

LOCTITE*Adhesives for more
reliable assemblies***APPLICATION CASE HISTORY****No. 222**

Loctite® Retaining Compound Keeps Tie And Piston Rods Secure After Rebuild

Situation:

Motion Industries' Service Department, based in Nashville, TN, is contracted by industrial customers to repair components of pneumatic and hydraulic power units. Components include cylinders, motors, pumps and lines.

Cylinders from both pneumatic and hydraulic units from 1 1/2" to 14" bore sizes are repaired to replace worn components. Worn components usually include the pistons, o-ring seats, rod wipers and rod bearings.

Some hydraulic cylinders can reach operating pressures of up to 3000 psi. For this reason, both ends of the piston rod and the tie rods need to be securely fastened to prevent failure of the unit on the job.

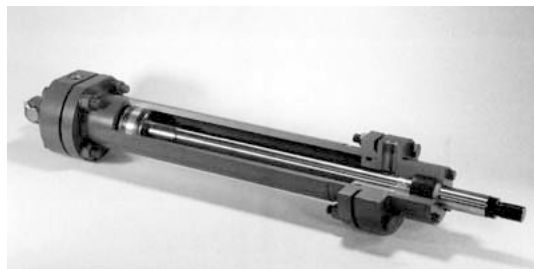
Solution:

Loctite® RC™ 603 Retaining Compound is a high strength retainer for as-received parts. This means that even if the threads of a part are not completely clean, RC 603 will still cure and lock those threads in place. It also seals and secures cylindrical assemblies up to .004" (0.1mm) radial clearance and provides a shear strength of 3,770 psi. RC 603 fixtures in just 10 minutes and prevents fretting and corrosion of metal assemblies.

For tie rod applications, Primer N is applied to the male (tie rod) and female (nut) threads, then RC 603 is applied by striking a bead along the male threads. Following assembly, they are torqued to specification. Both ends of the piston rod are also secured with RC 603.

Results:

"Because we service so many power units, we have to have a product we know is going to work the first time," said John Rippy, Motion Industries Service Manager. "We depend on Loctite RC 603 to keep these parts together, because our reputation depends on it."



Motion Industries services cylinders on pneumatic and hydraulic power units. Their mechanics depend on Loctite® RC™ 603 Retaining Compound to securely hold the tie rods and piston rod components in place.

Loctite Americas

U.S.A.
Loctite Corporation
1001 Trout Brook Crossing
Rocky Hill, Connecticut 06067
860-571-5100
Telefax: 860-571-5465

CANADA
Loctite Canada Inc.
2225 Meadowpine Blvd.
Mississauga, Ontario L5N 7P2
800-263-5043 (within Canada)
905-814-6511
Telefax: 905-814-5391

MEXICO
Loctite Company de México, S.A. de C.V.
Calzada de la Viga s/n, Fracc. Los Laureles
Loc. Tulpetlac, C.P. 55090
Ecatepec de Morelos, Edo. de México.
01-800-8499-412
Telefax: 011-525-787-9404