REXPO
CUTTING & BLASTING SOLUTIONS

How to Repair a KMT Style Bleed-Down Valve Using Kit #12593

These instructions will demonstrate how to replace components of a KMT Style Bleed-Down Valve with kit #12593

INTRODUCTION

Hypertherm is in no way affiliated with the above mentioned manufacturer

TOOLS:

- 5/8" wrench (1)
- 1" wrench (1)
- 1-1/8" wrench (1)

PARTS:

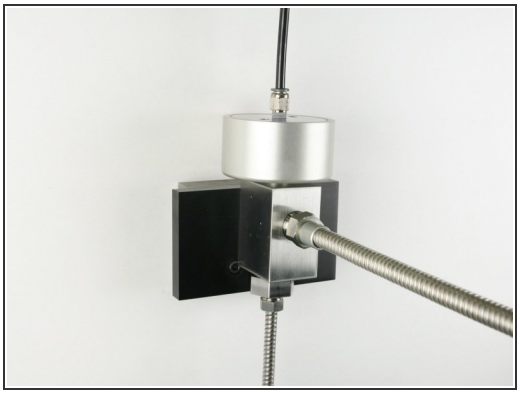
- Repair Kit #12593 (1)
- Seat #11099 (included in kit) (1)
- Seal Assembly #11100 (included in kit) (1)
- O-ring #11240 (included in kit) (1)
- Valve Stem #11102 (included in kit) (1)
- Brass Back-up Ring #11104 (included in kit) (1)
- Actuator #13243 (1)
- High-Pressure Gland Fitting #13802 (1)
- Blue Goop #11111 (1)
- Isopropyl Alcohol (1)

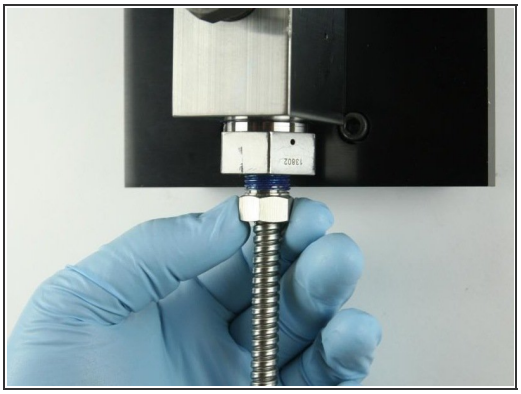
Step 1 — How to Repair a KMT Style Bleed-Down Valve Using Kit #12593

⚠ Always make sure all high-pressure water has been removed from the valve by the following machine manufacturers' safety instructions. Failure to do so can cause severe injury or death.

- Turn OFF all water pressure to the on/off valve.

Step 2

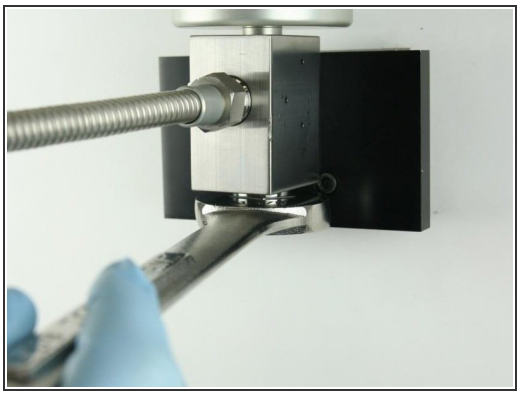
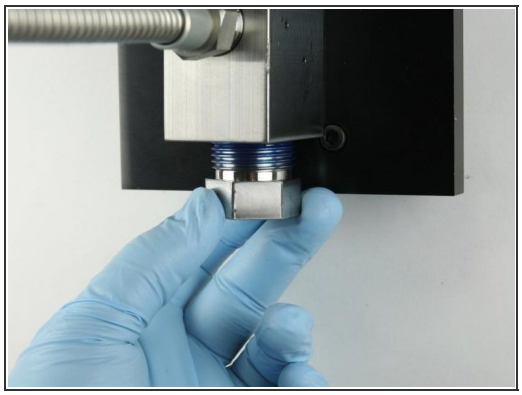




ⓘ The valve components can be replaced with the valve body mounted to the pump.

