DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE MANUAL FOR CENTER, COMMUNICATIONS, PATCHING AN/TSC-76 (LESS POWER UNIT) (NSN 5895-00-168-1574) (EIC: HMO)

This copy is a reprint which includes current pages from Changes 1 through 8

HEADQUARTERS, DEPARTMENT OF THE ARMY
OCTOBER 1970

WARNING

HIGH VOLTAGE
of 115 volts, ac is used in the operation of this equipment.

DEATH ON CONTACT
may result if personnel fail to observe safety precautions. Learn the areas containing 115-volt ac power.

READ AND OBSERVE
the referenced warnings concerning the following hazards:

115 volts ac POWER AND SIGNAL ENTRANCE BOX	(para 2-17)
115 volts ac Power distribution panel	(para 3-1)
115 volts ac Equipment	(para 3-2)

Before making any repairs to the equipment, make certain that 115-volt, ac power has been removed.
Always install the GROUND ROD (para 2-16) before connecting the AN/TSC-76 to a power source.

VENTILATION IS ESSENTIAL
The exhaust blower cover (para 3-2) and the fresh air intake door must be open, and the exhaust blower must be in operation whenever the AN/TS?-76 is occupied, to prevent asphyxiation.

DON'T TAKE CHANCESI

Change

No. 8

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 15 May 1992

Operator's, Organizational, Direct Support,
General Support, and Depot Maintenance Manual

CENTER, COMMUNICATIONS, PATCHING
AN/TSC-76 (Less Power Unit)
(NSN 5895-0-168-1574) (EIC: HMQ)

TM 115805-583-15, dated 30 October 1970, is changed as follows:

1. Title of manual is changed as shown above.
2. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page.

Remove pages	*Insert pages*
4-3 and 4-4	4-3 and 4-4
4-7 and 4-8	4-7 and 4-8

3. File this change sheet in the front of the publication for reference purposes.

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Chief of Staff

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No. 7

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 1 April 1990

Operator's, Organizational, Direct Support
General Support, and Depot Maintenance Manual
Center, Communications, Patching AN/TSC-76
(NSN 5895-00-168-1574)

TM 11-5805-583-15, 30 October 1970, is changed as follows:

1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page.

Remove pages	Insert pages
4-3 and 4-4	4-3 and 4-4
4-7 and 4-8	4-7 and 4-8

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Change
No. 6

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 15 July 1989

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
GENERAL SUPPORT, AND DEPOT MAINTENANCE MANUAL

CENTER, COMMUNICATIONS, PATCHING AN/TSC-76
(NSN 5895-00-168-1574)

TM 11-5805-583-15, 30 October 1970, is changed as follows:

1. Title of manual is changed as shown above.

2. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page.

Remove pages	Insert pages
and ii	i and ii
4-1 through 4-8	4-1 through 4-8
4-8.7/(4-8.8 blank)	4-8.7/(4-8.8 blank)

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Brigadier General, United States Army
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CHANGE

No. 5

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, I May 1988

**Operator's, Organizational, Direct Support,
General Support, and Depot Maintenance Manual**

**CENTER, COMMUNICATIONS, PATCHING AN/TSC-76,
(LESS POWER) (NSN 5895-00-168-1574)**

TM 11-5805-583-15, 30 October 1970, is changed as follows:

1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page. Added or revised illustrations are indicated by a vertical bar adjacent to the identification number.

Remove pages	*Insert pages*
i and ii	i and ii
1-1 and 1-2	1-1 and 1-2
2-1 through 24	2-1 through 2-4
4-1 through 4-8.8	4-1 through 4.8.7/(4-8.8 blank)
4-2.1 through 4-9	4-2.1 and 4-2.2
A-i and A-2	A- and A-2

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TECHNICAL MANUAL
No. 11-5805-583-15

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, *30 October 1970*

OPERATOR'S ORGANIZATIONAL, DS, GS, and DEPOT MAINTENANCE MANUAL CENTER, COMMUNICATIONS, PATCHING AN/TSC-76 (NSN 5895-00-168-1574)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-LC-ME-PS, Fort Monmouth New Jersey 07703-5000.

LIST OF ILLUSTRATIONS

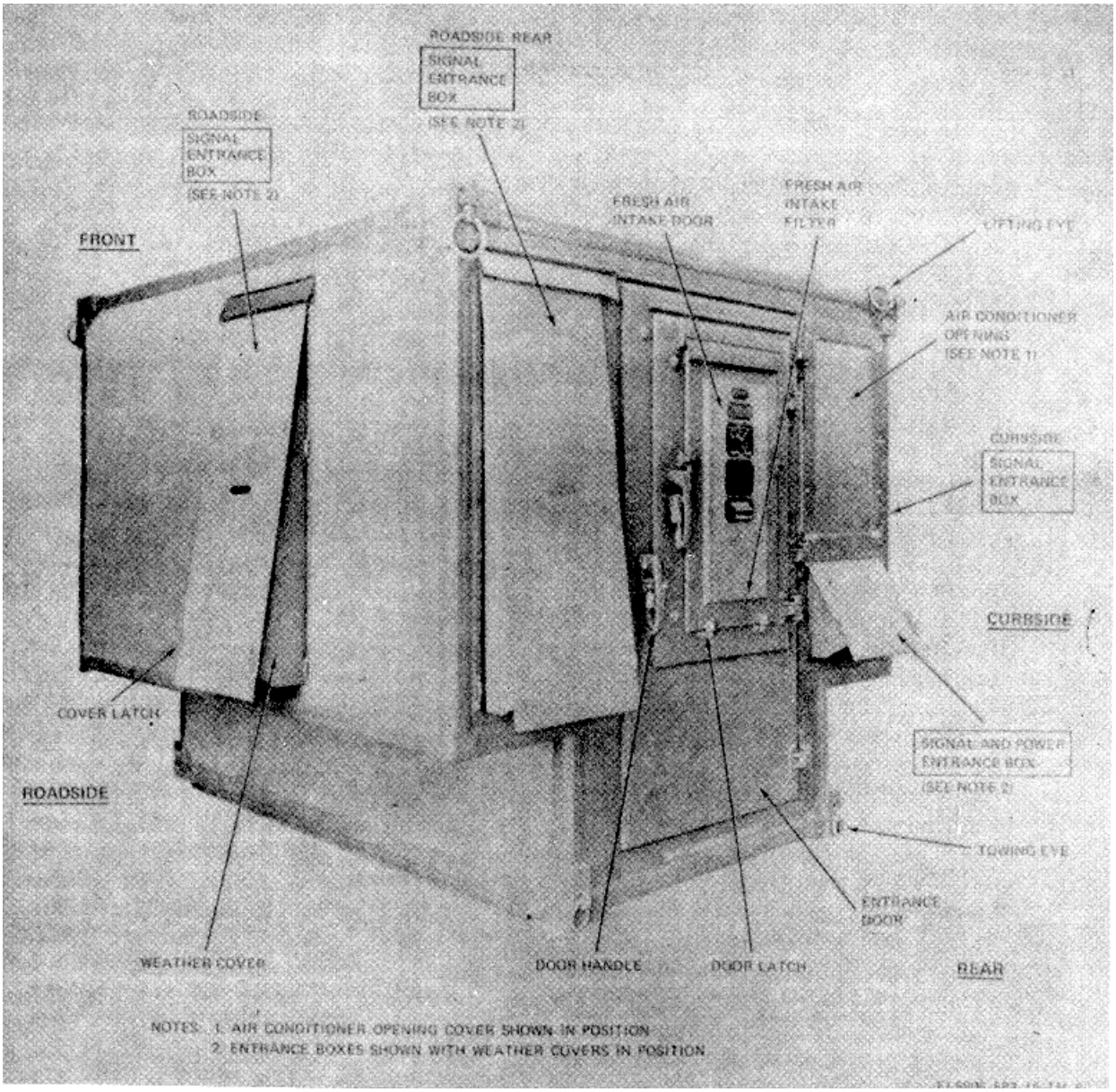

Fig. No. 1-1. Center, communications, patching AN/TSC-76.

CHAPTER 1
INTRODUCTION

Section I. GENERAL

1-1. Scope

This manual covers the installation, operation and maintenance of the Patching Communications Center AN/TSC-76 (fig. 1-1). Except for the shelter (para 1-7) and its components, the major components are covered in detail in their respective technical manuals (app A).

1-2. Consolidated Index of Army Publications and Blank Forms

Refer to the latest issue of DA Pam 25-30 to determine whether there are new editions, changes or additional publications pertaining to the equipment.

1-3. Maintenance Forms, Records, and Reports

a Reports of Maintenance and Unsatisfactory Equipment Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, as contained in Maintenance Management Update.

b. Report of Packaging and Handling Deficien/ies. Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST4355.73B/AFR400-54/ MCO 4430.3H.

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/NAVSUPINST4610.33C/AFR75-18/MCO P4610.19D/DLAR 4500.15.

1-3.1. Delete

1-3.2. Reporting Equipment Improvement Recommendations (EIR)

If your equipment needs improvement let us know Send us and EIR. You, the user, are the only one who can tell us what you don't like about the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, U.S. Army Communications - Electronics Command and Fort Monmouth, ATTN: AMSEL-PA- MA-D, Fort Monmouth, New Jersey 07703-5000. We'll send you a reply.

1-3.3. Administrative Storage

Administrative storage of equipment issued to and used by Army activities will have preventive maintenance performed in accordance with the PMCS charts before storing. When removing the equipment from administrative storage, the PMCS should be performed to assure operational readiness. Disassembly and repacking of equipment for shipment or limited storage and covered in paragraph 5-2.

1-3.4. Destruction of Army Electronics Materiel

Destruction of Army Electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

Section II. DESCRIPTION AND DATA

1-4. Purpose and Use

The AN/TSC-76 (fig. 1-1) is an air-or vehicular-transportable patching communications center used to provide an audio technical control facility for use in a division communications system. The AN/TSC-76 provides facilities for patching (routing and rerouting), testing, and monitoring telephone circuits, voice frequency (vf), and tone circuits for use with switchboard SB-22/PT (fig. 1-2). The AN/TSC-76 may be operated while mounted on a truck or on the ground.

1-5. Technical Characteristics

The technical characteristics of the AN/TSC-76 are listed below. For technical characteristics of individual components that make up the AN/TSC 76, refeir to the applicable publication for the individual component (app A).

Dimensions:

Depth	86 7/8 inches.
Width	79 5/16 inches.
Height	70 7/16 inches.

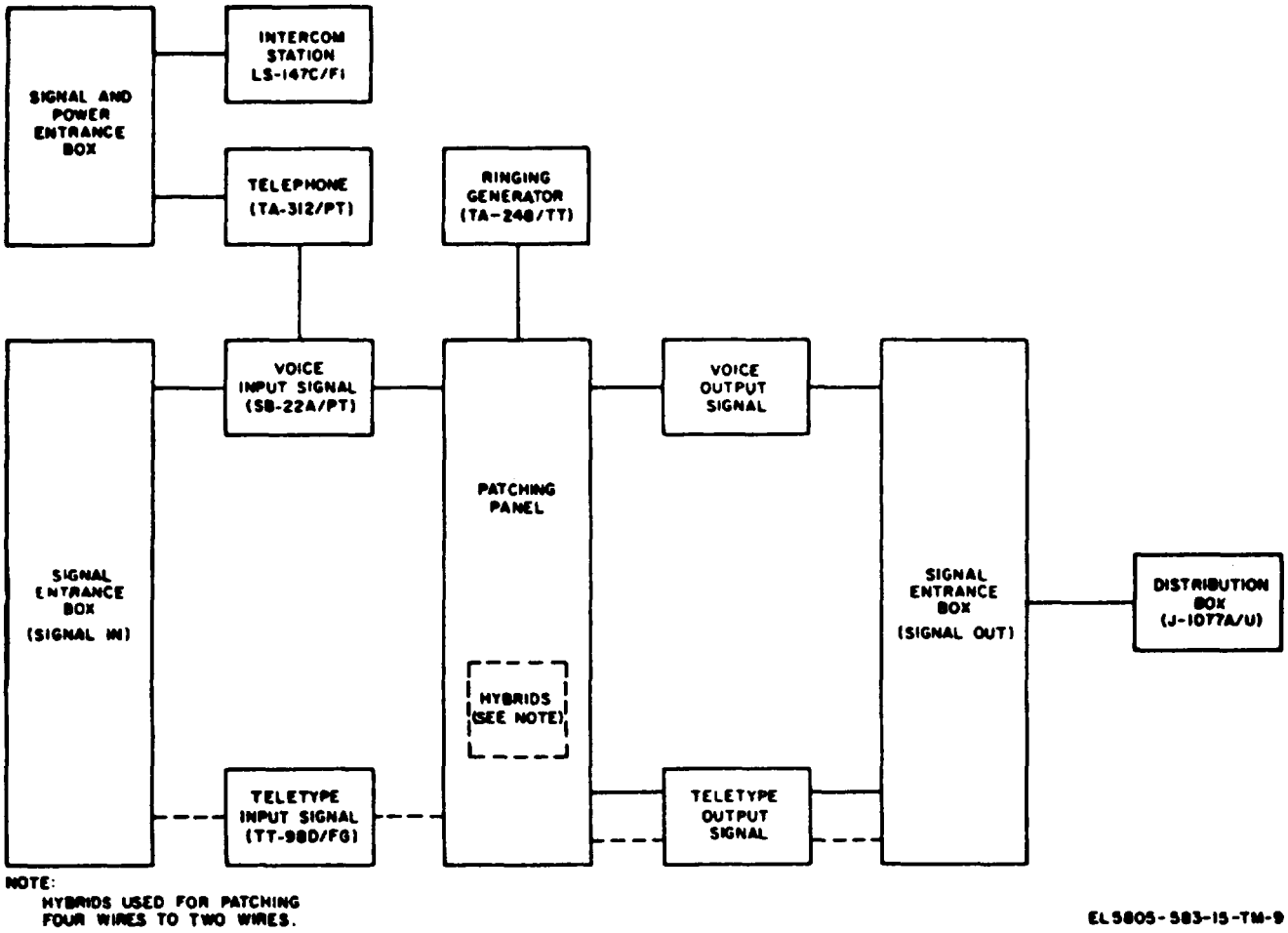

Fig. No. 1-2. ANSC-76functionl block diagram.

Local communication facilities:
Telegraph terminal set .....
Distribution box (two) .....J-1077 A/U.
Field telephone ..... TA-312/PT.
Intercommunication station.....LS147CFI.
Patching panel ..... 572 lines.
Ringing generator .....TA-248/IT.
Switchboard .....SB-22APT, twelve voice frequency circuits.
TH-22/C.
Teletypewriter ..... fT-98D/FG.
Power consumption (total) ..... 3, 00 watts.
Power requirements .....115 volts, x 10%, 50 or 60 Hz, single phase.
Weight (gross) ..... 2, 200 pounds.

1-6. Items Comprising an Operable Equipment

NSN	QTY	Nomenclature, part No. and mfr code	Weight (lbs.)	Dimensions (in.)			(Fig.) (No.)
				Height	Depth	Width	
		NOTE					
		The part number if followed by the applicable 5-digit Federal supply code for manufacturers (FSCM) identified in SB 708-42 and used to identify manufacturer, distributor, or Government agency, etc.					
5895-00-168-1574		Center, Communications Patching					
		AN/TSC-76, (Less Power) Consisting of:					
7520-00-9264726	1	Basket, Wastepaper: SC-W539454 (8.063)					5-1
6135-00-850-3177	1	Battery, 9V Lry: (for clock)2MN6 (09823)					
6135-00-120-1020	1	Battery BA-30					
4210-00-288-6849	1	Bracket. Fire Extinguisher:5-1 RB-I (33525)					
7920-00-178-8315	1	Brush, Dusting Bench: SC--539469 (8663)					5-1
5995-00-752-2566	2	Cable Assembly, Telephone:(For LS-147C/FI and TA-312/PT) SM-D-383873 GPIII (816 3)					
		Cable Assembly and Reel:(c/o Reel, Cable RC-435/U and 100 ft Power Cable CX-7453A/U)					
5995400-935-2686	I	Cable Assembly, Power Electrical CX-7705A/U: (15 ft)				1-8	
7105-00-269-8463	1	Chair, Folding: SC-D-539471 (80063)	9	39	3 ½	17 3/4	5-1
7910-00-832-7222	1	Cleaner, Vacuum: 280d (29335)					
6645-00410-2395	1	Clock, Wall. Electric: SCC-539475 (8e063)					5-1
5995-00-752-2516	5	Cord Assembly, Electrical: SM-b-352593 GRIII (8S63)					
5995-00-752-2496	*5*	Cord Assembly, Electrical: SM-D-352593 GRIV (80063)					
5995-00-752-2514	3	Cord Assembly, Electrical: SM-D-352593 GRU (80063)					
5995-00-752-2515	5	Cord Assembly, Electrical: SM-D-352594 GRIII (80063)					
5995-00-752-2549	*5*	Cord Assembly, Electrical: SM-D-352594 GRIV (80063)					
5995-00-752-2513	5	Cord Assembly, Electrical: SM-D-352594 GRV (80063)					
5995-00-752-2595	5	Cord Assembly, Electrical: SM-D-352595 GRIII (80063)					
5995-00-752-2595	5	Cord Assembly, Electrical: SM-D-352595 GRIV (80063)					
	3	Cord Assembly, Electrical: SM-D-352595 GRV (80063)					
5965-00-069-8885	1	Headset, Microphone H-144/U:					1-10
5410-00-877-9442	1	Shelter, Electrical Equipment S-403/TSC-76: (modified S-250 ( )/G					
5805-00-715-6171	I	Switchboard, Telephone Manual SB-22A/PT: (Less cover)	30	5 ¼	12 ½	16	1-4
5805-00-543-0012	1	Telephone Set TA-312/PT:					1-4
5815-00-503-2764	1	Teletypewriter Set TT-98D/FG:	67	11 1/2	21	17 1/2	1-3
5805-00-907-8300	1	Terminal, Telegraph TH-22/TG:	14 1/2	6	9	9 114	1-3
		NOTE					
		Dry batteries shown are used with the equipment but are not considered part of the equipment. They will not be pre-shipped automatically but are to be requisitioned in quantities necessary for the particular organization in accordance with SB 11-6.					
5995-00-752-2597	*5*	Cord Assembly, Electrical: SM-D-352596 GRIII (80063)					
5995-00-752-2592	*5*	Cord Assembly, Electrical: SM-D-352596 GRIV (80063)					
5995-00-752-2599	3	Cord Assembly, Electrical: SM-D-352596 GRV (80063)					

NSN	QTY	Nomenclature, part No. and mfr code	Weight (lbs.)	Dimensions (in.)			(Fig.) (No.)
				Height	Depth	Width	
5995400-752-2597	5	Cord Assembly, Electrical: SM-D-352597 GRIII (80063)					
	5	Cord Assembly, Electrical: SM-D-352597 GRIV (80063)					
5995-00-752-2599	3	Cord Assembly, Electrical: SM-D-353597 GRV (80063)					
5995-00-752-2498	15	Cord Assembly, Electrical: SM-D-352598 GRIII (80063)					
5995-00-752-2496	15	Cord Assembly, Electrical: SM-D-352598 GRIV (80063)					
5995-00-752-2601	10	Cord Assembly, Electrical: SM-D-352598 GRV (80063)					
	15	Cord Assembly, Electrical: SM-D-352599 GRIll (80063)					
5995-00-752-2495	15	Cord Assembly, Electrical: SM-1)-352599 GRIV (80063)					
5995-00-752-2601	10	Cord Assembly, Electrical: SM-D-352599 GRV (80063)					
5995-00-752-2585	3	Cord Assembly, Electrical: SM-D-352617 GRII (80063)					
5995-00-752-2590	3	Cord Assembly, Electrical: SM-D-352617 GRIII (80063)					
5995-00-752-2589	3	Cord Assembly, Electrical: SM-D-352618 GRII (80063)					
5995-00-752-2590	3	Cord Assembly, Electrical: SM-D-352618 GRIII (80063)					
5995-00-752-2587	6	Cord Assembly, Electrical: SM-D-352619 GRII (80063)					
5995-00-752-2586	6	Cord Assembly, Electrical: SM-D-352620 GRIII (80063)					
5995-00-823-3016	1	Cord Assembly, Electrical: SM-D-384145 GRI (80063)					
5995-00-889-0608	1	Cord Assembly, Electrical: SM-D-384145 GRII (80063)					
7210-00-753-3043	1	Cushion, Chair: SC-C-539526 (80063)					
6110-00-985-7574	3	Distribution Box J-1077A/U	12	9 ¼	3 7/8	17 7/8	5-1
5935-00-775-2446	38	Dummy Plug, Telephone: F7986(96344)					
5935-00-860-9551	75	Dummy Plug, Telephone: 493-01 (82389)					
	150	Dummy Plug, Telephone: 493-02 (82389)					
5120400-293-2696	1	Extractor, Electron Tube: SC-B-539547 (80063)					5-1
5120-00-293-2692	1	Extractor, Electron Tube: SC-B-539548 (80063)					5-1
5805-00-503-1482	1	Generator, Ringing Static TA-248/TT					5-1
5120-00-946-5148	16	Grip, Cable Woven: SC-B-539592 (80063)					1-10
5120400-946-5114	1	Grip, Cable Woven: SC-B-5 39593 (80063)					1-10
5120-00-251-4489	1	Hammer, Hand: SC-C-5395055-1 (80063)					
5830-00-752-5357	1	Intercommunication Station LS-147C/FI	11	7	7	11 l/*	1-17
	1207	Jack Telephone: JJ083 (81 349)					5-4
2540-00-846-8483	1	Ladder. Vehicle, Boarding MS-3543/U	12	42	5 ¾	16 3/8	5-1
6230-00-729-9614	1	Lantern. Electric: SC-'-539491 (80063)					

Change 1 1-2.2

NSN	QTY	Nomenclature, part No. and mfr code	Weight (lbs.)	Dimensions (in.)			(Fig.) (No.)
				Height	Depth	Width	
4940-00-7S2-2525	1	Lead, Electrical: SC-B-539492 (80063)					
6230-00-901-9755	1	light, Extension: SCC-539496 (80063)					1-10
7510-W0240-1526	1	Pencil, Gree: SS-P196 (Blck) (81349)					
7510M-174-3205	1	Pencil, Grease: SS-P-196 (Red) (81349)					
7510-00-264-4612	1	Pencil, Grease: SS-196 (Yellow) (81 349)					
7510-0036-5210	1	Pencil, Grease: SS-P-196 (Blue) (81349)					
7510410-275-7212	1	Pencil, Grease: SS-P-196 (Yellow) (81349)					
5120-00-293-3603	1	Pin Straightener, Electron Tube: SC-B-S39472					5-1
8130-00656-1090	1	Reel, Cable RC435/U					5-1
5120-00-234-8910	I	Screwdriver, Flat Tp: 851 (10266)					5-1
7520O162-6178	1	Sharpener, Pencil: SCC-539503 (80063)					5-1
	1	Wrench, Open-End, Fixed: SC-C-564099 (80063)					

1-6.1. Expendable Consumable Supplies and Materials

Expendable Consumable Supplies and Materials are listed in table 1-1.

Table 1-1. Expendable Consumable Supplies and Materials

The supplies and materials listed in this table are required for operation of this equipment and are authorized to be requisitioned by SB-700-50. The NSN for the applicable unit of issue required can be found in appropriate supply catalogs. The FSCM is used as an element in item identification to designate manufacturer or distributor or Government agency, etc., and is identified in SB 708-42.

Item	Description	Ref No. and FSCM	FSC
1	Pencil, Grease: SS-P-196 (Black).....	81349	7510
2	Pencil, Grease: SS-P-196 (Red).....	81349	7510
3	Pencil, Grease: SS-P-196 (Yellow).....	81349	7510
4	Pencil, Grease: SS-P-196 (Blue)	81349	7510
5	Pencil, Grease: SS-P-196.....	81349	7510

1-7. Nomenclature and Common Names

Listed below are the components to which common names have been assigned.

Nomenclature	*Common name*
Center, Communications, Patching AN/TSC-76	Assemblage
Distribution Box J-1077A/U	Distribution box
Electrical Connector Plug U-185/G	26-pair connector.
Electrical Connector Receptacle	26-pair receptacle. U—186/G
Electrical Power Cable Assembly, 15 feet, CX7705 A/U	power stub.
Electrical Power Cable Assembly, 100 ft, CX-7453 A/W	power cable.
Telephone set TA-312/PT	Telephone set
Intercommunication Station, LS-147/FI	Intercom
Panel, Patching, Communications	patching panel.
Ringing Generator TA-248/TT	Ringing generator
Shelter, Electrical Equipment S403/TSC-76	shelter facility
Switchboard SB-22A/PT	Switchboard
Terminal Telegraph TH-22/TG	Telegraph terminal
Telephone Cable Assembly	26-pair cable.
Teletypewriter TT-98D/FG	Teletypewriter

1-8. Additional Equipment Required

Listed below is the equipment required for operation of the AN/TSC-76 but not supplied.

Equipment	*Purpose*	*Applicable Publications*
115-volt, 60 Hz, 3.5 kw, single phase Power source.	To supply operating power to the AN/TSC-76	(None)
Air conditioner, CE6A-60A	To supply cooled, dehumidified air to the AN/TSC-76.	TM 5-4120-289-15
Designation strips	To designate jacks on patching panel.	(None)

1-9. Description

The AN/TSC-76 is a communications patching center contained in Shelter, Electrical Equipment S403/TSC-76. The equipment arrangement inside the shelter is shown in Fig. 5-1. Pictorial views of part of the equipment arrangement are provided in figures 1-3 through 1-7. Some of the components stored in the ACCESSORIES AND SPARES cabinets are shown in figures 1-8 through 1-10.

a. Power and Signal Connections. 115 vac power and grounding connections, field telephone and intercom connections, and 115 vac convenience outlets are contained in the SIGNAL AND POWER ENTRANCE BOX (fig. 1-11.). All connections to the switchboard, the miscellaneous jack panel, and the 26-pair cables are made at the signal entrance boxes shown in figures 1-12 through 1-14.

b. Equipment. Those components of the AN/TSC-76 that are not covered in separate technical manuals are illustrated in figures 1-15 through 1-18. For descriptions and illustrations of the other components, refer to appendix A. The cord assemblies supplied with the AN/TSC-76 are listed below.

