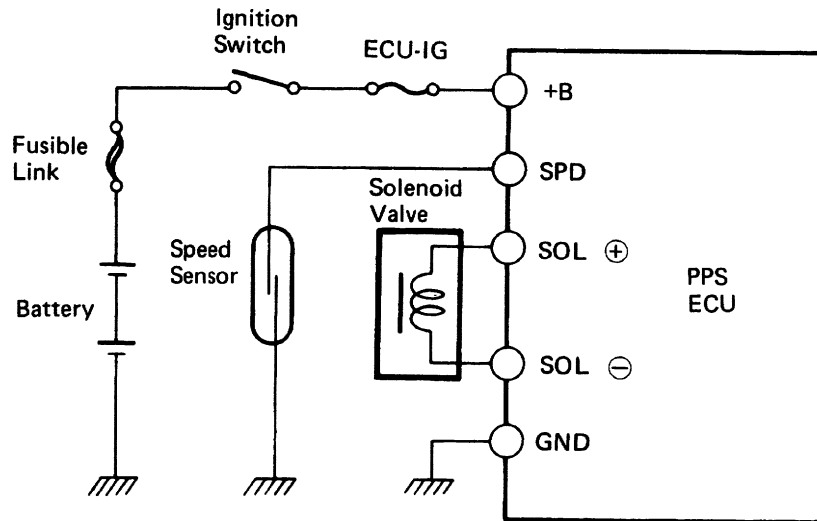
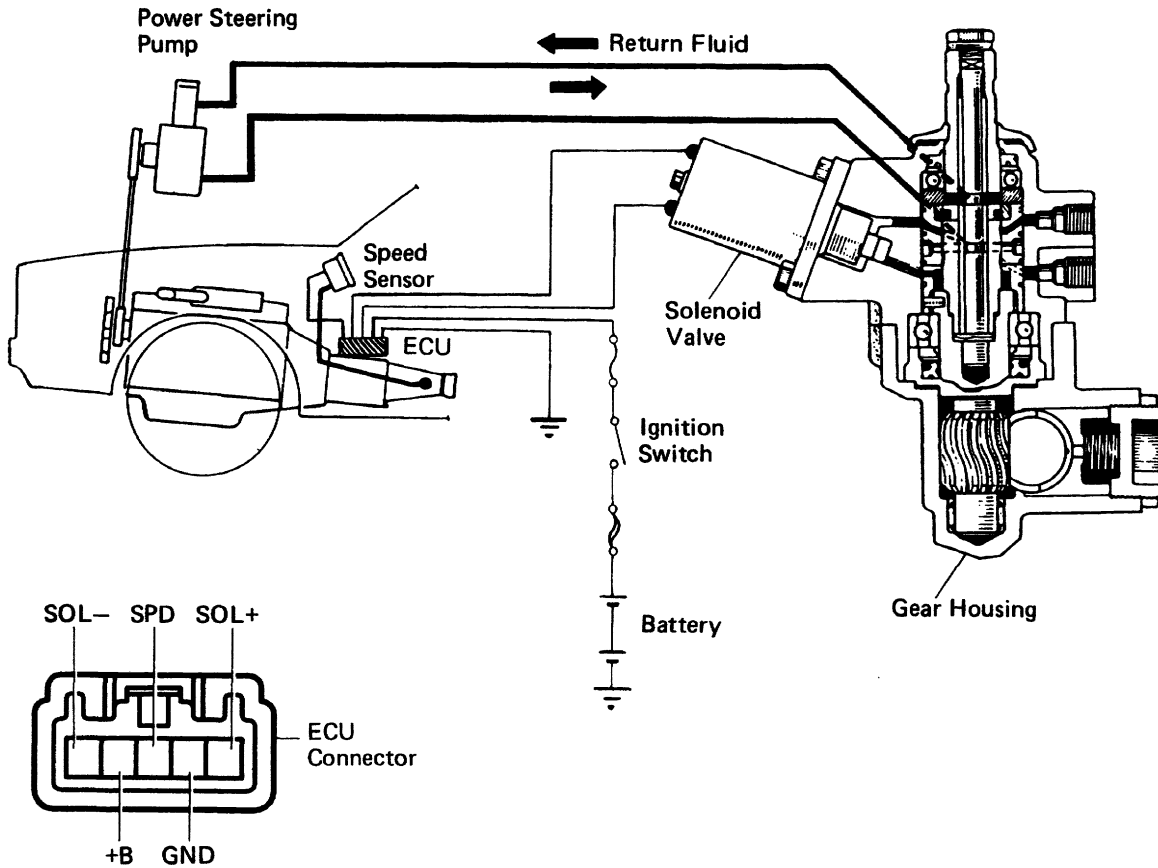


# Progressive Power Steering (PPS)

## DESCRIPTION AND ELECTRONIC CIRCUIT

This type of power steering is composed of the steering gear housing, solenoid valve, power steering pump, PPS ECU and the speed sensor, and it automatically increases the steering effort in proportion to the rise in the vehicle speed.



