

# BARNETT Scorpion™



## Installation Guide 608-30-10098

1998-2005 Dyna and 1998-2006 Big Twins

### 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.
3. Remove foot pegs (shifter lever) floorboard etc.
4. Remove (5) five screws to remove inspection cover from primary chain cover.
5. Remove (13) thirteen 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.



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 smoothness 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.

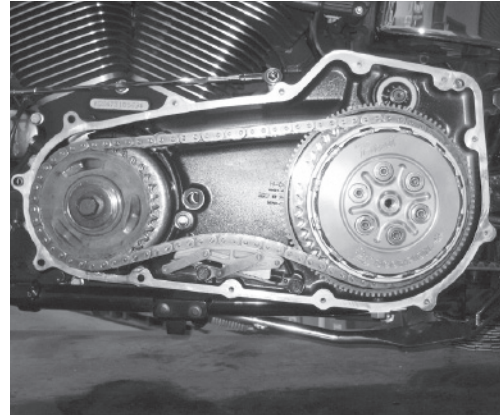


Photo 4

## 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.

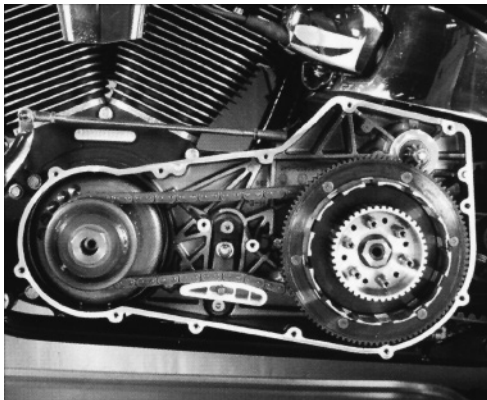


Photo 3

4. Start by installing the "B" fiber plate (B plate has larger I.D.). Next, install the damper spring seat (flat steel band), then install the damper spring (curved steel band) with the white dot facing OUT. Follow with a steel plate, then fiber, steel, fiber, ending with a steel plate installed last.
5. Install the pressure plate using (6) six MT-95 springs; (6) six spring cups; (6) six- 6mm SHCS.
6. Torque 6mm screws to 5 ft. lbs.
7. Adjust clutch and cable as per factory instructions. Refer to photo 4.
8. 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.

9. Using a new gasket, install clutch inspection cover as per factory instructions.

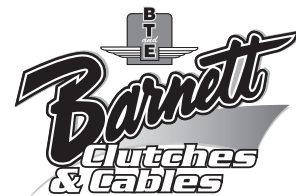
10. Re-install shifter lever, foot pegs, floorboards, etc.

### Clutch spring pressures

Springs	lbs. of Spring Pressure
MT-95-6	240 (40 lbs. each)
MT-7-6	348 (58 lbs. each)
MT-23-6	492 (82 lbs. each)
MT-91-6	600 (100 lbs. each)

#### Note:

When using (3) & (3) combination, you must alternate every other spring.



805.642.9435 • fax 805.642.9436  
2238 Palma Drive • Ventura, CA 93003-5733  
www.barnettclutches.com