



Chassis and Engine Numbers (cont'd)

Applicable Area Code/VIN/Engine Number/Transmission Number List

| MODEL | APPLICABLE AREA CODE | GRADE NAME | TRANSMISSION TYPE | VEHICLE IDENTIFICATION NUMBER | ENGINE NUMBER | TRANSMISSION NUMBER |
|-------|----------------------|------------|--------------------|-------------------------------|----------------|---------------------|
| CR-V | KE | SE | 5MT | SHSRD87402U000001- | K20A4-1000001- | Z2M1-1500001- |
| | | | 4AT | SHSRD88402U000001- | K20A4-1000001- | MRVA-1000001- |
| | | SES | 5MT | SHSRD87502U000001- | K20A4-1000001- | Z2M1-1500001- |
| | | | 4AT | SHSRD88502U000001- | K20A4-1000001- | MRVA-1000001- |
| | KG | LS | 5MT | SHSRD87602U000001- | K20A4-1000001- | Z2M1-1500001- |
| | | | 4AT | SHSRD88602U000001- | K20A4-1000001- | MRVA-1000001- |
| | | ES | 5MT | SHSRD87702U000001- | K20A4-1000001- | Z2M1-1500001- |
| | | | 4AT | SHSRD88702U000001- | K20A4-1000001- | MRVA-1000001- |
| | KR | LS | 5MT | SHSRD87202U000001- | K20A4-1000001- | Z2M1-1500001- |
| | | | 4AT | SHSRD88202U000001- | K20A4-1000001- | MRVA-1000001- |
| | | ES | 5MT | SHSRD87302U000001- | K20A4-1000001- | Z2M1-1500001- |
| | | | 4AT | SHSRD88302U000001- | K20A4-1000001- | MRVA-1000001- |
| | KS | ES | 5MT | SHSRD87102U000001- | K20A4-1000001- | Z2M1-1500001- |
| | | | 4AT | SHSRD88202U000001- | K20A4-1000001- | MRVA-1000001- |
| | KQ | RV-i | 5MT | JHLRD77402C200001- | K24A1-1400001- | Z2M3-1000001- |
| | | | 4AT | JHLRD78402C200001- | K24A1-1400001- | MRVA-1000001- |
| | | RV-Si | 5MT | JHLRD77802C200001- | K24A1-1400001- | Z2M3-1000001- |
| | | | 4AT | JHLRD78802C200001- | K24A1-1400001- | MRVA-1000001- |
| | KH | BASE | 5MT | JHLRD57402C200001- | K20A4-1900001- | Z2M1-1000001- |
| | | | 4AT | JHLRD58402C200001- | K20A4-1900001- | MRVA-1000001- |
| | KK | LX | 5MT | JHLRD77402C200001- | K24A1-1900001- | Z2M3-1000001- |
| | | | 4AT | JHLRD78402C200001- | K24A1-1900001- | MRVA-1000001- |
| | | EX | 5MT | JHLRD77802C200001- | K24A1-1900001- | Z2M3-1000001- |
| | | | 4AT | JHLRD78802C200001- | K24A1-1900001- | MRVA-1000001- |
| | | LX | 4AT | JHLRD68402C200001- | K24A1-1900001- | MCVA-1000001- |
| | | | | | | |
| | KM | RV-Si | 5MT | JHLRD77802C200001- | K24A1-1900001- | Z2M3-1000001- |
| | | | 4AT | JHLRD78802C200001- | K24A1-1900001- | MRVA-1000001- |
| | KN | RV-i | 5MT | JHLRD57402C200001- | K20A4-1900001- | Z2M1-1000001- |
| | | | 4AT | JHLRD58402C200001- | K20A4-1900001- | MRVA-1000001- |
| | | RV-Si | 5MT | JHLRD57802C200001- | K20A4-1900001- | Z2M1-1000001- |
| | | | 4AT | JHLRD58802C200001- | K20A4-1900001- | MRVA-1000001- |
| | KP | RV-i | 5MT | JHLRD57402C200001- | K20A5-1000001- | Z2M1-1000001- |
| | | | 4AT | JHLRD58402C200001- | K20A5-1000001- | MRVA-1000001- |
| | | RV-Si | 5MT | JHLRD57802C200001- | K20A5-1000001- | Z2M1-1000001- |
| | | | 4AT | JHLRD58802C200001- | K20A5-1000001- | MRVA-1000001- |
| | KT | BASE | 5MT | JHLRD57402C200001- | K20A5-1000001- | Z2M1-1000001- |
| | | | 4AT | JHLRD58402C200001- | K20A5-1000001- | MRVA-1000001- |
| | KU | RV-i | 4AT | JHLRD58402C200001- | K20A4-1900001- | MRVA-1000001- |
| | | RV-iH | 4AT | JHLRD58502C200001- | K20A4-1900001- | MRVA-1000001- |
| | | RV-Si | 4AT | JHLRD58802C200001- | K20A4-1900001- | MRVA-1000001- |
| | | RV-SiH | 4AT | JHLRD58902C200001- | K20A4-1900001- | MRVA-1000001- |
| | KW | BASE | 5MT | JHLRD57402C200001- | K20A5-1000001- | Z2M1-1000001- |
| | | | 4AT | JHLRD58402C200001- | K20A5-1000001- | MRVA-1000001- |
| | KY | RV-i | 5MT | JHLRD574*2C400001- | K20A4-1900001- | Z2M1-1000001- |
| | | | | JHLRD575*2C400001- | K20A4-1900001- | Z2M1-1000001- |
| | | | 4AT | JHLRD584*2C400001- | K20A4-1900001- | MRVA-1000001- |
| | | | | JHLRD585*2C400001- | K20A4-1900001- | MRVA-1000001- |
| RV-Si | | 5MT | JHLRD578*2C400001- | K20A4-1900001- | Z2M1-1000001- | |
| | | | JHLRD579*2C400001- | K20A4-1900001- | Z2M1-1000001- | |
| | | 4AT | JHLRD588*2C400001- | K20A4-1900001- | MRVA-1000001- | |
| | | | JHLRD589*2C400001- | K20A4-1900001- | MRVA-1000001- | |

DTC Troubleshooting (cont'd)

DTC P0135 (41-2): Primary HO2S (Sensor 1) Heater Circuit Malfunction

1. Reset the ECM/PCM (see page 11-4).
2. Start the engine.

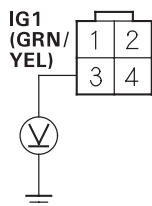
Is DTC P0135 indicated?

Yes Go to step 3.

