

MCP “CIVACONTROL” OPERATION MANUAL

The purpose of this document is to explain how the MCP CIVACONTROL® air control system operates and to communicate the capabilities of this system. Each air connection has been identified with descriptions below. A photograph of the air control manifold has been included as a reference, as well as a suggested plumbing schematic.

The air control manifold is designed with a master air valve that is used to supply air to the individual control valves. One of the safety features of this air control manifold is that the master can be closed (Knob pushed in) and will automatically close all the other control valves. Not only does this close off all (internal) loading valves, it pneumatically locks the control valves in the closed position with air pressure. The system can be plumbed in such a manner to allow the same automatic shut off from a remote location at the front of the tank using an emergency stop valve.

This air control system has been designed to protect the tank during loading or unloading. The master valve, pulled out, sends an automatic diagnostic signal to open the sequentially plumbed vapor vents and emergency valves. The signal is then returned to the individual control valves. At this point, an indicator can be plumbed into the system to physically show the signal has been returned to the individual control valves. The manifold poppets can't be opened until they have received the automatic diagnostic confirmation that the vapor recovery vents from each compartment have been opened.

This air control system has the ability to enable access to the API loading adaptors with the use of our guard bar lock. A protective bar is positioned over the ends of the API loading adaptors and cannot be rotated out of the way until an air valve that is located in a locked cabinet is actuated. This allows the guard bar to be lifted to load or unload.

WARNING:

Never lubricate or introduce non-recommended oils or solvents (WD40® or alcohol) into the CIVACONTROL® air control system. Please lubricate the system only with the recommended oils that are made for air controls on vehicles. The non-recommended oils or solvents can attack seals and cause damage to the valves resulting in excessive wear, leaking valves and even premature failures.

1

This is the primary air supply for ports 2 and 4. Air to this port should be the return air from the vapor vents.

2

With air supplying port 1, this port is air out with knob pulled out.

3

This is an exhaust port with flow from port 2 to port 3 with knob pushed in.

4

With air supplying port 1, this port is air out with knob pushed in.

5

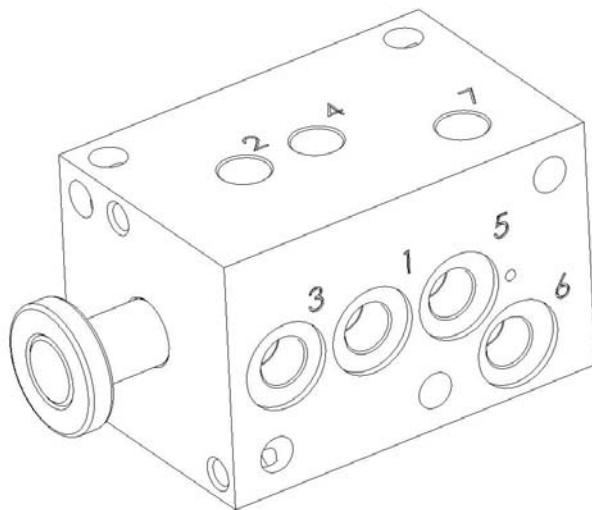
This is an exhaust port with flow from port 4 to port 5 with knob pulled out.

