

OPERATOR'S MANUAL

6744X, 6748X

INCLUDING: INSTALLATION, OPERATION AND PARTS LIST

RELEASED: 05-07-13
REVISED: 02-08-19
(REV. E)

67480, 67481, 67482 CROSS-OVER KIT

67448, 67449 CROSS-OVER CONTROLLER

FOR RM552H-XXX-XX, RM552S-XXX-XX, RM051S-XXX-XX-B, RM052S-XXX-XX and RM072S-XXX-XX RAMS.



**READ THIS MANUAL CAREFULLY BEFORE INSTALLING,
OPERATING OR SERVICING THIS EQUIPMENT.**

It is the responsibility of the employer to place this information in the hands of the operator. Keep for future reference.
The original language of this manual is English.

67448 FOR RM552H-XXX-XX, RM552S-XXX-XX, RM052S-XXX-XX AND RM072S-XXX-XX RAMS

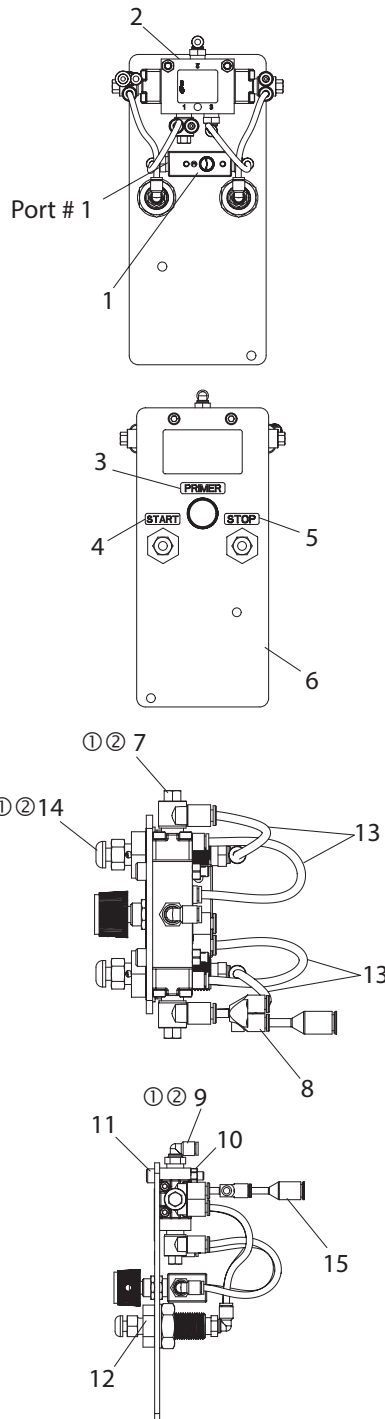
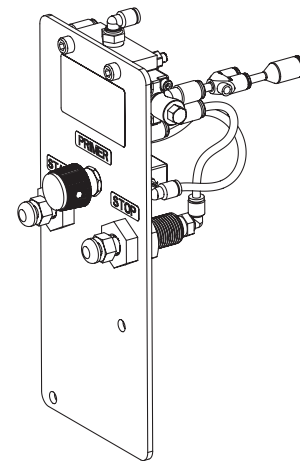


