- Make sure BCM fuse 4 (5A) is OK.
- Make sure the trailer brakes are electric-magnet actuated drum type brakes.

DIAGNOSIS AND TESTING > AUXILIARY BRAKE SYSTEM - VEHICLES WITH: TRAILER BRAKE CONTROL > PINPOINT TESTS > PINPOINT TEST A : THE TRAILER BRAKES ARE INOPERATIVE > PINPOINT TEST A : THE TRAILER BRAKES ARE INOPERATIVE

NOTE: Use the correct probe adapter(s) when making measurements. Failure to use the correct probe adapter(s) may cause damage to the connector.

A1 CHECK FOR BCM (BODY CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

Ignition ON.

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

Are any Diagnostic Trouble Codes (DTCs) present in the BCM?

Yes	DIAGNOSE all BCM Diagnostic Trouble Codes (DTCs). REFER to: Body Control Module (BCM) .

No	GO to A2

A2 CHECK FOR ABS (ANTI-LOCK BRAKE SYSTEM) MODULE DIAGNOSTIC TROUBLE CODES (DTCS)

Using a diagnostic scan tool, carry out the ABS module self-test.

Are any Diagnostic Trouble Codes (DTCs) present in the ABS module?

Yes	DIAGNOSE all ABS module Diagnostic Trouble Codes (DTCs). REFER to: Anti-Lock Brake System (ABS) and Stability Control .

No	GO to A3

A3 CHECK FOR TBM (TRAILER BRAKE CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

Using a diagnostic scan tool, carry out the TBM self-test.

Does the TBM communicate with the diagnostic scan tool?

Yes	If there are Diagnostic Trouble Codes (DTCs) in the TBM, DIAGNOSE all TBM Diagnostic

	Trouble Codes (DTCs). GO to the DTC Chart: TBM . If there are no Diagnostic Trouble Codes (DTCs) in the TBM, GO to A4

No	DIAGNOSE the TBM does not communicate with the diagnostic scan tool. REFER to: Communications Network .

A4 CHECK THE BCM (BODY CONTROL MODULE) BRAKE SWITCH 2 (BOO_2) PID (PARAMETER IDENTIFICATION)

Using a diagnostic scan tool, monitor the BCM BOO_2 PID while pressing and releasing the brake pedal.

Does the BOO_2 PID display ON with the brake pedal pressed and OFF with the brake pedal released?

Yes	GO to A5

No	DIAGNOSE the vehicle stoplamps. REFER to: Stoplamps .

A5 CHECK THE TBM (TRAILER BRAKE CONTROL MODULE) BRAKE SWITCH (BRAKE_SW) PID (PARAMETER IDENTIFICATION)

Using a diagnostic scan tool, monitor the TBM BRAKE_SW PID while pressing and releasing the brake pedal.

Does the BRAKE_SW PID display ON with the brake pedal pressed and OFF with the brake pedal released?

Yes	GO to A8

No	GO to A6

A6 CHECK THE TBM (TRAILER BRAKE CONTROL MODULE) BPP (BRAKE PEDAL POSITION) SWITCH INPUT CIRCUIT FOR A SHORT TO GROUND

Ignition OFF.

Disconnect TBM C2142 .

Disconnect BCM C2280A .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2142-12	Ω	Ground

Is the resistance greater than 10, 000 ohms?

Yes	GO to A7

No	REPAIR the circuit.

A7 CHECK THE TBM (TRAILER BRAKE CONTROL MODULE) BPP (BRAKE PEDAL POSITION) SWITCH INPUT CIRCUIT FOR AN OPEN

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2142-12	Ω	C2280A-13

Is the resistance less than 3 ohms?

Yes	VERIFY BCM fuse 4 (5A) is OK. If not OK, REFER to the SYSTEM WIRING DIAGRAMS article to identify the cause of the circuit short. If OK, GO to A10

No	REPAIR the circuit.

A8 CHECK THE TBM (TRAILER BRAKE CONTROL MODULE) PWM (PULSE WIDTH MODULATION) OUTPUT CIRCUIT FOR A SHORT TO GROUND

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2142-14	Ω	Ground

Is the resistance greater than 10, 000 ohms?

Yes	GO to A9

No	REPAIR the circuit.

A9 CHECK THE TBM (TRAILER BRAKE CONTROL MODULE) PWM (PULSE WIDTH MODULATION) OUTPUT CIRCUIT FOR AN OPEN

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2142-14	Ω	C4099-3

Is the resistance less than 3 ohms?

Yes	GO to A10