No Intermittent failure, system is OK at this time. Check for poor connections or loose wires at the primary HO2S (Sensor 1) and at the ECM/PCM.■

3. Turn the ignition switch OFF.
4. Disconnect the primary HO2S (Sensor 1) 4P connector.
5. Turn the ignition switch ON (II).
6. Measure voltage between primary HO2S (Sensor 1) 4P connector terminal No. 3 and body ground.

PRIMARY HO2S (SENSOR 1) 4P CONNECTOR



Wire side of female terminals

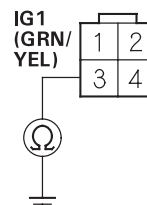
Is there battery voltage?

Yes Go to step 8.

No Go to step 7.

7. Check for continuity between body ground and primary HO2S (Sensor 1) 4P connector terminals No. 3.

PRIMARY HO2S (SENSOR 1) 4P CONNECTOR



Wire side of female terminals

Is there continuity?

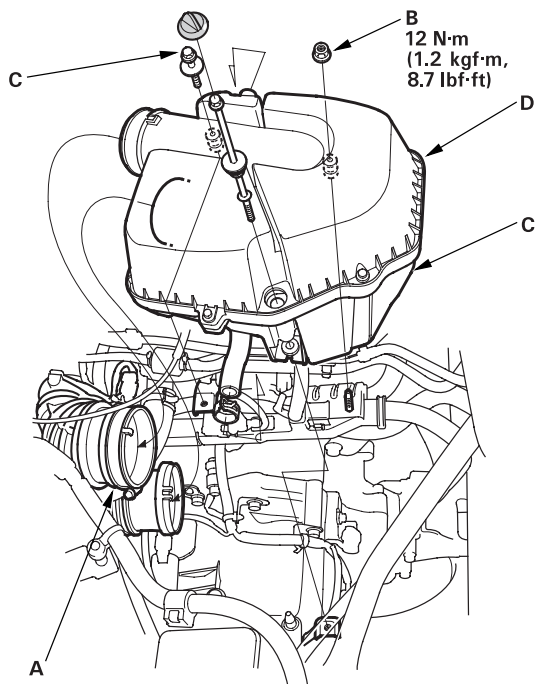
Yes Repair short in the wire between the primary HO2S (Sensor 1) and the No. 4 ACG (10A) fuse.■

No Check the No. 4 ACG (10A) fuse in the under-dash fuse/relay box. If the fuse is OK, repair open in the wire between the primary HO2S (Sensor 1) and the No. 4 ACG (10A) fuse.■

8. Turn the ignition switch OFF.
9. Reconnect the primary HO2S (Sensor 1) 4P connector.
10. Disconnect the negative cable from the battery.
11. Disconnect ECM/PCM connector A (31P).
12. Reconnect the negative cable to the battery.
13. Turn the ignition switch ON (II).

Air Cleaner Replacement

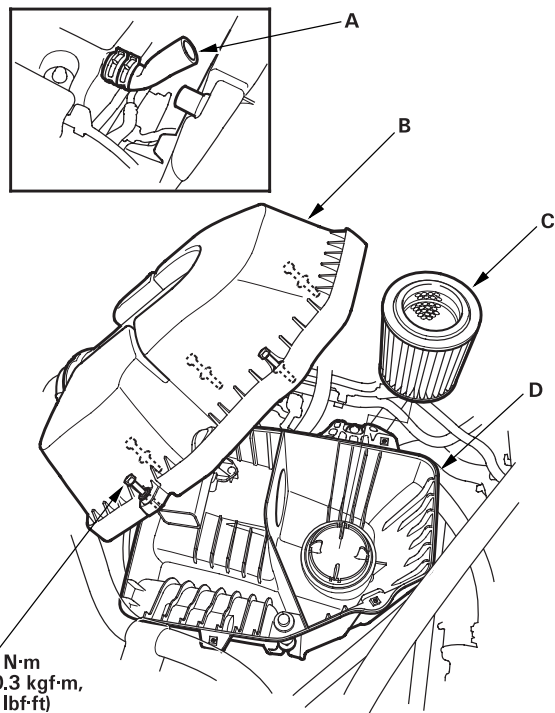
1. Remove the clamp (A), the nuts (B), and the bolts (C).



2. Remove the air cleaner (D).
3. Install the parts in the reverse order of removal.

Air Cleaner Element Replacement

1. Disconnect the PCV hose (A). Open the air cleaner housing cover (B).



2. Remove the air cleaner (C) from the air cleaner housing (D).
3. Install the parts in the reverse order of removal.

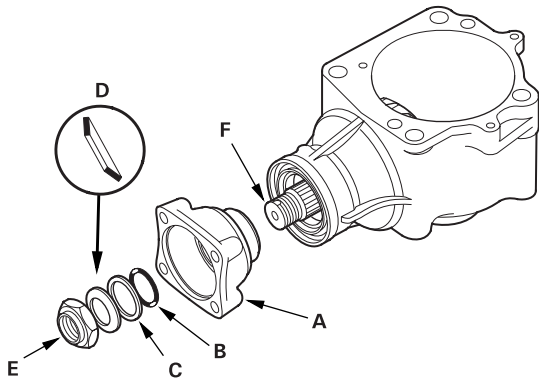
Transfer Reassembly (cont'd)

35 mm Thrust Shim Selection (cont'd)

23. Install the companion flange (A), O-ring (B), back-up ring (C), conical spring washer (D) and locknut (E) on the transfer driven gear (F).

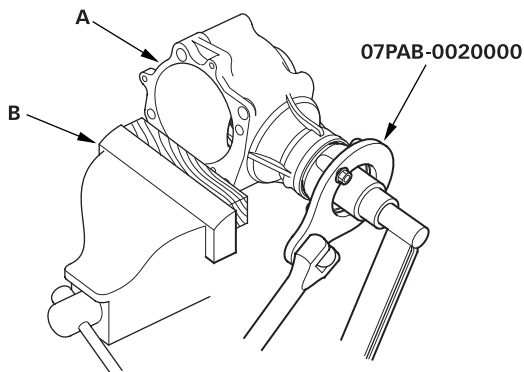
NOTE:

- Coat the threads of the locknut, O-ring and transfer shaft with MTF before installing the locknut.
- Install the conical spring washer in the direction shown.



24. Secure the transfer housing (A) in a bench vise (B) with soft jaws.

NOTE: To prevent damage to the transfer housing, always use soft jaws or equivalent materials between the transfer housing and the vise.



25. Install the special tool on the companion flange, then tighten the transfer driven gear shaft locknut while measuring the starting torque of the transfer driven gear shaft.

