

Diagnostics in this article assume a certain skill level and knowledge of Ford-specific diagnostic practices.
REFER to: Diagnostic Methods .

Condition	Possible Sources	Action
A module does not respond to the diagnostic scan tool	Fuse Wiring, terminals or connectors Module	REFER to: Communications Network .

DIAGNOSIS AND TESTING > BODY CONTROL MODULE (BCM) > PINPOINT TESTS > PINPOINT TEST A : U0100:87

Normal Operation and Fault Conditions

The BCM communicates with the PCM over the HS-CAN. REFER to: Communications Network - System Operation and Component Description .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
U0100:87	Lost Communication With ECM/PCM "A": Missing Message	A continuous memory DTC that sets in the BCM if powertrain data messages received from the PCM over the HS-CAN are missing.

Possible Sources

- Communication network concern
- Charging system concern
- PCM
- BCM

DIAGNOSIS AND TESTING > BODY CONTROL MODULE (BCM) > PINPOINT TESTS > PINPOINT TEST A : U0100:87 > PINPOINT TEST A : U0100:87



NOTE: If new modules were installed prior to the DTC being set, the module configuration may be incorrectly set during the PMI or the PMI may not have been carried out.

A1 VERIFY THE DIAGNOSTIC SCAN TOOL COMMUNICATES WITH THE PCM (POWERTRAIN CONTROL MODULE)

Ignition ON.

Connect the diagnostic scan tool.

Check that a vehicle session can be established using the diagnostic scan tool.

Can a vehicle session be established?

Yes	GO to A2
No	DIAGNOSE the PCM not communicating with the diagnostic scan tool. REFER to: Communications Network .

A2 RECHECK THE BCM (BODY CONTROL MODULE) CONTINUOUS MEMORY DIAGNOSTIC TROUBLE CODES (CMDTCS)

Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).

Wait 10 seconds.

Using a diagnostic scan tool, check the BCM Continuous Memory Diagnostic Trouble Codes (CMDTCs).

Is DTC U0100:87 retrieved again?

Yes	GO to A3
No	The system is operating correctly at this time. The DTC may have been set due to high network traffic or an intermittent fault condition.

A3 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE PCM (POWERTRAIN CONTROL MODULE) KOEO (KEY ON, ENGINE OFF) SELF-TEST

Using a diagnostic scan tool, perform the PCM KOEO self-test.

Are any voltage system related Diagnostic Trouble Codes (DTCs) present?

Yes	2.7L EcoBoost REFER to: ELECTRONIC ENGINE CONTROLS . 3.5L Duratec REFER to: ELECTRONIC ENGINE CONTROLS . 3.5L EcoBoost REFER to: ELECTRONIC ENGINE CONTROLS . 5.0L 32V Ti-VCT REFER to: ELECTRONIC ENGINE CONTROLS
No	GO to A4

A4 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE BCM (BODY CONTROL MODULE) SELF-TEST

Using a diagnostic scan tool, perform the BCM self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to the BCM DTC Chart .
No	GO to A5

A5 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0100 SET IN OTHER MODULES

Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).

Ignition OFF.

Ignition ON.

Wait 10 seconds.

Using a diagnostic scan tool, retrieve **all** Continuous Memory Diagnostic Trouble Codes (CMDTCs).

Is DTC U0100 set in any other module?

Yes	GO to A6
No	GO to A7

A6 CHECK FOR CORRECT PCM (POWERTRAIN CONTROL MODULE) OPERATION

Disconnect and inspect all PCM connectors.

Repair:

corrosion (install new connector or terminals - clean module pins)

damaged or bent pins - install new terminals/pins

pushed-out pins - install new pins as necessary

Reconnect the PCM connectors. Make sure they seat and latch correctly.

Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. 2.7L EcoBoost REFER to: POWERTRAIN CONTROL MODULE (PCM) . 3.5L Duratec REFER to: POWERTRAIN CONTROL MODULE (PCM) . 3.5L EcoBoost REFER to: POWERTRAIN CONTROL MODULE (PCM) . 5.0L 32V Ti-VCT REFER to: POWERTRAIN CONTROL MODULE (PCM) .
No	The system is operating correctly at this time. The concern may have been caused by module connections. ADDRESS the root cause of any connector or pin issues.

A7 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

Disconnect and inspect all BCM connectors.

Repair: