

If the vehicle needs to be towed, call a professional towing service. Never tow the vehicle behind another vehicle with just a rope or chain. It is very dangerous.

Emergency Towing

There are three popular methods of towing a vehicle.

Flat-bed Equipment

The operator loads the vehicle on the back of a truck. This is the best way of transporting the vehicle.

Wheel Lift Equipment

The tow truck uses two pivoting arms that go under the tyres (front or rear) and lifts them off the ground. The other two wheels remain on the ground.

Sling-type Equipment

The tow truck uses metal cables with hooks on the ends. These hooks go around parts of the frame or suspension and the cables lift that end of the vehicle off the ground. The vehicle's suspension and body can be seriously damaged if this method of towing is attempted.

If the 2WD HR-V cannot be transported by the flat-bed, it should be towed with the front wheels off the ground. If due to damage, the vehicle must be towed with the front wheels on the ground, do the following.

- ♦ Release the parking brake.
- ♦ Shift the transmission to Neutral **N** position.


The only recommended way of towing the 4WD HR-V is on a flat-bed truck. It may also be towed with all four wheels on the ground.

NOTICE

Towing the 4WD HR-V with only two wheels on the ground can damage parts of the 4WD system. If this vehicle is damaged and cannot be towed with all four wheels on the ground, it should be towed on a flat-bed truck.

If the 4WD HR-V is towed with all four wheels on the ground, do the following:

- ♦ Release the parking brake.
- ♦ Shift the transmission to Neutral **N** position.

 CAUTION

♦ Improper towing preparation will damage the transmission. Follow the above procedure exactly. If you cannot shift the transmission or start the engine (automatic transmission), the vehicle must be transported on a flat-bed.

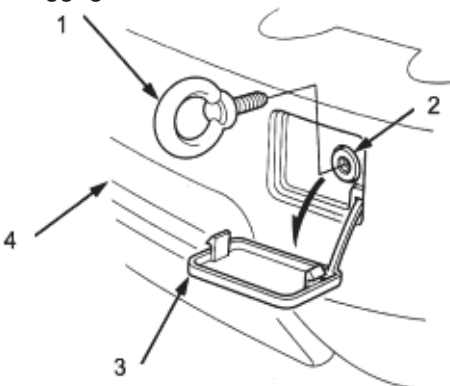
- ♦ It is best to tow the vehicle no farther than 50 miles (80 km), and keep the speed below 35 mph (55 km/h).
- ♦ Trying to lift or tow the vehicle by the bumpers will cause serious damage. The bumpers are not designed to support the vehicle's weight.

Towing Hook and Tie Down Bracket Locations:

Towing Hook:

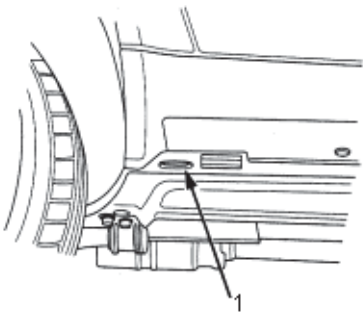
- ♦ Remove the cover from the front bumper.
- ♦ Install the front towing hook securely into the bolt hole.

The front towing hook is located in the tool kit in the luggage area.



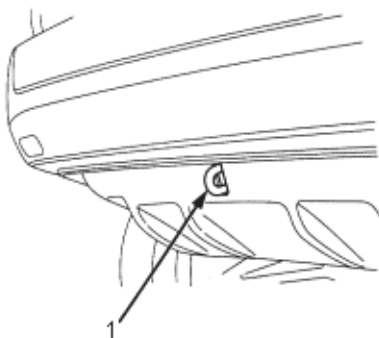
- 1. FRONT TOWING HOOK
- 2. BOLT HOLE
- 3. FRONT BUMPER
- 4. COVER

Front Tie Down Bracket Hole:



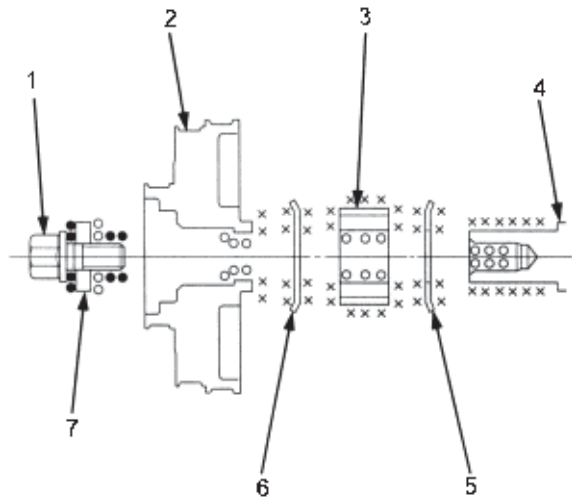
- 1. FRONT TIE DOWN BRACKET HOLE

Rear Tie Down Bracket:



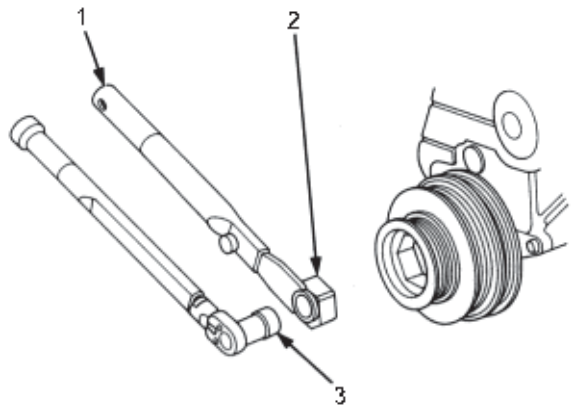
- 1. REAR TIE DOWN BRACKET

1. Remove any oil from the pulleys, crankshaft, bolt and washer. Clean and lubricate as shown below.
O: Clean
X: Remove any oil
●: Lubricate



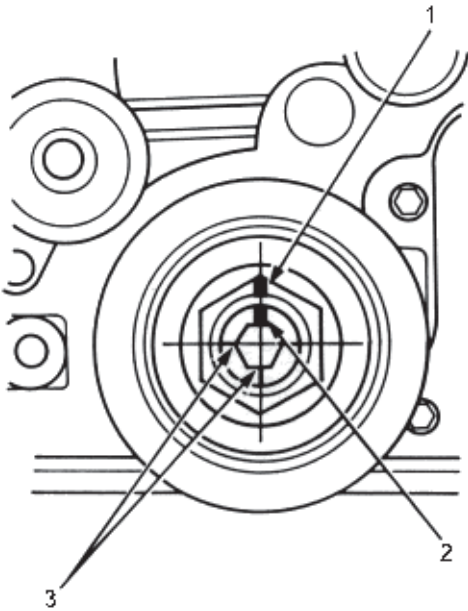
1. PULLEY BOLT
2. CRANKSHAFT PULLEY
3. TIMING BELT DRIVE PULLEY
4. CRANKSHAFT
5. TIMING BELT GUIDE PLATE
6. TIMING BELT GUIDE PLATE
7. WASHER