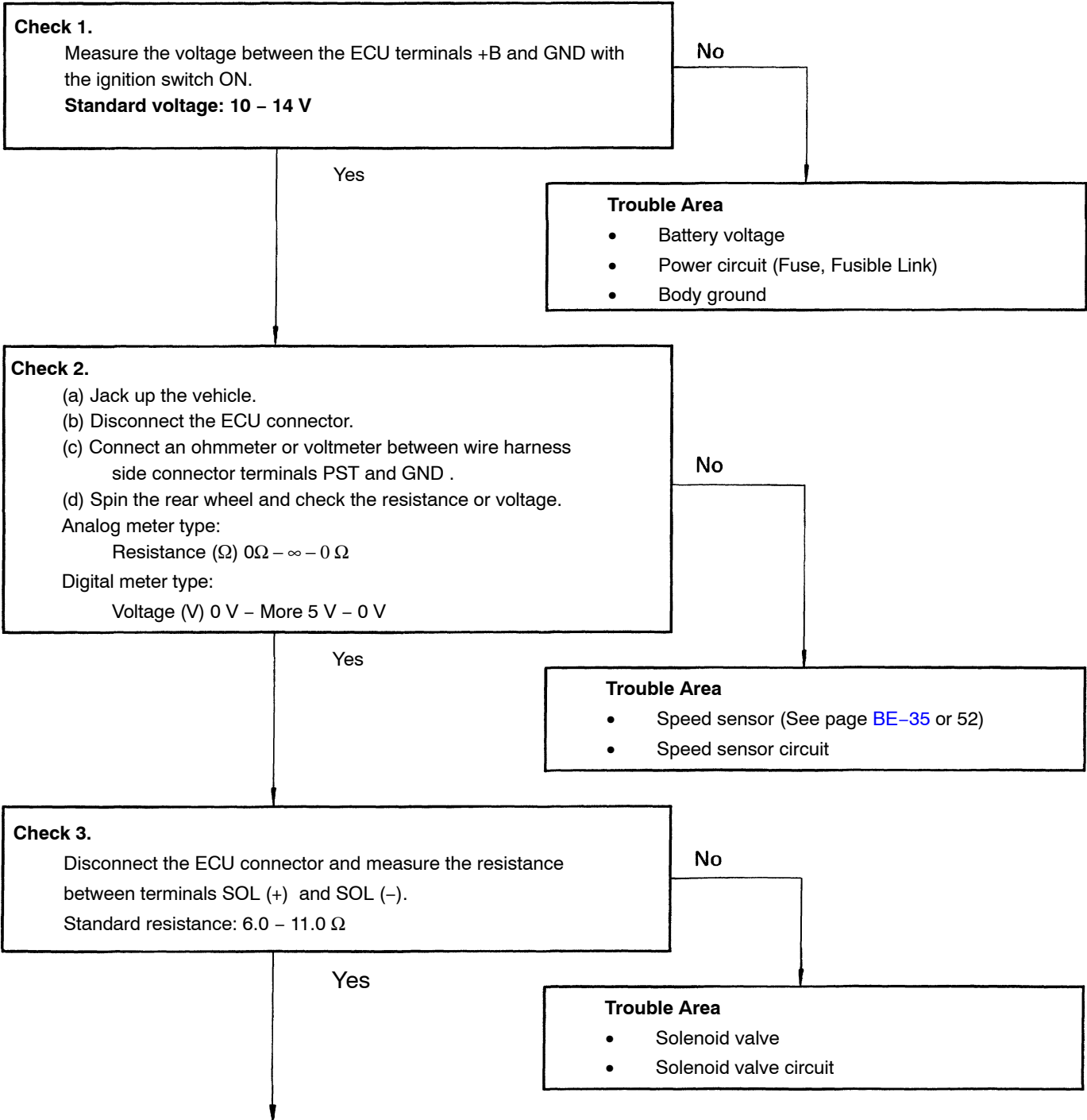
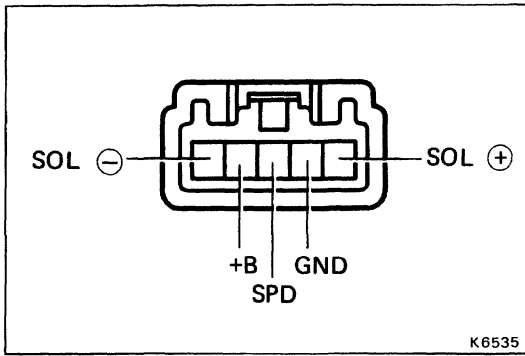
**TROUBLESHOOTING**

