# Installation Instructions for 555-40060 SSR-II Pro Series Distributor Chevrolet Small Block and Big Block V8

SSR-II Pro Series Distributors are perfect for a street performance ignition upgrade. It features a CNC machined billet aluminum body and hardened steel shaft, with a sealed ball bearing on top and a sintered steel bushing on the bottom. It also comes with a fully adjustable mechanical advance, magnetic pickup trigger, and a high-output circuit board module with digital tachometer output. The distributor cap and rotor are made from a special formulated dielectric material that eliminates internal spark flash-over. Cap includes solid brass terminals and a color-matched spark plug wire retainer.

A very important feature of all Pro Series distributors is the fully adjustable mechanical advance. This will allow you to easily modify the distributor to achieve your perfect timing curve. Included with all Pro Series distributors are four bushings of varied size. The bushing determines the mechanical advance the distributor can achieve. Also included are six springs, with two at each level of tension. The springs control the rate at which the distributor reaches the advance. The function of the advance curve is to match the ignition timing to the burning rate of the fuel and the speed (rpm) of the engine. Any factor that changes the burning rate of the fuel or the engine speed can cause a need for an ignition timing change. The rate or how quickly the advance comes in is determined by the type of springs, which are installed on the distributor. This Pro Series Distributor is equipped with two Medium Silver springs installed. These will give you an average advance curve and a good starting point. The parts kit contains two additional sets of springs, which can be used to match the advance curve to your particular application. To change the springs, remove the cap and rotor and use needle-nose pliers to remove the springs. Be sure the new springs seat in the groove on the pin. Locking out the mechanical advance is not necessary for normal operation. This is necessary for some aftermarket fuel systems. Confirm with the manufacture of the fuel management system to confirm.

### Please read the instructions below before installation

You should always disconnect the battery, negative lead first, before working on the ignition system. When you are done reconnect the battery installing the positive lead first.

The drive gear installed on this distributor is made of steel and therefore compatible with flat tappet camshafts. If it is to be installed with a hydraulic or mechanical roller camshaft, a bronze or other such compatible gear for the 0.500 in. shaft will need to be purchased and installed.

### Note:

This Unit is designed specifically for engines with a taller block, milled heads, or decked block and the stock length distributor will not fit properly. It has been fitted with an adjustable slip collar to allow for these modifications. See page 2 for slip collar adjustments before final installation.

An external CD ignition box and electronic ignition coil are required and available separately. It will not work without the external CD box since it does not have an ignition module inside the distributor.



# 555-40060 Slip Collar Instructions

### **ADJUSTING THE SLIP COLLAR**

Before final installation of the JEGS SSR-II Pro Series Distributor you must check tolerances and adjust the locking slip collar to fit your application. The distributor housing has 3 markings, S for stock height, 1 & 2 for alternate height adjustments. These markings are for reference purposes only and you must follow the adjustment procedure below. This is critical to the operation and longevity of the unit.

- 1. Install the gasket onto the housing and loosen the slip collar. Insert the distributor into the engine until it bottoms-out against the oil pump drive shaft.
- 2. After bottoming out, raise it to .010 in. .030 in. for shaft clearance, then slide the slip collar down into position and tighten it.

#### **Checking Gear Mesh**

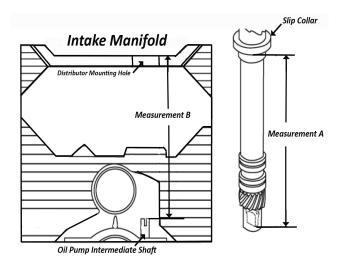
It is required to check for proper gear mesh between the cam gear and distributor drive gear before final installation. Failure to follow this procedure can cause severe engine damage.

- 1. Coat the distributor gear with moly grease and install it into the engine.
- 2. Remove the distributor Cap and mark the rotor pointer position on the distributor housing.
- 3. Hold the distributor in place while cranking the engine. It will need to turn over several revolutions to give you an accurate reading.
- 4. Before pulling the distributor out, make sure the rotor is pointing in the position that lines up with the original mark that you made during installation.
- 5. Pull the unit out and inspect the gear wear pattern shown on the grease.
- 6. Adjust the slip collar to achieve an even wear pattern in the middle of the distributor gear.
- 7. Once you have achieved the proper fitment, you can tighten up the locking screws on the slip collar.

#### **Checking the Oil Pump to Distributor Shaft Overlap**

The proper overlap between the distributor shaft and the oil pump shaft is critical, and the tip of the distributor shaft should fit into the groove of the oil pump shaft by at least 1/4 inch and not bottom out tight.

