

Rev	Date	ECN	Description
-	09/16/2019	-	Initial Release
A	10/28/2020	14441	Added: OZ-II Configuration Pictures, Schematic, Ref. List



**Document Number:**

**SF950-INST**

**Description:**

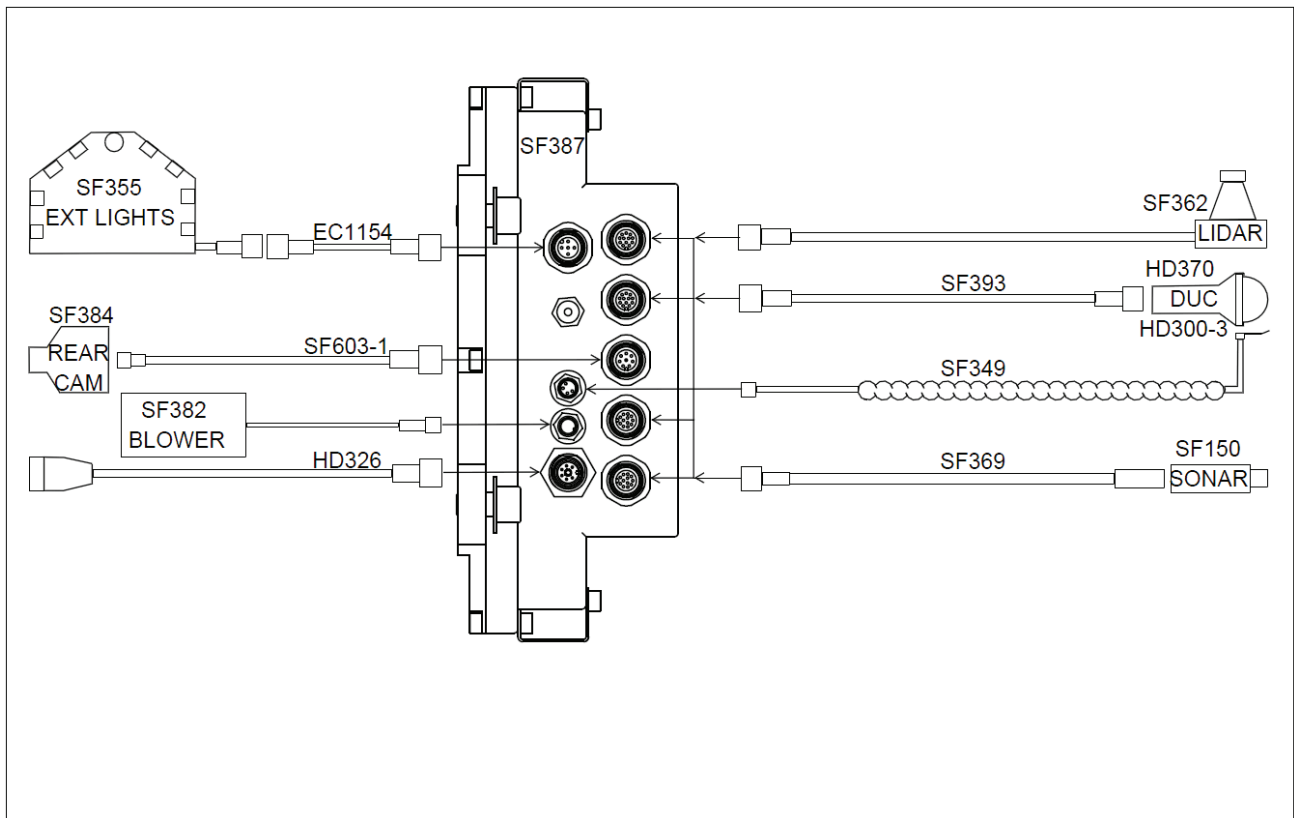
**SolidFX HDPE Float**

**Sensor Installation Instructions**

Signature CHKR: *Karla Caraballo*

Signature ENGR: *Tony Miniewicz*

Signature MFG: **Kevin Johnson**



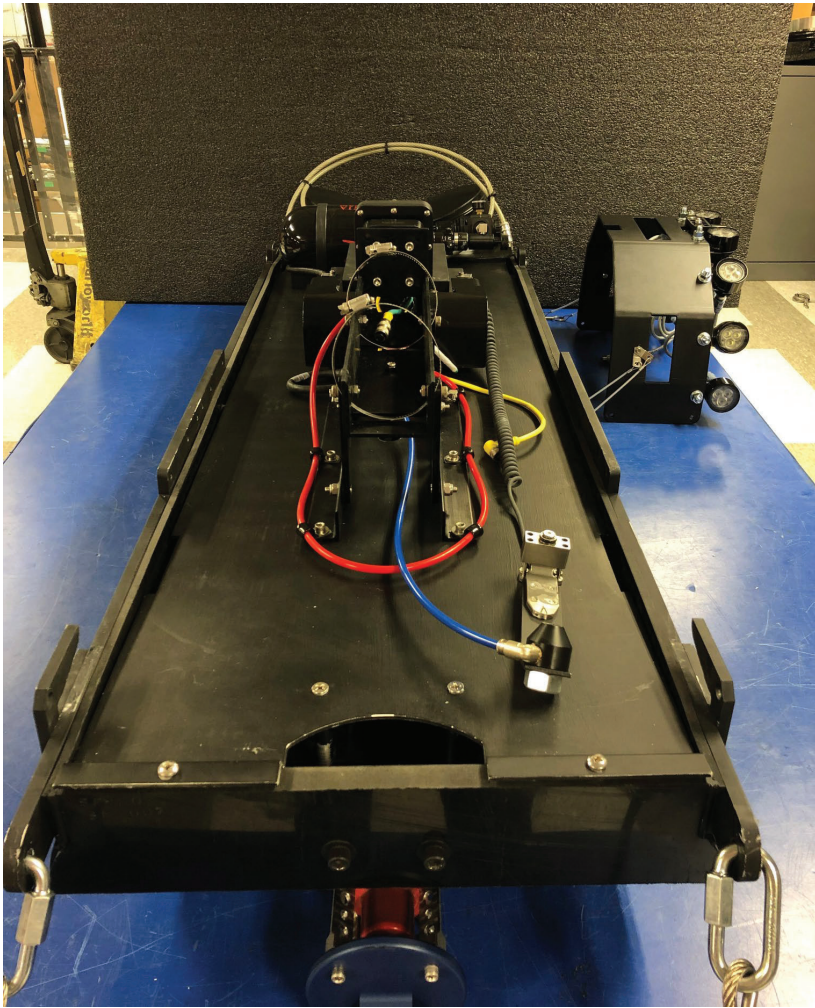
**Reference List:**  
**Frequently Lost and/or Damaged Part Numbers**

**Cables:**

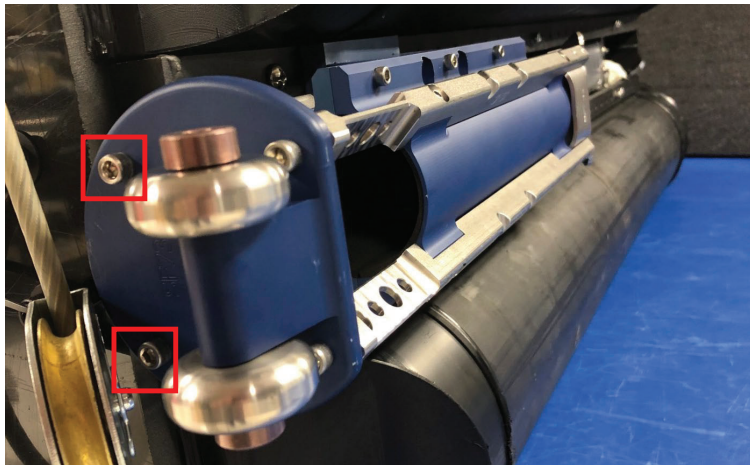
OZ-II – SF615  
 DUC Strobe – SF349  
 RVC – SF603-1  
 DUC – SF393  
 Sonar – SF369  
 HD Adapter Cable - HD326  
 External Light Extension – EC1154  
 External Light Daisy Chain Cable – EC2360

