

LITE-CHECK®

BRAKE, LIGHT, & DIAGNOSTIC PRODUCTS
Fleet Solutions, Inc.

EVALUATOR MODEL 740 OPERATIONS MANUAL



LITE-CHECK ELECTRICAL AND ABS TESTER
REV 1.0.0– March 21, 2019

LITE-CHECK Fleet Solutions, Inc.

301 N. Havana
Spokane, WA 99202

(800) 343-8579 or (509) 535-7512

info@lite-check.com

"One Tool, One Person, One Process"®

LITE-CHECK EVALUATOR 740

Revision History:

Name	Date	Changes	Version #
Paul Bertel	Monday, March 21, 2019	Initial Draft	1.0.0
Bill Hunt	Thursday, April 25, 2019	Second Draft	1.0.0
Bill Hunt	Tuesday, May 21, 2019	Final Draft	1.0.0

Cautions

- Block vehicle wheels from movement before releasing brakes
- The antenna must be fully exposed for a clear radio signal
- Do not weld while the tester is connected to the trailer. The tester is grounded to the chassis and will be damaged.
- Do not hook up electrical devices on the same trailer that the tester is diagnosing. The tester needs a clean power supply.
- Do not lengthen existing power cord on the tester. For the 740 DC tester, attach the power cord directly to a 12-volt battery or a regulated power supply. Lengthening the power cord will cause a power drop.
- Be aware of voltage spikes. The tester will only operate on regulated Power. For the 740 DC tester use a 12-volt battery or LITE-CHECK 313S Regulated Power Supply.
- Using a battery charger or power converter as a power source will damage the tester. Do not charge a battery when the battery is connected to the tester.
- The tester will not operate efficiently below 11.0 volts and will indicate “LOW BATTERY” (LOW BAT) ⇨
- The tester may shut down below 10.0 volts
- If operating gasoline motors near the tester, be sure that they have static suppression on the engine. Static can cause radio interference.

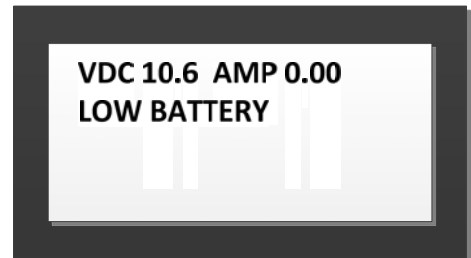


Table of Contents

Cautions	3
Table of Contents	4
Introduction	6
<i>Summary</i>	<i>6</i>
<i>Key Features of the EVALUATOR 740.....</i>	<i>7</i>
Overview	8
<i>EVALUATOR 740 Component Identification</i>	<i>8</i>
<i>Keyboard Layout.....</i>	<i>9</i>
Equipment and Setup	10
<i>What is included with the LITE-CHECK EVALUATOR 740?</i>	<i>10</i>
<i>Required Materials.....</i>	<i>11</i>
<i>LITE-CHECK EVALUATOR 740 Accessories</i>	<i>11</i>
<i>Set-Up Procedures</i>	<i>11</i>
<i>Reminders</i>	<i>12</i>
Operations	12
<i>Reading the Digital Display.....</i>	<i>12</i>
<i>7-Way Pin Numbers and Circuits.....</i>	<i>14</i>
Remote Control	14
<i>Operation.....</i>	<i>14</i>
Power Supply	15
<i>Power Supply Set Up:.....</i>	<i>15</i>
<i>Low Battery Messages</i>	<i>15</i>
Inspecting for Trailer Electrical Faults	16
<i>Overview.....</i>	<i>16</i>
<i>Electrical Testing</i>	<i>16</i>

LITE-CHECK EVALUATOR 740

<i>Circuit Condition Messages</i>	<i>17</i>
ABS Test Procedures.....	18
<i>Initial Setup and Configuration.....</i>	<i>18</i>
<i>Trailer ABS Power Supply Requirements</i>	<i>18</i>
<i>ABS Operation.....</i>	<i>19</i>
<i>Main Menu</i>	<i>20</i>
<i>Viewing Active Faults.....</i>	<i>20</i>
<i>Viewing Stored Faults.....</i>	<i>21</i>
<i>Clearing Active and Stored Faults</i>	<i>21</i>
<i>ECU Voltage.....</i>	<i>21</i>
<i>Manufacturer's Configuration.....</i>	<i>22</i>
<i>Special Functions</i>	<i>22</i>
<i>ABS Fault Identification and Troubleshooting.....</i>	<i>22</i>
Appendix.....	23
<i>ABS Button Codes.....</i>	<i>23</i>
<i>Definition of Terms.....</i>	<i>26</i>
<i>Accessories</i>	<i>27</i>
Warranty, Contact and Service Information.....	28
Shipping LITE-CHECK Products.....	28

LITE-CHECK EVALUATOR 740

Diagnostic Tester



Introduction

Summary

The LITE-CHECK EVALUATOR 740 Electrical and ABS tester will perform vital diagnostics of electrical and ABS systems on trailers. The EVALUATOR software puts trailer ABS inspection, fault identification and troubleshooting support at the fingertips of inspectors and mechanics. The LITE-CHECK EVALUATOR 740 provides your facility with an efficient tool for safety assurance and maintenance of your heavy-duty fleet.

