REASSEMBLY INSTRUCTIONS

Mueller® 4”, 6”, 8” & 12” Steel Wedge Stoppers
WITH POLYURETHANE COVERED CYLINDER

GENERAL

The correct assembly of the steel wedge stopper is critical to the successful and safe application of the Mueller® No-Blo® Line Stopping Method. These instructions must be followed exactly as they are given. Contact the Mueller Factory should any question or problem arise while using these instructions.

TOOLS AND PARTS REQUIRED

Required Tools
• Ring Gage (see chart)
• White Lithium Grease
• Heavy Never-Seez® Grease
• Sandblaster with fine grit
• Solvent Wash Tank

New Parts Required
• Recovered Cylinder and Web Assembly (see chart for part #)
• Locknuts (see chart for part # and quantity)

NOTE: DO NOT reuse locknuts from the original Steel Wedge Stopper. Reuse of these parts will seriously degrade the reliability and integrity of the Stopper, and compromise safety. Before starting, be sure to have a clean, dry and well lighted bench or table on which to perform this work.

REASSEMBLY INSTRUCTIONS

1. Lightly sandblast the Top Wedge Expander, the Bottom Wedge Expander, and Expander Shaft. Avoid damaging or eroding threads.

2. Wash these parts thoroughly in solvent to remove all grit, especially threads inside the wedge expanders.

3. Wire brush the Top Wedge Expander, the Bottom Wedge Expander and Expander Shaft. Inspect for burrs, damage or cracks. Threads must be clean, smooth, and free of any burrs or grit. If any cracks or damage are found, the affected part(s) must be replaced.

4. Test assemble the Top and Bottom Wedge Expanders on the Expander Shaft. Wedges must spin freely by hand over entire length of Shaft threads, to assure proper fit and cleanliness.

5. Disassemble the Top and Bottom Wedge Expanders from Expander Shaft, and wash all three parts in solvent again, thoroughly brushing parts inside and out.

6. Make sure Shaft and Wedges are completely dry and free of grit or debris, then brush top thread of Expander Shaft (end with drive square) with a uniform coating of heavy Never-Seez® Grease.

7. Install Top Wedge Expander on end of Expander Shaft with drive square. Spin on Wedge until no more than six threads are exposed above gap at mid-point of Shaft. Figure A.
REASSEMBLY INSTRUCTIONS (continued)

8. Brush outside of Top Wedge Expander cone with generous coating of White Lithium Grease.


10. Place this sub assembly into top of Cylinder (top has longer bolt studs). Align lug near Drive Square with slot in Cylinder O.D. When looking down into top of Cylinder, two pins on Top Expander Wedge should straddle a web. Figure B.

11. Install Clamp Bars onto top bolt in Cylinder, making sure clamp bars seat level and flush on webs (lightly file if needed, taking care not to contaminate grease or threads with filings). Hand start new Locknuts on studs, but DO NOT tighten at this time.


13. Turn Cylinder onto its side and spin on Bottom Wedge Expander onto bottom end of Expander shaft.

14. Looking through slot in outside of Cylinder, adjust both Top and Bottom Wedge Expanders for equal spacing from gap in center of Shaft. Assure top and bottom wedge expanders are in contact with webs. Figure C.

15. Install Clamp Bars onto bottom studs in Cylinder, making sure clamp bars seat level and flush on webs (lightly file if needed, taking care not to contaminate grease or threads with filings). Install new Locknuts on studs and tighten. Also, tighten the Locknuts on the top bolt studs. DO NOT overtighten Locknuts. Figure D.


17. Using the Line Stopping Machine, contract the Steel Wedge Stopper so that the slot measures \( \frac{3}{8} \) between the metal edges. Slot measurement should be uniform from top to bottom.

18. Install the large Locknut on the bottom end of Expander Shaft.

19. After ensuring Locknut is snugly against Bottom Wedge Expander, rotate Locknut counter-clockwise aligning set screw in Locknut with keyway of Expander Shaft. Figure E.

20. Tighten Locknut set screw against bottom of Shaft keyway.

21. Place Ring Gage of correct size (see chart) over center of the assembly, and expand Steel Wedge Stopper until it is snug against Ring Gage.

22. Stopper surface must tighten snugly against Ring Gage to assure proper Stopper expansion.

23. Loosen Steel Wedge Stopper and repeat this check at top and bottom of polyurethane coating to verify uniform expansion. Counting the number of turns to expand stopper helps to verify equal expansion at top and bottom of stopper. Mechanical action of Stopper should move freely without binding. Reassembly is now complete. Replace Steel Wedge Stopper in its protective sleeve during storage or transport.