DI3GW–03

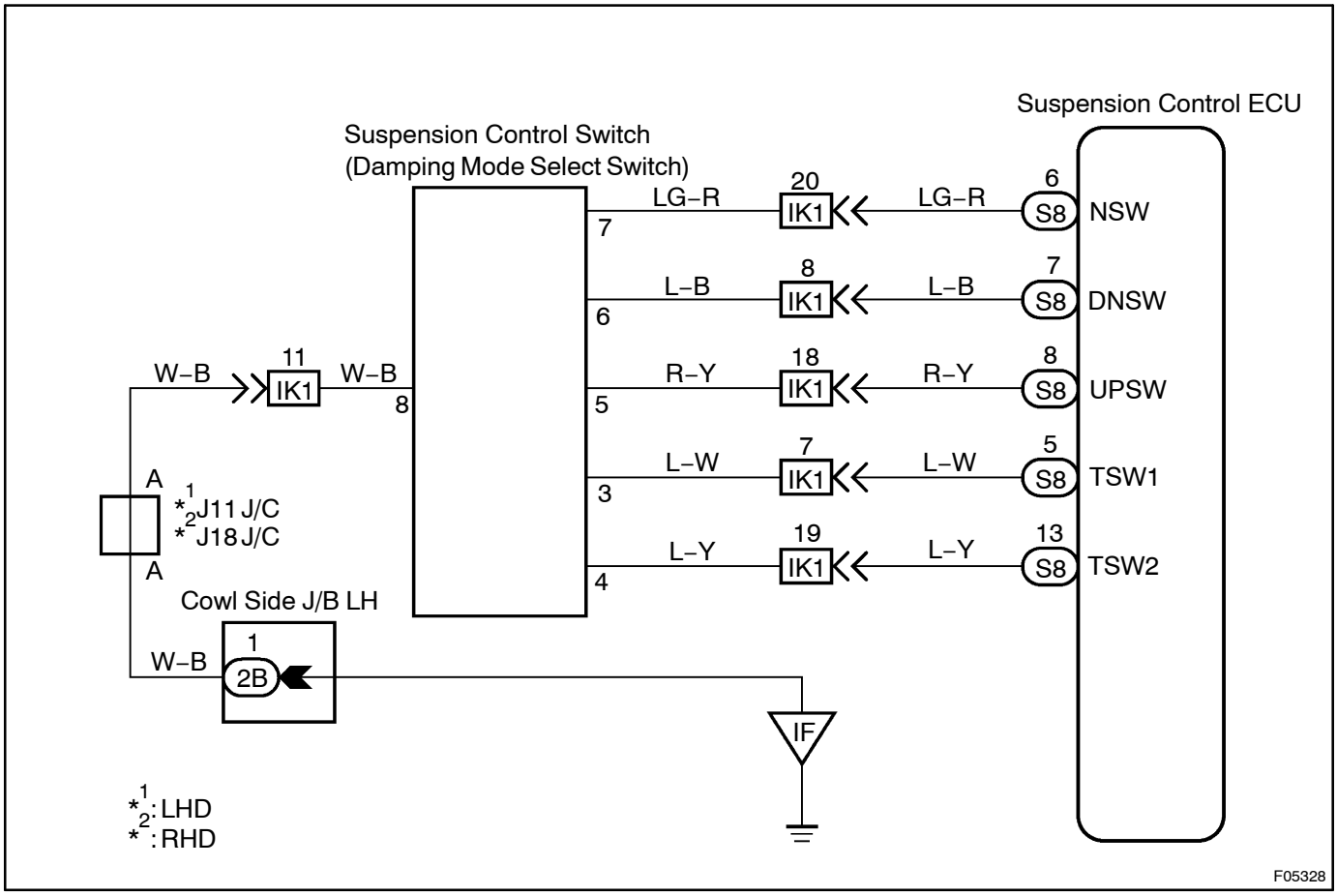
DTC	C 1787 / 87	Damping Mode Select Switch Circuit

CIRCUIT DESCRIPTION

This circuit is sending the signal to the ECU to switch over to the damping mode selected by the damping mode select switch.

DTC No.	DTC Detecting Condition	Trouble Area
C1787 / 87	TSW1 and TSW2 of damping mode select switch signals do not change.	• Damping mode select switch • Damping mode select switch circuit • Suspension control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Check output signal of damping mode select switch.**

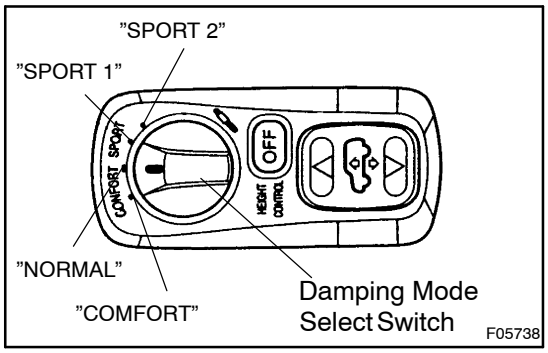
IN CASE OF USING HAND –HELD TESTER:

PREPARATION:

(a) Connect the hand –held tester to the DLC3.

(b) Turn the ignition switch ON and push the hand –held tester main switch ON.

(c) Select the DATALIST mode on the hand –held tester.



