TM 11-5033

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

ANTENNA SUPPORTS
AB-26A/CR AND AB-26B/CR

DEPARTMENT OF THE ARMY • DECEMBER 1950

TECHNICAL MANUAL

ANTENNA SUPPORTS AB-26A/CR, AB-26B/CR, AND AB-26C/CR

CHANGES No. 1

DEPARTMENT OF THE ARMY
WASHINGTON 25, D. C., *5 October 1953*

TM 11-5033, 22 December 1950, is changed as follows:

The title of the manual is changed to read:

ANTENNA SUPPORTS AB-26A/CR, AB-26B/CR, **AND AB-26C/CR**

1. Scope

a. These instructions are * * * of the equipment. They apply only to Antenna Supports AB-26A/CR, AB-26B/CR, **and AB-26C/CR**.

* * * * * * *

c. (Superseded) Throughout this manual, Antenna Support AB-26(*)/CR represents Antenna Supports AB-26A/CR, AB-26B/CR and AB-26C/CR. All information applies equally to all three models, except as otherwise specified.

3. General

* * * * * * *

c. (Superseded) Antenna Supports AB-26A/CR, AB-26B/CR, and AB-26C/CR are identical in appearance and use when assembled and erected, but differ slightly in design and in the method by which they are assembled. These differences are discussed in the pertinent paragraphs. The mast and boom sections of any one model are interchangeable among themselves, the sections and the mast and boom top plates are interchangeable between Antenna Supports AB-26B/CR and AB-26C/CR only, and the base assemblies of Antenna Supports AB-26B/CR and AB-26C/CR are interchangeable as complete units.

* * * * * * *

4. Major Components

a. Mast and Boom Sections (1, **figs. 3 and 3.1**). The seven mast sections and the three boom sections (par. 3) of each individual model of the support are all identical and interchangeable; the sections **of Antenna Supports AB-26B/CR and AB-26C/CR are interchangeable between these models but *not* with those of Antenna Support AB-26A/CR.** Each section is * * * the splicing bolts. The sections of the mast and boom of Antenna **Supports** AB-26B/CR and **AB-26C/CR** have no splice plates welded to the rod ends. Separate splice plates (plate connectors) are furnished which grip the mating ends of the straight rods of adjacent sections (**figs.** 8 **and 8.1**). All sections are galvanized and painted after fabrication.

b. Mast Top Plate. The mast top * * * on each side. The mast top plate of Antenna Support AB–26A/CR **(20, fig. 3)** has three splice plates welded to the under surface These splice plates * * * section (fig. 11). The mast top plate of Antenna Support AB–26B/CR **and of Antenna Support AB–26C/CR (12, fig. 3.1)** has three short rods welded to the under surface. These rods are * * * antenna halyard blocks.

c. Boom Top Plate. The boom top * * * and 7 1/16-inch sides. The boom top plate of Antenna Support AB–26A/CR (**15, fig. 3**) has three splice plates welded to the under surface. These splice plates * * * top boom section. The boom top plate of Antenna Support AB–26B/CR **and of Antenna Support AB–26C/CR (11, fig. 3.1**) has three short rods welded to the under surface. These rods are * * * during erection (fig. 9).

d. Base Assembly, ***Antenna Support AB–26A/CR and AB–26B/CR*** (6, fig. 3). The base assembly * * * together (par. 13*a* (2)).

d.1 (Added) *Base Assembly, Antenna Support AB–26C/CR* (2, fig. 3.1). This base assembly is made up of four magnesium castings which are joined together by 5/8-inch diameter stainless steel hinge pins. The large base casting is secured to the ground with three steel ground pins, each 1 inch in diameter by 30 inches long (8, fig. 3.1). The hinge casting is secured to the base casting, the swivel casting is secured to the hinge casting, and the boom casting is secured to the swivel casting with hinge pins held in place with washers and cotter pins (fig. 6.1). The boom and the mast are attached to the boom casting and the hinge casting, respectively. In each of these two castings, three square-headed, threaded stubs are inserted through holes in the castings and secured with nuts; the square heads of the stubs fit into square recesses in the castings. The rod ends of the first mast section and the first boom section are clamped to these stubs with splice plates in the same manner that the sections are fastened together (par. 13*a*(2)).

e. Mast Guys (8, 18, and 24, fig. 3). One back guy * * * type of sleeve.

Note (Added). The guys furnished with Antenna Supports AB–26A/CR and AB–26B/CR are shipped completely preassembled with the strain insulators installed. The guys furnished with Antenna Support AB–26C/CR (3, 6, and 13, fig 3.1) are shipped assembled except for strain insulators. These are supplied with the equipment and must be installed in the guys (par. 13*e*) before Antenna Support AB–26C/CR can be erected.

* * * * * * *

f. Boom Guys (3, fig. 3 **and 5, fig. 3.1**). The two boom * * * 5/8-inch diameter rope. Each has a 6-inch eye-splice formed in one end; the other end is passed through a friction catch **fastener** (fig. 12) and knotted so that an adjustable loop is formed. The eye-splice ends * * * the sliding fastener.

* * * * * * *

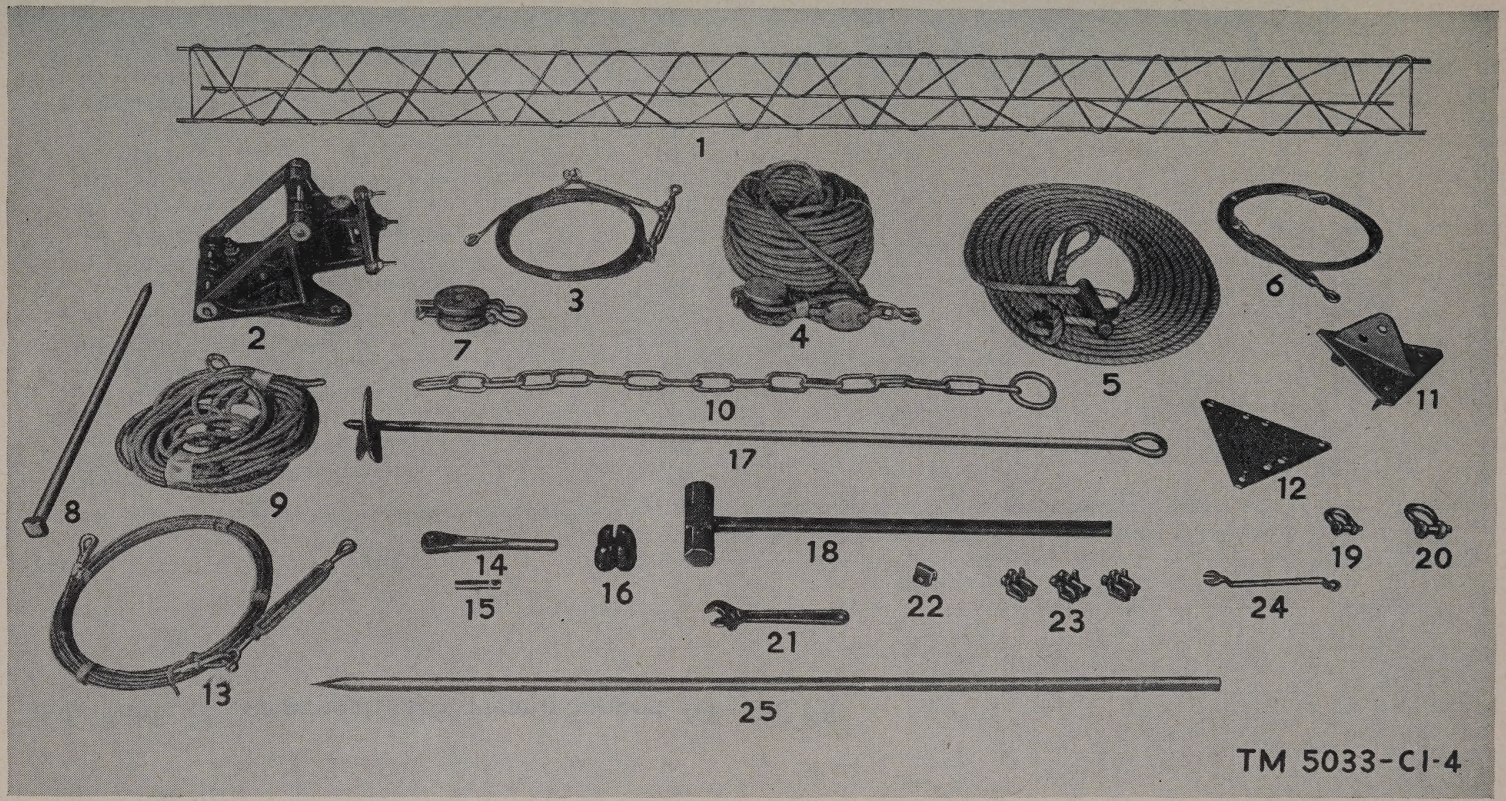


Figure 3.1 (Added). *Antenna Support AB–26C/CR, components* (see par. 6.1 for identification of items).

6. Table of Components for Antenna Supports AB–26A/CR and AB–26B/CR

(fig. 3)

* * * * * * *

6.1. Table of Components for Antenna Support AB–26C/CR

(fig. 3.1)
(Added)

Quantity	Component	Dimensions (in.)				Weight (lb.)	Reference No. fig. 3.1
		Length	Width	Height	Diameter		
7	Mast section (triangular)	120	6½ (ea face)			20	1
3	Boom section (triangular)	120	6½ (ea face)			20	1
1	Base assembly	19½	15¼	9⅞		19	2
1	Mast top plate (triangular)	9⅞ (ea side)		¼		4	12
1	Boom top plate (triangular)	8½ (base)	7 15/16 (ea side)			6	11
48	Splice plate assembly [a]	2	1¼	1¼		.5	23
3	Red guy with one turnbuckle	37′3″			7/32	3.3	6
1	Red guy with two turnbuckles	37′3″			7/32	3.3	3
3	White guy with one turnbuckle	52′11″			7/32	2.6	6
1	White guy with two turnbuckles	52′11″			7/32	2.6	3
3	Blue guy with one turnbuckle	74′7″			7/32	3.9	6
1	Blue guy with two turnbuckles	74′7″			7/32	3.9	3
18	Wire rope clamp [b]	1⅜	1 5/16	1 7/16		.2	
1	Back guy	119′			¼	12.5	13
33	Insulator, strain [c]	3¼	2⅞	2⅞	3⅜	1.7	16
2	Boom guy	52′			5/8	6	5
7	Anchor	66			6	11	17
6	Anchor chain (⅜″ dia links)	52				9	10

1	Block and tackle consisting of 2 double blocks and 280′ of ½″ dia rope.					33	4
3	Single block	6		3½		4	7
1	Radius rope	100′			½	8	9
15	Shackle	3½	2¼		½	.75	20
19	Shackle	2½	1¾		⅜	.3	19
8	Guy clip assembly	3⅜	1⅜	1/16		.1	22
3	Ground pin	30			1	10	8
1	Digging bar	60			⅞	8	25
1	Sledge hammer with 6″ head	36				9	18
1	Ratchet wrench	9⅝	2	1½		3	14
1	Socket, ⅝″ hexagonal	3				.75	15
1	Wrench, box, open-end	8 15/16	1 15/32	13/32		.4	24
1	Adjustable wrench	10	2¾	⅝		1	21

[a] Includes 12 spares.
[b] Used for guy repair.
[c] Includes four spares.

Note. This list is for general information only. See appropriate publications for information pertaining to the requisitioning of spare parts.

7. Technical Characteristics

Material:

Mast and boom sections	Steel wire.
Base assembly (**AB–26A/CR and AB–26B/CR**)	Aluminum.
Base assembly (AB–26C/CR)	**Magnesium.**

* * * * * * *

8. Packaging Data

(fig. 4)

Antenna Support AB–26(*)/CR * * * and length, respectively.

Container	Dimensions (in.)	Volume (cu. ft.)	Weight (lb.)	Contents	
				Item	Quantity
Chest 1	15⅞ x 23⅝ x 47⅝	10. 125	354	Red guy	4
*	*	*	*	* *	*
				Splice plate assembly [2]	36, (48)
				Insulator, strain [3]	**33**
*	*	*	*	*	*
				Wrench, crescent [4]	1
*	*	*	*	* *	*

[1] Items supplied with Antenna Support AB-26A/CR only.

[2] Items supplied with Antenna **Supports** AB-26B/CR **and AB-26C/CR only. Figure in parentheses indicates quantity supplied with AB-26C/CR.**

[3] **Items supplied with Antenna Support AB-26C/CR only.**

[4] **Items supplied with Antenna Support AB-26B/CR only.**

12. Installation of Base Assembly and Anchors

a. Base Assembly (figs. 6, 6.1, and 6.2).

* * * * * * *

Figure 6. Base Assembly (***Antenna Supports AB–26A/CR and AB–26B/CR***).

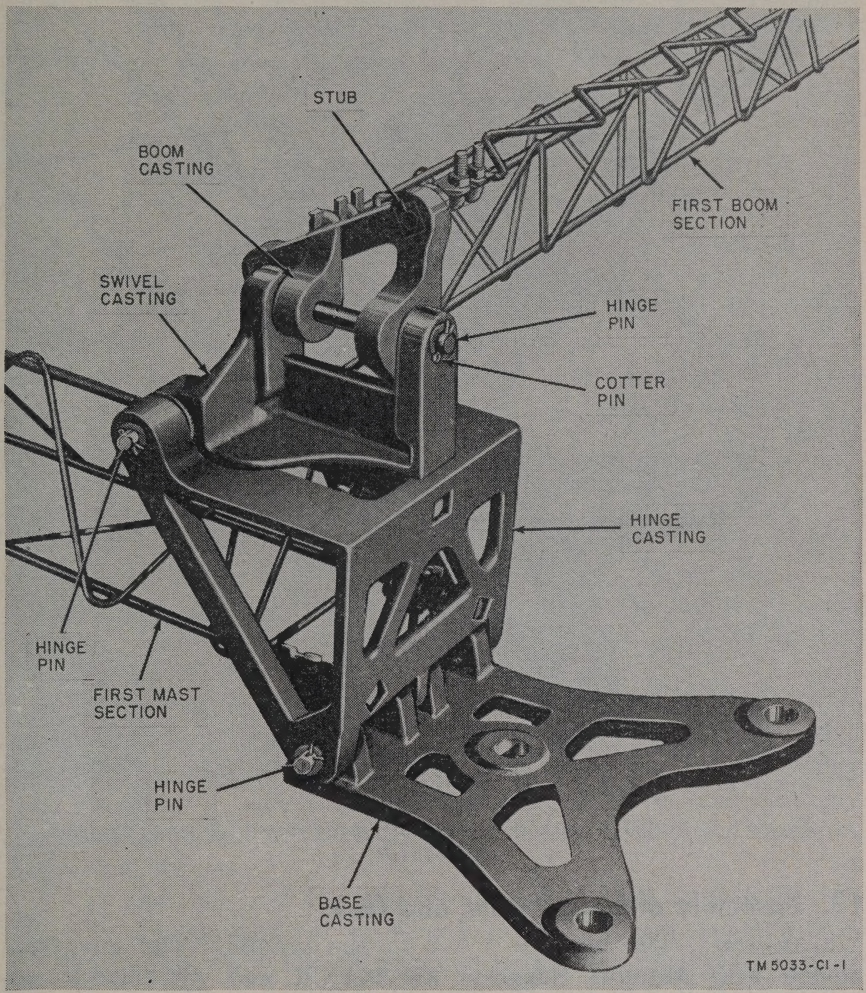


Figure 6.1 (Added). *Base assembly, mast and boom attached (Antenna Support AB–26C/CR).*

