

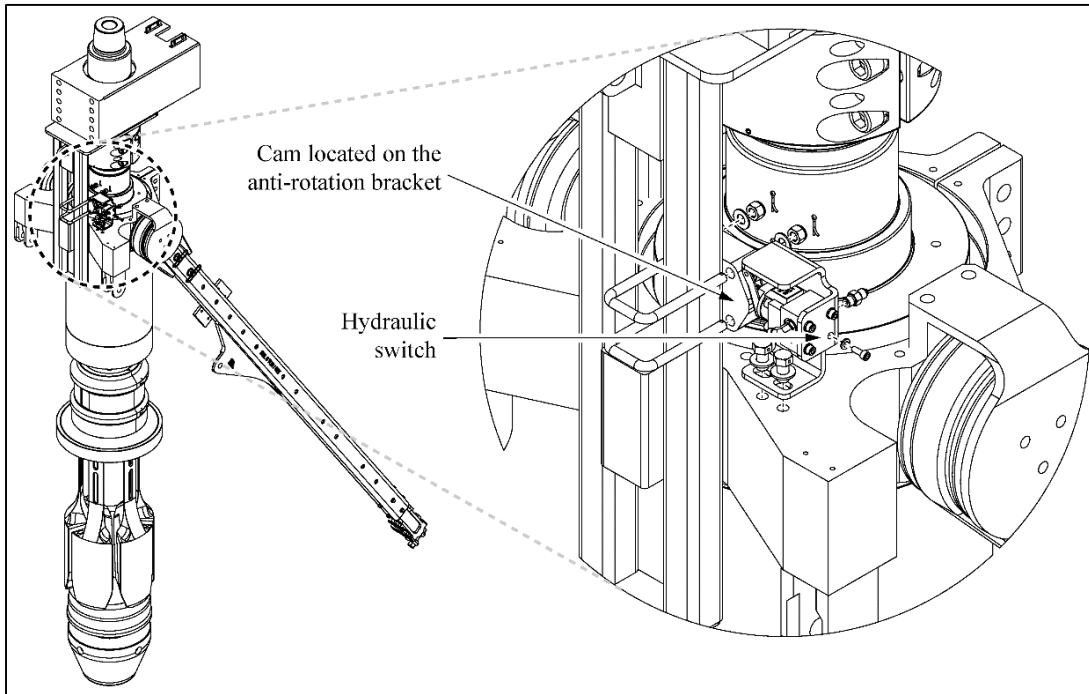


<b>Technical Bulletin</b>			 Tesco Corporation 5616 – 80th Avenue SE Calgary, Alberta, Canada T2C 4N5 Tel: 1-877-TESCO-77 (North America) Tel: 1 (713) 359-7195 (AMSS 24-hour support) Tel: 1 (713) 359-7295 (International) Email: bulletins@tescocorp.com www.tescocorp.com www.tescoparts.com
<b>No: TB110</b>	<b>Rev: 0</b>	<b>Date: June 28, 2016</b>	
<b>CDS Interlock System Upgrade with Close-Confirm Switch</b>			 <b>TESCO®</b>
<input type="checkbox"/> Internal Use Only	<input checked="" type="checkbox"/> External Use	<input checked="" type="checkbox"/> Mandatory	

**NOTE:** All numbers in parentheses are Tesco part / document numbers unless otherwise noted.

**BACKGROUND INFORMATION**

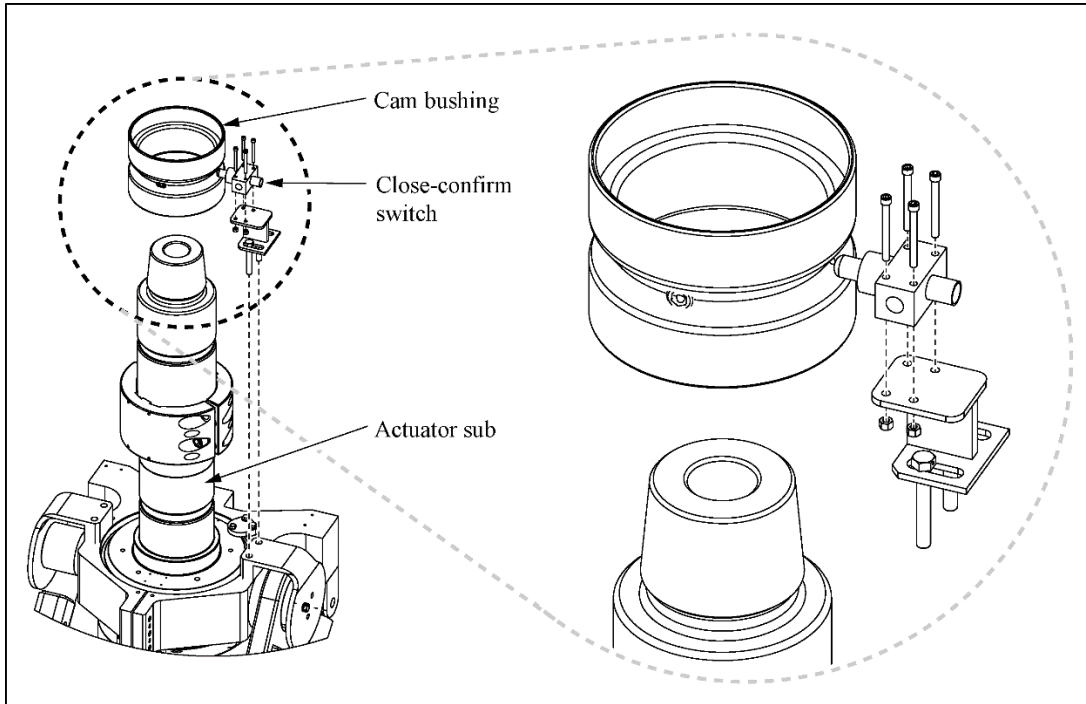
A number of years ago an interlock system was introduced for the Tesco Casing Drive System (CDS). The interlock system was designed to protect the operator from inadvertently releasing either the CDS or slips and accidentally dropping the casing string. The interlock system included a hydraulic switch that was fixed to the hanger plate. It operated on a cam located on the anti-rotation bracket to determine the position of the actuator. Unfortunately the anti-rotation brackets were not stable enough and this caused the switch to malfunction and rendered the CDS interlock system unreliable. This hydraulic switch has now been replaced with a “close-confirm” switch. The close-confirm switch is also mounted on the CDS hanger plate but it operates on a cam bushing that is mounted to the CDS actuator sub. The cam/close-confirm switch set-up can now reliably determine the close position of the CDS actuator. In other words, if the CDS was closed on a casing coupling instead of the intended position on the casing, the close-confirm switch would reliably determine that and initiate the interlock. The illustrations below shows the existing hydraulic switch (Figure 1) and the close-confirm switch upgrade (Figure 2).



