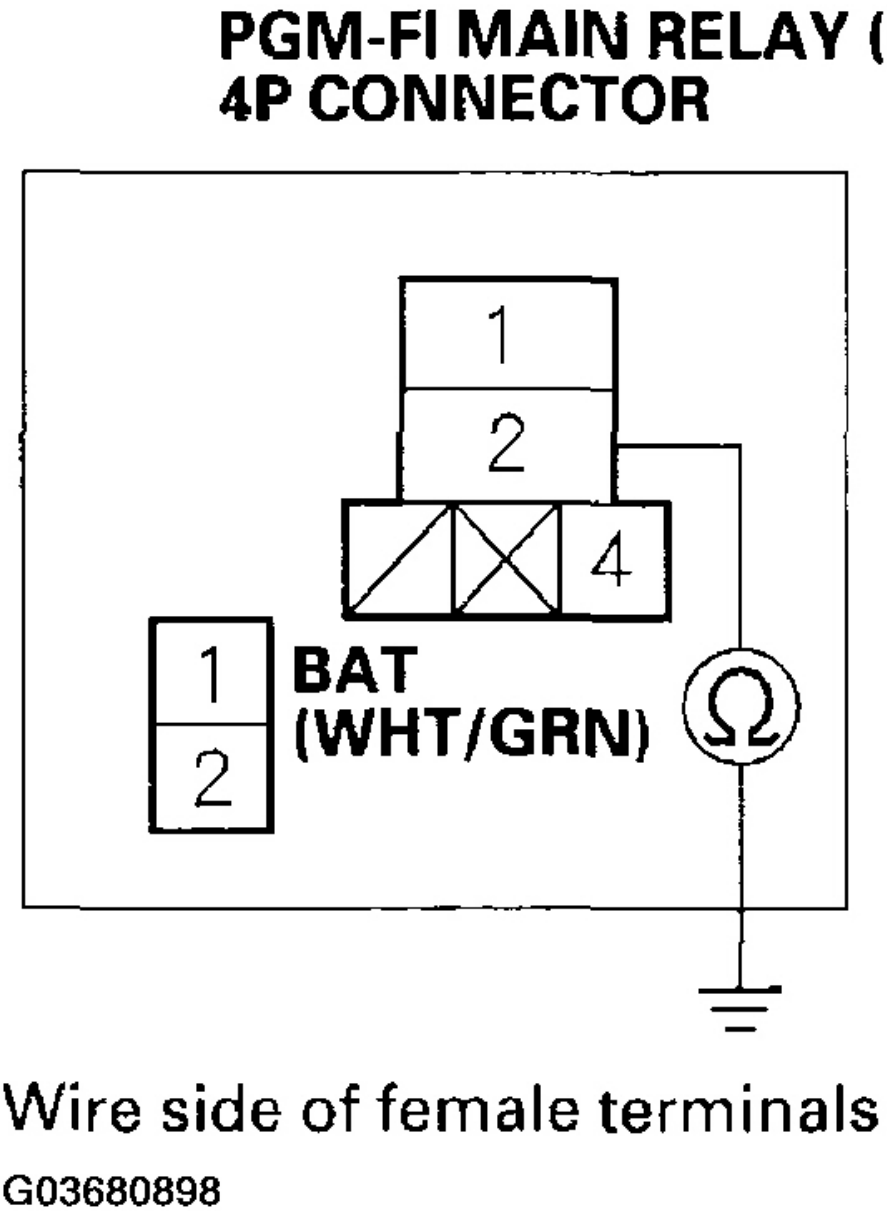


Fig. 195: Checking Continuity Between PGM-FI Main Relay Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the PGM-FI main relay (IGP) and each item. Also replace the No. 7 (15 A) fuse.

NO - Replace the PGM-FI main relay (IGP). Also replace the No. 7 (15 A) fuse.

22. Inspect the No. 2 (15 A) fuse in the under-dash fuse/relay box.

Is the fuse OK?

YES - Go to step 29 .

NO - Go to step 23.

23. Remove the blown No. 2 (15 A) fuse in the under-dash fuse/relay box.
24. Remove the PGM-FI main relay (FUEL PUMP).
25. Remove the fuel tank (see **FUEL TANK REPLACEMENT**).
26. Check for continuity between fuel pump 5P connector terminal No. 5 and body ground.

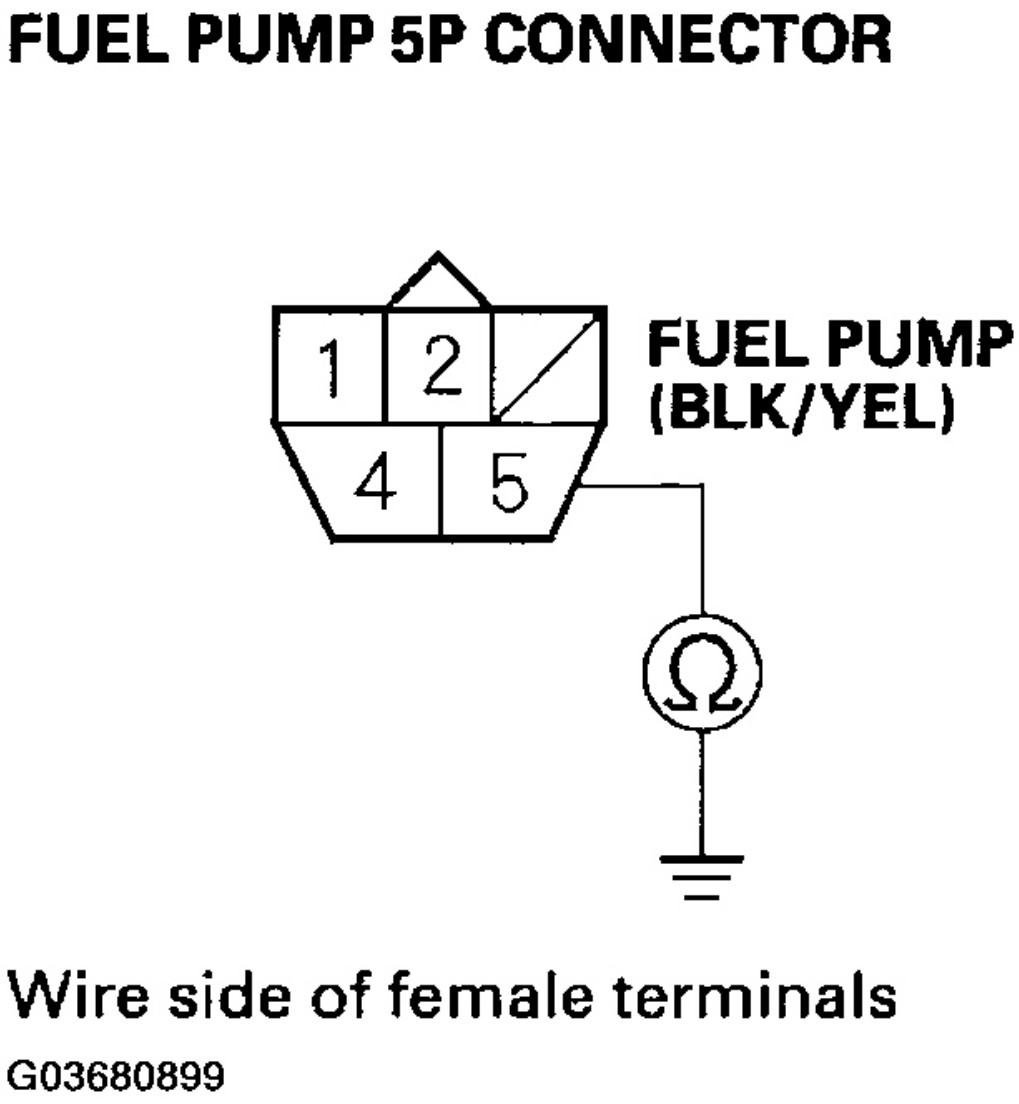


Fig. 196: Checking Continuity Between Fuel Pump Connector Terminal No. 5 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the fuel pump and the PGM-FI main relay (FUEL PUMP). Also replace the No. 2 (15 A) fuse.

NO - Go to step 27.

27. Reinstall the PGM-FI main relay (FUEL PUMP).
28. Check for continuity between fuel pump 5P connector terminal No. 5 and body ground.

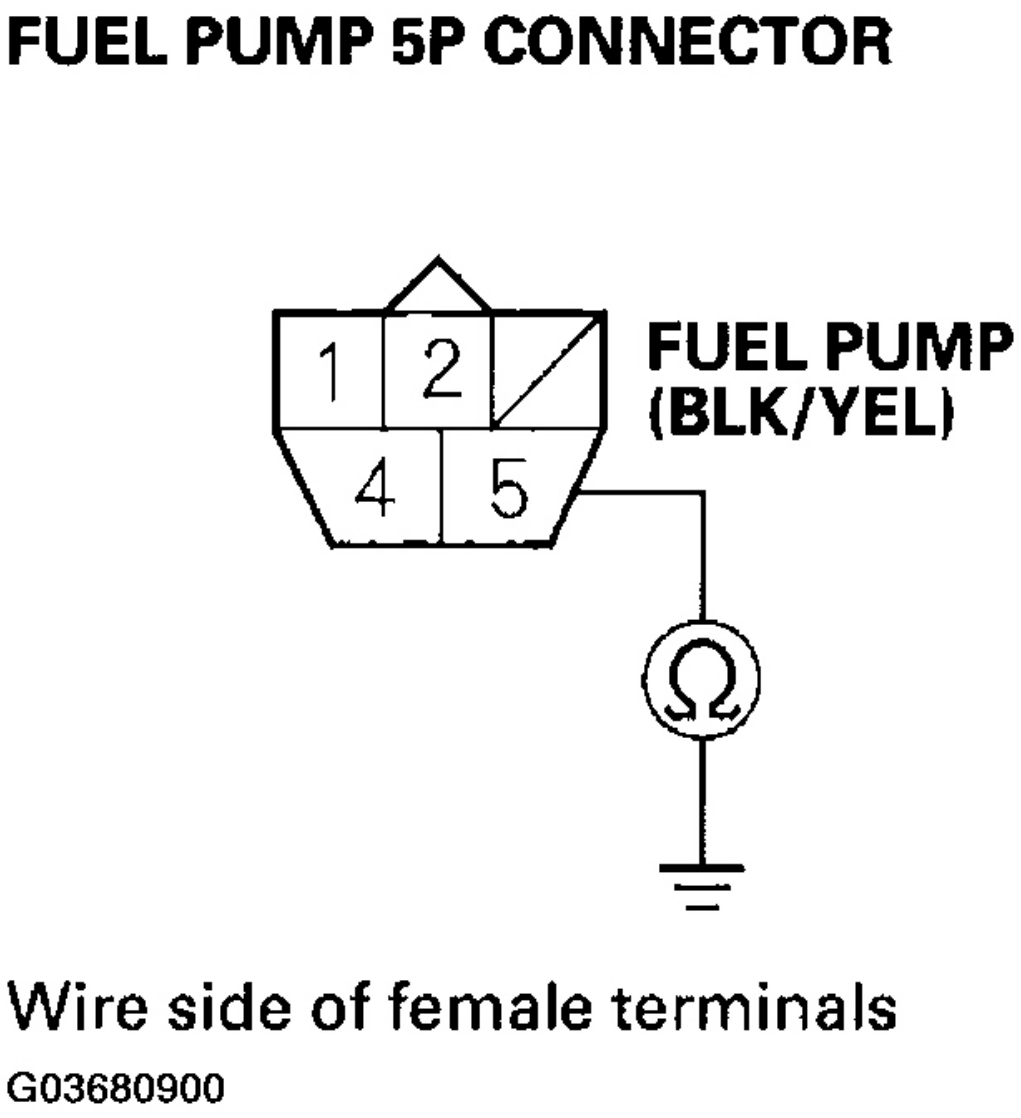


Fig. 197: Checking Continuity Between Fuel Pump 5P Connector Terminal No. 5 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the PGM-FI main relay (FUEL PUMP). Also replace the No. 2 (15 A) fuse.

NO - Check the fuel pump, and replace it if necessary. Also replace the No. 2 (15 A) fuse.

29. Check for continuity between body ground and PGM-FI main relay diode 2P connector terminal No. 2.

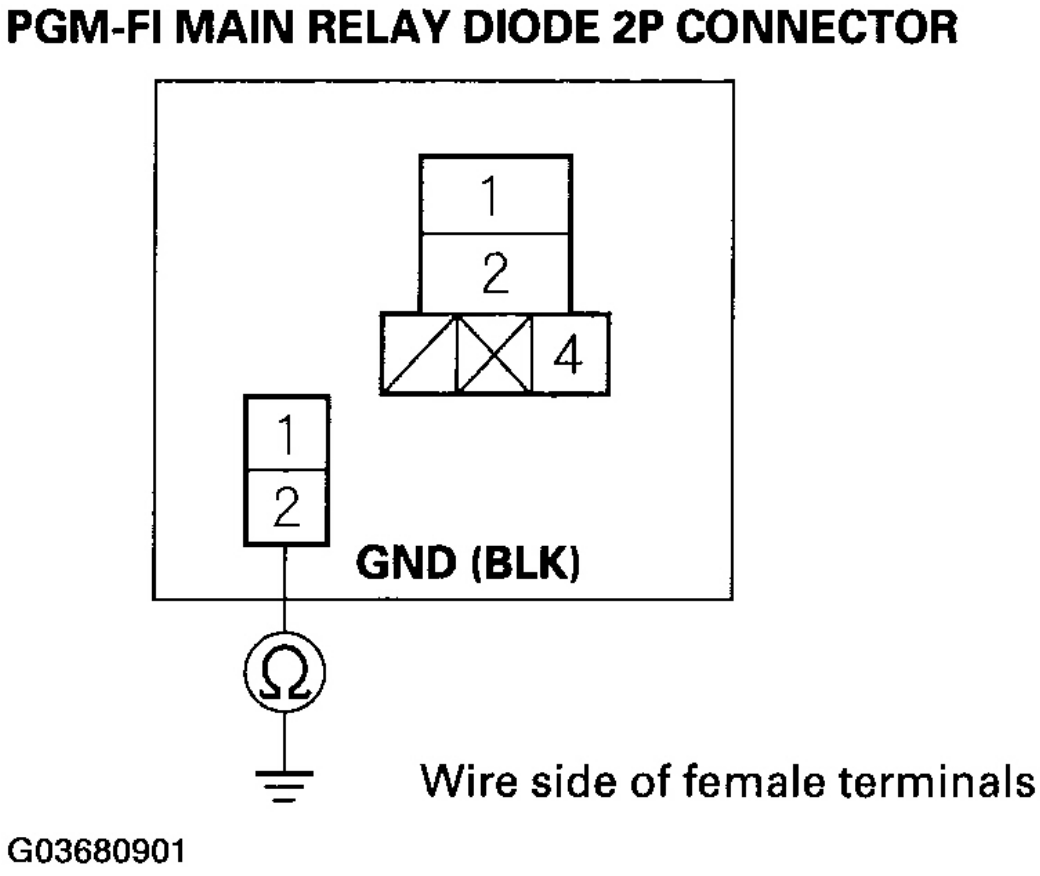


Fig. 198: Checking Continuity Between Body Ground And PGM-FI Main Relay Diode 2P Connector Terminal No. 2

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 30.

NO - Repair open in the wire between the PGM-FI main relay and G101.

30. Measure voltage between body ground and ECM connector terminals B1 and B9 individually.

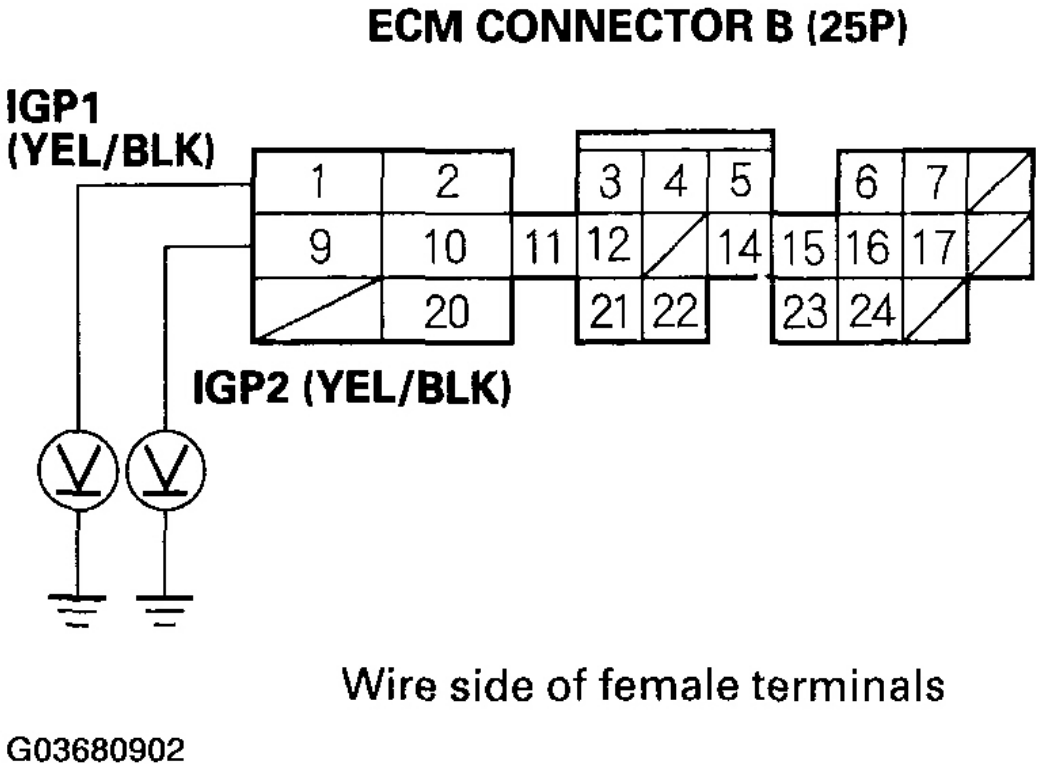


Fig. 199: Measuring Voltage Between Body Ground And ECM Connector Terminals B1 And B9
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 37 .

NO - Go to step 31.

31. Turn the ignition switch OFF.
32. Remove the PGM-FI main relay (IGP).
33. Turn the ignition switch ON (II).
34. Measure voltage between PGM-FI main relay (IGP) 4P connector terminal No. 2 and body ground.

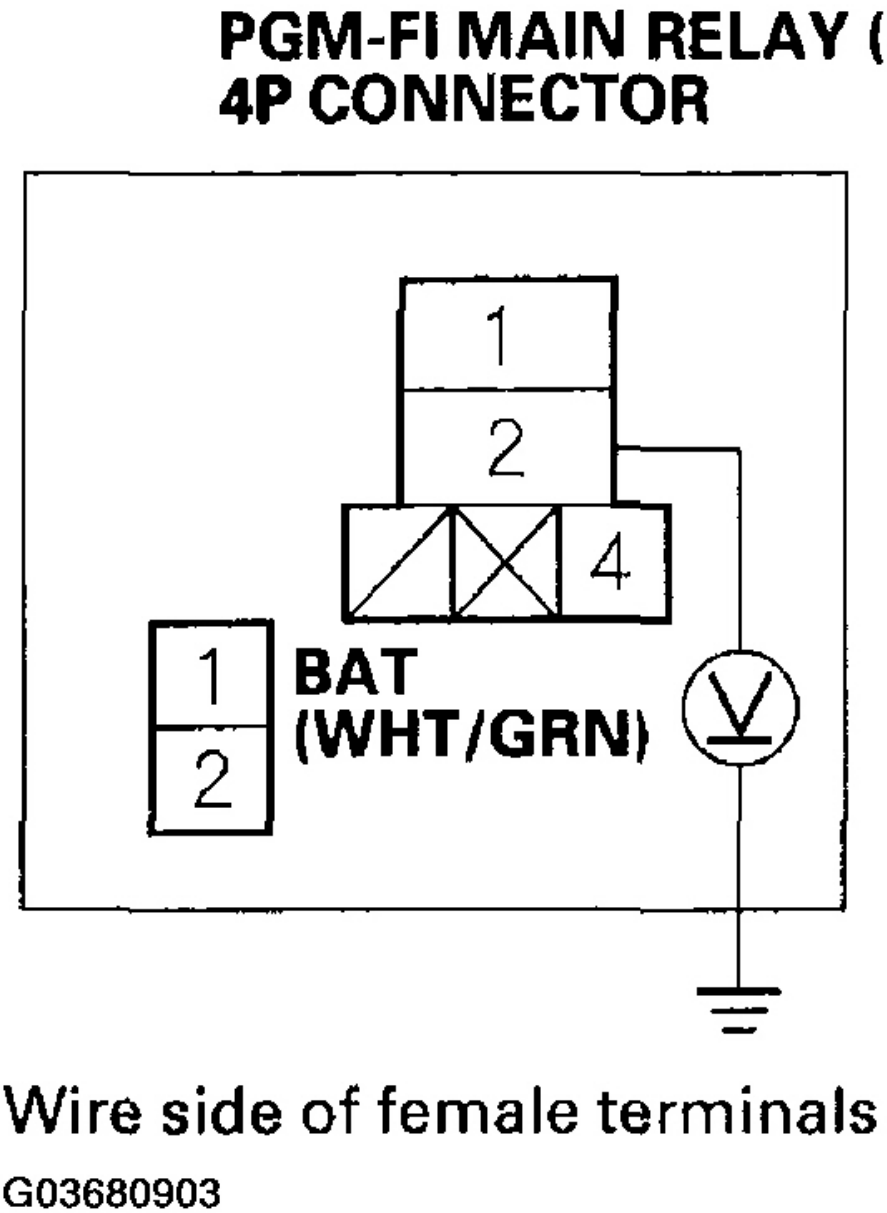


Fig. 200: Measuring Voltage Between PGM-FI Main Relay (IGP) 4P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 35.

NO - Repair open in the wire between the No. 7 (15 A) fuse and the PGM-FI main relay (IGP).

35. Turn the ignition switch OFF.
36. Check for continuity between PGM-FI main relay (IGP) 4P connector terminal No. 1 and ECM connector terminals B1 and B9 individually.

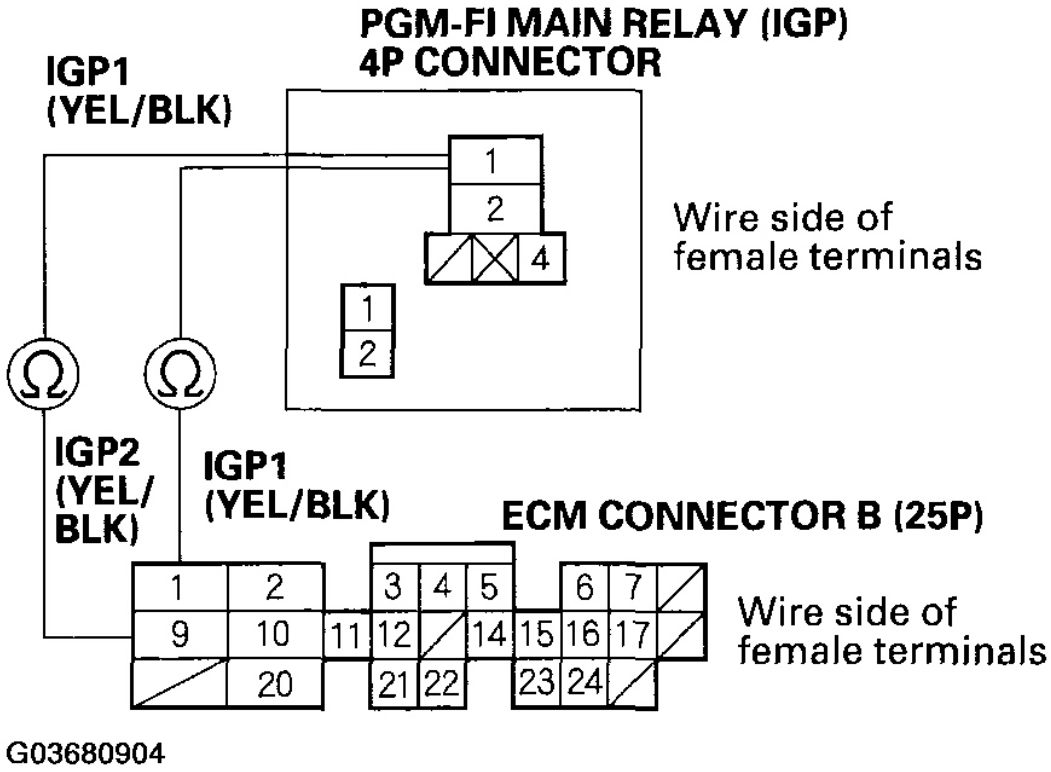


Fig. 201: Checking Continuity Between PGM-FI Main Relay (IGP) 4P Connector Terminal No. 1 And ECM Connector Terminals B1 And B9
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the PGM-FI main relay (IGP).

NO - Repair open in the wire between the PGM-FI main relay (IGP) and

the ECM (B1, B9).