STARTING TORQUE:

1.08 - 1.47 N·m
(11.0 - 15.0 kgf·cm, 9.55 - 13.0 lbf·in)

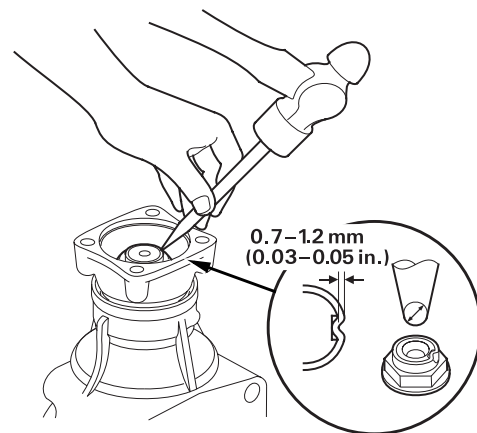
TIGHTENING TORQUE:

132 - 260 N·m
(13.5 - 26.5 kgf·m, 97.6 - 192 lbf·ft)

NOTE:

- Rotate the companion flange several times to seat the tapered roller bearing, then measure the starting torque.
- If the starting torque exceeds 1.47 N·m (15.0 kgf·cm, 13.0 lbf·in.), replace the transfer spacer and reassemble the parts. Do not adjust the torque with the locknut loose.
- If the tightening torque exceeds 260 N·m (26.5 kgf·m, 192 lbf·ft), replace the transfer spacer and reassemble the parts.
- Write down the measurement of the starting torque: it is used to measure the total starting torque.

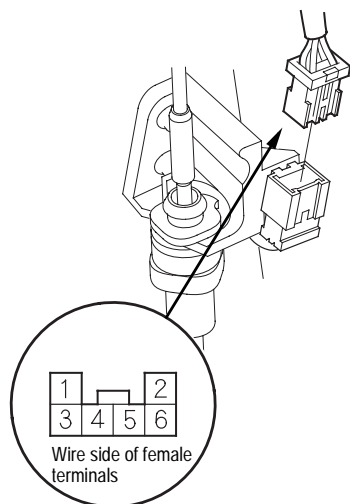
26. Stake the locknut into the transfer driven gear shaft using a 3.5 mm punch.



Shift Lock Solenoid Test/Replacement

1. Remove the ash tray, front console box, heater control panel (see page 20-91), driver's dashboard lower cover (see page 20-88), and dashboard gauge assembly cover (see page 20-87).
2. Disconnect the O/D switch/shift lock solenoid/park pin switch connector.

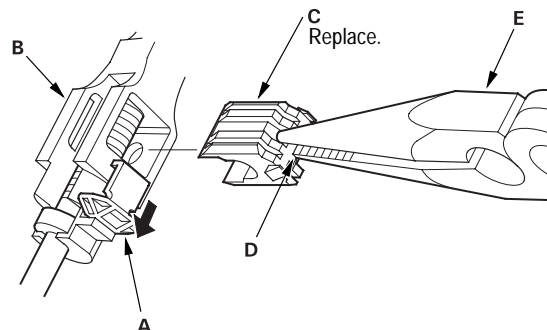
NOTE: The illustration shows LHD model; RHD is symmetrical.



O/D SWITCH/SHIFT LOCK SOLENOID/
PARK PIN SWITCH CONNECTOR

3. Connect the battery positive terminal to the No. 4 terminal of the O/D switch/shift lock solenoid/park pin switch connector, and connect the battery negative terminal to the No. 3 terminal.
NOTE: Do not connect the battery negative terminal to the No. 3 terminal or you will damage the diode inside the solenoid.
4. Check that the shift lever can be moved from [P] position. Release the battery terminals, move the shift lever back to the [P], and make sure it locks. If the shift lock solenoid works properly, connect the connector and install the removed parts. If the shift lock solenoid is faulty, go to step 5 for replacement.

5. Shift the shift lever to [R] position.
6. Slide the lock tab (A) down on the shift cable end holder (B).



7. Remove the shift cable lock (C) with holding at the middle (D) of it using needle-nose pliers (E) from the shift cable end and shift cable end holder.
NOTE: Do not pry the shift cable lock with a screwdriver, it may damage the shift cable end holder.
8. Separate the shift cable end from the shift cable end holder.



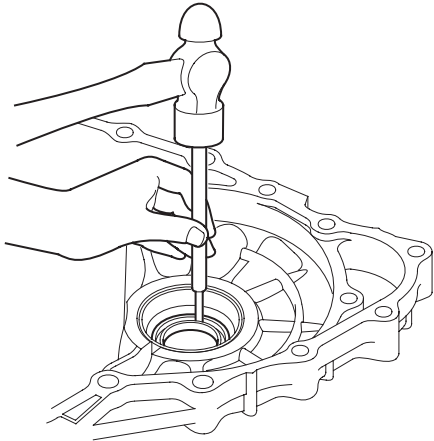
Oil Seal Replacement

Special Tools Required

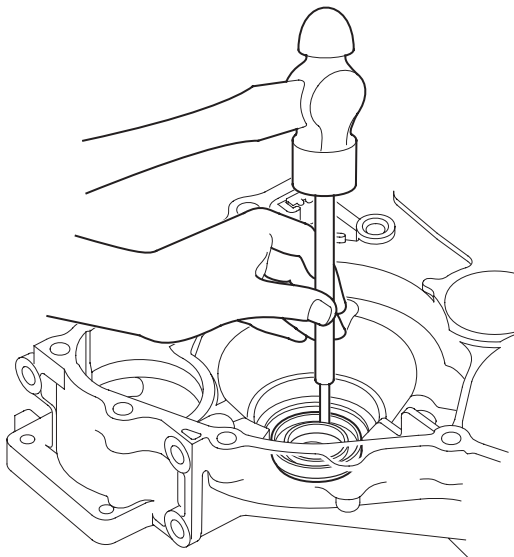
- Handle driver 07749-0010000
- Oil seal driver attachment 07947-SD90101
- Oil seal driver attachment 07JAD-PH80101

NOTE: The illustration shows the 4WD model; 2WD is similar.

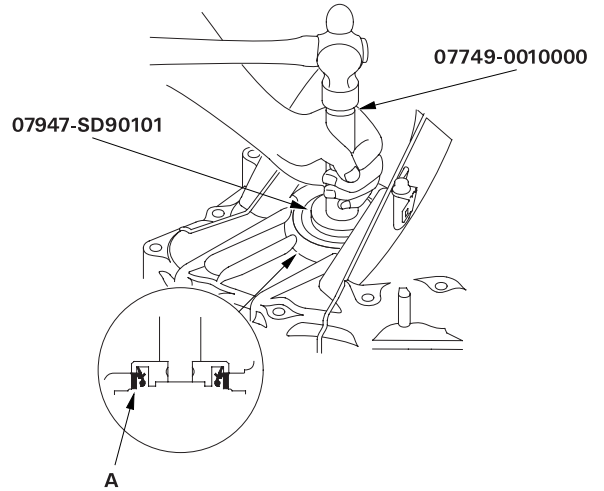
1. Remove the oil seal from the transmission housing.



