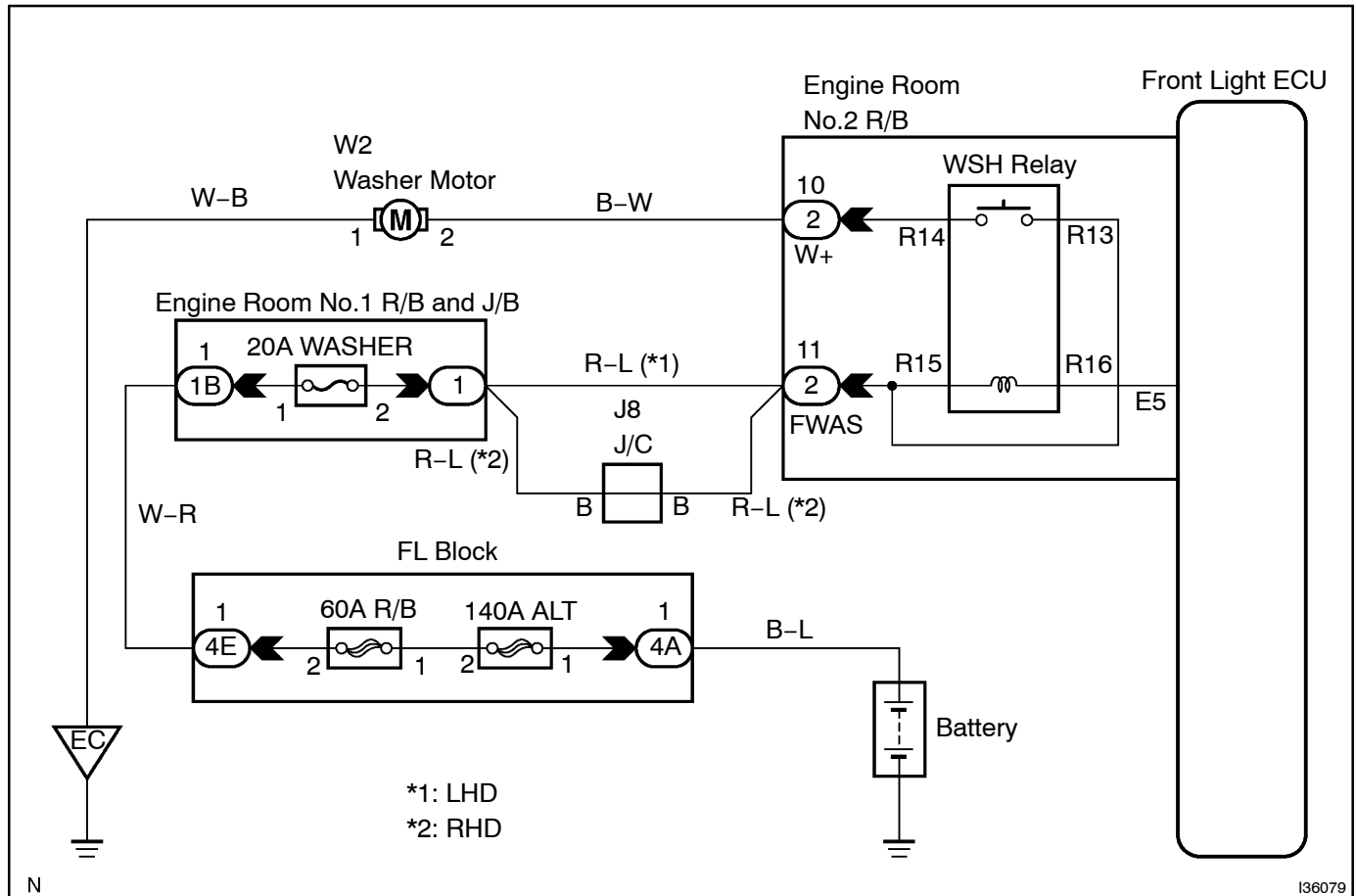# WASHER MOTOR CIRCUIT

CIRCUIT DESCRIPTION

The front light ECU receives washer switch information from the combination switch, and operates the washer relay.

