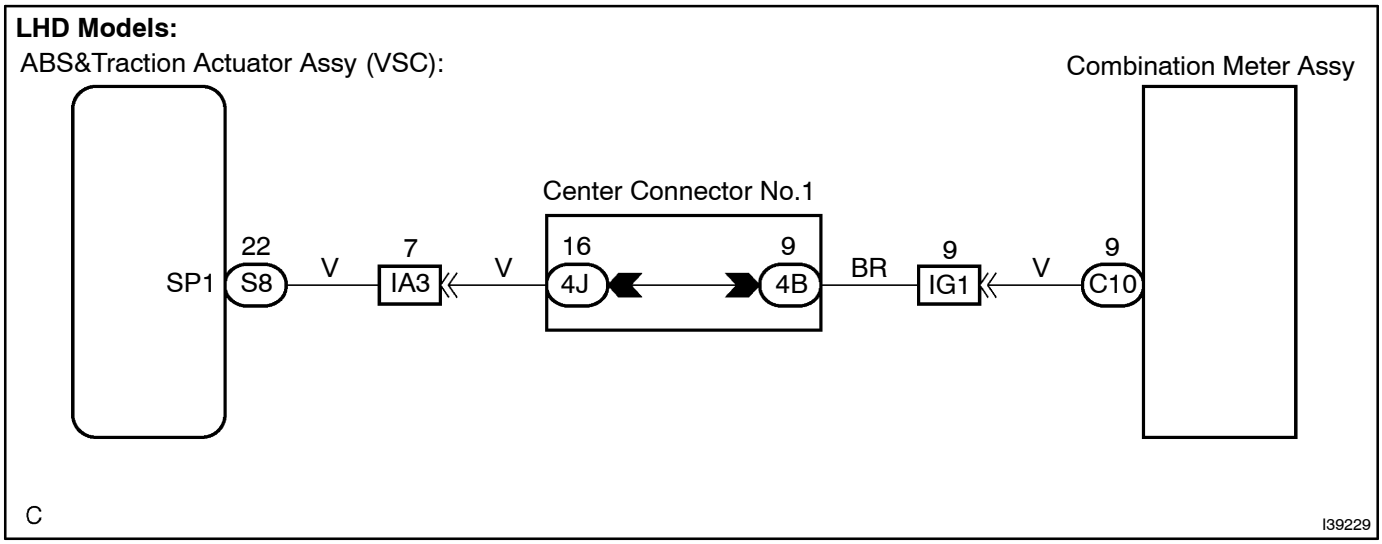
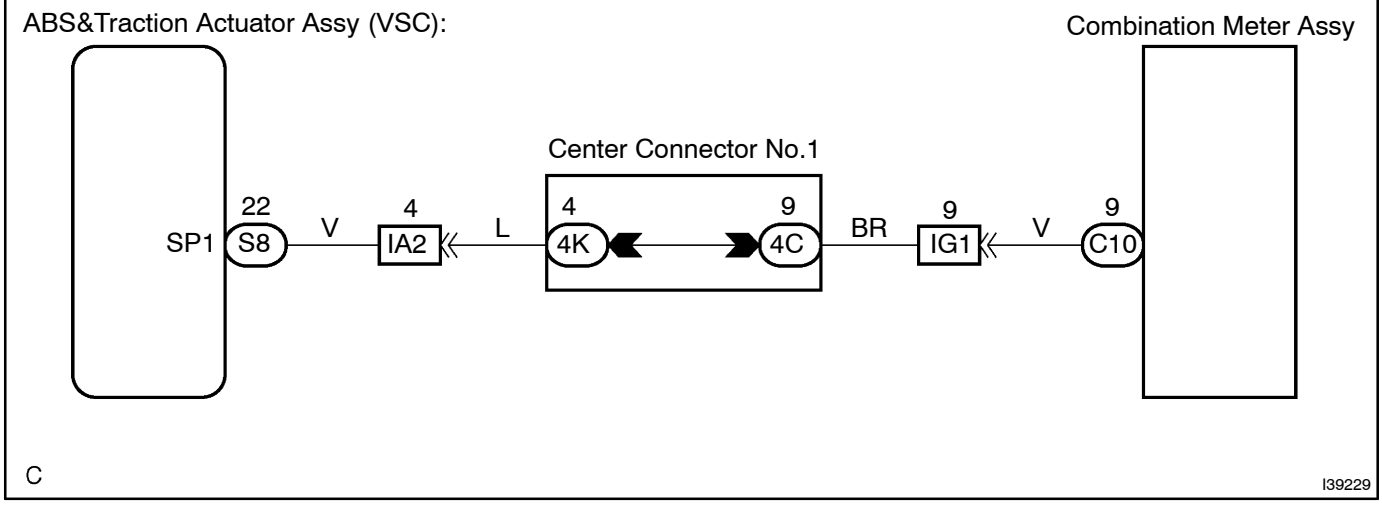
# MALFUNCTION IN SPEEDOMETER

## WIRING DIAGRAM

**LHD Models:**




**RHD Models:**



# INSPECTION PROCEDURE

| 1 | READ VALUE OF INTELLIGENT TESTER II (VEHICLE SPEED SIGNAL) |
|---|---|

(a) Operate the intelligent tester II according to the steps on the display and select the "DATA LIST".

