

# INSTALLATION INSTRUCTIONS

## DRAG SPECIALTIES BILLET CLUTCH SPRING RETAINING PLATE P/N 1132-0590

### ATTENTION INSTALLER (if other than owner):

Please forward this Instruction Sheet to the purchaser of this product. These instructions contain valuable information necessary to the end user.

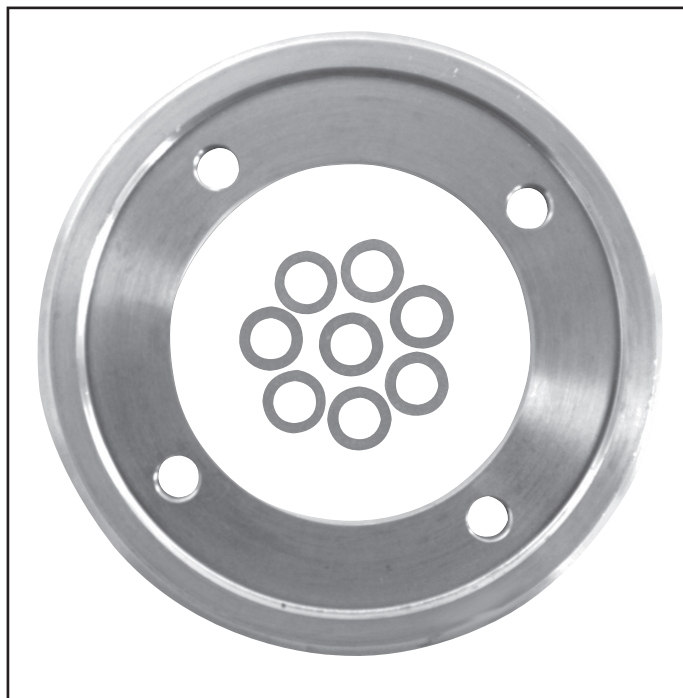
**INTRODUCTION:** These instructions describe the procedure for properly installing the billet clutch spring retaining plate in L84-89 Big Twin models. Review instructions carefully before beginning, as they contain important information. Please retain for future reference.

Particularly important information is distinguished in these instructions by the following notations:

**NOTE: A NOTE** provides key information to make procedures easier or clearer.

**CAUTION: A CAUTION** indicates special procedures that must be followed to avoid damage to the motorcycle and/or accessories.

**WARNING! A WARNING!** indicates special procedures that must be followed to avoid injury to a motorcycle operator or person inspecting or repairing the motorcycle.



### TOOLS REQUIRED:

5/32 Hex Key  
7/16" Combination Wrench  
Flat Ruler  
Feeler Gauges  
Torque wrench

### PROCEDURE:

1. Place motorcycle on a flat surface and support it vertically.
2. Disconnect the negative battery cable.
3. Remove the derby cover on the primary.
4. Loosen the center clutch pushrod adjusting screw and back off two turns.
5. Remove the stock original spring retaining plate by backing off the four 1/4" bolts, one turn at a time.

**NOTE:** Observe the location of the four bolts in either the "A", "B", or "C" location. This will help determine the starting point when installing the billet clutch spring retaining plate.

6. Set aside the original retaining plate, keeping the bolts for reuse with the new plate.
7. Take the new retaining plate and eight washers, insert the original bolts through the new retaining plate.

8. Using a combination of washers, you can adjust the retaining plate in or out to get the correct spring adjustment of the clutch spring. Each washer will move the retaining plate .055" in or out. Adding a washer will move the plate out making it less convex, and subtracting a washer will move the plate in making it more concave.

**CAUTION:** You may use washers of different thickness to get the adjustment perfect, just make sure that all washers used are the same thickness on each bolt. Washers must be the same diameter as ones furnished with kit.

9. Use a maximum of two washers per bolt. The washers will go between the retaining plate and the clutch hub to make the adjustment.
10. Place all unused washers under the bolt head on the outside of the retaining plate. That way, if you need to adjust the spring tension at a later time, the additional washers will be available.
11. Check clutch spring adjustment using the straight edge ruler and feeler gauge with the clutch lever released and the clutch engaged. There should be a maximum of 0.010" gap between the clutch spring and the straight edge. See illustration.
12. By adding or subtracting the washers between the spring retaining plate and the clutch hub, you can change the clearance required on the clutch spring. Remember to place all unused washers under the bolt heads for future use if necessary.



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13. The recommended spring adjustment is "flat" to 0.010" concave.

**NOTE:** Refer to your notes on the original bolt location. If the bolts in the original pressure plate were in the "A" position, we suggest that you start with one shim washer under the retaining plate; if the bolts were in the "B" position we would suggest that you try no shim washers; and if the bolts were in the "C" position try two shim washers on each bolt. Make sure to place the shim washers between the clutch hub bosses and the back of the retaining plate.

**NOTE:** If the correct spring adjustment cannot be obtained when all shim washers are removed, it is permissible to add one extra steel clutch plate directly under the pressure plate. Make sure to recheck the spring tension adjustment.

14. Use a low-strength thread-locking adhesive to prevent the bolts from backing out and torque the four bolts to 6.5-8 ft-lbs.
15. Back off the clutch cable adjuster to give extra free play.
16. Adjust the center clutch pushrod adjusting screw in to center the clutch release and back out  $\frac{3}{4}$  turn. Tighten lock nut to 6-10 ft-lbs.
17. Adjust cable free play to give  $\frac{1}{8}$ " play at the clutch lever. Operate the clutch lever three or four times to make sure all components are seated. Readjust cable if necessary.
18. Replace derby cover.
19. Reconnect battery cable. Always connect the negative cable last.
20. Test clutch for correct operation.

**NOTE:** If new plates were installed, we recommend that you recheck your clutch adjustment and spring tension adjustment after 500 miles.

**WARNING!** Before operating motorcycle, be sure all hardware is tight.