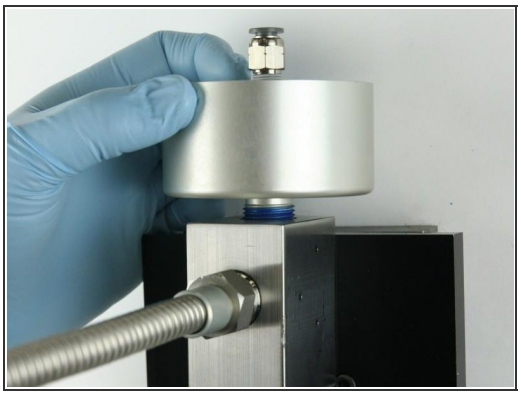
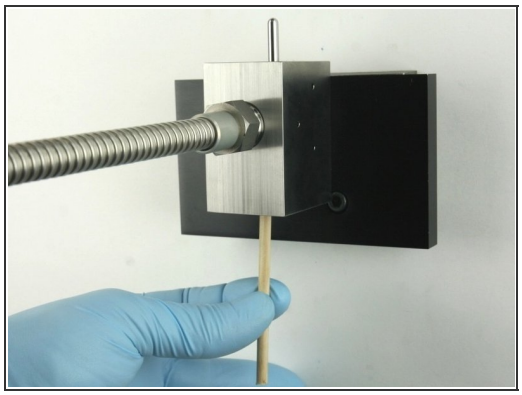
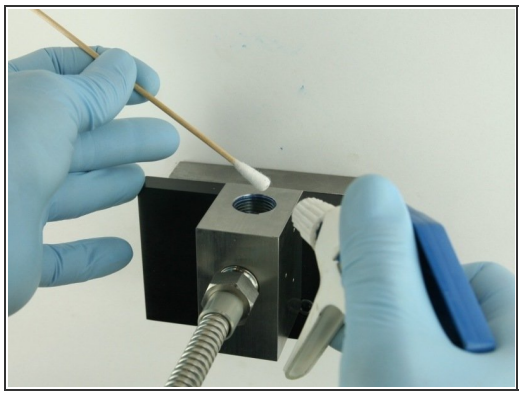
- Loosen the high-pressure tubing from the high-pressure gland fitting using a 5/8" and 1" wrench.
- Unthread the high-pressue tubing from the high-pressure gland fitting.

Step 3

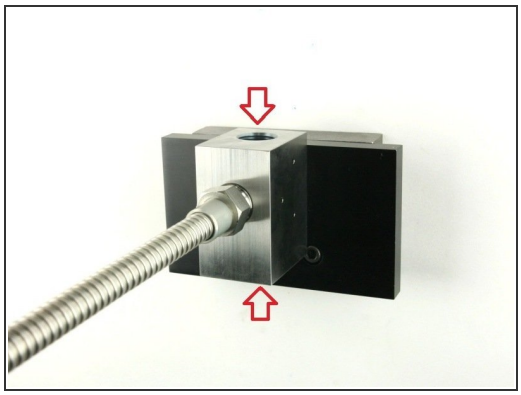
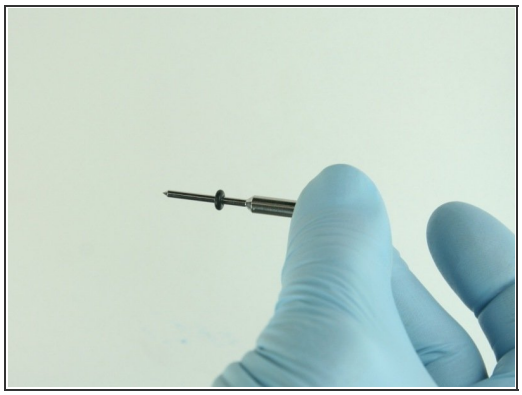
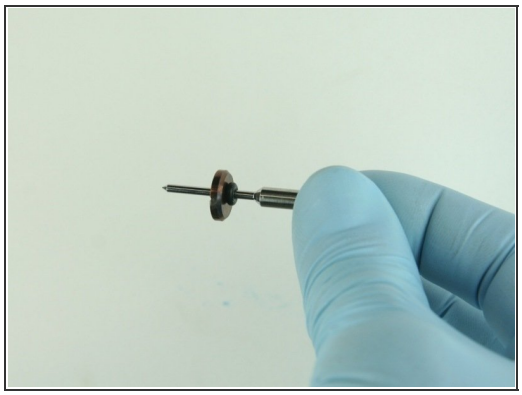

- Loosen the high-pressure gland fitting using a 1-1/8" wrench.
- Unthread the high-pressure gland fitting from the valve body.
- Disconnect the air line from the actuator.

