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INSTRUCTIONS

for

CONTINUED AIRWORTHINESS

for

EMERGENCY FLOTATION SYSTEM KIT

206-385-103 / 206-385-104

STC: SR01533AT

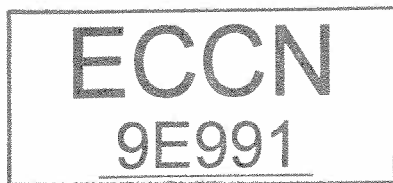
for

**BELL HELICOPTER TEXTRON
MODEL 206A AND 206B HELICOPTERS**

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11/18/08	A	Reformatted Document	All	-	-
		Revised Tables 5- 8	35 – 38		
		Reformatted Table of Contents	5		
		Added Section 2.0	7		
		Revised Section 5.0	8		
		Revised Section 6.3	10		
		Added Section 8.4	25		
		Revised Section 8.5	25		
		Revised Section 8.6	26		
		Added Section 8.8	30		
		Added Tables 3 and 4	34		
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		Added Caution to Section 4.0, Description	9		
		Added Valve Wrench B-51025 to Section 10.0, Special Tools Needed	31		
		Added (new) second Note to Section 11.0, Recommended Overhaul Periods	32		
		Deleted inapplicable airworthiness limitations	33		
		Revised 180 Day/500 Flight Hour Record	62 – 63		

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1.0 INTRODUCTION

These instructions contain the information necessary for inspection and maintenance of **AERONAUTICAL ACCESSORIES, INC., EMERGENCY FLOTATION SYSTEM KITS** installed on Bell model 206A and 206B Model Helicopters in accordance with STC SR01533AT.

2.0 GENERAL INSTRUCTION

1. Disconnect battery before starting work on helicopter.
2. If required, defuel helicopter per applicable Maintenance Manual.
3. Remove any accessories in order to gain access to work areas.
4. Discharge flotation system per the following:
 - a. Gain access to the emergency floatation system nitrogen reservoir inflation valve and charging Schrader valve.
 - b. Remove protective cap from the Schrader valve.
 - c. Slowly vent the pressurized nitrogen into the atmosphere until the system reservoir pressure gage indicates zero pressure.

NOTE

During discharging, the system reservoir will decrease in temperature rapidly. Adjust rate of nitrogen release as required to minimize hazard and avoid unprotected contact with reservoir during this process.

5. Close charging valve and allow the system reservoir temperature to stabilize.
6. Replace protective cap on Schrader valve. Place protective caps and/or plugs on all disconnected charging fittings and hoses to prevent contamination.

3.0 DISTRIBUTION

These instructions are provided with each Emergency Flotation System Kit. Any airworthiness or flight safety revisions will be immediately sent to all affected Emergency Flotation System Kit owners.

4.0 **DESCRIPTION**

The **AERONAUTICAL ACCESSORIES, INC. EMERGENCY FLOTATION SYSTEM KIT**, P/N 206-385-103/-104, on Bell 206A and 206B Model Helicopters provides an extra measure of safety during flights over water. The Emergency Flotation System Kit provides emergency water landing capabilities and adequate time for personnel evacuation. The kit is not designed for amphibious operations.

CAUTION

If a rescue hoist is installed, Aeronautical Accessories, Inc. Skid Cable Guard, P/N 206-990-200, must be installed to prevent possible interference between cable and floats.

WARNING

INFLATION OF FLOATS WITH AN AIRSPEED HIGHER THAN 52 KIAS (60 MPH) IS PROHIBITED. (REFER TO FLIGHT MANUAL SUPPLEMENT FOR OPERATIONAL LIMITATIONS.)

5.0 **SERVICING INFORMATION**

While pressurizing system reservoir, compare reservoir pressure gage with master gage on servicing equipment. Reservoir gage readings must be within plus or minus 200 psig of master gage. System reservoir gages that are faulty must be replaced. Use recommended equipment located in Section 10.0 Special Tools Needed to service the reservoir. Refer to decal on the reservoir for recommended operating pressure.

For any information not covered in these instructions, reference Flight Manual Supplement report number AA-95077 and/or Installation and Operation Instructions report number AA-95075.

If a rescue hoist is installed, the AERONAUTICAL ACCESSORIES, INC. Skid Cable Guard Kit P/N 206-990-100 must be installed to prevent possible interference between cable and float.

6.0 MAINTENANCE INSTRUCTIONS**CAUTION**

To prevent accidental float operation during operation and/or maintenance, pull circuit breaker in overhead console.

NOTE

For landing gear airworthiness, refer to AAI report numbers AA-01147 Instructions for Continued Airworthiness for Crosstubes and AA-01143 Instructions for Continued Airworthiness for Skid Tubes, on Bell 206 A, B Model Helicopters. For Floatstep airworthiness, refer to AAI report number AA-01160 Instructions for Continued Airworthiness for Flitestep/Floatstep on Bell 206 A, B Model Helicopters.

6.1 FLOAT KIT MAINTENANCE

Two separate gas boosters, which would enable the operator to charge the system from standard (2260 psi) nitrogen cylinders, are procurable. The supplier and description of each unit is as follows:

NOTE

Use instructions provided with the booster by the manufacturer.

- a. Haskel Gas Booster Model No. 17934 and 17934-1.

Weight: 40 lbs.

Compression Ratio: 30:1

Driving Power Requirement: 100 psi minimum, 140 psi maximum,
source of unit power is the same for cylinder as for system supply.

Haskel Engineer and Supply Company
100 East Graham Place
Burbank, California 91502

- b. Futurecraft Pneumatic Pressure Intensifier, Model No. 90987.

Weight: Approximately 20 lbs.

Compression Ratio: 10:1

Driving Power Requirement: 300 psi minimum,
source of unit power is the same for cylinder as for system supply.

Futurecraft Corporation
15430 Proctor Avenue
City of Industry, California 91747

6.2 PRESSURIZATION PROCEDURE

CAUTION

When received, the inflation nitrogen reservoir is not pressurized. Refer to the following pressurization procedures for filling instructions, and see "EMERGENCY FLOTATION CYLINDER PRESSURE LIMITS" decal, located on the side of the reservoir. The reservoir must not be pressurized unless it is installed on the helicopter. **DO NOT REMOVE RESERVOIR WHILE PRESSURIZED.**

1. Connect filler valve on reservoir neck to external source of nitrogen supply.

CAUTION

When emergency landings above sea level are probable, the cylinder pressure must be reduced by 100 psig for each 1000 feet above sea level. Deduct above pressure from indicated pressure on placard.

2. Use dry nitrogen only to pressurize reservoir. Fill reservoir as indicated on pressure limits decal. Read caution above prior to servicing reservoir.
3. During pressurization, the temperature of the system reservoir increases. Thus, during subsequent cool-down the pressure in the reservoir will drop. Increase to produce desired stabilized pressure, after reservoir cools to ambient air temperature.

6.3 DAILY/PRE-FLIGHT INSPECTION

NOTE

Removal of the Emergency Flotation System Kit from the helicopter is not required for inspection. If repair is required, refer to Section 8.0 for Removal and Installation information.

NOTE

If any damage or malfunction is noted during the Pre-flight Check, refer to Section 6.6 Repair or Section 7.0 Troubleshooting Information.

1. Visually inspect float assemblies for proper installation of hardware or any unusual wear patterns (abrasion, chafing and/or worn spots).
2. Inspect reservoir assembly for inflation pressure, any obvious defects, and latest hydrostatic inspection (to be performed every 3 years per BHT-206A/B-MM).

3. Inspect the hoses and float covers for condition and security. Inspect hose connections with fittings.
4. Inspect the inflation tubes for condition and security. Inspect tube connections with fittings.

6.4 180 DAY/500 FLIGHT HOUR INSPECTION

The following inspections shall be performed every 180 days and/or 500 flight hours, whichever comes first. Inspections may be incorporated into progressive maintenance programs, as appropriate. Utilize the Inspection Record provided in Appendix A to document inspection completions.

6.4.1 ELECTRICAL TEST PROCEDURES (180 DAY/500 FLIGHT HOUR INSPECTION)

1. Position MANUAL ARM switch in OFF position. Engage FLOAT POWER circuit breaker.
2. Position instrument panel switch to FLOAT TEST position.
3. Momentarily actuate float inflation trigger on pilot collective stick. FLOAT TEST segment shall illuminate indicating functional circuitry.
4. Position instrument panel switch to NORMAL position. FLOAT TEST segment shall extinguish.
5. Lift guard on MANUAL ARM switch and position switch to ON position. FLOAT ARM segment shall illuminate indicating functional circuitry.
6. Disconnect connector from Electrical Valve.
7. Depress float inflation trigger on pilot collective stick and check for 28 Vdc across Pins A & B on Electrical Valve connector.
8. Release float inflation trigger on pilot collective stick and verify 0 voltage across Pins A & B on Solenoid Valve connector (Operating range is 12 - 30 VDC).
9. Verify continuity across Pins A & B on Electrical Valve connector.
10. Close MANUAL ARM switch guard disarming system. FLOAT ARM segment shall extinguish.
11. Reconnect connector to Electrical Valve.

6.4.2 FLOAT BAGS AND INFLATION PIPING (180 DAY/500 FLIGHT HOUR INSPECTION)**NOTE**

Dry shop air may be used in lieu of nitrogen when checking floats. Use of Adapter, Topping Value (600.0209) is required with Apical Industries float bags.

1. Disconnect float inflation lines at fitting above skid. Connect external source of dry shop air to inflation line, unsnap cover over each bag, and inflate bags to normal pressure of 2.25 psig. Inspect bags, hoses and tubing as follows:
2. Clean and dry bags and covers. Visually inspect for wear, chafing or abrasion.
3. Check all clamps, fittings, and hoses for corrosion, abrasion, and security.

NOTE

Do not tighten or loosen hex fitting (shear head) at inlet to solenoid valve on reservoir.

6.4.3 FLOAT BAG LEAK TEST (180 DAY / 500 FLIGHT HOUR INSPECTION)**NOTE**

This test must not be performed when the OAT exceeds 100°F (38°C). **DO NOT PERFORM THE TEST IN THE SUN.**

1. Inflate bags to 2.25 psig. Readjust pressure after two (2) hours if required.
2. Record OAT and bag pressure.
3. After 6 hours, record OAT and bag pressure. See the graph of Figure 1 to determine changes in bag pressure caused by OAT changes.

Example Float Bag Leak Test

Initial Temperature	Initial Float Pressure	Final Temperature	Final Float Pressure
70°F (21°C)	2.25 psig	80°F (27°C)	2.42 psig

Outside temperature change 80°F to 70°F = 10°F (27°C to 21°C = 6°C).
(Ref. Figure 1)

Change in float bag pressure for 10°F (6°C) = 0.32 psig

Leakage rate: 2.25 psig – 2.10 psig = 0.15 psig

Float bag pressure change due to leakage of bags should not exceed .25 psig.

CAUTION

This floatation system is designed for emergency water landings and provides time for personnel evacuation. For ship salvage, pressurization equipment should be provided to maintain bag pressure between 1.5 and 2.25 psig.

Service the floatation system per Section 6.4.4 Functional Test.

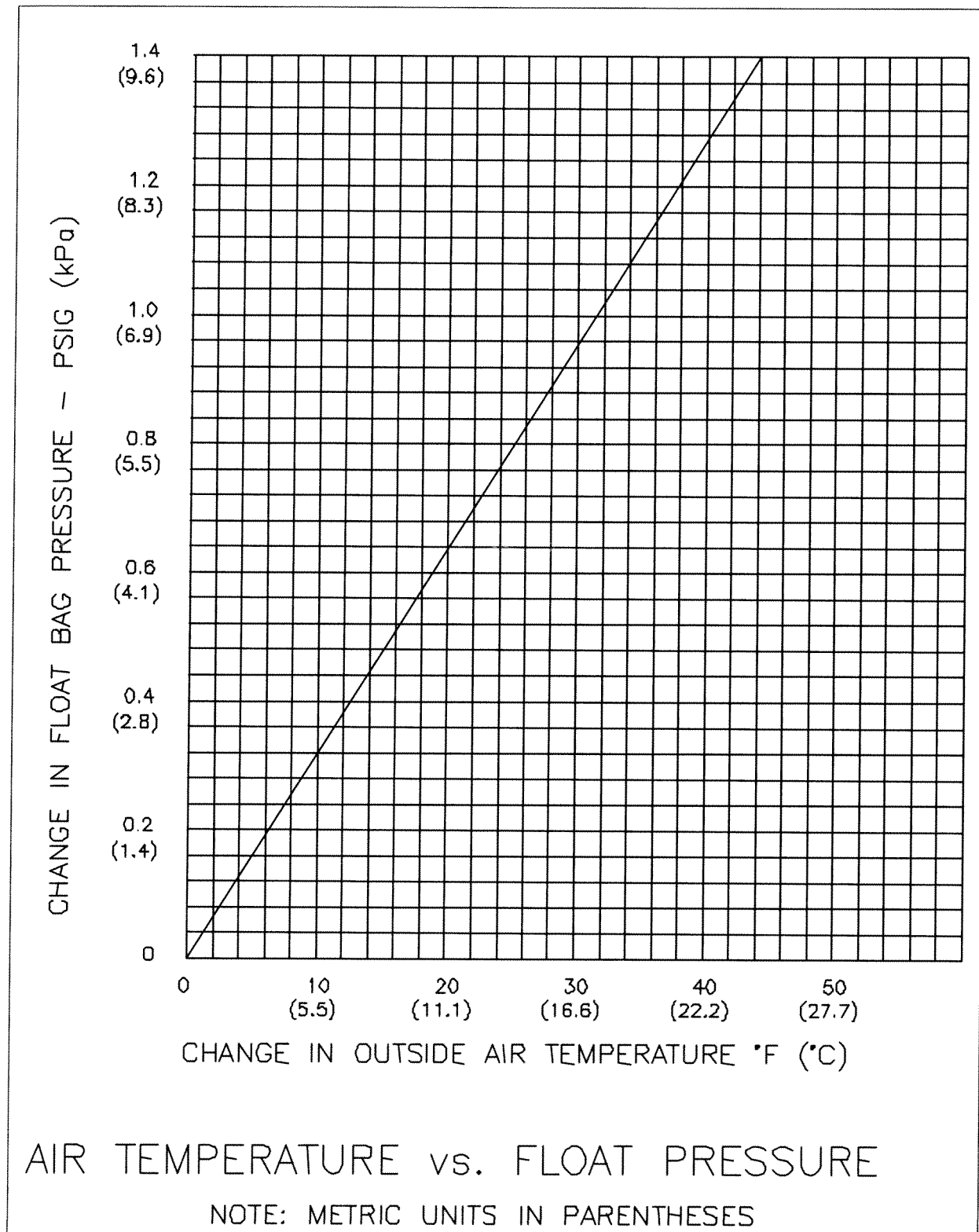


FIGURE 1. AIR TEMPERATURE VS. FLOAT PRESSURE

AERONAUTICAL ACCESSORIES, INC

6.4.4 FUNCTIONAL TEST (180 DAY / 500 FLIGHT HOUR INSPECTION)**CAUTION**

If test is conducted at an elevation above sea level, fill pressure of the cylinder should be reduced from the pressure indicated on the cylinder placard by 100 psig for each 1000 feet above sea level to prevent excessive floatation bag inflation pressure during inflation cycle.

