REXPO
CUTTING & BLASTING SOLUTIONS

How to Change High-Pressure Seals on Flow Style Intensifier Using Kit #11135

This guide will walk you through performing a standard High-Pressure seal change on a Flow Style Intensifier with kit #11135

INTRODUCTION

Hypertherm is in no way affiliated with the above mentioned manufacturer.

TOOLS:	PARTS:
• High-Pressure Seal Installation Tool Kit #12387 (1) • Rubber Mallet (1)	• High-pressure Seal Kit, 60K #11135 (1) • High-pressure Cylinders, 60K #11117 (1) • Back-up Seal Sleeve #11365 (1) • Bronze Back-up #11134 (included in kit) (1) • Blue Goop #11111 (1) • Isopropyl Alcohol (1)

Step 1 — How to Change High-Pressure Seals on Flow Style Intensifier Using Kit #11135

- Remove the high-pressure cylinder(s) from the pump.

- Position the high-pressure cylinder on the seal guide tool.

- Position the small (stepped) end of the installation tool into the top of the high-pressure cylinder.

Step 2

- Use a rubber mallet to push the internal back-up seal sleeve through the high-pressure cylinder forcing the seal and the hoop out of the other end.
    - Do not remove the sleeve from the high-pressure cylinder.

- Turn the high-pressure cylinder over so the dynamic end is facing up.

- Put the non-stepped end of the installation tool in the dynamic side of the high-pressure cylinder, push the other seal out by tapping with a rubber mallet.

Step 3

- Clean the high-pressure cylinder thoroughly after polishing.

- Visually inspect the high-pressure cylinder bore at both ends.

- If the inside bore finish is blemished, use scouring pad in both ends of the high-pressure cylinder, to smooth out blemishes, rolling back and forth.

Step 4

- Apply high-vacuum grease to the O-rings.

- Install all 4 O-rings onto the high-pressure seals.
  - Be sure not to twist the O-rings when installing them onto the high-pressure seals.

- Thread the seal guide tool onto the static end of the high-pressure cylinder.
  - It is helpful to begin with the flat end of the high-pressure cylinder side up.

Step 5
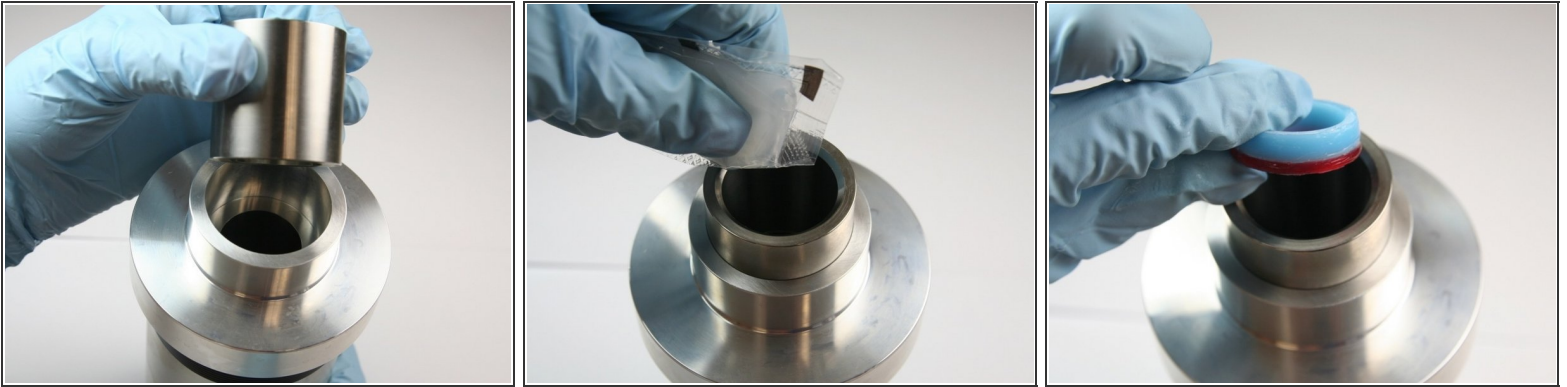
- Put the installation sleeve into the sleeve guide with the larger ID (tapered) end up.

