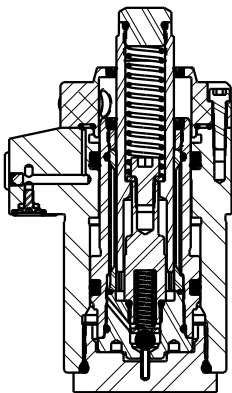


N/A	N/A	1S1016	INSTRUCTION SHEET				
N/A	N/A	61100524	KIT, SPRING				
N/A	N/A	6V100202	KIT, SEAL, FKM				
N/A	N/A	60100202	KIT, SEAL, STANDARD				
33	2	39V10022	WIPER,PRESS-IN, (3/4)	X	X		X
32	1	39H52032	SEAL,T, (1 3/16 X 1/8 X 1 7/16)	X	39V52040		X
31	1	39H52031	SEAL, BEVEL, 1 3/16 X 1/8 X 1 7/16	X	39V52039		
30	1	39F54009	BU RING, (-217)	X	X		
29	1	91000030	ASSY, RPS, WS, DA, CGS, 2750				
28	1	91000029	ASSY, SHUTTLE, WS, DA, CGS, RPS, 2750				
27	1	81071003	CAP, HOUSING, WS, DA, CGS, RPS				
26	1	81071002	HOUSING, RPS, WS, DA, CGS, 2750				
25	1	81071001	CAP, BODY, WS, DA, CGS, 2750				
24	1	81042003	STUD, WS, DA, CGS, 2750				X
23	1	81040608	BOLT, CONTACT, WS, DA, CGS, 2750				X
22	1	81000809	BODY, WS, DA, CGS, 2750				
21	1	70643770	VALVE, PRESSURE RELIEF, 1 PSI				
20	3	39055011	SEAL, BONDED, M3				
19	1	39051063	O-RING, (33mm x 1.5)	X	39V51063		
18	1	39051062	O-RING, (41mm x 1.5)	X	39V51062		
17	1	39051058	O-RING, (-920)	X	39051018		
16	3	39051025	O-RING, (-011)	X	X		
15	1	39000072	O-RING, (-013)	X	39V50047		X
14	1	39000024	O-RING, (-904)	X	39V00024	X	X
13	2	30603322	PLUG, PIPE, HEX, HOL, 1/8 NPT, STEEL				
12	2	30601144	PLUG, SOCH, SAE 4				
11	4	23600002	BALL, STEEL, ALLOY, .250				X
10	1	23530000	PIN, SPRING, COIL TYPE, 3/32 X 3/8, SST				
9	1	23355008	SPRING, COMPRESSION			X	
8	1	23355007	SPRING, COMPRESSION			X	X
7	1	23311016	SPRING, COMPRESSION			X	X
6	3	21500019	SCREW, CAP, BTNH, M3 X 6, ALY				
5	1	21430034	WASHER				X
4	1	21430033	WASHER				
3	1	21430020	WASHER				X
2	3	21411032	SCREW, CAP, SOCH, 8-32 X 5/8, ALY				
1	1	21411030	SCREW,CAP,SOCH,1/4-28 X 3/8,ALY,SLFLKG				X

No.	QTY	PART No.	DESCRIPTION	STANDARD SEAL KIT	FKM SEAL KIT	SPRING KIT	INCLUDED IN SUB-ASM 91-0000-29
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SEE 1S1016 FOR SERVICE INSTRUCTIONS  
 LUBRICATE ALL SEALS WITH CLEAN HYDRAULIC OIL PRIOR TO ASSEMBLY  
 DO NOT USE SILICONE BASED LUBRICANTS

WEIGHT 4.25 LBS

**PARTS LIST**



VEKTEK, INC.  
 1334 E. SIXTH AVE. P.O. BOX 625  
 EMPORIA, KS. 66801 U.S.A.

