DTC	C1252/52	HYDRO–BOOSTER PUMP MOTOR MALFUNCTION

CIRCUIT DESCRIPTION

Refer to DTC C1251/51 on page 05–836.

DTC No.	DTC Detection Condition	Trouble Area
C1252/52	Motor operates for 5 minutes or more.	• Hydraulic brake booster pump motor • Hydraulic brake booster pump motor circuit • Accumulator pressure sensor

HINT:
The pump motor continues operation for the first 3 minutes, then repeats start and stop.

WIRING DIAGRAM

Refer to DTC C1251/51 on page 05–836.

INSPECTION PROCEDURE

NOTICE:

When replacing the hydraulic brake booster (master cylinder solenoid), perform zero point calibration (see page 05–744).

HINT:
When C1253/53, C1254/54, or C1256/56 is output together with C1252/52, inspect and repair the trouble area indicated by C1253/53, C1254/54, or C1256/56 first.

1	CHECK PUMP MOTOR OPERATION

(a) Turn the ignition switch off.
(b) Depress the brake pedal more than 20 times.
(c) Turn the ignition switch to the ON position.
(d) Check how the pump motor operates.

Result:

Pump motor does not operate	A
Pump motor operates continuously, and does not stop	B
Pump motor operates intermittently	C
Pump motor operates, then stops	D

B → **REPLACE MASTER CYLINDER SOLENOID AND BRAKE BOOSTER W/ ACCUMULATOR PUMP ASSY (SEE PAGE 32–12)**

C → **Go to step 4**

D → **Go to step 5**

A

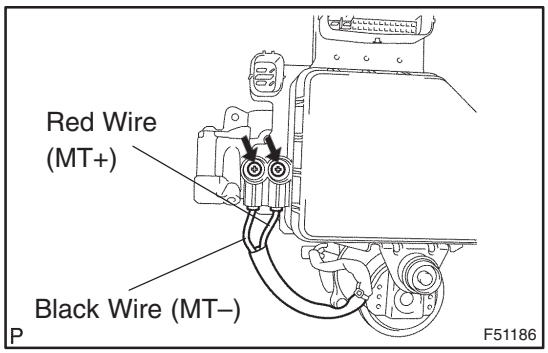
2	CHECK CONNECTION OF THE PUMP MOTOR WIRE HARNESS (MT+/MT–)

(a) Using a screwdriver, remove the 2 plugs from the hydraulic brake booster assy (see page 32–12).
(b) Check the tightening torque of the 2 screws which tighten the wire harness connecting the hydraulic brake booster assy and the brake booster pump (see page 32–12).
OK:
Torque: 2.9 N·m (30 kgf·cm, 26 in.·lbf)

NG → **TIGHTEN THE SCREWS UP, THEN GO TO STEP 5**

OK

3	CHECK RESISTANCE OF PUMP MOTOR WIRE HARNESS (MT+/MT–)



(a) Using a screwdriver, remove the 2 screws and pull the wire harness from the hydraulic brake booster assy (see page 32–12).
(b) Measure the resistance between the red wire (MT+) and the black wire (MT–).
OK:
Resistance: 2 Ω

NG → **REPLACE BRAKE BOOSTER W/ ACCUMULATOR PUMP ASSY (SEE PAGE 32–12)**

OK

4	READ VALUE OF INTELLIGENT TESTER II (ACCUMULATOR PRESSURE SENSOR)

(a) Connect the intelligent tester II to the DLC3.
(b) Turn the ignition switch to the ON position and push the intelligent tester II main switch ON.
(c) Select "DATA LIST" mode on the intelligent tester II.

Item	Measurement Item/Range (Display)	Normal Condition	Diagnostic Note
Accumulator Sensor	Accumulator pressure sensor reading/min.: 0 V, max.: 5 V	3.58 to 5 V	If the value is constant regardless of pump operation, accumulator pressure sensor malfunction is suspected

(d) Check the accumulator output value.

Result:

Output value is within the "Normal Condition" range	A
Output value is out of the "Normal Condition" range	B
Output value is constant regardless of pump operation	C

B → **REPLACE HYDRAULIC BRAKE BOOSTER (SEE PAGE 32–12)**

C → **REPLACE MASTER CYLINDER SOLENOID AND BRAKE BOOSTER W/ ACCUMULATOR PUMP ASSY (SEE PAGE 32–12)**

A

5	RECONFIRM DTC

(a) Clear the DTC (see page 05–766).
(b) Turn the ignition switch off.
(c) Turn the ignition switch to the ON position.
(d) Wait for more than 5 minutes.
(e) Check if the same DTC is detected (see page 05–766).

HINT:

Reinstall the sensors, connectors, etc. and restore the previous vehicle conditions before rechecking for DTCs.

Result:

DTC is output	A
DTC is not output	B

B → **REPLACE BRAKE BOOSTER W/ ACCUMULATOR PUMP ASSY (SEE PAGE 32–12)**

A

REPLACE MASTER CYLINDER SOLENOID AND BRAKE BOOSTER W/ ACCUMULATOR PUMP ASSY (SEE PAGE 32–12)