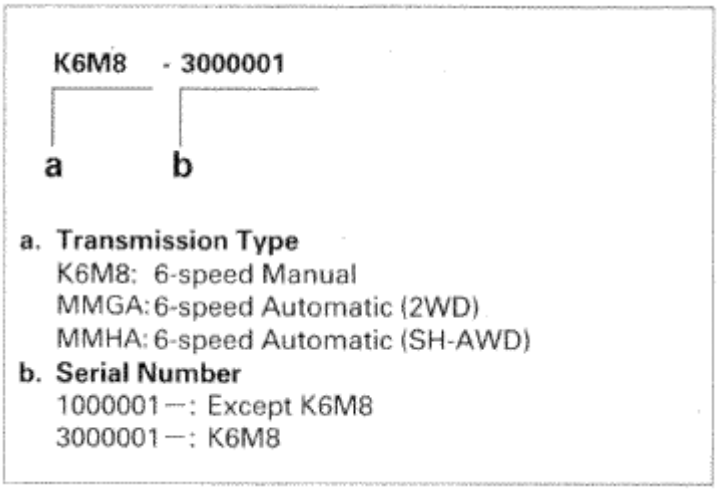

Fig. 4: Identifying Transmission Number
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PAINT CODE

Code	Color	USA models	Canada models
NH-731P	Crystal Black Pearl	o	o
NH-782M	Graphite Luster Metallic	o	o
NH-788P	Bellanova White Pearl	o	o
NH-789M	Forged Silver Metallic II	o	o
R-530P	Basque Red Pearl	o	o
YR-569M	Mayan Bronze Metallic	o	o

Required Materials:

- Masking tape
- Plumb line
- Scale

Before checking:

- Make sure the vehicle does not have aftermarket suspension.
- Make sure all the tires are the correct size, and set their pressures to the specifications shown on the doorjamb label.
- Make sure the fuel tank is full.
- Remove all cargo from the vehicle except the spare tire and tool kit.
- Park the vehicle on level ground (within 1 degree). Do not do this procedure with the vehicle on a lift or with the tires on steel plates or rollers.
- Make sure the steering wheel is pointed straight ahead, and do not turn it after parking the vehicle.
- Shift the transmission into P, and apply the parking brake.

1. Remove the rear bumper (see **LOWER FRONT BUMPER GRILLE REPLACEMENT**).
2. Remove the BSI radar unit(s) (see **BSI RADAR UNIT REMOVAL/INSTALLATION**).

NOTE: Make sure to remove the BSI radar unit when repairing the body.

3. Remove the screw, and detach the hooks (A), then remove the side spacer (B).

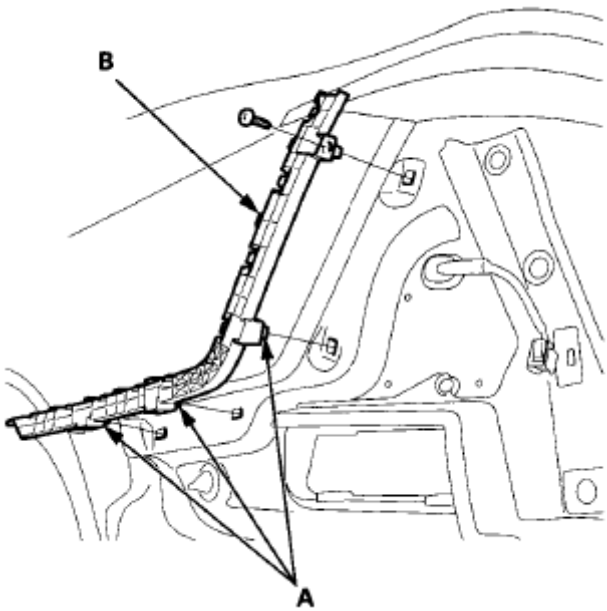

Fig. 82: Identifying Side Spacer, Hooks And Screw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U1289 indicated?

   YES -Go to step 5.

   NO -Intermittent failure, the system is OK at this time. Check for loose or poor connections between the remote slot control unit and the gauge control module.