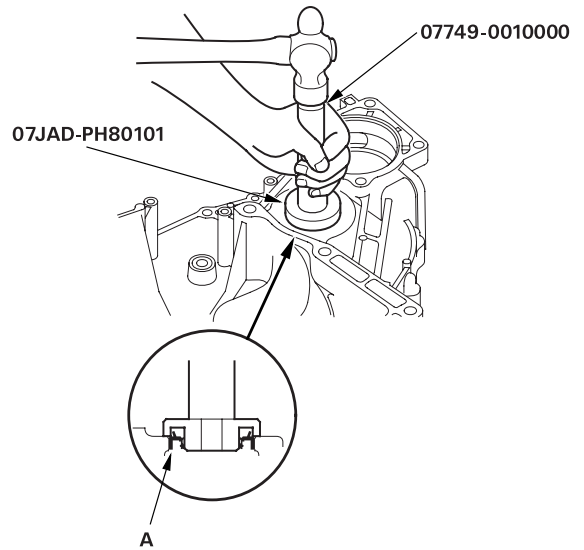
2. Remove the oil seal from the torque converter housing.



3. Install the new oil seal (A) in the transmission housing with the special tools.



4. Install the new oil seal (A) in the torque converter housing with the special tools.





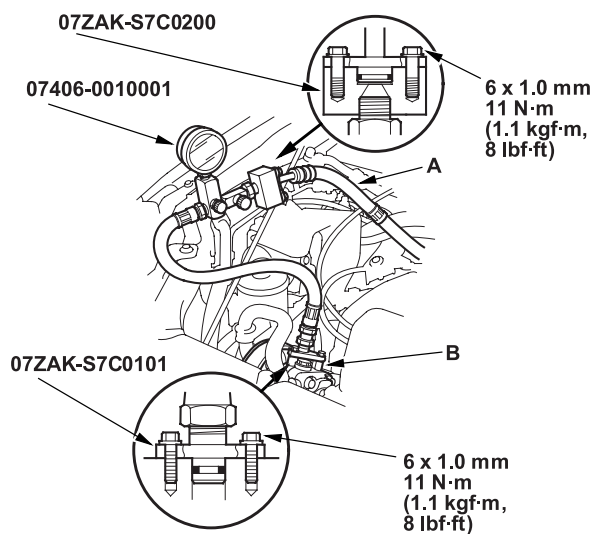
Pump Pressure Test

Special Tools Required

- P/S joint adapter (pump) 07ZAK-S7C0101
- P/S joint adapter (hose) 07ZAK-S7C0200
- P/S pressure gauge 07406-0010001

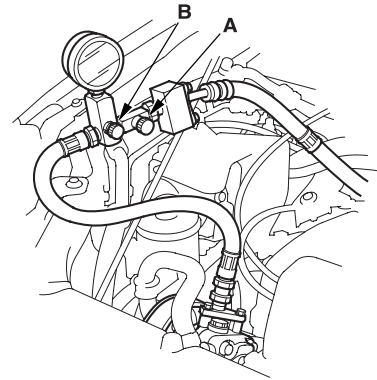
Check the fluid pressure as follows to determine whether the trouble is in the pump or gearbox.

1. Check the power steering fluid level (see page 17-11).
2. Disconnect the pump outlet hose (A) from the pump outlet with care so as not to spill the power steering fluid on the frame and other parts. Install the P/S joint adapter (pump) on the pump outlet (B).



3. Connect the P/S joint adapter (hose) to the P/S pressure gauge, then connect the pump outlet hose (A) to the P/S joint adapter (hose).
4. Install the P/S pressure gauge to the P/S joint adapter (pump).

5. Fully open the shut-off valve (A).



6. Fully open the pressure control valve (B).
7. Start the engine and let it idle.
8. Turn the steering wheel from lock-to-lock several times to warm the fluid to operating temperature at 158°F (70°).
9. Measure steady-state fluid pressure while the engine is idling. If the pump is in good condition, the pressure should be no more than 1,500 kPa (15 kgf/cm², 214 psi). If the pressure is too high, check the outlet hose or valve body unit (see Steering System Troubleshooting). Raise the engine speed to 3,000 rpm, and measure the fluid pressure. If the pump is in good condition, the pressure should be at least 1,500 kPa (15 kgf/cm², 214 psi). If the pressure is too high, repair or replace the pump.
10. Lower the engine speed and let it idle. Close the shut-off valve, then close the pressure control valve gradually until the pressure gauge needle is stable. Read the pressure.

NOTICE

Do not keep the shut-off valve closed more than 5 seconds or the pump could be damaged by overheating.

11. Immediately open the pressure control valve fully. If the pump is in good condition, the gauge should read at least this specification:

K20A4 and K20A5 Engine models:

6,900 - 7,500 kPa (70 - 77 kgf/cm², 1,000 - 1,100 psi)