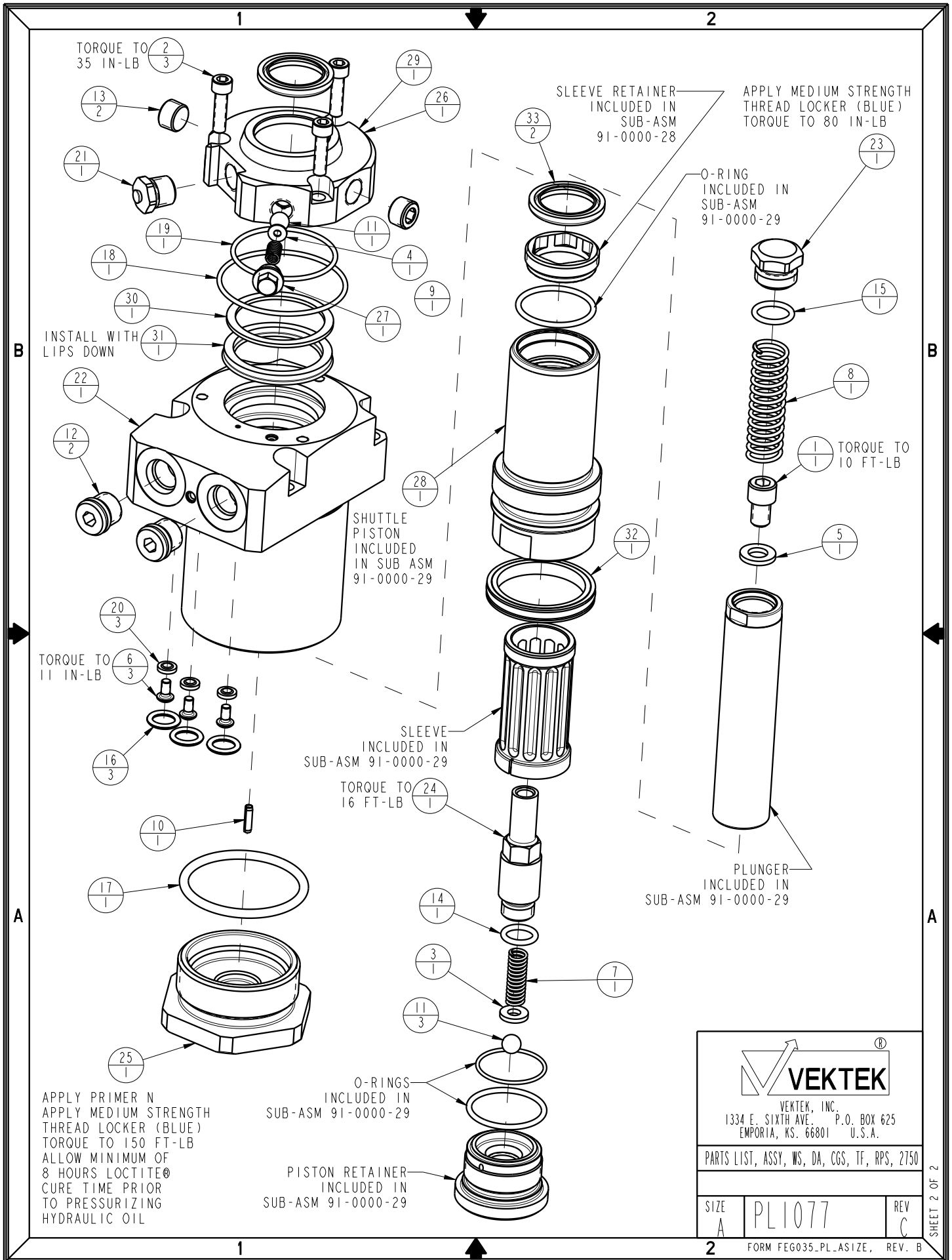
C	5740	RELEASE	JDW	06/13/25
REV	IN ACCORDANCE WITH ECN	EFFECTIVE DATE	REVISED BY	DATE
DRW BY: ALUTHI	DRAWING STATUS: <b>Released</b>			
DATE: 8-12-10	PRODUCTION APPROVED FOR RELEASED STATUS ONLY			

