TM11-5985-347-14&P

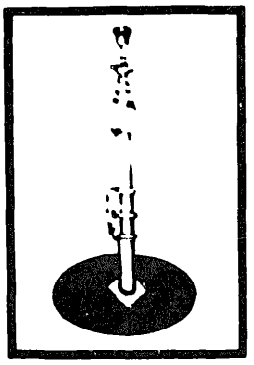
TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)
FOR
ANTENNA SYSTEM AS-3098/U (NSN 5985-00-009-0129)

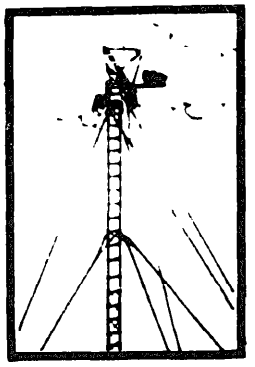
HEADQUARTERS, DEPARTMENT OF THE ARMY
JULY 1979

FIXED OPERATION WITH LONG RANGE ANTENNAS

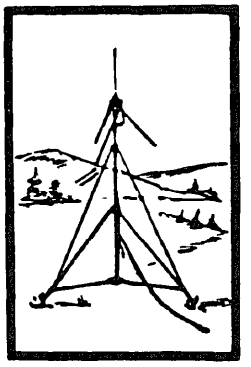
WARNING



TELESCOPING ANTENNA MAST



TYPICAL TOWER



EXTENDED RANGE ANTENNA

DOUBLET ANTENNA

NEVER ERECT THESE LONG RANGE ANTENNAS DIRECTLY UNDER POWERLINES.

IF YOU MUST ERECT THESE LONG RANGE ANTENNAS NEAR POWERLINES, POWERLINE POLES OR TOWERS, OR BUILDINGS WITH OVERHEAD POWERLINE CONNECTIONS, NEVER PUT THE ANTENNA CLOSER THAN TWO TIMES THE ANTENNA HEIGHT FROM THE BASE OF THE POWERLINE, POLE, TOWER OR BUILDINGS.

NEVER ATTEMPT TO ERECT ANY LONG RANGE ANTENNA WITHOUT A FULL TEAM.

BEFORE ERECTING ANY LONG RANGE ANTENNA, INSPECT ALL THE PARTS MAKING UP THE ANTENNA KIT. DO NOT ERECT THE ANTENNA IF ANY PARTS ARE MISSING OR DAMAGED.

DO AS MUCH OF THE ASSEMBLY WORK AS POSSIBLE ON THE GROUND.

WHEN ERECTING THE ANTENNA, ALLOW ONLY TEAM PERSONNEL IN THE ERECTION AREA.

MAKE SURE THAT THE AREA FOR THE ANCHORS IS FIRM. IF THE GROUND IS MARSHY OR SANDY, GET SPECIFIC INSTRUCTIONS FROM YOUR CREW CHIEF OR SUPERVISOR ON HOW TO REINFORCE THE ANCHORS.

WHEN SELECTING LOCATIONS FOR ANCHORS, AVOID TRAVELED AREAS AND ROADS. IF YOU CANN AVOID THESE AREAS, GET SPECIFIC INSTRUCTIONS FROM YOUR SUPERVISOR AS TO WHAT CLEAR ANCE YOUR GUY WIRES AND ROPES MUST HAVE OVER THE TRAVELED AREAS AND ROAD.

CLEARLY MARK ALL GUY WIRES AND ROPES WITH THE WARNING FLAGS OR SIGNS SUPPLIED BY YO UNIT. IN AN EMERGENCY, USE STRIPS OF WHITE CLOTH AS WARNING STREAMERS.

IF YOU SUSPECT THAT POWERLINES HAVE MADE ACCIDENTAL CONTACT WITH YOUR ANTENNA, ST OPERATING, ROPE OFF THE ANTENNA AREA, AND NOTIFY YOUR SUPERIORS.

IF THE WEATHER IN YOUR AREA CAN CAUSE ICE TO FORM ON YOUR LONG RANGE ANTENNA AND IT GUY WIRES AND ROPES, ADD EXTRA GUYS TO SUPPORT THE SYSTEM. ROPE OFF THE AREA AND POST IT WITH WARNING SIGNS LIKE "BEWARE OF FALLING ICE."

DO NOT TRY TO ERECT ANY ANTENNA DURING AN ELECTRICAL STORM

KEEP A SHARP EYE ON YOUR ANCHORS AND GUYS. CHECK THEM DAILY AND IMMEDIATELY BEFORE AND AFTER BAD WEATHER.

5 SAFETY STEPS TO FOLLOW IF SOMEONE IS THE VICTIM OF ELECTRICAL SHOCK

1. DO NOT TRY TO PULL OR GRAB THE INDIVIDUAL
2. IF POSSIBLE , TURN OFF THE ELECTRICAL POWER
3. IF YOU CANNOT TURN OFF THE ELECTRICAL POWER, PULL, PUSH, OR LIFT THE PERSON TO SAFETY USING A WOODEN POLE OR A ROPE OR SOME OTHER INSULATING MATERIAL
4. SEND FOR HELP AS SOON AS POSSIBLE
5. AFTER THE INJURED PERSON IS FREE OF CONTACT WITH THE SOURCE OF ELECTRICAL SHOCK, MOVE THE PERSON A SHORT DISTANCE AWAY AND IMMEDIATELY START ARTIFICIAL RESUSCITATION

TECHNICAL MANUAL

No. 11-5985-347-14&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, *30 July 1979*

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS) FOR ANTENNA SYSTEM AS-3098/U (NSN 5985-00-089-0129)

REPORTING OF ERRORS

You can improve this manual by recommending improvements using DA Form 2028-2 located in the back of the manual. Simply tear out the self-addressed form, fill it out as shown on the sample, fold it where shown, and drop it in the mail.

If there are no blank DA Forms 2028-2 in the back of your manual, use the standard DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forward to the Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, New Jersey 07703.

In either case a reply will be furnished direct to you.

LIST OF ILLUSTRATIONS

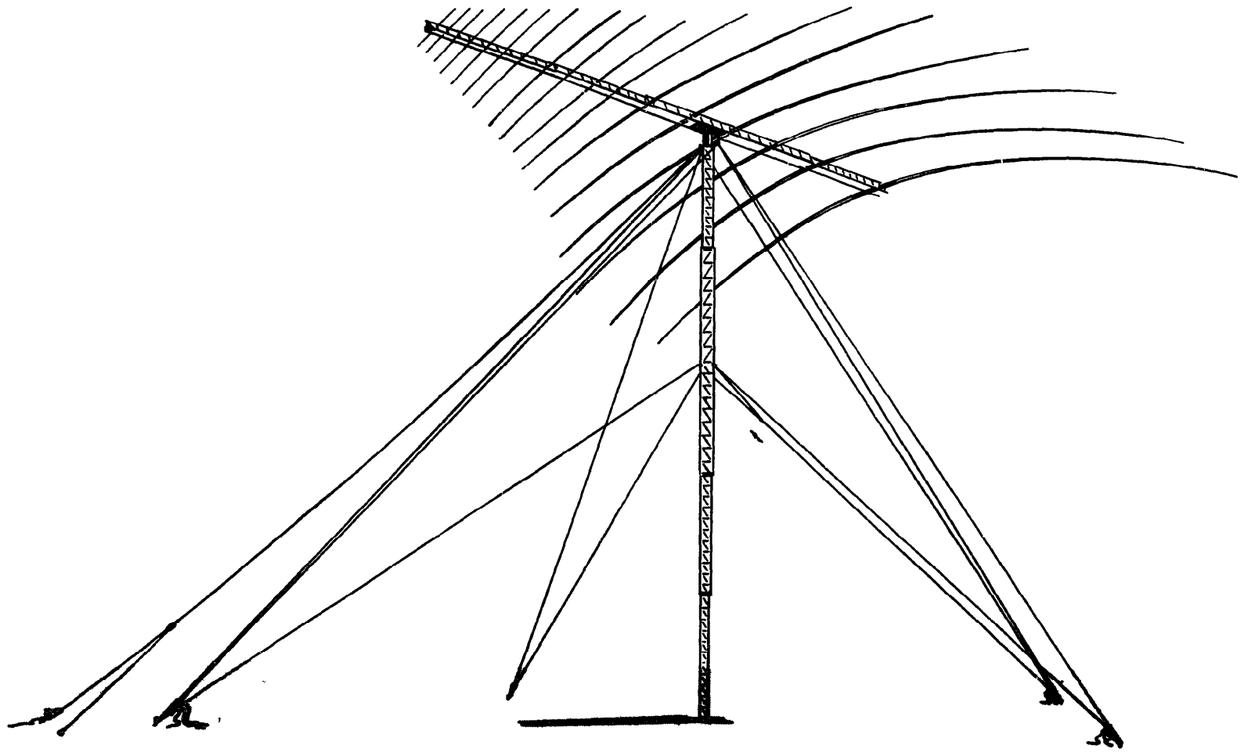


Figure 1-1. Overall view of erected Antenna System AS-3098/U.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual describes Antenna System AS-3098/U and covers its installation and maintenance.

b. **Appendix A contains a list of publications applicable to this equipment. Appendix C contains the Maintenance Allocation Chart. Repair Parts, tools, and accessories issued with or authorized for use by the operator for Antenna System AS-3098/U are listed in appendix B of this manual.**

c. Throughout this manual, the use of "man" or "men" should not be construed to limit the instructions to males only.

1-2. Indexes of Publications

a. DA Pam 310-4. **Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.**

b. DA Pam 310-7. **Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.**

1-3. Forms and Records

a. Reports of Maintenance and Unsatisfactory ***Equipment. Maintenance*** **forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM *38-750*.**

b. Report *of* ***Packaging and Handling Deficiencies.*** **Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58/ NAVSUPINST 4040.29/AFR 71-13/MCO P4030.29A and DLAR 4145.8.**

c. Discrepancy in Shipment Report (DISREP) (SF **361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33A/AFR 75-18/MCO P4610.19B and DLAR 4500.15.**

1-4. Reporting Equipment Improvement Recommendations (EIR)

EIR's will be prepared using Standard Form 368, Quality Deficiency Report. Instructions for preparing EIR's are provided in TM 38-750, The Army Maintenance Management System. EIR's should be mailed directly to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, New Jersey) 07703. A reply will be furnished direct to you.

1-5. Administrative Storage

Administrative storage of equipment issued to and used by Army activities shall be in accordance with paragraph 3-6.

1-6. Destruction of Army Electronics Materiel

Destruction of Army Materiel to prevent enemy use shall be as prescribed in TM 750-244-2.

Section II. DESCRIPTION AND DATA

1-7. Purpose and Use

NOTE

The National Bureau of Standards has officially adopted the *term Hertz* for cycles per second; therefore, megahertz (MHz) represents megacycles.

a. Antenna System AS-3098/U **consists of a five-section collapsible tower structure on which** is **attached a rotatable five section antenna boom containing 17 elements. This antenna operates over a frequency range of 4 to 30 MHz. The entire system is a semi-quick erectable unit which can be assembled and erected by 4 men in approximately 4 hours. All tools required for assembly and erection are supplied with this** antenna.

b. **The AS-3098/U is a unidirectionai, high frequency, log periodic antenna. It exhibits extremely wide band operation characteristics within design frequencies in conjunction with the capability of quickly and easily changing the operating azimuth or frequency.**

1-8. Tabulated Data

Longest Element	95 ft 2 in (29.00m)
Boom Length	62 ft (18.89m)
Number of Elements	17
Transportability	Can be shipped by any mode of transportation in factory cartons.
Storage Conditions	No special requirements
Input Connector (balun)	Type LC 50 ohms
Tower Height	60 ft (18.28m)
VSWR	2.5 to 1 or less
Frequency Range	4 to 30 MHz continuous
Power Handling Capability	
Average	2.5 kw
Peak	10 kw
Polarization	**Horizontal**
Maximum Wind (no ice)	**80 mph**
installation Area	**165 ft x 125 ft (50.29 x 38.10 m)**
Forward Gain	6-30 MHz

1-9. Items Comprising Operable Equipment

This equipment consists of one item, Antenna System AS-3098/U. This system is shipped complete with all assembly tools and hardware furnished. For a complete breakdown of all components with contents of the four equipment boxes, refer to table 2-2. For a complete breakdown of reparable parts, refer to the repair parts and special tools list, appendix B.

1-10. Description of Antenna

a. **The antenna has been constructed in accordanc with the principles of a logarithmically periodic an tenna structure. The structure consists of a series o dipole elements tapered in length and arranged in th proper spacing in accordance with latest design prin ciples. The antenna and its feedline are supported by a all aluminum boom structure which consists of thre parallel aluminum forms securely latticed together with heavy gauge aluminum cross bars and brackets The elements are all step-tapered to provide minimum wind loading. All hardware and mounting brackets are either high strength aluminum or stainless steel.**

b. **The rf is fed to the dipole by two copper cables ex tending the full length of the boom and spaced at th proper distance to provide the optimum impedance The rf feedline is fed by a balun with a 50 ohm input connector (Type LC).**

1-11. Description of Tower

a. **The 60 foot collapsible five section tower struc ture is supplied complete with guy wires, base plate and guy anchors.**

b. **The system is supplied with a gin pole to aid in tower erection through the use of a griphoist, pulley and cable. Special equipment needed for erection o the tower has been eliminated.**

CHAPTER 2

SERVICE UPON RECEIPT AND INSTALLATION

WARNING

The antenna system must be installed as far away from powerlines as possible. A distance at least equal to twice the height of the tower must be maintained between the tower and the powerline. Failure to observe these precautions may result in death or serious injury to personnel. Refer to TB SIG 291 for safety measures to be observed when installing Antenna System AS-3098/U.

Section I. SYSTEMS PLANNING

2-1. Equipment used

This equipment is shipped complete and requires only a connection to a transceiver that operates in the 4 to 30 MHz range. The system is designed to be used with any *other antenna operating in the same* frequency range. The transceiver can be set any distance from the antenna structure where the length of feedline will permit.

2-2. Site selection

a. The AS-3098/U requires an area of 125 feet wide by 165 feet long (38.1 x 50.29 m) for proper installation. The site selected should be free from any surrounding objects. A favorable location would be a flat, level area that is free from trees, large rocks, or power lines of any sort.

WARNING

The tower base assembly MUST be installed perfectly level.

***b.* The soil must be firm enough to hold the tower guy wire anchors. If the antenna is placed on a sloping surface, the guy anchoring should be adjusted. Soil conditions around the antenna foundation should allow access to the antenna during all weather conditions.**

2-3. Shelter requirements

a. This equipment will be used in an outside environment at all times; therefore, shelter requirements during use of the equipment are limited to only the individual component boxes if so desired.

***b.* *The antenna system requires no special storage* requirements while not being operated and can stay in any shelter or in the out-of-doors as long as the packaged system will not become damaged from falling objects or in any way suffer damage from moving objects.**

Table 2-1. Weights of Major Units

Unit	Weight (lb)	Dimensions (in.)			Volume (cu. ft.)
		Width	Height	Length	
Large accessory box	450	24	12	75	13
Small accessory box	230	24	12	39	7
Large element box	360	24	12	144	24
Small element box	250	24	12	114	19
Gin pole sections	130	14	7	136	8
Rotator assembly	175	24	30	24	10
Front nested boom assembly	120	18½	16	144	25
Rear nested boom assembly	100	18½	16	144	25
Lower nested tower assembly	160	18½	16	144	25
Upper nested tower assembly	110	18½	16	144	25
Crate assembly	180	42	53	146	190
Total system in wood shipping crate	2265	48	60	150	250

Table 2-2. Parts supplied for Antenna System AS-3098/U

Large element box contents	Qty.
Center Insulator Assembly #13	1
Center Insulator Assembly #14	1
Section 2 of Element #8	2
Section 3 of Element #13	2
Section 2 of Element #14	2
Section 3 of Element #14	2
Section 4 of Element #14	2
Section 4 of Element #16	2
Section 2 of Element #16	2
Section 2 of Element #11	2
Section 2 of Element #15	2
Section 3 of Element #15	2
Section 4 of Element #15	2
Section 3 of Element #16	2
Section 3 of Element #12	2
Section 5 of Element #15	2
Section 5 of Element #16	2
Center Insulator for Element #1	1
Center Insulator for Element #8	1
Center Insulator for Element #7	1
Center Insulator for Element #16	1
Center Insulator for Element #17	1

Small element box contents	Qty.
Center Insulator for Element #10	1
Center Insulator for Element #11	1
Center Insulator for Element #12	1
Center Insulator for Element #12	1
Center Insulator for Element #3	1
Center Insulator for Element #4	1
Center Insulator for Element #5	1
Center Insulator for Element #6	1
Center Insulator for Element #9	1
Section 2 of Element #3	2
Section 2 of Element #4	2
Section 2 of Element #5	2
Section 2 of Element #6	2
Section 2 of Element #13	2
Section 2 of Element #7	2
Section 4 of Element #13	2
Section 2 of Element #9	2
Section 3 of Element #9	2
Section 2 of Element #10	2
Section 3 of Element #10	2
Section 3 of Element #11	2
Section 2 of Element #12	2
Section 4 of Element #12	2
Section 2 of Element #2	2

Large accessory box contents	Qty.
Base plate	1
Screw anchors	6
Large stake anchors	6
Base plate stakes	4
Upper guy assembly	2
Anchor driving bar	1
Guy lines lower guy assembly	1
Tag lines	2
Lower front guy assembly	1
Joint stiffener straps	9
Knee cable assembly	1
Small accessory box contents	
Griphoist and cable	1
Tools (table 3-2)	all required
Boom ext. w/balun	1
Pulling cable	1
Hardware	As required
Boom sections, back nested	1
Boom sections, front nested	1
Gin poles assembly, lower	2
Gin pole, upper	2
Tower section, lower nested	1
Tower section, upper nested	1
Rotator assembly	2

c. The total weight of the system when packaged is 2,265 lbs. The building floor must be able to hold this capacity plus the weight of a mechanical truckster or similar equipment used to move the equipment.

Section II. Service Upon Receipt of Material

2-4. Unpacking

a. Antenna System AS-3098/U needs no special packing other than what is supplied. To conserve space, smaller items may be placed inside large items

b. This antenna system requires no special handling. However, care should be taken to insure against any damage to the smaller element assemblies and to insure that the rotating mechanism is not dropped or handled in any way to misalign or damage the rotating shaft and bearings. Table 2-1 gives the weight of all major assemblies shown in figure 2-1. Table 2-2 lists the contents of each of the four equipment boxes listed in figure 2-1.

c. This system may be shipped by any means of transportation. If a front loader or fork truck is used, exercise care when unloading the equipment. Do not allow any of the skids to fall or be damaged in any way. Do not start unloading the system until all metal bands, chains and other fastening devices are removed. Three lift rings are provided on each side of the shipping crate for use when unloading the crate with crane and cables. Figure 2-2 shows all major assemblies in the shipping crate. When using a fork truck to unload the system, place the forks as far apart as possible and lift the system at the location shown. Extension brackets may be required on the forks to avoid damaging any of the lower components.

d. The equipment is packed in one master crate which contains the tower and boom sections, gin pole, rotator, and four equipment boxes. Refer to table 2-2 for the contents of each. These original crates should be stored for any future reshipment needs. Care should be taken when handling to prevent damage.

CAUTION

When unpacking, uncrating, unloading, installing, erecting, or in any other way handling the equipment for Antenna System AS-3098/U, protective head gear such as

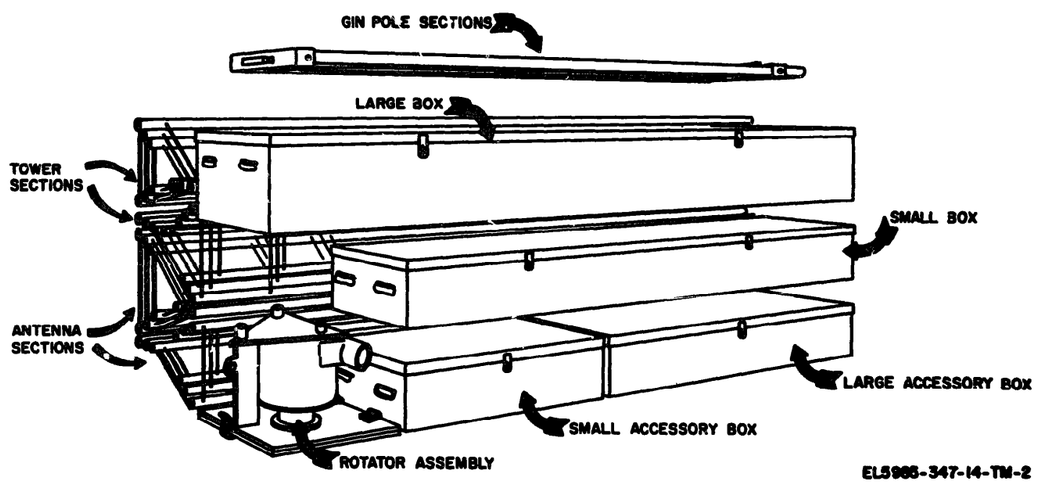


Figure 2-1. Individual component containers.

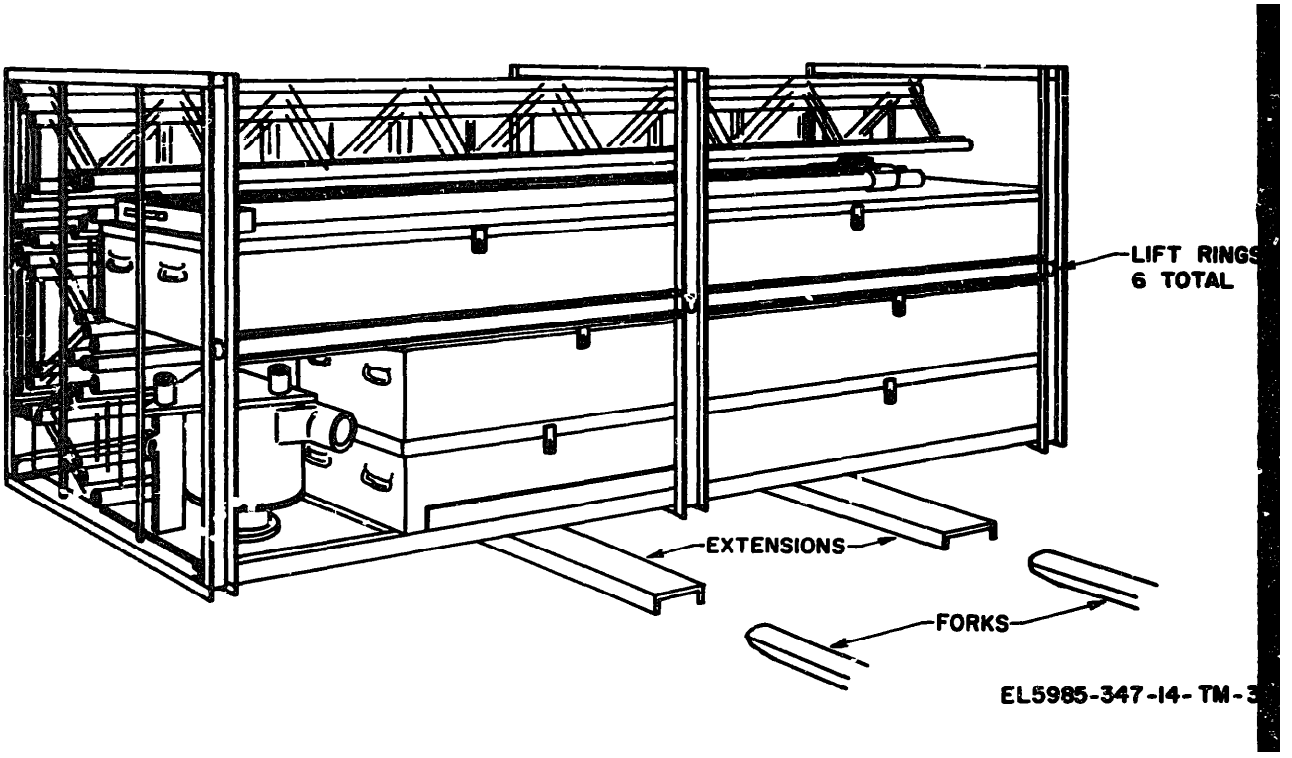


Figure 2-2. System component containers in shipping frame.

hard hats shall be worn at all times. Steel toed shoes and other protective clothing shall be used as directed by the person or persons responsible for the assembly and erection procedures of this antenna system. This antenna system is designed to meet all applicable Occupational Safety and Health Act Requirements.

2-5. Checking Unpacked Equipment

a. Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on DD Form 6 (para 1-3b).

***b.* Check the equipment against the component listing in tables 2-1 and 2-2, and the packing slip to see if the shipment is complete. Report all discrepancies in accordance with TM 38-750. The equipment should be placed in service even though a minor assembly or part that does not effect**

c. Check to see whether the equipment has been modified. (Equipment which has been modified will have the MWO number on the front panel, near the nomenclature plate.) **Check also to see whether all currently applicable MWO's have been applied. (Current MWO's applicable to the equipment are listed in the USASA Pam 310-6 or Pam 310-7 as applicable.)**

d. For dimensions, weights, and volume of packaged items, see table 2-1.

Section III. Installation Instructions

2-6. Tools and Equipment

Tools and materials required for installation are listed in table 2-3. Test equipment is not required for installation.

2-7. Base Plate Installation

a. After selecting the site and the position for the base plate, prepare the site by removing all vegetation and/or sod. This area should be slightly larger than the base plate assembly, or 2 feet by 6 feet (.60 x *1.82* m). Refer to figure 2-3.

Table 2-3 List of Tools

A. Items Supplied

Description	*Use*	*Qty*
Sledge hammer	Anchor placement	1
T handle pipe drive 7/16	Element assembly	3
Wrench 7/16 inch	Boom-to-rotator attachment	1
Wrench 7/8 inch	Replacing feedline	1
Wrench 1 1/4 inch	Adjusting rotator drag	2
Drive bar	Anchor installation	1
Screwdriver	Antenna assembly	2

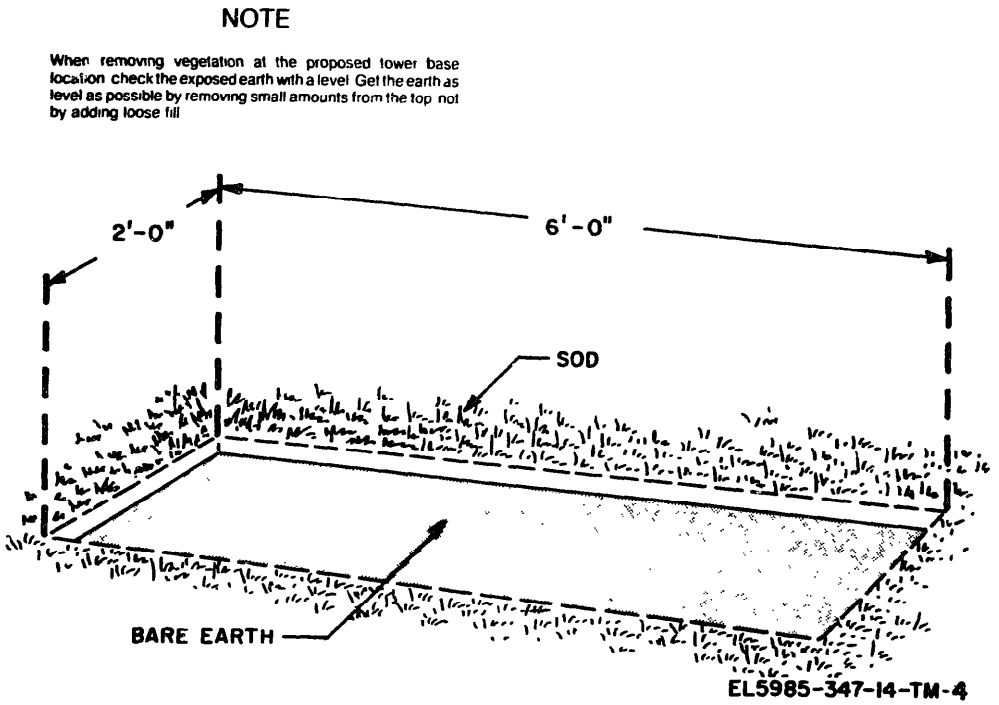


Figure 2-3 . Clearing vegetation

B. Items Not Supplied

Description	*Use*	Qty
Pioneer kit	Ground preparation	1
Pliers	Various uses	2
Spirit level	Level base and plumb tower	1
*Gloves, workmans	Hand protection	1
*Hard hats	Head protection	1

*For each person

b. After the sod has been removed, use a flat- or round-nosed shovel to remove the earth to a depth of approximately 2 inches (5 cm). If the ground is not level, make adjustments in the depth. At no time should the adjusted depth be more than 4 inches (10.16 cm). If the ground cannot be leveled by adjusting to the 4 inch depth, consider moving to a more favorable area.

c. Remove the base plate assembly and base plate anchors from the large accessory box.

d. Position the base plate in the prepared area and secure by driving the base plate pin into the ground through the anchor holes provided in the base plate. Refer to figure 2-4. Constantly check the base plate with a level to insure that it remains level. Anchor bolts and plates are provided for use in a concrete tower base if this is desired for a more permanent installation site. Figure 2-5 shows the layout for a concrete base.

NOTE

Permanent installation site does not mean that the system may be erected and left unattended for long periods of time. Due to the system's quick erectable and transportable features, it should be lowered weekly for inspection of all structural connections and hardware.

NOTE

Care should be taken when positioning and anchoring the base plate assembly that the tower can be assembled and erected without interfering with any overhanging objects.

2-8. Guy Anchor Placement

a. Lay **out the guy anchors with respect *to the base* plate. This antenna system is supplied with a four-way guying system. With this system, the side guys are also the erection guys, eliminating the need to locate extra guy anchors for erection purposes and repositioning the erection guys after erection.**

b. **Locate the four guy anchors, 50 feet ± 1 ft (15.24 m ± 30 cm) from the center of the base plate, at 90 degree intervals around the base plate. Refer to figures 2-6 and 2-7 for aid in locating these guy anchors. Use the rotator rope assembly for aid in laying out the 50 ft dimension.**

c. **Measure out 65 feet (19.81 m) toward guy anchor #1 from the center of the base plate. Mark this point (stake #7). Locate the two erection hoist anchors, #5 and #6, 2 feet (.60 m) on each side of this stake as shown in figure 2-6. Refer to table 2-4 to select the proper guy anchor for the soil conditions which exist at the site. Large stake anchors, and single-plate helix screw-in type anchors are provided with the system.**

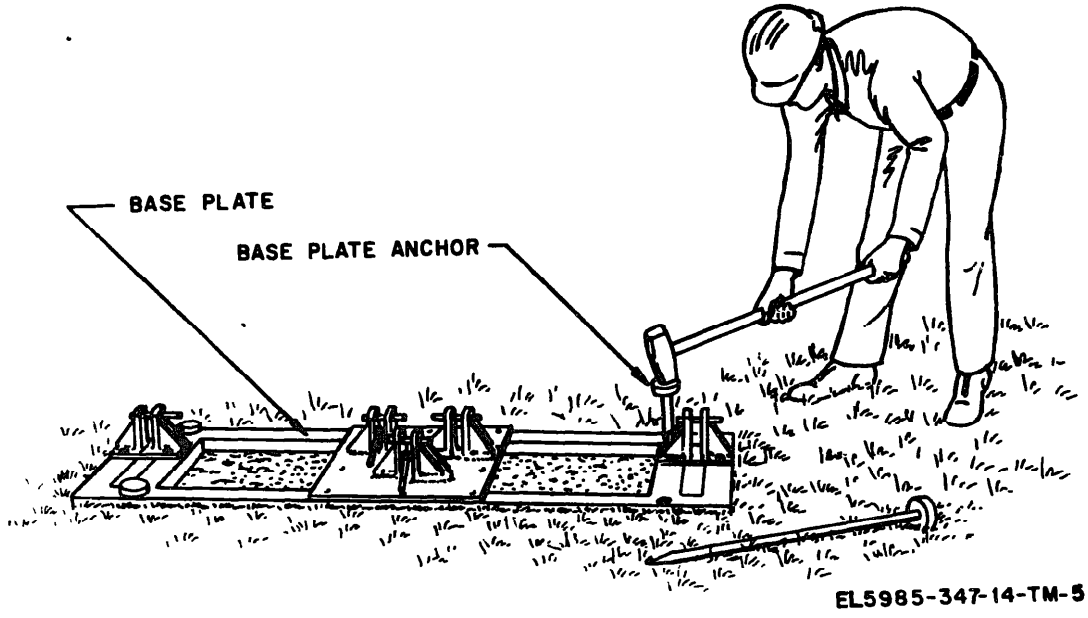


Figure 2-4. Installing base plate assembly

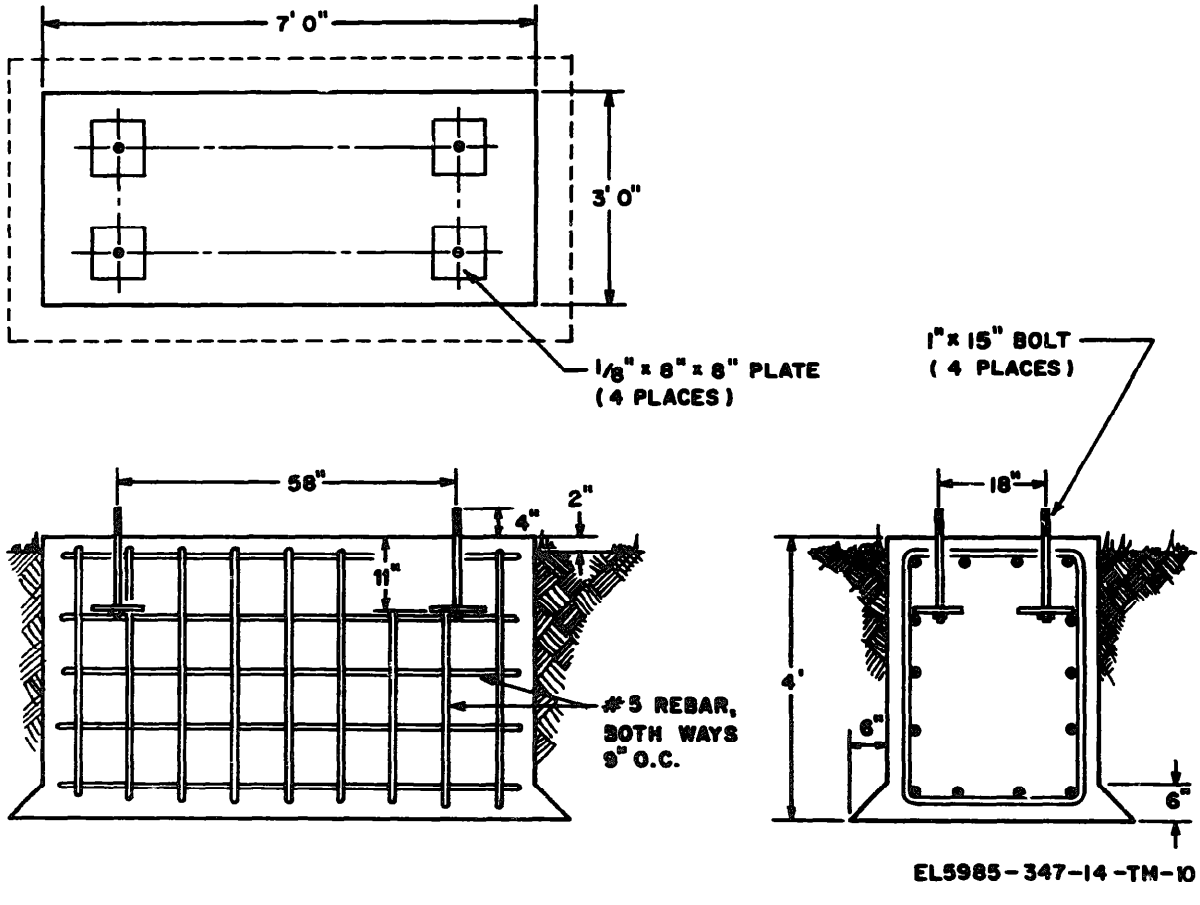


Figure 2-5. Concrete base installation

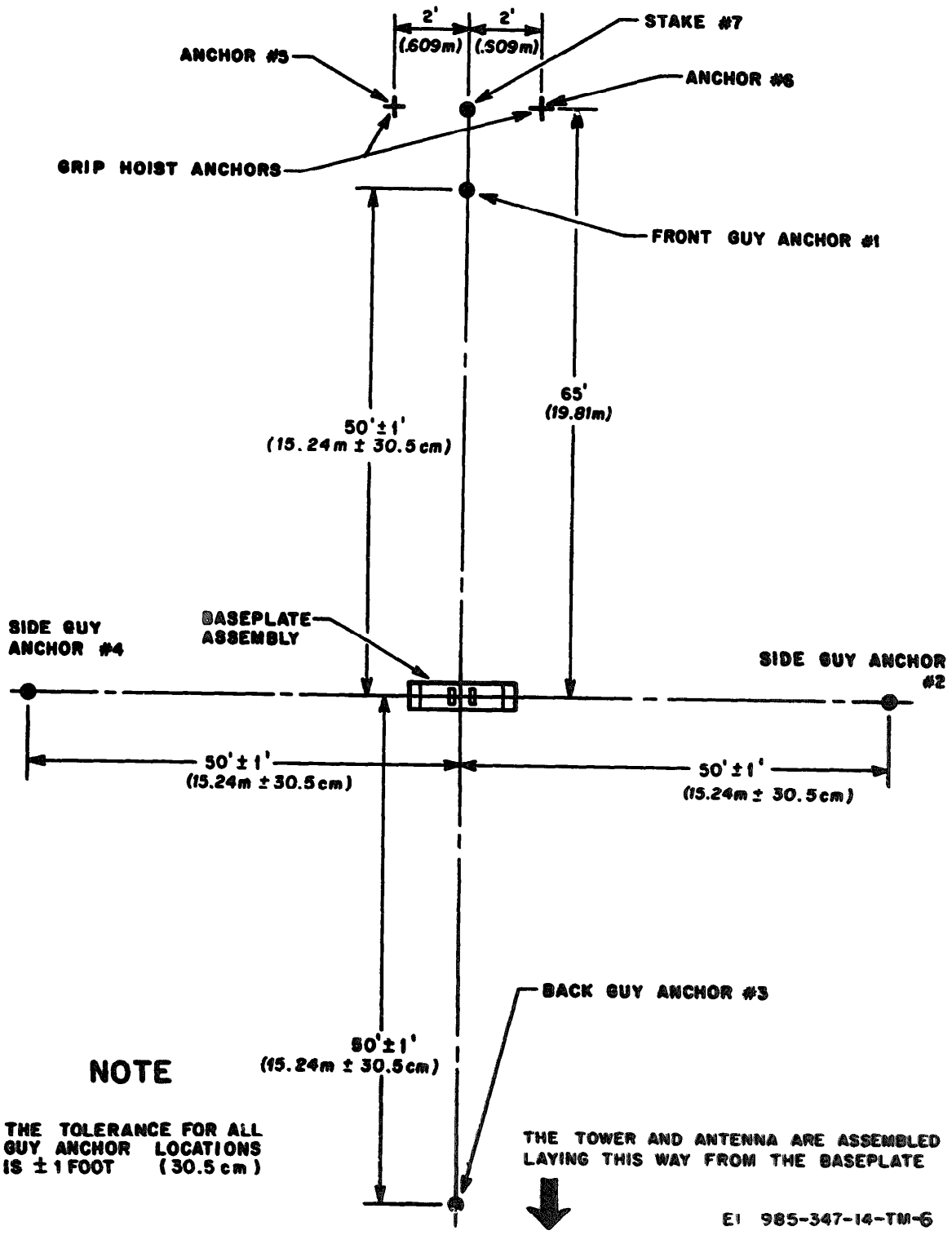


Figure 2-6. Plot plan

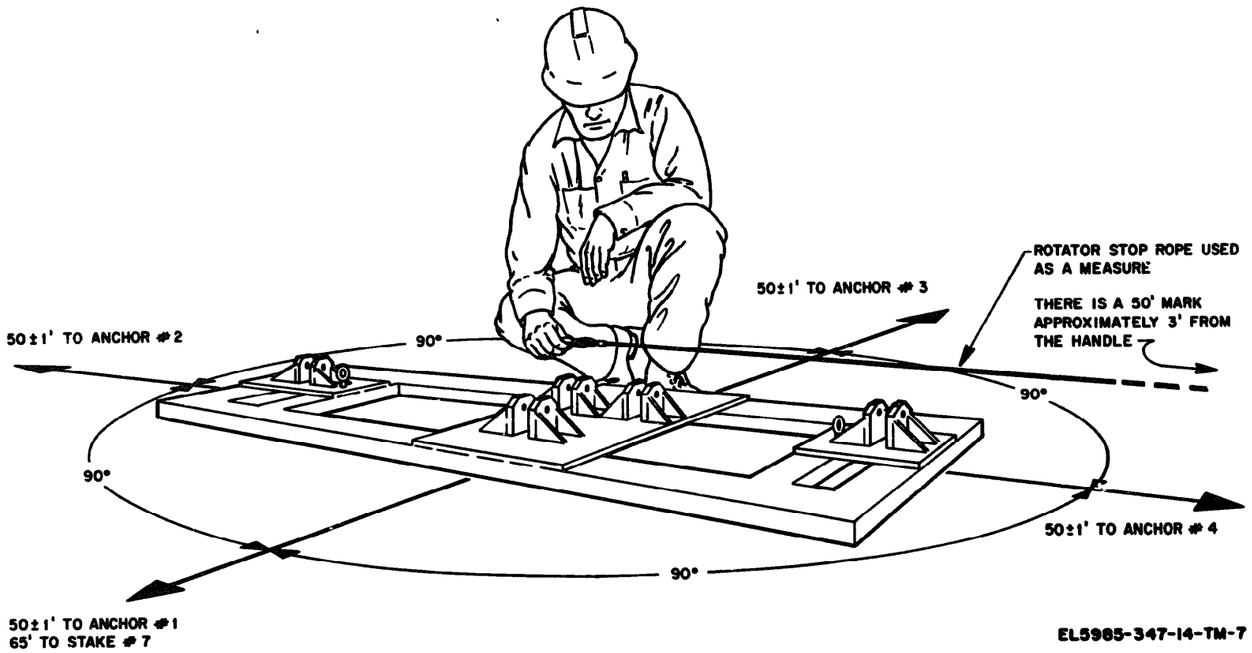


Figure 2-7. Anchor locations.

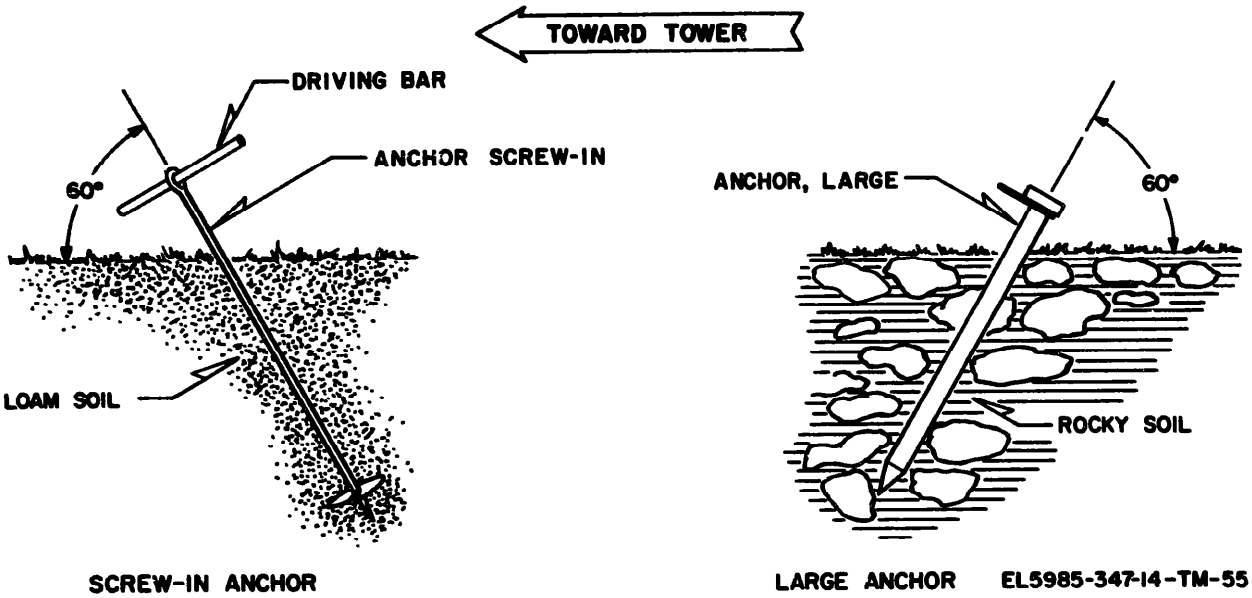


Figure 2-8. Normal anchor installation.

Figure 2-8 shows the proper installation of the anchors provided.

d. When soil conditions are extremely sandy or muddy, special anchoring is required. Figure 2-9 shows the proper installation for these conditions. The material required will be procured from local supply channels.

Table 2-4. Anchor selection Chart

Description of soil	*Recommended anchor*
Solid bedrock	Large anchor
Dense clay; compact gravel; dense fine sand; laminated rock; schist, or sandstone	Screw anchor or large anchor
Shale; broken bedrock; hardpan; compact clay-gravel mixtures	Screw anchor or large anchor
Gravel, compact gravel and sand; claypan	Screw anchor
Swamp; marsh; saturated silt; humus	Concrete

2-9. Tower Assembly

a The following assembly instructions are written for the use of an erection crew consisting of at least four men, with six or more men being desirable. Each of the men should assume the duties of the four-man erection crew as outlined in the manual. Although slight variations can be made to the assembly and erection procedures, the following step-by-step instructions are designed to provide the quickest and most efficient assembly and erection possible.

b. **Two men will remove the lower nested tower section from the crate. The lower and upper gin pole assemblies can also be removed from the crate at this time.**

c. The tower sections are nested together as shown in figure 2-10. Remove sections 3 and 2 from section 1, then remove section 3 from section 2, and lay them out as shown in Step 3. Note the color coding on the end of each tower leg. The bottom section (section 3) should be assembled near the base plate.

d. One man assembles the feet onto the small end of the lower tower section (fig. 2-11). He then moves the lower tower section over the base plate and pins the two lower tower legs to the tabs on the base plate (fig. 2-12).

e. Referring again to figures 2-10 and 2-11, three men assemble the tower sections as shown. Step 3 of figure 2-10 shows the connection of sections 3 and 2 and 1 of the lower tower section.

f. Put the four U-bolts loosely into tower joint stiffeners at the tower joints as shown in figure 2-11. After all three stiffeners of a section are loosely installed, tighten the U-bolts uniformly. Repeat for sections indicated in figure 2-11.

g. Assemble the upper tower section in a similar manner, referring to figures 2-10 and 2-11.

h. **As the tower lies on the ground, install the knee cable bracket into the upper mast leg. Position it at the second tower joint from the base plate. Fasten the bracket under the U-bolts. See figure 2-13.**

i. As the tower lays on the ground, install the knee **cable bracket (with cable) on the upper mast leg of the second joint from the base plate. Fasten the bracket with the U-bolts exactly as shown in figure 2-13.**

NOTE

It is essential that the proper leg be attached to the proper adjoining leg of the next section.

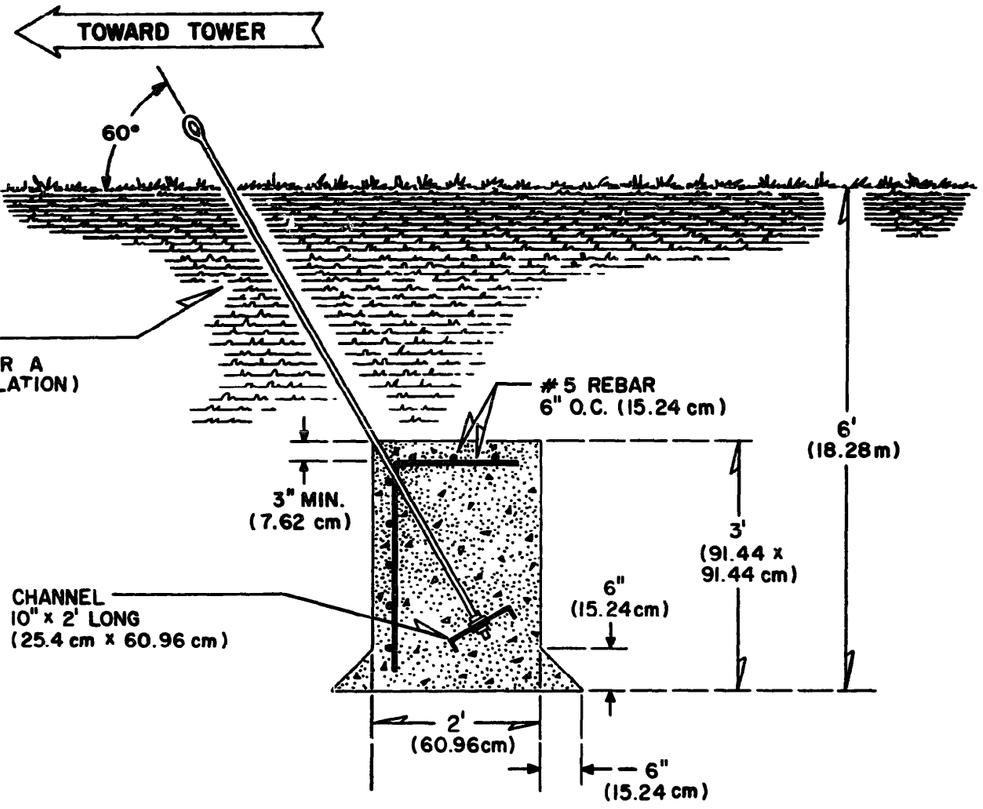


Figure 2-9. Anchor installation for sand or marsh

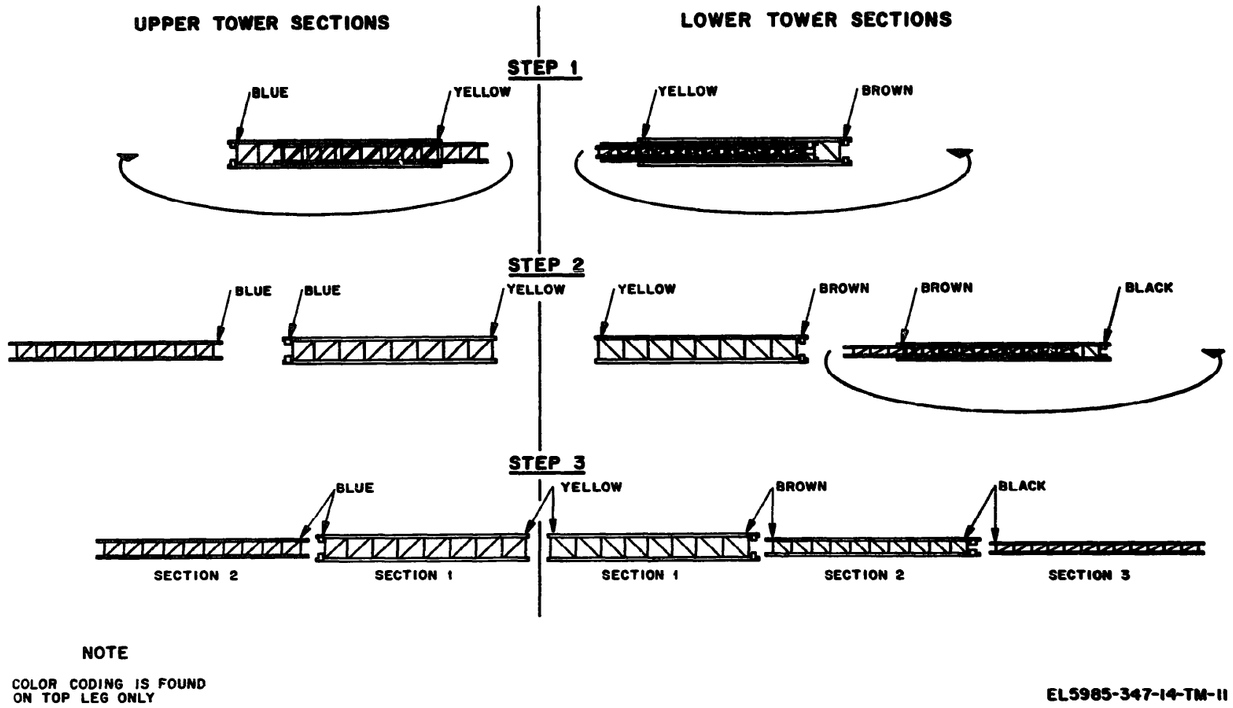


Figure 2-10. Layout of tower sections

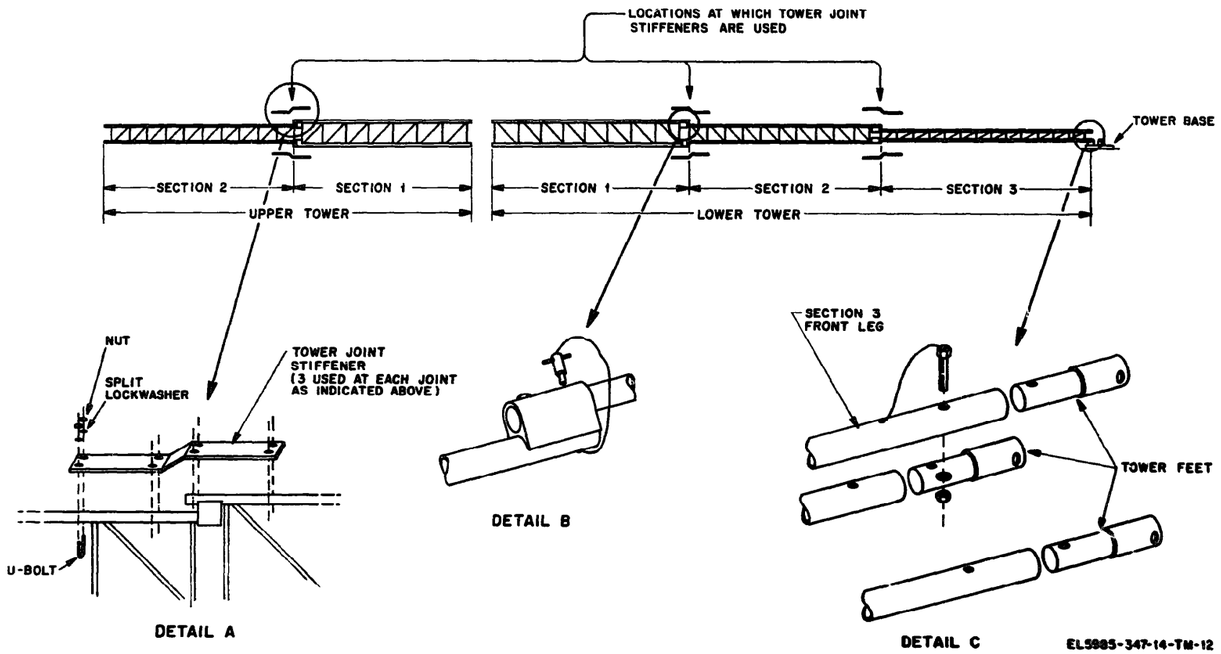


Figure 2-11. Tower section and stacking arrangement.

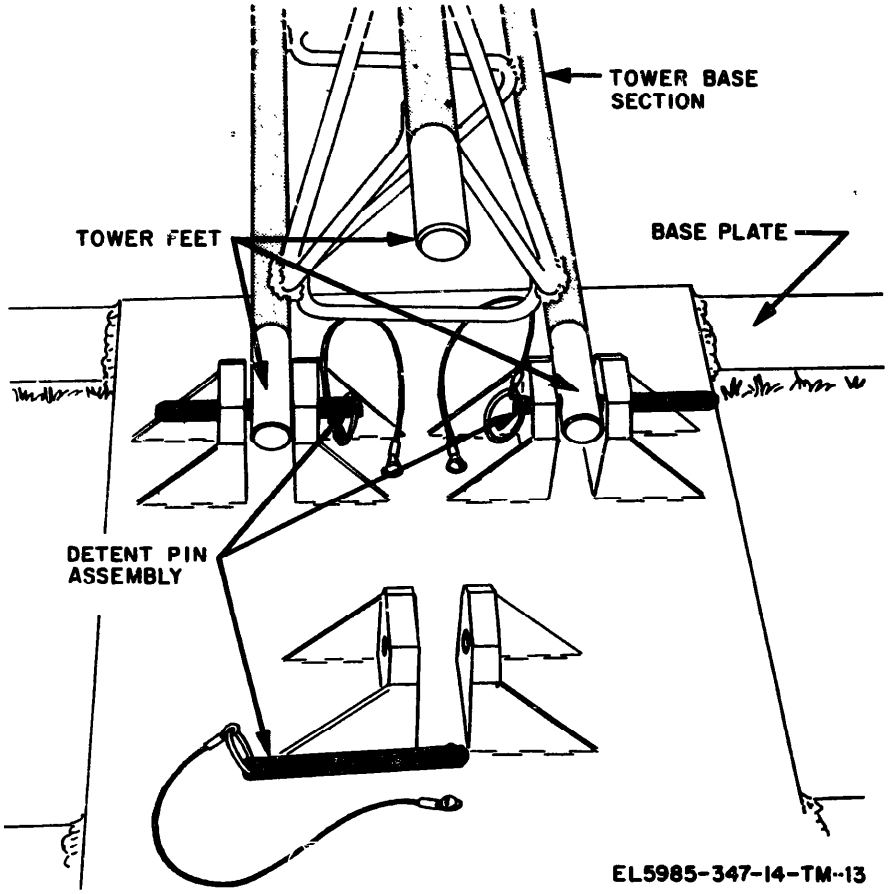


Figure 2-12 . Attaching tower base section to tower base plate.

j. Figure 2-14 identifies the lower tower guy plate assemblies. The guy plates are assembled between the lower tower section and the upper tower section as shown. Latch the guy plates and the tower sections together with the detent pins.

