

SEE IS1023 FOR SERVICE INSTRUCTIONS.  
LUBRICATE ALL SEALS WITH CLEAN  
HYDRAULIC OIL PRIOR TO ASSEMBLY.  
DO NOT USE SILICONE BASED LUBRICANTS.



APPLY MEDIUM STRENGTH  
THREAD LOCKER (BLUE)  
TORQUE TO 9 Nm  
(80 IN-LB)

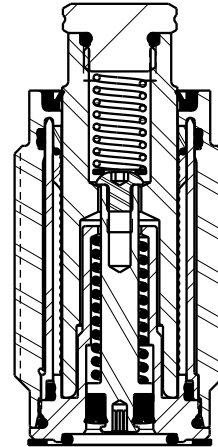
TORQUE TO  
1.25 Nm  
(11 IN-LB)

PLUNGER  
These work supports are  
fully rebuildable to full  
factory original capacity by  
any authorized Vektek repair  
facility. All seals can be  
replaced by any authorized  
repair facility.

BODY ASSEMBLY  
NOT REPLACEABLE  
TORQUE TO 67.8 Nm  
(50 FT-LB)

INSTALL LIP  
SIDE TOWARD  
BOTTOM OF PISTON

USE GASKET IF REPLACING  
41007103 OR USE O-RING  
(RECOMMENDED) IF ABIDES  
BY CAVITY ILMV100729 &  
ILMV100723 DO NOT USE  
BOTH SEALS



| NO  | QTY | PART NO  | DESCRIPTION                       | STD SEAL KIT | SPRING KIT |
|-----|-----|----------|-----------------------------------|--------------|------------|
| 1   | 1   | 21410075 | BHCS, 8-32 x 3/16 SELFLOCK, SST   |              |            |
| 2   | 1   | 21430001 | WASHER                            |              |            |
| 3   | 1   | 23350002 | SPRING, COMPRESSION               |              | X          |
| 4   | 1   | 23350059 | SPRING, COMPRESSION               |              | X          |
| 5   | 1   | 39000061 | O-RING, (-016)                    | X            |            |
| 6   | 1   | 39002009 | O-RING, (-012)                    | X            |            |
| 7   | 1   | 39050028 | SEAL, BEVEL, 3/16 X 7/16 X 1/8    | X            |            |
| 8   | 1   | 39054039 | BU RING, (-201)                   | X            |            |
| 9   | 1   | 41060802 | BOLT, CONTACT, WS, 17.8kN         |              |            |
| 10  | 1   | 81010817 | PISTON, WS, FA, HC, 4000          |              |            |
| 11  | 1   | 39H11062 | GASKET, (-213)                    | X            |            |
| 12  | 1   | 39V10023 | WIPER, PRESS-IN, (3/4), VBGV      | X            |            |
| N/A | N/A | 60100134 | KIT, SEAL, WS, FA, CM, HC, 17.8kN | NOTED        | N/A        |
| N/A | N/A | 61100222 | KIT, SPRING, WS, FA, HC, 4000     | N/A          | NOTED      |
| N/A | N/A | IS1023   | INSTRUCTION SHEET                 | N/A          | N/A        |

### PARTS LIST



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

ASSEMBLIES AFFECTED  
41070810

PARTS LIST, ASSY, WS, FA, CM, HC, 17.8kN  
DROP-IN REPLACEMENT FOR 41007103

SIZE  
A MPL1091

REV  
C

FORM FEG035\_PL\_ASIZE, REV. B

|         |                        |  |            |         |
|---------|------------------------|--|------------|---------|
| C       | 4244                   | RELEASE                                      | NPETERS    | 7/27/20 |
| REV     | IN ACCORDANCE WITH ECN | EFFECTIVE DATE                               | REVISED BY | DATE    |
| DRW BY: | ALS                    | <b>DRAWING STATUS: Released</b>              |            |         |
| DATE:   | 06/10/19               | PRODUCTION APPROVED FOR RELEASED STATUS ONLY |            |         |

SHEET 1 OF 1

|  |                          |                      |                         |                |
|--|--------------------------|----------------------|-------------------------|----------------|
| Vekttek LLC<br>1334 East Sixth Ave.<br>P.O. Box 625<br>Emporia, Ks. 66801<br>U.S.A.                        | <b>Instruction Sheet</b> | <b>IS</b>            | <b>1023</b>             |                |
|  |                          | <b>REV:</b>          | <b>D, I.A.W ECN4133</b> |                |
|  |                          | <b>REV. BY/DATE:</b> | <b>ALS</b>              | <b>5/11/20</b> |
|  |                          | <b>APPR/DATE:</b>    | <b>TDK</b>              | <b>5/11/20</b> |
| <b>TITLE: Disassembly/Assembly Instructions: Inch and Metric High Capacity Fluid Advance Work Supports</b> |                          |                      |                         |                |

**These work supports are fully rebuildable to full factory original capacity by any authorized Vekttek repair facility. All seals can be replaced by any authorized repair facility.**

**Read all instructions prior to disassembling!**

**Refer to the illustration on page three for component part numbers and tool list.**

## **Disassembly**

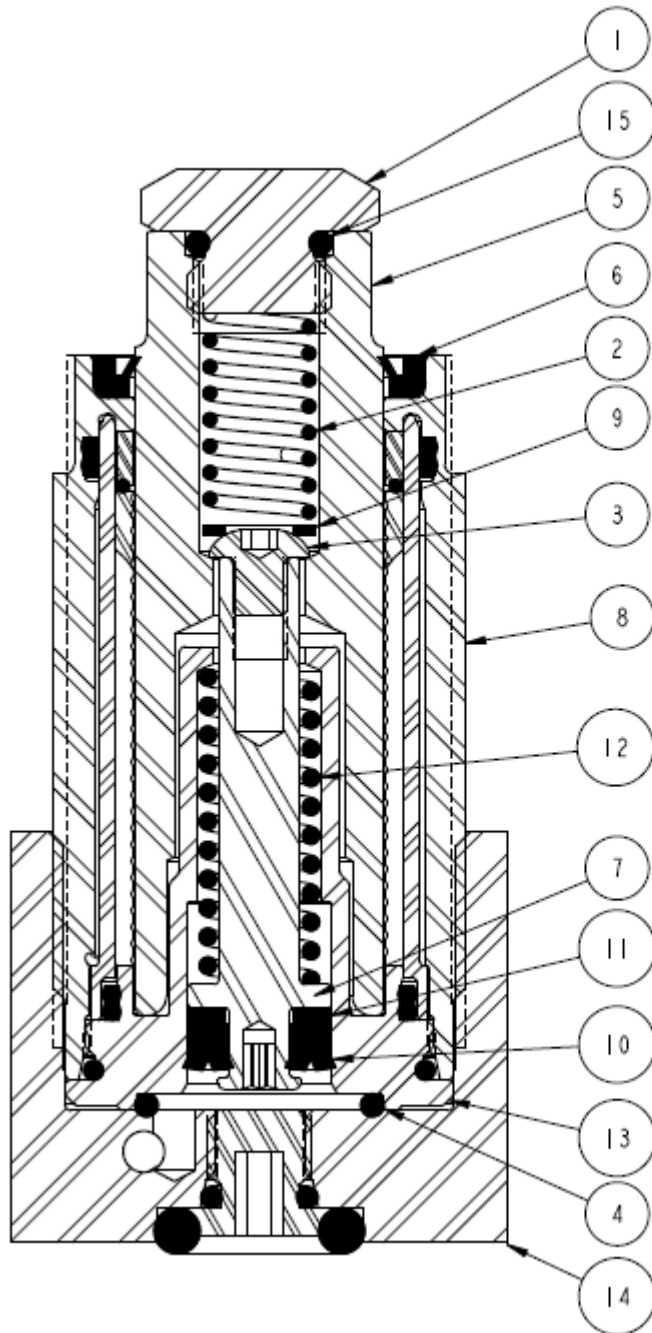
1. Unscrew the cartridge assembly (8) from the base (14) or fixture. **Caution- Use a six-point socket only. Other types of wrenches may damage the work support.**
2. Hold the plunger (5) stationary and unscrew the contact bolt (1). Remove contact o-ring (15) from contact bolt (1).
3. Remove the spring (2) and spacer (9) from inside the plunger (5).
4. Hold the piston (7) stationary and unscrew the cap screw (3).
5. Slide the plunger (5) out of the top of the cartridge assembly (8) and then push the piston (7) and spring (12) out of the retainer (13).
6. Remove the wiper (6) from the cartridge assembly (8).
7. Remove the piston seal (10) and piston seal back-up ring (11) from the piston (7), and the seal (4) from the base (14) or fixture.
8. Clean all parts thoroughly and set aside to dry.

