

# Ideal Products, Inc.

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## Cleaning and Maintenance for our Shock Tube Initiated Breech

### 1. Proper cleaning and lubrication of breech parts

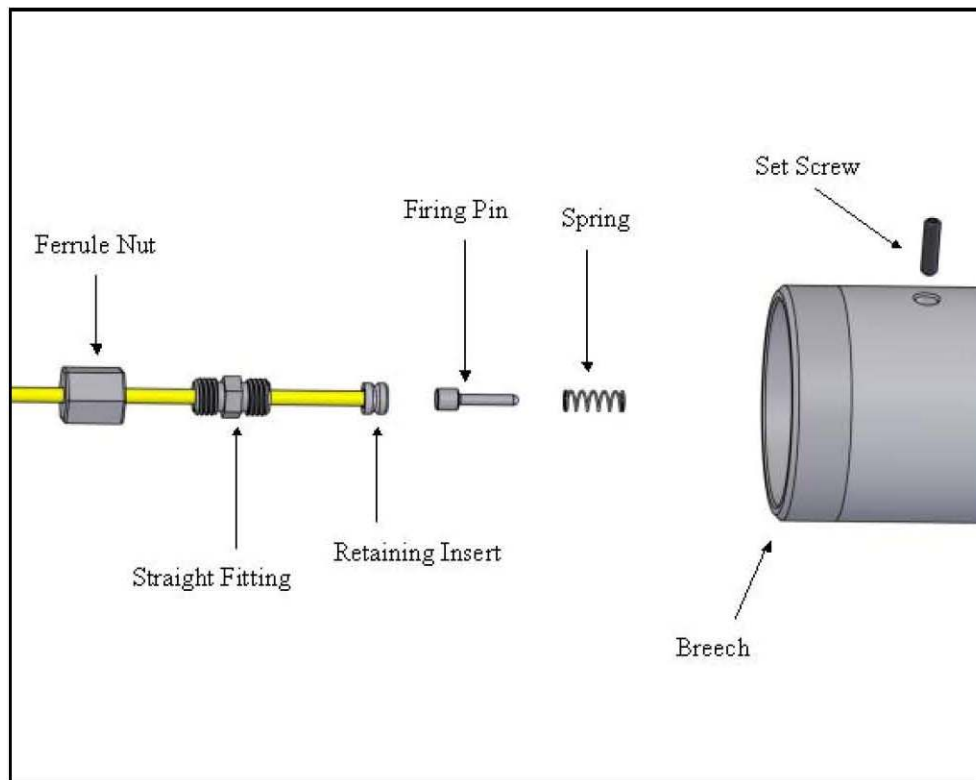
- a. Remove all parts of a breech
  - i. If firing pin and/or spring are stuck in the breech, use firing pin tool to push from the breech end.
  - ii. Be careful not to distort the spring
- b. Check all parts for buildup of powder
  - i. If parts have extra buildup, they may need to be replaced
    1. DO NOT take chances on extra dirty or damaged parts, replace them
- c. Clean parts including firing pin, insert and spring
  - i. Use powder solvent, WD-40, Break Free CLP, or any multi-purpose cleaner
    1. WD-40 or Break Free CLP are excellent for cleaning and lubrication
    2. Use nylon brushes, pipe cleaners, Q-Tips or paper towels
    3. DO NOT USE METAL ITEMS! They may scratch the parts
- d. After parts are clean, they **MUST** be lubricated. Wipe off excess afterwards.
  - i. Dry parts will cause extra friction that could cause the breech to misfire
    1. WD-40, Break Free CLP or gun oil works fine. Putting the firing pins and springs in a zip-lock bag or bottle with a lid makes them easier to lubricate.

