


33	WIPER,PRESS-IN, (3/4)
32	WASHER
31	WASHER
30	WASHER
29	STUD, WS, DA, CGS, 2750
28	SPRING, COMPRESSION
27	SPRING, COMPRESSION
26	SPRING, COMPRESSION
25	SLEEVE, WS, DA, CGS, 2750
24	SEAL,T, (1 3/16 X 1/8 X 1 7/16)
23	SEAL, BEVEL, 1 3/16 X 1/8 X 1 7/16
22	SCREW,CAP,SOCH,1/4-28 X 3/8,ALY,SLFLKG
21	BU RING,(-217)
20	BU RING,(-135)
19	RETAINER, SLEEVE, WS, DA, CGS, 2750
18	RETAINER, PISTON, WS, DA, CGS, 2750
17	PLUNGER, WS, DA, CGS, RPS, 2750
16	PISTON, SHUTTLE, WS, DA, CGS, 2750
15	PIN, SPRING, COIL TYPE, 3/32 X 3/8, SST
14	O-RING, (5-708)
13	O-RING, (-920)
12	O-RING, (-904)
11	O-RING, (-021)
10	O-RING, (41mm x 1.5)
9	O-RING, (33mm x 1.5)
8	O-RING, (-135)
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, CM, 2750
1	BALL, STEEL, ALLOY, .250
No.	DESCRIPTION

MODEL NUMBER	TOOL LIST
10-0208-03 10-0208-03F	1-7/8 SOCKET (6 pt.) 7/16, 5/8 & 11/16 wrenches 9/64 & 3/16 hex key 1/4 socket, 7/16 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, RPS, 2750 ***** SIZE A 1S1020 REV B

B	3060	RELEASE	DLG	7-18-16
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
10-0208-03
10-0208-03F

FORM FEG041-1S.AS1ZE, REV. B

SHEET 1 OF 2

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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 (28), washer (30) and ball (1). Remove o-rings (9) and (10) and press out wiper (33).
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 (13) 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 (16) sub-assembly out of body (2). Remove back-up ring (21), bevel seal (23), o-rings (8) and back-up rings (20) from body (2). Remove T-seal (24) from shuttle piston (16).
4. Using 5/8" and 11/16" wrenches remove contact bolt (3) from plunger (17), remove spring (27) and o-ring (7).
5. Clamp shuttle piston (16) in vise clamping on the flats near the bottom. Remove SHCS (22) and washer (32), plunger can now be removed.
6. Using 7/16" deep well socket remove stud (29) from piston retainer (18) and remove o-ring (12) from stud. Remove spring (26), washer (31), and ball (1).
7. Using small flat blade screw driver, remove wiper (33) from shuttle piston (16). CAUTION: DO NOT DAMAGE INSIDE OF SLEEVE (25) OR SLEEVE RETAINER (19).
8. DO NOT REMOVE SLEEVE RETAINER (19) OR PISTON RETAINER (18) FROM SHUTTLE PISTON (16). DOING SO WILL VOID PRODUCT WARRANTY!
9. Clean all parts thoroughly and set aside to dry.

ASSEMBLY

1. Lubricate o-rings (7), (9), (10), (12) & (13), T-seal (24), bevel seal (23) and back-up ring (21) with clean hydraulic oil (Vektek 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 (31), spring (26) into piston retainer (18) through top of shuttle piston (16). Install o-ring (12) on SAE 4 boss of stud (29). Torque stud into piston retainer, 16 ft-lb.
3. Press wiper (33) into top of shuttle piston (16) using only enough force to seat wiper into counterbore. CAUTION: EXCESS FORCE MAY CAUSE DAMAGE TO WIPER.
4. Slide plunger (17) into sleeve (25). Install washer (32) and SHCS (22), torque to 10 ft-lb. Install spring (27) into plunger (17). Install o-ring (7) onto contact bolt (3) and apply medium strength Loctite® (blue) to threads. Thread contact bolt (3) into plunger (17) 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 (24) onto shuttle piston (16) 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 (23) into body (2) with lips facing piston bore, push to bottom of groove, then install back-up ring (21). Make sure seals are not rolled.
7. Slide shuttle piston (16) 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 (13) 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. Install o-rings (8) and back-up rings (20) onto body. Make sure back-up rings are not rolled.
10. Press wiper (33) into top of return position sensor housing (6). Install ball (1), washer (30) and spring (28) into housing (6). Install housing cap (5) and tighten. Install o-rings (9) and (10) 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, CM, RPS, 2750		

SIZE A	IS1020	REV B
FORM FEG035_PL_ASIZE, REV. B		

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SHEET 2 OF 2