

Rev	Date	ECN	Description
-	08/31/22	-	Initial Release



Document Number:

SF970-INST

Description:

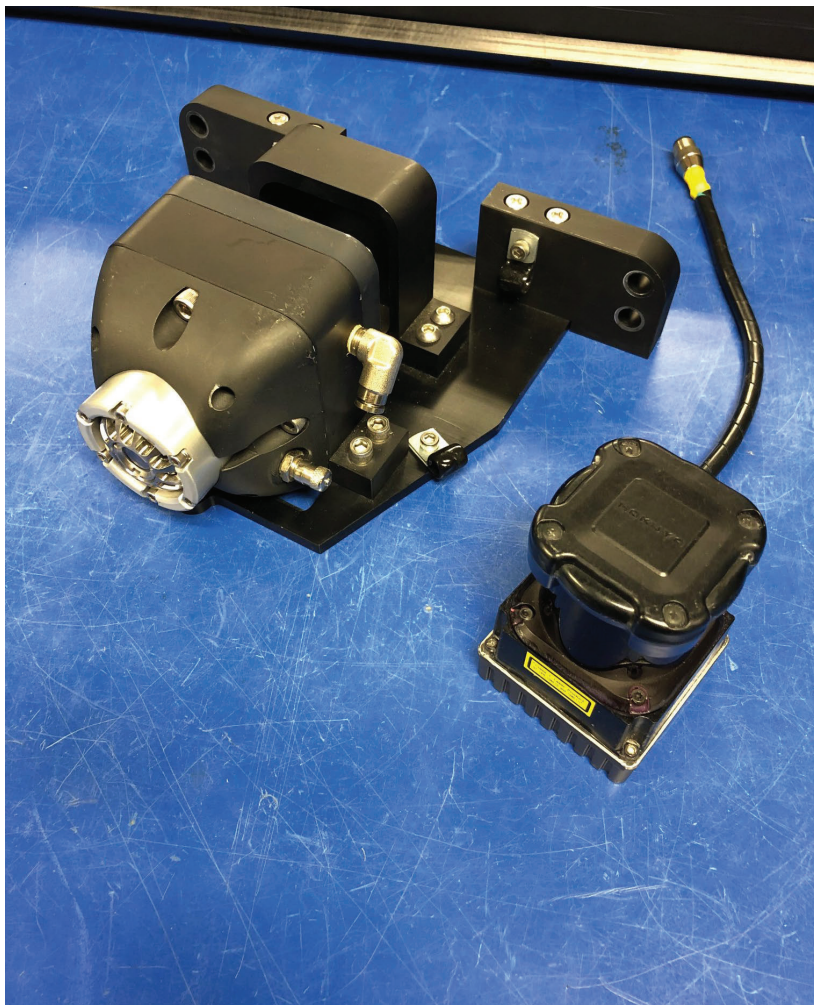
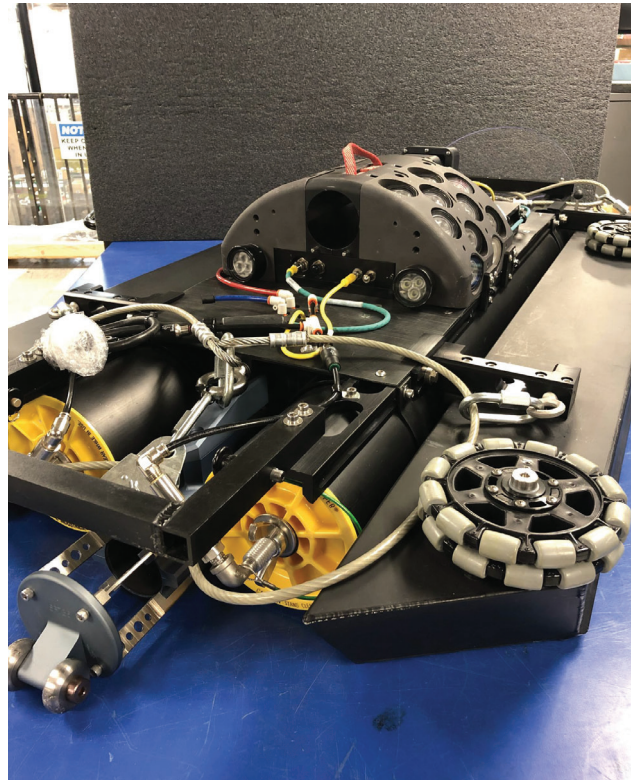
**INST SHT,SENSOR
INSTALLATION, SF970
SENSOR INSTALLATION
INSTRUCTIONS**