**ABS:**

| Item | Measurement Item/ Range (Display) | Normal Condition | Diagnostic Note |
|---|---|---|---|
| (FR/FL/RR/RL) SPD | Vehicle speed / Min.: 0 km/h (0 mph), Max.: 326 km/h (202 mph) | Almost same as actual speed (When driving) | – |

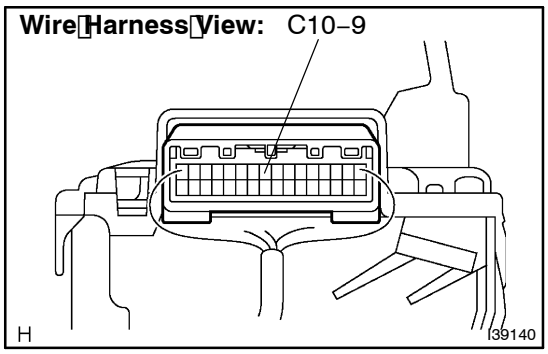
**OK:**

**Vehicle speed displayed on the tester is almost the same as the actual vehicle speed.**

**NG** → **GO TO BRAKE CONTROL SYSTEM (SEE PAGE 05–715)**

**OK**

| 2 | INSPECT COMBINATION METER ASSY |
|---|---|

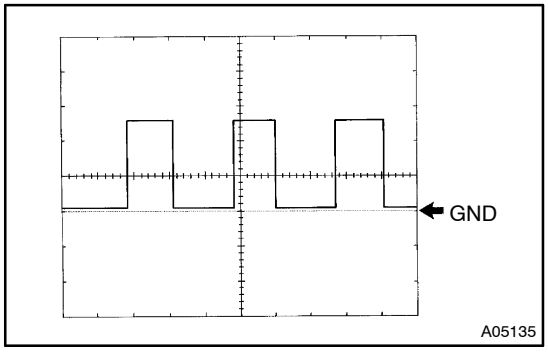



**INSPECTION USING OSCILLOSCOPE**

(a) Check the input signal waveform.

(1) Remove the combination meter assy.

(2) Connect the oscilloscope to the terminals C10–9 and body ground.




(3) Check the signal waveform according to the condition(s) in the table below.

| Item | Condition |
|---|---|
| Tool setting | 5 V/DIV, 20 ms/DIV |
| Vehicle condition | Driving at approx. 20 Km/h (12 mph) |

**OK:**

**As shown in the illustration**

HINT:

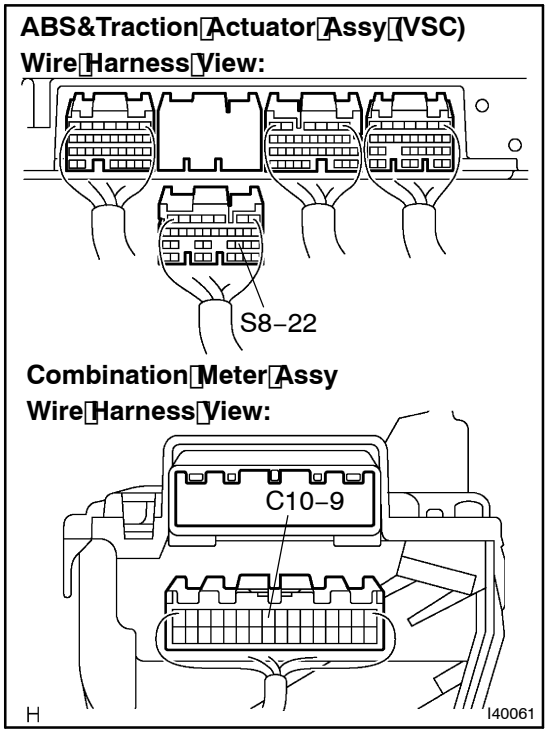
As vehicle speed increases, the cycle of the signal waveform narrows.

**NG** → **Go to step 3**

**OK**

**REPLACE COMBINATION METER ASSY (SEE PAGE 71–19)**

## 3 CHECK HARNESS AND CONNECTOR(ABS&TRACTION ACTUATOR ASSY(VSC) – COMBINATION METER ASSY)(SEE PAGE 01–36)




(a) Disconnect the C10 and S8 connectors.
(b) Measure the resistance according to the value(s) in the table below.

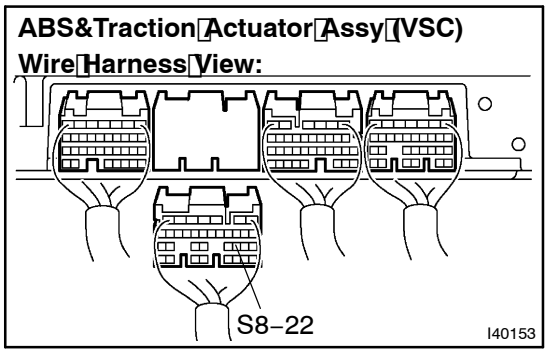
**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| C10–9 – S8–22 | Always | Below 1 Ω |
| C10–9 – Body ground | Always | 10 kΩ or higher |

NG → REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

## 4 INSPECT ABS&TRACTION ACTUATOR ASSY(VSC)




(a) Disconnect the S8 connector.
(b) Measure the voltage according to the value(s) in the table below.

**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| S8–22 – Body ground | Power switch ON (IG) | 10 to 14 V |

NG → REPLACE COMBINATION METER ASSY (SEE PAGE 71–19)

OK

GO TO BRAKE CONTROL SYSTEM(SEE PAGE 05–715)