

SkyWatcher Dobsonian 6-16" Telescopes: Encoders Installation

Please make sure that you have all the parts included in the kit:



Specifications:

Azimuth Encoder resolution: **8192** steps per revolutionAltitude Encoder resolution: **8192** steps per revolution

Current consumption: 10mA – Azimuth encoder, 10mA – Altitude encoder

Azimuth encoder installation

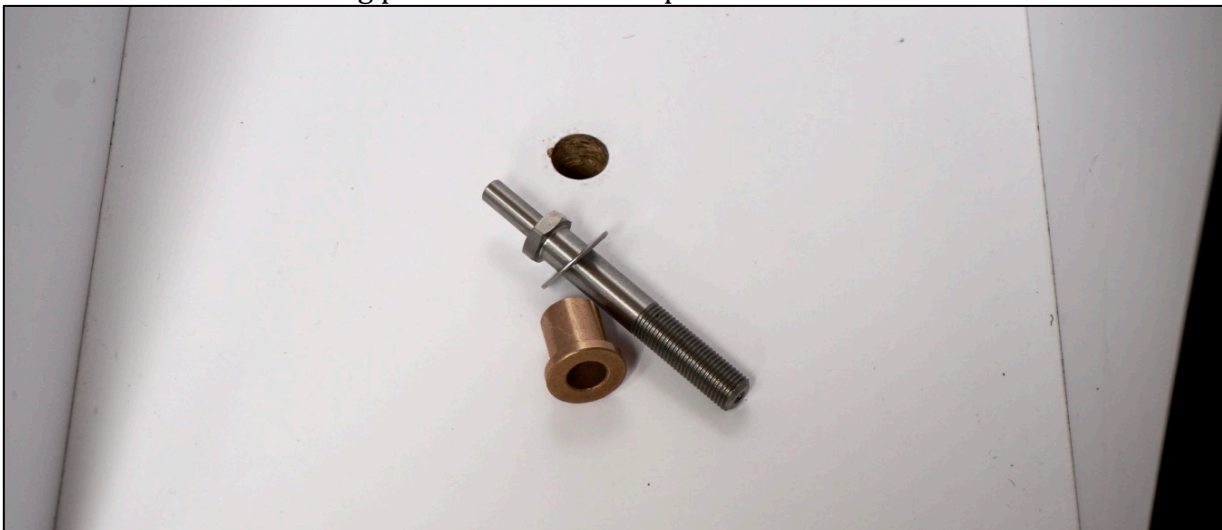
Please remove the OTA from the base. Then remove the azimuth pivot bolt.



You will find a plastic insert. You need to remove it and replace it with the bushing supplied.



You will need the following parts for the next step:



Insert the bushing provided and push it into the hole. You need the washer and the pivot bolt:



Put the new pivot bolt into the bushing:



Now turn the base around or put the whole base on a side:



Now thread the mounting plate onto the pivot bolt until the plate cannot be rotated:

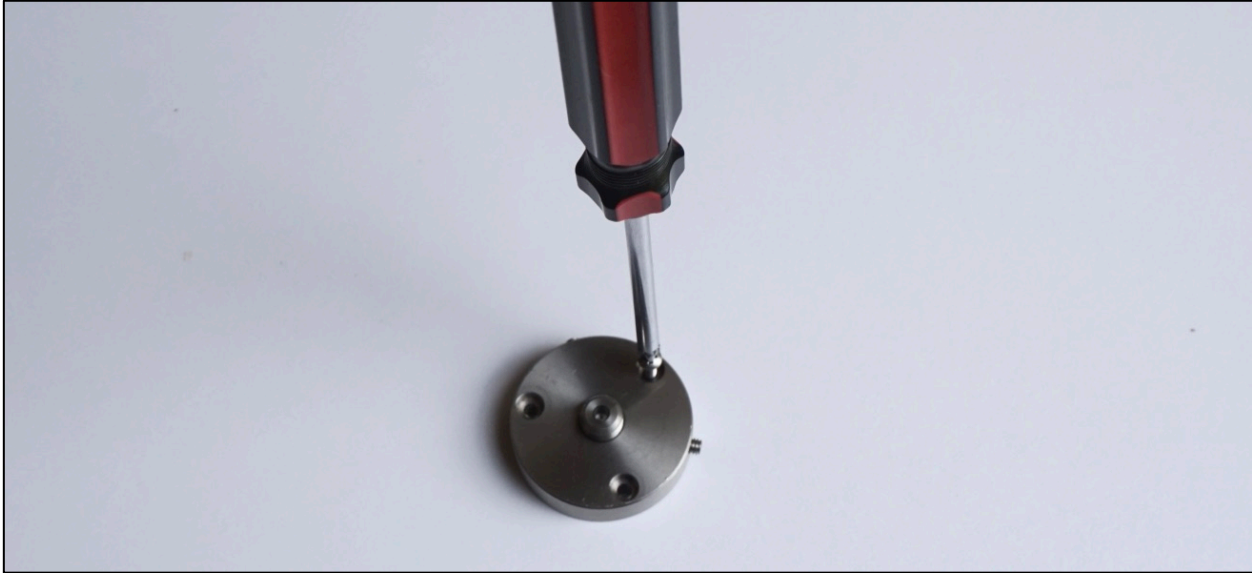


Now you need to drill a small hole using a 1.5-2mm drill bit:



Drill three holes – for each screw.

You now need a screwdriver and three screws for mounting the plate:



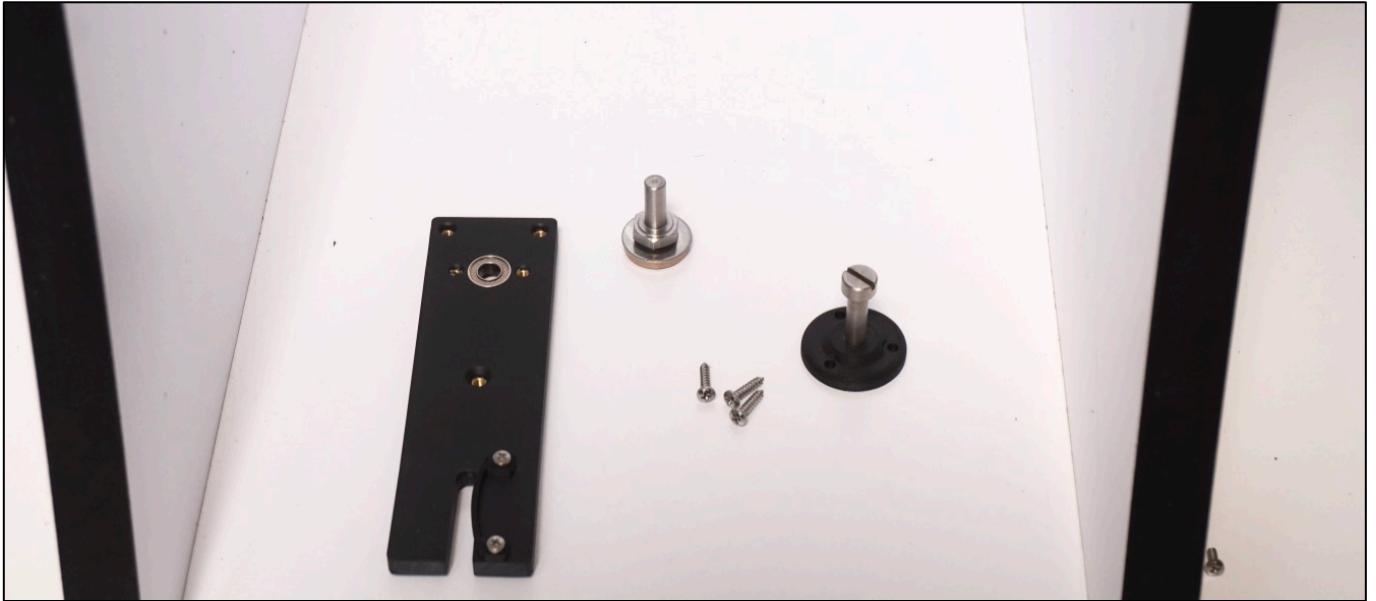
Use the screwdriver to fix the plate in place:



Tighten two set screws using the supplied Allen key (make sure that the rocker box can still rotate freely before tightening the set screws):



Now you need the following parts:



Put the tangent arm on the pivot bolt:



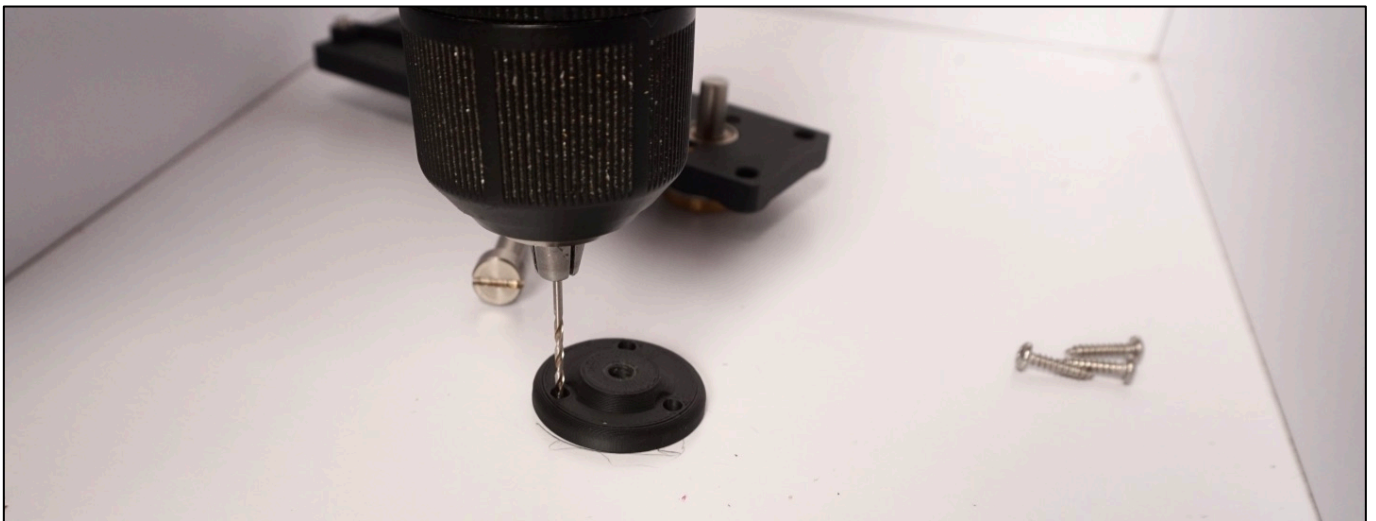
You will need to install the anchor bolt:

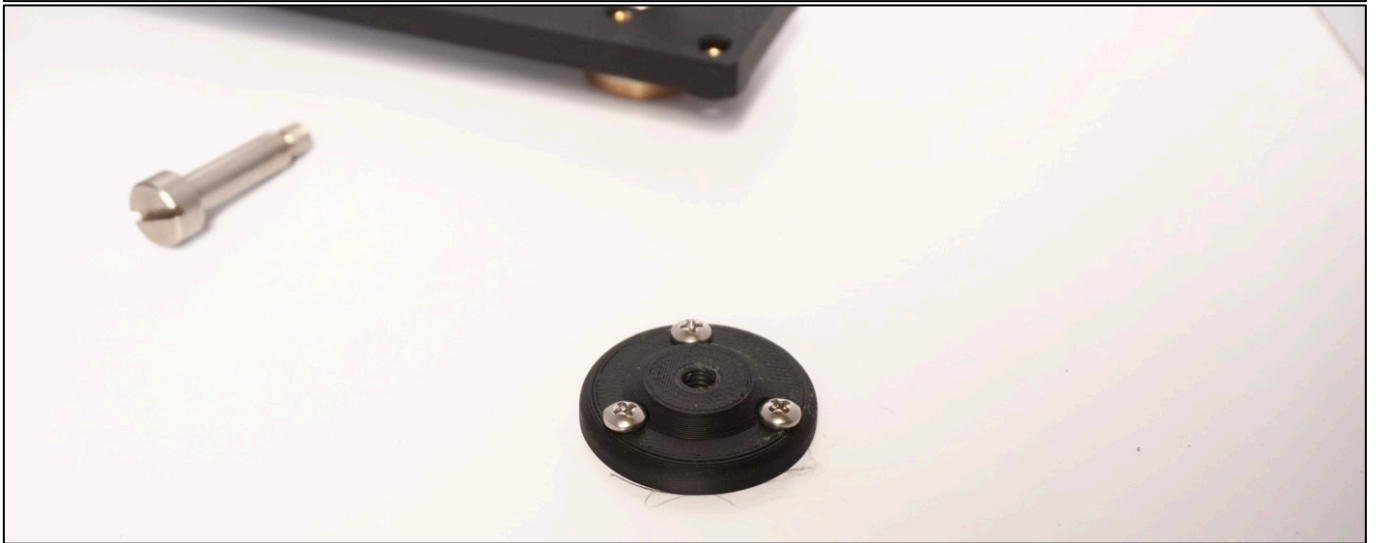
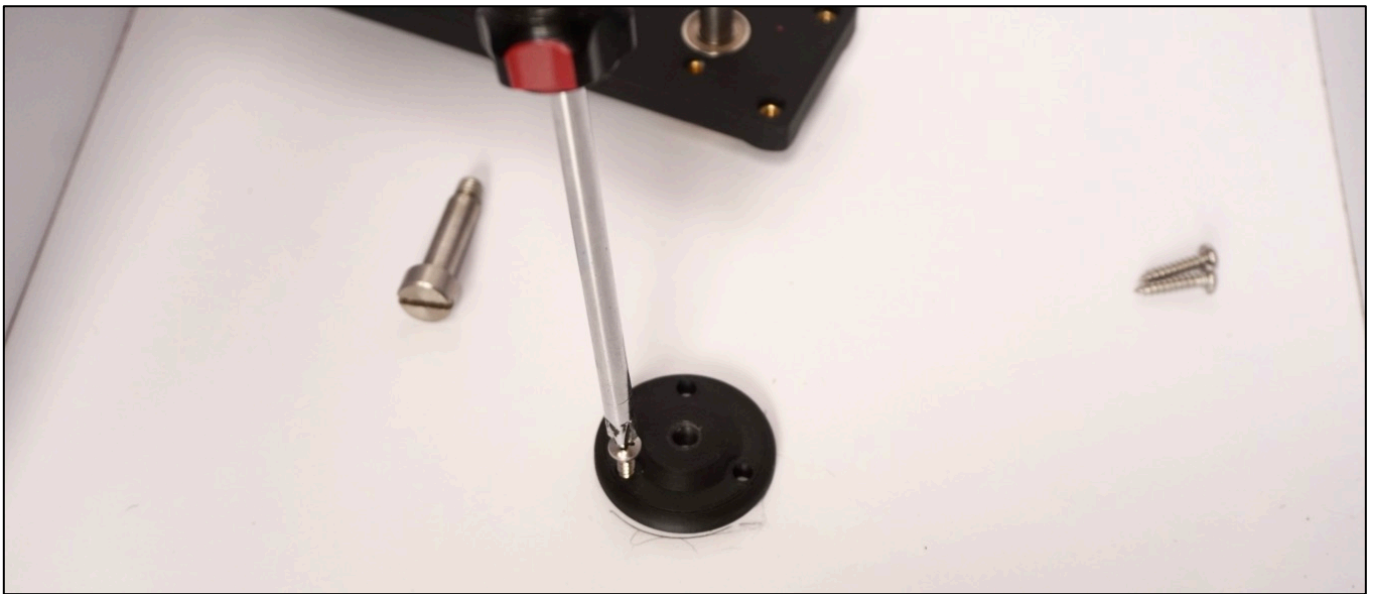


Mark the position of the anchor bolt's base with a pencil:

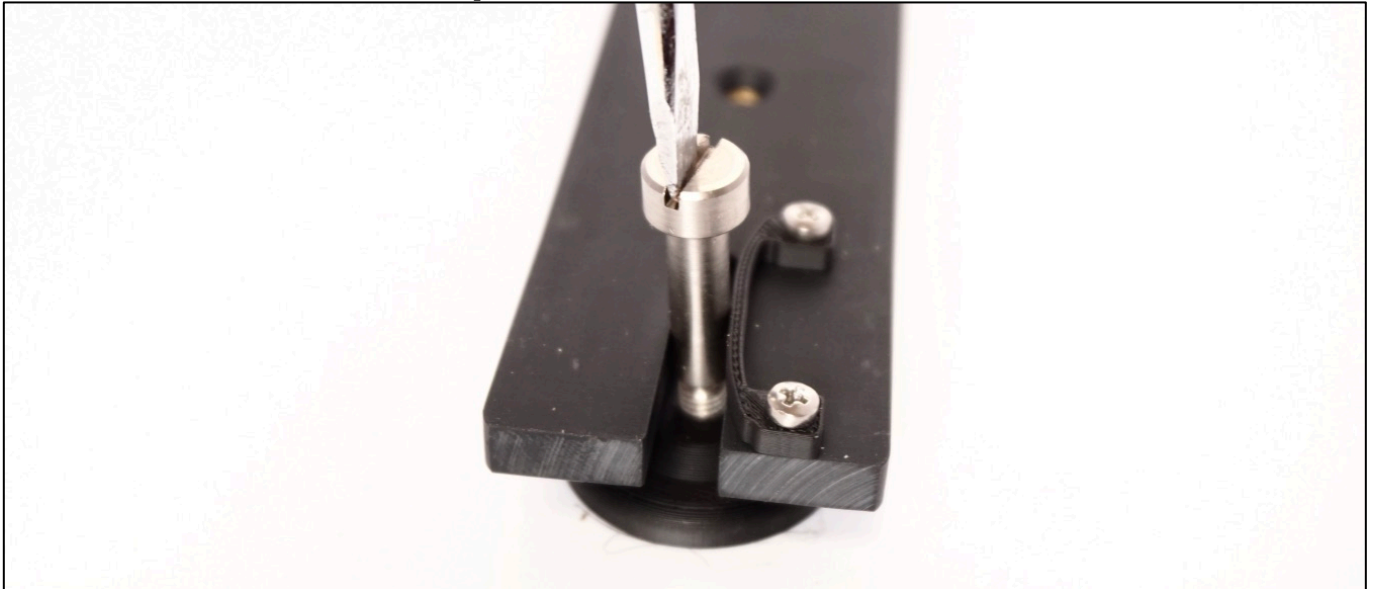


Unscrew the anchor bolt from its base. Drill holes for screws. Use the supplied screws to install the base of the anchor bolt:

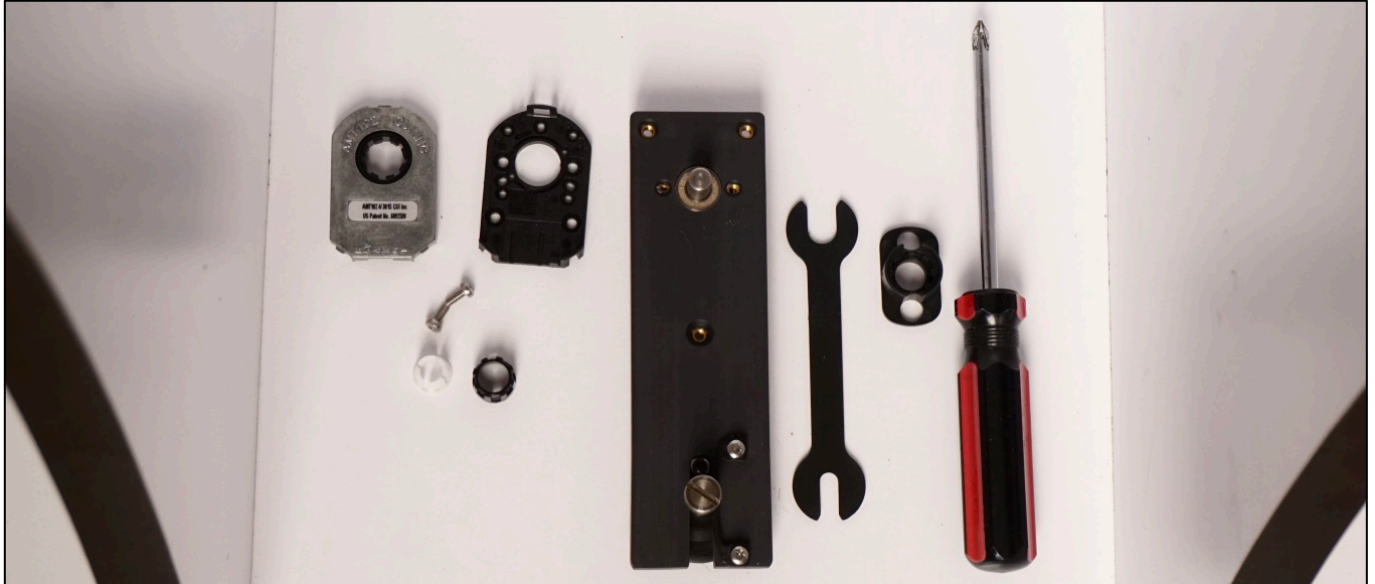




And screw the anchor bolt back in place:



You will need the following parts for the next step (most of them are in the box with the encoder):



Use the spacer to slide the white shaft adapter:



Install the black shaft adapter over the white adapter:



And push it down:



Put the encoder base plate and start threading the screws but do not tighten them yet:



Use the alignment tool to centre the encode base plate:



Tighten the screws:



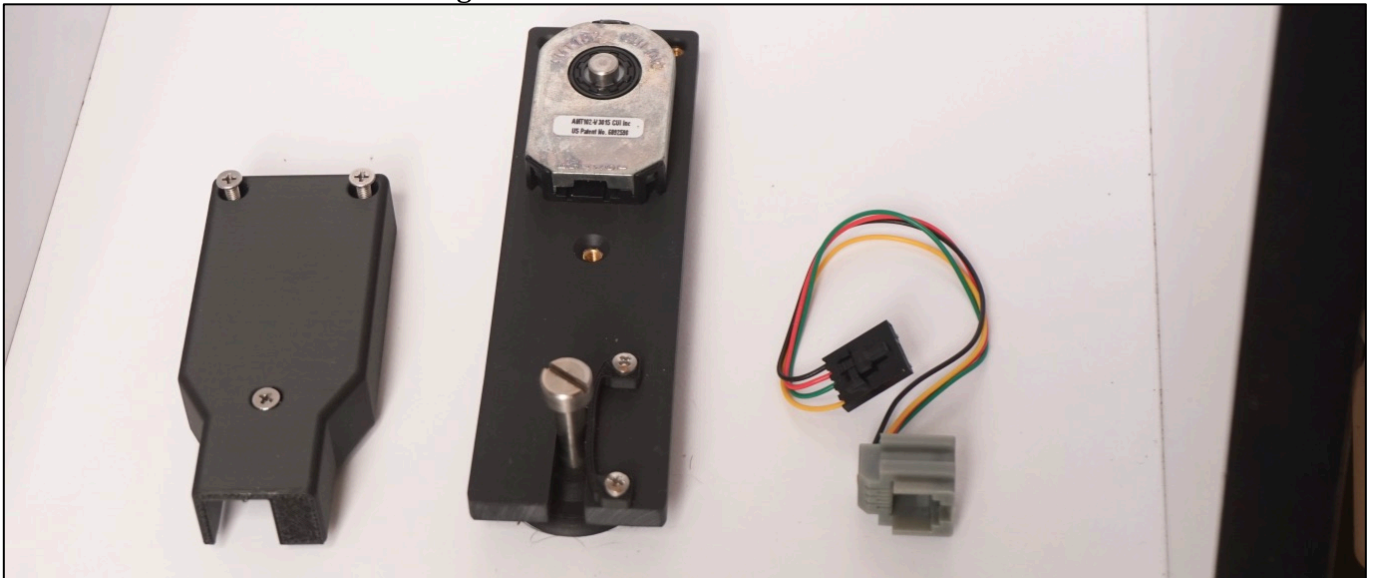
Remove the alignment tool:



Now install the encoder and push it into place:



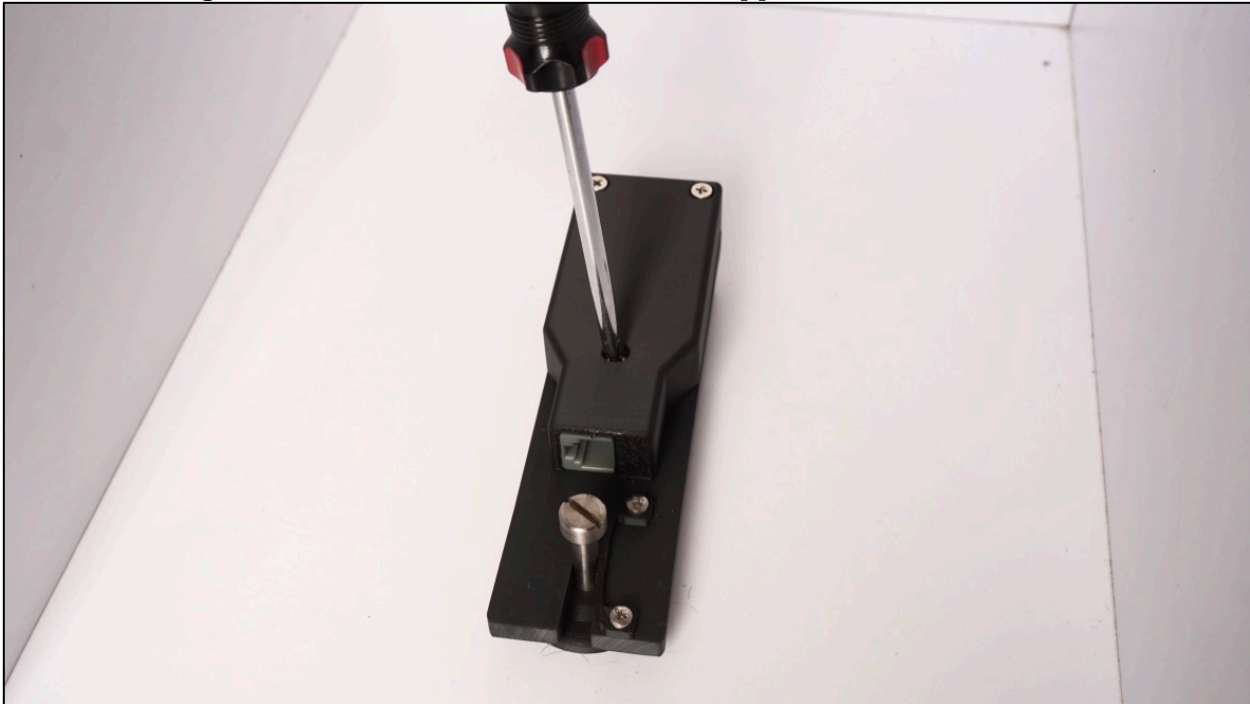
You will need the encoder housing now:



Plug the connector into the encoder:



Put the housing onto the encoder and fix it with the supplied screws:



Altitude encoder installation

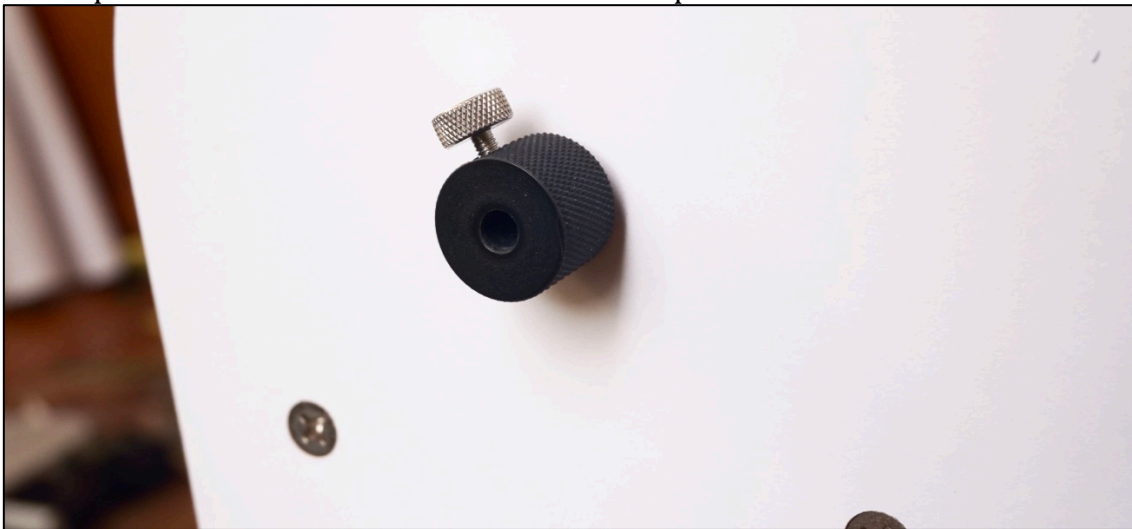
You will need the following parts:



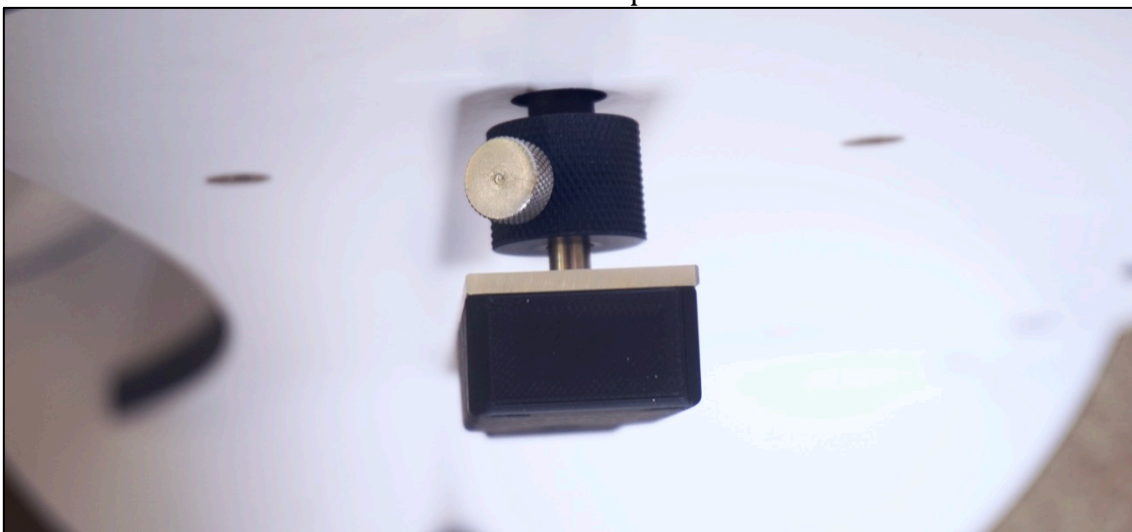
Remove one of the handles:



And replace it with the altitude encoder shaft adapter:



Insert the altitude encoder's shaft into the adapter:



Then position the tangent arm at an angle (to the right or to the left but it should not be positioned vertically) insert the anchor bolt into the slot:



Use a pencil to trace the outside of the anchor bolt's base:



Unscrew the anchor bolt from its base. Drill holes for the screws and put the screws in:





Put the anchor bolt back in:



Now install the tangent arm starting from the bottom slot:



Then insert the encoder shaft into the adapter and tighten the thumbscrew:



That completes the installation of the encoders.

DONE! Now plug the encoder cable into the jacks of the encoders and connect it to the DSC!





Please set the azimuth encoder steps to 8192 and altitude encoder steps to 8192 and follow the instructions of your DSC on setting the signs for the encoder steps correctly.