2. Tighten the pulley bolt to the specified torque.
Torque: 20 Nm (2.0 kgf/m, 14 lbf/ft)



1. HANDLE, 07JAB-0010200
2. PULLEY HOLDER ATTACHMENT, HEX 50 mm, 07JAB-0010400
3. SOCKET WRENCH, 17 mm, 07JAA-0010100

3. Use a felt tip pen to mark the pulley bolt head and washer.

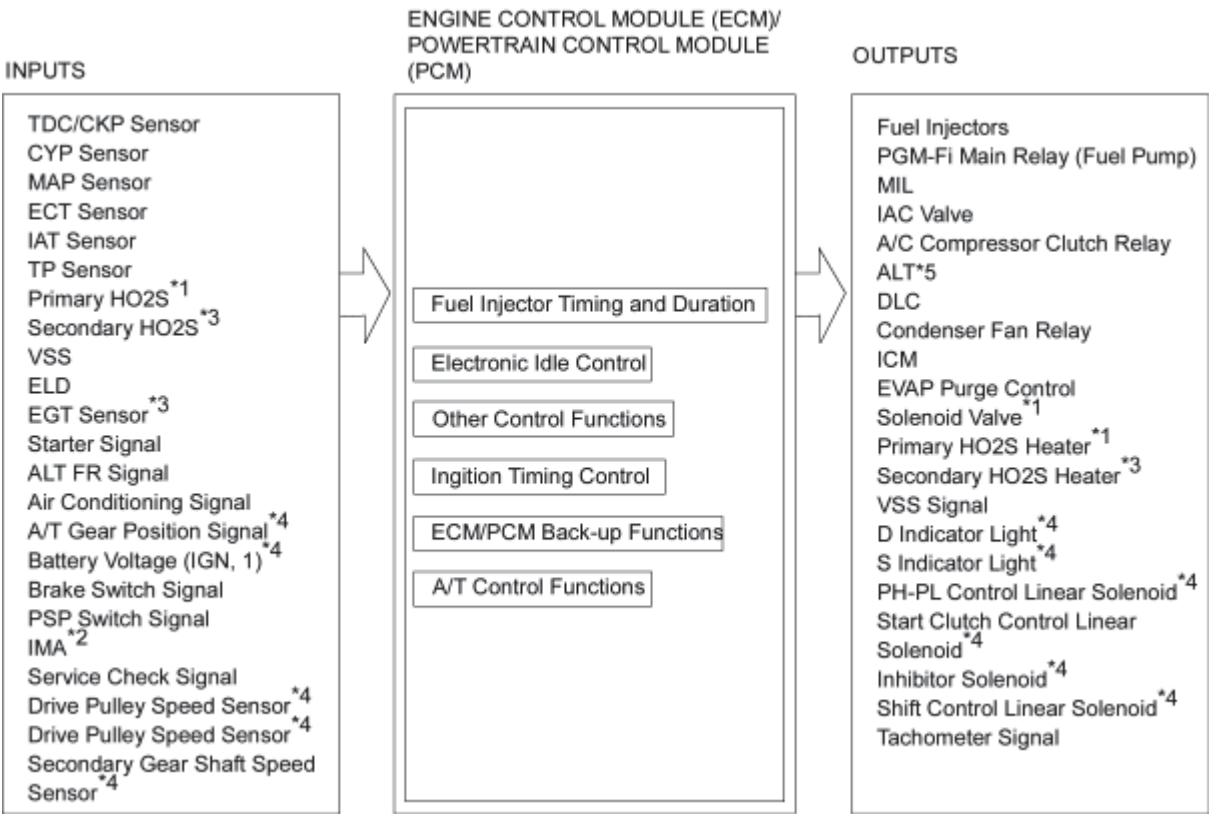


1. MARKING
2. MARKING
3. EMBOSSING MARKS

4. Tighten the pulley bolt an additional 90°.



1. EMBOSSING MARKS
2. MARKING
3. MARKING



*1 : with TWC models
*2 : without TWC models
*3 : with TWC models except KU model
*4 : A/T
*5 : KG, KE, KQ, KU models

PGM-FI System
The PGM-FI system on this model is a sequential multiport fuel injection system.

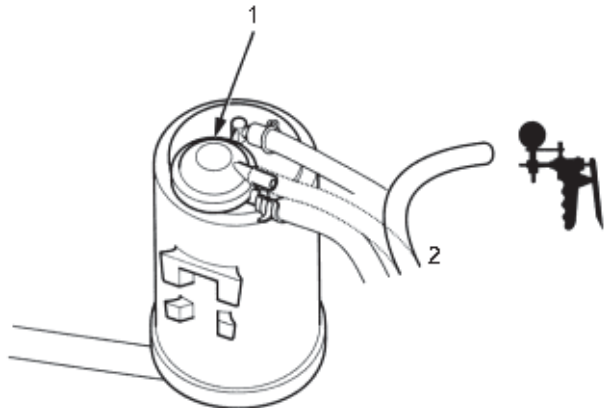
Fuel Injector Timing and Duration
The ECM/PCM contains memories for the basic discharge durations at various engine speeds and manifold pressures. The basic discharge duration, after being read out from the memory, is further modified by signals sent from various sensors to obtain the final discharge duration.

Idle Air Control
When the engine is cold, the A/C compressor is on, the transmission is in gear^{*4}, the brake pedal is depressed ^{*5}, the P/S load is high, or the alternator is charging, the ECM/PCM controls current to the IAC Valve to maintain the correct idle speed.

Ignition Timing Control
♦ The ECM/PCM contains memories for basic ignition timing at various engine speeds and manifold air flow rates. Ignition timing is also adjusted for engine coolant temperature.

Testing (without TWC models)

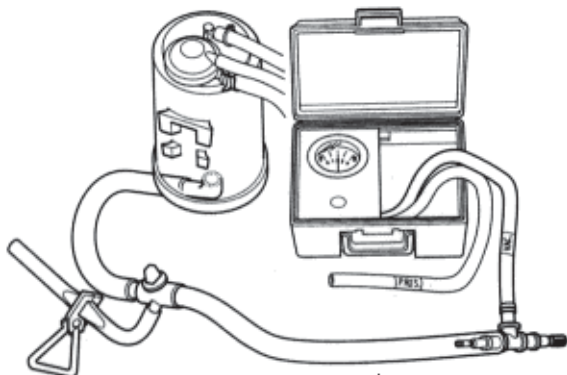
1. Remove the fuel fill cap.
2. Start the engine and allow to idle.
3. Disconnect vacuum hose at the EVAP purge control diaphragm valve (on the EVAP control canister) and connect a vacuum gauge to the hose.



1. EVAP PURGE CONTROL DIAPHRAGM VALVE
2. VACUUM PUMP/GAUGE

- ♦ If there is no vacuum, check vacuum hose for blockage, cracks or disconnected hose, as well as vacuum port for blockage.
4. Disconnect the vacuum gauge and reconnect the hose.
 5. Connect a vacuum gauge to EVAP control canister purge air hose.

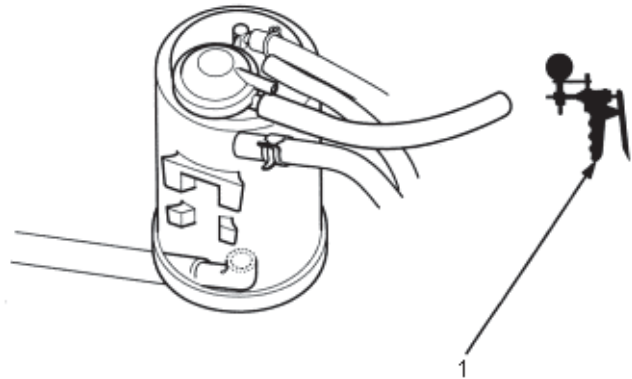
VACUUM/PRESSURE GAUGE, 0-100 mmHg (0.4 in.Hg)



1. PURGE AIR HOSE

6. Raise engine speed to 3,500 rpm (min-1). Vacuum should appear on gauge within 1 minute.
 - ♦ If vacuum appears on gauge in 1 minute, remove gauge, test is complete.
 - ♦ If no vacuum, disconnect vacuum gauge and reinstall fuel fill cap.
7. Remove EVAP control canister and check for signs of damage or defects.
 - ♦ If defective, replace EVAP control canister
8. Stop engine. Disconnect upper vacuum hose from EVAP purge control diaphragm valve. Connect a vacuum pump to lower vacuum as shown, and apply vacuum.

Vacuum should remain steady.



1. VACUUM PUMP/GAUGE

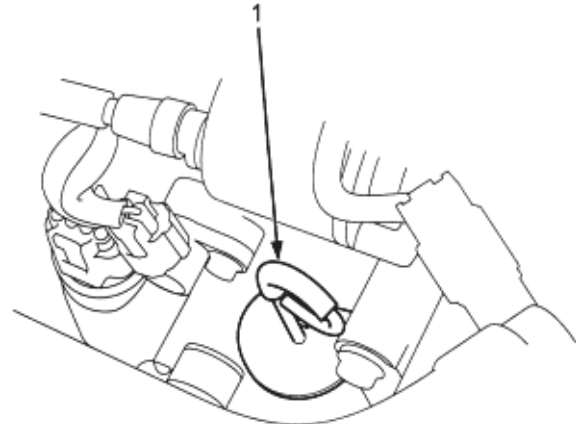
- ♦ If vacuum drops, replace the EVAP control canister and retest.
9. Restart engine. Reconnect upper vacuum hose to EVAP purge control diaphragm valve. Vacuum (lower vacuum hose side) should drop to zero.
 - ♦ If vacuum does not drop to zero, replace the EVAP control canister and retest.