5. From the BODY ELECTRICAL SYSTEM SELECT menu, select B-CAN CONTROL UNITS INFORMATION, and then select CHECK CONNECTED CONTROL UNITS.

   Is the remote slot control unit detected?

   YES -Go to step 9.

   NO -Go to step 6.

6. Measure the voltage between body ground and remote slot control unit 40P connector terminals No. 1 and No. 21 individually.

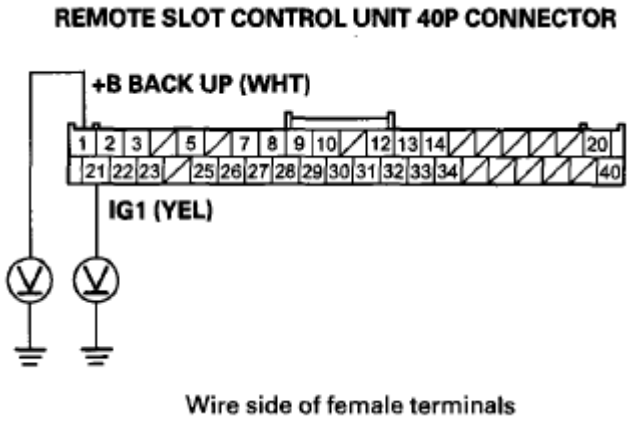

Fig. 47: Measuring Voltage Between Body Ground And Remote Slot Control Unit 40P Connector Terminals No. 1 And No. 21
Courtesy of AMERICAN HONDA MOTOR CO., INC.

   Is there battery voltage?

   YES -Go to step 7.

   NO -Go to step 8.

7. Check the No. 15 (10 A) fuse in the under-hood fuse/relay box and the No. 9 (20 A) fuse in the driver's under-dash fuse/relay box.

Built- in immobilizer function operates when the keyless access function is off.

ELECTRIC STEERING LOCK

The electric steering lock control unit is built into the electric steering lock, and it controls the steering lock motor. When the remote code is identified, the electric steering lock control unit unlocks the steering lock by controlling the steering lock motor.

FAIL- SAFE FUNCTION

The system has a fail- safe function. If any malfunction occurs, the keyless access system indicator and the malfunction indicator lamp (MIL) in the gauge come on.

SELF- DIAGNOSTIC FUNCTION

The system also has a self- diagnostic function.

POWER MODE CONTROL FUNCTION

The keyless access system has four power modes: OFF, ACC, ON, and START. The power modes can be changed by pressing the engine start/stop button. The power mode changes to START mode any time the engine start/stop button is pressed while also pressing the brake pedal (A/T) or clutch pedal (M/T).

- OFF and START mode: Indicator (A) in the engine start/stop button is off.
- ACC mode: Indicator in the engine start/stop button comes on green.
- ON mode: Indicator in the engine start/stop button remains green when the engine is not running (If the engine is running, the indicator goes off).

NOTE: If the keyless access system mode switch is OFF, Insert the remote into the remote slot, and press the engine start/stop button to select the mode.

