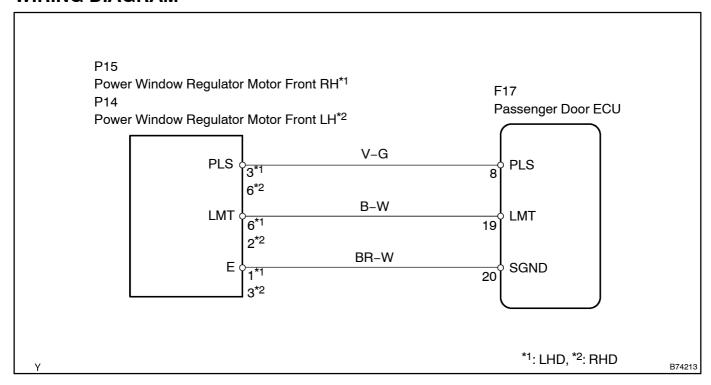
DTC	B1233	JAM PROTECTION LIMIT SWITCH CIRCUIT ON PASSENGER SIDE DOOR
DTC	B1234	JAM PROTECTION PULSE SENSOR CIR- CUIT ON PASSENGER SIDE DOOR

# **CIRCUIT DESCRIPTION**

These DTCs are output when the passenger door power window motor is malfunctioning.

DTC No.	DTC Detection Condition	Trouble Area
B1233	Open in limit switch of power window regulator motor front RH Open in limit switch of power window regulator motor front LH	Power window regulator motor front RH Power window regulator motor front LH Wire harness
B1234	Open in limit switch of power window regulator motor front RH Open in limit switch of power window regulator motor front LH	Power window regulator motor front RH Power window regulator motor front LH Wire harness

# **WIRING DIAGRAM**



## **INSPECTION PROCEDURE**

## 1 CHECK POWER WINDOW OPERATION

(a) Lower the passenger door power window from the fully closed position to the fully open position. Check if the DTC is erased.

## **Result:**

Result	Proceed to
DTC is erased	А
DTC is not erased	В

HINT:

If the DTC is erased, it is possible the driver door ECU incorrectly detected this DTC previously.

B Go to step 2

Α

**END** 

# 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.

#### **PASSENGER DOOR ECU:**

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
Limit SW		ON: Jam protection limit switch operates	_
Lillit OVV	SW	OFF: Jam protection limit switch does not operate	_

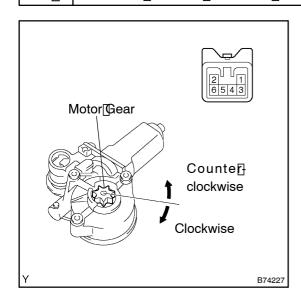
OK: "ON" (Jam protection limit switch operates) appears on the screen.

NG > Go to step 3

OK

## REPLACE PASSENGER DOOR ECU

# 3 | INSPECT[POWER[WINDOW[REGULATOR[MOTOR[ASSY][FRONT[PASSENGER[SIDE]



- (a) Remove the motor see page 75-17).
- (b) Apply battery voltage to the motor connector according to the table below.
- (c) Check that the motor rotates smoothly.

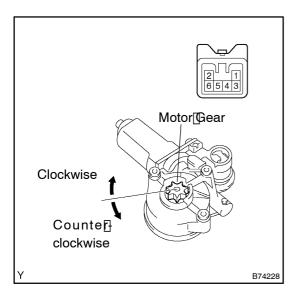
## **NOTICE:**

Do not apply battery voltage to any terminals except terminals 4 and 5.

OK:

## LHD models

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 5	Motor gear rotates clockwise
Battery positive (+) → Terminal 5 Battery negative (-) → Terminal 4	Motor gear rotates counterclockwise



## **RHD** models

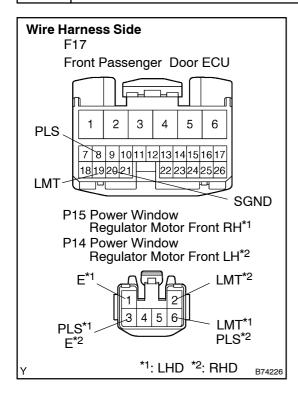
Measurement Condition	Specified Condition
Battery positive (+) → Terminal 5 Battery negative (-) → Terminal 4	Motor gear rotates clockwise
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 5	Motor gear rotates counterclockwise

NG

REPAIR POWER WINDOW REGULATOR MOTOR ASSY

OK

# 4 CHECK WIRE HARNESS (PASSENGER DOOR ECU – POWER WINDOW REGULATOR MOTOR ASSY FRONT RH)



- (a) Disconnect the F17 ECU connector.
- (b) Disconnect the P15 (LHD) or P14 (RHD) motor connectors.
- (c) Measure the resistance of the wire harness side connectors

#### Standard:

## **LHD** models

Tester Connection	Specified Condition
F17-19 (LMT) - P15-6 (LMT)	Below 1 Ω
F17-8 (PLS) - P15-3 (PLS)	Below 1 Ω
F17-20 (SGND) - P15-1 (E)	Below 1 Ω
P15-2 (LMT) - Body ground	10 kΩ or higher
P15-6 (PLS) - Body ground	10 kΩ or higher
P15-3 (E) - Body ground	10 kΩ or higher

## **RHD** models

Tester Connection	Specified Condition
F17-19 (LMT) - P14-2 (LMT)	Below 1 Ω
F17-8 (PLS) - P14-6 (PLS)	Below 1 Ω
F17-20 (SGND) - P14-3 (E)	Below 1 Ω
P14-2 (LMT) - Body ground	10 kΩ or higher
P14-6 (PLS) - Body ground	10 kΩ or higher
P14-3 (E) - Body ground	10 kΩ or higher

NG \

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE PASSENGER DOOR ECU