AIRGLAS INSTALLATION, MAINTENANCE, SERVICE INSTRUCTIONS & ILLUSTRATED PARTS LIST (IMSIIPL) MANUAL

MODEL LC20500 CARGO POD

CODE IDENT NO. 17564

17 Dec, 2020

AIRGLAS, INC

ANCHORAGE, ALASKA 99507

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EQUIPMENT AND MATERIALS

INITIAL SETUP

PERSONNEL REQUIRED

•One: AH-64 Helicopter Repairer

•Two: Assistants

TOOLS

- Aircraft Mechanic's Tool Kit
- Torque Wrench, 0 – 600 in. lbs, GGG-W-686

GENERAL TORQUE VALUES FOR UNSPECIFIED COMPONENTS

Airglas Inc. does not always annotate torque values for components. When it is not identified in our manual we recommend use of the below table to determine proper torque values. This data is from T.O. 1-1A-8 and TM-1-1500-204-23-6. If you have any questions, please make contact us at Airglas.

T.O. 1-1A-8

Table 5-8. Torque Values For Free Spinning Self-Locking Plain Nut

Tap Size	Min (In. - Lb.)	Max (In. - Lb.)
No. 10 - 32	28	34
1/4 - 28	75	85
5/16 - 24	160	180
3/8 - 24	240	260
7/16 - 20	450	500
1/2 - 20	550	750
9/16 - 18	900	1100
5/8 - 18	1200	1400
3/4 - 16	2300	2700
7/8 - 14	2700	3300
1 - 14	5000	6000

Torque Values. These values are to be used when no values are given in the Maintenance Technical Manual of the specific aerospace vehicle.

1.0 POD - PREPARATION

Section 1.0

Preparation of pod

1. Remove any packaging material from pod (i.e. foam, shrink wrap, etc.
2. Inspect pod for any damage that may have occurred in shipment.
3. Verify all hardware is installed, and functioning properly. Make sure doors hinges and latches are in working order.

2.0 HELICOPTER PYLON PREPARATION

Section 2.0

4. Insure pylon is functioning as required, by appropriate maintenance manual. Impulse cartridge shall be removed, IAW AWR 2017 A33, Dated: 11 Oct 17.
5. Pod is designed to connect to any BRU-22 ejector rack unit. Consult appropriate maintenance manual for more information.

3.0 POD INSTALLATION

Section 3.0

Once pod and pylon are prepped, install pod to the pylon.

6. The LC20500 Pod has two pick-up handles on each side. Assistants can use these handles to pick-up the pod into position of the BRU-22 Ejector Rack. Follow appropriate guidelines to properly close the mechanism on our two MS3314 lugs, mounted to the top of the pod.
7. Use appropriate manual to adjust support leveler screws on ejector rack, against the top of the pod. **Caution: Failure to properly adjust leveler screws can lead to an unstable pod in flight**.

3.0 POD INSTALLATION. CONT.

8. Once pod is completely installed, verify doors open and close properly.

4.0 SECURING OF CARGO LOAD

Section 4.0

Caution: Cargo load shifting in flight can cause adverse CG changes which could lead to unstable flight.

9. All loads must be secured, prior to flight IAW AWR 2017 A33, Dated: 11 Oct 17. Other methods to secure loads would need to be evaluated by proper authority, before use.

5.0 MAINTENANCE AND GROUND HANDLING RESTRICTIONS

10. See: AWR 2017 A33, Dated: 11 Oct 17, or subsequent change for guidance.

6.0 MAINTENANCE OPERATIONAL CHECKS

Daily Checks:

11. Perform a 10X visual inspection for security and integrity of the storage pod doors, hinges, and mounting lug locations as part of the PMD (Preventive Maintenance Daily). No cracks or signs of deterioration allowed. If found, remove Cargo Pod and report deficiency to the AWR POC(s). See: AWR 2017 A33, Dated: 11 Oct 17, or subsequent change for guidance.

