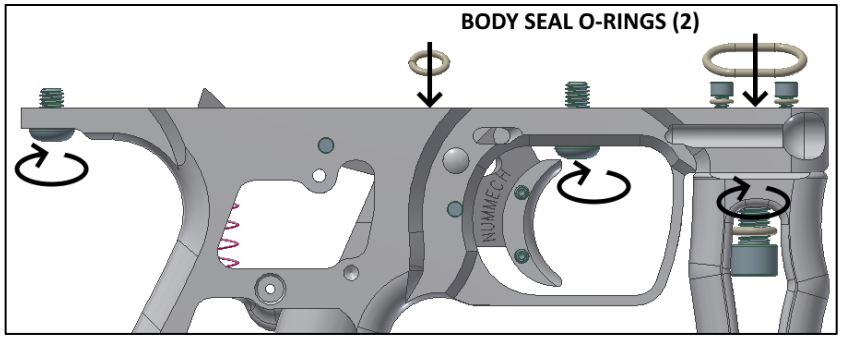
NUMMECH PRODUCTS - NAUTOCOCKER GRIP FRAME

Nautococker frames are designed to be bolt-on upgrades, but they have some new aspects due to the heavy redesign. Please read these instructions before your installation. An installation video can be found on our website www.nummech.com



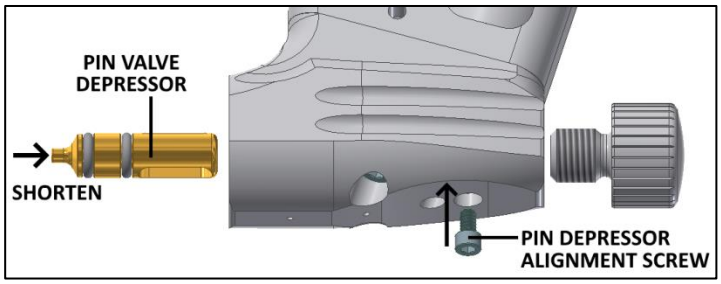
Installing the frame onto marker body:

1. The frame's top surface seals against the body using two o-rings.
   Vertical adapter area: 15/70
   Small air port: 1.5x5mm ID
   (See diagram at right)
2. Mount the frame against the marker body then install the three screws: (see diagram at right)
   - Rear frame screw: #10-32 button head cap screw, 5/16" length. (shorter of the two frame screws)
   - Front frame screw: #10-32 button head cap screw, 1/2" length. (longer of the two frame screws)
   - "New vertical adapter screw": 1/4"-28 socket head cap screw fitted with a size-10 o-ring around the screw head. The new vertical adapter screw fits inside the dummy foregrip, and most foregrips are drilled to allow tightening the screw using a 3/16" allen key.
     Note: THE NEW VERTICAL ADAPTER SCREW IS REQUIRED!!!
     Without the screw, air pressure inside the vertical adapter will bend the frame out and cause permanent damage to the body and frame.
   - Note: If using the angled foregrip wedge mount, the vertical adapter screw can only be tightened using a ball-rounded allen key (included with the wedge).

Installing an HPA tank:

Once the frame is mounted onto the marker body, you can install a tank to test. The ASA's on/off valve is designed for any HPA tank, but differences in tank valves may require modification to the brass "pin valve depressor" located within the ASA housing. **Ninja's ball valve requires a longer un-modified depressor, whereas many pin-valve HPA tanks can use a shorter depressor.**

How to tell: If your tank becomes pressurized too early when engaging the ASA knob, excess air will be vented from the ASA's vent port on bottom. A small amount of venting is normal, but if there's a HUGE amount of air wasted then you may wish to modify the pin valve depressor.



1. Remove the small alignment screw from the bottom of the ASA. This screw keeps the depressor's slot aligned vertically so an allen key can be inserted through it.
2. Unscrew the knob and push the brass pin depressor from the rear of the ASA.
3. Use a metal file or rasp to shorten the depressor by a SMALL amount. Clean away metal dust to avoid contamination.
4. Reinstall the depressor into the ASA and push it forward so that the alignment screw will pass into the depressor's vertical slot, then reinstall the screw.
5. Test out the ASA; repeat the process if needed. Warning – this is a permanent modification, so be cautious to avoid removing too much material. If you remove too much, the tank will not be opened and you will need a new pin valve depressor.