CAUTION

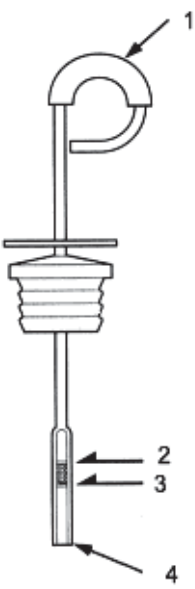
While checking, be sure not to allow dust and other foreign particles to enter into the transmission.

- NOTE:
- Check the fluid level with the engine normal temperature (the radiator fan comes on twice).
 - Check the fluid level 60 to 90 seconds after shutting off the engine.
1. Park the vehicle on the level ground, then turn the engine off.
 2. Remove the dipstick (yellow loop) from the transmission and wipe it with clean cloth.
 3. Insert the dipstick back into the transmission, then remove it.



1. DIPSTICK (YELLOW LOOP)

4. Check the fluid level at the dipstick level gauge. It should be between the upper mark and lower mark on the gauge.



1. DIPSTICK
2. UPPER MARK
3. LOWER MARK
4. LEVEL GAUGE

5. If the level is below the lower mark, add fluid into the filter hole to bring it to the upper mark. Use the following recommended fluid only.
 - European models: Genuine Honda CVT Fluid.
 - Except European models: Genuine Honda ATF PREMIUM (Automatic Transmission Fluid-PREMIUM).Using other fluids can affect transmission operation and may reduce transmission life.
6. Insert the dipstick back into the transmission.

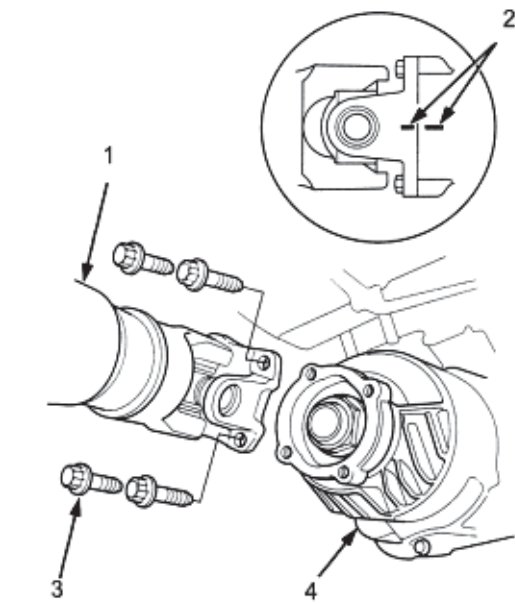
1.

Raise the front of the vehicle and support it with safety stands in the proper locations (see section 1).
2.

Drain the rear differential oil (See page 15-14).
3.

Make a reference mark across the propeller shaft and the rear differential flanges.
4.

Separate the propeller shaft from the rear differential.



1.

PROPELLER SHAFT
2.

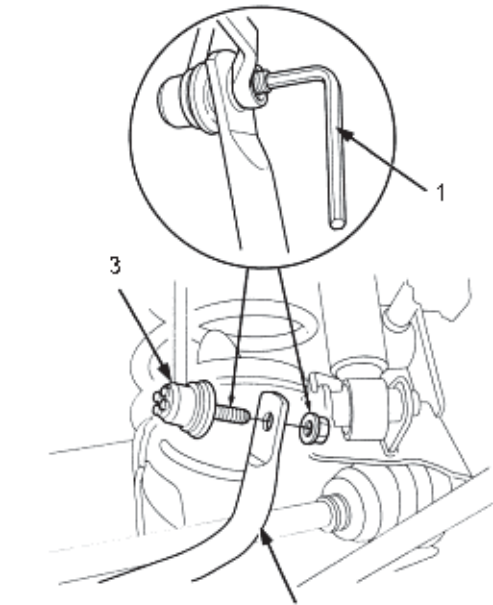
Mark
3.

12 POINT BOLT
4.

REAR DIFFERENTIAL

5.

Hold the stabiliser link ball joint with a hexagonal wrench and remove the flange nut, then separate the front stabiliser link and front stabiliser.



1.

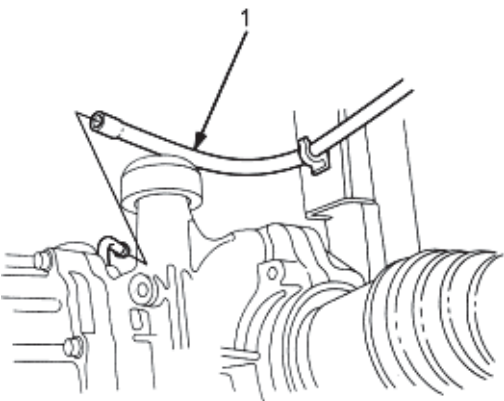
HEXAGONAL WRENCH
2.

FRONT STABILISER
3.

FRONT STABILISER LINK

6.

Disconnect the breather tube from the rear differential.

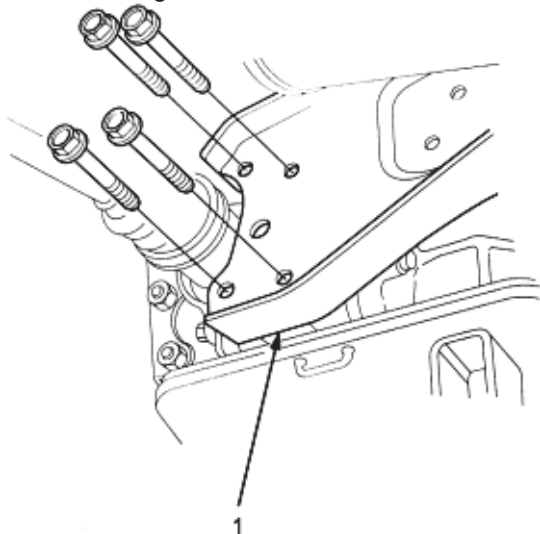


1.

BREATHER TUBE

7.

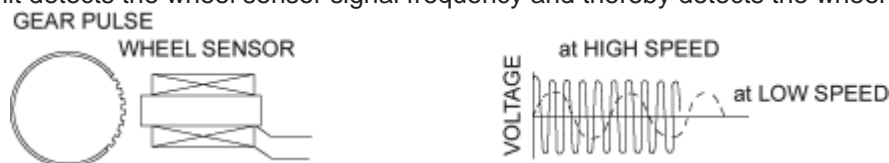
Remove the four rear differential mount A mounting bolts.



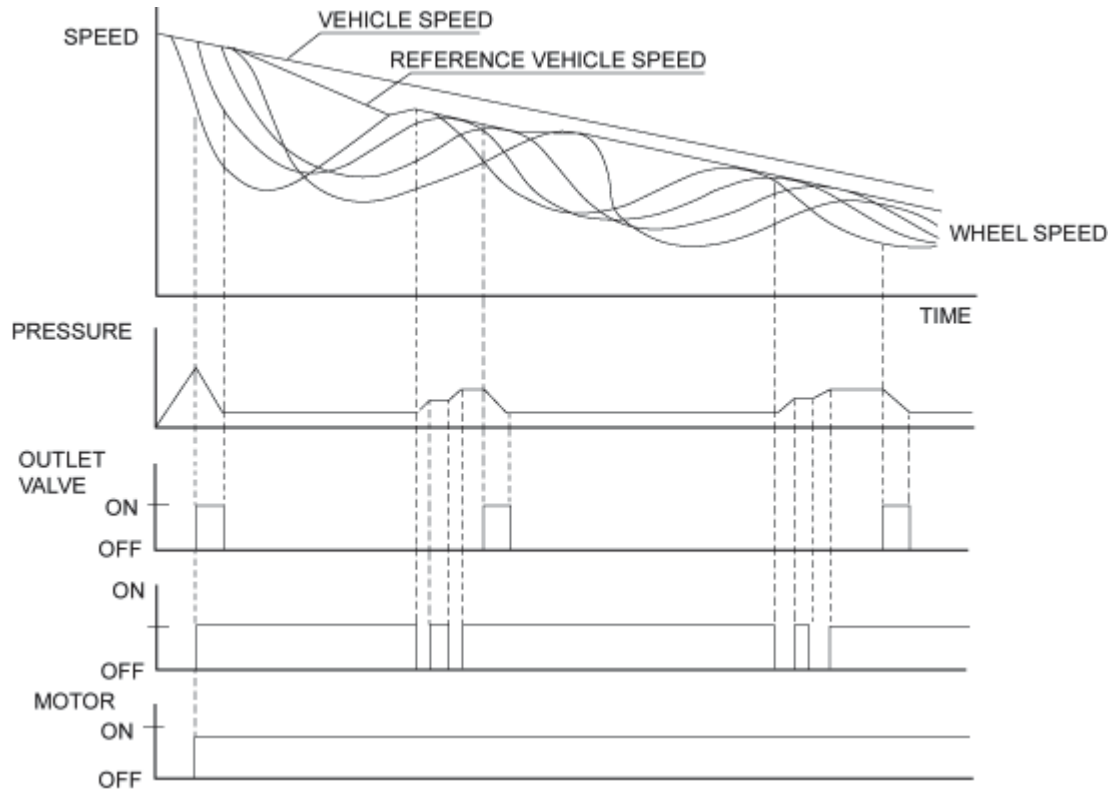
1.

