

FLYING MAGNET CRANK TRIGGER TIPS

The MSD Flying Magnet Crank Trigger System is the most accurate way possible to trigger the ignition. This is due to fact that the trigger signal is coming directly from the source of piston position in the cylinder; the crankshaft.

Distributors are accurate, but the piston position is derived through the timing chain, the camshaft, cam gear and finally to the distributor shaft. There are no mechanical variables in piston position when using a crank trigger system.

Non-Magnetic Pickup

The MSD Crank Trigger System uses a non-magnetic pickup to trigger the ignition. Magnets are embedded in the flywheel to produce the trigger signal. The non-magnetic pickup can only be triggered by the magnets in the flywheel. This design prevents the chance of false triggering.

When installing the pickup, it is recommended to twist the wires together and route the wires near the frame or engine. These areas act as an electrical shield against electrical interference in the air. Also keep the wires away from any spark plug wires, coil wires and ignition wires.



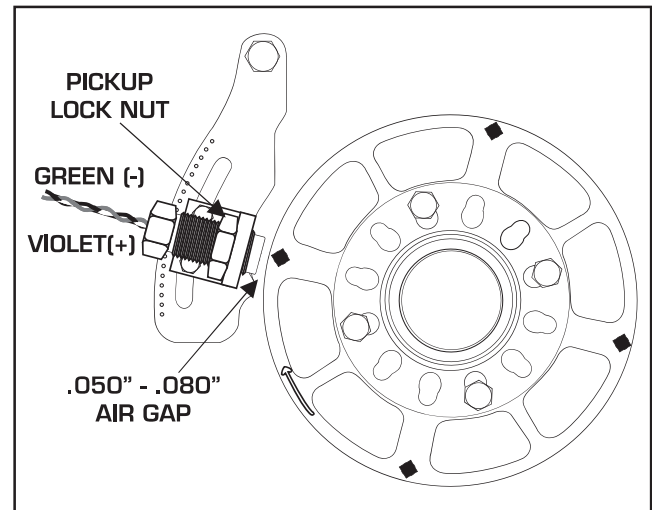
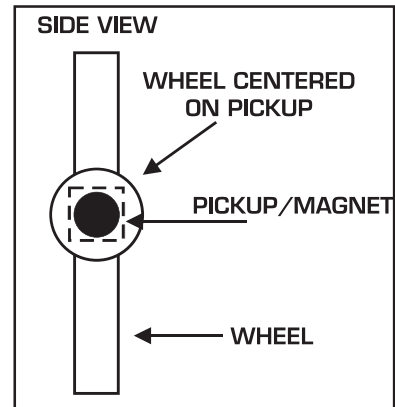
Pickup Mounting

The MSD Crank Trigger Kits come with all of the hardware needed to mount the pickup. Many kits feature a bracket that can be installed on either side of the engine block. Some kits are also supplied with several spacers to help obtain the correct alignment of the pickup and wheel. Due to the variety of balancers and pulleys, some modifying may be required to achieve the correct positioning of the bracket and pickup.

Trigger Wheel Mounting

Unlike conventional crank trigger systems using a magnetic pickup, the MSD trigger wheel must be mounted in the proper position. This is due to the polarity of the magnets in the wheel. If the wheel is reversed, the trigger signal will be affected and may advance the timing and cause inconsistent triggering accuracy. On the wheel there is an arrow which must point in the same direction as the engine rotation. Make sure this is installed correctly.

When the wheel and trigger pickup bracket are mounted, make sure the pickup is positioned in the center of the trigger wheel. If it is not, the trigger signal can be affected. If they are not aligned, the bracket may require different spacers.



Setting the Air Gap

The air gap between the pickup and trigger wheel is important, however it does not affect the performance in regards to your ET or mph. It affects the strength of the trigger signal. The farther away the pickup is from the wheel the weaker the trigger signal becomes. This could come into effect at cranking rpm.

The minimum air gap is 0.050" and any closer the chance of the wheel hitting the pickup at high rpm comes into play. Some big cubic inch engine builders (600-800ci) recommend 0.060" - 0.080" air gap due to the flexing of the crankshaft.

A good rule of thumb is to run the pickup all the way in until contacts the trigger wheel. Then, back the pickup out one full turn. This will set approximately 0.060" airgap, but always check the gap with a set of feeler gauges and in different areas of the wheel.