



## Twin Cam '00 & Later (Gear Driven)

1. Raise the rear tire off the ground and remove the cam cover and spark plugs.
  2. Remove the bolt that holds the rear cam gear on.
  3. Use blue Loctite on the threads of the magneto drive gear and install it on the end of the cam making sure to reuse the thick stock washer. Torque to 35 ft lb.
  4. Remove the timing sensor located in the front of the engine by the oil filter.
  5. Looking into the sensor hole, rotate the engine counter clockwise by turning the rear tire by hand. Looking through the sensor hole, locate the spot on the flywheel with no teeth. From this point, rotate the engine counter clockwise while counting the teeth, and stop on the fifth tooth. Now look at the rear cam timing gear to see if the dot on the gear is at the eleven-o-clock position. If not, rotate the engine one full revolution, putting the front cylinder on the compression stroke in the proper timing position.
  6. Install the cam cover on the engine with a new gasket.
  7. Take the cap off the magneto and rotate the gear clockwise until the small lobe on the breaker cam is just about to open the points.
  8. Install the magneto into the cam cover and snug down the lockdown screw on the side of the cam cover.
  9. With the magneto in cam cover take a pair of pliers and gently hold the breaker cam in the clockwise direction, so that the play is taken out of the gear mesh. Turn magneto housing counter clockwise until the small cam lobe is just touching the rubbing block on the points. This is the point when the magneto is about to fire. **Note:** For more accurate timing use a Hunt Timing Buzzer and rotate the magneto in a counter clockwise direction until the buzzer changes tone.
  10. After timing, lock the magneto in place by tightening the lockdown screw on the side of the cam cover. **Note:** To advance timing turn housing counter clockwise and to retard timing turn housing in the clockwise rotation.
  11. Install stainless "wire core" spark plug wires and non-resistor spark plugs gaped at .018" - .020"
  12. Points should be set between .016" - .018" when performing maintenance on the magneto.
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