

Chin Strap, Sealed Pull Pins and Swing Catch for Fiberglass Helmets

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1.1 Chin Strap

1.1.1 Chin Strap Removal

Tools Required:

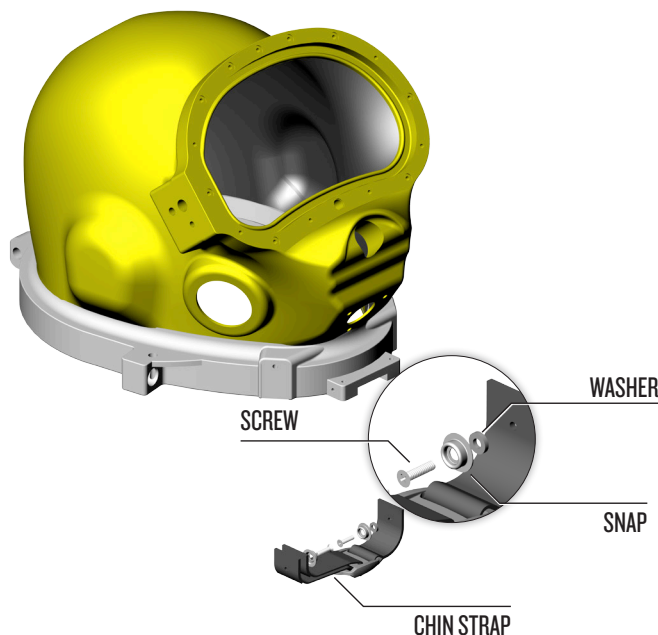
Phillips screwdriver

Plastic syringe for easy application of RTV sealant.

The chin strap must be replaced as a complete unit.

1) Remove the two screws that secure the chin strap to the helmet shell. Clean any sealant or debris from the holes.

2) Remove the worn chin strap and discard.



The chin strap mounts inside the helmet.

1.1.2 Chin Strap Replacement

NOTE: The adjustment strap should pull toward the right side of the helmet when it is on your head.

1) Using a syringe, inject silicone sealant into the holes that secure the chin strap.

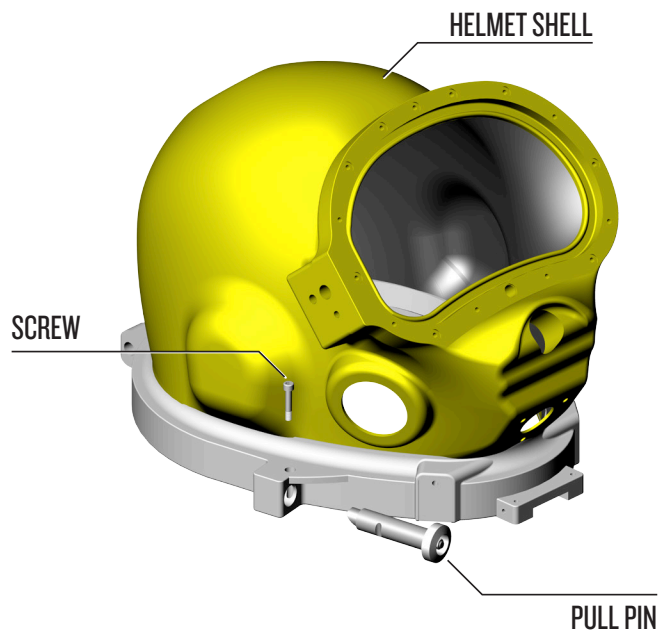
2) Install the two screws supplied with the chin strap kit to hold the chin strap in position. You may re-use the same snaps and washers if in good condition.

3) Tighten the screws in accordance with the torque specification found in the correct Table (correct model) of the manual Appendix. See Appendix *Contents: Torque Specs* starting on page APNDX-19.

1.2 Sealed Pull Pins

KMDSI recommends that the pull pins be serviced annually.

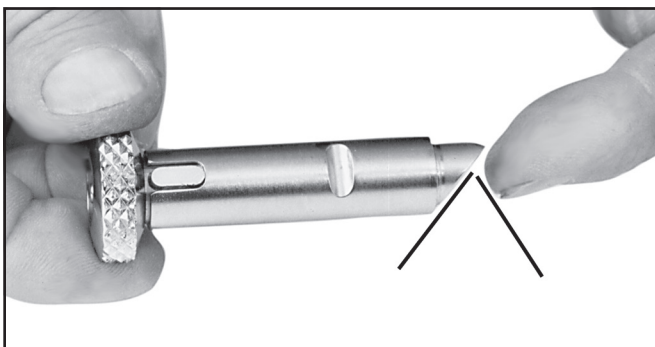
The sealed pull pins, P/N 505-110, lock the helmet onto the divers head, and should be inspected carefully in accordance with Dive Lab checklists A2.1, A2.2 and A2.23. Sealed pull pins should be regularly checked for signs of corrosion and silicone fluid leakage. If the sealed pull pins stick, do not provide adequate tension, do not pass inspection, or are in any way questionable, it is essential that they be serviced by certified personnel, factory trained specifically to perform rebuilds on the sealed pull pins. Read more on this topic; see Maintenance & Repair Bulletin #2 of 2013 on the KMDSI website www.kirbymorgan.com, under "Support" go to Bulletins.



The sealed pull pins must be carefully inspected regularly and serviced annually.

⚠ WARNING

The sealed pull pins must operate properly. If they do not lock properly the helmet could come off the diver underwater and drowning could result. If they do not release when needed, they could make it impossible to remove the helmet in an emergency situation. Do not use the helmet unless the pins are operating correctly.



The cam angle must be correct for the pins to work properly. Align angle towards bottom of the helmet neck ring.

