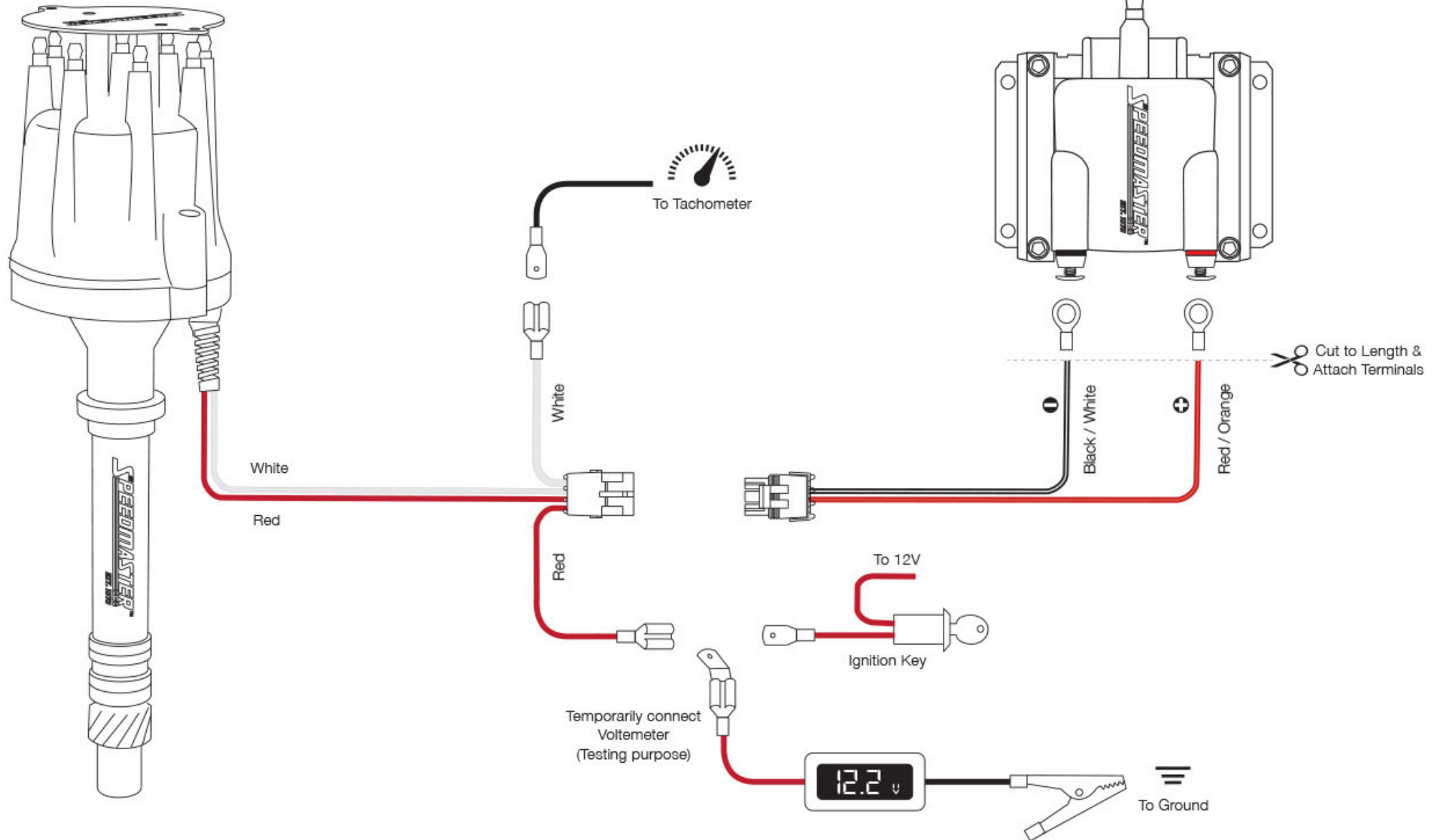


# Wiring Diagram El Rayo



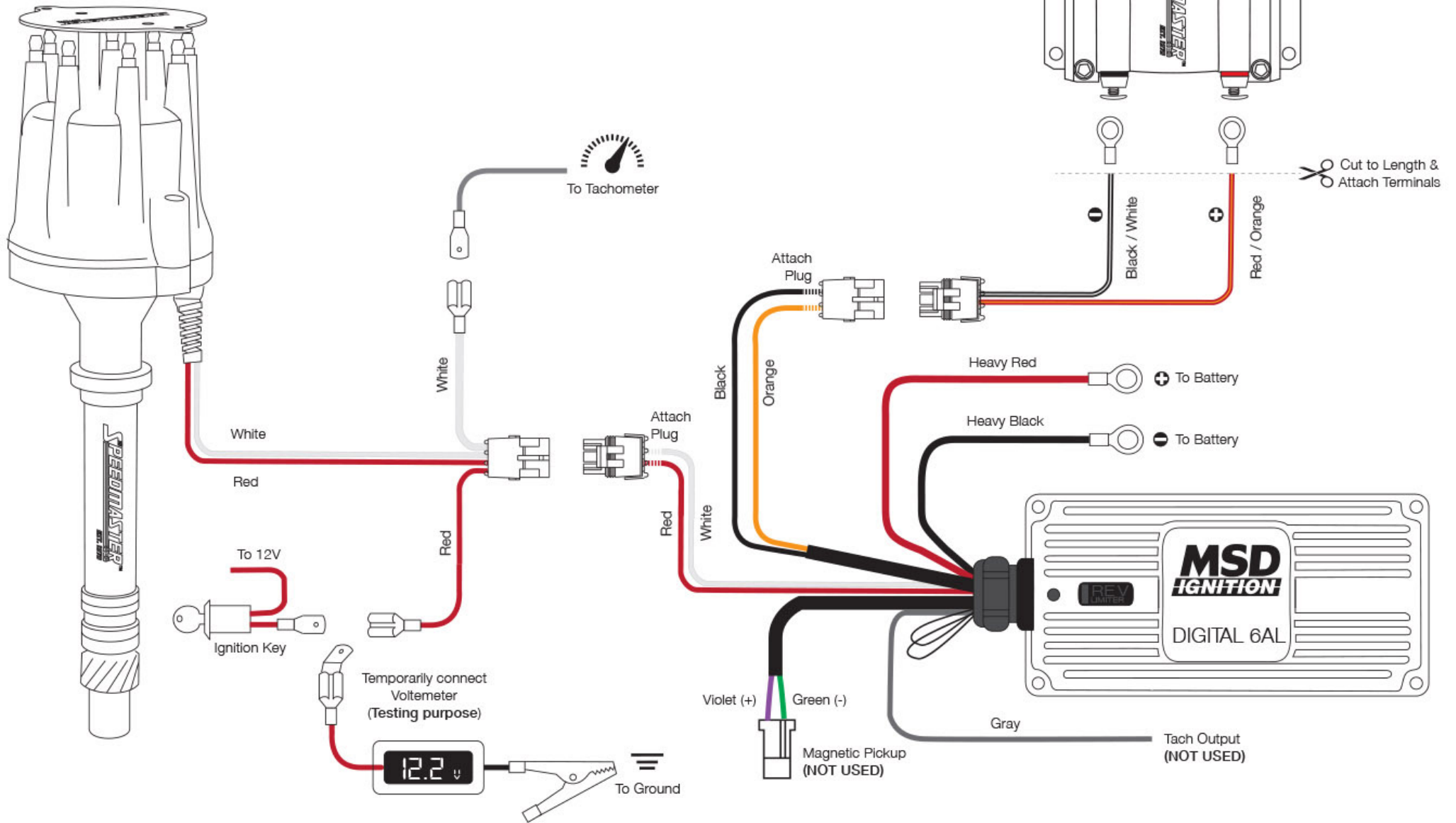
## Installation Instructions Ignition System Combo Kits

*Warning! These instructions must be read and fully understood before beginning the installation. Failure to follow these instructions may result in poor performance, vehicle damage, personal injury, or death. If these instructions are not fully understood, installation should not be attempted.*



