

eclecticangler

Version 6 Fly Reel Kit Assembly Guide

This guide will take you through the assembly process for our new version 6 reel kit and also highlight options to customize the appearance of your reel.

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INTRODUCTION

We've designed the reel kit, packaging and assembly guide so you have a great experience building your kit. Please follow the sequence in the guide and pay attention to the highlighted notes and tips. If you do have trouble, either post a comment on the specific step or email us at info@eclecticangler.com.

If you would like to print these instructions, simply click the [Formats: PDF](#) link for a printable PDF file. You might find the videos in this guide helpful though, so please take a minute or two to look through them.

Note that all tools and supplies are included with every kit!

TOOLS:

- [Small flat blade screwdriver](#) (1)
- [1/16" Allen wrench](#) (1)
- [sheet each of 320 and 600 grit sandpaper](#) (1)
- [packet of petroleum jelly](#) (1)
- [metal polish](#) (1)

PARTS:

- [An Eclectic Angler Fly Reel Kit](#) (1)

Step 1 — Getting Started



- Your kit includes all of the tools and materials you need to assemble your reel.
- The kit itself is packaged in six bags labeled Module 1 to Module 6 that help you stay organized and focused. Don't open a bag until you are ready to use it.
- ⓘ This Guide features our [1-2-3 Ported Round Frame kit](#). All kits are assembled exactly the same, they just look different when completed!

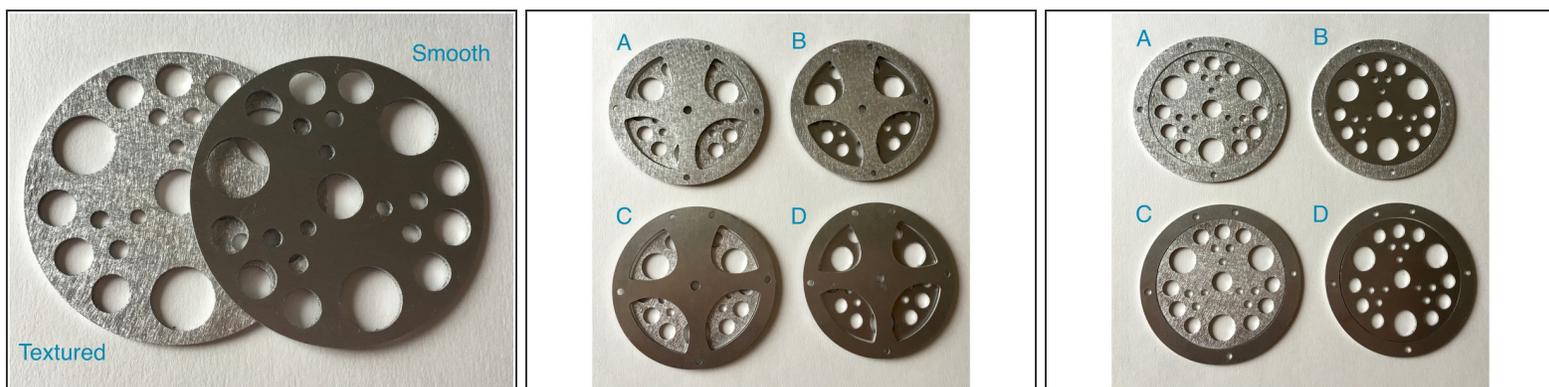
Step 2 — Introduction



⚠ Read the entire Assembly Guide before starting assembly. ***Pay attention*** to steps labeled **IMPORTANT**, **NOTES**, **TIPS** and **PREP NOTES**.

- The assembly steps for each Module begin with a labeled photo of the parts. The [Parts List](#) provides descriptions of the parts and part numbers appear in parenthesis like this: (1).
- ☑ **TIP:** Assemble the Modules sequentially as described in this Guide.
- ☑ **TIP:** Open the bag over a shallow container or tray to keep parts from escaping. The black 10" round containers from carry-out restaurants are perfect!
- Assembly takes from one to three hours for most people, but it isn't a race so enjoy the process!

