

Hydraulic Automatic Primary Chain Tensioner for Sportsters

Installation Instructions

Note: The factory service manual or equivalent for your motorcycle is highly recommended before attempting to install this product. Refer to your manual for disassembly and re-assembly of primary cover and components as you go through the following steps.

Step 1. Drain the primary fluid according to the instructions in your service manual.



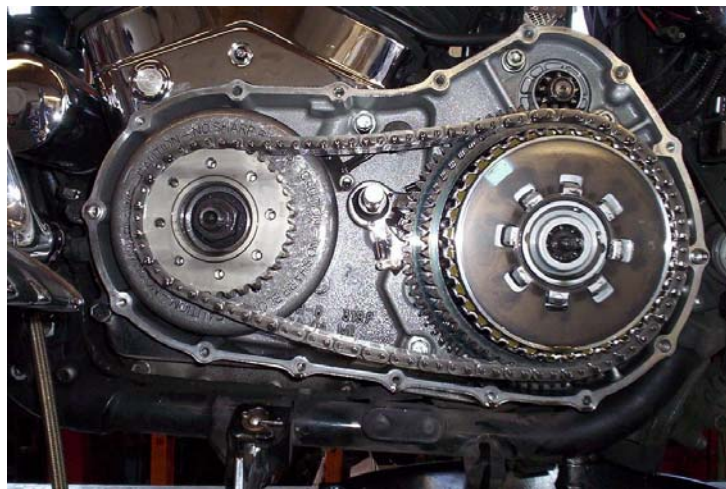
Step 2. Remove derby cover. Disconnect clutch cable from ramp. Remove the ramp.



Step 3. Remove the clutch cable from the primary cover. This is an optional step. It is possible to install the chain tensioner without removing the clutch cable. For proper removal, refer to the manual.



Step 4. Loosen the locking nut on the stock chain tensioner. Turn the adjustment bolt clockwise and loosen the tension on the primary chain so that the primary cover can be removed and the stock tensioner can slide out from under the chain. Remove the primary cover.



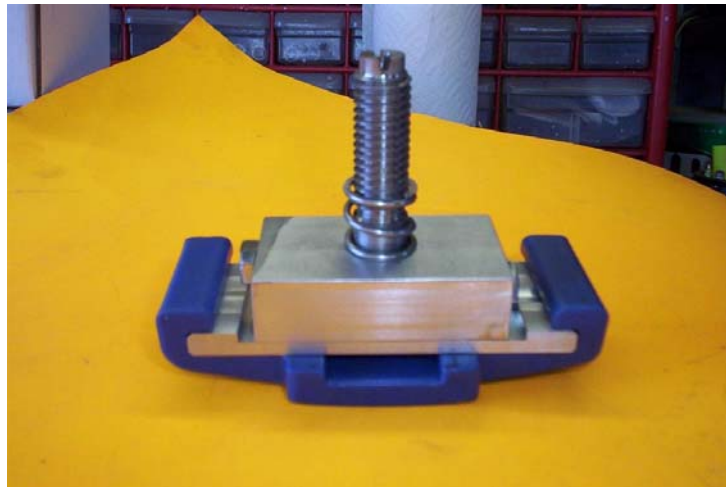
Step 5. Loosen and remove the locking nut from the stock chain tensioner, but do not discard.



Step 6. Turn the adjustment bolt in clockwise and completely remove the stock tensioner from the primary cover.



Step 7. Slip the spring over the adjuster bolt of the new chain tensioner.



Step 8. The tensioner has two check valves, one on each side of the block. One sits higher than the other. Install the new chain tensioner into the primary cover, making sure that the lower check valve is facing the front of the primary. Be sure to orient the nylon shoe so that the protruding lip is facing the back of the primary cover. Use a flat screwdriver to turn the adjuster bolt counter clockwise to thread it into the hole.



Step 9. Keep turning the adjuster bolt counter clockwise until the new tensioner is seated in the lowest possible position relative to the primary cover. You may need to apply pressure to the tensioner to compress the spring while tightening the tensioner down.



Step 10. Re-install the primary cover by carefully lifting the primary chain over the nylon shoe as you slide the primary cover back into place. If the primary cover gasket was damaged during removal, it should be replaced. After the primary cover is back in place, put a few of the primary cover bolts back in place to keep the cover in the proper position.

Step 11. Turn the adjuster bolt clockwise until you can't feel any tension as you turn it; then stop. This allows the spring to be fully extended. This is the initial adjustment of the new tensioner. Remove the primary chain inspection cover and visually check to make sure that most of the slack has been removed from the chain. If the chain still has more than a significant amount of slack, it could be due to the chain being old and stretched. If this is the case there are two solutions available. Solution one is to replace the primary chain with a new one. Solution two, which is easier and less expensive, is to shim the tensioner with washers. The washers need to be installed between the primary cover and the spring. In other words, place the washers below the spring before installed the stem into the primary cover.



Step 12. Re-install the original locking nut onto the adjuster bolt. While holding the adjuster bolt in position, tighten the locking nut back to torque specification per service manual.



Step 13. Re-install all the primary cover bolts and tighten to torque specifications per service manual. If you removed the clutch cable in step 3, re-install it per the service manual. Re-install the clutch cable ramp. Adjust the clutch by referring to your manual. Re-install the derby cover. Re-install the primary drain plug and tighten to specs. Using a long neck funnel, pour one quart of primary oil through the primary chain inspection opening. Re-install the inspection cover. If clutch cable was removed earlier, re-adjust the cable per the manual.

Step 14. After everything is fully re-assembled according to manual specs, start the engine and let it run for a few minutes. This will allow the new tensioner to prime itself with oil and build up the proper pressure. If you installed this new tensioner on a brand new motorcycle or with a new primary chain, you may hear a little whining. This is normal and will disappear within 100 miles or less.