Signature CHKR: *Karla Caraballo*

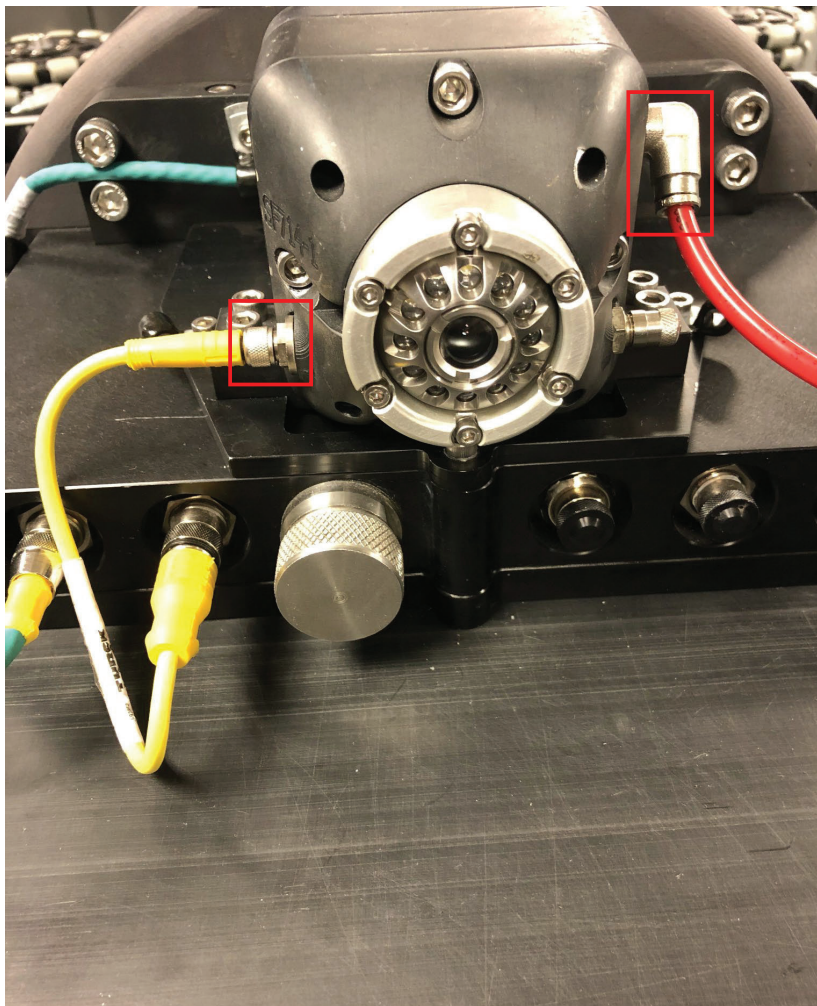
Signature ENGR: *Josh Freiberg*

Signature MFG: *Kevin Johnson*

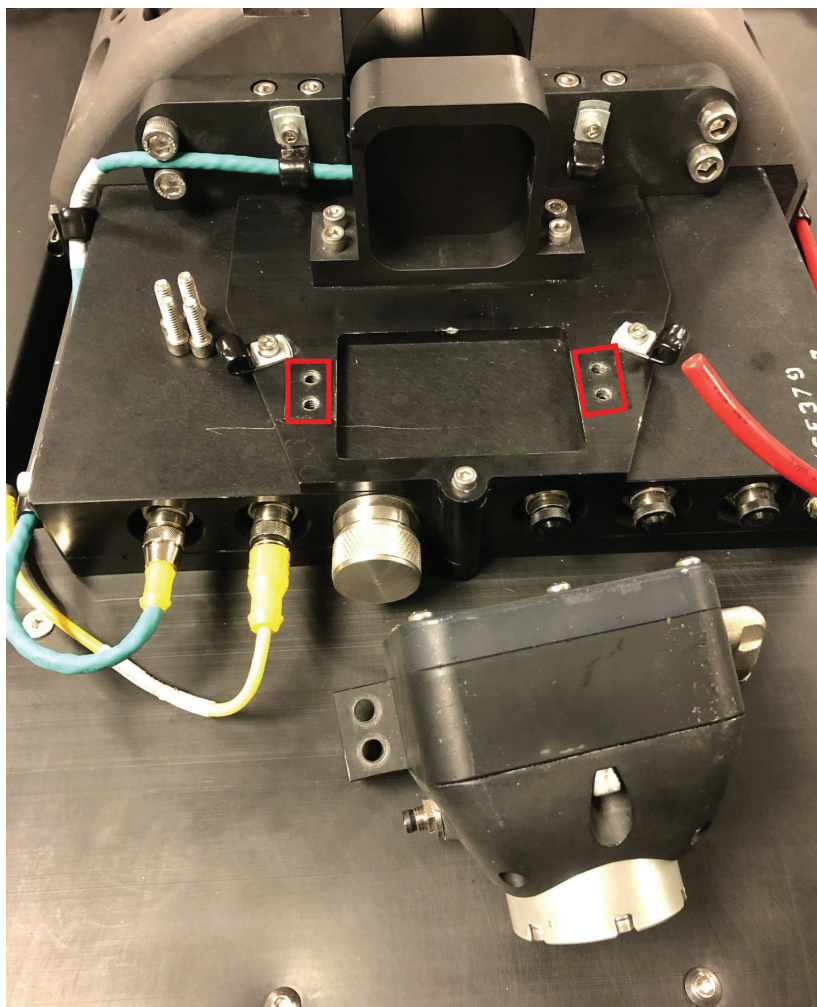
This instruction sheet will cover installation of LiDAR, Sonar, DUC, and OZ-II on an SF970 SoLID FX Float.



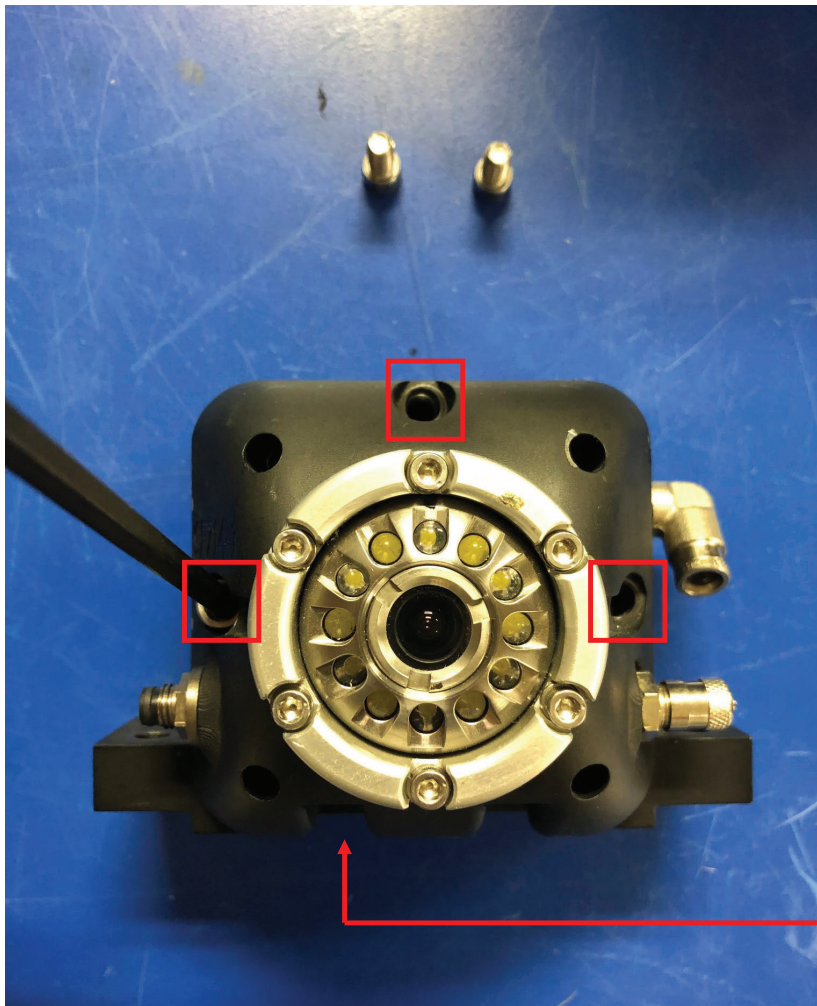
The LiDAR (SF362) is mounted to the SF970 with the SF385 LiDAR guard.