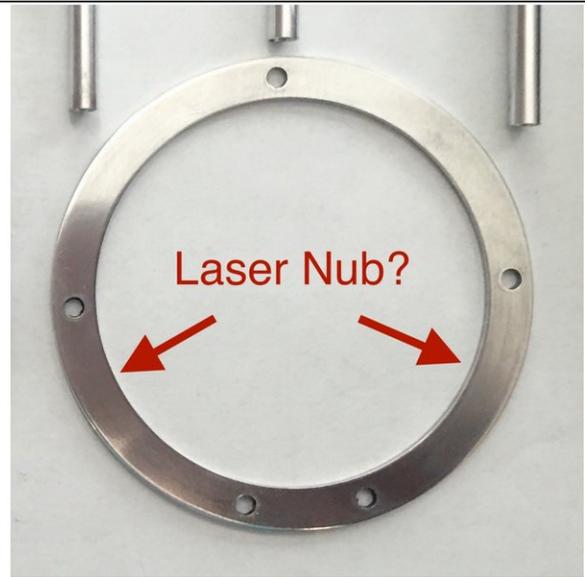
Step 3 — Creative Choices



- The V5 kit features aluminum frame and spool parts (1), (3), (8), (15), (19) with a textured surface on one side. This texturing is decorative, allowing you to customize your reel by choosing which surface is exposed.
 - There are 4 combinations for the back and 4 for the front as shown in the photos. This provides 16 different combinations for you to choose from for your reel!
 - A: textured frame with textured spool plates
 - B: textured frame with smooth spool plates
 - C: smooth frame with textured spool plates
 - D: smooth frame with smooth spool plates
- ✦ **TIP:** You can change your reel's appearance even after it's completed by flipping one or more parts around!
- ⓘ **NOTE:** The reel shown in this Assembly Guide uses the C combination for both the back and front.

Step 4 — Preparing the Aluminum Parts

Round Over



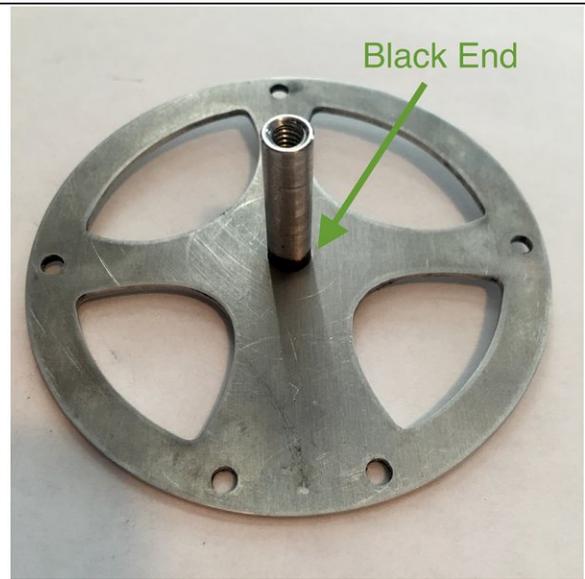
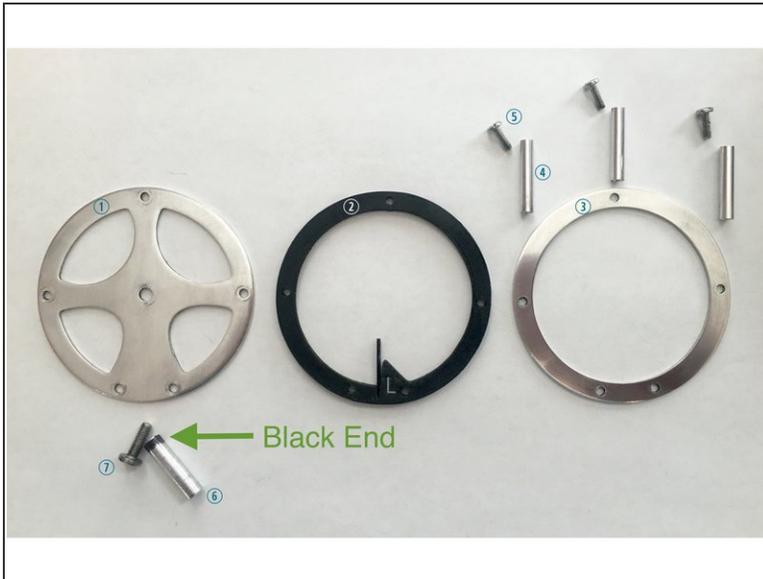
- Round over the edges of the **back frame plate (1)**, **front (19)** and **back spool plates (8)** by sanding the sharp edges with the course 320 grit sandpaper. Round over both the outside and inside edges of the **frame rings (3) and (15)**.

! **IMPORTANT:** Make sure to sand off ALL machining marks from the edges of the **frame** and **spool** parts - especially the inside edge of the **frame rings**.

