Publication No. CSP-026

Illustrated Parts List and Maintenance Instructions with Initial Installation Instructions

FOR

LITTER INSTALLATION

Part No. 369H90011-511
369H90011-517, 369H90011-519,
and 369H90011-521

USED ON HUGHES 500D AND 500MD (MODEL 369D) HELICOPTERS

Hughes Helicopters division of summa corporation / culver city, california

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TABLE OF CONTENTS

FOREWORD

F-1. PURPOSE AND CONTENT OF THIS MANUAL

F-2. This manual supplements information contained in HMI - Vol 1 and 369D - IPC, and contains instructions for initial installation and continuing maintenance for the litter installations. Weight and balance data is included. This manual also contains parts lists for procuring replacement parts for the litter installations.

F-3. APPLICABILITY

F-4. The litter installations are applicable for use on any Hughes 500D and 500MD (Model 369D) helicopter.

F-5. COMPATIBILITY OF COMBINED OPTIONAL EQUIPMENT

F-6. For compatibility information on which optional equipment may or may not be used in combination at the same time, refer to section 21, HMI - Vol 1.

F-7. ORGANIZATION OF CONTENTS

F-8. The contents of this manual is grouped into sections as outlined in the Table of Contents. Each section is organized to provide comprehensive coverage of entire systems, major equipment groupings, and major components that are similar or associated. (Procedures for each of these are presented in sequence as defined in section 1, HMI - Vol 1.)

F-9. USE OF THIS MANUAL

F-10. This manual is for use by operators of the Model 369D helicopter equipped with a litter installation. Although this manual is a separate publication, it should be kept with HMI - Vol 1, HMI - Vol 2, 369D - IPC, and other handbooks listed in section 1, HMI - Vol 1 that form the primary information file for the helicopter.

F-11. RELATED PUBLICATIONS

F-12. Reference is made to applicable portions of HMI - Vol 1 and 369D - IPC as required to accomplish instructions contained herein.

F-13. LITERATURE CHANGES AND REVISIONS

F-14. Changes and revisions to contents of this manual are made as defined in section 1, HMI - Vol 1.

SECTION 1
ILLUSTRATED PARTS LIST

1-1. SCOPE AND CONTENTS

1-2. This illustrated parts list provides, by means of text (parts lists) and companion illustrations, a complete parts definition of the litter installations manufactured by Hughes Helicopters, Culver City, California.

NOTE: The illustrated parts list is organized and presented in the same manner as the 369D Series Illustrated Parts List (369D - IPC). (For information on use, refer to 369D - IPC.)

1-3. GROUP ASSEMBLY PARTS LIST

1-4. The parts lists furnish information for procuring replacement parts for the litter installations and shall not be used for any other purpose. For information or procurement of replacement parts, refer to 369D - IPC.

1-5. ILLUSTRATIONS

1-6. Isometric illustrations are provided for each group assembly parts list. Each illustration is exploded to the extent necessary to show parts relationship for the complete litter installation (fig. 1-1).

1-7. USABLE ON CODE

1-8. The USABLE ON CODE column located at the right-hand side of the group assembly parts list pages indicates the effectivity of parts by aircraft serial number. In many cases two different parts are listed, one representing the original installation and another representing the improved replacement item. Alphabetic codes are used to indicate the aircraft serial number applications of a given part. When no USABLE ON CODE is listed, items are understood to have full effectivity.

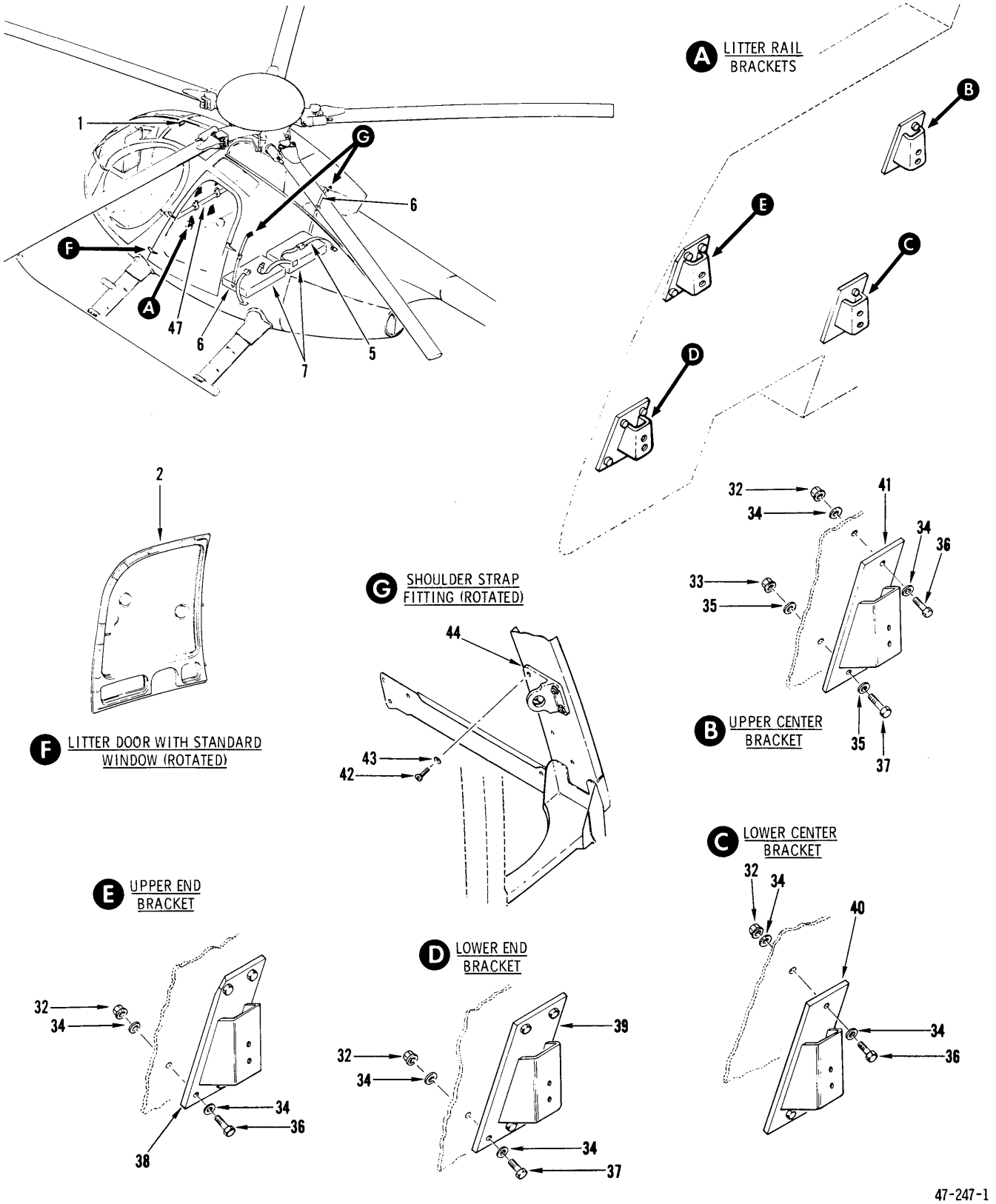

Figure 1-1. Litter kit installation (sheet 1 of 2)

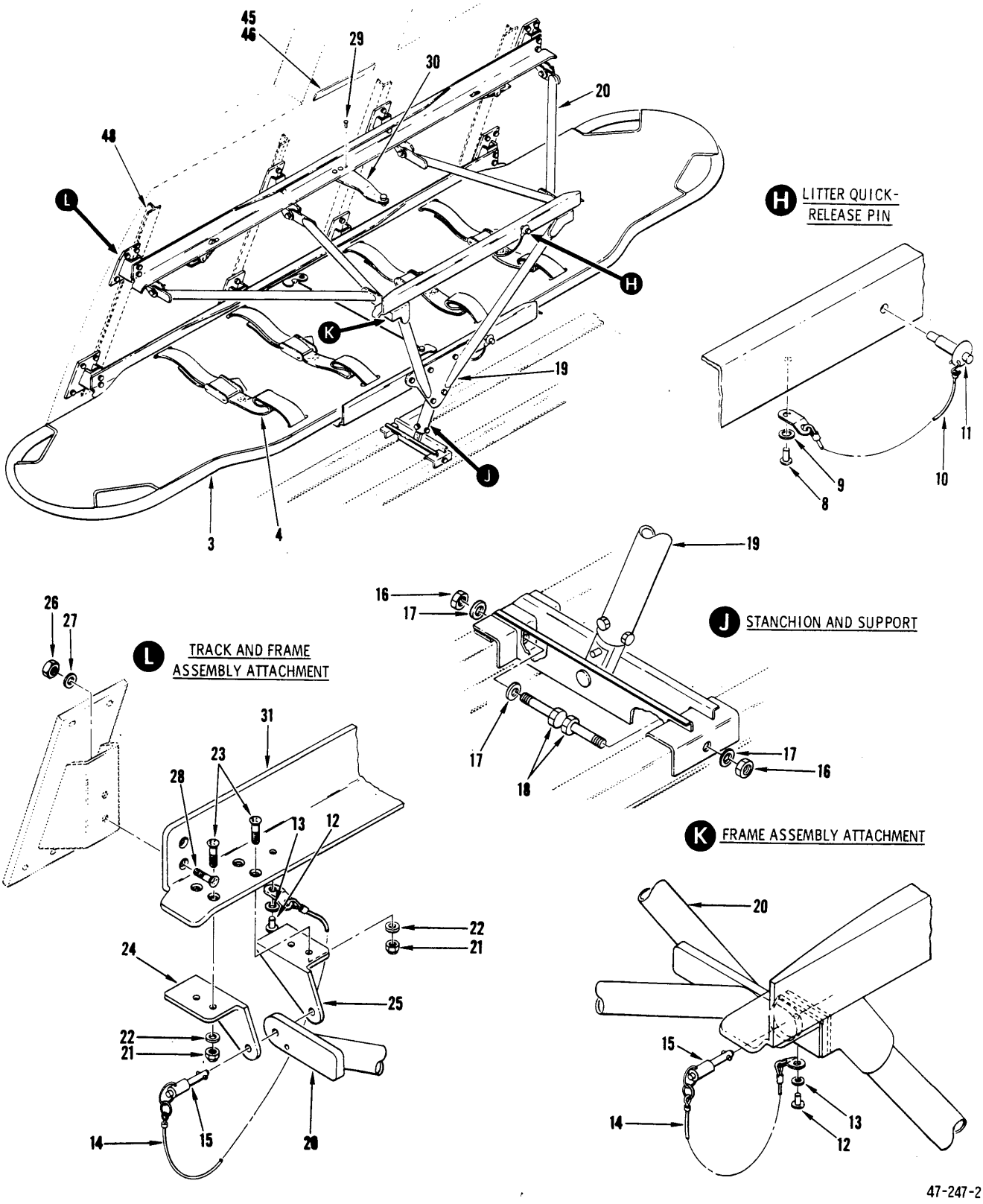

Figure 1-1. Litter kit installation (sheet 2 of 2)