ASSEMBLIES AFFECTED  
 10-0208-01  
 10-0208-01F

PARTS LIST, ASSY, WS, DA, CGS, TF, RPS, 2750	
SIZE A	PL1077
REV C	

FORM FEG035\_PL\_ASIZE, REV. B

SHEET 1 OF 2



**VEKTEK**®

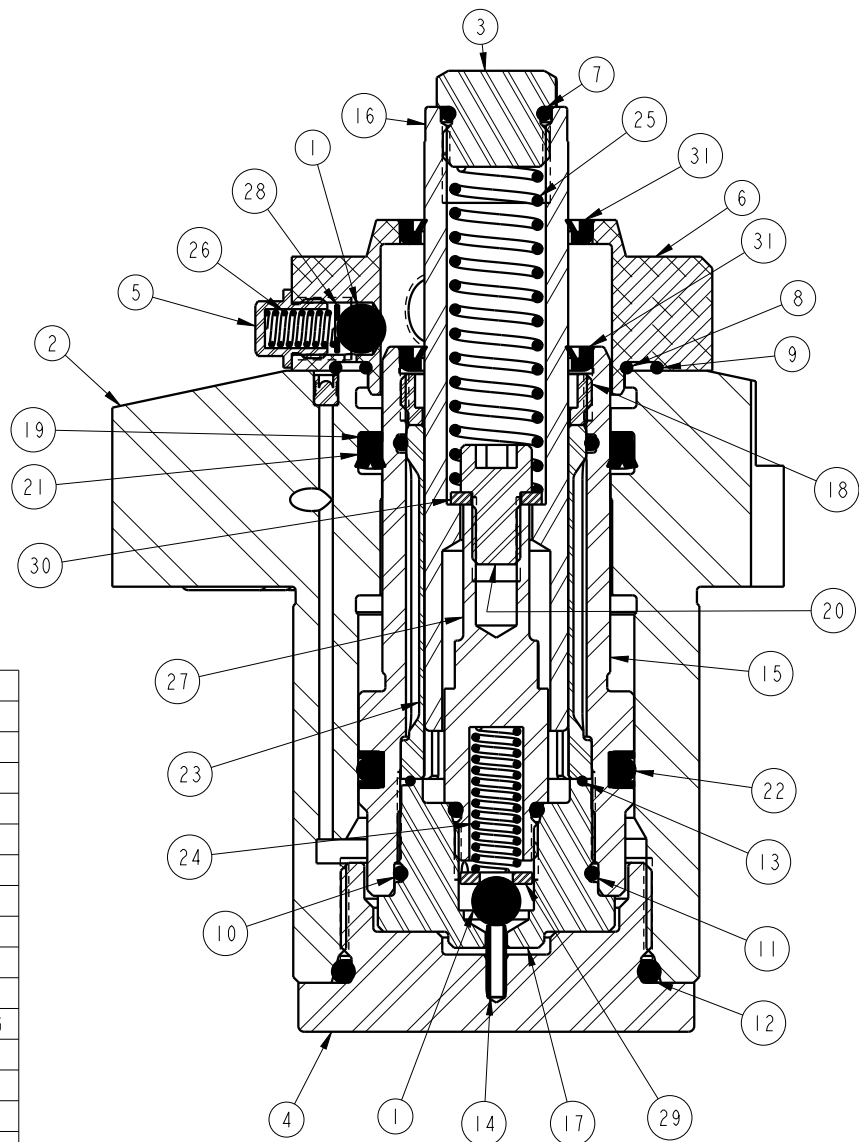
VEKTEK, INC.  
1334 E. SIXTH AVE. P.O. BOX 625  
EMPORIA, KS. 66801 U.S.A.