**Replacement Parts:**

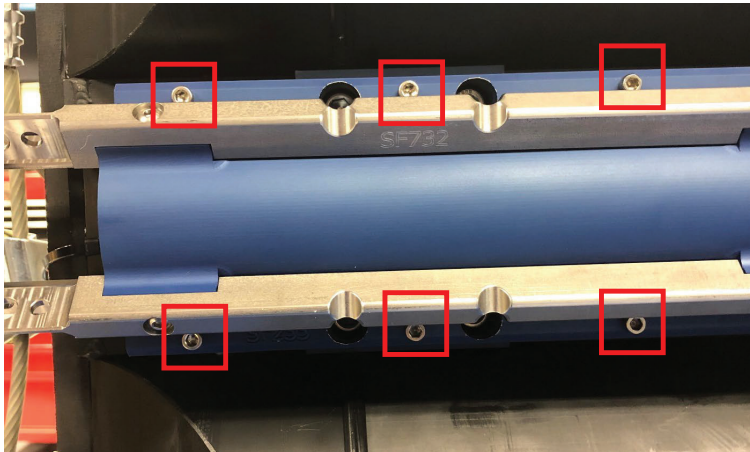
Stem Plug – HW4436  
 90° PTC Fitting – HW4124  
 4 Pin Dust Cap (Male) – EC2624  
 4 Pin Dust Cap (Female) – EC2625  
 7 Pin Dust Cap (Female) – EC2626  
 12 Pin Dust Cap (Male) – EC431  
 Black Tubing – CS633  
 Blue Tubing – CS634  
 Red Tubing – CS635  
 External LED Light – SF184



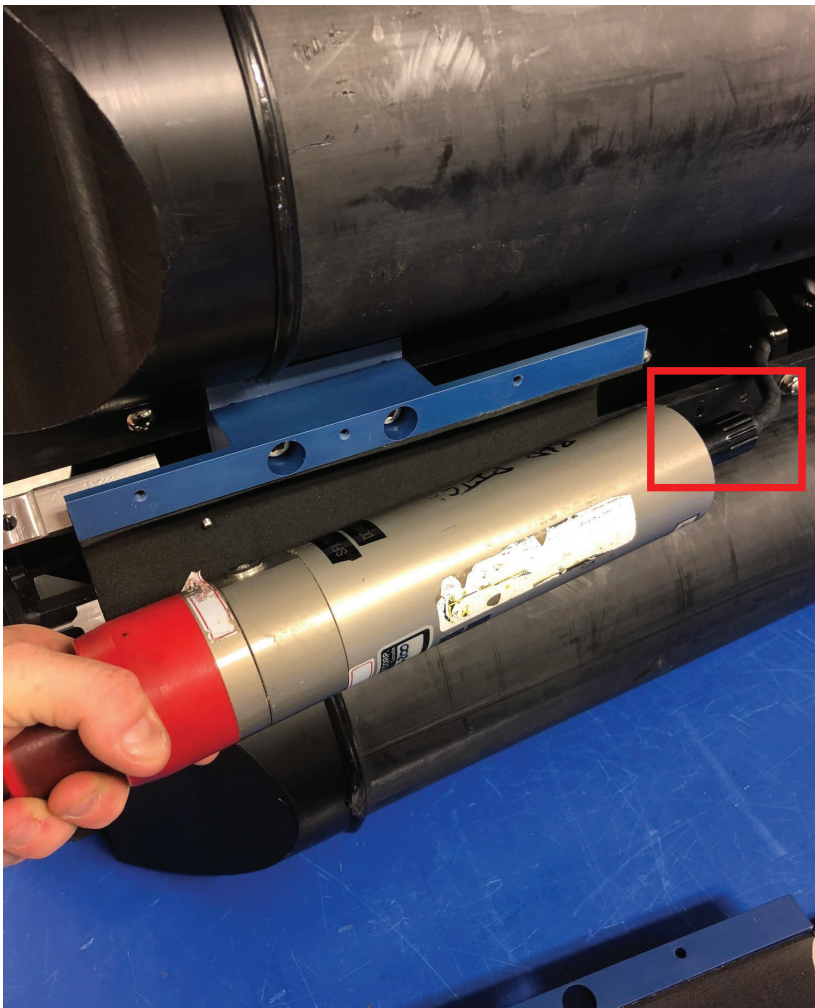
- Unplug the light array.
- Remove the light array and the outriggers from the float.



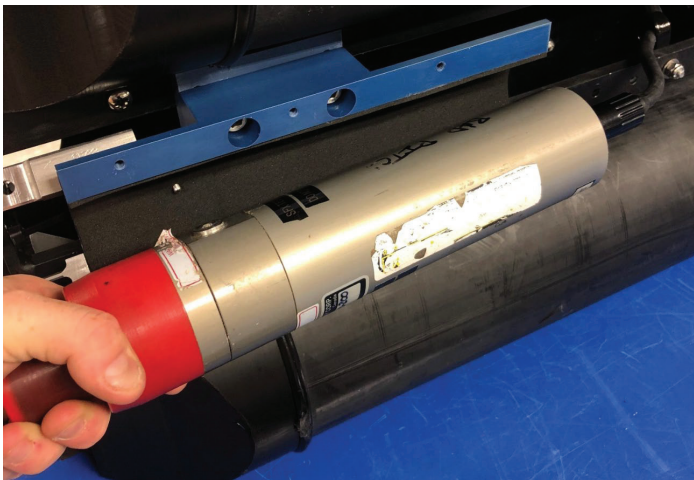
- Carefully flip float over on one side.
- Remove the 8 screws shown.



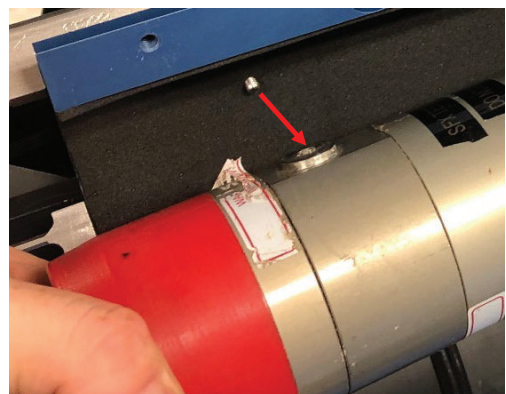
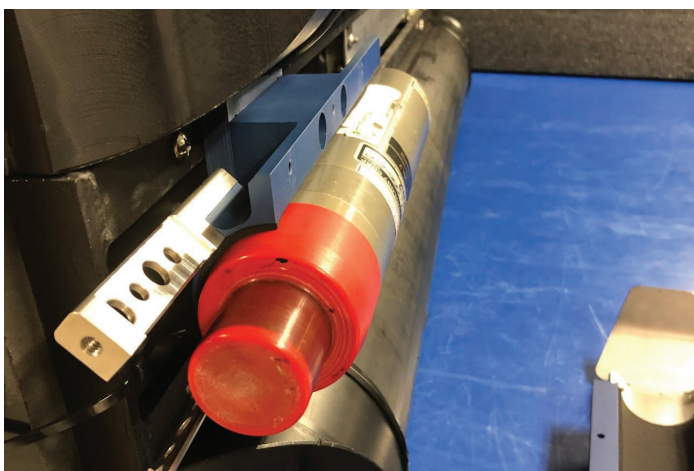