Figure 1

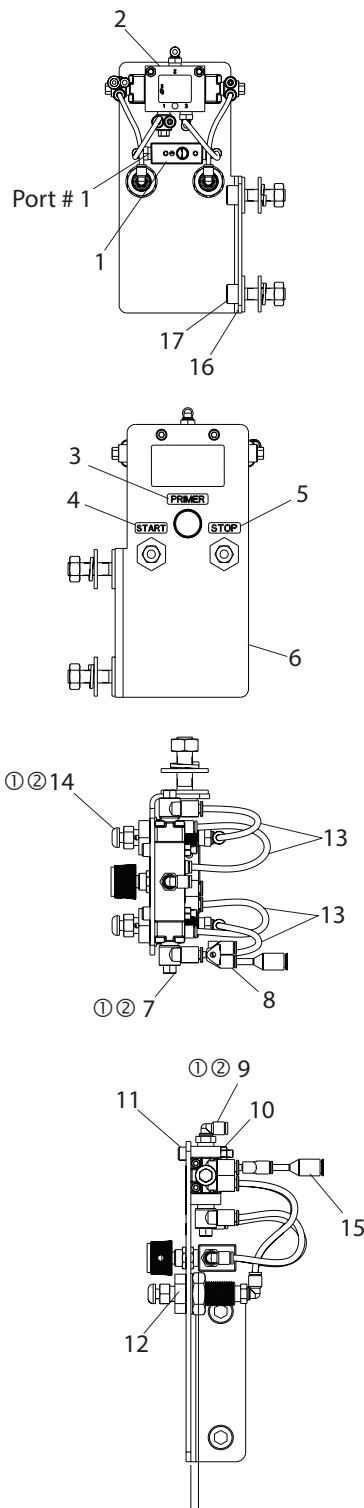


**67448 Cross-over Controller
Figure 2**

PART LIST 67448

Item	Description (size)	Qty	Part No.
1	Valve Assembly, Panel Button	(1)	224-C
2	Valve (includes item 14)	(1)	5030-33
3	Label, Primer	(1)	97001
4	Label, Start	(1)	96999
5	Label, Stop	(1)	97000
6	Bracket, Mounting	(1)	96992
7	Connector, Branch	(3)	97004
8	Connector, Plug-in Y	(1)	97003
9	Male Elbow	(6)	59756-4
10	Hex Nut	(2)	16M4JB6B
11	Socket Head Cap Screw	(2)	119M2A162B
12	Connector, Bulk Head	(2)	97824
13	Tubing (6" Long)	(4)	97825-(Ø)
14	Button Bleeder Assembly	(2)	24130
15	Reducer	(1)	59765-4
	Tubing	(8) FT	59675-XXX-XX
	Elbow	(1)	59756-56
Ø	Bulk Tubing	(1)	97825-XXX-X

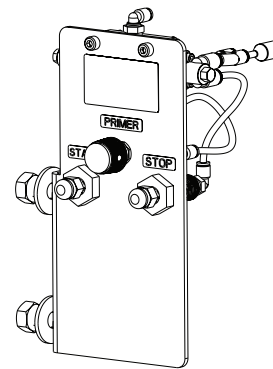
Reference - see 6750X Low Level Cutoff Kit manual for
installation for Cross-over Kits



LUBRICATION / SEALANTS

- ① Apply PTFE tape to all NPT male threads before assembly.
- ② Assemble all NPT threads to hand tight plus 1-2 turns.

Figure 3



67449 Cross-over Controller
Figure 4

PART LIST 67449

Item	Description (size)	Qty	Part No.
1	Valve Assembly, Panel Button	(1)	224-C
2	Valve (includes item 14)	(1)	5030-33
3	Label, Primer	(1)	97001
4	Label, Start	(1)	96999
5	Label, Stop	(1)	97000
6	Bracket, Mounting	(1)	96993
7	Connector, Branch	(3)	97004
8	Connector, Plug-in Y	(1)	97003
9	Male Elbow	(6)	59756-4
10	Hex Nut	(2)	16M4JB6B
11	Socket Head Cap Screw	(2)	119M2A162B
12	Connector, Bulk Head	(2)	97824
13	Tubing (6" Long)	(4)	97825-(●)
14	Button Bleeder Assembly	(2)	24130
15	Reducer	(1)	59765-4
*16	Washer, M10 Fender	(4)	96756
*17	Cap Screw (M10 x 40)	(2)	96775
*18	Lock Washer (10.2 mm id) Not shown	(2)	96753918
*19	Nut (M10 x 1.5 - 6h) Not shown	(2)	96691
	Bulk Tubing	(8) FT	59675-XXX-X
	Elbow	(1)	59756-56
①	Bulk Tubing	(1)	97825-XXX-X

Note: Parts marked with (*) are used to attach cross over controller to ram assembly

