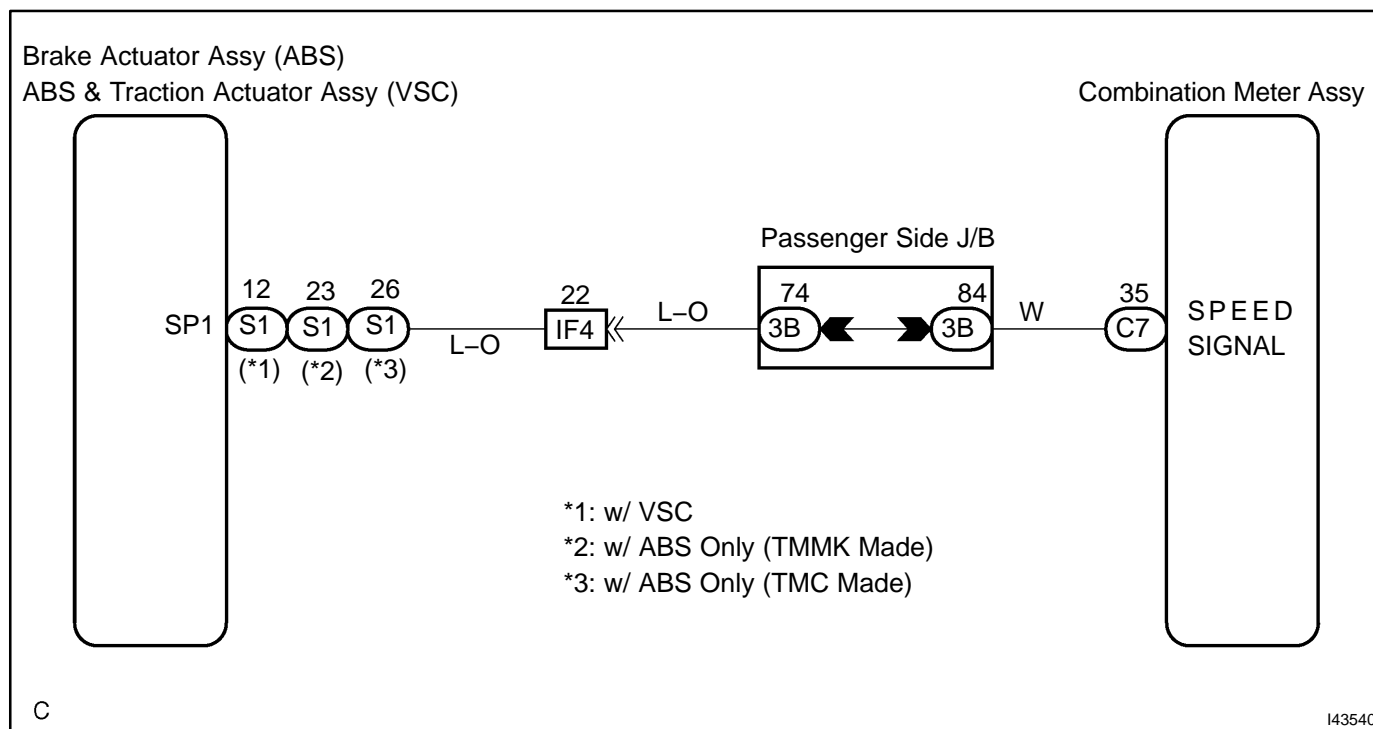


# MALFUNCTION IN SPEEDOMETER

## WIRING DIAGRAM



## INSPECTION PROCEDURE

### 1 READ VALUE OF HAND-HELD TESTER(VEHICLE SPEED SIGNAL)

(a) Operate the hand-held tester according to the steps on the display and select "DATA LIST".

**ABS:**

Item	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
(FR/FL/RR/RL) Wheel Speed	Vehicle speed/Min.: 0 km/h (0 mph), Max.: 255 km/h (158 mph)	Almost same as actual speed (When driving)	-

**OK:**

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

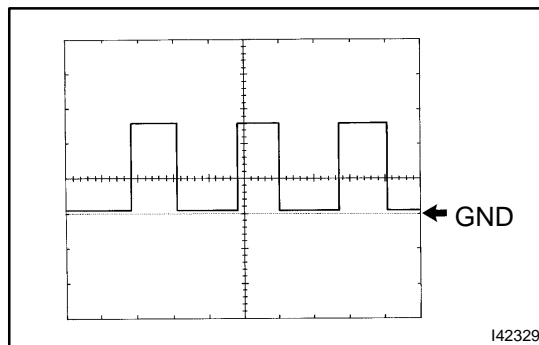
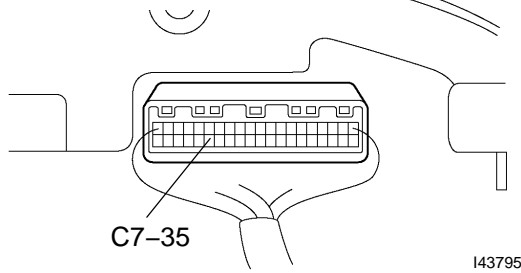
**NG**

**GO TO BRAKE CONTROL SYSTEM (SEE PAGE 05-983(w/ VSC), 05-870(w/ ABS (TMMK MADE), 05-930(w/ ABS (TMC MADE))**

**OK**

## 2 INSPECT COMBINATION METER ASSY

**Combination Meter Assy  
Wire Harness View:**



### INSPECTION USING OSCILLOSCOPE

- Remove the combination meter assy with the connectors still connected.
- Connect the oscilloscope to terminal C7-35 and body ground.
- Start the engine.
- Check the signal wave form 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 the vehicle speed increases, the cycle of the signal wave form narrows.