6

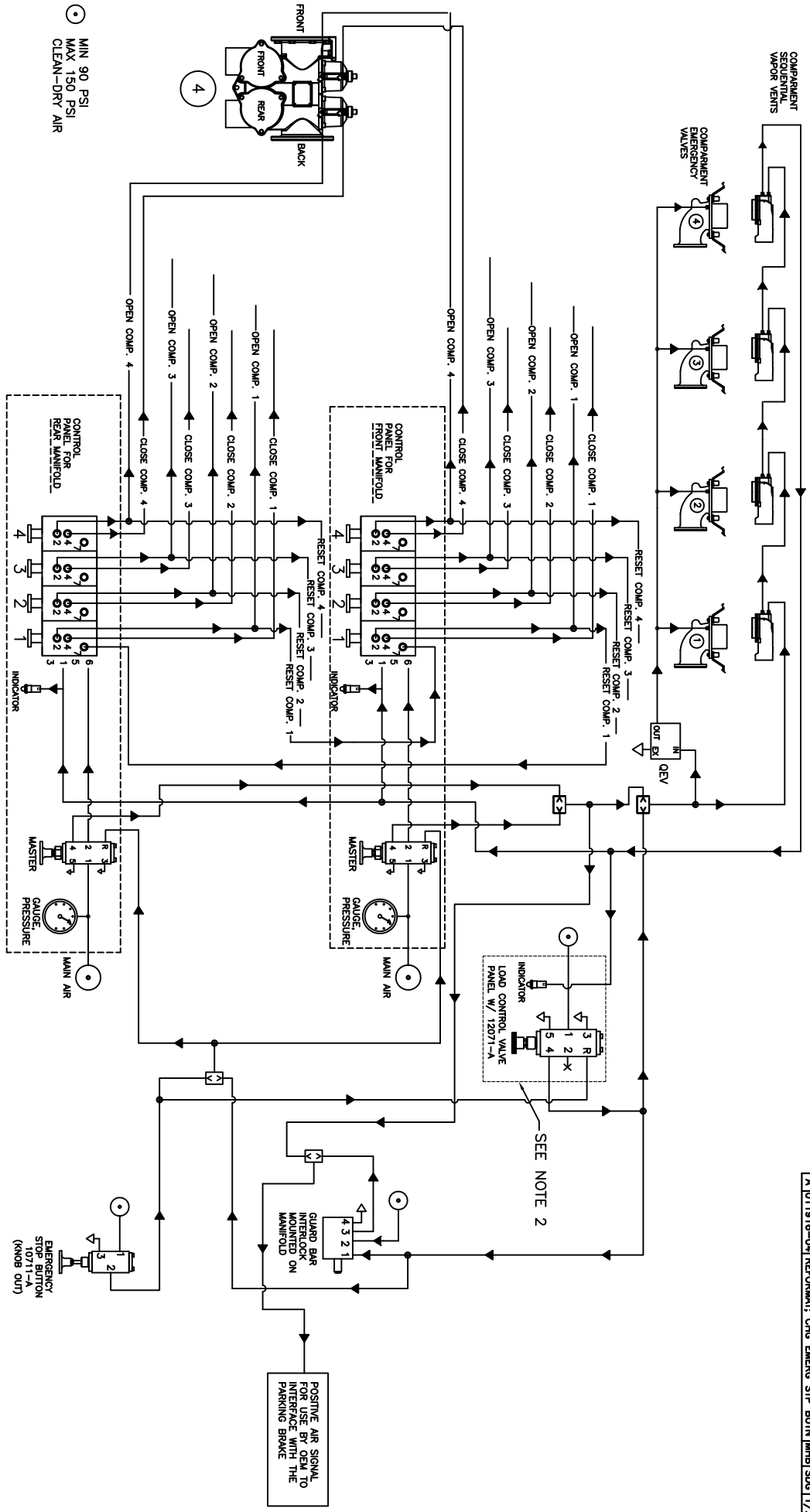
Air to this port will cause all knobs in the stack to pull in and remain retracted until air pressure is released. This is typically called the “common reset port”. For example, when air is applied to port 6 all compartment valves on an MCP-4 will pull in and remain retracted.

7

Air to this port will cause only the knob of the block it is on to pull in and remain retracted until air pressure is released. This is typically called the “individual reset port”. For example, when air is applied to port 7 on the compartment 3 valve of an MCP-4, only the compartment 3 valve will pull in and remain retracted.



REVISION		DESCRIPTION	BY	CHKD	DATE
LTR	ESR #	DESCRIPTION			
A	011916-04	REFORMATT: CHG EMERG STIP BLTN	MHB	SDG	1/20/16



MIN 90 PSI
MAX 150 PSI
CLEAN-DRY AIR

- MOUNTING NOTES**
- 1) LOAD CONTROL VALVE MANIFOLD TO BE MOUNT ABOVE THE MANIFOLD.
 - 2) THE CIVACONTROL MANIFOLD CONTROL PANELS CONTROL UNLOADING OPERATIONS ONLY. MOUNT EACH PANEL CLOSE TO OTHER RELEVANT UNLOADING CONTROLS ie METER OR HOSE REEL CONTROL, OR TO CUSTOMERS REQUIREMENTS