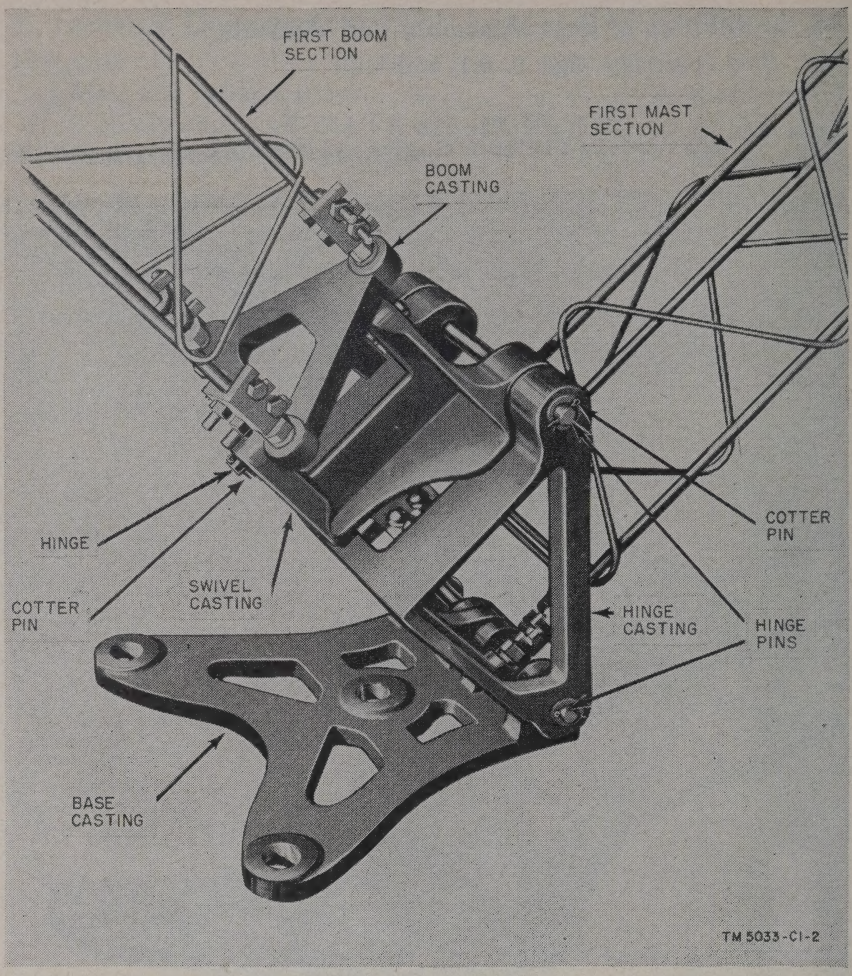


Figure 6.2 (Added). *Base assembly, mast being raised (Antenna Support AB–26C/CR).*

13. Assembly of Mast, Boom, and Guys

a. General. The mast is * * * on the ground. **The guys furnished with Antenna Supports AB–26A/CR and AB–26B/CR are shipped fully assembled; those of Antenna Support AB–26C/CR must have strain insulators installed before they are attached to the mast.**

* * * * * * *

(2) *Antenna* ***Supports*** *AB–26B/CR* ***and AB–26C/CR.*** To join together * * * of each rod. Turn the splice plate so that when the nut is tightened, the bolt will lie in this groove (**figs.** 8 **and 8.1**). Install a splice * * * a similar manner.

b. Mast,

(1) Bolt (AB–26A/CR) or * * * above the first. **When the mast of Antenna Support AB–26C/CR is being assembled, clamp the first section to the stubs attached to the hinge casting (par. 4*d.1* and fig. 6.1); make sure the stubs are inserted properly and that the nuts which secure them are tight. The remainder of the mast is assembled in the same manner that the mast of Antenna Support AB–26B/CR is assembled.**

* * * * * * *

c. Boom, ***Antenna Supports AB–26A/CR and AB–26B/CR.***

* * * * * * *

d. (Added) *Boom, Antenna Support AB–26C/CR.* Clamp a section to the stubs attached to the boom casting (par. 4*d.1* and fig. 6.1); make sure the stubs are inserted properly and that the nuts which secure them are tight. Clamp a second section to the first and a third section to the second. Attach the boom top plate to the top boom section; the corner of the triangular plate that is beneath the two holes in the vertical plate should point toward the mast. When assembly is complete, the boom will lie on the ground approximately at a right angle to the mast instead of lying on top of the mast as do the booms of Antenna Supports AB–26A/CR and AB–26B/CR (figs. 6 and 6.1).

Note. When the boom is installed to lower Antenna Support AB–26C/CR, assemble it on the ground in the usual manner but in the position it had when the erection of the mast was complete.

e. (Added) *Guys, AB–26C/CR Only.* A strain insulator must be installed at each place in each guy where there are two interlocked loops without thimbles. Install one strain insulator in each red guy, two insulators in each white guy, three insulators in each blue guy, and five insulators in the back guy. To install a strain insulator, proceed as follows:

(1) Slide one loop of a pair of interlocked loops against the compression sleeve of the other loop. Slide this second loop over a strain insulator and into one of the deep grooves so that the wide end of the loop fits into the deep part of the groove.

(2) Slide the other loop over the insulator and into the deep groove located on the side of the insulator opposite to and in a plane perpendicular to the groove containing a loop.

(3) Seat each loop securely into its respective groove so that the compression sleeves which secure the loops are opposite to one another on opposite sides of the strain insulator, and a straight line would pass through both sleeves and the center of the insulator.

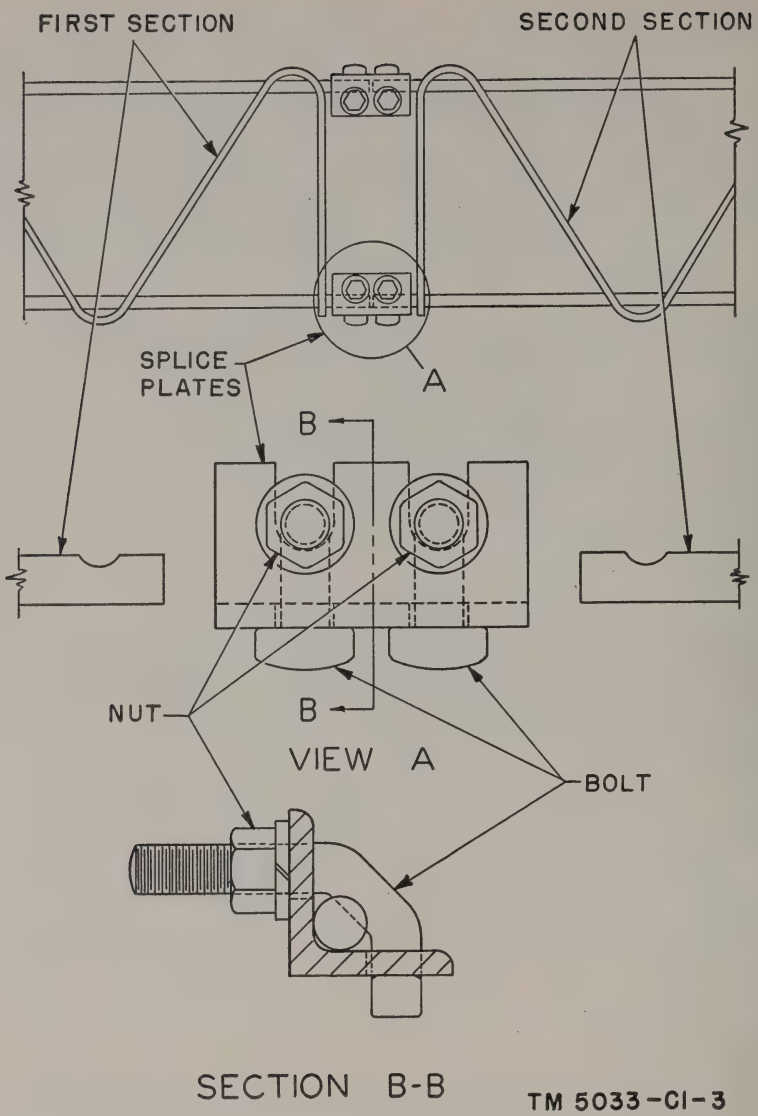


Figure 8.1 (Added). *Antenna Support AB–26C/CR, joining sections.*

14. Installation of Boom Guys and Block and Tackle

a. (Superseded) *Boom Guys* (fig. 9).

(1) Using one ½-inch shackle, attach the eye ends of both boom guys to the boom top plate (use the hole nearer the top corner of the vertical plate).

(2) When Antenna Support AB–26A/CR or AB–26B/CR is being erected, attach (use one ½-inch shackle) the looped end (formed by the friction catch fastener) of one of the boom guys to the A anchor eye (*not* to the anchor chain); attach

the looped end of the other boom guy to the C anchor eye in a similar manner. Take up the slack in the guy ropes with the fastener (fig. 12).

(3) When antenna Support AB–26C/CR is being erected, shackle the looped end of one boom guy to the eye of the C anchor; slide the friction catch fastener down almost to the shackle. The second boom guy is used to assist in raising the boom (par. 16*a.1*).

Note. When the boom is installed to lower Antenna Support AB–26C/CR, install the boom guy according to the instructions in (1) and (2) above.

* * * * * * *

15. Installation of Mast Guys

* * * * * * *

b. Guy Clips. Eight guy clips * * * holes and secured. The guy clip pins furnished with Antenna **Supports** AB–26A/CR **and AB–26C/CR** are secured in place with cotter pins (fig. 7); those furnished with Antenna Support AB–26B/CR have dropover ends and required no cotter pins. As soon as * * * be 90° apart. **When Antenna Support AB–26C/CR is being erected, be sure the strain insulators are installed in the guys (par. 13*e*) before attaching the guys to the mast.**

* * * * * * *

16. Erection of Antenna Support

a. Raising Boom, ***Antenna Supports AB–26A/CR and AB–26B/CR*** (fig. 14).

* * * * * * *

a.1 (Added). *Raising Boom, Antenna Support AB–26C/CR*

(1) Use three men to perform these operations Lift the top end of the boom several feet off the ground. Push the boom upward from the under side and, at the same time, pull the top of the boom upward with the boom guy rope not attached to an anchor (par. 14*a*(3)).

(2) While the boom is being raised, watch the tension on the rope of the block and tackle. If the tension is too great, so that the mast tends to rise, slacken the downhaul rope a little.

(3) When the boom is almost vertical, adjust the boom guy attached to the C anchor (par. 14*a*(3)) so that the boom cannot move past the perpendicular. When the boom is vertical, shackle the free boom guy to the A anchor eye and adjust the length of both boom guys so that the boom is held perpendicular and the tension on both guys is equal.

* * * * * * *

22. Preventive Maintenance Checklist

The operations listed * * * officer in command.

* * * * * * *

b. Guys, ***Strain Insulators,*** *Guy Clips, Shackles, Anchors, and Anchor Chains.*

Item No.	What to check	Corrective action	Reference
*	* *	* *	* *
4	**All strain insulators for cracks or breakage.**	Replace defective insulator.	Par. 26c **and *d*.**
*	* *	* *	* *

24. Lowering Mast

In general, the * * * they are given.

* * * * * * *

b. Install the boom, the boom guys, the boom anchor, and the block and tackle (pars. 13*a*, 13*c*, **13*d***, and 14).

* * * * * * *

25. Disassembly

In general, the * * * proceed as follows:

a. Lower the mast to the ground (par. 24) **and then lower the boom (reverse the instructions given in paragraph 16*a* or 16*a*.1).**

26. Repair

Repair of Antenna * * * by enemy action.

a. Replacement of a Mast Section.

* * * * * * *

(3) At each end of the damaged section, remove the nuts and bolts or the splice plates that attach this section to the adjacent parts; remove the section

* * * * * * *

b. Replacement of a Guy.

* * * * * * *

(4) Install a new guy of the proper length and adjust the tension. **When a new guy is being installed on Antenna Support AB–26C/CR, be sure that the proper number of strain insulators are installed correctly (par. 13*e*) before the guy is installed.**

* * * * * * *

c. Replacement of a Strain Insulator (***AB–26A/CR and AB–26B/CR***).

* * * * * * *

d. (Added). *Replacement of a Strain Insulator (AB–26/CR)*

(1) Remove the guy that has a defective insulator (*b*(1), (2), and (3) above).

(2) Push the loops of the guy out of the grooves of the defective insulator and remove the insulator.

(3) Install a new insulator in the guy (par. 13*e*).

(4) Reinstall the guy, adjust the tension, and remove the temporary guy.

APPENDIX II

IDENTIFICATION TABLE OF PARTS FOR ANTENNA SUPPORT AB–26(*)/CR

2. Identification Table of Parts for Antenna Supports AB–26A/CR and AB–26B/CR

* * * * * * *

3. Identification Table of Parts for Antenna Support AB–26C/CR (Sig C Stock No. 2A248–26A)

(Added).

Ref No. fig. 3.1	Name of part and description	Function of part	Signal Corps stock No.
17	ANCHOR, guy: screw type; steel; galv	Secures the guys to the ground	5B135.5–1
4	BLOCK, pulley: mortised, hardwood tackle block for ½″ dia rope; w/o becket; 2 sheaves.	Part of block and tackle used to raise mast.	6Q9002
7	BLOCK, pulley: snatch block type; single sheave for ⅝″ dia rope; w/o becket.	Used to attach antenna to support	6Q9003–3
7	BLOCK: tackle block type; upset swivel shackle fastening; double sheave; 2¼″ dia for ½″ dia rope.	Part of block and tackle assembly	6Q9002–2
	CLAMP, electrical: guy wire; accommodates ¼″ dia guy strand.	Used as wire rope clip to repair guys	2Z2642.261
22	CLAMP: steel; U shape; 1 3/16″ between legs 1⅜″ wd, approx 1⅞″ lg x 1/16″ thk; ⅜″ dia, roundhead rivet w/brass cotter pin through one end holds clip assembly in place.	Attaches the guys to the mast sections	2A478.21
16	INSULATOR, strain: glazed	Increases the strength of the guys	3G360–15
1	MAST SECTION: welded steel, lattice type; 6½″ equilateral triangle, 10′ lg o/a.	Mast and boom sections	2A2496–50
23	PLATE, connector: mast sect.; splice angle, 2″ lg; sides, 1¼″ lg x 3/16″ thk.	Joins sections	2A2822.15
25	ROD, ground: 1″ dia x 30⅝″ lg	Secures base to ground	2A2805–7
4	ROPE: manila hemp; twisted, 3 strand; ½″ dia	Part of block and tackle assembly	6Z7906.1
5	ROPE: sisal hemp; twisted, 3 strand, ⅝″ dia	Used as boom guy	6Z7900
9	ROPE ASSEMBLY: manila hemp; twisted, 3 strand; ⅜″ dia.	Used to lay out anchor positions	6Z7956
19	SHACKLE: screw pin type; ⅜″ dia material; galv	Used to secure guys to top plate and to anchor chains.	2A3205.1

20	SHACKLE: screw pin type; ½″ dia material; drop forged steel; galv.	Used to secure anchor chains to anchor rods and halyard blocks to mast top plate.	5B15508
13	THIMBLE, guy: for ¼″ dia rope; 2½″ lg x 1 9/16″ wd x ⅞″ thk.	Used on all guys to prevent chafing	5B18047
	TURNBUCKLE: drop forged steel, galv	Used to adjust guy tension	6Z8782
	TURNBUCKLE: drop forged steel, galv	Used to adjust guy tension	5B19008–7

[AG 413.44 (5 Aug 53)]

By order of the Secretary of the Army:

M. B. RIDGWAY,
General, United States Army,
Chief of Staff.

Official:

WM. E. BERGIN,
Major General United States Army,
The Adjutant General.

Distribution:

Active Army:

Tech Svc (1); Tech Svc Bd (1); AFF Bd (ea Svc Test Sec) (1); AFF (5); AA Comd (2); OS Maj Comd (5); Base Comd (5); MDW (2); Log Comd (5); A (5); CHQ (2); FT (2); Sch (5) except 11 (25); PMS & T 11 (1); Gen Dep (2); Dep 11 (20) except Sig Sec, Gen Dep (10); Tng Div (2); POE (10), OSD (2); Lab 11 (5); Mil Dist (3); Field Maint Shops 11 (3); Two (2) copies to each of the following T/O & E's 11–107; 11–127A; 11–128; 11–500A, CA, CB, CC, CD; 11–587; 11–592; 11–597.

NG: Same as Active Army except one copy to each unit.

Army Reserve: Same as Active Army except one copy to each unit.

For explanation of distribution formula, see SR 310–90–1.

TAGO 1082B

U. S. GOVERNMENT PRINTING OFFICE: 1953

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

TM 11–5033

ANTENNA SUPPORTS

AB–26A/CR AND AB–26B/CR



DEPARTMENT OF THE ARMY • *DECEMBER 1950*

United States Government Printing Office
Washington : 1951

DEPARTMENT OF THE ARMY
WASHINGTON 25, D. C., *22 December 1950*

TM 11–5033 is published for the information and guidance of all concerned.

[AG 400.402 (15 Dec 50)]

BY ORDER OF THE SECRETARY OF THE ARMY:

OFFICIAL:
EDWARD F. WITSELL
Major General, USA
The Adjutant General

J. LAWTON COLLINS
Chief of Staff, United States Army

DISTRIBUTION:

Tech Svc (2) except 11 (50); Arm & Svc Bd (1); AFF Bd (ea Svc Test Sec) (1); AFF (5); AA Comd (2); OS Maj Comd (5); Base Comd (3); MDW (5); A (20); CHQ (2); FC (2); Sch (2) except 11 (10); Gen Dep (2); Dep 11 (5); Tng Div (2); PE (10), OSD (2); Lab 11 (2); 4th & 5th Ech Maint Shops 11 (2); Two (2) copies to each of the following T/O & E's: 11–27; 11–107; 11–127; 11–500, EA, EB, EC, ED, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET; 11–587; 11–592; 11–597; SPECIAL DISTRIBUTION.

