

# **MSD** **IGNITION** **INSTALLATION INSTRUCTIONS**

## Pro Cap for the MSD Pro Mag PN 7455

### Parts Supplied

1 - Pro Cap, PN 7408

1 - Adapter Ring

1 - Rotor, PN 7423

1 - Billet Housing

2 - Plastic Hex Head Rotor Screws

3 - O-Rings

1 - Wire Retainer

4 - Self Tapping Screws

3 - Socket Head Cap Screws

10 - Belleville Washers

This Cap is designed to be used with MSD Pro Mags that are equipped with a Ford style cap and rotor. If you have a Pro Mag 12 that has the small diameter distributor cap on it, the unit must be sent to MSD to be modified to accept a Pro Cap.

**Note:** Blue Loctite or an equivalent thread locking compound is recommended for this installation.

## INSTALLATION

1. Remove the existing distributor cap, rotor, rotor drive and gray spacer ring (Figure 1).



Figure 1 Removing the Original Cap, Rotor and Drive.

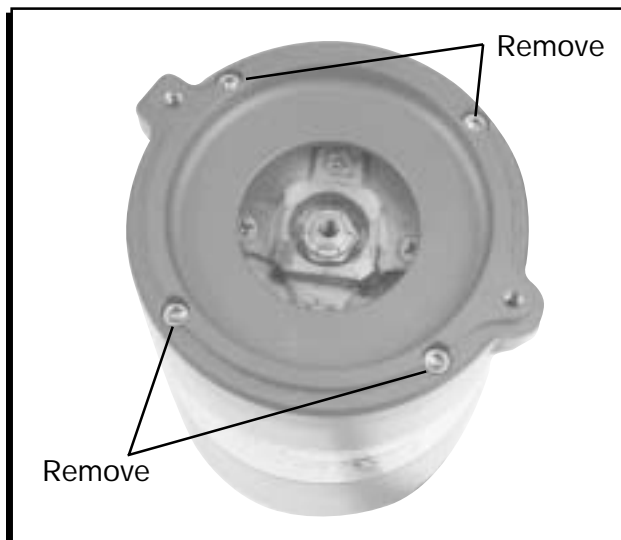


Figure 2 Removing the Cover and Billet Housing.

2. Remove the four Allen bolts and pull the upper billet aluminum housing off the generator (Figure 2).

3. Install the new billet base with the existing four screws with a small amount of Blue Loctite on the threads (Figure 3). Tighten the screws in a criss-cross pattern.

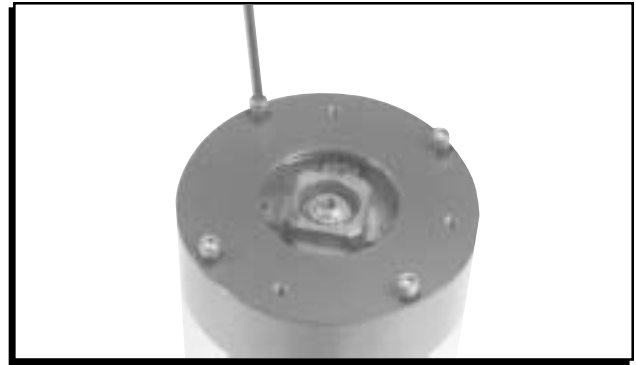


Figure 3 Installing the New Billet Housing.

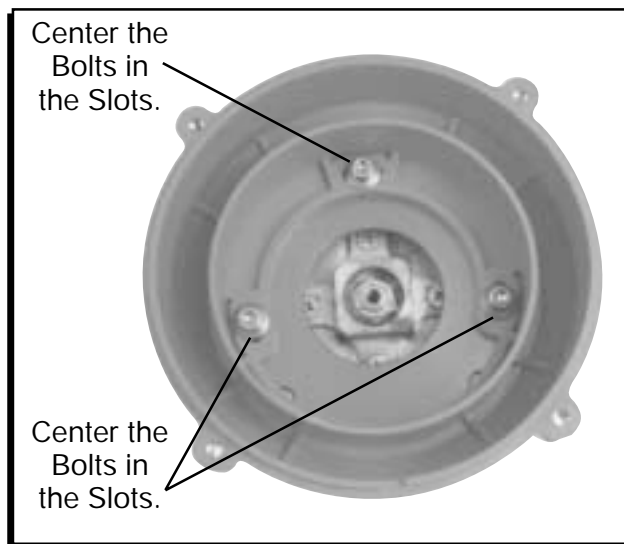


Figure 4 Installing the Adapter Ring.

4. Install the new adapter ring to the generator using the three new socket head cap screws and belleville washers (with the dome facing up). Position the adapter ring so the screws are in the middle of the adjustment slots (Figure 4). This sets the rotor phasing so the rotor tip is leading into the cap terminal when the magneto fires.