# Wiring Diagram

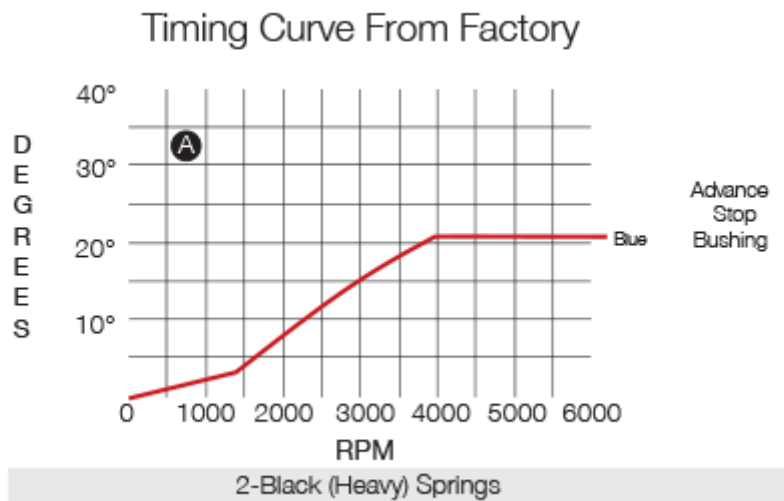
## El Rayo + MSD 6AL



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## Selecting the advance springs

- 1). The type of springs installed on the distributor determines the rate, or how quick the advance comes in.
- 2). The EI Rayo distributors are equipped with two Black Heavy springs installed to give the slowest advance curve possible. (Figure 1)



**Figure 1**

- 3). To match the advance curve to your particular application we have included two supplementary sets of springs in the kit (light silver and light red). Refer to the spring combination chart for the different types of combinations that can be achieved with different different sets of springs.(Figure 2 &3.).

String Combination	Rate of Advance	Figure 3
2- Heavy Black	Slowest	A
1- Heavy Black		B
1- Light Red		C
1-Heavy Black		D
1-Light Silver		E
2- Light Red		F
1- Light Silver		
1- Light Red	Fastets	
2- Light Silver		

