

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

MODEL L20500A SKI KIT CODE IDENT NO. 17564

18 March, 2021

THIS MANUAL INCLUDES INFORMATION PROPRIETARY TO AIRGLAS, INC. AND SHALL NOT BE USED TO MANUFACTURE OR REPRODUCE WITHOUT PERMISSION OF AIRGLAS, INC.

TABLE OF CONTENTS

Equipment & Materials	1
Section 1.0 Ski - Preparation Main Landing Gear	2
Section 2.0 Ski - Preparation Tail Landing Gear	2
Section 3.0 Helicopter - Preparation Main Landing Gear	2
Section 4.0 Helicopter - Preparation Tail Landing Gear	3
Section 5.0 Tail Ski - Installation	3
Section 6.0 Main Ski - Installation	4
Figure 1.0 Main Ski - Ski Preparation for Assembling to AH-64D	5
Figure 1.1 Main Ski - Ski Preparation for Assembling to AH-64D	6
Figure 2.0 Tail Ski - Ski Preparation for Assembling to AH-64D	7
Figure 3.0 Main Gear - Boeing Step and Plate Removal	8
Figure 3.1 Main Gear - Airglas Bracket and Step Assembly	9
Figure 3.2 Main Gear - Jack Pad Removal / Axle Assembly	10
Figure 5.0 Main Gear / Tail Gear – Pre-Install Ski Position	11
Figure 5.1 Main Ski – Axle Positioning and Assembly	12
Figure 5.2 Main Ski – Axle Positioning and Assembly	13
Figure 5.3 Main Ski – Spring Cylinder Positioning and Assembly	14
Figure 5.4 Main Ski – Check Cable Assembly	15
Figure 5.5 Main Ski – Safety Cable Assembly	16
Figure 5.6 Main Ski Check Cable Installation	17
Figure 6.0 Tail Ski – Axle Location and Assembly	18
Figure 6.1 Tail Ski – Axle Location and Assembly	19
Figure 6.2 Tail Ski - Spring Cylinder Positioning and Assembly	20
Figure 6.3 Tail Ski - Safety Cable Assembly	21
Section 7.0 Maintenance and Ground Handling Restrictions	22
Section 8.0 Maintenance Operational Checks	22
Section 9.0 Inspection Criteria	22
Section 10.0 Maintenance Tasks	23
Section 11.0 Ski Removal	30

EQUIPMENT AND MATERIALS

INITIAL SETUP

PERSONNEL REQUIRED

•One: AH-64 Helicopter Repairer

•One: Aircraft Structural Repairer

•Three: Assistants

MATERIALS/PARTS

•Corrosion Preventative Compound, MIL-C-16173D, Grade 2

- •Dry Cleaning Solvent, MIL PRF-680 Type II
- •SuperLube Synthetic Grease (PTFE)
- •Readily Available Anti-Seize agent
- •Rag, Clean, DDD-T-541

TOOLS

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

LANDING GEAR SKIS - INSTALL MAIN AND TAIL

SKI - PREPARATION MAIN LANDING GEAR

Section 1.0

Preparation of both skis is the same except where noted. Right side is shown.

- 1. Remove and save hardware (AN3-27A bolt, AN960-10 Washer, and AN365-1032 Nut) holding the Axle Assy., Outboard (L20500A-6) in place. See figure 1.0
- 2. Slide Axle Assy., Outboard out of fitting in ski. *See figure 1.0*
- 3. Remove Shipping Tube covering the Axle, Main Landing Gear (L20500A-7). *See figure 1.0*
- 4. Remove the Axle (L20500A-7) See figure 1.0
- 5. DO NOT REMOVE AXLE ASSY., INBOARD. *See figure 1.0*
- 6. Remove Tail Wheel Assembly and Check Cable from rear of the Main Ski by removing Elevator Bolts (EB616-20, EB616-21) from the bottom of the ski *See figure 1.1* Save all hardware for future use.

SKI - PREPARATION TAIL LANDING GEAR

Section 2.0

- 7. Remove Tail Wheel Bracket Kit (L20500-18) from back of Tail Ski Assy. (L20500A-3). Save all hardware for future use. *See Figure* 2.0
- 8. Remove Tail Ski Axle Adapter (L20500A-13). Save all hardware for future use *See Figure* 2.0

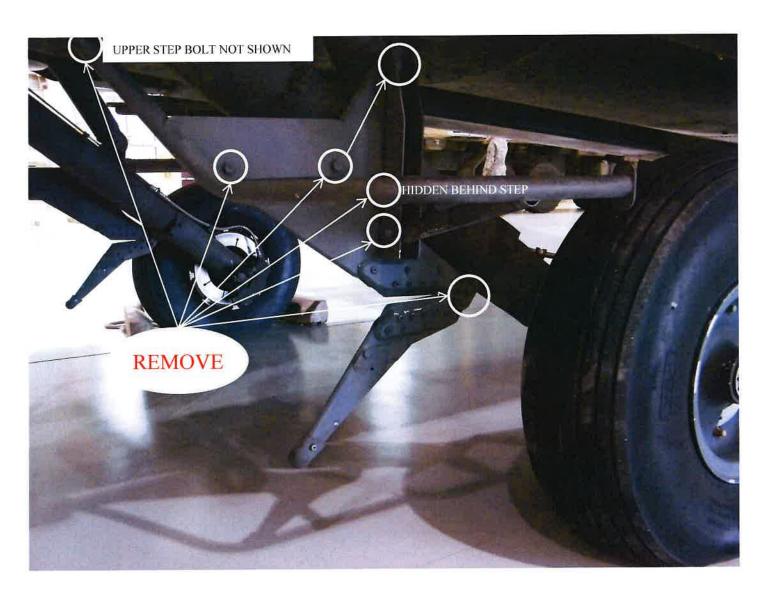
HELICOPTER - PREPARATION MAIN LANDING GEAR

Section 3.0

Preparation of both skis is the same except where noted. Right side is shown.

- 9. Remove Step Assembly (7-511113527-1 & -2). Keep existing hardware for future use. *See figure 3.0.*
- 10. Remove Wire Cutter Assembly (443-83020-2). Keep hardware and wire cutter assy. for future use. *See figure 3.0*
- 11. Attach Airglas Bracket Assembly (L20500A-20 R.H., L20500A-21 L.H.) to Main Landing Gear using existing hardware *See Figure 3.1* TORQUE VALUE
- 12. Bolt Bracket Assembly to Clamp (443-83023-1) (both sides) using existing hardware from Step 10. *See Figure 3.1*
- 13. Re-install Step Assembly (7-511113527-1 & -2) to Bracket Assembly (L20500A-20, L20500A-21) using existing hardware from Step 9. See Figure 3.1inboard
- 14. Remove Jack Pad (1168321-1). Keep existing hardware. *See Figure 3.2*
- 15. Slide Axle, Main Landing Gear (L20500A-7) into the Trailing Arm (1168320-101) axle housing. See Figure 3.2
- 16. Line up clearance hole on Axle (L20500A-7) with clearance hole on Trailing Arm (1168320-101).
- 17. Re-install existing hardware from Step 14 to hold Axle (L20500A-7) in place. *See Figure 3.2* TORQUE VALUE
- 18. Remove both inboard pylons.
- 19. Remove inboard attach bolts
- Install check cable attach bracket PN L20500A-11-3, see fig. 5..6
- 21. Match torque of existing pylon bolts.
- 22. Set levelers to make full contact with side of pylon. Tighten NAS509-3C and safety the two nuts.

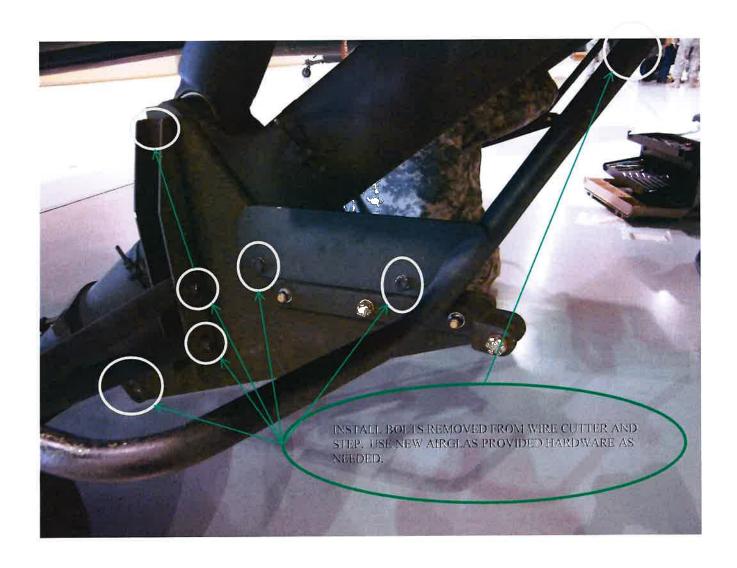
REMOVAL OF STEP AND WIRE CUTTER



REMOVE HARDWARE CIRCLED IN PICTURE. NOTE: ONE OF THE FASTENERS IS HIDDEN BEHIND THE STEP, ONE (UPPER STEP BOLT) IS NOT IN PICTURE.

