

## MSD Digital Ignition Tester PN 8998

These instructions detail how to use the Ignition tester with an MSD 6, 7, 8, 10, or SCI Series Ignition and the CPC Ignition, PN 7600. If you need to test an MSD DIS Ignition, you need tester PN 8996.

**WARNING:** Do not connect directly to the coil or this unit will be damaged.

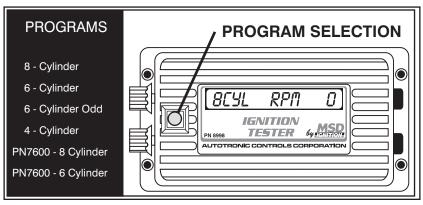
### PARTS INCLUDED:

- 1 Digital Ignition Tester, PN 8998
- 1 Load Plug

ONLINE PRODUCT REGISTRATION: Register your MSD product online and you'll be entered in our monthly 8.5mm Super Conductor Spark Plug Wire give-away! Registering your product will help if there is ever a warranty issue with your product and helps the MSD R&D team create new products that you ask for! Go to www.msdperformance.com/registration.

### PROGRAMMING

When you first connect power to the Tester, the LCD will display the name and Part Number. You can bypass this information by pushing the Red button. The Tester automatically defaults to the program for an 8-cylinder, single trigger ignition system. To select different applications press the Red Select button until the program you need is displayed.



### WIRING

Figure 1 Ignition Tester Programs.

The wires of the tester connect as follows. **Note:** The Cam Sync connector is only used with the Digital Programmable 7 Series and Multi-Function Controllers.

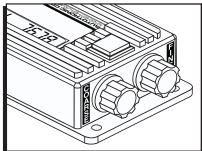
Red:	Connect to 12 volts.
Black:	Connect to a good ground source.
White:	This is the trigger wire used to test the points/amplifier (white wire trigger) circuit of an MSD Ignition.
Green/Violet:	This 2-Pin connector is for testing the magnetic input circuit of MSD Ignitions. It plugs directly into the MSD's magnetic pickup connector. Violet is mag (+) and Green is mag (-).
Cam Sync Lt. Blue/ Lt. Green:	This is a 2-pin connector for testing the cam sync pickup circuit of an MSD Programmable Ignition or CPC Ignition System. It plugs directly into the MSD Digital 7 Programmable Ignition's cam pickup connector. Light Blue is cam (+) and Light Green is cam (-). The CPC Ignition is supplied with a harness adapter.

### **RPM ADJUSTMENT**

The MSD Digital Tester has two rpm adjustments; Coarse and Fine:

**Coarse Adjustment:** When this knob is turned clockwise the rpm will increase in 100 rpm increments. This allows a large spread of rpm to be covered in a short period of time.

**Fine Adjustment:** When this knob is turned clockwise the rpm will increase in 1 rpm increments for precise adjustments.



**INSTALLATION & USE** 

Figure 2 Adjusting the Tester's RPM.

- 1. Be sure the ignition is Off.
- 2. Remove the coil wire from the distributor cap and install the MSD Load Plug. Connect the Plug to a ground source. Make sure the ground source is away from fuel lines, the carburetor or throttle body as a spark will jump the gap.

```
WARNING: A spark is going to jump across the tester's gap. Make sure there are no fuel sources or wiring near the tester. Never touch the test plug with the tester connected.
```

- 3. Attach the Tester's Red wire to a 12 volt source such as the positive battery terminal.
- 4. Connect the Black wire to ground.
- 5. Connect the trigger wire to fit your application. This will be the wire with the White alligator clip or the 2-pin connector for magnetic pickups. **Note:** The 2-pin mag pickup connector will <u>never</u> be used with the White trigger wire.
- 6. Make sure both the coarse and the fine adjustments on the tester are turned to the full counter clockwise position (zero).
- 7. Turn the ignition switch On and press the red button of the Tester until your appropriate engine combination is selected.
- 8. Increase the Coarse adjustment until you reach the desired rpm. Note that a spark will be firing across the load plug. The fine adjustment can be used to get the exact rpm you desire.

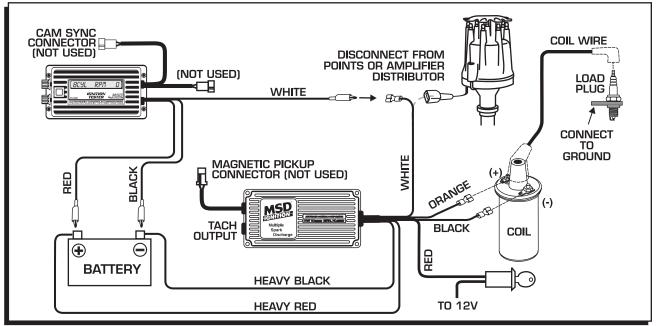


Figure 3 Testing an MSD 6 Series Through the White Wire.