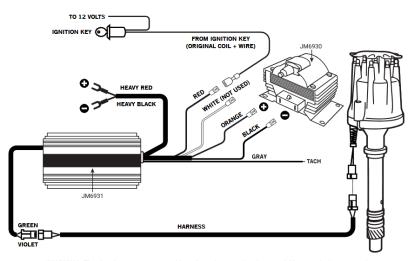
- 1. To check this fitment you need to measure the distance between the base of the slip collar to the tip of the distributor shaft. See the Illustration below. (Measurement A)
- 2. Using a straight edge, measure the distance from the intake manifold distributor mounting hole flange to the top of the oil pump intermediate shaft. See the Illustration below. (Measurement B)
- 3. Take the two measurements and subtract them. The difference is the overlap. If there is not enough clearance too much clearance, a new oil pump intermediate shaft may be needed.
- 4. Once you have set the slip collar you are ready for final installation and can follow the Installation Instructions.





### **Distributor Installation:**

- 1. Locate #1 wire on the distributor cap. Using a marker make a mark on the distributor flange right below where the cap mounts. Once you have made your mark you can now remove the cap. Do not remove the spark plug wires at this time.
- 2. Crank the engine slowly until the rotor blade aims at TDC (Top Dead Center). The rotor should be pointing to the number one cylinder and line up with the mark you made on the distributor flange. (Top Dead Center is when the #1 cylinder is at the furthest point of travel before it changes to the downward stroke).
- 3. Unplug all external connectors coming from the distributor.
- 4. Now put the existing cap back on and note and mark which spark plug wire the rotor (blade) is pointing at. Then number the wires according to cylinder and remove the wires. If in doubt you can leave the wires connected to the old cap and transfer them to the new cap and distributor later in the process.
- 5. Loosen and remove the distributor hold-down bolt and clamp. Lift the old distributor out. At this point the rotor may spin and move from its position. This is because of the distributor gear.
- 6. Install the gasket and lower the new distributor into position. The rotor should be aimed at the same fixed point as was the rotor from the old distributor. After the new distributor has been lowered into place, you may find that it hasn't seated firmly against the intake manifold. This indicates that the lower end of the distributor shaft is not properly aligned with the oil pump drive rod. Do not attempt to force the distributor into position.
- 7. Either remove the distributor and use a long screwdriver to turn the oil pump shaft until it properly aligns with the distributor shaft, or reinstall the hold-down clamp and thread the bolt just enough to exert a very slight pressure against the distributor. Manually rotate the engine until the distributor drops down into place.
- 8. With the distributor properly seated, tighten the hold-down bolt just enough so that the distributor is held in place, but can still be rotated with a little effort.
- 9. Remove the plug wires one at a time from the old cap and install them in the corresponding positions of the new cap. After all wires have been transferred, verify that the wire in the terminal post that is aligned with the rotor leads to number one cylinder. If you are unsure of cylinder number position or firing order, this information can be found in the service manual that covers your particular engine. Put on the distributor cap.



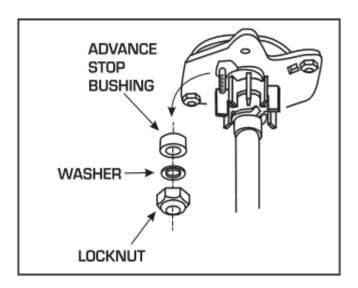
\*WARNING: This distributor is not compatible with stock points distributor coil. Must use high output coil.

**Parts Included:** (1) SSR-II Pro Series Distributor assembly (1) Adjustable Slip Collar (1) Spark Plug Wire Retainer (2) Spark Plug Wire Retainer Screws (1) Spring and Weight Advance Kit (1) Mounting Gasket (2) Rubber O-Rings (2) Distributor Cap Machine Screws

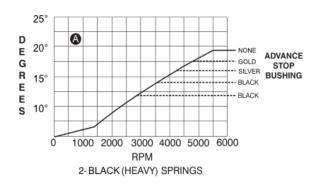


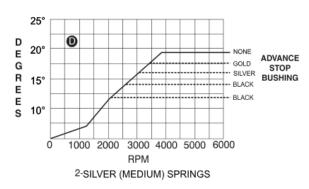
## **Changing The Advance Stop Bushings**

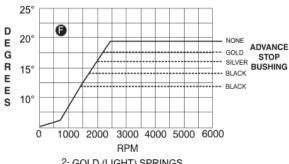
- 1. Remove the distributor cap and rotor.
- 2. Remove the locknut and washer on the boom of the advance assembly.
- 3. Remove the bushing and install the new one.
- 4. Install the washer and locknut.



## **Distributor Advance Curve Chart**







2- GOLD (LIGHT) SPRINGS



# **Locking Out The Centrifugal Advance**

- 1. Remove the advance components including the springs, weights and the advance stop bushing from the advance assembly.
- 2. Remove the roll-pin from the drive gear and remove the gear from the shaft.
- 3. Slide the shaft two inches out of the housing.
- 4. Rotate the shaft 180° and insert the advance stop bushing pin into the small hole on the advance plate.
- 5. Install the locknut and washer to the advance stop bushing pin. This locks the advance in place.
- 6. Install the drive gear and roll pin.