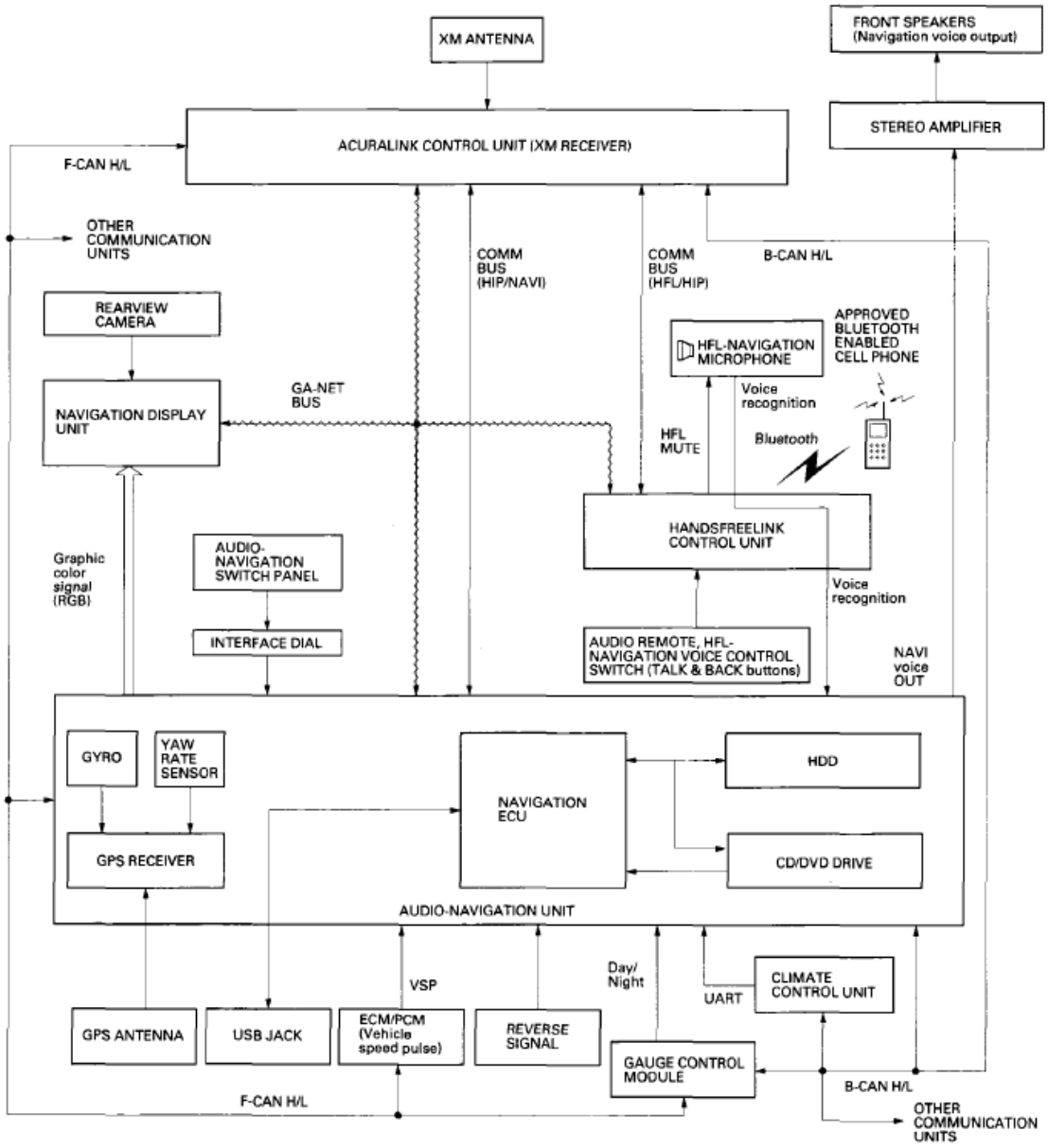

Fig. 16: HDD Navigation System Diagram - USA Models
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Canada models

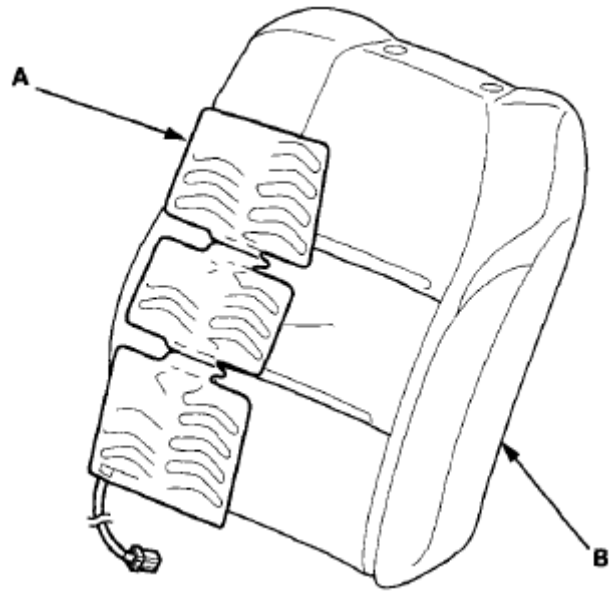

Fig. 12: Identifying Seat-Back Heater And Seat-Back Pad
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the removed parts in the reverse order of removal.