- Disconnect the 4 pin connector and the red tubing that are connected to the RVC.



- Remove the 4 screws shown and retain for reinstallation.
- The assembly with the RVC will now be disassembled for LiDAR installation.



- Remove the 3 screws shown and retain for reinstallation.
- This removes the LiDAR blower portion of the guard from the RVC.

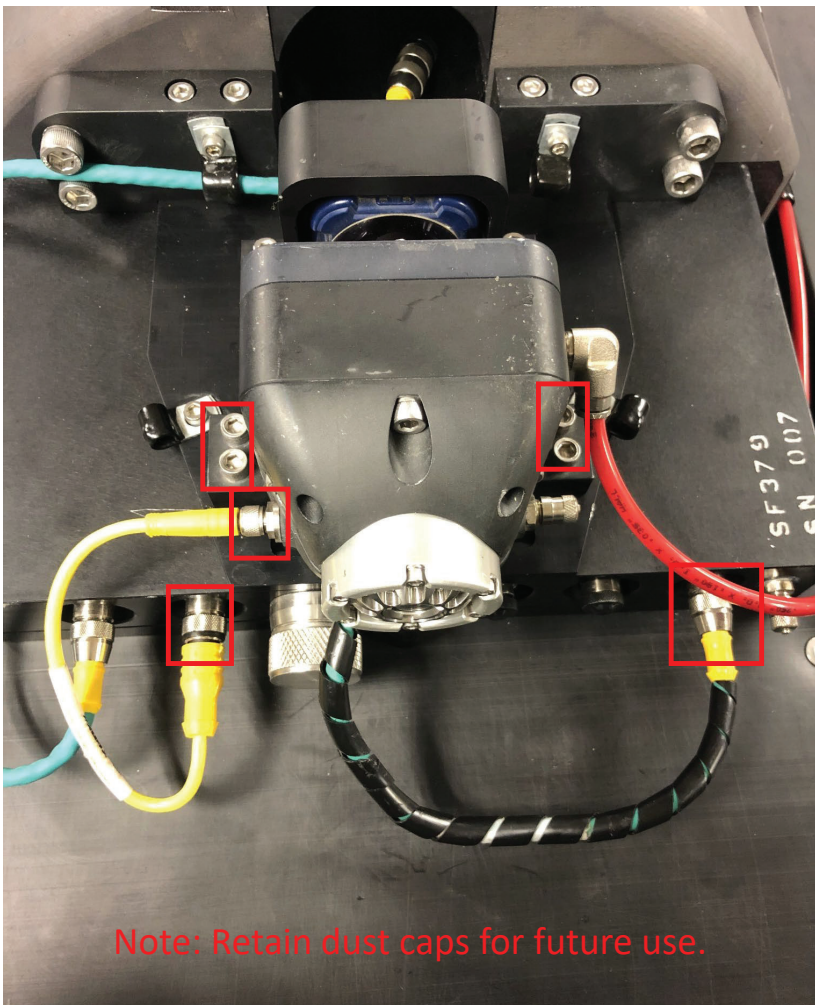
Note: LiDAR cable will be routed through this cutout when mated to the rest of the assembly.



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

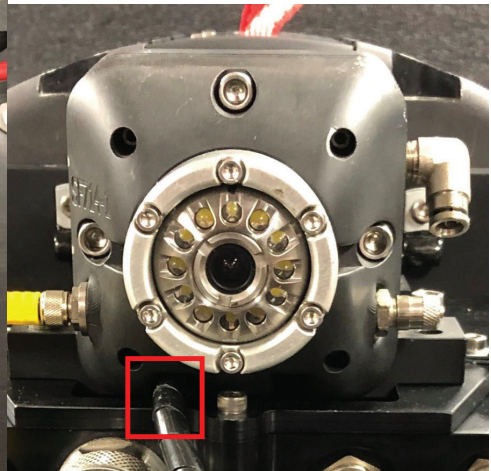


- Use the 3 screws that were previously removed to reinstall the blower assembly.



Note: Retain dust caps for future use.

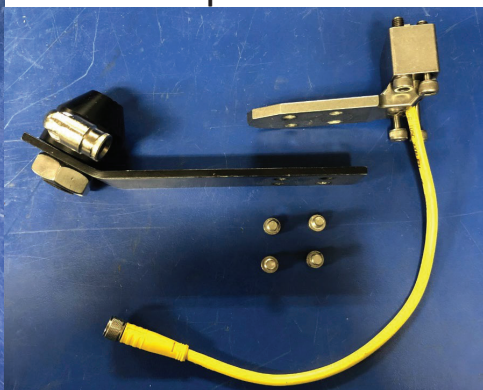
- **Note:** Route LiDAR cable through cutout shown below.
- Install the RVC/LiDAR assembly onto the flat plate using the 4 screws previously removed.
- Plug in 4 pin and 8 pin end of the RVC cable.
- Plug in 12 pin end of the LiDAR cable.



