


<b>Change 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: <a href="mailto:bulletins@tescocorp.com">bulletins@tescocorp.com</a> <a href="http://www.tescocorp.com">www.tescocorp.com</a> <a href="http://www.tescoparts.com">www.tescoparts.com</a>
<b>No: CB060</b>	<b>Rev: 1</b>	<b>Date: June 26, 2015</b>	
<b>Updates to the Cementing Plug Launching System</b>			
<input checked="" type="checkbox"/> <b>Internal Use Only</b> <input type="checkbox"/> <b>External Use</b>		<input checked="" type="checkbox"/> <b>Mandatory</b> <input type="checkbox"/> <b>Recommended</b>	

**IMPORTANT:** This change bulletin features **both** mandatory and recommended *Action Required* items.

**NOTE:** All numbers in parentheses are TESCO part numbers unless otherwise noted.

**BACKGROUND INFORMATION:**

A number of enhancements have been made to the Cement Plug Launching System (CPLS) to improve the product and increase the pressure rating of the system. A list of these changes is given below.

**1. New Side Entry Swivel Sub**

**Pressure Rating**

As per customer requests for a higher pressure rating of the Side Entry Swivel Sub (SESS), Tesco has successfully completed development of a 10,000 psi SESS. The new HP (High Pressure) SESS is essentially the same as the previous version with a number of minor differences. The hammer union connection on the HP SESS is now a 3" 1502 connection as opposed to the 4" 1002 on the original SESS. This change was made because the 3" connection has the pressure rating required for 10,000 psi.

**Threaded Connection**

There are now two versions of the HP SESS available for purchase. There is 6-5/8" Regular Box x Pin threaded connection and also a NC50 Box x Pin threaded connection version. The only difference between the two versions of the HP SESS is the load rating. Due to the difference in size of the connection, the NC50 HP SESS is rated to 380 Ton compared to the 6-5/8" Regular version which is rated to 600 Ton.

**Rotational Speed**

The HP SESS has a different maximum rotational speed compared to the original SESS. The HP SESS max operating rotational speed is now 30 rpm. The procedure for launching balls while rotating has remained the same.

**2. Ball Launching Mechanism and Cementing Plugs**

With the release of the HP SESS, all supporting equipment has been upgraded to take the increase in pressure. The ball launching mechanism was upgraded with a new internal seal that enables the system's pressure rating to be increased to 10,000 psi. All cementing plug kits have been updated accordingly so they can also take the increased pressure. Tests were completed on the phenolic balls and it was found they would shatter when subject to 10,000 psi. Refer to document 710287 for the report on this testing. To fix this issue, a new aluminum ball will replace the phenolic balls.

Version	Date (D/M/Y)	ECN	Description of changes
Rev 0	19/05/2015	201-0014	Initial release of document
Rev 1	26/06/2015	201-0014	Add instruction to remove and destroy all phenolic balls (Tesco #'s 990221 and 1530040) from inventory

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### 3. Additional Plug Adapter Kits, Anti-Rotation Bracket and Adapter Unions

Since the pressure rating was increased for the entire CPLS, a new set of plug adapter kits will be made available for purchase. The new packer cups provided by RubberAtkins cover the same range of casing weights and have been made available in the CPLS matrix (1320089), see Appendix A. The anti-rotation bracket has also been made available in the matrix. This bracket fits all versions of the SESS. With the new HP SESS having a different hammer union connection, a new adapter union has been made available to integrate with the ball launcher kit.

#### AFFECTED PRODUCTS:

##### 1. New Side Entry Swivel Sub

Part Description	Old Part Number	New Part Number
Sub,Side Entry Swivel,10,000psi,6-5/8 Reg Box x Pin	--	5036121
Sub,Side Entry Swivel,10,000psi,NC50 Box x Pin	--	5045521

##### 2. Ball Launching Mechanism and Cementing Plugs

Part Description	Old Part Number	New Part Number
Ball Injector Assembly,BLA	5003479	5003479-1
Cylinder, Ball Injector,BLA	5003483	5003483-1
Ball Launcher Assembly,CPLS	5003480	5003480-1
Kit,Ball Launching Assembly (BLA),CPLS	5005996-2	5005996-3
Kit,Plug,Cementing,4-1/2"Casing,CPLS	990342	990342-1
Kit,Plug,Cementing,5"Casing,1.188"OD Ball	5008869	5008869-1
Kit,Plug,Cementing,5-1/2"Casing,CPLS	990343	990343-1
Kit,Plug,Cementing,7"Casing,1.5"OD Ball	5001853	5001853-1
Kit,Plug,Cementing,7-5/8"Casing,1.5"OD Ball	5001854	5001854-1
Kit,Plug,Cementing,8-5/8"Casing,1.5"OD Ball	5001867	5001867-1
Kit,Plug,Cementing,9-5/8"Casing,1.5"OD Ball	710163	710163-1
Kit,Plug,Cementing,10-3/4"Casing,1.5"OD Ball	5001869	5001869-1
Kit,Plug,Cementing,11-3/4"Casing,1.5"OD Ball	5001870	5001870-1
Kit,Plug,Cementing,13-3/8"Casing,1.5"OD Ball	710161	710161-1

