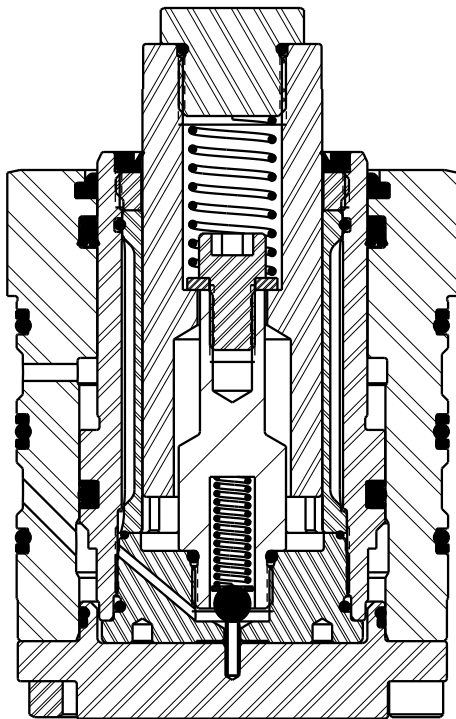


No.	QTY	PART No.	DESCRIPTION	STANDARD SEAL KIT	FKM SEAL KIT	SPRING KIT	INCLUDED IN SUB-ASM 91-0000-31
N/A	N/A	IS1021	INSTRUCTION SHEET				
N/A	N/A	61100525	KIT, SPRING				
N/A	N/A	6V100210	KIT, SEAL, FKM				
N/A	N/A	60100210	KIT, SEAL, STANDARD				
24	1	39V53002	WIPER,PRESS-IN, (1-1/4)	X	X		X
23	1	39H52034	SEAL,T, (1-7/8X1/8X2-1/8)	X	39V52042		X
22	1	39H52033	SEAL, BEVEL, 1 7/8 X 1/8 X 2 1/8	X	39V52041		
21	1	39H51002	O-RING, (-033)	X	39V51002		
20	4	39F54012	BU RING,(-149)	X	X		
19	1	39F54011	BU RING,(-225)	X	X		
18	1	91000031	ASSY, SHUTTLE, WS, DA, CGS, 5500				
17	1	81071004	CAP, BODY, WS, DA, CGS, 5500				
16	1	81042004	STUD, WS, DA, CGS, 5500 X 1/2 STRK				X
15	1	81040609	BOLT, CONTACT, WS, DA, CGS, 5500				X
14	1	81000814	BODY, WS, DA, CGS, CM, 5500				
13	1	39054017	BU RING,(-033)	X	X		
12	1	39053032	WIPER,SNAP-IN, (1 7/8)	X	X		
11	3	39051067	O-RING, (-149)	X	39V51067		
10	1	39051066	O-RING, (-016)	X	39V51066		X
9	1	39000026	O-RING, (-906)	X	39V00037	X	X
8	2	23600002	BALL, STEEL, ALLOY, .250				X
7	1	23530000	PIN, SPRING, COIL TYPE, 3/32 X 3/8, SST				
6	1	23350064	SPRING, COMPRESSION			X	X
5	1	23311016	SPRING, COMPRESSION			X	X
4	1	21430037	WASHER				X
3	1	21430022	WASHER				X
2	10	21411034	SCREW, CAP, SOCH, 1/4-28 X 5/8, ALY				
1	1	21411033	SCREW, CAP, SOCH, 5/16-24 X 1/2, ALY, SLFLKG				X