### 2. Proper cleaning of Breech

- a. After all parts are removed from breech, check for burrs or debris that may be left from venting. Clean out any debris and look for any scratches. If previous shot vented, check to see if firing pin is bent.
  - i. **DO NOT REMOVE BRASS PLATE FROM THE BACK OF THE AMMO!**  
This can cause venting of the primer, which pulls debris back into the breech and will bend the firing pin and damage the breech.
- b. Use powder solvent, WD-40, Break Free CLP or any other multi-purpose cleaner
  - i. WD-40 or Break Free CLP are excellent for cleaning and lubrication
  - ii. Use nylon brushes, pipe cleaners, Q-Tips or paper towels
    1. If you use Q-Tips, you may need to squeeze the tips smaller so they will fit inside the firing pin hole
  - iii. **DO NOT USE METAL ITEMS!** They may scratch the breech.
- c. After the breech is clean, it **MUST** be lubricated.
  - i. Alcohol and some other cleaners will leave the breech dry. A dry breech can cause the pin and spring to drag slow enough not to fire.

- d. Lubricate with WD-40, Break Free, gun oil or other lubricant. Wipe off excess
  - i. A Q-Tip coated with WD-40, Break Free CLP, or oil works great.

### 3. Assembly of Breech

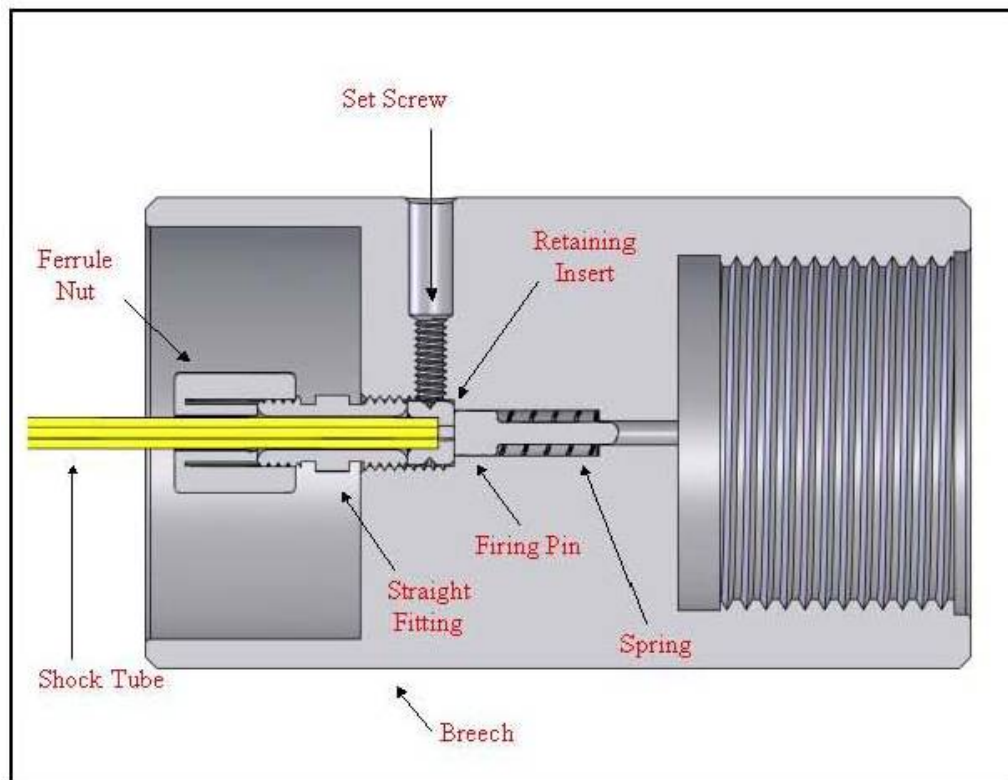


- a. After the breech and parts are clean and lubricated, they can be assembled.
  - i. It works best if you put the spring on the firing pin and put them in the breech together.
  - ii. The insert goes on top of the firing pin with the cup side up.
    1. The cup is where the shock tube must seat.
  - iii. Use the firing pin tool or an extra allen wrench to hold down on the insert while you tighten the set screw. **DO NOT OVERTIGHTEN!**
    1. The set screw must seat into the groove on the side of the insert. The insert will bottom out at the exact position if you hold it down.
- b. Screw the straight fitting into the breech. Use the nut driver or a 5/16 wrench to tighten the straight fitting.
  - i. It needs to be tight enough not to come out when putting the ferrule nut on and off.
- c. The ferrule nut can now be put on the straight fitting.

