

TM 55-1670-251-20&P/TO 13D3-2-2

TECHNICAL MANUAL

**ORGANIZATIONAL MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST
FOR
AERIAL RECOVERY KIT NSN 1670-00-264-8941
P/N 1670EG109A**

HEADQUARTERS, DEPARTMENT OF THE ARMY, 6 JUNE 1975

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Organizational Maintenance Manual
Including Repair Parts and Special Tools List

For

**AERIAL RECOVERY KIT, NSN 1670-00-264-8941
P/N 1670EG109A**

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Including Repair Parts and Special Tools List

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Change 1	28 July 1980	Change 5	1 Oct 1996
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HEADQUARTERS
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ORGANIZATIONAL MAINTENANCE MANUAL
 INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST

FOR

AERIAL RECOVERY KIT, NSN 1670-00-264-8941
 P/N 1670EG109A

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope.

This manual contains a description of and maintenance instructions for the "Aerial Recovery Kit," P/N 1670EG109A, NSN 1670-00-264-8941 which is used in recovery and evacuation of disabled aircraft.

1-2. Maintenance Forms and Records.

The maintenance forms and records which are required by personnel who perform the maintenance functions prescribed in this manual are listed in DA PAM 738-751.

1-3. Reporting Errors and Recommending Improvements.

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1-4. Destruction to Prevent Enemy Use.

For instructions applicable to the destruction of components of the Aerial Recovery Kit to prevent enemy use refer to TM 43-0002-1.

1-4.1 Preparation for Storage or Shipment.

For general technical information on preparation for storage and shipment refer to TM 1-1500-204-23. For regulatory requirements pertaining to equipment placed in administrative storage refer to AR 750-1.

Section II. DESCRIPTION AND DATA

1-5 Purpose and Use.

The Aerial Recovery Kit contains the equipment required for preparation, rigging and recovery of selected aircraft, by any one of four prime movers, the UHID H, CH-47, CH-54, and CH-53 helicopters.

1-6 Technical Characteristics.

a. The kit components are packaged in a bi-sectional water tight aluminum container having the approximate overall dimensions of 28.0 X 30.25 X 76.5 inches as shown in figure 1-1. The kit assembly is air transportable as an internal or external load. Six lift grips, three on each side of the container assembly, are provided for use as tie-down or suspension points for external transportation. Skid type feet are provided to facilitate positioning of the container either inside an aircraft or on the ground.

b. The container is constructed to have separable top and bottom sections, each of which are Compartmented to house the kit components in such a manner as to afford easy accessibility and identification of the components. Component part numbers are stenciled inside the container compartments to enable easy recognition and hence selection of components as required. Component locations for each of these sections are shown in figure 1-2.

1-7 Description of Major Components.

The major components of the aerial recovery kit are described below.

a. *Anti-Chafe Pad PIN 1670EG044.* The anti-chafe pad is used to maintain the spacing of the belly band strap assemblies and to afford padding to these assemblies in the areas where they would normally contact the fuselage of the slung aircraft thereby minimizing the risk of abrasion to the belly bands and damage to the recovery aircraft.

b. *Containers PIN 1670EG120 and P/N 5140-EG-090-001.* These containers provide storage of the kit components to secure the contents and protect them from adverse environmental conditions. The larger container, PIN 1670EG] 20 is intended for long term storage and for internal or external aircraft transport of the entire kit. The smaller container P/N 5140-EG-090-001, supplements the larger container for long term storage but is ideally suited for normal handling of only those components of a kit required for a given recovery operation.

c. *Coupling Link Assembly PIN 1670EG079-1.* The coupling link assembly is used to connect with the belly

band assembly to the spreader bar pendant assembly on the rotor head shackle.

d. *Drogue Chute Assembly P/N 1670EG029BI and 1670EG029B3.* Drogue chutes are provided to maintain the directional stability of slung aircraft. The smaller chute (60.0 inch diameter) is used on most aircraft while the larger chute (156 inch diameter) is required on the larger and inherently unstable type of aircraft. Swivel attachments prevent the chutes from winding up due to rotor downwash.

e. *Gust Locks PIN 1670EG030A.* The gust locks are used to secure the control surface and to prevent motions of ailerons, rudder, elevator, etc.

f. *Load-spreader PIN 1670EG035A1.* The load spreader is required for those aircraft where structural frame members do not coincide with the required belly band rigging stations. They reduce the risk of additional structure damage to the recovered aircraft by distributing the belly band loads over a large area.

g. *Pendant Adapter PIN 1670EG093-1 and BOS-14-KZ* These pendant adapters have a rigid section between the eyes at each end. A flexible pendant or sling set is attached to one eye using a webbing ring assembly or a steel apex fitting. The other end of the pendant adapter is attached directly onto the helicopter cargo hook. The pendant provides a light weight, non-conductive link which also eases hook-up by allowing additional separation between the hook-up crew and the lift helicopter. The PIN 1670EGO93-1 may be used on either the forward, aft, or-center cargo hooks on the CH-47D. The new P/N BOS-14-K7 has a smaller cross section at the rigid eye to allow hook-up to the UH-60 cargo hook as well.

h. *Pendant Assemblies.* Pendant assemblies (flexible) are used primarily to lengthen the distance from the cargo hook on the lift helicopter to the sling load. In addition to the two nylon webbing pendants, PIN 1670EG028A and 1670EG028A3, the new polyester roundlings, P/N PRS3C030, PRS7C065, and PRS7C070 provide excellent pendants, 30 foot, 65 foot and 70 foot long respectively.

i. *Positioning Strap PIN 1670EG036A-1.* The positioning strap is used to prevent the slipping of the belly bands, fore, aft, and laterally, from their required rigging locations on an aircraft fuselage.

j. *Probe Static Discharge PIN 1670EG068B-1.* The static discharge probe is used to bleed and ground the static charge from the hovering recovery prime mover helicopter, thereby allowing safe handling of the cargo hook during hookup of the sling assembly.

k. *Sling Assembly, Belly Band PIN 1670EG057A-1.*
 The belly band assemblies are used to cradle the downed aircraft thereby eliminating the need of hardpoint attachments for the sling system. Adjustable chain leg assemblies (P/N 1670EGO68B 1) are provided for one belly band assembly to provide a means of changing its length relative to the other band assembly so as to achieve appropriate attitude correction of the recovered aircraft. The size 7 polyester roundslings, P/N PRSC7065 and PRSC7070 may be used in lieu of the 1670EG056-1 webbing straps shown with this belly band. Lighter aircraft may be rigged using two PRS2E017 roundslings choked to form a 34 foot strap. The 1670EG068B1 adjustable chain leg assemblies can be replaced with grab hook and chain assembly from the standard 25,000 pound capacity helicopter external cargo sling set.

l. *Sling Rotor Head PIN 1670EG043-1.* The rotor head sling is used in conjunction with the pendant assembly, to facilitate rotor head slinging of light helicopters as an alternate method to belly band rigging. Rotor head slinging is also accomplished by use of two, four or more polyester roundslings choked around the barrel or arm of the main rotor hub and jointed with an apex fitting assembly from the standard 10,000 or 25,000 pound capacity helicopter external cargo slings.

m. *Spoiler Assembly P/N 1670EG032A.* Spoilers are required to destroy undesirable lifting tendencies of the suspended fixed wing aircraft during forward flight. The spoilers serve an important function in preventing the recovered aircraft from "flying" into the recovery (prime mover) helicopter.

n. *Spreaded Bar Arrangement PIN 1670EG060B1.* The spreader bar is to be used with pendant assembly and the sling assembly. Its function is two-fold depending upon its orientation with respect to the recoverable aircraft. On the larger type aircraft for example the CH-47, the spreader bar arrangement will be positioned across the fuselage. This reduces the crush

effect of the belly bands on the fuselage by maintaining a fixed distance, which is equal approximately to the width of the fuselage, between the two connecting ends of the-belly band assembly. For the smaller aircraft, particularly fixed wing, the spreader bar is aligned with the center line of the fuselage. This orientation allows for relocation of the vertex fitting on the spreader bar arrangement to correct for attitude changes of the recovered aircraft also the relative angle between the fore and aft belly bands is reduced. Two polyester roundslings P/N PRS3E008 can replace the P/N 1670EG034B 1 sling legs for the spreader bar hoisting assembly.

o. *Position Strap Anchors 1670EG075A1 and 1670EG075A3.* The position strap anchors provide a means for the webbing transition from two strap assemblies of three bands each to three equivalent assemblies of two bands each. The three strap legs are then covered by the antichafe pad which prevents abrasion of the webbing and also affords a more uniform loading between the belly band and the airframe.

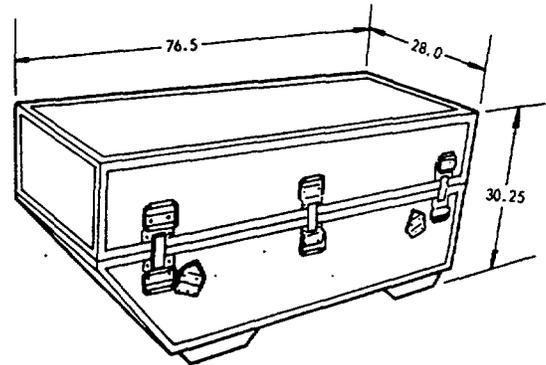


Figure 1-1. Aerial Recovery Kit Container (Part No. 1670EG120)

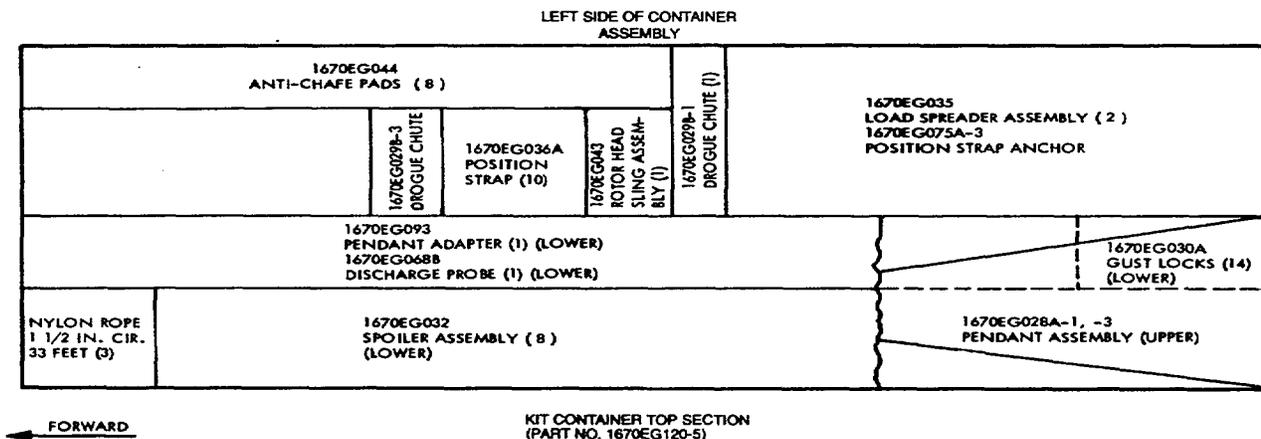


Figure 1-2. Stowage Diagram (sheet 1 of 2).