37. Measure voltage between body ground and ECM connector terminals B2, B10, B20, and B22 individually.

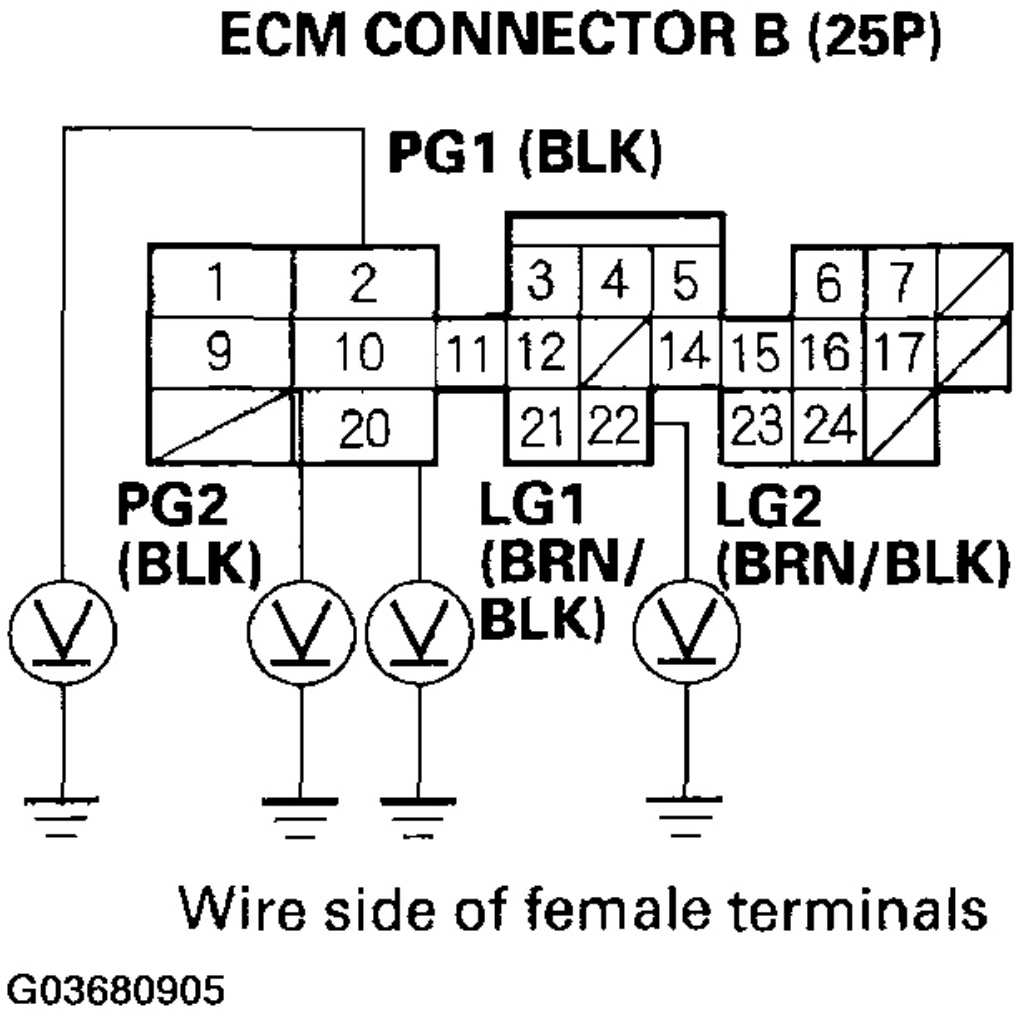


Fig. 202: Measuring Voltage Between Body Ground And ECM Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 1.0 V?

YES - Repair open in the wire(s) that had more than 1.0 V between G101 and the ECM (B2, B10, B20, B22).

NO - Go to step 38.

38. Measure voltage between body ground and ECM connector terminal C19.

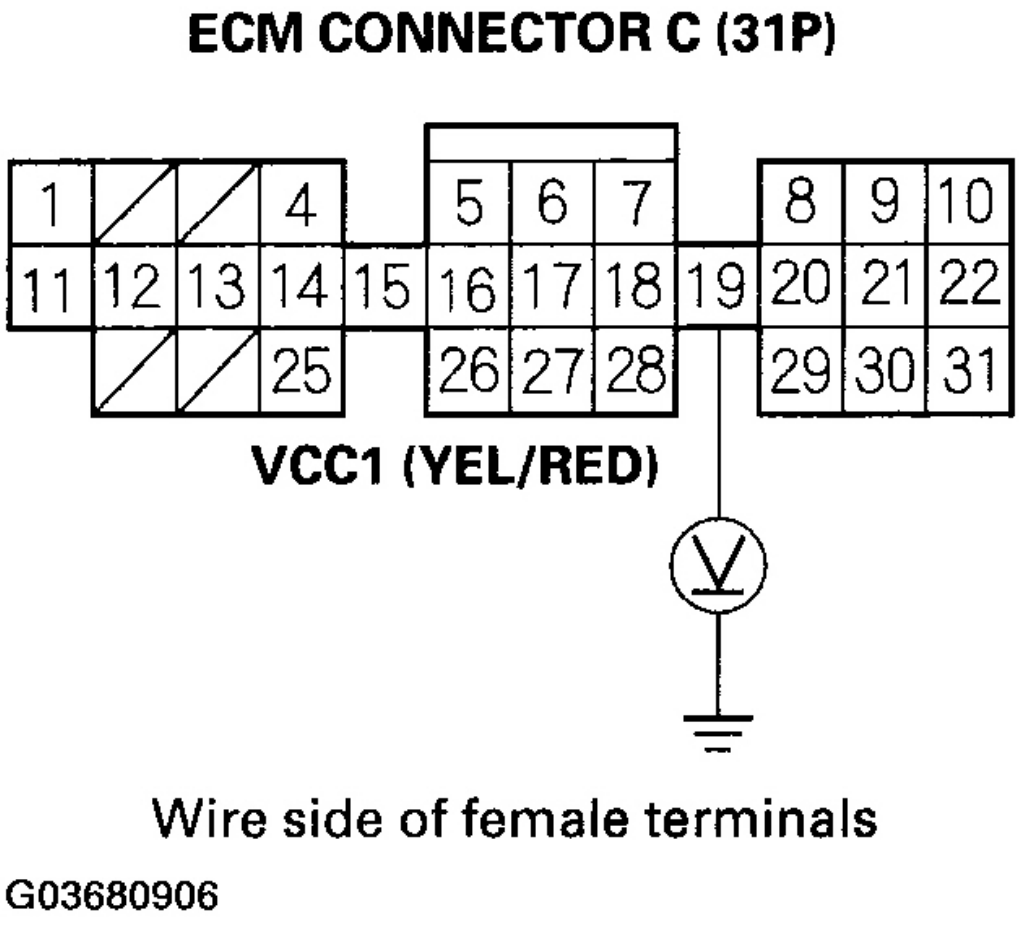


Fig. 203: Measuring Voltage Between Body Ground And ECM Connector Terminal C19
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 46 .

NO - Go to step 39.

39. Turn the ignition switch OFF.
40. Disconnect the manifold absolute pressure (MAP) sensor 3P connector.
41. Turn the ignition switch ON (II).
42. Measure voltage between body ground and ECM connector terminal C19.

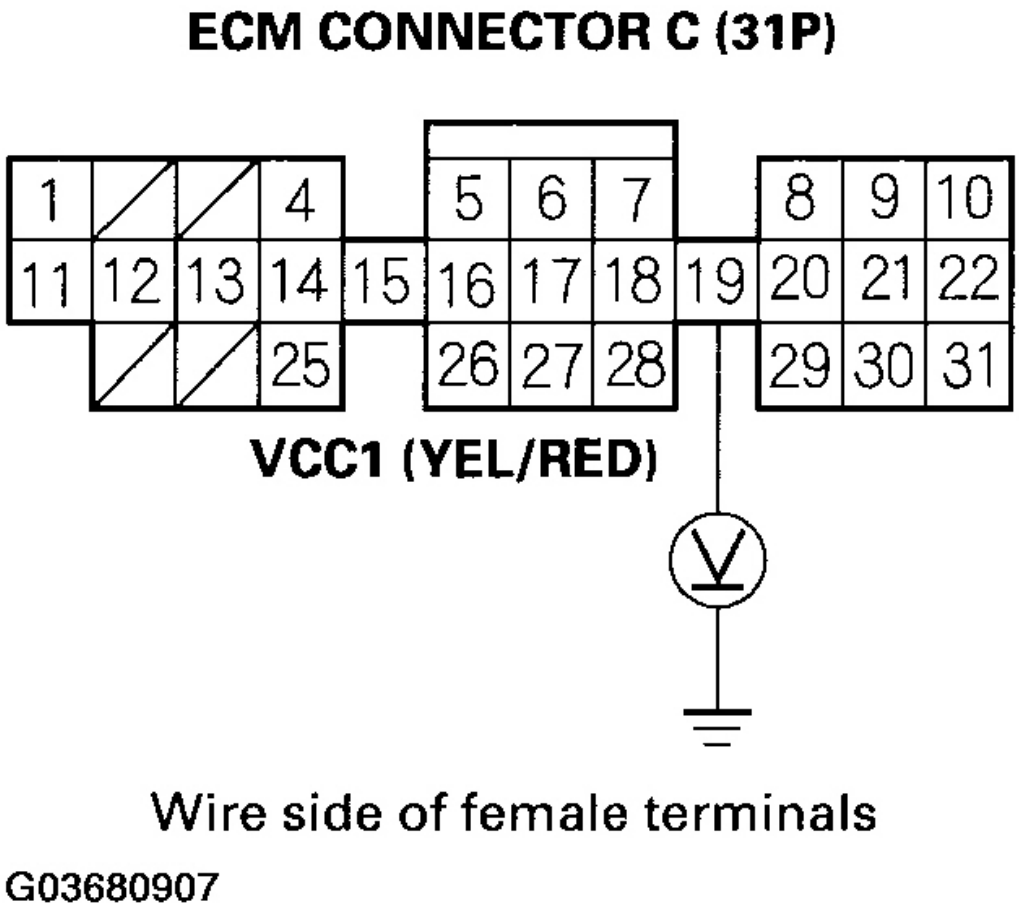


Fig. 204: Measuring Voltage Between Body Ground And ECM Connector Terminal C19
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the MAP sensor.

NO - Go to step 43.

43. Turn the ignition switch OFF.
44. Disconnect ECM connector C (31P).
45. Check for continuity between ECM connector terminal C19 and body ground.

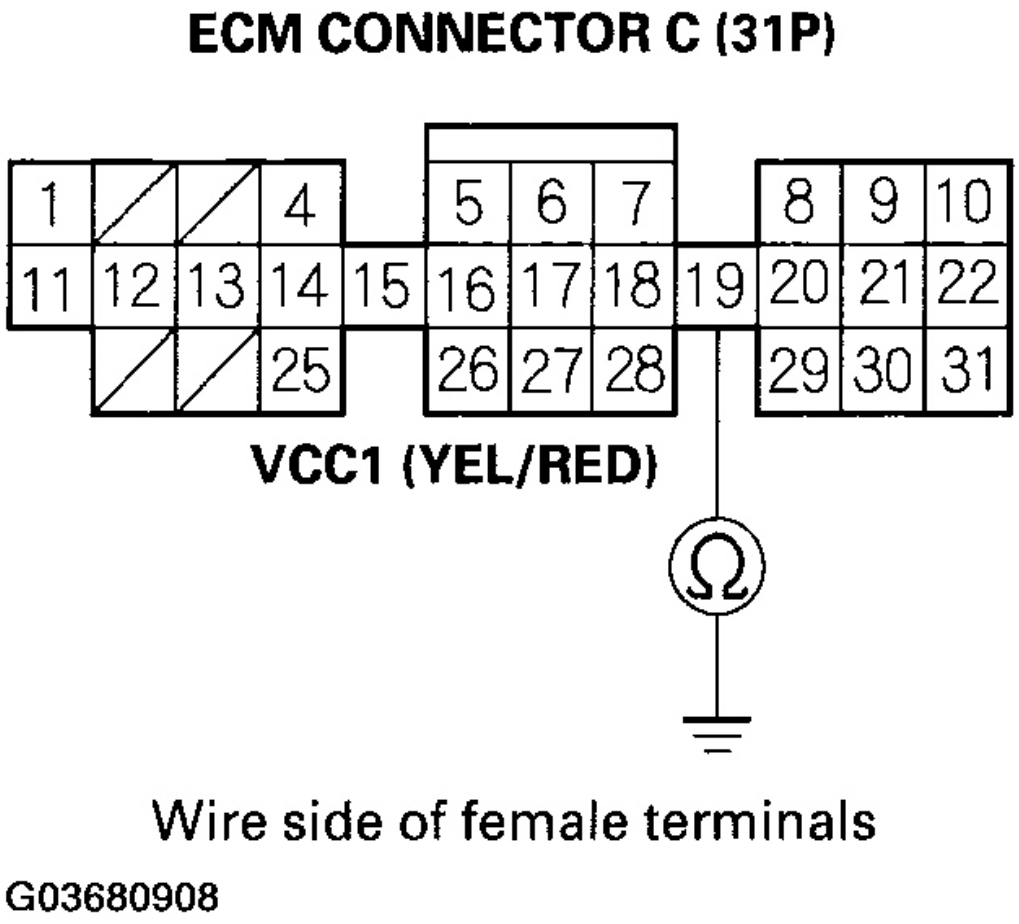


Fig. 205: Checking Continuity Between ECM Connector Terminal C19 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C19) and the MAP sensor.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

46. Measure voltage between body ground and ECM connector terminal C28.

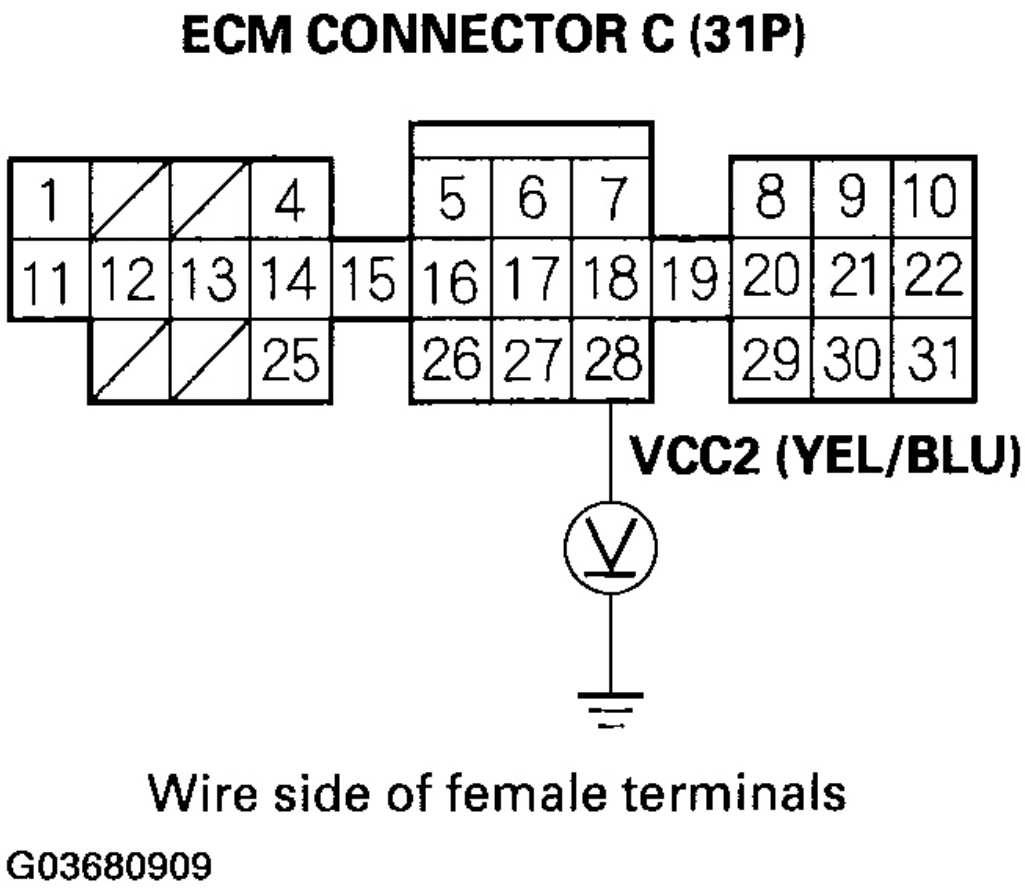


Fig. 206: Measuring Voltage Between Body Ground And ECM Connector Terminal C28
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES -

- CVT model: Go to step 53 .
- M/T model: Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT

model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Go to step 47.

47. Turn the ignition switch OFF.
48. Disconnect the 3P connector from each of these sensors, one at a time, and measure voltage between body ground and ECM connector terminal C28 with the ignition switch ON (II).
    - Exhaust gas recirculation (EGR) valve position sensor
    - Brake booster pressure sensor
    - Fuel tank pressure (FTP) sensor
    - Throttle position (TP) sensor

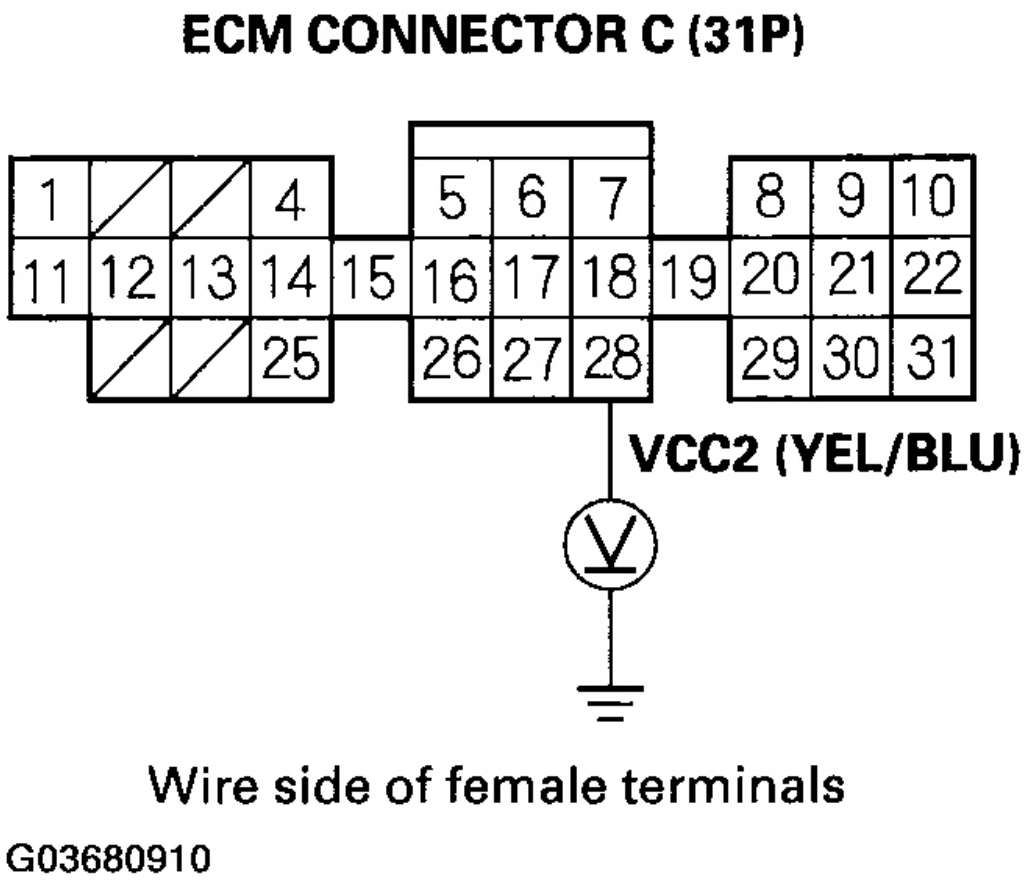


Fig. 207: Measuring Voltage Between Body Ground And ECM Connector Terminal C28 With Ignition Switch ON (II)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the sensor that restored about 5 V when disconnected.
NO - Go to step 49.

49. Turn the ignition switch OFF.
50. Disconnect the connectors from these sensors:
    - Exhaust gas recirculation (EGR) valve position sensor
    - Brake booster pressure sensor

- Fuel tank pressure (FTP) sensor
- Throttle position (TP) sensor

51. Disconnect ECM connector C (31P).
52. Check for continuity between ECM connector terminal C28 and body ground.

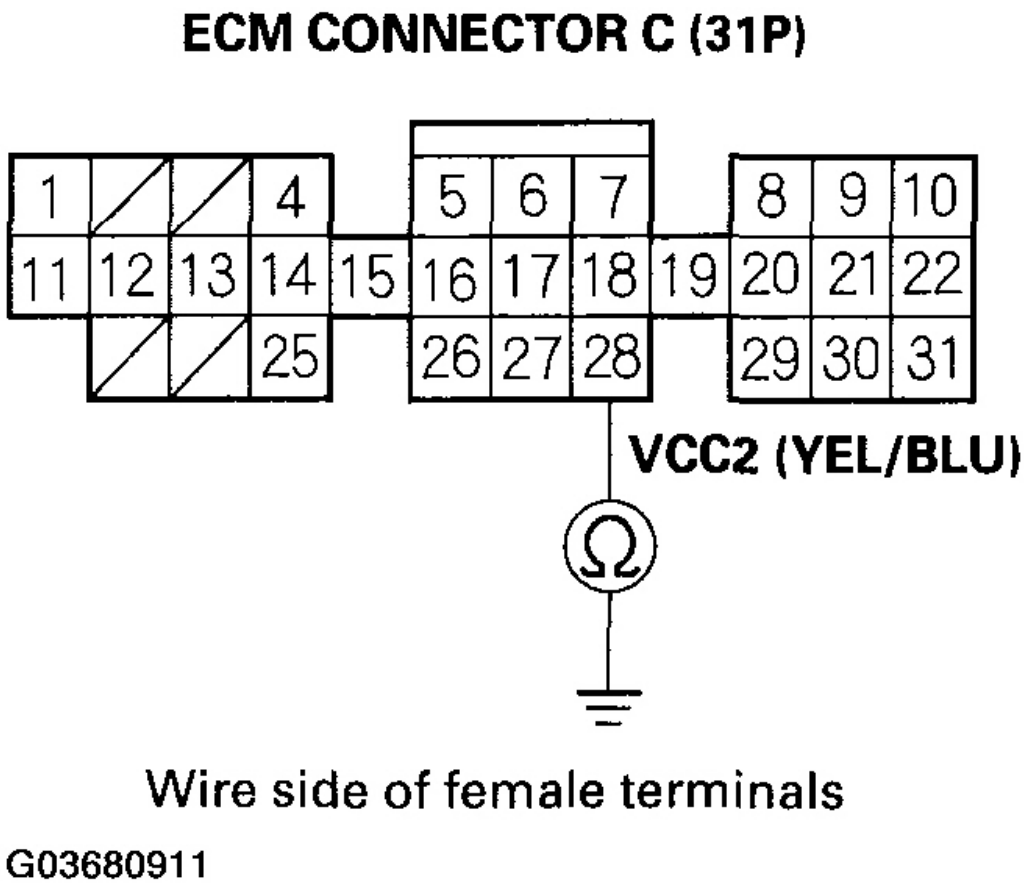


Fig. 208: Checking Continuity Between ECM Connector Terminal C28 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C28) and the EGR

valve position sensor, the brake booster pressure sensor, the FTP sensor, or the TP sensor.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

53. Measure voltage between body ground and ECM connector terminal B6.

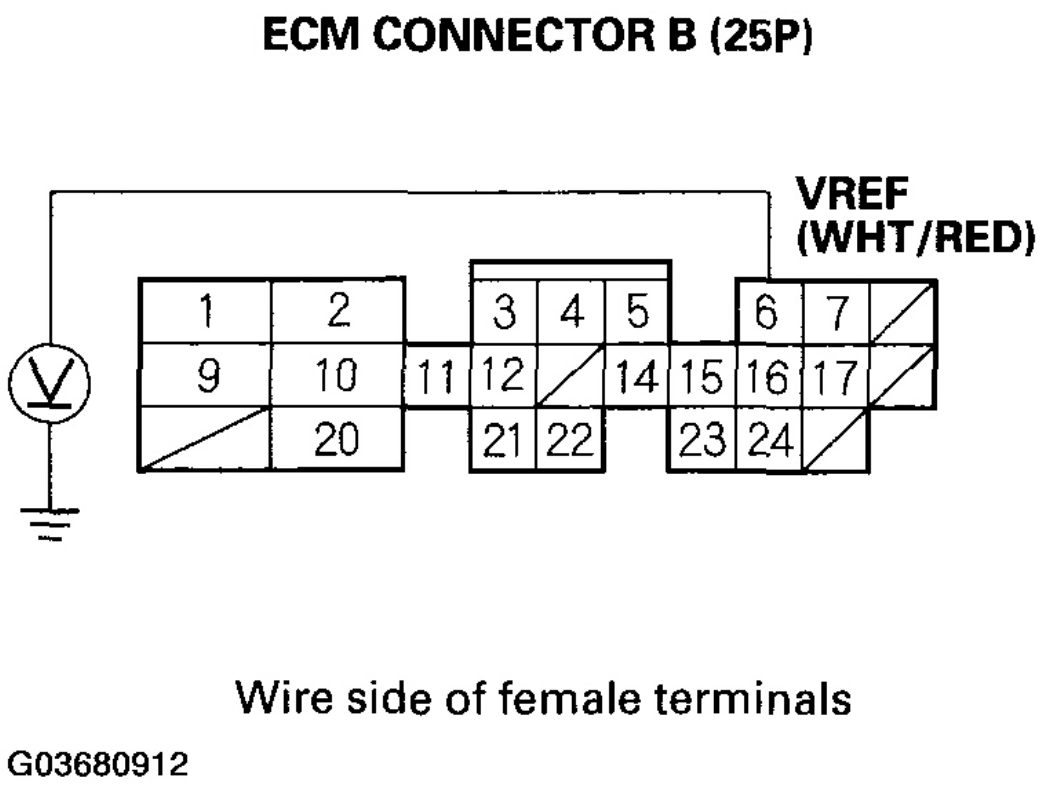


Fig. 209: Measuring Voltage Between Body Ground And ECM Connector Terminal B6
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Go to step 54.