### 4. Set up for the shot

- a. Remove the ferrule nut.
- b. Slip the ferrule nut onto the shock tube.
  - i. Be sure the threaded end points to the breech.

- c. Push the shock tube into the straight fitting and insert.
  - i. The shock tube must fit fully into the insert.
    - 1. If the shock tube does not fit into the insert fully, you may have a misfire. The pressure may not be directed through the hole in the insert and cause back pressure to push the shock tube out of the breech.
- d. **DO NOT USE ANY FOREIGN MADE SHOCK TUBE!! USE ONLY U.S. MADE SHOCK TUBE!** Foreign shock tube can vary in diameter, and not fit proper into the insert. It can also lose pressure before entering the breech.
- e. After the shock tube is seated into the insert, tighten the ferrule nut.
  - i. **Be sure the ferrule nut is tight!** Tighten as tight as you can with your forefinger and thumb.
    - 1. Do not use a wrench on the ferrule nut, but be sure that the shock tube does not pull out. A loose ferrule nut will cause the shock tube to blow out the back of the breech, losing pressure, and possibly cause a misfire.

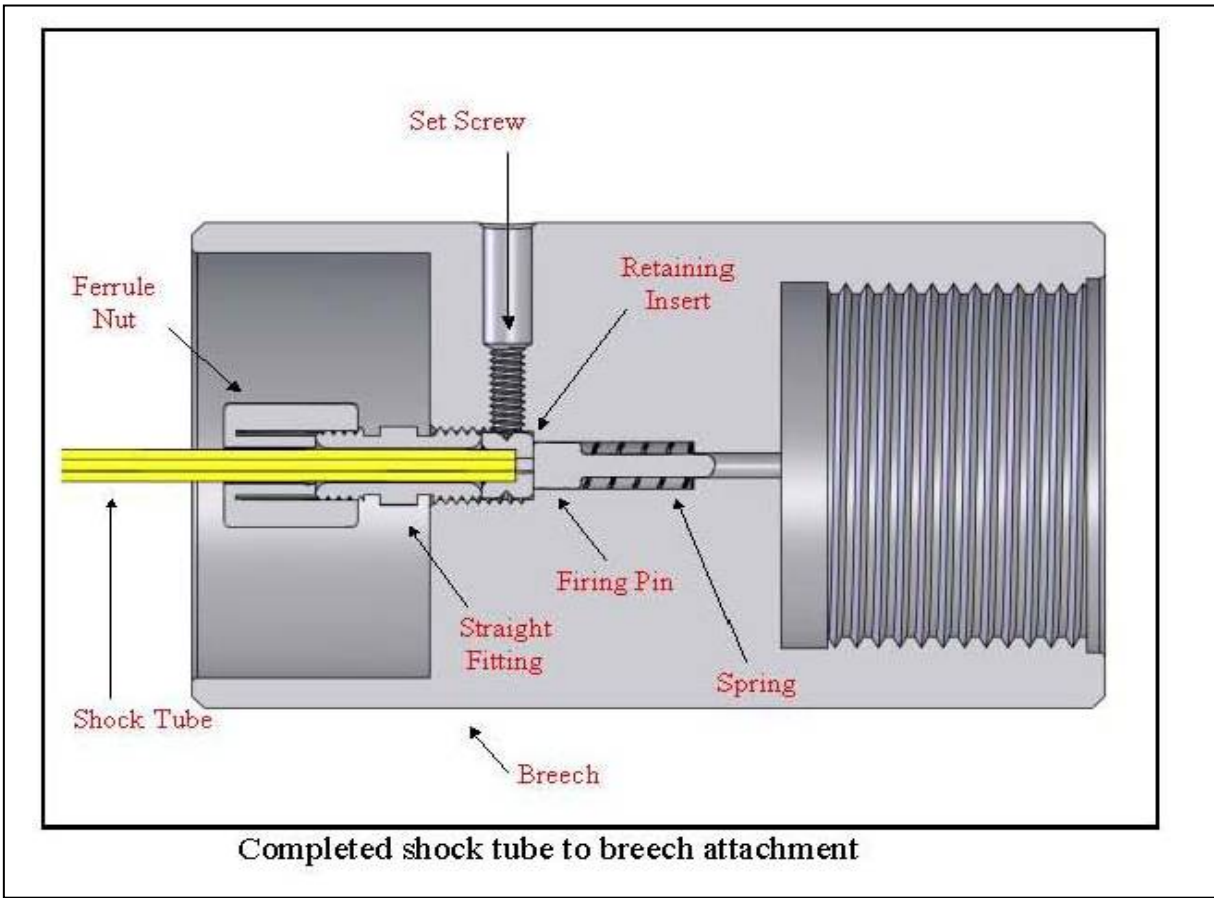


Completed shock tube to breech attachment

If you experience any problems or have any concerns, please contact either Scott Johns or Jenny Johns. Our phone numbers are 859-881-8665 or Toll Free 866-931-4363. Email addresses are [scott@idealproductsinc.net](mailto:scott@idealproductsinc.net) or [jenny@idealproductsinc.net](mailto:jenny@idealproductsinc.net)

# Different breeches made by Ideal Products Inc.

## The Standard PAN Breech



Using any of Ideal Products breeches, will require proper parts. Do not use parts from other manufacturers if you are not sure they are the exact same material, size, shape or color. The plastic ferrule nuts can be made from more than (6) different materials and other than the material we use, will not work properly. The wrong compression spring will cause problems like a misfire, or fail a drop test. The wrong material, plating, or hardness can also cause problems with parts.

