



## 1971- 1985 IRONHEAD XLH SPORTSTER #607-30-10871 Scorpion Clutch Assembly Instructions

### Refer to Factory Service Manual for:

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

**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. Drain into suitable container. (Dispose of oil in proper manner.)
3. Remove foot pegs, etc.
4. Remove primary cover.
5. Reference: service manual for removal of pressure plate, spring and associated components.
6. Remove retaining ring using clutch spring compression tool.
7. Remove clutch fibers and steel plates.
8. Remove main shaft hub nut.
9. Using proper puller, remove stock hub from shaft. *Ref to photo #1.*
10. Inspect basket and all related components for wear. Check service manual for factory tolerance.
11. Install Scorpion hub using new factory lock tabs and stock nut. Reference service manual for tightening procedure and torque specification. *Ref to photo #2.*
12. Install springs on hub. *Refer to photo #3.*
13. Push shoulder bolts through spline and backing plate assembly.
14. Use red Loctite on all threads.
15. Slide spline assembly into basket, lining up shoulder bolts to the center of springs and thread into clutch hub evenly. Bottom bolts, then torque to 5-7 ft. lb. Note: Bolts must be tightened evenly to prevent binding. Using Barnett lock up tool 638-30-80086 will stop the hub from spinning and allow easier torquing. *Ref to photo 4.*
16. Pre-soak friction plates in oil that is going to be used in primary for approximately 10 minutes. Wipe dry with lint free towel prior to installation.



Photo 1



Photo 2



Photo 3



Photo 4

17. Starting with friction plate first, steel plate next, following with friction, steel, friction, steel. Ending with steel plate last.
18. Next install 301-32-40808 outer drive plate which has friction material on one side (Friction side toward hub).
19. Install clutch pressure plate using (6) 10-24 x ¾ FHCS, using red Loctite. Torque to 3-5 ft. lb.
20. Install #606-30-10713 throw out bearing.
21. Install stock plate retaining ring using clutch spring compression tool. *Ref to photo #5.*
22. Check and adjust primary chain as per factory specifications.
23. Install primary cover using new gasket.
24. Adjust clutch and clutch cable per factory specifications.
25. <sup>1</sup>Reinstall primary drain plug.
26. Pour proper amount and type of primary lubricant into primary case inspection opening.
27. Reinstall foot pegs (etc.).



Photo 5



Photo 6

### **CLUTCH SPRING PRESSURES**

- (6) Six 501-37-06022 springs equals 240 lbs. of spring pressure.
- (6) Six 501-58-06018 springs equals 348 lbs. of spring pressure.
- (6) Six 501-70-06112 springs equals 420 lbs. of spring pressure.



2238 PALMA DRIVE, VENTURA, CA 93003-5733  
 PHONE: (805) 642-9435 FAX: (805) 642-9436  
<http://www.barnettclutches.com>