54. Turn the ignition switch OFF.
55. Disconnect TCM connector B (22P).
56. Turn the ignition switch ON (II).
57. Measure voltage between body ground and ECM connector terminal B6.

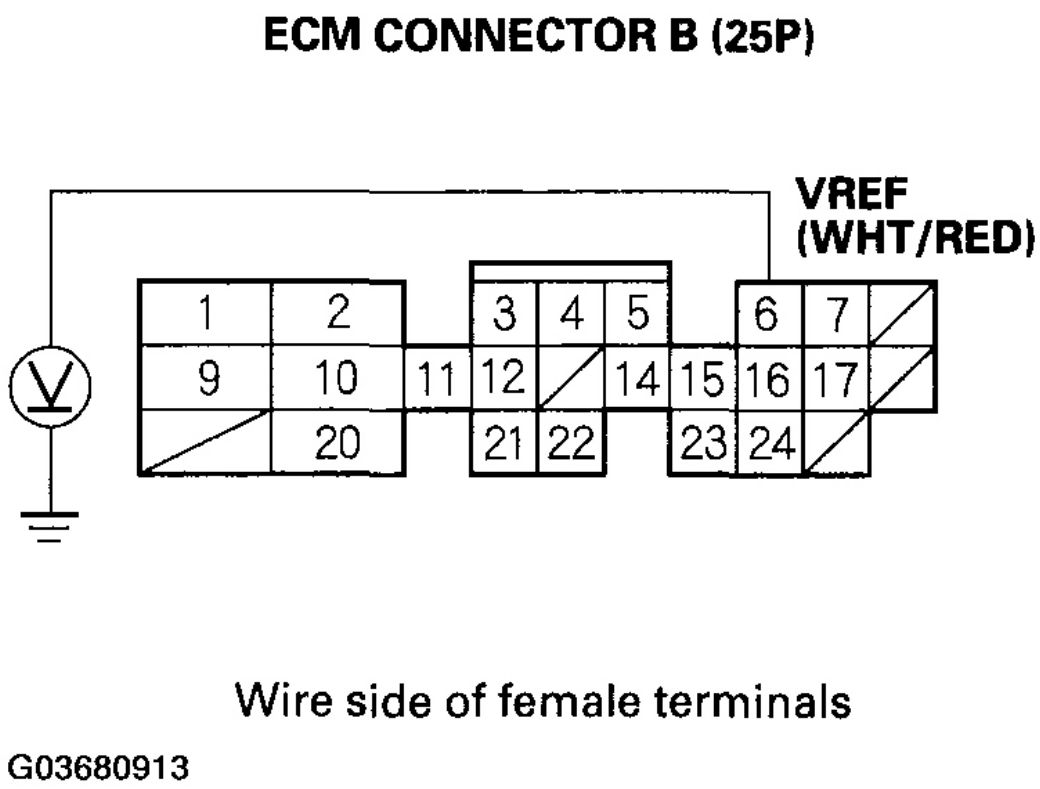


Fig. 210: Measuring Voltage Between Body Ground And ECM Connector Terminal B6
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Substitute a known-good TCM, and recheck (see **HOW TO TROUBLESHOOT CIRCUIT AT THE TCM**). If the symptom/indication goes away, replace the original TCM.

NO - Go to step 58.

58. Turn the ignition switch OFF.
59. Disconnect ECM connector B (25P).
60. Check for continuity between ECM connector terminal B6 and body ground.

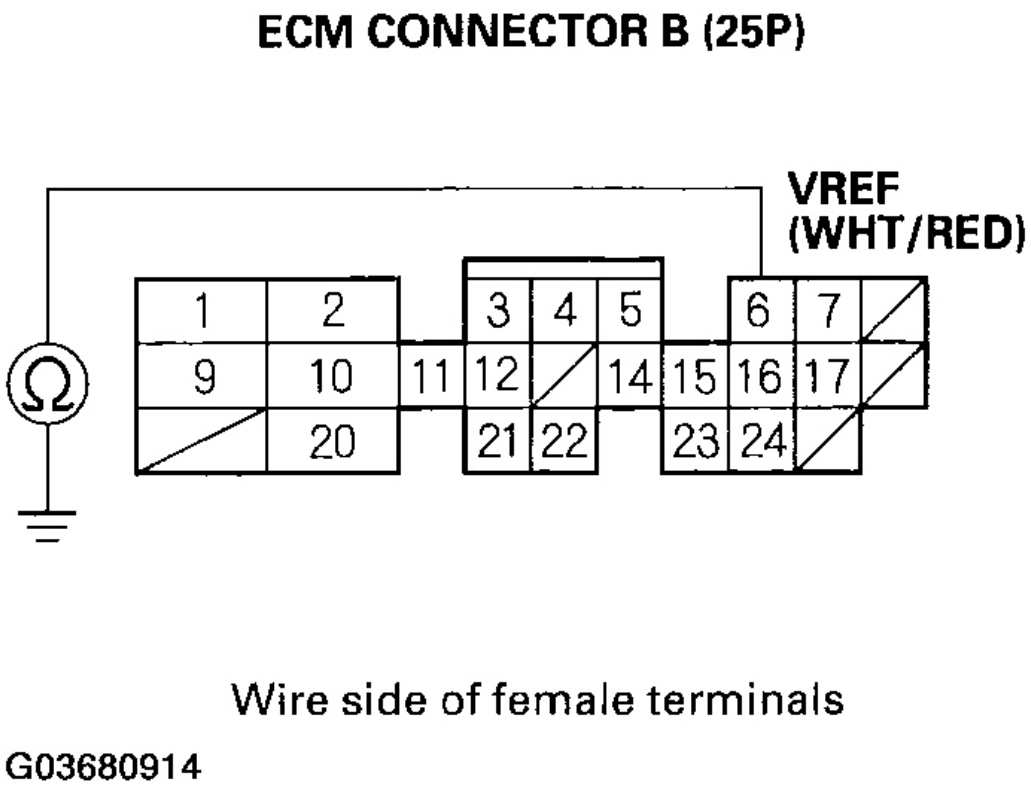


Fig. 211: Checking Continuity Between ECM Connector Terminal B6 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (B6) and the TCM (B20).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the

original ECM (see **ECM REPLACEMENT**).

61. Measure voltage between ECM connector terminal B17 and body ground.

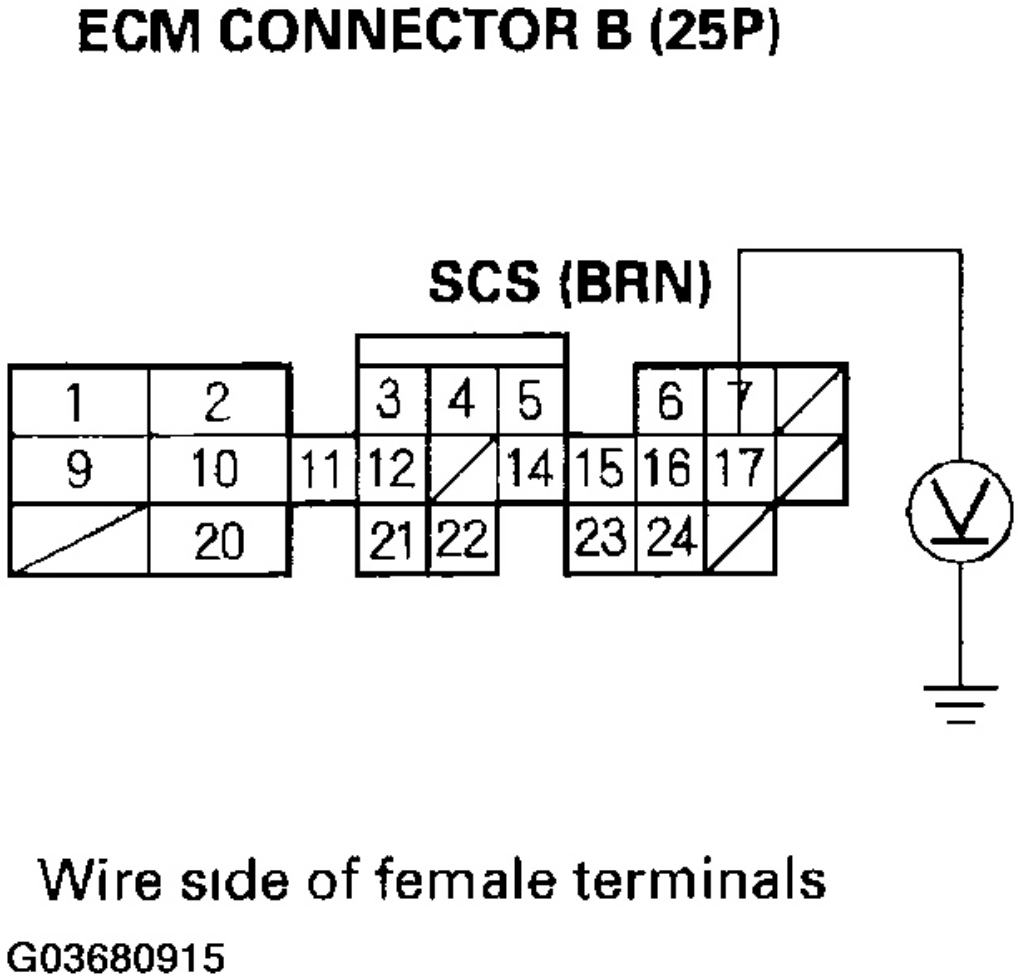


Fig. 212: Measuring Voltage Between ECM Connector Terminal B17 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V (or battery voltage)?

YES - Go to step 65 .

NO - Go to step 62.

62. Turn the ignition switch OFF.
63. Disconnect ECM connector B (25P).
64. Check for continuity between ECM connector terminal B17 and body ground.

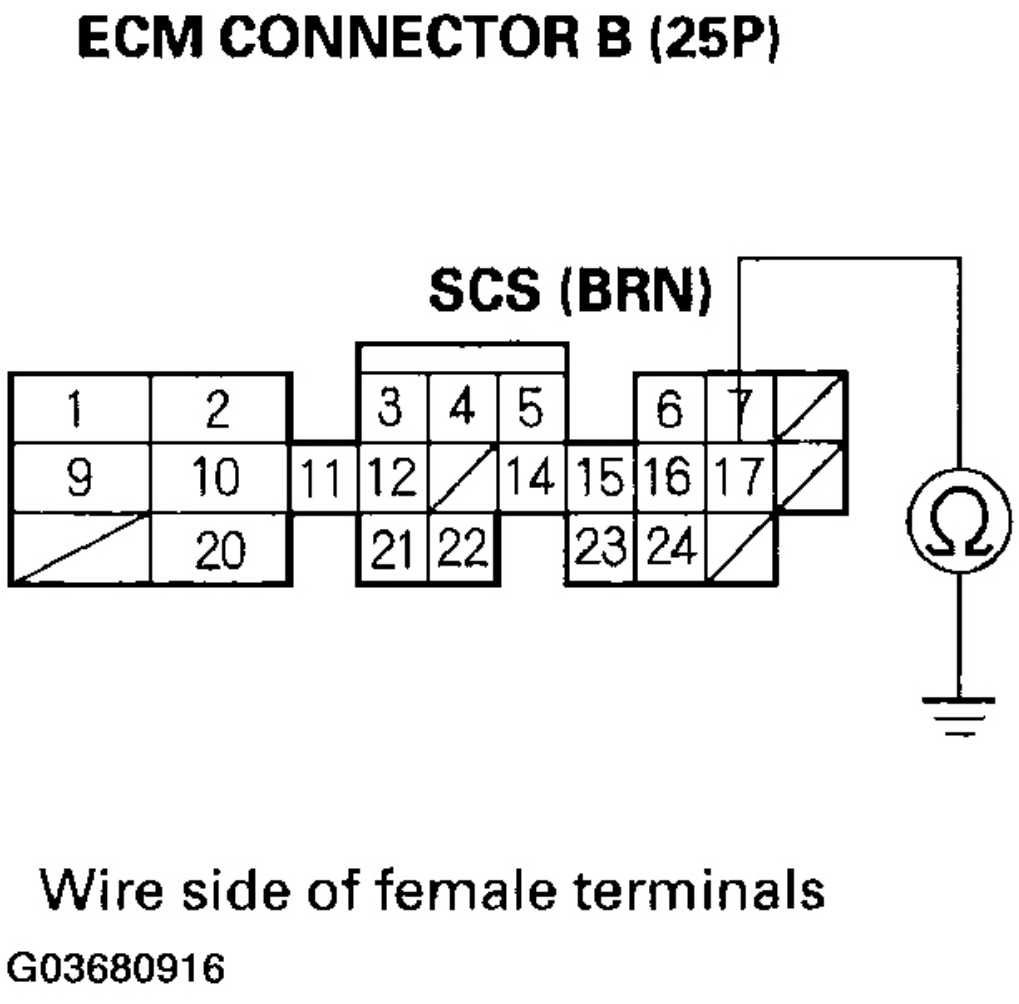


Fig. 213: Checking Continuity Between ECM Connector Terminal B17 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the DLC and the ECM (B17).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

65. Turn the ignition switch OFF.
66. Disconnect ECM connector B (25P).
67. Turn the ignition switch ON (II).

Is the MIL on?

YES - Repair short in the wire between the gauge assembly and the ECM (B17). If the wires are OK, replace the gauge assembly.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2004 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

2005-2006 MODELS

1. Connect the HDS (see **HOW TO USE THE HDS (HONDA DIAGNOSTIC SYSTEM)**).
2. Turn the ignition switch ON (II), and check the HDS.

Does the HDS communicate with the ECM?

YES - Go to step 3.

NO - Go to "DLC Circuit Troubleshooting" (see **DLC CIRCUIT TROUBLESHOOTING**).

3. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - Go to the indicated **DTC TROUBLESHOOTING**

NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Turn the ignition switch ON (II) and watch the malfunction indicator lamp (MIL).

Does the MIL come on and stay on for more than 20 seconds after turning the ignition switch ON (II)?

YES - If the MIL always comes on and stays on, go to step 81 . But if the MIL sometimes works normally, first check for these problems:

- An intermittent short in the wire between the ECM (B17) and the data link connector (DLC).
- An intermittent short in the wire between the ECM (A18) and the gauge assembly.
- The readiness codes are not set (see **HOW TO SET READINESS CODES**). (This is indicated if the MIL blinks five times after you turn the ignition switch ON (II) and wait about 20 seconds.)

NO - If the MIL is always off, go to step 6. But if the MIL sometimes works normally, first check for these problems:

- A loose No. 6 (7.5 A) fuse in the under-dash fuse/relay box.
- A loose No. 1 (50 A) fuse in the under-hood fuse/relay box.
- A loose No. 7 (15 A) fuse in the under-hood fuse/relay box.
- A loose No. 2 (15 A) fuse in the under-dash fuse/relay box.
- A poor connection at ECM terminal A18.
- An intermittent open in the GRN/ORN wire between the ECM (A18)

and the gauge assembly.

- An intermittent short in the wire between the ECM (C19) and the manifold absolute pressure (MAP) sensor.
- An intermittent short in the wire between the ECM (C28) and the throttle position (TP) sensor, the brake booster pressure sensor, the fuel tank pressure (FTP) sensor, the exhaust gas recirculation (EGR) valve position sensor, or brake fluid pressure sensor A (M/T model).
- An intermittent short in the wire between the ECM (C23) and brake fluid pressure sensor B (M/T model).
- An intermittent short in the wire between the ECM (B6) and the TCM (CVT model).

6. Turn the ignition switch OFF.
7. Turn the ignition switch ON (II).

Is the low oil pressure indicator on?

YES - Go to step 10 .

NO - Go to step 8.

8. Inspect the No. 6 (7.5 A) fuse in the under-dash fuse/relay box.

Is the fuse OK?

YES - Go to step 9.

NO - Repair short in the wire between the No. 6 (7.5 A) fuse and the gauge assembly. Also replace the No. 6(7.5A) fuse.

9. Inspect the No. 1 (50 A) fuse in the under-hood fuse/relay box.

Is the fuse OK?

YES - Repair open in the wire between the No. 1 (50 A) fuse and the gauge assembly. If the wires are OK, test the ignition switch (see **TEST**).

NO - Repair short in the wire between the No. 1 (50 A) fuse and the under-dash fuse/relay box. Also replace the No. 1 (50 A) fuse.

10. Try to start the engine.

Does the engine start?

YES - Go to step 11.

NO - Go to step 14 .

11. Turn the ignition switch OFF.
12. Connect ECM connector terminal A18 to body ground with a jumper wire.

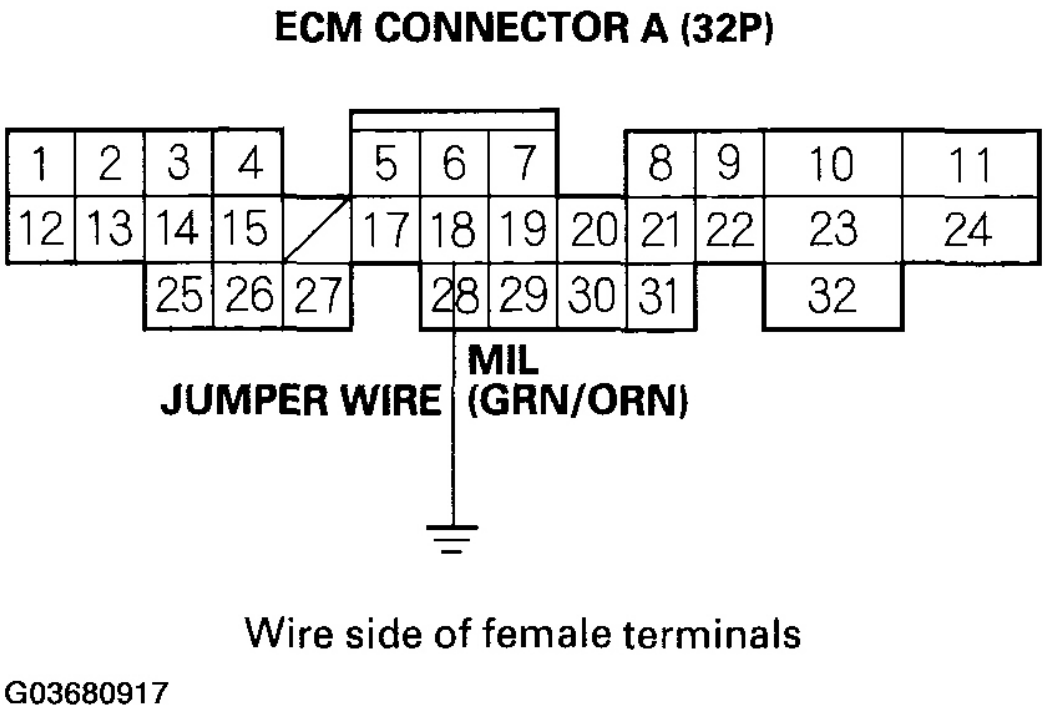


Fig. 214: Connecting ECM Connector Terminal A18 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Turn the ignition switch ON (II).

Is the MIL on?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION**

FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Check for an open in the wire between the ECM (A18) and the gauge assembly. Also check for a blown MIL bulb. If the wires and the bulb are OK, replace the gauge assembly.

14. Turn the ignition switch OFF.
15. Inspect the No. 7 (15 A) fuse in the under-hood fuse/relay box.

Is the fuse OK?

YES - Go to step 22 .

NO - Go to step 16.

16. Remove the blown No. 7 (15 A) fuse in the under-hood fuse/relay box.
17. Remove the PGM-FI main relay (IGP).
18. Check for continuity between body ground and PGM-FI main relay (IGP) 4P connector terminals No. 2 and No. 4 individually.

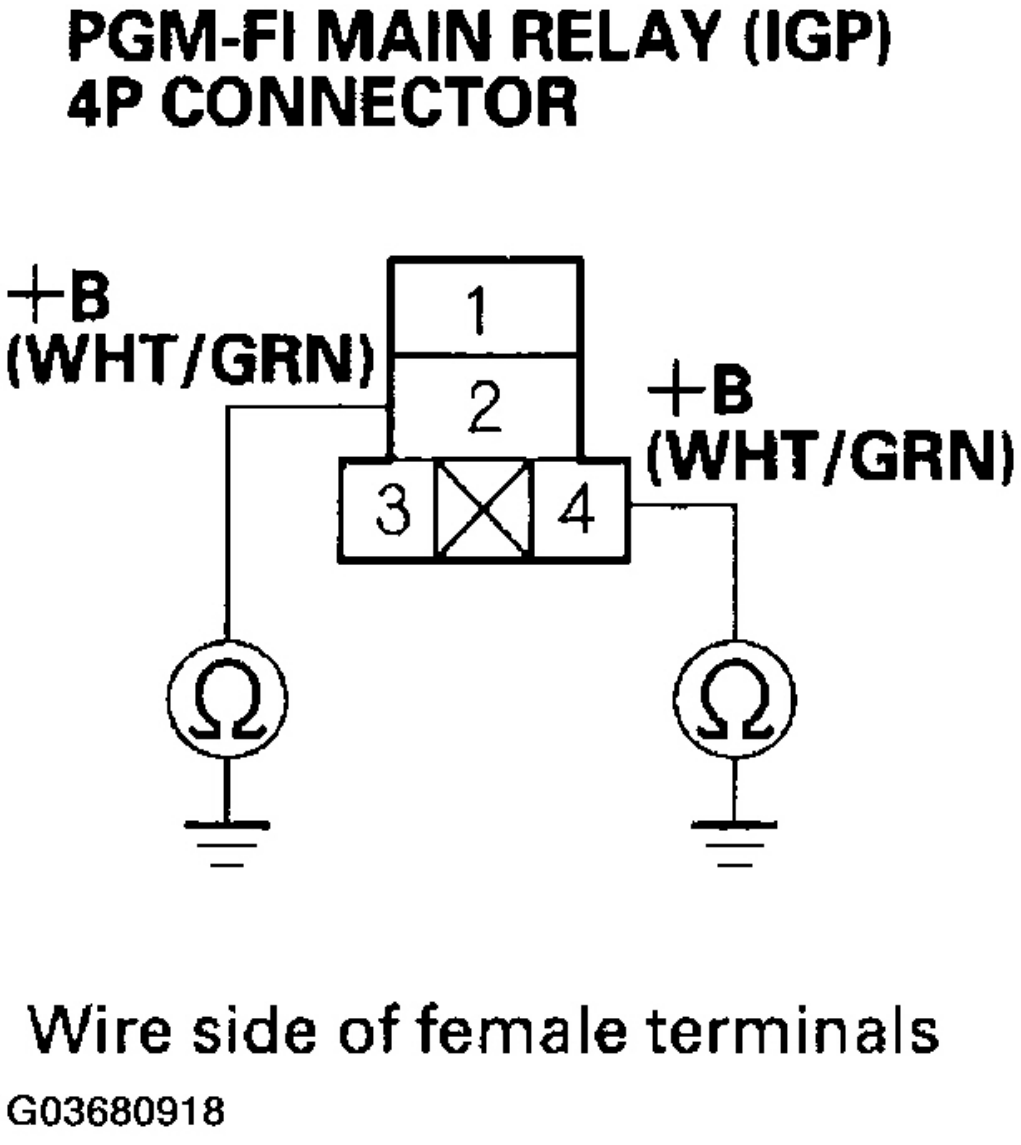


Fig. 215: Checking Continuity Between Body Ground And PGM-FI Main Relay (IGP) 4P Connector Terminals No. 2 And 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the No. 7 (15 A) fuse and the

PGM-FI main relay (IGP). Also replace the No. 7 (15 A) fuse.

NO - Go to step 19.

19. Disconnect the connectors from these components:
    - PGM-FI main relay (FUEL PUMP)
    - ECM connector B (25P)
    - Injectors
    - Idle air control (IAC) valve
20. Check for continuity between PGM-FI main relay (IGP) 4P connector terminal No. 1 and body ground.