**Figure 1: CDS interlock system with hydraulic switch**

Version	Date (D/M/Y)	ECN	Description of changes
Rev 0	06/28/2016	157-0086	Initial release of document

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**Figure 2: CDS interlock system with close-confirm switch**

## AFFECTED PRODUCTS

All sizes of the Internal and External CDS with integrated interlock systems.

## ACTION REQUIRED

All applicable customers and all Tesco business units:

1. Confirm that the CDS has been fitted with the hydraulic switch (as shown in Figure 1) or with the close-confirm switch (as shown in figure 2). If the CDS has been fitted with the hydraulic switch, then proceed to step 2. If the CDS has been fitted with the close-confirm switch, nothing needs to be done apart from taking note of the proper installation and set-up as per the instructions in Chapter 3 of the CDS Installation and Operations Guide (883003).
2. Order the Tesco close-confirm kit 5036566 from a local Tesco Aftermarket Sales & Service (AMSS) representative. A definition of this kit is provided in Appendix A of this bulletin.
3. Refer to the instructions in Chapter 3 of the CDS Installation and Operations Guide to install and set up the close-confirm kit on the CDS.
4. Install the CDS in the rig as per the CDS Installation and Operations Guide. Follow the detailed description in the guide to install the CDS actuator hose connections, slips and close-confirm to the CDS control panel. This procedure must be followed precisely to ensure proper operation.

# APPENDIX A: KIT, LOCK, CLOSE-CONFIRM, CDS

ITEM NO.	PART NO.	DESCRIPTION	QTY.	WT.
1	5036560	PROFILE LOCK, CLOSE-CONFIRM, CDS	1	27
2	14436	SCREW, CAP, SKT HD, 1/4"-20UNCx2-1/2"	4	
3	5036563	DECELERATION VALVE, LOCK, CLOSE-CONFIRM, CDS (PARKER, PN# BK06)	1	0.28
4	5036561	BRACKET, LOCK, CLOSE-CONFIRM, CDS	1	0.39
5	16327	SCREW, CAP, HEX, HD, 1/2"-13UNCx3-1/2", GR8, PLD, DR, HD	2	
6	22081	SCREW, SET, SKT DRIVE, CUP PT, 3/8"-16UNCx1/2"	2	
7	18137	VALVE, CHECK, IN-LINE, FF, #6 FNPT, 5000PSI, 5PSI CRACK	1	
8	420	DISCONNECT, QUICK, COUPLER, 72SERIES, 3/8"x3/8" FNPT	3	
9	410	DISCONNECT, QUICK, COUPLER, 72SERIES, 3/8"x3/8" FNPT	3	
10	0211	FITTING, HYD, STR, #6M/JIC, #6M/JIC	2	
11	368	FITTING, HYD, TEE, #6M/JIC, #6M/JIC	2	
12	0282	FITTING, HYD, STR, #6M/JIC, #6M/JIC	6	
13	4047	FITTING, HYD, STR, #4M/NPT, #6M/JIC, Bikhd	1	
14	5086	HOSE, HYD, 100R2, AT, #6x14", F, JICxJIC	2	
15	3718	HOSE, HYD, 100R2, AT, #6x38", F, JICxJIC	1	
16	0954	NUT, HEX, LOCK, NYLON, 1/4"-20UNC, GR2, PLD	4	

**DETAIL B**  
SCALE 1 : 6

**B**

SCALE 1:12

Member of 180113  
TEL: 403-291-1500 ext. 3000  
M. DAID

MATERIAL SPECIFICATIONS		TITLE	
SEE BOM	HEAT TREATMENT/SPECIAL PROCESS	<b>Kit, Lock, Close-Confirm, CDS</b>	
N/A		PROJECT:	M. DAID
		DRAWN:	12AUG2013
		CHECKED:	SCALE 1:12
		DATE:	SHEET SIZE
		DATE:	B
		DATE:	WEIGHT:
		DATE:	lbs
		REV:	PAGE
		5036566	1
			1 OF 2

REV	ECN	DESCRIPTION	DATE
1	250-0003	CORRECT CHECK VALVE DIRECTION	10APR2014
0	237-0014	RELEASED FOR PRODUCTION	12AUG2013

**NOTES**

- UNLESS NOTED, ALL PARTS SHALL BE PERMANENTLY IDENTIFIED.
- ALL PARTS AND COPIES SHALL BE DURNED UP ON CDS COMPLETION UNLESS OTHERWISE SPECIFIED IN WRITING BY TESCO CORPORATION.

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