

# COMMANDO WINCH SYSTEM

Parts included in kit:

A. 1x 3x6x1 Bushing

B. 1x End Cap

C. 1x 7x13x4 Bearing

D. 1x Winch Spool

E. 1x Centerpin

F. 1x Spring Pin

G. 2x 3x5 Washers

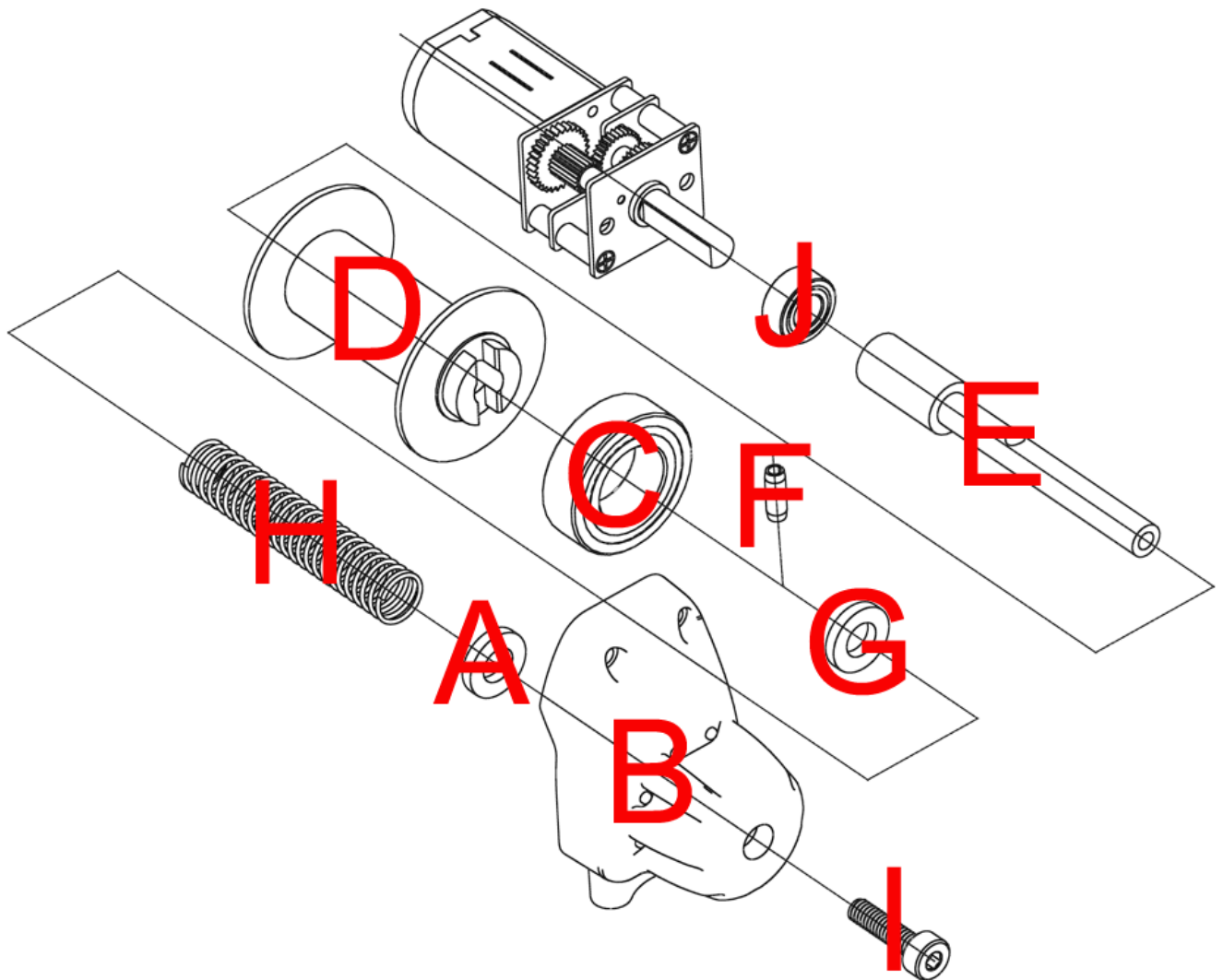
H. 1x Return Spring

I. 1x M2x4 Screw

J. 1x 3x6x2.5 Bearing

Not pictured:

2x Mini Screws



Additional **Washer G** is not pictured as they are optional during assembly.