! **IMPORTANT:** You might feel 2 or 3 little nubs on the inside of the rings from the laser cutter. Sand them off or your reel will squeak or bind. The nubs could be located anywhere on the inside of the two rings.

- It's best to round over and finish parts as you need them to assemble each Module. That way you won't lose or misplace parts.
- Once the edges are rounded over with the course (320 grit) sandpaper, finish with a quick pass using the fine (600 grit) sandpaper.
- Please read the additional PREP NOTES in the following steps for tips on preparing the parts.

Step 5 — Module 1: Frame Back



- i** **PREP NOTE:** If you prefer to have the smooth side of the **back frame plate (1)** showing, finish the smooth side by sanding with 600 grit sandpaper. Polish using the packet of Flitz™ polish provided in your kit. A 4"x4" piece of old denim jean fabric makes a great polishing cloth.
- One end of the **spindle (6)** is marked with black. This end has a small step to center it in the **back frame plate**.
 - Insert the black end of the **spindle** into the center hole in the **back frame plate**, making sure it is seated properly in the hole. Then attach it with the large **8-32 binding head screw (7)**.

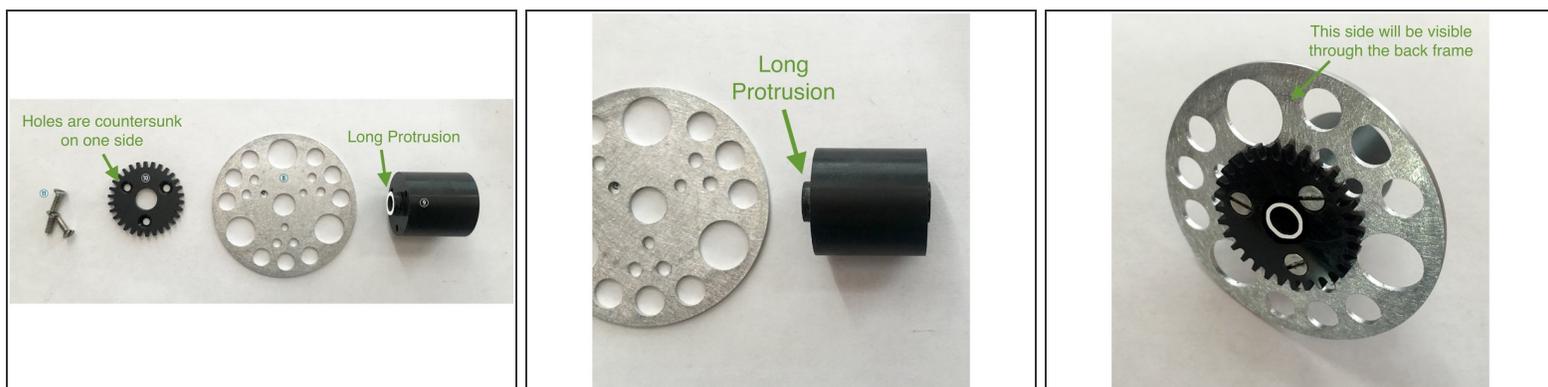
Step 6 — Module 1: Frame Back



- (i) NOTE:** The **frame spacer (2)** (black in the photo) is embossed on one side with an “L” for left hand retrieve and an “R” on the other side for right hand retrieve.

 - For a right hand retrieve reel, position the **frame spacer** with the “R” facing the **back frame plate**, the “L” should be visible as shown in the photo. For a left hand retrieve, flip it over so the “L” faces the **back frame plate**.
 - Choose whether you'd prefer the smooth or textured side of the **frame ring** showing and place it on top of the **frame spacer**. Make sure to align the holes as shown.
- (i) PREP NOTE:** If you prefer to have the smooth side showing, sand with 600 grit sandpaper and polish it before continuing.
- Insert the three **4-40 binding head screws (5)** and finger-tighten the **pillars (4)** to them as shown in the photo. The two closely spaced holes should be open, they are for the foot attachment.
- (i) NOTE:** The **back frame plate**, **frame spacer** and **frame ring form** a sandwich and the screws pass through from the **back frame plate** side.

