TECHNICAL MANUAL

OPERATING AND MAINTENANCE MANUAL

FOR RESCUE SEAT, FOREST PENETRATING

(FSN 4240-00-199-7353) INCLUDING REPAIR PARTS

AND SPECIAL TOOLS LIST

HEADQUARTERS, DEPARTMENT OF THE ARMY JUNE 1975

By Order of the Secretary of the Army:

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The Adjutant General

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CHANGE
NO. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 17 December 1985

Technical Manual
Operating & Maintenance

FOR RESCUE SEAT, FOREST PENETRATING
(FSN 4240-00-199-7353)
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST

TM 55-4240-284-12&P, 24 June 1975, is changed as follows:

1. Remove and insert pages as indicated below. New or changed text material is indicated by a vertical bar in the margin. An illustration change is indicated by a miniature pointing hand.

Remove pages	Insert pages
1-1 and 1-2	1-1 and 1-2
3-7	3-7/3-8
C-3 and C-4	C-3 and C-4

2. Retain this sheet in front of manual for reference purposes.

By Order of the Secretary of the Army:

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The Adjutant General

DISTRIBUTION:
To be distributed in accordance with DA Form 12-31-R, Operating and Maintenance for Rescue Seat, for All Fixed and Rotor Wing aircraft.

WARNING PAGE

STATIC ELECTRICITY MAY CAUSE SEVERE ELECTRICAL SHOCK TO GROUND PERSONNEL. To avoid possible shock from static electricity, ground personnel should not touch the hoist cable or rescue seat until after the seat has touched the ground.

Make certain that the hoist cable does not become fouled when fastening the rescue seat safety straps.

Make certain that the hoist cable is not entangled with any part of the body before signaling the hoist operator for ascent.

Instruct personnel being retrieved not to assist the helicopter crewman or attempt to dismount the rescue seat until instructed to do so.

Technical Manual
No. 55-4240-284-12&P

Headquarters
Department of the Army
Washington, D. C., *24 June 1975*

RESCUE SEAT, FOREST PENETRATING

LIST OF ILLUSTRATIONS

CHAPTER 1
INTRODUCTION

Section I. GENERAL

1-1. Scope.

This manual includes information on the operation of the rescue seat; on the composition, inspection, repair, and replacement of components and assemblies; and the Repair Parts and Special Tools List.

1-2. Appendices.

a. Appendix A is a list of applicable references.

b. Appendix B contains the Maintenance Allocation Chart.

1-3. Maintenance Forms and Records.

The maintenance forms and records required by personnel who perform the operations prescribed in this manual are listed and described in TM 38-750.

1-4. Reporting of Equipment Manual improvements.

The direct reporting of errors, omissions, and recommendations for improving this manual by the individual user is authorized and encouraged. DA Form 2028 (Recommended Changes to Publications and Blank Forms) will be used for reporting these improvements. This form may be completed using pencil, pen or typewriter. DA Form 2028 will be completed and forwarded direct to the following address:

Commanding General
US Army Aviation Systems Command
ATTN: AMSAV-MPSD
4300 Goodfellow Blvd.
St. Louis, MO 63120-1798

1-5. Precautionary Measures.

Precautionary measures to be observed during the operation and maintenance of the rescue seat are contained in the following paragraphs of this manual: 2-4, 2-5, 2-6 and 2-7.

Section II. DESCRIPTION AND DATA

1-6. Description.

The forest penetrating rescue seat assembly (fig. 1-1) is used by rescue and recovery units to retrieve personnel from areas that are inaccessible for helicopter landing. The seat assembly attaches to the hook of the helicopter rescue hoist cable, and it is designed to pass freely through interlacing tree branches and dense jungle growth allowing the hoist cable to penetrate to the ground. The seat blades are spring loaded to keep them flush against the sides of the rescue seat body when in the folded position; the upper surface of each seat blade is covered with non-slip coating. A safety strap is provided for each seat blade, and a fabric cover protects the stowed safety straps and maintains the ballistic profile of the rescue seat during its descent.

1-7. Tabulated Data

a. General.

Shape	Ballistic
No. of seat blades	3
No. of safety straps	3

b. Performance.

Type descent	Controlled
Method of control	Hoist cable
Method of ascent	Helicopter hoist

c. Capacities.

No. of personnel	3
Load capacity	600 lbs

d. Weights and measurements.

Weight	19 1/4 lbs
Length	34 in.
Diameter	
blades folded	7 in.
blades extended	26 in.
Width of seat blades	4 3/4 in.
Length of seat blades	11 1/2 in.
Length of safety straps	57 1/4 in.

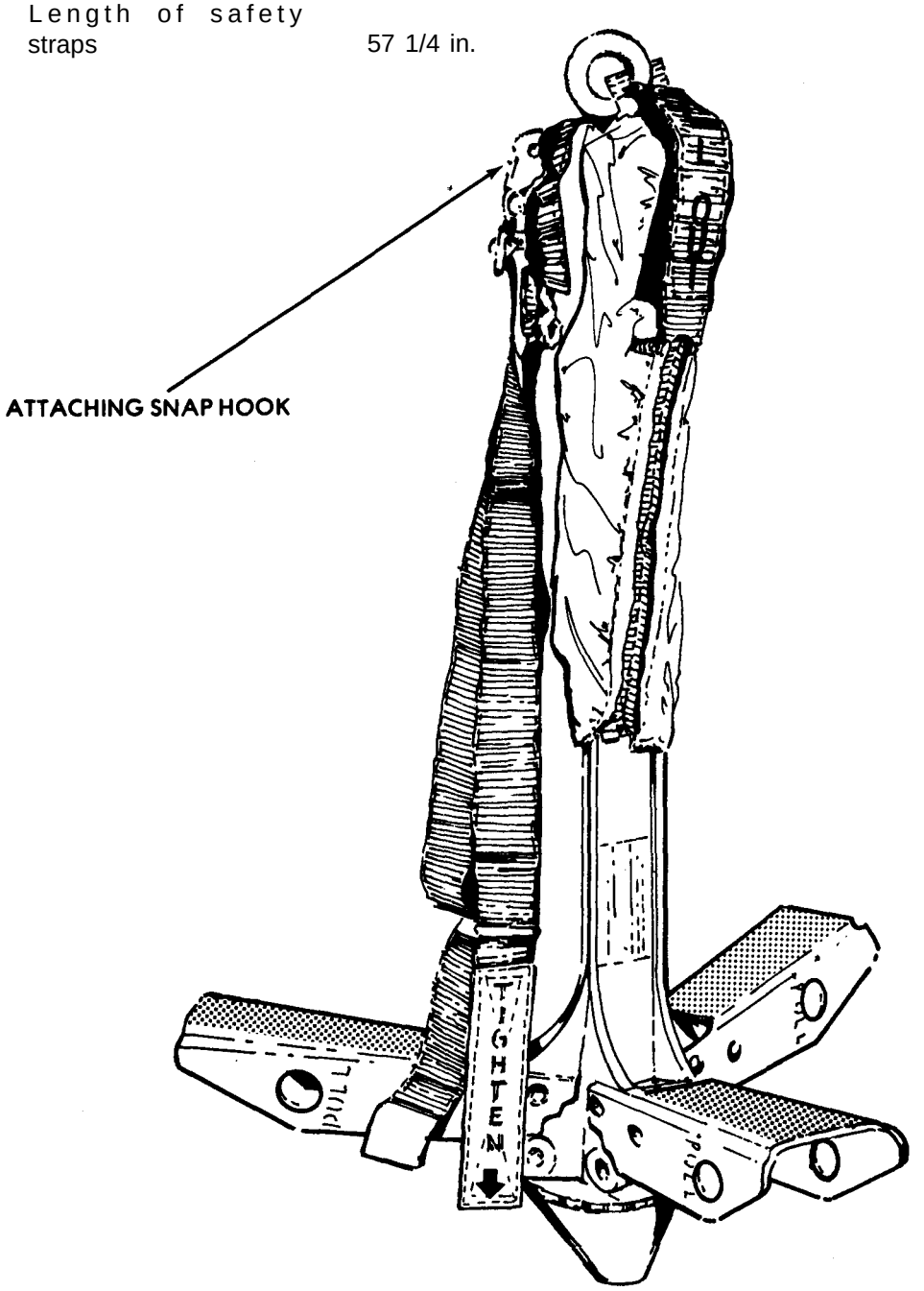

Figure 1-1. Forest Penetrating Rescue Seat

CHAPTER 2
OPERATING INSTRUCTIONS

Section I. SERVICE UPON RECEIPT

2-1. General.

