ATON ASSEMBLY CHECKLIST

AQP:		AQD:		Clamparatus S/N:		Date:	

1.0 The Nortek Current Profiler and Cable

1.1 Insert the profiler internal batteries

Check that the battery pack has ~14 V	VOLTAGE	
Connect and insert batteries		
Check that the current meter end cap O-ring is lubricated and free of dust, etc.		
If the sensor has recently been deployed: Replace the O-ring with a new one that is lubricated		
Tighten sensor end cap and head using the Allen wrench contained the Nortek blue maintenance kit		

1.2 Test profiler with cable

Use laptop with Aquapro to test cable and sensor with internal batteries	VERSION	
Download all data from the profiler put data in H://Ostep/AtonAdcp/EraseRecoderData/S/N	FILENAME	
"Erase Recorder" to wipe the recorders memory		
Check/Set baud rate to: *1/10 Watt*: 2400 *1 Watt:* 9600		
Lubricate the sensor pins with silicon spray		
Connect the sensor cable to the instrument, and tighten locking sleeve		

2.0 Assembling the Clamparatus

2.1 Clamparatus Preparation

Attach/replace Zinc plate on clamparatus		
Check rubber pads on deck plate and stand-offs, if necessary replace pads. Replaced?	YES ☐	NO ☐

2.2 Attach the fiberglass sensor tube

Parts: 3 U bolts, 3 rubber gaskets, 6 plastic bushings, 6 washers, 6 aircraft nuts (3/4" head)	
Ensure white plastic bushings are completely isolating the metal U bolts from clamparatus body	
Slide the fiberglass tube down so that the grey end cap is level with the deck plate	

2.3 Attaching the profiler

Remove sensor collar from clamparatus by removing the four bolts and attach sensor collar to profiler	
If reusing cable, pull it out of tube and visually inspect for damage.	
Run cable through tube *(verify that connectors are at their appropriate ends)*	
Align sensor and tube using the X mark *(line next to the X faces away from the body of the ATON)*	
Tighten the collar by snapping into the groove on the profiler and tightening 1 bolt	
Slide the profiler into the tube and attach collar to tube *(4 bolts)*	

2.4 Running the sensor cable through the end cap with strain relief

Remove locking sleeve from the sensor cable	
Remove 4 bolts from white delrin clam shell and take it off the grey end cap	
Remove the black rubber gasket and feed cable through hole in grey end cap	
Replace the rubber gasket and re-attach delrin clam shell and tighten screws	
Re-attach plastic end cap and tighten 4 Allen screws to secure on fiberglass sensor tube	

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Connect the sensor cable to the instrument, and tighten locking sleeve

2.0 Assembling the Clamparatus

2.1 Clamparatus Preparation

Attach/replace Zinc plate on clamparatus

Check rubber pads on deck plate and stand-offs, if necessary replace pads. Replaced?

YES

NO

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Ensure white plastic bushings are completely isolating the metal U bolts from clamparatus body

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If reusing cable, pull it out of tube and visually inspect for damage.

Run cable through tube (verify that connectors are at their appropriate ends)

Align sensor and tube using the X mark (line next to the X faces away from the body of the ATON)

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Re-attach plastic end cap and tighten 4 Allen screws to secure on fiberglass sensor tube

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3.0 Electronics Box Assembly, Testing, and Mounting

3.1 Battery Testing

Check voltage of both battery packs (should be ~14V) VOLTAGE

Connect and insert batteries

Record voltage and date on battery packs

3.2 Radio Setup

Check destination address + hopping channel ADDRESS

CHANNEL

Label board and shore station modem with destination address and hopping channel

Store settings files at H:\ATON_ADCP\Modem_Settings FILENAMES

Setup test radio for on boat communications tests

3.3 Data Flow Tests

Use a packaged Maxstream modem to test data flow out of the electronics box

Test data flow from electronics box to laptop via external radio, 1 hour

Test data flow from electronics box to 9210 via external radio, 48 hours

3.4 Attach electronics box to clamparatus

Put max # of desiccant bags under radio board, and maximum # of desiccant bags over batteries

Seal box with Boat LIFE Life Caulk + 32 stainless steel bolts (apply THIN never seize)

Check that connectors are facing away from the clamparatus tube

Lightly coat all bolts with never-seize

Make sure rubber isolators are in place

Add NOAA sticker on lid to electronics box if needed 4.0 Final Preparation

4.1 Paint system with anitfoulant

Sand the clamparatus tube

Thoroughly mix Trinidad 75

Paint from mounting plate to sensor head (2-3 coats if new , 2 if reinstalling) # OF COATS

4.2 Attach safety cable

Attach safety cable to the sensor collar

Cut cable to appropriate length and make top loop

Zip tie the cable to the clamparatus tube

Check mount clamp hardware

Approval Signature