PARTS LIST, ASSY, WS, DA, CGS, TF, RPS, 2750

SIZE A	PL1077	REV C
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FORM FEG035\_PL\_ASIZE, REV. B

SHEET 2 OF 2



31	WIPER, PRESS-IN, (3/4)
30	WASHER
29	WASHER
28	WASHER
27	STUD, WS, DA, CGS, 2750
26	SPRING, COMPRESSION
25	SPRING, COMPRESSION
24	SPRING, COMPRESSION
23	SLEEVE, WS, DA, CGS, 2750
22	SEAL, T, (1 3/16 X 1/8 X 1 7/16)
21	SEAL, BEVEL, 1 3/16 X 1/8 X 1 7/16
20	SCREW, CAP, SOCH, 1/4-28 X 3/8, ALY, SLFLKG
19	BU RING, (-217)
18	RETAINER, SLEEVE, WS, DA, CGS, 2750
17	RETAINER, PISTON, WS, DA, CGS, 2750
16	PLUNGER, WS, DA, CGS, RPS, 2750
15	PISTON, SHUTTLE, WS, DA, CGS, 2750
14	PIN, SPRING, COIL TYPE, 3/32 X 3/8, SST
13	O-RING, (5-708)
12	O-RING, (-920)
11	O-RING, (-904)
10	O-RING, (-021)
9	O-RING, (41mm x 1.5)
8	O-RING, (33mm x 1.5)
7	O-RING, (-013)
6	HOUSING, RPS, WS, DA, CGS, 2750
5	CAP, HOUSING, WS, DA, CGS, RPS
4	CAP, BODY, WS, DA, CGS, 2750
3	BOLT, CONTACT, WS, DA, CGS, 2750
2	BODY, WS, DA, CGS, 2750
1	BALL, STEEL, ALLOY, .250
<b>No.</b>	<b>DESCRIPTION</b>

MODEL NUMBER	TOOL LIST
10-0208-01	1-7/8 SOCKET (6 pt.)
10-0208-01F	7/16, 5/8 & 11/16 wrenches 9/64 hex key, 3/16 hex key 1/4 socket, 7/16 deep well socket

<b>INSTALLATION INSTRUCTIONS</b>	 <b>VEKTEK</b> <small>VEKTEK, INC.          1334 E. SIXTH AVE. P.O. BOX 625          EMPORIA, KS. 66801 U.S.A.</small>			
	<b>INSTRUCTION SHEET, WS, DA, CGS, TF, RPS, 2750</b>			
<b>ASSEMBLIES AFFECTED</b> 10-0208-01 10-0208-01F	<table border="1"> <tr> <td>SIZE A</td> <td style="font-size: 2em; font-weight: bold;">1S1016</td> <td>REV B</td> </tr> </table>	SIZE A	1S1016	REV B
SIZE A	1S1016	REV B		

B	3060	RELEASE	DLG	7/21/16
REV	IN ACCORDANCE WITH ECN	EFFECTIVE DATE	REVISED BY	DATE
DRW BY:	ALUTHI	<b>DRAWING STATUS: Released</b> PRODUCTION APPROVED FOR RELEASED STATUS ONLY		
DATE:	8-12-10			