REAR DIFFERENTIAL MOUNT A

Wheel Sensor
The wheel sensors are the magnetic contactless type. As the gear pulsar teeth rotate past the wheel sensor's magnetic coil, AC current is generated. The AC frequency changes in accordance with the wheel speed. The ABS control unit detects the wheel sensor signal frequency and thereby detects the wheel speed.

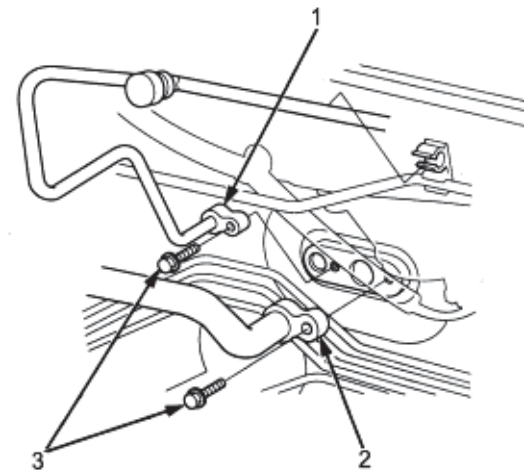


Wheel Speed and Modulator Control



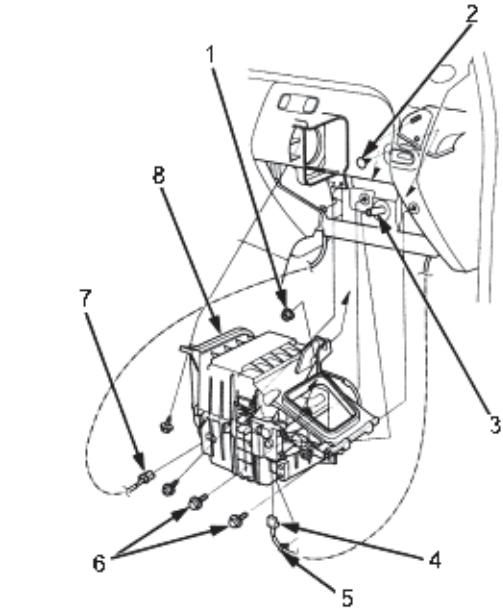
When the wheel speed drops sharply below the vehicle speed, the outlet valve opens momentarily to reduce the caliper fluid pressure. The pump motor starts at this time. As the wheel speed is restored, the inlet valve opens momentarily to increase the caliper fluid pressure.

- NOTE: LHD type is shown, RHD type is symmetrical.
1. Discharge the refrigerant (**See Page 22-38**).
 2. Remove the bolts, then disconnect the suction and receiver lines from the evaporator. Plug or cap the lines immediately after discharging them to avoid moisture and dust contamination.



1. RECEIVER LINE
2. SUCTION LINE
3. 6 x 1.0 mm, 9.8 Nm (1.0 kgf/m, 7.2lbf/ft)

3. Remove the glove box (see section 20).
4. Disconnect the connectors from the A/C thermostat and the recirculation control motor and the drain hose. Then remove the clip, wire harness clip, the self tapping screws, the mounting bolts, the mounting nut and the evaporator.



1. 6 x 1.0 mm, 9.8 Nm (1.0 kgf/m, 7.2 lbf/ft)
2. CLIP
3. DRAIN HOSE
4. CONNECTOR
5. CLIP
6. 6 x 1.0 mm, 9.8 (1.0 kgf/m, 7.2 lbf/ft)
7. CONNECTOR
8. EVAPORATOR

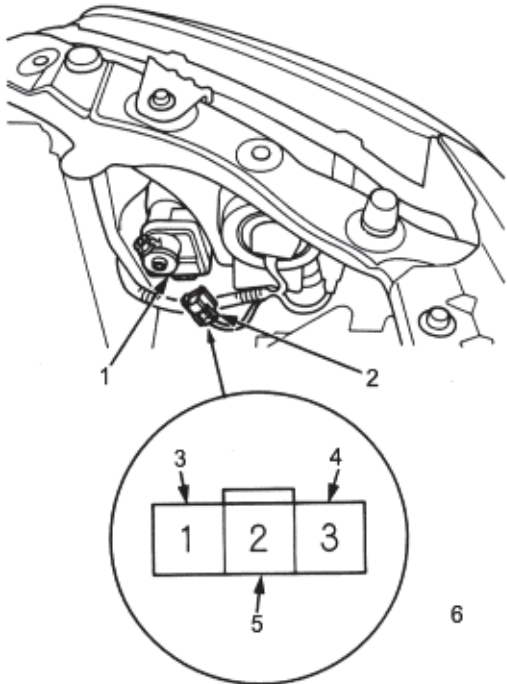
5. Install in the reverse order of removal and note the following items:
 - If you are installing a new evaporator, add refrigerant oil (KEIHIN Sp-10) (**See Page 22-24**).
 - Replace the O-rings with new ones at each fitting and apply a thin coat of refrigerant oil before installing them. Be sure to use the right O-rings for HFC-134a (R-134a) to avoid leakage.
 - Immediately after using the oil, replace the cap on the container and seal it to avoid moisture absorption.
 - Do not spill the refrigerant oil on the vehicle; it may damage the paint, wash it off immediately.
 - Make sure that there is no air leakage.
 - Charge the system (**See Page 22-40**) and test its performance (**See Page 22-42**).

Headlights Adjuster (KG and KE models)

Headlight Adjuster Input Test

23-D-14

- NOTE: Before testing check for:
- Blown No. 4 (10A) fuse in the under-dash fuse/relay box.
 - Bent, loose or corroded terminals.
1. Disconnect the 3P connectors from each headlight adjuster unit.



1. HEADLIGHT ADJUSTER UNIT
2. 3P CONNECTOR
3. YEL/BLK
4. BLK
5. YEL/BLU
6. Wire side of female terminals

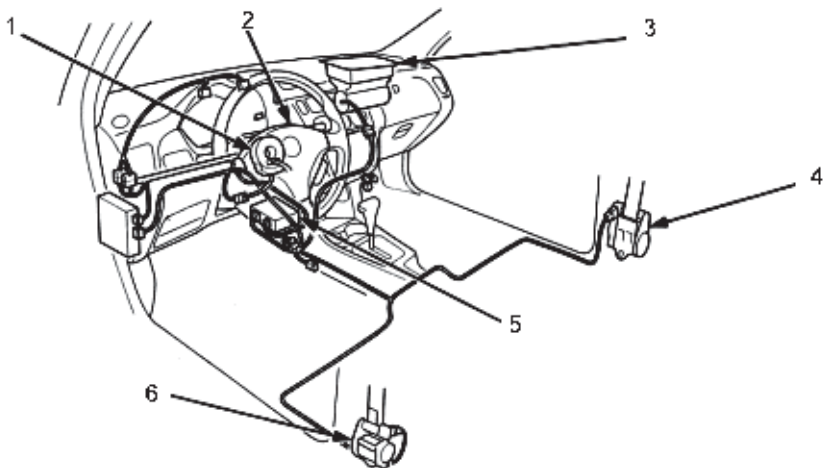
2. Check for continuity between the No. 3 (BLK) terminal and body ground.
There should be continuity.
- If there is no continuity, check for:
 - An open in the BLK wire
 - Poor ground (G201, G202, G301).
 - If there is continuity, go to step 3.

