Kirby Morgan Dive Systems, Inc.®
1430 Jason Way Santa Maria, California 93455
Phone: 805/928-7772 Fax: 805/928-0342
www.KirbyMorgan.com email: kmdsi@KirbyMorgan.com

Part #325-095
Manifold Block Rebuild Kit

Tools and Components Required:

- Vise and clean rags
- 9⁄16″, 5⁄8″, 11⁄16″ and 1″ (2) Open end wrenches
- 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

Equipment used for air diving or diving with oxygen mixtures containing **LESS than 40% oxygen** can be lubricated with food-grade silicone, such as Molykote® 111 or equivalent. DO NOT mix types of lubes in the regulators. At a minimum, all helmet or BandMask® 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, O-rings and valves may be reused if no damage or deformation is found. O-rings and valves may require replacement more often than yearly if 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 the monthly inspection (A2.2 checklist), will more accurately identify the need than simply counting hours between overhauls. Store spare O-rings, valves, and soft goods in a cool, dark, dry place. Avoid prolonged exposure to temperatures above 90 °F (32 °C) and/or to ultraviolet rays. Do not lubricate exhaust valves and diaphragms. Lubricating valves can cause dirt to adhere, leading to leakage.

⚠ CAUTION

Use only KMDSI original replacement parts. Using other manufacturers' parts will interfere with the performance 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.

Kirby Morgan Dive Systems, Inc.®

1430 Jason Way Santa Maria, California 93455
Phone: 805/928-7772 Fax: 805/928-0342
www.KirbyMorgan.com email: kmdsi@KirbyMorgan.com

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