DI8XR-02

	DTC	C1232 / 32, C1244 / 44	Deceleration Sensor Circuit	DIGAN-02
ı				

# **CIRCUIT DESCRIPTION**

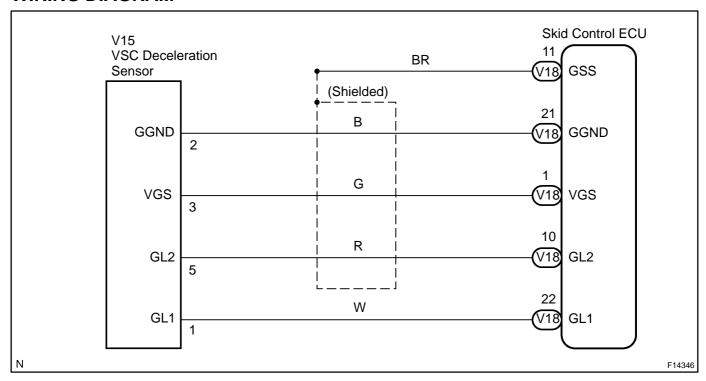
This sensor detects deceleration on the vehicle. The sensor signal is used in ABS & BA & TRAC & VSC. If the sensor functions abnormally, the ABS warning light comes on.

# **CIRCUIT DESCRIPTION**

DTC No.	DTC Detecting Condition	Trouble Area	
C1232 / 32	<ol> <li>Detection of either the condition 1. or 2.:</li> <li>At the vehicle speed of 10 km/h (6 mph) or more, when the condition that ECU terminal GL1 signal change range is less than 20 mV, and ECU terminal GL2 signal change range swings by 468 mV or more occurs for 30 sec. or more.</li> <li>At the vehicle speed of 10 km/h (6 mph) or more, the condition that ECU terminal GL2 signal change range is less than 20 mV, and ECU terminal GL1 signal change range swings by 468 mV or more occurs for 30 sec. or more.</li> </ol>	Deceleration sensor     Deceleration sensor circuit	
C1244 / 44	<ol> <li>Any of the conditions 1. through 4. is detected:</li> <li>The condition that ECU terminals GL1 and GL2 values are -1.5 G or less or 1.5 G or more continues for 1.2 sec. or more.</li> <li>The condition that the deceleration sensor terminal VGS voltage is 4.4 V or less or 5.6 V or more continues for 1.2 sec. or more.</li> <li>At the vehicle speed of 0 km/h (0 mph), after the difference of output value between deceleration sensor terminals GL1 and GL2 becomes 0.6 G or more, the condition that it does not become 0.4 G or less continues for 60 sec. or more.</li> <li>Deceleration sensor signal momentary open occurs for 7 times or more.</li> </ol>	Deceleration sensor     Deceleration sensor circuit	

Author: Date: 452

# **WIRING DIAGRAM**



## INSPECTION PROCEDURE

1 Check for open and short circuit in harness and connector between deceleration sensor and skid control ECU (See page IN-28).

NG

Repair or replace harness or connector.



2

Check deceleration sensor.

## In case of using the hand-held tester:

#### PREPARATION:

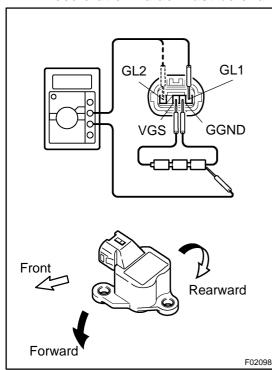
- (a) Connect the hand-held tester to DLC3.
- (b) Turn the ignition switch ON and turn the hand-held tester main switch ON.
- (c) Select the DATALIST mode on the hand-held tester.

#### CHECK:

Check that the deceleration value of the deceleration sensor observed in the hand-held tester is changing as the vehicle is tilted.

#### OK:

#### Deceleration value must be changing.



# In case of not using the hand-held tester:

## PREPARATION:

- (a) Remove the consol box.
- (b) Connect 3 dry batteries of 1.5 V in series.
- (c) Connect VGS terminal to the batteries' positive (+) terminal, and GGND terminal to the batteries' negative (-) terminal, apply about 4.5 V between VGS and GGND terminals.

### **NOTICE:**

# Do not apply voltage of 6 V or more to terminals VYS and GYAW.

#### CHECK:

Check the output voltage of GL1 and GL2 terminals when the sensor is tilted forward and rearward.

#### OK:

Symbols	Condition	Standard Value		
GL1	Horizontal	About 2.3 V		
GL1	Lean forward	0.4 V - about 2.3 V		
GL1	Lean rearward	About 2.3 V - 4.1 V		
GL2	Horizontal	About 2.3 V		
GL2	Lean forward	About 2.3 V - 4.1 V		
GL2	Lean rearward	0.4 V - about 2.3 V		

2002 4RUNNER (RM887U)

Author: Date: 454

## HINT:

- If the sensor is tilted too much it may show the wrong val-
- If dropped, the sensor should be replaced with a new one.
- The sensor removed from the vehicle should not be placed upside down.

NG

Replace deceleration sensor.

ΟK

Check and replace skid control ECU.

2002 4RUNNER (RM887U)

Author: Date: 455