

TOOLS AND RESOURCES REQUIRED

- Phillips Screw Driver
- 10-Minutes

⚠ CAUTION

Always wear safety glasses and gloves. Disconnect all power to the Downrigger before beginning any work or maintenance. Johnson Outdoors Inc. is not responsible for any damage due to improper rigging or installation. If you do not have the skills, experience and tools to perform the following maintenance and repairs we recommend you seek the help of a Minn Kota Authorized Service Providers.

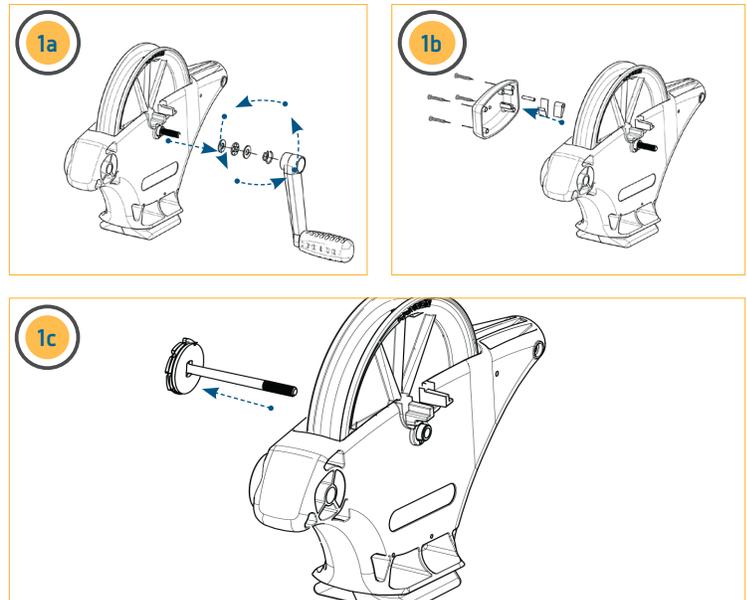
A list of Authorized Service Providers can be found at <http://www.cannondownriggers.com/ASC/>. Or contact our Technical Service Department by email at service@cannondownriggers.com or by dialing 800-227-6433

REMOVAL

REMOVING OLD CLUTCH >

- 1
 - a. Rotate the Crank Handle Counterclockwise until it is removed completely from the Ratchet Shaft. Carefully remove and set aside the Crank Spring; remove the Thrust Washers and Torque Transfer Bearing (these should be replaced during clutch service).
 - b. Remove the Clutch Cover, take note of the orientation of the Dog Ratchet, this may vary slightly depending on model.
 - c. Pull the Ratchet Shaft, Ratchet Brake Plate, Clutch Pad, and Clutch Brake Plate out of/off of the Reel Shaft.

NOTICE: Take note of the orientation of the Ratchet Brake Plate.

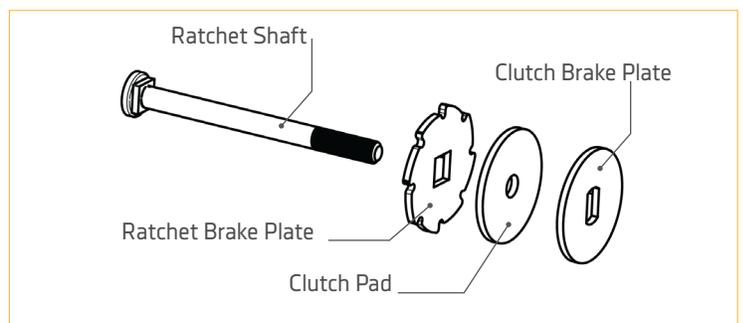


EVALUATION

INSPECTING PARTS >

All components should be inspected for wear. When servicing the Clutch Pad (3391710) it is recommended to also replace the two Thrust Washers (3391737 x 2) and the Torque Transfer Bearing (9010280).

