CASE

REPAIR MANUAL

5.9 L Engine Electronic Control System - CX240

6-11390

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STEP 1B: Verify that the automatic transmission is set correctly for application.

Condition:		
Action	**Specification/Repair**	**Next Step**
Verify that automatic transmission is set correctly for application. • Verify that this feature is activated if an automatic transmission is used, or deactivated if a manual transmission is used, using the on-board diagnostic system.	**OK** **Automatic transmission set correctly.**	1C
	NOT OK Adjust the feature setting to its correct value using the on-board diagnostic systemthe on-board diagnostic system.	3A

STEP 1C: Verify that application type is set correctly for application.

Condition:		
Action	**Specification/Repair**	**Next Step**
Verify that application type is set correctly for application.	**OK** **Application type set correctly.**	2A
• Verify that this feature setting is set correctly for the application in which this vehicle is used, using the on-board diagnostic system. **NOTE:** Driving for extended periods in lower gears is considered an on/off highway application.	**NOT OK** Adjust the feature setting to its correct value using the on-board diagnostic system.	3A

STEP 2: Look for signs of tampering.

STEP 2A: Inspect the VSS.

Condition:		
Action	**Specification/Repair**	**Next Step**
Inspect the VSS for: • Improper mounting of the VSS. • VSS improperly connected to OEM harness. • Other external device connected in place of VSS. • Any evidence that tampering with the VSS has taken place.	**OK** **No signs of tampering detected at or with the vehicle speed sensor.**	2B
	NOT OK **VSS is improperly installed, connected, or has been tampered with.** • Correctly install and connect the VSS to the OEM harness. Refer to Procedure 019-090 or 019-091. • Remove any tampering device.	3A

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TROUBLESHOOTING SUMMARY

△ CAUTION △

To avoid damaging a new ECM, all other active fault codes must be investigated prior to replacing the ECM.

STEPS		SPECIFICATIONS	SRT CODE
STEP 1: Check for static timing or engine speed sensor fault.			
STEP 1A:	Read the fault codes.	Fault Code 115 or 364 inactive.	
STEP 2: Check the engine harness.			
STEP 2A:	Inspect the engine harness, fuel pump, and the ECM connectors.	No damaged pins.	
STEP 2B:	Check for an open circuit.	Less than 10 ohms.	
STEP 2C:	Check for a short circuit to ground.	More than 100k ohms.	
STEP 2D:	Check for a short circuit from pin to pin.	More than 100k ohms.	
STEP 3: Check VP44 fuel pump static timing.			
STEP 3A:	Verify fuel pump static timing is correct.	Static timing correct.	
STEP 4: Clear the fault codes.			
STEP 4A:	Disable the fault codes.	Fault code 369 inactive.	
STEP 4B:	CLear the inactive fault codes.	All fault codes cleared.	

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STEP 2D: Check for a short circuit from pin to pin.

Δ WARNING Δ

Wait until the coolant temperature is below 50 °C [120 °F] before removing the coolant system pressure cap or the coolant temperature sensor. Failure to do so can cause personal injury from heated coolant spray.

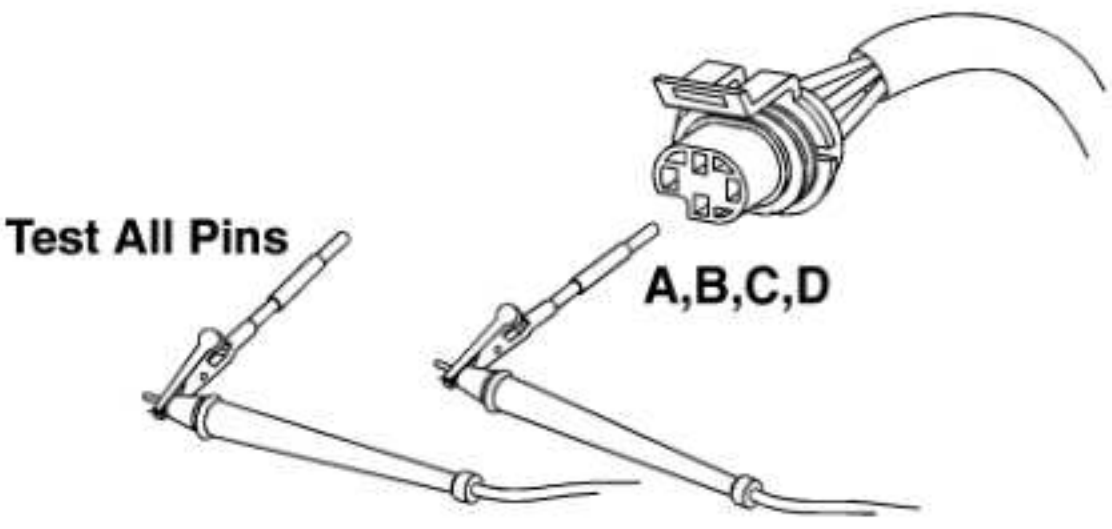
Δ CAUTION Δ

To avoid pin and harness damage, use the following test leads when taking a measurement:
Male Deutsch test lead.

Condition:

- Key switch in the "OFF" position.
- Disconnect the engine harness from the coolant level sensor jumper harness.
- Disconnect the coolant level sensor jumper harness from the coolant level sensor.

Action	Specification/Repair	Next Step
Check for a short circuit from pin to pin. • Measure the resistance from pin A on the coolant level sensor jumper harness connector to all other pins in the connector. • Measure the resistance from pin B on the coolant level sensor jumper harness connector to all other pins in the connector. • Measure the resistance from pin C on the coolant level sensor jumper harness connector to all other pins in the connector. • Measure the resistance from pin D on the coolant level sensor jumper harness connector to all other pins in the connector.	**OK** **More than 100k ohms.**	3A
	NOT OK **Repair or replace the coolant level sensor jumper harness.** • Refer to the OEM troubleshooting and repair manual.	4A



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