CAUTION

Reservoir should not be pressurized unless installed on helicopter. **DO NOT REMOVE WHILE PRESSURIZED.**

1. Pressurize nitrogen cylinder in accordance with CYLINDER PRESSURE LIMITS EMERGENCY FLOATATION DECAL on side of nitrogen cylinder. Refer to 6.2 Pressurization Procedure for detailed instructions.
2. Apply a castile soap and water solution to all connections to check for leaks. No leaks permitted.

CAUTION

Remove ground handling wheel, if installed, and alert personnel in area prior to inflation.

3. Inflate floats. Check that floats inflate fully and at a uniform rate.
4. Repack float bags per 8.6.1 Packing Float Bags.

6.5 RETURN TO FLIGHT CONFIGURATION

Once all applicable inspections have been conducted, return the aircraft to flight configuration as follows:

1. Clean and vacuum all debris from aircraft. Reinstall all existing parts removed to accomplish installation of the emergency flotation system kit. Return aircraft to flight configuration.
2. Attach ground handling gear assemblies, left side and right side, to the lugs located on the inboard side of the float skids.
3. Adjust ballast as necessary to restore balance to within allowable limits.

NOTE

A copy of the DOT Specification supplied with 206-376-100 Reservoir Assembly Installation Kit must accompany 206-377-050 Reservoir Assembly when it is removed from the aircraft and transported or shipped. When the Reservoir Assembly is sent to a testing agency for hydrostatic retest, a copy of this DOT Specification and the Hydrostatic Testing Procedures must accompany the Reservoir Assembly.

6.6 REPAIR

Basic electrical installation repair actions shall be in accordance with the Bell Helicopter Electrical Standard Practices Manual (BHT-ELEC-SPM).

6.6.1 NONREPAIRABLE FLOATS

It is not advisable to perform major repairs to floats with any of the following conditions:

1. Floats with adhesive seam deterioration.
2. Floats on which oil, grease, or any other foreign substance has caused deterioration.
3. Floats on which heavy mildew has deteriorated fabric.
4. Floats on which sections of porous fabric allow diffusion of air.
5. Floats with excessive damage that would not, in judgment of competent inspectors, justify repair.

6.6.2 REPAIRABLE FLOATS

1. Repair of floats is limited to minor repairs and replacement of unserviceable parts. Minor repairs are defined as patching of rips, tears, and abrasions which do not exceed 6 inches in length or cross seam laps of two adjacent compartments, and cementing of partially loosened patches and tapes. If necessary repairs are outside of these limits, float must be returned to a certified float repair facility for repair.
2. If trained, experienced personnel are not available to perform the repair procedures provided in this service instruction, the float(s) should be returned to a certified float repair facility for repair.

6.6.3 LEAKAGE

If leakage of bag is due to pin holes, repair as follows:

1. Deflate bag through manual valve by using vacuum pump.

2. Clean surface to be repaired with naphtha.
3. Coat surface with urethane adhesive (a product of Clifton Adhesive Inc., P/N LA 4123).
4. Cover adhesive with Teflon film, smooth out air bubbles, and tape film in place until adhesive is cured.
5. Cure at 70° to 90°F (21° to 32°C) for 24 hours.
6. After curing, remove tape and Teflon film.

6.6.4 RESTRICTIONS

1. No repair of punctures or tears located less than one inch from bulkhead installation, girt attachment, seam, valve installation reinforcement, strut tunnel or other structural attachment.
2. No replacement of cemented valve installations.
3. No repair or replacement of girts or other float bag to helicopter structural attachments.
4. Patches must not overlap.

NOTE

Repair Materials Required: Contact float bag manufacturer and/or Aeronautical Accessories, Inc. for repair kit information and criteria. Float bag part numbers should be provided when ordering repair kits.

6.6.5 PATCHING FLOAT BAG PUNCTURES

Patching float bag punctures, and cuts up to two inches long:

1. When surface oxidation (slight discoloration) of fabric coating is present, the repair area may be lightly scrubbed with scour cloth provided in repair kit.

CAUTION

When washing float bag fabric, DO NOT allow solvent to collect at edges of patches or seams. Avoid washing over stenciling, since stenciling can be removed by solvent.

2. Thoroughly wash all around the puncture with a clean cloth dampened with ethyl acetate.
3. Patch must be cut round for application to the outer float bag surface.
4. Cut patch to allow a two inch overlap beyond puncture edges.

NOTE

Cement has a pot life of 4 hours.

5. Apply three coats of cement to the float around the puncture covering an area slightly larger than the size of the patch. Apply the cement in medium, even coats, allowing each coat to dry before applying the next coat. When "blooming" or condensation occurs, remove it by swabbing with a separate cloth dampened in MEK.
6. Prepare one side of the patch by washing with solvent and applying three coats of cement in accordance with step 5.
7. Within two hours after cement application, or within one hour if Temperature-Humidity Index exceeds 130 ($\text{THI} = \text{Temperature } ^\circ\text{F} + \text{Relative Humidity } \%$), dampen a clean cloth in MEK and wipe cemented surfaces to reactivate them. This action brings up the tack and makes the surface ready for joining. If specified times are exceeded, apply a fourth coat of cement, allowing it to dry before proceeding.

CAUTION

Surfaces must be joined immediately after reactivating, to avoid dry seams.

8. Immediately join cemented surface of the patch to the cemented surfaces of float bag. The patch must be laid on progressively, one side to the other. To minimize the possibility of air bubbles, apply pressure evenly using a spatula.
9. Further press the joined surfaces together using a roller with firm pressure. Application of firm pressure is important for a good bond.
10. Dust lightly with talc or powdered soapstone and allow cement to cure undisturbed for a minimum of 24 hours at 70° to 90°F (21° to 32°C).

6.6.6 PATCHING FLOAT BAG TEARS AND CUTS

Patching Float Tears and Cuts over two inches long:

NOTE

Patching both inside and outside of float bag wall is required for repair of float bag tears.

1. Trim off loose threads with scissors.

CAUTION

When washing float bag fabric, DO NOT allow solvent to collect at edges of seams. Avoid washing over stenciling since stenciling can be removed by solvent.

2. Thoroughly wash inside of fabric around the tear with ethyl acetate.
3. Cut patch large enough to allow a two inch overlap beyond tear edges.
4. Apply three coats of cement to the inside of the float wall and prepare the patch per 6.6.5.
5. Within two hours after cement application or within one hour if the THI exceeds 130, dampen a clean cloth in MEK and wipe cemented surfaces to reactivate them. This brings up the tack and makes the surface ready for joining. If specified times are exceeded, apply a fourth coat of cement, allowing it to dry before proceeding.

CAUTION

Join surfaces immediately after reactivating to avoid dry seams. DO NOT reactivate more than twelve inches of seam at a time.

6. Immediately pass the patch through the tear and lay it, cement side up, on the float bag wall directly under the tear.
7. Press the torn wall section down on the patch as 6.6.5.
8. Immediately apply firm pressure with hand roller to bond the patch to the inside of the float bag wall. Pressure is important for a good bond.
9. Thoroughly wash external surface around the tear with ethyl acetate.
10. Cut patch large enough to allow a four inch overlap beyond tear edges.
11. Apply three coats of cement to the outside of float bag wall and prepare the patch 6.6.5.
12. Within two hours after cement application or within one hour if the THI exceeds 130, dampen a clean cloth in MEK and wipe cemented surfaces to reactivate them. This action brings up the tack and makes the surface ready for joining. If specified times are exceeded, apply a fourth coat of cement, allowing it to dry before proceeding.

CAUTION

Join surfaces immediately after reactivating to avoid dry seams.

13. Join cemented surface of the patch to the float bag wall.
14. Immediately apply firm pressure with the hand roller to bond the patch to the outside of the float bag wall.

15. Dust lightly with talc or powdered soapstone and allow cement to cure undisturbed for a minimum of 24 hours at 70° to 90°F (21° to 32°C).

6.6.7 REPAIRING SEAMS

1. Roll back loosened seams so they may be cemented properly.

CAUTION

When washing float fabric, DO NOT allow solvent to collect at edges of seams. Avoid washing over stenciling since stenciling can be removed by solvent.

2. Thoroughly wash both the float bag fabric and seam tape with solvent in the area to be repaired.
3. Apply three coats of cement to the surfaces to be joined.
4. Within two hours after cement application or within one hour if the THI exceeds 130, dampen a clean cloth in MEK and wipe cemented surfaces to reactivate them. This action brings up the tack and makes the surface ready for joining. If specified times are exceeded, apply a fourth coat of cement, allowing it to dry before proceeding.

CAUTION

Join surfaces immediately after reactivating to avoid dry seams. DO NOT reactivate more than twelve inches of seam at a time.

5. Rejoin the seam and tape in correct relative position.
6. Immediately apply firm pressure with a hand roller to bond seam and tape together.
7. Dust lightly with talc or powdered soapstone and allow cement to cure undisturbed for a minimum of 24 hours at 70° to 90°F (21° to 32°C).
8. Inflate float bags as instructed and check floats for leaks.

6.7 INLET CHECK/TOPPING-OFF VALVE - REMOVAL/REPLACEMENT

The following repair instructions for the Inlet Check/Topping-Off Valve are for Apical Industries Float Bags only (ref. Figure 2):

1. Using special tool (Valve Wrench B-51025), remove valve. Insert wrench into molded flange and turn counter-clockwise to remove valves.

NOTE

Contact Aeronautical Accessories, Inc. for Valve Wrench.

NOTE

Insert wrench slot over molded tab of topping-off valve and turn counter-clockwise.

2. Check threads in recessed molded fitting bonded in the float and clean if necessary, replace if discrepant.
3. Insert valve (old or replacement) into threads of recessed molded fitting and turn clockwise by hand to ensure threads are not crossed. Continue to turn by hand until valve is seated. Attach wrench and turn clockwise until valve is firmly seated, torque 30-40 inch-pounds.
4. Pre-assemble retainer, pivot and adaptor.

CAUTION

Note position of O-rings.

5. Turn clockwise by hand to ensure threads are not crossed. Continue to turn by hand until valve retainer is seated loosely through the pivot and into the adaptor.
6. Insert adaptor threads into the inlet check base and turn clockwise until adaptor is seated. Use tool B-51025 to tighten adaptor and torque to 30-40 inch pounds.
7. Use a 1/4" hex wrench and tighten retainer while positioning pivot outlet towards hose. Tighten retainer until pivot outlet is snug but does not turn. At this point tighten set screw in the side of the adaptor with a 1/16" hex wrench.

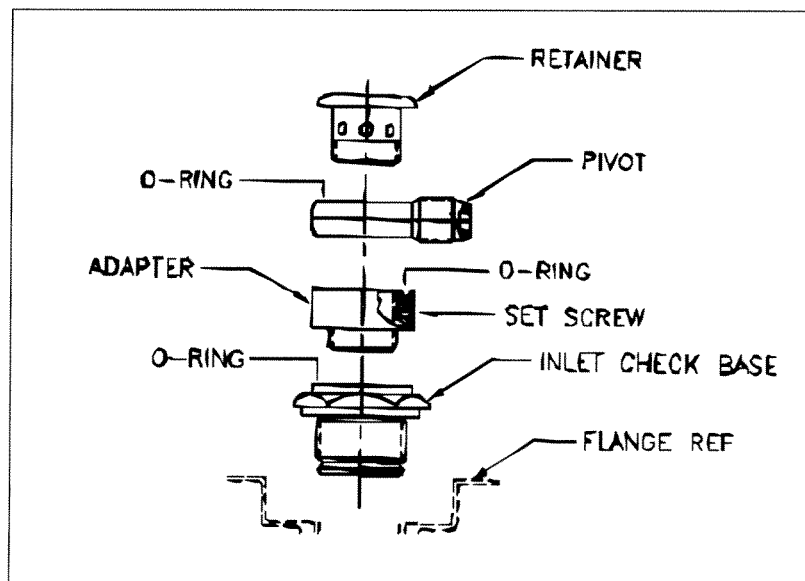


FIGURE 2. INLET CHECK/TOPPING-OFF VALVE

6.8 CLEANING REQUIREMENTS**6.8.1 FLOAT BAG CLEANING****CAUTION**

If hydraulic fluid comes in contact with bag material, remove fluid immediately.

1. Remove hydraulic fluid with a clean rag, damp with ethyl acetate and lightly wipe the contaminated area, turning cloth frequently. Continue until all traces of hydraulic fluid have been removed.
2. Allow bag to dry.
3. Dust bag lightly with powdered soapstone (talc) before repacking.

6.9 ADJUSTMENTS

Adjustment of the Emergency Flotation System Kit is not required.

7.0 TROUBLESHOOTING INFORMATION**TABLE 1. TROUBLESHOOTING**

Problem	Probable Cause	Remedy
Float bags do not inflate	A float line is disconnected	Ensure that all lines are properly attached to fittings
	Float Bottle is not properly charged	Ensure that the reservoir is charged to the appropriate pressure. Check to make sure that the bottle is not leaking around mouth of cylinder. If so, contact AAI
	Float Inflation Switch is bad	Replace Switch, contact AAI
	Electrical Inflation Valve is not working properly	Contact AAI
	Wiring incorrect	Ensure wiring is configured per Figure 12
	Wiring defect	Inspect and repair wiring as required
Float bag(s) inflate but do not stay inflated	Hole/Tear in bag(s)	Check bag(s) for holes/tears. Refer to Repair Section of this document
	Manual valve in bag(s) open or leaking	Ensure they are closed. If so, and still leaking refer to Repair Section of this document
Gauge(s) not reading properly	Packing/Seals are bad	Contact AAI and replace with the appropriate P/N
	Gauge(s) is bad	Contact AAI for replacement
Float Test light does not illuminate when performing test	Bulb is out	Replace Bulb
	Wiring incorrect	Ensure wiring is configured per Figure 12
	Wiring defect	Inspect and repair wiring as required
Float Armed light does not illuminate during operation or test	Bulb is out	Replace Bulb
	Wiring incorrect	Ensure wiring is configured per Figure 12
	Wiring defect	Inspect and repair wiring as required
Hoses vibrate in flight	Clamps are loose	Re-tighten and reposition clamps where there is little slack in the hoses
Reservoir losing pressure	Electrical Inflation Valve leaking	Return Electrical Inflation Valve to AAI for overhaul
Reservoir Depleted	Pressure Relief Valve malfunctioning	Contact AAI and replace with the appropriate P/N

8.0 REMOVAL AND INSTALLATION INFORMATION

Refer to Figures 3 thru 12 for hardware identification.