Description	*Quantity*
Cord Assembly, Black(2 ft. 6 in.)	5 each
Cord Assembly, Black(4 ft. 6 in.)	5 each
Cord Assembly, Black(6 ft. 6 in.)	5 each
Cord Assembly, Red(2 ft. 6 in.)	5 each
Cord Assembly, Red(4 ft. 6 in.)	5 each
Cord Assembly, Red(6 ft. 6 in.)	3 each
Cord Assembly, White(2 ft. 6 in.)	5 each
Cord Assembly, White(4 ft. 6 in.)	5 each
Cord Assembly, White(6 ft. 6 in.)	3 each
Cord Assembly, Green(2 ft. 6 in.)	5 each
Cord Assembly, Green(4 ft. 6 in.)	5 each
Cord Assembly, Green(6 ft. 6 in.)	3 each
Cord Assembly, Gray(2 ft. 6 in.)	5 each
Cord Assembly, Gray(4 ft. 6 in.)	5 each
Cord Assembly, Gray(6 ft. 6 in.)	3 each
Cord Assembly, Black(2 ft. 6 in.)	3 each
Cord Assembly, Black(4 ft. 6 in.)	3 each
Cord Assembly, Red(2 ft. 6 in.)	3 each
Cord Assembly, Red(4 ft. 6 in.)	3 each
Cord TTY Black (6 ft.)	1 each
Cord TTY Red (6 ft.)	1 each
Cord Assembly 5BD Pads, Black (2 ft. 6 in)	15 each
Cord Assembly 5BD Pads, Black (2 ft. 6 in)	15 each
Cord Assembly 5BD Pads, Black (2 ft. 6 in)	10 each
Cord Assembly 5BD Pads, Red (2 ft. 6 in)	15 each
Cord Assembly 5BD Pads, Red (2 ft. 6 in)	15 each
Cord Assembly 5BD Pads, Red (2 ft. 6 in)	10 each
Cord Assembly 5BD Pads, Red (2 ft. 6 in)	6 each
Cord Assembly 5BD Pads, Black (2 ft. 6 in)	6 each

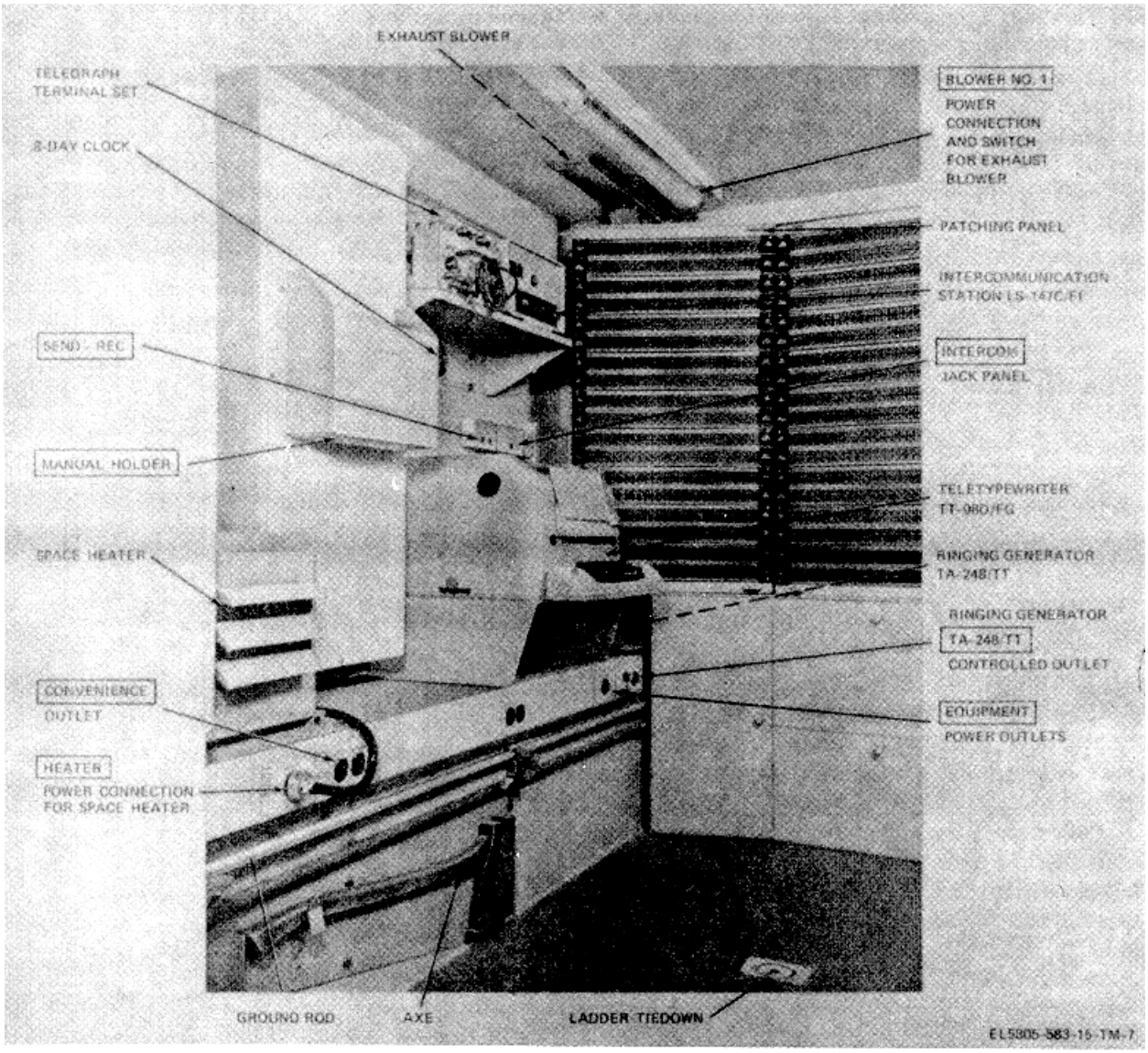

Fig. No. 1-3. AN/TSC-76, interior roadside wall

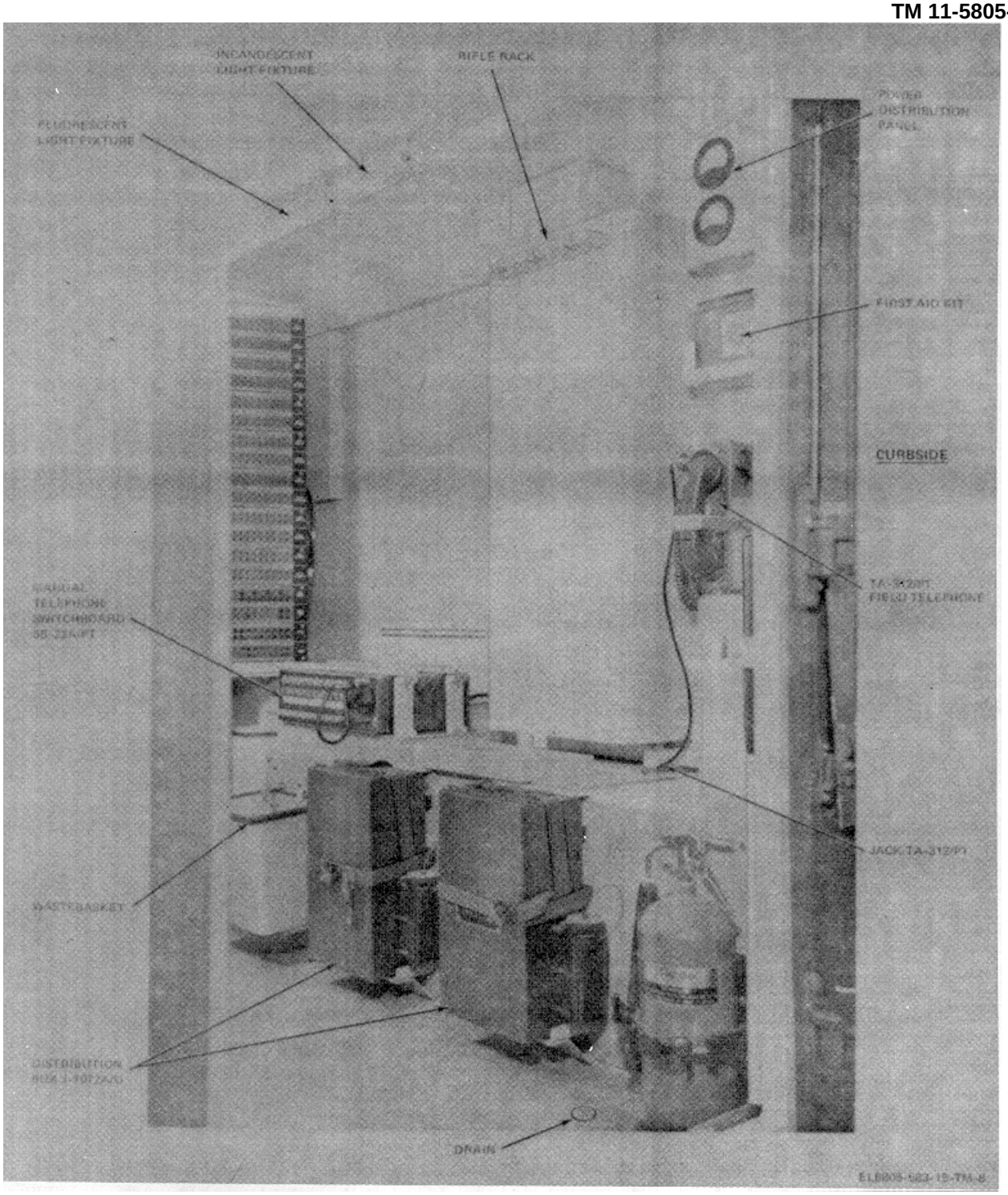

Fig. No. 1-4. AN/TSC-70, interior curbside wall.

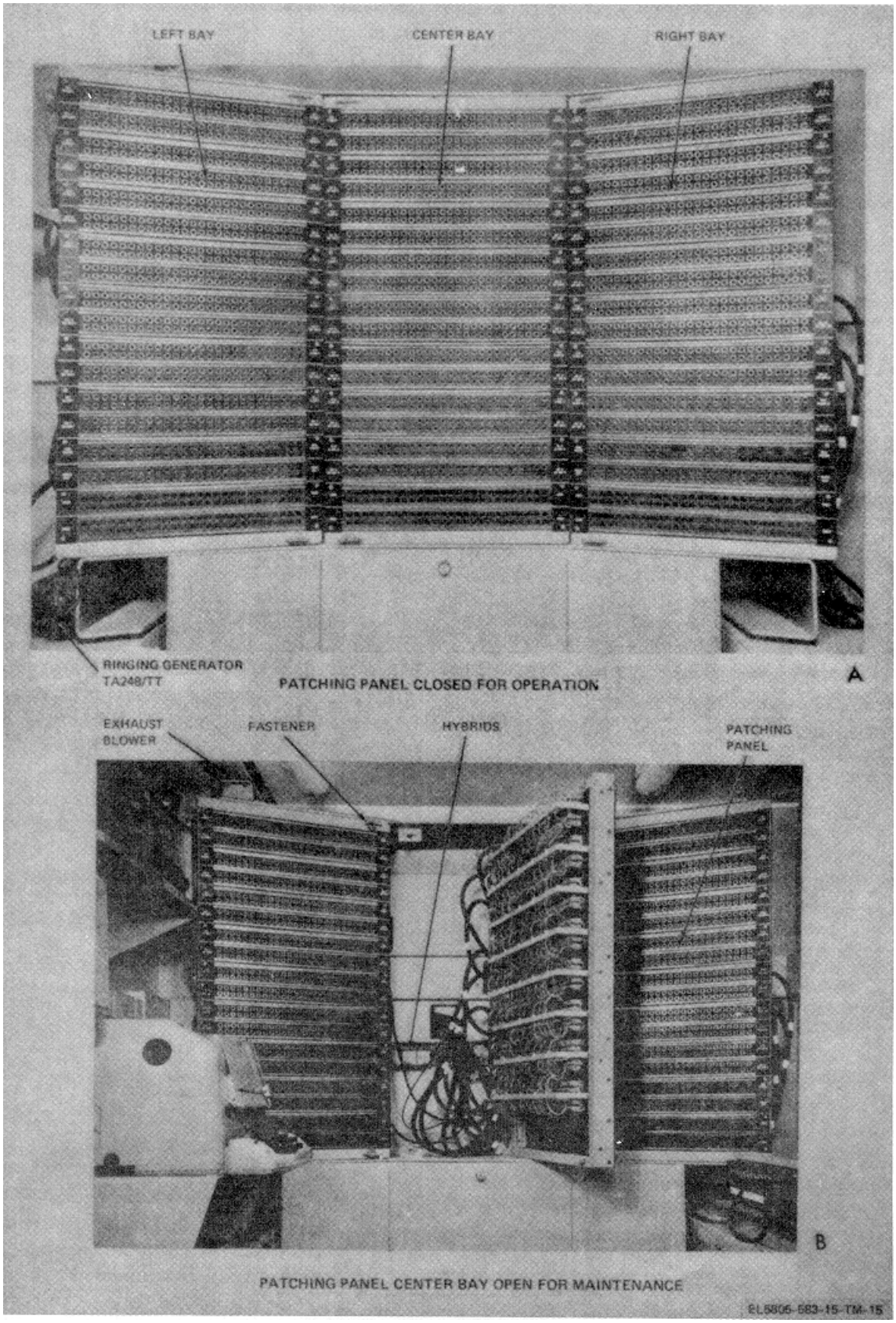

Fig. No. 1-5. Patching panel.

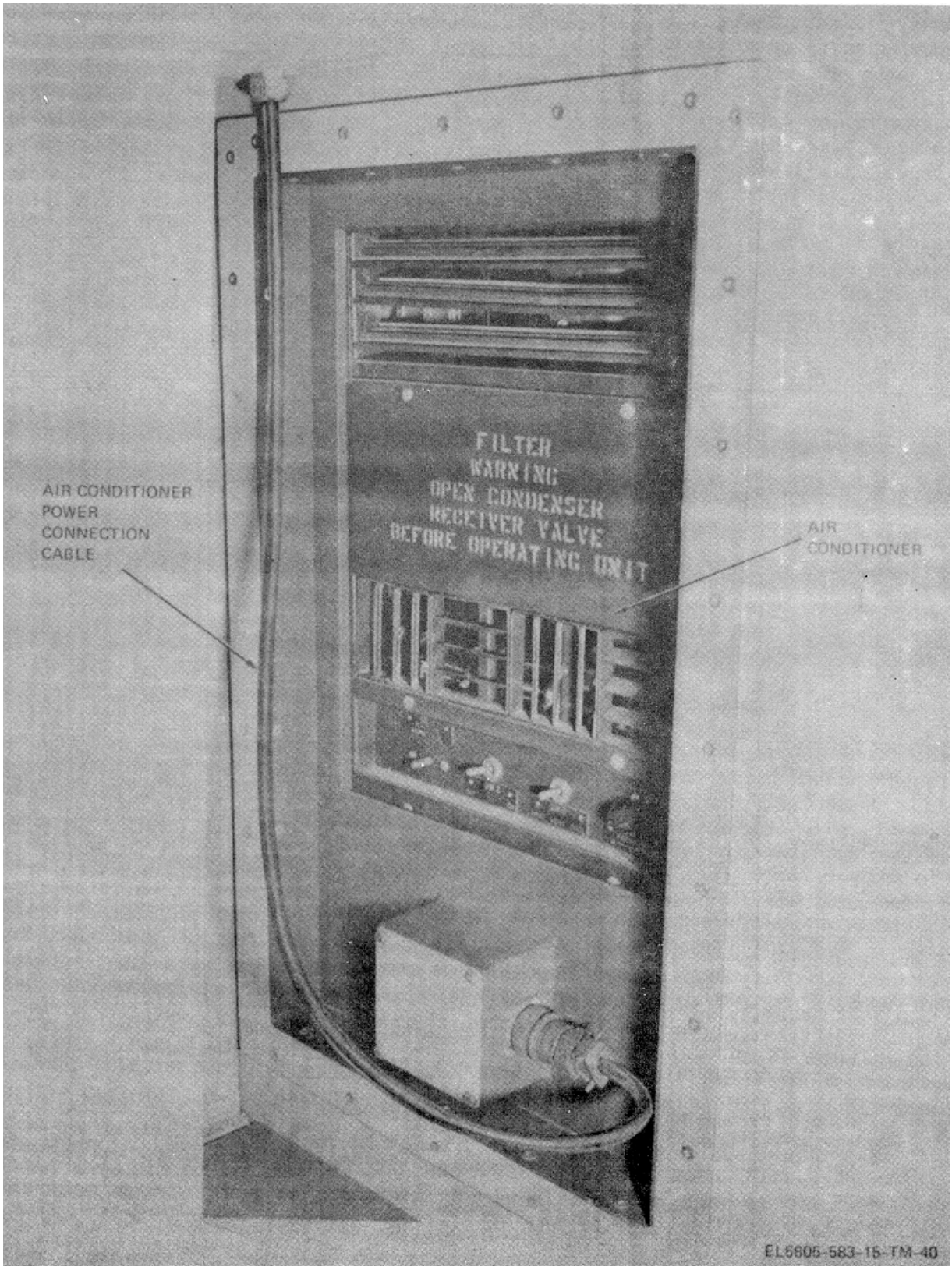

Fig. No. 1-6. Air conditioner installed, interior view.

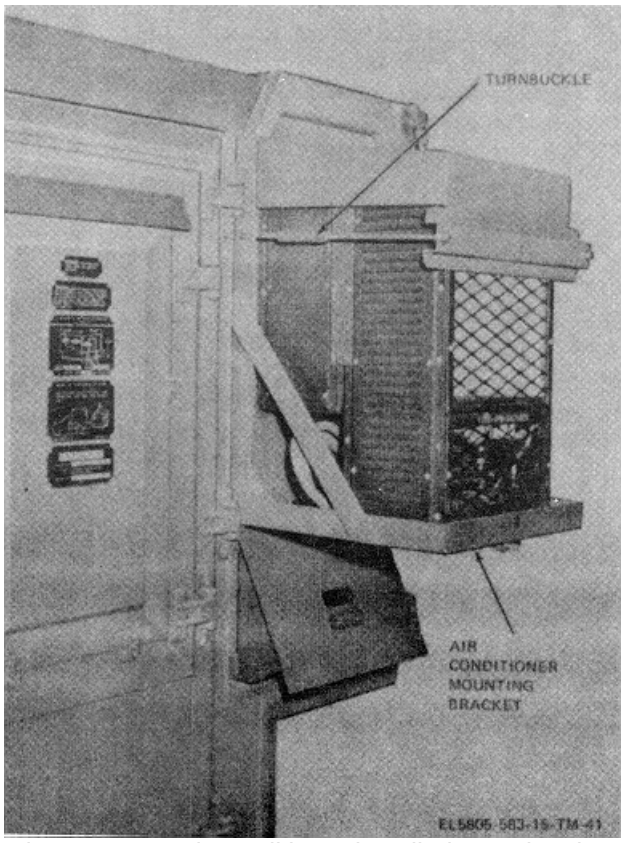

Fig. No. 1-7. Air conditioner installed, exterior view.

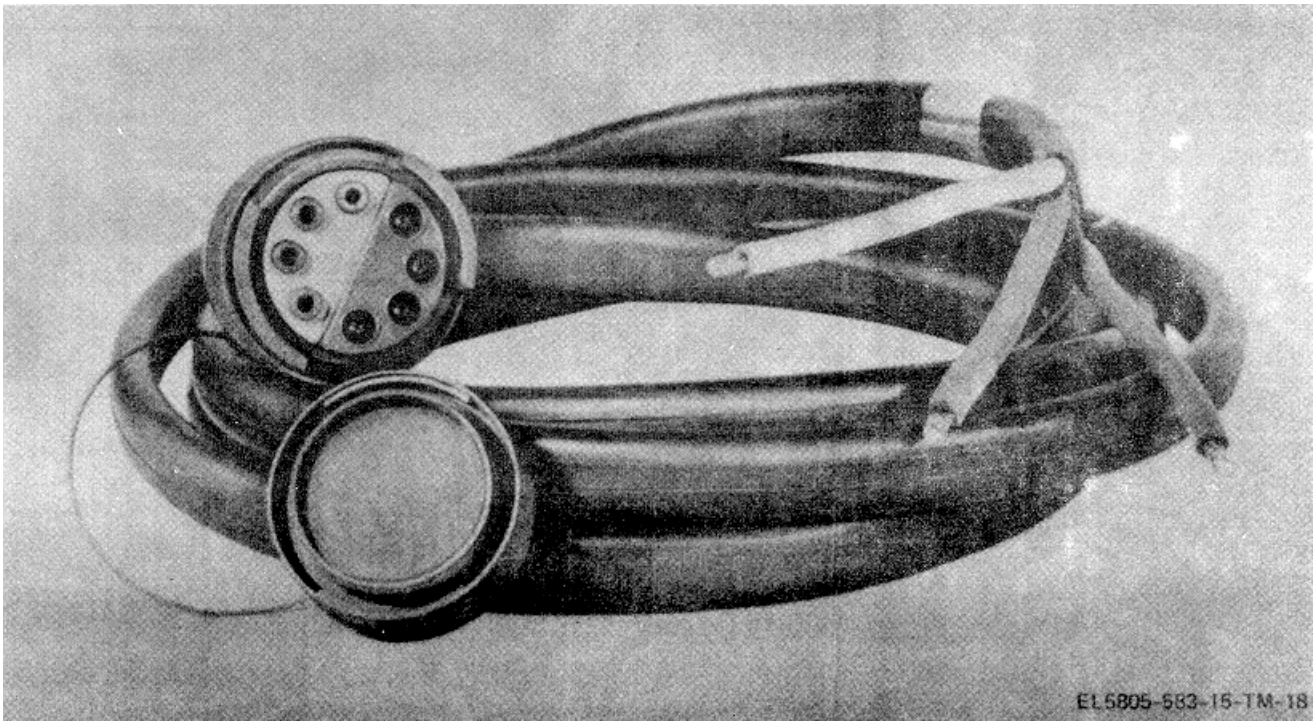

Fig. No. 1-8. Power cable stub.