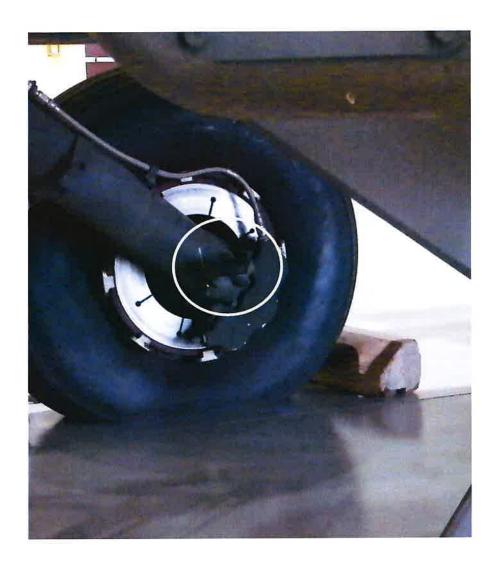
NOTE: RETAIN ALL HARDWARE FOR LATER USE.

INSTALLATION OF AIRGLAS ADAPTER ASSEMBLY (L20500A-20 RH SIDE. L20500A-21 LH Side)



SEE FIG 3.1 FOR SPECIFIC DETAILS ON HARDWARE AND TORQUE REQUIREMENTS

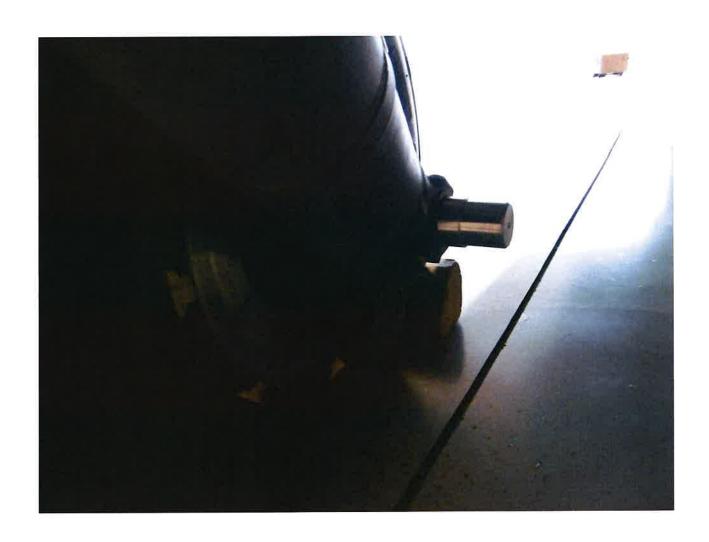
REMOVE JACK PAD



JACK PAD IS INSTALLED WITH ONE BOLT. REMOVE BOLT AND THEN TWIST AND PULL ON PAD TO REMOVE.

AFTER REMOVAL OF JACK PAD, CLEAN THE INTERIOR OF THE AXLE CAVITY TO REMOVE ALL FOREIGN MATERIAL. USE OF A ROUND (BORE) BRUSH AND SHOP AIR WILL BE NEEDED.

INSERT L20500A-7 AXLE INTO MAIN LANDING GEAR AXLE CAVITY.



INSERTION OF THE AIRGLAS L20500A-7 AXLE CAN HAVE BE COMPLICATED BY PAINT OVERSPRAY INSIDE AXLE CAVITY. BOEING DID NOT SPECIFY A PAINT THICKNESS IN THIS AREA. DO A TEST INSERTION TO SEE HOW FAR AXLE WILL GO IN WITH NO FORCE. IF IT DOES NOT GO IN ALL THE WAY, TAP LIGHTLY WITH A RUBBER MALLET.

NOTE: BE SURE TO ALIGN HOLES OF THE AIRGLAS AXLE (L20500A-7) AND THE MAIN LANDING GEAR AXLE.

YOU MAY NEED TO DO A SERIES OF INSERTIONS AND PAINT CHIP REMOVAL TO GET AXLE TO GO ALL THE WAY IN. IF YOU SEE ANY METALLIC CHIPS, STOP AND HAVE IT ASSESSED BY A TECHNICAL EXPERT.

HELICOPTER - PREPARATION TAIL LANDING GEAR

Section 4.0

23. Remove Wire Strike (Deflector) from Tail Landing Gear and all associated hardware.

NOTE: The bolts that attach wire strike to tail wheel axle will need to be replaced with NAS6405-32 bolts, or an alternate temporary method by using a washer stack added to replace the thickness of the wire strike attach lugs. Washers should be replaced at the next major maintenance inspection. These bolts are in shear, so washer stack has no impact on joint strength.

TAIL SKI - INSTALLATION

Section 5.0

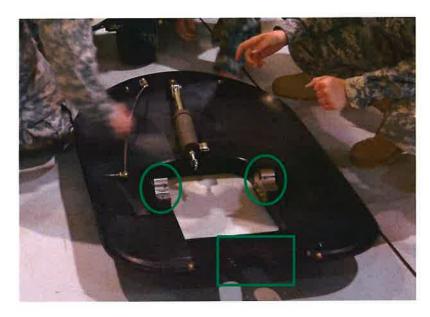
24. Remove Bolts (AN4-7A), Washers (AN960-416), and Nuts (A365-428), (and NAS70C-4 Washers) holding tail ski, Tail Wheel Bracket Kit (L20500-18) to ski and remove Tail Wheel Bracket Kit. See Figure 2.0 (retain hardware)

Note: Remove the L20500A-14-2 bracket (Item 38 of IPB on Page 28) prior to towing helicopter onto tail ski. This bracket will create interference with tow bar. This is done by removing the two AN5-12A bolts and one AN3-21A bolt (Item 8 & 41on page 28) attaching bracket to the L20500A-14 (Item 22 on page 28)

- 25. Center Tail Ski in front of Tail Gear Wheel. See Figure 5.0
- 26.. Tow helicopter, or push helicopter forward, with help of assistants, until Tail Wheel is centered in Ski Wheel Well.
- 27. Lift rear ski so the Tail Ski Attach Brackets (L20500A-14) line up with the Tail Wheel Axle (1168819-1). See Figure 6.0

Note: Re-install the L20500A-14-2 bracket (Item 38 of IPB on Page 28) attaching bracket to the L20500A-14 (Item 22 on page 28) This is done by installing the two AN5-12A bolts and one AN3-21A bolt (Item 8 & 41on page 28) removed in Step 24 above. Torque AN5-12A to 100-140 IN LBS, the AN3-21A to 20-25 IN LBS.

- 28. Insert Tail Ski Axle Adapter(s) (L20500A-13) through Ski Attach Bracket(s), place Axle Spacer(s) (L20500A-16) on Tail Ski Axle Adapter(s). See Figure 6.0
- 29. Push Ski Axle Adapter (s) into Tail Ski Axle until clearance holes line up on Ski Attach Bracket(s) and Ski Axle Adapter (s). See Figure 6.1
- Insert Bolt(s) (AN3-14A) through clearance holes, affix Washer(s) (AN960-10) and Nut(s) (AN365-1032). See Figure 6.1 TORQUE VALUE
- 31. Attach Spring Cylinder, Tail Ski (L20500A-15) to Tail Ski, Lower Attach Fitting (L20500A-19) with Bolt (AN26-21), Washer (AN960-616L) and Nut (AN320-6). Secure Nut with Cotter Pin (MS24665-302). See Figure 6.2 TORQUE VALUE
- 32. Insert Bushings (L20500A-22) into 3/8 hole in Eye Bolt, SPL (L20500A-23) one from each side. *See Figure 6.2*
- 33. Hold the Spring Cylinder in one hand, lift the front of the ski, and position the upper Eye Bolt (L20500A-23) so that the Eye Bolt is lined up with the Bushings and tlg wheel fork assy lugs 1168850. Insert Eye Bolt (L20500A-24) Affix Washer (AN960-416) and Nut (AN310-4). Instl MS24665-151 cotter pin. See Figure 6.2
- 34. Install Safety Cable Tail Ski (L20500A-17) onto Tail Ski using Washer (30185), Screw (NAS514P524-16), Washer (AN960-516) and Nut (AN365-524). See Figure 6.3 TORQUE VALUE
- 35. Attach upper portion of Safety Cable to Eye Bolt (L20500A-24) using Clevis Pin (AN394-15) and Cotter Pin (MS24665-151). See Figure 6.3
- 36. Re-Install Tail Wheel Bracket Kit (L20500-18). See Figure 2.0



Tail ski with L20500A-14-2 Tow Bar Adapters and L20500-18 tail wheel assembly removed



Tail ski with L20500A-14-2 Tow Bar Adapters reinstalled and L20500-18 tail wheel assembly being installed.



Tail ski with L20500A-14-2 Tow Bar Adapters reinstalled and connected to tow bar.

