

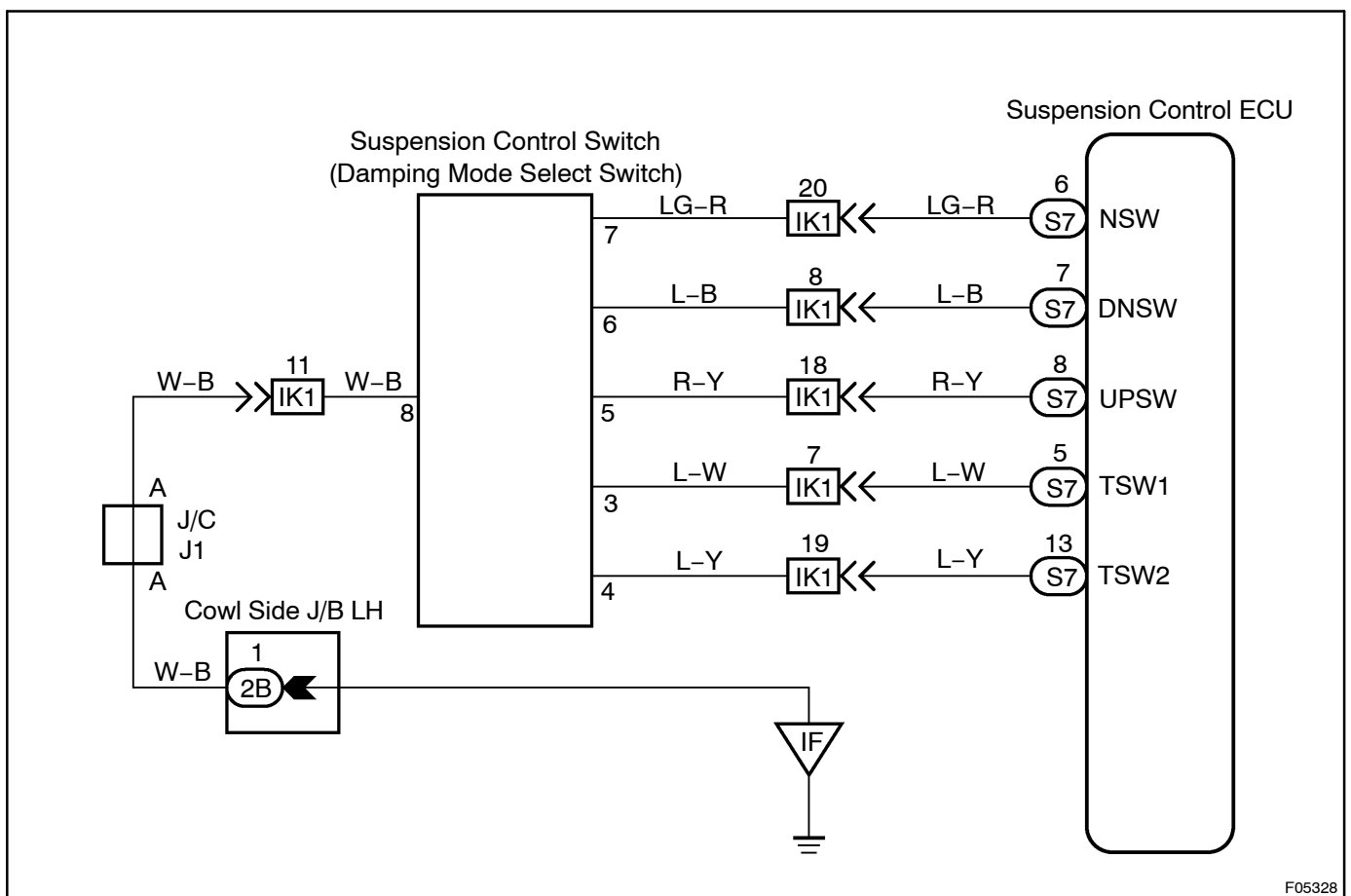
|            |                   |                                           |
|------------|-------------------|-------------------------------------------|
| <b>DTC</b> | <b>C1787 / 87</b> | <b>Damping Mode Select Switch Circuit</b> |
|------------|-------------------|-------------------------------------------|

