

## NUMMECH PRODUCTS - NAUTOCOCKER GRIP FRAME

### RAW PARTSLIST & INSTALLATION NOTES

Complete diagrams are available on our website under the replacement parts listings.

#### 3x4 bag: (Nautococker frame's normal hardware pack)

- Vertical adapter screw with o-ring
- Body mount screws (1 long, 1 short)
- Foregrip screws with o-rings (2 qty) << not listed on the hardware pack flier

#### 2x3 write-on bag: "REGULATOR / ASA"

- Regulator internals fully assembled
- ASA pin valve depressor
- ASA-to-frame seal o-ring (9/70)
- Spare regulator "base seal"

#### 2x3 write-on bag: "ASA SCREWS"

- ASA mounting screws (2 long, 2 short)
- ASA pin depressor retaining screw

#### 2x3 write-on bag: "SEAR"

- Telos roller sear
- "Medium" Autococker sear spring
- Sear pin (1/8" dia x 3/4" length)

#### 2x3 write-on bag: "TRIGGER"

Hinge parts:

- Hinge trigger pin (1/8" dia x 1/2" length)
- Hinge trigger bronze bushing
- Hinge trigger post-travel set screw (#6-32 thread)
- Hinge frame pre-travel set screw (#8-32 thread)

Slider parts:

- Slider frame brass-tipped set screws (2 qty) (#8-32 thread)
- Slider trigger shoe set screws (2 qty) (#4-40 thread)
- Telos roller trigger plate
- "Medium" slider trigger spring

#### 2x3 write-on bag: "SAFETY"

- Safety button
- Safety spring
- Safety set screw
- Safety ball bearing

#### 2x3 write-on bag: "RELIEF" (also contains "test" plug)

- 1/8" NPT plug for test port
- Relief set screw
- Relief spring
- Relief o-ring (4/90)
- Relief screw/washer
- Loctited air port set screw (#10-32 x 3/16" length)

#### 2x3 write-on bag: "GRIP PANELS"

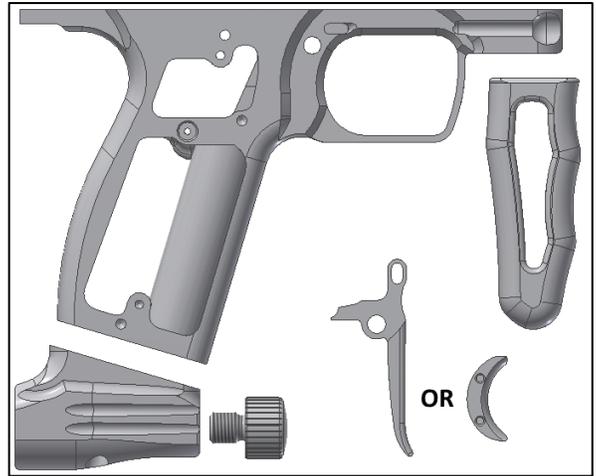
- Grip panel screws (4 qty) (#6-32 thread)

## RAW INSTALLATION NOTES

The following aluminum components can be anodized:

- Grip frame
- ASA housing
- ASA knob
- Foregrip external parts; mounting accessories
- Slide trigger shoe (or) hinge trigger

Some additional aluminum internals are already anodized which aren't visible from the outside of the marker. This includes parts of the regulator, safety button, and certain types of foregrip internals.



### Overview for assembly after anodizing:

Many steps of the assembly process can be done in any order. However, several key items must be done before other steps can be completed.

1. The regulator internals must be installed within the grip before the ASA adapter can be attached.
2. Once the regulator and ASA are mounted, the remaining frame components can be installed. This includes the foregrip, trigger set screws, pressure relief valve components, and the frame's loctited set screw(s).
3. When all items are assembled, mount the frame onto the marker body using the provided hardware (new frame screws, VA screw, and body sealing o-rings).

### Assembly of regulator and ASA internals:

The regulator comes as an assembled pack but it must be lubricated prior to installation.

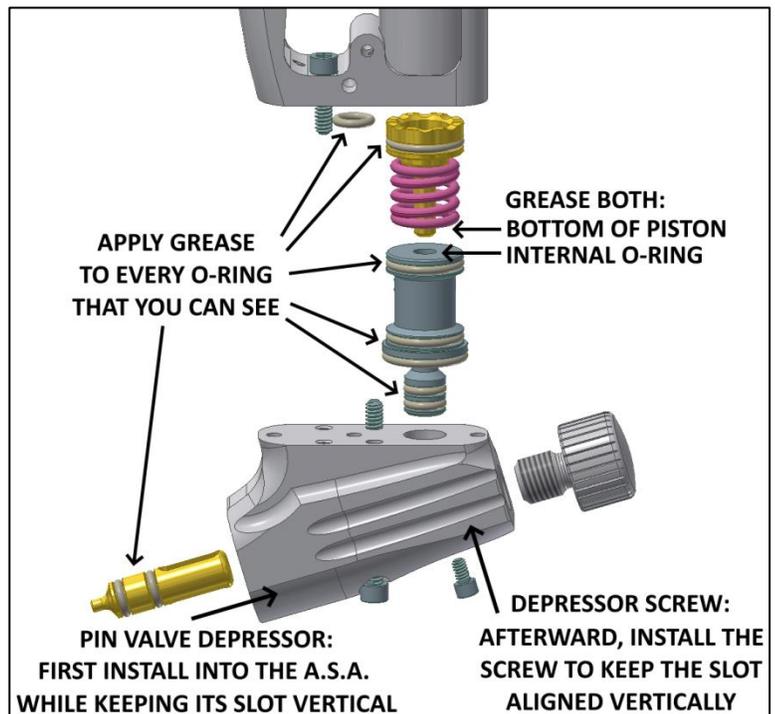
1. Apply grease to every visible o-ring. There's one "hidden" o-ring inside the red regulator body.
2. Insert the regulator components into the grip frame.
3. Mount the ASA housing onto the frame using the four cap screws (two from the inside, two from the outside).
4. Install the ASA knob.

