

**Introduction:**

The XS Performance Hall Effect Ignition system is a direct replacement for the points plate and points cam system on a Yamaha XS650. It can also be installed in later models of the XS650 that have a factory TCI system by installing the complete mechanical advance mechanism.

The stock coil in the TCI equipped models may be retained when installing this system.

Installing on a ,80 to ,84 requires the installation of the centrifugal advance system and cam bushings.

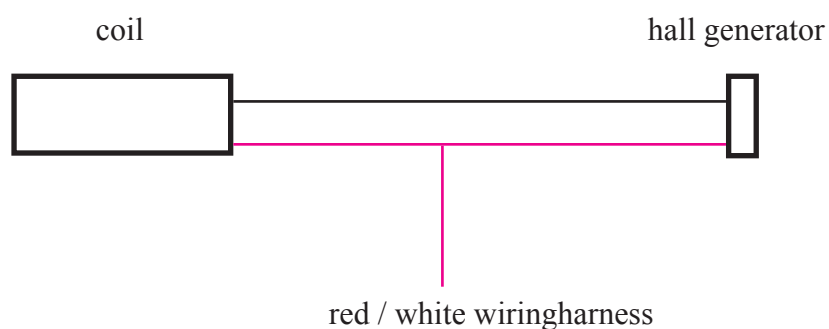
**Installation:****Caution:**

- 1 Do not apply power until the installation is complete.**
- 2 Do not apply power unless both spark plugs are connected.**
- 3. Do not test for spark with one or both plugs disconnected.**
- 4. Do not disconnect battery with engine running.**
- 5. Ensure that the battery cable connections are secure.**
- 6. Do not leave the ignition on when engine is not running.**

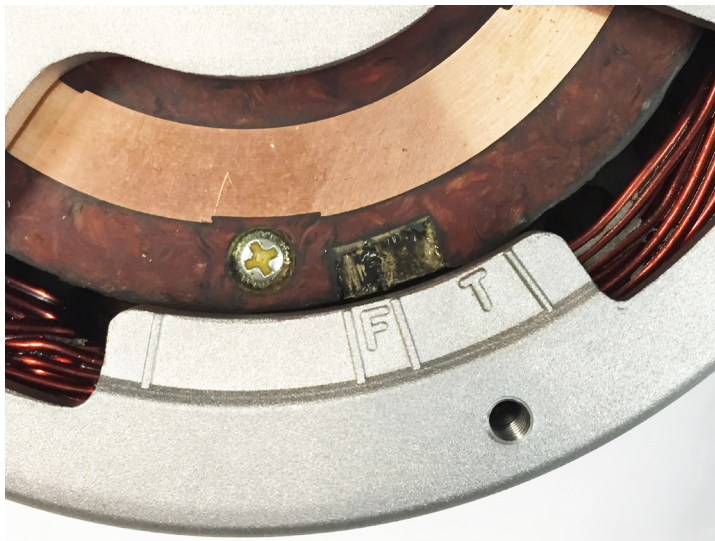
Failure to follow these cautions may damage the system and render it inoperative.

**It is recommended that the advance rod and centrifugal unit be serviced prior to installing this system.**

1. Remove the gas tank.
2. Remove the **two ignition coils** in a '70 to '84 model.
3. Disconnect the plug from the TCI on a '80 to '84 model.
4. Remove the points cam, points plate, points, **condenser** and wiring.
5. Install the coil.
6. Install the Ignition stator plate with the two hold down screws. .
7. Connect the wires from the Ignition :
  - Red wire from the Ignition plate to Red / White wiringharness
  - Orange wire from the Ignition plate to the coil ( Black / White )
  - Blue wire from the coil to the Red / White wiringharness

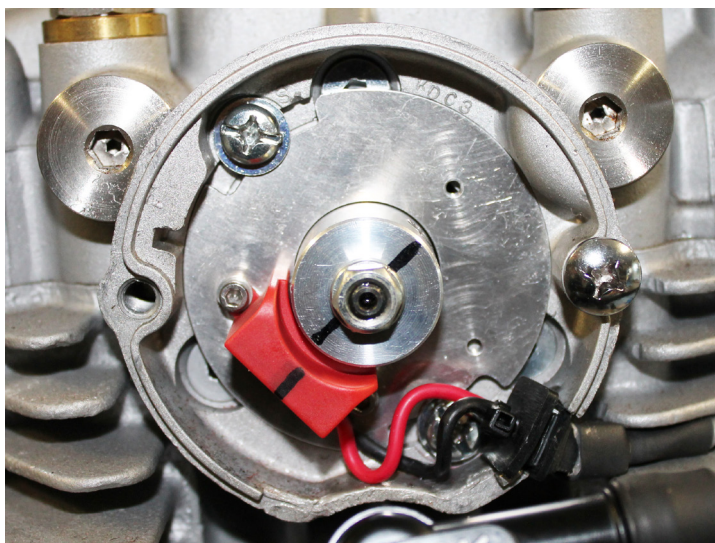


8. Turn the crankshaft that the timing mark on the rotor match with the „F“ mark on the stator.



9. Install the „rotor“ on the advance rod shaft.

10. Turn the Ignition plate that the mark of the ignition rotor in line with the mark of the hall generator and tighten the screws of the stator plate.



Reinstall the gas tank and proceed as follows to set the timing. A strobe type timing light is required to set the timing.

1. Connect the timing light. Note that with a dual output coil, some timing lights may be erratic due to the fact that there are opposite „polarities“ in the plug wires. If the timing light is erratic, then clip on to the opposite plug.
2. Start the engine and immediately shine the beam on the timing mark on the alternator rotor.
3. The strobe should illuminate the timing mark when it is between the two marks labeled „F“.
4. If necessary, loosen the hold down screw on the plate and rotate the plate clockwise to advance the timing and counter clockwise to retard the timing.
5. Tighten both hold down screws securing the plate.