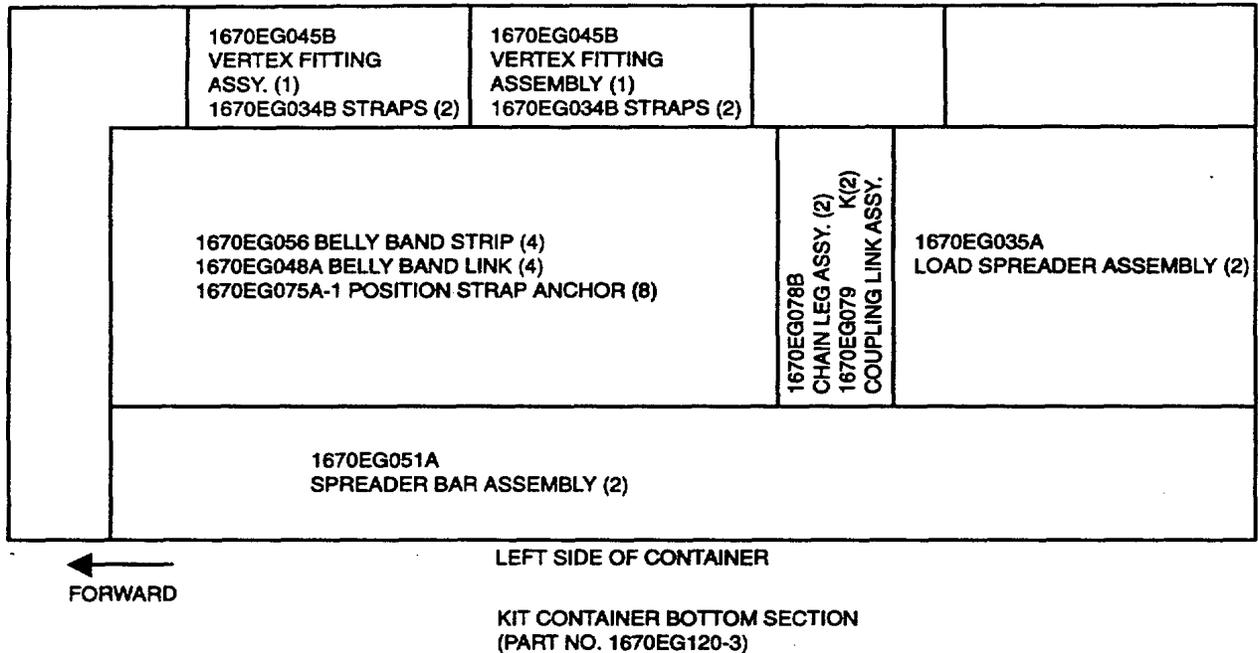


Figure 1-2. Stowage Diagram Concluded (sheet 2 of 2).

p. *Polyester Roundslings.* Roundslings consist of a continuous loop load bearing core formed with polyester yarn fully enclosed in a woven polyester protective cover. Roundslings used with this kit are formed into eye and eye slings with an additional wear pad sewn into each eye. The seven foot and 17 foot roundslings have a secondary protective sleeve which extends over the full body of the sling. To reduce weight, the 30 foot, 65 foot, and 70 foot roundslings have only a 24 inch sliding wear pad to protect the sling where it is formed into a basket or otherwise contacts the load. The roundsling are very flexible and conform to the load well whether in a straight vertical pull, a choker or basket configuration. The basket configuration allows smaller capacity slings to be used as adjustable length links in larger capacity lines.

(1) PRS2E008. This eight foot long, size two roundsling has a rated capacity of 4200 pounds in a choker configuration. It is used for rotor head lift of the OH-58, UH-1 and AH-1. Two are also used in the supplemental lifting line for the UH-60. One forms a basket around the tail cone and the other is formed into a double basket to provide a two foot connecting strap between the other eight foot and two 17 foot roundslings.

(2) PRS2E017. This 17 foot size two roundsling is used to make up the tail cone sling leg for the UH-60 and AH-64 or as a lightweight belly band strap.

(3) PRS3E008. This eight foot, size three roundsling has a rated capacity of 6700 pounds in a choker configuration. It is used as the main rotor head slings on the UH-60 and AH-64 helicopters. It may be used in lieu of the size two, PRS2E008, roundslings.

(4) PRS3E007. This 17 foot, size three roundsling has a rated capacity of 8400 pound in a single line vertical configuration. It can be used in lieu of the PRS3E017, size two roundsling. It can be used as a pendant for OH-58, UH-i and AH-I.

(5) PRS5C030. This 30 foot long, size five roundsling has a rated capacity of 13,200 pound as a single line and 26,000 pound in a basket configuration. It is used in a basket configuration to connect the main rotor slings on the UH-60 and AH-64 to the apex fitting.

(6) PRS7C065. This 65 foot, size seven roundsling has a rated capacity of 21,200 pounds and is used as a pendant for UH-60 and AH-64 helicopters. It is also used as the aft rotor head lifting sling for dual point recovery of the CH-47.

(7) PRS7C070. This 70 foot, size seven, roundsling has a rated capacity of 21,200 pounds. It can be used to increase the separation of the lift helicopter and the recovered helicopter by connecting to the PRS7C065 roundsling using an apex fitting from the 25,000 pound capacity helicopter external cargo sling. It is also used as the forward lifting leg for dual hook recovery of the CH-47.

q. *Standard Hardware.* The following readily available attaching hardware and fittings are used in various rigging schemes. TM 55-1670-251-20&P/TO 13D3-2-2

(1) Apex fitting assemblies, P/N 3885000004-045 and P/N 38850-00004-046. These are the apex fitting from the standard 10,000 pound and 25,000 pound capacity helicopter external cargo slings.

(2) Quick disconnect pins, P/N NAS1336C3C12 and NAS1336C3C17D. These 3/8 inch PIP pins may be used in lieu of the NAS safety bolt and nuts used with the 10,000 and 25,000 pound capacity apex fitting assemblies.

(3) Adjustable chain assembly, P/N 30050-00011-046 and 38850-00053-102. This chain and grab hook assembly is used with the 25,000 capacity external cargo sling. It can be used at the end of size 2 and size 3 roundslings or to replace the P/N 1670EG078BI chain leg assembly.

CHAPTER 2

MAINTENANCE INSTRUCTIONS

Section I. PREPARATION FOR USE

2-1. Preparation of the Kit at Start of a Mission.

a. Generally, not all suspension components and equipment available in the aerial recovery kit will be required to recover a particular aircraft.

b. The kit components and equipment which are not required for a given recovery mission can be removed from the kit and left behind at the storage site. These components must however be replaced in the kit after completion of the particular mission.

2-2. After-Use Inspection and Packaging.

All recovery equipment should be dried and cleaned before repackaging into the container.

a. Repacking of Drogue Chutes. The method of repacking the drogue chutes is shown in figure 2-1. After a recovery in a wet terrain it will be necessary to remove the mud before drying the webbing and fabric. Use standard parachute procedures for inspection.

b. Inspection of Tools. All tools used in the previous recovery mission must be thoroughly inspected, reconditioned and replaced if necessary.

c. Storage of the Equipment. All aerial recovery kit equipment components and tools which have been used, reconditioned, repaired or replaced should be placed in their appropriate compartment of the kit container as shown in packaging diagram figure 1-2. The kit container should then be locked and stored for a subsequent recovery mission.

Section II. TOOLS AND EQUIPMENT

2-3. Common Tools and Equipment.

Standard and commonly used tools and equipment having general application are not part of the kit equipment set. Such tools will normally be included in the equipment of the maintenance facility.

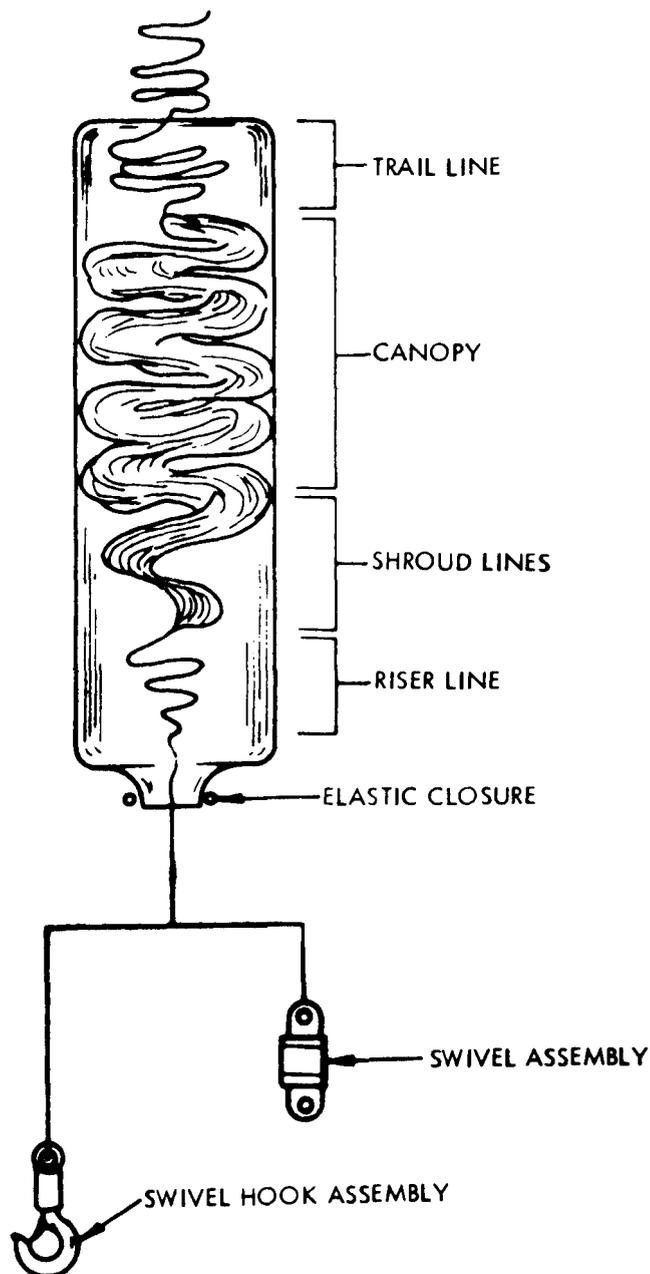


Figure 2-1. Drogue Chute Packaging.

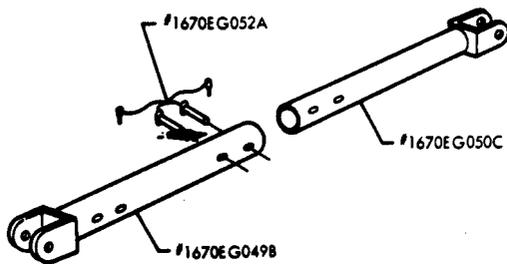


Figure 2-2. Spreader Bar Assembly.

2-4. Special Tools and Equipment.

No special tools or equipment are required over and above basic tools common to general mechanics tool box of MOS 67.

Section III. CLEANING AND LUBRICATION

2-5. Cleaning.

a. The kit equipment should be cleaned before repackaging into the container. All fabric components are to be allowed to dry and then brushed clean to prevent an accumulation of grit which will accelerate abrasion. Drogue chutes should be allowed to dry, shaken clean and repacked.

