

The 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™ 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 valve 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 valve. **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 Piston Seal Kit (Part#: 12150) 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.



PHONE: (816) 741-6600 • (888) 526-5657 • Fax: (816) 741-1061
4304 Mattox Road • Kansas City, MO 64150 • www.civacon.com



civacon
AN **opw** FLUID TRANSFER GROUP COMPANY

MaxAir™ 5" x 4" Air Operated Internal Valve Repair Procedure

P/N: 12151PA

Rev.B, MAY., 2011



MaxAir™ 5" x 4" Air Operated Internal Valve For Petroleum Cargo Tanks

MaxAir™ Seal Repair Procedure



PHONE: (816) 741-6600 • (888) 526-5657 • Fax: (816) 741-1061
4304 Mattox Road • Kansas City, MO 64150 • www.civacon.com

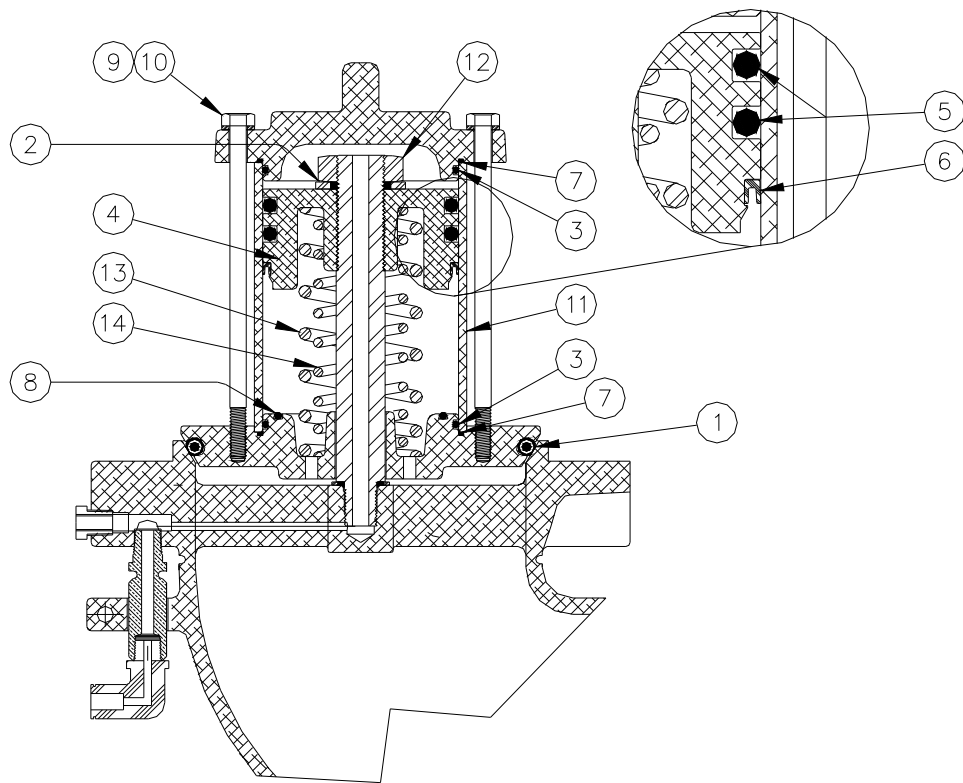


Figure 1 Air Operated Internal Valve Section View

BILL OF MATERIAL

ITEM	PART NUMBER	DESCRIPTION	QTY
1	6959	O-Ring, Tef-O-Sil, supplied with 12150 Kit	1
1	9456	O-Ring, Viton GF, supplied with 12150-V Kit	1
2	6960	Seal Washer	1
3	6961	O-Ring, Buna-N	2
4	12056	Piston, O-Ring Style	1
5	12122	O-Ring, Fluorosilicone	2
6	6966	U-Cup Seal, Teflon	1
7	6964	O-Ring, Viton	2
8	6969	O-Ring, Viton	1

REPAIR PROCEDURE

1. Review Figure 1 before disassembling the valve
2. Clamp the valve body in a vise
3. Remove air cylinder screws (9) and lock washers (10) from top of cap, remove cap from assembly (No spring tension in this area)
4. Slide cylinder body (11) off the end of the piston. Replace o-rings (3) and (7) in the cap (No spring tension in this area)
5. Remove hex nut (12) from shaft (No spring tension in this area)
6. Unscrew piston from the shaft and remove springs (13,14) (**Caution minimal spring tension**) While unscrewing piston spring tension will be reduced) **DO NOT USE OLD PISTON**
7. Remove disc from shaft and inspect seat of valve for scratches or gouges and replace Tef-O-Sil o-ring (1), and o-rings (3, 7). If valve seat is damaged valve will need to be replaced.
8. Inspect air cylinder body (11) for scratches, replace if necessary
9. Install disc with new seals (1, 3 & 7) and springs (13, 14)
10. Screw on new piston until threads bottom out. (**DO NOT USE ANY TOOLS ON OUTER PISTON DIAMETER**)
11. Refit new seal washer (2) (supplied in kit), install hex nut (12)
12. Lubricate air cylinder o-rings (5, 6) and slide cylinder body (11) gently over the o-rings and down past the wiper seal ensuring that seals are not damaged.
13. Refit cap with cylinder screws (9) and lock washers (10). Add blue loctite to threads of each screw.
14. Test valve to verify proper operation. Activate the valve with an air supply (80 psi minimum). Actuate the valve several times to ensure proper operation. With valve open, submerge entire valve in clear water. Wait 20 seconds and check for air bubbles. Air bubbles would indicate a leak and further repair would be required.

ORDERING SPECIFICATIONS

MaxAir™ Seal Repair Kit

12150 MaxAir™ Seal/Piston Repair Kit (Tef-O-Sil)

12150-V MaxAir™ Seal/Piston Repair Kit (Viton GF)