

**AIRFRAME DEPOT MAINTENANCE
WORK REQUIREMENT
CONTAINING
NATIONAL MAINTENANCE REPAIR STANDARDS
for**

**ARMY MODELS UH-60A, EH-60A, AND
UH-60L HELICOPTERS
NSN 1520-01-035-0266
NSN 1520-01-082-0686
NSN 1520-01-298-4532**

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**US Army Aviation
And Missile Command
8 January 2004**

WARNING

PRECAUTIONARY DATA

Personnel performing operations, procedures, and practices which are included or implied in this work requirement shall observe the following warnings. Disregard of these warnings and precautionary information can cause serious injury, death, or destruction of material.

CLEANING SOLVENTS

Cleaning solvents may be toxic. Use in well-ventilated areas. Avoid prolonged inhalation of fumes or direct contact with skin. Do not use solvents near open flames or in areas where very high temperatures prevail. Solvent with a flash point greater than 100°F (38°C) should be used. However solvents with a flash point lower than 100°F (38°C) may be specified. Consult the Material Safety Data Sheet (MSDS) for solvent flash point. Avoid breathing solvent vapor. Do operations involving cleaning solvent under a ventilated hood or in a well-ventilated work area. Wear a suitable mask when necessary. Avoid continuous contact with a solvent. Wear goggles, gloves, and apron to prevent irritation due to prolonged contact. Change clothing that has been saturated with solvent.

TOXIC MATERIALS

Before handling or using any consumable materials, read and observe the instructions on the material container. These warnings and precautionary data, if not strictly observed, may result in personnel injury or loss of life. Recommended safety equipment will be used at all times.

COMPRESSED AIR

Compressed air shall not be used for cleaning purposes except where reduced to less than 15 psi and only then with an effective chip guarding and personnel protection equipment. Do not direct compressed air near or directly against skin. When drying parts, do not use air under high pressure, or from a source not having a moisture trap. Do not spin bearings with compressed air.

ELECTRICAL WIRING

Disconnect all electrical wiring before removing any part of aircraft.

Warnings, cautions, and notes are used to emphasize important and critical instructions and are used for the following conditions.



Alerts personnel to operation, procedure, practice, etc, which, if not strictly observed, could result in personnel injury or loss of life.



Alerts personnel to operation, procedure, practice, etc, which, if not strictly observed, could result in damage to or destruction of equipment.

NOTE

Applies to operation, procedure, condition, etc, which is essential to highlight.

LIST OF EFFECTIVE PAGES

Insert latest changed pages; dispose of superseded pages in accordance with regulations.

NOTE: On a changed page, the portion of the text affected by the latest change is indicated by a vertical line in the outer margin of the page. Changes to illustrations are indicated by a vertical line next to the illustration title. Changes to wiring diagrams are indicated by shaded areas.

Dates of issue for original and changes pages are:

Original 0 8 January 2004

Total number of pages in this manual is 1,736 consisting of the following:

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E-274 blank	0

Zero in this column indicates an original page.

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**Airframe Depot Maintenance Work Requirement
Containing National Maintenance Repair Standards
for**

ARMY MODELS UH-60A, EH-60A, AND UH-60L HELICOPTERS
NSN 1520-01-035-0266, NSN 1520-01-082-0686, NSN 1520-01-298-4532

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, U.S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-LS-LP, Redstone Arsenal, AL 35898-5000. A reply will be furnished to you. You may also send in your comments electronically to our e-mail address: ls-lp@redstone.army or by fax 256-842-7546/DSN 788-7546. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

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APPENDIX E

MODIFICATIONS

E-1. UH60A RE-CAPITALIZATION PROGRAM.

The purpose of the UH-60A Re-capitalization Program is to extend the use of the U.S. Army owned UH-60A's for approximately ten additional years. The program will allow the aircraft to continue to be used until induction into the UH-60M Modernization Program. Approximately three hundred aircraft will be inducted into the re-capitalization program.

The airframe structural kits to be used in this program were developed based on review of the Government furnished Aircraft Corrosion Evaluation/Joint Aircraft Corrosion Evaluation/On Conditional Maintenance (ACE/JACE/OCM) data. The Sikorsky "Crack Database" as well as field service reports were also used to determine airframe components that were problematic to the user community.

Several of the airframe kits are based on those previously used on other H-60 derivative aircraft such as the MH/HH-60G. Modifications were made as required to account for any structural differences between the parent aircraft and the UH-60A. In many cases, the structural kits for the re-capitalization program were also incorporated into production via ECP or production change orders. In these cases, the inducted aircraft will then be brought up close to the current UH-60L configuration.

The kit description is broken down by aircraft structural component (cockpit, cabin, etc.). This was done because some of the components, namely the cockpit, tailcone and tail rotor pylon, will be reused when the aircraft is inducted into the UH-60 Modernization program. The structural kits for these areas are the same between the re-capitalization and the modernization programs. The item number shown for each kit was established from the first potential kit list shown in July 2001. Some of the kits were subsequently deleted but the original item numbers were retained for historical purposes.

The weight and center of gravity data for each of the structural kits is included. This will allow the revised weight and balance to be calculated for the aircraft inducted into the re-capitalization program.

E-2. INSTALLATION OF UH-60 "A TO A" RECAPITALIZATION PROGRAM (50-31).

Subject: Installation of UH-60 "A to A" Recapitalization Program, dated 31 March 2003

Purpose: The purpose of this Special Service Instructions (SSI) is to describe the modification and repair changes. Material information paragraph will be top kits and subkits only. Individual parts and parts disposition will not be listed. Step by step modification instructions will only reference SSI instructions and Technical Manuals (TM).

Model: UH-60A

Description: The Recapitalization Program will modify areas of the UH-60A, Nose/Canopy, Cabin, Transition, Tail Cone, Pylon, Firewall, and Engine Cows.

Drawings required for modification:

70000-03200, 70070-20167, 70070-20266, 70070-20465, 70070-20470, 70070-20488, 70070-20527, 70070-20566, 70070-20568, 70070-20570, 70070-20572, 70070-20575, 70070-20577, 70070-20578, 70070-20581, 70070-20582, 70070-20583, 70070-20587, 70070-20588, 70070-20615, 70070-20617, 70070-20641, 70070-30307, 70070-30308, 70070-95122, 70072-30000, 70083-20110, 70200-07050, 70201-06164, 70202-06051, 70203-03003, 70209-03012, 70209-03022, 70209-06056, 70211-01005, 70211-03001, 70211-03002, 70211-03004, 70211-03005, 70211-03006, 70211-03007, 70211-03009, 70212-02307, 70212-03002, 70212-03003, 70212-05004, 70213-02101, 70213-02301, 70213-02501, 70213-03001, 70213-03002, 70213-03004, 70217-01010, 70217-03001, 70219-03002, 70219-03011, 70304-02114, 70308-03611, 70400-03611, 70500-01053, 70553-07001, 70551-05140, 70551-03140, 70652-02150, 70551-03101, 70551-03102

References: (a) TM 1-1520-237-MTF, Technical Manual, Operator's and Crew Member's Check List

(b) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 1, Aircraft General

(c) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 2, Airframe

(d) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 4, Engine Systems

(e) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 5, Rotor System

(f) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 6, Drive System

(g) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 7, Pneudraulic System

(h) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 8, Instrument Systems

(i) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 9, Electrical System

(j) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 10, Fuel System

(k) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 11, Flight Control System

(l) SSI No. 50-5, Side Fuselage Structural Reinforcement, Installation of, dated 31 March 2003

(m) SSI No. 50-6, Lower Aft Transition Section, Rework of, dated 31 March 2003

(n) SSI No. 50-7, Buttlane 34.50, Modification of, dated 31 March 2003

(o) SSI No. 50-8, Tail Rotor Pylon, Modification of, dated 31 March 2003

(p) SSI No. 50-9, Drive Shaft Supports, Modification of, dated 31 March 2003

(q) SSI No. 50-10, Tail Pylon Side Skin, Modification of, dated 31 March 2003

(r) SSI No. 50-13, Tailcone Plating, Installation of, dated 31 March 2003

(s) SSI No. 50-15, ESSS Doublers, Installation of, dated 31 March 2003

(t) SSI No. 50-16, Upper Plating and Doubler Installation, Rework of, dated 31 March 2003

(u) SSI No. 50-17, Station 605.00 Bulkhead, Modification of, dated 31 March 2003

(v) SSI No. 50-19, Left and Right Side Firewall Assemblies, Modification of, dated 31 March 2003

(w) SSI No. 50-20, Tail Rotor Drive Shaft Support Brackets, Modification of, dated 31 March 2003

(x) SSI No. 50-21, Vapor Barrier Support Structure, Replacement of, dated 31 March 2003

(y) SSI No. 50-22, Cockpit Floor and Door Posts, Modification of, dated 31 March 2003

(z) SSI No. 50-24, Tail Cone, Modification of, dated 31 March 2003

(aa) SSI No. 50-25, Tail Rotor Pylon, Aft Spar Stabilator Attachment Fitting, Modification of, dated 31 March 2003

(ab) SSI No. 50-26, Station 379.00 Frame, Modification of, dated 31 March 2003

(ac) SSI No. 50-29, Tail Cone Shear Deck, Modification of, dated 31 March 2003

(ad) SSI No. 50-30, HIRSS Repair Kit, Installation of, dated 31 March 2003

(ae) SSI No. 50-33, Engine Cowl Assembly, Left and Right Side, Modification of, dated 31 March 2003

(af) SSI No. 50-34, Transition Station 485.00, Modification of, dated 31 March 2003

(ag) SSI No. 50-35, Canopy Assembly, Nose Door Hinge Access Holes, Modification of, dated 31 March 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before incorporating the installation of UH-60 "A to A" Recapitalization Program.
- Before beginning this modification procedure, use the material information list located in reference SSI's to inventory the modification kits. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual step(s), drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal, structural, and electrical modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, peeling shims, paint touch up, routing, clamping, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Personnel must be trained and certified in hole quality assurance and proper cold expansion procedures per SS5098.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- Trial Installation was performed on helicopter Serial Number (86-24510) at Corpus Christi Army Depot, (CCAD) Corpus Christi, TX.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with.
- (2) Turn off electrical/hydraulic power and make helicopter safe for ground maintenance.
- (3) Defuel helicopter per reference (b).
- (4) Perform arrival inspection.
- (5) Remove, clean, preserve, and tag main rotor blades per reference (e).
- (6) Remove, clean, preserve, and tag tailrotor blades per reference (e).
- (7) Clean and install pitot covers per reference (h).
- (8) Remove the following airframe components per reference (c).
 - (a) Remove pilots door, pilots seat, copilots door, copilots seat, cockpit floor panels, cockpit floor covers and nose access panel.
 - (b) Remove troop seats, troop seat supports, left cargo door, right cargo door, nose door, gunner seats, gunner seat supports, soundproofing, drip pan assembly, control enclosure left side, control enclosure right side, and aft cargo floor at station 397.00 from cabin.
 - (c) Remove fuel cell enclosure panels, drive shaft covers, stabilator fairings, and tail gear box cover from transition, tailcone, and pylon of helicopter.

- (d) Remove sliding pylon cover, left engine intake, right engine intake, main rotor gear box fairings, engine exhaust fairings, APU fairings, and oil cooler fairings.
- (e) Remove stabilator.
- (f) Remove engine platforms and place on a suitable work area.
- (g) Remove lower chin windows.
- (h) Remove (if equipped) ESSS fairings.
- (9) Remove the following flight controls per reference (k).
 - (a) Disconnect flight control cables at tail cone turnbuckle location.
 - (b) Remove lateral, forward, and aft primary servos.
- (10) Remove the following Pneudraulic/Hydraulic component per reference (g).
 - (a) Remove No. 1 and No. 2 transfer modules.
 - (b) Remove No. 1 and No. 2 transfer module manifolds.
 - (c) Remove primary servo manifold.
 - (d) Remove boost servo/pilot assist manifold.
 - (e) Disconnect tail rotor servo lines at station 647.00 and station 398.00 and pull forward to gain access to station 605.00 rework.
- (11) Remove tail rotor drive shafts per reference (e).
- (12) Remove engines per reference (d).
- (13) Remove main rotor gear box per reference (f).
- (14) Remove tail rotor gear box per reference (f).
- (15) Remove the following electrical and avionics components per reference (i).
 - (a) Disconnect, tag battery with helicopter serial number, and transfer helicopter battery to battery shop.
- (16) Remove fuel cells and fuel cell liners per reference (j).

B. Description of modification.

- (1) Recapitalization program modifications as follows:
 - (a) Side fuselage structure is reinforced by adding support structure between stations 265.50 and 308.00, left and right side gunners window.
 - (b) Lower aft transition structure is removed, corrosion treated, and new structure is installed.

(c) Buttlane 34.50 is modified by installing new reinforcements, coldworking fasteners locations, and installing new fasteners.

(d) Tail rotor gear box pylon mount fitting is modified by installing a new left side doubler and two right side straps with coldworked fasteners. Tail gear box mount fitting is removed and a new fitting is installed. Forward spar doubler is removed and replaced with a new doubler. Gear box fairing installation is modified.

(e) Tail rotor drive shaft supports are modified at stations 410.00, 471.00, 531.43, and 591.88 by installing new supports, doublers, and brackets.

(f) New doublers and stiffeners are added to the existing tail pylon side skin between stations 645.00 and 660.00.

(g) Lower skin and doubler between stations 485.00 and 605.00 are removed and new skin and doubler are installed. New doublers are installed at left and right side locations between tailcone stations 625.00 and 635.00.

(h) New skins and doublers are installed between stations 295.00 and 308.00 on helicopters equipped with ESSS provisions.

(i) New cabin upper plating is installed between stations 320.00 and 380.00 with coldworked fasteners common to buttlane 16.5 transmission beams.

(j) Tailcone station 605.00 is modified by installing a new doubler, filler, and radius block.

(k) New doublers, angles, straps, and spacers are installed to left and right side firewall assemblies.

(l) New intercostals which support vapor barriers over fuel cells between stations 413.00 and 443.50 are installed.

(m) Station 205.00, left and right side door post locations are modified by installing new fittings, angles and nutplates.

(n) Tailcone structure between stations 485.00 and 565.00 is modified by adding stringers and shear ties.

(o) Stabilator attachment fittings are modified by removing bushings and liners and installing new Forcemate bushings and spherical bearings.

(p) New straps and doublers are installed at station 379.00 frame left and right sides with coldworked fasteners.

(q) Tail cone shear deck is modified by installing new doublers and angles between stations 605.00 and 645.00.

(r) HIRSS structure is modified by installing new doublers, fillers, angles, and radius blocks on helicopters equipped with HIRSS.

(s) New hinge fitting assemblies are installed to reinforce the hinge area on the engine cowl assemblies.

(t) A new fitting and fasteners are installed at station 485.00.

(u) Two access holes, doublers, and new seal are added to the nose door hinge area.

C. Installation

(1) Perform recapitalization modifications as follows:

- (a) Rework nose/canopy per references (y), and (ag).
- (b) Rework cabin per references (l), (n), (s), (t), and (ab).
- (c) Rework of transition per references (m), (v), (w), (x), (ad), (ae), and (af).
- (d) Rework tail cone per references (p), (r), (u), (z), and (ac).
- (e) Rework tail pylon per reference (o), (q), and (aa).

D. Reinstallation of removed equipment:

- (1) Install fuel cells and fuel cell liners per reference (j).
- (2) Install main rotor gear box per reference (f).
- (3) Install tail rotor gear box per reference (f).
- (4) Install tail rotor drive shafts per reference (e).
- (5) Install engines per reference (d).
- (6) Install the following pneudraulic/hydraulic components per reference (g).
 - (a) Install No. 1 and No. 2 transfer modules.
 - (b) Install No. 1 and No. 2 transfer modules manifolds.
 - (c) Install boost servo/pilot assist manifold.
 - (d) Install primary servo manifold.
- (7) Install the following flight control per reference (k).
 - (a) Install lateral, forward, and aft primary servos.
 - (b) Reconnect flight control cables at tail cone turnbuckle locations.
- (8) Install the following airframe components per reference (c).
 - (a) Install pilots door, pilots seat, copilots door, copilots seat, cockpit floor panels, and cockpit floor covers.
 - (b) Install aft cargo floor to station 397.00, troop seats, troop seat supports, left cargo door, right cargo door, gunner seats, gunner seat supports, and soundproofing.
 - (c) Install fuel cell enclosure panels, drive shaft covers, stabilator, stabilator fairings, and tail gear box cover.
 - (d) Install sliding pylon cover, left engine intake, right engine intake, main rotor gear box fairings, engine exhaust fairings, engine platform doors, APU fairings, and oil cooler fairings.

(e) Install control enclosure left side and control enclosure right side, nose and cabin vibration absorber, nose access panel, and drip pan assembly.

(f) Install lower chin windows.

(g) Install ESSS fairings (if equipped).

(9) Install tail rotor blades per reference (e).

(10) Install main rotor blades per reference (e).

(11) Remove covers from pitot tubes per reference (h).

E. Perform operational check out as follows:

(1) Perform applicable operational checks that are identified in Technical Manual (TM) upon installation of components.

F. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

(2) Upon compliance with these Special Service Instructions, complete SA Form 7614 and return it to Sikorsky Aircraft ILS Manager.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-95122-011	Mod. Kit	+ 61.7	359.1	24.40

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: + 61.7 pounds

Moment arm: 359.1 in.

Change in basic moment/1000 24.40

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	8	209.0	*1672.0
Helicopter Electrician	1	8.0	*8.0
Fuel Mechanic	1	2.0	*2.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	RECAP Top Kit,	70070-95122-011	(1)
	consisting of:		
1	Mod. Kit, Nose/Canopy,	70070-20566-011	
	consisting of:		
1	Mod. Kit, Door Post,	70070-20566-012	
	consisting of:		
1	Mod. Kit, Floor Instl,	70070-20566-015	
1	Mod. Kit, Fitting Installation Left Hand,	70070-20566-019	
1	Mod. Kit, Fitting Installation Right Hand,	70070-20566-020	
1	Mod. Kit, Floor Left Hand,	70070-20566-017	
1	Mod. Kit, Floor Right Hand,	70070-20566-018	
1	Mod. Kit, Jamb Installation,	70070-20566-034	
1	Mod. Kit, Jamb Installation,	70070-20566-035	
1	Mod. Kit, Frame Installation,	70070-20566-037	
1	Mod. Kit, Frame Installation,	70070-20566-038	
1	Mod. Kit, Hinge Access,	70070-20566-013	
1	Mod. Kit, Cabin,	70070-20567-011	
	consisting of:		
1	Mod. Kit, Side Fuselage,	70070-20527-011	
	consisting of:		
1	Mod. Kit,	70070-20167-026	
1	Mod. Kit,	70070-20470-011	
1	Mod. Kit, Beef-Up,	70070-20527-012	
1	Mod. Kit, Beef-Up,	70070-20527-013	
1	Mod. Kit, Station 379.00,	70070-20568-011	
	consisting of:		
1	Mod. Kit, SPL Instl,	70070-20568-012	
1	Mod. Kit, Strap Instl,	70070-20568-013	
1	Mod. Kit, Upper Plating,	70070-20570-011	
	consisting of:		
1	Mod. Kit, Plate Instl,	70070-20570-012	
1	Mod. Kit, Nutplate Instl,	70070-20570-013	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Frame Instl,	70070-20570-014	
1	Mod. Kit, Angle Instl,	70070-20570-015	
1	Mod. Kit, Buttline 34.50,	70070-20572-011	
	consisting of:		
1	Mod. Kit, R/H Reinforcement,	70070-20572-012	
1	Mod. Kit, L/H Reinforcement,	70070-20572-013	
1	Mod. Kit, ESSS Doubler,	70070-20641-011	
	consisting of:		
1	Mod. Kit, Support R/H Instl,	70070-20641-012	
1	Mod. Kit, Support L/H Instl,	70070-20641-013	
1	Mod. Kit, Plating Instl,	70070-20641-014	
1	Mod. Kit, Shim Instl,	70070-20641-018	
1	Mod. Kit, Transition,	70070-20575-011	
	consisting of:		
1	Mod. Kit, TRDS Brackets,	70070-20488-023	
	consisting of:		
1	Mod. Kit, Support Instl,	70070-20488-012	
1	Mod. Kit, Support Instl,	70070-20488-022	
1	Mod. Kit, Station 485.00,	70070-20575-012	
1	Mod. Kit, Lower Aft Transition,	70070-20577-011	
	consisting of:		
1	Mod. Kit, Plate Assembly,	70070-20577-012	
1	Mod. Kit, Frame Instl,	70070-20577-013	
1	Mod. Kit, Hardware,	70070-20577-014	
1	Mod. Kit, Door Instl,	70070-20577-016	
1	Mod. Kit, Fuel Dump,	70070-20577-017	
1	Mod. Kit, Fuel Vent,	70070-20577-018	
1	Mod. Kit, Foam Liner,	70070-20577-015	
1	Mod. Kit, Enclosure,	70070-20578-011	
1	Mod. Kit, Tail Cone,	70070-20580-011	
	consisting of:		
1	Mod. Kit, Support, Shaft,	70070-20266-013	
1	Mod. Kit, Support, Shaft,	70070-20266-014	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Shear Deck,	70070-20581-011	
1	Mod. Kit, Stringer/Frame,	70070-20582-011	
	consisting of:		
1	Mod. Kit, Frame,	70070-20582-012	
1	Mod. Kit, Frame,	70070-20582-013	
1	Mod. Kit, Frame,	70070-20582-014	
1	Mod. Kit, Frame,	70070-20582-027	
1	Mod. Kit, Frame,	70070-20582-028	
1	Mod. Kit, Frame,	70070-20582-015	
1	Mod. Kit, Plating,	70070-20582-016	
1	Mod. Kit, Skin Assy,	70070-20582-024	
1	Mod. Kit, Plating,	70070-20582-017	
1	Mod. Kit, Skin Assy,	70070-20582-025	
1	Mod. Kit, Skin Assembly,	70070-20582-026	
1	Mod. Kit, Skin Doubler,	70070-20583-011	
1	Mod. Kit, Plate Instl,	70070-20615-011	
1	Mod. Kit, Bulkhead Instl,	70070-20617-011	
1	Mod. Kit, Pylon,	70070-20585-011	
	consisting of:		
1	Mod. Kit, Tail Pylon,	70070-20465-017	
	consisting of:		
1	Mod. Kit, Plating,	70070-20465-012	
1	Mod. Kit, Fairing,	70070-20465-014	
1	Mod. Kit,	70070-20465-015	
1	Mod. Kit,	70070-20465-016	
1	Mod. Kit, Fitting,	70070-20465-018	
1	Mod. Kit, Crescent Doubler,	70070-20465-019	
	consisting of:		
1	Mod. Kit, Plating TRP,	70070-20465-021	
1	Mod. Kit, Plating TRP,	70070-20465-022	
1	Mod. Kit, Front SPAR Fitting,	70070-20465-020	
	consisting of:		
1	Mod. Kit, Front SPAR,	70070-20465-027	
1	Mod. Kit, Support Instl,	70070-20465-028	
1	Mod. Kit, Support Instl,	70070-20465-029	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Side Skin,	70070-20587-011	
	consisting of:		
1	Mod. Kit, Plating Instl,	70070-20587-015	
1	Mod. Kit, Plating Instl,	70070-20587-016	
1	Mod. Kit, SPAR Instl,	70070-20587-017	
1	Mod. Kit, Aft SPAR Fitting,	70070-20588-011	
	consisting of:		
1	Mod. Kit, Fitting Assembly,	70070-20588-012	
1	Mod. Kit, Fitting Assembly	70070-20588-013	
1	Mod. Kit, Stab Instl,	70070-20588-014	
1	Mod. Kit, LH Firewall Improve- ments,	70070-30307-011	
1	Mod. Kit, RH Firewall Improve- ments,	70070-30307-012	
1	Mod. Kit, Cowl Engine,	70070-30308-011	
1	Mod. Kit, HIRSS Repair,	70072-30000-011	
	consisting of:		
1	Repair Kit,	70072-30000-012	
1	Repair Kit LH,	70072-30000-013	

B. Consumable Material:

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
32 oz.	Adhesive	EC-1357 or equivalent	(1)
64 oz.	Sealant	AMS-S-8802, A2 or equivalent	(1)
64 oz.	Sealant	AMS-S-8802, B2 or equivalent	(1)

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
64 oz.	Sealant	MIL-S-8802, Class A2, or equivalent	(1)
64 oz.	Sealant	MIL-S-8802, Class B2, or equivalent	(1)
64 oz.	Sealant	MIL-S-8802, Class C20, or equivalent	(1)
8 oz.	Chemical Conversion Coating for Aluminum (Alodine 600)	MIL-C-5541, Class 3, or equivalent	(1)
8 oz.	Sealant	RTV133 or equivalent	(1)
16 oz.	Primer	MIL-P-85582A or equivalent	(1)
16 oz.	Paint, Green	SS8511-40-34031 or equivalent	(1)
16 oz.	Paint, Black	SS8511-40-37038 or equivalent	(1)
8 oz.	Chemical Conversion Coating for Aluminum (Alodine 1200)	MIL-C-5541, Class 1A, or equivalent	(1)
32 oz.	Adhesive	EA9309.3NA or equivalent	(1)
8 oz.	Foam Syntactic	SS9587-002 or equivalent	(1)
8 oz.	Foam Syntactic	SS9587-001 or equivalent	(1)
8 oz.	Foam Syntactic	SS9587-003 or equivalent	(1)
6 oz.	Sealant	MIL-S-81733, Type 1 or IV or equivalent	(1)
2 oz.	Primer, Adhesive	EC-3917 or equivalent	(1)
6 oz.	Sealing Compound	AMS3267 Class A2 or C2, or equivalent	
2 oz.	Antiseize Compound	MIT-T-83483 or equivalent	(1)
2 oz.	1,1,1-Trichloroethane	MIL-T-81533 or equivalent	(1)
1 pkg	Mat, Abrasive	MIL-A-9962 or equivalent	(1)
1 pkg	Cloth, Cheesecloth	CCC-C-440 or equivalent	(1)
2 oz.	Sealing Compound	CA1000 or equivalent	
4 oz.	Compound	Dinotrol Av30 or Av15, or equivalent	(1)
4 oz.	Urethane	MIL-C-85285, or equivalent	(1)
4 oz.	Adhesive	444R, or equivalent	(1)
6 oz.	Primer	MIL-P-23377 or equivalent	(1)
8 oz.	Clear Epoxy	MIL-L-22750, or equivalent	(1)
4 oz.	Adhesive	PLIOBOND No. 20 or equivalent	(1)
3 oz.	Sealant Tape	AMS3255 CL2 or equivalent	(1)
8 oz.	Adhesive	EA9359.3 or equivalent	(1)
8 oz.	Adhesive	DP420 or equivalent	(1)
4 oz.	Sealing Compound	AMS 3265 or equivalent	(1)
4 oz.	Adhesive	EC1751 A/B or equivalent	(1)

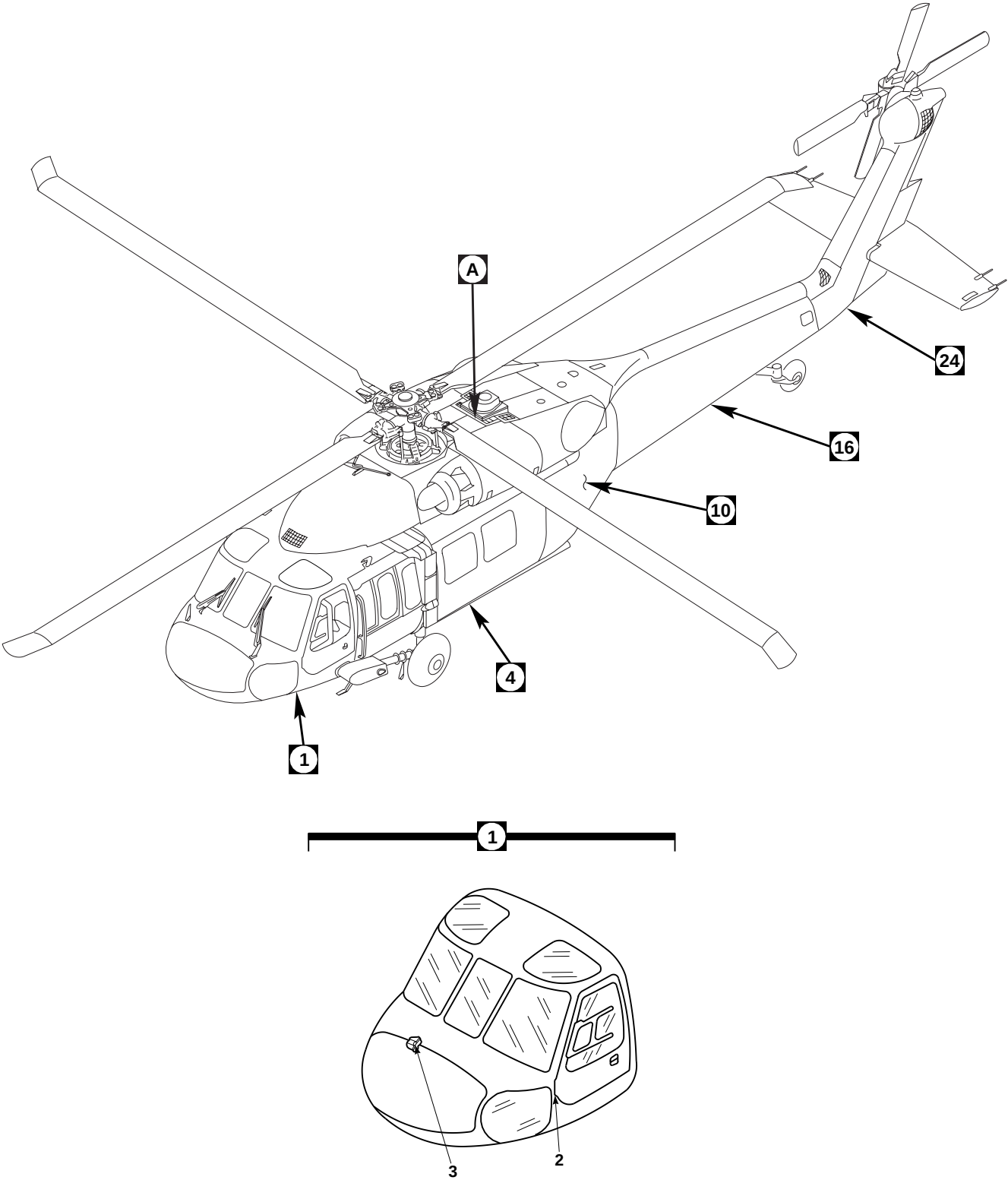
C. Support Equipment:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Bearing Removal/Installation Tool (Pylon)	70700-20129-041 or equivalent	(1)

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Installation Tool (Pylon)	70209-06056-041T046 or equivalent	(1)
1	Locally designed and manufactured fuselage support tool	N/A	(2)
1	Edge Distance Tool (Pylon)	70070-77399-041	(1)
1	Drill Tool (Door post)	70070-20566-017T046	(1)
1	Installation Tool (Hinge)	70070-20566-019T046	(1)
1	Installation Tool (Hinge)	70070-20566-020T046	(1)

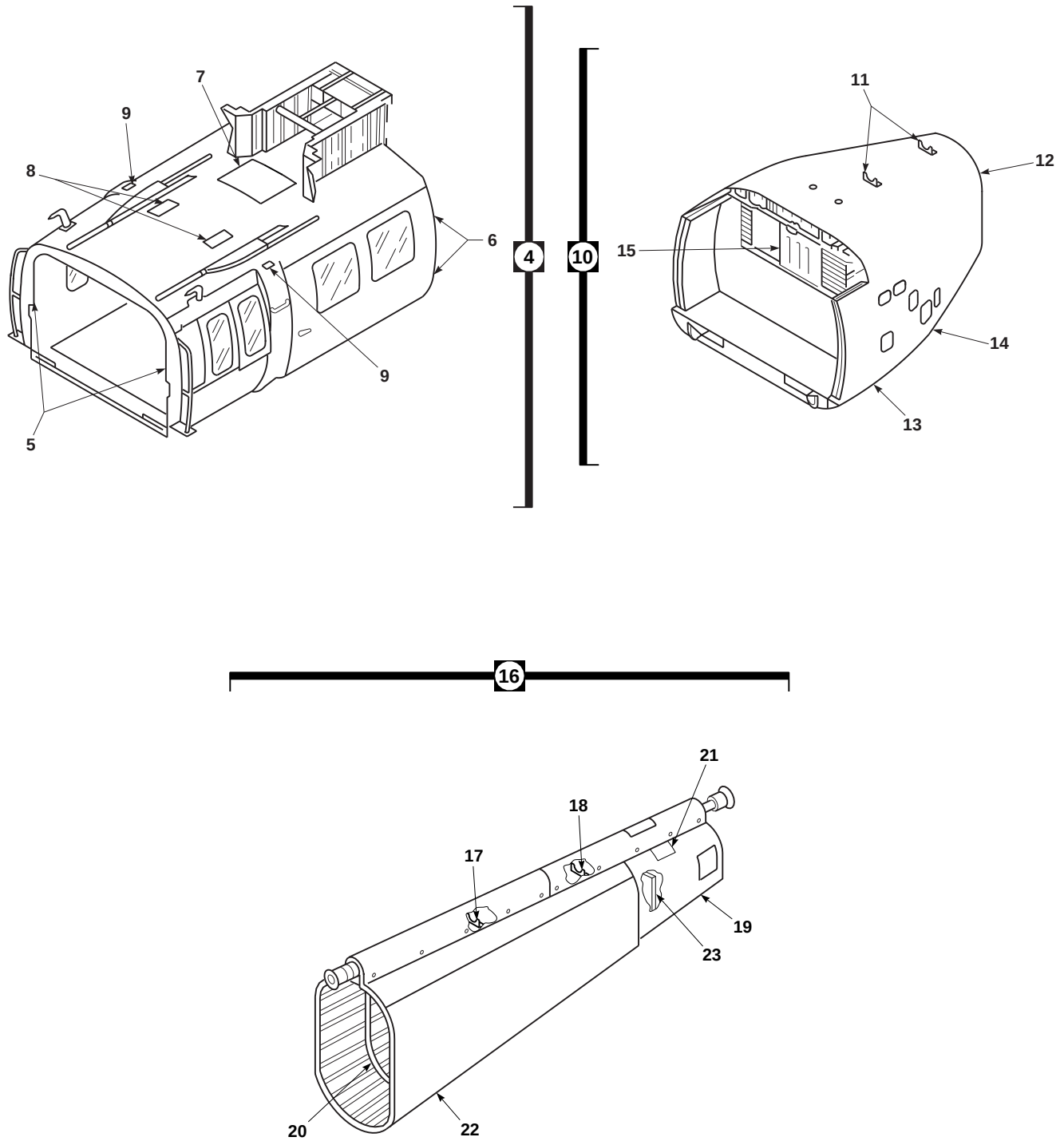
D. Source:

- (1) Available through normal supply channels
- (2) Locally Manufactured



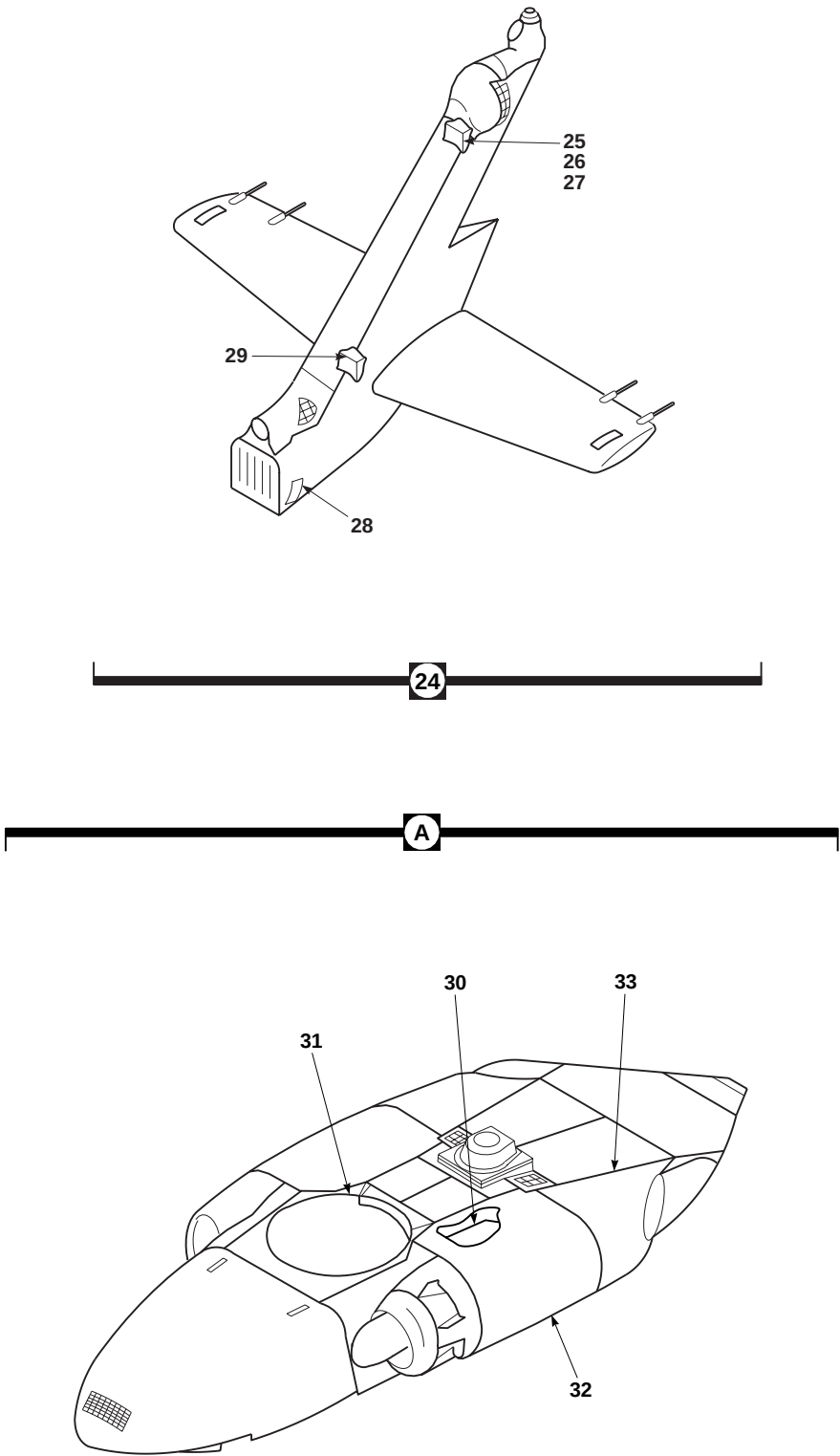
AB3088_1
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Figure E-1. Re-capitalization Modification Kit (Sheet 1 of 3)



AB3088_2
SA

Figure E-1. Re-capitalization Modification Kit (Sheet 2 of 3)



AB3088_3
SA

Figure E-1. Re-capitalization Modification Kit (Sheet 3 of 3)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-1-	70070-95122-011		RE-CAPATIALIZATION MODIFICATION KIT	1	
-1	70070-20566-011		. DOOR POST MODIFICATION KIT	1	
-2	70070-20566-012		. . DOOR POST MODIFICATION KIT, (See Fig. E-2 for Breakdown).....	1	
-3	70070-20566-013		. . HINGE ACCESS MODIFICATION KIT, (See Fig. E-3 for Breakdown).....	1	
-4	70070-20567-011		. CABIN MODIFICATION KIT	1	
-5	70070-20527-011		. . MODIFICATION KIT, (See Fig. E-4 for Breakdown).....	1	
-6	70070-20568-011		. . STATION 379 MODIFICATION KIT, (See Fig. E-5 for Breakdown).....	1	
-7	70070-20570-011		. . UPPER PLATING MODIFICATION KIT, (See Fig. E-6 for Breakdown).....	1	
-8	70070-20572-011		. . BL 34.5 MODIFICATION KIT, (See Fig. E-7 for Breakdown).....	1	
-9	70070-20641-011		. . ESSS DOUBLER MODIFICATION KIT, (See Fig. E-8 for Breakdown).....	1	
-10	70070-20575-011		. TRANSITION MODIFICATION KIT	1	
-11	70070-20488-023		. . TAIL ROTOR DRIVE SHAFT BRACKETS MODIFICATION KIT, (See Fig. E-9 for Breakdown).....	1	
-12	70070-20575-012		. . STATION 485 MODIFICATION KIT, (See Fig. E-10 for Breakdown).....	1	
-13	70070-20577-011		. . LOWER AFT TRANSITION MODIFICATION KIT- (See Fig. E-11 for Breakdown).....	1	
-14	70070-20577-015		. . FOAM LINER MODIFICATION KIT, (See Fig. E-12 for Breakdown).....	1	
-15	70070-20578-011		. . ENCLOSURE MODIFICATION KIT, (See Fig. E-13 for Breakdown).....	1	
-16	70070-20580-011		. TAILCONE MODIFICATION KIT	1	
-17	70070-20266-013		. . SUPPORT SHAFT MODIFICATION KIT, (See Fig. E-14 for Breakdown).....	1	
-18	70070-20266-014		. . SUPPORT SHAFT MODIFICATION KIT, (See Fig. E-15 for Breakdown).....	1	
-19	70070-20581-011		. . SHEAR DECK MODIFICATION KIT, (See Fig. E-16 for Breakdown).....	1	
-20	70070-20582-011		. . STRINGER/FRAME MODIFICATION KIT, (See Fig. E-17 for Breakdown).....	1	
-21	70070-20583-011		. . SKIN DOUBLER MODIFICATION KIT, (See Fig. E-18 for Breakdown).....	1	
-22	70070-20615-011		. . PLATE INSTALLATION MODIFICATION KIT- (See Fig. E-19 for Breakdown).....	1	
-23	70070-20617-011		. . BULKHEAD INSTALLATION MODIFICATION KIT, (See Fig. E-20 for Breakdown)	1	
-24	70070-20585-011		. PYLON MODIFICATION KIT	1	
-25	70070-20465-017		. . TAIL PYLON MODIFICATION KIT, (See Fig. E-21 for Breakdown).....	1	
-26	70070-20465-019		. . CRCT DOUBLE MODIFICATION KIT, (See Fig. E-22 for Breakdown).....	1	
-27	70070-20465-020		. . FRONT SPAR FT MODIFICATION KIT, (See Fig. E-23 for Breakdown).....	1	
-28	70070-20587-011		. . SIDE SKIN MODIFICATION KIT, (See Fig. E-24 for Breakdown).....	1	
-29	70070-20588-011		. . AFT SPAR FITTING MODIFICATION KIT, (See Fig. E-25 for Breakdown).....	1	
-30	70070-30307-011		. L/H FIREWALL MODIFICATION KIT, (See Fig. E-26 for Breakdown).....	1	
-31	70070-30307-012		. R/H FIREWALL MODIFICATION KIT, (See Fig. E-27 for Breakdown).....	1	
-32	70070-30308-011		. COWL ASSEMBLY MODIFICATION KIT, (See Fig. E-28 for Breakdown).....	1	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
-33	70072-30000-011	.							HIRSS REPAIR KIT, (See Fig. E-29 for Breakdown)	1	

E-3. DOOR POST MODIFICATION KIT (50-22).

Subject: Cockpit Door Posts, Modification of, dated 31 March 2003

Purpose: Provide instructions for the structural strengthening of the left and right side cockpit lower door post hinge area.

Model: UH-60A

Description: The left and right side lower door post structure at station 205.00 are modified to improve the structural strength at these locations.

Drawings required for modification:

70070-20566, 70500-01053, 70211-01005

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before incorporating the Door Post Modification Kit.
- Before beginning this modification procedure, use the material information list to inventory the modification kit. Make sure all parts are present and in serviceable condition.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, and paint touch up and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Where drawing numbers are not listed within individual step(s), drawing(s) listed in preceding step(s) are the controlling authority.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Modification, left side door post.

- (1) Remove fasteners at station 205.00, waterline 226.00, left butline 41.00 and remove duct assembly (70500-01053-043). Keep for reuse (Dwg 70500-01053, Sheet 1, Zones 14-E and 11-C).
- (2) Remove two RFI grounding seals (03-0402-A137), straps (70211-01005-103 and 70211-01005-105), and jambs (70211-01005-104 and -107) at station 205.00 (Dwg 70211-01005, Sheet 1, Zones 9-E, 9-F and 6-F).

- (3) Remove fasteners, doubler (70214-01003-112), and angle (70211-01011-117) (Dwg 70070-20566, Sheet 6, View H-H, Zones 12-C and 9-B).
- (4) Remove fasteners shown from floor skin, between station 194.00 and station 209.00, between butline 30.00 and butline 40.00 (Sheet 6, Zones 12-B through 9-D).
- (5) Trim floor skin (70214-01003-101) to agree with support fitting (70209-21206-113) and peel back to station 210.00 (Sheet 6, View H-H, Zone 11-C).
- (6) Remove nutplates (MS21075-3N and 52LHA3575-02), station 200.00, waterline 215.00, between butline 30.00 and butline 40.00 (Sheet 6, View H-H, Zones 9-D and 12-C).
- (7) Remove fasteners shown from shim (70219-01000-102), plate (70219-01000-108), washers (70219-01000-109), radius block (SS1058A10-29-48), and hinge fitting assembly (70219-01008-041 or 70219-01008-043) (Sheet 6, Zones 15-D, 15-E, and 14-E).
- (8) Remove fasteners and fitting assembly (70217-01024-041 or 70217-01024-045) (Sheet 6, View J-J, Zone 17-F).
- (9) Remove fasteners at station 205.00, left butline 40.00 as shown (Sheet 6, View A-A, Zones 15-A through 15-F and, 19-B through 19-G).
- (10) Remove channel (70211-01011-130) (Sheet 6, Zones 18-G).
- (11) Remove fasteners and angle (70211-01011-111) (Sheet 6, Zone 11-D).
- (12) Remove angle (70211-01011-103) (Sheet 6, Zone 19-B).
- (13) Remove fasteners and angle (70211-01011-105) (Sheet 6, Zone 20-B).
- (14) Remove fasteners, baffle (70211-01011-127), and radius block (SS1058-7-30-23) (Sheet 6, Zones 18-F, 16-F and 17-C; Sheet 3, Notes 24 and 25).
- (15) Locate and temporarily install following parts at station 205.00, between waterline 210.00 and waterline 230.00, between left butline 35.00 and butline 45.00 as follows:
 - (a) Slot skin and frame existing lower door hinge mount holes to 0.260 X 0.340-inch slots (Dwg 70070-20566, Sheet 6, Zone 16-D).
 - (b) Plug rivet skin first and third holes below lower door hinge location with fasteners shown (Sheet 6, Zone 14-D).
 - (c) Position angle (70070-20566-107) against forward side of station 205.00 and transfer drill inboard holes from frame through angle. Transfer drill station 205.00 outboard holes and skin below waterline 215.00 only (Sheet 6, View A-A, Zone 19-B).
 - (d) Position angle (70070-20566-111) and transfer drill holes from station 205.00 frame and butline 30.00 fitting (Sheet 6, Zone 11-D).

NOTE

The station 205.00 frame outboard holes above waterline 215.00 are not drilled in the following step.

- (e) Position angle (70211-01011-105) against aft side of station 205.00 and transfer drill inboard holes from frame through angle. Transfer drill station 205.00 outboard holes below waterline 215.00 (Sheet 6, View A-A, Zone 20-D).
- (f) Position doubler (70070-20566-105), shim (70204-21003-132), and support fitting (70209-21206-113) on waterline 215.00 against forward face of frame 205.00. Transfer drill holes from angle (70211-01011-105) (Sheet 6, View H-H, Zones 10-B and 10-C).
- (g) Drill support fitting (70209-21206-113) outboard holes through station 205.00 frame, angles (70070-20566-107 and 70070-20566-111), and skin clearing support fitting radius (Sheet 6, View A-A, Zones 19-C and 19-D, Note 58).
- (h) Drill fastener holes from support fitting (70209-21206-113) through shim (70204-21003-132), doubler (70070-20566-105), and structure through support fitting clearing support fitting radius (Sheet 6, View H-H, Zone 10-B).
- (i) Position channel (70211-01011-130) on station 205.00 frame and transfer drill rivet holes from frame through channel (Sheet 6, View A-A, Zones 15-C through 15-F and 20-B through 19-F).
- (j) Locate door check channel assembly (70217-01024-045) on inboard and aft sides of channel (70211-01011-130) (Sheet 6, Views A-A and J-J, Zones 19-D and 17-F).
- (k) Transfer drill aft side holes from channel assembly (70217-01024-045) through channel (70211-01011-130) and open inboard hole to agree with frame.
- (l) Remove door check channel assembly (70217-01024-045) and channel (70211-01011-130).
- (m) Temporarily attach centerline of baffle (70070-20566-109) to channel (70211-01011-130) aft holes (Sheet 6, View J-J, Zone 16-F).
- (n) Reposition channel (70211-01011-130) on station 205.00 frame.
- (o) Transfer drill two fastener holes from inboard side of frame through baffle (70070-20566-109).
- (p) Transfer drill two 0.250-inch diameter holes from channel (70211-01011-130) through baffle (70070-20566-109) aft flange.
- (q) Clamp drill template (70070-20566-019T046) to aft side of frame.
- (r) Drill two 0.187-inch diameter holes from drill template through frame and support fitting (70209-21206-113). Remove drill template.
- (s) Remove support fitting (70209-21206-113) from forward side of frame.
- (t) Open two 0.250 and 0.187-inch diameter holes to 0.448-inch diameter in channel (70211-01011-103), angles (70070-20566-107 and 70211-01011-105), and baffle (70070-20566-109) (Sheet 6, Zone 16-F).
- (u) Temporarily position angle (70211-01011-117) on floor aft of station 205.00. Transfer drill fastener holes from floor and frame through angle (Sheet 6, View H-H, Zone 10-B).
- (v) Temporarily reinstall support fitting (70209-21206-113).

(w) Temporarily attach door check channel assembly (70217-01024-045) to channel (70211-01011-130) with work hardware and bushings (NAS73-4-107).

(x) Position installation tool (70070-20566-019T046) onto upper door hinge and door check channel assembly (70217-01024-045).

(y) Drill two 0.250-inch diameter holes. Remove installation tool.

(z) Remove parts from station 205.00, clean, deburr, and touch up as required.

(aa) Position radius block (70201-21011-135) onto inboard side of support fitting (70209-21206-113). Drill two No. 30 (0.128-inch diameter) holes with 100° countersink and transfer drill two 0.250-inch diameter holes (Sheet 6, View K-K, Zone 17-B).

(ab) Install radius block (70201-21011-135) to support fitting (70209-21206-113) with fasteners shown (Sheet 6, View K-K, Zone 17-B).

(ac) Install new frame parts with fasteners shown (Sheet 6, Zones 8 through 20, Note 44).

(ad) Install door hinge fitting assembly (70219-01008-045), shim (70219-01000-102), and plate (70219-01000-108) with fasteners shown (Sheet 6, Zones 7-C, 14-E, and 16-E, Notes 44 and 45).

(ae) Install nutplates (MS21075-3N and 52LHA3575-02) with fasteners shown (Sheet 6, Zones 10-D and 12-D).

(af) Reinstall floor with fasteners shown (Sheet 6, View H-H, Zone 9-B through 12-D).

(ag) Reinstall duct assembly (70500-01053-043) (Dwg 70500-01053, Sheet 1, Zones 14-E and 11-C).

(ah) Install two RFI grounding seals (03-0402-A137), straps (70211-01005-103 and -105), and jambs (70211-01005-104 and -107) at station 205.00 with fasteners shown (Dwg 70211-01005, Sheet 1, Zones 9-E, 9-F and 6-F).

C. Modification, right side door post.

(1) Remove fasteners at station 205.00, waterline 226.00, right butline 41.00 and remove duct assembly (70500-01053-044). Keep for reuse (Dwg 70500-01053, Sheet 1, Zones 14-E and 11-C).

(2) Remove two RFI grounding seals (03-0402-A137), straps (70211-01005-103 and 70211-01005-106), and jambs (70211-01005-104 and -108) at station 205.00 (Dwg 70211-01005, Sheet 1, Zones 9-E, 9-F and 6-F).

(3) Remove fasteners and angle (70211-01011-118) (Dwg 70070-20566, Sheet 6, View H-H, Zone 9-G).

(4) Remove fasteners shown from floor skin, between station 194.00 and station 209.00, between butline 30.00 and butline 40.00 (Sheet 6, Zones 12-B through 9-D).

(5) Trim floor skin (70214-01003-102) to agree with support fitting (70209-21206-114) and peel back to station 210.00 (Sheet 6, View H-H, Zone 11-F).

(6) Remove radius block (SS1056-7-24-26) (Sheet 6, View H-H, Zone 11-F).

(7) Remove nutplates (MS21075-3N and 52LHA3575-02), station 200.00, waterline 215.00, between butline 30.00 and butline 40.00 (Sheet 6, View H-H, Zones 9-E and 12-F).

(8) Remove fasteners shown from shim (70219-01000-102), plate (70219-01000-108), washers (70219-01000-109), radius block (SS1058A10-29-48), and hinge fitting assembly (70219-01008-042 or 70219-01008-044) (Sheet 6, Zones 15-D, 15-E, and 14-E).

(9) Remove fasteners and fitting assembly (70217-01024-042 or 70217-01024-045) (Sheet 6, View J-J, Zone 17-F).

(10) Remove fasteners at station 205.00, right butline 40.00 as shown (Sheet 6, View A-A, Zones 15-A through 15-F and, 19-B through 19-G).

(11) Remove channel (70211-01011-131) (Sheet 6, Zones 18-G).

(12) Remove fasteners and angle (70211-01011-115) (Sheet 6, Zone 11-E).

(13) Remove angle (70211-01011-104) (Sheet 6, Zone 19-B).

(14) Remove fasteners and angle (70211-01011-106) (Sheet 6, Zone 20-B).

(15) Remove fasteners, baffle (70211-01011-128), and radius block (SS1058-7-30-23) (Sheet 6, Zones 18-F, 16-F and 17-C, Sheet 3, Notes 24 and 25).

(16) Locate and temporarily install following parts at station 205.00, between waterlines 210.00 and 230.00, between right butline 35.00 and butline 45.00 as follows:

(a) Slot skin and frame existing lower door hinge mount holes to 0.260 X 0.340-inch slots (Dwg 70070-20566, Sheet 6, Zone 16-D).

(b) Plug rivet skin first and third holes below lower door hinge location with fasteners shown (Sheet 6, Zone 14-D).

(c) Position angle (70070-20566-106) against forward side of station 205.00 and transfer drill inboard holes from frame through angle. Transfer drill from station 205.00 outboard holes and skin below waterline 215.00 only (Sheet 6, View A-A, Zone 19-B).

(d) Position angle (70070-20566-110) and transfer drill holes from station 205.00 frame and butline 30.00 fitting (Sheet 6, Zone 11-D).

NOTE

The station 205.00 frame outboard holes above waterline 215.00 are not drilled in the following step.

(e) Position angle (70211-01011-106) against aft side of station 205.00 and transfer drill inboard holes from frame through angle. Transfer drill station 205.00 outboard holes below waterline 215.00 (Sheet 6, View A-A, Zone 20-D).

(f) Position doubler (70070-20566-105), shim (70204-21003-132), and support fitting (70209-21206-114) on waterline 215.00 against forward face of frame 205.00. Transfer drill holes from angle (70211-01011-106) (Sheet 6, View H-H, Zones 10-G and 10-H).

(g) Drill support fitting (70209-21206-114) outboard holes through station 205.00 frame, angles (70070-20566-106 and 70070-20566-110), and skin clearing support fitting radius (Sheet 6, View A-A, Zones 19-C and 19-D, Note 58).

- (h) Drill fastener holes from support fitting (70209-21206-114) through shim (70204-21003-132), doubler (70070-20566-105), and structure through support fitting clearing support fitting radius (Sheet 6, View H-H, Zone 10-G).
- (i) Position channel (70211-01011-131) on station 205.00 frame and transfer drill rivet holes from frame through channel (Sheet 6, View A-A, Zones 15-C through 15-F and 20-B through 19-F).
- (j) Locate door check channel assembly (70217-01024-044) on inboard and aft sides of channel (70211-01011-131) (Sheet 6, Views A-A and J-J, Zones 19-D and 17-F).
- (k) Transfer drill aft side holes from channel assembly (70217-01024-044) through channel (70211-01011-131) and open inboard hole to agree with frame.
- (l) Remove door check channel assembly (70217-01024-044) and channel (70211-01011-131).
- (m) Temporarily attach centerline of baffle (70070-20566-108) to channel (70211-01011-131) aft holes (Sheet 6, View J-J, Zone 16-F).
- (n) Reposition channel (70211-01011-131) on station 205.00 frame.
- (o) Transfer drill two fastener holes from inboard side of frame through baffle (70070-20566-108).
- (p) Transfer drill two 0.250-inch diameter holes from channel (70211-01011-131) through baffle (70070-20566-108) aft flange.
- (q) Clamp drill template (70070-20566-019T046) to aft side of frame.
- (r) Drill two 0.187-inch diameter holes from drill template through frame and support fitting (70209-21206-114). Remove drill template.
- (s) Remove support fitting (70209-21206-114) from forward side of frame.
- (t) Open two 0.250 and 0.187-inch diameter holes to 0.448-inch diameter in channel (70211-01011-103), angles (70070-20566-106 and 70211-01011-106), and baffle (70070-20566-108) (Sheet 6, Zone 16-F).
- (u) Temporarily position angle (70211-01011-118) on floor aft of station 205.00. Transfer drill fastener holes from floor and frame through angle (Sheet 6, View H-H, Zone 9-H).
- (v) Temporarily reinstall support fitting (70209-21206-114).
- (w) Temporarily attach door check channel assembly (70217-01024-044) to channel (70211-01011-131) with work hardware and bushings (NAS73-4-107).
- (x) Position installation tool (70070-20566-019T046) onto upper door hinge and door check channel assembly (70217-01024-045).
- (y) Drill two 0.250-inch diameter holes. Remove installation tool.
- (z) Remove parts from station 205.00, clean, deburr, and touch up as required.
- (aa) Position radius block (70201-21011-135) onto inboard side of support fitting (70209-21206-114). Drill two No. 30 (0.128-inch diameter) holes with 100° countersink and transfer drill two 0.250-inch diameter holes (Sheet 6, View K-K, Zone 17-B).

(ab) Install radius block (70201-21011-135) to support fitting (70209-21206-114) with fasteners shown (Sheet 6, View K-K, Zone 17-B).

(ac) Install new frame parts with fasteners shown (Sheet 6, Zones 8 through 20, Note 44).

(ad) Install door hinge fitting assembly (70219-01008-044), shim (70219-01000-102), and plate (70219-01000-108) with fasteners shown (Sheet 6, Zones 7-C, 14-E, and 16-E, Notes 44 and 45).

(ae) Install nutplates (MS21075-3N and 52LHA3575-02) and radius block (SS1056-7-24-26) with fasteners shown (Sheet 6, View H-H, Zones 10-E, 11-F, and 12-F).

(af) Reinstall floor with fasteners shown (Sheet 6, View H-H, Zone 9-B through 12-D).

(ag) Reinstall duct assembly (70500-01053-044) (Dwg 70500-01053, Sheet 1, Zones 14-E and 11-C).

(ah) Install two RFI grounding seals (03-0402-A137), straps (70211-01005-103 and 70211-01005-106), and jambs (70211-01005-104 and -108) at station 205.00 with fasteners shown (Dwg 70211-01005, Sheet 1, Zones 9-E, 9-F and 6-F).

D. Reidentification:

NOTE

The following reidentifications are for record purposes only. No physical reidentification is required.

<u>FROM</u>	<u>TO</u>	<u>Nomenclature</u>
70214-01003-011	70070-20566-031	Floor Instl, LH
70214-01003-016	70070-20566-033	Floor Instl, LH
70214-01003-012	70070-20566-030	Floor Instl, RH
70214-01003-017	70070-20566-032	Floor Instl, RH
70214-01003-041	70070-20566-041	Floor Assy, LH
70214-01003-043	70070-20566-043	Floor Assy, LH
70214-01003-042	70070-20566-042	Floor Assy, RH
70214-01003-044	70070-20566-044	Floor Assy, RH
70214-01003-101	70070-20566-103	Skin
70214-01003-102	70070-20566-104	Skin
70219-01000-011	70070-20566-025	Fitting Instl, LH
70219-01000-013	70070-20566-029	Fitting Instl, LH
70219-01000-012	70070-20566-026	Fitting Assy, RH
70219-01000-014	70070-20566-028	Fitting Instl, RH
70211-01011-012	70070-20566-014	Frame Instl
70211-01011-011	70070-20566-039	Frame Instl
70211-01001-041	70070-20566-045	Frame Assy
70211-01001-042	70070-20566-046	Frame Assy
70211-01001-044	70070-20566-047	Frame Assy
70211-01001-045	70070-20566-048	Frame Assy

E. Reinstallation of removed equipment:

(1) Perform reinstallation of parts and equipment per reference (a).

F. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20566-012	Mod. Kit, Door Post	+5.9	210.0	+1.239

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +5.9 pounds

Moment arm: 210.0 in.

Change in basic moment/1000: 1.239

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	2	40.0	*80.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Door Post	70070-20566-011	(1)
	consisting of:		
1	Mod. Kit, Door Post,	70070-20566-012	
	consisting of:		
1	Mod. Kit, Floor Instl,	70070-20566-015	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	consisting of: Mod. Kit, Fitting Instl, LH,	70070-20566-019	
2	consisting of: Bolt	AN4C14A	
2	Nut	MS21043-4	
2	Fastener, Blind	MS90354U0502	
3	Fastener, Blind	MS90354U0602	
3	Rivet	NAS1097AD4-9	
4	Rivet	NAS1097AD5-9	
2	Washer, Flat	NAS1149D0463K	
1	Radius Block	70201-21011-135	
4	Washer	SS5072-4	
1	Shim	70219-01000-102	
1	Plate	70219-01000-108	
2	Washer	70219-01000-109	
1	Fitting Assembly	70219-01008-045	
10	Rivet	MS20470AD5-9	
2	Rivet	MS20470AD6-3	
3	Rivet	RA097AD5-3	
4	Rivet, Blind	NAS1738B6-5	
1	Mod. Kit, Fitting Instl, RH,	70070-20566-020	
2	consisting of: Bolt	AN4C14A	
2	Nut	MS21043-4	
2	Fastener, Blind	MS90354U0502	
3	Fastener, Blind	MS90354U0602	
3	Rivet	NAS1097AD4-9	
4	Rivet	NAS1097AD5-9	
2	Washer, Flat	NAS1149D0463K	
1	Radius Block	70201-21011-135	
4	Washer	SS5072-4	
1	Shim	70219-01000-102	
1	Plate	70219-01000-108	
2	Washer	70219-01000-109	
1	Fitting Assembly	70219-01008-046	
10	Rivet	MS20470AD5-9	
2	Rivet	MS20470AD6-3	
3	Rivet	RA097AD5-3	
4	Rivet, Blind	NAS1738B6-5	
1	Mod. Kit, Floor LH,	70070-20566-017	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
	consisting of:		
2	Washer	AN960PD10L	
8	Rivet	CCR244SS-3-2	
8	Rivet	CCR244SS-3-4	
16	Collar	HL1087A-5	
16	Pin, Hi Lok	HL20PB-5-4	
3	Nutplate	MS21075-3N	
2	Rivet	NAS1097AD5-9	
10	Rivet, Blind	NAS1738B4-1	
10	Rivet, Blind	NAS1738B4-2	
15	Rivet, Blind	NAS1738B5-2	
15	Rivet, Blind	NAS1739B4-2	
2	Rivet, Blind	NAS1739B4-3	
3	Nutplate	52LHA3575-02	
1	Doubler	70070-20566-105	
1	Support Fitting	70209-21206-113	
1	Angle	70211-01011-117	
2	Screw	MS27039-1-09	
3	Rivet, Blind	NAS1739B4-1	
1	Shim, Laminated	70204-21003-132	
1	Mod. Kit, Floor, RH	70070-20566-018	
	consisting of:		
2	Washer	AN960PD10L	
8	Rivet	CCR244SS-3-2	
8	Rivet	CCR244SS-3-4	
16	Collar	HL1087A-5	
16	Pin, Hi Lok	HL20PB-5-4	
3	Nutplate	MS21075-3N	
2	Rivet	NAS1097AD5-9	
3	Rivet, Blind	NAS1738B4-2	
22	Rivet, Blind	NAS1738B5-2	
16	Rivet, Blind	NAS1739B4-2	
2	Rivet, Blind	NAS1739B4-3	
1	Radius Block	SS1058-7-24-26	
3	Nutplate	52LHA3575-02	
1	Doubler	70070-20566-105	
1	Shim, Laminated	70204-21003-132	
1	Angle	70211-01011-118	
1	Support Fitting	70209-21206-114	
2	Screw	MS27039-1-09	
15	Rivet, Blind	NAS1738B4-2	
1	Mod. Kit, Jamb Instl,	70070-20566-034	
	consisting of:		
2	Pin, Hi Lok	HL20PB-5-5	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
2	Collar	HL70TW-5	
6	Rivet	MS20470AD5-3	
9	Rivet	MS20470AD5-4	
3	Fastener, Blind	MS90354U0603	
1	Washer, Flat	NAS1149DN416K	
5	Rivet, Blind	NAS1738B4-2	
2	Rivet, Blind	NAS1738B4-3	
2	Seal, RFI Grndng	03-0402-A137	
1	Strap	70211-01005-103	
1	Jamb	70211-01005-104	
1	Strap	70211-01005-105	
1	Jamb	70211-01005-107	
1	Mod. Kit, Jamb Instl,	70070-20566-035	
	consisting of:		
2	Pin, Hi Lok	HL20PB-5-5	
2	Collar	HL70TW-5	
6	Rivet	MS20470AD5-3	
9	Rivet	MS20470AD5-4	
3	Fastener, Blind	MS90354U0603	
1	Washer, Flat	NAS1149DN416K	
5	Rivet, Blind	NAS1738B4-2	
2	Rivet, Blind	NAS1738B4-3	
2	Seal, RFI Grndng	03-0402-A137	
1	Strap	70211-01005-103	
1	Jamb	70211-01005-104	
1	Strap	70211-01005-106	
1	Jamb	70211-01005-108	
1	Mod. Kit, Frame Instl,	70070-20566-037	
	consisting of:		
2	Bolt	AN4-21	
27	Rivet	MS20470AD5-9	
2	Nut	MS21043-4	
7	Fastener, Blind	MS90354U0506	
2	Washer, Flat	NAS1149D0416K	
2	Washer, Flat	NAS1149D0463K	
2	Pin, SWG LKG	NAS1525-02	
4	Pin, SWG LKG	NAS1525-03	
5	Pin, SWG LKG	NAS1526-03	
10	Rivet, Blind	NAS1738B5-2	
7	Rivet, Blind	NAS1738B5-3	
2	Bushing	NAS73-4-107	
1	Baffle	70070-20566-109	
1	Channel	70211-01011-130	
1	Channel Assembly	70217-01024-045	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Channel	70070-20566-111	
1	Angle	70211-01011-105	
1	Angle	70070-20566-107	
1	Mod. Kit, Frame Instl,	70070-20566-038	
	consisting of:		
2	Bolt	AN4-21	
27	Rivet	MS20470AD5-9	
2	Nut	MS21043-4	
7	Fastener, Blind	MS90354U0506	
2	Washer, Flat	NAS1149D0416K	
2	Washer, Flat	NAS1149D0463K	
2	Pin, SWG LKG	NAS1525-02	
4	Pin, SWG LKG	NAS1525-03	
5	Pin, SWG LKG	NAS1526-03	
10	Rivet, Blind	NAS1738B5-2	
7	Rivet, Blind	NAS1738B5-3	
2	Bushing	NAS73-4-107	
1	Angle	70211-01011-106	
1	Baffle	70070-20566-108	
1	Channel	70211-01011-131	
1	Channel Assembly	70217-01024-044	
1	Angle	70070-20566-106	
1	Channel	70070-20566-110	

B. Consumable Material:

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

NOTE

The following material is required to incorporate this SSI per drawing Notes.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
8 oz.	Sealant	MIL-S-8802, Class A2 or equivalent	(1)
4 oz.	Adhesive	EC1751A/B or equivalent	(1)

DMWR 1-1520-237

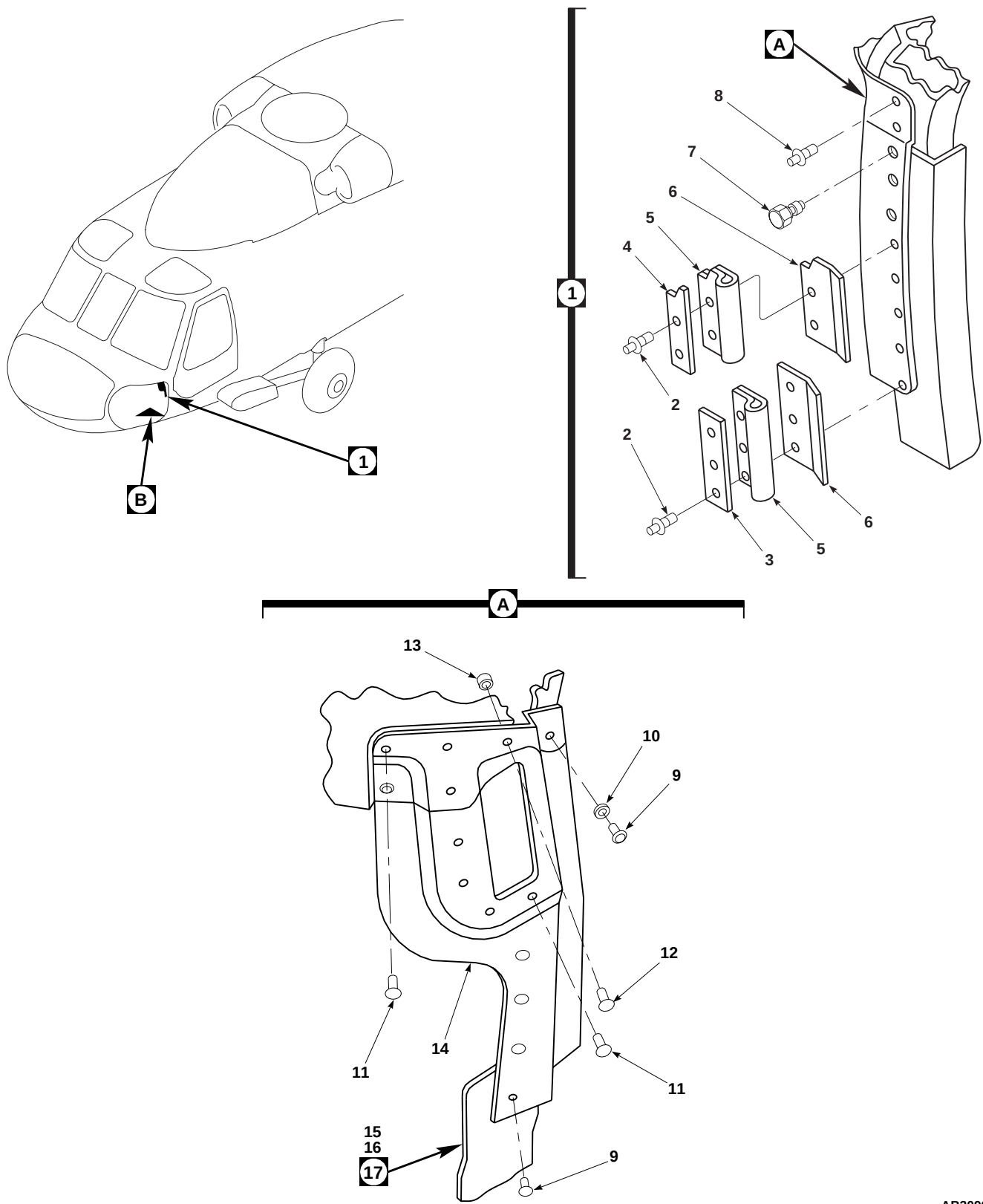
<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
8 oz.	Adhesive	EA9309.3NA or equivalent	(1)

C. Support Equipment:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Installation Tool	70070-20566-019T046	(1)
1	Installation Tool	70070-20566-020T046	(1)
1	Drill Tool	70070-20566-017T046	(1)

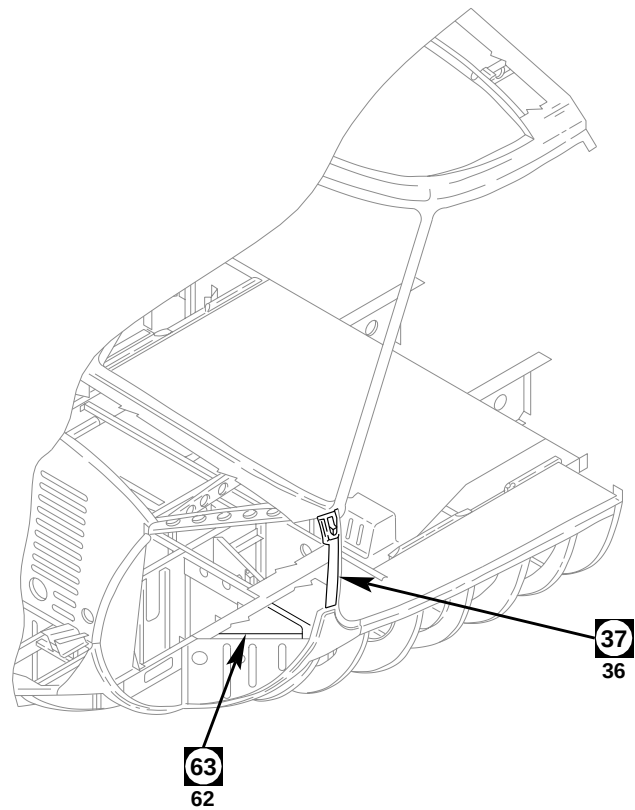
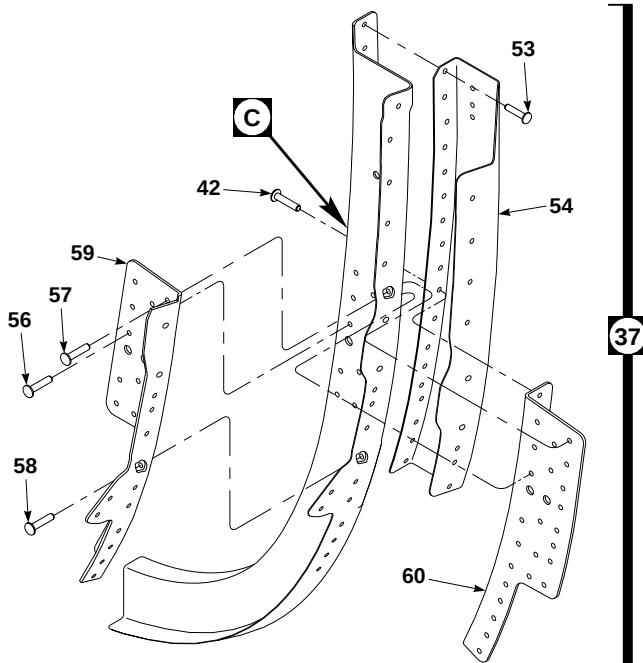
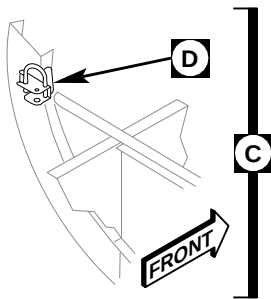
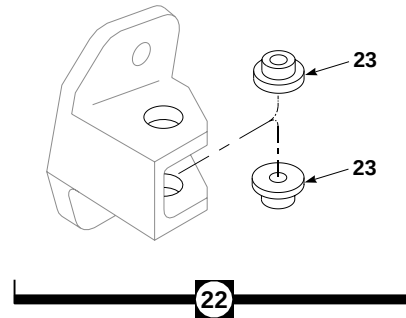
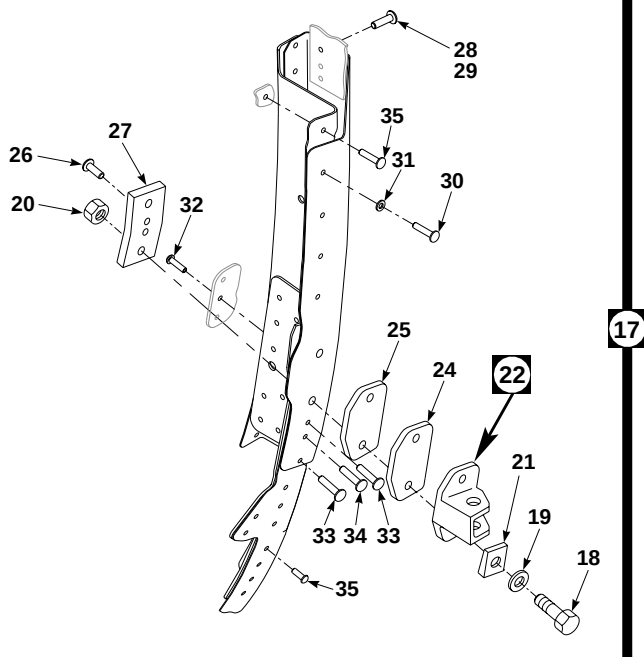
D. Source:

- (1) Available through normal supply channels



AB3096_1
SA

Figure E-2. Door Post Modification Kit (Sheet 1 of 3)



AB3096_2
SA

Figure E-2. Door Post Modification Kit (Sheet 2 of 3)

