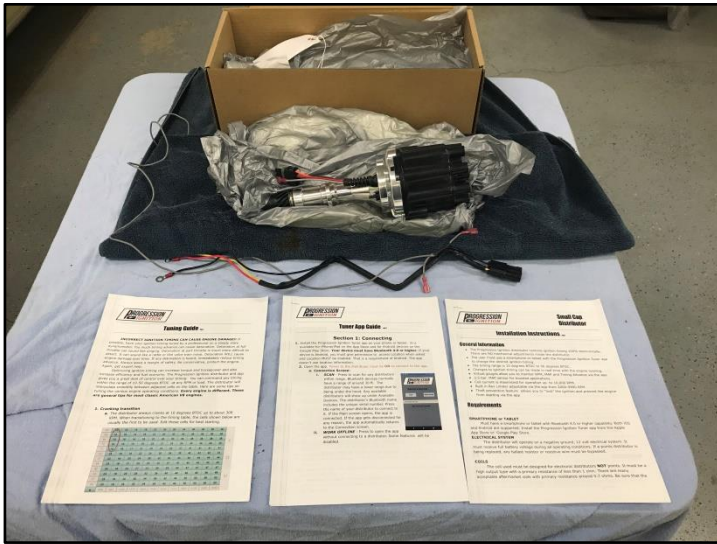


# Progression Ignition Distributor Installation

By Larry Klusza - July, 2020

Progression Ignition (<https://www.progressionignition.com/>) markets a new type of electronic distributor that promises almost unlimited tuning capability, all from your smartphone or tablet via Bluetooth. Being new to Pontiacs in general and a classic GTO in particular, I spend much of my Internet forum time in those focused on all things Pontiac in order to learn as much as possible. At the time of writing I saw that a few people had asked about this unit, but none that I could find had actually tried it yet. Since I recently found myself in need of a new distributor, I decided to take the plunge and document the experience to share with others.

Progression Ignition has distributors to fit GM/Ford/Mopar and even Holden and Toyota engines. They are available in large cap HEI as well as small cap versions. The small cap versions are further available in male or female terminal caps, so you can keep a points-style distributor look if that's important to you. Interestingly, the female cap and rotor are an exact exchange for the stock GM parts except that the cap no longer has the little window necessary for access to the ignition points. But either cap and rotor physically fit and will work. I don't know about the Ford or Mopar units. As my application is a stock 1970 GTO, I chose to go with the small cap / female terminal version to keep the stock look.



The distributor assembly, harness and documentation come well packaged. The documentation includes an installation guide, a guide for using the app on your smartphone, and a tuning guide to help you get the most out of the technology. All are well written. They are also freely available for download in PDF format so you can see what's involved before deciding if this is the solution for you. Even the smartphone app is free from Apple or Android. It has an offline mode so you can practice generating new "tunes" for your distributor, and view the results.

Each unit comes with a tag attached, showing its model number, serial number as well as its unique PIN that you need for the first-time setup procedure.





My distributor came highly polished. This seems to be the default. Instead of a vacuum advance mechanism, there is a small port on the underside of the body where you would attach your vacuum line. This vacuum line must be connected to full a manifold vacuum source and not a ported source.