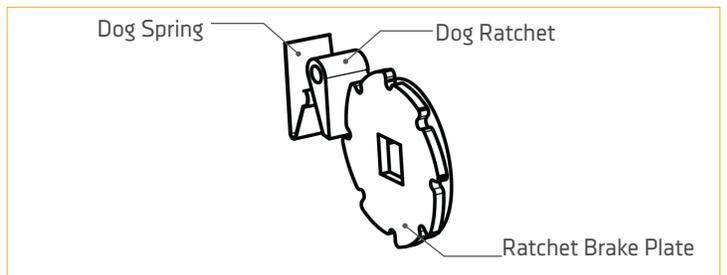
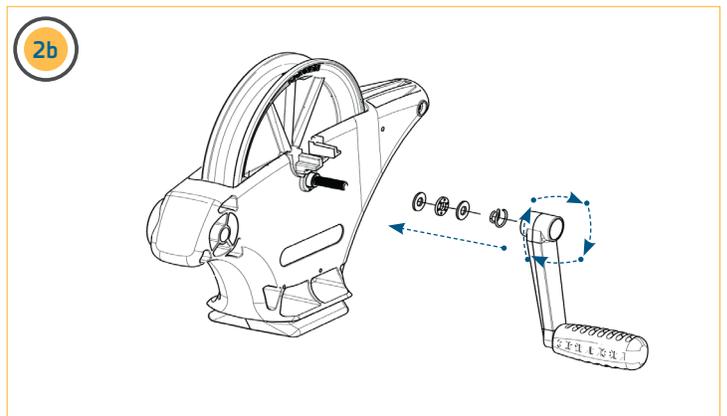
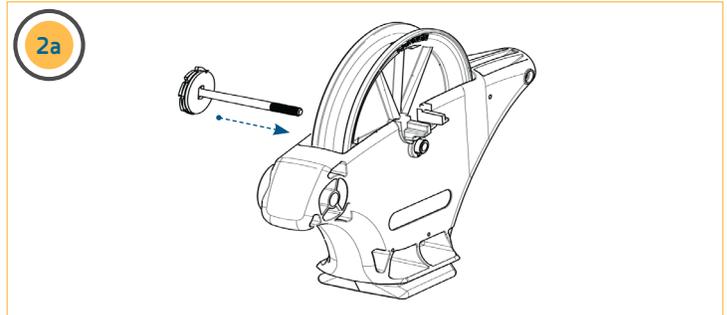
Place the Ratchet Brake Plate onto the Ratchet Shaft oriented as it was when it was removed, place the Clutch Pad onto Ratchet Shaft next, then place the Clutch Brake Plate onto the Ratchet Shaft.



INSTALLING NEW PARTS >

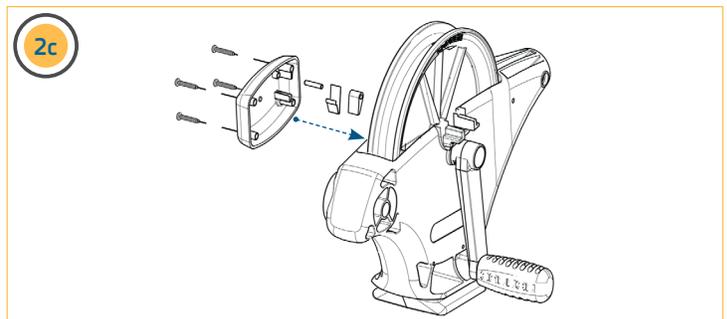
2

- a. Feed the Ratchet Shaft into the Reel Shaft, as Clutch Brake Plate contacts the Reel Shaft orient the Clutch Brake Plate so the protrusions from the Reel Shaft are captured in the center opening of the Clutch Brake Plate. Verify the square end of the Ratchet Shaft is fully seated in the square center opening of the Ratchet Plate.
- b. On the handle side of the downrigger, place a Thrust Washer, then the Torque Transfer Bearing, and the other Thrust Washer on the end of Ratchet Shaft. Place the Crank Spring on the Ratchet Shaft, the smaller end of the Crank Spring goes toward the Downrigger Frame, away from the handle, the larger end makes direct contact with the Handle. Hold the Ratchet Shaft in place and install the handle a few turns to keep the ratchet shaft from backing out and allowing any part of the Clutch Assembly to misalign.



NOTICE: The orientation of the Ratchet Brake Plate to the Dog Ratchet is critical to the proper operation of the clutch assembly and the downrigger. While there is some variation between downrigger models, when assembled as viewed from the clutch side of the downrigger the flat side of the Ratchet Brake Plate teeth lead as the plate turns clockwise, the ramps lead as the disc turns counterclockwise. The tip of the Dog Ratchet is beveled, the sharper point should be toward the Ratchet Brake Plate.

- c. Install the Clutch Cover, making sure the Dog Ratchet and Dog Ratchet Spring are aligned properly. Hold the Spool and tighten the handle fully. Verify operation, when turning the handle clockwise the ratchet should click, and the spool should turn with the handle, counterclockwise handle rotation should engage the dog ratchet and the handle should begin loosening, relieving pressure on the clutch and allowing the spool to turn freely.



For warranty information, please visit <https://www.cannondownriggers.com/Warranty/>.

