

**DIAGNOSIS AND TESTING > AUXILIARY BRAKE SYSTEM - VEHICLES WITH:
TRAILER BRAKE CONTROL > PINPOINT TESTS > PINPOINT TEST H : U0121:00,
U0415:81, U0415:82, U0415:83**

Refer to TRAILER/CAMPER ADAPTER for schematic and connector information.

Normal Operations and Fault Conditions

With the ignition ON, the ABS module sends messages to the TBM over the HS-CAN2. If the TBM does not receive these messages within the specified time frame, the TBM sets a DTC. For information on the messages sent to the TBM by the ABS module, REFER to: Auxiliary Brake System - Vehicles With: Trailer Brake Control - System Operation and Component Description .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
U0121:00	Lost Communication With Anti-Lock Brake System (ABS) Control Module: No Sub Type Information	This DTC sets in continuous memory and on-demand if the TBM does not receive any network messages from the ABS module. This can be due to a ABS module failure, a circuit failure on the HS-CAN or an excessive load on the network.
U0415:81	Invalid Data Received from Anti-Lock Brake System (ABS) Control Module: Invalid Serial Data Received	This DTC sets in continuous memory and on-demand if network message data Total Brake Torque Request contains "unknown" or "fault" for more than 8 seconds instead of valid brake torque data.
U0415:82	Invalid Data Received from Anti-Lock Brake System (ABS) Control Module: Alive / Sequence Counter Incorrect / Not Updated	The TBM software contains an event counter for various Diagnostic Trouble Codes (DTCs). When the data in the Total Brake Torque Request message does not change, the counter is increased by 1. When the counter reaches 10, this DTC sets in continuous memory.
U0415:83	Invalid Data Received from Anti-Lock Brake System (ABS) Control Module: Value of Signal Protection Calculation Incorrect	The TBM uses sensor inputs and CAN message data to calculate the total braking torque required and compares this calculated value against the actual brake torque request message. If the calculated value is incorrect, a software counter is increased by 1. When the counter reaches 10,