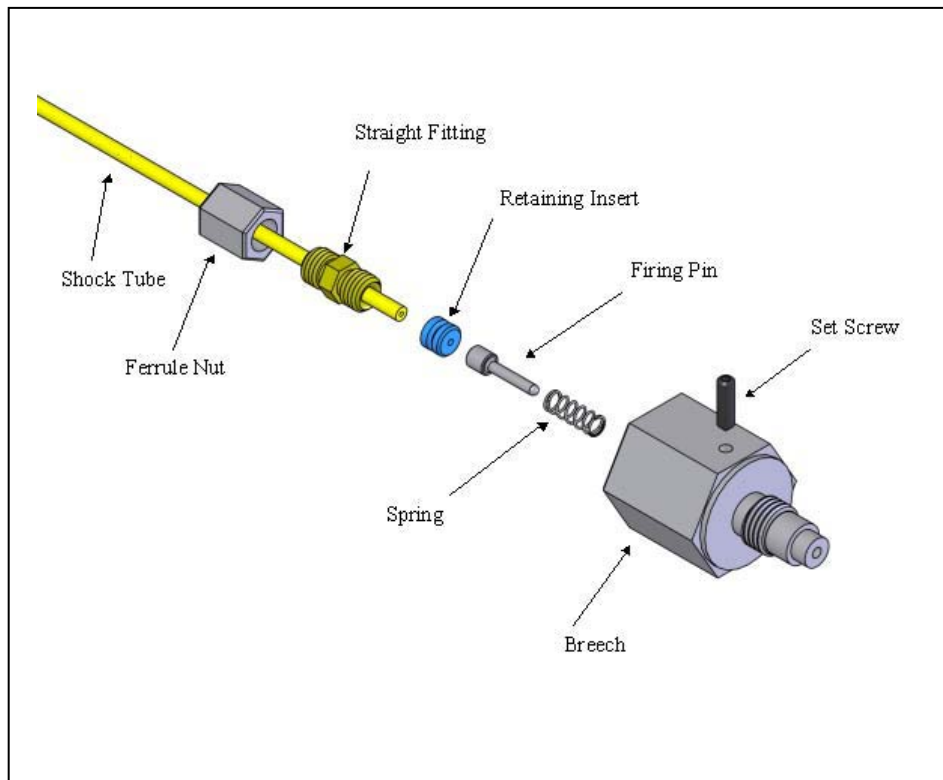
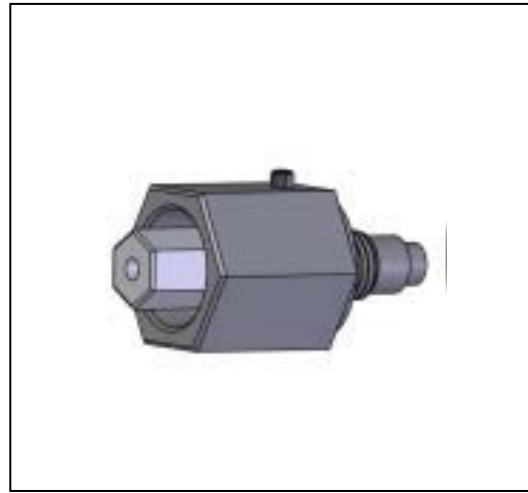
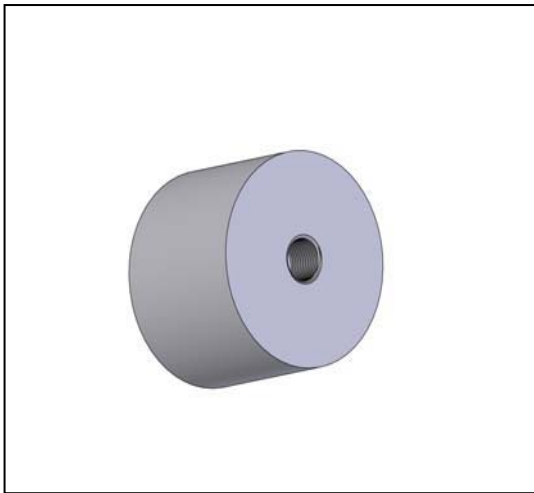
Be sure and only purchase parts directly from Ideal Products Inc or call us and we can tell you if another part will work in our breech.

## The Breech Cap and Hex Plug Style

The breech cap comes with the standard 1.5 inch PAN breech threads or the 1.5 inch ACME threads like on the T3 disrupter. The plug is standard and can be exchanged between all breech caps on either disrupter.