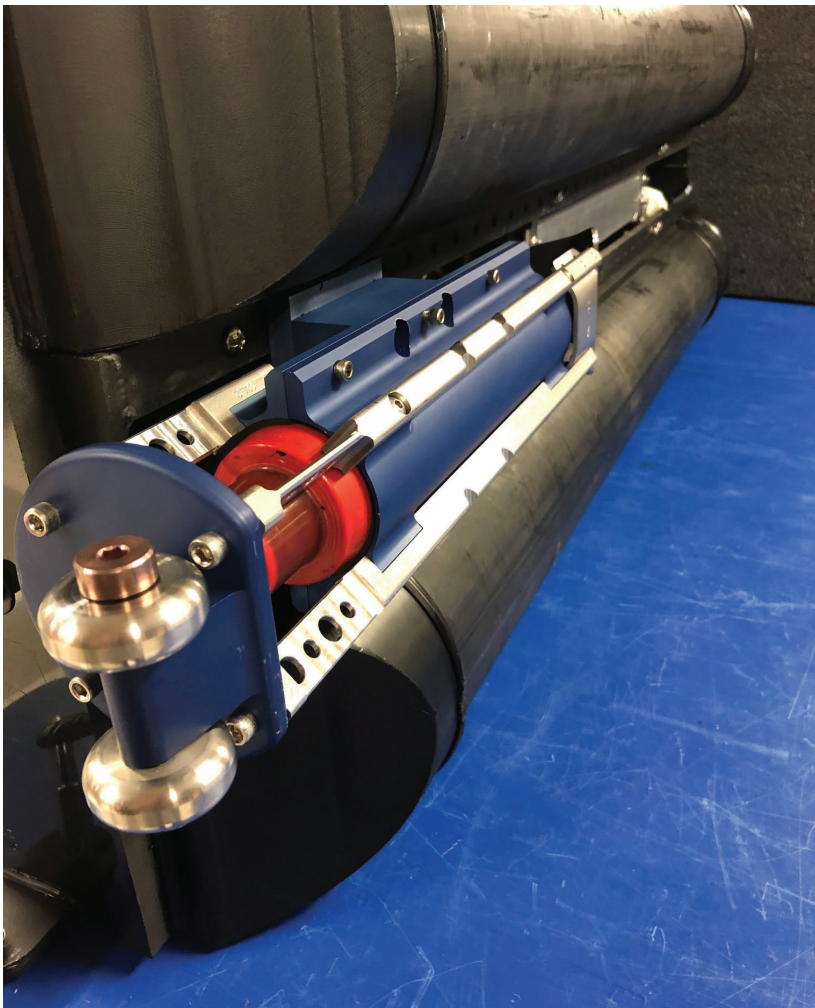
- **Note:** When plugging in sensors, match the pin positions of the mating connectors.
- Plug the sonar into the SF369 cable.
- Once plugged in, slide cable sleeve up to the mated connector on the back end of the sonar and thread until tight.



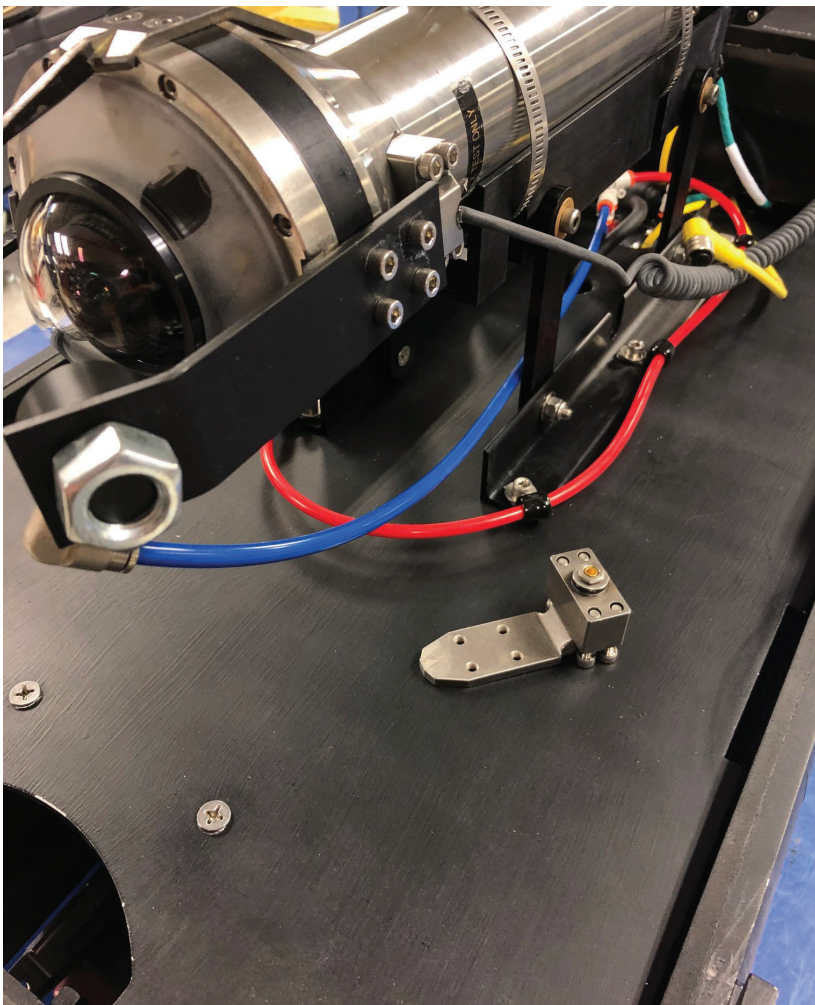
- Align pin with alignment hole on the sonar as shown (below).
- **Note:** the sonar should not be able to slide forward or backward.



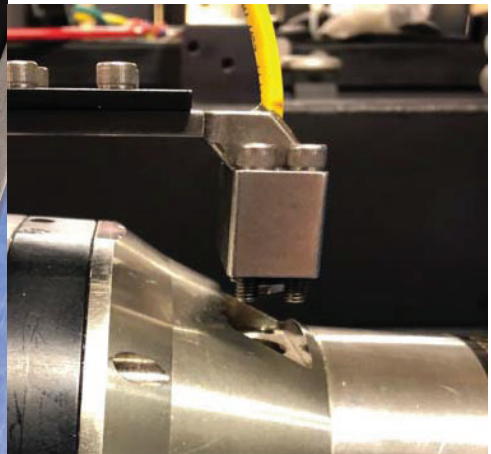




- Put the sonar guard back together using the 8 screws that were previously removed.
- Return the float to the operating position.



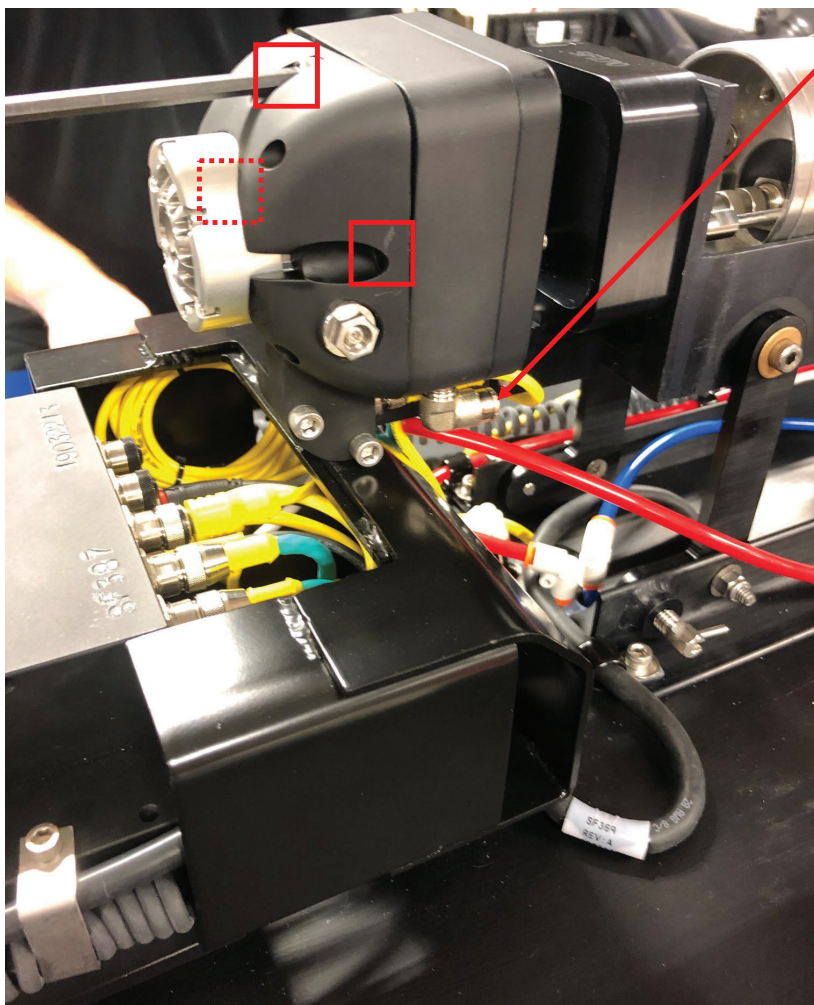
- Slide the DUC camera through the clamps on the lift.
- Remove the bottom skid plate/fork from the DUC, attach SF396 to SF349, and attach the assembly to the DUC.