***k. Lay* out the equalizer plate toward rear guy anchor #3, and the lower tower front guy cable toward the base plate. Do not hook the quick tension device.**

2-10. Gin Pole Assembly

CAUTION

Take extreme care to ensure that the gin pole is properly assembled.

a. Lay the upper gin poles and the lower gin poles on the ground near the tower in their approximate assembled position.

***b.* Assemble the upper gin pole into the lower gin pole, and lock them together with the detent pin.**

c. Spread the legs of the gin pole at the bottom, and be sure the tab on the bottom of each leg points inward.

d. Two men should assemble the gin pole top plate on the upper gin pole sections, being sure the side with the groove faces the ground.

e. Lock the top plate assembly with the detent pins, being sure that the tab on the bottom of each leg is still pointing inward.

f. Two men shall pick up the gin pole and move it over the top of the assembled lower tower section.

g. Install the gin pole on the base plate with the detent pins.

***h. One man will route the knee cables (knee cable* and lower front guy wire) from the tower to the top of the gin pole. Each cable runs over one of the cable rollers at the gin pole top plate and down the gin pole leg nearest its respective cable roller (fig. 2-16).**

CAUTION

The quick tension devices must be locked at all time, except when being adjusted.

i. The quick tension devices on the knee cables attach to the eyebolts on the base plate (fig. 2-13). They **provide the adjustment needed to equalize tension between the knee cables and the pulling cable. Refer to figure 2-17 for instruction for operating the quick tension devices.**

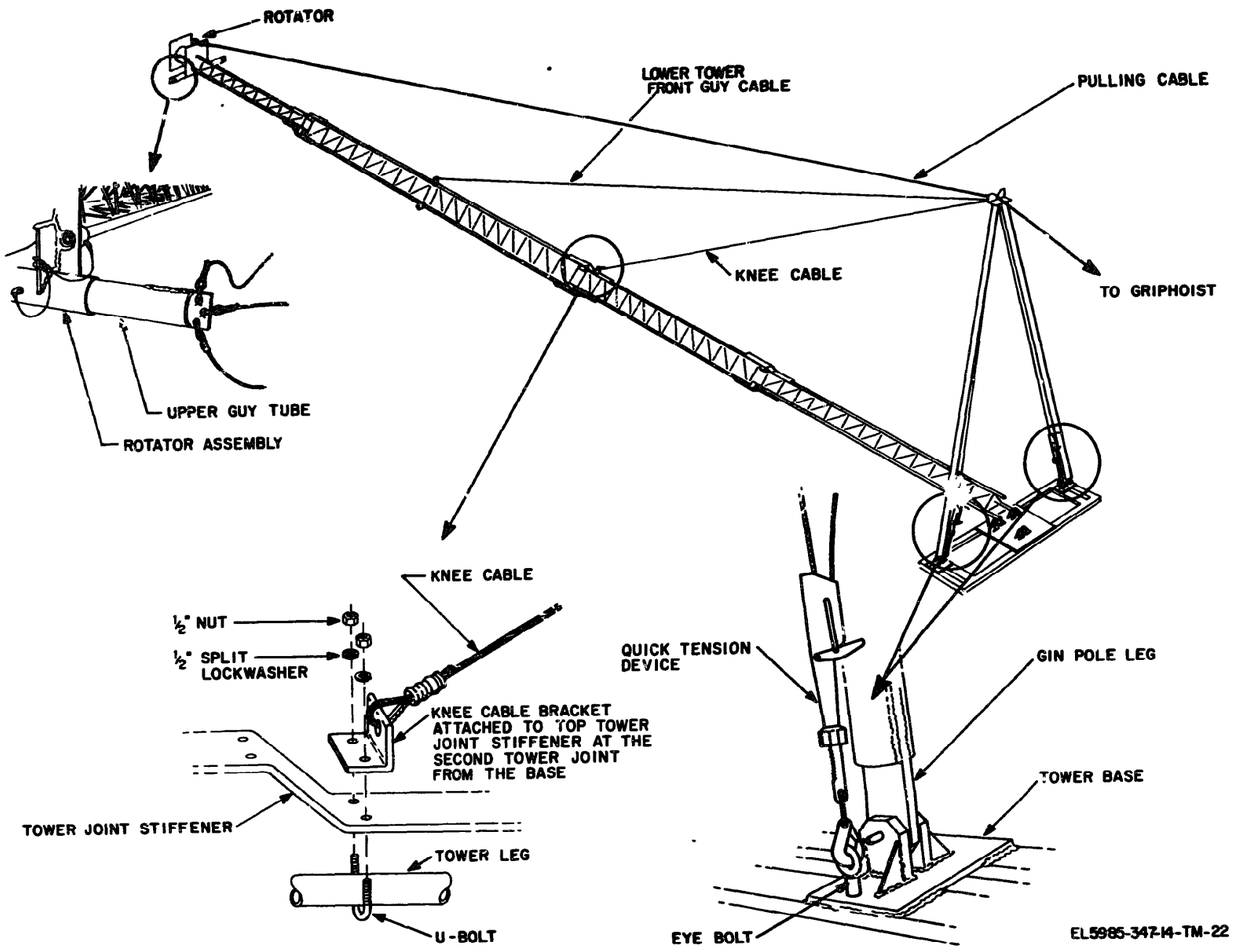
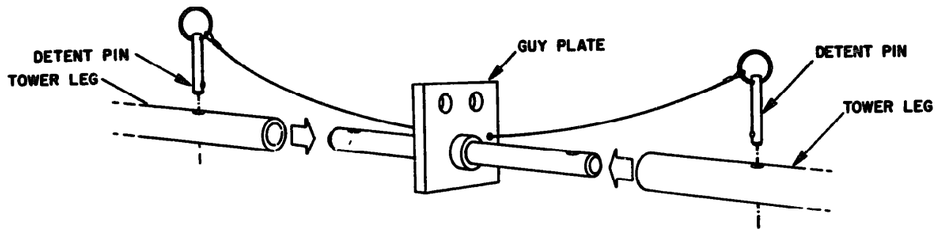


Figure 2-13. Cable attachments to tower.



TYPICAL GUY PLATE INSTALLATION

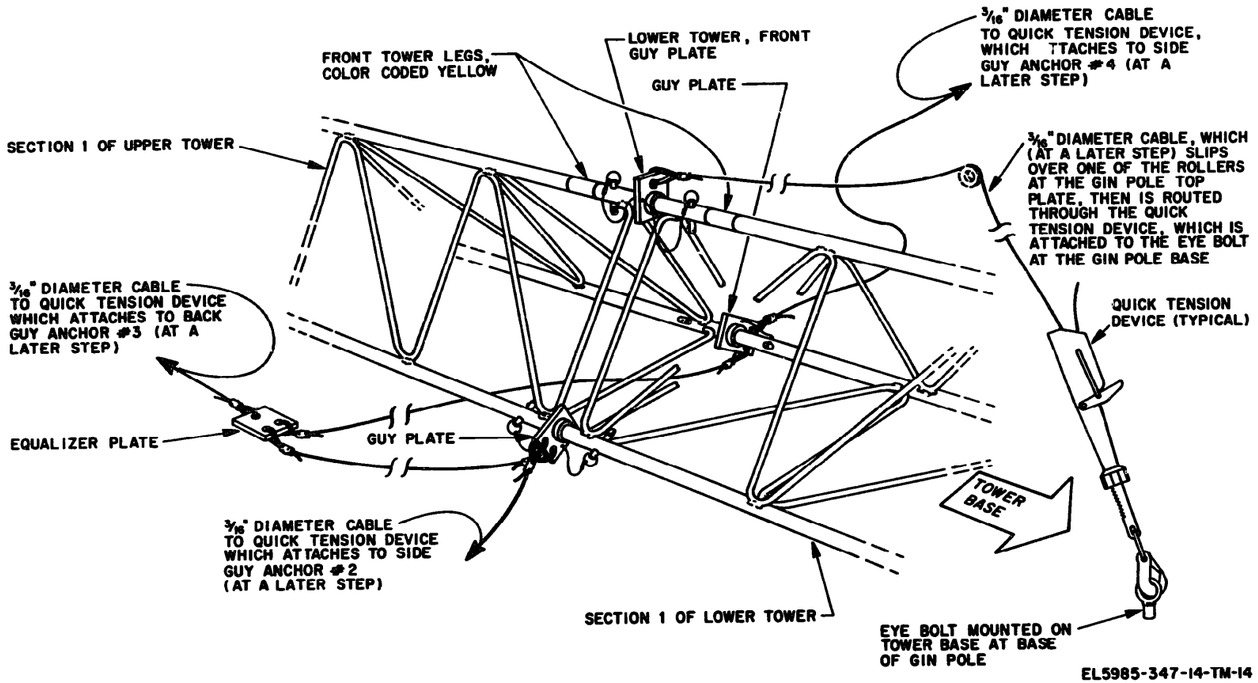


Figure 2-14. Lower tower guy assemblies.

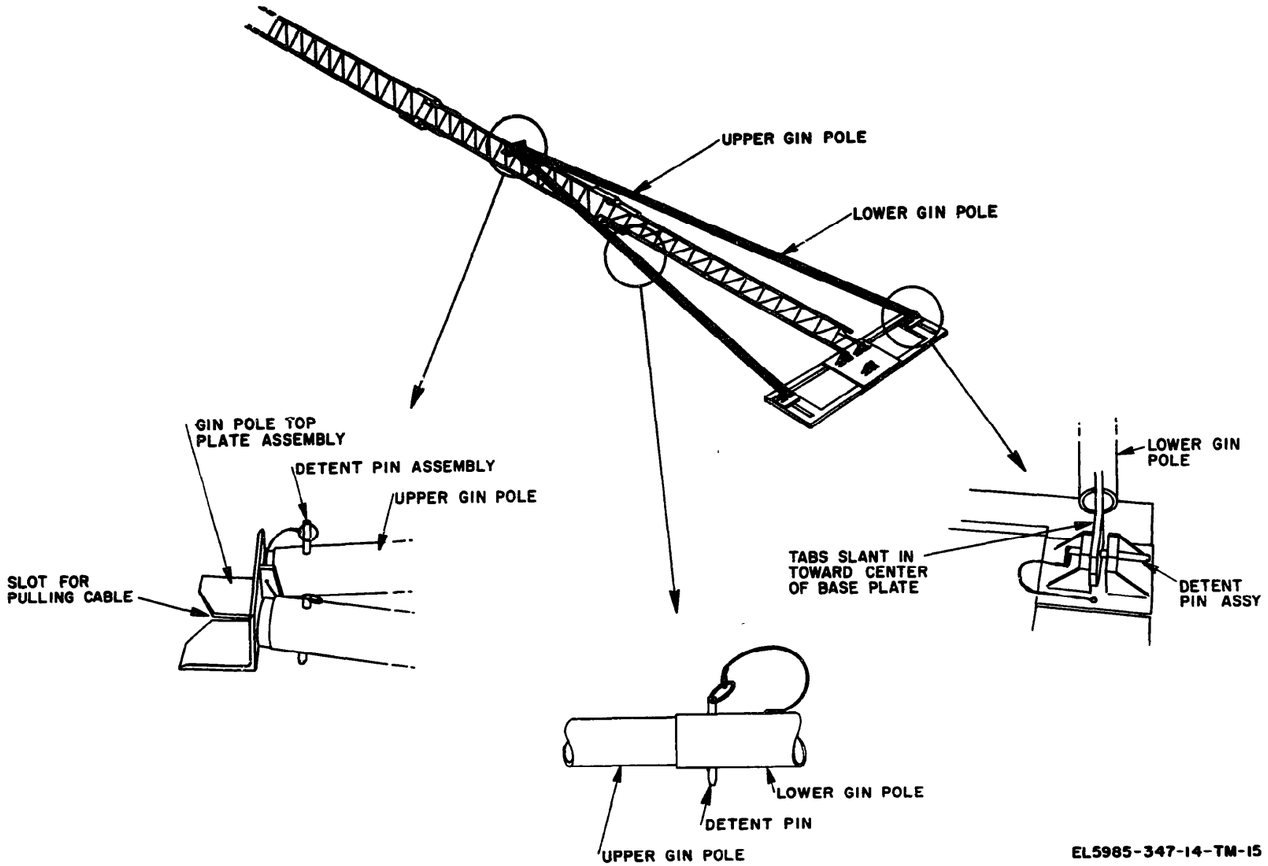


Figure 2-15. Gin pole assembly

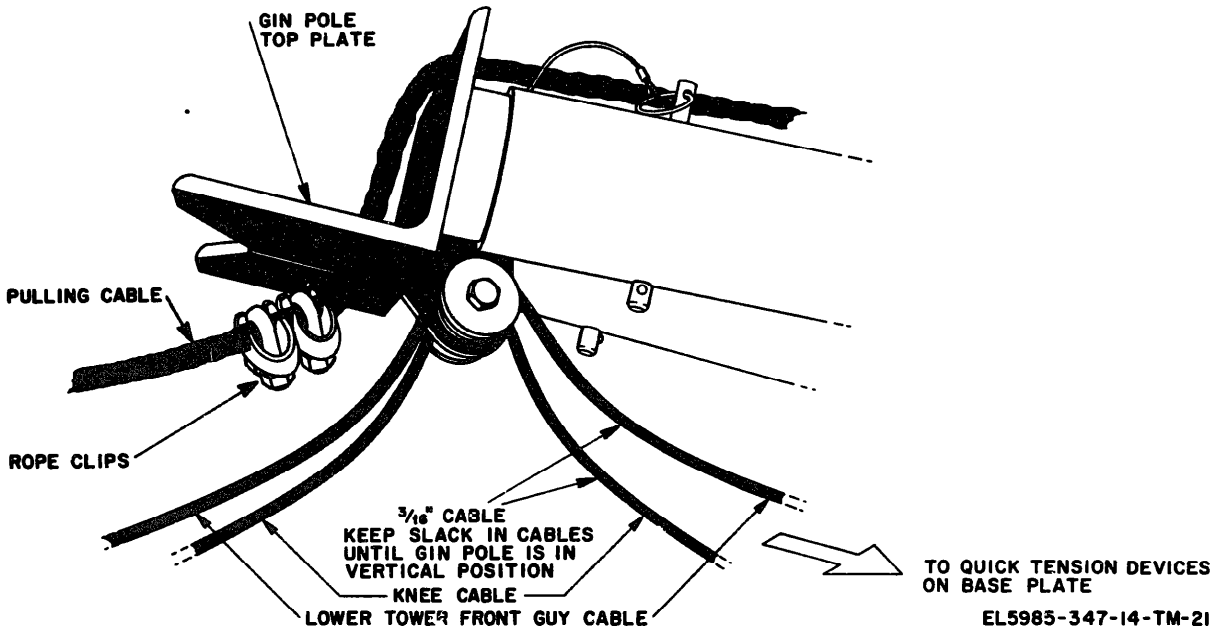


Figure 2-16. Gin pole top plate and cable arrangement

2-11. Rotator **Upper Guy** Wires **and** Pulling Cable ***Assembly***

CAUTION

Be certain the boomplate is latched so it does not fall while the rotator is being handled.

a. Two men remove the rotator from the box and place it near the top of the tower assembly.

b. **Assemble the rotator to the top of the tower, and lock it in place using the detent pins, as shown in figure 2-18.**

c. Attach the upper guy tubes (fig. 2-19) to the rotator and lock them in place with their detent pins.

d. Lay **out the upper guy wires to the respective anchors as indicated in figure 2-19.**

e. Be sure there are no kinks or sharp bends in the guy wires, then connect the quick tension devices to the proper anchor.

f. One man removes the pulling cable (fig. 2-20) from the box, attaches the hook on the cable to rotator loop (fig. 2-21), routes the cable through the slot in the top plate, and then lays it out over the base plate.

g. At this time, hook the pulley block to the pulling cable, hook the griphoist cable to anchor #6, and place griphoist on the ground near anchor #5.

h. **Referring to figures 2-21 and 2-22, route the griphoist cable through the pulley block and toward the griphoist.**

2-12. Griphoist Operation and Raising Gin pole

a. Push the clutch actuating lever (fig. 2-22) firmly toward the hook into the notched position. This opens both pairs of jaws.

b. **Push the reversing lever toward the wire rope entry. Introduce the tapered end of the griphoist cable (coming from the pulley block) through the guide busing by approximately 4 inches. Push the lever back toward the hook and continue to feed in the rope.**

c. Pull the wire rope coming out of the hook by hand until all the slack is taken out of the griphoist and pulling cables. Hook the griphoist to anchor #5. Push the clutch actuating lever back to the locking position.

d. **Place the telescopic lever on the power stroke lever. Engage the notch in the locking pin and fix the lever by turning it arouud.**

e. Operate the power stroke lever backward and forward with a slow steady movement. Jerking motions should be avoided to ensure smooth operation. For heavy loads, the telescopic lever should be pulled out to its fullest extent.

f. Two men will manually lift the gin pole about 5 feet off the ground as shown in figure 2-23 making sure the pulling cable rests in the slot on the gin pole top plate assembly and that the wire rope clamps are on the correct side of the slot (fig 2-21).

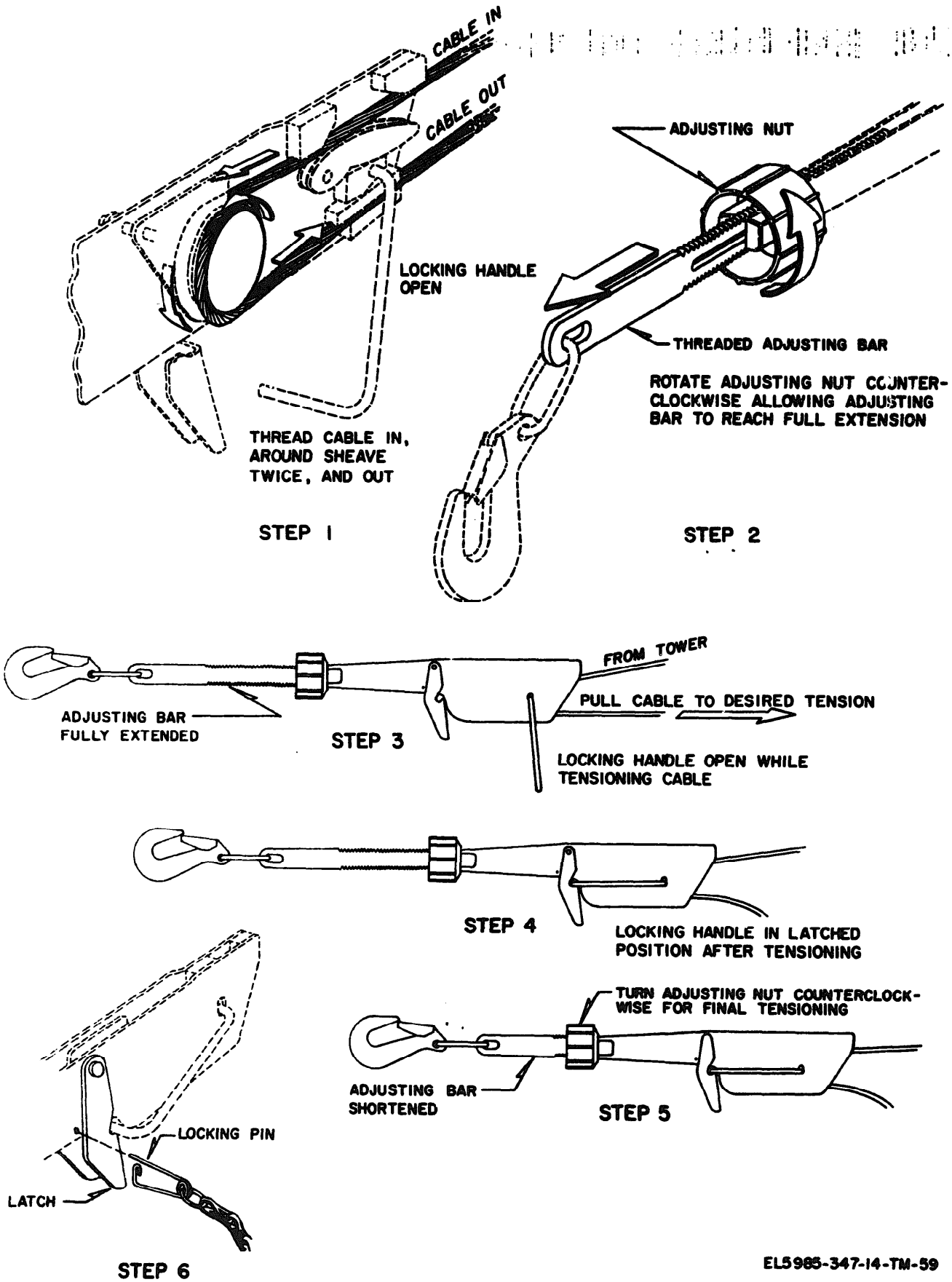


Figure 2-17. Quick tension device operation.

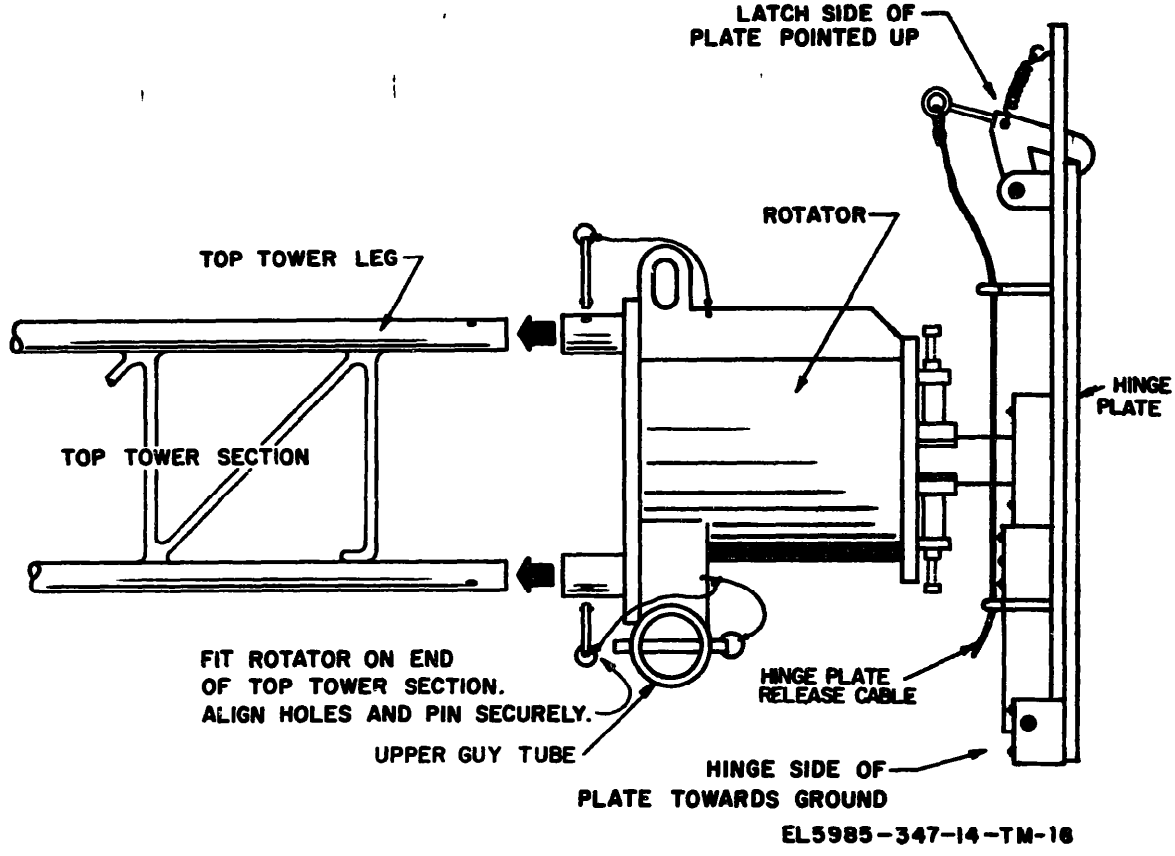


Figure 2-18. Placement *of rotator on* top of *tower.*

g. The griphoist operator will continue to operate the griphoist, **slowly pulling the excess slack from the griphoist and pulling cables.**

h. At this time, check the cables to make sure the pulley block, **griphoist, griphoist cable, and pulling cable are all securely hooked up, and that there are no kinks or sharp bends in the cables.**

i. Connect the lower tower back guy wires to the equalizer plate, and the lower tower side guy wires to the guy plates.

j. Lay the guy wires out on the ground toward their respective anchors (figs. 2-14 and 2-24), being sure there are no kinks or sharp bends in the wires.

k. Connect the lower tower guy quick tension devices to their respective anchors.

l. Adjust the quick tension devices of the upper and lower side guys to remove all excess slack. Do not apply tension to the guys at this time, only remove excess

m. The griphoist operator will begin to raise the gin pole to its vertical position.

NOTE

The knee cable and the front lower tower guy should not be tensioned until the pulling cable is tight.

n. Connect the **quick tension device on the knee cable and the lower tower front guy to the eyebolts on the base plate.**

NOTE

If the knee cable or the front lower tower guy become taut before the pulling cable, loosen them, using the quick tension device.

o. As the gin pole nears the vertical position, check to be sure the quick tension devices on the base plate are locked to prevent the gin pole from falling toward the griphoist.

p. When the gin pole is vertical (fig. 2-24) adjust the quick tension devices on the bass plate so there is equal tension on the knee cables and pulling cable.

2-13. Preliminary Raising and Lowering of the Tower

CAUTION

Do not omit the preliminary raising of the tower. This will ensure that each man knows his duties when the complete system is raised, and it will also allow guy cables to be preadjusted.

a. One man will take a position between anchors

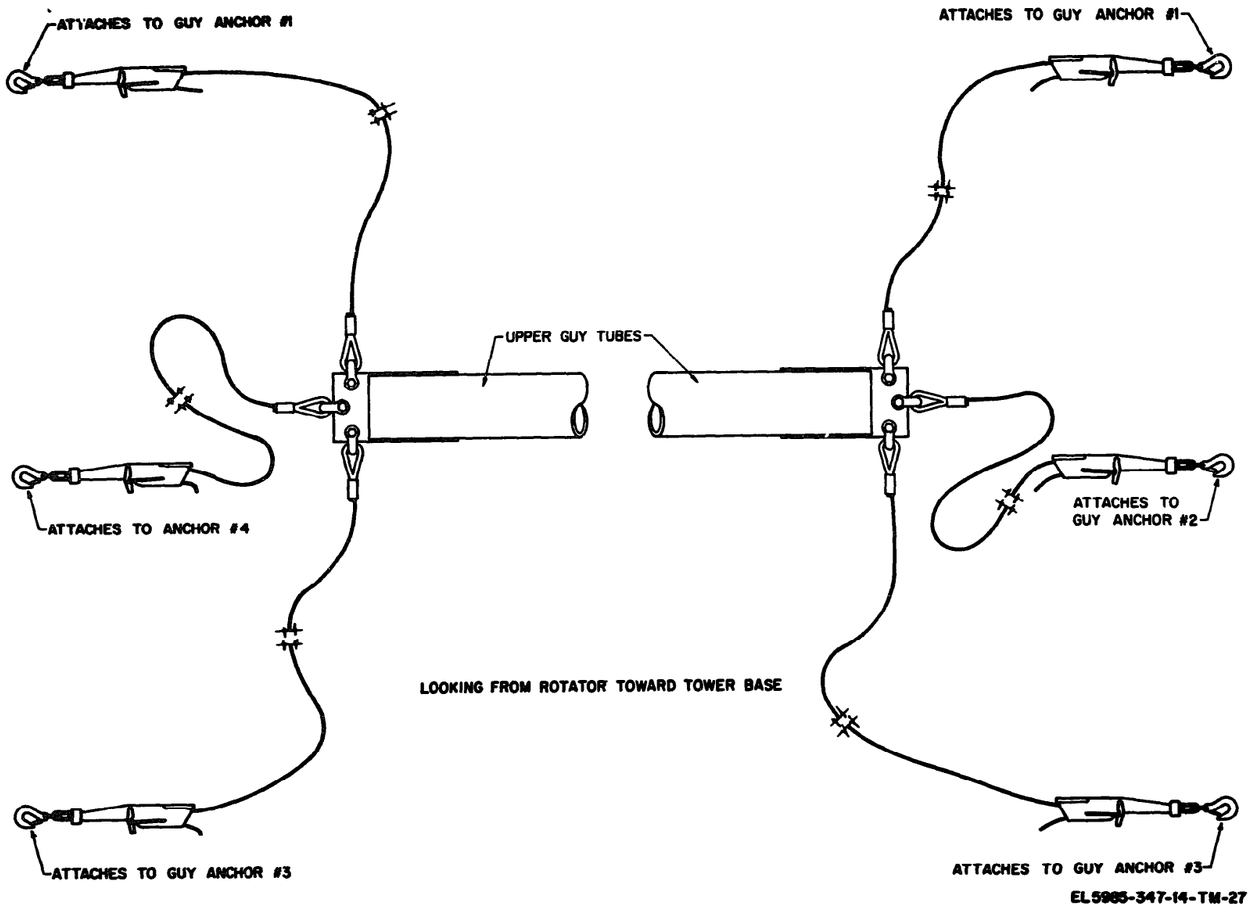


Figure 2-19. Upper guy identification.

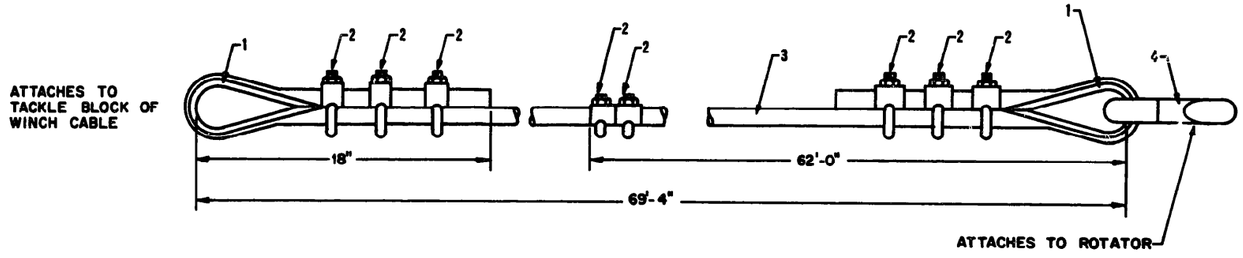


Figure 2-20. *Pulling cable*

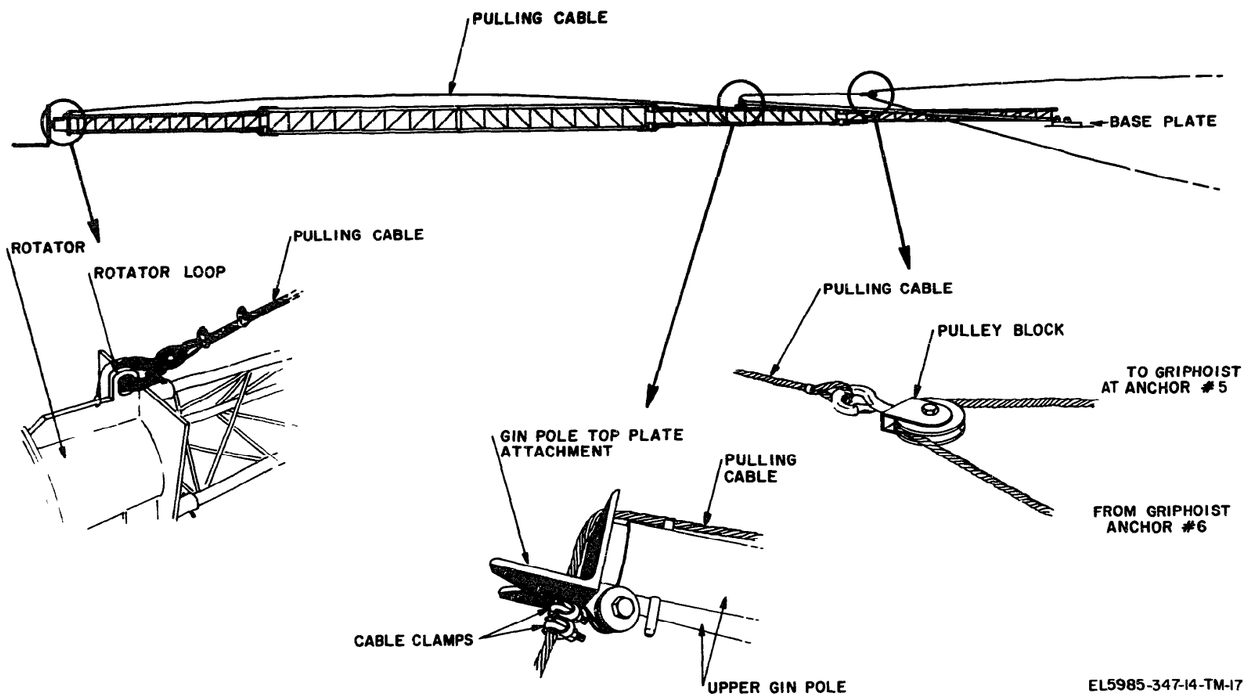


Figure 2-21. Cable and gin pole arrangement prier to erection

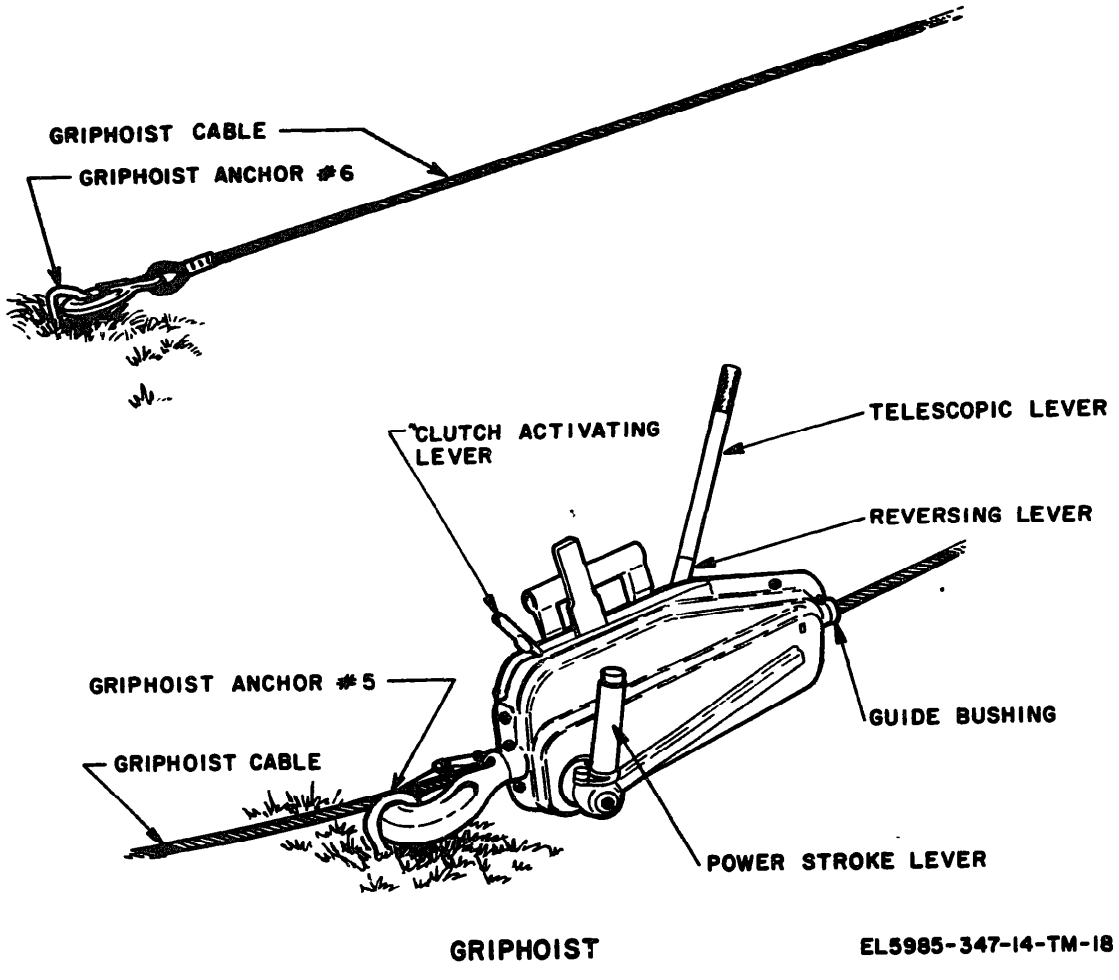


Figure 2-22. Griphoist identification and attachment.

#5 and 6 as shown in figure 2-4, who will now be referred to as the "man in charge" during the erecting procedure.

CAUTION

Failure to make this adjustment may cause serious structural damage to the tower.

b. Position a man at each side guy anchor as shown in figure 2-4. These men will make guy adjustments as required when instructed by the man in charge.

CAUTION

It is important that the griphoist be operated slowly and smoothly. Rapid pumping of the griphoist will cause the tower to bounce. Excessive bouncing may cause structural failure.

c. The griphoist operator begins to slowly raise the tower, taking slow, steady strokes on the griphoist, stopping when the tower just clears the ground.

d. The man in charge will sight through the tower base to the back guy anchor. He will ensure that the tower is in a straight line between the front anchor and the back anchor.

e. He will give instructions to the men manning the side guys to make appropriate adjustments to obtain proper alignment, and to take out any bowing of the tower.

CAUTION

Side guys must be adjusted without applying escessive tension to the guys. Before the man in charge gives an order to tighten any side

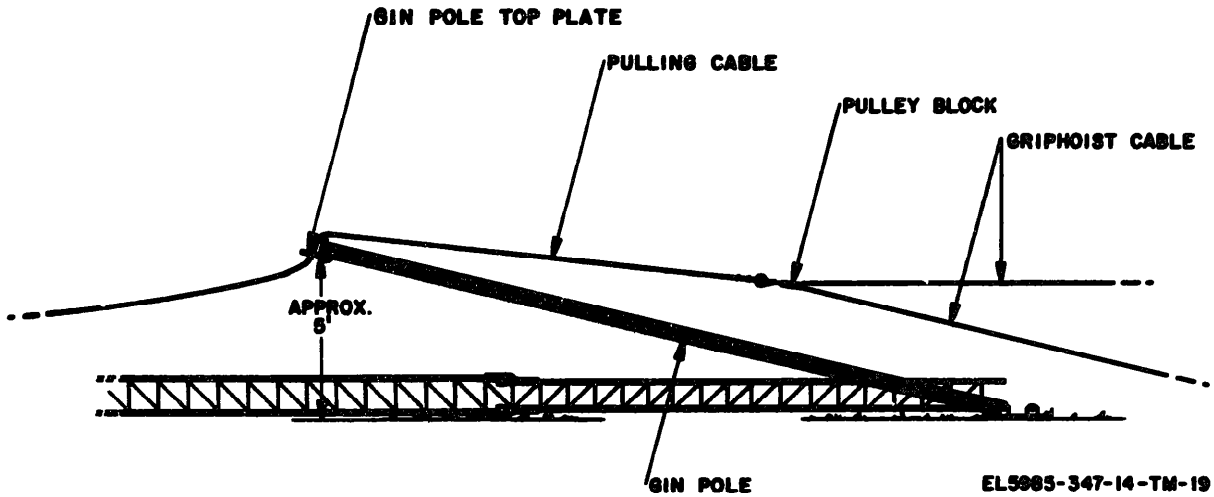


Figure 2-23. Lifting gin pole.

guy, he must first give instructions to reduce the tension in the corresponding guy on the opposite side of the tower. Failure to follow this procedure may cause serious structural damage to the tower and cause failure of the system.

f. Make adjustments to the quick tension devices at the base plate to take out any bow in the tower. The knee cables, and pulling cable must be equally taut to keep the tower straight.

g. The tower must be kept in line and straight during the entire lifting procedure. The man in charge will give constant attention to the tower at all times. He will order adjustments to the side guys (upper and lower) as necessary. Only apply enough tension to remove excessive sag from the guys. To check the tension of the side guys, refer to figure 2-25 and proceed as follows:

(1) Grasp the guy wire with your hand.

(2) Rotate your hand so that two angles are formed.

(3) If the two angles thus formed are more or less than the tension shown in figure 2-25, increase or decrease tension as required with the quick tension device adjusting nut.

h. During the remainder of the erection procedure the man in charge must constantly maintain alignment of the tower. He must watch for any bowing or bending toward either side. He must give instructions immediately to the man at the side guys to make adjustments to keep the tower straight and in line with the back anchor.

i. When the tower is approximately 35 degrees to the ground, the pulling cable will depart from the gin pole. The lifting force for the remainder of the tower erection will be at the top of the tower only.

j. As the tower nears vertical, a man will be stationed at the back guy anchor to adjust the back guys. This will prevent the tower from going past vertical (toward the front guy anchor or griphoist).

k. When the tower is in the vertical position, insert the pin to lock the front tower leg to the base plate (fig. 2-26).

l. Remove the lower front guy wire from the eyelet on the base plate and from the roller on the gin pole. Attach the guy to anchor #1 and tension it.

m. Attach the two upper tower front guys to the same anchor and tension them.

n. After the front guys are tensioned, slack must be put in the pulling cable to plumb the tower.

o. Remove the griphoist telescopic lever from the power stroke lever and attach it to the reversing lever (fig. 2-22).

p. Operate the reversing lever backward and forward with the same smooth motion as before. The pulling cable will move in the opposite direction, putting slack in the cable (fig. 2-27). If desired, the griphoist may be removed from its anchor.

q. Using the level, plumb the tower by making slight adjustment of the adjusting nut of the appropriate quick tension devices. Figures 2-28 and 2-29 show a top view of the lower and upper guy assemblies properly installed.

r. After the tower is plumb and all personnel are familiar with all the procedures in *a* through *q* above, proceed to lower the tower to the ground.

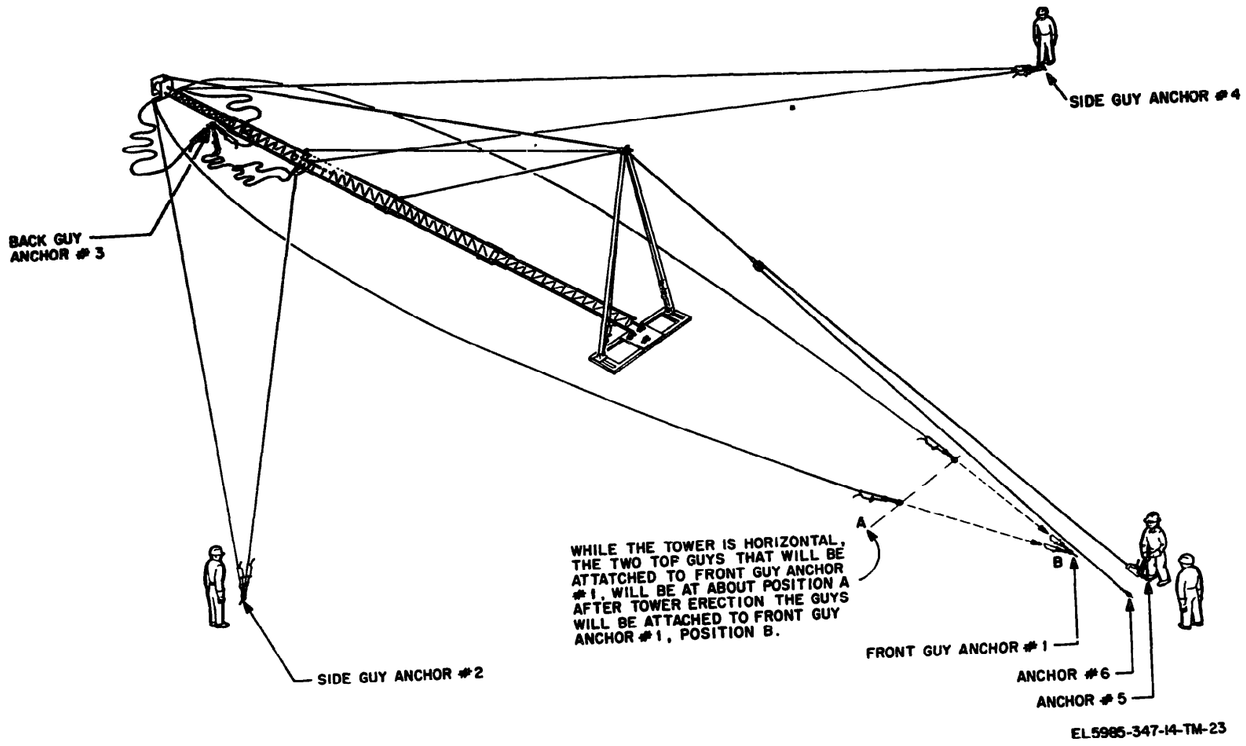


Figure 2-24. Guy attachments to tower before erection

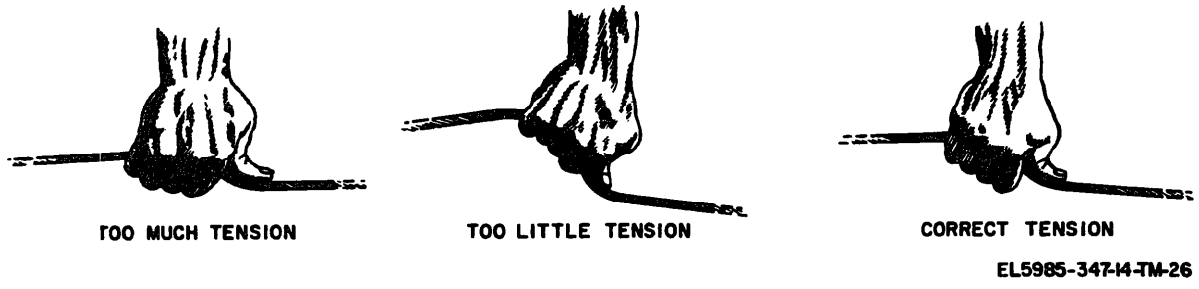


Figure 2-25. Checking side guy tension

s. Each man will take the position assigned during the erection procedure, and assume the same duties as during the erection of the tower.

t. If removed, attach the griphoist to its anchor. Place the telescopic lever on the power stroke lever and put tension in the pulling cable (fig. 2-30).

u. Release the tension on the front guy wires and remove the quick tension devices from the anchor.

v. One man at this time will remove the pin from the front leg of the tower at the base plate.

w. Place the lower front guy and the knee cables over the rollers at the top of the gin pole as shown in figure 2-16, and connect the quick tension devices to the eyelets on the base plate. Tension the cables.

x. The griphoist operator should begin to lower the tower, using slow, steady strokes of the reversing lever. The back guys will not require any adjustment. It will be necessary to again watch the side guys and adjust them whenever required during the lowering procedure to prevent tower misalignment, bending, and bowing. Use only enough tension in the side guys to keep the tower straight. All orders will be given by the man in charge.

y. As the tower is lowered, guide the pulling cable into the "V" groove of the gin pole top plate assembly, making sure the wire rope clamps on the pulling cable are on the proper side of the "V" groove as shown in figure 2-16. Lower the tower to the ground.

NOTE

Exercise care in keeping the guys in the proper relation to the antenna as the antenna is assembled. The guys may be disconnected from the tower if desired and must be reconnected after completion of the antenna assembly prior to erection, as shown in figure 2-51.

2-14. Assembling Boom and Antenna

a. At this time the front nesting boom section assembly and the rear nesting boom section assembly will be removed from the crate. Assemble section 1 of the front boom and section 1 of the rear boom using the boom splicing pin assembly, as shown in figure 2-31. The red-marked region on this middle section indicates the position where the boom is attached to the hinge plate.

***b.* The griphoist operator will raise the tower and rotator two or three feet off the ground with the griphoist to allow the two sections of the antenna boom to be easily slid under the tower (fig. 2-32).**

NOTE

When the boom is attached to the rotator hinge plate, the color coded leg will be closest to the ground.

c. Pull the small hinge plate release cable (fig. 2-18) to unlatch the hinge plate while holding the hinge plate, and lower the hinge plate to the horizontal position. Move the boom under the tower. Make sure the shortest end of the boom, color coded white, lies closest to the base plate assembly. Align the red-marked region on the boom with the hinge plate as shown in figure 2-33.

d. One man will remove the six boom saddle block assemblies from the accessory box and assemble the red-marked region of the boom to the hinge plate as shown in figure 2-33.

e. The griphoist operator will lower the tower slowly until the U-bolts can be aligned with the holes and attached securely to the holes in the antenna boom plate as shown in figure 2-33.

f. Assemble the remaining boom sections as shown in figure 2-31. A color coding mark has been applied to the top leg of each boom section. The end of each boom section should be assembled exactly as shown in figure 2-31. These boom legs must all match so that when the tower is completely assembled, all the top legs will be marked with the appropriate color code marking.

g. Two men will remove the boom extension assem-bly with feedline from the box and attach it on the end

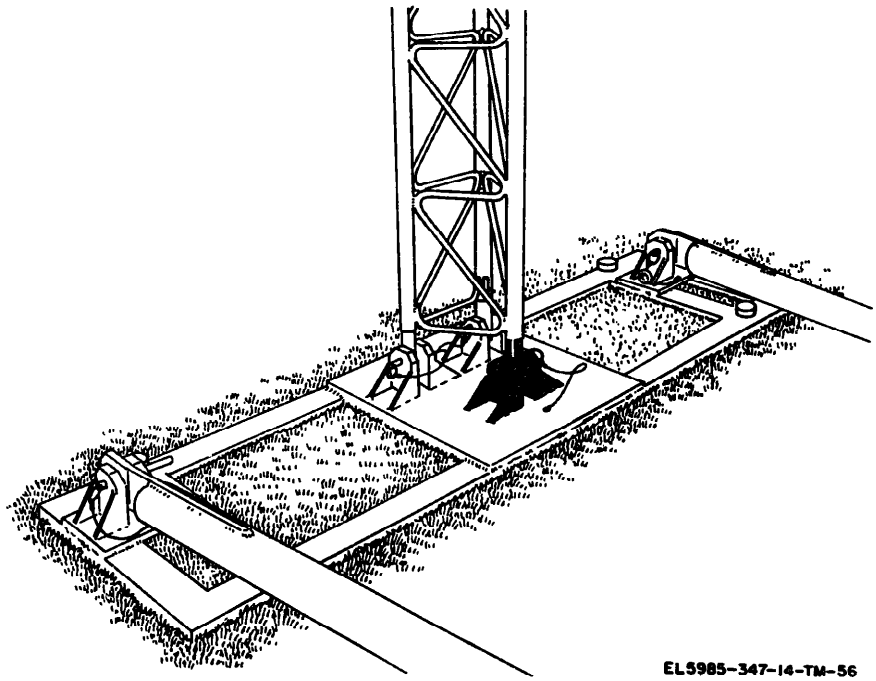


Figure 2-26. Locking front tower leg to the base plate assembly.

of the front antenna section as shown in figure 2-34. The assembly will be completed in the same manner as the tower sections were assembled. Make sure that the hardware connections are secure on the tower, rotator, and boom sections.

h. Mount the 10 kw balun assembly on the boom extension as shown in figure 2-37. Inspect the balun to be sure it is filled with oil.

i Two men now lay out the approximate location of all the element center insulators, making sure the color code identification on the element center insulators match the same color coding on the boom. The boom is marked for this purpose. Refer to figure 2-35.

j. Two men install the center insulator assemblies in their proper locations and secure them to the boom as shown in figure 2-36.

k. The red band of all center insulator assemblies must be on one side. This is very important to insure proper antenna hook-up and operation.

l. Connect the solder lugs of the feedline (at the front end of the boom extension) to the balun insulators as shown in figure 2-37.

m. Starting at the front end of the antenna, thread the copper cables through the entire length of the boom. The copper cables MUST be placed on each side of the center insulator assembly as shown in figure 2-38. One should be placed on TOP of the center insulator and the other copper cable should be placed UNDER the center insulators, and through each of the connectors.

n. Attach the end of the copper cable with the fiberglass plate to the jay bolts in the rear end of the boom triangle bracket as shown in figure 2-39.

o. Refer to figure 2-40 and attach the feedline to the element feedline clamp, alternating each connection as shown. Figure 2-41 shows hand tightening of the thumb screw to make a secure connection between each element and the feedline wire.

p. Make sure that all center insulator assemblies and feedline connections are securely attached to their proper locations.

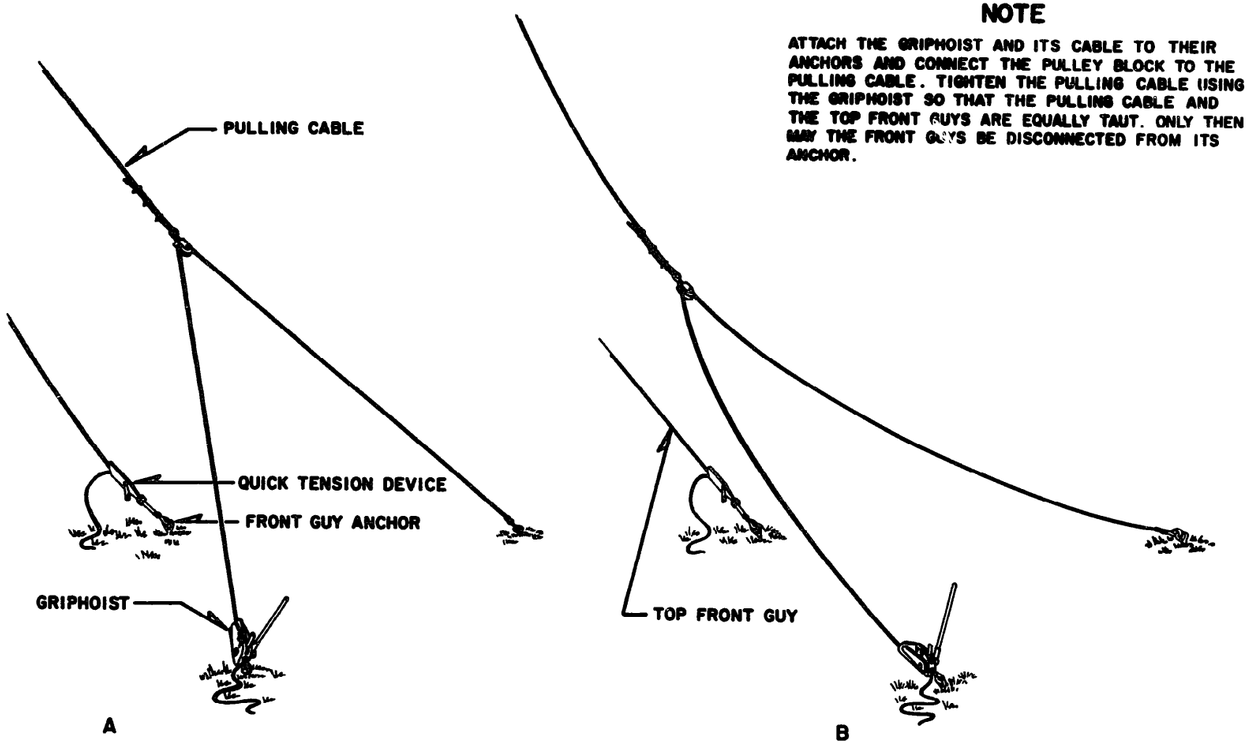
q. Two men should now place all the element sections on the ground near the element center insulators. The end of the center insulators are color coded. The element sections which have a corresponding color coding must match up with the respective center insulator. Refer to figure 2-42 and tables 2-5 and 2-6 for aid in determining the exact element section and its respective color code.

CAUTION

DO NOT RELEASE THE TOP FRONT GUY UNTIL THE PULLING CABLE IS TAUT.

NOTE

ATTACH THE GRIPHOIST AND ITS CABLE TO THEIR ANCHORS AND CONNECT THE PULLEY BLOCK TO THE PULLING CABLE. TIGHTEN THE PULLING CABLE USING THE GRIPHOIST SO THAT THE PULLING CABLE AND THE TOP FRONT GUYS ARE EQUALLY TAUT. ONLY THEN MAY THE FRONT GUYS BE DISCONNECTED FROM ITS ANCHOR.



TO DISCONNECT (AFTER RAISING TOWER)

EL5985-347-14-TM-57

Figure 2-27. Griphoist disconnect.

