



1430 Jason Way Santa Maria, California 93455 Phone: 805/928-7772 Fax: 805/928-0342

www.KirbyMorgan.com email: kmdsi@KirbyMorgan.com

# Part #200-125 Balanced SCUBA Regulator Assembly for M-48 SuperMask® and MOD-1

### Installation Guide

Part Number	Description	Qty
200-120	Balanced SCUBA Regulator Assembly	1
220-057	Balance Purge Sleeve	1
220-087	Balance Purge Tube	1
520-038	Tie Wrap	1
520-039	Tie Wrap	1

#### Tools and Components required:

- Pliers or Tie Wrap Gun rated at 50 pounds/22.6 kg
- Side Cutter Pliers
- Thin Nylon Rope (e.g., Paracord) or equivalent (for Pull Test)
- 25 pound (11 kg) weight or a filled 50 cu. ft. aluminum scuba tank (for Pull Test)

This regulator was specifically designed to work with the M-48 SCUBA POD assembly as well as being a standalone scuba regulator.

The sleeve, P/N 220-057, purge tube, P/N 220-087, and tie wrap, P/N 520-038, will be used to replace the original tilt to purge valve. Using the new parts will eliminate the need to manually purge any accumulated water from inside the pod. This will now become an automatic function.

1. After removing the regulator from the POD, clean and carefully inspect the pod assembly for damages such as cuts in the rubber, cracked or broken parts. Replace as necessary. Remove the tie wrap from around the tilt to purge valve and remove the plastic tilt valve assembly, P/N 805-047, as well as the small internal valve body insert and its exhaust valve as a unit. Inspect the valve and valve body for damages, Clean and replace as necessary. Also make sure the sealing surfaces of the POD, where the valve will insert, have been thoroughly cleaned.



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

www.KirbyMorgan.com email: kmdsi@KirbyMorgan.com





2. Reinstall ONLY the valve body insert with its valve, back into the water dump tube on the POD. Push it in all the way. YOU WILL NO LONGER NEED THE TILT TO PURGE VALVE ASSEMBLY.



Valve orientation allows breathing gas and water to exit the POD when installed correctly.

### **A WARNING**

Only the KMDSI mouthpiece, P/N 810-022L, will function correctly in your SCUBA POD. Do not attempt to use any other manufacturer's mouthpiece. Doing so could result in death by drowning

#### **A WARNING**

Never dive the mask without a mouthpiece installed in the POD. A mouthpiece allows use of the POD even if the POD is not sealed to the mask. Buddy breathing cannot be done without a mouthpiece installed. Use of the mask without the mouthpiece could result in death by drowning.

3. Insert the KMDSI mouthpiece, P/N 810-022L, from inside the POD; into the opening so that the bite end extends into the cavity and the other end is flush with the POD opening.









1430 Jason Way Santa Maria, California 93455 Phone: 805/928-7772 Fax: 805/928-0342

www.KirbyMorgan.com email: kmdsi@KirbyMorgan.com

4. Insert, the sleeve, P/N 220-057, into the Purge Tube, P/N 220-087, as shown. Make sure the direction of the insert is correct and pushed in all the way.





5. Insert these two parts together into the tube of the POD as one unit until they are against the exhaust valve and body. The outside of the tube should **NOT** be bulged out or displaced if the tube has been installed properly. Align the tube to point upwards.





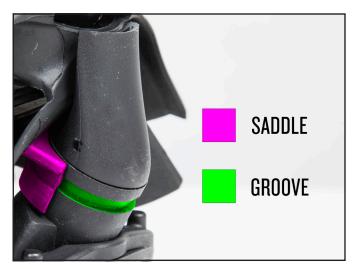
1430 Jason Way Santa Maria, California 93455 Phone: 805/928-7772 Fax: 805/928-0342

www.KirbyMorgan.com email: kmdsi@KirbyMorgan.com



6. Make certain that the regulator mount tube is clean and free of ANY lubricants. Insert the regulator into the mouthpiece opening and fit it so that the mouthpiece and POD opening are fully seated on the demand regulator. Be certain everything is lined up straight.





### **A WARNING**

Use only a tie wrap rated for a minimum pull of 50 pounds. A weaker tie wrap, or one that is "LOW PROFILE" could become loose and allow the regulator to pull out of the POD. This could lead to flooding of the POD and death by drowning.



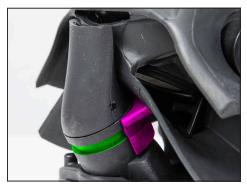
- 7. Fit the longer tie wrap, P/N 520-039, into position. Ensure the joint of the tie wrap will sit in the "center of the side" of the mouth opening as shown. Pull as tight as possible by hand or use a tie wrap installation tool.
- 8. Cut off excess tie wrap material flush with the joint lock of the tie wrap. There should be no sharp edges.