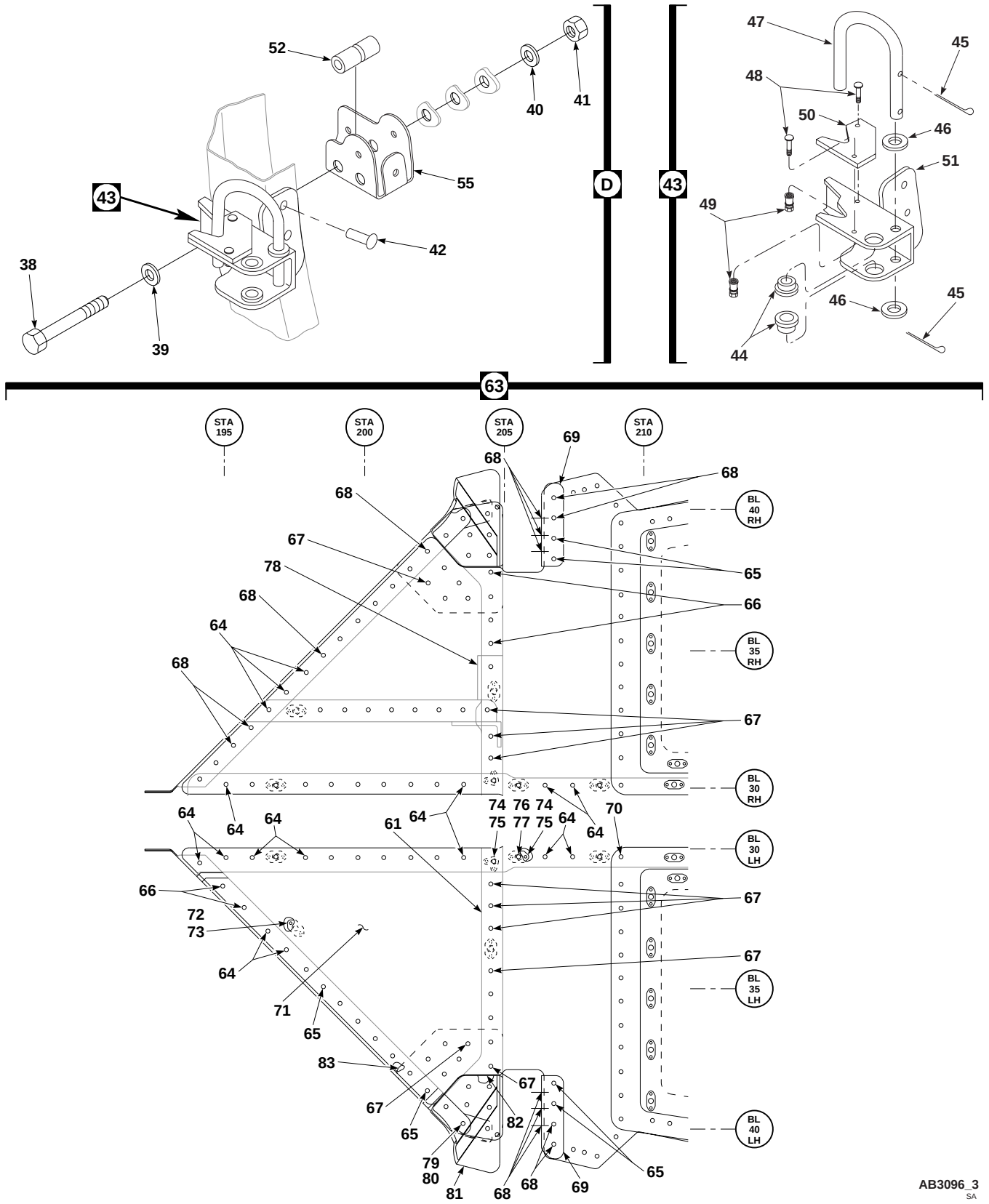


Figure E-2. Door Post Modification Kit (Sheet 3 of 3)

AB3096_3
SA

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-2-	70070-20566-012		DOOR POST MODIFICATION KIT	REF	
-1	70070-20566-034		. M/K JAMB INSTL.....	1	
	70070-20566-035		. M/K JAMB INSTL.....	1	
-2	NAS1738B4-2		. . BLIND RIVET	5	
-3	70211-01005-103		. . STRAP	1	
-4	70211-01005-104		. . JAMBP	1	
-5	03-0402-A137		. . SEAL,RFI GRNDNG, (12881).....	2	
-6	70211-01005-105		. . STRAP, (Used on 70070-20566-034).....	1	
	70211-01005-106		. . STRAP, (Used on 70070-20566-035).....	1	
-7	MS90354U0603		. . BLIND FASTENER	3	
-8	NAS1738B4-3		. . BLIND RIVET	2	
-9	MS20470AD5-3		. . RIVET.....	6	
-10	NAS1149DN416K		. . FLAT WASHER	1	
-11	MS20470AD5-4		. . RIVET.....	9	
-12	HL20PB-5-5		. . HI-LOK PIN, (73197).....	2	
-13	HL70TW-5		. . COLLAR, (73197)	2	
-14	70211-01005-107		. . JAMB, (Used on 70070-20566-034)	1	
	70211-01005-108		. . JAMB, (Used on 70070-20566-035)	1	
-15	70070-20566-015		. M/K DOOR POST.....	1	
-16	70070-20566-019		. . M/K DOOR POST L.....	1	
	70070-20566-020		. . M/K DOOR POST R.....	1	
-17	70070-20566-025		. . . FITTING INST LH, (Reidentified from 70219-01000-011)	REF	
	70070-20566-029		. . . FITTING INST LH, (Reidentified from 70219-01000-013).....	REF	
	70070-20566-026		. . . FITTING INST RH, (Reidentified from 70219-01000-012).....	REF	
	70070-20566-028		. . . FITTING INST RH, (Reidentified from 70219-01000-014).....	REF	
-18	AN4C14A		. . . BOLT	2	
-19	NAS1149D0463K		. . . FLAT WASHER	2	
-20	MS21043-4		. . . NUT.....	2	
-21	70219-01000-109		. . . WASHER	2	
-22	70219-01008-045		. . . FITTING ASSY, (Used on 70070-20566-019)...	1	
	70219-01008-046		. . . FITTING ASSY, (Used on 70070-20566-020)...	1	
-23	NAS77A4-14P		. . . BUSHING.....	2	
-24	70219-01000-108		. . . PLATE.....	1	
-25	70219-01000-102		. . . SHIM.....	1	
-26	NAS1097AD4-9		. . . RIVET.....	3	
-27	70201-21011-135		. . . RADIUS BLOCK	1	
-28	MS90354U0502		. . . BLIND FASTENER	2	
-29	MS90354U0602		. . . BLIND FASTENER	3	
-30	NAS1097AD5-9		. . . RIVET.....	4	
-31	SS5072-4		. . . WASHER	4	
-32	NAS1738B6-5		. . . BLIND RIVET.....	4	
-33	RA097AD5-3		. . . RIVET.....	3	
-34	MS20470AD6-3		. . . RIVET.....	2	
-35	MS20470AD5-9		. . . RIVET.....	10	
-36	70070-20566-037		. M/K FRAME INSTL LH.....	1	
	70070-20566-038		. M/K FRAME INSTL RH	1	
-37	70070-20566-014		. . FRAME INSTL, (Modified from 70211-01011-012)	REF	
	70070-20566-039		. . FRAME INSTL, (Modified from 70211-01011-011).....	REF	
	70070-20566-045		. . FRAME ASSY LH, (Reidentified from 70211-01001-041).....	REF	
	70070-20566-046		. . FRAME ASSY RH, (Reidentified from 70211-01001-042).....	REF	
	70070-20566-048		. . FRAME ASSY LH, (Reidentified from 70211-01001-045).....	REF	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
	70070-20566-047	. .							FRAME ASSY RH, (Reidentified from 70211-01001-044).....	REF	
-38	AN4-21	. .							BOLT.....	2	
-39	NAS1149D0463K	. .							FLAT WASHER.....	2	
-40	NAS1149D0416K	. .							FLAT WASHER.....	2	
-41	MS21043-4	. .							NUT.....	2	
-42	NAS1738B5-3	. .							BLIND RIVET.....	7	
-43	70217-01024-045	. .							CHANNEL ASSY, (Used on 70070-20566-037)...	1	
	70217-01024-044	. .							CHANNEL ASSY, (Used on 70070-20566-038)...	1	
-44	NAS77-3-10	. . .							BUSHING.....	2	
-45	MS24665-1013	. . .							COTTER PIN.....	2	
-46	AN960PD416L	. . .							WASHER.....	2	
-47	70217-01024-104	. . .							SPRING.....	1	
-48	HL20PB-5-4	. . .							HI-LOK PIN, (73197).....	2	
-49	HL1087-5	. . .							COLLAR, (73197).....	2	
-50	70217-01024-107	. . .							WEAR PLATE.....	1	
-51	70217-01024-105	. . .							CHECK FITTING, (Used on 70217-01024-045).....	1	
	70217-01024-106	. . .							CHECK FITTING, (Used on 70217-01024-044).....	1	
-52	NAS73-4-107	. .							BUSHING.....	2	
-53	NAS1738B5-2	. .							BLIND RIVET.....	10	
-54	70211-01011-130	. .							CHANNEL, (Used on 70070-20566-037).....	1	
	70211-01011-131	. .							CHANNEL, (Used on 70070-20566-038).....	1	
-55	70070-20566-109	. .							BAFFLE, (Used on 70070-20566-037).....	1	
	70070-20566-108	. .							BAFFLE, (Used on 70070-20566-038).....	1	
-56	MS20470AD5-9	. .							RIVET.....	27	
-57	MS90354U0506	. .							BLIND FASTENER.....	7	
-58	NAS1525-03	. .							SWAGE LOCKING PIN.....	4	*
	NAS1525-02	. .							SWAGE LOCKING PIN.....	2	*
	NAS1526-03	. .							SWAGE LOCKING PIN.....	5	*
-59	70070-20566-107	. .							ANGLE, (Used on 70070-20566-037).....	1	
	70070-20566-106	. .							ANGLE, (Used on 70070-20566-038).....	1	
-60	70211-01011-105	. .							ANGLE, (Used on 70070-20566-037).....	1	
	70211-01011-106	. .							ANGLE, (Used on 70070-20566-038).....	1	
-61	70070-20566-111	. .							CHANNEL, (Used on 70070-20566-037).....	1	
	70070-20566-110	. .							CHANNEL, (Used on 70070-20566-038).....	1	
-62	70070-20566-017	. .							M/K FLOOR LH.....	1	
	70070-20566-018	. .							M/K FLOOR RH.....	1	
-63	70070-20566-031	. .							FLOOR INSTL LH, (Modified from 70214-01003-011).....	REF	
	70070-20566-030	. .							FLOOR INSTL RH, (Modified from 70214-01003-012).....	REF	
	70070-20566-033	. .							FLOOR INSTL LH, (Modified from 70214-01003-016).....	REF	
	70070-20566-032	. .							FLOOR INSTL RH, (Modified from 70214-01003-017).....	REF	
	70070-20566-041	. .							FLOOR ASSY LH, (Reidentified from 70214-01003-041).....	REF	
	70070-20566-042	. .							FLOOR ASSY RH, (Reidentified from 70214-01003-042).....	REF	
	70070-20566-043	. .							FLOOR ASSY LH, (Reidentified from 70214-01003-043).....	REF	
	70070-20566-044	. .							FLOOR ASSY RH, (Reidentified from 70214-01003-044).....	REF	
-64	NAS1739B4-2	. .							BLIND RIVET, (Used on 70070-20566-017).....	15	
	NAS1739B4-2	. .							BLIND RIVET, (Used on 70070-20566-018).....	16	
-65	NAS1738B4-1	. .							BLIND RIVET, (Used on 70070-20566-017).....	10	
	NAS1738B4-1	. .							BLIND RIVET, (Used on 70070-20566-018).....	3	
-66	NAS1739B4-1	. .							BLIND RIVET, (Used on 70070-20566-017).....	3	
-67	NAS1738B5-2	. .							BLIND RIVET, (Used on 70070-20566-017).....	15	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
-68	NAS1738B5-2	.	.	.	.	.	.	.	BLIND RIVET, (Used on 70070-20566-018)	22	
	NAS1738B4-2	.	.	.	.	.	.	.	BLIND RIVET, (Used on 70070-20566-017)	10	
	NAS1738B4-2	.	.	.	.	.	.	.	BLIND RIVET, (Used on 70070-20566-018)	15	
-69	70211-01011-117	.	.	.	.	.	.	.	ANGLE, (Used on 70070-20566-017)	1	
	70211-01011-118	.	.	.	.	.	.	.	ANGLE, (Used on 70070-20566-018)	1	
-70	NAS1739B4-3	.	.	.	.	.	.	.	BLIND RIVET	2	
	NAS1097AD5-9	.	.	.	.	.	.	.	RIVET	2	*
-71	70070-20566-103	.	.	.	.	.	.	.	SKIN, (Reidentified from 70214-01003-101) (Used on 70070-20566-017)	REF	
	70070-20566-104	.	.	.	.	.	.	.	SKIN, (Reidentified from 70214-01003-102) (Used on 70070-20566-018)	REF	
-72	CCR244SS-3-2	.	.	.	.	.	.	.	RIVET, (11815)	8	
-73	MS21075-3N	.	.	.	.	.	.	.	NUTPLATE	3	
-74	CCR244SS-3-4	.	.	.	.	.	.	.	RIVET, (11815)	8	
-75	52LHA3575-02	.	.	.	.	.	.	.	NUTPLATE, (72962) (Superseded by NAS1149D0316K).....	3	
	NAS1149D0316K	.	.	.	.	.	.	.	NUTPLATE	3	
-76	MS27039-1-09	.	.	.	.	.	.	.	SCREW	2	
-77	AN960PD10L	.	.	.	.	.	.	.	WASHER, (Superseded by NAS1789X3).....	2	
	NAS1789X3	.	.	.	.	.	.	.	WASHER	2	
-78	SS1058-7-24-26	.	.	.	.	.	.	.	RADIUS BLOCK, RH, (Used on 70070-20566-018)	2	
-79	HL20PB-5-4	.	.	.	.	.	.	.	HI-LOK PIN, (73197).....	16	
-80	HL1087A-5	.	.	.	.	.	.	.	COLLAR, (73197)	16	
-81	70209-21206-113	.	.	.	.	.	.	.	SUPPORT FITTING, (Used on 70070-20566-017)	1	
	70209-21206-114	.	.	.	.	.	.	.	SUPPORT FITTING, (Used on 70070-20566-018)	1	
-82	70204-21003-132	.	.	.	.	.	.	.	LAMINATED SHIM	1	
-83	70070-20566-105	.	.	.	.	.	.	.	DOUBLER	1	

E-4. HINGE ACCESS MODIFICATION KIT (50-35).

Subject: Canopy Assembly, Nose Door Hinge Access Holes; Modification of, dated 31 March 2003

Purpose: Provide instructions to create access holes for installation of hinges.

Model: UH-60A

Description: The following is a brief overview of the work required to modify station canopy assembly station 185.00. Two 1.62 x 0.50 inch slotted holes are drilled in the composite structure and doublers and a new seal are installed.

Drawings required for modification:

70070-20566, 70217-01010

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before reworking nose canopy station 185.00.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Install two new access holes at station 186.00 as follows:

- (1) Locate and remove complete upper portion of seal (70217-01010-106) at station 186.00, waterline 236.00, between right and left buttlines 20.0, to expose area to be reworked (Dwg 70217-01010, Sheet 1, Zones 19-F through 23-F).

(2) Locate and slot two holes (1.62 x .50) inch at station 186.00 at right and left buttlines 9.43 and 10.56 (Dwg 70070-20566, Sheet 7, Zones 14-F and 15-G).

(3) Deburr, clean and touch up as required.

(4) Install doublers (70070-20611-101 and -102) using fasteners shown (Sheet 7, Zone 15-G).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(5) Apply a bead of sealant (AMS3265 or AMS-S-8802 or equivalent) around doublers (70070-20611-101 and -102) (Sheet 7, Zone 15-D, and Sheet 5, Note 57).

(6) Install seal (70217-01010-106) at station 186.00, between right and left buttlines 20.0 using sealant (EC-1357 or equivalent) (Dwg 70217-01010, Sheet 1, Zones 19-F through 23-F, Note 14).

C. Reinstallation of removed equipment;

(1) Reinstall removed equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20566-013	Mod. Kit, Door Post	+.13	187.5	+.024

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: 0.14 pounds

Moment arm: 187.5 in.

Change in basic moment/1000: 0.263

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Structural Mechanic	1	4.0	*4.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Door Post,	70070-20566-013	(1)
	consisting of:		
1	Seal	70217-01010-106	
1	Doubler	70070-20611-101	
1	Doubler	70070-20611-102	
5	Rivet	CCR244SS3-4	

B. Consumable Material:

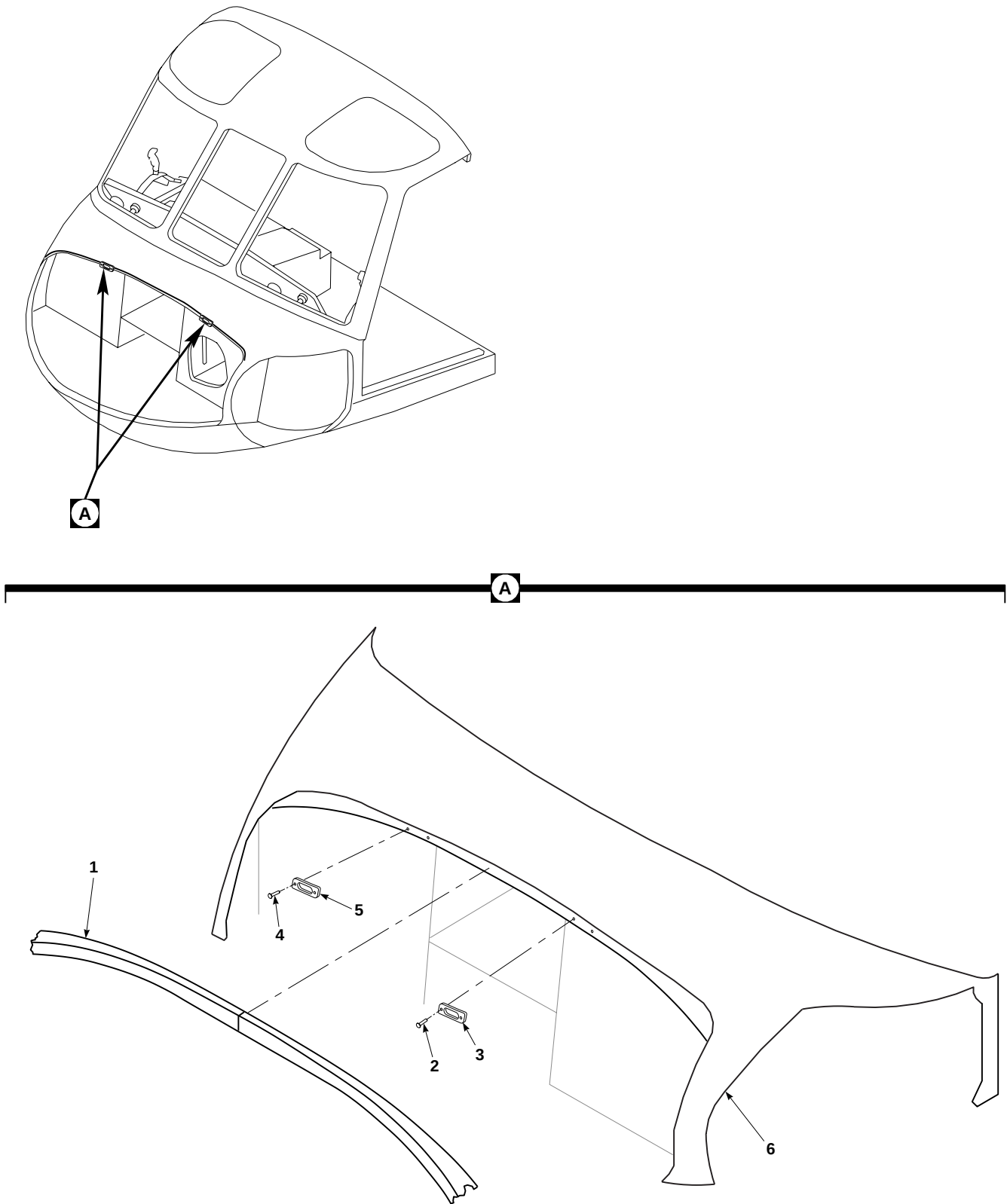
WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
8 oz.	Sealant	EC-1357 or equivalent	(1)
8 oz	Sealant	AMS 3265 or AMS-S-8802 or equivalent	(1)

C. Source:

- (1) Available through normal supply channels



AB3091
SA

Figure E-3. Hinge Access Modification Kit

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-3-	70070-20566-013	HINGE ACCESS MODIFICATION KIT.....								REF	
-1	70217-01010-106	. SEAL.....								1	
-2	CCR244SS3-4	. RIVET, (11815).....								2	
-3	70070-20611-101	. COVER.....								1	
-4	CCR244SS3-4	. RIVET, (11815).....								2	
-5	70070-20611-102	. COVER.....								1	
-6	70070-20566-049	. CANOPY ASSY, (Reidentified from 70211-01008-041).....								REF	
	70070-20566-050	. CANOPY ASSY, (Reidentified from 70211-01008-051).....								REF	
	70070-20566-051	. CANOPY ASSY, (Reidentified from 70211-01008-054).....								REF	
	70070-20566-052	. CANOPY ASSY, (Reidentified from 70211-01008-057).....								REF	

E-5. MODIFICATION KIT (50-5).

Subject: Side Fuselage Structural Reinforcement; Installation of, dated 31 March 2003

Purpose: Provide instructions for the structural strengthening of the fuselage on the left and right side around the gunners window.

Model: UH-60A

Description: The left and right side gunner windows are reworked to add support structure between stations 265.50 and 308.00.

Drawings required for modification:

70070-20167, 70070-20470, 70070-20527, 70083-20110, 70212-02307, 70213-02301

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) SSI No. 50-7 Butline 34.50, Modification of dated March 31, 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before incorporating the side fuselage structural reinforcement installation kit.
- Before beginning this modification procedure, use the material information list to inventory the modification kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual step(s), drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- Reference (b) must be done concurrently with this SSI.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

(3) Remove wiring routed through left and right side channel (70212-02037-105 and -106) between stations 247.00 and station 265.00, waterline 227.00.

B. Modification, left and right side gunners window structural and plating installation as follows:

(1) Modify left side gunners window structure and plating installation as follows (Dwg 70213-02301):



TO AVOID DAMAGING COMPONENTS, USE EXTREME CARE WHEN DRILLING INTO AIRFRAME.
TEMPORARILY MOVE ANY TUBE ASSEMBLIES OR WIRING HARNESSSES OUT OF REWORK AREA.

(a) Remove and keep for reuse, ring (70219-02313-101) and fitting (70219-02313-102) with attaching hardware, at station 308.00, waterline 221.00 (Dwg 70213-02301, Sheet 1, Zones 7-G and 10-C).

(b) Drill out fasteners and remove inner skin (70213-02301-105) between stations 265.00 and 295.00, waterlines 221.00 and 227.00 (Sheet 1, Zone 7-C).

(c) Drill out fasteners and remove bracket assembly (70551-02001-064) at station 297.00, waterline 259.00 (Sheet 2, Zone 7-G).

(d) Drill out fasteners and remove doubler (70213-02301-113) between stations 295.00 and 308.00, waterlines 238.22 and 260.00 (Sheet 2, Zone 7-H).

(e) Remove and keep for reuse ring (70219-02313-101) and fitting (70219-02313-102) with attaching hardware, at station 308.00, waterline 260.00 (Sheet 1, Zone 12-F).

(f) Drill out fasteners and remove skin (70213-02301-117) between stations 295.00 and 308.00, waterlines 207.00 and 260.00 (Sheet 1, Zone 9-E).

(g) Remove and keep for reuse fitting (70751-02022-101). Remove stiffeners (70212-02307-113 and -123) at station 268.12, between waterlines 221.00 and 227.00 (Dwg 70083-20110, Sheet 1, Zones 8-E, 8-J, and 8-C).

(h) Drill out fasteners, remove and keep for reuse stringer (70202-02310-109) between station 247.00 and station 265.50, waterline 233.80 (Sheet 1, Zone 10-F).

(i) Drill out fasteners and remove angle (70211-02304-105) at station 265.50, waterline 233.80 (Sheet 1, Zone 10-G).

(j) Drill out fasteners and remove channel (70212-02307-105) between station 247.00 and station 265.50, waterline 227.00 (Sheet 1, Zone 11-E).

(k) Drill out fasteners and remove angle (70212-02307-126) at station 265.00, waterline 221.00 (Sheet 1, Zone 7-H).

NOTE

Reference (b) must be completed in it's entirety at this time.

(l) Locate and temporarily install left side channel, (70083-20110-105) at station 265.50, between waterlines 221.00 and 233.80 (Sheet 1, Zone 4-F).

1 Drill out and remove any fasteners or parts that would interfere with the installation of channel.

2 Transfer drill five, 0.375-inch diameter holes, from channel (70211-02304-101) through left side channel (70083-20110-105) (Sheet 1, Zone 6-F).

(m) Locate and temporarily reinstall stringer (70202-02310-109) between stations 247.00 and 265.50, waterline 233.80, removed in step (h) (Sheet 1, Zone 10-F).

(n) Locate and temporarily install angle (70083-20110-113) at station 265.50, waterline 233.80 (Sheet 1, Zone 10-G).

(o) Locate and temporarily install left side channel (70083-20110-103) between stations 247.00 and 265.50, waterline 227.00 (Sheet 1, Zone 11-E).

(p) Locate and temporarily install angle (70083-20110-111) at station 265.50, waterline 221.00 (Sheet 1, Zone 7-H).

(q) Locate and temporarily install doubler (70083-20110-115) between stations 265.50 and 278.50, waterline 227.00 (Sheet 1, Zone 7-F).

1 Cutout 2.25-inch diameter hole through doubler (70083-20110-115) to match cutout in channel (70212-02307-101) station 268.12, waterline 227.00.

(r) Locate and temporarily install shims (70083-20110-107 and -109) at station 265.50, waterline 226.00 (Sheet 1, Zones 4-E and 6-D).

1 Remove four fasteners at station 278.50 (Sheet 1, Zone 7-H).

(s) Locate and temporarily install strap (70083-20110-118) at station 278.50, waterline 227.00 (Sheet 1, Zone 6-J).

(t) Locate and temporarily install stiffeners (70212-02307-113 and -123) between stations 276.00 and 308.00, waterlines 221.00 and 227.00 (Dwg 70212-02307, Sheet 1, Zones 4-D, 5-D, 16-H, and 17-J).

(u) Locate and temporarily reinstall fitting (70751-02022-101) at station 268.12, waterline 227.00, removed in step (g) (Sheet 1, Zone 8-E).

(v) Transfer drill the remaining fastener holes needed for assembly.

(w) Remove fitted parts and deburr and touch up as required.

(x) Install fitted parts using fasteners shown (Dwg's 70083-20110 and 70212-02307).

(y) Locate and temporarily install stringer (70070-20167-127) with clips (70070-20167-106 and -113) between stations 247.00 and 265.50, trace waterline 229.45 (Dwg 70070-20167, Sheet 3, Zones 11-E, 12-E, 17-F, and 18-E).

(z) Locate and temporarily install stringer (70070-20167-117), clip (70070-20167-106), and bracket angle (SS1082-192) between stations 247.00 and 265.50, trace waterline 237.18 (Sheet 3, Zones 11-G, 12-F, 13-G, and 17-F).

(aa) Locate and temporarily install stringer (70070-20167-111), clips (70070-20167-106 and -113), and radius block (SS1058A5-24-12) between stations 247.00 and 265.50, waterline 245.00 (Sheet 3, Zones 11-E, 11-J, 12-K, 15-J, and 17-H).

(ab) Locate and temporarily install stringer (70070-20167-103) with clips (70070-20167-106 and -107) between stations 247.00 and 265.50, trace waterline 250.92 (Sheet 2, Zones 11-E, 12-E, 14-E, and 17-D).

(ac) Locate and temporarily install stringer (70070-20167-119), clip (70070-20167-105), and bracket angle (SS1082-192) between stations 250.06 and 265.50, waterline 257.73 (Sheet 2, Zones 4-C, 5-B, and 6-B).

(ad) Locate and temporarily install stiffener (70070-20167-123) and clip (70070-20167-125) at station 255.00, waterline 260.00, left butline 40.00 (Sheet 2, Zone 6-F).

(ae) Locate and temporarily install stiffener (70070-20167-121) and clip (70070-20167-125) at station 260.00, waterline 260.00, left butline 40.00 (Sheet 2, Zone 4-F).

(af) Transfer drill the remaining fastener holes needed for assembly.

(ag) Remove fitted parts, deburr and touch up as required.

(ah) Install fitted parts, using fasteners shown on (Dwg 70070-20167, Sheets 2 and 3).

(ai) Install shims (70212-02307-104) and angles (70212-02307-117 and -119) (Dwg 70212-02307, Sheet 1, Zones 4-D, 5-D, 16-H and 17-J).

(aj) Locate and temporarily install plating assembly (70213-02301-041) between stations 295.00 and 308.00, waterlines 207.00 and 260.00 (Dwg 70213-02301, Sheet 5, Zone 7-F).

(ak) Locate and temporarily install skin inner (70213-02301-129) between stations 265.00 and 295.00, waterlines 221.00 and 227.00 (Sheet 5, Zone 6-C).

(al) Locate and temporarily reinstall two rings (70219-02313-101) and fitting (70219-02313-102), at station 308.00, waterlines 221.00 and 260.00 (Sheet 5, Zones 10-C and 12-F).

(am) Locate and temporarily install doubler (70213-02301-113) between stations 295.00 and 308.00, waterlines 238.22 and 260.00 (Sheet 2, Zone 7-H).

(an) Locate and temporarily install bracket assembly (70551-02001-064) at station 297.00, waterline 259.00 (Sheet 2, Zone 7-G).

(ao) Locate and temporarily install zee (70213-02301-137) between stations 289.14 and 308.00, waterline 227.00 (Sheet 5, Zone 7-E).

(ap) Transfer drill the remaining fastener holes needed for assembly.

(aq) Remove fitted parts, deburr and touch up as required.

(ar) Install fitted parts, using fasteners shown (Dwg 70213-02301, Sheets 2, 3, and 5).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(as) Install skins and fasteners wet with sealant (AMS-S-8802, A2 or C20 or equivalent) (Sheet 3, Notes 15 and 16).

(at) Apply a bead of sealant (AMS-S-8802, B-2 or equivalent) along edge of exterior skins and frame joints (Sheet 1, Zone 3-C, Note 15).

(au) Install foam (70213-02301-139) and grommet (MS21266-2N) to zee (70213-02301-138) between stations 289.14 and 308.00, waterline 227.00 with adhesive EC-1357 (Sheet 5, Zones 7-E, 10-E, and 12-H, Note 22).

(av) Install foam (70213-02301-139) and grommet (MS21266-2N) to zee (70213-02301-137) between stations 289.14 and 308.00, waterline 227.00 (Sheet 5, Zones 7-E, 10-E, and 12-H, Note 22).

(2) Modify right side gunners window structural and plating installation as follows:

CAUTION

TO AVOID DAMAGING COMPONENTS, USE EXTREME CARE WHEN DRILLING INTO AIRFRAME. TEMPORARILY MOVE ANY TUBE ASSEMBLIES OR WIRING HARNESSSES OUT OF REWORK AREA.

(a) Remove and keep for reuse, ring (70219-02313-101) and fitting (70219-02313-102) with attaching hardware, at station 308.00, waterline 221.00 (Dwg 70213-02301, Sheet 1, Zones 7-G, and 10-C).

(b) Drill out fasteners and remove inner skin (70213-02301-106) between stations 265.00 and 295.00, waterlines 221.00 and 227.00 (Sheet 1, Zone 7-C).

(c) Drill out fasteners and remove bracket assembly (70551-02001-065) at station 297.00, waterline 259.00 (Sheet 2, Zone 7-G).

(d) Drill out fasteners and remove doubler (70213-02301-114) between stations 295.00 and 308.00, waterlines 238.22 and 260.00 (Sheet 2, Zone 7-H).

(e) Remove and keep for reuse, ring (70219-02313-101) and fitting (70219-02313-102) with attaching hardware, at station 308.00, waterline 260.00 (Sheet 1, Zone 12-F).

(f) Drill out fasteners and remove skin (70213-02301-118) between stations 295.00 and 308.00, waterlines 207.00 and 260.00 (Sheet 1, Zone 9-E).

(g) Remove and keep for reuse, fitting (70751-02022-102). Remove stiffeners (70212-02307-114 and -124) at station 268.12, between waterlines 221.00 and 227.00 (Dwg 70083-20110, Sheet 1, Zones 16-B, 16-C, and 16-J).

(h) Drill out fasteners, remove and keep for reuse, stringer (70202-02310-110) between stations 247.00 and 265.50, waterline 233.80 (Sheet 1, Zone 10-F).

(i) Drill out fasteners and remove angle (70211-02304-106) at station 265.50, waterline 233.80 (Sheet 1, Zone 10-G).

(j) Drill out fasteners and remove channel (70212-02307-106) between stations 247.00 and 265.50, waterline 227.00 (Sheet 1, Zone 11-E).

(k) Drill out fasteners and remove angle (70212-02307-127) at station 265.00, waterline 221.00 (Sheet 1, Zone 7-H).

NOTE

Reference (b) must be completed in it's entirety at this time.

(l) Locate and temporarily install right side channel (70083-20110-106) at station 265.50, between waterlines 221.00 and 233.80 (Sheet 1, Zone 4-F).

1 Drill out and remove any fasteners or parts that would interfere with the installation of channel.

2 Transfer drill five 0.375-inch diameter holes from channel (70211-02304-102) through right side channel (70083-20110-106) (Sheet 1, Zone 6-F).

(m) Locate and temporarily reinstall stringer (70202-02310-110) between stations 247.00 and 265.50, waterline 233.80, removed in step (h) (Sheet 1, Zone 10-F).

(n) Locate and temporarily install angle (70083-20110-114) at station 265.50, waterline 233.60 (Sheet 1, Zone 10-G).

(o) Locate and temporarily install right side channel (70083-20110-104) between stations 247.00 and 265.50, waterline 227.00 (Sheet 1, Zone 11-E).

(p) Locate and temporarily install angle (70083-20110-112) at station 265.50, waterline 221.00 (Sheet 1, Zone 7-H).

(q) Locate and temporarily install doubler (70083-20110-116) between stations 265.00 and 278.50, waterline 227.00 (Sheet 1, Zone 16-H).

1 Cutout 2.25-inch diameter hole through doubler (70083-20110-116) to match cutout in channel (70212-02307-103).

(r) Locate and temporarily install shims (70083-20110-108 and -109) at station 265.50, waterline 226.00 (Sheet 1, Zones 4-E and 6-D).

(s) Locate and temporarily install strap (70083-20110-117) at station 278.50, waterline 227.00 (Sheet 1, Zone 17-H).

(t) Locate and temporarily install stiffeners (70212-02307-114 and -124) between stations 276.00 and 308.00, waterlines 221.00 and 227.00 (Dwg 70212-02307, Sheet 1, Zones 4-D, 5-D, 16-H, and 17-J).

- (u) Locate and temporarily reinstall fitting (70751-02022-102) at station 268.12, waterline 227.00, removed in step (g) (Sheet 1, Zone 16-C).
- (v) Transfer drill the remaining fastener holes needed for assembly.
- (w) Remove fitted parts, deburr and touch up as required.
- (x) Install fitted parts using fasteners shown (Dwg's 70083-20110 and 70212-02307, Sheet 1).
- (y) Locate and temporarily install stringer (70070-20167-126) with clips (70070-20167-106 and -114) between stations 247.00 and 265.50, trace waterline 229.45 (Dwg 70070-20167, Sheet 3, Zones 7-D, 11-E, 12-E, and 17-F).
- (z) Locate and temporarily install stringer (70070-20167-118), clip (70070-20167-106), and bracket angle (SS1082-192) between stations 247.00 and 265.50, trace waterline 237.18 (Sheet 3, Zones 11-G, 12-F, and 13-G).
- (aa) Locate and temporarily install stringer (70070-20167-112), clips (70070-20167-106 and 70070-20167-114), and radius block (SS1058A5-24-12) between stations 247.00 and 265.50, waterline 245.00 (Sheet 3, Zones 11-E, 11-J, 12-K, and 15-J).
- (ab) Locate and temporarily install stringer (70070-20167-104) with clips (70070-20167-106 and -108) between stations 247.00 and 265.50, trace waterline 250.92 (Sheet 2, Zones 11-E, 12-E, and 14-E).
- (ac) Locate and temporarily install stringer (70070-20167-120), clip (70070-20167-105), and bracket angle (SS1082-192) between stations 250.06 and 265.50, waterline 257.73 (Sheet 2, Zones 4-C, 5-B, and 6-B).
- (ad) Locate and temporarily install stiffener (70070-20167-124) and clip (70070-20167-125) at station 255.00, waterline 260.00, left butline 40.00 (Sheet 2, Zone 6-F).
- (ae) Locate and temporarily install stiffener (70070-20167-122) and clip (70070-20167-125) at station 260.00, waterline 260.00, left butline 40.00 (Sheet 2, Zone 4-F).
- (af) Transfer drill the remaining fastener holes needed for assembly.
- (ag) Remove fitted parts, deburr and touch up as required.
- (ah) Install fitted parts, using fasteners shown (Dwg 70070-20167, Sheets 2 and 3).
- (ai) Install shims (70212-02307-104) and angles (70212-02307-118 and -120) (Dwg 70212-02307, Sheet 1, Zones 4-D, 5-D, 16-H and 17-J).
- (aj) Locate and temporarily install plating assembly (70213-02301-042) between stations 295.00 and 308.00, waterlines 207.00 and 260.00 (Dwg 70213-02301, Sheet 5, Zone 7-F).
- (ak) Locate and temporarily install skin inner (70213-02301-130) between stations 265.00 and 295.00, waterlines 221.00 and 227.00 (Sheet 5, Zone 6-C).
- (al) Locate and temporarily reinstall two rings (70219-02313-101) and fitting (70219-02313-102) at station 308.00, waterlines 221.00 and 260.00 (Sheet 5, Zones 10-C and 12-F).
- (am) Locate and temporarily install doubler (70213-02301-114) between stations 295.00 and 308.00, waterlines 238.22 and 260.00 (Sheet 2, Zone 7-H).

(an) Locate and temporarily install bracket assembly (70551-02001-065) at station 297.00, waterline 259.00 (Sheet 2, Zone 7-G).

(ao) Locate and temporarily install zee (70213-02301-138) between stations 289.14 and 308.00, waterline 227.00 (Sheet 5, Zone 7-E).

(ap) Transfer drill the remaining fastener holes needed for assembly.

(aq) Remove fitted parts deburr and touch up as required.

(ar) Install fitted parts, using fasteners shown (Dwg 70213-02301, Sheets 2, 3, and 5).

WARNING

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(as) Install skins and fasteners wet with sealant (AMS-S-8802, A2 or C20 or equivalent) (Sheet 3, Notes 15 and 16).

(at) Apply a bead of sealant (AMS-S-8802, B-2 or equivalent) along edge of exterior skins and frame joints (Sheet 1, Zone 3-C, Note 15).

(au) Install foam (70213-02301-139) and grommet (MS21266-2N) to zee (70213-02301-138) between stations 289.14 and 308.00, waterline 227.00 with adhesive (EC-1357) (Sheet 5, Zones 7-E, 10-E, and 12-H, Note 22).

C. Reinstallation of removed equipment:

(1) Perform reinstallation of parts and equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20527-011	Mod. Kit	+15.6	281.0	4.4

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +15.6 pounds

DMWR 1-1520-237

Moment arm: 281.0 in.

Change in basic moment/1000: 4.4

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	2	100.0	*200.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Side Fuselage Structural Beef Up,	70070-20527-011	(1)
	consisting of:		
1	Mod. Kit, Stringer Installation Cabin Sta 247.00 - 265.00,	70070-20167-026	
	consisting of:		
1	Mod. Kit, Left Side,	70070-20167-027	
	consisting of:		
9	Rivet	MS20470AD4-4	
9	Rivet	MS20470AD4-5	
106	Rivet	MS20470AD5-5	
6	Rivet	MS20470AD5-6	
6	Rivet	MS20470AD5-7	
41	Rivet	MS20470AD5-8	
4	Rivet	MS20470AD6-8	
55	Rivet, Blind	NAS1738B5-2	
1	Radius Block	SS1058A5-24-12	
2	Bracket Angle	SS1082-192	
1	Stringer	70070-20167-103	
1	Clip	70070-20167-105	
4	Clip	70070-20167-106	
1	Clip	70070-20167-107	
1	Stringer	70070-20167-111	
2	Clip	70070-20167-113	
1	Stringer	70070-20167-117	
1	Stringer	70070-20167-119	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Stiffener	70070-20167-121	
1	Stiffener	70070-20167-123	
2	Clip	70070-20167-125	
1	Stringer	70070-20167-127	
1	Mod. Kit, Right Side,	70070-20167-028	
	consisting of:		
9	Rivet	MS20470AD4-4	
9	Rivet	MS20470AD4-5	
106	Rivet	MS20470AD5-5	
6	Rivet	MS20470AD5-6	
6	Rivet	MS20470AD5-7	
41	Rivet	MS20470AD5-8	
4	Rivet	MS20470AD6-8	
55	Rivet, Blind	NAS1738B5-2	
1	Radius Block	SS1058A5-24-12	
2	Bracket Angle	SS1082-192	
1	Stringer	70070-20167-104	
1	Clip	70070-20167-105	
4	Clip	70070-20167-106	
1	Clip	70070-20167-108	
1	Stringer	70070-20167-112	
2	Clip	70070-20167-114	
1	Stringer	70070-20167-118	
1	Stringer	70070-20167-120	
1	Stiffener	70070-20167-122	
1	Stiffener	70070-20167-124	
2	Clip	70070-20167-125	
1	Stringer	70070-20167-126	
1	Mod. Kit, Plating Instl- Side Fuselage Sta 247.00 to Sta 308.00,	70070-20470-011	
	consisting of:		
1	Mod. Kit,	70070-20470-012	
	consisting of:		
2	Bolt	AN173-10A	
1	Bolt	AN173-12A	
1	Bolt	AN173-20A	
4	Bolt	AN173-7A	
2	Pin, Hi Lok	HL20PB-5-4	
16	Washer	AN960KD10LL	
1	Pin, Hi Lok	HL22-5-3	
1	Collar	HL77-5	
2	Collar	HL86PB-5	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
3	Rivet	MS20426AD6-9	
11	Rivet	MS20470AD4-9	
16	Rivet	MS20470AD5-9	
258	Rivet	MS20470AD6-9	
22	Rivet	MS20605S3W5	
8	Nut	MS21044N3	
10	Nutplate	MS21075-3N	
23	Grommet	MS21266-2N	
8	Fastener, Blind	MS90354U0502	
6	Fastener, Blind	MS90354U0503	
1	Collar	NAS1080-5	
48	Collar	NAS1080-06	
2	Rivet	NAS1097AD5-9	
1	Pin, SWG LKG	NAS1465-03	
28	Pin, SWG LKG	NAS1466-04	
20	Pin, SWG LKG	NAS1466-08	
32	Rivet, Blind	NAS1738B4-3	
15	Rivet, Blind	NAS1738B5-2	
40	Rivet, Blind	NAS1738B6-2	
29	Rivet, Blind	NAS1738B6-3	
17	Rivet, Blind	NAS1738B6-4	
20	Rivet, Blind	NAS1738B6-5	
4	Rivet, Blind	NAS1738B6-6	
6	Rivet, Blind	NAS1738B6-7	
2	Rivet, Blind	NAS1738B6-8	
3	Shim	70212-02307-104	
1	Stiffener	70212-02307-114	
1	Angle	70212-02307-118	
1	Angle	70212-02307-120	
1	Stiffner	70212-02307-124	
1	Plating Assy	70213-02301-042	
1	Doubler	70213-02301-114	
1	Skin Inner	70213-02301-130	
1	Zee	70213-02301-138	
1	Foam	70213-02301-139	
1	Bracket Assy	70551-02001-065	
1	Mod. Kit, Left Side,	70070-20470-013	
	consisting of:		
2	Bolt	AN173-10A	
1	Bolt	AN173-12A	
1	Bolt	AN173-20A	
4	Bolt	AN173-7A	
2	Pin, Hi Lok	HL20PB-5-4E	
16	Washer	AN960KD10LL	
1	Pin, Hi Lok	HL22-5-3	
1	Collar	HL77-5	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
2	Collar	HL86PB-5	
3	Rivet	MS20426AD6-9	
11	Rivet	MS20470AD4-9	
16	Rivet	MS20470AD5-9	
258	Rivet	MS20470AD6-9	
22	Rivet	MS20605S3W5	
8	Nut	MS21044N3	
10	Nutplate	MS21075-3N	
23	Grommet	MS21266-2N	
8	Fastener, Blind	MS90354U0502	
6	Fastener, Blind	MS90354U0503	
1	Collar	NAS1080-05	
48	Collar	NAS1080-06	
2	Rivet	NAS1097AD5-9	
1	Pin, SWG LKG	NAS1465-03	
28	Pin, SWG LKG	NAS1466-04	
20	Pin, SWG LKG	NAS1466-08	
32	Rivet, Blind	NAS1738B4-3	
15	Rivet, Blind	NAS1738B5-2	
40	Rivet, Blind	NAS1738B6-2	
29	Rivet, Blind	NAS1738B6-3	
17	Rivet, Blind	NAS1738B6-4	
20	Rivet, Blind	NAS1738B6-5	
4	Rivet, Blind	NAS1738B6-6	
6	Rivet, Blind	NAS1738B6-7	
2	Rivet, Blind	NAS1738B6-8	
3	Shim	70212-02307-104	
1	Stiffner	70212-02307-113	
1	Angle	70212-02307-117	
1	Angle	70212-02307-119	
1	Stiffner	70212-02307-123	
1	Plating Assy	70213-02301-041	
1	Doubler	70213-02301-113	
1	Skin Inner	70213-02301-129	
1	Zee	70213-02301-137	
1	Foam	70213-02301-139	
1	Bracket Assy	70551-02001-064	
1	Mod. Kit, Beef Up, Left Side,	70070-20527-012	
	consisting of:		
20	Rivet	MS20470AD4-9	
46	Rivet	MS20470AD5-9	
69	Rivet	MS20470AD6-9	
9	Fastener, Blind	MS90354-0502	
7	Fastener, Blind	MS90354-0503	
3	Collar	NAS1080-05	
16	Collar	NAS1080-06	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
3	Collar	NAS1080D05	
2	Rivet	NAS1097AD4-9	
3	Pin, SWG LKG	NAS1465-03	
5	Pin, SWG LKG	NAS1466-03	
11	Pin, SWG LKG	NAS1466-04	
3	Pin, SWG LKG	NAS1525-04	
16	Rivet, Blind	NAS1738B5-2	
11	Rivet, Blind	NAS1738B5-3	
59	Rivet, Blind	NAS1738B6-2	
6	Rivet, Blind	NAS1738B6-3	
9	Rivet, Blind	NAS1738B6-4	
1	Channel, LH	70083-20110-103	
1	Channel, LH	70083-20110-105	
1	Shim	70083-20110-107	
1	Shim	70083-20110-109	
1	Angle	70083-20110-111	
1	Angle	70083-20110-113	
1	Doubler	70083-20110-115	
1	Strap	70083-20110-118	
1	Mod. Kit, Right Side, Beef Up,	70070-20527-013	
	consisting of:		
20	Rivet	MS20470AD4-9	
46	Rivet	MS20470AD5-9	
97	Rivet	MS20470AD6-9	
9	Fastener, Blind	MS90354-0502	
7	Fastener, Blind	MS90354-0503	
3	Collar	NAS1080-05	
16	Collar	NAS1080-06	
3	Collar	NAS1080D05	
2	Rivet	NAS1097AD4-9	
3	Pin, SWG LKG	NAS1465-03	
5	Pin, SWG LKG	NAS1466-03	
11	Pin, SWG LKG	NAS1466-04	
3	Pin, SWG LKG	NAS1525-04	
16	Rivet, Blind	NAS1738B5-2	
11	Rivet, Blind	NAS1738B5-3	
59	Rivet, Blind	NAS1738B6-2	
6	Rivet, Blind	NAS1738B6-3	
9	Rivet, Blind	NAS1738B6-4	
1	Channel, RH	70083-20110-104	
1	Channel, RH	70083-20110-106	
1	Shim	70083-20110-108	
1	Shim	70083-20110-109	
1	Angle	70083-20110-112	
1	Angle	70083-20110-114	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Doubler	70083-20110-116	
1	Strap	70083-20110-117	

B. Consumable Material:

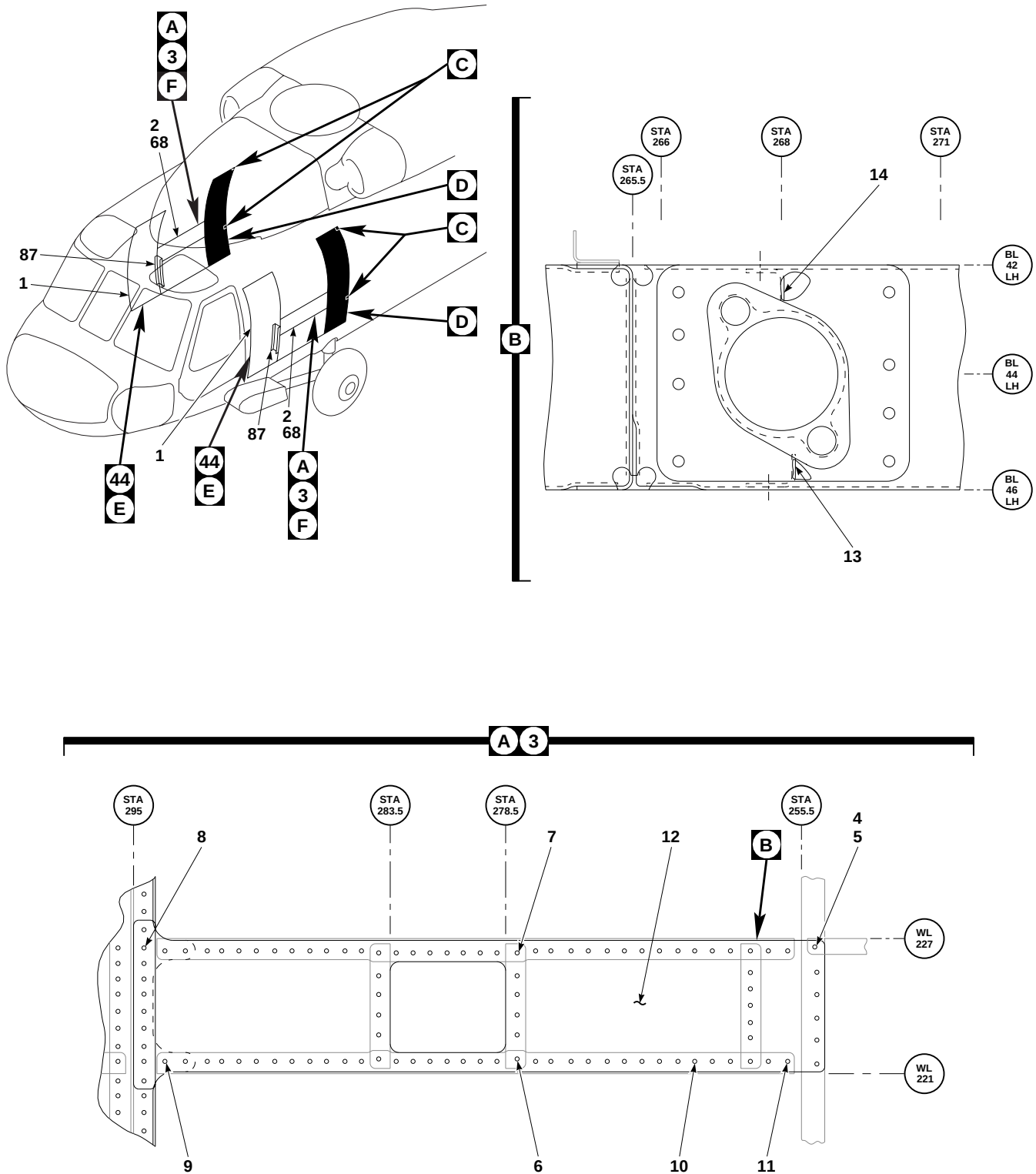
WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
4 oz.	Adhesive	EC-1357	(1)
8 oz.	Sealant	AMS-S-8802, A2 or equivalent	(1)
8 oz.	Sealant	AMS-S-8802, B2 or equivalent	(1)
8 oz.	Sealant	AMS-S-8802, C20 or equivalent	(1)

C. Source:

- (1) Available through normal supply channels



AB3102_1
SA

Figure E-4. Modification Kit (Sheet 1 of 4)

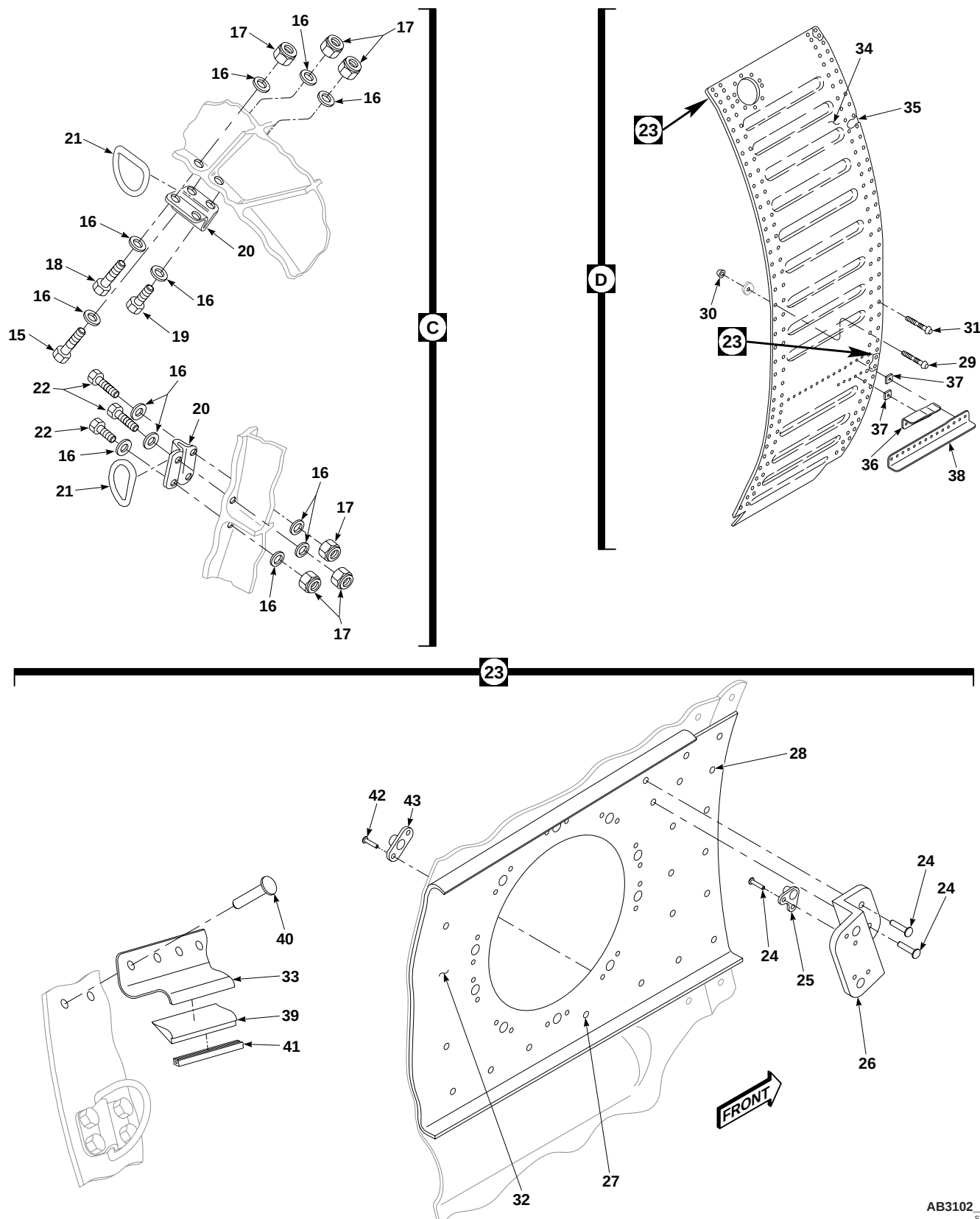


Figure E-4. Modification Kit (Sheet 2 of 4)

AB3102_2
SA

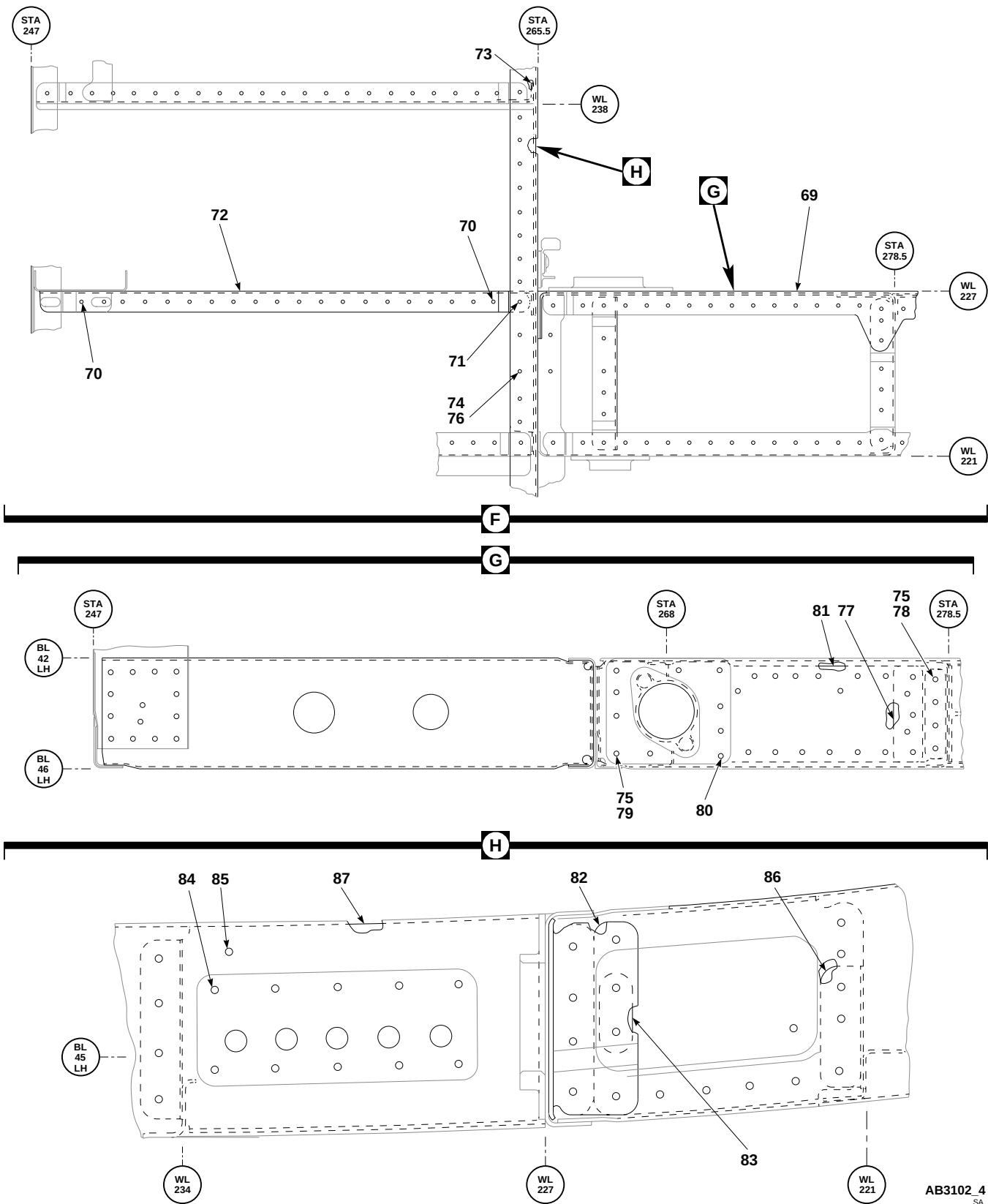


Figure E-4. Modification Kit (Sheet 4 of 4)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-4-	70070-20527-011		MODIFICATION KIT	REF	
-1	70070-20470-011	.	MOD KIT	1	
-2	70070-20470-013	. .	MOD KIT	1	
	70070-20470-012	. .	MOD KIT, RH.....	1	
-3	70213-02301-041	. . .	PLATING ASSY	1	
	70213-02301-042	. . .	PLATING ASSY, (Used on 70070-20470-012) .	1	
-4	HL22-5-3	. . .	HI-LOK PIN, (73197).....	1	
	HL20PB-5-4	. . .	HI-LOK PIN, (73197).....	2	*
-5	HL77-5	. . .	COLLAR, (73197)	1	
	HL86PB-5	. . .	COLLAR, (73197)	2	*
-6	MS90354U0503	. . .	BLIND FASTENER	6	
-7	MS90354U0502	. . .	BLIND FASTENER	8	
-8	NAS1738B6-4	. . .	BLIND RIVET.....	17	
	NAS1738B6-6	. . .	BLIND RIVET.....	4	*
	NAS1738B6-7	. . .	BLIND RIVET.....	6	*
	NAS1738B6-8	. . .	BLIND RIVET.....	2	*
-9	NAS1738B6-3	. . .	BLIND RIVET.....	29	
-10	NAS1738B5-2	. . .	BLIND RIVET.....	15	
-11	NAS1738B6-2	. . .	BLIND RIVET.....	40	
	NAS1738B4-3	. . .	BLIND RIVET.....	32	*
-12	70213-02301-129	. . .	SKIN INNER	1	
	70213-02301-130	. . .	SKIN INNER, (Used on 70070-20470-012).....	1	
-13	70212-02307-123	. . .	STIFFENER	1	
	70070-20167-124	. . .	STIFFENER, (Used on 70070-20470-012).....	1	
-14	70212-02307-113	. . .	STIFFENER	1	
	70212-02307-114	. . .	STIFFENER, (Used on 70070-20470-012).....	1	
-15	AN173-20A	. . .	BOLT	1	
-16	AN960KD10LL	. . .	WASHER	16	
-17	MS21044N3	. . .	NUT	8	
-18	AN173-12A	. . .	BOLT	1	
-19	AN173-10A	. . .	BOLT	2	
-20	70219-02313-102	. . .	FITTING	REF	
-21	70219-02313-101	. . .	RING	REF	
-22	AN173-7A	. . .	BOLT	4	
-23	70551-02001-064	. . .	BRACKET ASSY	1	
	70551-02001-065	. . .	BRACKET ASSY, (Used on 70070-20470-012)	1	
-24	MS20426AD3		RIVET.....	4	
-25	MS21073-3		NUTPLATE	2	
-26	70551-02001-164		BRACKET	1	
-27	NAS1097AD5-9		RIVET.....	2	
-28	MS20470AD6-9		RIVET.....	258	
	MS20426AD6-9		RIVET.....	3	*
	MS20470AD4-9		RIVET.....	11	*
	MS20470AD5-9		RIVET.....	16	*
-29	NAS1466-08	. . .	SWAGE LOCKING PIN	20	
-30	NAS1080-06	. . .	COLLAR.....	48	
-31	NAS1466-04	. . .	SWAGE LOCKING PIN	28	
	NAS1465-03	. . .	SWAGE LOCKING PIN	1	*
	NAS1080-05	. . .	COLLAR.....	1	*
-32	70213-02301-113	. . .	DOUBLER.....	1	
	70213-02301-114	. . .	DOUBLER, (Used on 70070-20470-012)	1	
-33	70213-02301-137	. . .	ZEE	1	
	70213-02301-138	. . .	ZEE, (Used on 70070-20470-012).....	1	
-34	70213-02301-120		SKIN INNER	1	
	70213-02301-121		SKIN INNER, (Used on 70070-20470-012)....	1	
-35	70213-02301-122		SKIN INNER	1	
	70213-02301-123		SKIN INNER, (Used on 70070-20470-012)....	1	
-36	70212-02307-119	. . .	ANGLE	1	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
	70212-02307-120	.	.	.	ANGLE, (Used on 70070-20470-012)					1	
-37	70212-02307-104	.	.	.	SHIM					3	
-38	70212-02307-117	.	.	.	ANGLE					1	
	70212-02307-118	.	.	.	ANGLE, (Used on 70070-20470-012)					1	
-39	70213-02301-139	.	.	.	FOAM.....					1	
-40	NAS1738B6-5	.	.	.	BLIND RIVET					20	
-41	MS21266-2N	.	.	.	GROMMET					23	
-42	MS20605S3W5	.	.	.	RIVET.....					22	
-43	MS21075-3N	.	.	.	NUTPLATE					10	
-44	70070-20167-026	.	.	.	MOD KIT					1	
-45	70070-20167-027	.	.	.	LH MOD KIT					1	
	70070-20167-028	.	.	.	RH MOD KIT.....					1	
-46	70070-20167-029	.	.	.	PLATING INSTL., (Modified from 70213-02301-017).....					REF	
	70070-20167-030	.	.	.	PLATING INSTL., (Used on 70070-20167-028) (Modified from 70213-02301-018).....					REF	
-47	MS20470AD5-8	.	.	.	RIVET.....					41	
-48	70070-20167-125	.	.	.	CLIP					2	
-49	70070-20167-123	.	.	.	STIFFENER					1	
	70212-02307-124	.	.	.	STIFFENER, (Used on 70070-20167-028).....					1	
-50	70070-20167-121	.	.	.	STIFFENER					1	
	70070-20167-122	.	.	.	STIFFENER, (Used on 70070-20167-028).....					1	
	NAS1738B5-2	.	.	.	BLIND RIVET					55	*
-51	MS20470AD6-8	.	.	.	RIVET.....					4	
-52	SS1082-192	.	.	.	BRACKET ANGLE					2	
-53	70070-20167-105	.	.	.	CLIP					1	
-54	70070-20167-119	.	.	.	STRINGER.....					1	
	70070-20167-120	.	.	.	STRINGER, (Used on 70070-20167-028)					1	
-55	MS20470AD5-7	.	.	.	RIVET.....					6	
-56	70070-20167-107	.	.	.	CLIP					1	
	70070-20167-108	.	.	.	CLIP, (Used on 70070-20167-028).....					1	
-57	MS20470AD4-4	.	.	.	RIVET.....					9	
-58	MS20470AD4-5	.	.	.	RIVET.....					9	
-59	70070-20167-106	.	.	.	CLIP					4	
-60	MS20470AD5-5	.	.	.	RIVET.....					106	
-61	70070-20167-103	.	.	.	STRINGER.....					1	
	70070-20167-104	.	.	.	STRINGER, (Used on 70070-20167-028)					1	
-62	70070-20167-113	.	.	.	CLIP					2	
	70070-20167-114	.	.	.	CLIP, (Used on 70070-20167-028).....					2	
-63	SS1058A5-24-12	.	.	.	RADIUS BLOCK					1	
-64	70070-20167-111	.	.	.	STRINGER.....					1	
	70070-20167-112	.	.	.	STRINGER, (Used on 70070-20167-028)					1	
-65	70070-20167-117	.	.	.	STRINGER.....					1	
	70070-20167-118	.	.	.	STRINGER, (Used on 70070-20167-028)					1	
-66	MS20470AD5-6	.	.	.	RIVET.....					6	
-67	70070-20167-127	.	.	.	STRINGER.....					1	
	70070-20167-126	.	.	.	STRINGER, (Used on 70070-20167-028)					1	
-68	70070-20527-012	.	.	.	MOD KIT BEEF-UP					1	
	70070-20527-013	.	.	.	MOD KIT BEEF-UP					1	
-69	70083-20110-011	.	.	.	STR MOD GECAL					REF	
	70083-20110-012	.	.	.	PROD MOD RH, (Used on 70070-20527-013)					REF	
-70	MS20470AD5-9	.	.	.	RIVET.....					46	
	MS20470AD4-9	.	.	.	RIVET.....					20	*
	NAS1097AD4-9	.	.	.	RIVET.....					2	*
-71	MS20470AD6-9	.	.	.	RIVET.....					69	
-72	70083-20110-103	.	.	.	CHANNEL LH					1	
	70083-20110-104	.	.	.	CHANNEL RH, (Used on 70070-20527-013)					1	
-73	70083-20110-113	.	.	.	ANGLE					1	
	70083-20110-114	.	.	.	ANGLE, (Used on 70070-20527-013)					1	
-74	NAS1525-04	.	.	.	SWAGE LOCKING PIN					3	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
-75	NAS1080-06	.	.	.	.	.	.	.	COLLAR.....	16	
-76	NAS1080-05	.	.	.	.	.	.	.	COLLAR.....	3	
	NAS1080D05	.	.	.	.	.	.	.	COLLAR.....	3	*
-77	70083-20110-118	.	.	.	.	.	.	.	STRAP	1	
	70083-20110-117	.	.	.	.	.	.	.	STRAP, (Used on 70070-20527-013).....	1	
-78	NAS1466-03	.	.	.	.	.	.	.	SWAGE LOCKING PIN	5	
-79	NAS1465-03	.	.	.	.	.	.	.	SWAGE LOCKING PIN	3	
	MS90354-0502	.	.	.	.	.	.	.	BLIND FASTENER	9	*
	MS90354-0503	.	.	.	.	.	.	.	BLIND FASTENER	7	*
-80	NAS1466-04	.	.	.	.	.	.	.	SWAGE LOCKING PIN	11	
-81	70083-20110-115	.	.	.	.	.	.	.	DOUBLER.....	1	
	70083-20110-116	.	.	.	.	.	.	.	DOUBLER, (Used on 70070-20527-013)	1	
-82	70083-20110-107	.	.	.	.	.	.	.	SHIM	1	
	70083-20110-108	.	.	.	.	.	.	.	SHIM, (Used on 70070-20527-013).....	1	
-83	70083-20110-109	.	.	.	.	.	.	.	SHIM	1	
-84	NAS1738B5-3	.	.	.	.	.	.	.	BLIND RIVET	11	
	NAS1738B5-2	.	.	.	.	.	.	.	BLIND RIVET	16	*
-85	NAS1738B6-3	.	.	.	.	.	.	.	BLIND RIVET	6	
	NAS1738B6-2	.	.	.	.	.	.	.	BLIND RIVET	59	*
	NAS1738B6-4	.	.	.	.	.	.	.	BLIND RIVET	9	*
-86	70083-20110-111	.	.	.	.	.	.	.	ANGLE	1	
	70083-20110-112	.	.	.	.	.	.	.	ANGLE, (Used on 70070-20527-013)	1	
-87	70083-20110-105	.	.	.	.	.	.	.	CHANNEL LH	1	
	70083-20110-106	.	.	.	.	.	.	.	CHANNEL RH, (Used on 70070-20527-013)....	1	

E-6. STATION 379 MODIFICATION KIT (50-26).

Subject: Station 379.00 Frame, Modification of, dated 31 March 2003

Purpose: Provide instructions to install straps and doublers at station 379.00 frame left and right sides.

Model: UH-60A

Description: The left and right side station 379.00 frame at waterlines 206.00 and 255.00 are modified by installing new straps and doublers and cold expanding holes.

Drawings required for modification:

70070-20568

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) SSI No. 50-6, Lower Aft Transition, Rework of, dated 31 March 2003

(c) TM 1-1500-335-23, Technical Manual, Nondestructive Inspection Methods

(d) TM 1-1520-265-23, Technical Manual, Aviation Unit Maintenance (AVUM) and Aviation Intermediate Maintenance (AVIM) Manual, Nondestructive Inspection Procedures for H-60 Helicopter Series

Instructions:

NOTE

- A complete review of this SSI is recommended before modifying station 379.00 frame.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- Personnel must be trained and certified in hole quality assurance and proper cold expansion procedures per SS5098.
- This modification is to be done concurrently with reference (b).

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Installation of new straps at station 379.00 left and right sides:

NOTE

Rework and installation of doublers (70070-20568-101 and -102) at waterline 206.75 left and right sides must be done in conjunction with reference (b).

- (1) Remove existing fasteners between station 373.00 and station 385.00, waterline 206.75, left side (Dwg 70070-20568, Sheet 3, Zones 7-E through 9-E).
- (2) Position doubler (70070-20568-101) and tapered shim (SS81-202-I) between station 373.00 and station 385.00 and transfer drill from structure into doubler (-101) (Sheet 3, Zones 9-F and 7-F).
- (3) Inspect holes and surrounding area prior to cold expansion (Sheet 2, Note 7).
- (4) Cold work holes where existing fasteners were removed in step B.(1) (Sheet 3, Zones 7-E through 9-E; Sheet 2, Note 2, and reference (c) and (d)).
- (5) Remove doubler (70070-20568-101) deburr and touch up as required reworked area.

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

- (6) Install doubler (70070-20568-101) wet with sealant (AMS-S-8802 or equivalent) using fasteners shown (Sheet 3, Zone 9-F and Sheet 2, Note 2).
- (7) Repeat steps B.(1) through (5) to install right side doubler (70070-20568-102).
- (8) Remove existing fasteners at station 379.00, waterline 255.00, left butline 40.00 (Sheet 2, Zones 4-E through 6-H).
- (9) Position strap (70211-02111-120) at station 370.00, waterline 255.00, left butline 40.00 and transfer drill from structure into strap (-120) (Sheet 2, Zones 4-F through 6-H).
- (10) Inspect holes and surrounding area prior to cold expansion (Sheet 2, Note 7).
- (11) Cold work holes where existing fasteners were removed in step B.(7) (Sheet 2, Zones 3-F through 5-G, Notes 1, 2, and reference (c) and (d)).
- (12) Remove strap (70211-02111-120) deburr and touch up as required reworked area.

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(13) Install strap (70211-02111-120) wet with sealant (AMS-S-8802 or equivalent) using fasteners shown (Sheet 2, Zones 4-F through 6-H, Notes 1 and 2).

(14) Repeat steps B.(7) through (11) to install right side strap (70211-02111-120).

C. Reinstallation of removed equipment:

(1) Install removed equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20568-011	Mod. Kit	+0.6	379.0	0.227

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +0.6 pounds

Moment arm: 379.0 in.