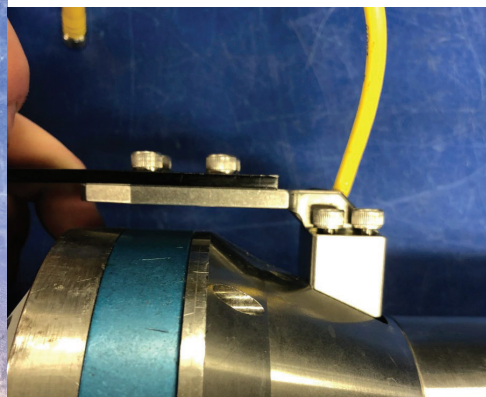


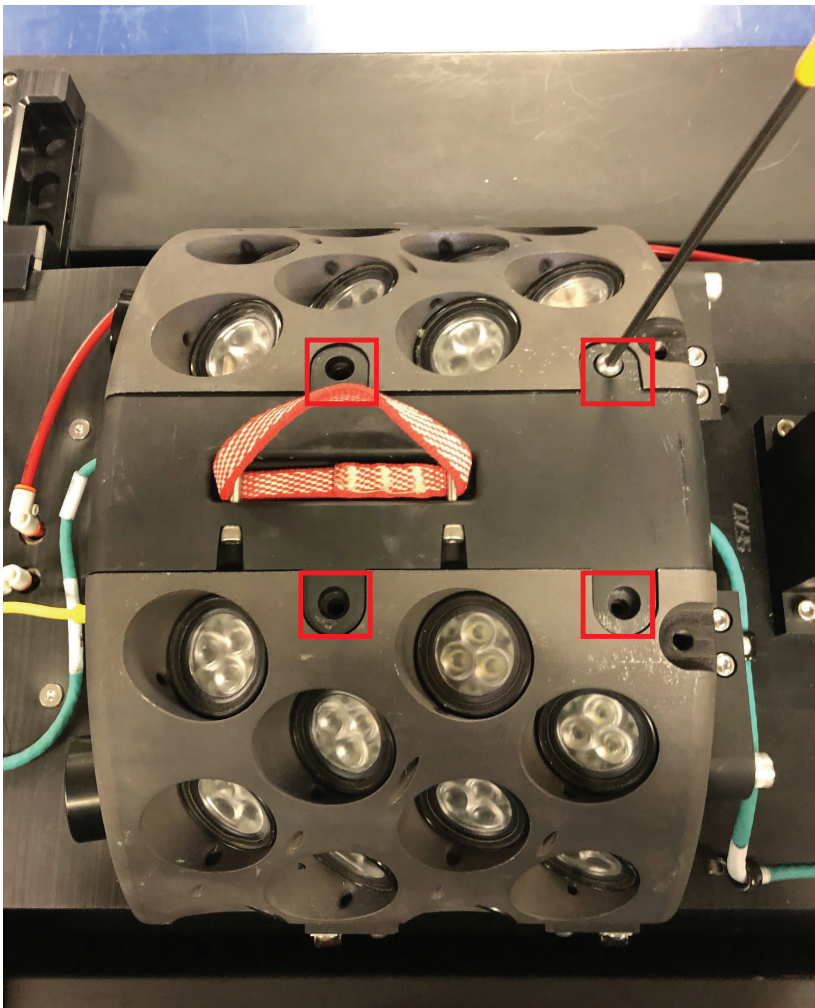
For DUC installation you will need a DUC, DUC Blower Assembly (SF396), and a DUC Pulse Output Skid Plate (SF649-1).

- Using blue threadlocker and the bagged and tagged screws, attach the blower assembly to the skid plate.

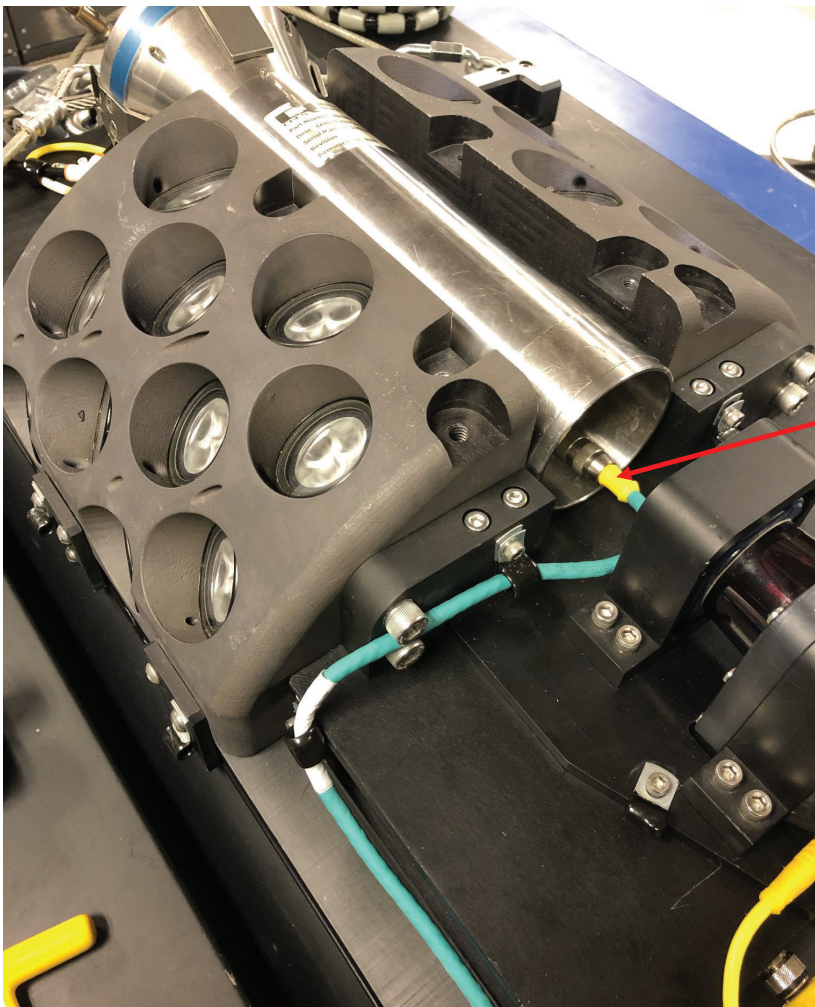


- Remove the bottom skid from the DUC and replace it with the previously assembled part.
- **Note:** Align connector as straight as possible when mating.