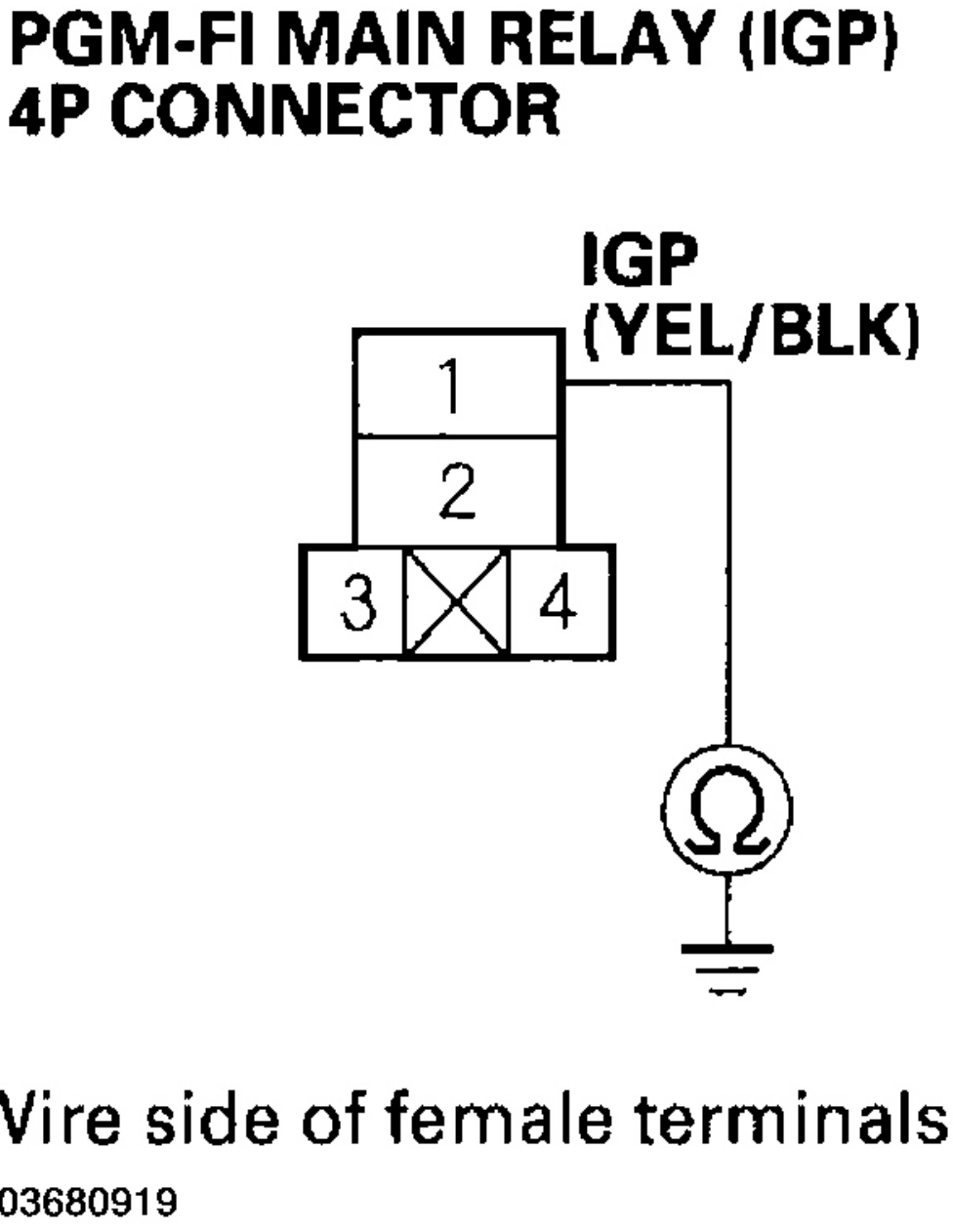


Fig. 216: Checking Continuity Between PGM-FI Main Relay (IGP) 4P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in YEL/BLK wire between the PGM-FI main relay (IGP) and each item. Also replace the No. 7 (15 A) fuse.

NO - Go to step 21.

21. Reconnect each of the components of the connectors below, one at a time, and check for continuity between PGM-FI main relay (IGP) 4P connector terminal No. 1 and body ground.
    - PGM-FI main relay (FUEL PUMP)
    - ECM connector B (25P)
    - Each injector 2P connector
    - Idle air control (IAC) valve 3P connector

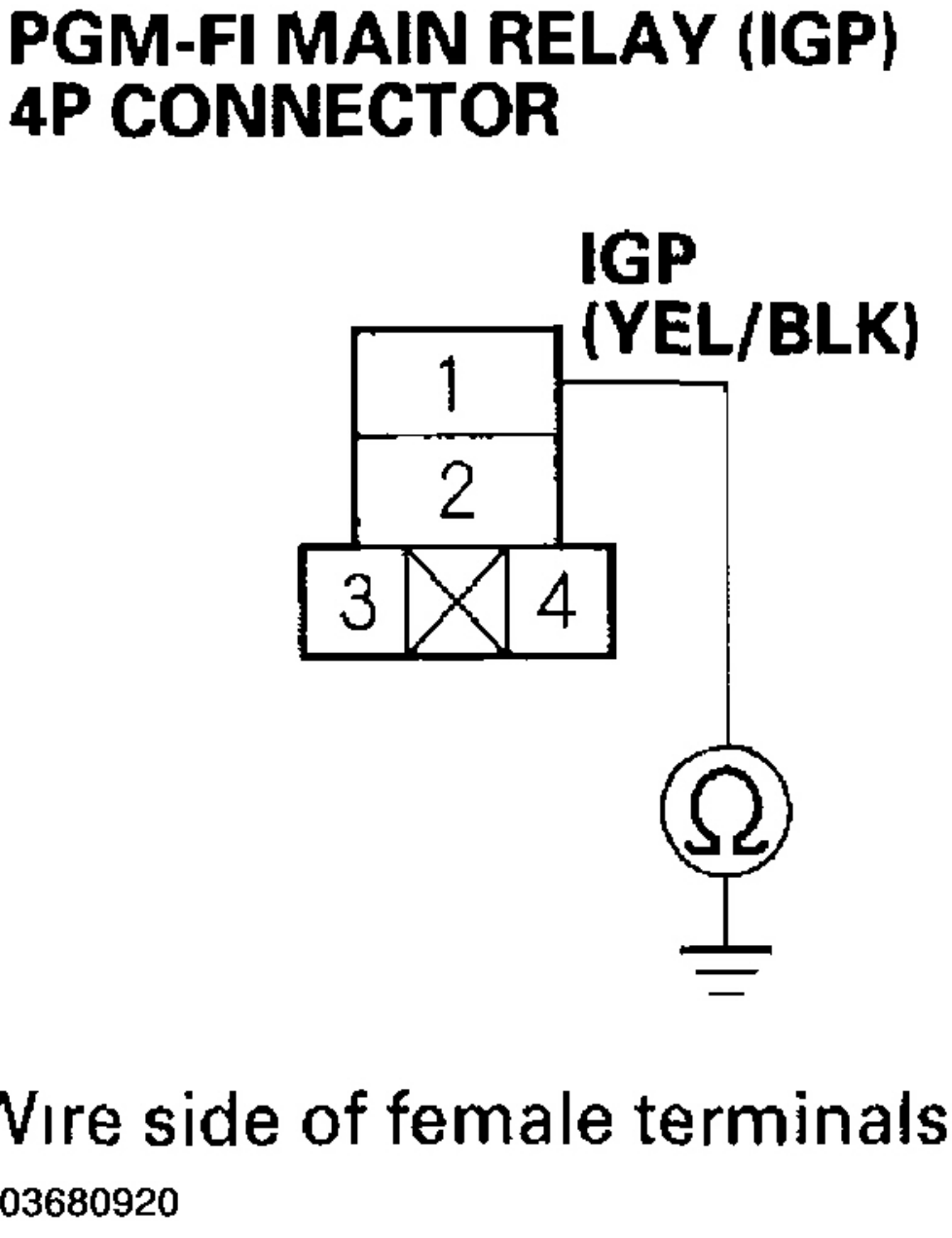


Fig. 217: Checking Continuity Between PGM-FI Main Relay (IGP) 4P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the component that made continuity to body ground go away when disconnected. If the item is the ECM, update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**). Also replace the No. 7 (15 A) fuse.

NO - Replace the PGM-FI main relay (IGP). Also replace the No. 7 (15 A) fuse.

22. Inspect the No. 2 (15 A) fuse in the under-dash fuse/ relay box.

Is the fuse OK?

YES - Go to step 32 .

NO - Go to step 23.

23. Remove the blown No. 2 (15 A) fuse from the under-dash fuse/relay box.
24. Remove ECM connector A (32P).
25. Check for continuity between ECM connector terminal A26 and body ground.

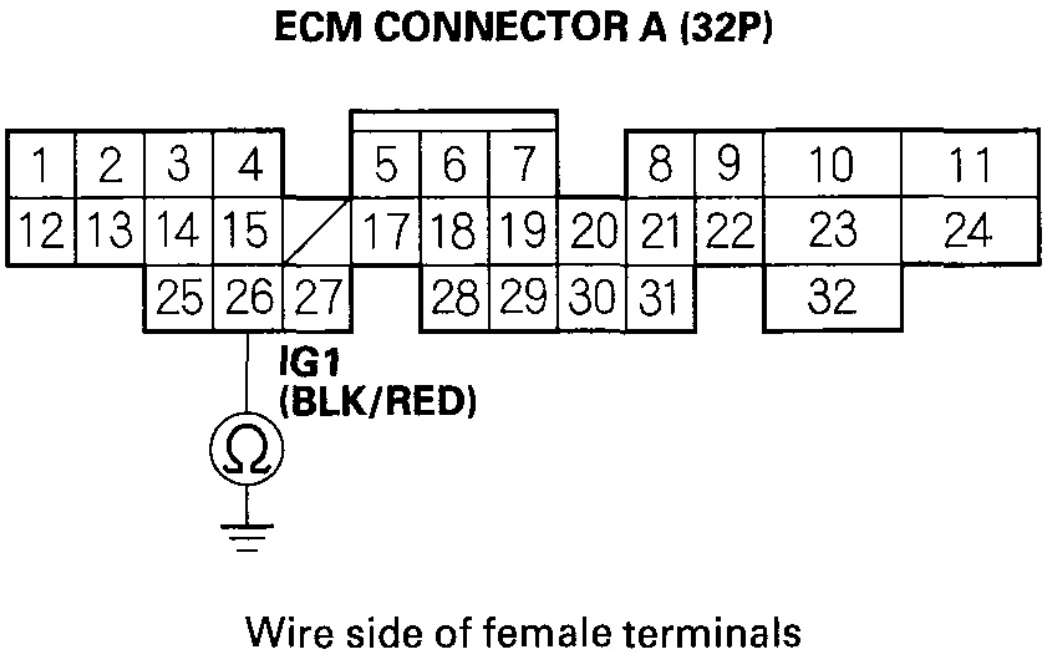


Fig. 218: Checking Continuity Between ECM Connector Terminal A26 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 26.

NO - Replace the No. 2 (15 A) fuse, and update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

26. Remove the PGM-FI main relay (FUEL PUMP).
27. Check for continuity between ECM connector terminal A26 and body ground.

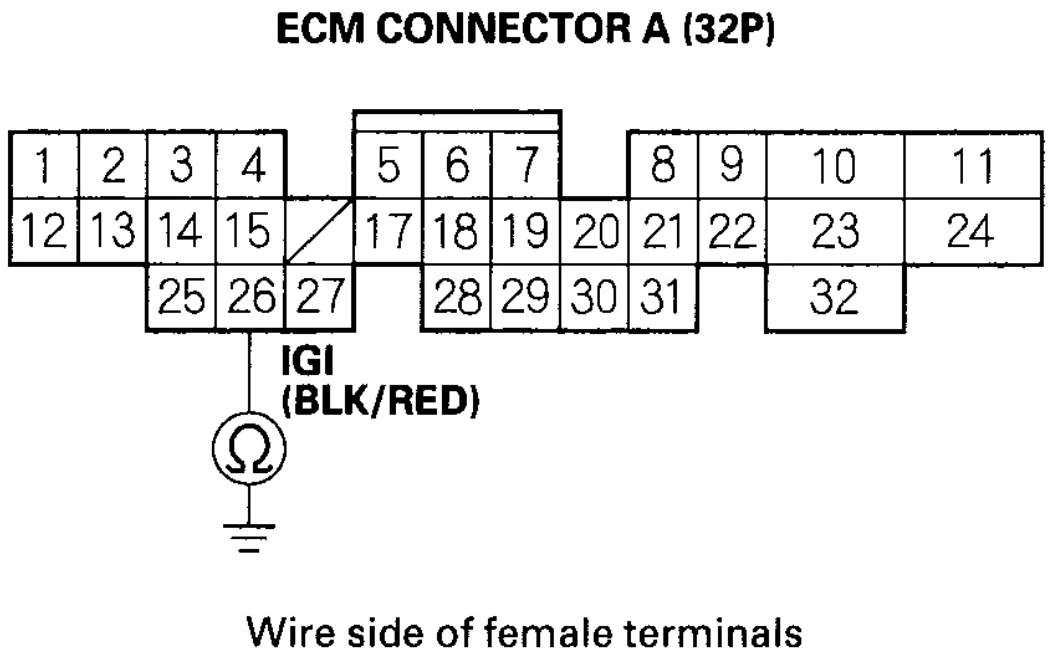


Fig. 219: Checking Continuity Between ECM Connector Terminal A26 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the No. 2 (15 A) fuse and the ECM (A26), or the No. 2 (15 A) fuse and the PGM-FI main relay (FUEL PUMP). Also replace the No. 2 (15 A) fuse.

NO - Go to step 28.

28. Remove the fuel tank; 2005 model (see **2000-2005 MODELS**), 2006 model (see **2006 MODEL**).
29. Check for continuity between fuel pump 5P connector terminal No. 5 and body ground.

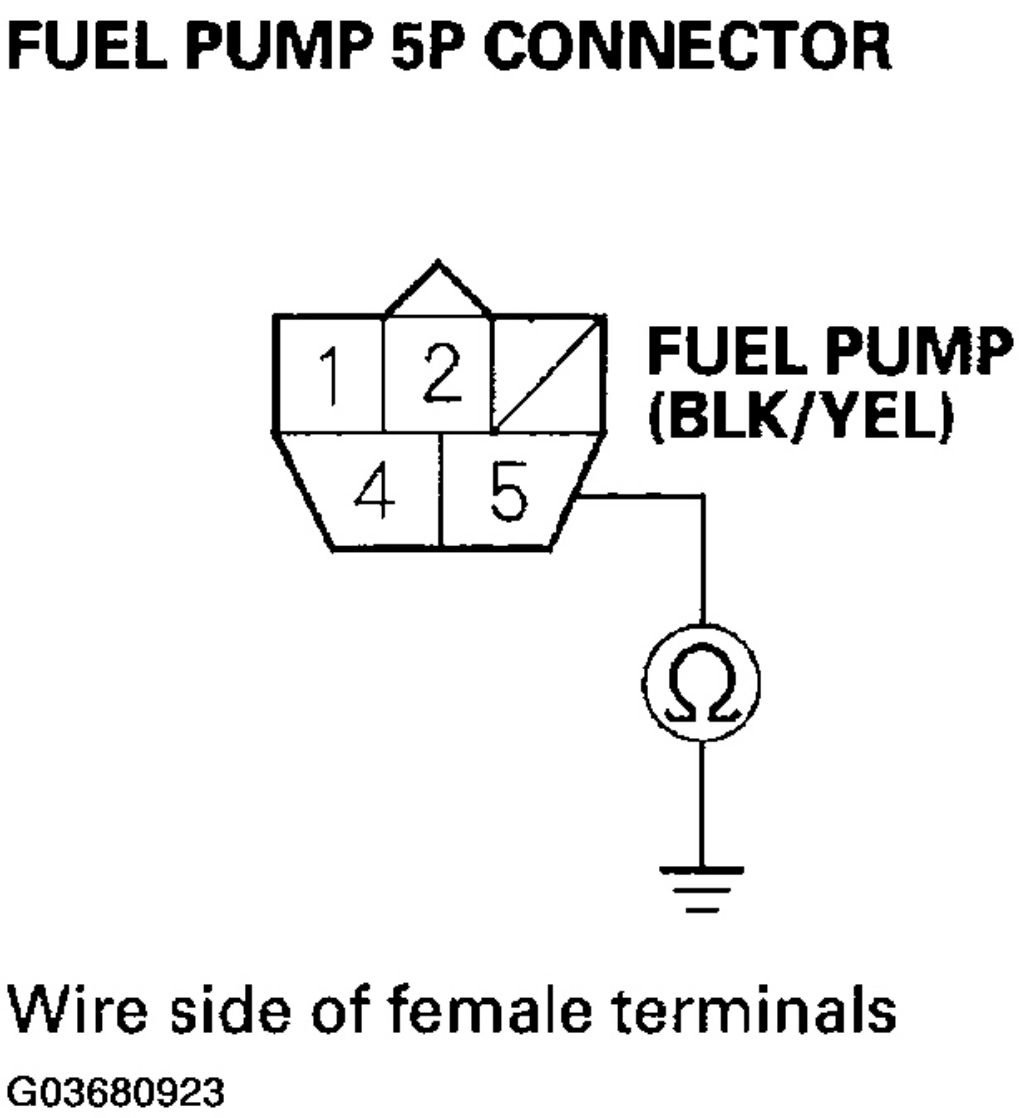


Fig. 220: Checking Continuity Between Fuel Pump 5P Connector Terminal No. 5 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the fuel pump and the PGM-FI main relay (FUEL PUMP). Also replace the No. 2 (15 A) fuse.

NO - Go to step 30.

30. Reinstall the PGM-FI main relay (FUEL PUMP).
31. Check for continuity between fuel pump 5P connector terminal No. 5 and body ground.

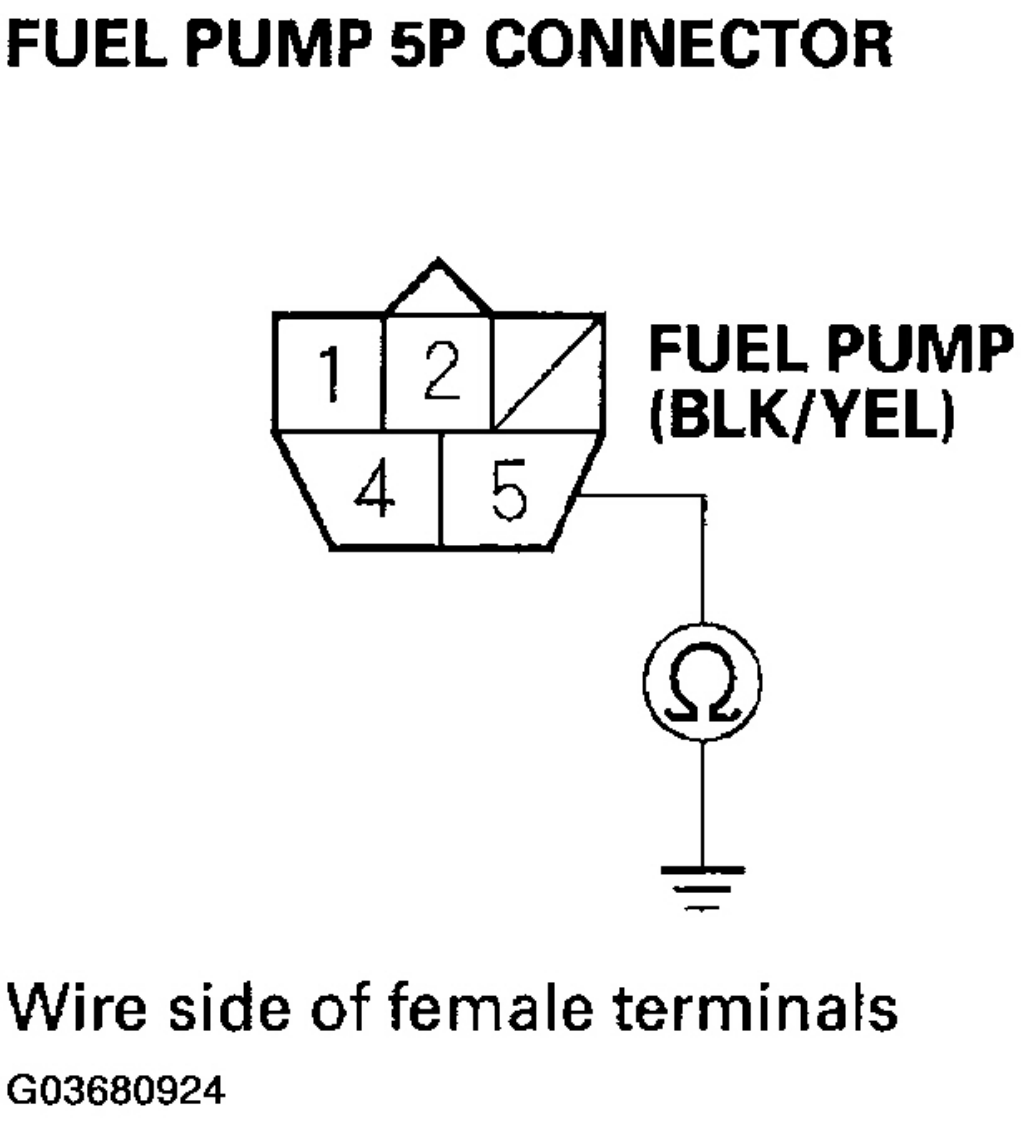


Fig. 221: Checking Continuity Between Fuel Pump 5P Connector Terminal No. 5 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the PGM-FI main relay (FUEL PUMP). Also replace the No. 2 (15 A) fuse.

NO - Check the fuel pump, and replace it if necessary. Also replace the No. 2 (15 A) fuse.

32. Turn the ignition switch ON (II).
33. Measure voltage between ECM connector terminal A26 and body ground.

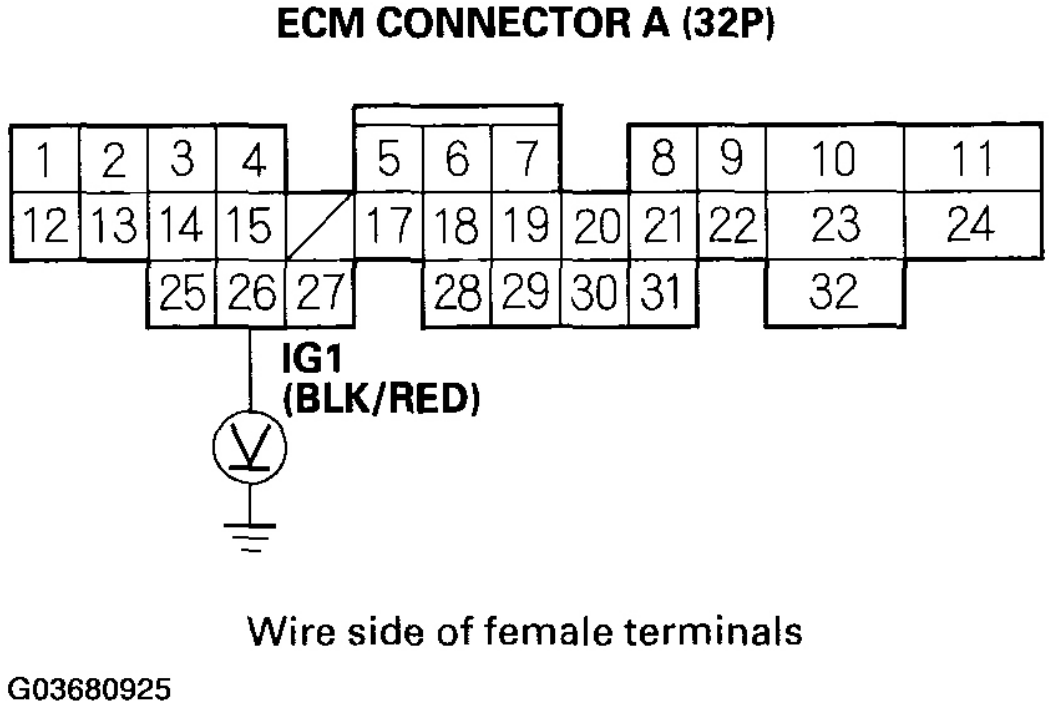


Fig. 222: Measuring Voltage Between ECM Connector Terminal A26 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 34.

NO - Repair open in the wire between the No. 2 (15 A) fuse and the ECM (A26).

34. Turn the ignition switch OFF.
35. Measure voltage between ECM connector terminal A8 and body ground.

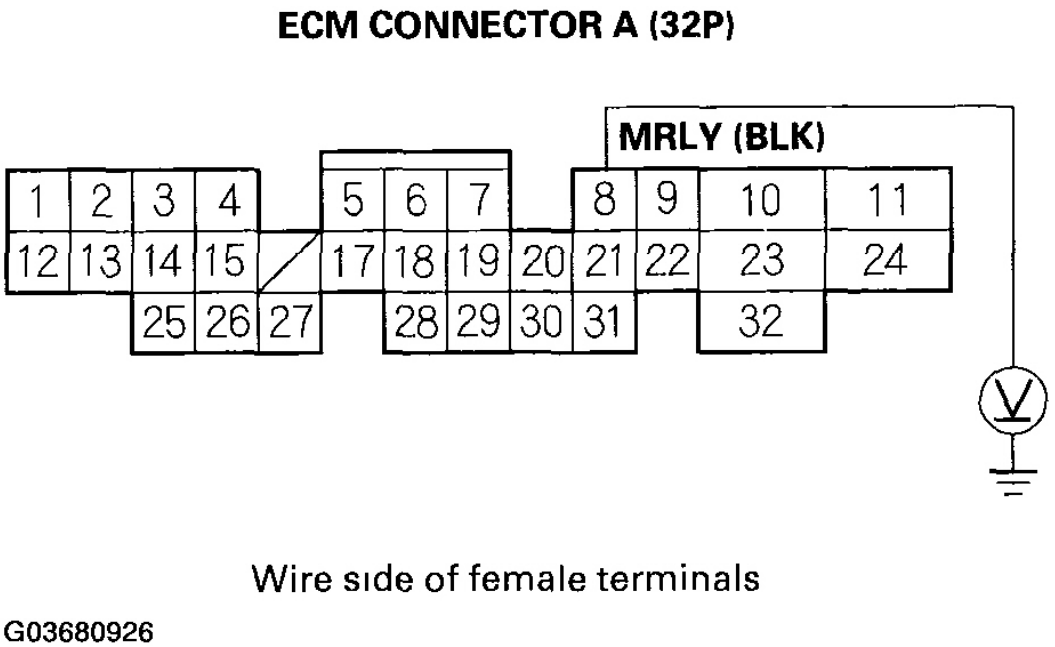


Fig. 223: Measuring Voltage Between ECM Connector Terminal A8 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 41 .

NO - Go to step 36.

36. Remove the PGM-FI main relay (IGP).
37. Measure voltage between PGM-FI main relay (IGP) 4P connector terminal No. 4 and body ground.