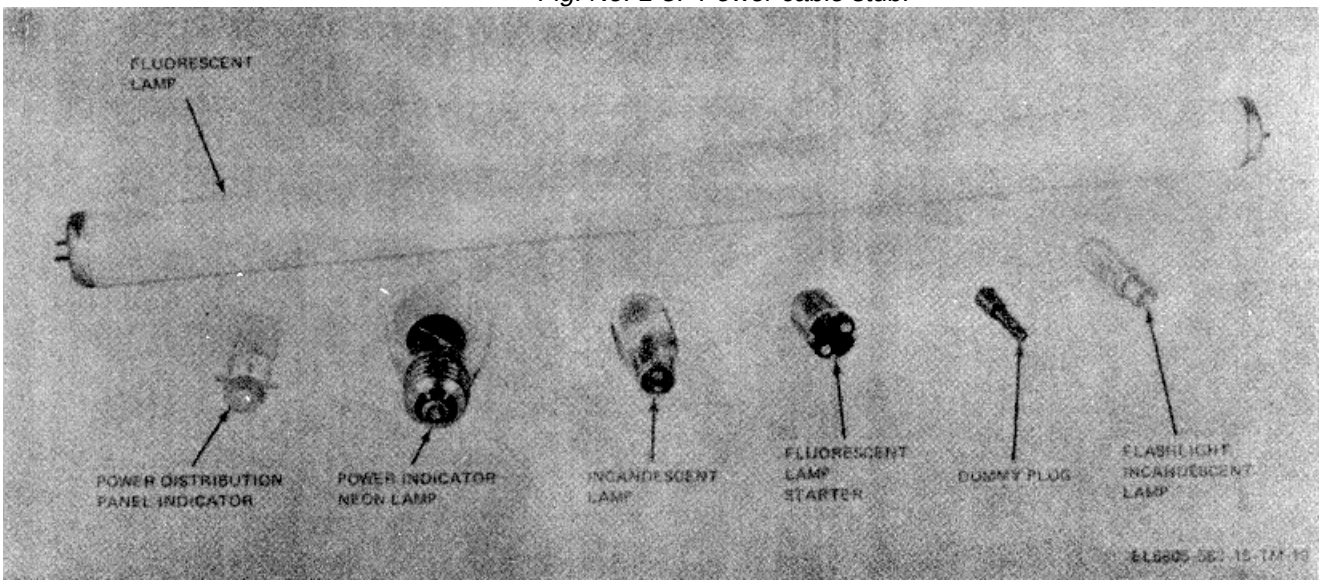

Fig. No. 1-9. Running spares

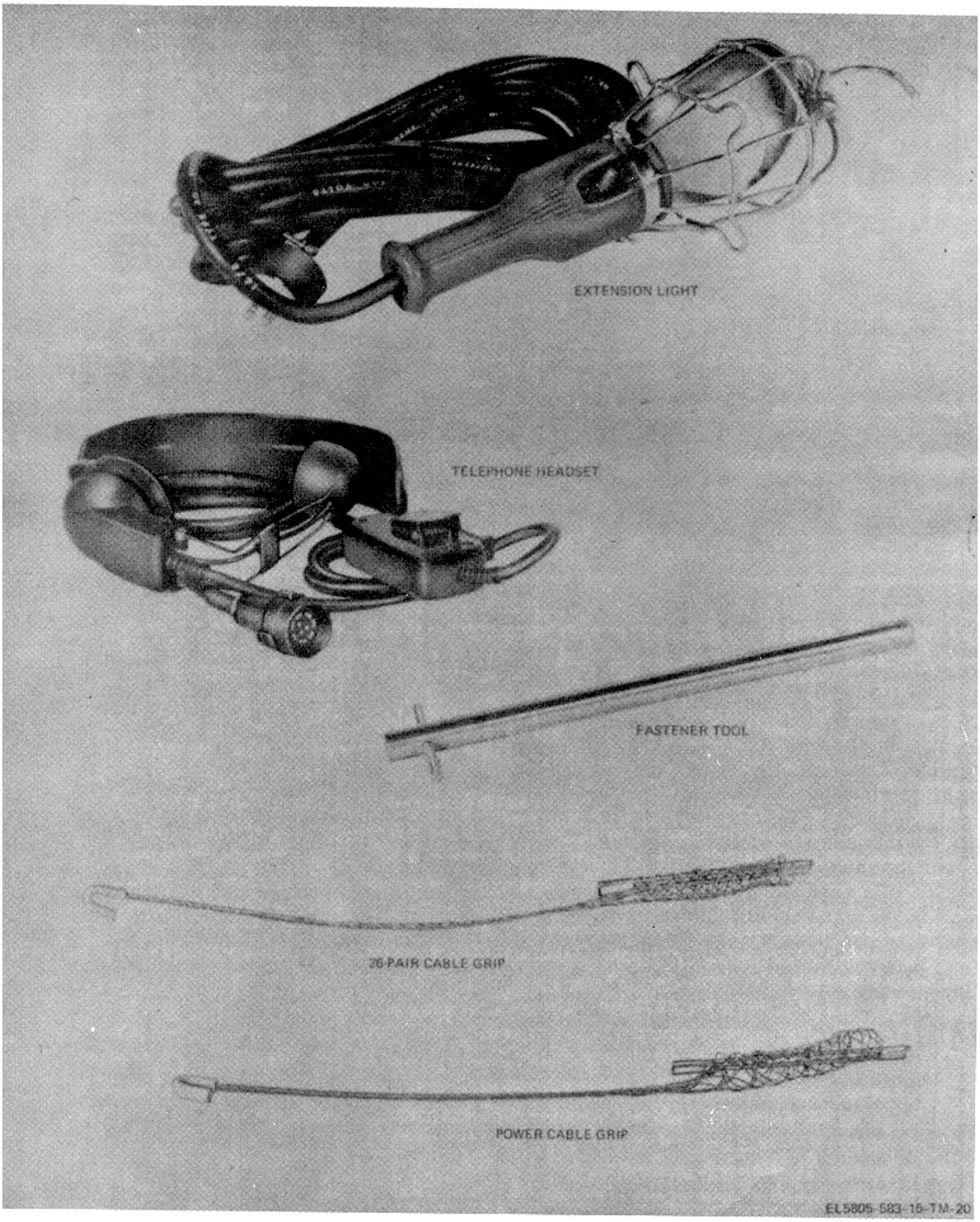

Fig. No. 1-10. Partial contents of Accessories and Spares cabinets

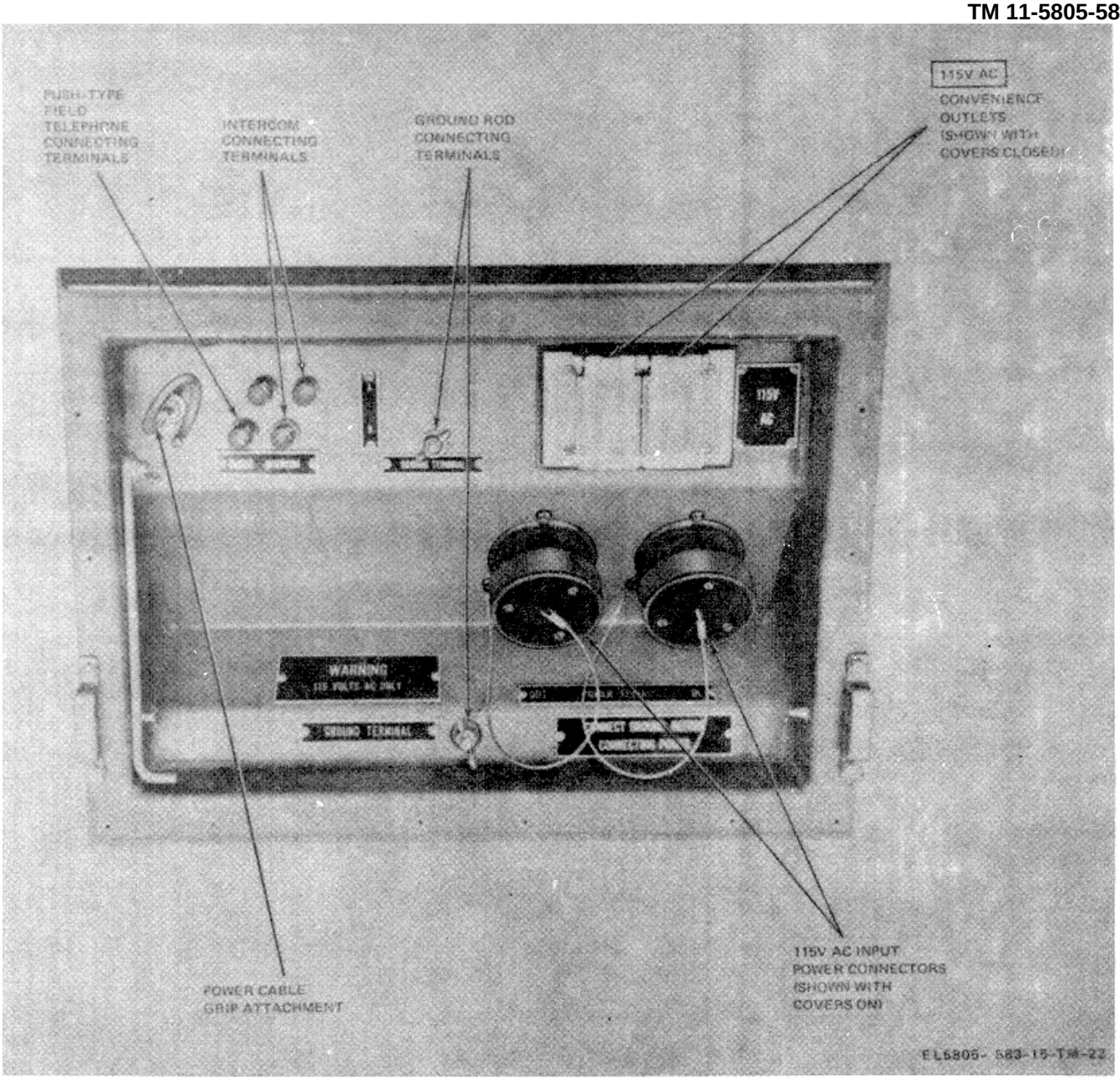

Fig. No. 1-11. Signal and Power Entrance box.

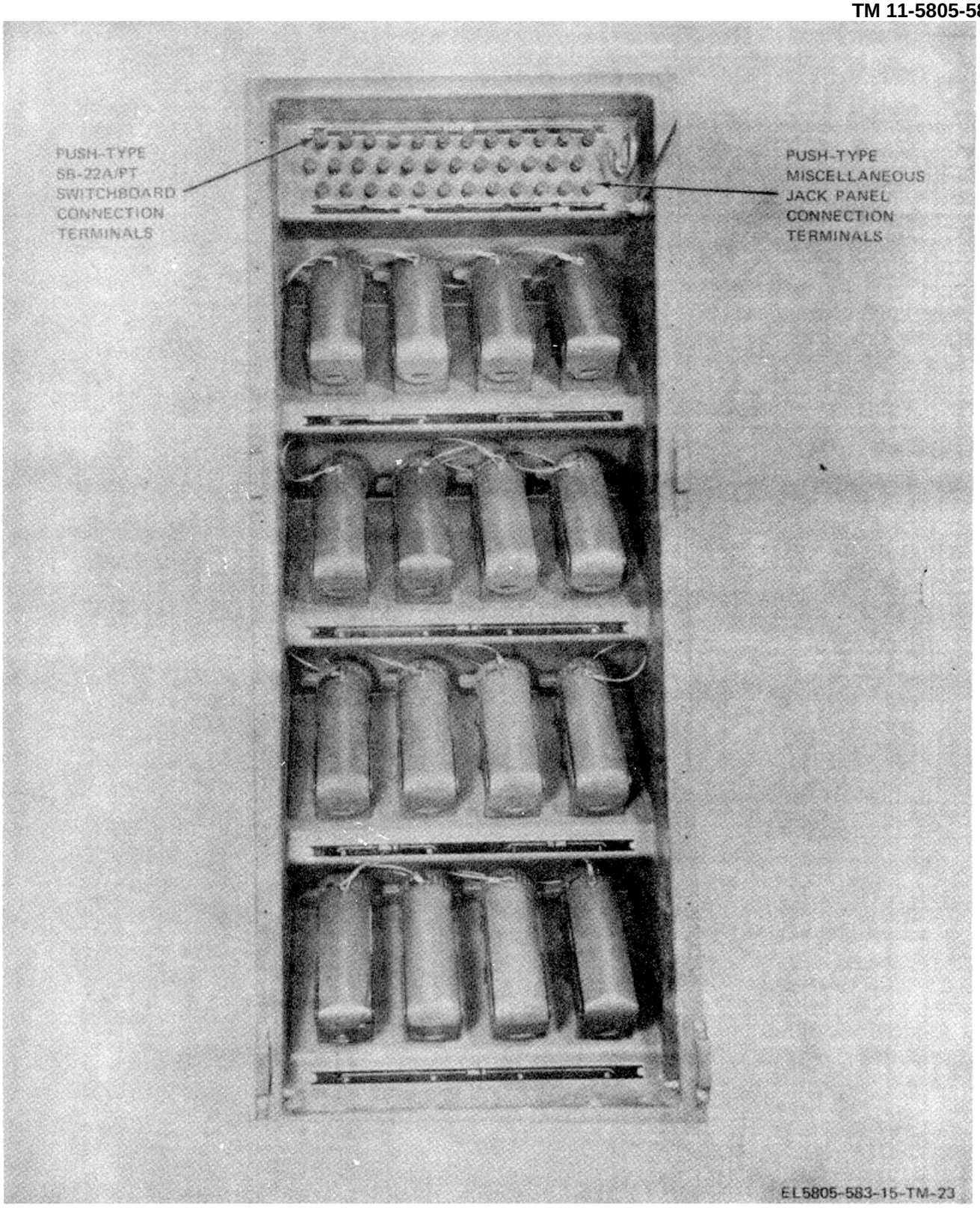

Fig. No. 1-12. Signal Entrance Box, rear, roadside.

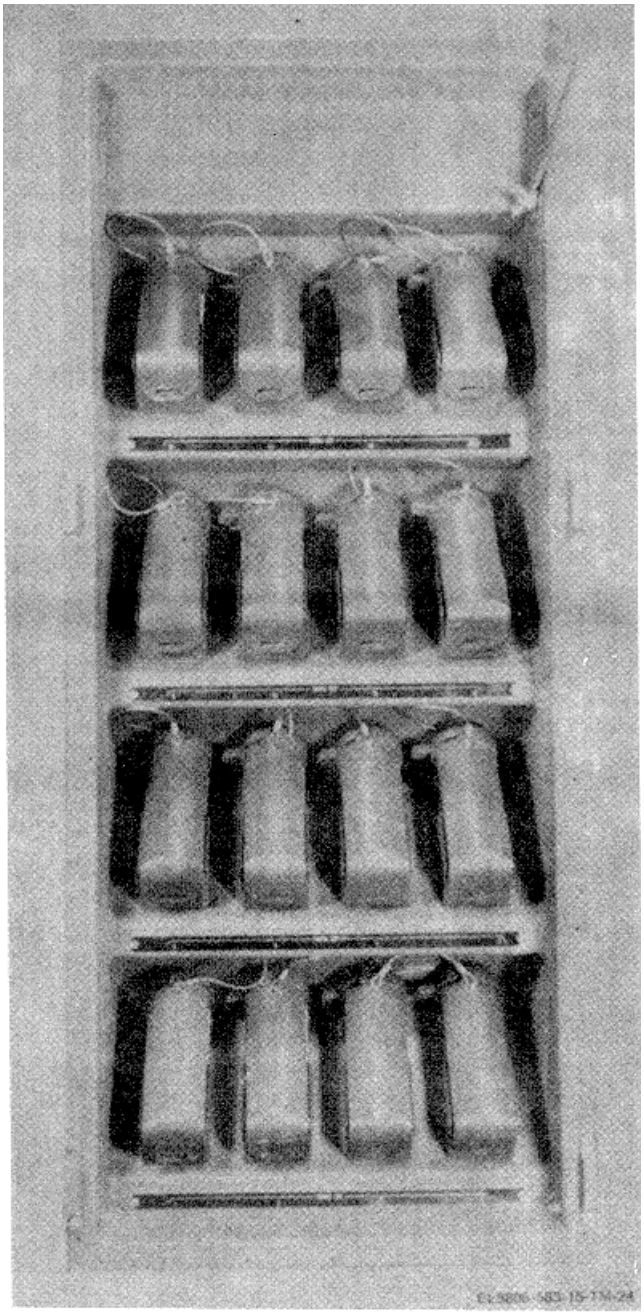

Fig. No. 1-13. Signal Entrance Box, (SIGNAL OUT I through SIGNAL OUT 16).

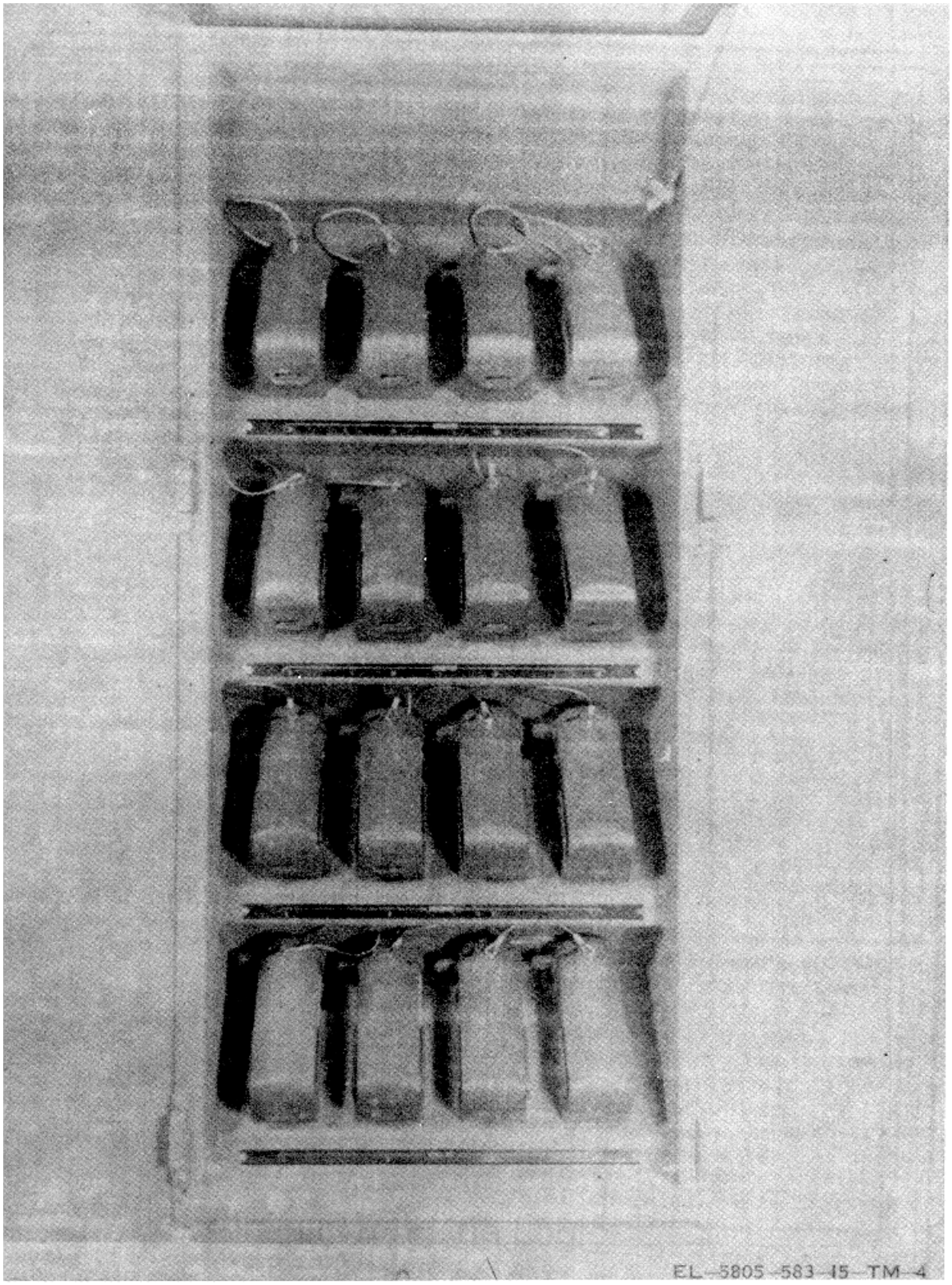

Fig. No. 1-14. Signal Entrance Box (SIGNAL IN 1 through SIGNAL IN 16).

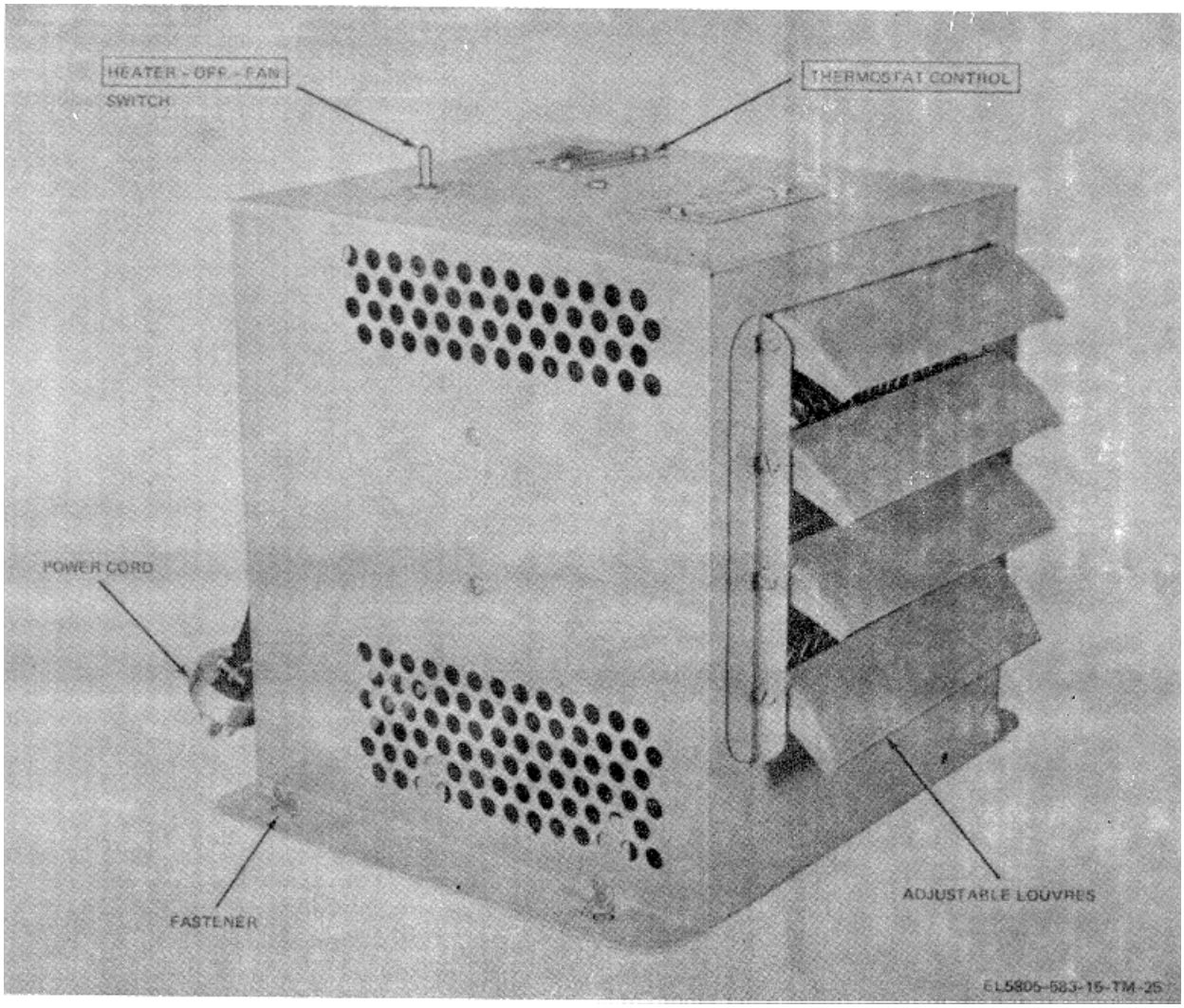

Fig. No. 1-15. Space heater.

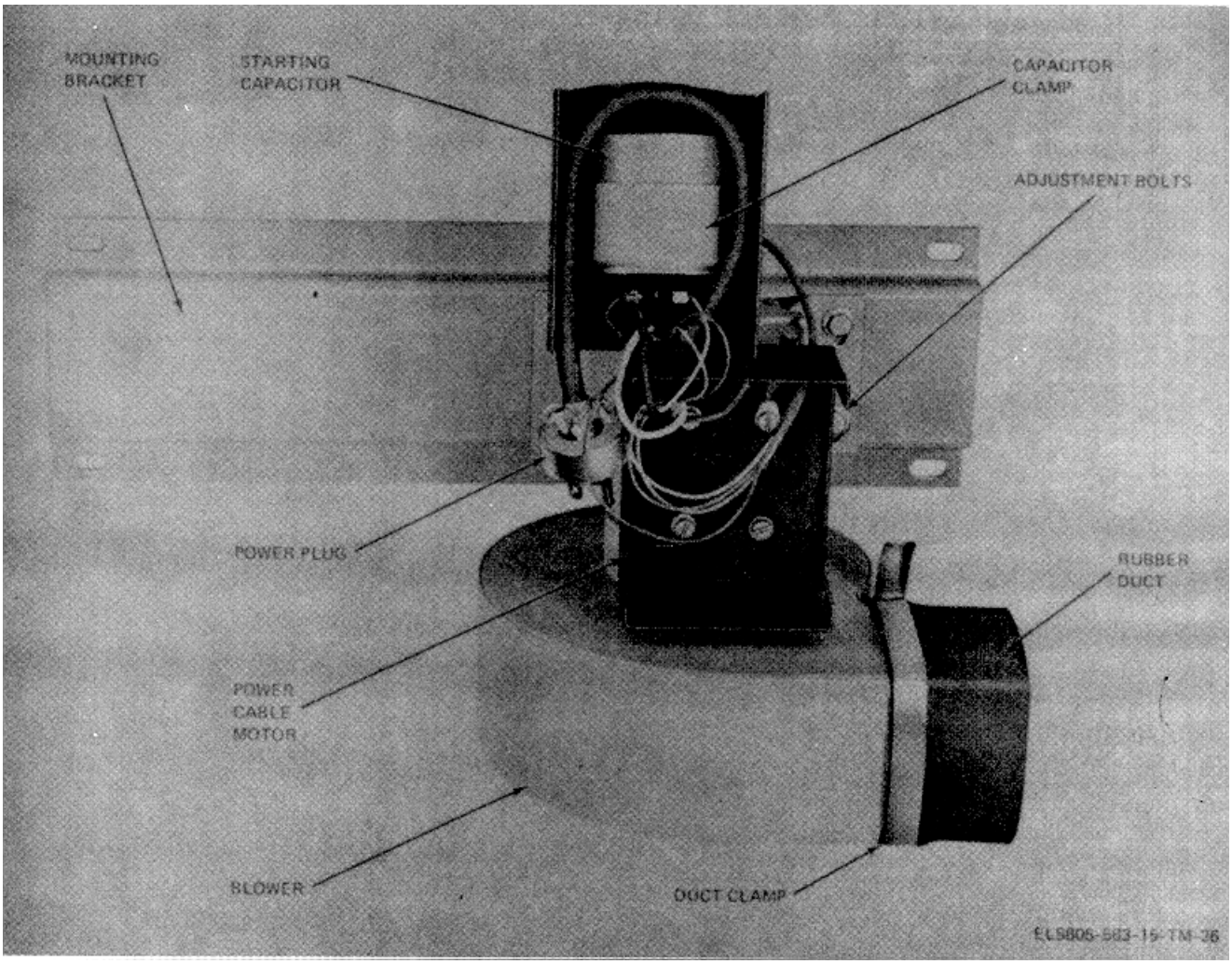

Fig. No. 1-16. Exhaust Blower.

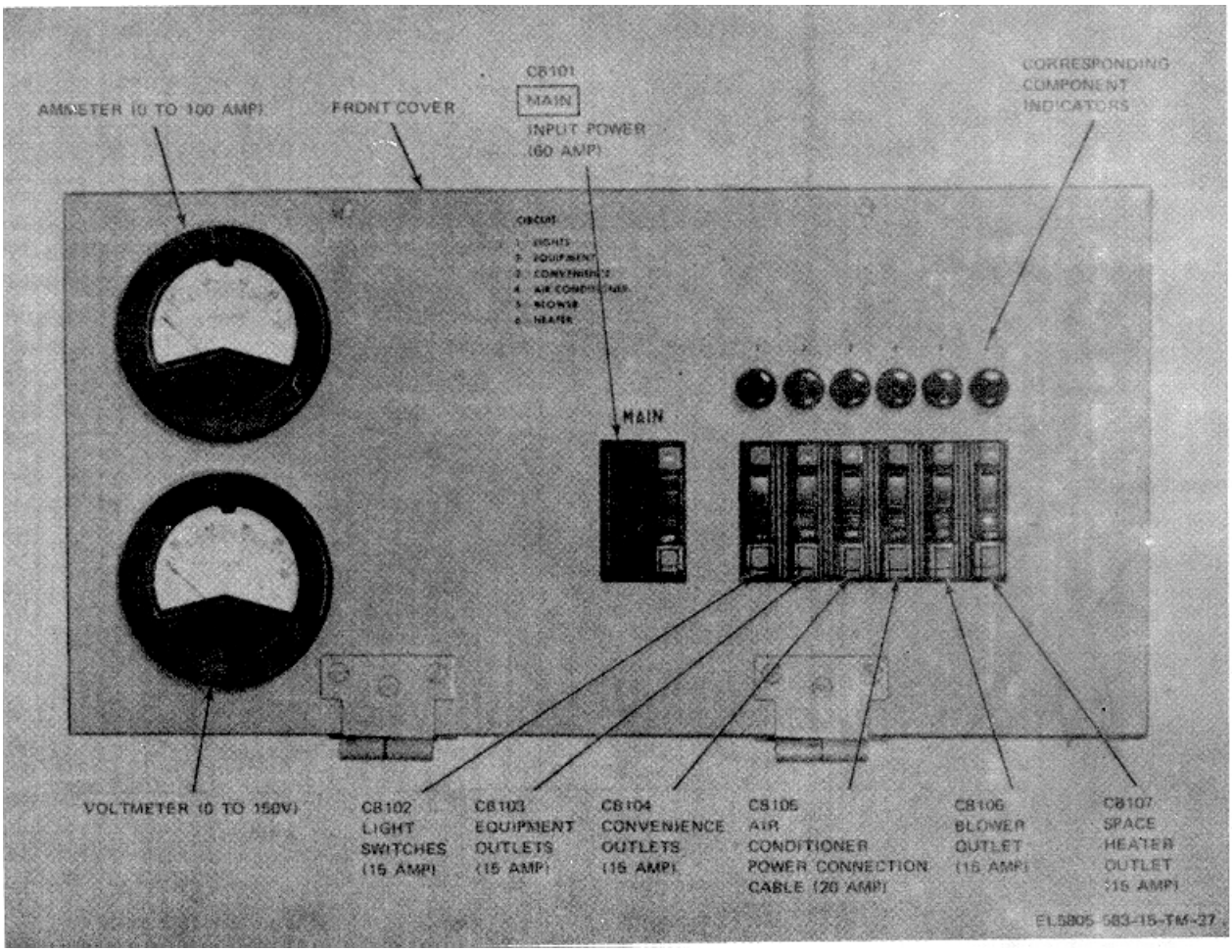

Fig. No. 1-17. Power distribution panel.

