



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 #425-120 Regulator Rebuild Kit for KMACS-5, DCS-2A, DCS-2 and DCS-3

LOC #	PART #	DESCRIPTION	QTY
14	410-008	Backup O-ring	1
18	410-119	O-ring	1
19	410-121	Thread Seal	1
20	430-022	Nylon Locknut	1
6	450-038	Seat Assembly	1
<i>See manual for exploded view</i>	455-135	Conical Seals	2
13	510-008	O-ring	1
10 & 12	510-014	O-ring	2

See next page for O-ring Identification

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.



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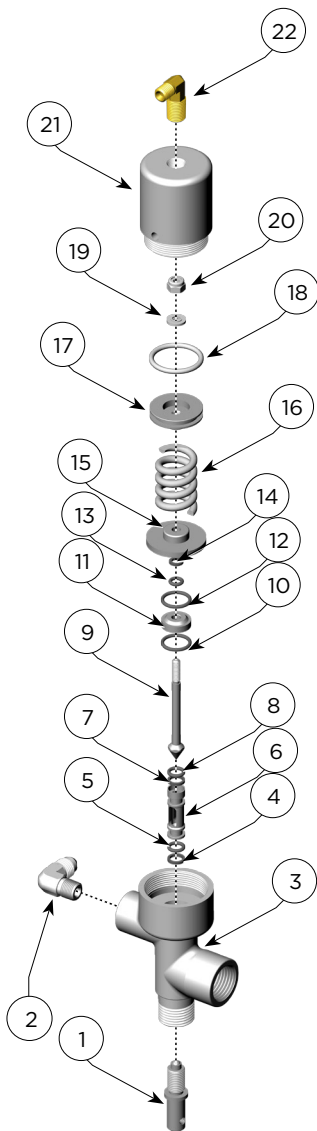
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405-120 Regulator Assembly



LOC #	PART #	DESCRIPTION
1	450-120	Stem, Regulator Adjustment
2	455-197	Male Elbow
3	460-110	Regulator Body
4	410-010	O-ring
5	510-010	O-ring
6	450-038	Seat Assemembly (includes 4, 5, 7 and 8)
7	410-010	O-ring
8	510-010	O-ring
9	450-037	Piston Stem
10	510-014	O-ring
11	450-034	Packing Washer, Small
12	510-014	O-ring
13	510-008	O-ring
14	410-008	Back-up Ring, Large Internal
15	450-033	O-ring Cap, Large
16	435-006	Spring
17	450-032	Piston Head
18	410-119	O-ring
19	410-121	Thread Seal
20	430-022	Nylok® Locknut
21	450-157	Regulator Cylinder
22	455-075	Elbow

O-ring Identification

410-008



510-008



410-119



510-014





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Instructions

1. Remove the main panel from the KMACS-5 or DCS. Remove the regulator mount nut, washer and adjustment stem.

2. Invert the panel and remove the regulator sensor tube and the regulator cylinder. Now lift out the stem assembly and the O-ring from the recess in the regulator body.



On the DCS 3, it may be necessary to remove the high-pressure tube to facilitate removal of the regulator cylinder.

3. Insert a small wooden dowel (a pencil will do) into the regulator from the adjustment stem end, and push the seat assembly out.

4. Thoroughly clean the regulator body and the cylinder. Inspect both for wear. The cylinder may show wear in the area of piston travel. Any noticeable wear is cause for replacement of the part.

5. Disassemble the stem assembly; clean and inspect all parts. The stem may show wear, and if rough or grooved, should be replaced.

6. Reassemble the stem assembly using the new parts supplied in the rebuild kit. Lubricate the stem and O-rings (12, 13, 14, 18) with a light coating of silicone grease. (Reinstall any shims that were between the spring and O-ring cap and/or piston head.)

7. Before installing the stem assembly, hook the KMACS-5 or DCS up to an air supply and blow air through the regulator body to clear any debris from the system. Lightly lubricate the bore in the regulator body and the O-ring (10) with silicone grease. Place the O-ring into the recess in the regulator body.

8. Insert the seat assembly (6) into the regulator body, metal end first, seat end up. Press this assembly in gently with a finger, while wiggling it slightly to ease the O-rings on the seat assembly into the bore. Be very careful not to nick these O-rings when inserting the seat assembly.

9. Install the stem assembly into the regulator body. Ensure that all O-rings remain in place.

10. Lubricate the threads and the inside of the regulator cylinder, and slip it over the stem assembly. Thread the cylinder into the regulator body and tighten.

11. Reinstall the regulator sensor tube.



On the DCS 3, use the new copper conical seals and install the high-pressure tube. Next, reinstall the regulator adjustment stem and mount nut.

12. Turn panel top-side up and install the regulator adjustment stem.



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13. Install the regulator mount washer and nut. Tighten nut securely.

14. Test the regulator for proper operation.