For explanation of distribution formula, see SR 310–90–1.

CONTENTS

		Paragraph	Page
CHAPTER 1. INTRODUCTION			
Section I.	General:		
	Scope	1	1
	Forms and records	2	1
II.	Description and data:		
	General	3	1
	Major components	4	2
	Accessory equipment	5	8
	Table of components	6	8
	Technical characteristics	7	9
	Packaging data	8	10
CHAPTER 2. INSTALLATION INSTRUCTIONS			
Section I.	Service on receipt of equipment:		
	Siting	9	12
	Unpacking and checking	10	12
II.	Assembly and erection:		
	Location of base assembly and guy and boom anchors	11	13
	Installation of base assembly and anchors	12	14
	Assembly of mast and boom	13	16
	Installation of boom guys and block and tackle	14	18
	Installation of mast guys	15	18
	Erection of antenna support	16	24
	Final adjustments and connections	17	26
CHAPTER 3. MAINTENANCE INSTRUCTIONS			
Section I.	Lubricants and preservatives:		
	Lubricants	18	28
	Preservatives	19	28
II.	Preventive maintenance:		
	Meaning of preventive maintenance	20	28
	Preventive maintenance services	21	29
	Preventive maintenance checklist	22	29
CHAPTER 4. REPAIR			
	General	23	31
	Lowering mast	24	31
	Disassembly	25	31
	Repair	26	32
CHAPTER 5. DEMOLITION TO PREVENT ENEMY USE			
	Methods of demolition	27	34
	Destruction of components	28	34
APPENDIX I. REFERENCES			35
	II. IDENTIFICATION TABLE OF PARTS		36
INDEX			43

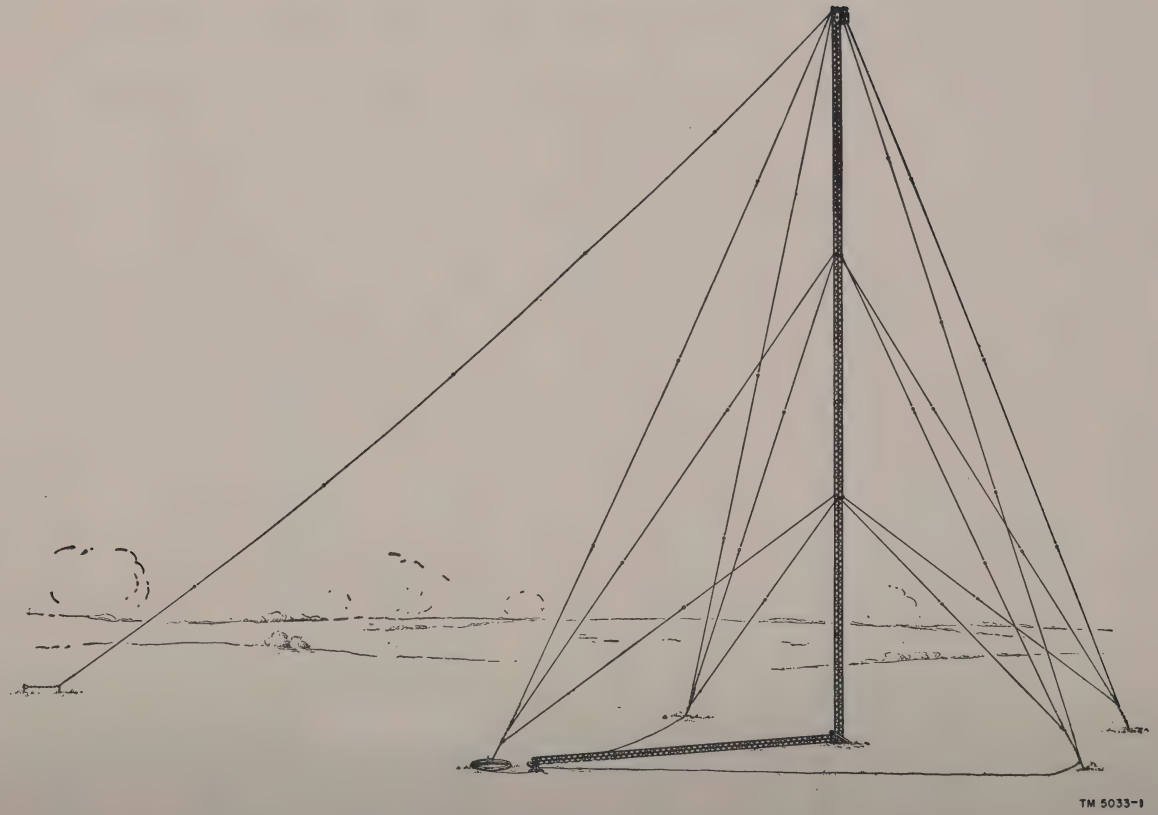


Figure 1. Antenna Support AB–26(*)/CR.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

a. These instructions are published for the information and guidance of the personnel to whom this equipment is issued. They contain information on the assembly, erection, maintenance, and repair of the equipment. They apply only to Antenna Supports AB–26A/CR and AB–26B/CR.

b. Appendix I contains a list of current references, including supply catalogs, technical manuals, and other available publications applicable to the equipment; appendix II contains an identification table of parts.

c. Throughout this manual, Antenna Support AB–26(*)/CR represents both Antenna Support AB–26A/CR and Antenna Support AB–26B/CR. All information applies equally to both models unless otherwise stated.

2. Forms and Records

The following standard forms will be used for reporting unsatisfactory conditions of equipment, or improper preservation, packaging, packing, marking, loading, stowage, or handling thereof.

a. DD Form 6, Report of Damaged or Improper Shipment (Reports Control Symbol CS GLD–66), will be filled out and forwarded as prescribed in SR 745–45–5.

b. DA AGO Form 468, Unsatisfactory Equipment Report (Reports Control Symbol CS GLD–247), will be filled out and forwarded to the Office of the Chief Signal Officer as prescribed in SR 700–45–5.

c. Use other forms and records as authorized.

Section II. DESCRIPTION AND DATA

3. General

a. Antenna Support AB–26(*)/CR is a 70-foot, guyed, latticed, triangular mast for supporting antennas. It is made up of seven identical, triangular sections joined together; this assembly is attached to a hinged base plate so that the support can be raised completely assembled and may be lowered for repairs or for disassembly for

storage or shipment. The mast is guyed at three levels in each of four quadrants (fig. 2); in addition, a back guy that extends from the top of the mast bisects one of the quadrants exactly opposite to the mean antenna direction. Three single-sheave wooden blocks are supplied with the antenna support; these may be used to attach a doublet, vee, or rhombic antenna to the mast.

b. A 30-foot boom, made up of three sections identical to those which make up the mast, is attached to the hinged base plate and used when the mast is being raised or lowered.

c. Antenna Supports AB–26A/CR and AB–26B/CR, are identical in appearance and use when assembled and erected, but differ slightly in design and in the method by which they are assembled. These differences are discussed in paragraphs 4*a* through *d* and 13*a*. The mast and boom sections of either model are interchangeable among themselves, but the sections, base assembly, and the mast and boom top plates are not interchangeable between models.

d. Antenna Support AB–26(*)/CR is used with, but is not a part of, various ground radio equipments. The particular ground set in use will determine the specific antenna that will be attached to the support. As the mast can be climbed after it is erected, antenna attachments may be made at any time.

4. Major Components

a. Mast and Boom Sections (1, fig. 3). The seven mast sections and the three boom sections (par. 3) of each individual model of the support are all identical and interchangeable; the sections are *not* interchangeable between models. Each section is composed of three straight rods, .3938 inch in diameter, and three preformed serpentine wires, .207 inch in diameter, that are welded together to form an equilateral, triangular prism 6½ inches across each face and 10 feet long. The mast and boom sections of Antenna Support AB–26A/CR have a splice plate welded to each end of each of the straight rods; two holes are drilled in each splice plate to receive the splicing bolts. The sections of the mast and boom of Antenna Support AB–26B/CR have no splice plates welded to the rod ends. Separate splice plates (plate connectors) are furnished which grip the mating ends of the straight rods of adjacent sections (fig. 8). All sections are galvanized and painted after fabrication.

b. Mast Top Plate (20, fig. 3). The mast top plate is a ¼-inch steel, triangular plate, 9⅜ inches long on each side. The mast top plate of Antenna Support AB–26A/CR has three splice plates welded to the under surface. These splice plates are similar to the splice plates welded to the ends of the mast sections and mate with them so that the top plate can be bolted to the upper splice plates of the top mast section (fig. 11). The mast top plate of Antenna Support

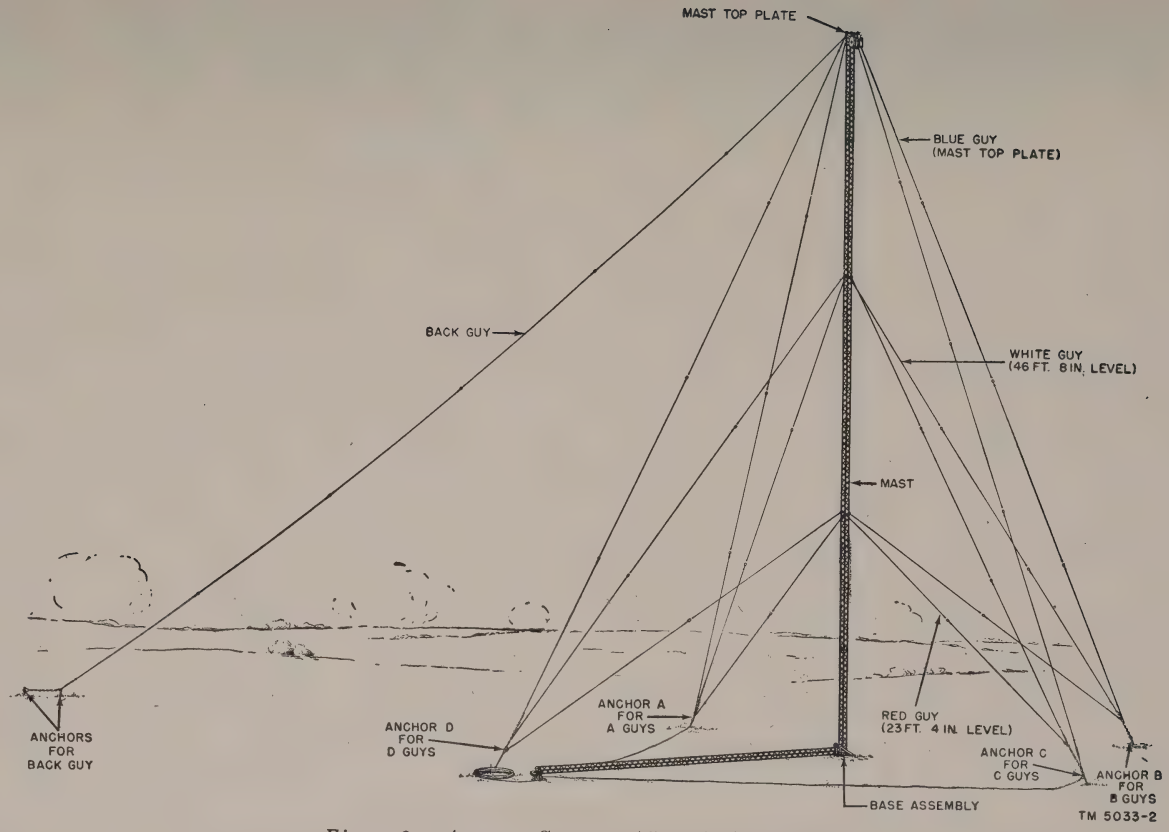


Figure 2. Antenna Support AB–26(*)/CR erected.

AB–26B/CR has three short rods welded to the under surface. These rods are similar to the rod ends of the mast sections and mate with them so that the top plate can be clamped to the upper ends of the top mast section by splice plates in the same manner that the sections are fastened together (par. 13*a* (2)). Eight ⅝-inch holes are drilled in the mast top plate to provide a means of attaching the shackles for the guy connections and antenna halyard blocks.

c. Boom Top Plate (15, fig. 3). The boom top plate is a ¼-inch steel, triangular plate that has an 8½-inch base and 7 5/16-inch sides. The boom top plate of Antenna Support AB–26A/CR has three splice plates welded to the under surface. These splice plates are similar to the splice plates welded to the ends of the boom sections and mate with them so that the boom top plate can be bolted to the top boom section. The boom top plate of Antenna Support AB–26B/CR has three short rods welded to the under surface. These rods are similar to the rod ends of the boom sections and mate with them so that the top plate can be clamped to the upper ends of the top boom section in the same manner that the sections are fastened together (par. 13*a* (2)). Another triangular plate is welded to the top surface of the boom top plate, at a right angle to it. Two holes drilled in this plate provide a means of attaching two shackles, one of which secures the boom guys and the hook of the block and tackle, the other the mast-raising guys, during erection (fig. 9).

d. Base Assembly (6, fig. 3). The base assembly is composed of three aluminum castings which are joined together by ⅝-inch diameter, stainless steel hinge pins. The large base casting is secured to the earth with three 1-inch diameter by 30-inch long galvanized steel ground pins (21, fig. 3). The mast base is joined to this casting by a steel hinge pin, and the boom base is joined to the mast base by a steel hinge pin. The mast base and the boom base of Antenna Support AB–26A/CR each are provided with splice plates to which the mast and the boom, respectively, may be bolted (fig. 6). The mast base and the boom base of Antenna Support AB–26B/CR each are provided with three short rods similar to the rod ends of the mast and boom sections and mate with them so that the mast base and boom base can be clamped to the lower ends of the mast and boom, respectively, in the same manner that the sections are fastened together (par. 13*a* (2)).

e. Mast Guys (8, 18, and 24, fig. 3). One back guy and four sets of side guys, three guys to a set, are provided. The sets of side guys are attached to the mast, one set in each quadrant (fig. 2), and are secured at the opposite end to properly located anchors set in the earth. The back guy bisects one of the quadrants and extends from the top of the mast to a back-guy anchor assembly (fig. 15). For convenience, the sets of side guys and their corresponding anchors are designated by letters, in a clockwise direction from the back guy

(which is unlettered). The first set is designated A, the second B, the third C, and the fourth D. The D guys are the mast-raising guys. Each set of three side guys comprises guys of three lengths; these are color-coded according to their respective points of attachment to the mast. The shortest guys, which are attached at the lowest level, have red bands; the next longer, which are attached at the next higher level, have white bands; and the longest, which are attached to the mast top plate, have blue bands (fig. 2). All three guys in all four sets of guys furnished with Antenna Support AB–26A/CR are fabricated of ¼-inch diameter guy wire, 6 by 7 mild plow steel, stranded and galvanized, with a breaking strength of 3,600 pounds; those supplied with Antenna Support AB–26B/CR are fabricated of 7/32-inch diameter, nylon-covered, flexible wire rope with a breaking strength of 2,800 pounds. All side guys are provided with glazed ceramic strain insulators, each 2⅛ inches long. The back guy furnished with Antenna Support AB–26A/CR is fabricated of ¼-inch diameter, extra-high strength, 7-strand galvanized wire, with a breaking strength of 6,650 pounds; that supplied with Antenna Support AB–26B/CR is fabricated of ¼-inch diameter, nylon-covered, standard wire rope with a breaking strength of 4,600 pounds. All back guys have glazed ceramic strain insulators, each 3 7/16 inches long. All the strain insulators are secured in place by ¼-inch forged aluminum, compression-type sleeves; each end of each guy has a ¼-inch galvanized steel thimble secured in place by the same type of sleeve.

(1) *Red guys A, B, and C.* Each of these three guys is 37 feet 3 inches long and has one strain insulator secured in place 18 feet 7 inches from the mast end (approximately at the midpoint). A turnbuckle is attached to the thimble at the anchor end of each guy. These guys are attached to the mast at the 23-foot 4-inch level.

(2) *Red guy D.* This guy is the same over-all length as red guys A, B, and C and has one insulator similarly located. The lower end is made up of two pieces: one piece, 14 feet 8 inches long, is spliced to the insulator; the other, a 4-foot tailpiece, is linked to the first by interlocked thimbles and has a turnbuckle at its anchor end. A second turnbuckle is attached to the thimble at the mast end. This guy, also, is attached to the mast at the 23-foot 4-inch level.