LANDING GEAR SKIS - INSTALL MAIN AND TAIL

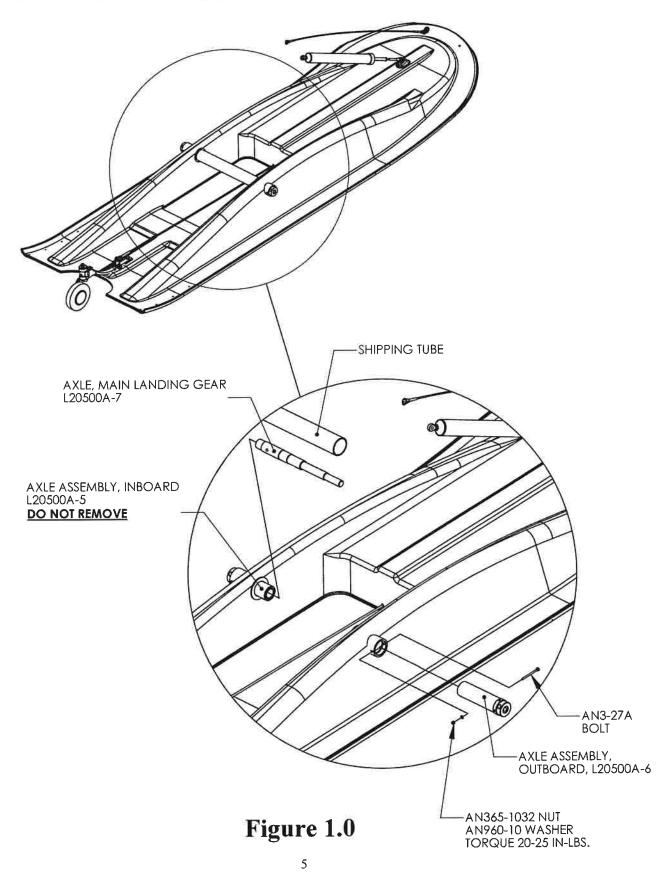
MAIN SKI - INSTALLATION

Section 6.0

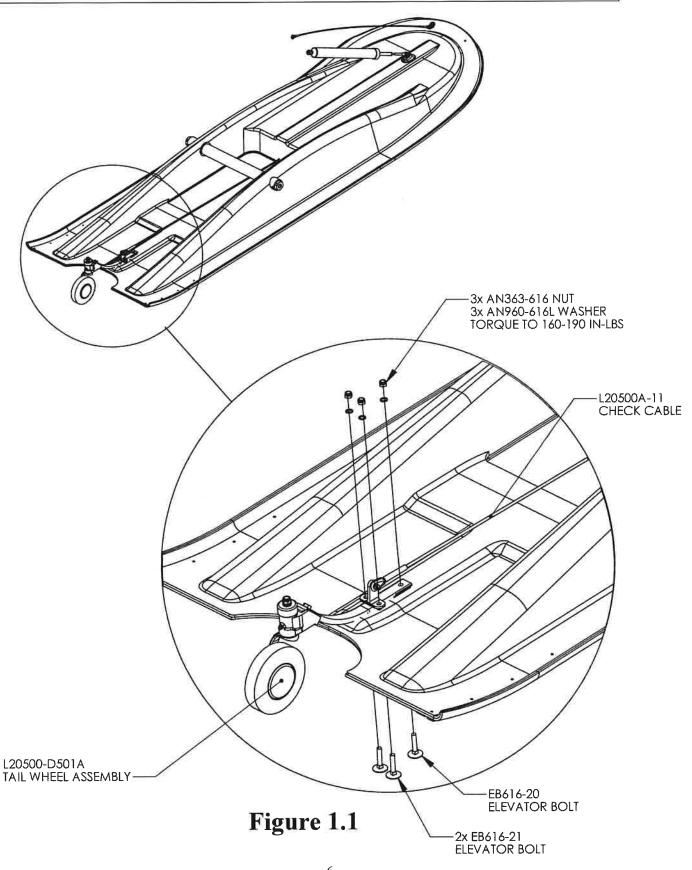
- 37. Center Main Skis in front of Main Landing Gear Wheels *See Figure 5.0*
- 38. CAUTION To avoid damage to ski take extreme care to ensure that the wheels are on the outboard part of the wheel wells.
- 39. Install Airglas installation ramps on both main skis.
- 40. Tow helicopter or push helicopter forward with help of assistants until the main wheels are centered in the ski wheel well.
- 41. Lubricate Axle, Main Landing Gear (L20500A-7) with thin coat of Synthetic Grease (PTFE).
- 42. Lift tail of main ski off the ground and slide fore or aft to align the Axle Assembly, Inboard (L20500A-5) (which was left on the ski) with the Axle, Main Landing Gear (L20500A-7). Slide ski outboard until Axle (L20500A-7) is properly seated in Inboard Axle (L20500A-5). See Figure 5.1
- 43. Coat Axle Assy., Outboard (L20500A-6) threads with anti-seize agent. Coat Axle Assy., Outboard (L20500A-6) body with corrosion preventative compound, MIL-C-16173D, Grade 2.

- 44. Insert Axle Assy., Outboard (L20500A-6) into Main Ski Bushing Assy. (L20500-4) and thread Ski Axle into Ski Bushing. See Figure 5.1
- 45. Thread Inboard and Outboard Ski Axles until both are evenly seated on Axle, Main Landing Gear (L20500A-7). See Figure 5.2
- 46. Back off Inboard and Outboard Ski Axles until the holes line up to slots on the Ski Bushing.
- 47. Install bolt(s) (AN3-27A) through Inboard and Outboard Axles and Ski Bushing. Affix Washer(s) (AN960-10) and Nut(s) (AN365-1032) onto bolt(s) *See Figure 5.2.* TORQUE NUTS TO 20 25 INCH-POUND.
- 48. Install Spring Cylinder, Main Ski (L20500A-8) on forward Ski Eye Bolt (AN47-14) with Clevis Bolt (AN396-23) and Cotter Pin (MS24665-302) and to the Upper Mounting Bracket (L20500A-21-3) with Clevis Bolt (AN26-25), (2) Washers (AN960-616L) and Nut (AN320-6), (4) Special Washers (P/N 528D378D050 (2 each side of rod end). See Figure 5.3 TORQUE VALUE
- 49. Install Check Cable (L20500A-11) to check cable bracket, PN L20500A-11-3 using Clevis Pin and Cotter Pin.
- 50. Re-Install Tail Wheel Assembly (L20500-D501A) *See Figure 1.1*
- 51. Align Check Cable to Ski Angle Bracket (L20500A-11-1A, L20500A-11-1B), Insert Clevis Pin (AN396-23) and Cotter pin (MS24665-302). See Figure 5.4
- 52. Install lower end of Safety Cable Assy.
 (L20500A-12) to ski with Bolt (AN5-6A)
 Washer (AN960-516L) Nut (AN365-524). See
 Figure 5.5. TORQUE VALUE Install upper end
 to Eye Bolt (AN45-11) at 2nd hole back on
 Bracket Assy. (P/N L20500A-20, L20500A-21)
 Fasten with clevis pin (AN395-17) and secure
 with cotter pin MS249665-302. See Figure 5.5.

MAIN SKI – SKI PREPARATION FOR ASSEMBLING TO AH-64D



MAIN SKI - SKI PREPARATION FOR ASSEMBLING TO AH-64D



TAIL SKI – SKI PREPARATION FOR ASSEMBLING TO AH-64D

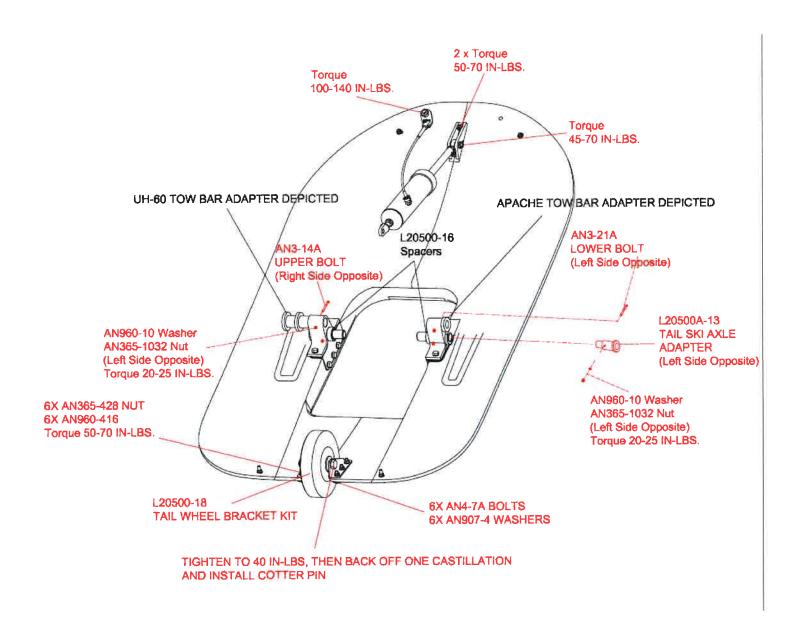


FIGURE 2.