SEE IS1021 FOR SERVICE INSTRUCTIONS

LUBRICATE ALL SEALS WITH CLEAN HYDRAULIC OIL PRIOR TO ASSEMBLY

DO NOT USE SILICONE BASED LUBRICANTS



PARTS LIST



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

ASSEMBLIES AFFECTED

PARTS LIST, ASSY, WS, DA, CGS, CM, 5500

10-0212-02

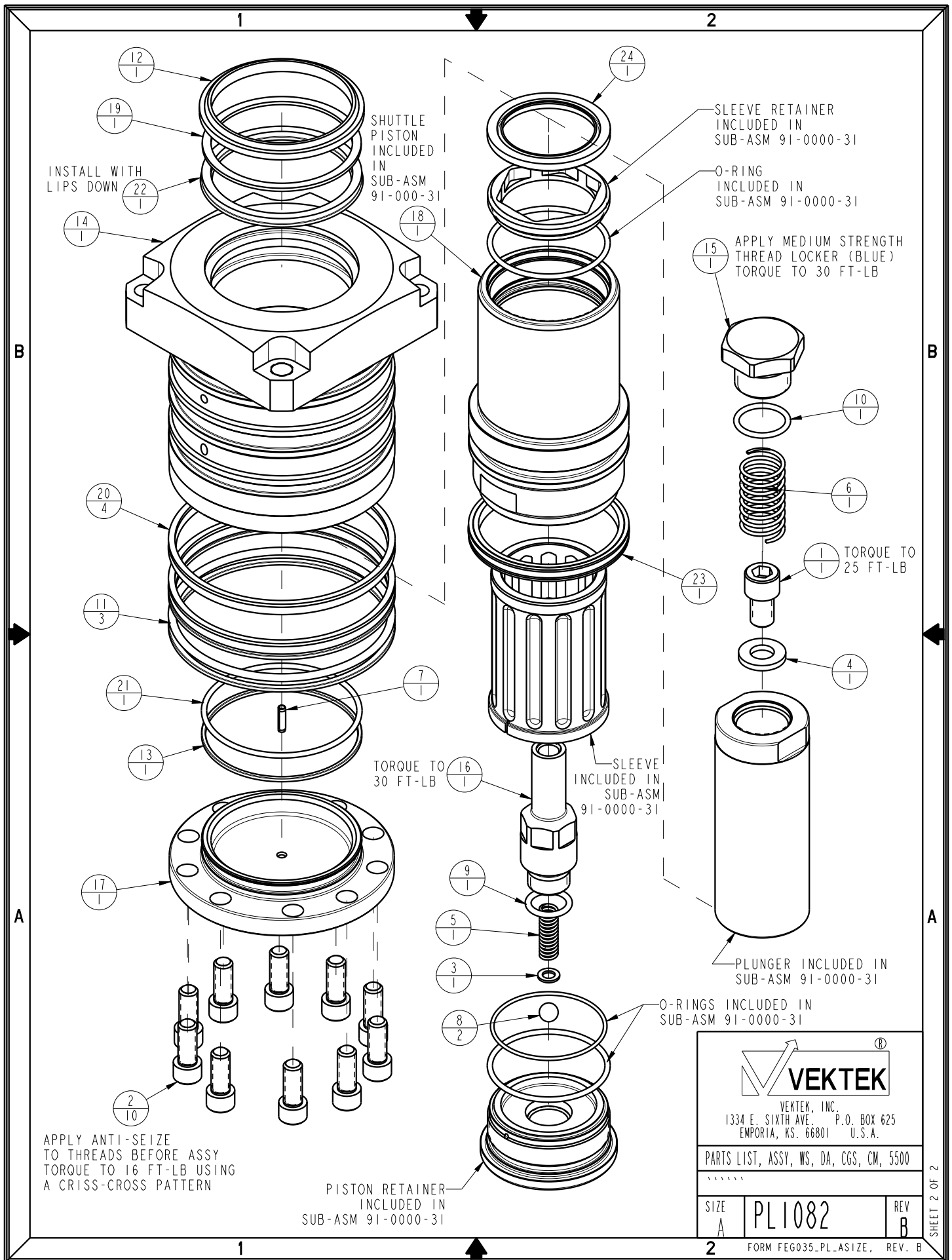
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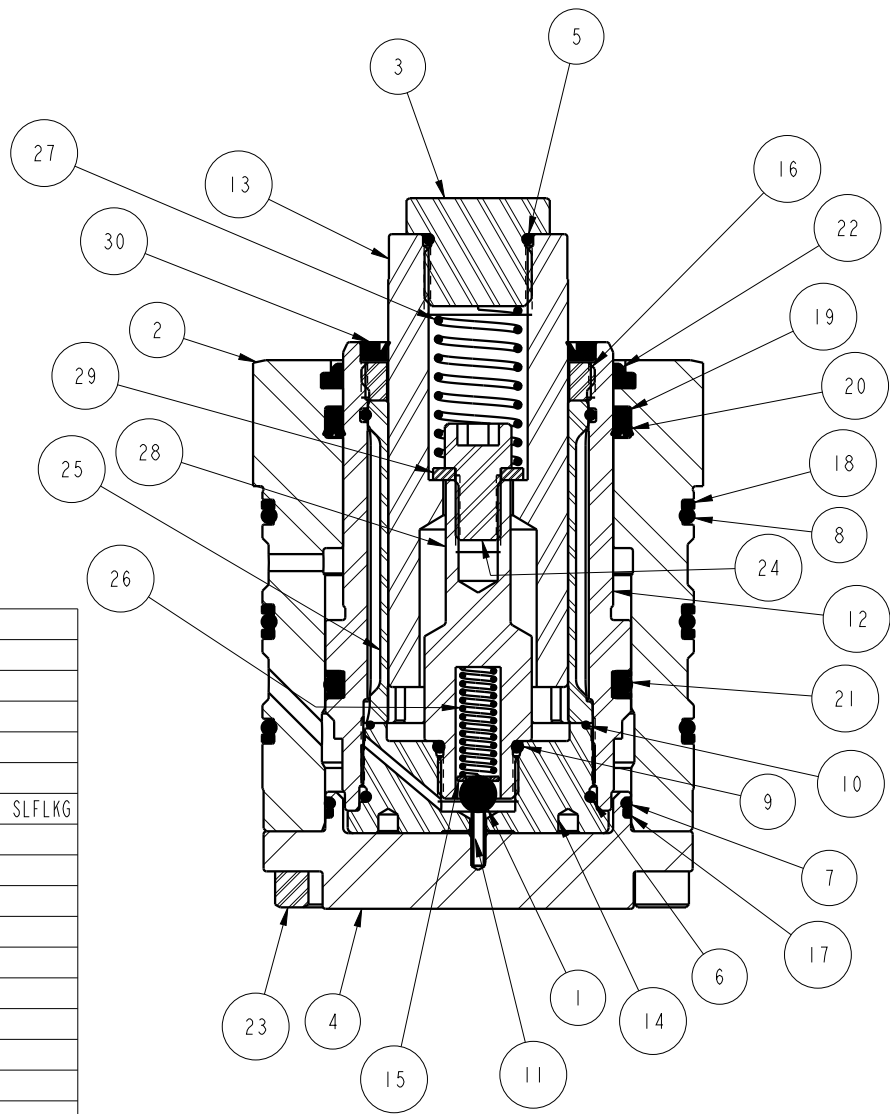
SIZE
A