WARNING

Do not use pressurized air for cleaning the nylon components as this will have a tendency to force grit into weave.

b. Metal components should be wiped clean prior to repackaging. Specifically the spreader bar assembly (P/N 1670EG051A1), shown in figure 2-2, should be

cleaned of foreign material to allow mating tubes to slide freely. All shackle bearing surfaces should be clean.

c. Remove grease or oil from webbing with dry cleaning solvent (tetrachlorethylene) NSN 6850-00-264-9038. No repairs such as splicing or restitching are authorized.

2-6. Lubrication.

In general, no lubrication is required for any of the kit components.

CAUTION

Do not lubricate metal components of the sling assemblies as this will accumulate grit and accelerate wear.

Section IV. PREVENTIVE MAINTENANCE CHECKS, SERVICE AND REPAIR

2-7. General.

a. This section contains general instructions for inspection maintenance and repair of the Aerial Recovery Kit components. In the following paragraphs, and table 2-1 specific repair and inspection instructions are presented to restore the major items to a serviceable condition.

b. Preventive maintenance and repair of the kit components is most easily accomplished as a post mission operation since the items required cleaning and handling for repackaging.

c. Two categories of inspection are applicable to this kit:

(1) A routine inspection of each component will be made by the user before and after use.

(2) An inspection of the kit will be performed every six months using the Preventative Maintenance Checks and Services (PMCS), Table 2-1 by a qualified Military Parachute Rigger, or a qualified Army Aircraft Quality Control and Technical Inspector. To facilitate recording of this inspection, each kit will be stamped in 1 inch lettering with the date the kit is placed in service by the using unit. The stamped date will be used in determining the date of the next inspection. The marking will be with either Orange Yellow Parachute Marking Ink, NSN 7510-00-634-6583 or Strata Blue Parachute Marking Ink, NSN 7510-00-286-5362. If found serviceable upon each six months inspection, the new

date will be stamped on the container. At no time will the kit be used beyond the six month period without being inspected. Components judged unserviceable will be disposed of. Prior to disposal, all serviceable components will be cannibalized from the condemned item for future use.

2-8. Kit Container (Figure 1-1).

The container should be inspected for holes, dents and damage to the seal and its receptacle. The seal and its mating surface must be kept free of grit. Small indentations can be repaired as deemed necessary. Check sling suspension points.

Table 2-1. Preventive Maintenance Checks and Services

Key: X-After Use
 Y-Prior to Use
 Z-Periodic (6 month) Inspection

Interval and Sequence No.			Item Inspected	Procedures (inspect for)	Work time (M/H)
X	Y	Z			
1	1	1	Kit packed for use	Determine that all components are present for use	0.8
	2	2	Kit Container	Check for holes, dents, damage to seal and grit between seal and mating surface. Check sling suspension points for wear and damage, latches and strikes for freedom of action. Check inspection record for last date of inspection.	0.8
2	3	3	Drogue Chutes	Check for evidence of fraying and abrasion of canopy, shroud lines and riser lines. Examine hook swivel for freedom of action. Check for dampness, fungus acid, grease, oil, dirt, foreign material, holes, cuts, tears, and broken lines and webbing.	0.8
3	4	4	Fabric Material	Check for legibility of data markings, completeness, dampness, fungus, dirt, acid, grease, oil, foreign material, rips, burns, cuts, frays, tears, holes, thin spots, loose weaving and loose or broken stitching, lines or webbing.	0.8
4	5	6	Hardware Components	Check for corrosion, rough spots, burrs, breaks, cracks, bends, and missing or worn tie chord, clevis pin or safety pin.	0.9

for example, lifting grips for wear and damage. Check latches and strikes for freedom of operation.

2-9. Nylon Rope.

Inspect for cuts, frays, oil or grease stains and rust at points of contact with metal. Remove grease or oil by spot cleaning with dry cleaning solvent (tetrachlorethylene), NSN 6850-00-264-9039. Replace as required.

2-10. Load Stabilizers.

The load stabilizers of the aerial recovery kit are shown in figure 2-3 items (1) through (4). These are as follows:

a. Drogue Chutes. There are two types of drogue chutes, 156 inches and 60 inches diameter when inflated, item (1) and (2), respectively. The drogue chutes if wet should be suspended and allowed to dry after use. When dry shake and brush to remove grit. Check for evidence of fraying and abrasion of canopy, shroud lines, and riser lines. Examine hook swivel for freedom of operation. Repackage into bag as shown in Figure 2-1. The maximum amount of wear which can be tolerated before replacement of the chute assembly is defined in TM 10-1670-201-23.

a.1. Drogue chutes manufactured before June 1980. Inspect and repair as follows:

(1.) Swivel assemblies either be smoothed down and/or remove any casting flash by grinding or filing, or tape over the metal portion that contacts the webbing with appropriate tape.

(2.) Overstitch the zig zag stitch pattern with a three point WW Stitch Pattern using size FF Nylon Thread.

b. Gust Lock Assembly. Inspect for pin wear and general deformation. Straighten as required. Check the shock bungee chord assemblies for cuts and abrasion. Replace as required.

c. Spoiler Assembly. Check the assemblies for evidence of fraying and abrasion of nylon straps and the integrity of their attachment to the spoilers. A reduction of 50% in section area of one strap or the loss of one rivet per attachment necessitates the repair or replacement of the strap assembly. Check the rubber to aluminum bond and rebond if required using adhesive liquid FED-MM-A-139. Straighten spoiler angles. Replace when beyond economical repair.

2-11. Sling Assemblies.

The sling assemblies of the aerial recovery kit are shown in figure 2-4. These are as follows :

a. Anchor Positioning Straps. Inspect

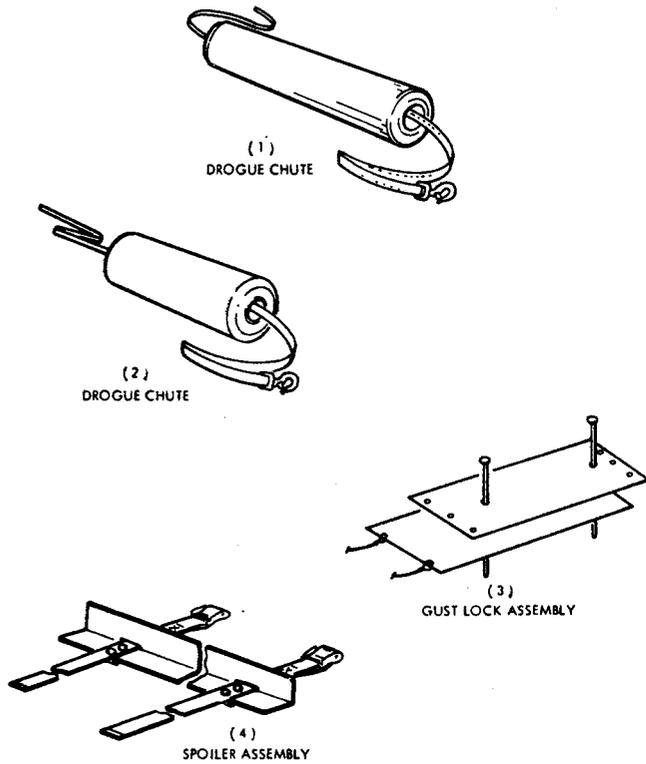


Figure 2-3. Load Stabilizers.

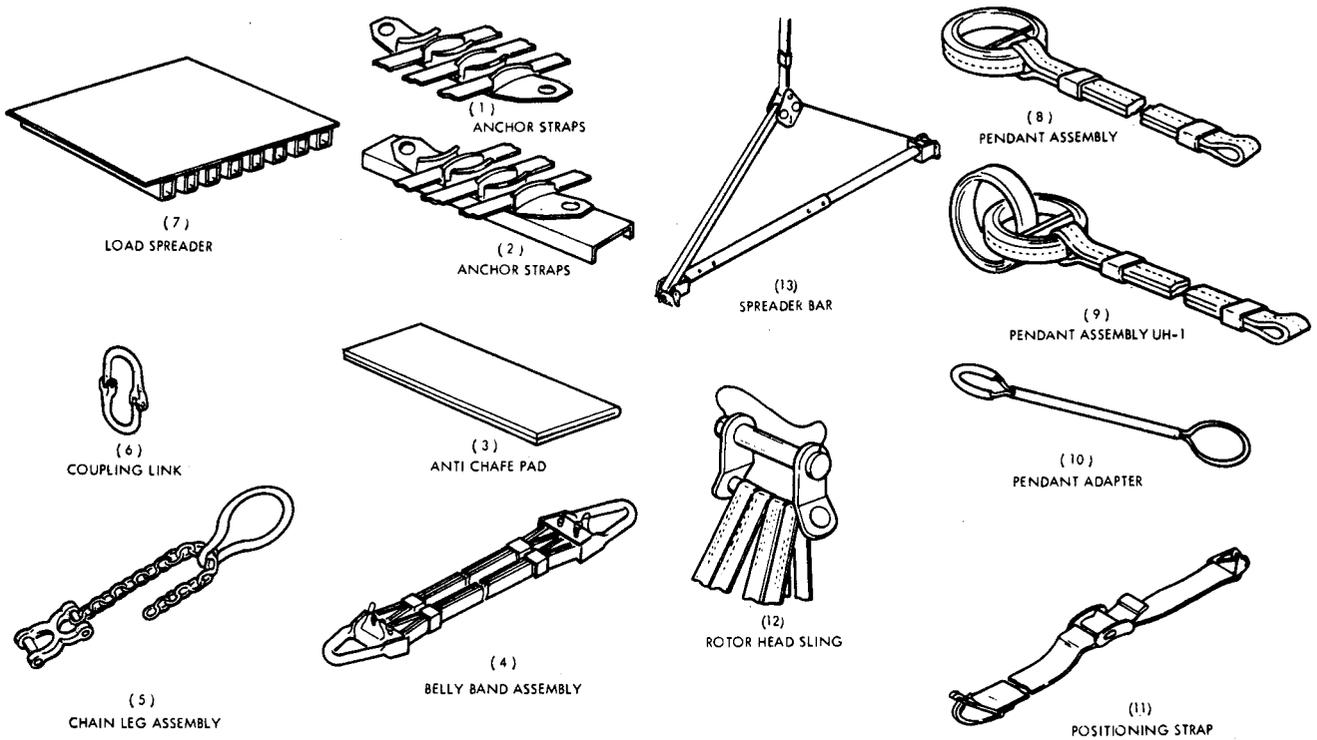


Figure 2-4. Sling Components.