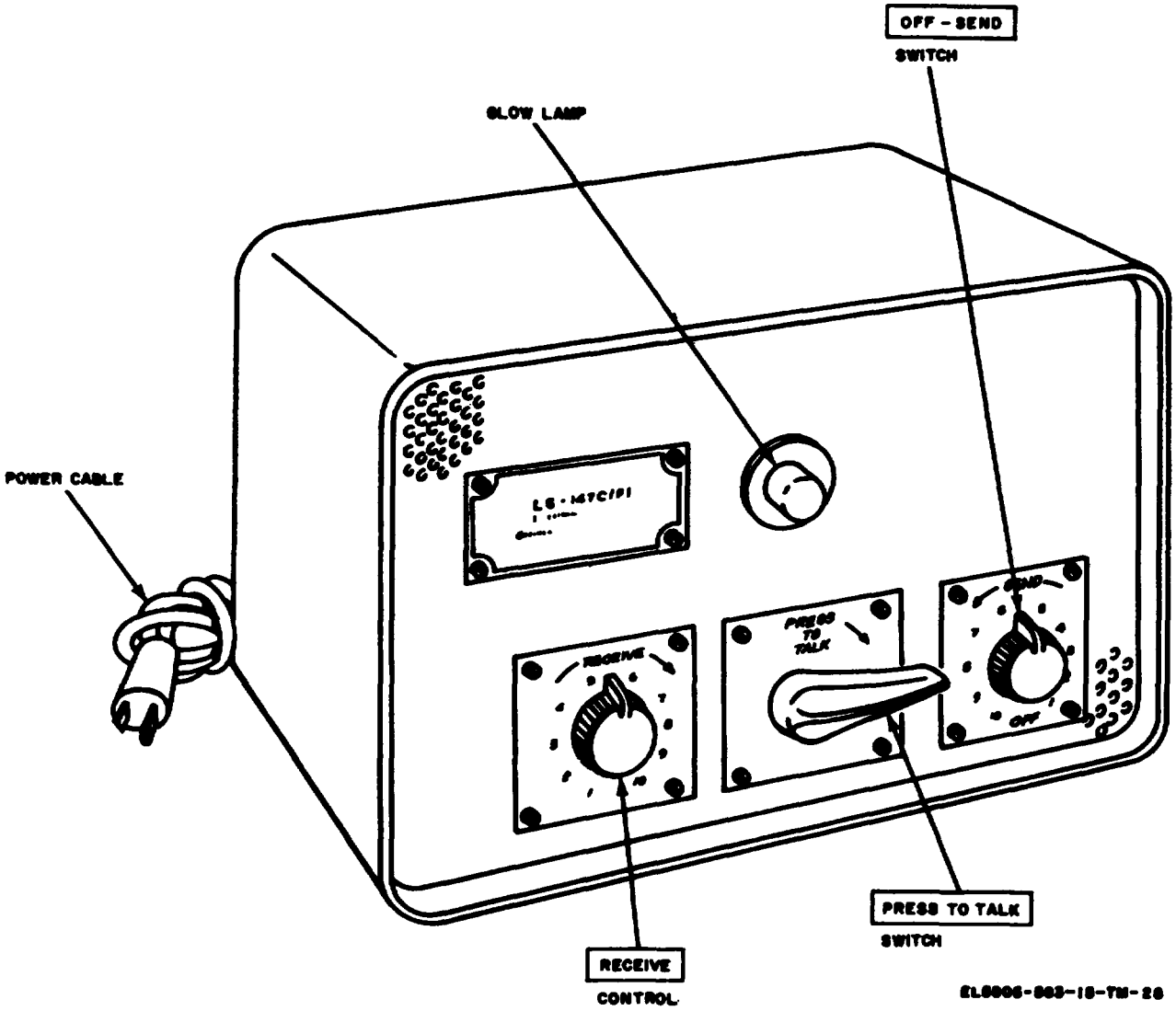

Fig. No. 1-18. Intercom LS-147C/FI.

CHAPTER 2

INSTALLATION

Section I. INSTALLATION OF EQUIPMENT

WARNING

During installation of this equipment conform to all safety requirements set forth in TB SIG 291. Injury or DEATH could result from failure to comply with safe practices.

2-1. General Installation Instructions

When the AN/TSC-76 is received, refer to *b* through h below for the order of equipment installation and applicable paragraph references.

NOTE

If the AN/TSC-76 is received with its major components installed and connected, unpack and check the equipment (para 2-2a and i) and proceed with the instruction given in paragraphs 2-11 through 2-13.

a. Unpack and check the equipment (para 2-2 to para 2-3).

b. Install and connect the LC-147C/FI (para 2-4).

c. Install and connect the TT-98D/FG (para 2-5).

d. Install and connect the space heater (para 2-6).

e. Install and connect the SB-22A/PT (para 2-7).

f. Install and connect the TA-312/PT (para 2-8).

g. Install and connect the TA-248/TT (para 2-9).

h. Install and connect the TH-22/TG (para 2-10).

i. Check the equipment installations (para 2-11 through 2-13).

2-2. Unpacking and Checking

a. Packaging Data (Fig. 2-1). For shipment, the AN/TSC-76 is packed in a reusable wooden crate. The AN/TSC-76 is anchored to eyebolts in the skid base of the crate and blocked at the sides and ends with lumber. The skid base has side entries for handling with a forklift. The dimensions of the crate are 85 inches high by 88 inches wide by 105 inches deep.

b. Removal From Crate (fig. 2-1).

(1) Unfasten the lag screws with wrenches and remove the top, end, and side panels from the crate base.

(2) Loosen the turnbuckles and detach the sling assemblies from the eyebolts in the crate base.

(3) Remove the wood blocking from the ends and sides of the AN/TSC-76.

CAUTION

Be careful when handling tools, because the aluminum skin of the AN/TSC-76 can be easily damaged.

(4) Remove the AN/TSC-76 from the crate base. Use overhead lifting equipment whenever available. If overhead lifting equipment is not available, remove the headers from the crate base, and drag the AN/TSC-76 from the crate base by the towing eyes. A forklift may be used to lift the AN/TSC-76 from either end of the crate base, if the prongs of the forklift are carefully inserted between the AN/TSC-76 and the crate base.

CAUTION

If a forklift is used, be extremely careful, because the skin of the AN/TSC-76 may be easily damaged by the prongs of the forklift. Underline the shelter with wood planking before using forklift.

(5) Forward the crate (reassembled, or with the sections tied together) to a local storage area, if practicable. The crate may be re-used for shipment of similar items.

c. Removing Contents.

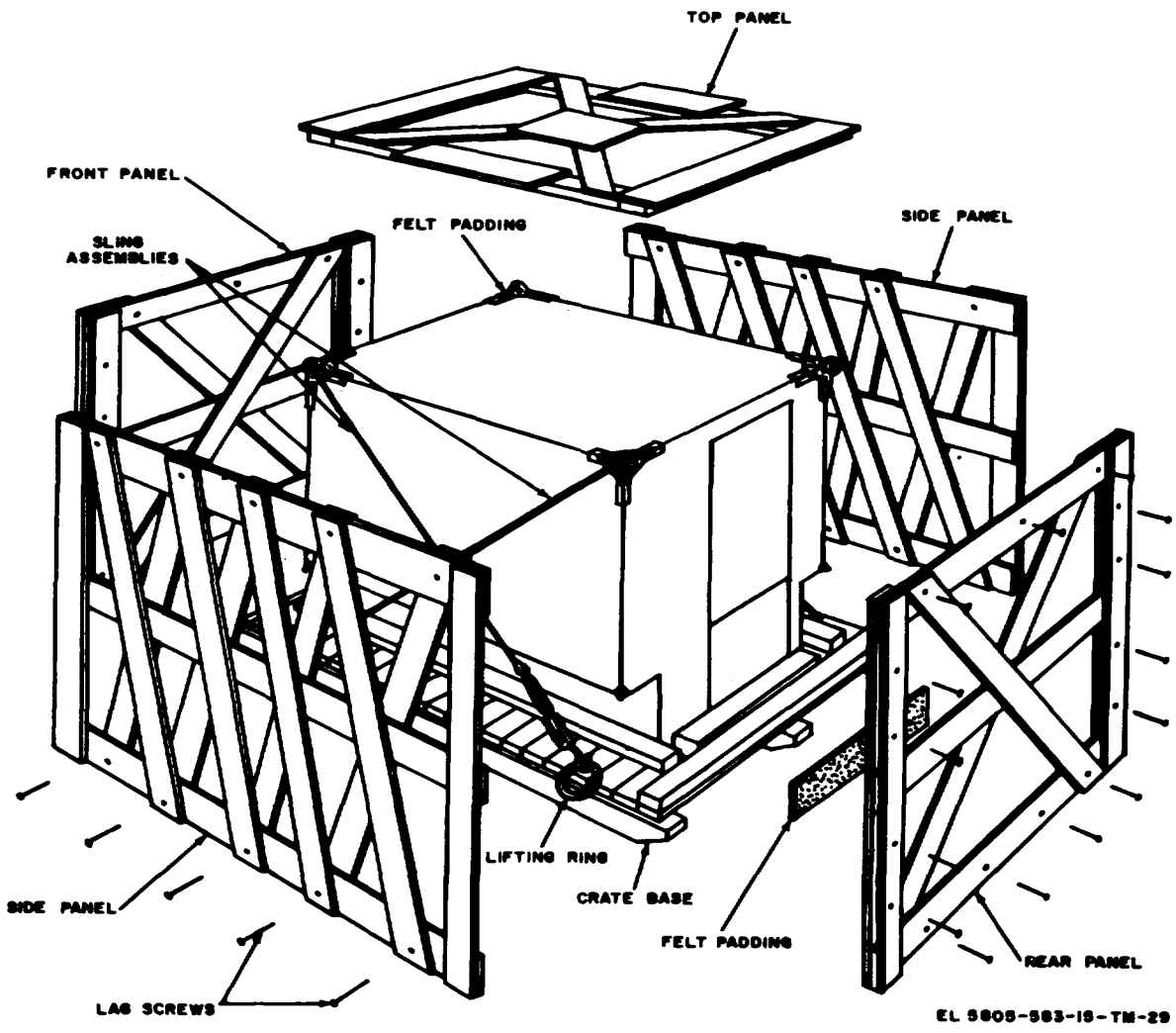

Fig. No. 2-1. Typical packaging diagram.

(1) Open the entrance door (fig. 1-1).

NOTE

With the entrance door and escape door locked from the outside, remove the thumbscrew (Fig. 5-1) on the inside of each door to determine that the door safety lock releases are operative.

(2) Remove packing and unscrew the cable reel holders that secure the cable reels to the floor (fig. 5-1) and place the holders in their mountings.

(3) Remove the cable reel.

(4) Remove the boarding ladder and place it on the ground or against the tailgate of the truck.

(5) Unpack ground rods, ground rod leads and cord assemblies.

2-3. Checking Unpacked Equipment

a. Inspect the AN/TSC-76 and its components for damage that may have occurred during shipment If the equipment has been damaged, fill out and forward SF 364 (para *1-3b).*

b. Check to see that the equipment is complete as listed on the packing slip. If a packing slip is not available, check the equipment against the basic issue

items list (app B). Report all discrepancies in accordance with DA Pam 738-750. The equipment should be placed in service even though a minor assembly or part that does not affect proper functioning is missing.

c. Check to see whether the equipment has been modified. If the equipment has been modified, the MWO number will appear on the front panel, near the nomenclature plate. Check also to see whether all MWO's current at the time the equipment is placed in use have been applied.

NOTE

Current MWO's applicable to the equipment are listed in DA Pam 25-30.

d. Check the latest issue of DA Pam 25-30 (never more than one year old) and its latest changes (never more than six months old) to see whether you have the latest editions of all applicable maintenance literature. (Equipment issued by depots may have been in stock for some time and may contain superseded manuals)

2-4. Installation of the LS-147C/F1

a. Bolt the LS-147C/FI in position as shown in fig. 5-1.

b. Connect the power cable to the nearest EQUIPMENT outlet.

c. Connect the LS--147C/FI, using a cord and plug assembly, to the INTERCOM jack panel (fig. 1-3).

2-5. Installation of the TT-98D/FG

a. Bolt the TT-98D/FG in position as shown in figure 5-1.

b. Connect the power cable to the nearest EQUIP-
MENT outlet

c. Connect the special purpose cable assemblies to the
TT-98D/FG SEND-REC jack panel.

2-6. Installation of the Space Heater

a. Install the space heater in position (fig. 5-1) and tighten the fasteners (fig. 1-15) with the fastener tool (fig. 1-10).

b. Connect the power cable to the HEATER power. receptacle (fig. 1-3).

2-7. Installation of the SB-22A/PT

a. Position the SB-22A/PT as shown in figure 5-1.

b. Lift the recess thumb latches at the rear of the SB-22A/PT and open the rear door.

c. Feed the signal cable designated SB-22A/PT through the right wire entry at the side of the SB22A/PT and connect the leads as given below.

.

	Bottom binding post		*Top binding post*	
Binding post pair	*Base color*	*Band*	*Base color*	*Band*
1	Blue	1 White	Blue	2 White
2	Orange	1 White	Orange	2 White
3	Green	1 White	Green	2 White
4	Brown	1 White	Brown	2 White
5	Gray	1 White	Gray	2 White
6	Blue	1 Red	Blue	2 Red
7	Orange	1 Red	Orange	2 Red
8	Green	1 Red	Green	2 Red
9	Brown	1 Red	Brown	2 Red
10	Gray	1 Red	Gray	2 Red
11	Blue	1 Black	Blue	2 Black
12	Orange	1 Black	Orange	2 Black

d. Install batteries into the SB-22A/PT.

(1) Place the index fingers on the end caps of the battery case.

(2) Pull straight out on the battery case with the index fingers to remove the battery case from the switchboard. Remove the end caps.

(3) Slide two batteries BA-30 into each end of the battery case. Be sure that each battery is positioned so that the top (+) terminal is toward the open end of the battery case.

(4) Replace the two end caps of the battery case after the batteries have been installed.

(5) Replace the battery case on the spring contacts and press it straight into the spring contacts. Be careful not to damage the spring contacts.

e. Feed the cable designated RING GEN from the send duct through the wire entry at the side of the SB*22A/PT* and make the following connections:

(1) (Connect the white lead to the top binding post of pair 16 (GEN POWER RING).

(2) Connect the blue lead to the bottom binding post of pair 16 (GEN POWER RING).

f. Close the rear access door of the SB-22A/PT.

g. Insert the SB-22A/PT into the equipment rack; engage and fasten the slide snap catches of the SB22A/PT mounting with the D-rings of the SB-22A/PT carrying case.

h. Remove the H--144 from the front cover and place it in the holder at the side of the equipment rack; connect the connector plug at the end of the cord to the receptacle on the SB-22A/PT front panel.

2-8. Installation of the TA-312/PT

a. Open the clamp on the wallholder as shown in figure 5-1.

b Remove the TA-312/PT from its canvas carrying case.

c. Place the TA--312/PT in the holder. Remove the handset from the handset bracket.

d. Install mounting block, replace and fasten the clamp over the TA-3 12/PT.

e. Replace the handset in the handset bracket and fasten the handset strap over the handset.

f. If the Handset-Headset, is to be used with the TA312/PT, follow the instructions given in the appropriate technical manual (app A) for installation and connections.

2-9. Installation of the TA-24/TT

a. Remove the screws in the mounting plate of the TA-248/T.

b. Position the TA-248/TT as shown in figure 5-1.

c. Connect the cable designated RING GEN from the signal duct to the TA-248ITT. Connect the white and blue wires to terminals C and I, respectively.

d. Connect the power cord to the RINGING GENERATOR TA-248/TT controlled outlet (fig. 1-3).

2-10. Installation of the TH-22/TG

a. Secure the TH-22/TG in position shown in figure 5-1.

b. If required, install the special purpose cable assembly.

NOTE

Perform the procedure outlined in para 2-16, para 2-17 and para 3-2 before proceeding to paragraphs 2-11 through 2-13.

2-11. Checking the TA-312/PT, TA-248/TT and SB-22A/PT

a. Signal Connections.

(1) Insert the plug at the end of the operator's cord into jack I of the SB-22A/PT

.

(2) Insert the plug of a cord assembly into C29J24, and the other end to SB-22A/PT lines jack on the patching panel. (fig. 5--2).

(3) Talk between the SB-22A/PT and the TA-312/PT.

(4) Repeat the procedure given in (1), (2), and (3) above to talk over lines 2-12 of the patching panel.

b. Manual Ringing Connections.

(1) Insert the plug at the end of the operator's cord into a jack of the SB-22A/PT.

(2) Insert the cord assembly from C29J24 to the corresponding jack of the SB-22A/PT LINES jack on the patching panel.

(3) Rotate the hand generator crank of the SB22A/PT with the RING BACK-PWR RING FWD switch at RING BACK. The buzzer of the TA-312/PT should sound.

NOTE

The switch on the RINGING GENERATOR TA-248/TT controlled outlet (fig. 5-1) should be off.

(4) Remove the plug of the operator's jack from the jack of the SB-22A/PT.

(5) Operate the hand generator crank of the TA312/PT to ring on the line. The drop of the line tested should operate; the buzzer or the visible alarm should operate.

(6) Insert the plug of the operator's jack into the jack on the SB-22A/PT corresponding to the line tested. The drop should restore.

c. Power Ringing Connections.

(1) Operate the switch on the RINGING

GENERATOR TA-248/TT controlled outlet (fig. 5-1) to ON.

(2) Insert the plug at the end of the TA248/TT into C29J24 using a cord assembly.

(3) Insert the plug at the end of the operator's cord into the jack on the SB-22A/PT corresponding to the SB-22A/PT LINES jack.

(4) Operate the RING BACK-PWR RING FWD switch to PWR RING FWD. The buzzer of the TA-312/PT should sound.

(5) Remove the TA-312 PT and the SB22A/PT cord plugs from the jacks.

2-12. Checking the LS-147C/F for Normal Operation

a. Connect a cable assembly to the binding posts located on the rear of the LS-147C/FI.

b. Connect another LS-147C/FI or equivalent intercom circuit, to the appropriate binding posts in the SIGNAL & POWER ENTRANCE box (fig. 1-11).

c. Check the LS-147C/FI for normal operation as described in TM 11-5830-221-12 (app A).

NOTE

The 12 miscellaneous jack panel connection terminals (fig. 1-12) on the rear

.

roadside signal entrance box may be used for connection to the LS-147C/FI.

2-13. Checking the Space Heater and Blower No. 1

a. Connect the power cord from Blower no. 1 to the BLOWER NO. 1 power connection (fig. 1-3).

CAUTION

Make certain that the exhaust blower cover (fig. 3-2) is open.

b. Set CB105 on the power distribution panel to ON. Blower no. 1 shall overate.

c. Set CB106 on the power distribution panel to ON.

d. Set the THERMOSTAT CONTROL on the space heater (fig. 1-15) to the lowest setting.

NOTE

Make certain that the space heater power cable is connected to the HEATER power connection for space heater (para 2-6).

e. Set the HEAT-OFF-FAN switches to HEAT. The space heater shall operate.

Section II. INSTALLATION ON OF THE AN/TSC-76

2-14. Siting

a. The location of the AN/TSC-76 will depend on the tactical situation and local considerations. When installed on the ground, it should be located on firm, dry ground with good drainage; the site should be prepared and leveled. The AN/TSC-76 should be placed on concrete blocks or wooden beams, if possible, and positioned to facilitate connection of power and signal cables. The AN/ TSC-76 can also be installed on a truck (para 2-15).

b Avoid locations that require more than six cable lengths (1, 500 feet) of 26-pair cable between the AN/TSC-76 and other operating equipments. Excessive distance reduces the signal quality.

c. If a generator set is used to supply 60 Hz ac power to the AN/TSC-76, locate the generator et approximately 75 feet from the AN/TSC-76 minimize fire hazard and generator noise in reference.

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2-15. Installing the AN/TSC-76

NOTE

To install the AN/TSC-76 on the ground or a truck, four men and a device capable of lifting 2.200 pounds are required.

a. Lifting and Loading the AN/TSC-76 (fig. 2-2). To install the AN/TSC-76 on a truck, follow the procedures given below.

(1) Use the snaphooks (nearest the turnbuckles) to connect the sling assembly to the lifting eyes.

(2) Place the sling assembly on top of the AN/TSC-76.

(3) Connect the four sling hooks to the lifting ring.

(4) Place the lifting ring over the hook on the lifting device.

WARNING

To avoid injury to personnel and damage to the equipment, only the personnel en-

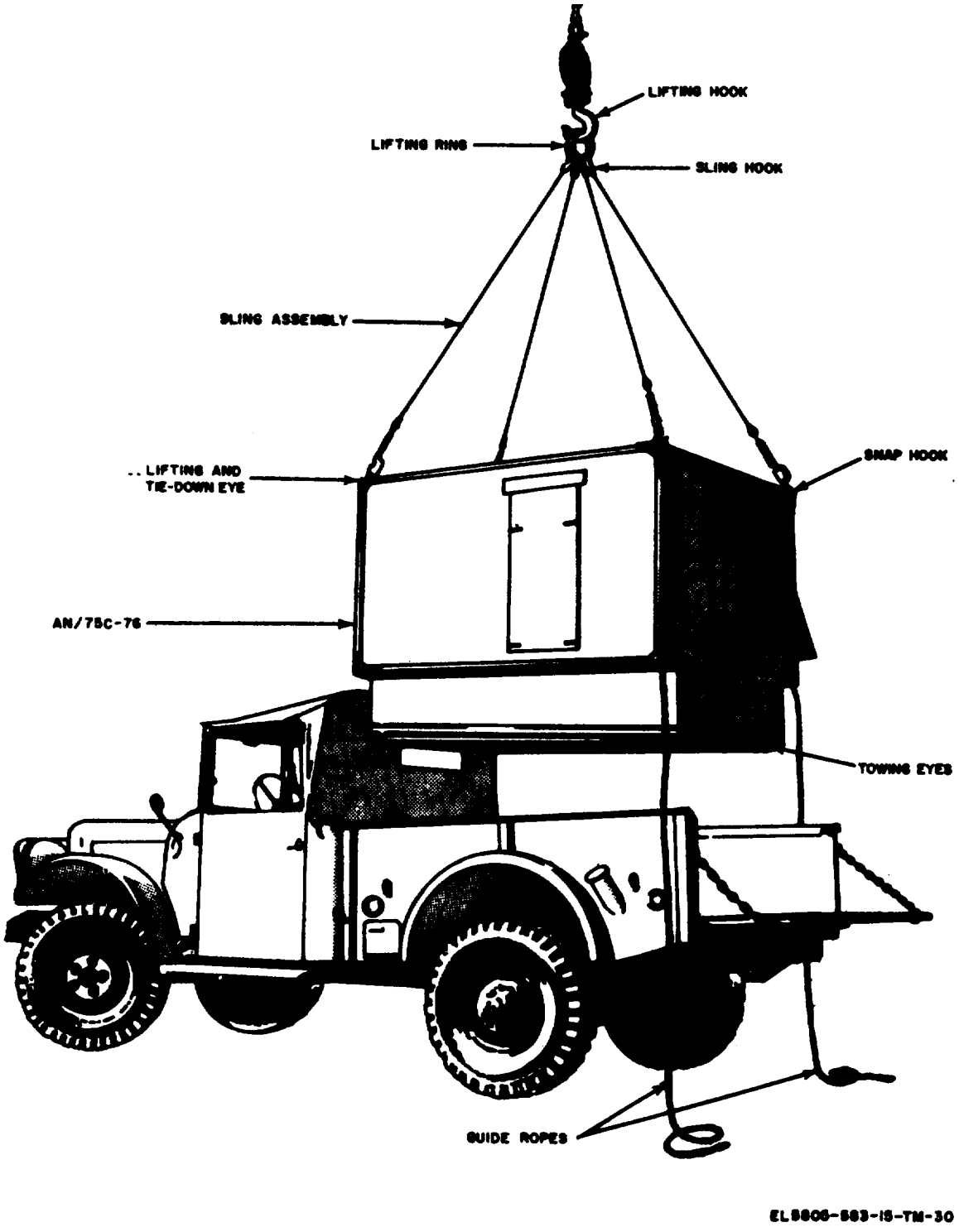

Fig. No. 2-2. Loading the AN/TSC-76 on a track.

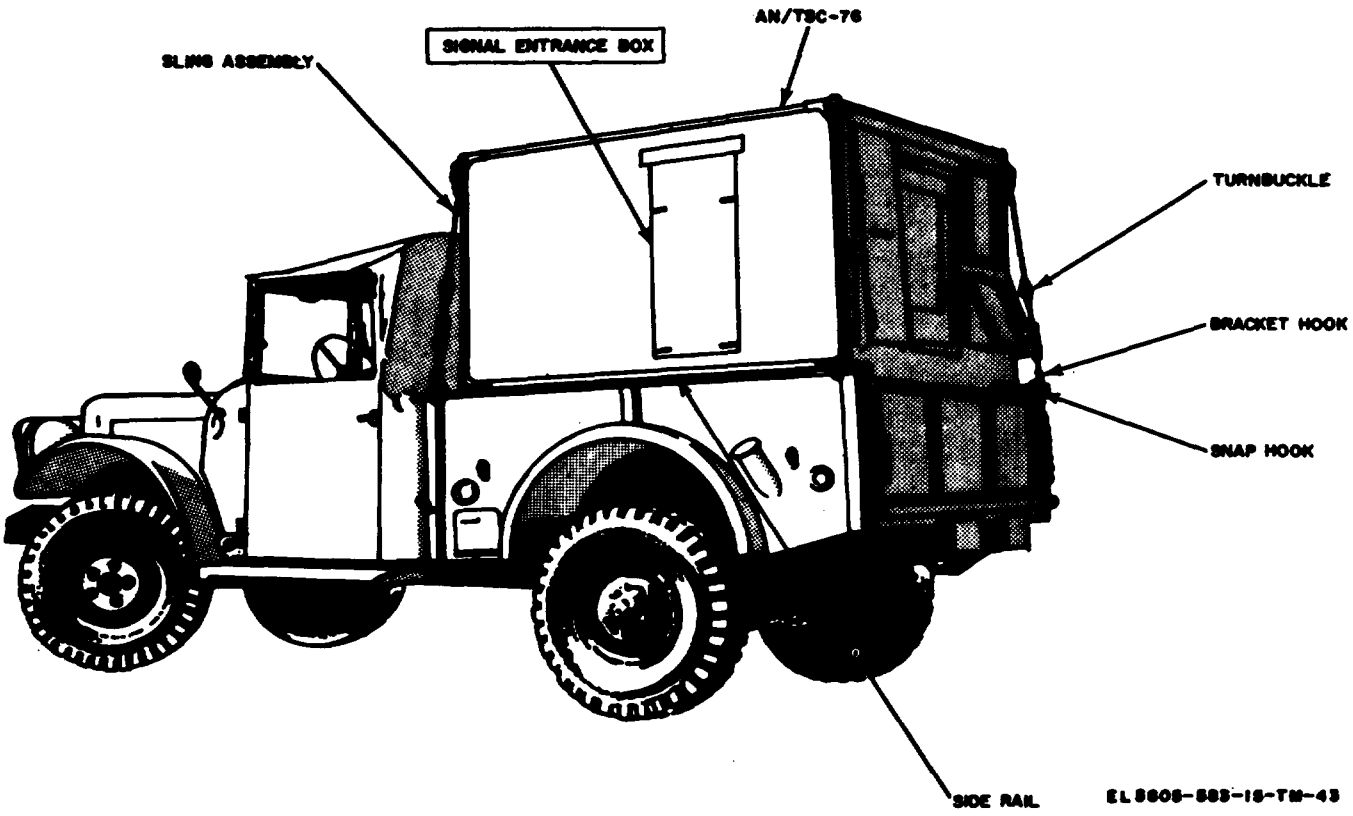

Fig. No. 2-3. Securing the AN/SC-76 on a truck.

gaged in the actual loading operation should be permitted near the truck, lifting device, and the AN/TSC-76. To eliminate confusion, all instructions must come from the loading crew supervisor.

