



# Kirby Morgan Dive Systems, Inc.®

1430 Jason Way Santa Maria, California 93455

Phone: 805/928-7772 Fax: 805/928-0342

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## Part #325-095 Manifold Block Rebuild Kit

### Tools and Components Required:

- Vise and clean rags
- $\frac{9}{16}$ ",  $\frac{5}{8}$ ",  $1\frac{1}{16}$ " and 1" (2) Open end wrenches
- $\frac{5}{32}$ " Hex wrench
- Large flat blade screwdriver
- Torque wrench, 0-300 inch pounds
- Soft nylon tooth brush
- O-ring pick
- White vinegar

### Parts Included:

PART #	DESCRIPTION	QTY
310-003	O-ring	3
510-013	O-ring	1
520-024	Packing	1

PART #	DESCRIPTION	QTY
525-330	One-Way Valve Kit	1
540-095	Packing Washer	1

O-rings should be lightly lubricated with food grade silicone Dow Corning® 111 or equivalent in accordance with the operations and maintenance manual. Christo-Lube® may also be used. At a minimum, all helmet or Band-Mask® O-rings should be replaced at least once a year in accordance with the A2.1 checklist for the helmet or mask being inspected. During daily and monthly maintenance, disturbed O-rings and valves may be reused providing no damage or deformation is found. O-rings and valves may require replacement more often than yearly if the helmet or mask use is extreme, or if the helmet or mask is used in waters containing oil or chemical contamination. Daily cleaning and inspections as well as performing the monthly inspection (A2.2 checklist) will identify the need more accurately than simply placing a number of hours between overhaul. Store spare O-rings, valves and soft goods in a cool, dark, dry place. Avoid prolonged exposure to temperatures above 90 degrees Fahrenheit and/or exposure to ultra violet rays. Do not lubricate exhaust valves. Lubricating valves can cause dirt to stick, allowing leakage.

### ⚠ CAUTION

**Use only KMDSI original replacement parts. The use of other manufacturers' parts will interfere with the performance characteristics of your life support equipment and may jeopardize your safety. Additionally, any substitutions will void any warranties offered by KMDSI. When ordering spares, always insist on Kirby Morgan Genuine Parts.**



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1. Remove the manifold backing plate and the rubber gasket. Remove all hoses and P/N 550-095, plugs and remove the P/N 310-003, O-rings from the plugs.
2. Place the manifold in the vise using a rag to protect the chrome finish. Remove the P/N 505-060, one-way valve from the manifold, then remove the emergency valve.
3. Place the manifold block, backing plate and plugs into a solution of 50% white vinegar and 50% water. Carefully clean these parts, removing any old lubricant, dirt and corrosion. Rinse in fresh water and blow dry.
4. Disassemble, clean, reassemble and test the one-way valve according to the directions in the one-way valve kit. Be sure to remove, clean, re-tape and replace the umbilical adapter fitting.
5. Disassemble the emergency valve. Remove the P/N 550-019, lock nut, P/N 535-802, spring and P/N 520-525, knob from the P/N 550-180, valve stem.
6. Undo the packing nut. When the P/N 550-091, packing nut is clear of the threads on the P/N 550-140, emergency valve body, back out the stem until it is free.
7. Clean all parts in 50% white vinegar and 50% water. Rinse and blow dry. Inspect all parts and replace any that show wear or damage.
8. With the exception of the tapered pipe thread, lubricate all components with a light coating of silicone grease. Wrap the pipe thread with Teflon tape.
9. Place the new Teflon washer and packing on the stem. Use the packing that matches the one removed. Holding these components in place on the stem, screw the stem into the emergency valve body.
10. Rotate the stem until it is seated all the way in. Thread the packing nut onto the body and tighten slightly with a wrench.
11. Place the knob onto the stem and rotate the stem all the way out and back in again. The rotation must be smooth.
12. Tighten the packing nut with a wrench until moderate resistance is felt when rotating the knob.
13. Place the spring and lock nut onto the stem and tighten lock nut until it is flush with the knob.
14. Test the valve by attaching it to an air source. The valve must not leak and there must be no leakage past the stem or packing



310-003



510-013