(3) *White guys A, B, and C.* Each of these three guys is 52 feet 11 inches long and has two strain insulators, the first 16 feet and the second 36 feet from the mast end. The tailpiece attached to the second insulator is 16 feet 11 inches long and has a turnbuckle attached to the thimble at its anchor end. These guys are attached to the mast at the 46-foot 8-inch level.

(4) *White guy D.* This guy is 52 feet 8 inches long over-all and has two strain insulators located similarly to those of white guys A, B, and C. The portion of the guy attached to the second, or lower, insulator is made up of two pieces: one, spliced to the insulator, is 13 feet 8 inches long; the other, linked to the first, is 3 feet long and has a turnbuckle at its anchor end. A second turnbuckle is attached to the thimble at the mast end. This guy, also, is attached to the mast at the 46-foot 8-inch level.

(5) *Blue guys A, B, and C.* Each of these three guys is 74 feet 7 inches long and has three strain insulators, the first 18 feet, the second 38 feet, and the third 58 feet from the mast end. The tailpiece attached to the third, or lowest, insulator is 16 feet 7 inches long and has a turnbuckle attached to the thimble at its anchor end. These guys are attached to the top plate of the mast.

(6) *Blue guy D.* This guy is 74 feet 7 inches long over-all and has three strain insulators located similarly to those of blue guys A, B, and C. The portion of the guy attached to the third, or lowest, insulator is made up of two pieces: one, spliced to the insulator, is 12 feet 7 inches long; the other, linked to the first, is 4 feet long and has a turnbuckle at its anchor end. A second turnbuckle is attached to the thimble at the mast end. This guy, also, is attached to the top plate of the mast.

(7) *Back guy.* The back guy is 119 feet long and has five strain insulators spaced at 20-foot intervals measured from the mast end; the tailpiece is 19 feet long and has a turnbuckle attached to the thimble at the anchor end. This guy is attached to the top plate of the mast and secured at the other end to the back guy anchor assembly.

f. Boom Guys (3, fig. 3). The two boom guys, each 52 feet long, are fabricated of ⅝-inch diameter rope. Each has a 6-inch eye-splice formed in one end; the other end is passed through a friction catch fastened (fig. 12) and knotted so that an adjustable loop is formed. The eye-splice ends are shackled to the boom top plate (fig. 9); the loop ends are secured to the A and C anchors, respectively (fig. 12). The tension of the boom guys can be adjusted by means of the sliding fastener.

g. Anchors and Anchor Chains.

(1) *Anchors* (23, fig. 3). The seven, screw-type anchors are fabricated of carbon steel, drop-forged and hot-dip galvanized; each is 66 inches long. Each anchor consists of a rod with a forged ovaleye at one end and a forged, helical screw, 6 inches in diameter, at the other end. Each anchor has a holding power, in sand, of 2,500 pounds. One anchor

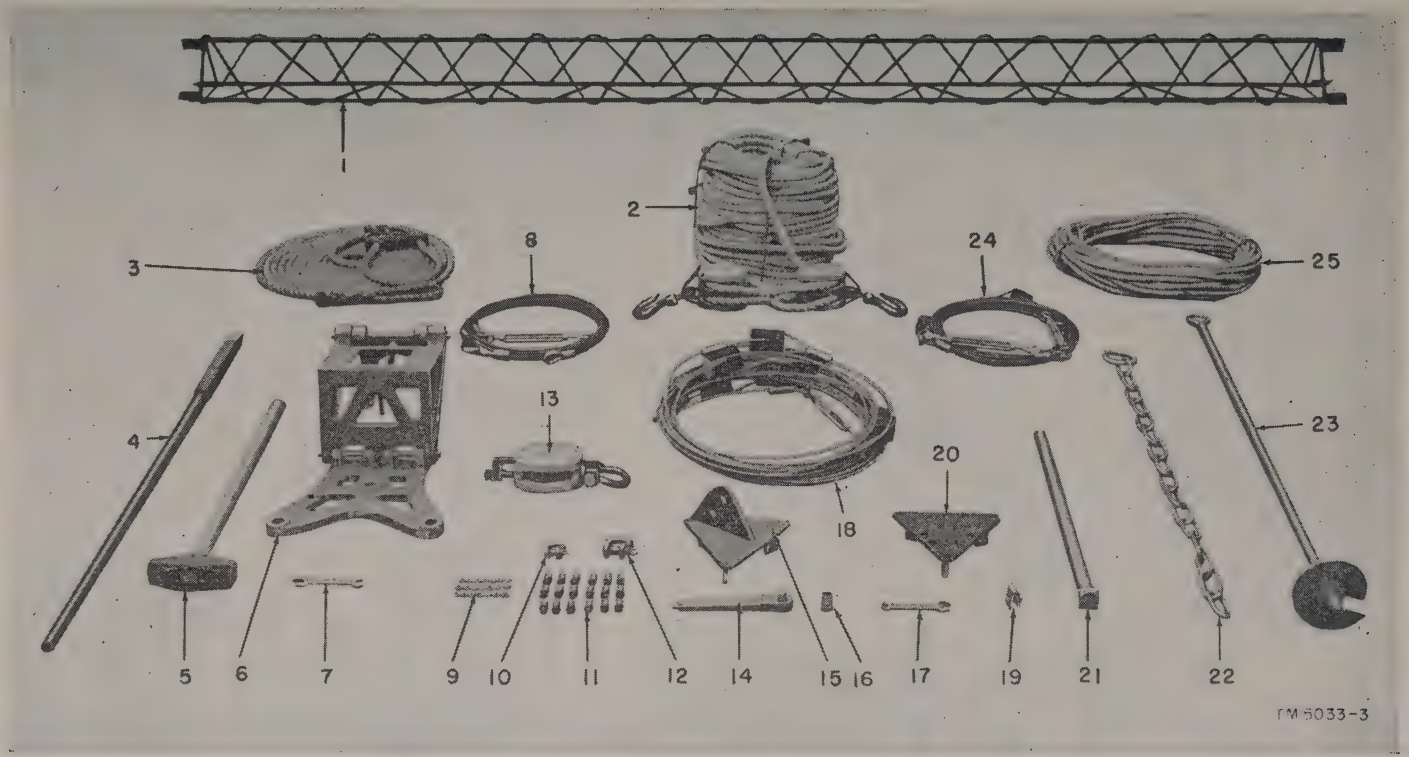


Figure 3. Antenna Support AB–26A/CR, components (see par. 6 for identification of items). All items except 9, 11, and 17 are components also of Antenna Support AB–26B/CR. See Note "1," paragraph 6, for additional components of Antenna Support AB–26B/CR. Mast and boom sections and top plates of Antenna Support AB–26B/CR differ slightly from those shown (par. 4a).

is used to secure each set of side guys (A, B, C, and D); two anchors are used to secure the back guys and one anchor is used to secure the ground end of the block and tackle.

(2) *Anchor chains* (22, fig. 3). Six galvanized steel chains, each 52 inches long over-all and provided with a 3-inch inside diameter ring at one end, are supplied. These are shackled, ring end down, to the ovaleyes of the anchors and provide a means of adjusting the lengths of the mast guys to compensate for uneven terrain.

5. Accessory Equipment

a. Block and Tackle (2, fig. 3). Two double-sheave, wooden tackle blocks and 280 feet of ½-inch diameter rope are supplied with Antenna Support AB–26(*)/CR. These are used to raise the boom and mast.

b. Radius Rope (25, fig. 3). The radius rope is 100 feet long. It is made up of two sections, one 24 feet 9 inches long, the other 75 feet 3 inches long; the two pieces are linked together by interlaced eye splices. An eye splice is woven into the free end of the shorter piece; the free end of the longer piece is plain. There is a black mark on the rope 32 feet from the free end with the eye splice; there is a red mark 35 feet from the same end. This rope is used to lay out the anchor locations (par. 11).

6. Table of Components

(fig. 3)

Quantity	Component	Dimensions (in.)				Weight (lb)	Ref No. fig 3
		Length	Width	Height	Diam		
7	Mast section (triangular).	120	6½ (ea face).			20	1
3	Boom section (triangular).	120	6½ (ea face).			20	1
1	Base assembly	24	18	12		39. 5	6
1	Mast top plate (triangular).	9⅞ (ea side).		¼		4	20
1	Boom top plate (triangular).	8½ (base).	$7\frac{15}{16}$ (ea side).			6	15
36	Splice plate assembly [1]	2	1¼	1¼		. 5	
3	Red guy with one turnbuckle.	37 ft 3 in.			¼	5	8
1	Red guy with two turnbuckles.	37 ft 3 in.			¼	5	24
3	White guy with one turnbuckle.	52 ft 11 in.			¼	6	8
1	White guy with two turnbuckles.	52 ft 8 in.			¼	6	24

See footnote at end of table.

Quantity	Component	Dimensions (in.)				Weight (lb)	Ref No. fig 3
		Length	Width	Height	Diam		
3	Blue guy with one turnbuckle.	74 ft 7 in.			¼	9	8
1	Blue guy with two turnbuckles.	74 ft 7 in.			¼	9	24
180	Wire rope clamp [1]	1⅜	1 5/16	1 7/16		.2	
1	Back guy	119 ft			¼	21	18
2	Boom guy	52 ft			⅝	6	3
7	Anchor	66			6	11	23
6	Anchor chain (7/16 in. dia links).	52				9	22
1	Block and tackle consisting of 2 double blocks and 280 ft of ½" dia rope.					33	2
3	Single block	6		3½		4	13
1	Radius rope	100 ft			½	8	25
15	Shackle	3½	2¼		½	.75	12
19	Shackle	2½	1¾		⅜	.3	10
72	Bolt, ⅜"–16NC [2]	1					11
72	Nut, ⅜"–16NC, hexagonal.[2]						9
8	Guy clip	3⅜	1⅜	1/16		.1	19
3	Ground pin	30			1	10	21
1	Digging bar	60			⅞	8	4
1	Sledge hammer with 6" head.	36				9	5
1	Ratchet wrench	9⅝	2	1½		3	14
1	Socket, ⅜" hexagonal	3				.75	16
2	Open-end wrench [2]	5⅝	¾	¼		2	17
1	Open-end wrench	5⅝	¾	¼		2	7
1	Crescent wrench [1]	10	2¾	⅝		1	

[1] Items supplied with Antenna Support AB–26B/CR only.
[2] Items supplied with Antenna Support AB–26A/CR only.

Note. This list is for general information only. See appropriate publications for information pertaining to the requisitioning of spare parts.

7. Technical Characteristics

Material:	
Mast and boom sections	Steel wire.
Base assembly	Aluminum.
Foundation	Base assembly secured to ground with ground pins.
Mounting	Hinged base.
Loading	Designed to withstand a 100 mile per hour wind with a head load of 2,000 lb.

Guys, breaking strength:

Side guys (AB–26A/CR)	3,600 lb.
Side guys (AB–26B/CR)	2,800 lb.
Back guy (AB–26A/CR)	6,650 lb.
Back guy (AB–26B/CR)	4,600 lb.
Anchors	Screw type; holding power, in sand—2,500 lb.

8. Packaging Data

(fig. 4)

Antenna Support AB–26(*)/CR is shipped disassembled and packed in two wooden chests and three bundles. The contents of each chest and bundle, together with the over-all dimensions and weights, are given in the following table. The dimensions given are for height, width, and length, respectively.

Container	Dimensions (in.)	Volume (cu ft)	Weight (lb)	Contents	
				Item	Quantity
Chest 1	15⅞ x 23⅝ x 47⅝.	10. 125	354	Red guy	4
				White guy	4
				Blue guy	4
				Back guy	1
				Block and tackle assembly.	1
				Single block	3
				Base assembly	1
				Bolt and nut, each [1]	72
				Shackle	34
				Turnbuckle	16
				Radius rope	1
				Guy clip	8
				Splice plate assembly.[2]	36
				Mast top plate	1
				Boom top plate	1
				Wire rope clamps [2]	180
				Socket	1
				Wrench, ratchet	1
				Wrench, open-end [1]	2
				Wrench, open-end	1
				Wrench, crescent [2]	1
				Boom guys	2
Chest 2	8 x 18⅜ x 71½.	5. 740	196	Screw anchor	7
				Anchor chain	6
				Digging bar	1
				Sledge hammer	1
				Ground pin	3
Bundle 1	15 x 17½ x 120	18. 22	88	Mast section	4
Bundle 2	15 x 17½ x 120	18. 22	88	do	4
Bundle 3	7 x 12⅝ x 120	6. 13	44	do	2

[1] Items supplied with Antenna Support AB–26A/CR only.
[2] Items supplied with Antenna Support AB–26B/CR only.

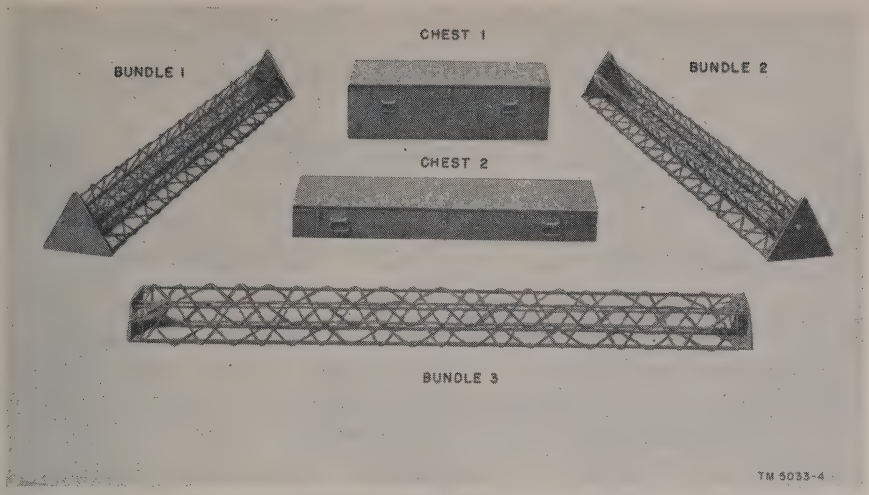


Figure 4. Antenna Support AB–26(*)/CR, packed for shipment.

CHAPTER 2

INSTALLATION INSTRUCTIONS

Section I. SERVICE ON RECEIPT OF EQUIPMENT

9. Siting

Select a convenient and suitable location of sufficient area to permit laying out the antenna support components on the ground. The ideal site is a level area approximately 150 feet long by 100 feet wide, free from trees and high brush. The shape and size of the area required for the erection of the support may be determined from figure 5. The minimum space is in the form of an irregular X, one leg of which must be 70 feet long. In order to afford good anchoring conditions, the ground should be firm and free from large rocks which might interfere with the installation of the anchors. Avoid ground that is soft or marshy. To prevent interference with the mast and guys during assembly and erection of the antenna support, it may be necessary to clear away brush along the guys and from the area near the mast as it rests on the ground. If level ground is not available, the guys will have to be adjusted while the mast is being raised and additional personnel may be required to prevent any swaying or bending during erection.

10. Unpacking and Checking

Unpack the equipment carefully to prevent damaging it. Proceed as follows:

a. Place the two unopened chests and the three bundles near the selected site.

b. Unbuckle the webbing straps that bind the mast and boom sections to the packing plates; lay the sections on the ground.

c. Unlatch and raise the lids of the chests. Remove the protective packing. Note carefully the position of each item in each chest so that it may be repacked if the support is disassembled for shipment or storage. Remove the larger items from the chest and lay them on the ground near their final location. Leave the smaller items, such as the shackles, the nuts and bolts, the splice plates, and the guy clips, in the chest so they will not be mislaid.

d. Check the contents of each chest against the master packing list that accompanies it. Be sure all items are present before the erection of the support is begun.

Section II. ASSEMBLY AND ERECTION

11. Location of Base Assembly and Guy and Boom Anchors (fig. 5)

a. After the site for the erection of the antenna support has been selected (par. 9), determine the mean direction of the antenna that will be attached to the support.

