



**MODEL 1391**

**OPTIC SYSTEM TESTER**

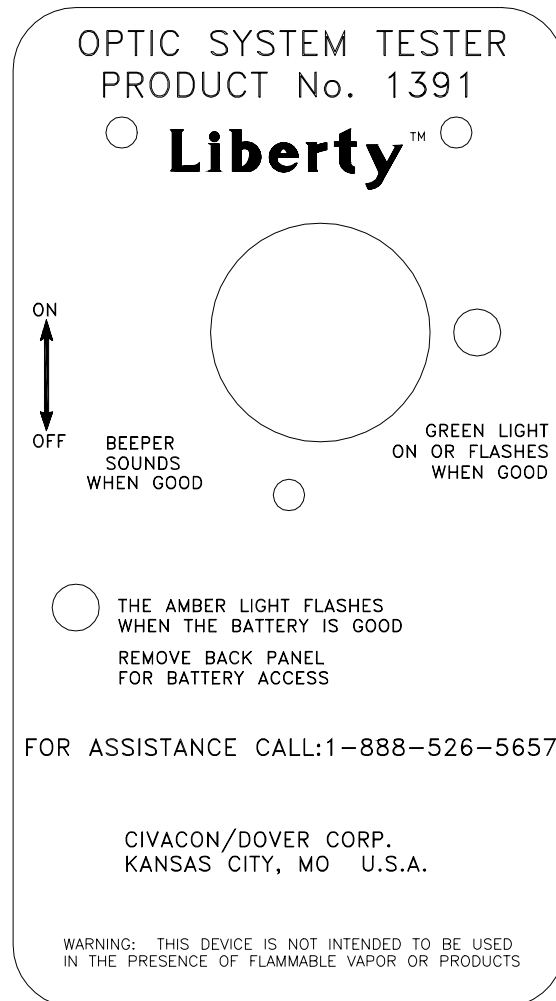
**INSTRUCTION SHEET**

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**CIVACON**  
**A DOVER RESOURCES CO.**  
**4304 MATTOX RD.**  
**KANSAS CITY, MO 64150**

## MODEL 1391 OPTIC SYSTEM TESTER



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## **PRODUCT DESCRIPTION**

The model 1391 Optic Tester is a versatile unit that is capable of testing many products found on truck overfill systems. Its ease of use, portability and flexibility provide the user with not only confidence that his system will function at the load terminal but the 1391 also aids the user during troubleshooting conditions. The 1391 simulates terminal rack signal levels in order to test the truck's overfill protection system.

## **FEATURES AND BENEFITS**

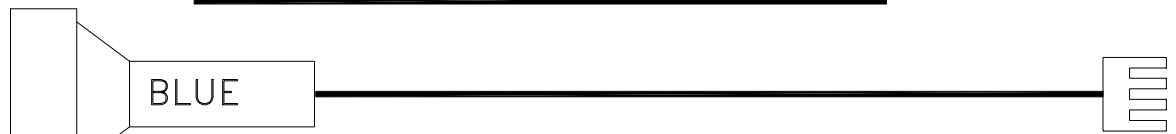
- Tests All Individual Optic Probes – 2 Wire, Quick Start, 5 Wire
- Checks Thermistor and Optic Socket Output of On Board Monitors(ROM)
- Can Be Used In Both Routine and Troubleshooting Situations
- Because of Audio Tone Present for 'Good' Condition, Only One Operator is Needed to Perform Periodic Probe Dip Testing on Truck

## **SUPPLIED ACCESSORIES**

H50308    TEST LEAD, 1391, 2 WIRE  
D40028    TEST LEAD, 1391, 4 WIRE  
H50325    TEST LEAD, 1391, ROM THERM OUTPUT W/PROBE  
H50357M   BATTERY, 9 VOLT, ALKALINE – QTY 2, INSTALLED