- Lubricate the ID of the Installation sleeve with the high-vacuum grease.

- Put the high-pressure seal into the sleeve with the O-ring side down.
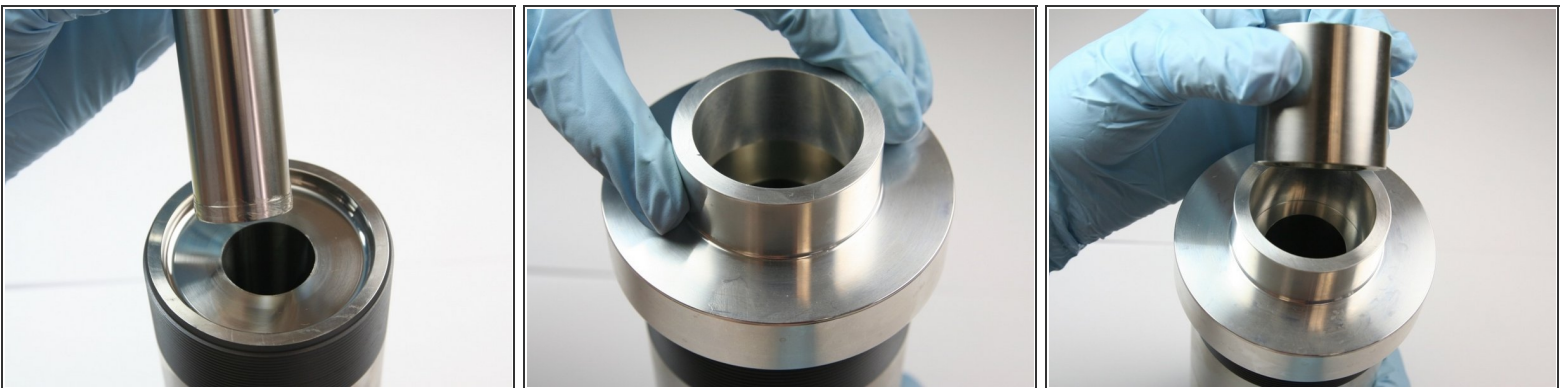
Step 6
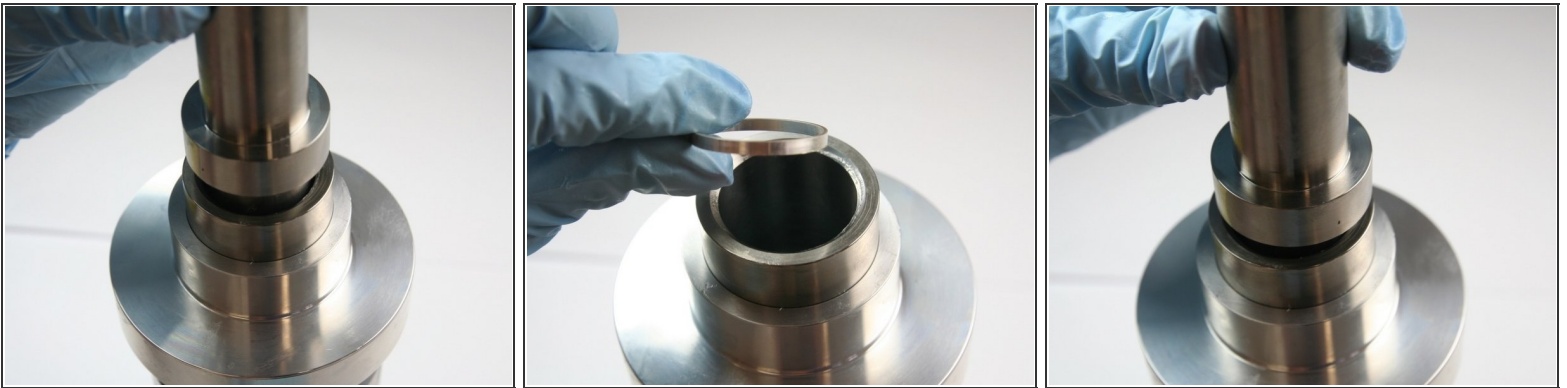
- Use the blunt (non-stepped) end of the installation tool to hand press the high-pressure seal into the high-pressure cylinder.

