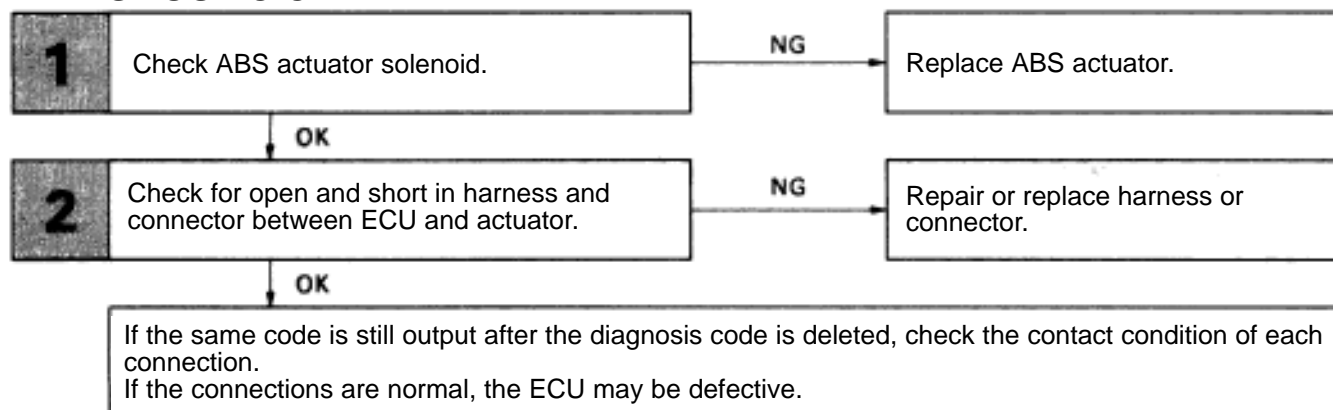


**Diag. Code 21, 22
23, 24****ABS Actuator Solenoid Circuit****CIRCUIT DESCRIPTION**

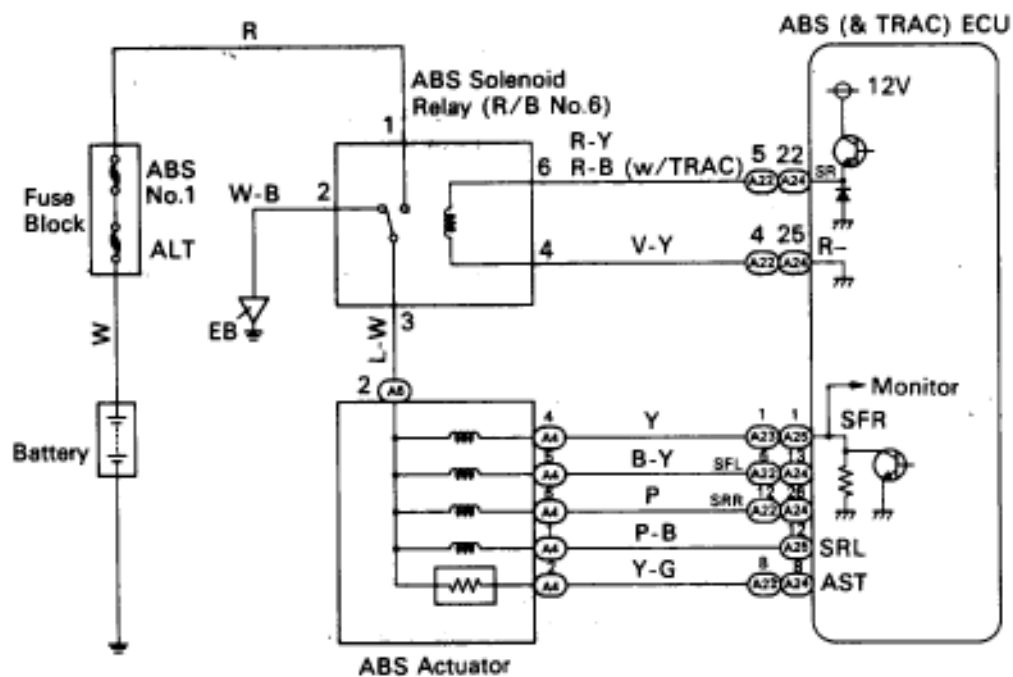
This solenoid goes on when signals are received from the ECU and controls the pressure acting on the wheel cylinders, thus controlling the turning of the wheels.

Code No.	Diagnostic Code Detecting Condition	Trouble Area
21	Conditions (1) through (3) continue for 0.05 sec. or more: (1) ABS solenoid relay: ON (2) Voltage of ABS (& TRAC) ECU terminal AST: Battery voltage (3) When power transistor of ECU is ON, voltage of terminal SFR is 0 V or battery voltage.	<ul style="list-style-type: none"> •ABS actuator •Open or short in SFR circuit. •ECU
22	Conditions (1) through (3) continue for 0.05 sec. or more: (1) ABS solenoid relay: ON (2) Voltage of ABS (& TRAC) ECU terminal AST: Battery voltage (3) When power transistor of ECU is ON, voltage of terminal SFI is 0 V or battery voltage.	<ul style="list-style-type: none"> •ABS actuator •Open or short in SFL circuit. •ECU
23	Conditions (1) through (3) continue for 0.05 sec. or more: (1) ABS solenoid relay: ON (2) Voltage of ABS (& TRAC) ECU terminal AST: Battery voltage (3) When power transistor of ECU is ON, voltage of terminal SRR is 0 V or battery voltage.	<ul style="list-style-type: none"> •ABS actuator •Open or short in SRR circuit. •ECU
24 (Only vehicles with TRAC)	Conditions (1) through (3) continue for 0.05 sec. or more: (1) ABS solenoid relay: ON (2) Voltage of ABS & TRAC ECU terminal AST: Battery voltage (3) When power transistor of ECU is ON, voltage of terminal SRL is 0 V or battery voltage.	<ul style="list-style-type: none"> •ABS actuator •Open or short in SRL circuit. •ECU

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

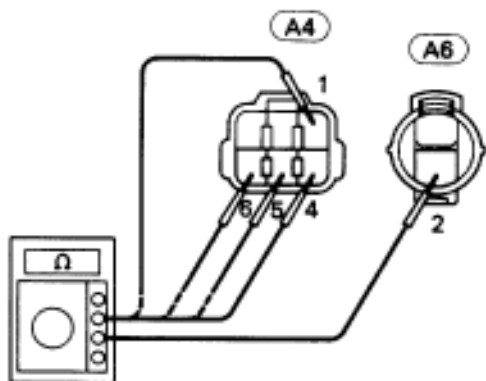
DIAGNOSTIC CHART

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check ABS actuator solenoid.



BR5420

C Check continuity between terminal 2 and terminal 1*, 4, 5, and 6 respectively of the actuator connector **A4**.

*: Only vehicles with TRAC.

Continuity

OK

Resistance of each solenoid is 1.2Ω.

HINT:

OK**NG**

Replace ABS actuator.

2

Check for open and short in harness and connector between ABS (& TRAC) ECU and actuator (See page [IN-27](#)).

OK**NG**

Repair or replace harness or connector.

If the same code is still output after the diagnosis code is deleted, check the contact condition of each connection.

If the connections are normal, the ECU may be defective.