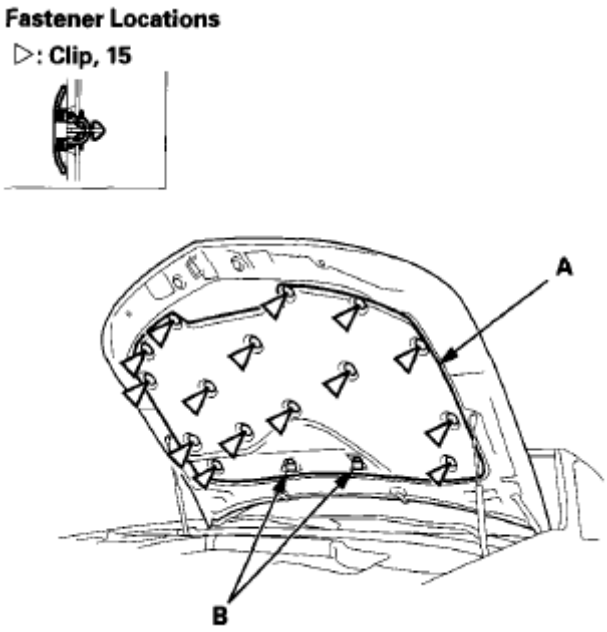

Fig. 5: Identifying Hood Insulator And Hooks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the insulator in the reverse order of removal, and note these items:
   - If the clips are damaged or stress-whitened, replace them with new ones.
   - Push the clips and the hooks into place securely.

HOOD SUPPORT STRUT REPLACEMENT

NOTE:
- **Use eye protection when doing this procedure.**
- **When prying with a flat-tip screwdriver, wrap it with protective tape to prevent damage.**

1. With the help of an assistant, use a flat-tip screwdriver (A) to pry out the clips (B) on both ends of the hood support struts (C), and then remove the support struts from the pivot bolts (D). Do not remove the clips from the struts.

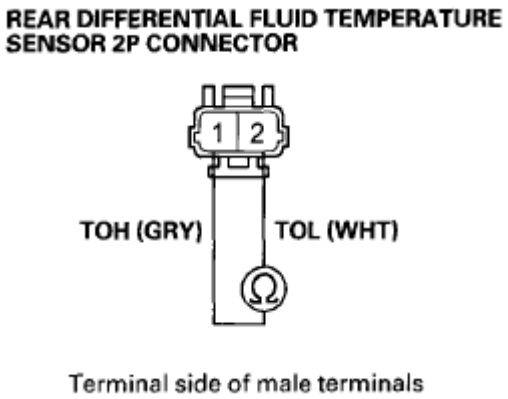

Fig. 28: Checking Continuity Between Rear Differential Fluid Temperature Sensor 2P Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the wire between rear differential fluid temperature sensor 2P connector terminals No. 1 and No. 2.

NO - Go to step 12.

12. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
13. Measure the voltage between body ground and rear differential fluid temperature sensor 2P connector terminals No. 1 and No. 2 respectively.

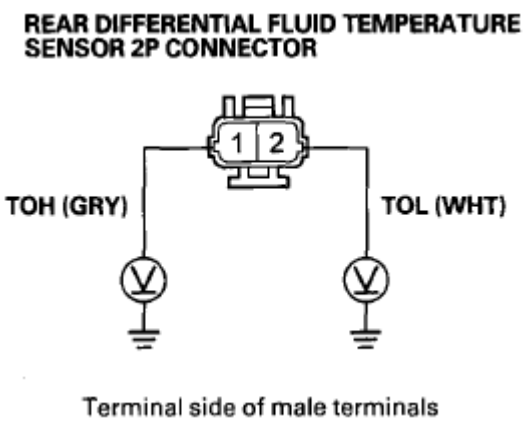

Fig. 29: Measuring Voltage Between Body Ground And Rear Differential Fluid Temperature Sensor 2P Connector Terminals No. 1 And No. 2 Respectively
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V or more?