Upon initial receipt of a new forest penetrating rescue seat assembly, check the shipping container for evidence of damage incurred during transit. Remove the rescue seat assembly from the shipping container, and check to see that all components are present, undamaged and free of defects.

2-2. Inspection.

Inspect each component of the rescue seat assembly as prescribed in paragraph 3-2. Report damage or defects on DA Form 2402, Exchange Tag, in accordance with instructions in TM 38-750.

Section II. OPERATION UNDER USUAL CONDITIONS

2-3. Preparation.

a. Stowing the safety straps.

(1) Attach the safety strap snaphook to the anchor bolt at the top of the rescue seat body (fig.1-1).

(2) Fold the strap neatly and stow it inside the safety strap cover (fig. 2-1).

(3) Close the cover with the appropriate velco fastener (fig. 2-2).

b. Folding the seat blades.

(1) Insert thumb into recess at the top of the seat blade retaining hook, and push down on the blade.

(2) Pull down on the seat blade retaining hook, and allow the blade to retract (fig. 2-3).

(3) Release the seat blade retaining hook and allow the blade to fold flush against the body of the seat assembly.

2-4. Lowering the Rescue Seat.

Lower the rescue seat to retrieve ground personnel as follows:

a. Make certain that the seat blades are folded and that safety straps are stowed, see paragraph 2-3b (2) and (3).

b. Select a spot in the rescue site foliage suitable to allow retrieved personnel to ascend safely.

c. Lower the rescue seat with helicopter hoist. Reel out sufficient cable to allow the rescue seat to contact the ground. Ground contact will discharge accumulated static electricity.

d. Advise ground personnel to wait for ground contact before attempting to mount the rescue seat.

WARNING

To avoid possible shock from static electricity, ground personnel should not touch the hoist cable or the rescue seat until after ground contact.

2-5. Preparing for Retrieval.

Since ground personnel may not be familiar with the rescue seat, instructions must be relayed by the helicopter crewman. The helicopter's public address system or a portable loud speaker may be used, and in some instances a helicopter crewman may be required to descend with the rescue seat to assist personnel being rescued. The following preparations are required by ground personnel.

a. Open a velco fastener in the safety strap cover, and remove the safety strap.

b. Pull the seat blade down until the retaining hook engages and secures the seat blade in the extended position.

c. Pass the safety strap over head and shoulders and position under armpits.

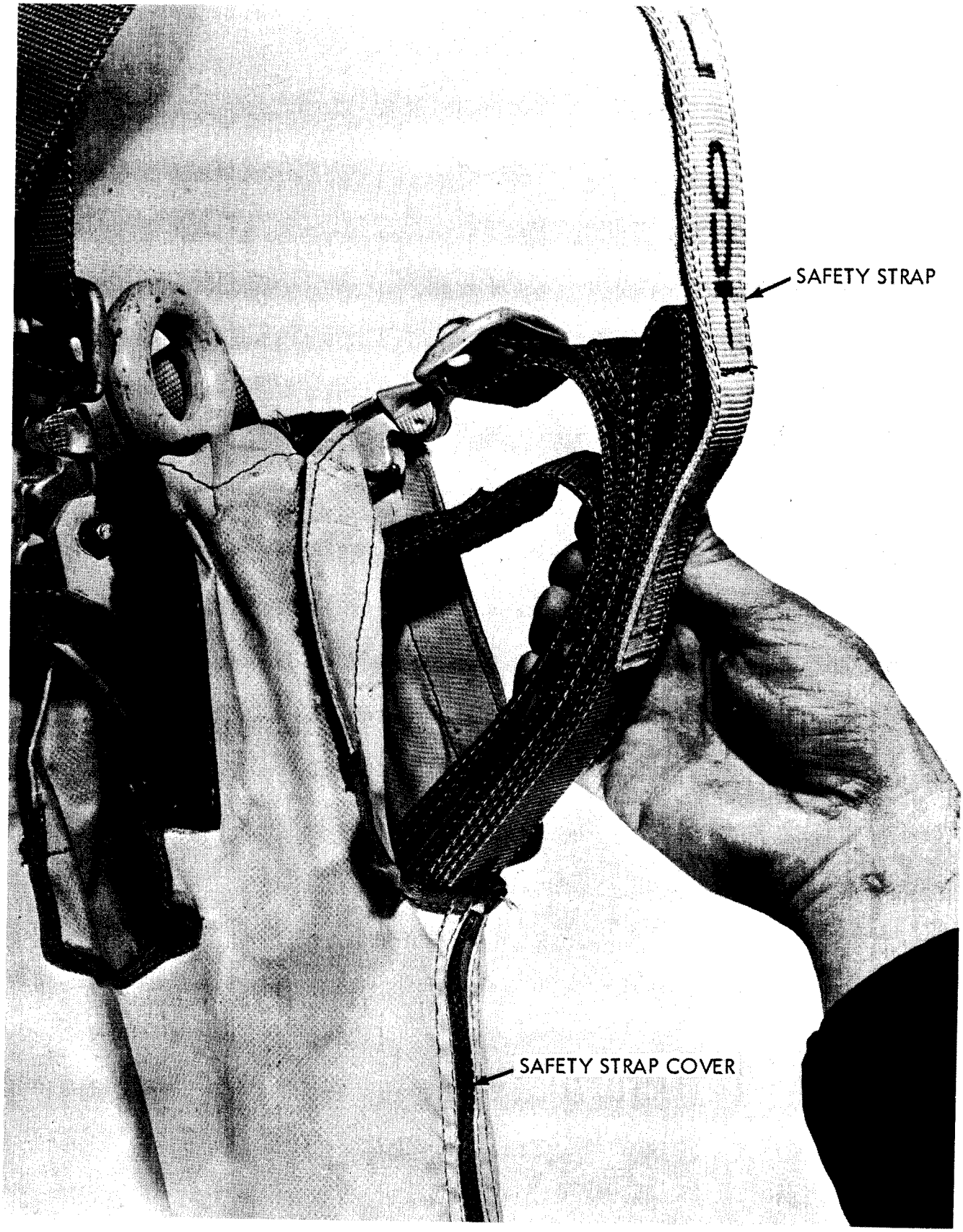

Figure 2-1. Stowing the Safety Strap.

WARNING

Make certain that the hoist cable is not fouled in the safety strap.

d. Normal rescue of one, two, or three individuals not exposed to hostile fire.

(1) One man rescue. Assume kneeling position with the rescue seat in a vertical position and with nose of seat assembly resting on the ground. Remove nearest safety strap from cover pocket (fig. 2-4). Pass the safety strap over head and shoulders (fig. 2-5). Push nearest seat blade 'down into locked position. Mount seat and tighten safety strap (fig. 2-6). Safety strap must be under armpits. Signal helicopter by radio or by vigorously shaking the hoist cable from side to side when ready for retrieval.