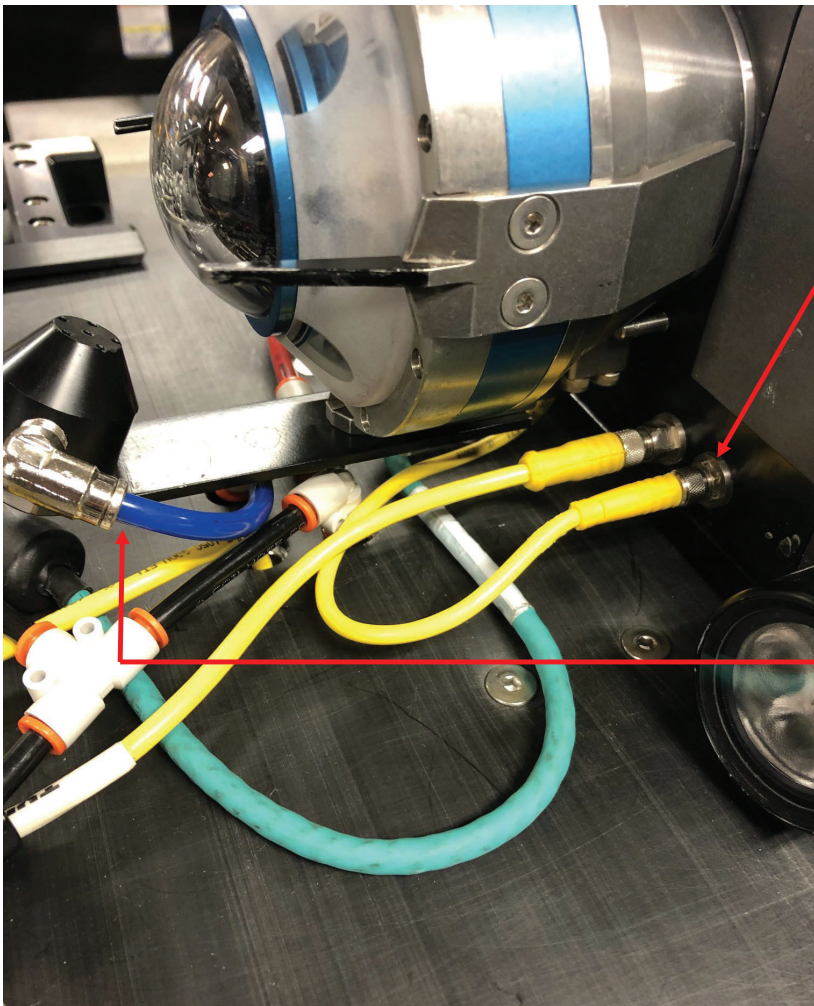




- Remove clamp with these and retain screws for reinstallation.



- **Note:** When plugging in connectors, match the notch positions of the receptacle.
- Place the DUC into the camera cradle as shown.
- Plug the camera in to the routed cable shown.
- Using the 4 screws that were previously removed, reinstall the camera clamp.



- **Note:** When plugging in connectors, match the notch positions of the receptacle.
- Plug the connector from the skid plate attachment into the receptacle shown.
- Remove cap from blue pneumatics and plug it into the fitting on the blower assembly. Retain tube cap for future reinstallation.



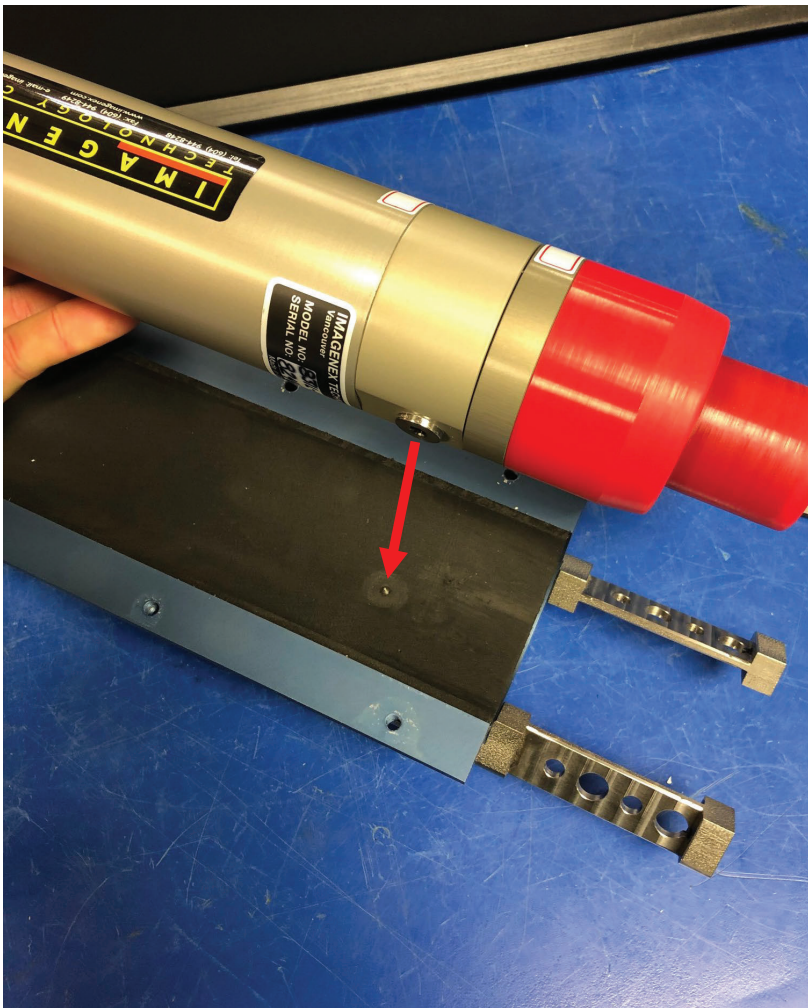
*Sonar sensor
Installation*



- Remove the 2 screws shown to remove the sonar guard. Retain for reinstallation of the guard.