8.1 REMOVAL – LANDING GEAR

1. Remove hardware from the fuselage fittings from the aft crosstube. Retain hardware and fitting for replacement.
2. Remove hardware from the fuselage fittings from the forward crosstube. Retain hardware and fitting for replacement.
3. Raise the helicopter and remove the floatation landing gear. Temporarily install the original landing gear while working on floatation landing gear. Install using the same fittings and hardware, removed in steps 1 and 2.
4. Removal complete.

8.2 REMOVAL - FLOAT BAGS

1. If bag is inflated, deflate by opening manual valves.
2. If bag is in stowed condition, open bag cover.
3. Disconnect hose at tee fitting near base of crosstube.
4. Remove screws securing bag, cover, and retainers, and retain hardware for re-use.
5. Disconnect hoses from inlet check valves on bottom of bag. Retain for re-use.
6. Removal complete.

8.3 REMOVAL – RESERVOIR ASSEMBLY AND PIPING**CAUTION**

When received, the inflation nitrogen reservoir is not pressurized. Refer to the pressurization procedures for filling instructions, and see “EMERGENCY FLOTATION CYLINDER PRESSURE LIMITS” decal, located on the side of the reservoir. The reservoir must not be pressurized unless it is installed on the helicopter. DO NOT REMOVE RESERVOIR WHILE PRESSURIZED.

1. Disconnect electrical plug from reservoir assembly valve.
2. Disconnect valve from piping and union from valve.

3. Loosen clamps securing reservoir to bracket assemblies. Slide reservoir from brackets and retain.
4. Removal complete.

8.4 REMOVAL—FLOAT SWITCH ASSEMBLY

8.4.1 S/N 4310 AND PRIOR

1. Remove and retain screws securing float switch assembly cover to collective. Remove cover.
2. Remove and retain nut and washer securing switch to float switch assembly cover.
3. Remove wiring from switch, taking care to ensure that wire does not recede through grommet.
4. Remove switch.
5. Removal complete.

8.4.1 S/N 4311 AND SUBSEQUENT:

1. Remove and retain screws securing switch box cover. Remove cover.
2. Disconnect wiring from switch.
3. Remove nut and washer securing switch to the switch box.
4. Remove switch from plug.
5. Removal complete.

8.5 INSTALLATION – LANDING GEAR

1. Raise the helicopter (hoist or jacks) and remove the original crosstube retention straps and the original landing gear assembly (crosstubes and skid tubes).
2. Place the floatation landing gear in position with crosstube attach points lined up with fuselage fittings.
3. Attach forward crosstube to helicopter with the hardware.
4. Attach aft crosstube to the helicopter with the components and hardware removed from the original.
5. Torque per Table 2, Standard Torque Values.

6. Installation complete.

8.6 INSTALLATION - FLOAT BAGS

1. Prior to replacement of float bags, carefully inspect area of skid tube for damage (scratches, scuffs, nicks, dents, cracks) and corrosion. Refer to AAI report number AA-01143 (Instructions for Continued Airworthiness for 206 A, B Skid Tubes) for damage and repair limits.
2. Connect hose to inlet check valve on bottom of float bag. Ensure that bag is properly oriented to skid tube and that the swivel ends of the hoses for the aft bag are toward tee fittings on landing gear.
3. If required, mark a starter hole on the float bag using the hole on the skid tube closest to the aft of the helicopter as a guide. Disconnect hose to inlet check valve and remove float bag. On a flat surface, use the retainer as a guide to mark hole locations on float bag. Once holes are made in float bag, repeat step 2.
4. Align forward hose with the inboard retainer, the cover, and the girt of float bag with the threaded hole in skid tube, and install screw. Do not tighten screw at this time.
5. Align holes of float bag and retainer with the holes on skid tube. Secure retainer and float bag to skid tube using retained screws. Tighten screws per Table 2.
6. Connect hoses to tee fitting at base of crosstube.
7. Installation complete.

TABLE 2. STANDARD TORQUE VALUE

FASTENER SIZE	TORQUE (IN-LBS)
#10	20-25
1/4	50-70
5/16	100-140

8.6.1 PACKING FLOAT BAGS

(Refer to Figure 13)

NOTE

Always ensure manual valves are closed before repacking floats.

NOTE

Packing procedures are identical for left and right side float bags

1. To prepare float bags for packing:
 - a. Provide a clean dry area to spread bags.
 - b. Open manual inflation valve on bag by turning in direction indicated. Attach vacuum with adapter to manual inflation valve. Exhaust all air while smoothing out as many creases and wrinkles as possible. Close manual inflation valve. Remove vacuum and adapter.
 - c. Apply powdered soapstone talc liberally to outside surface of bags.
2. Pack forward float bag as follows:
 - a. Spread collapsed float bag flat on outboard side of skid tube.
 - b. Fold rounded aft bulkhead of bag forward and flat on top of bag. Check that folded rear edge of bag is inside the dimensions of cover underneath bag.
 - c. Fold cone shaped part of bag aft and flat on top of bag. Check that folded forward edge of bag is inside the dimensions of cover underneath bag.
 - d. Roll flat bag tightly toward skid tube. Hold bag on top of skid tube. Install cover around bag.
 - e. Secure inside hook fasteners and snap fasteners on girt. Hose must extend out rear of bag toward tee at crosstube.
 - f. Install lacing cord in cover, using crossover. Pull taut and tie to close gap in cover.
 - g. Tuck in loose ends of lacing cord. Close outside hook and pile fasteners along length of cover. Close end flaps with hook and pile fasteners.
3. Pack middle float bag as follows
 - a. Spread collapsed float bag flat on outboard side of skid tube.
 - b. Fold rounded forward bulkhead of bag aft, with half of fold flat against top of bag and half of fold flat against bottom of bag.
 - c. Fold cone shaped part of bag forward until folded aft edge of bag is inside dimensions of cover underneath bag. At this point cone will

extend beyond cover underneath bag at front.

- d. Fold cone end of bag back on itself so that forward folded edge is inside the dimensions of cover underneath.
 - e. Roll folded bag from outer edge toward skid tube, as tightly as possible, until roll is on top of skid tube.
 - f. Hold bag on top of skid tube and install cover.
 - g. Secure inside hook fasteners and snap fasteners on cover to corresponding pile and snap fasteners on girt. Hose must extend out front of bag toward tee at crosstube.
 - h. Install lacing cord in cover. Use crossover method. Pull taut and tie to close gap in cover.
 - i. Tuck in loose ends of lacing cord. Close outside hook and pile fasteners along length of cover. Close end flaps with hook and pile fasteners.
4. Pack aft float bag as follows:
- a. Spread collapsed float bag flat on outboard side of skid tube.
 - b. Fold rounded forward bulkhead of bag aft, with half of fold flat against top of bag and half of fold flat against bottom of bag.
 - c. Fold aft end of bag forward, so that folded edge is inside the dimensions of cover underneath.
 - d. Roll bag toward skid tube as compactly as possible. Keep two hoses toward center of roll.
 - e. Hold bag on top of skid tube. Install cover around bag.
 - f. Secure inside hook fasteners and snap fasteners on cover to corresponding pile and snap fasteners on girt.
 - g. Install lacing cord in cover. Use crossover method. Pull taut and tie to close gap in cover.
 - h. Tuck in loose ends of lacing cord. Close outside hook and pile fasteners along length of cover. Close end flaps with hook and pile fasteners.
5. Installation complete.

8.7 INSTALLATION – RESERVOIR ASSEMBLY AND PIPING**CAUTION**

When received, the inflation nitrogen reservoir is not pressurized. Refer to the pressurization procedures for filling instructions, and see “EMERGENCY FLOTATION CYLINDER PRESSURE LIMITS” decal, located on the side of the reservoir. The reservoir must not be pressurized unless it is installed on the helicopter. **DO NOT REMOVE RESERVOIR WHILE PRESSURIZED.**

NOTE

To ease removal of lines in future maintenance procedures, grease (Ease-off 990 or equivalent) should be used during installation of threaded system connections

1. Install reservoir assembly on bottom of helicopter by following steps:
 - a. Put the clamp assembly threaded shank through the brackets.
 - b. Hold the reservoir assembly up to the brackets and secure in place with the clamp assembly.
 - c. Torque the clamp assembly nuts to 10 to 15 inch pounds.
2. Hold tube assembly (22) up to fuselage belly and attach to previously installed inserts using hardware (25,26). Do not tighten clamps.
3. Connect tube assembly (22) to the valve on the reservoir assembly (7).
4. Connect tee (30) to aft end of the tube assembly (22).
5. Connect hose (17) to tee (19) and to tee (5) at the left forward crosstube fitting.
6. Attach hose (17) to forward crosstube using hardware (16,38,39). Locate the clamps on the crosstube as shown.
7. Connect hose (21) to the right hand side of tee (19), and to tee (5) at the right hand forward crosstube fitting.
8. Attach hose (21) to forward crosstube using hardware (16,38,39). Locate the clamps on the crosstube as shown.
9. Connect two hoses (29,32) to tee (26) and to tee (12), at the left hand and right hand crosstube fittings.
10. Attach two hoses (29,32) to the aft crosstube using hardware (9,10,11). Locate the clamps on the crosstube as shown.

11. Attach hose (32) to the fuselage belly using hardware (24,31).
12. Tighten the clamps left loose in step 2, holding tube (22) to the fuselage belly.
13. Refer to Section 6.2 for pressurization procedure.
14. Installation complete.

8.8 INSTALLATION—FLOAT SWITCH ASSEMBLY

8.8.1 S/N 4310 AND PRIOR:

1. Secure switch to float switch assembly cover with retained nut and washer.
2. Connect wiring to switch per Figure 12.
3. Attach float switch assembly cover to collective with retained screws.
4. Installation complete.

8.8.2 S/N 4311 AND SUBSEQUENT:

1. Insert switch into plug in switch box.
2. Secure switch to switch box with retained washer and nut.
3. Connect wiring to switch per Figure 12.
4. Secure switch box cover to switch box with retained screws.
5. Installation complete.

9.0 STRUCTURAL FASTENER DATA

For hardware identification, refer to Section 14 (Part Breakdown) and Figures 3 - 13. For standard torque values, refer to Table 2.

10.0 SPECIAL TOOLS NEEDED

Torque Wrench

Valve Wrench B-51025

Two separate gas boosters (Haskel Gas Booster Model No. 17934 and 17934-1 and Futurecraft Pneumatic Pressure Intensifier, Model No. 90987), which enable the operator to charge the system from standard (2260 psi) nitrogen cylinders, are needed as required. Reference 6.1 Float Kit Maintenance for the supplier and description of each unit.

11.0 RECOMMENDED OVERHAUL PERIODS

Hydrostatic tests shall be performed to the Reservoir Assembly every **3 years**. Remove the Reservoir Assembly cylinder and hydrostatic test in accordance with exemption report DOT-E-11194 (Alt: DOT-E-8391). If not qualified to perform hydrostatic testing, contact Aeronautical Accessories, Inc.

NOTE

The service life of the Reservoir Assembly cylinder is limited to 15 years from date of manufacture. Reservoir Assembly cylinder shall be replaced upon completion of service life.

NOTE

A copy of the DOT Specification supplied with 206-376-100 Reservoir Assembly Installation Kit must accompany 206-377-050 Reservoir Assembly when it is removed from the aircraft and transported or shipped. When the Reservoir Assembly is sent to a testing agency for hydrostatic retest, a copy of this DOT Specification and the Hydrostatic Testing Procedures must accompany the Reservoir Assembly.

Overhaul of the Electric Valve Assembly (099-370-150) is required after every **6 years** of service, concurrent with the second reservoir hydrostatic test. The service life starts at the first installation date on the aircraft and runs uninterrupted thereafter.

NOTE

The Electrical Valve Assembly cannot be disassembled in the field. Repair and overhaul is not approved in the field. The Electrical Valve Assembly must be returned to Aeronautical Accessories, Inc. for overhaul or exchange. Aeronautical Accessories, Inc. will maintain an exchange pool of valves to allow continued operation.

A Historical Service Record Card (component card) is included with the Electrical Valve Assembly for use in recording the service and transfer procedures performed on it. It is to accompany the Electrical Valve Assembly when it is returned for overhaul. Upon initially receiving the Historical Service Record Card fill in the initial installation date. The service record portion of the card is provided to document all installation and removal actions and to track component time toward overhaul. Upon transfer, the appropriate Electrical Valve Assembly shipping and receiving information shall be recorded in the corresponding blocks of the transfer record.

12.0 AIRWORTHINESS LIMITATIONS

No airworthiness limitations associated with this type design change.

13.0 WEIGHT AND BALANCE

Weight Change: + 153.5 lbs

Longitudinal Arm: 100.5 in

Longitudinal Moment Change: +15,426.8 in-lbs.

Lateral Arm: -0.5 in

Lateral Moment: -76.8 in-lbs.

*In lateral calculations, - is left, + is right.

14.0 PARTS BREAKDOWN

Tables 3 thru 8 contain Parts Breakdown data for the model 206A, 206B Emergency Floatation Kit.

The column Availability Code (AV Code) specifies the procurement status for each part. The codes to identify if a part is procurable, procedure details to get an assembly or local manufacture code are as follows:

AV Code	Details
0	Nonprocurable part
1	Procurable part
2	Procure as detail parts only
3	Procurable as Next Higher Assembly
4	Local manufacture. Contact AAI Product Support Engineering (PSE)
5	Part replacement requires a fixture or special equipment. Contact AAI PSE
6	Non-stock procurable part

TABLE 3. PARTS BREAKDOWN, 206-366-050 WIRING KIT

Qty	Part Number	Description	AV Code
1	P23A12	Wire 12 AWG, 2 ft	1
1	W27A22	Wire 22 AWG, 12 ft	1
1	W30C22	Wire 22 AWG, 12 ft	1
1	W34A22	Wire 22 AWG, 4 ft	1
1	W71A22	Wire 22 AWG, 4 ft	1

**TABLE 4. PARTS BREAKDOWN, EMERGENCY FLOTATION SYSTEM,
206-366-300 ELECTRICAL INSTALLATION KIT**

Qty	Part Number	Description	AV Code
1	206-366-110	Terminal Strip Assembly	1
1	206-366-050	Wiring Kit	1

**TABLE 5. PARTS BREAKDOWN, EMERGENCY FLOTATION SYSTEM KIT
206-376-100 EMERGENCY FLOTATION SYSTEM
LIGHTWEIGHT RESERVOIR ASSEMBLY INSTALLATION
(REPLACEMENT RESERVOIR KIT)**

Qty	Part Number	Description	AV Code
1	206-377-050	Lightweight Reservoir Assembly	1
2	206-377-030	Bracket Assembly	1
8	206-377-064	Spacer Assembly	1
2	206-374-081	Clamp Assembly	1
8	MS27039-1-09	Screw	1
8	NAS1149D0332J	Washer (Alt: AN960JD10L)	1
1	MS28778-16	Packing	1

**TABLE 6. PARTS BREAKDOWN, EMERGENCY FLOTATION SYSTEM KIT
206-385-103 / 206-385-104**

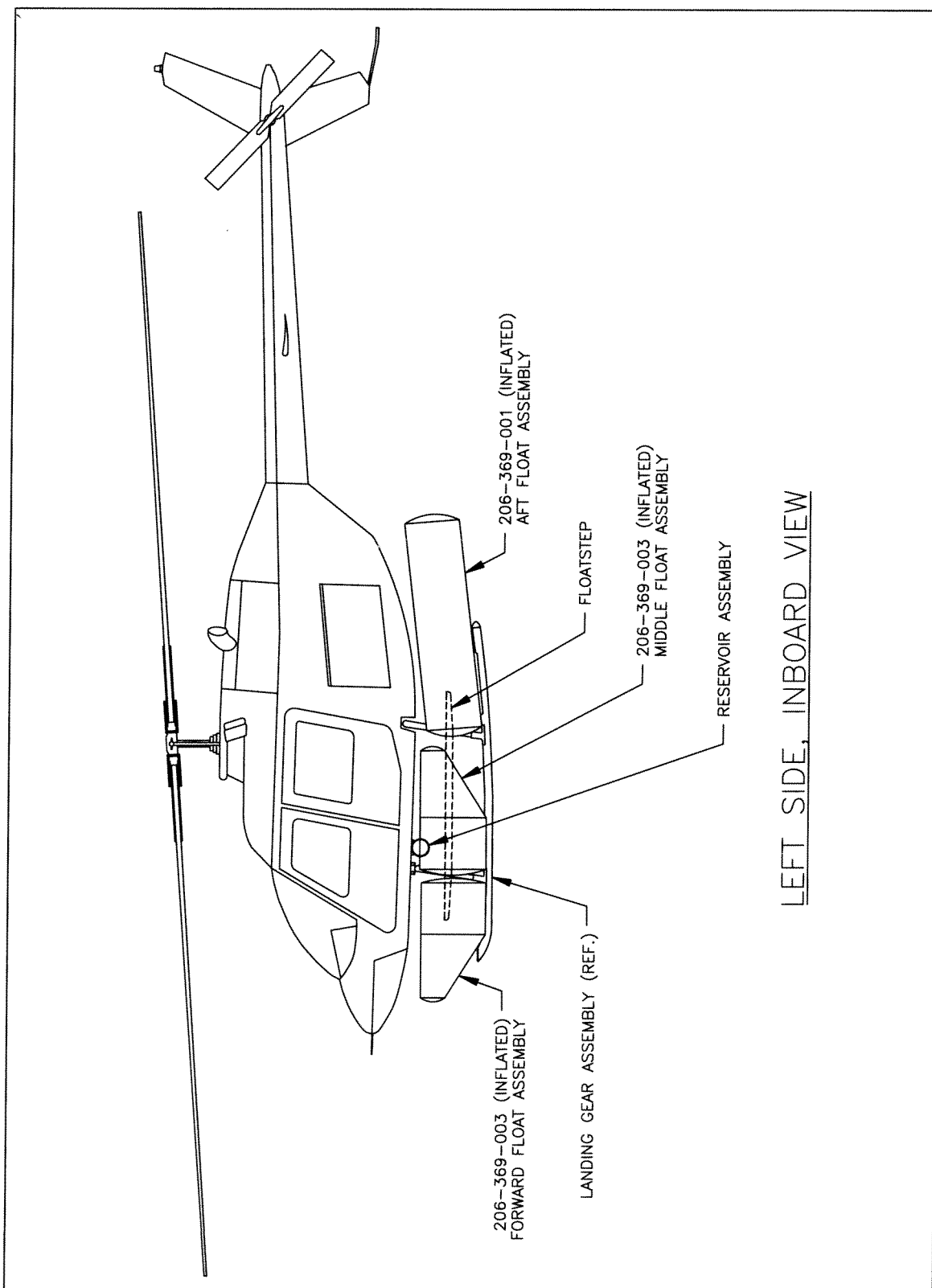
Qty -103	Qty -104	Part Number	Description	AV Code
1	1	206-386-103	Electrical Installation Kit	1
1	1	206-387-103	Reservoir and Piping Kit	1
1		206-389-103	Landing Gear Kit	1
	1	208-389-104	Landing Gear Kit	1
1	1	206-391-001	Position Light Kit	1
1	1	206-303-401	Floatstep	1
1	1	Ease-Off 990	Grease	1
2	2	099-050-222	Sealant (CS3204B2)	1
2	2	099-050-121	Structural Adhesive (Magnobond 6398) (ALT: 099-050-132 ;EA934NA)	1
1	1		Float Kit Component Card	1

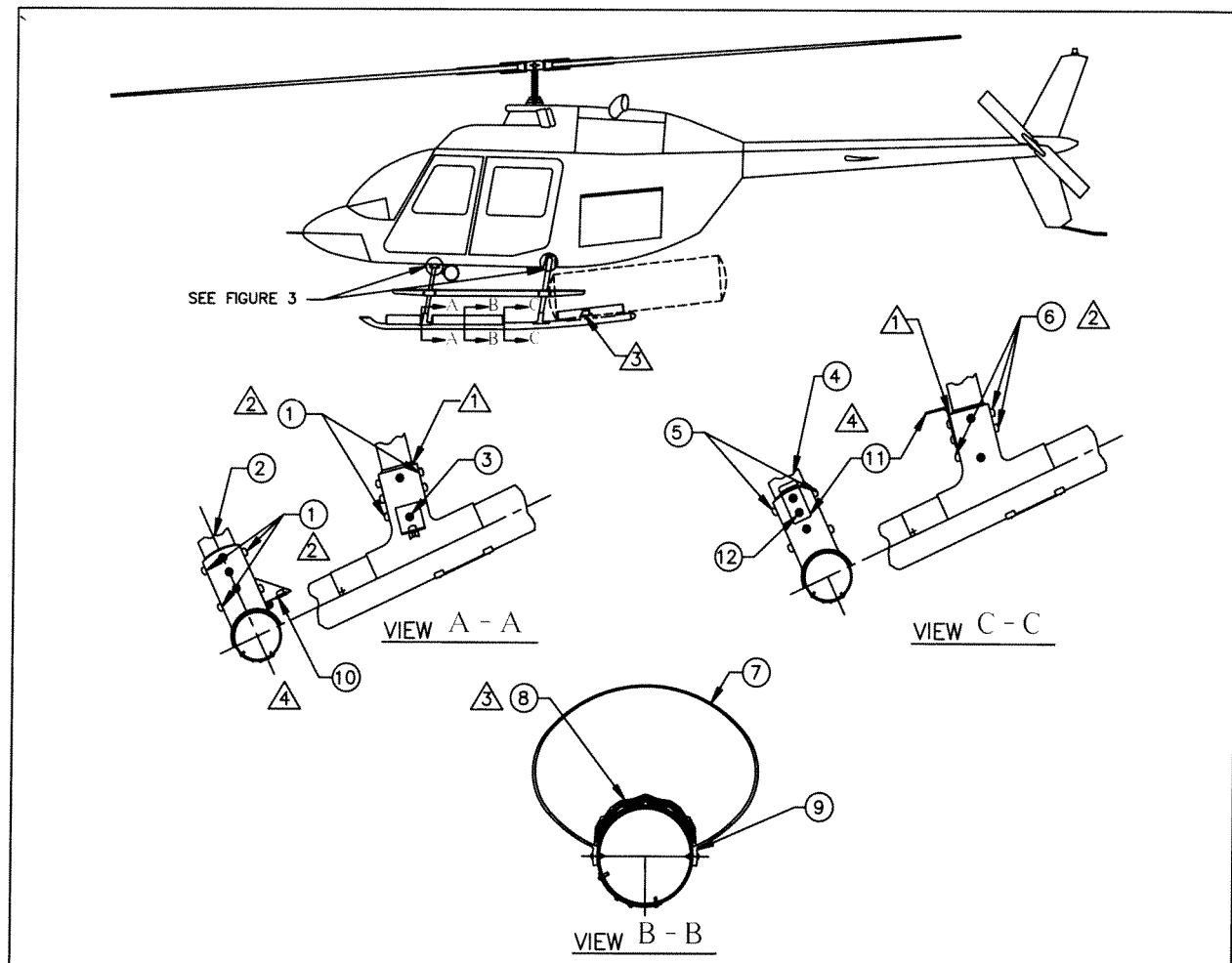
TABLE 7. PARTS BREAKDOWN, 206-386-103 ELECTRICAL INSTALLATION KIT

Qty	Part Number	Description	AV Code
1	099-121-101	Annunciator Lens Panel Assembly	1
1	099-121-102	Annunciator Lens Panel Assembly	1
1	099-123-101	Indicator - "Float Arm"	1
1	099-123-102	Indicator "Float-Test"	1
1	206-378-041	Float Switch Assembly	1
1	206-378-101	Float Switch Assembly	1
1	099-088-001	Decal	1
1	099-088-005	Decal	1
1	099-088-007	Decal	1
1	099-088-009	Decal	1
1	MS26574-5	Circuit Breaker	1
1	MS24529-22	Switch	1
1	MS25224-1	Guard	1
1	MS24524-26	Switch	1
3	M39029/35-274	Contact	1
2	M39029/56-351	Contact	1
11	MS25036-102	Ring Terminal	1
1	MS25036-103	Ring Terminal (ALT: 36153)	1
1	MS25036-111	Ring Terminal (ALT: 320567)	1
1	MS25036-156	Ring Terminal (ALT:320568)	1
2	MS35206-218	Screw	1
2	NAS1149DN432J	Washer (ALT: AN960JD4)	1
2	MS21044N04	Nut	1
1	MS35489-33	Grommet	1
1	MS27467T9B98S	Connector	1
1	M85049/76-08W01	Backshell (ALT:M85049/17-8W01)	1
1	206-366-300	Wiring Kit	1
1	MS35206-245	Screw	1
1	MS35335-31	Washer	1
1ft	M23053/5-305-0	Heatshrink Tubing	1

TABLE 8. PARTS BREAKDOWN, 206-387-103 RESERVOIR AND PIPING KIT

Qty	Part Number	Description	AV Code
1	099-370-120	Adaptor	1
2	099-370-127	Hose Assembly (ALT:099-370-136)	1
1	099-370-130	Pressure Gauge	1
1	099-370-140	Fusible Plug	1
1	099-370-150	Valve Assembly	1
1	099-370-160	Valve- Pressure Relief (ALT: 099-370-101)	1
1	099-370-171	Tee	1
2	099-370-181	Hose Assembly (ALT: 099-370-136)	1
2	099-370-200	Hose Assembly (ALT: 099-370-210)	1
1	099-370-293	Hose Assembly	1
1	099-370-311	Hose Assembly	1
2	099-370-321	Hose Assembly (ALT: 099-370-331)	1
1	099-370-515	Hose Assembly	1
1	099-370-606	Hose Assembly	1
1	206-376-100	Replacement Reservoir Kit	1
1	206-380-105	Tube Assembly	1
2	AN6289J12	Nut (ALT: AS1035J080608)	1
1	AN6289J4	Nut	1
2	AB832-8J	Union	1
6	AN924-8J	Nut	1
2	AN938J8	Tee	1
1	AP793	Union (ALT: A4-01020, US1180, P3600J1210, 110-090-6C)	1
15	MS21042L3	Nut	1
18	MS21919WDG10	Clamp	1
2	MS21919WDG12	Clamp	1
1	MS21919WDG3	Clamp	1
4	MS21919WDG32	Clamp	1
2	MS21919WDG33	Clamp	1
7	MS21919WDG34	Clamp	1
2	MS21919WDG8	Clamp (ALT: MS21919WDG12)	1
1	MS27039-1-06	Screw	1
5	MS27039-1-16	Screw	1
1	MS28773-04	Retainer	1
2	MS28773-12	Retainer	1
2	MS28778-4	Packing	1
1	MS28778-6	Packing	1
6	MS28778-8	Packing	1
2	MS28778-12	Packing	1
1	MS28889-2	Valve, Charging	1
32	NAS1149D0332J	Washer (ALT: AN960JD10L)	1
2	NAS43DD3-32N	Spacer	1
2	80-005-2-16	Insert	1
8	80-007-16-3	Insert	1
2	110-080-13C	Tee (ALT: AS1035J060608, US1187-13C)	1
1	110-081-8C	Tee (ALT: AN834-12J)	1
4	110-083-4C	Elbow (ALT: AS1038J0806, US1189-4C)	1
1	110-089-18C	Tee (ALT: US1165-18C)	1
15	MS27039-1-08	Screw	1