**Note:** It is recommended to check the rotor phasing after the installation.

5. Apply Loctite to the threads of the rotor drive screw. Make sure the belleville washer is in place and install the rotor drive.

6. Install the rotor making sure that it is placed correctly on the mount and the alignment dowels are seated before installing the rotor hold down screws. Install one O-ring on each of the over-molded rotor screws for increased spark isolation as well as a belleville washer (Figure 5). Apply Loctite to the threads of the rotor drive screw and tighten.

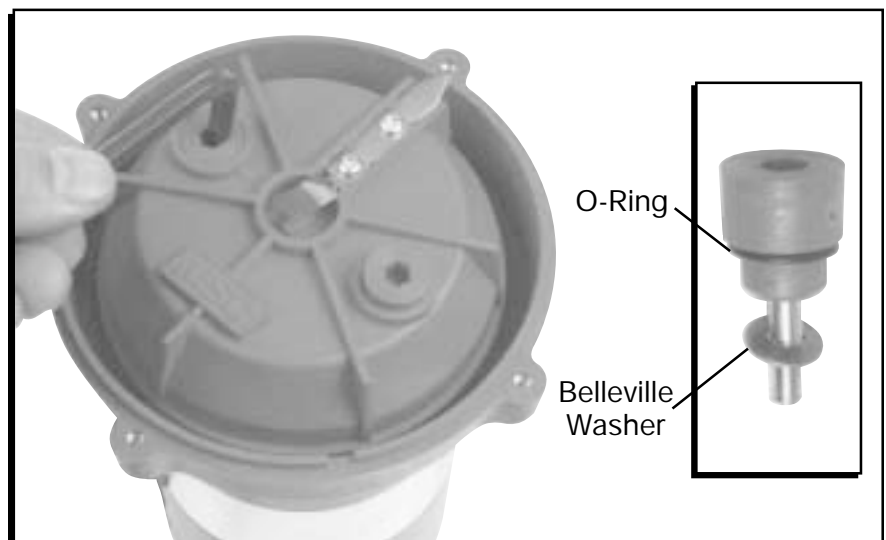


Figure 5 Installing the Rotor.



Figure 6 Installing the Wire Retainer.

7. Install the distributor cap with the four Phillips screws and belleville washers. Connect the spark plug wires to their corresponding posts.

8. Install the wire retainer over the wires and secure it with the supplied self tapping screws (Figure 6). Depending on the style spark plug boots used, the retainer may not sit flush on the posts of the cap.

## DISTRIBUTOR CAP MAINTENANCE

Like any part of your vehicle, the cap and rotor should be inspected periodically for signs of wear or carbon tracking. The terminals of the Pro Cap are serviceable items and are available as PN 7410.

Inspect the condition of the rotor tip. The rotor tip should be secure and appear in good shape. Over time the tip will show obvious signs of wear and deterioration. The center of the rotor tip should not be burned or appear pitted.

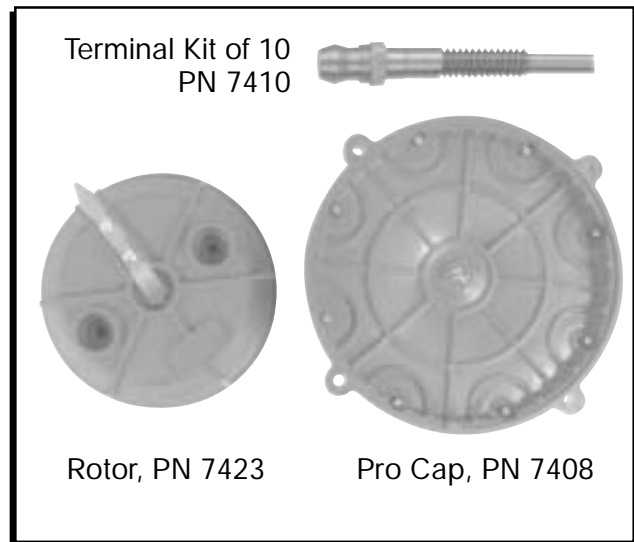


Figure 7 Inspecting the Cap and Rotor.

Check for signs of Carbon Tracking. Carbon tracking can be caused by a crack in the cap or rotor and could cause a misfire, usually under load when the most voltage is needed to jump the gap of the spark plug. Carbon tracking appears as small traces that are left when the spark jumps to a different (easier) path to ground.

Moisture can affect the transfer of the spark voltage and energy. Make sure the inside of the cap is clean and dry. Ionization, the build up of conductive gases (ozone) inside the cap, acts as a conductor and can cause spark scatter.

In some high humidity areas, it may be necessary to vent the cap to prevent moisture and eventual buildup of corrosion and ozone gases inside the cap. To vent the cap, drill three or four 1/4" holes in the spacers below the rotor.

