

# SIMPLEX

## PRODUCT BULLETIN

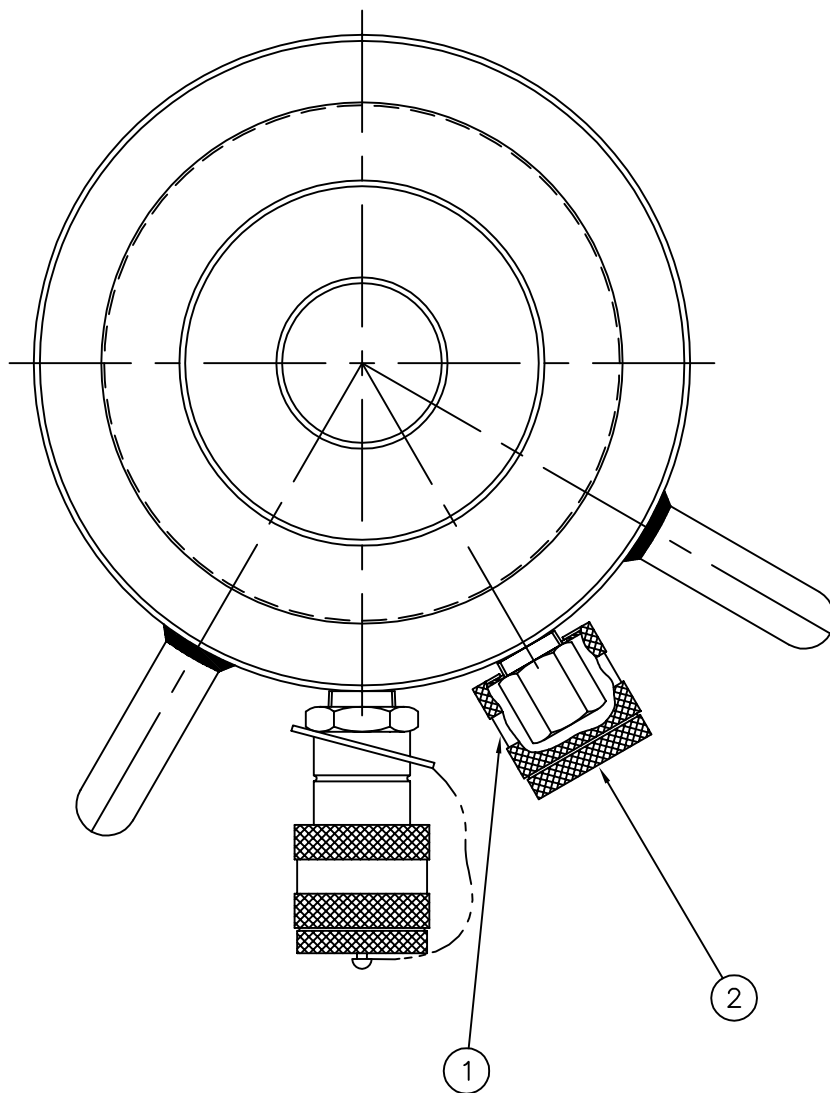
### No. 54409

- 1.0 REPLACEMENT RELIEF VALVES FOR CYLINDERS ON SIMPLEX RPE120 E RAIL PULLERS.
- 2.0 PRODUCTS AFFECTED: ALL CYLINDER ASSEMBLIES 17431 USED ON RPE120 RAIL PULLER SYSTEMS.
- 3.0 RELIEF VALVE REPLACEMENT KIT # 18856 consisting of (2) 44884 cylinder retract side relief valves and (2) 44885 cylinder advance side relief valves.
- 4.0 The replacement relief valves allow the release of trapped hydraulic pressure from the cylinders in the hydraulic system of the Simplex RPE120 E Rail Puller.
- 5.0 The new valves include a knurled knob that can be turned by hand to open Or close the valve to release trapped oil pressure. Turning the knob to the left (counter clockwise) opens the valve and allows trapped pressure to escape. Turning the valve to the right (clockwise) closes the valve and resets the relief valve function. The exhaust oil is diffused through a series of small holes to prevent any risk of injury from the escaping oil. The oil will exit the valve from underneath the knob and back toward the housing on the cylinder. As the knob is turned to release the trapped pressure, the escaping oil will have a braking effect on the turning action of the knob. This will make turning the knob quickly more difficult and prevent opening the valve too fast. Turn the knob at a rate of speed that still allows the valve to turn easily. Never force the knob to turn too quickly because this could damage the valve and cause undesired oil spray. Always remember to shut off the oil pressure power source before attempting to release static trapped pressure. Always remember to close the valve to reset the relief valve function and prevent unnecessary oil leakage during puller operation. See relief valve installation instruction diagram on pages 2, 3, and 4.
- 6.0 If you have questions or suggestions contact:

Industry Railway Suppliers  
Bensenville, Illinois  
(800) 728-0029

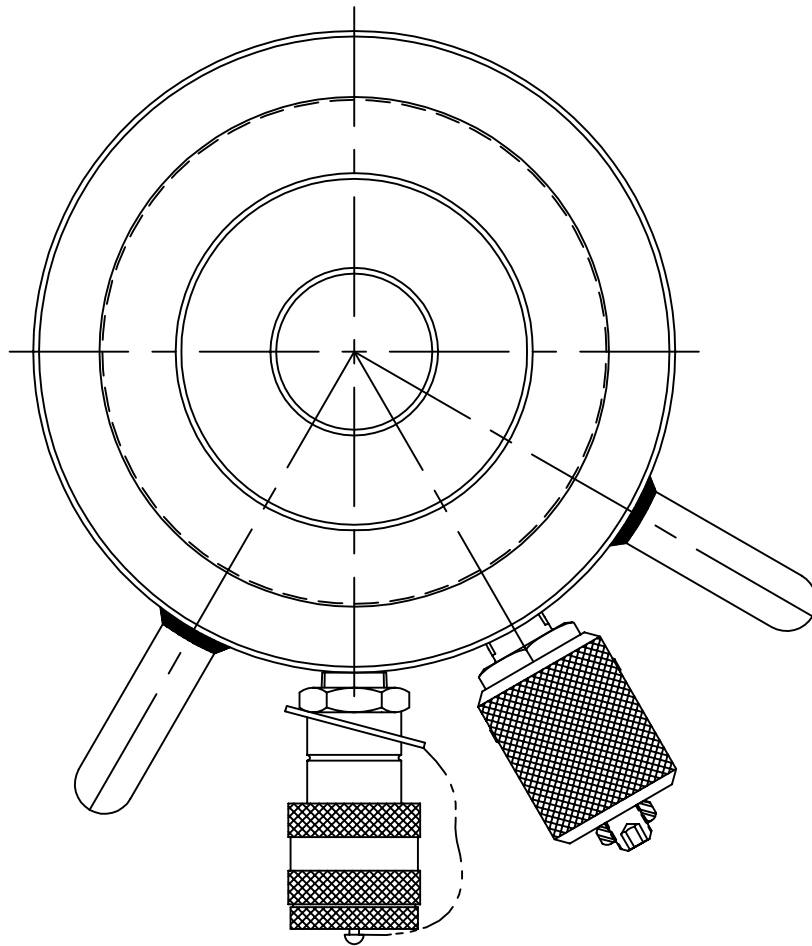
or

Simplex  
Broadview, IL  
(800) 323-9114



TO REMOVE THE OLD RELIEF VALVES:

1. UNSCREW THE CAP ITEM 2 FROM THE SLEEVE ITEM 1. APPLY HEAT OR USE SOLVENT TO REMOVE THE LOCTITE BOND AND UNTHREAD THE CAP. USE VICE GRIPS OR PIPE WRENCHES TO FORCIBLY DISASSEMBLE THE CAP IF NECESSARY.
2. USE A WRENCH TO REMOVE THE OLD RELIEF VALVE ASSEMBLY FROM THE SIDE OF THE CYLINDER. CLEAN ANY DEBRIS AND OLD SEALANT FROM THE PIPE THREADS IN THE CYLINDER HOUSING. REPEAT THESE STEPS FOR BOTH RELIEF VALVES ON THE CYLINDER.



TO INSTALL THE NEW RELIEF VALVES:

1. CHECK TO MAKE SURE THE THREADS ON THE NEW RELIEF VALVE ARE CLEAN, AND FREE OF NICKS. APPLY TEFLON TAPE OR SEALANT TO THE THREADS ON THE RELIEF VALVE, KEEPING THE TAPE OR SEALANT AWAY FROM THE FIRST 1.5 TO 2 THREADS. APPLY NO MORE THAN 1.5 TURNS OF TEFLON TAPE.
2. MAKE SURE THAT YOU HAVE THE CORRECT VALVE ASSEMBLY FOR THE END OF THE CYLINDER THAT YOU ARE INSTALLING THE RELIEF VALVE INTO. THE RETRACT SIDE RELIEF VALVE IS # 44884 AND IS SET AT 10,500 PSI, THE ADVANCE SIDE IS #44885 AND IS SET AT 8,750 PSI.
3. HOLD ON TO THE PIPE THREADED END OF THE VALVE AND TURN THE KNURLED KNOB TO THE LEFT (COUNTER CLOCKWISE) TO EXPOSE ALL OF THE 1" HEX ON THE VALVE BODY. CAREFULLY THREAD THE NEW VALVE INTO THE PORT ON THE SIDE OF THE CYLINDER AND HAND TIGHTEN. USE AN OPEN END WRENCH ON THE 1" HEX TO TIGHTEN THE RELIEF VALVE INTO THE HOUSING TO A TORQUE OF APPROXIMATELY 50 FT. LBS. TURN THE KNURLED KNOB TO THE RIGHT (CLOCKWISE) UNTIL HAND TIGHT. DO NOT TORQUE THE KNURLED KNOB. DO NOT CHANGE THE ADJUSTMENT OF THE SETSCREW AND LOCK NUT ON THE END OF THE KNOB.

