

INSTALLATION INSTRUCTIONS and PARTS LIST for HERCU-LINK CONTROL VALVE RETRO-FIT KIT 27027

This instruction sheet provides information for service personnel to retro-fit the new control valve and limit paddle to HA2 Hercu-Link air chain hoists.

This sheet should be used in conjunction with the HA2 Hercu-Link Parts, Operation and Maintenance Manual, MHD56055.

PROCEDURES

Disassembly

Throughout this instruction sheet there are steps and procedures which, if not followed, may result in a hazard. Refer to HA2 Parts, Operation and Maintenance Manual MHD56055 for an explanation of these signal words which are used to identify the level of potential hazard.

Read the instructions listed in the 'MAINTENANCE' section of the manual prior to performing this procedure.

NOTICE

• If the pendant is removed, note the hose connections and port locations to assist reassembly.

1. Disconnect brake line from elbow fitting on old control valve.
2. Remove capscrews (500) and washers (482) from valve cap (502).
3. Remove capscrews (505) and washers (482), pull manifold assembly straight out of motor housing.

NOTICE

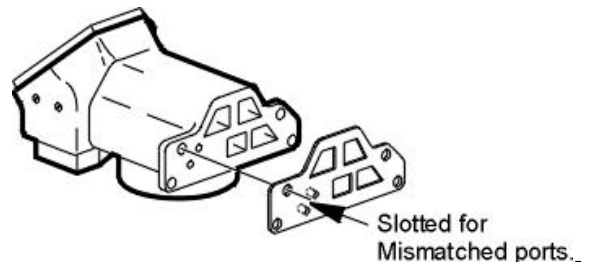
• Ensure that rotary valve (467) stays inside rotary bushing (466).

4. Separate old control valve from manifold by removing capscrews (505) and washers (482). Discard old control valve (537) and gasket (526).
5. Remove old limit paddle and discard.

Assembly

Manifold Assembly

1. Place new gasket (526) onto surface of manifold assembly. The 2 small ports to the left of the main ports should match the holes in the gasket, if not, carefully notch the gasket to open these ports.



(Dwg. MHP1743)

2. Fasten mounting bar (701) to ears on motor adapter plate with capscrews (703) and washers (702) and tighten.

NOTICE

• Spacer bar has a stamped surface. This surface should face the air motor.

3. Attach new control valve assembly (537) to mounting bar using capscrews (704) and washers (702). Leave these capscrews loose, they will be tightened later.
4. Carefully insert manifold assembly back into motor housing.

NOTICE

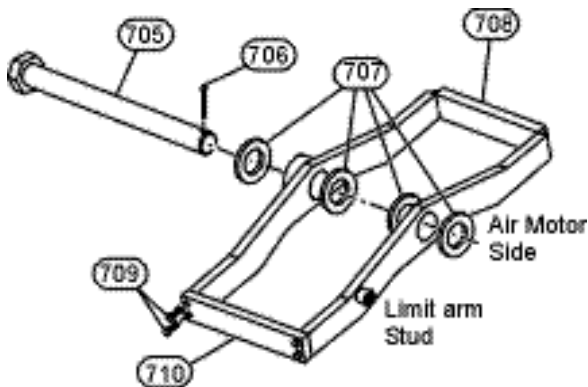
• **Valve cap (502) might have to be removed to allow rotary valve (467) to be rotated, aligning valve with crankshaft (473).**

5. Loosely secure manifold assembly to motor housing with capscrews (500) and washers (482).
6. Insert gasket (526) between manifold and control valve.
7. Insert capscrews (505) with washers (482) through manifold and gasket into control valve. Tighten loosely.
8. Fully tighten the following capscrews in this order.
 - a. Capscrews (704) securing control valve to mounting bar.
 - b. Capscrews (505) securing manifold to control valve.
 - c. Capscrews (500) securing valve cover to motor housing.

Limit Paddle Assembly

Refer to Dwgs. MHP1744 and MHP1745.

1. Remove capscrews (709) and bar (710). Place limit paddle over load chain with limit arm stud facing the control valve.
2. Secure bar to limit paddle with capscrews.
3. Insert capscrew (527) through link (528). Supporting paddle, align capscrew (527) with limit arm stud and hand tighten.
4. Lubricate pivot bolt with grease.
5. Place one washer (707) on pivot bolt (705), insert this into paddle opposite air motor.
6. Align paddle pivot holes with holes in hoist body, insert additional washers between paddle and hoist body while pushing pivot bolt through.
7. The last washer (707) is retained with cotter pin (706).



(Dwg. MHP1744)

ITEM NO.	DESCRIPTION OF PART	QTY TOTAL	PART NUMBER
705	Pivot Bolt	1	17733
706	Cotter Pin	1	71001531
707	Washer	4	50527
708	Limit Paddle Assembly	1	17415
709	Capscrew	4	Part of Item 708
710	Bar	1	

Final Connections and Tests

1. Connect brake line.
2. Connect pendant lines if removed.

Pendant Function Test

Actuate controls on the pendant control (one at a time) while observing operation/movement of the hoist. Ensure that the movements of the hoist match the directions indicated on the pendant. Correct any discrepancies before continued testing and operation.

