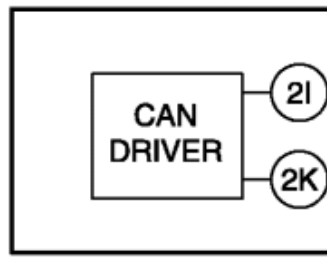


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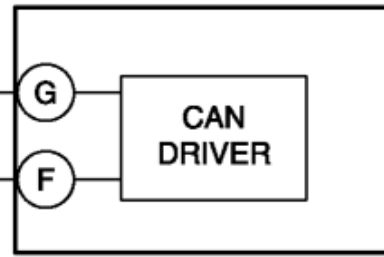
DTC U0028:87 [DYNAMIC STABILITY CONTROL (DSC)]

U0028:87	SAS control module system (CAN2 line malfunction)
DETECTION CONDITION	• Communication error with SAS control module is detected in CAN communication.
POSSIBLE CAUSE	• SAS control module malfunction • Connector or terminal malfunction • Short to ground in wiring harness between SAS control module terminal 2I and DSC HU/CM terminal G • Short to ground in wiring harness between SAS control module terminal 2K and DSC HU/CM terminal F • Open circuit in wiring harness between SAS control module terminal 2I and DSC HU/CM terminal G • Open circuit in wiring harness between SAS control module terminal 2K and DSC HU/CM terminal F • DSC HU/CM malfunction

SAS CONTROL MODULE



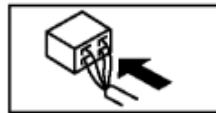
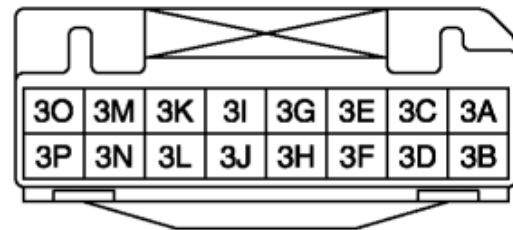
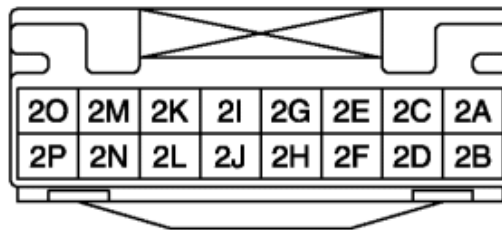
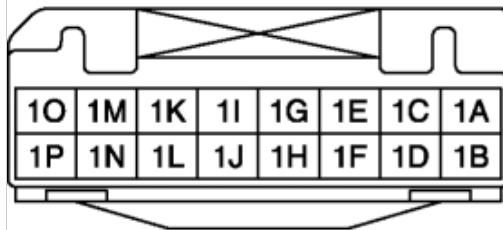
DSC HU/CM



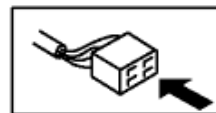
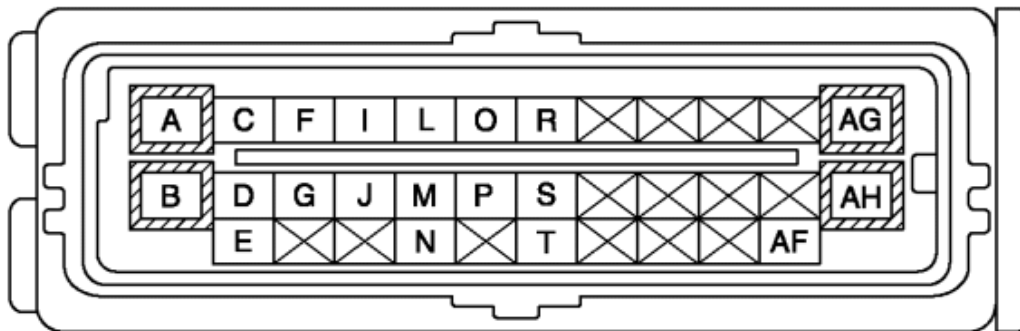
CAN2_H

