

PUBLISHED: 30-SEP-2019
2020.0 DEFENDER (LE), 502-03

TOWBAR

TOWBAR CONTROL MODULE (G2417005)

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PRINCIPLES OF OPERATION

 CAUTION:

Diagnosis by substitution from a donor vehicle is **NOT** acceptable. Substitution of control modules does not guarantee confirmation of a fault and may also cause additional faults in the vehicle being checked and/or the donor vehicle

 NOTES:

- If the control module or a component may be at fault and the vehicle remains under manufacturer warranty, refer to the Warranty Policy and Procedures manual, or determine if any prior approval program is in operation, prior to the installation of a new module/component
- When performing voltage or resistance tests, always use a digital multimeter (DMM) accurate to three decimal places, and with an up-to-date calibration certificate. When testing resistance, always take the resistance of the DMM leads into account

For a detailed description of the towbar control module system and operation, refer to the relevant section of the workshop manual

INSPECTION AND VERIFICATION

1. Verify the customer concern
2. Visually inspect for obvious signs of mechanical or electrical damage

Visual Inspection

MECHANICAL	ELECTRICAL
■ Deployable towbar mechanism and motor ■ Check for free movement of towing socket	■ Fuses ■ Battery junction box ■ Rear junction box ■ Wiring harness ■ Loose or corroded connector(s) ■ Deployable towbar motor and control module ■ Deployable towbar switch ■ Deployable towbar status indicator

3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step

4. If the cause is not visually evident, verify the symptom and refer to the table below

DEPLOYABLE TOWBAR - DIAGNOSIS AND TESTING

Deployable Towbar - Security system status indicators and tones

The towbar control module is able to communicate various status and fault indicators through a speaker and the LED on the towbar deploy switch. Details of these status indicator codes are included in the table below. Further diagnostic information can be obtained by reading any DTCs set by the towbar control module

FUNCTION	STONE	STONE DURATION	SECURITY SYSTEM STATUS INDICATOR	SECURITY SYSTEM STATUS INDICATOR DURATION	USER ACTION REQUIRED
Towbar deploying	Slow beep	Until action is complete	Slow flashing	Until action is complete	None - Wait for action to complete
Towbar stowing					
Towbar running recovery cycle					
Towbar movement obstructed	Fast beep	Two seconds	Fast flashing	Two seconds	Remove load or obstruction and operate towbar to start recovery cycle
Inhibit not met error	Fast beep	One second	Fast flashing	One second	Make sure the vehicle is not in gear and not moving and that the tailgate is open before attempting to operate the towbar
User requested stop	Fast beep	One second	Fast flashing	One second	When towbar action is to be restarted, operate towbar to start recovery cycle
Towbar not locked	Fast beep	Ten seconds	Very fast flashing	As long as vehicle systems are operating	Do not attempt to tow with the towbar in this state. Operate the towbar to start recovery cycle
Towbar fault	Fast beep	Five seconds	Very fast flashing	As long as vehicle systems are operating	Do not attempt to tow with the towbar in this state
Recovery cycle failed	Fast beep	Two seconds	Very fast flashing	As long as vehicle systems are operating	Do not attempt to tow with the towbar in this state
Deploy complete	None	n/a	ON	As long as vehicle systems are operating	n/a

FUNCTION	tone	tone duration	SECURITY SYSTEM STATUS INDICATOR	SECURITY SYSTEM STATUS INDICATOR DURATION	USER ACTION REQUIRED
Recovery complete					
Stow complete	None	n/a	ON	2 seconds	■ n/a

DTC INDEX

For a list of diagnostic trouble codes that could be set on this vehicle, please refer to Section 100-00. REFER to: [Diagnostic Trouble Code Index - DTC: Tow Bar Control Module \(TBM\)](#) (100-00 General Information, Description and Operation).

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