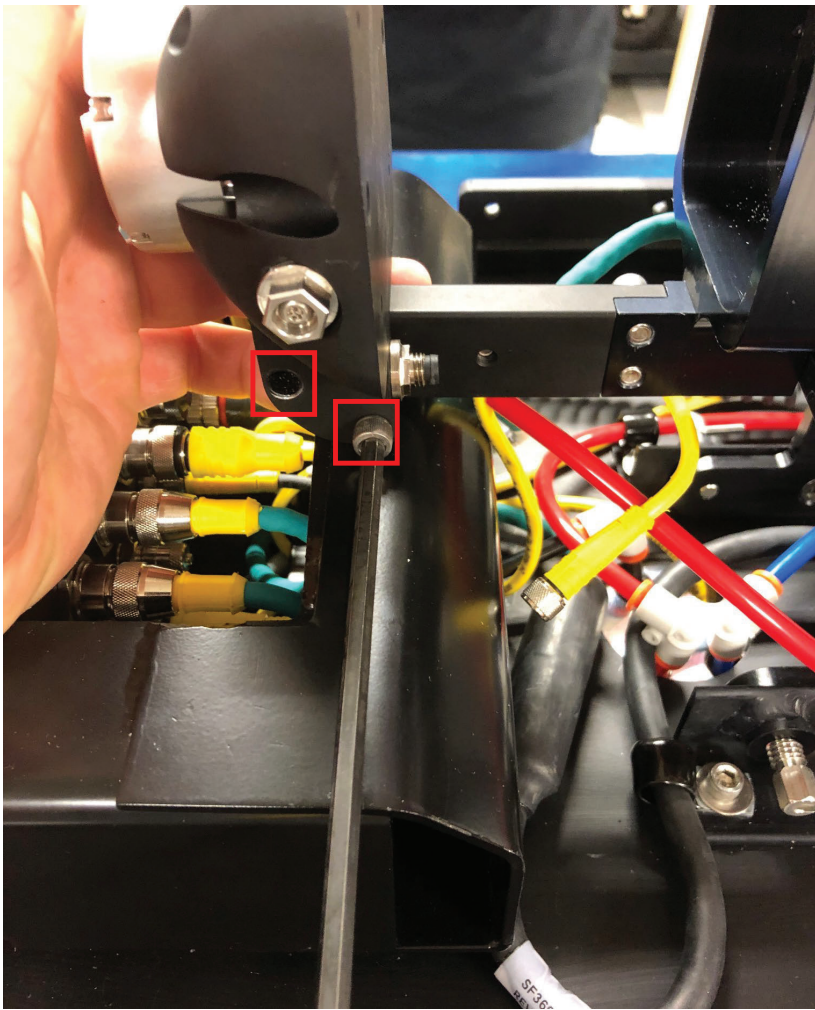


- **Note:** When plugging in sensors, match the notch positions of the mating connectors.
- Plug the 8 pin connector end of SF393 into the DUC.
- Tighten camera clamps to maintain mounting position.
- Retain the skid plate/fork that was removed for when pneumatics are not used.



- Unplug the red tubing from the PTC fitting on the LiDAR blow off assembly.
- Remove and retain the 3 screws shown to remove the blow off assembly.



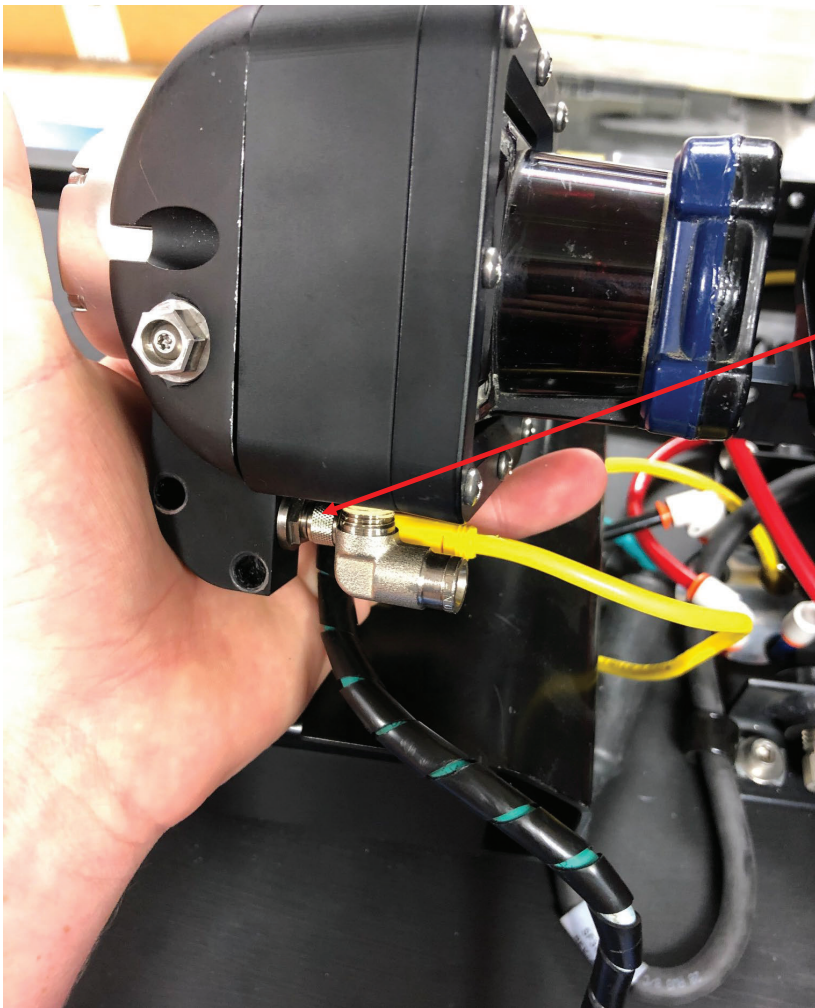


- Unplug the 4 pin end of SF603-1 from the Rear View Camera.
- Remove and retain the 2 screws shown to remove the RVC.