Change in basic moment/1000: 0.227

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	1	24.0	*24.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification kit required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Station 379.00, consisting of:	70070-20568-011	(1)
1	Mod. Kit, Spl. Inst consisting of:	70070-20568-012	
66	Collar	HL1087ATW-6	
31	Pin, Hi Lok	HL20PB-6-3	
9	Pin, Hi Lok	HL20PB-6-4	
26	Pin, Hi Lok	HL20PB-6-5	
2	Strap	70211-02111-120	
1	Mod. Kit, Strap Instl, consisting of:	70070-20568-013	
5	Pin, Hi-Lok	HL12VAZ-6-3	
22	Pin, Hi-Lok	HL12VAZ-6-5	
3	Pin, Hi-Lok	HL12VAZ-6-6	
3	Pin, Hi-Lok	HL12VAZ-6-9	
33	Collar	HL75DU-6ADW	
12	Fastener, Blind	MS90354U0605	
3	Fastener, Blind	MS90354U0606	
3	Fastener, Blind	MS90354U0608	
10	Collar	NAS1080-06	
5	Pin, SWG LKG	NAS1466-04	
5	Pin, SWG LKG	NAS1466-05	
3	Rivet, Blind	NAS1738B5-6	
3	Rivet, Blind	NAS1738B5-7	
1	Doubler	70070-20568-101	
1	Doubler	70070-20568-102	
2	Shim, Tapered	SS81-202-I	

B. Consumable Material:

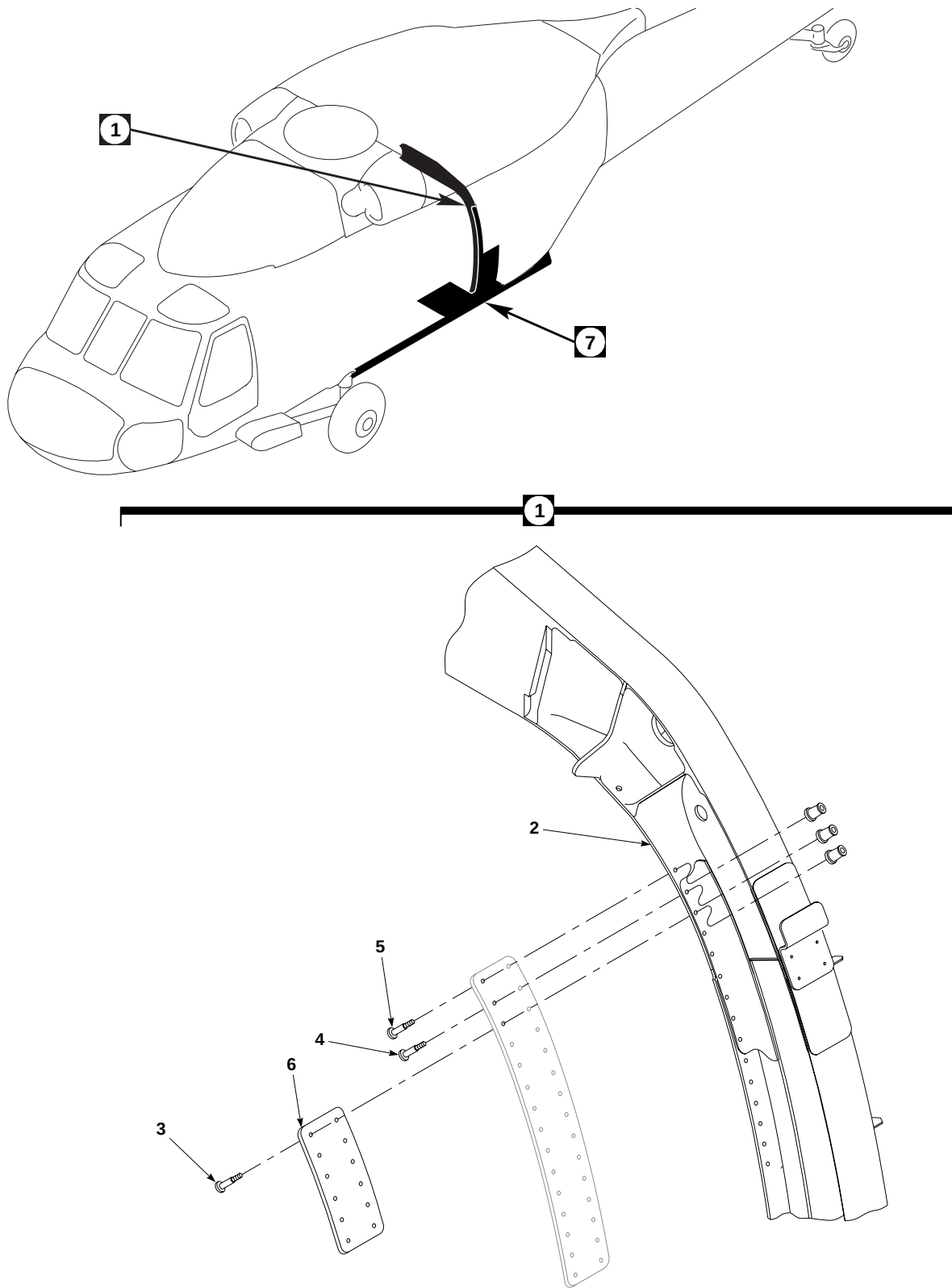


OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
6 oz.	Sealant	AMS-S-8802 or equivalent	(1)

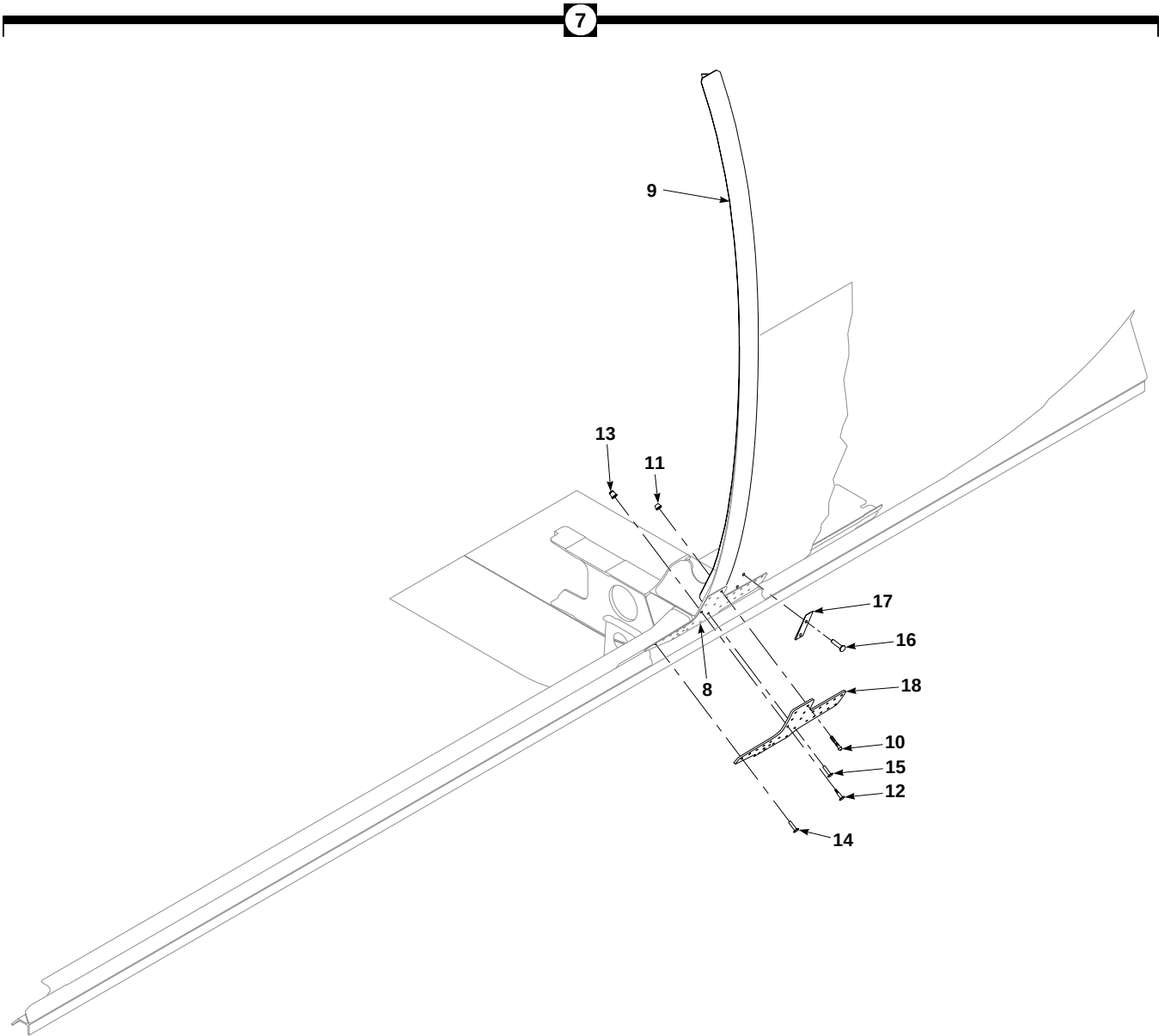
C. Source:

- (1) Available through normal supply channels



AB3119_1
SA

Figure E-5. Station 379 Modification Kit (Sheet 1 of 2)



AB3119_2
SA

Figure E-5. Station 379 Modification Kit (Sheet 2 of 2)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-5-	70070-20568-011		STATION 379 MODIFICATION KIT	REF	
-1	70070-20568-012		. M/K SPLICE INSTALLATION	1	
-2	70070-20568-015		. . SPLICE INSTALLATION, (Modified from 70211-02111-013).....	REF	
	70070-20568-016		. . SPLICE INSTALLATION, (Modified from 70211-02111-014).....	REF	
-3	HL64PB-6-5		. . HI-LOK PIN, (73197).....	26	
	HL1087ATW-6		. . COLLAR, (73197)	26	
-4	HL64PB-6-4		. . HI-LOK PIN, (73197).....	9	
	HL1087ATW-6		. . COLLAR, (73197)	9	
-5	HL20PB-6-3		. . HI-LOK PIN, (73197).....	31	
	HL1087ATW-6		. . COLLAR, (73197)	31	
-6	70211-02111-120		. . STRAP	2	
-7	70070-20568-013		. M/K STRAP INSTALLATION.....	1	
-8	70070-20568-014		. . STRAP INSTALLATION, (Modified from 70213-02501-014).....	REF	
-9	70070-20568-017		. . SEAL INSTALLATION, (Modified from 70217-02721-013).....	REF	
	70070-20568-018		. . SEAL INSTALLATION, (Modified from 70217-02721-014).....	REF	
-10	NAS1466-05		. . SWAGE LOCKING PIN	5	
	NAS1466-04		. . SWAGE LOCKING PIN	5	
-11	NAS1080-06		. . COLLAR.....	10	
-12	HL12VAZ-6-9		. . HI-LOK PIN, (73197).....	3	
	HL12VAZ-6-6		. . HI-LOK PIN, (73197).....	3	
	HL12VAZ-6-3		. . HI-LOK PIN, (73197).....	5	
	HL12VAZ-6-5		. . HI-LOK PIN, (73197).....	22	
-13	HL75DU-6ADW		. . COLLAR (73197)	33	
-14	MS90354U0605		. . BLIND FASTENER	12	
	MS90354U0606		. . BLIND FASTENER	3	
	MS90354U0608		. . BLIND FASTENER	3	
-15	NAS1738B5-7		. . BLIND RIVET	3	
	NAS1738B5-6		. . BLIND RIVET	13	
-16	NAS1738B4-7		. . BLIND RIVET	3	
-17	SS81-202-I		. . TAPERED SHIM.....	2	
-18	70070-20568-101		. . DOUBLER, LH	1	
	70070-20568-102		. . DOUBLER, RH	1	

E-7. UPPER PLATING MODIFICATION KIT (50-16).

Subject: Upper Plating and Doubler Installation, Rework of, dated 31 March 2003

Purpose: Provide instructions for installing new cabin upper plating and doubler.

Model: UH-60A

Description: The following is a brief overview of the work required to rework upper transition stations 320.00 through 380.00. New doublers and upper deck plating is installed.

Drawings required for modification:

70070-20570, 70213-02101

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) TM-1-1520-265-23, Technical Manual, Aviation Unit Maintenance (AVUM) and Aviation Intermediate (AVIM) Manual, Nondestructive Test Procedure for H-60 Helicopter Series

(c) TM-1-1500-335-23, Technical Manual, Nondestructive Inspection Method

Instructions:

NOTE

- A complete review of this SSI is recommended before installing the upper plating and doubler installation.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- Personnel must be trained and certified in hole quality assurance and proper cold expansion procedures per SS5098.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Rework of plating installation (70213-02101-011, -013, or -014), stringer installation (70212-02119-011, -012, -013, or -014), frame assembly (70211-02109-041 or -042), nutplate installation (70213-02101-012), stringer installation (70202-02120-011 or -012), and angle installation (70304-02201-011 or -012) as follows:

(1) Removals between stations 320.00 and 380.00, left and right buttlines 34.50 as follows (Dwg 70070-20570):

(a) Remove and save for reuse fairing (70213-02101-127 or -163) and doubler (70213-02101-129) station 335.00, left buttlines 22.25 (Sheet 5, View D, Zone 5-E).

(b) Remove and save for reuse fairing (70213-02101-128 or -162) and doubler (70213-02101-129) station 335.00, right buttlines 22.25 (Sheet 5, View P, Zones 7-B and 7-D).

(c) Remove five nutplates (MS21075-3) and four nutplates (MS21069-3) left and right sides (Sheet 4, Zones 12-G, 13-G, and 16-E; Sheet 6, Zones 12-B, 16-D, and 16-E).

(d) Remove two doubler washers (SS430X15B000431) between left buttlines 18.00 and 22.00 (Sheet 4, Zones 14-G and 16-F).

(e) Remove angle (70304-02201-109) and angle (70304-02201-103 or -112) left side firewall (Sheet 4, Zones 10-D and 11-G).

(f) Remove gusset (70213-02101-106) left side (Sheet 4, Zone 16-D).

(g) Remove and save for reuse angle (70211-02109-117) station 343.61, left side (Sheet 7, Zone 11-B).

(h) Remove clips (70211-02110-111, -112, and 70211-02109-121) station 343.61, left side (Sheet 7, Section T-T, Zones 13-D, 14-E, and 16-E).

(i) Remove angles (70211-02109-109, -115, and 70213-02101-121) left side (Sheet 5, Zone 5-G; Sheet 7, Zones 8-G and 9-C).

(j) Remove and save for reuse angle (70211-02109-118) station 343.61, right side (Sheet 7, Zone 7-B).

(k) Remove angles (70211-02109-110, -116, and 70213-02101-122) right side (Sheet 5, Zone 5-G; Sheet 7, Zones 8-G and 9-C).

(l) Remove clips (70211-02110-111, -112, and 70211-02109-121) right side (Sheet 7, Section T-T, Zones 13-D, 14-E, and 16-E).

(m) Remove gusset (70213-02101-106) right side (opposite) (Sheet 4, Zone 16-D).

(n) Remove angle (70304-02201-107 or -113) and angle (70304-02201-106) right side firewall (Sheet 6, Zones 10-D and 11-B).

(o) Remove gusset (70213-02101-126) station 365.00, right buttlines 5.00 (Sheet 5, Zone 10-G).

(p) Remove remaining fasteners shown on sheets 4, 5, 6, and 7.

(2) Installations between stations 320.00 and 380.00, left and right buttlines 34.50 as follows (Dwg 70070-20570):

- (a) Temporarily install doubler (70070-20570-141), gusset (70070-20570-105), and filler (70070-20570-139) between stations 328.00 and 355.00, left buttlines 16.50 and 30.00 (Sheet 4, Zones 9-A, 13-C, and 16-D).
- (b) Make cutout in doubler (70070-20570-141) and gusset (70070-20570-105) using hole in skin as a template (Sheet 5, View D, Zone 3-C).
- (c) Temporarily reinstall saved fairing (70213-02101-127 or -163) and doubler (70213-01201-129) (Sheet 5, View D, Zone 4-E; Sheet 4, Zones 13-D, 13-E, 14-D, and 14-E).
- (d) Temporarily install angle (70070-20570-125 or -127) and angle (70070-20570-107) to left side firewall (Sheet 2, Notes 10 and 11; Sheet 4, Zones 10-D and 11-G; Sheet 6, Sections W-W, AB-AB, and Y-Y, Zones 3-D, 3-G, and 6-C).
- (e) Temporarily install zee (70070-20570-111) with two clips (70070-20570-110) to left side cabin overhead (Sheet 4, Zones 11-C and 11-G; Sheet 5, Sections F-F, G-G, and H-H, Zones 4-G, 6-F, and 7-F).
- (f) Make cutout in angle (70070-20570-125 or -127) using existing hole in firewall as a template (Sheet 6, Sections AB-AB and Y-Y; Sheet 2, Notes 10 and 11; Sheet 3, Note 24).
- (g) Temporarily install two doubler washers (SS430X15B000431) between stations 330.00 and 340.00, left buttlines 16.50 and 22.50 (Sheet 4, Zones 14-G and 16-F).
- (h) Drill two number 8 (0.199-inch diameter) holes, one number 11 (0.191-inch diameter) hole, and three number 1 (0.228-inch diameter) holes (Sheet 4, Zones 12-G, 13-G, 14-F, and 16-E).
- (i) Temporarily install three nutplates (MS21075-3) and two nutplates (MS21069-3) between stations 330.00 and 345.00, left buttlines 16.5 and 22.50 (Sheet 4, Zones 12-G and 16-E).
- (j) Temporarily install clip (70070-20570-117) in cabin overhead station 343.61, left buttlines 28.75 (Sheet 7, Sections E-E and R-R, Zones 13-D and 15-B).
- (k) Temporarily install angles (70070-20570-135 and -137) and two clips (70070-20570-123) in cabin overhead station 343.61, between left buttlines 16.00 and 23.00 (Sheet 7, Sections E-E, T-T, U-U, and V-V, Zones 8-G, 9-C, 14-E, and 16-E).
- (l) Temporarily reinstall angle (70211-02109-117) in cabin overhead station 343.61, left buttlines 23.50 (Sheet 7, Section E-E, Zone 11-B).
- (m) Temporarily install clip (70070-20570-118) in cabin overhead station 343.61, right buttlines 28.75 (Sheet 7, Sections E-E, N-N, and R-R, Zones 5-C, 13-C, and 15-B).
- (n) Temporarily install angles (70070-20570-136 and -138) and two clips (70070-20570-123) in cabin overhead station 343.61, between right buttlines 16.00 and 23.00 (Sheet 7, Sections N-N, T-T, U-U, and V-V, Zones 8-G, 9-C, 14-E, and 16-E).
- (o) Temporarily reinstall angle (70211-02109-118) in cabin overhead station 343.61, right buttlines 23.50 (Sheet 7, Section N-N, Zone 7-B).
- (p) Temporarily install doubler (70070-20570-142), gusset (70070-20570-106), and filler (70070-20570-140) between stations 328.00 and 355.00, right buttlines 16.50 and 30.00 (right side opposite) (Sheet 4, Zones 9-A, 13-B, and 16-D; Sheet 6, Zones 10-F, 11-F, and 16-D).

- (q) Make cutout in doubler (70070-20570-142) and gusset (70070-20570-106) on right side using hole in skin as template (Sheet 5, View P, Zone 6-D).
- (r) Temporarily reinstall saved fairing (70213-02101-128 or -162) and doubler (70213-02101-129) (Sheet 5, View P, Zones 7-B and 8-D; Sheet 6, Zones 13-D, 13-E, 14-D, and 14-E).
- (s) Temporarily install angle (70070-20570-126 or -128) and angle (70070-20570-108) to right firewall (Sheet 2, Notes 10 and 11; Sheet 6, Sections AA-AA, AB-AB, and Y-Y, Zones 6-E, 10-E, and 11-B).
- (t) Temporarily install zee (70070-20570-112) with two clips (70070-20570-110) to right side cabin overhead (Sheet 5, Sections F-F, G-G, and H-H, Zones 4-G, 6-F, and 7-F).
- (u) Make cutout in angle (70070-20570-126 or -128) using existing hole in firewall as a template (Sheet 6, Sections AB-AB and Y-Y; Sheet 2, Notes 10 and 11; Sheet 3, Note 24).
- (v) Drill two number 8 (0.199-inch diameter) holes, one number 11 (0.191-inch diameter) hole, and two number 1 (0.288-inch diameter) holes (Sheet 6, Zones 12-B, 14-B, 16-D, and 16-E).
- (w) Temporarily install two nutplates (MS21075-3) and two nutplates (MS21069-3) between stations 325.00 and 345.00, right buttlines 16.50 and 22.25 (Sheet 6, Zones 12-B, 16-D, and 16-E).
- (x) Temporarily install angle (70070-20570-143) with clips (70070-20570-115 and -116) and radius block (SS1058-1-18-14) between buttline 0.00 and left buttline 5.33 (Sheet 5, View B, Sections J-J, L-L, M-M, and K-K, Zones 15-F, 15-G, and 16-G).
- (y) Temporarily install angle (70070-20570-144) with clips (70070-20570-115 and -116) and radius block (SS1058-1-18-14) between buttline 0.00 and right buttline 5.33 (Sheet 5, View B, Sections J-J, L-L, M-M, and K-K, Zones 15-F, 15-G, and 16-G).
- (z) Temporarily install gusset (70070-20570-109) between stations 362.00 and 370.00, left and right buttline 5.33 (Sheet 5, View B, Zone 10-G).
- (aa) Perform penetrant or Eddy current inspection to holes and surrounding area prior to cold expansion (Sheet 4, Note 45).
- (ab) Cold work holes where existing fasteners were removed and hi lok pins (HL20PB) are installed (Sheet 2, Note 18; Sheet 3, Note 27; Sheet 4, Zones 9-F, 9-G, and 15-F; Sheet 6, Zones 9-B, 10-B, 9-C, 10-C, 15-C, and 16-C).
- (ac) Inspect each hole and a 0.20-inch minimum surrounding area for cracks (Sheet 3, Note 27).
- (ad) Cold work holes where existing fasteners were removed and hi lok pins (HL64PB) are installed (Sheet 2, Note 18; Sheet 3, Note 28; Sheet 4, Zones 9-F, 9-G, 10-F, 11-F, 11-E, 12-E, 13-E, 13-F, 14-F, and 15-F; Sheet 6, Zones 9-A, 10-C, 11-C, 12-C, 13-C, 14-C, and 15-C; Sheet 7, Zones 7-D, 10-D, and 11-G).
- (ae) Inspect each hole and a 0.20-inch minimum surrounding area for cracks (Sheet 3, Note 28).
- (af) Transfer drill any remaining fastener holes for assembly (Sheets 4, 5, 6, and 7).
- (ag) Remove parts fitted in steps B.(2) (a) through B.(2) (z), deburr and touch up as required.

WARNING

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(ah) Apply sealant (MIL-S-8802, A2, or C20, or equivalent) to areas indicated by crosshatch (Dwg 70070-20570, Sheet 1, Note 7; Dwg 70213-02101, Sheet 1, Note 1).

(ai) Install parts fitted in steps B.(2)(a) through B.(2)(z) using fasteners shown (Dwg 70070-20570, Sheet 1, Note 7, Sheet 3, Notes 27 and 28, Sheets 4, 5, 6, and 7).

(aj) Reidentify the following parts using pen and contrasting ink (Sheet 4, Note 37):

<u>Old Part No.</u>	<u>Nomenclature</u>	<u>New Part No.</u>
70212-02119-111	Stringer	70070-20570-129
70212-02119-112	Stringer	70070-20570-130
70212-02119-113	Stringer	70070-20570-131
70212-02119-114	Stringer	70070-20570-132
70202-02120-101	Stringer Zee	70070-20570-133
70202-02120-102	Stringer Zee	70070-20570-134

C. Reinstallation of removed equipment:

(1) Install removed equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20570-011	Mod. Kit	+11.4	345.0	3.933

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +11.4 pounds

Moment arm: 345.0 in.

Change in basic moment/1000: 3.933

Manpower (Estimated):

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	2	80.0	*160.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Upper Plating, Doubler Instl,	70070-20570-011	(1)
	consisting of:		
1	Mod. Kit, Plate Assembly,	70070-20570-012	
	consisting of:		
31	Collar	HL1087A-5	
487	Collar	HL1087A-6	
29	Pin, Hi Lok	HL20PB-5-2	
2	Pin, Hi Lok	HL20PB-5-3	
160	Pin, Hi Lok	HL20PB-6-3	
38	Pin, Hi Lok	HL20PB-6-4	
100	Pin, Hi Lok	HL20PB-6-5	
16	Pin, Hi Lok	HL20PB-6-6	
25	Pin, Hi Lok	HL20PB-6-7	
12	Pin, Hi Lok	HL64PB-6-3	
10	Pin, Hi Lok	HL64PB-6-4	
31	Pin, Hi-Lok	HL64PB-6-5	
67	Pin	HL64PB-6-6	
28	Pin, Hi Lok	HL64PB-6-7	
5	Rivet	MS20470AD4-3	
5	Rivet	MS20470AD4-4	
228	Rivet	MS20470AD5-2	
155	Rivet	MS20470AD5-3	
9	Rivet	MS20470AD5-4	
9	Rivet, Blind	NAS1738B4-4	
11	Rivet, Blind	NAS1738B5-3	
55	Rivet, Blind	NAS1738B5-4	
56	Rivet, Blind	NAS1738B5-5	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
22	Rivet	RA615-5M2	
2	Radius Block	SS1058-1-18-14	
2	Washer, Doubler	SS430X15B000431	
1	Filler	70070-20570-139	
1	Filler	70070-20570-140	
1	Doubler	70070-20570-141	
1	Doubler	70070-20570-142	
1	Gusset	70070-20570-105	
1	Gusset	70070-20570-106	
1	Gusset	70070-20570-109	
4	Clip	70070-20570-110	
1	Zee	70070-20570-111	
1	Zee	70070-20570-112	
1	Angle	70070-20570-143	
1	Angle	70070-20570-144	
2	Clip	70070-20570-115	
2	Clip	70070-20570-116	
1	Mod. Kit, Nutplate Instl,	70070-20570-013	
	consisting of:		
4	Nutplate	MS21069-3	
5	Nutplate	MS21075-3	
14	Rivet	NAS1097AD3-3	
3	Rivet	NAS1097AD3-4	
5	Rivet	NAS1097AD3-6	
1	Mod. Kit, Frame Instl,	70070-20570-014	
	consisting of:		
82	Collar	HL1087A-6	
12	Pin, Hi Lok	HL20PB-6-2	
18	Pin, Hi Lok	HL20PB-6-3	
4	Pin, Hi Lok	HL20PB-6-4	
6	Pin, Hi Lok	HL20PB-6-5	
12	Pin, Hi Lok	HL20PB-6-6	
4	Pin, Hi Lok	HL20PB-6-8	
22	Pin, Hi-Lok	HL64PB-6-5	
4	Pin	HL64PB-6-6	
1	Clip	70070-20570-117	
1	Clip	70070-20570-118	
1	Angle	70070-20570-135	
1	Angle	70070-20570-136	
1	Angle	70070-20570-137	
1	Angle	70070-20570-138	
4	Clip	70070-20570-123	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Angle Instl,	70070-20570-015	
	consisting of:		
39	Collar	HL1087-6	
6	Pin, Hi Lok	HL20PB-6-3	
14	Pin, Hi Lok	HL20PB-6-4	
2	Pin, Hi Lok	HL20PB-6-5	
3	Pin, Hi Lok	HL64PB-6-4	
12	Pin	HL64PB-6-6	
2	Pin, Hi Lok	HL64PB-6-7	
18	Rivet	MS20615-4M	
2	Rivet	NAS1097AD6-7	
1	Angle	70070-20570-107	
1	Angle	70070-20570-108	
1	Angle	70070-20570-125	
1	Angle	70070-20570-126	
1	Angle	70070-20570-127	
1	Angle	70070-20570-128	

B. Consumable Material:

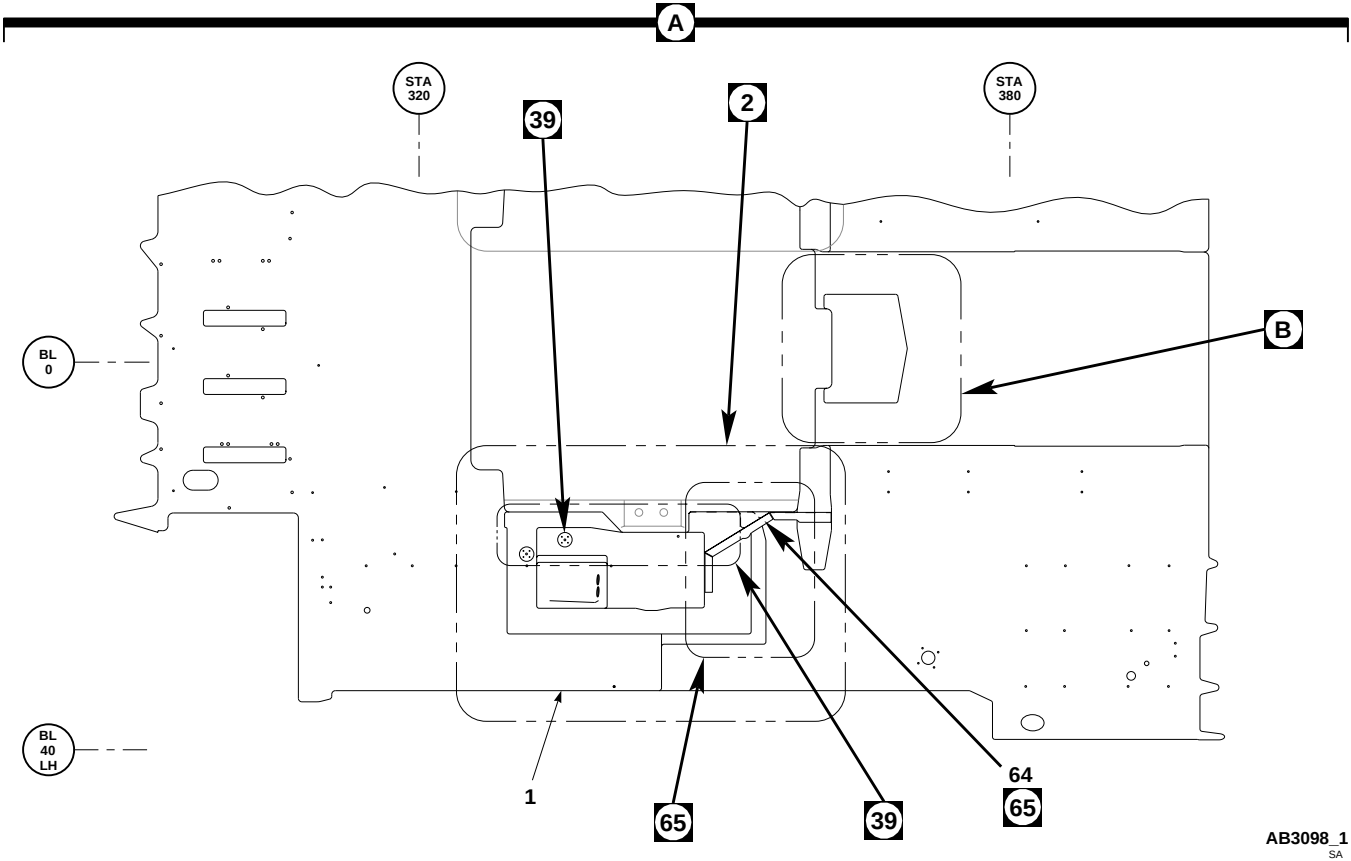
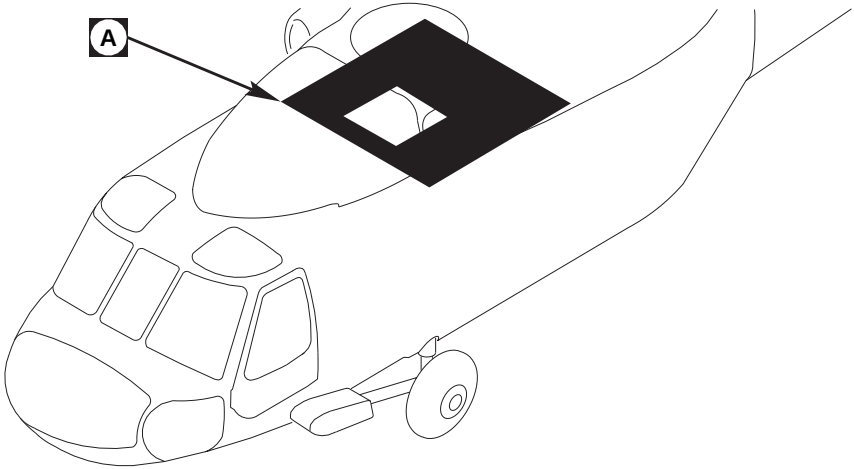
WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
16 oz.	Sealant	MIL-S-8802, A2, or C20, or equivalent	(1)

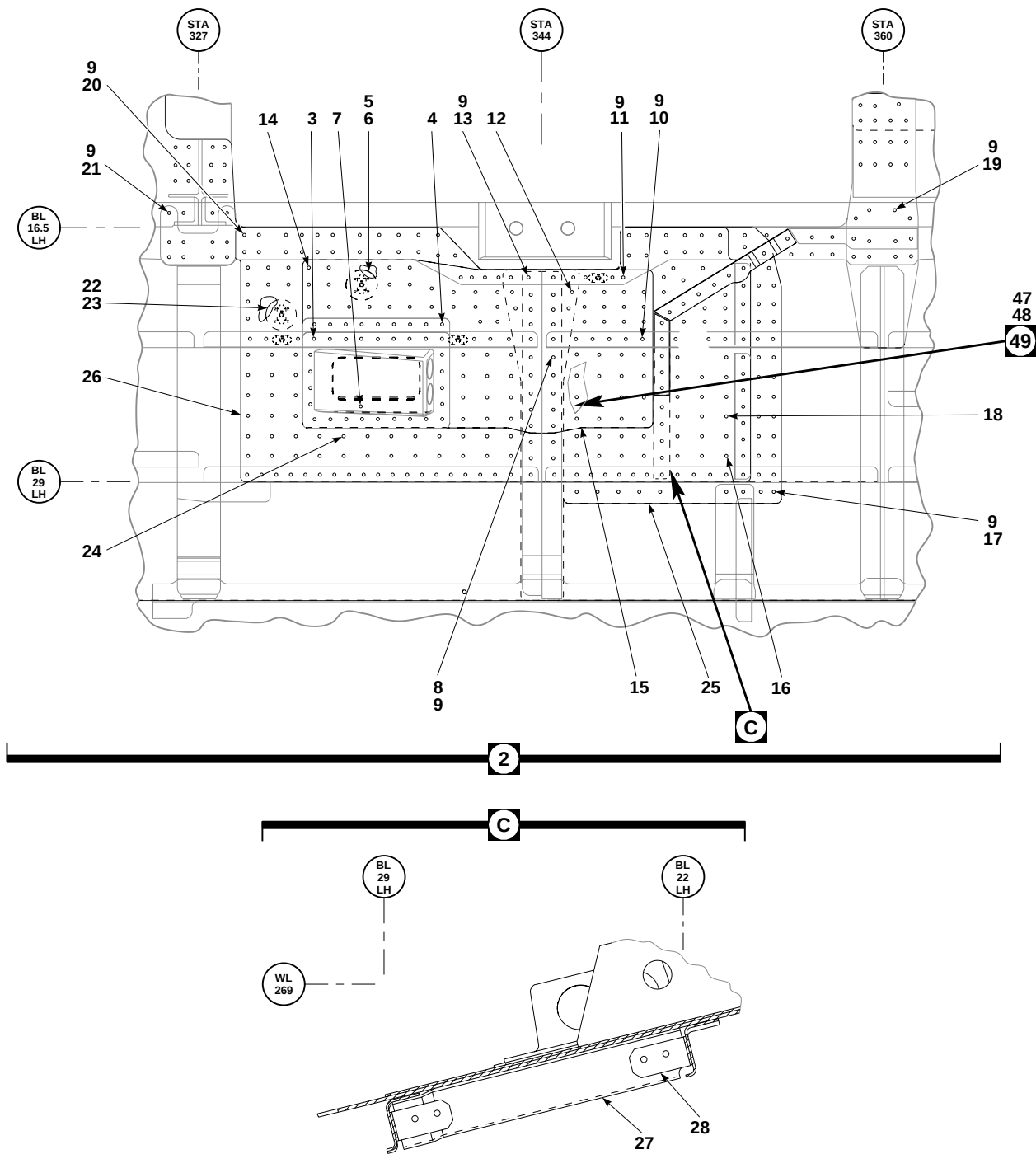
C. Source:

- (1) Available through normal supply channels



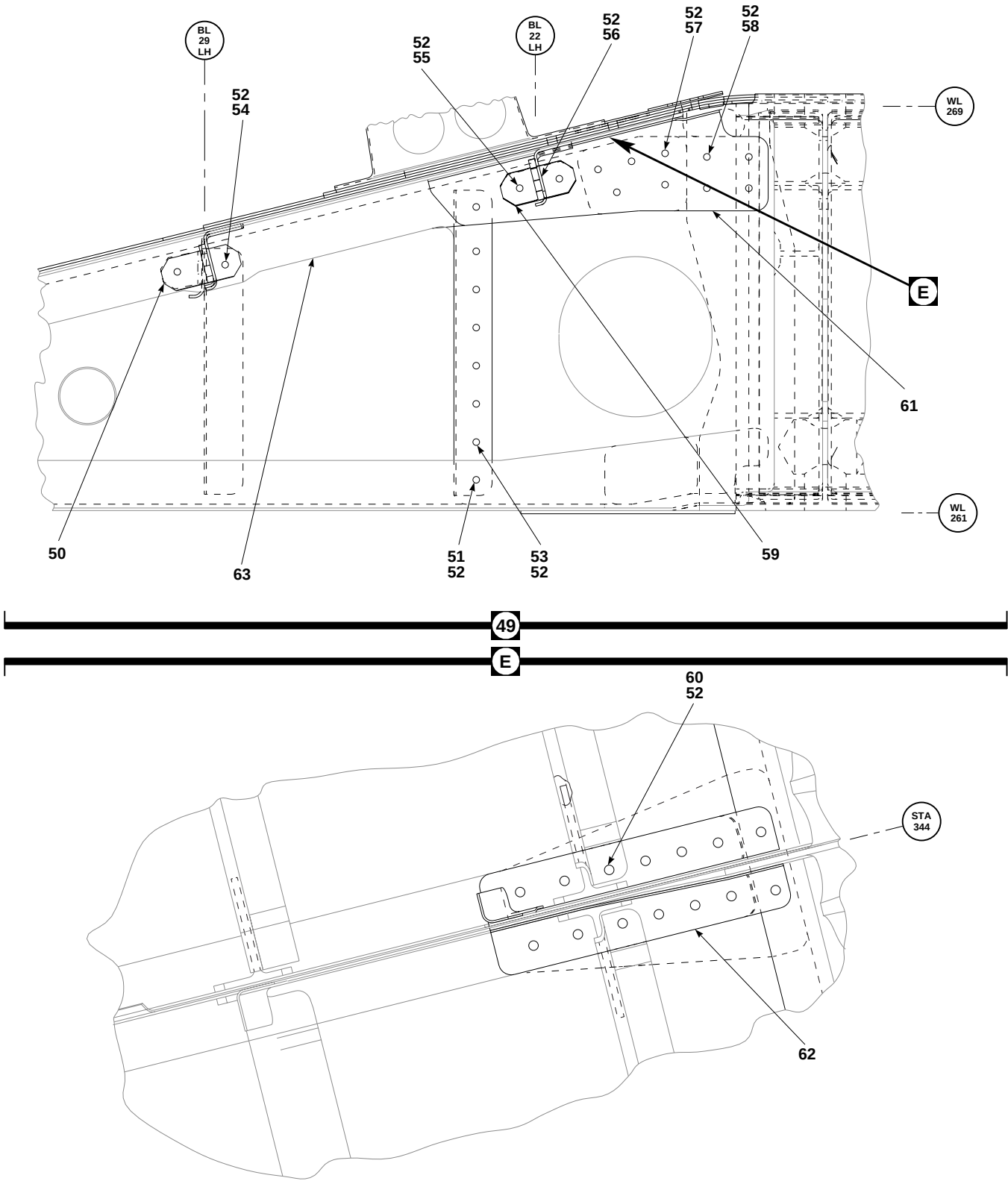
AB3098_1
SA

Figure E-6. Upper Plating Modification Kit (Sheet 1 of 5)



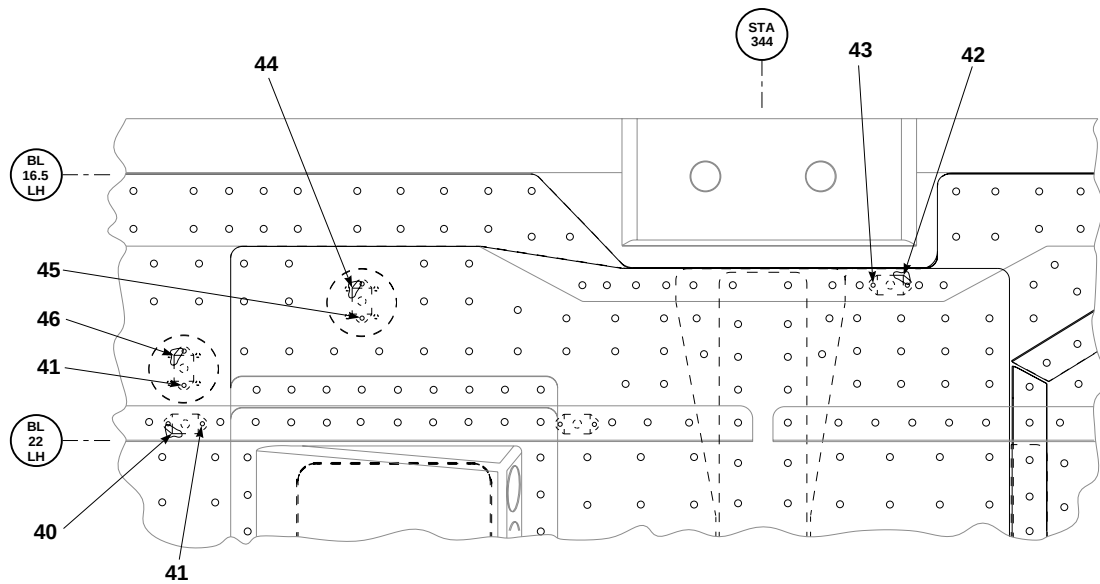
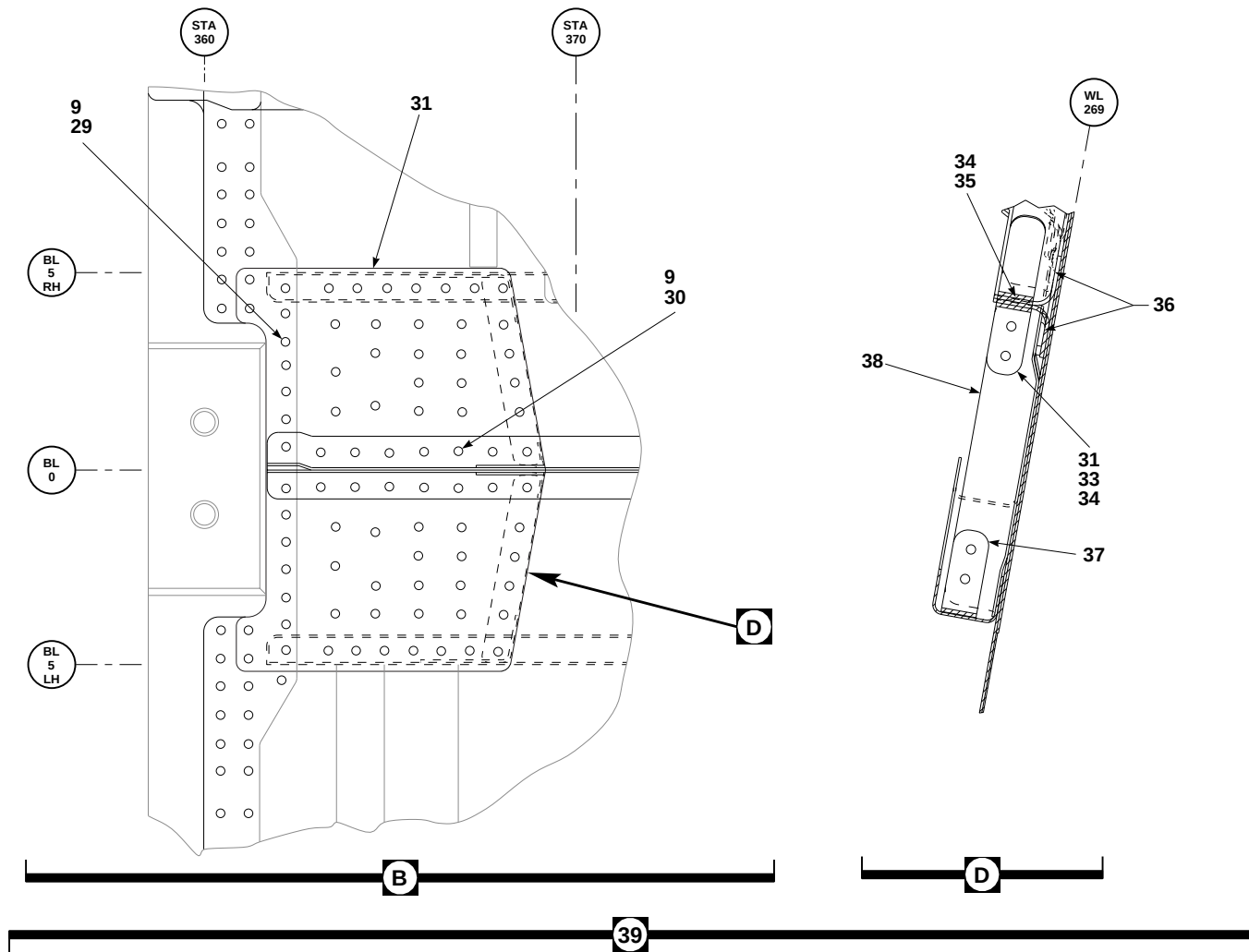
AB3098_2
SA

Figure E-6. Upper Plating Modification Kit (Sheet 2 of 5)



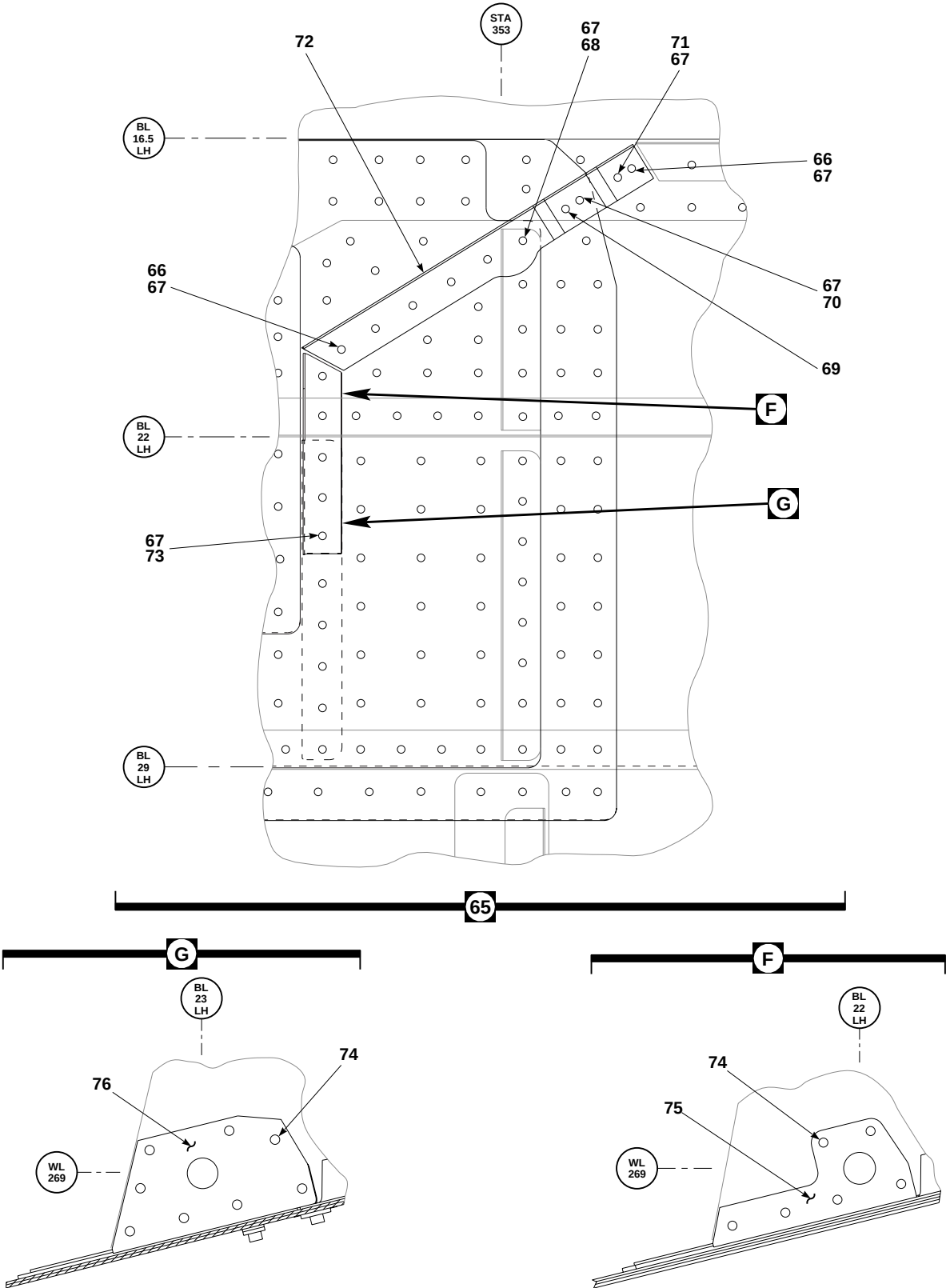
AB3098_3
SA

Figure E-6. Upper Plating Modification Kit (Sheet 3 of 5)



AB3098_4
SA

Figure E-6. Upper Plating Modification Kit (Sheet 4 of 5)



AB3098_5
SA

Figure E-6. Upper Plating Modification Kit (Sheet 5 of 5)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-6-	70070-20570-011		UPPER PLATING MODIFICATION KIT	REF	
-1	70070-20570-012		. M/K,PLATE INSTL	1	
-2	70070-20570-022		. . PLATING INSTL (Modified from 70213-02101-011)	REF	
	70070-20570-023		. . PLATING INSTL (Modified from 70213-02101-013)	REF	
	70070-20570-024		. . PLATING INSTL (Modified from 70213-02101-014)	REF	
-3	NAS1738B5-5		. . BLIND RIVET	56	
-4	NAS1738B5-4		. . BLIND RIVET	55	
-5	SS430X15B000431		. . DOUBLER WASHER	1	
-6	MS20470AD4-4		. . RIVET	5	
-7	NAS1738B4-4		. . BLIND RIVET	9	
-8	HL64PB-6-5		. . HI-LOK PIN, (73197)	31	
-9	HL1087A-6		. . COLLAR, (73197)	487	
-10	HL20PB-6-4		. . HI-LOK PIN, (73197)	38	
-11	HL64PB-6-6		. . PIN, (73197)	67	
-12	MS20470AD5-4		. . RIVET	9	
-13	HL20PB-6-5		. . HI-LOK PIN, (73197)	100	
-14	MS20470AD5-3		. . RIVET	155	
-15	70070-20570-105		. . GUSSET, LH	1	
	70070-20570-106		. . GUSSET, RH	1	
-16	RA615-5M2		. . RIVET, (76100)	22	
-17	HL20PB-6-3		. . HI-LOK PIN, (73197)	160	
-18	MS20470AD5-2		. . RIVET	227	
-19	HL20PB-6-6		. . HI-LOK PIN, (73197)	16	
-20	HL64PB-6-7		. . HI-LOK PIN, (73197)	28	
-21	HL20PB-6-7		. . HI-LOK PIN, (73197)	25	
-22	SS430X15B000431		. . DOUBLER WASHER	1	
-23	MS20470AD4-3		. . RIVET	5	
-24	MS20470AD5-2		. . RIVET, LH	1	
	NAS1738B5-3		. . BLIND RIVET, RH	11	
-25	70070-20570-139		. . FILLER, LH	1	
	70070-20570-140		. . FILLER, RH	1	
-26	70070-20570-141		. . DOUBLER, LH	1	
	70070-20570-142		. . DOUBLER, RH	1	
-27	70070-20570-111		. . ZEE, LH	1	
	70070-20570-112		. . ZEE, RH	1	
-28	70070-20570-110		. . CLIP	4	
-29	HL64PB-6-4		. . HI-LOK PIN, (73197)	10	
-30	HL64PB-6-3		. . HI-LOK PIN, (73197)	12	
-31	70070-20570-109		. . GUSSET	1	
-32	70070-20570-115		. . CLIP	2	
-33	HL20PB-5-2		. . HI-LOK PIN, (73197)	29	
-34	HL1087A-5		. . COLLAR, (73197)	31	
-35	HL20PB-5-3		. . HI-LOK PIN, (73197)	2	
-36	SS1058-1-18-14		. . RADIUS BLOCK	2	
-37	70070-20570-116		. . CLIP	2	
-38	70070-20570-143		. . ANGLE, LH	1	
	70070-20570-144		. . ANGLE, RH	1	
-39	70070-20570-013		. M/K,NUTPLATE INSTL	1	
-40	MS21069-3		. . NUTPLATE	4	
-41	NAS1097AD3-3		. . RIVET	14	
-42	MS21075-3		. . NUTPLATE	2	
-43	NAS1097AD3-6		. . RIVET	5	
-44	MS21075-3		. . NUTPLATE	1	
-45	NAS1097AD3-4		. . RIVET	3	
-46	MS21075-3		. . NUTPLATE	2	
-47	70070-20570-014		. M/K,FRAME INSTL	1	
-48	70070-20570-016		. . STRINGER INSTL (Modified from 70212-02119-012)	REF	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
	70070-20570-017	.	.						STRINGER INSTL (Modified from 70212-02119-013).....	REF	
	70070-20570-018	.	.						STRINGER INSTL (Modified from 70212-02119-014).....	REF	
	70070-20570-019	.	.						STRINGER INSTL (Modified from 70202-02120-011).....	REF	
	70070-20570-020	.	.						STRINGER INSTL (Modified from 70202-02120-012).....	REF	
	70070-20570-021	.	.						STRINGER INSTL (Modified from 70212-02119-011).....	REF	
-49	70070-20570-041	.	.						STRINGER ASSY (Modified from 70211-02109-041).....	REF	
	70070-20570-042	.	.						STRINGER ASSY (Modified from 70211-02109-042).....	REF	
-50	70070-20570-117	.	.						CLIP, LH.....	1	
	70070-20570-118	.	.						CLIP, RH.....	1	
-51	HL20PB-6-4	.	.						HI-LOK PIN, (73197).....	4	
-52	HL1087A-6	.	.						COLLAR, (73197).....	82	
-53	HL20PB-6-2	.	.						HI-LOK PIN, (73197).....	12	
-54	HL20PB-6-5	.	.						HI-LOK PIN, (73197).....	6	
-55	HL20PB-6-8	.	.						HI-LOK PIN, (73197).....	4	
-56	HL20PB-6-3	.	.						HI-LOK PIN, (73197).....	18	
-57	HL20PB-6-6	.	.						HI-LOK PIN, (73197).....	12	
-58	HL64PB-6-5	.	.						HI-LOK PIN, (73197).....	22	
-59	70070-20570-123	.	.						CLIP.....	4	
-60	HL64PB-6-6	.	.						PIN, (73197).....	4	
-61	70070-20570-137	.	.						ANGLE, LH.....	1	
	70070-20570-138	.	.						ANGLE, RH.....	1	
-62	70070-20570-135	.	.						ANGLE, LH.....	1	
	70070-20570-136	.	.						ANGLE, RH.....	1	
-63	70070-20570-129	.	.						STRINGER (Reidentified from 70212-02119-111).....	REF	
	70070-20570-130	.	.						STRINGER (Reidentified from 70212-02119-112).....	REF	
	70070-20570-131	.	.						STRINGER (Reidentified from 70212-02119-113).....	REF	
	70070-20570-132	.	.						STRINGER (Reidentified from 70212-02119-114).....	REF	
	70070-20570-133	.	.						STRINGER ZEE (Reidentified from 70202-02120-101).....	REF	
	70070-20570-134	.	.						STRINGER ZEE (Reidentified from 70202-02120-102).....	REF	
-64	70070-20570-015	.	.						M/K,ANGLE INSTL.....	1	
-65	70070-20570-025	.	.						ANGLE INSTL (Modified from 70304-02201-011).....	REF	
	70070-20570-026	.	.						ANGLE INSTL (Modified from 70304-02201-012).....	REF	
-66	HL20PB-6-4	.	.						HI-LOK PIN, (73197).....	14	
-67	HL1087-6	.	.						COLLAR, (73197).....	39	
-68	HL20PB-6-5	.	.						HI-LOK PIN, (73197).....	2	
-69	NAS1097AD6-7	.	.						RIVET.....	2	
-70	HL64PB-6-7	.	.						HI-LOK PIN, (73197).....	2	
-71	HL64PB-6-6	.	.						PIN, (73197).....	12	
-72	70070-20570-107	.	.						ANGLE, LH.....	1	
	70070-20570-108	.	.						ANGLE, RH.....	1	
-73	HL20PB-6-3	.	.						HI-LOK PIN, (73197).....	6	
-74	MS20615-4M3	.	.						RIVET.....	36	
-75	70070-20570-127	.	.						ANGLE, LH.....	1	
	70070-20570-128	.	.						ANGLE, RH.....	1	
-76	70070-20570-125	.	.						ANGLE, LH.....	1	
	70070-20570-126	.	.						ANGLE, RH.....	1	

E-8. BL 34.5 MODIFICATION KIT (50-7).

Subject: Buttlane 34.50, Modification of, dated 31 March 2003

Purpose: Provide instructions to modify buttlane 34.50 to eliminate cracking and to replace existing fasteners.

Model: UH-60A

Description: The following is a brief overview of the work required to modify buttlane 34.50. New reinforcements are installed, existing fasteners are removed, the holes are coldworked and new fasteners are installed.

Drawings required for modification:

70070-20572

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) TM 1-1520-265-23, Technical Manual, Aviation Unit Maintenance (AVUM) and Aviation Intermediate (AVIM) Manual, Nondestructive Inspection Procedure for H-60 Helicopter Series

(c) TM 1-1500-335-23, Technical Manual, Nondestructive Inspection Method

Instructions:

NOTE

- A complete review of this SSI is recommended before modifying buttlane 34.50.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- Personnel must be trained and certified in hole quality assurance and proper cold expansion procedures per SS5098.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Modify right side butline 34.50 as follows:

- (1) Remove and save for reinstallation angle (70212-02112-170, 70211-02108-119 or -171) (Dwg 70070-20572, Sheet 3, Zone 5-F, Notes 16, 18, 19, and 20).
- (2) Remove and discard angle (70212-02112-132 or -162) at butline 34.50, waterline 265.00 (Sheet 3, Zone 6-G, Notes 16 and 17).
- (3) Temporarily install new reinforcement (70080-70107-222) transfer drilling through existing fastener locations and adding new fasteners (Sheet 3, Zones 5-F through 8-F).
- (4) Remove remaining fasteners identified on drawing in preparation for cold expansion process (Sheet 3, Zones 7-E through 9-E and 7-E through 9-G).
- (5) Inspect holes prior to cold working (Dwg 70070-20572, Sheet 3, Note 22).
- (6) Cold work fastener locations at butline 34.50 between stations 305.00 and 315.00, and waterlines 260.00 and 265.00 identified on drawing (Sheet 3, Zones 7-E through 9-E, 7-F through 9-F, Notes 12, 13, 14, 16, 17, and 23).
- (7) Inspect holes per Sheet 3, Note 22.
- (8) Remove parts installed in step B.(3) deburr and touch up as required.
- (9) Install all parts removed in step B.(8) and angle (70212-02112-170, 70211-02108-119, or -171) using fasteners shown (Sheet 3, Zones 6-G, 5-F, 7-E through 9-E, 7-G through 9-G, Notes 9, 12, 13, and 14).

C. Modify left side butline 34.50 as follows:

- (1) Remove and discard angle (70212-02112-131 or -161) at butline 34.50, waterline 265.00 (Dwg 70070-20572, Sheet 3, Zone 13-G, Notes 16 and 17).
- (2) Temporarily install new reinforcement (70080-70107-223) transfer drilling through existing fastener locations and adding new fasteners (Sheet 3, Zones 12-G through 15-G).
- (3) Remove remaining fasteners identified on drawing in preparation for cold expansion process (Sheet 3, Zones 11-E through 13-E and 11-F through 13-F).
- (4) Inspect holes per Sheet 3, Note 22.
- (5) Cold work fastener locations at butline 34.50 between stations 305.00 and 315.00, and waterlines 260.00 and 265.00 identified on drawing (Sheet 2, Zones 11-E through 12-E, 11-F through 12-F, Notes 12, 13, 14, 16, 17 and 23).
- (6) Inspect holes per Sheet 3, Note 22.
- (7) Remove part installed in step C.(2) deburr and touch up as required.
- (8) Install parts removed in step C.(7) using fasteners shown (Sheet 3, Zones 11-E through 11-G, 13-G, 11-F through 13-F, Notes 9, 12, 13, 1 and 234).

D. Reinstallation of removed equipment:

- (1) Install removed equipment per reference (a).

E. Record of Compliance:

- (1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20572-011	Mod. Kit	+1.0	308.0	0.308

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +1.0 pounds

Moment arm: 308.0 in.

Change in basic moment/1000: 0.308

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	2	24.0	*48.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

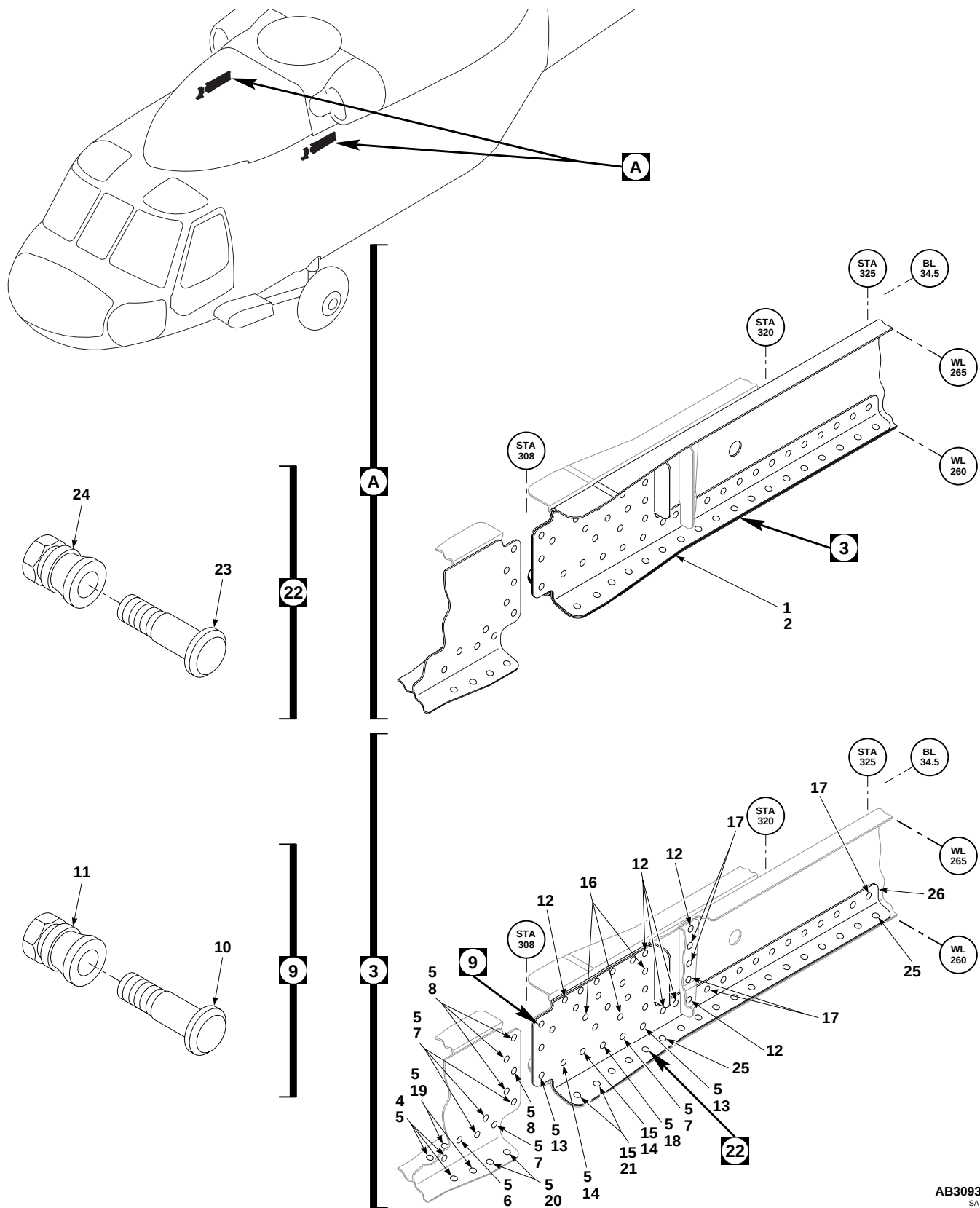
<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Buttline 34.5, consisting of:	70070-20572-011	(1)
1	Mod. Kit, R.H Reinforcement, consisting of:	70070-20572-012	
18	Collar	HL1087A-6	
6	Collar	HL1087A-8	
4	Pin Collar Assy	HL20PB86-6-3	
6	Pin Collar Assy	HL20PB86-6-4	
3	Pin Collar Assy	HL20PB86-6-6	
5	Pin	HL204-6-2	
5	Pin	HL204-6-3	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
5	Pin	HL204-6-4	
5	Pin	HL204-6-5	
10	Pin	HL204-6-6	
5	Pin	HL204-6-7	
5	Pin	HL204-6-8	
5	Pin	HL204-8-5	
5	Pin	HL204-8-6	
5	Pin	HL204-8-7	
5	Pin	HL204-8-8	
5	Pin, Hi-Lok	HL220-6-2	
5	Pin, Hi-Lok	HL220-6-3	
5	Pin, Hi-Lok	HL220-6-4	
5	Pin, Hi-Lok	HL220-6-5	
10	Pin, Hi-Lok	HL220-6-6	
5	Pin	HL220-6-7	
5	Pin, Hi-Lok	HL220-6-8	
5	Pin, Hi-Lok	HL220-8-5	
5	Pin, Hi-Lok	HL220-8-6	
5	Pin, Hi-Lok	HL220-8-7	
5	Pin, Hi-Lok	HL220-8-8	
40	Collar	HL287-6	
20	Collar	HL287-8	
3	Pin, Hi-Lok	HL64PB-6-2	
2	Pin, Hi-Lok	HL64PB-6-3	
1	Pin, Hi-Lok	HL64PB-6-4	
2	Pin, Hi-Lok	HL64PB-6-5	
5	Pin	HL64PB-6-6	
4	Pin, Hi-Lok	HL64PB-6-7	
1	Pin, Hi-Lok	HL64PB-6-8	
4	Pin, Hi-Lok	HL64PB-8-5	
2	Pin	HL64PB-8-8	
40	Collar	HL93-6	
20	Collar	HL93-8	
15	Rivet	MS20470AD5-2	
13	Rivet	MS20470AD5-5	
18	Rivet	MS20470AD6-5	
9	Rivet	MS20470AD6-6	
1	Reinforcement	70080-70107-222	
1	Mod. Kit, R.H Reinforcement,	70070-20572-013	
	consisting of:		
18	Collar	HL1087A-6	
6	Collar	HL1087A-8	
4	Pin Collar Assy	HL20PB86-6-3	
6	Pin Collar Assy	HL20PB86-6-4	
3	Pin Collar Assy	HL20PB86-6-6	
5	Pin	HL204-6-2	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
5	Pin	HL204-6-3	
5	Pin	HL204-6-4	
5	Pin	HL204-6-5	
10	Pin	HL204-6-6	
5	Pin	HL204-6-7	
5	Pin	HL204-6-8	
5	Pin	HL204-8-5	
5	Pin	HL204-8-6	
5	Pin	HL204-8-7	
5	Pin	HL204-8-8	
5	Pin, Hi-Lok	HL220-6-2	
5	Pin, Hi-Lok	HL220-6-3	
5	Pin, Hi-Lok	HL220-6-4	
5	Pin, Hi-Lok	HL220-6-5	
10	Pin, Hi-Lok	HL220-6-6	
5	Pin	HL220-6-7	
5	Pin, Hi-Lok	HL220-6-8	
5	Pin, Hi-Lok	HL220-8-5	
5	Pin, Hi-Lok	HL220-8-6	
5	Pin, Hi-Lok	HL220-8-7	
5	Pin, Hi-Lok	HL220-8-8	
40	Collar	HL287-6	
20	Collar	HL287-8	
3	Pin, Hi-Lok	HL64PB-6-2	
2	Pin, Hi-Lok	HL64PB-6-3	
1	Pin, Hi-Lok	HL64PB-6-4	
2	Pin, Hi-Lok	HL64PB-6-5	
5	Pin	HL64PB-6-6	
4	Pin, Hi-Lok	HL64PB-6-7	
1	Pin, Hi-Lok	HL64PB-6-8	
4	Pin, Hi-Lok	HL64PB-8-5	
2	Pin	HL64PB-8-8	
40	Collar	HL93-6	
20	Collar	HL93-8	
16	Rivet	MA20470AD5-2	
13	Rivet	MS20470AD5-5	
17	Rivet	MS20470AD6-5	
7	Rivet	MS20470AD6-6	
1	Reinforcement	70080-70107-223	

B. Source:

(1) Available through normal supply channels



AB3093
SA

Figure E-7. BL 34.5 Modification Kit

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-7-	70070-20572-011	BL 34.5 MODIFICATION KIT		REF	
-1	70070-20572-013	. M/K L/H REINFORCEMENT		1	
	70070-20572-012	. M/K R/H REINFORCEMENT		1	
-2	70070-20572-014	. . BEAM INSTL RH, (Modified from 70212-02112-012)		REF	
	70070-20572-015	. . BEAM INSTL LH, (Modified from 70212-02112-011)		REF	
	70070-20572-016	. . BEAM INSTL RH, (Modified from 70212-02112-014)		REF	
	70070-20572-017	. . BEAM INSTL LH, (Modified from 70212-02112-013)		REF	
-3	70070-20572-041	. . BEAM ASSY, (Reidentified from 70212-02112-051)		REF	
	70070-20572-042	. . BEAM ASSY, (Reidentified from 70212-02112-050)		REF	
	70070-20572-043	. . BEAM ASSY, (Reidentified from 70212-02112-043)		REF	
	70070-20572-044	. . BEAM ASSY, (Reidentified from 70212-02112-047)		REF	
-4	HL64PB-6-2	. . HI-LOK PIN, (73197)		3	
	HL220-6-2	. . HI-LOK PIN, (73197)		5	*
	HL204-6-2	. . PIN, (73197)		5	*
-5	HL1087A-6	. . COLLAR, (73197)		18	
	HL287-6	. . COLLAR, (73197)		40	*
	HL93-6	. . COLLAR, (73197)		40	*
-6	HL64PB-6-4	. . HI-LOK PIN, (73197)		1	
	HL220-6-4	. . HI-LOK PIN, (73197)		5	*
	HL204-6-4	. . PIN, (73197)		5	*
-7	HL64PB-6-6	. . PIN, (73197)		5	
	HL204-6-6	. . PIN, (73197)		10	*
	HL220-6-6	. . HI-LOK PIN, (73197)		10	*
-8	HL20PB86-6-3	. . PIN COLLAR ASSY, (73197)		4	
-9	HL20PB86-6-6	. . PIN COLLAR ASSY, (73197)		3	
-10	HL20PB-6-6	. . . HI-LOK PIN, (73197)		1	
-11	HL86-6	. . . COLLAR, (73197) (Superseded By HL1086A-6)		1	
	HL1086A-6	. . . COLLAR, (73197)		1	
-12	MS20470AD6-6	. . RIVET		9	
-13	HL64PB-6-5	. . HI-LOK PIN, (73197)		2	
	HL204-6-5	. . PIN, (73197)		5	*
	HL220-6-5	. . HI-LOK PIN, (73197)		5	*
-14	HL64PB-8-8	. . PIN, (73197)		2	
	HL220-8-8	. . HI-LOK PIN, (73197)		5	*
	HL204-8-8	. . PIN, (73197)		5	*
-15	HL1087A-8	. . COLLAR, (73197)		6	
	HL287-8	. . COLLAR, (73197)		40	*
	HL93-8	. . COLLAR, (73197)		20	*
-16	MS20470AD5-5	. . RIVET		13	
-17	MS20470AD6-5	. . RIVET		18	
-18	HL64PB-6-8	. . HI-LOK PIN, (73197)		1	
	HL220-6-8	. . HI-LOK PIN, (73197)		5	*
	HL204-6-8	. . PIN, (73197)		5	*
-19	HL64PB-6-3	. . HI-LOK PIN, (73197)		2	
	HL220-6-3	. . HI-LOK PIN, (73197)		5	*
	HL204-6-3	. . PIN, (73197)		5	*
-20	HL64PB-6-7	. . HI-LOK PIN, (73197)		4	
	HL204-6-7	. . PIN, (73197)		5	*

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
-21	HL220-6-7	.	.	.	.	.	.	.	HI-LOK PIN, (73197).....	5	*
	HL64PB-8-5	.	.	.	.	.	.	.	HI-LOK PIN, (73197).....	4	
	HL220-8-5	.	.	.	.	.	.	.	HI-LOK PIN, (73197).....	5	*
	HL204-8-5	.	.	.	.	.	.	.	PIN, (73197).....	5	*
	HL220-8-6	.	.	.	.	.	.	.	HI-LOK PIN, (73197).....	5	*
	HL204-8-6	.	.	.	.	.	.	.	PIN, (73197).....	5	*
	HL220-8-7	.	.	.	.	.	.	.	HI-LOK PIN, (73197).....	5	*
	HL204-8-7	.	.	.	.	.	.	.	PIN, (73197).....	5	*
-22	HL20PB86-6-4	.	.	.	.	.	.	.	PIN COLLAR ASSY, (73197)	6	
-23	HL20PB-6-4	.	.	.	.	.	.	.	HI-LOK PIN, (73197).....	1	
-24	HL86-6	.	.	.	.	.	.	.	COLLAR, (73197) (Superseded By HL1086A-6).....	1	
	HL1086A-6	.	.	.	.	.	.	.	COLLAR, (73197)	1	
-25	MS20470AD5-2	.	.	.	.	.	.	.	RIVET.....	15	
-26	70080-70107-222	.	.	.	.	.	.	.	REINFORCEMENT, (Used on 70070-20572-012).....	1	
	70080-70107-223	.	.	.	.	.	.	.	REINFORCEMENT, (Used on 70070-20572-013).....	1	

E-9. ESSS DOUBLER MODIFICATION KIT (50-15).

Subject: ESSS Doubler; Installation of, dated 31 March 2003

Purpose: Provide instructions to install new doublers and skins between station 295.00 and station 308.00 right and left sides on UH-60A helicopters equipped with ESSS provisions.

Model: UH-60A

Description: The following is a brief overview of the work required to modify left and right sides between station 295.00 and 308.00. New doublers and skins are installed between station 295.00 and station 308.00, buttline 16.50 through 34.50. This modification is applicable to UH-60A equipped with ESSS.

Drawings required for modification:

70070-20641, 70652-02150

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before installing new doublers and skins between station 295.00 and station 308.00.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.

A. Preparation for modification and removal of equipment.

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Install right and left side ESSS doublers as follows:

(1) Modify right side between station 295.00 and station 308.00 as follows (Dwg 70070-20641):

(a) Remove and save for reuse, strap (70213-02101-173) at buttlane 16.50, waterline 269.00 (Sheet 3, Zone 12-B).

(b) Remove fasteners attaching hat (70219-04203-130) between buttlanes 28.75 and 34.50, waterline 269.00 leaving hat (-130) in place (Sheet 3, Zone 9-E).

(c) Position doubler (70070-20641-102) (top deck) and skin (70085-22135-117) (cabin ceiling) between buttlanes 16.50 and 34.50, waterline 269.00 and mark rivets to be removed (Sheet 3, Zones 10-G and 12-B).

(d) Remove fasteners identified in previous step.

NOTE

In step B.(1)(e), existing rivets may interfere with the flange on skin (70085-22135-117). If this condition exists trimming the flange enough to clear rivets is permissible.

(e) Position and temporarily install skin (70085-22135-117) (cabin ceiling) and doubler (70070-20641-102) (top deck) (Sheet 3, Zones 10-G and 12-B).

(f) Remove skin (70085-22135-117) and doubler (70070-20641-102), deburr and touch up as required.

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(g) Install skin (70085-22135-117), doubler (70070-20641-102), and strap (70213-02101-173) wet with sealant (AMS-S-88022, A2 or C20 or equivalent) using fasteners shown (Sheet 3, Zones 12-B and 10-H; Sheet 2, Notes 9, 12 and 13).

(2) Modify left side between station 295.00 and station 308.00 as follows (Dwgs 70070-20641 and 70652-02151):

(a) Remove and discard spacer (70213-02101-174) and nutplate (MS21075-4) at buttlane 16.50, waterline 269.00 (Dwg 70070-20641, Sheet 3, Zone 18-H).

(b) Remove shim (70652-02151-102) at left buttlane 16.50 using a nonmetallic scraper, measure and record thickness of shim (-102) for use in step B.(2)(l) (Dwg 70652-02151, Sheet 1, Zone 12-F).

(c) Remove and save for reuse, strap (70213-02101-172) at butline 16.50, waterline 269.00 (Dwg 70070-20641, Sheet 3, Zone 18-A).

(d) Remove fasteners attaching hat (70219-04203-129) between butlines 28.75 and 34.50, waterline 269.00 leaving hat (-129) in place (Sheet 3, Zone 23-D).

(e) Remove and discard nutplates (MS21075-3) (two places) and nutplate (MS21069-3) (Sheet 3, Zones 22-B, 19-B, and 20-H).

(f) Position doubler (70070-20641-101) (top deck) and skin (70085-22135-113) (cabin ceiling) between butlines 16.50 and 34.50, waterline 269.00 and mark rivets to be removed (Sheet 3, Zones 20-B and 23-D).

(g) Remove fasteners identified in previous step.

NOTE

In step B.(2)(h), existing rivets may interfere with the flange on skin (70085-22135-117). If this condition exists trimming the flange enough to clear rivets is permissible.

(h) Position and temporarily install skin (70085-22135-113) (cabin ceiling) and doubler (70070-20641-101) (top deck) (Sheet 3, Zones 20-B and 23-D).

(i) Remove skin (70085-22135-113) and doubler (70070-20641-101), deburr and touch up as required.

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(j) Install skin (70085-22135-113), doubler (70070-20641-101), and strap (70213-02101-172) wet with sealant (AMS-S-8802, A2 or C20 or equivalent) using fasteners shown (Sheet 3, Zones 23-D, 20-B, and 18-A; Sheet 2, Notes 9, 12, and 13).

(k) Install three new nutplates (MS21075-3) (two places) and MS21069-3) (Sheet 3, Zones 20-B, 22-B and 20-H).

(l) Install new shim (70652-02151-102) from previous step using adhesive (EA 9309.3NA or equivalent) (Dwg 70652-02151, Sheet 1, Zone 12-D and Note 2).