Step 7 — Module 2: Spool Back



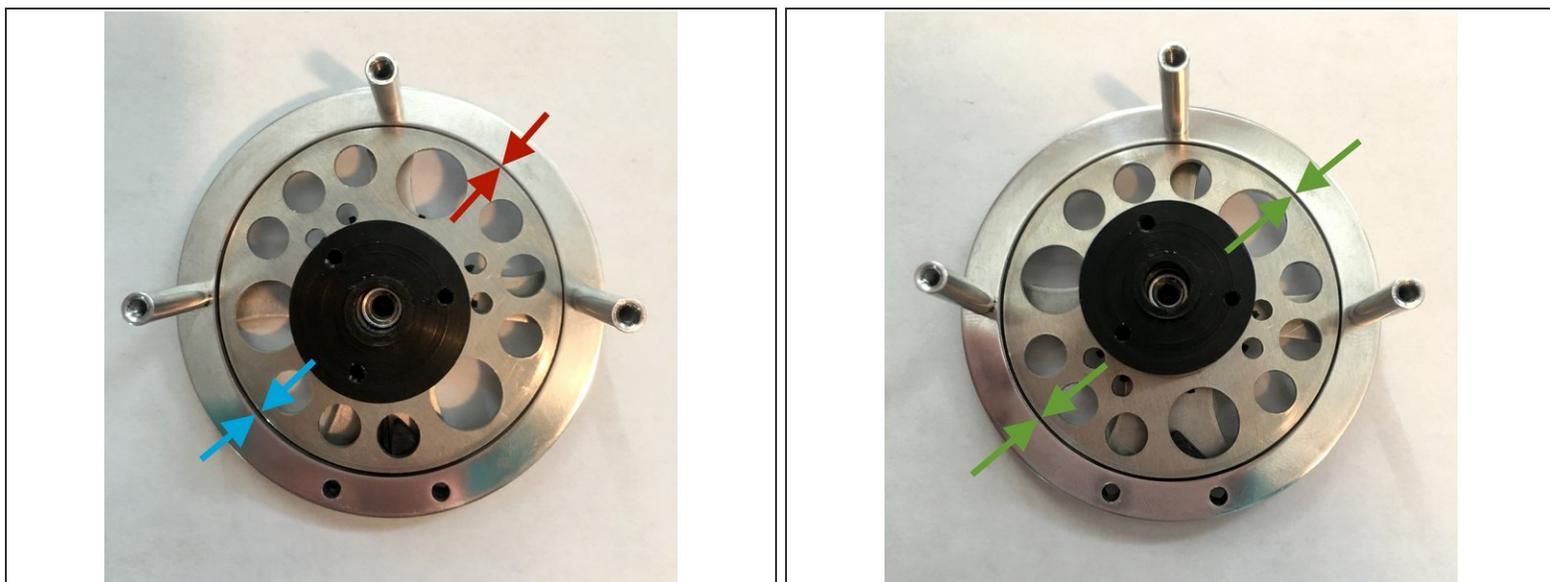
- Next you are going to assemble the back half of the spool. The Module 2 bag includes three **flat head screws (11)**, the **check disk (10)**, the **back spool plate (8)** and the Delrin™ **spool hub (9)**.

ⓘ **PREP NOTE:** Both sides of the **back spool plate** are visible so sand and polish the smooth side. Choose which face you want showing through the **back frame plate** when you install it.

⚠ **IMPORTANT:** The longer protrusion on one end of the **spool hub** is marked white. The **back spool plate** and **check disk** fit on this white marked end. If you assemble the spool with the **spool hub** backwards, your reel will not function properly.

- Place the **back spool plate** over the longer protrusion with the textured or smooth side you want visible through the **back frame plate** facing out.
- Place the **check disk** over the **back spool plate** with the countersunk holes facing *outwards* as shown in the photo. Attach it with the three **flat head screws**.

Step 8 — Aligning the Back Spool Plate in the Frame



⚠ THIS STEP IS IMPORTANT

- Now you are going to align the **spool** and **frame** assemblies so they are concentric and the spool rotates freely.
- Install the **spool** on the **spindle** and rotate it back and forth. Note the gap between the **back spool plate** and **frame ring**, it should be even all the way around. In this example it is not; the RED arrows point to a small gap and the BLUE arrows point to a large gap.

⚠ IMPORTANT: If the gap is not even, as the GREEN arrows in the second photo show, loosen the three **pillar** screws and you will be able to move the **frame ring** to center the **back spool plate** and get the gap even. Carefully tighten the screws and recheck to make sure the **frame ring** did not move out of position.

ⓘ NOTE: Watch the short video in the next step for more information.

Step 9 — Testing the Spool fit and Click Check



- The **click check** should make a nice crisp sound and the **spool** should not bind.