**FIGURE 3. EMERGENCY FLOTATION SYSTEM REFERENCE**

**FIGURE 4. EMERGENCY FLOTATION SYSTEM PART REFERENCE**

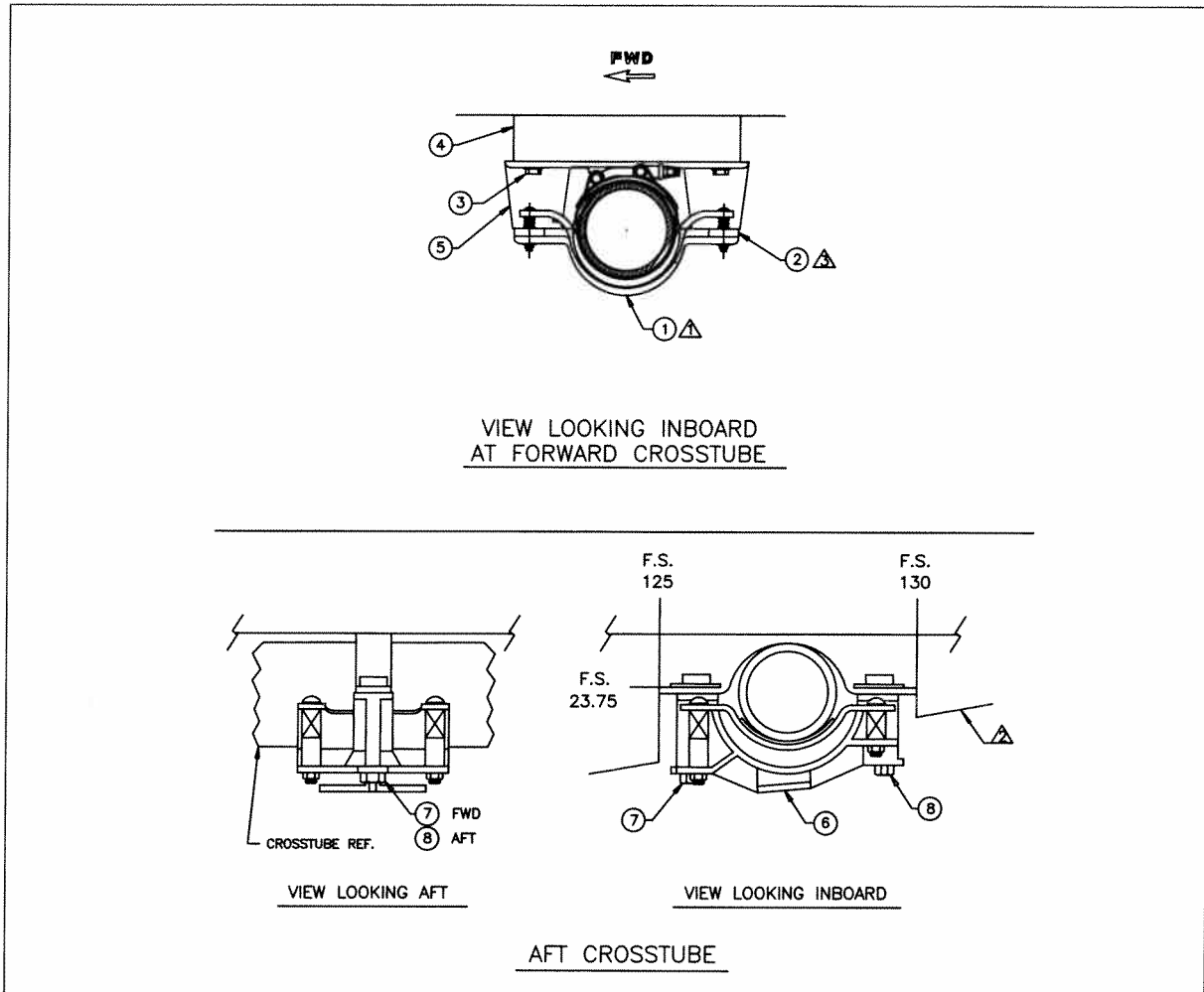
INSTRUCTIONS for CONTINUED AIRWORTHINESS EMERGENCY FLOTATION SYSTEM KIT

LEGEND – FIGURE 4

Callout	Part Number	Description	Quantity
1	MS27039-5-14	Screw	8
	NAS1149D0516J	Washer	8
	NAS1149D0563J	Washer	3
2	206-321-021	Fwd Crosstube	1
3	MS27039-5-17	Screw	1
	NAS1149D0516J	Washer	1
4	206-321-026	Aft Crosstube	1
5	MS27039-5-17	Screw	4
	NAS1149D0563J	Washer	4
	MS27039-5-48	Screw	2
	NAS1149D0516J	Washer	2
6	MS27039-5-17	Screw	3
	NAS1149D0563J	Washer	3
	MS27039-5-48	Screw	1
	NAS1149D0516J	Washer	1
7	206-369-001	Float – aft	1
8	206-369-203	Cover Assy. with Float (Stowed)	1
9	206-379-003	Retainer	1
10	206-375-006	Bracket	1
11	206-375-007	Bracket	1
12	MS27039-5-18	Screw	2
	NAS1149D0563J	Washer	2
	MS27039-5-48	Screw	2
	NAS1149D0516J	Washer	2

WORK STATEMENTS

1. Apply a bead of sealant (099-050-222) at juncture of crosstube and skid tube fitting.
2. Install all fasteners with sealant (099-050-222).
3. Install floats deflated and stowed.
4. Coat faying surfaces of clip and saddle with epoxy polyamide primer (MIL-P-23377). Install Clip wet

**FIGURE 5. CROSSTUBE PART REFERENCE**

**INSTRUCTIONS for CONTINUED AIRWORTHINESS
EMERGENCY FLOTATION SYSTEM KIT****LEGEND – FIGURE 5**

Callout	Part Number	Description	Quantity
1	206-343-113	Strap Assembly	1
	NAS6604-13	Bolt	2
	NAS1149D0463J	Washer	2
2	601-029-103	Support Instl. Assy.	2
3	Existing Hardware	Existing Hardware	N/A
4	206-031-167-001	Spacer (ref)	1
5	206-030-104-001	Fitting (ref)	1
6	206-050-218-103	Support	2
7	NAS6604-25	Bolt	2
	NAS1149D0463J	Washer	2
8	NAS6604-28	Bolt	2
	NAS1149D0463J	Washer	2

WORK STATEMENTS

1. Remove existing strap and attaching hardware.
2. Trim aft edge of skin to clear support.
3. Install 601-029-103 Support Instl. Assembly.

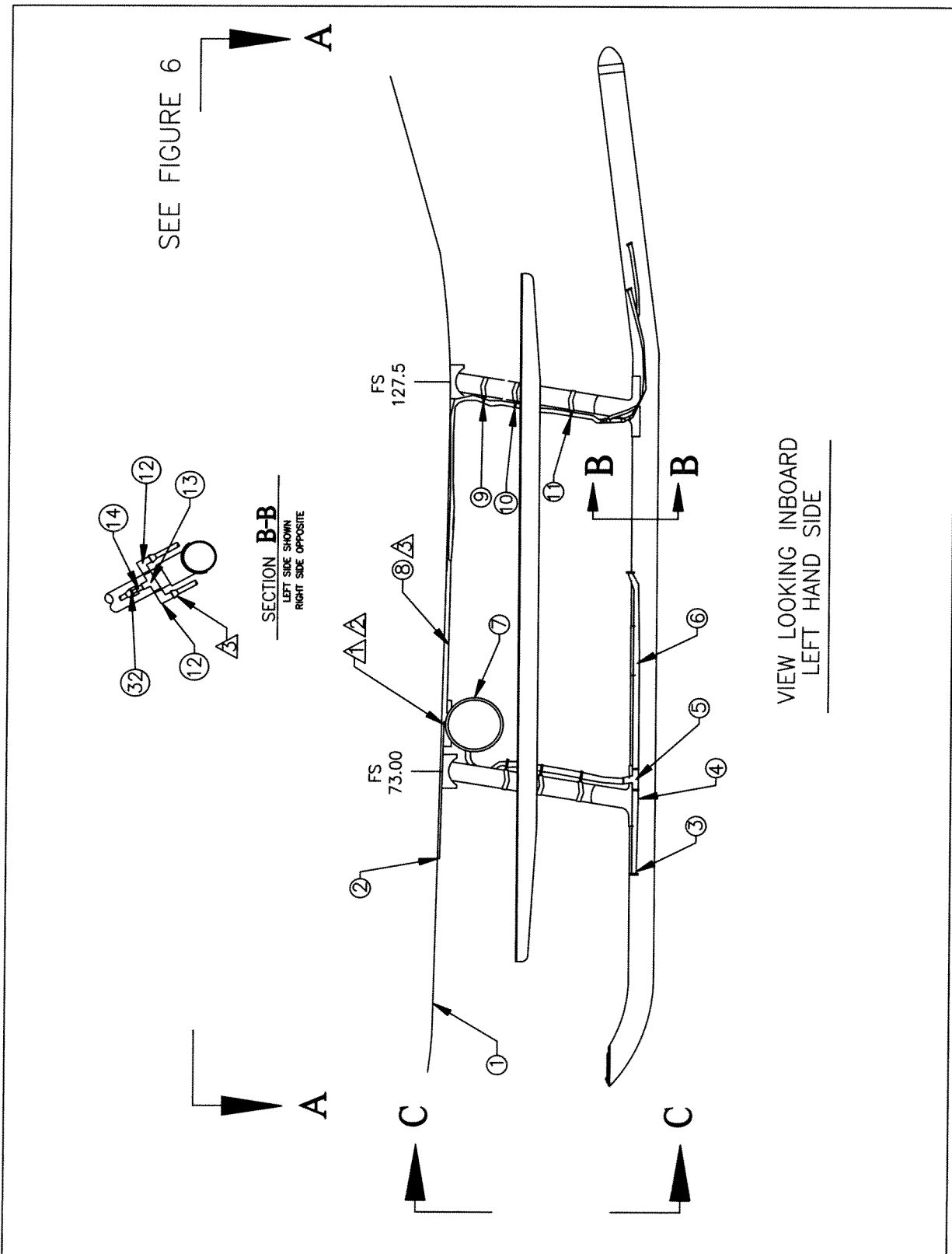


FIGURE 6 (SHEET 1 OF 2). RESERVOIR ASSEMBLY AND PIPING REFERENCE

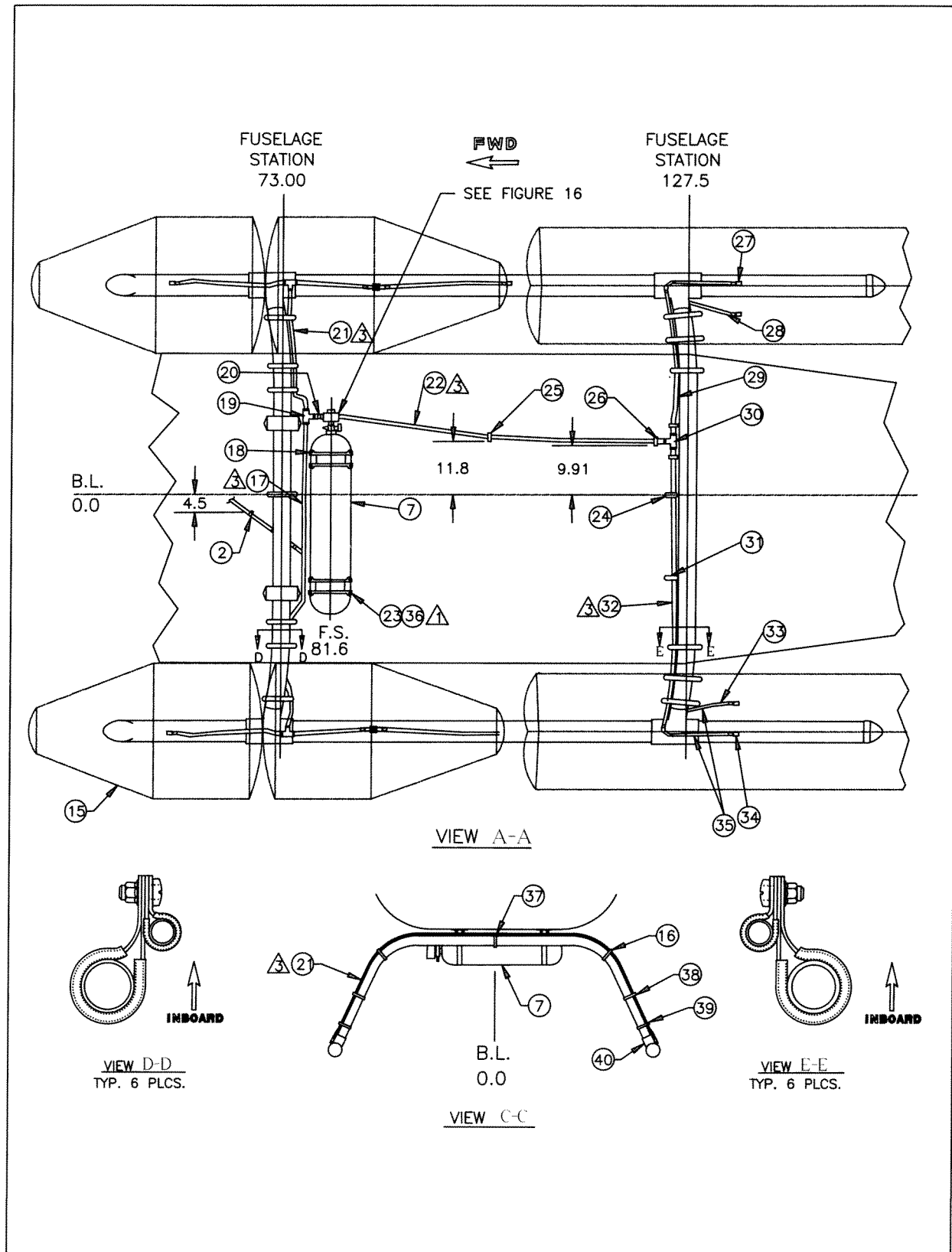


FIGURE 6 (SHEET 2 OF 2). RESERVOIR ASSEMBLY AND PIPING REFERENCE

INSTRUCTIONS for CONTINUED AIRWORTHINESS EMERGENCY FLOTATION SYSTEM KIT

LEGEND – FIGURE 6

Callout	Part Number	Description	Quantity
1		Lower Fuselage	1
2	206-706-341	Hoist Kit	if installed
3	099-370-181	Hose	2
4	MS21919WDG8	Clamp	2
	MS27039-1-08	Screw	2
	NAS1149D0332J	Washer	2
	MS21042L3	Nut	2
5	110-080-13C	Tee	2
6	099-370-127	Hose	2
7	206-377-050	Reservoir Assembly	1
8	206-380-105	Tube Assembly	1
9	MS21919WDG34	Clamp	2
	MS27039-1-08	Screw	2
	NAS1149D0332J	Washer	2
	MS21042L3	Nut	2
10	MS21919WDG33	Clamp	2
	MS21919WDG10	Clamp	2
	MS27039-1-08	Screw	2
	NAS1149D0332J	Washer	2
	MS21042L3	Nut	2
11	MS21919WDG32	Clamp	2
	MS21919WDG10	Clamp	2
	MS27039-1-08	Screw	2
	NAS1149D0332J	Washer	2
	MS21042L3	Nut	2
	NAS1149D0332J	Washer	1
12	110-083-4C	Elbow	4
	AN924-8J	Nut	4
	MS28778-8	Packing	4
13	AN938J8	Tee	2
14	AN832-8J	Union	2
	AN924-8J	Nut	2
	MS28778-8	Packing	2
15	206-369-003	Float	1
16	MS21919WDG34	Clamp	2
	MS21919WDG10	Clamp	2
	MS27039-1-08	Screw	2
	NAS1149D0332J	Washer	2
	MS21042L3	Nut	2
17	099-370-606	Hose	1

INSTRUCTIONS for CONTINUED AIRWORTHINESS EMERGENCY FLOTATION SYSTEM KIT

LEGEND – FIGURE 6

Callout	Part Number	Description	Quantity
18	Pickup outboard screw in bracket	Clamp	2
	MS21919WDG10	Washer	2
	NAS1149D0332J	Screw	2
	MS27039-1-16	Spacer	2
19	110-089-18C	Tee	1
20	AP793	Union	1
21	099-370-311	Hose	1
22	206-380-105	Tube	1
23	206-377-030	Bracket	2
	206-377-062	Spacer	8
	NAS1149D0332J	Washer	8
24	Remove existing screw		
	MS21919WDG10	Clamp	1
	MS27039-1-16	Screw	1
	NAS1149D0332J	Washer	1
	NAS1149D0332J	Washer	1
25	MS21919WDG12	Clamp	1
	NAS1149D0332J	Washer	1
	MS27039-1-06	Screw	1
26	MS21919WDG12	Clamp	1
	MS27039-1-16	Screw	1
	NAS43DD3-32	Spacer	1
27	099-370-200	Hose	1
28	099-370-321	Hose	1
29	099-370-293	Hose	1
30	110-080-12C	Tee	1
31	Remove existing screw		
	MS21919WDG10	Clamp	1
	NAS43DD3-32	Spacer	1
	MS27039-1-16	Screw	1
32	099-370-515	Hose	1
33	099-370-200	Hose	1
34	099-370-321	Hose	1
35		Hose swivel towards float bag	1
36	206-374-081	Clamp Assy.	2
37	MS21919WDG34	Clamp	1
	MS27039-1-08	Screw	1
	NAS1149D0332J	Washer	1
	MS21042L3	Nut	1
	MS21919WDG3	Clamp	1