FIG. & INDEX NO.	PART NO.	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
1-1-	369H90011-519	LITTER KIT INSTL (Complete with doors)	REF	
	369H90011-521	LITTER KIT INSTL (Without doors)	REF	
-1	369D292572	. CARD ASSY, VNE	1	
-2	369H90011-511	. DOOR KIT, HIGH HEAD ROOM (Component of 369H90011-519) (See figure 1-2 for breakdown)		
-3	369H92610	. LITTER ASSY	2	
-4	360H92723	. BELT ASSY	8	
-5	369H92252-9	. SEAT BELT	1	
	369H92252-7	. SEAT BELT	1	
-6	369H6513-3	. SHOULDER STRAP (For replacement order 369H6513-5)	2	
-7	369H92253-503	. SEAT ASSY	2	
	369H92253-501	. SEAT ASSY (Interchangeable with 369H92253-503 in ship sets only)	2	
-8	MS20426AD4	. RIVET	2	
-9	AN960PD04	. WASHER	2	
-10	L8T4V	. CABLE	2	
-11	SLS4B15S	. PIN	2	
-12	MS20470AD4	. RIVET	12	
-13	AN960PD04	. WASHER	12	
-14	LW1023-1-6	. LANYARD	12	
-15	NAS1333C6C07D	. PIN	12	
-16	MS21083N4	. NUT	2	
-17	AN960PD416L	. WASHER	3	
	AN960-416L	. WASHER (Interchangeable with AN960PD416L)	3	
-18	AN4-12A	. BOLT	2	
-19	369H92605	. STANCHION ASSY, AFT (See figure 1-3 for breakdown)	1	
-20	369H92600	. FRAME ASSY	4	
-21	MS21083N3	. NUT	32	
-22	AN960PD10L	. WASHER	32	
	AN960-10L	. WASHER (Interchangeable with AN960PD10L)	32	
-23	NAS1203-3	. BOLT	32	
-24	369H92609-1	. BRACKET, LH	8	
-25	369H92609-2	. BRACKET, RH	8	
-26	MS21083N3	. NUT	16	
-27	AN960PD10L	. WASHER	16	
	AN960-10L	. WASHER (Interchangeable with AN960PD10L)	16	
-28	NAS1203-5	. BOLT	16	
-29	MS20426AD4	. RIVET	3	
-30	369H92611	. SUPPORT	1	
-31	369H92606	. TRACK ASSY	2	
-32	MS21042-3	. NUT	22	
-33	MS21042-4	. NUT	4	
-34	AN960PD10L	. WASHER	44	
	AN960-10L	. WASHER (Interchangeable with AN960PD10L)	44	
-35	AN960PD416L	. WASHER	4	
	AN960-416L	. WASHER (Interchangeable with AN960PD416L)	4	
-36	AN3-5A	. BOLT	14	
-37	AN3-6A	. BOLT	10	
-38	369H92603-1	. BRACKET, LH	1	
	369H92603-2	. BRACKET, RH	1	
-39	369H92604-1	. BRACKET, LH	1	
	369H92604-2	. BRACKET, RH	1	

FIG. & INDEX NO.	PART NO.	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
1-1-40	369H92602-1	. BRACKET, LH	1	
	369H92602-2	. BRACKET, RH	1	
-41	369H92601-1	. BRACKET, LH	1	
	369H92601-2	. BRACKET, RH	1	
-42	NAS623-3-4	. SCREW	8	
-43	AN960PD10L	. WASHER	8	
	AN960-10L	. WASHER (Interchangeable with AN960PD10L)	8	
-44	369H92250	. FITTING	2	
-45	V330-1-80-100	. HOOK, VELCRO (Used only when 369H90123 Rotor Brake Kit is installed)	AR	
-46	V330-2-100	. PILE, VELCRO (Used only when 369H90123 Rotor Brake Kit is installed)	AR	
-47	369H92173	. RETAINER INSTL, PASSENGER AND LITTER. DOOR (See figure 1-4 for breakdown)	2	
-48	369H90011-517	. PROVISION, LITTER KIT (Component of 369H90011-519) (See figure 1-5 for breakdown)	1	

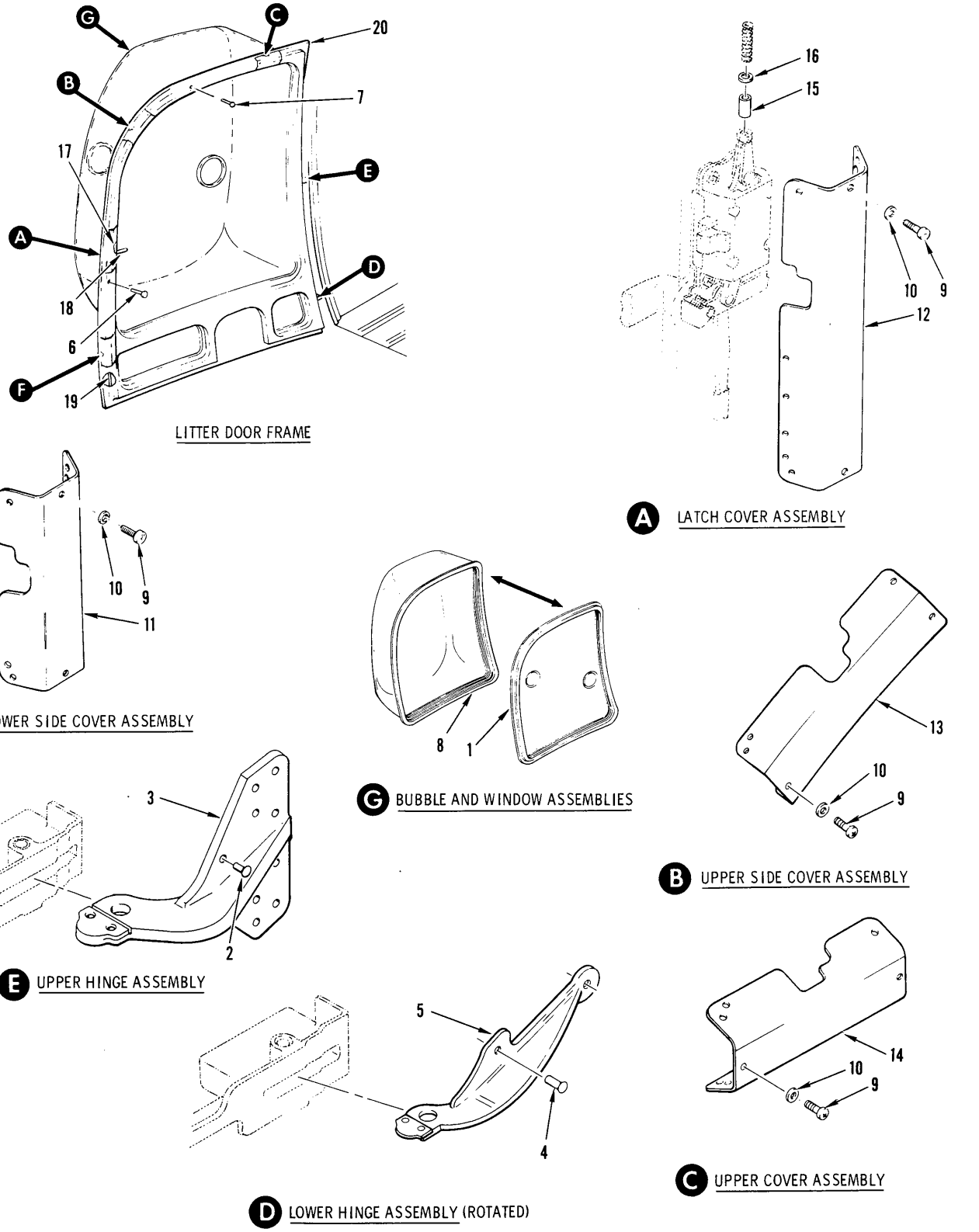

Figure 1-2. High head room door kit

FIG. & INDEX NO.	PART NO.	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
1-2-	369H90011-511	DOOR KIT, HIGH HEAD ROOM (Component of ... 369H90011-519) (May be procured separately) (See figure 1-1 for NHA)	REF	
	369A9906	. HANDLE, JACK	1	
-1	369H92731-1	. WINDOW ASSY, LH	1	
	369H92731-2	. WINDOW ASSY, RH	1	
	369H90085-1	. DOOR ASSY, LH	1	
	369H90085-2	. DOOR ASSY, RH	1	
-2	NAS1738B4	. . RIVET	8	
-3	369H92747-1	. . HINGE, UPPER, LH	1	
	369H92747-2	. . HINGE, UPPER, RH	1	
-4	NAS1738B5	. . RIVET	4	
-5	369H92034-1	. . HINGE, LOWER, LH	1	
	369H92034-2	. . HINGE, LOWER, RH	1	
-6	MLSPB4	. . RIVET	8	
-7	MS20470AD4	. . RIVET	16	
-8	369H92733-1	. . BUBBLE ASSY, LH	1	
	369H92733-2	. . BUBBLE ASSY, RH	1	
-9	AN515C6R	. . SCREW	30	
-10	AN960PD6L	. . WASHER	30	
-11	369H92732-1	. . COVER, LH	1	
	369H92732-2	. . COVER, RH	1	
-12	369H2038-11	. . COVER, LH	1	
	369H2038-12	. . COVER, RH	1	
-13	369H2038-13	. . COVER, LH	1	
	369H2038-14	. . COVER, RH	1	
-14	369H2038-15	. . COVER, LH	1	
	369H2038-16	. . COVER, RH	1	
-15	NAS43DD320	. . SPACER	1	
-16	AN960-10L	. . WASHER	1	
-17	C8101F	. . DOOR LOCK, LH	1	
	C8101C	. . DOOR LOCK, RH	1	
-18	369H2048-15	. . LATCHING SYSTEM, LH	1	
	369H2048-16	. . LATCHING SYSTEM, RH	1	
-19	MR4665	. . EXTRUSION	1	
-20	369H92702-1	. . DOOR STRUCTURE, LH	1	
	369H92702-2	. . DOOR STRUCTURE, RH	1	