(5) Tie a 1/2-inch rope (at least 15 feet long) to each rear towing eye.

(6) Lower the truck tailgate and make sure 'that all tools and equipment have been removed from the truck body.

(7) Slowly lift the AN/TSC-76 from the ground to a position high enough to clear the body of the truck.

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(8) Back the truck into position under the AN/TSC-76.

WARNING

All personnel must remain clear of the truck while the AN/TSC-76 is being lowered into position.

(9) Position a man at each of the guide ropes ((5) above) to guide the AN/TSC-76 into position, and slowly lower it onto the truck body.

(10) Remove the lifting ring from the lifting hook and disassemble the lifting ring and sling hooks. Remove the snaphooks from the lifting

eyes and the /2-inch ropes from the rear towing eyes.

b. Securing the AN/TSC-76 on Truck (fig. 2-3).

(1) Hook each of the sling hooks to a lifting eye.

(2) Use the sling assembly cable attached to the lifting eye at the forward roadside of the AN/TSC-76 and place the bracket' hook on the rear of the left side rail.

(3) Use the sling assembly cable attached to the lifting eye at the forward roadside of the AN/TSC-76 and place the bracket hook on the front of the left side rail.

(4) Use the sling assembly cables on the curbside of the AN/TSC-76 and follow the procedures given in (2) and (3) above to secure the curbside of the AN/TSC-76.

(5) After the sling assembly has been attached to the side rails of the truck, tighten the turnbuckles.

CAUTION

To prevent the AN/TSC-76 from twisting in the truck body, tighten all turnbuckles equally at the same time. Do not overtighten turnbuckles. Overtightening the turnbuckles will damage the AN/TSC-76.

(6) Raise and secure the truck tailgate.

2-16. Grounding

The AN/TSC-76 must be properly grounded before input power is connected. Select a grounding site that will not interfere with personnel movement or with power and signal circuit cables. Ground the AN/TSC-76 as follows:

a. Loosen the cover latches on the SIGNAL & POWER ENTRANCE box (fig. 1-1), lift the cover, and straighten the stays.

b Fold the side flaps out from under the cover and hook them onto the retaining studs at each side of the SIGNAL & POWER ENTRANCE box.

c. Remove the ground rod and sledge hammer (fig. 5-1) from their mountings.

d If possible, select a grounding site within 8 feet of the SIGNAL & POWER ENTRANCE box. Scoop out a small hole about 6 inches deep.

e. Drive a clean ground rod into the hole until the top of the ground rod is approximately 3 inches above the bottom of the hole

.

f. Remove the ground lead from the overflow carton.

g. Connect one end of the ground lead to the ground rod and the other end to the GROUND TERMINAL (fig. 1-11) in the SIGNAL & POWER ENTRANCE box.

h. If a generator set is used for supplying ac power, ground it in the same manner as the AN/ TSC-76.

2-17. Power Connections

WARNING

Grounding connections (para 2-16) must be completed before power is connected to the AN/TSC-76.

a. SIGNAL AND POWER ENTRANCE BOX. Power for the AN/TSC-76 normally is supplied through POWER 115 VAC IN receptacle on the SIGNAL & POWER ENTRANCE box (fig. 1-11). The OUT POWER 115 VAC receptacle is provided to supply external power, or to supply power to the AN/TSC-76 if the POWER 115 VAC IN receptacle is damaged. When the OUT POWER 115 VAC connector is used to supply external power, do not allow the total current drain to exceed 60 amperes (fig. 1-17) or the capability of the power source, if lower than 60 amperes. Cable grips and cable hooks may be installed as shown in figure 2-4

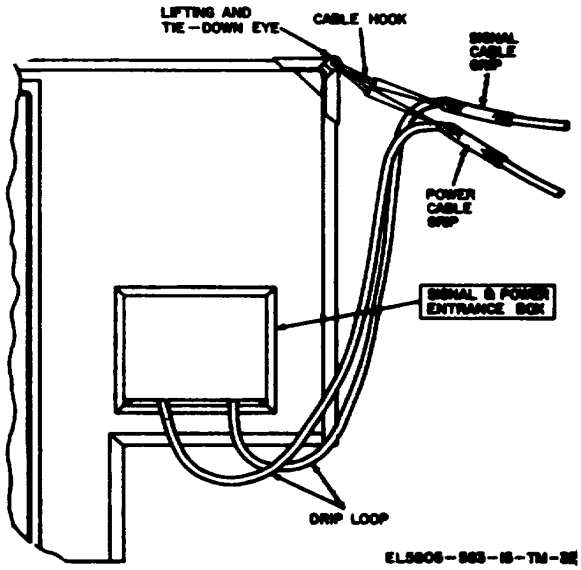

Fig. No. 2-4. Cables grip and cable hook installation diagram.

to relieve strain on the wall of the AN/TSC-76. The power cable grip attachment (fig. 1-11) may also be used.

b. Preliminary Procedures.

(1) Make sure that all circuit breakers and equipment power switches are in the OFF position.

(2) Remove the power cable, the power stub, and the cable reel (fig. 5-1) from their stowage locations.

(3) Unwind the power cable and unpack the power stub.

c Connection to *Generator Set.* If a generator set is to provide power for the AN/TSC-76, connect 60 Hz ac power to the SIGNAL & POWER ENTRANCE box as described in (1) and (2) below; otherwise, connect power as described in *d* below.

(1) Remove the cover from the POWER 115 VAC IN receptacle in the SIGNAL & POWER ENTRANCE box (fig. 1-12) and from the connector at one end of the power cable (fig. 1-8). Connect the power cable to the POWER 115 VAC IN receptacle (fig. 1-11).

(2) If the generator set includes an output connector that is compatible with a connector of the power cable, connect the power cable connector to the output connector of the generator set; otherwise, refer to the generator set technical manual and connect the white (neutral), black (hot) and red (ground) leads of the power stub to appropriate output terminals of the generator set. Remove the covers from the connectors of the power stub and the power cable (fig. 1-8), and interconnect the connectors with the connector adapter.

d. Connection to Commercial Power Source.

(1) Turn off or disconnect the commercial power before making any connections.

NOTE

Terminal 1 of the power connector is hot, terminal 2 is neutral, terminal 8 is no connection, and terminal 4 is ground.

(2) If the power source is a 120-volt, 60 Hz, single-phase, two-wire source, connect the red and white wires of the power stub to the neutral wire, and connect the black wire of the power stub to the hot wire.

(3) If the power source is a 120-volt, 60 Hz single-phase or 120-240 volt three-wire distribution system, connect the red and white wires of the power cable stub to the neutral terminal and the black wire to either of the two hot terminals of the source.

(4) If the power source is a 110-220-volt, 60 Hz, 3-phase, four-wire distribution system, connect the red and white wires of the power stub to the neutral bus bar, and the black wire to the phase 1, phase 2, or the phase 3 bus bar.

(5) Connect the power cable stub to one end of the power cable and connect the other end of the power cable to the POWER 115 VAC IN receptacle in the SIGNAL & POWER ENTRANCE box.

Section III. SIGNAL CONNECTIONS

2-18. General

The signal connections to the AN/TSC-76 depend on the circuit requirements of the area-type communication system. Each connection must be properly identified at the patching panel with designation strips. The circuits available at the AN/TSC-76 are indicated below.

a. Twenty-four two-wire lines, between each SIGNAL IN and each SIGNAL OUT receptacle *(fig.* 1-12 through 1-14) are normal-through the hatching panel (fig. 5-2).

b. Twenty-two 2-wire lines between TEL SWBD 1 receptacle (fig. 1-12) and pair 25 of each SIGNAL IN receptacle are normal-through the patching panel (fig. 5-2).

c Twenty-two 2-wire lines between TEL SWBD 2 receptacle (fig. 1-12) and pair 25 of each SIGNAL OUT receptacle are normal through the patching panel (fig. 5-2).

d. Pair 26 on each SIGNAL IN and SIGNAL OUT receptacle is common to nine MULT and three CUT OFF jacks on the patching panel (fig. 5-2) and common to each other.

e. Pairs 23 through 26 of each TEL SWBD receptacle (fig. 1-12) terminate at the patching panel (fig. 5-2).

f. Twelve binding post pairs (SB-22 LINES 1 through 12) on the SIGNAL ENTRANCE box (fig. 1-12) are normal-through the patching panel (fig. 5-2) to the SB-22A/PT (fig. 5-1).

g. JACKS 1 through 4 of the SIGNAL ENTRANCE

box (fig. 1-12) terminate at BINDING POSTS 1 through 4 jacks on the patching panel (fig. 5-2).

h. BINDING POSTS A and B of the SIGNAL ENTRANCE box (fig. 1-12) are terminated on the BIND. POST A and BIND. POST B jacks on the patching panel (fig. 5-2).

2-19. Connecting 26-Pair Cables

a. Removal of Dust Cover With Locking Ring on Outer End.

(1) If the 26-pair cables are provided with locking rings on the outer end, grasp the locking ring on the outer end of the dust cover and turn it counterclockwise until the outer end of the dust cover is unlocked.

(2) Continue to turn the dust cover and the receptacle counterclockwise until the upper end is unlocked.

(3) Carefully lift the dust cover from the receptacle.

b. Removal of Dust Cover With Flange on Outer End

(1) If the 26-pair cables are provided with flanges on the outer end, grasp the dust cover and the receptacle and turn them counterclockwise until the upper end is unlocked.

(2) Lift the upper end of the dust cover off the receptacle.

(3) Swing the dust cover upward and outward until the flange unhooks from the lug on the outer end of the receptacle.

c. Connection of 26-Pair Cables.

(1) Remove the dust cover from the 26-pair cable connector.

(2) Place the 26-pair cable connector on the receptacle. Be sure the connector is positioned squarely on the receptacle.

(3) Gently press the connector into the receptacle.

CAUTION

The connector or receptacle inserts may be damaged if the connector is not properly positioned or if too much pressure is required to interconnect the units.

(4) Tighten both locking collars.

d. Disconnecting 26.-Pair Cable Connector.

(1) Grasp the locking ring or flange on the 26-pair cable connector, near the cable, and turn it counterclockwise until the lock at each end of the connector is released.

(2) Carefully lift the 26-pair cable connector from the receptacle.

CAUTION

Do not twist the connector to remove it from the receptacle. Twisting will damage the contacts.

(3) Place the dust covers on the 26-pair cable connector and the receptacle immediately.

CAUTION

Do not drop or lay the open connector on the ground. Dirt and moisture will cause corrosion, and damage the contacts.

e Replacement of Dust Cover With Locking Ring on Outer End.

(1) If the dust cover is provided with a locking ring on outer end, replace the dust cover squarely on the receptacle.

(2) Hold the dust cover in position. Grasp the locking ring on the outer end of the dust cover and turn the locking ring clockwise until .the outer end is locked.

(3) Turn the dust cover and the receptacle clockwise until the upper end is securely locked.

f. Replacement of Dust Cover With Flange on Outer End.

(1) If the dust cover Is provided with a flange on the outer end, place the hole in the flange over the lug on the outer end of the receptacle.

(2) Swing the upper end of the dust cover down, squarely onto the receptacle.

(3) Grasp the dust cover and the receptacle and turn both items clockwise until the dust cover is securely locked in position.

2-20. Connecting Field Wire

Using the J-1077 A/U and a 26-pair cable, connect the J-1077 A/U to a signal entrance box. Connect the field wire to the J-1077 A/U as given below.

a. Remove one-half inch of insulation from the end of the pair of field wire requiring connection.

b. Depress the binding post to open the slot, insert each field wire in its respective slot, and release the binding post.

2-21. Air Conditioner Installation

Install the air conditioner with the air conditioner mounting bracket as illustrated in figures 1-6 and 1-7. Always maintain the air conditioner in an upright position. Tighten the turnbuckles sufficiently so that the air conditioner tilts away from the shelter to allow for drainage of the condensate. When the air conditioner is removed from the shelter, install the air conditioner opening cover (fig. 3-2).

CHAPTER 3
OPERATING INSTRUCTIONS

3-1. Control and Indicators

a. POWER DISTRIBUTION PANEL (Fig. 1-17).

WARNING

Before operating this equipment make certain all requirements of TB SIG 291 are met. Injury or DEATH could result from improper or careless operation.

NOTE

For controls and indicators not given below, refer to the applicable technical manual (app A).

Control or indicator	*Function*
MAIN circuit breaker (CB101, 50 amp)	Provides overload protection and control of ac power to tributary circuit breakers.
Tributary Circuit Breaker	Provides overload protection and ac power distribution for the following.
LIGHTS (CB102, 15 amp)	Shelter lighting.
EQUIPMENT (CB103, 15 amp)	EQUIPMENT receptacles
CONVENIENCE (CB-104, 15 amp)	CONVENIENCE receptacles
BLOWER (CB106, 20 amp)	Exhaust blower.
HEATER (CB106, 15 amp)	Space heater.
AIR CONDITIONER (CB107, 15 amp)	Air conditioner.
Voltmeter (0 to 1I0V)	Indicates input voltage to AN/TSC-76.
Ammeter (0 to 100 amp)	Indicates current drain of AN/TSC-76.
Indicator 1 through 6	Glow when associated circuit breaker Is ON.

b Light Control and Indicators (Fig. 3-1).

Control or indicator	*Function*
POWER INDICATOR lamp	Glows when power is supplied to the AN/TSC-76 power distribution panel
BYPA8S BLACKOUT ON OFF switch	Controls ceiling light. in AN/TSC-76 as follows: ON: permits AN/TC-6 ceiling light to be controlled by individual switches.
‘	OFF: permits assemblage ceiling lights to be controlled by interlock switch
Interlock switch	Extinguishes AN/TSC-76 ceiling lights when door is open and BYPASS-BLACKOUT switch is at OFF.
INCANDESCENT COLD START ON OFF LIGHT switch	Controls incandescent ceiling lights.
FLUORESCENT ON OFF LIGHT switch	Controls fluorescent ceiling lights.

c. Patching Panel Jacks (Fig. 5-2).

Control or indicator	*Function*
IN (1 through 22)	Enables patching into applicable receive line and opening normal-through ine.
IN MON (1 through 22)	Enables monitoring applicable receive line without interrupting service.
OUT (1 through 22)	Enables patching into applicable send line and opening normal-through line.
OUT MON (1 through 22)	Enables monitoring applicable send line without interrupting service.
MISC	
HYBRIDS	Enables two-wire to four wire conversion.
SERIES	Enables series conference circuits, dc telegraph circuits or reversing signals
MULT	Enables parallel conference circuits.
SPARE	Spare patching facilities for SB-22A/PT.

d.. Space Heater Controls (Fig. 1-15).

Control or indicator	*Function*
HEAT-OFF-FAN switch	HEAT: applies power to heater element and fan motor.
‘	OFF: disconnects power from heater element and fan motor.
	FAN: applies power to fan motor only.

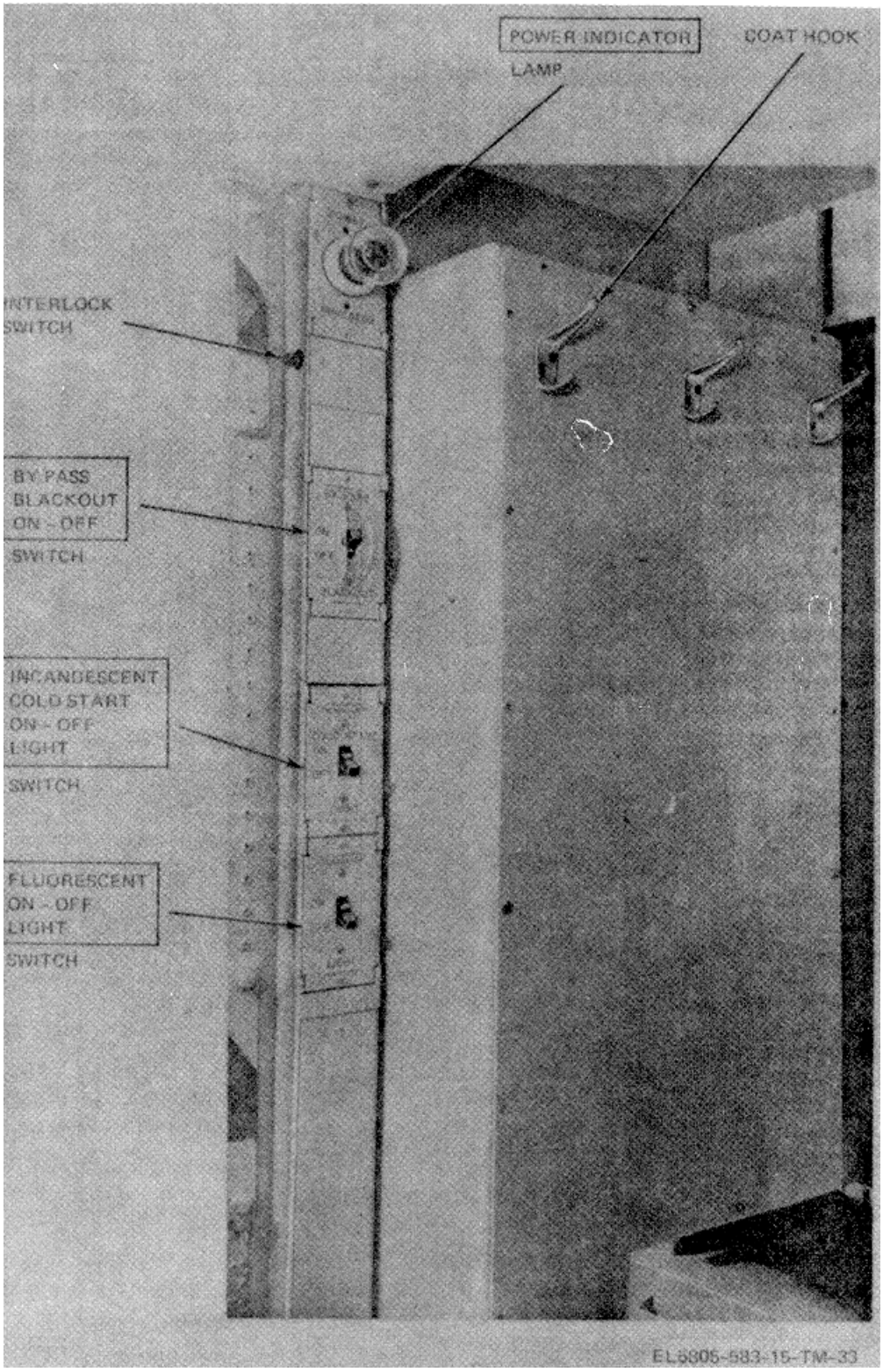

Fig. No. 3-1. Lighting Controls and *indicators..*

Control or indicator	*Function*
THERMOSTAT CONTROL	Regulates temperature provided by heating element.
Adjustable louver	Direct flow of hot air.

e. Intercommunications station LS-147C/FI (fig. 1-18).

Control or indicator	*Function*
OFF-SEND switch	Energizes LB-147C/FI in SEND position and controls transmitting volume.
RECEIVE control	Controls LS-147C/FI receiving volume.
PRESS TO TALK switch	Enables LS-147C/FI transmissions in depressed position
Pilot lamp	Indicates that power is applied to LS-147C/FI when lighted.

WARNING

Before operating the AN/TSC-76 make certain that the exhaust blower cover (fig. 3-2) is open, that the exhaust blower (fig. 1-3) is operating, and that the fresh air intake door (fig. 1-1) is open.

3-2. Energizing the 50 or 60 Hz Circuits

a. If a generator set is used to supply the 50 or 60 Hz power, start the generator; if a commercial power source is used, turn on the source.

b. Operate the MAIN circuit breaker on the POWER DISTRIBUTION PANEL (fig. 1-17) to ON.

c. Operate the LIGHTS circuit breaker to ON.

d. Operate the FLUORESCENT ON OFF LIGHT switch (fig. 3-1) to ON.

e. Operate the BYPASS BLACKOUT switch to ON. If blackout conditions are required, operate the BYPASS BLACKOUT switch to OFF.

f. Check the voltmeter (fig. 1-17). It should indicate 115 *10 volts. Check the ammeter. It should indicate less than 2 amperes.

g Open the exhaust blower cover (fig. 3-2) and the fresh air intake door on the outside of the AN/TSC-76. Operate both the BLOWER circuit breaker on the POWER DISTRIBUTION PANEL (fig. 1-17) and the BLOWER outlet switch (fig. 5-1) to ON.

3-3. Operating the Space Heater

a. Operate the HEAT-OFF-FAN switch (fig. 1-15) to the desired position.

b. If the HEAT-OFF-FAN switch is operated to HEAT, adjust the THERMOSTAT CONTROL for the desired temperature.

3-4. Patching

NOTE

If ringing cannot be accomplished when patching a circuit to the two-wire side of a hybrid, use a 5-decibel (db) patching cord.

The AN/TSC-76 contains normal-through jacks which eliminate the need for patching between many of the circuits that are connected to the SIGNAL ENTRANCE boxes. Patching facilities are also provided to permit optional patching arrangements for rerouting, testing, and monitoring these circuits. Any IN or OUT line may be patched to any other IN or OUT line.

3-5. Operating Under Adverse Climatic Conditions

The AN/TSC-76 operates under conditions of extremely cold or hot climates. The AN/TSC-76 offers complete protection from the elements for personnel and equipment; however, the following precautions should be observed.

a. Cold Climates.

(1) Extreme cold causes cables and field wires to become hard and brittle, and difficult to handle. Be careful when handling the cables and connecting them to the AN/TSC-76 so that kinks and unnecessary loops will not result in permanent damage.

(2) Make sure that the binding posts and receptacles on the outside of the AN/TSC-76 are kept free of frost, snow, and ice, by replacing the covers over the receptacles and closing the covers over the entrance boxes when they are not in use. Lower the folding side panels whenever the entrance box covers are open. Replace the connector cover on a 26-pair cable as soon as the cable is disconnected in snow.

NOTE

If an appropriate air conditioner is available, it may be installed in the AN/TSC-76 for use in hot, warm or damp climates (b and c below) by removing the air conditioner opening cover (fig. 3-3) and using the air conditioner mounting bracket (fig. 5-1). Power to the air conditioner is supplied through the air conditioner power connection cable

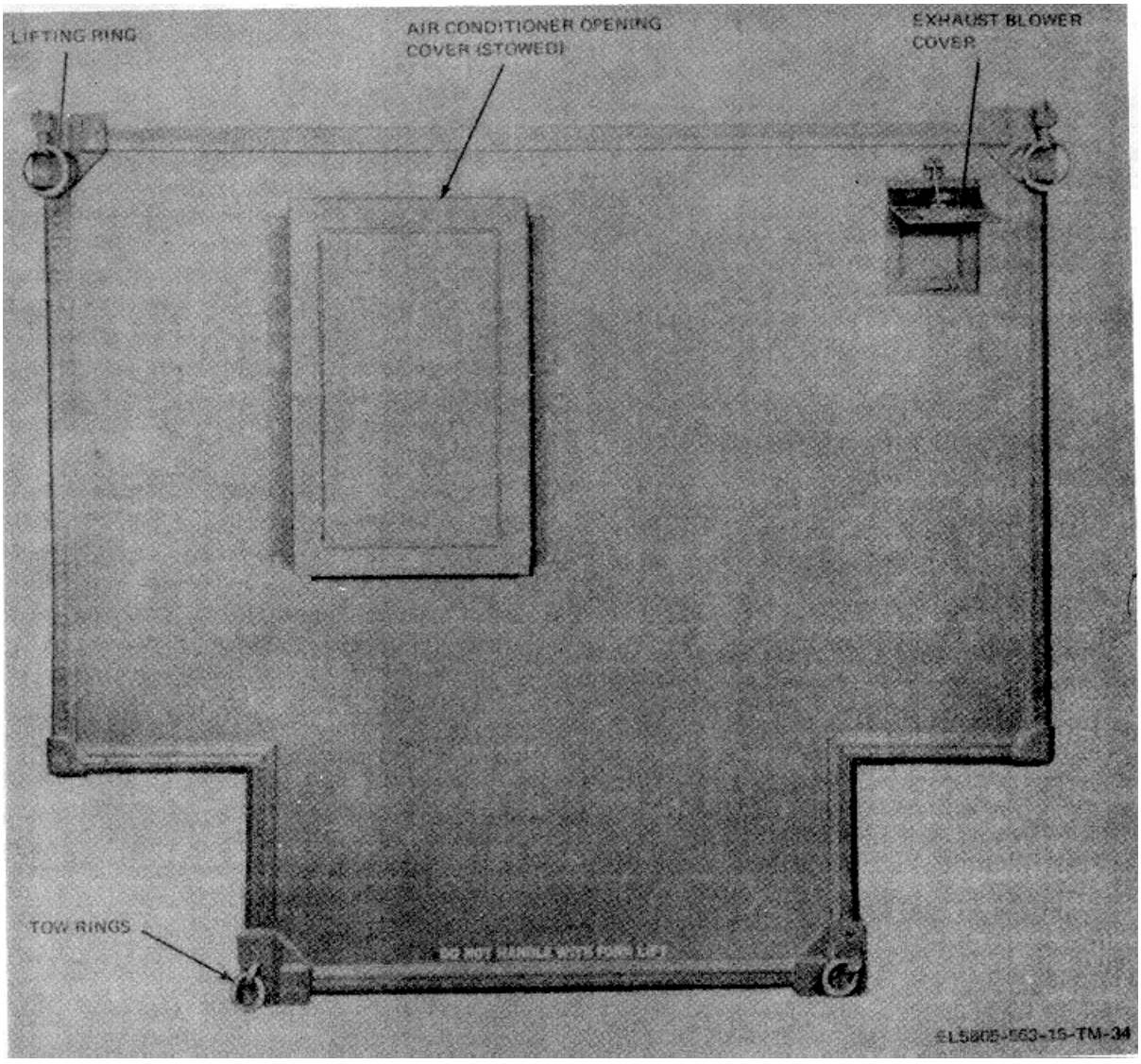

Fig. No. 3-2. AN/TSC-76, front wall, exterior view.