WARNING

Make certain that the hoist cable is not entangled with any part of body before signaling hoist operator.

(2) Two man rescue. The number one man assumes position with rescue seat as in (1) above. He removes nearest safety strap and passes it over head and shoulders. He pushes the two nearest seat blades into locked position. He mounts the two seat blades, one blade under each leg, and tightens safety strap. He now assumes a crouched position, holding the rescue seat vertically with the seat blades firmly against his legs. The number two man removes the remaining safety strap which is directly above the remaining seat, passes it over his head and shoulders, and pushes the remaining seat blade down to locked position. He then mounts the seat with his legs over the top of the legs of the number one man (fig. 2-7). The number two man tightens safety strap and signals helicopter that they are ready for retrieval.

(3) Three man rescue. When retrieving three men, each man dons a safety strap as prescribed in (1) above, straddles a seat blade, and tightens his safety strap (fig. 2-8). Signal helicopter to begin the retrieval.

e. Retrieval of one, two, or three men in a hostile environment or when injured or wounded.

(1) Rescue of one man. The rescuee assumes a prone position beside the rescue seat. He dons the safety strap and tightens it. He pushes the nearest seat blade into locked position between his legs and signals helicopter that he is ready (fig. 2-9).

(2) Rescue of two or three men: Rescuees maintain a low profile as possible in the kneeling or crouched position. They don and tighten safety straps as in (1) above. Two men mount seat as in figure 2-7. Three men will mount rescue seat as in figure 2-8. Signal helicopter when ready for retrieval.

NOTE

Rescue of injured personnel or rescue under any type of emergency operations. The rescuee always dons and tightens the safety strap. Personnel can be safely retrieved without being mounted on the seat.

2-6. Hoisting Personnel to Helicopter.

Personnel being retrieved will be instructed to observe the following procedures during ascent to the helicopter:

a. Hold the rescue seat blade tightly against the crotch until the cable slack is taken up.

b. Keep hands below and away from the hoist cable swivel. When two individuals are being retrieved, they should hug each other.

c. Keep heads close to the rescue seat body to avoid entrapping tree branches.

d. Upon reaching the helicopter, do not attempt to dismount the rescue seat until instructed to do so by helicopter crewman.

e. Do not attempt to assist helicopter crewman when entering helicopter unless instructed to do so.

f. If for any reason the rescue seat must be retrieved unloaded, ground personnel will be instructed to fold the seat blades and stow the safety straps in the cover.

2-7. Dismounting Retrieved Personnel.

When the rescue seat has been hoisted to the helicopter, personnel being retrieved will be dismounted from the rescue seat by a helicopter crewman as follows:

a. Turn the rescue seat so that the man being retrieved faces away from the helicopter,

b. Pull the seat into the helicopter, disengage the safety strap snap hook from its anchor bolt, and allow the man to dismount.

c. When two men are being retrieved, the man whose legs are on top will be pulled in first.

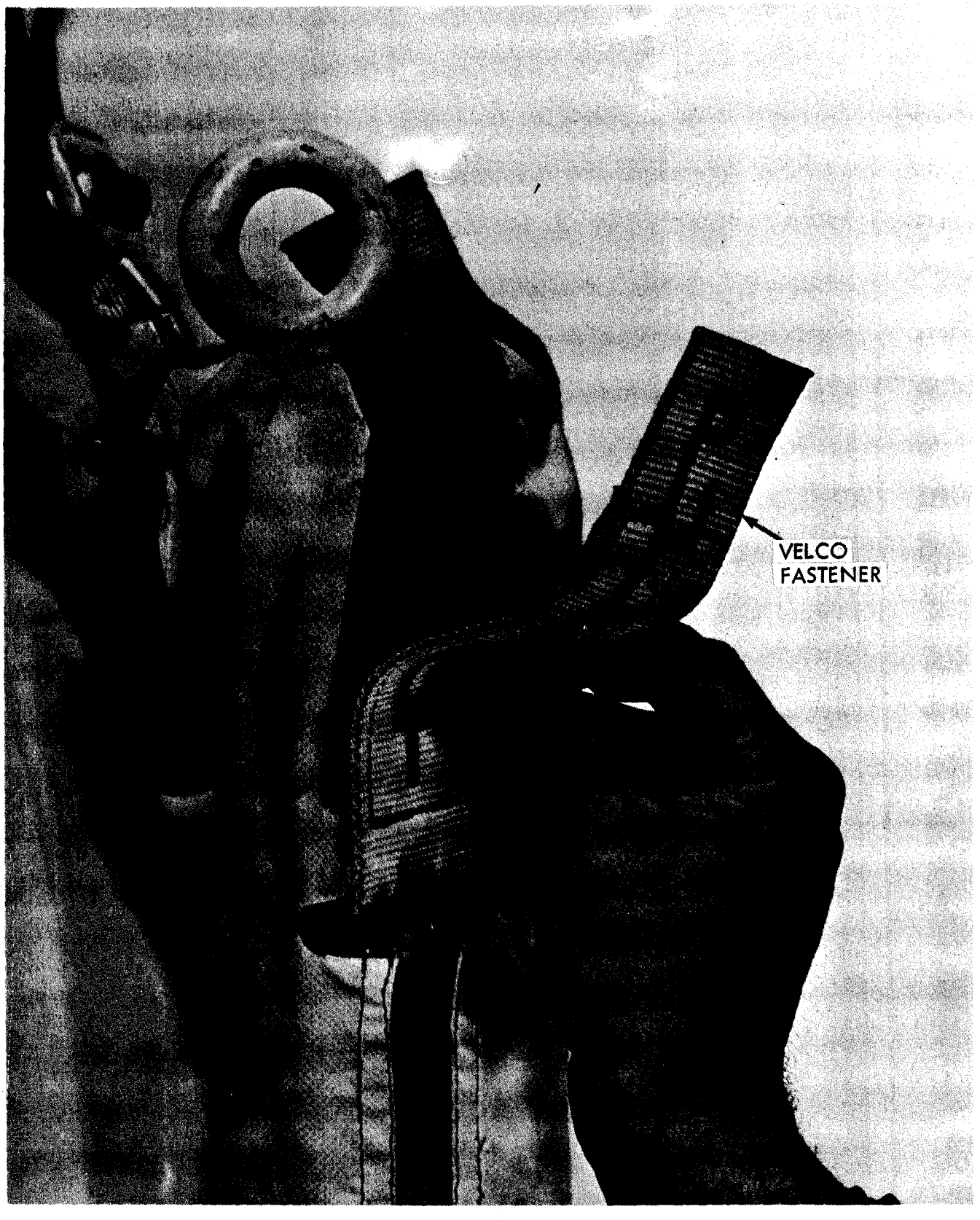

Figure 2-2. Closing the Cover.

