# MSD Timing Light PN 8992

#### **Parts Included:**

- 1 MSD Timing Light
- 1 Cable Harness

**Note:** Consult a service manual for your vehicle for information on vacuum connections and specific timing procedures.

### **CONNECTING THE MSD TIMING LIGHT**

- 1. Connect the inductive pickup to the timing light harness.
- 2. With the engine off, connect the Black clip to the negative (-) terminal on the battery. Connect the Red clip to the positive (+) terminal on the battery. The voltage should be between 10-16 volts (Figure 1).
- 3. Clamp the inductive pickup over the number 1 spark plug wire (See Figure 1). The position of the inductive pickup does not matter but the wire must fit in the gap between the jaws of the pickup (Figure 2). Do not pinch the wire between the end of the jaws. Consult your vehicle's service manual to locate the number 1 cylinder on your engine.

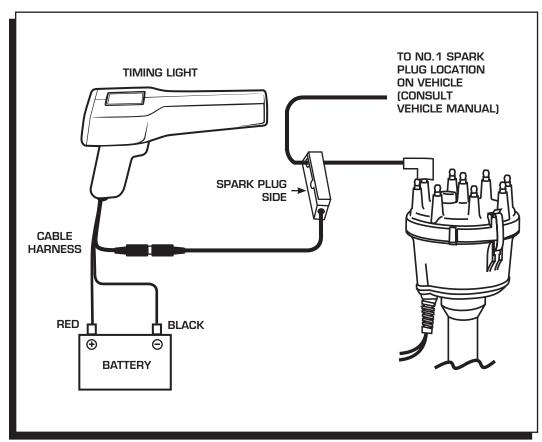


Figure 1 Wiring.

**Note:** The ferrite pole pieces in the inductive pickup are fragile and may be damaged if the jaws are allowed to "snap" closed or if the pickup itself is dropped.

4. With the engine stopped, clean any dirt from the timing marks. Figure 3 shows several typical timing marks and the rotation of the engine.

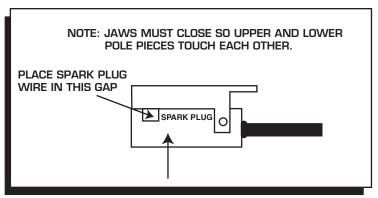


Figure 2 Inductive Pickup.

## **CHECKING THE ENGINE TIMING**

**Caution**: When timing the engine, be very careful not to let the Timing Light cables get tangled in the engine's cooling fan.

- 1. Start the engine and let it warm up to operating temperature. Note that the light flashes when the power is connected. There is no trigger button.
- 2. Set the engine idle speed according to the service manual using a tachometer.
- If the distributor has breaker points, set the dwell angle according to the service manual before checking engine timing. (When using an MSD Ignition, the dwell setting is not critical.)
- 4. With the engine idling at the recommended rpm, aim the Timing Light at the timing marks. The engine timing should be the same as recommended in the service manual. If not, see the next section on adjusting the timing.

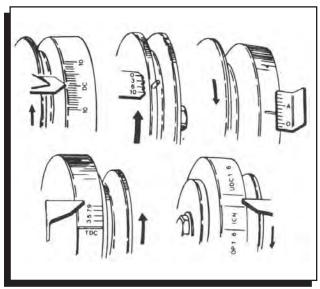


Figure 3 Typical Engine Timing Marks.

# **ADJUSTING THE ENGINE TIMING**

### STANDARD POINTS OR ELECTRONIC DISTRIBUTORS

- 1. Stop the engine. Loosen the distributor hold-down clamp until the distributor is just loose enough to turn the distributor by hand.
- 2. Restart the engine. Using the Timing Light, rotate the distributor until the timing marks line up. Stop the engine and securely tighten the distributor hold-down clamp.
- 3. Restart the engine and recheck the timing. If the timing needs further adjustment, repeat.

### CRANK TRIGGER SYSTEMS

1. Stop the engine. Loosen the timing pickup and adjust it in the bracket, depending on whether you want to advance or retard the timing. Tighten the pickup.

**Caution:** Do not attempt to move the pickup while the engine is running. Personal injury or damage to the timing pickup could result.

2. Restart the engine and recheck the timing. If the timing needs further adjustment, repeat step.

#### **TIMING TIPS**

- In many racing applications, the timing should be checked at a higher rpm to verify total advance.
   In this case, a new mark must be made on the harmonic balancer representing your desired total advance (i.e. BTDC). This can be done using a timing tape or a degree wheel. After you've made the mark, start the engine and increase the rpm high enough to where all the mechanical advance is in. When your new mark lines up with the timing marks, you are at your selected total timing.
- Make sure the power clips are securely attached to the battery or alternator. Do not connect these
  to the coil.
- Keep the Timing Lights power cables away from all the spark plug wires.
- Make sure the number 1 cylinder wire is well separated from the other spark plug wires. This minimizes the chance for stray signals causing inaccurate readings.
- Make sure the wires to the inductive pickup do not pass near any spark plug wires. Again, this will help prevent false triggering of the light.
- Keep the pole pieces clean by wiping them with a cloth. Do not scrape or file the pole pieces. To
  insure accurate readings, make sure the number 1 wire is widely separated from the other spark
  plug wires.
- Always use the same timing light when tuning. This will keep your timing settings consistent.

**Note:** MSD offers a timing tape, PN 8985, that can be applied to the balancer to help set the total timing.



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#### **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.msdignition.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 Ignition 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 IGNITION 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 Ignition. 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 Ignition. 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 Ignition 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 Ignition. Any modifications to this item or if it is used on an application other than what MSD Ignition 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 Ignition will accept no liability for custom applications.

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