DI1J8–03

DTC	21, 22, 23	ABS Actuator Solenoid Circuit

CIRCUIT DESCRIPTION

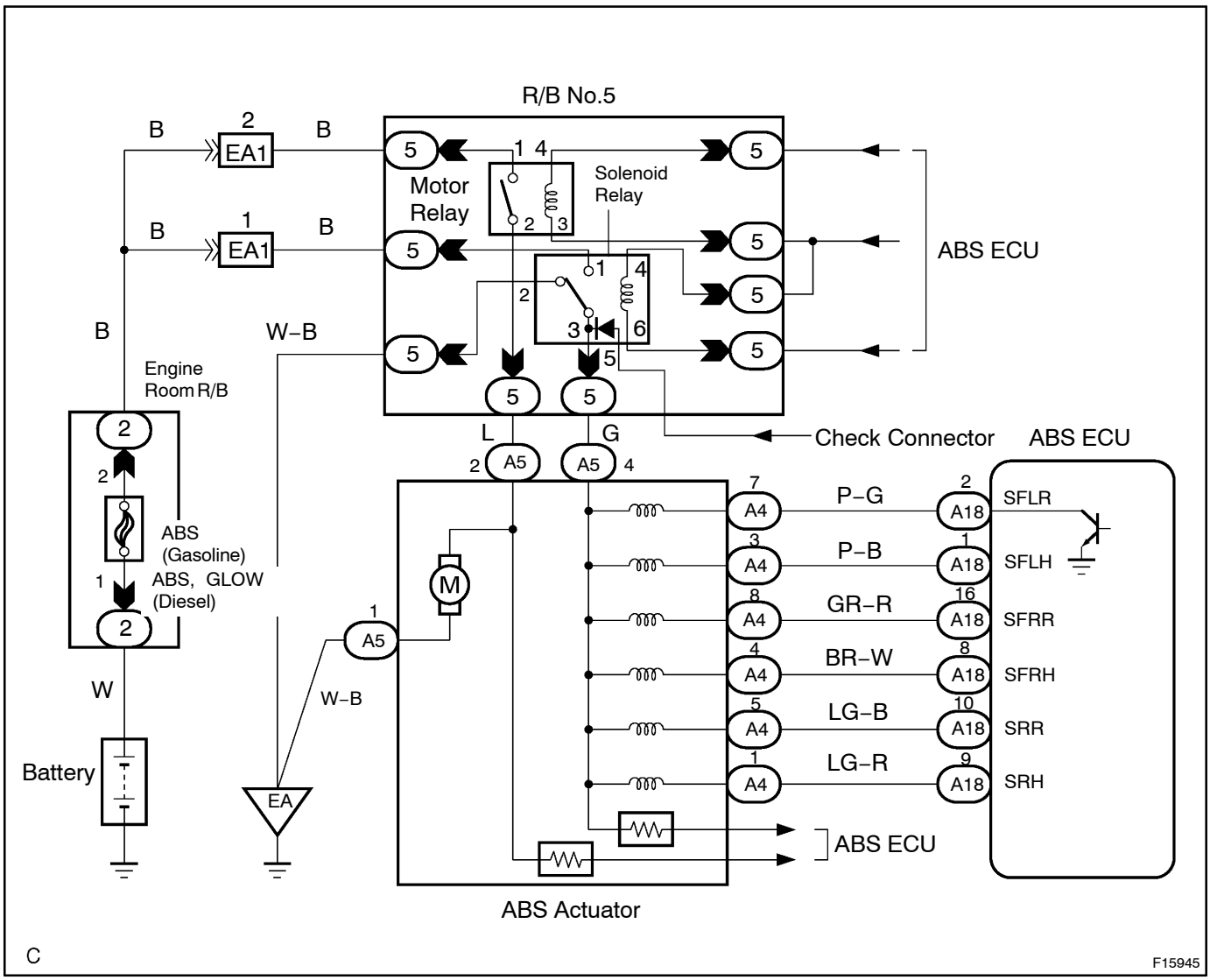
This solenoid goes on when signals are received from the ECU and controls the pressure acting on the wheel cylinders thus controlling the braking force.

DTC No.	DTC Detecting Condition	Trouble Area
21	Conditions (1) through (3) continue for 0.02 sec. or more: (1) ABS solenoid relay terminal (SR) voltage: Battery voltage (2) Voltage of ABS ECU terminal AST: Battery voltage (3) When power transistor of ECU is ON, voltage of terminal SFRR or SFRH is 0 V or battery voltage.	• ABS actuator • Open or short in SFRR or SFRH circuit • ECU
22	Conditions (1) through (3) continue for 0.02 sec. or more: (1) ABS solenoid relay terminal (SR) voltage: Battery voltage (2) Voltage of ABS ECU terminal AST: Battery voltage (3) When power transistor of ECU is ON, voltage of terminal SFLR or SFLH is 0 V or battery voltage.	• ABS actuator • Open or short in SFLR or SFLH circuit • ECU
23	Conditions (1) through (3) continue for 0.02 sec. or more: (1) ABS solenoid relay terminal (SR) voltage: Battery voltage (2) Voltage of ABS ECU terminal AST: Battery voltage (3) When power transistor of ECU is ON, voltage of terminal SRR or SRH is 0 V or battery voltage.	• ABS actuator • Open or short in SRR or SRH circuit • ECU

Fail safe function:

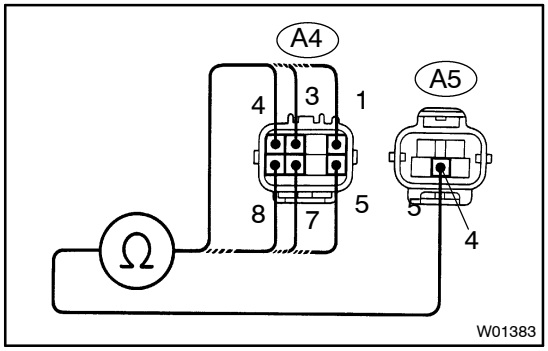
If trouble occurs in the actuator solenoid circuit, the ECU cuts off current to the ABS solenoid relay and prohibits ABS control.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Check ABS actuator solenoid.**



PREPARATION:

Disconnect the 2 connectors from ABS actuator.

CHECK:

Check continuity between terminals A5 – 4 and A4 – 1, 3, 4, 5, 7, 8 of ABS actuator connector.

OK:

Continuity

HINT:

Resistance of each solenoid coil

SFRH, SFLH, SRH: 5.0 Ω

SFRR, SFLR, SRR: 2.2 Ω

NG	**Replace ABS actuator.**

OK

2	**Check for open and short in harness and connector between ABS ECU and actuator (See page IN–26).**

NG	**Repair or replace harness or connector.**

OK

If the same code is still output after the DTC is deleted, check the contact condition of each connection. If the connection is normal, the ECU may be defective.