CAN2_L

SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



DSC HU/CM WIRING HARNESS-SIDE CONNECTOR



Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT SAS CONTROL MODULE MALFUNCTION - Switch the ignition to off. - Using the M-MDS, perform the DTC inspection for the SAS control module. (See DTC INSPECTION.) - Are any DTCs detected?	Yes Go to applicable DTC inspection. (See DTC TABLE.) No Go to the next step.
2	INSPECT SAS CONTROL MODULE CONNECTOR CONDITION Switch the ignition to off.	Yes Repair or replace the connector or terminals, then go to Step 6.

	• Disconnect the negative battery cable. • Disconnect the SAS control module connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?		No Go to the next step.
3	INSPECT DSC HU/ CM CONNECTOR CONDITION • Disconnect the DSC HU/CM connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 6.
		No	Go to the next step.
4	INSPECT SAS CONTROL MODULE COMMUNICATION CIRCUIT FOR SHORT TO GROUND • Inspect for continuity between the following terminals and body ground: ▪ SAS control module terminal 2I (wiring harness-side) ▪ SAS control module terminal 2K (wiring harness-side) • Is there continuity?	Yes	Repair or replace the wiring harness for a possible short to ground, then go to Step 6.
		No	Go to the next step.
5	INSPECT SAS CONTROL MODULE POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT • Inspect for continuity between the following terminals: ▪ SAS control module terminal 2I (wiring harness-side) and DSC HU/CM terminal G (wiring harness-side) ▪ SAS control module terminal 2K (wiring harness-side) and DSC HU/CM terminal F (wiring harness-side) • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
6	VERIFY DTC TROUBLESHOOTING COMPLETED • Make sure to reconnect the disconnected connectors. • Reconnect the negative battery cable. • Clear the DTC from the DSC HU/CM memory using the M-MDS. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • Perform the DSC DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].)	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the DSC HU/CM, then go to the next step. (See DSC HU/ CM REMOVAL/ INSTALLATION .)
		No	Go to the next step.

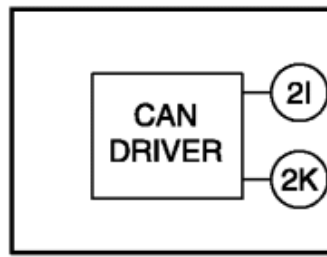
	Is the same DTC present?		
7	VERIFY AFTER REPAIR PROCEDURE Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)] .)
		No	DTC troubleshooting completed.

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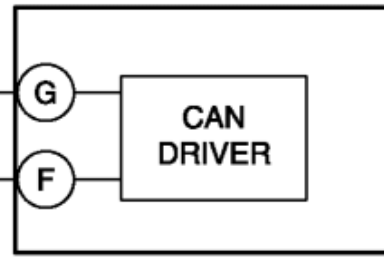
DTC U0028:87 [DYNAMIC STABILITY CONTROL (DSC)]

U0028:87	SAS control module system (CAN2 line malfunction)
DETECTION CONDITION	• Communication error with SAS control module is detected in CAN communication.
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SAS CONTROL MODULE



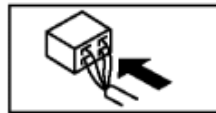
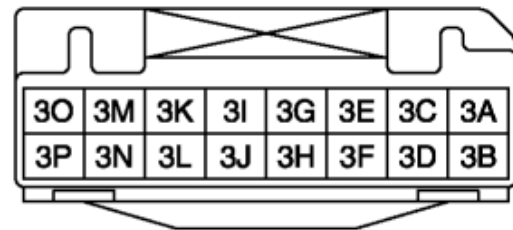
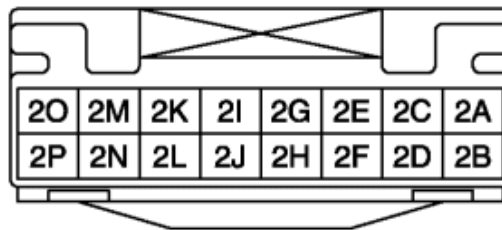
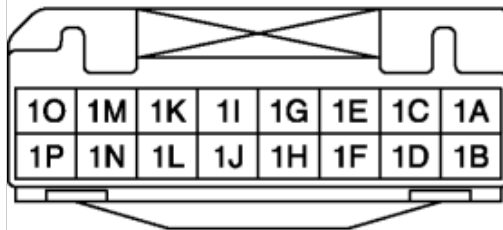
DSC HU/CM