Foregrip screws:

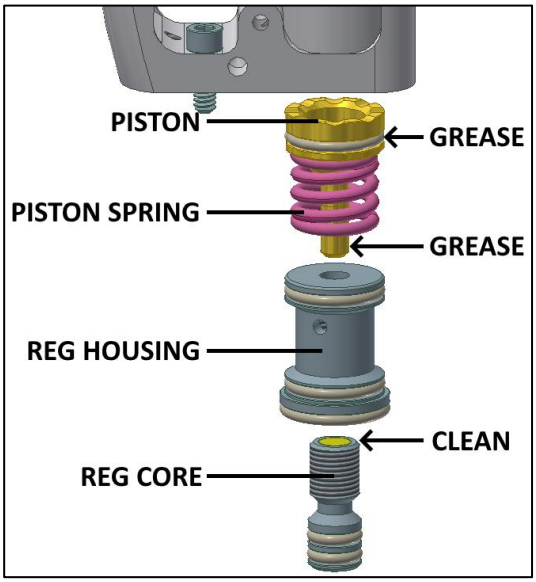
The Nautococker frame's "dummy" foregrip attaches using a pair of small cap screws downward from the top, each using a small 1x2.5mm ID o-ring around the screw head to create a pressure seal.
If swapping foregrips for another version, or adding an accessory such as the extender or wedge, be sure to use cap screws with the o-rings fitted around their head.

Regulator adjustment and tuning:

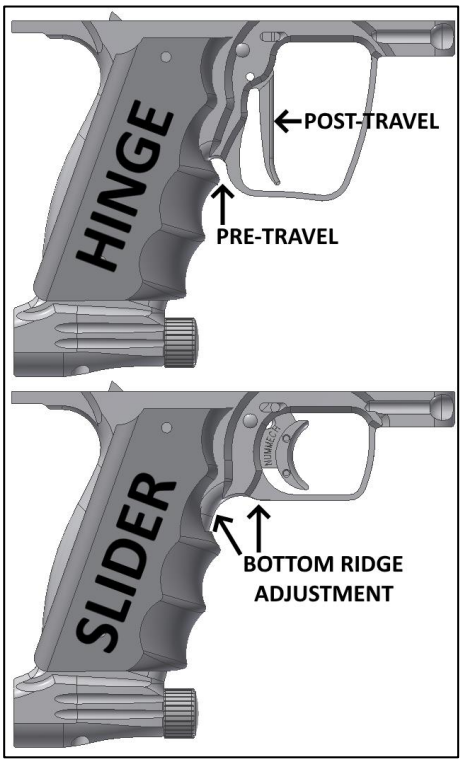
- The Nautococker frame's internal regulator comes pre-set to approximately 325-psi output pressure.
- The ASA housing is engraved with directions on changing pressure. **Make SMALL adjustments!!**
- A 1/8"-NPT gauge port is available on the left side of the frame, marked "TEST". Install a pressure gauge at this location to view the marker's operating pressure.
- The frame has a vent port that will release pressure around 425-psi. The relief valve can be adjusted higher or lower, but you will need to install a test gauge to set its output.

Cleaning and maintenance: (see diagram at right >>>)
The only components that require periodic cleaning are the regulator piston and base seat.

1. Separate the ASA housing from the grip frame by removing the four cap screws (two inside, two outside).
2. Remove the regulator internals. If needed, use a pair of needlenose pliers to GENTLY extract the piston/spring. Do not damage the bottom of the piston.
3. Clean and re-grease the piston, then clean the base seat (it should be dry). Apply grease to all o-rings.
4. Reinstall the regulator internals. The reg output pressure may be slightly different after reinstallation; you may need to re-adjust the regulator using a test pressure gauge. Use a chronograph to verify whether or not the setting has changed.



Trigger adjustments:
Upon installation, the trigger will need to be adjusted based on the marker's timing and your desired pull length. All internal set screws should use a small amount of threadlocker to prevent them from wiggling out of adjustment through regulator use.



- Hinge frames have a trigger pre-travel set screw located under the trigger, and a post-travel set screw located in the trigger itself. Use these set screws to control the trigger's stroke.
- Slider frames utilize two brass-tipped set screws which interface with the trigger's bottom "ridges". The pair of ridge screws will limit the trigger's vertical wobble; each screw controls movement at a different position within the trigger's stroke.
  Below are generalized steps to adjust the slider ridge screws:
  1. Start with both screws loose enough that the trigger can be pulled easily.
  2. Pull and hold the trigger back, then gently tighten the rear ridge set screw.
  3. Slowly loosen the rear screw until the trigger is able to freely move. Use very small adjustments.
  4. Repeat the procedure for the front screw.
  5. When properly set, the trigger should have virtually no up-and-down wiggle at any time during its stroke.

  Nautococker slide frames ship with Nummech's Telos roller trigger plate, which are precision ground on the bottom ridge surfaces to be perfectly parallel with their roller movement. Both ridge adjustment screws will ultimately end up allowing similar movement when properly set.