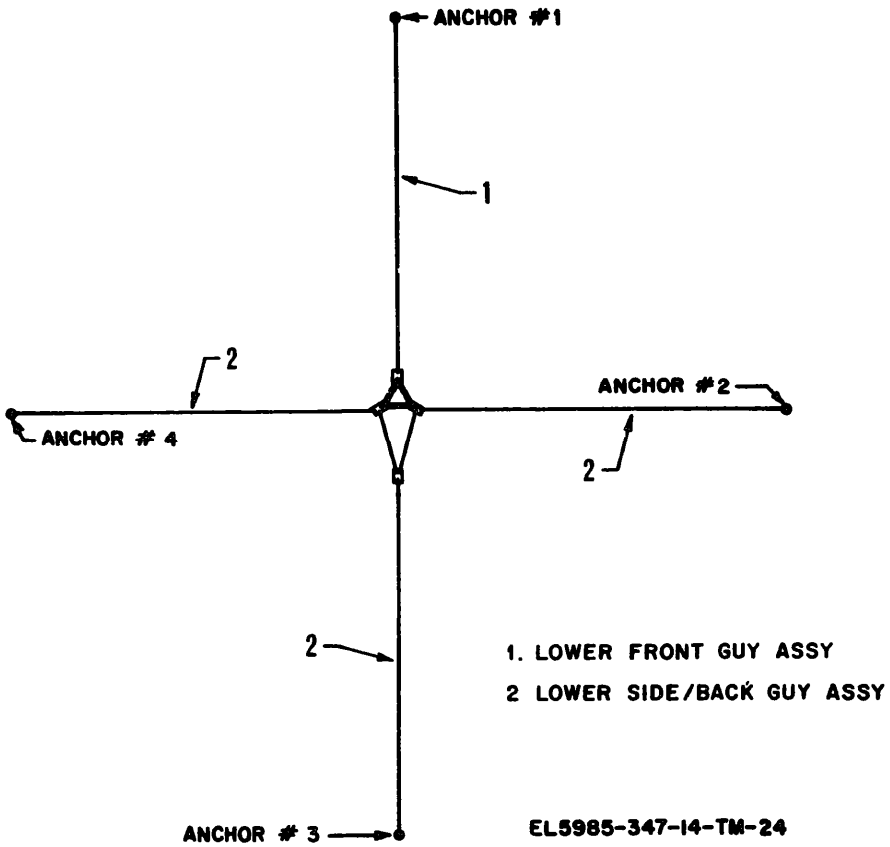


Figure 2-28. Lower guy configuration

Table 2-5. Element Length and Spacing Distance

Element	L Distance		Distance From A	
No.	Feet and Inches	Metric Conversion	Measurement	Metric Conversion
1	66-¼"	168 23cm.	3"	.0762 m.
2	78-7/16"	199.14 cm.	1'-3-½"	.3937 m.
3	89-⅛"	226.03 cm.	2'-4-¼"	.7176 m.
4	103-13/16"	263 95 cm.	3'-8-⅛"	1.1208 m.
5	119-5/16"	303 03 cm.	5'-2-¼"	1.5812 m.
6	135-⅛"	343 85 cm.	7'-½"	2.1463 m.
7	13'-2-½"	402.59 cm.	9'-¼"	2.7495 m.
8	15'-3-⅛"	4.6641 m.	11'-9-⅛"	3.5941 m.
9	17'-6-⅛"	5 3372 m.	14'-¾"	4.2863 m.
10	19'-9-⅛"	6.0293 m.	16'-11-¾"	5.1753 m.
11	22'-9-⅛"	6 9437 m.	19'-7-½"	5.9817 m.
12	26'-4-¼"	8.0328 m.	23'-8"	7.2136 m.
13	32'-3-11/16"	9 5425 m.	28'-9-⅛"	8.7725 m.
14	36'-10-7/16"	11.2379 m.	34'-4-¾"	10.4838 m.
15	45'-1-⅛"	13.7573 m.	40'-4"	12.2936 m.
16	47'-2-15/16"	14.4002 m.	48'-1-½"	14.6685 m.
17	47'-10-11/16"	14 5971 m.	56'-5"	17.1958 m.

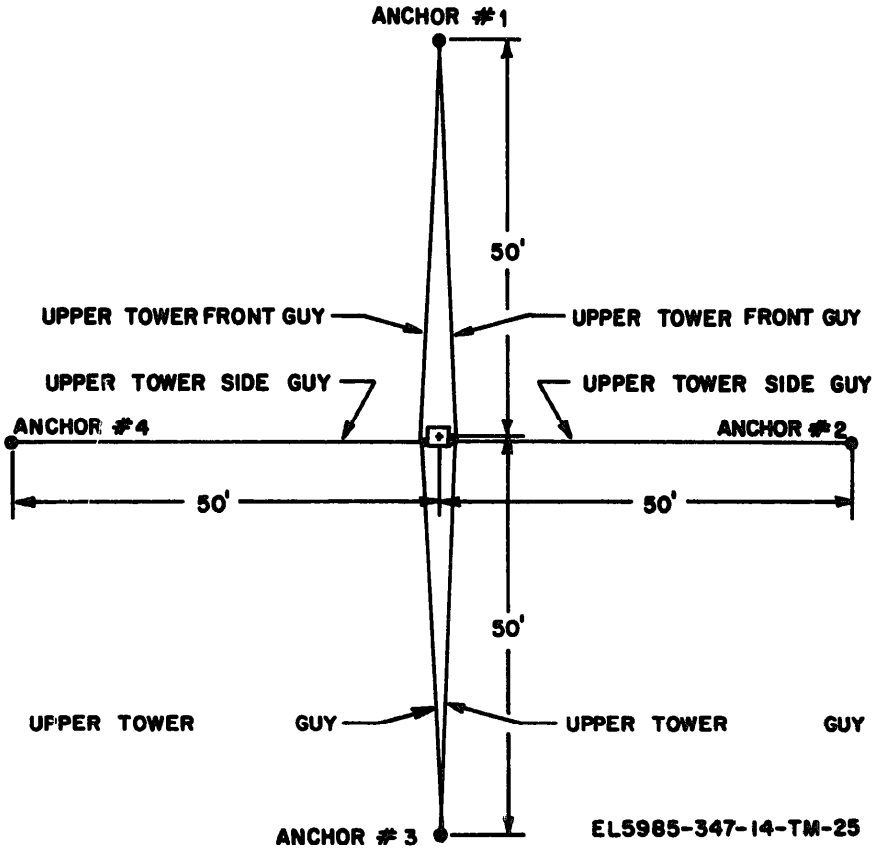


Figure 2-29 Upper guy configuration

Table 2-6. Element Color Coding with Boom

Element No.	*Element color coding for location of elements on boom*
1	brown
2	yellow
3	blue
4	green
5	white
6	brown and yellow
7	brown and blue
8	brown and green
9	brown and white
10	brown and brown
11	yellow and yellow
12	yellow and blue
13	yellow and green
14	yellow and white
15	blue and blue
16	blue and green
17	blue and white

r. Refer to figure 2-43 for element splice connection details. Note the matching color coding on the end of each tube.

s. Check all element lengths by referring to table 2-5 and figure 2-44. Each element must be the exact length as specified in table 2-5.

t. Figure 2-45 identifies the 3851AA antenna coax kit. The coax connects directly to the 50 ohm coaxial input connector (Type LC) on the balun as shown in figures 2-37 and 2-45.

u. Attach gripper clips to the boom leg and tower leg as shown.

NOTE

Leave enough slack in the coax to allow for boom rotation.

v. One man now attaches the rotator stop rope (identified in figure 2-46) to the rotator. He threads the rope down the middle of the tower, as shown in figure 2-47, and snaps it to the ring on the rotator (fig. 2-44). The black rope on the handle is tied to one of the tower legs about 5 feet (1.5 m) from the tower base.

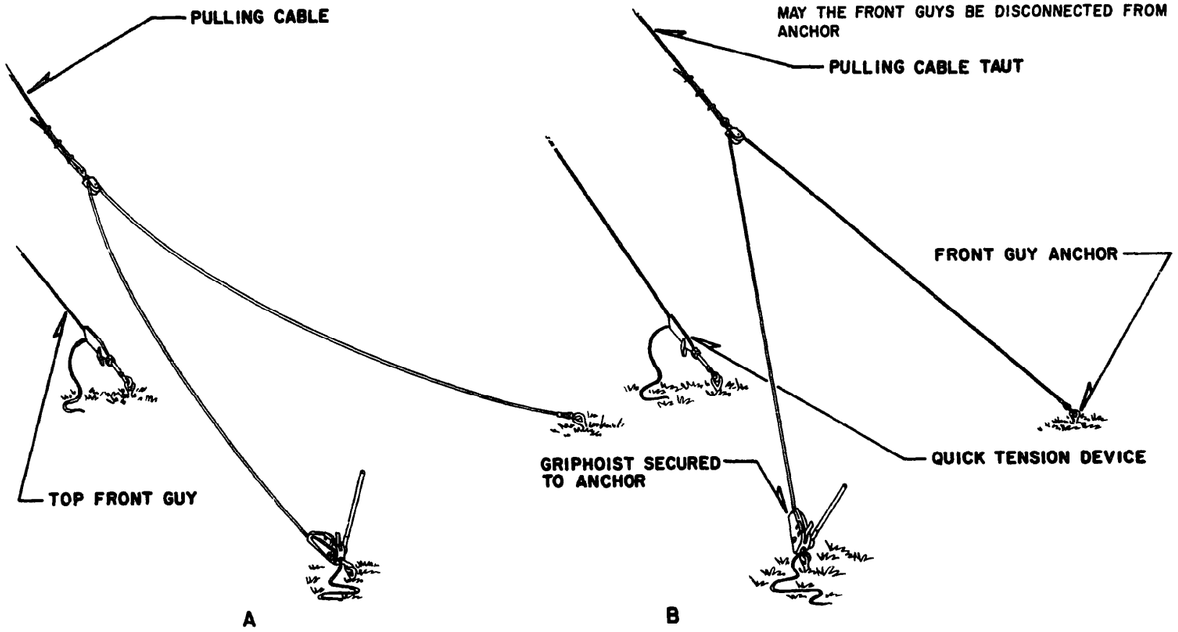
w. One man attaches the hinge plate release rope (identified in figure 2-46) to the rotator as shown in figure 2-49, being careful not to get it tangled with any elements or feedlines.

CAUTION

DO NOT RELEASE THE TOP FRONT GUY UNTIL THE PULLING CABLE IS TAUT.

NOTE

ATTACH THE GRIPHOIST AND ITS CABLE TO THEIR ANCHORS AND CONNECT THE PULLEY BLOCK TO THE PULLING CABLE. TIGHTEN THE PULLING CABLE USING THE GRIPHOIST SO THAT THE PULLING CABLE AND THE TOP FRONT GUYS ARE EQUALLY TAUT ONLY THEN MAY THE FRONT GUYS BE DISCONNECTED FROM ITS ANCHOR



TO CONNECT (BEFORE LOWERING TOWER)

EL5985-347-14-TM-58

Figure 2-30. Griphoist connect

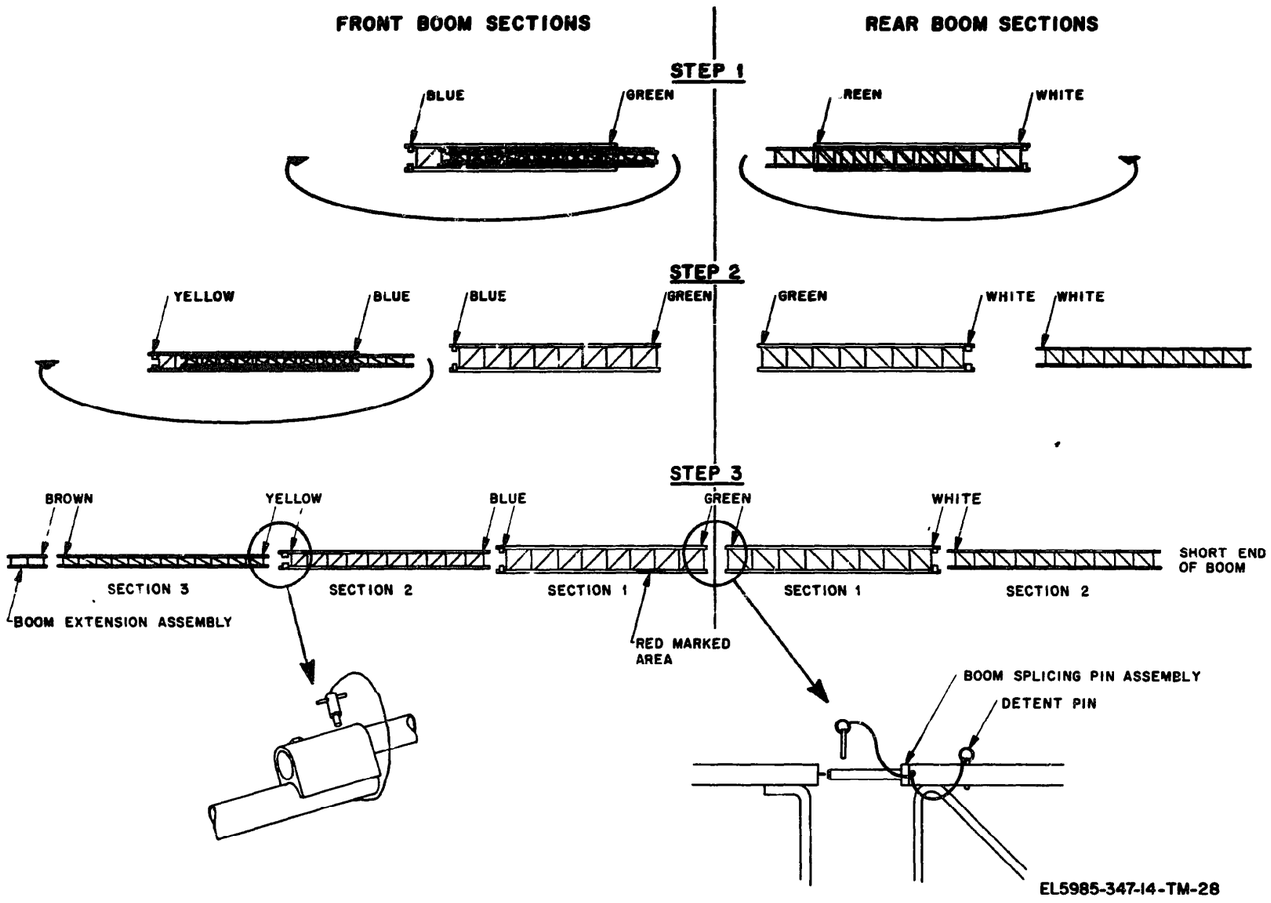


Figure 2-31. *Assembly of antenna boom sections.*

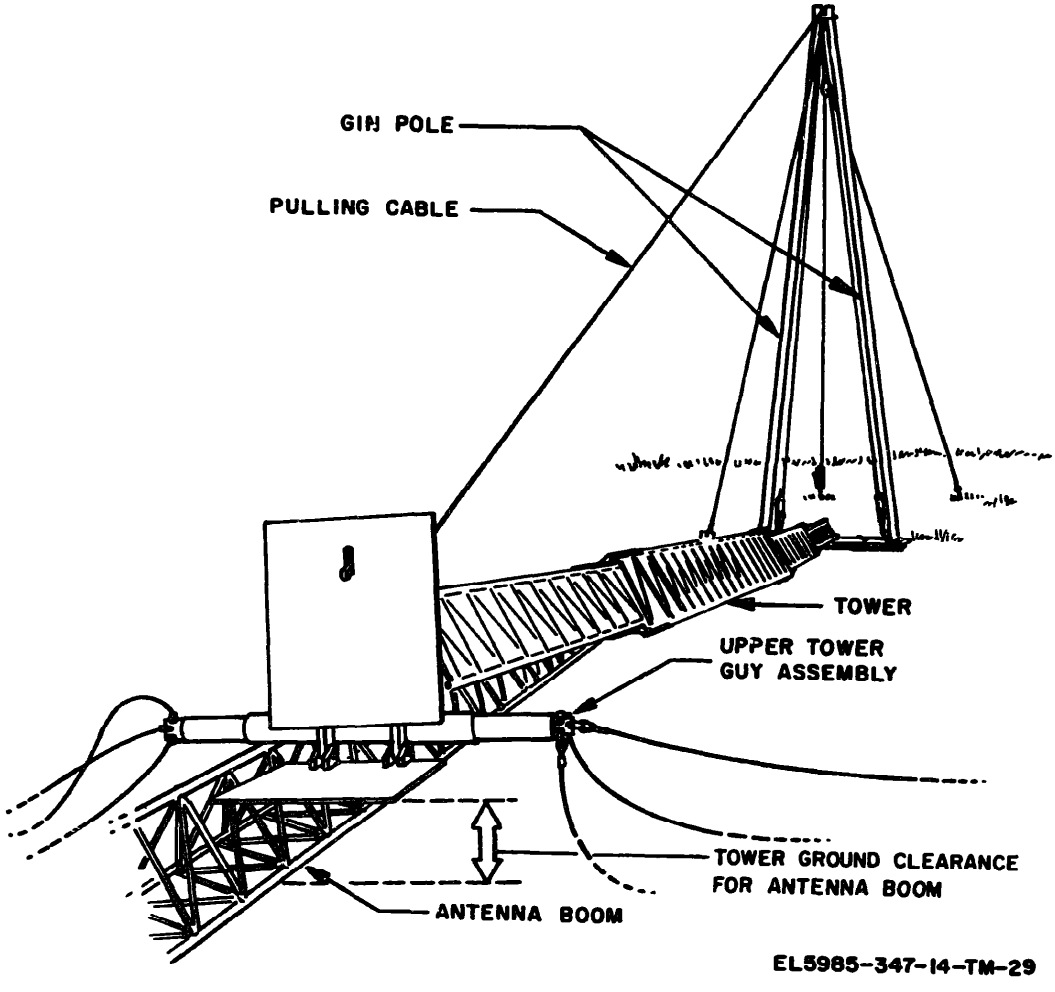


Figure 2-32. *Raising tower to allow insertion of boom* under *tower.*

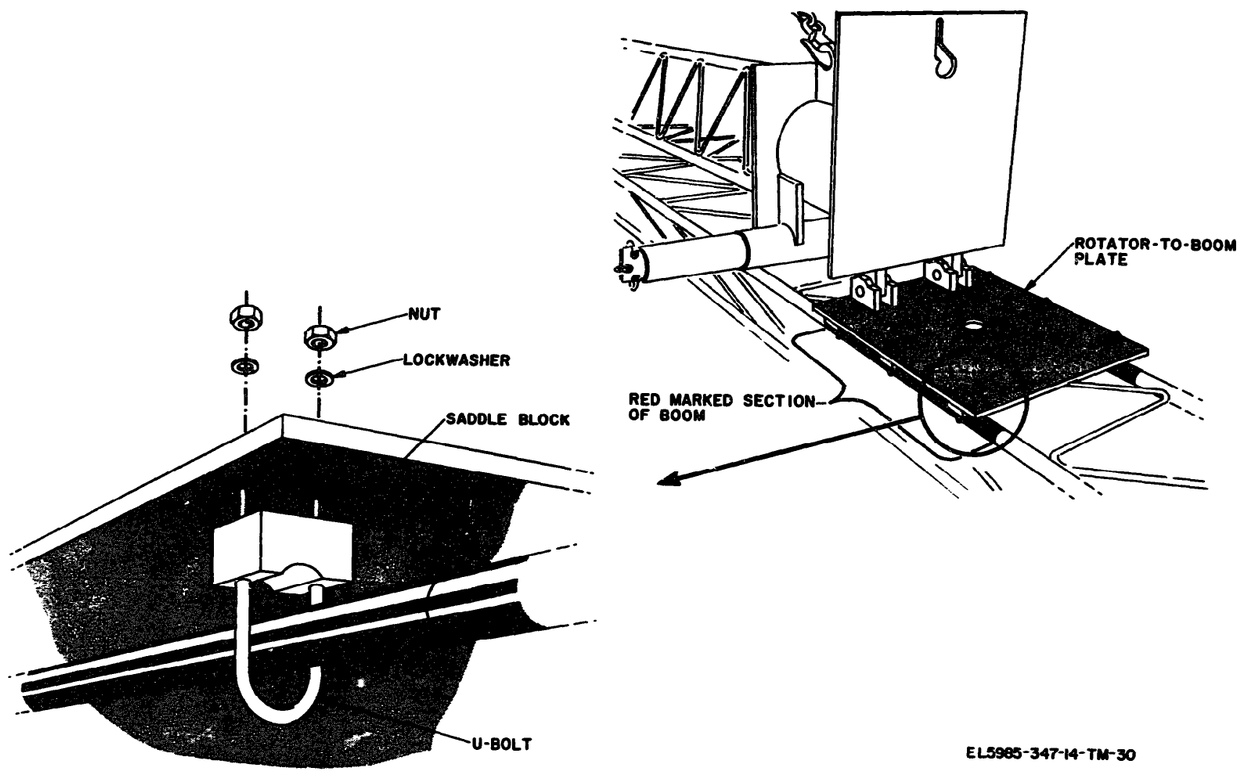


Figure 2-33. Rotator attachment to boom and saddle block attachment.

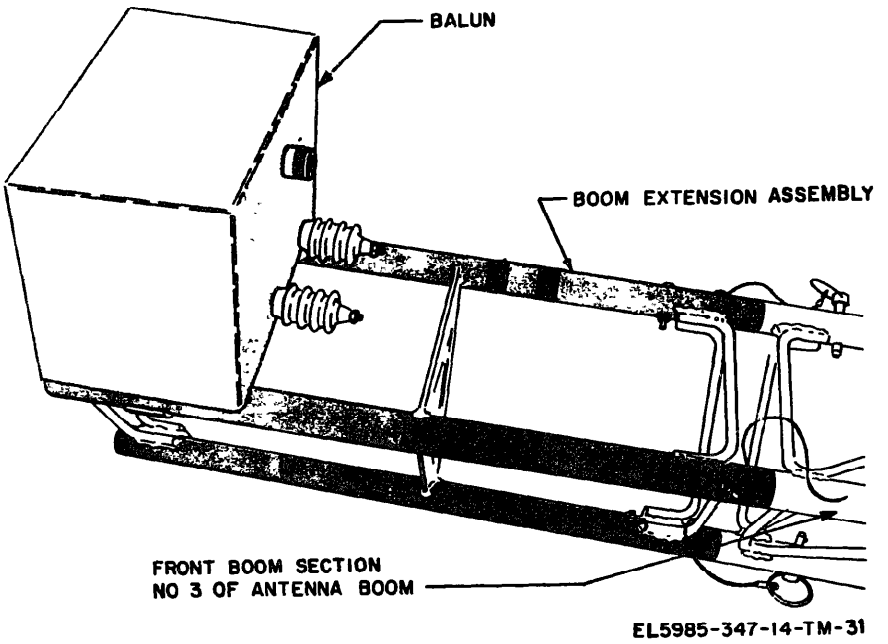


Figure 2-34 Attachment of boom extension to boom

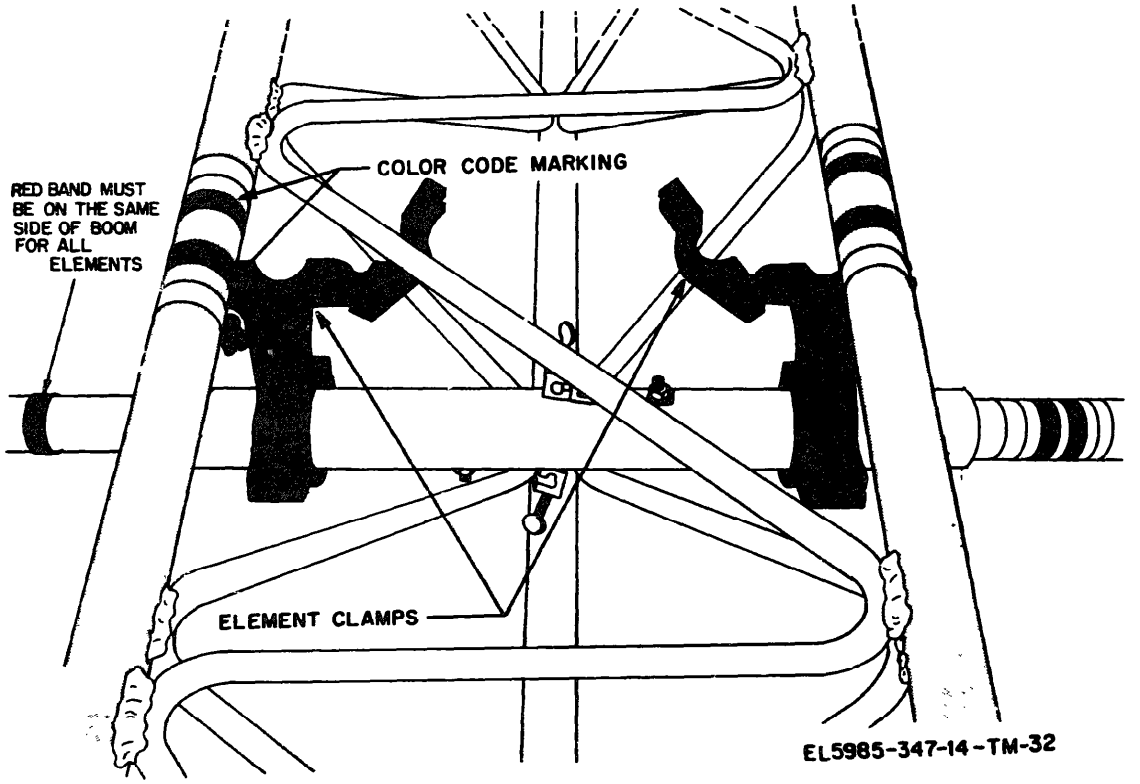


Figure 2-35. Locating element center insulator assemblies on boom.

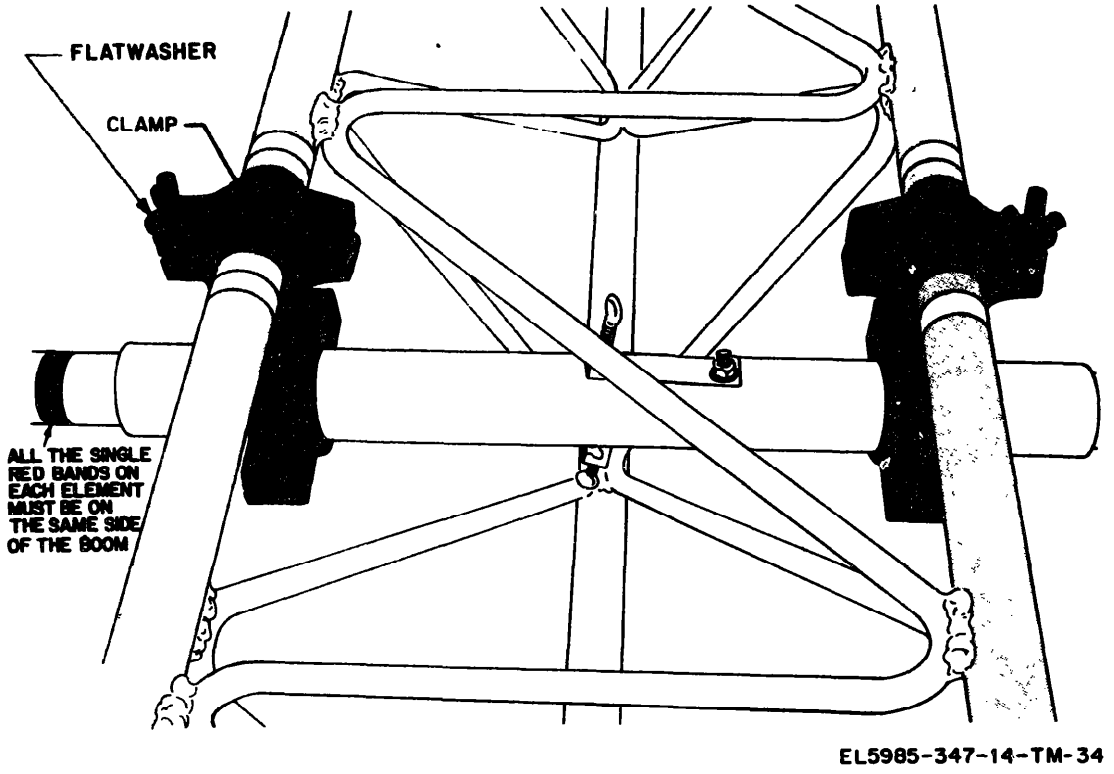


Figure 2-36 Securing element center insulator assemblies to boom.

WARNING

The hinge plate release rope must be placed along the antenna boom; NOT the tower. This is done to avoid confusion between the rotator stop rope and the hinge plate release rope when the antenna system is completely erected and as azimuth change is required.

x. One man shall tie the two tag lines (identified in figure 2-46) on the rear of the boom as shown in figure 2-50. These will then be laid out in a manner that will not interfere with the tower guys during erection procedures.

y. At this time, any guys previously disconnected from the tower or the base of the antenna assembly must be reconnected.

z. The back guys, side guys, and front guys should now be checked for position in relation to the antenna boom and elements as shown in figures 2-51 and 2-52. The side guys should lay on top of the element assemblies and should be attached to the side guy anchors. The upper back guy assemblies should lay over elements 14, 15, 16, and 17 and then be doubled back under the element assemblies toward and connected to the back guy anchor.

aa. Apply slight tension on the side guys as done previously when the tower was raised.

CAUTION

Never raise the tower or gin pole when the wind is in excess of 30 mph.

2-15. Raising the Antenna System

a. The antenna system will now be erected using **similar procedures and observing all the CAUTIONS and WARNINGS as during the preliminary raising of the tower (para. 2-13 above).**

b. One man positions himself at the griphoist, and one man will be stationed at either side guy anchor. Two men will stand near the rear end of the boom, one on each side of the tower (fig. 2-53).

c. The duties of the men stationed at the boom will be

(1) Raise the boom to clear obstacles on the ground as the tower is being raised (fig.2-54).

(2) One man will make tension adjustment to the unattended side guy when ordered by the griphoist operator.

(3) Latch the boom.

d. The griphoist operator will slowly raise the tower until it just leaves the ground, he will then make sure that the tower is straight.

e. He will order adjustments to the side guys and knee cables as required until the tower is straight.

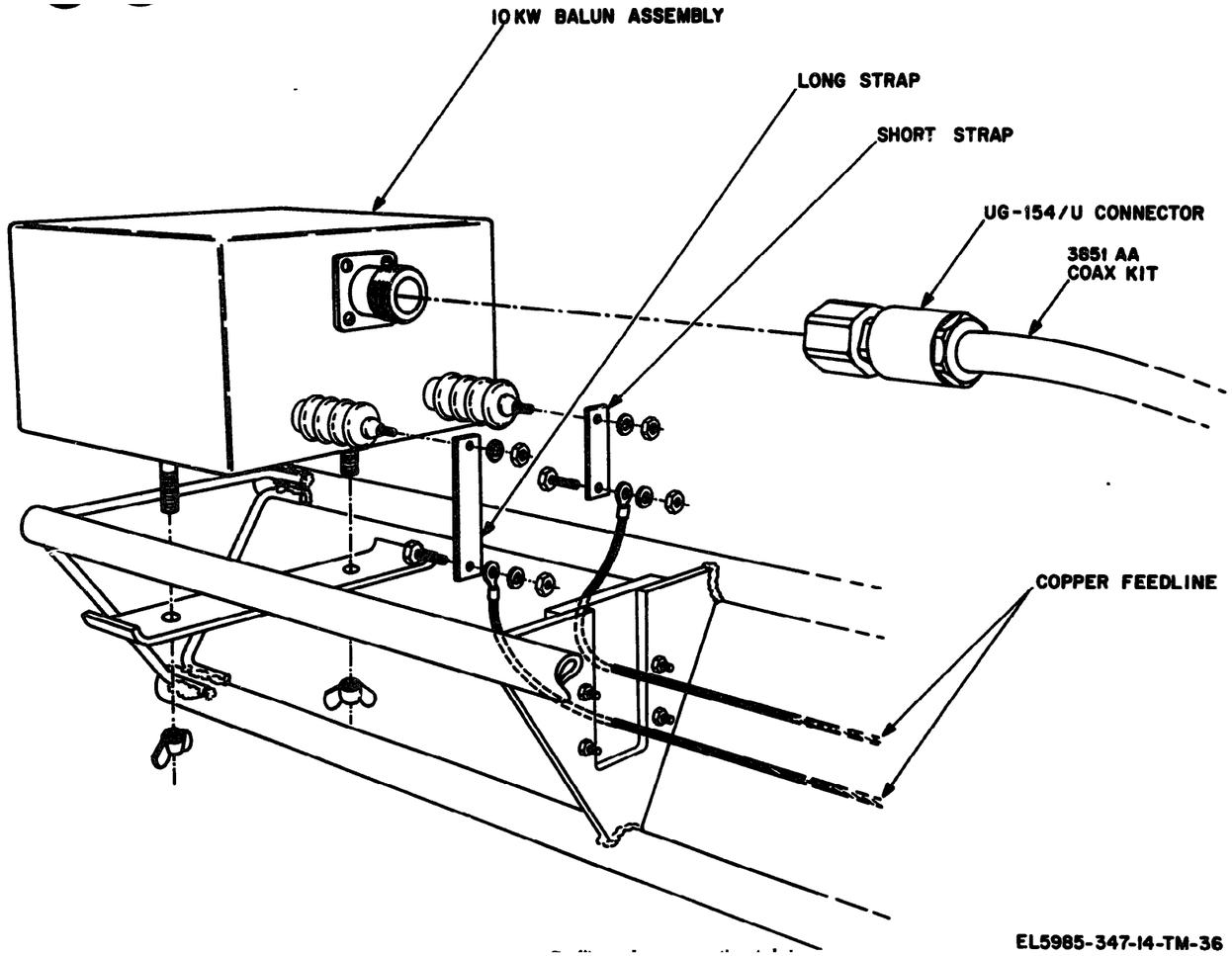


Figure 2-37. Feedline and coax connections to balun.

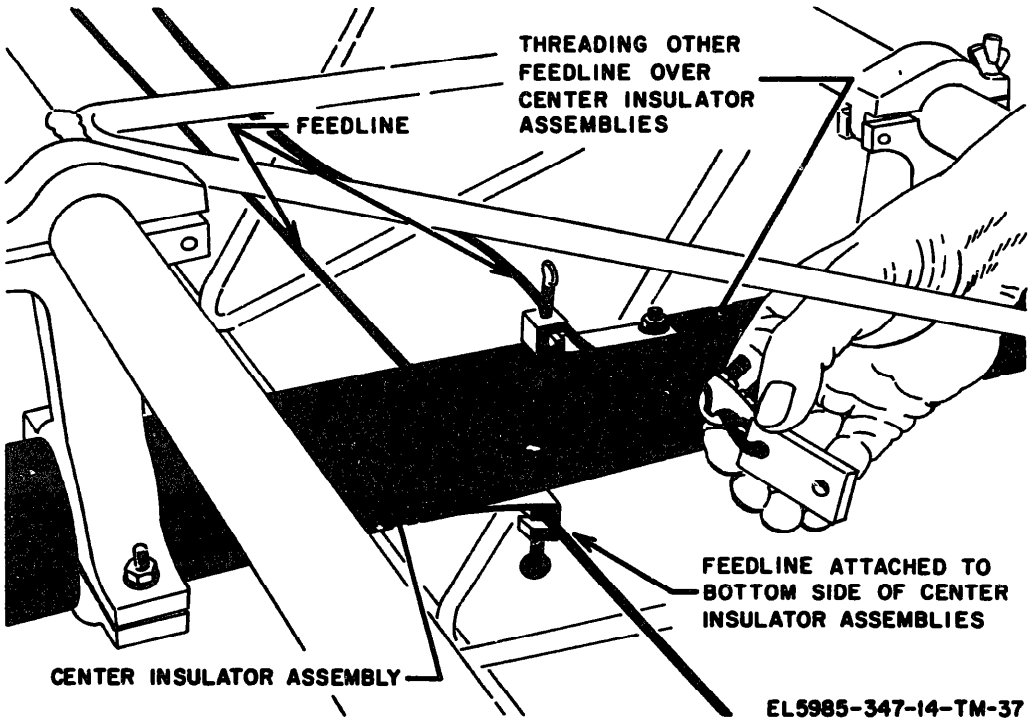


Figure 2-38. Threading feedline below and above center insulators

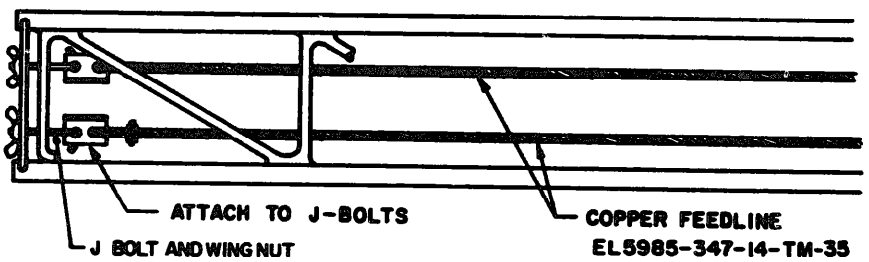


Figure 2-39. Attaching feedline to boom plate.

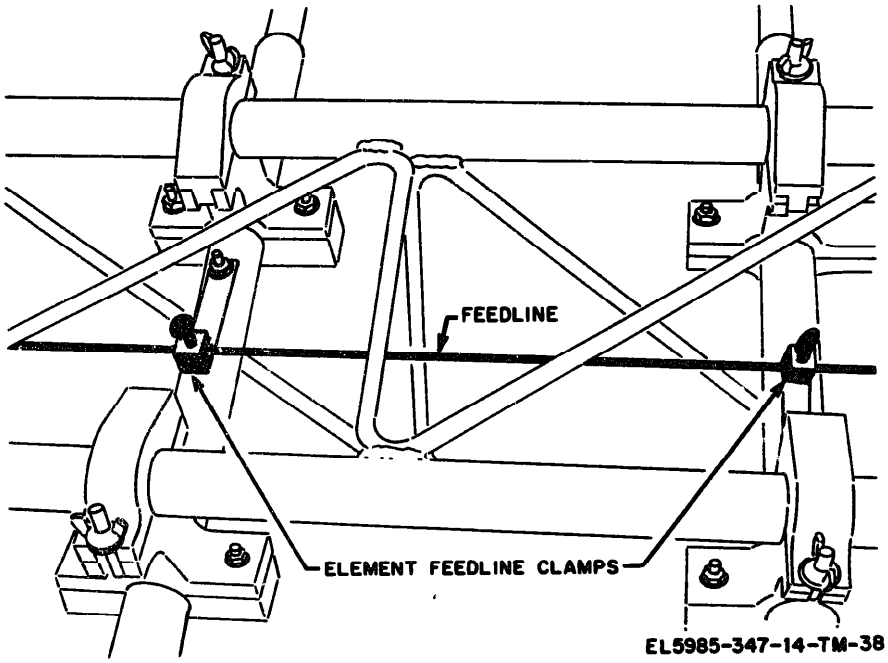


Figure 2-40. Feedline cable alternately attached to center insulators.

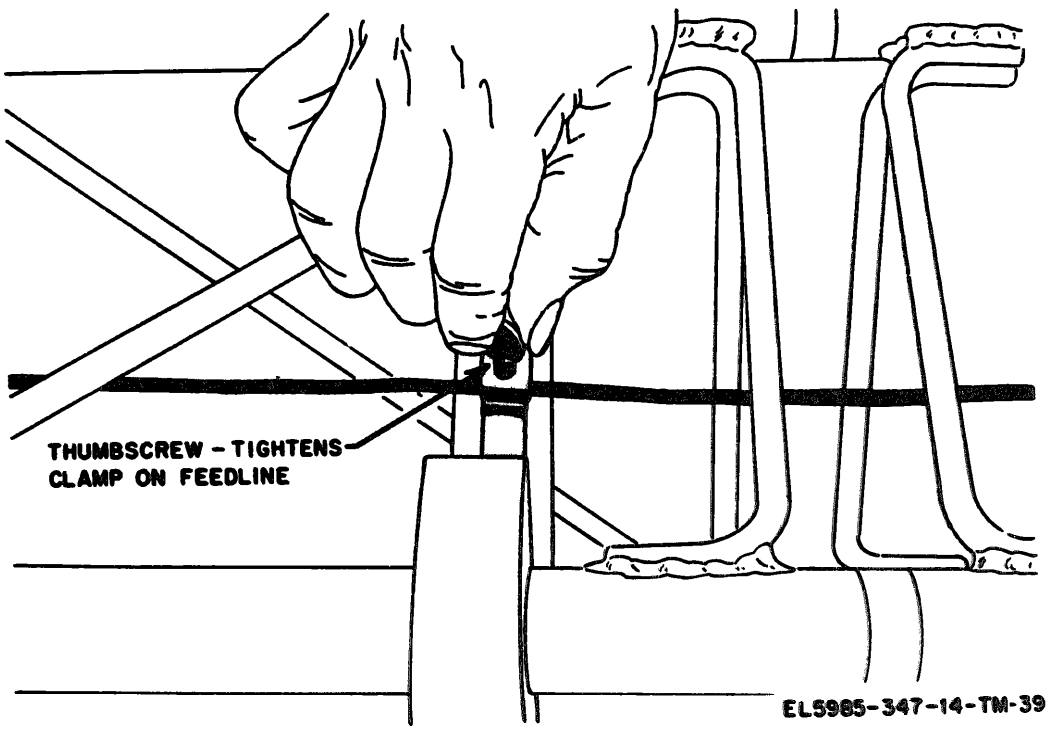
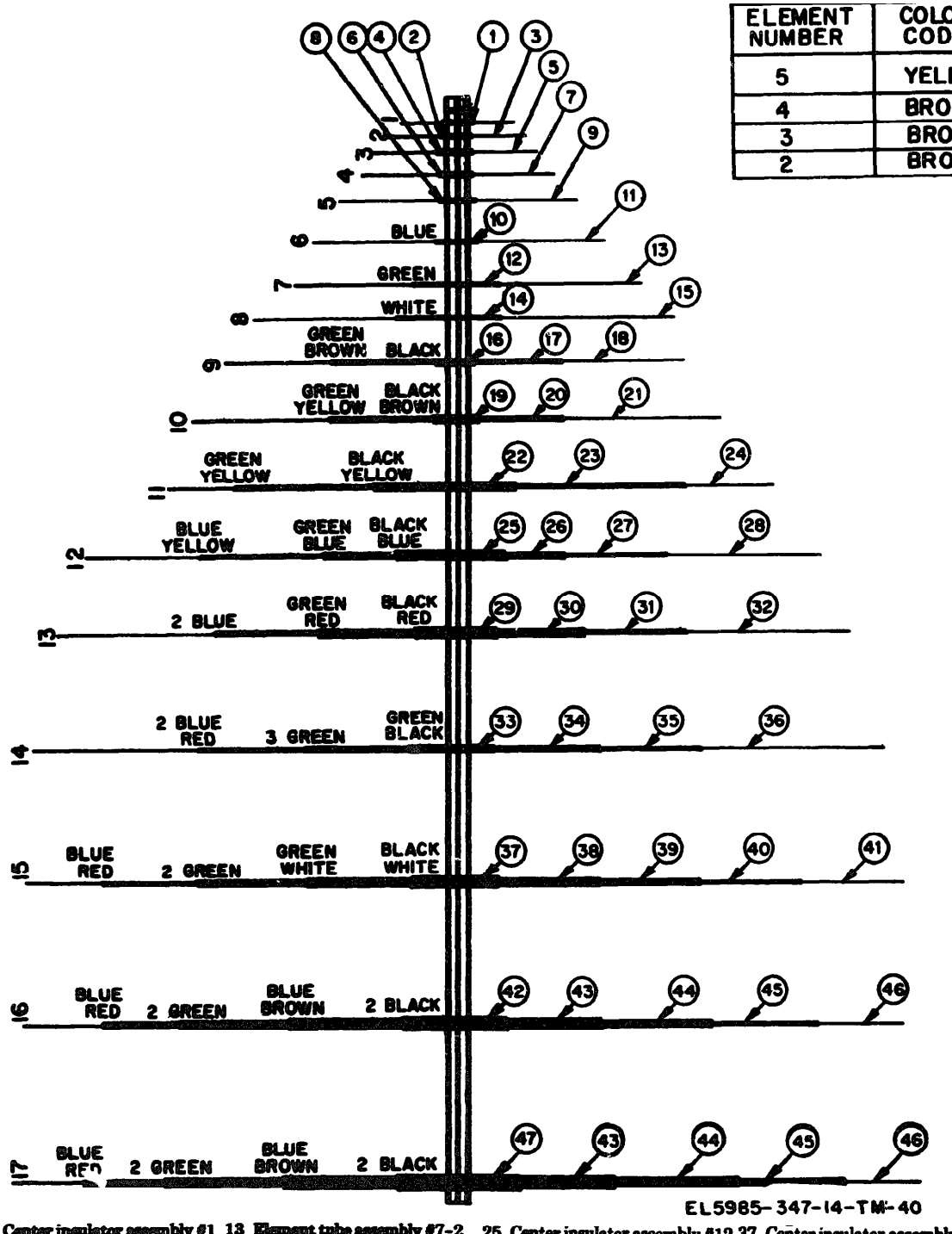


Figure 2-41 Fastening feedline cable to center insulators

ELEMENT NUMBER	COLOR CODE
5	YELLOW
4	BROWN
3	BROWN
2	BROWN



1 Center insulator assembly #1
2 Center insulator assembly #2
3 Element tube assembly #2-2
4 Center insulator assembly #3
5 Element tube assembly #3-2
6 Center insulator assembly #4
7 Element tube assembly #4-2
8 Center insulator assembly #5
9 Element tube assembly #5-2
10 Center insulator assembly #6
11 Element tube assembly #6-2
12 Center insulator assembly #7
13 Element tube assembly #7-2
14 Center insulator assembly #8
15 Element tube assembly #8-2
16 Center insulator assembly #9
17 Element tube assembly #9-2
18 Element tube assembly #9-3
19 Center insulator assembly #10
20 Element tube assembly #10-2
21 Element tube assembly #10-3
22 Center insulator assembly #11
23 Element tube assembly #11-3
24 Element tube assembly #11-3
25 Center insulator assembly #12
26 Element tube assembly #12-2
27 Element tube assembly #12-3
28 Element tube assembly #12-4
29 Center insulator assembly #13
30 Element tube assembly #13-2
31 Element tube assembly #13-3
32 Element tube assembly #13-4
33 Center insulator assembly #14
34 Element tube assembly #14-2
35 Element tube assembly #14-3
36 Element tube assembly #14-4
37 Center insulator assembly #15
38 Element tube assembly #15-2
39 Element tube assembly #15-3
40 Element tube assembly #15-4
41 Element tube assembly #15-5
42 Center insulator assembly #16
43 Element tube assembly #16-2 & 17-2
44 Element tube assembly #16-3 & 17-3
45 Element tube assembly #16-4 & 17-4
46 Element tube assembly #16-5 & 17-5
47 Center insulator assembly #17

Figure 2-42. Element splice coding

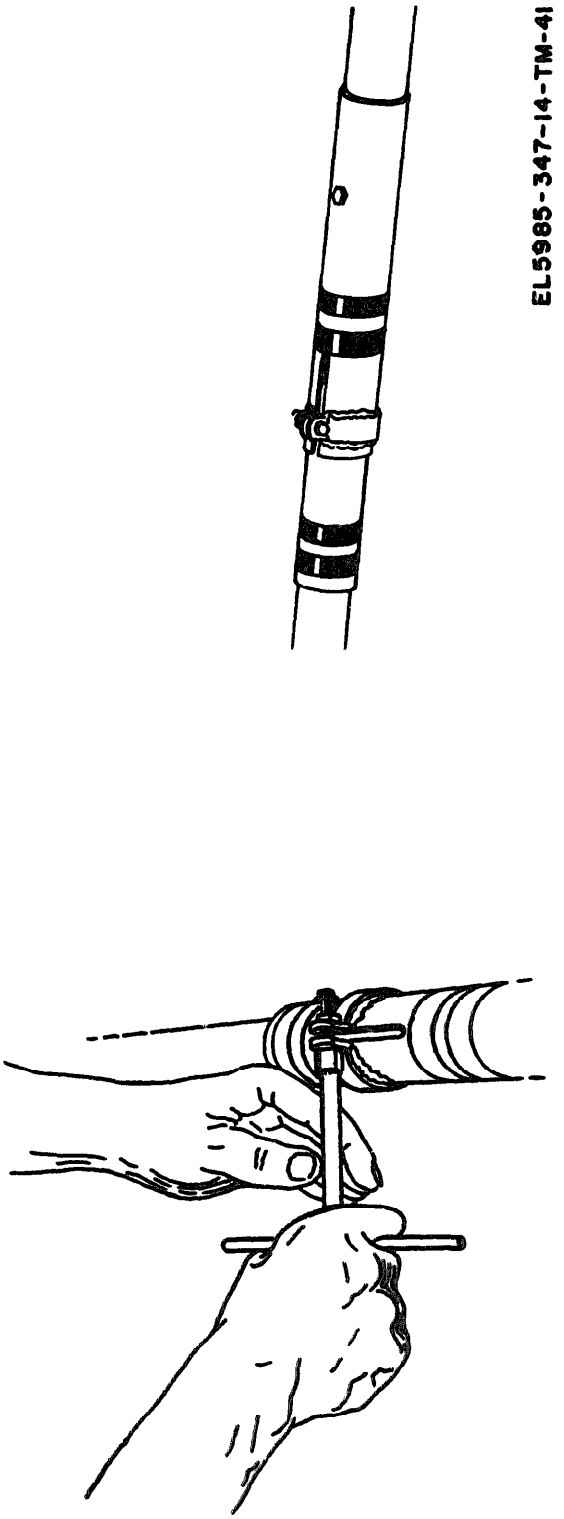


Figure 2-43 Element splice, tightened and completed splice

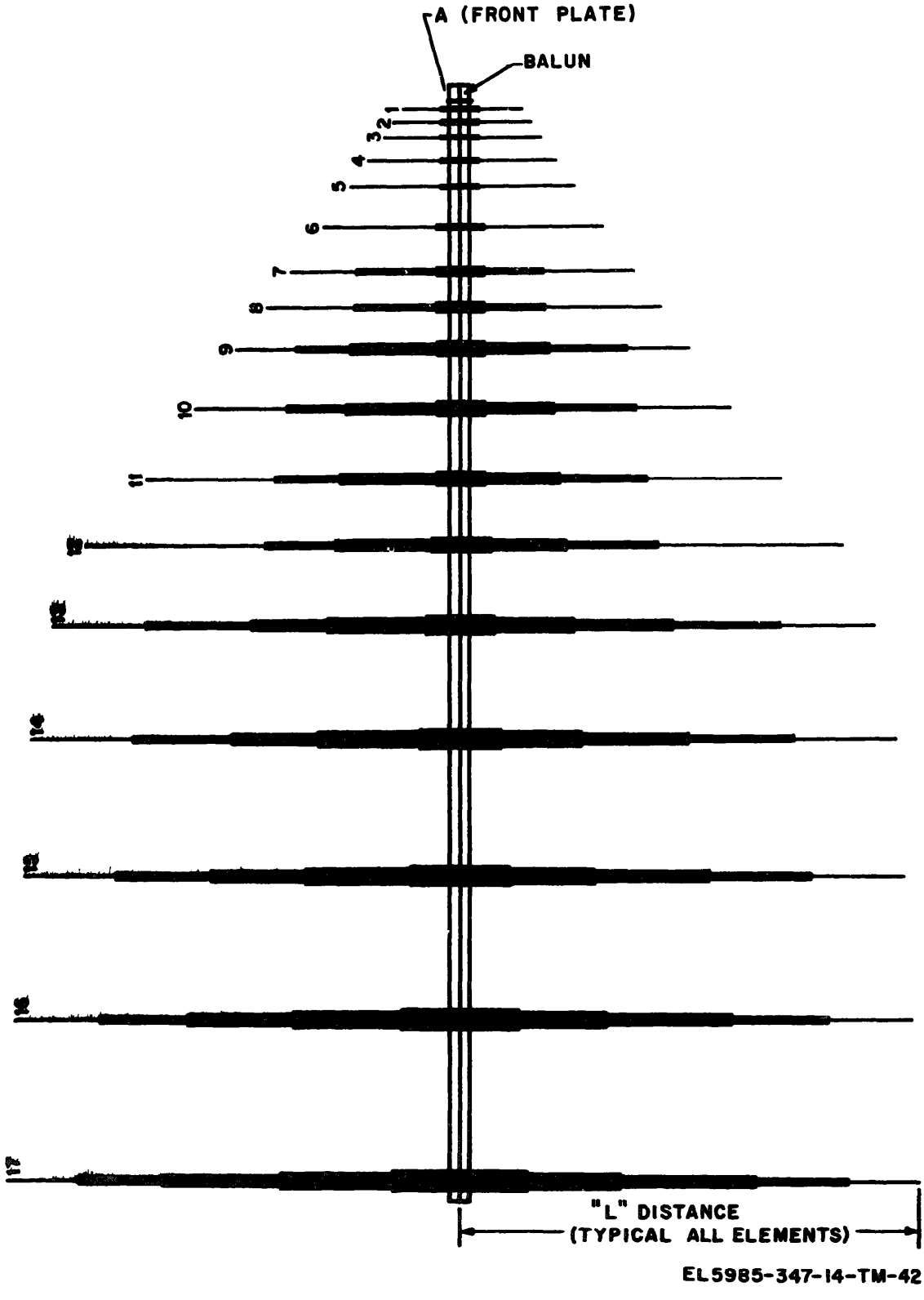


Figure 2-44. Element lengths.

f. Continue raising the tower as in paragraph 2-13 until the boom is clear of the ground.

CAUTION

Do not pull on the antenna elements to control latching. Take extreme care to be sure that the coax does not kink or become damaged when latching the boom.

g. One man hoists the tower and antenna system high enough to allow the second and fourth men to latch the antenna to the rotator-to-boom plate by pushing the rear end of the antenna boom away from the tower as shown in figure 2-55.

NOTE

The antenna must latch securely. If the boom moves away from the rotator when the large element end is pushed back toward the tower base, a secure latch did not take place.

h. If a successful latch did not take place, push the rear end of the boom away from the tower for another attempt to secure the antenna boom to the rotator. A successful latch has occurred when the boom will not move or separate *from the tower hinge* plate.

i. After the antenna is securely latched, tie off the hinge plate rope assembly to the leg of the boom. Make sure there is not tension on this hinge plate rope. Figure 2-56 shows a general view of the antenna with the boom properly latched, and the tower almost erect.

j. When the pulling cable is about to lift *from the* gin pole top plate, reduce the tension in the knee cable and the front midtower guy. Use the quick tension device at the base plate to allow the pulling cable to lift out of the gin pole slot freely and smoothly.

k. Two men will operate tag lines until the antenna is up.

l. The men located at the rear anchor will insure that the top and rear guys are attached to the rear guy anchor as shown in figure 2-56.

m. When the tower is erect, plumb the tower following the procedures in paragraph 2-13K through q.

n. If the antenna is to be left erected for more than one day, it is recommended that the griphoist be stored to prevent the accumulation of dirt in the mechanism.

NOTE

If possible, cover the griphoist or store it in a bag to prevent dirt accumulation.

o. When the griphoist is removed, the pulling cable can then be tied off near the base of the tower or tied to either of the erection anchors or front guy anchor. A 40-foot length of $\frac{5}{32}$ polyethylene rope is supplied for this purpose.

p. Figure 1-1 shows Antenna System AS-3098/U completely erected and properly guyed.

Section IV. PRELIMINARY ADJUSTMENT OF EQUIPMENT

2-16. Initial Checkout and Adjustment

This system is shipped complete. The only checkout or adjustment will be a visual check of proper tension on all guys and the coaxial cable, to be sure it has not been pinched or damaged. Checkout of this system will depend on the actual transceiver equipment in use. Refer to the technical manual of the transceiver for check out procedure.

2-17. Operating the Rotator

a. This paragraph covers the operational procedures for the manually operated rotator for setting the antenna to the desired direction of propagation.

b. The rotator is a manually operating locking device which allows the operator to release the lock position of the antenna in any of 12 positions of azimuth.

c. One man can release the brake mechanism as shown in figure 2-48 by placing the rotator release lever under the horizontal brace in the tower section so that the brace fits the notched portion of the rotator release lever. Grasp the lever and push up on the unnotched end of the lever. (This in turn puts tension on the rotator release rope.) Maintain tension on the rotator release rope until the desired azimuth is reached.

NOTE

If the lever doesn't allow force to be placed on the rotator stop rope, readjust the attachment point to the lever by adjusting the rope clips on the rotator stop rope.

d. Two men should rotate the antenna by pulling on the tag lines attached to the rear of the boom. The rotator is equipped with azimuth settings located 30 degrees apart The antenna can be rotated to, and locked in, any of these 12 azimuth directions.

e. The rotator has a factory adjusted drag mechanism to limit rotational speed. The rotator is equipped with a stop to limit rotation to ± 180 degrees. This is to insure that the coax cable is not damaged as a result of continued rotation in one direction. The operator should not force the antenna to rotate past the stop. The antenna should always be rotated slowly so as not to damage this stop or the rotator locking pin (azimuth control pin).

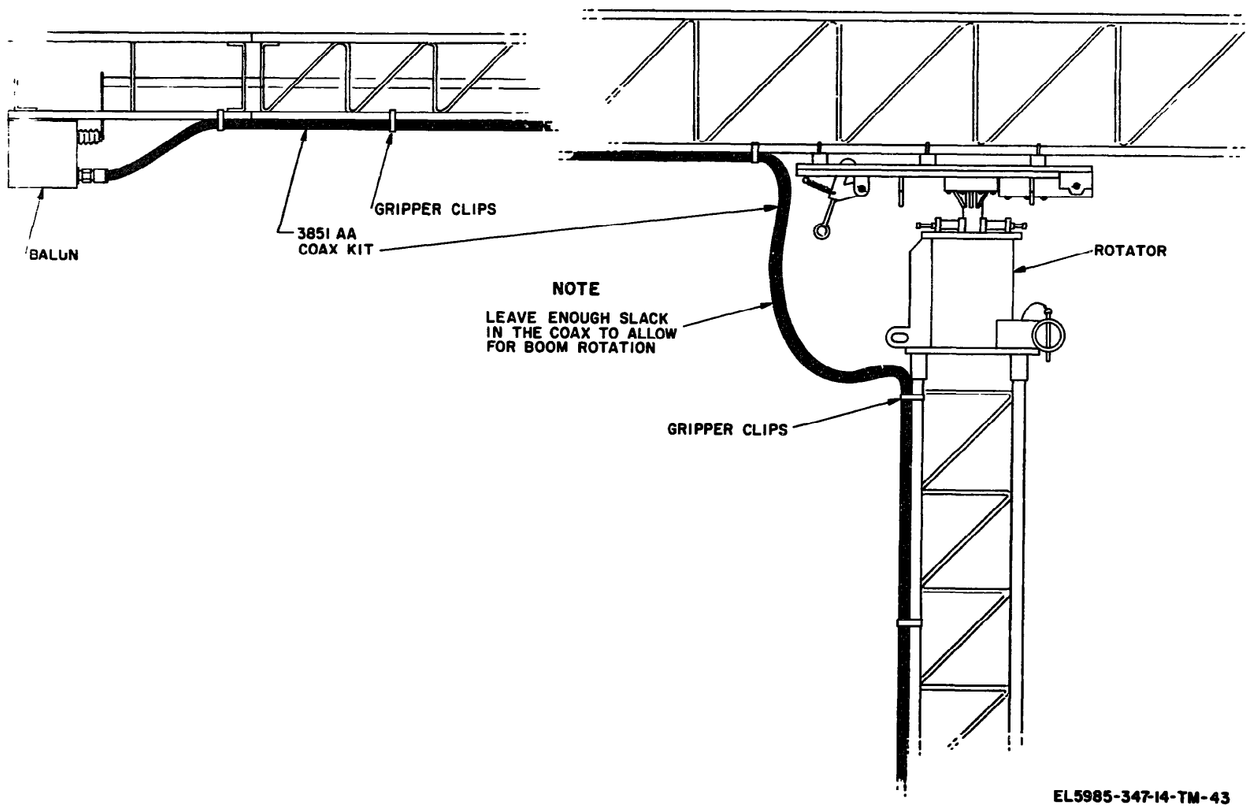


Figure 2-45. Coax identification and routing.