MAIN GEAR - BOEING STEP AND PLATE REMOVAL

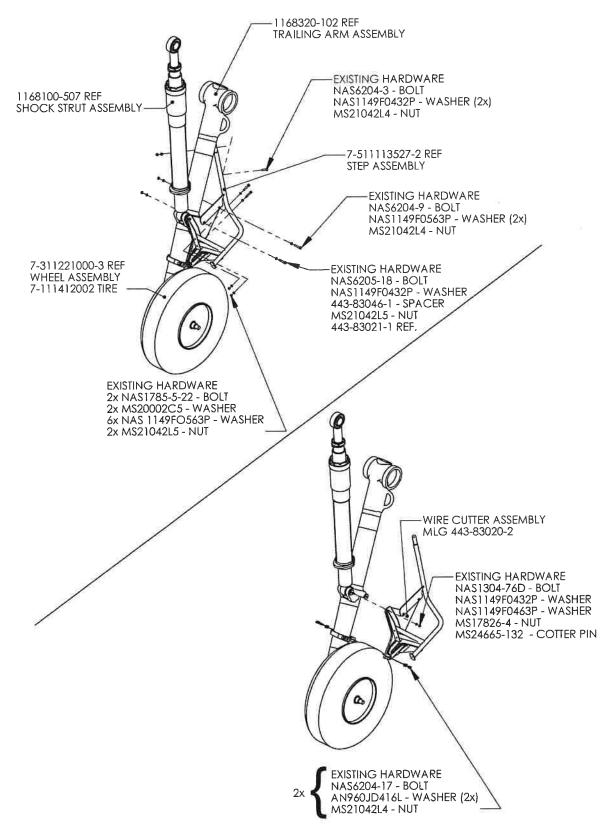
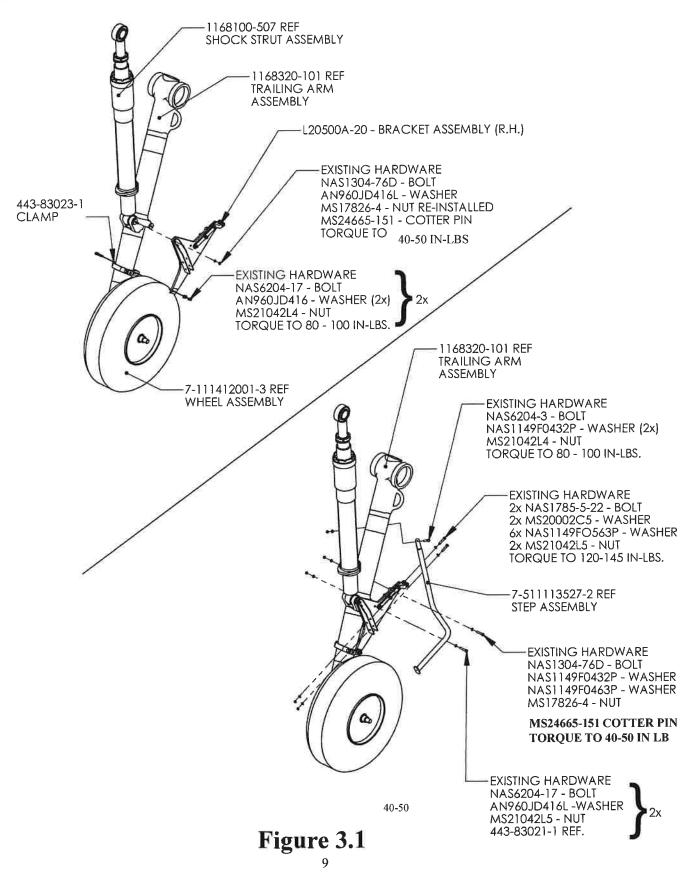


Figure 3.0

8

MAIN GEAR - AIRGLAS BRACKET AND STEP ASSEMBLY



MAIN GEAR - JACK PAD REMOVAL / AXLE ASSEMBLY

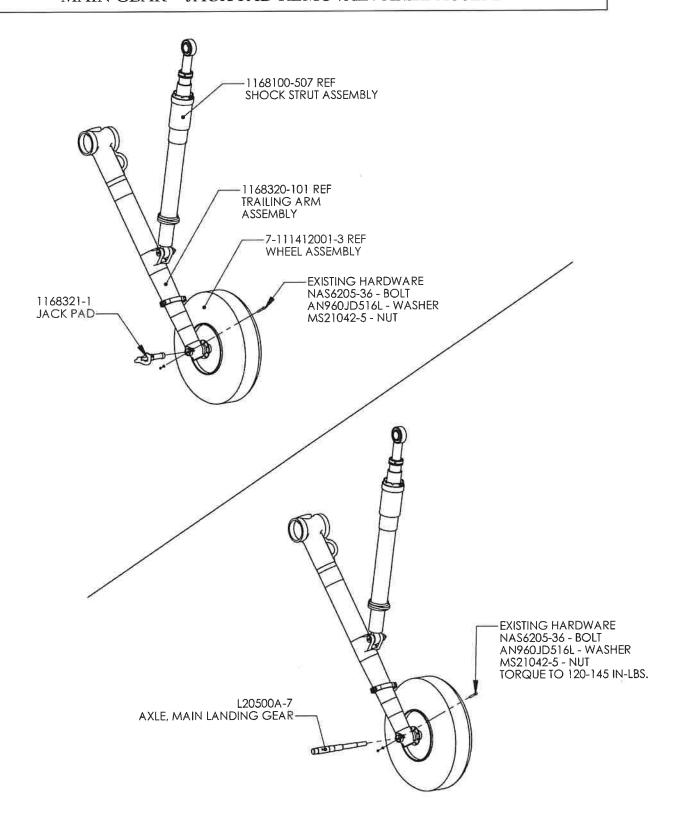
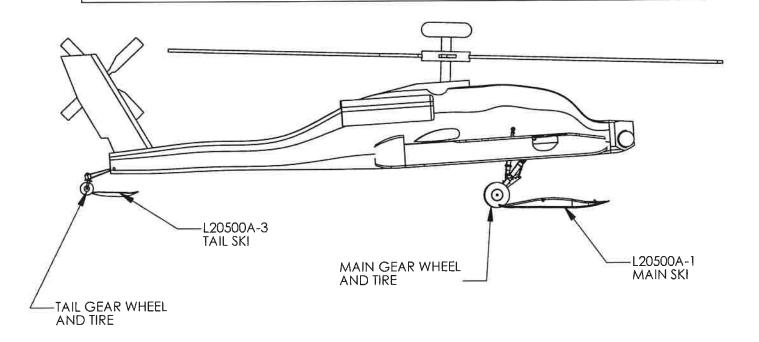


Figure 3.2

MAIN GEAR / TAIL GEAR – PRE-INSTALL SKI POSITION



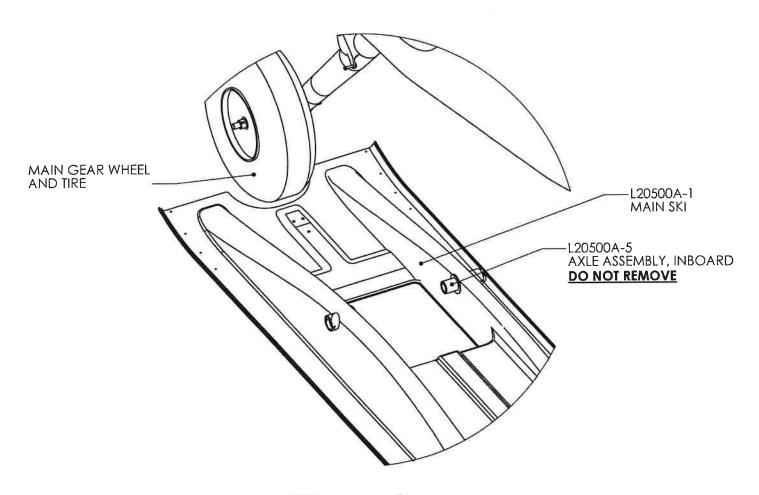
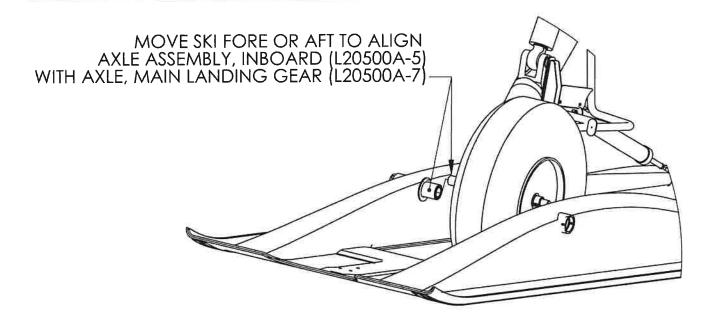