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

www.KirbyMorgan.com email: kmdsi@KirbyMorgan.com

- 9. Pull the mouthpiece and the demand regulator in opposite directions with enough force to ensure that they are both securely mounted to the POD.
- 10. If the mouthpiece or demand regulator pulls off the POD, even partially, it MUST be remounted.
- 11. Align the "saddle" on the exhaust cover, over the area of the Purge Tube, P/N 220-087. You will see that the grooves on the tube will align to the saddle.
- 12. Ensure the purge tube is still pointing up and install the shorter tie wrap, P/N 520-038. The open end of the purge tube should line up evenly with the face of the regulator tube.









If the mouthpiece or demand regulator pulls off the POD, even partially, it must be remounted.



### 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



#### **Pull Test**

After Initial Assembly

#### **A WARNING**

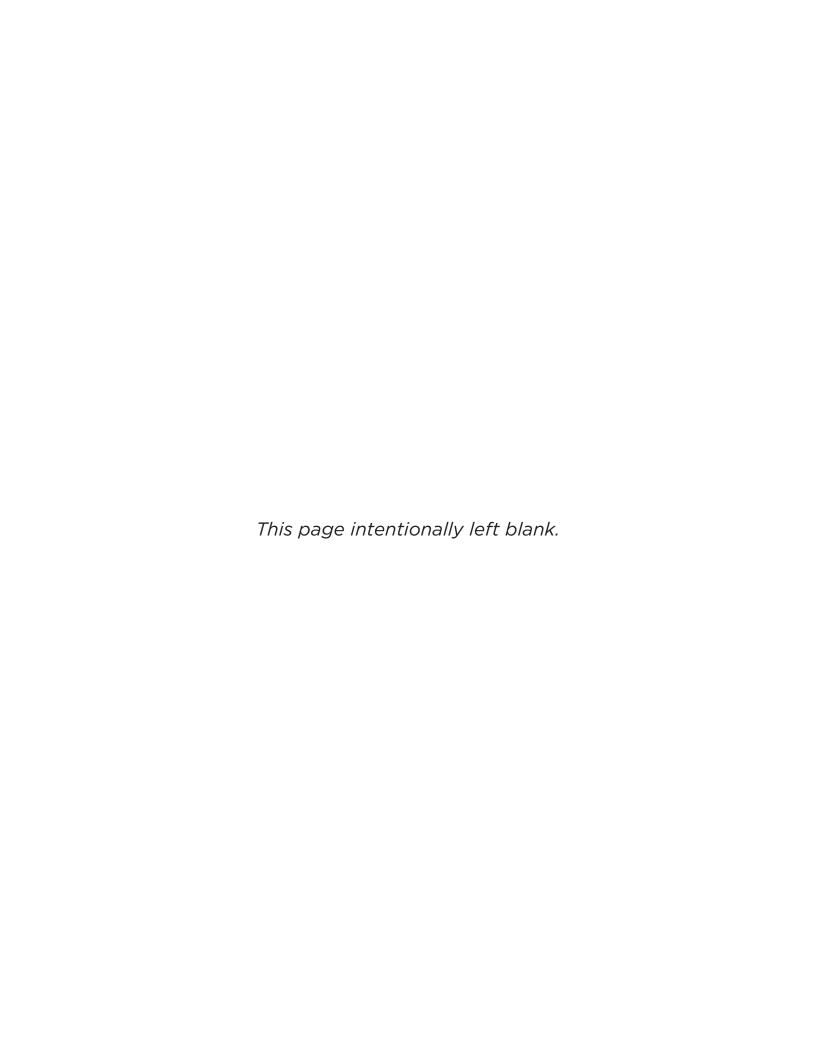
A properly secured mouthpiece and regulator should be able to withstand a pull force of 25 pounds minimum (111 Newtons). If in doubt, a pull test should be conducted by securing a 25 pound (11 Kg.) weight to the regulator and allowing the full force of the weight to be applied for a minimum of three seconds.

**NOTE:** It is recommended that anytime a user is in doubt about the "component to POD" fit, a simple pull test be performed by the end user or installer. Before testing, make careful note of the mouthpiece and POD positions in order to check for movement later.

- 1. Attach a 25 pound (11 kg) weight or a filled 50 cu. ft aluminum scuba tank to the demand regulator using string or tie wraps in the manner shown on this page.
- 2. Suspend the weight for three-five seconds from the POD with the POD mounted on a stable device if available, allowing the full weight to pull on the demand regulator.
- 3. Check the position relationship of the mouthpiece and POD to be certain they have not moved.









Kirby Morgan Dive Systems, Inc. 1430 Jason Way Santa Maria, CA 93455, USA

Telephone (805) 928-7772, FAX (805) 928-0342

E-Mail: KMDSI@KirbyMorgan.com, Web Site:www.KirbyMorgan.com