Key Features of the Evaluator 740

- Remote control operation of electrical system
- Dynamic monitoring of electrical faults
- Microprocessor-driven simultaneous monitoring of all 7-way circuits allows direct identification of circuit conditions including: shorts, opens, open grounds, and chassis shorts
- Digital display provides fault information at the tester. Unique audible alarms assist in troubleshooting and repair activities at various locations around the trailer.
- “One-Button ABS” feature with direct access to faults present in ABS controllers
- Built-in guidance for ABS fault resolution

LITE-CHECK EVALUATOR 740

Overview



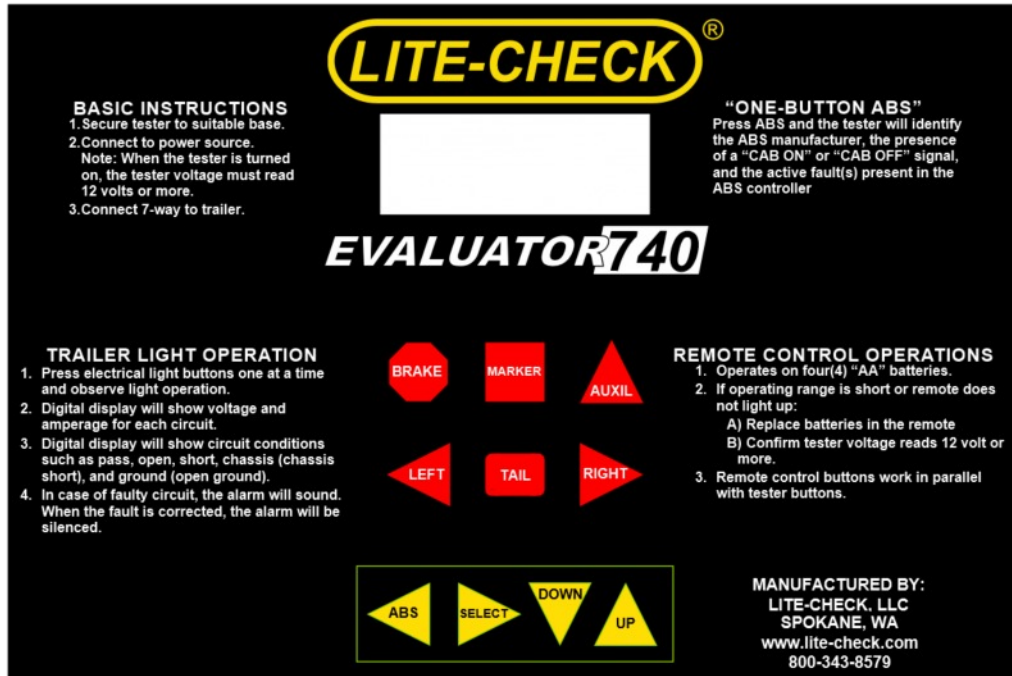
EVALUATOR 740 Component Identification

The LITE-CHECK EVALUATOR 740 has the following components.

Item	Description
RC Antenna	Antenna for use with remote control
Digital Display	Displays messages on tester status and results
Keypad	See action (below) on individual buttons
Alarm Speaker	Speaker sounds different alarms for any test failure
7-Way Cable Socket	Cable socket for 7-way cable

LITE-CHECK EVALUATOR 740

Keypad Layout



The chart below provides a brief description of each button on the keyboard panel and on the remote control.

Graphic	Button	Function
	Brake	Operates brake electrical circuit
	Marker	Operates marker (clearance) circuit
	Auxil	Operates auxiliary circuit (ABS power)
	Left	Operates left turn circuit
	Tail	Operates tail circuit
	Right	Operates right turn circuit
	ABS	ABS Test – Initiates the ABS test routine (30to 45 seconds). Pressing the ABS (BACK) button at other times will display the previous screen.
	Select	ABS select – Enter on selected option, or view on screen
	Down	Move display cursor down
	Up	Move display cursor up

LITE-CHECK EVALUATOR 740

***SELECT details:** Diagnostic testers such as the EVALUATOR 740 and other members of the LITE-CHECK family of automatic testers activate a single circuit at a time and monitor the activity on all of the circuits to provide computer assisted fault identification. Multiple circuits can be activated at the same time by using the “SELECT” button on the tester or the remote control unit. In this mode, multiple circuits can be switched on and off, with the tester’s computer display indicating the total current draw of all of the circuits. Press the “SELECT” button to leave this mode.

Equipment and Setup

The LITE-CHECK EVALUATOR 740 diagnostic tester is designed for easy operation and setup. Some additional items are required to fully utilize all of the 740’s functions.

What is included with the LITE-CHECK EVALUATOR 740?

The EVALUATOR 740 ships with the following items:

- 1 – LITE-CHECK EVALUATOR 740
- 1 – This Operations Manual
- 1 – Quick Reference Guide
- 1 – Antenna
- 1 – Remote Control
- 1 – Plastic Cover
- 1 – Orange Neck Pouch

Please inspect the shipment when it arrives for any missing or damaged items.

