The Civacon MaxAir Emergency Valve is designed to provide long dependable service life when the emergency valve is opened prior to loading. The correct method of actuating the emergency valve design is to use a pneumatic control valve (CivaControl<sup>™</sup> or equivalent equipment) to route air to open the emergency valve. By using this process, the valve will open fully allowing optimum flow with minimal pressure drop to minimize static generation. It also seals product from the air system.

If the emergency value is not opened with air prior to loading the compartment there is a possibility that a small amount of product can enter the air system in the value. This loading procedure is not recommended.

Inspect the air lines between the controller and the emergency valve to determine if product has entered the air system. If product is detected, we recommend you install a Seal Kit for the air cylinder portion on the emergency valve. It is important that the seals are installed per the instructions in the kit to eliminate product from entering the air system in the future. In addition any product found in the air lines going to the valve must be blown out using compressed air.

### WARNING!!

CIVACON products should be used in compliance with the applicable federal, state and local laws and regulations. Product selection should be based on physical specifications and limitations, compatibility with the environment, and the material being handled.

#### CIVACON MAKES NO WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

## **TECHNICAL ASSISTANCE**

If at any time during the installation a question arises that is not covered in this manual or with any other applicable documents feel free to call the Customer Service Department or visit our website at **www.civacon.com**.

In the U.S., call 1-888-526-5657 In all other countries, call your local agent.



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#### MAXAIR SEAL REPAIR KIT, PETRO VALVE INSTRUCTIONS

P/N: 13141PA

Rev.A, JAN., 2017



# Air Operated Internal Valve For Petroleum Cargo Tanks

Seal Repair Procedure





# Figure 1 - Air Operated Internal Valve Section View

ITEM	PART NUMBER	DESCRIPTION	QTY
2	12470	O-Ring, Viton GF	
3	12471	O-Ring, Buna	1
4	12469	Seal, U-Cup, Polyurethane	1
5	13138	Poppet, Machined	1
7	12305	Seal, Wiper, FKM/Viton	1
15	12303	O-Ring, Buna	1
16	12407	Piston, Machined	1
17	13137	O-Ring, Viton GFLT	2
18	6959	O-Ring, Tef-O-Sil, supplied with 13139RK Kit	1
18	9456	O-Ring, Viton GF, supplied with 13139VRK Kit	1
26	13140	3" Piston Bearing	1
27	13171	Back-up Ring, PTFE	1
28	12244	Silicone Compound Lubricant	1

## **REPAIR PROCEDURE**

- 1. Review Figure 1 before disassembling the valve
- 2. Remove bolts/washers (19). This will allow the end cap (1) to be removed.
- 3. Remove nut and lock washer (13)(14). This will allow the piston (16), and poppet (5) to be removed from the shaft (12).
- 4. For 13139RK-P and 1313VRK-P, Replace piston (16), u-cup seal (4), o-ring (15), poppet (5), o-rings (17), back-up rings (27), and wiper seal (7).
- 5. For 13139RK and 1313VRK,. Replace u-cup seal (4),o-ring (15), o-rings (17), back-up rings (27), and wiper seal (7).
- 6. Install wiper seal (7), o-rings (17), and back up rings (27) into poppet assembly (25). Ensure back up rings are installed on bottom side of o-rings as shown in figure 1.
- 7. Generously apply lubricant (28) to wiper seal (7), o-rings (17), and shaft (12).
- 8. Install poppet assembly (5) onto shaft (12) being careful not to damage o-rings (17).
- 9. Install u-cup seal (4) into piston (16)
- 10.Generously apply lubricant (28) to o-ring (15), u-cup seal (4) and poppet bore (5). Ensure Bearing (26) is installed in piston assembly.
- 11.Re-install spring (6), new piston assembly (16), seals from kit (4 & 15), and nut/washer (13)(14). Tighten nut (13) until piston (26) is fully seated onto shaft (12).
- 12.Remove o-rings (2)(3) from end cap (1), being careful not to scratch o-ring grooves, and replace with new seals from kit.
- 13. Apply lubricant (28) to end cap o-rings (2)(3). Re-install end cap (1), install lock washers and securely tighten bolts.

## **ORDERING SPECIFICATIONS**

Part Number	Description	Manufactures Date
13139VRK	Seal Repair Kit (Viton)	After 7/31/17
13139RK	Seal Repair Kit (Tef-O-Sil)	After 7/31/17
13139VRK-P	Seal Repair Kit with Poppet (Viton)	Before 7/31/17
13139RK-P	Seal Repair Kit with Poppet (Tef-O-Sil)	Before 7/31/17