C. Reinstallation of removed equipment:

(1) Reinstall removed equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20641-011	Mod. Kit	+ 1.9	301.4	0.573

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +1.9 pounds

Moment arm: in. 301.4

Change in basic moment/1000: 0.573

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	2	24.0	*48.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, ESSS Doubler,	70070-20641-011	(1)
	consisting of:		
1	Mod. Kit, Support R/H Instl,	70070-20641-012	
	consisting of:		
19	Rivet	MS20470AD5-9	
2	Pin, SWG LKG	NAS1465-04	
7	Pin, SWG LKG	NAS1525-03	
11	Rivet, Blind	NAS1738B4-3	
27	Rivet, Blind	NAS1738B5-9	
1	Skin	70085-22135-117	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Support L/H Instl,	70070-20641-013	
	consisting of:		
19	Rivet	MS20470AD5-9	
2	Pin, SWG LKG	NAS1465-04	
7	Pin, SWG LKG	NAS1525-03	
11	Rivet, Blind	NAS1738B4-3	
27	Rivet, Blind	NAS1738B5-9	
1	Skin	70085-22135-113	
1	Mod. Kit, Plating Instl,	70070-20641-014	
	consisting of:		
2	Pin Collar Assy	HL19PB86-6-8	
2	Pin Collar Assy	HL20PB86-6-6	
8	Pin Collar Assy	HL20PB86-6-8	
2	Pin Collar Assy	HL20PB86-6-9	
3	Rivet	MS20426AD3-9	
94	Rivet	MS20470AD4-3	
64	Rivet	MS20426AD5-9	
35	Rivet	MS20470AD6-9	
1	Nutplate	MS21069-3	
2	Nutplate	MS21075-3N	
1	Nutplate	MS21075-4N	
5	Rivet	NAS1097AD3-3	
3	Rivet	NAS1097AD3-9	
7	Rivet	NAS1097AD5-9	
47	Pin, SWG LKG	NAS1466-05	
23	Pin, SWG LKG	NAS1466-06	
18	Pin, SWG LKG	NAS1466-07	
6	Pin, SWG LKG	NAS1466-08	
22	Pin, SWG LKG	NAS1466-09	
1	Doubler	70070-20641-101	
1	Doubler	70070-20641-102	
1	Mod. Kit, Shim Instl,	70070-20641-018	
	consisting of:		
8	Shim	70652-02151-101	
10	Shim	70652-02151-102	
4	Shim	70652-02151-103	

B. Consumable Material:



OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
8 oz.	Sealant	AMS-S-8802, A2, C20, or equivalent	(1)
8 oz.	Adhesive	EA9309.3NA or equivalent	(1)

C. Source:

- (1) Available through normal supply channels

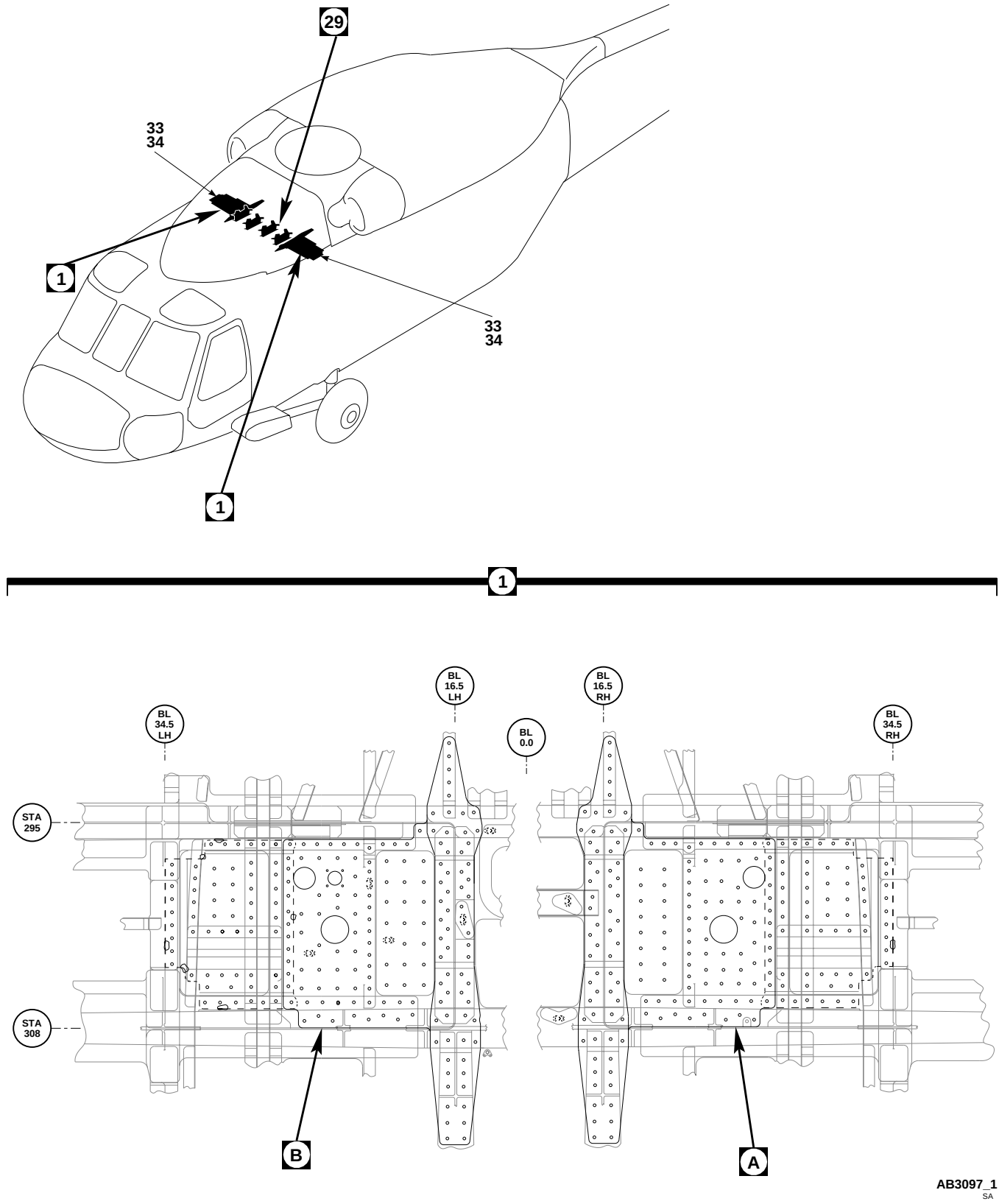
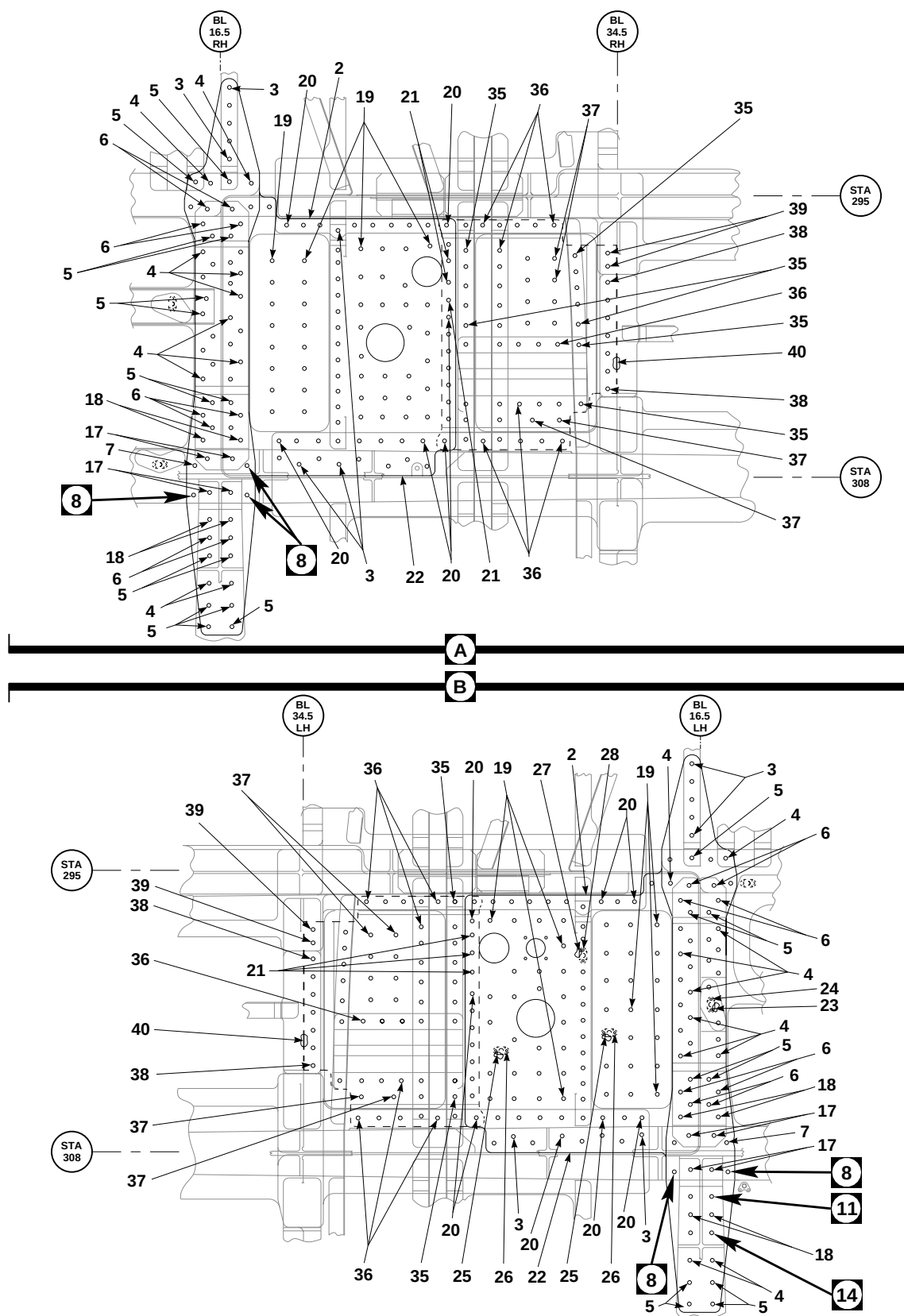


Figure E-8. ESSS Doubler Modification Kit (Sheet 1 of 2)



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Figure E-8. ESSS Doubler Modification Kit (Sheet 2 of 2)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-8-	70070-20641-011		ESSS DOUBLER MODIFICATION KIT	REF	
-1	70070-20641-014		. M/K PLATING INSTL	1	
-2	70070-20641-015		. . PLATING INSTL, (Modified from 70213-02101-014)	REF	
-3	MS20470AD6-9		. . RIVET	35	
-4	NAS1466-05		. . SWAGE LOCKING PIN	47	
-5	NAS1466-06		. . SWAGE LOCKING PIN	23	
-6	NAS1466-07		. . SWAGE LOCKING PIN	18	
-7	HL19PB86-6-8		. . PIN COLLAR ASSY, (73197)	8	
-8	HL20PB86-6-8		. . PIN COLLAR ASSY, (73197)	8	
-9	HL20PB-6-8		. . . HI-LOK PIN, (73197)	1	
-10	HL86-6		. . . COLLAR, (73197) (Superseded by HL1087A-6)	1	
	HL1087A-6		. . . COLLAR, (73197)	1	
-11	HL20PB86-6-9		. . PIN COLLAR ASSY, (73197)	2	
-12	HL20PB-6-9		. . . HI-LOK PIN, (73197)	1	
-13	HL86-6		. . . COLLAR, (73197) (Superseded by HL1087A-6)	1	
	HL1087A-6		. . . COLLAR, (73197)	1	
-14	HL20PB86-6-6		. . PIN COLLAR ASSY, (73197)	2	
-15	HL20PB-6-6		. . . HI-LOK PIN, (73197)	1	
-16	HL86-6		. . . COLLAR, (73197) (Superseded By HL1087A-6)	1	
	HL1087A-6		. . . COLLAR, (73197)	1	
-17	NAS1466-09		. . SWAGE LOCKING PIN	22	
-18	NAS1466-08		. . SWAGE LOCKING PIN	6	
-19	MS20470AD4-3		. . RIVET	94	
-20	MS20470AD5-9		. . RIVET	64	
-21	NAS1097AD5-9		. . RIVET	7	
-22	70070-20641-101		. . DOUBLER, LH	1	
	70070-20641-102		. . DOUBLER, RH	1	
-23	MS21075-4N		. . NUTPLATE	1	
-24	MS20426AD3-9		. . RIVET	3	
-25	MS21075-3N		. . NUTPLATE	2	
-26	NAS1097AD3-3		. . RIVET	5	
-27	MS21069-3		. . NUTPLATE	1	
-28	NAS1097AD3-9		. . RIVET	3	
-29	70070-20641-018		. M/K SHIM INSTL	1	
-30	70652-02151-101		. . SHIM	8	
-31	70652-02151-102		. . SHIM	10	
-32	70652-02151-103		. . SHIM	4	
-33	70070-20641-013		. M/K SUPPORT L/H INSTL	1	
	70070-20641-012		. M/K SUPPORT R/H INSTL	1	
-34	70070-20641-016		. . SUPPORT INSTL, (Modified from 70219-42426-014)	REF	
	70070-20641-017		. . SUPPORT INSTL, (Modified from 70219-42426-013)	REF	
-35	MS20470AD5-9		. . RIVET	19	
-36	NAS1738B5-9		. . BLIND RIVET	27	
-37	NAS1738B4-3		. . BLIND RIVET	11	
-38	NAS1525-03		. . SWAGE LOCKING PIN	7	
-39	NAS1465-04		. . SWAGE LOCKING PIN	2	
-40	70085-22135-117		. . SKIN, LH (Used on 70070-20641-013)	1	
	70085-22135-113		. . SKIN, RH (Used on 70070-20641-012)	1	

E-10. TRDS BRACKETS MODIFICATION KIT (50-20).Subject: Tail Rotor Drive Shaft Support Brackets; Modification of, dated 31 March 2003Purpose: Provide instructions for the structural strengthening of the tail rotor drive shaft supports to eliminate cracking.Model: UH-60ADescription: The tail rotor drive shaft support brackets at station 410.00 and station 472.00 are modified to improve the structural strength at these locations.Drawings required for modification:

70070-20488

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) SSI No. 50-9, Drive Shaft Supports; Modification of, dated March 31, 2003

(c) TM 1-1520-237-23-2, Technical Manual Aviation Unit and Intermediate Maintenance for UH-60A, UH-60L, EH-60A, UH-60Q and HH-60L Helicopters

Instructions:**NOTE**

- A complete review of this SSI is recommended before incorporating the tail rotor drive shaft support brackets modification kit.
- Before beginning this modification procedure, use the material information list to inventory the modification kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual step(s), drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- This modification is to be done concurrently with reference (b).

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Modification of tail rotor drive shaft support brackets:

CAUTION

TO AVOID DAMAGING COMPONENTS, USE EXTREME CARE WHEN DRILLING INTO AIRFRAME. TEMPORARILY MOVE ANY TUBE ASSEMBLIES OR WIRING HARNESSSES OUT OF REWORK AREA.

- (1) Mark location on top skin of support (70361-03010-114) (Dwg 70070-20488, Sheet 4, Zone 20-B).
- (2) Remove support (70361-03010-114) at station 410.00, butline 0.00 (Sheet 4, Zone 20-B and Sheet 3, Note 26).
- (3) Position new support (70361-03010-125) over station 410.00 where support (70361-03010-114) was removed in previous step.
- (4) Line up forward face of new support (70361-03010-125) where marked location was noted in step B.(1).
- (5) Transfer drill from angle (70361-03010-101) (inside transition ceiling) through new support (70361-03010-125) and put support (-125) aside for installation in later steps.
- (6) Remove former (70361-03010-110) near station 410.00, right butline 5.00 (Sheet 4, Zone 14-H and Sheet 3, Note 26).
- (7) Remove former (70361-03010-109) near station 410.00, left butline 5.00 (Sheet 4, Zones 14-E and 14-F; Sheet 3, Note 26).
- (8) Mark location on top skin of support (70219-03006-107) (Sheet 7, Zone 13-D).
- (9) Remove support (70219-03006-107) near station 470.50 (Sheet 7, Zone 13-D).
- (10) Position new support (70219-03006-114) over station 470.00 where support (70219-03006-107) was removed in previous step.
- (11) Line up forward face of new support (70219-03006-114) where marked location was noted in step B.(8).
- (12) Transfer drill from angle (70219-03006-108) (inside transition ceiling) through new support (70219-03006-114) and set aside support (-114) for installation in later steps.
- (13) Remove radius block (SS1058A7-28-29) and gusset (70219-03006-106) at station 472.00, right butline 4.00 (Sheet 7, Zones 11-G and 11-H; Sheet 3, Note 28).
- (14) Remove radius block (SS1058A7-28-29) and gusset (70219-03006-105) at station 472.00, left butline 4.00 (Sheet 7, Zones 11-F and 11-G; Sheet 3, Note 28).
- (15) Remove stringer (70212-03001-149) between station 470.00 and station 485.00, butline 0.00 (Sheet 7, Zone 9-G and Sheet 4, Note 44).
- (16) Remove angle (70219-03006-102 or -108) near station 472.50, butline 0.00 (Sheet 7, Zone 11-C and Sheet 4, Notes 40 and 41).

(17) Remove remaining fasteners, as required (Sheets 4 and 7).

C. Installation of tail rotor drive shaft support brackets.

(1) Locate and temporarily install new radius block (SS1058A7-20-51) and former (70070-20488-102) at station 410.00, right butline 5.00 (Dwg 70070-20488, Sheet 4, Zones, 14-G and 14-H).

(2) Locate and temporarily install new radius block (SS1058A7-20-51) and former (70070-20488-103) at station 410.00, left butline 5.00 (Sheet 4, Zone 14-E).

(3) Locate and temporarily install support (70361-03010-125) (previously fit-out) at station 410.00, butline 0.00 (Sheet 4, Zone 19-B and Sheet 2, Notes 10 and 11).

(4) Locate and temporarily install stringer (70212-03001-168) between station 470.00 and station 485.00, butline 0.00 (Sheet 7, Zones 9-F to 12-F).

(5) Locate and temporarily install new angle (70219-03006-108) near station 472.50, butline 0.00 (Sheet 7, Zone 11-C).

(6) Locate and temporarily install radius block (SS1058A7-28-29) and gusset (70070-20488-106) at station 472.00, right butline 4.00 (Sheet 7, Zone 11-H).

(7) Locate and temporarily install radius block (SS1058A7-28-29) and gusset (70070-20488-105) at station 472.00, left butline 4.00 (Sheet 7, Zone 11-F).

(8) Locate and temporarily install support (70219-03006-114) (previously fit-out) at station 472.50, butline 0.00 (Sheet 7, Zone 13-C, and Sheet 2, Notes 10 and 11).

(9) Locate and temporarily install clip (70212-03001-171) at station 485.00, butline 0.00 (Sheet 7, Zone 9-F).

(10) Transfer drill remaining fastener holes for assembly.

(11) Line up new brackets (70070-20488-101 and -104) at stations 410.00 and 470.00 per reference (c).

(12) Locate and temporarily install bracket (70070-20488-104) at station 472.50, butline 0.00 (Sheet 7, Zone 11-D).

(13) Locate and temporarily install bracket (70070-20488-101) at station 410.00, butline 0.00 (Sheet 4, Zone 18-B and Sheet 2, Notes 9, 10 and 11).

(14) Remove fitted parts, deburr and touch up as required.

(15) Install parts removed in previous step using fasteners shown (Sheet 1, Note 2 and Sheet 2, Note 12).

D. Reinstallation of removed equipment:

(1) Install removed equipment per reference (a).

E. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20488-023	Mod. Kit	0.3	448.1	0.1

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: + 0.3 pounds

Moment arm: 448.1 in.

Change in basic moment/1000: 0.1

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	2	18.0	*36.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Tail Rotor Driveshaft Support Brackets,	70070-20488-023	(1)
	consisting of:		
1	Mod. Kit, Support Installation,	70070-20488-012	
	consisting of:		
10	Collar	HL1087A-5	
9	Pin, Hi Lok	HL20PB-5-2	
1	Pin, Hi Lok	HL20PB-5-3	
2	Pin, Hi Lok	HL22D-5-3	
8	Pin, Hi Lok	HL22D-5-6	
10	Collar	HL77-5TW	
37	Rivet	MS20470AD5-9	
2	Radius Block	SS1058A7-20-51	
1	Bracket	70070-20488-101	
1	Former	70070-20488-102	
1	Former	70070-20488-103	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Support	70361-03010-125	
1	Mod. Kit, Support Installation,	70070-20488-022	
	consisting of:		
86	Rivet	MS20470AD5-9	
8	Pin Collar Assy	HL20PB86-5-2	
1	Angle	70219-03006-108	
4	Rivet	MS20470AD4-9	
2	Radius Block	SS1058A7-28-29	
1	Bracket	70070-20488-104	
1	Stringer	70212-03001-168	
1	Clip	70212-03001-171	
2	Collar	NAS1080D05	
2	Pin, SWG LKG	NAS1525-03	
1	Gusset	70070-20488-105	
1	Gusset	70070-20488-106	
1	Support	70219-03006-114	

B. Consumable Material:

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
4 oz.	Sealant	AMS-S-8802, A2, or C20, or equivalent	(1)

C. Source:

- (1) Available through normal supply channels

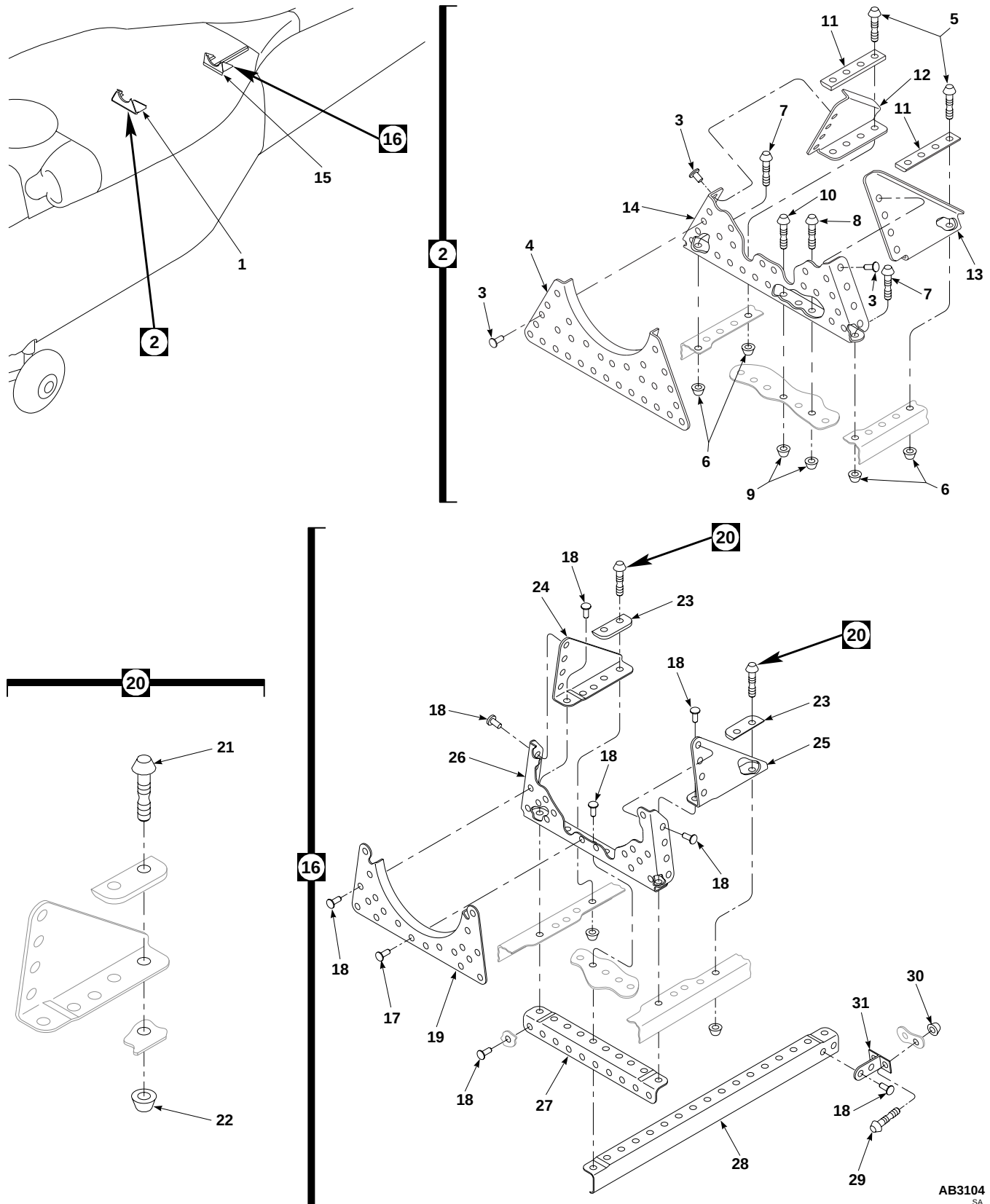


FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-9-	70070-20488-023		TAIL ROTOR DRIVE SHAFT BRACKETS		
			MODIFICATION KIT	REF	
-1	70070-20488-012		. M/K SUPPORT INSTL	1	
-2	70070-20488-013		. . SUPPORT INSTL	REF	
-3	MS20470AD5-9		. . RIVET,	37	
-4	70361-03010-125		. . SUPPORT	1	
-5	HL22D-5-6		. . HI-LOK PIN, (73197)	8	
-6	HL77-5TW		. . COLLAR, (73197)	10	
-7	HL22D-5-3		. . HI-LOK PIN, (73197)	2	
-8	HL20PB-5-2		. . HI-LOK PIN, (73197)	9	
-9	HL1087A-5		. . COLLAR, (73197)	1	
-10	HL20PB-5-3		. . HI-LOK PIN, (73197)	1	
-11	SS1058A7-20-51		. . RADIUS BLOCK	2	
-12	70070-20488-102		. . FORMER	1	
-13	70070-20488-103		. . FORMER	1	
-14	70070-20488-101		. . BRACKET	1	
-15	70070-20488-022		. M/K SUPT INSTL	1	
-16	70070-20488-024		. . SUPPORT INSTL (Reidentified from 70219-03006-011)	REF	
	70070-20488-025		. . PLATING ASSY (Reidentified from 70213-03001-043)	REF	
	70070-20488-026		. . PLATING ASSY (Reidentified from 70213-03001-044)	REF	
	70070-20488-027		. . PLATING ASSY (Reidentified from 70213-03001-045)	REF	
	70070-20488-028		. . PLATING ASSY (Reidentified from 70213-03001-046)	REF	
-17	MS20470AD4-9		. . RIVET	4	
-18	MS20470AD5-9		. . RIVET	86	
-19	70219-03006-114		. . SUPPORT	1	
-20	HL20PB86-5-2		. . PIN COLLAR ASSY, (73197)	8	
-21	HL20PB-5-2		. . . HI-LOK PIN, (73197)	1	
-22	HL86-5		. . . COLLAR, (73197) (Superseded By HL1087A-5)	1	
	HL1087A-5		. . . COLLAR, (73197)	1	
-23	SS1058A7-28-29		. . RADIUS BLOCK	2	
-24	70070-20488-106		. . GUSSET	1	
-25	70070-20488-105		. . GUSSET	1	
-26	70070-20488-104		. . BRACKET	1	
-27	70219-03006-108		. . ANGLE	1	
-28	70212-03001-168		. . STGR #0	1	
-29	NAS1525-03		. . SWAGE LOCKING PIN	2	
-30	NAS1080D05		. . COLLAR	2	
-31	70212-03001-171		. . CLIP	1	

E-11. STATION 485 MODIFICATION KIT (50-34).

Subject: Transition Station 485.00; Modification of, dated 31 March 2003

Purpose: Provide instructions to remove and replace fitting at station 485.00.

Model: UH-60A

Description: The following is a brief overview of the work required to modify station 485.00. Fitting is removed and replaced, using new fasteners.

Drawings required for modification:

70000-03200, 70070-20575, 70211-03009, 70213-03001

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before reworking station 485.00.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Installation of new brackets at station 485.00:

- (1) Locate and remove fitting (70209-03007-125) at station 485.00 left side (Dwg 70211-03009, Sheet 1, Zone 21-L).
- (2) Position new fitting (70209-03007-125) at station 485.00 and transfer drill holes from structure, through fitting.

- (3) Remove fitting (70209-03007-125) deburr and touch up as required.
- (4) Install fitting (70209-03007-125) at station 485.00 using hardware shown (Dwg 70213-03001, Sheet 1, Zone 23-F).
- (5) Line ream/drill 0.3125-inch diameter hole from backside fitting into new fitting (70209-03007-125).
- (6) Install remaining new hardware to fitting (70209-03007-125) (Dwg 70000-03200, Sheet 1, Zone 4-E, and Note 1).
- C. Record of Compliance:
- (1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data: Negligible:

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Structural Mechanic	1	4.0	*4.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Station 485.00	70070-20575-012	(1)
	consisting of:		
1	Washer	MS20002-5	
1	Washer	MS20002C5	
2	Rivet	MS20470AD5-4	
4	Rivet	MS20470AD6-4	
3	Rivet	NAS1097AD6-5	
1	Pin, Swg Lkg	NAS1446-04	
1	Bolt	NAS625-14	
1	Nut	SS5081-05	
1	Fitting	70209-03007-125	

B. Source:

- (1) Available through normal supply channels

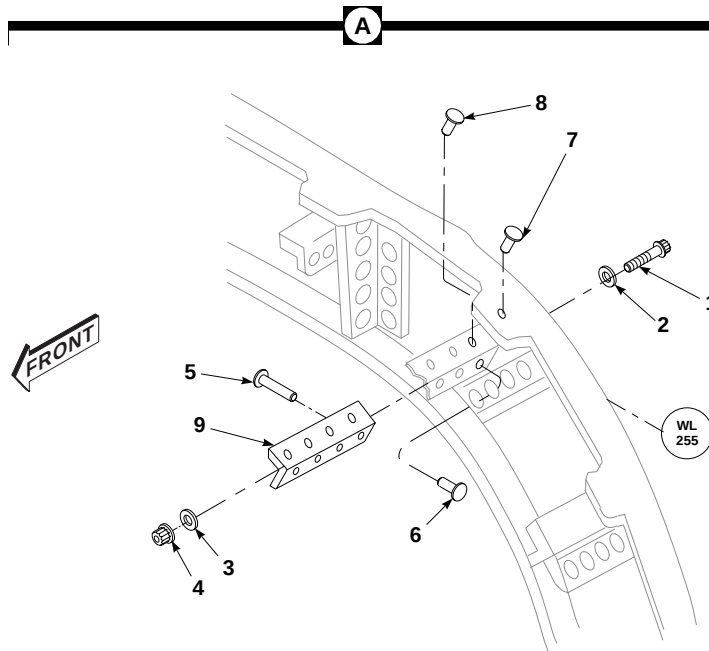
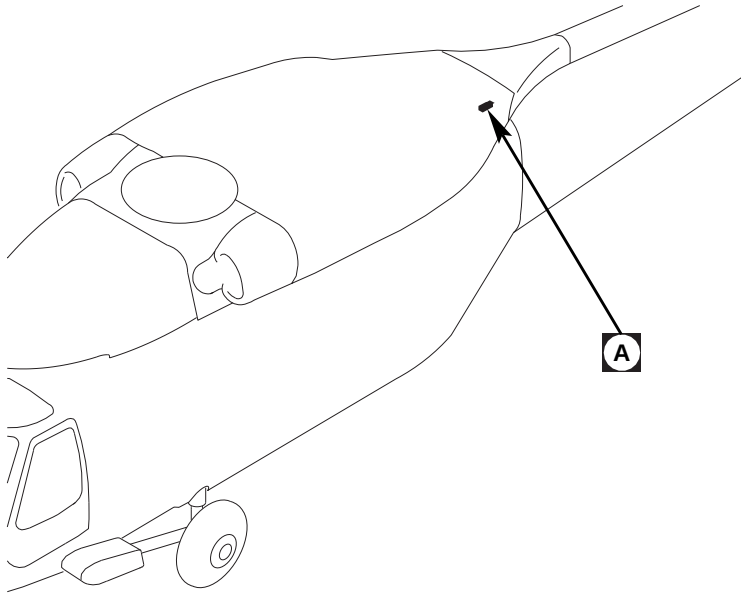


Figure E-10. Station 485 Modification Kit

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-10-	70070-20575-012	STATION 485 MODIFICATION KIT								REF	
-1	NAS625-14	. BOLT								1	
-2	MS20002C5	. WASHER								1	
-3	MS20002-5	. WASHER								1	
-4	SS5081-05	. NUT								1	
-5	NAS1446-04	. SWAGE LOCKING PIN								1	
-6	MS20470AD6-4	. RIVET								4	
-7	MS20470AD5-4	. RIVET								2	
-8	NAS1097AD6-5	. RIVET								3	
-9	70209-03007-125	. FITTING								1	

E-12. LOWER AFT TRANSITION/FOAM LINER MODIFICATION KIT (50-6).

Subject: Lower Aft Transition Section, Rework of, dated 31 March 2003

Purpose: Provide instructions to rework lower aft transition section structure.

Model: UH-60A

Description: The lower aft transition section structure is removed, corrosion treated, and new structure is installed.

Drawings Required for Modification:

70203-03003, 70211-03001, 70211-03002, 70211-03003, 70211-03004, 70211-03005, 70211-03006, 70211-03007, 70211-03009, 70212-03002, 70212-03003, 70209-03012, 70209-03022, 70213-02501, 70213-03002, 70213-03004, 70070-20577, 70217-03001, 70219-03011

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) SSI 50-26, Station 379.00 Frame, Modification of dated 31 March, 2003

Instructions:

NOTE

- A complete review of this directive is recommended before starting the installation of the lower aft transition section modification.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- This modification must be done concurrently with reference (b).

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).
- (3) Support helicopter forward of station 379.00 with locally manufactured support.
- (4) Support helicopter aft of station 485.00 with locally manufactured support.

B. Modification, lower aft transition section.

(1) Remove lower aft transition section structure as follows:

(a) Remove aft fuselage fuel sump and drain door assemblies (70217-03001-041 and 70217-03001-042 or 70217-03001-045 and 70217-03001-046) Keep serviceable parts for reuse (Dwg 70217-03001, Sheet 1, Zones 5-B, 5-C, and 6-E, Dwg 70070-20577, Sheet 5, Note 48).

(b) Remove aft fuselage extended range fuel dump outlet cover (70209-03022-101) and scuppers (70209-03022-101 and 70209-03022-103). Keep serviceable parts for reuse (Dwg 70209-03022, Sheet 1, Zones 11-E and 12-F).

(c) Remove aft fuselage fuel vent assembly (70209-03012-041). Keep serviceable parts for reuse (Dwg 70209-03012, Sheet 1, Zone 11-E).

(d) Remove aft fuselage foam, and scrap.

NOTE

The following airframe parts, when removed are kept for use as templates and then scrapped.

(e) Remove station 379.00 strap (70213-02501-126) (Dwg 70213-02501, Sheet 3, Zone 15-A).

(f) Remove doubler (70213-03002-113) (Dwg 70213-03002, Sheet 3, Zone 16-B).

(g) Remove aft fuselage antenna doubler (70203-03003-101) (Dwg 70203-03003, Sheet 1, Zone 12-C).

NOTE

The following steps are done to aid in removing skins.

(h) Remove rivets from left and right buttlines 30.00 through buttlines 40.00, station 379.00 through station 485.00 and roll skins back as necessary.

(i) Remove rivets from station 379.00 forward, between buttlines 30.00, and roll skins back.

(j) Remove station 379.00 through station 443.50 left and right side skins (70213-03002-116, 70213-03002-117, and 70213-03002-118) (Dwg 70213-03002, Sheet 1, Zone 15-A, Sheet 3, Zone 11-B).

(k) Remove doubler (70213-03004-101) and bracket angles (SS1083-147, SS1083-192, and SS1083-237) (Dwg 70213-03004, Sheet 1, Zones 8-E, 7-F, 7-G, and 7-H).

(l) Remove station 443.50 through station 485.00 left and right side skins (70213-03002-107, 70213-03002-108, and 70213-03002-119) (Dwg 70213-03002, Sheet 1, Zone 10-B, and Sheet 3, Zone 8-B).

(m) Remove left and right side No. 19 stringers (70212-03002-117 and 70212-03002-118) at station 379.00, station 398.00, station 416.60, station 424.90, and station 443.50 frames (Dwgs 70070-20577, Sheet 5, Zones 15-G and 15-C, 70212-03002, Sheet 2, Zones 4-F through 17-F, and Sheet 1, Section A-A, Zone 11-L).

(n) Remove left and right side No. 20 stringers (70212-03002-113 and 70212-03002-114) at station 379.00, station 398.00, station 416.60, station 424.90, and station 443.50 frames (Dwg 70070-20577, Sheet 5, Zones 15-F and 15-C, Dwg 70212-03002, Sheet 2, Zones 4-N through 17-, and Sheet 1, Section A-A, Zone 11-L).

(o) Remove left and right side No. 22 stringers (70212-03002-103, 70212-03002-104, 70212-03002-105, 70212-03002-106) at station 379.00, station 398.00, station 416.60, station 424.90, and station 443.50 frames (Dwg 70070-20577, Sheet 5, Zones 15-E, 15-D, 14-H, and 14-B, Dwg 70212-03002, Sheet 1, Zones 6-P through 13-P and 15-P through 19-P, Section A-A, Zone 11-L).

(p) Remove No. 23 stringer (70212-03002-111) at station 379.00 through station 416.50 (Dwg 70070-20577, Sheet 5, Zone 15-D, Dwg 70212-03002, Sheet 2, Zones 6-E through 10-F).

(q) Remove aft fuselage left and right side beam assemblies (70212-03003-041, 70212-03003-042, 70212-03003-043, and 70212-03003-044) and angle splices (70212-03003-131 and 70212-03003-132), station 379.00 through station 443.50, butline 10.00 (Dwg 70070-20577, Sheet 6, Zones 15-E and 15-D, Dwg 70212-03003, Sheet 1, Zones 15-E, 22-L, and 24-E).

(r) Remove aft fuselage left and right side beam assemblies (70212-03003-048, 70212-03003-049, 70212-03003-047, and 70212-03003-050), cap angles (70212-03003-115 and 70212-03003-116), and splice angles (70212-03003-141 and 70212-03003-142), station 379.00 through station 443.50, butline 30.00 (Dwg 70070-20577, Sheet 6, Zones 15-C and 15-G, Dwg 70212-03003, Sheet 2, Zones 10-H, 15-G, 15-D, and 15-L).

(s) Remove station 398.00 shear angle (70211-03002-101) (Dwg 70211-03002, Sheet 1, Zone 15-B).

(t) Remove station 408.30 intercostals (70211-03003-101, 70211-03003-102, 70211-03003-103, and 70211-03003-104), angles (70211-03003-114 and 70211-03003-115), and gussets (70211-03003-116, 70211-03003-117, and 70211-03003-118) (Dwg 70211-03003, Sheet 1, Zones 12-A, 14-A, 14-D, 13-D, and 9-D).

(u) Remove station 416.60 intercostals (70211-03004-101, 70211-03004-102, 70211-03004-105, and 70211-03004-106), stiffeners (70211-03004-103, 70211-03004-104, 70211-03004-107, and 70211-03004-108), angles (70211-03004-117, 70211-03004-118, 70211-03004-119, 70211-03004-120, 70211-03004-121, 70211-03004-122, 70211-03004-126, and 70211-03004-127), between left and right side butlines 29.97 (Dwg 70211-03004, Sheet 1, Views C-C and F-F, Zones 10-A through 21-D, 13-D, and 9-E).

(v) Remove station 424.90 intercostals (70211-03005-101, 70211-03005-102, 70211-03004-103, and 70211-03004-104) and angles (70211-03005-115, 70211-03005-116, 70211-03005-117, and 70211-03005-118, 70211-03005-120, 70211-03005-121, 70211-03004-117, 70211-03004-118, 70211-03004-119, and 70211-03004-120), between left and right side butlines 29.99 (Dwg 70211-03005, Sheet 1, Views A-A and B-B, Zones 10-A, 11-A, 12-B, 14-D, 9-F, 17-D, and 22-D).

(w) Remove station 433.20 frames (70211-03006-101, 70211-03006-102, 70211-03006-103, and 70211-03006-104), gussets (70211-03006-114), and angles (70211-03006-115 and 70211-03006-0116) between left and right side butlines 30.00 (Dwg 70211-03006, Sheet 1, Zones 10-A through 22-D).

(x) Remove station 443.50 shear angle (70211-03007-185) (Dwg 70211-03007, Sheet 1, Zone 14-B).

(y) Remove No. 22 stringers (70212-03002-107 and 70212-03002-108) between station 464.00 and station 485.00 (Dwg 70070-20577, Sheet 5, Zones 9-E and 9-F).

(z) Remove stringers (70212-03002-124 and 70212-03002-123) between station 464.00 and 485.00 (Sheet 5, Zones 11-E and 9-E).

(aa) Remove No. 20 stringers (70212-03002-115 and 70212-03002-116) at station 443.50, 464.00, and station 485.00 (Dwg 70070-20577, Sheet 5, Zones 10-C and 10-F, 70212-03002, Sheet 1, Section A-A, Zone 11-L).

(ab) Remove No. 17 stringers (70212-03002-109 and 70212-03002-110) at station 443.50, station 464.00, and station 485.00 (Dwg 70070-20577, Sheet 5, Zones 11-B and 10-G, Dwg 70212-03002, Sheet 1, Section A-A, Zone 11-L).

(ac) Remove butline 10.00 stringers (70212-03002-119 and 70212-03002-120) at station 443.50, station 464.00, and station 485.00 (Dwgs 70070-20577, Sheet 5, Zones 9-D and 9-F, 70212-03002, Sheet 1, Section A-A, Zone 11-L).

(2) Install lower aft transition section structure as follows:

(a) Inspect lower aft transition section structure for corrosion and repair damaged areas (Dwg 70070-20577, Sheet 5, Note 48).

(b) Install station 398.00 shear angle (70211-03002-101) (Dwg 70070-20577, Sheet 6, Zone 16-F, Note 43).

(c) Install station 408.30 intercostals (70211-03003-101, 70211-03003-102, 70211-03003-103, and 70211-03003-104), angles (70211-03003-114 and 70211-03003-115), and gussets (70211-03003-116, 70211-03003-117, and 70211-03003-118) (Sheet 6, Zone 14-B, Note 40).

(d) Install station 416.60 intercostals (70211-03004-101, 70211-03004-102, 70211-03004-103, 70211-03004-104, 70211-03004-105, and 70211-03004-106), stiffeners (70211-03004-107 and 70211-03004-108), and angles (70211-03004-117, 70211-03004-118, 70211-03004-119, 70211-03004-120, 70211-03004-121, 70211-03004-122, 70211-03004-126, and 70211-03004-127) (Sheet 6, Zone 12-B, Note 39).

(e) Install station 424.90 intercostals (70211-03005-101, 70211-03005-102, 70211-03005-103, and 70211-03005-104) and angles (70211-03005-115, 70211-03005-116, 70211-03005-117, 70211-03005-118, 70211-03005-120, 70211-03005-121, 70211-03004-117, 70211-03004-118, 70211-03004-119, and 70211-03004-120) (Sheet 6, Zone 12-H, Note 36).

(f) Install station 433.20 frames (70211-03006-101, 70211-03006-102, 70211-03006-103, and 70211-03006-104), gussets (70211-03006-114), and angles (70211-03006-115 and 70211-03006-116) (Sheet 6, Zone 11-G, Note 37).

(g) Install station 443.50 shear angle (70211-03007-185) (Sheet 6, Zone 11-B, Note 38).

NOTE

- In the following step, beam assemblies (70212-03003-554 and 70212-03003-544) are installed in place of (70212-03003-054 and 70212-03003-044). The splice angles (70212-03003-132 and 70212-03003-131) are preinstalled on (70212-03003-054 and 70212-03003-044) creating (70212-03003-554 and 70212-03003-544).
- After installation is completed the (70212-03003-554 and 70212-03003-544) are reidentified to (70212-03003-054 and 70212-03003-044).

(h) Install aft fuselage left and right side beam assemblies (70212-03003-041, 70212-03003-554, 70212-03003-042, and 70212-03003-544) between station 379.00 and station 443.50, butline 10.00 (Dwgs 70212-03003, Sheet 1, Zones 24-F, 24-G, and 22-L, Dwg 70211-03007, Sheet 1, Section A-A, Zone 9-A).

NOTE

- In the following step, beam assemblies (70212-03003-555 and 70212-03003-548) are installed in place of (70212-03003-055 and 70212-03003-048). The splice angles (70212-03003-142 and 70212-03003-141) are preinstalled on (70212-03003-055 and 70212-03003-048) creating (70212-03003-555 and 70212-03003-548).

- After installation is completed the (70212-03003-555 and 70212-03003-548) are reidentified to (70212-03003-055 and 70212-03003-048).

(i) Install aft fuselage left and right side beam assemblies (70070-20577-041, 70212-03003-555, 70212-03003-548, and 70070-20577-042) and cap angles (70212-03003-115 and 70212-03003-116) between station 379.00 and station 443.50, butline 30.00 (Dwg 70212-03003, Sheet 2, Zone 15-D, 15-L, 18-E, and 18-F, Dwg 70211-03007, Sheet 1, Zone 11-C through 11-E).

(j) Install No. 23 stringer (70212-03002-111) between station 379.00 and station 398.00, butline 0.00 (Dwg 70213-03002, Sheet 3, Zone 17-C, Dwg 70211-03001, Sheet 1, Section R-R, Zone 8-F, Dwg 70212-03002, Sheet 1, Zone 6-F).

(k) Install left and right side No. 22 stringers (70212-03002-103 and 70212-03002-104) between station 379.00 and station 416.60, butline 5.00 (Dwg 70213-03002, Sheet 3, Zone 17-C and Dwg 70212-03002, Sheet 1, Section A-A, Zones 11-L and 13-N).

(l) Install left and right side No. 20 stringers (70212-03002-113 and 70212-03002-114) between station 379.00 and station 443.50, butline 16.70 (Dwg 70213-03002, Sheet 3, Zone 17-E, Dwg 70211-03001, Sheet 1, Section S-S, Zone 5-H, Dwg 70211-03007, Sheet 1, Section B-B, Zone 7-A, Dwg 70212-03002, Sheet 1, Section A-A, Zone 11-L).

(m) Install left and right side No. 19 stringers (70212-03002-117 and 70212-03002-118) between station 379.00 and station 443.50, butline 23.70 (Dwg 70213-03002, Sheet 3, Zone 17-F, Dwg 70211-03007, Sheet 1, Section AB-AB, Dwg 70212-03002, Sheet 1, Section A-A, Zone 11-L).

(n) Install left and right side No. 22 stringers (70212-03002-105 and 70212-03002-106) between station 424.90 and station 443.50, butline 5.00 (Dwg 70213-03002, Sheet 3, Zone 10-A, Dwg 70212-03002, Sheet 1, Section A-A, Zones 11-L and 15-J).

(o) Install position No. 22 stringers (70212-03002-107 and 70212-03002-108) between station 464.00 and station 485.00 (Dwg 70213-03002, Sheet 3, Zone 7-B, Dwg 70211-03009, Sheet 1, Section R-R, Zone 8-J).

(p) Install butline 10.00 stringers (70212-03003-119 and 70212-03003-120) at station 443.50, station 464.00, and station 485.00 (Dwg 70213-03002, Sheet 1, Zone 6-G, Dwg 70211-03007, Sheet 1, Section A-A, Zone 8-A, Dwg 70211-03009, Sheet 1, Section F-F, Zone 4-J, Dwg 70212-03002, Sheet 1, Section A-A, Zone 11-L).

(q) Install stringer (70212-03002-123) forward of station 485.00, butline 0.00 (Dwg 70213-03002, Sheet 3, Zone 7-B, Dwg 70211-03009, Sheet 1, Section S-S, Zone 9-B).

(r) Install stringer (70212-03002-124) aft of station 464.00 (Dwg 70213-03002, Sheet 3, Zones 8-A, Note 16).

NOTE

The nutplates for the IFF antenna are installed after the skins and structure are urethane coated.

(s) Install IFF antenna doubler (70213-03004-101) with angles (SS1083-147, SS1083-192, and SS1083-237) (Dwg 70070-20577, Sheet 9-D and Sheet 2, Note 18).

(t) Install No. 20 stringers (70213-03002-115 and 70213-03002-116) at station 443.50, station 464.00, and station 485.00 (Dwg 70213-03002, Sheet 1, Zone 7-F, Dwg 70211-03007, Sheet 1, Section B-B, Zone 7-A, Dwg 70211-03009, Sheet 1, Section P-P, Zone 9-L, Dwg 70212-03002, Sheet 1, Section A-A, Zone 11-L).

(u) Install No. 19 stringers (70212-03003-125 and 70212-03003-126) at station 443.50, station 464.00, and station 485.00, butline 10.00 (Dwg 70213-03002, Sheet 3, Zone 8-G, Zone 10-B, and Dwg 70211-03009, Sheet 1, Section N-N, Zone 14-D, Dwg 70212-03002, Sheet 1, Section A-A, Zone 11-L).

(v) Install No. 17 stringers (70212-03002-109 and 70212-03002-110), at station 443.50, station 464.00, and 485.00, butline 30.00 (Dwg 70213-03002, Sheet 1, Zone 8-H, Dwg 70211-03007, Sheet 1, Section F-F, and Dwg 70211-03009, Sheet 1, Section M-M, Zone 7-L, Dwg 70212-03002, Sheet 1, Section A-A, Zone 11-L).

(w) Position skins (70213-03002-107, 70213-03002-119, 70213-03002-108), from station 443.50 through station 485.00. Transfer drill fastener holes from structure and doublers through skins (Dwg 70070-20577, Sheet 5, Zones 10-B, 9-D, and 10-F, Dwg 70213-03002, Sheet 1, Zone 10-B, Sheet 3, Zone 8-B).

(x) Position skin (70070-20577-103) and transfer hole cutout from doubler (70213-03004-101) installed in step (s) on page 6 (Dwg 70070-20577, Sheet 5, Zone 9-D, Notes 19, 32 and 57).

(y) Transfer drill nutplate holes from IFF antenna doubler through skin.

(z) Position skins (70213-03002-117, 70213-03002-118, 70213-03002-116), from station 379.00 through station 443.50. Transfer drill fastener holes from structure and doublers through skins (Dwg 70070-20577, Sheet 5, Zones 16-F and 16-C, Dwg 70213-03002, Sheet 1, Zone 15-A, Sheet 3, Zone 11-B).

NOTE

The antenna mount doubler nutplates are installed after the skins and structure are urethane coated.

(aa) Position antenna mount doubler (70203-03003-101) on skin at station 443.50 through station 464.00. Drill fastener and nutplate holes (Dwg 70070-20577, Sheet 5, Zone 10-C, Dwg 70203-03003, Sheet 1, Zone 13-C).

(ab) Position serviceable aft fuselage fuel vent assembly (70209-03012-041), kept for reuse, into skin cutout between station 443.50 and station 450.00, left butline 20.00. Drill fastener holes (Dwg 70209-03012, Sheet 1, Zone 11-E).

(ac) Position serviceable aft fuselage extended range fuel dump outlet scuppers (70209-03022-101 and 70209-03022-103) and cover (70209-03022-102), kept for reuse, into skin cutout between station 443.50 and station 450.00, right butline 20.00. Drill fastener holes (Dwg 70209-03022, Sheet 1, Zone 12-D).

(ad) Position new fuel sump drain doublers (70217-03001-111) and doors (70217-03001-041 and 70217-03001-042 or 70217-03001-045 and 70217-03001-045 and 70217-03001-046), into skin cutouts, between station 416.60 and station 424.90, between left and right side butlines 3.00 and 10.00. Drill fastener holes (Dwg 70217-03001, Sheet 1, Zones 4-B and 6-E).

(ae) Drill stud receptacle holes from doublers (70217-03001-111) through skin.

(af) Position doubler (70213-03002-113) on skin between station 385.00 and station 393.00, butline 0.00 and left side butline 5.00. Drill fastener holes (Dwg 70213-03002, Sheet 3, Zone 16-A).

(ag) Drill eight nutplate holes in skin (Sheet 3, Detail B, Zone 5-H).

(ah) Position strap (70213-02501-126) on skins, station 379.00. Drill fastener holes (Dwg 70213-02501, Sheet 3, Detail H, Zone 15-A).

(ai) Drill 40 0.320-inch diameter drain holes in skins (Dwg 70070-20577, Sheet 5, Zone 14-E, Note 32).

(aj) Remove doublers, scuppers, doors, fuel vent, strap, and skins.

NOTE

- The receptacles used in the following step are for the fuel sump assemblies (70217-03001-045 and 70217-03001-046) only.
- In the next two steps, do not install fasteners that are used to secure doublers, scuppers, doors, fuel vent, and strap.

(ak) Install receptacles (212-12) and nutplates (MS21075-3 and MS21059-3) with fasteners shown on IFF antenna doubler, station 443.50 through station 464.00 antenna mount, fuel dump outlet, fuel sump drain, and station 389.00 antenna mount (Dwg 70213-03004, Sheet 1, Zone 7-G, Dwg 70203-03003, Sheet 1, Zone 11-B, Dwg 70217-03001, Sheet 1, Zone 3-E, Dwg 70213-03002, Sheet 3, Zone 17-A).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(al) Touch up skins and structure with epoxy primer (MIL-P-85582 or equivalent), urethane (MIL-C-85285 or equivalent), and corrosion preventive compound, (Dinotrol AV30 or AV15 or equivalent) (Dwg 70070-20577, Sheet 5, Note 47).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

NOTE

The side skins that were loosened to remove the bottom skin are reattached when the bottom skins are installed.

(am) Install skins with fasteners wet with sealant (AMS 3265, Class A or Class C or equivalent) between station 443.50 and station 485.00 using drawing cross hatch sections (Dwg 70213-03002, Sheet 5, Zones 5-C through 3-E and 14-H through 12-F, Dwg 70203-03003, Sheet 2, Dwg 70070-20577, Sheet 5, Note 10, 11, 21, 12, 13, 14, 15, 19, 17, and 47).

(an) Install skins with fasteners wet with sealant (AMS 3265, Class A or Class C or equivalent) between station 379.00 and station 443.50 using drawing cross hatch sections (Dwg 70213-03002, Sheet 5, Zones 8-B through 5-E and 17-I through 14-F, Dwg 70217-03001, Sheet 2, Dwg 70070-20577, Sheet 5, Note 23, 24, 25, 26, 27, 28, and 47).

(ao) Install doublers, scuppers, doors, fuel vent, strap with sealant (AMS 3265, Class A or Class C or equivalent) using cross hatch sections (Dwg 70203-03003, Sheet 2, Dwg 70217-03001, Sheet 2, Dwg 70213-02501, Sheet 5, Section AE-AE, Zone 6-B, Dwg 70070-20577, Sheet 5, Note 47).

(ap) Bond foam blocks (70219-03001-123 through 70219-03011-144) to structure with adhesive, (444R) (Dwg 70219-03011, Sheet 1 Note 3).

NOTE

There are no reidentification of structure assemblies or installations created by this modification.

C. Reinstallation of removed equipment:

(1) Install removed equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20577-011	Lwr. Aft	Negligible	409.4	0.0

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: Negligible

Moment arm: 409.4

Change in basic moment/1000: 0.0

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Helicopter Structural Mechanic	2	240.0	*480.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Lower Aft Transition, consisting of:	70070-20577-011	(1)
1	Mod. Kit, Lower Aft Trans, consisting of:	70070-20577-012	
1	Stringer 22	70212-03002-103	
1	Stringer 22	70212-03002-104	
1	Stringer 22	70212-03002-105	
1	Stringer 22	70212-03002-106	
1	Stringer 22	70212-03002-107	
1	Stringer 22	70212-03002-108	
1	Stringer 17	70212-03002-109	
1	Stringer 17	70212-03002-110	
1	Stringer 23	70212-03002-111	
1	Stringer	70212-03002-113	
1	Stringer	70212-03002-114	
1	Stringer 20	70212-03002-115	
1	Stringer 20	70212-03002-116	
1	Stringer 19	70212-03002-117	
1	Stringer 19	70212-03002-118	
1	Stringer	70212-03002-125	
1	Stringer	70212-03002-126	
1	Stringer	70212-03002-123	
1	Stringer	70212-03002-124	
1	Strap	70213-02501-126	
1	Shear Angle	70211-03002-101	
1	Skin	70213-03002-107	
1	Skin	70213-03002-108	
1	Doubler	70213-03002-113	
1	Skin	70213-03002-116	
1	Skin	70213-03002-117	
1	Skin	70213-03002-118	
1	Skin	70070-20577-103	
1	Doubler	70213-03004-101	
1	Doubler	70203-03003-101	
2	Bracket Angle	SS1083-147	
2	Bracket Angle	SS1083-192	
2	Bracket Angle	SS1083-237	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit,	70070-20577-013	
	consisting of:		
1	Beam Assy	70070-20577-041	
1	Beam Assy	70070-20577-042	
1	Intercostal	70211-03003-101	
1	Intercostal	70211-03003-102	
1	Intercostal	70211-03003-103	
1	Intercostal	70211-03003-104	
1	Angle	70211-03003-114	
1	Angle	70211-03003-115	
2	Gusset	70211-03003-116	
1	Gusset	70211-03003-117	
1	Gusset	70211-03003-118	
1	Intercostal	70211-03004-101	
1	Intercostal	70211-03004-102	
1	Stiffener	70211-03004-103	
1	Stiffener	70211-03003-104	
1	Intercostal	70211-03004-105	
1	Intercostal	70211-03004-106	
2	Stiffener	70211-03004-107	
2	Stiffener	70211-03004-108	
4	Angle	70211-03004-117	
4	Angle	70211-03004-118	
4	Angle	70211-03004-119	
4	Angle	70211-03004-120	
2	Angle	70211-03004-121	
2	Angle	70211-03004-122	
1	Angle	70211-03004-126	
1	Angle	70211-03004-127	
1	Intercostal	70211-03005-101	
1	Intercostal	70211-03005-102	
1	Intercostal	70211-03005-103	
1	Intercostal	70211-03005-104	
1	Angle	70211-03005-115	
1	Angle	70211-03005-116	
2	Angle	70211-03005-117	
2	Angle	70211-03005-118	
1	Angle	70211-03005-120	
1	Angle	70211-03005-121	
1	Frame	70211-03006-101	
1	Frame	70211-03006-102	
1	Frame	70211-03006-103	
1	Frame	70211-03006-104	
4	Gusset	70211-03006-114	
1	Angle	70211-03006-115	
1	Angle	70211-03006-116	
1	Shear Angle	70211-03007-185	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Beam Assy	70212-03003-041	
1	Beam Assy	70212-03003-042	
\$1	Beam Assy	70212-03003-544	
\$1	Beam Assy	70212-03003-548	
1	Beam Assy	70212-03003-041	
1	Beam Assy	70212-03003-042	
\$1	Beam Assy	70212-03003-554	
\$1	Beam Assy	70212-03003-555	
1	Angle Cap	70212-03003-115	
1	Angle Cap	70212-03003-116	
1	Stringer BL10	70212-03003-119	
1	Stringer BL10	70212-03003-120	
&Ref	Angle Splice	70212-03003-131	
&Ref	Angle Splice	70212-03003-132	
&Ref	Angle Splice	70212-03003-141	
&Ref	Angle Splice	70212-03003-142	
1	Mod. Kit,	70070-20577-014	
	consisting of:		
8	Bolt	AN173-14A	
12	Bolt	AN173-15A	
5	Pin Collar Assy	HL20PB86-6-10	
5	Pin Collar Assy	HL20PB86-6-8	
10	Pin Collar Assy	HL20PB86-6-9	
18	Collar	HL86TW-6	
14	Rivet	MS20426AD3-2	
45	Rivet	MS20426AD3-4	
10	Rivet	MS20426AD5-2	
26	Rivet	MS20470AD4-2	
1000	Rivet	MS20470AD5-2	
1385	Rivet	MS20470AD5-3	
400	Rivet	MS20470AD5-4	
125	Rivet	MS20470AD5-5	
22	Rivet	MS20470AD6-2	
380	Rivet	MS20470AD6-3	
65	Rivet	MS20470AD6-4	
58	Rivet	MS20470AD6-5	
18	Nut	MS21044N3	
22	Nutplate	MS21059-3	
16	Nutplate	MS21075-3	
170	Collar	NAS1080C06	
30	Rivet	NAS1097AD4-3	
140	Rivet	NAS1097AD5-4	
35	Washer Flat	NAS1149F0332P	
14	Pin, Swg Lkg	NAS1436-03	
46	Pin, Swg Lkg	NAS1446-03	
28	Pin, Swg Lkg	NAS1446-04	
26	Pin, Swg Lkg	NAS1446-05	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
10	Pin, Swg Lkg	NAS1465-04	
14	Pin, Swg Lkg	NAS1526-05	
14	Pin, Swg Lkg	NAS1526-06	
14	Pin, Swg Lkg	NAS1526-07	
50	Rivet	RA097AD4-2	
75	Rivet	RA097AD6-3	
1	Mod. Kit,	70070-20577-015	
	consisting of:		
1	Foam Liner Kit,	70219-03011A012	
	made up of:		
4	Foam Liner	70219-03011-123	
4	Foam Liner	70219-03011-124	
4	Foam Liner	70219-03011-125	
4	Foam Liner	70219-03011-126	
4	Foam Liner	70219-03011-127	
2	Foam Liner	70219-03011-128	
2	Foam Liner	70219-03011-129	
2	Foam Liner	70219-03011-130	
1	Foam Liner	70219-03011-131	
1	Foam Liner	70219-03011-132	
1	Foam Liner	70219-03011-133	
8	Foam Liner	70219-03011-134	
8	Foam Liner	70219-03011-135	
2	Foam Liner	70219-03011-136	
4	Foam Liner	70219-03011-137	
4	Foam Liner	70219-03011-138	
3	Foam Liner	70219-03011-139	
3	Foam Liner	70219-03011-140	
1	Foam Liner	70219-03011-141	
1	Foam Liner	70219-03011-142	
1	Foam Liner	70219-03011-143	
2	Foam Liner	70219-03011-144	
1	Mod. Kit,	70070-20577-016	
	consisting of:		
2	Doubler	70217-03001-111	
77	Rivet	MS20470AD5-9	
5	Rivet	NAS1097AD3-9	
37	Rivet	NAS1097AD5-9	
2	Receptacle	212-12	
1	Mod. Kit,	70070-20577-017	
	consisting of:		
10	Rivet	MS20470AD3-9	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
60	Rivet	MS20470AD5-9	
4	Nutplate	MS21075-3	
4	Screw	MS27039-1-10	
5	Rivet	NAS1097AD4-9	
5	Rivet, Blind	NAS1739B4-2	
2	Rivet, Blind	NAS1739B5-2	
30	Rivet, Blind	NAS1739B5-3	

\$ Beam assemblies (70212-03003-544, 70212-03003-548, 70212-03003-554, and 70212-03003-555) are supplied in place of (70212-03003-044, 70212-03003-048, 70212-03003-054, and 70212-03003-055).

& Angle splices (70212-03003-131, 70212-03003-132, 70212-03003-141, and 70212-03003-142) are not used. They are preassembled onto the above mentioned beam assemblies.

B. Consumable Material:

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

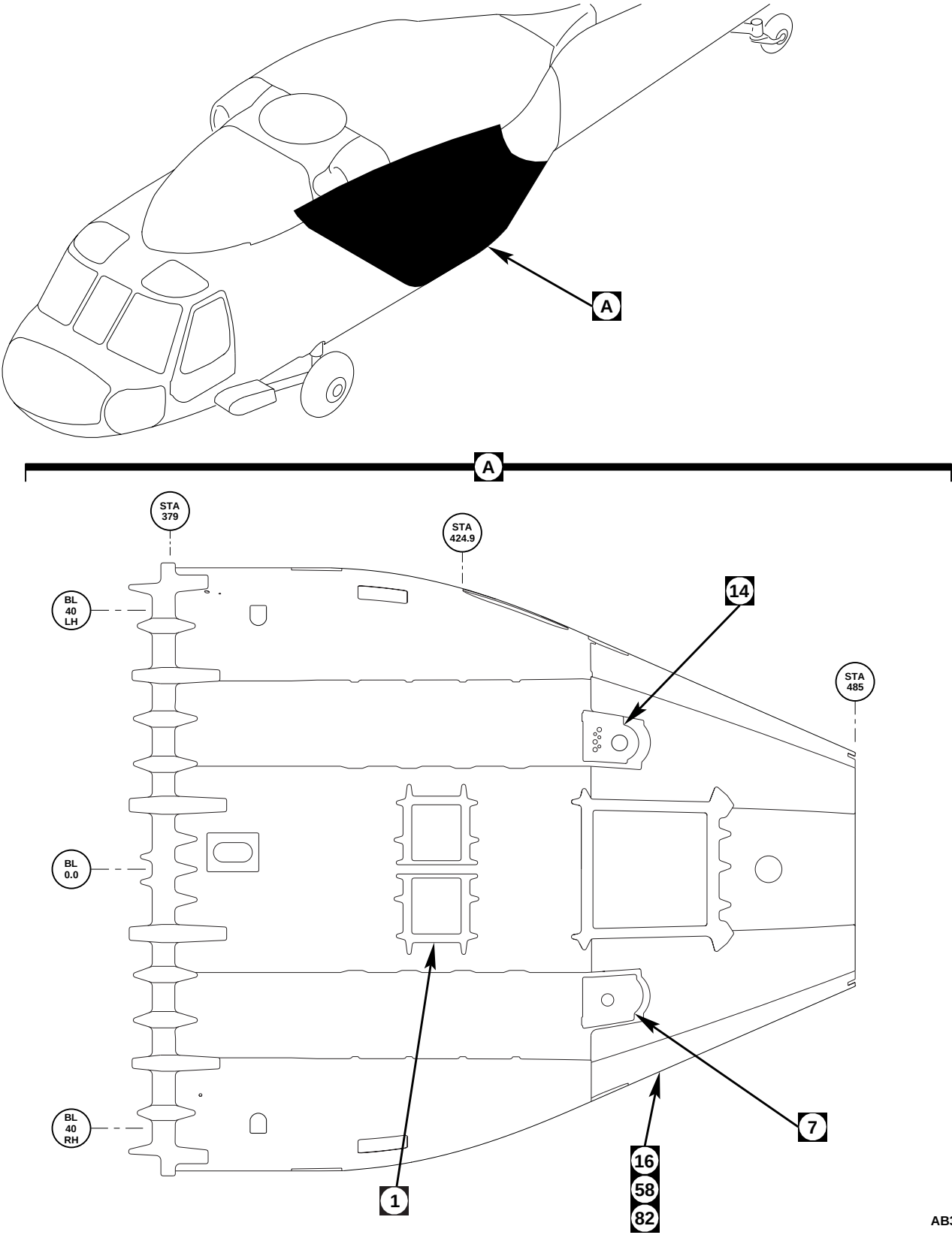
<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
8 oz.	Sealant	AMS 3265, Class A or C or equivalent	(1)
8 oz.	Corrosion Preventive Compound	Dinotrol Av30 or Av15 or equivalent	(1)
8 oz.	Primer, Epoxy	MIL-P-85582 or equivalent	(1)
8 oz.	Urethane	MIL-C-85285 or equivalent	(1)
8 oz.	Adhesive	444R or equivalent	(1)

C. Support Equipment:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Locally designed and manufactured fuselage supports	N/A	(2)

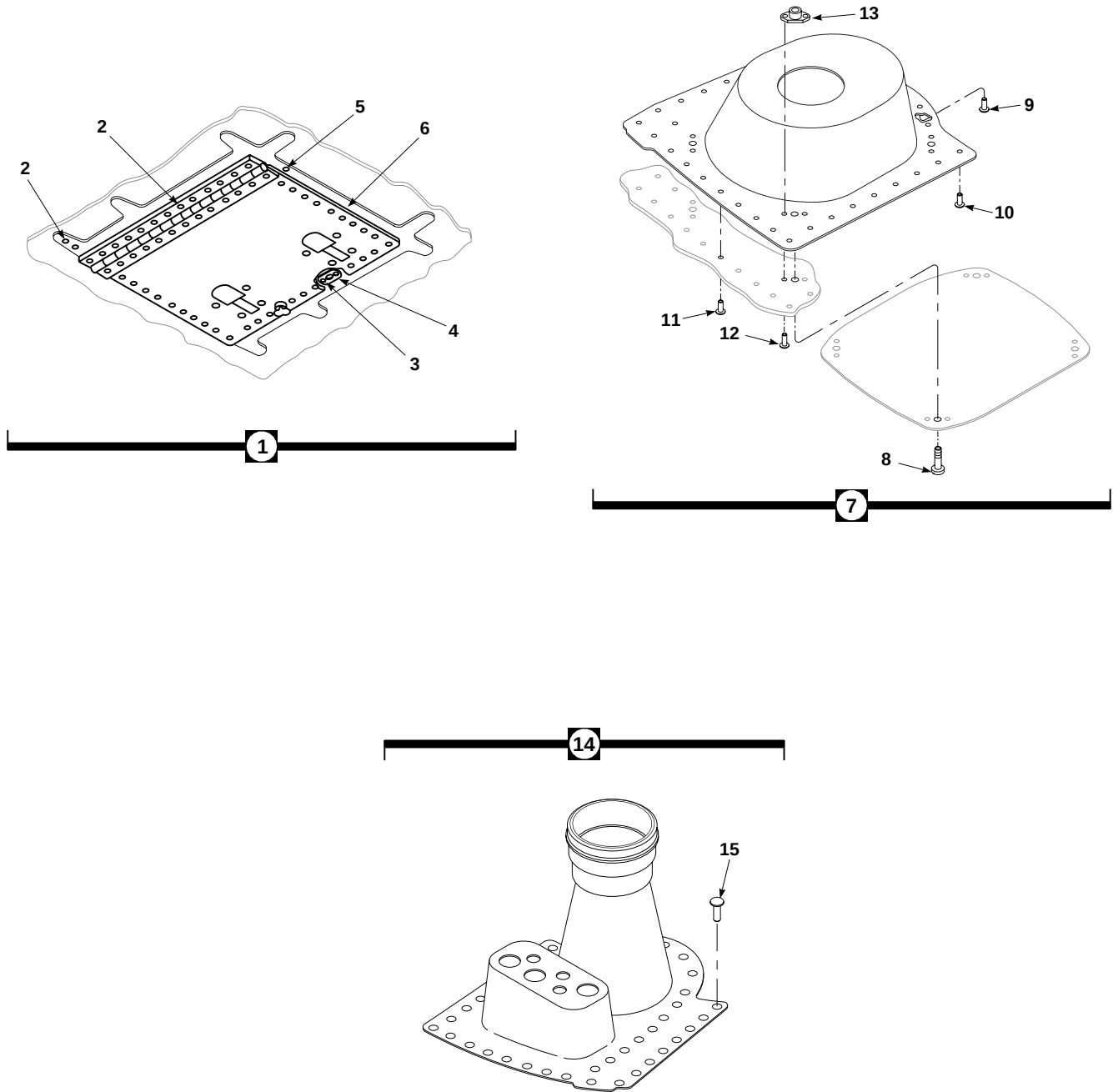
D. Source

- (1) Available through normal supply channels.
- (2) Locally fabricated



AB3095_1
SA

Figure E-11. Lower Aft Transition Modification Kit (Sheet 1 of 8)



AB3095_2
SA

Figure E-11. Lower Aft Transition Modification Kit (Sheet 2 of 8)

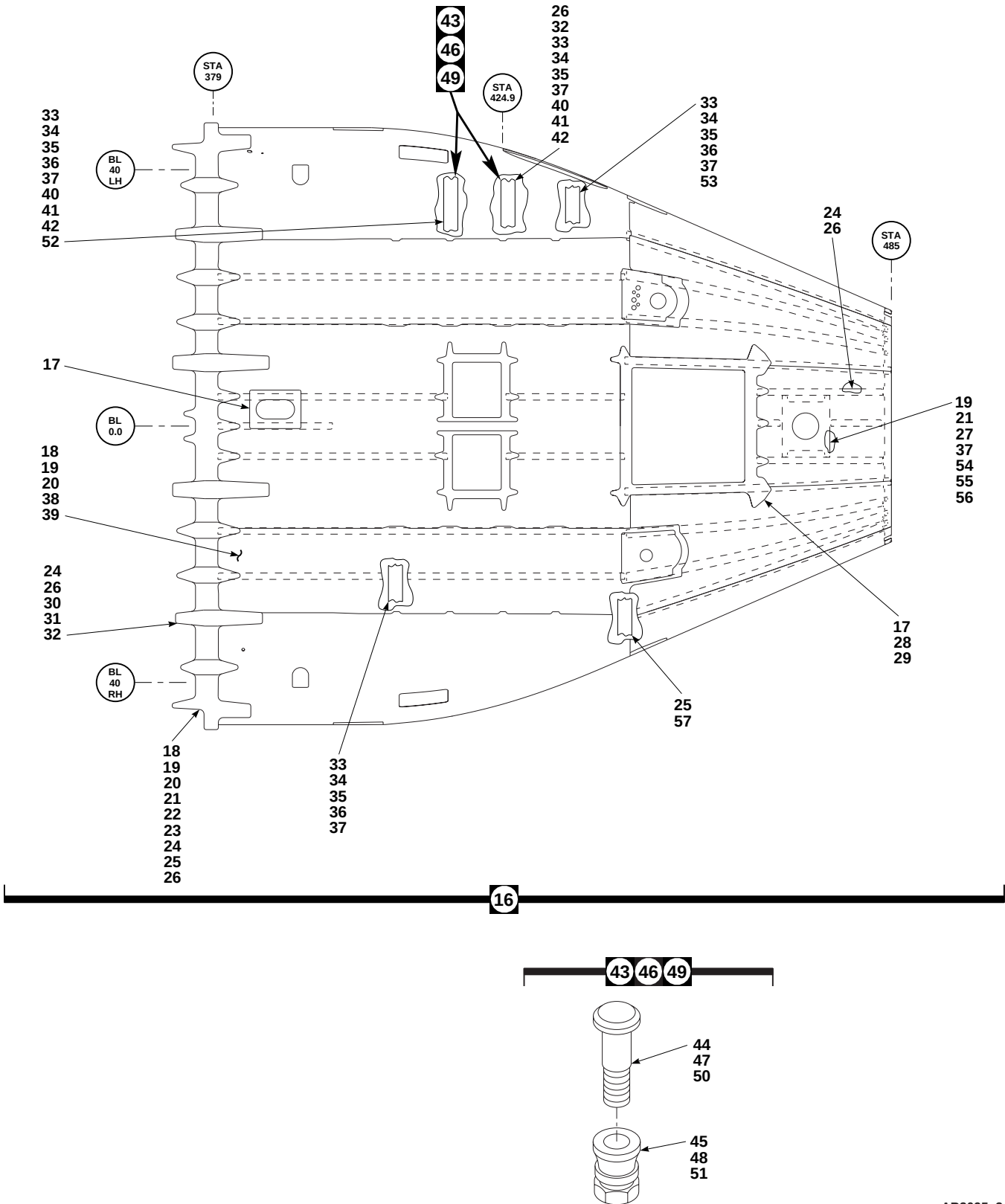
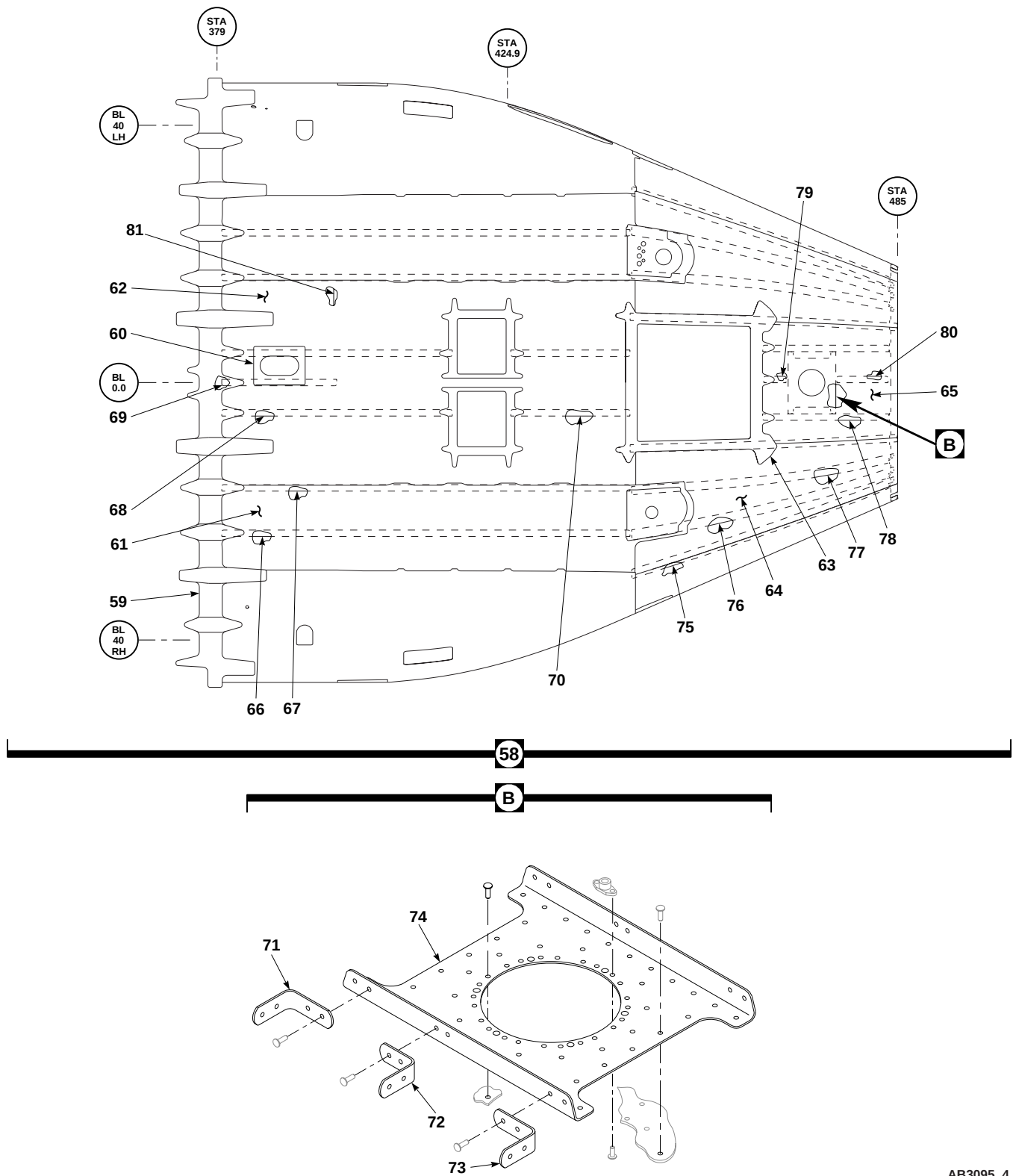


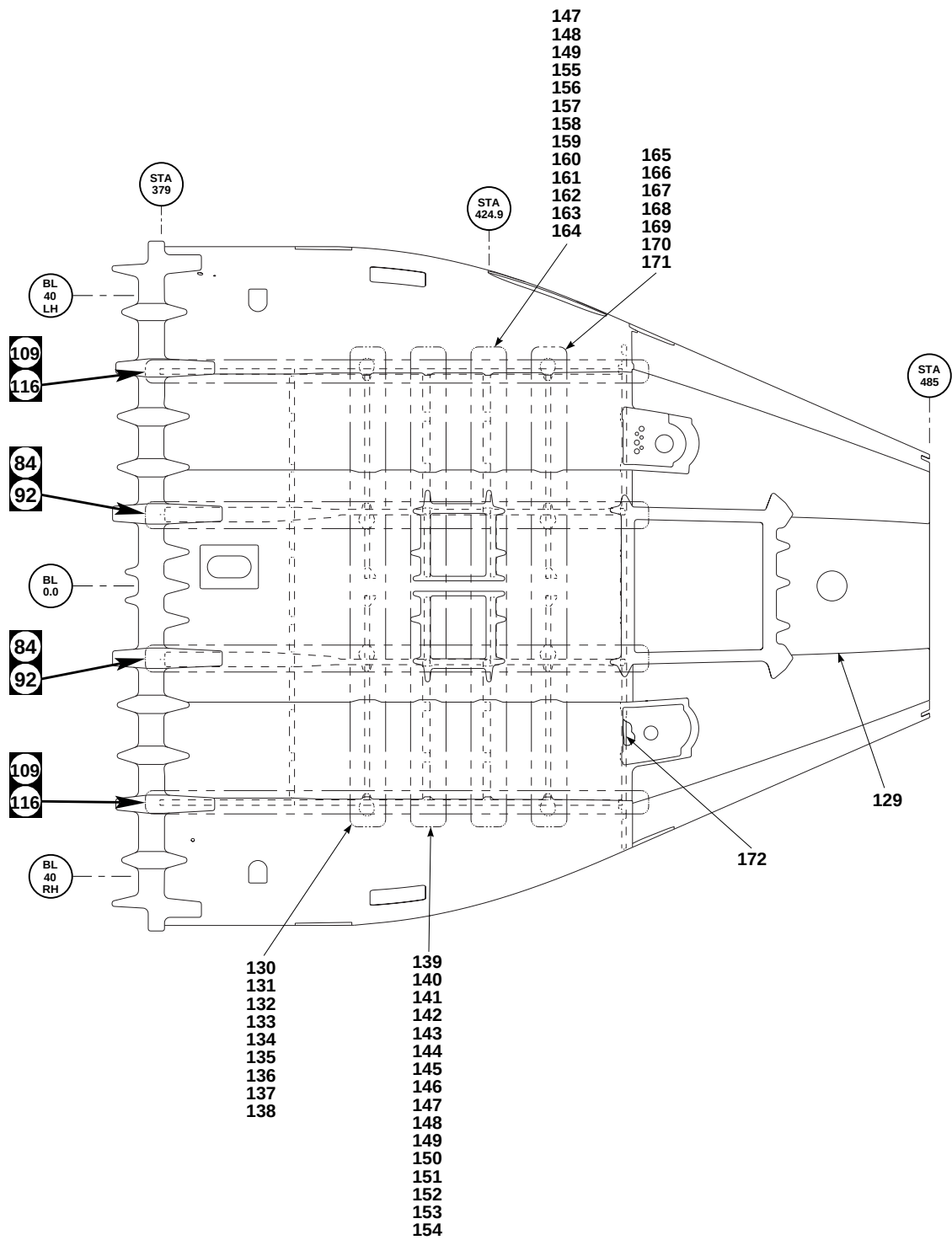
Figure E-11. Lower Aft Transition Modification Kit (Sheet 3 of 8)