YES - Repair a short to power in the wire harness.

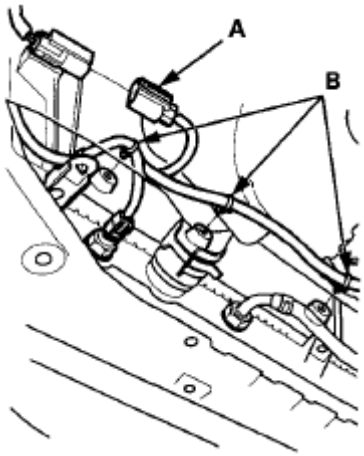

Fig. 27: Identifying Radiator Fan Motor Connector And Harness Clamps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. A/T model: Install the harness clamp (A).

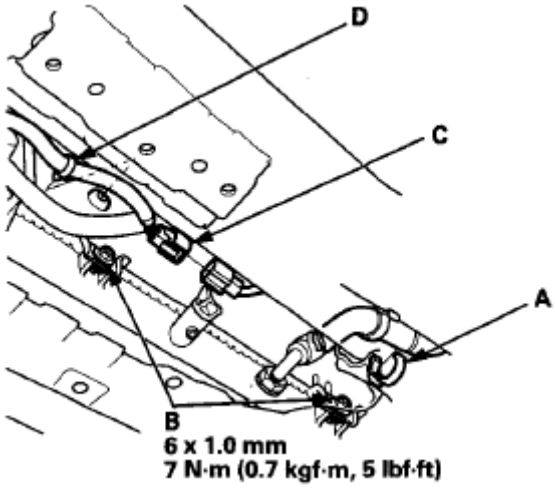

Fig. 28: Identifying Harness Clamps, Mounting Bolts And Motor Connector With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Tighten the A/C condenser fan shroud mounting bolts (B).
9. Connect the A/C condenser fan motor connector (C), and install the harness clamp (D).
10. Install the front splash shield (see **FRONT SPLASH SHIELD REPLACEMENT**).
11. Lower the vehicle on the lift.
12. Install the air intake duct splash separator (see **ENGINE INSTALLATION**).
13. Install the battery base (see **BATTERY REMOVAL AND INSTALLATION**).
14. Do the battery installation procedure (see **BATTERY REMOVAL AND INSTALLATION**).
15. Install the engine compartment covers (see **ENGINE COMPARTMENT COVER REPLACEMENT**).

	Reverse idler gear shaft thrust washer thickness		1.50- 1.55 mm (0.0591- 0.0610 in)	-
ATF pump	ATF pump thrust clearance		0.04- 0.07 mm (0.002- 0.002 in)	0.07 mm (0.002 in)
	Clearance between ATF pump gear and main valve body	Drive gear	0.210- 0.265 mm (0.009- 0.010 in)	-
		Driven gear	0.070- 0.125 mm (0.003- 0.004 in)	-
	ATF pump driven gear I.D.		14.016- 14.034 mm (0.55181- 0.55252 in)	When worn or damaged
	ATF pump driven gear shaft O.D.		13.980- 13.990 mm (0.55039- 0.55079 in)	When worn or damaged
Stator shaft	I.D. at needle bearing contact area	At torque converter side	28.000- 28.021 mm (1.10236- 1.10319 in)	When worn or damaged
		At ATF pump side	40.000- 40.025 mm (1.57480- 1.57578 in)	-
	I.D. at mainshaft sealing ring contact area		41.000- 41.025 mm (1.61417- 1.61515 in)	41.05 mm (1.6161 in)
Reverse shift fork	Fork finger thickness		5.90- 6.00 mm (0.2323- 0.2362 in)	5.4 mm (0.213 in)
Park gear and pawl	-		-	When worn or damaged
Regulator valve body	I.D. of shift fork shaft contact area	At shaft part	14.000- 14.010 mm (0.55118- 0.55157 in)	-
		At valve part	37.000- 37.039 mm (1.45669- 1.45823 in)	37.045 mm (1.45846 in)
Main valve body	Third shaft sealing ring contact I.D.		35.000- 35.025 mm (1.37795- 1.37893 in)	35.05 mm (1.3799 in)
ATF guide collar	Secondary shaft sealing ring contact 1. D.		30.000- 30.021 mm (1.18110- 1.18193 in)	30.05 mm (1.1831 in)
	Driveshaft/intermediate shaft		32.025- 32.055	

9. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
10. Reset the ECM/PCM with the HDS.
11. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
12. Test-drive under these conditions:
    - Engine coolant temperature (ECT SENSOR 1) above 158°F(70°C)
    - A/T in D, or M/T in 4th
    - Drive at a steady speed between 55- 75 mph (88- 120 km/h) for at least 10 seconds
    - During the drive, decelerate (with the throttle fully closed) for 5 seconds
13. Check for Pending or Confirmed DTCs with the HDS.

    Is DTC P0401 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the connections are OK, go to step 15.

    NO - Go to step 14.

14. Monitor the OBD STATUS for DTC P0401 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete. If any other Pending or Confirmed DTCs were indicated in step 13, go to the indicated **DTC'S TROUBLESHOOTING**.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 12.

15. Update the ECM/PCM if it does not have the latest software (see **ECM/PCM UPDATE**), or substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**).
16. Test-drive under these conditions:
    - Engine coolant temperature (ECT SENSOR 1) above 158°F(70°C)
    - A/T in D, or M/T in 4th
    - Drive at a steady speed between 55- 75 mph (88- 120 km/h) for at least 10 seconds
    - During the drive, decelerate (with the throttle fully closed) for 5 seconds
17. Check for Pending or Confirmed DTCs with the HDS.

    Is DTC P0401 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**), then go to step 16. If the ECM/PCM was substituted, go to step 1.

YES - Repair a short in the wire between the ECM/PCM (C23 (C36)*) and secondary HO2S (Sensor 2), then go to step 24.

NO - Go to step 31.

18. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
19. Jump the SCS line with the HDS.
20. Disconnect ECM/PCM connector B (49P).
21. Check for continuity between ECM/PCM connector terminal B25 (B16)* and body ground.

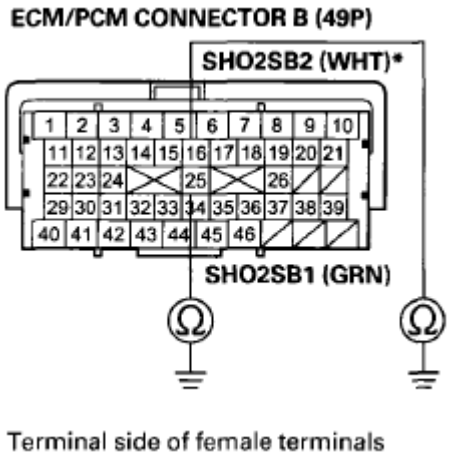

Fig. 40: Checking Continuity Between ECM/PCM Connector Terminal B25 (B16) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the wire between the ECM/PCM (B25 (B16)*) and secondary HO2S (Sensor 2), then go to step 24.

NO - Go to step 31.

22. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
23. Replace **secondary HO2S (Sensor 2)**.
24. Reconnect all connectors.
25. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
26. Reset the ECM/PCM with the HDS.
27. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
28. Start the engine. Hold the engine speed at 3, 000 RPM without load (A/T in P or N, M/T in neutral) until the radiator fan comes on, then let it idle.
29. Check for Pending or Confirmed DTCs with the HDS.