Step 4

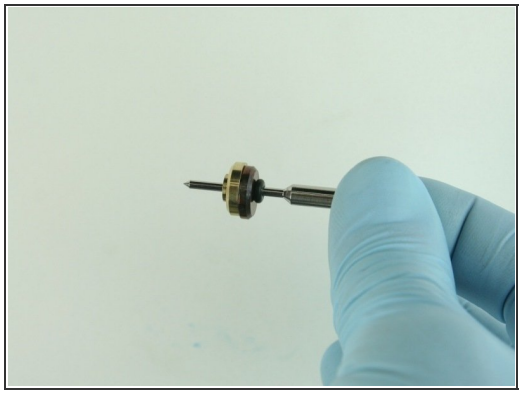
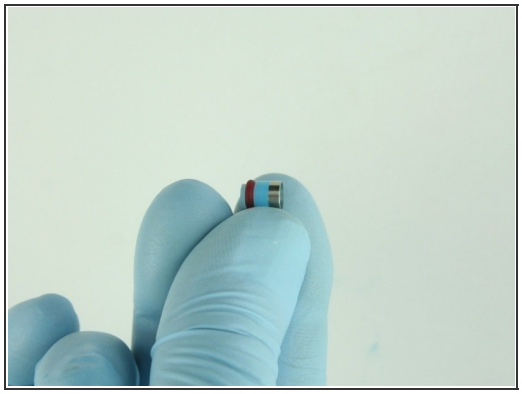
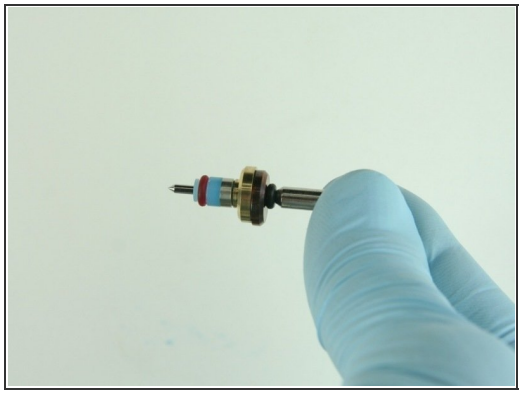
- Unthread the actuator from the valve body.
- Remove all the valve components from the valve body with the included dowel.
- Thoroughly clean theinterior of the valve body with isopropyl alcohol or a similar cleaning agent before replacing the components.

Step 5

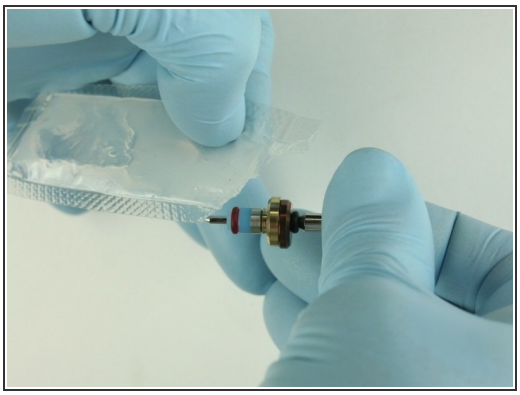
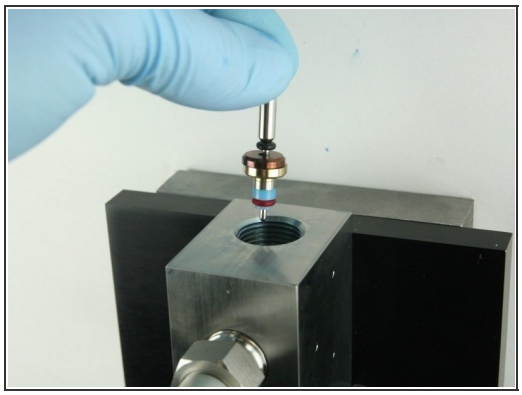
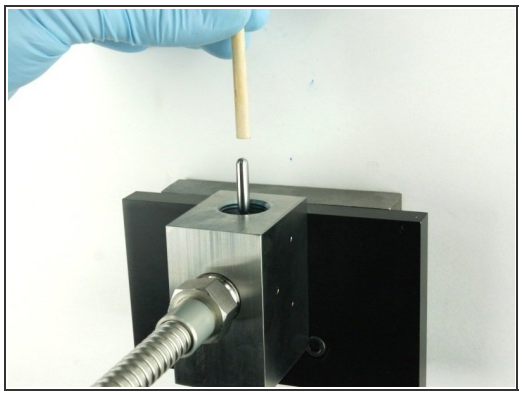
- Visually inspect the top and bottom of the valve bore for cracks/blemishes. If excessive wear or cracks are visible, replace the valve body.
- Slide the O-ring on to the point of the valve stem.
- Slide the stainless steel back-up ring on to the valve stem point with the chamfer side towards the O-ring.

