

Magneto Timing

SOLID CORE SPARK WIRES SHOULD ALWAYS BE USED. FIBER CORE WILL BURN OUT AND CAUSE MISFIRE

A couple of questions first. Have you recently replaced the mag? Or is it already installed and just running rough?

With a magneto everything is timed off #4 nearest the generator.

The timing hole is located in the flywheel housing behind the air cleaner (you will see the keyhole) You will have to spin the engine (not start) while you spray brake cleaner in the keyhole to clean it. This way you will see the timing mark "TDC" a " T " stamped in red can also be found. Use the "T" to match with the timing light flash. Use "TDC" to center your gear marks properly.

1. Remove the magneto take to work bench and gently secure into vise. Insert plug wire into #4 hole of magneto (firing order is 1-3-4-2 clockwise when looking at magneto cap) Hold spark wire by insulation and position the other end close to the vise, turn the mag coupling by hand until it fires on #4. Then turn coupling back (counterclockwise) about a 1/4 turn so that the coupling is horizontal. Set aside
2. Pull #4 spark plug and crank engine until it comes up on #4 cylinder forcing your finger from the hole
3. Look into the magneto mounting hole at the governor and camshaft gears. Using a long screwdriver in the vents of the generator housing push on the fans (one way or the other) until the tooth on the camshaft gear indicated by a punch mark is between the two governor gear teeth also indicated by punch marks.
4. Install the magneto by fitting the coupling into the governor gear. (They should line up without moving)
5. Install mounting bolts. Bottom bolt may need to be loosened so that accurate timing can be performed by moving the bottom of the magneto. Do not connect the ground wire to the magneto or the engine will not run
6. Connect the timing light to #4 wire
7. Start engine and run at high idle
8. Point the timing light into the keyhole of the generator housing. It should flash on the " T " if properly timed. If not loosen the bottom magneto bolt and with the butt of a hammer lightly tap magneto in or out until timed.