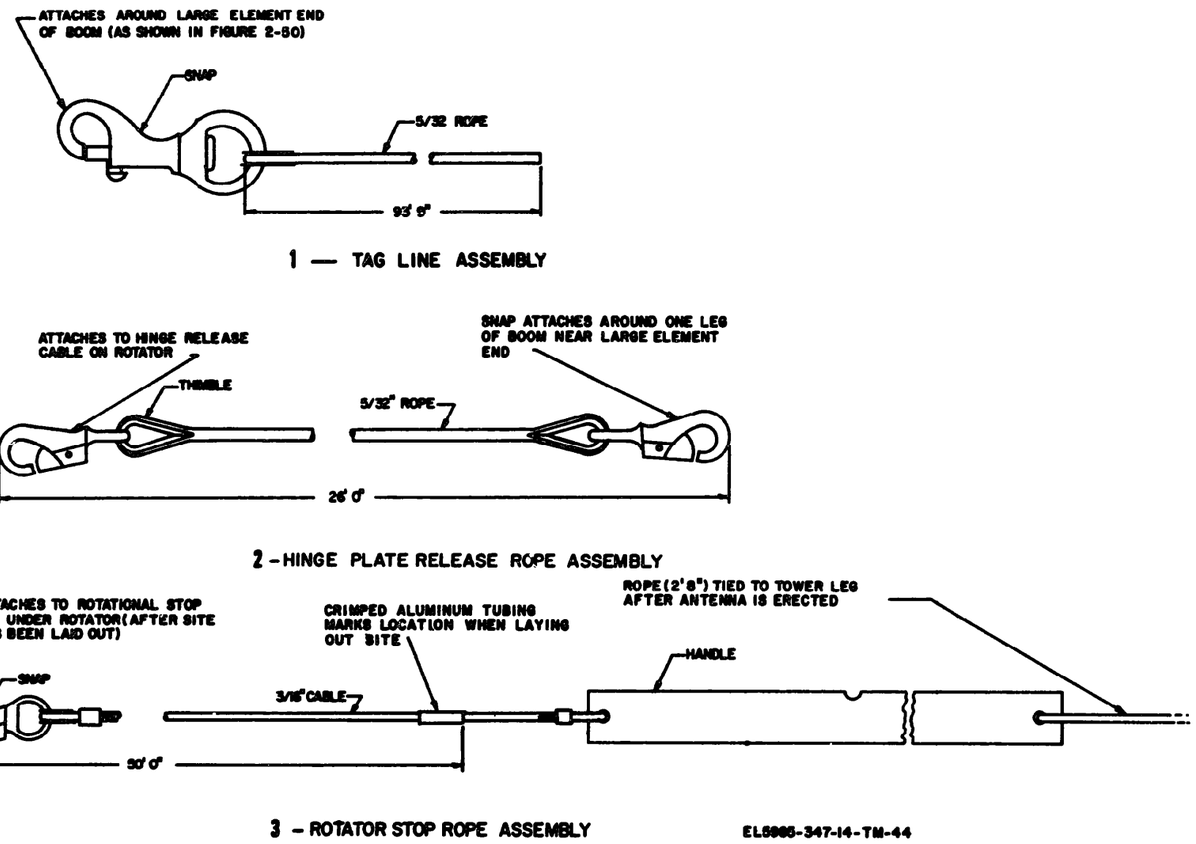


Figure 2-46. Rope identifications.

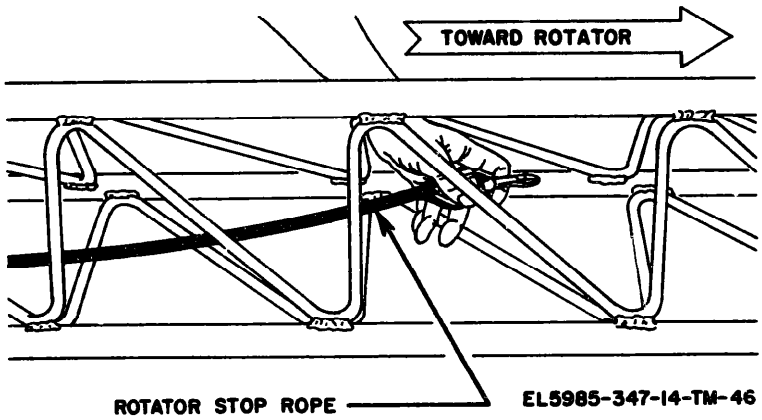


Figure 2-47. Threading rotator stop rope through tower.

f. Pull down on the rotator stop rope and move the antenna boom slowly to the desired direction. Release the rotator stop rope to allow the locking pin to engage. Secure the rotator stop rope back to the base of the tower, out of the way.

g. Snugly tie off the tag lines to the nearest anchors to insure minimum side sway of the antenna boom while in the erected position. These tag lines are of braided polyethylene and are elastic. When securing the tag lines to the guy anchor or other nearby objects these elastic lines will absorb a large amount of the force the wind may cause on the antenna rather than allow all of this force to be imposed on the rotational stop pin in the rotator.

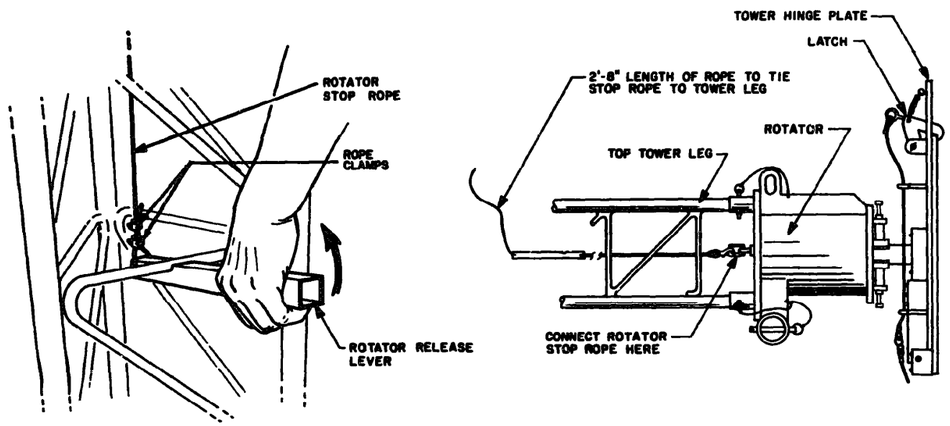


Figure 2-48. Attaching rotator stop rope to rotator.

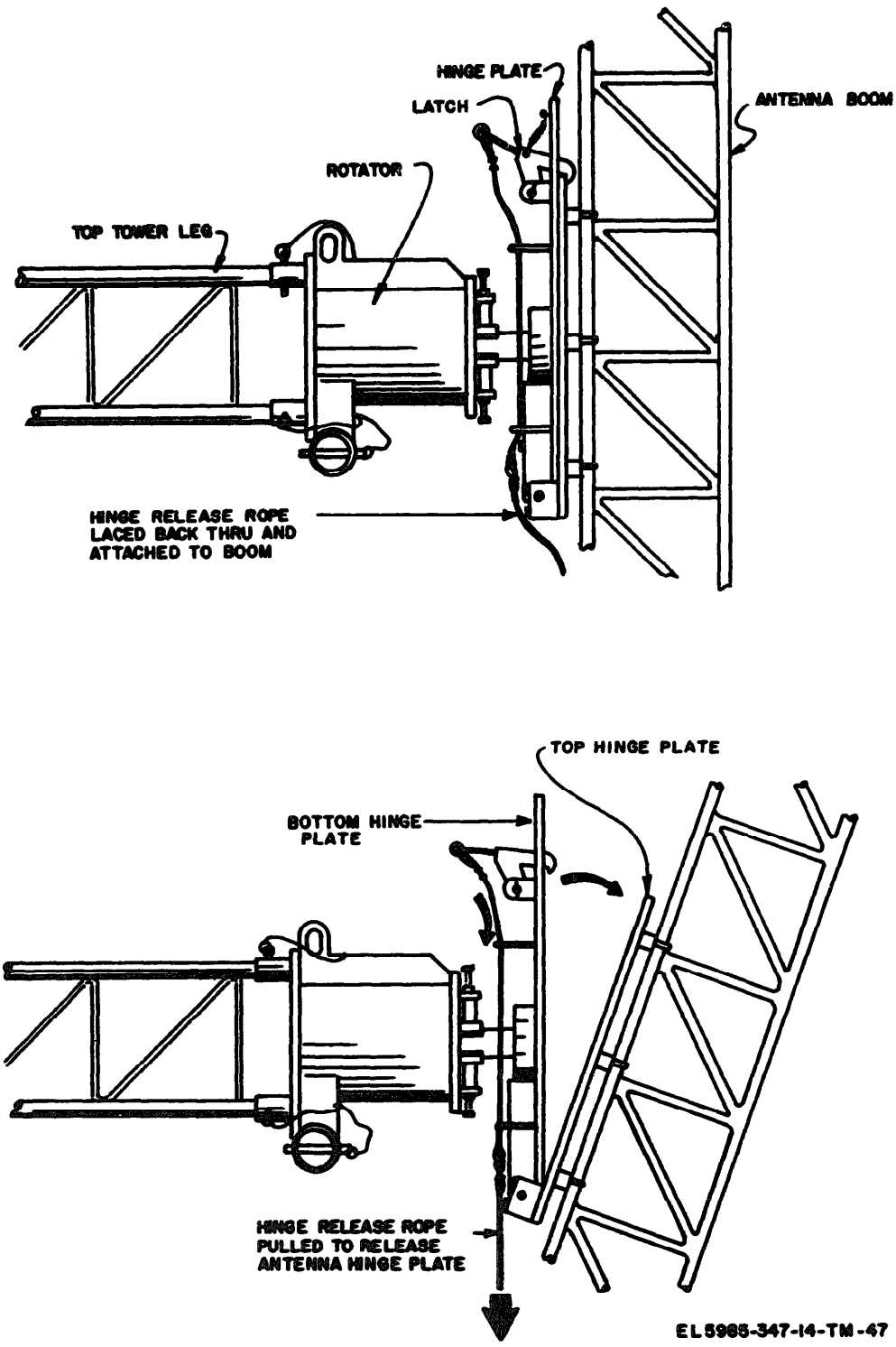


Figure 2-49. Hinge plate release.

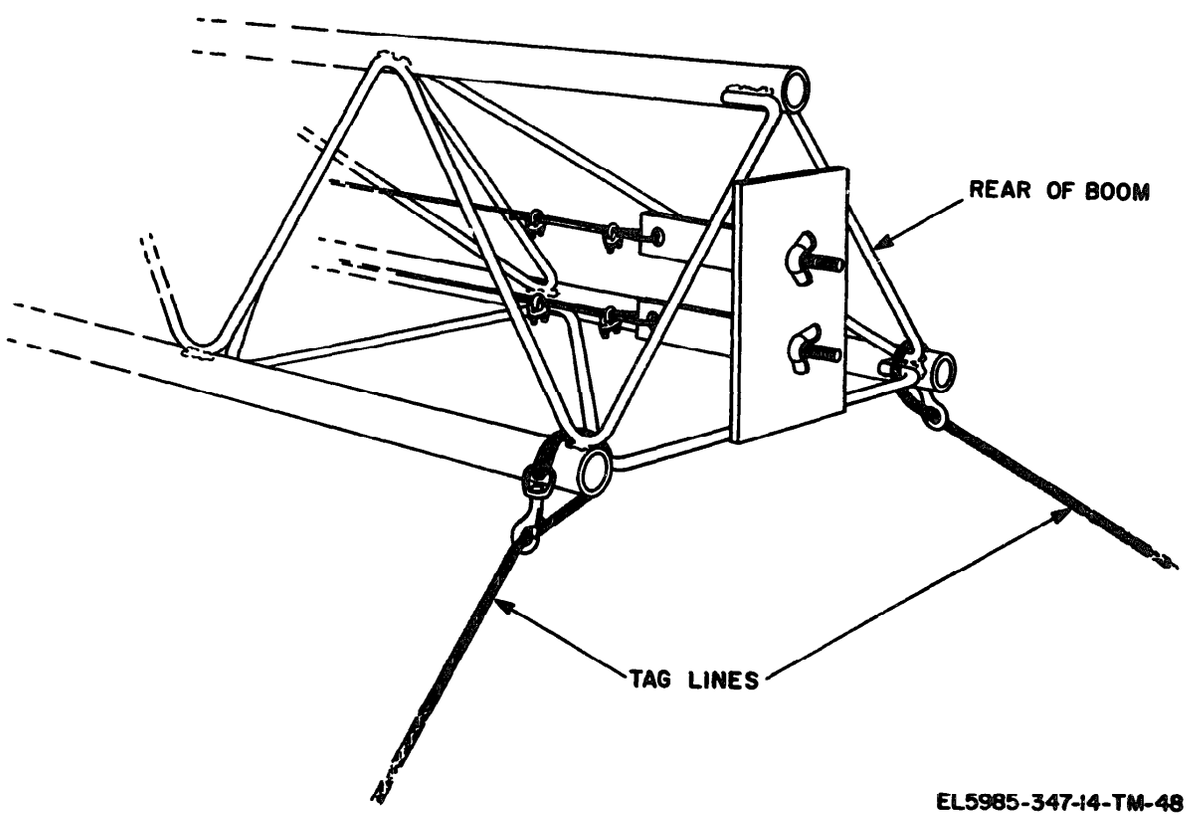


Figure 2-50 Tag lines to end of boom

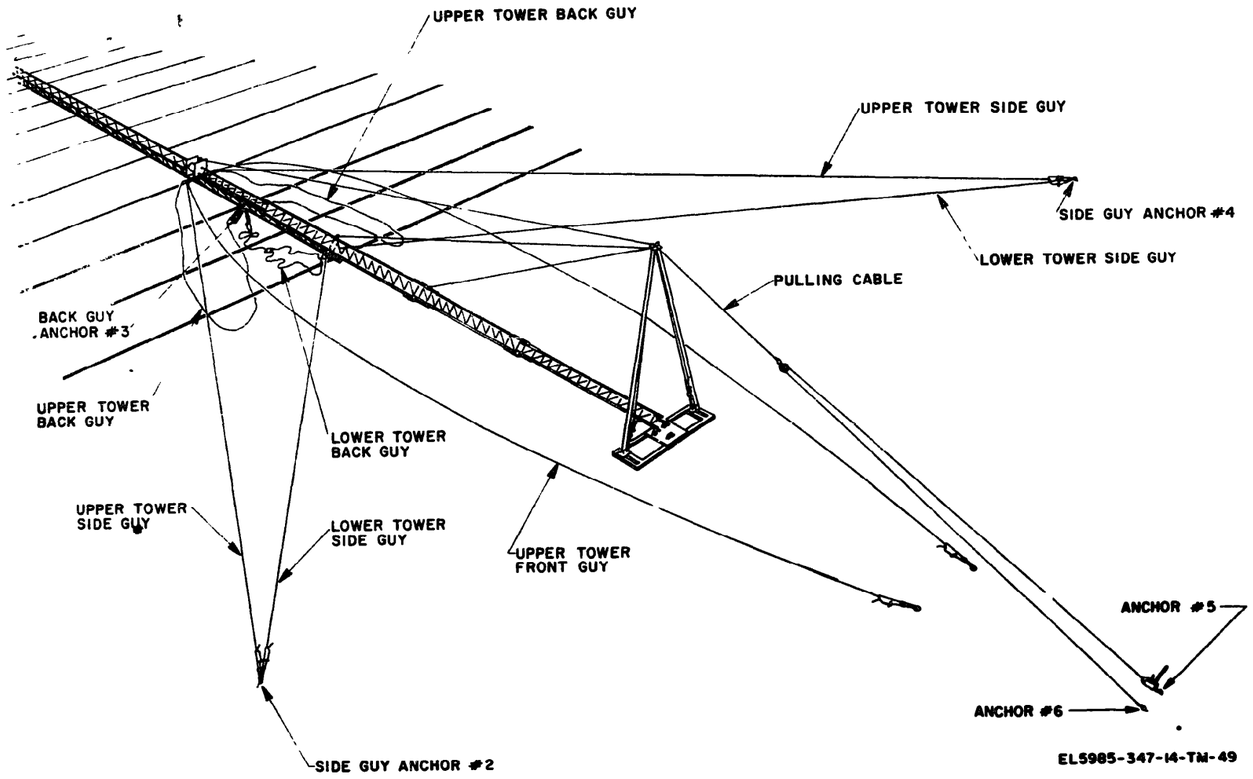


Figure 2-51. Antenna and tower prior to erection.

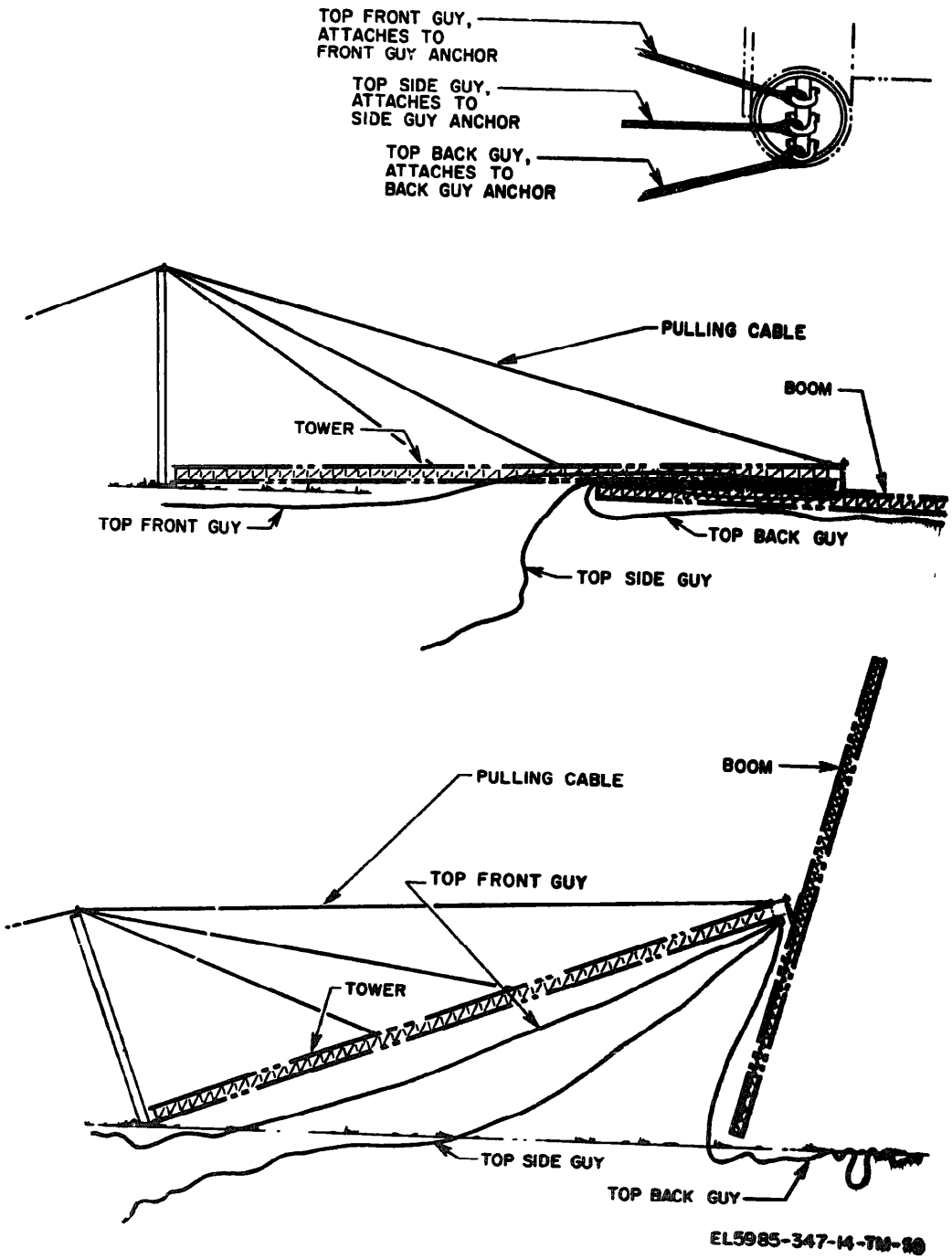


Figure 2-52. Laying out upper back guy prior to erection.

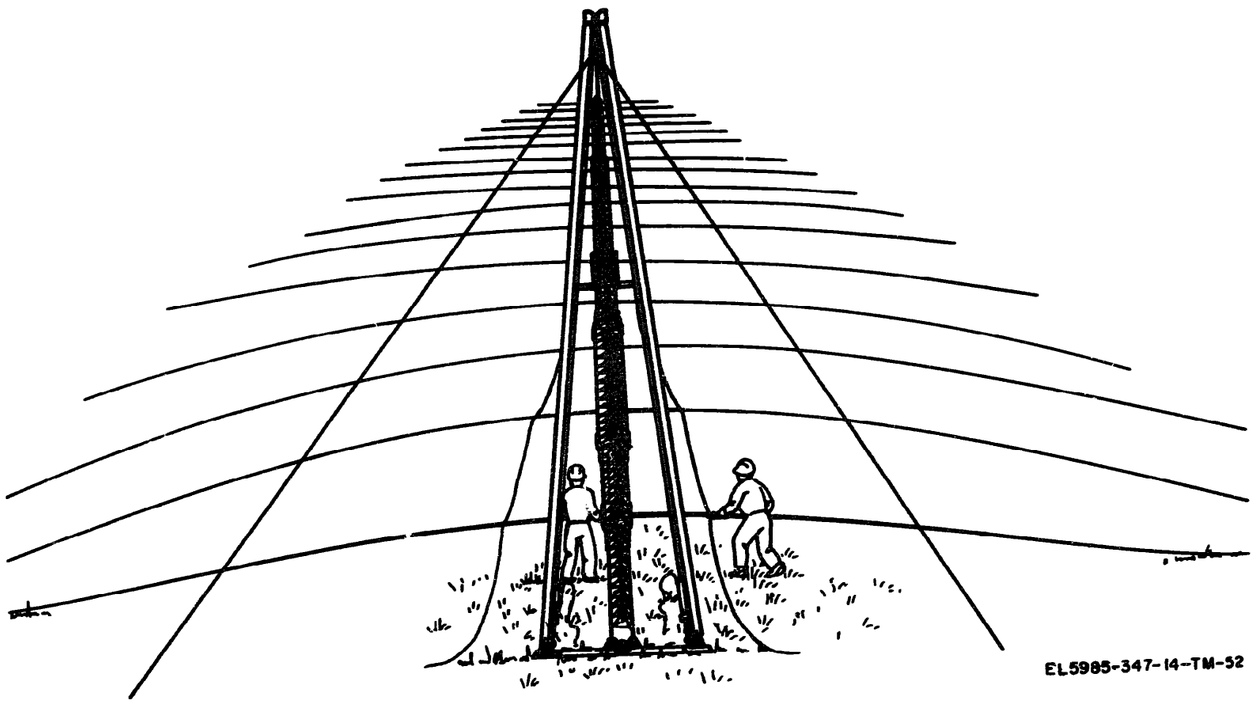


Figure 2-53 Keeping antenna system in line with gin pole and pulling cable.

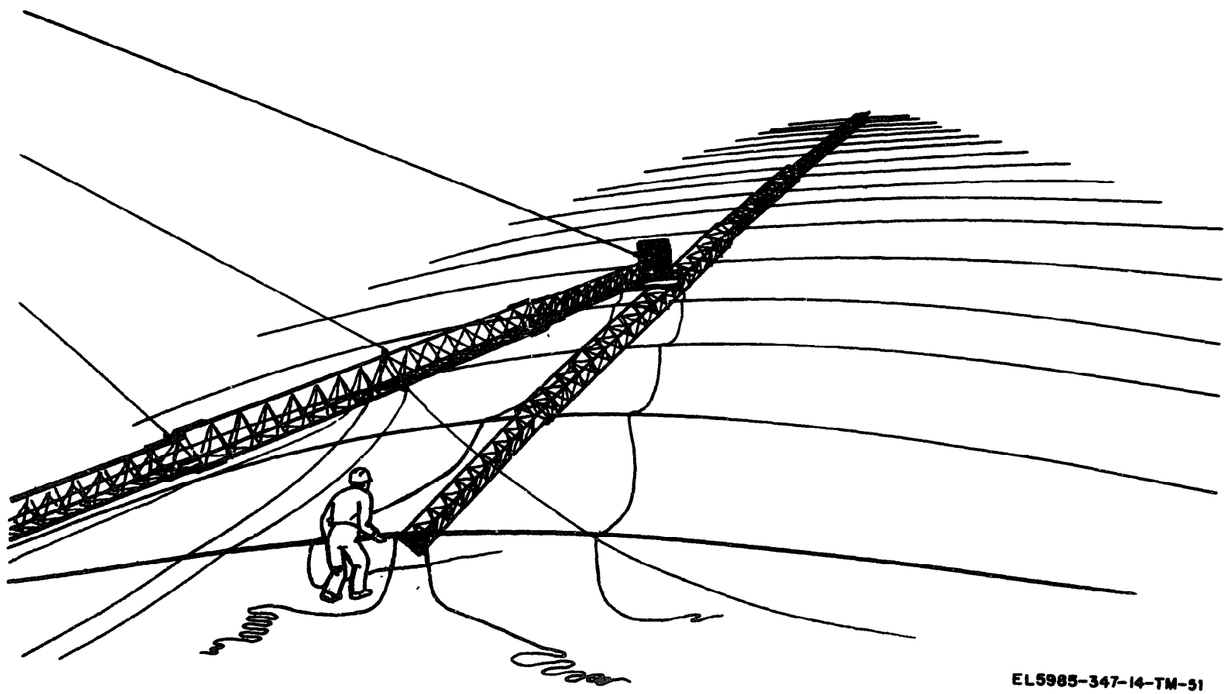


Figure 2-54. Initial raising of antenna system

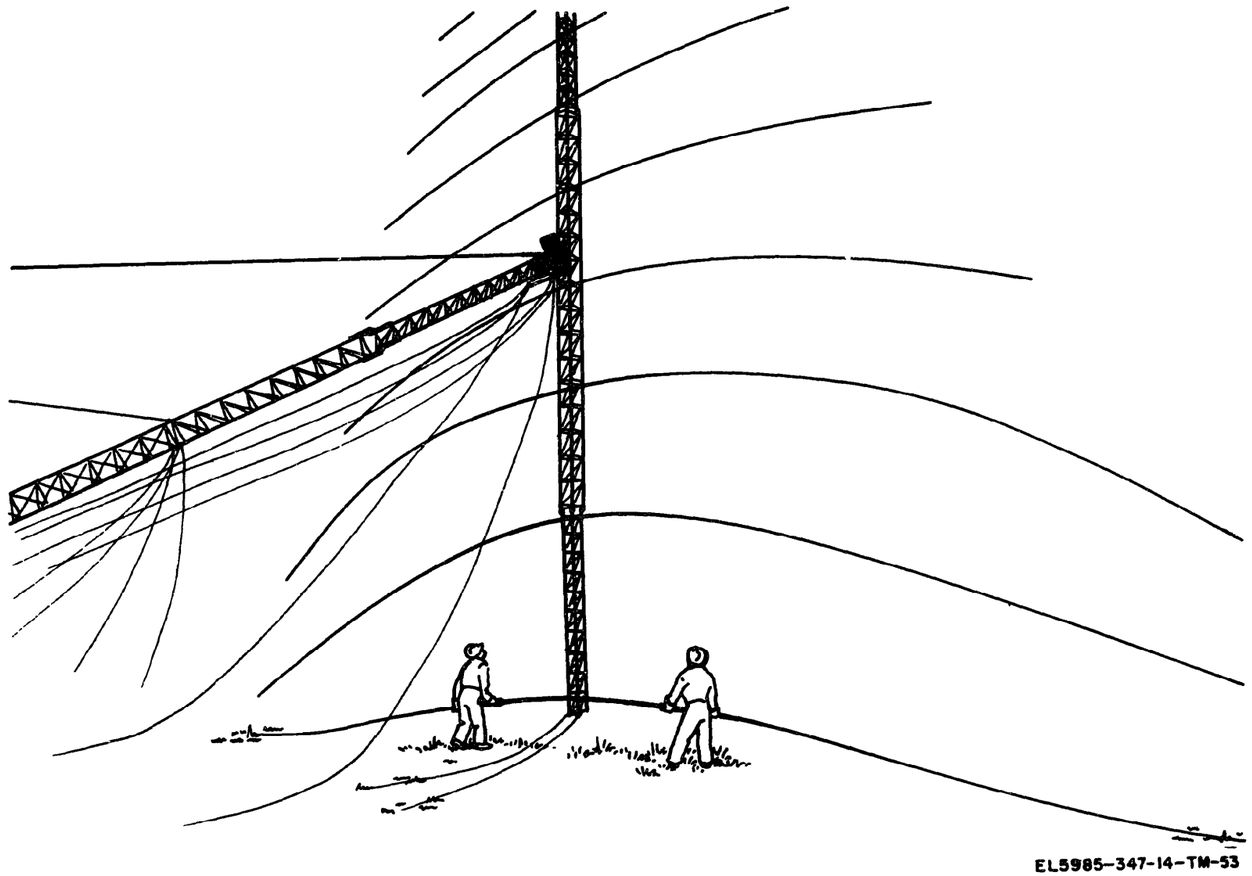


Figure 2-55. Preparing to latch antenna to tower

Figure 2-56. Raising of antenna system.
Located in back of manual.

CHAPTER 3

OPERATING INSTRUCTIONS

Section I. OPERATION UNDER USUAL CONDITIONS

3-1. Controls and Indicators

This system has no controls or indicators other than the rotating of the antenna boom to its desired azimuth, as explained in paragraph 2-17. Refer to the *operation chapter of the* appropriate technical manual for operational procedures of the transceiver being used with Antenna System AS-3098/U.

3-2. Normal Operation

This system is complete and only needs to be connected to a transceiver that operates in the 4 to 30 MHz range. Refer to the operation chapter of the appropriate technical manual for operational procedures of the transceiver being used with Antenna System AS-3098/U.

CAUTION

Antenna System AS-3098/U is designed to operate in the 4 to 30 MHz range and should be used and operated in that frequency range only. The antenna should not be used for operation in any other range, for example 30 to 76 MHz range. Most transceivers operating in the 4 to 30 MHz range are capable of operating as low as 2 MHz. DO NOT allow the antenna to be used below 4 MHz. Severe damage to the antenna may result if this is allowed to occur.

Section II. OPERATION UNDER EMERGENCY OR UNUSUAL CONDITIONS

3-3. Operation Under Emergency Conditions

When the antenna is to be operated under emergency conditions, such as severe thunder storms or other similar atmospheric disturbances, do not allow any personnel to walk **or stand near the antenna, as this may cause serious injury or death.**

3-4. Operation Under Unusual Conditions

This antenna system may be operated in areas of extreme cold or heat, high humidity, sand, snow, mud, saltwater areas, high altitudes, or other conditions not normally encountered. Note that field modifications must be made to properly secure the antenna guy anchors and the bass plate anchors. Concrete anchor encasements may be required in sandy or muddy areas (fig. 2-9). Refer to table 2-4 for soil conditions and the type of anchor required.

Section III. PREPARATIONS FOR MOVEMENT

3-5. Movement to a New Site

a. Rotate and lock the antenna boom so that the small element end is pointing in the same direction as the front guy anchor (para. 2-17).

***b. Make sure the gin pole is correctly* and completely assembled on the base plate (para 2-10).**

c. Untie the pulling cable from the tower and attach the pulley block and griphoist, with cable, following instructions given in paragraph 2-11 and figure 2-30.

NOTE

Make certain the griphoist is kept clean and well lubricated. The cable should be free from dirt and debris before being used with the griphoist. Refer to lubrication instructions of the griphoist for proper maintenance.

d. One man will apply tension on the pulling cable with the griphoist.

e. Remove the upper and lower front guys from the front guy anchor.

f. Route both the knee cable and the mid tower front guy over the gin pole top plate rollers and attach the quick tension devices at the base plate. As the tower is lowered, use the quick tension devices to adjust the positions of the gin pole and insure proper engagement of the pulling cable into the gin pole top plate.

g. Position one man at the tower base plate.

h. Position two men at each side of the guy anchor to control the tension on each of the side guys. This keep the system from swaying or shifting off center while being lowered.

CAUTION

The side guy lines are still used to secure the system. When adjusting the side guys for proper tension, **do not remove the quick tension devices from their anchors. These side guys must remain attached to their anchors during the entire lowering procedure. To adjust tension on the side guys, unscrew the large adjusting nut on each quick tension device. DO NOT decrease the tension on these side guys by disconnecting them from their** anchors.

i. One man unpins the third tower leg from the baseplate. The griphoist operator may need to increase or decrease tension on the griphoist to allow easy removal of the pin in the third tower leg.

j. One man carefully puts slight tension on the back guys to pull the system off dead center, with two other men adjusting the side guys.

***k.* The griphoist operator lowers the system using slow, even strokes to prevent the tower from bouncing, which will occur if the tower is lowered too fast.**

l. The tower must be kept in line and straight during the entire lowering procedure. Give constant attention to the tower at all times. Make adjustments to the side guys as necessary. The side guys (upper and lower) should not be tight during lowering. Apply only enough tension to remove excessive sag from the guys. The side guys must be used to keep the tower in line with the back guy anchor when viewed from the front guy anchor. The man in charge must constantly keep an eye on this alignment and instruct the men at the side guy anchor to make appropriate adjustments to the side guys. It is also most important that the man in charge watch the tower for any bowing or bending toward either side and instruct the men at the side guys to adjust as required to remove the slightest side bow or bend from the tower during the entire lowering procedure. These adjustments must be made without applying excessive tension to the side guys. Normally an instruction from the man in charge to tighten a guy on the side of the tower should be preceded by an instruction to reduce the tension in the corresponding guy on the opposite side of the tower. Failure to follow this procedure may cause serious damage or failure to the system.

m. The **man in charge directs the adjustments on these two side guys to keep the system in line with the front and back guy anchors.**

n. **Give constant attention to the position of the antenna boom. It must not be allowed to sway or shift off-center with the tower. The rotator and gin pole must be kept in alignment with the front and back guy anchors.**

o. The men at the side guys will adjust their respective side guy to keep the tower in line during the entire lowering procedure.

p. As the system is lowered, the knee cables will lift the top of the gin pole off the ground.

***q. During these initial stages* of lowering the system, make any adjustments to the side guys in order to keep the system in line with the front and back guy** anchors.

r. The griphoist operator continues to slowly operate the griphoist to lower the system. After the system reaches approximately 35 degrees to 40 degrees from horizontal, the gin pole will make contact with the pulling cable. The small cable clamps on the pulling cable must fit in the tower side of the gin pole top plate assembly (fig. 2-10)

s. After the pulling cable is properly seated in the gin pole top plate slot, remove any sag from the center of the tower by adjusting the knee cable and the tower guy quick tension devices at the tower plate. Continue to lower the system, watching the tower for straightness. Make adjustments as required, using the side guy cables and the knee cable.

t. The man in charge keeps constant watch on the side guys, not allowing the system to move off center between the front and back guy anchors. He shall also direct the men to make any adjustments in the guys so the system will not move off center.

u. Lower the system slowly until the large element end of the boom is about four feet off the ground.

v. Adjust the side guys during this time so that excess tension and side-forces do not allow the antenna boom and tower to move off center.

WARNING

Failure to keep the system in line may cause damage to the system and injury to personnel. The system MUST be kept in line with the front and back guy anchors.

w. The griphoist operator will stop lowering the system.

x. Secure the side guys and prepare to aid in **releasing the hinge plate:**

NOTE

Hold the boom firmly before pulling release rope to prevent the boom from swinging its own weight.

y. Pull the hinge plate release rope, located in the antenna boom, and unlock the boom from the rotator.

z. Three men then slowly swing the large element end of the boom toward the tower baseplate. DO NOT allow the large element to drag on the ground.

WARNING

Do not stand directly under the system during the lowering procedure.

aa. After the boom has been pulled back, the men return to their side guys.

***ab*- The griphoist operator continues to slowly lower the system with the griphoist.**

ac. The men at the side guys continue to make any necessary adjustments to the side guys as directed by the man in charge. Lower the system until the boom is resting on the ground.

ad. This completes the lowering procedure.

ae. Disassemble the antenna in the reverse order of assembly, and pack the components in their original containers If the **containers have been destroyed or lost, make new ones.**

af. Before transporting, make sure all crates are securely fastened to the transit vehicle.

ag. Care should again be taken when selecting a new site.

3-6. Preparation for Limited Storage and Reshipment

This system can he stored in any building having minimum protection from severe weather, such as heavy rain or dust, for a period of up to two weeks, or can be covered with tarpaulins or polyurethane plastic, which will give some protection from severe weather.

CHAPTER 4

OPERATOR/CREW MAINTENANCE INSTRUCTIONS

WARNING

During assembly, erection, disassembly, removal, or repair of the tower, follow all safety requirements of TB SIG 291. Injury or DEATH could result from failure to comply with safe practices.

Section I. INSTRUCTIONS, TOOLS, AND LUBRICATION

4-1. Operator/Crew Maintenance Instruction

The operator maintenance consists of inspection of welds and tightening of the coaxial feedline connections. Tighten the connections if required and apply a coating of weatherproofing if the connection has been loosened. Replace the coax if the outer insulator has been damaged in any way.

4-2. Tools and Equipment

Repair parts, tools, test equipment, and accessories issued with or authorized for use by the operator of Antenna System AS-3093/U are listed in Appendix B.

4-3. Lubrication

All servicing and lubrication shall be performed by organizational maintenance personnel. Refer to paragraphs 5-4 and 5-5 for lubrication instructions.

Section II. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

4-4. General

To be sure that Antenna System AS-3098/U is always ready for operation, it must be inspected systematically so that defects may be discovered and corrected before they result in serious damage or failure. The necessary preventive maintenance checks and services to be performed by the operator or crew are listed and described in table 4-1. The item numbers indicate the sequence of minimum inspection requirements. Defects discovered during operation of the unit will he noted for future correction, to be made as soon as operation has ceased. Stop operation immediately if a deficiency which would damage the equipment is noted during operation. Record all deficiencies, along with the corrective action taken, on equipment forms and records in accordance with instructions given in TM 38-750.

4-5. Maintenance

Antenna System AS-3098/U will be lowered weekly by an erection crew and checked by organizational maintenance personnel. The required checks are identified as preventive maintenance checks in table 4-1.

Table 4-1 Preventive Maintenance Checks and Services

NOTE

If the equipment must be kept in continuous operation, check and service only those items that can be checked and serviced without disturbing operation; make the complete checks and services when the equipment can be shut down

Item No.	*Item to be Inspected*	*Procedure*
1	Base plate	Visually inspect for secure mounting
2	Tower assemblies	Visually inspect for secure attachment of hardware Inspect welds, for cracks or failure
3	Captivated hardware	Visually inspect for broken captivated leads
4	Tower guy wire assembly and quick tension devices	Inspect for proper attachment, tensioning, and safety latching of quick tensioning devices
5	Guy anchors	Visually inspect for secure mounting
6	Rotator	Lubricate and inspect, making sure it is in good operating condition
7	Boom assemblies	Visually inspect all sections to make sure all attaching hardware is tightened securely
8	Feedline	Inspect to make certain feedline is tensioned properly and connected securely at its proper terminals

9	Element center insulator assembly	Visually check to see that the red bands are all on one side of the boom
10	Griphoist and pulling cable	Lubricate and make certain it is in good working order Check for broken or worn cable strands
11	Rf cable	Inspect the rf cable for broken connections or cut or broken covering. Repair if necessary
12	Connecting hardware	Lower the system and check all bolts and attaching hardware to make certain they are tight and in place

Section III. TROUBLESHOOTING

4-6. General

a. This chapter contains information to aid the operator in finding trouble or malfunction of Antenna System AS-3098/U only. Refer to the appropriate technical manual to troubleshoot the transceiver being used with this antenna system.

b. Any trouble that is beyond the scope of operator/crew shall be referred to organizational maintenance.

4-7. Troubleshooting Chart

Following is the troubleshooting chart for operator maintenance.

Table 4-2 Troubleshooting Chart

Malfunction	*Probable Cause*	*Corrective Action*
Front baseplate hinge pin will not engage	Back tower guy or guys too short	Adjust guy tension slightly as needed
Element sections will not mate properly during assembly	Foreign material in or on mating parts of joint	Inspect and clean mating parts
	Mating parts deformed or scarred	Action to be performed by organizational personnel
Rotator hinge plate will not latch or difficult to latch	Latch mechanism fouled with dirt, etc	Organizational maintenance personnel shall lower tower to ground, inspect and CLEAN PARTS
	Latch rope tangled	Organizational maintenance personnel shall lower tower and free rope
	Antenna boom not properly positioned on hinge plate	Inspect for proper location as indicated in manual, reposition boom on hinge plate to insure proper balance
Rotator locking pin will not engage or disengage	Locking pin rope tangled	Untangle
	Accumulation of dirt etc on pin or in pin hole	Organizational maintenance personnel shall lower antenna, clean and inspect for wear, lubricate
Antenna will not rotate	Accumulation of dirt etc in rotator assembly	Organizational maintenance personnel shall lower antenna, clean, inspect and lubricate
	Insufficient loop in coaxial cable between tower and antenna boom	Sufficient loop must be left in coax To allow antenna to rotate 180 degrees without binding Readjust coax and inspect for damage
Loss of electrical performance	Broken or damaged coax	Check entire length of coax and all connections (also see above)
		Check all feedline connections at balun and at element feedline connection points Secure all connections

CHAPTER 5

ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE INSTRUCTIONS

Section I. TOOLS, MAINTENANCE AND REPAINTING INSTRUCTIONS

5-1. Tools and Equipment

The tools and equipment used to maintain Antenna System **AS-3098/U are** listed in table 2-3. No special tools are required for maintaining the system.

5-2. Maintenance **Instructions**

Maintenance performed by organizational and direct support personnel shall follow the requirements listed in the maintenance allocation chart (MAC) (App. C).

5-3. Repainting and Refinishing Instructions

The system is chemically treated to prevent atmospheric and weather corrosion. Repainting or refinishing any part, or assembly of the system is not required.

Section II. LUBRICATION INSTRUCTIONS

5-4. Servicing and Lubrication of the Antenna System

a Before operation, organizational maintenance personnel must be certain the coaxial cable is clean and free from excessive moisture. The coaxial connector should be cleaned of any dirt or debris

b The system should be checked monthly, and all moving parts, such as the rotator, should be lubricated with a light weight motor oil to prevent atmospheric deterioration The quick tension devices shall also be lubricated with a light weight motor oil

5-5. Lubrication of the Griphoist

a. Lubricate generously with SA-30 motor oil, using a brush. Make sure that the lubricant penetrates well into the mechanism. Take special care to thoroughly lubricate the jaw lugs, spring shafts and slotted plates. To allow the lubricant to penetrate to the jaw lugs, alternately pull and release the clutch actuating lever.

b. Repeat lubrication as described above each time the machine is to be used; repeat also during drawn-out operations. Excess lubrication will not cause the wire rope to slip. Lack of lubrication is the greatest cause of malfunction, causing wear or jamming of the bearings.

Section III. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

5-6. General

To insure that Antenna System AS-3098/U is always ready for operation, it must be inspected systematically so that defects may be discovered and corrected before they result in serious damage or failure. The necessary preventive maintenance checks and services to be performed by organizational maintenance personnel are listed and described in table 4-1, The item numbers Indicate the sequence of minimum inspection requirements Defects discovered during the operation of the unit will be noted for future correction, which will be made as soon as operation has ceased. Stop operation immediately if a deficiency which would damage the equipment is noted during operation. Record all deficiencies, along with the corrective action taken, on equipment forms and records; follow instructions given in TM 38-750

5-7. Responsibilities

Antenna System AS-3098/U will be lowered weekly and checked by organizational maintenance personnel. Instructions for performing the required checks are identified as preventive maintenance checks in table 4-1

Section IV. TROUBLESHOOTING AND REPAIR

5-8. General

a. This chapter contains information to aid the organizational maintenance personnel in finding trouble or malfunction of Antenna System AS-3098/U only Refer to the appropriate technical manual to troubleshoot the transceiver being used with this antenna system.

b. The system is relatively simple, therefore all problems should be able to be corrected by organizational maintenance personnel.

Table 5-1 Troubleshooting for Organizational Maintenance Personnel

Malfunction	*Probable Cause*	*Corrective Action*
Front baseplate hinge pin will not engage	Back tower guy or guys too short.	Adjust guy tension slightly as needed
Tower or boom sections will not mate during assembly	Mating parts have accumulation of grit or foreign material on them.	Clean mating parts
	Sections sprung or bent out of alignment during handling or shipping.	Minimum straightening permitted—replace parts or sections as required
Element sections will not mate properly during assembly.	Foreign material in or on mating parts of joint	Inspect and clean mating parts
	Mating parts deformed or scarred	Dress mating parts with file or emery cloth as required. If parts are deformed enough to cause weakening, replace parts as required
Rotator hinge plate will not latch or is difficult to latch.	Latch mechanism fouled with dirt, etc	Lower tower to ground, inspect and clean parts
	Latch rope tangled	Lower tower and free rope
	Antenna boom not properly positioned on hinge plate.	Inspect for proper location as indicated in manual, reposition boom on hinge plate to insure proper balance
Rotator locking pin will not engage or disengage	Locking pin rope tangled	Untangle.
Antenna will not rotate	Accumulation of dirt, etc on pin or in pin hole	Lower antenna, clean and inspect for water, lubricate
	Accumulation of dirt, etc. in rotator assembly	Lower antenna, clean, inspect, and lubricate
	Insufficient loop in coaxial cable between tower and antenna boom	Sufficient loop must be left in coax To allow antenna to rotate 180 degrees without binding Readjust coax and inspect for damage
Loss of electrical performance	Broken or damaged coax	Check entire length of coax and all connections (also see above)
		Check all feedline connections at balun and at element feedline connection points Secure all connections, repair or replace parts as required
Antenna tower not plumb during erection or while lowering	Side guys improperly adjusted	Readjust side guys. On uneven site it may be necessary to station a man at each side guy anchor to constantly adjust side guys while antenna is being raised or lowered

5-9. Maintenance of Assemblies or Parts

All assemblies, subassemblies, and parts in Antenna System AS-3098/U are replaceable. All maintenance on these items shall be directed to replacement only.

CHAPTER 6

FUNCTIONING OF EQUIPMENT

6-1. Electrical and Electronic Theory

a. This antenna system is a planar array of dipoles assembled in accordance with logarithmically periodic antenna design and principles. Refer to figure 6-1 for a schematic of the antenna. This design provides an antenna whose characteristics remain co&ant over a 4 to 30 MHz band. The parameters of the antenna are defined only by angles and ratios. The operating frequency of the antenna is limited only by its structural characteristics. The successive dipoles are connected alternately to opposite sides of a transmission line, called the feeder, to produce the required element phasing. RF energy, at a given frequency, travels along the feeder -until it reaches a section of the structure where the electrical length of the elements and the phase relationships are such as to produce radiation. The resulting beam from this "active region" is directed toward the end of the shortest elements, so the beam always shoots through elements which are shorter than one-half wavelength at the operating frequency. These small, closely spaced elements are oppositely connected so that the field produced by currents in adjacent elements ahead of the active region tend to cancel.

b. ***The*** **electrical operating characteristics of the antenna system may be predicted from design factors TAU and ALPHA. To provide optimum performance consistent with acceptable size, a TAU (relative spacing) factor of 0.85 and ALPHA angle of 30 degrees were chosen. These factors will theoretically provide a gain of 8 dB over an isotropic source, as measured in free space.**

c. Gain figures as outlined in the electrical specifications of this antenna have been proven both on scale models and on the full size antenna.

6-2. Mechanical Theory

The theory of this system's mechanics are relatively elementary. This antenna is designed to allow field personnel to quickly and easily move the system from one location to another.

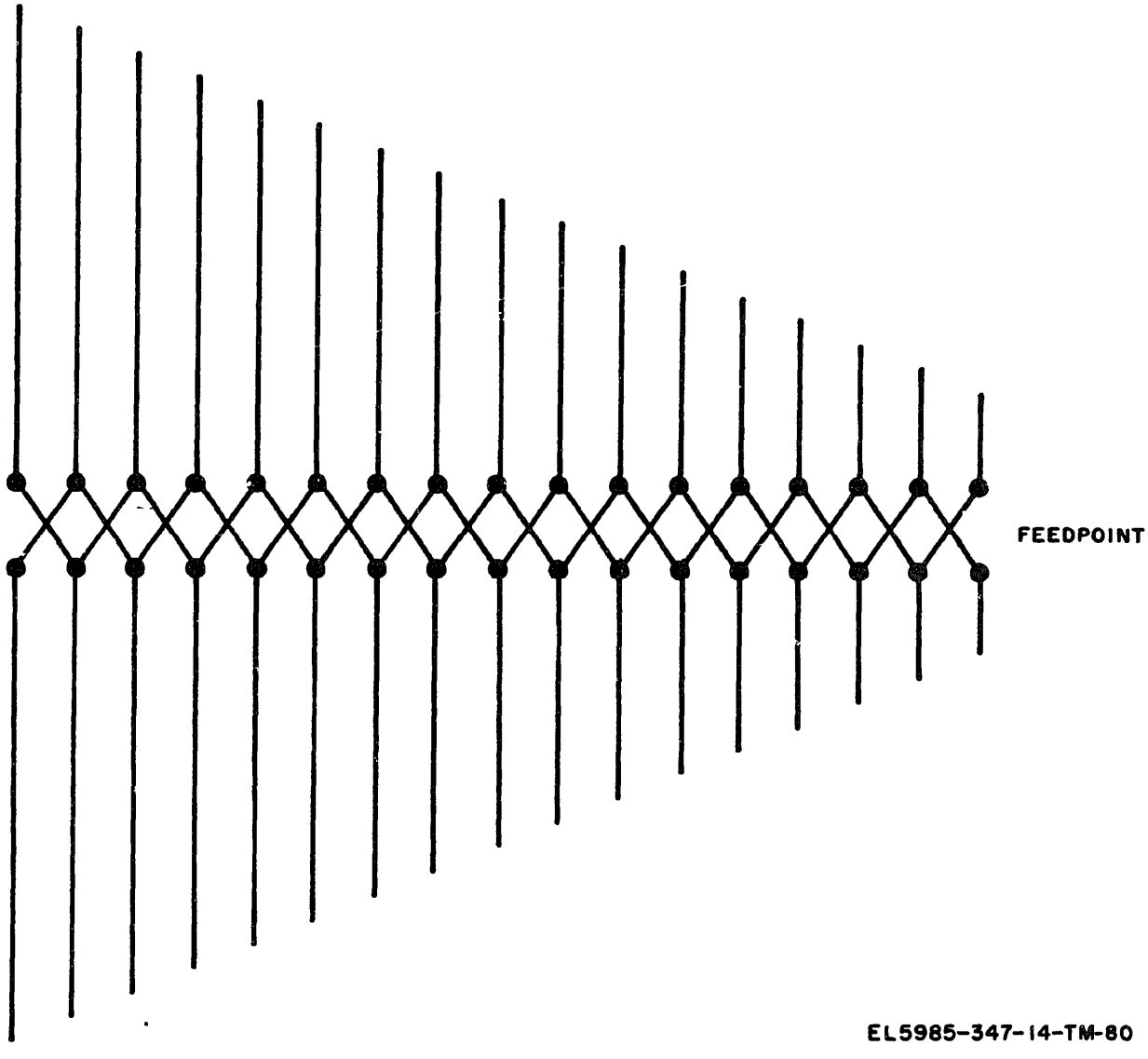


Figure 6-1 Schematic diagram of Antenna System AS-3098/U

CHAPTER 7

OPERATION OF EQUIPMENT USED IN CONJUNCTION WITH THE MAJOR ITEM

This system is complete and only needs to be connected to a transceiver that operates in the 4 to 30 MHz range.
Refer to the operation chapter of the appropriate technical manual for operation procedures of the transceiver being used with Antenna System AS-3098/U

CAUTION

Antenna System AS-3098/U is designed to operate in the 4 to 30 MHz range and should only be used and operated in that particular frequency range. The antenna should not be used for operation in any other region, for example 30 to 76 MHz range. Most transceivers which operate in the 4 to 30 MHz range are capable of operating as low as 2 MHz. DO NOT allow the antenna to be used below 4 MHz. Severe damage to the antenna may result if this is allowed to occur.

APPENDIX A

REFERENCES

DA Pam 310-4	**Index of Technical Publications: Technical Manuals, Technical Bulletins, Supply Manuals (Types 7, 8, and 9), Supply Bulletins, and Lubrication Orders.**
DA Pam 310-7	**US Army Equipment Index of Modification Work Orders.**
TB SIG 291	**Safety Measures to be Observed When Installing and Using Whip Antennas, Field Type Masts, Towers, Antennas, and Metal Poles that are Used With Communication, Radar, and Direction Finding Equipment.**
TM 11-2262-2	**Outside Plant Construction and Maintenance: Pole Line Construction and Maintenance.**
TM 38-750	**The Army Maintenance Management System (TAMMS).**
TM 750-244-2	**Procedures for Destruction of Electronics Materiel to Prevent Enemy Use (Electronics Command).**

APPENDIX B

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

Section I. INTRODUCTION

B-1. Scope

This appendix lists basic issue items; items troop installed or authorized; spares and repair parts; special tools, special test, measurement, and diagnostic equip ment (TMDE), and other special support equipment required for performance of organizational, direct support, and general support maintenance of the AS-3098/U. It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

B-2. General

This Basic Issue Items, Items Troop Installed or Authorized, Repair Parts and Special Tools List is divided into the following sections:

a. ***Section II. Basic Issue Items List.*** Not applicable.

b. Section III. Items Troop Installed or Authorized List. Not applicable.

c. ***Section IV. Repair Parts List.*** A list of spares and repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in numeric sequence, with the parts in each group listed in figure and item number sequence.

d. Section V. ***Special*** Tools List. Not applicable.

e. Section VI 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 alphameric sequence, of all part numbers appearing in the listings. National stock number and part numbers are cross-referenced to each illustration figure and item number appearance.

B-3. **Explanation of Columns**

a. ***Illustration.*** This column is divided as follows:

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

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

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

(1) ***Source*** code Source codes 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.
PF -	Support equipment which will not be stocked but which will be centrally procured on demand.
XD -	A support item that is not stocked. When required, item will be procured through normal supply channels.

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded XA and 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 one of the following levels of maintenance:

Code	*Application/Explanation*
F-	Support item is removed, replaced, used at the direct support 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 one of the following maintenance codes:

Code	*Application/Explanation*
F -	The lowest maintenance level capable of complete repair of the support item is the direct support level.
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.

Recoverability codes — *Definition*

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

F-Reparable item. When uneconomically reparable, condemn and dispose at the direct support level.

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 tiems.**

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.**

B-4. Special Information

National stock number (NSN's) that are missing from P **source coded items have been applied for and will be added to this TM by future change/revision when they are entered in the Army Master Data File (AMDF). Until the NSN's are established and published, submit exception requisitions to: Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-MM, Fort Monmouth, New Jersey 07703 for the part required to support your equipment.**

B-5. How to Locate Repair Parts

a. **When National stock number or part number is** unknown.

(1) First. **Using the table of contents, determine the functional group within which the item belongs. This is necessary since illustrations are prepared for functional groups and listings are divided into the same groups.**

(2) Second. Find the illustration covering the functional group to which the item belongs.

(3) ***Third.*** **Identify the item on the illustration and note the illustration figure and item number of the item.**

(4) Fourth. **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 alphameric 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.**

B-6. Abbreviations

Not applicable.