Figure 5.0

MAIN SKI – AXLE POSITIONING AND ASSEMBLY



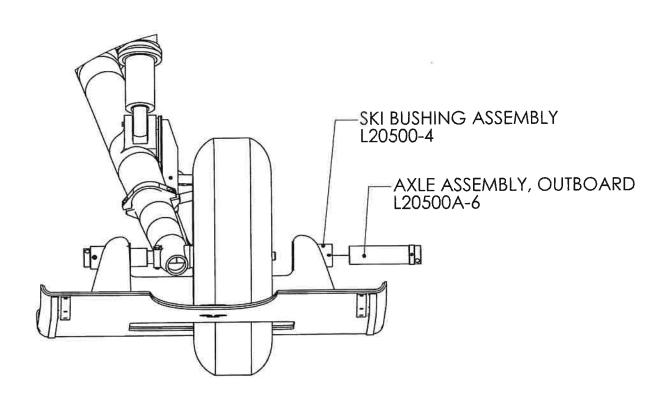


Figure 5.1

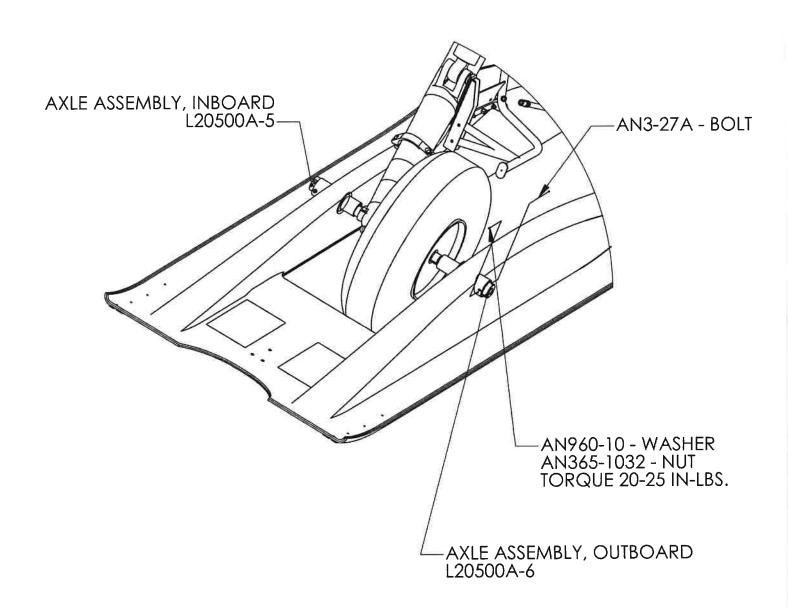


Figure 5.2

MAIN SKI - SPRING CYLINDER POSITIONING AND ASSEMBLY

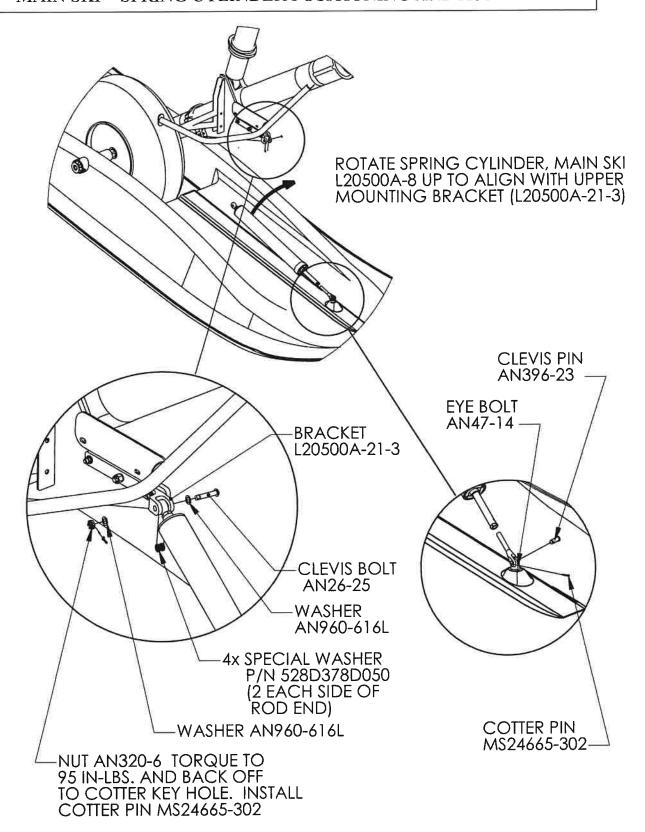


Figure 5.3

MAIN SKI - CHECK CABLE ASSEMBLY

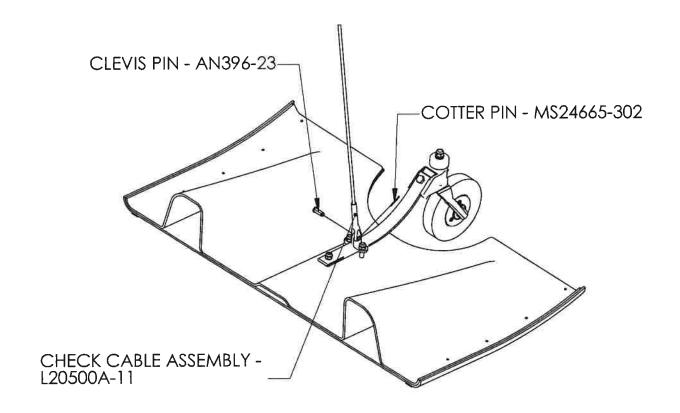
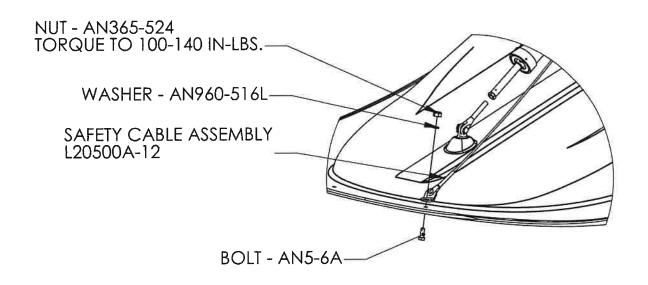
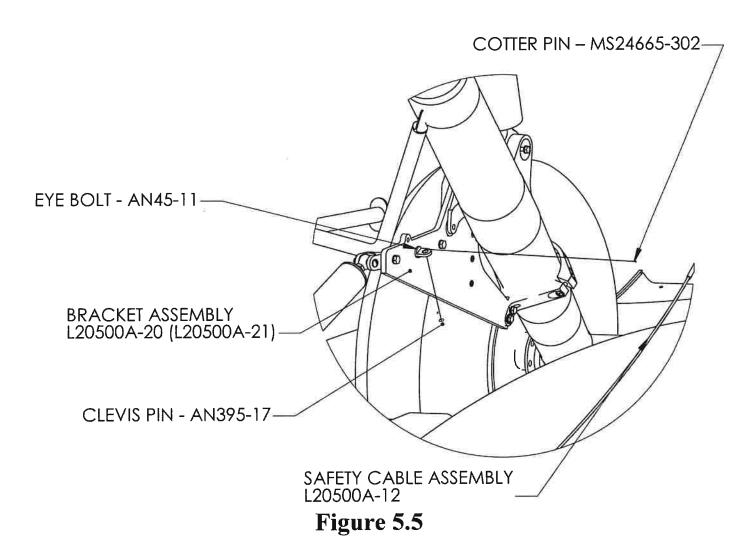


Figure 5.4

MAIN SKI – SAFETY CABLE ASSEMBLY





PYLON CHECK CABLE BRACKET INSTALL

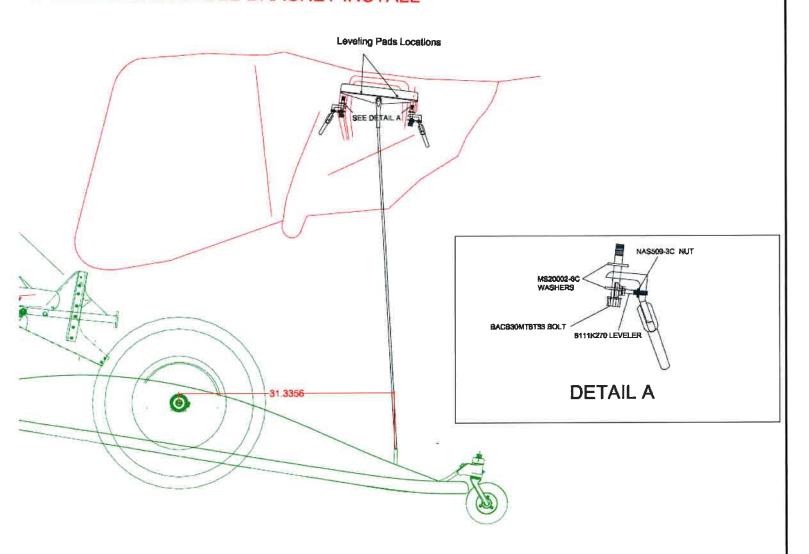
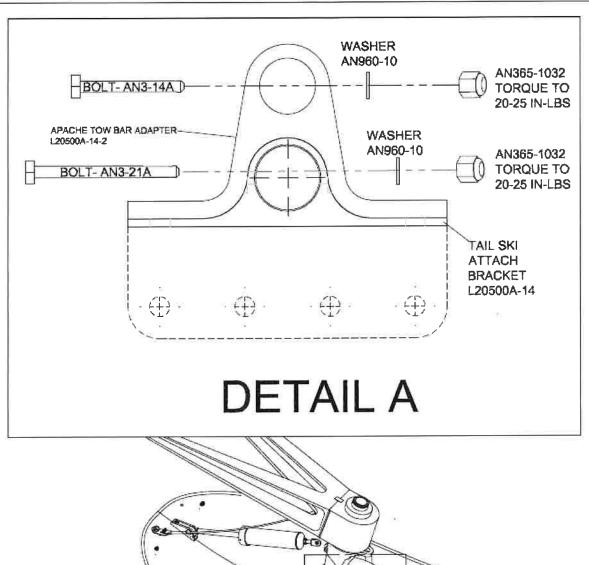
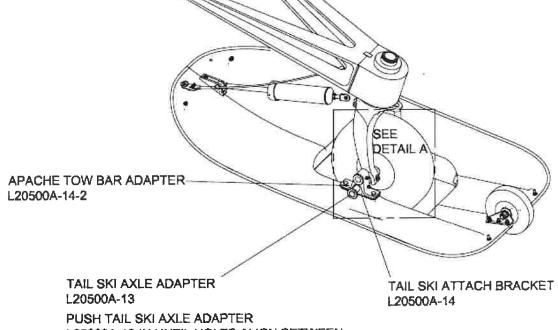


FIGURE 5.6

APACHE TOW BAR FITTING L20500A-14-3 APACHE TOW BAR ADAPTER L20500A-14-2 TAIL SKI AXLE ADAPTER L20500A-13 FIGURE 6.0 TAIL SKI ATTACH BRACKET L20500A-14 L20500A-16 **AXLE SPACER** TAIL WHEEL AXLE- 1168819-1