#### INSTALLATION INSTRUCTIONS

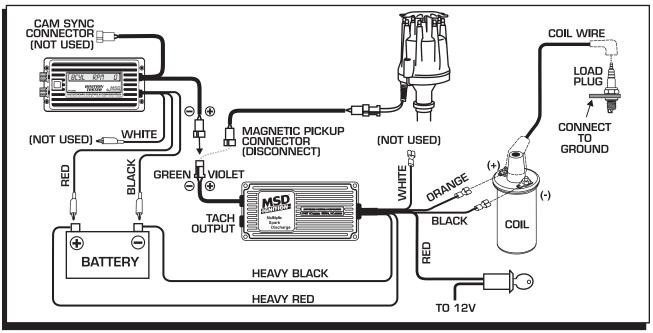


Figure 4 Testing an MSD 6 Series Through the Mag Pickup.

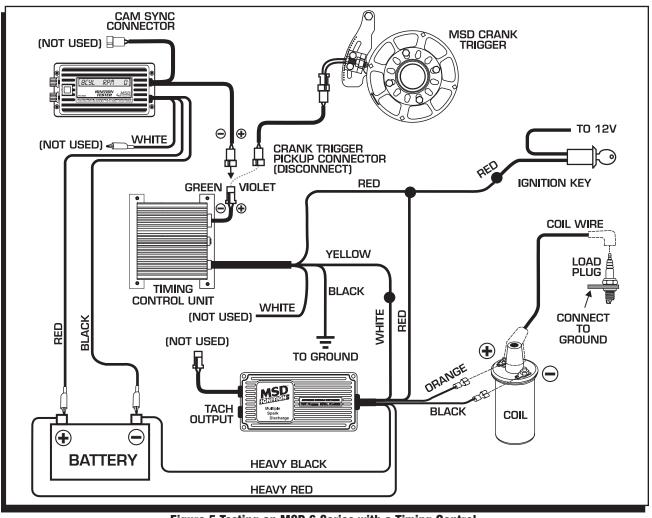


Figure 5 Testing an MSD 6 Series with a Timing Control.

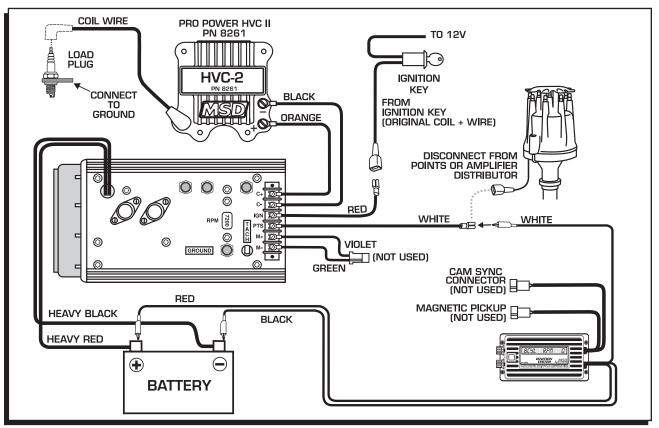
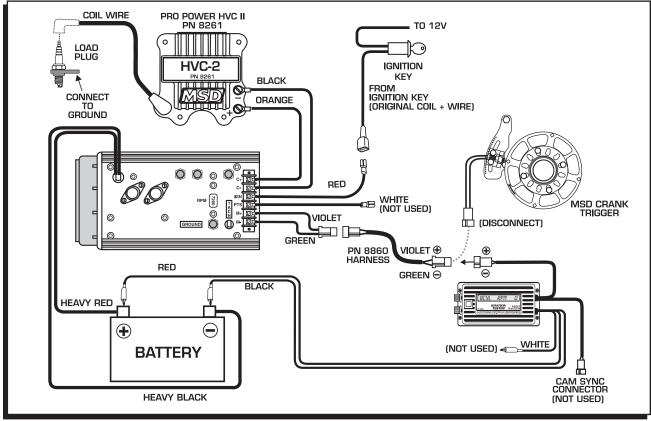


Figure 6 Testing an MSD 7 Series Ignition Through the White Wire.





#### **INSTALLATION INSTRUCTIONS**

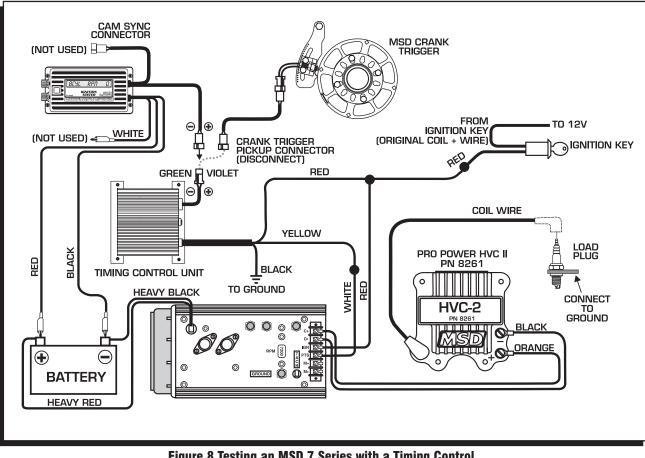


Figure 8 Testing an MSD 7 Series with a Timing Control.

