

GENERAL: There are only two significant differences between the installation of a Pertronix distributor and the late model Delco. Installing the Pertronix distributor with the tip of the rotor pointing directly aft (away from the flywheel end of the engine) will insure that the cap retaining ears on the housing will not interfere with anything near to the distributor, and the post used for attaching the number one plug wire is the post midway between the leads to the coil and the nearest retaining ear.

Except for the orientation of the hold-down bracket on early model engines, the procedures are the same for both late and early model engines. On early model engines, the hold-down bracket is secured using the 1/4" bolt hole on the accessory drive.

PRELIMINARY STEPS:

1) Remove all spark plugs.

2) Rotate engine counterclockwise to bring the No.1 cylinder (at the flywheel end of the engine) to Top Dead Center (TDC) following its compression stroke.

If TDC of the No. 1 cylinder is not known, it's most easily found by holding a finger over the spark plug hole in the first cylinder, while manually turning the flywheel counterclockwise. As soon as compression is felt, stop turning and look at the position of the roll pin in front of the crankshaft. Continue turning until the roll pin is perfectly vertical. The piston will then be at TDC.

On engines where the roll pin is not visible, it's possible (with a good flash light) to see the edge of the piston through the spark plug hole as it reaches TDC.

INSTALLATION OF DISTRIBUTOR:

1) On early model engines, be sure the plug installed on the second hole on top of the accessory drive (the hole used for the old mechanical tachometer drive) is driven all the way in until it's flush with the top of the accessory drive housing.

2) Install the Pertronix distributor with the tip of the rotor pointing directly aft (away from the flywheel end of the engine). It helps to seat the o-ring in the base of the distributor into the accessory drive if a bit of all purpose grease or motor oil is applied to the o-ring.

3) Orient the housing of the distributor so that the tip of the rotor is pointing mid-way between the leads coming out of the distributor and the nearest retaining ear for the distributor cap. This retaining ear is also the location of the indexing tab for the cap which will insure that there is a plug wire post directly over the tip of the rotor when the cap is installed. This is the post which will be used for the number one plug wire.

4) Connect the red lead from the distributor to the positive terminal of the coil and the black lead to the negative terminal.

CAUTION: If the polarity of the red and black leads is reversed, the electronic module of the Pertronix distributor will self-destruct within minutes of applying power to the ignition system.

TIMING:

1) Connect a 12 volt continuity checking light between the primary terminals of the coil and with the ignition switch ON, rotate the distributor housing a small amount in each direction as the light turns on and off. Tighten the hold down bracket at the place where the light has just gone off. Early model hold-down brackets are secured using a 1/4 X 20 bolt in the bolt hole originally used for the Prestolite hold-down bracket.

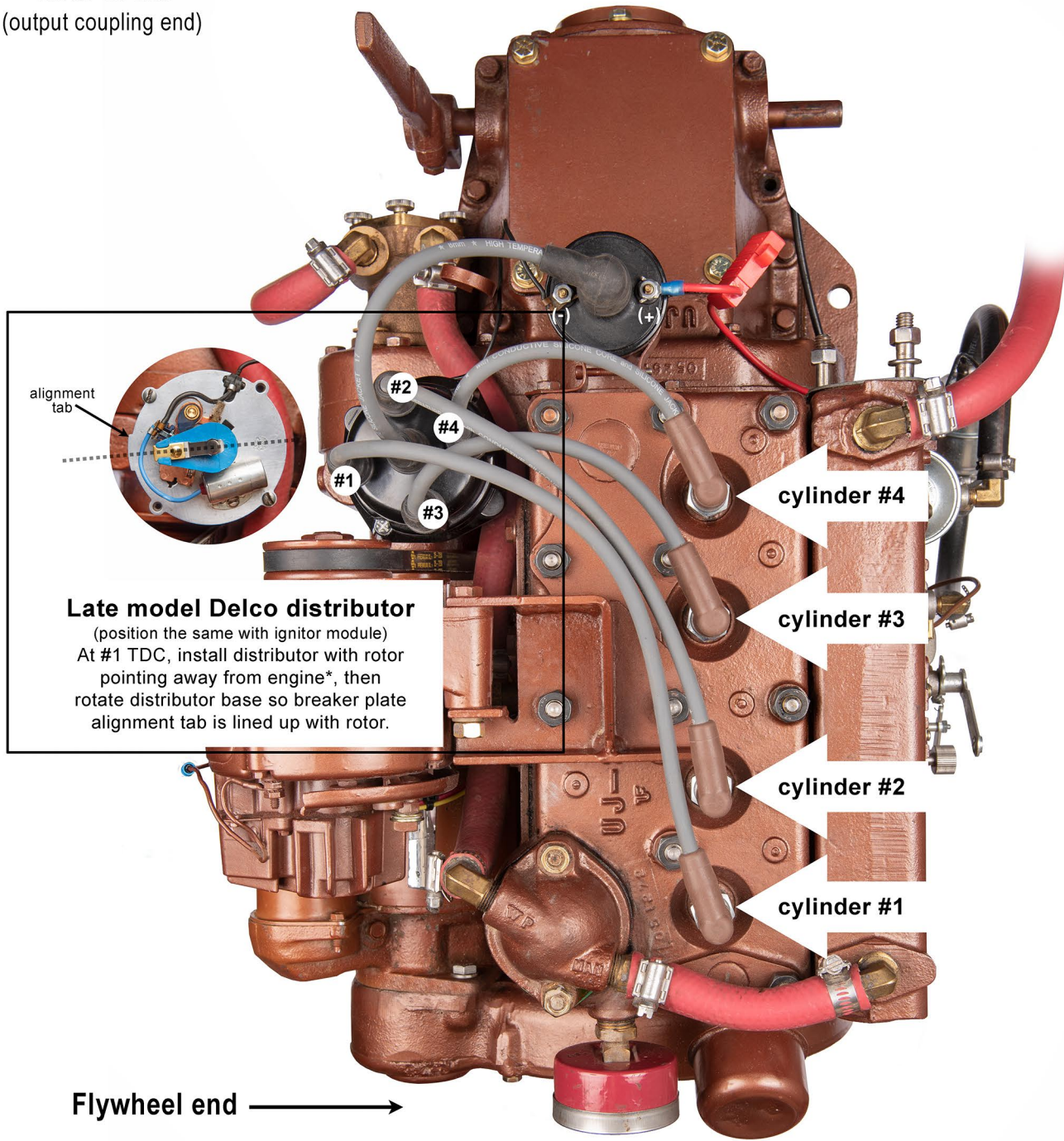
2) Install the number one spark plug wire into the post on the cap that is mid-way between the red and black leads and the nearest cap retaining ear. The rest of the wires get installed in a clockwise orientation with the sequence of 1, 2, 4, and 3.

