



# Kirby Morgan Dive Systems, Inc.®

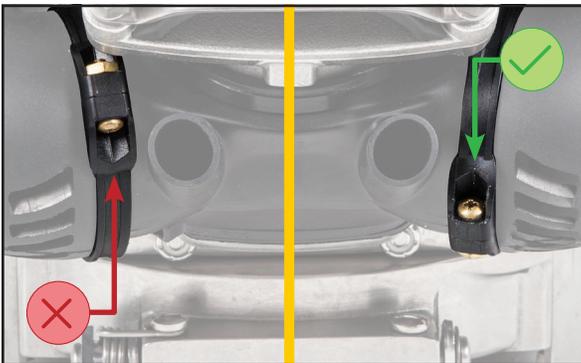
1430 Jason Way Santa Maria, California 93455

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## Part #525-761 KM 97 Water Shroud Kit Installation Instructions

Part #	Description	Qty.	Part #	Description	Qty.
510-723	Regulator Shroud, 455	1	520-049	Tie Wrap	4
510-733	Access Cover	1	550-074	Bishop Pin	2
510-734	Side Block Shroud	1	550-572	Adapter Sleeve	1
510-736	Water Tube A	1	550-580	Adapter Sleeve, Long	1
510-737	Water Tube B	1	550-644	Pin	1
520-039	Tie Wrap	6			



Rotating the clamps will allow more clearance when installing the regulator shroud, making the installation easier.

### Tools Required:

- Torque Wrench
- $\frac{1}{16}$ ,  $\frac{7}{8}$  and 1 inch Open End Attachments
- $\frac{13}{16}$ ,  $\frac{7}{8}$  and 1 inch Open Ended Wrench
- $\frac{1}{4}$  inch Flat Blade Screwdriver
- Small Phillips Screwdriver
- Small Cutting Pliers
- Dow Corning® Molykote® 111 Lubricant or Equivalent



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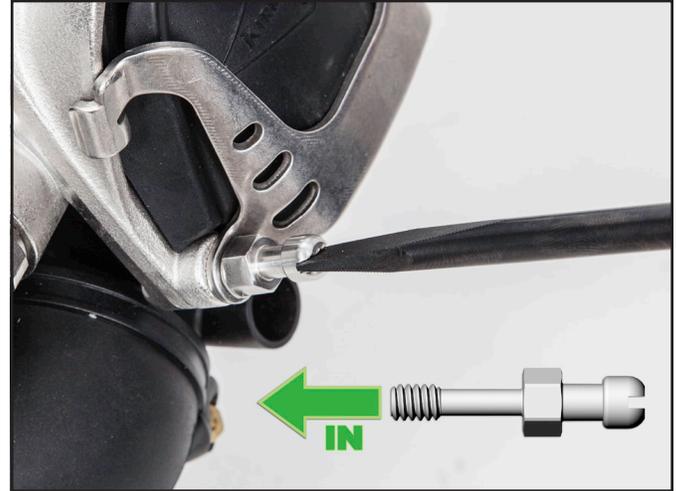
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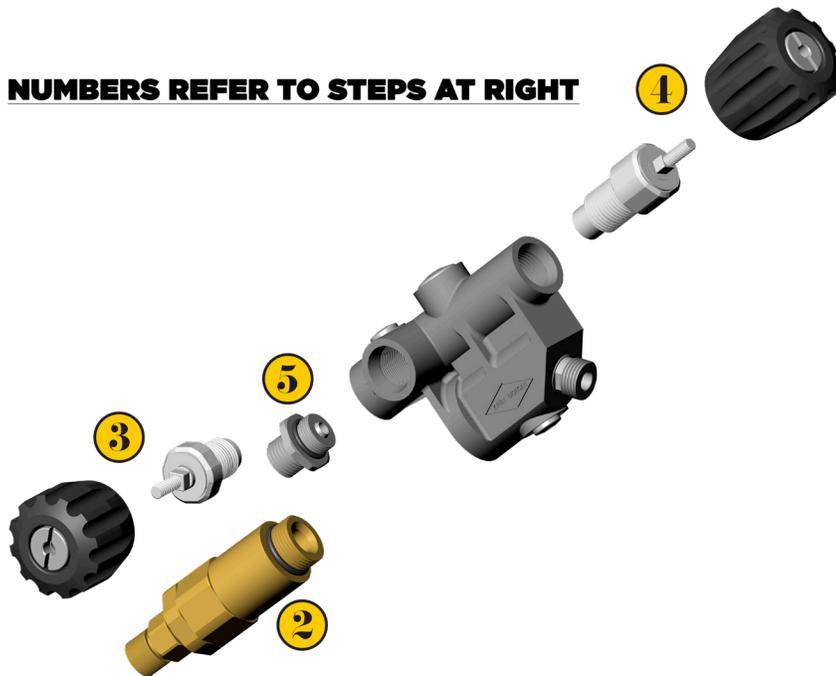


- 1) Remove and replace the lower two screws with the bishop pins.