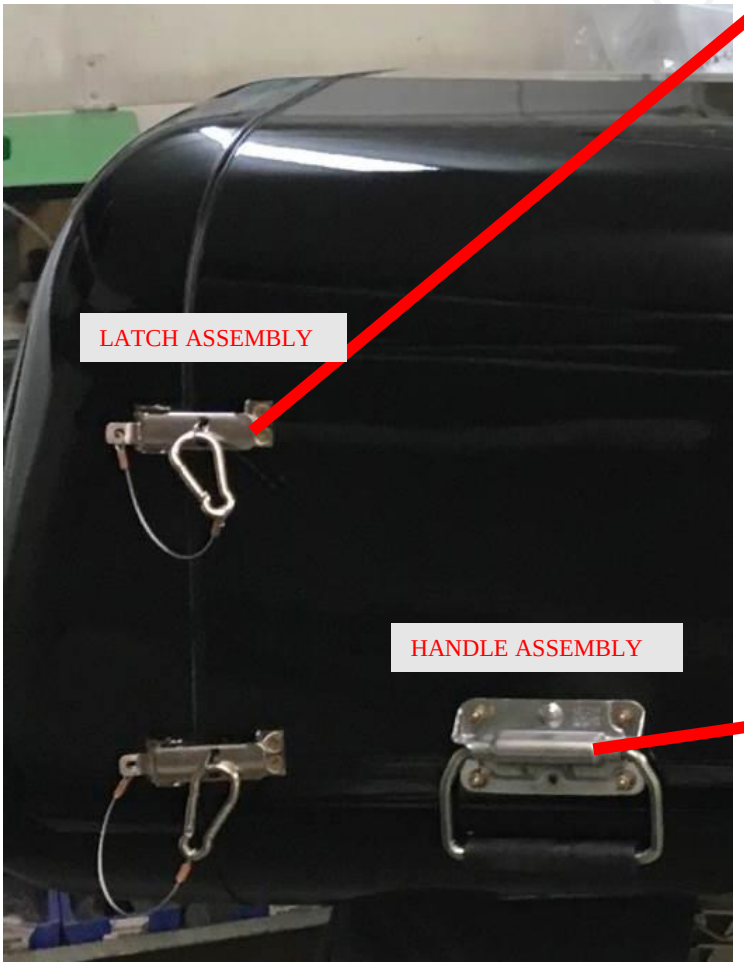
7.0 INSPECTIONS

Inspections:

11. Perform a 10X visual inspection for security and integrity of the storage pod doors, hinges, and mounting lug locations as part of the PMD (Preventive Maintenance Daily). No cracks or signs of deterioration allowed. If found, remove Cargo Pod and report deficiency to the AWR POC(s). See: AWR 2017 A33, Dated: 11 Oct 17, or subsequent change for guidance.

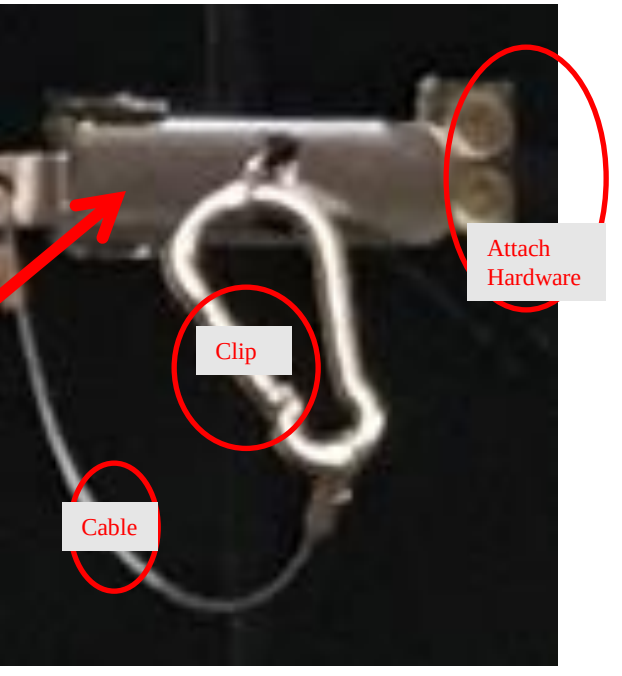
NOTE: Inspect safety cables for Hinge Pins and latch rings for excessive wear.