CROSS-OVER CONTROLLER INSTALLATION ON RAMS

1. Install Cross-Over Controller assembly (67448) for RM552H-XXX-XX, RM552S-XXX-XX, RM052S-XXX-XX and RM072S-XXX-XX Rams. (see Figures 5 & 7, pages 4 & 6).
 - a. Remove the two Cap Screws (96719) that hold the Rotary Lever Valve (M512LR) to the Ram.
 - b. Place Cross-Over Controller assembly behind Rotary Lever Valve and reattach the Rotary Lever Valve using the two Cap Screws.
 - c. Repeat steps a-b for second Ram.
2. Install Cross-Over Controller assembly (67449) for RM051S-XXX-XX-B Ram (see Figures 6 & 7, page 5 & 6).
 - a. Remove the Cap Screws (96702170) and Washers (96756) that are on the Ram. (Only needed on models SP0443X2XXXXXXX and NP322XX4XR7-XX)
 - b. Attach Cross-Over Controller assembly to upper bolt pattern of Ram Head (Ref PN 97543-1 on Ram Assembly) using (16) Washers, (17) Cap Screws, (18) Lock Washers, and (19) Nuts (see figure 6, page 5).
 - c. Repeat steps a-b for second Ram.
3. Low Level Cutoff Kits (67500, 67501 or 67502) are required to make Cross-Over operational. Attach a Low Level Cutoff to both Rams, using instructions in the manual for the Low Level Cutoff kit.
4. Remove both Tubing's (94981-XXX-X) from the Low Level Cutoff on each Ram and discard.
5. Remove push-tubing fitting from Limit Valve Assembly (MQ3863) Port #2 and install tube fitting (59756-56) in Port #1.
Remove Exhaust Silencer from Limit Valve Assembly (MQ3863) Port #1 and install in Port #2.
Port #3 to remain open with no tubing connected.
Using (59675-XXX-X) Tubing, attach tubing to Port #1 on the Limit Valve Assembly (MQ3863) to the Low Level Cutoff to (15) Reducer attached to Port #1 on (2) Valve. Cut to length desired, approximately 48 inches (for Two Post RAM). Can be shorter for Single Post RAM. Repeat for the second Ram.
6. Using (94981-XXX-X) Tubing. Attach Tubing to pilot port on top of Valve (H254PS) closest to Port #3 of the Low Level Cutoff. Run Tubing to (7) Branch Connector at port #1 on (2) Valve. Cut to length and attach to the Branch Connector. Approximant length of Tubing is 45 inches (for Two Post RAM). Can be shorter for Single Post RAM. Repeat for second Ram.
7. Using (94981-XXX-X) Tubing. Attach Tubing to pilot port on top of Valve (H254PS) closest to Port #2 of the Low Level Cutoff. Run Tubing to (9) Male Elbow at port #2 on (2) Valve. Cut to length and attach to the Male Elbow. Approximant length of Tubing is 45 inches (for Two Post RAM). Can be shorter for Single Post RAM. Repeat for second Ram.
8. Using (94981-XXX-X) Tubing. Attach Tubing to (8) "Y" Connector at pilot port closest to port #1 on (2) Valve on the first Ram. Run Tubing to (7) Branch Connector at pilot port closest to port #3 on (2) Valve on the second Ram. Cut to length and attach to the Branch Connector.
9. Using (94981-XXX-X) Tubing. Attach Tubing to (7) Branch Connector at pilot port closest to port #3 on (2) Valve on the first Ram. Run Tubing to (8) "Y" Connector at pilot port closest to port #1 on (2) Valve on the second Ram. Cut to length and attach to the Branch Connector.
10. No tubing will be connected to port #3 on the Limit Valve Assembly (MQ3863) of the Low Level Cutoff.
11. **One Time Only:** When all air lines are connected, press the "Stop" button on each Ram to insure the valves are in the correct position.

OPERATION

1. Turn off the air supply to the pumps.
2. Raise the both Rams and place a drum of material into position.
3. Lower both Rams into the drums.
4. Press and hold the "Primer" button. This allows you to prime the pump. This has to be done on both Rams.
5. The system is now ready for operation.
6. Press the "Start" button on one of the Rams to start the pump.
7. When one drum becomes empty, the other pump will begin pumping by receiving a signal from the Ram with the empty drum.
8. **NOTE:** Priming operation will be required whenever there is a drum change.
9. In order to stop the system, press the "Stop" button on the Ram that needs to be stopped.

