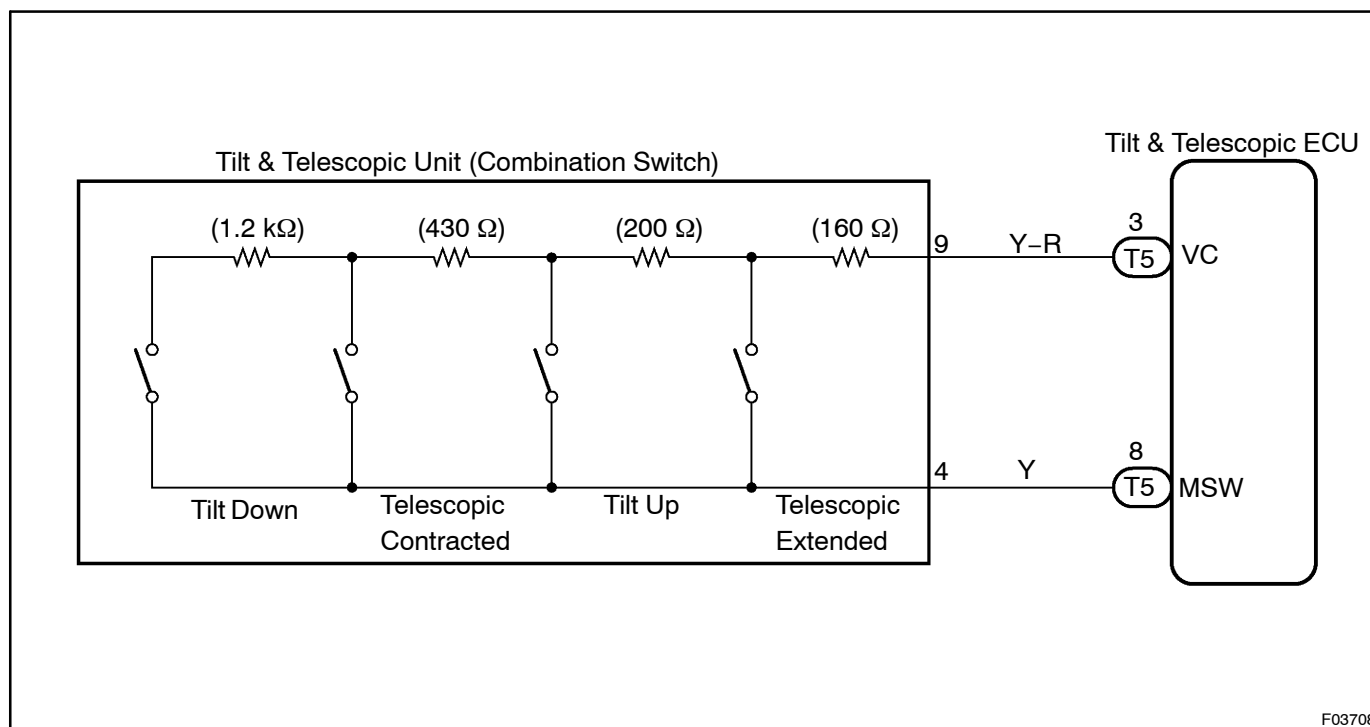


Tilt and Telescopic Manual switch circuit

CIRCUIT DESCRIPTION

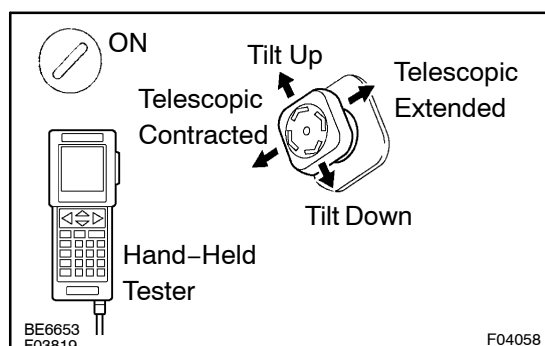
The different voltage signals which are occurred by operating the manual switch are sent to the Tilt and Telescopic ECU.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check Tilt and Telescopic Manual switch Voltage.



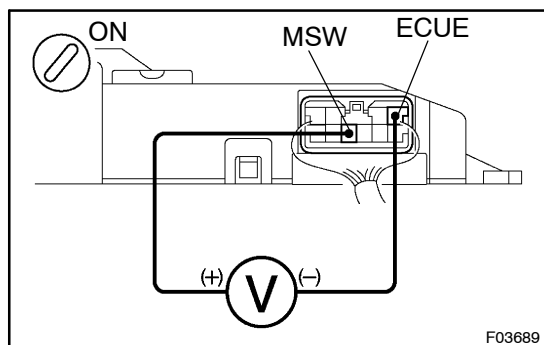
When using hand-held tester

PREPARATION:

- Connect the hand-held tester to the DLC3
- Turn ignition switch ON and push the hand-held tester main switch ON.
- 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 ECUE 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:

A	Switch voltages in all directions are within the standard.
B	Switch voltage in a certain direction is out of the standard.
C	Switch voltages in all directions are out of the standard.

A

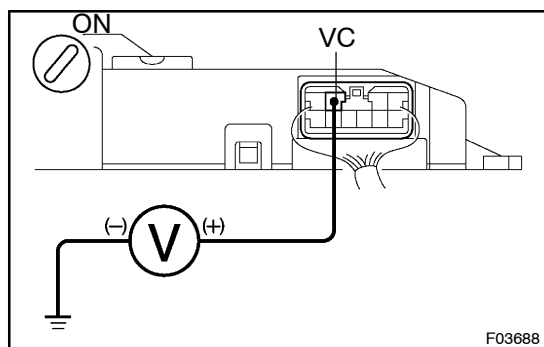
Proceed to next circuit inspection shown on the Problem Symptom Table. (See page DI-359)

B

Replace the manual switch.

C**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.

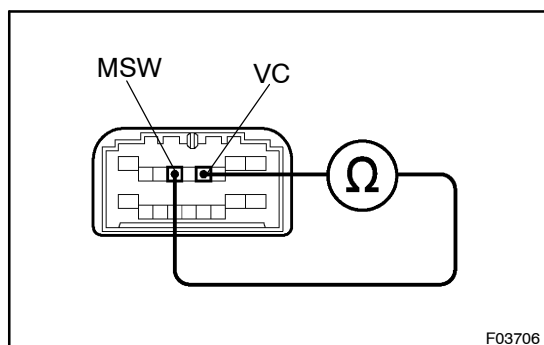
OK:

Voltage: 4.5 ~ 5.5 V

NG

Go to step 4

OK

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-29)****NG****Repair or replace harness or connector.****OK**

Proceed to next circuit inspection shown on the Problem Symptom Table.
(See page DI-359)