12. Perform a recurring visual inspection of the Cargo POD as part of the 25 hour / 14 day PMS. No cracks or signs of deterioration allowed. If found, remove Cargo Pod and report deficiency to the AWR POC above. See: AWR 2017 A33, Dated: 11 Oct 17, or subsequent change for guidance.



SPECIFIC INSPECTIONS OF LATCH ASSEMBLY

1. Inspect attach cable for wear, looseness.
2. Inspect attachment hardware for tightness. Use general torque criteria.
3. Verify Clip is functioning, spring closer is working.
4. Verify latch is functioning properly. Latch should move over center and stay shut without applying additional force. If it doesn't go over center, make an adjustment to the paw. Tighten lock nut when complete.



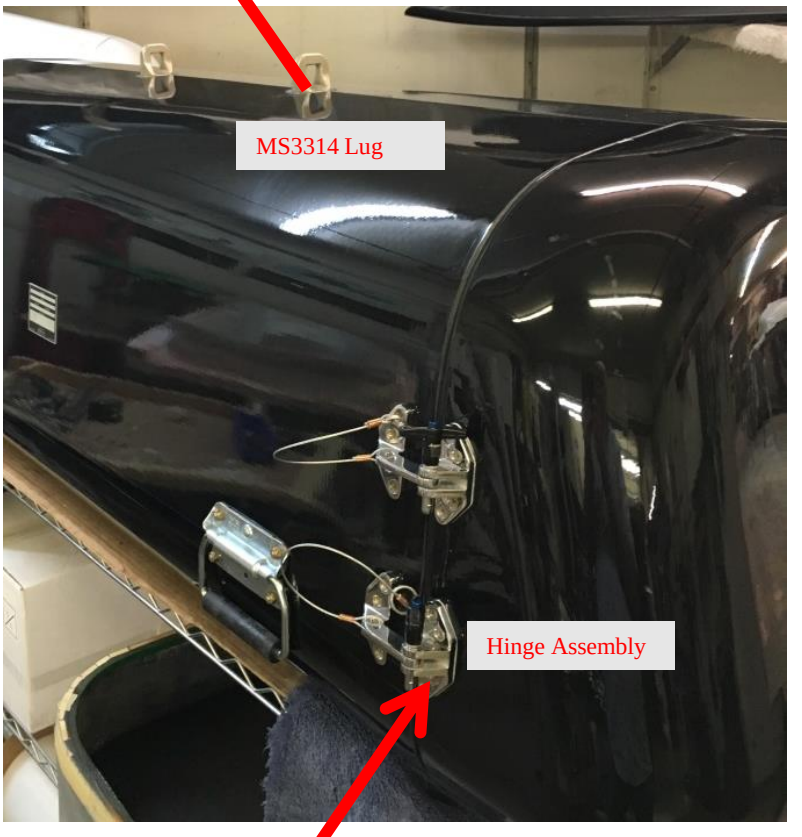
SPECIFIC INSPECTIONS OF HANDLE ASSEMBLY

1. Inspect attachment hardware for tightness. Use general torque criteria.
2. Verify spring load remains on handle.

7.0 INSPECTIONS (Cont.)

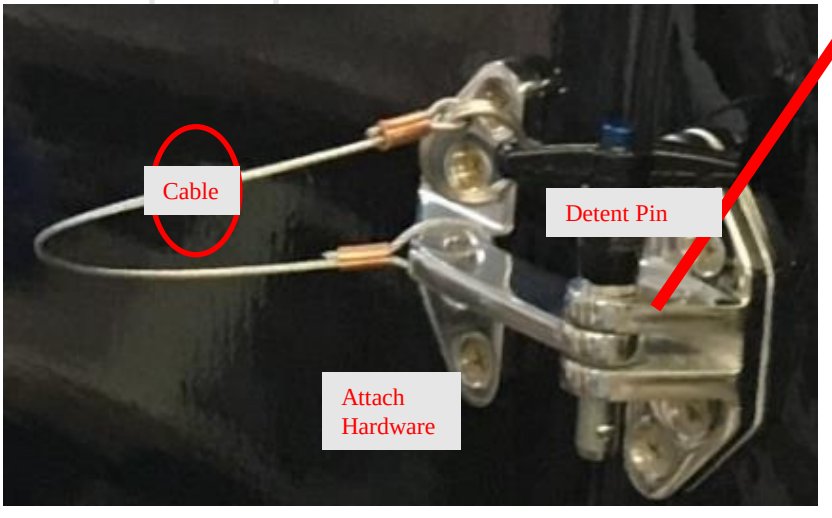
SPECIFIC INSPECTION OF MS3314 LUGS

1. Inspect for looseness., corrosion.



SPECIFIC INSPECTIONS OF HINGE ASSEMBLY

1. Inspect attach cable for wear, looseness.
2. Inspect attachment hardware for tightness. Use general torque criteria.
3. Verify detent pin is functioning, Spring load on ball should function.
4. Verify Hinge is functioning properly.



8.0 Maintenance Checks

13. RESERVED

9.0 POD REMOVAL

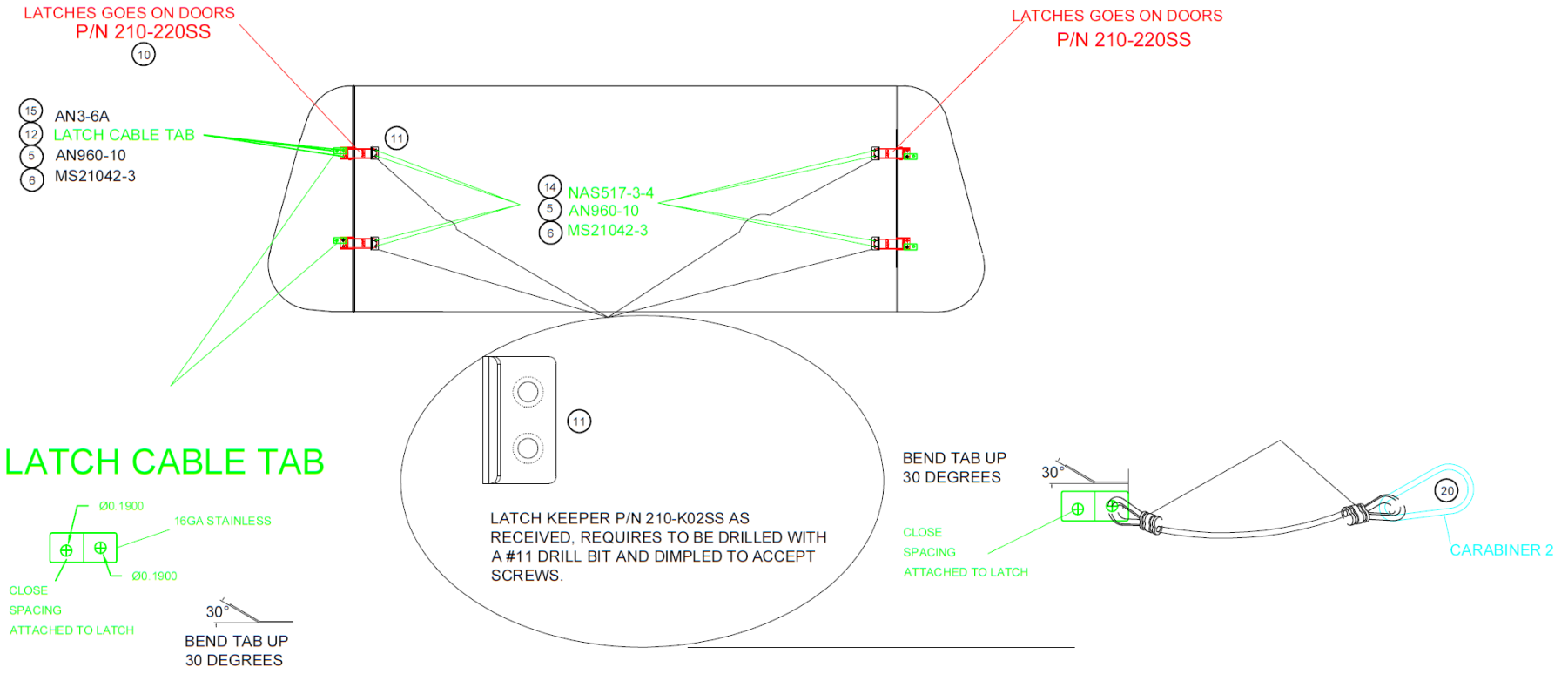
Section 9.0.

