

## **H0014 Cylinder Repair**

H0014	Version 1	Hydraulics	17-08-04
		J	

Procedure to repair a cylinder if you do not have access to a workshop with the necessary tools

Before you start, you must have with you:

- 2 full cylindrical bars of 4 mètres part A
- 2 hoses B able to slide in the full bar A
- some rags
- One full seal kit it is possible that you might damage some seals during this procedure.
- an acetylene blowtorch

## **Procedure**

- 1) Disconnect the cylinder from the crane to bring it to the workshop.
- 2) Take out the valve situated at the inferior base of the cylinder.



Be careful: the oil can be under pressure and a significant quantity can escape from the cylinder.

- 3) Empty completely the cylinder of its oil.
- 4) Weld a cylindrical bar A on part C



Be careful: protect the chrome tube D with some wet rags during the welding...

- 5) Block the cylinder by blocking part E for example.
- 6) Turn the welded bar A and B anti-clock wise.
- 7) To help unblock it, hit with a hammer around the cylinder (F) while someone else tries to unscrew the part C.
- 8) If the part C is completely rusted and that you can't unblock it with a hammer, (7), you must heat up the surface around the cylinder while someone else tries to unscrew the part C.



Be careful: You need to operate quite quickly because it's not recommended to heat up the cylinder for too long..



- 9) Now that the part C is unscrewed, take out the whole chrome tube D as well as the piston G of the cylinder.
- 10) Weld the second bar H on the piston G.
- 11) Unscrew the piston G by turning it anti-clock wise.
- 12) You can now slide the J head by the bottom of the chrome tube D.
- 13) Change the seals of the J head.
- 14) Put back J head around the chrome tube D.
- 15) Put back piston G with the new seal.
- 16) Unweld the cylindrical bar H and grind down the bottom of the piston G so that it's completely smooth.
- 17) Put back part C in place.
- 18) Unweld the cylindrical bar A.
- 19) Grind down part C to remove any welding trace.
- 20) Paint again part C to avoid any possible rusting.
- 21) Put back the valve at the bottom of the cylinder.
- 22) Put back the cylinder in place on the crane.