Additional **Mini Screws** are not pictured as they are provided as a courtesy should you lose your stock screws (they are hard to find elsewhere!)

Motor assembly is pictured for reference only and is not included in this kit

## Installation Instructions

For these instructions we assume you have a stock 3 Racing winch (part# CR01-27) mounted to the stock 3 Racing winch plate/fairlead.

***In the first 3 steps you will partially disassemble your 3 Racing winch.***

Step 1.

Remove the 2x M2 screws holding the stock non-motor side end cap of your winch to the winch plate.

Step 2.

Remove the 2x mini screws holding the stock non-motor side end cap of your winch to the center winch support.

Step 3.

If you have not already, unspool all of your winch line to access the grub screw that holds the spool to the stock motor assembly shaft. Loosen the grub screw and remove the spool.

***Now for the LURC parts!***

Step 4.

Insert **Bushing A** into **End Cap B** taking care to insure it is fully seated.



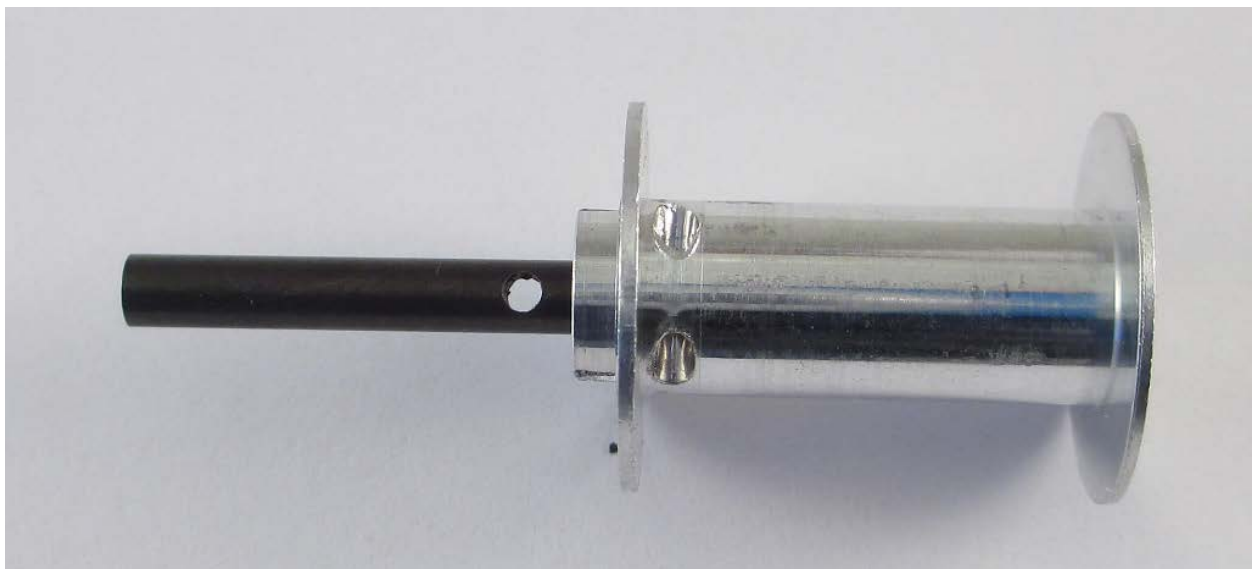
Step5.

Insert **Bearing C** into recessed area of **End Cap B** and ensure it is fully seated.



Step 6.

Slide **Centerpin E** through **Spool D** so the narrow end of the **Centerpin E** is exposed in the groove on top of the spool and that the cross pin hole is exposed.



Step 7.