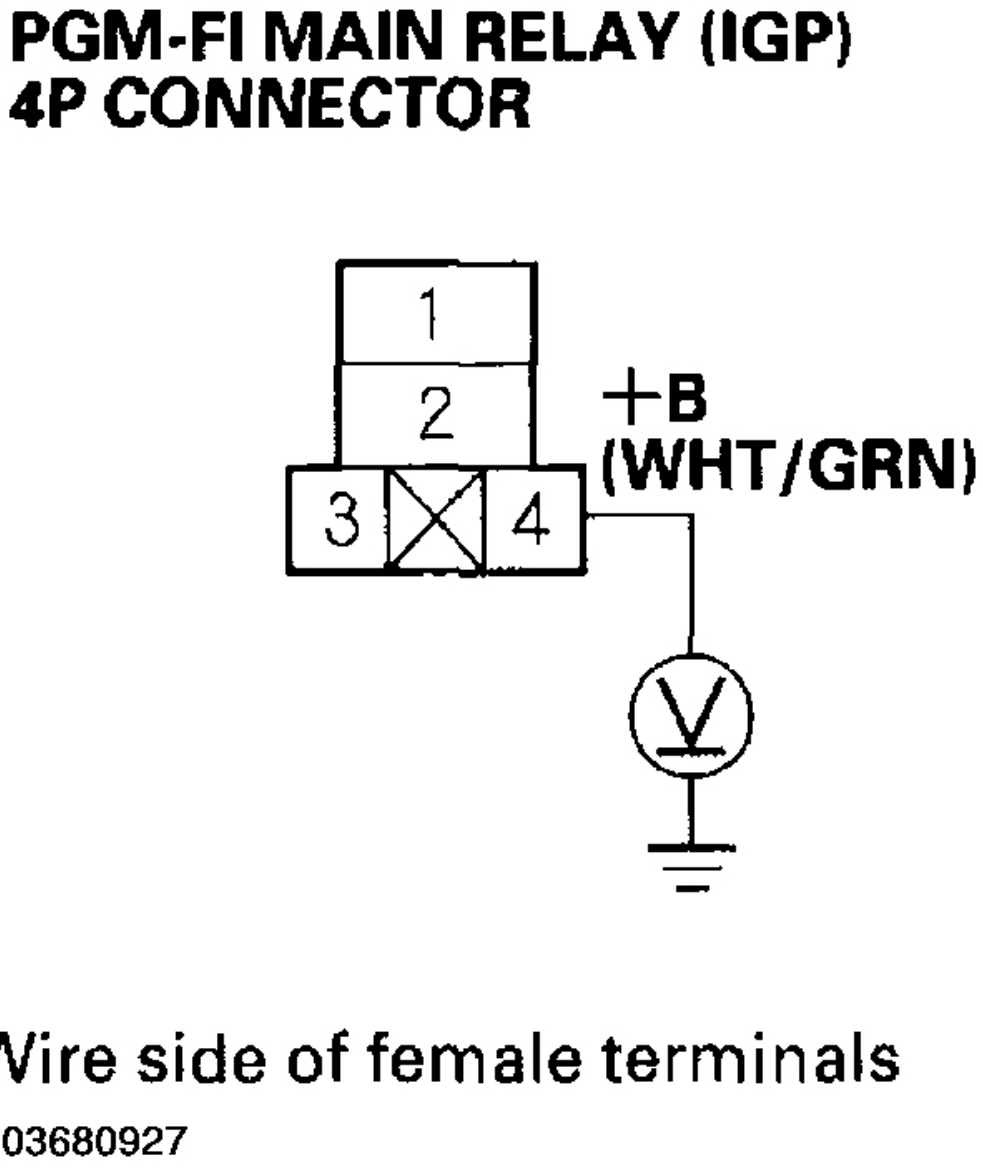


Fig. 224: Measuring Voltage Between PGM-FI Main Relay Connector Terminal No. 4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 38.

NO - Repair open in the wire between the No. 7 (15 A) fuse and the PGM-FI main relay (IGP).

38. Disconnect ECM connector A (32P).
39. Connect ECM connector A8 to body ground with a jumper wire.

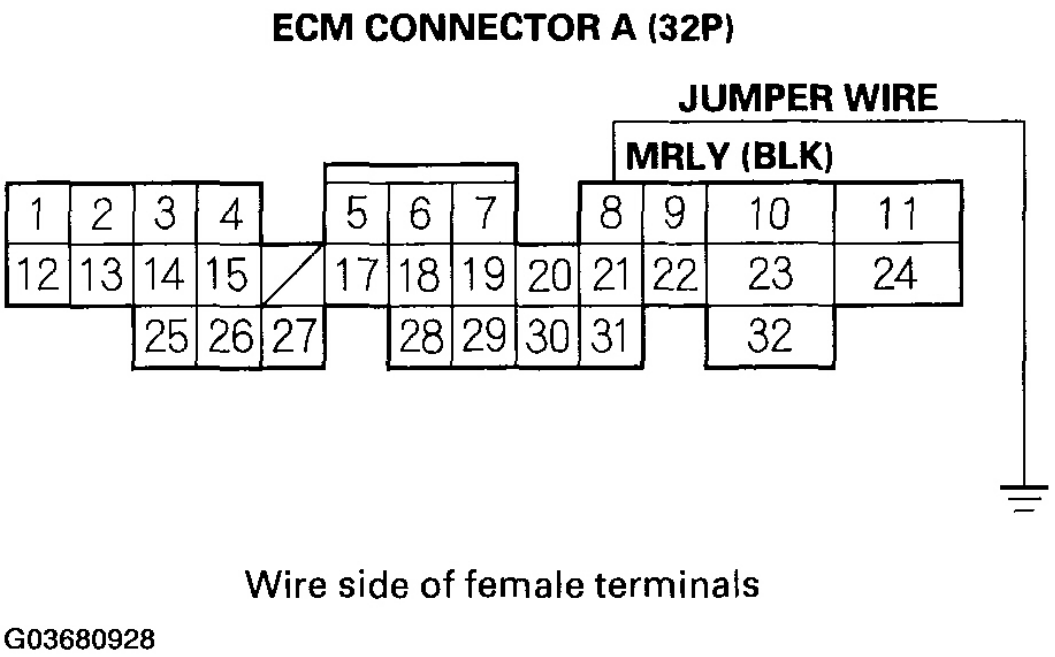


Fig. 225: Connecting ECM Connector A8 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

40. Check for continuity between body ground and PGM-FI main relay (IGP) 4P connector terminal No. 3.

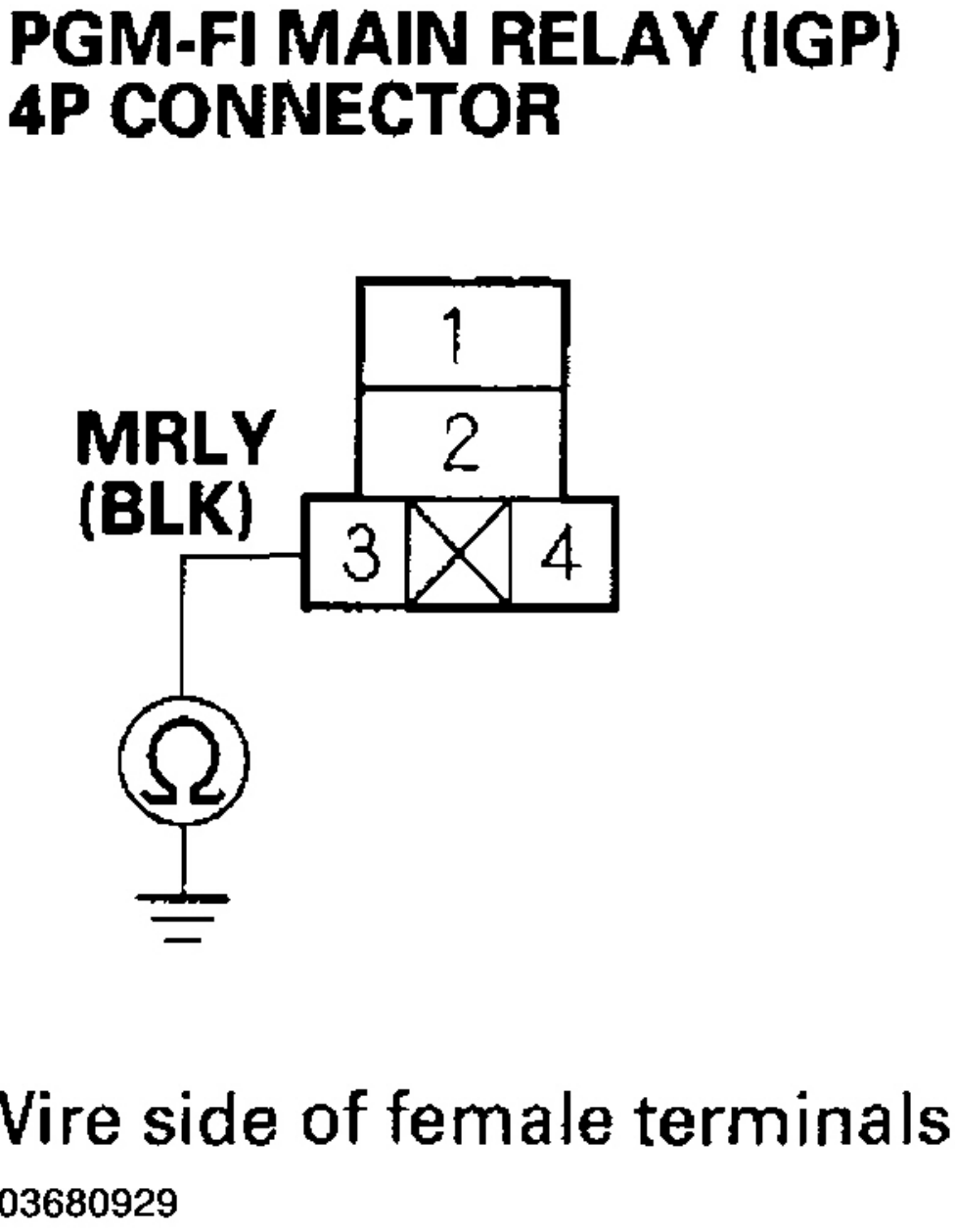


Fig. 226: Checking Continuity Between Body Ground And PGM-FI Main Relay (IGP) 4P Connector Terminal No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the PGM-FI main relay (IGP).

NO - Repair open in the wire between the PGM-FI main relay (IGP) and the ECM (A8).

41. Turn the ignition switch ON (II).
42. Measure voltage between body ground and ECM connector terminals B1 and B9 individually.

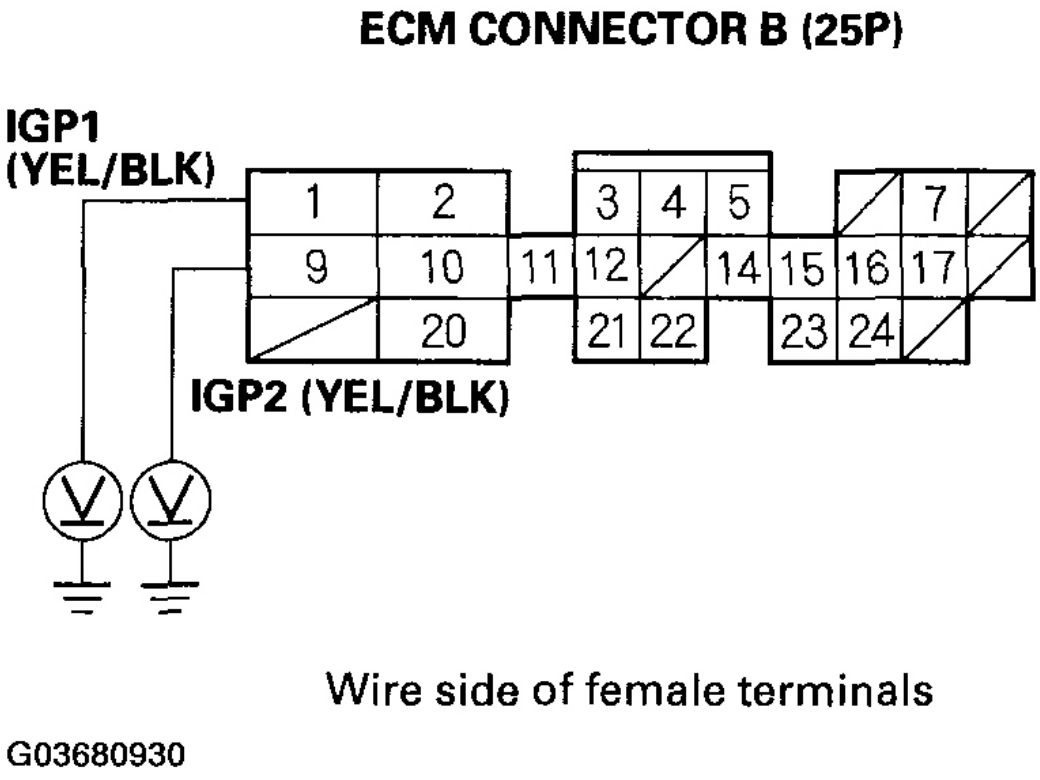


Fig. 227: Measuring Voltage Between Body Ground And ECM Connector Terminals B1 And B9
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 49 .

NO - Go to step 43.

43. Turn the ignition switch OFF.
44. Remove the PGM-FI main relay (IGP).
45. Turn the ignition switch ON (II).
46. Measure voltage between PGM-FI main relay (IGP) 4P connector terminal No. 2 and body ground.

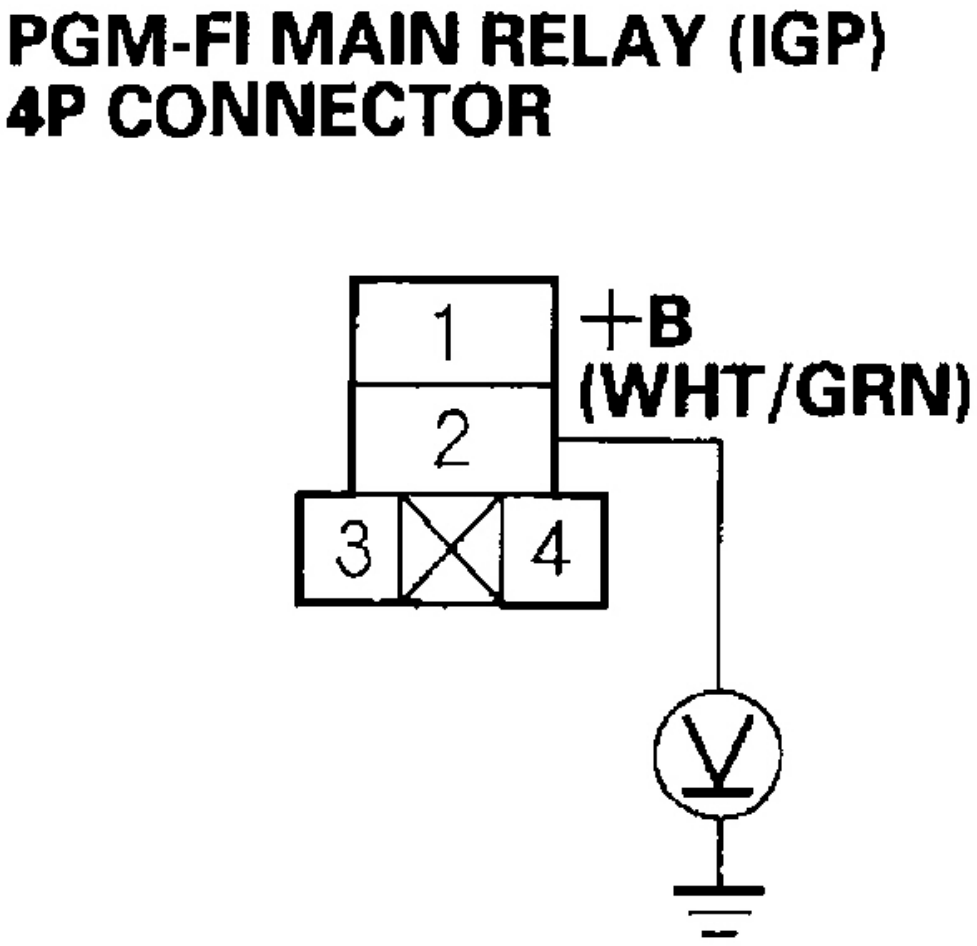


Fig. 228: Measuring Voltage Between PGM-FI Main Relay (IGP) 4P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 47.

NO - Repair open in the wire between the No. 7 (15 A) fuse and the PGM-FI main relay (IGP).

47. Turn the ignition switch OFF.
48. Check for continuity between PGM-FI main relay (IGP) 4P connector terminal No. 1 and ECM connector terminals B1 and B9 individually.

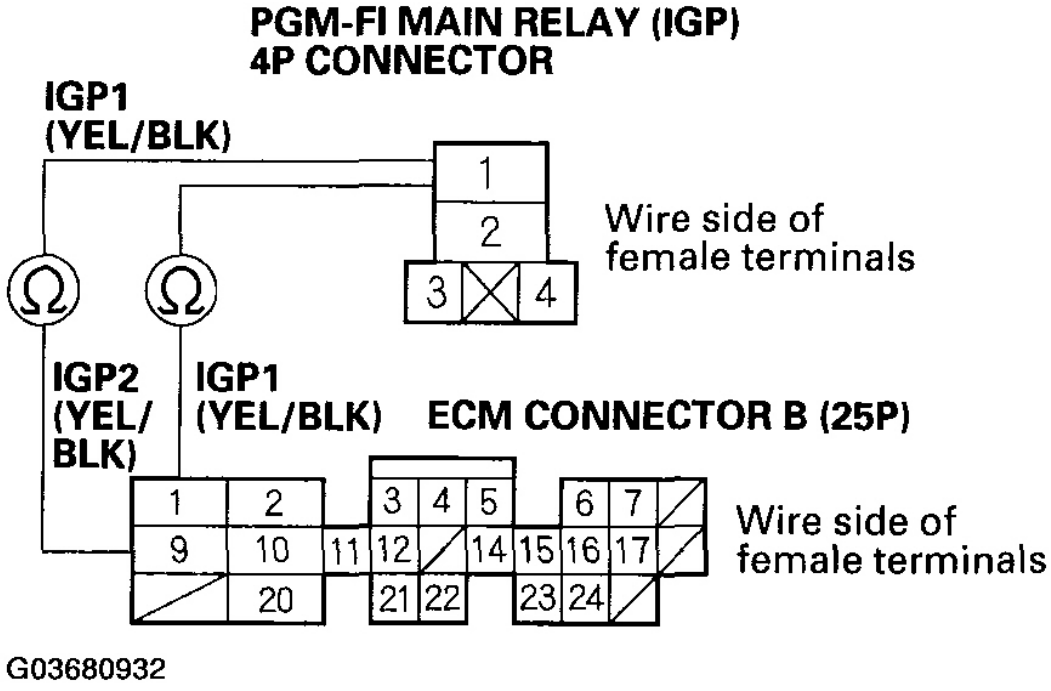


Fig. 229: Checking Continuity Between PGM-FI Main Relay (IGP) 4P Connector Terminal No. 1 And ECM Connector Terminals B1 And B9
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the PGM-FI main relay (IGP).

NO - Repair open in the wire between the PGM-FI main relay (IGP) and the ECM (B1, B9).

49. Measure voltage between body ground and ECM connector terminals B2, B10,

B20, and B22 individually.

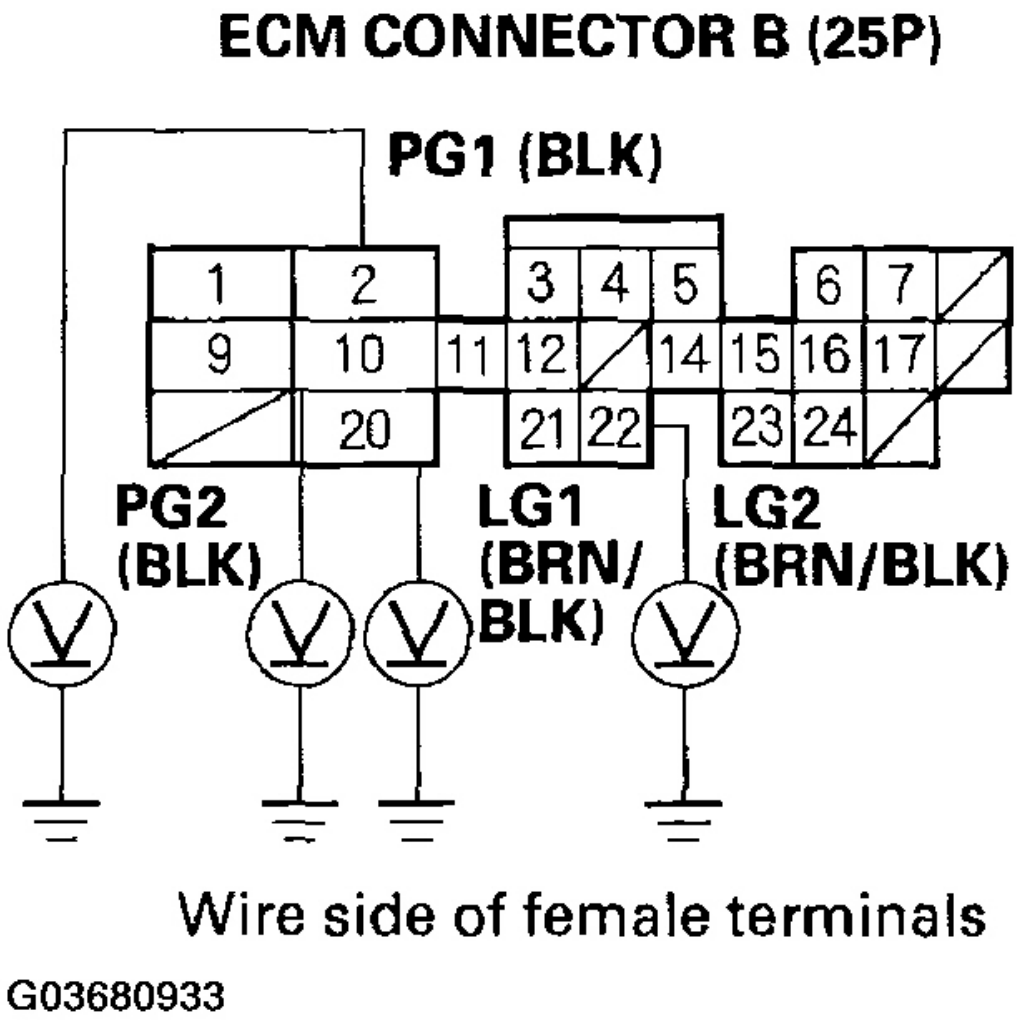


Fig. 230: Measuring Voltage Between Body Ground And ECM Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there more than 1.0 V?

YES - Repair open in the wire(s) that had more than 1.0 V between G101 and the ECM (B2, B10, B20, B22).

NO - Go to step 50.

50. Measure voltage between body ground and ECM connector terminal C19.

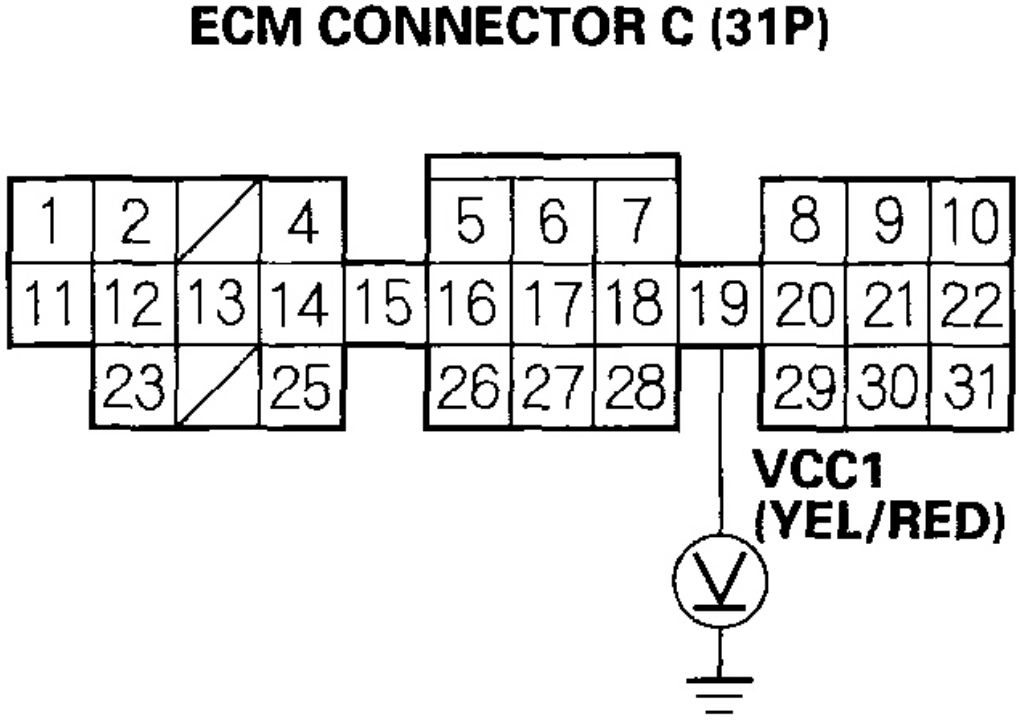


Fig. 231: Measuring Voltage Between Body Ground And ECM Connector Terminal C19
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 58 .

NO - Go to step 51.

51. Turn the ignition switch OFF.
52. Disconnect the manifold absolute pressure (MAP) sensor 3P connector.
53. Turn the ignition switch ON (II).
54. Measure voltage between body ground and ECM connector terminal C19.