## OPTIONAL ACCESSORIES

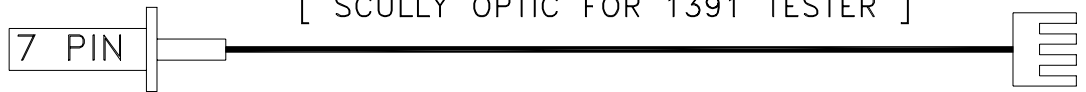
### TEST PLUGS – ASSORTED



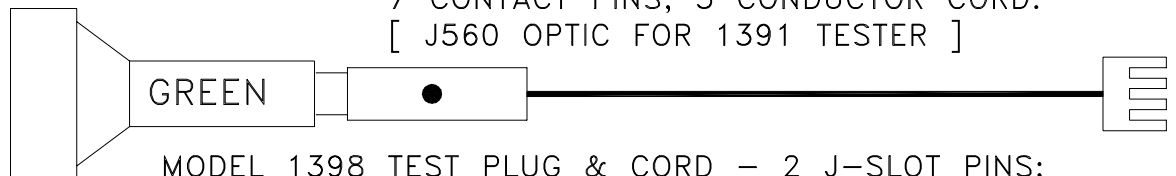
MODEL 1395 TEST PLUG & CORD – 3 J-SLOT PINS;  
6 CONTACTS; 5 CONDUCTOR CORD.  
[ API OPTIC FOR 1391 TESTER ]



MODEL 1396 TEST PLUG & CORD – 2 J-SLOT PINS;  
6 CONTACTS; 5 CONDUCTOR CORD.  
[ SCULLY OPTIC FOR 1391 TESTER ]



MODEL 1397 TEST PLUG & CORD – J560 (7-WAY);  
7 CONTACT PINS; 5 CONDUCTOR CORD.  
[ J560 OPTIC FOR 1391 TESTER ]



MODEL 1398 TEST PLUG & CORD – 2 J-SLOT PINS;  
8 CONTACTS; 5 CONDUCTOR CORD.  
[ THERMISTOR OBM FOR 1391 TESTER ]



MODEL 1399 TEST PLUG & CORD – J560 (7-WAY);  
7 CONTACT PINS; 5 CONDUCTOR CORD.  
[ J560 THERMISTOR FOR 1391 TESTER ]

## 1.0 TESTING 2 WIRE OPTIC PROBES – (Red/Black wire)

Connect 1391 Tester as shown in Figure 1 with D40028 test lead.  
GREEN light is ON and TONE is heard with Good Probe.

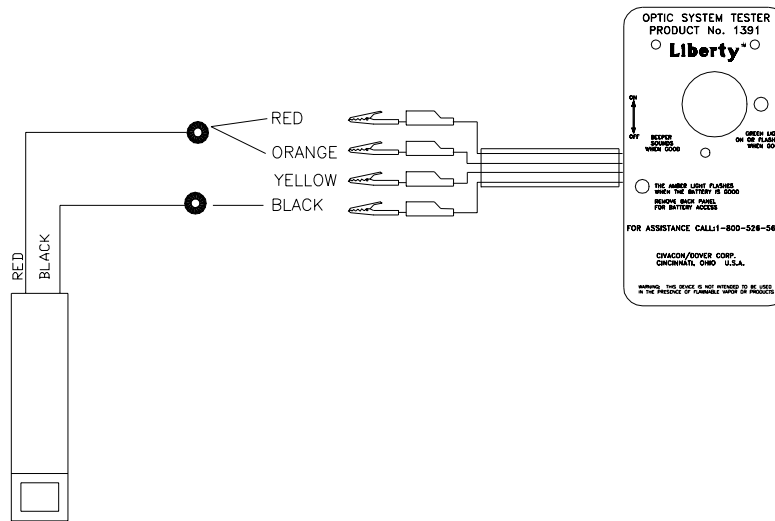


FIGURE 1

## 2.0 TESTING QUICK START OPTIC PROBES (White/Black wire)

Connect 1391 Tester as shown in Figure 2 with D40028 test lead.  
GREEN light is ON and TONE is heard with Good Sensor.