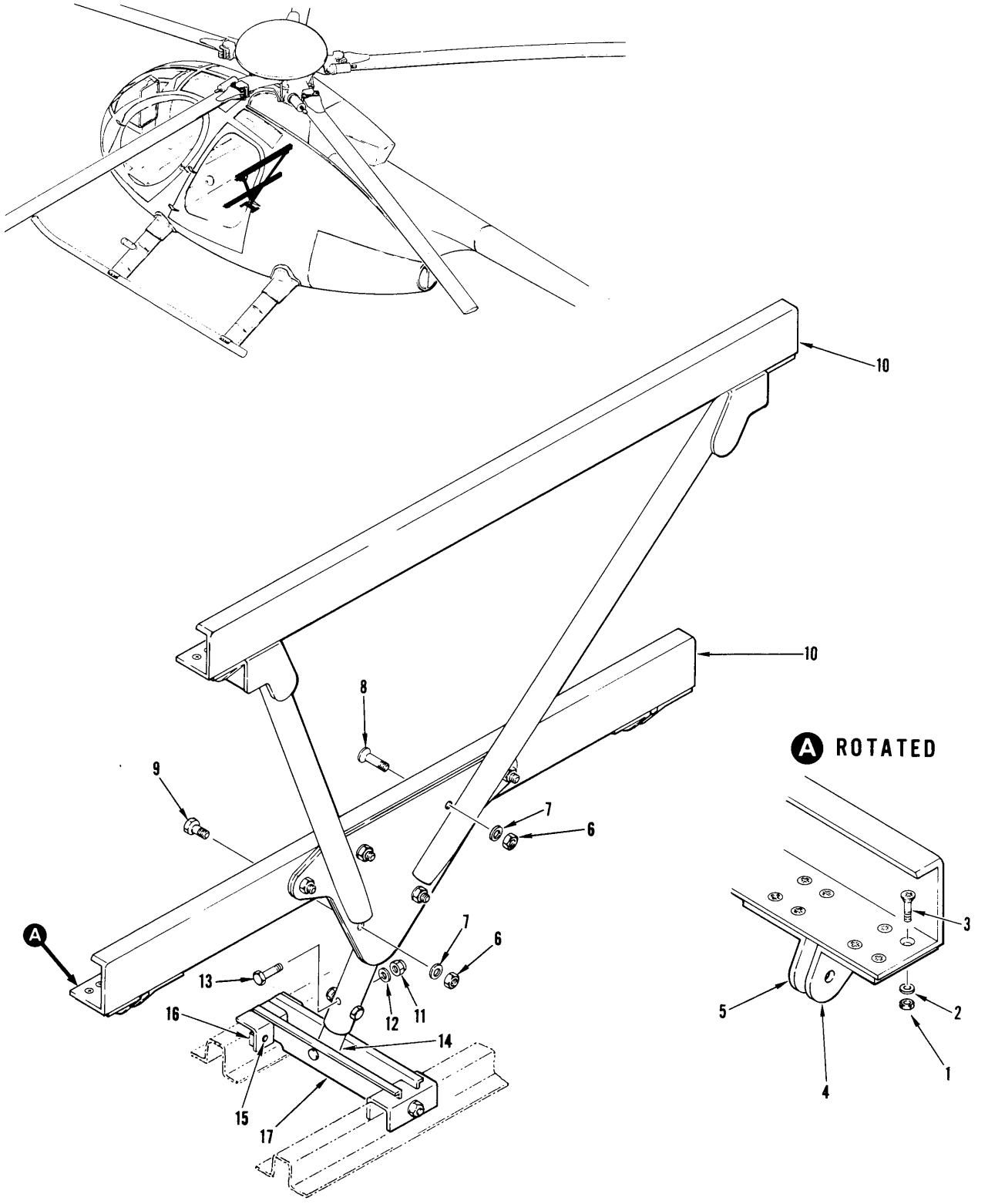

Figure 1-3. Aft stanchion assembly

FIG. & INDEX NO.	PART NO.	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
1-3-	369H92605	STANCHION ASSY, AFT (See figure 1-1 for NHA)	REF	
-1	MS21083N3	. NUT	24	
-2	AN960-10	. WASHER	24	
-3	NAS1203-5	. BOLT	24	
-4	369H92605-19	. ANGLE	3	
-5	369H92605-20	. ANGLE	3	
-6	MS21083N4	. NUT	6	
-7	AN960-416L	. WASHER	6	
-8	NAS1204-5	. BOLT	4	
-9	AN4-4A	. BOLT	2	
-10	369H92607	. TRACK ASSY	2	
-11	MS1083N3	. NUT	2	
-12	AN960-10	. WASHER	2	
-13	AN3-13A	. BOLT	2	
-14	CLH51-3	. LOCK ASSY	1	
-15	MS20427M3	. RIVET	2	
-16	369H92605-7	. SHIM (Thickness as required)	1	
-17	369H92605-9	. SUPPORT	1	

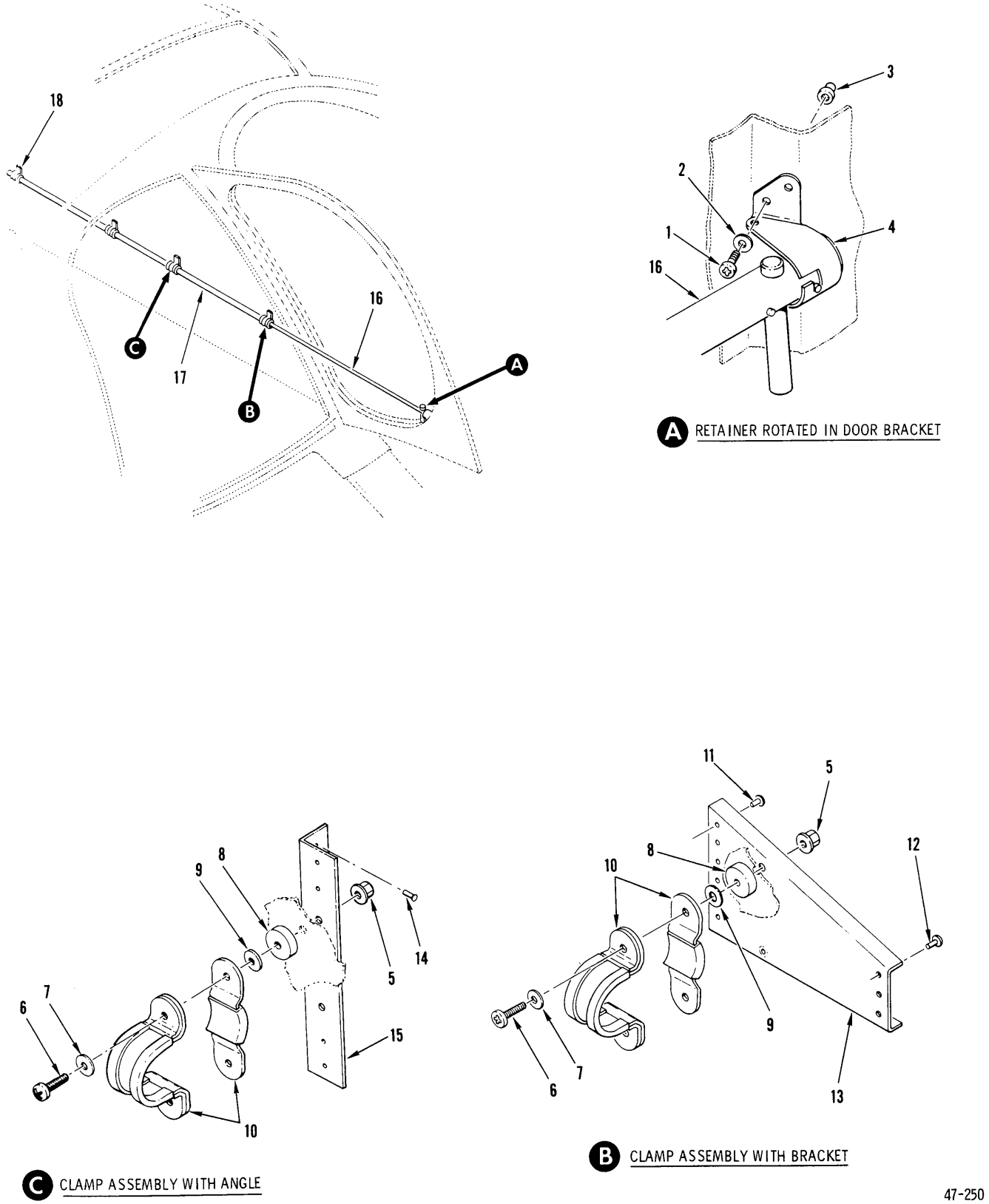

Figure 1-4. Passenger and litter door retainer installation

FIG. & INDEX NO.	PART NO.	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
1-4-	369H92173	RETAINER INSTL, PASSENGER AND LITTER DOOR (May be procured separately) (See figure 1-1 for NHA)	REF	
-1	NAS1403-2	. SCREW	4	
-2	AN960-10L	. WASHER	4	
-3	S10H85	. RIVNUT	4	
-4	369H92173-31	. BRACKET, LH	1	
	369H92173-32	. BRACKET, RH	1	
-5	MS21042-3	. NUT	8	
-6	NAS1403-8	. SCREW	8	
-7	AN960-10L	. WASHER	8	
-8	369H92173-15	. SPACER	8	
-9	AN960-10	. WASHER	AR	
	AN960-10L	. WASHER (Interchangeable with AN960-10)	AR	
-10	TA9C89SSR20	. CLAMP	4	
-11	MS20470AD4	. RIVET	AR	
-12	MS20670AD3	. RIVET	AR	
-13	369H92173-13	. BRACKET, LH (Not used with litter provisions installed)	1	
	369H92173-14	. BRACKET, RH (Not used with litter provisions installed)	1	
-14	MS20426AD3	. RIVET	AR	
-15	369H92173-35	. ANGLE, LH (Not used with litter provisions installed)	1	
	369H92173-36	. ANGLE, RH (Not used with litter provisions installed)	1	
-16	369H92173-11	. TUBE ASSY	1	
-17	369H92173-5	. TUBE	1	
-18	369H92173-33	. END CAP	1	