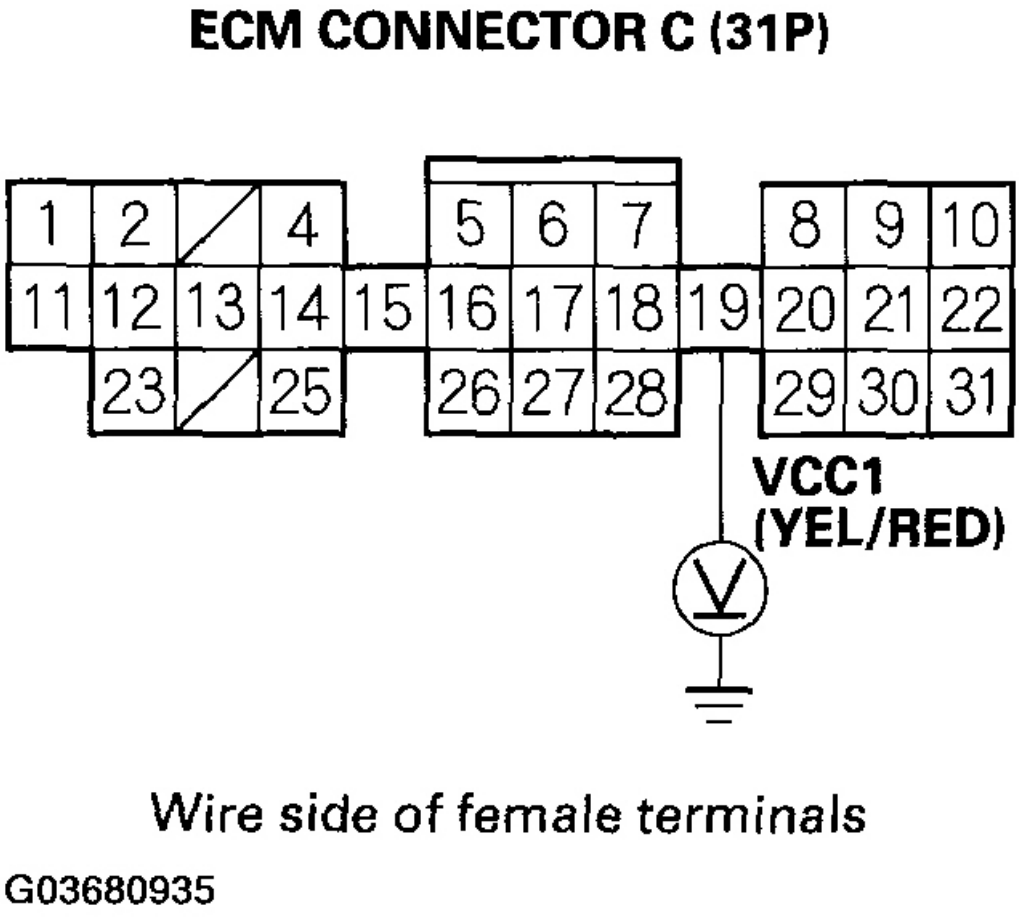


Fig. 232: Measuring Voltage Between Body Ground And ECM Connector Terminal C19
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the MAP sensor.

NO - Go to step 55.

55. Turn the ignition switch OFF, and wait for 10 seconds.
56. Disconnect ECM connector C (31P).
57. Check for continuity between ECM connector terminal C19 and body ground.

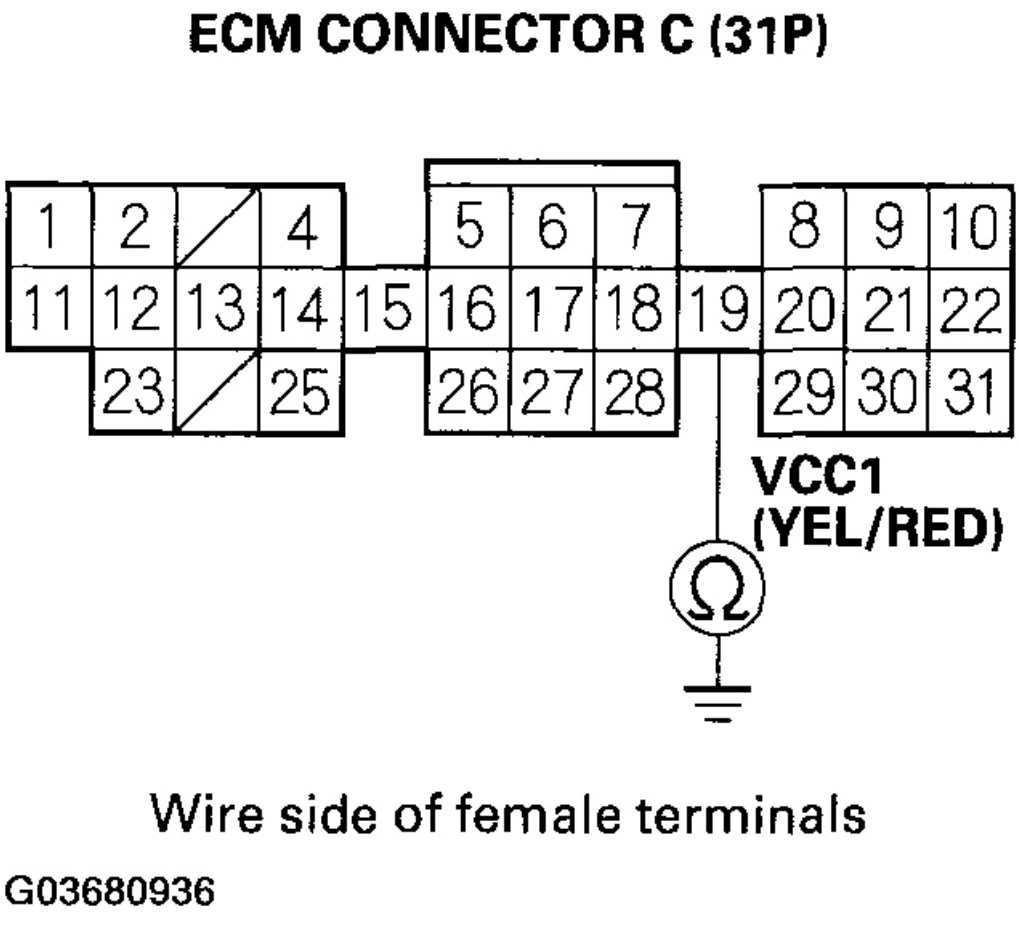


Fig. 233: Checking Continuity Between ECM Connector Terminal C19 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C19) and the MAP sensor.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

58. Measure voltage between body ground and ECM connector terminal C28.

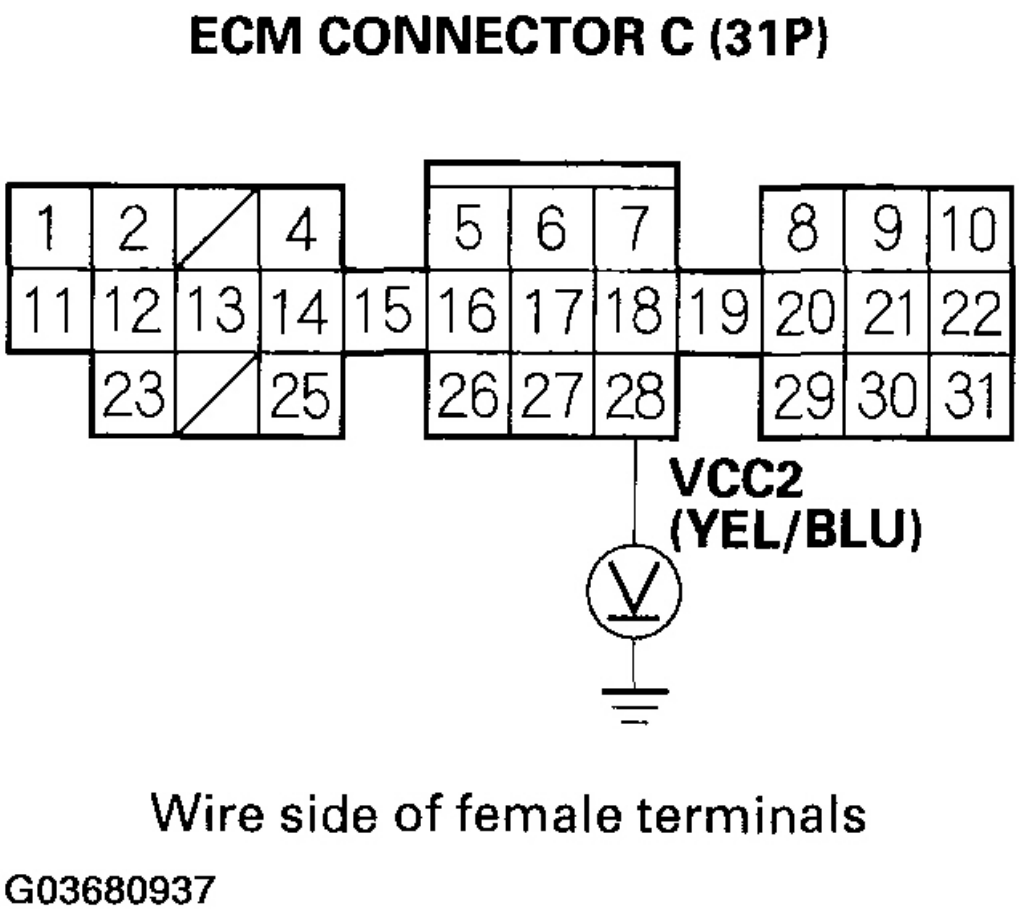


Fig. 234: Measuring Voltage Between Body Ground And ECM Connector Terminal C28

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES -

- M/T model: Go to step 65 .
- CVT model: Go to step 73 .

NO - Go to step 59.

59. Turn the ignition switch OFF.
60. Disconnect the 3P connector from each of these sensors, one at a time, and measure voltage between body ground and ECM connector terminal C28 with the ignition switch ON (II).
    - Exhaust gas recirculation (EGR) valve position sensor
    - Brake booster pressure sensor
    - Fuel tank pressure (FTP) sensor
    - Throttle position (TP) sensor
    - Brake fluid pressure sensor A (M/T model)

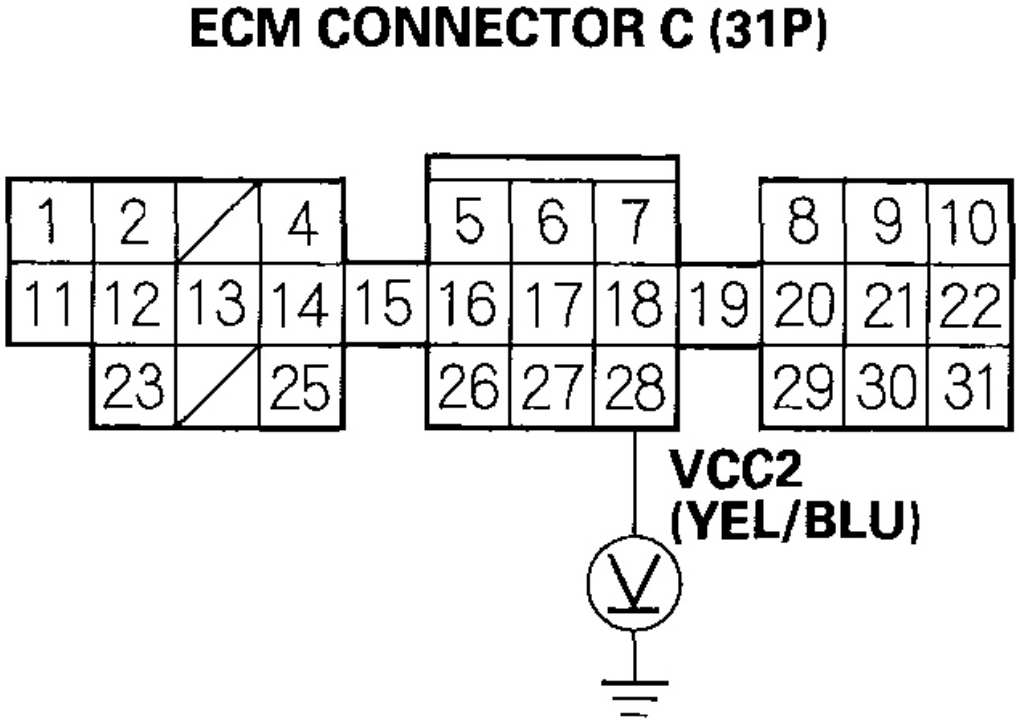


Fig. 235: Measuring Voltage Between Body Ground And ECM Connector Terminal C28 With Ignition Switch ON (II)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the sensor that restored about 5 V when disconnected.

NO - Go to step 61.

61. Turn the ignition switch OFF.
62. Disconnect the connector from these sensors:
    - Exhaust gas recirculation (EGR) valve position sensor

- Brake booster pressure sensor
- Fuel tank pressure (FTP) sensor
- Throttle position (TP) sensor
- Brake fluid pressure sensor A (M/T model)

63. Disconnect ECM connector C (31P).
64. Check for continuity between ECM connector terminal C28 and body ground.

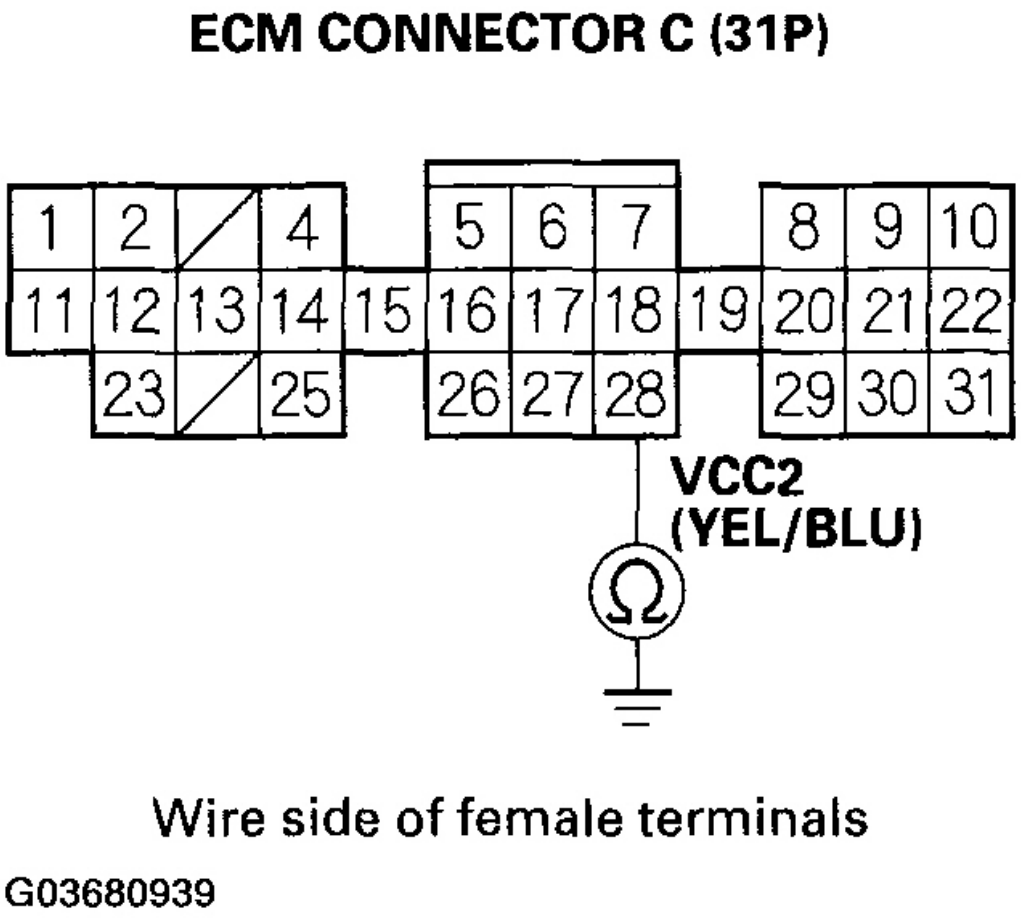


Fig. 236: Checking Continuity Between ECM Connector Terminal C28 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C28) and the EGR valve position sensor, the brake booster pressure sensor, the FTP sensor, the TP sensor, or brake fluid pressure sensor A (M/T model).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

65. Measure voltage between body ground and ECM connector terminal C23.

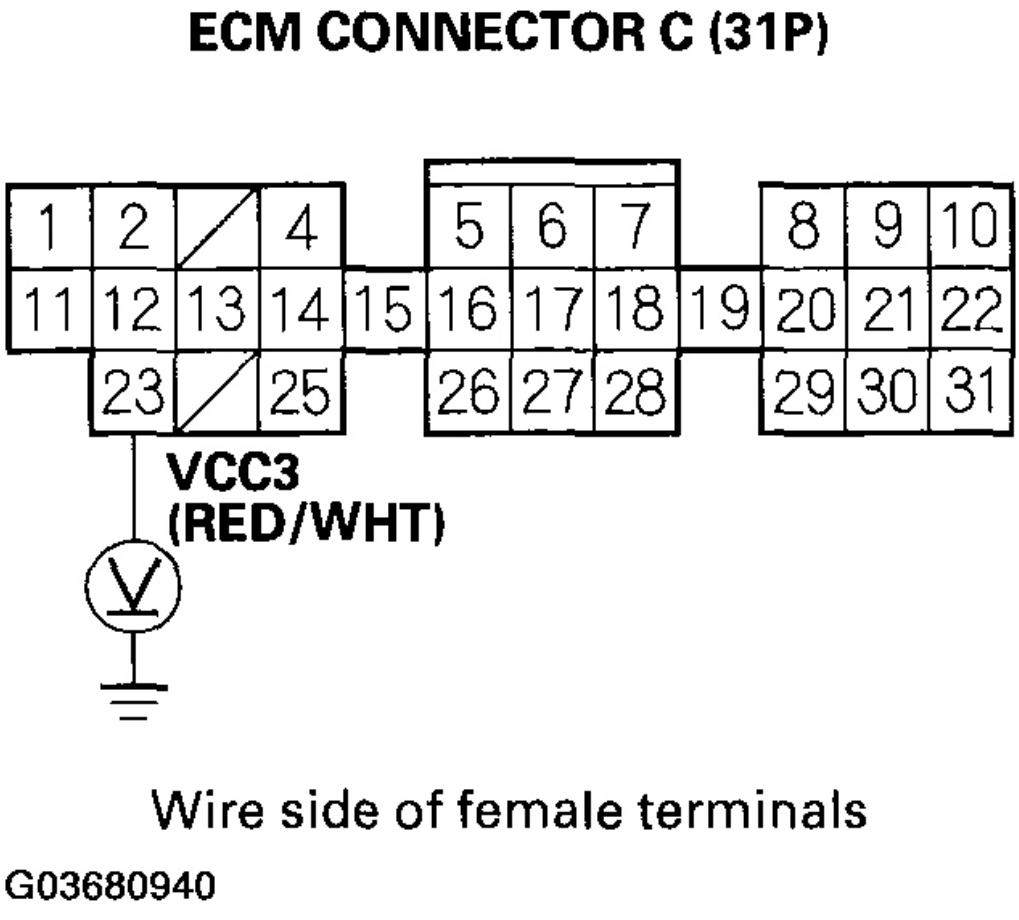


Fig. 237: Measuring Voltage Between Body Ground And ECM Connector Terminal C23
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Go to step 66.

66. Turn the ignition switch OFF.
67. Disconnect the brake fluid pressure sensor B 3P connector.
68. Turn the ignition switch ON (II).
69. Measure voltage between body ground and ECM connector terminal C23.

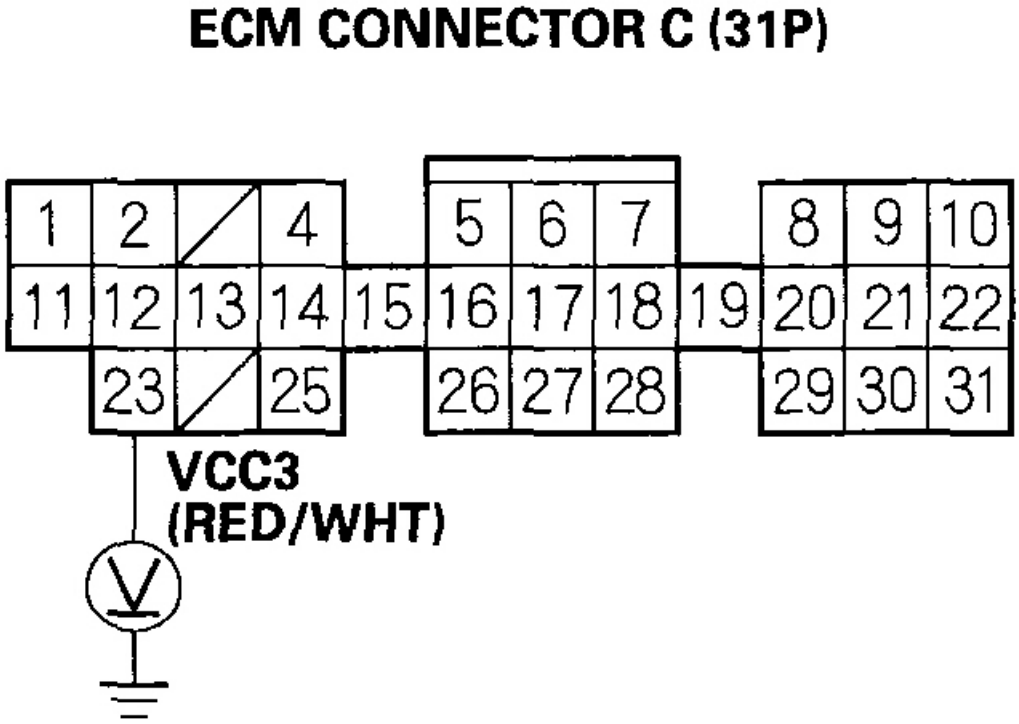


Fig. 238: Measuring Voltage Between Body Ground And ECM Connector Terminal C23
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace brake fluid pressure sensor B.

NO - Go to step 70.

70. Turn the ignition switch OFF, and wait for 10 seconds.
71. Disconnect ECM connector C (31P).
72. Check for continuity between ECM connector terminal C23 and body ground.

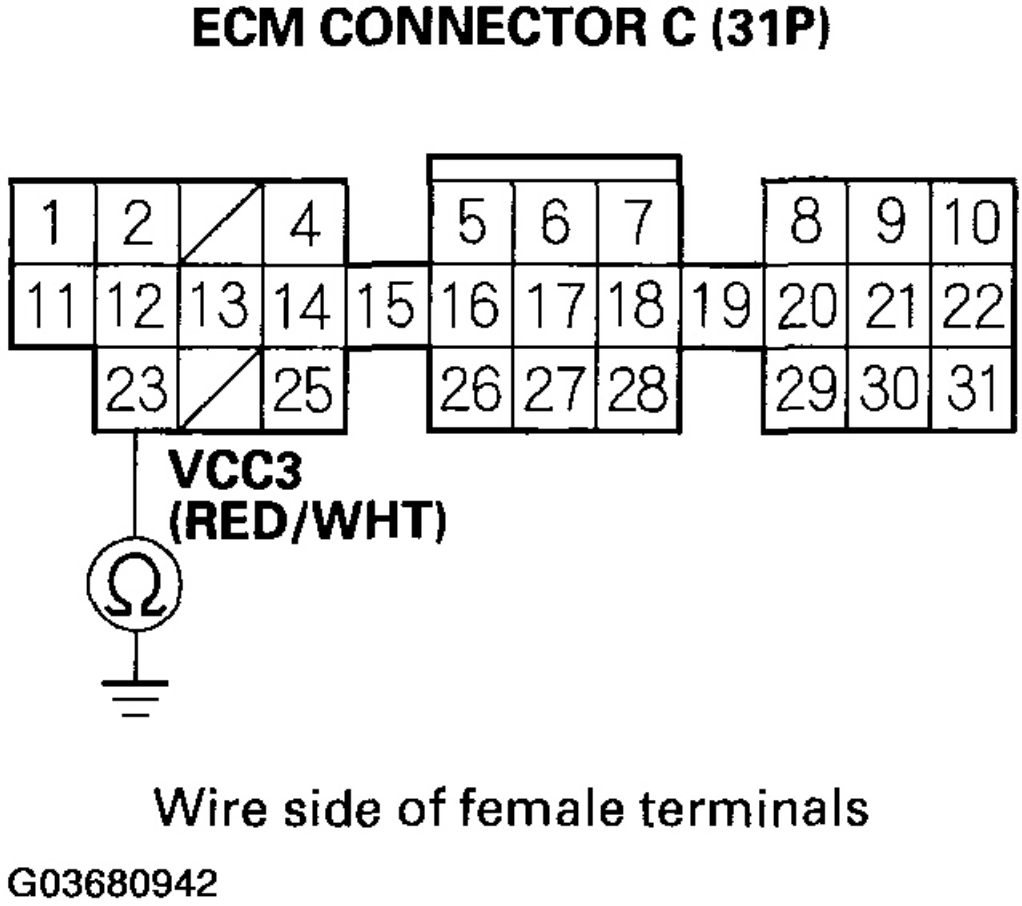


Fig. 239: Checking Continuity Between ECM Connector Terminal C23 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (C23) and brake fluid pressure sensor B.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM,

replace the original ECM (see **ECM REPLACEMENT**).

