



Piranha User Instructions

Features:

Precision Machined all Stainless Steel Construction!

Compact size- 3/8" x 2"

Lightweight- about 22gms

Uses a specially designed line cutting piston as the powder measure!

Lifetime Tech Support!

Lifetime Unconditional Warranty!

Parts List:

1 - SS Housing

1 - SS Line Cutter/Powder Measure Piston

1 - SS Cap Screw

1 - pk 004-70 O-rings

1 - pk Zip-ties (Cable ties)

1 - 1/16" Long Allen wrench for disassembly

Cotton Swabs (Q-tips)

Powder Vial

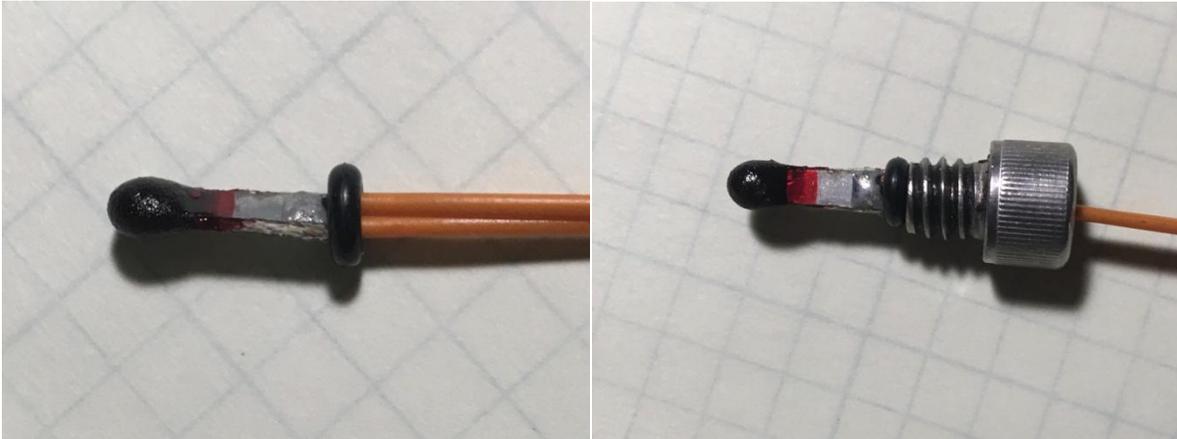
(Warranty is simple: you break it, we will fix or replace it at no charge to you other than postage!)



Dual Piranha Line Cutters Shown Above

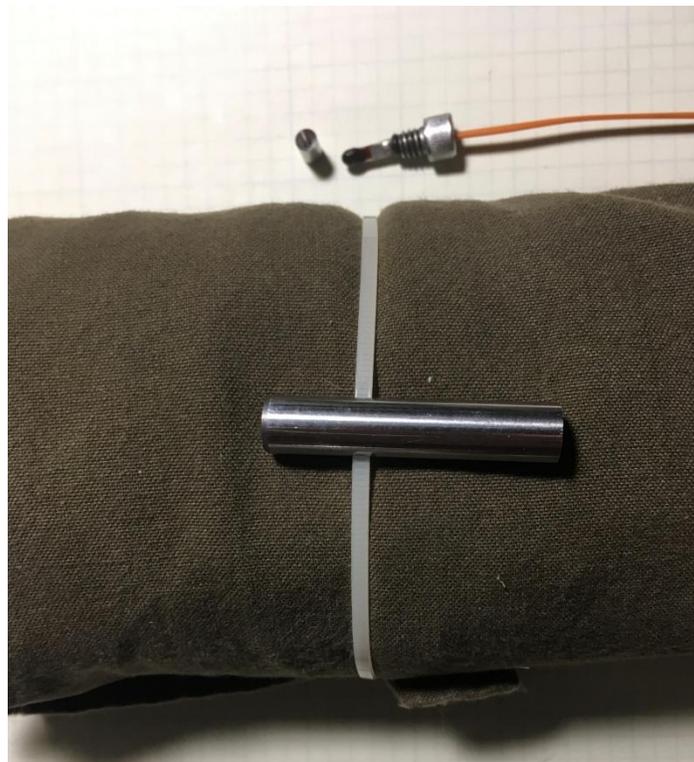
Step 1 - Prepare the initiator/Cap Screw

Remove the protective plastic cover from the e-match
Slide an o-ring over the wire and up to the e-match head
Slide the wire into the Cap Screw and set aside



Step 2 - Prepare your parachute

Wrap your packed parachute in a protective fabric
Thread Zip tie through cutting holes on the Piranha
Wrap Zip tie securely around wrapped parachute



Step 3 - Add powder

Note that the actual line cutter has a large cavity machined into one end
Completely fill this opening with 3F or 4F black powder (4F preferred)

Drop powder filled line cutter into the SS Housing

(**Note:** Black Powder is the only recommended pyro powder! Triple Seven was tested and though it worked, it was inconsistent in performance!)



Step 4 - Finish Assembling Cutter
Insert pre-assembled Cap Screw Assembly
Tighten hand tight only
Connect to altimeter



Plain talk about powder

Black Powder is the only pyro powder that is recommended for use in the Piranha. The best choice is the BP that is supplied with the smaller Aerotech motors for motor deployment. This appears to be 4F granulation. An alternate choice would be to use 3F BP. Triple Seven (Triple 7) has been thoroughly tested and was found to be inconsistent in results when using the cutter piston opening as the powder measure. The reason for this is that there is not enough back pressure to allow Triple Seven to burn rapidly enough for reliable function. This said, Pyrodex would be worse as it requires even more back pressure to burn properly. One could use Triple Seven (Not recommended) and increase the amount of powder until consistent results were achieved, but this would defeat the design intent of using the specially designed cutter piston opening as the powder measure! So just use black powder!

After use Disassembly & Cleaning

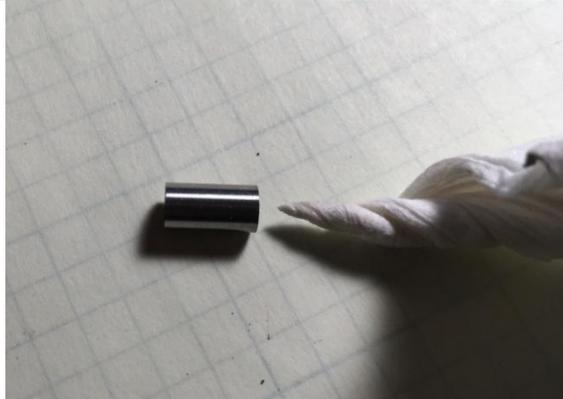
Step 1 Disassemble

Disassemble completely (Do not remove the small o-ring that is inside the SS Housing)
Use the supplied Allen Wrench to push out the Cutter piston



Step 2 Rinse & Clean

Wash all parts in hot water
Swab the inside of Piranha body with cotton swab while still wet
Swab again to dry and remove remaining residue
Roll tissue to a point to thoroughly clean Cutter cavity



Step 4 Re-assemble for later use

Make sure all parts are dry before re-assembly!

The o-ring that goes on the e-match may be cleaned and re-used many times before replacement. The o-ring that is inside the unit will last a very long time, repeated testing of this device showed no damage to this o-ring and it is expected to last dozens of firings.

To remove the o-ring inside the unit for inspection, use a 3/32" Allen wrench (Not included) to push the o-ring out. An alternative method would be to use an air hose to spit it out!

Re-install this o-ring using the flat side of a 3/16" drill bit to push the o-ring completely to the bottom of the device.

The o-ring found inside the device is the same as the o-ring that is used to seal the e-match wire and replacement o-rings are included.

