

# **MSD** INSTALLATION INSTRUCTIONS

## **MSD Race Ignition Test Tool PN 89973**

**ONLINE PRODUCT REGISTRATION:** Register your MSD product online. Registering your product will help if there is ever a warranty issued with your product and helps the MSD R&D team create new products that you ask for! Go to [www.msperformance.com/registration](http://www.msperformance.com/registration)

### **Parts Included:**

1- Module

### **FEATURES**

The MSD Race Ignition Test Tool, PN 89973, (Test Tool) is designed for use by racing sanctioning bodies. This tool can be attached to the MSD CAN bus or the Diagnostic Connector to validate the connected units or their settings. The readings on the screen allow the sanctioning bodies to verify compliance with the rules. The Test Tool provides the sanctioning bodies the ability to set their own regulated parameters from within the MSD controller. The Test Tool will function with MSD products that were designed to operate with it, such as the 6014CT. This tool is also backwards compatible with the 7730 Power Grid System.

**Note:** For use with the 7730 Power Grid System skip to section "OPERATION WITH THE 7730 POWER GRID"



Figure 1 PN89973

### **OPERATION**

A Master unit is a designated unit the Test Tool uses to validate other units are in compliance. Any MSD unit with a "REGULATED" tab on the MSD View screen can become a Master unit. Before using the Test Tool PN 89973 to validate compliance, it must be paired with the "Master" unit. The designated Master unit should be programmed with the regulated parameter values and their appropriate checkboxes selected in the REGULATED tab. Next, connect the Tech tool to the Diagnostic Connector and follow the steps to replace the Master unit. At this point, the unit is ready to check compliance when connected to any other MSD controller.

To check compliance, connect the MSD Tech Tool to a unit and observe the reading on the screen. The screen will indicate whether the connected unit is a match or a mismatch to the master unit.

An example of a Match indication on the display (Figure 1):

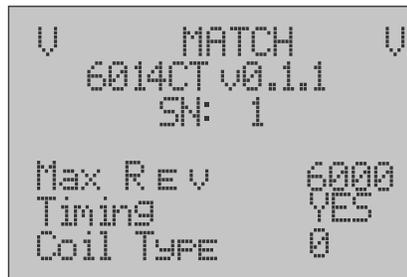
Background is **Green**

Top line: "V MATCH V"

Second line: Part Number and software version

Third line: Serial Number

Actual readings from the unit are displayed



**Figure 2 Display Match Screen**

An example of Mismatch indication on the display (Figure 2):

Background is **Red**

Top of the screen shows "XX MISMATCH XX"

Actual readings from the unit are displayed



**Figure 3 Display Mismatch Screen**

Note: For the Test Tool to operate the ignition power must be ON.

**MASTER UNIT REPLACEMENT**

Note: Before replacing the Master unit, the intended unit needs to be programmed by MSD View according to the requirements of the sanctioning body. The checkboxes associated with the regulated parameters must be checked in the REGULATED tab.