AB3095_3
SA



AB3095_4
SA

Figure E-11. Lower Aft Transition Modification Kit (Sheet 4 of 8)



AB3095_5
SA

Figure E-11. Lower Aft Transition Modification Kit (Sheet 5 of 8)

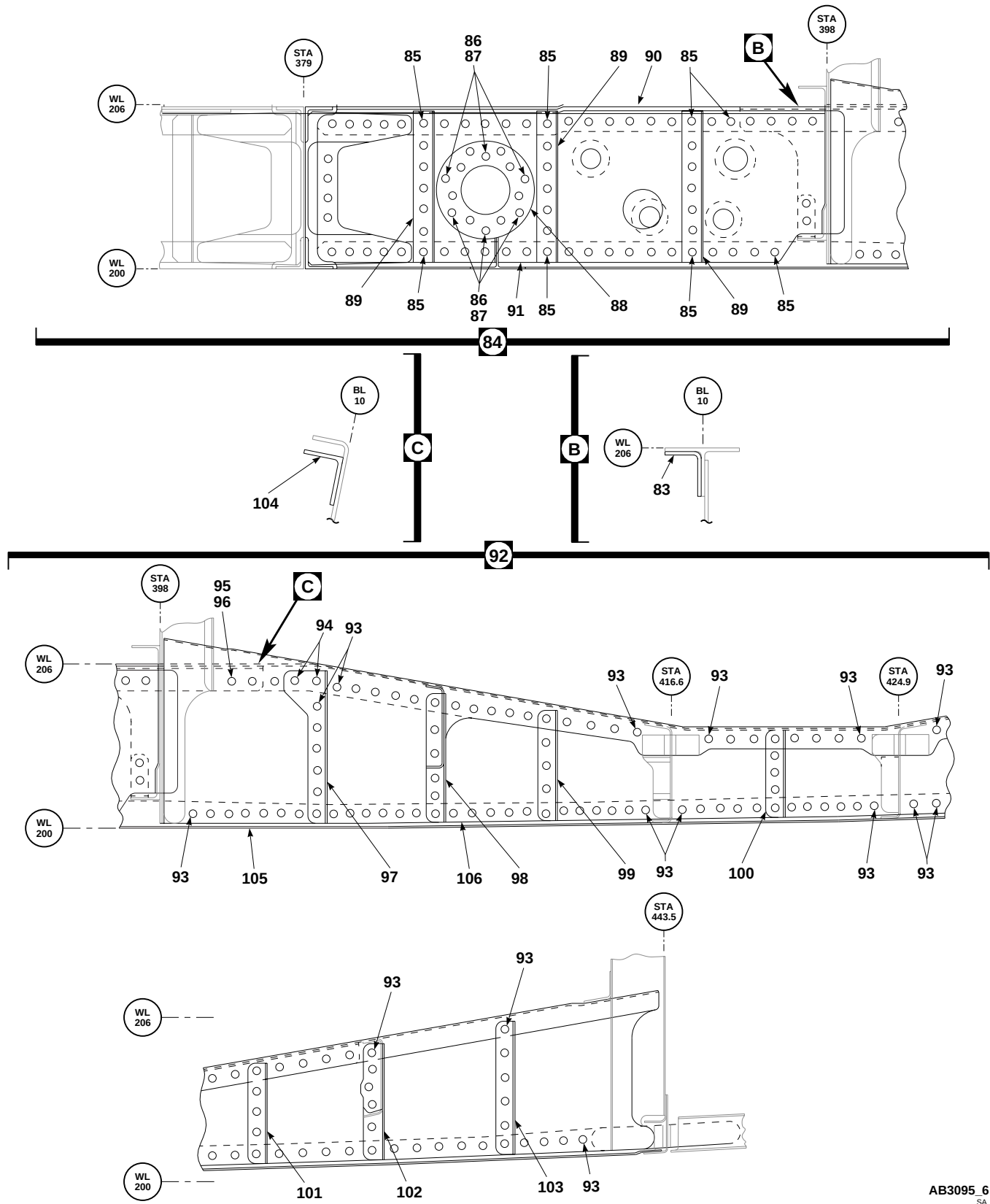
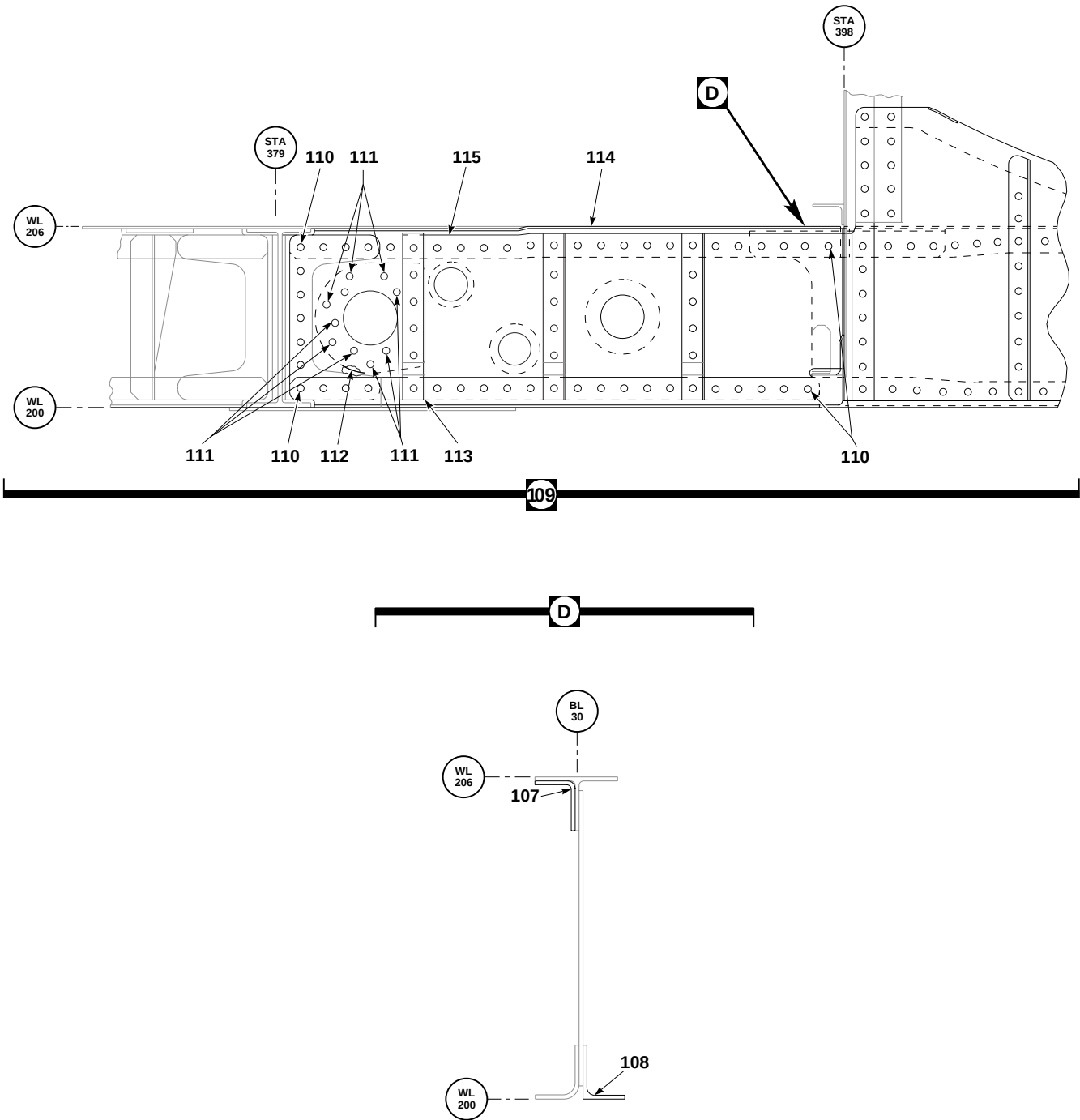
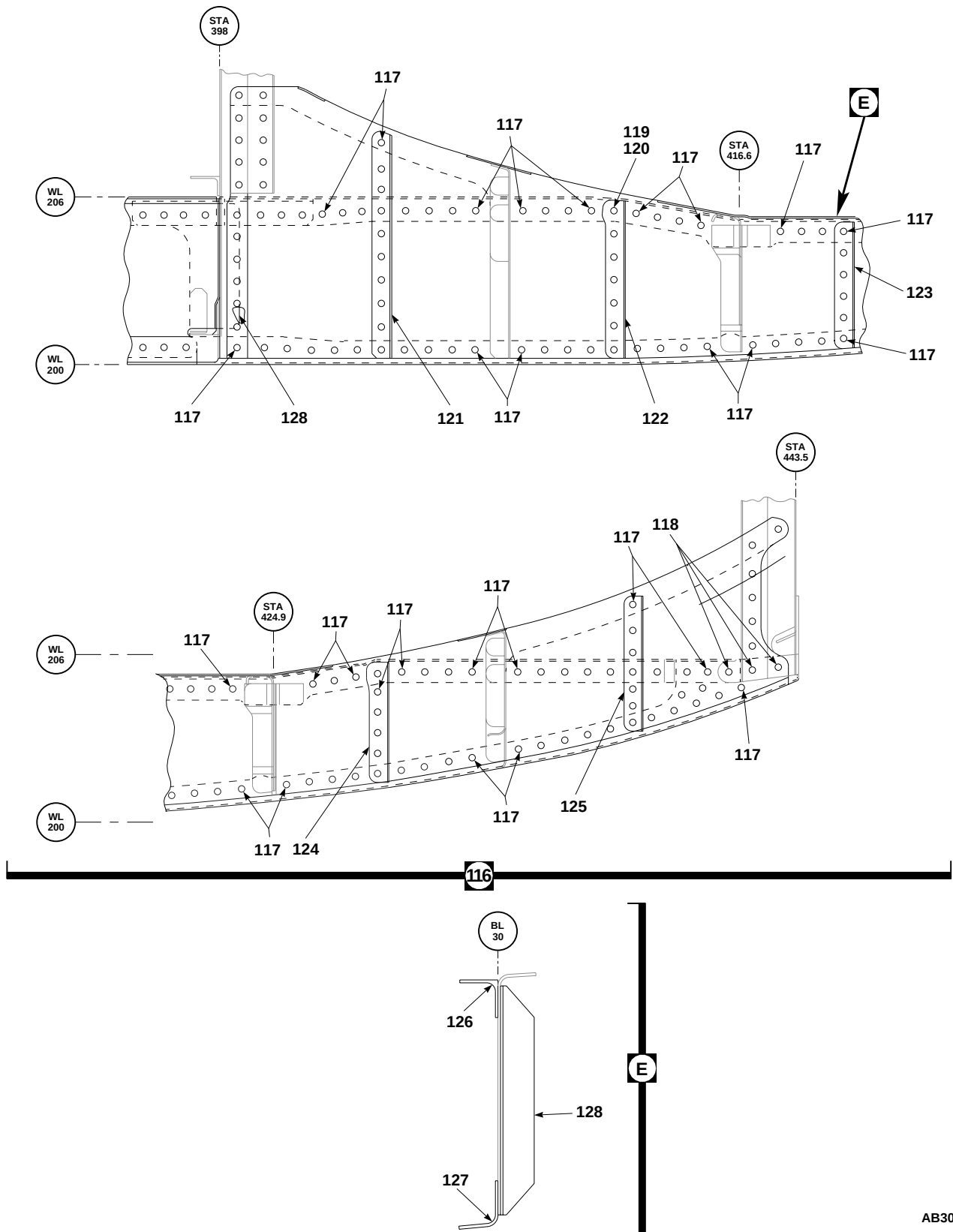


Figure E-11. Lower Aft Transition Modification Kit (Sheet 6 of 8)



AB3095_7
SA

Figure E-11. Lower Aft Transition Modification Kit (Sheet 7 of 8)



AB3095_8
SA

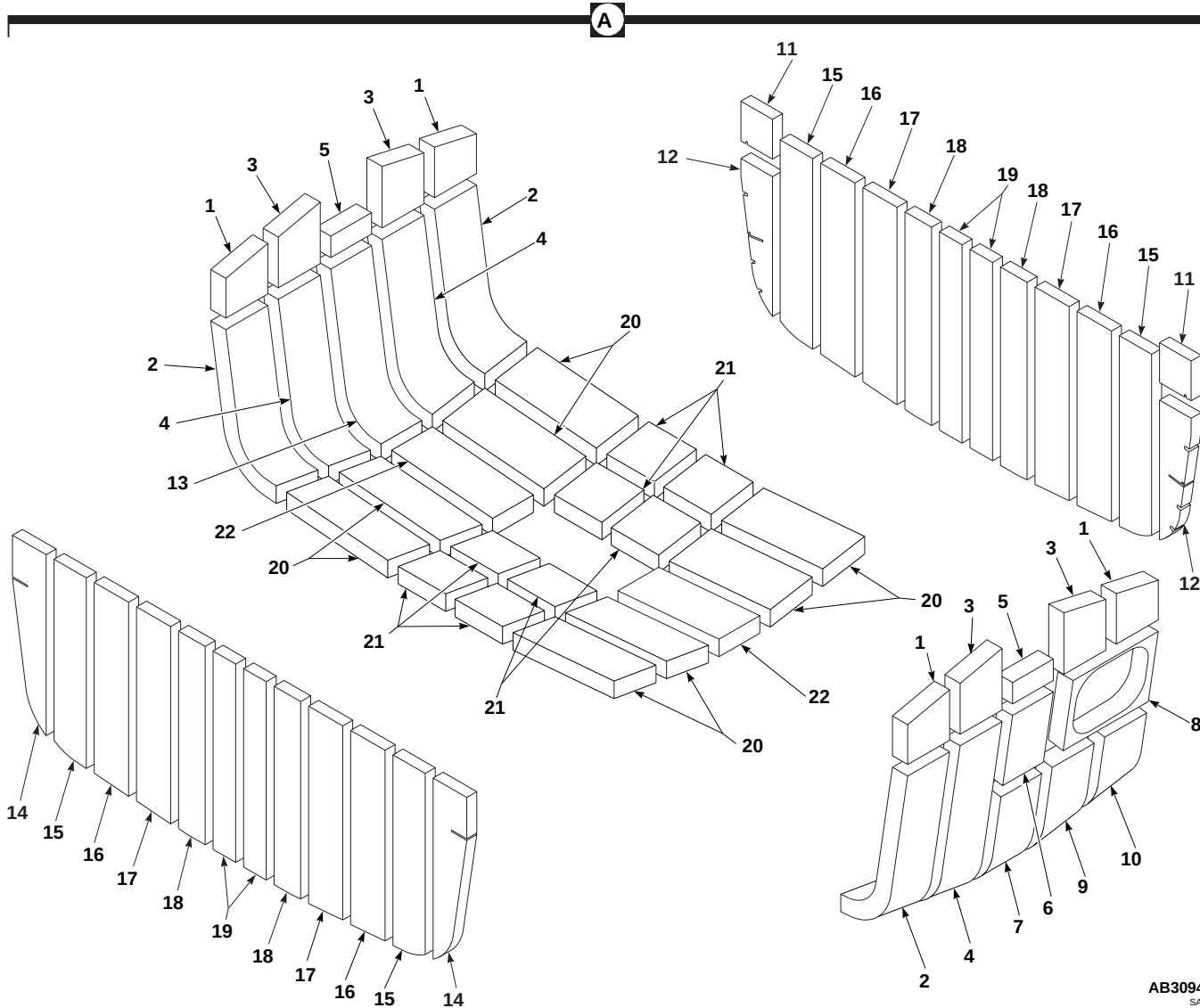
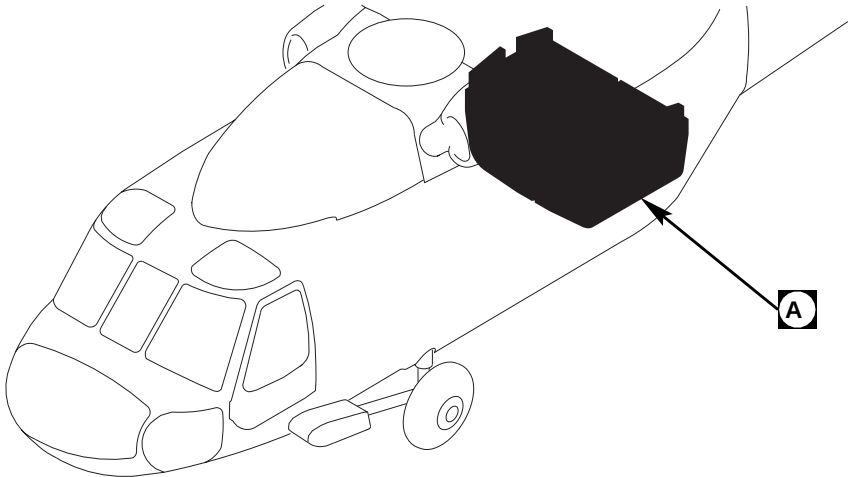
Figure E-11. Lower Aft Transition Modification Kit (Sheet 8 of 8)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-11-	70070-20577-011		LOWER AFT TRANSITION MODIFICATION KIT	REF	
-1	70070-20577-016	.	M/K DOOR INSTL	1	
-2	MS20470AD5-9	.	RIVET	77	
-3	NAS1097AD3-9	.	RIVET	5	
-4	212-12	.	RECEPTACLE, (71286)	2	
-5	NAS1097AD5-9	.	RIVET	37	
-6	70217-03001-111	.	DOUBLER	2	
-7	70070-20577-017	.	M/K FUEL DUMP	1	
-8	MS27039-1-10	.	SCREW	4	
-9	NAS1739B5-3	.	BLIND RIVET	30	
-10	NAS1739B4-2	.	BLIND RIVET	5	
	NAS1097AD4-9	.	RIVET	5	*
	NAS1739B5-2	.	BLIND RIVET	2	*
-11	MS20470AD5-9	.	RIVET	60	
-12	MS20470AD3-9	.	RIVET	10	
-13	MS21075-3	.	NUTPLATE	4	
-14	70070-20577-018	.	M/K FUEL VENT	1	
-15	NAS1738B5-3	.	BLIND RIVET	42	
-16	70070-20577-014	.	M/K HARDWARE	1	
-17	NAS1097AD5-4	.	RIVET	140	
-18	MS20470AD5-2	.	RIVET	1000	
-19	MS20470AD5-3	.	RIVET	1385	
-20	MS20470AD5-4	.	RIVET	400	
-21	MS20470AD6-3	.	RIVET	380	
-22	MS20470AD6-5	.	RIVET	58	
-23	MS20470AD5-5	.	RIVET	125	
-24	NAS1446-04	.	SWAGE LOCKING PIN	28	
-25	NAS1446-05	.	SWAGE LOCKING PIN	26	
-26	NAS1080C06	.	COLLAR	170	
-27	MS20470AD6-4	.	RIVET	65	
-28	MS20426AD3-4	.	RIVET	45	
-29	MS21059-3	.	NUTPLATE	22	
-30	RA097AD6-3	.	RIVET	75	
-31	NAS1436-03	.	SWAGE LOCKING PIN	14	
-32	NAS1446-03	.	SWAGE LOCKING PIN	46	
-33	AN173-14A	.	BOLT	8	
-34	AN173-15A	.	BOLT	12	
-35	NAS1149F0332P	.	FLAT WASHER	35	
-36	MS21044N3	.	NUT	18	
-37	NAS1097AD4-3	.	RIVET	30	
-38	MS20470AD6-2	.	RIVET	22	
-39	MS20426AD5-2	.	RIVET	10	
-40	NAS1526-05	.	SWAGE LOCKING PIN	14	
-41	NAS1526-06	.	SWAGE LOCKING PIN	14	
-42	NAS1526-07	.	SWAGE LOCKING PIN	14	
-43	HL20PB86-6-8	.	PIN COLLAR ASSY, (73197)	5	
-44	HL20PB-6-8	.	HI-LOK PIN, (73197)	1	
-45	HL86-6	.	COLLAR, (73197) (Superseded by HL1087A-6)	1	
	HL1087A-6	.	COLLAR, (73197)	1	
-46	HL20PB86-6-9	.	PIN COLLAR ASSY, (73197)	10	
-47	HL20PB-6-9	.	HI-LOK PIN, (73197)	1	
-48	HL86-6	.	COLLAR, (73197) (Superseded by HL1087A-6)	1	
	HL1087A-6	.	COLLAR, (73197)	1	
-49	HL20PB86-6-10	.	PIN COLLAR ASSY, (73197)	5	
-50	HL20PB-6-10	.	HI-LOK PIN, (73197)	1	
-51	HL86-6	.	COLLAR, (73197) (Superseded by HL1087A-6)	1	
	HL1087A-6	.	COLLAR, (73197)	1	
-52	HL86TW-6	.	COLLAR, (73197)	18	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
-53	RA097AD4-2	.	.	.	.	.	.	.	RIVET.....	50	
-54	MS20426AD3-2	.	.	.	.	.	.	.	RIVET.....	14	
-55	MS20470AD4-2	.	.	.	.	.	.	.	RIVET.....	26	
-56	MS21075-3	.	.	.	.	.	.	.	NUTPLATE.....	16	
-57	NAS1465-04	.	.	.	.	.	.	.	SWAGE LOCKING PIN.....	10	
-58	70070-20577-012	.	.	.	.	.	.	.	M/K PLATE ASSY.....	1	
-59	70213-02501-126	.	.	.	.	.	.	.	STRAP.....	1	
-60	70213-03002-113	.	.	.	.	.	.	.	DOUBLER.....	1	
-61	70213-03002-117	.	.	.	.	.	.	.	SKIN, LH.....	1	
	70213-03002-116	.	.	.	.	.	.	.	SKIN, RH.....	1	
-62	70213-03002-118	.	.	.	.	.	.	.	SKIN.....	1	
-63	70203-03003-101	.	.	.	.	.	.	.	DOUBLER.....	1	
-64	70213-03002-107	.	.	.	.	.	.	.	SKIN, LH.....	1	
	70213-03002-108	.	.	.	.	.	.	.	SKIN, RH.....	1	
-65	70070-20577-103	.	.	.	.	.	.	.	SKIN.....	1	
-66	70212-03002-117	.	.	.	.	.	.	.	STRINGER 19, LH.....	1	
	70212-03002-118	.	.	.	.	.	.	.	STRINGER 19, RH.....	1	
-67	70212-03002-113	.	.	.	.	.	.	.	STRINGER, LH.....	1	
	70212-03002-114	.	.	.	.	.	.	.	STRINGER, RH.....	1	
-68	70212-03002-103	.	.	.	.	.	.	.	STRINGER 22, LH.....	1	
	70212-03002-104	.	.	.	.	.	.	.	STRINGER 22, RH.....	1	
-69	70212-03002-111	.	.	.	.	.	.	.	STRINGER 23.....	1	
-70	70212-03002-105	.	.	.	.	.	.	.	STRINGER 22, LH.....	1	
	70212-03002-106	.	.	.	.	.	.	.	STRINGER 22, RH.....	1	
-71	SS1083-147	.	.	.	.	.	.	.	BRACKET ANGLE.....	2	
-72	SS1083-192	.	.	.	.	.	.	.	BRACKET ANGLE.....	2	
-73	SS1083-237	.	.	.	.	.	.	.	BRACKET ANGLE.....	2	
-74	70213-03004-101	.	.	.	.	.	.	.	DOUBLER.....	1	
-75	70212-03002-109	.	.	.	.	.	.	.	STRINGER 17, LH.....	1	
	70212-03002-110	.	.	.	.	.	.	.	STRINGER 17, RH.....	1	
-76	70212-03002-125	.	.	.	.	.	.	.	STRINGER, LH.....	1	
	70212-03002-126	.	.	.	.	.	.	.	STRINGER, RH.....	1	
-77	70212-03002-115	.	.	.	.	.	.	.	STRINGER 20, LH.....	1	
	70212-03002-116	.	.	.	.	.	.	.	STRINGER 20, RH.....	1	
-78	70212-03002-107	.	.	.	.	.	.	.	STRINGER 22, LH.....	1	
	70212-03002-108	.	.	.	.	.	.	.	STRINGER 22, RH.....	1	
-79	70212-03002-124	.	.	.	.	.	.	.	STRINGER.....	1	
-80	70212-03002-123	.	.	.	.	.	.	.	STRINGER.....	1	
-81	70211-03002-101	.	.	.	.	.	.	.	SHEAR ANGLE.....	1	
-82	70070-20577-013	.	.	.	.	.	.	.	M/K FRAME INSTL.....	1	
-83	70212-03003-131	.	.	.	.	.	.	.	ANGLE SPLICE.....	1	
	70212-03003-132	.	.	.	.	.	.	.	ANGLE SPLICE.....	1	
-84	70212-03003-044	.	.	.	.	.	.	.	BEAM ASSY.....	1	
	70212-03003-054	.	.	.	.	.	.	.	BEAM ASSY.....	1	
-85	MS20470AD6	.	.	.	.	.	.	.	RIVET, (Used on 70212-03003-044).....	A/R	
-86	NAS1525-02	.	.	.	.	.	.	.	SWAGE LOCKING PIN, (Used on 70212-03003-054).....	14	
-87	NAS1080D05	.	.	.	.	.	.	.	COLLAR, (Used on 70212-03003-054).....	14	
-88	70212-03003-160	.	.	.	.	.	.	.	DOUBLER, (Used on 70212-03003-054).....	1	
-89	70212-03003-146	.	.	.	.	.	.	.	STIFFENER.....	3	
-90	70212-03003-110	.	.	.	.	.	.	.	TEE CAP, (Used on 70212-03003-044).....	1	
	70212-03003-109	.	.	.	.	.	.	.	TEE CAP, (Used on 70212-03003-054).....	1	
-91	70212-03003-102	.	.	.	.	.	.	.	WEB, (Used on 70212-03003-044).....	1	
	70212-03003-159	.	.	.	.	.	.	.	WEB, (Used on 70212-03003-054).....	1	
-92	70212-03003-041	.	.	.	.	.	.	.	BEAM ASSY, LH.....	1	
	70212-03003-042	.	.	.	.	.	.	.	BEAM ASSY.....	1	
-93	MS20470AD5	.	.	.	.	.	.	.	RIVET.....	A/R	
-94	MS20470AD6	.	.	.	.	.	.	.	RIVET.....	A/R	
-95	NAS1526-02	.	.	.	.	.	.	.	SWAGE LOCKING PIN.....	1	
-96	NAS1080D06	.	.	.	.	.	.	.	COLLAR.....	1	
-97	70212-03003-123	.	.	.	.	.	.	.	STIFFENER, (Used on 70212-03003-041).....	1	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
-98	70212-03003-124	.	.	.	.	.	.	.	STIFFENER, (Used on 70212-03003-042).....	1	
	70212-03003-125	.	.	.	.	.	.	.	STIFFENER, (Used on 70212-03003-041).....	1	
	70212-03003-126	.	.	.	.	.	.	.	STIFFENER, (Used on 70212-03003-042).....	1	
-99	70212-03003-127	.	.	.	.	.	.	.	STIFFENER.....	1	
-100	70212-03003-128	.	.	.	.	.	.	.	STIFFENER.....	1	
-101	70212-03003-147	.	.	.	.	.	.	.	STIFFENER.....	1	
-102	70212-03003-129	.	.	.	.	.	.	.	STIFFENER, (Used on 70212-03003-041).....	1	
	70212-03003-130	.	.	.	.	.	.	.	STIFFENER, (Used on 70212-03003-042).....	1	
-103	70212-03003-148	.	.	.	.	.	.	.	STIFFENER.....	1	
-104	70212-03003-133	.	.	.	.	.	.	.	CAP ANGLE.....	1	
	70212-03003-134	.	.	.	.	.	.	.	CAP ANGLE, (Used on 70212-03003-042).....	1	
-105	70212-03003-111	.	.	.	.	.	.	.	TEE CAP, (Used on 70212-03003-041).....	1	
	70212-03003-112	.	.	.	.	.	.	.	TEE CAP, (Used on 70212-03003-042).....	1	
-106	70212-03003-103	.	.	.	.	.	.	.	WEB, (Used on 70212-03003-041).....	1	
	70212-03003-104	.	.	.	.	.	.	.	WEB, (Used on 70212-03003-042).....	1	
-107	70212-03003-141	.	.	.	.	.	.	.	ANGLE SPLICE.....	1	
	70212-03003-142	.	.	.	.	.	.	.	ANGLE SPLICE.....	1	
-108	70212-03003-115	.	.	.	.	.	.	.	CAP ANGLE.....	1	
	70212-03003-116	.	.	.	.	.	.	.	CAP ANGLE.....	1	
-109	70212-03003-048	.	.	.	.	.	.	.	BEAM ASSY.....	1	
	70212-03003-055	.	.	.	.	.	.	.	BEAM ASSY.....	1	
-110	MS20470AD6	.	.	.	.	.	.	.	RIVET.....	A/R	
-111	MS20470AD5	.	.	.	.	.	.	.	RIVET, (Used on 70212-03003-055).....	A/R	
-112	70212-03003-162	.	.	.	.	.	.	.	DOUBLER, (Used on 70212-03003-055).....	1	
-113	70212-03003-145	.	.	.	.	.	.	.	STIFFENER.....	3	
-114	70212-03003-114	.	.	.	.	.	.	.	TEE CAP, (Used on 70212-03003-048).....	1	
	70212-03003-113	.	.	.	.	.	.	.	TEE CAP, (Used on 70212-03003-055).....	1	
-115	70212-03003-161	.	.	.	.	.	.	.	WEB, (Used on 70212-03003-055).....	1	
	70212-03003-106	.	.	.	.	.	.	.	WEB, (Used on 70212-03003-048).....	1	
-116	70070-20577-041	.	.	.	.	.	.	.	BEAM ASSY, LH.....	1	
	70070-20577-042	.	.	.	.	.	.	.	BEAM ASSY, RH.....	1	
-117	MS20470AD5	.	.	.	.	.	.	.	RIVET.....	A/R	
-118	MS20470AD6	.	.	.	.	.	.	.	RIVET.....	A/R	
-119	NAS1526-02	.	.	.	.	.	.	.	SWAGE LOCKING PIN.....	2	
-120	NAS1080D06	.	.	.	.	.	.	.	COLLAR.....	2	
-121	70212-03003-137	.	.	.	.	.	.	.	STIFFENER, (Used on 70070-20577-041).....	1	
	70212-03003-138	.	.	.	.	.	.	.	STIFFENER, (Used on 70070-20577-042).....	1	
-122	70212-03003-139	.	.	.	.	.	.	.	STIFFENER, (Used on 70070-20577-041).....	1	
	70212-03003-140	.	.	.	.	.	.	.	STIFFENER, (Used on 70070-20577-042).....	1	
-123	70212-03003-149	.	.	.	.	.	.	.	STIFFENER.....	1	
-124	70212-03003-121	.	.	.	.	.	.	.	STIFFENER, (Used on 70070-20577-041).....	1	
	70212-03003-122	.	.	.	.	.	.	.	STIFFENER, (Used on 70070-20577-042).....	1	
-125	70212-03003-135	.	.	.	.	.	.	.	STIFFENER.....	1	
	70212-03003-136	.	.	.	.	.	.	.	STIFFENER, (Used on 70070-20577-042).....	1	
-126	70212-03003-143	.	.	.	.	.	.	.	CAP ANGLE, (Used on 70070-20577-041).....	1	
	70212-03003-144	.	.	.	.	.	.	.	CAP ANGLE, (Used on 70070-20577-042).....	1	
-127	70070-20577-101	.	.	.	.	.	.	.	CAP ANGLE, (Used on 70070-20577-041).....	1	
	70070-20577-102	.	.	.	.	.	.	.	CAP ANGLE, (Used on 70070-20577-042).....	1	
-128	70212-03003-150	.	.	.	.	.	.	.	WEB, (Used on 70070-20577-041).....	1	
	70212-03003-151	.	.	.	.	.	.	.	WEB, (Used on 70070-20577-042).....	1	
-129	70212-03003-119	.	.	.	.	.	.	.	STRINGER BLIO.....	1	
	70212-03003-120	.	.	.	.	.	.	.	STRINGER BLIO.....	1	
-130	70211-03003-101	.	.	.	.	.	.	.	INTERCOSTAL.....	1	
-131	70211-03003-102	.	.	.	.	.	.	.	INTERCOSTAL.....	1	
-132	70211-03003-103	.	.	.	.	.	.	.	INTERCOSTAL.....	1	
-133	70211-03003-104	.	.	.	.	.	.	.	INTERCOSTAL.....	1	
-134	70211-03003-114	.	.	.	.	.	.	.	ANGLE.....	1	
-135	70211-03003-115	.	.	.	.	.	.	.	ANGLE.....	1	
-136	70211-03003-116	.	.	.	.	.	.	.	GUSSET.....	2	
-137	70211-03003-117	.	.	.	.	.	.	.	GUSSET.....	1	
-138	70211-03003-118	.	.	.	.	.	.	.	GUSSET.....	1	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
-139	70211-03004-101	.	.	.	.	.	.	.	INTERCOSTAL	1	
-140	70211-03004-102	.	.	.	.	.	.	.	INTERCOSTAL	1	
-141	70211-03004-103	.	.	.	.	.	.	.	STIFFENER	1	
-142	70211-03004-104	.	.	.	.	.	.	.	STIFFENER	1	
-143	70211-03004-105	.	.	.	.	.	.	.	INTERCOSTAL	1	
-144	70211-03004-106	.	.	.	.	.	.	.	INTERCOSTAL	1	
-145	70211-03004-107	.	.	.	.	.	.	.	STIFFENER	2	
-146	70211-03004-108	.	.	.	.	.	.	.	STIFFENER	2	
-147	70211-03004-117	.	.	.	.	.	.	.	ANGLE	4	
-148	70211-03004-118	.	.	.	.	.	.	.	ANGLE	4	
-149	70211-03004-119	.	.	.	.	.	.	.	ANGLE	4	
-150	70211-03004-120	.	.	.	.	.	.	.	ANGLE	4	
-151	70211-03004-121	.	.	.	.	.	.	.	ANGLE	2	
-152	70211-03004-122	.	.	.	.	.	.	.	ANGLE	2	
-153	70211-03004-126	.	.	.	.	.	.	.	ANGLE	1	
-154	70211-03004-127	.	.	.	.	.	.	.	ANGLE	1	
-155	70211-03005-101	.	.	.	.	.	.	.	INTERCOSTAL	1	
-156	70211-03005-102	.	.	.	.	.	.	.	INTERCOSTAL	1	
-157	70211-03005-103	.	.	.	.	.	.	.	INTERCOSTAL	1	
-158	70211-03005-104	.	.	.	.	.	.	.	INTERCOSTAL	1	
-159	70211-03005-115	.	.	.	.	.	.	.	ANGLE	1	
-160	70211-03005-116	.	.	.	.	.	.	.	ANGLE	1	
-161	70211-03005-117	.	.	.	.	.	.	.	ANGLE	2	
-162	70211-03005-118	.	.	.	.	.	.	.	ANGLE	2	
-163	70211-03005-120	.	.	.	.	.	.	.	ANGLE	1	
-164	70211-03005-121	.	.	.	.	.	.	.	ANGLE	1	
-165	70211-03006-101	.	.	.	.	.	.	.	FRAME	1	
-166	70211-03006-102	.	.	.	.	.	.	.	FRAME	1	
-167	70211-03006-103	.	.	.	.	.	.	.	FRAME	1	
-168	70211-03006-104	.	.	.	.	.	.	.	FRAME	1	
-169	70211-03006-114	.	.	.	.	.	.	.	GUSSET	4	
-170	70211-03006-115	.	.	.	.	.	.	.	ANGLE	1	
-171	70211-03006-116	.	.	.	.	.	.	.	ANGLE	1	
-172	70211-03007-185	.	.	.	.	.	.	.	SHEAR ANGLE	1	



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Figure E-12. Foam Liner Modification Kit

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-12-	70070-20577-015	FOAM LINER MODIFICATION KIT								REF	
-1	70219-03011-137	.	FOAM LINER							4	
-2	70219-03011-139	.	FOAM LINER							3	
-3	70219-03011-138	.	FOAM LINER							4	
-4	70219-03011-140	.	FOAM LINER							3	
-5	70219-03011-136	.	FOAM LINER							2	
-6	70219-03011-141	.	FOAM LINER							1	
-7	70219-03011-142	.	FOAM LINER							1	
-8	70219-03011-133	.	FOAM LINER							1	
-9	70219-03011-143	.	FOAM LINER							1	
-10	70219-03011-132	.	FOAM LINER							1	
-11	70219-03011-129	.	FOAM LINER							2	
-12	70219-03011-130	.	FOAM LINER							2	
-13	70219-03011-131	.	FOAM LINER							1	
-14	70219-03011-128	.	FOAM LINER							2	
-15	70219-03011-127	.	FOAM LINER							4	
-16	70219-03011-126	.	FOAM LINER							4	
-17	70219-03011-125	.	FOAM LINER							4	
-18	70219-03011-124	.	FOAM LINER							4	
-19	70219-03011-123	.	FOAM LINER							4	
-20	70219-03011-135	.	FOAM LINER							8	
-21	70219-03011-134	.	FOAM LINER							8	
-22	70219-03011-144	.	FOAM LINER							2	

E-13. ENCLOSURE MODIFICATION KIT (50-21).

Subject: Vapor Barrier Support Structure; Replacement of, dated 31 March 2003

Purpose: Provide instructions for the replacement of structure supporting vapor barriers above fuel cells.

Model: UH-60A

Description: The structure which supports vapor barrier between stations 413.00 and 443.50, right and left butline 10.00 is replaced.

Drawings required for modification:

70070-20578, 70219-03002, 70400-03611, 70551-03140, 70551-03101, 70551-03102

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) TM 1-1520-237-23, Technical Manual, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A and UH-60Q Helicopters, Chapter 10, Fuel Systems

Instructions:

NOTE

- A complete review of this SSI is recommended before incorporating the rework of vapor barrier.
- Before beginning this modification procedure, use the material information list to inventory the modification kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual step(s), drawing(s) listed in preceding step(s) are the controlling authority.
- The electrical, sheet metal, and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, routing, clamping, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).
- (3) Disconnect connectors and pull back wiring as required for rework of vapor barriers.
- (4) Remove fuel lines as required for rework of vapor barriers per reference (b).

B. Rework of enclosure installation (70219-03002-012) as follows:

(1) Modification of enclosure installation (70219-03002-012) left side as follows:

CAUTION

TO AVOID DAMAGING COMPONENTS, USE EXTREME CARE WHEN DRILLING INTO AIRFRAME. TEMPORARILY MOVE ANY TUBE ASSEMBLIES OR WIRING HARNESSSES OUT OF REWORK AREA.

(a) Remove bracket installation (70400-03611-012 or -016) as required to gain access to intercostal (70219-03002-111, -142, -143, or -151) keep parts as required for reinstallation (Dwg 70400-03611, Sheet 1, Zones 10-B, 12-B, 13-E, 14-D, 16-B, 16-C, 16-F, 17-A, 17-C, and 17-H; Dwg 70070-20578, Sheet 1, Notes 13 and 14).

(b) Remove angle (70219-03002-133 or -153) as required to remove intercostal (70219-03002-111, -142, -143, or -151) keep parts as required for reinstallation (Dwg 70219-03002, Sheet 2, Zones 8-G and 16-B).

(c) Remove left side intercostal (70219-03002-111, -142, -143, or -151) (Dwg 70219-03002, Sheet 1, Zones 13-M and 14-M; Dwg 70070-20578, Sheet 1, Notes 7, 8, 9, and 10).

(d) Install four brackets (MS3341-2-9) on new intercostal (70070-20578-101) using hardware shown and old intercostal (70219-03002-111, -142, -143, or -151) as a template (Dwg 70551-03140, Sheet 3, View AC-AC, Zones 7-H, 8-H, and 9-H; Dwg 70070-20578, Sheet 1, Note 5).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(e) Install grommet (MS21266-1N) on new intercostal (70070-20578-101) using adhesive (PLIOBOND NO. 20, or equivalent) (Dwg 70219-03002, Sheet 1, Zone 10-L, Note 17).

(f) Install nameplates (SS9014J308 and SS9014J323) (Dwg 70070-20578, Sheet 1, Notes 19 and 20, Sheet 2, Notes 21 and 22; Dwg 70551-03101, Sheet 2, Zones 11-C and 11-G; Dwg 70551-03102, Sheet 2, Zones 4-D, 4-H and 7-D).

(g) Install intercostal (70070-20578-101) using hardware shown (Dwg 70219-03002, Sheet 1, Zones 13-M and 14-M; Dwg 70070-20578, Sheet 1, Notes 4 and 5).

(h) Reinstall angle (70219-03002-133 or -153) using hardware shown (Dwg 70319-03002, Sheet 2, Zones 8-G and 16-B).

(i) Reinstall bracket installation (70400-03611-012 or -016) using hardware shown (Dwg 70400-03611, Sheet 1, Zones 10-B, 12-B, 13-E, 14-D, 16-B, 16-C, 16-F, 17-A, 17-C, 17-H, and Note 13; Dwg 70070-20578, Sheet 1, Notes 15 and 16).

(2) Modification of enclosure installation (70219-03002-012) right side as follows:



TO AVOID DAMAGING COMPONENTS, USE EXTREME CARE WHEN DRILLING INTO AIRFRAME. TEMPORARILY MOVE ANY TUBE ASSEMBLIES OR WIRING HARNESSSES OUT OF REWORK AREA.

(a) Remove bracket installation (70400-03611-011 or -015) as required to gain access to intercostal (70219-03002-112, -144, or -150) keep parts as required for reinstallation (Dwg 70400-03611, Sheet 1, Zones 10-B, 12-B, 13-E, 14-D, 16-B, 16-C, 16-F, 17-A, 17-C, and 17-H; Dwg 70070-20578, Sheet 1, Notes 13 and 14).

(b) Remove angle (70219-03002-134 or -152) as required to remove intercostal (70219-03002-112, -144, or -150) keep parts as required for reinstallation (Dwg 70319-03002, Sheet 2, Zones 4-G and 16-G).

(c) Remove right side intercostal (70219-03002-112, -144, or -150) (Dwg 70219-03002, Sheet 1, Zones 13-M and 14-M; Dwg 70070-20578, Sheet 1, Notes 7, 8, 9, and 10).

(d) Install three brackets (MS3341-2-9) on new intercostal (70070-20578-102) using hardware shown and old intercostal (70219-03002-112, -144, or -150) as a template (Dwg 70551-03140, Sheet 3, View AA-AA, Zone 7-B and Dwg 70070-20578, Sheet 1, Note 6).

(e) Install cover, protector (MS3181-10CA) to new intercostal (70070-20578-102) using hardware shown (Dwg 70551-03102, Sheet 2, Zones 3-C and 7-C).

(f) Install nameplates (SS9014J347, SS9014J307, and SS9014J322) (Dwg 70070-20578, Sheet 1, Notes 19 and 20, Sheet 2, Notes 21 and 22; Dwg 70551-03101, Sheet 2, Zones 11-C and 11-G; Dwg 70551-03102, Sheet 2, Zones 4-D, 4-H and 7-D).



OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(g) Install grommet (MS21266-1N) on new intercostal (70070-20578-102) using adhesive (PLIOBOND NO.20 or equivalent) (Dwg 70219-03002, Sheet 1, Zone 10-L, Note 17).

(h) Install intercostal (70070-20578-102) using hardware shown (Dwg 70219-03002, Sheet 1, Zones 13-M and 14-M; Dwg 70070-20578, Sheet 1, Notes 4 and 6).

(i) Reinstall angle (70219-03002-134 or -152) using hardware shown (Dwg 70219-03002, Sheet 2, Zones 8-G and 16-B).

(j) Reinstall bracket installation (70400-03611-011 or -015) using hardware shown (Dwg 70400-03611, Sheet 1, Zones 10-B, 12-B, 13-E, 14-D, 16-B, 16-C, 16-F, 17-A, 17-C, 17-H, and Note 13; Dwg 70070-20578, Sheet 1, Notes 15 and 16).

C. Reinstallation of removed equipment:

- (1) Reinstall removed wiring and reconnect connectors as required.
- (2) Reinstall removed fuel lines as required per reference (b).
- (3) Install removed equipment per reference (a).

D. Record of Compliance:

- (1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20578-011	Mod. Kit	+0.2	432.0	0.086

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +0.2 pounds

Moment arm: 432.0 in.

Change in basic moment/1000: 0.086

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	1	24.0	*24.0
Helicopter Electrician	1	8.0	*8.0
Fuel Mechanic	1	2.0	*2.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Modification Kit, Enclosure,	70070-20578-011	(1)
	consisting of:		
2	Pin, Hi Lok	HL20PB-6-11	
2	Pin, Hi Lok	HL20PB-6-7	
4	Pin, Hi Lok	HL20PB-6-9	
8	Collar	HL75-6AW	
3	Rivet	MS20426AD5-4	
30	Rivet	MS20470AD3-3	
116	Rivet	MS20470AD4-5	
20	Rivet	MS20470AD4-6	
26	Rivet	MS20470AD5-4	
16	Rivet	MS20470AD5-5	
18	Rivet	MS20604AD3W4	
2	Grommet	MS21266-1N	
7	Bracket	MS3341-2-9	
1	Cover, Prot	MS3181-10CA	
8	Rivet	NAS1097AD5-5	
4	Rivet	NAS1097AD5-6	
2	Radius Block	SS1058-1-30-12	
1	Intercostal	70070-20578-101	
1	Intercostal	70070-20578-102	
1	Nameplate	SS9014J347	
1	Nameplate	SS9014J323	
1	Nameplate	SS9019J322	
2	Nameplate	SS9014J308	
2	Nameplate	SS9014J307	

B. Consumable Material:

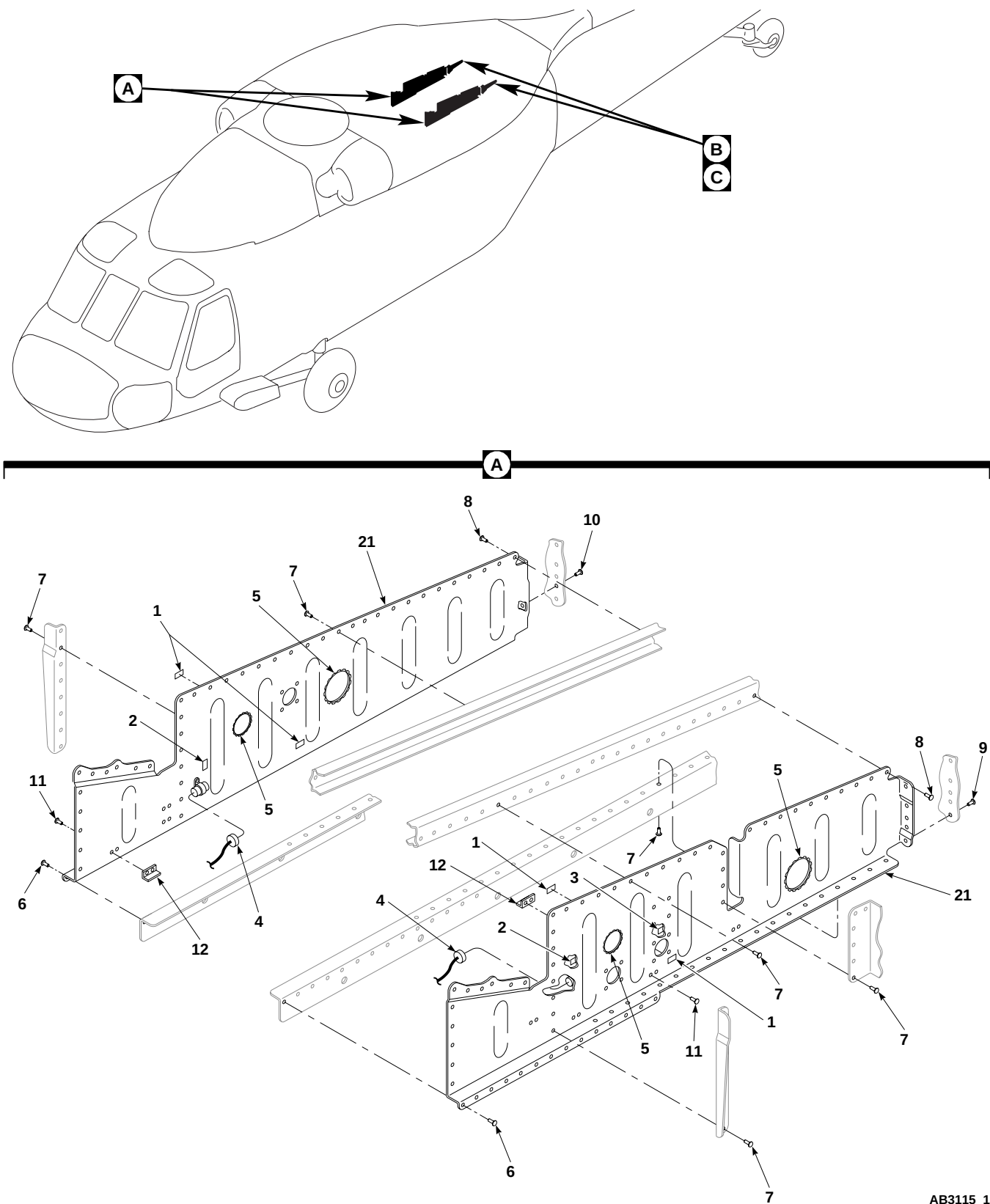
WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
4 oz.	Adhesive	PLIOBOND NO. 20 or equivalent	(1)

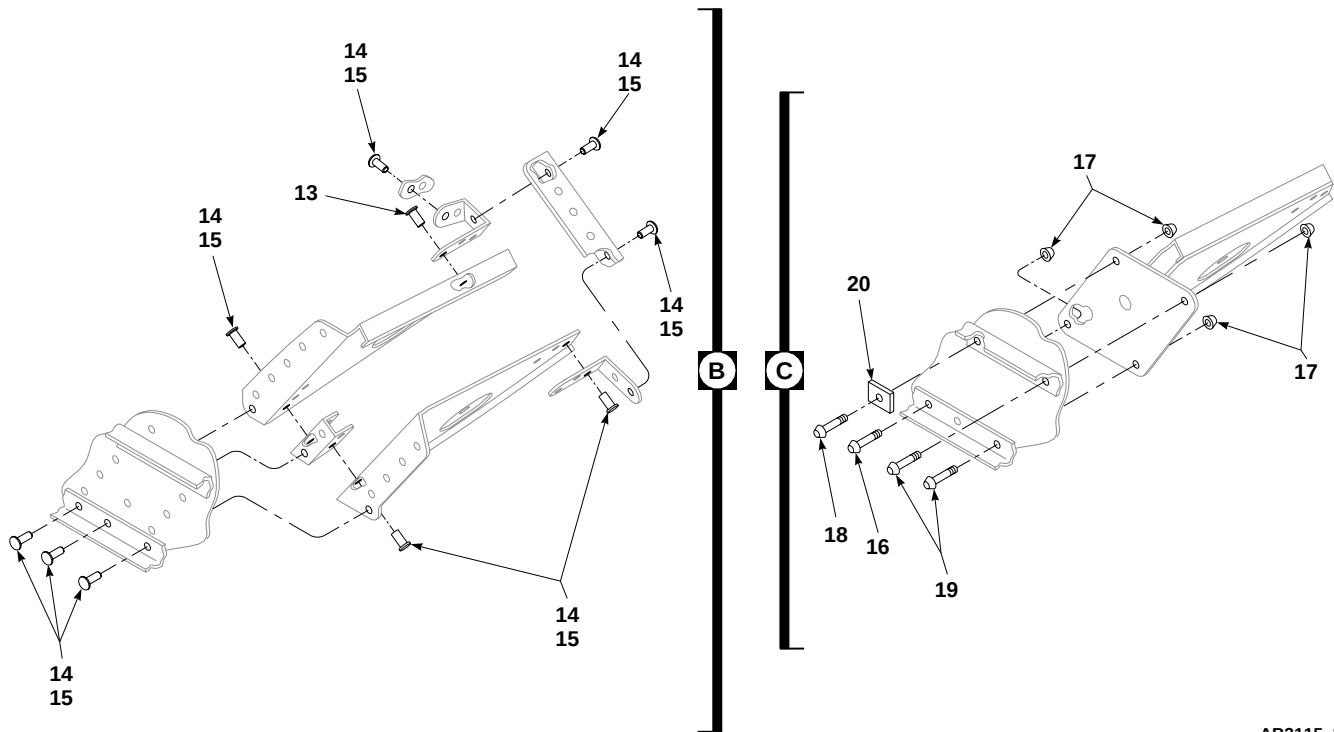
C. Source:

(1) Available through normal supply channels



AB3115 1
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Figure E-13. Enclosure Modification Kit (Sheet 1 of 2)



AB3115_2
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Figure E-13. Enclosure Modification Kit (Sheet 2 of 2)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-13-	70070-20578-011		ENCLOSURE MODIFICATION KIT.....	REF	
-1	SS9014J307	.	NAMEPLATE, LH.....	2	
	SS9014J308	.	NAMEPLATE, RH.....	2	
-2	SS9014J322	.	NAMEPLATE, LH.....	1	
	SS9014J323	.	NAMEPLATE, RH.....	1	
-3	SS9014J347	.	NAMEPLATE	1	
-4	MS3181-10CA	.	PROTECTIVE COVER	2	
-5	MS21266-1N	.	GROMMET	2	
-6	MS20470AD3-3	.	RIVET	30	
-7	MS20470AD4-5	.	RIVET	116	
-8	MS20470AD4-6	.	RIVET	20	
-9	NAS1097AD5-5	.	RIVET	8	
-10	NAS1097AD5-6	.	RIVET	4	
-11	MS20604AD3W4	.	RIVET	18	
-12	MS3341-2-9	.	BRACKET	7	
-13	MS20426AD5-4	.	RIVET	3	
-14	MS20470AD5-4	.	RIVET	26	
-15	MS20470AD5-5	.	RIVET	16	
-16	HL20PB-6-7	.	HI-LOK PIN, (73197).....	2	
-17	HL75-6AW	.	COLLAR, (73197)	8	
-18	HL20PB-6-11	.	HI-LOK PIN, (73197).....	2	
-19	HL20PB-6-9	.	HI-LOK PIN, (73197).....	4	
-20	SS1058-1-30-12	.	RADIUS BLOCK	2	
-21	70070-20578-101	.	INTERCOSTAL, LH	1	
	70070-20578-102	.	INTERCOSTAL, RH.....	1	

E-14. SUPPORT SHAFT MODIFICATION KIT (50-9).

Subject: Drive Shaft Supports; Modification of, dated 31 March 2003

Purpose: Provide instructions to remove and install new drive shaft supports along tail cone section.

Model: UH-60A

Description: The following is a brief overview of the work required to rework drive shaft supports at station 531.43 and station 591.88. Tail drive shaft supports are removed and new supports and doublers are installed.

Drawings required for modification:

70070-20266

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) SSI No. 50-20, Tail Rotor Drive Shaft Support Brackets; Modification of, dated March 31, 2003

(c) TM 1-1520-237-23-2, Technical Manual Aviation Unit and Intermediate Maintenance for UH-60A, UH-60L, EH-60A, UH-60Q and HH-60L Helicopters

Instructions:

NOTE

- A complete review of this SSI is recommended before reworking station 531.43 and station 591.88.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- This modification is to be done concurrently with reference (b).

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Rework of drive shaft supports at station 531.88 and station 591.88 as follows:

- (1) Remove angle supports (70212-05005-105 and -106) at station 531.43 (Dwg 70070-20266, Sheet 6, Zone 10-G).
- (2) Mark location on top skin of support (70212-05005-123 or -125) (Sheet 6, Zone 11-G and Sheet 5, Notes 4 and 7).
- (3) Remove support (70212-05005-123 or -125) at station 531.43 (Sheet 6, Zone 11-G and Sheet 5, Notes 4 and 7).
- (4) Position new support (70070-20266-106) over station 531.00 where support (70212-05005-123 or -125) was removed in step (3).
- (5) Line up forward face of new support (70070-20266-106) where marked location was noted in step (2).
- (6) Transfer drill from angle (70212-05005-109) (inside tailcone) through new support (70070-20266-106) and put new support (-106) aside for installation in later steps.
- (7) Remove angle (70212-05005-109) at station 531.43 (Sheet 6, Zone 13-B).
- (8) Remove angle supports (70212-05005-119 and -120) at station 591.88 (Sheet 6, Zone 4-G).

NOTE

Before removing support (70212-05005-124 or -126) in step B.(10) perform the following step.

- (9) Mark location on top skin of support (70212-05005-124 or -126) (Sheet 6, Zone 5-G and Sheet 5, Notes 4 and 7).
- (10) Remove support (70212-05005-124 or -126) at station 591.88 (Sheet 6, Zone 5-G and Sheet 5, Notes 4 and 7).
- (11) Position new support (70070-20266-107) over station 591.88 where support (70212-05005-124 or -126) was removed in step B.(10).
- (12) Line up forward face of new support (70070-20266-107) where marked location was noted in step B. (9).
- (13) Transfer drill from angle (70212-05005-110) (inside tailcone) through new support (70070-20266-107) and set aside support (-107) for installation in a later step.
- (14) Remove angle (70212-05005-110) at station 591.88 (Sheet 6, Zone 8-G).
- (15) Remove and keep for reuse, angle (70215-05002-107 or -109) and clips (70215-05002-110 and -121) at station 525.00 (Sheet 4, Zones 16-C and 15-A).
- (16) Remove and keep for reuse clips (70215-05002-111 and -122) at station 545.00 (Sheet 4, Zones 14-C and 14-B).
- (17) Remove and keep for reuse, clips (70215-05002-113 and -124) at station 585.00 (Sheet 4, Zones 15-J and 16-F).
- (18) Remove and keep for reuse, clips (70215-05002-114 and -125) at station 605.00 (Sheet 4, Zones 14-H and 14-F).

- (19) Temporarily install doubler (70070-20266-101) between station 520.00 and station 545.00, buttline 0.00 (Sheet 4, Zone 16-B).
- (20) Transfer drill holes from structure into doubler (70070-20266-101) (Sheet 4).
- (21) Pick up remaining field holes in doubler (70070-20266-101) and transfer drill from doubler (70070-20266-101) into structure (Sheet 4, Zones 13-B through 16-B).
- (22) Temporarily install angle (70215-05002-107 or -109) and clips (70215-05002-110 and -121) saved for reuse at station 525.00 (Sheet 4, Zones 15-A and 16-D).
- (23) Temporarily install clips (70215-05002-111 and -122) saved for reuse in step B.(8) at station 545.00 (Sheet 4, Zones 14-A and 14-C).
- (24) Temporarily install at station 531.43 support (70070-20266-106), angle (previously fit out), angle (70070-20266-105) angle supports (70212-05005-130 and -134) and filler (70212-05005-133) (Sheet 6, Zones 12-C and 9-G).
- (25) Temporarily install doublers (70070-20266-102 and -103) between station 585.00 and station 605.00, buttline 0.00 (Sheet 4, Zones 13-G through 16-G; Sheet 3, Notes 3 and 4 and Sheet 2, Note 4).
- (26) Transfer drill holes from structure into doublers (70070-20266-102 and -103) (Sheet 4, Zones 13-G through 16-G).
- (27) Pick up remaining field holes in doublers (70070-20266-102 and -103) and transfer drill from doublers (-102 and -103) into structure (Sheet 4, Zones 13-G through 16-G).
- (28) Temporarily install clips (70215-05005-113 and -124) saved for reuse in step B.(9) at station 585.00 (Sheet 4, Zones 15-J and 16-F).
- (29) Temporarily install clips (70215-05005-114 and -125) saved for reuse in step B. (10) at station 605.00 (Sheet 4, Zones 13-F and 13-H).
- (30) Temporarily install at station 591.88 support (70070-20266-107) (previously fit out) angle (70070-20266-104) angle supports (70212-05005-131 and -132) and filler (70212-05005-133) (Sheet 6, Zones 8-B, 8-C, 8-D and 4-G).
- (31) Remove all parts temporarily installed deburr, and touch up as required.
- (32) Install all parts removed in previous steps and install using fasteners shown (Sheets 3, 4, and 6).
- (33) Line up and install new brackets (70212-05003-135 and -137) at stations 531.00 and 591.00 per reference (c).
- (34) Remove fitted parts, deburr and touch up as required.
- (35) Install fitted parts using fasteners shown (Sheets 3, 4, and 6).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(36) Apply a bead of sealant (AMS-S-8802 or equivalent) around doublers (70070-20266-101, -102, and -103) between station 525.00 and station 605.00 (Sheet 3, Note 4).

C. Reinstallation of removed equipment:

(1) Reinstall removed equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20266-013	Mod. Kit	0.9	531.9	.50
1	70070-20266-014	Mod. Kit.	0.9	531.9	.54

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +1.8 pounds

Moment arm: 531.9 in.

Change in basic moment/1000: 1.0

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	2	32	*64

*Does not include time required to prepare helicopter or return it to flight status.

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Drive Shaft Support,	70070-20266-013	(1)
	consisting of:		
4	Pin, Hi-Lok	HL12VAZ-5-2	
4	Pin, Hi-Lok	HL12VAZ-5-3	
2	Pin, Hi-Lok	HL12VAZ-5-4	
10	Collar	HL75DU-5ADW	
25	Rivet	MS20470AD4-4	
40	Rivet	MS20470AD4-5	
10	Rivet	MS20470AD4-6	
35	Rivet	MS20470AD5-5	
6	Rivet	NAS1097AD4-5	
3	Rivet	NAS1097AD5-5	
20	Rivet	MS20470AD5-7	
15	Rivet	MS20470AD5-6	
1	Doubler	70070-20266-101	
1	Angle	70070-20266-105	
1	Filler	70212-05005-133	
1	Bracket	70070-20266-106	
1	Support	70212-05005-135	
1	Angle Support	70212-05005-134	
1	Angle Support	70212-05005-130	
1	Mod. Kit, Drive Shaft Support,	70070-20266-014	
	consisting of:		
4	Pin, Hi-Lok	HL12VAZ-5-2	
4	Pin, Hi-Lok	HL12VAZ-5-3	
2	Pin, Hi-Lok	HL12VAZ-5-4	
10	Collar	HL75DU-5ADW	
20	Rivet	MS20470AD4-4	
40	Rivet	MS20470AD4-5	
10	Rivet	MS20470AD4-6	
30	Rivet	MS20470AD5-5	
25	Rivet	MS20470AD5-6	
25	Rivet	MS20470AD5-7	
3	Rivet	NAS1097AD5-5	
1	Filler	70212-05005-133	
1	Doubler	70070-20266-102	
1	Doubler	70070-20266-103	
1	Bracket	70070-20266-107	
1	Angle	70070-20266-104	
1	Angle Support	70212-05005-131	
1	Angle Support	70212-05005-132	
1	Support	70212-05005-137	

B. Consumable Material:

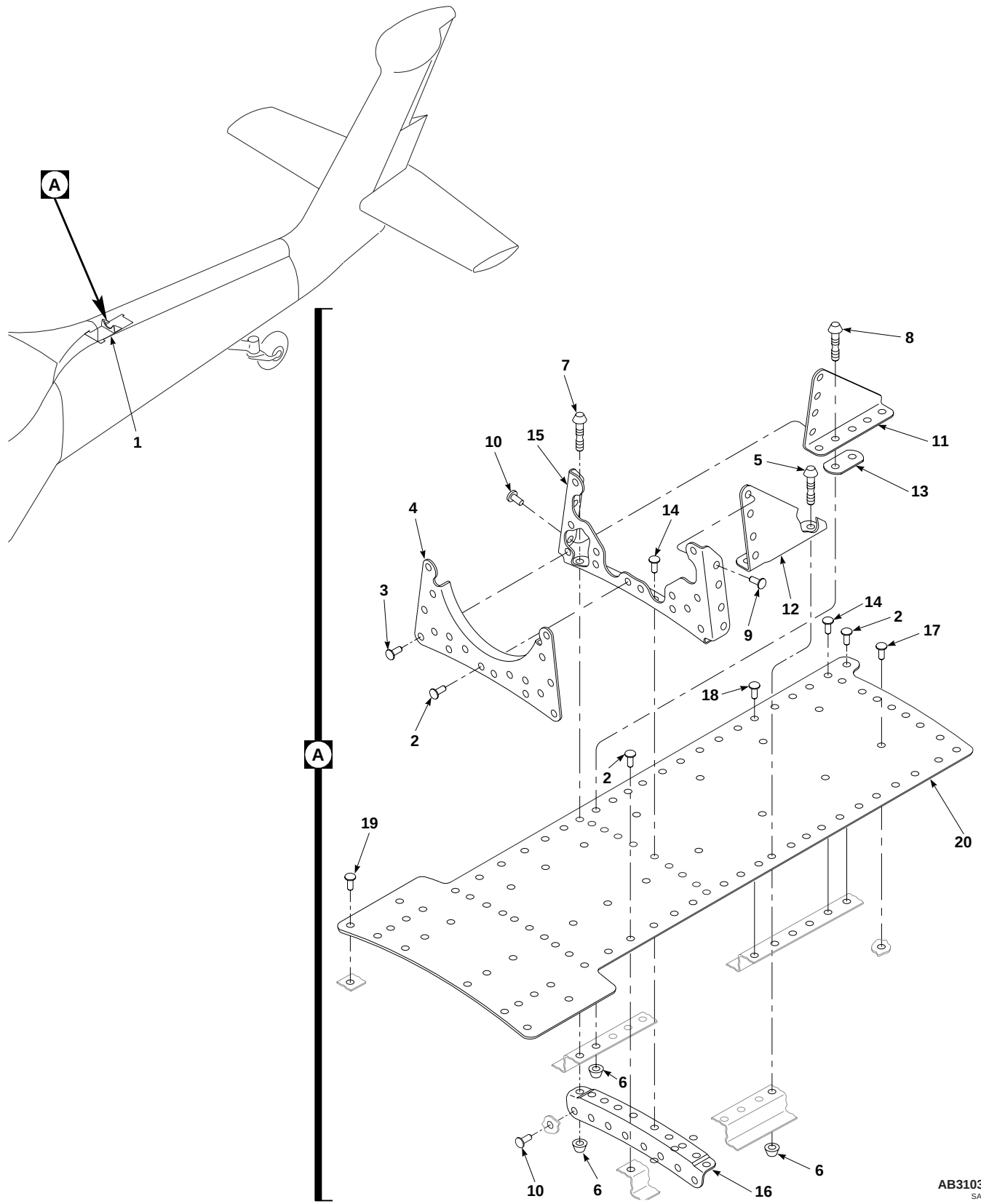


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<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
8 oz.	Sealant	AMS-S-8802, or equivalent	(1)
6 oz.	Primer	MIL-P-23377, or equivalent	(1)

C. Source:

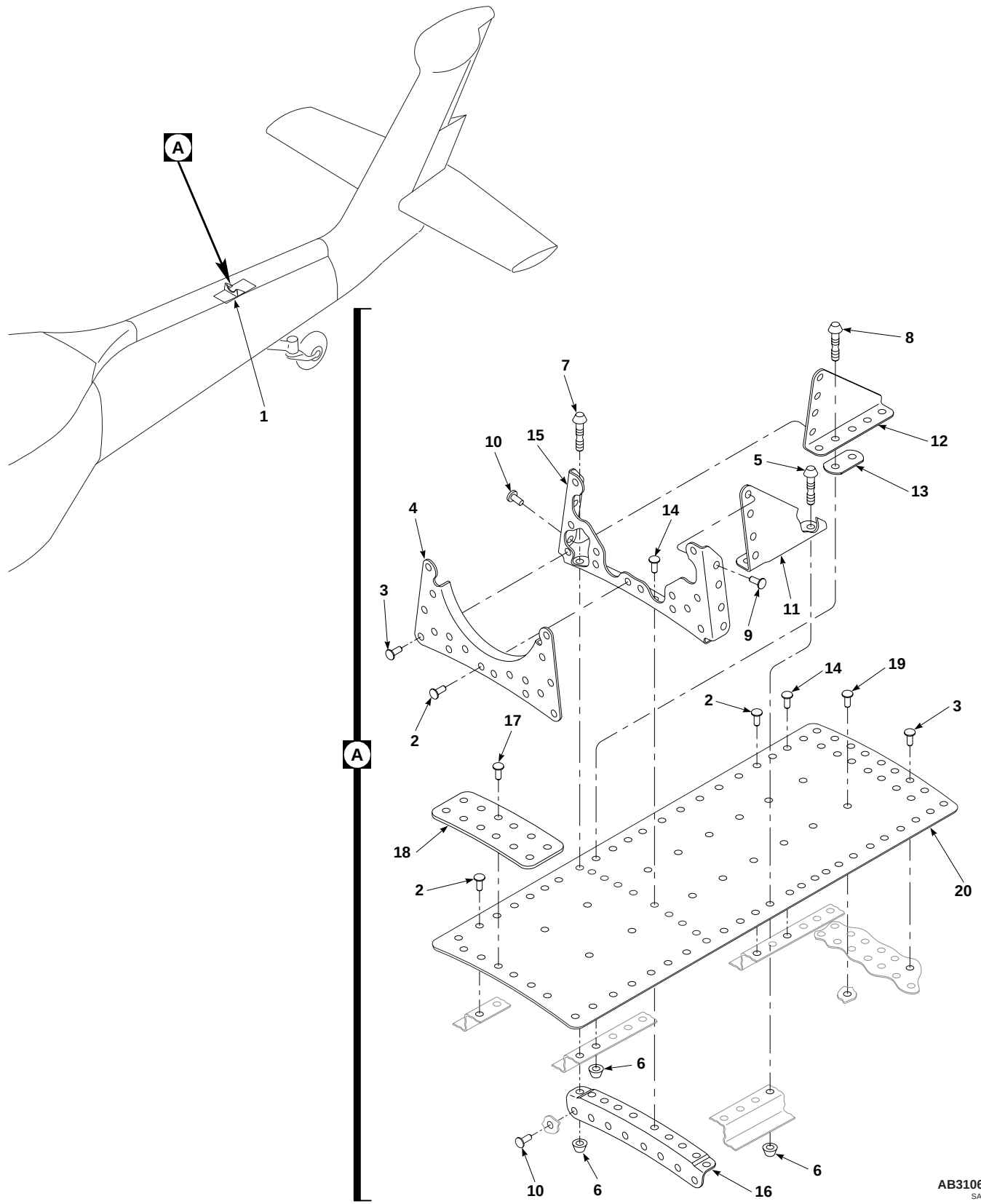
- (1) Available through normal supply channels



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Figure E-14. Support Shaft Modification Kit

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-14-	70070-20266-013		SUPPORT SHAFT MODIFICATION KIT.....	REF	
-1	70070-20266-015	.	SUPPORT INSTL, (Modified by 70212-05005-011).....	REF	
-2	MS20470AD4-6	.	RIVET.....	10	
-3	MS20470AD5-6	.	RIVET.....	15	
-4	70212-05005-135	.	SUPPORT.....	1	
-5	HL12VAZ-5-2	.	HI-LOK PIN, (73197).....	4	
-6	HL75DU-5ADW	.	COLLAR, (73197).....	10	
-7	HL12VAZ-5-4	.	HI-LOK PIN, (73197).....	2	
-8	HL12VAZ-5-3	.	HI-LOK PIN, (73197).....	4	
-9	NAS1097AD5-5	.	RIVET.....	3	
-10	MS20470AD5-5	.	RIVET.....	35	
-11	70212-05005-130	.	ANGLE SUPPORT.....	1	
-12	70212-05005-134	.	ANGLE SUPPORT.....	1	
-13	70212-05005-133	.	FILLER.....	1	
-14	MS20470AD5-7	.	RIVET.....	20	
-15	70070-20266-106	.	BRACKET.....	1	
-16	70070-20266-105	.	ANGLE.....	1	
-17	MS20470AD4-4	.	RIVET.....	25	
-18	MS20470AD4-5	.	RIVET.....	40	
-19	NAS1097AD4-5	.	RIVET.....	6	
-20	70070-20266-101	.	DOUBLER.....	1	



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Figure E-15. Support Shaft Modification Kit

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-15-	70070-20266-014		SUPPORT SHAFT MODIFICATION KIT.....	REF	
-1	70070-20266-016	.	SUPPORT INSTL, (Modified by 70212- 05005-012).....	REF	
-2	MS20470AD4-6	.	RIVET.....	10	
-3	MS20470AD5-6	.	RIVET.....	25	
-4	70212-05005-137	.	SUPPORT.....	1	
-5	HL12VAZ-5-2	.	HI-LOK PIN, (73197).....	4	
-6	HL75DU-5ADW	.	COLLAR, (73197).....	10	
-7	HL12VAZ-5-4	.	HI-LOK PIN, (73197).....	2	
-8	HL12VAZ-5-3	.	HI-LOK PIN, (73197).....	4	
-9	NAS1097AD5-5	.	RIVET.....	3	
-10	MS20470AD5-5	.	RIVET.....	30	
-11	70212-05005-131	.	ANGLE SUPPORT.....	1	
-12	70212-05005-132	.	ANGLE SUPPORT.....	1	
-13	70212-05005-133	.	FILLER.....	1	
-14	MS20470AD5-7	.	RIVET.....	25	
-15	70070-20266-107	.	BRACKET.....	1	
-16	70070-20266-104	.	ANGLE.....	1	
-17	MS20470AD4-5	.	RIVET.....	40	
-18	70070-20266-103	.	DOUBLER.....	1	
-19	MS20470AD4-4	.	RIVET.....	20	
-20	70070-20266-102	.	DOUBLER.....	1	

E-15. SHEAR DECK MODIFICATION KIT (50-29).

Subject: Tail Cone Shear Deck; Modification of, dated 31 March 2003

Purpose: Provide instructions for modification of tail cone shear deck

Model: UH-60A

Description: The tail cone shear deck is reworked to improve the structure by adding doublers and angles between station 605.00 and station 645.00.

Drawing required for modification:

70070-20581

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) SSI No. 50-17, Station 605.00 Bulkhead; Modification of, dated March 31, 2003

Instructions:

NOTE

- A complete review of this s SSI is recommended before modification of the tail cone shear deck.
- Before beginning this modification procedure, use the material information list to inventory the modification kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual step(s), drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, peeling shims, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- This modification is to be done concurrently with reference (b).

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Rework shear deck installation (70211-05010-011 or -012) as follows:

- (1) Remove shear deck with channels (70211-05010-107 and -108) and place on a suitable work area.

(2) Locate and remove channels (70211-05010-107 and -108) between station 605.00 and station 645.00 (Dwg 70070-20581, Sheet 2, Zones 10-C, 11-C, 16-C through 23-C, and 16-E through 23-E).

(3) Remove and keep for reuse two clips (70211-05010-114) at station 640.00 (Sheet 2, Zones 15-G, 17-C, and 17-D).

(4) Remove and keep for reuse two clips (70211-05010-115) at station 645.00 (Sheet 2, Zones 15-C, 16-C, and 16-D).

(5) Remove two tapered shims (SS81-018-I) at station 608.00 (Sheet 2, Zones 23-C and 23-E).

(6) Locate and temporarily install doubler (70070-20581-101) between station 605.00 and station 623.00 (Sheet 2, Zone 19-F and Note 9).

(7) Locate and temporarily install channel (70070-20581-102) between station 605.00 and station 645.00 (Sheet 2, Zones 11-C, 19-F, and 16-E through 21-E).

(8) Locate and temporarily install channel (70070-20581-103) between station 605.00 and station 645.00 (Sheet 2, Zones 10-C, 18-F, and 16-C through 21-C).

(9) Locate remaining field fastener holes and transfer drill in channels (70070-20581-102 and -103) (Sheet 2, Zones 16-C through 21-C and 16-E through 21-E).

(10) Locate and temporarily install two shims, tapered (SS81-014-I) at station 607.00, two clips (70211-05010-114) at station 640.00 and two clips (70211-05010-115) at station 645.00 (Sheet 2, Zones 23-C, 23-E, 17-C, 17-D, 16-C and 16-D).

(11) Remove fitted parts, deburr and touch up as required.

(12) Install fitted parts using fasteners shown (Sheet 2, Note 9).

C. Reinstallation of removed equipment:

(1) Install removed equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20581-011	Mod. Kit, Shear Deck	+1.9	621.7	1.18

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: + 1.9 pounds

Moment arm: 621.7 in.