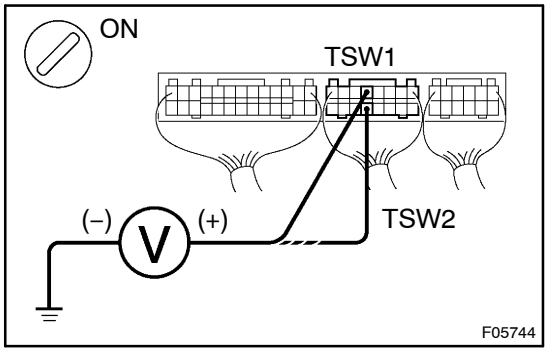
CHECK:

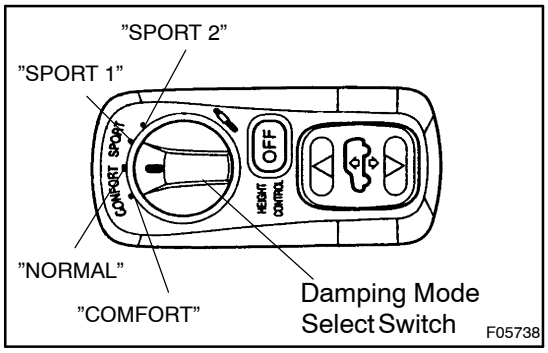
Check the damping mode select switch condition displayed on the hand –held tester when changing the damping mode select switch to each mode.

OK:

Damping mode select switch must display the condition as the following table.

Switch position	Switch condition
"COMFORT"	"ON" is displayed for TSW1 of damping mode select switch condition. "OFF" is displayed for TSW2 of damping mode select switch condition.
"NORMAL"	"ON" is displayed for TSW1 and TSW2 of damping mode select switch condition.
"SPORT 1"	"OFF" is displayed for TSW1 of damping mode select switch condition. "ON" is displayed for TSW2 of damping mode select switch condition.
"SPORT 2"	"OFF" is displayed for TSW1 and TSW2 of damping mode select switch condition.





IN CASE OF NOT USING HAND –HELD TESTER:

PREPARATION:

Remove the suspension control ECU with connectors still connected.

CHECK:

(a) Turn the ignition switch ON.

(b) Measure voltage between terminals TSW1 and TSW2 of suspension control ECU connector and body ground when changing the damping mode select switch to each mode.

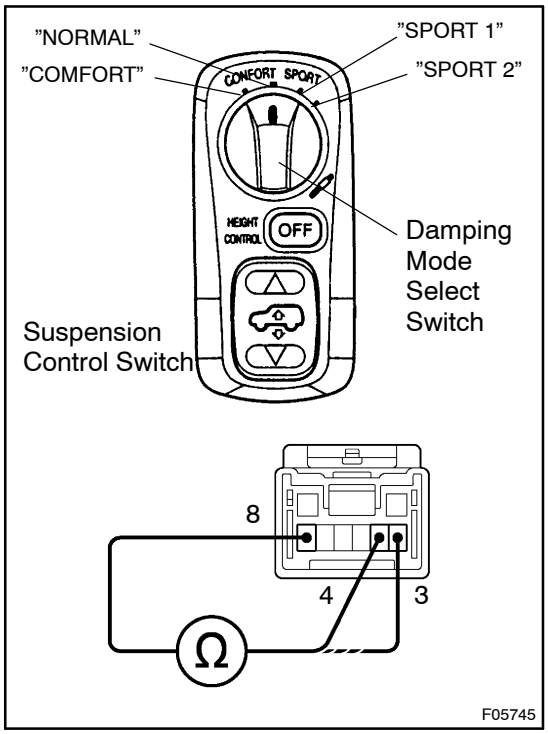
OK:

Terminal	Switch position	Voltage
TSW1 – Body ground	"COMFORT"	9 – 14 V
	"NORMAL"	9 – 14 V
	"SPORT 1"	Below 1.5 V
	"SPORT 2"	Below 1.5 V
TSW2 – Body ground	"COMFORT"	Below 1.5 V
	"NORMAL"	9 – 14 V
	"SPORT 1"	9 – 14 V
	"SPORT 2"	Below 1.5 V

OK → **No problem.**

NG

2	Check damping mode select switch.



PREPARATION:

(a) Remove the suspension control switch.

(b) Disconnect the suspension control switch (for damping mode select switch) connector.

CHECK:

Measure resistance between terminals 3, 4 and 8 of suspension control switch (for damping mode select switch) connector when changing the damping mode select switch to each mode.

OK:

Terminal	Switch position	Resistance
3 – 8	"COMFORT"	0 Ω (Continuity)
	"NORMAL"	0 Ω (Continuity)
	"SPORT 1"	∞ Ω (Open)
	"SPORT 2"	∞ Ω (Open)
4 – 8	"COMFORT"	∞ Ω (Open)
	"NORMAL"	0 Ω (Continuity)
	"SPORT 1"	0 Ω (Continuity)
	"SPORT 2"	∞ Ω (Open)

NG → **Replace suspension control switch.**

OK

3	Check for open and short circuit in harness and connector between damping mode select switch and suspension control ECU (See page IN–35).

NG → **Repair or replace harness or connector.**

OK

Check and replace suspension control ECU.