(fig. 3-3). The air conditioner may also be used as a supplemental heater in cold climates.

b. Hot Climates.

(1) In hot, dry climates, the connectors, receptacles and binding posts are subject to damage from dirt and dust. Close the covers on the entrance boxes when they are not in use; replace the covers over the connectors and receptacles.

(2) Lower the folding side panels whenever the entrance box covers are open.

(3) Never drag or place an open 26-pair connector on the ground.

c. Warm, Damp Climates.

(1) In warm, damp climates, the equipment is subject to damage from moisture and fungi. Wipe all moisture and fungi from the exterior of the equipment with a clean cloth.

(2) The receptacle and connector contacts are susceptible to corrosion that will cause a high resistance contact area. Wipe all receptacle and connector contacts with a clean, dry cloth before connecting them together.

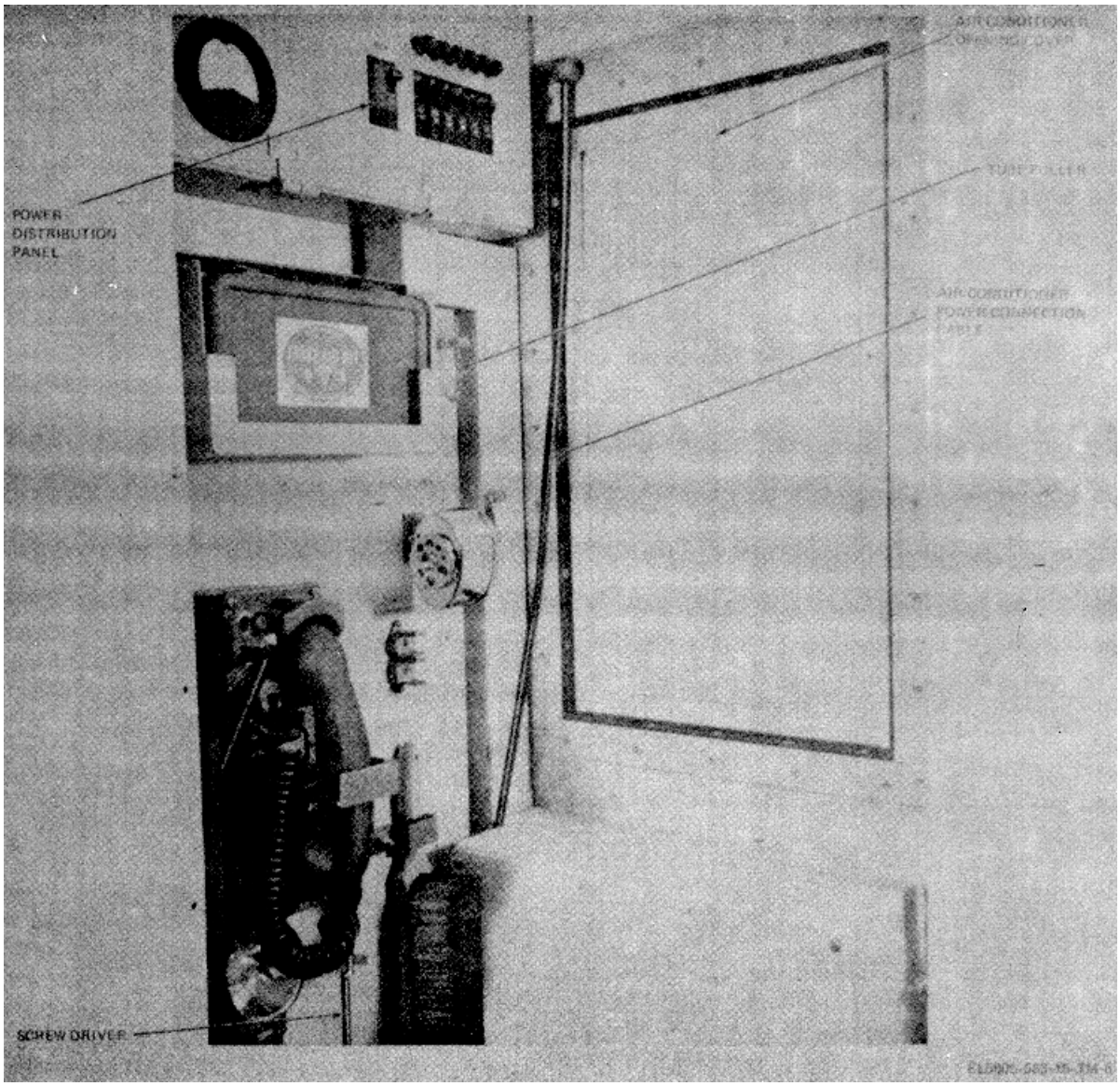

Fig. No. 3-3. AN/TSC-76, part of curbside wall, interior view

3-6. Stopping Procedure

NOTE

To turn the power off in an emergency, operate the MAIN circuit breaker on the POWER DISTRIBUTION PANEL (fig. 1-17) to OFF.

a. Major Components. Refer to the applicable technical manual (app A) for stopping procedures for the major components.

b. Space Heater (fig. 1-15). Operate the TEMPERATURE CONTROL to its lowest setting and the HEAT-OFF-FAN switch to OFF.

c. Circuit Breakers and Light Switches. Operate all light switches and circuit breakers to OFF.

CHAPTER 4

MAINTENANCE

Section I. OPERATOR/CREW AND ORGANIZATIONAL MAINTENANCE

4-1. GENERAL.

a. Maintenance Forms and Records. The forms and records you fill out have several uses, including: (1) a permanent record of the services, repairs, and modifications made on your equipment; (2) reports to the next level of maintenance and to your commander; and (3) a checklist for you when you want to know the status of the equipment after its last use, and whether faults, if any, have been fixed. For information on forms and records, see DA PAM 738-750 (if USMC, see TM-4700-15/ld).

b. Routine Checks. Routine checks, such as cleaning, dusting, washing, stowing items not in use, covering unused receptacles, and checking for damage, are not listed as PMCS checks. They are things you should do any time you see they must be done. Ensure that all discrepancies are noted and corrected.

c. Operator /Crew PMCS. Operator's PMCS are the required periodic inspections and actions necessary to keep your equipment in good operating condition.

d. Organizational PMCS. Organizational preventive maintenance procedures are designed to help maintain equipment in serviceable condition. They include what items should be checked and how to check them. These checks and services are described in paragraph 4-3, outline inspections that are to be made at specific (W) weekly, (M) monthly, (Q) quarterly, and (A) annual intervals.

e. System Readiness Criteria. System Readiness Criteria are those standard, specific requirements your system must meet for it to be mission-capable.

4-2. Operator/Crew PMCS table. (page 4-4) The PMCS table lists all the scheduled maintenance tasks required for your system.

a. Explanation of Columns.

(1) Item No. This column contains a number for each procedure to be performed. When reporting malfunctions or failures on DA Form 2404, Equipment Inspection and Maintenance Worksheet, place this number in the "TM Item No." column.

(2) Interval. These columns tell you when to do a procedure. Each column that applies will contain an asterisk (*). Some procedures will have asterisks in more than one column.

4-2. Operator/Crew PMCS table (cont).

(3) Item to be inspected/procedure. This column contains the name of the item to be inspected and tells how to perform the required checks and services on it. Carefully follow these instructions and perform them in the order listed.

(4) Equipment is not ready/available if: This column tells you the conditions which will cause the equipment to be classified as not ready (red) for readiness reporting.

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.

b. Instructions.

(1) Do your before (B) preventive maintenance just before you operate your equipment. Pay attention to CAUTION
S and WARNING

(2) Do your during (D) preventive maintenance while the equipment and/or its component systems are in operation.

(3) Do your after (A) preventive maintenance right after operating the, equipment. Pay attention to the CAUTION
S and WARNING

(4) Do your weekly (W) preventive maintenance once a week.

(5) Do your monthly (M) preventive maintenance once a month. month.

(6) If something doesn't work, troubleshoot it with the instructions in this manual and notify your supervisor.

(7) Always do your preventive maintenance in the same order.

(8) If anything goes wrong and you can't fix it, write it on your DA Form 2404, or applicable form. If you find something seriously wrong, report it to the next level of maintenance IMMEDIATELY.

WARNING

Never operate the generator or shelter until is has been properly grounded. Electrical defects in the load lines or equipment can cause DEATH by electrocution when contact is made with an ungrounded system.

WARNING

USE OF CLEANING SOLVENT

Adequate ventilation should be provided while using TRICHLOROTRIFLUOROETHANE. Avoid prolonged breathing of vapor. The solvent should not be used near heat or flame; the products of decomposition are toxic and irritating. Since TRICHLOROTRIFLUOROETHANE dissolves natural oils, avoid prolonged contact with skin. The use of chemical gloves (solvent resistant), chemical splash goggles and full face-shield are required when using TRICHLOROTRIFLUOROETHANE. **DO NOT** use compressed air to dry parts when TRICHLOROTRIFLUOROETHANE has been used. TRICHLOROTRIFLUOROETHANE is an ozone-depleting substance.

WARNING

Compressed air is dangerous and can cause serious bodily harm if protective means or methods are not observed to prevent a chip or particle (of whatever size) from being blown into the eyes or unbroken skin of the operator or other personnel. Compressed air shall not be used for cleaning purposes except where reduced to less than 30 pounds per square inch gauge (30 psig) and then only with effective chip guarding and personnel protective equipment (industrial safety glasses and full faceshield). DO NOT use compressed air to dry parts when TRICHLOROTRIFLUOROETHANE has been used.

Operator/Crew Preventive Maintenance Checks and Services

Item No	INTERVAL B	D	A	W	M	Item to be inspected PROCEDURE:	Equipment is Not Ready/Available If:
1						Truck, Utility 1 1/2 Ton	
						Follow PMCS procedures in TM 9-2320-289-10-2 and TM 9-2320-289-12.	Truck is inoperative and no substitute is available.
2						Generator Set, Trailer Mounted PU-617/M (2 generators in set)	
						Follow PMCS procedures in TM 5-6115-365-15.	Both generators are inoperative and no substitutes are available.
3						Grounding Rod MX-148/G	
	*			*		Check grounding system to see that it is properly installed. Tighten loose ground connections.	Unable to ground properly.
4						Shelter Blowers	
	*		*			Check for proper air flow.	Blowers do not operate.
5						Shelter door filters.	
		*				Clean or replace as necessary.	
6						Heater, Electric	
	*		*			Check for proper heat output.	
	7					Air Conditioner CE6A-60A	
						Follow PMCS procedures in TM 5-4120-309-15.	Air conditioner is inoperative and no substitute is available.

Operator/Crew Preventive Maintenance Checks and Services (cont'd)

Item No	INTERVAL B	D	A	W	M	Item to be inspected PROCEDURE:	Equipment is Not Ready/Available If:
8					*	Telephone Set TA-312/PT Batteries-Inspect for foreign matter and corrosion -Clean as necessary.	
9						Switchboard, Telephone Manual SB-22A/PT	
	*			*		Check battery for electrolyte leakage and corroded clips and springs.	

4-3. System Readiness Criteria table (table 4-2). The System Readiness Criteria table is your "checklist" for determining the mission readiness of your system.

a. Explanation of Columns.

(1) Item No. This column contains a number for each readiness-reportable item. When reporting, on DA Form 2404, Equipment Inspection and Maintenance Worksheet, malfunctions or failures that cannot be repaired "on-the-spot, " place this number in the "TM Item No." column.

(2) Subsystems and Components. This column lists all system equipments which are required for readiness reporting.

(3) Equip Model ID #. This column contains the equipment model identification number (type-classification) of each equipment.

(4) Qty. This column tells you the quantity of equipment/items furnished as part of, or with, your system.

(5) Remarks. This column contains other information/special instructions and will alert you to any exceptions to the requirements, designed to give you maximum mission flexibility.

b. Instructions. Perform the following steps to determine system readiness:

(1) BEFORE starting your mission, ensure that listed equipments/items are on hand and operational. If necessary, perform operational checks in applicable TM's to determine the condition of your equipment.

(2) Take note of REMARKS column. This column contains exceptions and special instructions to help you tailor your requirements to your mission.

(3) If any required equipment/item is not on hand and operational, your entire system is deadlined (unless otherwise noted in the REMARKS column).

(4)Correct any discrepancies, then re-check all equipments/items on list. When all required equipment/items are on hand and operational, your system is mission-ready.

(5) AFTER completing your mission, and before moving to a new location, ensure that all listed equipments/items are on hand.

SYSTEM READINESS CRITERIA

System ratings: Fully Mission Capable (FMC) Not Mission Capable (NMC)

Item Sub No.	AN/TSC-76 systems and Components	Equip Model ID #	QTY	REMARKS
1R	Shelter, Electrical Equipment	S-403/ TSC-76	1	System may be rated FMC with component(s) rated NMC if that/those component(s) not required to support mission.
2R	Panel, Patching,		3	System may be rated FMC if Communications two Panel, Patching, Communications are rated NMC
3R	Switchboard, Tele-phone manual	SB-22A/1 PT		System may be rated FMC if SB-22A/PT is rated NMC and TA-312/PT is rated FMC.
4R	Telephone Set	TA-312/1	1	System may be rated FMC if PTTA-312/PT is rated NMC and SB-22A/PT is rated FMC.
5R	Terminal, Telegraph	TH-22/TG	1	System may be rated FMC if TH-22/TG is rated NMC.
6R	Teletypewriter Set	TT-98D/ FG	1	System may be rated FMC if TT-98D/FG is rated NMC.
7R	Distribution Box	J-1077A/ U	3	System may be rated FMC if two J-1077A/U are rated NMC
8R	Generator, Ringing Static	TA-248/ TT	1	System may be rated FMC if TA-248/TT is rated NMC.
9R	Intercommunications Station	LS-147C/ FI	1	System may be rated FMC if LS-147C/FI is rated NMC.
10R	Heater, Space		2	
11R	Generator Set, Trailer Mounted (2 generators in set)	PU-617/M	1	System may be rated FMC if one generator is rated NMC.
12R	Cable Assembly, Power Electric (100 foot)	CX-7453A /U	1	

SYSTEM READINESS CRITERIA (cont'd)

System ratings: Fully Mission Capable (FMC) Not Mission Capable (NMC)

Item Sub No.	AN/TSC-76 systems and Components	Equip Model ID #	QTY	REMARKS
13R	Cable Assembly, Power Electric (15 foot)	CX-7505A /U	1	
14R	Cable Reel	RC-435	1	
15R	Air Conditioner	CE-6A-60 A	1	System may be rated FMC if a substitute is available
16R	Grounding Rod	MX-148/G	1	System may be rated FMC if a substitute is available
17R	Truck, Utility 1 ½ Ton	M-1028	1	System may be rated FMC if a substitute is available

4-3. Organizational Preventive Maintenance Checks and Services

M - Monthly Q - Quarterly

Item No.	Interval M	Interval QW	Item to be Inspected	Procedures
1		•	Components Inventory	a Inventory equipment; requisition missing and defective parts.
		•		b. Check to see that all components are mounted or stowed in assigned places, except those that are being used (such as power cables, intercom, etc.).
		•		c. Requisition all operator and organizational maintenance manuals and all parts manuals covering the AN/TSC-76 and its components that are not on hand or in usable condition(including all current change publications).
2		•	Modification work orders	Check to see whether any MWO's are required for AN/TSC-76 or its components. Check equipment to see if applicable MWO's have been applied and MWO number is stamped as required. Perform modification or request for modification as applicable.
			EXTERIOR	
3	•		Shelter skin and hardware.	a Paint blistered, pitted, and flaking areas and bare metal spots (such as steps, signal entrance box covers, skids, towing eyes, etc.), as follows: (1) Remove rust and corrosion from metal surfaces by y lightly sanding them with fine sandpaper (2) Brush on white lusterless enamel produced in accordance with Federal Specification TT-E-516 TT-E-516. (3) When undercoat is dry, apply green topcoat using green luster-less enamel produced in accordance with MIL-SPEC MILE-46061
		•		b. Check for skin punctures, cracks, or open seams that would permit moisture to enter the shelter.
4	•		Grounding system	a Clean ground lug connections. Ensure all connections are tight
		•		b Replace ground rod if ground lead cannot be tightened securely. Replace ground lead if it is cut, corroded or broken
5	•		Sling assembly.	Paint bare metal spots

Item No.	Interval M	Interval Q	Item to be Inspected	Procedures
6		•	Shelter door.	*a* Paint bare metal spots.
	•			*b.* Lubricate door locks and latches with Grease, Graphite: Aircraft (GGA); lubricate hinges with Lubricating Oil, General Purpose: Preservative (PL-SPECIAL) or Lubricating Oil, Internal Combustion Engine (OE-10).
	•			c. Put gasket adhesive on loose gaskets
		•		*d* Replace defective or missing rubber gaskets or those that do not provide a watertight seal
7	•		Power and signal	a Remove corrosion from metal of wires entrance boxes connected to binding posts
	•			*b.* Check binding posts to see that they have enough tension to hold wires
	•			*c.* Lubricate piano-type hinges of covers; use oil (PL-SPECIAL or OE-10).
	•			*d* Paint bare metal spots.
8	•		Power and signal cable	*a* Repair insulation, cuts, and abrasions assemblies with electrical insulation tape.
	•			*b.* Inspect cable layout and relocate cables as necessary so that they are not endangered by, and are not dangerous to, vehicles and personnel
	•			*c.* Replace cable assemblies in which wiring, insulation, or connectors are defective.
			INTERIOR GENERAL	
9	•		Signal and power cables, wires, and patching cords.	*a* Tighten screws and clamps that hold wires to terminals.
	•			*b.* Cover unconnected bare wires with electrical insulation tape to prevent damage to equipment and personnel
	•			*c.* Repair insulation, cuts, and abrasions with electrical insulation tape.
	•			*d.* Polish metal plugs (such as those on patching cords, telephone cords, etc) with Metal Paste Polish (NSN 7930-00-269-5270).
		•		*e.* Dress all cables, wires, and cords, neatly using cable and cord clamps provided in ANfTSC-76; or use electrical insulation tape and twine.
10	•		Lighting system	*a.* Tighten loose screws and nuts that hold lighting fixtures, lights, and parts of POWER DISTRIBUTION PANEL

Item No.	Internal M	Internal Q	Item to be Inspected	Procedures
	•			*h* Repair or replace defective pats in lighting system and on POWER DISTRIBUTION PANEL
11	•		Walls, ceiling, and floor.	*a.* Check for skin punctures and cracked seams
				b. Paint blistered, pitted, or flaking areas and bare metal parts
				CAUTION
12			Equipment mounting	a When tightening **4** in-20 bolt use a torque wrench with a maximum of 60 i./lbs When tightening 5/16 in-18 bolts, use a torque wrench with a maximum of 100 in/lbs Over tightening bolts will damage shelter akin.
	•			*a* Tighten loose bolts, nuts, and screws that bold equipment, racks, frames, shelves, braces, clamps and mounting hardware. Replace missing bolts nuts, and screws
		•		*b.* Check to see that equipment mountings such as rack frames, shelves, braces, and clamps are not bent, broken, or so out of shape as to endanger equipment or personnel
13	•		Binding post	Check to see that they have enough tension to hold wires
14	•		Jacks and patching	a Check for dirt and corrosion on all panels exposed elements and contacts Examine for dirt, pits, and buildups Dry, compressed air, not to exceed 60 pounds per square inch, may be used to remove dust and dirt from around wiring and jacks at the rear of each patch bay.
	•			b. Inspect wiring for broken, shorted, or open connections.
	•			c. Inspect mechanical action of jacks by inserting a plug.
15	•		Incandescent equipment	Inspect for secure mounting in the lamps socket
16	•		Equipment components; transformers, chokes, resistors, capacitors, ter-	aCheck for broken, shorted, or open connection
	•		minal mounting boards, lugs, fuses, fuseholders, and switches	*b.* Inspect for signs of damage (leaks, bulges, or charred insulation or coverings).
	•			c. Inspect for completeness and proper tightness
	•			d. Check for loose connections or cracked or broken insulation
	•			*e.* Inspect fuses for proper size and type. Check fuseholder for cracked or loose cap or holder.

Item No.	Internal M	Internal Q	Item to be Inspected	Procedures
	•			*f.* Check switch mechanical action and spring tension for insufficient contact pressure.
17		•	Reel unit.	*a* Check to see that reel rotates freely. Replace if bent or broken.
		•		*b.* Paint blistered, pitted, or flaking areas and bare metal spots
18		•	Boarding ladder.	a. Paint blistered, pitted, or flaking areas and bare metal spots
		•		*b.* Replace if steps, frame or parts are bent, broken, or if boarding ladder is unsafe for use.
			ENTRANCE WALL	
19		•	Air Conditioner.	
		•	Air filter gages.	*a.* Inspect the liquid and moisture indicator. Indicator turns yellow if moisture is in refrigerant Inspect compressor oil level Correct level is marked on center of sight level gage. Check refrigerant after continuous operation of unit from I½ to 1l hours If refrigerant passing through liquid and moisture indicator is clear and cooling is produced, the system is properly charged. If cloudiness or bubbles appear, additional refrigerant is needed
		•	Control panel and wiring.	*b.* Inspect selector switch and temperature control for proper operation and mounting Inspect all wiring for cracks, frayed conditions, and corroded connections
		•	Motors, fans, and housing.	*c.* Check for unusual noise in evaporator and condenser assemblies. Inspect for proper operation, alignment and condition of wiring.
		•	Switches and wiring harness	*d* Inspect all switches for breakage, burns, and improper operation Inspect wiring for breakage, worn or frayed insulation and secure mounting.
		•	Refrigerant receiver.	*e.* Inspect for loose or missing mounting hardware, leaks or other damage.
		•	Condenser and evaporator coil	*f* See if coil fins are clean. Clean with a soft brush Check tubing connections for leaks and damage.
		•	Strainer-drier.	*g.* Inspect for leaks and secure mounting. Check for clogging by feeling liquid leaving and entering lines Should leaving line be cooler than entering line, strainer-drier is clogged.

Item No.	Internal M	Internal Q	Item to be Inspected	Procedures
		•	Motor starting and protective devices	h. Inspect relays for loose mounting and connections
			CURBSIDE WALL	
20	•		Distribution boxes J-1077A/U.	a. Perform procedures outlined in Item No. 7a through d
		•		*b.* Remove corrosion from binding posts.
21	•		Switchboard SB-22A/PT. Batteries and battery	a. Perform procedures outlined in Item No.'s 13 and 14.
	•		compartment	*b.* Replace batteries that show signs of swelling, leaking, or corrosion. Inspect battery clips and contact springs for corrosion or loose or corroded connections.
				CAUTION
			Lamp.	When replacing the lamp do not use any tools to remove the LITE-OUT -NA-IN knob from the switchboard.
	•			c. Perform procedures outlined in Item No. 15.
				CAUTION
		packs.	Operator's pack and line	When replacing the operator's pack or line packs, do not force the units into the switchboard case.
	•			*d.* If defective, remove and install new operator's pack or line pack
	•		Operator's telephone set.	*e.* Repair defective operator's telephone set by replacing earphone or micro- phone element
22		•	Fire extinguisher.	A. Check weight of contents. If less than prescribed, have extinguisher refilled.
		•		*b.* Check seal If seal is broken, have extinguisher weighed, refilled if required, and resealed.
		•		*c.* Replace if valve assembly is damaged.
23		•	Telephone set TA-312/PT.	a. Check gaskets and moisture blocking diaphragms on receiver and transmitter for cuts, tears, or breaks.
		•		*b.* Check to see that mounting hardware is complete and in serviceable condition.
		•		c. Check to see that binding posts have wires for fraying, breaks, or cracked insulation
			FRONT WALL	

Item No.	Internal M	Internal Q	Item to be Inspected	Procedures
24	•		Exhaust blower.	Lubricate at oil points with oil
25	•		Patching panels.	Perform procedures outlined in Item No. 14.
26	•		Ringing generator TA-248ITT.	*a.* Check surfaces for rust or corrosion Remove rust and corrosion, and repaint metal surfaces as required.
			Wiring and components	**CAUTION** Do not disturb the position of the contact-adjusting screw.
	•			*b.* Perform procedures outlined in Items No. 9, 15, and 16.
27	•		ROADSIDE WALL Intercommunication station-LS-147C/FL	*a.* Inspect seating of readily accessible pluckout items: tubes, lamps, fuses and connectors.
	•			*b.* Perform procedures outlined in Items No. 9, 15, and 16.
	•			c. Check the PRESS TO TALK switch for burned, dirty, or open contact
	•		Connections.	*d.* Inure that ground connection is connected. Check line binding posts to inure that two line wires are connected. Insure power plug is connected to a 115-volt 60-Hz outlet
	•		OFF-SEND control	*e.* Operate control until a clock is heard, then position control at approximately midposition Pilot lamp should light
	•		PRESS TO TALKI switch.	Depress switch, release; inure switch returns to nondepressed position Check to insure transmission is sent and received.
	•		RECEIVE control.	*g.* Check control to insure that the volume can be varied
	•		OFF-SEND control	*k.* Operate control to OFF position. Pilot lamp goes out
28	•		Terminal Telegraph TH-22/TG.	
	•		Gaskets	a Inspect waterproof gaskets for leaks and worn or loose edge Gaskets must be clean, flexible, and in good condition
	•		Wiring and components	*b.* Perform procedures outlined in Items No. 9, 13, 15, and 16.
29	•		8-Day clock	Replace if correct time cannot be maintained

4-4. DELETED.

4-5. TROUBLESHOOTING.

a. General. Troubleshooting of the AN/TSC-76 consists of performing the procedures outlined in the troubleshooting chart. If the suggested corrective measure does not restore the equipment to normal operation, higher category of maintenance is required. Refer to figures 5-3 and 5-4 to aid in troubleshooting.

b. Troubleshooting Chart.