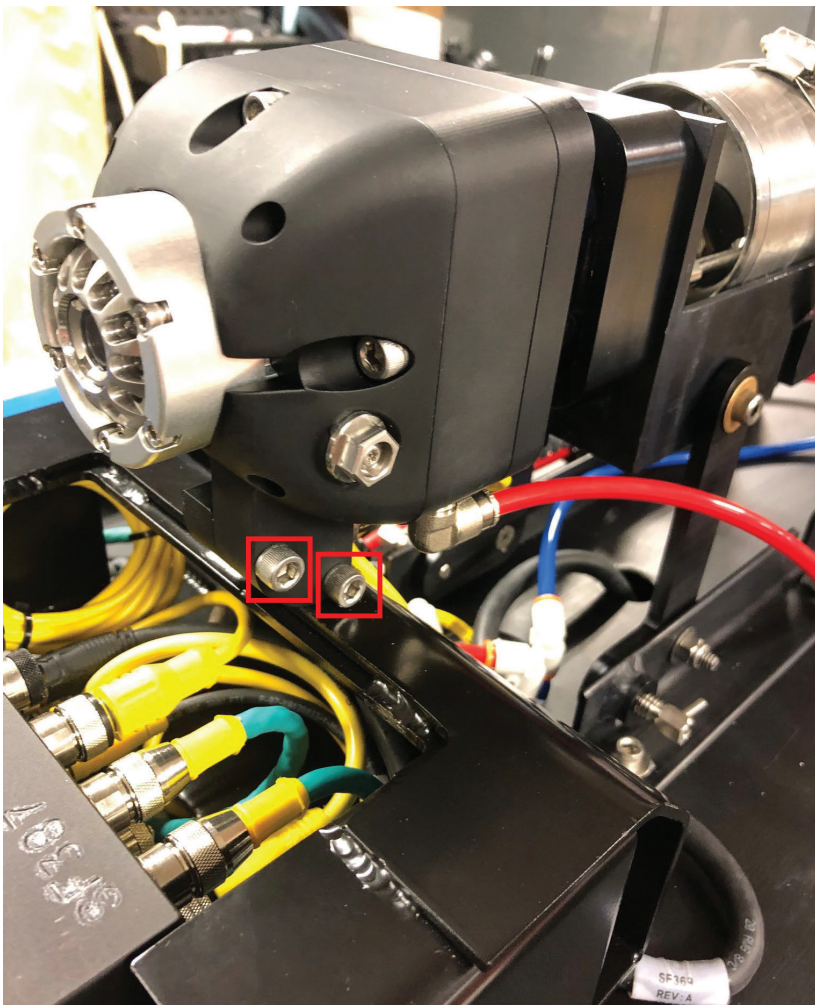


- Install the LiDAR onto the back of the RVC with the four M3 screws that are bagged and tagged with the assembly.



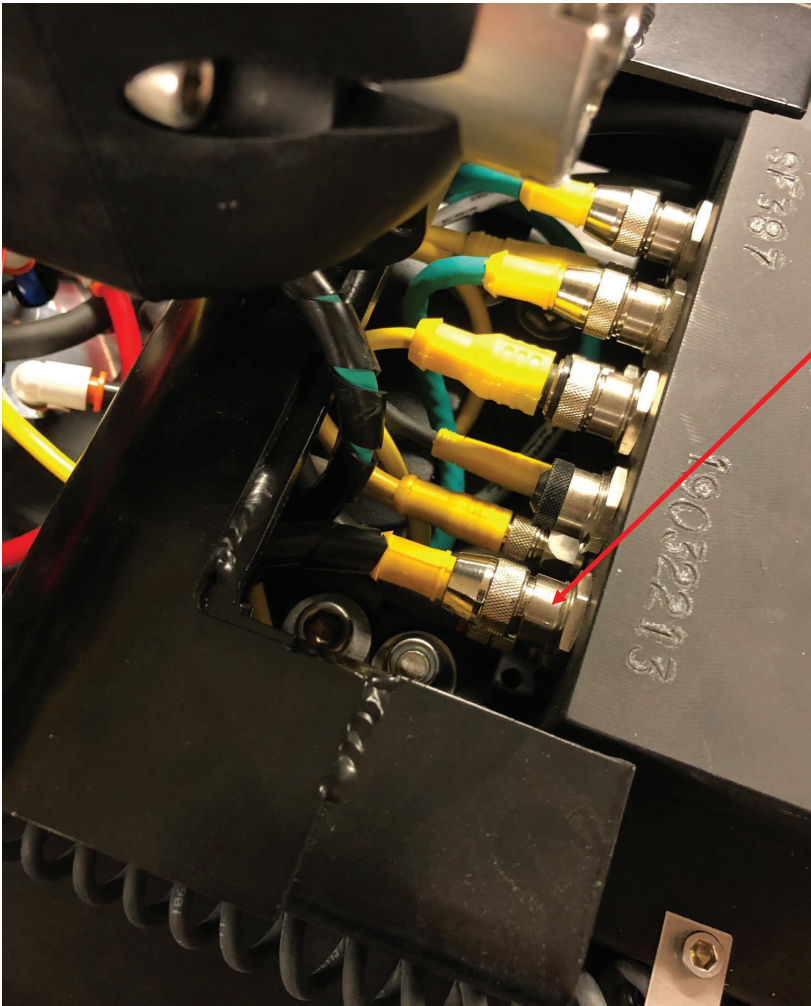


- **Note:** When plugging in sensors, match the notch positions of the mating connectors.
- Reinstall the 4-pin connector
- Reinstall the LiDAR blow off assembly with the 3 screws that were used to remove it.

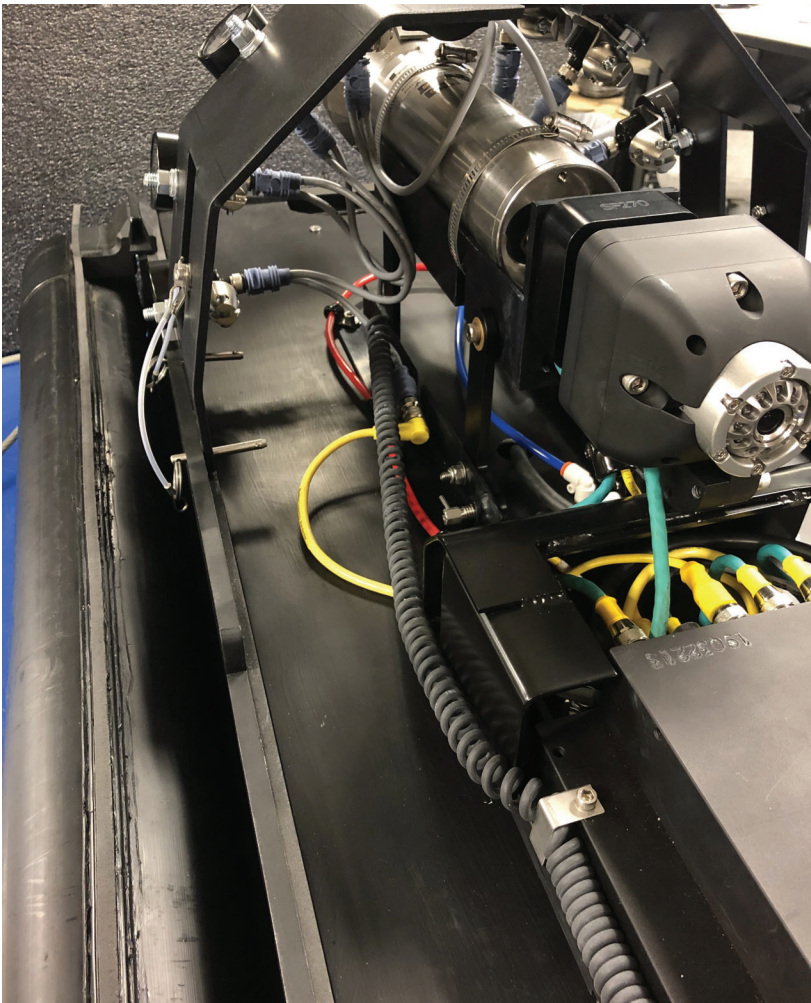


- Reinstall the RVC/LiDAR assembly using the 2 screws that were used to remove the RVC.
- Insert the red tubing back into the PTC fitting on the LiDAR blow off.





- **Note:** When plugging in sensors, match the notch positions of the mating connectors.
- Remove the dust cap from a 12 pin receptacle and retain for shipping/when port is not in use.
- Feed the LiDAR cable into the guard and plug in the LiDAR.