PL1082

REV
B


B	2785	RELEASE	MAJ	1-12-15
REV	IN ACCORDANCE WITH ECN	EFFECTIVE DATE	REVISED BY	DATE
DRW BY: ALUTHI	DRAWING STATUS: Released			
DATE: 8-12-10	PRODUCTION APPROVED FOR RELEASED STATUS ONLY			





30	WIPER,PRESS-IN, (1-1/4)
29	WASHER
28	STUD, WS, DA, CGS, 5500
27	SPRING, COMPRESSION
26	SPRING, COMPRESSION
25	SLEEVE, WS, DA, CGS, 5500
24	SCREW, CAP, SOCH, 5/16-24 X 1/2, ALY, SLFLKG
23	SCREW, CAP, SOCH, 1/4-28 X 5/8, ALY
22	WIPER,SNAP-IN, (1 7/8)
21	SEAL,T, (1-7/8X1/8X2-1/8)
20	SEAL, BEVEL, 1 7/8 X 1/8 X 2 1/8
19	BU RING,(-225)
18	BU RING,(-149)
17	BU RING,(-033)
16	RETAINER, SLEEVE, WS, DA, CGS, 5500
15	WASHER
14	RETAINER, PISTON, WS, DA, CGS, 5500
13	PLUNGER, WS, DA, CGS, 5500
12	PISTON, SHUTTLE, WS, DA, CGS, 5500
11	PIN, SPRING, COIL TYPE, 3/32 X 3/8, SST
10	O-RING, (5-142)
9	O-RING, (-906)
8	O-RING, (-149)
7	O-RING, (-033)
6	O-RING, (-029)
5	O-RING, (-016)
4	CAP, BODY, WS, DA, CGS, 5500
3	BOLT, CONTACT, WS, DA, CGS, 5500
2	BODY, WS, DA, CGS, CM, 5500
1	BALL, STEEL, ALLOY, .250
No.	DESCRIPTION

MODEL NUMBER	TOOL LIST
10-0212-02 10-0212-02F	1 & 1 1/8 wrenches 3/16 & 1/4 hex key 11/16 deep well socket