(Next printed page is B-5)

SECTION IV REPAIR PARTS LIST

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
				GROUP: 00 ANTENNA SYSTEM AS-3098/U				
B-1	1	PAFZZ	4030-01-005-2397	870162	15536	ANCHOR,LARGE	EA	6
B-1	2	PAFZZ		380163	15536	ANCHOR,SCREW-IN	EA	6
B-1	3	PAFZZ		180173	15536	PLATE,CONCRETE	FA	4
				GROUP: 01 FRONT BOOM SECTIONS				
B-2	1	PFFFF		880017	15536	BOOM SECTION,FRONT,NO. 3	EA	1
B-2	2	PAFZZ	5305-00-616-6370	MS35307-313	96906	SCREW,CAP,HEXAGON HEAD	EA	6
B-2	3	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	6
B-2	4	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	6
B-2	5	PAFZZ	5985-01-016-0276	380153	15536	PIN,SPLICE	EA	3
B-2	6	PAFZZ		380154	15536	PIN,SPLICE	EA	3
B-2	7	PFFFF		880016	15536	BOOM SECTION,FRONT,NO. 2	EA	1
B-2	8	PFFFF		880024	15536	BOOM SECTION,FRONT,NO. 1	EA	1
B-2	9	PAFZZ	1015-01-019-7117	MS1/1526	96906	PIN-SPRING	EA	1
B-2	10	PAFZZ		380145	15536	COLLAR	EA	1
B-2	11	PFFFF		870464	15536	PIN ASSEMBLY,SPLICE	EA	3
B-2	12	PAFZZ	5985-01-016-0278	380143	15536	PIN,SPLICE	EA	1
B-2	13	PFFFF	5985-01-016-0277	870482	15536	PIN ASSEMBLY,DETENT	EA	3
B-2	14	PAFZZ	4030-00-431-5536	28-1C	76691	SLEEVE,SPLICING	EA	6
B-2	15	PAFZZ	4020-01-015-6553	690082	15536	MONOFILAMENT,NYLON	EA	8
B-2	16	PFFFF		870471	15536	BOLT ASSEMBLY,T-HANDLE	EA	6
B-2	17	PAFZZ	5310-00-883-9384	MS15795-842	96906	WASHER,FLAT	EA	6
B-2	18	PAFZZ	5305-00-050-9229	MS51957-63	96906	SCREW,MACHINE	EA	2
B-2	19	PAFZZ	5985-01-016-1851	870367	15536	STRAP,WEBBING	EA	2
B-2	20	XDFZZ		MS20604B6T6	96906	RIVET,BLIND	EA	2
				GROUP: 02 BACK BOOM SECTIONS				
B-3	1	PFFFF		880026	15536	BOOM SECTION,BACK,NO. 1	EA	1
B-3	2	PAFZZ		380154	15536	PIN,SPLICE	EA	3
B-3	3	PAFZZ	5305-00-616-6370	MS35307-313	96906	SCREW,CAP,HEXAGON HEAD	EA	3
B-3	4	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	3
B-3	5	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	3
B-3	6	PAFZZ	5985-01-016-1851	870367	15536	STRAP,WEBBING	EA	2
B-3	7	XDFZZ		MS20604B6T6	96906	RIVET,BLIND	EA	2
B-3	8	PAFZZ	5310-00-883-9384	MS15795-842	96906	WASHER,FLAT	EA	8

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-3	9	PFFFF		880025	15536	BOOM SECTION,BACK,NO. 2	EA	1
B-3	10	PAFZZ	5306-01-016-8066	380162	15536	BOLT,HOOK	EA	2
B-3	11	PAFZZ	5310-00-515-9267	551153	15536	NUT,PLAIN,WING	EA	2
B-3	12	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-3	13	PFFFF		870471	15536	BOLT ASSEMBLY,T-HANDLE	EA	3
B-3	14	PAFZZ	5305-00-050-9229	MS51957-63	96906	SCREW,MACHINE	EA	1
B-3	15	PAFZZ	4030-00-431-5536	28-1C	76691	SLEEVE,SPLICING	EA	3
B-3	16	PFFFF	5985-01-016-0277	870482	15536	PIN ASSEMBLY,DETENT	EA	3
B-3	17	PAFZZ	4020-01-015-6553	690082	15536	MONOFILAMENT,NYLON	EA	2
						GROUP: 03 ROTATOR ASSEMBLY		
B-4	1	PAFZZ	5305-00-543-4406	MS35307-370	96906	SCREW,CAP,HEXAGON HEAD	EA	8
B-4	2	XDFZZ		180313	15536	PLATE,HINGE,TOP	EA	1
B-4	3	PAFZZ		380170	15536	PIN,HINGE	EA	2
B-4	4	PAFZZ	5312-00-236-8371	MS24665-441	96906	PIN,COTTER	EA	4
B-4	5	XDFZZ	5985-01-016-0285	180318	15536	PLATE,HINGE,BOTTOM	EA	1
B-4	6	XDFZZ		180317	15536	PLATE,HINGE	EA	4
B-4	7	PAFZZ	5310-00-913-8881	MS51971-3	96906	NUT,PLAIN,HEXAGON	EA	26
B-4	8	PAFZZ	5310-00-984-7042	MS35338-141	96906	WASHER,LOCK	EA	26
B-4	9	PAFZZ	5310-00-933-8120	MS35338-138	96906	WASHER,LOCK	EA	6
B-4	10	PAFZZ	5985-01-016-0286	180363	15536	BRACKET,MOUNTING,CONNECTOR	EA	1
B-4	11	PAFZZ	5935-00-104-1187	18575	02660	CAP,CONNECTOR,MALE	EA	1
B-4	12	PAFZZ	5305-00-054-5652	MS51957-18	96906	SCREW,MACHINE	EA	4
B-4	13	PAFZZ	5935-00-928-3126	82-62	02660	CONNECTOR,COAXIAL,UG22B/U	EA	1
B-4	14	PAFZZ	5310-00-933-8118	MS35338-135	96906	WASHER,LOCK	EA	4
B-4	15	PAFZZ	5310-00-934-9748	MS35649-244	96906	NUT,PLAIN,HEXAGON	EA	4
B-4	16	PAFZZ	5305-00-050-9229	MS51957-63	96906	SCREW,MACHINE	EA	2
B-4	17	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	1
B-4	18	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	1
B-4	19	PAFZZ		546607	15536	BOLT,EYE	EA	1
B-4	20	PAFZZ		180316	15536	HINGE	EA	2
B-4	21	PAFZZ	4030-01-015-6571	351700	15536	THIMBLE	EA	1
B-4	22	PAFZZ	4030-00-132-9163	28-3M	76691	SLEEVE,SPLICING	EA	2
B-4	23	PAFZZ	5305-00-489-0751	MS51021-93	96906	SETSCREW	EA	3
B-4	24	PAFZZ	5305-00-727-6804	MS35307-414	96906	SCREW,CAP,HEXAGON HEAD	EA	8

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-4	25	PAFZZ	5305-00-021-3740	MS35307-364	96906	SCREW,CAP,HEXAGON HEAD		EA	12
B-4	26	PAFZZ	5985-01-016-0283	880043	15536	SHOE,BRAKE		EA	2
B-4	27	PAFZZ		270037	15536	LINING,BRAKE		EA	2
B-4	28	PAFZZ	5305-00-701-5078	MS51959-65	96906	SCREW,MACHINE		EA	4
B-4	29	PAFZZ		9-2006-21	15840	SPRING,COMPRESSION		EA	2
B-4	30	PAFZZ	5985-01-017-6760	180314	15536	PLUNGER,BRAKE		EA	2
B-4	31	PAFZZ	5310-00-934-9727	MS35691-59	96906	NUT,PLAIN,HEXAGON		EA	4
B-4	32	XDFZZ		880044	15536	PLATE,TOP,ROTATOR		EA	1
B-4	33	XDFZZ		380169	15536	BOLT,BRAKE		EA	2
B-4	34	PAFZZ		1-15/16 SC4	71956	BEARING,ROLLER,FLANGED		EA	1
B-4	35	PAFZZ	5310-00-933-8778	MS35338-143	96906	WASHER,LOCK		EA	14
B-4	36	PAFZZ	5310-00-768-0321	MS51971-5	96906	NUT,PLAIN,HEXAGON		EA	14
B-4	37	PAFZZ	5310-00-934-9760	MS35649-204	96906	NUT,PLAIN,HEXAGON		EA	4
B-4	38	PAFZZ	5306-00-050-0346	MS51937-3	96906	BOLT,EYE-SHOULDER		EA	1
B-4	38A	PAFZZ		540043	15536	BOLT,EYE		EA	1
B-4	39	XDFZZ		880045	15536	HUB,ROTATOR		EA	1
B-4	40	PAFZZ	5985-01-016-1239	380171	15536	PIN,HINGE		EA	1
B-4	41	PAFZZ	5985-01-016-1853	631517	15536	CABLE,LATCH RELEASE		EA	1
B-4	42	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER		EA	1
B-4	43	PAFZZ	5315-01-015-8721	380173	15536	PIN,DRILLED		EA	1
B-4	44	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT		EA	2
B-4	45	PAFZZ		V3C	73646	SPRING,EXTENSION		EA	2
B-4	46	PAFZZ	5340-01-015-8709	380172	15536	LATCH		EA	1
B-4	47	PAFZZ	5340-01-015-8708	180311	15536	HINGE,LATCH		EA	1
B-4	48	PAFZZ	5985-01-016-0284	370793	15536	BOLT,SPRING		EA	2
B-4	49	PAFZZ	5305-00-719-5017	MS51959-82	96906	SCREW,MACHINE		EA	2
B-4	50	PAFZZ	5305-01-018-5568	MS16219-12	96906	SCREW,MACHINE,FLAT HEAD		EA	6
B-4	51	PAFZZ	5305-00-890-4773	MS16219-10	96906	SCREW,MACHINE,FLAT HEAD		EA	6
B-4	52	PFFFF	5985-01-016-0295	870469	15536	PIN ASSEMBLY,DETENT		EA	2
B-4	53	PAFZZ		690080	15536	CABLE,CAPTIVATING		EA	2
B-4	54	PAFZZ	4030-00-431-5536	28-1C	76691	SLEEVE,SPLICING		EA	2
B-4	55	PFFFF		870615	15536	PIN ASSEMBLY,DETENT		EA	3
B-4	56	PAFZZ	5935-00-322-2658	6950	74868	CAP,CONNECTOR,FEMALE		EA	1
B-4	57	PAFZZ	5340-01-015-8710	350589	15536	LINK,COUPLING		EA	1

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-4	58	PAFZZ	5315-00-687-3787	MS9048-171	96906	PIN-SPRING		EA	1
B-4	59	PAFZZ	5935-00-892-9863	82-61	02660	CONNECTOR,COAXIAL,UG21B/U		EA	1
B-4	60	PAFZZ		607360	15536	COAX,RG213BU		EA	1
B-4	61	XDFZZ		880047	15536	PLATE,BOTTOM,ROTATOR		EA	1
B-4	62	PAFZZ	5985-01-016-0282	370790	15536	SLEEVE,STOP PIN		EA	1
B-4	63	PAFZZ	5360-01-016-0620	8C11	73646	SPRING,COMPRESSION		EA	1
B-4	64	PAFZZ	3130-01-016-8092	370809	15536	BEARING,ROLLER,FLANGED		EA	1
B-4	65	PAFZZ	5935-01-016-1852	380174	15536	PIN,STOP		EA	1
B-4	66	PAFZZ		180315	15536	SPACER		EA	1
B-4	67	PAFZZ		870614	15536	SHAFT,ROTATOR		EA	1
B-4	68	PAFZZ	5315-01-016-3502	380178	15536	KEY		EA	1
B-4	69	XDFZZ		880046	15536	BODY,ROTATOR MAIN		EA	1
						GROUP: 04 TOWER AND ATTACHMENTS			
B-5	1	PFFFF		880023	15536	TOWER SECTION,UPPER,NO. 2		EA	1
B-5	2	PFFFF		880028	15536	TOWER SECTION,UPPER,NO. 1		EA	1
B-5	3	PAFZZ		870465	15536	GUY ASSEMBLY,LOWER		EA	1
B-5	4	PAFZZ	5315-01-015-8720	350586	15536	PIN,DETENT		EA	6
B-5	5	PAFZZ		690073	15536	CABLE,GUY,BACK,LOWER		EA	1
B-5	6	PAFZZ		28-6X	76691	SLEEVE,SPLICING		EA	10
B-5	7	PAFZZ	4030-01-015-6570	356788	15536	THIMBLE		EA	9
B-5	8	PAFZZ	5985-01-016-0279	180255	15536	PLATE,EQUALIZER		EA	1
B-5	9	PAFZZ		690072	15536	CABLE,YOKE,LOWER		EA	2
B-5	10	PAFZZ	5985-01-016-0280	180278	15536	PLATE,GUY		EA	2
B-5	11	PAFZZ		690071	15536	CABLE,GUY,SIDE,LOWER		EA	2
B-5	12	PAFZZ		SP4304-3	96603	DEVICE,TIE DOWN,CABLE WINDER		EA	5
B-5	13	PAFZZ		690080	15536	CABLE,CAPTIVATING		EA	8
B-5	14	PAFZZ	4030-00-431-5536	28-1C	76691	SLEEVE,SPLICING		EA	16
B-5	15	PAFZZ	5985-01-016-0281	380144	15536	PIN,TOWER SPLICE		EA	3
B-5	16	PAFZZ		380145	15536	COLLAR		EA	6
B-5	17	PAFZZ	1015-01-019-7117	MS171526	90696	PIN-SPRING		EA	6
B-5	18	PFFFF		880014	15536	TOWER SECTION,LOWER,NO. 1		EA	1
B-5	19	PFFFF		880015	15536	TOWER SECTION,LOWER,NO. 2		EA	1
B-5	20	PFFFF		880018	15536	TOWER SECTION,LOWER,NO. 3		EA	1
	1	PFFFF		870616	15536	PIN ASSEMBLY,DETENT		EA	3

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-5	22	PAFZZ	5310-00-883-9384	MS15795-842	96906	WASHER,FLAT	EA	16
B-5	23	XDFZZ		MS20604B6T6	96906	RIVET,BLIND	EA	4
B-5	24	PAFZZ	5985-01-016-1851	870367	15536	STRAP,WEBBING	EA	4
B-5	25	XDFZZ		380155	15536	INSERT,TOWER,C	EA	1
B-5	26	XDFZZ		380156	15536	INSERT,TOWER,B	EA	1
B-5	27	XDFZZ		380157	15536	INSERT,TOWER,A	EA	1
B-5	28	PFFFF	5985-01-016-0295	870469	15536	PIN ASSEMBLY,DETENT	EA	5
B-5	29	PAFZZ	5305-00-616-6370	MS35307-313	96906	SCREW,CAP,HEXAGON HEAD	EA	9
B-5	30	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	9
B-5	31	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	9
B-5	32	PAFZZ	5985-01-016-1850	380151	15536	PIN,SPLICE	EA	9
B-5	33	PFFFF		875949	15536	BOLT ASSEMBLY,T-HANDLE	EA	9
B-5	34	PAFZZ	5305-00-050-9229	MS51957-63	96906	SCREW,MACHINE	EA	5
B-5	35	PFFFF		870483	15536	GUY ASSEMBLY,LOWER FRONT	EA	1
B-5	36	PAFZZ		690075	15536	CABLE	EA	2
B-5	38	PAFZZ		180280	15536	PLATE,GUY,LOWER FRONT	EA	1
B-5	39	PAFZZ		380267	15536	TOWER JOINT STIFFENER	EA	9
B-5	40	PAFZZ		540021	15536	U-BOLT	EA	36
B-5	41	PAFZZ		565873	15536	WASHER,LOCK	EA	72
B-5	42	PAFZZ		878902	15536	KNEE CABLE ASSEMBLY	EA	2
B-5	43	PAFZZ		380297	15536	KNEE CABLE BRACKET	EA	2
B-5	44	PAFZZ		359769	15536	CLIP,ROPE	EA	4
						GROUP: 05 CABLES, ROPES, AND BASE ASSEMBLY		
B-6	1	PAFZZ	5310-00-913-8881	MS51971-3	96906	NUT,PLAIN,HEXAGON	EA	2
B-6	2	PAFZZ	5310-00-984-7042	MS35338-1	96906	WASHER,LOCK	EA	2
B-6	3	PAFZZ	5985-01-016-1240	870712	15536	CLAMP ASSY,BOOM LEG/ROTATOR	EA	6
B-6	4	PAFZZ		180323	15536	SPACER,BLOCK	EA	1
B-6	5	PAFZZ	5306-01-016-7851	380150	15536	U-BOLT	EA	1
B-6	6	PAFZZ		870491	15536	CABLE ASSEMBLY,ROTATOR	EA	1
B-6	7	PAFZZ		3921TIY	39428	SNAP,ROPE	EA	1
B-6	8	PAFZZ	4030-01-015-6570	356788	15536	THIMBLE	EA	4
B-6	9	PAFZZ		28-6X	76691	SLEEVE,SPLICING	EA	5
B-6	10	XDFZZ		690077	15536	CABLE,ROTATOR	EA	1
B-6	11	XDFZZ		170195	15536	TUBE	EA	1
B-6	11A	PAFZZ		690075	15536	CABLE	EA	1

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-6	12	PAFZZ		359769	15536	ROPE CLIP		EA	2
B-6	12A	PAFZZ		180484	15536	ROTATOR RELEASE LEVER		EA	1
B-6	12B	PAFZZ	4020-01-015-9582	690078	15536	ROPE,TIE-OFF		EA	1
B-6	13	PFFFF		880042	15536	GUY CABLE ASSEMBLY,UPPER		EA	2
B-6	14	XDFZZ		870995	15536	BRACKET,TUBE,GUY		EA	1
B-6	15	PAFZZ	4030-00-880-2389	35257J	15536	CLEVIS		EA	3
B-6	16	PAFZZ		690079	15536	CABLE,GUY,UPPER		EA	3
B-6	17	PAFZZ		SP4304-3	96603	DEVICE,TIE DOWN,CABLE WINDER		EA	3
B-6	18	PAFZZ	5310-00-543-5933	MS35333-73	96906	WASHER,LOCK		EA	1
B-6	19	PAFZZ	5305-00-063-4568	MS24630-48	96906	SCREW,TAPPING,THREAD CUTTING		EA	1
B-6	20	PFFFF	5985-01-016-0295	870469	15536	PIN ASSEMBLY,DETENT		EA	1
B-6	21	PAFZZ		690080	15536	CABLE,CAPTIVATING		EA	1
B-6	22	PAFZZ	4030-00-431-5536	28-1C	76691	SLEEVE,SPLICING		EA	4
B-6	23	XDFZZ		880020	15536	GIN POLE ASSEMBLY,LOWER		EA	2
B-6	24	PFFFF		880019	15536	BASEPLATE ASSEMBLY		EA	1
B-6	25	PFFFF		170972	15536	BASEPLATE		EA	1
B-6	26	PAFZZ	3950-00-729-6165	T-20	12708	GRIPHOIST		EA	1
B-6	27	PAFZZ		870470	15536	LINE ASSEMBLY,TAG		EA	2
B-6	28	PAFZZ		1402	06762	SNAP,ROPE		EA	1
B-6	29	PAFZZ	4030-01-015-6571	351700	15536	THIMBLE		EA	1
B-6	30	PAFZZ	5985-01-017-6746	690074	15536	ROPE,TAG LINE		EA	1
B-6	31	XDFZZ		880021	15536	STAKE,BASEPLATE		EA	4
B-6	32	PAFZZ	5306-00-524-7549	501134	15536	BOLT,HEXAGON HEAD		EA	4
B-6	33	PAFZZ	5310-00-880-5986	567627	15536	WASHER,LOCK-SPRING		EA	4
B-6	34	XDFZZ		870711	15536	BOLT ASSEMBLY		EA	4
B-6	35	PAFZZ		551145	15536	NUT,PLAIN,HEXAGON		EA	4
B-6	36	PAFZZ	3940-00-929-0037	418	70257	BLOCK,TACKLE		EA	1
B-6	37	XDFZZ		180279	15536	POLE,GIN,UPPER		EA	2
B-6	38	PAFZZ		350551	15536	PIN,DETENT		EA	2
B-6	39	PAFZZ		690081	15536	CABLE,CAPTIVATING		EA	1
B-6	40	XDFZZ		880022	15536	TOP PLATE ASSY,GIN POLE		EA	1
B-6	41	PAFZZ		870467	15536	CABLE ASSEMBLY,PULLING		EA	1
B-6	42	PAFZZ		631328	15536	CABLE		EA	1
B-6	43	PAFZZ		MS16842-107	96906	CLAMP,WIRE ROPE,SADDLED		EA	6

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-6	44	PAFZZ	4030-01-015-7428	356589	15536	THIMBLE	EA	2
B-6	45	PAFZZ	5340-01-016-8054	350559	15536	HOOK,EYE	EA	1
B-6	46	PAFZZ		380317	15536	ROPE CLIP	EA	2
B-6	47	PAFZZ		870490	15536	ROPE ASSEMBLY,HINGE PLATE	EA	1
B-6	48	XDFZZ		690076	15536	ROPE,HINGE PLATE	EA	1
B-6	49	PAFZZ		392ITIY	39428	SNAP,ROPE	EA	2
B-6	49A	PAFZZ		506145	15536	SCREW,MACHINE	EA	1
B-6	50	PAFZZ		380273	15536	CABLE ROLLER MOUNTING BRACKET	EA	2
B-6	51	PAFZZ		280111	15536	CABLE ROLLER	EA	2
B-6	52	PAFZZ		567055	15536	WASHER,LOCK	EA	3
B-6	53	PAFZZ		556920	15536	NUT,PLAIN,HEXAGON	EA	1
B-6	54	PAFZZ		540020	15536	EYEBOLT	EA	2
B-6	55	PAFZZ		380274	15536	EYEBOLT SPACER	EA	2
						GROUP: 06 BOOM EXTENSION AND BALUN		
B-7	1	PFFFF		3791,PRODUCT	15536	BALUN ASSEMBLY	EA	1
B-7	2	PAFZZ	5305-00-702-4523	MS35307-306	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-7	3	PAFZZ	5985-01-016-0297	270069	15536	STRAP,SHORT	EA	1
B-7	4	PAFZZ		470146	15536	INSULATOR,FEEDLINE	EA	1
B-7	5	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	5
B-7	6	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	5
B-7	7	PAFZZ	5310-00-905-1691	MS51972-1	96906	NUT,PLAIN,HEXAGON	EA	2
B-7	8	PAFZZ	5985-01-016-0298	270068	15536	STRAP,LONG	EA	1
B-7	9	PFFFF		870161	15536	FEEDLINE ASSEMBLY	EA	2
B-7	10	PAFZZ	4030-01-015-6571	351700	15536	THIMBLE	EA	1
B-7	11	PAFZZ	4030-01-015-9583	359929	15536	CLIP,ROPE,WIRE	EA	1
B-7	12	PAFZZ	5310-00-883-9384	MS15795-842	96906	WASHER,FLAT	EA	1
B-7	12A	PAFZZ		350558	15536	STOP SLEEVE	EA	1
B-7	13	PAFZZ		611622	15536	CABLE,FEEDLINE	EA	1
B-7	13A	PAFZZ		670208	15536	SOLDER LUG	EA	1
B-7	14	PAFZZ	5985-01-016-0296	180390	15536	PLATE,MOUNTING	EA	1
B-7	15	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-7	16	PAFZZ	1015-01-019-7117	MS171526	96906	PIN-SPRING	EA	3
B-7	17	PAFZZ		380146	15536	COLLAR	EA	
B-7	18	XDFZZ		380152	15536	INSERT,BOOM EXTENSION	EA	3

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-7	19	PAFZZ	5305-00-616-6370	MS35307-313	96906	SCREW,CAP,HEXAGON HEAD		EA	3
B-7	20	PAFZZ	5310-00-934-9760	MS35649-204	96906	NUT,PLAIN,HEXAGON		EA	4
B-7	21	PAFZZ	5310-00-154-1831	MS35338-138	96906	WASHER,LOCK		EA	4
B-7	22	PAFZZ		470143	15536	PLATE,FIBERGLASS		EA	1
B-7	23	PAFZZ	5305-00-543-2800	MS51957-65	96906	SCREW,MACHINE		EA	4
B-7	24	PAFZZ		3851AA,PRODUCT	15536	COAXIAL KIT		EA	1
B-7	25	PAFZZ		501011	15536	CABLE,COAXIAL		EA	1
B-7	26	PAFZZ		650041	15536	CONNECTOR		EA	2
B-7	27	PAFZZ		650043	15536	ADAPTER		EA	1
B-7	28	PAFZZ		350579	15536	GRIPPER CLIP,LARGE		EA	22
B-7	29	PAFZZ		350580	15536	GRIPPER CLIP,MEDIUM		EA	22
B-7	30	PAFZZ		456418	15536	TY-RAP		EA	22

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNT
				GROUP: 07 ELEMENTS				
B-8	1	PAFZZ	5985-01-016-0291	870499	15536	TUBE,ELEMENT,2-2	EA	2
B-8	2	PAFZZ	5985-01-006-7263	870438	15536	TUBE,ELEMENT,3-2	EA	2
B-8	3	PAFZZ	5985-01-006-7264	870439	15536	TUBE,ELEMENT,4-2	EA	2
B-8	4	PAFZZ	5985-01-006-7265	870440	15536	TUBE,ELEMENT,5-2	EA	2
B-8	5	PAFZZ	5985-01-006-7266	870441	15536	TUBE,ELEMENT,6-2	EA	2
B-8	6	PAFZZ	5985-01-006-7267	870443	15536	TUBE,ELEMENT,7-2	EA	2
B-8	7	PAFZZ	5985-01-006-7268	870444	15536	TUBE,ELEMENT,8-2	EA	2
B-8	8	PAFZZ	5985-01-006-7261	870448	15536	TUBE,ELEME..T,9-3	EA	2
B-8	9	PAFZZ	5985-01-012-5648	870451	15536	TUBE,ELEMENT,10-3	EA	2
B-8	10	PAFZZ		870457	15536	TUBE,ELEMENT,11-3	EA	2
B-8	11	PAFZZ	5985-01-016-0290	870498	15536	TUBE,ELEMENT,12-4	EA	2
B-8	12	PAFZZ	5985-01-006-7260	870446	15536	TUBE,ELEMENT,13-4	EA	2
B-8	13	PAFZZ	5985-01-006-7262	870453	15536	TUBE,ELEMENT,14-4	EA	2
B-8	14	PAFZZ	5985-01-016-1854	870500	15536	TUBE,ELEMENT,15-5	EA	2
B-8	15	PAFZZ	5985-01-016-0292	870602	15536	TUBE,ELEMENT,17-5&16-5	EA	4
				GROUP: 08 INSULATOR ASSY, CTR, ELEMENT 5				
B-9	1	PAFZZ	5305-00-616-6370	MS35307-313	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-9	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-9	3	PAFZZ	5985-01-016-0294	180135	15536	BRACKET,ELEMENT/BOOM	EA	2
B-9	4	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-9	5	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	2
B-9	6	PAFZZ	5313-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-9	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-9	8	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-9	9	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-9	10	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-9	11	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-9	12	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-9	13	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-9	14	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-9	15	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-9	16	PAFZZ	5985-01-016-0293	180144	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-9	17	PAFZZ	5310-00-757-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-9	18	PAFZZ	5310-00-974-6623	MS35388-140	96906	WASHER,LOCK	EA	4
B-9	19	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-9	20	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-9	21	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-9	22	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-9	23	PAFZZ		878730	15536	INSULATOR,CENTER	EA	1
						GROUP: 09 INSULATOR ASSY, CTR, ELEMENT 4		
B-10	1	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-10	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-10	3	PAFZZ	5340-01-015-8722	180134	15536	BRACKET,ELEMENT/BOOM	EA	2
B-10	4	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	2
B-10	5	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-10	6	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-10	7	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-10	8	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-10	9	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-10	10	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-10	11	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-10	12	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-10	13	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-10	14	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-10	15	PAFZZ		180145	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-10	16	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-10	17	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-10	18	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-10	19	PAFZZ	5305-01-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-10	20	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-10	21	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-10	22	PAFZZ		878727	15536	INSULATOR,CENTER	EA	1

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 10 INSULATOR ASSY, CTR, ELEMENT 3		
B-11	1	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-11	2	PAFZZ	5306-00-816-5272	MS35307-340	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-11	3	PAFZZ	5985-01-017-6747	470147	15536	BRACKET,ELEMENT/BOOM	EA	2
B-11	4	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	2
B-11	5	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-11	6	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-11	7	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-11	8	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-11	9	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-11	10	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-11	11	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-11	12	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-11	13	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-11	14	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-11	15	PAFZZ		180145	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-11	16	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-11	17	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-11	18	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-11	19	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-11	20	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-11	21	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-11	22	PAFZZ		878725	15536	INSULATOR,CENTER	EA	1
						GROUP: 11 INSULATOR ASSY, CTR, ELEMENT 2		
B-12	1	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-12	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-12	3	PAFZZ	5340-01-015-8722	180134	15536	BRACKET,ELEMENT/BOOM	EA	2
B-12	4	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	
B-12	5	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-12	6	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-12	7	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-12	8	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-12	9	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-12	10	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 10 INSULATOR ASSY, CTR, ELEMENT 3		
B-11	1	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-11	2	PAFZZ	5306-00-816-5272	MS35307-340	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-11	3	PAFZZ	5985-01-017-6747	470147	15536	BRACKET,ELEMENT/BOOM	EA	2
B-11	4	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	2
B-11	5	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-11	6	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-11	7	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-11	8	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-11	9	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-11	10	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-11	11	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-11	12	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-11	13	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-11	14	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-11	15	PAFZZ		180145	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-11	16	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-11	17	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-11	18	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-11	19	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-11	20	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-11	21	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-11	22	PAFZZ		878725	15536	INSULATOR,CENTER	EA	1
						GROUP: 11 INSULATOR ASSY ,CTR, ELEMENT 2		
B-12	1	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-12	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-12	3	PAFZZ	5340-01-015-8722	180134	15536	BRACKET,ELEMENT/BOOM	EA	2
B-12	4	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	
B-12	5	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-12	6	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-12	7	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-12	8	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-12	9	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-12	10	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-12	11	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-12	12	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-12	13	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-12	14	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-12	15	PAFZZ		180145	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-12	16	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-12	17	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-12	18	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-12	19	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-12	20	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-12	21	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-12	22	PAFZZ		878724	15536	INSULATOR,CENTER	EA	1
						GROUP: 12 INSULATOR ASSY, CTR, ELEMENT 1		
B-13	1	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-13	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-13	3	PAFZZ	5340-01-015-8722	180134	15536	BRACKET,ELEMENT/BOOM	EA	2
B-13	4	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-13	5	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-13	6	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-13	7	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-13	8	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-13	9	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-13	10	PAFZZ		180145	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-13	11	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-13	12	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-13	13	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-13	14	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-13	15	PAFZZ	5303-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-13	16	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-13	17	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-13	18	PAFZZ		878726	15536	INSULATOR,CENTER	EA	1
						GROUP: 13 INSULATOR, ASSY, CTR, ELEMENT 6		
B-14	1	PAFZZ	5305-00-616-6370	MS35307-313	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-14	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-14	3	PAFZZ	5985-01-016-0294	180135	15536	BRACKET,ELEMENT/BOOM		EA	2
B-14	4	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD		EA	2
B-14	5	PAFZZ		880040	15536	SPLICING ASSEMBLY		EA	2
B-14	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER		EA	2
B-14	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD		EA	2
B-14	8	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON		EA	4
B-14	9	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK		EA	2
B-14	10	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP		EA	2
B-14	11	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN		EA	2
B-14	12	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT		EA	2
B-14	13	PAFZZ		380160	15536	TONGUE,HINGE		EA	2
B-14	14	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM		EA	2
B-14	15	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE		EA	4
B-14	16	PAFZZ	5985-01-016-0293	180144	15536	BRACKET,ELEMENT SUPPORT		EA	2
B-14	17	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON		EA	4
B-14	18	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK		EA	4
B-14	19	PAFZZ	5310-00-543-2740	MS5333-74	96906	WASHER,LOCK		EA	4
B-14	20	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD		EA	2
B-14	21	PAFZZ		530004	15536	SCREW,THUMB		EA	2
B-14	22	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE		EA	2
B-14	23	PAFZZ		878732	15536	INSULATOR,CENTER		EA	1
						GROUP: 14 INSULATOR ASSY, CTR, ELEMENT 7			
B-15	1	PAFZZ	5305-00-616-6370	MS35307-313	96906	SCREW,CAP,HEXAGON HEAD		EA	2
B-15	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD		EA	4
B-15	3	PAFZZ	5985-01-016-0294	180135	15536	BRACKET,ELEMENT/BOOM		EA	2
B-15	4	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD		EA	2
B-15	5	PAFZZ		880040	15536	SPLICING ASSEMBLY		EA	2
B-15	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER		EA	2
B-15	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD		EA	2
B-15	8	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON		EA	4
B-15	9	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK		EA	2
B-15	10	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP		EA	2
B-15	11	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN		EA	2
B-15	12	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT		EA	2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-15	13	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-15	14	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-15	15	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-15	16	PAFZZ	5985-01-016-0293	180144	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-15	17	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-15	18	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-15	19	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-15	20	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-15	21	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-15	22	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-15	23	PAFZZ		878729	15536	INSULATOR,CENTER	EA	1
						GROUP: 15 INSULATOR ASSY, CTR, ELEMENT 8		
B-16	1	PAFZZ	5305-00-616-6370	MS35307-313	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-16	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-16	3	PAFZZ	5985-01-016-0294	180135	15536	BRACKET,ELEMENT/BOOM	EA	2
B-16	4	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-16	5	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	2
B-16	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-16	7	XDFZZ		MS1109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-16	8	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-16	9	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-16	10	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-16	11	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-16	12	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-16	13	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-16	14	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-16	15	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-16	16	PAFZZ	5985-01-016-0293	180144	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-16	17	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-16	18	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-16	19	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-16	20	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-16	21	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-16	22	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-16	23	PAFZZ		878728	15536	INSULATOR,CENTER	EA	1
						GROUP: 16 INSULATOR ASSY, CTR, ELEMENT 9		
B-17	1	PAFZZ	5305-00-655-6974	MS35307-315	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-17	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-17	3	PAFZZ	5985-01-005-2701	180136	15536	BRACKET,ELEMENT/BOOM	EA	2
B-17	4	PAFZZ		880041	15536	SPLICING ASSEMBLY	EA	2
B-17	5	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-17	6	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-17	7	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-17	8	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-17	9	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-17	10	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-17	11	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-17	12	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-17	13	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-17	14	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-17	15	PAFZZ	5895-01-005-2702	180161	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-17	16	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-17	17	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-17	18	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-17	19	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-17	20	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-17	21	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-17	22	PAFZZ		878731	15536	INSULATOR,CENTER	EA	1
						GROUP: 17 TUBE ASSEMBLY, ELEMENT 9-2		
B-18	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-18	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-18	3	PAFZZ	5985-01-005-2486	180289	15536	TUBE,ALUMINUM	EA	1
B-18	4	PAFZZ	5985-01-005-2487	878708	15536	TUBE,ELEMENT	EA	1
B-18	5	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	1
B-18	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-18	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-18	8	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-18	9	PAFZZ	5305-00-721-8010	MS35307-314	96906	SCREW,CAP,HEXAGON HEAD	EA	1

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 18 INSULATOR ASSY, CTR, ELEMENT 10		
B-19	1	PAFZZ	5395-00-655-6974	MS35307-315	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-19	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-19	3	PAFZZ	5985-01-005-2702	180161	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-19	4	PAFZZ		880041	15536	SPLICING ASSEMBLY	EA	2
B-19	5	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-19	6	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-19	7	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-19	8	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-19	9	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-19	10	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-19	11	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-19	12	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-19	13	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-19	14	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-19	15	PAFZZ	5985-01-005-2701	180136	15536	BRACKET,ELEMENT/BOOM	EA	2
B-19	16	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-19	17	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-19	18	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-19	19	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-19	20	PAFZZ		530004	15536	SCREW,THUMB	EA	4
B-19	21	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-19	22	PAFZZ		878702	15536	INSULATOR,CENTER	EA	1
						GROUP: 19 TUBE ASSEMBLY, ELEMENT 10-2		
B-20	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-20	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-20	3	PAFZZ	5985-01-005-2486	180289	15536	TUBE,ALUMINUM	EA	1
B-20	4	PAFZZ	5985-01-005-2488	878709	15536	TUBE,ELEMENT	EA	1
B-20	5	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	1
B-20	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-20	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-20	8	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-20	9	PAFZZ	5305-00-721-8010	MS35307-314	96906	SCREW,CAP,HEXAGON HEAD	EA	1

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 20 INSULATOR ASSY, CTR, ELEMENT 11		
B-21	1	PAFZZ	5305-00-655-6974	MS35307-315	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-21	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-21	3	PAFZZ	5985-01-005-2702	180161	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-21	4	PAFZZ		880041	15536	SPLICING ASSEMBLY	EA	2
B-21	5	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-21	6	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-21	7	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-21	8	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-21	9	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	1
B-21	10	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-21	11	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-21	12	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-21	13	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-21	14	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-21	15	PAFZZ	5985-01-005-2701	180136	15536	BRACKET,ELEMENT/BOOM	EA	2
B-21	16	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-21	17	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-21	18	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-21	19	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-21	20	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-21	21	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-21	22	PAFZZ		878703	15536	INSULATOR,CENTER	EA	1
						GROUP: 21 TUBE ASSEMBLY, ELEMENT 11-2		
B-22	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-22	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-22	3	PAFZZ	5985-01-005-2486	180289	15536	TUBE,ALUMINUM	EA	1
B-22	4	PAFZZ	5985-01-016-0241	878713	15536	TUBE,ELEMENT	EA	1
B-22	5	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	1
B-22	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-22	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-22	8	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-22	9	PAFZZ	5305-00-721-8010	MS35307-314	96906	SCREW,CAP,HEXAGON HEAD	EA	1
						GROUP: 22 INSULATOR ASSY, CTR, ELEMENT 12		
B-23	1	PAFZZ	5305-00-721-8005	MS35307-316	96906	SCREW,CAP,HEXAGON HEAD	EA	4

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-23	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-23	3	PAFZZ	5985-01-005-2705	180142	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-23	4	PAFZZ		880037	15536	SPLICING ASSEMBLY	EA	2
B-23	5	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-23	6	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-23	7	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-23	8	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-23	9	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-23	10	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-23	11	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-23	12	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-23	13	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-23	14	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-23	15	PAFZZ	5985-01-005-2704	180137	15536	BRACKET,ELEMENT/BOOM	EA	2
B-23	16	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-23	17	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-23	18	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-23	19	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-23	20	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-23	21	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-23	22	PAFZZ		878718	15536	INSULATOR,CENTER	EA	1
						GROUP: 23 TUBE ASSEMBLY, ELEMENT 12-2		
B-24	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-24	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-24	3	PAFZZ	4710-01-004-0017	180262	15536	TUBE,ALUMINUM	EA	1
B-24	4	PAFZZ	5985-01-016-0288	180299	15536	TUBE,ALUMINUM	EA	1
B-24	5	PAFZZ		880041	15536	SPLICING ASSEMBLY	EA	1
B-24	6	PAFZZ	5315-00-234-1853	MS24665-153	96906	PIN,COTTER	EA	1
B-24	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-24	8	PAFZZ	5305-00-655-6974	MS35307-315	96906	SCREW,CAP,HEXAGON HEAD	EA	2
						GROUP: 24 TUBE ASSEMBLY, ELEMENT 12-3		
B-25	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-25	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-25	3	PAFZZ	5985-01-005-2486	180289	15536	TUBE,ALUMINUM	EA	1

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-25	4	PAFZZ	5985-01-016-0289	878716	15536	TUBE,ELEMENT	EA	1
B-25	5	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	1
B-25	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-25	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-25	8	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-25	9	PAFZZ	5305-00-721-8010	MS35307-314	96906	SCREW,CAP,HEXAGON HEAD	EA	1
						GROUP: 25 INSULATOR ASSY, CTR, ELEMENT 13		
B-26	1	PAFZZ	5305-00-802-0016	MS35307-317	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-26	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-26	3	PAFZZ	5985-01-007-5795	180138	15536	BRACKET,ELEMENT/BOOM	EA	2
B-26	4	PAFZZ	5305-00-721-8005	MS35307-316	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-26	5	PAFZZ		880037	15536	SPLICING ASSEMBLY	EA	2
B-26	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-26	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-26	8	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-26	9	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-26	10	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-26	11	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-26	12	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-26	13	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-26	14	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-26	15	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-26	16	PAFZZ	5985-01-005-2706	180141	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-26	17	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-26	18	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-26	19	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-26	20	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-26	21	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-26	22	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-26	23	PAFZZ		878719	15536	INSULATOR,CENTER	EA	1
						GROUP: 26 TUBE ASSEMBLY, ELEMENT 13-2		
B-27	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-27	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-27	3	PAFZZ	4710-01-004-0017	180262	15536	TUBE,ALUMINUM	EA	1

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-27	4	PAFZZ	4710-01-004-0872	180297	15536	TUBE,ALUMINUM	EA	1
B-27	5	PAFZZ		880041	15536	SPLICING ASSEMBLY	EA	1
B-27	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-27	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-27	8	PAFZZ	5305-00-655-6974	MS35307-315	96906	SCREW,CAP,HEXAGON HEAD	EA	2
						GROUP: 27 TUBE ASSEMBLY, ELEMENT 13-3		
B-28	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-28	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-28	3	PAFZZ	5985-01-005-2486	180289	15536	TUBE,ALUMINUM	EA	1
B-28	4	PAFZZ	5985-01-005-6558	878707	15536	TUBE,ELEMENT	EA	1
B-28	5	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	1
B-28	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-28	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-28	8	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-28	9	PAFZZ	5305-00-721-8010	MS35307-314	96906	SCREW,CAP,HEXAGON HEAD	EA	1
						GROUP: 28 INSULATOR ASSY, CTR, ELEMENT 14		
B-29	1	PAFZZ	5305-00-802-0016	MS35307-317	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-29	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-29	3	PAFZZ	5985-01-007-5795	180138	15536	BRACKET,ELEMENT/BOOM	EA	2
B-29	4	PAFZZ	5305-00-721-8005	MS35307-316	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-29	5	PAFZZ		80037	15536	SPLICING ASSEMBLY	EA	2
B-29	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-29	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-29	8	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-29	9	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-29	10	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-29	11	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-29	12	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-29	13	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-29	14	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-29	15	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-29	16	PAFZZ	5985-01-005-2706	180141	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-29	17	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-29	18	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-29	19	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-29	20	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-29	21	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-29	22	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE	EA	2
B-29	23	PAFZZ		878720	15536	INSULATOR,CENTER	EA	1
						GROUP: 29 TUBE ASSEMBLY, ELEMENT 14-2		
B-30	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-30	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-30	3	PAFZZ	4710-01-004-0017	180262	15536	TUBE,ALUMINUM	EA	1
B-30	4	PAFZZ	5985-01-005-2489	180295	15536	TUBE,ALUMINUM	EA	1
B-30	5	PAFZZ		880041	15536	SPLICING ASSEMBLY	EA	1
B-30	6	PAFZZ	5315-00-230-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-30	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-30	8	PAFZZ	5305-00-655-6974	MS35307-315	96906	SCREW,CAP,HEXAGON HEAD	EA	2
						GROUP: 30 TUBE ASSEMBLY, ELEMENT 14-3		
B-31	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-31	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
31	3	PAFZZ	5985-01-005-2486	180289	15536	TUBE,ALUMINUM	EA	1
B-31	4	PAFZZ	5985-01-005-2490	878710	15536	TUBE,ELEMENT	EA	1
B-31	5	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	1
B-31	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-31	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-31	8	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-31	9	PAFZZ	5305-00-721-8010	MS35307-314	96906	SCREW,CAP,HEXAGON HEAD	EA	1
						GROUP: 31 INSULATOR ASSY, CTR, ELEMENT 15		
B-32	1	PAFZZ	5305-00-702-9070	MS35307-318	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-32	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-32	3	PAFZZ	5985-01-005-2708	180140	15536	BRACKET,ELEMENT SUPPORT	EA	2
B-32	4	PAFZZ		880039	15536	SPLICING ASSEMBLY	EA	2
B-32	5	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-32	6	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-32	7	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-32	8	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-32	9	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-32	10	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN		EA	2
B-32	11	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT		EA	2
B-32	12	PAFZZ		380160	15536	TONGUE,HINGE		EA	2
B-32	13	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM		EA	2
B-32	14	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE		EA	4
B-32	15	PAFZZ	5985-01-005-2707	180139	15536	BRACKET,ELEMENT/BOOM		EA	2
B-32	16	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON		EA	4
B-32	17	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK		EA	4
B-32	18	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK		EA	4
B-32	19	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD		EA	2
B-32	20	PAFZZ		530004	15536	SCREW,THUMB		EA	2
B-32	21	PAFZZ	5985-01-005-2703	880010	15536	CLAMP,FEEDLINE		EA	2
B-32	22	PAFZZ		878721	15536	INSULATOR,CENTER		EA	1
						GROUP: 32 TUBE ASSEMBLY, ELEMENT 15-2			
B-33	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON		EA	2
B-33	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK		EA	2
B-33	3	PAFZZ	5985-01-005-2493	180257	15536	TUBE,ALUMINUM		EA	1
B-33	4	PAFZZ	5985-01-016-0242	878714	15536	TUBE,ELEMENT		EA	1
B-33	5	PAFZZ		880037	15536	SPLICING ASSEMBLY		EA	1
B-33	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER		EA	1
B-33	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD		EA	1
B-33	8	PAFZZ	5305-00-802-0016	MS35307-317	96906	SCREW,CAP,HEXAGON HEAD		EA	1
B-33	9	PAFZZ	5305-00-721-8005	MS35307-316	96906	SCREW,CAP,HEXAGON HEAD		EA	1
						GROUP: 33 TUBE ASSEMBLY, ELEMENT 15-3			
B-34	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON		EA	2
B-34	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK		EA	2
B-34	3	PAFZZ	4710-01-004-0017	180262	15536	TUBE,ALUMINUM		EA	1
B-34	4	PAFZZ	5985-01-016-0275	180294	15536	TUBE,ALUMINUM		EA	1
B-34	5	PAFZZ		880041	15536	SPLICING ASSEMBLY		EA	1
B-34	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER		EA	1
B-34	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD		EA	1
B-34	8	PAFZZ	5305-00-655-6974	MS35307-315	96906	SCREW,CAP,HEXAGON HEAD		EA	2
						GROUP: 34 TUBE ASSEMBLY, ELEMENT 15-4			
B-35	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON		EA	2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-35	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-35	3	PAFZZ	5985-01-005-2486	180289	15536	TUBE,ALUMINUM	EA	1
B-35	4	PAFZZ	5985-01-016-0243	878715	15536	TUBE,ELEMENT	EA	1
B-35	5	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	1
B-35	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-35	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-35	8	PAFZZ	5305-00-207-2297	MS35307-312	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-35	9	PAFZZ	5305-00-721-8010	MS35307-314	96906	SCREW,CAP,HEXAGON HEAD	EA	1
						GROUP: 35 INSULATOR ASSY, CTR, ELEMENT 16		
B-36	1	PAFZZ	5315-00-826-3251	MS171528	96906	PIN-SPRING	EA	2
B-36	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,MACHINE	EA	4
B-36	3	PAFZZ	5985-01-005-2707	180139	15536	BRACKET,ELEMENT/BOOM	EA	2
B-36	4	PAFZZ	5305-00-702-9070	MS35307-318	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-36	5	PAFZZ		880039	15536	SPLICING ASSEMBLY	EA	2
B-36	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	2
B-36	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-36	8	PAFZZ	5310-00-2509477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	4
B-36	9	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK	EA	4
B-36	10	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP	EA	2
B-36	11	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN	EA	2
B-36	12	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT	EA	2
B-36	13	PAFZZ		380160	15536	TONGUE,HINGE	EA	2
B-36	14	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTOM	EA	2
B-36	15	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE	EA	4
B-36	16	PAFZZ	5985-01-016-0287	180143	15536	BRACKET,ELEMENT,SUPPORT	EA	2
B-36	17	PAFZZ	5305-00-719-3997	MS35307-303	96906	SCREW,CAP,HEXAGON HEAD	EA	2
B-36	18	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON	EA	4
B-36	19	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK	EA	4
B-36	20	PAFZZ	5305-00-824-7158	MS24618-28	96906	SCREW,TAPPING,PAN HEAD	EA	2
B-36	21	PAFZZ		530004	15536	SCREW,THUMB	EA	2
B-36	22	PAFZZ		880013	15536	CLAMP,FEEDLINE	EA	2
B-36	23	PAFZZ		878722	15536	INSULATOR,CENTER	EA	1
						GROUP: 36 TUBE ASSEMBLY, ELEMENT 16-2 & 17-2		
B-37	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-37	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-37	3	PAFZZ	5985-01-005-2493	180257	15536	TUBE,ALUMINUM	EA	1
B-37	4	PAFZZ	5985-01-005-2492	878712	15536	TUBE,ELEMENT	EA	1
B-37	5	PAFZZ		880037	15536	SPLICING ASSEMBLY	EA	1
B-37	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-37	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-37	8	PAFZZ	5305-00-802-0016	MS35307-317	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-37	9	PAFZZ	5305-00-721-8005	MS35307-316	96906	SCREW,CAP,HEXAGON HEAD	EA	1
						GROUP: 37 TUBE ASSEMBLY, ELEMENT 16-3 & 17-3		
B-38	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-38	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-38	3	PAFZZ	4710-01-004-0017	180262	15536	TUBE,ALUMINUM	EA	1
B-38	4	PAFZZ		180290	15536	TUBE,ALUMINUM	EA	1
B-38	5	PAFZZ		880041	15536	SPLICING ASSEMBLY	EA	1
B-38	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-38	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-38	8	PAFZZ	5305-00-655-6974	MS35307-315	96906	SCREW,CAP,HEXAGON HEAD	EA	2
						GROUP: 38 TUBE ASSEMBLY, ELEMENT 16-4 & 17-4		
B-39	1	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON	EA	2
B-39	2	PAFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK	EA	2
B-39	3	PAFZZ	5985-01-005-2486	180289	15536	TUBE,ALUMINUM	EA	1
B-39	4	PAFZZ	5985-01-005-2491	878711	15536	TUBE,ELEMENT	EA	1
B-39	5	PAFZZ		880040	15536	SPLICING ASSEMBLY	EA	1
B-39	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER	EA	1
B-39	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-39	8	PAFZZ	5305-00-616-6370	MS35307-313	96906	SCREW,CAP,HEXAGON HEAD	EA	1
B-39	9	PAFZZ	5305-00-721-8010	MS35307-314	96906	SCREW,CAP,HEXAGON HEAD	EA	1
						GROUP: 39 INSULATOR ASSY, CTR, ELEMENT 17		
B-40	1	PAFZZ	5315-00-826-3251	MS171528	96906	PIN-SPRING	EA	2
B-40	2	PAFZZ	5306-00-655-6170	MS35307-338	96906	SCREW,MACHINE	EA	4
B-40	3	PAFZZ	5985-01-005-2707	180139	15536	BRACKET,ELEMENT/BOOM	EA	2
B-40	4	PAFZZ	5305-00-702-9070	MS35307-318	96906	SCREW,CAP,HEXAGON HEAD	EA	4
B-40	5	PAFZZ		880039	15536	SPLICING ASSEMBLY	EA	2

SECTION IV REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO	(1) ILLUSTRATION (B) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-40	6	PAFZZ	5315-00-234-1854	MS24665-153	96906	PIN,COTTER		EA	2
B-40	7	XDFZZ		MS51109-8	96906	SCREW,CAP,HEXAGON HEAD		EA	2
B-40	8	PAFZZ	5310-00-250-9477	MS35649-2254	96906	NUT,PLAIN,HEXAGON		EA	4
B-40	9	PAFZZ	5310-00-543-2740	MS35333-74	96906	WASHER,LOCK		EA	4
B-40	10	PAFZZ	5365-01-005-4594	352728	15536	RING,SNAP		EA	2
B-40	11	PAFZZ	5310-00-828-8189	550008	15536	NUT,WING,PLAIN		EA	2
B-40	12	PAFZZ	5310-00-625-5756	MS15795-812	96906	WASHER,FLAT		EA	2
B-40	13	PAFZZ		380160	15536	TONGUE,HINGE		EA	2
B-40	14	PAFZZ	5985-01-005-2700	180133	15536	BRACKET,ELEMENT SUPPORT BOTTM		EA	2
B-40	15	PAFZZ	5315-01-007-1312	380161	15536	PIN,HINGE		EA	4
B-40	16	PAFZZ	5985-01-016-0287	180143	15536	BRACKET,ELEMENT,SUPPORT		EA	2
B-40	17	PAFZZ	5305-00-719-3997	MS35307-303	96906	SCREW,CAP,HEXAGON HEAD		EA	2
B-40	18	PAFZZ	5310-00-767-0445	MS51971-2	96906	NUT,PLAIN,HEXAGON		EA	4
B-40	19	PAFZZ	5310-00-974-6623	MS35338-140	96906	WASHER,LOCK		EA	4
B-40	20	PAFZZ	5305-00-824-7168	MS24618-28	96906	SCREW,TAPPING,PAN HEAD		EA	2
B-40	21	PAFZZ		530004	15536	SCREW,THUMB		EA	2
B-40	22	PAFZZ		880013	15536	CLAMP,FEEDLINE		EA	2
B-40	23	PAFZZ		878723	15536	INSULATOR,CENTER		EA	1

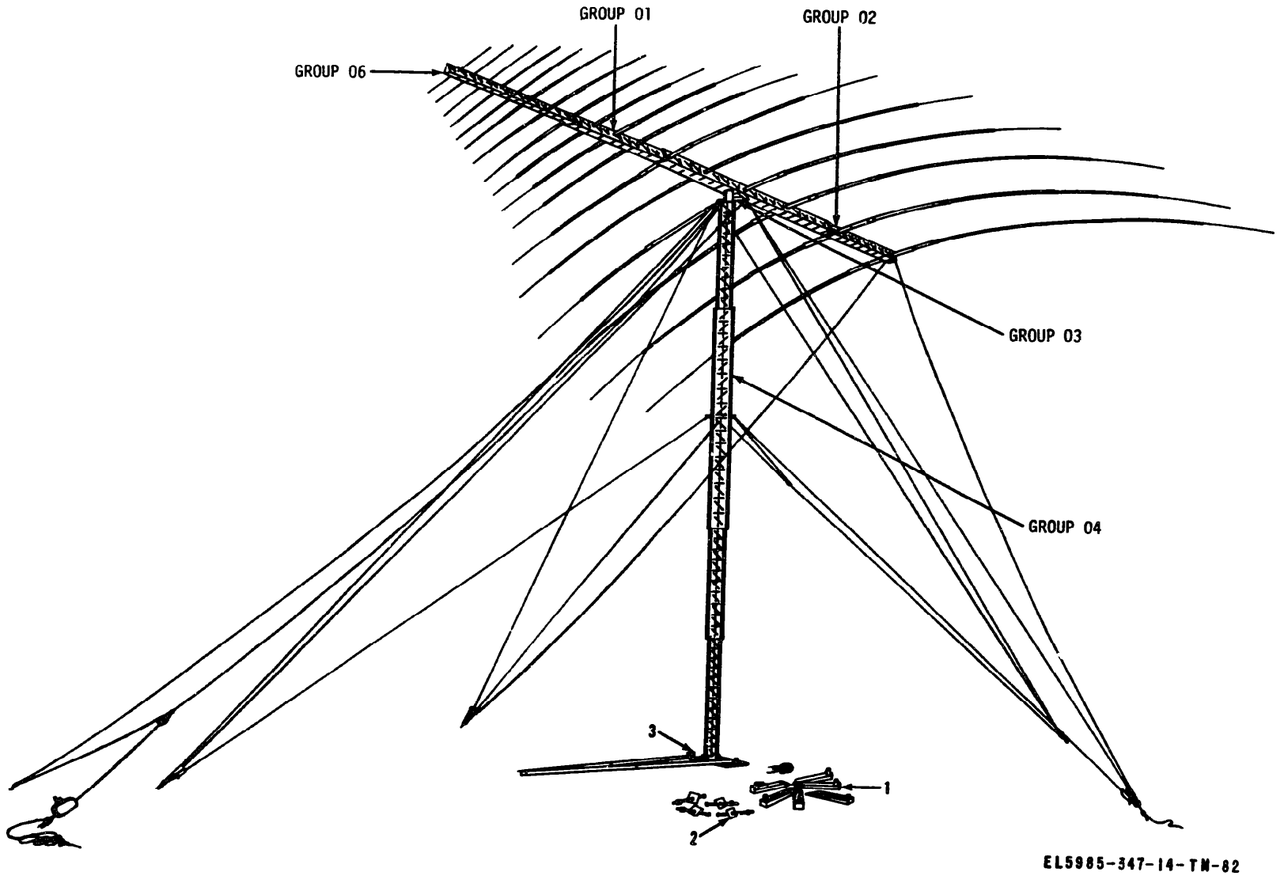


Figure B-1 Antenna System AS-3098/U.