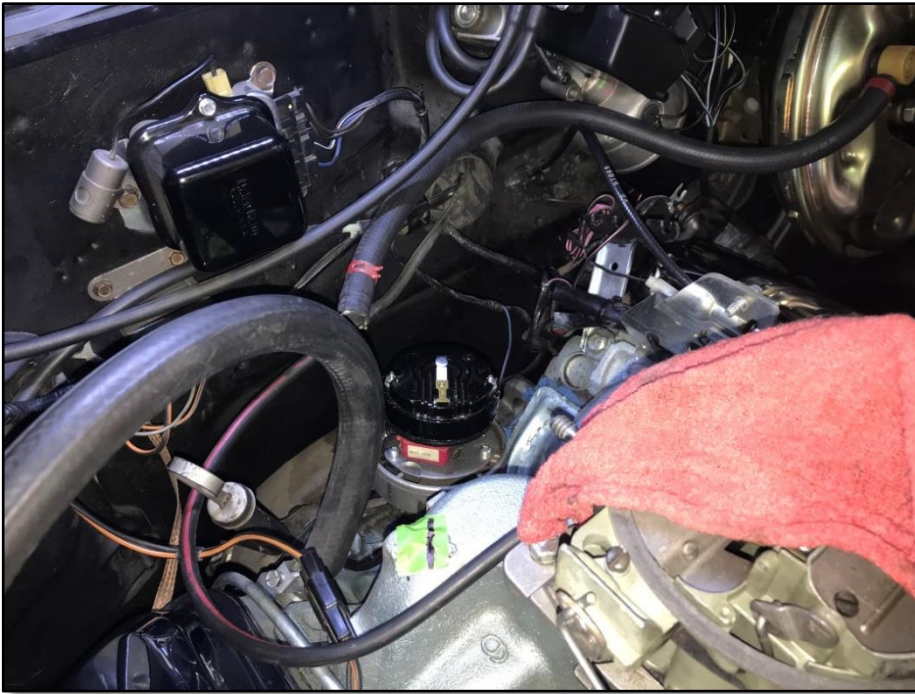
There is a three conductor Weather Pak connector to make connections and any servicing simpler.

The separate grey wire is a dedicated tach feed. However, even though it's a 12v connection, it isn't powerful enough to drive a vintage tach, dwell/tach meter, or (in my case) the Pontiac hood mounted unit. It's intended as a signal generator for the more modern electronic instruments like those from Dakota Digital, etc. So, in my case it was recommended to leave the grey wire alone and connect the tach in the conventional way, via the negative post on the ignition coil. HEI-based units may be different.

The first order of business in the installation procedure is to get the engine's #1 cylinder to 10° BTDC on the compression stroke. Once that's done, disconnect the battery.







Next, pull the distributor cap and wires. Note where the rotor is pointing and mark it somehow on the engine for reference. That's the location of the number one wire terminal on the cap. I used a piece of painters tape in a suitable location on the intake manifold. Once that's done, go ahead and disconnect the coil lead and remove the distributor.

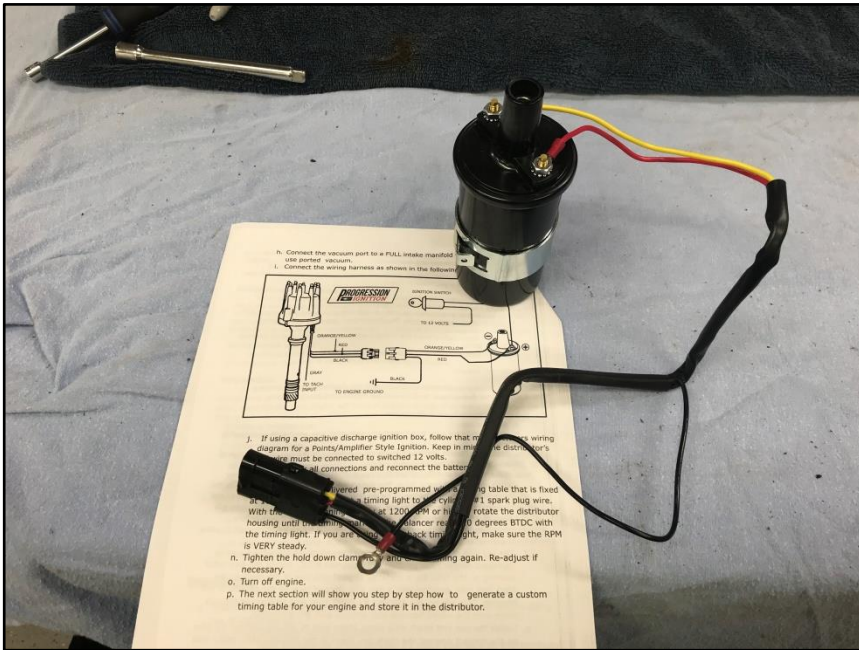
**NOTE:** Though it might be easier on other engines, I chose to attach a long length of vacuum hose to the distributor before installation because the little nipple on the underside of the housing is difficult to reach once installed on a Pontiac engine. The hose would then be trimmed to fit as I finalized my vacuum connection.