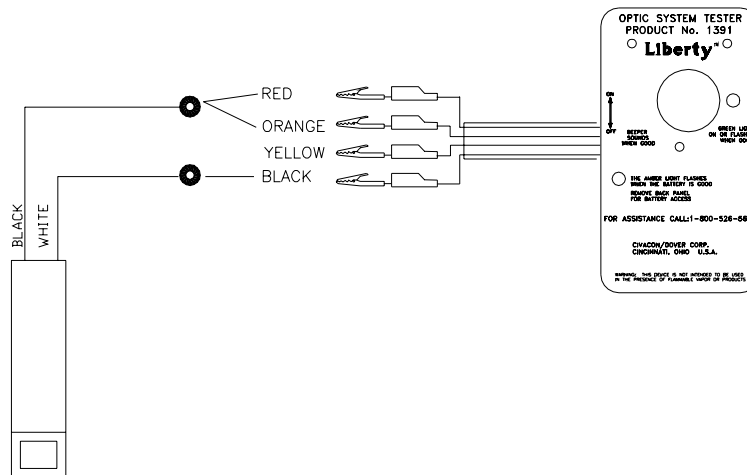


FIGURE 2

### 3.0 TESTING 5 WIRE OPTIC PROBES

Connect 1391 Tester as shown in Figure 3 with D40028 test lead. GREEN light is ON and TONE is heard with Good Probe.

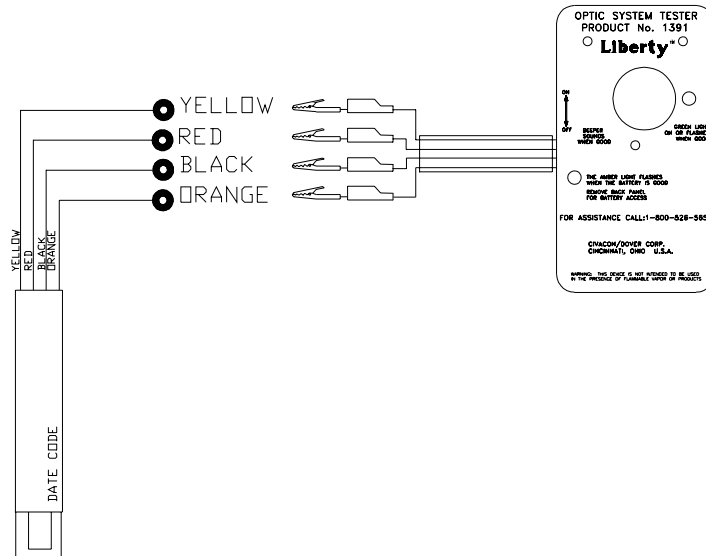


FIGURE 3

### 4.0 TESTING ON BOARD MONITOR THERMISTOR OUTPUT (ROM) WITH TEST PLUG 1398 or 1399 (see page 3)

Connect 1391 Tester as shown in Figure 4. GREEN light is ON and TONE is heard with Good Probe. Move the switch on the test plug to the other position. GREEN light and TONE are active as with the other position.

