MID-USA V-FACTOR PART # 17573

ELECTRONIC SINGLE FIRE IGNITION INSTALLATION INSTRUCTIONS

Installation instructions for street application using coils with 5 ohms of primary resistance. If installing in a race application, you may use 3 ohm coils.

- 1. Remove old ignition.
- 2. Lubricate the new advance assembly shaft lightly with oil. Put the magnetic rotor over the shaft and push it in to connect with the advance assembly weights. (Note: it will only go on one way) Make sure that the rotor rotates easily and the weights cycle back and forth.
- 3. Install the advance assembly on the engine making sure the pin on the assembly seats in the slot on the cam. Install and tighten the bolt. Don't over tighten. The rotor must rotate freely.
- 4. Use the standoffs to install the ignition with the plate aligned so the large power module is at either 12 o'clock or 3 o'clock (depends on the module).
- 5. Avoiding the exhaust pipes, route the ignition assembly cable out through the engine case hole. Attach the connection ends to the wires.
- 6. Use the jumper wire to connect the primary studs of the coils. One of these will also be the contact for the ignition switch wire (12V) and the other will be the contact for the ignition's *Red wire*.
- 7. The black wire attaches to the other end of the front cylinder's coil, across from the ignition switch wire.
- 8. The white wire attaches to the other end of the rear cylinder's coil opposite the red wire.
 - 9. Ensure all the connections are firmly attached.

Timing adjustment for single plug set up

If you are using dual plug set up, you might need different settings.

- 1. You only need set the timing for the front cylinder as the firing angle of this ignition is factory pre-set to coordinate the rear cylinder firing.
- 2. Consult the OE shop manual for the engine's timing mark and use the flywheel's timing advance indicators. Clockwise rotation of the ignition plate will advance the timing and the reverse will retard the timing.

Dynamic timing adjustment

- 1. Take out the crank case timing hole plug and substitute a see-thru acrylic timing plug.
- 2. While maintaining 2000 rpm on the running engine, aim timing light into the inspection hole. Confirm where the front cylinder timing is set and rotate ignition plate to center the front cylinder timing mark in the view hole. Clockwise rotation of the ignition plate will advance the timing and the reverse will retard the timing.
- 3. Once the mark for the front cylinder is set at center. You can tighten up the ignition plate's standoffs, change out the acrylic plug for the case hole plug and reattach the cover.

Static timing adjustment

- 1. After attaching a 12V test light to the black coil wire and grounding it to the engine case, manually rotate the engine until the front cylinder is on the compression stroke. Take out the crank case timing hole plug.
- 2. Turn on the ignition and hold the ignition rotor counter clockwise into advanced position with the weights against the stops. Then slowly rotate the engine forward until the test light brightens. Check in the timing hole to see that the front cylinder's advance mark is centered, if it is, go on to step 4 below.
- 3. If the front cylinder's advance mark is not centered on the timing hole, turn off the ignition. Loosen the ignition plate's standoffs and rotate the ignition plate clockwise to advance or counterclockwise to retard the timing. Once you get it to the correct position you should re-tighten the ignition plate standoffs then perform step 2 above again. Repeat step 2 and step 3 until you achieve the proper timing.
- 4. Once you make sure no wires are contacting the rotor, you can re-place the crankcase timing hole plug and the side cover.