1.2.1 Removal of Sealed Pull Pins

Tools Required:

$\frac{3}{4}$ Hex Key on Torque Screwdriver

1) Unscrew the hex head screws from the bottom ring on the base of the helmet.



Unscrew the hex head screws

2) Remove the sealed pull pins by pulling them out of the bottom ring.

3) Have the sealed pull pins inspected by, and if necessary, serviced by factory trained personnel, certified to rebuild the pins. Or, the pins may be replaced.

1.2.2 Replacement of Sealed Pull Pins

Loctite® 248 may be required.

1) Insert the pin(s) into the bottom ring on the base of the helmet. The cam angle must be correct for the pins to function.

2) If the original screws are being re-used and there is little or no thread locker remaining on the threads, apply a small amount of Loctite® 248 onto the ends of the screws. If new screws are used, applying Loctite® or other thread locker is not necessary because the screws come with a locking compound already applied.

3) Insert the screws into the bottom ring and tighten until it is just flush and has bottomed in the counter bore.

1.3 Swing Catch

The swing catch assembly helps to provide alignment for the front of the neck ring assembly, as well as making it easy to remove the helmet. The swing catch should rarely need attention or service, unless damaged accidentally.

1.3.1 Disassembly of the Swing Catch

Tools Required:
Screw driver

- 1) Remove the screw on the starboard side of the swing catch.
- 2) Remove the spring spacer. Take care not to lose the Teflon® washer that is attached to the inside of the swing catch. If it comes loose it can be glued back into place. (A “quick dry” rubber cement works well). Silicone grease can also be used to hold the washer in place.
- 3) Remove the screw from the port side of the swing catch.
- 4) Remove the washer and the spacer. The swing catch should now disengage from the spring.
- 5) If the spring needs to be replaced, this requires removal of the regulator and whisker. See "1.3.1 SuperFlow® 350 Demand Regulator Removal from Helmet" on page SF350-8 or "1.1.6 455 Balanced Regulator Removal" on page 455BAL-12 for instructions on how to remove the regulator and whisker.

1.3.2 Reassembly of the Swing Catch

NOTE: A drop of Loctite® 222 should be used on all screws.

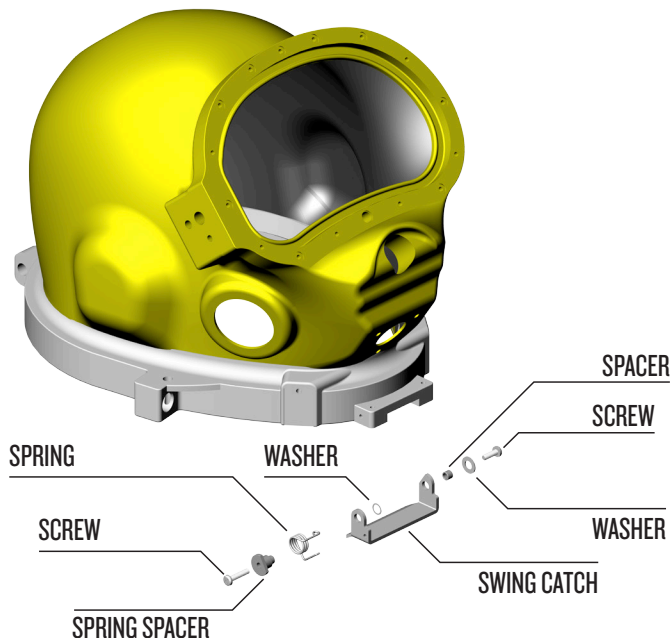
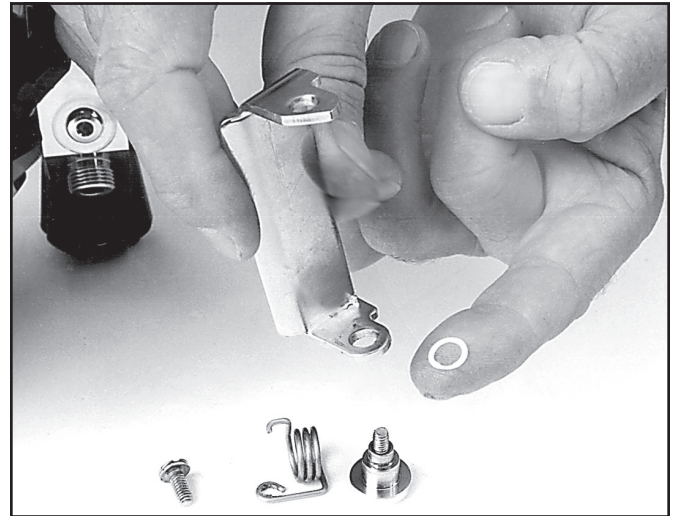


Diagram of the swing catch.

- 1) Make sure the Teflon® washer is on the right side and in the proper place, inside of the swing catch.



Make sure you have not dislodged the Teflon® washer.

- 2) Insert the hooked end of the spring into the small hole in the swing catch. Slip the swing catch over the tongue catch of the bottom ring on the base of the helmet. The spring end goes on the right side. Make sure you have not dislodged the Teflon® washer, P/N 520-167.
- 3) Insert the screw and spring spacer into the spring, then thread the screw into the screw hole on the bottom ring. Run the screw in until it is just snug.
- 4) Place the washer and spacer on the screw and insert the screw through the hole on the left end of the swing catch.
- 5) Tighten the screw while ensuring that the spacer fits through the hole in the swing catch, along with the washer, and no binding occurs.
- 6) Tighten all three screws in accordance with the torque specification found in the correct Table (correct model) of the manual Appendix. See Appendix *Contents: Torque Specs* starting on page APNDX-19.
- 7) Test the function of the swing catch. Also, test prior to diving with the system to ensure proper operation.