3. Check for voltage between the No. 1 (YEL/BLK) terminal and body ground with the ignition switch ON (II).
There should be battery voltage.
- If there is no battery voltage, check for an open in the YEL/BLK wire.
 - If there is battery voltage, go to step 4.
4. Check for continuity between the No. 2 (YEL/BLU) terminal and body ground in any switch position.
There should be continuity.
- If there is no continuity, check for:
 - An open in the YEL/BLU wire
 - Faulty headlight adjuster switch.
 - If there is continuity, go to step 5.
5. If all input tests prove OK, but the headlight adjuster does not work, check for frozen, stuck or improperly installed headlight adjuster unit.
If the mechanical check is OK, replace the headlight adjuster unit.
6. After installing, recheck the system.

The SRS is a safety device which, when used in conjunction with the seat belt, is designed to help protect the driver and front passenger in a frontal impact exceeding a certain set limit. The system consists of the SRS unit (including safety sensor and impact sensor), the cable reel, the driver's airbag and front passenger's airbag.

Seat Belt Tensioner

The seat belt tensioner is linked with the SRS airbags to further increase the effectiveness of the seat belt. In a front-end collision, the tensioner instantly retracts the belt firmly to secure the occupants in their seats.



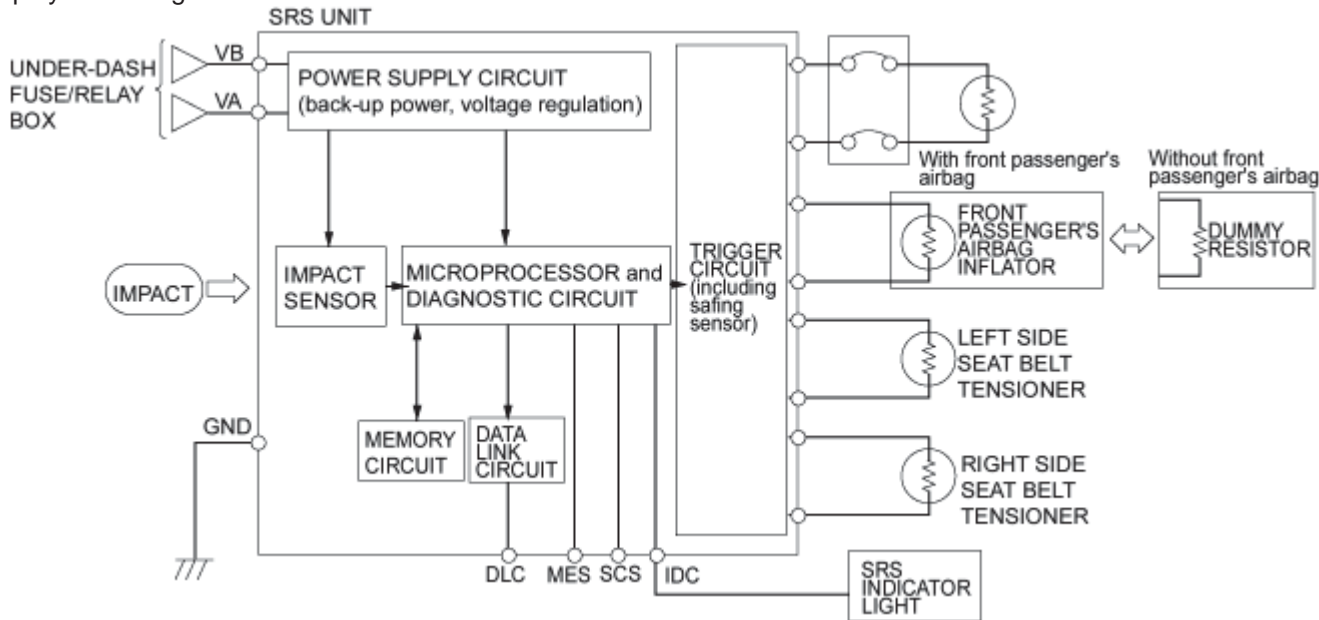
- 1. CABLE REEL
- 2. DRIVER'S AIRBAG
- 3. FRONT PASSENGER'S AIRBAG
- 4. RIGHT SIDE SEAT BELT TENSIONER
- 5. SRS UNIT
- 6. LEFT SIDE SEAT BELT TENSIONER

Operation

The main circuit in the SRS unit senses and judges the force of impact and, if necessary, ignites the inflator charges. If battery voltage is too low or power is disconnected due to the impact, the voltage regulator and the back-up power circuit respectively will keep voltage at a constant level.

For the SRS to operate:

- (1) The impact sensor must activate and send electric signals to the microprocessor.
- (2) The microprocessor must compute the signals and send them to the airbag inflators and seat belt tensioners.
- (3) The inflators must ignite and deploy the airbags and activate the tensioners.



Self-diagnosis System

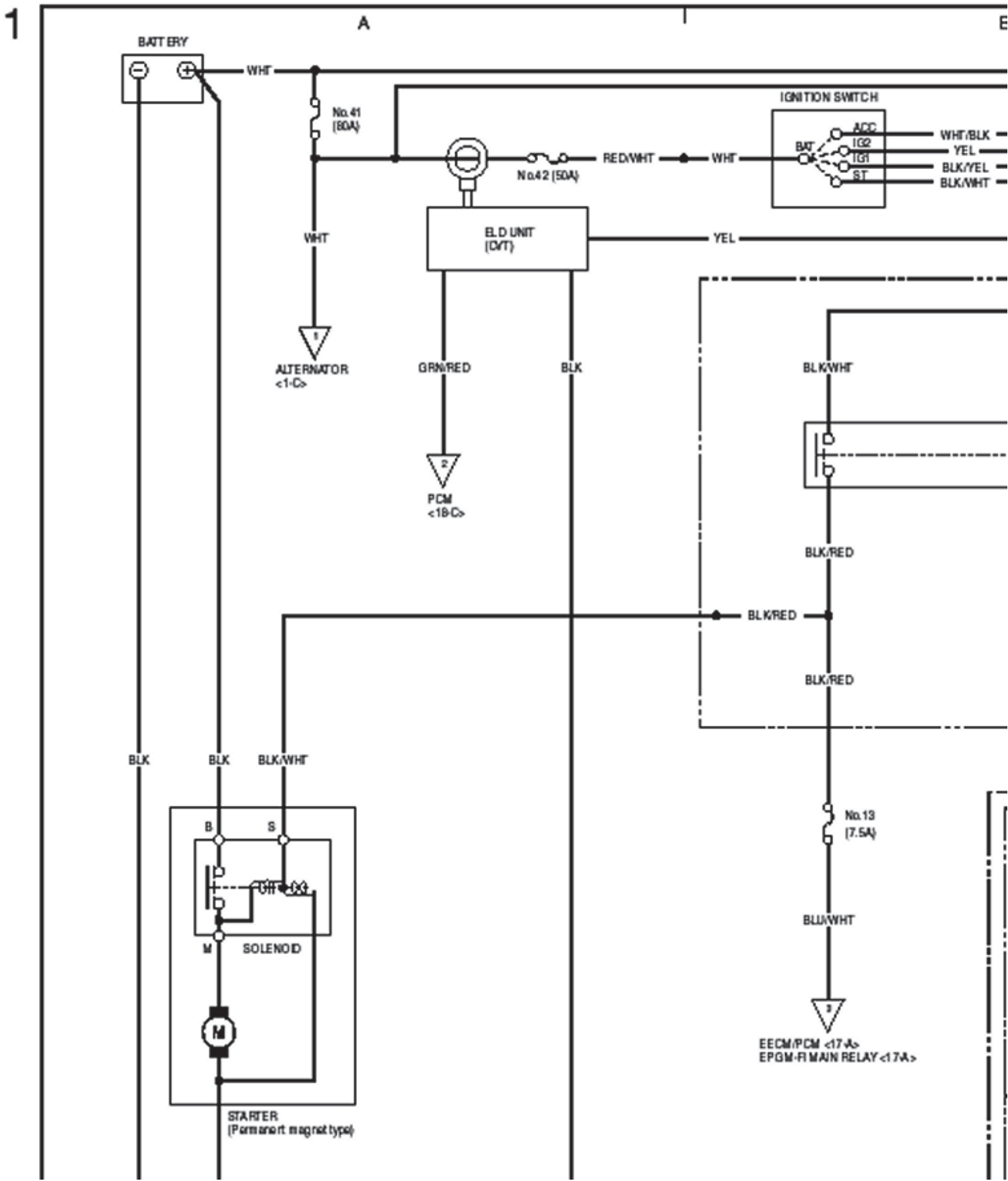
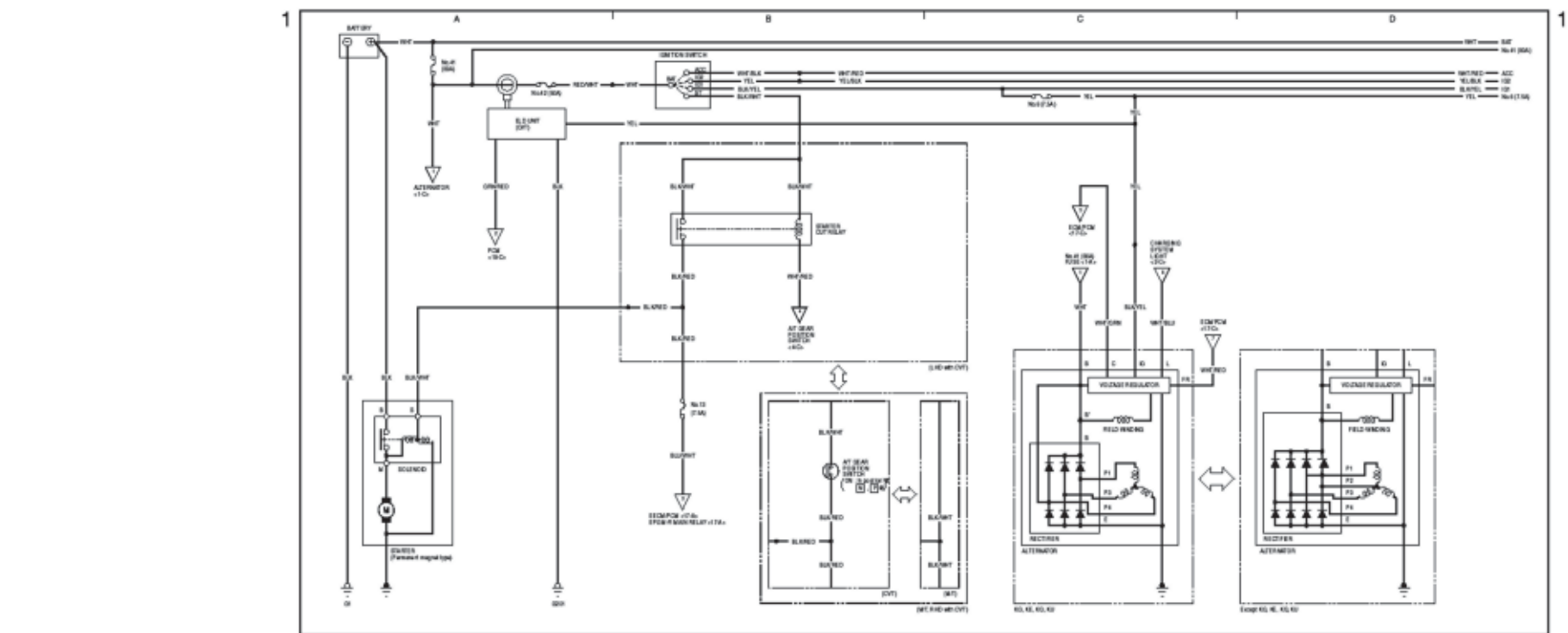
A self-diagnosis circuit is built into the SRS unit; when the ignition switch is turned ON (II), the SRS indicator light comes on and goes off after about six seconds if the system is operating normally.