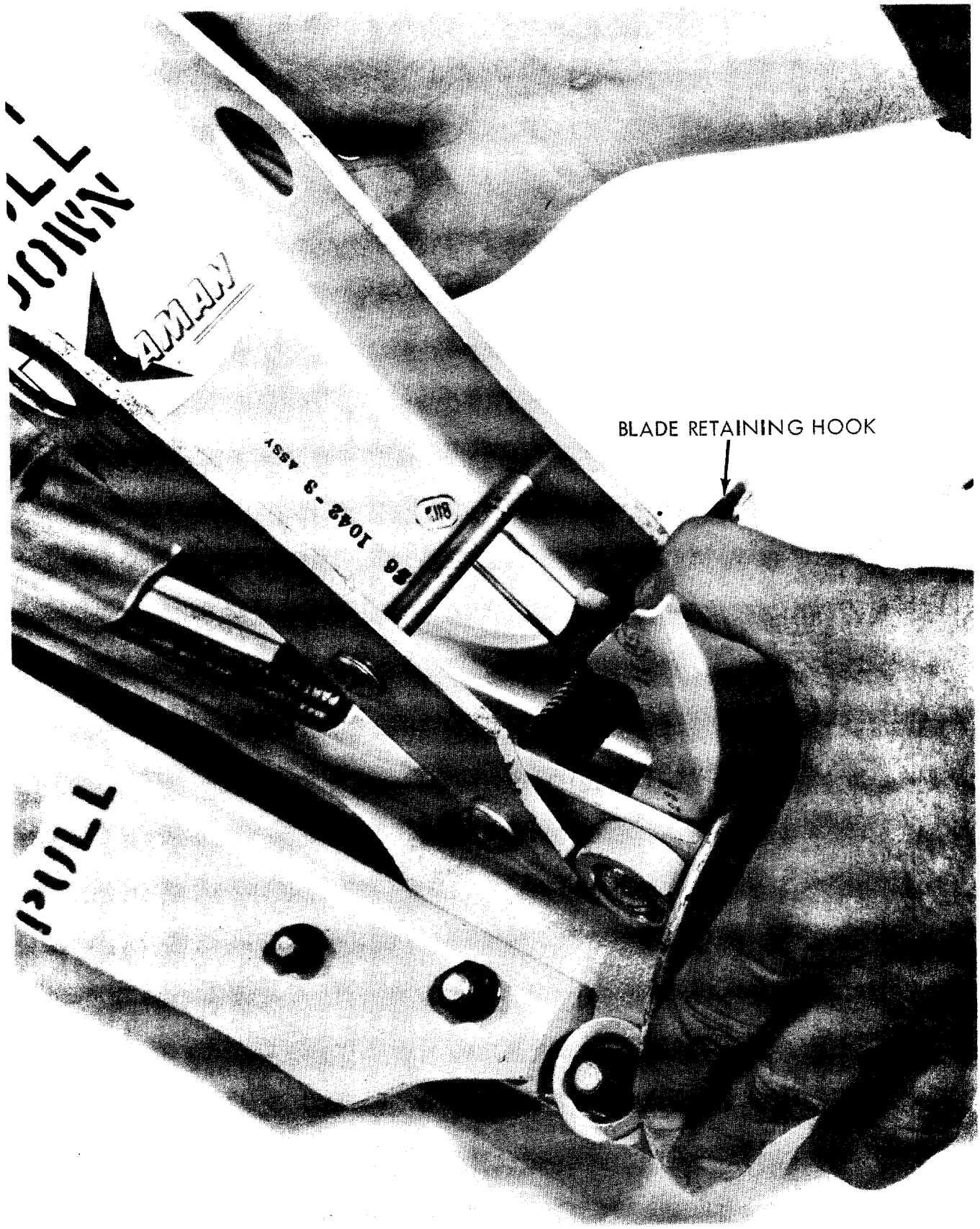

Figure 2-3. Blade Retaining Hook.

Figure 2-4. Removing Safety Strap From Cover.

Figure 2-5. Passing Safety Strap Over Head and Shoulders.

Figure 2-6. Tightening Safety Strap.

Figure 2-7. Two Man Rescue.

Figure 2-8. Three Man Rescue.

Figure 2-9. One Man Retrieval in Hostile Environment.

CHAPTER 3
MAINTENANCE INSTRUCTIONS

Section I. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

3-1. General.

To insure that the forest penetrating rescue seat is ready for use at all times, it must be inspected at prescribed intervals. These inspections are necessary so that defects can be discovered and corrected before they result in injury to personnel or damage to the equipment. All defects discovered, together with the corrective action taken, will be recorded on DA Form 2402 (Exchange Tag) as prescribed in TM 38-750.

3-2. Checks and Services.

This paragraph contains tabulated listings (tables 3-1 and 3-2) of preventive maintenance checks and services which must be performed by aircraft personnel. The items to be inspected are listed consecutively and the numbers indicate the sequence of minimum inspection requirements. The intervals of inspection required for the forest penetrating rescue seat assembly are as follows:

a. Routine Inspection (table 3-1). Service upon receipt, before and after operation.

b. Monthly Schedule (table 3-2).

Table 3-1.. Preventive Maintenance Checks and Services

Aircraft Crew — Routine Inspection

Sequence Number	Item to be Inspected	Procedures		Paragraph Reference
1	Rescue seat assembly	Check for damaged or missing components	.01	2-1
2	Cover	Check slide and velco fasteners for ease of operations.	.01	2-2
3	Safety Straps	Check snap hooks for proper operation.	.01	
4	Seat Blade	Check for proper latching, folding, retracting.	.01	2-2

Table 3-2. Preventive Maintenance Checks and Services

Organizational Maintenance		Monthly Schedule		
Sequence Number	Item to be Inspected	Procedures		Paragraph Reference
1	Eye bolt	Check for looseness and for broken or missing cotter pin.	.01	3-8
2	Anchor bolt	Check for looseness.	.01	3-3
3	Cover	Check for cuts, rips, snags, frays, loose or broken stitching, wear, deterioration, and loose or missing screws.	.01	3-5
4	Fasteners, slide and velco	Check for breaks, proper closure and ease of operation. Check for broken, loose, or missing stitching.	.01	
5	Safety straps	Check for cuts, rips, frays, loose or broken stitching, wear and deterioration.	.01	
6	Snap hooks	Check for bends, breaks, corrosion, weak ejector spring and proper operation. Lubricate ejector pivot points with light weight lubricating oil.	.01	
7	Seat blades	Check for loose bolts and nuts and for proper latching, folding, and retracting. Lubricate pivot points with light weight lubricating oil.	.02	3-4
8	Seat blade latching hook	Check for wear, corrosion, proper operation. Lubricate pivot points with light weight lubricating oil.	.01	3-6
9	Seat blade retracting spring	Check for bends, breaks, corrosion, and weak torsion.	.01	3-4
10	Hook latching spring	Check for bends, breaks, corrosion and weak torsion.	.01	3-6

Section II. REPAIR PROCEDURES

3-3. General.

a. Inspection. Inspect the rescue seat for rust, corrosion, debris and foreign material. Inspect metal components for burrs and sharp edges. Check for loose or missing bolts, nuts, or screws.

b. Repair.

(1) Remove rust, corrosion, and foreign material with cleaning solvent.

(2) Remove burrs and smooth sharp edges with crocus cloth.

(3) Tighten loose bolts, nuts, or screws.

(4) Replace a broken or missing eye bolt cotter pin (item 7, fig. 3-1) with a serviceable like item.

3-4. Seat Blade Assembly.

a. Description. The seat blade (item 24, fig. 3-1) is made of 1/4-inch thick cast aluminum and has two mounting flanges on the underside. A latching hook retainer bolt (item 21) extends between the two flanges to engage the seat blade latching hook (item 17) when the blade is in its extended position. The blade retracting spring (item 13) with a spacer washer on either side is installed on the mounting bolt to hold the seat blade in its retracted position.

b. Inspection.

(1) Inspect the seat blade for bends, breaks, cracks, burrs, sharp edges, and wear.

(2) Inspect the seat blade retracting spring for bends, breaks, corrosion, and weak tension.

(3) Replace a defective seat blade or blade retracting spring as required.

c. *Removal.*

(1) Fold the seat blade (item 24) to its retracted position.

(2) Remove nut (item 18) and washer (item 12).

(3) Remove the seat blade mounting bolt (item 21), blade retracting spring (item 13), spacer washers (item 12), spacer (item 14), and remove the seat blade.

d. Installation.

(1) Pull down the seat blade latching hook (item 17) and secure it so that the seat blade assembly may be installed.