Limit Paddle Test

⚠ CAUTION

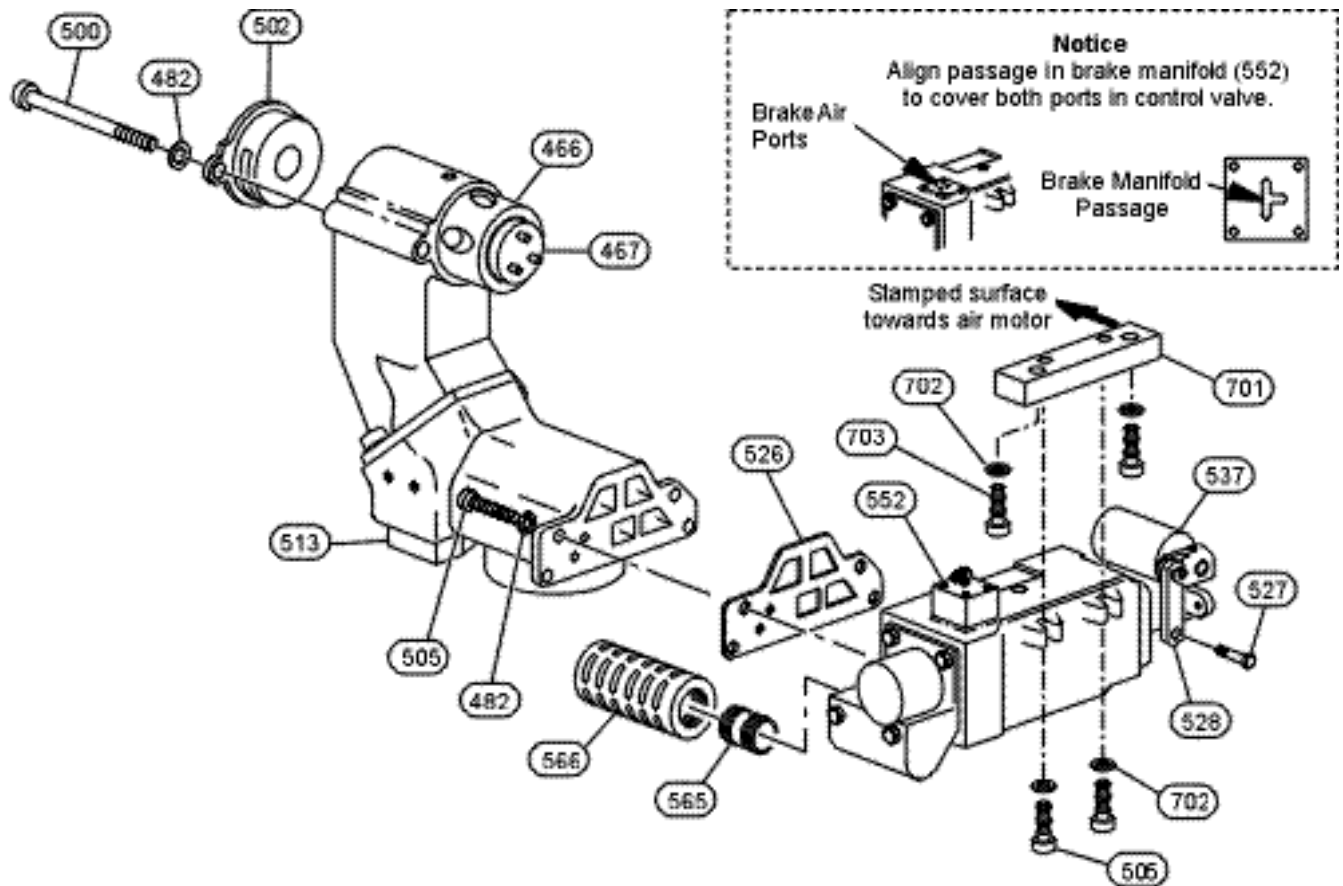
- **Do not use the chain stopper for this test.**
- **Keep hands clear of moving load chain during this test.**

While actuating pendant control in the hoist UP direction, press the end of the limit paddle (where the spring loaded chain stop would hit) in the UP direction. The hoist should stop operation. Keeping the paddle in this position actuate the pendant control in the DOWN direction, the hoist should operate.

Repeat this test for the other side of the limit paddle. Correct any discrepancies before continued testing and operation.

Refer to HA2 Parts, Operation and Maintenance Manual MHD56055 for other testing, prior to placing unit back into service.

CONTROL VALVE ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP1745)

ITEM NO.	DESCRIPTION OF PART	QTY TOTAL	PART NUMBER	ITEM NO.	DESCRIPTION OF PART	QTY TOTAL	PART NUMBER
---	Control Valve Assembly*	1	27027	528	Link	1	17416
446	Rotary Bushing	1	20-2	537	Control Valve Assembly	1	12354
467	Rotary Valve	1	94-019	552	Brake Manifold	1	13372
482	Washer	6	50200	565	Nipple Fitting	1	51057
500	Capscrew	2	53840	566	Muffler	1	52465
502	Valve Cap	1	15031	701	Mounting Bar	1	17414
505	Capscrew	4	71030787	702	Washer	4	50177
510	Manifold Assembly	1	B10064	703	Capscrew	2	71109862
526	Gasket	1	9855	704	Capscrew	2	51712
527	Capscrew	1	71349542				

* Includes items (526-528, 537, 565-566, 701-708)

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