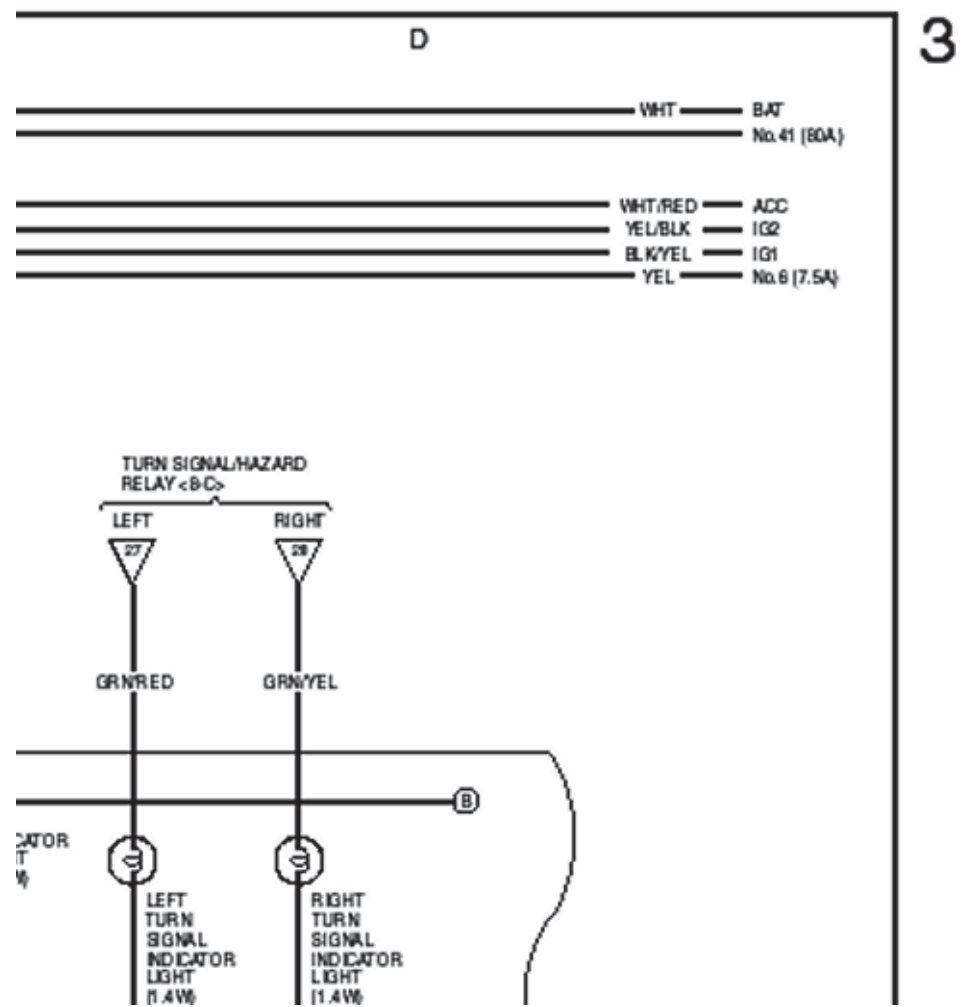
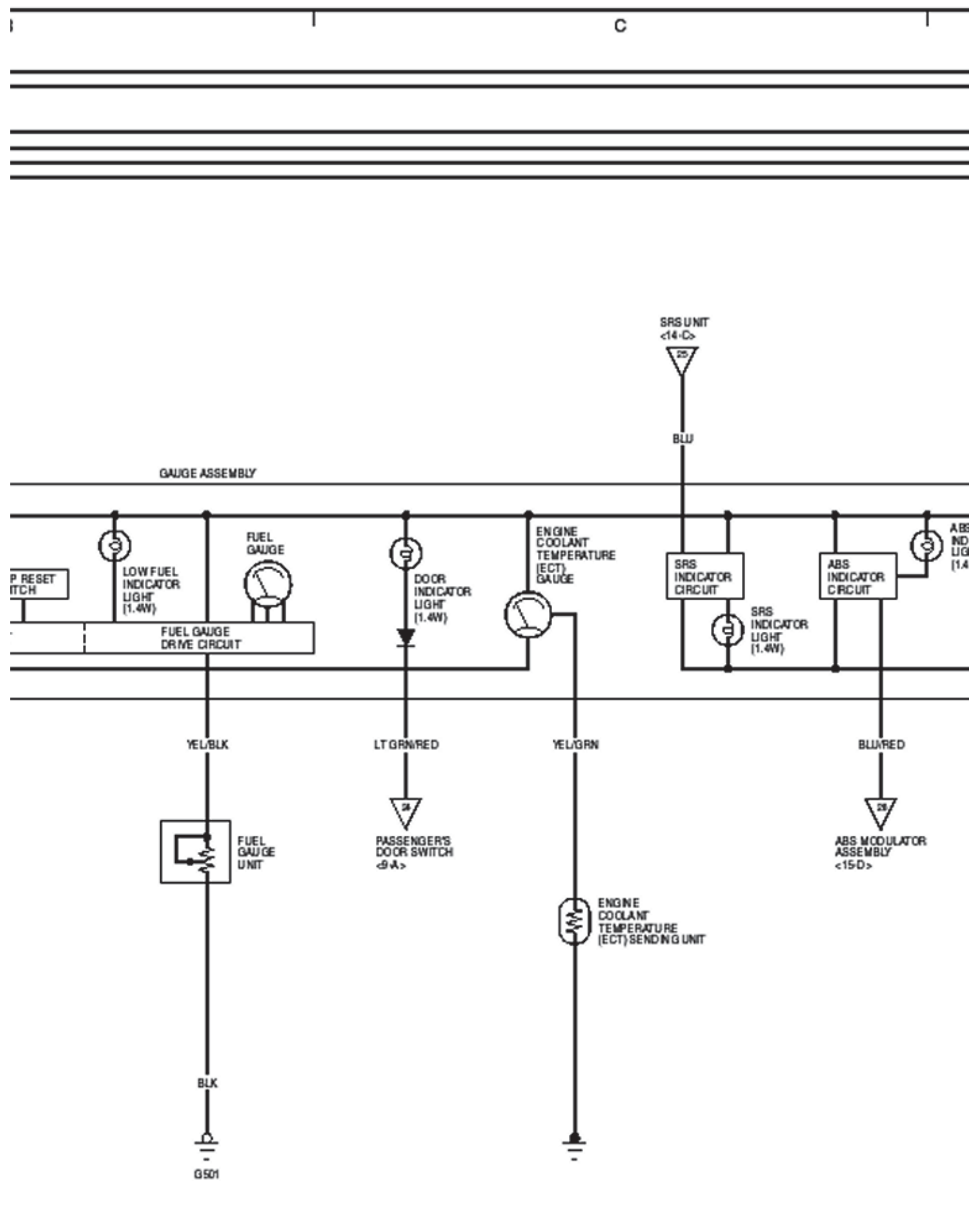
If the light does not come on, or does not go off after six seconds or if it comes on while driving, it indicates an abnormality in the system. The system must be inspected and repaired as soon as possible.