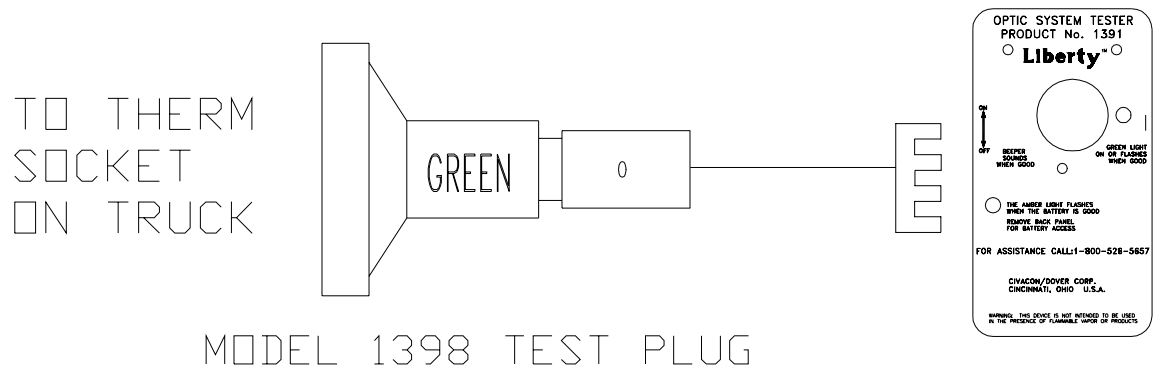
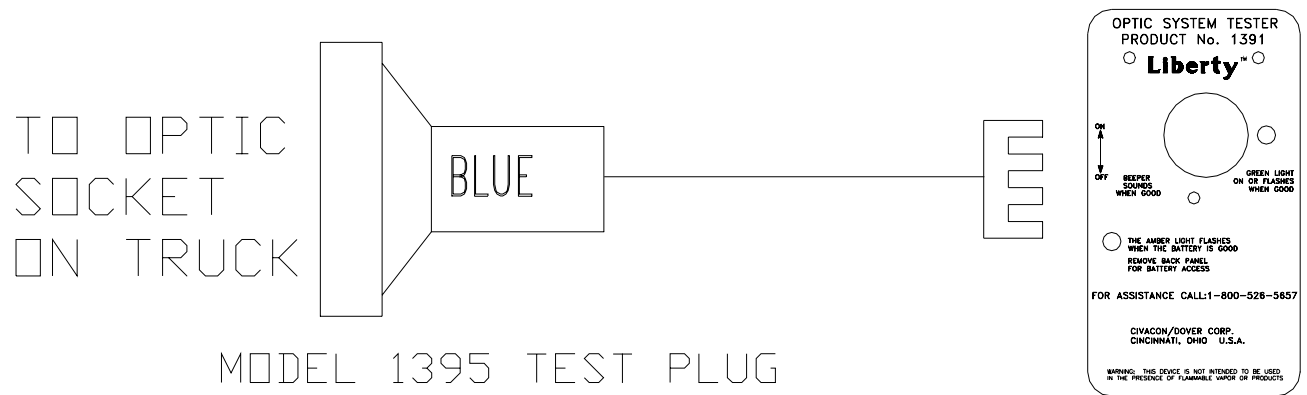


FIGURE 4

## 5.0 TESTING ON BOARD MONITOR(ROM) OPTIC OUTPUT WITH TEST PLUG 1395, 1396, 1397 (see page 3)

Connect 1391 Tester as shown in Figure 5.

GREEN light is ON and TONE is heard with Good Sensor.



**FIGURE 5**

## 6.0 TESTING ON BOARD MONITOR(ROM) THERMISTOR OUTPUT WITH TEST LEADS

Remove top cover of ROM Monitor.

Connect 1391 with H50325 test leads as follows: (See figure 6)

| ROM THERM CONNECTOR | 1391 LEAD |
|---------------------|-----------|
| ORANGE AND RED      | PROBE     |
| ORANGE              | ORANGE    |
| RED                 | RED       |
| BLACK               | BLACK     |

Connect PROBE from lead to ORANGE terminal on THERMISTOR connector on ROM. ROM must have the PERMIT light ON before making test. GREEN light is ON and TONE is heard with Good Sensor.

Connect PROBE from lead to RED terminal on THERMISTOR connector on ROM. GREEN light is ON and TONE is heard with Good Sensor. If no TONE is heard when attaching PROBE to either the ORANGE or RED connections, the ROM needs to be replaced.