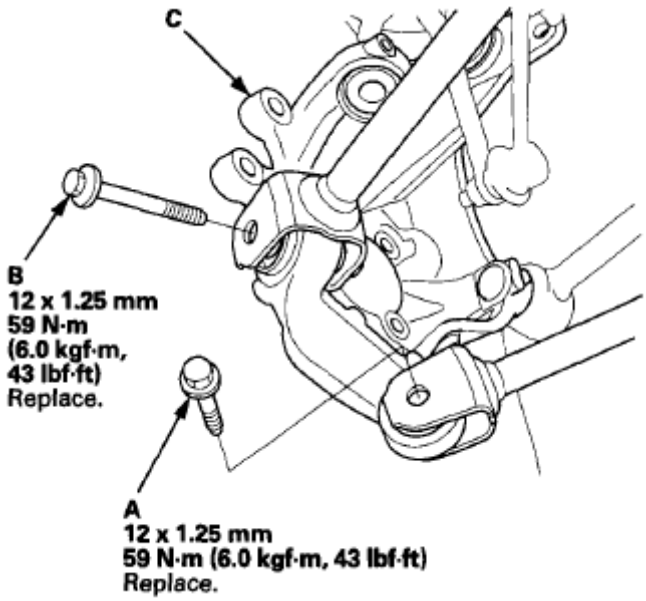

Fig. 13: Identifying Lower Arm Mounting Bolts And Knuckle With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the knuckle in the reverse order of removal, and note these items:
    - First install all of the components, and lightly tighten the bolts and the nuts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque.
    - Be careful not to damage the ball joint boot when connecting the knuckle.
    - Before connecting the ball joint, degrease the threaded section and the tapered portion of the ball joint pin, the ball joint connecting hole, the threaded section, and the mating surfaces of the castle nut.
    - Torque the castle nut to the lower torque specification, then tighten it only far enough to align the slot with the ball joint pin hole. Do not align the castle nut by loosening it.
    - Before installing the wheel, clean the mating surfaces between the brake disc/drum and the inside of the wheel.
13. Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

UPPER ARM REPLACEMENT

Special Tools Required

- Ball Joint Thread Protector, 14 mm 07AAE-SJAA100
- Ball Joint Remover, 32 mm 07MAC-SL0A102

1. Raise and support the vehicle (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheel.
3. Remove the rear damper/spring (see **DAMPER/SPRING REMOVAL AND INSTALLATION**).
4. Release the parking brake lever fully.

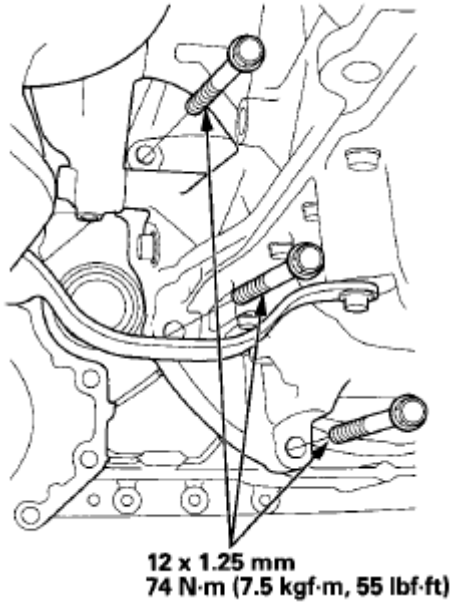

Fig. 249: Installing Lower Transmission Housing Mounting Bolts With Torque Specifications (Rear Side)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Connect the crankshaft position (CKP) sensor connector (A), and install the CKP sensor cover (B).

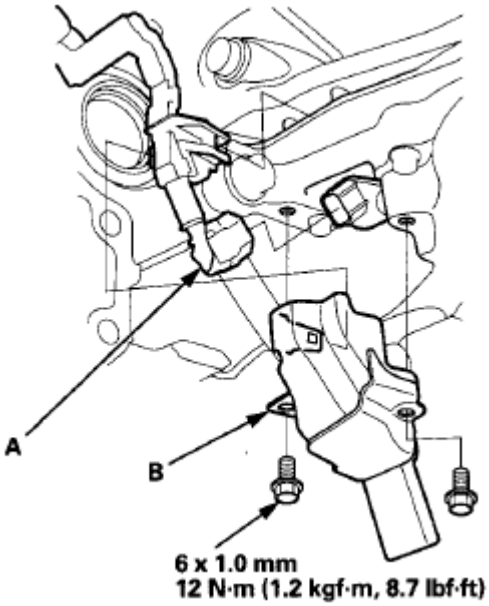

Fig. 250: Identifying Crankshaft Position (CKP) Sensor Connector And CKP Sensor Cover With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the front engine mount bracket with new bolts.