(2) Position the seat blade (item 24) on the rescue seat body and align the seat blade mounting bolt holes.

(3) Install the seat blade mounting bolt, (item 21), spacer washers (item 12), spacer (item 14) and blade retracting spring (item 13). Install the blade retracting spring so that tension is applied to hold the seat blade against the rescue seat body.

(4) Replace washer (item 12), nut (item 18), and secure the nut.

e. Lubrication.

(1) Lubricate the seat blade pivot points with light weight lubricating oil.

(2) Release the blade latching hook and check the seat blade for proper operation.

3-5. Safety Strap Cover.

a. Description. The safety strap cover (item 1) is a three-sided waterproof canvas cover attached to the upper portion of the rescue seat body with two self-tapping metal screws (item 9). The cover has three velco fasteners to provide ready access to the safety straps (item 6) which are stowed inside the cover. Two metal mounting plates are sewed into the bottom seam of the cover to provide secure attaching points for the cover; one slide fastener provides a form fit of cover to body assembly.

b. Inspection. Inspect the safety strap cover for rips, cuts, frays, stuck or broken slide fastener, loose or missing screws, broken or loose stitching in velco fasteners, and deterioration.

c. Removal. Remove the two self-tapping metal screws (item 9), open the detachable slide fastener, and remove the safety strap cover.

d. Installation.

(1) Position a serviceable cover (item 1) as shown in figure 3-1. Overlap the ends of the bottom seam and align the holes in the cover mounting plates with the rescue seat body.

(2) Install the two self-tapping metal screws (item 9) and fasten the detachable slide fastener.

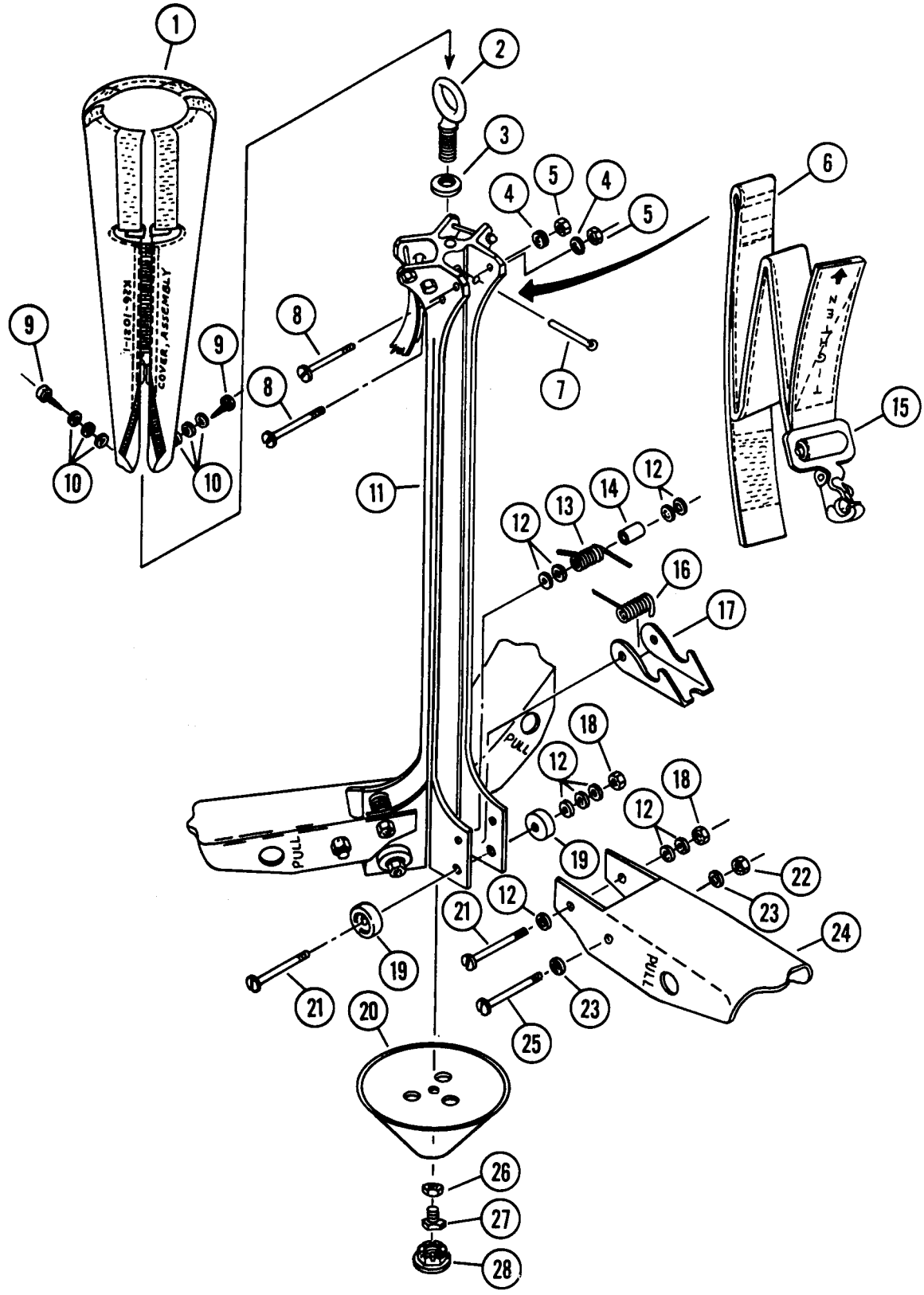

Figure 3-1. Forest Penetrator Exploded View (Sheet 1 Of 2).

(3) Check the slide fastener for ease of operation and lubricate with paraffin wax.

e. Lubrication. Lubricate the slide fastener with paraffin wax.

3-6. Seat Blade Latching Hook Assembly.

a. Description. The seat blade latching hook (item 17) is formed from U-channel extruded aluminum. The two side flanges are shaped to form the hook and holes are drilled in the flanges to provide pivot points for attachment to the rescue seat body. The latching hook is attached to the rescue seat body with mounting bolt (item 21). The latching hook spring (item 16) provides tension to engage the latching hook with the blade retaining bolt (item 25) and secures the seat blade in its extended position.

b. Removal.

(1) Fold the seat blade (item 24) to its retracted position.

(2) Remove nut (item 18) and washer (item 12).

(3) Remove mounting bolt (item 21), latching hook spring (item 16), and latching hook (item 17).

c. *Inspection.*

(1) Inspect the seat blade latching hook for bends, breaks, cracks, burrs, sharp edges and wear.

(2) Inspect the latching hook spring for bends, breaks, corrosion, and weak tension.