ASA assembly:

5. Insert the brass "pin valve depressor" into the back of the ASA housing. Push it all the way forward, until you can fit a 1/8" allen key up through the ASA housing's adjustment hole.

6. With the brass depressor far enough forward, install the small #4-40 retaining screw in the bottom of the ASA housing to keep the slot aligned. **DO NOT FORCE THE SCREW IF THERE IS RESISTANCE!** – something is likely out of position. Remove the depressor and ensure it's vertical.

7. The retaining screw must extend up into the depressor slot. Afterward, the depressor will maintain alignment with your allen key for regulator adjustments.



### Grip frame loctited set screw:

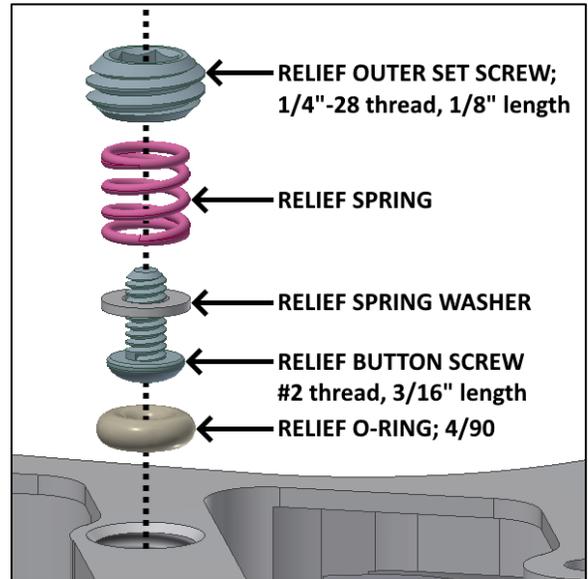
The grip frame has one threaded port that must be plugged with a #10-32 loctited set screw. The included screw is coated with black oxide which bonds to threadlockers.

For best permanent results, apply a small dab of loctite to the screw, and another small dab of loctite onto the exposed threads of the hole. Insert the screw until none of the screw threads are visible. Set the frame aside to cure overnight. The Loctite must fully-cure before use (24 hours is recommended).

### Relief valve:

Assemble the relief valve internals according to the diagram at right. The relief internals are installed into the "RELIEF" hole on the right side of the frame.

The left side of the frame has an optional 1/8"-NPT "TEST" port. The test port is normally intended to be plugged with a screw, but you can install a pressure gauge if you wish to tune the regulator and/or relief valve.



### Hinge trigger bushing:

A bronze bushing must be pressed into the hinge trigger to act as a pivot. The bushing can be installed using a good bench vise, or an arbor press (preferred).

Depending on the bushing tolerances, you may need to "chase" the bushing's hole with a 1/8" drill bit after installing it within the trigger. This repair can be done using a typical hand-drill and a common 1/8" drill bit. When done correctly, the trigger should swing freely around its 1/8" pin. If there is resistance, chase the bushing hole with the hand drill again to clean any metal burrs.

### Trigger set screws:

The trigger's related set screws must be installed prior to inserting the trigger into the frame.

Most trigger set screws should have a SMALL amount of Loctite applied prior to installation, which will help them to maintain their settings throughout regular use.

- Hinge frames have a single #8-32 set screw located vertically behind the trigger (pre-travel adjustment), and one #6-32 set screw located in the face of the trigger itself (post-travel adjustment).
- Slider frames have two brass-tipped #8-32 set screws located vertically under the slider trigger.
- Slider triggers come with a trigger shoe that has a pair of #4-40 set screws. Applying a VERY SMALL amount of threadlocker can be helpful to avoid loosening the set screws over time. You must use caution to avoid applying too much threadlocker, because the tiny set screws may strip if too much sealant is used.

### Pressure-sealed screws:

All screws interacting with the vertical adapter area are sealed using o-rings. This includes:

- Pair of #4-40 x 1/2" length cap screws used to mount the foregrip (which each use a 1x2.5mm ID o-ring). These screws are installed from the inside of the frame within the area normally occupied by a vertical adapter.
- New 1/4"-28 vertical adapter screw (which uses a 10/90 o-ring) installed from outside the frame.

Any foregrip accessories (extender, angle wedge) must still use o-ring screws to connect with the frame itself, but screws linking the accessory and foregrip do not need o-rings.