ON–VEHICLE INSPECTION

05J11–01

1. INSPECT SPEEDOMETER

(a) Check the operation.

(1) Using a speedometer tester, inspect the speedometer for acceptable indication error and check the operation of the odometer.

Reference: km/h (Canada)

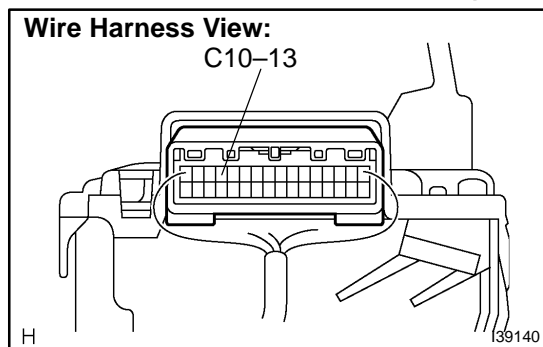| Standard indication	Acceptable range
20 km/h	18.0 to 22.0 km/h
40 km/h	38.0 to 42.0 km/h
60 km/h	58.0 to 62.0 km/h
80 km/h	78.0 to 82.0 km/h
100 km/h	97.0 to 103.0 km/h
120 km/h	117.0 to 123.0 km/h
140 km/h	137.0 to 143.0 km/h
160 km/h	157.0 to 163.0 km/h

Reference: mph (U.S.A)

Standard indication	Acceptable range
20 mph	18.0 to 22.0 mph
40 mph	38.0 to 42.0 mph
60 mph	59.0 to 63.0 mph
80 mph	79.0 to 83.0 mph
100 mph	99.0 to 104.0 mph
120 mph	119.0 to 125.0 mph

NOTICE:

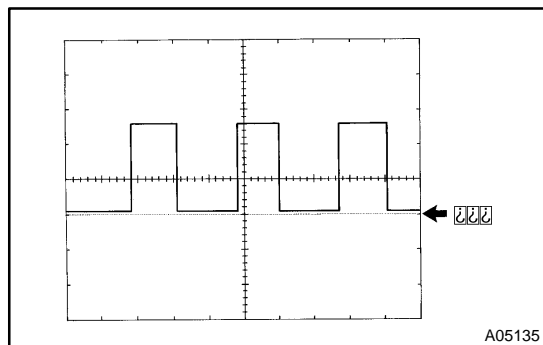**Tire wear and over or under tire pressure will affect indication error.**

(2) Check the deflection width of the speedometer indicator.

Reference: Below 0.5 km/h (0.3 mph)

Wire Harness View:

C10–13

H 39140

2. INSPECT OUTPUT SIGNAL OF VEHICLE SPEED

(a) Check the output signal waveform.

(1) Remove the combination meter assy.

(2) Connect the oscilloscope to the terminals C10–13 and body ground.

(3) Start the engine.

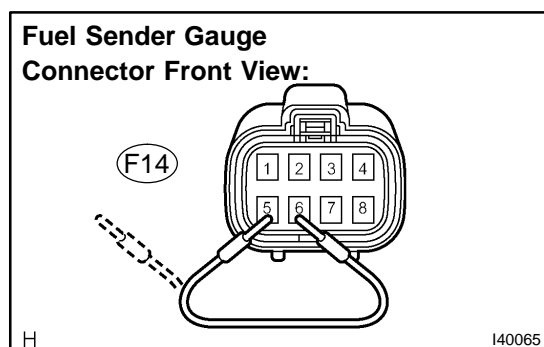(4) Check the signal waveform according to the condition (s) in the table below.

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.

A05135

**Fuel Sender Gauge
Connector Front View:**

F14

1 2 3 4
5 6 7 8

H   I40065

3.   INSPECT FUEL RECEIVER GAUGE
(a)   Disconnect the connector from the sender gauge.
(b)   Turn the power switch ON (IG) position, then check the position of the receiver gauge needle.
      OK:
      Needle position is on (EMPTY).
(c)   Connect terminals 5 and 6 on the wire harness side connector of the fuel sender gauge.
(d)   Turn the power switch to the ON (IG) position, then check the position of the receiver gauge needle.
      OK:
      Needle position is on (FULL).

4.   INSPECT FUEL LEVEL WARNING
(a)   Disconnect the connector from the sender gauge.
(b)   Turn the power switch ON (IG) position, then check that the fuel level needle indicates EMPTY and the fuel level warning light comes on.
      OK:
      EMPTY (The No.1 segment blinks).

5.   INSPECT LOW OIL PRESSURE WARNING LIGHT
(a)   Disconnect the connector from the low oil pressure switch.
(b)   Turn the power switch ON (IG) position.
(c)   Ground the terminal of the wire harness side connector, then check the master warning light.
      OK:
      Mster warning light comes on.