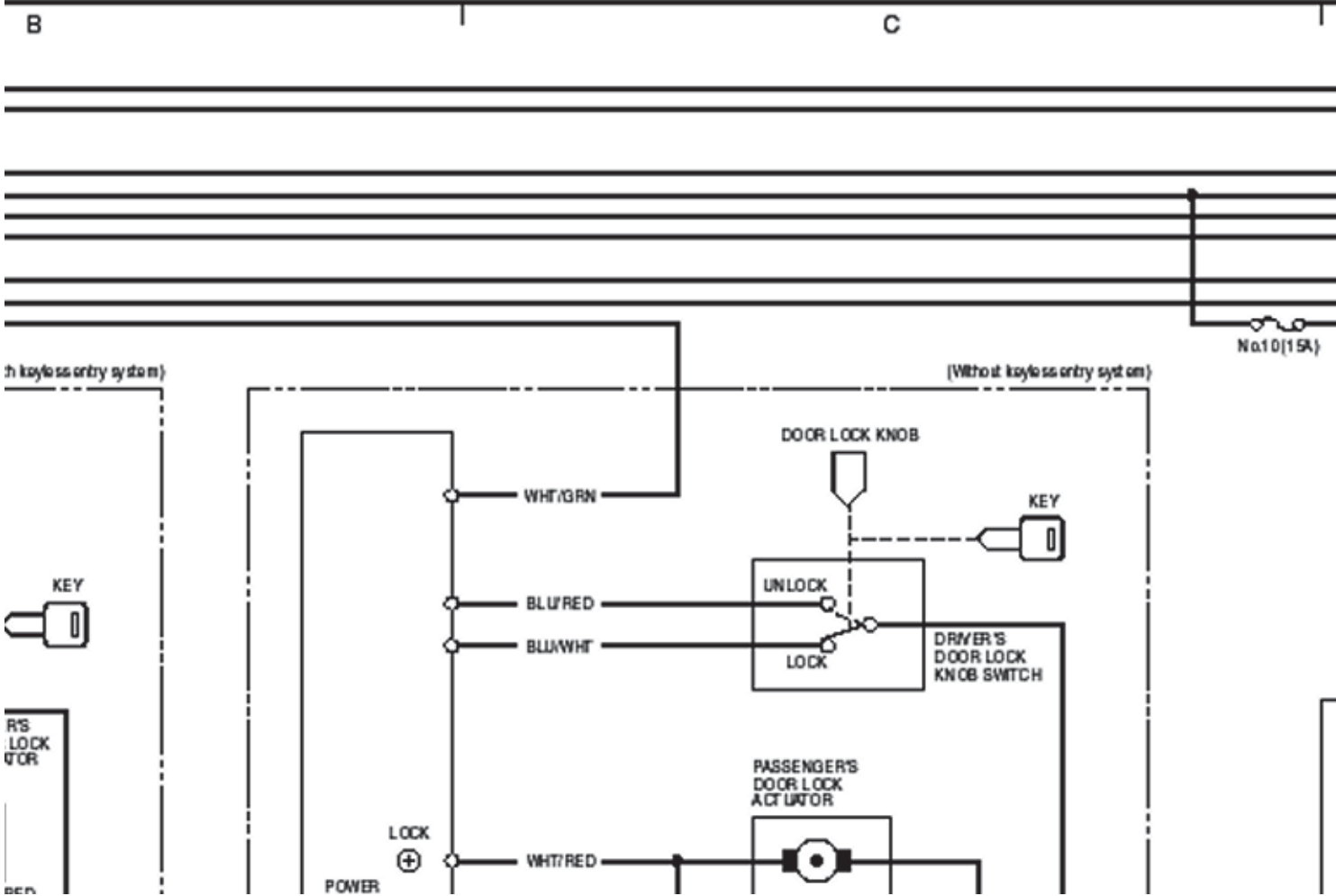
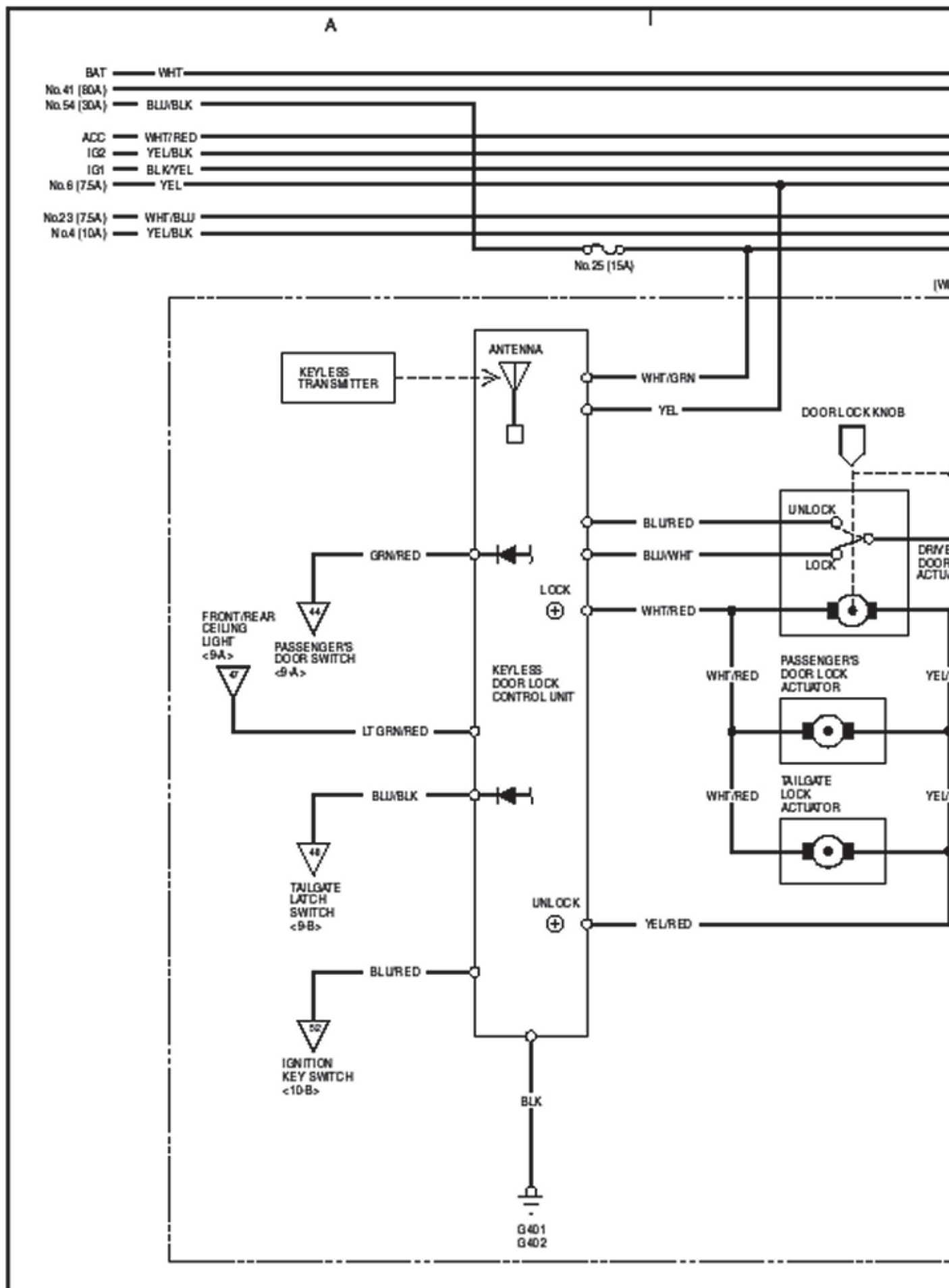
For better serviceability, the SRS unit memory stores the cause of the malfunction and the unit is connected to the data link connector (DLC). This information can be read with the Honda PGM Tester when it is connected to the DLC (3P).