- Put the hoop into the sleeve with the sharp (tapered) end first.

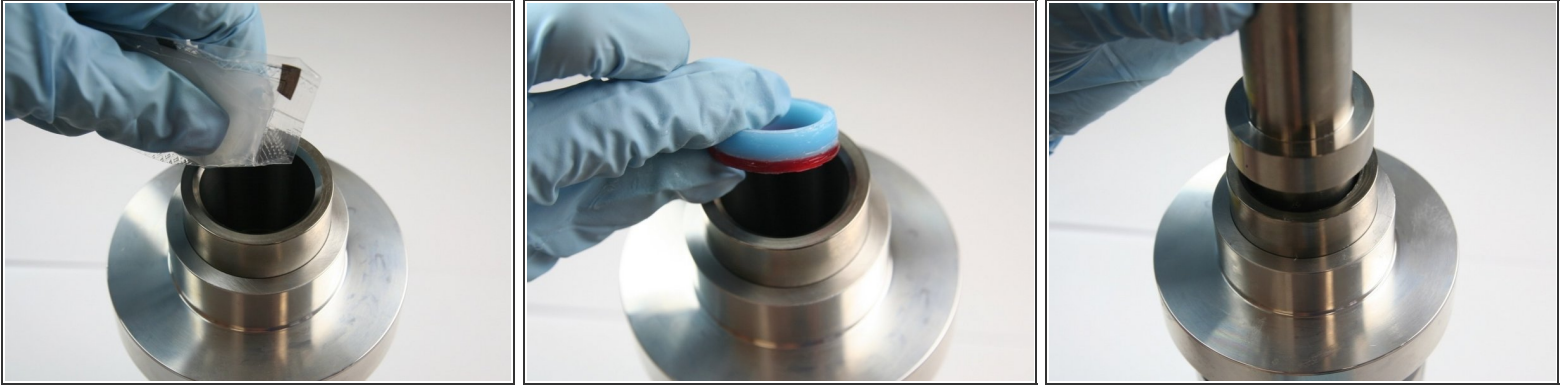- Push the hoop down into the sleeve with the blunt end of the installation tool.

Step 7
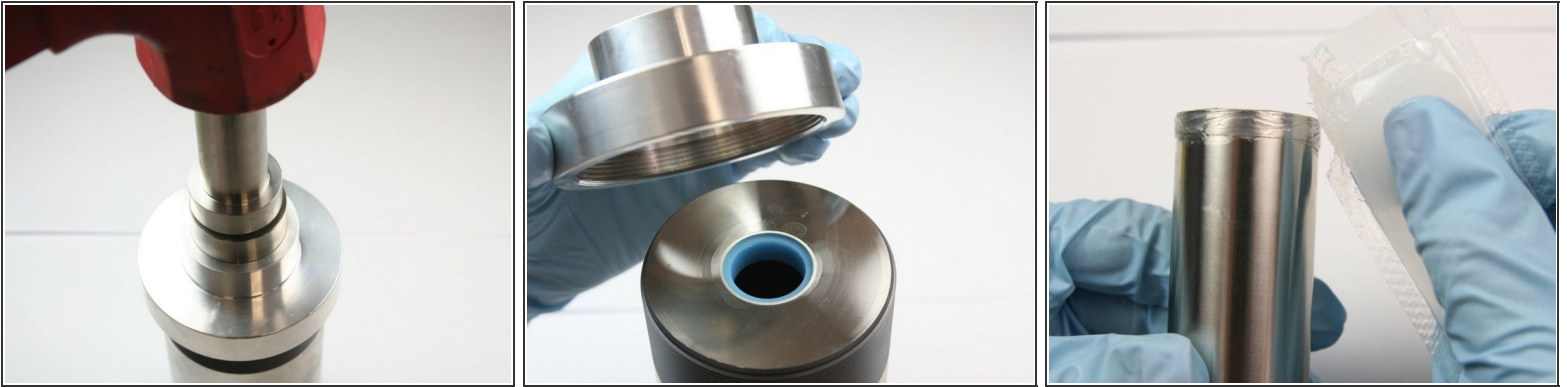
- Put the hoop in place by tapping the installation tool in with a rubber mallet until the tool bottoms at the high-pressure cylinder face.