Step 6

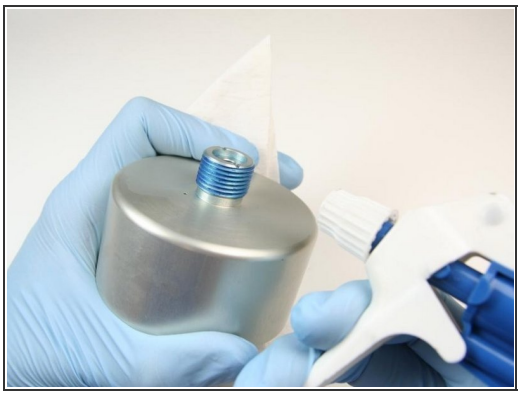
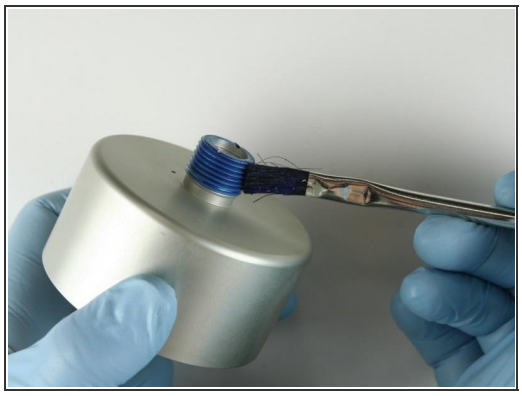
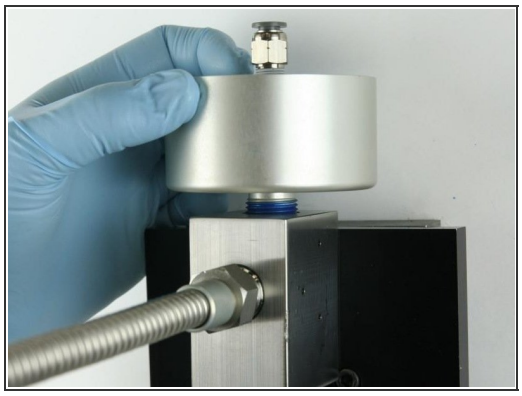
- Slide the brass back-up ring on to the valve stem point with the chamfer side away from the stainless steel back-up ring.
- Put the hoop on the high-pressure seal with the sharp edge of the hoop towards the seal.
- Slide the hoop and the high-pressure valve seal onto the valve stem with the hoop towards the brass back-up ring.

Step 7

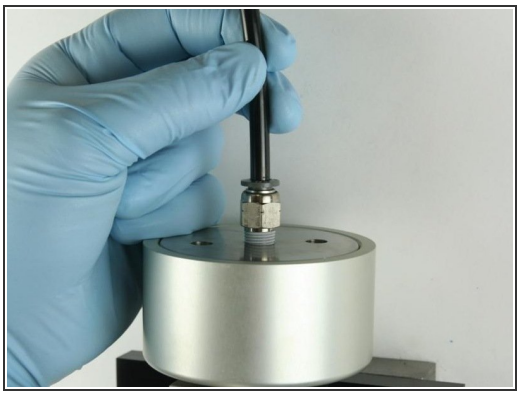
- Apply high-pressure lubricant to the outside diameter of the high-pressure valve seal.
- Put the point of the valve stem into the valve body.
- Push the valve stem with the dowel until it bottoms out.