Wiring Diagrams

Charging System







1.

Base material reconditioning (sanding)

-1.

Replacement part.
Lightly sand both sides of the part.

-2.

Slight scores or scratches.
Use a flexible sanding block and wet-sand the damaged section with #400, #600.
NOTE: Sand level to remove damage.

-3.

Deep scratches, when filling.
Use a flexible sanding block and wet-sand the damaged section with #400, #600.
NOTE: Perform the featheredge on the material surface and coat surface (primer, intermediate coat and top coat) thoroughly and properly).

Polish the levelled area with #400 sandpaper
2.

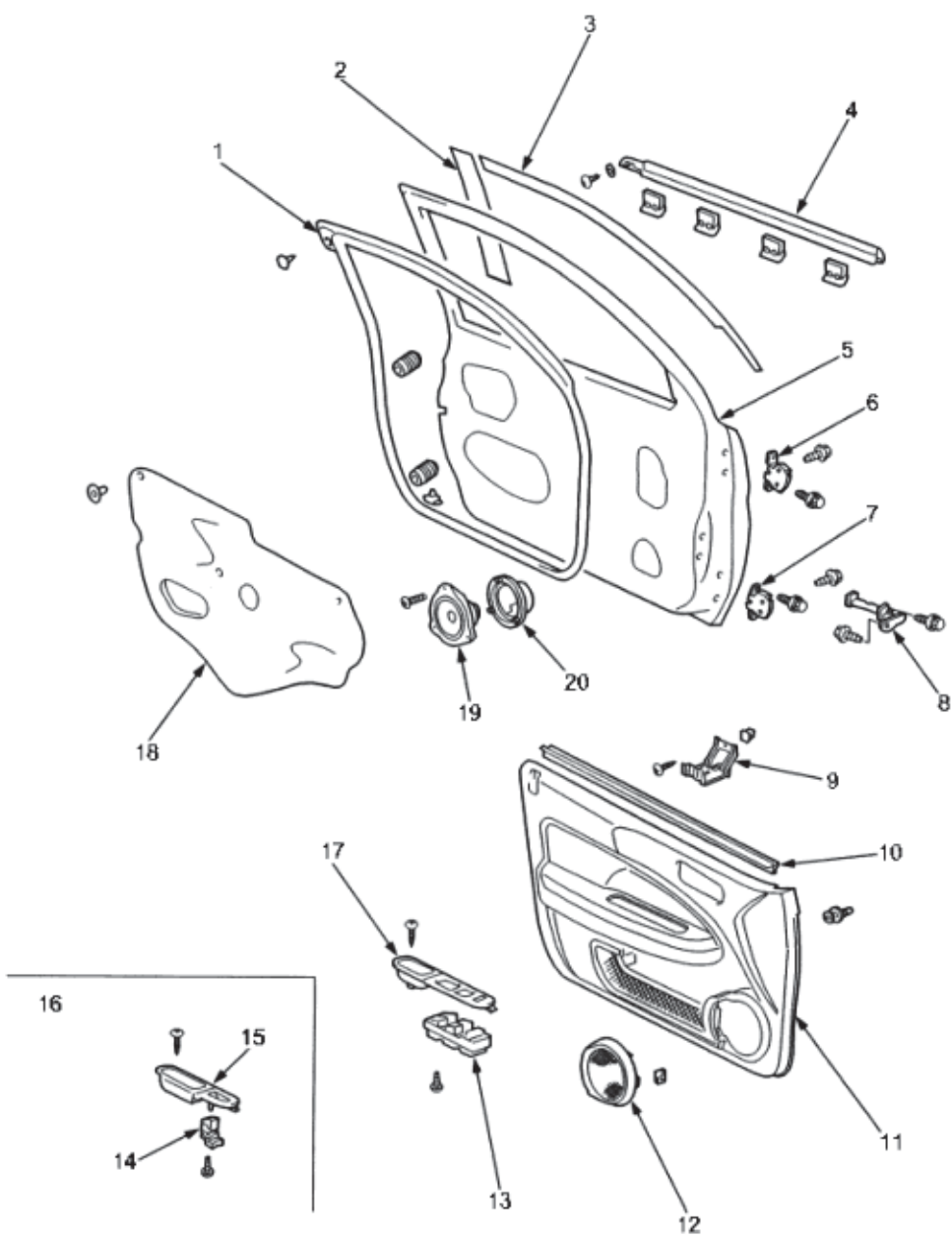
Degreasing/Cleaning
- Clean the repair area with wax and grease remover, then blow dry with air.
- Do not use high air pressure; use only an approved 210 kPa (2.1 kgf/cm2, 30 psi) air nozzle.
- Wear goggles or safety glasses to prevent eye injury.
- NOTE: Wipe dust off the surface with a tack cloth.
3.

Primer application
- Apply to the deep scratches and areas to be filled.
This procedure might not be required by some manufacturer's products.
- Spray wider than the damaged section (i.e. area to be filled) two to three times.
- NOTE: Follow the manufacturer's specifications.

4.

Coating with primer surfacer and drying
- NOTE: Some manufacturer's might require puttying before performing this step.
Spray the primer surfacer wider than the filled area and the exposed base material.
The spray guideline should be 20 - 23 microns.
- Ventilate when spraying paint. Most paint contains substances that are harmful if inhaled or swallowed.
Read the paint label before opening the container.
- Avoid contact with skin. Wear an approved respirator, gloves, eye protection and appropriate clothing when painting.
- Paint is flammable. Store it in a safe place, and keep it away from sparks, flames and cigarettes.
- NOTE: Follow the manufacturer's instructions.
- After coating with the primer surfacer, let the primer surfacer dry naturally for 5 to 10 minutes, then dry the paint film of the primer surfacer with an infra-red dryer.
- When drying the primer surface with the dryer, be sure to keep the dryer 40 - 50 cm (16 - 20in) away from the paint film.
- Body parts being dried with an industrial dryer can get hot enough to cause injury. Do not touch parts being dried.
5.

Filling, drying and sanding
- The exposed base material could be directly filled, depending on the manufacturer's specification.
- Be sure that the primer surfacer is completely dry.
- Lightly dry sand the primer surfacer paint film with the #240 paper.



- 1. DOOR WEATHERSTRIP
- 2. CENTRE CHANNEL TAPE
Replacement, (See Page 20-19)
- 3. UPPER CHANNEL TAPE
Replacement, (See Page 20-19)
- 4. DOOR MOULDING
- 5. FRONT DOOR
- 6. HINGE
- 7. HINGE
- 8. DETENT ROD
- 9. PULL POCKET BRACKET
- 10. INNER WEATHERSTRIP
- 11. FRONT DOOR PANEL
Removal and installation, (See Page 20-6)
- 12. SPEAKER COVER
- 13. POWER WINDOW SWITCH
- 14. POWER WINDOW SWITCH
- 15. PULL POCKET PANEL
- 16. Passenger's:
PULL POCKET PANEL
- 17. PULL POCKET PANEL
- 18. PLASTIC COVER
- 19. SPEAKER
- 20. ADAPTER