



INSTALLATION INSTRUCTIONS

9/66 RING AND PINION SET

READ THESE INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION!

NOTE: Refer to the Factory Shop Manual electrical section for safety instructions prior to performing any repairs or installations of electrical components.

CAUTION! ALWAYS DISCONNECT THE BATTERY CABLES BEFORE PERFORMING ANY ELECTRICAL SYSTEM REPAIRS OR MODIFICATIONS. THIS WILL PREVENT DAMAGE TO THE ELECTRICAL SYSTEM OR ACCIDENTAL STARTING OF THE MOTORCYCLE IN CASE OF AN ELECTRICAL ARC CAUSED BY SHORTING THE BATTERY POWER TO GROUND.

WARNING! SEVERE DAMAGE TO THE ELECTRICAL SYSTEM OR PERSONAL INJURY MAY OCCUR BY NOT FOLLOWING THE ABOVE SAFETY INSTRUCTIONS.

CAUTION! The installation of the Spyke 32 Amp stator requires factory Harley Davidson® service tools in the disassembly of the clutch and primary chain sprocket. If you are not familiar with the disassembly of the primary drive assembly, or do not have the proper tools, Spyke recommends the installation be performed by a trained Harley Davidson® technician.

RING AND STARTER PINION GEAR REMOVAL

1. Remove the seat and disconnect the cables at the battery. Remove the ground cable first and then the positive (+) cable.
2. Drain the oil in the outer primary case and remove the outer primary cover following instructions in the Factory Shop manual.
3. Bend the tab on the jackshaft bolt away from the bolt head. Remove the starter pinion gear with the jackshaft bolt, lock plate and washer.
4. Remove the clutch assembly using the procedure found in the Factory Shop manual.
5. Remove the original equipment ring gear from the clutch basket by drilling out the rivets with a 5/16-inch drill bit. Drill through the rivet head and tap the ring gear off the clutch basket using a hammer.
6. Drill out the six holes in the clutch basket with the 5/16-inch drill bit.

RING AND STARTER PINION GEAR INSTALLATION

1. Attach the new 66-tooth ring gear to the clutch basket using the six 5/16x24 socket head cap screws supplied. NOTE... The bevel side of the ring gear (identified by the three dots) faces away from the starter motor. Torque the socket head cap screws to 29 ft lbs.

2. Assemble and install the primary drive assembly following the instructions in the factory Shop manual.
3. Install the new 9-tooth pinion gear with the jackshaft bolt, lock plate and thrust washer. Torque the jackshaft bolt to 7 – 9 ft lbs. Bend the lock tab on the lock plate against a flat on the jackshaft bolt head.
4. Measure and adjust the air gap between the ring gear and the pinion gear. See **Fig-1**. The correct gap is .075 - .125 inch. If the gap is larger than .125 inch, use the supplied shim washers inside the jackshaft coupler. See **Fig-2**. If the air gap is smaller than .075 inch, the jackshaft must be shortened by removing material from the splined end of the shaft. See **Fig-3**.
5. Install the outer primary cover following instructions in the Factory Shop manual and refill the primary case with the proper amount of primary oil.
6. Re-install the battery cables in the reverse order they were removed. Re-install the seat.

For technical assistance call 909/547-9058

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LIMITED WARRANTY

PerTronix, LLC. Warrants to the original Purchaser of its solid-state ignition system (product) that the module, trigger rotor and wiring (components) shall be free from defects in material and workmanship for a period of (12) months from the date of purchase.

If within the period of the foregoing warranty PerTronix finds, after inspection, that the product or any component thereof is defective, PerTronix will, at its option, repair such products or component or replace them with identical or similar parts PROVIDED that within such period Purchaser Promptly Notifies PerTronix, in writing, of such defects.