**Figure 2**

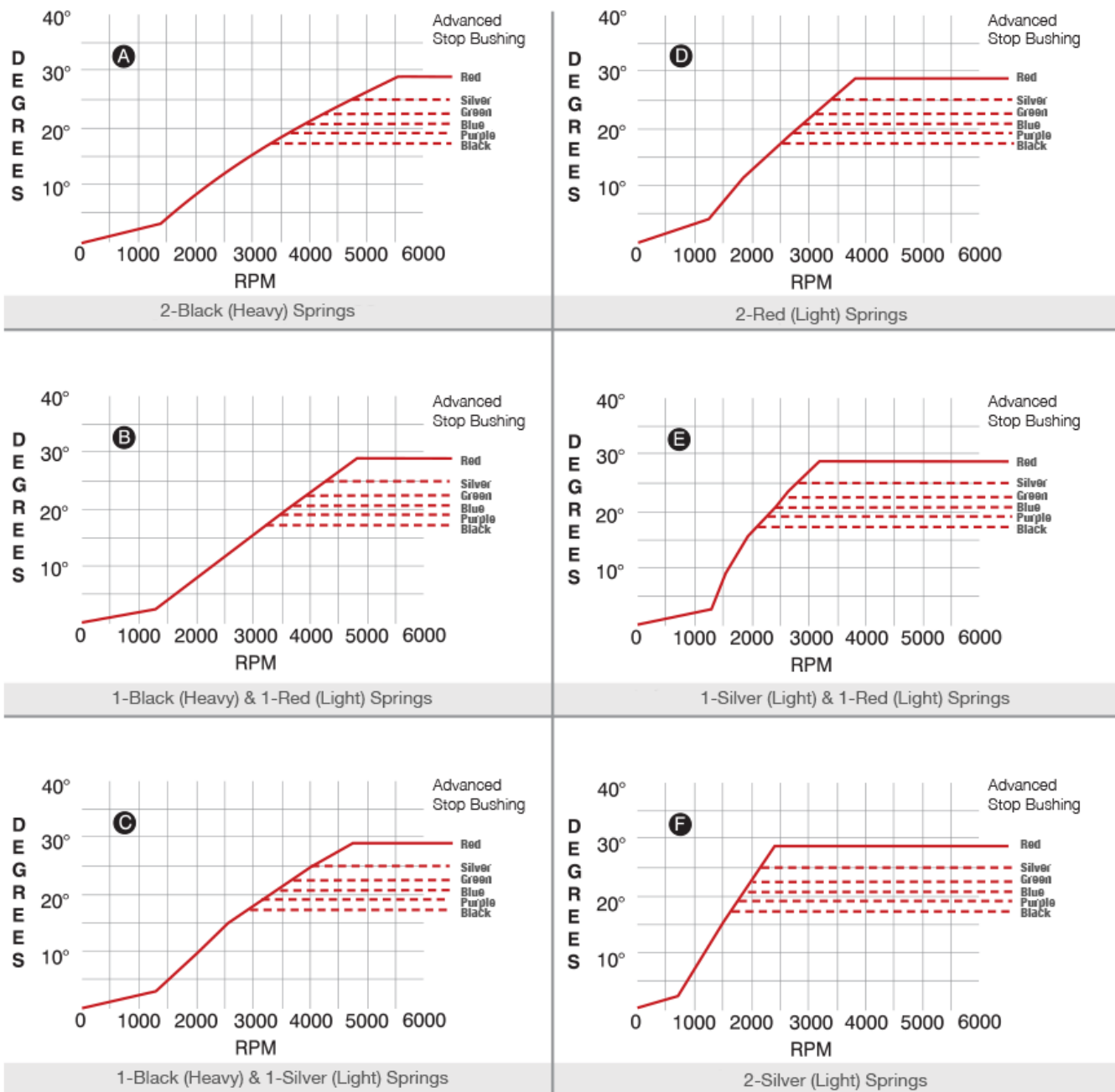


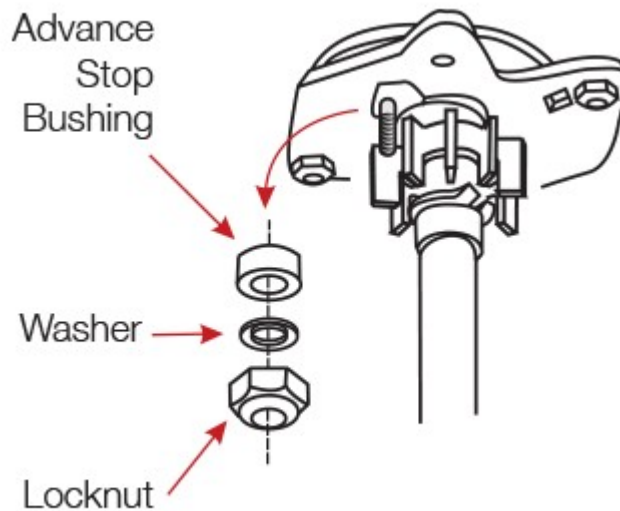
Figure 3

4). To change the springs, remove the cap and rotor and use needle nose pliers to remove the springs. Please be sure that the new springs sit in the groove on the pin.

### **Selecting the Stop Bushings.**

The Stop Bushings are responsible for limiting the amount of advance.

- 1). A Purple bushing is already installed in the distributor, five different advance stop bushings are also supplied in the distributor kit (Red, Silver, Green, Blue and Black).
- 2). If a different amount of centrifugal advance is desired, follow the next procedure to change the bushings.
- 3). Remove the lock nut and washer on the bottom of the advance assembly to change the bushing(Figure 4)



**Figure 4**

4). The chart in Figure 5 gives the size and approximate degrees for the corresponding bushings

Bushing Size	Approximate Crankshaft Degrees
Red-Smallest	28
Silver	25
Green	23
Blue	21
Purple	19
Black-Largest	18

Figure 5

### Locking out the centrifugal advance

- 1). Disconnect the advance components including the springs, weights and the advance stop bushing from the advance assembly.
- 2). Remove the roll-pin from the shaft retaining sleeve and slide the shaft two inches out of the housing (Figure 6).
- 3). Rotate the shaft 180° and insert the advance stop bushing pin into the small hole on the advance plate (Figure 7).
- 4). Connect the locknut and washer to the advance stop bushing pin. This locks the advance in place.
- 5). Fix the drive gear and roll-pin.

