Moyer Marine inc.



PARTS

GENERAL

The following instructions are provided in conjunction with those contained in "Ignitor" electronic ignition kits for *Atomic 4* engines. Late model engines use Kit number 1146A, and early model engines use Kit number 1545.

REMOVING BREAKER PLATE (Step 4)

Before removing the breaker plate, check that the timing of the engine is proper. By insuring proper timing beforehand, the engine should start after installing the Ignitor system without the need for re-timing. On the Atomic 4, this check is easily done as follows:

- 1) Bring the engine to normal operating temperature and then set the throttle at your favorite cruising RPM (under way, or while pulling on the dock lines in your slip).
- 2) Loosen the distributor hold-down bolt, and carefully rotate the distributor back and forth (a small amount) until the highest RPM is reached. Then retighten the distributor hold-down bolt.

After confirming proper timing **on late model engines**, remove the breaker plate, being sure to leave the points and condenser installed on the plate without disturbing them as shown in Photo 1. In this way, the entire plate assembly can be reinstalled later if necessary, without major retiming of the engine.

In the case of early model engines with Prestolite distributors, it is more difficult to remove and replace the breaker plate; so, it is usually neces-

to remove the distributor when installing the Ignitor system. However, by leaving the hold-down bracket attached to the base of the distributor and reinstalling the distributor the way it came out, timing should be very close during initial startup after the Ignitor kit is installed.

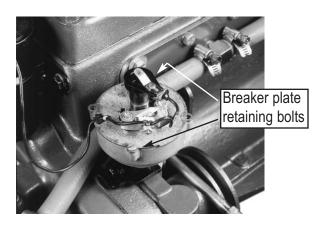


Photo 1

INSTALLING THE MAGNETIC SLEEVE (Step 8)

In some cases, magnetic sleeves fit over the cam of the distributor <u>very tightly</u>. To be sure that it is fully seated, be certain that the top of the sleeve is 7/16" below

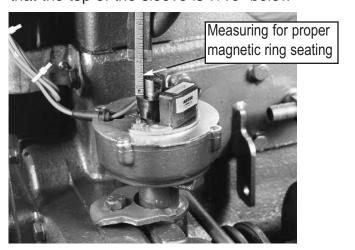


Photo 2

INSTALLING MAGNETIC SLEEVE (continued)

the top of the distributor shaft on late model engines, and 1/4" on early models. (See Photo 2).

NOTE: If the sleeve is not fully seated, the rotor will be forced against the inside of the cap and be severely damaged.

A 9/16" deep socket and a small hammer (very small!) can be used to tap the sleeve into place. In worst cases, a hair dryer can be used to warm and expand the magnetic ring for an easier installation

MODIFYING DISTRIBUTOR CAP (Step 11) Late models only



Photo 3

A coarse round 3/8" file works best to slot the underside of the distributor cap as shown in Photo 3. There is already a small notch in the distributor cap where the leads pass out over the breaker plate. File this notch larger until the cap fits snugly over the grommet as shown in Photo 7.

SECURING GROMMET AND LEADS (Step 12 for late models) (Step 7 for early models)

In kits supplied by Moyer Marine Inc., a small electrical terminal is provided to install under one of the nuts on the the mounting bracket of the electronic module. Use one of the small cable ties to secure the leads as shown in Photo 4 or 5. This precaution is taken to insure that the leads do not rub against the magnet sleeve, or (worse) that the leads never loop up and get caught in the rotor as it turns.

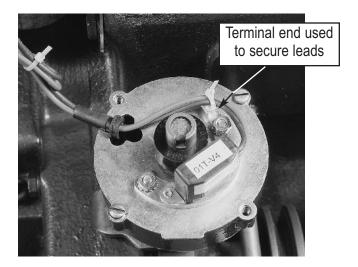


Photo 4

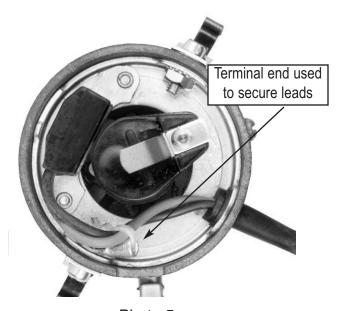


Photo 5

SECURING GROMMET AND LEADS (CONTINUED)

On early model engines, it is necessary to squeeze the round terminals on the ends of the black and red leads with a pair of pliers (making them slightly oblong) to get them through the hole in the side of the breaker plate and housing.

After pulling the leads through the plate and housing as shown in Photo 6, the terminals can be rounded again by working them with a small screw driver.



Photo 6

CONNECTING LEADS TO THE COIL

It is critical to connect the <u>red lead to the</u> <u>positive terminal</u> of the coil, and <u>the</u> <u>black lead to the negative terminal</u>. Care must also be exercised to insure that all other wires running to the coil are proper to avoid damaging the electronic module.

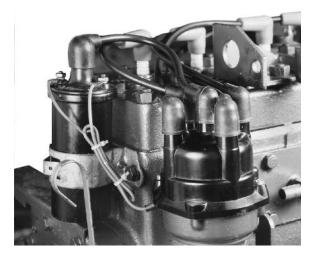


Photo 7

The finished installation: On both late and early model engines, use the two remaining cable ties to secure the leads as shown in Photo 7, mostly to avoid damaging the leads when removing the oil dip stick.

INITIAL START-UP

If the distributor was not removed, or if it was reinstalled in the same orientation as it was before installation of the Ignitor, the engine should start and be very close to proper timing. It is recommended however, that the timing be fine tuned under power as described in the left column on page one.

In the event that the timing was inadvertently disturbed during installation: (1) set the engine to number one top dead center, (2) reinsert distributor with the rotor pointing directly away from the block (late model), or toward the near corner of the oil filling lid (early models), and (3) use a 12 volt timing light across the positive and negative terminals of the coil to find the place where the ignitor opens the primary circuit - in the same way as when using points and condenser.