INSTALLATION INSTRUCTIONS	 VEKTEK <small>VEKTEK, INC. 1334 E. SIXTH AVE. P.O. BOX 625 EMPORIA, KS. 66801 U.S.A.</small>		
	INSTRUCTION SHEET, WS, DA, CGS, CM, 5500 ***** <table border="1" style="width: 100%;"> <tr> <td style="width: 20%;">SIZE A</td> <td style="width: 60%; text-align: center; font-size: 2em;">1S1021</td> <td style="width: 20%; text-align: right;">REV B</td> </tr> </table>	SIZE A	1S1021
SIZE A	1S1021	REV B	

B	2785	RELEASE	MAJ	1-12-15
REV	IN ACCORDANCE WITH ECN	EFFECTIVE DATE	REVISED BY	DATE
DRW BY:	ALUTHI	DRAWING STATUS: Released PRODUCTION APPROVED FOR RELEASED STATUS ONLY		
DATE:	8-12-10			

ASSEMBLIES AFFECTED
10-0212-02 10-0212-02F

SIZE A	1S1021	REV B
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1

2

READ ALL INSTRUCTIONS BEFORE DISASSEMBLY


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

DISASSEMBLY

1. Clamp work support body (2) in vise and using 3/16" hex key remove SHCS (23) from bottom cap (4). Remove bottom cap (4) from body (2) and remove o-ring (7) and back-up ring (17).
2. Slide shuttle piston (12) sub-assembly out of body (2). Remove wiper (22), back-up ring (19), bevel seal (20), o-rings (8) and back-up rings (18) from body (2). Remove T-seal (21) from shuttle piston (12).
3. Using 1" and 1 1/8" wrenches remove contact bolt (3) from plunger (13), remove spring (27) and o-ring (5).
4. Clamp shuttle piston (12) in vise clamping on the flats near the bottom. Remove SHCS (24) and washer (29), plunger can now be removed.
5. Using 1 1/16" deep well socket remove stud (28) from piston retainer (14) and remove o-ring (9) from stud. Remove spring (26), washer (15), and ball (1).
6. Using small flat blade screw driver, remove wiper (30) from shuttle piston (12). CAUTION: DO NOT DAMAGE INSIDE OF SLEEVE (25) OR SLEEVE RETAINER (16).
7. DO NOT REMOVE SLEEVE RETAINER (16) OR PISTON RETAINER (14) FROM SHUTTLE PISTON (12). DOING SO WILL VOID PRODUCT WARRANTY!
8. Clean all parts thoroughly and set aside to dry.

ASSEMBLY

1. Lubricate o-rings (5), (7) & (9), T-seal (21), bevel seal (20), back-up rings (17) & (19) and wiper (22) with clean hydraulic oil (Vektek 65-0010-01 or equivalent). Apply Loctite® primer N or equivalent to the threads of contact bolt (3), then allow to dry.
2. Install ball (1), washer (15), spring (26) into piston retainer (14) through top of shuttle piston (12). Install o-ring (9) on SAE 6 boss of stud (28). Torque stud into piston retainer, 30 ft-lb.
3. Press wiper (30) into top of shuttle piston (12) using only enough force to seat wiper into counterbore. CAUTION: EXCESS FORCE MAY CAUSE DAMAGE TO WIPER.
4. Slide plunger (13) into sleeve (25). Install washer (29) and SHCS (24), torque to 25 ft-lb. Install spring (27) into plunger (13). Install o-ring (5) onto contact bolt (3) and apply medium strength Loctite® (blue) to threads. Thread contact bolt (3) into plunger (13) and torque to 30 ft-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 (21) onto shuttle piston (12) 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 (20) 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. Install snap-in wiper (22) into body (2).
7. Slide shuttle piston (12) subassembly into body (2) bore. Shuttle piston should slide smoothly up and down in bore.
8. Install back-up ring (17) and o-ring (7) onto cap (4). Install cap (4) into body (2) with holes in proper orientation. Apply anti-seize to threads of SHCS (23), insert through cap and thread into body. Torque to 16 ft-lb using a criss-cross pattern.
9. Install o-rings (8) and back-up rings (18) onto body. Make sure back-up rings are not rolled.

		
VEKTEK, INC. 1334 E. SIXTH AVE. P.O. BOX 625 EMPORIA, KS. 66801 U.S.A.		
INSTRUCTION SHEET, WS, DA, CGS, CM, 5500 *****		
SIZE A	IS1021	REV B
FORM FEG035_PL_ASIZE, REV. B		

1

2