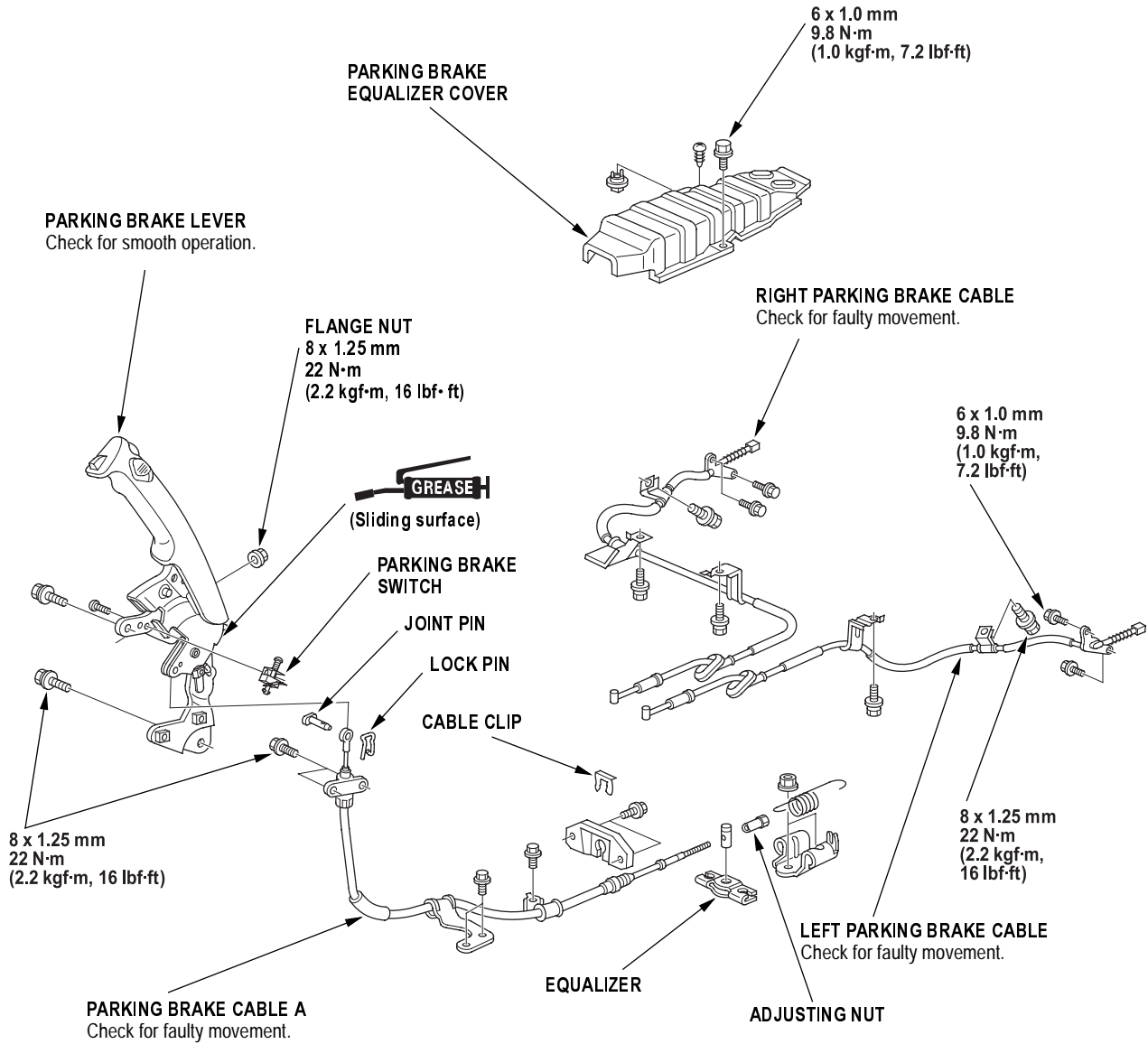
K24A1 Engine models:

7,500 - 8,100 kPa (76 - 83 kgf/cm², 1,080 - 1,180 psi)

A low reading means pump output is too low for full assist. Repair or replace the pump.

Parking Brake Cable Replacement

Exploded View

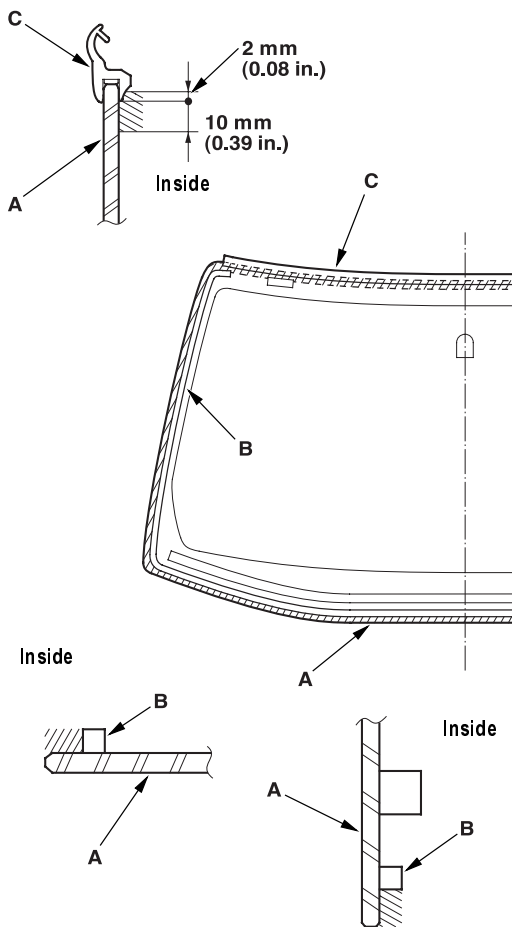


Windshield Replacement (cont'd)

16. With a sponge, apply a light coat of glass primer around the edge of the windshield (A) between the rubber dam (B) and molding (C) as shown, then lightly wipe it off with gauze or cheesecloth:

- Apply glass primer to the molding.
- Do not apply body primer to the windshield, and do not get body and glass primer sponges mixed up.
- Never touch the primed surfaces with your hands. If you do, the adhesive may not bond to the windshield properly, causing a leak after the windshield is installed.
- Keep water, dust, and abrasive materials away from the primed surface.

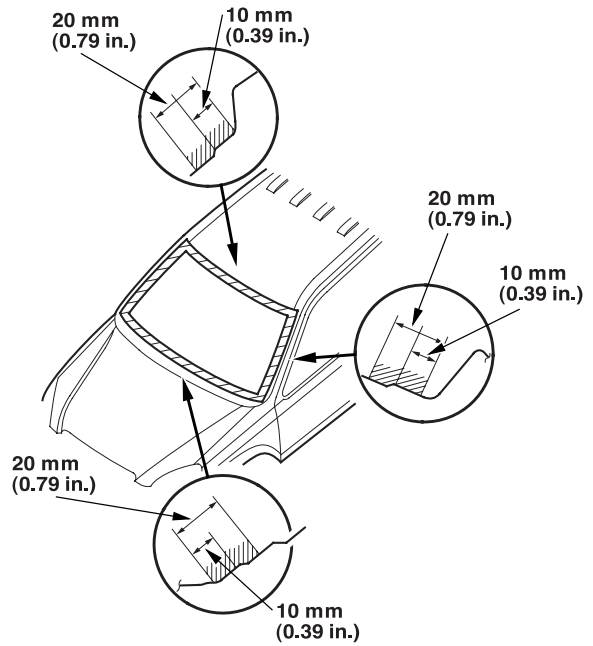
//// : Apply glass primer here



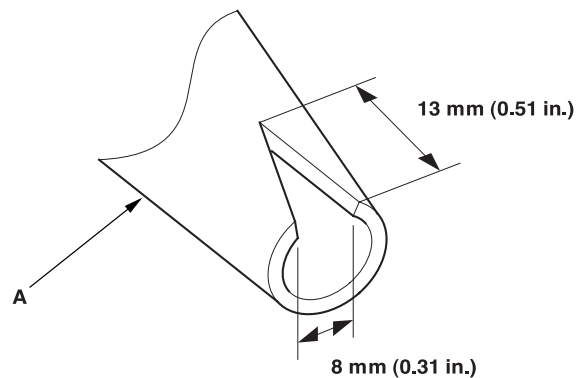
17. With a sponge, apply a light coat of body primer to the original adhesive remaining around the windshield opening flange. Let the body primer dry for at least 10 minutes:

- Do not apply glass primer to the body, and be careful not to mix up glass and body primer sponges.
- Never touch the primed surfaces with your hands.
- Mask off the dashboard before painting the flange.