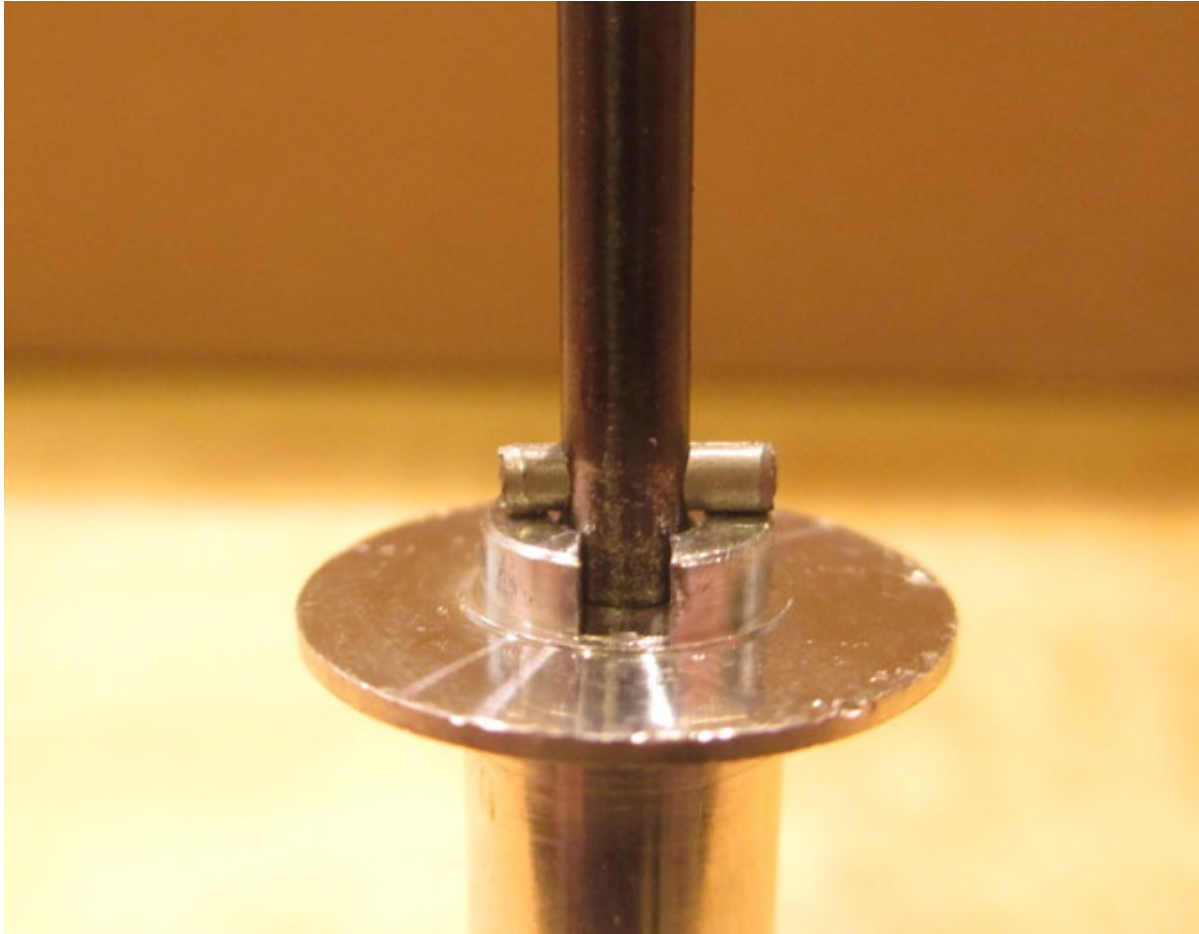
Insert **Spring Pin F** through the cross pin hole of **Centerpin E** so that the seam in the spring pin is facing away from the spool. This should prevent **Centerpin E** from being able to slide all the way out of **Spool D**.



*(NOTE: You can lightly pinch the end of the spring pin with pliers to help get it started)*



**99% of the issues you might have with the kit are from this:**



The **Spring Pin F** in the picture is just slightly sticking past the bearing surface on the **Spool D**. If your setup looks like this, it will make your engagement/disengagement very stiff. To solve this, you can either trim the **Spring Pin F** with a dremel or manipulate it with pliers to get it more centered. It's important to get this part right.

**We gave this picture its own page because this is critical.**



Step 8.

