APPENDIX B:

Safety & Maintenance Instructions for LOKTOOL Installation Tools

LOKTOOL System General Safety Instructions

1. LOKTOOL system components (head, couplers, hoses, pumps) are fully rated for 10,000 psi operating pressure. Do not substitute non-approved components without prior authorization of LOKRING.

2. Make sure Quick Disconnects are fully secured, and that threaded locking ring, if supplied, on the hose coupler is fully advanced to ensure against accidental separation of installation tool from hose during operation or transportation.

   **Note:** Loose couplers will act as a partial or complete line restriction causing little or no oil flow and resulting in equipment damage or failure.

3. Cycle tool several times without fitting to assure that quick disconnects are fully secured, and no air is trapped in the system.

   **Note:** If the LOKTOOL jaw does not advance and retract smoothly, air might be trapped in system and must be bled prior to operation. Follow manufacture's instructions included with hydraulic pump.

4. Be sure that LOKRING fittings are fully seated in the LOKTOOL jaws before actuating hydraulic pressure. Fittings that are "cocked" or not fully seated can damage fitting and/or tool.

5. Keep fingers clear of the jaws during the activation cycle.

6. NEVER ATTEMPT TO DISASSEMBLE LOKTOOL HEADS. Call LOKRING immediately if any problems with the tools are encountered.

7. Do not drop heavy objects on hoses, and make sure that the hoses are never kinked or sharply bent. Always provide adequate clearance for hoses and coupler to avoid moving objects, abrasion, or sharp objects.

8. Keep hydraulic equipment and hoses away from flames and heat. For optimum performance, do not expose equipment to temperatures of 150°F or higher.

9. Do not use LOKTOOL components that show signs of damage, abuse, or excessive wear.

10. Clean LOKTOOL head and lubricate bearing surfaces on a daily basis after use.

11. Do not attempt to install LOKRING fittings with broken or damaged inserts nor with inserts of the wrong size.
APPENDIX B:

Safety & Maintenance Instructions for LOKTOOL Installation Tools

LOKTOOL Head Maintenance & Cleaning Instructions:

The LOKTOOL body and jaw (and body and jaw inserts) are manufactured from 17-4 heat treated and aged stainless steel, precision machined for many years of reliable service. Assembled tools require no calibration. However, regular cleaning and lubrication of the bearing services is required for proper maintenance of the tools.

The following general cleaning procedures are recommended on a daily basis following use:

1. Clean installation tooling jaws of all foreign material. Brush or blow debris out of jaw cavity from top (looking down between the tool jaws).

2. Rag wipe front bearing pad or bushing, and apply Moly-lube, all-purpose lubricant as needed to the pad after cleaning.

   Note: LOKTOOL head sizes IT30, IT45, IT50, and IT60, have a flat bronze wear pad between the LOKTOOL jaw and body, visible when looking down into the tool cavity from above. IT04 has no separate wear pad, and IT10 and IT20 have bronze bushings

3. Advance the LOKTOOL jaw (without fitting) until it is in the closed position. Clean and Moly-lube the sliding (bearing) surfaces on the tool body and behind the advanced jaw (if applicable to specific tool model).

4. Make sure that body and jaw inserts are properly oriented in LOKTOOL head and secured with set screws.

5. Return LOKTOOL head to equipment case for storage after use.

Power Supply Maintenance Instructions

1. Follow manufacturer's recommendations regarding periodic maintenance. Check reservoir oil level once hose, pump, and LOKTOOL head are connected. For manual pump, fill to indicator mark on the end cap. Replace the fill cap and be sure it is closed.

   Note: Always use pump manufacturer’s recommended fluid only. Introduction of other brand hydraulic fluids into the system may contaminate the system, and may void pump warranty.

2. Always cover disconnect coupler halves with dust caps. As with any hydraulic system, use every precaution to guard LOKTOOL head, hose, and pump against entrance of dirt.