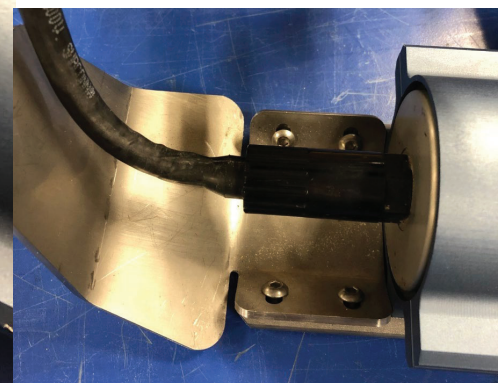
- Remove the 4 screws shown on either side of the guard. Retain screws for reassembly.
- **Note:** The sonar will be fitted in the top half of the guard as shown in the next step.



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

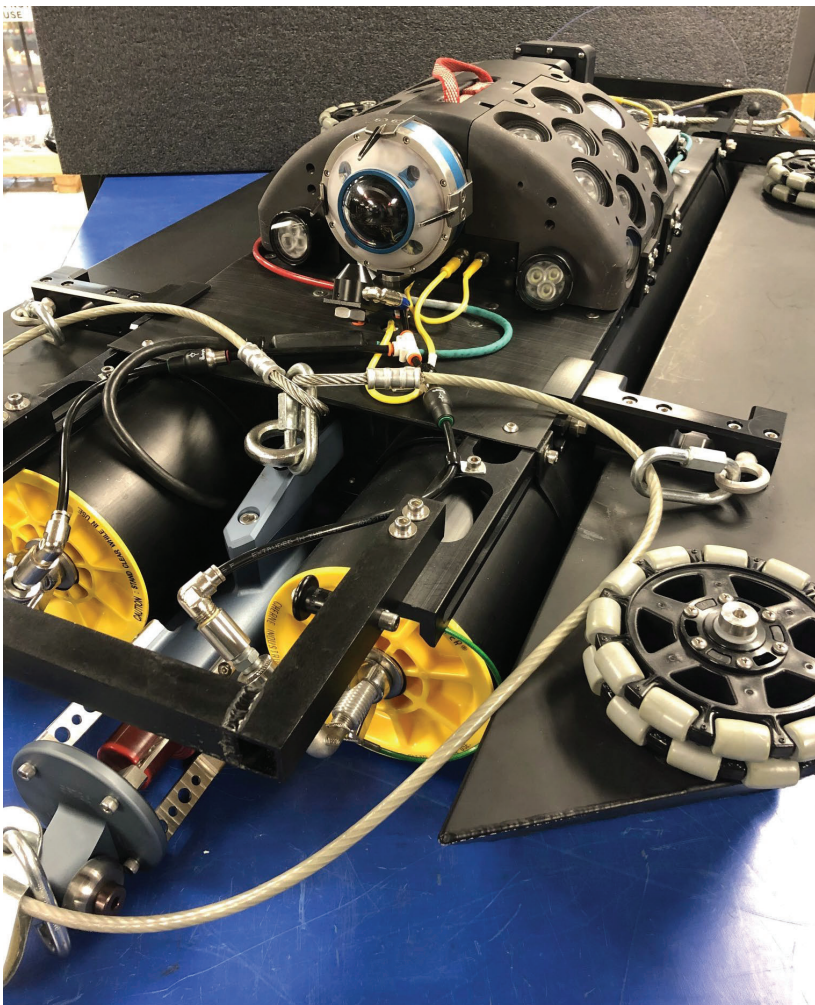


- **Note:** When plugging in the cable, match the notch positions of the sonar.
- Plug in sonar cable.
- Once plugged in, slide cable sleeve up to the mated connector and thread until tight.

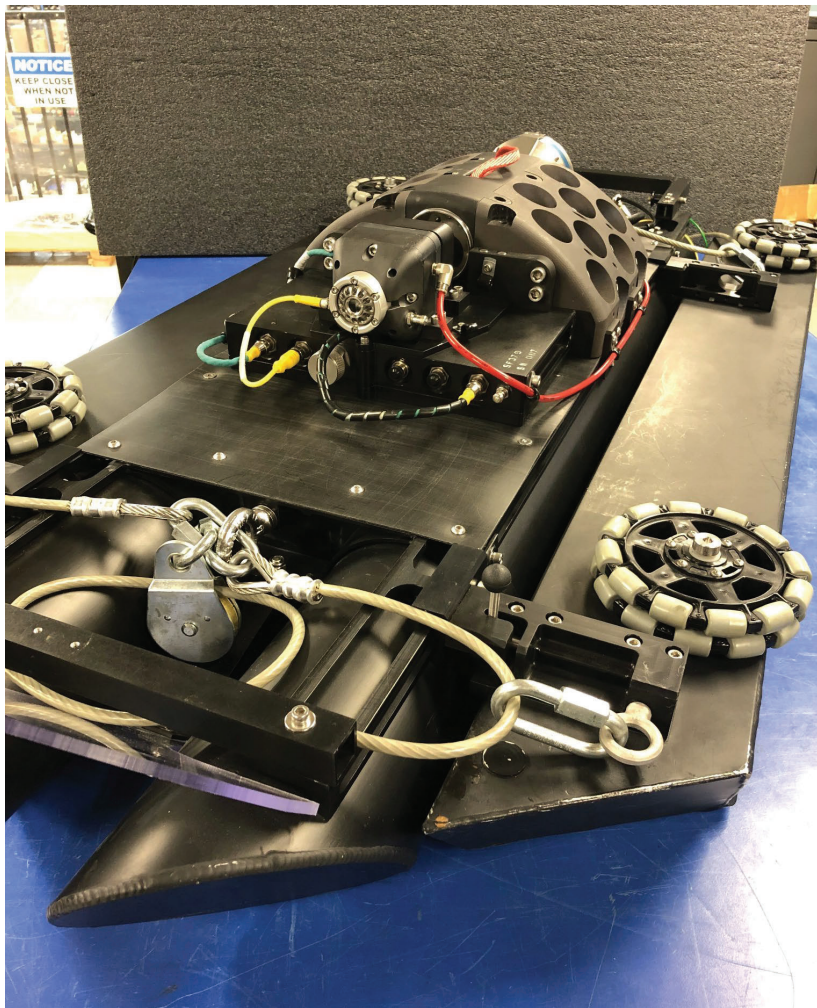




- Install sonar guard with plugged in sonar using the 2 screws that were previously removed.

