

**V-Twin Mfg.**  
**JOE HUNT H4 AUTOMATIC ADVANCE MAGNETO, POLISHED**  
**FITS 1993-1999 BT**  
**VT No. 32-1252**

**This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper installation.**

**H-4 MAGNETO DRIVE INSTALLATION INSTRUCTION**

1. Loosen push rods, remove spark plugs, point plate, advance mechanism and cam cover.
2. Install new gasket; blue up the pinion shaft bushing in the cam cover. Install and tighten down, check camshaft end play, it should be between .005 to .012.
3. Place cam gear on cam, install blue or green loctite on threads and tighten down. Try turning engine over, it should spin freely if there is any binding remove cam cover. Check to see if pinion gear nut is in contact with the pinion bushing. To correct this problem remove the pinion gear nut and grind .010 to .020 off the back surface of the nut. Reinstall nut and torque down. Reinstall cam cover and try turning engine over again. This problem usually occurs when after market wheels and rods are used. Place cam cap on to cam cover and tighten down. Check to see if the engine turns over freely. If it does not, the camshaft is too long and is binding on the inside of the cap. Correct this by grinding end of the cam gear shaft at the cap end .010 to .020 is usually enough. This is due to varying lengths of cams.
4. It is important that the engine spins freely. **We cannot stress this point enough.**
5. When installing magneto into cam cover, bring front cylinder timing mark up in timing window on compression stroke. Remove cap on magneto and turn the breaker cam in a clockwise rotation so that the small lobe is about to engage the rubbing block on the points. Install magneto into cam cover.

**Note:** The magneto fires when points just break open. This can be determined by using a buzz box or a .001 feeler gauge.

6. With magneto in cam cover, take a pair of pliers and hold breaker cam in the clockwise position. Turn mag housing either clockwise or counterclockwise to get the small lobe just touching the rubbing block on the points.
7. Hook up buzz box or install feeler gauge and hold cam in clockwise position and rotate housing counter clockwise until buzzer changes tones or you can pull out feeler gauge. To advance timing turn housing counter clockwise and to retard timing turn housing in the clockwise rotation.
8. After timing lock magneto down with the lock down screw.
9. Magneto points are preset at the factory. Your plug wires should be wire core and your plugs should be non-resistor and gaped at .018 to .020.