Cross-over
Controller

M512LR
Rotary Lever
Valve

96719
Cap Screw

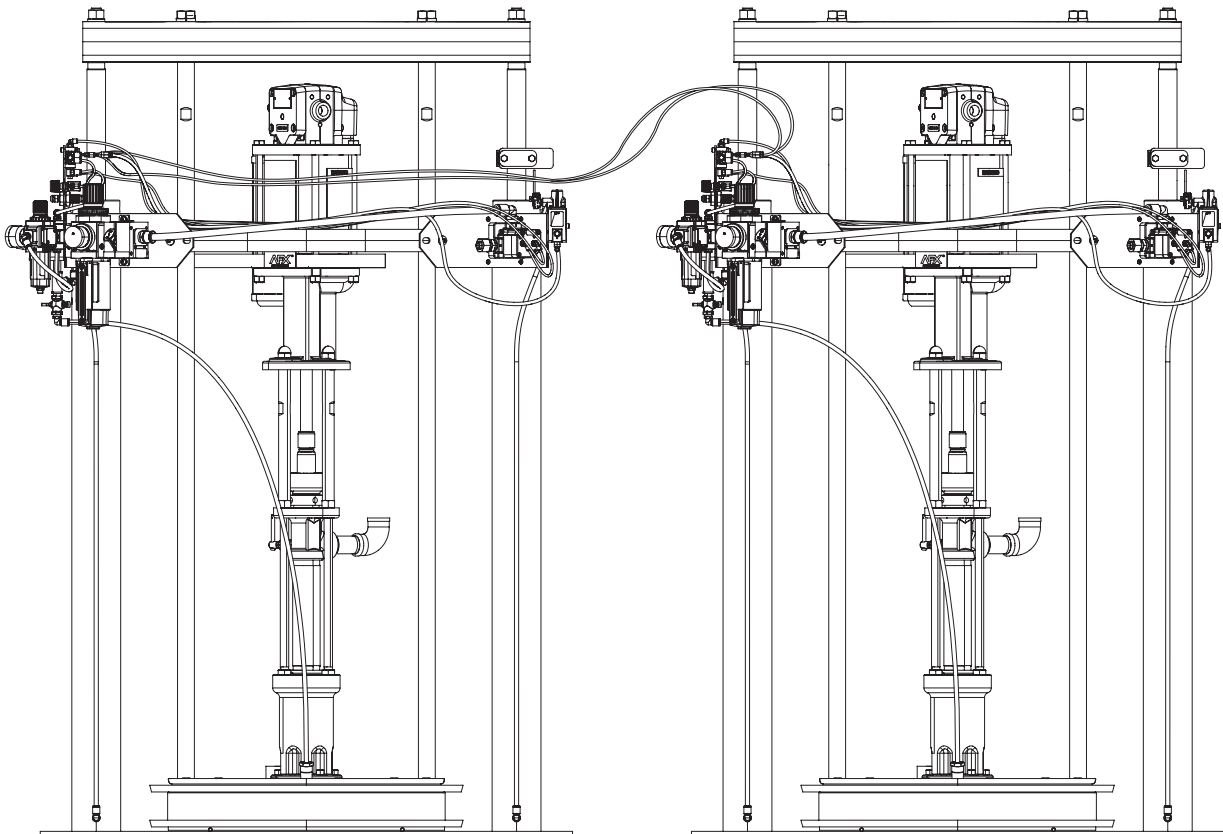
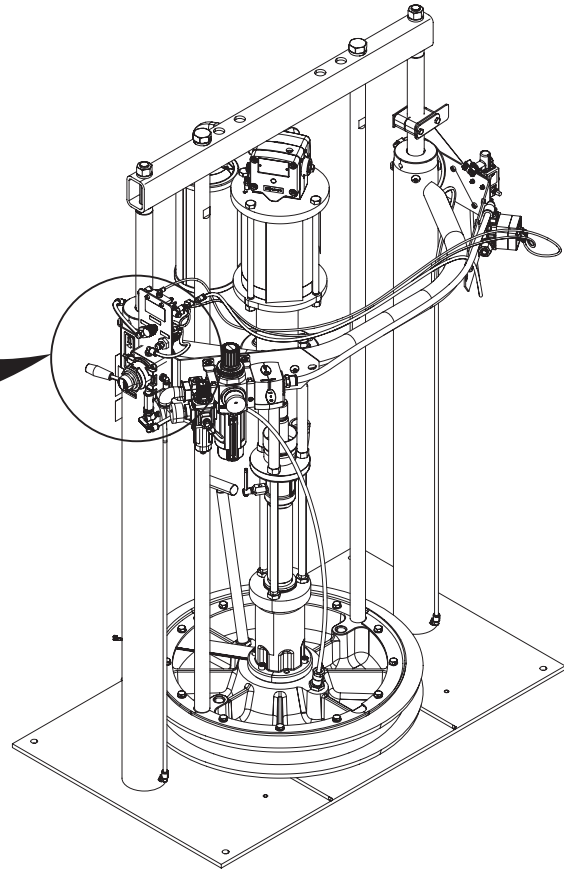


