



**Title:** TDA Trailer ABS System Inspection

**Date:** March 31, 2021

**Vehicles:** Vehicles Part of KME Recall 21V100

**Issue:** Verify Activation of Trailer ABS Module

**Corrective Action:** Perform Start-up Test of Trailer ABS System while Monitoring System Response.

**Work Instructions:** See Attachment.

- Tools Required:**
- Personal Protective Equipment (Protective Glasses, Gloves, Face Shield, etc.)
  - Voltmeter

**KME Parts Required:** None

**KME CONTACT:** Dennis Wittig, Technical Support

**TELEPHONE:** 570-233-1891

**EMAIL:** [dwittig@kmeffire.com](mailto:dwittig@kmeffire.com)

**MAILING ADDRESS:** KME Fire Apparatus  
Plant #8  
One Industrial Complex  
Nesquehoning, PA 18240

**ATTENTION:** Mr. Dennis Wittig

## ***WORK INSTRUCTIONS***

1. Ensure the vehicle is parked in a safe area with the park brake set.
2. Chock the wheels.
3. Turn on the Master Battery Switch.
4. Activate Ignition Switch.

The self-test will start. During the self-test the ECU/modulator valve assembly should click two times and the dash mounted “Trailer ABS” Indicator illuminates for 3 seconds.

Check mark the questions below.

- Did the ABS valve click two times?             PASS     FAIL
  - Did the “Trailer ABS” Indicator illuminate for 3 seconds?  PASS     FAIL
5. If both answers are PASS, no further action required. Contact the KME Contact on previous page. If any or both answers to the question is FAIL, Go to Step 6.
  6. Fail Results and actions:
    - a. If both answers are FAIL, the trailer ABS module is not activating and power connections to the ABS module must be evaluated.
    - b. If only the “Trailer ABS” Indicator remains illuminated, beyond the 3 second self-test, the system is active, but fault codes are present.
  7. Based on A or B in Step 6, perform the Work Instructions in next two Sections, Work Instructions A or Work Instructions B.

## **WORK INSTRUCTIONS A**

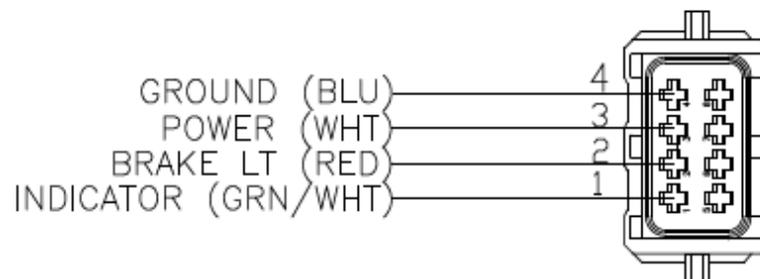
(Both questions, FAIL.)

1. Locate trailer ABS module and test signals at ABS power cable.
  - Trailer ABS module is located on the forward face of the crossmember above the trailer axle.
  - The ABS power cable connects to the curb side of the module.



Figure 1 ABS Module and ABS Power Cable

2. Ensure that the truck is parked with the wheels chocked, the ignition on and the engine not running:
  - Release the retaining lock from the ABS Power Cable and unplug the connector.
  - Refer to the ABS Power Cable drawing for wire function and pin location.



### ABS POWER CABLE

Figure 2 Pin Locations on ABS Power Cable

# ***WORK INSTRUCTIONS A***

***(CONTINUED)***

3. Use a voltmeter set to measure DC voltage.
  - Measure voltage between pins 3 and 4. Reading should be equal to chassis voltage.  
Record voltage: \_\_\_\_
  - Using a frame ground as a reference, measure the voltage on pin 2.  
Record voltage: \_\_\_\_
  - Using a frame ground as a reference, measure the voltage on pin 2 with the service brake applied.  
Record voltage: \_\_\_\_
4. Verify function of Trailer ABS dash indicator.
  - Locate Trailer ABS indicator light on dash panel.
  - Using a jumper wire make a temporary connection between pins 3 and 1.
  - Confirm activation of Trailer ABS indicator.
  - Pass \_\_      Fail \_\_

Contact KME contact, Dennis Wittig, with the results of Trailer ABS power cable test. Include GSO number of truck, name of Fire Department and current mileage. KME will provide detailed instructions relative to model year and test results.

**NOTE:** If a wiring issue is found, the technician should contact Dennis Wittig before the circuit is modified. See first page of this bulletin.

## ***WORK INSTRUCTIONS B***

**(“Trailer ABS” Indicator illuminates longer than 3 second Self-Test.)**

1. The illumination of the Trailer ABS indicator for more than three seconds after the ignition is activated indicates that the Trailer ABS Module is functioning, but active codes are present.
  - Refer to the Wabco Maintenance Manual for Enhanced Easy-Stop Trailer ABS with PLC (MM0180) for information on code identification and diagnostics.
  - If you need the Wabco Manual, contact Dennis Wittig. See first page of this bulletin.

**IMPORTANT!** If a wiring issue is found, the technician should contact Dennis Wittig before the circuit is modified. See first page of this bulletin.