Slide one of the 4 Washers G onto the shaft of Centerpin E.



Step 9.

Slide Return Spring H onto the shaft of Centerpin E.



You should now have this:



Step 10.

Slide the tip of **Centerpin/Spool/Return Spring** assembly through **End Cap B** so that the end of the **Centerpin E** protrudes through **Endcap B**.



Step 11.

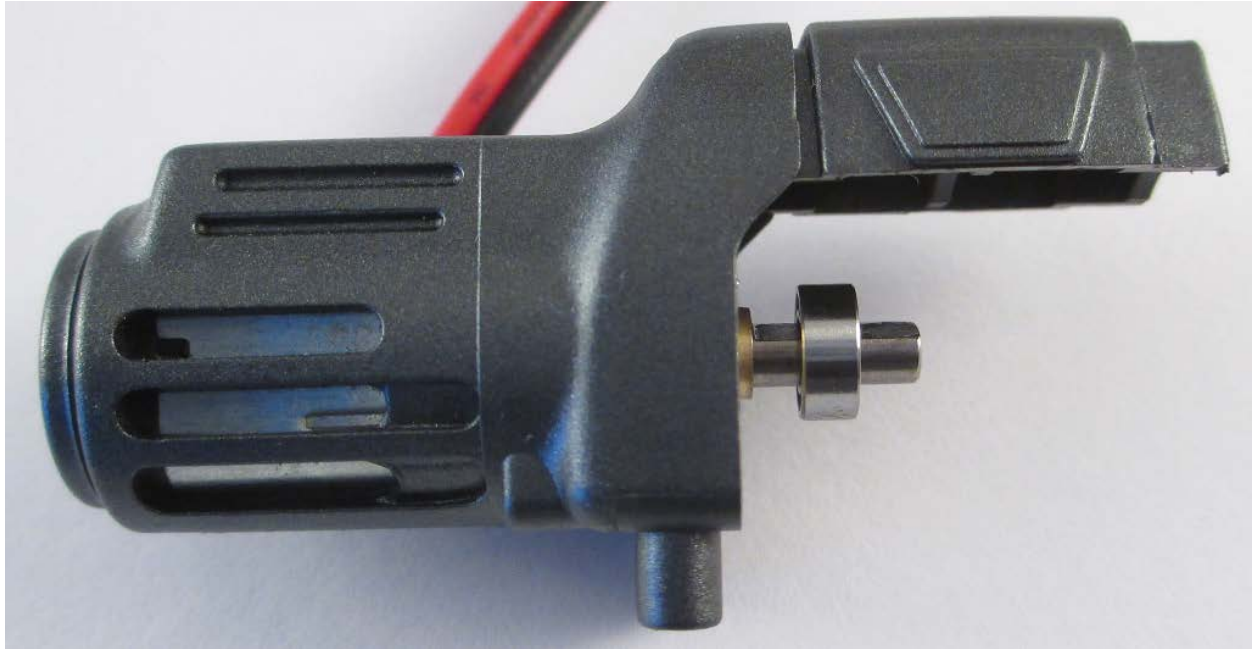
Use **M2x4 Screw I** and thread through **End Cap B** and into **Centerpin E** to hold it all together.