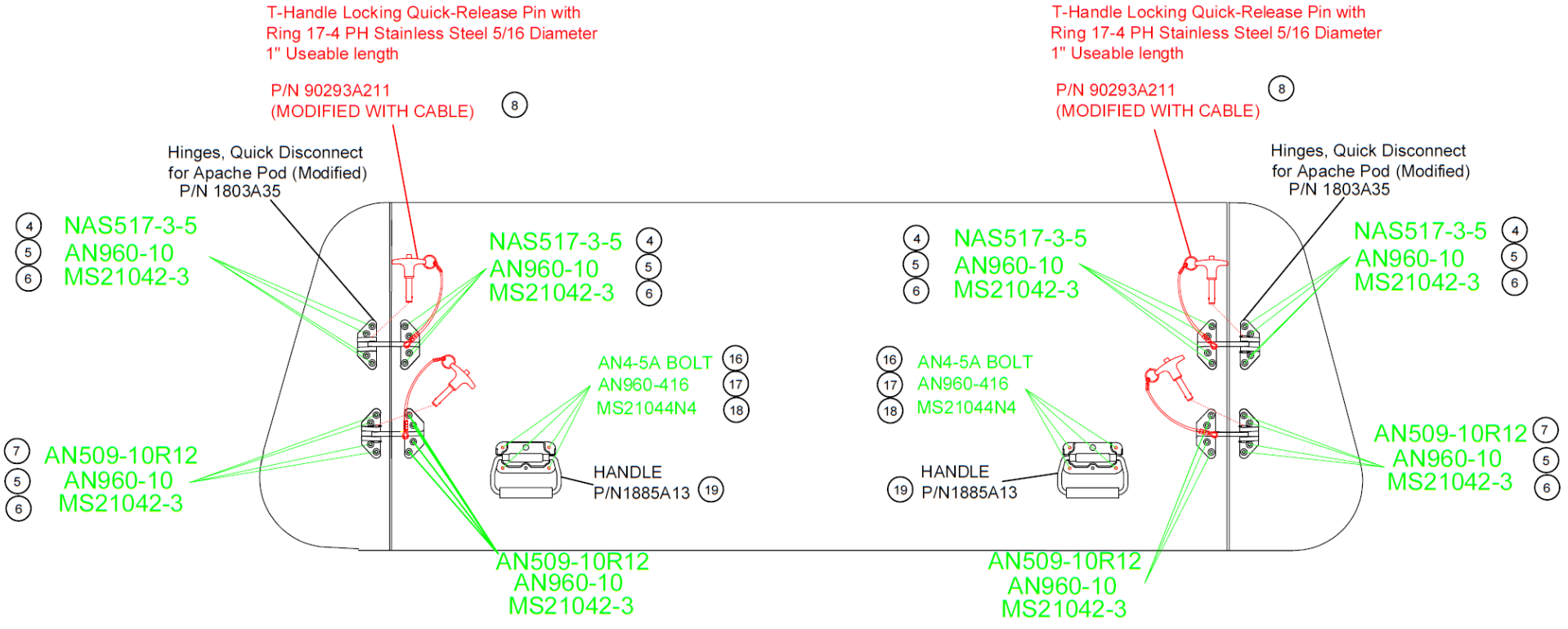
14. Use appropriate manual to adjust support leveler screws on ejector rack, away from the top of the pod.

15. The LC20500 Pod has two pick-up handles on each side. Assistants can use these handles to hold the pod the pod against the BRU-22 Ejector Rack. Follow appropriate guidelines to properly open the mechanism and release our two MS3314 lugs, mounted to the top of the pod.

NOTE: In the event of use during emergency, levelers do not need to be adjusted away from pod. Pod has runners in bottom that will allow it to perform similar to a sled. Uses handles as tie down locations for rope, or other pulling material.

Pod can serve as a windbreak, or if required, and removal of gear can be done, one crew member could use it as a temporary shelter. Doors can be used as shovels after removal from pod body.