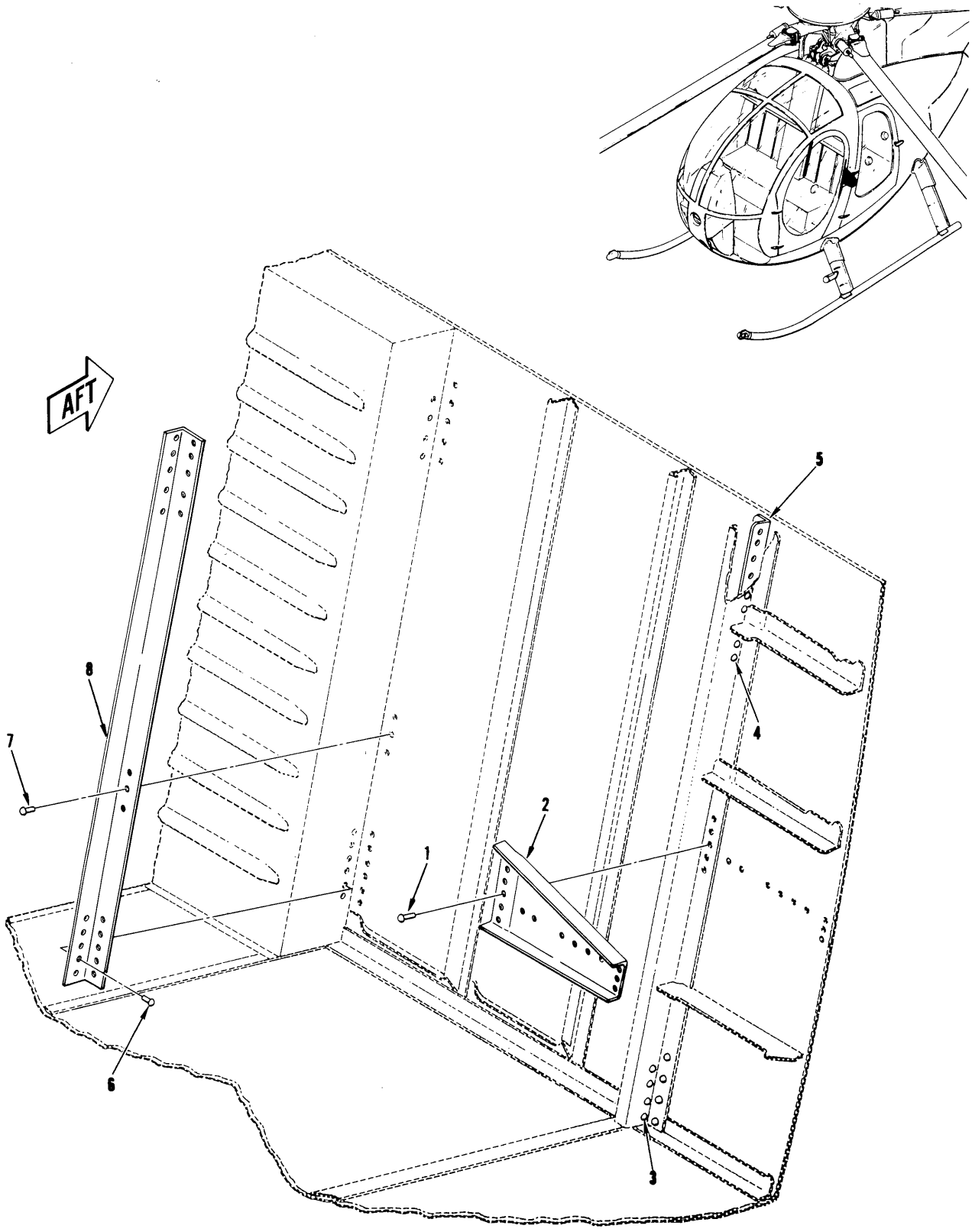

Figure 1-5. Litter kit provisions

FIG. & INDEX NO.	PART NO.	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
1-5-	369H90011-517	PROVISION, LITTER KIT (Component of 369H90011-519) (May be procured separately) (See figure 1-1 for NHA)	REF	
-1	MS20470AD4	. RIVET	18	
-2	369H92173-13	. BRACKET, LH (Also supplied with 369H92173 retainer installation)	1	
	369H92173-14	. BRACKET, RH (Also supplied with 369H92173 retainer installation)	1	
-3	MS20615M4	. RIVET	8	
-4	MS20470AD4	. RIVET	AR	
-5	369H2508-205	. ANGLE, LH	1	
	369H2508-206	. ANGLE, RH	1	
-6	NAS1738B5-3	. RIVET	AR	
-7	MS20470AD3	. RIVET	AR	
-8	369H90011-3	. ANGLE, LH	1	
	369H90011-4	. ANGLE, RH	1	

SECTION 2
MAINTENANCE INSTRUCTIONS

2-1. GENERAL INFORMATION

2-2. DESCRIPTION. The litter installation consists of two litters mounted on an aluminum alloy framework in the passenger/cargo compartment, and additional equipment including special litter doors, a door hold-open retainer, and special seating. Litter doors may be equipped with flat or bubble windows that permit door closure with litters installed. Door hold-open retainer equipment retains cargo doors at the open position when litters are installed. Installations may contain various combinations of components. The 369H90011-519 kit contains all litter equipment, together with the litter structural attachment hard points and special litter doors. The 369H90011-521 kit contains all litter equipment and litter structural attachment hard points; however, no special litter doors are provided. The 369H90011-511 kit contains special litter doors and all equipment necessary to install the special doors. The 369H90011-517 kit contains the structural attachment hard points required to mount a litter kit on the station 78.50 canted bulkhead. Extruded aluminum alloy channels (tracks) engage and support each litter assembly. The forward tracks are attached to the aft side of the station 78.50 canted bulkhead and the aft tracks are supported by a tubular stanchion. A-frame type members, attached with quick-release pins, form a supporting box between the forward and aft tracks. Teflon runners attached to the tracks allow each litter to slide on the track until two automatic latching levers on each forward track snap into place. A quick-release pin locks each litter on the aft tracks. The litters may be removed from either side of the compartment by releasing the nearest latching lever and the quick-release pin. When the litters are removed, the support frame may be folded and stowed against the station 78.50 canted bulkhead by releasing a floor latch on the stanchion assembly and swinging the entire assembly upward to catch a stowage support mounted on the forward track (see fig. 2-1). The litter support framework, with the exception of the upper and lower forward tracks, may be removed from the helicopter by pulling the eight quick-release pins at the A-frame pivot points. The litters are hinged at the center for folding and are secured in the open position with hinge locks. Four safety belts are attached to each litter assembly.

2-3. REFERENCE DATA. Information pertaining to helicopter structural components which interface with the litter kit installation is in the Structural Repair Manual (369D - SRM). Information pertaining to standard helicopter equipment is in HMI - Vol 1 and 369D-IPC.

2-4. LITTER INSTALLATION

2-5. REPLACEMENT OF LITTER INSTALLATION COMPONENTS. See figure 1-1 and remove or install sufficient attaching hardware for individual component replacement or repair.

2-6. INSPECTION OF LITTER INSTALLATION.

a. Inspect litters and supporting framework for cracks, corrosion, deformation, and other visible damage.

b. Inspect pivot points and attaching hardware for wear and positive locking.

c. Inspect litter safety belts for worn or frayed condition and loose stitching. If any doubt exists as to belt strength, pull test with a 1500-pound test load as specified in HMI - Vol 1. Replace unserviceable belts.

2-7. REPAIR OF LITTER INSTALLATION. Perform tubular weld repairs and repair damaged sheet metal according to instructions in FAA AC 43.13-1, Aircraft Inspection and Repair.

2-8. LITTER DOOR INSTALLATION

2-9. GENERAL. The litter door installation (fig. 2-2) consists of a door frame complete with hinges, door latching mechanism, and two alternate window configurations. Either a bubble window, used with litters installed, or a standard window panel may be installed on the door frame with quick-release Camloc fasteners.

2-10. LITTER DOOR FRAME. The litter door frame consists of a complete door frame assembly with automatic latching mechanism. Camloc fastener receptacles are provided in 15 locations that match the fasteners on either a bubble window or standard window panel. Refer to HMI - Vol 1 for inspection and maintenance of the door

frame, hinges, and automatic latching mechanism. See figure 2-2 for replacement of Camloc fastener receptacles.

2-11. LITTER DOOR BUBBLE WINDOW. The removable bubble window assembly is installed on the litter door frame when the helicopter is equipped with litters. The clear stretched acrylic bubble is fastened to the outside of the door frame with 15 Camloc fasteners. Two plastic snap vents provide for intake or exhaust of ventilating air. Clear acrylic ribs and a Geon plastic, airfoil-shaped deflector control airflow over the window surface. The ribs are bonded to the window bubble and the air deflector is attached with screws and barrel nuts to every other rib. Refer to 369D - SRM for repair of plastics and to HMI - Vol 1 for door window maintenance. Replace Camloc fasteners and deflector as shown in figure 2-2.