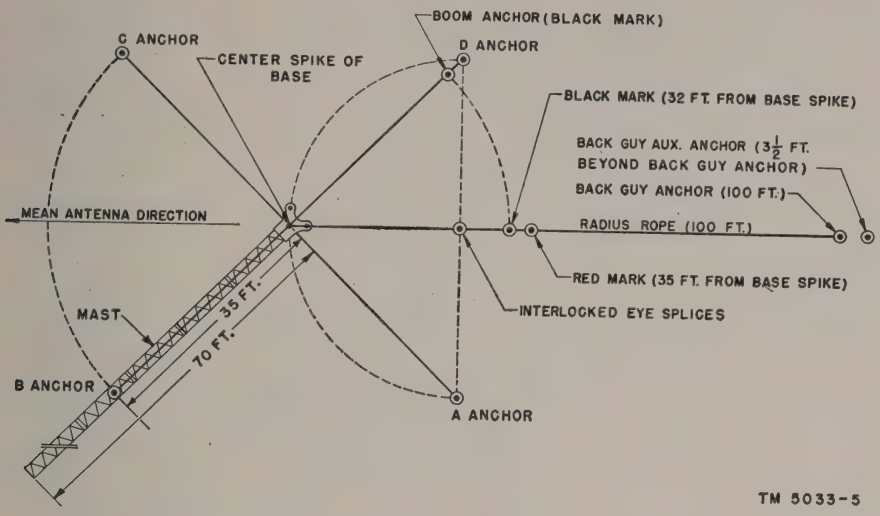


Figure 5. Location of base assembly and anchors.

b. Choose a point, free from any obstructions and approximately in the center of the selected area, at which the erected mast will stand. Drive a stake into the ground to mark this point. The base assembly will be installed here later.

c. Place the end loop of the short section of the radius rope (par. 5*b*) over the stake that marks the base location and stretch the rope along the ground in a direction exactly opposite to the mean direction of the antenna (*a* above).

Caution: Perform this and the following operations which locate the guy anchors carefully or the preassembled guys will not be the correct length and the pull on the mast will not be exerted at the proper relative angles.

d. Drive a stake at the free end of the radius rope. This is 100 feet from the base stake and establishes the location of the back guy anchor. Drive another stake 3½ feet beyond the back guy anchor stake, in line with it and the base stake. (The sledge hammer handle is 3 feet long and its head is 6 inches long; use this tool as a rule to make this measurement.) This is the location of the back guy auxiliary anchor.

e. Drive a stake through the interlaced eye splices which link the two sections of the radius rope.

f. Lift the end loop of the short section of the radius rope from the base stake. Swing this short section 90° clockwise so that it is perpendicular to the long section which joins the eye-splice stake and the back guy anchor stake.

g. Drive a stake in the loop at the end of the short section. This is the location of anchor D (fig. 5).

h. Reverse the direction of the short section of the radius rope 180° and drive a stake in the loop at the free end. This is the location of anchor A (fig. 5).

i. Sight across the anchor A stake, the eye-splice stake, and the anchor D stake. The three stakes must be in a straight line.

j. Replace the loop in the short end of the radius rope over the base stake and remove the eye-splice stake.

k. With the base stake as a pivot, extend the radius rope in a direction opposite to the direction of the anchor D stake from the base stake. Drive a stake at the point indicated by the *red* mark on the rope. This is the location of anchor B. Make sure that the anchor D stake, the base stake, and the anchor B stake are in a straight line.

l. Repeat the operation described in *k* above, but extend the radius rope in a direction opposite to the direction of the anchor A stake from the base stake. The stake driven at the point indicated by the *red* mark on the rope is the location of anchor C. Be sure that the anchor A stake, the base stake, and the anchor C stake are in a straight line.

m. Still using the base stake as a pivot, extend the radius rope successively to A, B, C, and D anchor locations. Be sure that at each location the *red* mark on the rope coincides with the point marked by the anchor stake. Each anchor must be 35 feet from the base.

n. With the loop in the end of the short section of the radius rope over the base stake, extend the rope between the base stake and the anchor D stake. Drive a stake at the point indicated by the *black* mark on the rope. This is the location of the boom anchor.

12. Installation of Base Assembly and Anchors

a. Base Assembly (fig. 6).

(1) Remove the stake that marks the location of the mast (par. 11*b*) and position the base assembly at that point so that the ears on the casting are toward the location of anchor D (fig. 5). Line up the base so that anchor stake D, the center ground pin hole in the base, and anchor stake B are in a straight line. When the mast is being raised, a straight pull is necessary to prevent applying torque to the mast.

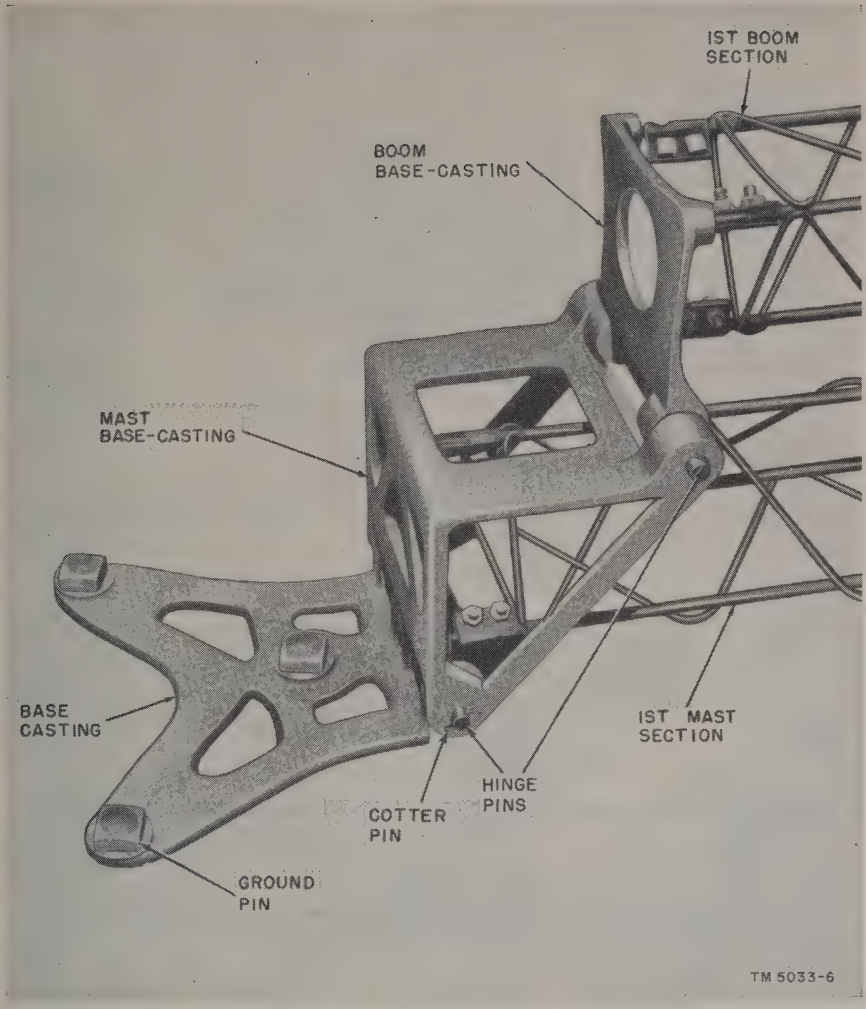


Figure 6. Base assembly.

(2) Be sure that the base plate is level. Use a spirit level, if one is available. Level the base carefully, otherwise the mast will not be vertical when it is erected.

(3) Using the sledge hammer, drive the three ground pins through the holes in the base plate until the heads of the pins are firmly against the plate. Again check to be sure the plate is level.

b. Anchors. Install each of the seven anchors as follows:

(1) Remove the stake that marks the anchor location. With the digging bar, make a hole large enough to allow the anchor screw to be started into the ground at the point marked by the stake.

(2) Thread the digging bar through the eye of the anchor. Place the hands, one on each end of the bar, and turn the bar clockwise so that the anchor will screw into the ground. Stand so that the weight of the body will increase the pressure that is applied as the bar is turned.

Note. When anchors are being installed in hard ground, two men, one at each end of the digging bar, may be required to turn the anchor. Do not apply enough force to twist the anchor rod.

(3) Screw the anchor into the earth until the eye on the anchor rod is flush with the ground. Tamp down the earth around the anchor.

(4) Using ½-inch shackles, attach an anchor chain, ring end down, to the eye of each anchor except the boom anchor.

13. Assembly of Mast and Boom

a. General. The mast is made up of seven sections bolted or clamped together, the boom of three sections similarly joined. Assembly is performed on the ground.

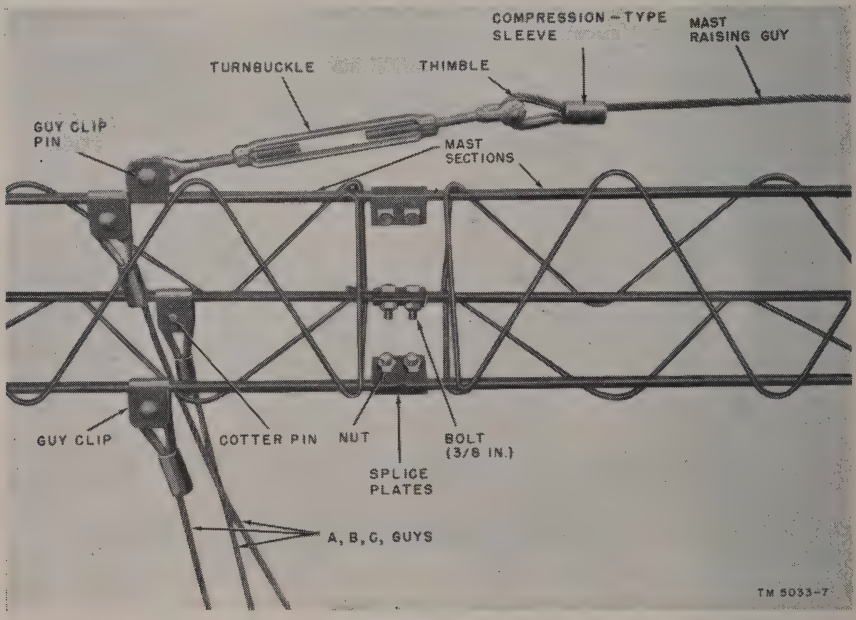


Figure 7. Antenna Support AB–26A/CR joining sections and attaching guys.

(1) *Antenna Support AB–26A/CR.* Each end of each section is equipped with three splice plates (par. 4*a*). To join together any two sections, mate the splice plates of two adjacent sections, line up the bolt holes, and insert a bolt in each of the two holes of the mated pairs of splice plates (fig. 7). Generally, it will be found more convenient to insert the

bolts from the inside of the sections, outward. Install and tighten a nut on each bolt. The mast and boom are attached to the base assembly (fig. 6), and the top plates are attached to the uppermost boom and mast sections (figs. 9 and 11) in a similar manner.

(2) *Antenna Support AB–26B/CR.* To join together any two sections, loosen the nuts on a splice plate assembly sufficiently to permit the rod end of a section to be inserted. There is a groove near the end of each rod. Turn the splice plate so that when the nut is tightened, the bolt will lie in

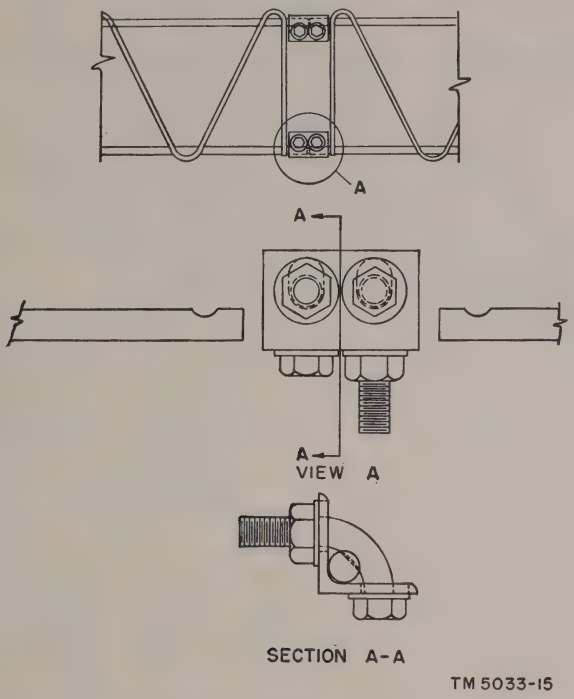


Figure 8. Antenna Support AB–26B/CR joining sections.

this groove (fig. 8). Install a splice plate on each of the three rods of one end of a section. Insert the rod ends of a second section into the splice plates already installed and tighten the nuts so that the bolts lie in the grooves of the rods. The mast and boom are attached to the base assembly, and the top plates are attached to the uppermost mast and boom sections in a similar manner.

b. Mast.

(1) Bolt (AB–26A/CR) or clamp (AB–26B/CR) a section to the mast base plate, and then assemble together five more sections above the first.

(2) Secure the tower top plate to a seventh section and attach this section to the rest of the mast. The corner of the triangular top plate that is opposite to the side in which a single hole is drilled (fig. 11) should be uppermost.

c. Boom.

(1) Bolt (AB–26A/CR) or clamp (AB–26B/CR) a section to the boom base plate, and then assemble together two more sections above the first.

(2) Attach the boom top plate to the top boom section. The corner of the triangular top plate that is beneath the two holes in the vertical plate should be down (fig. 9).

14. Installation of Boom Guys and Block and Tackle

a. Boom Guys (fig. 9). Using one ½-inch shackle, attach the eye ends of both boom guy ropes to the boom top plate (use the top hole). Using one ½-inch shackle, attach the looped end (formed by the friction catch fastener) of one of the boom guys to the A anchor eye (*not* the anchor chain); attach the looped end of the other boom guy to the C anchor eye in a similar manner. Take up the slack in the guy ropes with the fastener (fig. 12).

b. Block and Tackle. Hook the block to which the rope is spliced into the ½-inch shackle that attaches the boom guys to the boom top plate (fig. 9). Be sure to lash the hook so it cannot work loose. Hook the other block into the eye of the boom anchor and lash the hook.

15. Installation of Mast Guys

a. General. Each of the four sets of mast guys (par. 4*e*) is identified by the same letter that identifies its associated anchor (A, B, C, and D). The three guys in each set are color-coded at their ends according to length and point of attachment to the support. The red guys are the shortest and are attached to the mast at the 23-foot 4-inch level; the white guys are the next longer and are attached to the mast at the 46-foot 8-inch level; the blue guys are the longest and are attached to the mast top plate. The back guy, also, is attached to the mast top plate; it is not color-coded. Figure 2 identifies the guys and their respective anchors and indicates the levels at which the guys should be attached to the mast. Carefully identify the guys and lay them out in their approximate locations. The back guy is longer than any of the other guys; the D guys (mast-raising guys) have interlocked thimbles near the ground end of each and have a turnbuckle attached to the thimble at each end of each guy.

b. Guy Clips. Eight guy clips of stainless steel strapping are provided; these are used to attach the red and white guys to the mast. A guy clip is placed around a vertical member of a mast section just

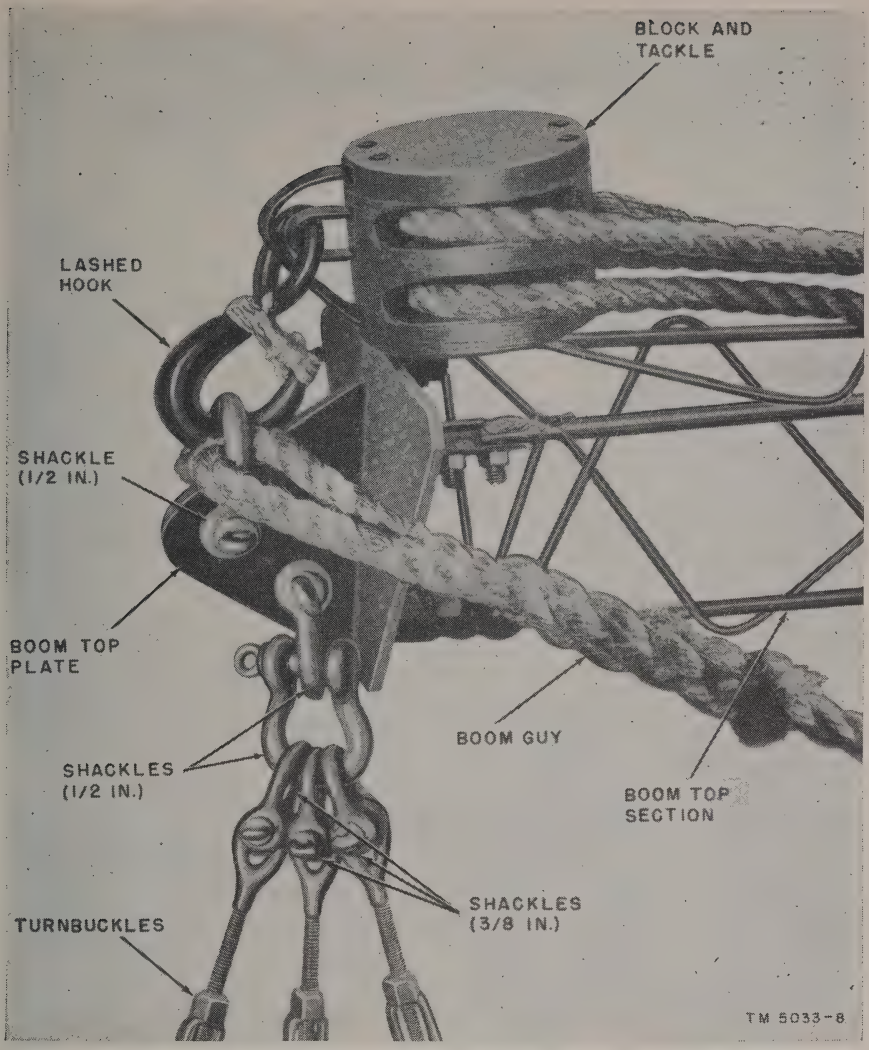


Figure 9. Boom top plate.