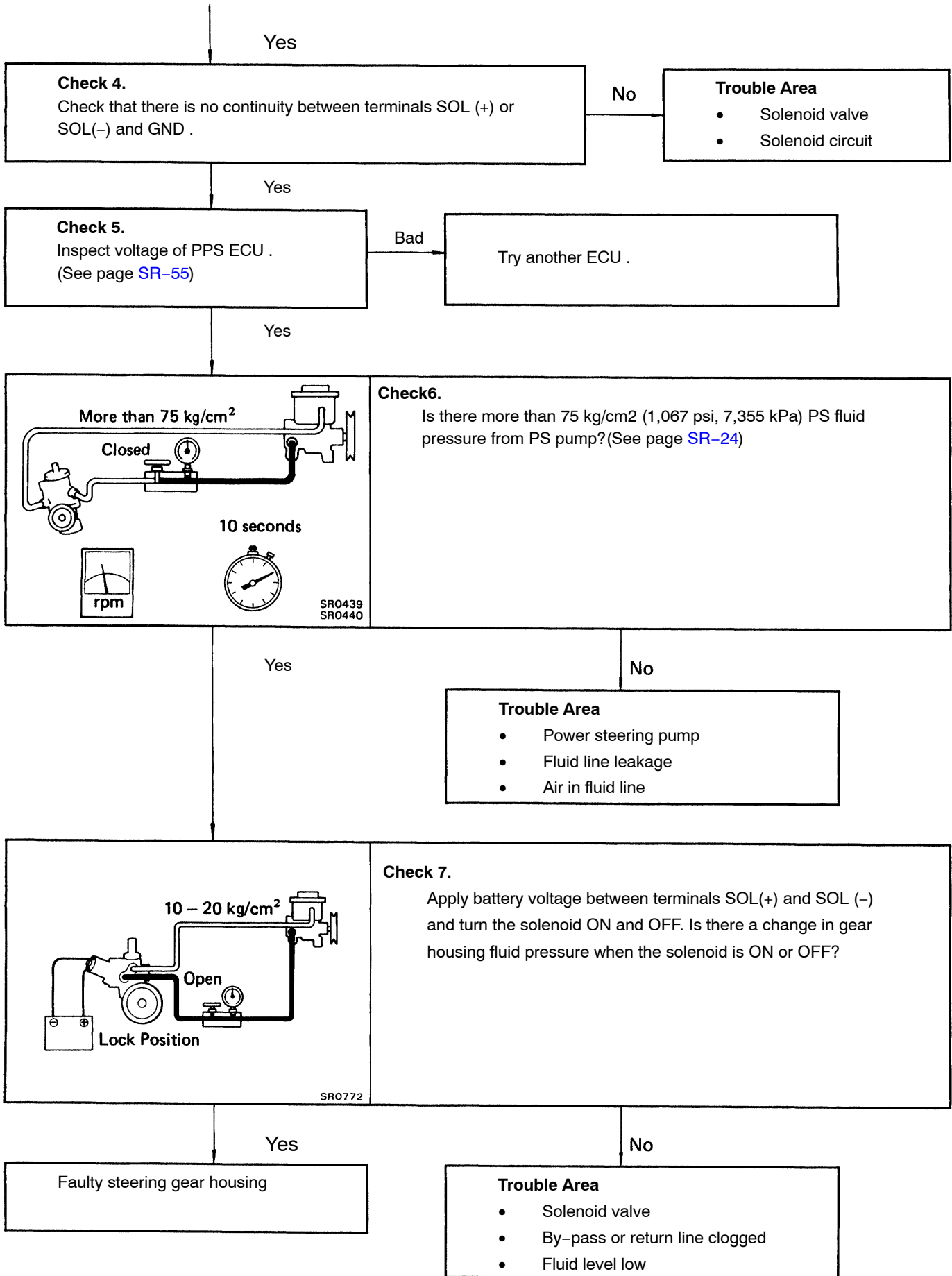
**Trouble**

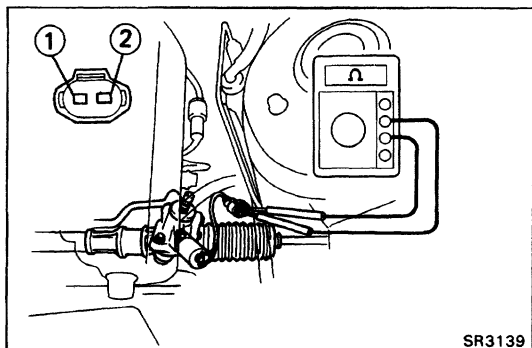
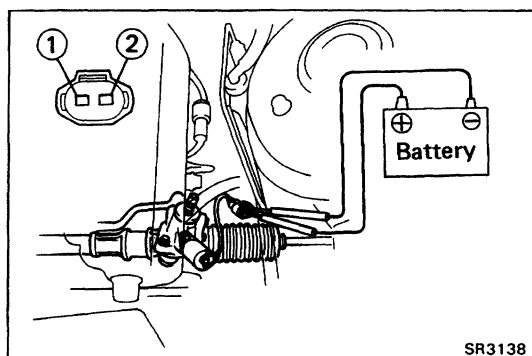
- Hard steering at idle or low-speed driving.
- Steering too sensitive during high-speed driving.

**Preliminary check**

- Check tire pressure.
- Check lubrication of suspension and steering linkage.
- Check front wheel alignment.
- Check steering system joint and suspension arm ball joint.
- Check for bent steering column.
- Check that all connectors are secure.
- Check PS pump fluid pressure (See page [SR-23](#)).







## INSPECTION OF ELECTRIC CONTROL COMPONENTS

### 1. INSPECT SOLENOID VALVE

- Disconnect the solenoid connector.
- Apply voltage between terminals (1) and (2). At this time, confirm that a solenoid operation sound is heard.

- Using an ohmmeter, measure the solenoid coil resistance between terminals (1) and (2).