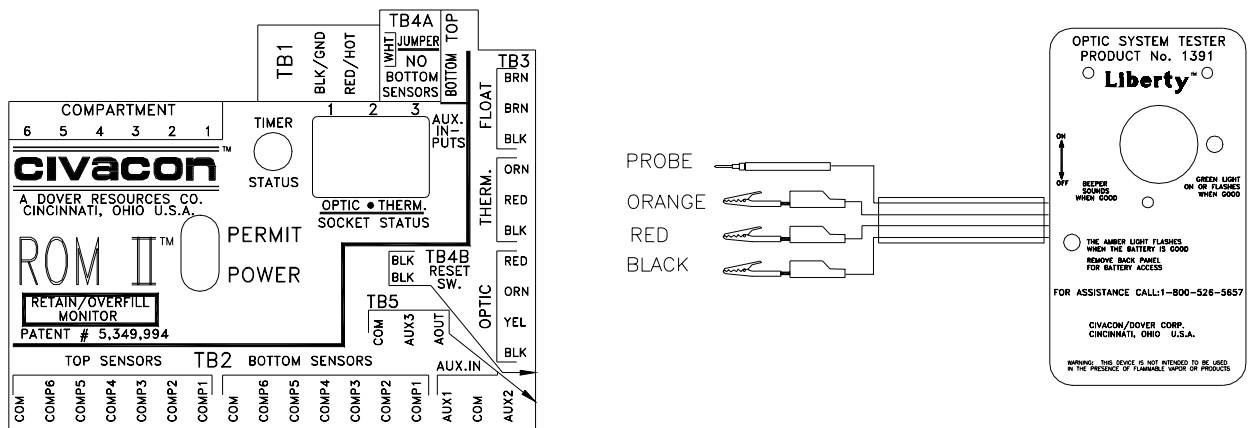


FIGURE 6

## 7.0 TESTING ON BOARD MONITOR(ROM) OPTIC OUTPUT WITH TEST LEADS

Remove top cover of ROM Monitor.

Connect 1391 with D40028 test leads as follows: (See figure 7)

| ROM THERM CONNECTOR | 1391 LEAD |
|---------------------|-----------|
| RED                 | RED       |
| ORANGE              | ORANGE    |
| YELLOW              | YELLOW    |
| BLACK               | BLACK     |

Connect alligator leads to the OPTIC connector on the ROM. ROM must have the PERMIT light ON before making test. GREEN light is ON and TONE is heard with Good Sensor.

If the ROM has a PERMIT and there is no TONE and GREEN light on tester, the ROM needs to be replaced.