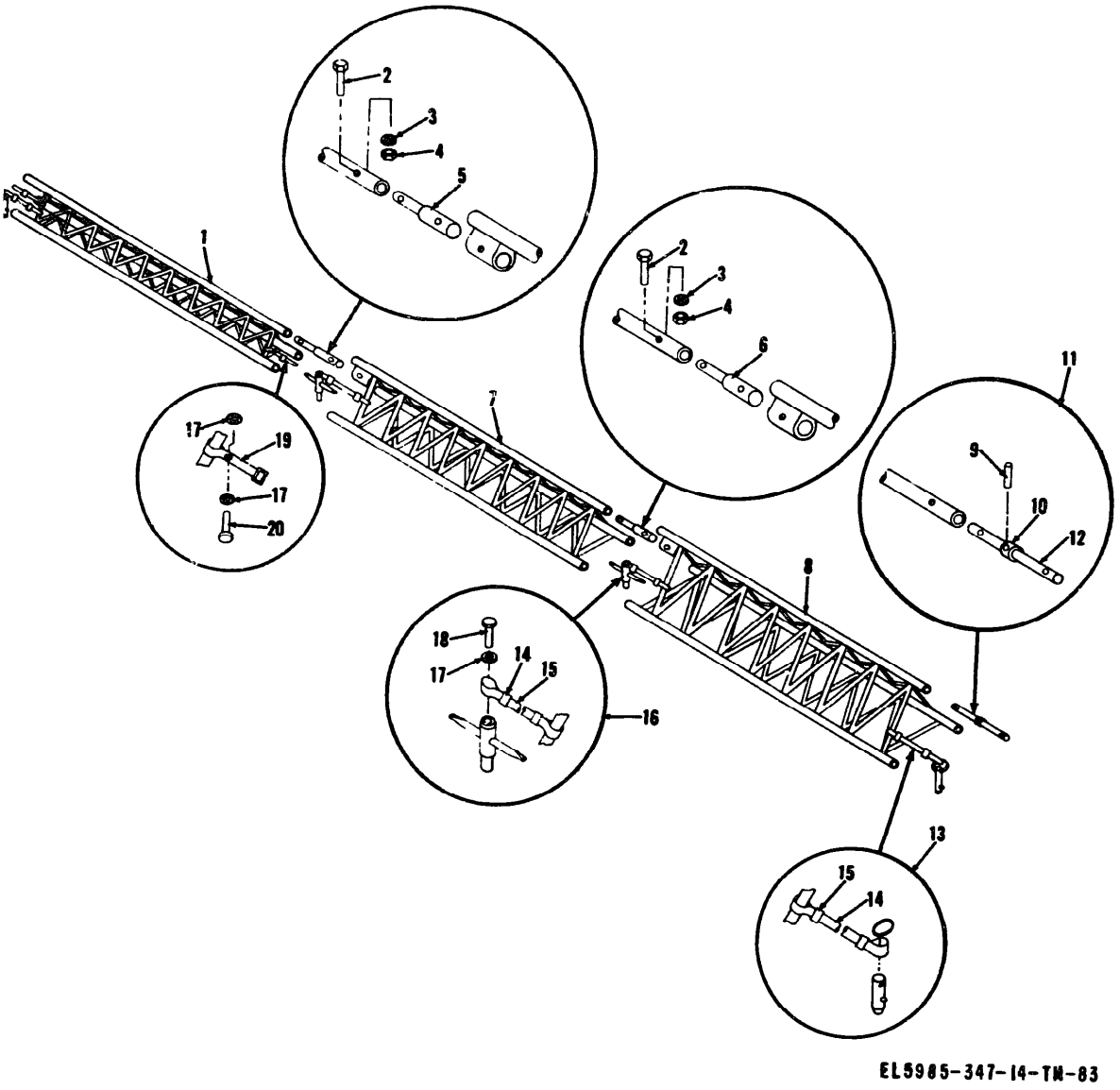


Figure B-2 Front boom sections

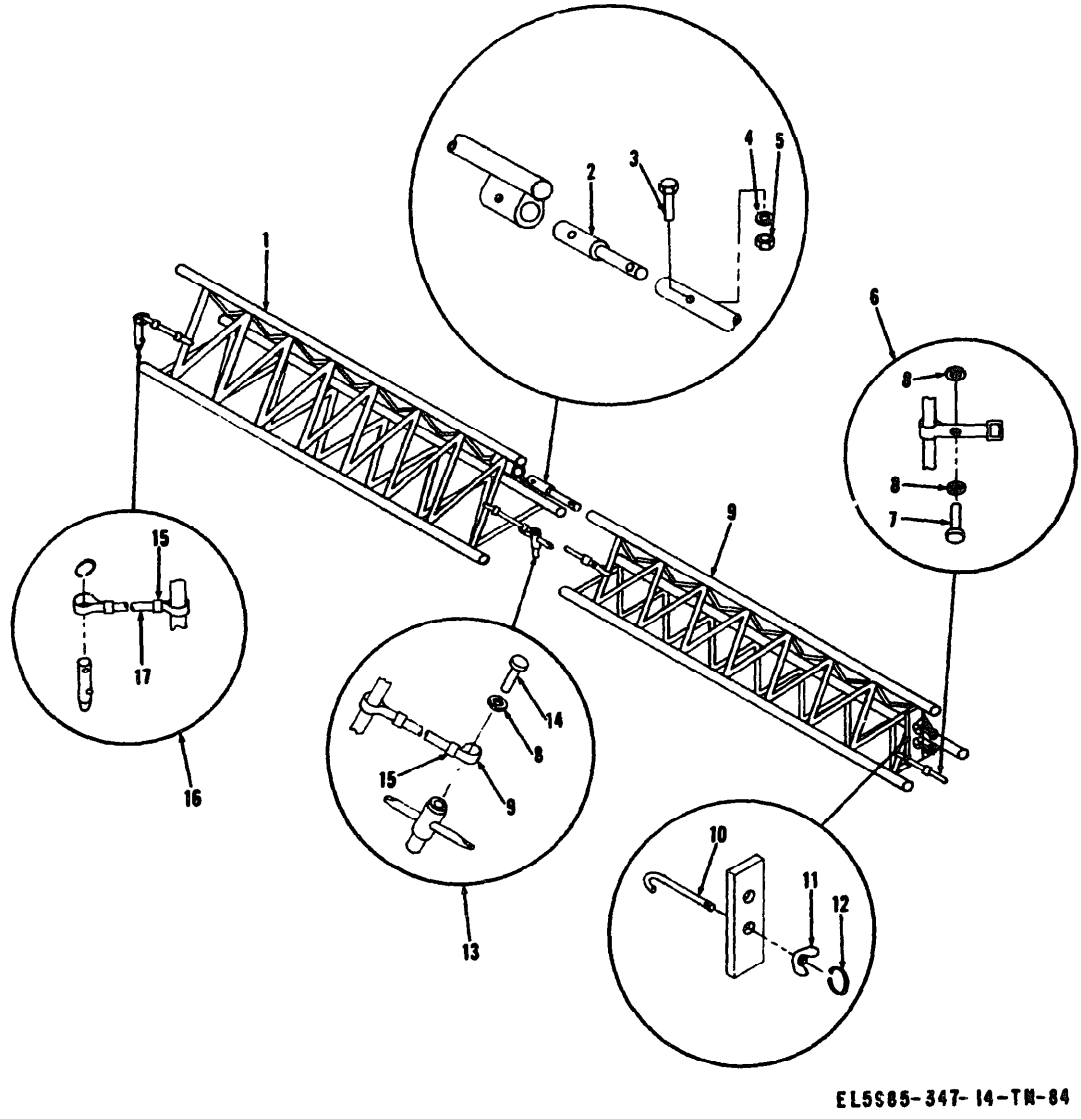


Figure B-3 Back boom sections

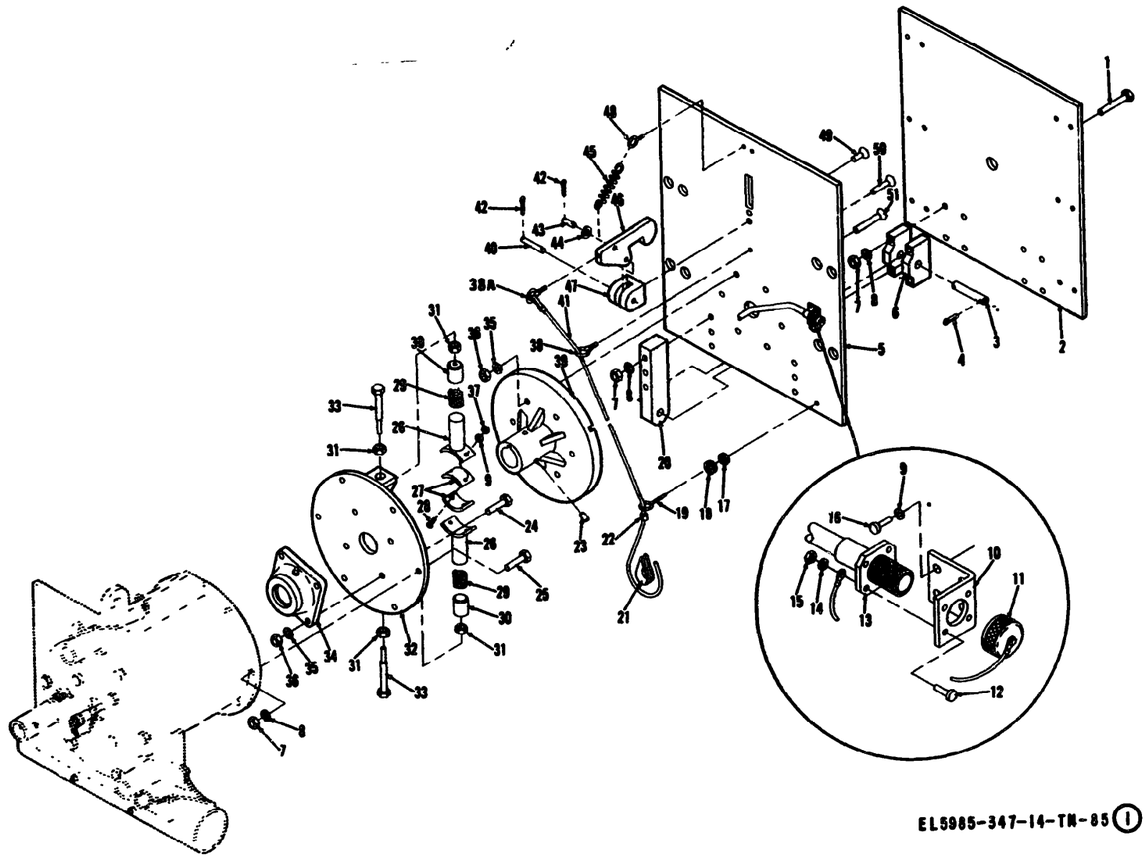


Figure B-4. Rotator assembly (Sheet 1 of 2).

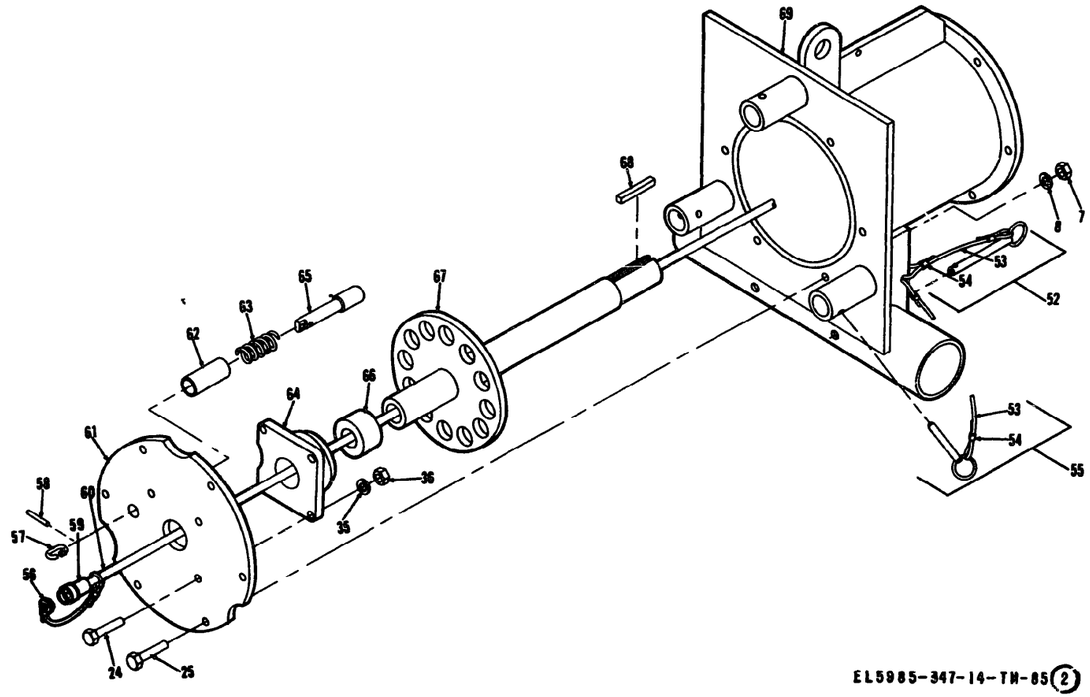


Figure B-4. Rotator assembly (Sheet 2 of 2).

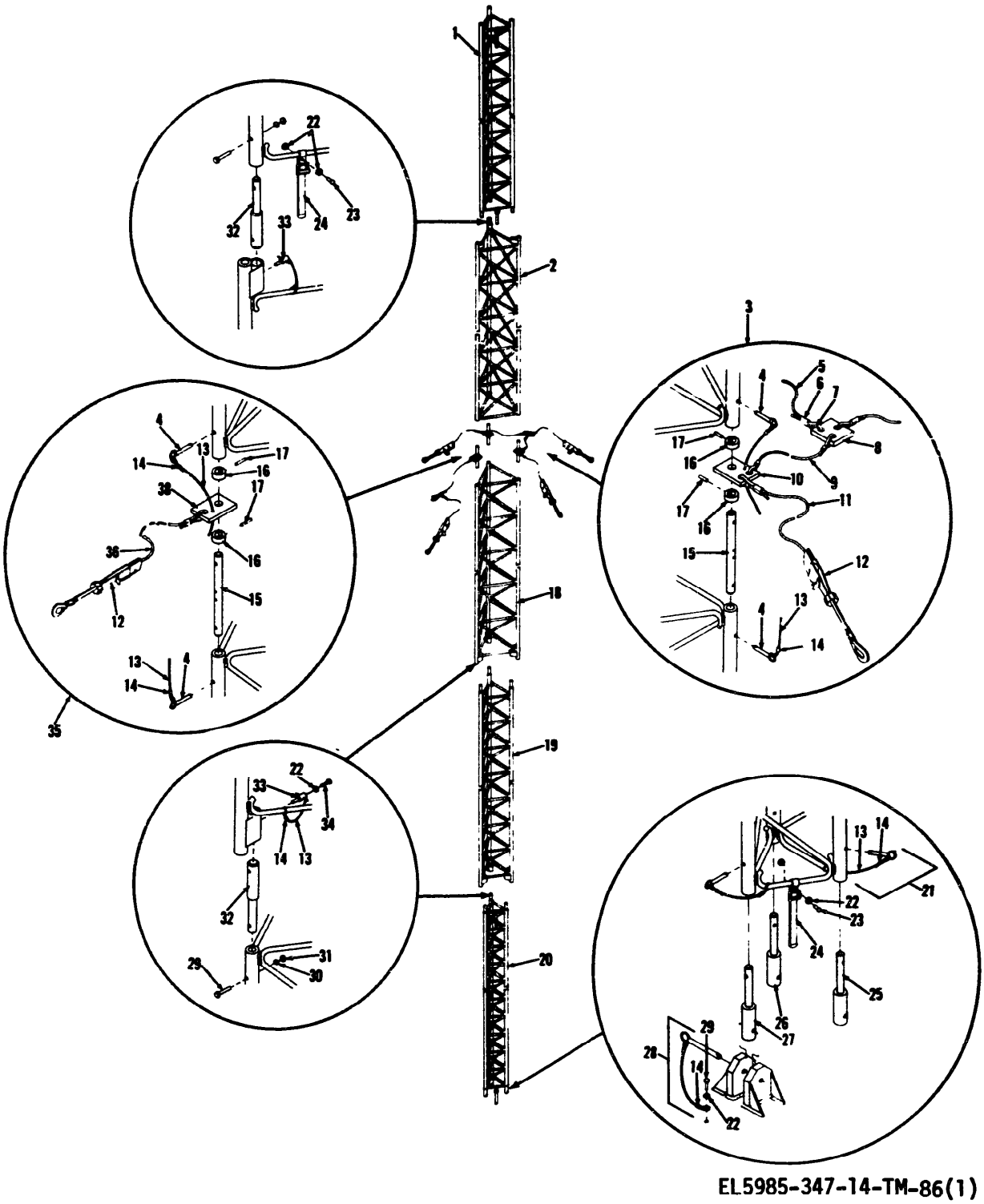


Figure B-5. Tower and attachments (Sheet 1 of 2)

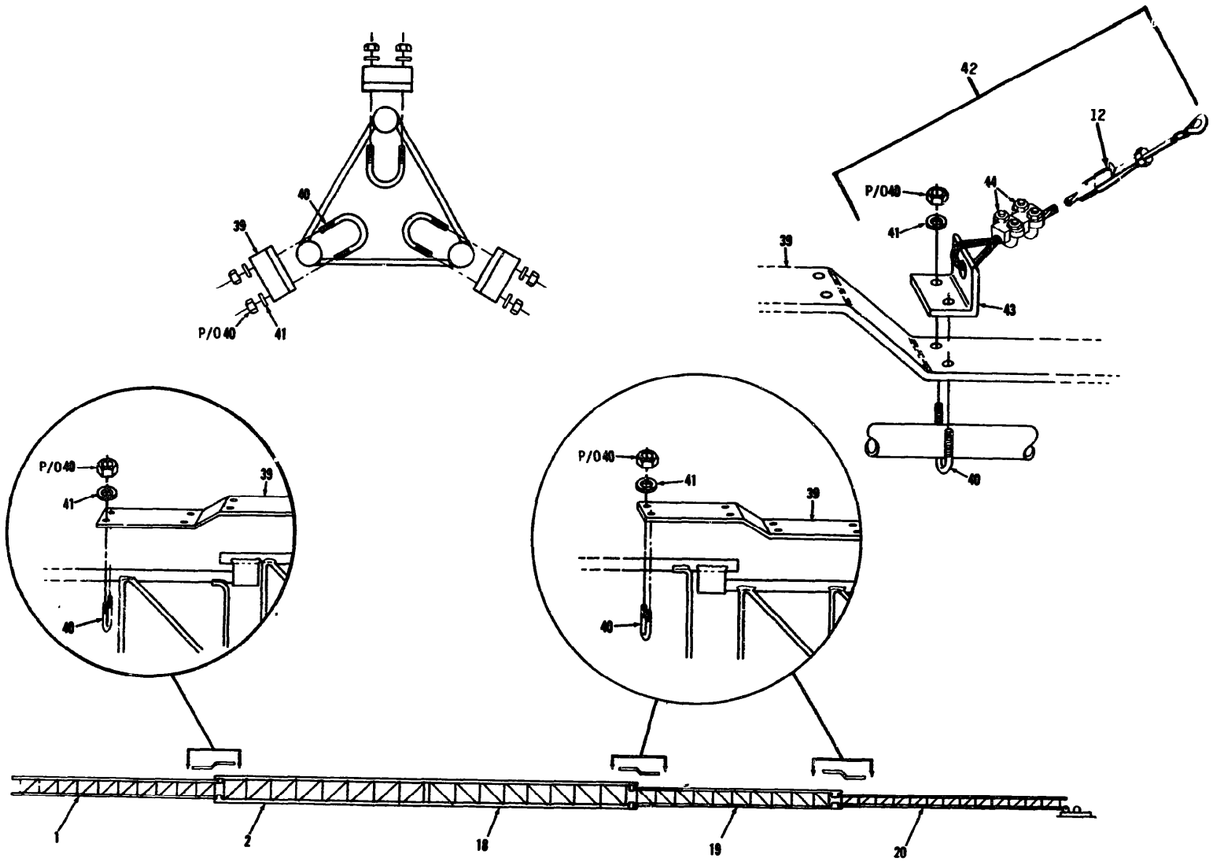


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Figure B-5. Tower and attachments (Sheet 2 of 2).

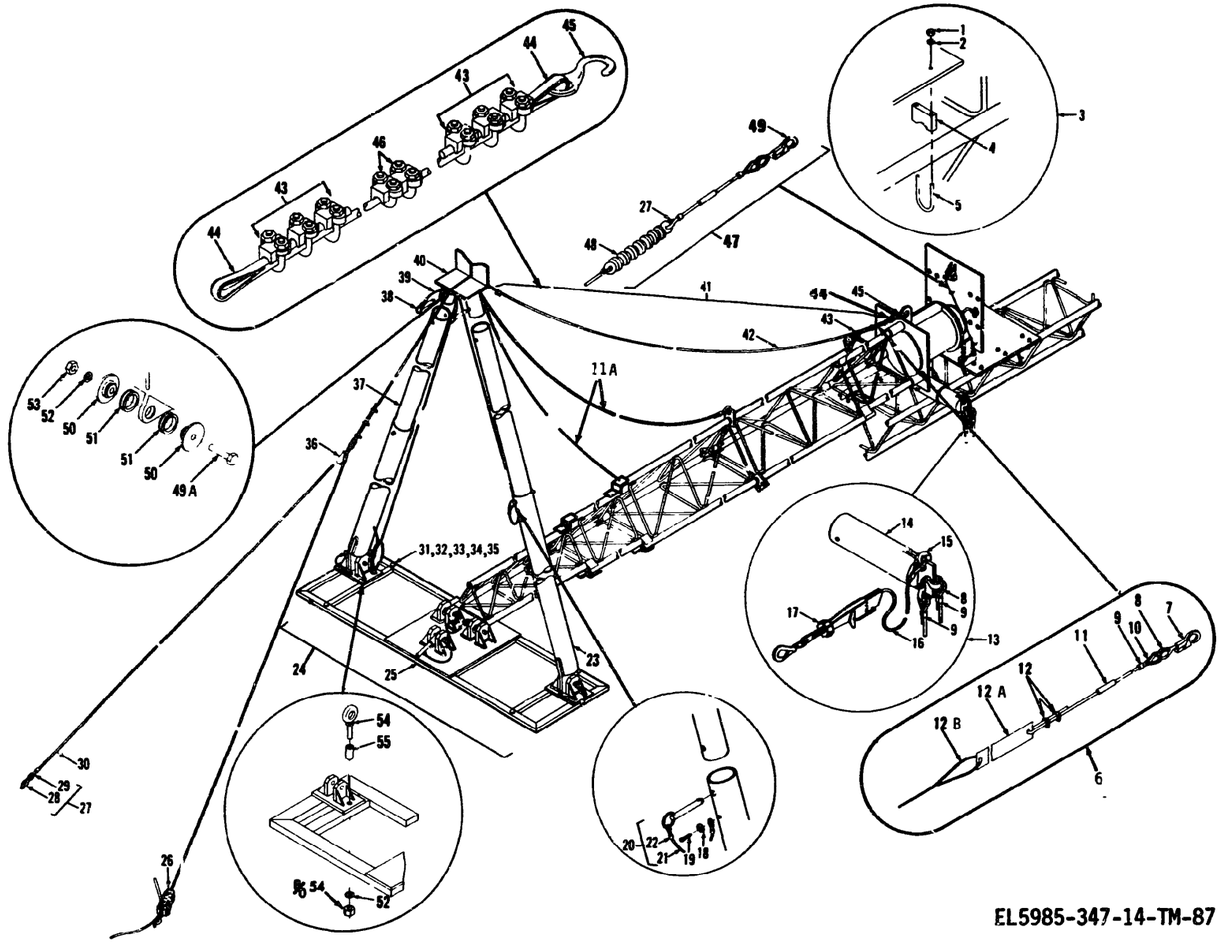

Figure B-6 . Cables, ropes, and base assembly

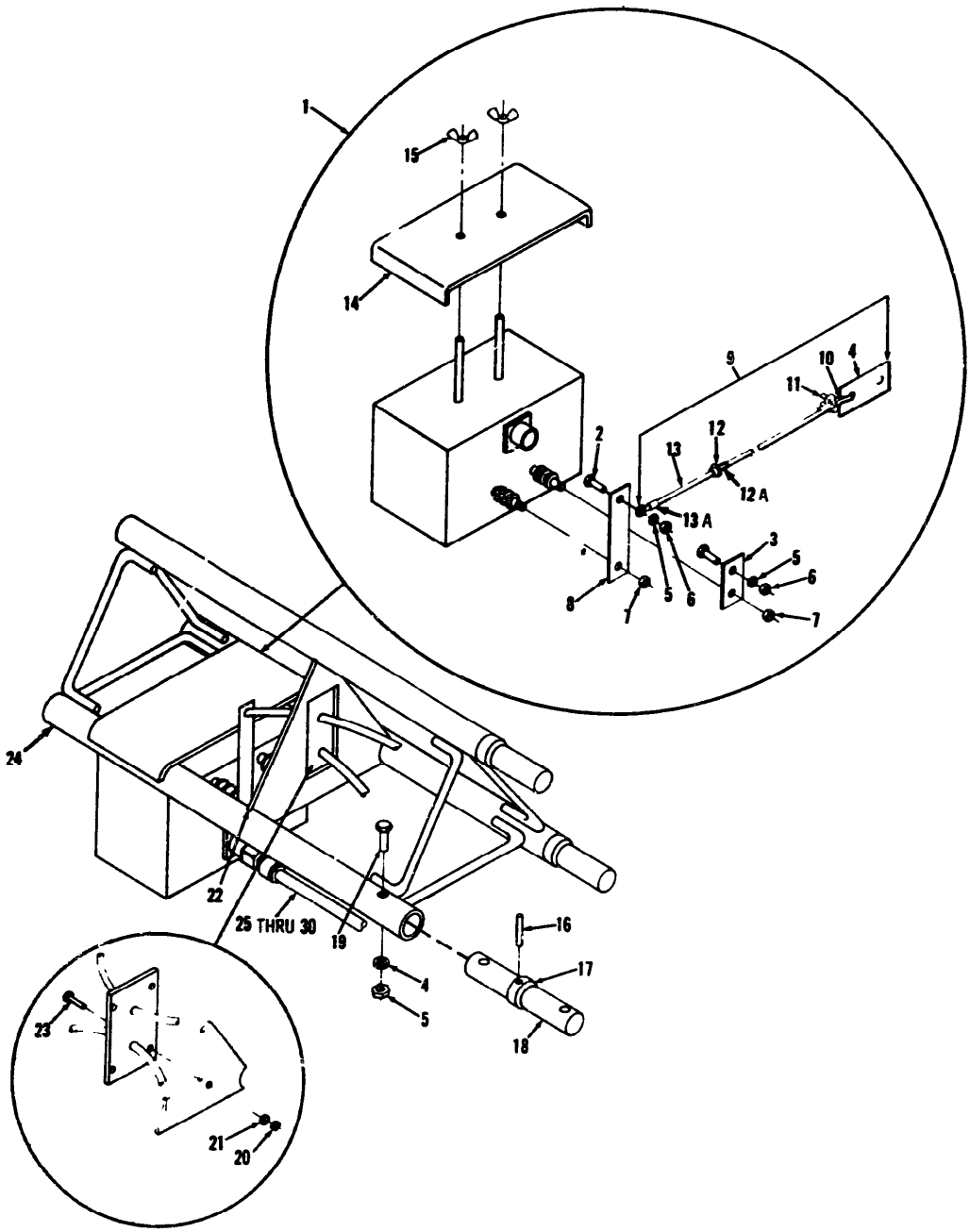

Figure B-7. Boom extension and balun

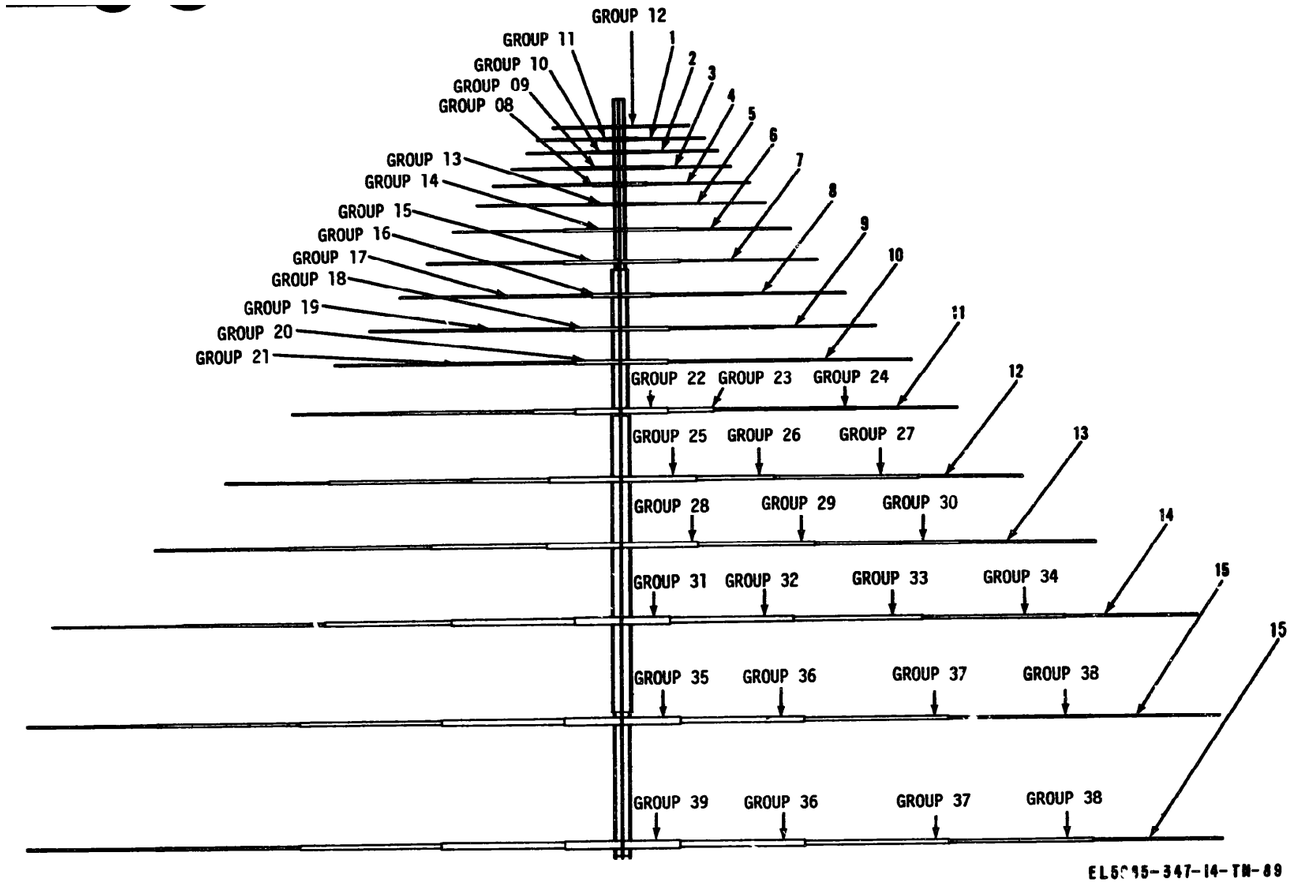

Figure B-8 Elements

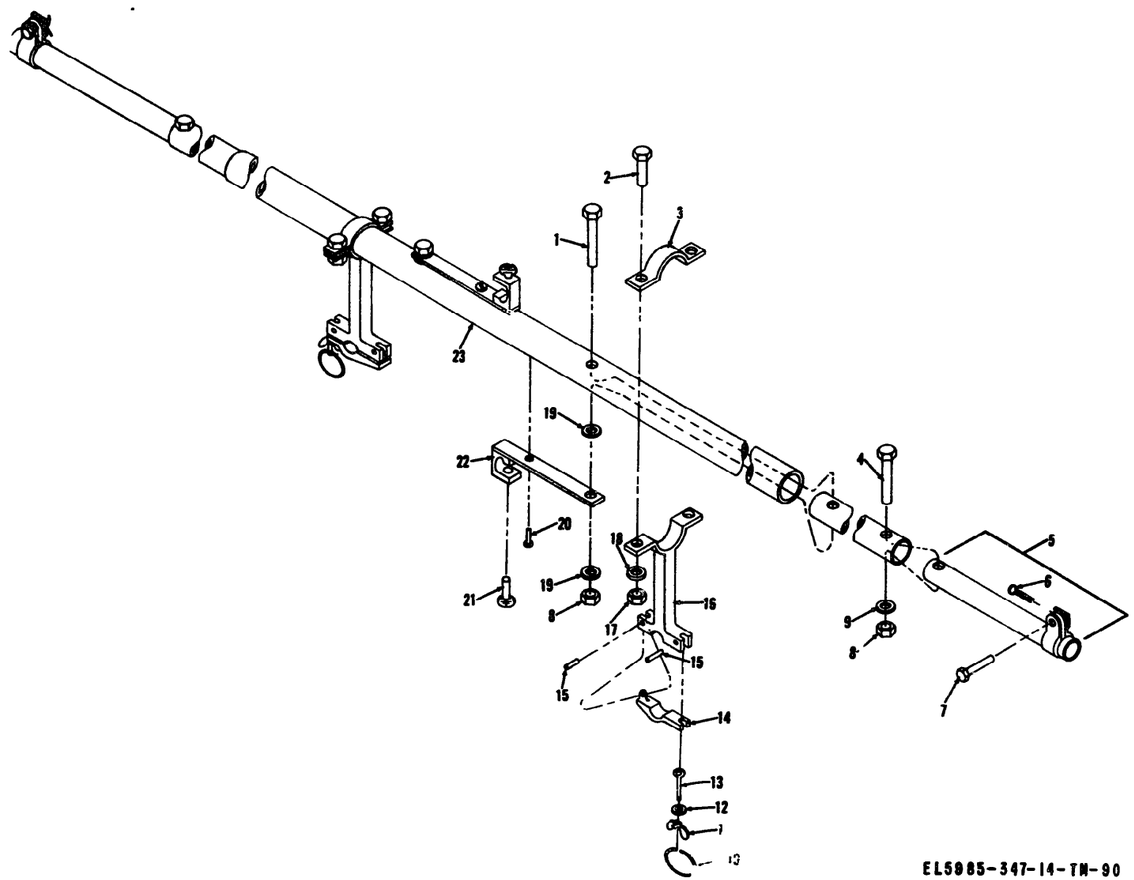

Figure B-9 Insulator assembly, center, Element 5.

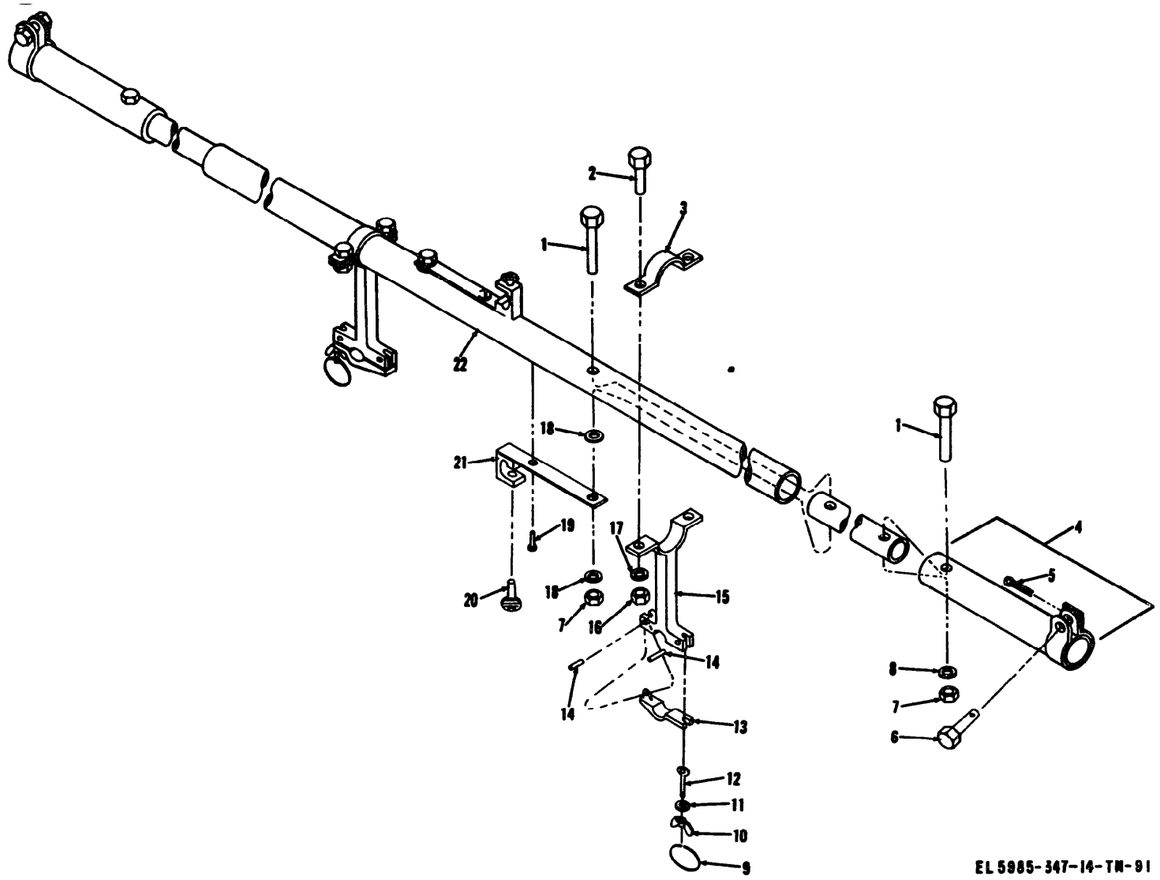

Figure B-10 Insulator assembly, center, Element 4.

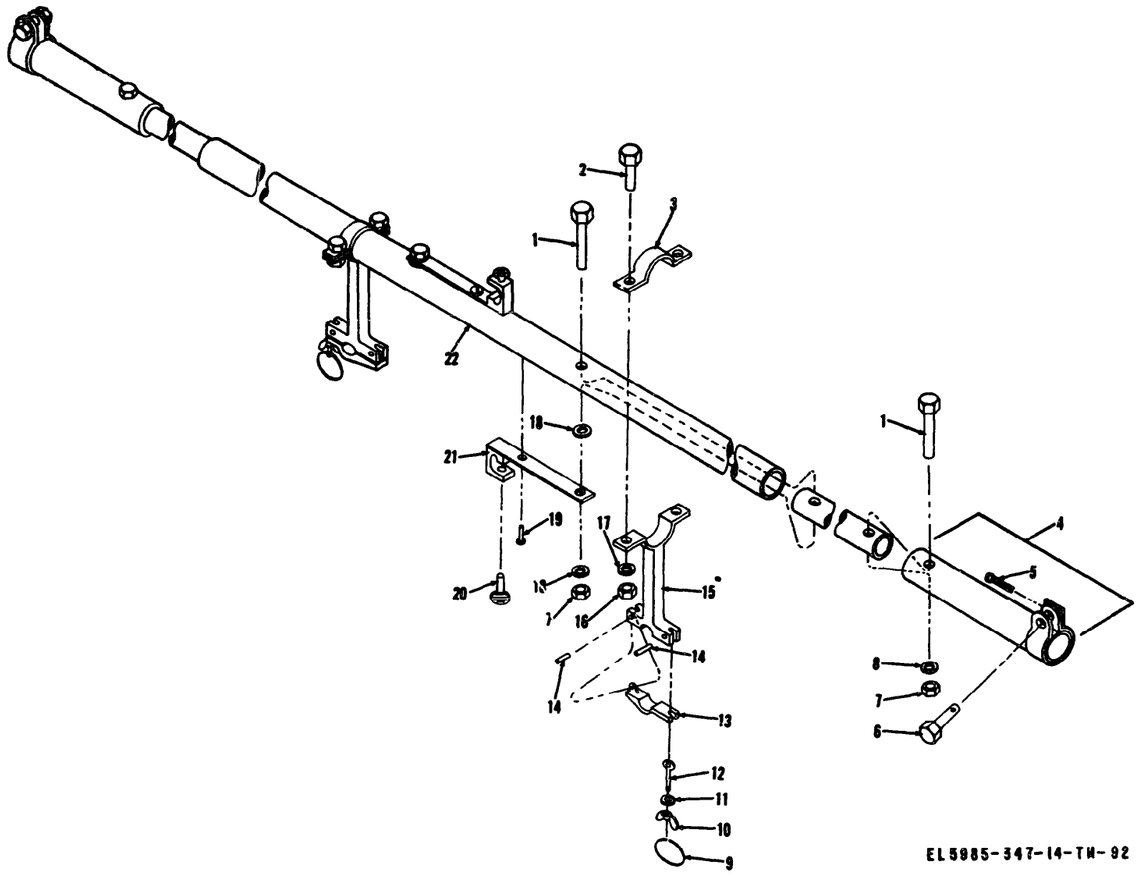

Figure B-11. Insulator assembly, center, Element 3.

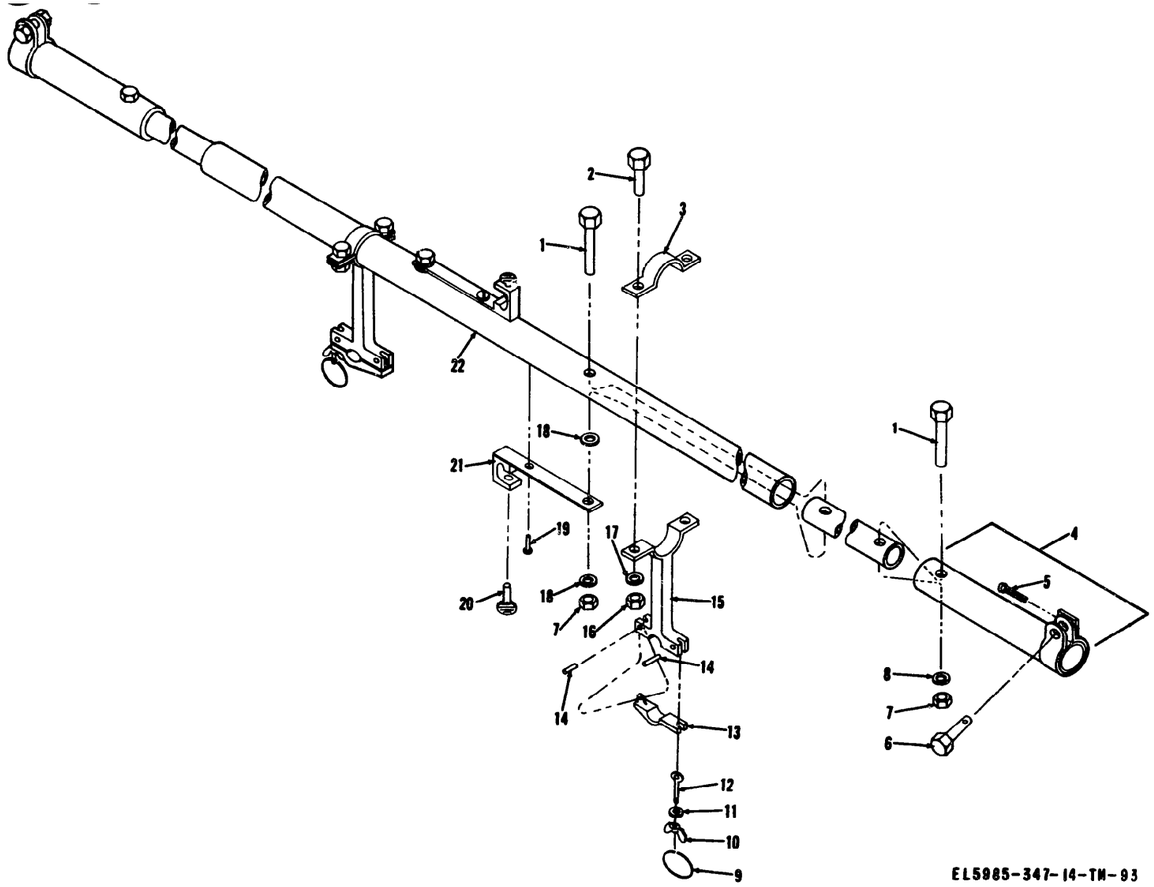

Figure B-12 Insulator assembly, center, Element 2

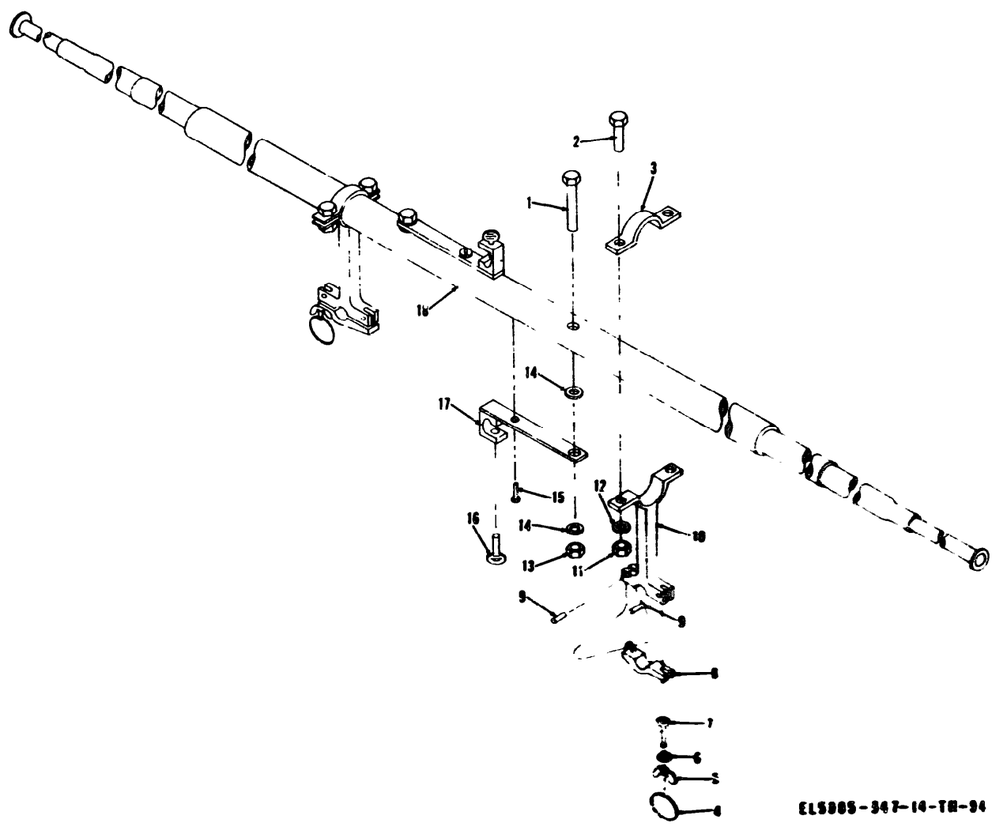

Figure B-13. Insulator assembly, center, Element 1.

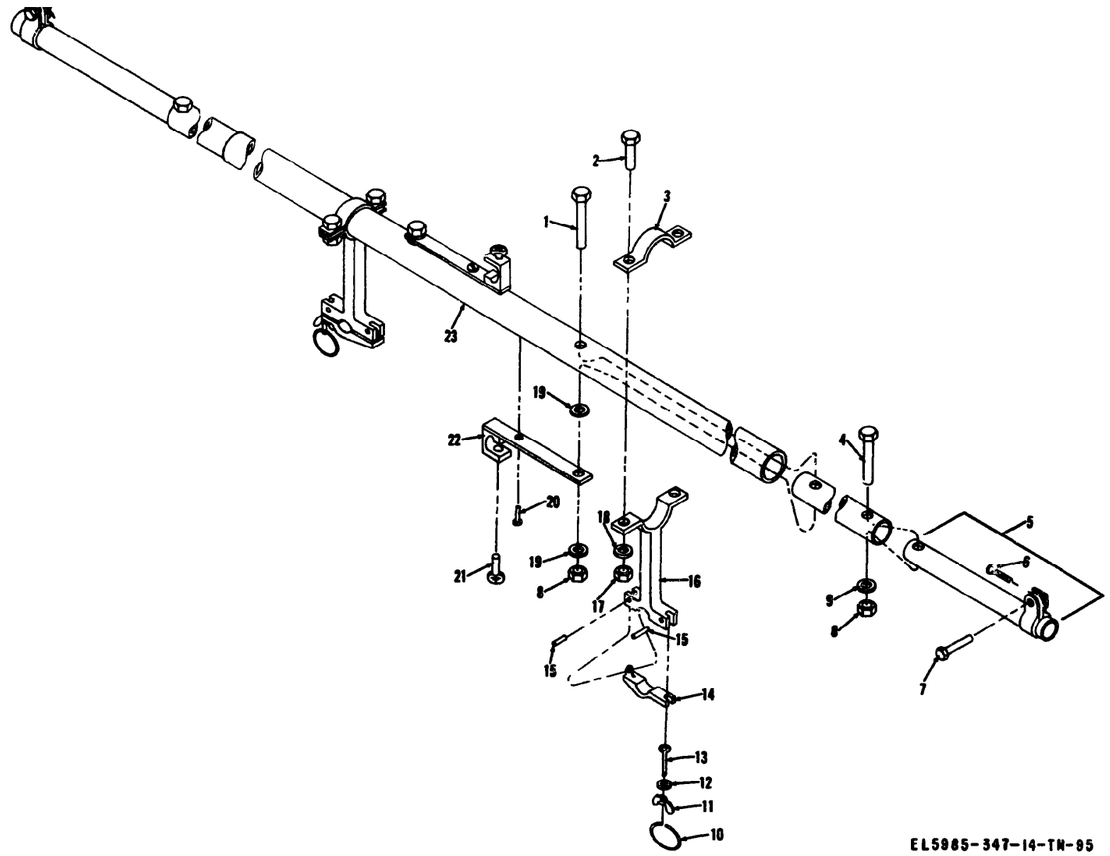

Figure B-14 Insulator assembly, center, Element 6.

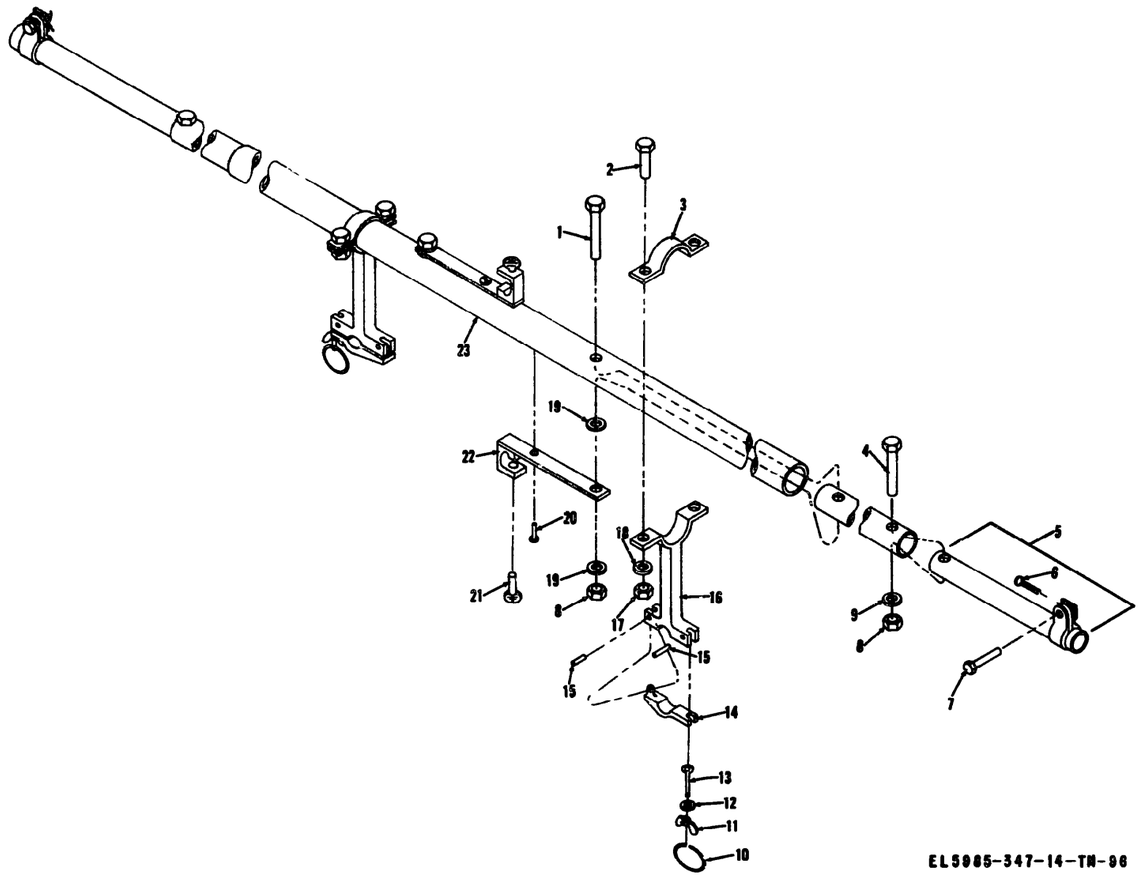

Figure B-15 Insulator assembly, center, Element 7.

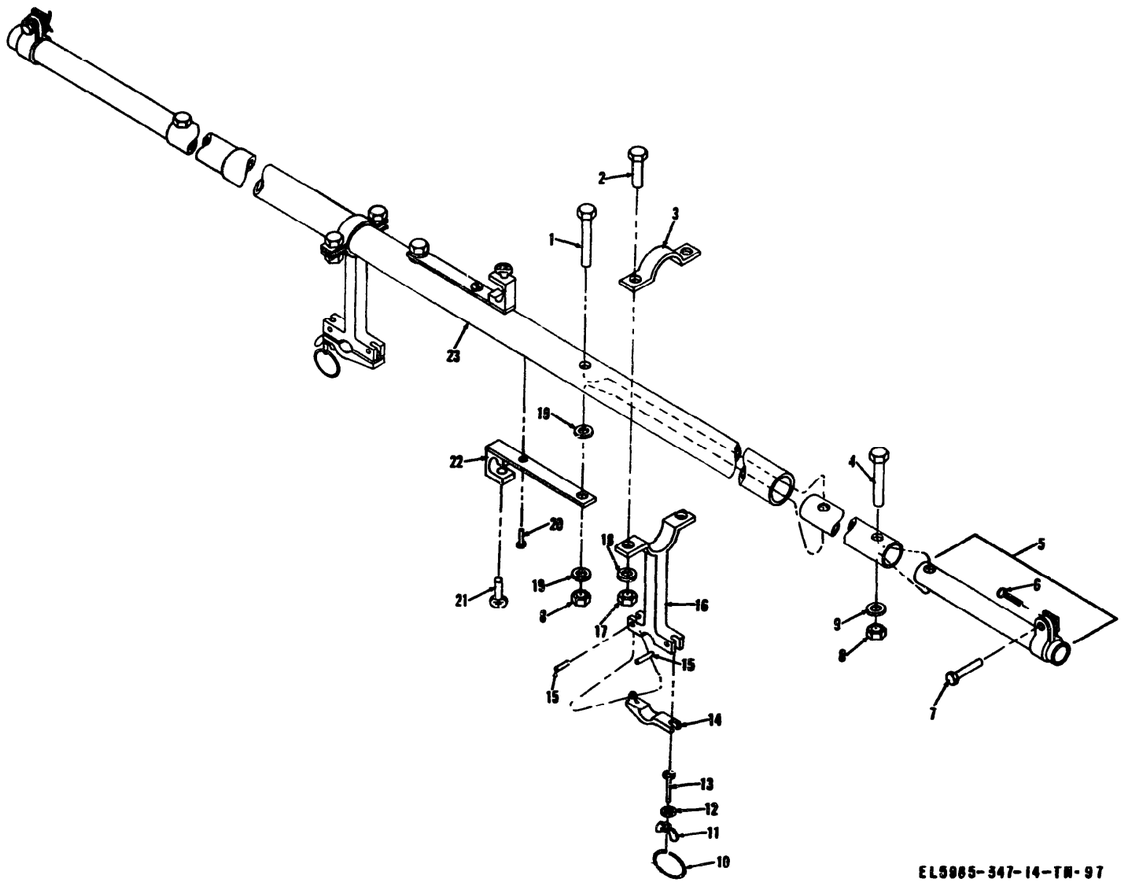

Figure B-16 Insulator assembly, center, Element 8.

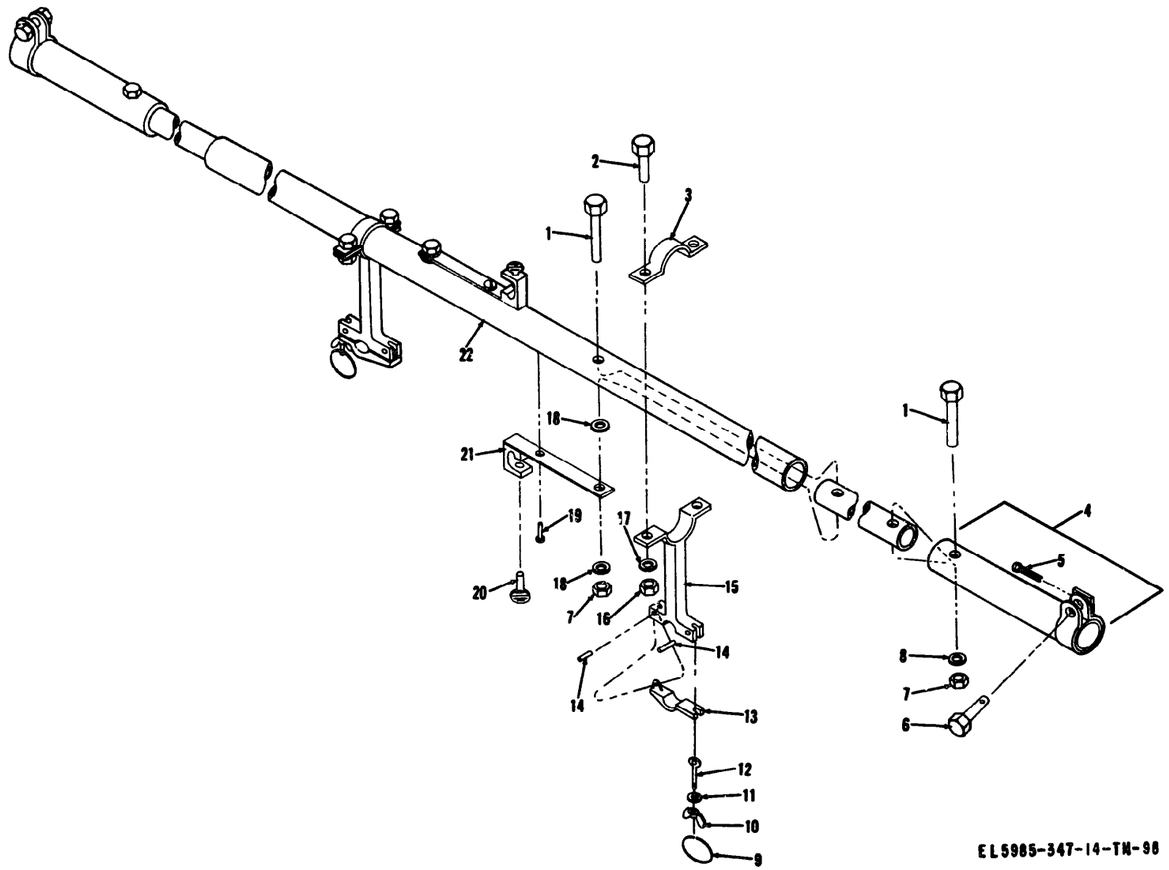

Figure B-17. Insulator assembly, center, Element 9.