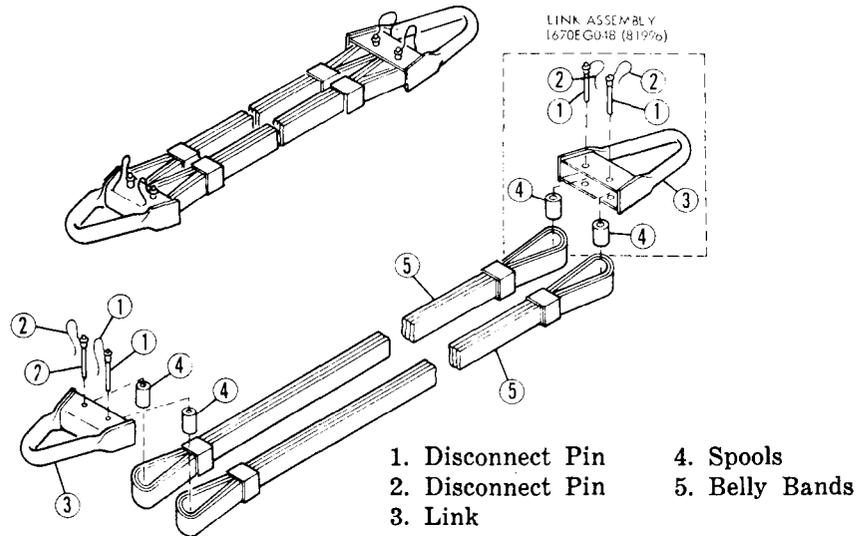


Figure 2-5. Sling Assembly Belly Band P/N 1670EG057A1.

for wear and any burrs which may abrade the belly bands. Remove burrs, check for free running of anchor on belly bands. If the positioning anchor strap cannot be adjusted to obtain a free sliding movement, it should be replaced.

b. *Anti Chafe Pad.* Inspect outer lines of pad assembly for tears and abrasion. Check “Velcro” bonded attachment. Before initiating repair to liner, allow felt filler to dry thoroughly. Rebond “Velcro” as required. Replace pad assembly when beyond economical repair.

c. *Belly Band Assembly.* Using disassembly procedures illustrated in figure 2-5, remove quick disconnect pins, (1) and (2) and separate link, from the belly bands, Remove the spools from the belly bands. Inspect the belly bands for fraying and abrasion, particularly in the region of the spools. Any evidence of abrasion of the nylon belly-bands shall warrant replacement (individual straps may be replaced). Inspect the spools and inside the link for smoothness of surface, remove any burrs that are evident. Any deformation of the spools or pins shall warrant replacement. Check fitting for evidence of cracks in vicinity of welds and for peeling of protective plating. Replace if cracks or peeling are evident. Assembly is opposite of above procedure.

d. *Chain Leg Assembly.* Use disassembly procedures illustrated in figure 2-6. Remove the quick disconnect. pin and pull the large diameter clevis pin from the fitting. Remove the cotter pin and slide the small diameter pin from the fitting thus releasing the chain. Remove the chain from the grab link and inspect both components for

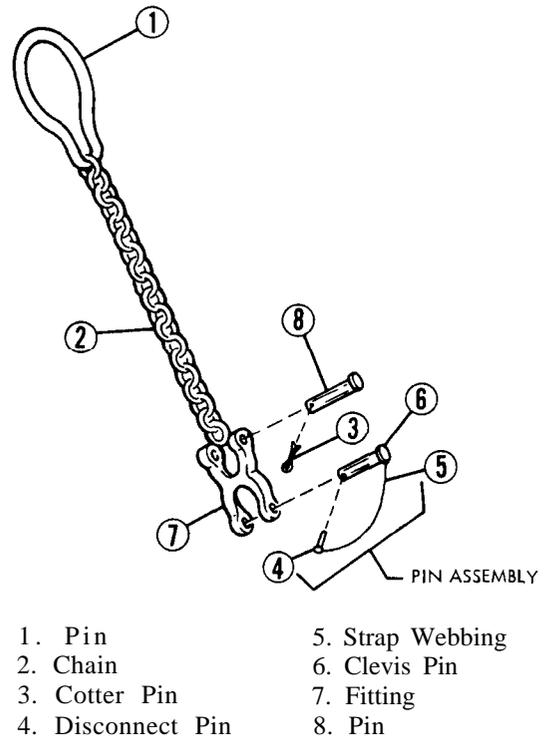


Figure 2-6. Chain Leg Assembly P/N 1670EG078B1.

freedom of operation and alignment. Replace if locking mechanism does not operate freely or if the pin is bent. Inspect both clevis pins for alignment, cracks and wear. If pins are bent or worn in excess of 0.02 inches-replace. Inspect the clevis fitting for indications of wear, cracks or bending particularly at the pin holes. If worn in excess of 0.02 inches-replace. Inspect the chain for evidence of wear and cracks. Any cracks or wear in excess of 0.02 inches shall be cause for replacement. Assembly is the opposite of that stated for disassembly. Replace cotter pin with a new pin.

e. Coupling Link Assembly. Use disassembly procedures illustrated in figure 2-7. Depress the quick disconnect pin lock detent and remove pin from the clevis pin. Remove clevis pin and separate fitting links. Check quick disconnect pin for freedom of operation and for alignment. Inspect the clevis pin for wear and cracks if the

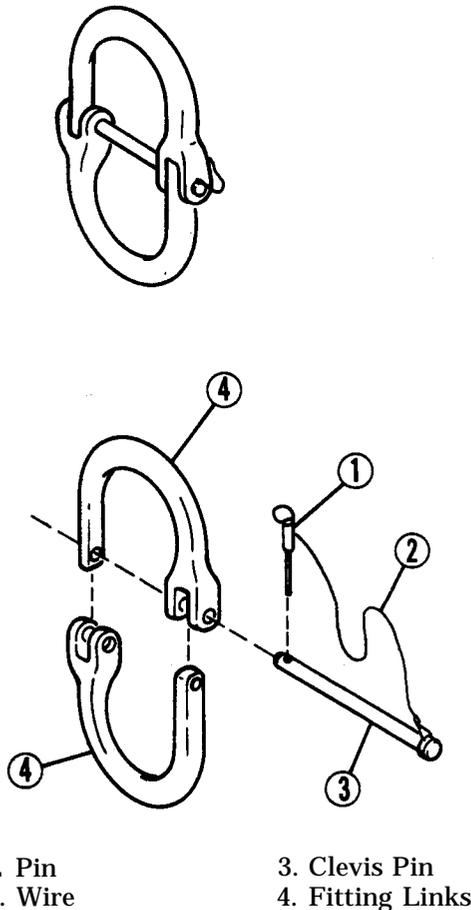


Figure 2-7. Coupling Link Assembly
P/N 1670EG079-1.

pin diameter is worn such that it can be detected by feel, particularly in the area of the clevis connection or is cracked it should be replaced. Inspect the coupling links for wear, cracks or peeling of the plating. If wear in the area of the belly band assembly exceeds 0.02 inches or if peeling or cracks are evident-replace the links as an assembly.

f. Load Spreader Assembly. Disassemble as shown in figure 2-8 if required. Inspect the fabric cover assembly and closure strips for tears. Check the tube assemblies for binding or deformation by touch. Check the bond between the velcro tape and cover assembly and the pad assembly. Re-bond as required. Repair tears in the cover assembly by bonding on a patch using adhesive Liquid FED-MM-A-139. If there is evidence of tube deformation cut the closure strip, remove tube and replace with a new unit. Bond on a new closure strip.

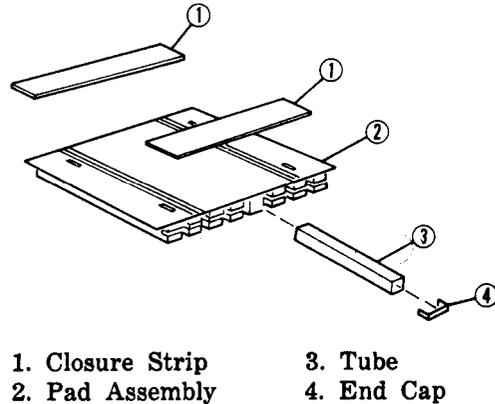


Figure 2-8. Spreader Load Assembly
P/N 1670EG035A1.

g. Pendant Assembly. Suspend pendant assembly from nylon ring and allow to dry thoroughly. Remove grit from webbing by shaking and brushing. Do not use pressurized air as this will force particles into webbing. Inspect sling, leg and ring assembly for indications of abrasion. If abrasion is apparent on any of the load carrying components, they must be replaced.

h. Pendant Assembly UH-1 Type. Same as above.

i. Pendant Adapter. Suspend pendant adapter, allow to dry, inspect for indication of abrasion, replace as required.

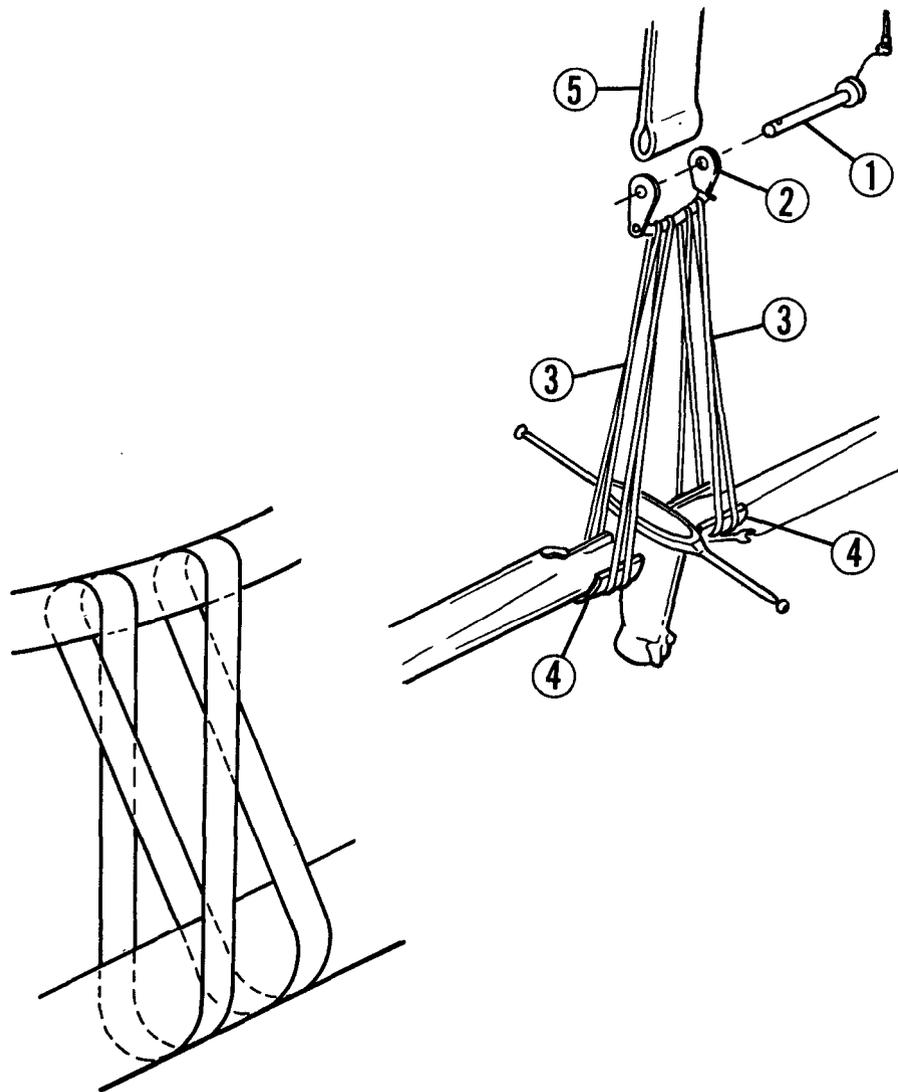
j. Positioning Strap Arrangement. Inspect the assemblies of the arrangement for evidence of

fraying and abrasion. Check buckle for burrs which may cause abrasion and deburr as required. Replace frayed or abraded straps.

k. Rotor Head Sling Arrangement. Check each strap assembly (figure 2-9) for evidence of fraying and abrasion. If this type of wear is evident the assembly should be replaced. Inspect the shackle assembly (1) and (2) for evidence of wear. Burrs which may occur on the body of the pin or on the shackle tube should be polished smooth. If the protective plating is worn through or peeling, or if there are any indications of cracks the assembly should be replaced.