73. Measure voltage between body ground and ECM connector terminal B6.

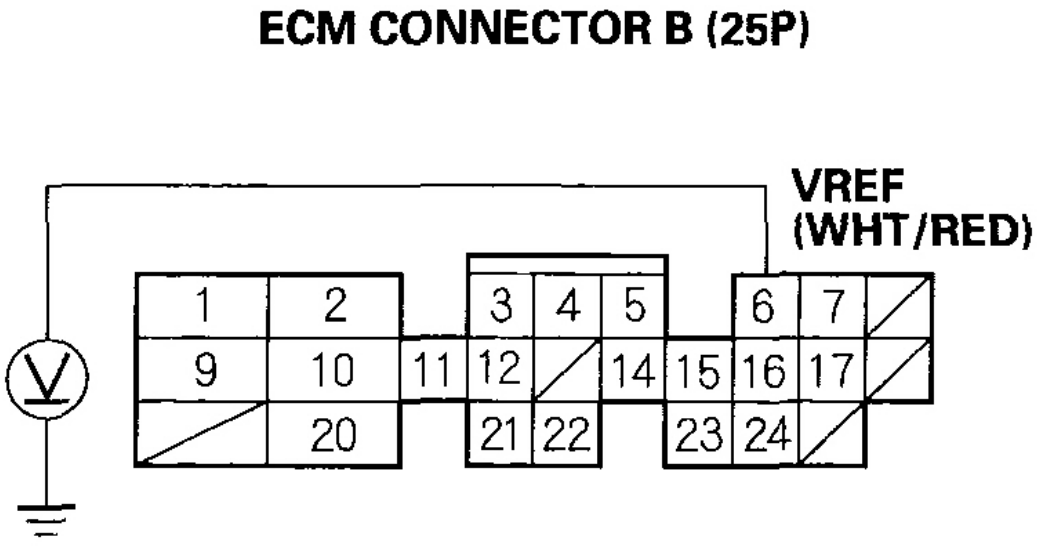


Fig. 240: Measuring Voltage Between Body Ground And ECM Connector Terminal B6
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Go to step 74.

74. Turn the ignition switch OFF.
75. Disconnect TCM connector B (22P).
76. Turn the ignition switch ON (II).
77. Measure voltage between body ground and ECM connector terminal B6.

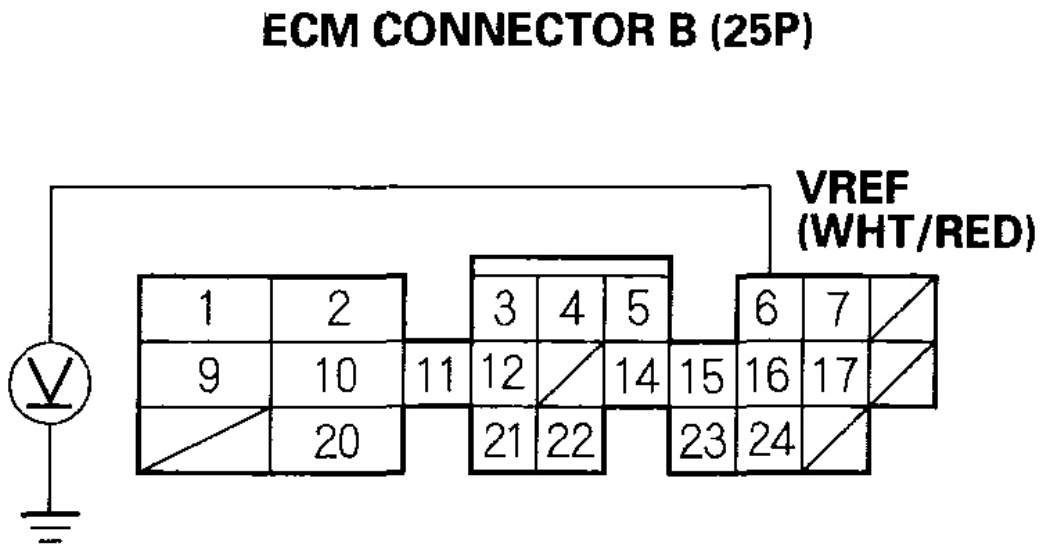


Fig. 241: Measuring Voltage Between Body Ground And ECM Connector Terminal B6
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Substitute a known-good TCM, and recheck (see **HOW TO TROUBLESHOOT CIRCUIT AT THE TCM**). If the symptom/indication goes away, replace the original TCM.

NO - Go to step 78.

78. Turn the ignition switch OFF, and wait for 10 seconds.
79. Disconnect ECM connector B (25P).
80. Check for continuity between ECM connector terminal B6 and body ground.

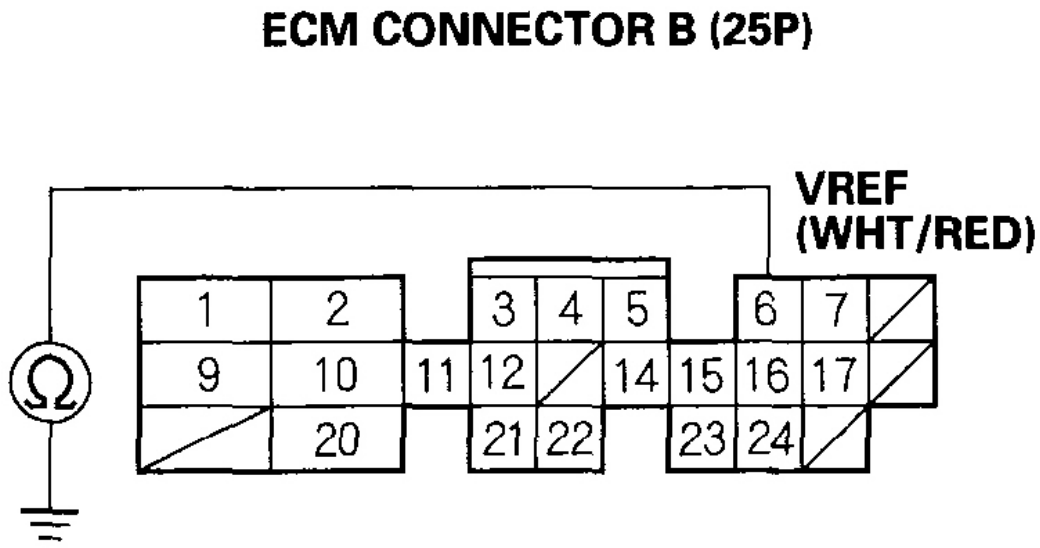


Fig. 242: Checking Continuity Between ECM Connector Terminal B6 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM (B6) and the TCM (B20).

NO - Update the ECM if it does not have the latest software, or substitute

a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

81. Measure voltage between ECM connector terminal B17 and body ground.

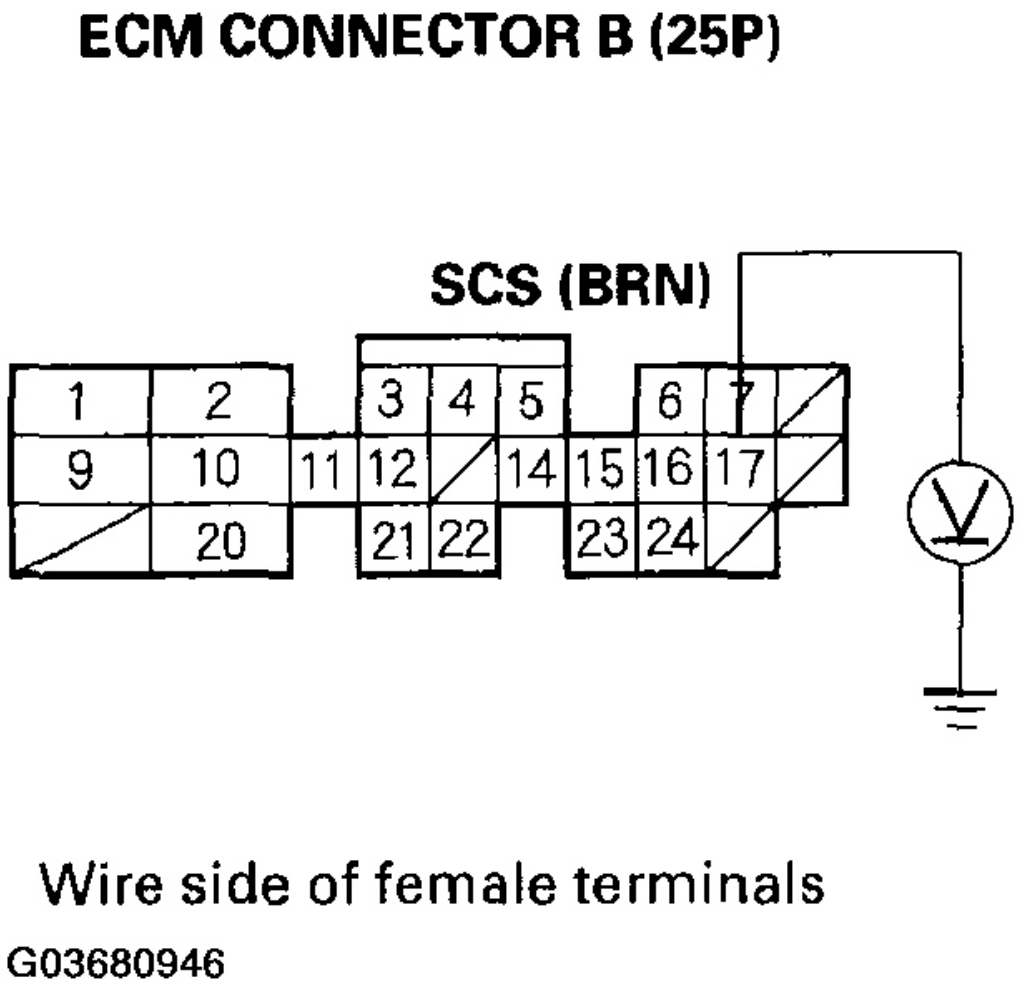


Fig. 243: Measuring Voltage Between ECM Connector Terminal B17 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V (or battery voltage)?

YES - Go to step 85 .

NO - Go to step 82.

82. Turn the ignition switch OFF, and wait for 10 seconds.
83. Disconnect ECM connector B (25P).
84. Check for continuity between ECM connector terminal B17 and body ground.

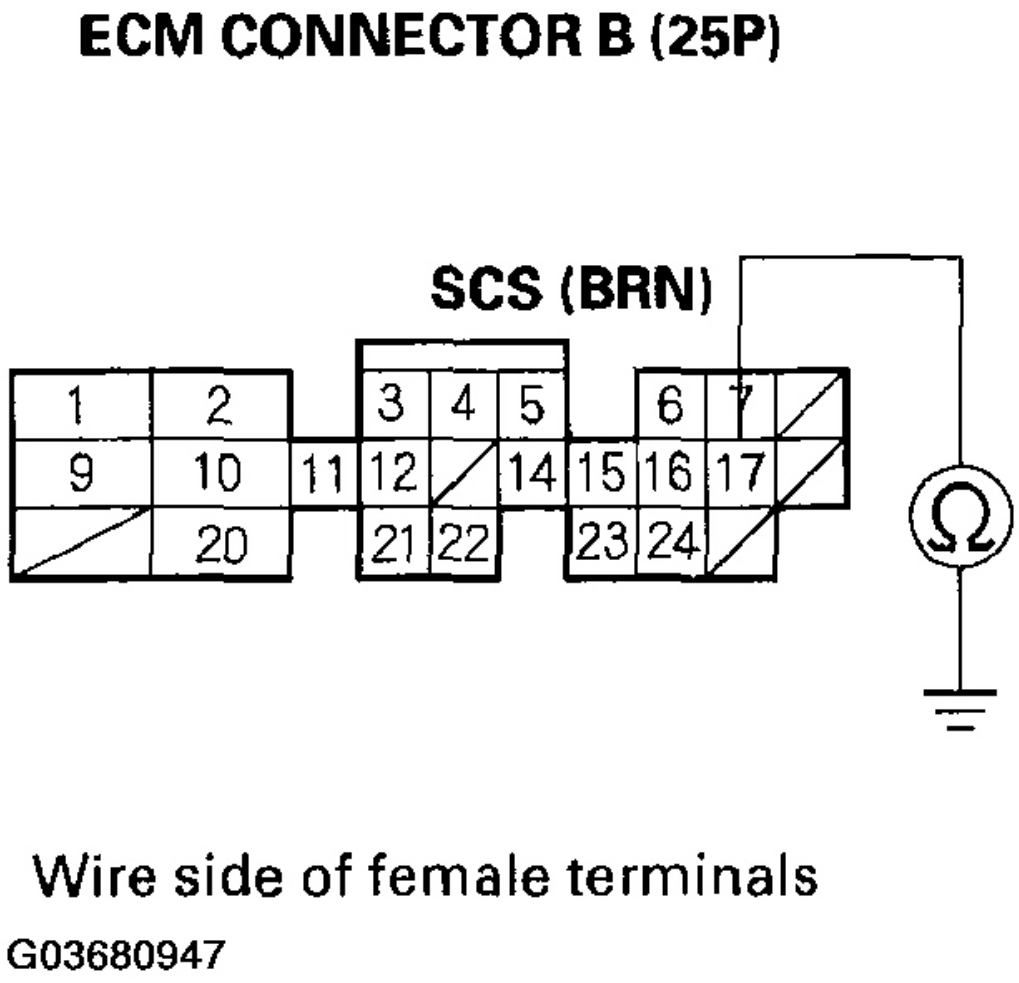


Fig. 244: Checking Continuity Between ECM Connector Terminal B17

And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the DLC and the ECM (B17).

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

85. Turn the ignition switch OFF, and wait for 10 seconds.
86. Disconnect ECM connector B (25P).
87. Turn the ignition switch ON (II).

Is the MIL on?

YES - Repair short in the wire between the gauge assembly and the ECM (B17). If the wire is OK, replace the gauge assembly.

NO - Update the ECM if it does not have the latest software, or substitute a known-good ECM (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

DLC CIRCUIT TROUBLESHOOTING

- If the ECM does not communicate with the HDS, do this troubleshooting procedure.
- Check that the MIL circuit is normal, then do this troubleshooting.

1. Measure voltage between DLC terminal No. 16 and body ground.

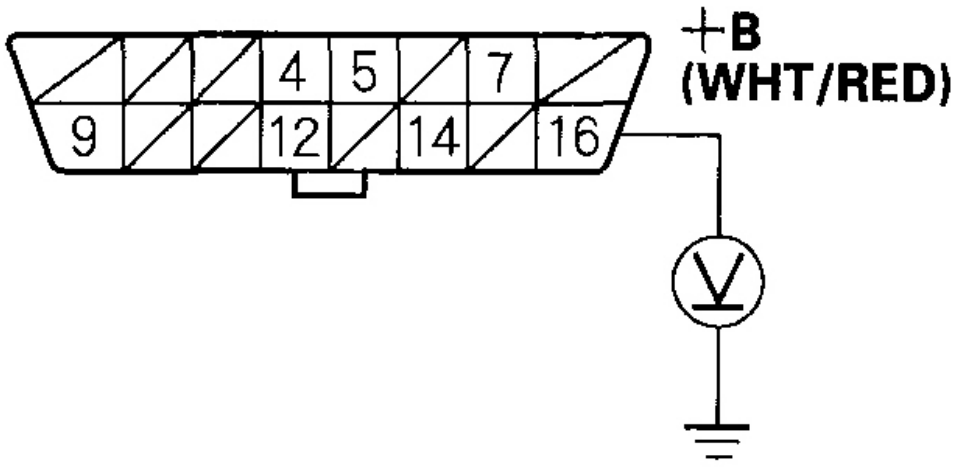


Fig. 245: Measuring Voltage Between DLC Terminal No. 16 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 2.

NO - Repair open in the wire between DLC terminal No. 16 and the No. 18 (7.5 A) fuse in the under-hood fuse/relay box.

2. Measure voltage between DLC terminals No. 4 and No. 16.

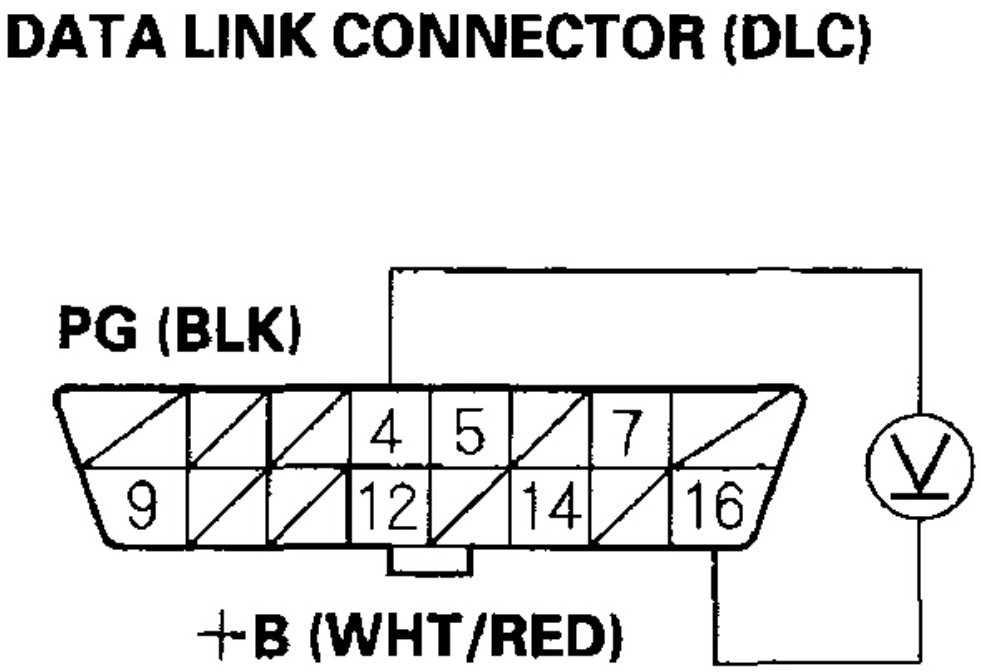


Fig. 246: Measuring Voltage Between DLC Terminals No. 4 And 16
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 3.

NO - Repair open in the wire between DLC terminal No. 4 and body ground.

3. Measure voltage between DLC terminals No. 5 and No. 16.

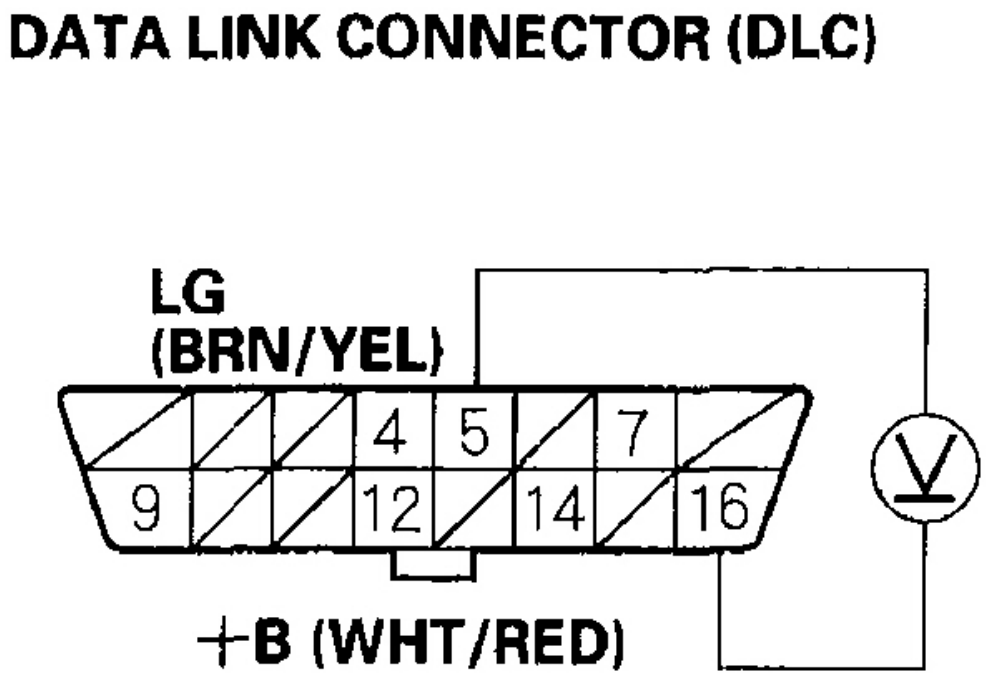


Fig. 247: Measuring Voltage Between DLC Terminals No. 5 And 16
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.

NO - Repair open in the wire between DLC terminal No. 5 and body ground.

4. Turn the ignition switch ON (II).

5. Measure voltage between DLC terminals No. 5 and No. 7.

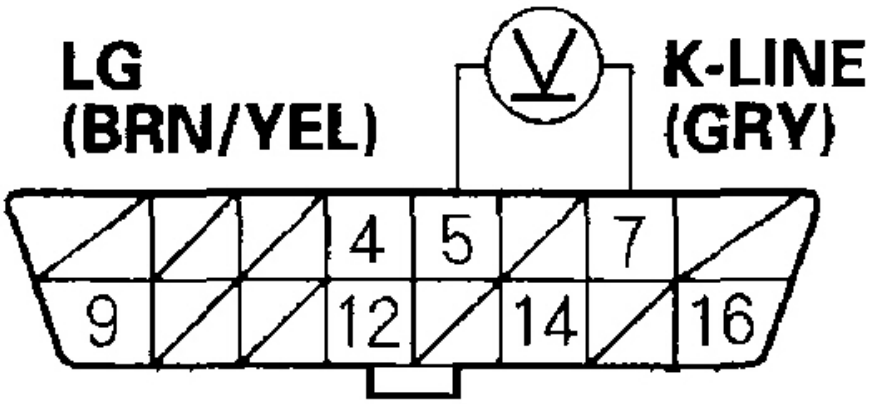


Fig. 248: Measuring Voltage Between DLC Terminals No. 5 And 7
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 8.5 V or more?

YES - Go to step 10 .

NO - Go to step 6.

6. Turn the ignition switch OFF, and wait for 10 seconds.
7. Disconnect ECM connector A (32P).
8. Check for continuity between DLC terminal No. 7 and body ground.

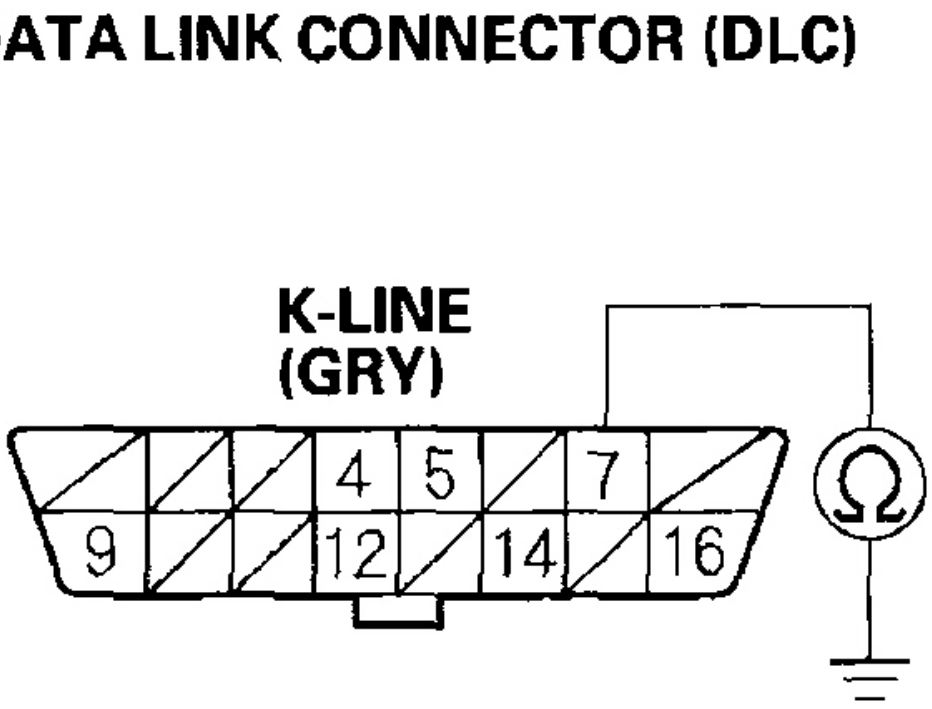


Fig. 249: Checking Continuity Between DLC Terminal No. 7 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between DLC terminal No. 7 and the ECM (A21). After repairing the wire, check the DTC with the HDS, and go to the indicated **DTC TROUBLESHOOTING** .

NO - Go to step 9.

9. Check for continuity between DLC terminal No. 7 and ECM terminal A21.

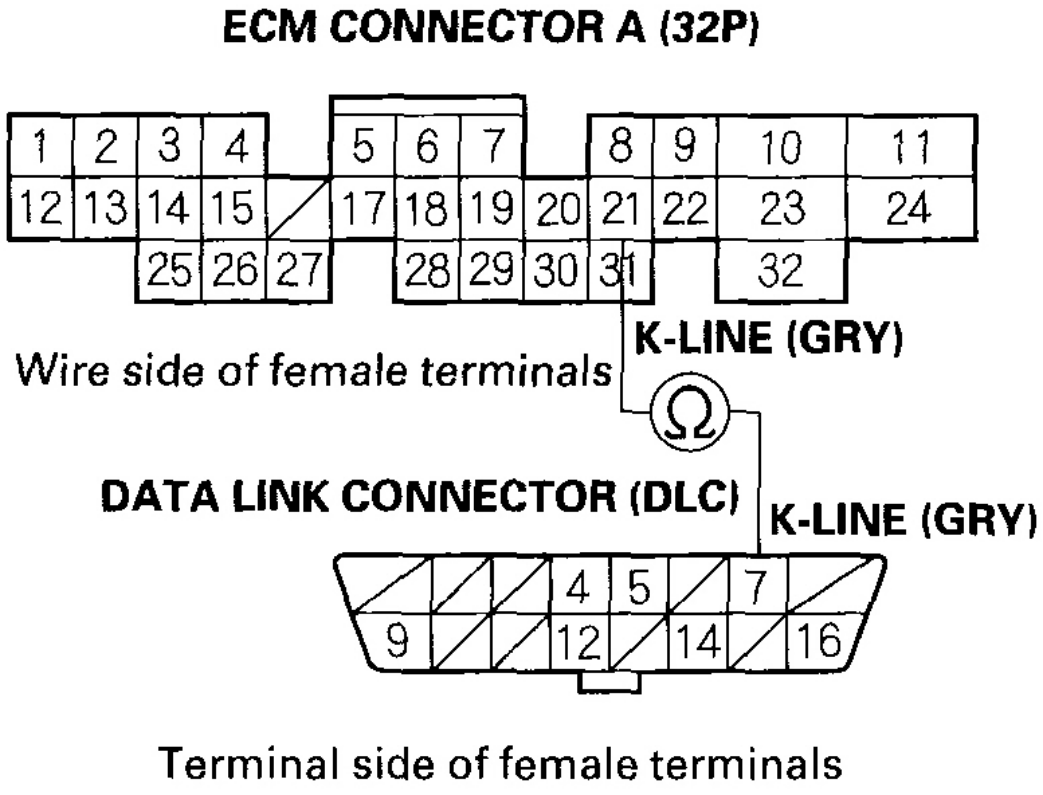


Fig. 250: Checking Continuity Between DLC Terminal No. 7 And ECM Terminal A21
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001 M/T MODELS)**), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair open in the wire between DLC terminal No. 7 and the ECM (A21). After repairing the wire, check the DTC with the HDS, and go to the indicated **DTC TROUBLESHOOTING** .