LITE-CHECK EVALUATOR 740

Required Materials

The following additional materials are required to operate the EVALUATOR 740:

- 1 – 7-way cable with 7-way plugs on both ends
- 1 – Power supply, either AC or DC. See below.
- 1 – AC Power supply (110 VAC Wall socket), OR 1 – DC Power supply (either a charged 12-volt battery **OR** a regulated power supply (such as the LITE-CHECK 313S 12VDC Regulated Power Supply))

Warning: *Power to the tester must be regulated to protect the trailer's ABS electronics and ensure consistent tester performance.*

- Mounting location or plate to secure the tester

Warning: *The LITE-CHECK EVALUATOR 740 is a “diagnostic” tester that monitors the current flow through the ground circuit to aid in identifying various fault conditions. Care should be taken to insure that the tester's case is not grounded to the trailer or tractor under test. The 740 should not be supplied with power from the tractor.*

LITE-CHECK EVALUATOR 740 Accessories

Besides the items above, the following LITE-CHECK items are available to enhance the EVALUATOR 740:

- **LITE-CHECK 313S 12VDC Regulated Power Supply**

Set-Up Procedures

The following steps should be taken to ensure proper setup of the EVALUATOR 740:

1. Review the Operators Manual (this manual) and the Quick Reference Guide
2. Mount the Tester securely
3. Connect the EVALUATOR 740 Tester to a 110 VAC wall socket or a 12 Volt, 20 amp capability power supply

Warning: *A 12 volt battery charger or simple inverter cannot be used, applied power must be clean (filtered and regulated) and capable of generating 20 amp*

4. Connect red battery clamp or ring terminal to the positive output
5. Connect black battery clamp or ring terminal to the negative output
6. Connect a 7-way cable from the 740 Evaluator to the trailer being tested.

LITE-CHECK EVALUATOR 740

Reminders


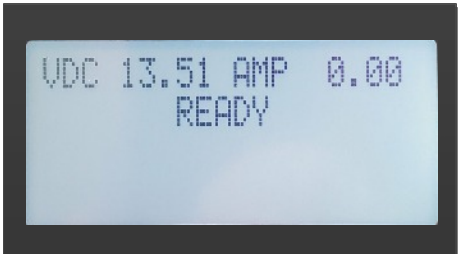
- ✓ Do not use battery chargers – Battery Chargers are non-regulated and may cause damage to the ABS ECU, or the tester.
- ✓ The tester will not operate reliably below 11.0 volts and will indicate a “Low Battery” condition (LOW BAT)
- ✓ The tester will completely shut down if the voltage drops below 10.0 volts

Note: If the 740 DC won't operate, check if the 12 volt power line polarity is reversed.

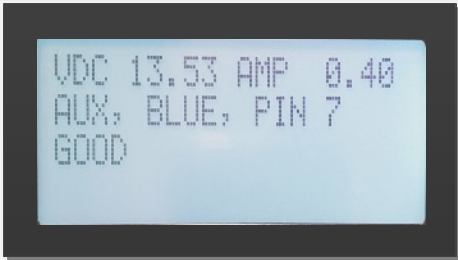
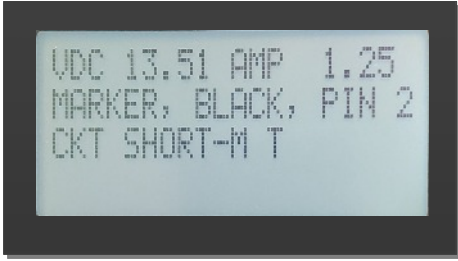
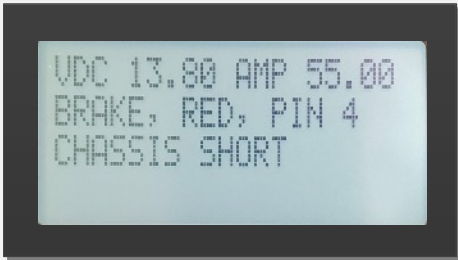
Operations

Reading the Digital Display

The digital display on the EVALUATOR 740 includes a variety of error messages. The following are examples only. The full list of messages is shown with the appropriate test procedure.

Display	Details
	This first screen appears on the display for several seconds
	When the tester is ready, this screen will display. The tester automatically begins in “Trailer mode.”

LITE-CHECK EVALUATOR 740

Display	Details
	<ul style="list-style-type: none"> • VDC is the voltage at the tester • AMP is the circuit amperage the tester is reading • AUX, BLUE, PIN 7 indicates 7-Way PIN number and circuits are currently being tested (see Pin Numbers and Circuits below) • Electrical circuits will display “GOOD” if greater than 10mA and less than 15Amps and no other faults are found
	<p>“SHORT” – Shorted circuit fault <i>Fault with multiple circuits involved when a single circuit is under test. The tester has identified electrical activity on more than one circuit.</i></p> <p>The panel circuit indicator lights illuminate for all shorted circuits, and the “SHORT” fault alarm sounds. The digital display indicates the circuit under test, current draw, voltage and a SHORTED circuit fault. Amperage shows the total circuit load on the digital display.</p> <p><i>This screen is identifying a short to the marker. The shorted circuits on the marker will be illuminated on the tester panel.</i></p>
	<p>“CHASSIS SHORT” – Ground Fault <i>Fault with circuit supply wire in contact with the chassis or ground circuit.</i></p> <p>The panel circuit indicator light is on and the “CHASSIS” fault alarm sounds. Current to the trailer is restricted, and the digital display shows 55.00 amps.</p> <p>This screen is identifying that the brake circuit wire is shorted to the chassis. The tester’s software protects the vehicle harness by pulsing the power</p>

LITE-CHECK EVALUATOR 740

7-Way Pin Numbers and Circuits

7-Way Pin Number	Wire Color	Circuit
1	White	Ground
2	Black	Marker
3	Yellow	Left turn
4	Red	Brake
5	Green	Right turn
6	brown	Tail
7	Blue	Auxiliary

Remote Control

The remote control allows the vehicle inspector to operate electrical functions around the vehicle and observe the responses.