## Side Block

**NUMBERS REFER TO STEPS AT RIGHT**



- 2) Remove the one way valve assembly from the side block.
- 3) Remove the emergency valve control knob and all parts down to the seat assembly.
- 4) Remove the steady flow control knob and all parts down to the seat assembly.
- 5) Remove the bailout hose fitting.

- 6) Remove the bent tube assembly. Refer to “1.3.1 Removal of the Bent Tube Assembly” on page BNT-4 in the KMDSI modular manual.
- 7) Install the side block shroud starting at the bailout end.

Fit the shroud onto the block while progressing towards the front of the block. Make certain the shroud is positioned properly. The fit should be snug and everything should align.



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8) Reinstall all of the side block parts that were removed except the bent tube assembly.

## Regulator Shroud

9) Lightly lubricate the opening of the regulator shroud, 455 P/N 510-723, where the adjustment knob of the regulator will pass through.

*Notice the opening is surrounded by many fine slices to allow the shroud in that area, to easily spread over the large end of the adjustment knob.*

10) Starting at the adjustment knob end of the regulator, slip the regulator shroud over the adjustment knob.



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## Bent Tube

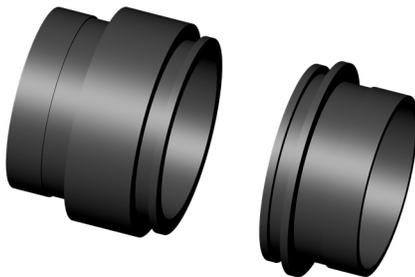
11) Insert bent tube assembly into regulator inlet side and line up the bent tube mount nut to the side block.

The adapter sleeves have to be inserted onto the bent tube assembly and remain loose while the bent tube is being installed. The channeled ends of the sleeves will be facing each other while installing the bent tube assembly.



12) Swing the bent tube away from the side block and put the adapter sleeve (short), P/N 550-572, onto the bent tube assembly first, channeled end facing away from regulator inlet.

UPPER (SIDE BLOCK)



LOWER (REGULATOR)

13) Fit the adapter sleeve, long, P/N 550-580, over the bent tube assembly, channeled end facing away from the side block.

14) Complete installation of bent tube assembly. Refer to “1.2.3 Installation of the Bent Tube Assembly” on page BNT-2 from the KMDSI modular manual.





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**NOTE:** Adapter sleeves remain away from the shrouds until the bent tube is properly installed per helmet manual guidelines. The adapter sleeves can be moved away from either end while securing each end of the bent tube, however, they must remain on the bent tube.

15) Once the bent tube is secured and torqued to the correct values, insert the adapter sleeves into the prospective locations, long adapter sleeve into the side block end and the short adaptor sleeve into the regulator inlet side.



16) Line up the detail features of water tubes A & B, with the mating details of both adapter sleeves.

Water flow arrow is found on the A tube and should be positioned farthest away from the helmet (on the outside)



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17) Use the three wider tie wraps P/N 520-039 (represented by the purple color in the photo) to secure the two tubes together, one in the middle and one on each of the leading edges of the tube. Little to no gap should be evident between the two tubes.

18) Using two narrower tie wraps, P/N 520-049, (represented by the yellow color in the photo), secure both the side block and regulator shrouds to the sleeves.

## Regulator Shroud



19) Align the access cover, P/N 510-733, to the regulator shroud P/N 510-723, as shown and install the pin, P/N 550-644, until it is evenly located into the area of the regulator shroud where it will remain.

20) Close the access cover and secure by pushing over the bishop pins. Make sure the regulator shroud and access cover line up correctly and no part is pinched or tucked.



Generally between one–two gallons per minute of water flow is plenty to heat the incoming gas or to keep the interior clean of debris without interfering with the regulator diaphragm.





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