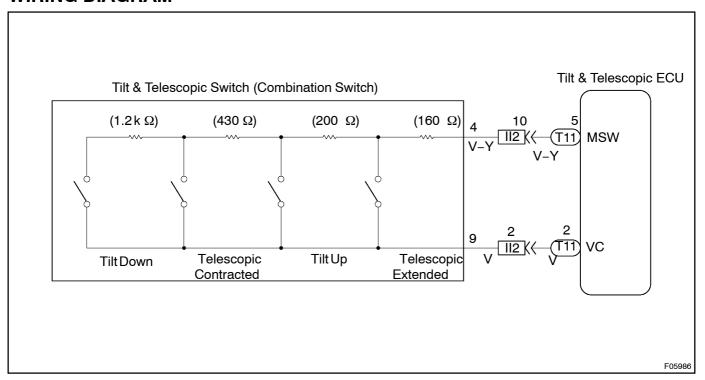
DI23O-04

# Tilt and Telescopic Manual switch circuit

## **CIRCUIT DESCRIPTION**

The different voltage signals which are occurred by operating the manual switch are sent to the tilt and telescopic ECU.

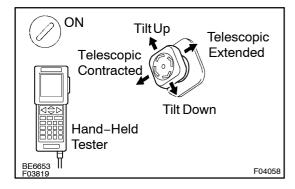
# **WIRING DIAGRAM**



# INSPECTION PROCEDURE

1

Check tilt and telescopic manual switch voltage.

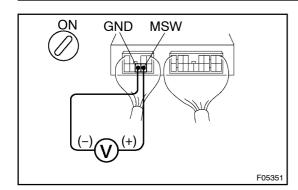


# When using hand -held tester PREPARATION:

- (a) Connect the hand -held tester to the DLC3.
- (b) Turn ignition switch ON and push the hand —held tester main switch ON.
- (c) Select DATALIST mode on the hand -held tester.

#### **CHECK:**

Read the voltages on the tester screen when operating the manual switch.



# When not using hand-held tester PREPARATION:

Remove tilt and telescopic ECU with connector still connected.

#### **CHECK:**

Measure voltage between terminals MSW and GND of ECU connector when operating the manual switch.

## OK:

Manual switch position	Standard voltage
Neutral position	0.00 – 0.20 V
Tilt up	1.30 – 1.70 V
Tilt down	0.30 – 0.50 V
Telescopic contracted	0.65 – 0.95 V
Telescopic extended	2.05 – 2.75 V

### **RESULT:**

А	Switch voltages in all directions are within the standard.
В	Switch voltage in a certain direction is out of the standard.
С	Switch voltages in all directions are out of the standard.

Α `

Proceed to next circuit inspection shown on the problem symptoms table. (See page DI-416)

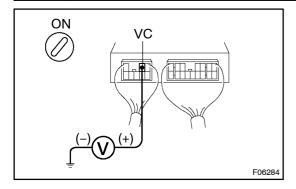
В

Replace the manual switch.

С

2

Check voltage between terminal VC of ECU connector and body ground.



#### **PREPARATION:**

Remove ECU with connectors still connected.

#### CHECK.

Measure voltage between terminal VC of ECU and body ground.

# OK:

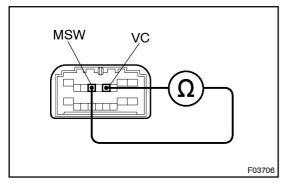
Voltage: 4.5 ± 5.5 V

ок

NG

Go to step 4.

3 Check tilt and telescopic manual switch.



### **PREPARATION:**

Disconnect combination switch connector.

#### **CHECK:**

Measure resistance between terminals VC and MSW of combination switch connector when operating the manual switch.

#### OK:

Switch position	Resistance
Tilt up	360 Ω
Tilt down	1,990 Ω
Telescopic contracted	790 Ω
Telescopic extended	160 Ω

NG

Replace the manual switch.

OK

4

Check harness and connector between tilt and telescopic ECU and manual switch. (See page IN-35)

NG

Repair or replace harness or connector.

OK

Proceed to next circuit inspection shown on the problem symptoms table.

(See page DI-416)