Operation

- Press and release the designated button
- Inspect. One light circuit will be activated at a time
- The Remote Control is keyed to operate one 740 Evaluator at a time
- Remote Control operations are parallel to the panel keyboard
- Range with AA batteries in good condition is over 100 feet

LITE-CHECK EVALUATOR 740

Notes:

- Remove the batteries using the pull strap inside the case. ***Do not pry them out.***
- If remote controls need to be keyed to different 740 Evaluators, contact LITE-CHECK for assistance
- The tester antenna must be fully exposed for good test reception

Power Supply

The tester is designed for negative ground vehicles (black-negative, red-positive). In case of reversed battery leads on the power cable, the tester will not operate.



Power Supply Set Up:

Attach the battery cable clamps (or ring terminals) to a 12Vdc automotive battery, or a regulated power supply (such as the LITE-CHECK 313S).

- Black battery cable to negative –
- Red battery cable to positive +

Turn the power switch on (located on the front panel of the tester) for operation.

Low Battery Messages

NOTE: *The tester will not work properly if the battery is not charged to a full 12+volts. The tester will not operate and will possibly lock up if the power is below 10.0 volts.*

Inspecting for Trailer Electrical Faults

Overview

Always begin the inspection operation with a properly setup EVALUATOR 740. Adequate 110VAC and 12-volt DC power should be verified before starting the test.

LITE-CHECK automatic testers are programmed to concurrently monitor all of the wires on the 7-way cable connecting the tester to the trailer. This provides immediate feedback on the conditions of each electrical circuit under test.

Electrical faults are signaled by the tester.

Electrical circuits that have burned-out, or have damaged lamps may still have properly operating lamps AND the circuit will not indicate a fault. The tester's digital display can be used to observe the current drawn by each circuit and to look for unusual variances

Electrical Testing

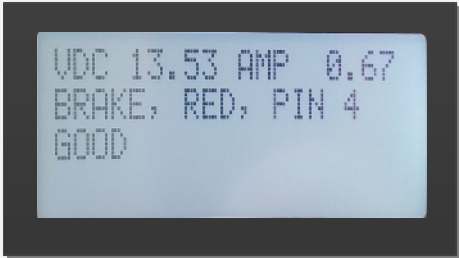
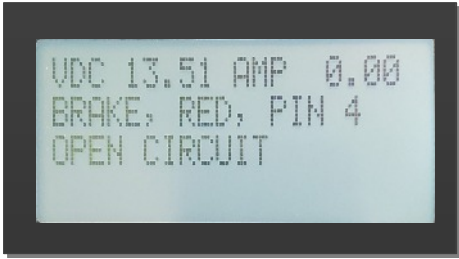
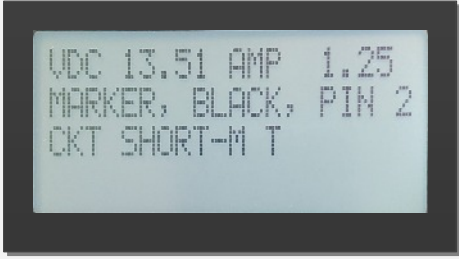
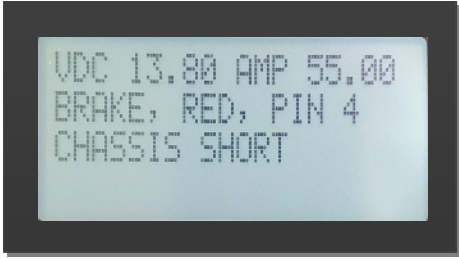
In normal operating mode only **ONE** electrical circuit will operate at a time. The digital display will show amperage, voltage and circuit condition. The corresponding electrical indicator LED will be lit.

1. Start at the front corner of the trailer and observe the lights. Press the button for the circuit being tested. Each light must be visually inspected to ensure it is good.
2. Move to the other corner of the trailer and continue the light inspection.

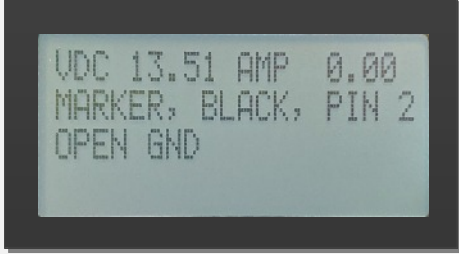
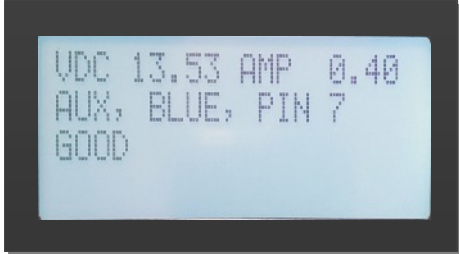
LITE-CHECK EVALUATOR 740

Circuit Condition Messages

Note: LITE-CHECK automatic testers are “live” in that any changes in circuit conditions are immediately detected and displayed by the tester.