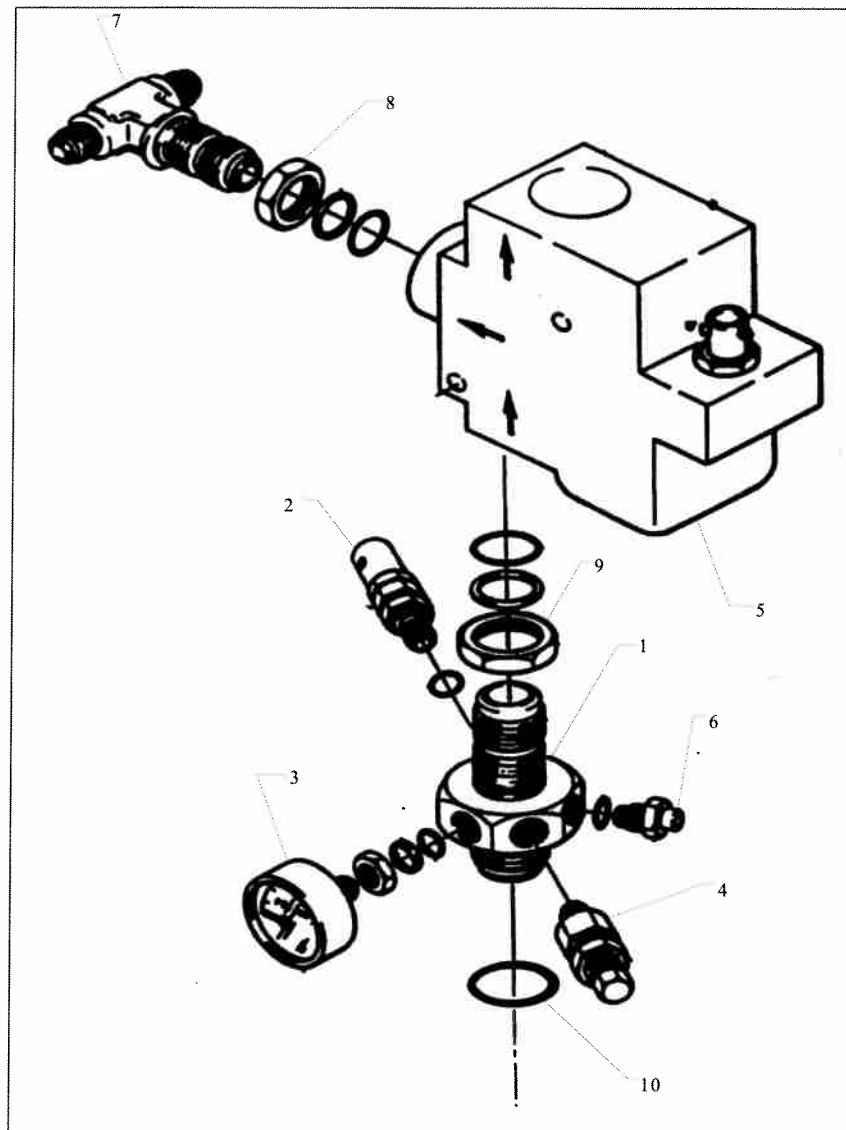
INSTRUCTIONS for CONTINUED AIRWORTHINESS EMERGENCY FLOTATION SYSTEM KIT

LEGEND – FIGURE 6

Callout	Part Number	Description	Quantity
38	MS21919WDG34	Clamp	2
	MS27039-1-08	Screw	2
	NAS1149D0332J	Washer	2
	MS21042L3	Nut	2
	MS21919WDG10	Clamp	2
39	MS21919WDG32	Clamp	2
	MS27039-1-08	Screw	2
	NAS1149D0332J	Washer	2
	MS21042L3	Nut	2
	MS21919WDG10	Clamp	2
40	206-321-XXX	Crosstube, Fwd	1
	206-321-XXX	Crosstube, Aft	1
	206-327-XXX	Skid Tube, L/H	1
	206-327-XXX	Skid Tube, R/H	1

WORK STATEMENTS

1. Apply sealant (099-050-222) around edges of bracket feet and around attaching screw heads.
2. Torque nuts on clamps 10-15 inch-pounds.
3. Apply grease (Ease-Off 990, or equivalent) to threads of all tube and hose connections.

**FIGURE 7. RESERVOIR ASSEMBLY REFERENCE**

INSTRUCTIONS for CONTINUED AIRWORTHINESS EMERGENCY FLOTATION SYSTEM KIT

LEGEND – FIGURE 7

Callout	Part Number	Description
1	099-370-120	Lower Fuselage
2	099-370-160	Hoist Kit
	MS28778-4	Hose
3	099-370-130	Clamp
	AN6289J4	Screw
	MS28773-4	Washer
	MS28778-4	Nut
4	MS28889-2	Tee
5	099-370-150	Hose
6	099-370-140	Reservoir Assembly
7	110-081-8C	Tube Assembly
8	AN6289J12	Clamp
	MS28773-12	Screw
	MS28778-12	Washer
9	AN6289J12	Nut
	MS28773-12	Clamp
	MS28778-12	Clamp
10	MS28778-16	Screw

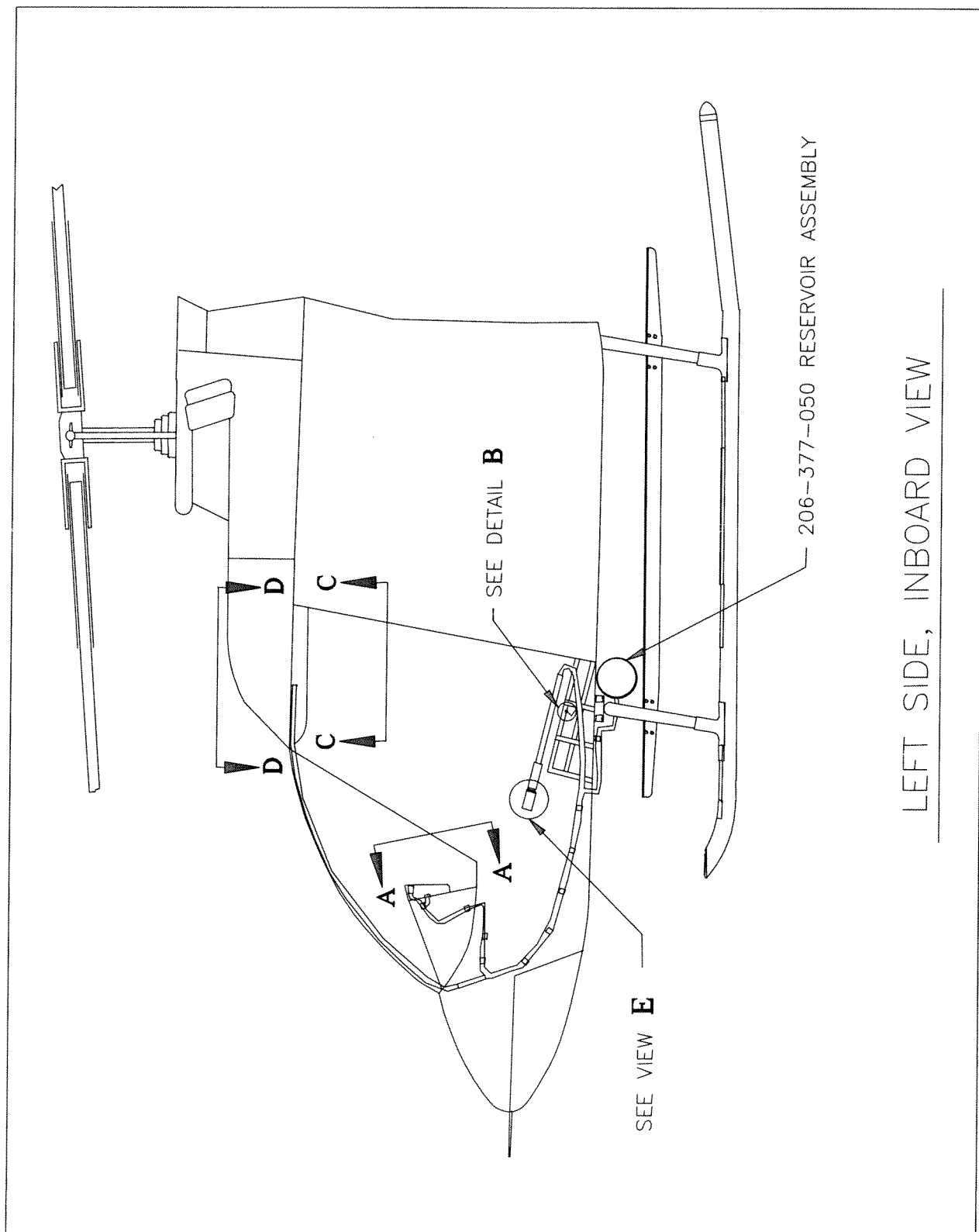


FIGURE 8. INBOARD VIEW REFERENCE

AERONAUTICAL ACCESSORIES, INC

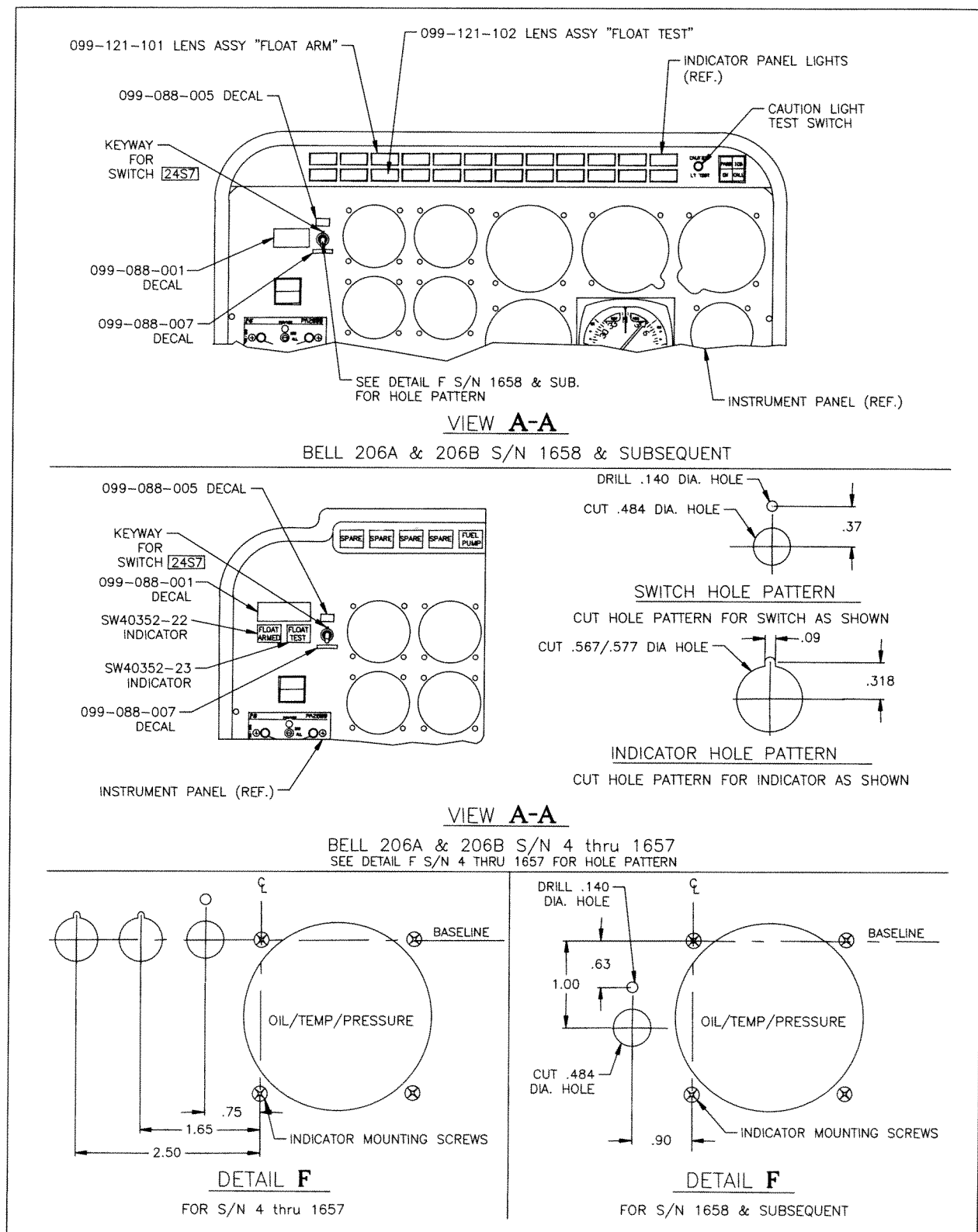
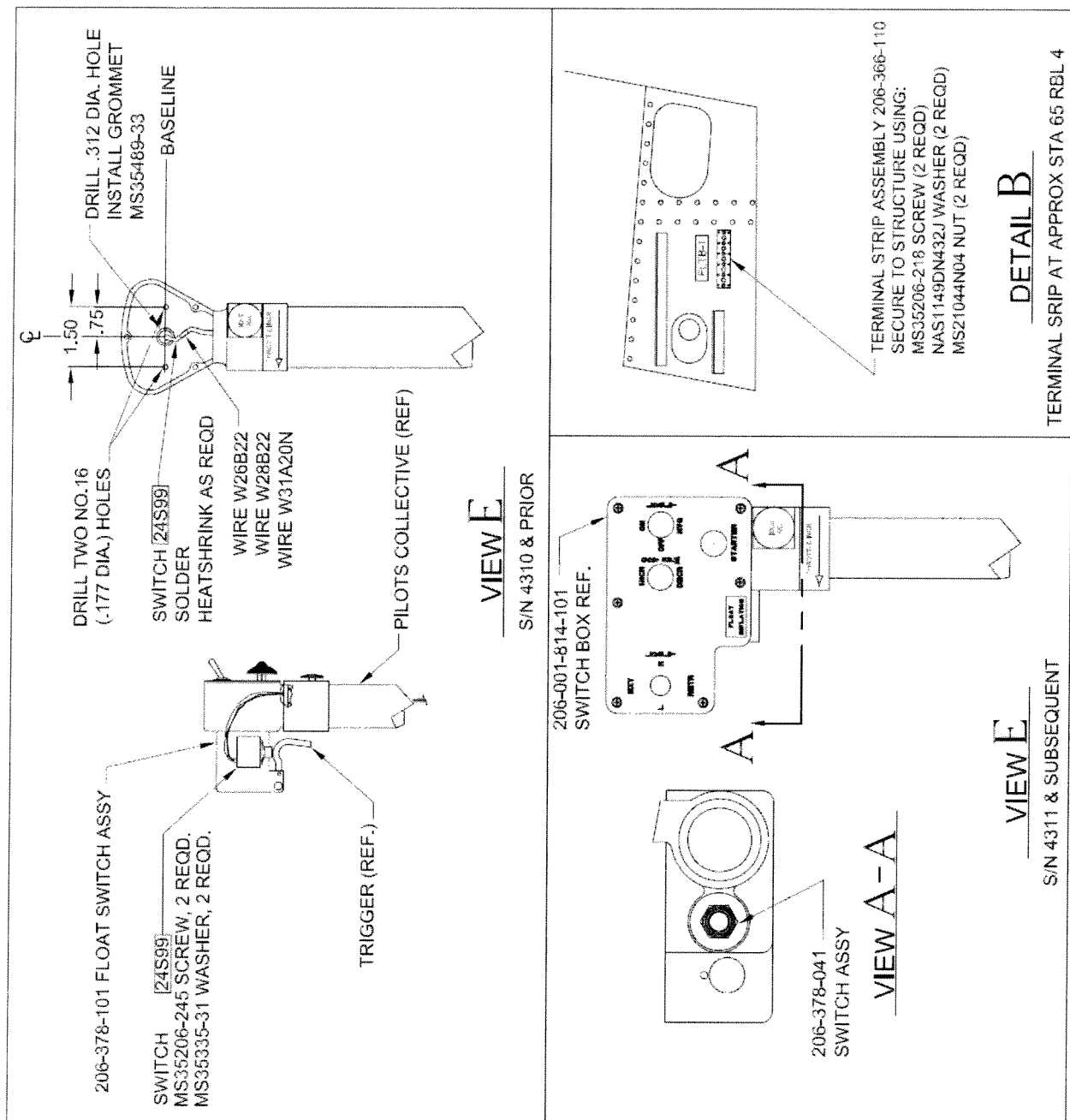
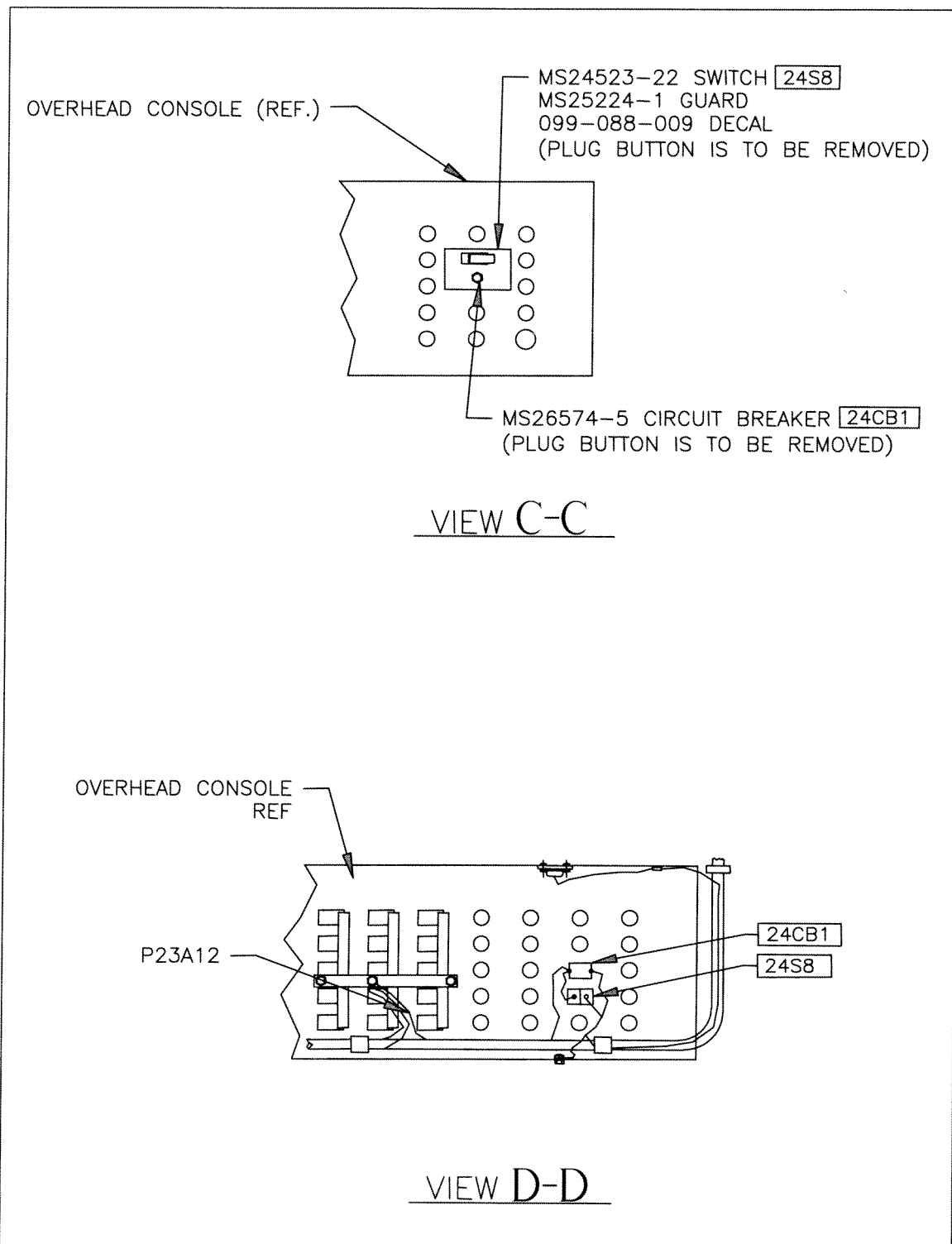