Change in basic moment/1000: 1.18

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	2	20.0	* 40.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Shear Deck,	70070-20581-011	(1)
	consisting of:		
53	Rivet	MS20470AD6-7	
3	Rivet	MS20470AD5-9	
3	Rivet	MS20470AD5-8	
9	Rivet	MS20470AD5-7	
91	Rivet	MS20470AD5-6	
68	Rivet	MS20470AD5-5	
72	Rivet	MS20470AD4-4	
2	Pin, SWG LKG	NAS1465-06	
2	Pin, SWG LKG	NAS1465-03	
4	Pin, SWG LKG	NAS1465-02	
8	Collar	NAS1080-05	
2	Shim, Tapered	SS81-014-I	
1	Doubler	70070-20581-101	
1	Channel	70070-20581-102	
1	Channel	70070-20581-103	

B. Source:

(1) Available through normal supply channels

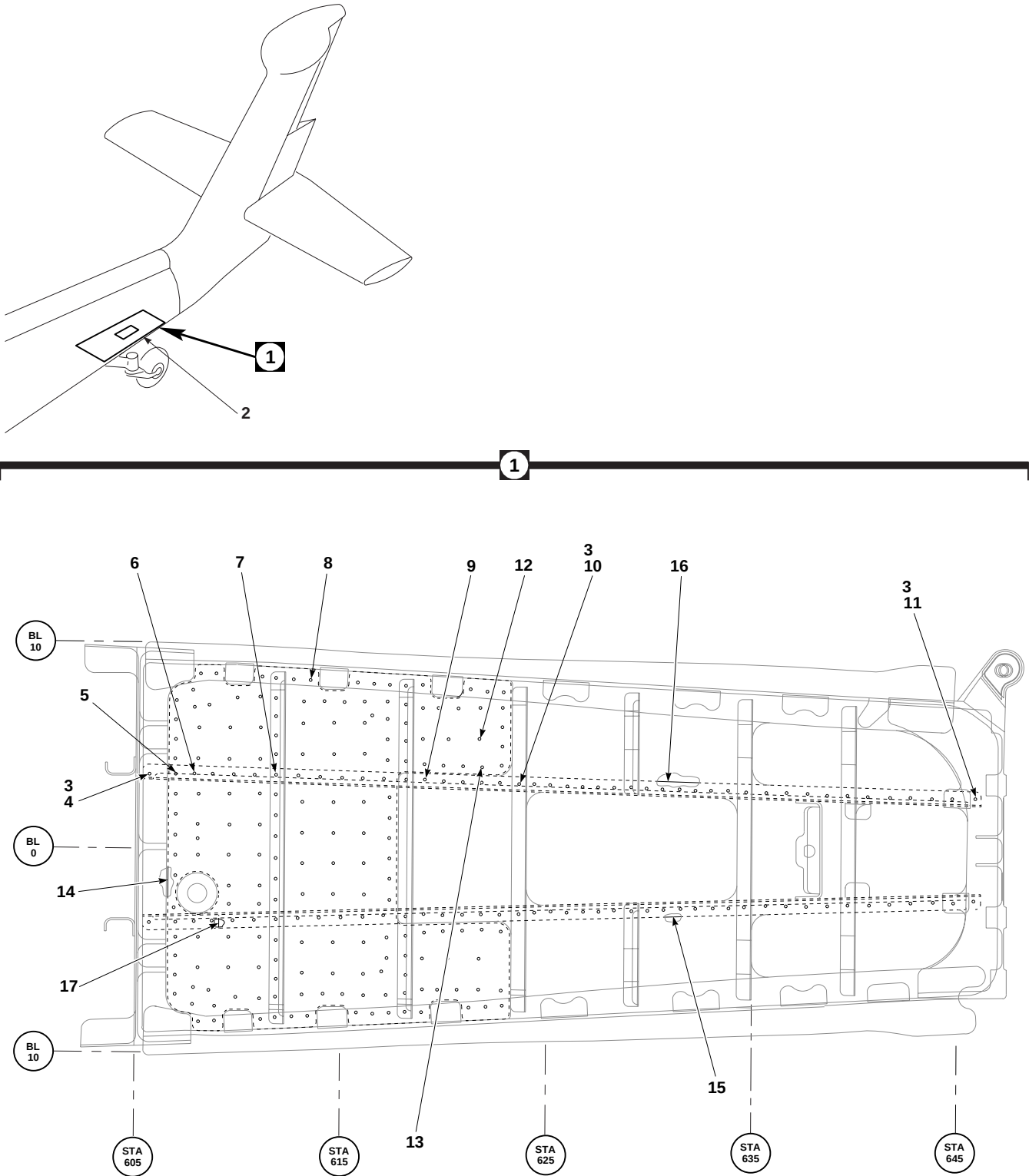


Figure E-16. Shear Deck Modification Kit

AB3121
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FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-16-	70070-20581-011		SHEAR DECK MODIFICATION KIT	REF	
-1	70070-20581-012		. SHEAR DECK INSTL, (Modified from 70211-05010-011).....	REF	
	70070-20581-013		. SHEAR DECK INSTL, (Modified from 70211-05010-012).....	REF	
-2	70070-20581-041		. SHEAR DECK ASSY, (Modified from 70211-05010-041).....	REF	
-3	NAS1465-06		. SWAGE LOCKING PIN	2	
-4	NAS1080-05		. COLLAR.....	8	
-5	MS20470AD5-9		. RIVET.....	3	
-6	MS20470AD5-8		. RIVET.....	3	
-7	MS20470AD5-7		. RIVET.....	9	
-8	MS20470AD5-6		. RIVET.....	91	
-9	MS20470AD6-7		. RIVET.....	53	
-10	NAS1465-02		. SWAGE LOCKING PIN	4	
-11	NAS1465-03		. SWAGE LOCKING PIN	2	
-12	MS20470AD4-4		. RIVET.....	72	
-13	MS20470AD5-5		. RIVET.....	68	
-14	70070-20581-101		. DOUBLER.....	1	
-15	70070-20581-103		. CHANNEL	1	
-16	70070-20581-102		. CHANNEL	1	
-17	SS81-014-I		. TAPERED SHIM	2	

E-16. STRINGER/FRAME MODIFICATION KIT (50-24).

Subject: Tail Cone, Modification of, dated 31 March 2003

Purpose: To provide instructions to install tail cone modification kit.

Model: UH-60A

Description: To strengthen the tail cone structure by adding stringers and shear ties to station 485.00 through station 565.00.

Drawings required for modification:

70070-20582

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) SSI No. 50-13 Tail Cone Plating, Modification of, dated 31 March 2003

(c) Technical Manual (TM) 1-1520-237-23-1, Aviation Unit And Intermediate Maintenance for Army Models UH-60A, UH-60L, and EH-60A Helicopters, Chapter 1, Aircraft General

Instructions:

NOTE

- A complete review of this SSI is recommended before installing tail cone modification kit.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- This modification is to be done concurrently with reference (b).

A. Preparation for modification and removal of equipment.

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).
- (3) Inspect and repair structure for corrosion and damage per reference (c).

B. Modification, tailcone:

(1) Modify tail cone after removal of lower skin (70213-05001-041 or 70213-05001-048) per reference (b).

(2) Installation, tail cone structure:

(a) Use portions of removed stringers from lower skin to align shear ties on lower section of modified frames.

(b) Modify station 505.00 as follows:

1 Remove right side brackets (70213-05001-154) between waterline 215.00 and waterline 230.00, waterline 255.00 (Dwg 70070-20582, Sheet 6, Zones 11-E through 11-G, Sheet 7, Section W-W, Zone 23-D, Notes 10 and 11).

2 Position shear ties (70070-20582-136, 70070-20582-101, 70070-20582-102, 70070-20582-135, 70070-20582-134, 70070-20582-103, and 70070-20582-137) as shown (Sheet 6, Zones 13-C through 11-E, Sheet 7, Zones 17-D and 18-F through 21-F).

3 Position splice (70084-25104-116) (Sheet 7, Zone 17-B).

4 Transfer drill fastener holes from shear ties and splice through frame and skins (Sheet 6, Zones 15 through 10, Sheet 7, Zones 16 through 22).

NOTE

Clips 96203-05001 are not secured at this time.

5 Secure shear ties and splice to frame with fasteners shown (Sheet 6, Zones 11 through 10, and Sheet 7, Zones 17 through 22).

6 Secure shear ties and skin with fasteners shown wet with sealant (MIL-S-8802 or equivalent) (Sheet 6, Views D-D, F-F, E-E, K-K, and L-L, Zones 14-A through 9-C, Sheet 7, Views P-P, R-R, S-S, and U-U, Zones 16-A through 22-F, Sheet 5, Note 4).

(c) Install station 485.00 to station 505.00 stringers as follows:

1 Position left side stringers (70213-05001-155 and 70213-05001-157) between waterline 215.00 and waterline 225.00 as shown (Sheet 6, Zones 20-C and 20-E, Note 12).

2 Drill fastener holes from stringers through skin, station 485.00 and station 505.00 frames.

3 Position angle brackets (SS1076-57 and SS1076-183) onto stringers and against frame (Sheet 6, Sections G-G, H-H, and J-J, Zones 23-C through 24-G, Note 12).

4 Drill fastener holes from angle brackets through stringers and frame.

5 Position right side stringers (70213-05001-156, 70213-05001-158, and 70213-05001-159) between waterline 215.00 and waterline 230.00 in shear tie (70070-20582-102) cutouts as shown (Sheet 6, View D-D, Zone 6-C, Note 12).

6 Drill fastener holes from stringers through skin, station 485.00 and station 505.00 frames as shown.

7 Position clips (96203-05001-152, 96203-05001-151, and 96203-05001-150) as shown (Sheet 6, Zones 11-E, 11-F, and 11-G).

8 Position buttline 0.00 stringer (70213-05001-153) at waterline 260.00 (Sheet 7, View V-V, Zone 5-C, Note 13).

9 Drill fastener holes from stringers through skin, station 485.00 and station 505.00 as shown.

10 Position bracket (70070-20582-131) as shown (Sheet 7, Section W-W, Zones 20-F and 22-D).

11 Drill fastener holes from brackets through stringers and frame.

12 Remove stringers, clips, angles, and brackets.

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

13 Coat skin with clear epoxy (MIL-C-22750 or equivalent) (Sheet 5, Note 7).

WARNING

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14 Secure stringers, clips, angles, and brackets wet with sealant (MIL-S-8802 or equivalent) (Sheet 6, Views C-C and D-D, Zones 6-C, 10-D, 10-E, 10-G, 19-C, 23-C, 22-G, and 23-G, Sheet 7, View V-V, Zone 5-C, Section T-T, Zone 10-F, Note 4).

NOTE

Station 525.00 is modified per paragraph (d) or paragraph (e).

(d) Modify station 525.00 using modification kit (70070-20582-013) as follows:

1 Position shear ties (70070-20582-109, 70070-20582-108, 70070-20582-107, 70070-20582-106, 70070-20582-105, 70070-20582-104, 70070-20582-111, and 70070-20582-110) (Dwg 70070-20582, Sheet 8, Zones 6 through 12 and 17 through 23).

2 Drill fastener holes from shear ties through frame and skins as shown (Sheet 8, Zones 6 through 12 and 17 through 23).

- 3 Secure shear ties to frame with fasteners shown (Sheet 8, Zones 22 through 17 and 12 through 7).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

- 4 Secure shear ties and skins with fasteners shown wet with sealant (MIL-S-8802 or equivalent) (Sheet 8, Views Z-Z, AF-AF, AG-AG, AH-AH, AJ-AJ, AK-AK, AL-AL, AM-AM, AN-AN, AE-AE, AD-AD, AB-AB, AA-AA, and AC-AC, Sheet 5, Note 4).

- (e) Modify station 525.00 using modification kit (70070-20582-027) as follows:

- 1 Position shear ties (70070-20582-149, 70070-20582-151, 70070-20582-150, 70070-20582-148, 70070-20582-146, 70070-20582-144, 70070-20582-145, and 70070-20582-147) (Dwg 70070-20582, Sheet 11, Zones 6 through 12 and 16 through 23).

- 2 Drill fastener holes from shear ties through frame and skins as shown (Sheet 11, Zones 6 through 12 and 16 through 23).

- 3 Secure shear ties to frame with fasteners shown (Sheet 11, Zones 22 through 16 and 12 through 7).

WARNING

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- 4 Secure shear ties and skins with fasteners shown wet with sealant (MIL-S-8802 or equivalent) (Sheet 11, Views CR-CR, CS-CS, CT-CT, CU-CU, CV-CV, CW-CW, CX-CX, CY-CY, CQ-CQ, CP-CP, CN-CN, CM-CM, CL-CL, and CK-CK, Sheet 5, Note 4).

NOTE

Station 545.00 is modified per paragraph (f) or paragraph (g).

- (f) Modify station 545.00 using modification kit (70070-20582-014) as follows:

- 1 Position shear ties (70070-20582-132, 70070-20582-133, 70070-20582-140, 70070-20582-115, 70070-20582-142, 70070-20582-117, 70070-20582-116, 70070-20582-138, 70070-20582-114, 70070-20582-

112, 70070-20582-143, 70070-20582-139, and 70070-20582-141) (Dwg 70070-20582, Sheet 9, Zones 22 through 17 and 11 through 6).

2 Drill fastener holes from shear ties and angles through frame and skins (Sheet 9, Zones 22 through 17 and 11 through 6).

3 Secure shear ties and angles to frame with fasteners shown (Sheet 9, Zones 22 through 17 and 11 through 7).

WARNING

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4 Secure shear ties and skins with fasteners shown wet with sealant (MIL-S-8802 or equivalent) (Sheet 9, Views AV-AV, AU-AU, AT-AT, AS-AS, BA-BA, BB-BB, BC-BC, BD-BD, BE-BE, BF-BF, BG-BG, BH-BH, AZ-AZ, AY-AY, AX-AX, and AW-AW, Sheet 5, Note 4).

(g) Modify station 545.00 using modification kit (70070-20582-028) as follows:

1 Position shear ties (70070-20582-152, 70070-20582-154, 70070-20582-156, 70070-20582-158, 70070-20582-160, 70070-20582-162, 70070-20582-161, 70070-20582-159, 70070-20582-157, 70070-20582-164, 70070-20582-163, 70070-20582-155, and 70070-20582-153) (Dwg 70070-20582, Sheet 12, Zones 22 through 17 and 11 through 6).

2 Drill fastener holes from shear ties and angles through frame and skins (Sheet 12, Zones 22 through 17 and 11 through 6).

3 Secure shear ties and angles to frame with fasteners shown (Sheet 12, Zones 22 through 17 and 11 through 7).

WARNING

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4 Secure shear ties and skins with fasteners shown wet with sealant (MIL-S-8802 or equivalent) (Sheet 12, Views DE-DE, DF-DF, DG-DG, DH-DH, DD-DD, DR-DR, DP-DP, DN-DN, DM-DM, DL-DL, DK-DK, DJ-DJ, CZ-CZ, DA-DA, DB-DB, and DC-DC, Sheet 5, Note 4).

(h) Modify station 565.00 as follows:

1 Position shear ties (70070-20582-119, 70070-20582-120, 70080-20582-118, 70070-20582-129, 70070-20582-130, 70070-20582-121, 70070-20582-122, 70070-20582-123, 70070-20582-124, 70070-20582-125, 70070-20582-126, 70070-20582-127, and 70070-20582-128) (Dwg 70070-20582, Sheet 10, Zones 21 through 17 and 11 through 7).

2 Drill fastener holes from shear ties through frame and skins (Sheet 10, Zones 21 through 17 and 11 through 7).

3 Secure shear ties to frame with fasteners shown (Sheet 10, Zones 21 through 17 and 11 through 7).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

4 Secure shear ties and skins with fasteners shown wet with sealant (MIL-S-8802 or equivalent) (Sheet 10, Views BT-BT, BS-BS, BR-BR, BP-BP, BN-BN, BZ-BZ, CA-CA, CB-CB, CC-CC, CD-CD, CE-CE, X-X, Y-Y, BY-BY, BX-BX, BW-BW, BV-BV, and BU-BU, Sheet 5, Note 4).

(3) Reidentification:

NOTE

The following reidentifications are for record purposes only. No physical reidentification is required.

<u>FROM</u>	<u>TO</u>	<u>Nomenclature</u>
70211-05002-011	70070-20582-018	Frame Instl
*70211-05003-011	70070-20582-019	Frame Instl
**70211-05004-011	70070-20582-020	Frame Instl
&70211-05003-011	70070-20582-019	Frame Instl
&&70211-05004-011	70070-20582-020	Frame Instl
70211-05005-011	70070-20582-021	Frame Instl
70213-05001-011	70070-20582-022	Plating Instl
70213-05001-012	70070-20582-023	Plating Instl
70213-05001-041	70070-20582-041	Skin Assy
70213-05001-042	70070-20582-042	Skin Assy
70213-05001-044	70070-20582-043	Skin Assy

*Reidentify when incorporating 70070-20582-013 modification kit.

**Reidentify when incorporating 70070-20582-014 modification kit

&Reidentify when incorporating 70070-20582-027 modification kit

&&Reidentify when incorporating 70070-20582-028 modification kit

C. Reinstallation of removed equipment:

- (1) Reinstall removed equipment per reference (a).

D. Record of Compliance:

- (1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20582-011	Mod. Kit, Tailcone	+5.30	527.2	+2.794

Weight and Balance: Change resulting from these actions is as follows:

Change in basic weight: +5.30 pounds

Moment arm: 527.2

Change in basic moment/1000: +2.794

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Helicopter Structural Mechanic	2	50	*100

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification kits required.

NOTE

The modification subkits (70070-20582-013) or (70070-20582-027) and (70070-20582-014) or (70070-20582-028) are interchangeable.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Tailcone,	70070-20582-011	(1)
	consisting of:		
1	Mod. Kit, Frame,	70070-20582-012	
	consisting of:		

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
103	Rivet	MS20470AD5-5	
12	Rivet	MS20470AD5-6	
1	Shear Tie	70070-20582-101	
1	Shear Tie	70070-20582-102	
1	Shear Tie	70070-20582-103	
1	Shear Tie	70070-20582-134	
1	Shear Tie	70070-20582-135	
1	Shear Tie	70070-20582-136	
1	Shear Tie	70070-20582-137	
1	Splice	70084-25104-116	
1	Mod. Kit, Frame,	70070-20582-013	
	consisting of:		
134	Rivet	MS20470AD5-5	
2	Rivet	MS20470AD5-6	
1	Shear Tie	70070-20582-104	
1	Shear Tie	70070-20582-105	
1	Shear Tie	70070-20582-106	
1	Shear Tie	70070-20582-107	
1	Shear Tie	70070-20582-108	
1	Shear Tie	70070-20582-109	
1	Shear Tie	70070-20582-110	
1	Shear Tie	70070-20582-111	
1	Mod. Kit Frame,	70070-20582-014	
	consisting of:		
123	Rivet	MS20470AD5-5	
1	Shear Tie	70070-20582-112	
1	Shear Tie	70070-20582-139	
1	Shear Tie	70070-20582-114	
1	Shear Tie	70070-20582-115	
1	Shear Tie	70070-20582-116	
1	Shear Tie	70070-20582-117	
1	Shear Tie	70070-20582-132	
1	Shear Tie	70070-20582-133	
1	Shear Tie	70070-20582-138	
1	Shear Tie	70070-20582-140	
1	Shear Tie	70070-20582-141	
1	Shear Tie	70070-20582-142	
1	Shear Tie	70070-20582-143	
1	Mod. Kit, Plating,	70070-20582-015	
	consisting of:		
109	Rivet	MS20470AD5-5	
1	Shear Tie	70070-20582-118	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Shear Tie	70070-20582-119	
1	Shear Tie	70070-20582-120	
1	Shear Tie	70070-20582-121	
1	Shear Tie	70070-20582-122	
1	Shear Tie	70070-20582-123	
1	Shear Tie	70070-20582-124	
1	Shear Tie	70070-20582-125	
1	Shear Tie	70070-20582-126	
1	Shear Tie	70070-20582-127	
1	Shear Tie	70070-20582-128	
1	Shear Tie	70070-20582-129	
1	Shear Tie	70070-20582-130	
1	Mod. Kit, Plating,	70070-20582-016	
	consisting of:		
55	Rivet	MS20470AD4-4	
232	Rivet	MS20470AD5-5	
5	Rivet	MS20470AD5-6	
1	Mod. Kit, Skin Assy,	70070-20582-024	
	consisting of:		
7	Rivet	MS20470AD4-5	
1	Bracket Angle	SS1076-183	
1	Bracket Angle	SS1076-57	
1	Stringer	70213-05001-155	
1	Stringer	70213-05001-157	
1	Mod. Kit, Plating,	70070-20582-017	
	consisting of:		
89	Rivet	MS20470AD4-4	
199	Rivet	MS20470AD5-5	
4	Rivet	MS20470AD5-6	
1	Mod. Kit, Skin Assy,	70070-20582-025	
	consisting of:		
1	Stringer	70213-05001-156	
1	Stringer	70213-05001-158	
1	Stringer	70213-05001-159	
1	Clip	96203-05001-150	
1	Clip	96203-05001-151	
1	Clip	96203-05001-152	
1	Mod. Kit, Skin Assy,	70070-20582-026	
	consisting of:		
1	Stringer	70213-05001-153	

DMWR 1-1520-237

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Bracket	70070-20582-131	
30	Rivet	MS20470AD4-4	
2	Rivet	MS20470AD5-6	
6	Rivet	MS20470AD4-5	
1	Mod. Kit Frame	70070-20582-027	
	consisting of:		
134	Rivet	MS20470AD5-5	
2	Rivet	MS20470AD5-6	
1	Shear Tie	70070-20582-144	
1	Shear Tie	70070-20582-145	
1	Shear Tie	70070-20582-146	
1	Shear Tie	70070-20582-147	
1	Shear Tie	70070-20582-148	
1	Shear Tie	70070-20582-149	
1	Shear Tie	70070-20582-150	
1	Shear Tie	70070-20582-151	
1	Mod. Kit Frame	70070-20582-028	
	consisting of:		
134	Rivet	MS20470AD5-5	
1	Shear Tie	70070-20582-152	
1	Shear Tie	70070-20582-153	
1	Shear Tie	70070-20582-154	
1	Shear Tie	70070-20582-155	
1	Shear Tie	70070-20582-156	
1	Shear Tie	70070-20582-157	
1	Shear Tie	70070-20582-158	
1	Shear Tie	70070-20582-159	
1	Shear Tie	70070-20582-160	
1	Shear Tie	70070-20582-161	
1	Shear Tie	70070-20582-162	

B. Consumable Material:

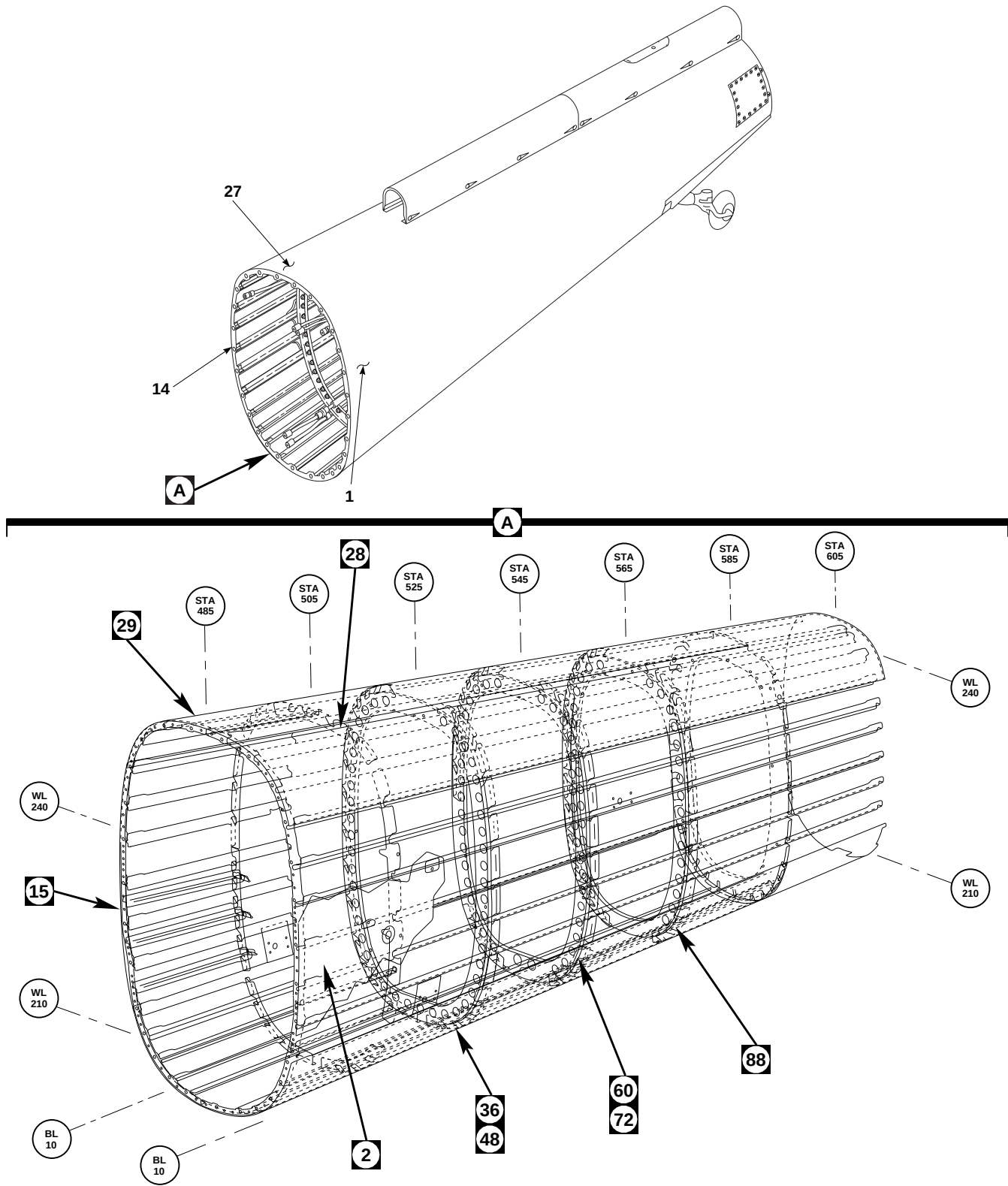


OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
16 oz.	Sealant	MIL-S-8802 or equivalent	(1)
8 oz.	Clear Epoxy	MIL-C-22750 or equivalent	(1)

C. Source:

- (1) Available through normal supply channels.



AB3092_1
SA

Figure E-17. Stringer/Frame Modification Kit (Sheet 1 of 9)

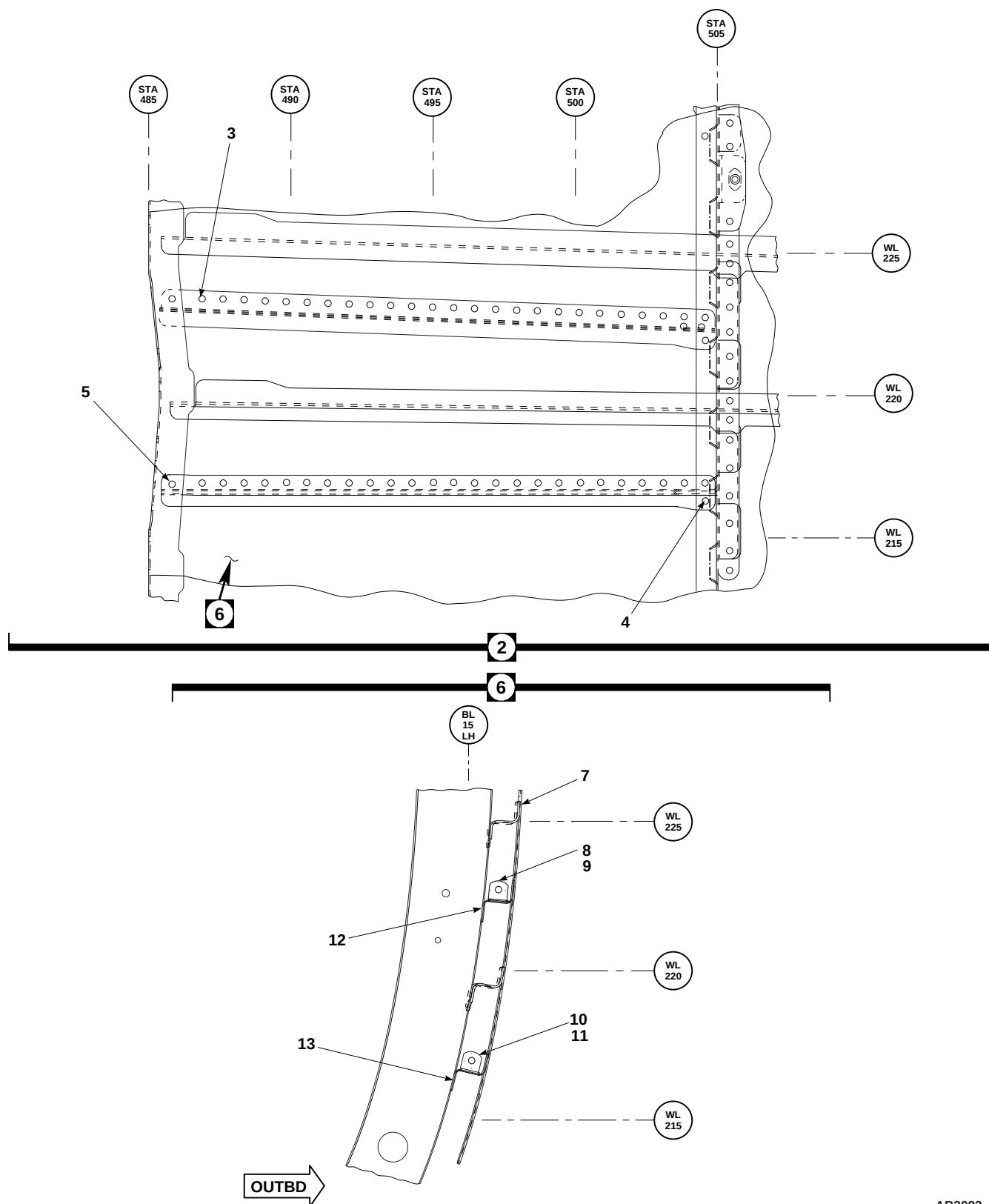
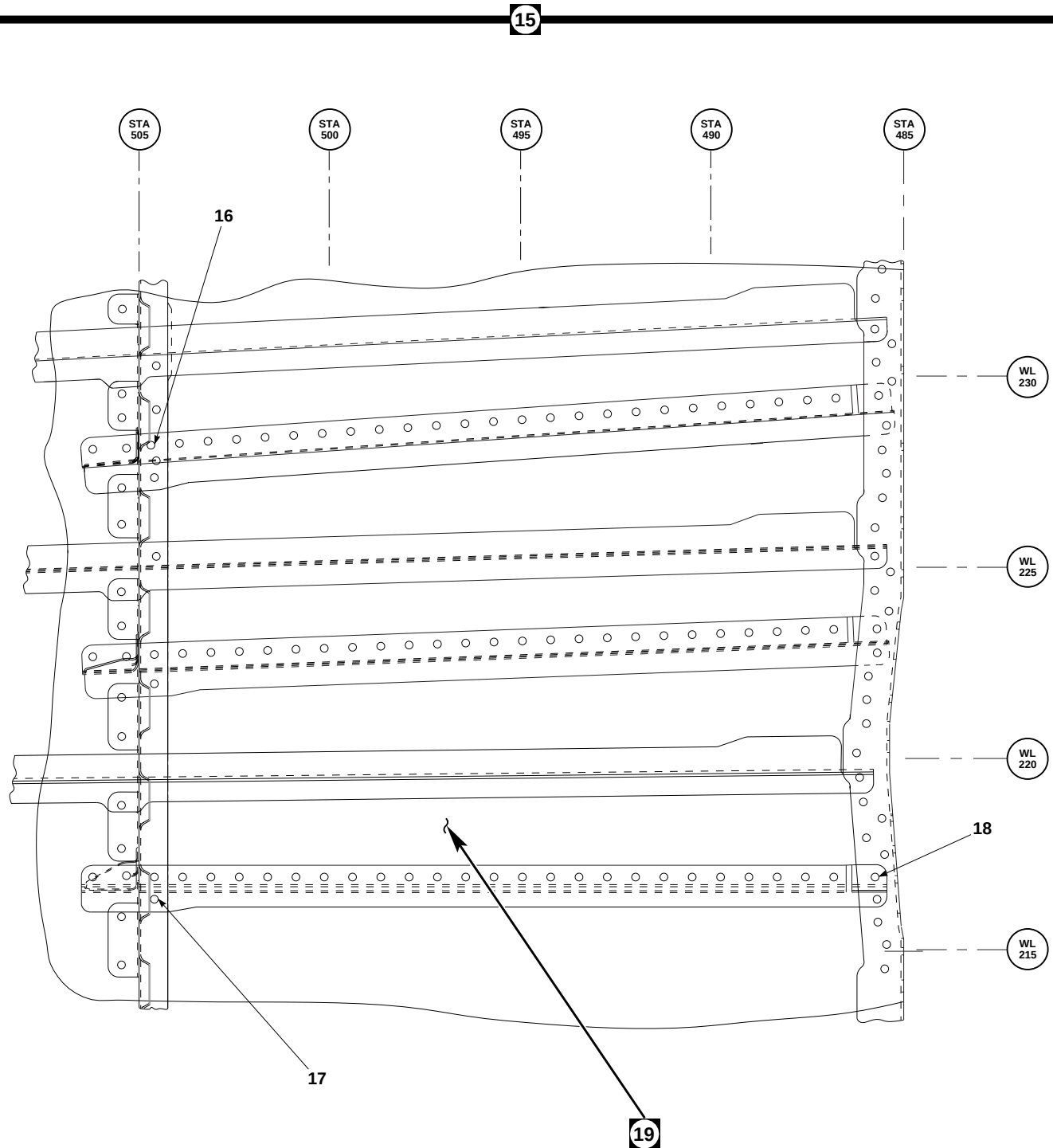
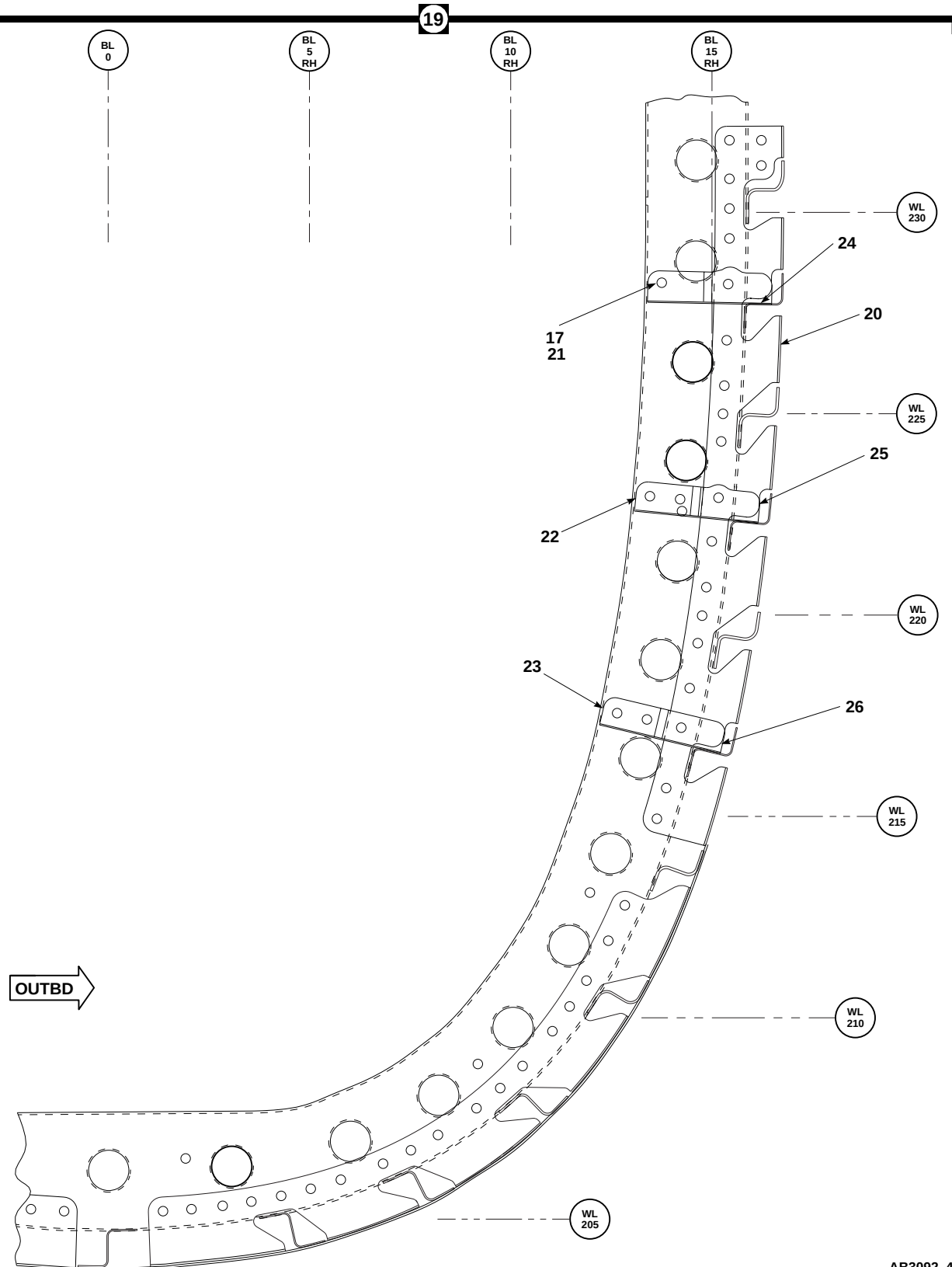
AB3092_2
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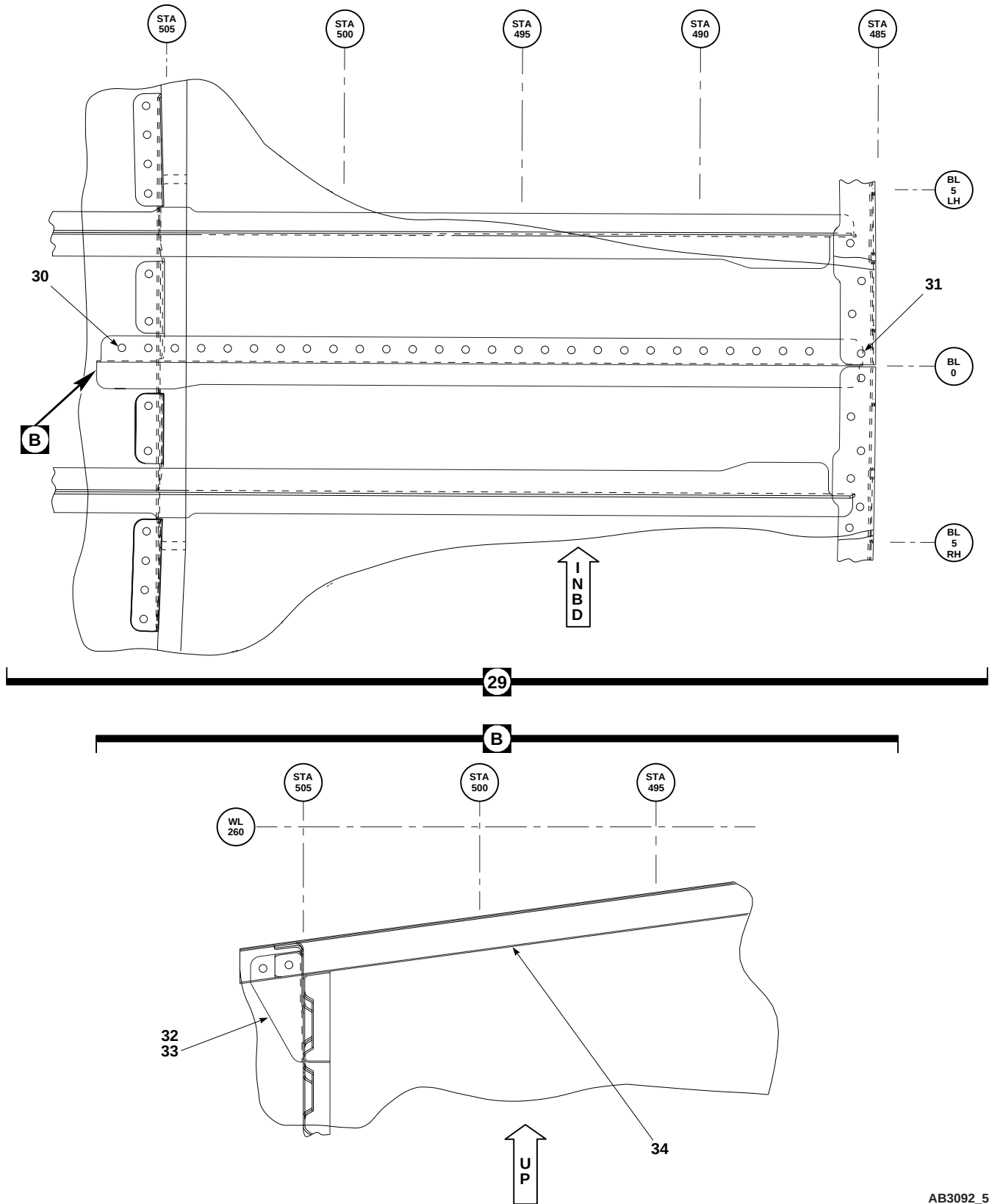
Figure E-17. Stringer/Frame Modification Kit (Sheet 2 of 9)



AB3092_3
SA

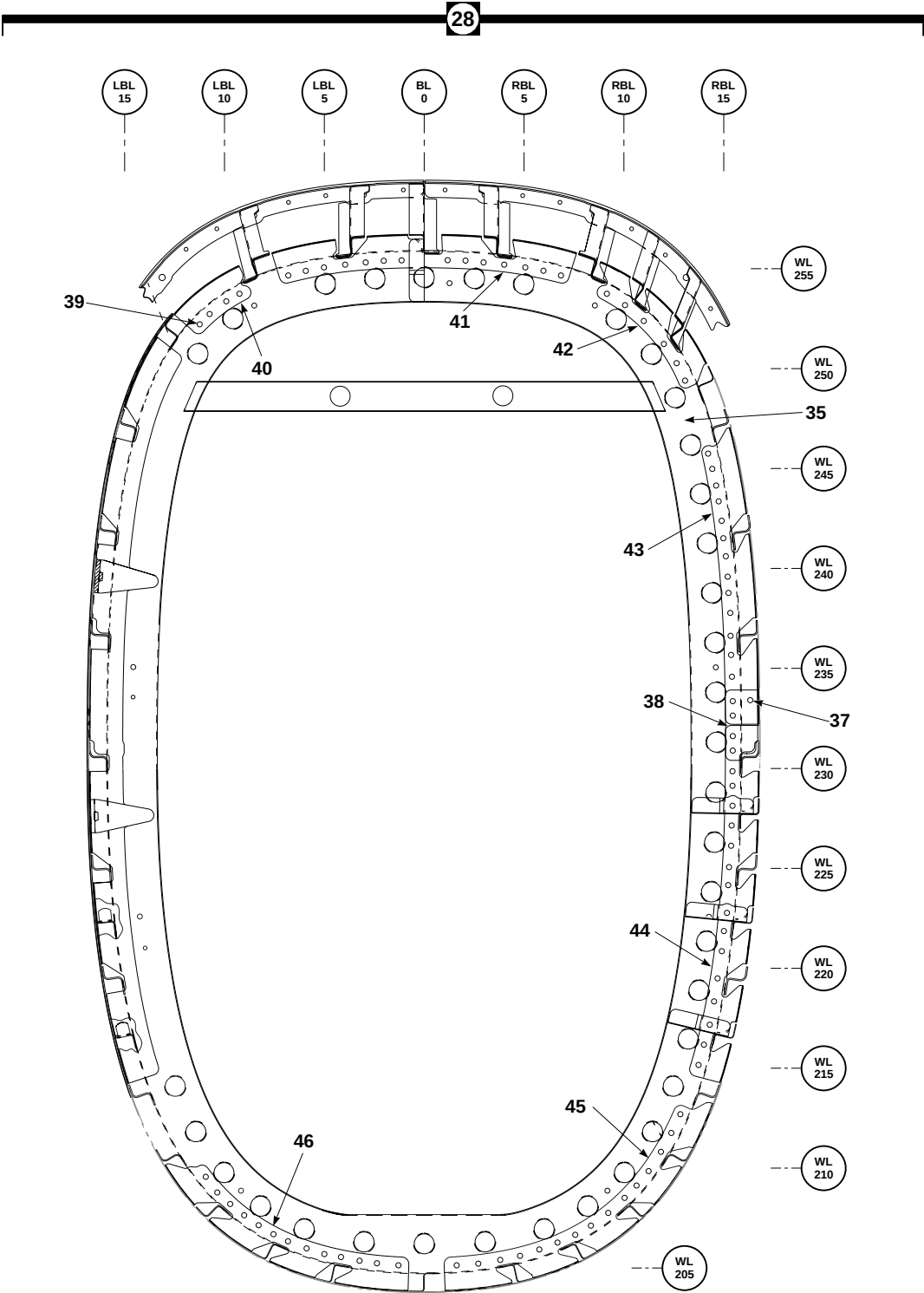
Figure E-17. Stringer/Frame Modification Kit (Sheet 3 of 9)





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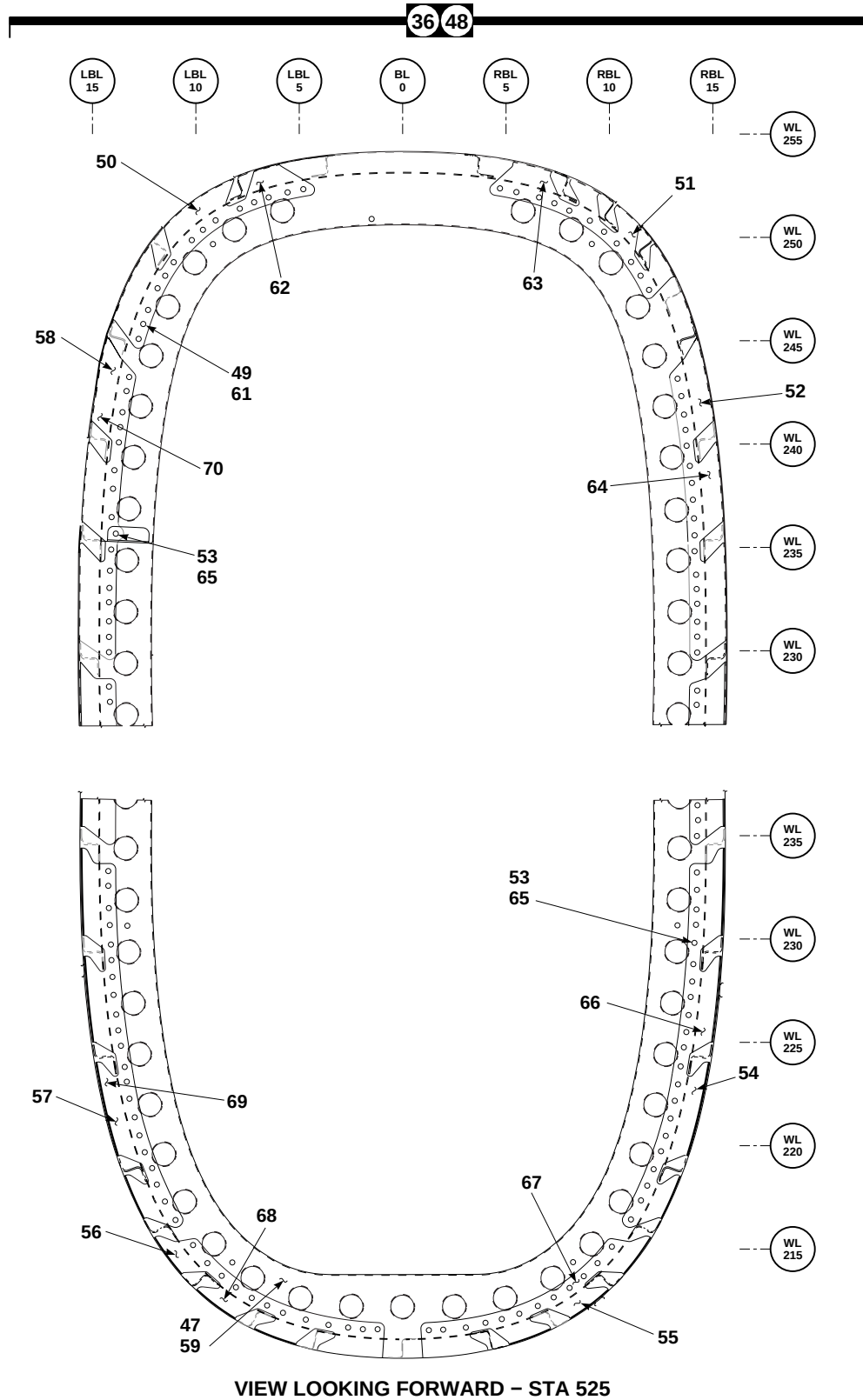
Figure E-17. Stringer/Frame Modification Kit (Sheet 5 of 9)



VIEW LOOKING FORWARD – STA 505

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SA

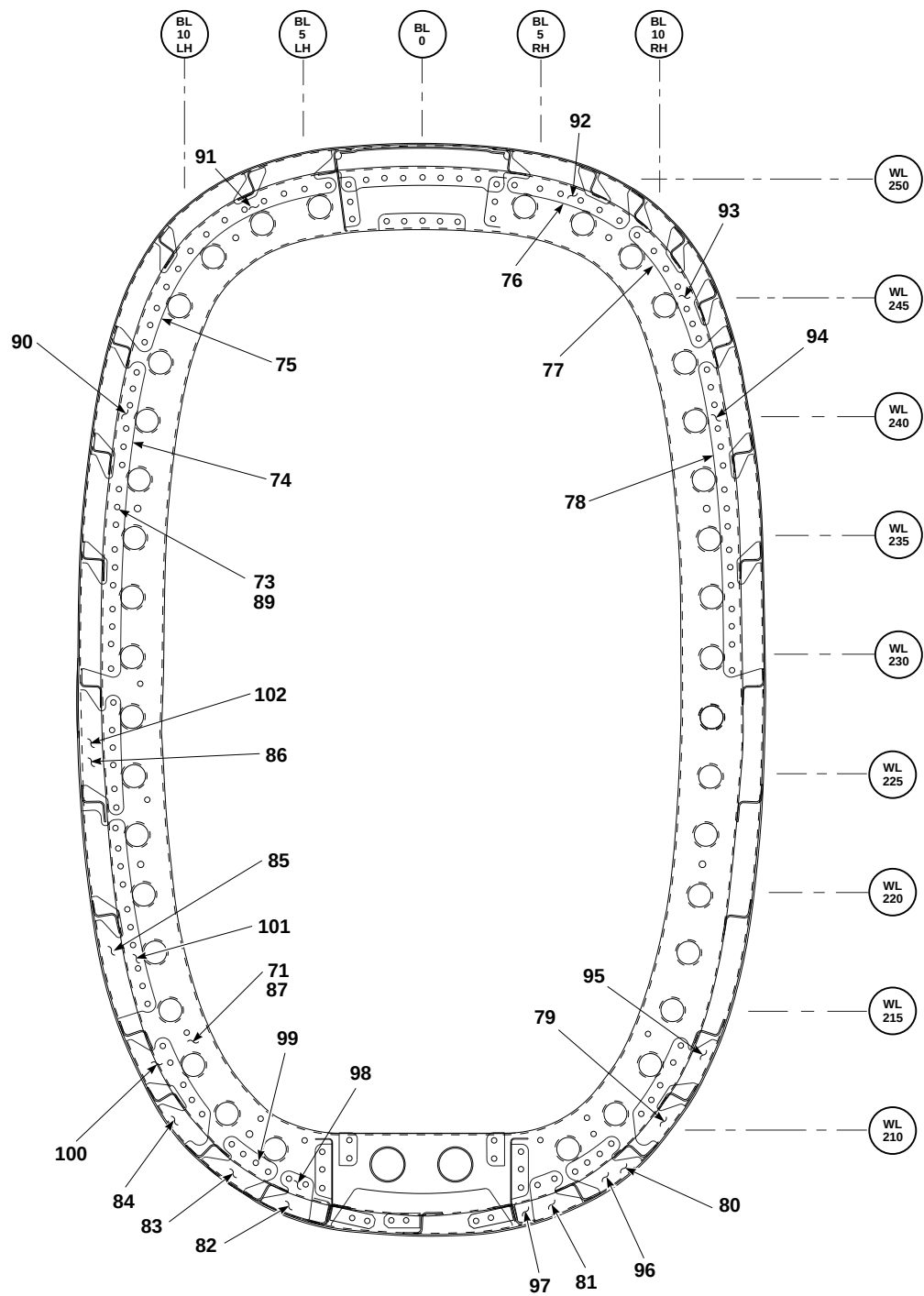
Figure E-17. Stringer/Frame Modification Kit (Sheet 6 of 9)



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Figure E-17. Stringer/Frame Modification Kit (Sheet 7 of 9)

60 72

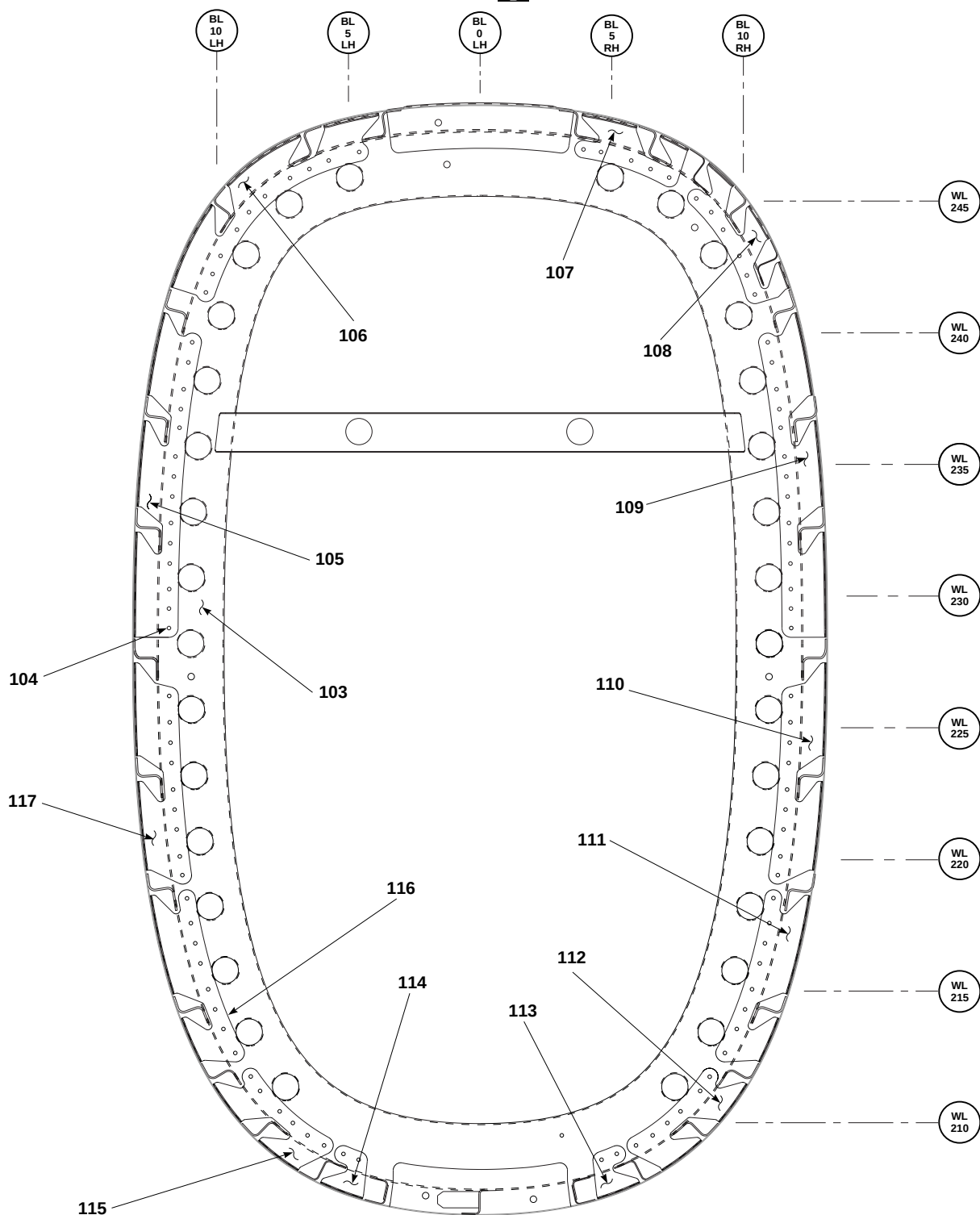


VIEW LOOKING FORWARD – STA 545

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Figure E-17. Stringer/Frame Modification Kit (Sheet 8 of 9)

88



VIEW LOOKING FORWARD – STA 565

AB3092_9
SA

Figure E-17. Stringer/Frame Modification Kit (Sheet 9 of 9)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-17-	70070-20582-011		STRINGER/FRAME MODIFICATION KIT	REF	
-1	70070-20582-016		. M/K PLATING, (Modified from 702113-05001-011)	1	
-2	70070-20582-022		. . PLATING INSTL	REF	
-3	MS20470AD4-4		. . RIVET	55	
-4	MS20470AD5-5		. . RIVET	232	
-5	MS20470AD5-6		. . RIVET	5	
-6	70070-20582-024		. . M/K SKIN ASSY	1	
-7	70070-20582-041		. . . SKIN ASSY, (Reidentified from 70213-05001-041)	REF	
-8	MS20470AD4-5		. . . RIVET	3	
-9	SS1076-57		. . . BRACKET ANGLE	1	
-10	MS20470AD4-5		. . . RIVET	3	
-11	SS1076-183		. . . BRACKET ANGLE	1	
-12	70213-05001-157		. . . STRINGER	1	
-13	70213-05001-155		. . . STRINGER	1	
-14	70070-20582-017		. M/K PLATING, (Modified from 70213-05001-012) ..	1	
-15	70070-20582-023		. . PLATING INSTL	REF	
-16	MS20470AD4-4		. . RIVET	89	
-17	MS20470AD5-5		. . RIVET	199	
-18	MS20470AD5-6		. . RIVET	4	
-19	70070-20582-025		. . M/K SKIN ASSY	1	
-20	70070-20582-042		. . . SKIN ASSY, (Reidentified from 70213-05001-042)	REF	
-21	96203-05001-150		. . . CLIP	1	
-22	96203-05001-151		. . . CLIP	1	
-23	96203-05001-152		. . . CLIP	1	
-24	70213-05001-159		. . . STRINGER	1	
-25	70213-05001-158		. . . STRINGER	1	
-26	70213-05001-156		. . . STRINGER	1	
-27	70070-20582-026		. M/K SKIN ASSY	1	
-28	70070-20582-018		. . FRAME INSTL, (Modified from 70211-05002-011)	REF	
-29	70070-20582-043		. . SKIN ASSY	REF	
-30	MS20470AD4-4		. . RIVET	30	
-31	MS20470AD5-6		. . RIVET	2	
-32	MS20470AD4-5		. . RIVET	6	
-33	70070-20582-131		. . BRACKET	1	
-34	70213-05001-153		. . STRINGER	1	
-35	70070-20582-012		. M/K FRAME	1	
-36	70070-20582-019		. . FRAME INSTL, (Modified from 70211-05003-011)	REF	
-37	MS20470AD5-6		. . RIVET	12	
-38	70084-25104-116		. . SPLICE	1	
-39	MS20470AD5-5		. . RIVET	103	
-40	70070-20582-137		. . SHEAR TIE	1	
-41	70070-20582-103		. . SHEAR TIE	1	
-42	70070-20582-134		. . SHEAR TIE	1	
-43	70070-20582-135		. . SHEAR TIE	1	
-44	70070-20582-102		. . SHEAR TIE	1	
-45	70070-20582-101		. . SHEAR TIE	1	
-46	70070-20582-136		. . SHEAR TIE	1	
-47	70070-20582-013		. M/K FRAME	1	
-48	70070-20582-029		. . FRAME INSTL, (Modified from 70211-05003-011)	REF	
-49	MS20470AD5-5		. . RIVET	134	
-50	70070-20582-111		. . SHEAR TIE	1	
-51	70070-20582-104		. . SHEAR TIE	1	
-52	70070-20582-105		. . SHEAR TIE	1	
-53	MS20470AD5-6		. . RIVET	2	
-54	70070-20582-106		. . SHEAR TIE	1	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
-55	70070-20582-107	.	.	.	.	.	.	.	SHEAR TIE	1	
-56	70070-20582-108	.	.	.	.	.	.	.	SHEAR TIE	1	
-57	70070-20582-109	.	.	.	.	.	.	.	SHEAR TIE	1	
-58	70070-20582-110	.	.	.	.	.	.	.	SHEAR TIE	1	
-59	70070-20582-027	.	.	.	.	.	.	.	M/K FRAME	1	
-60	70070-20582-020	.	.	.	.	.	.	.	FRAME INSTL, (Modified from 70211-05004-011)	REF	
-61	MS20470AD5-5	.	.	.	.	.	.	.	RIVET	134	
-62	70070-20582-145	.	.	.	.	.	.	.	SHEAR TIE	1	
-63	70070-20582-144	.	.	.	.	.	.	.	SHEAR TIE	1	
-64	70070-20582-146	.	.	.	.	.	.	.	SHEAR TIE	1	
-65	MS20470AD5-6	.	.	.	.	.	.	.	RIVET	2	
-66	70070-20582-148	.	.	.	.	.	.	.	SHEAR TIE	1	
-67	70070-20582-150	.	.	.	.	.	.	.	SHEAR TIE	1	
-68	70070-20582-151	.	.	.	.	.	.	.	SHEAR TIE	1	
-69	70070-20582-149	.	.	.	.	.	.	.	SHEAR TIE	1	
-70	70070-20582-147	.	.	.	.	.	.	.	SHEAR TIE	1	
-71	70070-20582-014	.	.	.	.	.	.	.	M/K FRAME	1	
-72	70070-20582-030	.	.	.	.	.	.	.	FRAME INSTL, (Modified from 70211-05004-011)	REF	
-73	MS20470AD5-5	.	.	.	.	.	.	.	RIVET	123	
-74	70070-20582-139	.	.	.	.	.	.	.	SHEAR TIE	1	
-75	70070-20582-141	.	.	.	.	.	.	.	SHEAR TIE	1	
-76	70070-20582-132	.	.	.	.	.	.	.	SHEAR TIE	1	
-77	70070-20582-133	.	.	.	.	.	.	.	SHEAR TIE	1	
-78	70070-20582-140	.	.	.	.	.	.	.	SHEAR TIE	1	
-79	70070-20582-115	.	.	.	.	.	.	.	SHEAR TIE	1	
-80	70070-20582-142	.	.	.	.	.	.	.	SHEAR TIE	1	
-81	70070-20582-117	.	.	.	.	.	.	.	SHEAR TIE	1	
-82	70070-20582-116	.	.	.	.	.	.	.	SHEAR TIE	1	
-83	70070-20582-138	.	.	.	.	.	.	.	SHEAR TIE	1	
-84	70070-20582-114	.	.	.	.	.	.	.	SHEAR TIE	1	
-85	70070-20582-112	.	.	.	.	.	.	.	SHEAR TIE	1	
-86	70070-20582-143	.	.	.	.	.	.	.	SHEAR TIE	1	
-87	70070-20582-028	.	.	.	.	.	.	.	M/K FRAME	1	
-88	70070-20582-021	.	.	.	.	.	.	.	FRAME INSTL, (Modified from 70211-05005-011)	REF	
-89	MS20470AD5-5	.	.	.	.	.	.	.	RIVET	123	
-90	70070-20582-155	.	.	.	.	.	.	.	SHEAR TIE	1	
-91	70070-20582-153	.	.	.	.	.	.	.	SHEAR TIE	1	
-92	70070-20582-152	.	.	.	.	.	.	.	SHEAR TIE	1	
-93	70070-20582-154	.	.	.	.	.	.	.	SHEAR TIE	1	
-94	70070-20582-156	.	.	.	.	.	.	.	SHEAR TIE	1	
-95	70070-20582-158	.	.	.	.	.	.	.	SHEAR TIE	1	
-96	70070-20582-160	.	.	.	.	.	.	.	SHEAR TIE	1	
-97	70070-20582-162	.	.	.	.	.	.	.	SHEAR TIE	1	
-98	70070-20582-161	.	.	.	.	.	.	.	SHEAR TIE	1	
-99	70070-20582-159	.	.	.	.	.	.	.	SHEAR TIE	1	
-100	70070-20582-157	.	.	.	.	.	.	.	SHEAR TIE	1	
-101	70070-20582-164	.	.	.	.	.	.	.	SHEAR TIE	1	
-102	70070-20582-163	.	.	.	.	.	.	.	SHEAR TIE	1	
-103	70070-20582-015	.	.	.	.	.	.	.	M/K FRAME	1	
-104	MS20470AD5-5	.	.	.	.	.	.	.	RIVET	109	
-105	70070-20582-119	.	.	.	.	.	.	.	SHEAR TIE	1	
-106	70070-20582-118	.	.	.	.	.	.	.	SHEAR TIE	1	
-107	70070-20582-129	.	.	.	.	.	.	.	SHEAR TIE	1	
-108	70070-20582-130	.	.	.	.	.	.	.	SHEAR TIE	1	
-109	70070-20582-120	.	.	.	.	.	.	.	SHEAR TIE	1	
-110	70070-20582-122	.	.	.	.	.	.	.	SHEAR TIE	1	
-111	70070-20582-124	.	.	.	.	.	.	.	SHEAR TIE	1	
-112	70070-20582-126	.	.	.	.	.	.	.	SHEAR TIE	1	

FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
-113	70070-20582-128	.	.						SHEAR TIE	1	
-114	70070-20582-127	.	.						SHEAR TIE	1	
-115	70070-20582-125	.	.						SHEAR TIE	1	
-116	70070-20582-123	.	.						SHEAR TIE	1	
-117	70070-20582-121	.	.						SHEAR TIE	1	

E-17. SKIN DOUBLER/PLATE INSTALLATION MODIFICATION KIT (50-13).

Subject: Tail Cone Plating Modification Kit, Installation of, dated 31 March 2003

Purpose: Provide instructions for installations of tail cone lower plating modification kit and tail cone side skin modification kit.

Model: UH-60A

Description: Lower skin and doubler are removed between station 485.00 and station 605.00, and new lower skin and doubler are installed. Doublers are installed left and right side of tail cone between stations 625.00 and 635.00.

Drawings Required for Modification:

70070-20615, 70212-05004, 70070-20583

References: (a) TM 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 2, Airframe

(b) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(c) SSI No. 50-24, Tail Cone, Modification of dated 31 March 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before modifying tail cone plating.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- This modification is to be done concurrently with reference (c).

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (b).
- (2) Perform preparation for modification per reference (b).

B. Modify tail cone as follows:

(1) Remove skin assembly (70213-05001-043) as follows:

(a) Remove fasteners securing skin assembly to frame between station 485.00 and station 585.00 (Dwg 70070-20615, Sheet 2, Zones 10-B through 10-G to 19-B through 19-G).

(b) Remove skin assembly with stringers attached, and discard.

(c) Inspect and clean exposed stringers and frame components per reference (a).

(2) Rework left and right side tail cone between stations 625.00 and 635.00 as follows:

(a) Locate doubler (70070-20583-101) on left side of tail cone between station 624.00 and station 635.00 along waterline 235.00 (Dwg 70070-20583, Sheet 2, Zone 6-H).

(b) Mark and remove existing fasteners.

(c) Locate doubler (70070-20583-102) on right side of tail cone between station 624.00 and station 635.00 along waterline 235.00 (Sheet 2, Zone 6-H).

(d) Mark and remove existing fasteners.

(e) Locate and temporarily secure doublers and back drill through existing fastener holes.

(f) Remove doublers, deburr and touch up, as required. Remove skin assembly, deburr and touch up, as required.

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(g) Install doublers (70070-20583-101 and -102) on left and right side wet with sealant (AMS-S-8802 or AMS 3265 or equivalent) using fasteners shown (Sheet 2, Zone 6-H and Note 7).

NOTE

After modification structure assembly (70210-05001-045) becomes (70070-20583-041) and structure assembly (70210-05001-046) becomes (70070-20583-042). No physical reidentification is required.

(3) Perform reference (c) modification before completing skin assembly installation.

(4) Install new skin assembly (70213-55001-041/-541) between stations 485.00 and 565.00 as follows:

- (a) Locate and temporarily install bracket (AN743Z12) on stringer at location shown (Dwg 70070-20615, Sheet 2, Zone 12-B, Section J-J).
- (b) Drill fastener hole at location shown (Sheet 2, Zone 13-A).
- (c) Remove bracket, deburr and touch up, as required.
- (d) Secure bracket (AN743Z12) to stringer using fastener shown (Sheet 2, Zone 13-A).
- (e) Locate and temporarily secure new skin assembly (70213-55001-041/-541) onto frames (Sheet 2, Zones 10-B through 10-D to 19-B through 19-E).

WARNING

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- (f) Locate and bond grommets (AN231-4) eight places using adhesive (EA9309.3NA or equivalent) as shown (Sheet 2, Zones 11-B and 19-B and Sheet 1, Note 9).

NOTE

Reference (c) shear ties at or below waterline 215.00 should be fit-out at this time to ensure proper contour.

- (g) Remove skin assembly, and reference (c) shear ties, deburr and touch up, as required.

WARNING

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- (h) Apply adhesive (MIL-C-22750 or equivalent) on inboard side of skin and structure as shown (Sheet 2, Zones 18-A through 18-E, and Sheet 1, Note 7).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

- (i) Apply sealant (AMS-S-8802 A2 or equivalent) to skin overlap areas (Sheet 1, Note 8).
- (j) Secure skin onto frame and wet install fasteners as shown (Sheet 2, Zones 10-B through 10-D to 19-B through 19-E).

NOTE

70070-20615-101 doubler may already be installed on skin 70213-55001. If installed proceed to step C.(1).

- (k) Locate and temporarily secure doubler (70070-20615-101) (Sheet 2, Zone 14-B).
- (l) Drill fastener holes as shown (Sheet 2, Zone 14-B and Dwg 70212-05004, Sheet 1, Zone 17-C).
- (m) Remove doubler, deburr and touch up, as required.

WARNING

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- (n) Install sealant tape (AMS3255 CL2) to doubler seating surface (Dwg 70070-20615, Sheet 1, Note 10).
- (o) Secure doubler (70070-20615-101) using fasteners shown (Dwg 70213-55001, Sheet 1, Zone 14-B and Dwg 70212-05004, Sheet 1, Zone 17-C, and Note 8).

C. Reinstallation of removed equipment:

- (1) Install removed equipment per reference (b).

D. Record of Compliance:

- (1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20615-011	Mod. Kit	3.98	535.0	+2.129
1	70070-20583-011	Mod. Kit	+0.50	630.0	+0.315

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +4.5 pounds

Moment arm: 543.0 in.

Change in basic moment/1000: +2.444

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Helicopter Mechanic	2	40.0	*80.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kits Required:

(1) Kit A:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod Kit, Plating Instl	70070-20615-011	(1)
	consisting of:		
8	Grommet	AN231-4	
1	Bracket	AN743Z12	
90	Rivet	MS20470AD4-5	
84	Rivet	MS20470AD5-5	
200	Rivet	MS20470AD5-6	
70	Rivet	MS20470AD6-6	
100	Rivet	MS20470AD6-8	
12	Collar	NAS1080D06	
6	Pin, Swg Lkg	NAS1526-02	
6	Pin, Swg Lkg	NAS1526-03	
1	Doubler	70070-20615-101*	
1	Skin Assy	70213-55001-041/541*	

*70213-55001-541 consists of 70213-55001-041 skin assembly and 70070-20615-101 doubler

(2) Kit B:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Skin Doubler,	70070-20583-011	(1)
	consisting of:		
1	Doubler	70070-20583-101	
1	Doubler	70070-20583-102	
14	Rivet	MS20470AD4-2	
62	Rivet	MS20470AD5-3	
3	Rivet	MS20470AD5-4	
25	Rivet	MS20470AD6-4	
3	Rivet	MS20470AD6-5	

B. Consumable Material:

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
16 oz.	Sealant	AMS-S-8802 A2, or equivalent	(1)
8 oz.	Sealant	AMS 3255 CL2, or equivalent	(1)
8 oz.	Adhesive	EA9309-3NA, or equivalent	(1)
8 oz.	Epoxy, Clear	MIL-C-22750, or equivalent	(1)

C. Source:

- (1) Available through normal supply channels

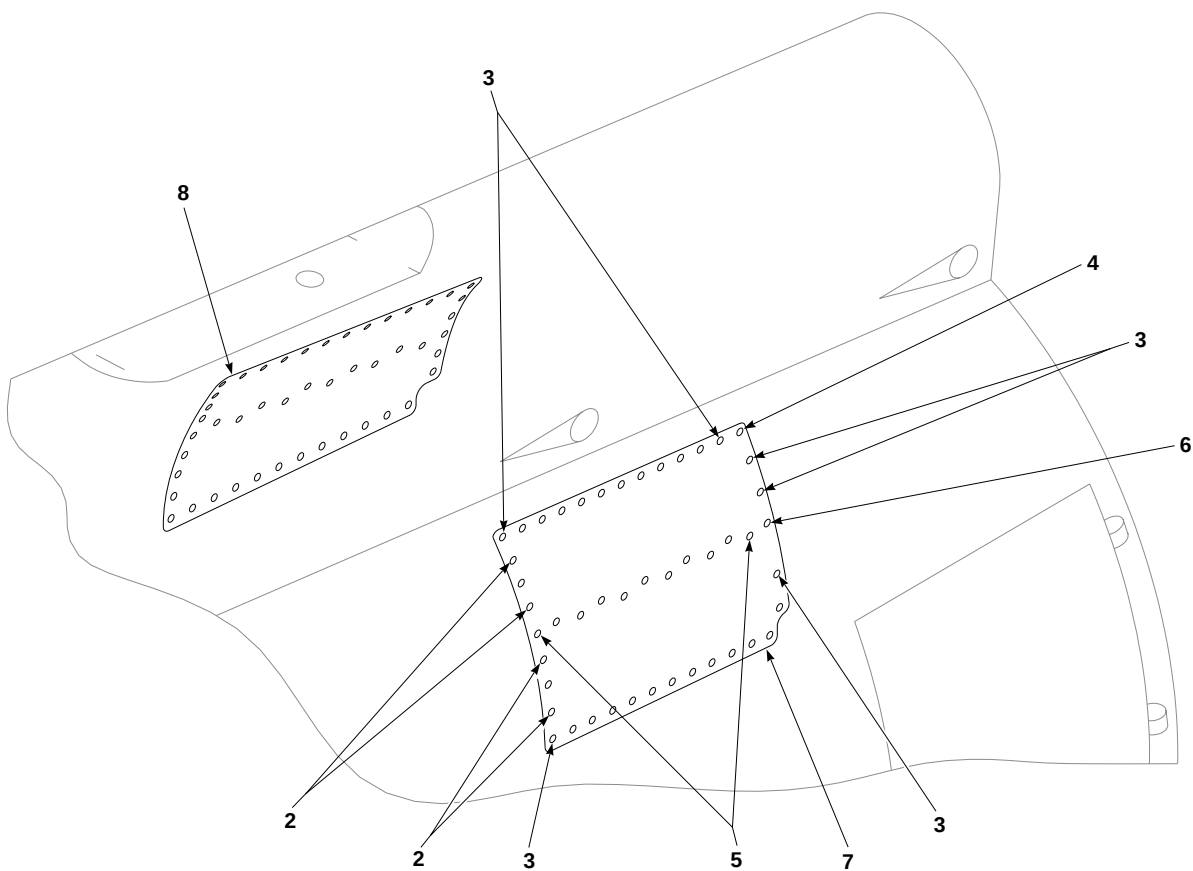
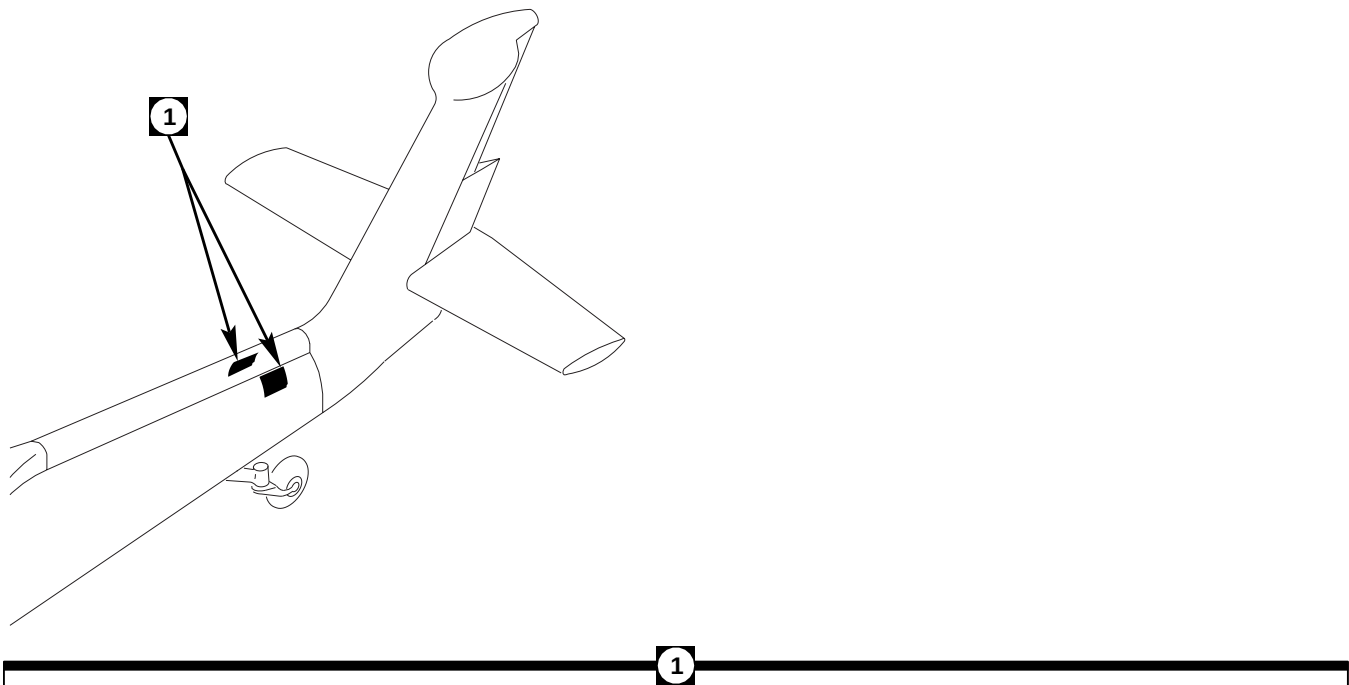


Figure E-18. Skin Doubler Modification Kit

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FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-18-	70070-20583-011	SKIN DOUBLER MODIFICATION KIT								REF	
-1	70070-20583-041	STRUCTURAL ASSY, (Reidentified from 70210-05001-045).....								REF	
	70070-20583-042	STRUCTURAL ASSY, (Reidentified from 70210-05001-046).....								REF	
-2	MS20470AD4-2	.	RIVET.....							14	
-3	MS20470AD5-3	.	RIVET.....							62	
-4	MS20470AD5-4	.	RIVET.....							3	
-5	MS20470AD6-4	.	RIVET.....							25	
-6	MS20470AD6-5	.	RIVET.....							3	
-7	70070-20583-101	.	DOUBLER, LH							1	
-8	70070-20583-102	.	DOUBLER, RH							1	

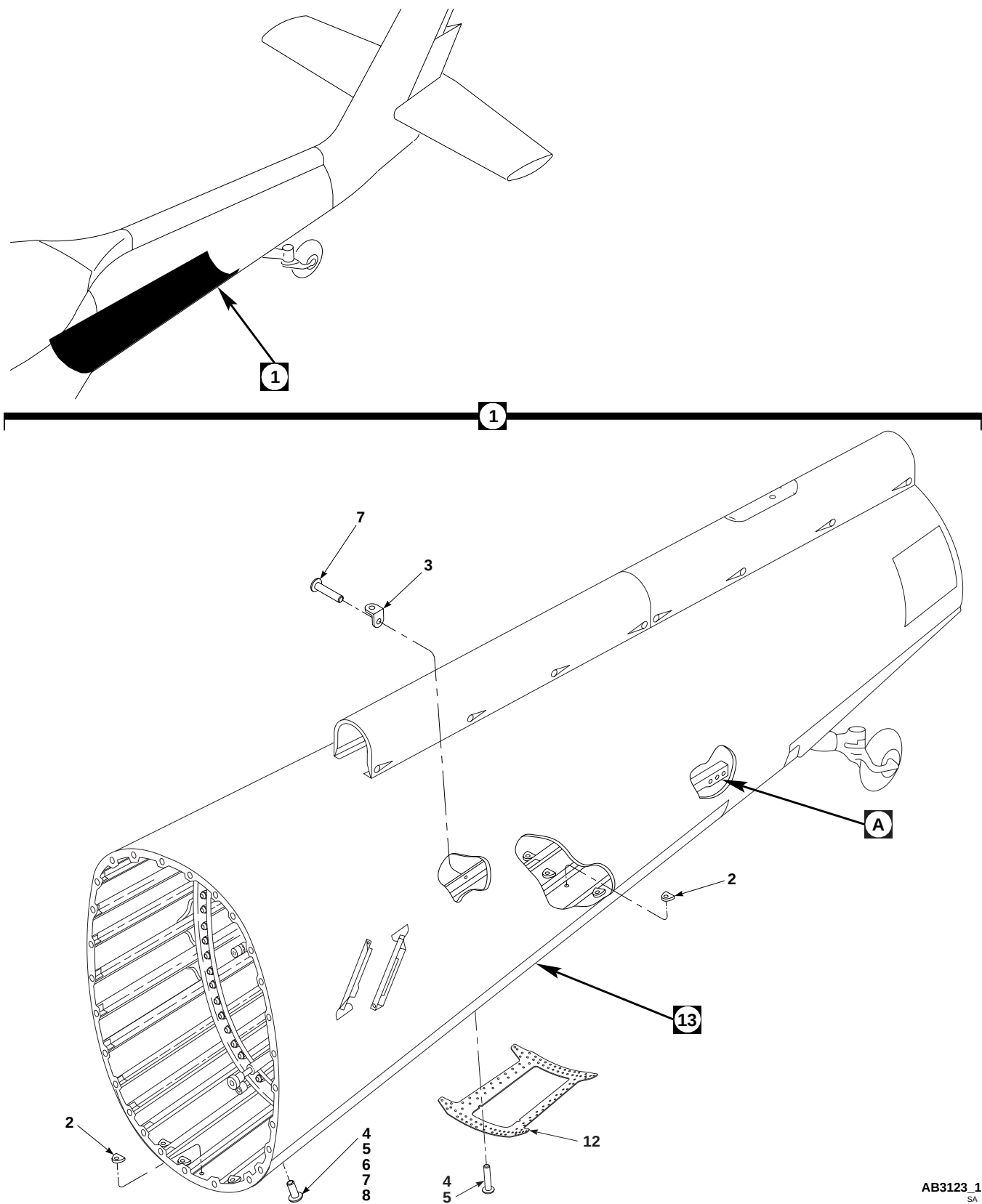
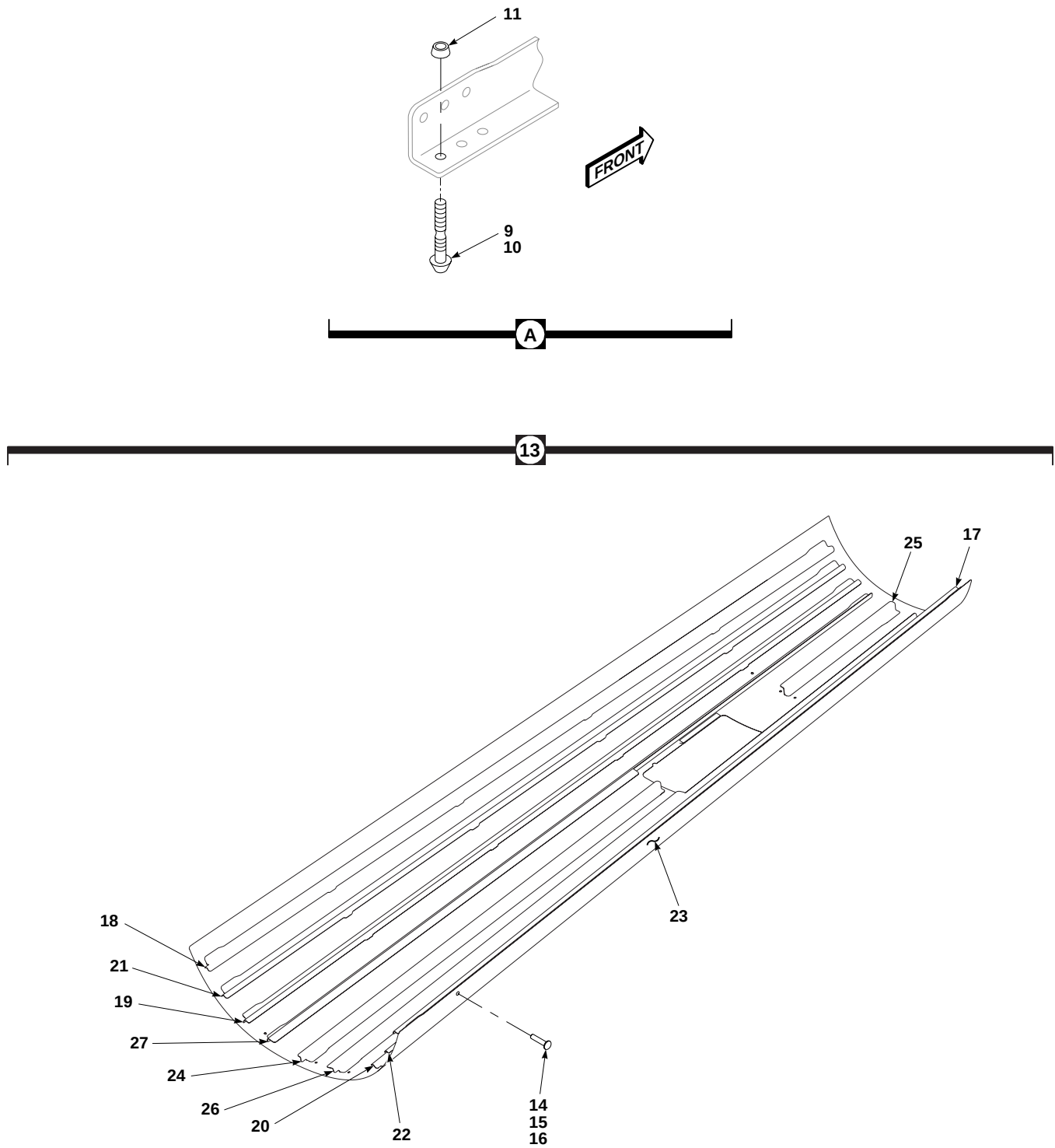


Figure E-19. Plate Installation Modification Kit (Sheet 1 of 2)

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AB3123_2
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Figure E-19. Plate Installation Modification Kit (Sheet 2 of 2)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-19-	70070-20615-011		PLATE INSTALLATION MODIFICATION KIT	REF	
-1	70213-55001-011	.	PLATING INSTL, (Reidentified from 70213-05001-013)	REF	
-2	AN231-4	.	GROMMET	8	
-3	AN743Z12	.	BRACKET	1	
-4	MS20470AD4-5	.	RIVET	90	
-5	MS20470AD5-5	.	RIVET	84	
-6	MS20470AD5-6	.	RIVET	200	
-7	MS20470AD6-6	.	RIVET	70	
-8	MS20470AD6-8	.	RIVET	100	
-9	NAS1526-02	.	SWAGE LOCKING PIN	6	
-10	NAS1526-03	.	SWAGE LOCKING PIN	6	
-11	NAS1080D06	.	COLLAR	12	
-12	70070-20615-101	.	DOUBLER	1	
-13	70213-55001-041	.	SKIN ASSY	1	
-14	MS20470AD4	.	RIVET	1009	
-15	MS20470AD5	.	RIVET	246	
-16	NAS1738B4-2	.	BLIND RIVET	28	
-17	70213-05001-173	.	STRINGER	1	
-18	70213-05001-174	.	STRINGER	1	
-19	70213-05001-182	.	STRINGER	1	
-20	70213-05001-183	.	STRINGER	1	
-21	70213-05001-187	.	STRINGER	2	
-22	70213-05001-188	.	STRINGER	2	
-23	70213-05001-190	.	SKIN	1	
-24	70213-55001-101	.	STRINGER	1	
-25	70213-55001-102	.	STRINGER	1	
-26	70213-55001-103	.	STRINGER	1	
-27	70213-55001-104	.	STRINGER	1	

E-18. BULKHEAD INSTALLATION MODIFICATION KIT (50-17).