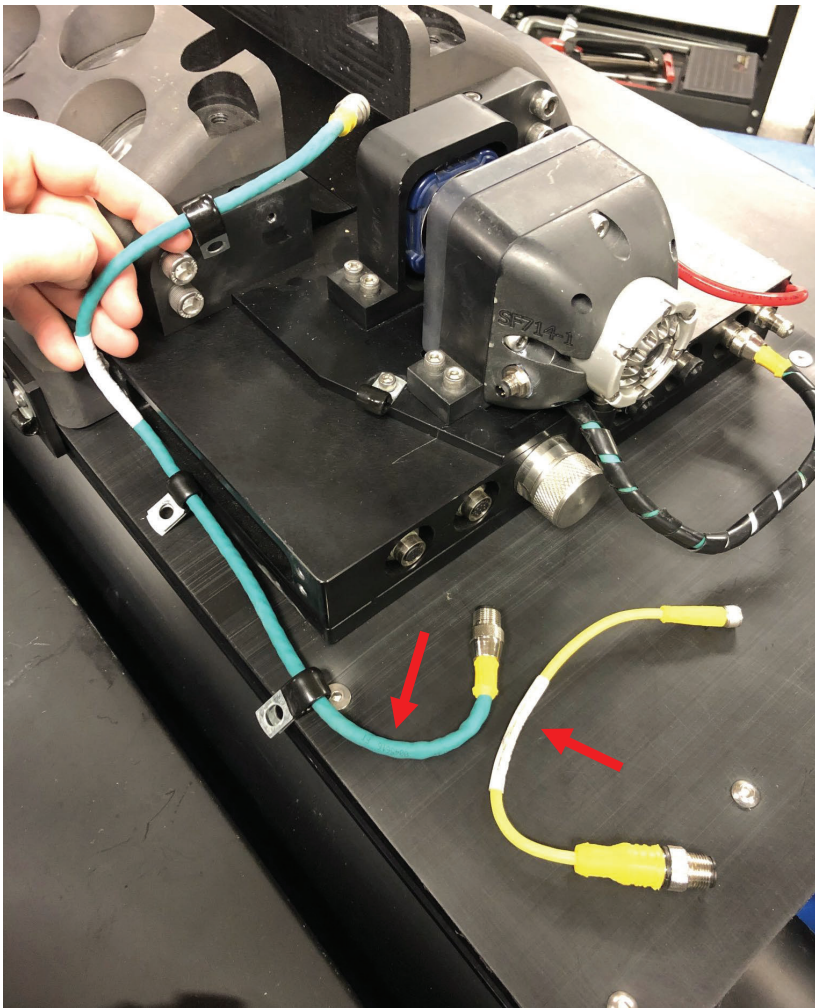


- *Front view of complete sensor installation.*

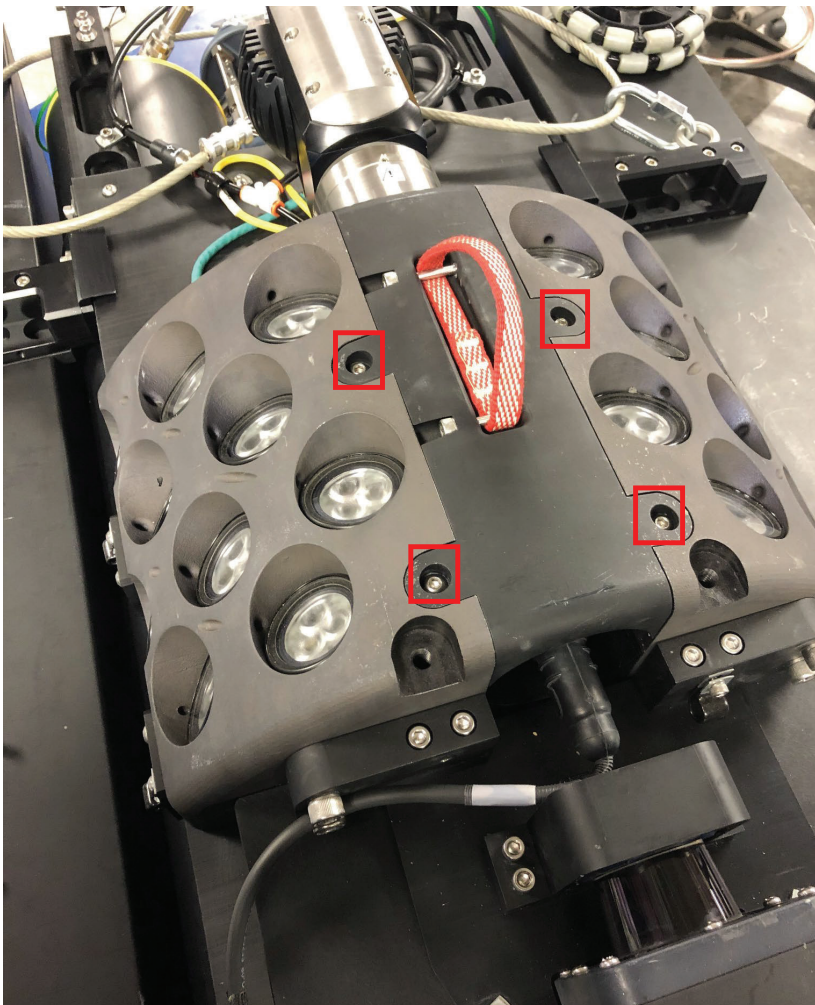


- *Rear view of complete sensor installation.*

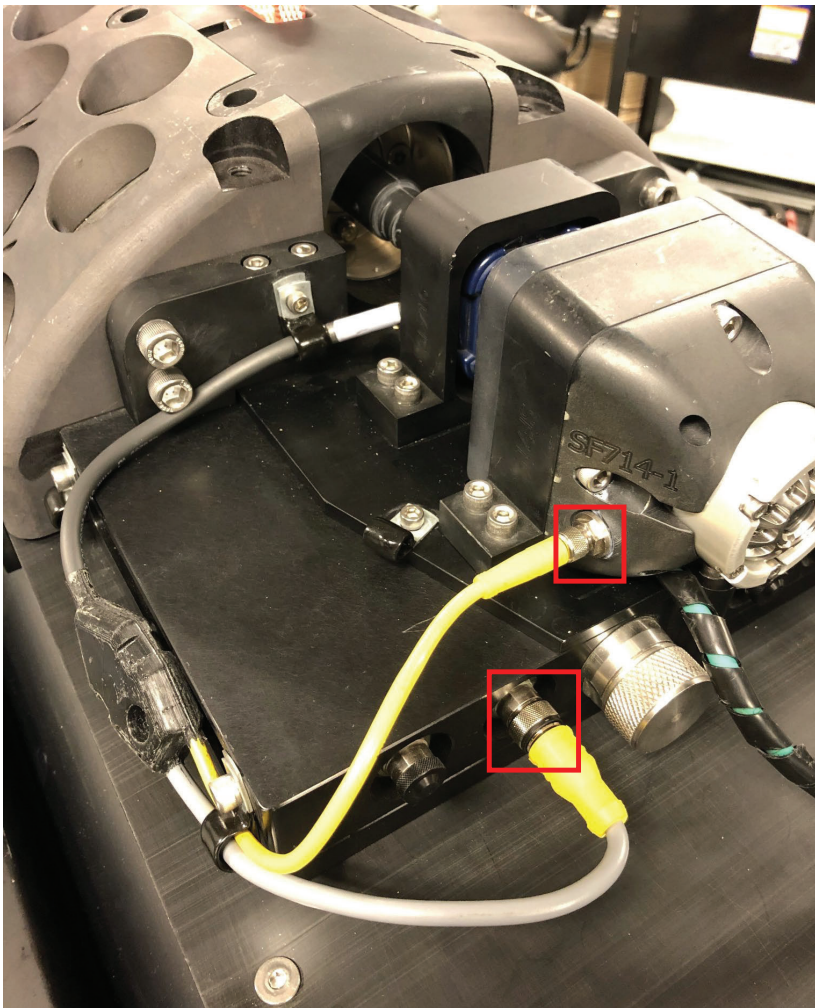
OZ-II CONFIGURATION



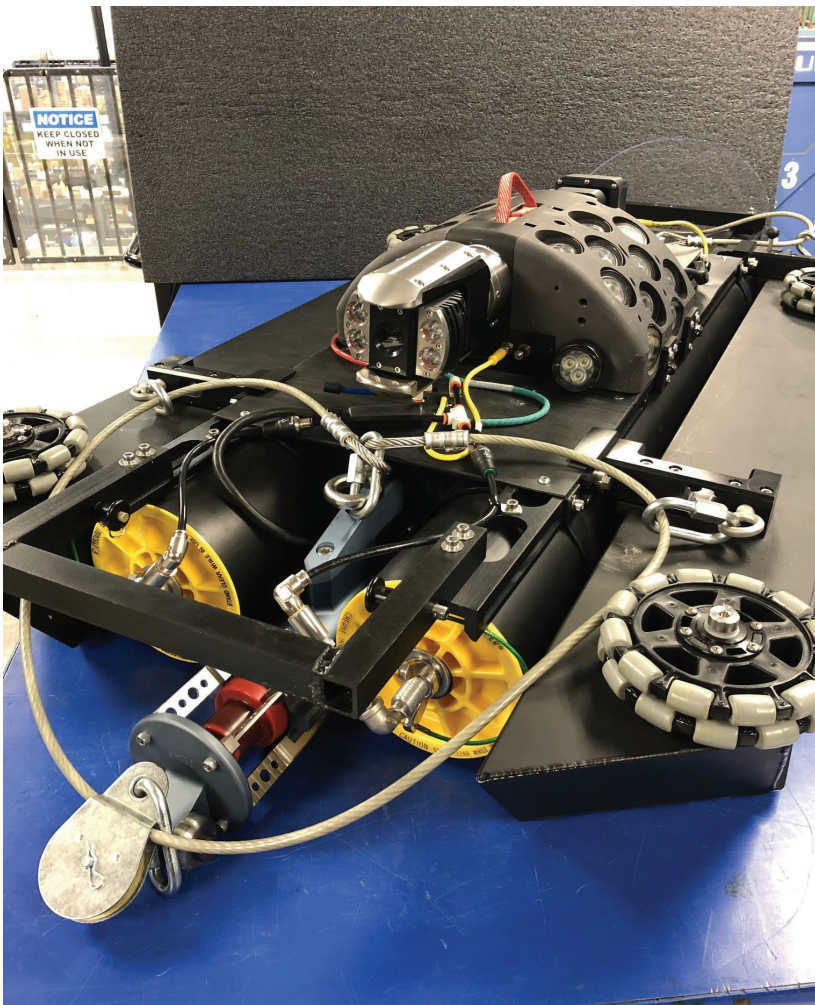
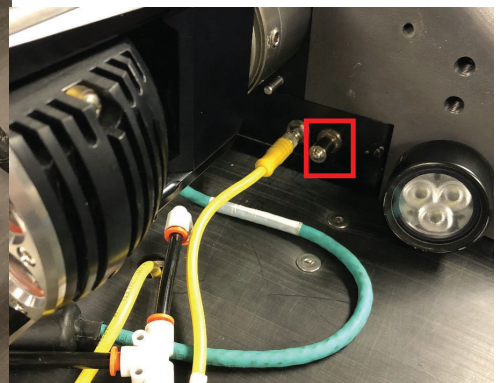
- The two cables shown should be removed for the OZ-II configuration.
- Keep cable clamps and hardware for OZ-II cable installation.



- Plug in the OZ-II camera cable and secure the camera in the camera clamp using the 4 screws shown.



- Route the OZ-II cable as shown using mounted hardware.
- Plug in and thread the 4 pin and 8 pin connectors.
- Make sure dust caps are applied to unused receptacles.



View of complete sensor installation with OZ-II camera.