Step 10 — Module 3: Foot



- The new V5 **foot (12)** is pre-shaped to fit most rod reel seats and can be used as-is (after you remove any sharp edges with sandpaper).
- Test fit the foot on your rod and re-shape it with 320 grit sandpaper if needed. Typically, this involves thinning down both ends of the **foot**.
- ⓘ **PREP NOTE:** If you'd like a polished foot as shown in the second photo, simply sand off the machining ridges with 320 grit sandpaper. Then sand with 600 grit sandpaper and finish with the included polish.
- The **foot** attaches to the **frame** assembly with two **4-40 binding head screws (14)** and two **short foot pillars (13)** as shown in the photographs.

Step 11 — Module 4: Frame Front Ring



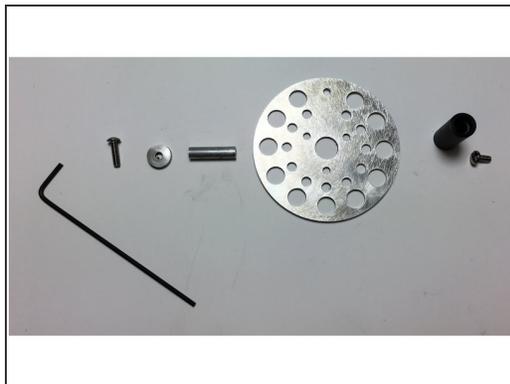
- The video shows how the **front ring (15)** is attached to the **frame assembly**.

Step 12 — Module 4: Frame Front Ring



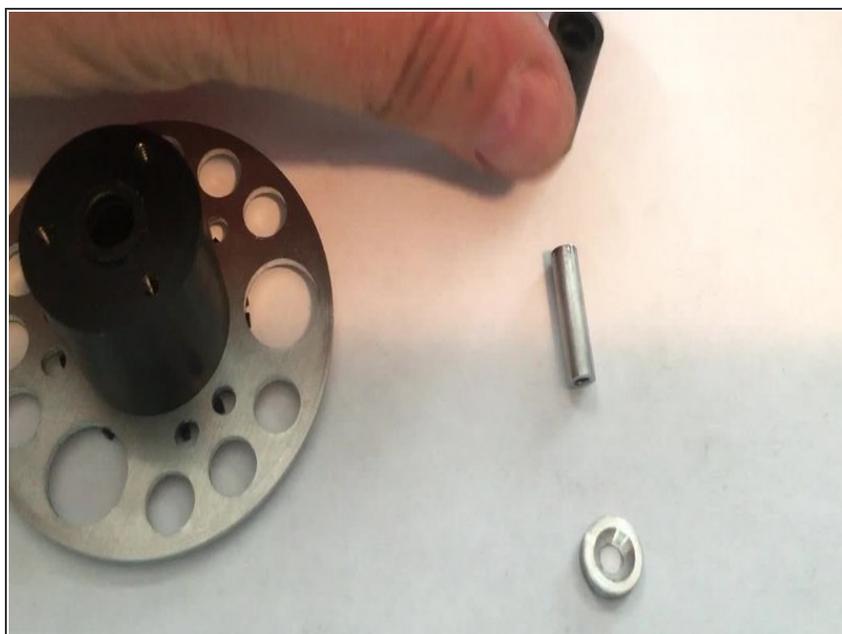
- Attach the **front ring (15)** to the **frame** with three **4-40 binding head screws (16)** as shown.
- ⓘ **PREP NOTE:** Both sides of the **front ring** are visible so sand and polish the smooth side. Choose which face you want showing when you install it.
- Insert one of the short **foot pillars (17)** in the space between the **front ring** and the **foot** and secure it with one of the **long 4-40 binding head screws (18)**.
- Repeat to assemble the second **foot pillar** to the **frame**.

Step 13 — Module 5: Spool Front and Handle



- i** PREP NOTE: Both sides of the **front spool plate (19)** are visible so sand and polish the smooth side. Choose which face you want showing when you install it.
- Insert the **button head screw (20)** through the back side of the **front spool plate**.
 - Place the **handle bolster (21)** over the screw and secure it with the **handle spindle (22)** as shown in the second photo using the provided Allen wrench.
 - See the video in the next step for details on installing the handle.

Step 14 — Handle Video



- The video shows the proper orientation of the Delrin **handle**. One end of the **handle** has a recess. This end faces out and the **binding head screw** that attaches the **handle** will fit in the recess.