**Result:**

OK	A
NG (w/ VSC)	B
NG (w/ ABS only)	C

**B**

**Go to step 3**

**C**

**Go to step 5**

**A**

**REPLACE COMBINATION METER ASSY (SEE PAGE 71-29)**

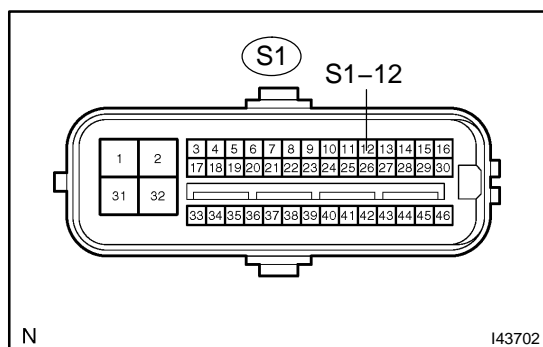
## 3 CHECK HARNESS OR CONNECTOR(BETWEEN ABS & TRACTION ACTUATOR ASSY (VSC) AND COMBINATION METER ASSY)

**NG**

**REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**

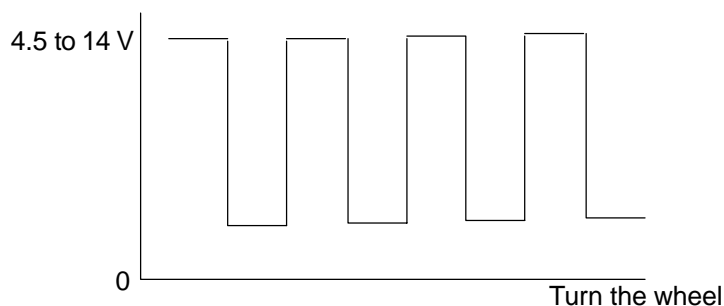
#### 4 INSPECT ABS&TRACTION ACTUATOR ASSY(VSC)



- Shift the shift lever to neutral.
- Jack up either of the front wheels.
- Turn the ignition switch to ON.
- Measure the voltage between terminal S1-12 of the VSC & traction actuator assy and body ground when the front wheel is turned slowly.

**OK:**

**Voltage is generated intermittently.**



**NG**

**REPLACE ABS&TRACTION ACTUATOR ASSY(VSC) (SEE PAGE 05-983)**

**OK**

**REPLACE COMBINATION METER ASSY (SEE PAGE 71-29)**

#### 5 CHECK HARNESS OR CONNECTOR(BETWEEN BRAKE ACTUATOR ASSY (ABS) AND COMBINATION METER ASSY)

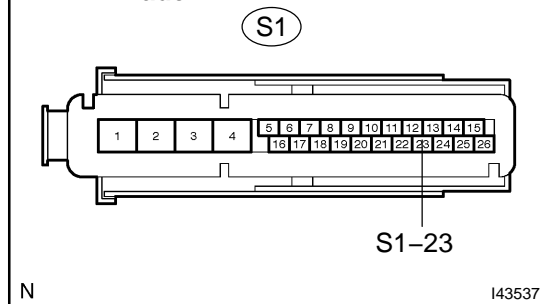
**NG**

**REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**

## 6 INSPECT BRAKE ACTUATOR ASSY(ABS)

**TMMK Made:**



- Shift the shift lever to neutral.
- Jack up either of the front wheels.
- Turn the ignition switch to ON.
- TMMK Made:

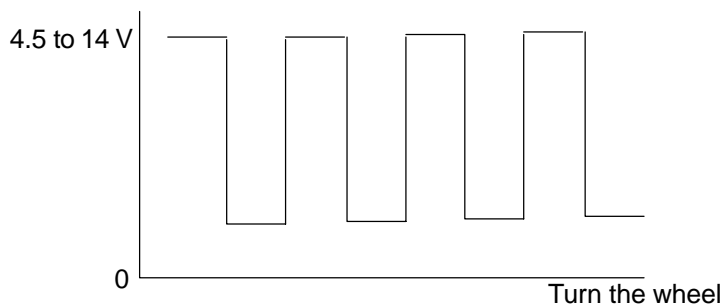
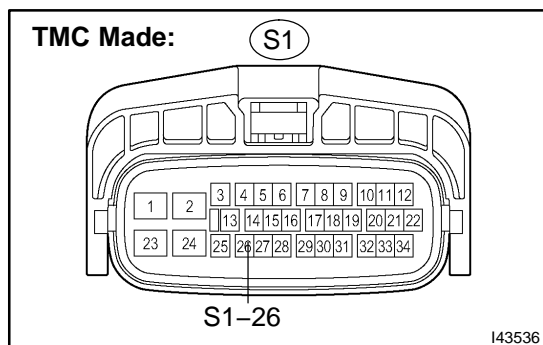
Measure voltage between terminal S1-23 of the brake actuator assy (ABS) and body ground when the front wheel turned slowly.

- TMC Made:

Measure the voltage between terminal S1-26 of the brake actuator assy (ABS) and body ground when the front wheel is turned slowly.

**OK:**

**Voltage is generated intermittently.**



**NG**

**REPLACE BRAKE ACTUATOR ASSY(ABS)**  
(SEE PAGE [05-870](#)(w/ ABS (TMMK MADE),  
[05-930](#)(w/ ABS (TMC MADE)))

**OK**

**REPLACE COMBINATION METER ASSY (SEE PAGE [71-29](#))**