



Starfire 600 Ignition System

A high energy magnet is attached to the flywheel and passes by a permanently mounted generator coil facing the flywheel. Each time the magnet passes by the face of the generator coil, a capacitor is charged to peak voltage.

A trigger magnet is also mounted on the flywheel and faces off to a trigger coil located on the engine. The trigger coil is positioned so that the magnet will pass the trigger coil and cause the SCR to discharge the storage capacitor into the ignition transformer located near the spark plug.

Long maintenance free service is assured because there are no moving parts. All electronic parts are encapsulated to protect against moisture and physical damage.

Starfire 600 General Installation Instructions

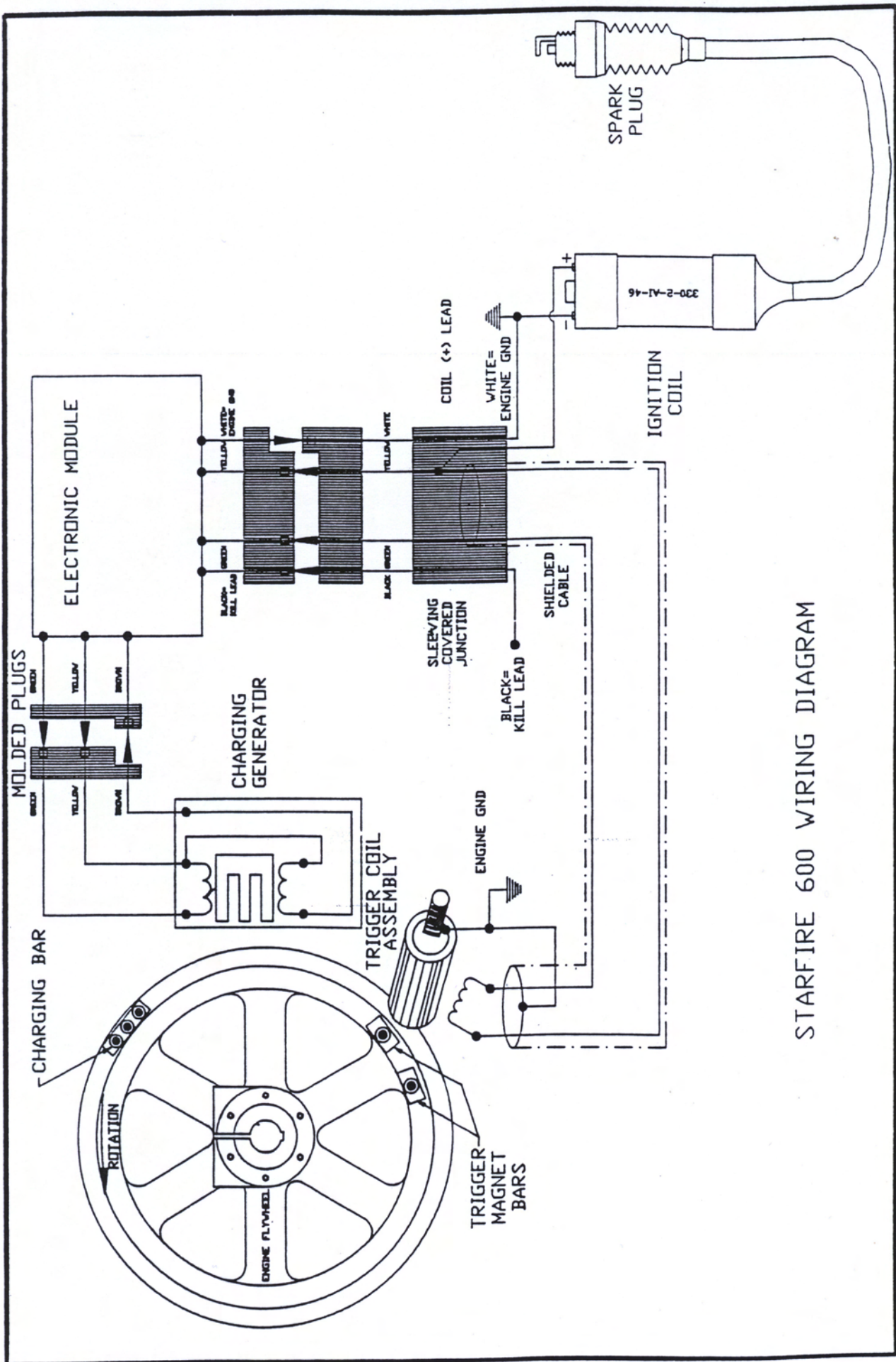
Locate a convenient place on the engine to install the Electronic Module/Generator (EMG). The EMG must be mounted so that it is positioned facing the side of the flywheel. The EMG must be positioned with sufficient clearance from the flywheel to allow the magnet bar (which is to be mounted on the flywheel) to pass between the EMG and the flywheel with a nominal .030 inch gap between the magnet bar and the EMG.

After positioning the EMG, rotate the engine flywheel to the running spark position. Now rotate the flywheel an additional 30 degrees in the advance direction or against normal rotation. Mark the flywheel under the EMG and install the magnet bar on the flywheel at this location making sure the three magnets are aligned as much as possible with the three poles of the EMG. The air gap between the EMG and the magnet bar should be a nominal .030 inches but no more than .080 inches.

The trigger coil and the trigger magnet bar should be installed next. Locate a place on the engine to mount the trigger coil so it will face the side of the flywheel. The trigger coil should be positioned so it is at least 2.5 inches radially separated from the circle on the flywheel described by the EMG and its magnet bar. Now rotate the engine to running spark position making sure the charging bar has cleared the EMG before the advance button magnet (i.e.: magnet that is flush to the surface of the trigger magnet bar) is positioned under the trigger coil. Mount the trigger magnet bar with the recessed magnet directly under the trigger coil. The other end of the trigger magnet bar should be against (i.e.: the recessed magnet should be leading) the direction of rotation of the flywheel. The trigger magnet bar and the EMG magnet bar should now be located on the flywheel on circles separated by at least 2.5 inches. The air gap between the trigger coil and the trigger magnet bar should be a nominal .100 to .200 inches. Engine starting will be better at the lower air gap setting.

Caution: The Black/Kill lead has a potential of 300 to 400 volts.

Refer to the connection diagram on the reverse side of page.



STARFIRE 600 WIRING DIAGRAM