ITEM NO.	NATIONAL STOCK NUMBER	MFR CODE	PART NUMBER	NOMENCLATURE
	4240-00-199-7353	84955	K26-1000-9	SEAT, RESCUE, FOREST PENETRATING
1	4240-00-829-9824	84955	K26-1021-1	COVER ASSEMBLY
2	5306-00-869-8984	84955	K26-1009-11	EYE BOLT
3			MIL-S-22499	WASHER, LAMINATED
4	5310-00-184-9001	88044	AN960PD416L	WASHER
5	5310-00-807-1475	96096	MS21042-L4	NUT, SELF-LOCKING
6	4240-00-179-6531	84955	K26-1020-1	SAFETY STRAP
7	5315-00-059-0494	96906	MS24665-379	COTTER PIN
8	5306-00-151-1411	88044	AN4-25A	BOLT
9	5305-00-068-0522	96906	MS24621-45	SCREW, SELF-TAPPING
10	5310-00-167-0753	88044	AN960PD10L	WASHER
11		84955	K26-1001-1	BODY ASSEMBLY
12	5310-00-187-2400	88044	AN960PD616	WASHER
13	1670-00-832-4221	84955	K26-1008-11	SPRING, TORSION
14	5365-00-160-9520	80205	NAS43DD6-94	SPACER
15	5340-00-875-1861	96906	MS22018-1	HOOK, SNAP
16	5360-00-832-4224	84955	K26-1019-11	SPRING, TORSION
17	4240-00-832-4220	84955	K26-1018-11	HOOK
18	5310-00-807-1477	80205	MS21042-L6	NUT, SELF-LOCKING
19		84955	K26-1010-11	STOP
20		84955	K26-1083-1	NOSE
21	5306-00-427-6797	88044	AN26-54A	BOLT
22	5310-00-807-1476	96906	MS21042-L5	NUT, SELF-LOCKING
23	5310-00-184-8980	88044	AN960PD516L	WASHER
24	4240-00-443-1076	84955	K26-1042-3	SEAT
25	5306-00-427-6756	88044	AN25-54A	BOLT
26	5310-00-407-9566	88044	AN935-516	WASHER
27	5306-00-720-8557	96906	MS20074-05-05	BOLT
28	5340-00-664-0399	61864	SS51045	BUTTON, PLUG

Figure 3-1. Forest Penetrator Exploded View (Sheet 2 of 2).

(3) Replace a defective seat blade latching hook or latching hook spring as required.

d. Installation.

(1) Position the seat blade latching hook (item 17) and align the mounting bolt holes.

(2) Install the latching hook mounting bolt (item 21), spacers (item 14) and latching hook spring (item 13). Install the latching hook spring so that tension is applied to hold the latching hook toward the rescue seat body.

(3) Replace washer (item 12) and nut (item 18) and tighten the nut.

e. Lubrication. Lubricate the pivot points with light weight lubricating oil and check the latching hook for proper operation.

3-7. Safety Strap Assembly.

a . Description. The safety strap (item 6) is constructed of type Vll nylon webbing. One end is looped and permanently attached to the seat body by a bolt (item 8), washer (item 4) and nut (items 8, 4 and 5). The opposite end of the safety strap has an adjustable snap fastener (item 15). The safety strap is constructed with velco fastener attached, which provides a means to close safety strap cover when straps are stowed in stowage compartments of the cover.

b. Inspection.

(1) Inspect safety straps for cuts, tears, broken, loose, or missing stitching.

(2) Inspect safety strap for stains or sign of deterioration.

(3) Inspect ejector lever in locked position for secure seating and for ease in opening.

c. Removal.

(1) Unsnap snap hook (item 15) from snap hook anchor bolt (item 8).

(2) Remove snap hook anchor bolt nut (item 5) and washer (item 4).

(3) Remove snap hook anchor bolt (item 8) and safety strap (item 6).

d. Installation.

(1) Position rescue seat in vertical position with nose down. Attach snap hook to snap hook anchor bolt in such a way that the running end of safety strap is on top (fig. 2-1).

(2) Place looped end of safety strap in position and insert safety strap anchor bolt, insuring there are no twists in the safety strap. lnstall washer (item 4) and nut (item 5).

(3) Adjust safety strap to its maximum size.

(4) Fold safety strap as in figure 2-1 and stow in accordance with figure 2-2.

3-8. Eyebolt.

a. Description. The eyebolt (item 2, fig. 3-1) is threaded on one end and the other end is formed into a loop approximately 1 1/4 inches in diameter. Immediately adjacent to the loop is a shoulder which seats against the body. The hoist cable attaches to rescue seat eyebolt.

b. Inspection.

(1) Inspect the loop of the eyebolt for cracks and wear.

(2) Ascertain that the cotter pin is secure and that it passes through seat body and eyebolt. The ends of cotter pin should protrude far enough through seat body to be separated with each prong bent in a circular motion back to the seat body.

(3) Eyebolt must be tight. If it can be moved in the seat body and if a new cotter pin will not eliminate the slack, replace the eyebolt.

c. Removal.

(1) Remove cover assembly as outlined in paragraph 3-5.

(2) Remove cotter pin (item 7) from eyebolt and body assembly (item 11).

(3) Unscrew eyebolt (item 2) from seat body.

d. Installation.

(1) Screw new eyebolt with washer into seat body, tighten with a torque wrench to 300 to 600 inch-pounds.

(2) Drill .140 diameter hole in eyebolt using hole in body assembly as a guide. Do not drill hole until eyebolt is secured as outlined above.

(3) Insert cotter pin and separate the protruding ends. Grasp the right protruding prong of cotter pin with appropriate size pliers and turn in clockwise motion until end of prong is resting against seat body. Repeat operation with left protruding end, only turn in counterclockwise motion.

(4) Install cover assembly as in paragraph 3-5.

(5) Stow safety straps as in paragraph 3-7.

3-9. Button Plug.

a. Description. The buttom plug (item 28) is inserted in point of the nose (item 20) to prevent dirt and debris from collecting in the nose and to maintain the ballistic profile of the rescue seat.

b. Removal. Insert tip of screwdriver between nose and buttom plug and pry out.

c. Installation. Insert new plug, ascertaining that all prongs on the plug are inside of cone opening. Tap plug gently with hammer until firmly seated in nose cone.

3-10. Nose Bolt.

a. Description. The nose bolt (item 27) secures the nose to seat body. This bolt is located underneath the nose plug.

b. Inspection. Inspect bolt for stripped threads.

c. Removal.

(1) Remove button plug (item 28) as in 3-9b.

(2) Remove bolt using appropriate size socket and extension.

d. Installation.

(1) Using appropriate size socket and extension, install new bolt. Make certain nose is aligned with seat body before tightening.

(2) Replace button plug as in 3-9c.

3-11. Cleaning.

a. Wash the penetrator nose, blades, and blade hooks with mild soap and water to remove earth deposits. Rinse with clean water and dry thoroughly.

b. After use in salt water, remove the peretrator cover. Flush the penetrator cover and the penetrator with fresh water. With the safety straps hanging loose, dry all parts thoroughly and replace cover.

3-12. Repair of Blade ANTI-SKID Coating.

a. Prior to painting or touching up seat blade, the area must be clean and free from oil, grease, dirt, and other foreign material. Area to be painted shall be washed with a cleaning solvent or soap and warm water. Rinse and allow to dry completely.

b. Apply walkway coating by spray or brush. Allow each coat to dry before applying succeeding coat. If applying by brush, the coating may be thinned to permit an even spreading of the coating. Allow last coat to dry for 24 hours.

c. All edges of the walkway coating-shall be sanded to insure that they fair in smoothly with adjacent areas. Seat blades shall not be polished or waxed.

CHAPTER 4
SHIPMENT, LIMITED STORAGE, AND DEMOLITION

Section I. SHIPMENT AND LIMITED STORAGE

4-1. Preparation for Shipment.

a. General. The initial packaging and shipping of the forest penetrating rescue seat is the responsibility of the manufacturer, who must comply with the packaging specifications and standards stated in his contract. The manufacturer normally ships the rescue seat to the initial receiving point by domestic freight, packaged in a container which meets overseas shipping requirements. Except for a sample which may be removed from its container at the depot, the rescue seat normally will arrive at the using unit in its original unopened containers.

b. Inspection. Inspect each component of the rescue seat for damage and for defects as outlined in paragraph 3-2.

c. Cleaning. Remove all contamination from the rescue seat by an approved method. The approved method for cleaning airdrop items is described in TM 10-1670-201-23. The types of preservatives to be used and the methods of applying the preservatives are described in TM 38-750.

d. Marking. Mark each shipping container in accordance with instructions in AR 55-10.

4-2. Loading for Shipment.

Using appropriate materials handling equipment, load and ship rescue seat in accordance with instructions in AR 55-10.