TAIL SKI – AXLE LOCATION AND ASSEMBLY

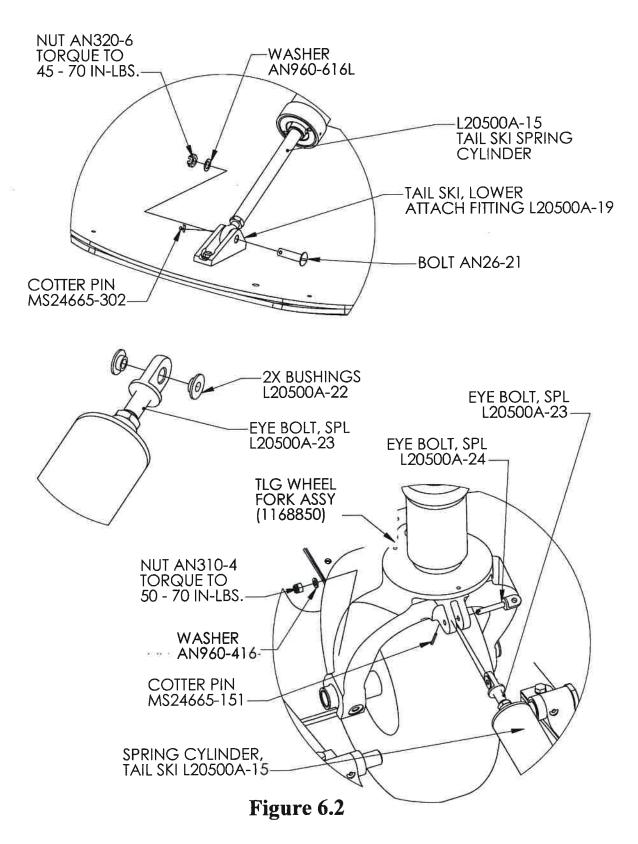




L25000A-13 IN UNTIL HOLES ALIGN BETWEEN ADAPTER AND BRACKETS

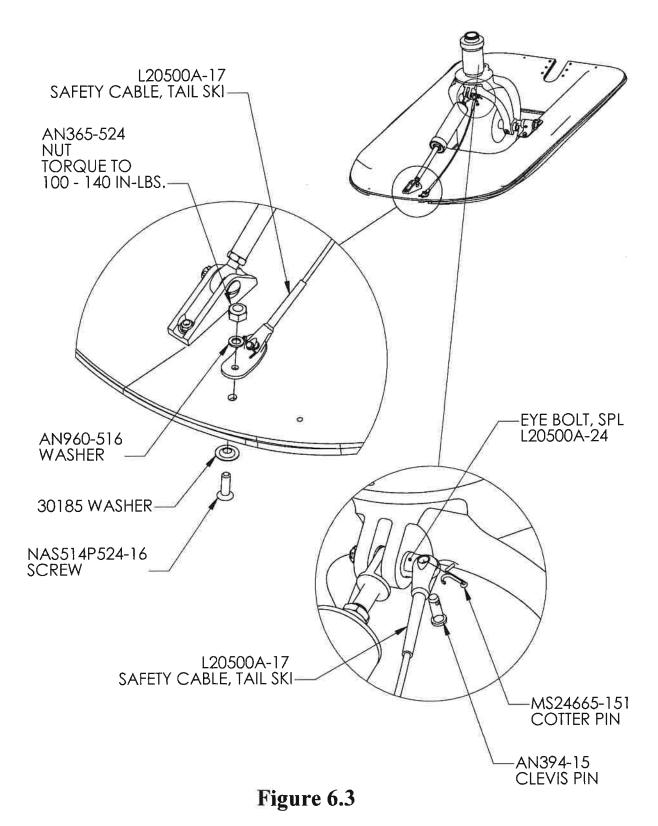
FIGURE 6.1

TAIL SKI – SPRING CYLINDER POSITIONING AND ASSEMBLY



20 AIRGLAS, INC ANCHORAGE, ALASKA 99507

TAIL SKI - SAFETY CABLE ASSEMBLY



21 AIRGLAS, INC ANCHORAGE, ALASKA 99507

MAINTENANCE AND INSPECTION CRITERIA

Section 7.0 MAINTENANCE AND GROUND HANDLING RESTRICTIONS

- 1. DO NOT Push or Pull on skis to move aircraft
- 2. DO NOT Subject to flame or high heat
- 3. DO NOT Attempt to jack aircraft with skis installed
- 4. DO NOT Subject to harsh solvents or caustic chemicals
- 5. DO NOT Use skis as a tie down for the aircraft
- 6. DO NOT Disassemble the Main Ski Spring Cylinder (Airglas Part No.# L20500A-8)
- 7. DO NOT Disassemble the Tail Ski Spring Cylinder (Airglas Part No.# L20500A-15)
- 8. DO NOT Attempt to change a main gear tire with the skis installed
- 9. DO NOT Attempt to change a tail gear tire with the skis installed
- 10. DO NOT Use standard wheel chocks with skis installed

Section 8.0 MAINTENANCE OPERATIONAL CHECKS

10-14 Check (10 hour or 14 day inspection)

- 1. CHECK Force required to move main ski tail wheel (Airglas Part No. # L20500-D501A) sideways, force shall be 3-5 lbs (22.24 Newtons).
- 2. CHECK- Main landing gear skis (if installed) inspect for cracks, excessive wear, fractures and abrasions. Security of spring cylinders. Main ski safety and check cables for security (Airglas Part No.# L20500A-12-1) & (Airglas Part No.# L20500A-11).
- 3. CHECK Main landing gear ski tail wheel spring for damage and security (Airglas Part No. # L20500-D501A).
- **4. CHECK-** Tail landing gear skis (if installed) inspect for cracks, excessive wear, fractures and abrasions. Security of the spring cylinder (Airglas Part No. # L20500A-15, Boeing Part No.# 7-511210303-003). Security of the safety cable No. (Airglas Part No. # L20500A-17). Security of the tail wheel assembly (Airglas Part No. # L20500-18).

Section 9.0 INSPECTION CRITERIA

500-Annual (500 hour or Annual inspection)

- 1. INSPECT The main landing gear ski (Airglas Part No.# L20500A-01) for excessive cracks, wear, fractures and abrasions. Inspect the bottom for cracks, scratches and excess wear. If damaged consult manufacturer. Lubricate tail wheel fittings with SuperLube Synthetic Grease (PTFE).
- 2. INSPECT The tail landing gear ski (Airglas Part No.# L20500A-03) for excessive cracks, wear, fractures and abrasions. Inspect the bottom for cracks, scratches and excess wear. If damaged consult manufacturer. Lubricate tail wheel fittings with SuperLube Synthetic Grease (PTFE).
- 3. INSPECT The main landing gear safety cable (Airglas Part No.# L20500A-12) for integrity and fraying. The main landing gear check cable (Airglas Part No.# L20500A-11) for integrity and fraying. The main landing gear spring cylinder (Airglas Part No.# L20500A-8) for cracks, dents, wear, fractures and abrasions. The main landing gear bracket assembly (Airglas Part No.# L20500A-20 & 21) for integrity, cracks, dents and excessive wear.
- **4. INSPECT-** The tail landing gear ski safety cable (Airglas Part No.# L20500A-17) for integrity and fraying. The tail landing gear spring cylinder (Airglas Part No.# L20500A-15) for cracks, dents, wear, fractures and abrasions.
- **5. INSPECT-** The main landing gear ski axle (Airglas Part No.# L20500A-7 for cracks, dents and fractures. The main landing gear ski axle assemblies (Airglas Part No.# L20500A-5 and L20500A-6) for cracks, dents, fractures and thread integrity.
- 6. INSPECT –The tail landing gear ski axle adapters (Airglas Part No.# L20500A-13) for cracks, dents and fractures. The two (2) special eyebolts (Airglas Part No.#'s L20500A-24 & L20500A-23) for cracks and integrity.

MAINTENANCE TASKS

Section 10.0 MAINTENANCE TASKS

10.1 TOP SURFACE MAINTENANCE

The surface of the ski has a very durable plastic coating that is not affected by gas or oil or environmental conditions. It may be brightened up with rubbing compound and wax occasionally but should not require painting. (NOTE) Small hairline crack marks may appear in this coating at stress points. These do not affect the strength of the ski in any way and ARE NOT to be considered cracks as they are only in the surface coating and don't extend into the laminate.

10.2 BOTTOM SURFACE MAINTENANCE

- 1. The Teflon urethane coating allows maximum sliding in all snow conditions. No wax is required. Additional coats may be applied by brush or spray when necessary.
- 2. When bottom surface becomes excessively scratched or worn, it may be sanded down with a small belt or disc sander and re-coated with a brush application of the graphite filled epoxy resin coating 4B2. This is allowed to cure at room temperature and is then roughed up. Then it is coated with a Teflon urethane coating. A kit for this process is obtainable from manufacturer. If major repairs are necessary, manufacturer can advise on proper procedure.