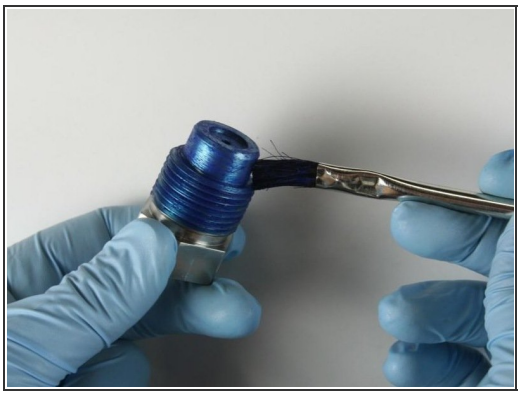
Step 8

- Clean the actuator threads of all Blue Goop with isopropyl alcohol or a similar cleaning agent.
- Apply Blue Goop to the actuator threads.
- Thread (hand tighten) the actuator into the top of the valve body until it bottoms out.

Step 9

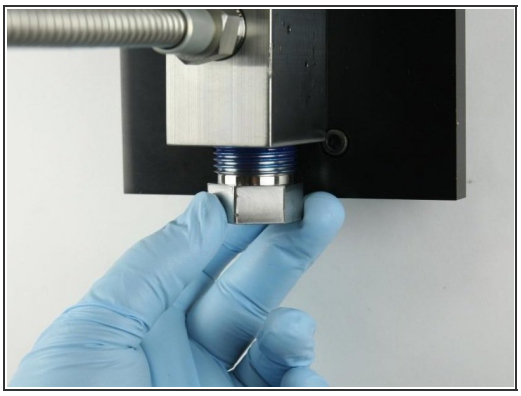




- Reconnect the air tube to the actuator.
- Clean the high-pressure gland fitting of all Blue Goop.
- Reapply Blue Goop to the threads of the high-pressure gland fitting.

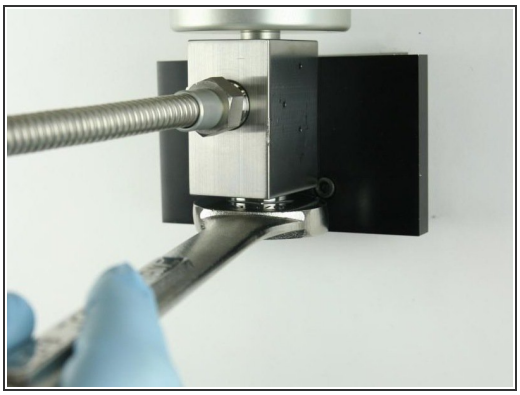
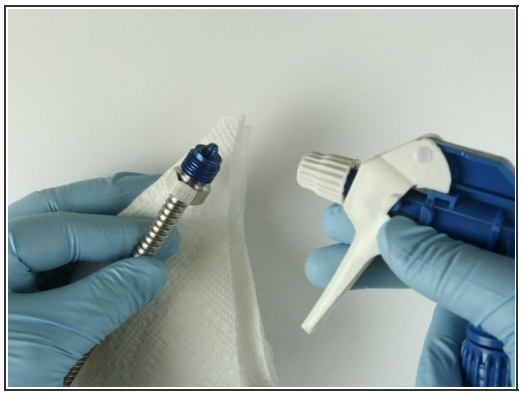
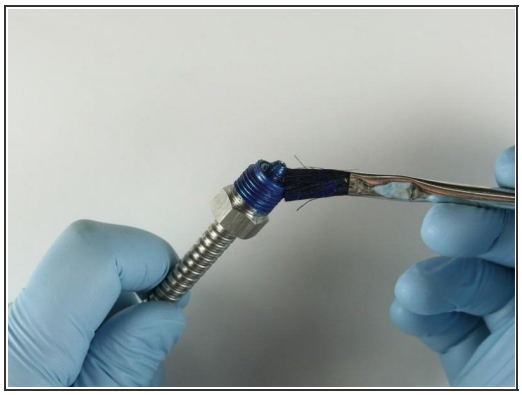
Step 10