### 3. Additional Plug Adapter Kits, Anti-Rotation Bracket, and Adapter Unions Added to CPLS Matrix

Part Description	Old Part Number	New Part Number
Matrix,Cementing Plug Launching System (CPLS)	1320089Rev8	1320089Rev9

## **ACTION REQUIRED:**

Tesco requests that all District Managers follow the guidelines outlined below:

### **1. Mandatory Actions**

**IMPORTANT:** The following action item is mandatory and must be implemented immediately.

**Cement Plugs (and Kits):** Remove and destroy all phenolic balls (Tesco Part Numbers 990221 and 1530040) from inventory. Replace the phenolic balls with aluminum balls (5045907 – 1-3/16" ball and 5045908 – 1-1/2" ball). Also remove and destroy all phenolic balls from the cement plug kits and replace with aluminum balls of an equivalent size. For part numbers of the affected kits, refer to *AFFECTED PRODUCTS*: "2. Ball Launching Mechanism and Cementing Plugs" on page 2.

The aluminum balls can be purchased from a Tesco service center.

### **2. Recommended Actions**

**Ball Launcher Assembly:** For jobs with a pressure requirement higher than 5,000 psi, the polypack seal (Item 11 on drawing 5003479) must be replaced with a new high pressure seal (5047944). Refer to CPLS user guide (883035) for instructions on how to disassemble and assemble the injector assembly. The customer may require a pressure test be conducted on the ball launch assembly before it is used for the job. See Appendix B for reference drawing.


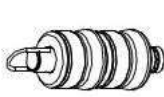
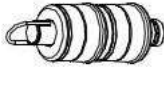

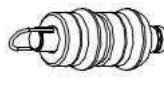


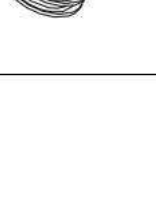
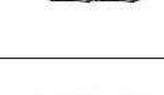



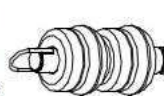
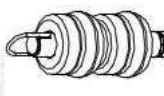
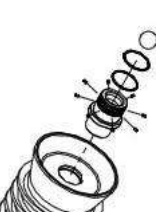













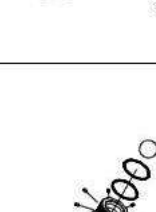








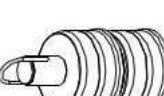
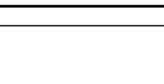



**Kit, Ball Launcher Assembly:** Purchase the following parts and add them to the storage container. These parts are required to run the 10,000 psi cement swivel.


- a) 5048318 (Adapter,Union,Hammer,15000-psi, 3"Fig1502Winged x 2"Fig1502)
- b) 5048319 (Sub,Blind,Male,Union,Hammer,3"Fig 1502)







CEMENTING PLUG	PLUG ADAPTER	DOC KIT
 <p>KIT, CEMENTING PLUG, FOR 1-1/2" BALL 3-3/8" CASING PIN 710165-1</p> <p>Not in Use KIT, CEMENTING PLUG, FOR 2" BALL 10-3/4" CASING PIN 860235</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504787-8</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504788</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504789</p> <p>WEIGHT: 147 LB</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504790</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504791</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504792</p> <p>WEIGHT: 147 LB</p>
 <p>KIT, CEMENTING PLUG, FOR 1-1/2" BALL 3-3/8" CASING PIN 710165-1</p> <p>Not in Use KIT, CEMENTING PLUG, FOR 2" BALL 10-3/4" CASING PIN 860236</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504793</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504794</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504795</p> <p>WEIGHT: 147 LB</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504796</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504797</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504798</p> <p>WEIGHT: 147 LB</p>
 <p>KIT, CEMENTING PLUG, FOR 1-1/2" BALL 3-3/8" CASING PIN 710165-1</p> <p>Not in Use KIT, CEMENTING PLUG, FOR 2" BALL 11-3/4" CASING PIN 860237</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504799</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504800</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504801</p> <p>WEIGHT: 147 LB</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504802</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504803</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504804</p> <p>WEIGHT: 147 LB</p>
 <p>KIT, CEMENTING PLUG, FOR 1-1/2" BALL 3-3/8" CASING PIN 710165-1</p> <p>Not in Use KIT, CEMENTING PLUG, FOR 2" BALL 11-3/4" CASING PIN 860238</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504805</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504806</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504807</p> <p>WEIGHT: 147 LB</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504808</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504809</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504810</p> <p>WEIGHT: 147 LB</p>
 <p>KIT, CEMENTING PLUG, FOR 1-1/2" BALL 3-3/8" CASING PIN 710165-1</p> <p>Not in Use KIT, CEMENTING PLUG, FOR 2" BALL 11-3/4" CASING PIN 860239</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504811</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504812</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504813</p> <p>WEIGHT: 147 LB</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504814</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504815</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504816</p> <p>WEIGHT: 147 LB</p>
 <p>KIT, CEMENTING PLUG, FOR 1-1/2" BALL 3-3/8" CASING PIN 710165-1</p> <p>Not in Use KIT, CEMENTING PLUG, FOR 2" BALL 11-3/4" CASING PIN 860240</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504817</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504818</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504819</p> <p>WEIGHT: 147 LB</p>	 <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504820</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504821</p> <p>WEIGHT: 147 LB</p>  <p>KIT, CEMENTING PLUG ADAPTER, 10KSI 3-3/8" X 32.3-86.4 LB/FT PIN 504822</p> <p>WEIGHT: 147 LB</p>

