

ABS Pump Motor Over-run

Diagnostic Trouble Code (DTC) 1: ABS Pump Motor Over-run

NOTE: The ABS indicator light comes on twice; once for two seconds during the bulb check, then again, indicating DTC 1.

The ABS control unit monitors the pump motor relay drive signal during the initial diagnosis and individual diagnosis when the ABS is not functioning.

When the ABS control unit detects the drive signal for 40 seconds, it turns the pump motor relay off and keeps the ABS indicator light on. When the ABS control unit detects the drive signal for 40 seconds after the ABS indicator light went off, the control unit turns the ABS indicator light on again.

Possible causes:

- Air mixed in the ABS brake fluid
- Pressure switch stuck OFF
- Open circuit between the pressure switch and ABS control unit
- Open circuit in the P-SW circuit between the pressure switch and body ground, or a poor ground
- Drop in pump discharge volume
- Leaking outlet valve
- Leaking relief valve
- Brake fluid leakage on the ABS operation system
- Faulty ABS control unit

— With engine running, ABS indicator light is ON.
— With the SCS short connector connected (see page 19-60), DTC 1 is indicated.

Start the engine and let it run for 1 minute.

Does the pump motor run for 40 seconds and does the ABS indicator light come on?

NO

The vehicle is OK at this time.

YES

Check the reservoir fluid level.

Is the level OK?

NO

Replace the modulator unit.
(Brake fluid leakage)

YES

Bleed ABS brake fluid of air (see page 19-132).

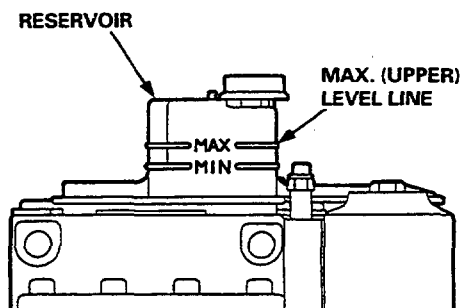
Does the ABS indicator light go off after the bleeding?

YES

Air mixed ABS brake fluid.

NO

(To page 19-72)



(cont'd)

Troubleshooting

ABS Pump Motor Over-run (cont'd)

(From page 19-71)

Turn the ignition switch OFF.

Disconnect the modulator unit 14P connector.

Check for continuity between the modulator unit 14P connector No. 4 (YEL) and No. 11 (BLK) terminals.

Is there continuity?

NO

Replace the modulator unit.
• Pressure switch stuck OFF
• Drop in pump discharge volume
• Leaking outlet valve
• Leaking relief valve

YES

Turn the ignition switch ON.

Measure the voltage between the modulator unit 14P connector No. 4 (YEL) terminal and body ground.

Is there battery voltage?

YES

Repair open in the BLK wire between the pressure switch and body ground, or poor ground.

NO

Measure the voltage between the ABS control unit 26P connector No. 19 (YEL) terminal and body ground.

Is there battery voltage?

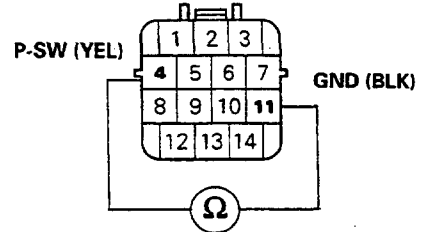
YES

Repair open in YEL wire between the pressure switch and ABS control unit.

NO

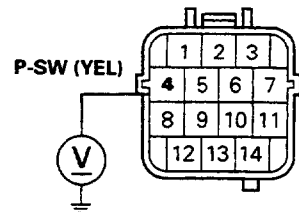
Check for loose ABS control unit connectors. If necessary, substitute a known-good ABS control unit and recheck.

MODULATOR UNIT 14P CONNECTOR



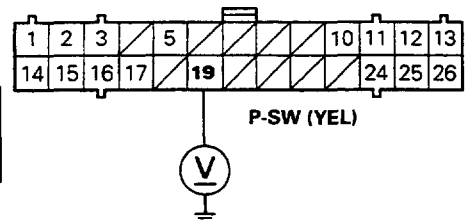
WIRE SIDE OF FEMALE TERMINALS

MODULATOR UNIT 14P CONNECTOR



TERMINAL SIDE OF MALE TERMINALS

ABS CONTROL UNIT 26P CONNECTOR



WIRE SIDE OF FEMALE TERMINALS