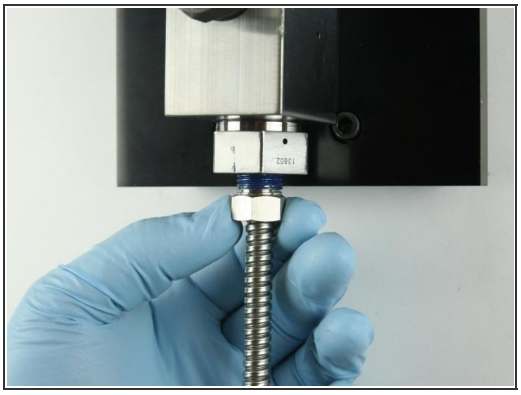
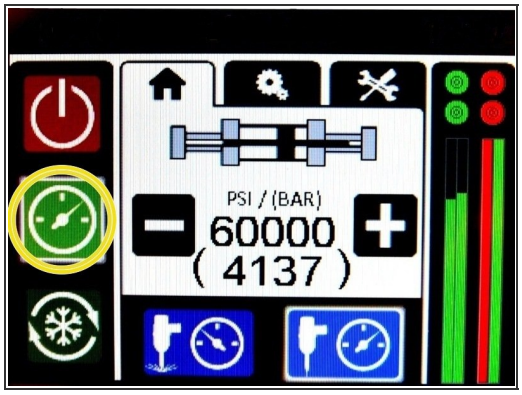
- Put the seat into the top of the high-pressure gland fitting with the flat side towards the gland fitting.
- Apply Blue Goop to the top of the seat.
- Thread the high-pressure gland fitting into the bottom of the valve body.

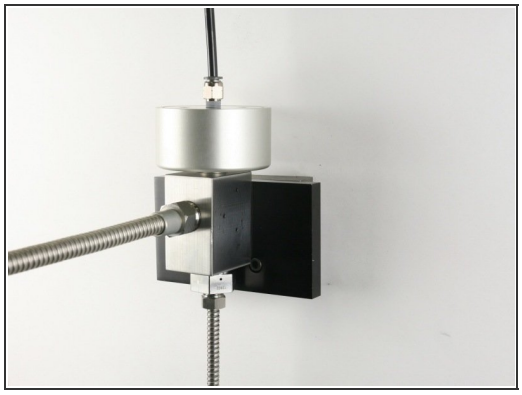
Step 11

- Tighten the high-pressure gland fitting using a 1-1/8" wrench.
- Clean the high-pressure tubing threads and cone of all Blue Goop with isopropyl alcohol or a similar cleaning agent.
- Reapply Blue Goop to the high-pressure tubing threads and cone.

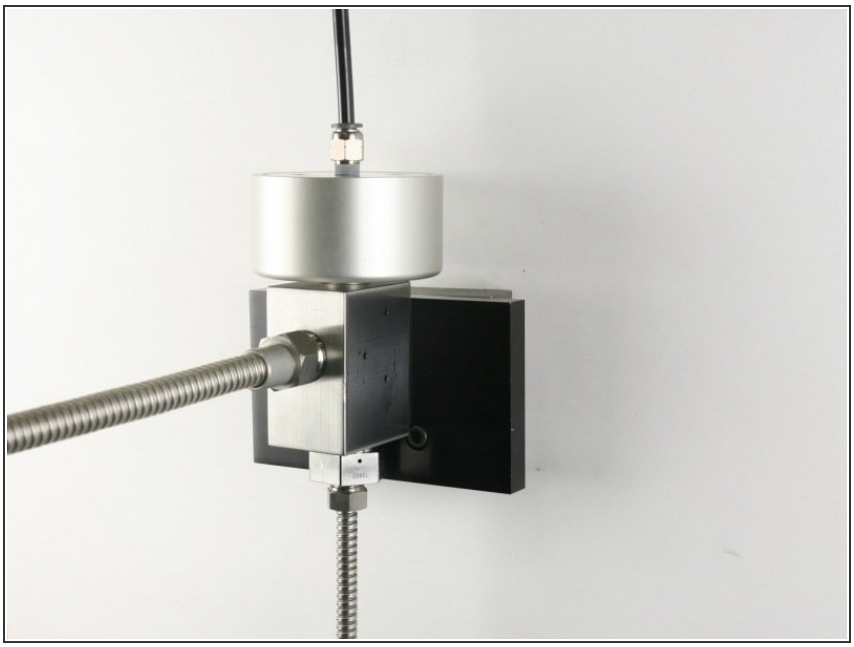
Step 12



- Thread in the high-pressure tubing to the bottom of the high-pressure gland fitting.
- Apply water pressure to the valve assembly to verify there are no leaks.
- Re-install the cutting head and continue the cutting process.

Step 13



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