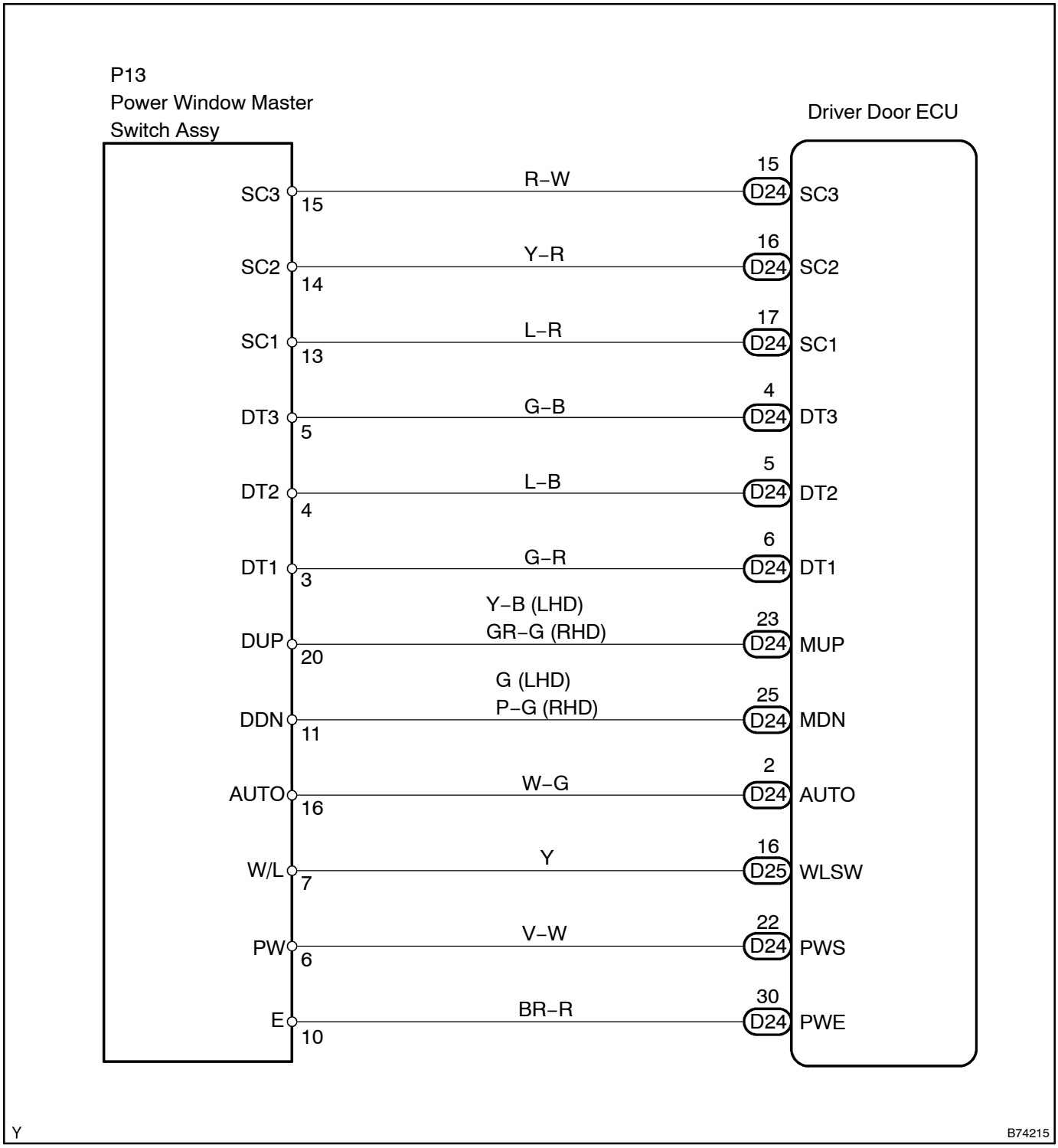
POWER WINDOW REGULATOR MASTER SWITCH CIRCUIT (DRIVER'S DOOR)

CIRCUIT DESCRIPTION

This circuit transmits signals from the power window master switch assy to the driver door ECU.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK FOR DTCS

(a) Operate any of the switches on the power window master switch assy. Check if any DTC is output.
RESULT:

Result	Proceed to
DTC is output	A
No DTC is output	B

A → **PROCEED TO DTC CHART (See page 05–1998)**

B

2	READ VALUE OF INTELLIGENT TESTER II

(a) Connect the intelligent tester II to the DLC3.
(b) Turn the ignition switch ON and press the intelligent tester II main switch ON.
(c) Select the items below in the DATA LIST and read the displays on the intelligent tester II.
DRIVER DOOR ECU:

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
Power window regulator master switch	Not operated → Operated	ON: Operated OFF: Not operated	–

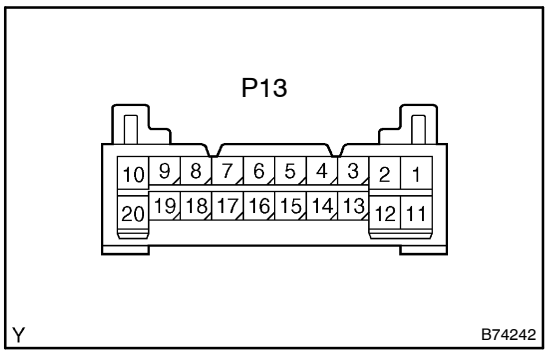
OK: "ON" (each switch is operated) appears on the screen.