FIGURE 9. INSTRUMENT PANEL REFERENCE



**FIGURE 11. OVERHEAD CONSOLE REFERENCE**

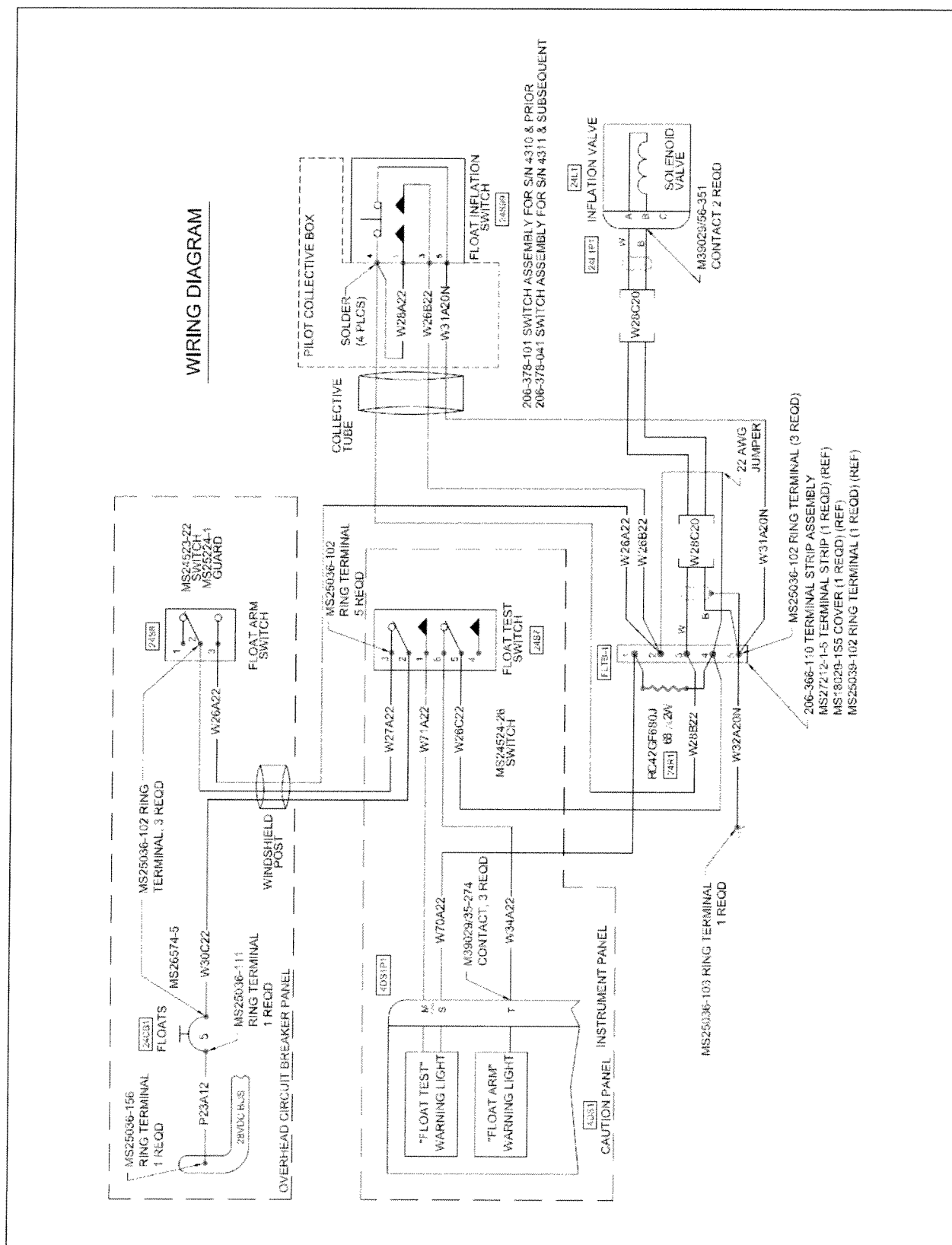


FIGURE 12. WIRING SCHEMATIC REFERENCE

AERONAUTICAL ACCESSORIES, INC

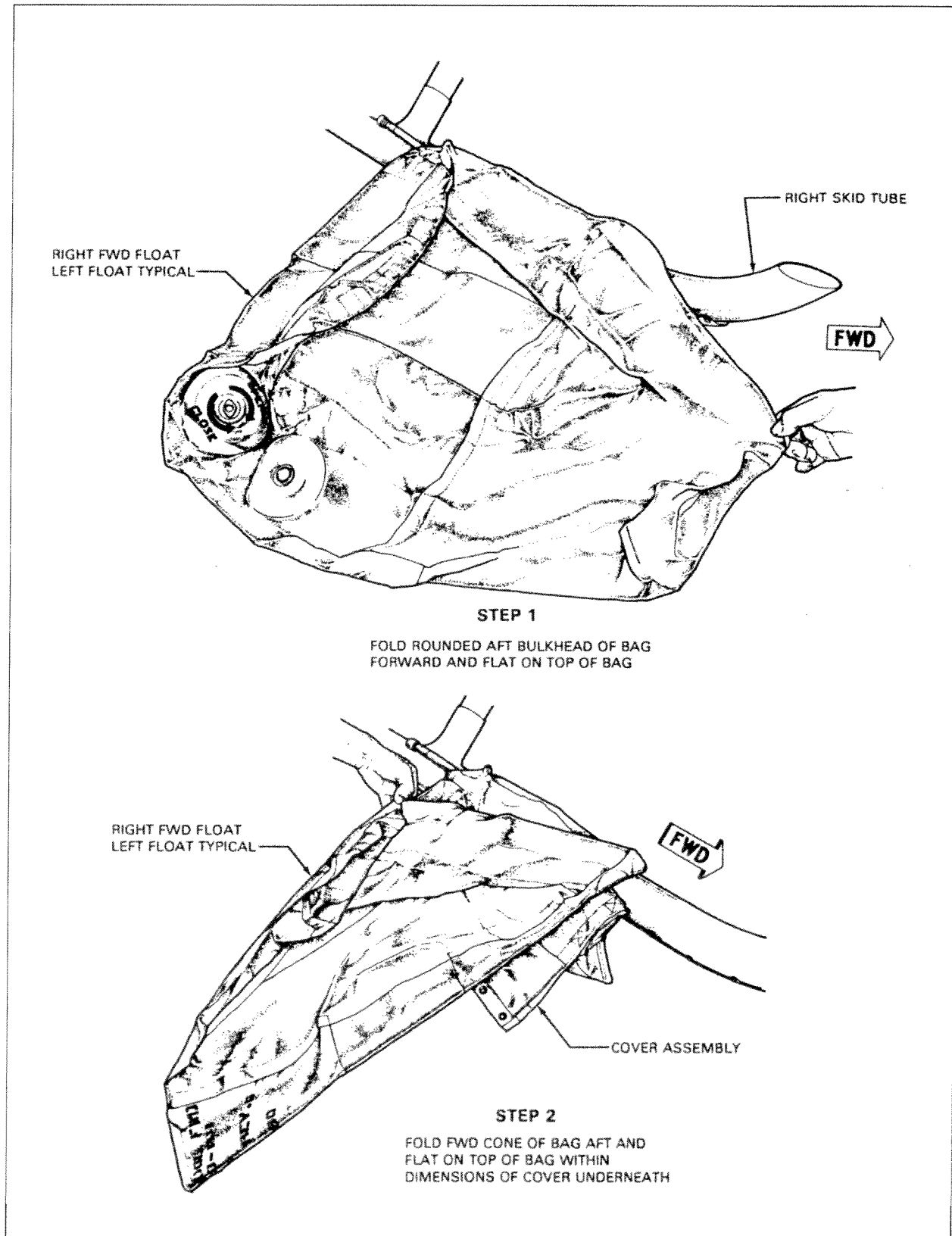


FIGURE 13 (SHEET 1 OF 4). FLOAT BAG PACKING REFERENCE

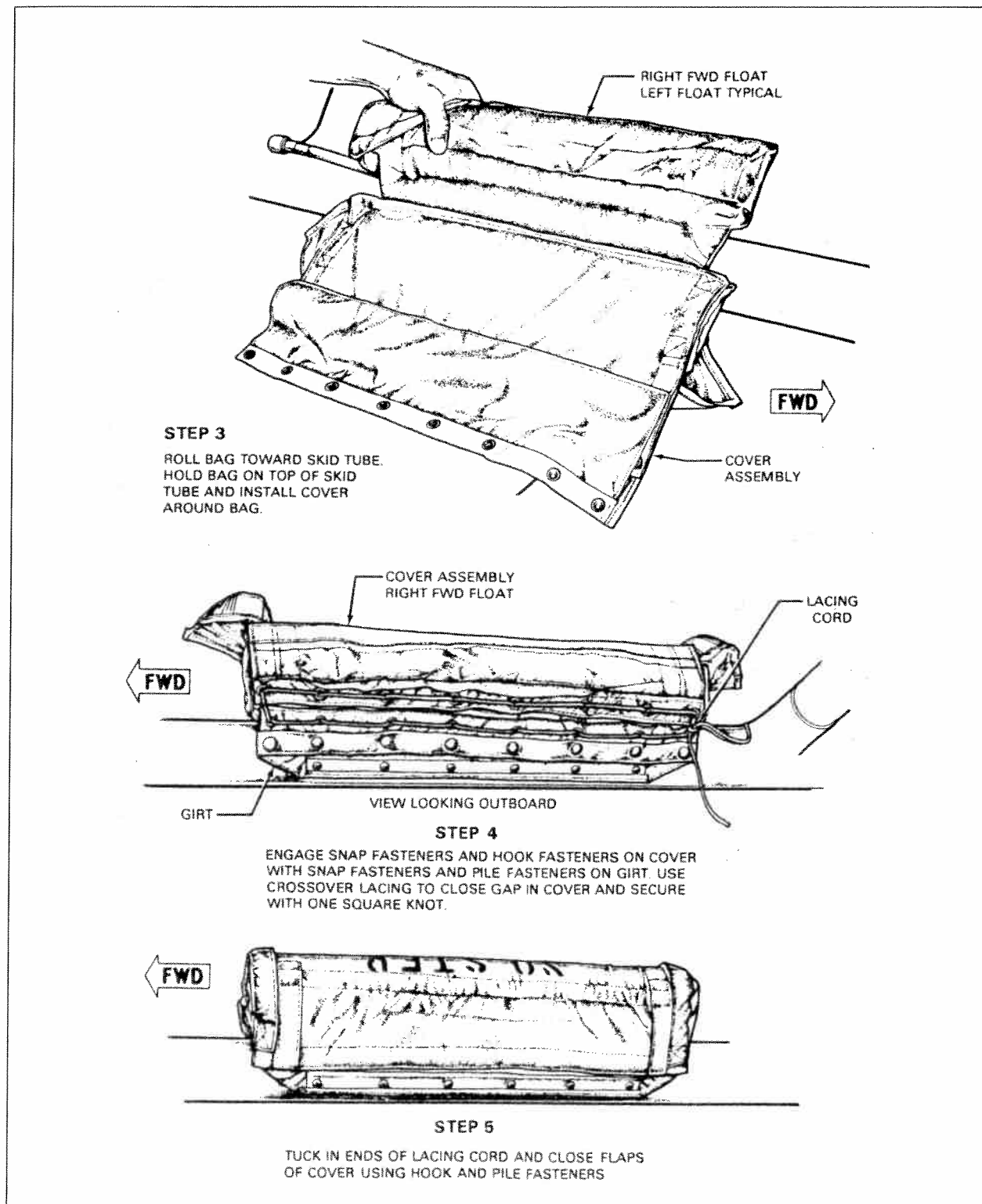


FIGURE 13 (SHEET 2 OF 4). FLOAT BAG PACKING REFERENCE

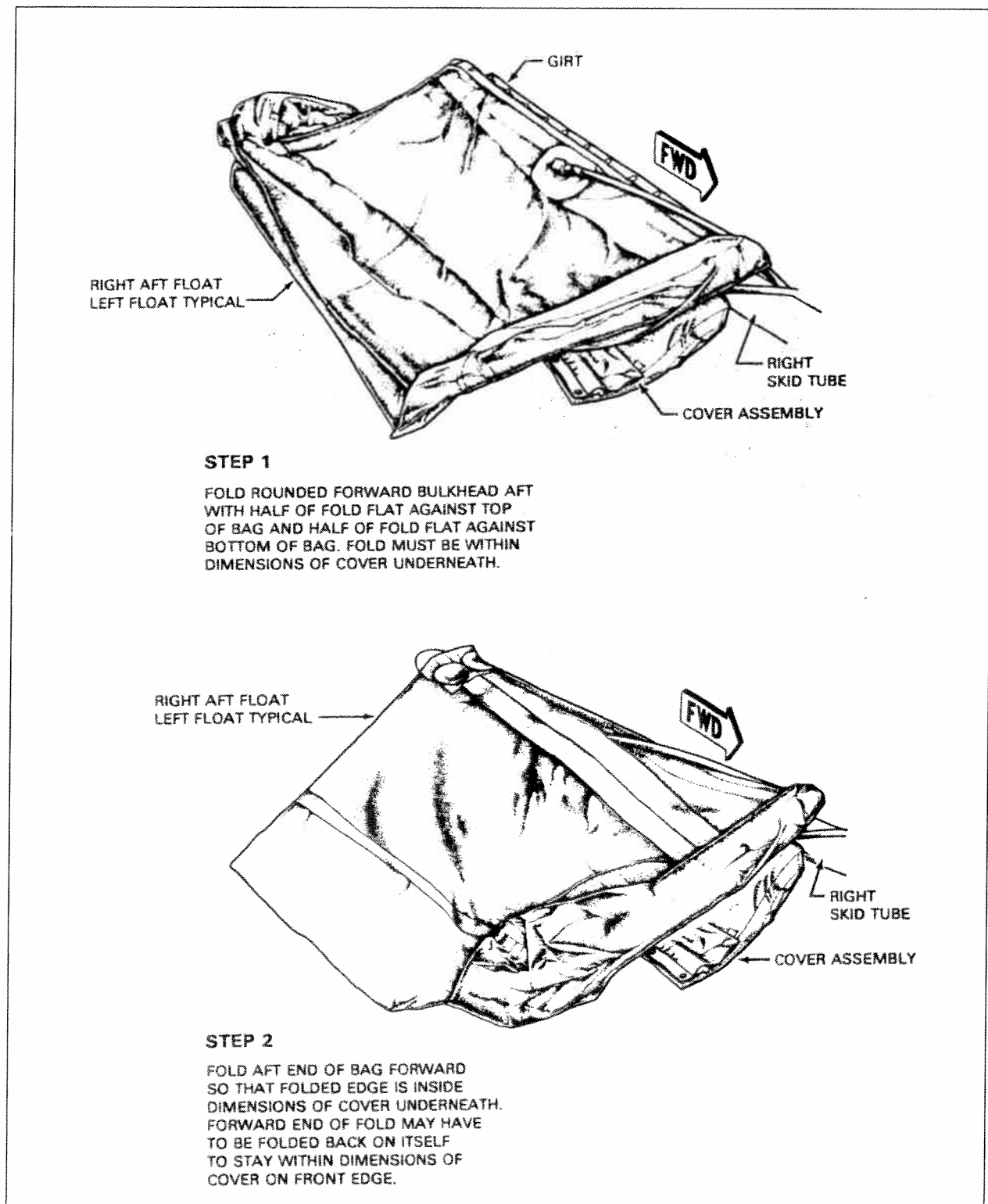


FIGURE 13 (SHEET 3 OF 4). FLOAT BAG PACKING REFERENCE

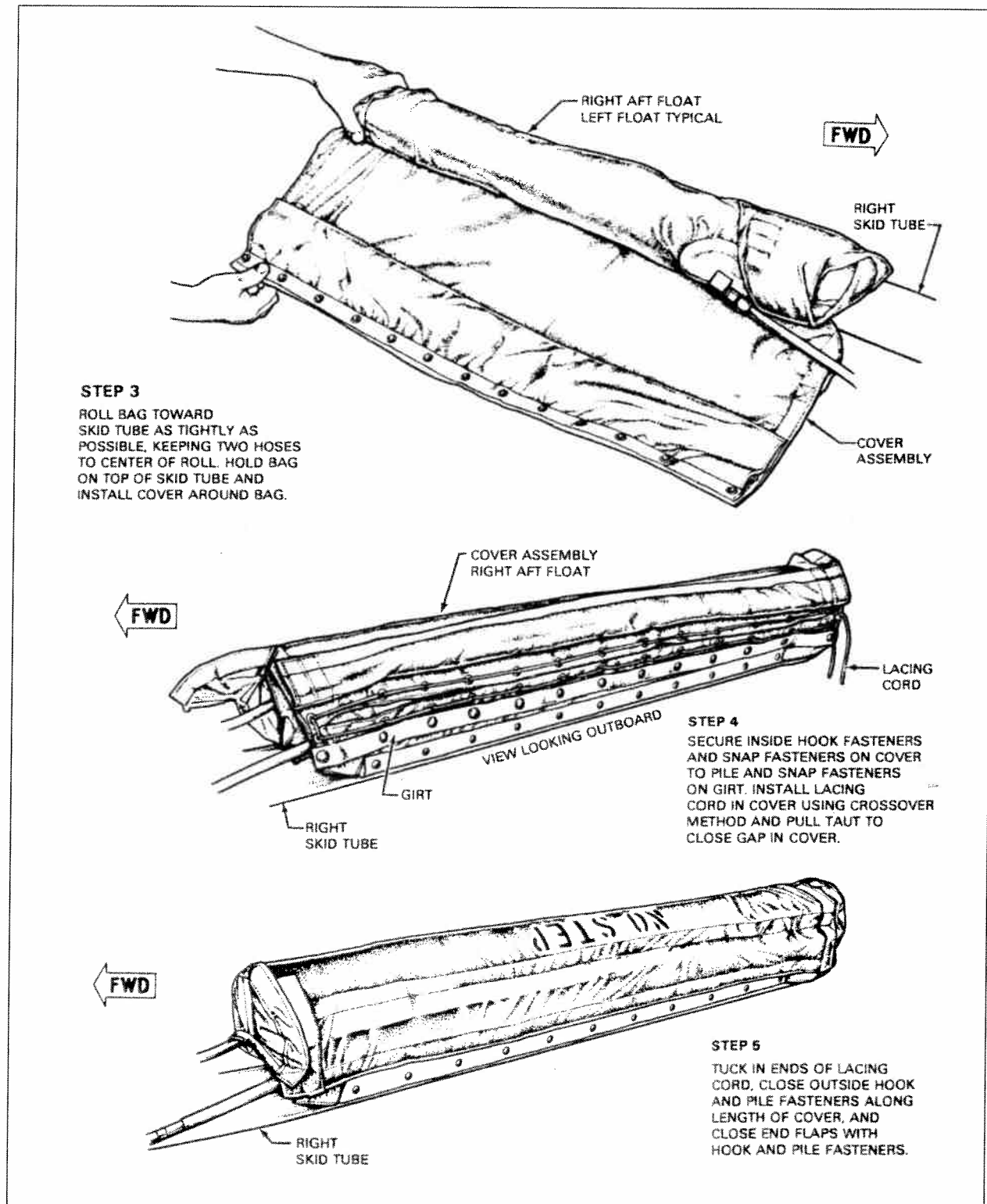


FIGURE 13 (SHEET 4 OF 4). FLOAT BAG PACKING REFERENCE

APPENDIX A

180 DAY/500 FLIGHT HOUR INSPECTION RECORD

Work Order Number: _____

Registration Number: _____

Serial Number: _____

Total Time: _____

Date: _____

Inspection intervals shall be performed every 180 days and/or 500 flight hours, whichever comes first. Inspections may be incorporated into progressive maintenance programs, as appropriate.

ELECTRICAL TEST PROCEDURES

1. Position MANUAL ARM switch in OFF position. Engage FLOAT POWER circuit breaker _____
2. Position instrument panel switch to FLOAT TEST position _____
3. Momentarily actuate float inflation trigger on pilot collective stick. FLOAT TEST segment shall illuminate indicating functional circuitry _____
4. Position instrument panel switch to NORMAL position. FLOAT TEST segment shall extinguish _____
5. Lift guard on MANUAL ARM switch and position switch to ON position. FLOAT ARM segment shall illuminate indicating functional circuitry _____
6. Disconnect connector from Electrical Valve _____
7. Depress float inflation trigger on pilot collective stick and check for 28 Vdc across Pins A & B on Electrical Valve connector _____
8. Release float inflation trigger on pilot collective stick and verify 0 voltage across Pins A & B on Solenoid Valve connector. (Operating range is 12 - 30 VDC) _____
9. Verify continuity across Pins A & B on Electrical Valve connector _____
10. Close MANUAL ARM switch guard disarming system. FLOAT ARM segment shall extinguish _____
11. Reconnect connector to Electrical Valve _____

180 DAY/500 FLIGHT HOUR INSPECTION RECORD

Work Order Number: _____

Registration Number: _____

Serial Number: _____

Total Time: _____

Date: _____

FLOAT BAGS AND INFLATION PIPING**NOTE**

Dry shop air may be used in lieu of nitrogen when checking floats. Use of Adapter, Topping Value, (600.0209) provided, is required with Apical Industries float bags.

1. Disconnect float inflation lines at fitting above skid. Connect external source of dry shop air to inflation line, unsnap cover over each bag, and inflate bags to normal pressure of 2.25 psig. Inspect bags, hoses and tubing as follows _____