- Remove the seal guide tools from the top of the high-pressure cylinder (static side).

- Apply a light coat of grease to both ends of the back-up seal sleeve.

Step 8

- Put the sleeve into the open end of the high-pressure cylinder and repeat the high-pressure seal installation process.

- Thread the seal guide tool onto the dynamic side of the high-pressure cylinder.

- Put the sleeve into the seal guide tool with the tapered end facing up.

Step 9

- Apply a high-vacuum grease to the ID of the sleeve.

- Put the seal assembly into the sleeve with the O-ring first.

- Use the blunt (non-stepped) end of the installation tool to hand press the high-pressure seal into the high-pressure cylinder.

Step 10
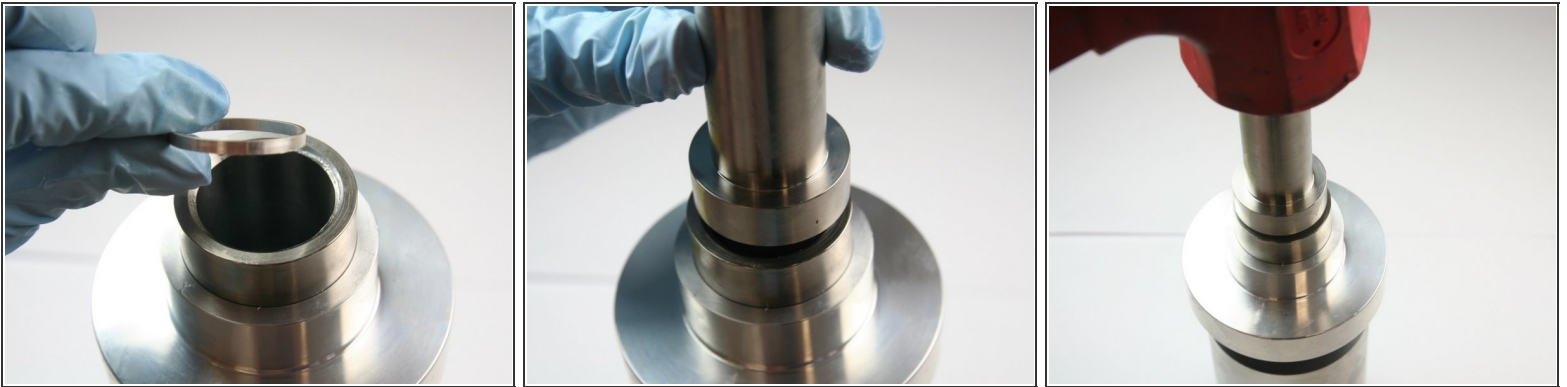
- Put the hoop into the sleeve with the sharp (tapered) end first.

- Push the hoop down into the sleeve with the blunt end of the installation tool.

- Put the hoop in place by tapping the installation tool in with a rubber mallet until the tool bottoms out on the high-pressure cylinder face.