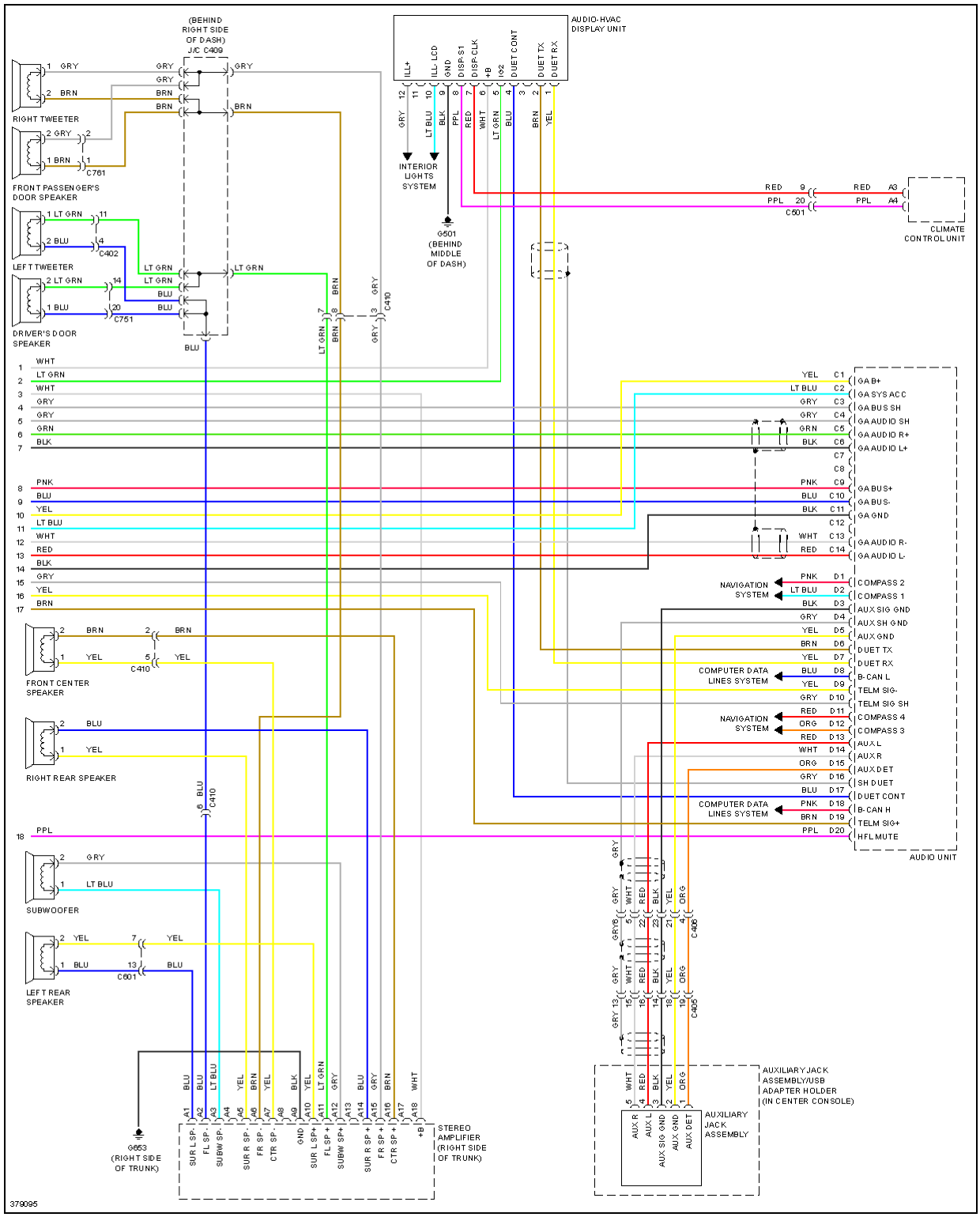

Fig. 107: Radio Circuit, W/O Navigation (3 of 3)