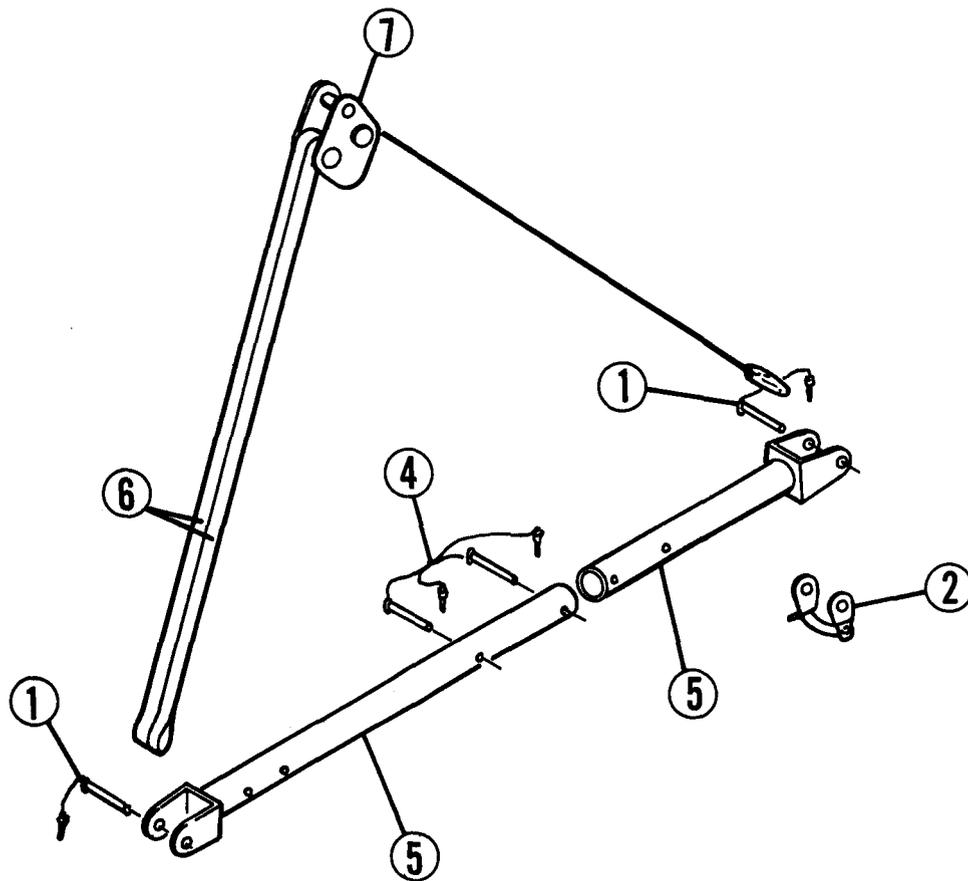
1. Spreader Bar Arrangement. Using disassembly procedures illustrated in figure 2-10,

remove pin assemblies to release the strap assemblies from the spreader bar assembly and shackle. Remove pin assembly from spreader bars (3) and (5). Separate spreader bars and examine both segments for dents, galling and weld cracks. Localized dents are acceptable if they do not impair the sliding engagement of the spreader bars. Those areas exhibiting galling should be smoothed by burnishing. Any evidence of cracks, (these are most likely to appear in the vicinity of the welds) shall warrant replacement. Check all pin assemblies for burrs and wear. If burrs are evident they should be smoothed by burnishing. If the protective plating of any pin is worn through it should be replaced. Any lanyards that are frayed or broken should be replaced.



1. Rotor head shackle pin 2. Rotor head shackle 3. Strap assembly 4. Antichafe pad

Figure 2-9. Rotor Head Sling Arrangement P/N 1670EG043-1.



INDEX REFERENCE

ASSEMBLE 6 TO 7 WITH
INDEX NUMBERS FACING UP

POSITION NUMBERS
(TYPICAL)

INDEX MARK (YELLOW)
CENTER ON BOTTOM FOR
EQUAL LEGS

- 1. Pin
- 2. Shackle
- 3. Spreader Bar

- 4. Pin Assembly
- 5. Spreader Bar

Figure 2-10. Spreader Bar Arrangement P/N 1670EG060B.

CAUTION

Each load rigged with polyester slings is to be checked to ensure the proper load capacity is indicated on the identification tag prior to use. The rigging is to be inspected to insure that the roundsling is protected from being cut by sharp corners, sharp edges, protrusions or abrasive surfaces. Roundslings are not to be dragged on floors or other abrasive surfaces. No repair of round-ins is authorized.

m. *Polyester Roundslinger.* Polyester roundslings are to be visually inspected for structural integrity of the lifting eyes, the-protective covers and the wear (anti-chafe) pads prior to rigging. The polyester roundsling shall be removed from service if any of the following is visible.

(1) If polyester roundsling identification tag is missing or unreadable.

(2) Melting, charring or weld spatter of any part of the polyester roundsling.

(3) Holes, tears, cuts, embedded particles, abrasive wear, or snags that expose the core fibers of the polyester roundsling.

(4) Broken or worn stitching in the cover which exposes the core fibers.

(5) Fittings when damaged, stretched or distorted in any way.

(6) Polyester roundslings that are knotted.

(7) Acid or alkali burns of the polyester roundsling.

(8) Any conditions which cause doubt as to the strength of the polyester roundsling.

**APPENDIX A
REFERENCES**

AR 750-1	Army Material Maintenance Concepts and Policies
TM 10-1670-201-23	Maintenance of Parachutes and Other Airdrop Equipment, General
DA PAM 738-751	Functional Users Manual for The Army Maintenance Management System-Aviation (TAMMS-A)
TM 43-0002-1	Procedures for the Destruction of Air Delivery Equipment to Prevent Enemy Use
TM 1-1500-204-23 (Series)	General Aircraft Maintenance Manual

*U.S. GOVERNMENT PRINTNG OFFICE: 1996. 755-825/40278

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APPENDIX B MAINTENANCE ALLOCATION CHARTS

Section I. INTRODUCTION

B-1. Summary.

a. This appendix assigns maintenance functions and repair operations to be performed by the lowest appropriate maintenance echelon. Section II defines the maintenance operations required; Section III lists the tool and test equipment requirements and Section IV presents a list of operating supplies.

b. Columns in the maintenance allocation chart areas follows:

(1) *Part or Component*. This column shows only the nomenclature or standard item name. Additional descriptive data are included only where clarification is necessary to identify the part. Components and parts comprising a major end item are listed alphabetically. Assemblies and subassemblies are in alphabetical sequence with their components listed alphabetically immediately below the assembly listing.

(2) *Maintenance Function*. This column indicates various maintenance functions allocated to the echelon capable of performing the operation.

(a) *Service*. To clean, to preserve, and to replenish fuel and lubricants.

(b) *Adjust*. To regulate periodically to prevent malfunction.

(c) *Inspect*. To verify serviceability and to detect the first stage of electrical or mechanical failure by scrutiny.

(d) *Test*. To verify serviceability and to detect the first stages of electrical or mechanical failure by use of special equipment such as gages and meters.

(e) *Replace*. To substitute serviceable assemblies, subassemblies and parts for unserviceable components.

(f) *Repair*. To restore to a serviceable condition by replacing unserviceable parts or by any other action required utilizing tools, equipment, and skills available, to include welding, grinding, riveting, straightening, adjusting, etc.

(g) *Calibrate*. To determine, check or rectify the graduation of an instrument, weapon, or weapons system, or components of a weapons system.

(h) *Rebuild*. To restore to a condition comparable to new by disassembling the item to determine the condition of its component parts and reassembling it using serviceable, rebuilt, or new assemblies, subassemblies, and parts.

(3) *1st, 2nd, 3rd, 4th, 5th Echelon*. The symbol X placed in columns 1 thru 5 indicated the echelon responsible for performing that particular maintenance operation, but does not necessarily indicate that repair parts will be stocked at that level. Normally there will be no deviation from the assigned level of maintenance. In cases of operational necessity, maintenance functions assigned to a maintenance level may, on a one-time basis and at the request of the lower maintenance level, be specifically authorized by the maintenance officer of the level of maintenance to which the function is assigned. The special tools, equipment, etc. required by the lower level of maintenance to perform this function will be furnished by the maintenance level to which the function is assigned. This transfer of a maintenance function to a lower maintenance level does not relieve the higher maintenance level of the responsibility for the function. The higher level of maintenance has the authority to determine:

1) If the lower level is capable of performing the work.

2) If the lower level will require assistance or technical supervision and on-site inspection.

3) If the authorization will be granted.

(4) *Tools Required*. This column indicates codes assigned to individual tool, test equipment, and maintenance equipment referenced. The grouping of codes in this column of the maintenance allocation chart indicates the tool, test and maintenance equipment required to perform the maintenance function.

c. Columns in the allocation of tools for maintenance functions are as follows:

(1) *Tools Required for Maintenance Functions*. This column lists tools, test, and maintenance equipment required to perform the maintenance functions.

(2) *1st, 2nd, 3rd, 4th, 5th Echelon*. To be assigned at a later date.

(3) *Tool Code*. This column lists the tool code assigned.

B-2. Mounting Hardware.

The basic entries of this maintenance allocation chart do not include mounting hardware such as screws, nuts, bolts, washers, brackets, and clamps.