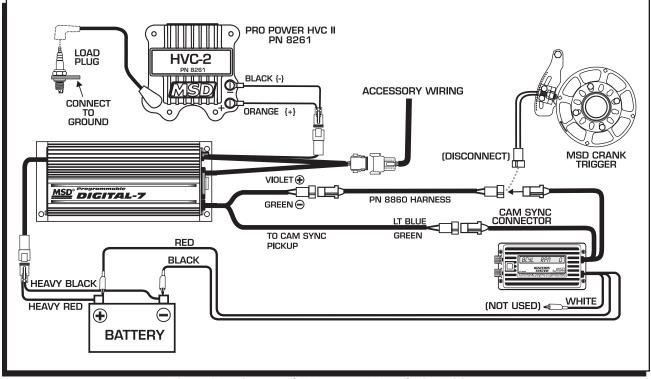


Figure 9 Testing an MSD Programmable 7 Series Inition.

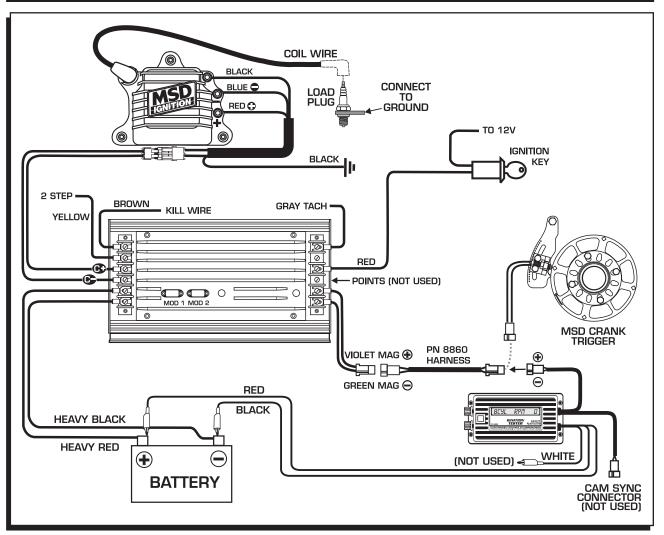


Figure 10 Testing an MSD 10 Plus Ignition.

#### INSTALLATION INSTRUCTIONS

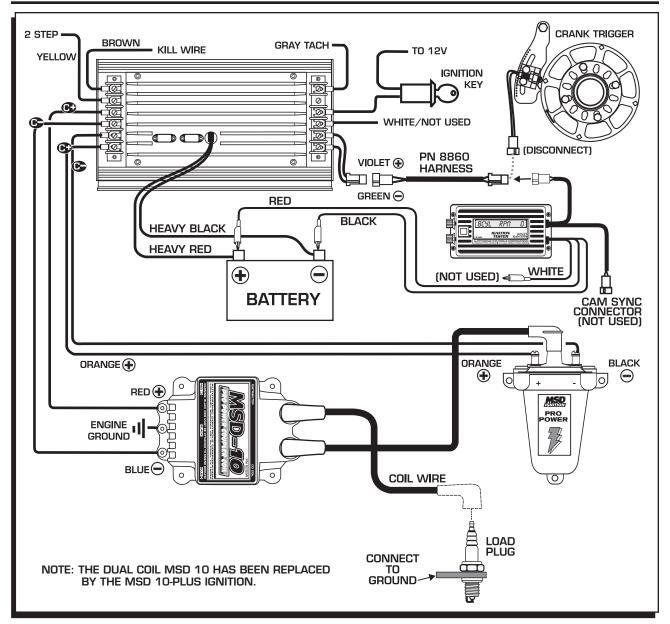


Figure 11 Testing a Dual Coil MSD 10 Ignition.

## TIPS & TROUBLESHOOTING:

#### No spark after Tester is connected:

- Inspect the wiring of the tester. Make sure you have a good ground and 12 volt source.
- Check to make sure you have the correct testing program for your application.
- Swap another coil in and repeat the test. If spark occurs, the coil is at fault.



# **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.msdperformance.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.

MSD • www.msdperformance.com • (915) 857-5200 • FAX (915) 857-3344 © 2014 MSD LLC FRM28619 Revised 01/14 Printed in U.S.A.