**Resistance: 6.0 – 11.0Ω**

- Connect the solenoid connector.

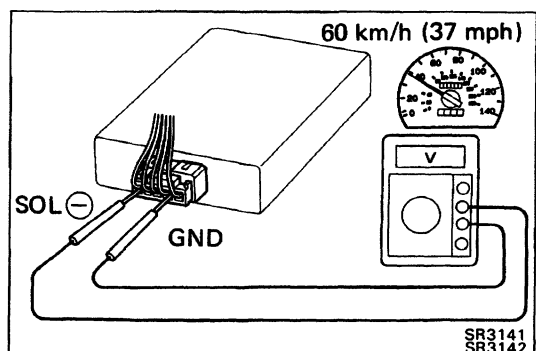
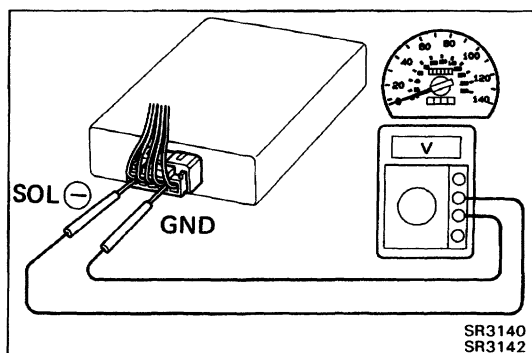
### 2. INSPECT SPEED SENSOR IN COMBINATION METER

(See page BE-35 or 52)

### 3. INSPECT VOLTAGE OF PPS ECU CONNECTOR

- Jack up vehicle and support it on stands.
- Remove the glove box.
- HINT: Do not disconnect the ECU connector.
- Start the engine.
- Using a voltmeter, check that there is voltage between ECU terminals SOL (-) and GND while the engine is idling.

**Standard voltage: 0 – 0.05 V**



- Place the transmission in gear and while traveling at about 60 km/h (37 mph), measure the voltage between the computer terminals SOL (-) and GND.

**Standard voltage: Voltage measured in (d) above, plus 0.12 – 0.23 V**

If there is not standard voltage, replace the ECU.