10. Turn the ignition switch OFF, and wait for 10 seconds.
11. Disconnect ECM connector A (32P).
12. Turn the ignition switch ON (II).
13. Measure voltage between DLC terminals No. 5 and No. 7.

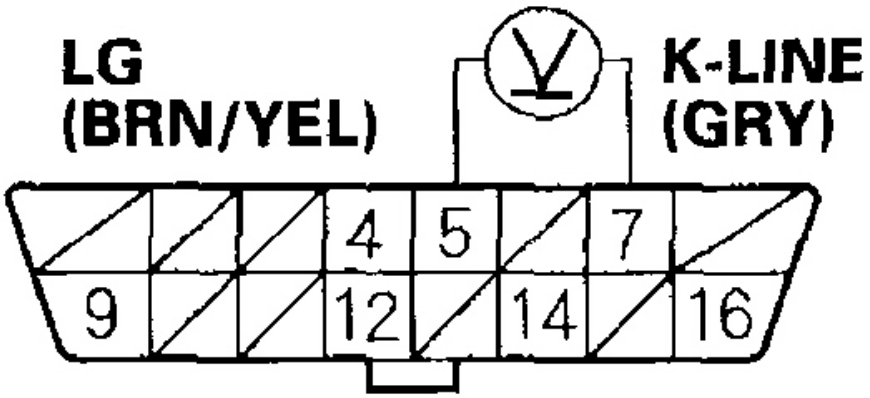


Fig. 251: Measuring Voltage Between DLC Terminals No. 5 And 7
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 0 V?

YES - Update the ECM if it does not have the latest software, or substitute a known-good ECM; 2000-2001 M/T models (see **HOW TO SUBSTITUTE THE ECM FOR TESTING PURPOSES (2000-2001**

M/T MODELS)), 2002-2006 M/T models and CVT model (see **ECM UPDATING AND SUBSTITUTION FOR TESTING-2002-2006 M/T MODELS AND CVT MODEL**), then recheck. If the symptom/indication goes away with a known-good ECM, replace the original ECM (see **ECM REPLACEMENT**).

NO - Repair short to power in the wire between DLC terminal No. 7 and the ECM (A21). After repairing the wire, check for DTCs with the HDS, and go to the indicated **DTC TROUBLESHOOTING** .

INJECTOR REPLACEMENT

1. Relieve the fuel pressure; 2000-2003 models (see **2000-2003 MODELS**), 2004-2005 models (see **2004-2005 MODELS**), 2006 model (see **2006 MODEL**).
2. Remove the fuel rail cover (A), then disconnect the connectors from the fuel injectors (B).

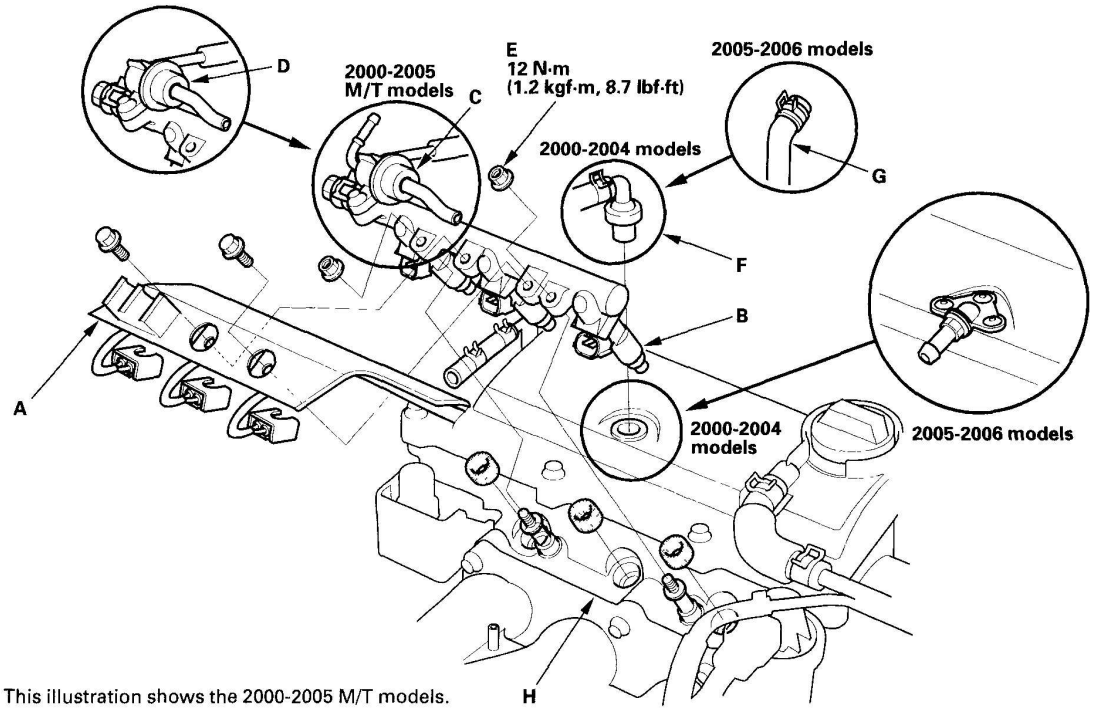


Fig. 252: Removing Fuel Rail Cover And Disconnecting Connectors From

Fuel Injectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. 2000-2005 M/T models: Disconnect the vacuum hose and fuel return hose from the fuel pressure regulator (C). Place a rag or shop towel over the hoses before disconnecting them.
4. CVT model, 2006 M/T model: Disconnect the vacuum hose from the fuel pulsation damper (D).
5. Remove the retainer nuts (E).
6. 2000-2004 models: Disconnect the PCV valve (F).
7. 2005-2006 models: Disconnect the PCV hose (G).
8. Disconnect the fuel rail.
9. Remove the fuel injectors from the cylinder head (H).
10. Slide new cushion rings (A) onto the fuel injectors (B).

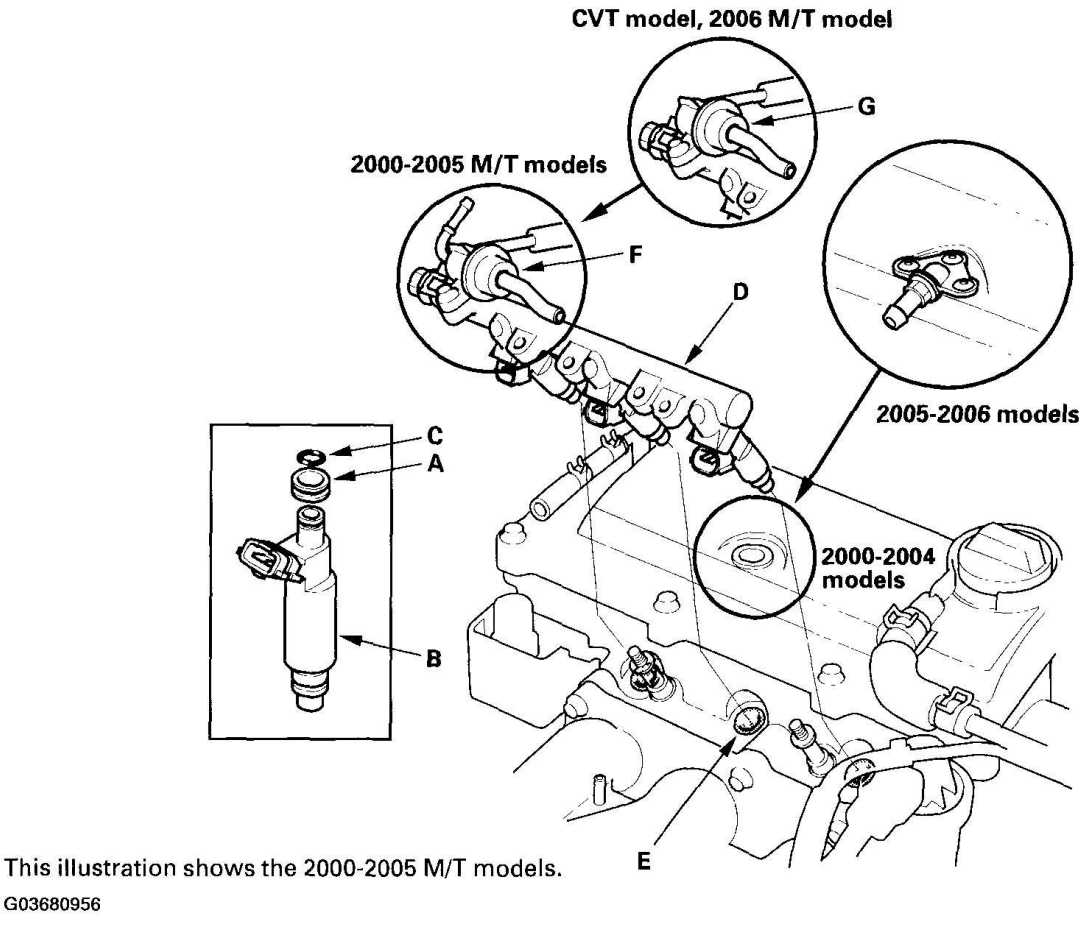


Fig. 253: Sliding Cushion Rings Onto Fuel Injectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Coat new O-rings (C) with clean engine oil, and put them on the fuel injectors.
12. Insert the fuel injectors into the fuel rail (D).
13. Coat new seal rings (E) with clean engine oil, and press them into the cylinder head.
14. Install the fuel injectors into the cylinder head.
15. Install and tighten the retainer nuts.
16. 2000-2005 models: Connect the fuel hose to the fuel rail with new washers.
17. 2000-2005 M/T models: Connect the vacuum hoses and fuel return hose to the fuel pressure regulator (F).
18. CVT model, 2006 M/T model: Connect the vacuum hose to the fuel pulsation

damper (G).

19. 2005-2006 models: Connect the PCV tube.
20. 2000-2004 models: Connect the PCV valve.
21. Turn the ignition switch ON (II), but do not operate the starter. After the fuel pump runs for about 2 seconds, the fuel pressure in the fuel line rises. Repeat this two or three times, then check for fuel leakage.

A/F SENSOR REPLACEMENT

Special Tools Required

02 sensor socket wrench, Snap-on YA8875, SP Tools 93750, or equivalent, commercially available

1. Disconnect the A/F sensor 4P or 8P connector (A), and remove the A/F sensor (B).

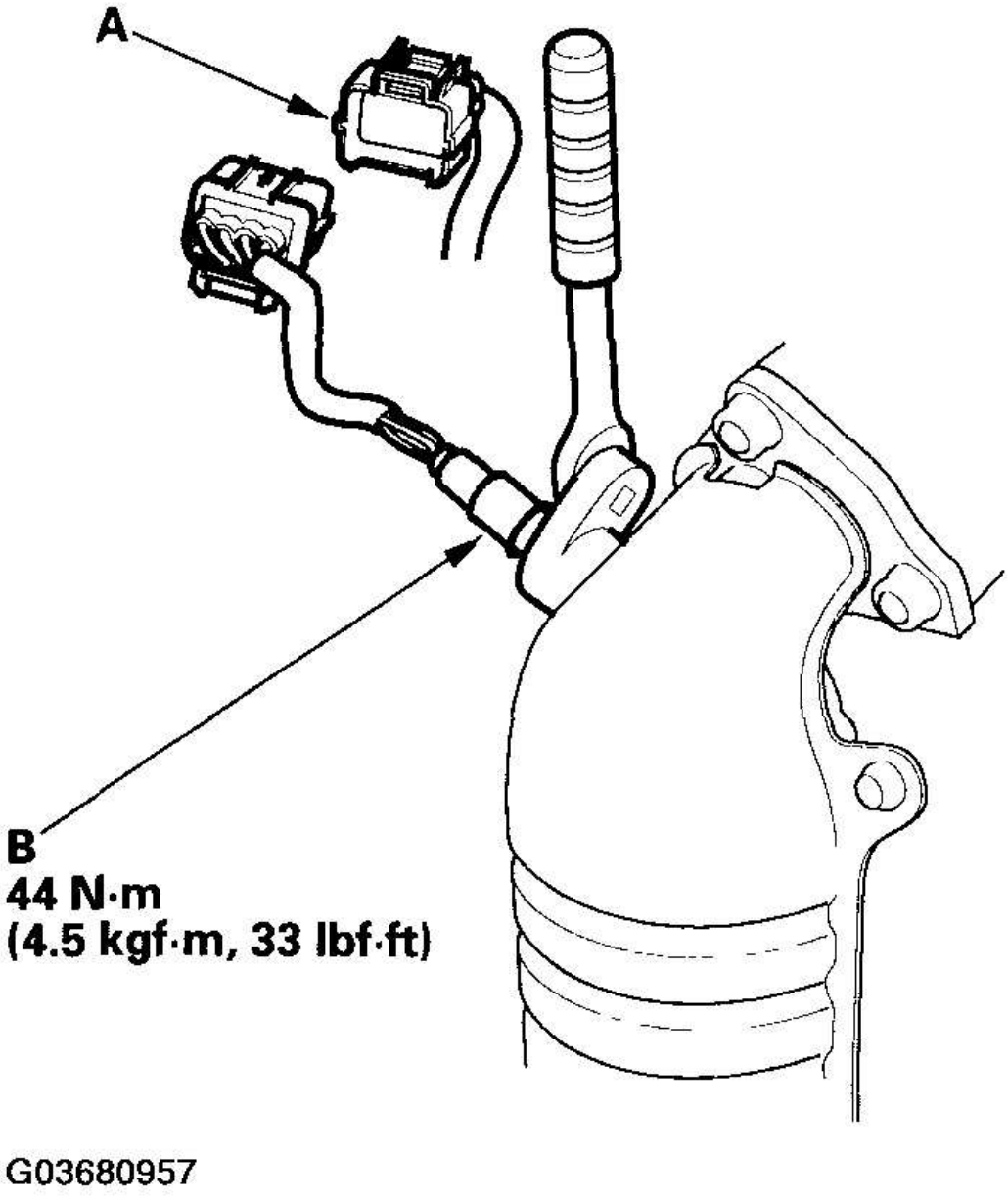


Fig. 254: Disconnecting A/F Sensor 4P Or 8P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the A/F sensor in the reverse order of removal.

SECONDARY HO2S REPLACEMENT

Special Tools Required

02 sensor socket wrench. Snap-on YA8875, SP Tools 93750, or equivalent, commercially available

NOTE: When the secondary HO2S is replaced the third HO2S must be replaced at the same time (2002-2006 M/T models only).

1. Disconnect the secondary HO2S 4P connector (A), and remove the secondary HO2S (B).

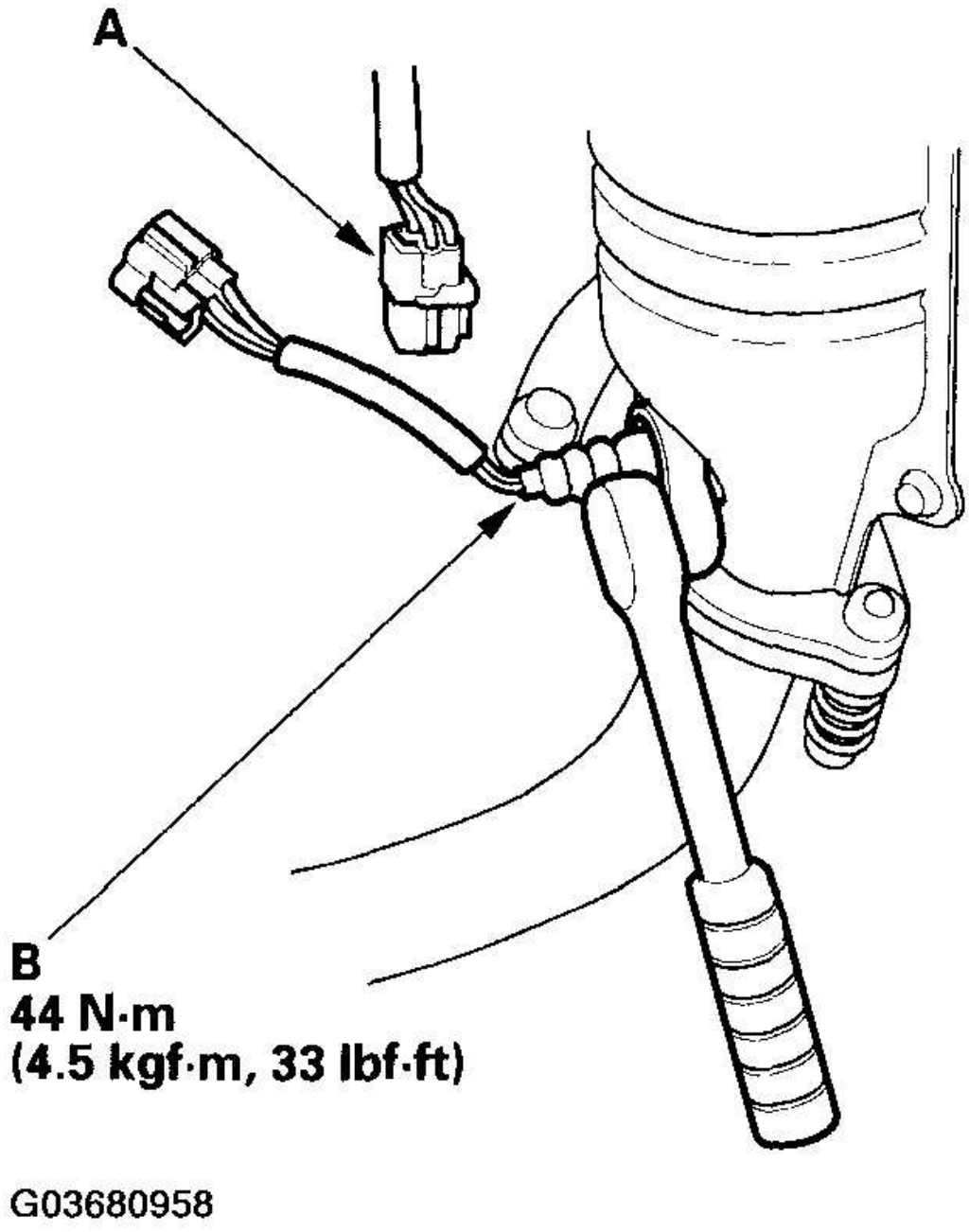


Fig. 255: Removing Secondary HO2S
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the secondary HO2S in the reverse order of removal.

THIRD HO2S REPLACEMENT

Special Tools Required

O2 sensor socket wrench, Snap-on YA8875, SP Tools 93750, or equivalent, commercially available

2002-2006 M/T MODELS

NOTE: When the third HO2S is replaced, the secondary HO2S must be replaced at the same time.

1. Disconnect the third HO2S 4P connector (A), and remove the third HO2S (B).

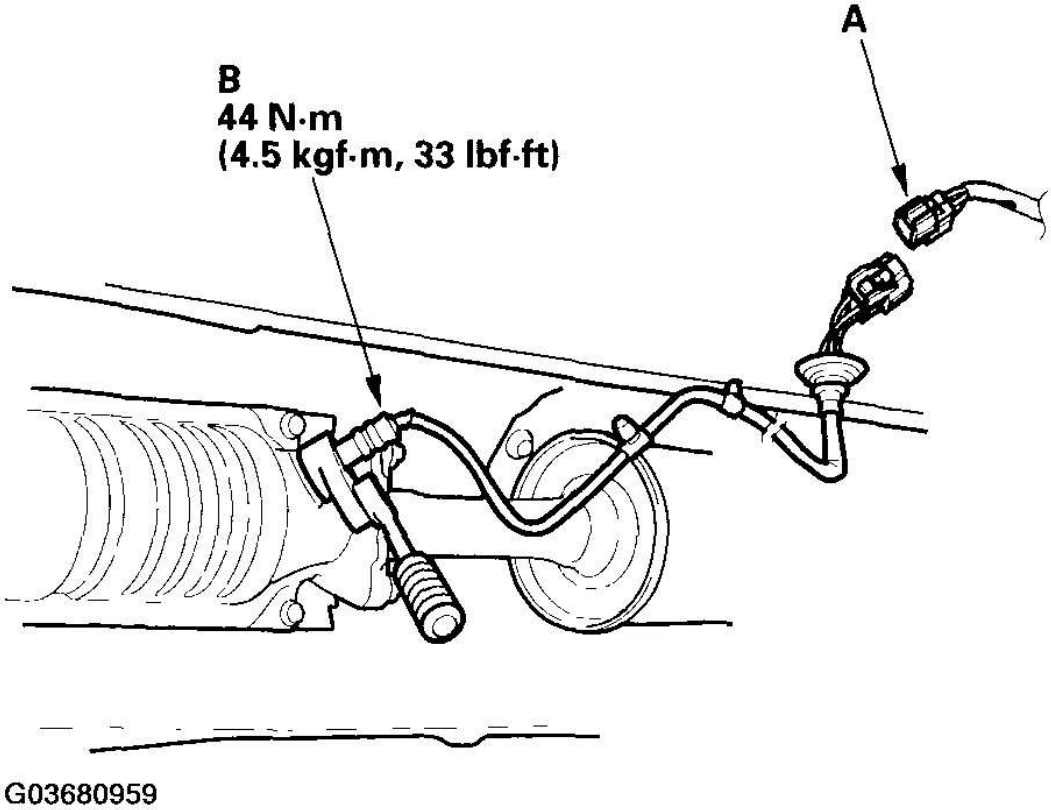


Fig. 256: Removing Third HO2S
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the third HO2S in the reverse order of removal.

ECM REPLACEMENT

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

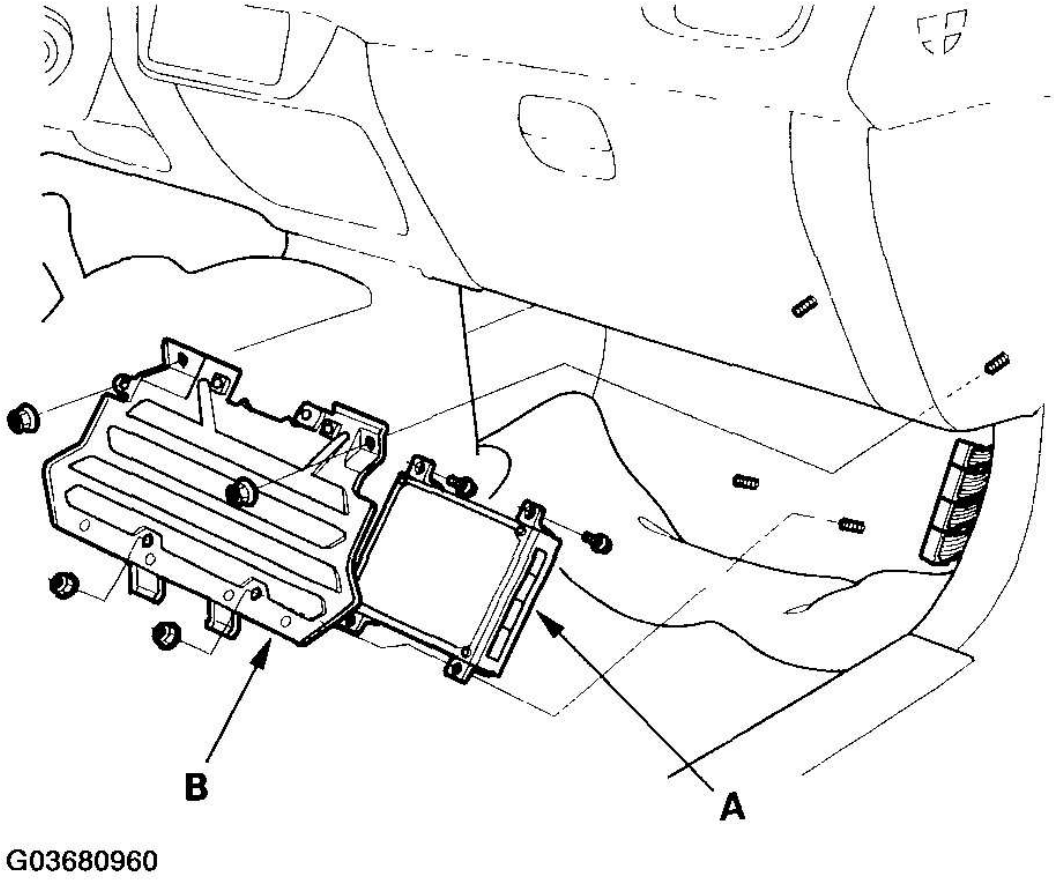


Fig. 257: Pulling Passenger's Side Carpet Back To Expose ECM
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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 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 presets, and set the clock.