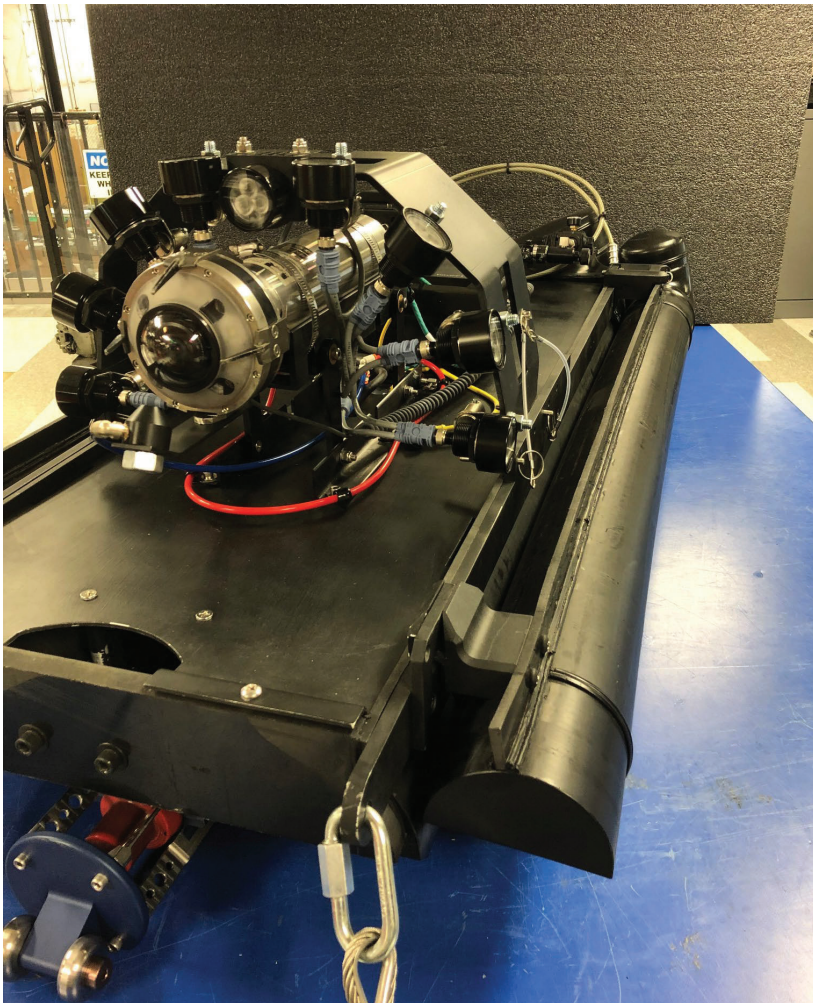


- **Note:** When plugging in sensors, match the notch positions of the mating connectors.
- Reinstall the light array.
- Plug the light array cable (EC2360) into the 5-pin extension cable (EC1154).
- Reattach the outriggers.





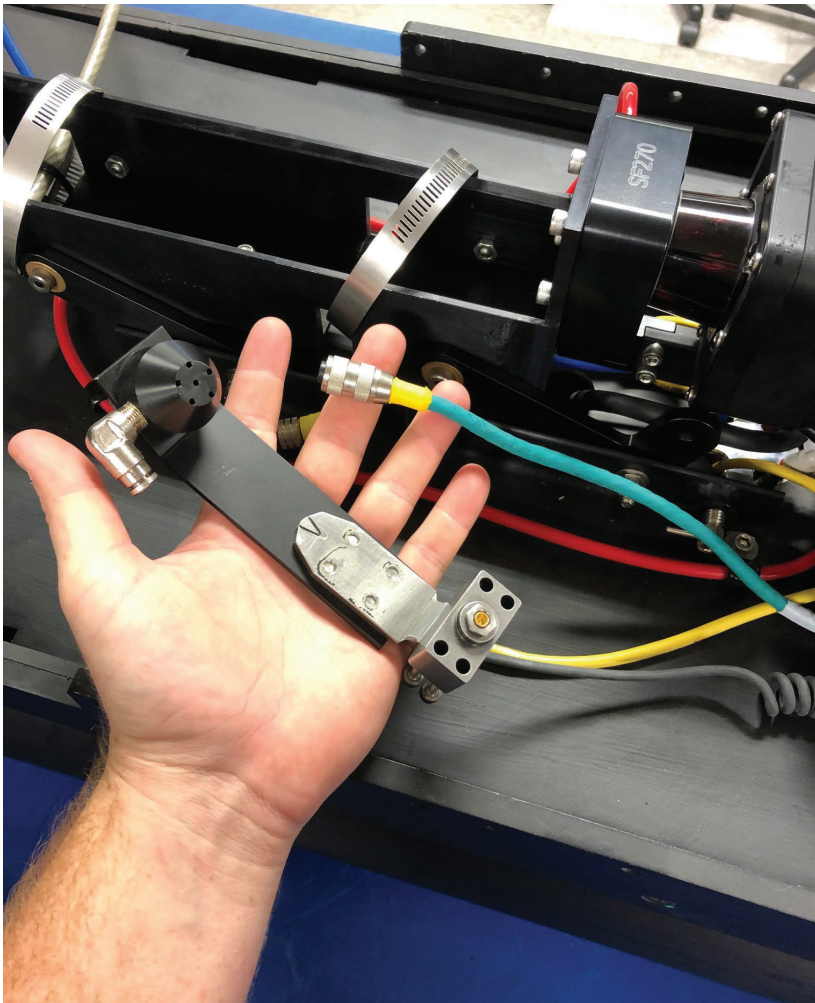
- *View of complete sensor installation.*



- *View of complete sensor installation.*



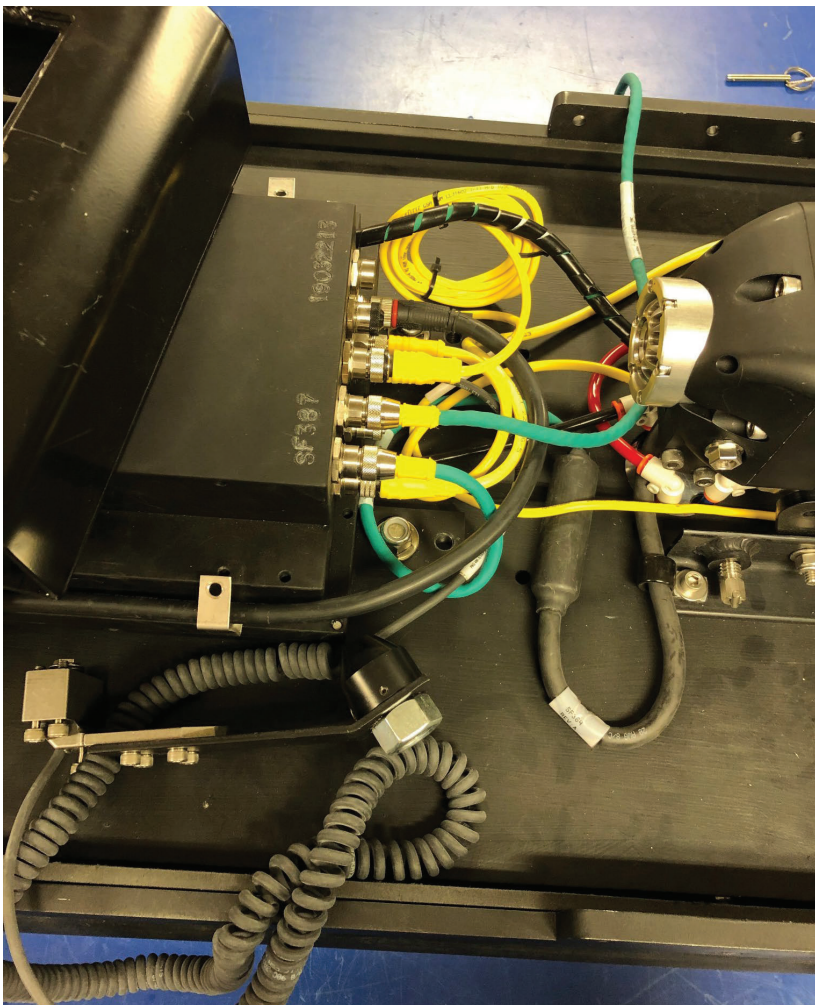
## OZ-II Configuration



- For the OZ-II configuration, the DUC camera should be removed and all cables that were plugged into the DUC should be removed.