Next, transfer your old distributor gasket, or use a new one, and lube the gear (I also applied some lube up into the oil pump drive tang area on the bottom of the gear). Progression Ignition recommends using either engine assembly lube or motor oil on the distributor gear to help it break in with the drive gear on the engine's camshaft. Install the distributor, ensuring that it's fully seated and with the rotor as close as possible to your reference mark. If it's off slightly, it's no big deal as this is for reference only. Just be sure that it's seated fully and you can tell which cap terminal will line up with the rotor, indicating the position of the number one spark plug wire. Install the hold-down and snug the bolt so that you can just rotate the distributor.



The inside lip of the distributor housing has eight black marks, indicating where the rotor would fire a plug wire – three are visible in this picture, circled in red. Go ahead and rotate the housing so that the rotor tip lines up with the nearest of the black marks as shown.

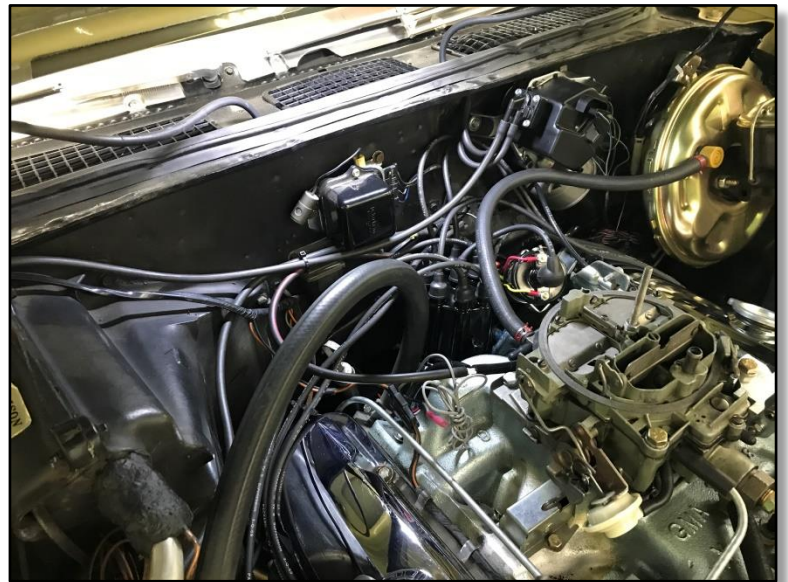
Once that's done, make a little mark on the outside edge of the distributor that lines up with your rotor tab (green circle) so that when your cap is installed, you can tell which terminal is number one. Tighten the hold-down clamp now.



I also added a new coil and correct mounting bracket to the project. I didn't want to drop tiny nuts and washers down into the engine bay. You know the ones. They drop and never hit the floor. So, I attached the other half of the harness to the coil on the bench.

The next step was to mount the coil and plug in the harness, then secure the ground wire. After that came the cap and spark plug wires.

**NOTE:** I did have difficulty getting the car to fire and after a quick email exchange with Progression Ignition Support, I found out that the positive coil lead in my engine harness was resistor wire. Progression distributors need full battery power at all times when running. So, if you have a ballast resistor or some other type of point-based unit, you might use the old coil lead to operate a relay setup to provide full battery power to the coil. I was annoyed with myself, because it clearly said so in the instructions and also in the YouTube installation and tuning videos and I missed it.



Once that was corrected, the thing ran flawlessly. No more fiddling with bushings, weights, and springs. Although the distributor memory can hold only one "tune" at a time – the one it's running on, your smartphone or tablet can hold any number of tunes. This means that you can store an 87 octane tune, as well as a 91 and 94 octane tune in your phone, and upload which ever one you need at the moment, on the fly, and with the engine running! Because of the Bluetooth connectivity, the app also provides an anti-theft function that allows you to disable the ignition, providing even more security for your ride.

Relative to the other factory and aftermarket electronic ignitions solutions out there, this might seem pricey on the face of it. That said, the ease of installation coupled with the unlimited tuning ability performed effortlessly from the comfort of your driver's seat, makes spark knock and detonation a thing of the past while giving you all the performance your engine has to offer. Throw in the added vehicle security, and this seems to be a pretty good deal well worth a second look. So far, I'm glad I did.