3) Later, when the engine is fully warmed up and pulling on the dock lines at a normal cruising power setting, loosen the hold-down bracket and slowly rotate the distributor housing a slight amount in each direction to see if you can find a location of higher RPM. Re-tighten the hold-down bracket at the location of highest RPM.





Rear or aft →
(output coupling end)



alignment tab

Late model Delco distributor

(position the same with ignitor module)
At #1 TDC, install distributor with rotor pointing away from engine*, then rotate distributor base so breaker plate alignment tab is lined up with rotor.

cylinder #4

cylinder #3

cylinder #2

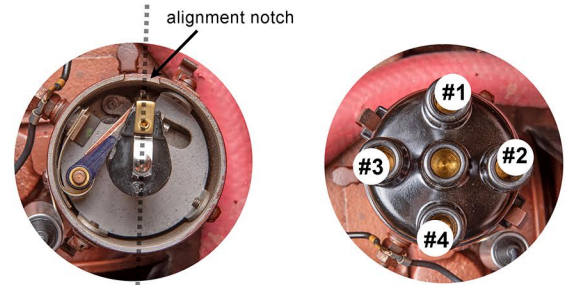
cylinder #1

Flywheel end →

Flywheel faces towards the Bow in Direct Drive and Reduction Gear engines, and towards the Stern in V-Drive engines.

Early model Prestolite distributor

(position the same with ignitor module)
At #1 TDC, install distributor with rotor pointing aft, or rear of engine*, then rotate distributor base so alignment notch is lined up with rotor.



alignment notch

spark plug wire to cylinder routing

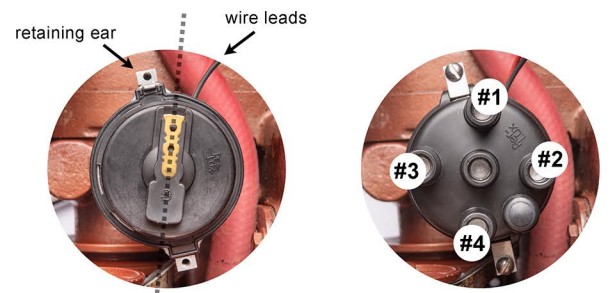
Engine orientation same as photo left

For instructions on setting #1 TDC, go to chapter 3 in your Moyer Marine Service and Overhaul Manual, or watch the "Ignition Timing" video on our video tech tips page at www.moyermarine.com

Late and early model Atomic 4 firing sequence: 1,2,4,3

Pertronix distributor

At #1 TDC, install distributor with rotor pointing aft, or rear of engine*, then rotate distributor housing so rotor lines up midway between wire leads and nearest retaining ear.



retaining ear

wire leads

spark plug wire to cylinder routing

Engine orientation same as photo left

* The precise point that the rotor is pointing may vary slightly depending on the amount of play in your accessory drive gear, it should however be close to the photos shown.