Figure 5

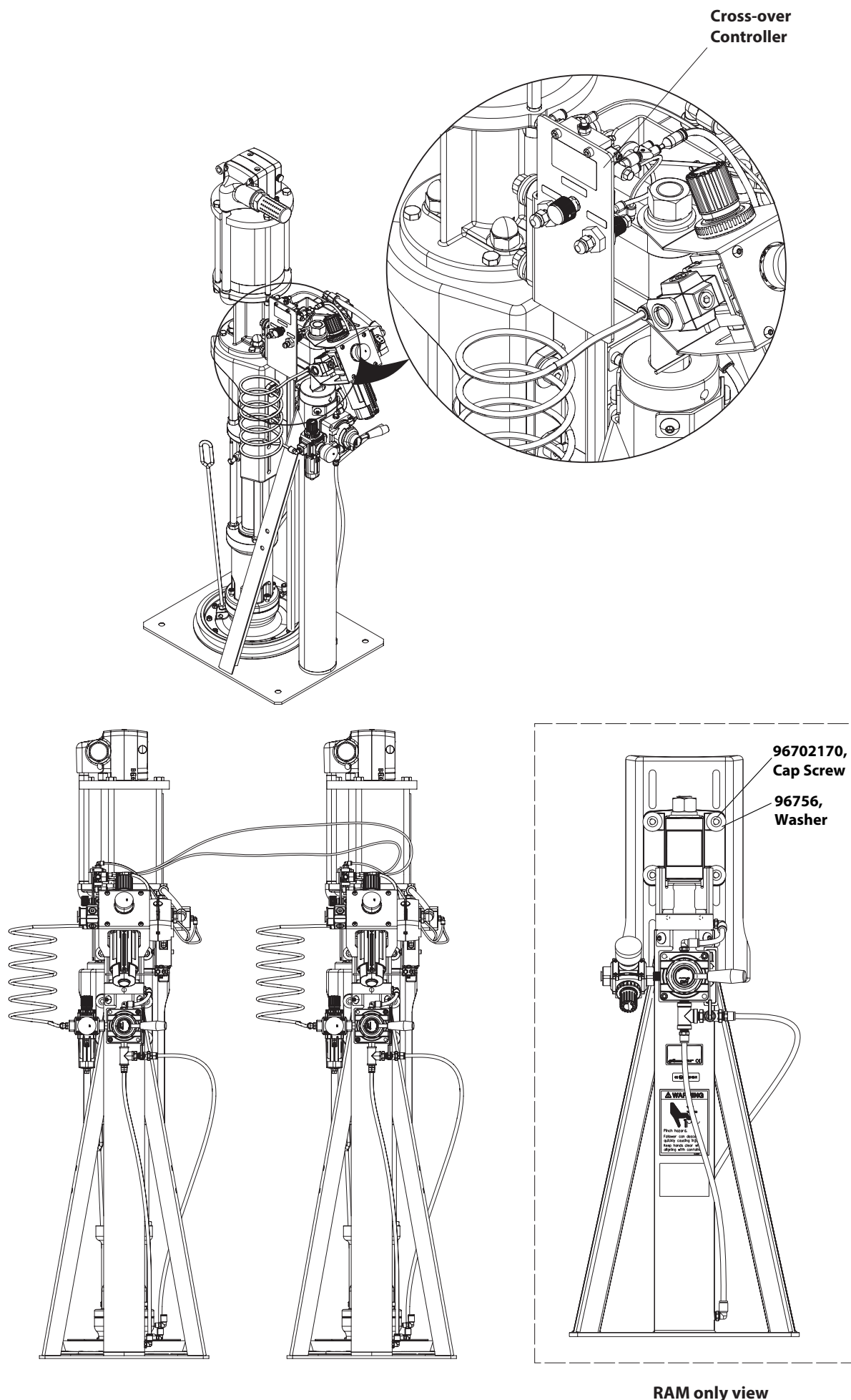


Figure 6