//// : Apply body primer here



18. Before filling a cartridge, cut a "V" in the end of the nozzle (A) as shown.





Frame Repair Chart

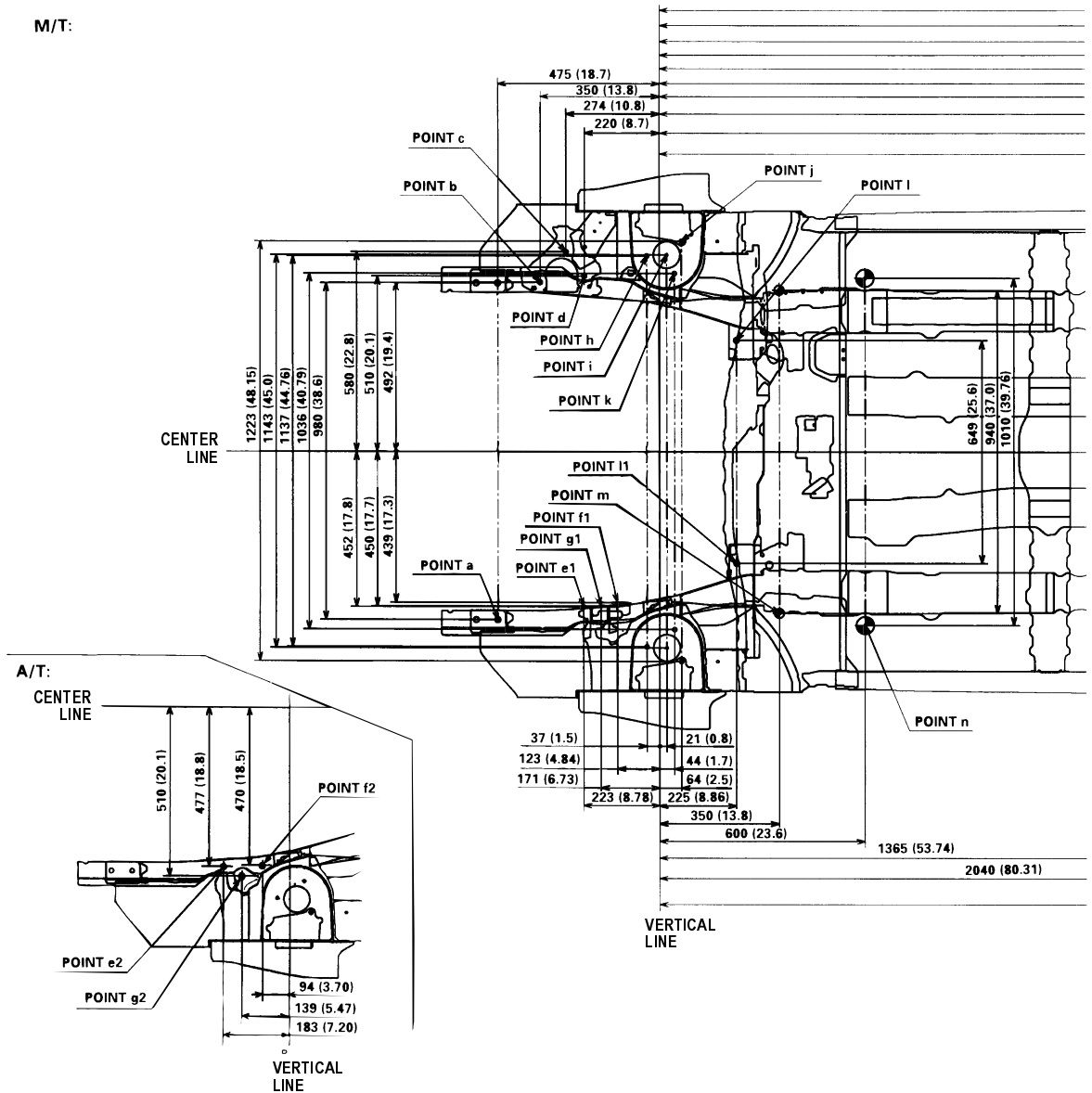
Top View

Unit: mm (in.)

Ø: Inner diameter

- | | | | |
|----|---------------------------------------|----|-------------------------------|
| a | For sub-frame Ø16 (0.63) | h | For damper mount Ø11.5 (0.45) |
| b | For engine mount Ø13 (0.51) | i | For damper center Ø78 (3.07) |
| c | For engine mount Ø13 (0.51) | j | For damper mount Ø11.5 (0.45) |
| d | For engine mount Ø13 (0.51) | k | For damper mount Ø11.5 (0.45) |
| e1 | For M/T transmission mount Ø13 (0.51) | l | For sub-frame Ø16 (0.63) |
| e2 | For A/T transmission mount Ø13 (0.51) | l1 | For sub-frame Ø16 (0.63) |
| f1 | For M/T transmission mount Ø13 (0.51) | m | Locating hole Ø27.4 (1.08) |
| f2 | For A/T transmission mount Ø13 (0.51) | n | Locating hole Ø50 (1.97) |
| g1 | For M/T transmission mount Ø13 (0.51) | | |
| g2 | For A/T transmission mount Ø13 (0.51) | | |

M/T:



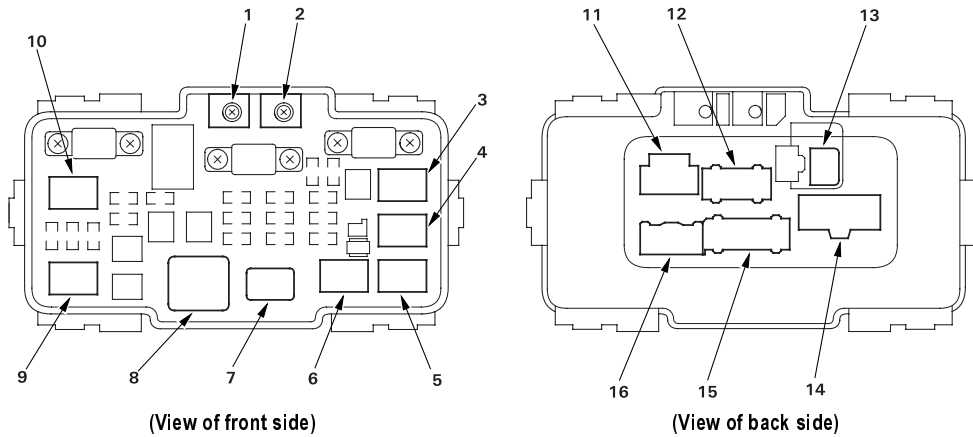


Fuse/Relay Boxes

Connector to Fuse/Relay Box Index

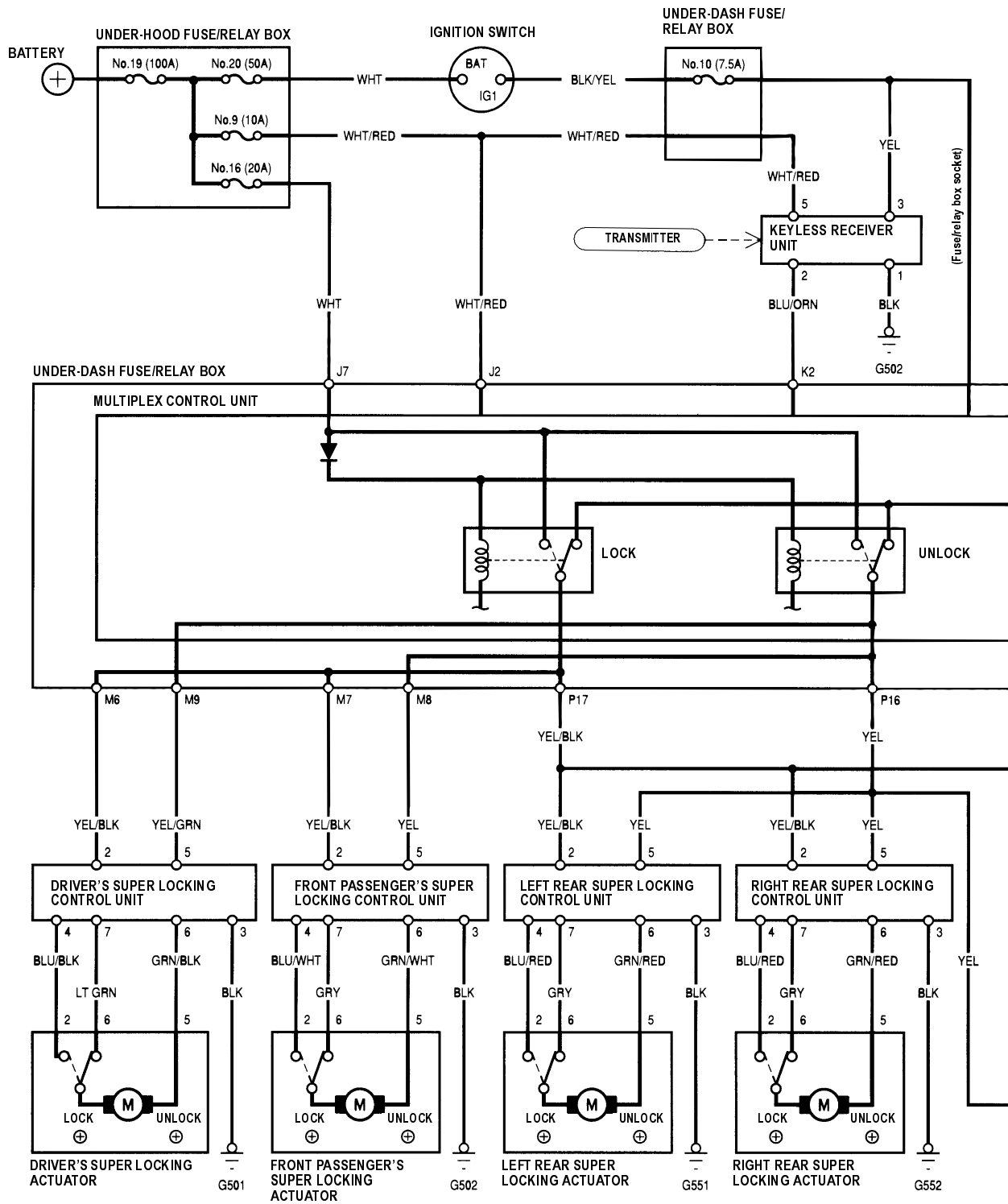
Under-hood Fuse/Relay Box

| Socket | Ref | Terminal | Connects to |
|-----------------------------|-----|----------|---------------------------------|
| A | 11 | 2 | Engine compartment wire harness |
| A/C compressor clutch relay | 6 | 4 | Engine compartment wire harness |
| B | 16 | 5 | Engine compartment wire harness |
| Blower motor relay | 8 | 4 | Engine compartment wire harness |
| C | 12 | 12 | Engine compartment wire harness |
| Condenser fan relay | 3 | 4 | Engine compartment wire harness |
| D | 15 | 14 | Engine compartment wire harness |
| E | 14 | 7 | Engine compartment wire harness |
| ELD unit | 13 | 3 | Engine compartment wire harness |
| Horn relay | 4 | 4 | |
| Headlight relay 1 | 9 | 4 | |
| Headlight relay 2 | 10 | 4 | |
| Radiator fan relay | 5 | 4 | |
| Rear window defogger relay | 7 | 4 | |
| T1 (Battery) | 2 | | Starter sub-harness |
| T101 (Alternator) | 1 | | Starter sub-harness |



(cont'd)

Circuit Diagram - With Super Locking



General Troubleshooting Information

General Operation

Refer to the Honda Navigation System Owner's manual for the navigation system operating procedures.

Anti-theft Feature

The navigation system has a coded theft protection circuit. Be sure to get the customer's five-digit security code number before:

- disconnecting the battery
- disconnecting navigation unit connector A (12P)
- removing the No. 9 (10A) fuse from the under-hood fuse/relay box

After service, reconnect power to the navigation unit, and turn the ignition switch ON (II). Enter the five-digit security code.

When replacing the navigation unit, be sure to give the customer the new anti-theft security code.

Symptom Diagnosis

Certain circumstances and system limitations will result in occasional vehicle positioning errors. Some customers may think this indicates a problem with the navigation system when, in fact, the system is normal. Keep the following items in mind when interviewing customers about navigation system symptoms.

Self-Inertial Navigation Limitations

The limitations of the self-inertial portion of the navigation system (the yaw rate sensor and the vehicle speed signal) can cause some discrepancies between the vehicle's actual position and the indicated vehicle position (GPS vehicle position). However, if GPS signals cannot be received, you must tune the vehicle position manually.

