**A.**  **RAPID DE-AIRING PROCEDURE FOR CARDIOHELP**

**PURPOSE:**

To re-prime HLS pump-head in a severe air entrainment incident where ECLS flow/RPMs goes to zero.

**EQUIPMENT LIST:**

* Rapid de-airing line
* 0.5-1L Plasmalyte
* Waste Bag
* Large bore 12” pigtail

**PROCEDURE:**

1. Remove yellow cap from de-airing port
2. Take patient off ECMO – clamp arterial outlet tubing at clamp symbol near HLS module and venous inlet tubing **below the 3/8x3/8 luer.**
3. Turn RPMs to zero.
4. Attach 0.5-1 L plasmalyte to rapid de-airing line via spike and **prime the line**– close white clamp on de-airing line.
5. Remove spring port on HLS oxygenator unit. Attach end of rapid de-airing line to oxygenator.
6. Attach 12” pigtail with waste bag to luer on venous tubing and **open stopcock to the waste bag.**
7. Open white clamp on rapid de-airing line and rapidly push ~0.5-1L plasmalyte through the oxygenator and out the venous limb to waste bag to re-prime pump.
8. Once majority of air is removed, turn stopcock off to the waste bag.
9. **Leave de-airing supplies attached and go back on ECLS.**
10. Remove venous cannula clamp.
11. Turn up RPMs as you release the arterial cannula clamp.
12. If you still cannot achieve flow with increased RPMs you must repeat de-airing procedure
13. If flow achieved and you are back on ECLS, reset venous bubble alarm, remove waste bag, remove rapid de-airing line, and replace spring cap.
14. **Replace yellow cap on the de-airing port.**