LIGHT/BRAKE TEST BOX INSTRUCTIONS

LED Ready

All Croft Test Boxes include:

- · 12 Volt negative ground sealed battery
- · Separate power switch with circuit breaker
- · Hand held control unit with 30' cord
- · 7-Way round with flat pins, 6-way round & 4-flat
- · Battery float charger with automatic shut-off

TTB01

Trailer Light & Electric Brakes Test Box

is designed as an aid for testing trailer lights and brakes. It allows one person to visually test brake lights, tail lights, right and left turn signal lights by simply connecting the test box to the front of the trailer and taking the 30' hand held control unit to the rear of the trailer to test and make repairs as needed. This eliminates the need for two people to test, and or one person going back and forth between vehicle and trailer. Designed to test trailer lights and electric brakes. Includes built in LED indicator lights. Works with incandescent and LED lights.

TVTB03

Trailer Light & Electric Brakes Test Box/Vehicle Connector

like its predecessor is able to test lights and electric brakes, but also has the added benefit of visually testing a vehicle's connector. With the **TVTB03**'s bright LED lighting in the hand held control unit and removable plug, you are able to test the connector from the cab of the vehicle. Eliminating the guesswork associated with a test light and allowing you to test without hooking up a trailer.

CHARGING PROCEDURES

Please read and observe all charging and safety instructions included with the test box.

COMMON TRAILER WIRING PROBLEMS

- 1. Trailer not properly grounded.
- 2. Trailer not wired industry standard.
- 3. Open filament in light bulb.
- 4. Wires open or shorted.
- 5. Corrosion on ground between light and mounting bracket.

INITIAL SET-UP (Battery must be connected)

- 1. Open battery box.
- 2. Connect black wire to red terminal.
- 3. Connect white wire to black terminal.
- Verify proper connection by turning on the power switch, red LED should light up.



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TVTB03

OPERATING INSTRUCTIONS HOOK-UP PROCEDURES

Turn on power switch inside test box, the red light will come on to show power is connected to the text box (if red light does not come on see initial set-up on back page). The light is protected by a circuit breaker which will open the circuit if any of the voltages applied to the trailer lights are grounded. This circuit breaker protects the Trailer Light Test Box during tests. If during the test procedures, this light goes out, either the battery has become disconnected or one of the voltages has been shorted to ground due to defective wiring. If shorting occurs, the circuit breaker will open to protect the test box. It will automatically reset after a few minutes.

Select the Socket on the Trailer Light Text Box that matches the plug of the trailer to be tested. Connect the trailer plug to the tester. NOTE: All Sockets on the test box are wired industry standard and all Sockets contain a ground wire. If the trailer to be tested is wired other than standard, adapters will have to be made to insure proper operation.

If testing electric brakes TTB01 & TVTB03, jack trailer up to rotate wheels where brakes are present.

With the Trailer Light Test Box connected to the 12 volt battery and the trailer connected to the Trailer Light Test Box, you are now ready to test the trailer lights and brakes.

If testing vehicle plug <u>TVTB03 only</u>, unplug hand held control unit from test box and plug it into your vehicle connector, if you do not have a 7-way connection on your vehicle you will have to use an adapter. With the hand held control unit plugged into your vehicle you are now ready to test.

TEST PROCEDURES for TTB01

Remove the hand held control unit from the box and go to the rear of the trailer. From this position, you can check the "Tail", "Brake", "Left Turn" and "Right Turn" lights by operating the Toggle switches marked Tail, Brake, Rt and Lt respectively to their "on" positions. Note: Only one switch at a time should be in the "on" position until the whole sequence has been checked.

Taillights: Turn toggle switch marked Tail to "on" position. Observe both tail lights and all marker/clearance lights. If lights do not work, check for proper grounding, defective light bulbs or defective wiring. Turn toggle switch to "off" position.

Left Turn: Turn toggle switch marked Left to "on" position. Observe that the left turn signal flashes. If it does not flash**, check for defective wiring. If the brake light check was good, this indicates that the filament of the left turn signal is good. If both lights flash, check for a defective ground. Turn toggle switch to "off" position.

Right Turn: Turn toggle switch marked Right to "on" position and follow the same procedure as outlined for the left turn. Turn toggle switch to "off" position.

Brake Lights: Turn toggle switch marked Brake Lights to "on" position. Observe both brake lights. The brake light filaments are brighter than the tail lights. If only one is operating, check for defective bulbs or defective wiring. You should have already checked for proper grounding in the tail light check. Turn toggle switch to "off" position.

Brake Magnets for TTB01: Rotate wheels first then engage brakes by turning toggle switch marked brake magnets to the "on" position. If brakes do not engage and wheel does not stop spinning, check for defective wiring. If wiring is OK, service brakes.

** NOTE: Works with incandescent and LED lights.

TEST PROCEDURES for TVTB03

Follow test procedures for the TTB01 to test trailer lights and electric brakes.

Test the vehicle's connector by first following the hook-up procedure. After hook-up has been successfully completed take the hand held control unit to the cab of the vehicle to be tested. Once inside the cab you are ready for testing. From this position, you can check the tail, brake, left turn, right turn and brake connection of the vehicle plug by operating the vehicles functions.

NOTE: vehicle may require being in the on or auxiliary position to work lights and or signal functions.

Taillights: Turn on vehicle's lights. Observe the LED light on the hand held control unit above the taillight switch. If the vehicle's plug is wired correctly the LED light should be on.

Left Turn: Turn on vehicles left turn. Observe the LED light above the left turn switch. if the vehicle's plug is wired correctly the LED should be blinking.

Right Turn: Turn on vehicles right turn. Observe the LED light above the right turn switch. If the vehicle's plug is wired correctly the LED should be blinking.

Brake Lights: Apply the vehicle's brakes by depressing the brake pedal. Observe the LED lights above left turn and right turn on hand held control if the vehicle's plug is wired correctly both lights should light up.

NOTE: if the vehicle is wired for brakes the LED light above the brake light switch should come on when applying the vehicle's brakes..

Electric Brakes: For vehicle's with an electronic brake control apply the brakes by using the manual brake switch on the brake control unit. If the vehicle's plug is wired correctly the LED light above brake lights should illuminate gradually.

NOTE: rate of speed LED light illuminates may vary depending upon the type of brake control unit you have and the amount of sync and gain set.