TYPES OF POSSIBLE DAMAGE

A.) Negligible damage

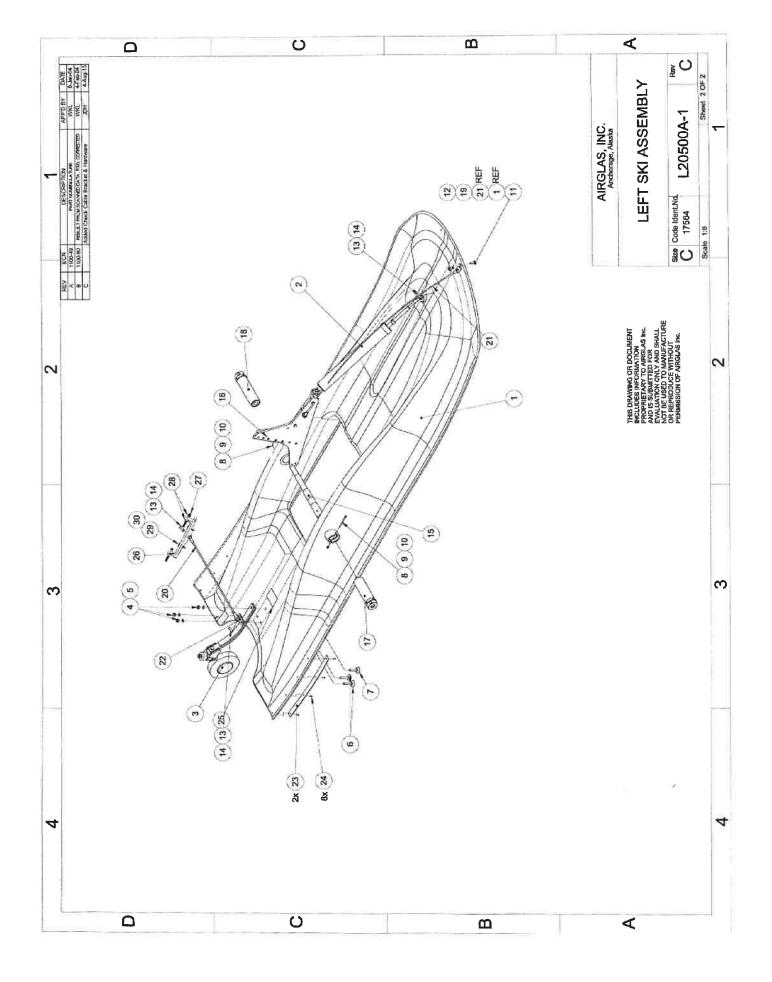
1. Small nicks, scratches or abraded areas in top or bottom of ski.

B.) Repairable damage

- 1. Cracks or fractures except in area of ski bushing or spring cylinder attach points. Airglas should be consulted on repairs in this area.
- 2. **Delamination -** except in area of ski bushing and spring cylinder attach points. Airglas should be consulted on repairs in this area.
- 3. Small holes max. 2" dia.
- 4. **Abrasion** bottom wear due to contact with rocks etc., bottom coatings worn through to glass fibers.
- 5. **Demolished section** if under 30% of the area of the ski and it must be confined to forward or aft 1/3 of ski. Consult Airglas for repair.
- 6. Major bottom damage complete new or partial bottom may be factory installed.

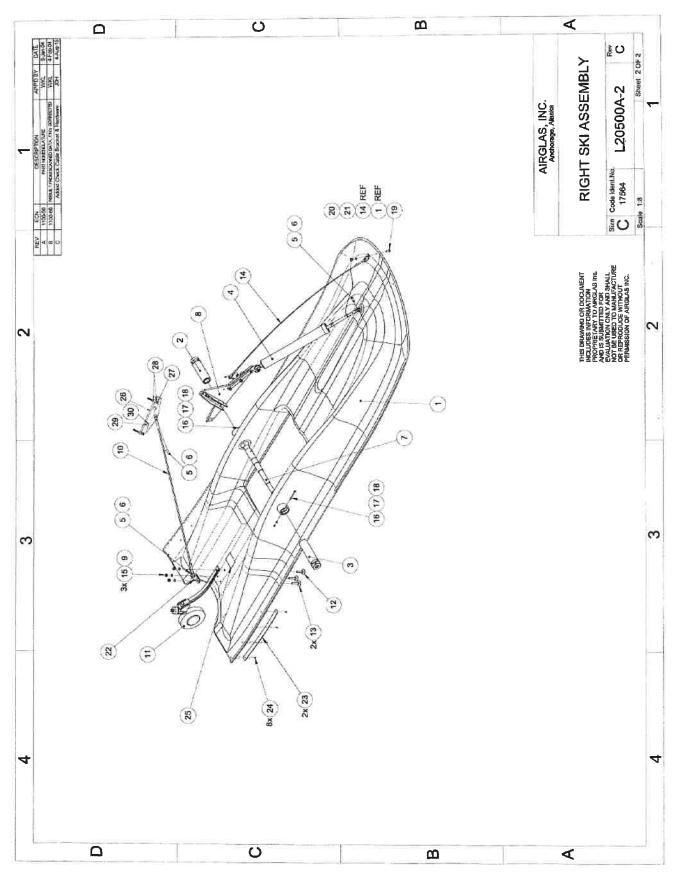
C.) DAMAGE NECESSITATING REPLACEMENT

- 1. Major damage in area of ski bushings.
- 2. Damage to more than 30% of area of top of ski. This could be a combination of cracks, fractures, delamination, and demolished sections. This type of damage would be caused from a crash.



24 AIRGLAS, INC ANCHORAGE, ALASKA 99507

Ö.	ΩT	CODE-IDENT-NO	PART NO.	DESCRIPTION	STOCK SIZE	MATERL
_	-	17564	L20500A-01	MAIN SKI		
2		17564	L20500A-8	SPRING CYLINDER, MAIN SKI		
3	_	17564	L20500-D501HD	TAIL WHEEL, ASSY (Heavy Duty)		
4	3		AN363-616	NUT		
2	က		AN960-616L	WASHER		
9	2	17564	EB616-24	ELEVATOR BOLT		
7	_	17564	EB616-22	ELEVATOR BOLT		
ω	2		AN3-27A	BOLT		
6	2		AN960-10	WASHER		
10	2		AN365-1032	NUT		
11	_		AN5-6A	BOLT		
12	-		AN365-524	NUT		
13	က		AN396-23	CLEVIS PIN		
14	က		MS24665-302	COTTER PIN		
15	0.0	17564	L20500A-7	AXLE, MAIN LANDING GEAR		
16	-	17564	L20500A-21	BRACKET ASSEMBLY		
17	-	17564	L20500A-5	AXLE ASSY, INBOARD		
18	-	17564	L20500A-6	AXLE ASSY, OUTBOARD		
19	-		AN960-516L	WASHER		
20	-	17564	L20500A-11	CHECK CABLE		
21	_	17564	L20500A-12	SAFETY CABLE ASSY		
22	_	17564	L20500A-11-1A	SKI ANGLE BRACKET, L.H.		
23	2	17564	L20500-44	MAIN SKI RUNNER / L20500-44HD Is a Heavy Duty R	HD Is a Heav	/y Duty R
24	ω		SSB6-10	RIVET / USE AN509-10R-16 or MS24694SB, With MS21C	1S24694SB, Wi	th MS21C
25		17564		PLACARD		
26	-	17564	L20500A-11-3	C HECK CABLE BRACKET		
27	2		BACB30MT6T33	BOLT		
-	1		1			



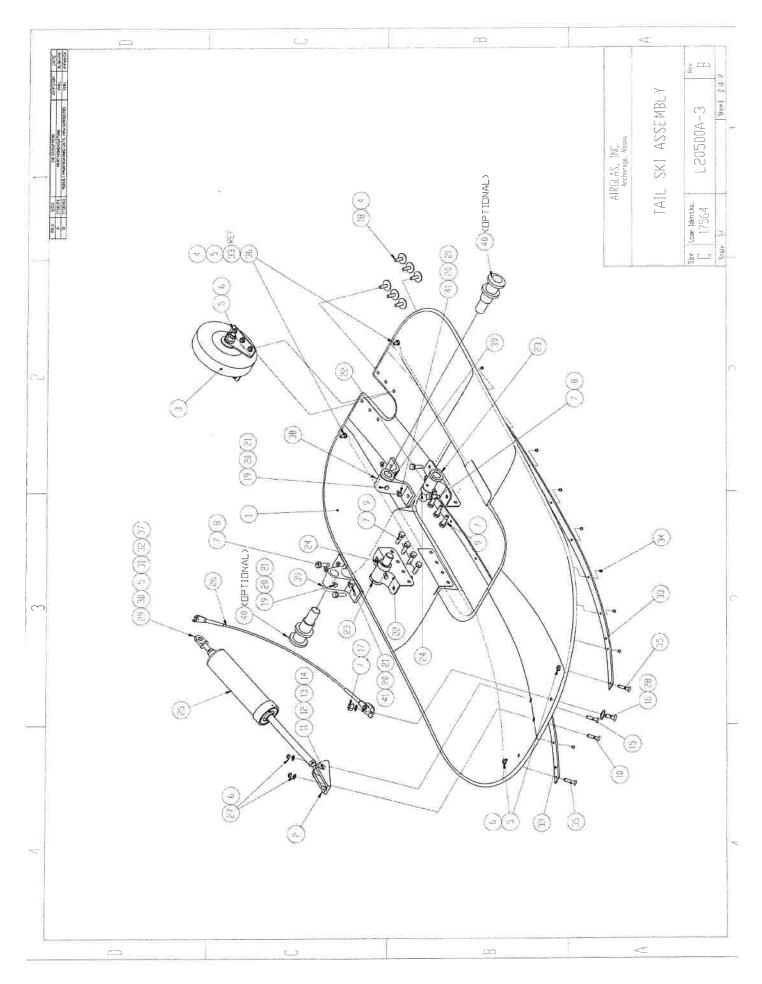
26 AIRGLAS, INC ANCHORAGE, ALASKA 99507

1. できる 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	17564 17564 17564 17364 17364 17364	P.D.SOHO 30 30 30 30 30 30 30 30 30 30	IAIL WHEEL ASST GHEGAP DULY LLEVANDR BOLT SAFETY CABLE ASSY AND WASHER AND BOUT WASHER SILVANDE BY LIXIXOL-44/101 RIVET USE ANSW-106-14 on MSZ4(RIVET RIV	Duly) CO-44HD ts o Hecray or MSQ46WCSI, Wife MO.	Surp Banner, 1209 MS21042-3 Nut on	IAIL WHEEL ASSY (Negary Duly) ELEVADOR BOUL SAFETY CABLE ASSY WASHER WASHER WASHER WASHER WASHER SOLI WASHER SAL ANCLE BRACKER K.H. WASHER SAL ANCLE BRACKER J. SALVEN-106-14 on MSZ46WCSJ. With MSZ1042-3 Hull on Hacky Ducy Rummer FLACARD BOUT WASHER BOUL WASHER SALVER R.H. WASHER WASHER WASHER SALVER R.H. WASHER WASHER
NEWTASEV NEWTASEV	AH-84D TASSV USED OM APPLICATION	MACING TOWN THE PERSON WAS ASSESSED.		Appeared by : WKL Cheshed by : GL Brewn by : PG81 Date - SEPTEMBER 22, 2003	RIGH	RIGHT SKI ASSEMBLY