Display	Details
	<p>“GOOD” – Circuit Passes</p> <p>The circuit indicator light is on. The digital display indicates the circuit under test, current draw, voltage and a GOOD circuit.</p>
	<p>“OPEN” – Open wire and no amperage load</p> <p>The panel circuit indicator light is on and the “OPEN” fault alarm sounds. The digital display indicates the circuit under test, current draw, voltage and an OPEN circuit fault.</p>
	<p>“SHORT” – Circuit wires are in contact</p> <p>The panel circuit indicator lights illuminate for all shorted circuits, and the “SHORT” fault alarm sounds. The digital display indicates the circuit under test, current draw, voltage and a SHORTED circuit fault.</p>
	<p>“CHASSIS SHORT” – Circuit wire is in contact with chassis, frame, return or ground check.</p> <p>The panel circuit indicator light is on and the “CHASSIS” fault alarm sounds. The digital display indicates the circuit under test, current draw, voltage and a CHASSIS circuit fault.</p>

LITE-CHECK EVALUATOR 740

Display	Details
	<p>“OPEN GROUND” – Ground wire is open</p> <p>All panel circuit indicator lights are on and the “OPEN GROUND” fault alarm sounds. The digital display indicates the circuit under test, current draw, voltage and an open ground circuit fault.</p>
	<p>“GOOD” – Faults repaired</p> <p>The circuit indicator light is on and the digital display indicates the circuit under test, current draw, voltage and a GOOD circuit</p>

NOTE: If more than one fault is detected, the tester will first identify the faults based on the hierarchy below. Once the first fault is corrected, the tester will go to the next fault and so on.

Fault Detection Hierarchy

1. Chassis Short
2. Open Ground
3. Short
4. Open
5. Good

ABS Test Procedures

Initial Setup and Configuration

Before beginning ABS testing, be sure these steps are followed:

Trailer ABS Power Supply Requirements

Determine the trailer total running electrical load.

See TMC Recommended Practice 141 – The purpose of the Recommended Practice is to recommend a minimum voltage of 9.5 VDC at the ECU. If the ECU voltage is



PLC SIGNAL DETECTED
DETERMINING ECU
MANUFACTURER
PLEASE WAIT ****

LITE-CHECK EVALUATOR 740

lower, it may indicate wire corrosion. New trailers must provide the correct voltage to their antilock braking system (ABS) electronic control unit (ECU) through both the stop lamp circuit and the continuous power circuit. The specified value of 9.5 volts for minimum voltage includes a safety margin of 1.0 volt.

1. Connect the tester to the trailer with the 7-Way vehicle cable
2. Press **"SELECT"** button (this will allow the tester to test multiple added loads)
3. Record tester voltage and amperage (00.00 at this step)
4. Press the following buttons in order
 - a. **"MARKER"**
 - b. **"LEFT"**
 - c. **"TAIL"**
 - d. **"RIGHT"**
 - e. **"BRAKE"**
 - f. **"AUXIL"**
5. Record tester voltage and amperage
6. Press **"SELECT"** button to cancel the test


NOTE: A similar feature is available in the **SPECIAL FUNCTIONS** tab under **ABS**.

ABS Operation

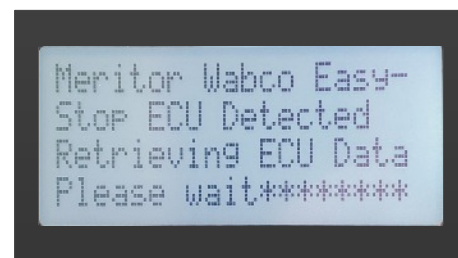
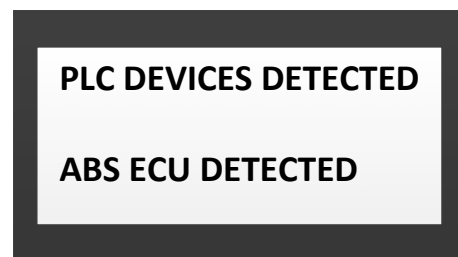
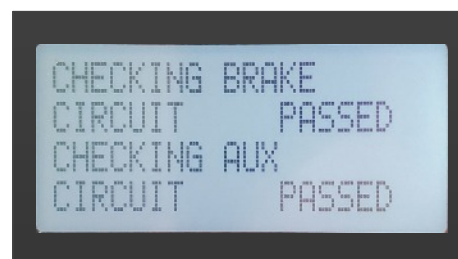
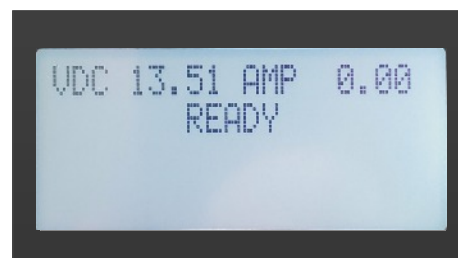
Warning: If the trailer being tested has multiple ECUs, before beginning the ABS test procedure, disconnect all but one ECU. Run the ABS test procedure using the steps below. When completed, disconnect the first ECU and reconnect the next one. Now repeat the test procedure with the next ECU.

