

Normal Operation

When the ELD MSS is engaged to lock the rear differential, the ELD MSS opens allowing the voltage being monitored by the TCCM to go high. When the TCCM senses the voltage is high it activates the ELD. The TCCM sends a message to the IPC via the HS-CAN requesting the IPC illuminate the ELD message center indicator.

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
P185A:00	Differential Lock-Up Input Switch Circuit High: No Sub Type Information	If the ELD is functioning normally, the differential immediately locks when the ELD MSS is activated and the ELD operating conditions are qualified. This DTC only displays during the self-test function.

Possible Sources

- Wiring, terminals or connectors
- TCCM
- MSS



NOTE: Make sure the battery is fully charged before carrying out this pinpoint test.

DIAGNOSIS AND TESTING > ELECTRONIC LOCKING DIFFERENTIAL (ELD) > PINPOINT TESTS > PINPOINT TEST A : DTC P185A:00 > PINPOINT TEST A : DTC P185A:00

A1 CHECK FOR TCCM DTCS



NOTE: Failure to place the ELD MSS in OFF position prior to carrying out a self-test of the TCCM Module results in the false setting of DTC P185A:00.

Ignition ON.

Set the ELD MSS to OFF.

Enter the following diagnostic mode: TCCM Self-Test.

Are any DTCs present?

Yes	If only DTC P185A:00 is retrieved, GO to A2
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	For any other DTCs, REFER to the DTC Chart .
No	IDENTIFY the customer concern and GO to Symptom Chart: ELD .

A2 CHECK THE LOCKER MODE SWITCH CIRCUIT FOR A SHORT TO VOLTAGE

Ignition OFF.

Disconnect TCCM C2371A .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2371A-15		Ground

Is any voltage present?

Yes	GO to A3
No	GO to A4

A3 CHECK THE LOCKER MODE SWITCH CIRCUIT FOR A SHORT TO VOLTAGE

Ignition OFF.

Disconnect MSS C284 .

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2371A-15		Ground

Is any voltage present?

Yes	REPAIR circuit. CLEAR the DTCs.
No	INSTALL a new MSS

A4 CHECK THE LOCKER MODE SWITCH CIRCUIT FOR AN OPEN

Ignition OFF.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C284-5	Ω	C2371A-15

Is the resistance less than 3 ohms?

Yes	GO to A5
No	REPAIR the circuit.

A5 CHECK THE MSS

Connect MSS Switch C284 .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2371A-15	Ω	Ground

Is the resistance between 24 - 24.5 ohms with the ELD MSS de-activated and greater than 10, 000 ohms with the ELD MSS activated?

Yes	GO to A7
No	INSTALL a new MSS. REFER to: Mode Select Switch (MSS) .

A6 CHECK THE LOCKER MODE SWITCH GROUND CIRCUIT FOR AN OPEN

Ignition OFF.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C284-1	Ω	Ground

Is the resistance less than 3 ohms?

Yes	GO to A7
No	REPAIR the circuit.

A7 CHECK FOR CORRECT TCCM OPERATION

Ignition OFF.