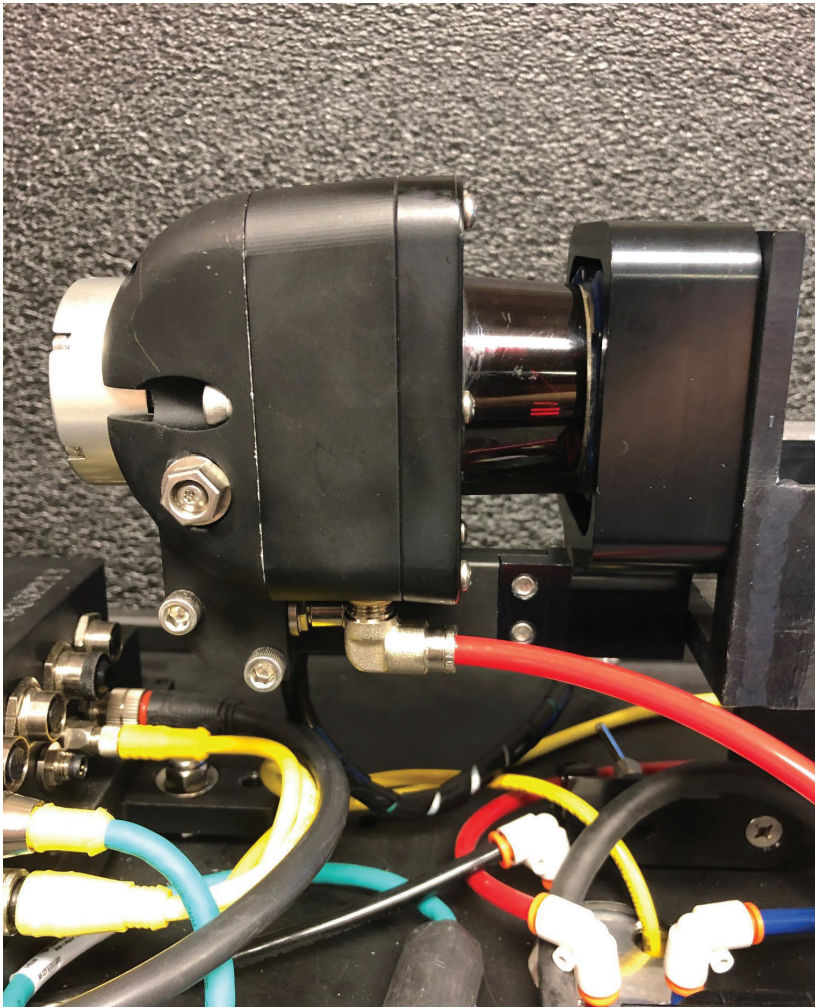


- Remove the cable guard from the electronics box.
- Unplug the LiDAR.
- Remove the top 4 screws from the cable retaining clips and loosen the bottom 4.
- Remove the SF349 (coiled cable) from the cable retaining clips.



- Unplug the strobe sync, rear view camera, and DUC cables from the electronics box. Save these for standard DUC configuration.



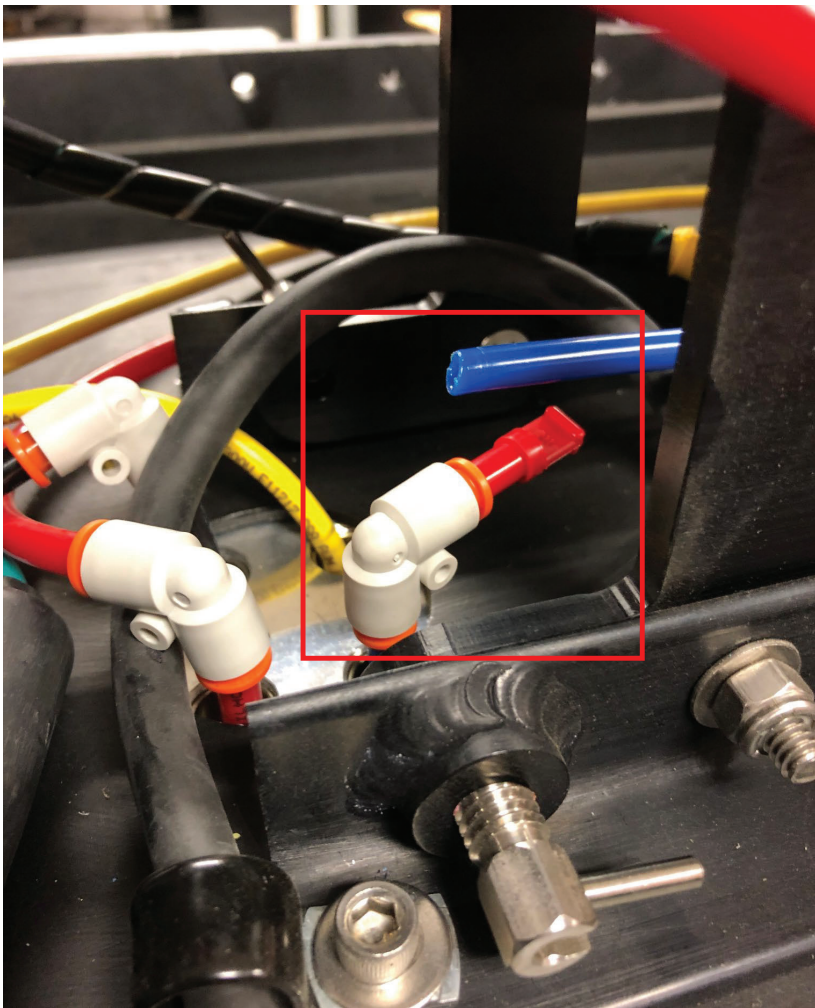


- Remove the red tubing from the push-to-connect fitting on the LiDAR guard.
- Disassemble the LiDAR guard to remove the other end of the rear view camera cable.
- Apply the dust cap to the receptacle.
- Reassemble and install the LiDAR guard and reinstall the red tubing.

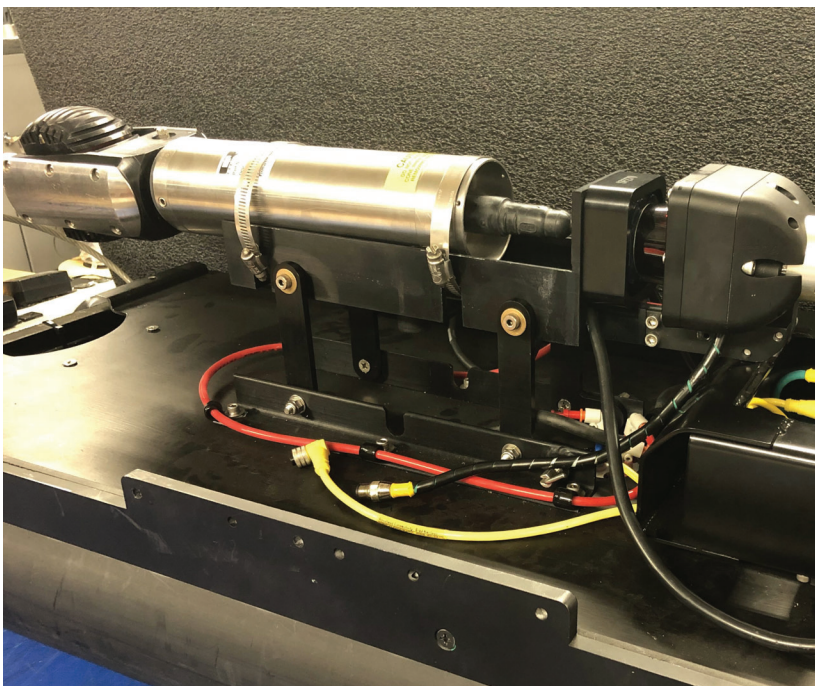


- Apply dust caps to the receptacles that the strobe sync and DUC camera cable were plugged into.