NOTE: All ABS notes are for the Meritor Wabco Easy Stop, other ECUs may vary

The EVALUATOR 740 automatically checks the brake and auxiliary circuits.

Press the yellow  **ABS** button on either the keyboard or remote. The tester will display the brake and auxiliary circuits' status for a few moments.

NOTE: If the brake circuit test fails, the operator will be given the option of continuing or exiting the test. If the auxiliary circuit test fails the display will indicate an error



LITE-CHECK EVALUATOR 740

message for a few moments, and then automatically exit the test. The PLC is read on the auxiliary line, So there must be no faults on that line to proceed.



Next the tester will search for the PLC Signal and will attempt to determine the ECU Manufacturer. This process may take up to a minute to complete.

Once the PLC is detected, the ECU will be identified; the ECU manufacturer will display along with other information including any active faults present in the system:

NOTE: Each star indicates a stage in the ECU information retrieval. If the tester is unable to complete Identification, note the number of stars and contact LITE-CHECK customer support.

Main Menu

Pressing the  **SELECT** button displays the **ABS**

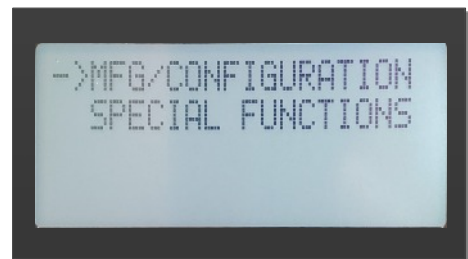
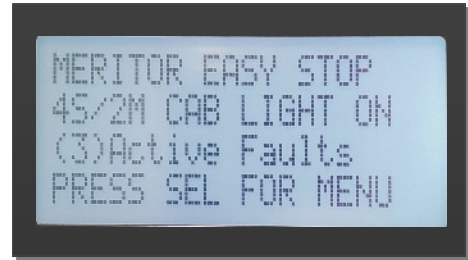
menu. Use the  **UP** and  **DOWN** buttons to navigate the menu. The **cursor** -> on the display will move up and down, indicating which option selected. Press the **SELECT** button to choose a menu option.

Move the cursor -> to the bottom of the digital display and pressing the **DOWN** button once more will display additional menu options.

Viewing Active Faults

View an active fault by using the DOWN button to the “**VIEW ACTIVE FAULT**” option and pressing **SELECT**. The digital display will show the active faults.

Pressing the **DOWN** button will display the first active fault. In this case, an “Open/Short Circuit” is indicated. Press the **DOWN** button again to display the next active fault. Press the **UP** button to return to the previous fault.

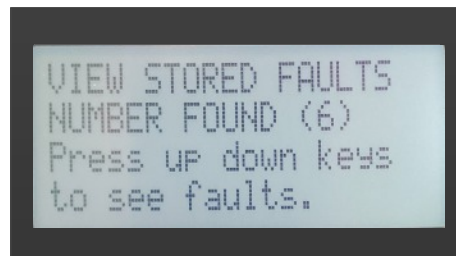


LITE-CHECK EVALUATOR 740

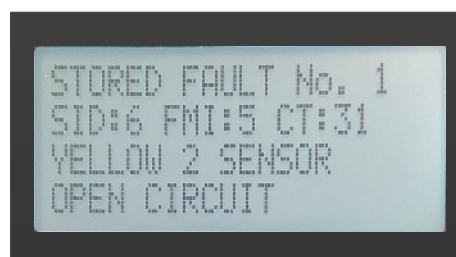
When the fault is displayed, press the SELECT key to view the manufacturer's repair notes.

Viewing Stored Faults

View a stored fault by moving the cursor to the "**VIEW STORED FAULT**" option and pressing **SELECT**. The digital display will show previously discovered faults for this trailer.

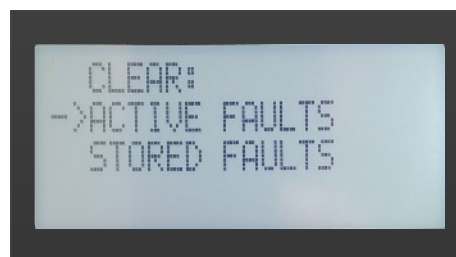


Pressing the **DOWN** button will display the first stored fault. In this case, an "Open Circuit" is indicated. Press the **DOWN** button again to display the next stored fault. Press the **UP** button to return to the previous fault.



Clearing Active and Stored Faults

Move the cursor -> **UP** or **DOWN** to select "**ACTIVE FAULTS**" or "**STORED FAULTS**," press the **SELECT** button to clear the faults from the ECU's memory.

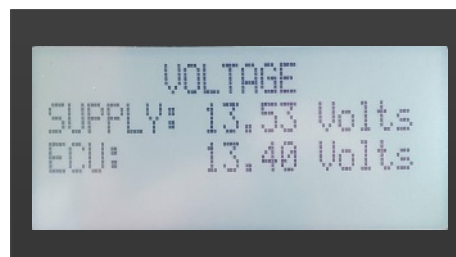


ECU Voltage

This option displays the power supply and **ECU** voltage.