2-12. LITTER DOOR STANDARD WINDOW. The standard window assembly is removable and is used with the litter door frame when the litter door bubble is not installed. The clear acrylic window is bonded in extruded plastic retainers. The window is fastened through the edge retainers to the outside of the door frame with 15 Camloc fasteners. Two plastic snap vents provide for intake or exhaust of ventilating air. Refer to 369D - SRM for repair of plastics and to HMI - Vol 1 for inspection and maintenance procedures. Replace Camloc fasteners as shown in figure 2-2.

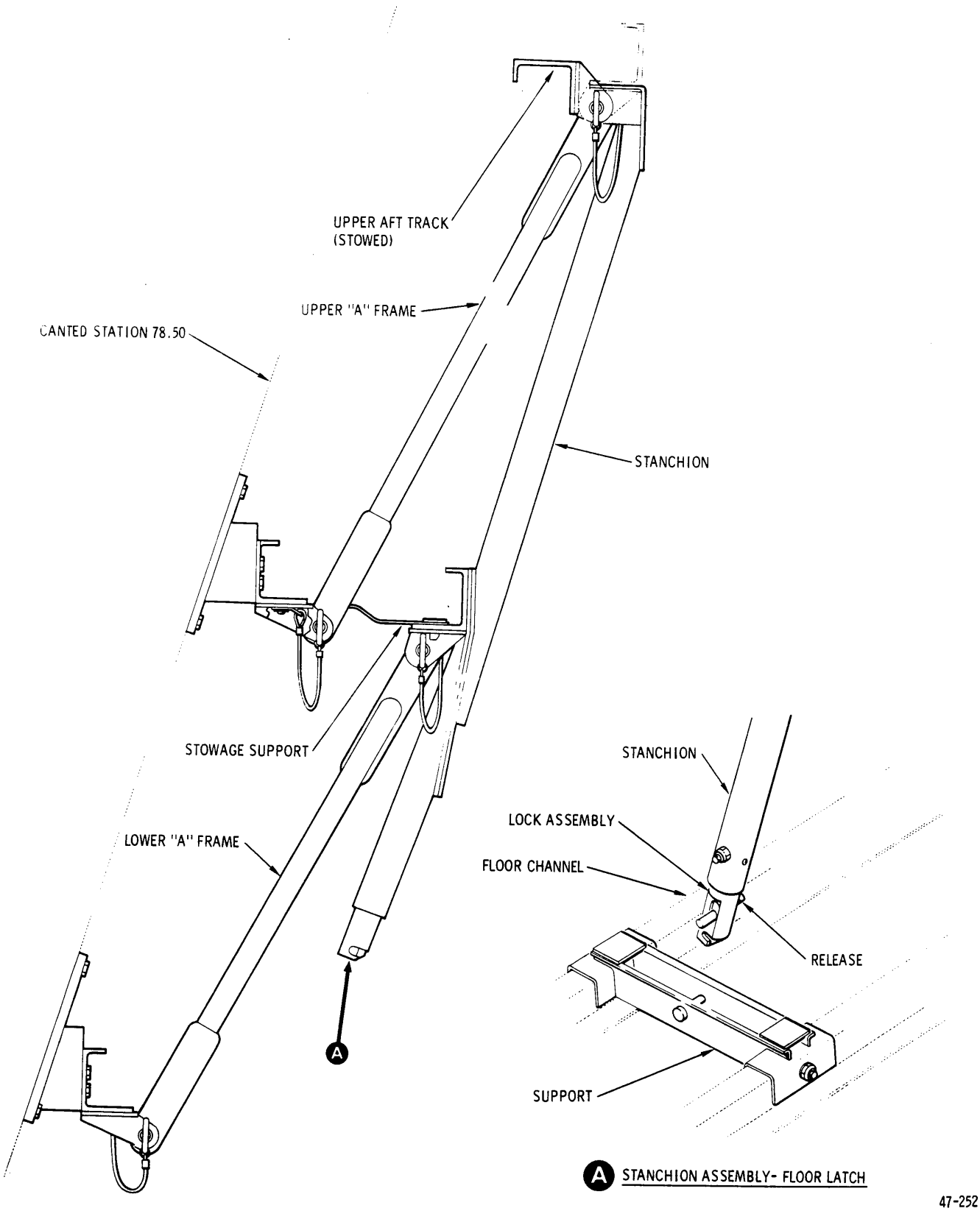

Figure 2-1. Litter frame installation - stowed position

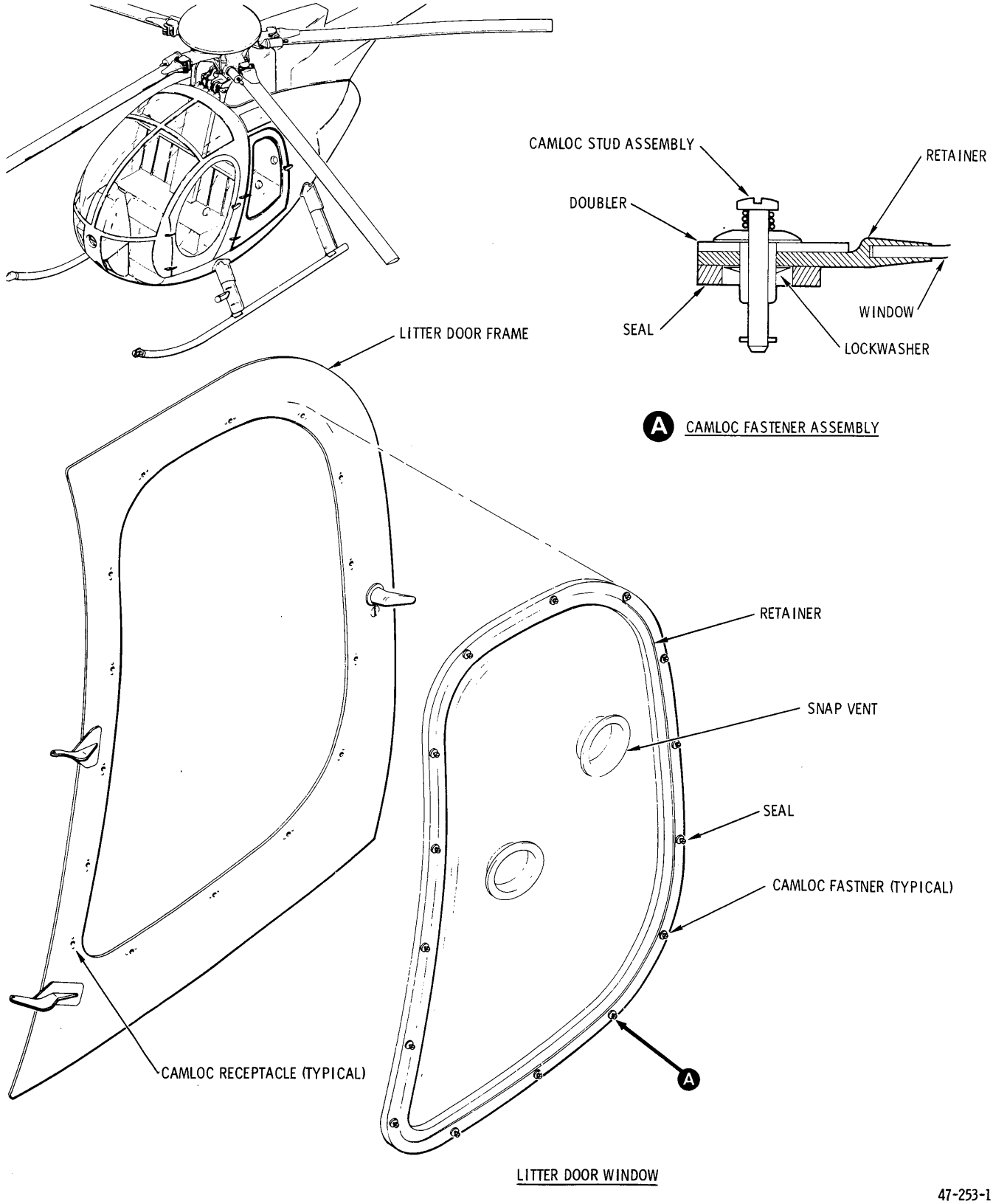

Figure 2-2. Litter door installation (sheet 1 of 2)