|  |                   |               |                  |         |
|--|-------------------|---------------|------------------|---------|
| Vekttek LLC<br>1334 East Sixth Ave.<br>P.O. Box 625<br>Emporia, Ks. 66801<br>U.S.A.                        | Instruction Sheet | IS            | 1023             |         |
|  |                   | REV:          | D, I.A.W ECN4133 |         |
|  |                   | REV. BY/DATE: | ALS              | 5/11/20 |
|  |                   | APPR/DATE:    | TDK              | 5/11/20 |
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## Assembly

1. Lubricate all O-rings, gaskets, back-up rings and seals with clean hydraulic fluid (Vekttek 65-0010-01 or equivalent). Apply Loctite primer N® or equivalent to the threads of the contact bolt (1) and the retainer (13) and set aside to dry.
2. First install the back-up ring (11) then the piston seal (10) onto the piston (7) with the sealing lips of the piston seal (10) toward the piston (7) base.
3. Slide the spring (12) onto the piston (7) and insert both parts into the retainer (13).
4. Insert the plunger (5) into the top of the cartridge assembly (8).
5. While holding the piston (7) stationary insert the cap screw (3) into the top of the plunger (5) and thread the cap screw (3) into the piston (7). Tighten to the specification on the parts list.
6. Insert the flat washer (9) and the spring (2) into the top of the plunger (5).
7. Install contact o-ring (15) onto contact bolt (1). Apply one drop of Loctite 243® or equivalent to the threads of the contact bolt (1). While holding the plunger (5) stationary tighten the contact bolt (1) to the plunger (5). Tighten to the torque specification on the parts list.
8. If using o-ring, place the o-ring (4) flat in the bottom of the retainer (13). Insert the work support assembly into the base (14) or mounting cavity and tighten it to the torque specification on the parts list.  
**Caution- Use a six-point socket only. Other types of wrenches may damage the work support. Note- Use o-ring if cavity abides by ILS100730 or ILMV100723. Use o-ring OR gasket, not both.**
9. If using gasket, place the gasket (4) flat in the bottom of the base (14) or mounting cavity. Insert the work support assembly into the base (14) or mounting cavity and tighten it to the torque specification on the parts list.  
**Caution- Use a six-point socket only. Other types of wrenches may damage the work support.**

|  |                          |                              |                |
|--|--------------------------|------------------------------|----------------|
| <b>Vekttek LLC</b><br>1334 East Sixth Ave.<br>P.O. Box 625<br>Emporia, Ks. 66801<br>U.S.A.                 | <b>Instruction Sheet</b> | <b>IS 1023</b>               |                |
|  |                          | <b>REV: D, I.A.W ECN4133</b> |                |
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|             |                    |
|-------------|--------------------|
| 15          | CONTACT O-RING     |
| 14          | BASE               |
| 13          | RETAINER           |
| 12          | CONTACT SPRING     |
| 11          | BACK-UP RING       |
| 10          | PISTON SEAL        |
| 9           | FLAT WASHER        |
| 8           | CARTRIDGE ASSY     |
| 7           | PISTON             |
| 6           | WIPER              |
| 5           | PLUNGER            |
| 4           | SEAL               |
| 3           | CAP SCREW          |
| 2           | CONTACT SPRING     |
| 1           | CONTACT BOLT       |
| <b>Item</b> | <b>Description</b> |