above a weld; a pin is then inserted through the holes and secured. The guy clip pins furnished with Antenna Support AB–26A/CR are secured in place with cotter pins (fig. 7); those furnished with Antenna Support AB–26B/CR have dropover ends and require no cotter pins. As soon as the mast is assembled, attach guy clips to it at the proper points at which the red guys and the white guys should be secured. These locations (*a* above and fig. 2) may be determined readily as each mast section is 10 feet long and has the serpentine wire welded to its vertical members at approximately 12-inch intervals. Clips for the B guys should be attached to the members that carry the D guy clips and should be placed immediately above them as shown in figure 7. This

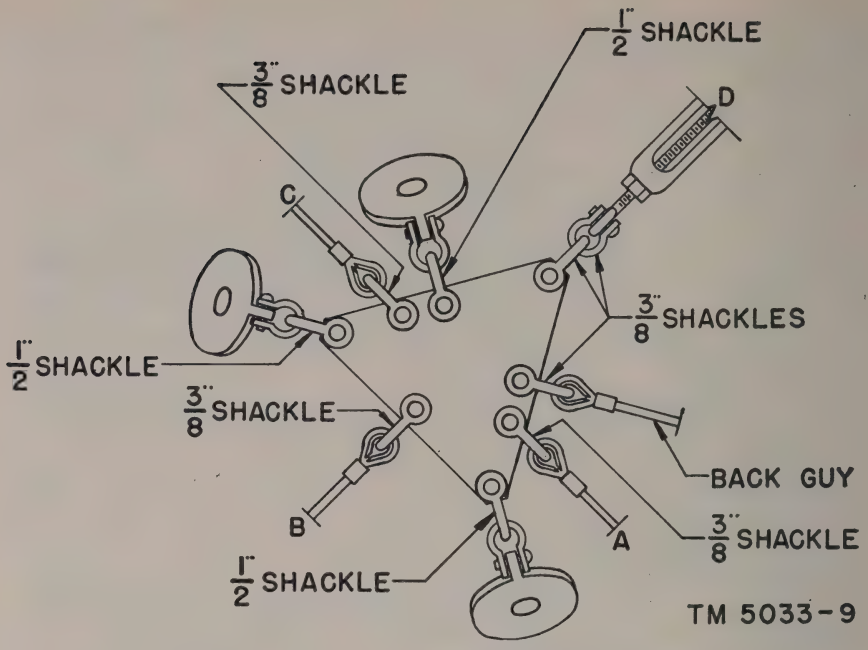


Figure 10. Layout of connections to mast top plate.

insures that the mast will be guyed at the correct levels and that the sets of guys will be 90° apart.

c. A AND C GUYS.

(1) Attach each of the A and C guys to the mast at the correct point (*a* above); attach the end *without* a turnbuckle to the mast. Begin with the blue or longest guys and, using a ⅜-inch shackle, attach each to the top plate at the position shown in figure 10; figure 11 shows the method of making this attachment.

(2) Next, install the white guys, and then the red guys. Secure the red guys and the white guys to the support by linking the thimble at the mast end of each guy with the correct guy clip; figure 7 shows the method of making this attachment. Be sure to secure the pins.

(3) Set the turnbuckles at the anchor ends of the A and C guys at midpoint. Using ⅜-inch shackles, attach the turnbuckle ends of these guys to their respective anchor chains as shown in figure 12. Leave these guys a little slack, but keep the tension on each side approximately the same.

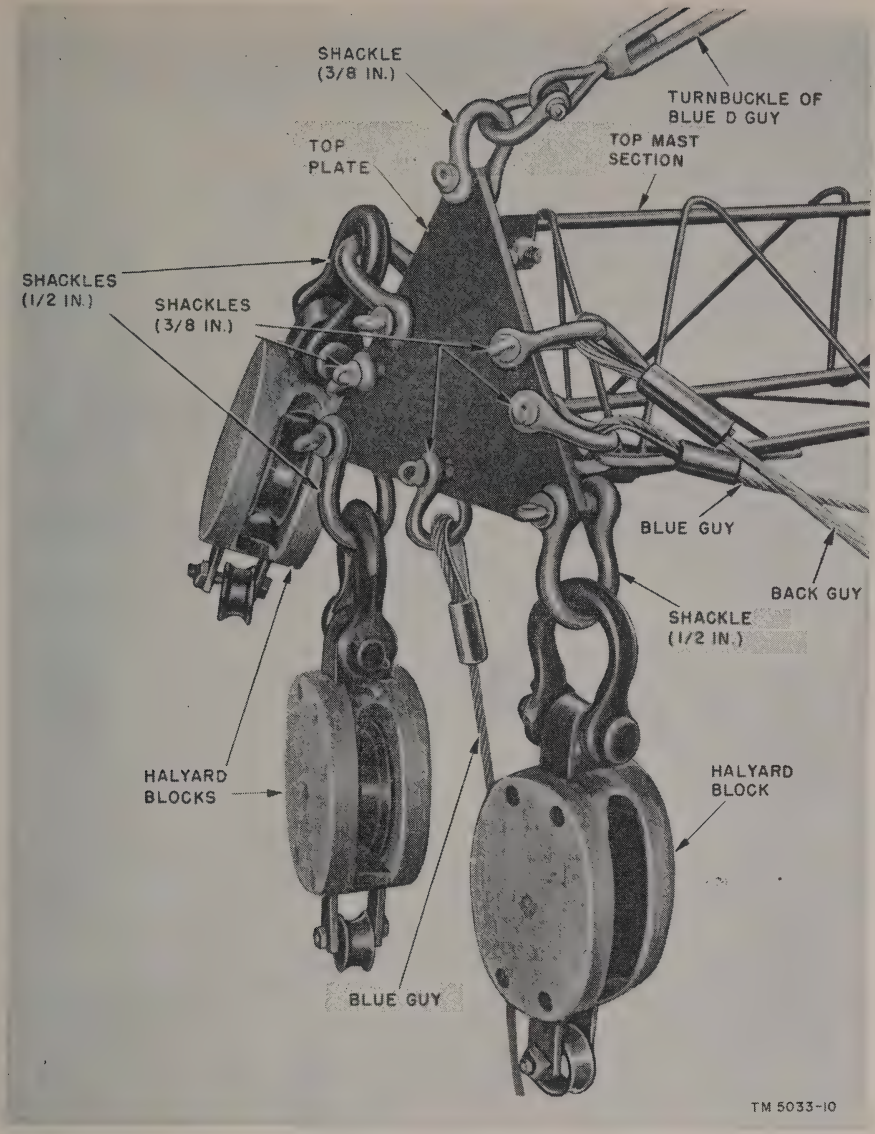


Figure 11. Mast top plate.

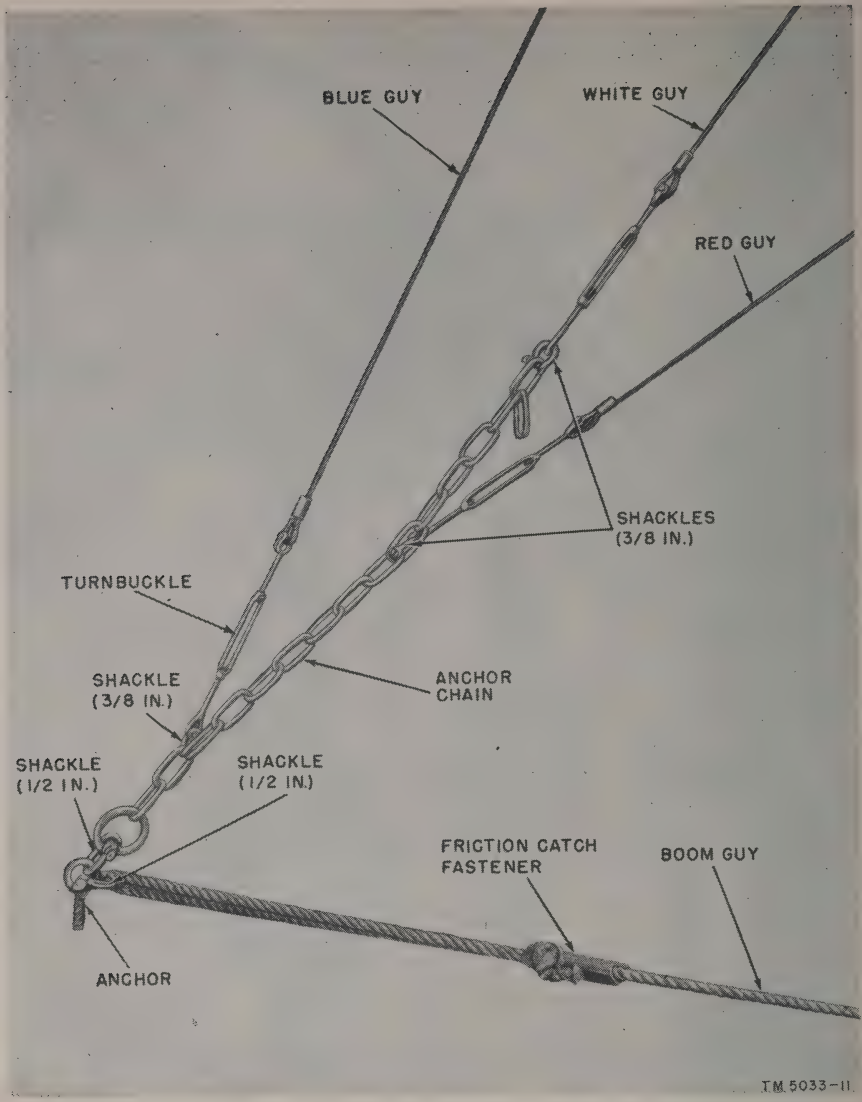


Figure 12. Attachment of mast and boom guys to anchor.

d. B Guys. The B guys are installed in exactly the same manner as the A and C guys. The white and red B guys extend through the support and are attached to the upper clips on the same vertical members that carry the D guy clips. *Do not* connect the B guys to the mast until it has been raised 4 or 5 feet off the ground.

e. D Guys. These are the mast-raising guys. Each D guy is made up of a long section and a short section joined by interlocked thimbles (par. 4*e*) and has a turnbuckle at each end.

(1) Remove the turnbuckle at the end of the short section of each D guy and attach it to the thimble at the lower end of the

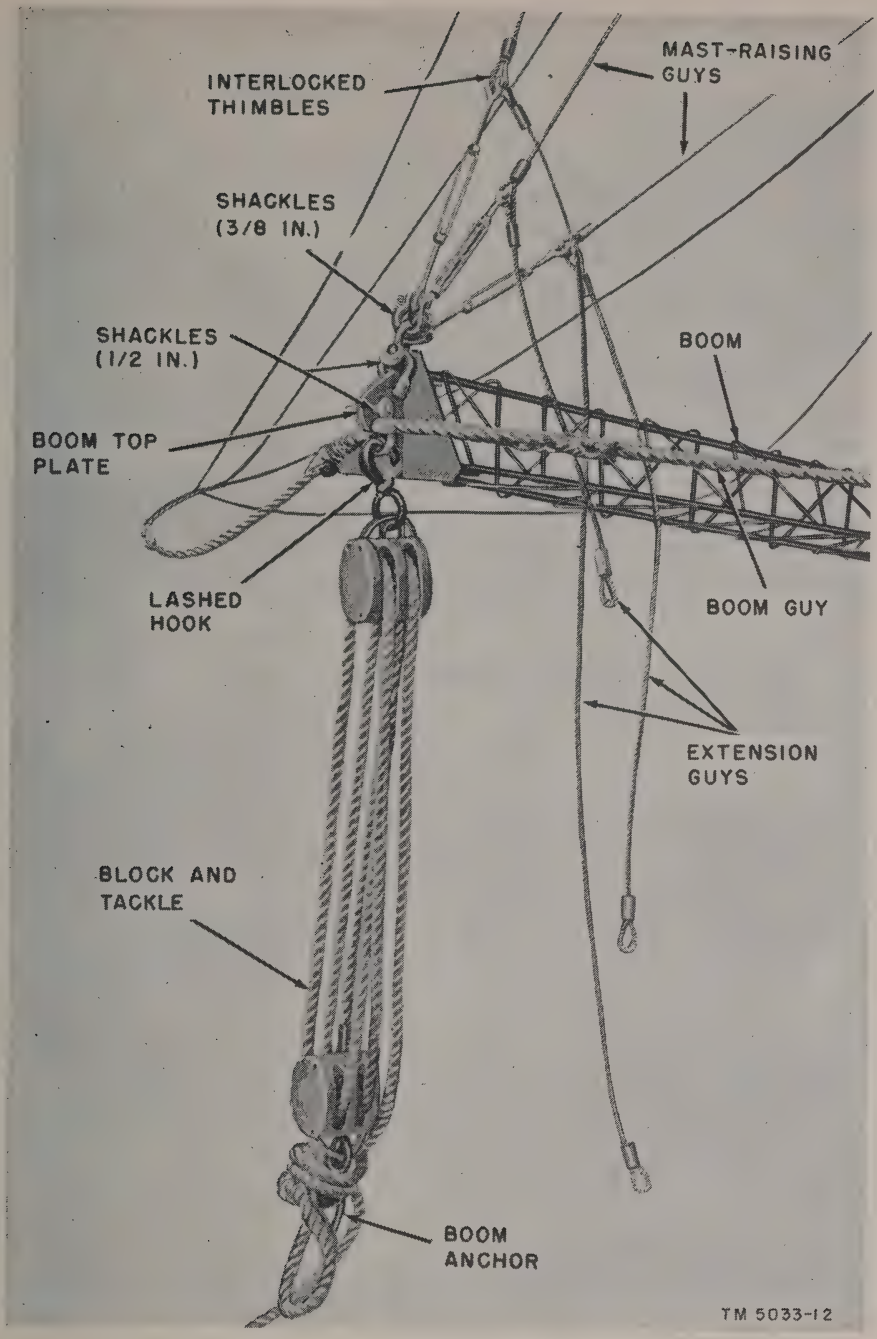


Figure 13. Boom top plate; block and tackle, D guys, and boom guys attached.

long section. Attach a ⅜-inch shackle to the eye end of each of these turnbuckles.

(2) Attach a ½-inch shackle to the boom top plate (use the lower hole).

(3) Link the three ⅜-inch shackles on the ends of the turnbuckles with a ½-inch shackle and attach this shackle to the ½-inch shackle in the lower hole of the boom top plate; figure 9 shows the method of making these connections; the short or extension sections of the D guys hang loose, as shown in figure 13.

(4) Using ⅜-inch shackles, attach the turnbuckle at the mast end of each long section to the support at the correct location. The D guys are attached to the mast in the same manner as the A and C guys (*c* above).

f. Back Guy. Using a ⅜-inch shackle, attach the back guy to the mast top plate at the location shown in figure 10; the end without a turnbuckle should be attached to the top plate. *Do not* attach this guy to its anchor until the mast has been erected and the tension of the side guys has been adjusted.

16. Erection of Antenna Support

a. Raising Boom (fig. 14).

(1) Lift the top end of the boom several feet off the ground. This moves it over the dead spot so that it can be raised by the block and tackle.

(2) Pull on the downhaul rope of the block and tackle and raise the boom until it forms an angle of 80° to 85° with the mast as it lies on the ground. Lash the downhaul rope.

(3) Adjust the position of the friction catch fasteners on the boom guys so that these guys are tight and exert equal tension on the boom.

b. Raising Mast.

Caution: Do not attempt to raise the mast in a strong wind.

(1) Using the turnbuckles at the mast ends, adjust the tension of the D guys so that they are tight. These guys carry most of the load while the support is being raised, and the ease with which it may be erected depends in a large measure on their proper adjustment.

