



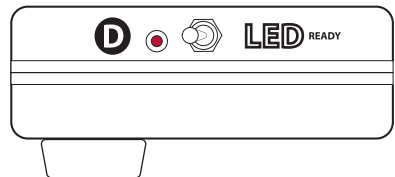
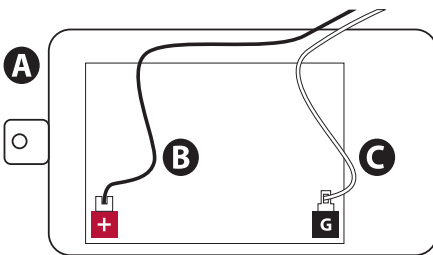
LIGHT / BRAKE TEST BOX

INSTRUCTIONS FOR TTB01 & TVTB03

Thank you for purchasing the **Croft Test Box**.
For additional product information please
visit www.CroftTrailer.com.



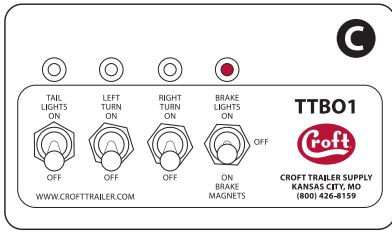
INITIAL SET-UP (Battery must be connected)



1. Open (A) battery box.
2. Connect (B) black "+" wire to red terminal.
3. Connect (C) white "Gnd" wire to black terminal.
4. Verify proper connection by turning on the power switch, (D) red LED should light up.

CHARGING PROCEDURES

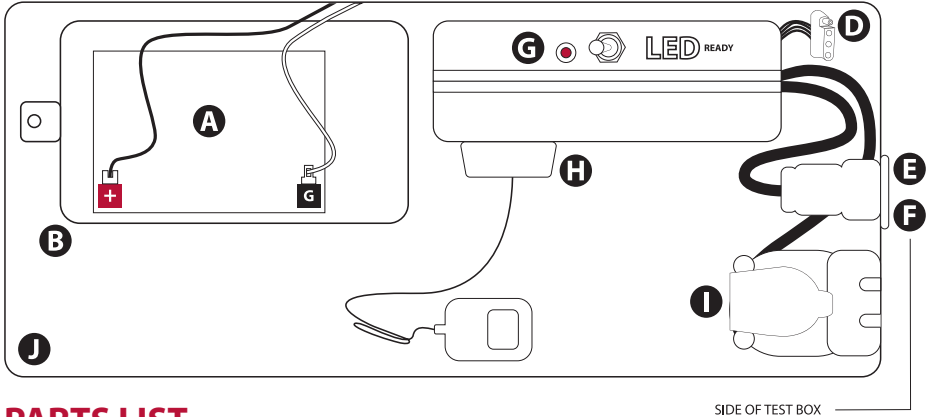
Please read and observe all charging & safety instructions included with the test box.



LIGHT / BRAKE TEST BOX

Box Height: 9"
 Box Width: 20"
 Box Depth: 10.5"

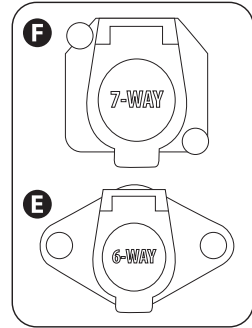
INSIDE TEST BOX



SIDE OF TEST BOX

PARTS LIST

- A - 2023 12 Volt Negative Ground Sealed Battery
- B - Battery Box
- C - Hand Held Control Unit with 30 ft of Cable
- D - 4-Flat Connector
- E - 6-Way Round Connector
- F - 7-Way Round with Flat Pins Connector
- G - Power Switch with Circuit Breaker
- H - 1 Amp Trickle Charger with Automatic Circuit Breaker
- I - Plug-in for Hand Controller (Available Only in the TVTB03)
- J - Contained in a Highly Durable Case



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 test box (if red light does not come on see initial set-up on front 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 Test 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 to industry standards 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 with **TTB01** and **TVT03**, jack trailer up to rotate wheels where brakes are present.

With both 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.

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, left turn, right turn, and brake lights by operating the toggle switches marked *Tail*, *Left*, *Right*, and *Brake* 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 taillights 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.

TEST PROCEDURES for **TVT03**

*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 vehicle's 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.

If testing vehicle plug (**TVT03** only), 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, use an adapter. With the hand held control unit plugged into your vehicle you are ready to test.

Turn toggle switch to "off" position.

***NOTE:** Works with incandescent and LED lights.

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 good, service brakes.

Left Turn: Turn on vehicle's 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 vehicle's 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 unit, 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 vehicles with an electronic

Test Procedures for **TVT B03** Continued

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

CHARGING PROCEDURES for **TTB01/ TVTB03**

Plug NOCO charger into wall outlet. Press mode until 12V lights up. See below for charging explanation.








Understanding Charge LEDs.

The charger has one (1) Charge LED. This Charge LED indicates the connected battery(s) state-of-charge (SOC). See the explanation below:

LED	Explanation
Pulsing Red LED	The Charge LED will slowly pulse "on" and "off" when the battery is less than 75% fully charged.
Pulsing Green LED	Bulk charge complete, optimizing battery for extended life.
Solid Green LED	When the battery is 100% charged, the Charge LED will be solid green.
Maintenance Green LED	After the battery is fully charged, the charger will continue monitoring the battery, and provide ongoing maintenance and optimization. The 100% Charge LED will pulse "on" and "off" slowly during these cycles. The charger can be left connected to the battery indefinitely.

Understanding Error LEDs.

Error Conditions will be indicated by the following LEDs.

LED	Reason/Solution
 Solid	Charger is in Standby mode or Battery voltage is too low for charger to detect.
 Solid	Possible battery short / Battery will not hold a charge. Have battery checked by a professional.
 Solid	Battery voltage is too high for the selected charge mode / Check the battery and charge mode.
 Solid	Reverse polarity / Reverse the battery connections.
   Flashing	Charger internal temperature too high / Charger will resume function once the Charger internal temperature drops. Charger ambient temperature too cold / Charger will resume function once the Charger ambient temperature rises.

Common Trailer

Wiring Problems

- Trailer not properly grounded.
- Trailer not wired to industry standard.
- Open filament in light bulb.
- Wires open or shorted.
- Corrosion on ground between light & mounting bracket.

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