

# 1297 Magneto Installation Instructions



Fig. 1

1. Remove the stock points cover and gasket from the cam cover followed by the timing plate, breaker cam and advance assembly (Fig. 1).

2. Install the angle drive provided in the kit using the 8-32 x 1 ¼" hex bolts with o-ring and washer making sure to install the flat washer first followed by the o-ring. **Note:** To ensure proper sealing. Use Loctite Green Threadlocker or equivalent on all bolts.



Fig. 2

3. Next, put a light coat of oil on the entire drive shaft and install it using the 10-32 x 1" hex bolt making sure that the pin in the drive shaft is engaged with the slot in the cam and install the hex bolt with Loctite (Fig. 2).

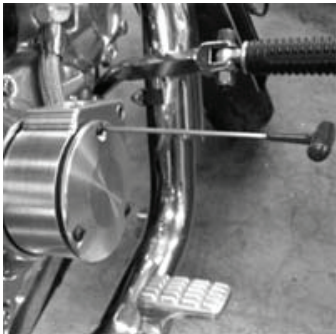


Fig. 3

4. Lightly coat the o-ring on the end cap and install using the included 8 x 32 button head screws (Fig. 3).



Fig. 4

5. Level the bike and fill the angle drive unit up using a non-foaming oil until the level is just touching the bottom of the drive shaft gear (Fig. 4). **Note:** If too full, oil will be forced upward into the bottom of the magneto.

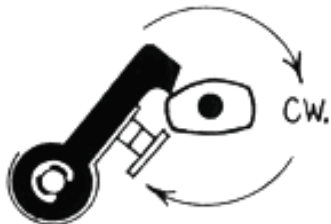


Fig. 5

6. Rotate the engine to bring the front cylinder timing mark into the timing window while the engine is on the compression stroke. Remove the cap on the magneto and turn it in a clockwise direction until the points are just beginning to open on the small cam lobe (Fig. 5). Install the magneto into the angle drive unit. **Note:** Once the magneto is installed into the angle drive the housing may need to be rotated to maintain the orientation of the points and cam. This is because the magneto fires when the points are just beginning to break open. This can be determined most accurately with a timing buzzer, but a .001 feeler gauge will do as well.

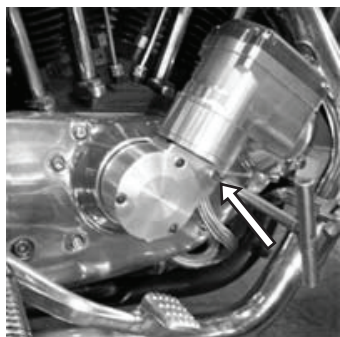


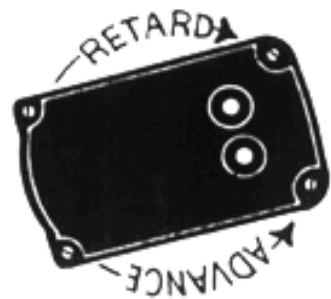
Fig. 6

7. After rotating the housing into the correct position, lock the unit down using the hex lockdown bolt (Arrow) on the side of the angle drive unit (Fig. 6).



Fig. 7

8. Place cap on magneto and install plug wires. **Note:** When using a magneto ignition system, copper or stainless steel solid core spark plug wires and non-resistor spark plugs are required for optimum performance.



9. Connect kill switch to ground terminal stud located on the side of the magneto housing. Start the bike and adjust the timing as necessary to achieve the desired idle. Turning the magneto housing counter clockwise will advance the timing and clockwise will retard the timing.

\* The magneto points are preset at the factory, but may need to be checked from time to time due to normal wear. The points should be gapped at (0.018" to 0.20")