6.   INSPECT BRAKE WARNING LIGHT
(a)   Inspect the parking brake warning light.
      (1)   Disconnect the connector from the parking brake switch.
      (2)   Turn the power switch ON (IG) position.
      (3)   Ground the terminal of the wire harness side connector, then check the parking brake warning light.
      OK:
      Brake warning light comes on.
(b)   Inspect the brake fluid level warning light.
      (1)   Disconnect the connector from the brake fluid level warning switch.
      (2)   Turn the power switch ON (IG) position.
      (3)   Connect a terminal to the other terminal of the wire harness side connector, then check the brake fluid level warning switch.
      OK:
      Brake warning light comes on.

7.   INSPECT BRAKE FLUID LEVEL WARNING SWITCH

(a)   Remove the reservoir tank cap and strainer.

(b)   Disconnect the connector.

(c)   Measure the resistance between the terminals.
        Standard:
        Float up (switch off): 10 kΩ or higher

(d)   Use a syphon, etc. to take fluid out of the reservoir tank.

(e)   Measure the resistance between the terminals.
        Standard:
        Float down (switch on): Below 1 Ω

(f)   Pour the fluid back in the reservoir tank.

(g)   Reconnect the connector.

8.   MAINTENANCE LIQUID RESETTING PROCEDURE (U.S.A. models)

Indicator Condition:

State	Condition	Specified State
Blinking	The vehicle runs 4,500 miles after the previous setting	The indicator blinks for 15 seconds after the power switch on (IG) (including 3 seconds for a valve check).
Continuously Illuminated	The vehicle runs 5,000 miles after the previous setting	The indicator is continuously illuminated after the power switch on (IG).

(a)   Set the display window to ODO.

(b)   Turn the power switch off.

(c)   Pressing the reset switch, turn the power switch to the ON (IG) position (keep pressing for at least 5 seconds).

(d)   Reset procedure is completed.
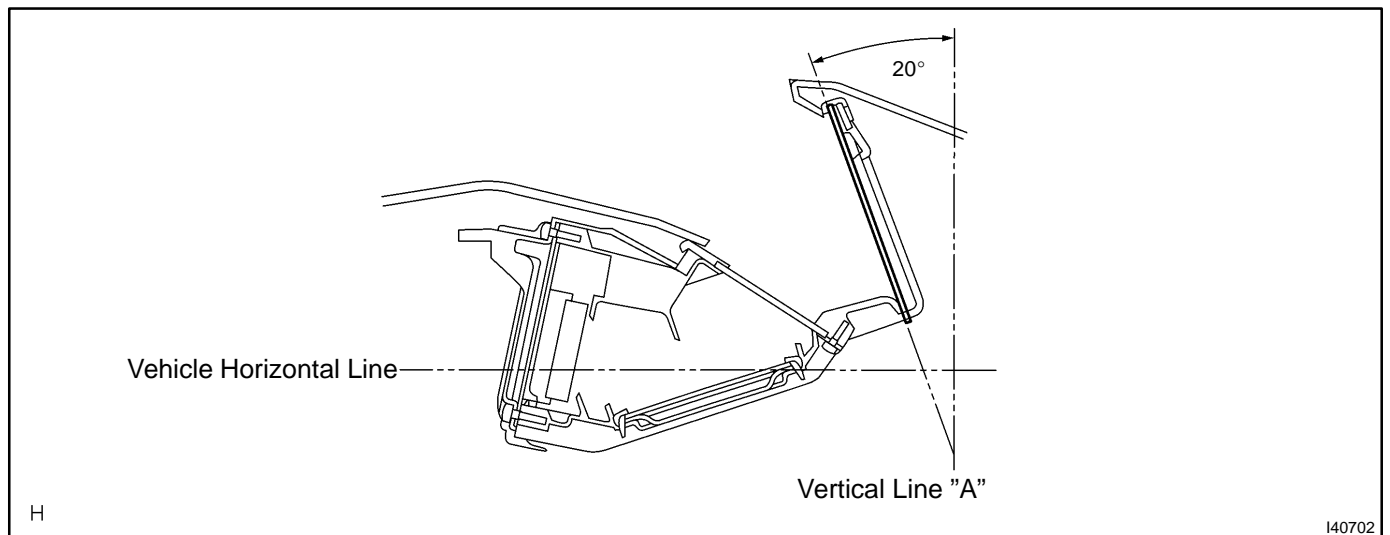
HINT:

•   If the power switch is turned off during reset procedure, reset mode is canceled.

