

# Safety Bulletin

No: SB051

Rev: 1

Date: 2/3/2011

## Tesco Hydraulic Cylinders



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**TESCO**<sup>®</sup>

### BACKGROUND INFORMATION:

During a recent investigation into failed hydraulic cylinders Tesco has discovered a number of cylinders do not conform to desired specification. The fasteners holding the cylinder piston to the rod were not the locking Stover<sup>®</sup> type used by Tesco (Figure 1). This may allow the nut to separate from the cylinder rod during normal use allowing the cylinder rod end to part from the cylinder piston.



Figure 1: Cylinder rod end without locking Stover<sup>®</sup> nut

## AFFECTED PRODUCT:

The following cylinders, identified by Tesco part numbers and matching manufacturer numbers listed below in use on all Tesco top drive products including HC, HS, HMIS, HXI, ECI, EMI and EXI are affected by this Safety Bulletin

Tesco #	Description
0930	Cylinder,Hyd,Single Stage,1.5"Bore,1"Rod,4"Stroke.1/4"FNPT
7619	CYLINDER,HYD,PIPE HANDLER LOCK,650HCI
0926	Cylinder,Hyd,Sngl Stage,2.5"Bore,1.25"Rod,24"Str
0931	CYLINDER,HYD,LINK TILT
6027	CYLINDER,MODIFIED, HMI LINK TILT
7177-1	Cylinder,Hyd,Sngl Stage,3"Bore,1.25"Rod,8"Stroke
15645	Cylinder,Hyd,Sngl Stage,2.5"Bore,1.25"Rod,16.125"Stroke
7972	Cylinder,Hydraulic,Double Acting,2.5"Bore,1.25"Rod,29"Stroke
0928	Cylinder,Hyd,Single Stage,1.5"Bore,1"Rod,8"Stroke
9520	Cylinder,Hydraulic,Single Stage,4"Bore,1-1/2"Rod,16"Stroke,1

## ACTION REQUIRED:

Tesco has identified that should the locking nut become loose, it may allow the cylinder rod end to part from the cylinder piston, posing a risk of falling objects. The following precautions should be taken during operation and/or while servicing the affected cylinders.

### Grabber Lift Cylinders:

- 1) Ensure the grabber leg safety chain is in place at all times and is securely attached to the lower grabber leg assembly as per OEM specifications using 3/8" GR80 chain and 3/8" 1Ton G-2130 shackles (Figure 2). The cylinder should be inspected to verify the manufacturing number in accordance with the instructions below (figure 3 & 4).



Figure 2: Grabber leg safety chain

- 2) If manufacturer number matches any of the numbers identified below contact your local Tesco Service and Repair facility where you will be provided with a replacement grabber lift cylinder.
- 3) Replace cylinders matching manufacturer numbers identified below with replacement cylinders provided by Tesco.

### All Other Cylinders:

- 1) Visually inspect all other cylinders listed and locate manufacturer number (Figure 3 & 4).
- 2) Use caution when servicing cylinders on the top drive that match the manufacturer numbers identified below.
- 3) Secure both ends of cylinder prior to removing from anchor point on top drive to prevent objects falling to rig floor should the cylinder rod part from the cylinder piston.



Please review figure 3 & 4 below to understand the label and markings that must be identified.

MFG017994, MFG019929, MFG011987, MFG012643, MFG013954, MFG015044, MFG015473  
MFG017047, MFG017695, MFG017994, MFG018994, MFG019929, MFG021848, MFG021930  
MFG022012, MFG022639, MFG022849, MFG023026, MFG023230, MFG023413, MFG023518  
MFG023665, MFG024154

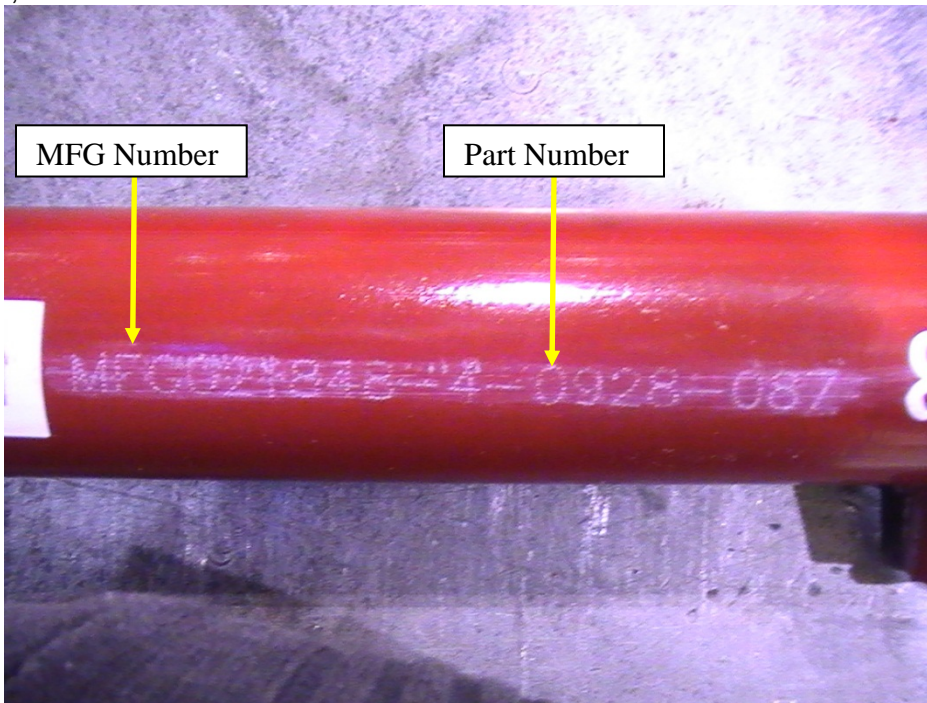


Figure 3: Manufacturer number and part number shown on cylinder piston



Figure 4: Manufacturer number and part number shown on cylinder piston

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**Contact your local TESCO Parts and Service Center for further information regarding this bulletin and or supply of affected components noted above.**