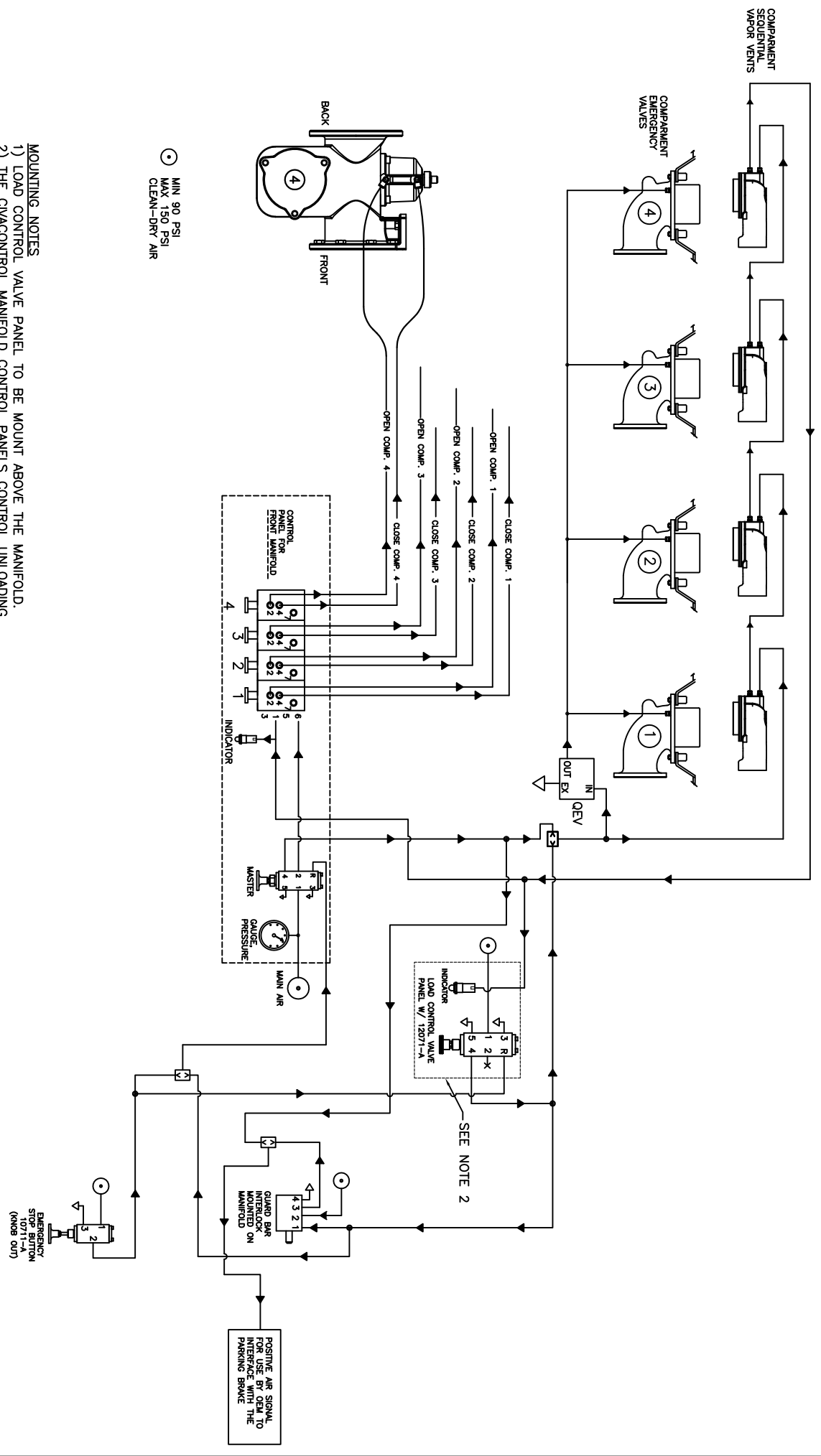
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CIVACON
PART OF OPW
4504 WATKINS ROAD - WATKINS CRT, MO 64110 - PHONE: (816) 741-0600 - FAX: (816) 741-1041

TOLERANCES UNLESS OTHERWISE SPECIFIED:
SURFACE FINISH: 63 μIN.
FRACTIONAL: ± 1/16
DECIMAL: .00 ± 0.30
ANGLE: ± 1°

TITLE: DUAL MFLD CNTRL, OP. TWO PUMPS, INDVL LOCKOUT
DRAWN BY: JJB
DATE: 5/5/2015
SCALE: -
P/N: MCP_A_1

REVISION		BY	CHKD	DATE
LTR	ESR #			
DESCRIPTION		MHB	SDG	1/19/16
A	011916-04	REFORMATTED		



- MOUNTING NOTES**
- 1) LOAD CONTROL VALVE PANEL TO BE MOUNT ABOVE THE MANIFOLD.
 - 2) THE CIVACONTROL MANIFOLD CONTROL PANELS CONTROL UNLOADING OPERATIONS ONLY. MOUNT EACH PANEL CLOSE TO OTHER RELEVANT UNLOADING CONTROLS i.e METER OR HOSE REEL CONTROL, OR TO CUSTOMERS REQUIREMENTS

<p>THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CIVAACON. IT IS SUBMITTED ON THE CONDITION THAT THE DESIGNS CONTAINED HEREIN, AND ARE SUBJECT TO RETURN UPON DEMAND.</p>		<p>CIVAACON</p> <p>PART OF OPW</p> <p>4000 WATSON ROAD - BIRMINGHAM, AL 35202 - PHONE (205) 291-4000 - FAX (205) 291-1081</p>	
MATERIAL:	TOLERANCES UNLESS OTHERWISE SPECIFIED	DATE:	SCALE:
	SURFACE FINISH: 63 UN.	12/3/15	1:1
	FRAC TIONAL: 1/16	JOB:	P/No:
	DECIMAL: .0005-.010	DATE:	MCP_B_1
	ANGLES: 3:1		