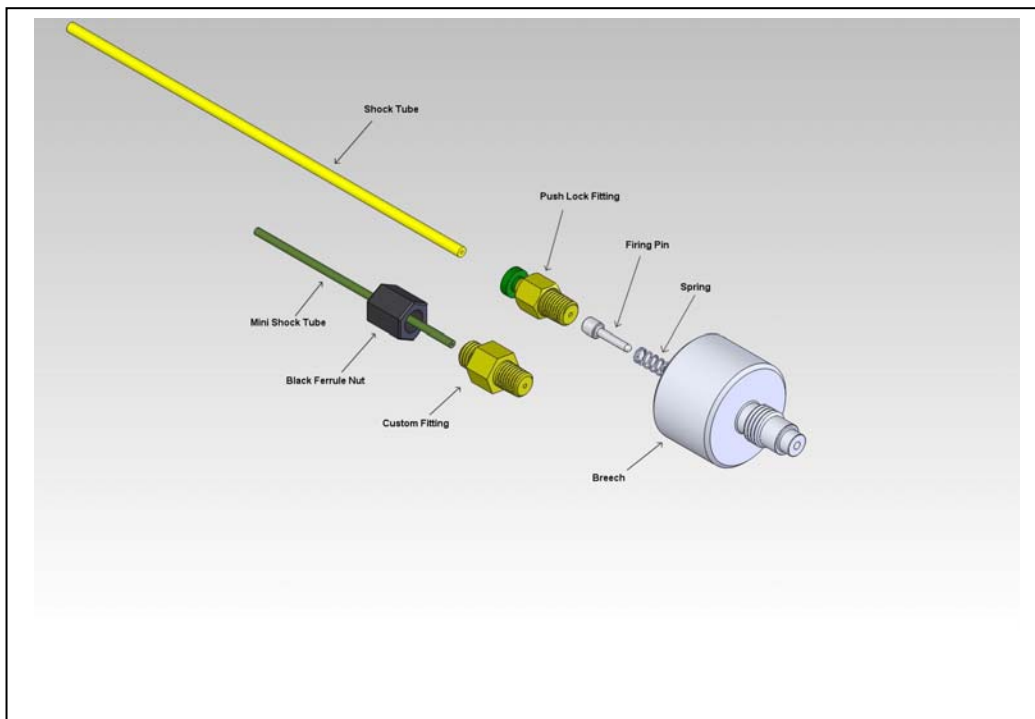
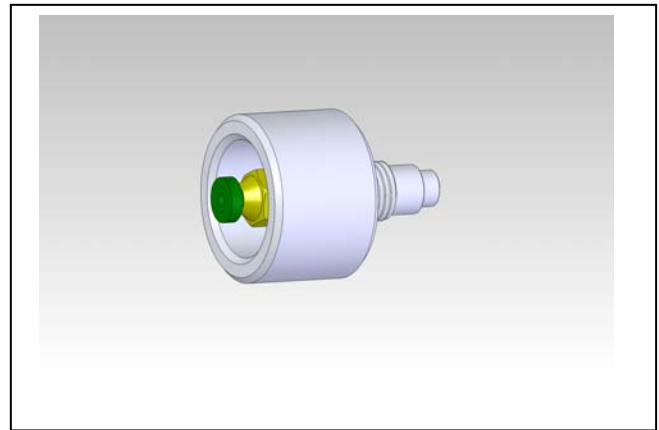
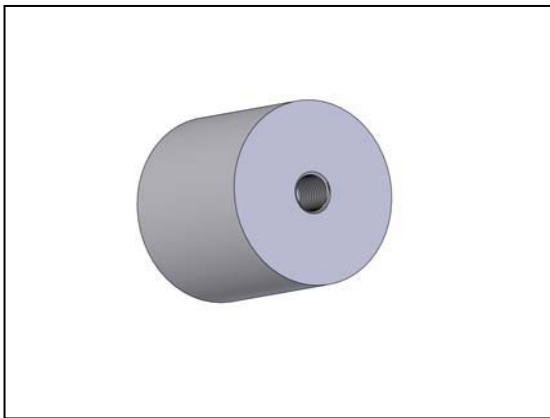
The breech cap is designed to accept a pyrotechnic pencil and be able to operate without the breech plug or shock tube.

The hex breech plug uses all the same breech parts: firing pin, spring, insert, straight fitting and ferrule nuts.



## Push Lock Breech Plug (K4350PL)

The new plug style has a push lock feature. This plug does not require a ferrule nut, straight fitting or insert. It also uses a different firing pin and spring. It can also use the original firing pin and spring or any combination of the two. This plug uses an auto lock feature that holds the shock tube in place and will release the shock tube when the operator pushes down on the plastic ring. No ferrule nut necessary. A custom ferrule nut and straight fitting is necessary when the operator uses the mini shock tube(.090). A different push lock is necessary if the operator uses 4mm shock tube. The push lock breech plug can come with either push lock needed; 1/8 inch standard shock tube or 4mm for military.



## The Electric Breech

The electric breech uses 300 volts to operate a solenoid to fire standard percussion ammo. The electric breech fires the same ammo the PAN disrupter was designed for, made by L-Tech Enterprises. The electric breech does not need any shock tube. It can operate from a robot or stand alone on a stand. There is practically no maintenance. Since there is no shock tube, there are no internal parts that require constant cleaning. There are also no expendable parts. Multiple firings can be done without any disassembly of the breech. There is extremely quick and easy cleaning of parts when required. Ask for more details or a manual.