WIRING DIAGRAM

INSPECTION PROCEDURE

1	PERFORM ACTIVE TEST ON INTELLIGENT TESTER II

(a) Connect the intelligent tester II to the DLC3.
(b) Turn the ignition switch to the ON position and turn the intelligent tester II main switch on.
(c) Select the item below in the ACTIVE TEST and then check that the washer motor operates.

BODY NO.5 (MULTIPLEX NETWORK FRONT LIGHT ECU):

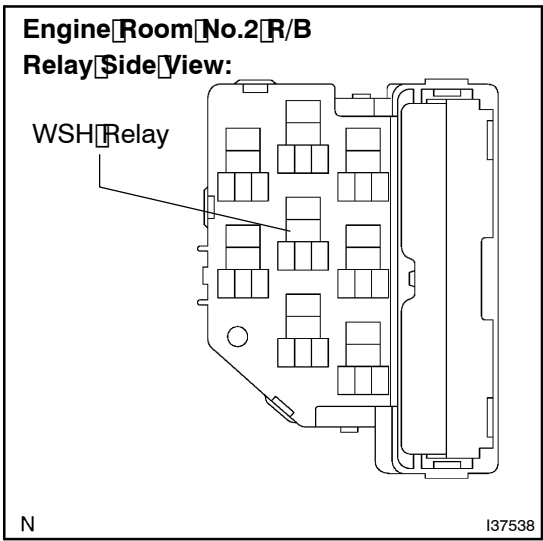| Item	Test Details	Diagnostic Note
Washer Motor Operation	Washer motor OFF/ON	–

OK: Washer motor operates.

NG ▷ **Go to step 2**

OK ▽

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05−1582)

2	INSPECT RELAY

**Engine Room No.2 R/B
Relay Side View:**

WSH Relay

N   I37538

(a) Remove the WSH relay from the engine room No.2 relay block.
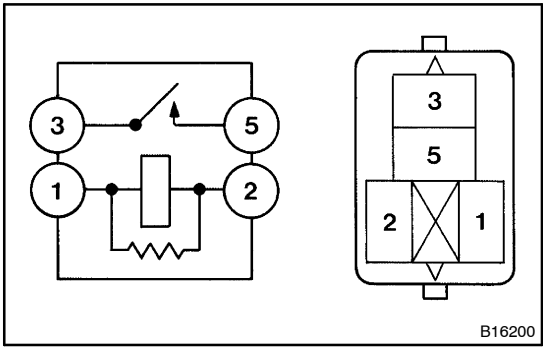
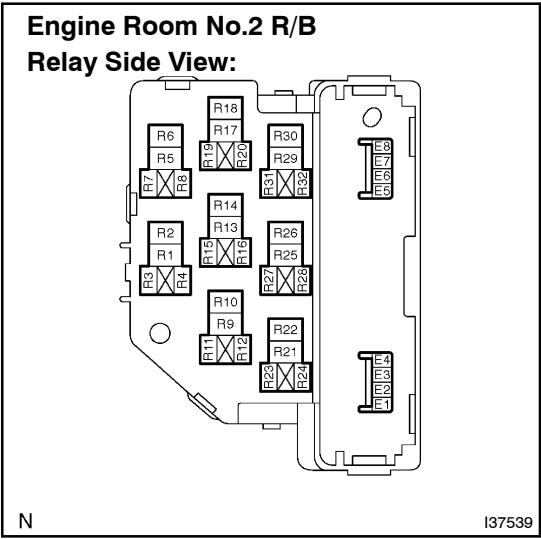(b) Measure the resistance according to the value(s) in the table below.
Standard:

Tester connection	Specified condition
3 – 5	10 kΩ or higher
3 – 5	Below 1 Ω (When battery voltage is applied to terminals 1 – 2)

B16200

NG ▷ **REPLACE RELAY**

OK ▽

| 3 | INSPECT MULTIPLEX NETWORK BODY ECU(ENGINE ROOM NO.2 R/B) |

Engine Room No.2 R/B
Relay Side View:

N   I37539

(a) Using a service wire, connect R13 and R14 in the engine room No.2 relay block.
OK: Front window washer operates.

| NG | Go to step 5 |

| OK |

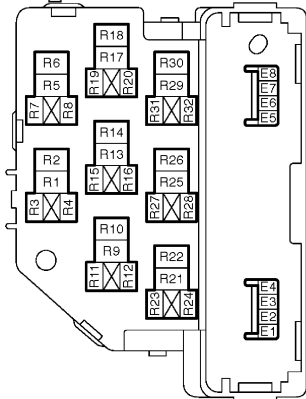| 4	INSPECT MULTIPLEX NETWORK BODY ECU(ENGINE ROOM NO.2 R/B)

Engine Room No.2 R/B Connector Front View:
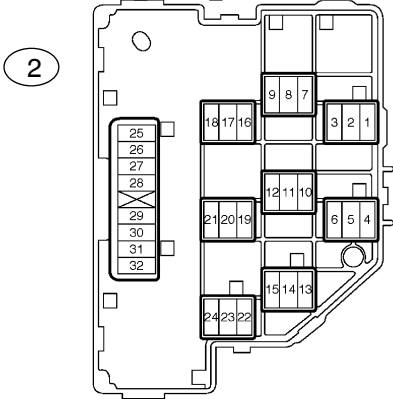
N   I37540

(a) Disconnect the 2−11 connector from the engine room No.2 relay block.

(b) Remove the front light ECU from the engine room No.2 relay block.

Engine Room No.2 R/B Relay Side View:

N   I37539

(c) Using a service wire, connect R15 and R16 in the engine room No.2 relay block.

(d) Measure the resistance according to the value(s) in the table below.
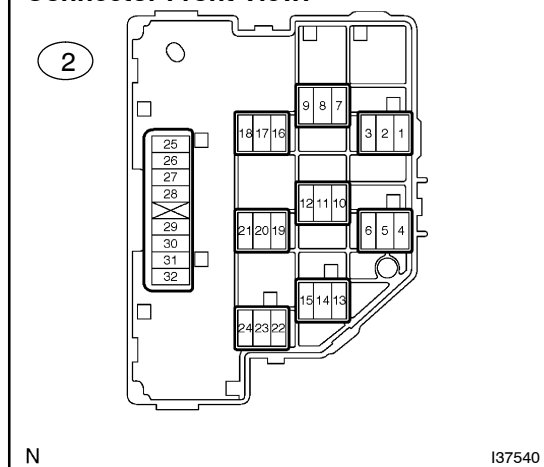
Standard:

Tester connection	Condition	Specified condition
2−11 − E5	Connect R15 and R16	Below 1 Ω

| NG >	**REPLACE MULTIPLEX NETWORK BODY ECU (ENGINE ROOM NO.2 R/B)**

OK ▽

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05−1582)

5	CHECK HARNESS AND CONNECTOR(POWER SOURCE CIRCUIT)

**Engine Room No.2 R/B
Connector Front View:**

N   I37540

(a) Measure the voltage according to the value(s) in the table below.