Item No.	Symptom	Probable trouble	Corrective measures
1	a. No indication on voltmeter.	(1) No input power.	(1) Check power source (para 2-17).
		(2) Defective power cable.	(2) Check power cable and repair if necessary (para 4-12).
		(3) Defective receptacle.	(3) Check receptacle and replace if necessary (para 4-13).
		(4) Defective voltmeter.	(4) Check voltmeter and replace if necessary (para 4-8).
		(5) Defective MAIN circuit breaker.	(5) Check Main circuit breaker and replace if necessary (para 4-8).
	b. Voltmeter indicates abnormally high or low voltage.	Defective power source.	Check power source (para 2-17).
2	LIGHTS indicator lamp does not light	a. Defective lamp.	a. Check lamp and replace if necessary (fig. 4-4).
		b. Defective circuit breaker.	b. Check circuit breaker and replace if necessary (para 4-8).
3	Fluorescent ceiling lights do not light.	a. Defective lamps.	a. Check and replace as required (para 4-10).
		b. Defective fluorescent starter.	*b.* Check and replace as required (fig. 4-4).
		c. Defective switch.	*c.* Check and replace as required (para 4-9).
4	a. Ceiling lights do not extinguish when door is opened with BYPASS BLACKOUT switch at OFF.	(1) Defective switch.	(1) Check switch and replace if necessary (para 4-9).
		(2) Defective interlock switch.	(2) Check interlock switch and replace if necessary (para 4-9).
	b. Ceiling lights do not light with door open and BY-PASS BLACKOUT switch at ON.	Defective switch.	Check switch and replace if necessary (para 4-9).
5	CONVENIENCE indicator lamp does not light.	a. Defective lamp.	a. Check lamp and replace if necessary (fig. 4-3).
		b. Defective circuit breaker.	b Check circuit breaker and replace if necessary (para 4-8).
6	a. Blower operates, but indicator lamp does not light.	Defective lamp.	Check lamp and replace if necessary (fig. 4-3).
	b. Indicator lamp does not light and blower does not operate.	Defective circuit breaker or BLOWER outlet switch.	Check circuit breaker and BLOWER outlet switch and replace either or both if necessary (para 4-8 and 4-9).
	c. Indicator lamp lights, but blower does not operate.	Defective blower.	Check and make necessary repairs (para 4-7).
	EQUIPMENT indicator lamp does not light.	a. Defective lamp.	a. Check lamp and replace if necessary (fig. 4-3).
		b. Defective circuit breaker.	*b.* Check circuit breaker and replace if necessary (para 4-8) .
	HEATER indicator lamp does not light.	a. Defective lamp.	a. Check lamp and replace if necessary (fig. 4-3).
		b. Defective circuit breaker.	*b.* Check circuit breaker and replace if necessary (para 4-8).

Item No.	Symptom	Probable trouble	Corrective measures
9	a. No air is expelled from(1) heater.	(1) Defective outlet	(1) Check outlet and replace if necessary (fig. 1-3).
	(2)	Defective power cord.	(2) Check power cord and replace if necessary (fig. 4-1).
	(3) HEAT-OFF-FAN switch	(3) Check switch and replace if defective.	necessary (fig. 4-1).
	b Air is not heated.	(1) THERMOSTAT CONTROL defective.	(1) Check switch and replace if necessary (fig. 4-1).
	(2) Heating element defective.	(2) Check heating element and	replace if necessary (fig. 4-1).
10	AIR CONDITIONER in-a. Defective lamp. dicator lamp does not light when air conditioner is installed.		a. Check lamp and replace if necessary (fig. 4-3).
		b. Defective circuit breaker.	*b.* Check circuit breaker and replace if necessary (para 4-8).
11	Lamp associated with TA-248UTT switch does not light.	a. Defective lamp.	a. Check lamp and replace if necessary.
		b. Defective switch.	b.Check switch and replace if necessary (para 4-9)**.**
12	a. Communication equipment does not operate.	a. Defective communication equipment.	a. Replace defective equipment.
	b. Patching panel circuit inoperative.	b. Defective part in patching panel.	b. Check and replace defictive part.

WARNING

Remove all electrical power from the AN/TSC-76 before making repairs to any electrical equipment
.

4-6. Space Heater Repair

a. Remove the space heater from its mounting base (fig. 4-1) and remove the cover plates to provide access to the interior.

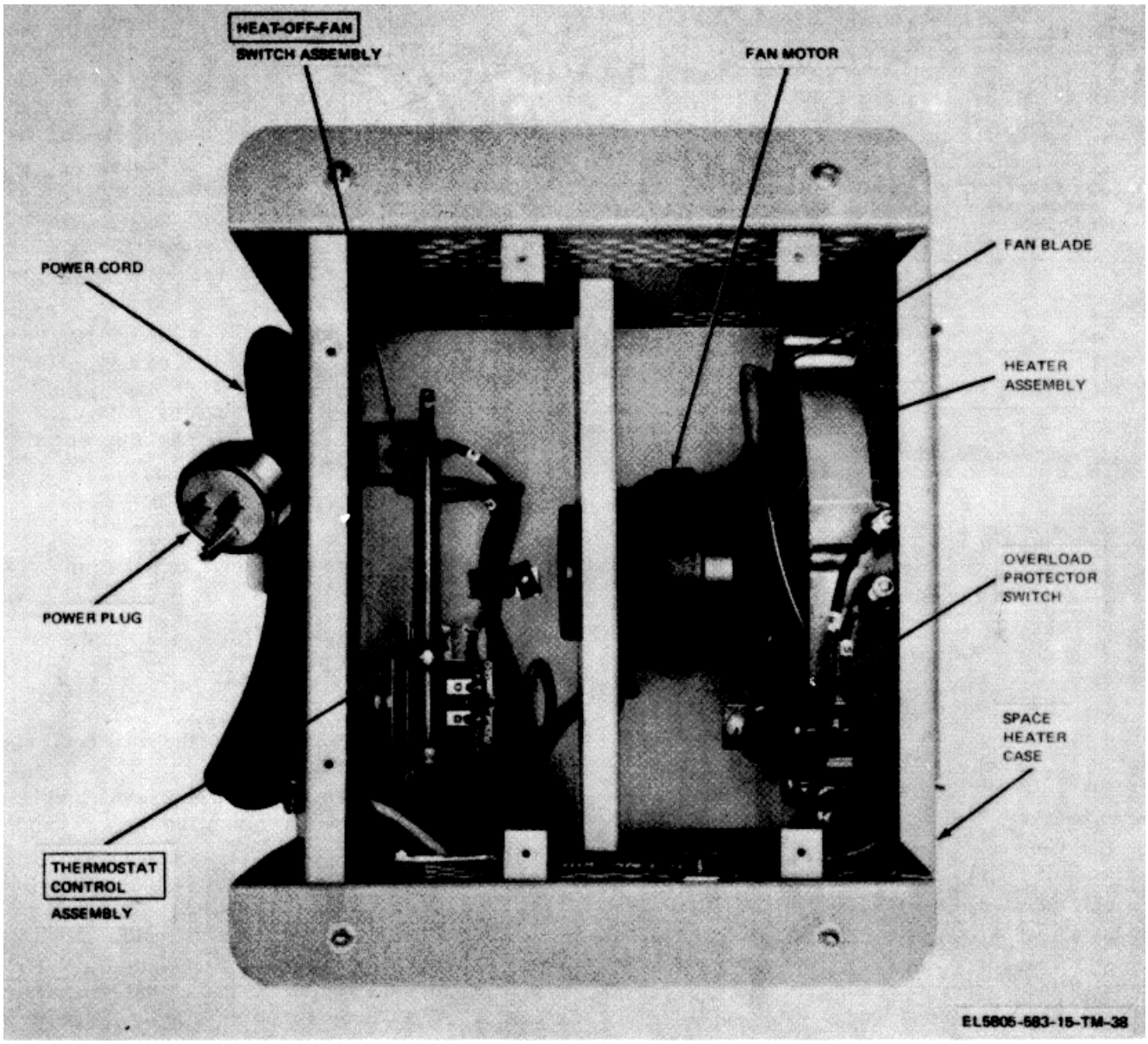

Fig. No. 4-1. Space heater, parts location diagram.

b. Refer to figure 4-2 for circuit details.
c. Replace defective parts as required.

4-7. Exhaust Blower Repair
(fig. 1-16)

a. Operate the BLOWER circuit breaker and the BLOWER outlet switch to OFF.
b. Replace defective parts as required.

4-8. Power Distribution Panel Repair
(fig. 4-3)

WARNING

Before performing any repairs on the POWER DISTRIBUTION PANEL, disconnect the ac power cable from the POWER 115 VAC IN receptacle of the SIGNAL & POWER ENTRANCE box (fig. 1-11).

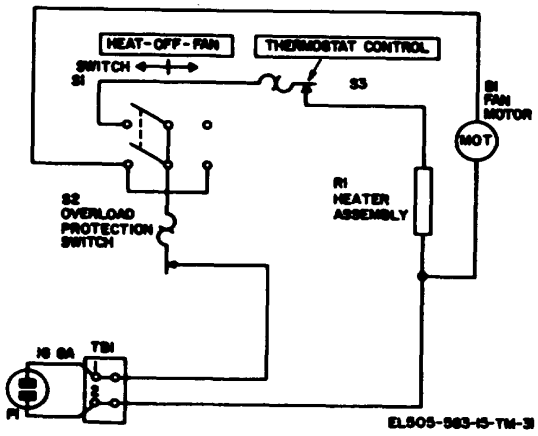

Fig. No. 4-2. Space heater, schematic wiring diagram.

a. Preliminary Procedures. Remove the screws that secure the cover to the power distribution panel, and open the cover before performing the procedures given in *b, c,* and d below.

b. Removal and Replacement of Circuit Breakers.

(1) Grasp the defective circuit breaker and pull it straight out and down from the retaining clips on the panel.

(2) Disconnect the wires connected to the circuit breaker.

(3) Connect the wires to the appropriate terminals of the replacement circuit breaker.

(4) Position the circuit breaker in the panel and firmly press it into the retaining clips.

c. Removal and Replacement of Current Transformer.

(1) Remove the screws that secure the power distribution panel cover and open cover.

(2)Tag and disconnect the black and white leads from the transformer terminals.

(3) Remove the retaining nuts and washers and remove the current transformer.

(4) Disconnect the black wire wound around the current transformer from the MAIN circuit breaker and carefully unwind the wire.

CAUTION

Be sure that the number of turns of black wire around the replacement current transformer is the same as that on the original transformer.

(5) Wind the black wire around the replacement current transformer

.

(6) Reconnect the black wire to the MAIN circuit breaker.

(7) Position the current transformer inside the panel and secure it with the retaining nuts and washers.

(8) Connect the black and white ammeter leads to the appropriate terminals of the transformer.

(9) Replace the power distribution panel and tighten the screws.

d. Removal and Replacement of Meters.

(1)Tag and disconnect the leads from the meter terminals.

(2) Remove the retaining bolts and lift out the meter.

(3) Position the replacement meter in the panel and secure it with the retaining bolts.

(4) Connect the leads to the appropriate terminals of the new meter.

CAUTION

After performing *b, c,* or *d* above, secure the cover to the power distribution panel.

4-9. Replacement of Switches

a. Operate the appropriate circuit breaker (fig. 1-17) to OFF.

b. Loosen the screws from the brackets at each end of the switch.

c. Remove the brackets and the switchplate.

d. Remove the switch mounting screws and the switch.

e. Remove the wires from the switch and connect them to the replacement switch.

f. Position the new switch and secure it with the switch mounting screws.

g. Replace and secure the switchplate and the brackets.

4-10. Fluorescent Light Fixture Repair

(figs. 4-4 and 4-5)

a. Remove the guard and the lamp (fig. 4-4).

b. Remove the clips and lift off the duct cover.

c. Refer to figure 4-5 for circuit details.

d. Replace parts as required (TM 11- 5805-583-24P).

4-11. Replacement of Power Cable Connectors

(fig. 5-5)

a. Removal.

(1) Unscrew the packing nut and slide the packing nut and packing glands away from the housing.

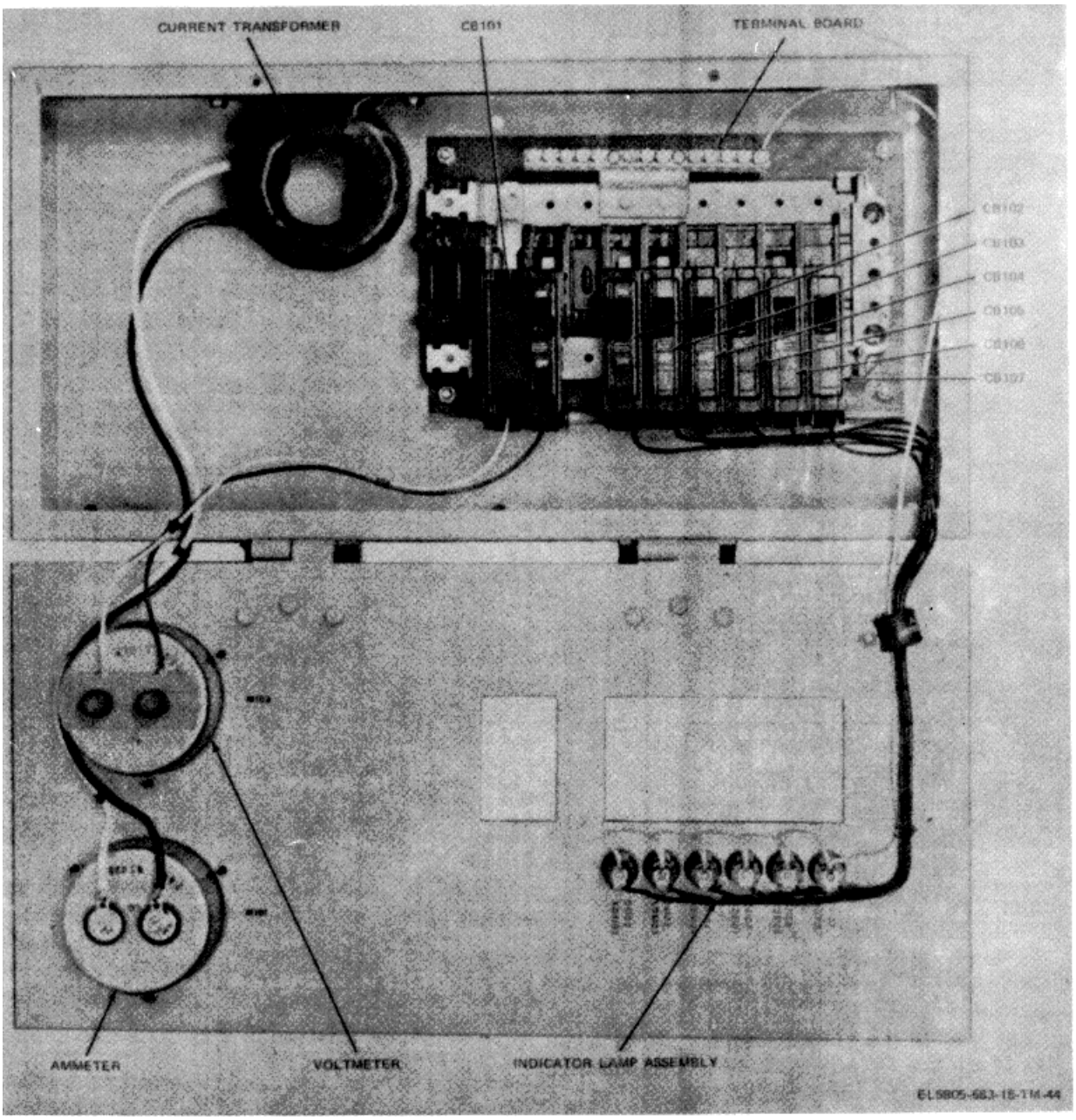

Fig. No. 4-3. Power distribution panel parts location diagram

(2) Unscrew the cap and remove the retaining ring.

WARNING

Be careful when removing the retaining ring to prevent it from flying and causing serious injury

.

(3) Remove the inserts, body, gasket, and shell.

(4) Slide the cable out of the housing and unsolder the contacts.

b. Replacement.

(1) Solder the contacts on the leads as required and slide the cable into the housing.

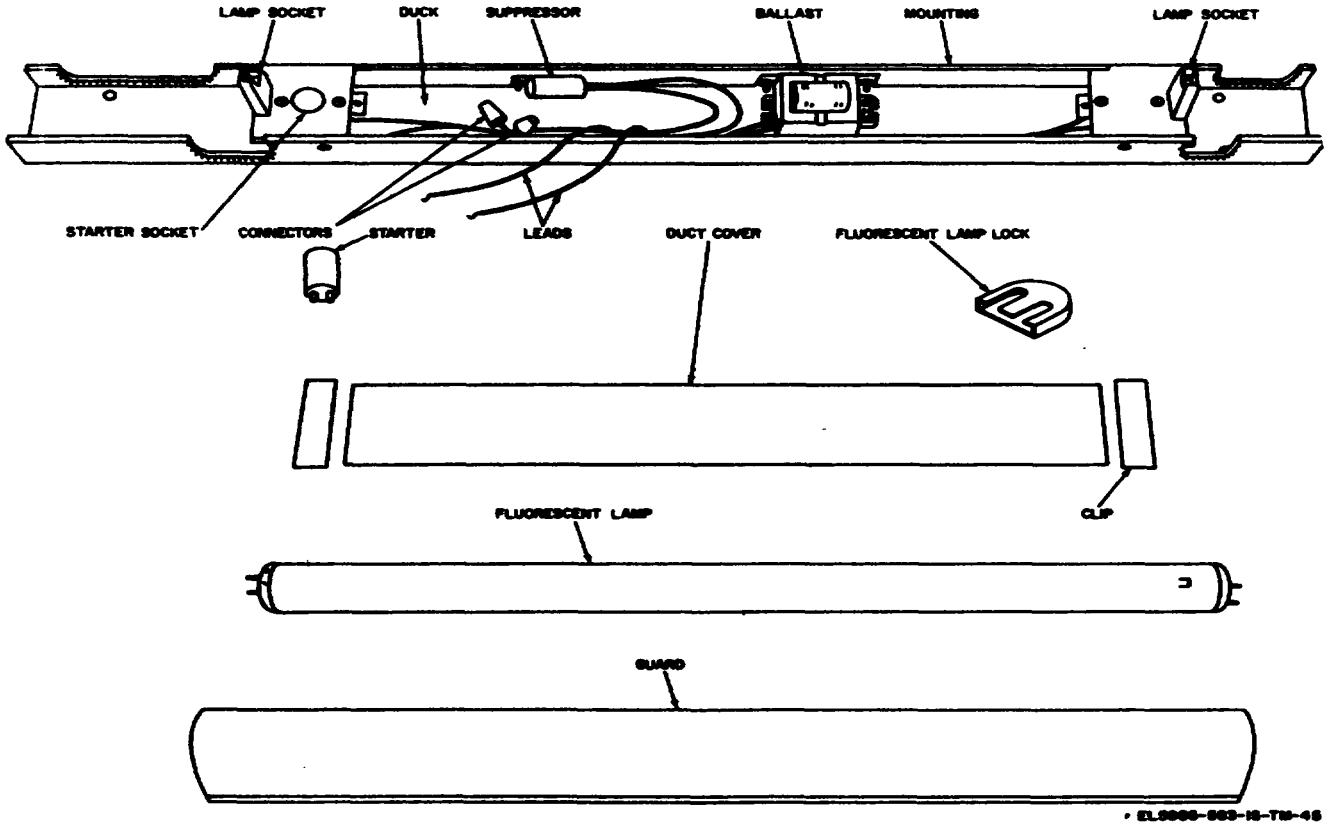

Fig. No. 4-4. Fluorescent fixture, parts location diagram.

(2) Install the shell, inserts, body, and gasket.
(3) Install the retaining ring.
(4) Slide the packing glands into the housing.
(5) Tighten the packing nut in the housing.
(6) Install the cap.

4-12. Replacement of Power Receptacles

(fig. 4-6)

a. Removal.

(1) Remove the Inside cover from the SIGNAL a POWER ENTRANCE box.
(2) Unscrew the cap from the body.
(3) **Unscrew the** nut and remove the chain ring and gasket.
(4) Slide the body through the panel.
(5) Remove the retaining ring.

WARNING

Be careful when removing the retaining ring to prevent it from flying and causing serious injury.

(6) Remove the inserts and contacts from the body.
(7) Unsolder the contacts from the wires.

b. Replacement

(1) Solder the contacts on the wires.
(2) Insert the contacts and inserts into the body.
(3) Install the retaining ring.
(4) Insert the body through the panel.
(5) Install the gasket, chain ring, and nut.
(6) Install the cap.
(7) Replace the inside cover on the SIGNAL & POWER ENTRANCE box.

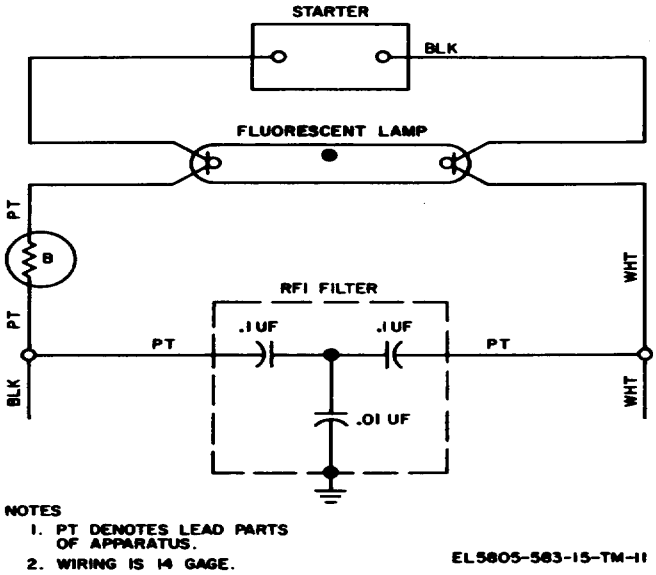

Fig. No. 4-5. Fluorescent fixture, schematic wiring diagram

Section II. DIRECT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

4-13. Scope of Direct, General Support, and Depot Maintenance

Direct, general support, and depot maintenance duties are indicated in appendix C. The parts authorized for replacement are indicated in TM 11-5805-583-24P. Replacement procedures for connectors mounted on the SIGNAL ENTRANCE box and attached to the 26-pair cables are covered in paragraphs 4-14 and 4-15.

4-14. Replacement of SIGNAL ENTRANCE BOX Receptacles

(fig. 4-7)

a. Removal.

(1) Turn the Locking ring and remove the cover from the receptacle.

(2) Loosen the clamp screws and loosen the cable clamp on the inside of the mounting plate.

(3) Remove the contact assembly retaining screws from the underside of the housing.

(4) Be careful not to damage the leads, and lift the contact assembly out of the housing.

(5) If necessary, work some slack from the cable through the cable clamp into the housing.

(6)Unscrew the insert and push the insert back into the shelter

(7) Tag and disconnect the leads from the contact assembly.

NOTE

Do not remove housing unless replacement is required.

(8) Remove the housing mounting screws and slide the housing away from the mounting plate.

(9) Slide the housing and cover off the cable.

(10) Remove the retaining screws and pull the mounting plate and gasket off the cable.

b. Replacement.

(1) Position the gasket and mounting plate on the SIGNAL ENTRANCE box and secure them with the retaining screws.

(2)Slide the cable through the gasket and mounting plate.

(3) Slide the housing over the cable, position it against the mounting plate, and secure it with the housing mounting screws.

(4)Install the separator with the leads properly positioned.

(5) Position the contact assembly near the housing and connect the leads.

(6) Insert the contact assembly into the housing. If necessary, work the cable slack out of the housing.

.

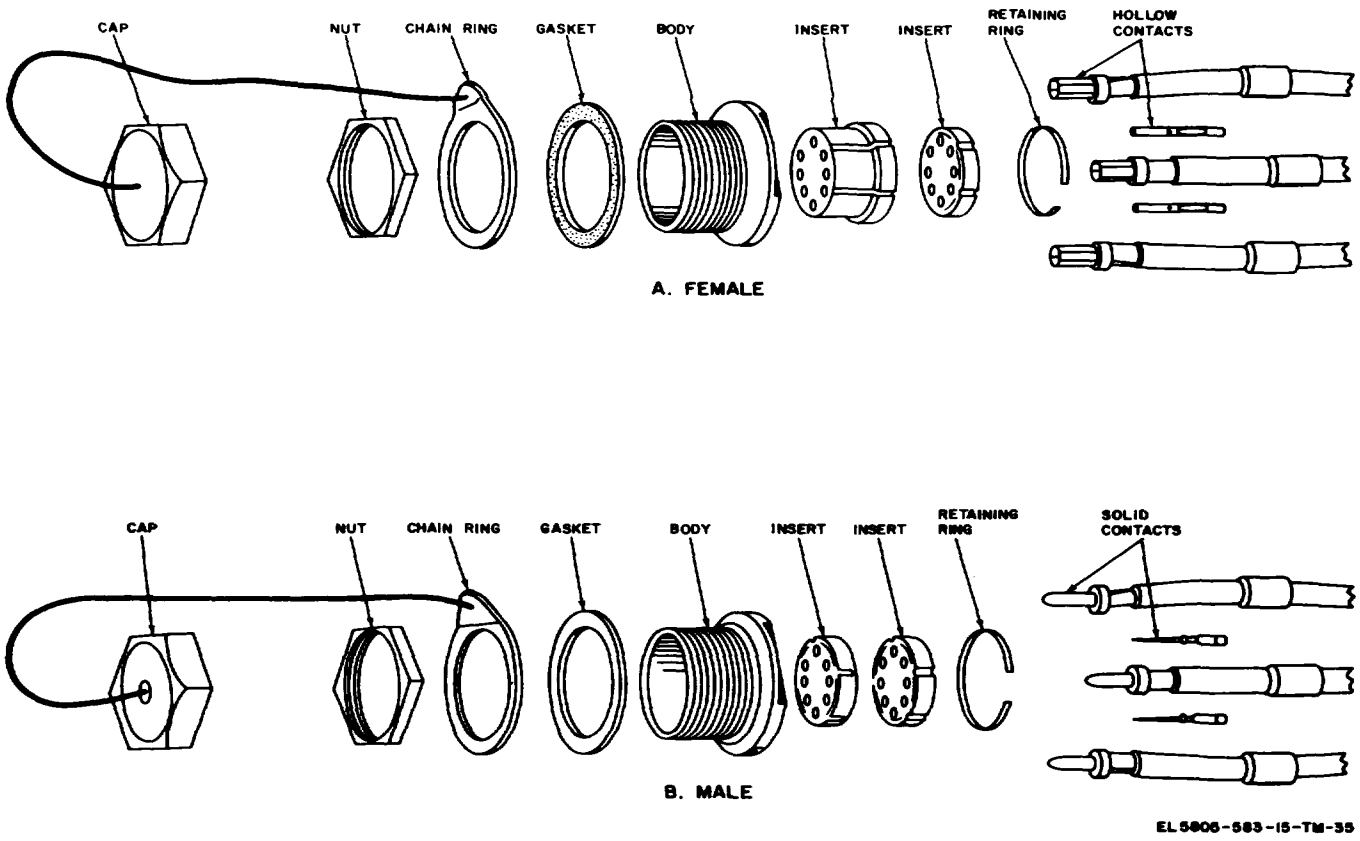

Fig. No. 4-6. Power receptacle, exploded view.