(2) Pull on the downhaul rope of the block and tackle until the top of the mast is 3 or 4 feet off the ground; relash the rope (fig. 14).

(3) Adjust the A and C guys so that their tension is equal and will maintain the alinement of the mast while it is being raised; set the turnbuckles at midpoint and connect each guy to a suitable link in its anchor chain. These guys

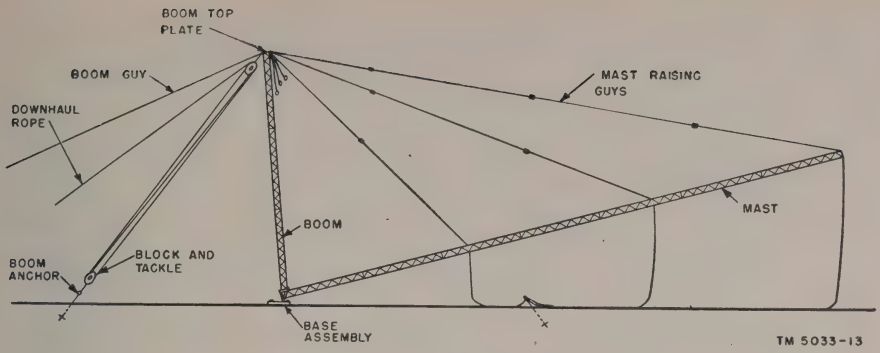


Figure 14. Raising the mast.

should be snug; a slight sag is permissible in order to prevent them from becoming excessively tight while the mast is being raised, but they must be tight enough to prevent any sideward motion of the mast. Be sure that the A and C guys have the same tension or the mast will be pulled to one side as it is raised. Upon the completion of these adjustments, the mast may have a slight bow toward the ground. By adjusting the turnbuckles, tighten or slacken the D guys (mast-raising guys) so that, while it is being raised, the mast will bend as little as possible.

(4) Attach each B guy to the mast at the correct point (par. 15*a* and *b*). Set the turnbuckles on the anchor ends at midpoint and, using ⅜-inch shackles, attach each guy to the B anchor chain.

(5) When all the guys have been properly attached and adjusted, the mast is ready to be raised into a vertical position. Place six men as follows: one man at each of the boom guy ropes, one man at the A anchor location, one man at the C anchor location, and two men at the downhaul rope of the block tackle. Unlash the downhaul rope and walk with it straight away from the mast.

(6) As the mast is being raised, check the tension of the A and C guys and the boom guys. If any guy becomes tight or loose, stop raising the mast and adjust the guy to the proper tension.

Note. If any anchor is higher than the mast base when the mast is being raised on uneven ground, the corresponding guys will slacken as the mast is raised; if any anchor is lower than the mast base, the corresponding guys will tighten as the mast is raised.

(7) Before the mast reaches a vertical position, be sure that the B guys are attached to the mast and to their anchor. If these guys are not properly fastened, the mast may continue past the vertical position and fall on the erection crew.

(8) When the mast has attained a vertical position, connect the D guys to the D anchor chain. One at a time, beginning with the blue (longest) guy, disconnect the turnbuckle from the boom top plate and from the guy. Connect the turnbuckle to the thimble at the free end of the extension guy and, with a ⅜-inch shackle, attach the guy to the D anchor chain. In the same manner, successively attach the white and the red D guys to the D anchor chain. By hand, pull each guy as taut as possible before attaching it to the chain.

17. Final Adjustments and Connections

a. Removing Erection Equipment.

(1) Detach the block and tackle from the boom and boom anchor and detach the boom guys from the boom and the A and C anchors. Remove the boom anchor from the earth.

(2) Detach the boom from the boom base and disassemble the boom.

(3) Repack this equipment and the tools in their proper places in the chests.

b. Adjusting Side Guys. After the erection equipment has been removed, trim the mast by adjusting the tension of the side guys. Stand at the base of the mast and sight up. If there is a structure in the vicinity that is known to be perpendicular, stand off at a distance and line up the mast with this structure. Adjust the guys so that the mast is straight. The guys must be tight enough to prevent any motion of the mast due to wind.

c. Attaching Back Guy (fig. 15).

(1) With a ⅜-inch shackle, attach the back guy to the main (nearer to the mast) back guy anchor chain.

(2) Pull the chain of the back guy auxiliary anchor tight and, with a ½-inch shackle, attach it to the eye of the main anchor.

(3) Use the turnbuckle to adjust the tension of the back guy. The tension required depends on the type of antenna that the mast will be used to support.

Note. For information on lowering and disassembling Antenna Support AB–26(*)/CR, refer to paragraphs 24 and 25.

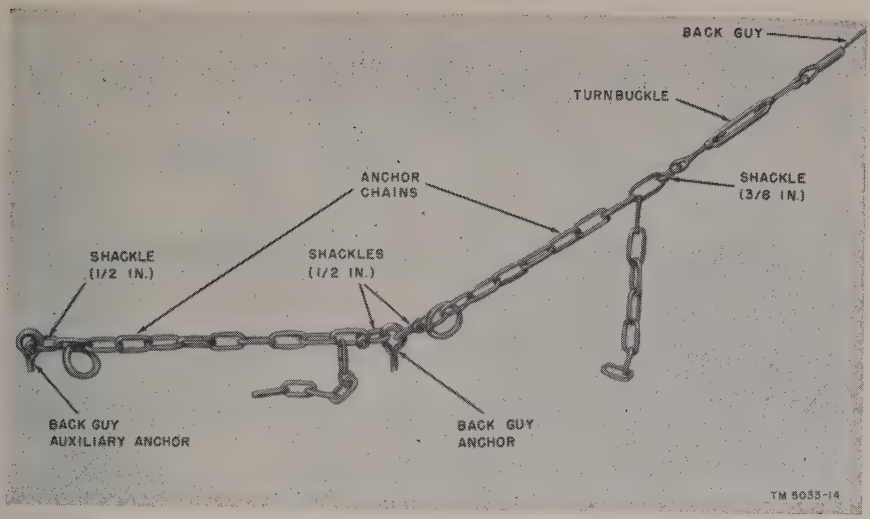


Figure 15. Back guy anchor assembly.

CHAPTER 3
MAINTENANCE INSTRUCTIONS

Section I. LUBRICANTS AND PRESERVATIVES

18. Lubricants

Antenna Support AB–26(*)/CR requires no lubrication. A thin coating of petrolatum, U. S. Army spec No. 2–67A (PET), may be applied to the threads of the turnbuckles to facilitate the adjustment of these parts.

19. Preservatives

The components of Antenna Support AB–26(*)/CR do not require special weatherproofing nor the application of any preservative except paint to prevent rust and corrosion. When any part begins to rust or to show signs of corrosion, proceed as follows:

a. Use a steel wire brush to remove all rust or corrosion from the affected area. Dress the cleaned area with No. 000 sandpaper to obtain a bright, smooth surface; wipe clean with a dry cloth.

b. Apply to the cleaned area a priming coat of paint, Federal spec TT–P–636; when this is thoroughly dry, apply lusterless olive drab paint, U. S. Army spec 3–173. Use brush, sashtool, Signal Corps stock No. 6Z1556–2.

Section II. PREVENTIVE MAINTENANCE

20. Meaning of Preventive Maintenance

Preventive maintenance is a systematic series of operations that should be performed on equipment periodically in order to prevent major breakdowns that result in unwanted interruptions in service. Its primary purpose is to *prevent* breakdowns and the need for repairs. The regular performance of preventive maintenance operations enables personnel to locate and correct minor defects or damages before they become serious enough to necessitate a major repair. The importance of preventive maintenance cannot be overemphasized. Personnel should make themselves thoroughly familiar with the equipment and with the suitable preventive maintenance services that should be performed.

21. Preventive Maintenance Services

Antenna Support AB–26(*)/CR requires regular inspection and routine maintenance. The particular operations that should be performed and the frequency of their performance depends, to a certain degree, on the weather conditions that are encountered at the location of the installation. Excessive dampness, salt spray, snow or ice, or continuous heat tend to damage the exposed surfaces of the support. Damage is indicated by rusting or corrosion of the metal parts of the mast and the guys; rusting of the threaded parts of the turnbuckles may cause serious difficulty when adjustment of these parts is necessary. Wind may cause the anchors to loosen and the guys to slacken. The components of the antenna support should be inspected at regular intervals. Inspection consists of examining carefully all the parts of the equipment and noting especially their color, position, cleanliness, and tightness. Inspection usually will reveal whether there is need for cleaning, tightening, adjusting, or replacing any parts. All accumulations of dirt, dust, rust, corrosion, or other foreign matter on fittings and connections should be removed and bare surfaces painted. Never tighten the shackles or nuts carelessly; they may be damaged if they are overtightened.

22. Preventive Maintenance Checklist

The operations listed in the following checklist should be performed by organizational personnel at monthly intervals, or more frequently, as determined by the officer in command.

a. Mast Sections, Splice Plates, and Base Assembly.

Item No.	What to check	Corrective action	Reference
1	All parts for rust and corrosion.	Clean any rusted or corroded parts and paint them.	Par. 19
2	All bolts and nuts for security.	Tighten any loose nuts	Par. 21
3	Entire support for evidence of misalinement caused by slack guys or loose anchors.	Trim the mast by adjusting the guys. Reset the anchors if they are excessively loose.	Par. 17*b*

b. Guys, Guy Clips, Shackles, Anchors, and Anchor Chains.

Item No.	What to check	Corrective action	Reference
1	All guys for proper tension.	Adjust the guy tension. Use the turnbuckles; in case of excessive slackness, shackle the guy to a lower link of the anchor chain.	
	Note. When the mast has just been installed, check the guy tension *daily*. Stretching of the wire or setting of the loops around the insulators and thimbles may cause the guy tension to slacken.		
2	All turnbuckles for security and evidence of corrosion.	Tighten loose turnbuckles; clean corroded turnbuckles.	
3	Guy clips for correct location (against weld), good condition, and security of pins.	Adjust as necessary; replace defective clips of pins.	
4	Porcelain insulators for broken or cracked insulators.	Replace defective insulator.	Par. 26*c*.
5	All shackles for good condition and security.	Tighten loose shackles; replace defective shackles.	
6	Anchors for security in earth.	If excessively loose, reset anchor.	
7	Chains for security of attachment to anchors.	Tighten loose shackles; replace defective shackles.	

CHAPTER 4
REPAIR

23. General

This chapter includes instructions both for lowering the support for repair and for completely disassembling it for storage or shipment. Repair procedures that involve the replacement of parts are given.

24. Lowering Mast

In general, the process of lowering the mast to the ground for repair or disassembly is the reverse of the erection procedure. The directions that follow should be carried out in the order in which they are given.

a. Remove any antennas or rigging attached to the support.

b. Install the boom, the boom guys, the boom anchor, and the block and tackle (pars. 13*a*, 13*c*, and 14). Figure 5 shows the location of the boom anchor; instructions for installing the anchor are given in paragraph 12*b*.

c. Detach the back guy from its anchor. Reverse the procedure outlined in paragraph 17*c*.

d. One at a time, detach the D guys (mast raising guys) from their anchors and attach them to the boom top plate. Reverse the procedure outlined in paragraph 16*b* (8). Adjust the tension on these guys so that they are tight (par. 16*b* (1)).

e. Make sure the area that will be occupied by the mast during lowering and when it is on the ground is free of obstructions and that the areas around the A and C guys are clear.

f. Pay out the downhaul rope and slowly lower the mast. Be sure to watch the A and C guys and the boom guys; if necessary, adjust them (par. 16*b* (6)) as the mast is being lowered. When the top of the mast is still 3 or 4 feet off the ground, detach the B guys from the mast.

25. Disassembly

In general, the process of disassembling Antenna Support AB–26(*)/CR is the reverse of the installation procedures. If the support is to be disassembled for storage or shipment, proceed as follows:

a. Lower the mast to the ground (par. 24).

b. Detach all the mast guys, the boom guys, and the block and tackle. Remove all guy clips and shackles.

Note. Be careful not to lose any of the smaller parts (guy clips, shackles, splice plates, and bolts and nuts); they will be needed when the support is reassembled.

c. Disassemble the boom and mast; reverse the process outlined in paragraph 13.

d. Remove the ground pins that secure the base plate to the ground. Remove the anchors from the earth; thread the digging bar through the eye of the anchor and turn the bar counterclockwise, pulling upward on the bar as it is turned.

e. Strap the mast sections into bundles as shown in figure 4, and pack all the other parts into the chests; the contents of each chest are listed in paragraph 8. As they are packed, check the components of the equipment against the packing lists. Be sure that all the items are present.

26. Repair

Repair of Antenna Support AB–26(*)/CR usually can be accomplished best by first lowering the mast to the ground. Some minor repairs can be effected and some parts replaced while the tower is erect, but any repair that involves the replacement of a part of the mast itself necessitates lowering the mast. Damage that requires extensive repair or the replacement of a part may be caused by excessively high winds (such as occur during a hurricane), by heavy ice loads, or by enemy action.

a. Replacement of a Mast Section.

(1) Lower the mast to the ground (par. 24).

(2) If any guys are attached to the damaged section, detach these guys and guy clips.

(3) At each end of the damaged section, remove the nuts and bolts (AB–26A/CR) or the splice plates (AB–26B/CR) that attach this section to the adjacent parts; remove the section.

(4) Secure a new section in place (par. 13*a*) and reattach any detached guy clips and guys at the proper locations. Make sure the nuts on the bolts through the splice plates are tight and that all guy clips and shackles are secure.

(5) Re-erect the mast (pars. 16 and 17).

b. Replacement of a Guy.

(1) Obtain a rope sufficiently long to reach from the guy clip or mast top plate shackle of the damaged guy to the anchor of the damaged guy. The rope supplied with the block and tackle can be used.

(2) Fasten an end of this rope to the mast at the point at which the defective guy is attached. Secure the other end of the rope to the anchor of the defective guy.
(3) Detach the defective guy from its anchor and from the mast.
(4) Install a new guy of the proper length and adjust the tension.
(5) Remove the rope from the anchor and mast.

c. Replacement of a Strain Insulator.

(1) Remove the guy that has a defective insulator. Follow the procedure outlined in *b* (1), (2), and (3) above.
(2) Remove the damaged insulator. Use a hack saw to cut the guy wire just beyond the compression-type sleeve at each end of the insulator. Cut as close to the sleeve as possible.
(3) Insert one free end of the guy wire through one hole in a new insulator. Bend the wire back on itself around the insulator so that a loop is formed. Observe the way the strain insulators are inserted in the other guys and be sure to install the new insulator in a similar manner. Secure the free end of the wire to the main strand with two wire rope clamps of the proper size. (The guys of Antenna Support AB–25A/CR may be spliced if no wire rope clamps are available.) Repeat this procedure with the other free end of the guy wire.

Note. When replacing a strain insulator of a guy of Antenna Support AB–26B/CR, be sure the wire rope clamps are secure. Strip the nylon from the wire at the points at which the guy is in contact with the wire rope clamps.

(4) Reinstall the guy and adjust the tension.
(5) Remove the rope (temporary guy) from the anchor and the mast.

CHAPTER 5

DEMOLITION TO PREVENT ENEMY USE

27. Methods of Demolition

a. SMASH. Use sledges, axes, handaxes, pickaxes, hammers, crowbars, heavy tools.

b. CUT. Use axes, handaxes, machetes.

c. BURN. Use gasoline, kerosene, oil, flame throwers, incendiary grenades.

d. EXPLODE. Use firearms, grenades, TNT.

e. DISPOSE. Bury in slit trenches, fox holes, other holes. Throw in streams. Scatter.

Note. Use anything immediately available for destruction of this equipment.

28. Destruction of Components

When ordered by the commander, destroy all equipment to prevent its being used or salvaged by the enemy.

a. Smash the strain insulators, tower and boom sections, base, anchors, shackles, turnbuckles, clips, top plates, blocks.

b. Cut all guys and ropes.

c. Burn wooden chests, blocks, ropes, technical manuals.

d. Bury or scatter all remaining parts of the equipment.

e. Destroy everything.

APPENDIX I

REFERENCES

Note. For availability of pertinent publications, see SR 310–20–3, SR 310–20–4, SR 310–20–5, and SIG 1.

SB 11–47	Preparation and Submission of Requisitions for Signal Corps Supplies.
SB 11–76	Signal Corps Kit and Materials for Moisture and Fungi-Resistant Treatment.
TB SIG 13	Moistureproofing and Fungiproofing Signal Corps Equipment.
TB SIG 123	Preventive Maintenance Practices for Ground Signal Equipment.
JAN–P–100	Packaging and Packing for Overseas Shipment—General Specification.
JAN–P–116	Packaging and Packing for Overseas Shipment—Preservation, Methods of.
100–2E	Marking Shipments by Contractors, Standard Specification for.