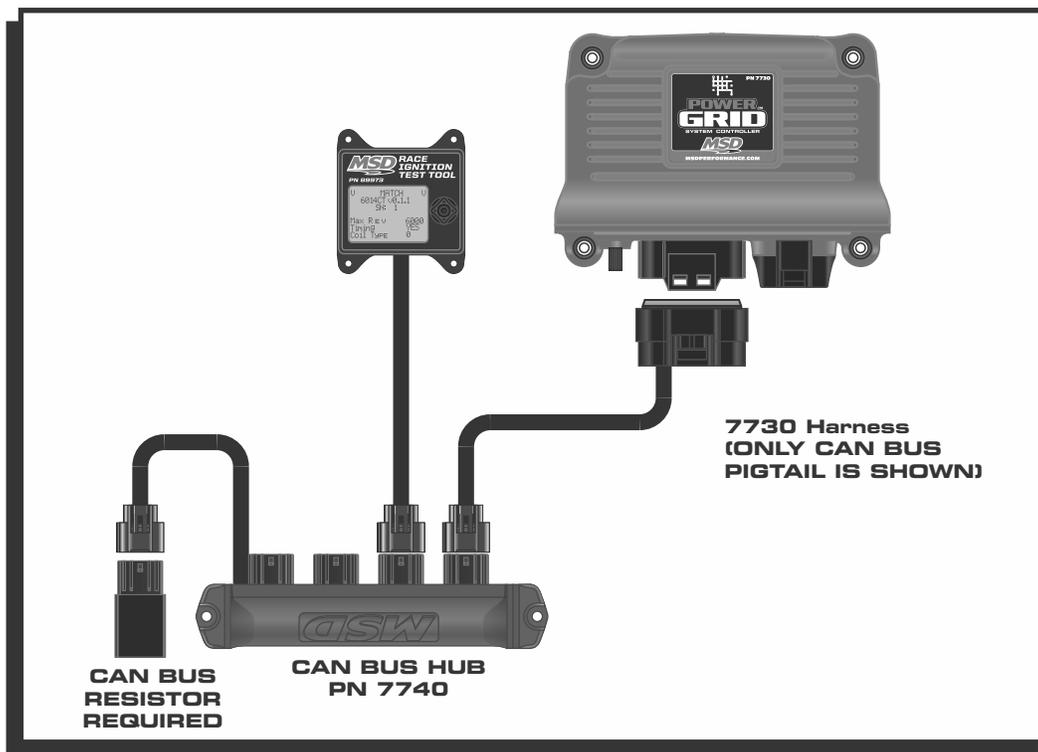
1. Connect the MSD Tech Tool to the CAN bus port.
2. Press “down” once for the readings of the Master unit to be displayed
3. Press “right” to replace the Master unit
4. Press “up” for two seconds to confirm the Master replacement
5. A message “MASTER REPLACED SUCCESSFULLY” will be displayed

**OPERATION WITH THE 7730 POWER GRID**

Connect the MSD Tech Tool to the Power Grid CAN bus. Scroll right to read the different parameters, Modules connected, or to change the display settings.

The MSD Tech Tool displays the part numbers, serial Numbers and software version number of all units connected on the CAN bus.

- If the Power Grid PN 7730 was operating for over an hour without the ARC Module the background light will be green and the TC Timeout will read 0.
- If the ARC module was recently connected, the TC Timeout will read 60 minutes and the background light will be red.
- While the 7730 operates with the engine running without the ARC module, the Timeout timer within the 7730 will decrement in 3 minutes intervals. The background light of the MSD Race Ignition Test Tool will be orange during values between 3 to 57 minutes.



**Figure 4 PN89973 System**



# INSTALLATION INSTRUCTIONS

## TECH NOTES

### Service

In case of malfunction, this MSD component will be repaired free of charge according to the terms of the warranty. When returning MSD components for warranty service, Proof of Purchase must be supplied for verification. After the warranty period has expired, repair service is based on a minimum and maximum fee.

**All returns must have a Return Material Authorization (RMA) number** issued to them before being returned. To obtain an RMA number please contact MSD Customer Service at 1 (888) MSD-7859 or visit our website at [www.msperformance.com/rma](http://www.msperformance.com/rma) to automatically obtain a number and shipping information.

When returning the unit for repair, leave all wires at the length in which you have them installed. Be sure to include a detailed account of any problems experienced, and what components and accessories are installed on the vehicle. The repaired unit will be returned as soon as possible using Ground shipping methods (ground shipping is covered by warranty). For more information, call MSD at (915) 855-7123. MSD technicians are available from 7:00 a.m. to 5:00 p.m. Monday - Friday (mountain time).

### Limited Warranty

MSD warrants this product to be free from defects in material and workmanship under its intended normal use\*, when properly installed and purchased from an authorized MSD dealer, for a period of one year from the date of the original purchase. This warranty is void for any products purchased through auction websites. If found to be defective as mentioned above, it will be repaired or replaced at the option of MSD. Any item that is covered under this warranty will be returned free of charge using Ground shipping methods.

This shall constitute the sole remedy of the purchaser and the sole liability of MSD. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representation whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall MSD or its suppliers be liable for special or consequential damages.

\*Intended normal use means that this item is being used as was originally intended and for the original application as sold by MSD. Any modifications to this item or if it is used on an application other than what MSD markets the product, the warranty will be void. It is the sole responsibility of the customer to determine that this item will work for the application they are intending. MSD will accept no liability for custom applications.