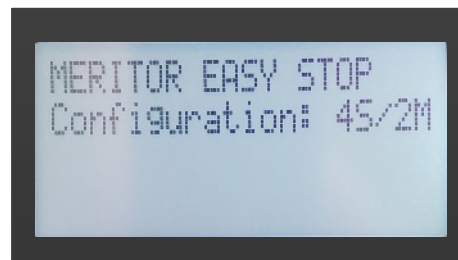
Note: Some **ECUs** do not support this voltage test.

Note: Check the ECU voltage to the supply voltage. A large differential can indicate corrosion, bad connection, etc. and if the ECU voltage is too low it will not operate correctly or reliably.



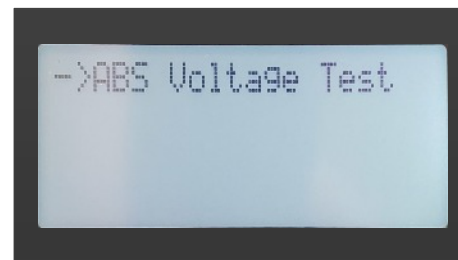
Manufacturer's Configuration

Selecting this option provides the **ECU** configuration information.



Special Functions

Selecting this option will bring you to the special functions menu. Here you can select the ABS Voltage Test.



ABS Fault Identification and Troubleshooting

The following table shows manufactures and types of ABS supported by the LITE-CHECK EVALUATOR 740.

Manufacturer	Display Active Faults	Display storred faults	Clear active faults	Clear stored faults
Wabco Easy Stop	Yes	Yes	No ¹	Yes
Wabco RSS+	Yes	Yes	Yes	Yes
Haldex PLC4 Trucks	Yes	Yes	Yes	Yes
Haldex TRS	Yes	Yes	Yes	Yes
Bendix MC-30	Yes	Yes	Yes	Yes
Bendix TABS 6 Standard	Yes	Yes	Yes	Yes
Bendix TABS 6 Single Channel	Yes	Yes	Yes	Yes
Bendix TABS 6 Multi-Channel	Yes	Yes	Yes	Yes

1. Exit ABS mode to cycle and clear faults.

All information and directions were obtained directly from each of the above ABS OEMs. The Lite-Check process conforms to each OEM's procedure.

NOTE: If the EVALUATOR 740 tester does not support particular ECU, such as an Eaton unit, the tester display will read **"NOT SUPPORTED AT THIS TIME"** or **"UNABLE TO DETERMINE ECU TYPE."**

Appendix

ABS Button Codes

The following ABS Button Codes provide additional help with finding and correcting faults. The four yellow buttons on the panel and the remote will allow the user to select menu items and display fault information and the on-line help.



ABS/BACK – Moves back one display screen



SELECT/HELP – Enter selected option



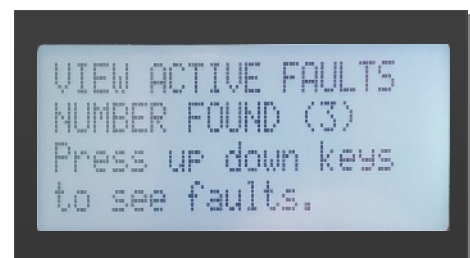
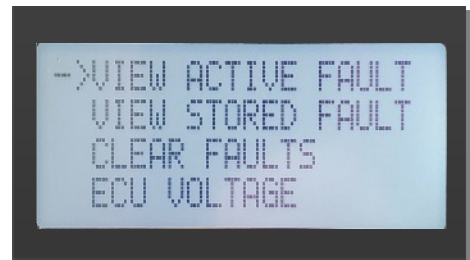
DOWN – Move display cursor -> down



UP – Move display cursor -> up

The menu items are explained below:

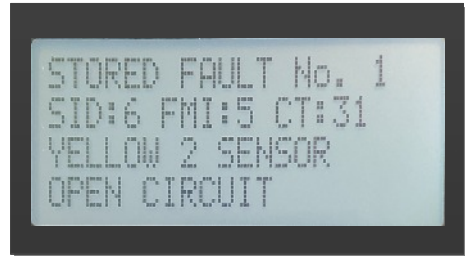
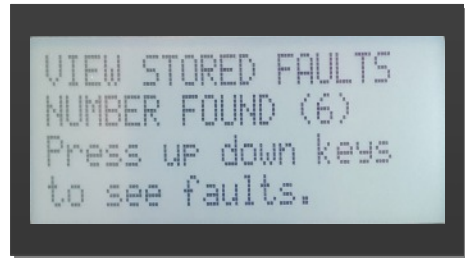
- **View Active Faults**
 - Press SELECT to view active faults
 - Press the DOWN button to see detailed fault information
 - Press ABS/BACK to return to the fault
 - Press ABS/BACK again to return to the menu



LITE-CHECK EVALUATOR 740

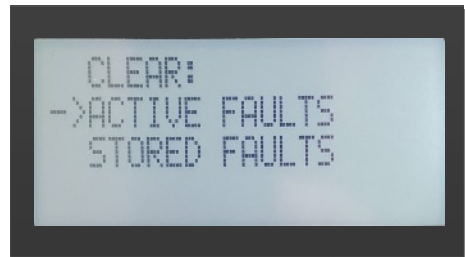
- **View Stored Faults**

- Press SELECT to view the stored faults
- Display – Number found (#)
- Press the DOWN button to see detailed stored fault information
- Press the SELECT to display the help screen for this fault – this displays the factory solution for this fault. Use the DOWN/UP buttons to scroll through the Help Information
- Press ABS/BACK to return to the fault
- Press ABS/BACK again to return to the menu



- **Clear Faults**

- Press SELECT to clear faults
- Use the UP/DOWN buttons to choose active or stored faults
- Press SELECT to clear either Active or stored faults



Note: Use the DOWN button to move to the second menu screen.