2. Clean and dry the bags and covers. Visually inspect for wear, chafing or abrasion _____
3. Check all clamps, fittings, and hoses for corrosion, abrasion, and security _____

NOTE

Do not tighten or loosen hex fitting (shear head) at inlet to solenoid valve on reservoir. _____

180 DAY/500 FLIGHT HOUR INSPECTION RECORD

Work Order Number: _____
Registration Number: _____
Serial Number: _____
Total Time: _____
Date: _____

FLOAT BAGS LEAK TEST**NOTE**

This test must not be performed when the OAT exceeds 100°F (38°C). **DO NOT PERFORM THE TEST IN THE SUN.**

1. Inflate bags to 2.25 psig. Readjust pressure after two (2) hours if required _____
2. Record OAT and bag pressure _____
3. After 6 hours, record OAT and bag pressure. See the graph of Figure 1 to determine changes in bag pressure caused by OAT changes _____

The following is an example of a float bag leak test.

Initial Temperature: 70°F (21°C)

Initial Float Pressure: 2.25 psig

Final Temperature: 80°F (27°C)

Final Float Pressure: 2.42 psig

Outside temperature change 80°F to 70°F = 10°F (27°C to 21°C = 6°C).
(Ref. Figure 1)

Change in float bag pressure for 10°F (6°C) = 0.32 psig

Leakage rate: 2.25 psig – 2.10 psig = 0.15 psig

Float bag pressure change due to leakage of bags should not exceed .25 psig.

180 DAY/500 FLIGHT HOUR INSPECTION RECORD

Work Order Number: _____
Registration Number: _____
Serial Number: _____
Total Time: _____
Date: _____

FUNCTIONAL TEST**CAUTION**

If test is conducted at an elevation above sea level, fill pressure of the cylinder should be reduced from the pressure indicated on the cylinder placard by 100 psig for each 1000 feet above sea level to prevent excessive floatation bag inflation pressure during inflation cycle.

CAUTION

Reservoir should not be pressurized unless installed on helicopter. **DO NOT REMOVE WHILE PRESSURIZED.**

1. Pressurize nitrogen cylinder in accordance with CYLINDER PRESSURE LIMITS EMERGENCY FLOATATION DECAL on side of nitrogen cylinder. Refer to MAINTENANCE INSTRUCTIONS for detailed instructions _____
2. Apply a castile soap and water solution to all connections to check for leaks. _____
No leaks permitted _____

CAUTION

Remove ground handling wheel, if installed, and alert personnel in area prior to inflation.

3. Inflate floats. Check that floats inflate fully and at a uniform rate _____
4. Repack float bags _____
5. Return to Flight Configuration per 6.5 _____

Signature _____ A & P No. _____

Signature _____ Inspector _____