

INSTALLATION GUIDE

FRL FILTER-REGULATOR-LUBRICATOR

TECHNICAL DOCUMENT

1.1 PURPOSE

This document gives instructions on installing and using the FRL Filter-Regulator-Lubricator on a mill with a Power Drawbar or Automatic Tool Changer (ATC).

1.2 PRODUCT INFORMATION

Product: FRL Filter-Regulator-Lubricator (PN 32457)



Quantity	Description
2	1/4 NPT to 3/8 NPT Brass Fitting (PN 32456)
1	Dial
1	FRL Filter-Regulator-Lubricator (PN 32445)
2	Quick-Connect Bushing

Note: If any of these items are missing, we can help.



Email support@tormach.com to contact Tormach Technical Support for guidance on how to proceed.

2.1 INSTALL AND SET UP THE FRL

Complete the following steps in the order listed:

- × **Step 1:** "Install the FRL" (below)
- × **Step 2:** "Set Up the FRL" (below)

2.1.1 Install the FRL

1. Clean the FRL to make sure that it's free of dust.
2. Remove and discard the plastic inserts from the FRL.
3. Identify the dial provided, and then put two layers of thread seal tape on its threads.
4. Attach the dial on the front of the FRL.
5. Identify the two quick-connect bushings and the two NPT reducers provided. Connect the quick-connect bushings to the NPT reducers.
6. Put two layers of thread seal tape on the threads of the NPT reducers.
7. Attach the NPT reducers to the valve housings on either side of the FRL.
8. Determine a location to install the FRL. We recommend installing it on the back of the machine's chip pans.

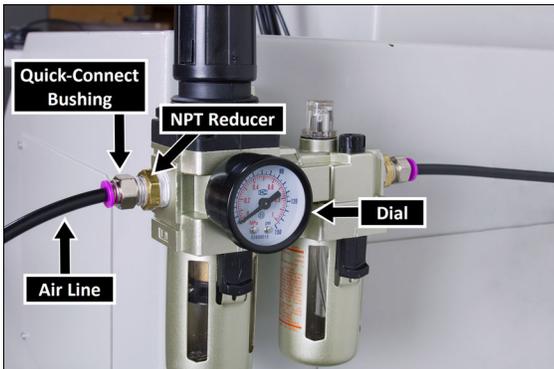


Figure 2-1: FRL installed on the machine.

9. Use the FRL bracket as a template to mark the two hole locations, and then drill two holes.
10. Install the FRL bracket on the machine with your own hardware.
11. Connect the air lines to the quick-connect bushings.

2.1.2 Set Up the FRL

1. Open the fill port on the FRL with a hex wrench.

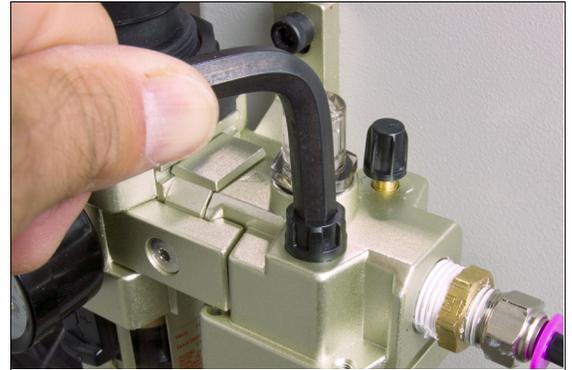


Figure 2-2: Fill port on an FRL.

2. Fill the lubricator bowl with standard air tool oil with a small funnel to. You must only use oil specifically designed for air tools.
3. Turn the adjustment knob halfway toward the +.
4. Flush all air bubbles from the system.
5. Examine the sight window for air bubbles. When there are no air bubbles in the sight window, and a drop of lubricant is on the bottom of the stem, turn the adjustment knob one-quarter turn back.

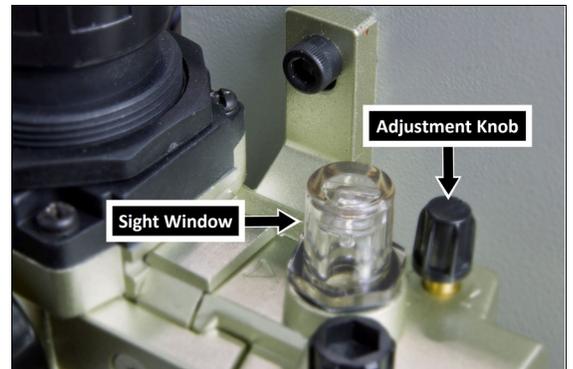


Figure 2-3: Components to flush the air from the FRL.