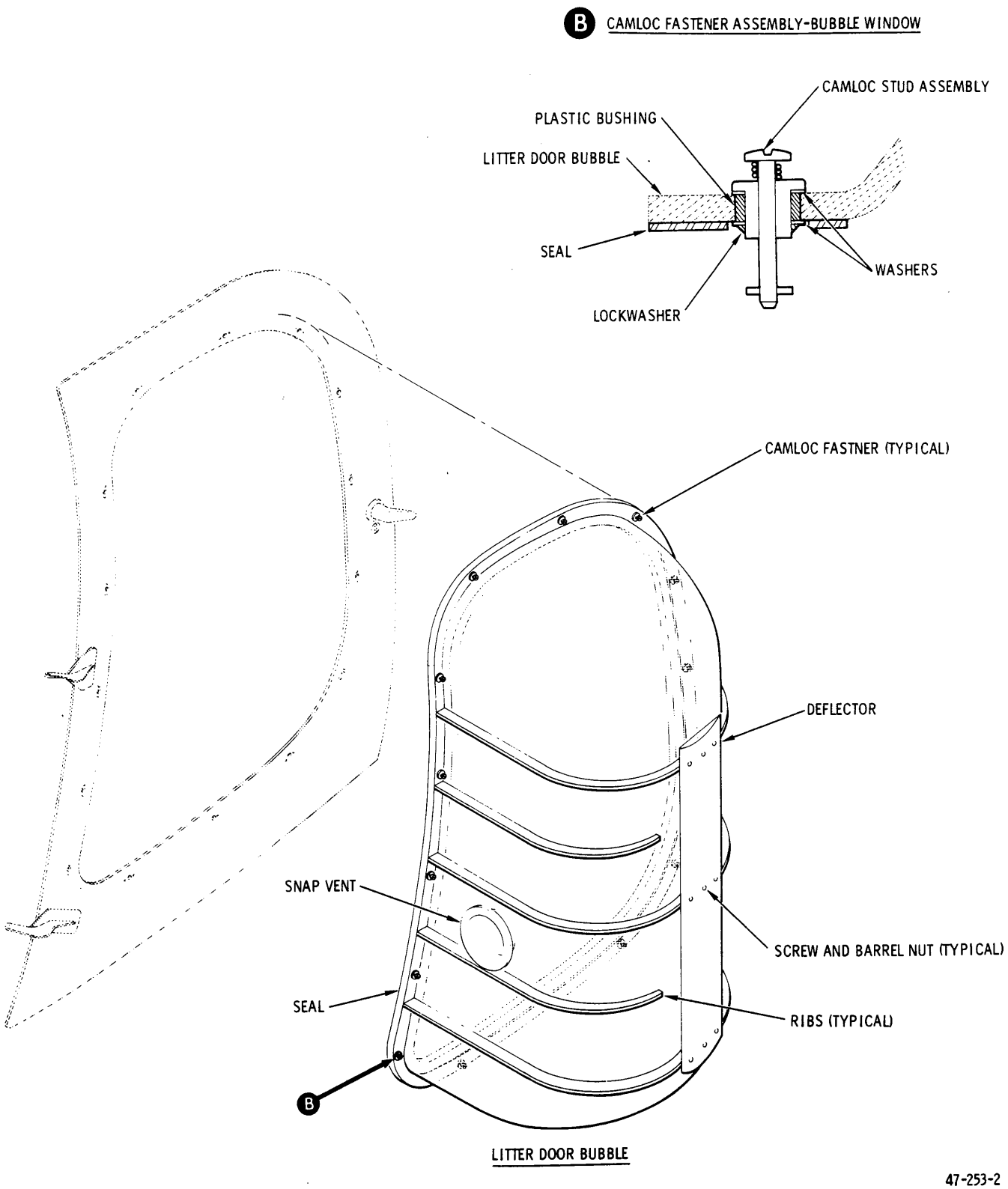

Figure 2-2. Litter door installation (sheet 2 of 2)

SECTION 3
INSTALLATION INSTRUCTIONS

3-1. GENERAL INFORMATION

3-2. SCOPE. Procedures in this section may be performed at the operator's discretion. These instructions assume installation of the complete litter kit (369H90011-519) which includes the litter kit without doors (369H90011-521), litter doors only (369H90011-511), and litter provisions only (369H90011-517). The operator may install any one of the four kits by simply omitting those steps which are not applicable. Reference is made in the instructions to applicable data in HMI - Vol 1 required to accomplish installation of the litter kit.

3-3. REFERENCE DATA. Table 3-1 lists consumable materials and expendable items required for installation. Items listed are recommended items of a commercial nature which may be procured locally. Alternate, but equivalent, items are acceptable.

3-4. PREPARATION. Preparation for installation of the litter kit includes the following:

a. Identify all removed components including attaching hardware and components removed to gain access to work areas. Protect components from damage and foreign matter until reinstalled.

b. Check all electrical switches for OFF position.

NOTE: Pay particular attention to BATT-OFF-EXT switch and ensure that switch is in the OFF position.

3-5. REMOVAL OF HELICOPTER EQUIPMENT

3-6. Prior to installing a litter kit, a limited number of items must be removed from the helicopter. Refer to HMI - Vol 1 and perform the following:

a. Remove crew and passenger compartment seats.

b. Remove following crew compartment trim panels as required:

(1) Controls tunnel cover.
(2) Shoulder beam panel.
(3) Left and right bulkhead panels.
(4) Left and right lower aft panels.

c. Remove following passenger compartment trim panels as required:

(1) Forward bulkhead panel.
(2) Left and right door panels.
(3) Floor carpeting and floor pan.

NOTE: 369MD helicopters are not equipped with trim panels.

d. Remove passenger compartment doors.

e. For 369MD helicopters, remove passenger compartment ashtray.

f. If helicopter is equipped with rotor brake installation, remove passenger compartment convenience panel.

g. Remove fuel cells forward vent lines.

3-7. INSTALLATION OF LITTER KIT PROVISIONS

3-8. The litter kit provisions (369H90011-517) consist of structural attachment hard points and

Table 3-1. Consumable materials and expendable items

Item No.	Material	Specification No.	Commercial Product Name/No.	Commercial Product Manufacturer
1	Compound, Sealant	MIL-S-7502	PR 1221	Product Research Burbank, California
			EP711 or Pro-Seal 247	Coast Pro-Seal Compton, California
2	Paint and painting materials	NOTE: For information on products, sources, colors, etc, refer to HMI - Vol 1.		

structural reinforcement members required to install a litter kit on the station 78.50 canted bulkhead.

a. Locate structural reinforcement angles (8, fig. 1-5) to forward side of station 78.50 canted bulkhead using two existing 0.070-inch tooling holes (view B, fig. 3-1). Use angles (8) as a template and determine rivet hole locations on station 78.50 canted bulkhead. Drill rivet attach holes, 0.069- to 0.074-inch diameter, using drill motor and appropriate drill bit. Attach angles (8) to 78.50 bulkhead using rivets (6, 7).

b. Position structural reinforcement angles (5, fig. 1-5) on forward side of station 78.50 canted bulkhead (view A, fig. 3-1). Locate thirteen existing rivets which must be removed prior to installation of reinforcement angles. Remove rivets using drill motor and appropriate drill bit. Use angles (5) as template and determine rivet hole locations on station 78.50 bulkhead. Drill rivet attach holes, 0.069- to 0.074-inch diameter, using drill motor and appropriate drill bit. Attach angles (5) to 78.50 bulkhead using rivets (3, 4).

c. Position structural reinforcement brackets (2, fig. 1-5) on forward side of station 78.50 canted bulkhead as shown. Locate nine existing rivets which must be removed prior to installation of reinforcement brackets. Remove rivets using drill motor and appropriate drill bit. Use brackets (2) as template and determine rivet hole locations on station 78.50 bulkhead. Drill rivet attach holes, 0.069- to 0.074-inch diameter, using drill motor and appropriate drill bit. Attach brackets (2) to 78.50 bulkhead using rivets (1).

3-9. INSTALLATION OF PASSENGER AND LITTER DOOR RETAINER

3-10. The passenger and litter door retainer installation consists of a tubular assembly attached to the station 78.50 canted bulkhead with four clamps. With the passenger or litter doors in the open position, a tube is slid out of the tubular assembly to contact a bracket attached to the door frame and thus retain the door in the open position. Refer to figures 3-1 and 3-2 and install the passenger and litter door retainer as follows:

NOTE: Angles (15, fig. 1-4) and brackets (13) are to be installed only when the litter provisions kit is not installed. The following instructions assume installation of angles (15) and brackets (13); however, omit steps a. and b. if installation of the litter kit provisions (para 3-7) has been accomplished.

a. Locate doubler angles (15, fig. 1-4) to forward side of station 78.50 canted bulkhead using two existing 0.070-inch tooling holes (view B, fig. 3-1). Use angles (15) as template and determine rivet hole locations on station 78.50 bulkhead. Drill rivet attach holes, 0.069- to 0.074-inch diameter, using drill motor and appropriate drill bit. Attach angles (15) to 78.50 bulkhead using rivets (14).

b. Position structural reinforcement brackets (13, fig. 1-4) on forward side of station 78.50 canted bulkhead as shown in figure 3-1. Locate nine existing rivets which must be removed prior to installation of reinforcement brackets. Remove rivets using drill motor and appropriate drill bit. Use brackets (13) as template and determine rivet hole locations on 78.50 bulkhead. Drill rivet attach holes, 0.069- to 0.074-inch diameter, using drill motor and appropriate drill bit. Attach brackets (13) to 78.50 bulkhead using rivets (11, 12).

c. Using drill motor and appropriate drill bit, drill eight 0.190- to 0.199-inch diameter holes through station 78.50 canted bulkhead and structural reinforcement angles (15) and brackets (13) at locations shown in figure 3-2.

d. Install the retainer assembly (16, 17, 18, fig. 1-4) on station 78.50 canted bulkhead using clamps (10), washers (7, 9), spacers (8), screws (6), and nuts (5).

e. Locate brackets (4) on passenger doors in such a manner as to allow tube (16) to contact brackets (4) when doors are in open position. Install brackets (4) on passenger door frames using rivnuts (3), washers (2), and screws (1).

3-11. INSTALLATION OF STANCHION SUPPORT

3-12. The stanchion support is a component of the stanchion assembly and is shipped assembled with the litter kit installation.

a. Remove stanchion support (17, fig. 1-3) from stanchion assembly by releasing lock assembly (14).

b. Position stanchion support (17, fig. 1-3) over passenger compartment floor channels at station 96.42 and station 102.23 as shown in figure 3-3.

NOTE: These floor channels are the third and fourth floor channels aft of the station 78.50 canted bulkhead.

c. Center stanchion support (17, fig. 1-3) on BL 0.00 and measure gap between aft edge of third floor channel and forward end of stanchion support while stanchion support is firmly seated over floor channels.

d. Peel laminations from stanchion support shim (16, fig. 1-3), as required, to obtain thickness equal to gap measured in previous step. Position shim on forward end of stanchion support (17) and drill two 0.069- to 0.074-inch diameter