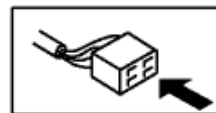
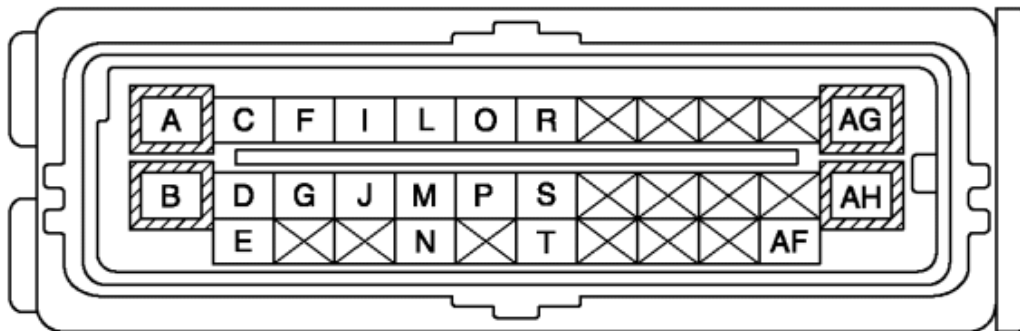
CAN2_H

CAN2_L

SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



DSC HU/CM WIRING HARNESS-SIDE CONNECTOR



Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT SAS CONTROL MODULE MALFUNCTION - Switch the ignition to off. - Using the M-MDS, perform the DTC inspection for the SAS control module. (See DTC INSPECTION.) - Are any DTCs detected?	Yes Go to applicable DTC inspection. (See DTC TABLE.) No Go to the next step.
2	INSPECT SAS CONTROL MODULE CONNECTOR CONDITION Switch the ignition to off.	Yes Repair or replace the connector or terminals, then go to Step 6.

	• Disconnect the negative battery cable. • Disconnect the SAS control module connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?		No Go to the next step.
3	INSPECT DSC HU/ CM CONNECTOR CONDITION • Disconnect the DSC HU/CM connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 6.
		No	Go to the next step.
4	INSPECT SAS CONTROL MODULE COMMUNICATION CIRCUIT FOR SHORT TO GROUND • Inspect for continuity between the following terminals and body ground: ▪ SAS control module terminal 2I (wiring harness-side) ▪ SAS control module terminal 2K (wiring harness-side) • Is there continuity?	Yes	Repair or replace the wiring harness for a possible short to ground, then go to Step 6.
		No	Go to the next step.
5	INSPECT SAS CONTROL MODULE POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT • Inspect for continuity between the following terminals: ▪ SAS control module terminal 2I (wiring harness-side) and DSC HU/CM terminal G (wiring harness-side) ▪ SAS control module terminal 2K (wiring harness-side) and DSC HU/CM terminal F (wiring harness-side) • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
6	VERIFY DTC TROUBLESHOOTING COMPLETED • Make sure to reconnect the disconnected connectors. • Reconnect the negative battery cable. • Clear the DTC from the DSC HU/CM memory using the M-MDS. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • Perform the DSC DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].)	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the DSC HU/CM, then go to the next step. (See DSC HU/ CM REMOVAL/ INSTALLATION .)
		No	Go to the next step.

	Is the same DTC present?		
7	VERIFY AFTER REPAIR PROCEDURE Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)] .)
		No	DTC troubleshooting completed.