APPENDIX II

IDENTIFICATION TABLE OF PARTS FOR ANTENNA SUPPORT AB–26(*)/CR

1. General

The fact that a part is listed in this table is not sufficient basis for requisitioning the item. Requisitions must cite a T/O & E, T/A, T/BA, SIG 7 & 8, SIG 7–8–10, SIG 10, list of allowances of expendable material, or another authorized supply basis. For an index of available supply catalogs in the Signal portion of the Department of the Army Supply Catalog, see the latest issue of SIG 1, Introduction and Index.

2. Identification Table of Parts for Antenna Support AB–26(*)/CR

Fig. ref.	Name of part and description	Function of part	Signal Corps stock No.
Fig. 1	ANTENNA SUPPORT AB–26(*)/CR: steel wire, latticed tower, triangular cross-section; 70′ h x 6½″ wd ea face; incl guys, anchors, and hoisting boom.	Supports various types of antennas.	2A248–26A
23, fig. 3	ANCHOR, screw: steel, galv; ¾″ dia x 66″ lg rod; 6″ helix forged on one end, forged ovaleye other end.	Used as ground holding device for guys and block and tackle.	5B135.5–1
4, fig. 3	BAR, digging: CRS, galv; ⅞″ dia x 5′ lg; one end plain, other end swedged into a point.	Used to make holes in which to start screw anchors.	6Q3505
6, fig. 3	BASE ASSEMBLY: aluminum; c/o three castings joined by two SS hinge pins; complete with splice plates. (AB–26A/CR only.)	Supports mast; permits raising and lowering mast completely assembled.	2A326–18
	BASE ASSEMBLY: aluminum; c/o three castings joined by two SS hinge pins; complete with grooved rods for attachment of mast and boom. (AB–26B/CR only.)	do	2A326–18
2, fig. 3	BLOCK, pulley: mortised, hardwood tackle block for ½″ dia rope; flat, loose side hook; without becket; 2 sheaves, galv; bronze-bushed shell varnished.	Part of block and tackle used to raise mast.	6Q9002
2, fig. 3	BLOCK, pulley: mortised, hardwood tackle block for ½″ dia rope; flat, loose swivel hook; without becket; 2 sheaves, galv; bronze-bushed shell varnished. (AB–26A/CR only.)	do	6Q9002–1
	BLOCK, pulley: mortised, hardwood tackle block for ½″ dia rope; upset swivel shackle fastening; without becket; 2 sheaves, galv; bronze-bushed shell varnished. (AB–26B/CR only.)	do	6Q9002–2
	BLOCK, pulley: snatch block type; single sheave for ⅝″ dia rope; without becket; swivel hook fastening. (AB–26B/CR only.)	Used to attach antenna to support.	6Q9003–3
13, fig. 3	BLOCK, pulley: mortised, hardwood tackle block; single sheave for ⅝″ dia rope; without becket; shackle eye fastening. (AB–26A/CR only.)	do	6Q9003–2

Fig. ref.	Name of part and description	Function of part	Signal Corps stock No.
2, fig. 3	BLOCK TACKLE SET: hand operated; approx 70′ max lift; c/o one double-sheave block with loose side hook, one double sheave block with flat, loose swivel hook, and 280′ of ½″ dia manila rope. (AB–26A/CR only.)	Used to raise the boom and mast	6Q9275–2
	BLOCK TACKLE SET: hand operated; approx 70′ max lift; c/o one double sheave block with loose side hook, one double sheave block with upset swivel shackle, and 280′ of ½″ dia manila rope. (AB–26B/CR only.)	do	6Q9275–3
11, fig. 3	BOLT, machine (cap screw): hexagonal head; steel, galv; ⅜″–16; NC 1″ lg. (AB–26A/CR only.)	Used to secure all members together.	6L4906–16P
	CASE: plywood; 47⅝″ lg x 23⅝″ wd x 15⅞″ h; 4 compartments	Used to store or transport guys, hardware, block and tackle, and small tools.	6F505–18
	CASE: plywood; 71½″ lg x 18⅜″ wd x 8″ h; 3 spacer blocks	Used to store or transport anchors, ground pins, digging bar, and hammer.	6F505–19
22, fig. 3	CHAIN: straight link, 4″ lg x 7/16″ cross-section; steel, galv; 52″ lg over-all; 3″ ID ring one end; 10,000 lb breaking strength.	Used between anchor and guys to provide adjustment.	6Z1806–11
	CLAMP: guy wire; malleable iron and steel, hot-dip galv, one U bolt ea end; with two hexagonal nuts; one saddle, to accommodate ¼″ guy stand. (AB–26B/CR only.)	Used as wire rope clip to secure thimbles and insulators.	2Z2642.261
19, fig. 3	CLIP, guy (clamp): SS strapping; 1⅜″ wd x 3⅜″ lg x 1/16″ thk; U-shaped; fabricated with two holes; provided with one pin secured with one cotter pin.	Used to attach guys to mast sections.	2A478.21
8, fig. 3	GUY: steel wire; ¼″ dia iron 6 x 7 mild plow, stranded; galv; 37′ 3″ lg with one ins; thimble ea end; one turnbuckle; red band ea end. (AB–26A/CR only.)	Used as side guy to prevent lateral motion of the mast.	2A1344–90

	GUY: steel wire; 7/32″ dia; nylon-covered, flexible wire rope, galv; 37′ 3″ lg with one ins; thimble ea end; one turnbuckle; red band ea end. (AB–26B/CR only.)	do	2A1344–101
8, fig. 3	GUY: steel wire; 1/4″ dia iron 6 x 7 mild plow, stranded; galv; 52′ 11″ lg with two ins; thimble ea end; one turnbuckle; white band ea end. (AB–26A/CR only.)	do	2A1334–93
	GUY: steel wire; 7/32″ dia; nylon-covered, flexible wire rope, galv; 52′ 11″ lg with two ins; thimble ea end; one turnbuckle; white band ea end. (AB–26B/CR only.)	do	2A1334–102
8, fig. 3	GUY: steel wire; 1/4″ dia iron 6 x 7 mild plow, stranded; galv; 74′ 7″ lg with three ins; thimble ea end; one turnbuckle; blue band ea end. (AB–26A/CR only.)	do	2A1334–94
	GUY: steel wire; 7/32″ dia; nylon-covered, flexible wire rope, galv; 74′ 7″ lg with three ins; thimble ea end; one turnbuckle; blue band ea end. (AB–26B/CR only.)	do	2A1334–103
24, fig. 3	GUY: steel wire; 1/4″ dia iron 6 x 7 mild plow, stranded; galv; 37′ 3″ lg with one ins; tail piece spliced one end; thimble and turnbuckle ea end; red band ea end. (AB–26A/CR only.)	Used as raising guy and as side guy to prevent lateral motion of the mast.	2A1334–91
	GUY: steel wire; 7/32″ dia; nylon-covered, flexible wire rope, galv; 37′ 3″ lg; one ins; tail piece spliced one end; thimble and turnbuckle ea end; red band ea end. (AB–26B/CR only.)	do	2A1334–99
24, fig. 3	GUY: steel wire; 1/4″ dia iron 6 x 7 mild plow, stranded; 52′ 8″ lg with two ins; tailpiece spliced one end; thimble and turnbuckle ea end; white band ea end. (AB–26A/CR only.)	do	2A1334–92
	GUY: steel wire; 7/32″ dia; nylon-covered flexible wire rope, galv; 52′ 8″ lg; two ins; tailpiece spliced one end; thimble and turnbuckle ea end; white band ea end. (AB–26B/CR only.)	do	2A1334–104
24, fig. 3	GUY: steel wire; 1/4″ dia iron 6 x 7 mild plow, stranded; 74′ 7″ lg with three ins; tailpiece spliced one end; thimble and turnbuckle ea end; blue band ea end. (AB–26A/CR only.)	do	2A1334–96
	GUY: steel wire; 7/32″ dia; nylon-covered, flexible steel rope galv; 74′ 7″ lg; three ins; tailpiece spliced one end; thimble and turnbuckle ea end; blue band ea end. (AB–26B/CR only.)	do	2A1334–100

Fig. ref.	Name of part and description	Function of part	Signal Corps stock No.
18, fig. 3	GUY: steel wire; ¼″ dia extra high strength 7 strand galv; 119′ lg with five ins; thimble ea end; one turnbuckle. (AB–26A/CR only.)	Used as back guy	2A1344–95
	GUY: steel wire; ¼″ dia; nylon-covered std wire rope, galv; 119′ lg with 5 ins; thimble ea end; one turnbuckle. (AB–26B/CR only.)	do	2A1334–98
5, fig. 3	HAMMER, hand: sledge; 8 lb; double face with 36″ wooden handle	Used to drive ground pins into earth.	6Q50200–8H
	INSULATOR, strain: cylindrical; brown porcelain; 2⅛″ lg x 1¼″ dia; Locke type #500.	Used as strain insulator on all side guys.	3G1250–34.2
	INSULATOR, strain: cylindrical; brown porcelain; 3 11/16″ lg x 2 3/16″ sq; Locke type #502.	do	3G1100–59
1, fig. 3	MAST SECTION, antenna: triangular, welded steel lattice type; 6½″ across ea face x 10′ lg complete with splice plates; Wind Turbine type #650. (AB–26A/CR only.)	Used as mast and boom sections.	2A2496–49
	MAST SECTION, antenna: triangular, welded steel lattice type; 6½″ across ea face x 10′ lg; rod ends grooved; Wind Turbine type #650–A. (AB–26B/CR only.)	do	2A2496–50
9, fig. 3	NUT, hexagonal: galv; ⅜″–16 NC thd. (AB–26A/CR only.)	Used as nut on all bolts	6L3506–16–5.3
21, fig. 3	PIN, straight: steel, galv; 1″ dia x 30″ lg; diamond point, forged sq head.	Used to secure base to ground	2A2805–7
	PLATE CONNECTOR: steel, galv; slotted angle with 2 curved bolts ⅜″–16 NC thd complete with washers and nuts. (AB–26B/CR only.)	Used to secure all members together.	2A2822.15
	PLATE, end: triangular, 12½″ lg x 7″ h x 1/16″ thk; with 3 webbing straps.	Used as a packing plate to secure 2 sections together for transportation.	2A2822–21
	PLATE, end: triangular, 17½″ ea side x 15″ h x 1/16″ thk; with 3 webbing straps.	Used as packing plate to secure 4 sections together for transportation.	2A2822–18

20, fig. 3	PLATE, top: galv and painted; ¼″ steel plate with six sides, three sides 9″ lg, three 11/16″ lg; fabricated with eight ⅝″ holes; complete with splice plates; Wind Turbine #727–36–A. (AB–26A/CR only.)	Used as top plate on mast	2A2822–19
	PLATE, top: galv and painted; ¼″ steel plate with six sides, three sides 9″ lg, three 11/16″ lg; fabricated with eight ⅝″ holes; complete with grooved rods for attachment to mast. (AB–26B/CR only.)	do	2A2822–19
15, fig. 3	PLATE, top: galv and painted; ¼″ steel plate with three sides, one side 8½″ lg, two sides 7 15/16″ lg; second steel plate welded to flat surface fabricated with two holes; complete with splice plates; Wind Turbine #727–37–A. (AB–26A/CR only.)	Used as top plate on boom	2A2822–20
	PLATE, top: galv and painted; ¼″ steel plate with three sides, one side 8½″ lg, two sides 7 15/16″ lg; second steel plate welded to flat surface fabricated with two holes; complete with grooved rods for attachment to boom. (AB–26B/CR only.)	do	2A2822–20
2, fig. 3	ROPE: sisal, twisted, green tropicalized; approx ½″ dia; breaking strength 2,120 lb; bulk, 280′.	Part of block and tackle used to raise mast.	6Z7906.1
25, fig. 3	ROPE ASSEMBLY: radius; sisal, twisted; ½″ dia, 100′ lg; formed of two linked lengths, one 24′ 9″ lg, one 75′ 3″ lg.	Used to lay out anchor positions	6Z7955B.1–4
3, fig. 3	ROPE ASSEMBLY: boom guy; sisal, twisted; ⅝″ dia, 52′ lg; eye splice one end, friction catch fastener other end.	Used as boom guy	6Z7900
12, fig. 3	SHACKLE, anchor: screw pin, ½″ std	Used to secure anchor chains to anchor rods and halyard blocks to mast top plate.	5B15508
10, fig. 3	SHACKLE, anchor: screw pin, steel drop forged galv; 2½″ x 2¼″ x ⅞″ thk; ⅝″ jaw opening; 7/16″ dia pin; ⅜″ dia stock.	Used to secure guys to mast top plate and to anchor chains.	2A3205.1
	THIMBLE, guy: for ¼″ dia rope; 2½″ lg x 1 9/16″ wd x ⅞″ thk	Used on all guys to prevent chafing.	5B18047
	TURNBUCKLE: steel, hot galv; ½″–13 ea end; jaw and eye stubs; 6″ take up. (AB–26B/CR only.)	Used to adjust tension of back guy.	5B19008–7
	TURNBUCKLE: drop forged steel, galv; ⅜″–16 ea end; jaw and eye stubs; 6″ take up.	Used to adjust guy tension	2Z8782.

Fig. ref.	Name of part and description	Function of part	Signal Corps stock No.
	WRENCH, crescent: steel, bonderized; 10″ lg. (AB–26B/CR only.)	Used to tighten nuts on turnbuckles.	6R55010–1
17, fig. 3	WRENCH: double open-end; 15° offset; for ⅜″ nut; flat, straight handle; chrome alloy steel.	Used to tighten nuts on bolts securing members together.	6R55514–16.2
7, fig. 3	WRENCH: double open-end; 15° offset; for 5/16″ nut; flat straight handle; steel alloy, cad plate (AB–26A/CR only.)	Used to tighten nuts on turnbuckles.	6R55565
	WRENCH: double open-end; 15° offset; for ¼″ and ⅜″ nuts; flat, straight handle; drop forged steel, chrome finish. (AB–26B/CR only.)	Used to tighten nuts on bolts securing members together.	6R57066

INDEX

	Paragraph	Page
Anchor chains:		
Installation	12*b* (4)	16
Anchors:		
Installation	12*b*	15
Locating	11	13
Base assembly:		
Installation	12*a*	14
Locating	11	13
Block and tackle:		
Installation	14*b*	18
Boom:		
Anchor location	11*n*	14
Assembly and installation	13*a*, 13*c*	16, 18
Raising	16*a*	24
Removal	17*a*	26
Disassembly for storage or shipment	25	31
Erection equipment:		
Installation	13*a*, 13*c*, 14	16, 18
Removal	17*a*	26
Ground pins:		
Installation	12*a* (3)	15
Guy clips, description and use	15*b*	18
Guys, boom:		
Installation	14*a*	18
Tension	16*a* (3)	24
Guys, mast:		
Adjustment:		
During erection	16*b* (1), (3), (6)	24, 25
Final	17*b*, 17*c*	26
Back:		
Adjustment	17*c* (3)	26
Installation	15*f*, 17*c*	24, 26
Level of attachment	15*a*	18
Blue:		
Level of attachment	15*a*	18
Breaking strength	4*e*, 7	4, 9
Installation:		
A and C	15*c*	20
B	15*d*, 16*b* (4)	22, 25
Back	15*f*, 17*c*	24, 26
D	15*e*, 16*b* (8)	22, 26
Red:		
Level of attachment	15*a*	18
Replacement	26*b*	32
White:		
Level of attachment	15*a*	18

	Paragraph	Page
Insulators, strain:		
Replacement	26*c*	33
Interchangeability of parts	3*c*	2
Loading	7	9
Locating anchors	11	13
Maintenance:		
Checklist	22	29
General	21	29
Repair	26	32
Mast:		
Assembly and installation	13*a*, 13*b*	16, 17
Disassembly	25	31
Lowering	24	31
Raising	16*b*	24
Mast and boom sections:		
Joining:		
AB–26A/CR	13*a* (1)	16
AB–26B/CR	13*a* (2)	17
Replacement	26*a*	32
Models, differences between	3*c*	2
Painting	19	28
Radius rope:		
Use	11	13
Raising antenna support:		
Boom	16*a*	24
Mast	16*b*	24
Repacking for storage or shipment	10*c*, 25*e*	12, 32
Replacement:		
Guy	26*b*	32
Mast section	26*a*	32
Strain insulator	26*c*	33
Top plate:		
Boom:		
Installation	13*c* (2)	18
Mast:		
Installation	13*b* (2)	18
Weatherproofing	19	28

U. S. GOVERNMENT PRINTING OFFICE: 1951