Step 11
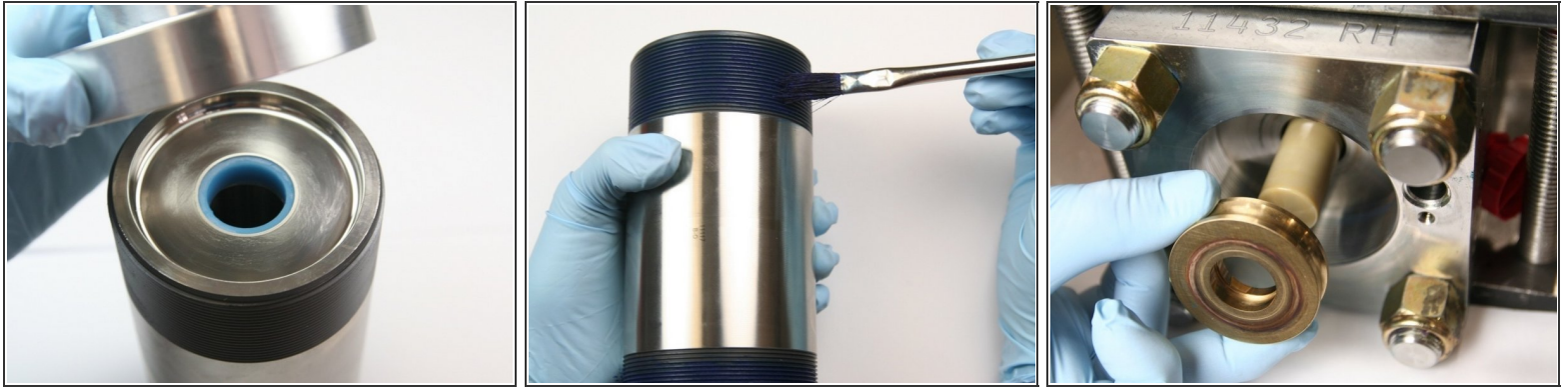
- Remove the seal guide tools from the dynamic side of the high-pressure cylinder.

- Apply Blue Goop to both threads of the high-pressure cylinder.

- Remove the old [bronze back-up ring](#) from the plunger.

Step 12
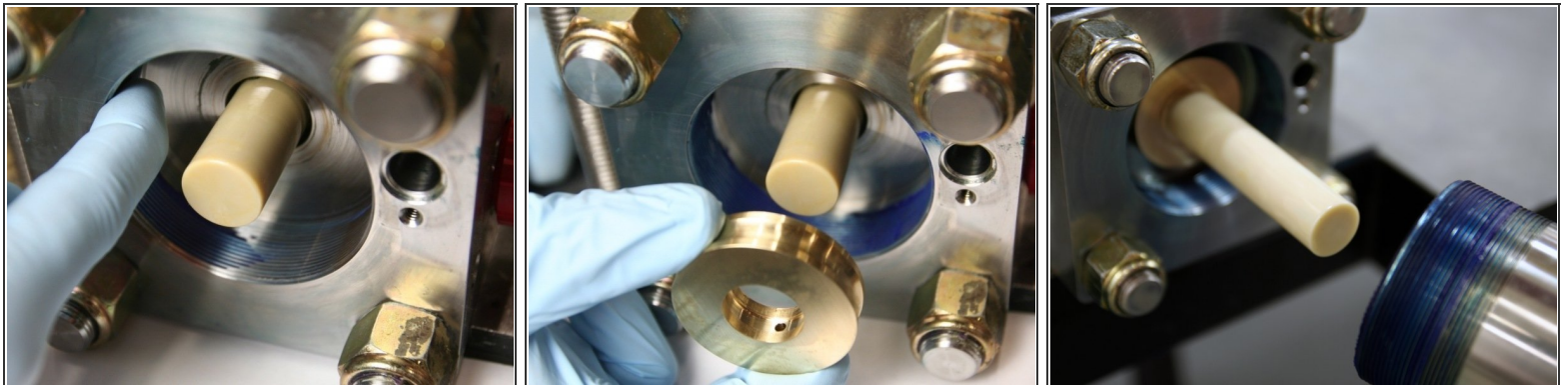
- Apply [Blue Goop](#) to the threads on both ends of the cylinder and to the threads on the end cap.

- Replace the bronze back-up with the new disc from the kit onto the plunger.

- Put the high-pressure cylinder on the plunger with the dynamic side first.