LATCHES GOES ON DOORS
P/N 210-220SS
10
LATCHES GOES ON DOORS
P/N 210-220SS
15 AN3-6A
12 LATCH CABLE TAB
5 AN960-10
6 MS21042-3
11
14 NAS517-3-4
5 AN960-10
6 MS21042-3
11
LATCH KEEPER P/N 210-K02SS AS RECEIVED, REQUIRES TO BE DRILLED WITH A #11 DRILL BIT AND DIMPLED TO ACCEPT SCREWS.
LATCH CABLE TAB
Ø0.1900
16GA STAINLESS
Ø0.1900
CLOSE SPACING ATTACHED TO LATCH
30°
BEND TAB UP 30 DEGREES
BEND TAB UP 30 DEGREES
30°
CLOSE SPACING ATTACHED TO LATCH
20
CARABINER 2


T-Handle Locking Quick-Release Pin with
Ring 17-4 PH Stainless Steel 5/16 Diameter
1" Useable length
P/N 90293A211
(MODIFIED WITH CABLE)
8
Hinges, Quick Disconnect
for Apache Pod (Modified)
P/N 1803A35
4 NAS517-3-5
5 AN960-10
6 MS21042-3
7 AN509-10R12
5 AN960-10
6 MS21042-3
AN4-5A BOLT
16 AN960-416
17 MS21044N4
18
HANDLE
P/N1885A13
19
AN509-10R12
AN960-10
MS21042-3
T-Handle Locking Quick-Release Pin with
Ring 17-4 PH Stainless Steel 5/16 Diameter
1" Useable length
P/N 90293A211
(MODIFIED WITH CABLE)
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Hinges, Quick Disconnect
for Apache Pod (Modified)
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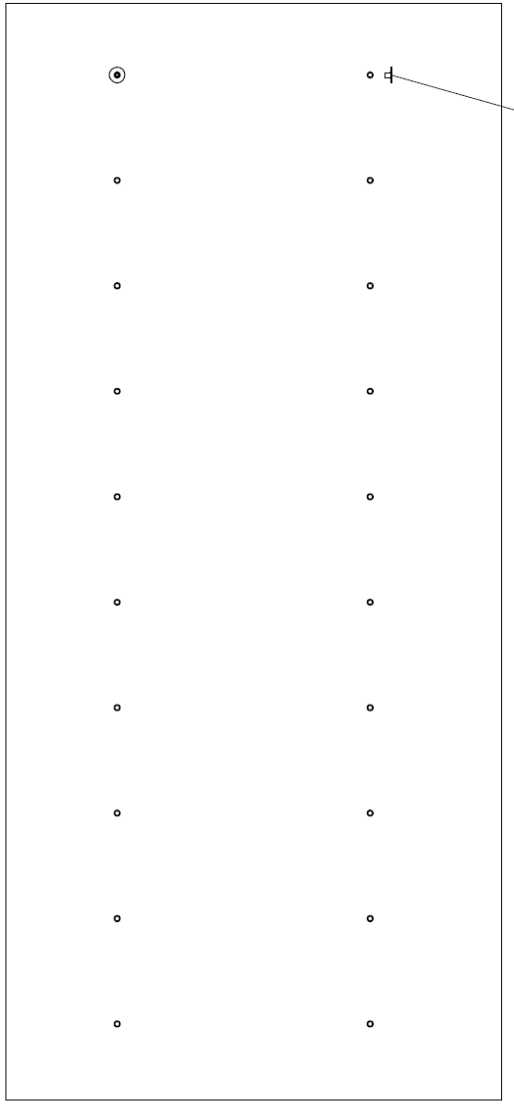
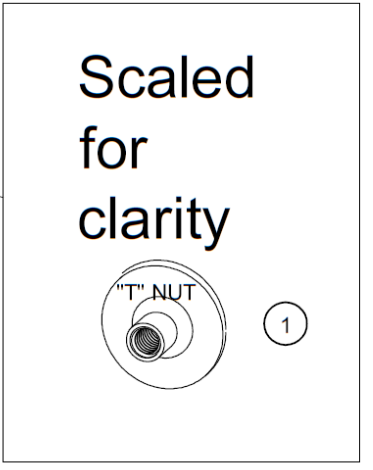
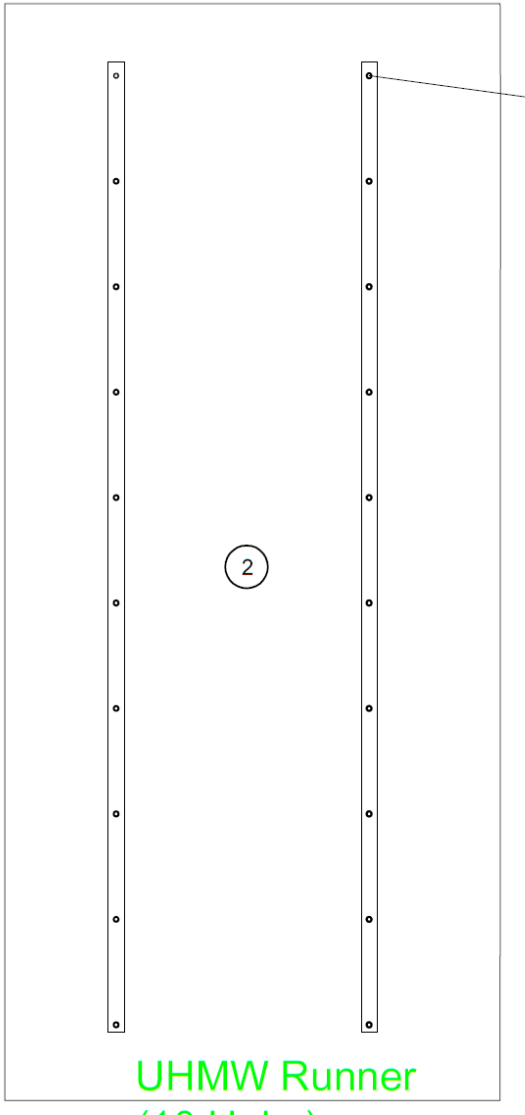
5 AN960-10
6 MS21042-3
16 AN4-5A BOLT
17 AN960-416
18 MS21044N4
19 HANDLE
P/N1885A13
AN509-10R12
AN960-10
MS21042-3