*(NOTE: Blue Loctite is OK here)*

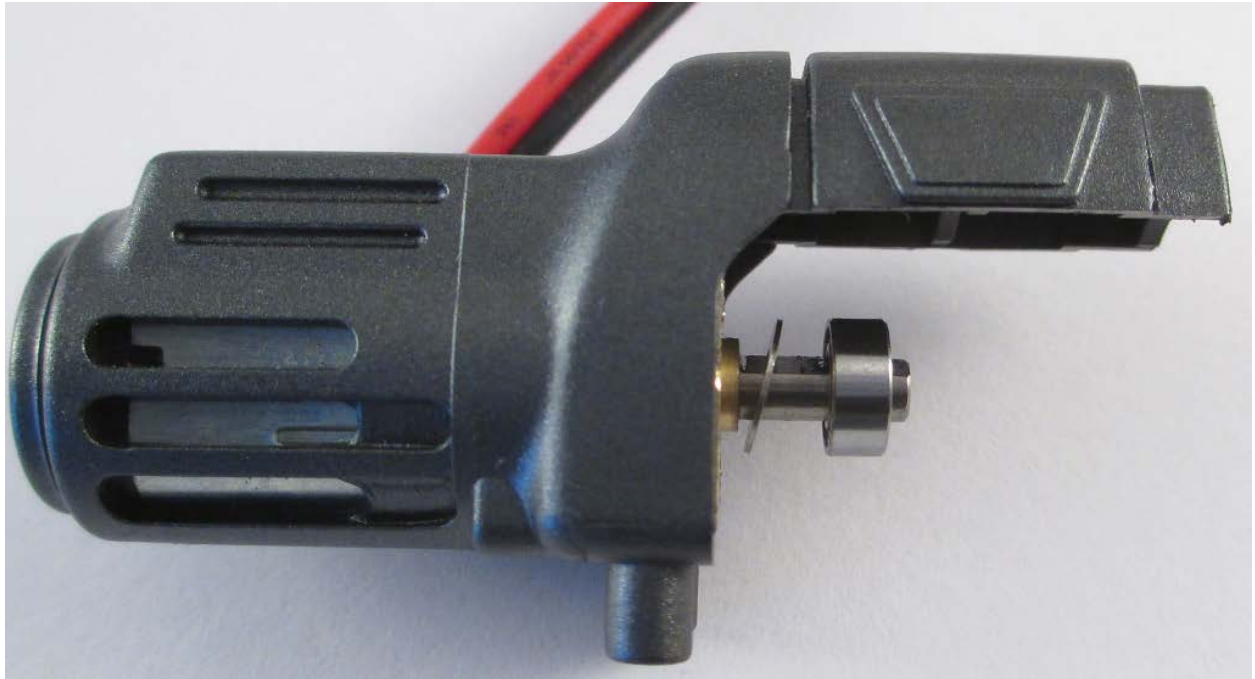


Step 12.

Slide **Bearing J** onto the stock motor assembly shaft.



*(Note that you may have to return to this step and insert additional 3x5 **Washers G** between the bearing and Motor side of the shaft to remove play and fill space between the winch body and spool edge as shown below.)*





Step 13.

Slide your subassembly onto the motor assembly shaft using the flat side as a key.



Step 14.

Use the two stock mini screws to attach **End Cap B** to the stock center support. Do not over tighten. *(We include additional screws if you lose yours)*



Step 15.

Use the Stock M2 screws to attach End Cap B to the stock winch plate from underneath.

Step 16.

Spool your favorite winch line, winch hook and winch saver so that the line wraps under **Spool D** from front to back. *(reverse spooling may enhance loosening issues with the **M2x4 Screw I** in the **Centerpin E**).*



Step 16.

Test winch for proper powered/free spool function and go have some fun!

## Basic Troubleshooting

*Issue: There is space/play between the spool and the winch body.*

Solution: Go back to step 11 and try adding a few 3x5 washers between the 3x5 bearing and the motor side of the motor assembly shaft. Add only what is necessary for proper function.

*Issue: My winch spools in and out under power just fine; however, after I free spool, the spring does not pop back into place immediately.*

Solution: With time the free spool function of the winch will smooth out; however, you may find it helpful to file/polish the edges/corners of the grooves on top of Spool D so that the Spring Pin slides in and out more smoothly. When first transitioning from free spool to power, your centerpin may stick out until tension on the line and power snaps it into place. If this is a continuing issue you may consider letting go of your centerpin/screw and drawing additional line until the unit snaps out of free spool.

*Issue: The M2x4 in the end of my Centerpin keeps coming loose.*

Solution: We recommend you spool your winch line so that it goes under the spool from front to back. This way, when you are freespooling and holding the screw, it will be threading in. If you reverse spool your line the screw will loosen while you pull your line out.

*Issue: My winch does not free spool.*

Insure your line is not tangled. We recommend respelling your winchline after every run so that each consecutive layer sits on the prior layer flat and does not wedge between itself.

Other issues?

Submit a ticket through our website (on the contact us tab) and we will do our best to get your kit up and running!