1

2

READ ALL INSTRUCTIONS BEFORE DISASSEMBLY


REFER TO THE ILLUSTRATION ON PAGE ONE FOR COMPONENT NUMBERS AND TOOL LIST

## DISASSEMBLY

1. Remove return position sensor housing (6) using 9/64" hex key to remove the 3 SHCS. Remove the housing cap (5) using 1/4" socket and remove spring (26), washer (28) and ball (1). Remove o-rings (8) and (9) and press out wiper (31).
2. Clamp work support body (2) in vise and using 1 7/8" six point socket remove bottom cap (4). Cap is installed with Loctite® and tightened to 150 ft-lbs so will require high torque to remove cap. Remove o-ring (12) from cap (4) and clean Loctite® off threads using a wire brush. CAUTION: USE 6 POINT SOCKET ONLY, OTHER TYPES OF WRENCHES MAY DAMAGE THE WORK SUPPORT.
3. Slide shuttle piston (15) sub-assembly out of body (2). Remove back-up ring (19), and bevel seal (21) from body (2). Remove T-seal (22) from shuttle piston (15).
4. Using 5/8" and 11/16" wrenches remove contact bolt (3) from plunger (16), remove spring (25) and o-ring (7).
5. Clamp shuttle piston (15) in vise clamping on the flats near the bottom. Remove SHCS (20) and washer (30), plunger can now be removed.
6. Using 7/16" deep well socket remove stud (27) from piston retainer (17) and remove o-ring (11) from stud. Remove spring (24), washer (29), and ball (1).
7. Using small flat blade screw driver, remove wiper (31) from shuttle piston (15). CAUTION: DO NOT DAMAGE INSIDE OF SLEEVE (23) OR SLEEVE RETAINER (18).
8. DO NOT REMOVE SLEEVE RETAINER (18) OR PISTON RETAINER (17) FROM SHUTTLE PISTON (15). DOING SO WILL VOID PRODUCT WARRANTY!
9. Clean all parts thoroughly and set aside to dry.

## ASSEMBLY

1. Lubricate o-rings (7), (8), (9), (11) & (12), T-seal (22), bevel seal (21) and back-up ring (19) with clean hydraulic oil (Vekttek 65-0010-01 or equivalent). Apply Loctite® primer N or equivalent to the threads of the cap (4), threads of body (2) and contact bolt (3), then allow to dry.
2. Install ball (1), washer (29), spring (24) into piston retainer (17) through top of shuttle piston (15). Install o-ring (11) on SAE 4 boss of stud (27). Torque stud into piston retainer, 16 ft-lb.
3. Press wiper (31) into top of shuttle piston (15) using only enough force to seat wiper into counterbore. CAUTION: EXCESS FORCE MAY CAUSE DAMAGE TO WIPER.
4. Slide plunger (16) into sleeve (23). Install washer (30) and SHCS (20), torque to 10 ft-lb. Install spring (25) into plunger (16). Install o-ring (7) onto contact bolt (3) and apply medium strength Loctite® (blue) to threads. Thread contact bolt (3) into plunger (16) and torque to 80 in-lb. Plunger should freely move up and down in sleeve without binding or dragging. Spring force should return plunger to full stroke without sticking.
5. Install T-seal (22) onto shuttle piston (15) with round bulb facing out. Install back-up rings on each side of T-seal bulb. Make sure back-up rings are seated.
6. Install bevel seal (21) into body (2) with lips facing piston bore, push to bottom of groove, then install back-up ring (19). Make sure seals are not rolled.
7. Slide shuttle piston (15) subassembly into body (2) bore and ensure that piston seal back-up rings do not catch in threads. Shuttle piston should slide smoothly up and down in bore.
8. Install o-ring (12) onto cap (4) and apply medium strength Loctite® (blue) to threads. Immediately thread cap (4) into body (2) and torque to 150 ft-lb. Allow 8 hours of Loctite® cure time before pressurizing device with hydraulic oil.
9. Press wiper (31) into top of return position sensor housing (6). Install ball (1), washer (28) and spring (26) into housing (6). Install housing cap (5) and tighten. Install o-rings (8) and (9) onto bottom side of housing (6). Install housing sub-asm onto body (2), insert SHCS and torque to 35 in-lb.

		
VEKTEK, INC. 1334 E. SIXTH AVE. P.O. BOX 625 EMPORIA, KS. 66801 U.S.A.		
INSTRUCTION SHEET, WS, DA, CGS, TF, RPS, 2750		
SIZE A	1S1016	REV B
FORM FEG035_PL_ASIZE, REV. B		

1

2