Subject: Station 605.00 Bulkhead, Modification of

Purpose: Provide instructions to modify tailcone station 605.00 bulkhead

Model: UH-60A

Description: Tailcone station 605.00 bulkhead is modified by adding a new doubler, filler, and radius block at right butline 4.80.

Drawings required for modification:

70551-05140, 70070-20617

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) SSI No. 50-29 Tailcone Shear Deck, Modification of dated 31 March 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before modifying station 605.00.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- This modification is to be done concurrently with reference (b).

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Rework channel (70211-05007-109) as follows (Dwg 70070-20617):



TO AVOID DAMAGING COMPONENTS, USE EXTREME CARE WHEN DRILLING INTO AIRFRAME. TEMPORARILY MOVE ANY TUBE ASSEMBLIES OR WIRING HARNESS OUT OF REWORK AREA.

NOTE

- Rework of channel (70211-05007-109) can be accomplished while channel (-109) remains installed at station 605.00.
 - If shear deck is removed to facilitate other maintenance, proceed to step B.(4).
- (1) Rework channel (70211-05007-109) per dimensions shown (Dwg 70070-20617, Sheet 3, Zone 16-C).
 - (2) Deburr and touch up channel (70211-05007-109) as required.
 - (3) After rework reidentify channel (70211-05007-109) to (70070-20617-101) using pen and contracting ink.
 - (4) Remove four clips (two SS1050-1 and two SS1051-3) (Sheet 2, Zones 15-H, 11-H, and 12-B).
 - (5) Remove bracket assembly (SS7061-252) at butline 0.00 (Sheet 2, Zone 9-E).
 - (6) Remove fasteners between left butline 3.50 and right butline 4.80 from channels (70211-05007-108 and -109) and angle (70211-05007-107) as shown (Sheet 1, Note 12 and Sheet 2, Zones 13-D and 13-E).
 - (7) Temporarily install radius block (70070-20617-103), filler (70070-20617-104), and doubler (70070-20617-105) (Sheet 2, Zones 7-C, 7-D, and 11-H, Sheet 1, Notes 14 and 15).
 - (8) Temporarily install two clips (SS1051-03) (Sheet 2, Zones 11-H and 12-B).
 - (9) Temporarily install bracket assembly (SS7061-252), two clips (SS1050-1), and nutplate (NAS1033N3) (Dwg 70551-05140, Sheet 3, Zones 6-C, 6-E, and 8-E, View F-F).
 - (10) Scribe directional cable hole in filler (70070-20617-104) and doubler (70070-20617-105).
 - (11) Remove parts temporarily installed in steps B.(7) through B.(9), deburr and touch up as required.
 - (12) Cut out hole in filler (70070-20617-104) and doubler (70070-20617-105) marked in step (B).(10).
 - (13) Install parts removed in step B.(11) using fasteners shown (Dwg 70070-20617, Sheet 1, Notes 2, 9, 12, and 16; Sheet 2, Zones 11-E through 13-E; Dwg 70551-05140, Sheet 3, View F-F, Zone 7-B).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(14) Install grommet (MS21266-1N) using adhesive (SS9230-001 or equivalent) around control cable hole.

C. Reinstallation of removed equipment:

(1) Install removed equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20617-011	Mod. Kit	+0.50	604.6	0.302

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +0.50 pounds

Moment arm: 604.6 in.

Change in basic moment/1000: 0.302

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	1	20.0	*20.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Bulkhead Installation,	70070-20617-011	(1)
	consisting of:		
1	Collar	HL1087A-6	
1	Pin, Hi Lok	HL20PB-6-7	
3	Rivet	MS20470AD3-5	
14	Rivet	MS20470AD4-5	
5	Rivet	MS20470AD5-10	
35	Rivet	MS20470AD5-6	
9	Rivet	MS20470AD5-7	
28	Rivet	MS20470AD5-9	
2	Rivet	MS20470AD6-10	
1	Nutplate	NAS1033N3	
2	Clip	SS1050-1	
2	Clip	SS1051-3	
1	Bracket Assy	SS7061-252	
1	Doubler	70070-20617-105	
1	Radius Block	70070-20617-103	
1	Filler	70070-20617-104	
1	Grommet	MS21266-1N	

B. Consumable Material:

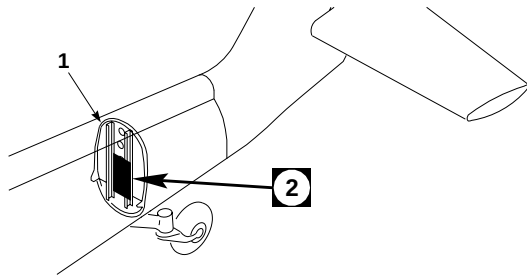
WARNING

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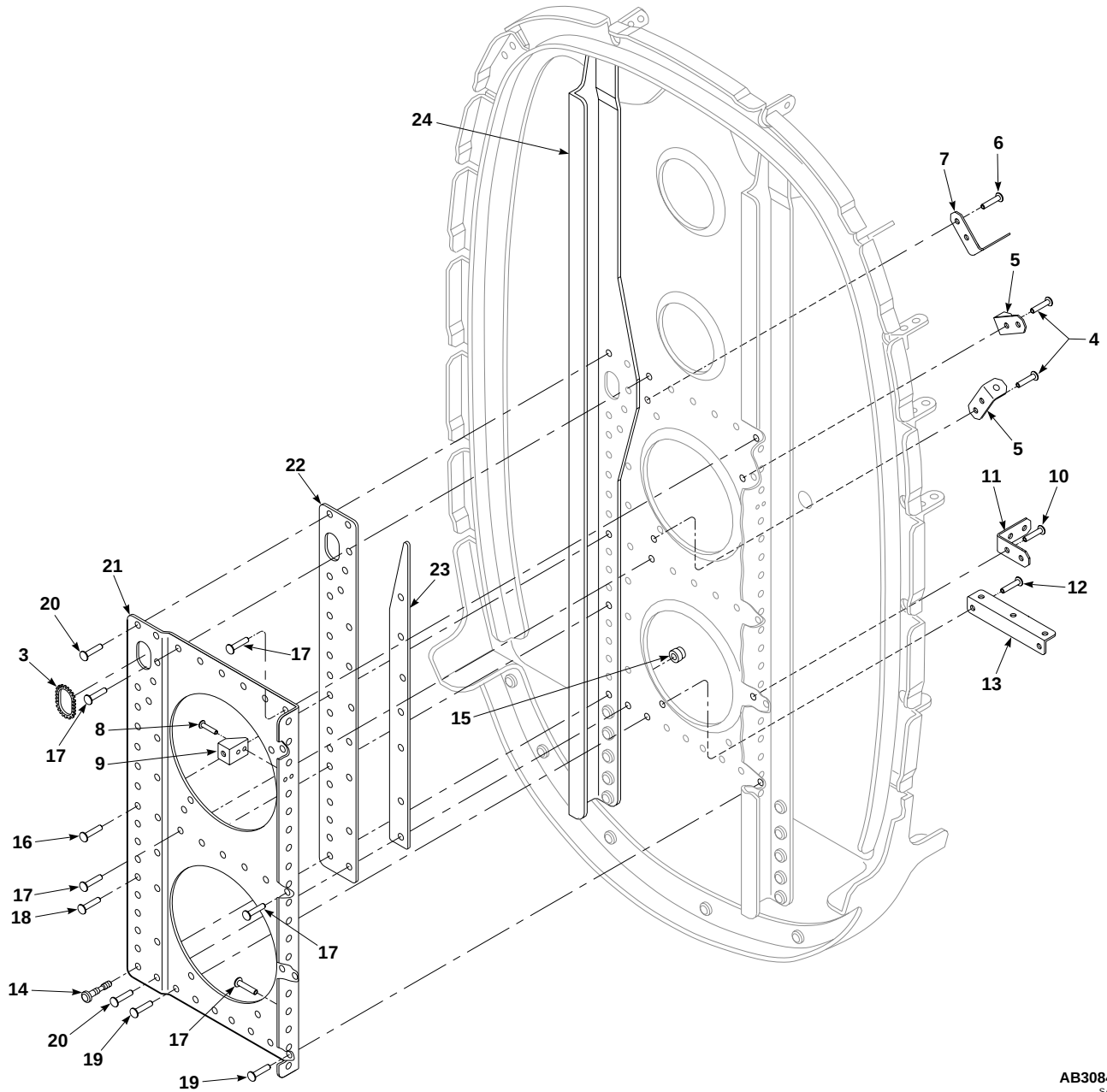
<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1 oz.	Adhesive	SS9230-001 or equivalent	(1)

C. Source:

- (1) Available through normal supply channels



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Figure E-20. Bulkhead Installation Modification Kit

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-20-	70070-20617-011		BULKHEAD INSTALLATION MODIFICATION KIT.....	REF	
-1	70070-20617-012		. BULKHEAD INSTL. (Redidentified from 70211-05007-011).....	REF	
-2	70070-20617-041		. BULKHEAD ASSY (Reidentified from 70211-05007-041).....	REF	
-3	MS21266-5N		. GROMMET	1	
-4	MS20470AD4-5		. RIVET	4	
-5	SS1050-1		. CLIP	2	
-6	MS20470AD4-5		. RIVET	2	
-7	SS1051-3		. CLIP	1	
-8	MS20470AD3-5		. RIVET	3	
-9	NAS1033N3		. NUTPLATE	1	
-10	MS20470AD4-5		. RIVET	2	
-11	SS1051-3		. CLIP	1	
-12	MS20470AD4-5		. RIVET	2	
-13	SS7061-252		. BRACKET ASSY	1	
-14	HL20PB-6-7		. HI LOK PIN (73197).....	1	
-15	HL1087A-6		. COLLAR (73197)	1	
-16	MS20470AD6-10		. RIVET	2	
-17	MS20470AD5-6		. RIVET	12	
-18	MS20470AD5-9		. RIVET	12	
-19	MS20470AD5-7		. RIVET	7	
-20	MS20470AD5-10		. RIVET	3	
-21	70070-20617-105		. DOUBLER.....	1	
-22	70070-20617-103		. RADIUS BLOCK	1	
-23	70070-20617-104		. FILLER	1	
-24	70070-20617-101		. CHANNEL (Reidentified from 70211-05007-109)....	REF	

E-19. TAIL PYLON, CRCT DOUBLER, FRONT SPAR FT MODIFICATION KIT (50-8).

Subject: Tail Rotor Pylon, Modification of, dated 31 March 2003

Purpose: Provide instructions for modification of tail rotor pylon.

Model: UH-60A

Description: The tail rotor pylon is modified by installing a new left side doubler, two right side straps and cold working eight fastener holes. Tail rotor gearbox mount fitting is removed and a new fitting is installed. Forward spar doubler is replaced with a new doubler, one support assembly is modified and one support assembly is replaced with a new assembly. Fairing installation is modified.

Drawings Required for Modification:

70070-20465, 70202-06051, 70201-06164

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) TM 1-1520-265-23, Technical Manual, Aviation Unit Maintenance (AVUM) and Aviation Intermediate (AVIM) Manual, Nondestructive Inspection Procedure for H-60 Helicopter Series

(c) TM 1-1500-335-23, Technical Manual, Nondestructive Inspection Methods

Instructions:

NOTE

- A complete review of this Special Service Instructions (SSI) is recommended before starting the tail rotor pylon modification.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- Personnel must be trained and certified in hole quality assurance and proper cold expansion procedures per SS5098.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).

- (2) Perform preparation for modification per reference (a).

B. Modify tail rotor pylon as follows:

- (1) Drill out fasteners and remove strap (70203-06050-114) from between pylon station 204.00 and pylon station 212.00. Keep strap for use as template (Dwg 70070-20465, Sheet 4, Zone 4-E).
- (2) Remove washers, nuts, and fasteners as shown (Sheet 4, Zone 8-C).
- (3) Remove fasteners shown (Sheet 4, Zones 7-B through 10-B, 6-C through 10-C, 5-D through 8-D, 4-E, 6-E, and 6-F).
- (4) Remove tail rotor gear box fitting (70209-06056-041) from tail rotor pylon as follows:
 - (a) Locate and align tail rotor gearbox fitting installation tool (70209-06056-041T046 or equivalent) as follows:
 - 1 Thoroughly clean surface of tail rotor gear box mounting pads.
 - 2 Install tool (70209-06056-041T046) on fitting (70209-06056-041) and secure in place using pins, clamps, and barrel nuts.
 - 3 Loosen two clamp block screws and thumb screws, and align pins with center of dimple in fastener.
 - 4 Adjust rods and pointer to any four fasteners on each side of pylon. Tighten screws after correct positioning of pins.
 - 5 Mark eight fastener heads with marker, or equivalent.

NOTE

These eight marked fasteners will be the trammel points to locate new fitting (70209-06056-042).

- 6 Apply torque stripe to each tool screw to ensure alignment.
- 7 Back pins out of fastener heads enough to allow for removal of tool, and remove mount fitting tool from fitting.
- 8 Store and secure tool in such a way as to avoid disturbing tool settings.
- (b) Remove fasteners securing left and right side skin, between pylon station 200.31 and station 210.69 as required (Dwg 70202-06051, Sheet 3, Zones 4-G and 5-G, and Sheet 2, Zones 4-C and 4-D through 6-C and 6-D).
- (c) Remove web splice fasteners as required (Sheet 2, Zones 3-J to 3-M through 6-J to 6-M).
- (d) Peel back pylon skin, as required, to remove fitting (70209-06056-041).
- (e) Remove angles as required.
- (f) Remove remaining fasteners securing fitting to pylon structure, and remove fitting (70209-06056-041).
- (g) Discard removed fitting (70209-06056-041).
- (h) Clean and inspect rework area.

- (i) Install new fitting (70209-06056-042) into position in pylon frame and secure inner structure components with temporary fasteners or clamps.
- (j) Install alignment tool (70209-06056-041T046), align eight pins with eight marked fasteners and temporarily secure.
- (k) Drill fastener holes, as required, on each leg of fitting and secure with temporary fasteners or clamps.
- (l) Recheck alignment tool to insure that pointers are still in position.
- (m) Remove alignment tool and continue drilling fastener holes, as required.
- (5) Modify forward spar and support assemblies as follows:
 - (a) Drill out fasteners and remove support assembly (70400-06681-042, or -043) from pylon station 193.00 (Dwg 70070-20465, Sheet 8, Zones 12-G and 13-G, and Sheet 6, Notes 26, and 27).
 - (b) Drill out fasteners and remove angle (70202-06051-149) as shown (Sheet 8, Zone 14-E).
 - (c) Drill out fasteners and remove angle (70400-06680-143) at pylon station 187.00 (Sheet 8, Zone 6-F).
 - (d) Drill out fasteners and remove support assembly (70400-06680-041) from pylon station 185.00 (Sheet 8, Zone 15-B).
 - (e) Drill out fasteners and remove doubler (70202-06051-158) from pylon station 190.47 (Sheet 8, Zone 13-B).
 - (f) Drill out fasteners and remove radius block (SS1058A7-27-46) (Sheet 8, Zone 6-C).
 - (g) Drill out fasteners and remove radius block (SS1058A7-25-24) (Sheet 2, Zone 8-D).
 - (h) Temporarily install new radius blocks (SS1058A7-25-24 and SS1058A7-27-46) as shown (Sheet 8, Zones 8-D and 6-C).
 - (i) Temporarily install doubler (70070-20465-104) at pylon station 190.47 (Sheet 8, Zone 13-B).
 - (j) Temporarily install angle (70070-20465-105) as shown (Sheet 8, Zone 5-G).
 - (k) Temporarily install angle (70202-06051-149) as shown (Sheet 8, Zone 14-E).
 - (l) Mark and drill fastener holes in doubler (70070-20465-105), radius blocks (SS1058A7-25-24 and SS1058A7-27-46), and angles (70070-20465-400-06680-143) and (70202-06051-149) (Sheet 8, Zones 12-C and 12-D through 13-C and 13-D, and 6-E, 6-C, 7-E, and 7-D).
 - (m) Remove temporarily installed doubler, radius blocks, and angles, deburr and touch up as required.
 - (n) Install radius blocks (SS1058A7-25-24 and SS1058A7-27-46) using fasteners shown (Sheet 8, Zones 8-D and 6-C).
 - (o) Install doubler (70070-20465-104) and angle (70070-20465-105) and (70202-06051-149) using fasteners shown (Dwg 70070-20465, Sheet 8, Zone 12-C, 12-D through 14-C and 14-D, and 5-D through 7-D).
 - (p) Temporarily install support assembly (70400-06680-546) with laminated shim (70400-06680-145) (if required) as shown (Sheet 8, Zones 10-B and 11-C). Adjust shim as required.

- (q) Temporarily install new support assembly (70400-06681-044) as shown (Sheet 8, Zone 12-G).
- (r) Mark and drill fastener holes through temporarily installed support assemblies, and shim as required.
- (s) Remove temporarily installed support assembly with laminated shim and support assembly (70400-06681-044), deburr and touch up as required.
- (t) Install support assembly (70400-06680-046) with laminated shim (70400-06680-145) (if required) and secure using fasteners shown (Sheet 8, Zones 10-B and 11-C).
- (u) Install support assembly (70400-06681-044) using fasteners shown (Sheet 8, Zones 12-G and 13-G).
- (v) After modification, reidentify upper spar assembly (70202-06051-043) to (70070-20465-044) and upper spar assembly (70202-06051-044) to (70070-20465-045) using pen and contrasting ink.

NOTE

After modification, spar installation (70202-06051-012) becomes (70070-20465-030), support installation (70400-06680-012) becomes (70070-20465-031), and support installation (70400-06680-014) becomes (70070-20465-032). No physical reidentification required.

- (6) Install new tail rotor gearbox fitting (70209-06056-042) as follows:
 - (a) Remove fitting and deburr all components, as required.

WARNING

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- (b) Locate fitting, wet with sealant (AMS-S-8802, A2, or equivalent) and install fasteners wet with primer (MIL-P-23377, or equivalent) securing fitting to pylon structure (Dwg 70070-20465, Sheet 4, Zone 11-E and Dwg 70202-06051, Sheet 2, Zones 6-J through 6-M and 3-J through 3-M).

NOTE

After installation, fitting assembly (70209-06056-042) fitting becomes (-041). No physical reidentification required.

- (c) Install right side skin and temporarily secure, as required.
- (d) Install cold worked fasteners right side pylon as follows:
 - 1 Locate and remove eight fasteners shown (Dwg 70070-20465, Sheet 4, Zones 6-F and 13-F).
 - 2 Measure and mark eight fastener holes using edge distance tool (70700-77399-041) (Sheet 4, Zones 6-F and 13-F, and Sheet 2, Note 16).

- 3 Prepare cold work area (Sheet 3, Note 25).
 - 4 Inspect eight holes prior to cold working as shown (Sheet 4, Zones 6-F and 13-F, and Sheet 2, Note 16).
 - 5 Cold work eight holes shown (Sheet 4, Zones 6-F and 13-F, Notes 16 and 17 and reference (b) and (c)).
 - 6 Inspect eight holes after cold working (Sheet 2, Notes 16 and 17).
 - 7 Install eight fasteners into cold worked holes as shown (Sheet 4, Zones 8-F and 13-F).
- (e) Place template (70070-20422-104) on inboard side of strap (70203-06050-114) kept for reuse (Sheet 4, Zone 4-E).
- (f) Position template (70070-20422-104) and strap (70203-06050-114) over existing hole pattern on pylon and trace holes onto template (Dwg 70070-20465, Sheet 2, Note 21).
- (g) Temporarily position straps (70203-06050-122 and -123) on pylon, and trim as required (Sheet 4, Zone 7-B and 4-D).
- (h) Drill existing holes in new straps (70203-06050-122 and -123) using template (70070-20422-104).
- (i) Remove templates and discard.
- (j) Remove straps (70203-06050-122 and -123), deburr and touch up as required.

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

- (k) Place two straps (70203-06050-122 and -123) into position wet with sealant (AMS-S-8802, A-2, or equivalent) (Sheet 4, Zones 4-E and 6-B, and Sheet 2, Note 19).

WARNING

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- (l) Install fasteners wet with primer (MIL-P-23377, or equivalent) as shown (Sheet 4, Zones 4-E, 5-C, 6-C, 6-D, 7-A through 7-D, 8-A, through 8-C, 9-B, 10-A, and 10-B; and Sheet 2, Notes 11 and 13).

- (m) Install hardware and fasteners shown (Sheet 4, Zones 8-C and 6-F, and Sheet 3, Notes 26 and 29).

WARNING

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- (n) Install right side upper plate (70203-06050-112), wet with sealant (AMS-S-8802, A2, or equivalent), into position and secure with fasteners shown (Dwg 70202-06051, Sheet 2, Zones 4-C, 4-D through 6-C and 6-D).

NOTE

- After modification plating assembly (70203-06050-044) becomes (70203-06050-047). No physical re-identification required.
- After modification, plating installation (70203-06050-016) becomes (70203-06050-017). No physical reidentification required.

- (7) Modify left side plating installation as follows:

(a) Drill out fasteners and remove strap (70203-06050-113) from between pylon station 194.00 and pylon station 216.00 left side (Dwg 70070-20465, Sheet 7, Zone 12-C).

(b) Drill out fasteners and remove strap (70201-06164-102) from between pylon station 215.00 and 225.00 as shown (Sheet 7, Zone 7-C).

- (c) Position and temporarily install strap (70070-20465-102) as shown (Sheet 7, Zone 7-C).

NOTE

70070-20465-101 strap may require trimming if whip antenna modification has been installed.

- (d) Position and temporarily install strap (70070-20465-101) as shown (Sheet 7, Zones 12-C).

(e) Mark and drill fastener holes in two straps, as shown (Sheet 7, Zones 9-C through 11-F and 11-E through 15-F).

(f) Mark one receptacle location and seven nutplate locations, and backdrill fastener holes from skin (Sheet 7, Zones 15-F and 14-B).

(g) Mark 12 nutplate locations, and backdrill fastener holes as shown (Dwg 70201-06164, Sheet 1, Zone 6-E).

- (h) Remove two straps, deburr and touch up as required.

(i) Install 12 nutplates (MS21075-3) in strap (70070-20465-102) with fasteners as shown (Dwg 70201-06164, Sheet 1, Zone 6-E).

(j) Install receptacle (212-12) and seven nutplates (MS21075-3) in doubler (70070-20465-101) using fasteners shown (Dwg 70070-20465, Sheet 7, Zones 15-F and 14-B).

WARNING

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(k) Install straps (70070-20465-101) and (70070-20465-102) wet with sealant (AMS-S-8802, A2, or equivalent), into position with fasteners shown (Sheet 7, Zones 11-E, 12-D, 13-D, 14-E, and 14-F, and 10-C and 10-D).

(l) After modification reidentify plating assembly (70203-06050-043) to (70070-20465-041), rib assembly (70201-06154-043) to (70070-20465-042) and rib assembly (70201-06154-045) to (70070-20465-043) using pen and contrasting ink.

NOTE

After modification, plating installation (70203-06050-011) becomes (70070-20465-023), plating installation (70203-06050-013) becomes (70070-20465-024), plating installation (70203-06050-015) becomes (70070-20465-025), and rib installation (70201-06164-011) becomes (70070-20465-026). No physical reidentification required.

(8) Modify fairing installation (70205-06052-012) as follows:

(a) Remove screws, washers, nutplates and fasteners shown (Dwg 70070-20465, Sheet 4, Zones 18-C, 18-H, and 20-F).

(b) Remove receptacles, studs, washers, and fasteners shown (Sheet 4, Zones 15-G, 17-C, 17-H, and Sheet 3, Note 30).

(c) Locate and temporarily install two fillers (70070-20422-101 and -103) as shown (Sheet 4, Zones 19-C and 21-C).

(d) Locate and temporarily install spacer (70070-20422-102) as shown (Sheet 4, Zone 15-E, and Sheet 2, Note 24).

(e) Mark and drill fastener holes, as required.

(f) Remove temporarily installed fillers and spacer, deburr and touch up as required.

WARNING

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- (g) Install two fillers (70070-20422-101 and -103) wet with adhesive (EA9309.3NA, or equivalent) using fasteners shown (Sheet 4, Zones 19-C and 21-C, and Sheet 2, Note 15).

WARNING

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- (h) Install spacer (70070-20422-102) wet with adhesive (EA9309.3NA, or equivalent) using fasteners shown (Sheet 4, Zone 15-E, and Sheet 2, Notes 15 and 24).
- (i) Install nutplates, screws, washers, and fasteners shown (Dwg 70070-20465, Sheet 4, Zones 18-C, 18-H, and 20-F).
- (j) Install receptacles with fasteners shown (Sheet 4, Zones 15-G, 16-C, and 17-G).
- (k) After modification reidentify fairing assembly (70205-06052-061) to (70205-06052-065), and fairing assembly (70205-06052-053) to (70205-06052-067) using pen and contrasting ink.

NOTE

After modification, fairing installation (70205-06052-012) becomes (70205-06052-013). No physical reidentification required.

C. Reinstallation of removed equipment:

- (1) Reinstall removed equipment per reference (a).

D. Record of Compliance:

- (1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20465-017	Mod. Kit	+2.0	736.0	+1.47
1	70070-20465-019	Mod. Kit	+0.4	707.6	+0.28
1	70070-20465-020	Mod. Kit	+0.3	721.7	+0.22

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +2.7 pounds

Moment arm: 729.6 in.

Change in basic moment/1000: 1.97

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Helicopter Mechanic	1	120.0	*120.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification kits required:

(1) Kit A:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod Kit, Tail Rotor Pylon, consisting of:	70070-20465-017	(1)
1	Mod Kit, Plating Instl, consisting of:	70070-20465-012	
4	Washer	AN960D10L	
3	Washer	AN960D8L	
8	Collar	HL1087A-5	
14	Collar	HL1087A-6	
9	Pin	HL19PB-5-5	
2	Pin	HL19PB-5-6	
2	Pin	HL19PB-6-6	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
3	Pin, Hi Lok	HL20PB-6-4	
4	Pin, Hi Lok	HL20PB-6-5	
5	Pin, Hi Lok	HL20PB-6-6	
4	Pin, Hi Lok	HL20PB-6-7	
4	Collar	HL375-6AW	
16	Rivet	MS20470AD5-9	
9	Rivet	MS20470AD6-9	
3	Nut	MS21043-08	
4	Nut	MS21043-3	
5	Rivet	NAS1097AD4-9	
6	Rivet	NAS1097AD5-9	
1	Template	70070-20422-104	
1	Strap	70203-06050-122	
1	Strap	70203-06050-123	
1	Mod Kit, Fairing,	70070-20465-014	
	consisting of:		
5	Washer	AN960KD10L	
8	Rivet	MS20605S3W5	
2	Rivet	MS20605S3W7	
1	Nutplate	MS21075-3	
5	Screw	MS27039-1-16	
4	Nutplate	SS5091-03-5	
1	Mod Kit,	70070-20465-015	
	consisting of:		
2	Rivet	MS20426AD3-9	
6	Rivet	MS20605S3W5	
3	Receptacle	212-12	
3	Camlock Stud	26S51-11	
3	Washer	2600-SW	
1	Spacer	70070-20422-102	
1	Mod Kit,	70070-20465-016	
	consisting of:		
1	Filler	70070-20422-101	
1	Filler, Tapered	70070-20422-103	
1	Mod Kit, Fitting,	70070-20465-018	
	consisting of:		
4	Pin, Hi Lok	HL20PB-6-6	
4	Hi Lok	HL220PB-6-6	
4	Collar	HL375-6AW	
4	Collar	HL70-6	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
21	Collar	NAS1080-06	
31	Rivet	MS20470AD4-4	
31	Rivet	MS20470AD4-6	
25	Rivet	MS20470AD5-6	
8	Pin, Swg Lkg	NAS1466-03	
6	Pin, Swg Lkg	NAS1466-04	
4	Pin, Swg Lkg	NAS1466-05	
7	Rivet, Blind	NAS1738B4-3	
8	Rivet, Blind	NAS1738B5-3	
25	Rivet, Blind	NAS1738B5-5	
8	Pin, Swg Lk	NAS1466-06	
13	Pin, Swg Lk	NAS1526-03	
4	Pin, Swg Lk	NAS1526-05	
1	Fitting Assy	70209-06056-042	

(2) Kit B:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod Kit, Crescent Doubler,	70070-20465-019	
	consisting of:		
1	Mod Kit, Plating,	70070-20465-021	
	consisting of:		
16	Rivet	CCR264SS-3-2	
8	Rivet	MS20470AD5-5	
7	Nutplate	MS21075-3	
45	Rivet	NAS1097AD4-5	
20	Rivet	NAS1097AD5-5	
3	Pin, Swg Lkg	NAS1465-03	
2	Pin, Swg Lkg	NAS1466-03	
3	Pin, Swg Lkg	NAS1466-04	
3	Pin, Swg Lkg	NAS1466-05	
6	Pin, Swg Lkg	NAS1466-06	
3	Rivet, Blind	NAS1738B4-3	
4	Rivet, Blind	NAS1738B4-5	
3	Rivet, Blind	NAS1739B4-4	
4	Rivet, Blind	NAS1739B4-5	
1	Receptacle	212-12	
1	Strap	70070-20465-101	
1	Mod Kit, Plating,	70070-20465-022	
	consisting of:		
12	Nutplate	MS21075-3	
30	Rivet	NAS1097AD3-3	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
4	Rivet, Blind	NAS1738B5-4	
25	Rivet, Blind	NAS1738B5-3	
4	Rivet, Blind	NAS1738B5-4	
1	Strap	70070-20465-102	
(3) Kit C:			
<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod Kit, Fwd Spar,	70070-20465-020	
	consisting of:		
1	Mod Kit, Fwd Spar,	70070-20465-027	
	consisting of:		
35	Rivet	MS20470AD5-9	
1	Radius Block	SS1058A7-25-24	
1	Radius Block	SS1058A7-27-46	
1	Doubler	70070-20465-104	
1	Stiffener	70202-06051-149	
1	Mod Kit, Spprt Instl,	70070-20465-028	
	consisting of:		
3	Pin	HL19PB-5-4	
3	Pin Collar Assy	HL20PB86-5-6	
1	Pin Collar Assy	HL20PB86-5-7	
3	Collar	HL70TW-5	
1	Support Assembly	70400-06681-044	
1	Mod Kit, Spprt Instl,	70070-20465-029	
	consisting of:		
10	Collar	HL1087ATW-5	
3	Collar	HL1087ATW-6	
4	Pin, Hi Lok	HL20PB-5-2	
5	Pin, Hi Lok	HL20PB-5-3	
1	Pin, Hi Lok	HL20PB-5-4	
3	Pin, Hi Lok	HL20PB-6-8	
6	Rivet	MS20470AD5-4	
1	Support Assy	70400-06680-546	
2	Bushing	NAS538-5P10	
1	Angle	70070-20465-105	
1	Laminated Shim	70400-06680-145	

B. Consumable Material:

WARNING

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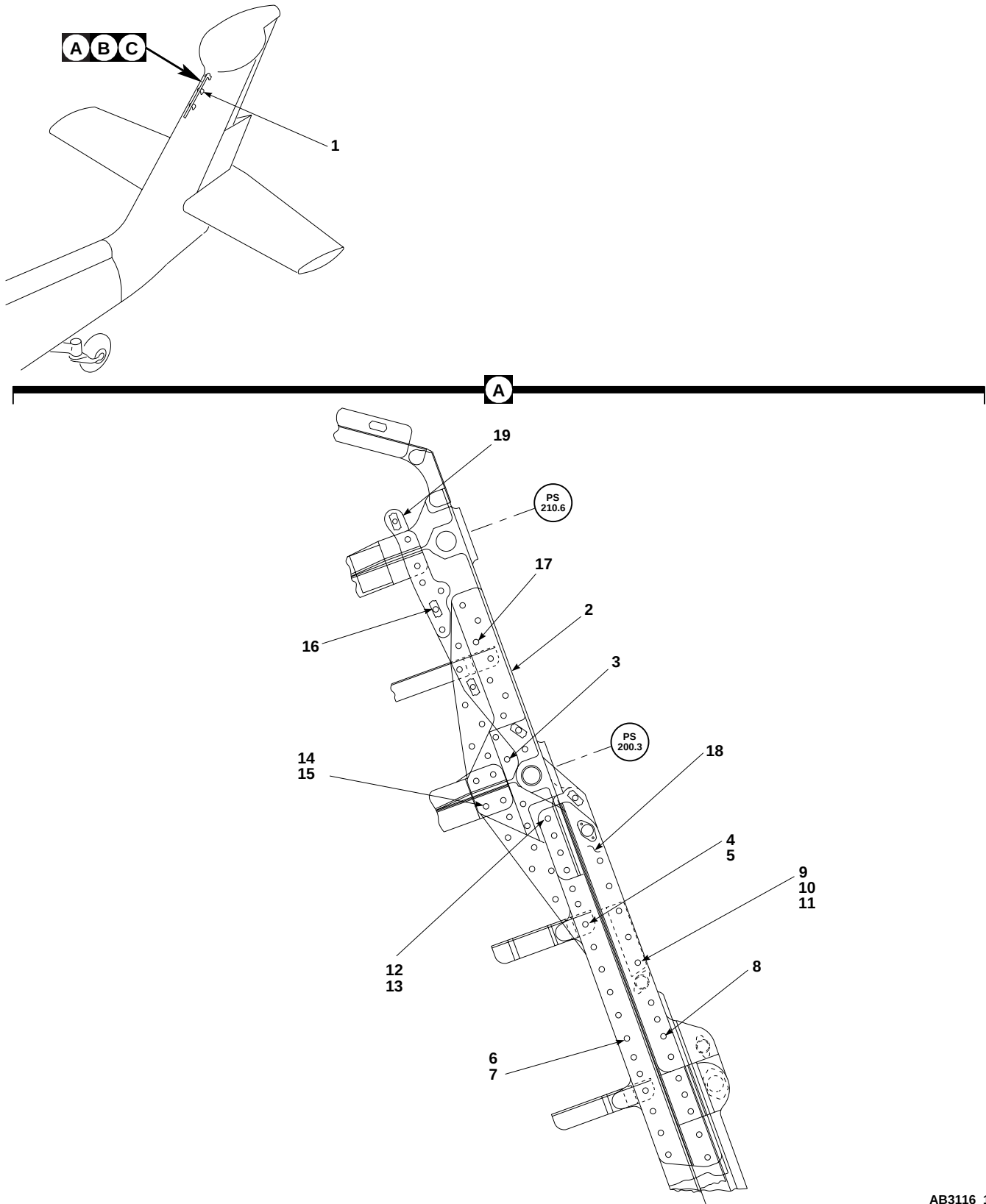
<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
8 oz.	Primer	MIL-P-23377 or equivalent	(1)
8 oz.	Adhesive	EA9305. 3NA or equivalent	(1)
2 oz	Alodine	MIL-C-541, Class 1A or equivalent	(1)
8 oz.	Sealant	AMS-S-8802, A-2, or equivalent	(1)

C. Support Equipment:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Installation Tool	70209-06056-041T046	(1)
1	Edge Distance Tool	70070-77399-041	(1)

D. Source of supply:

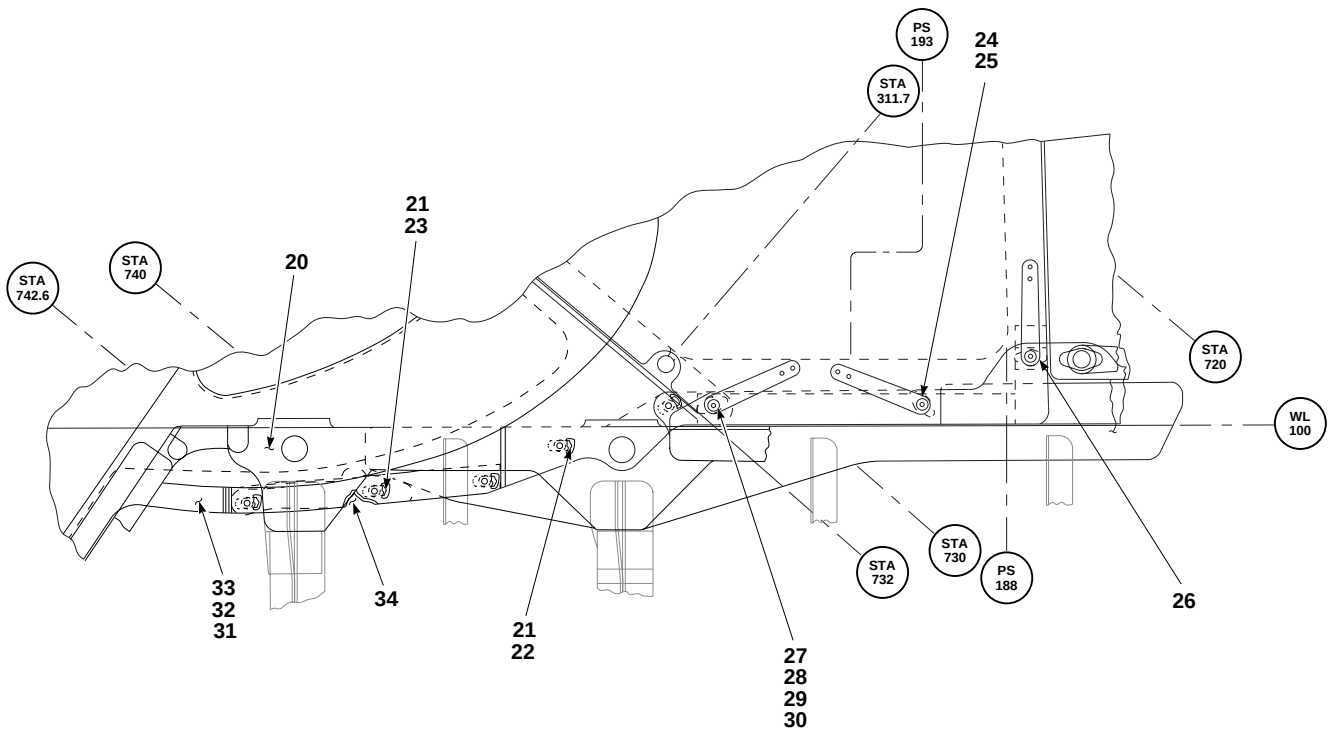
- (1) Available through normal supply channels



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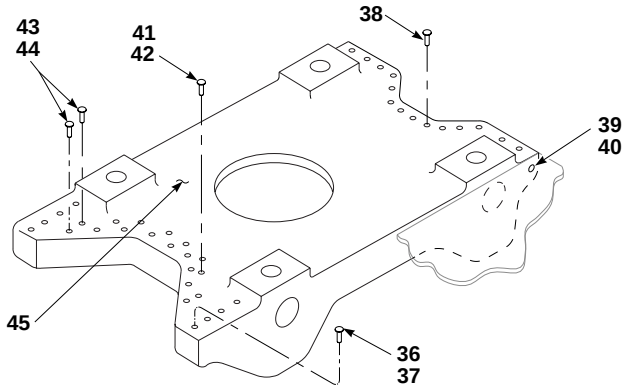
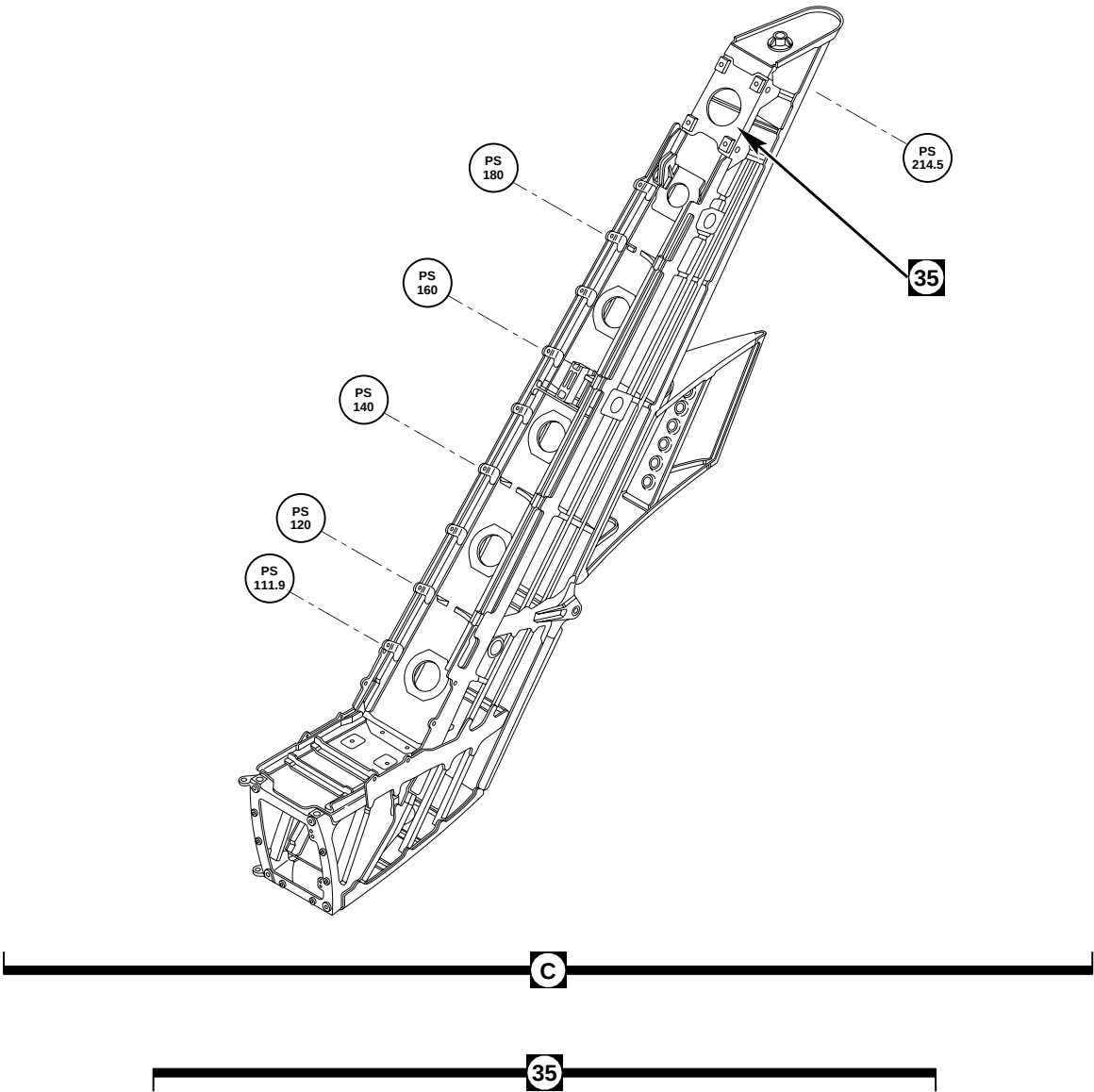
Figure E-21. Tail Pylon Modification Kit (Sheet 1 of 3)

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Figure E-21. Tail Pylon Modification Kit (Sheet 2 of 3)

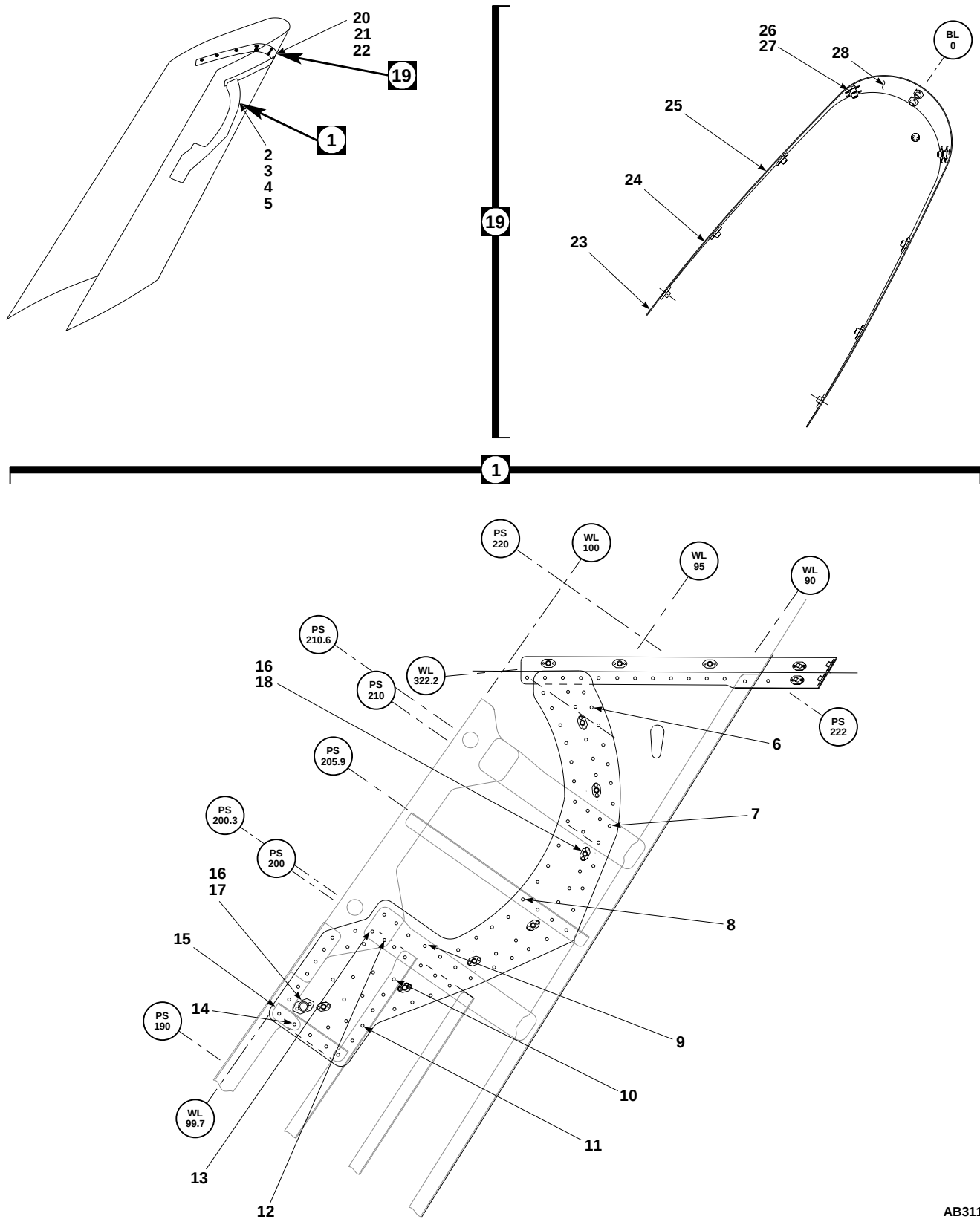


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Figure E-21. Tail Pylon Modification Kit (Sheet 3 of 3)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-21-	70070-20465-017		TAIL PYLON MODIFICATION KIT	REF	
-1	70070-20465-012		. MOD. KIT-PLATING	1	
-2	70203-06050-017		. . PLATING INSTL, (Modified from 70203-06050-016)	REF	
-3	70203-06050-047		. . PLATING ASSY, (Modified from 70203-06050-047)	REF	
-4	HL20PB-6-6		. . HI-LOK PIN, (73197)	5	
	HL20PB-6-4		. . HI-LOK PIN, (73197)	3	*
	HL20PB-6-5		. . HI-LOK PIN, (73197)	4	*
	NAS1466-5		. . SWAGE LOCKING PIN,	4	*
	NAS1466-05		. . SWAGE LOCKING PIN	4	*
-5	HL1087A-6		. . COLLAR, (73197)	14	
	HL1087A-5		. . COLLAR, (73197)	8	*
-6	MS20470AD5-9		. . RIVET	16	
-7	MS20470AD6-9		. . RIVET	9	
-8	NAS1097AD5-9		. . RIVET	6	
-9	HL19PB-5-5		. . PIN, (73197)	9	
	HL19PB-5-6		. . PIN, (73197)	2	*
-10	AN960D8L		. . WASHER, (Superseded by NAS1149DN816H) ...	3	
	NAS1149DN816H		. . WASHER	3	
-11	MS21043-08		. . NUT	3	
-12	HL220PB-6-7		. . HI-LOK PIN, (73197) (Superseded by HL220-6-7)	4	
	HL220-6-7		. . HI-LOK PIN, (73197)	4	
-13	HL375-6AW		. . COLLAR, (73197)	4	
-14	AN960D10L		. . WASHER, (Superseded by NAS1149D0316H)	4	
	NAS1149D0316H		. . WASHER	4	
-15	MS21043-3		. . NUT	4	
-16	NAS1097AD4-9		. . RIVET	5	
-17	HL19PB-6-6		. . PIN, (73197)	2	
-18	70203-06050-122		. . STRAP	1	
-19	70203-06050-123		. . STRAP	1	
-20	70070-20465-014		. MOD KIT-FAIRING	1	
-21	MS27039-1-16		. . SCREW	5	
	AN960KD10L		. . WASHER, (Superseded by NAS1149D0332K)	5	
	NAS1149D0332K		. . WASHER	5	
-22	MS21075-3		. . NUTPLATE, (Superseded by MS21075-3N)	1	
	MS21075-3N		. . NUTPLATE	1	
	MS20605S3W7		. . RIVET	2	
-23	SS5091-03-5		. . NUTPLATE	4	
	MS20605S3W5		. . RIVET	8	
-24	70070-20465-015		. . MOD KIT	1	
-25	70205-06052-067		. . . FAIRING ASSY, (Modified from 70205-06052-053)	REF	
-26	70070-20422-102		. . . SPACER	1	
-27	26S51-11		. . . CAMLOCK STUD, (08733)	3	
-28	2600-SW		. . . WASHER, (71286)	3	
-29	212-12		. . . RECEPTACLE, (71286)	3	
-30	MS20605S3W5		. . . RIVET	6	
	MS20426AD3-9		. . . RIVET	2	*
-31	70070-20465-016		. . MOD KIT	1	
-32	70205-06052-065		. . . FAIRING ASSY, (Modified from 70205-06052-065)	REF	
-33	70070-20422-103		. . . FILLER TAPERED	1	
-34	70070-20422-101		. . . FILLER	1	
-35	70070-20465-018		. MOD KIT FTG	1	
-36	HL20PB-6-6		. . HI-LOK PIN, (73197)	4	
	HL220PB-6-6		. . HI-LOK PIN, (73197)	4	*
-37	HL70-6		. . COLLAR, (73197)	4	

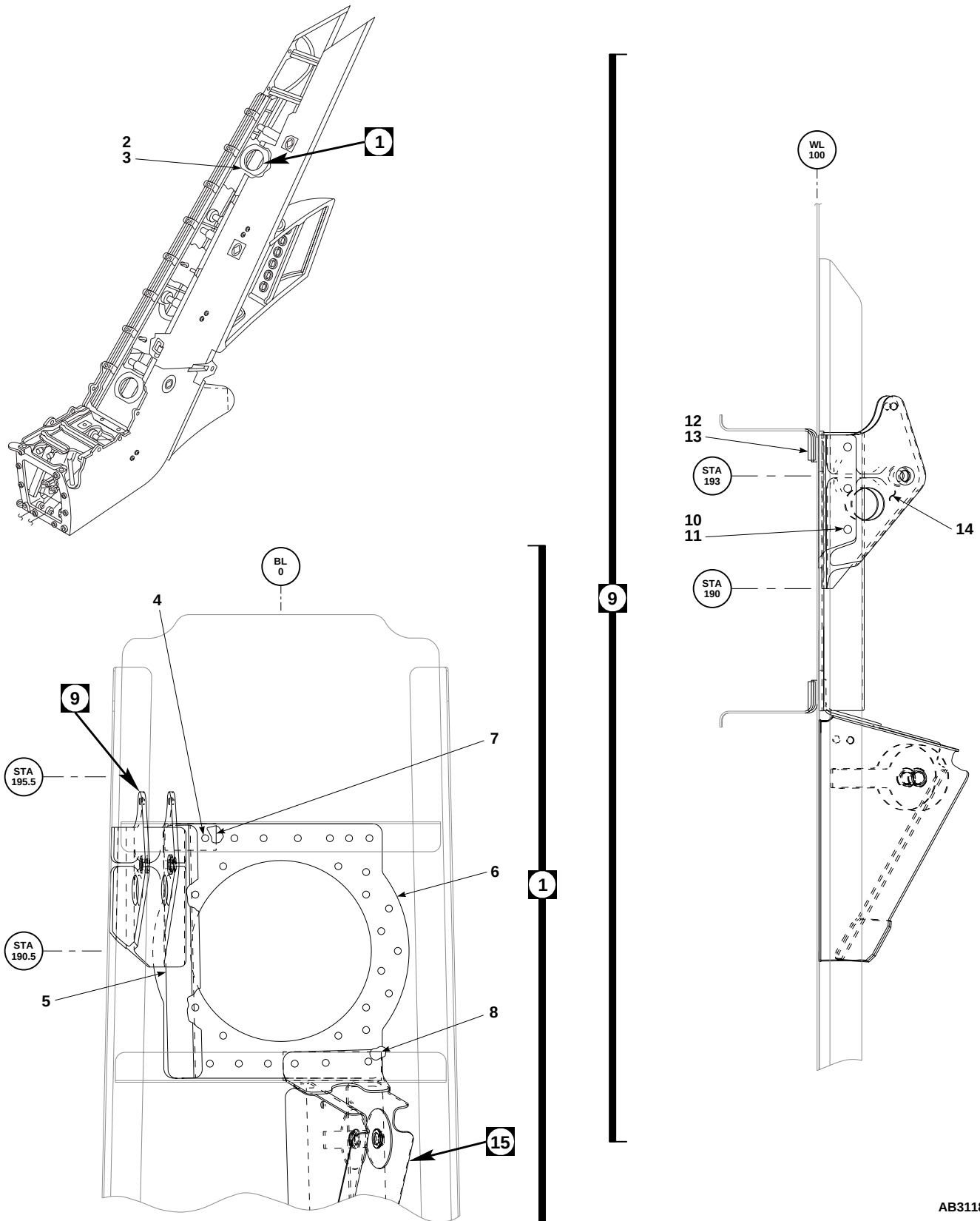
FIGURE & INDEX NO.	PART NUMBER	1	2	3	4	5	6	7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
	HL375-6AW	.	.						COLLAR, (73197)	4	*
-38	MS20470AD4-4	.	.						RIVET.....	31	
	MS20470AD4-6	.	.						RIVET.....	31	*
	MS20470AD5-6	.	.						RIVET.....	25	*
-39	NAS1738B4-3	.	.						BLIND RIVET.....	7	
-40	NAS1738B5-3	.	.						BLIND RIVET.....	8	
	NAS1738B5-5	.	.						BLIND RIVET.....	25	*
-41	NAS1466-03	.	.						SWAGE LOCKING PIN	8	
	NAS1466-04	.	.						SWAGE LOCKING PIN	6	*
	NAS1466-05	.	.						SWAGE LOCKING PIN,	4	*
	HL20PB-6-5	.	.						HI-LOC PIN (73197)	4	*
	NAS1466-06	.	.						SWAGE LOCKING PIN	8	*
-42	NAS1080-06	.	.						COLLAR.....	21	
-43	NAS1526-03	.	.						SWAGE LOCKING PIN	13	
-44	NAS1526-05	.	.						SWAGE LOCKING PIN	4	
-45	70209-06056-042	.	.						FITTING ASSY, (See 1-1520-237P for breakdown)	1	



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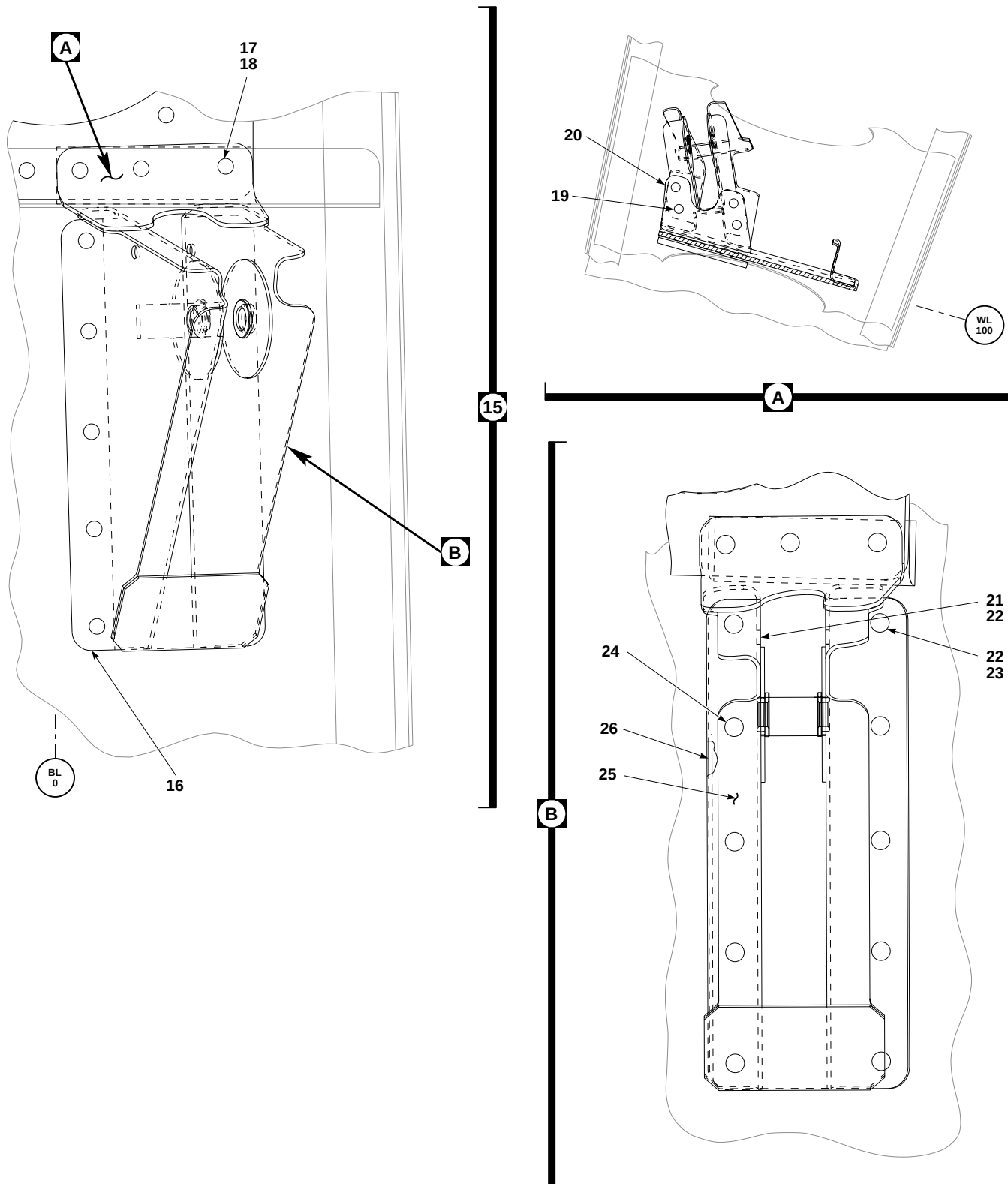
Figure E-22. CRCT Doubler Modification Kit

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-22-	70070-20465-019		CRCT DOUBLE MODIFICATION KIT	REF	
-1	70070-20465-021	.	M/K PLATING TRP	1	
-2	70070-20465-023	. .	M/K PLATING INSTL, (Modified from 70203-06050-011)	REF	
-3	70070-20465-024	. .	M/K PLATING INSTL, (Modified from 70203-06050-013)	REF	
-4	70070-20465-025	. .	M/K PLATING INSTL, (Modified from 70203-06050-015)	REF	
-5	70070-20465-041	. .	M/K PLATING ASSY, (Reidentified from 70203-06050-043)	REF	
-6	NAS1097AD4-5	. .	RIVET	45	
-7	NAS1097AD5-5	. .	RIVET	20	
-8	NAS1739B4-4	. .	BLIND RIVET	3	
-9	MS20470AD5-5	. .	RIVET	8	
-10	NAS1739B4-5	. .	BLIND RIVET	4	
-11	NAS1738B4-5	. .	BLIND RIVET	4	
-12	NAS1466-03	. .	SWAGE LOCKING PIN	2	
	NAS1466-04	. .	SWAGE LOCKING PIN	3	*
	NAS1466-05	. .	SWAGE LOCKING PIN	3	*
	HL20PB-6-5	. .	HI-LOK PIN	3	*
	NAS1466-06	. .	SWAGE LOCKING PIN	6	*
-13	NAS1465-03	. .	SWAGE LOCKING PIN	3	
-14	NAS1738B4-3	. .	BLIND RIVET	3	
-15	70070-20465-101	. .	STRAP	1	
-16	CCR264SS-3-2	. .	RIVET, (11815) (Superseded by MS20605S3W2)	16	
	MS20605S3W2	. .	RIVET,	16	
-17	212-12	. .	RECEPTACLE, (71286)	1	
-18	MS21075-3	. .	NUTPLATE, (Superseded by MS21075-3N)	7	
	MS21075-3N	. .	NUTPLATE,	7	
-19	70070-20465-022	.	M/K PLATING TRP	1	
-20	70070-20465-026	. .	M/K RIB INSTL, (Modified from 70201-06164-011)	REF	
-21	70070-20465-042	. .	M/K RIB ASSY, (Reidentified from 70201-06164-043)	REF	
-22	70070-20465-043	. .	M/K RIB ASSY, (Reidentified from 70201-06164-045)	REF	
-23	NAS1738B5-4	. .	BLIND RIVET	4	
-24	NAS1738B5-3	. .	BLIND RIVET	25	
-25	NAS1738B4-5	. .	BLIND RIVET	4	
-26	NAS1097AD3-3	. .	RIVET	30	
-27	MS21075-3	. .	NUTPLATE	12	
-28	70070-20465-102	. .	STRAP	1	



AB3118_1
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Figure E-23. Front Spar FT Modification Kit (Sheet 1 of 2)



AB3118_2
SA

Figure E-23. Front Spar FT Modification Kit (Sheet 2 of 2)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-23-	70070-20465-020		FRONT SPAR FT MODIFICATION KIT	REF	
-1	70070-20465-027	.	M/K FRT SPAR.....	1	
-2	70070-20465-030	.	M/K SPAR INSTL	REF	
-3	70070-20465-044	.	M/K SPAR ASSY	REF	
	70070-20465-045	.	M/K SPAR ASSY	REF	
-4	MS20470AD5-9	.	RIVET.....	35	
-5	70202-06051-149	.	STIFFENER	1	
-6	70070-20465-104	.	DOUBLER.....	1	
-7	SS1058A7-25-24	.	RADIUS BLOCK	1	
-8	SS1058A7-27-46	.	RADIUS BLOCK	1	
-9	70070-20465-028	.	M/K SUPPORT INSTL.....	1	
-10	HL19PB-5-4	.	PIN, (73197).....	3	
-11	HL70TW-5	.	COLLAR, (73197)	3	
-12	HL20PB86-5-6	.	PIN COLLAR ASSY, (73197)	3	
-13	HL20PB86-5-7	.	PIN COLLAR ASSY, (73197)	1	
-14	70400-06681-044	.	SUPPORT ASSY	1	
-15	70070-20465-029	.	M/K SUPPORT INSTL.....	1	
-16	70070-20465-031	.	M/K SUPPORT INSTL.....	REF	
	70070-20465-032	.	M/K SUPPORT INSTL.....	REF	
-17	HL20PB-6-8	.	HI-LOK PIN, (73197).....	3	
-18	HL1087ATW-6	.	COLLAR, (73197)	3	
-19	MS20470AD5-4	.	RIVET.....	6	
-20	70070-20465-105	.	ANGLE	1	
-21	HL20PB-5-4	.	HI-LOK PIN, (73197).....	1	
-22	HL1087ATW-5	.	COLLAR, (73197)	10	
-23	HL20PB-5-2	.	HI-LOK PIN, (73197).....	4	*
-24	HL20PB-5-3	.	HI-LOK PIN, (73197).....	4	
-25	70400-06680-046	.	SUPPORT ASSY	1	
-26	70400-06680-145	.	LAMINATED SHIM	1	

E-20. SIDE SKIN MODIFICATION KIT (50-10).

Subject: Tail Pylon Side Skin, Modification of, dated 31 March 2003

Purpose: To provide instruction for the rework of the tail pylon side skin.

Model: UH-60A

Description: Additional doublers are added to the existing tail pylon side skin between station 645.00 and station 660.00.

Drawing Required for Modification:

70070-20587

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before incorporating the modification of tail pylon side skin.
- Before beginning this modification procedure, use the material information list to inventory the modification kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual step(s), drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- When installing fasteners refer to drawing sheet and zones for applicable fasteners.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Modification of tail pylon side skin as follows:

- (1) Modify left side plating installation (70203-06050-011, -013, -015, or -018) as follows:
 - (a) Remove pneumatic lines as required for access to left side pylon interior.

(b) Remove fasteners shown (Dwg 70070-20587, Sheet 2, Zones 9-D, 10-C, 10-E, 11-C through 11-E, 12-C through 12-F, and Notes 5, 7, and 8).

(c) Locate and temporarily install doubler (70070-20587-101), stiffener (70070-20587-103), clip (70070-20587-105), and radius block (SS1058A7-26-13) as shown (Sheet 2, Zones 10-E, 11-E, 14-C, and 15-E).

(d) Drill fastener holes, as shown (Sheet 2, Zones 9-D, 10-C, 10-D, 11-C, and 11-D).

(e) Remove temporarily installed doubler (70070-20587-101), stiffener (70070-20587-103), clip (70070-20587-105), and radius block (SS1058A7-26-13), deburr and touch up, as required.

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(f) Install doubler (70070-20587-101) wet with sealant (AMS-S-8802 A2 or equivalent) using fasteners shown (Sheet 2, Zones 9-E, 10-C, 10-E, and 11-C through 11-E).

(g) Install stiffener (70070-20587-103), clip (70070-20587-105), and radius block (SS1058A7-26-13) using fasteners shown (Sheet 2, Zones 10-E, 14-D, and 14-F).

WARNING

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(h) Reinstall fasteners wet with sealant (AMS-S-8802 A2 or equivalent) at locations shown (Sheet 2, Zones 11-B, 11-D, 11-F, 12-C through 12-E, and Notes 5, 7, and 8).

(i) Remove and replace fasteners wet with sealant (AMS-S-8802 A2 or equivalent) at locations shown (Sheet 2, Zones 5-E through 5-G, 6-E through 6-G, 9-F, and Note 5).

(2) Modify right side plating installation (70203-06050-012, -014, -016, or -017) as follows:

(a) Remove fasteners shown (Dwg 70070-20587, Sheet 2, Zones 9-D, 10-C, 10-E, 11-C through 11-E, 12-C through 12-F, and Notes 5, 7, and 8).

- (b) Locate and temporarily install doubler (70070-20587-102), stiffener (70070-20587-104), clip (70070-20587-106), and radius block (SS1058A7-26-13) as shown (Sheet 2, Zones 10-E, 11-E, 14-C, and 15-E).
- (c) Drill fastener holes, as shown (Sheet 2, Zones 9-D, 10-C, 10-D, 11-C, and 11-D).
- (d) Remove temporarily installed doubler (70070-20587-102), stiffener (70070-20587-104), clip (70070-20587-106), and radius block (SS1058A7-26-13), deburr and touch up, as required.

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

- (e) Install doubler (70070-20587-102) wet with sealant (AMS-S-8802 A2, or equivalent) using fasteners shown (Sheet 2, Zones 9-E, 10-C, 10-E, and 11-C through 11-E).
- (f) Install stiffener (70070-20587-104), clip (70070-20587-106), and radius block (SS1058A7-26-13) using fasteners shown (Sheet 2, Zones 10-E, 14-D, and 14-F).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

- (g) Reinstall fasteners wet with sealant (AMS-S-8802, A2 or equivalent) at locations shown (Sheet 2, Zones 11-B, 11-D, 11-F, 12-C through 12-E, and Notes 5, 7, and 8).
 - (h) Remove and replace fasteners wet with sealant (AMS-S-8802, A2 or equivalent) at locations shown (Sheet 2, Zones 5-E through 5-G, 6-E through 6-G, 9-F, and Note 5).
 - (i) Reinstall pneumatic lines previously removed.
- C. Reinstallation of removed equipment:
- (1) Install removed equipment per reference (a).
- D. Record of Compliance:
- (1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20587-011	Mod. Kit	+1.8	653.7	1.177

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +1.8 pounds

Moment arm: 653.7 in.