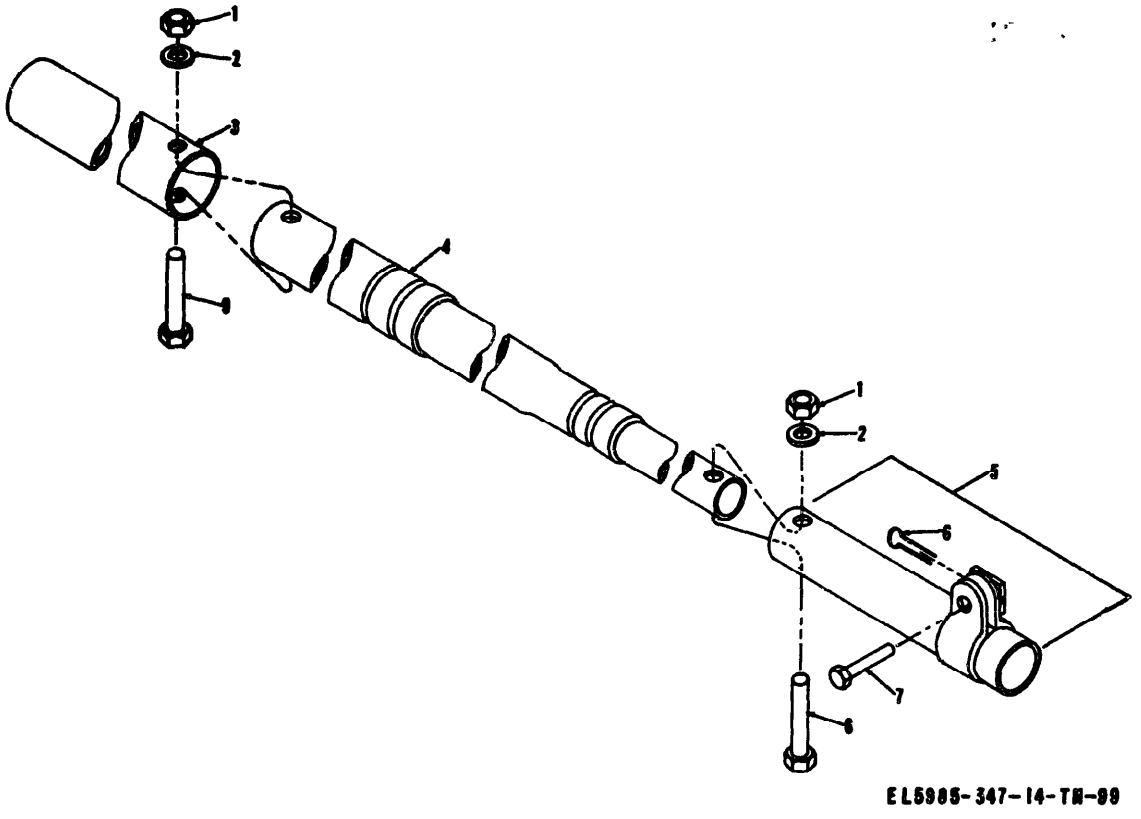

Figure B-18. Tube assembly, element 9-2.

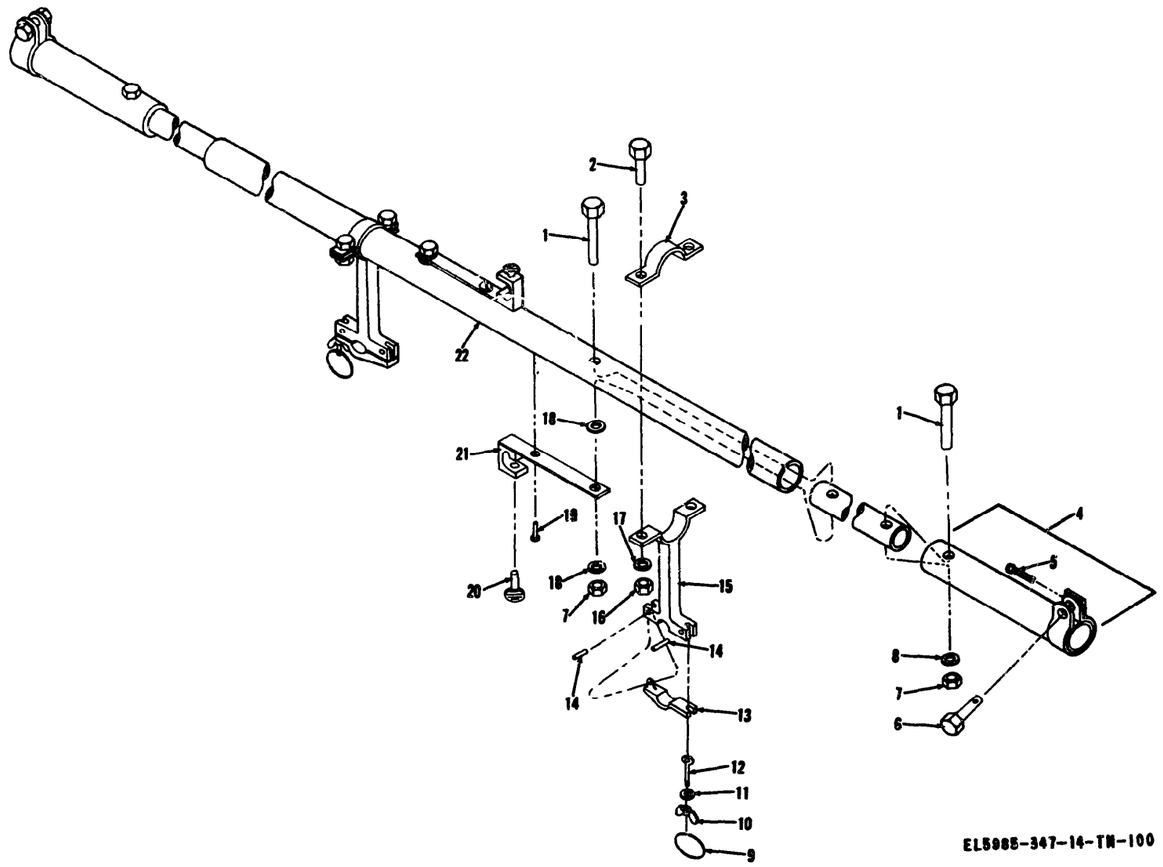

Figure B-19 Insulator assembly, center, Element 10.

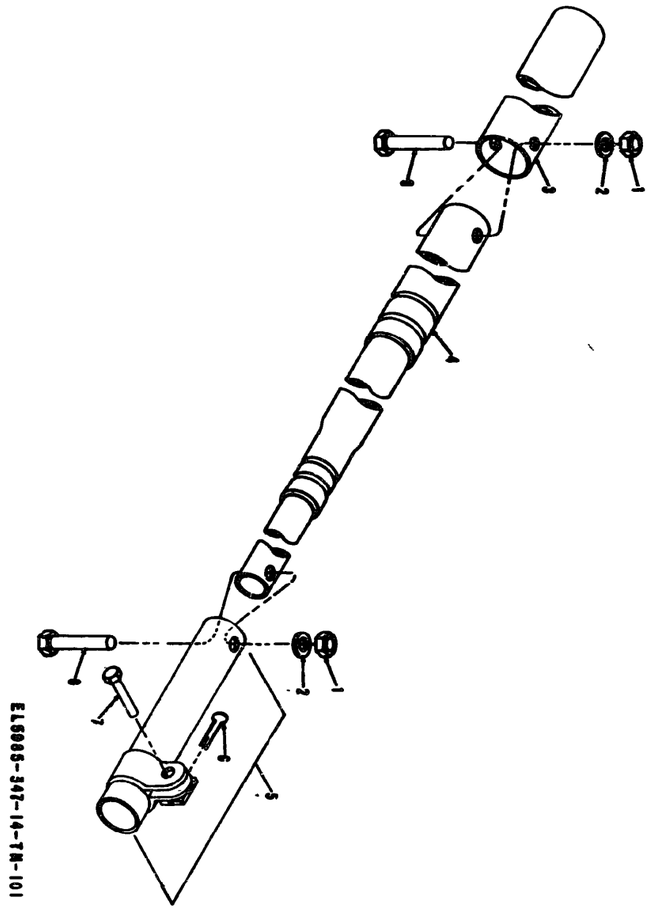

Figure B-20 Tube assembly, element 10-2.

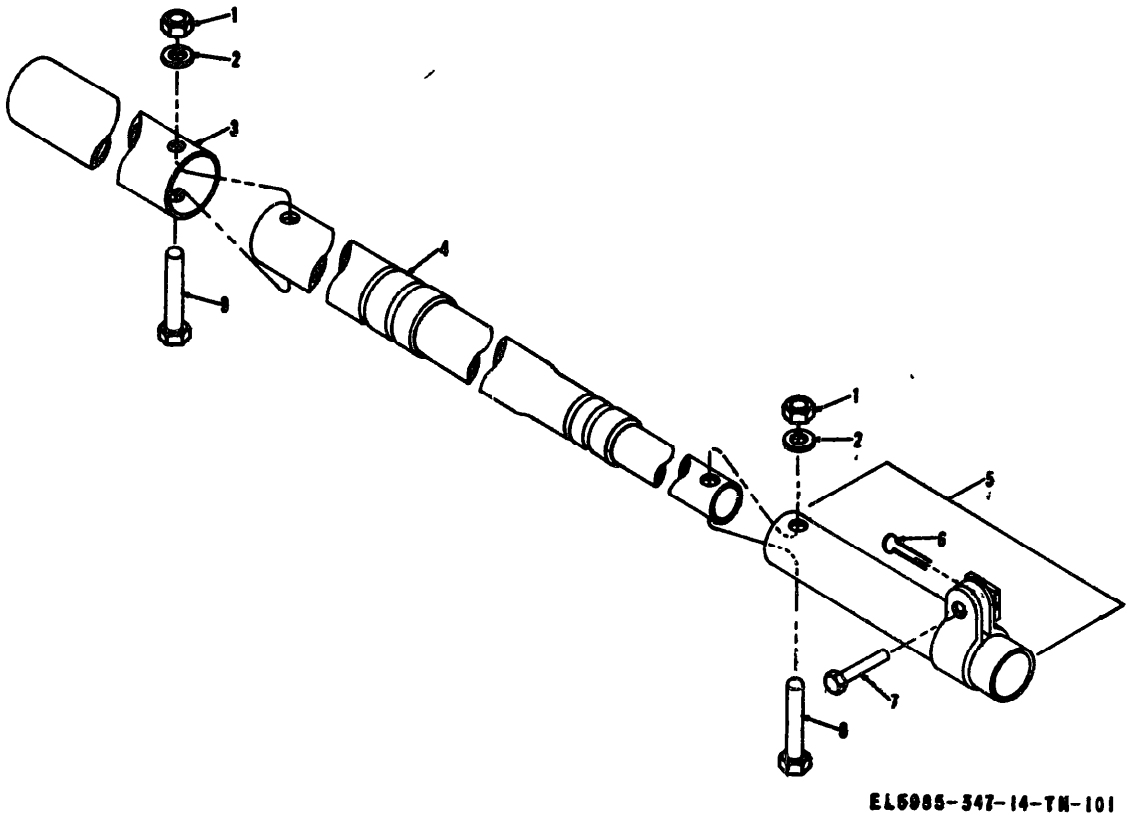

Figure B-20. Tube assembly, element 10-2.

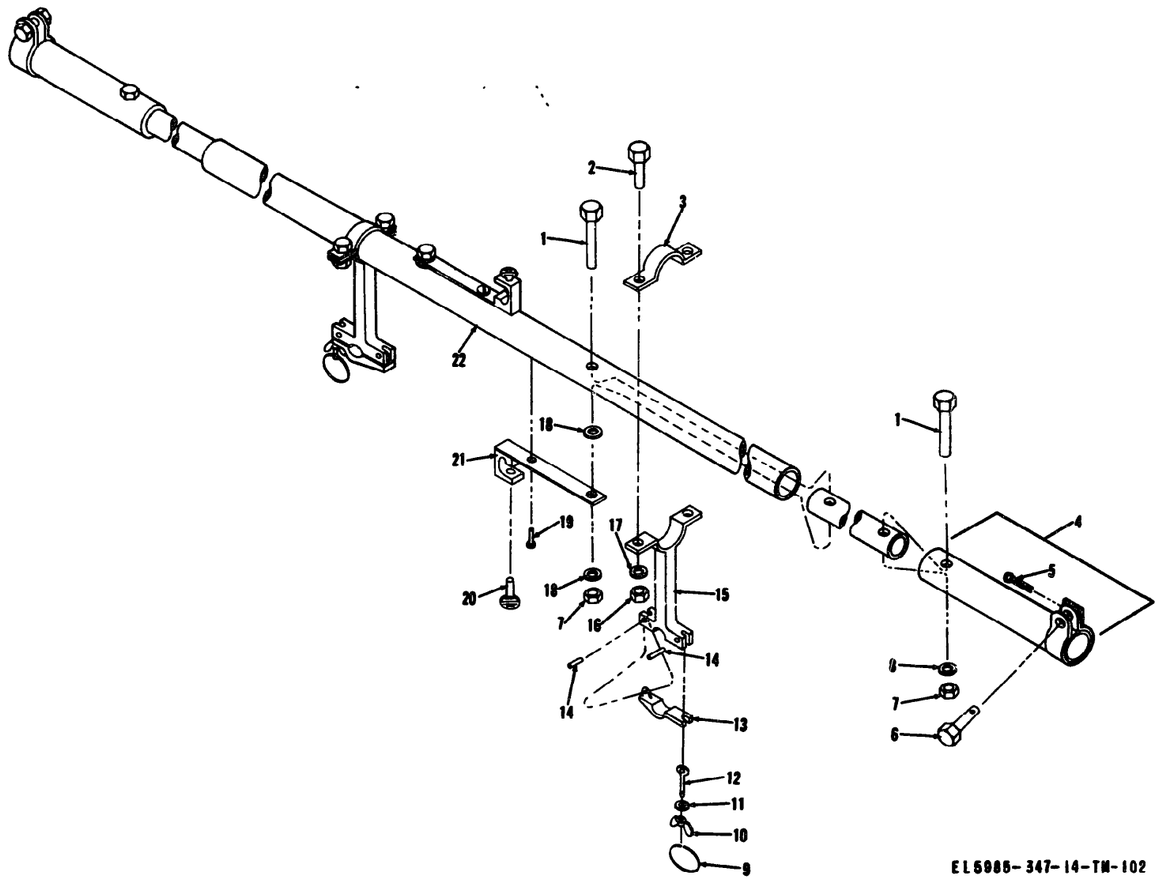

Figure B-21 Insulator assembly, center, Element 11

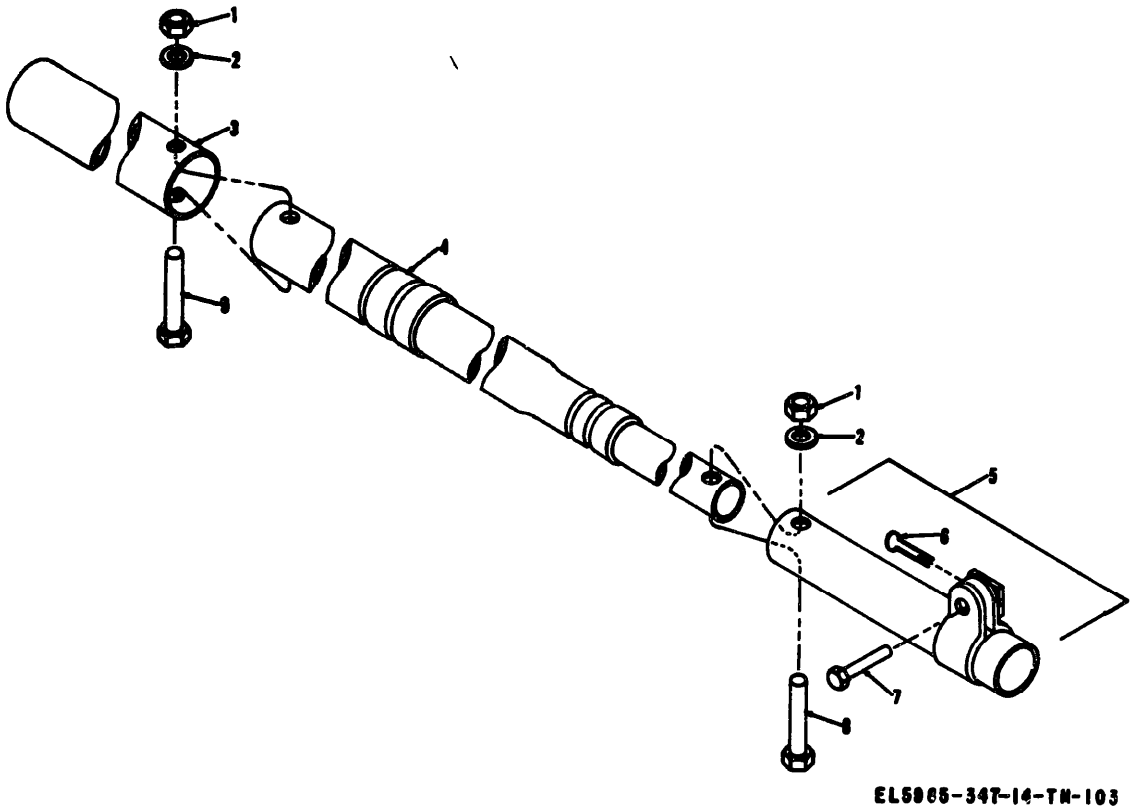

Figure B-22. Tube assembly, element 11-2.

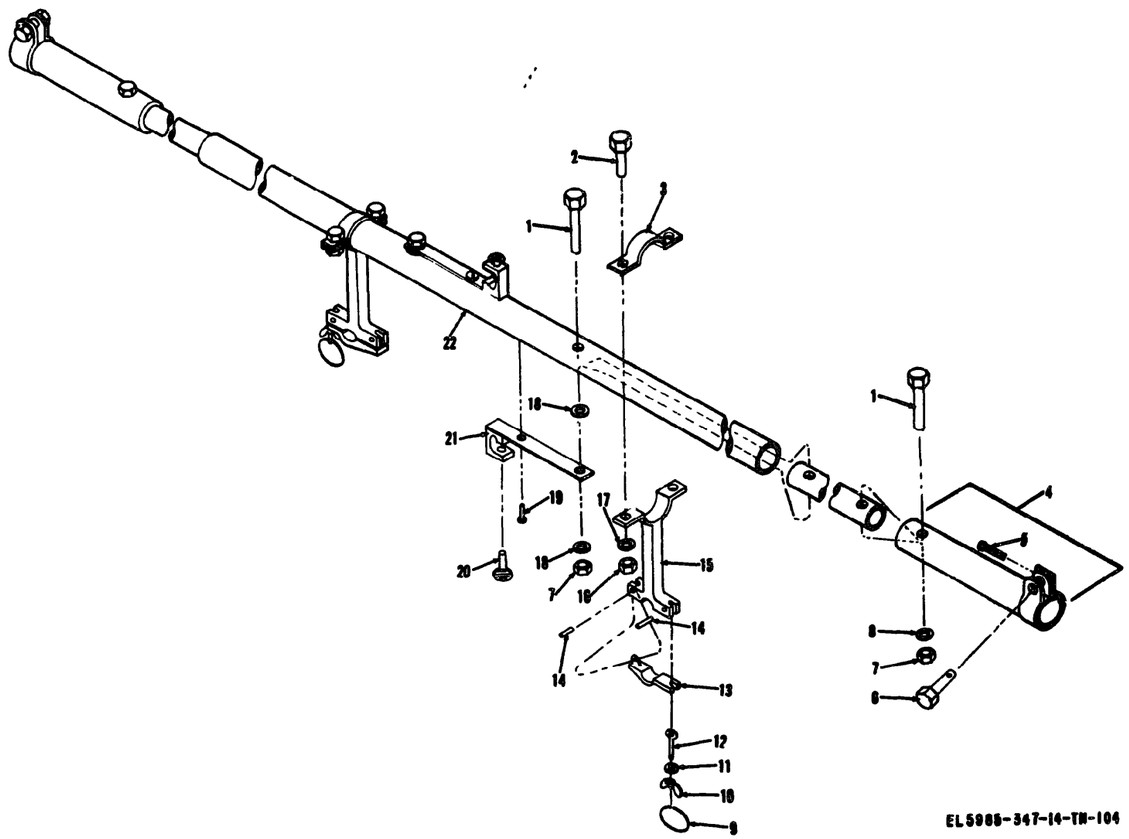

Figure B-23. Insulator assembly, center, Element 12.

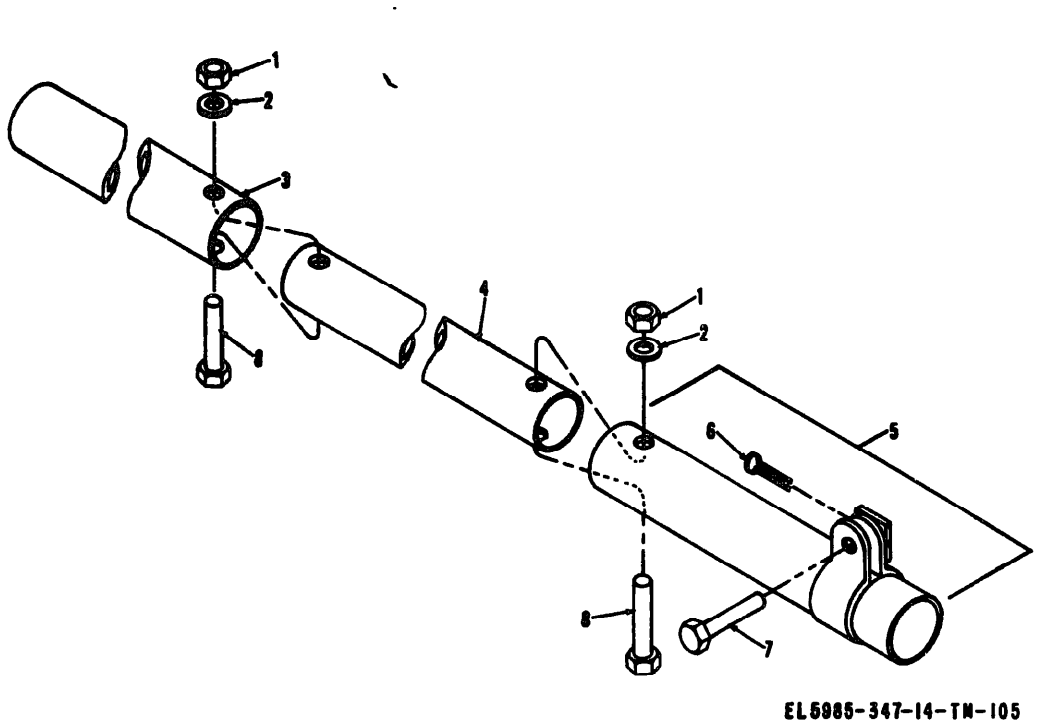

Figure B-24 Tube assembly element 12-2

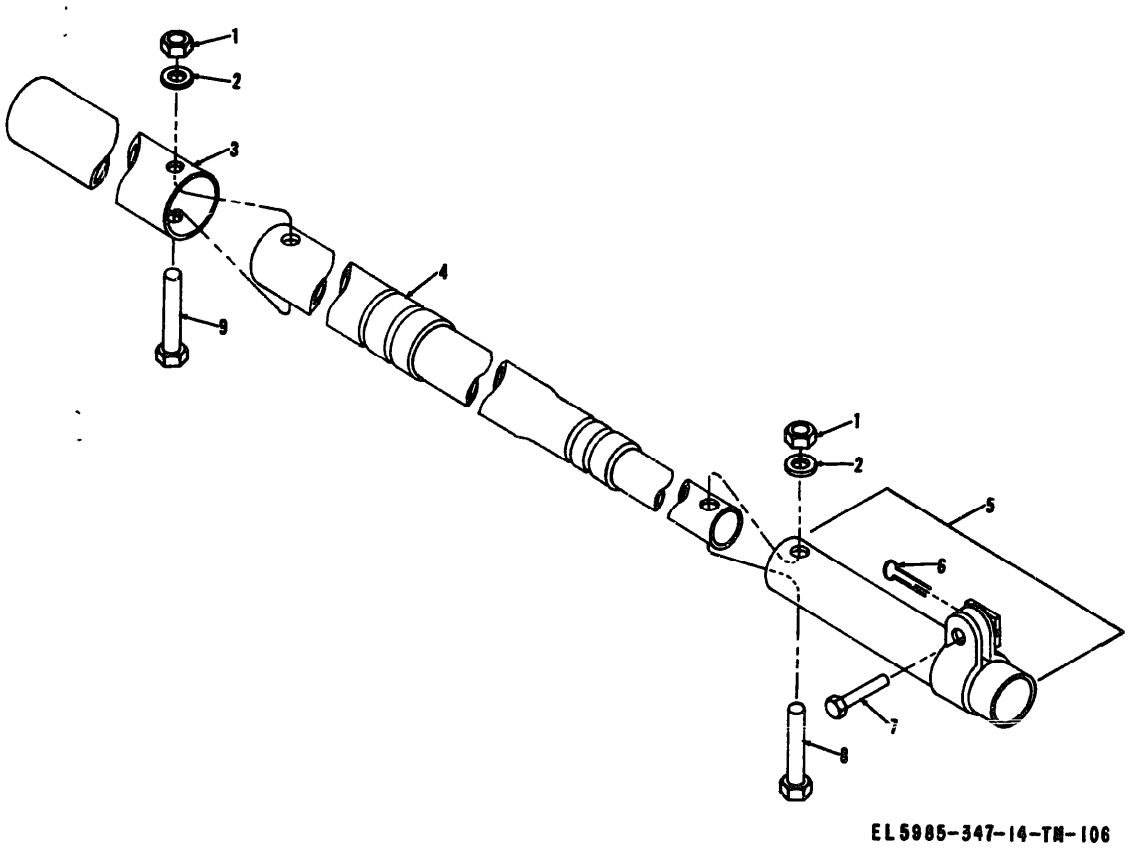

Figure B-25. Tube assembly, element 12-3

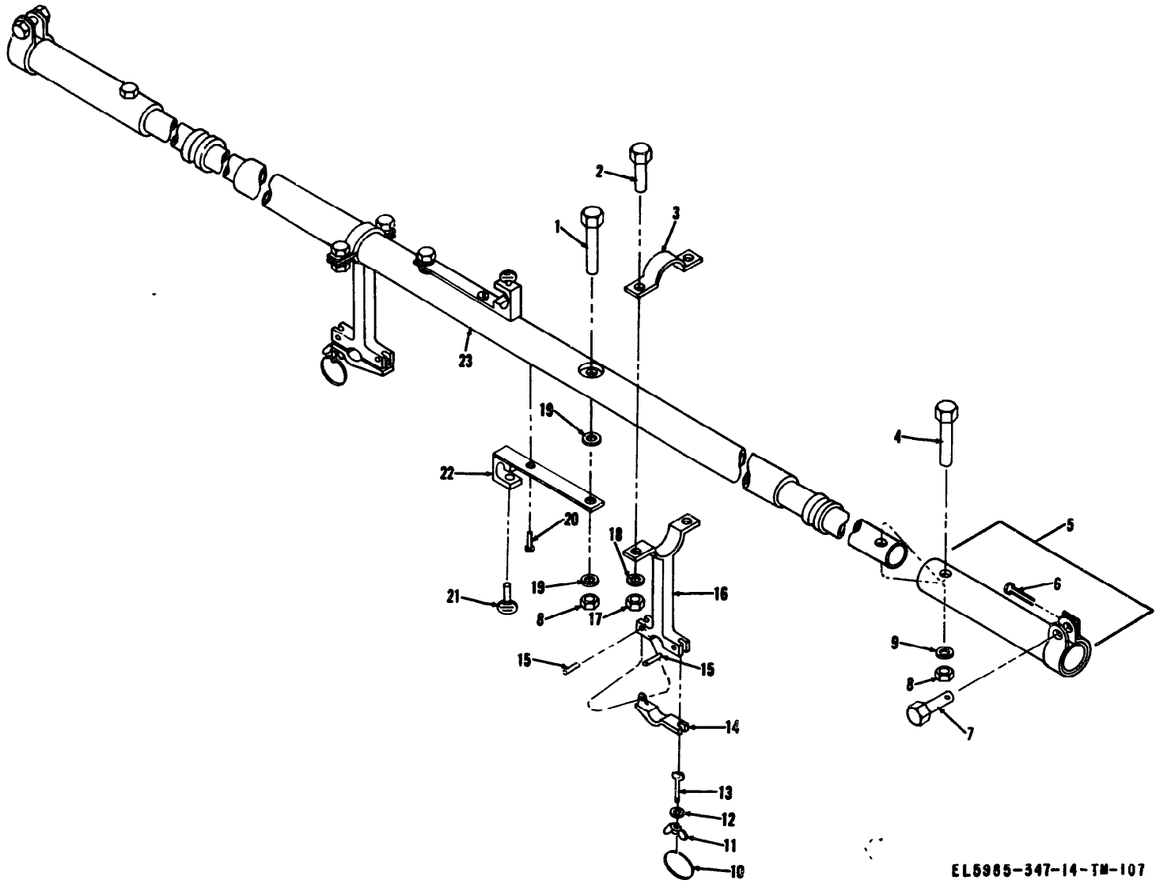

Figure B-26. Insulator assembly, center, Element 13.

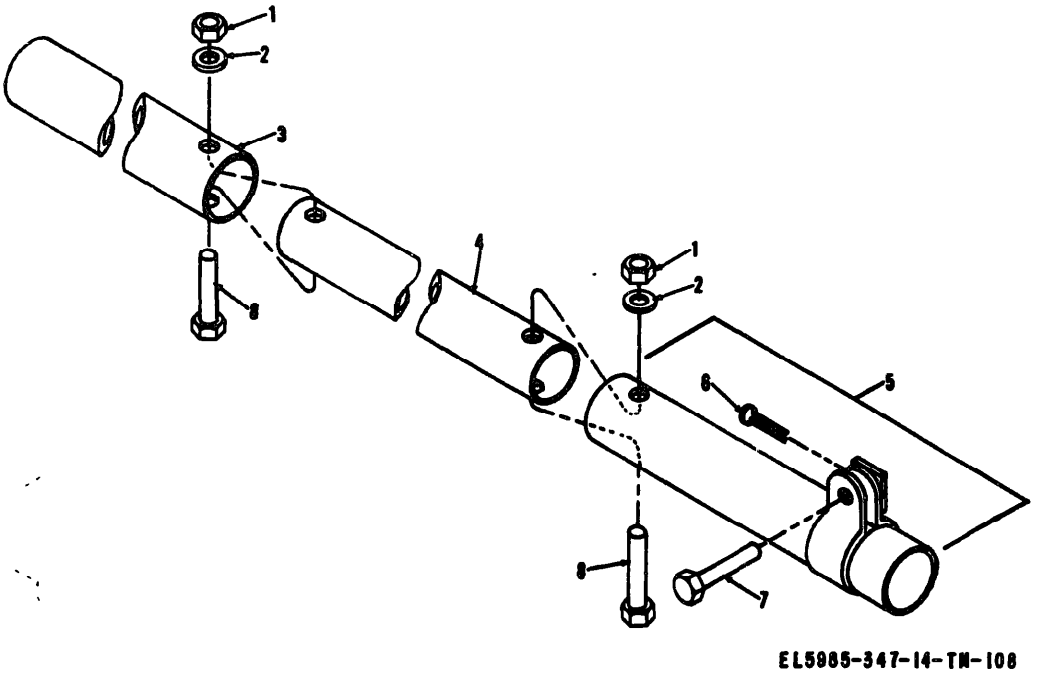

Figure B-27 Tube assembly, element 13-2

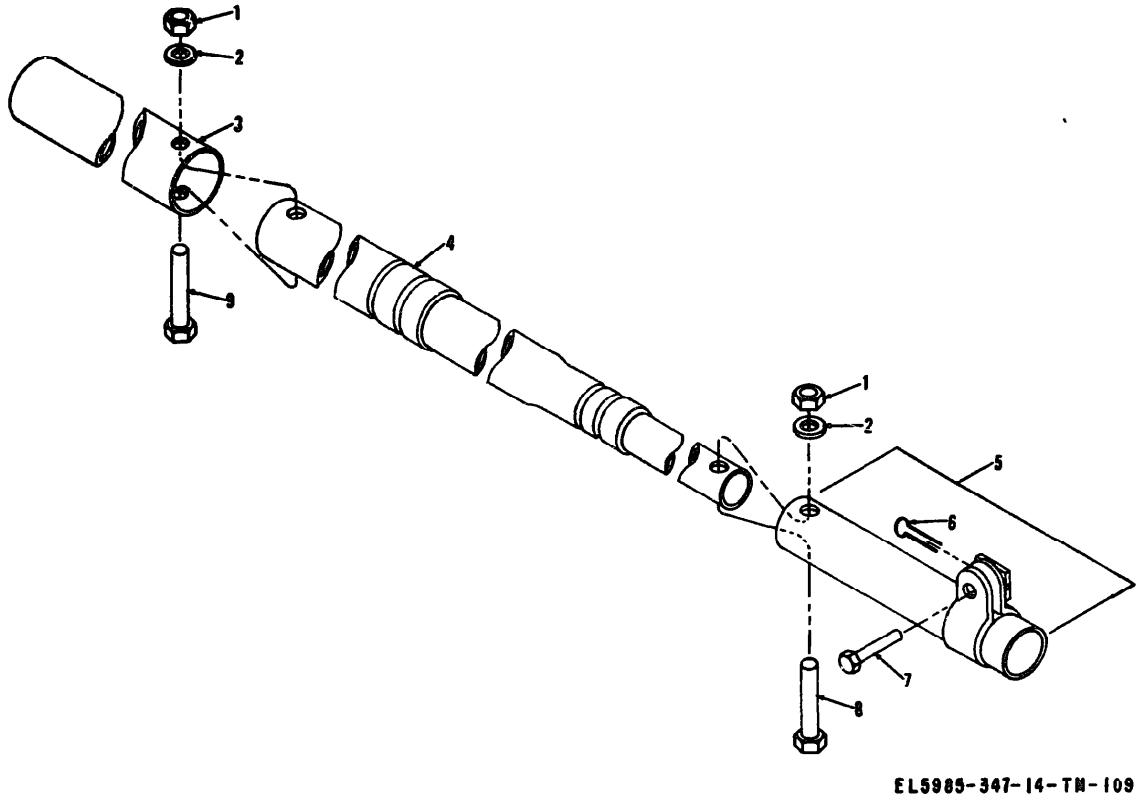

Figure B-28 Tube assembly, element 13-3

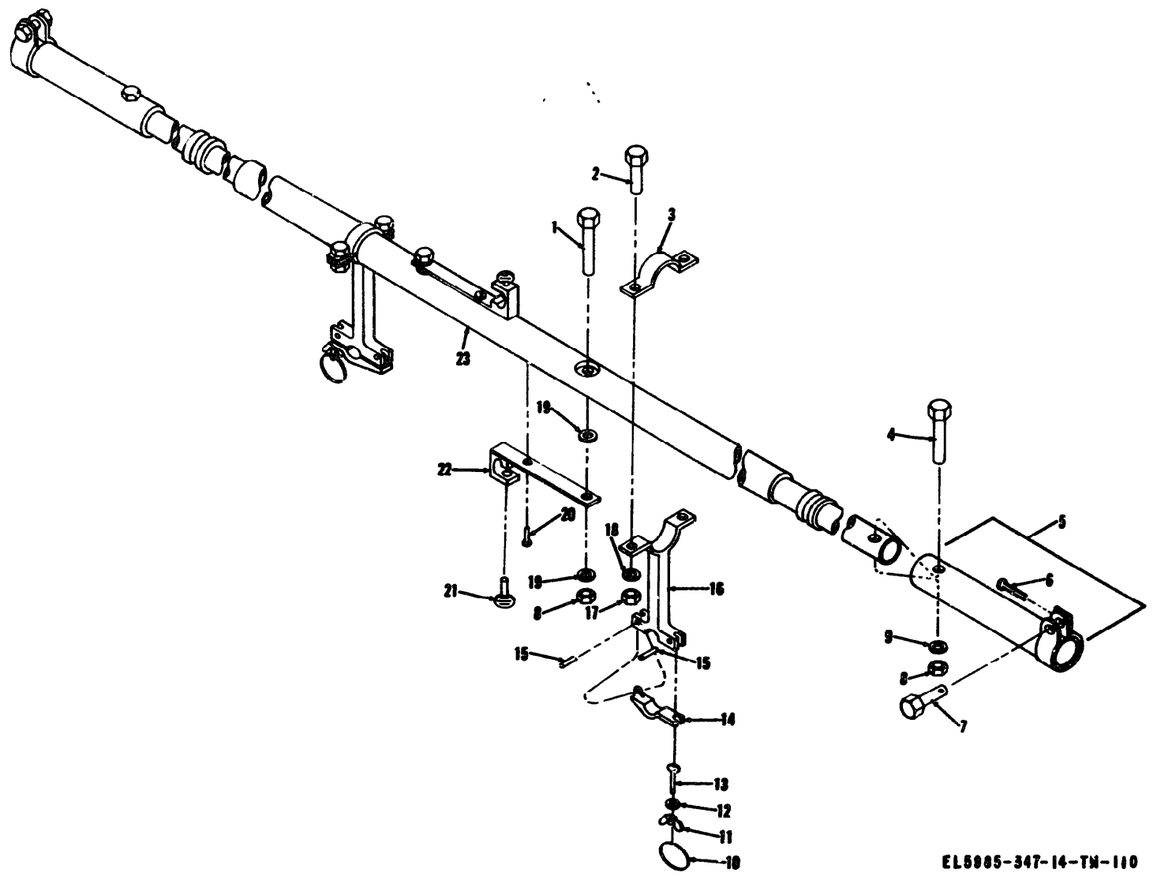

Figure B-29. Insulator assembly, center, Element 14.

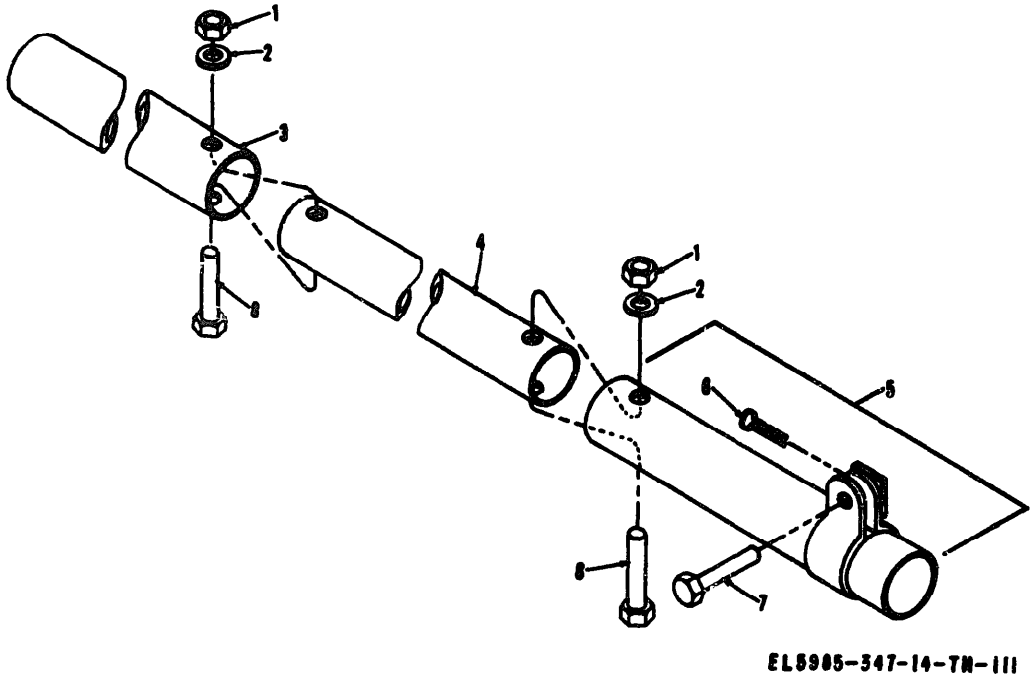

Figure B-30 Tube assembly. element 14-2

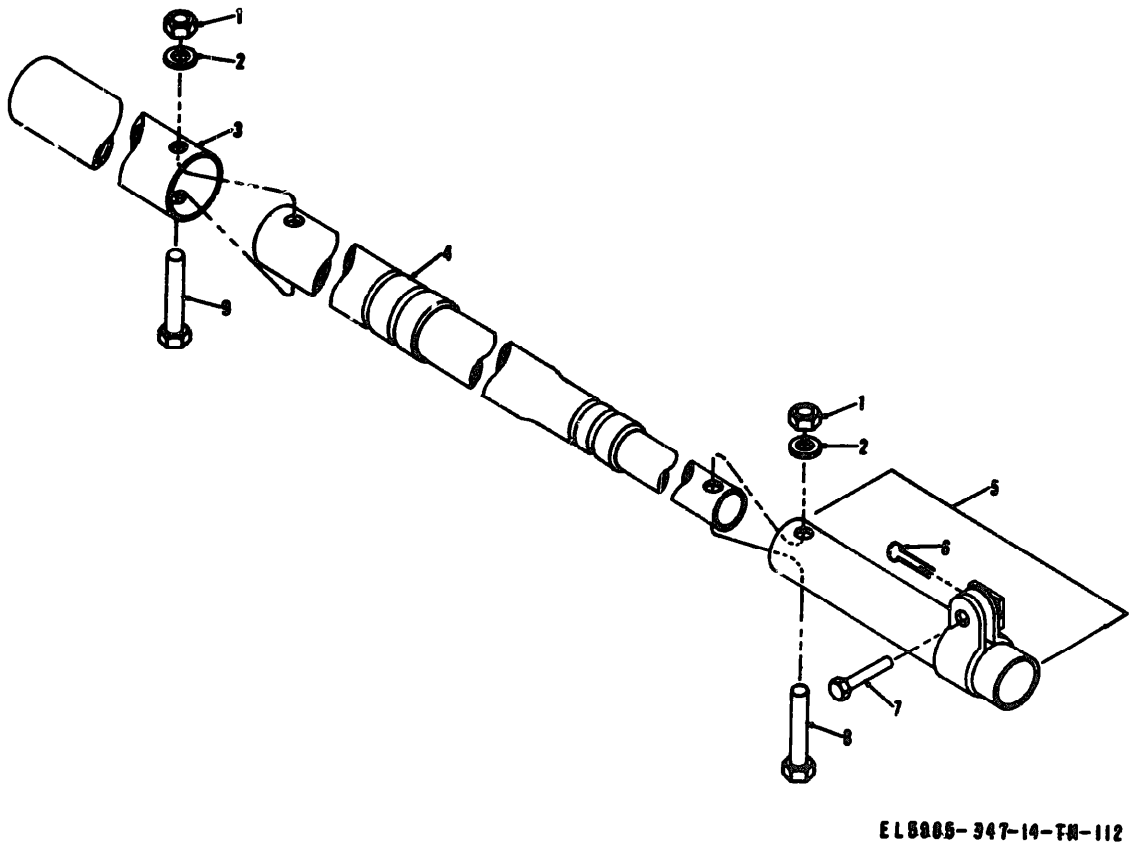

Figure B-31. Tube assembly, element 14-3.

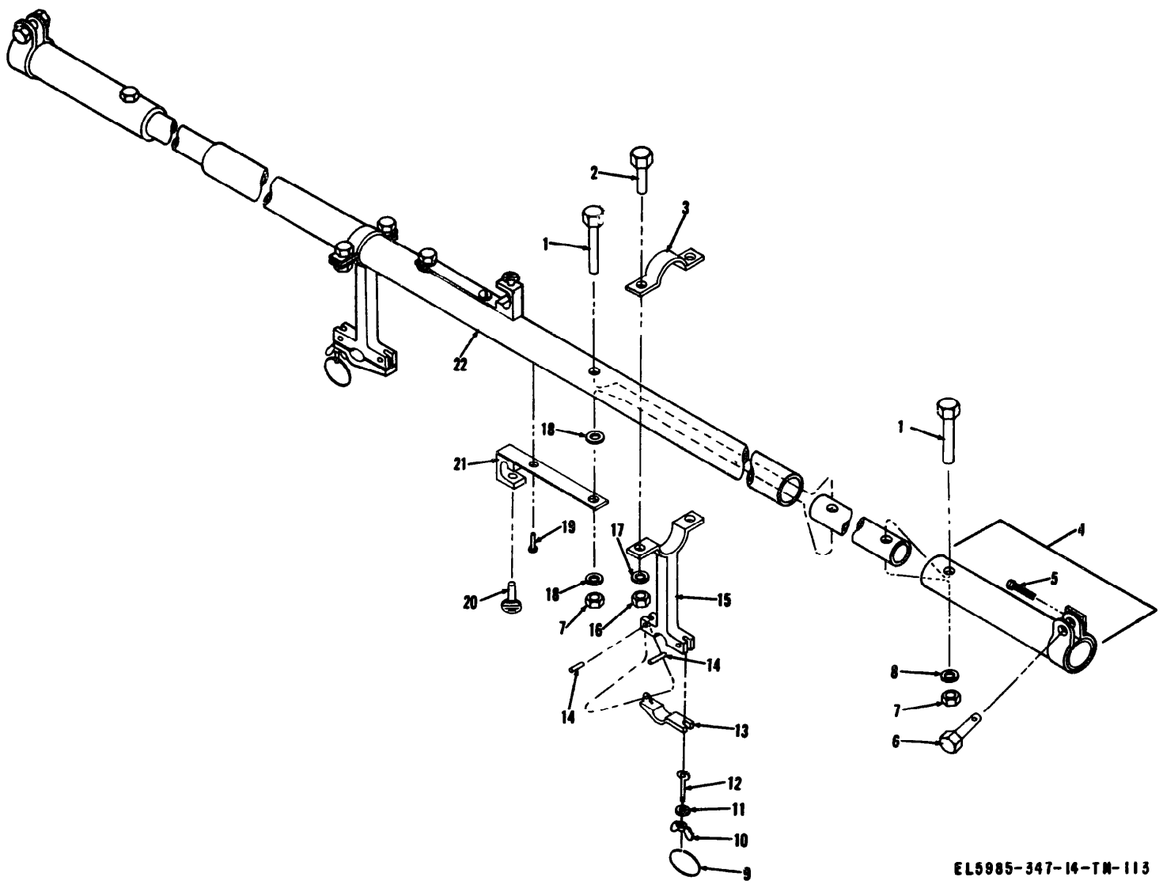

Figure B-32 Insulator assembly, center, Element 15

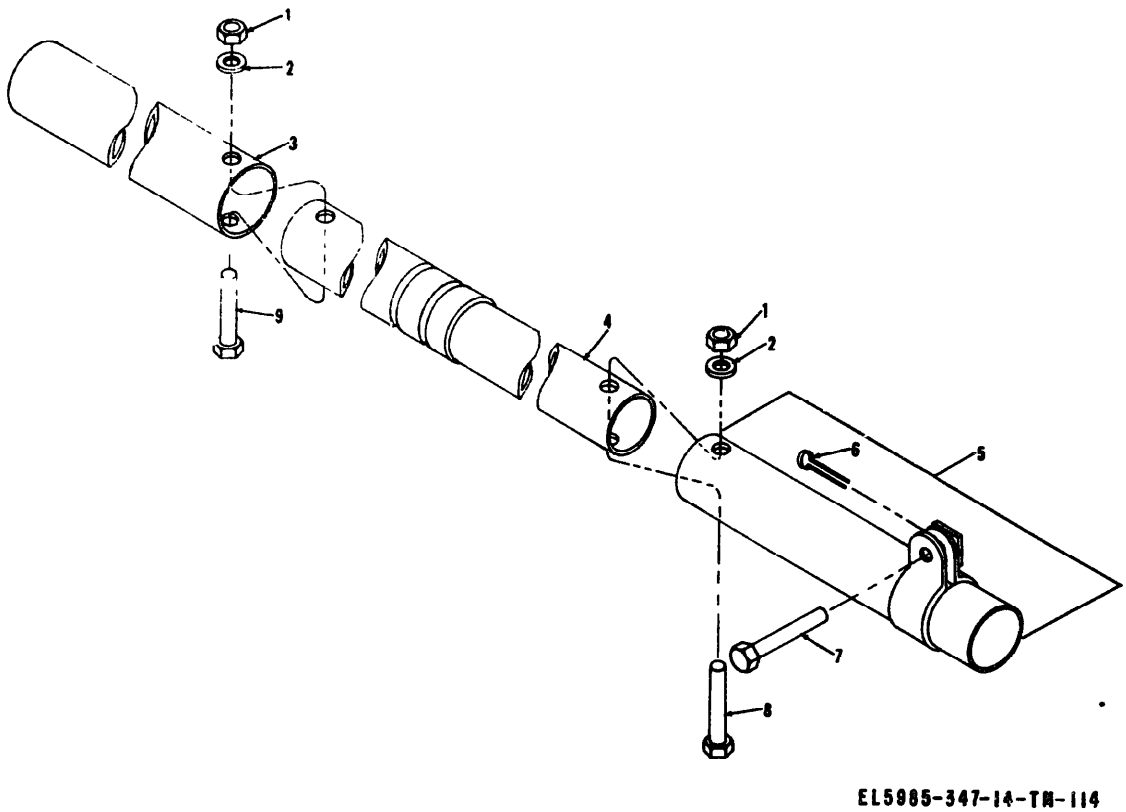

Figure B-33 Tube assembly, element 15-2

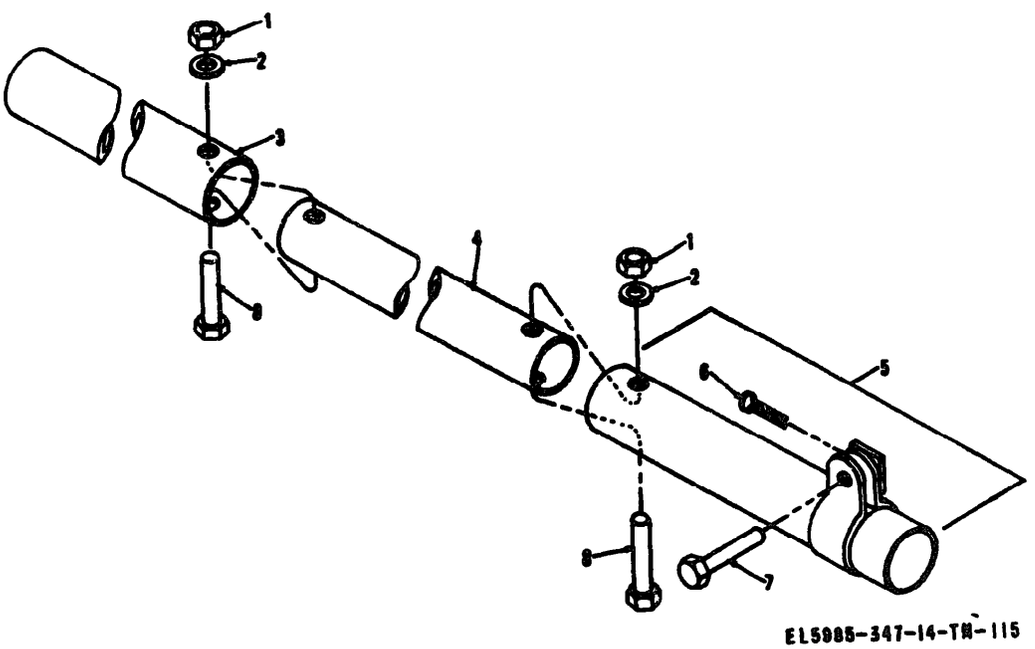

Figure B-34. Tube assembly, element 15-3.

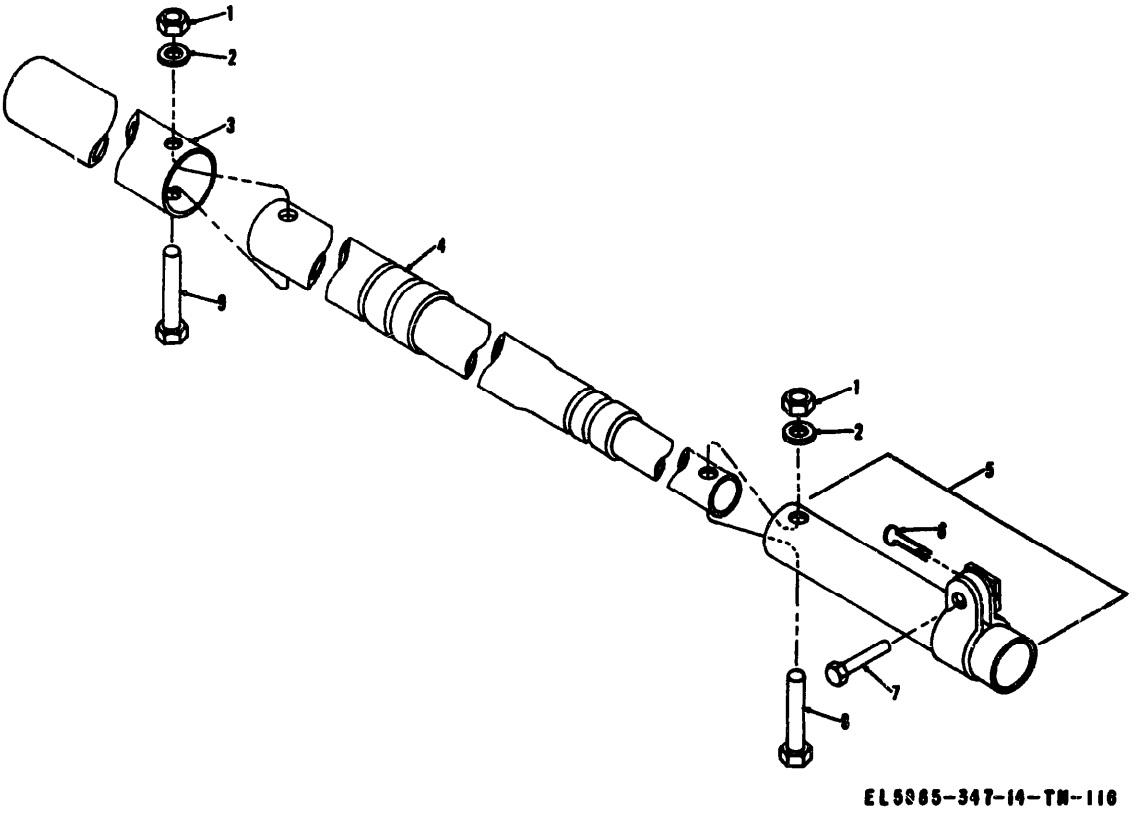

Figure B-35 Tube assembly, element 15-4.

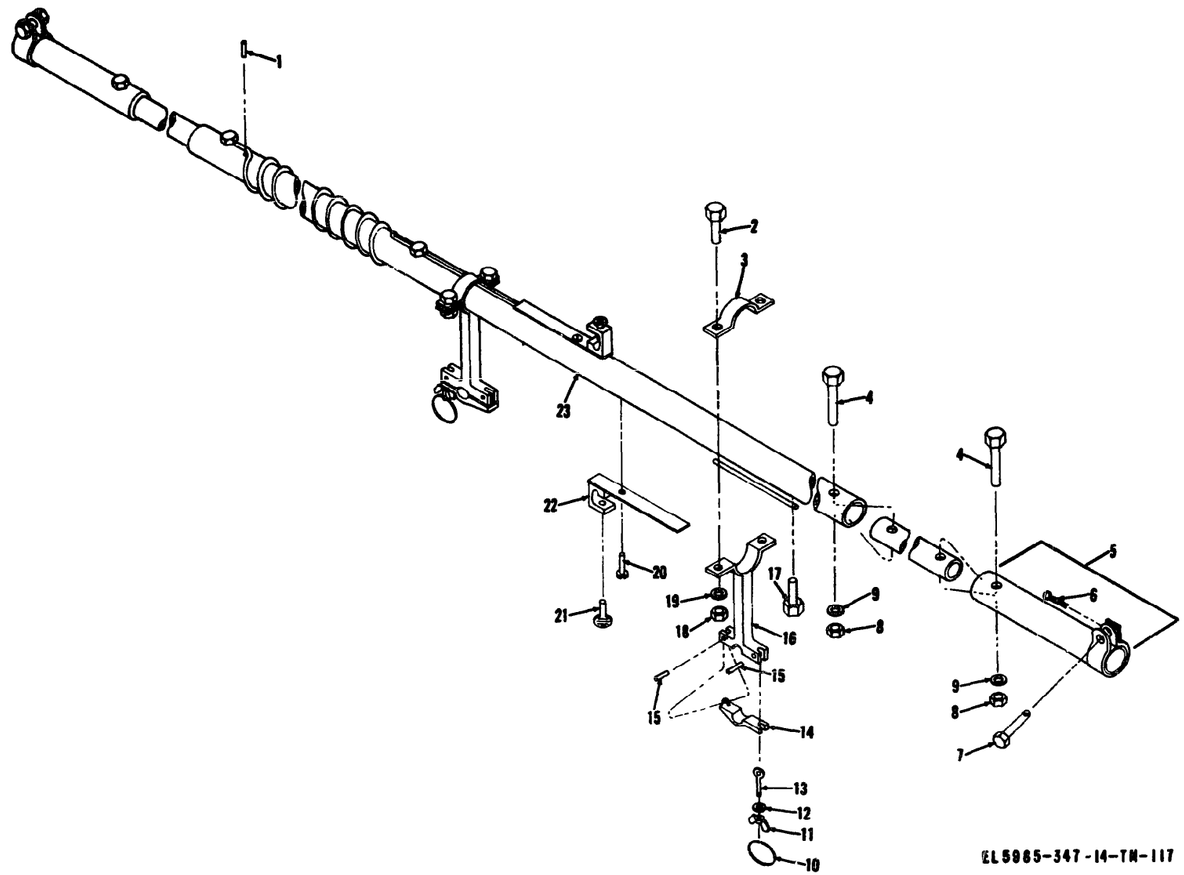

Figure B-36. Insulator assembly, center, Element 16.

