Technical Bulletin			Tesco Corporation 5616 – 80th Avenue SE
No: TB098	Rev: 0	Date: February 13, 2014 Calgary, Alberta, Canada T2C 4N5 Tel: 1-877-TESCO-77 (North America) Tel: 1 (713) 250 7105 (AMSS 24 hour sur	
		stry-Wide DROPS Initiative; Pins with Cotter Pins	Tel: 1 (713) 359-7195 (AMSS 24-hour support) Tel: 1 (713) 359-7295 (International) Email: <u>bulletins@tescocorp.com</u> <u>www.tescocorp.com</u> <u>www.tescoparts.com</u>
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BACKGROUND INFORMATION:

TESCO has developed the Dropped Object Prevention Program that focuses on eliminating the occurrence of dropped objects on the jobsite. Creating a drops-free workplace is an integral part of TESCO's vision to increase safety in workshops and field locations around the world.

Based on the Dropped Objects Prevention Scheme (DROPS) of which TESCO is an active member, the objective is to raise the awareness and prevention through the identification of potential dropped object hazards and understanding their inherent risks and consequences.

One risk that could potentially lead to dropped object incidents is the use of safety/diaper pins on lifting equipment or for securing of equipment or structure at height. Such pins or any other type of pin device do not adequately secure equipment because they can spring or be knocked out during transport or operation, posing an immediate danger to personnel.

In line with adopting industry best practices and guidelines outlined by the DROPS initiative, TESCO is in the process of changing out and discontinuing all of the safety pins used on TESCO Top Drive and Casing Drive System (CDS) parts and assemblies and replacing them with cotter/split pins (Figure 1). Cotter pins are metal fasteners with two tines that are bent during installation. This effectively secures other fasteners such as bolts, nuts and clevis pins and prevents them from disengaging.

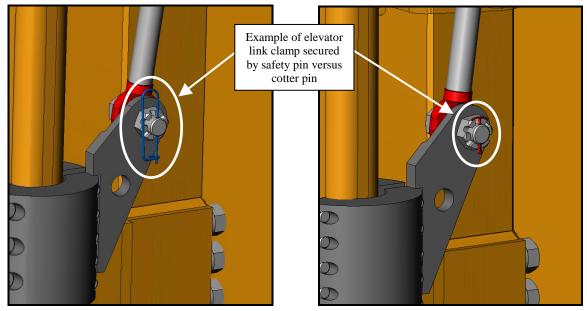


Figure 1: Example of safety pin (left) replaced by cotter pin (right) on an elevator link clamp



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AFFECTED PRODUCTS:

All TESCO Top Drive and CDS parts and assemblies that use safety pins.

ACTION REQUIRED:

TESCO is currently converting all new parts and assemblies that use safety pins to cotter pins. A conversion kit for existing TESCO equipment will be available to customers as a mandatory upgrade and can be obtained through a local TESCO service center.

The following are best practice recommendations on using cotter pins:

- Cotter pins must be bent sufficiently to prevent them from falling out.
- Where there is a danger that personnel will be exposed to the sharp ends, the cotter pin must be bent as shown in Figure 1.
- When hoisting personnel or loads, always use four-part shackles (bow, pin, nut and cotter pin).
- Tractor or hitch pins, hairpins, welding rods or home-made pins must not be used.
- Cotter pins should be made of a stainless steel suitable for the operational environment.
- Cotter pins must be inspected regularly and replaced when they no longer function as intended.

TESCO encourages all personnel to adhere to the DROPS best practice guidelines. Contact a local TESCO service center for further information on DROPS. More details can also be found on the DROPS website (www.dropsonline.org).



Version	Date (D/M/Y)	ECN	Description of changes
Rev 0	13/02/2014	157-0041	Initial release of document

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