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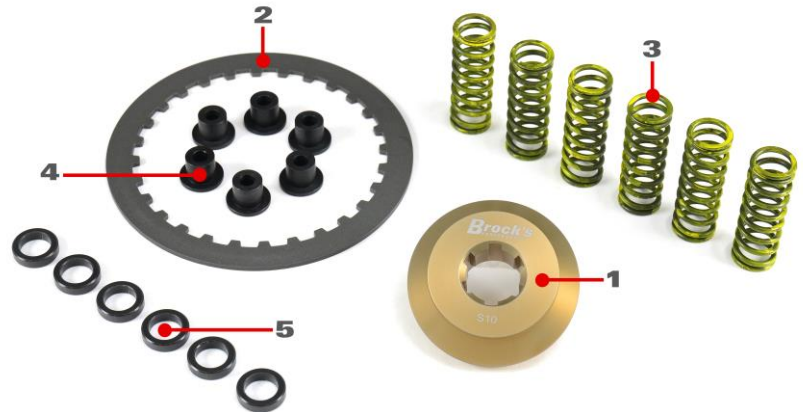
GSX-R1000 (07-16), GSX-S1000 (2021), AND KATANA (2020) ULTRA-LIGHT BILLET CLUTCH MOD INSTALLATION INSTRUCTIONS

The Ultra-Light Billet Clutch Mod for the Suzuki replaces the OEM back-torque limiter disabling the slipper clutch. The clutch mod is designed to reduce rotating mass, eliminate "bucking" during dead stop launches, and increase clutch life.

Check Package Contents:

The Package Contents Include:

1. One (1) Ultra-Light Billet Clutch Mod
2. One (1) Hyperplate
3. Six (6) Heavy Duty Clutch Springs
4. Six (6) Adjustable Spring Tops
5. Six (6) .180" Spacers (12-16 models only)



If your package contents differ, please contact Brock's Performance at 937-912-0054.

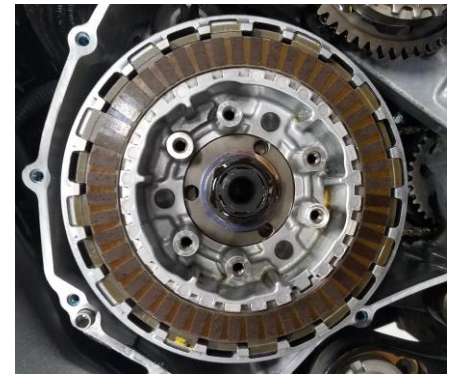
For additional installation support please refer to the OEM service manual.

Installation Notes:

- Several spring washers are used in the clutch assembly. Pay special attention to the orientation of these springs during removal and installation.
- It is recommended to change engine oil during this procedure.

Removal Instructions:

1. Properly support the bike using a wheel stand or lift.
 2. Drain engine oil.
 3. Remove clutch cover.
- Caution:** The clutch cover gasket is reusable. Take care to prevent damage. Replace as needed.
4. Loosen locknuts and remove three (3) clutch lifter pins, washers, and locknuts from the pressure plate (pins, washers, and locknuts will not be reused).
 5. Remove six (6) bolts securing OEM clutch springs/spring tops and the pressure plate (springs and spring tops will not be reused).
 6. Remove clutch pusher assembly.
 7. Loosen clutch sleeve hub nut.



Note: A special tool is available from Suzuki to ease removal. Holding the clutch sleeve hub with a rag and using an impact to remove the hub nut also works.

8. Remove the clutch sleeve hub nut, spring washer (note the orientation), and flat washer.

9. Remove the clutch sleeve hub and drive/driven plates (Clutch Pack) from the input shaft as an assembly. Also, remove the parts behind the inner hub in order. The thrust washer can remain on the input shaft.

Note: If the assembly does not slide out smoothly, carefully file the stock "stake mark" smooth. Take extra caution to avoid getting metal shavings into the engine.

10. Flip the entire clutch assembly over onto a flat surface. Carefully remove the clutch sleeve hub while leaving the clutch drive/driven plates stacked in order.
11. Remove four (4) Belleville washers (note the orientation) and the clutch lifter drive/driven cams (back-torque limiter).
12. Remove the spring washer (note the orientation) and spring washer seat from clutch sleeve hub.

Installation Instructions:

Note: Inspect the clutch sleeve hub, clutch release bearing, push rod, and clutch pack for signs of wear. Replace as needed.