Standard:

| Tester connection	Condition	Specified condition
2−11 (FWAS) – Body ground	Always	10 to 14 V

NG ▷ **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

6	INSPECT MULTIPLEX NETWORK BODY ECU(ENGINE ROOM NO.2 R/B)

**Engine Room No.2 R/B
Connector Front View:**

N   I37540
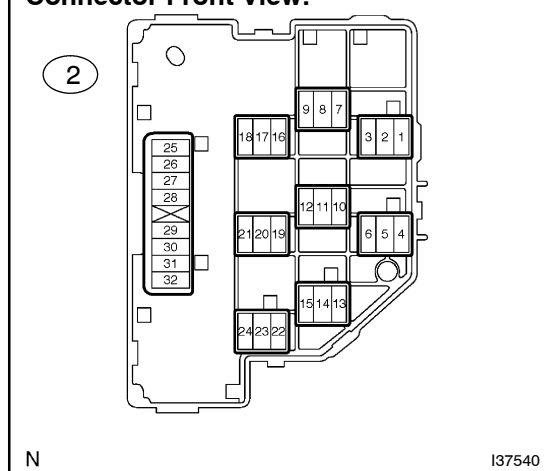
(a) Measure the voltage according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
2−10 (W+) – Body ground	Connect R13 and R14	10 to 14 V

NG ▷ **Go to step 8**

OK

7	INSPECT WINDSHIELD WASHER MOTOR AND PUMP ASSY
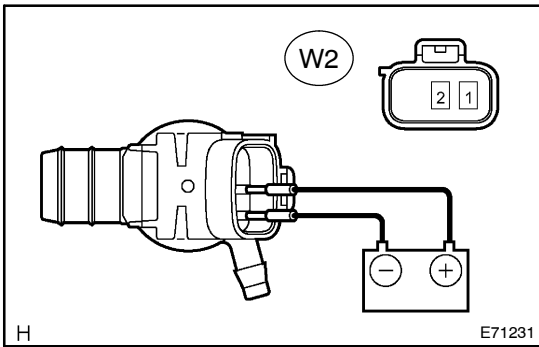
(a) Disconnect the windshield washer motor and pump assy connector.

(b) Connect the positive battery (+) lead to terminal 2 of the windshield washer motor and pump assy, and the negative battery (−) lead to terminal 1.
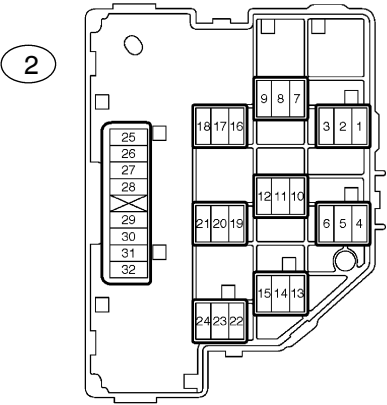
OK: Operation sounds are heard.

NG	REPLACE WINDSHIELD WASHER MOTOR AND PUMP ASSY

OK

REPAIR OR REPLACE HARNESS OR CONNECTOR(WASHER MOTOR CIRCUIT)

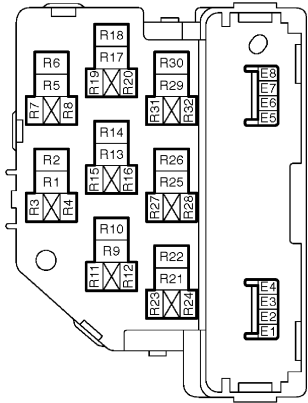| 8	INSPECT MULTIPLEX NETWORK BODY ECU(ENGINE ROOM NO.2 R/B)

Engine Room No.2 R/B Connector Front View:

N   I37540

(a) Disconnect the 2–11 connector from the engine room No.2 relay block.

(b) Remove the front light ECU from the engine room No.2 relay block.

Engine Room No.2 R/B Relay Side View:

N   I37539

(c) Using a service wire, connect R15 and R16 in the engine room junction block.

(d) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
2–10 – 2–11	Connect R13 and R14	Below 1 Ω
2–11 – E5	Connect R15 and R16	Below 1 Ω

NG >	REPLACE MULTIPLEX NETWORK BODY ECU (ENGINE ROOM NO.2 R/B)

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–1582)