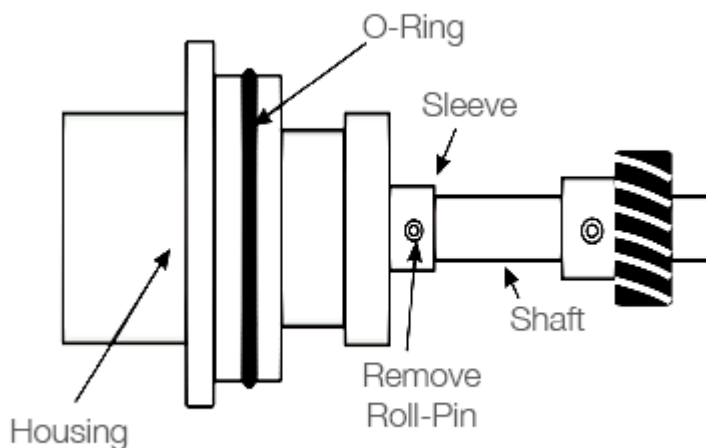


Figure 6

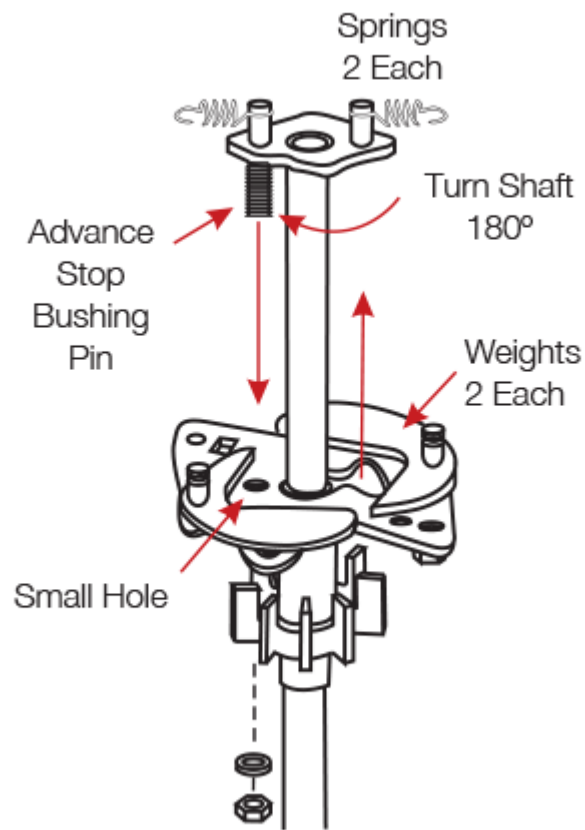


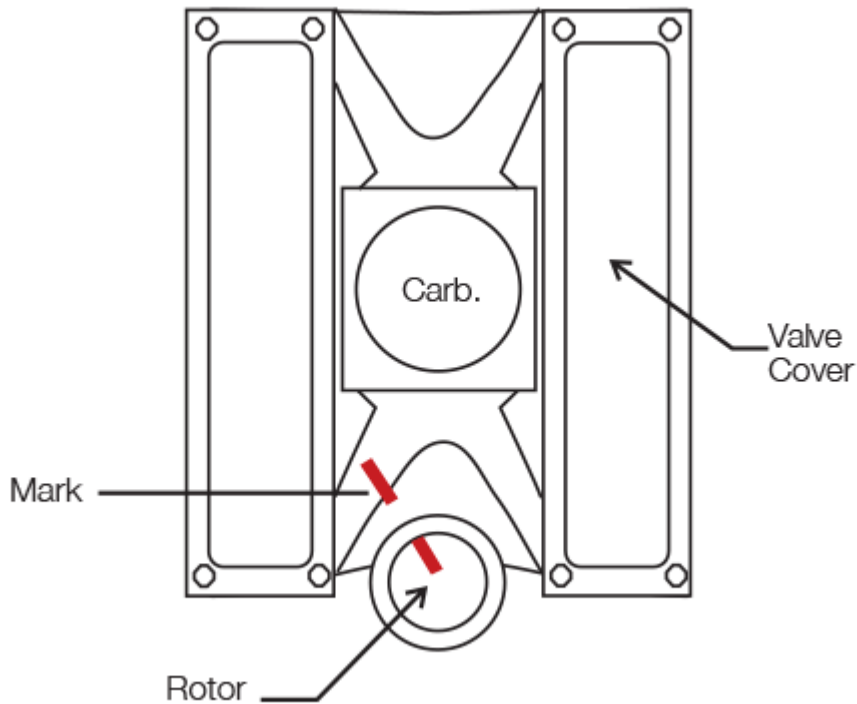
Figure 7

## **Installing the Distributor and Coil**

**Caution:- Disconnect the battery cables before connecting the El Rayo distributor, always remove the (-) cable first when disconnecting the battery cables, and install it last.**

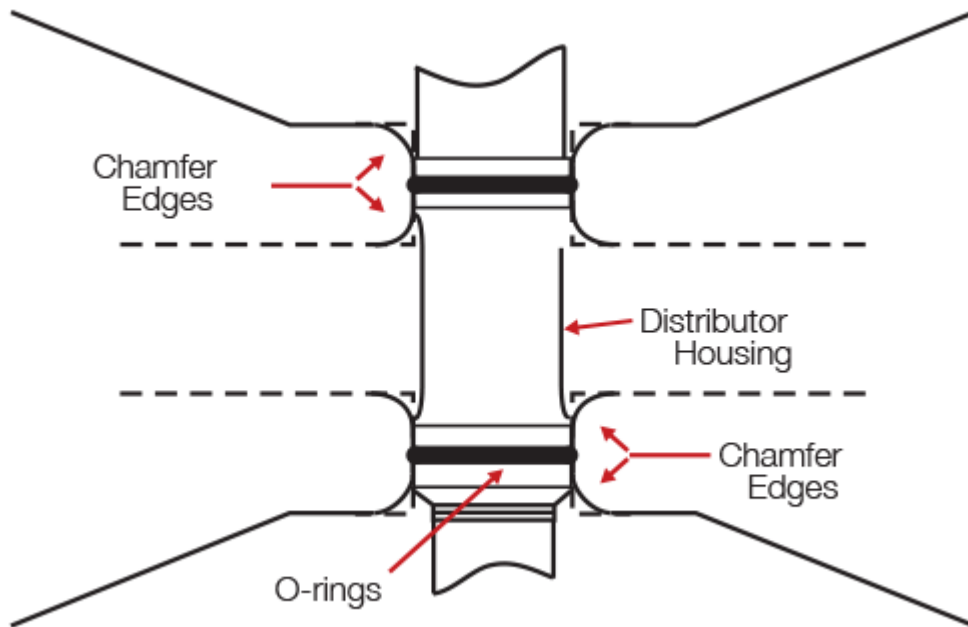
- 1). Detach the existing distributor cap first without disconnecting any of the spark plug wires.
- 2). Aim the distributor rotor at a fixed point on the engine or firewall by Cranking the engine continuously. Note this position by making a mark (Figure 8).





**Figure 8**

- 3). Fix the distributor cap back and make a note which spark plug wire the rotor is pointing to, mark the plug wires and remove the distributor cap.
- 4). Separate the wiring from the distributor.
- 5). Unfasten the hold down clamp of the distributor and slide it out of the way.
- 6). Take the distributor out of the engine.
- 7). Due to the helical cut gear the rotor starts rotating as you lift the distributor out of the engine. This should be taken into consideration while connecting the new distributor.
- 8). Install the new gasket and lubricate the distributor gear.
- 9). The supplied springs and bushings can only be used if the block has been modified as shown in Figure 9.



**Figure 9**

- 10). Start Installing the New distributor by making sure that the rotor comes to rest pointing at the fixed mark.
- 11). Rotate the oil pump shaft If the distributor is not fully seated with the rotor pointing to the marked position.
- 12). Position the hold down clamp and tighten it onto the distributor.
- 13). Connect the distributor cap along with the spark plug wires one at a time to ensure correct location. The distributor features plug and play capability to either your coil or ignition box.
- 14). Follow the wiring diagram.