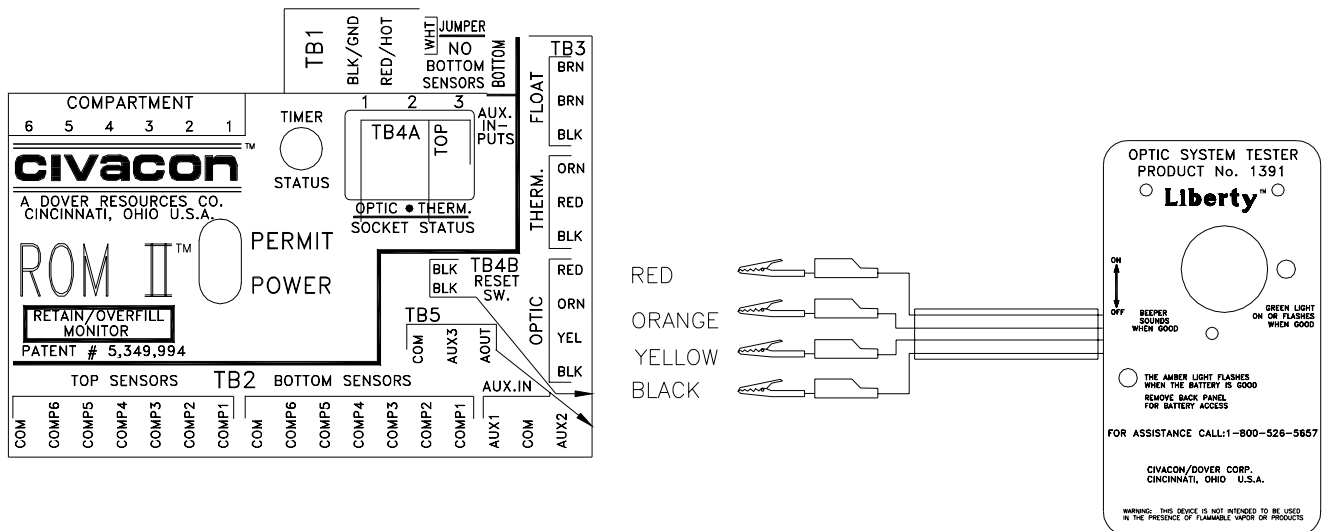
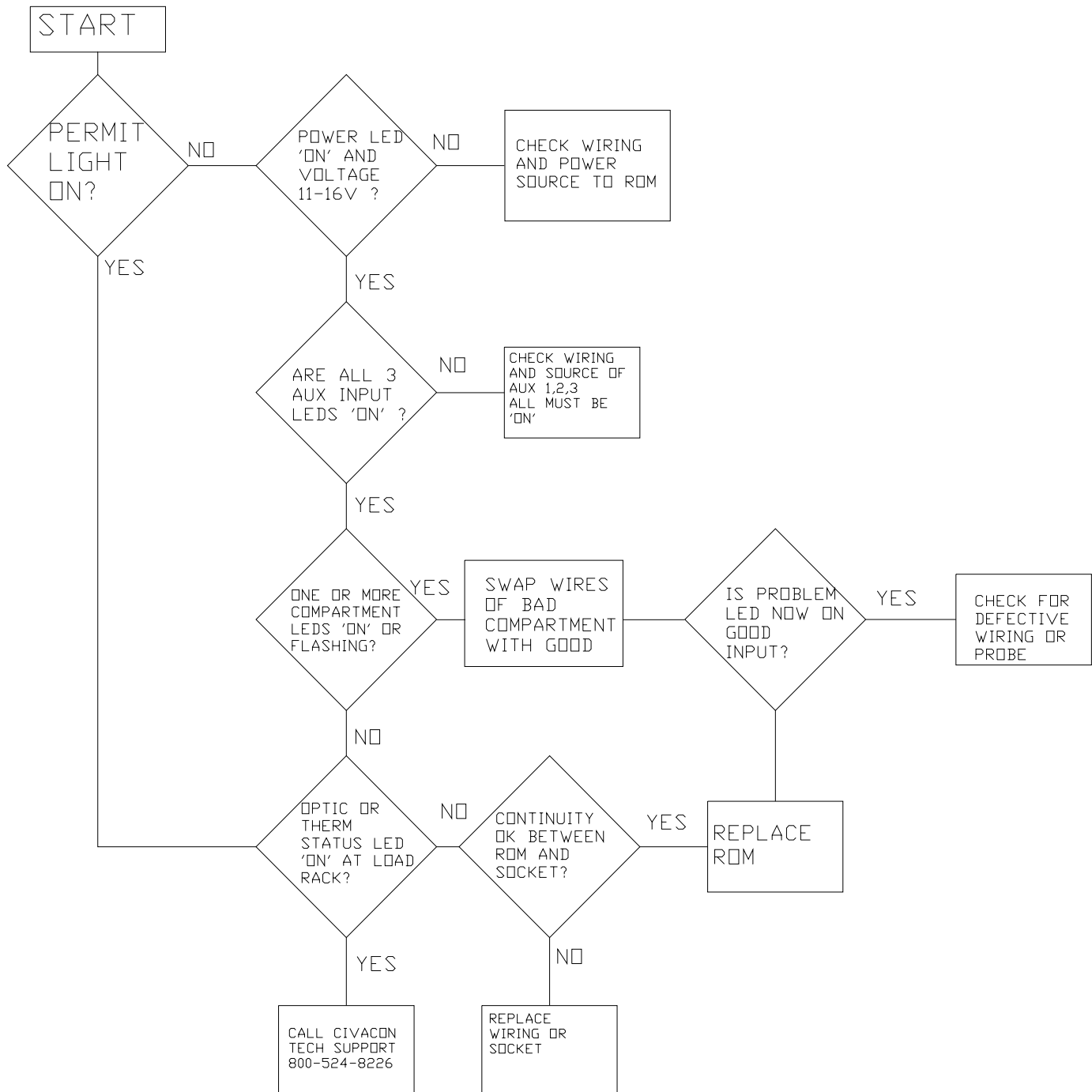


FIGURE 7

## 8.0 ROM TROUBLESHOOTING FLOWCHART



# QUESTIONS OR HELP?

If a question arises at any time during the operation of this or any other **CIVACON** product, please call the **CIVACON ELECTRONICS TECHNICAL ASSISTANCE LINE** :

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