

American Prime Mfg. Inc. **Comp Master™ Clutch**

1056-0007

(All 5 Speed Sportster Models)
Installation Instructions



1. Disconnect both battery cables (negative cable first) for safety.
2. Remove the chain-case drain plug (lower rear of outer primary cover). Drain the primary fluid. Remove the gear shift lever and left footrest assembly. Loosen chain adjuster screw lock-nut, and turn chain adjuster screw counter clock wise to release pressure on the primary chain.
3. Remove the clutch inspection cover or derby cover (94 or later models) and O-ring seal. Slide spring and hex-shaped lockplate from the primary cover. Turn the clutch adjustment screw clockwise until the nut can be removed.
4. Remove outer primary cover screws and outer primary cover with gasket. Remove & discard shift-er lever shaft seal. Leave the clutch cable and release mechanism connected to the primary cover.
5. Use a sprocket locking tool to aid in the removal of the motor sprocket nut. Loosen the motor sprocket, and leave it in place. (See Figure 2)
6. Remove adjuster plate retaining ring and remove the adjuster plate and adjusting screw assembly from the pressure plate.
7. Remove left-hand thread clutch hub nut & washer from the transmission main/shaft.
8. Remove the clutch assembly, primary chain and motor sprocket together
9. With the clutch assembly removed, reinstall the adjusting screw assembly into the pressure plate. Secure the adjusting screw assembly in place with the retaining ring.
10. Thread the clutch spring tool forcing screw (See Figure 1 & 3) onto the clutch adjusting screw. Place the flat ring of the spring compression tool (See Figure 3) against the diaphragm clutch spring. Thread the tool handle onto the end of the forcing screw. Hold the forcing screw with a wrench, and turn the tool handle clockwise until pressure is released from the snap ring & spring seat that holds the diaphragm spring in place. Do not compress the spring any more than is needed to remove the snap ring and spring seat, or damage to the pressure plate may occur.
11. Carefully remove the snap ring, spring seat, diaphragm spring, and spring compressor tool as an assembly, and set aside.
12. Remove all the OEM clutch plates.
13. Remove the retaining ring from the inboard end of the clutch hub. Using an arbor press (or hydraulic press), and with proper bearing (inner race) support, press the OEM clutch hub from the clutch basket. Failure to properly support the inner bearing race when pressing the clutch hub out, may damage the bearing.
14. Disassemble your APM Comp Master™ clutch kit in preparation for installation noting the sequence of the clutch plates. They will be re-installed in exactly the same order. Using the arbor press (or hydraulic press) while supporting the inner bearing race, press-in the APM COMP MASTER CLUTCH (1056-0007) clutch hub until it bottoms. Check the bearing for smooth operation. Stiff, or difficult-to-rotate bearings must be replaced.
15. Immerse the Comp Master™ fiber plates in primary fluid for a few minutes. Install the Comp Master™ clutch pack into the clutch basket (.120" steel plate first, fiber, steel, fiber etc.) with a steel drive plate last in. Install the pressure plate.
16. Position the diaphragm spring and spring compressor assembly onto the clutch pack/basket, and re-install the spring seat and snap ring to hold the diaphragm spring in place. With a wrench holding the forcing screw, turn the tool handle counter-clockwise until the spring compressor can be removed. Remove adjuster plate retaining ring and clutch adjuster assembly.

17. Install the front motor sprocket, primary chain, and clutch basket together on the motor shaft & transmission main/shaft. Using the sprocket locking tool, tighten the front motor sprocket to 150-165 foot pounds of torque. Install the clutch hub nut (left hand threads) and tighten to 70-80 foot pounds of torque.
18. Install the adjuster plate and adjuster screw mechanism into the pressure plate.
19. Install a new shifter shaft seal in the primary cover. Reinstall outer primary cover, adjust primary chain tension and fill primary with the required amount of primary fluid. (See OE manual). Adjust the clutch, install the hex-shaped lock plate & spring and you're ready to ride!

Figure 1

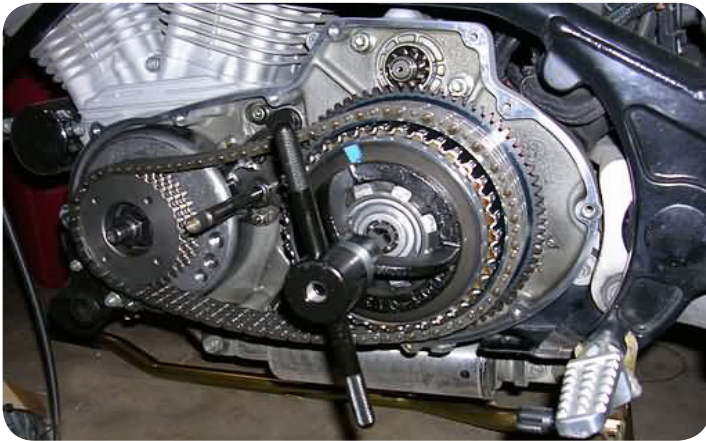


Figure 2

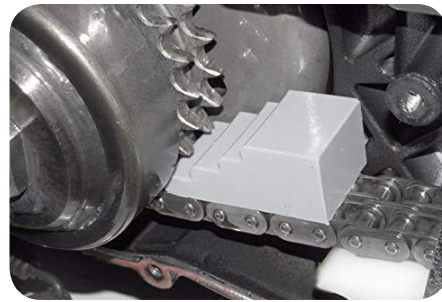
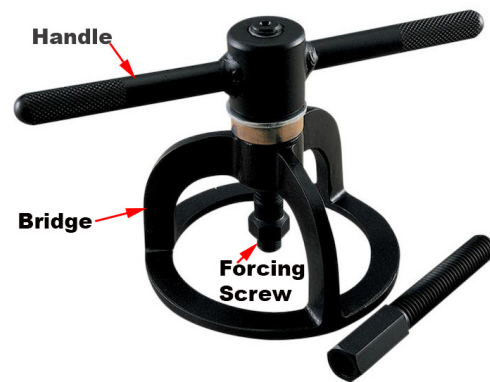


Figure 3



General Warranty

American Prime Mfg. Inc.'s sole obligation and the customer's sole remedy is limited to replacement or repair of products free of charge in the event products fail to perform as warranted for a period of one year from actual date of purchase. Proof of purchase must accompany any warranty claim. In no event shall American Prime Mfg. Inc. be liable for claims for any other damages, whether direct, incidental, foreseeable, consequential, or special (including but not limited to loss of use, revenue or profit), whether based upon warranty, contract, tort (including negligence) or strict liability arising in connection with the sale or the failure of American Prime Mfg. Inc. products to perform in accordance with the stated specifications.

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