Section II. MAINTENANCE ALLOCATION CHART

MAINTENANCE ALLOCATION CHART FOR AERIAL RECOVERY KIT FOR US ARMY AIRCRAFT (AVS COM Reg 310-10)														
(1) GROUP NO.	(2) FUNCTIONAL GROUP	(3) MAINTENANCE FUNCTION											(4) TOOLS AND EQUIP- MENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
8001	Container Assembly													
	Handle	0							0					
	Lift Grip	0.1							0.2					
	Seal	0	0						0					
	Shell	0.1	0.1						0.2					
8002	Load Spreader													
	Cover Assembly	0		0					0	0				
	Pad Assembly	0.1		0.1					0.3	0.3				
	Tube Assembly	0		0.1					0.2	0.2				
8003	Load Stabilizers													
	Drogue Chutes	0		0					0	0				
	Gust Lock Bracket	0.1		0.1					0.2	0.3				
	Bungee Cord	0		0					0	0				
	Spoiler Assembly	0.1		0.1					0.2	0.2				
8004	Sling Assemblies													
	Anchor Positioning Strap	0							0	0				
	Anti Chafe Pad	0.1							0.1	0.2				
	Link Assembly Belly Band Lanyard	0		0					0	0				
	Quick Disconnect Pin	0.1		0.1					0.1	0.2				
	Spool	0							0					
	Nylon Rope	0.1							0.1					
	Pendant Assembly	0							0					
	Ring Assembly	0.1		0.1					0.1	0.2				
	Sling Leg	0		0					0	0				

**MAINTENANCE ALLOCATION CHART
FOR
AERIAL RECOVERY KIT FOR US ARMY AIRCRAFT**

(AVS COM Reg 310-10)

(1) GROUP NO.	(2) FUNCTIONAL GROUP	(3) MAINTENANCE FUNCTION										(4) TOOLS AND EQUIP- MENT	(5) REMARKS		
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL			REBUILD	
8005	Pendant Assembly UH-1														
	Adapter Ring	0		0					0						
		0.1		0.1					0.1						
	Ring Assembly	0		0					0	0					
		0.1		0.1					0.1	0.2					
	Sling Leg	0		0					0	0					
		0.1		0.1					0.1	0.2					
	Positioning Strap														
	Sling Assembly - Belly Band														
	Link Assembly	0							0	0					
		0.1							0.1	0.1					
	Strap Assembly	0		0					0	0					
		0.1		0.1					0.1	0.1					
	Spreader Bar Arrangement														
	Bar Assembly														
	Inner Tube Assembly	0							0	0					
		0.1							0.1	0.2					
	Outer Tube Assembly	0							0	0					
		0.1							0.1	0.2					
	Pin	0							0						
		0.1							0.1						
	Chain Leg Assembly														
	Chain	0							0						
		0.1							0.1						
	Clevis	0		0					0	0					
		0.1		0.1					0.1	0.2					
	Grab Link	0							0	0					
		0.1							0.1	0.2					
	Coupling Link Assembly	0							0	0					
		0.1							0.1	0.2					
Pin Assembly	0							0							
	0.1							0.1							
Shackle Assembly	0							0	0						
	0.1							0.1	0.2						
Strap Assembly	0		0					0	0						
	0.1		0.1					0.1	0.2						
Vertex Fitting Assembly															
Housing	0							0	0						
	0.1							0.1	0.2						
Pin	0							0							
	0.1							0.1							
Pin	0							0							
	0.1							0.1							

1. See special assembly instructions for Pendant Ring

APPENDIX C

REPAIR PARTS AND SPECIAL TOOLS LIST (Current as of 17 December 1974)

Section I. INTRODUCTION

C-1. Scope.

This appendix lists the repair parts and bulk materials required for performance of organizational maintenance of the Aerial Recovery Kit.

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 Reference Number Index. A list, in ascending numerical sequence, of all National stock numbers appearing in the listing, followed by a list, in alphameric sequence, of all reference numbers appearing in the listing. National stock numbers and reference 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 listing:

a. 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
PA	Item procured and stocked for anticipated or known usage.
PB	Item procured and stocked for insurance purpose because essentiality dictates that a minimum quantity be available in the supply systems.

NOTE: Cannibalization or salvage may be 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
0	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 repair (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.

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

c. Description. Indicates the Federal item name and, if required, a minimum description to identify the item. The description column includes the following:

(1) *Reference Number and Manufacturer Code.* 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, specification standards and inspection requirements, to identify an item or range of items. The primary number is followed by the Federal supply code for manufacture (FSCM) in parentheses. 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.

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

(2) *Usable on Code.* (Not applicable).

d. 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.

e. Quantity Incorporated in Unit. Indicates the quantity of the item in the breakout shown on the illustration figure, which is prepared for an assembly. A "V" appearing in this column in lieu of a quantity indicates that no specific quantity is applicable.

f. 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.

C-4. How To Locate Repair Parts.

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

(1) *First.* Identify the repair part on the exploded view illustration and note the item number of the repair part.

(2) *Second.* Using the Repair Parts Listing, find the item number listed in the illustration column.

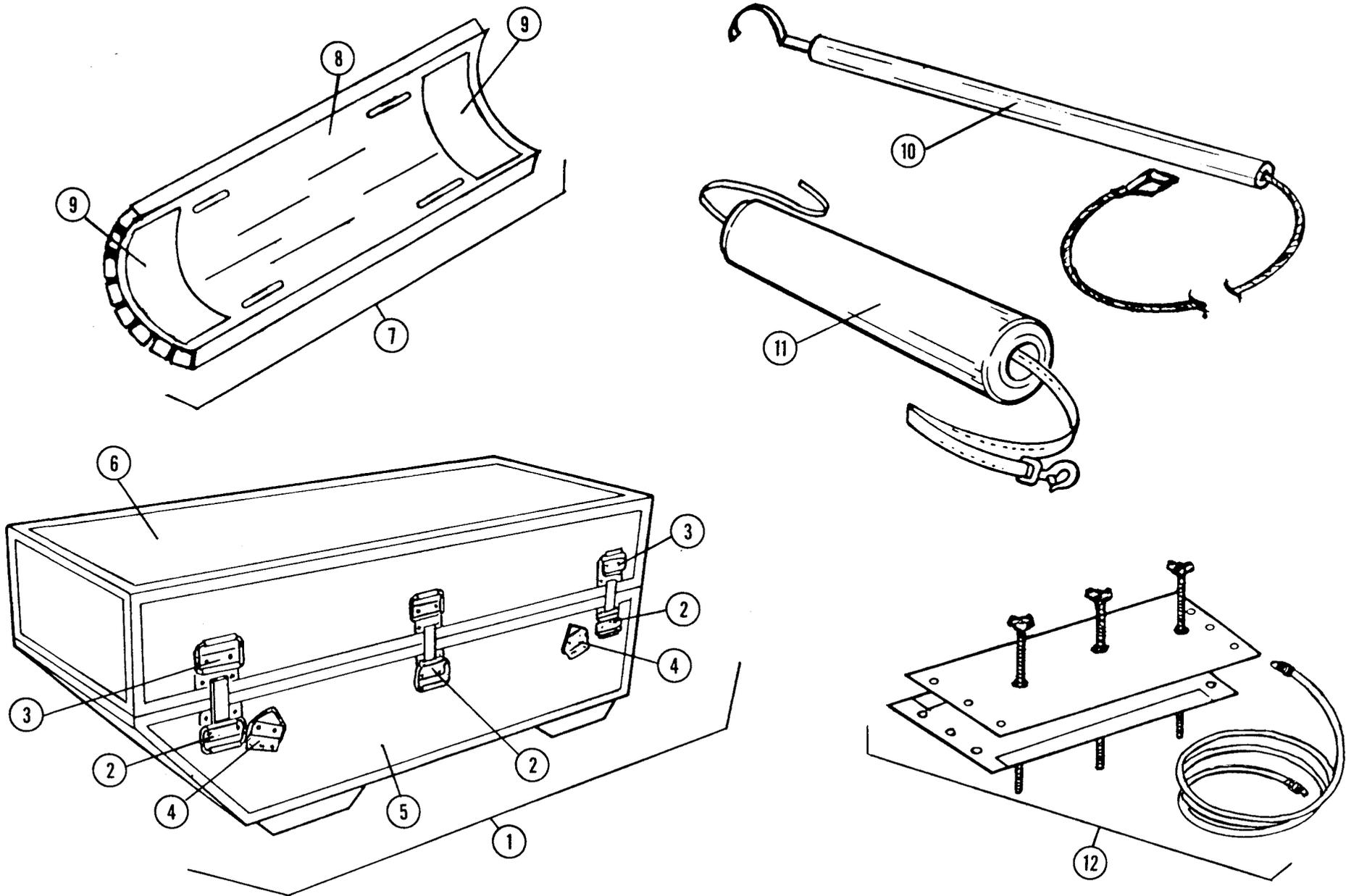
b. When National Stock Number or Reference Number is Known:

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

(2) *Second.* After finding the figure and item number, locate the figure and item in the illustration column of the Repair Parts Listing.

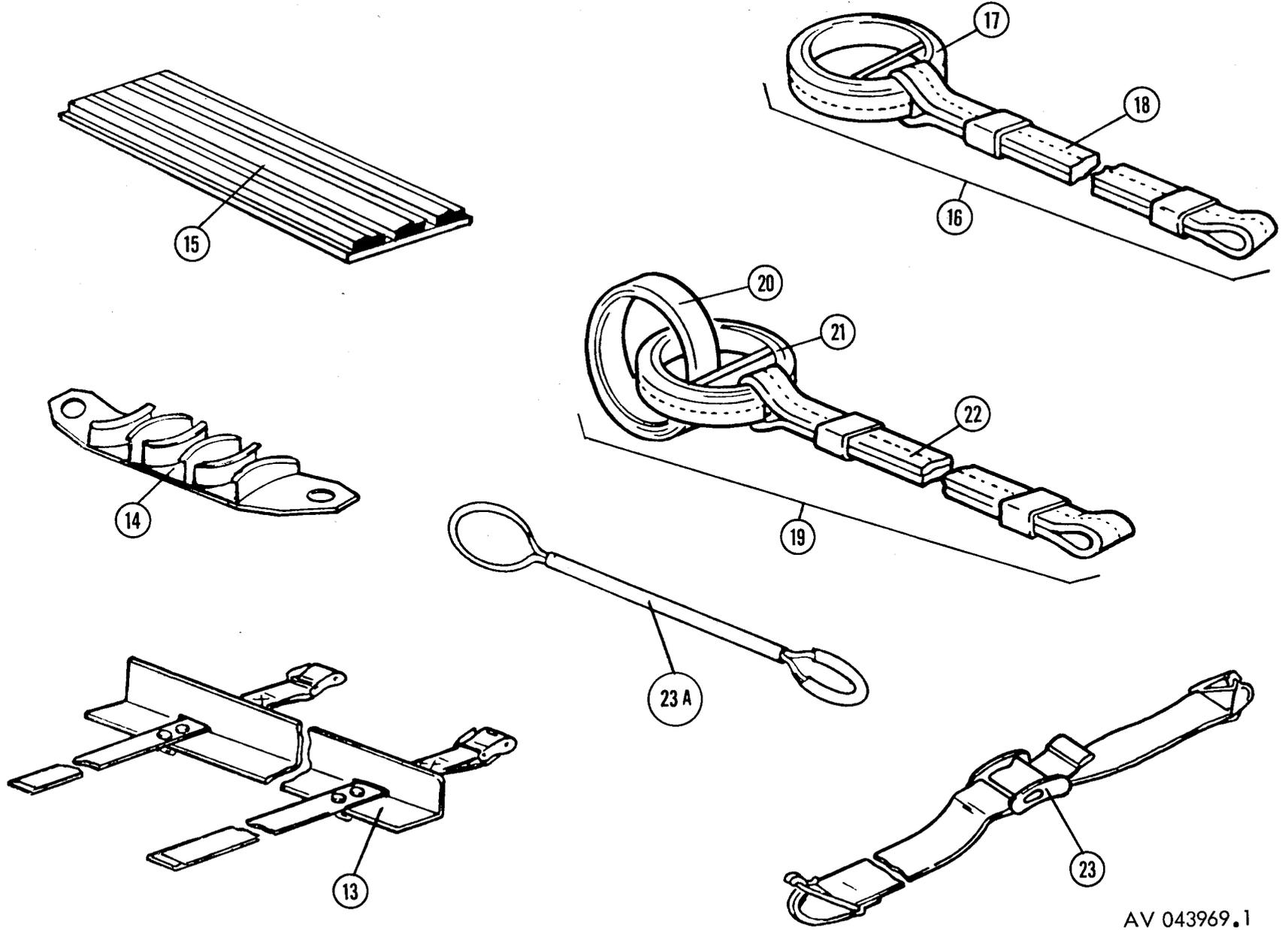
C-5. Abbreviations.