4-3. Inspection and Maintenance in Storage.

The inspection and maintenance of the components while in storage will be in accordance with instructions in TM 10-1670-201-23.

Section II. DEMOLITION TO PREVENT ENEMY USE

4-4. General.

The destruction of equipment, related parts, material, and tools in danger of imminent capture by the enemy is a command responsibility and will be performed only upon order of the proper authoritv. When undertaken, destruction should be as thorough as time, personnel, and means permit. In th event that complete destruction cannot be accomplished in the time available, the destruction of identical items will prevent repair or restoration by cannibalization. Necessary components and parts which cannot be destroyed in time should be evacuated by using unit if at all possible.

4-5. Demolition to Render Equipment Inoperative.

Using shears, fabric cutters, file, knives, screwdrivers, or similar available objects, cut, rip, tear, slash, or otherwise demolish fabric, lines, loops, straps, tape, and webbing. Using hammers, mallets, bolt cutters, files, hacksaws, screwdrivers, metal bars, or similar objects smash, break, bend, cut, or otherwise demolish critical areas of metal fittings, and components.

APPENDIX A

REFERENCES

A-1. Dictionaries of Terms and Abbreviations.

AR 320-5	Dictionary of United States Army Terms
AR 320-50	Authorized Abbreviations and Brevity Codes

A-2. Preventive Maintenance.

AR 750-1	Organization, Policies, and Responsibilities for Maintenance Operations
TM 10-1670-201-23	Maintenance of Parachutes and Other Airdrop Equipment; General
TM 38-750	Army Equipment Records Procedures

A-3. Publication Indexes.

DA Pam 310-1	Index of Administrative Publications
DA Pam 310-3	Index of Doctrinal, Training, and Organizational Publications
DA Pam 310-4	Index of Technical Manuals, Technical Bulletins, Supply Bulletins, Lubrication Orders, and Modification Work Orders

A-4. Shipment and Limited Storage.

AR 55-10	Military Standard Transportation and Movement Procedures (MILSTAMP)
AR 700-15	Preservation, Packaging, and Packing
TM 38-230	Preservation, Packaging, and Packing of Military Supplies and Equipment
TM 743-200	Storage and Materials Handling

A-5. Supply Publications.

AR 735-35	Supply Procedures for TOE Units, Organizations and Non-TOE Activities

APPENDIX B
MAINTENANCE ALLOCATION

Section I. INTRODUCTION

B-1. General.

This appendix contains explanations of all maintenance and repair functions authorized at the various levels of maintenance. Section II is the maintenance allocation chart. The maintenance allocation chart assigns authorized maintenance functions to the lowest maintenance level based on skills available, time required, and tools and test equipment authorized.

B-2. Maintenance.

Maintenance is any action taken to keep material in a serviceable condition or to restore it to serviceability when it is unserviceable.

B-3. Maintenance Levels.

The five levels of maintenance authorized for Army material and the symbols used to indicate each level are as follows:

C	Operator or Crew
O	Organizational
F	Direct Support
H	General Support
D	Depot

B-4. Symbols.

A maintenance level symbol placed in the appropriate maintenance function column indicates the lowest level authorized to perform that particular maintenance functions.

B-5. Explanation of Columns.

a. Group number. Column 1 lists group numbers to identify components, assemblies, and subassemblies, with the next higher assembly,

b. functional group. Column 2 lists the noun names of components, assemblies and subassemblies on which maintenance is authorized.

c. Maintenance function. Column 3 is divided into subcolumns to indicate the maintenance functions authorized for the components, assemblies, and subassemblies. Each maintenance function which is indicated for the rescue seat assembly is applicable to all items of the assembly. The term "replace" applies only to the assembly or item beside which it appears. Definition of the maintenance functions authorized are as follows:

(1) Inspect. To determine serviceability of an item by comparing its physical and mechanical characteristics with established standards.

(2) Service. To clean; to dry; to preserve components, assemblies, and subassemblies.

(3) Install. To set up for use in an operational environment.

(4) Replace. To replace unserviceable items with like serviceable items.

(5) Repair. To restore an item to serviceable condition through correction of a specific failure or unserviceable condition. This includes, but is not limited to, replacing components and lubricating.

d. Tools and equipment. Column 4 is used to specify those tools and test equipment required to perform the designated maintenance function.

e. Remarks. Column 5 lists specific maintenance functions.

MAINTENANCE ALLOCATION CHART FOR

(AVSCOM Reg 310-10)

(1) GROUP NO	(2) FUNCTIONAL GROUP	(3) MAINTENANCE FUNCTION											(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
	SEAT RESCUE, FOREST PENETRATING	O		O										
	SEAT RESCUE			O .1					O .3				CLEAN & LUBRICATE	
	BOLT								O .1					
	WASHER								O .1					
	NUT, SELF-LOCKING								O .1					
	SPRING TORSION								O .2					
	SPACER								O .2					
	WASHER								O .1					
	BOLT								O .1					
	NUT								O .1					
	COVER								O .2					

MAINTENANCE ALLOCATION CHART FOR

(AVSCOM Reg 310-10)

(1) GROUP NO	(2) FUNCTIONAL GROUP	(3) MAINTENANCE FUNCTION											(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
	SCREW								O .1					
	WASHER								O .1					
	HOOK								O .2					
	SPRING								O .2					
	STRAP								O .2					
	BOLT								O .1					
	WASHER								O .1					
	NUT, SELF-LOCKING								O .1					
	EYEBOLT								O .1					
	COTTER PIN								O .1					
	BUTTON PLUG								O .1					
	WASHER, LOCK								O .1					

MAINTENANCE ALLOCATION CHART FOR

(AVSCOM Reg 310-10)

(1) GROUP NO	(2) FUNCTIONAL GROUP	(3) MAINTENANCE FUNCTION											(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
	BOLT								O .1					

APPENDIX C

REPAIR PARTS AND SPECIAL TOOLS LIST
(Current as of 13 March 1975)

Section I. INTRODUCTION

C-1. Scope.

This appendix lists repair parts required for operation and performance of organizational maintenance of the Forest Penetrating Rescue Seat.

C-2. General.

This Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List. A list of repair parts authorized for use in the performance of maintenance. Parts are listed in figure and item number sequence. Bulk materials are listed in NSN sequence.

b. Section III. Special Tools List. (Not Applicable)

c. Section IV. National Stock Number and Part Number Index. A list, in ascending numerical sequence, of all National stock numbers appearing in the listings, followed by a list, in alphanumeric sequence, of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.

C-3. Explanation of Columns.

The following provides an explanation of columns found in the tabular listings:

a. Illustration. This column is divided as follows:

(1) *Figure Number.* Indicates the figure number of the illustration in which the item is shown.

(2) *Item Number.* The number used to identify each item called out in the illustration.

b. Source, Maintenance and Recoverability Codes (SMR).

(1) *Source Code.* Source codes are assigned to support items to indicate the manner of acquiring support items for maintenance, repair or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

Code	*Definition*
P A	Item procured and stocked for anticipated or known usage.
P C	Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature.
X B	Item is not procured or stocked. If not available through salvage, requisition.

NOTE

Cannibalization or salvage maybe used as a source of supply for any items source coded above except aircraft support items as restricted by AR 700-42.

(2) *Maintenance Code.* Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code format as follows:

(a) The maintenance code entered in the third position will indicate the lowest maintenance level authorized to remove, replace and use the support item, The maintenance code entered in the third position will indicate the following level of maintenance:

Code	*Application/Explanation*
O	Support item is removed, replaced, used at the organizational level.

(b) The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete re-

pair (i.e., all authorized maintenance functions). This position will contain the following maintenance code:

Code	*Application/Explanation*
Z	- - - Nonreparable. No repair is authorized.