RAM only view

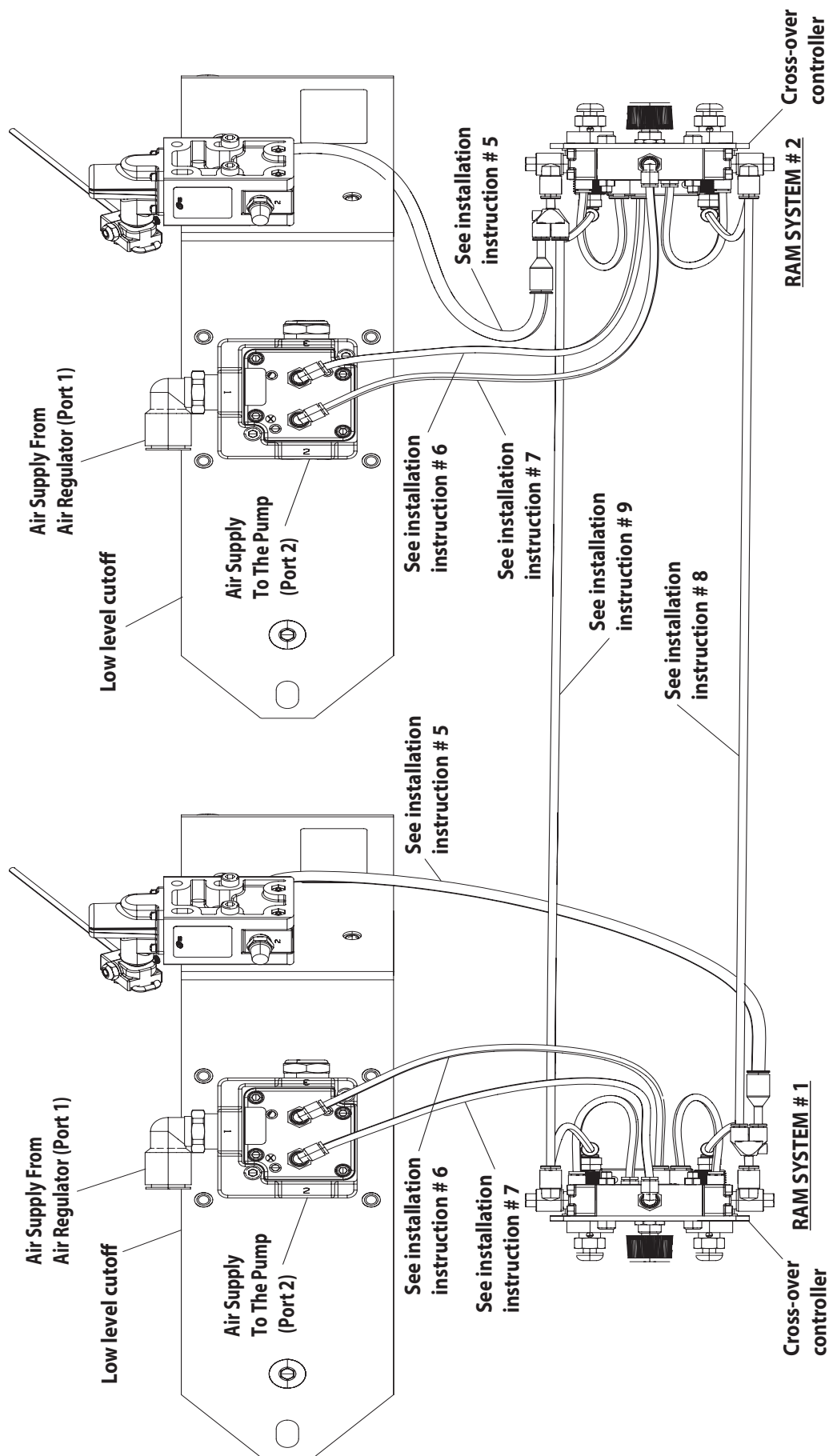


Figure 7