(Not applicable).



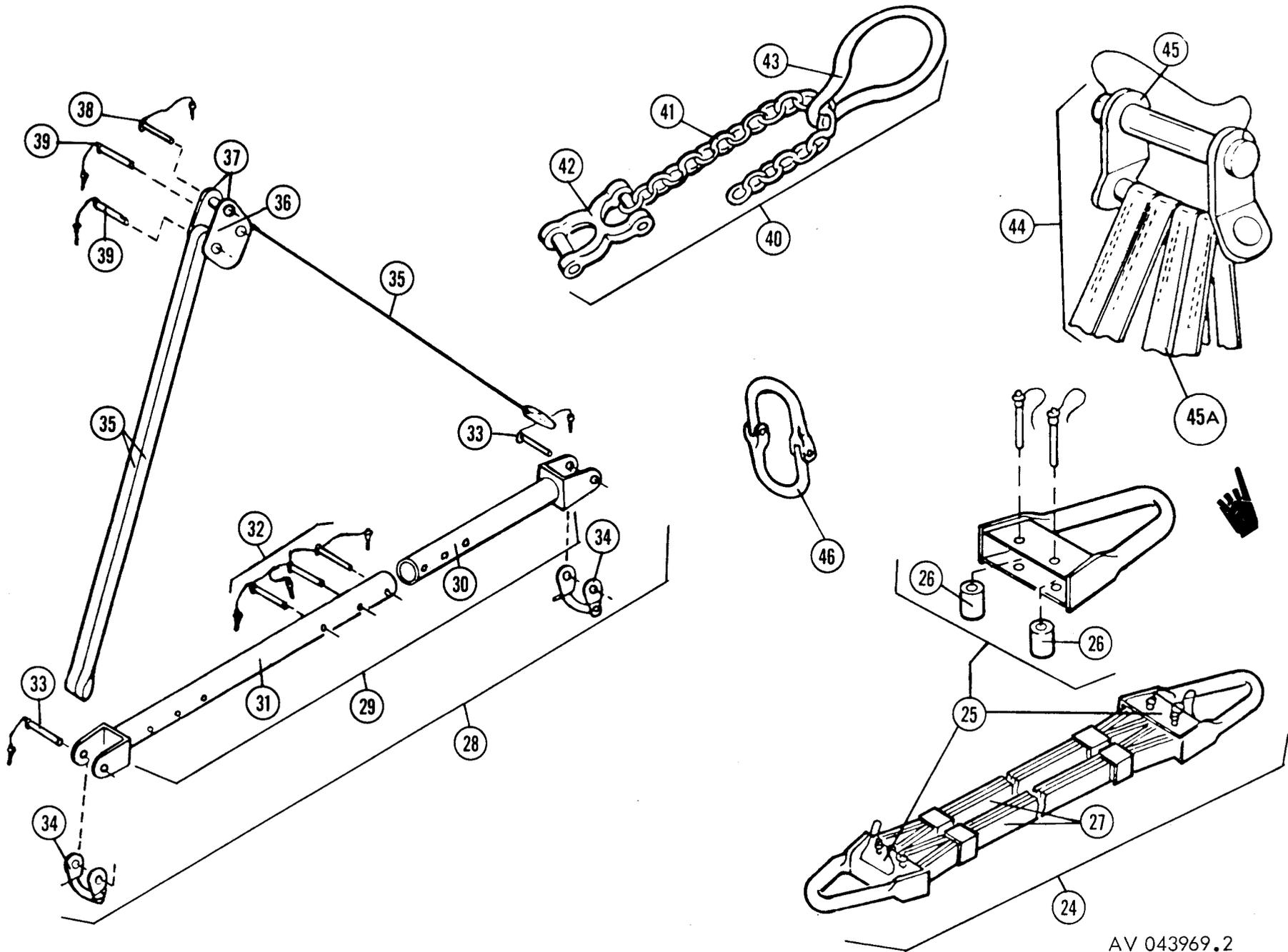
AV 043969

Figure C-1. Aerial Recovery Kit (sheet 1 of 3).



AV 043969.1

Figure C-1. Aerial Recovery Kit (sheet 2 of 3).



Change 2 C-5

Figure C-1. Aerial Recovery Kit (sheet 3 of 3).

AV 043969.2

TM 55-1670-251-20&P/T/O 13D3-2-2

SMR CODE	NATIONAL STOCK NUMBER	REFERENCE NUMBER & MFR CODE		DESCRIPTION	USABLE ON CODE	UNIT OF MEA	QTY INC IN UNIT	ILLUSTRATION	
								FIG NO	ITEM NO
	1670-00-264-8941	1670EG109A	(81996)	KIT, AERIAL RECOVERY-AIRCRAFT				C-1	
				SECTION II REPAIR PARTS LIST					
PBOZZ	1670-00-391-8585	1670EG120	(81996)	CONTAINER, AERIAL RECOVERY KIT	EA	1	C-1		1
PAOZZ	1670-00-111-2239	1670EG086-1	(81996)	. HANDLE, BAIL-BOTTOM	EA	6	C-1		2
PAOZZ	1670-00-111-2240	1670EG086-2	(81996)	. HANDLE, BAIL-TOP	EA	6	C-1		3
PAOZZ	1670-00-111-2241	1670EG086-9	(81996)	. HANDLE, BAIL-LIFT	EA	4	C-1		4
PBOZZ	1670-00-391-8588	1670EG120-1	(81996)	. SHELL, CONTAINER, BOTTOM	EA	1	C-1		5
PBOZZ	1670-00-391-8589	1670EG120-2	(81996)	. SHELL, CONTAINER, TOP	EA	1	C-1		6
PBOZZ	1670-00-393-0472	1670EG035A1	(81996)	SPREADER ASSEMBLY, AERIAL RECOVERY	EA	4	C-1		7
PBOZZ	1670-00-393-0457	1670EG073-1	(81996)	. COVER, LOAD SPREADER	EA	1	C-1		8
PBOZZ	1670-00-391-8501	1670EG035A5	(81996)	. PAD, SPREADER	EA	2	C-1		9
PBOZZ	1670-00-574-8044	1670EG068B1	(81996)	PROBE, STATIC DISCHARGE	EA	1	C-1		10
PAOZZ	1670-00-391-8499	1670EG029B3	(81996)	CHUTE, DROGUE, AIR RECOVERY-60 IN. DIA	EA	1	C-1		11
PAOZZ	1670-00-391-8607	1670EG029B1	(81996)	CHUTE, DROGUE, AIR RECOVERY-156 IN. DIA	EA	1	C-1		11
PAOZZ	1670-00-391-8605	1670EG030A	(81996)	GUST LOCK ASSEMBLY, AERIAL RECOVERY	EA	14	C-1		12
PBOZZ	1670-00-393-0454	1670EG032A	(81996)	SPOILER ASSEMBLY, AERIAL RECOVERY	EA	8	C-1		13
PAOZZ	1670-00-391-8583	1670EG075A1	(81996)	ANCHOR, POSITIONING STRAP-STRAIGHT	EA	8	C-1		14
PAOZZ	1670-00-574-8046	1670EG075A3	(81996)	ANCHOR, POSITIONING STRAP-ANGLED	EA	4	C-1		14
PAOZZ	1670-00-391-8511	1670EG044	(81996)	PAD ASSEMBLY, AITI-CHAFE	EA	8	C-1		15
PBOZZ	1670-01-388-3917	PRS5E030	(81996)	CH-47 PENDANT ASSY	EA	1	C-1		16
PAOZZ	1670-00-393-0460	1670EG070B1	(81996)	. RING ASSEMBLY, AERIAL RECOVERY	EA	1	C-1		17
PBOZZ	1670-00-393-0455	1670EG069-1	(81996)	. SLING LEG, AERIAL RECOVERY	EA	1	C-1		18
PAOZZ	1670-01-388-8479	PRS3E017	(81996)	UH-60 PENDANT ASSY	EA	1	C-1		19

SMR CODE	NATIONAL STOCK NUMBER	DESCRIPTION REFERENCE NUMBER & MFR CODE		USABLE ON CODE	UNIT OF MEA	QTY INC IN UNIT	ILLUSTRATION	
							FIG NO	ITEM NO
PAOZZ	1670-00-393-0507	1670EG067B1	(81996)	. ADAPTER RING, AERIAL RECOVERY	EA	1	C-1	20
PAOZZ	1670-00-393-0460	1670EG070B1	(81996)	. RING ASSEMBLY, AERIAL RECOVERY	EA	1	C-1	21
PBOZZ	1670-00-393-0455	1670EG069-1	(81996)	. SLING LEG, AERIAL RECOVERY	EA	1	C-1	22
PAOZZ	1670-00-393-0489	1670EG036A1	(81996)	POSITIONING STRAP, AERIAL RECOVERY	EA	12	C-1	23
PAOZZ	1670-00-574-8049	1670EG093-1	(81996)	PENDANT ADAPTER, AERIAL RECOVERY	EA	1	C-1	23A
PBOZZ	1670-01-388-3901	PR57E065	(81996)	BELLY BAND ASSY (ROUND SLING DOUBLED) ...	EA	1	C-1	24
PAOZZ	1670-00-391-8523	1670EG048A1	(81996)	. LINK ASSEMBLY, AERIAL RECOVERY	EA	2	C-1	25
PAOZZ	1670-00-391-8556	1670EG048A5	(81996)	. . SPOOL, LINK ASSEMBLY	EA	2	C-1	26
PAOZZ	1670-01-388-3845	PR52E017	(81996)	BELLY BAND STRAP, (DOUBLED)	EA	2	C-1	27
PBOZZ	1670-00-391-8549	1670EG060B1	(81996)	HOISTING ASSEMBLY, AERIAL RECOVERY	EA	2	C-1	28
PBOZZ	1670-00-391-8513	1670EG051A1	(81996)	. SPREADER BAR, AERIAL RECOVERY	EA	1	C-1	29
PBOZZ	1670-00-391-8509	1670EG050C1	(81996)	. . TUBE ASSEMBLY, SPREADER BAR, INNER	EA	1	C-1	30
PBOZZ	1670-00-391-8521	1670EG049B1	(81996)	. . TUBE ASSEMBLY, SPREADER BAR, OUTER	EA	1	C-1	31
PAOZZ	1670-00-391-8512	1670EG052A5	(81996)	. . PIN ASSEMBLY, SPREADER BAR	EA	1	C-1	32
PAOZZ	1670-00-393-0506	1670EG054A3	(81996)	. PIN ASSEMBLY, AERIAL RECOVERY	EA	2	C-1	33
PAOZZ	1670-00-391-8578	1670EG053B1	(81996)	. SHACKLE ASSEMBLY, AERIAL RECOVERY	EA	2	C-1	34
PBOZZ	1670-01-388-8480	PR53E008	(81996)	HOISTING ASSY STRAP	EA	4	C-1	35
PBOZZ	1670-00-391-0505	1670EG045B1	(81996)	. VERTEX FITTING ASSEMBLY AERIAL RECOVERY	EA	1	C-1	36
PAOZZ	1670-00-393-0508	1670EG042B1	(81996)	. . HOUSING, VERTEX FITTING	EA	1	C-1	37
PAOZZ	1670-00-393-0500	1670EG040C1	(81996)	. . PIN ASSEMBLY, AERIAL RECOVERY	EA	1	C-1	38
PAOZZ	1670-00-393-0465	1670EG040C9	(81996)	. . PIN ASSEMBLY, AERIAL RECOVERY	EA	2	C-1	39
PAOZZ	4010-00-391-8608	1670EG078B1	(81996)	CHAIN ASSEMBLY, SINGLE LINK	EA	2	C-1	40
PAOZZ	4010-00-391-8609	1670EG078B9	(81996)	. CHAIN, WELDED	EA	1	C-1	41
PAOZZ	1670-00-391-8579	1670EG078B7	(81996)	. CLEVIS, DOUBLE LINK	EA	1	C-1	42