AFTER "T" NUTS ARE INSERTED, ATTACH THE TWO EACH, UHMW RUNNERS TO THE BOTTOM,
WITH AN507C10R18, OR EQUIVILANT SCREWS.

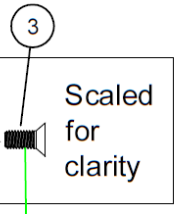




Round Base 10/32 for
Pod Runner Attachment
P/N 90860A107



UHMW Runner
(10 Hole)



AN507C10R18
Or Equivilant

20	4		2” Stainless Steel Carabiner	Carabiner	
19	4		1885A13	HANDLE	McMASTER-CARR
18	56		MS21044N4	SCREW	
17	4		AN960-416	WASHER	
16	16		AN4-5A	BOLT	
15	8		AN3-6A	BOLT	
14	8		NAS517-3-4	SCREW	
13			RESERVED		
12	4	17564	210-CABLE & TAB	LATCH CABLE TAB	AIRGLAS
11	4	17564	210-K02SS (MOD)	LATCH KEEPER	Sierra Pacific Engineering and Products
10	4		210-220SS	LATCH	Sierra Pacific Engineering and Products
9	4		1803A35	Hinges, Quick Disconnect (Mod)	AIRGLAS /McMaster-Carr
8	4		90293A211	T-HANDLE, Q RELEASE (Mod)	AIRGLAS /McMaster-Carr
7	16		AN509-10R12	SCREW	
6	64		MS21042-3	NUT	
5	64		AN960-10	WASHER	
4	16		NAS517-3-5	SCREW	
3	20		AN507C10R18	SCREW (FOR RUNNER INSTALL)	
2	2	17564	LC20500-01-4	RUNNER (10 Hole) UHMW	AIRGLAS
1	20		90860A107	T-NUT(FOR RUNNER INSTALL)	McMASTER-CARR
	1	17564	LC20500	POD	AIRGLAS
NO.	**QTY**	**CODE-IDENT-NO**	**PART NO.**	**DESCRIPTION**	**SOURCE**

LIST OF MATERIALS