INSTRUCTION SHEET

XS Torque Starter Internal Shims

PN's 9502, 9507, 9511, 9513, 9514, 9517, 9520, 9522, 9523, 9524, etc.





After the starter has been installed, there should be 1/16" (0.062) minimum between the engine side of the ring gear and the front edge of the teeth on the starter pinion gear. Check this distance with the ring gear in at least three different positions. If the distance is too little, shims can be installed inside the starter, which will pull the pinion into the starter an additional 0.072". This will result in additional clearance between the pinion and the ring gear.

- 1. Remove the four bolts that hold the billet mounting block to the starter assembly. This includes the two black socket head bolts found near the pinion on the starter and the two long hex head bolts that hold the starter body together.
- 2. Carefully remove the mounting block from the starter. Observe where all internal parts are located upon disassembly. Some parts may fall out if care is not taken (Figure 1).
- 3. Remove the clutch/pinion assembly from the mounting block. Place the round clutch bearing shim in the block and reinstall the clutch/pinion assembly. This spacer shim should be located between the pinion side bearing and the billet block and be visible behind the pinion gear after the starter has been reassembled. (Figure 2)
- 4. The larger starter body shim should be installed between the billet mounting block and the starter body.
- 5. Reinstall the four starter assembly bolts and tighten.