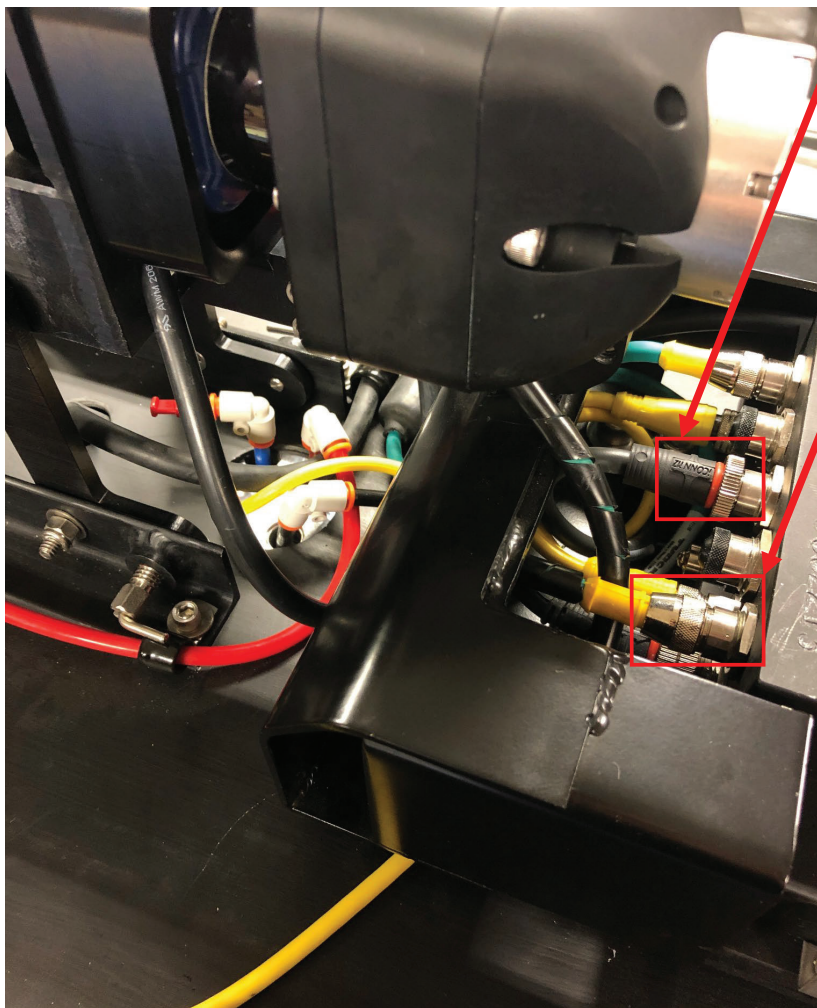


- Unplug the blue pneumatic tubing from the PTC fitting and replace it with a stem plug (HW4436).
- Retain blue tubing for standard DUC configuration.



- Plug the 5-pin end of the OZ-II cable (SF615) into the back of the OZ-II.
- While routing the cable and camera through the two hose clamps, route the other end of the OZ-II cable through the cutout near the back of the lift.
- Tighten the hose clamps to secure the camera.
- Get the SF387 electronics box guard back in place but do not tighten it down yet.





- Route the 8-pin end of the OZ-II cable under the cable guard and plug it into the 8-pin receptacle.

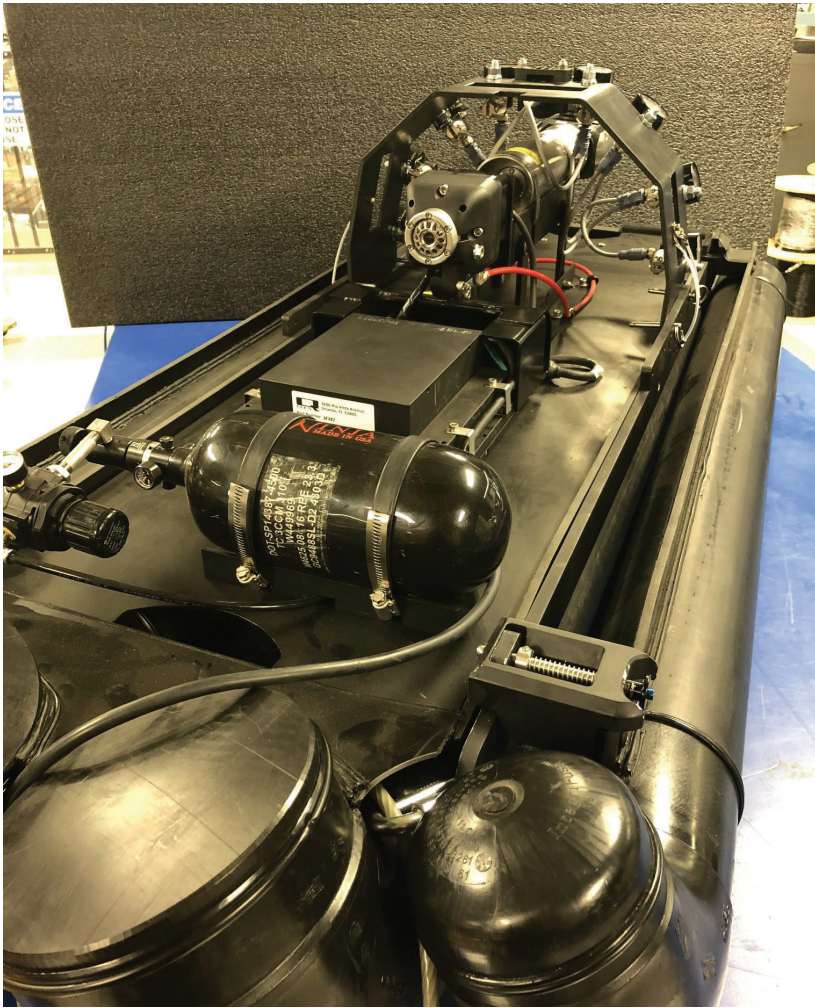
- Route the LiDAR cable over the cable guard and plug it into the remaining 12-pin receptacle.



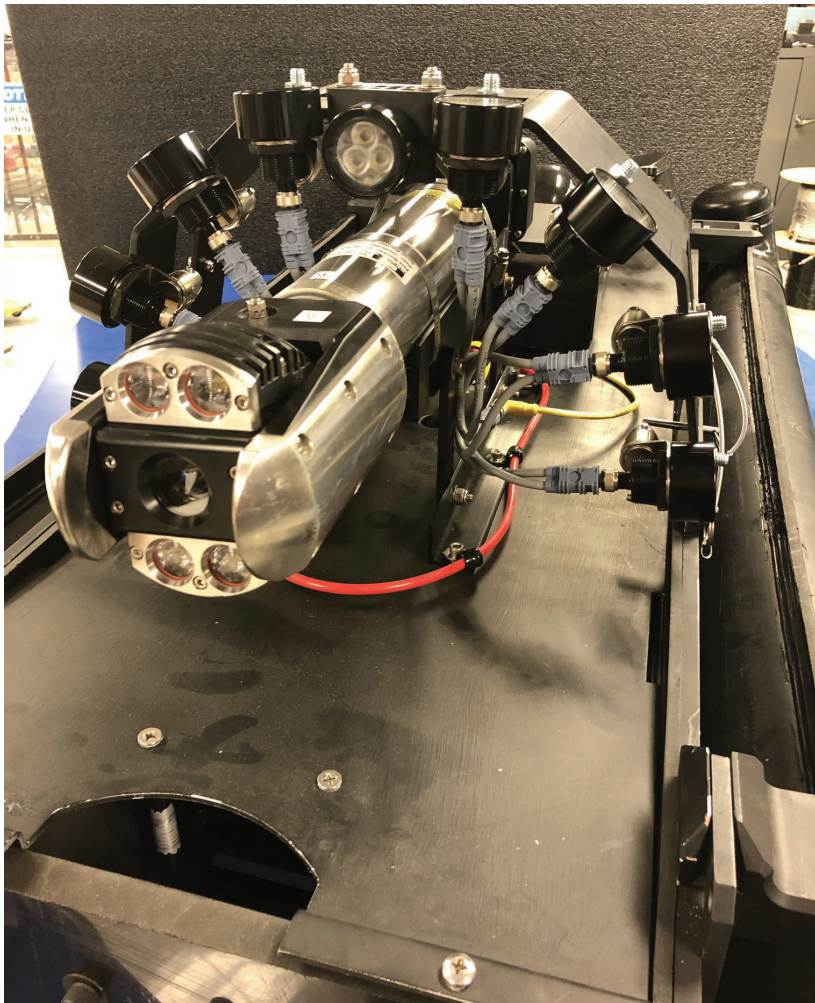
- Tighten down the cable guard with the previously removed hardware.

- Reinstall the top set of 4 screws for the cable retaining clips on the sides of the electronics box and tighten the bottom set.





- View of complete OZ-II configuration.



- View of complete OZ-II configuration.