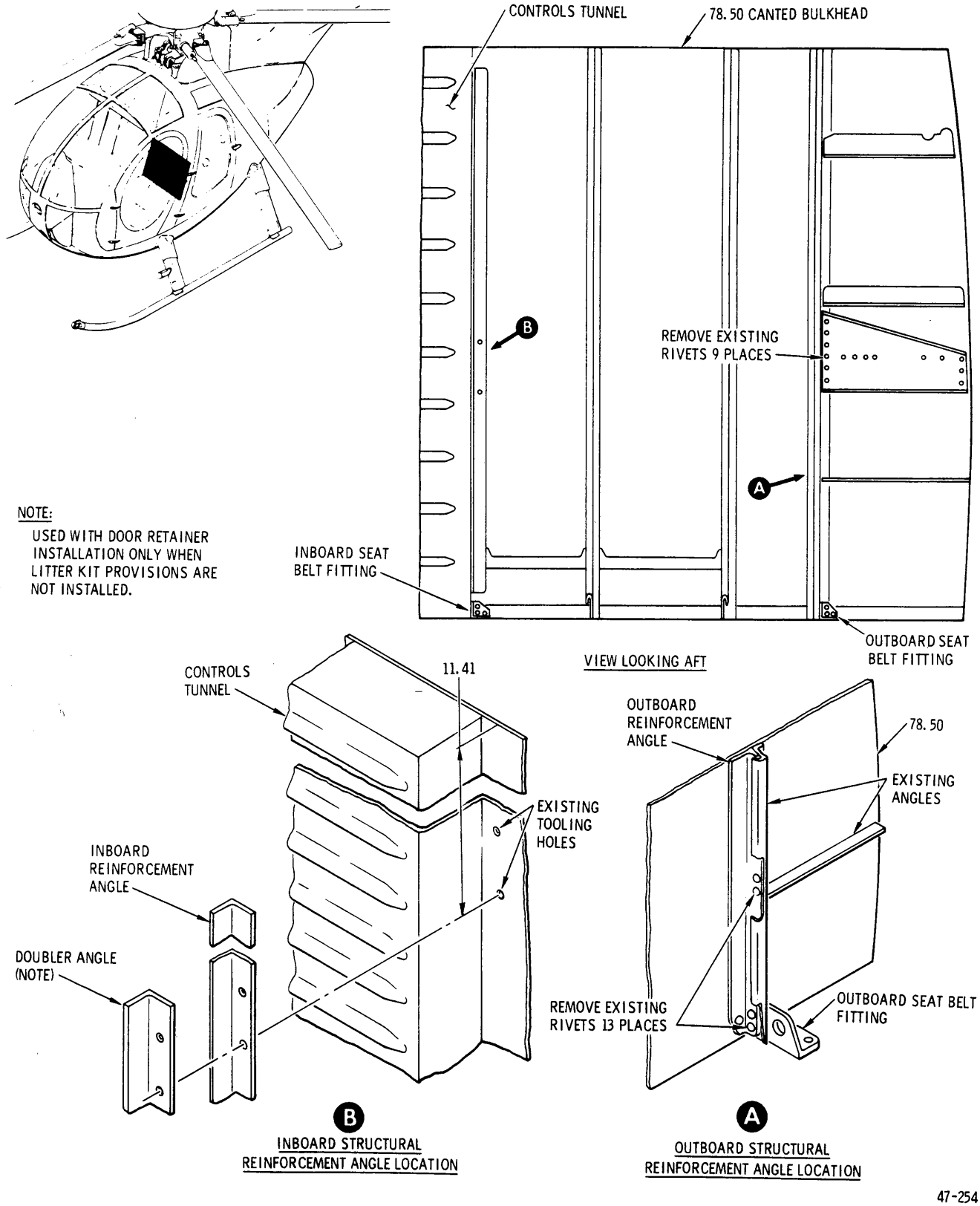

Figure 3-1. Litter kit provisions installation

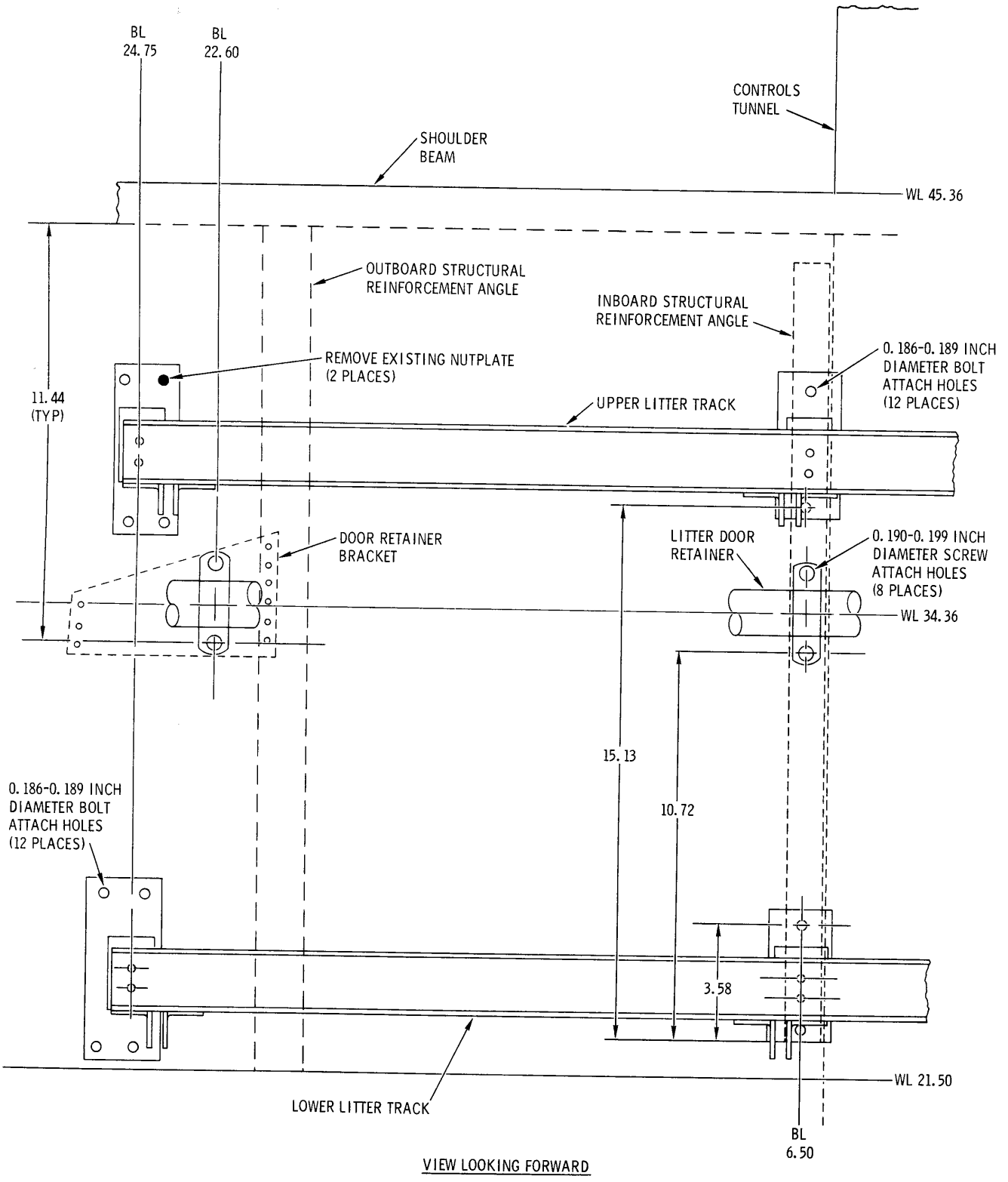

Figure 3-2. Litter kit location diagram

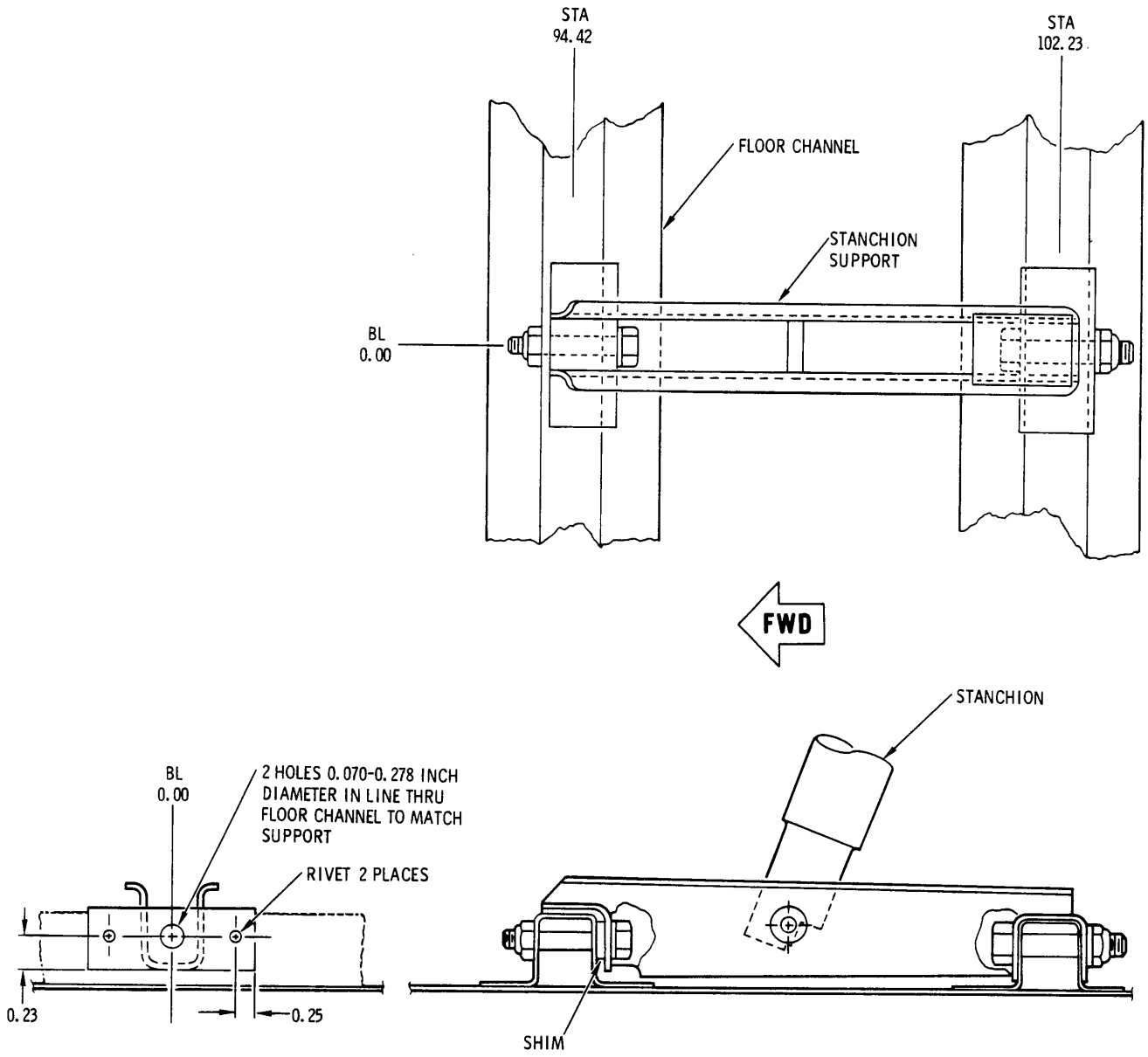

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Figure 3-3. Stanchion support location diagram

holes at locations shown in figure 3-3. Countersink holes on outer side of shim and secure shim to stanchion support with rivets (15, fig. 1-3).

e. Position stanchion support (17) over floor channels and center on BL 0.00. Use stanchion support as a template and determine bolt hole locations. Drill bolt attach holes, 0.270- to 0.278-inch diameter in line through two sides of each floor channel, using drill motor and appropriate drill bit. Attach stanchion support (17) to floor channels using bolts (18, fig. 1-1), washers (17), and nuts (16).

