

## 810-X Bar Replacement Procedures

1. Remove the headcap and disconnect the optical fibre from its connector.
2. Disconnect the nut on the brass fitting and remove the brake line and fibre from the head.
3. Mark the tube at the point that it exits the 1" compression fitting.
4. Loosen the top of the 1" compression fitting.
5. Remove the bottom portion of the 1" compression fitting from the coupler in the tank.
6. The tube can now be CAREFULLY lifted out of the tank. The float will remain sitting on the support.
7. Measure the length of the old bar from the underside of the head to the underside of the endcap attached to the bottom of the tube. Also measure the distance between the underside of the head to the mark you made in step 3. This measurement will be used again when reinstalling the new bar.
8. Cut the new bar 1/8" less than the old bar. Use a hacksaw only, NOT a cutoff saw! After cutting the bar make sure the electronic traces on the circuit board are not touching. Do this by using a small flat head screwdriver to clean out the potting material around the circuit board. Then with a flat edged knife trim the end of the circuit board making sure they are not touching. (If possible test the bar on top of the tank to make sure all the readings are there.)
9. Place the new compression fitting on the bar, (thread down) slide it towards the head, and tape it in place so that it can't slide.
10. Install the endcap using the Loctite method as per Technical Services Bulletin #17.
11. Observe the serial number of the old bar (the label can be found inside the head). If the serial number starts out with "810S" then you have to change out the float as well.
12. Retrieve and replace the float. Note that the cone shape of the new float should face up.
13. Remove the tape holding the compression fitting and apply some anti-seize compound to the threads then install the new tube making certain that the end goes through the hole in the float and into the support.
14. Tighten the bottom portion of the 1" compression fitting into the coupler.
15. Position the tube so that the space between the underside of the head and the top portion of the compression fitting is the same as you measured in step 7.
16. Tighten the top of the 1" compression fitting.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

17. Replace the fibre into the head and tighten the brass nut. Ensure that the head is vented as per Technical Services Bulletin #18. The head O-ring had grease applied to it before it was shipped but it may be helpful to do it again. Use any common O-ring lubricant. Replace the headcap.
18. Have an assistant raise the float while watching the gauge display to make sure the system is functioning.
19. The reinstallation is now complete. Note that the bottom reading MAY be slightly different from the previous one. Make sure that the operator is aware of any change.

**CANADIAN CUSTOMERS:** Pack up the old bar and the old float (if it was changed) and ship it back PRE-PAID ONLY to us via Loomis, Tiger, or Greyhound (note that the length limit for Greyhound is 84"). Our shipping address is at the top of the first page.

**UNITED STATES CUSTOMERS:** Pack up the old bar and the old float (if it was changed) and ship it back PRE-PAID ONLY to us via UPS or FedEx. Note that UPS has ground service so your costs will be less. You must use an international waybill that is available from the shipping company. Make a note that we use U.P.S. as our customs broker and label the outside of the package "Canadian Goods Being Returned". Our shipping address is at the top of the first page.

**IMPORTANT NOTE:** If these parts were provided under warranty you **MUST** ship the old parts within 7 days or you will be invoiced. Garnet staff will perform a rigorous inspection and checkout of all returned parts. If our findings show that there has been tampering or improper original installation, Garnet Instruments reserves the right to invoice partially or fully for the new parts. All new parts are guaranteed for three (3) months or for the length remaining on the original warranty (determined by the date of installation as recorded on the warranty card), whichever is longer.

**FOR TECHNICAL SUPPORT CALL 1-800-617-7384**