

# SHIMANO®

## Quick Fix Instructions– Large Round Baitcasting Reels

### Drag Washer and Roller Clutch Bearing Replacement

Shimano® round baitcasting reel drags and roller clutch bearings are easily replaced by the consumer.

**Models:** 400 and 700 size Calcutta® and Calcutta®B Series

**Symptoms of Drag malfunction:** Jerky drag, no drag pressure, no drag range.

**Symptoms of Anti-Reverse malfunction:** Handle spins backwards on hookset or with line pressure.

**Diagnostic Procedure for Anti-reverse:** Spin the handle rapidly and quickly depress the clutch bar. If the handle does not stop immediately upon depression of the clutch bar, then that is a good indicator that the anti-reverse is in need of replacement.

**Diagnostic Procedure for Drag:** With the reel in gear, pull line out with your hand. The line should come off the spool with little or no start-up hesitation or jerkiness. In other words, if it is not “smooth”, the drag washer should either be serviced or replaced.

**Tools that may be needed:** Small flat head screwdriver, small Phillips head screwdriver, 10mm nutdriver or crescent wrench, cotton swabs, rubbing alcohol, Shimano® Bantam® Oil. Shimano® Drag Grease.

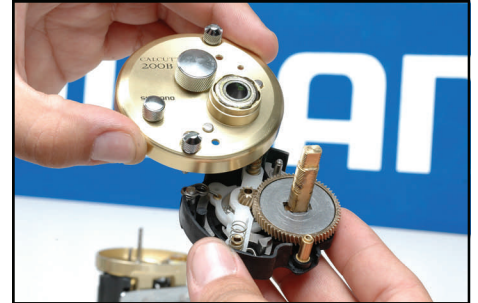
**Schematics:** [http://fish.shimano.com/publish/content/fish/sac/us/en/customer\\_service/reel\\_schematics.html](http://fish.shimano.com/publish/content/fish/sac/us/en/customer_service/reel_schematics.html)



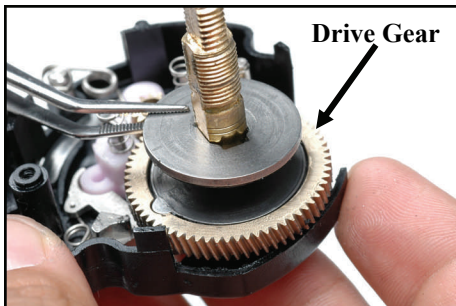
Loosen thumb screws and remove side plate. **Note:** When closing, never over torque thumbscrews with a screwdriver, as they will break.



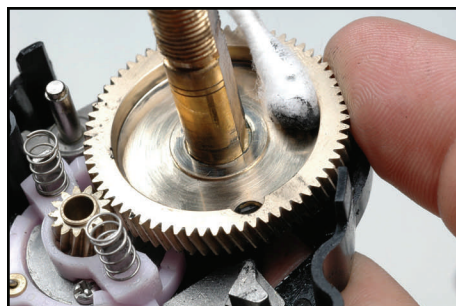
Use a small screwdriver to remove handle nut plate, handle nut and side plate screws. Back-off star drag and remove washers underneath.



The sideplate is now ready for removal. Be careful not to drop or lose the yoke springs as they are hard to find!



Remove drag washers from drive gear. Prior to 1999, CT400 and CT700 were originally manufactured with titanium fabric drag washers. There is a significant increase in overall drag performance when these reels are upgraded to Dartanium® drag washers.



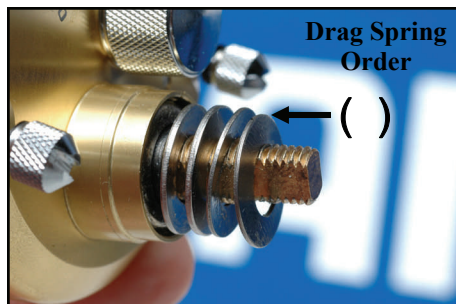
Clean drag residue, grease or oil from metal washers and drive gear with cotton swabs and rubbing alcohol. Most of the time, the drag washers are still usable after cleaning and servicing.



Apply a light coat of Shimano® Drag Grease to Dartanium® drag washers. More grease= smoother drag. Less grease= more drag pressure. Excessive grease will yield insufficient drag. **Dartanium® drags are fragile.** Take care not to break them!



Note the above photo for the order of the drag washers. The Dartanium® washer with the large diameter hole(1) goes first into the drive gear. Subsequently followed by the thin keyed washer(2), drag washer(3), eared washer(4), drag washer (5), and lastly the thick keyed washer(6).



Note the proper order of the star drag spring washers above. Improper ordering will affect drag range and overall drag performance. **(thick thick) (thin thin).** These four washers are followed by the flat star drag spacer.



**Important:** When re-installing the sideplate on Calcutta® sizes CT50-CT400, make sure that the clutch bar is held in the “up” position, otherwise, the clutch won’t work. Run the **Diagnostic Procedure** again to ensure proper function of the drag.