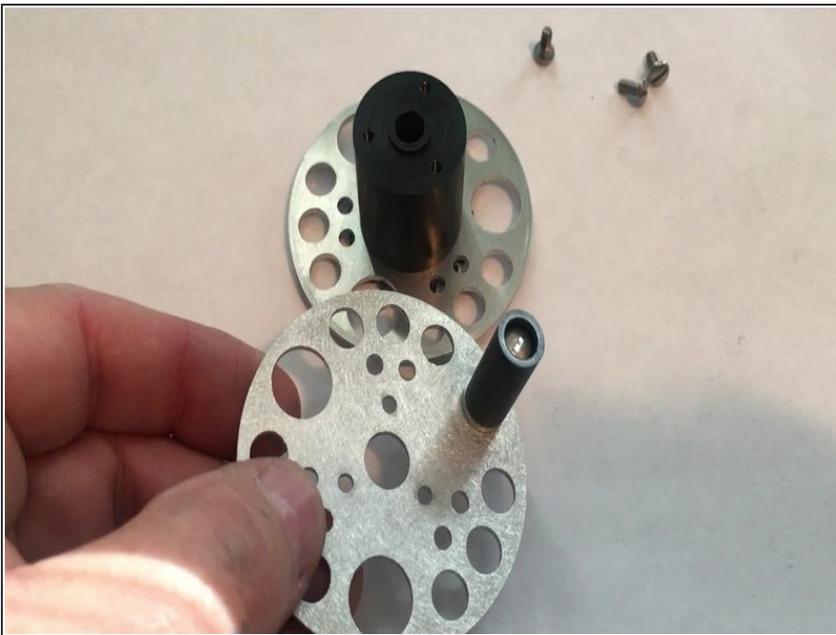
! **IMPORTANT:** If you assemble the **handle** backwards with the recess towards the **bolster**, it will not rotate properly.

Step 15 — Module 5: Spool Front and Handle



- ❶ Lubricate the **handle spindle** with a *dab* of the Petroleum Jelly provided with your kit. If you prefer, you can use a light machine oil instead.
- Install the **handle** as shown in the previous video and secure it with one of the **binding head screws (24)**.

Step 16 — Bolster Alignment



- The video shows how to align the **bolster** with the **handle**.

Step 17 — Module 5: Spool Front and Handle



- Attach the **front spool plate** and **handle** assembly to the **spool hub** assembly using three **binding head screws (24)**.

⚠ IMPORTANT: If the center part of the **spool hub** extends above the surface of the **front spool plate**, you have assembled the **spool** incorrectly. Go back and review [Step 7](#) for the correct orientation of the **spool hub**.

Step 18 — Aligning the Front Spool Plate in the Frame



- Place the **spool** in the **frame** and check that the gap between the **frame ring** and the **front spool plate** is even all the way around.

⚠ **IMPORTANT:** If the gap is not even, slightly loosen all five **binding head screws** that attach the **front ring** to the **pillars** and move the **front ring** until the gap is even.

⚠ **IMPORTANT:** If the spool still rubs after centering you need to sand the edges of the **spool plates** and the inside of the **frame rings** some more to round them over properly. Also, make sure there are no nubs on the inside of the rings.

- Carefully tighten the five **screws**, ensuring that the gap remains even.

Step 19 — Module 6: Spool Retainer



- This video shows how to attach the **spool** to the **frame** using the **binding head screw (25)**, **spacer (27)** and **white Delrin washer (26)**.
- ★ **TIP:** Make sure that the **white Delrin washer** is completely **seated** and centered in the **spool plate**.
- ⓘ Lubricate the **spindle** with a dab of the Petroleum Jelly provided with your kit. If you prefer, you can use a light machine oil instead.

Step 20 — Fine Tuning



- This video shows how to fine tune the fit of the **spool** in the **frame**.

Step 21 — Finishing Up



- Your reel is now complete! Add a line and go fishing!
- ☑ **TIP:** To protect the polished finish, wax the reel - car wax works perfectly. Or, you can allow the aluminum to age to a soft matte patina and go fishing!
- ☑ **TIP:** If desired, remove each screw and add a tiny bit of thread locker to keep it in place. I do not do this on my reels as I am constantly taking them apart to demonstrate how they are assembled. I've never had one come apart on the river!

Step 22 — Care and Maintenance



- Rinse your reel in fresh water and blot dry to keep it clean.
- We recommend an occasional dab of Petroleum Jelly or light oil on the spool and handle spindles.

Step 23 — Don't Panic!*

- If at any time you need help or a replacement part - even if you lost or ran over a part with your tractor - contact us at info@eclecticangler.com - and we'll help you out.
- *a nod to Douglas Adams' *The Hitchhiker's Guide to the Galaxy*