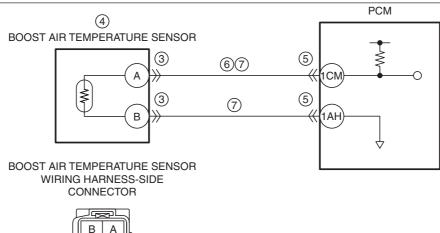
DTC P007D: 00	Boost air temperature sensor circuit high input
	 The PCM monitors the input signal from the boost air temperature sensor. If the voltage from the boost air temperature sensor is above 4.90 V for 1 s, the PCM determines that the boost air temperature sensor circuit has a malfunction. MONITORING CONDITIONS Battery voltage: 8—20 V
DETECTION	Diagnostic support note
CONDITION	This is a continuous monitor (CCM).
	• The check engine light illuminates if the PCM detects the above malfunction condition during the first drive
	cycle.
	• FREEZE FRAME DATA (Mode 2)/Snapshot data is available.
	• DTC is stored in the PCM memory.
	PCM restricts engine torque. Inhibite the first standard and to the control of the control
FAIL-SAFE	Inhibits the two-stage turbo control. Inhibits the EGR control.
FUNCTION	Inhibits the diesel particulate filter regeneration control.
TONCTION	Inhibits engine-stop by operating the i-stop function.
	PCM restricts engine-transaxle integration control.
	Intake air temperature is too low
	Boost air temperature sensor connector or terminals malfunction
	Boost air temperature sensor malfunction
	PCM connector or terminals malfunction
POSSIBLE CAUSE	• Short to power supply in wiring harness between boost air temperature sensor terminal A and PCM terminal 1CM
	Open circuit in wiring harness between the following terminals:
	Boost air temperature sensor terminal A—PCM terminal 1CM
	Boost air temperature sensor terminal B—PCM terminal 1AH
	• PCM malfunction
	PCM





	1BR1BM1BH1BC1AX1AS1AN1AI						
1EF 1EB 1DX 1DT 1DP 1DL 1DH 1DB 1CX 1CT 1CP 1CL 1CH 1CD 1BZ	1BS 1BN 1BI 1BD 1AY 1AT 1AO 1AJ 1AE 1Z 1U 1P 1K 1F 1B						
	1BT 1BO 1BJ 1BE 1AZ 1AU 1AP 1AK 1AF 1AA 1V 1Q 1L 1G 1C						
1EI 1EG 1EC 1DY 1DU 1DQ 1DM 1DI 1DE 1DC 1CY 1CU 1CQ 1CM 1CI 1CE 1CA 1BW	1BU 1BP 1BK 1BF 1BA 1AV 1AQ 1AL 1AG 1AB 1W 1R 1M 1H 1D						
1EJ 1EH 1ED 1DZ 1DV 1DR 1DN 1DJ 1DF 1DD 1CZ 1CV 1CR 1CN 1CJ 1CF 1CB 1BX	1BV 1BQ 1BL 1BG 1BB 1AW 1AR 1AM 1AC 1X 1S 1N 1I						



Diagnostic Procedure

STEP	INSPECTION		ACTION
1	VERIFY FREEZE FRAME DATA (MODE 2)/	Yes	Go to the next step.
'	SNAPSHOT DATA HAS BEEN RECORDED	No	Record the FREEZE FRAME DATA (Mode 2)/snapshot data
	Has the FREEZE FRAME DATA (Mode 2)/	INO	on the repair order, then go to the next step.
	snapshot data been recorded?		on the repair order, then go to the next step.
2	VERIFY RELATED SERVICE INFORMATION	Yes	Perform repair or diagnosis according to the available
	AVAILABILITY	165	Service Information.
	Verify related Service Information availability.	NIa	• If the vehicle is not repaired, go to the next step.
	• Is any related Service Information available?	No	Go to the next step.
3	INSPECT BOOST AIR TEMPERATURE SENSOR	Yes	Repair or replace the connector and/or terminals, then go to
	CONNECTOR CONDITION	NI-	Step 8.
	Switch the ignition off. Discourse at the heart six terms are true assess.	No	Go to the next step.
	Disconnect the boost air temperature sensor connector.		
	 Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). 		
4	• Is there any malfunction? INSPECT BOOST AIR TEMPERATURE SENSOR	Vaa	Deplete the beast six to represent up conservations as to Oten
4		Yes	Replace the boost air temperature sensor, then go to Step
	• Inspect the boost air temperature sensor.		8.
	(See BOOST AIR TEMPERATURE SENSOR		(See BOOST AIR TEMPERATURE SENSOR REMOVAL/
	INSPECTION [SKYACTIV-D 2.2].)	NI-	INSTALLATION [SKYACTIV-D 2.2].)
	• Is there any malfunction?	No	Go to the next step.
5	INSPECT PCM CONNECTOR CONDITION	Yes	Repair or replace the connector and/or terminals, then go to
	Disconnect the PCM connector.	NI-	Step 8.
	• Inspect for poor connection (such as damaged/	No	Go to the next step.
	pulled-out pins, corrosion).		
	• Is there any malfunction?	V	On the the provide to a
6	INSPECT BOOST AIR TEMPERATURE SENSOR	Yes	Go to the next step.
	CIRCUIT FOR SHORT TO POWER SUPPLY	No	Repair or replace the wiring harness for a possible short to
	Verify that the boost air temperature sensor and		power supply, then go to Step 8.
	PCM connectors are disconnected.		
	Switch the ignition ON (engine off).		
	Measure the voltage at the boost air temperature appear terminal A (wiring barrage side)		
	sensor terminal A (wiring harness-side).		
7	• Is the voltage 0 V?	Voo	Co to the payt stan
7	INSPECT BOOST AIR TEMPERATURE SENSOR	Yes	Go to the next step.
	CIRCUIT FOR OPEN CIRCUIT	No	Repair or replace the wiring harness for a possible open
	Verify that the boost air temperature sensor and		circuit, then go to the next step.
	PCM connectors are disconnected.		
	Switch the ignition off. I have at far continuity between the fallowing.		
	Inspect for continuity between the following terminals (wiring barrages side):		
	terminals (wiring harness-side):		
	Boost air temperature sensor terminal A— PCM terminal 1CM		
	Boost air temperature sensor terminal B— PCM terminal 1AH		
	Is there continuity?		
8	VERIFY DTC TROUBLESHOOTING	Yes	Repeat the inspection from Step 1.
0	COMPLETED	168	If the malfunction recurs, replace the PCM.
	Always reconnect all disconnected connectors.		(See PCM REMOVAL/INSTALLATION [SKYACTIV-D
	Clear the DTC from the PCM memory using the		2.2].)
	M-MDS.		Go to the next step.
	(See AFTER REPAIR PROCEDURE	No	Go to the next step.
	[SKYACTIV-D 2.2].)	INU	GO to the next step.
	Perform the KOEO or KOER self test.		
	(See KOEO/KOER SELF TEST [SKYACTIV-D		
	2.2].)		
	Is the same DTC present?		
	- 19 the same DTO present!		

STEP	INSPECTION		ACTION
9	VERIFY AFTER REPAIR PROCEDURE	Yes	Go to the applicable DTC inspection.
	Perform the "AFTER REPAIR PROCEDURE".		(See DTC TABLE [SKYACTIV-D 2.2].)
	(See AFTER REPAIR PROCEDURE	No	DTC troubleshooting completed.
	[SKYACTIV-D 2.2].)		
	Are any DTCs present?		