(3) *Recoverability Code.* Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the Uniform SMR Code format as follows:

code	*Definition*
Z	- - - Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.

c. National Stock Number. Indicates the National stock number assigned to the item and will be used for requisitioning purposes.

d. Part Number. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards and inspection requirements, to identify an item or range of items.

NOTE

When a stock numbered item is requisitioned, the repair part received may have a different part number than the part being replaced.

e. Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency, etc.

f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item.

g. Unit of Measure (U/M). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr, etc.). When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

h. Quantity Incorporated in Unit. Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that no specific quantity is applicable (e.g., shims, spacers, etc.).

C-4. Special Information. (Not Applicable)

C-5. How to Locate Repair Parts.

a. When National Stock Number or Part Number is Unknown:

(1) *First.* Find the illustration covering the assembly to which the repair part belongs.

(2) *Second.* Identify the repair part on the illustration and note the illustration figure and item number of the repair part.

(3) *Third.* Using the Repair Parts Listing, find the figure and item number noted on the illustration.

b. When National Stock Number or Part Number is Known.

(1) *First.* Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in ascending NSN sequence followed by a list of part numbers in ascending alphanumeric sequence, cross-referenced to the illustration figure number and item number.

(2) *Second.* After finding the figure and item number, locate the figure and item number in the repair parts list.

C-6. Abbreviations. (Not Applicable)

(1) ILLUST (a) FIG NO.	(1) ITION (b) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(8) QTY INC IN UNIT
-1		PAOOD	240-00-199-7353	26-1009	14955	SEAT,RESCUE,FOREST PENETRATING	
				SECTION II REPAIR PARTS LIST			
-1	1	AOZZ	240-00-829-9824	26-1021-1	14955	COVER ASSEMBLY,SAFETY STRAP	1
-1	2	AOZZ	306-00-869-8984	26-1009-11	14955	BOLT,EYE	1
-1	4	AOZZ	310-00-184-9001	N960PD416L	88044	WASHER,FLAT	6
-1	5	AOZZ	310-00-807-1475	S21042L4	96906	NUT,EXTENDED WASHER,HEXAGON	6
-1	6	AOZZ	240-00-179-6531	26-1020-1	14955	STRAP,SAFETY,RESCUE SEAT	3
-1	7	AOZZ	315-00-059-0494	S24665-379	96906	PIN,COTTER	1
-1	8	AOZZ	306-00-151-1417	N4-25A	88044	BOLT,MACHINE	6
-1	9	AOZZ	305-00-068-0522	S24621-45	96906	SCREW,TAPPING,THREAD FORMING	2
-1	10	AOZZ	310-00-167-0753	N960PD10L	88044	WASHER,FLAT	6
-1	12	AOZZ	310-00-187-2400	N960PD616	88044	WASHER,FLAT	30
-1	13	AOZZ	670-00-832-4427	26-1008-11	14955	SPRING,HELICAL,TORSION	3
-1	14	AOZZ	365-00-160-9520	AS43DD6-94	80205	SPACER,SLEEVE	3
-1	16	AOZZ	360-00-832-4224	26-1019-11	14955	SPRING,HELICAL,TORSION	3
-1	17	AOZZ	240-00-832-4220	26-1018-11	14955	CATCHING HOOK,RESCUE SEAT	3
-1	18	AOZZ	310-00-807-1477	S21042L6	96906	NUT,EXTENDED WASHER,HEXAGON	6
-1	21	AOZZ	306-00-427-6797	N26-54A	88044	BOLT,CLEVIS	6
-1	22	AOZZ	310-00-807-1476	S21042L5	96906	NUT,EXTENDED WASHER,HEXAGON	3
-1	23	AOZZ	310-00-184-8980	N960PD516L	88044	WASHER,FLAT	6
-1	24	BOZZ		26-1042-3	14955	SEAT,BLADE,RESCUE	3
-1	25	AOZZ	306-00-427-6758	N25-54A	88044	BOLT,CLEVIS	3
-1	26	AOZZ	310-00-407-9566	S35336-45	96906	WASHER,LOCK	1
-1	27	AOZZ	306-00-720-8557	S20074-05-05	96906	BOLT,MACHINE	1
-1	28	AOZZ	340-00-664-0395	S51045	51864	BUTTON,PLUG	1
				BULK MATERIALS			
BULK		COZZ	610-00-641-0427			WALKWAY COMPOUND,NONSLIP: BLACK, ROUGH TYPE, BRUSH APPLIED, 1 GAL CAN, MIL-W-5044, TYPE II, CLASS 1	V
BULK		AOZZ	150-00-231-6685			LUBRICATING OIL, GENERAL PURPOSE: 1 QT CAN, FED VV-L-800	V
BULK		AOZZ	160-00-285-2044			WAX, PARAFFIN, TECHNICAL: 1 LB CAKE, FED VV-W-95, TYPE I, GRADE A	V
				SECTION III SPECIAL TOOLS LIST (NOT APPLICABLE)			

SECTION IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER	STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER
1670-00-832-4221	3-1	13	5310-00-187-2400	3-1	12
4240-00-179-6531	3-1	6	5310-00-407-9566	3-1	26
4240-00-829-9824	3-1	1	5310-00-807-1475	3-1	5
4240-00-832-4220	3-1	17	5310-00-807-1476	3-1	22
5305-00-068-0522	3-1	9	5310-00-807-1477	3-1	18
5306-00-151-1411	3-1	8	5315-00-059-0494	3-1	7
5306-00-427-6756	3-1	25	5340-00-664-0399	3-1	28
5306-00-427-6797	3-1	21	5360-00-832-4224	3-1	16
5306-00-720-8557	3-1	27	5365-00-160-9520	3-1	14
5306-00-869-8984	3-1	2	5610-00-641-0427	BULK	
5310-00-167-0753	3-1	10	9150-00-231-6689	BULK	
5310-00-184-8980	3-1	23	9160-00-285-2044	BULK	
5310-00-184-9001	3-1	4			

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SECTION IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

PART NUMBER	FSCM	FIG UMBEI	ITEM UMBEI
AN25-54A	8044	-1	5
AN26-54A	8044	-1	1
AN4-25A	8044	-1	8
AN960PD10L	8044	-1	0
AN960PD416L	8044	-1	4
AN960PD516L	8044	-1	3
AN960PD616	8044	-1	2
K26-1008-11	4955	-1	3
K26-1009-11	4955	-1	2
K26-1018-11	4955	-1	7
K26-1019-11	4955	-1	6
K26-1020-1	4955	-1	6

PART NUMBER	FSCM	FIG UMBER	ITEM UMBER
K26-1021-1	4955	-1	1
K26-1042-3	4955	-1	4
MS20074-05-05	5906	-1	7
MS21042L4	5906	-1	5
MS21042L5	5906	-1	2
MS21042L6	5906	-1	3
MS24621-45	5906	-1	9
MS24665-379	5906	-1	7
MS35338-45	5906	-1	5
NAS43DD6	0205	-1	4
SS51045	1864	-1	3

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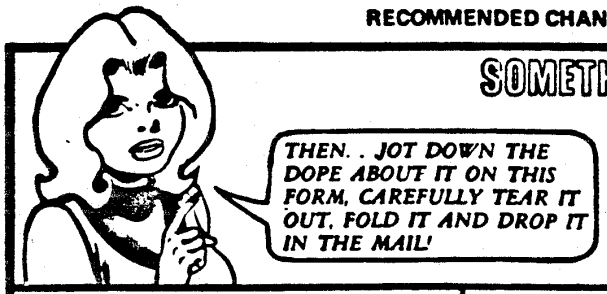

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