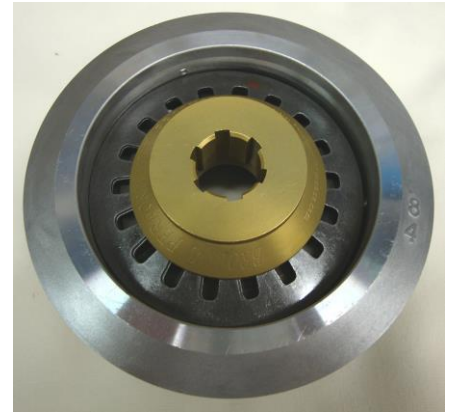
13. Install two (2) Belleville springs from step 11 to the clutch sleeve hub (Discard the other 2 springs).
14. Install the Ultra-Light Clutch Mod in place of the OEM back-torque limiter into the clutch sleeve hub.
15. Install clutch sleeve hub, Belleville springs, and clutch mod.
16. Install flat washer, spring washer (check orientation), and clutch hub nut from step 8. Torque nut to 69 lb-ft (95 N·m).

Note: A special tool is available from Suzuki to ease installation. Holding the clutch sleeve hub with a rag and using an impact to tighten the nut also works.

17. Check the inner hub for free spin. If any abnormal drag is felt, **STOP** and try the assembly procedure again.
18. Using a center punch, stake the hub nut in place.
19. Install the Hyperplate **first** (this will be the innermost plate).
20. Install the spring washer seat and spring washer (note the orientation).
21. Install the clutch drive/driven plates in the same order as removed.

Note: The innermost fiber to be installed has a larger inner diameter.

22. Continue installing clutch plates until last fiber remains. Rotate **only** the last (outermost) fiber to align with the short slots in the outer basket.
23. Install clutch pusher assembly. Press the assembly towards the engine to offset creep.
24. Before the pusher creeps outwards, install the pressure plate. Align tab on pressure plate with a notch on clutch sleeve hub.
25. Install supplied clutch springs, spacers (12 – 16 Models Only), and spring tops using bolts removed in step 5. Torque bolts to 7.0 lb-ft (10 N·m) diagonally and evenly.
26. Adjust clutch free-play (below).
27. Install clutch cover, gasket, and bolts. Torque bolts to 7.0 lb-ft (10 N·m).
28. Refill engine oil.



Attention: Although casual riding is generally unaffected after Clutch Mod installation, some rear wheel 'chirp, hop and/or chatter' may be noticed.

Spring Force Table:

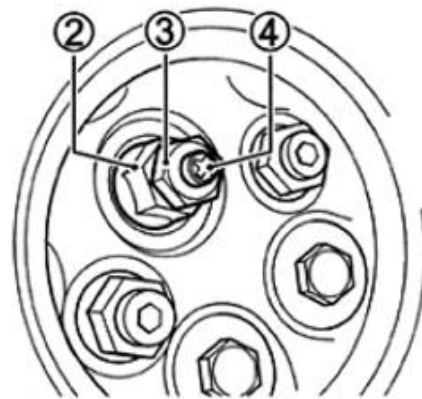
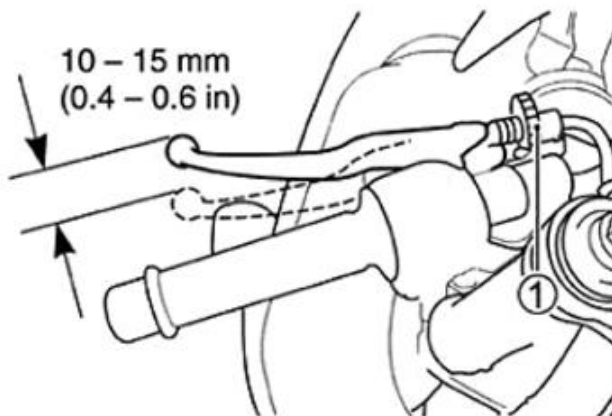
Model Year	Stock Spring (lbs.)	Clutch Mod Spring (lbs.)	Total Mod Spring Force (lbs.)
2007 - 2011	50	62	372
2012 - 2016	61	74	444

To increase or reduce spring force, [Clutch Spring Spacers](#) can be purchased from [Brock's Performance](#). When adding additional spacers, check that the springs do not fully compress while pulling in on the clutch lever.

Clutch Free Play Adjustment:

Clutch cable play should be .4" to .6" (10mm-15mm) measured at the clutch lever end. Adjust as needed.

1. Turn knob at the clutch lever all the way in to allow for maximum slack in the clutch cable.
2. Hold the clutch push piece (#2) and loosen the locknut (#3).
3. While holding the clutch push piece, tighten the adjuster (#4) until it stops.
4. Loosen the adjuster ½ of a turn.
5. Hold the clutch push piece and tighten the locknut. Torque to 4.5 lb-ft (6 N·m).
6. Adjust remaining free-play at the clutch lever knob.



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