## 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. | <ul style="list-style-type: none"> <li>Damping mode select switch</li> <li>Damping mode select switch circuit</li> <li>ECU</li> </ul> |

## WIRING DIAGRAM

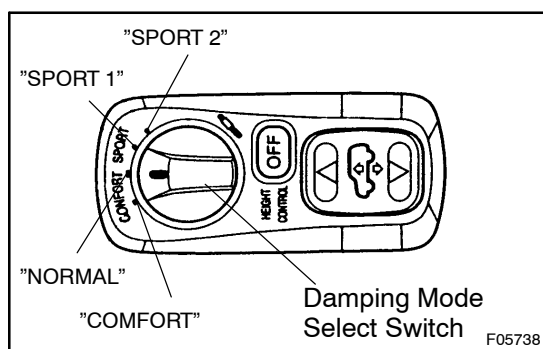


**INSPECTION PROCEDURE**

|          |                                                           |
|----------|-----------------------------------------------------------|
| <b>1</b> | <b>Check output signal of damping mode select switch.</b> |
|----------|-----------------------------------------------------------|

**IN CASE OF USING LEXUS HAND-HELD TESTER:****PREPARATION:**

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

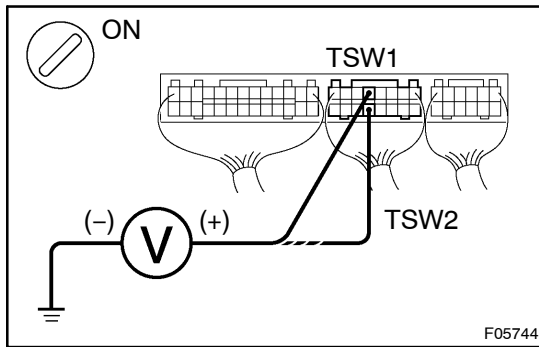
**CHECK:**

Check the damping mode select switch condition displayed on the LEXUS 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.<br>"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.<br>"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 LEXUS HAND-HELD TESTER:**  
**PREPARATION:**

Remove the suspension control ECU with connectors still connected.

**CHECK:**

- Turn the ignition switch ON.
- 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.

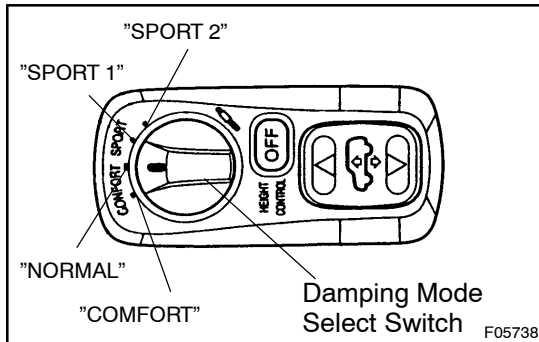
**OK:**

| 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

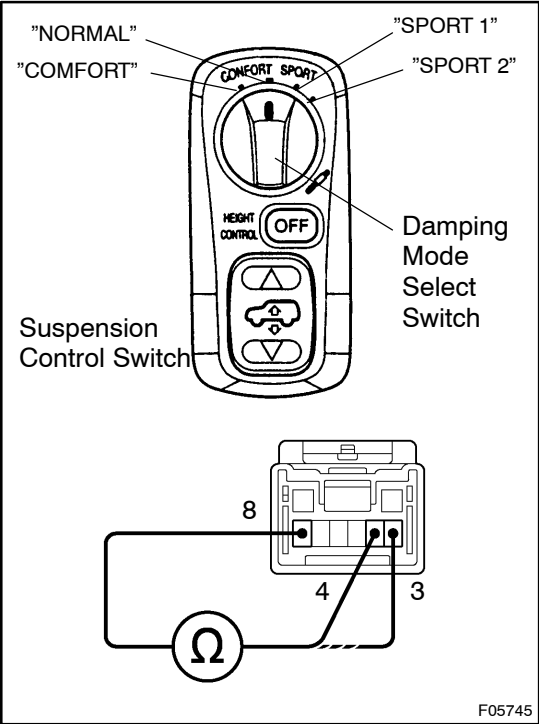
No problem.

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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)       |

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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-33](#)).

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Repair or replace harness or connector.

OK

Check and replace suspension control ECU.