SMR CODE	NATIONAL STOCK NUMBER	DESCRIPTION REFERENCE NUMBER & MFR CODE		USABLE ON CODE	UNIT OF MEA	QTY INC IN UNIT	ILLUSTRATION	
							FIG NO	ITEM NO
PAOZZ	4010-00-391-8611	1670EG078B11	(81996)	. LINK, CHAIN, END	EA	1	C-1	43
PBOZZ	1670-00-574-8048	1670EG043-1	(81996)	SLING ASSEMBLY, ROTOR HEAD	EA	1	C-1	44
PAOZZ	1670-00-574-8043	1670EG061C1	(81996)	. SHACKLE ASSEMBLY, ROTOR HEAD SLING	EA	1	C-1	45
PAOZZ	1670-01-388-6789	PR52E008	(81996)	ROTOR HEAD SLING STRAP ASSY	EA	4	C-1	45A
PAOZZ	1670-00-398-9670	1670EG079-1	(81996)	COUPLING LINK ASSEMBLY, AERIAL RECOVERY	EA	2	C-1	46
BULK MATERIALS								
PAOZZ	4020-00-753-2886			ROPE, NYLON-1-1/4 IN. CIR, 20 FT PER LB. 4,800 LB	FT	V	BULK	
				BREAKING STRENGTH, 1,200 FT PER REEL, MIL-R-17343				
PAOZZ	5350-00-221-0872			CLOTH, ABRASIVE-FERRIC OXIDE & QUARTZ, JEAN CLOTH	SH	V	BULK	
				BACKING, 9 IN. W, 11 IN. LG, 24 SHEETS PER CARTON				
PAOZZ	6850-00-264-9038			DRY CLEANING SOLVENT-LIQUID, 5 GAL PAIL, FED P-D-680	GL	V	BULK	
PAOZZ	7510-00-286-5362			INK, MARKING, PARACHUTE-STRATA-BLUE, 1 PT CAN,	PT	V	BULK	
				MIL-I-6903, TYPE IV				
PAOZZ	7510-00-634-6583			INK, MARKING, PARACHUTE-ORANGE-YELLOW, 1 PT BOTTLE	PT	V	BULK	
				MIL-I-6903, TYPE IV				
PAOZZ	7510-00-663-0196			TAPE, PRESSURE SENSITIVE ADHESHIVE-2 IN. W, OLIVE	YD	V	BULK	
				DRAB, FILM BACKING, OPAQUE, 60 YD ROLL, FED PPP- T-60, TYPE III				
PAOZZ	7520-00-230-2734			MARKER, TUBE TYPE-STRATA-BLUE INK, FELT TIP	EA	V	BULK	
				FED GG-M-00114				
PAOZZ	7520-00-469-7596			MARKER, TUBE TYPE-ORANGE-YELLOW INK, FELT TIP	EA	V	BULK	
				FED GG-M-00114				
PAOZZ	7520-00-491-2917			BALL POINT PEN-STRATA-BLUE INK, MEDIUM POINT	EA	V	BULK	
				FED GG-B-0060				
PAOZZ	8010-00-297-2124			ENAMEL-OLIVE DRAB, SEMIGLOSS, 1 GAL CAN. . .	GL	V	BULK	
				FED TT-E-485, TYPE II				
PAOZZ	8040-00-262-9062			ADHESIVE-LIQUID, 1 PT CAN, FED MMM-A-139, CLASS 2	PT	V	BULK	
PAOZZ	8305-00-267-3114			CORD, ELASTIC-3/8 IN. DIA, 300 LB BREAKING STRENGTH	FT	V	BULK	
				MIL-C-5651, TYPE I				
PAOZZ	8315-00-926-4930			FASTENER TAPE, PILE-BLACK, NYLON, 2 IN. W. .	FT	V	BULK	
				MIL-F-21840, TYPE II, CLASS 1				

SMR CODE	NATIONAL STOCK NUMBER	DESCRIPTION REFERENCE NUMBER & MFR CODE	USABLE ON CODE	UNIT OF MEA	QTY INC IN UNIT	ILLUSTRATION	
						FIG NO	ITEM NO
PAOZZ	8315-00-926-4931			FT	V	BULK	
PAOZZ	9310-00-160-7858			SH	V	BULK	
PAOZZ				IN	V	BULK	
PAOZZ				IN	V	BULK	
SECTION III SPECIAL TOOLS LIST (NOT APPLICABLE)							

SECTION IV
NATIONAL STOCK NUMBER AND REFERENCE NUMBER INDEX

STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER	STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER
1670-01-388-8479	C-1	19	1670-00-393-0505	C-1	36
1670-01-388-3917	C-1	16	1670-00-393-0506	C-1	33
1670-00-391-8499	C-1	11	1670-00-393-0507	C-1	20
1670-00-391-8501	C-1	9	1670-00-393-0508	C-1	37
1670-00-391-8509	C-1	30	1670-00-398-9670	C-1	46
1670-00-391-8511	C-1	15	1670-00-374-8043	C-1	45
1670-00-391-8512	C-1	32	1670-00-574-8044	C-1	10
1670-00-391-8513	C-1	29	1670-00-574-8046	C-1	14
1670-00-391-8521	C-1	31	1670-00-574-8048	C-1	44
1670-00-391-8523	C-1	25	1670-00-574-8049	C-1	23A
1670-00-391-8549	C-1	28	1670-01-388-3901	C-1	24
1670-00-391-8556	C-1	26	1670-01-388-6789	C-1	45A
1670-00-391-8578	C-1	34	4010-00-391-8608	C-1	40
1670-00-391-8579	C-1	42	4010-00-391-8609	C-1	41
1670-00-391-8583	C-1	14	4010-00-391-8611	C-1	43
1670-00-391-8585	C-1	1	4020-00-753-2886	BULK	
1670-00-391-8588	C-1	5	5340-00-111-2239	C-1	2
1670-00-391-8589	C-1	6	5340-00-111-2240	C-1	3
1670-00-391-8605	C-1	12	5340-00-111-2241	C-1	4
1670-00-391-8607	C-1	11	5350-00-221-0872	BULK	
1670-00-393-0454	C-1	13	6850-00-264-9038	BULK	
1670-00-393-0455	C-1	18	7510-00-286-5362	BULK	
1670-00-393-0455	C-1	22	7510-00-634-6583	BULK	
1670-00-393-0457	C-1	8	7510-00-663-0196	BULK	
1670-01-388-3845	C-1	27	7520-00-230-2734	BULK	
1670-00-393-0460	C-1	17	7520-00-469-7596	BULK	
1670-00-393-0460	C-1	21	7520-00-491-2917	BULK	
1670-00-393-0465	C-1	39	8010-00-297-2124	BULK	
1670-01-388-8480	C-1	35	8040-00-262-9062	BULK	
1670-00-393-0472	C-1	7	8305-00-267-3114	BULK	
1670-00-393-0489	C-1	23	8315-00-926-4930	BULK	
1670-00-393-0500	C-1	38	8315-00-926-4931	BULK	
			9310-00-160-7858	BULK	

REFERENCE NUMBER	MFG CODE	FIG NUMBER	ITEM NUMBER	REFERENCE NUMBER	MFG CODE	FIG NUMBER	ITEM NUMBER
PRS5E030	81996	C-1	16	PRS7E065	81996	C-1	24
PRS3E017	81996	C-1	19	1670EG060B1	81996	C-1	28
1670EG029B1	81996	C-1	11	1670EG061C1	81996	C-1	45
1670EG029B3	81996	C-1	11	PRS2E008	81996	C-1	45A
1670EG030A	81996	C-1	12	1670EG067B1	81996	C-1	20
1670EG032A	81996	C-1	13	1670EG068B1	81996	C-1	10
PRS3E008	81996	C-1	35	1670EG069-1	81996	C-1	18
1670EG035A1	81996	C-1	7	1670EG069-1	81996	C-1	22
1670EG035A5	81996	C-1	9	1670EG070B1	81996	C-1	17
1670EG036A	81996	C-1	23	1670EG070B1	81996	C-1	21
160EG040C1	81996	C-1	38	1670EG073-1	81996	C-1	8
1670EG040C9	81996	C-1	39	1670EG075A1	81996	C-1	14
1670EG042B1	81996	C-1	37	1670EG075A3	81996	C-1	14
1670EG043-1	81996	C-1	44	1670EG078B1	81996	C-1	40
1670EG044	81996	C-1	15	1670EG078B11	81996	C-1	43
1670EG045B1	81996	C-1	36	1670EG078B7	81996	C-1	42
1670EG048A1	81996	C-1	25	1670EG078B9	81996	C-1	41
1670EG048A5	81996	C-1	26	1670EG079-1	81996	C-1	46
1670EG049B1	81996	C-1	31	1670EG086-1	81996	C-1	2
1670EG050C1	81996	C-1	30	1670EG086-2	81996	C-1	3
1670EG051A1	81996	C-1	29	1670EG086-9	81996	C-1	4
1670EG052A5	81996	C-1	32	1670EG093-1	81996	C-1	23A
1670EG053B1	81996	C-1	34	1670EG120	81996	C-1	1
1670EG054A3	81996	C-1	33	1670EG120-1	81996	C-1	5
PRS2E017	81996	C-1	27	1670EG120-2	81996	C-1	6

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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.

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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.



THEN ... JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

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10 January 1999

PUBLICATION NUMBER
TM 1-1520-270-13&P

PUBLICATION DATE
30 December 1998

PUBLICATION TITLE
Operator's manual MH60L Helicopter

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
6	2-1 a		
B1		4-3	

In line 6 of paragraph 2-1a the manual states the engine has 6 cylinders. The engine on my set only has 4 cylinders. Change the manual to show 4 cylinders.

Callout 16 in figure 4-3 is pointed at a bolt. In key to figure 4-3, item 16 is called a shim. Please correct one or the other

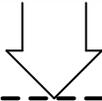
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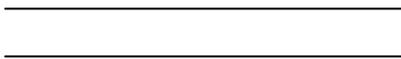
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