Change in basic moment/1000: 1.177

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	1	24.0	*24.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Side Skin,	70070-20587-011	(1)
	consisting of:		
1	Mod. Kit, Plating Instl,	70070-20587-015	
	consisting of:		
41	Collar	HL1087A-6	
3	Collar	HL1087A-8	
26	Pin, Hi-Lok	HL64PB-6-3	
5	Pin, Hi Lok	HL64PB-6-4	
1	Pin, Hi-Lok	HL64PB-6-5	
4	Pin	HL64PB-6-6	
5	Pin, Hi Lok	HL64PB-6-7	
3	Pin	HL64PB-8-8	
30	Rivet	MS20470AD4-2	
15	Rivet	MS20470AD5-3	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
2	Rivet	MS20470AD5-7	
8	Rivet	MS20470AD6-5	
1	Radius Block	SS1058A7-26-13	
1	Doubler	70070-20587-101	
1	Stiffener	70070-20587-103	
1	Clip	70070-20587-105	
1	Mod. Kit, Plating Instl,	70070-20587-016	
	consisting of:		
47	Collar	HL1087A-6	
3	Collar	HL1087A-8	
30	Pin, Hi-Lok	HL64PB-6-3	
6	Pin, Hi Lok	HL64PB-6-4	
1	Pin, Hi-Lok	HL64PB-6-5	
5	Pin	HL64PB-6-6	
5	Pin, Hi Lok	HL64PB-6-7	
3	Pin	HL64PB-8-8	
30	Rivet	MS20470AD4-2	
15	Rivet	MS20470AD5-3	
2	Rivet	MS20470AD5-7	
8	Rivet	MS20470AD6-5	
1	Radius Block	SS1058A7-26-13	
1	Doubler	70070-20587-102	
1	Stiffener	70070-20587-104	
1	Clip	70070-20587-106	
1	Mod. Kit, Spar Instl,	70070-20587-017	
	consisting of:		
3	Rivet	MS20470AD6-6	
3	Pin, SWG LKG	NAS1526-06	

B. Consumable Material:

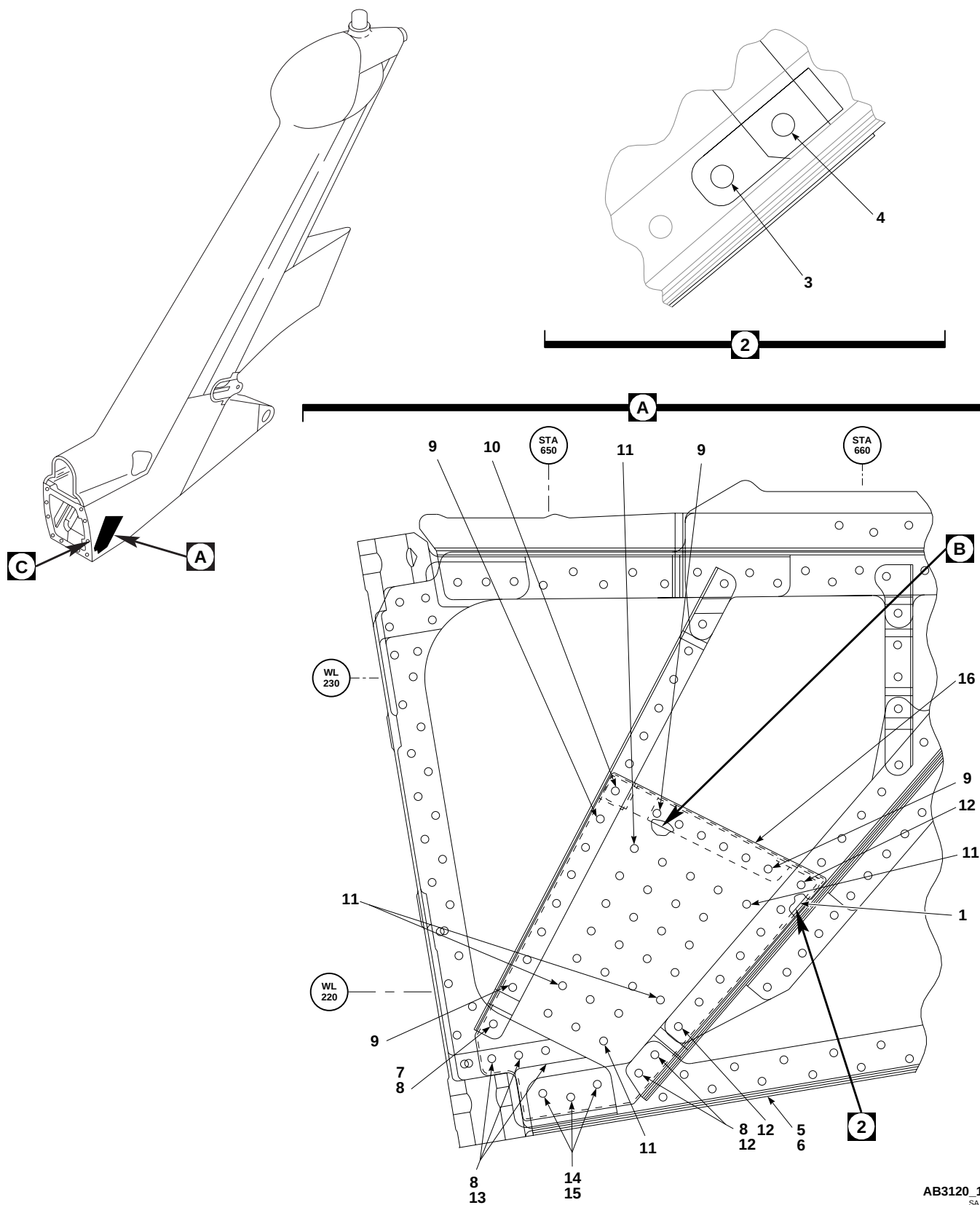
WARNING

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<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
8 oz.	Sealant	AMS-S-8802, A2 or equivalent	(1)

C. Source:

(1) Available through normal supply channels



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Figure E-24. Side Skin Modification Kit (Sheet 1 of 2)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-24-	70070-20587-011		SIDE SKIN MODIFICATION KIT	REF	
-1	70070-20587-017		. M/K SPAR INSTL	1	
-2	70070-20587-023		. . SPAR INSTL, (Modified from 70203-06051-012) ..	REF	
-3	MS20470AD6-6		. . RIVET	3	
-4	NAS1526-06		. . SWAGE LOCKING PIN	3	
-5	70070-20587-015		. M/K PLTG INSTL, LH	1	
	70070-20587-016		. M/K PLTG INSTL, RH	1	
-6	70070-20587-012		. . PLATING INSTL, (Modified from 70203-06050-011)	REF	
	70070-20587-013		. . PLATING INSTL, (Modified from 70203-06050-013)	REF	
	70070-20587-014		. . PLATING INSTL, (Modified from 70203-06050-015)	REF	
	70070-20587-018		. . PLATING INSTL, (Modified from 70203-06050-018)	REF	
	70070-20587-019		. . PLATING INSTL, (Modified from 70203-06050-012)	REF	
	70070-20587-020		. . PLATING INSTL, (Modified from 70203-06050-014)	REF	
	70070-20587-021		. . PLATING INSTL, (Modified from 70203-06050-016)	REF	
	70070-20587-022		. . PLATING INSTL, (Modified from 70203-06050-017)	REF	
-7	HL64PB-6-5		. . HI-LOK PIN, (73197)	1	
-8	HL1087A-6		. . COLLAR, (73197) (Used on 70070-20587-015) ..	41	
	HL1087A-6		. . COLLAR, (73197) (Used on 70070-20587-016) ..	47	
-9	MS20470AD5-3		. . RIVET	15	
-10	MS20470AD5-7		. . RIVET	2	
-11	MS20470AD4-2		. . RIVET	30	
-12	MS20470AD6-5		. . RIVET	8	
-13	HL64PB-6-7		. . HI-LOK PIN, (73197)	5	
-14	HL64PB-8-8		. . PIN	3	
-15	HL1087A-8		. . COLLAR, (73197)	3	
-16	70070-20587-101		. . DOUBLER, (Used on 70070-20587-015)	1	
	70070-20587-102		. . DOUBLER, (Used on 70070-20587-016)	1	
-17	70070-20587-105		. . CLIP, (Used on 70070-20587-015)	1	
	70070-20587-106		. . CLIP, (Used on 70070-20587-016)	1	
-18	70070-20587-103		. . STIFFENER, (Used on 70070-20587-015)	1	
	70070-20587-104		. . STIFFENER, (Used on 70070-20587-016)	1	
-19	SS1058A7-26-13		. . RADIUS BLOCK	1	
-20	HL64PB-6-3		. . HI-LOK PIN, (73197) (Used on 70070-20587-015)	26	
	HL64PB-6-3		. . HI-LOK PIN, (73197) (Used on 70070-20587-016)	30	
-21	HL64PB-6-4		. . HI-LOK PIN, (73197) (Used on 70070-20587-015)	5	
	HL64PB-6-4		. . HI-LOK PIN, (73197) (Used on 70070-20587-016)	6	
-22	HL64PB-6-6		. . PIN, (73197)	4	

E-21. AFT SPAR FT MODIFICATION KIT (50-25).

Subject: Tail Rotor Pylon, Aft Spar Stabilator Attachment Fitting, Modification of, dated 31 March 2003

Purpose: Provide instructions to remove bushings and install new Forcemate bushings and spherical bearings at the tail rotor pylon aft spar attachment location.

Model: UH-60A

Description: The stabilator attachment fittings are reworked by removing bushings and liners and installing new Forcemate bushings and spherical bearings.

Drawings required for modification:

70070-20588

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

(b) Technical Manual (TM) 1-1520-237-23, Aviation Unit And Intermediate Maintenance For Army Models UH-60A, UH-60L, EH-60A, and UH-60Q Helicopters, Chapter 2, Airframe

(c) Fatigue Technologies Inc., FAN-718, dated March 4, 2002

(d) TM 1-1520-265-23, Technical Manual, Aviation Unit Maintenance (AVUM) and Aviation Intermediate (AVIM) Manual, Nondestructive Inspection Procedures for H-60 Helicopter Series

(e) TM 1-1500-335-23, Technical Manual, Nondestructive Inspection Methods

Instructions:

NOTE

- A complete review of this SSI is recommended before incorporating the tail rotor pylon stabilator attachment fitting modification kit.
- Before beginning this modification procedure, use the material information list to inventory the modification kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual step(s), drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.

- During rework refer to reference (c) as required.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

WARNING

FLIGHT SAFETY PART

TAIL ROTOR PYLON STABILATOR ATTACHMENT FITTING CONTAINS CRITICAL CHARACTERISTICS WHICH MUST NOT BE DAMAGED DURING REMOVAL AND REWORK. USE EXTREME CAUTION DURING REMOVAL AND REWORK.

B. Modification, tail rotor pylon, aft spar assembly (70202-06052-041, -043, -044, or -045) stabilator attachment fitting:

- (1) Modification of left side attachment fitting assembly (70209-06052-041) as follows (Dwg 70070-20588):
 - (a) Remove two bushings (NAS538-10P024) and one bushing (NAS537-10P062) using bearing removal/installation tool (70700-20129-041) (Sheet 2, Zones 6-G and 6-E).

WARNING

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- (b) Clean lug bore surfaces using cheesecloth cloth (CCC-C-440 or equivalent) and 1,1,1 - trichloroethane (MIL-T-81533 or equivalent).
- (c) Inspect for damage to critical areas (minimum thickness and minimum area) of stabilator attachment fitting (70209-06052-101 or -103) and repair as required (Sheet 2, View F, Zone 11-G, Note 10; Sheet 3, Note 43).
- (d) Inspect fitting assembly (70209-06052-041) bores and measure diameters. Line ream hole to 0.8120 - 0.8130-inch diameter nominal. See Sheet 2, Note 7 for over sized holes (Sheet 2, Zone 7-G, Notes 7 and 12; Sheet 3, Note 32).
- (e) Break all sharp edges of line reamed holes.

WARNING

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- (f) Perform liquid penetrant or Eddy Current inspection of holes (Sheet 2, Note 13 and reference (d) and (e)).
- (g) Inspect for damage to critical areas (minimum thickness and minimum area) of stabilator attachment fitting (70209-06052-101 or -103) and repair as required (Sheet 2, View F, Zone 11-G, Note 10; Sheet 3, Note 43).

WARNING

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- (h) Apply alodine 1200S or equivalent and apply primer (EA9203 or equivalent) to reworked area (Sheet 2, Note 14).

NOTE

Allow primer (EA9203 or equivalent) to dry before proceeding to next step.

- (i) Install bushing (FMI-718-45010-A) inner on fitting assembly (70209-06052-041). See Sheet 2, Note 7 for over sized bushing (Sheet 2, Zone 6-G, Note 8; Sheet 3, Note 32).

- (j) Perform axial load proof test on inner shoulder bushing (FMI-718-45010-A) (Sheet 2, Zone 5-G, Note 11).

RESULT: Verify bushing or bearing does not move.

- (k) Install nominal bushing (FMI-718-45030-A) outer on fitting assembly (70209-06052-041). See Sheet 2, Note 7 for over sized bushing (Sheet 2, Zone 6-E, Note 8; Sheet 3, Note 32).

- (l) Perform axial load proof test on inboard end of nominal bushing (FMI-718-45030-A) (Sheet 2, Zones 5-E, 5-G, 6-E, and 6-G, Note 11).

RESULT: Verify movement of bushing at or below 2000 pound force.

- (m) Line ream hole to 0.6250 - 0.6265-inch diameter (Sheet 2, Zone 7-G).

- (n) Chamfer (inside only) both edges of bushings (FMI-718-45010-A and FMI-718-45030-A) 0.015 / 0.030 x 45 degrees (Sheet 2, Details B and E, Zones 5-C and 7-C).

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- (o) Fillet seal inboard side of bushing (FMI-718-45010-A) inner using sealing compound (AMS3265 or equivalent) (Sheet 2, Zone 8-G; Sheet 3, Note 19).

- (p) Apply coating of antiseize compound (MIL-T-83483 or equivalent) to inner bores of bushings (Sheet 3, Note 24).

- (q) Reidentify fitting assembly (70209-06052-041) to (70070-20588-043) with pen and contrasting ink (Sheet 1, Note 4).

- (2) Modification of right side attachment fitting assembly (70209-06052-043 or -046) as follows (Dwg 70070-20588):

- (a) Remove bearing (B5539WZZ) or spherical bearings (KNDB 12-25) from fitting assembly (70209-06052-043 or -046) using bearing removal/installation tool (70700-20129-041). If bearing is roller staked remove staking flanges on outside of race by rotating arbor and cutter while applying light pressure until cutter has penetrated stake 0.020-inch (Sheet 2, Zones 13-E and 13-G; Sheet 1, Notes 1 and 2).

- (b) Remove four liners (70209-06052-104) using a drift and mallet from fitting assembly (70209-06052-043 or -046) (Sheet 2, Zones 13-E and 13-G; Sheet 3, Note 30).

- (c) Remove remaining adhesive using a nonmetallic scraper and/or abrasive mat (MIL-A-9962 or equivalent).

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- (d) Clean lug bore surfaces using cheesecloth cloth (CCC-C-440 or equivalent) and 1,1,1-trichloroethane (MIL-T-81533 or equivalent).

(e) Inspect for damage to critical areas (minimum thickness and minimum area) of stabilator attachment fitting (70209-06052-101 or -103) and repair as required (Sheet 2, View F, Zone 11-G, Note 10; Sheet 3, Note 43).

(f) Inspect fitting assembly (70209-06052-043 or -046) bores and measure diameters. Line ream hole to 1.2523 - 1.2533-inch diameter nominal. See Sheet 2, Note 7 for over sized holes (Sheet 2, Zone 14-G, Notes 7 and 12; Sheet 3, Note 32).

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(g) Perform liquid penetrant or Eddy Current inspection of holes (Sheet 2, Note 13 and reference (d) and (e)).

(h) Line ream holes to applicable size.

(i) Chamfer both edges of fitting assembly (70209-06052-043 or -046) 0.045 / 0.035 x 45 degrees (Sheet 2, Detail D, Zone 15-B).

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(j) Perform liquid penetrant or Eddy Current inspection of holes (Sheet 2, Note 13 and reference (d) and (e)).

(k) Inspect for damage to critical areas (minimum thickness and minimum area) of stabilator attachment fitting (70209-06052-101 or -103) and repair as required (Sheet 2, View F, Zone 11-G, Note 10; Sheet 3, Note 43).

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(l) Apply alodine 1200S or equivalent and apply primer (EA9203 or equivalent) to reworked area (Sheet 2, Note 14).

NOTE

Allow primer (EA9203 or equivalent) to dry before proceeding to next step.

(m) Install two bushings (FMI-718-45020-A) on fitting assembly (70209-06052-043 or -046). See Sheet 2, Note 7 for over sized bushings (Sheet 2, Zones 12-E and 12-F, Notes 8 and 16; Sheet 3, Note 32).

(n) Inspect bushings (FMI-718-45020-A) for flushness (+0.010 / -0.010) after installation (Sheet 3, Note 33).

(o) Line ream hole to 1.1870 - 1.1875-inch diameter (Sheet 2, Zone 14-H).

(p) Chamfer (inside only) both edges of bushings (FMI-718-45020-A) 0.045 / 0.035 x 45 degrees (Sheet 2, Detail D, Zone 15-B).

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(q) Install two spherical bearings (KNDB 12-25) wet with sealing compound (CA1000 or equivalent) on fitting assembly (70209-06052-043 or -046) and roller stake (Sheet 2, Zones 13-E and 13-F, Note 9).

(r) Perform axial test on spherical bearings (KNDB 12-25) (Sheet 2, Zones 13-E and 13-F, Note 11).

RESULT: Verify bushing or bearing does not move.

(s) Check for alignment after staking and check for rotational movement after staking with finger pressure (Sheet 3, Notes 34 and 35).

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(t) Seal grooves between fitting assembly (70209-06052-043 or -046), bushing (FMI-718-45020-A), and spherical bearing (KNDB 12-25) using sealing compound (AMS3265 or equivalent) (Sheet 2, Zones 13-E and 13-F, Note 16).

(u) Reidentify fitting (70209-06052-044) to (70070-20588-044) with pen and contrasting ink (Sheet 3, Note 36).

(v) Reidentify fitting assembly (70209-06052-043 or -046) to (70070-20588-041 or -042) with pen and contrasting ink (Sheet 1, Notes 5 and 6).

(3) Fit out of stabilator assembly (70070-20589-041, -042, -043, or -044) as follows (Dwg 70070-20588):

(a) Bond steel washer (70070-20588-101) to gasket washer (70070-20588-102) (Sheet 3, Zone 7-E, Note 25).

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(b) Fillet seal steel washer (70070-20588-101) and gasket washer (70070-20588-102) to fitting assembly (70070-20588-043) using sealing compound (AMS3265 or equivalent) (Sheet 3, View A, Note 31).

CAUTION

Allow time for sealing compound to cure prior to installing stabilator assembly on pylon.

(c) Temporarily install stabilator assembly (70200-07050-043, -044, -047 or -051) to right side fitting assembly (70070-20588-041 or -042) with hardware saved from removal per reference (b).

(d) Temporarily install stabilator assembly (70200-07050-043, -044, -047, or -051) to left side fitting assembly (70070-20588-043) using hardware shown (Sheet 3, Zones 4-D, 4-E, and 6-C, Notes 18, 19, 20, 21, 23, 24, and 41).

(e) Remove all hardware temporarily installed and save for reuse in reference (a).

(4) Reidentify spar assembly with pen and contrasting ink as follows (Sheet 3, Note 36):

<u>FROM</u>	<u>TO</u>
70202-06052-041	70070-20588-045
70202-06052-043	70070-20588-046
70202-06052-044	70070-20588-047
70202-06052-045	70070-20588-048

C. Reinstallation of removed equipment:

(1) Install removed equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-20588-011	Mod. Kit	Negligible	700.1	0..0

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: Negligible

Moment arm: 700.1 in.

Change in basic moment/1000: 0.0

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Machinist	1	4.0	*4.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, TRP, Aft Spar, consisting of:	70070-20588-011	(1)
1	Mod. Kit, TRP, Aft Spar, consisting of:	70070-20588-012	
2	Bushing	FMI-718-45020-A	
2	Bushing	FMI-718-45120-A	
2	Bushing	FMI-718-45220-A	
2	Bushing	FMI-718-45320-A	
2	Bushing	FMI-718-45420-A	
2	Bushing, 5TH-OS	FMI-718-45520-A	
2	Bushing OS	FMI-718-45620-A	
2	Sherical BRG	KNDB 12-25	
1	Mod. Kit TRP, Aft Spar, consisting of:	70070-20588-013	
1	Bushing	FMI-718-45010-A	
1	Bushing, Nominal	FMI-718-45030-A	
1	Bushing	FMI-718-45110-A	
1	Bushing, 1ST-OS	FMI-718-45130-A	
1	Bushing	FMI-718-45210-A	
1	Bushing, 2ND-OS	FMI-718-45230-A	
1	Bushing	FMI-718-45310-A	
1	Bushing, 3RD-OS	FMI-718-45330-A	
1	Bushing	FMI-718-45410-A	
1	Bushing, 4TH-OS	FMI-718-45430-A	
1	Bushing, 5TH-OS	FMI-718-45510-A	
1	Bushing, 5TH-OS	FMI-718-45530-A	
1	Mod. Kit, Stabilator INSTL, consisting of:	70070-20588-014	
1	Nut	MS17826-10	
2	Washer	MS20002-10	
1	Washer	MS20002C10	
1	Pin, Cotter	MS24665-374	
1	Bolt	NAS6210-48D	
1	Washer, STL	70070-20588-101	
1	Washer, Gasket	70070-20588-102	

B. Consumable Material:

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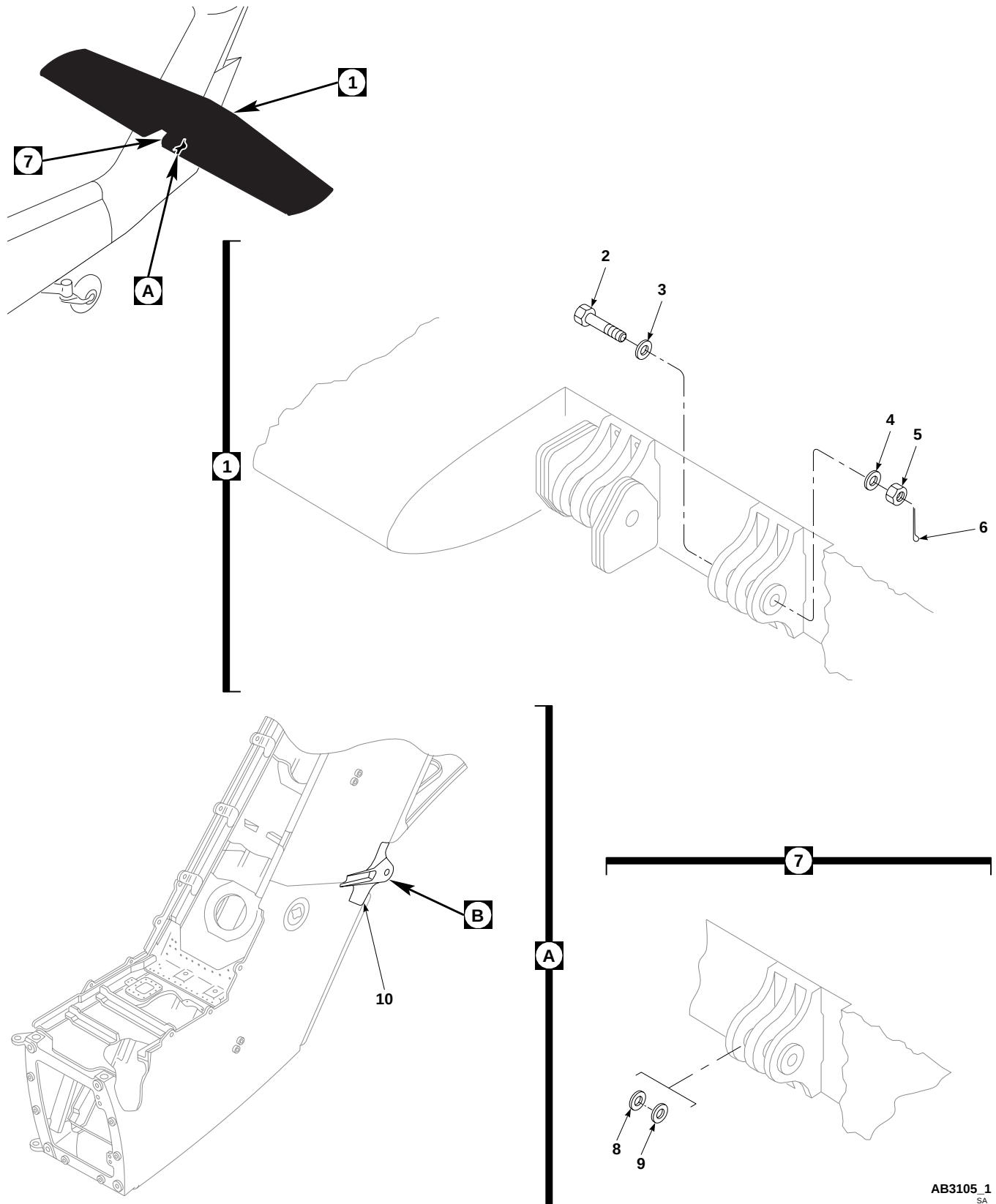
<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
2 oz.	Primer	EA9203 or equivalent	(1)
6 oz.	Sealing Compound	AMS3265 or equivalent	(1)
2 oz.	Antiseize Compound	MIL-T-83483 or equivalent	(1)
2 oz.	1,1,1-Trichloroethane	MIL-T-81533 or equivalent	(1)
1 pkg	Mat, Abrasive	MIL-A-9962 or equivalent	(1)
1 pkg	Cloth, Cheesecloth	CCC-C-440 or equivalent	(1)
2 oz.	Sealing Compound	CA1000 or equivalent	(1)
2 oz.	Alodine	Alodine 1200S or equivalent	(1)

C. Support equipment:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Fatigue Technology Capital Tool Kit	FTI-718-1	(1)
1	Fatigue Technology Durable Tool Kit Location 1 and 3	FMTS-718-1/3	(1)
1	Fatigue Technology Durable Tool Kit Location 2	FMTS-718-2	(1)
1	Bearing Removal/Installation Tool	70700-20129-041 or equivalent	(1)

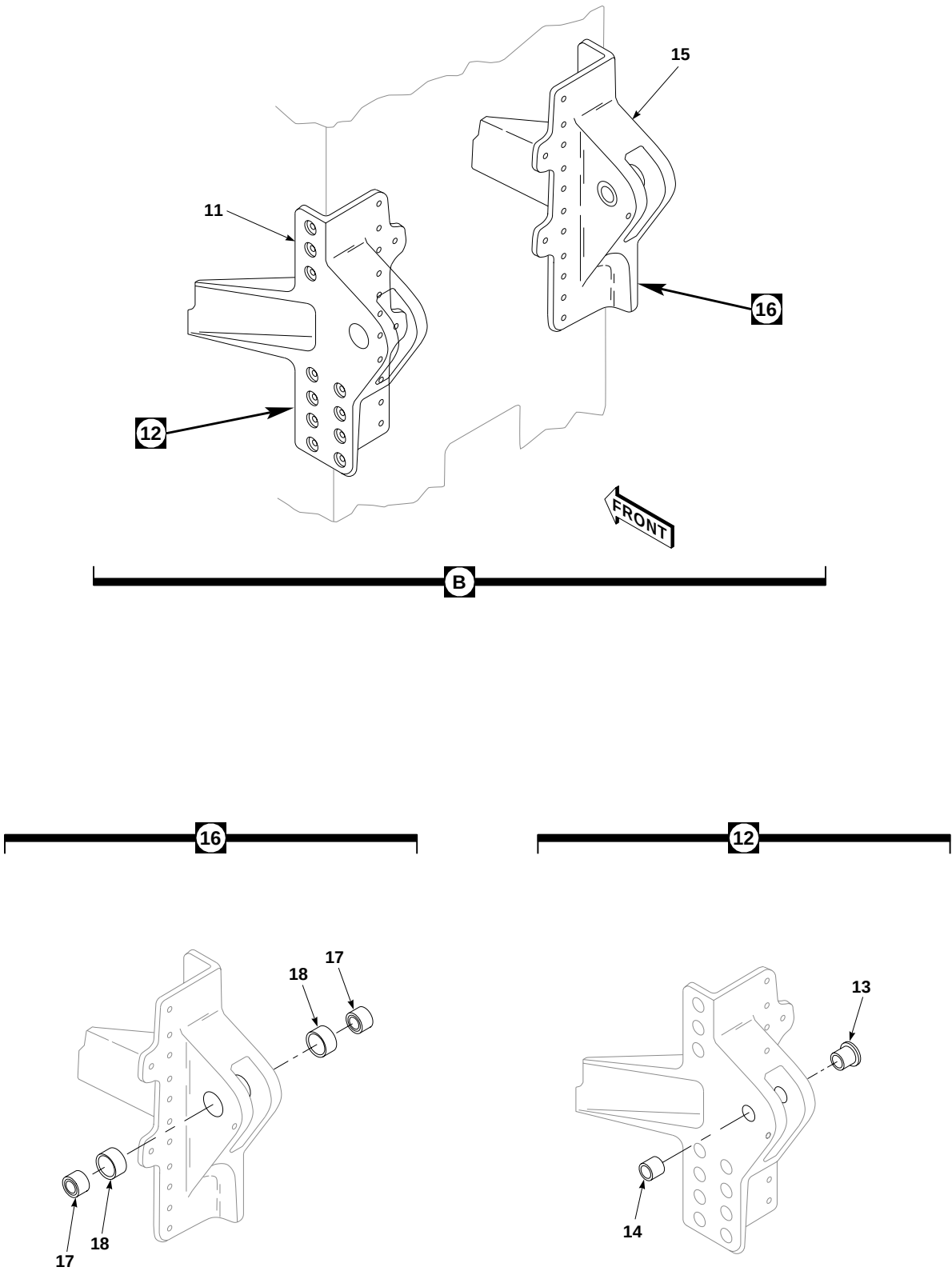
D. Source:

- (1) Available through normal supply channels



AB3105_1
SA

Figure E-25. Aft Spar Fitting Modification Kit (Sheet 1 of 2)



AB3105_2
SA

Figure E-25. Aft Spar Fitting Modification Kit (Sheet 2 of 2)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-25-	70070-20588-011		AFT SPAR FITTING MODIFICATION KIT	REF	
-1	70070-20588-014		. M/K STAB INSTL	1	
-2	NAS6210-48D		. . BOLT	1	
-3	MS20002C10		. . WASHER	1	
-4	MS20002-10		. . WASHER	2	
-5	MS17826-10		. . NUT	1	
-6	MS24665-374		. . COTTER PIN	1	
-7	70070-20588-015		. . STAB INSTL, Modified from 70000-07050-011)...	REF	
-8	70070-20588-101		. . STEEL WASHER	1	
-9	70070-20588-102		. . GASKET WASHER	1	
-10	70070-20588-045		. SPAR ASSY, (Reidentified from 70202-06052-041)	REF	*
	70070-20588-046		. SPAR ASSY, (Reidentified from 70202-06052-043)	REF	*
	70070-20588-047		. SPAR ASSY, (Reidentified from 70202-06052-044)	REF	*
	70070-20588-048		. SPAR ASSY, (Reidentified from 70202-06052-045)	REF	*
-11	70070-20588-013		. M/K FITTING ASSY	1	
-12	70070-20588-043		. . FITTING ASSY	REF	
-13	FMI-718-45010-A		. . BUSHING, (51439)	1	*
	FMI-718-45110-A		. . BUSHING, (51439)	1	*
	FMI-718-45210-A		. . BUSHING, (51439)	1	*
	FMI-718-45310-A		. . BUSHING, (51439)	1	*
	FMI-718-45410-A		. . BUSHING, (51439)	1	*
	FMI-718-45510-A		. . BUSHING, 5TH-OS, (51439)	1	*
-14	FMI-718-45030-A		. . BUSHING, NOMINAL, (51439)	1	*
	FMI-718-45130-A		. . BUSHING, 1ST-OS, (51439)	1	*
	FMI-718-45230-A		. . BUSHING, 2ND-OS, (51439)	1	*
	FMI-718-45330-A		. . BUSHING, 3RD-OS, (51439)	1	*
	FMI-718-45430-A		. . BUSHING, 4TH-OS, (51439)	1	*
	FMI-718-45530-A		. . BUSHING, 5TH-OS, (51439)	1	*
-15	70070-20588-012		. M/K FITTING ASSY	1	
-16	70070-20588-041		. . FITTING ASSY, (Reidentified from 70209-06052-043)	REF	
	70070-20588-042		. . FITTING ASSY, (Reidentified from 70209-06052-046)	REF	
	70070-20588-044		. . FITTING ASSY, (Reidentified from 70209-06052-041)	REF	
-17	KNDB 12-25		. . SPHERICAL BEARING, (97613)	2	
-18	FMI-718-45020-A		. . BUSHING, (51439)	2	*
	FMI-718-45120-A		. . BUSHING, (51439)	2	*
	FMI-718-45220-A		. . BUSHING, (51439)	2	*
	FMI-718-45320-A		. . BUSHING, (51439)	2	*
	FMI-718-45420-A		. . BUSHING, (51439)	2	*
	FMI-718-45520-A		. . BUSHING, 5TH-OS, (51439)	2	*
	FMI-718-45620-A		. . BUSHING OS, (51439)	2	*

E-22. L/H R/H FIREWALL MODIFICATION KIT (50-19).

Subject: Left and Right Side Firewall Assemblies, Modification of, dated 31 March 2003

Purpose: Provide instructions to modify/reinforce existing firewall installation to prevent wear and fatigue cracking.

Model: UH-60A

Description: The following is a brief overview of the work required to modify left and right side firewall assemblies. New doublers, angles, straps, and spacers are installed to left and right firewall assemblies.

Drawings required for modification:

70070-30307, 70304-02114

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before modifying right and left side firewall assemblies.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.

A. Preparation for modification and removal of equipment:

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) The helicopter is prepared for modification per reference (a).

B. Modification of left side firewall as follows (Dwg 70070-30307):

- (1) Remove and discard angle (70304-02115-117) from left side firewall assembly (Sheet 3, Zone 7-B).
- (2) Remove and save for reinstallation angle (70304-02115-118) (Sheet 3, Zone 6-E).
- (3) Install doubler (70070-30307-101) at station 349.00, left butline 21.25 using fasteners shown (Sheet 3, Zone 14-B).

(4) Install angle (70070-30275-103), spacer (70070-30275-104), and angle (removed in step B.(2)) (70304-02115-118) using fasteners shown (Sheet 3, Zones 7-B, 5-D, and 6-E).

(5) Install strap (70070-30307-102) at station 355.00, left buttline 20.00 using fasteners shown (Sheet 3, Zone 11-D).

C. Modification of right side firewall as follows (Dwg's 70070-30307, and 70304-02114):

(1) Remove and save for reinstallation bracket assembly (70551-01101-041) and bracket (AN743C13) (Dwg 70070-30307, Sheet 3, Zones 14-H and 14-F).

(2) Remove two doublers (70304-02114-133) and angles (70304-02114-116, -119 and -157) from right side firewall (Dwg 70304-02114, Sheet 1, Zones 16-L, 17-M, 14-K and 17-L).

(3) Install doubler (70070-30307-103), bracket assembly (removed in step C.(1)) (70551-01101-041), angles (70304-02114-167, -168 and -170), two doublers (70304-02114-169) and bracket (AN743C13) using fasteners shown (Dwg 70070-30307, Sheet 3, Zones 14-G, 13-H and 14-F; Dwg 70304-02114, Sheet 1, Zones 17-N, 14-L and 17-L).

(4) Install strap (70070-30307-104) using fasteners shown (Dwg 70070-30307, Sheet 3, Zone 11-F).

(5) After rework reidentify firewall assemblies with pen and contrasting ink as follows:

<u>FROM</u>	<u>TO</u>
70304-02115-041	70070-30307-041
70304-02115-045	70070-30307-042
70304-02115-047	70070-30307-043
70304-02115-049	70070-30307-044
70304-02115-053	70070-30307-045
70304-02114-041	70070-30307-046
70304-02114-043	70070-30307-047
70304-02114-045	70070-30307-048
70304-02114-046	70070-30307-049
70304-02115-052	70070-30307-055
70304-02115-048	70070-30307-054
70304-02115-044	70070-30307-053
70304-02115-043	70070-30307-052
70304-02114-049	70070-30307-050
70304-02114-051	70070-30307-051

D. Reinstallation of removed equipment:

(1) Reinstall removed equipment per reference (a).

E. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-30307-011	Mod. Kit, Firewall			
1	70070-30307-012	Mod. Kit, Firewall			
		Total:	+1.1	350.8	0.386

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +1.1 pounds

Moment arm: 350.8 in.

Change in basic moment/1000: 0.386

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mec	1	28.0	*28.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

(1) Kit A:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Firewall LH,	70070-30307-011	(1)
	consisting of:		
70	Rivet	MS20615-4M5	
1	Doubler	70070-30307-101	
1	Strap	70070-30307-102	
1	Angle	70070-30275-103	
1	Spacer	70070-30275-104	

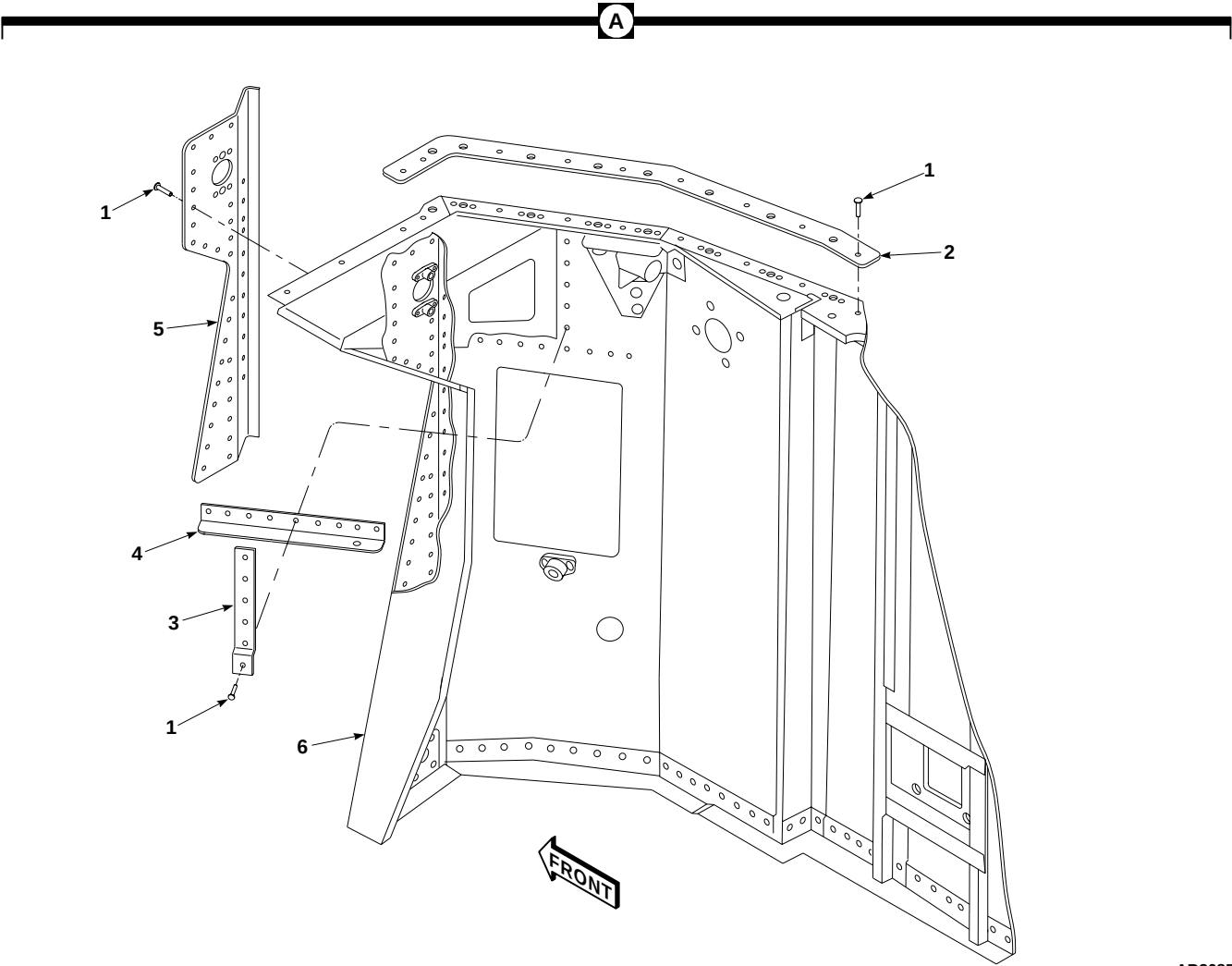
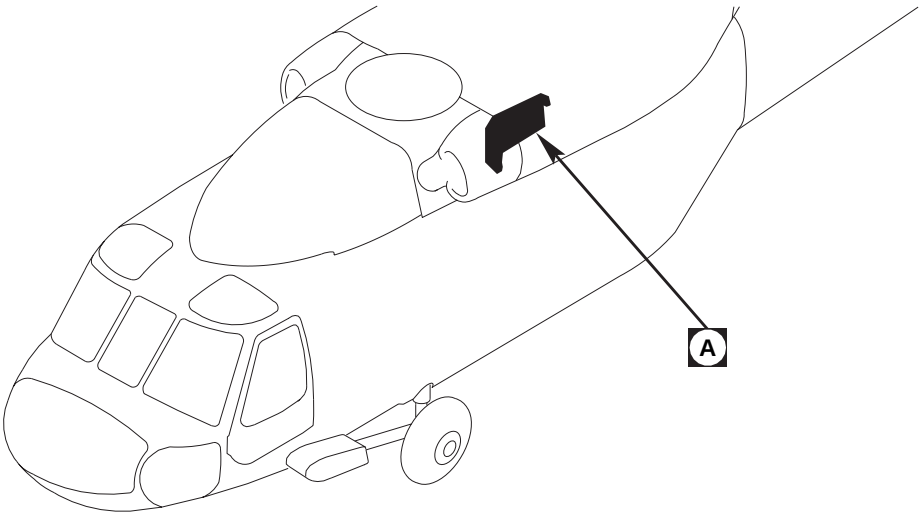
(2) Kit B:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Firewall RH,	70070-30307-012	(1)

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
	consisting of:		
71	Rivet	MS20615-4M5	
4	Nutplate	MS21060-3	
3	Nutplate	MS21062-3	
1	Nutplate	MS21074-L3	
18	Rivet	NAS1097AD3-9	
1	Doubler	70070-30307-103	
1	Strap	70070-30307-104	
1	Angle	70304-02114-167	
1	Angle	70304-02114-168	
2	Doubler	70304-02114-169	
1	Angle	70304-02114-170	

B. Source:

(1) Available through normal supply channels



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Figure E-26. L/H Firewall Modification Kit

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-26-	70070-30307-011		L/H FIREWALL MODIFICATION KIT	REF	
-1	MS20615-4M5	.	RIVET	70	
-2	70070-30275-102	.	STRAP	1	
-3	70070-30275-104	.	SPACER	1	
-4	70070-30307-103	.	ANGLE	1	
-5	70070-30307-101	.	DOUBLER	1	
-6	70070-30307-013	.	FIREWALL INSTL (Reidentified from 70304-02200-011)	REF	
	70070-30307-041	.	FIREWALL ASSY (Reidentified from 70304-02115-041)	REF	
	70070-30307-042	.	FIREWALL ASSY (Reidentified from 70304-02115-045)	REF	
	70070-30307-043	.	FIREWALL ASSY (Reidentified from 70304-02115-047)	REF	
	70070-30307-044	.	FIREWALL ASSY (Reidentified from 70304-02115-049)	REF	
	70070-30307-045	.	FIREWALL ASSY (Reidentified from 70304-02115-053)	REF	
	70070-30307-052	.	FIREWALL ASSY (Reidentified from 70304-02115-043)	REF	
	70070-30307-053	.	FIREWALL ASSY (Reidentified from 70304-02115-044)	REF	
	70070-30307-054	.	FIREWALL ASSY (Reidentified from 70304-02115-048)	REF	
	70070-30307-055	.	FIREWALL ASSY (Reidentified from 70304-02115-052)	REF	

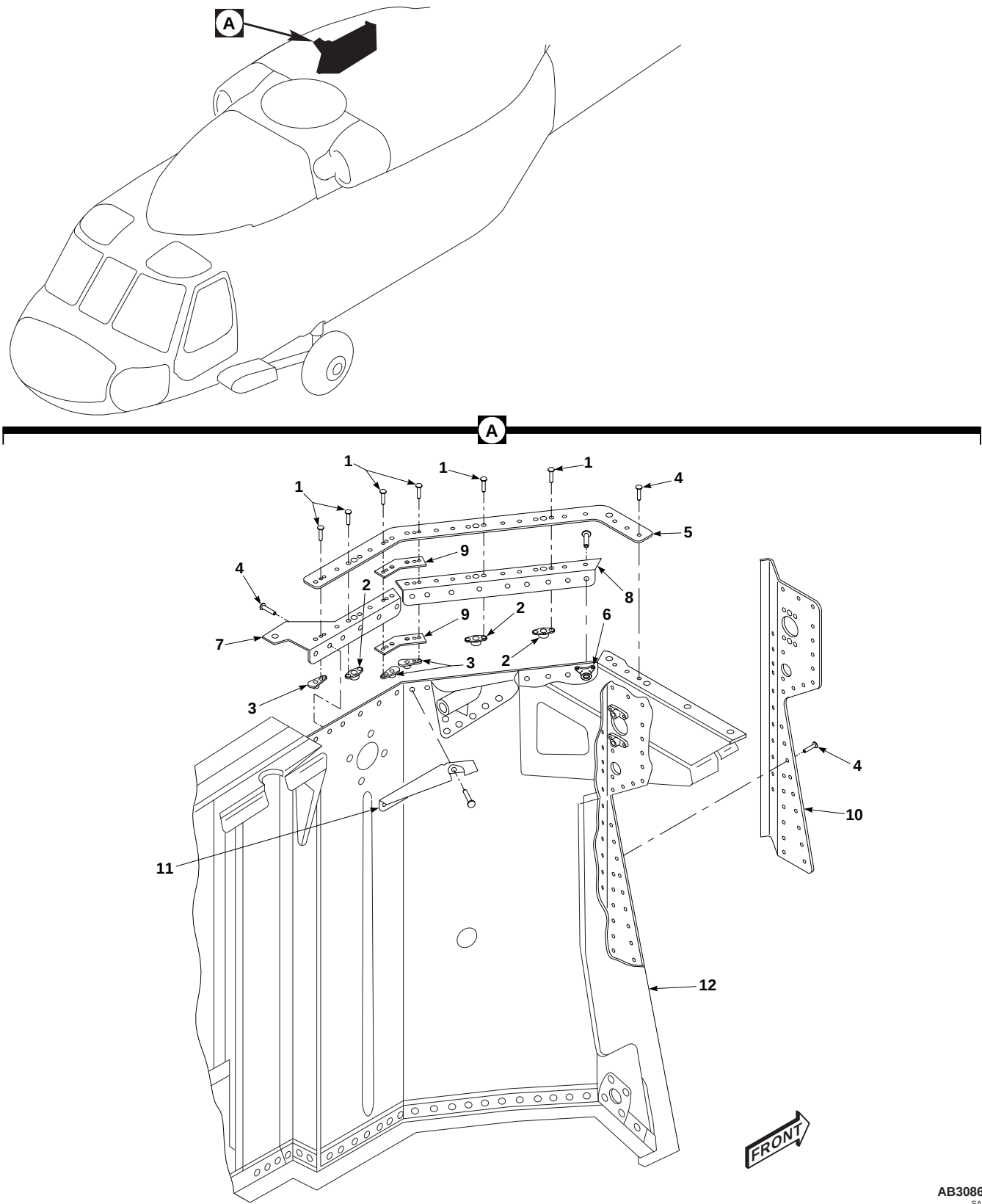


Figure E-27. R/H Firewall Modification Kit

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FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-27-	70070-30307-012		R/H FIREWALL MODIFICATION KIT.....	REF	
-1	NAS1097AD3-9	.	RIVET.....	18	
-2	MS21060-3	.	NUTPLATE	4	
-3	MS21062-3	.	NUTPLATE	3	
-4	MS20615-4M5	.	RIVET.....	71	
-5	70070-30307-104	.	STRAP	1	
-6	MS21074-L3	.	NUTPLATE	1	
-7	70304-02114-167	.	ANGLE	1	
-8	70304-02114-168	.	ANGLE.....	1	
-9	70304-02114-169	.	DOUBLER.....	2	
-10	70070-30307-103	.	DOUBLER.....	1	
-11	70304-02114-170	.	ANGLE.....	1	
-12	70070-30307-014	.	FIREWALL INSTL (Reidentified from 70304-02200-012).....	REF	
	70070-30307-046	.	FIREWALL ASSY (Reidentified from 70304-02114-041).....	REF	
	70070-30307-047	.	FIREWALL ASSY (Reidentified from 70304-02114-043).....	REF	
	70070-30307-048	.	FIREWALL ASSY (Reidentified from 70304-02114-045).....	REF	
	70070-30307-049	.	FIREWALL ASSY (Reidentified from 70304-02114-046).....	REF	
	70070-30307-050	.	FIREWALL ASSY (Reidentified from 70304-02114-049).....	REF	
	70070-30307-051	.	FIREWALL ASSY (Reidentified from 70304-02114-051).....	REF	

E-23. COWL ASSEMBLY MODIFICATION KIT (50-33).

Subject: Engine Cowl Assembly, Left and Right Side, Modification of, dated 31 March 2003

Purpose: Provide instructions for installation of splice straps on engine cowl assembly.

Model: UH-60A

Description: New one piece hinge fitting assemblies are installed to reinforce the hinge area.

Drawings Required for Modification:

70070-30308

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003

Instructions:

NOTE

- A complete review of this SSI is recommended before incorporating the engine cowl assembly modification kit.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in sheet metal/structural work, skilled in reading modification drawings, standard working/repair, and safety practices. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, and paint touch up may not be called out herein. However, these steps and all other required routine tasks shall be done.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- When installing fasteners refer to drawing sheet and zones for rivet code on applicable drawings.

A. Preparation for modification:

- (1) Confirm all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Installation of parts for modification of engine cowl assembly:

NOTE

- Drawing shows right side forward hinge only. Rework of remaining hinge locations is the same, except remove hinge -042, and install hinge fitting assembly -048.

- This modification does not apply to platforms with alternate method of manufacturing with walking surfaces integral with rib support.

(1) Position cowl assembly (70302-02141-041, -042, -044, -045, -048, or -049) on suitable work bench.

(2) Remove hinge (70302-02157-041 and -042) and shims (70302-02141-109) if applicable, from forward and aft ribs as follows:

(a) Remove and discard seven screws, nuts, and washers on hinge assembly (70302-02157-041 and -042) (Dwg 70070-30308, Sheet 2, Zone 6-E).

NOTE

If shims (70302-02141-109) are installed proceed to step B.(2)(b). Otherwise proceed to step B.(2).

(b) Wedge a non-metallic scraper in between the shims of aluminum stock (70302-02141-109) and remove and save for reinstallation (Sheet 2, Zone 5-C and Note 12).

(c) Position and pin at two locations removed hinge (70302-02141-041 or -042) on top of new hinge fitting assembly (70070-30308-047 or -048).

NOTE

Placing a spacer bar in between the old and new hinge assemblies will insure proper alignment during pinning and drilling operation.

(d) Transfer drill from old hinge (70302-02141-041 or -042) into new hinge fitting assembly (70070-30308-047 or -048) at two locations.

(e) Remove pins and clean and deburr the two holes drilled in step (d).

(f) Position hinge fitting assembly (70070-30308-047 or -048) into engine cowling (70302-02141-041, -042, -044, -045, -048, or -049) and pin two previously drilled holes (Sheet 2, Zone 6-E).

(g) Transfer drill remaining five 0.1935-inch diameter holes from engine cowl (70302-02141-042, -044, -045, -048, or -049) to hinge fitting assembly (70070-30308-047, or -048) to match existing hole locations (Sheet 2, Zone 7-C).

(h) Temporarily fasten all holes in hinge fitting (70070-30308-047 or -048) to engine cowl assembly (70302-02141-041, -042, -044, -045, -048, or -049) (Sheet 2, Zone 7-C).

(i) Layout 14 holes in engine cowl assembly (70070-30308-041, -042, -044, -045, -045, -048, or -049) and hinge fitting assembly (70070-30308-047 or -048) (Sheet 2, Zone 8-G).

(j) Remove hinge fitting assembly (70070-30308-047 or -048) deburr and touch up as required.

(k) Install hinge fitting assembly (70070-30308-047 or -048) into cowl assembly (70302-02141-041, -042, -044, -045, -048, or -049) using hardware shown. If shims were previously removed, reinstall at this time (Sheet 2, Zone 8-C).

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

(l) Mix syntactic foam (Epocast, Type II, 1652 A/B) per manufacturers instructions and fill interior of the ribs through previously drilled holes in step B.(2)(i) (Sheet 2, Zone 5-G).

(m) Drill out holes previously filled with syntactic foam (Epocast, Type II, 1652 A/B) and install fasteners shown (Sheet 2, Zone 8-G).

(3) After rework reidentify engine cowl assembly using pen and contrasting ink as follows:

<u>FROM</u>	<u>TO</u>
70302-02141-041	70070-30308-041
70302-02141-042	70070-30308-042
70302-02141-044	70070-30308-043
70302-02141-045	70070-30308-044
70302-02141-048	70070-30308-045
70302-02141-049	70070-30308-046

C. Reinstallation of removed equipment:

(1) Perform installation of parts and equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70070-30308-011	Mod. Kit	+3.0	375.5	+1.126

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: +3.0 pounds

Moment arm: 375.5 in.

Change in basic moment/1000: 1.126

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	1	32.0	*32.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, Cowl Assembly-Engine	70070-30308-011	(1)
	consisting of:		
2	Hinge Fitting Assembly	70070-30308-047	
2	Hinge Fitting Assembly	70070-30308-048	
75	Pin, Hi Lok	HL20PB-6-10	
75	Collar	HL75-6AW	
31	Screw	MS27039C1-14	
31	Nut	MS21043-3	
62	Washer	NAS1149C0332R	

B. Consumable Material:

WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
16 oz.	Foam, Syntactic	Epocast, Type II, 1652 A/B, SS9587-003 or equivalent	(1)

C. Source:

(1) Available through normal supply channels

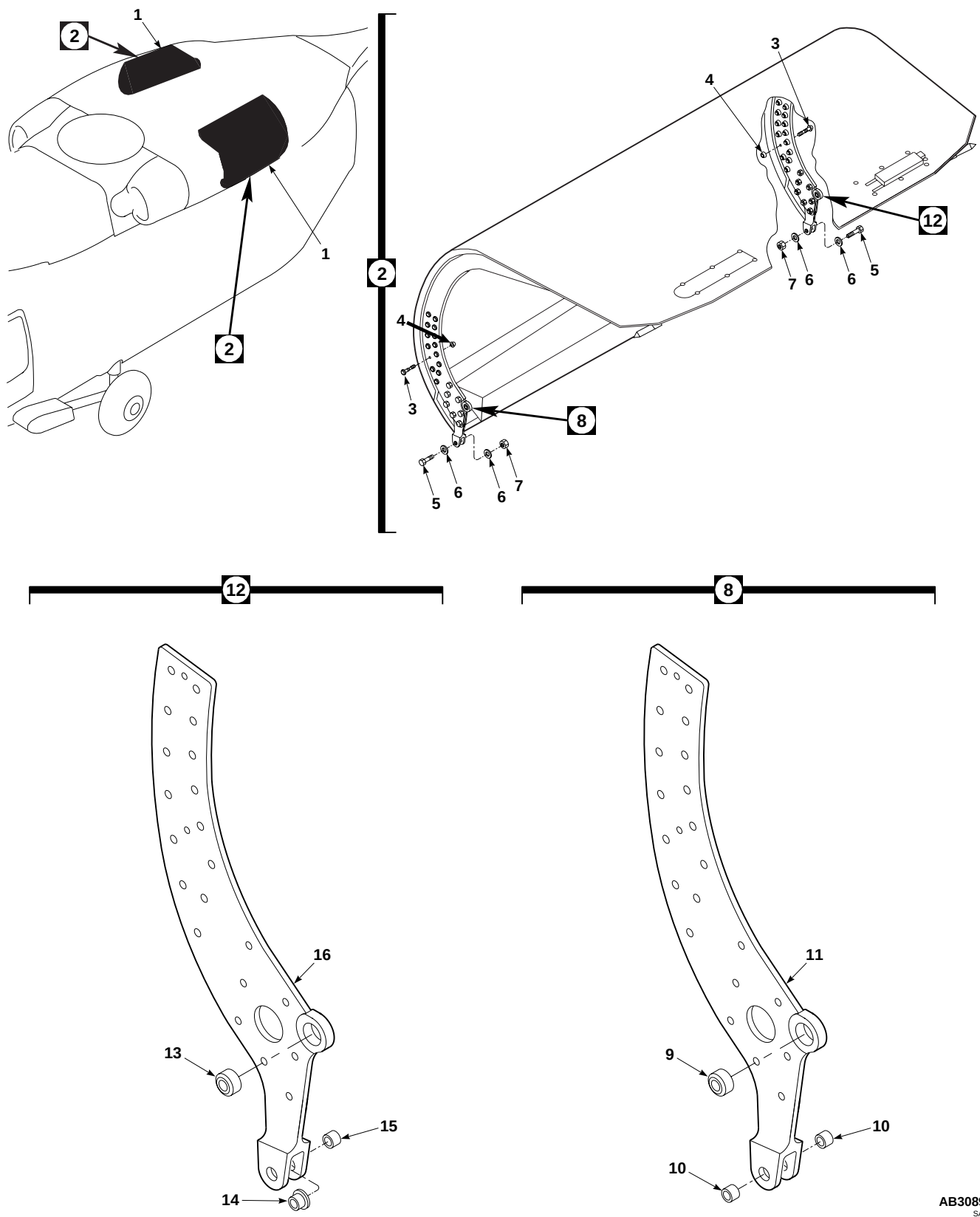


Figure E-28. Cowl Assembly Modification Kit

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FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-28-	70070-30308-011		COWL ASSEMBLY MODIFICATION KIT.....	REF	
-1	70070-30308-013	.	COWL INSTALLATION, (Modifies 70302-02200-011).....	REF	
-2	70070-30308-041	.	COWL ASSY (Reidentified from 70302-02141-041).....	REF	
	70070-30308-042	.	COWL ASSY (Reidentified from 70302-02141-042).....	REF	
	70070-30308-043	.	COWL ASSY (Reidentified from 70302-02141-044).....	REF	
	70070-30308-044	.	COWL ASSY (Reidentified from 70302-02141-045).....	REF	
	70070-30308-045	.	COWL ASSY (Reidentified from 70302-02141-048).....	REF	
	70070-30308-046	.	COWL ASSY (Reidentified from 70302-02141-049).....	REF	
-3	HL20PB-6-10	.	HI-LOK PIN, (73197).....	14	
-4	HL75-6AW	.	COLLAR, (73197).....	14	
-5	MS27039C1-14	.	SCREW.....	28	
-6	NAS1149C0332R	.	FLAT WASHER.....	56	
-7	MS21043-3	.	NUT.....	28	
-8	70070-30308-047	.	HINGE FITTING ASSEMBLY.....	2	
-9	MS14103-4K	.	BEARING.....	1	
	SBSH8ATC20ZM	.	BEARING.....	1	*
-10	NAS537-4-034	.	BUSHING.....	2	
-11	70070-30308-102	.	HINGE FITTING.....	1	
-12	70070-30308-048	.	HINGE FITTING ASSEMBLY.....	2	
-13	MS14103-4K	.	BEARING.....	1	
	SBSH8ATC20ZM	.	BEARING.....	1	*
-14	NAS77-4-020	.	BEARING.....	1	
-15	NAS75-4-011	.	BUSHING.....	1	
-16	70070-30308-102	.	HINGE FITTING.....	1	

E-24. HIRSS REPAIR KIT (50-30).Subject: HIRSS Repair Kit ; Installation ofPurpose: Provide instructions to install HIRSS repair kit.Model: UH-60ADescription The following is a brief overview of the work required to install the HIRSS repair kit. New doublers, fillers, angles, and radius blocks are installed to the left and right exhaust extenders.Drawings required for modification:

70072-30000, 70308-03611

References: (a) Special Service Instructions (SSI) No. 50-31, Installation of "A to A" Recapitalization Program, dated March 31, 2003Instructions:**NOTE**

- A complete review of this SSI is recommended before installing HIRSS repair kit.
- Before beginning this modification procedure, use the material information list to inventory the kit. Make sure all parts are present and in serviceable condition.
- Where drawing numbers are not listed within individual steps, drawing(s) listed in preceding step(s) are the controlling authority.
- The sheet metal and structural modifications in this SSI shall be done by personnel experienced in reading modification drawings. Routine steps such as cleaning, layout and drilling, deburring, standard repairs, corrosion control, clean up after rework, chemical coating for aluminum after cutting/trimming parts, paint touch up, and safety practices may not be called out herein. However, these steps and all other required routine tasks shall be done.
- When installing fasteners refer to drawing sheet and zones and rivet code on applicable drawing.
- Slight variations to the instructions contained herein are allowed, as long as the intent of the modification is accomplished.

A. Preparation for modification and removal of equipment.

- (1) Confirm that all warnings, cautions, and notes are complied with per reference (a).
- (2) Perform preparation for modification per reference (a).

B. Modification of left and right exhaust extender assemblies as follows (Dwg 70308-03611):

- (1) Remove support angle (70308-03611-124) from right side exhaust extender (Sheet 2, Zone 21-D).
- (2) Temporarily install new support angle (70308-03611-124), angle clip (70308-03611-159), filler plate (70308-03611-160), and radius block (SS1058-5-38-24) (Sheet 2, Zones 21-D, 22-B, and 24-H; Sheet 6, Zone 21-C).

(3) Position and temporarily install doubler (70308-03611-166) and fillers (70308-03611-167 and 168) (Sheet 2, Zones 18-H, 20-G, and 18-F).

(4) Remove all parts temporarily installed in steps B.(2) and B.(3), deburr and touch up as required.

(5) Install all parts removed in step B.(4) using fasteners shown (Sheet 2, Zones 21-D, 22-B, 24-H, 18-H, 20-G, and 18-F; Sheet 6, Zone 21-C; Sheet 1, Note 20).

(6) Remove support angle (70308-03611-123) from left side exhaust extender (Sheet 2, Zone 21-D).

(7) Temporarily install new support angle (70308-03611-123), angle clip (70308-03611-159), filler plate (70308-03611-160), and radius block (SS1058-5-38-24) (Sheet 2, Zones 21-D, 22-B, and 24-H; Sheet 6 Zone 21-C).

(8) Position and temporarily install doubler (70308-03611-165) and fillers (70308-03611-167 and -168) (Sheet 2, Zones 18-H, 20-G, and 18-F).

(9) Remove fitted parts, deburr and touch up as required.

(10) Install fitted parts using fasteners shown (Sheet 2, Zones 21-D, 22-B, 24-H, 18-H, 20-G, and 18-F; Sheet 6, Zone 21-C; Sheet 1, Note 20).

C. Reinstallation of removed equipment:

(1) Install removed equipment per reference (a).

D. Record of Compliance:

(1) Make an appropriate logbook entry to show compliance with this Special Service Instruction.

Weight and Balance Data:

<u>QTY</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>POUNDS WEIGHT</u>	<u>INCHES AFT OF DATUM</u>	<u>MOMENT/ 1000</u>
1	70072-3000-011	Mod. Kit, HIRSS Repair Kit	+2.1	442.2	0.929

Weight and Balance: Change resulting from these instructions are as follows:

Change in basic weight: + 2.1 pounds

Moment arm: 442.2 in.

Change in basic moment/1000: 0.929

Manpower (Estimated)

	<u>No. of Personnel</u>	<u>No. of Hours</u>	<u>Man-hours</u>
Sheet Metal Mechanic	1	16.0	*16.0

*Does not include time required to prepare helicopter or return it to flight status.

Material Information:

A. Modification Kit Required:

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
1	Mod. Kit, HIRSS Repair Kit,	70072-30000-011	(1)
	consisting of:		
1	Repair Kit, RH,	70072-30000-012	
	consisting of:		
2	Collar	HL1087ATW-5	
2	Pin, Hi Lok	HL20PB-5-2	
11	Rivet, Blind	NAS1738M4-2	
15	Rivet, Blind	NAS1738M4-3	
8	Rivet, Blind	NAS1738M4-4	
41	Rivet, Blind	NAS1738M4-5	
1	Radius Block	SS1058-5-38-24	
1	Support Angle	70308-03611-124	
1	Angle Clip	70308-03611-159	
1	Filler Plate	70308-03611-160	
1	Doubler	70308-03611-166	
1	Filler	70308-03611-167	
2	Filler	70308-03611-168	
1	Repair Kit, LH,	70072-30000-013	
	consisting of:		
2	Collar	HL1087ATW-5	
2	Pin, Hi Lok	HL20PB-5-2	
11	Rivet, Blind	NAS1738M4-2	
15	Rivet, Blind	NAS1738M4-3	
8	Rivet, Blind	NAS1738M4-4	
41	Rivet, Blind	NAS1738M4-5	
1	Radius Block	SS1058-5-38-24	
1	Support Angle	70308-03611-123	
1	Angle Clip	70308-03611-159	
1	Filler Plate	70308-03611-160	
1	Doubler	70308-03611-165	
1	Filler	70308-03611-167	

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
2	Filler	70308-03611-168	

B. Consumable Material:

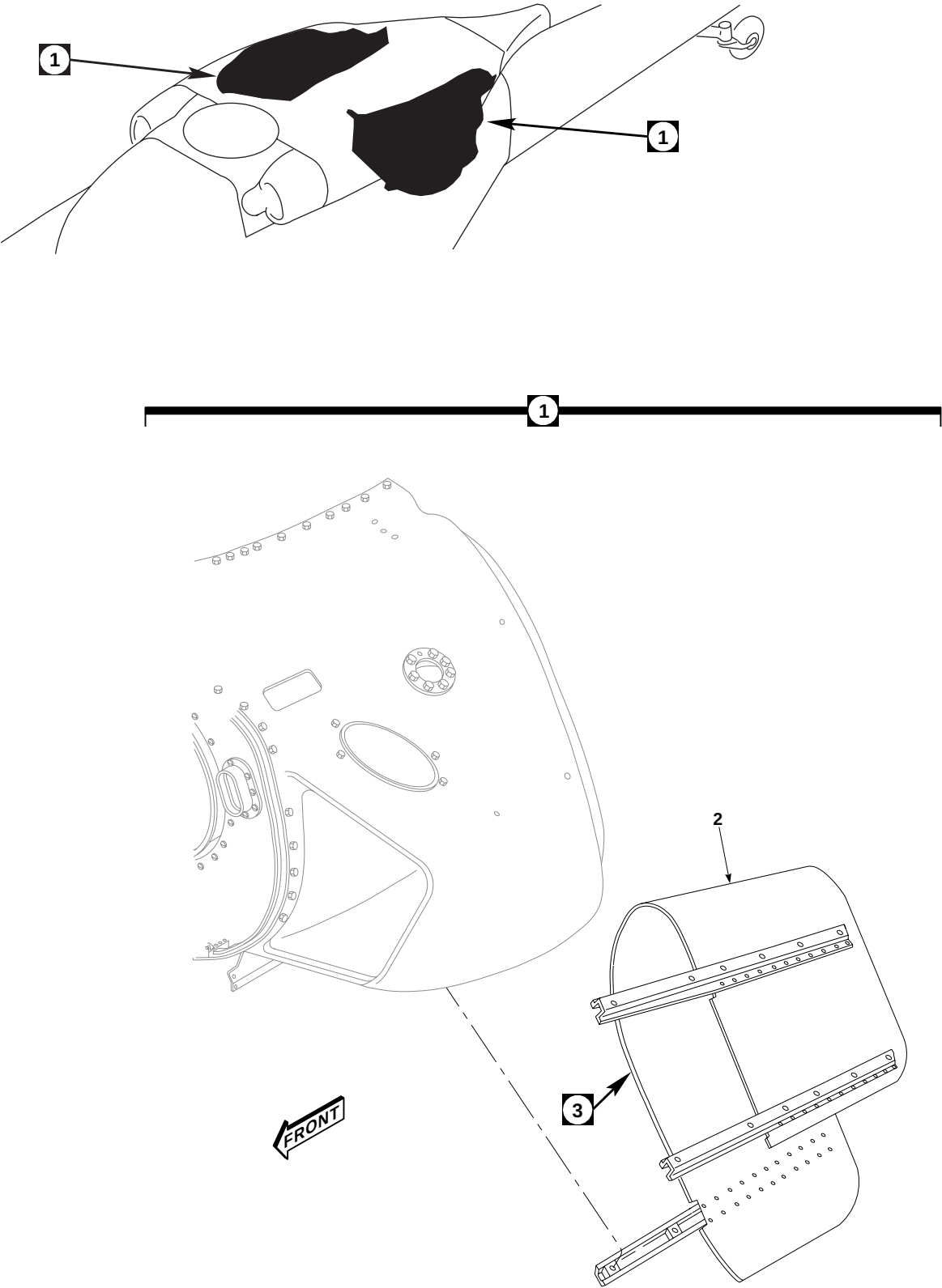
WARNING

OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK, AND FLAME. MAKE CERTAIN EQUIPMENT IS PROPERLY GROUNDED AND FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT, AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL PEOPLE, OR MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	<u>Part Number</u>	<u>Source</u>
6 oz.	Sealant	RTV133 or equivalent	(1)

C. Source:

(1) Available through normal supply channels



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Figure E-29. HIRSS Repair Kit (Sheet 1 of 2)

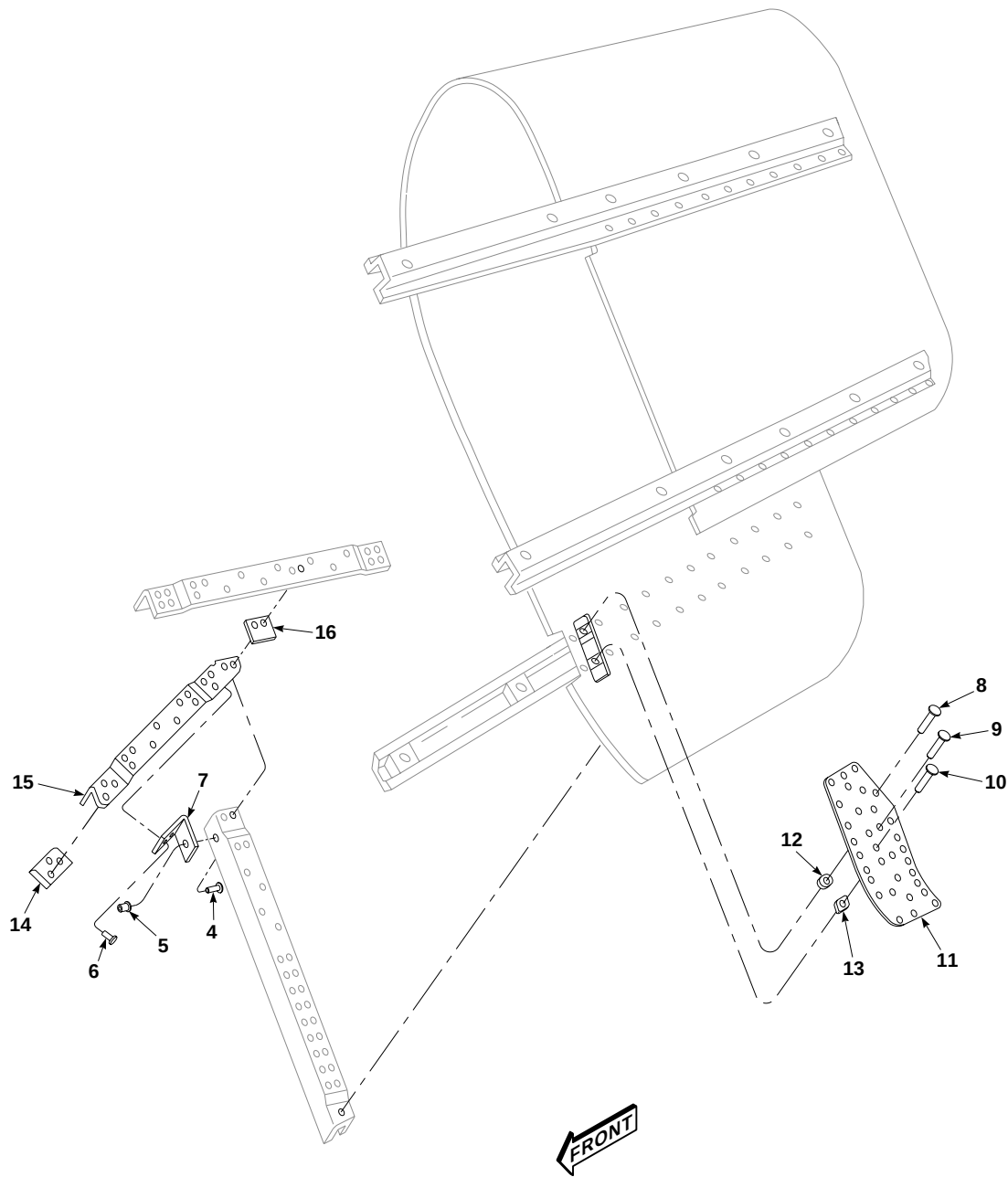


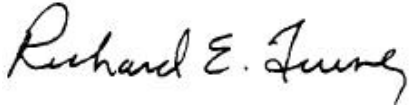
Figure E-29. HIRSS Repair Kit (Sheet 2 of 2)

FIGURE & INDEX NO.	PART NUMBER	1 2 3 4 5 6 7	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
E-29-	70072-30000-011		HIRSS REPAIR KIT.....	REF	
-1	70308-03611-011		. EXTENDER INSTALLATION.....	REF	
	70308-03611-012		. EXTENDER INSTALLATION.....	REF	
	70308-03611-013		. EXTENDER INSTALLATION.....	REF	
	70308-03611-014		. EXTENDER INSTALLATION.....	REF	
-2	70308-03611-041		. EXTENDER ASSY. (Used on 70308-03611-011).....	REF	
	70308-03611-042		. EXTENDER ASSY. (Used on 70308-03611-012).....	REF	
	70308-03611-053		. EXTENDER ASSY. (Used on 70308-03611-013).....	REF	
	70308-03611-054		. EXTENDER ASSY. (Used on 70308-03611-014).....	REF	
-3	70072-30000-013		. REPAIR KIT LH	1	
	70072-30000-012		. REPAIR KIT	1	
-4	HL20PB-5-2		. . HI-LOK PIN, (73197).....	2	
-5	HL1087ATW-5		. . COLLAR, (73197)	2	
-6	NAS1739M4-3		. . BLIND RIVET	2	
-7	70308-03611-159		. . ANGLE CLIP	1	
-8	NAS1738M4-2		. . BLIND RIVET	11	
-9	NAS1738M4-3		. . BLIND RIVET	15	
-10	NAS1738M4-4		. . BLIND RIVET	8	
	NAS1738M4-5		. . BLIND RIVET	41	*
-11	70308-03611-165		. . DOUBLER, (Used on 70308-03611-041 and -053).....	1	
	70308-03611-166		. . DOUBLER, (Used on 70308-03611-042 and -054).....	1	
-12	70308-03611-167		. . FILLER	1	
-13	70308-03611-168		. . FILLER	2	
-14	SS1058-5-38-24		. . RADIUS BLOCK	1	
-15	70308-03611-123		. . SUPPORT ANGLE, (Used on 70308-03611-041 and -053).....	1	
	70308-03611-124		. . SUPPORT ANGLE, (Used on 70308-03611-042 and -054).....	1	
-16	70308-03611-160		. . FILLER PLATE	1	

FOR THE COMMANDER:

JOHN B. SMITH
Colonel, QM
Chief of Staff

OFFICIAL:

A handwritten signature in black ink, reading "Richard E. Turner". The signature is written in a cursive style with a large, stylized 'R' and 'T'.

RICHARD E. TURNER
Deputy Director
Integrated Materiel Management Center

REQUEST FOR DEPOT ENGINEERING SUPPORT				CONTRACT NO	PRIORITY OF REQUEST ☐ URGENT ☐ ROUTINE	DATE OF REQUEST	
TO: THRU: COPIES:				FROM:			
				POINT-OF-CONTACT:			
				PUBLICATION NO.	CHANGE NO.	PUBLICATION DATE	
				PUBLICATION TITLE			
AREA OF PUBLICATION WHERE PROBLEM EXISTS							
BE EXACT				PIN-POINT WHERE IT IS			IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:
PAGE NO	PARA- GRAPH	FIGURE NO	TABLE NO				
							(Use Continuation Sheet If Necessary)
TITLE				SIGNATURE			DATE
RECOMMENDED SOLUTIONS OR DISPOSITION:							(Use Continuation Sheet If Necessary)
TITLE				SIGNATURE			DATE

These are the instructions for sending an electronic 2028

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whoever" <whoever@wherever.army.mil>

To: 2028@redstone.army.mil

Subject: DA Form 2028

1. **From:** Joe Smith
2. **Unit:** home
3. **Address:** 4300 Park
4. **City:** Hometown
5. **St:** MO
6. **Zip:** 77777
7. **Date Sent:** 19-OCT-93
8. **Pub no:** 55-2840-229-23
9. **Pub Title:** TM
10. **Publication Date:** 04-JUL-85
11. **Change Number:** 7
12. **Submitter Rank:** MSG
13. **Submitter FName:** Joe
14. **Submitter MName:** T
15. **Submitter LName:** Smith
16. **Submitter Phone:** 123-123-1234
17. **Problem:** 1
18. **Page:** 2
19. **Paragraph:** 3
20. **Line:** 4
21. **NSN:** 5
22. **Reference:** 6
23. **Figure:** 7
24. **Table:** 8
25. **Item:** 9
26. **Total:** 123
27. **Text:**

This is the text for the problem below line 27.

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM)	DATE 8/30/02
TO: (Forward to proponent of publication or form)(Include ZIP Code) Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898						FROM: (Activity and location)(Include ZIP Code) MSG, Jane Q. Doe 1234 Any Street Nowhere Town, AL 34565	
PART 1 - ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER TM 9-1005-433-24						DATE 16 Sep 2002	TITLE Organizational, Direct Support, And General Support Maintenance Manual for Machine Gun, .50 Caliber M3P and M3P Machine Gun Electrical Test Set Used On Avenger Air Defense Weapon System
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON	
1	WP0005 PG 3		2			Test or Corrective Action column should identify a different WP number.	
EXAMPLE							
* Reference to line numbers within the paragraph or subparagraph.							
TYPED NAME, GRADE OR TITLE MSG, Jane Q. Doe, SFC				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION 788-1234		SIGNATURE	

TO: (Forward direct to addressee listed in publication) Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898				FROM: (Activity and location) (Include ZIP Code) MSG, Jane Q. Doe 1234 Any Street Nowhere Town, AL 34565				DATE 8/30/02	
PART II - REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS									
PUBLICATION NUMBER				DATE		TITLE			
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION	
PART III - REMARKS (Any general remarks, suggestions, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)									
EXAMPLE									
TYPED NAME, GRADE OR TITLE MSG, Jane Q. Doe, SFC				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION 788-1234			SIGNATURE		

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM)	DATE
TO: (Forward to proponent of publication or form)(Include ZIP Code) Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898						FROM: (Activity and location)(Include ZIP Code)	
PART 1 - ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER						DATE	TITLE
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON	
* Reference to line numbers within the paragraph or subparagraph.							
TYPED NAME, GRADE OR TITLE					TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE

TO: (Forward direct to addressee listed in publication) Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898				FROM: (Activity and location) (Include ZIP Code)				DATE	
PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS									
PUBLICATION NUMBER				DATE			TITLE		
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION	
PART III – REMARKS (Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)									
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION			SIGNATURE		

The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigrams = .035 ounce
 1 decagram = 10 grams = .35 ounce
 1 hectogram = 10 decagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

Temperature (Exact)

F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
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