Offset Timing Key Installation

*Offset Timing Keys will advance the timing of your engine and if improperly installed...WILL hurt your engine. Use at your own risk!

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1. Remove the fan shroud/recoil starter by unbolting the (4) M6 bolts that attach to the crankcase.

2. Remove the center flywheel bolt and starting pawl by locking the flywheel (Usually with a large screwdriver or piston stop) and breaking the nut loose. It is held on by 83ftlbs of torque and can be difficult to remove.

3. Remove the plastic flywheel fan.

4. The flywheel will be locked onto the crankshaft because of the pressure applied to it by the nut. You will need to gently tap it from the rear of the engine, rotating it 90 degrees ever tap to distribute the impact. Eventually, it will pop right off.

5. Remove the factory key, it’s usually very tight and will need to be hammered out.

6. Install the new key and make sure the machined portion of the key is facing the cylinder head side of the engine. It is imperative that all machined surfaces including the flywheel taper and the crankshaft are perfectly clean. There cannot be any oil or grease on either mating surface or the flywheel will slip and break the timing key, potentially damaging the crankshaft and flywheel. It is advised to spray brake cleaner on both surfaces before mating them together.

7. Re-Install the flywheel, flywheel fan, starter pawl, and nut. (Leave the nut just slightly loose)

8. Torque the flywheel nut to 83ft lbs! (Make sure the flywheel is seated fully into the machined portion of the key. Apply clockwise pressure to the flywheel while tightening the nut to prevent it from moving.)

9. Re-Install the Fan Shroud/Recoil Starter