NG → **Go to step 3**

OK

PROCEED TO NEXT CIRCUIT INSPECTION

3	INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSY



(a) Remove the master switch.
(b) Disconnect the P13 switch connector.
(c) Measure the resistance and voltage between the terminals of the connector when the switch is operated.
Standard:
Driver switch

Switch Condition	Tester Connection	Specified Condition
AUTO UP	6 – 20 6 – 16	Below 1 Ω
UP	6 – 20	Below 1 Ω
OFF	–	–
DOWN	6 – 11	Below 1 Ω
AUTO DOWN	6 – 11 6 – 16	Below 1 Ω

Passenger switch

Switch Condition	Tester Connection	Specified Condition
AUTO UP	3 – 14 3 – 15	Below 1 Ω
UP	3 – 14	Below 1 Ω
OFF	–	–
DOWN	3 – 13	Below 1 Ω
AUTO DOWN	3 – 13 3 – 15	Below 1 Ω

Rear LH

Switch Condition	Tester Connection	Specified Condition
AUTO UP	5 – 14 5 – 15	Below 1 Ω
UP	5 – 14	Below 1 Ω
OFF	–	–
DOWN	5 – 13	Below 1 Ω
AUTO DOWN	5 – 13 5 – 15	Below 1 Ω

Rear RH

Switch Condition	Tester Connection	Specified Condition
AUTO UP	4 – 14 4 – 15	Below 1 Ω
UP	4 – 14	Below 1 Ω
OFF	–	–
DOWN	4 – 13	Below 1 Ω
AUTO DOWN	4 – 13 4 – 15	Below 1 Ω

Window lock switch

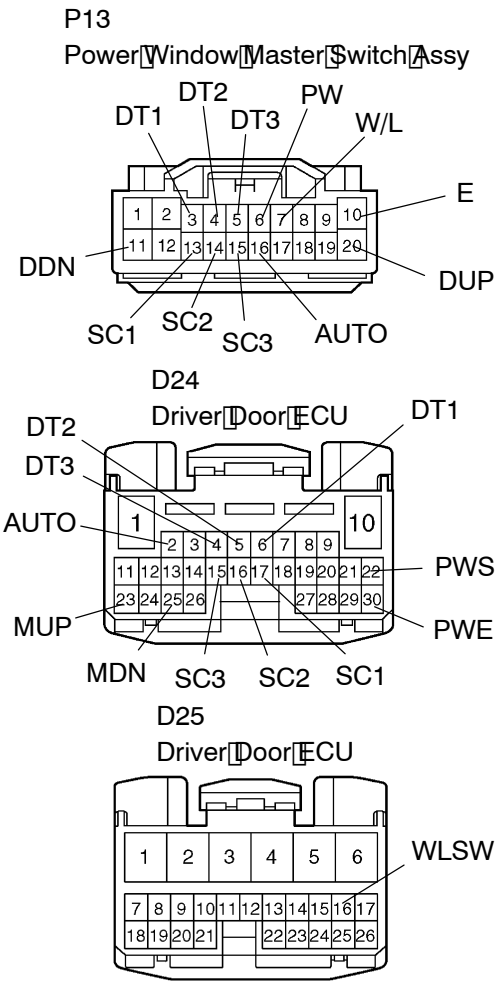
Switch Condition	Tester Connection	Specified Condition
NORMAL	Battery positive (+) → Terminal 6 Battery negative (–) → Terminal 10	All 4 switches illuminate
LOCK	Battery positive (+) → Terminal 6 Battery negative (–) → Terminal 10	Driver door window switch illuminate

NG → **REPLACE POWER WINDOW REGULATOR MASTER SWITCH ASSY**

OK

4	CHECK WIRE HARNESS (DOOR LOCK CONTROL SWITCH ASSY – DRIVER DOOR ECU AND BODY GROUND)

Wire Harness Side



(a) Disconnect the P13 switch connector.

(b) Disconnect the D24 and D25 ECU connectors.

(c) Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
P13–6 (PW) – D24–22 (PWS)	Below 1 Ω
P13–10 (E) – D24–30 (PWE)	Below 1 Ω
P13–16 (AUTO) – D24–2 (AUTO)	Below 1 Ω
P13–20 (DUP) – D24–23 (MUP)	Below 1 Ω
P13–11 (DDN) – D24–25 (MDN)	Below 1 Ω
P13–3 (DT1) – D24–6 (DT1)	Below 1 Ω
P13–4 (DT2) – D24–5 (DT2)	Below 1 Ω
P13–5 (DT3) – D24–4 (DT3)	Below 1 Ω
P13–13 (SC1) – D24–17 (SC1)	Below 1 Ω
P13–14 (SC2) – D24–16 (SC2)	Below 1 Ω
P13–15 (SC3) – D24–15 (SC3)	Below 1 Ω
P13–7 (W/L) – D25–16 (WLSW)	Below 1 Ω
P13–6 (PW) – Body ground	10 kΩ or higher
P13–10 (E) – Body ground	10 kΩ or higher
P13–16 (AUTO) – Body ground	10 kΩ or higher
P13–20 (DUP) – Body ground	10 kΩ or higher
P13–11 (DDN) – Body ground	10 kΩ or higher
P13–3 (DT1) – Body ground	10 kΩ or higher
P13–4 (DT2) – Body ground	10 kΩ or higher
P13–5 (DT3) – Body ground	10 kΩ or higher
P13–13 (SC1) – Body ground	10 kΩ or higher
P13–14 (SC2) – Body ground	10 kΩ or higher
P13–15 (SC3) – Body ground	10 kΩ or higher
P13–7 (W/L) – Body ground	10 kΩ or higher

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE
(See page 05–1985)