# **BARNETT** Scorpion<sup>™</sup>



### **Refer to Factory Service Manual for:**

- All Safety Instructions
- Removal/ Installation Instructions
- Proper Tools and Pullers
- Torque and Lubrication Specifications

## **Removing The Existing Clutch**

#### Note:

A hydraulic press is required to remove OEM clutch hub and install the Barnett Scorpion clutch hub!

Barnett Tool and Engineering recommends changing primary lubricant after the first 500 miles and every 5,000 miles thereafter.

- 1. To protect against accidental shock or start up. Disconnect both battery cables.
- 2. Remove primary drain plug at bottom of primary cover. Drain lubricant into suitable container.
- 3. Remove foot pegs (shifter lever) floorboard etc.
- 4. Remove (3) three screws to remove inspection cover from primary chain cover.
- 5. Remove (10) ten socket set screws with washers from primary cover. Remove primary cover.
- 6. Refer to your Factory Manual to remove clutch basket and associated components using proper safety Instructions, proper tools, and pullers.
- 7. A hydraulic press is required to remove OEM clutch hub & install the Barnett Scorpion clutch hub.
- 8. Using a hydraulic press remove the OEM clutch hub from the clutch basket. Firmly support the OEM basket as shown during this operation. After pressing the hub out; check the bearing for smoothness. If the bearing feels rough or binds, it must be replaced. Refer to photo 1.



## Installation Guide 608-30-10090





Photo 1

## Installing Your Scorpion™ Clutch

1. Using a press install the Barnett Scorpion Clutch hub into the OEM clutch hub basket. Securely support the inner bearing races during this process. Carefully bottom the Scorpion Clutch hub In the OEM basket. After pressing the Barnett Scorpion hub, check the bearing for smooth ness again! Refer to photo 2.



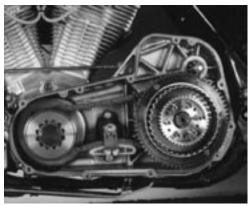
Photo 2 (Continued on back)

### WARNING!

Always wear proper eye protection when removing or installing snap rings. Slippage may propel the ring with enough force to cause eye injury. Use correct retaining ring pliers. Verify that the tips of the pliers are not excessively worn or damaged.

## Installing Your Scorpion™ Clutch

- 2. Install snap ring into rear of Barnett Scorpion hub; make sure the snap ring is correctly embedded in the snap ring groove.
- 3. Re-install the clutch basket into the primary case (*with chain and the associated components!*) Using Red thread lock on the transmission main shaft prior to installing the clutch hub nut. Tighten the hub nut using the factory torque specifications (50-60 foot lbs.) as instructed in your factory manual. Refer to photo 3.





- 4. Presoak friction disks in lubricant for approximately ten minutes. Wipe dry with lint-free towel prior to installation.
- 5. Starting with installing friction plate first; steel plate next, following with friction, steel, friction, steel. Ending with steel plate last.
- 6. Install the pressure plate using (6) six MT-7 springs; (6) six spring cups; (6) six- 6mm SHCS.
- 7. Torque 6mm screws to 5 to 6 ft. lbs.
- 8. Adjust clutch as you would normally, using a center bolt adjuster. Refer to photo 4.
- 9. Check and adjust primary chain as needed; re-install outer primary cover and pour proper amount and type of primary case lubricant through the clutch inspection opening.

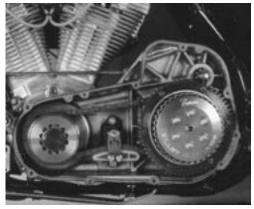


Photo 4

- 10. Using a new O-Ring, install clutch inspection cover in chain case cover. Install (3) three socket screws, using new rubber sealing washers. Tighten screws to 50-70 inch lbs.
- 11. Re-install shifter lever, foot pegs, floorboards, etc.

### **Clutch spring pressures**

Springs	Ibs of Spring Pressure
MT-7-6	348
MT-23-6	492
Using 3 ea. MT-7 and 3 ea. MT-23	420
MT-91-6	600



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