•   If the reset switch is turned off during the reset procedure, reset mode is canceled and the display shows the condition prior to the reset procedure.

9.   CENTERED VALUE SETTING (INCLINATION SENSOR)

Perform the following procedures to correct inclination of the meter and inclination sensors when installing/ removing/replacing the meter or after replacing the inclination sensors or main base.

(a)   Setting procedure

        (1)   Connect the connector and install the mater securely in the position as shown in the illustration so that it is inclined at a 20 degree angle to the vehicle's vertical line A.

(2) Turn the power switch on while the trip switch is on.

(3) Within 5 seconds of turning the power switch on, push the trip switch two times.

(4) Within 5 seconds, push and hold the trip switch for 5 seconds or more. Turn the trip switch off and check that the inclination sensor information is displayed on the ODO display.

HINT:

Perform the procedure from step (2) again if there is not information displayed.

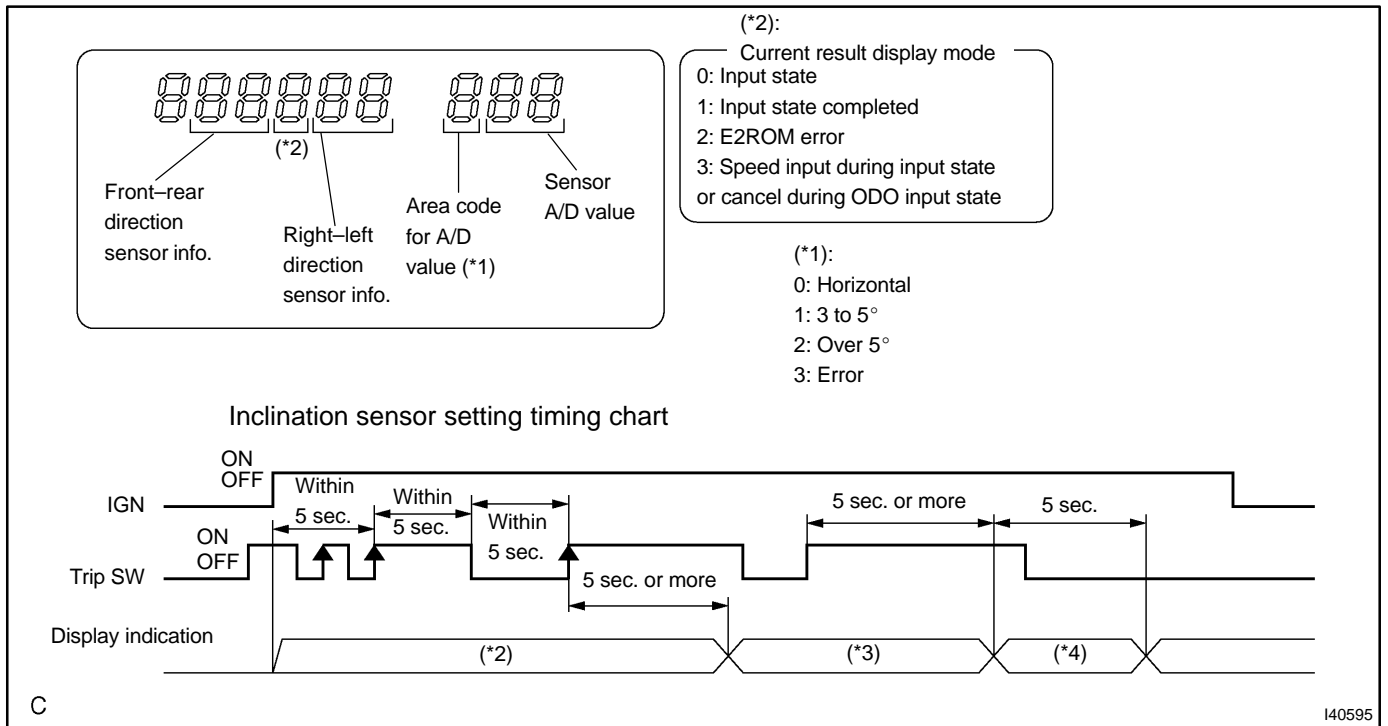(5) During the setting mode, push and hold the trip switch for 5 seconds or more to update the centered value.

HINT:

Turning the trip switch off within 5 seconds will return to the normal mode without updating the value.

(6) After the value is input into the meter display, the current result will be displayed on the third digit for 5 seconds.

HINT:

Do not turn the power switch off while the information is displayed. (Turning the power switch off will prevent the meter display from inputting the setting value.)

*2: ODO/TRIP display (Normal mode)
*3: Sensor information display (Setting mode)
*4: Current result display