The following circumstances may cause vehicle positioning errors:

- Moving the vehicle with the engine stopped, such as by ferry or tow truck, or if the vehicle is spun on a turn table

- Tire slippage, changes in tire rolling diameters, and some driving situations may cause discrepancies in travel distances. Examples of this include:
 - Continuous tire slippage on a slippery surface
 - Driving with snow chains mounted
 - Abnormal tire pressure
 - Incorrect tire size
 - Frequent lane changes across a wide highway
 - Continuous driving on a straight or gently curving highway
- Tolerances in the system and map inaccuracies sometimes limit how precisely the vehicle position is indicated. Examples of this include:
 - Driving on roads not shown on the map (map matching is not possible)
 - Driving on a road that winds in one direction, such as a loop bridge, an interchange, or a spiral parking garage
 - Driving on a road with a series of sharp hair-pin turns
 - Driving on one of two close parallel roads
 - After making many 90 degree turns

Global Positioning System (GPS) Limitations

The GPS cannot detect the vehicle's position during the following instances:

- For the first 5 to 10 minutes after reconnecting the battery
- When the satellite signals are blocked by tall building, mountains, tunnels, large trees, or large trucks
- When the GPS antenna is blocked by something on the dashboard
- When there is no satellite signal output (Signal output is sometimes stopped for satellite servicing)
- When the satellite signals are blocked by the operation of some electronic after market accessories.

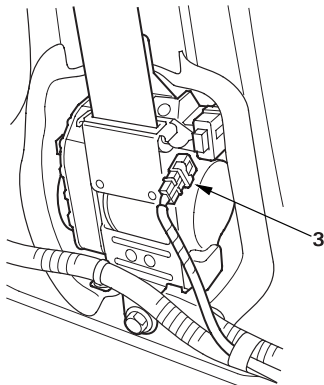
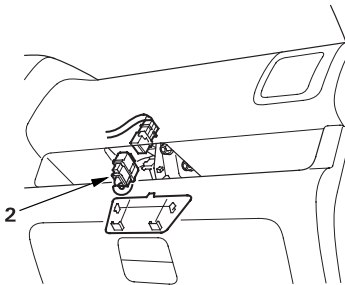
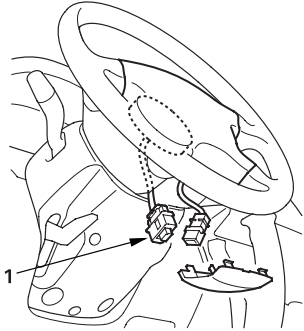
The accuracy of GPS is reduced during these instances:

- When only two satellite signals can be received (Three satellite signals are required for accurate positioning)
- When the satellite control centers are experiencing problems

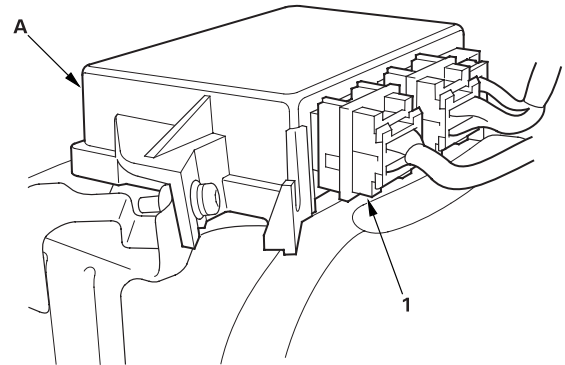


15. Disconnect the battery negative cable, and wait for 3 minutes.

16. Disconnect the D1o connector (1), P1o connector (2), and TL1i connector (3).



17. Disconnect the U1o connector (1) from the SRS unit (A).



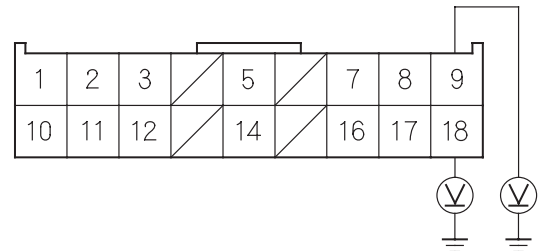
18. Disconnect the special tool from the T2i connector.

19. Reconnect the battery negative cable.

20. Turn the ignition switch ON (II).

21. Check for voltage between the No. 9 terminal of U1o connector and body ground, and between the No. 18 terminal and body ground. There should be 0.5 V or less.

U1o CONNECTOR



Wire side of female terminals

Is the voltage as specified?

Yes Faulty SRS unit; replace the SRS unit (see page 23-144). ■

No Short to power in dashboard wire harness B; replace dashboard wire harness B. ■

(cont'd)



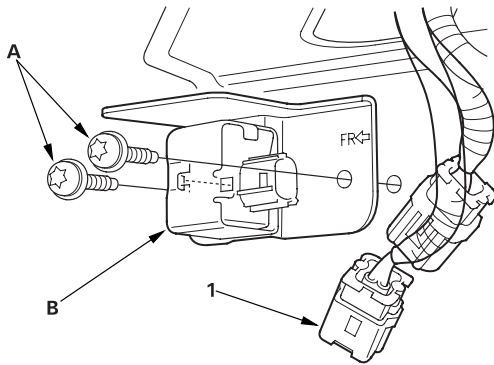
Front Sensor Replacement

Removal

NOTE:

- Removal of the front sensor must be performed according to the precautions/procedures described before.
- Before disconnecting the front sensor 2P connector(s), disconnect the driver's and front passenger's airbag 4P, both seat belt tensioner 2P connector(s).
- Do not turn the ignition switch ON (II), and do not connect the battery cable while replacing the front sensor.

1. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
2. Remove the front inner fender (see page 20-155).
3. Disconnect the engine compartment wire harness 2P connector (1), and remove the two Torx bolts (A) using a Torx T30 bit, then remove the front sensor (B).

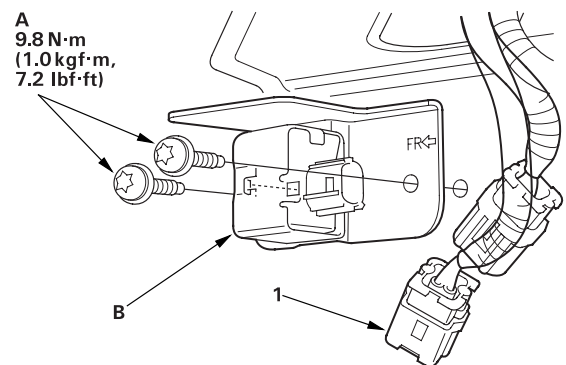


Installation

NOTE:

- Be sure to install the harness wires so that they are not pinched or interfering with other parts.
- Do not turn the ignition switch ON (II), and do not connect the battery cable while replacing the front sensor.

1. Install the new front sensor with new Torx bolts (A), then connect the engine compartment wire harness 2P connector (1) to the front sensor (B).



2. Reconnect the battery negative cable.
3. After installing the front sensor, confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.