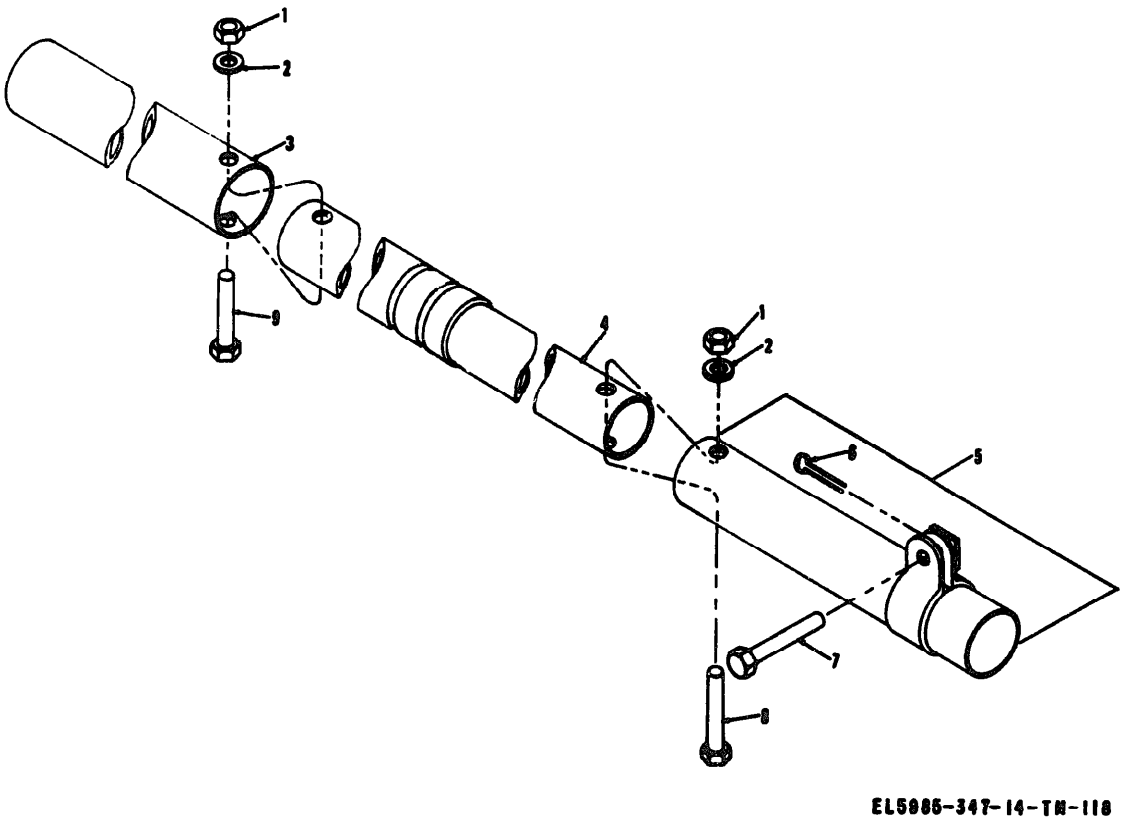

Figure B-37. Tube assembly, element 16-2. + 17-2.

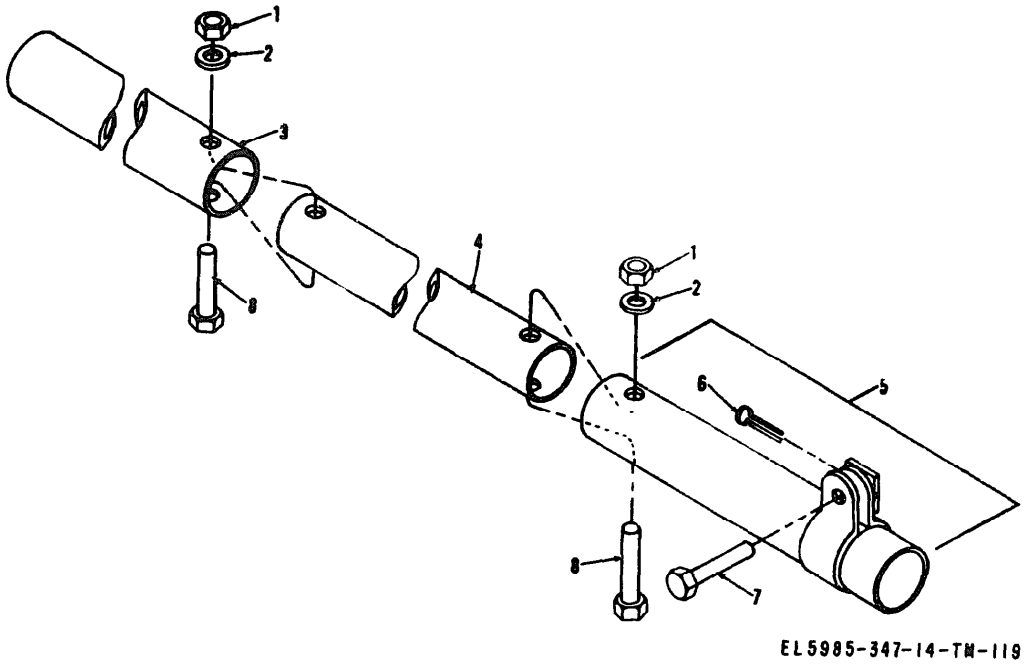

Figure B-38 Tube assemblv, element 16-3 + 17-3

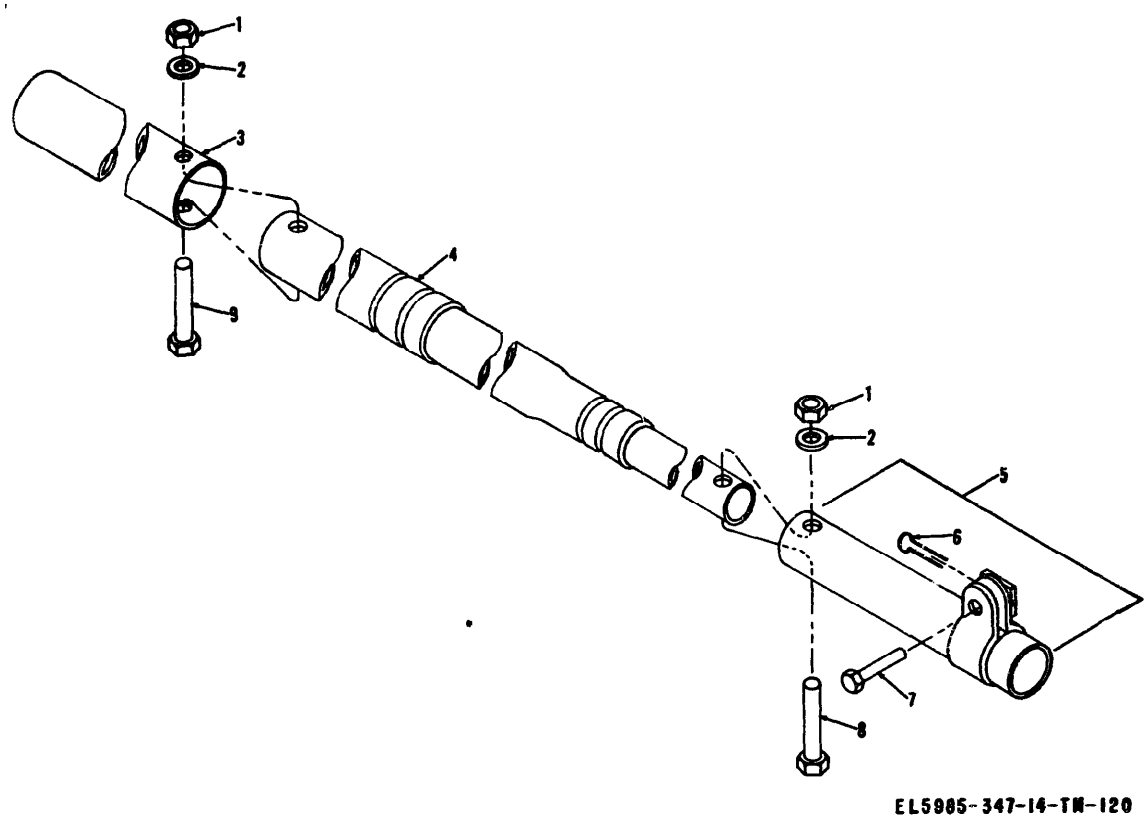

Figure B-39 Tube assembly, element 16-4 + 17-4

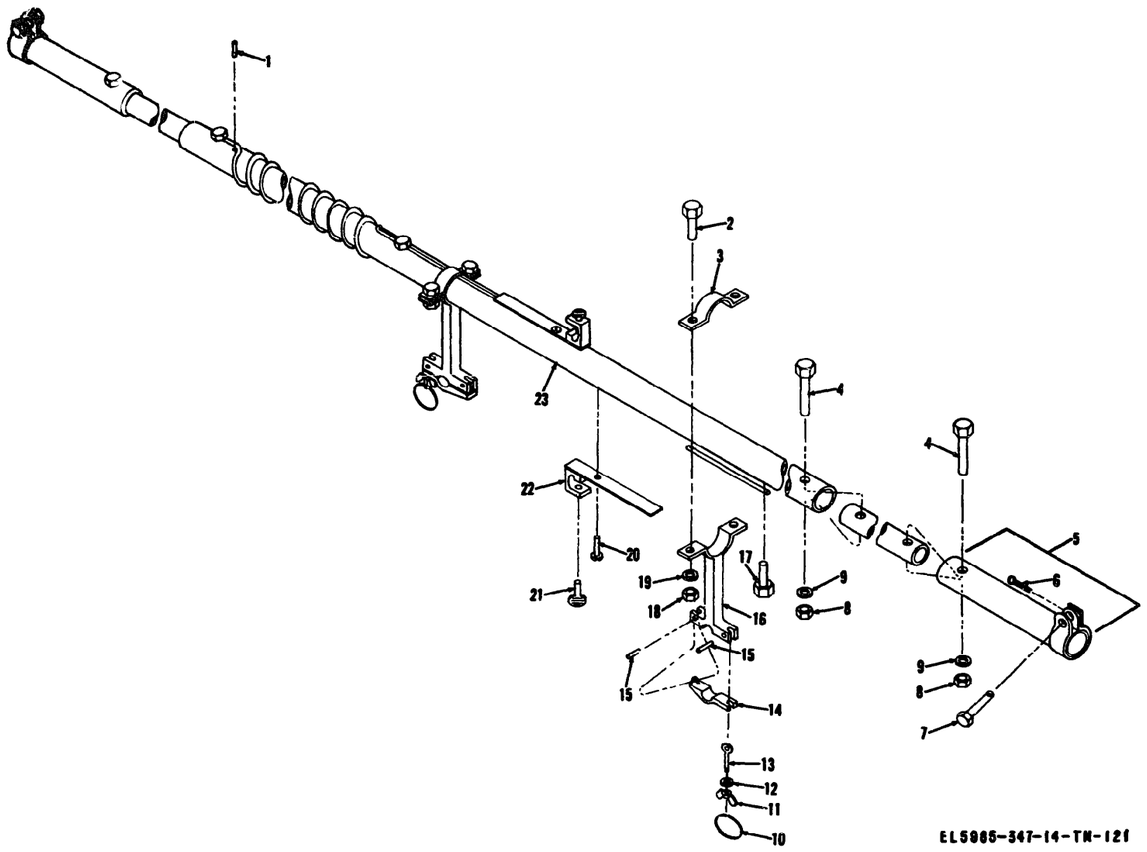

Figure B-40 Insulator assembly, center, element 17

SECTION VI. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

STOCK NUMBER	FIG. NO.	ITEM NO.
1015-01-019-7117	B-2	9
	B-5	17
	B-7	16
3130-01-016-8092	B-4	64
3940-00-929-0037	B-6	36
3950-00-729-6165	B-6	26
4020-01-015-6553	B-2	15
	B-3	17
4020-01-015-9582	B-6	10
4030-00-132-9163	B-4	22
4030-00-431-5536	B-2	14
	B-3	15
	B-4	54
	B-5	14
	B-6	22
4030-00-880-2389	B-6	15
4030-01-005-2397	B-1	1
4030-01-015-6570	B-5	7
	B-6	8
4030-01-015-6571	B-4	21
	B-6	29
	B-7	10
4030-01-015-7402	B-5	37
4030-01-015-7428	B-6	44
4030-01-015-9583	B-7	11
4710-01-004-0017	B-24	3
	B-27	3
	B-30	3
	B-34	3
	B-38	3
4710-01-004-0872	B-27	4
5305-00-021-3740	B-4	25
5305-00-050-9229	B-2	18
	B-3	14
	B-4	16
	B-5	34
5305-00-050-9231	B-7	23
5305-00-054-5652	B-4	12
5305-00-063-4568	B-6	19
5305-00-207-2297	B-9	4
	B-10	1
	B-11	1
	B-12	1
	B-13	1
	B-14	4
	B-15	4
	B-16	4
	B-18	8
	B-20	8
	B-22	8
	B-25	8
5305-00-207-2297	B-28	8
	B-31	8
	B-35	8
5305-00-489-0751	B-4	23
5305-00-543-4406	B-4	1
5305-00-616-6370	B-2	2
	B-3	3
	B-5	29
	B-7	19
	B-9	1
	B-14	1
	B-15	1
	B-16	1
	B-39	8
5305-00-655-6974	B-17	1
	B-19	1
	B-21	1
	B-24	8
	B-27	8
	B-30	8
	B-34	8
	B-38	8
5305-00-701-5078	B-4	28
5305-00-702-4523	B-7	2
5305-00-702-9070	B-32	1
	B-36	4
	B-40	4
5305-00-719-3997	B-36	17
	B-40	17
5305-00-719-5017	B-4	49
5305-00-721-8005	B-23	1
	B-26	4
	B-29	4
	B-33	9
	B-37	9
5305-00-721-8010	B-18	9
	B-20	9
	B-22	9
	B-25	9
	B-28	9
	B-31	9
	B-35	9
	B-39	9
5305-00-727-6804	B-4	24
5305-00-802-0016	B-26	1
	B-29	1
	B-33	8
	B-37	8
5305-00-824-7168	B-9	20
	B-10	19
	B-11	19

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STOCK NUMBER	FIG. NO.	ITEM NO.
5305-00-824-7168	B-12	19
	B-13	15
	B-14	20
	B-15	20
	B-16	20
	B-17	19
	B-19	19
	B-21	19
	B-23	19
	B-26	20
	B-29	20
	B-32	19
	B-36	20
	B-40	20
5305-00-890-4773	B-4	51
5305-01-018-5568	B-4	50
5306-00-050-0346	B-4	38
5306-00-524-7549	B-6	32
5306-00-655-6170	B-9	2
	B-10	2
	B-12	2
	B-13	2
	B-14	2
	B-15	2
	B-16	2
	B-17	2
	B-19	2
	B-21	2
	B-23	2
	B-26	2
	B-29	2
	B-32	2
	B-36	2
	B-40	2
5306-00-816-5272	B-11	2
5306-01-016-7851	B-6	5
5306-01-016-8066	B-3	10
5310-00-250-9477	B-2	4
	B-3	5
	B-4	18
	B-5	31
	B-7	6
	B-9	8
	B-10	7
	B-11	7
	B-12	7
	B-13	13
	B-14	8
	B-15	8
	B-16	8
	B-17	7
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	B-19	7
	B-20	1
	B-21	7
	B-22	1
	B-23	7
	B-24	1
	B-25	1
	B-26	8
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	B-30	1
	B-31	1
	B-32	7
	B-33	1
	B-34	1
	B-35	1
	B-36	8
	B-37	1
	B-38	1
	B-39	1
	B-40	8
5310-00-515-9267	B-3	11
5310-00-543-2740	B-9	19
	B-10	18
	B-11	18
	B-12	18
	B-13	14
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	B-15	19
	B-16	19
	B-17	18
	B-19	18
	B-21	18
	B-23	18
	B-26	19
	B-29	19
	B-32	18
	B-36	9
	B-40	9
5310-00-543-5933	B-6	18
5310-00-625-5756	B-4	44
	B-9	12
	B-10	11
	B-11	11
	B-12	11
	B-13	6
	B-14	12
	B-15	12
	B-16	12

SECTION VI. NATIONAL STOCK NUMBER AND PART NUMBER INDEX (CONTINUED)

STOCK NUMBER	FIG. NO.	ITEM NO.
5310-00-625-5756	B-17	11
	B-19	11
	B-21	11
	B-23	11
	B-26	12
	B-29	12
	B-32	11
	B-36	12
	B-40	12
5310-00-767-0445	B-9	17
	B-10	16
	B-11	16
	B-12	16
	B-13	11
	B-14	17
	B-15	17
	B-16	17
	B-17	16
	B-19	16
	B-21	16
	B-23	16
	B-26	17
	B-29	17
	B-32	16
	B-36	18
	B-40	18
5310-00-768-0321	B-4	36
5310-00-828-8189	B-7	15
	B-9	11
	B-10	10
	B-11	10
	B-12	10
	B-13	5
	B-14	11
	B-15	11
	B-16	11
	B-17	10
	B-19	10
	B-21	10
	B-23	10
	B-26	11
	B-29	11
	B-32	10
	B-36	11
	B-40	11
5310-00-880-5986	B-6	33
5310-00-883-9384	B-2	17
	B-3	8
	B-5	22
	B-7	12
5310-00-905-1691	B-7	7
5310-00-913-8881	B-4	7
	B-6	1
5310-00-933-8118	B-4	14
5310-00-933-8120	B-4	9
	B-7	21
5310-00-933-8121	B-2	3
	B-3	4
	B-4	17
	B-5	30
	B-7	5
	B-9	9
	B-10	8
	B-11	8
	B-12	8
	B-14	9
	B-15	9
	B-16	9
	B-17	8
	B-18	2
	B-19	8
	B-20	2
	B-21	8
	B-22	2
	B-23	8
	B-24	2
	B-25	2
	B-26	9
	B-27	2
	B-28	2
	B-29	9
	B-30	2
	B-31	2
	B-32	8
	B-33	2
	B-34	2
	B-35	2
	B-37	2
	B-38	2
	B-39	2
5310-00-933-8778	B-4	35
5310-00-934-9727	B-4	31
5310-00-934-9748	B-4	15
5310-00-934-9760	B-4	37
	B-7	20
5310-00-974-6623	B-9	18
	B-10	17
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	B-21	17
	B-23	17
	B-26	18
	B-29	18
	B-32	17
	B-36	19
	B-40	19
5310-00-984-7042	B-4	8
	B-6	2
5315-00-234-1854	B-4	42
	B-9	6
	B-10	5
	B-11	5
	B-12	5
	B-14	6
	B-15	6
	B-16	6
	B-17	5
	B-18	6
	B-19	5
	B-20	6
	B-21	5
	B-22	6
	B-23	5
	B-24	6
	B-25	6
	B-26	6
	B-27	6
	B-28	6
	B-29	6
	B-30	6
	B-31	6
	B-32	5
	B-33	6
	B-34	6
	B-35	6
	B-36	6
	B-37	6
	B-38	6
	B-39	6
	B-40	6
5315-00-236-8371	B-4	4
5315-00-687-3787	B-4	58
5315-00-826-3251	B-36	1
	B-40	1
5315-01-007-1312	B-9	15
	B-10	14
	B-11	14
5315-01-007-1312	B-12	14
	B-13	9
	B-14	15
	B-15	15
	B-16	15
	B-17	14
	B-19	14
	B-21	14
	B-23	14
	B-26	15
	B-29	15
	B-32	14
	B-36	15
	B-40	15
5315-01-015-8720	B-5	4
5315-01-015-8721	B-4	43
5315-01-016-3502	B-4	68
5340-01-015-8708	B-4	47
5340-01-015-8709	B-4	46
5340-01-015-8710	B-4	57
5340-01-015-8722	B-10	3
	B-12	3
	B-13	3
5340-01-016-8054	B-6	45
5360-01-016-0620	B-4	63
5365-01-005-4594	B-3	12
	B-9	10
	B-10	9
	B-11	9
	B-12	9
	B-13	4
	B-14	10
	B-15	10
	B-16	10
	B-17	9
	B-19	9
	B-21	9
	B-23	9
	B-26	10
	B-29	10
	B-32	9
	B-36	10
	B-40	10
5935-00-104-1187	B-4	11
5935-00-322-2658	B-4	56
5935-00-892-9863	B-4	59
5935-00-928-3126	B-4	13
5985-01-005-2486	B-18	3
	B-20	3
	B-22	3
	B-25	3

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5985-01-005-2486	B-28	3
	B-31	3
	B-35	3
	B-39	3
5985-01-005-2487	B-18	4
5985-01-005-2488	B-20	4
5985-01-005-2489	B-30	4
5985-01-005-2490	B-31	4
5985-01-005-2491	B-39	4
5985-01-005-2492	B-37	3
5985-01-005-2493	B-33	3
	B-37	4
5985-01-005-2700	B-9	14
	B-10	13
	B-11	13
	B-12	13
	B-13	8
	B-14	14
	B-15	14
	B-16	14
	B-17	13
	B-19	13
	B-21	13
	B-23	13
	B-26	14
	B-29	14
	B-32	13
	B-36	14
	B-40	14
5985-01-005-2701	B-17	3
	B-19	15
	B-21	15
5985-01-005-2702	B-17	15
	B-19	3
	B-21	3
5985-01-005-2703	B-9	22
	B-10	21
	B-11	21
	B-12	21
	B-13	17
	B-14	22
	B-15	22
	B-16	22
	B-17	21
	B-19	21
	B-21	21
	B-23	21
	B-26	22
	B-29	22
	B-32	21
5985-01-005-2704	B-23	15
5985-01-005-2705	B-23	3
5985-01-005-2706	B-26	16
	B-29	16
5985-01-005-2707	B-32	15
	B-36	3
	B-40	3
5985-01-005-2708	B-32	3
5985-01-005-6558	B-28	4
5985-01-006-7260	B-8	12
5985-01-006-7261	B-8	8
5985-01-006-7262	B-8	13
5985-01-006-7263	B-8	2
5985-01-006-7264	B-8	3
5985-01-006-7265	B-8	4
5985-01-006-7266	B-8	5
5985-01-006-7267	B-8	6
5985-01-006-7268	B-8	7
5985-01-006-5795	B-26	3
	B-29	3
5985-01-012-5648	B-8	9
5985-01-016-0241	B-22	4
5985-01-016-0242	B-33	4
5985-01-016-0243	B-35	4
5985-01-016-0275	B-34	4
5985-01-016-0276	B-2	5
5985-01-016-0277	B-2	13
	B-3	16
5985-01-016-0278	B-2	12
5985-01-016-0279	B-5	8
5985-01-016-0280	B-5	10
5985-01-016-0281	B-5	15
5985-01-016-0282	B-4	62
5985-01-016-0283	B-4	26
5985-01-016-0284	B-4	48
5985-01-016-0285	B-4	5
5985-01-016-0286	B-4	10
5985-01-016-0287	B-36	16
	B-40	16
5985-01-016-0288	B-24	4
5985-01-016-0289	B-25	4
5985-01-016-0290	B-8	11
5985-01-016-0291	B-8	1
5985-01-016-0292	B-8	15
5985-01-016-0293	B-9	16
	B-14	16
	B-15	16
	B-16	16
5985-01-016-0294	B-9	3
	B-14	3
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5985-01-016-0295	B-4	52			
	B-5	28			
	B-6	20			
5985-01-016-0296	B-7	14			
5985-01-016-0297	B-7	3			
5985-01-016-0298	B-7	8			
5985-01-016-1239	B-4	40			
5985-01-016-1240	B-6	3			
5985-01-016-1850	B-5	32			
5985-01-016-1851	B-2	19			
	B-3	6			
	B-5	24			
5985-01-016-1852	B-4	65			
5985-01-016-1853	B-4	41			
5985-01-016-1854	B-8	15			
5985-01-016-6746	B-6	30			
5985-01-017-6747	B-11	3			
5985-01-017-6760	B-4	30			

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PART NO.	FSCM	FIGURE NO.	ITEM NO.
MS15795-812	96906	B-4	44
		B-9	12
		B-10	11
		B-11	11
		B-12	11
		B-13	6
		B-14	12
		B-15	12
		B-16	12
		B-17	11
		B-19	11
		B-21	11
		B-23	11
		B-26	12
		B-29	12
		B-32	11
		B-36	12
		B-40	12
MS15795-842	96906	B-2	17
		B-3	8
		B-5	22
		B-7	12
MS16219-10	96906	B-4	51
MS16219-12	96906	B-4	50
MS16842-107	96906	B-6	43
MS171526	96906	B-2	9
		B-5	17
		B-7	16
MS171528	96906	B-36	1
		B-40	1
MS20604B6T6	96906	B-2	20
		B-3	7
		B-5	23
MS24618-28	96906	B-9	20
		B-10	19
		B-11	19
		B-12	19
		B-13	15
		B-14	20
		B-15	20
		B-16	20
		B-17	19
		B-19	19
		B-21	19
		B-23	19
		B-26	20
		B-29	20
		B-32	19
		B-36	20
		B-40	20
MS24630-48	96906	B-6	19
MS24665-153	96906	B-4	42
		B-9	6
MS24665-153	96906	B-10	5
		B-11	5
		B-12	5
		B-14	6
		B-15	6
		B-16	6
		B-17	5
		B-18	6
		B-19	5
		B-20	6
		B-21	5
		B-22	6
		B-23	5
		B-24	6
		B-25	6
		B-26	6
		B-27	6
		B-28	6
		B-29	6
		B-30	6
		B-31	6
		B-32	5
		B-33	6
		B-34	6
		B-35	6
		B-36	6
		B-37	6
		B-38	6
		B-39	6
		B-40	6
MS24665-441	96906	B-4	4
MS35307-303	96906	B-36	17
		B-40	17
MS35307-306	96906	B-7	2
MS35307-312	96906	B-9	4
		B-10	1
		B-11	1
		B-12	1
		B-13	1
		B-14	4
		B-15	4
		B-16	4
		B-18	8
		B-20	8
		B-22	8
		B-25	8
		B-28	8
		B-31	8
		B-35	8
MS35307-313	96906	B-2	2
		B-3	3
		B-5	29
		B-7	19

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PART NO.	FSCM	FIGURE NO.	ITEM NO.
MS35307-313	96906	B-9	1
		B-14	1
		B-15	1
		B-16	1
		B-39	8
MS35307-314	96906	B-18	9
		B-20	9
		B-22	9
		B-25	9
		B-28	9
		B-31	9
		B-35	9
		B-39	9
MS35307-315	96906	B-17	1
		B-19	1
		B-21	1
		B-24	8
		B-27	8
		B-30	8
		B-34	8
		B-38	8
MS35307-316	96906	B-23	1
		B-26	4
		B-29	4
		B-33	9
		B-37	9
MS35307-317	96906	B-26	1
		B-29	1
		B-33	8
		B-37	8
MS35307-318	96906	B-32	1
		B-36	4
		B-40	4
MS35307-338	96906	B-9	2
		B-10	2
		B-12	2
		B-13	2
		B-14	2
		B-15	2
		B-16	2
		B-17	2
		B-19	2
		B-21	2
		B-23	2
		B-26	2
		B-29	2
		B-32	2
		B-36	2
		B-40	2
MS35307-340	96906	B-11	2
MS35307-364	96906	B-4	25
MS35307-370	96906	B-4	1
MS35307-414	96906	B-4	24
MS35333-73	96906	B-6	18
MS35333-74	96906	B-9	19
		B-10	18
		B-11	18
		B-12	18
		B-13	14
		B-14	19
		B-15	19
		B-16	19
		B-17	18
		B-19	18
		B-21	18
		B-23	18
		B-26	19
		B-29	19
		B-32	18
		B-36	9
		B-40	9
MS35338-135	96906	B-4	14
MS35338-138	96906	B-4	9
		B-7	21
MS35338-139	96906	B-2	3
		B-3	4
		B-4	17
		B-5	30
		B-7	5
		B-9	9
		B-10	8
		B-11	8
		B-12	8
		B-14	9
		B-15	9
		B-16	9
		B-17	8
		B-18	2
		B-19	8
		B-20	2
		B-21	8
		B-22	2
		B-23	8
		B-24	2
		B-25	2
		B-26	9
		B-27	2
		B-28	2
		B-29	9
		B-30	2
		B-31	2
		B-32	8
		B-33	2
		B-34	2
		B-35	2
		B-37	2
		B-38	2
		B-39	2

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MS35338-140	96906	B-9	18
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		B-12	17
		B-13	12
		B-14	18
		B-15	18
		B-16	18
		B-17	17
		B-19	17
		B-21	17
		B-23	17
		B-26	18
		B-29	18
		B-32	17
		B-36	19
		B-40	19
MS35338-141	96906	B-4	8
		B-6	2
MS35338-143	96906	B-4	35
MS35338-74	96906	B-10	18
		B-15	19
MS35649-204	96906	B-4	37
		B-7	20
MS35649-2254	96906	B-2	4
		B-3	5
		B-4	18
		B-5	31
		B-7	6
		B-9	8
		B-10	7
		B-11	7
		B-12	7
		B-13	13
		B-14	8
		B-15	8
		B-16	8
		B-17	7
		B-18	1
		B-19	7
		B-20	1
		B-21	7
		B-22	1
		B-23	7
		B-24	1
		B-25	1
		B-26	8
		B-27	1
		B-28	1
		B-29	8
		B-30	1
		B-31	1
		B-32	7
		B-33	1
MS35649-2254	96906	B-34	1
		B-35	1
		B-36	8
		B-37	1
		B-38	1
		B-39	1
		B-40	8
MS35649-244	96906	B-4	15
MS35691-59	96906	B-4	31
MS51021-93	96906	B-4	23
MS51109-8	96906	B-9	7
		B-10	6
		B-11	6
		B-12	6
		B-14	7
		B-15	7
		B-16	7
		B-17	6
		B-18	7
		B-19	6
		B-20	7
		B-21	6
		B-22	7
		B-23	6
		B-24	7
		B-25	7
		B-26	7
		B-27	7
		B-28	7
		B-29	7
		B-30	7
		B-31	7
		B-32	6
		B-33	7
		B-34	7
		B-35	7
		B-36	7
		B-37	7
		B-38	7
		B-39	7
		B-40	7
MS51937-3	96906	B-4	38
MS51957-18	96906	B-4	12
MS51957-63	96906	B-2	18
		B-3	14
		B-4	16
		B-5	34
MS51957-65	96906	B-7	23
MS51959-65	96906	B-4	28
MS51959-82	96906	B-4	49
MS51971-2	96906	B-9	17
		B-10	16
		B-11	16
		B-12	16

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PART NO.	FSCM	FIGURE NO.	ITEM NO.
MS51971-2	96906	B-13	11
		B-14	17
		B-15	17
		B-16	17
		B-17	16
		B-19	16
		B-21	16
		B-23	16
		B-26	17
		B-29	17
		B-32	16
		B-36	18
		B-40	18
MS51971-3	96906	B-4	7
		B-6	1
MS51971-5	96906	B-4	36
MS51972-1	96906	B-7	7
MS9048-171	96906	B-4	58
SP4304-3	96603	B-5	12
		B-6	17
T-20	12708	B-6	26
V3c	73646	B-4	45
1-15/16 SC4	71956	B-4	34
1402	06762	B-6	28
170195	15536	B-6	11
170972	15536	B-6	25
180133	15536	B-9	14
		B-10	13
		B-11	13
		B-12	13
		B-13	8
		B-14	14
		B-15	14
		B-16	14
		B-17	13
		B-19	13
		B-21	13
		B-23	13
		B-26	14
		B-29	14
		B-32	13
		B-36	14
		B-40	14
180134	15536	B-10	3
		B-12	3
		B-13	3
180135	15536	B-9	3
		B-14	3
		B-15	3
		B-16	3
180136	15536	B-17	3
		B-19	15
		B-21	15
180137	15536	B-23	15
180138	15536	B-26	3
		B-29	3
180139	15536	B-32	15
		B-36	3
		B-40	3
180140	15536	B-32	3
180141	15536	B-26	16
		B-29	16
180142	15536	B-23	3
180143	15536	B-36	16
		B-40	16
180144	15536	B-9	16
		B-14	16
		B-15	16
		B-16	16
180145	15536	B-10	15
		B-11	15
		B-12	15
		B-13	10
180161	15536	B-17	15
		B-19	3
		B-21	3
180173	15536	B-1	3
180255	15536	B-5	8
180257	15536	B-33	3
		B-37	3
180262	15536	B-24	3
		B-27	3
		B-30	3
		B-34	3
		B-38	3
180278	15536	B-5	10
180279	15536	B-6	37
180280	15536	B-5	38
180289	15536	B-18	3
		B-20	3
		B-22	3
		B-25	3
		B-28	3
		B-31	3
		B-35	3
		B-39	3
180290	15536	B-38	4
180294	15536	B-34	4
180295	15536	B-30	4
180297	15536	B-27	4
180299	15536	B-24	4
180311	15536	B-4	47
180313	15536	B-4	2
180314	15536	B-4	30
180315	15536	B-4	66
180316	15536	B-4	20
180317	15536	B-4	6
180318	15536	B-4	5

SECTION VI NATIONAL STOCK NUMBER AND PART NUMBER INDEX (CONT.)

PART NO.	FSCM	FIGURE NO.	ITEM NO.
180323	15536	B-6	4
180363	15536	B-4	10
180390	15536	B-7	14
180484	15536	B-6	12A
18575	02660	B-4	11
270037	15536	B-4	27
270068	15536	B-7	8
270069	15536	B-7	3
28-1C	76691	B-2	14
		B-3	15
		B-4	54
		B-5	14
		B-6	22
28-3M	76691	B-4	22
28-6X	76691	B-5	6
		B-6	9
280111	15536	B-6	51
350551	15536	B-6	38
350558	15536	B-7	12A
350559	15536	B-6	45
350579	15536	B-7	28
350580	15536	B-7	29
350586	15536	B-5	4
350589	15536	B-4	57
351700	15536	B-4	51
		B-6	29
		B-7	10
352573	15536	B-6	15
352728	15536	B-3	12
		B-9	10
		B-10	9
		B-11	9
		B-12	9
		B-13	4
		B-14	10
		B-15	10
		B-16	10
		B-17	9
		B-19	9
		B-21	9
		B-23	9
		B-26	10
		B-29	10
		B-32	9
		B-36	10
		B-40	10
356589	15536	B-6	44
356788	15536	B-5	7
		B-6	8
359769	15536	B-5	44
359769	15536	B-6	12
359929	15536	B-7	11
370790	15536	B-4	62
370793	15536	B-4	48
370809	15536	B-4	64
3791,PRODUCT	15536	B-7	1
380143	15536	B-2	12
380144	15536	B-5	15
380145	15536	B-2	10
		B-5	16
380146	15536	B-7	17
380150	15536	B-6	5
380151	15536	B-5	32
380152	15536	B-7	18
380153	15536	B-2	5
380154	15536	B-2	6
		B-3	2
380155	15536	B-5	25
380156	15536	B-5	26
380157	15536	B-5	27
380160	15536	B-9	13
		B-10	12
		B-11	12
		B-12	12
		B-13	7
		B-14	13
		B-15	13
		B-16	13
		B-17	12
		B-19	12
		B-21	12
		B-23	12
		B-26	13
		B-29	13
		B-32	12
		B-36	13
		B-40	13
380161	15536	B-9	15
		B-10	14
		B-11	14
		B-12	14
		B-13	9
		B-14	15
		B-15	15
		B-16	15
		B-17	14
		B-19	14
		B-21	14
		B-23	14
		B-26	15
		B-29	15
		B-32	14
		B-36	15
380161	15536	B-40	15
380162	15536	B-3	10
380163	15536	B-1	2
380169	15536	B-4	33
380170	15536	B-4	3

SECTION VI NATIONAL STOCK NUMBER AND PART NUMBER INDEX (CONT.)

PART NO.	FSCM	FIGURE NO.	ITEM NO.
380171	15536	B-4	40
380172	15536	B-4	46
380173	15536	B-4	43
380174	15536	B-4	65
380178	15536	B-4	68
380267	15536	B-5	39
380273	15536	B-6	50
380274	15536	B-6	55
380297	15536	B-5	43
380317	15536	B-6	46
3851,PRODUCT	15536	B-7	24
3921TIY	39428	B-6	7
		B-6	49
418	70257	B-6	36
456418	15536	B-7	30
470143	15536	B-7	22
470146	15536	B-7	4
470147	15536	B-11	3
501134	15536	B-6	32
530004	15536	B-9	21
		B-10	20
		B-11	20
		B-12	20
		B-13	16
		B-14	21
		B-15	21
		B-16	21
		B-17	20
		B-19	20
		B-21	20
		B-23	20
		B-26	21
		B-29	21
		B-32	20
		B-36	21
		B-40	21
540020	15536	B-6	54
540021	15536	B-5	40
540043	15536	B-4	38A
546607	15536	B-4	19
550008	15536	B-7	15
		B-9	11
		B-10	10
		B-11	10
		B-12	10
		B-13	5
		B-14	11
		B-15	11
		B-16	11
		B-17	10
		B-19	10
		B-21	10
		B-23	10
		B-26	11

PART NO.	FSCM	FIGURE NO.	ITEM NO.
550008	15536	B-29	11
		B-32	10
		B-36	11
		B-40	11
551145	15536	B-6	35
551153	15536	B-3	11
556920	15536	B-6	53
565873	15536	B-5	41
567055	15536	B-6	52
567627	15536	B-6	33
607360	15536	B-4	60
601011	15536	B-7	25
611622	15536	B-7	13
631328	15536	B-6	42
631517	15536	B-4	41
650041	15536	B-7	26
650043	15536	B-7	27
670208	15536	B-7	13A
690071	15536	B-5	11
690072	15536	B-5	9
690073	15536	B-5	5
690074	15536	B-6	30
690075	15536	B-5	36
690076	15536	B-6	48
690077	15536	B-6	12
690078	15536	B-6	12B
690079	15536	B-6	16
690080	15536	B-4	53
		B-5	13
		B-6	21
690081	15536	B-6	39
690082	15536	B-2	15
		B-3	17
6950	74868	B-4	56
8C11	73646	B-4	63
82-61	02660	B-4	59
82-62	02660	B-4	13
870161	15536	B-7	9
870162	15536	B-1	1
870367	15536	B-2	19
		B-3	6
		B-5	24
870438	15536	B-8	2
870439	15536	B-8	3
870440	15536	B-8	4
870441	15536	B-8	5
870443	15536	B-8	6
870444	15536	B-8	7
870446	15536	B-8	12
870448	15536	B-8	8
870451	15536	B-8	9
870453	15536	B-8	13
870457	15536	B-8	10
870464	15536	B-2	11

SECTION VI NATIONAL STOCK NUMBER AND PART NUMBER INDEX (CONT.)

PART NO.	FSCM	FIGURE NO.	ITEM NO.
870465	15536	B-5	3
870467	15536	B-6	41
870469	15536	B-4	52
		B-5	28
		B-6	20
870470	15536	B-6	27
870471	15536	B-2	16
		B-3	13
870482	15536	B-2	13
		B-3	16
870483	15536	B-5	35
870490	15536	B-6	47
870491	15536	B-6	6
870498	15536	B-8	11
870499	15536	B-8	1
870500	15536	B-8	14
870602	15536	B-8	15
870614	15536	B-4	67
870615	15536	B-4	55
870616	15536	B-5	21
870711	15536	B-6	34
870712	15536	B-6	3
870995	15536	B-6	14
875949	15536	B-5	33
878702	15536	B-19	22
878703	15536	B-21	22
878707	15536	B-28	4
878708	15536	B-18	4
878709	15536	B-20	4
878710	15536	B-31	4
878711	15536	B-39	4
878712	15536	B-37	4
878713	15536	B-22	4
878714	15536	B-33	4
878715	15536	B-35	4
878716	15536	B-25	4
878718	15536	B-23	22
878719	15536	B-26	23
878720	15536	B-29	23
878721	15536	B-32	22
878722	15536	B-36	23
878723	15536	B-40	23
878724	15536	B-12	22
878725	15536	B-11	22
878726	15536	B-13	18
878727	15536	B-10	22
878728	15536	B-16	23
878729	15536	B-15	23
878730	15536	B-9	23
878731	15536	B-17	22
878732	15536	B-14	23
878902	15536	B-5	42
880010	15536	B-9	22
		B-10	21

PART NO.	FSCM	FIGURE NO.	ITEM NO.
880010	15536	B-11	21
		B-12	21
		B-13	17
		B-14	22
		B-15	22
		B-16	22
		B-17	21
		B-19	21
		B-21	21
		B-23	21
		B-26	22
		B-29	22
		B-32	21
880013	15436	B-36	22
B-40	22	B-40	22
880014	15536	B-5	18
880015	15536	B-5	19
880016	15536	B-2	7
880017	15536	B-2	1
880018	15536	B-5	20
880019	15536	B-6	24
880020	15536	B-6	23
880021	15536	B-6	31
880022	15536	B-6	40
880023	15536	B-5	1
880024	15536	B-2	8
880025	15536	B-3	9
880026	15536	B-3	1
880027	15536	B-7	24
880028	15536	B-5	2
880037	15536	B-23	4
		B-26	5
		B-29	5
		B-33	5
		B-37	5
880039	15536	B-32	4
		B-36	5
		B-40	5
880040	15536	B-9	5
		B-10	4
		B-11	4
		B-12	4
		B-14	5
		B-15	5
		B-16	5
		B-18	5
		B-20	5
		B-22	5
		B-25	5
		B-28	5
		B-31	5
		B-35	5
		B-39	5
880041	15536	B-17	4

SECTION VI NATIONAL STOCK NUMBER AND PART NUMBER INDEX (CONT.)

PART NO.	FSCM	FIGURE NO.	ITEM NO.
880041	15536	B-19	4
		B-21	4
		B-24	5
		B-27	5
		B-30	5
		B-34	5
		B-38	5
880042	15536	B-6	13
880043	15536	B-4	26
880044	15536	B-4	32
880045	15536	B-4	39
880046	15536	B-4	69
880047	15536	B-4	61
9-2006-21	15840	B-4	29
		B-19	4
		B-21	4
		B-24	5
		B-27	5
		B-30	5
		B-34	5
		B-38	5

PART NO.	FSCM	FIGURE NO.	ITEM NO.

APPENDIX C

MAINTENANCE ALLOCATION

Section I. INTRODUCTION

C-1. General

This appendix provides a summary of the maintenance operations for AS-3098/U. It authorizes categories of maintenance for specfic maintenance functions on repairable items and components and the tools and equipment required to perform each *function.* This appendix may be used as an aid in planning maintenance operations.

C-2. Maintenance Function

Maintenance functions will be limited to and defined as follows:

a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination.

b. Test. To verify serviceability and to detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. Operations required periodically to keep an item in proper operating condition, i.e., to clean (decontaminate), to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulic fluids, or compressed air supplies.

d. Adjust. To maintain, within prescribed limits, by bringing into proper or exact position, or by setting the operating characteristics to the specified parameters.

e. *Align.* To adjust specified variable elements of an item to bring about optimum or desired performance.

f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test measuring and diagnostic equipments used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

g. Install. The act of emplacing, seating, or fixing into position an item, part, module (component or assembly) in a manner to allow the proper functioning of the equipment or system.

h Replace. The act of substituting a serviceable like type part, subassembly, or module (component or assembly) for an unserviceable counterpart.

i. Repair. The application of maintenance services (inspect, test, service, adjust, align, calibrate, replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, remachining, or resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

j. Overhaul. That maintenance effort (service/action) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (i.e., DMWR) in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

k. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours, miles, etc.) considered in classifying Army equipments/components.

C-3. Column Entries

a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.

b. Column 2, Component/Assembly. Column 2 contains the noun names of components, assemblies, subassemblies, and modules for which *maintenance is* authorized.

c. Column 3, Maintenance *Functions.* Column 3 lists the functions to be performed on the item listed in column 2. When items are listed without maintenance functions, it is solely for purpose of having the group numbers in the MAC and RPSTL coincide.

d. Column 4, Maintenance Category. Column 4 specifies, by the listing of a ork time" figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity

of the tasks within the listed maintenance function vary at different maintenance categories, appropriate "work time" figures will be shown for each category. The number of task-hours specified by the "work time" figure represents the average time required to restore an item (assembly, subassembly, component, module, end item or system) to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time, and quality assurance/quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. Subcolumns of column 4 are as follows:

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

e. Column 5, Tools and Equipment. Column 5 specifies by code, those common tool sets (not individual tools) and special tools, test, and support equipment required to perform the designated function.

f. Column 6, Remarks. Column 6 contains an alphabetic code which leads to the remark in section IV, Remarks, which is pertinent to the item opposite the particular code.

C-4. Tool and Test Equipment Requirements (Sec. III)

a. Tool or Test Equipment Reference Code. The numbers in this *column coincide with* the numbers used in the tools and equipment column of the MAC. The numbers indicate the applicable tool or test equipment for the maintenance functions.

b. Maintenance Category. The codes in this column indicate the maintenance category allocated the tool and test equipment.

c. Nomenclature. This column lists the noun name and nomenclature of the tools and test equipment required to perform the maintenance functions.

d. National/NATO Stock Number. This column lists the National/NATO stock number of the specific tool or test equipment.

e. Tool Number. This column lists the manufacturer's part number of the tool followed by the Federal Supply Code for manufacturers (5-digit) in parentheses.

C-5. Remarks (Sec. IV)

a. *Reference* Code. This code refers to the appropriate item in section II, column 6.

b. Remarks. This column provides the required explanatory information *necessary* to clarify items appearing in section II.

(Next printed page is C-3)

SECTION II MAINTENANCE ALLOCATION CHART
FOR
ANTENNA STSTEM AS-3098/U

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY C	O	F	H	D	(5) TOOLS AND EQPT.	(6) REMARKS
00	ANTENNA SYSTEM AS-3098/U	Inspect	0.5						A
		Inspect		0.2				1 thru 9	B
	NOTE	Service		1.5					
		Install		4.0				1 thru 10	
	Group Nos. 01 thru 39 provided for information only. Maintenance functions are identical to Group 00.	Repair			4.0			1 thru 10	C
01	FRONT BOOM SECTIONS								
02	BACK BOOM SECTIONS								
03	ROTATOR ASSEMBLY								
04	TOWER AND ATTACHMENTS								
05	CABLES, ROPES, AND BASE ASSEMBLY								
06	BOOM EXTENSION AND BALUN								
07	ELEMENTS								
08	INSULATOR ASSY, CTR, ELEMENT 5								
09	INSULATOR ASSY, CTR, ELEMENT 4								
10	INSULATOR ASSY, CTR, ELEMENT 3								
11	INSULATOR ASSY, CTR, ELEMENT 2								
12	INSULATOR ASSY, CTR, ELEMENT 1								
13	INSULATOR ASSY, CTR, ELEMENT 6								
14	INSULATOR ASSY, CTR, ELEMENT 7								
15	INSULATOR ASSY, CTR, ELEMENT 8								
16	INSULATOR ASSY, CTR, ELEMENT 9								
17	TUBE ASSY, ELEMENT 9-2								
18	INSULATOR ASSY, CTR, ELEMENT 10								
19	TUBE ASSY, ELEMENT 10-2								
20	INSULATOR ASSY, CTR, ELEMENT 11								
21	TUBE ASSY, ELEMENT 11-2								
22	INSULATOR ASSY, CTR, ELEMENT 12								
23	TUBE ASSEMBLY, ELEMENT 12-2								
24	TUBE ASSEMBLY, ELEMENT 12-3								
25	INSULATOR ASSY, CTR, ELEMENT 13								
26	TUBE ASSEMBLY, ELEMENT 13-2								
27	TUBE ASSEMBLY, ELEMENT 13-3								
28	INSULATOR ASSY, CTR, ELEMENT 14								
29	TUBE ASSEMBLY, ELEMENT 14-2								
30	TUBE ASSEMBLY, ELEMENT 14-3								
31	INSULATOR ASSY, CTR, ELEMENT 15								
32	TUBE ASSEMBLY, ELEMENT 15-2								
33	TUBE ASSEMBLY, ELEMENT 15-3								
34	TUBE ASSEMBLY, ELEMENT 15-4								

SECTION II MAINTENANCE ALLOCATION CHART - Continued
FOR
ANTENNA SYSTEM AS-3098/U

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY C	O	F	H	D	(5) TOOLS AND EQPT.	(6) REMARKS
35									
36	INSULATOR ASSY, CTR, ELEMENT 16								
37	TUBE ASSEMBLY, ELEMENT 16-2 & 17-2								
38	TUBE ASSEMBLY, ELEMENT 16-3 & 17-3								
39	TUBE ASSEMBLY, ELEMENT 16-4 & 17-4								
	INSULATOR ASSY, CTR, ELEMENT 17								

SECTION III TOOL AND TEST EQUIPMENT REQUIREMENTS FOR ANTENNA SYSTEM AS-3098/U

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOOL NUMBER
1	O	TOOL KIT, ELECTRONIC EQUIPMENT, TK-105/G	5180-00-610-8177	
2	O	WRENCH SET TL-552/U		
		NOTE Tools and equipment 3 thru 10 are required for installing, maintaining and repairing the LP 1112 MR antenna system. These tools are furnished with system and are special tools used by USACC teams.		
3	O	GRIPHOIST	3950-00-729-6165	
4	O	TACKLE, BLOCK		
5	O	WRENCH 9/16" OPEN END		
6	O	WRENCH 3/8" OPEN END		
7	O	WRENCH 1-1/8" OPEN END		
8	O	SCREWDRIVER		
9	O	WRENCH, SOCKET SET		
10	O	HAMMER, SLEDGE		

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TM 11-5840-340-14&P	23 Jan 74	Radar Set AN/PLC-76

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IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PAGE NO.	PARAGRAPH	FIGURE NO.	TABLE NO.	
2-25	2-28			Recommend that the installation antenna alignment procedure be changed throughout to specify a 2° IFF antenna lag rather than 1°. REASON: Experience has shown that with only a 1° lag, the antenna servo system is too sensitive to wind gusting in excess of 25 knots, and has a tendency to rapidly accelerate and decelerate as it hunts, causing strain to the drive train. Hunting is minimized by adjusting the lag to 2° without degradation of operation.
3-10	3-3		3-1	Item 5, Function column. Change "2 db" to "3db." REASON: The adjustment procedure for the TRANS POWER FAULT indicator calls for a 3 db (500 watts) adjustment to light the TRANS POWER FAULT indicator.
5-6	5-8			Add new step f.1 to read, "Replace cover plate removed in step e.1, above." REASON: To replace the cover plate.
E-5				For item 2, change the NSN to read: 5835-00-134-9186. REASON: Accuracy.
E-8		E-3		Identify the cover on the junction box (item no. 5). REASON: It is a separate item and is not called out on figure 19.
E-9				Add the cover of the junction box as an item in the listing for figure 19. REASON: Same as above.

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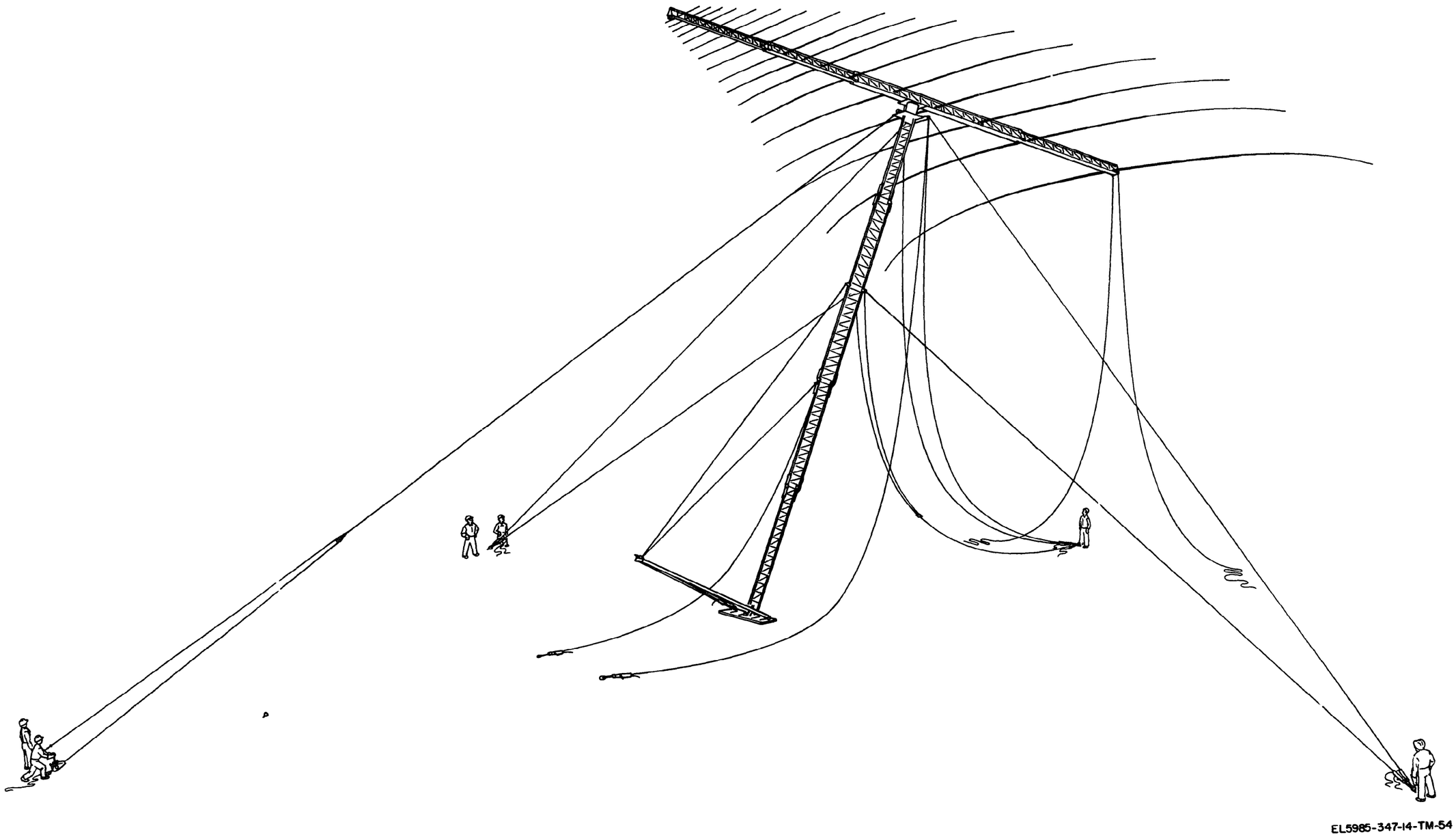

Figure 2-56. *Raising of antenna system.*

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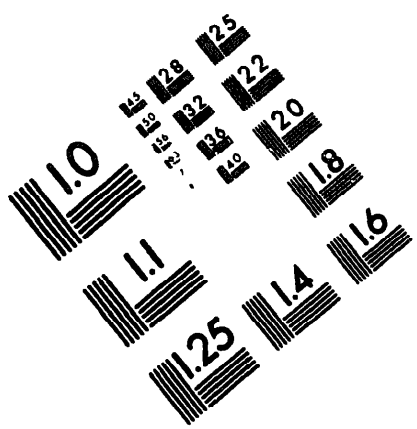

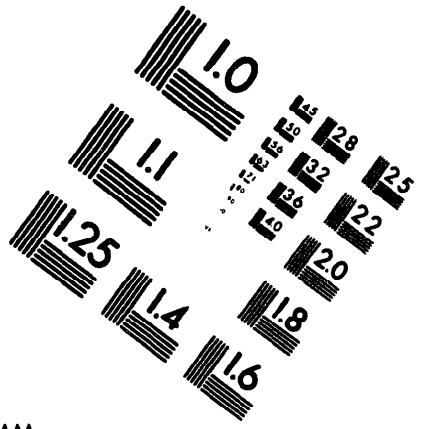

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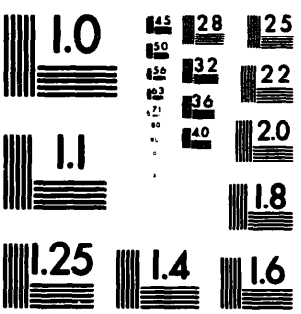

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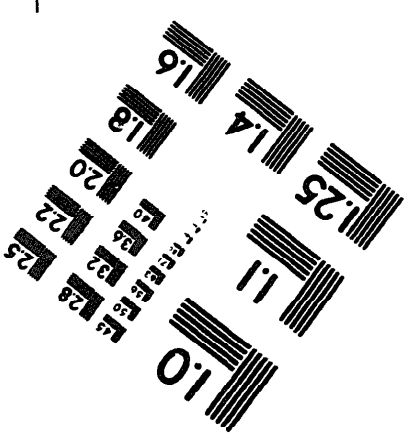

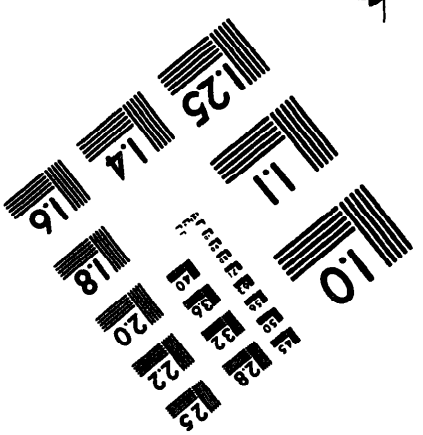

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