


ARMS Processing – ARMS Disassembly

 Make sure that all the containers and tools used have been bleached and rinsed between ARMS processing. Wear gloves at all times; do not touch the water with bare skin.

Materials:

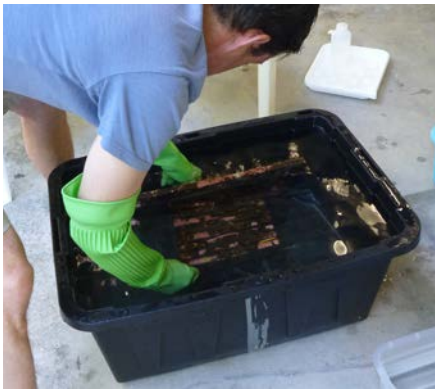
- 1 recovery bin containing ARMS unit in seawater
- 1 clean bin filled with filtered (40-microns) seawater containing one clean dish rack OR 5 numbered 20-Liters buckets filled with filtered (40-microns) seawater – Each bucket will receive up to two plates (numbering should reflect the plates #: (1/2) – (3/4) – (5/6) – (7/8) – (9))
- 1 bubbler with tubing and air-stones (one stone per bucket).
- 2 wrenches
- 1 pair of Tweezers
- 1 water pitcher
- 1 squeeze bottle with filtered seawater
- 1 pair of elbow long gloves
- 1 pair of laboratory gloves
- 9 small zipties

Procedure:

1. Using gloves, remove the hooked elastic chords from the ARMS unit to free the recovery crate and place on the side.
2. Carefully lift the recovery crate off the ARMS and rinse all 5 internal sides of the crate back into the ARMS recovery bin using the filtered seawater squeeze bottle. Once the crate is clean, put it aside.
3. Using the wrenches, unscrew the nylon-insert locknuts from the base plate and put aside. Make sure the ARMS does not spend much time outside of the water.
4. Lift the base plate off the ARMS, and lightly brush it in the seawater tub to recover all motile organisms. The base plate can be set aside at this point as it is not part of the ARMS unit and should not be processed any further.
5. Unscrew the nuts at the base of the first plate and discard them.
6. Lift the first plate (the plate closest to the base plate is plate #1) and mark the North corner with a ziptie (the same corner will be marked for all the plates). Be careful to remember which is side the top of the plate.

7. If the plate contains the spacers (short and long), remove them and shake them inside the water tub to remove motile organism. Discard the spacers.
8. Vigorously shake the plate in the ARMS tub to remove all motile organisms. Inspect the plate and remove manually remaining motile organisms with a pair of tweezers. Those organisms can be placed back in the ARMS tub or place in a separate container containing seawater for the time being.
9. Stack the plates one by one in the aerated seawater tub or buckets in the same order and direction as removed.
10. The last plate (plate #9) should hold the 4 bolts. Set the bolts aside.

Illustrations:



Unscrewing the nuts to free the ARMS plates

The plates are removed one by one keeping track of the plate number and orientation (bottom or top) and transferred into a new tub of filtered seawater.



Plates are stacked in order in a new, aerated seawater tub. Notice the zip tie marking the same corner for each plate. The plate on the right is the top plate.