		TITLE: CEMENTING PLUG LAUNCHING SYSTEM
201-0013 Update and Add High Pressure Kits	14Nov2014	DRAFTED: HLR
071-0079 Add SESS, Travel stand & Test Accessory	12Jan2012	CHECKED:
195-0001 Add Ball gauge and update part number 6005906-1	13DEC2011	DATE: 23MAR2011
071-0085 Add 5" and 4-1/2" tooling kit. Transfer to SolidW	23MAR2011	APPROVED:
REV EON DESCRIPTION	DWG NO: 1320089	PAGE: 3 OF 3 REV: 9



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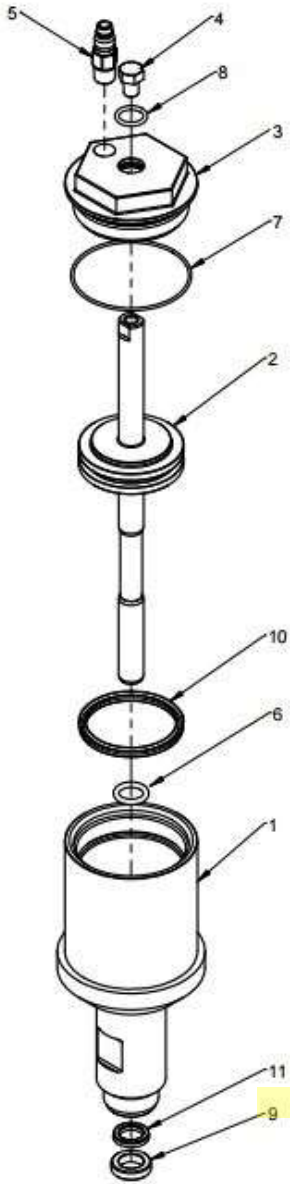

REV	EON	DESCRIPTION	DATE
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DWG NO: 1320089


PAGE: 3 OF 3  
REV: 9

Appendix B: Ball Injector Assembly, BLA

ITEM NO.	QTY	PART NO.	DESCRIPTION
1	1	5003483-1	CYLINDER, BALL INJECTOR
2	1	5003481	PISTON, BALL INJECTOR
3	1	5003482	Cap, Ball Injector
4	1	3270	SCREW, CAP, HEX HD, 3/8" -16UNC x 1/2" DR HD
5	1	710027	Disconnect, Quick, Nipple, Air, Parker Series20, 1/4"x1/4"MNPT
6	1	5003547	O-RING, N70-208, 0.609" ID X 0.139" Dia
7	1	5003548	O-RING, N70-040, 2.864" ID X 0.070" Dia
8	1	5003549	O-RING, N70-114, 0.612" ID X 0.103" Dia
9	1	5003542	RETAINER, SEAL, BALL INJECTOR
10	1	5003538	SEAL, HOMO U CUP, 2-5/8"OD x 2-1/4"ID x 3/16"W
11	1	5047944	Seal, Polypack, 10,000psi, 0.875"ODx0.625"IDx0.125"W





ISOMETRIC VIEW



Member: M71377  
Tesco's permit to practice: PO6506  
2 Jan 2015

**NOTE:**  
 1. USE WHITE LITIUM GREASE TO ASSEMBLE ALL SEALS AND O-RINGS  
 2. USE THREAD ANTI SEIZE ON ALL THREADS DURING ASSEMBLY

					<b>TITLE:</b> <b>INJECTOR, BALL, ASSEMBLY, BLA</b>		
					<b>DRAFTED:</b> Colin M.	<b>DATE:</b> 15DEC2014	
<b>0</b> 201-0013    RELEASED FOR PRODUCTION    18DEC2014				<b>CHECKED:</b>	<b>APPROVED:</b>		
<b>REV</b>	<b>ECN</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>DWG NO:</b> 5003479-1	<b>PAGE:</b> 1 OF 2	<b>REV:</b> 0	