LITE-CHECK EVALUATOR 740

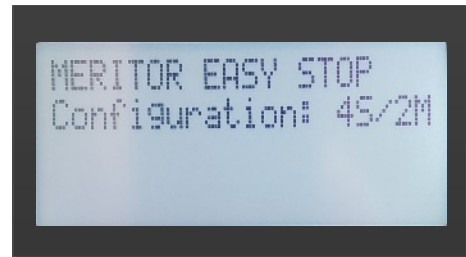
- **ECU Voltage**

- Press SELECT to display the ECU and supply voltages
- The digital display will show both supply (AUX voltage at the nose plug) and ECU Voltage.
- Press ABS/BACK to return to the menu



- **MFG/Configuration**

- Press SELECT to display the ECU Manufacturer and configuration



- **Special Functions**

- Press SELECT to display the Special Functions menu
- Note: Manufacturers may have other special functions.
- Press ABS/BACK to return to the menu

Definition of Terms

Glossary and Definition of Terms

ALARM – Distinct sound for each fault type. Alarm will cease automatically or change when a fault is corrected

TRAILER – Depends on outside power source to operate light and brake systems

VEHICLE – Trailer, or dolly

7-Way Cable – 7-pin wiring cable connecting between vehicles

FAULT MESSAGES – Messages that appear on the tester's digital display along with active circuits and alarms

Electrical Circuit Definitions

GOOD CIRCUIT – Complete circuit with amperage load (some components may not work)

OPEN CIRCUIT – Incomplete circuit without an amperage load. A fault message will appear with the circuit indicators flashing and alarm sounding

SHORT CIRCUIT – Circuit wires are in contact, showing a combined amperage load. The fault message will display with all the circuit indicator lights flashing and alarm sounding.

OPEN GROUND – The ground wire is not connected, showing an incomplete circuit. A fault message will appear with the circuit indicators flashing and alarm sounding

CHASSIS – Shorted circuit wire is in contact with the chassis. A fault message will appear with the circuit indicators flashing and alarm sounding

ABS Glossary

ABS – Anti-lock Brake System (now required on all new trailers)

BLINK CODE – An ABS indicator lamp located on the trailer can indicate current and stored faults with a blink sequence.

1. Upon start-up, the ABS lamp will light up and turn off if the ABS has no active faults
2. Upon start-up, the ABS lamp will light up and stay on if the ABS has active faults
3. Faults are identified by counting the number of blinks of the ABS indicator lamp

CONFIGURATION – the number of sensors and modulator valves on the system

2S/1M – 2 sensors and 1 modulator valve

4S/2M – 4 sensors and 2 modulator valves

ECU – Electronic Control Unit

1. Regulates braking according to input from the wheel sensors
2. Stores faults in memory

LITE-CHECK EVALUATOR 740

PLC – “Power Line Carrier” (also know as **PLC4TRUCKS**) is a method to communicate **ABS** operation and other information to the tractor over the Auxiliary circuit.

Trailers manufactured after March 1, 2001 are required to have PLC capability

SENSOR – A wheel sensor for measuring wheel revolutions

FAULTS –

1. Active – a fault which currently exists
2. Stored – a fault which occurred previously, but does not presently exist
3. Intermittent – a fault which comes and goes, usually with certain driving conditions.

Accessories

- LITE-CHECK 313S 12VDC Regulated Power Supply

Warranty, Contact and Service Information

LITE-CHECK products have a one-year limited warranty on parts and labor against manufacturing defects. All warranty service to be performed at LITE-CHECK, Spokane, Washington. The Customer is responsible for shipping costs. The warranty does not cover abuse, neglect, or damage caused by electrical or other outside sources as specified in this owner's manual. Some parts may be subject to OEM warranties. Any modifications made to the equipment without prior written approval, voids this warranty. Any software upgrades released within one year from the date of shipment will be provided at no additional cost. Extended, enhanced and/or expedited warranties are available.

Testers and power supplies have a serial number attached to the device for tracking purposes.

Questions concerning operation and service may be addressed to LITE-CHECK by calling 1-800-343-8579 during normal business hours (Pacific Time Zone).

Shipping LITE-CHECK Products

Please follow these instructions for shipping LITE-CHECK testers and products to minimize damage.

1. Include the **remote control** and **antenna** with the tester
2. Select a sturdy box that exceeds the tester's size by at least 2 inches in all three dimensions.
3. Pack tester in an **upright position** with the shipping label on top of the box
4. Place dunnage on bottom and all surfaces to **prevent movement** inside box
5. Enclose return shipping instructions
6. **Include a brief explanation of equipment problems and history**

Ship to the following address: **LITE-CHECK LLC
301 N Havana
Spokane, WA 99202**