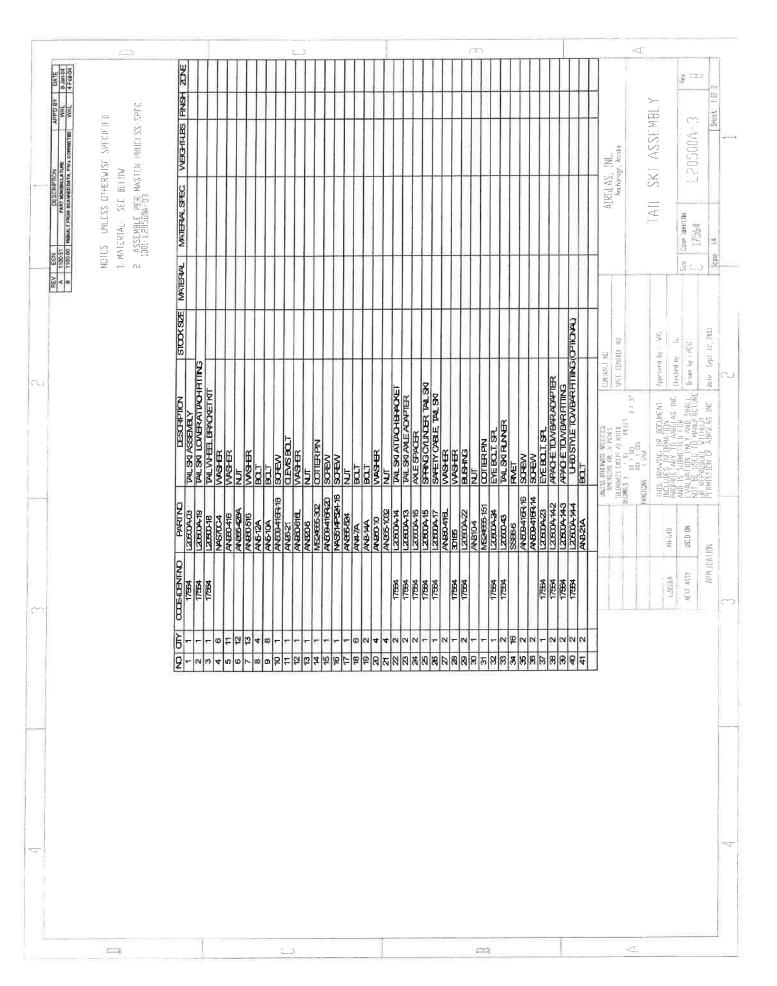
 \mathbf{m}

∢

O



28 AIRGLAS, INC ANCHORAGE, ALASKA 99507



REMOVAL OF SKISPROCEDURE

The best method to remove the L20500A Ski kit is to remove the Tail Ski (L20500A-3) first.

Tail Ski Removal Procedure:

- 1. Remove Bolts (AN4-7A), Washers (AN960-416), and Nuts (A365-428), (and NAS70C-4 Washers) holding tail ski, Tail Wheel Bracket Kit (L20500-18) to ski and remove Tail Wheel Bracket Kit. *See Figure 2.0* (retain hardware)
- 2. Remove Cotter pin (MS24665-151), Washer (AN960-416) and Nut (AN310-4) from Eye Bolt (L20500A-24) attached to TLG wheel fork assembly lugs 1168850.
- 3. Hold the Spring Cylinder in one hand, lift the front of the ski, and remove the L20500A-24 from TLG lug. Retain the upper Spring Cylinder Eye Bolt (L20500A-23) and Bushings. After removal from the TLG lug, loosely reinstall the L20500A-24 back into the L20500A-23 Eyebolt, using the Washer (AN960-416) and Nut (AN310-4). Note: The Safety cable (L20500A-17) can remain attached to eyebolt (L20500A-24) for storage. See Figure 6.2
- 4. Remove Bolt(s) (AN3-21A) lower bolts of Apache Tow Bar Adapter (L20500A-14-2). Retain Bolt, Washer(s) (AN960-10) and Nut(s) (AN365-1032). See page 29& 30 of Manual for Breakdown of parts
- 5. Remove Tail Ski Axle Adapter(s) (L20500A-13) from Ski Attach Bracket(s), remove Axle Spacer(s) (L20500A-16) on Tail Ski Axle Adapter(s). See page 29& 30 of Manual for Breakdown of parts
- 6. Remove Ski Axle Adapter (s) (L20500A-13) from Tail Ski Axle. Use care in holding up ski during this step.
- 7. Once ski is completely removed from tail landing gear, connect tow vehicle to standard axle location.
- 8. Tow helicopter backwards until the wheel rolls over and out of tail ski.
- 9. Re-Install Tail Wheel Bracket Kit (L20500-18) onto tail ski. See Figure 2.0
- 10. Reinstall a Wire Strike (Deflector) onto Tail Landing Gear using all hardware identified in Helicopters Illustrated Parts Breakdown (IPB).

Main Ski Removal Procedure:

NOTE: Preparation of both skis is the same except where noted.

- 11. Remove Tail Wheel Assembly and Check Cable from rear of the Main Ski by removing Elevator Bolts (EB616-20, EB616-21) from the bottom of the ski *See figure 1.1* Save all hardware for future use.
- 12. Remove bolt(s) (AN3-27A) from Inboard and Outboard Axles and Ski Bushing. Retain Washer(s) (AN960-10) and Nut(s) (AN365-1032) onto bolt(s) *See Figure 5.2*.
- 13. Remove Spring Cylinder, Main Ski (L20500A-8) from Upper Mounting Bracket (L20500A-21-3), retain Clevis Bolt (AN26-25), (2) Washers (AN960-616L) and Nut (AN320-6), (4) Special Washers (P/N 528D378D050 (2 each side of rod end). See Figure 5.3
- 14. Remove upper end of Safety Cable Assy. (L20500A-12) from to Eye Bolt (AN45-11) at 2nd hole back on Bracket Assy. (P/N L20500A-20, L20500A-21) Retain clevis pin (AN395-17) and cotter pin MS249665-302. *See Figure 5.5*
- 15. Completely remove Axle Assy's., Inboard & Outboard (L20500A-5 & L20500A-6) from Main Ski Bushing Assy. (L20500-4). Lift Rear of ski to take weight off of axles. *See Figure 5.1* Note: Assistance will be needed to support ski during this operation.
- 16. Remove Check Cable (L20500A-11) from check cable bracket, PN L20500A-11-3 by removing Clevis Pin and Cotter Pin.
- 17. Install Airglas installation ramps on both main skis. Ensure all attachments to gear are removed.

- 18. Tow helicopter or push helicopter aft with help of assistants until the main wheels are completely outside of skis. CAUTION To avoid damage to ski take extreme care to ensure that the wheels are on the outboard part of the wheel wells. See Figure 5.0
- 19. Re-Install Tail Wheel Assembly (L20500-D501A) See Figure 1.1
- 20. Once ski is removed, continue to remove other hardware as needed. If skis are only removed for maintenance or other issues, all remaining hardware can remain installed on helicopter.

RETURNING AIRCRAFT TO ORIGINAL CONFIGURATION (WITHOUT SKIS)

- 21. Remove Axle (L20500A-7) from Trailing Arm (1168320-101). Remove bolt, and slide axle out by rotating and pulling on it. Retain existing hardware for later install of Jack Pad (1168321-1). See Figure 3.2
- 22. Install Jack Pad (1168321-1) and align with Trailing Arm (1168320-101), using hardware from Step 21 above. Torque to value given in Figure 3.2
- 23. Remove both inboard pylons.
- 24. Remove inboard attach bolts and check cable bracket (L20500-11-3).
- 25. Install original HS6170V6-22 bolts back into inboard pylon.
- 26. Re-install pylon. Match torque of existing pylon bolts.
- 27. Remove Step Assembly (7-511113527-1 & -2). Keep existing hardware for future use. See figure 3.0.
- 28. Remove Airglas Bracket Assembly (L20500A-20 R.H., L20500A-21 L.H.) to Main Landing Gear, retain existing hardware *See Figure 3.1*
- 29. Install Wire Cutter Assembly (443-83020-2). *See figure 3.0*, Bolt Wire Cutter to Clamp (443-83023-1) (both sides) using existing hardware from Step 28. *See Figure 3.1*
- 30. Re-install Step Assembly (7-511113527-1 & -2) to Wire Cutter Assembly using existing hardware from Step 27. See Figure 3.1 inboard.