NOTE: Bolts (18, fig. 1-1) must be installed in direction shown.

3-13. INSTALLATION OF HIGH HEAD ROOM DOOR KIT

3-14. The high head room door kit (fig. 1-2) consists of two passenger compartment door frames and two types of windows for each door. The door frames are complete with installed hinges, latching systems, and door locks. Quick-release fasteners are used to attach either a flat window or a bubble window to the door frame. Install doors as follows:

a. Install two doors in accordance with instructions contained in HMI - Vol 1.

b. Position window of desired configuration on door and secure in place with captive quick-release fasteners.

3-15. INSTALLATION OF LITTER KIT

3-16. The litter kit consists of two litters, litter support framework and attaching hardware, two attendant seats, seat belts, and shoulder straps. Refer to figure 1-1 and install litter kit as follows:

a. If an optional rotor brake kit is installed, bond Velcro pile (46) to station 78.50 canted bulkhead and bond Velcro hook (45) to convenience panel in such a way that Velcro strips may be used to secure convenience panel to canted bulkhead.

b. Secure shoulder strap fittings (44) to aft bulkhead using screws (42), washers (43), and existing nutplates at WL 39 (approximately).

c. Remove pins (15) and separate track assemblies (31) from assembled litter frame assembly (20).

d. Refer to figure 3-2 and remove two existing nutplates from forward side of station 78.50 canted bulkhead.

e. Position upper track assembly (31, fig. 1-1) with attached brackets (38, 41) on aft side of station 78.50 canted bulkhead as shown in figure 3-2. Maintain alignment with drift pins or temporarily installed bolts. Using brackets (38, 41, fig. 1-1) as templates, mark location of bolt attach holes. Also, locate existing rivets which must be removed to allow installation of brackets. Remove track assembly.

f. Remove four existing bolts from outboard seat belt fitting on forward right side of station 78.50 canted bulkhead. Retain fitting for installation.

g. Position lower track assembly (31, fig. 1-1) with attached brackets (39, 40) on aft side of station 78.50 canted bulkhead as shown in figure 3-2. Temporarily attach right side of assembly to bulkhead with drift pins or bolts. Maintain alignment and determine that end brackets (39) are identical distance above floor. Using brackets (39, 40) as templates, mark location of bolt attach holes. Also, locate existing rivets which must be removed to allow installation of brackets. Remove track assembly.

h. Remove existing rivets which interfere with installation of brackets (38, 39, 40, 41, fig. 1-1) and replace with flush rivets.

i. Using drill motor and appropriate drill bit, drill eighteen to twenty-four 0.186- to 0.189-inch diameter holes, as required, through station 78.50 canted bulkhead and structural angles (5, 8, fig. 1-5) at locations shown in figure 3-2.

j. Install upper and lower track assemblies (31, fig. 1-1) and secure brackets (38, 39, 40, 41) to 78.50 canted bulkhead with bolts (36, 37), washers (34, 35), and nuts (32, 33) as shown in figure 1-1. Verify that outboard seat belt fitting, removed in step f, is installed on forward right side of canted bulkhead.

k. Secure frame assemblies (20, fig. 1-1) and attach stanchion assembly (19) to track assemblies (31) using pins (15).

l. Attach and lock stanchion assembly (19, fig. 1-1) to stanchion support fitting (44).

m. Install seat assemblies (7, fig. 1-1), shoulder straps (6), and seat belts (5) as shown in figure 3-4.

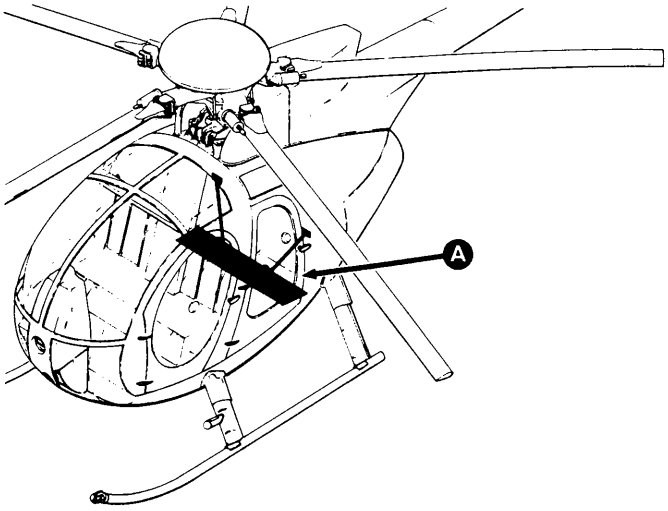
n. Slide litter assemblies (3, fig. 1-1) into tracks of stanchion assembly (19) and track assemblies (31). Ensure that track latches secure litter in place and install pins (11).

o. Install VNE card assembly (1, fig. 1-1).

p. Apply stenciled NO SMOKING words in 0.5-inch high letters, using black or red paint, to aft side of station 78.50 canted bulkhead in accordance with table 3-1. Center letters on BL 0.00 approximately 2 inches above upper litter.

3-17. INSTALLATION OF HELICOPTER EQUIPMENT

3-18. After installation of litter kit, a limited number of items must be replaced in the helicopter. Refer to HMI - Vol 1 and perform the following:



A
LITTER KIT
SEATS AND BELTS

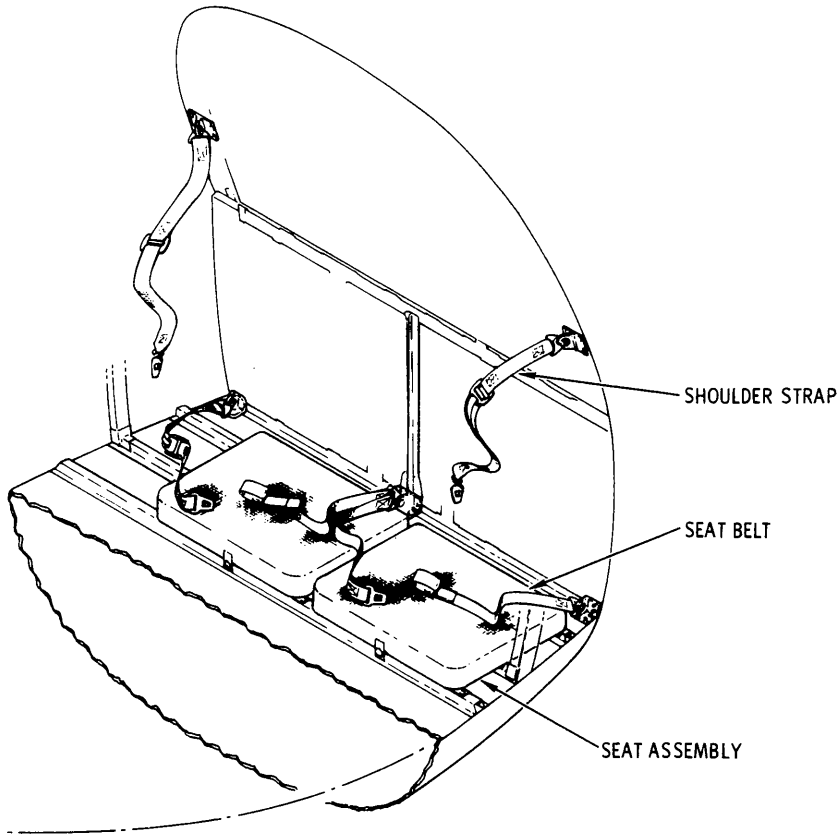


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Figure 3-4. Attendant seats

a. Install crew compartment seats.
b. Install following crew compartment trim panels as required:
(1) Controls tunnel cover.
(2) Shoulder beam panel.
(3) Left and right bulkhead panels.
(4) Left and right lower aft panels.
c. Install following passenger trim panels, as required:
(1) Forward bulkhead panel.
(2) Left and right door panels.

NOTE: 369MD helicopters are not equipped with trim panels.

d. If helicopter is equipped with rotor brake installation, install passenger compartment convenience panel.

3-19. WEIGHT AND BALANCE DATA

3-20. Weight and balance data resulting from installation of the various litter kits are listed in table 3-2. After installation of any litter kit configuration called out in table 3-2, incorporate changes in helicopter weight and balance records as instructed in HMI - Vol 2.

Table 3-2. Weight and balance data

Item	Weight (pounds)	Arm (inches)	Moment (in.-lb/100)
-511 Door Kit			
Standard windows			
Added	23.7	100.5	24
Removed	–	–	–
Changed	23.7	100.5	24
Bubble windows			
Added	25.9	96.3	25
Removed (standard windows)	8.3	98.7	8
Changed	17.6	95.2	17
-517 Provisions Kit			
Provisions only			
Added	1.4	84.1	1
Removed	–	–	–
Changed	1.4	84.1	1
-519 Litter Kit			
Complete with doors, bubble windows			
Added	102.0	97.3	99
Removed (standard cargo doors)	21.6	100.0	22
Changed	80.4	96.6	77
Complete with doors, standard windows			
Added	84.4	97.7	82
Removed (standard cargo doors)	21.6	100.0	22
Changed	62.8	97.0	60
-521 Litter Kit			
Complete without doors			
Added	60.7	96.7	58
Removed	–	–	–
Changed	60.7	96.7	58