DTC U3003:16 [REAR VEHICLE MONITORING SYSTEM]

id0902z2888800

System malfunction location	Rear vehicle monitoring control module (RH) low power supply voltage input				
Detection	• Power supply circuit voltage of 9 V or less is detected in rear vehicle monitoring control module (RH) for				
condition	1 s or more.				
Fail-safe	• Inhibits the rear vehicle monitoring system.				
Possible cause	 DTCs are stored in the PCM. Battery malfunction Generator malfunction Rear vehicle monitoring control module (RH) connector or terminal malfunction Rear vehicle monitoring control module (RH) power supply circuit malfunction Short to ground in wiring harness between C/U IG1 15 A fuse and rear vehicle monitoring control module (RH) terminal F C/U IG1 15 A fuse malfunction Open circuit in wiring harness between IG1 relay and rear vehicle monitoring control module (RH) terminal F Rear vehicle monitoring control module (RH) malfunction 				
	REAR VEHICLE MONITORING CONTROL MODULE (RH) RELAY AND FUSE BLOCK C/U IG1 15 A F				
REAR VEHICLE MONITORING CONTROL MODULE (RH) WIRING HARNESS-SIDE CONNECTOR					
	A C E G I K B D F G J L				

Diagnostic Procedure

Step	Inspection		Action
1	Perform the DTC inspection for the PCM using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST)	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See DTC TABLE [SKYACTIV-D 2.2].)
	[SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) • Is the DTC displayed?	No	Go to the next step.
2	INSPECT BATTERY Inspect the battery. (See BATTERY INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See BATTERY INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See BATTERY INSPECTION [SKYACTIV-D 2.2].) Is the battery normal?	Yes No	Go to the next step. Recharge or replace the battery, then go to Step 6. (See BATTERY RECHARGING [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See BATTERY RECHARGING [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See BATTERY RECHARGING [SKYACTIV-D 2.2].) (See BATTERY REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See BATTERY REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)

Step	Inspection		Action
3	INSPECT GENERATOR	Yes	Go to the next step.
	Inspect the generator. (See GENERATOR INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See GENERATOR INSPECTION [SKYACTIV-D 2.2].) Is the generator normal?	No	Replace the generator, then go to Step 6. (See GENERATOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See GENERATOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
4	INSPECT REAR VEHICLE MONITORING	Yes	Go to the next step.
	CONTROL MODULE (RH) CONNECTOR • Switch the ignition to off. • Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Disconnect the rear vehicle monitoring control modules (RH) connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is the connector normal?	No	Repair or replace the connector, then go to Step 6.
5	VERIFY REAR VEHICLE MONITORING	Yes	Go to the next step.
	CONTROL MODULE (RH) POWER SUPPLY VOLTAGE • Reconnect all the disconnected connectors. • Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Display PID VPWR_R using the M-MDS. (See PID/DATA MONITOR INSPECTION [REAR VEHICLE MONITORING SYSTEM].) • Is the voltage B+?	No	Inspect the C/U IG1 15 A fuse. If a fuse is burnt out: Repair or replace the wiring harness which is shorted to ground. Replace the fuse. If a fuse is damaged: Replace the fuse. If the fuse is normal: Repair or replace the wiring harness which has an open circuit. Go to the next step.

6	VERIFY THAT REPAIRS HAVE BEEN COMPLETED • Reconnect all the disconnected connectors.	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the rear vehicle
	Reconnect all the disconnected connectors. Reconnect the disconnected negative battery cable.		monitoring control module (RH), then go to the next step. (See REAR VEHICLE MONITORING CONTROL MODULE REMOVAL/INSTALLATION.)
	(See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Clear the DTC for the rear vehicle monitoring control module using the M-MDS. (See CLEARING DTC [REAR VEHICLE MONITORING SYSTEM].) • Switch the ignition ON (engine off or on) and wait for 1.5 s or more. • Perform the DTC inspection for the rear vehicle monitoring control module using the M-MDS. (See DTC INSPECTION [REAR VEHICLE MONITORING SYSTEM].) • Is DTC U3003:16 displayed?	No	Go to the next step.
7	• Are any other DTCs displayed?	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [REAR VEHICLE MONITORING SYSTEM].) DTC troubleshooting completed.