(7) Be sure the contact assembly is properly seated and secure it to the connector housing with the contact assembly retaining screws.

(8) Tighten the cable clamp on the inside of the mounting plate.

(9) Replace the cover.

4-15. Replacement of 26Pair Cable Connectors

(fig. 4-8)

a. Removal.

(1) Loosen the setscrews and slide the locking ring back on the cable.

(2) Remove the clamping bolts and clamp nuts from the cable clamp.

(3) Remove the retaining bolts and both sections of the cable clamp.

(4) Slide the enforcement and nylon insulator back on the cable.

.

(5) Remove the contact assembly retaining screws.

(6) Work the cable into the housing and lift the contact assembly out of the housing.

(7) Slide the separator away from the contact assembly.

(8) Tag and disconnect the leads.

(9) Remove the separator and slide the housing off the cable.

(10) Slide the nylon insulator, enforcement, locking ring, and cover off the cable.

b. Replacement.

(1) Slide the cover, locking ring, enforcement, and nylon insulator onto the cable. Be sure the flange on the enforcement and nylon insulator is toward the cable end.

(2) Slide the housing on the cable.

(3) Install the separator with the leads properly positioned.

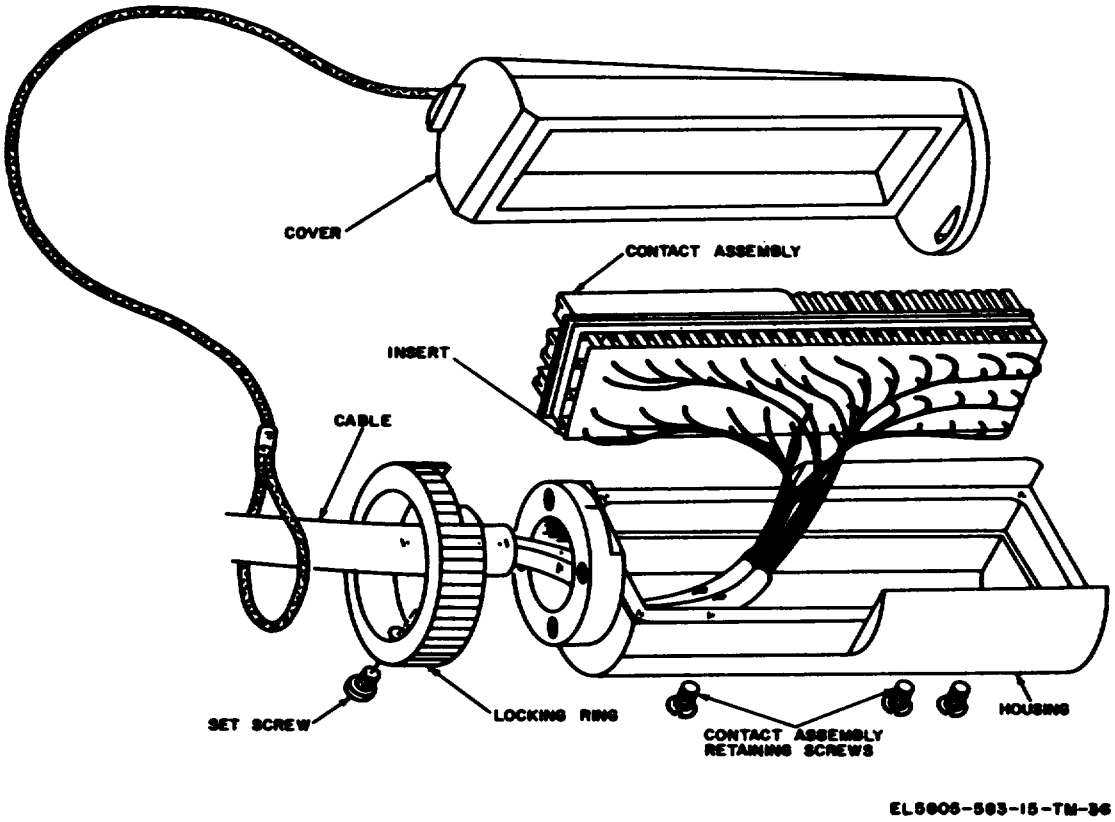

Fig. No. 4-7. 26-pair receptacle, exploded view.

(4) Position the contact assembly near the housing and connect the leads.

(5) Replace the contract assembly in the housing. If necessary, work the cable out of the housing to provide clearance for the contact assembly.

(6) Be sure the contact assembly is properly seated and secure it to the connector housing with the contact assembly retaining screws.

(7) Slide the nylon insulator until its flange is flush against the housing

.

(8) Slide the enforcement until its flange is flush against the nylon insulator.

(9) Replace the sections of the cable clamp and secure them with the retaining bolts.

(10) Replace the clamping bolts and nuts, and tighten them securely.

(11) Slide the locking ring into position on the housing and secure it with the setscrew.

(12) Replace the cover.

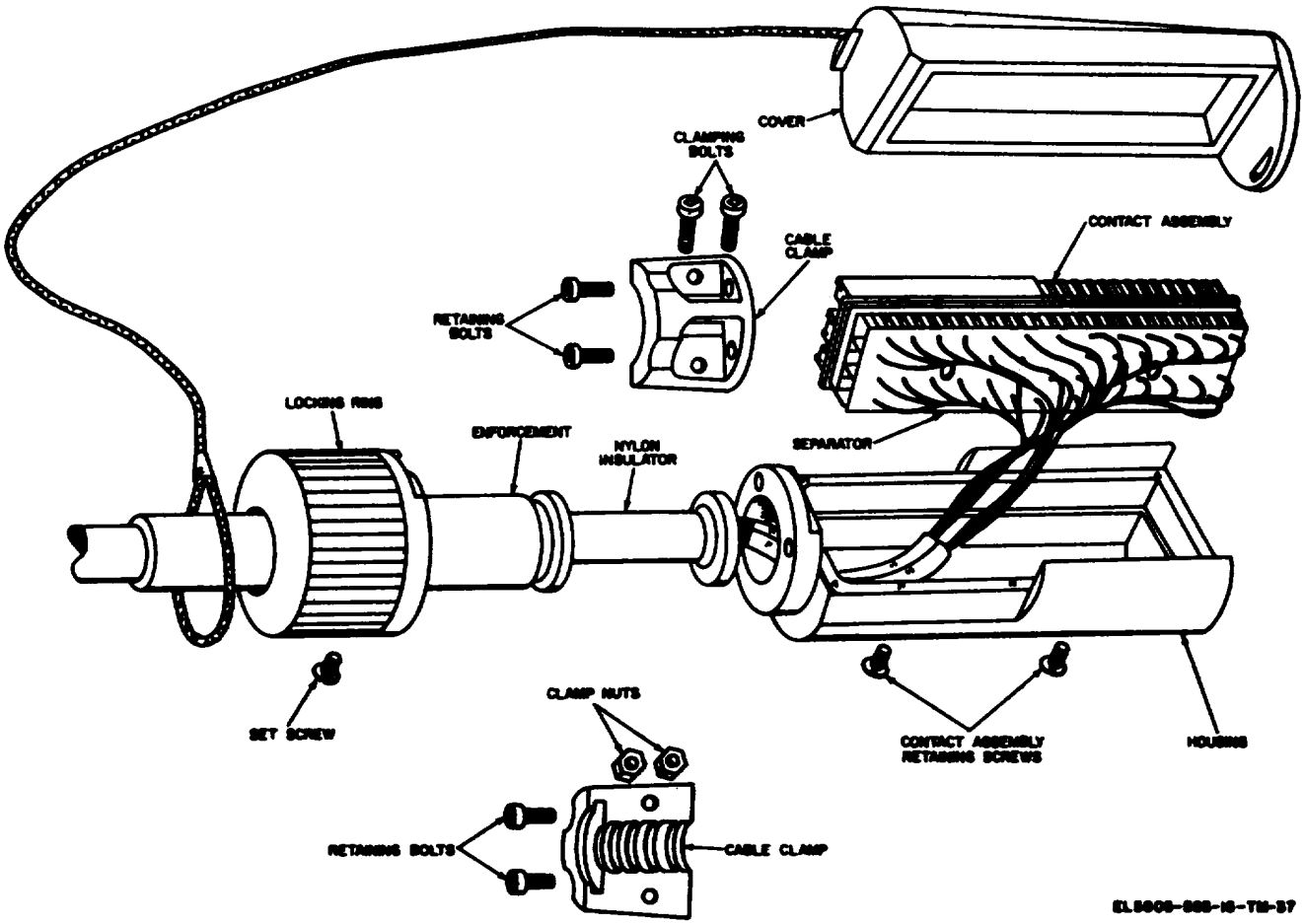

Fig. No. 4-8. 26-pair cable connector, exploded view

CHAPTER 5

SHIPMENT AND LIMITED STORAGE AND DEMOLITION

TO PREVENT ENEMY USE

Section I. SHIPMENT AND LIMITED STORAGE

5-1. Disassembly of Equipment

Perform the following procedures when the AN/ TSC-76 is moved to a different location or placed in storage.

a. Turn off all equipment power switches and circuit breakers except the LIGHTS and MAIN circuit breakers and the FLUORESCENT ON OFF LIGHT switches.

b. Secure all components in their cabinets, cases, racks, mountings, or holders.

c. Place all miscellaneous items in ACCESSORIES AND SPARES cabinets and secure the cabinets for transit.

d. Remove the batteries for prolonged storage or for long distance shipment.

e. Disconnect the field wires from the binding posts in the SIGNAL & POWER ENTRANCE box.

i. Disconnect the 26-pair cables from the SIGNAL ENTRANCE boxes. Replace the covers on all connectors and receptacles. Close and secure all covers on the SIGNAL ENTRANCE boxes.

g. If power was obtained from a generator set, proceed as given below.

(1) Stop the generator set.

(2) Disconnect the power cable from the POWER 115 VAC IN receptacle on the SIGNAL & POWER ENTRANCE box. Replace both connector covers.

(3) Disconnect the power cable from the generator set. If the power stub was used, disconnect it from the power cable; replace the covers and wind the power cable on the cable reel and store the cable stub in a storage drawer.

h. If power was obtained from a commercial power source, proceed as given below.

(1) Turn off or disconnect the power.

(2) Disconnect the power cable from the POWER 115 VAC IN receptacle on the SIGNAL & POWER ENTRANCE box. Replace both. connector covers

.

(3) Disconnect the power stub from the power source and from the power cable. Replace the covers, and wind the power cable on the cable reel. Stow and secured the power stud.

i. Disconnect the ground strap from the GRD terminal in the SIGNAL & POWER ENTRANCE box. Close and secure the cover on the SIGNAL & POWER ENTRANCE box.

j. Disconnect the ground strap from the generator set (if used) and from the ground rod. Stow and secure the ground strap.

k. Close and secure the exhaust blower cover and the fresh air intake filter door.

l. Remove the ground rod and secure it (fig. 5-1).

m. Secure the power cable reel and the boarding ladder in place (fig. 5-1).

n. Recheck the area for loose items using the lantern. If a generator set was used to supply power, prepare it for shipment or limited storage as described in the appropriate technical manual (app A).

o. Clean the AN/TSC-76 thoroughly. Make sure that the drain plug is tightly closed. Stow and secure the lantern.

p. Make certain that all personnel have evacuated the AN/TSC-76, and close and lock the door.

q. If the AN/TSC-76 is truck-mounted, secure the tailgate in the upright position.

5-2. Repackaging for Shipment or Limited Storage

Repackaging of the AN/TSC-76 for shipment or limited storage normally will be performed at apackaging facility or by a packaging team. Should emergency packaging be required, select materials from those listed in SB 38-100 (app A). Package the AN/TSC-76 in accordance with the original packaging insofar as possible with available materials.

Section II. DEMOLITION OF MATERIAL TO PREVENT ENEMY USE

5-3. Authority for Demolition

Demolition of the equipment will be accomplished only upon the order of the commander. The destruction procedures outlined in paragraph 5-4 will be used to prevent further use of the AN/TSC-76.

5-4. Methods of Destruction

Use any or all of the following methods to destroy the AN/TSC-76.

a Smash. Smash the controls, components, power distribution panel, and patching panel

b. Cut. Cut all cables and cords and slash the wiring on the components.

WARNING

Be extremely careful when handling explosives and incendiary devices. Use these items only when the need is urgent.

c. Burn. Burn cords and technical manuals

d. Bend .Bend panels, components, and cabinets.

e. Explode. Use explosives if necessary.

f. Dispose. Bury or scatter the destroyed parts in slit trenches or foxholes, or throw them into streams or lakes

.

Fig *5-1. AN/TSC-76, interior floor plan and* el*evation diagram.*

(Located in back of manual)

Fig. 5-2 Patching panel.

(Located in back of manual)

Fig. 5-3 AN/ TSC-76 power distribution. wiring diagram/

(**Located in back of manual** *)*

Fig. 5-4(1). *AN/TSC-76 signal schematic diagram* (sheet1 of 4)

(Located on back of manual)

Fig 5-4(2). *AN/TSC-76 signal* schematic *diagram (sheet 2 of 4).*

(Located in back of manual)

Fig. 5-4(3). *AN/TSC-76 signal; schematic diagram (sheet 3 of 4*).

(Located in back of manual)

Fig. 5-4④. AN/TSC-76 signal schematic diagram (sheet 4 of 4).

(Located in back of manual)

Fig. 5-5. Power cable connector, exploded view.

(Located in back of manual)

APPENDIX A
REFERENCES

DA Pam 25-30	Consolidated Index of Army Publications and Blank Forms.
DA Pam 738-750	The Army Maintenance Management System (TAMMS).
TB 43-0118	Field Instructions for Painting and Preserving Electronics Command Equipment Including Camouflage Pattern Painting of Electrical Equipment Shelters.
TB 43-0124‘	Maintenance and Repair Procedures for S-141/G, S-144/G, S-250/G, S-280/G, and S-318/G Type Shelters.
TM 5-4120-289-15	Operator, Organizational Direct and General Support, and Depot Maintenance Manual: Air Conditioner. Wall or Base Mounted; Air Cooled, Self-Contained, Electric Motor Driven, 6000 Btu/Hr, 115 V, 1 Phase, 2 Wire, 50/60 Cycle (Redmanson Model CE-6A-60A) (NSN 4120-926-1161), 208V, 3 Phase, 4 Wire, 400 Cycle (Redmanson Model CE 6A-400A) (NSN 4140-926-1162).
TM 11-5805-201-12	Operator’s and Organizational Maintenance Manual (Including Repair Parts and Special Tool Lists): Telephone Set TA-312/PT.
TM 11-5805-201-35	DS, GS, and Depot Maintenance Manual (Including Repair Parts and Special Tool Lists): Telephone Set TA-312/PT.
TM 11-5805-262-12	Operator’s and Organizational Maintenance Manual: Switchboards, Telephone, Manual SB-22/PT and SB-22A/PT.
TM 11-5805-262-20P	Organizational Maintenance Repair Parts and Special Tool Lists: Switchboard, Telephone, Manual SB-22A/PT.
TM 11-5805-262-34	DS and GS Maintenance Manual: Switchboards, Telephone, Manual SB-22/PT and SB-22A/PT.
TM 11-5805-262-34P	DS and GS Maintenance Repair Parts and Special Tool Lists: Switchboard, Telephone, Manual SB-22A/PT.
TM 11-5805-298-15	Operator’s, Organizational, DS, GS, and Depot Maintenance Manual: Static Ringing Generator TA-248/TT and TA-248A/TT.
TM 11-5805-356-12	Operator and Organizational Maintenance Manual (Including Repair Parts and Special Tool Lists): Terminal Telegraph-Telephone AN/TCC-29 (Including Terminal, Telegraph TH-22/TG and Converter, Telegraph-Telephone Signal CV-425/U).
TM 11-5805-583-24P	Organizational Direct Support and General Support Maintenance Repair Parts and Special Tool Lists (Including Depot Maintenance Repair Parts and Special Tools): for Center Communications Patching AN/TSC-76 (NSN 5895-00-878-2707).
TM 11-5815-200-12	Operator’s and Organizational Maintenance Manual Including Repair Parts and Special Tool Lists: Teletypewriter Sets AN/FGC-20, AN/FGC-20X, AN/FGC-21, AN/FGC-66, AN/FGC-159, AN/FGC-159A, AN/FGC-160, AN/FGC-177, AN/UGC-4, AN/UGC-29, AN/UGC-29X, and Teleprinter TT-259/FG.
TM 11-5815-200-34P-2	DS and GS Maintenance Repair Parts and Special Tool Lists: Teletypewriter Sets AN/FGC-20X, AN/FGC-159K, AN/FGC-177, and AN/UGC-4.
TM 11-5815-200-35	DS, GS, and Depot Maintenance Manual: Teletypewriter Sets AN/FGC-20, AN/FGC-20X, AN/FGC-21, AN/FGC-66, AN/FGC-159, AN/FGC-159X, AN/FGC-160, AN/FGC-177, AN/UGC-4, AN/UGC-29, AN/UFG-29X, and Teleprinter TT-259/FG.
TM 11-5830-221-12	Operator’s and Organizational Maintenance Manual: Intercommunication Stations LS-147A/FI, LS-147C/FI, and LS-147D/FI, 147D/FI.

TM 11-5805-221-24P	Organizational DS, and GS Maintenance Manual Repair Parts and Special Tool Lists (Including Depot Maintenance Repair Parts and Special Tool Lists): Intercommunication Station LS-147C/FI.
TM 11-5935-203-15P	Organizational DS and GS, and Depot Maintenance Repair Parts and Special Tool Lists: Connectors, Receptacle, Electrical U-186A/G and U-186B/G.
TM 11-5395-205-14P	Operator's, Organizational Direct Support and General Support Maintenance Repair Parts and Special Tool Lists (Including Depot Maintenance Repair Parts and Special Tool Lists): Connectors, Receptacle, Electrical U-187/G and U-187A/G.
TM 11-5965-206-14P	Operator's, Organizational Direct Support, and General Support Maintenance Repair Parts and Special Tool Lists (Including Depot Maintenance Repair Parts and Special Tool Lists): Headset-Microphone H-91A/U; Handset-Headset H-144/U, H-144A/U, H-144B/U, and H-144C/U and Headset-Microphone H-210/G.
TM 11-5965-224-14P	Operator's Organizational Direct Support, and General Support Maintenance Repair Parts and Special Tool Lists (Including Depot Maintenance Repair Parts and Special Tool Lists): Handsets H-60/PT and H-165/U.
TM 11-5965-271-50	Depot Maintenance Manual: Handsets TS-9-(*), TS-10-(*), TS-11-(*), TS-12-F, TS-13(*), TS-14-(*), TS-15-(*), H-22B/U, H-23-(*)U, and H-60/PT.
TM 11-6110-201-12P	Operator and Organizational Maintenance Repair Parts and Special Tool Lists: Distribution Boxes J-1077/U and J-1077A/U.
TM 11-6625-366-15	Operator's, Organizational DS, GS, and Depot Maintenance Manual: Multimeter TS-352B/U.
TM 43-0139	Painting Instructions for Field Use.
TM 750-244-2	Procedures for Destruction of Electronics Materiel to Prevent Enemy Use (Electronics Command).

APPENDIX B
BASIC ISSUE ITEMS UST (BILL) AND ITEMS TROOP INSTALLED OR AUTHORIZED LISTS (ITIAL)

Section I. INTRODUCTION

B-1. Scope
This appendix lists basic issue items and items troop installed or authorized required by the crew/ operator for installation, operation, and maintenance of Center, Communications, Patching AN/ TSC-76.

B-2. General
This Basic Issue Items and Items Troop Installed or Authorized List is divided into the following sections:

a. Basic Issue Items List Section II. A list, in alphabetical sequence, of items which are furnished with, and which must be turned in with the end item.

b. Items Troop Installed or Authorized List Section II. A list, in alphabetical sequence of items which, at the discretion of the unit commander, may accompany the end item, but are not subject to be rned in with the end item.

B-3. Explanation of Columns
The following provides an explanation of columns found in the tabular listings:

a. Illustration. This column is divided as follows:

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

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

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

c. Description Indicates the Federal item name and a minimum description required to identify the item.

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

(2) *Federal Supply Code for Manufacturer (FSCM).* The FSCM is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., and is identified in SB 708-42 *d. Unit ofMeasure (UIM).* Indicates the standard of basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr, etc.). When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

e Quantity Furnished With Equipment (Basic Isue Items Only). Indicates the quantity of the basic issue item furnished with the equipment.

f. Quantity Authorized (Items Troop Installed or Authorized Only). Indicates the quantity of the item authorized to be used with the equipment.

(Next printed page in B-3)

Section II. BASIC ISSUE ITEMS LIST

(1) ILLUS (A) FIG. NO.	(1) ILLUS (B) ITEM NO.	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION (FSCM) and Part Number Usable On Code	(4) QTY FURN WITH EQUIP
5-1		5110-00-115-5049	AXE, SINGLE BIT: SC-C-539451 (80063)	1
5-1			EXTINGUISHER, FIRE: 5T2 (33525)	1
5-1		6545-00-922-1200	FIST AID KIT, GENERAL PURPOSE SC-D-539483 (80063)	1
		5340-00-682-1508	PADLOCK: MS-35647-3 (96906)	1
5-1		5975-00-224-5260	IDD, GROUND MX-148/G	1
2-2		3940-00-115-6380	SLING ASSEMBLY: SM-D-650070-GR2 (80063)	1
2-2			SLING ASSEMLY: SM-D-65070’70-GRI (80063)	1

Section III. ITEMS TROOP INSTALLED OR AUTHORIZED LIST

(1) NATIONAL STOCK NUMBER	(2) DESCRIPTION FSCM AND PART NUMBER	USABLE ON CODE	(3) U/M	(4) QTY AUTH
4120-00-679-2669	AIR CONDITIONER: F9000 (94833)		EA	1
	HEATER, SPACE, EIECTRICAL SCD-539901		EA	1

APPENDIX C
MAINTENANCE ALLOCATION

Section I. INTRODUCTION

C-1. General

This appendix provides a summary of the maintenance operations for the AN/TSC-76. It authorizes categories of maintenance for specific 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, preserve, drain, paint, or to replenish fuel/lubricants/hydraulic fluids or compressed air supplies.

d. Adjust. 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 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 equipment used in precision measurement. Consists of the comparison 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 functioning into position an item, part, module (component or assembly) in a manner to allow the proper functioning of the equipment/system.

h. Replace. The act of substituting a serviceable like-type part, subassembly, model (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, pr resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module/component/ assembly, end item or system.

j. Overhaul. That periodic maintenance effort (service/action) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (e.g., 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 alike-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 equipment/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

d. Column 4, Maintenance Category. Column 4 specifies, by the listing of a "worktime" 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 "worktime" figures will be shown for each category. The number of man-hours specified by the "worktime" 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.

C-4. Tool and Test Equipment Requirements (Table 1)

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 or 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 (5digit) in parentheses.

Section II. MAINTENANCE ALLOCATION CHART FOR CENTER, COMMUNICATIONS PATHCING AN/TSC-76

(1) Group Number	(2) Component/Assembly	(3) Maintenance Function	(4) Maintenance Level* C	O	F	H	D	(5) Tools and Equipment
00	CENTER, COMMUNICATION PATCHING AN/TSC-76	Inspect	0.2					
		Service	0.4					
		Service[1]		0.5				5
		Test[2]		0.5				
		Repair[3]		1.5				5
		Repair[4]			0.3			1 ,2, 3
01	DISTRIBUTION BOX J-1077A/U (SEE TM 11-6110-201-15P FOR MAINTENANCE ALLOCATIONS)							
02	HEADSET, MICROPHONE H-144/U (SEE TM 11-5965-206-15P FOR MAINTENANCE ALLOCATIONS)							
03	INTERCOMMUNICATIONS STATIONS (SEE TM 11-5805-262-12 FOR MAINTENANCE ALLOCATIONS)							
04	SWITCH BOARD, TELEPYHONE MANUAL SB-244/PT (SEE TM 11-5805-262-12 FOR MAINTENANCE ALLOCATIONS)							
05	TELEPHONE SET, TA-312/PT (SEE) TM 11-5805-201-12 FOR MAINTENANCE ALLOCATIONS)							
06	TELETYPEWRITER SET TT-980/ FG (SEE TM 11-5815-200-12 FOR MAINTENANCE ALLOCATIONS)							
07	TERMINAL TELEGRAPH TH-22/TG (SEE TM 11-5805-356-12 FOR MAINTENANCE ALLOCATIONS)							
08	SHELTER, ELECTRICAL EQUIPMENT	Test[5]		1.0				1,2,5
	(SEE TM 750-240 FOR ADDITIONAL	Repair[6]	1.0				1,2,5	
	SHELETER MAINTENANCE)	Repair				2.0		1 thru 4

(1) Daily services.
(2) Test in accordance with equipment MACS.
(3) Heater, exhaust blower, power distribution panel, switches, lights, power cable.
(4) Signal entrance box and cables.
(5) Continuity of proper lighting and signal circuits.
(6) Lighting and signal circuits.

TABLE 1. TOOL AND TEST EQUIPMENT REQUIREMENTS FOR CENTER, COMMUNICATION PATCHING AN/TSC-76

(1) TOOL OR TEST EQUIPMENT REF CODE	(2) MAINTENANCE LEVEL	(3) NOMENCLATURE	(4) NATIONAL/NATO STOCK NUMBER	(5) TOOL NUMBER
1	O,F,H	MULTIMETER AN/USM-223	6625-00-999-7645	
2	O,F,H	OHMMETER 2M-21 A/U	6625-00-581-2466	
3	F, H	TOOL KIT, ELECTRONIC EQUIPMENT TK-105/G	5180-00-610-8177	
4	H	TOOL KIT, ELECTRONIC EQUIPMENT SHELTER	5180-00-973-4369	
5	O	TOOL KIT, ELECTRONIC EQUIPMENT TK-101/GSQ	5180-00-064-5178	

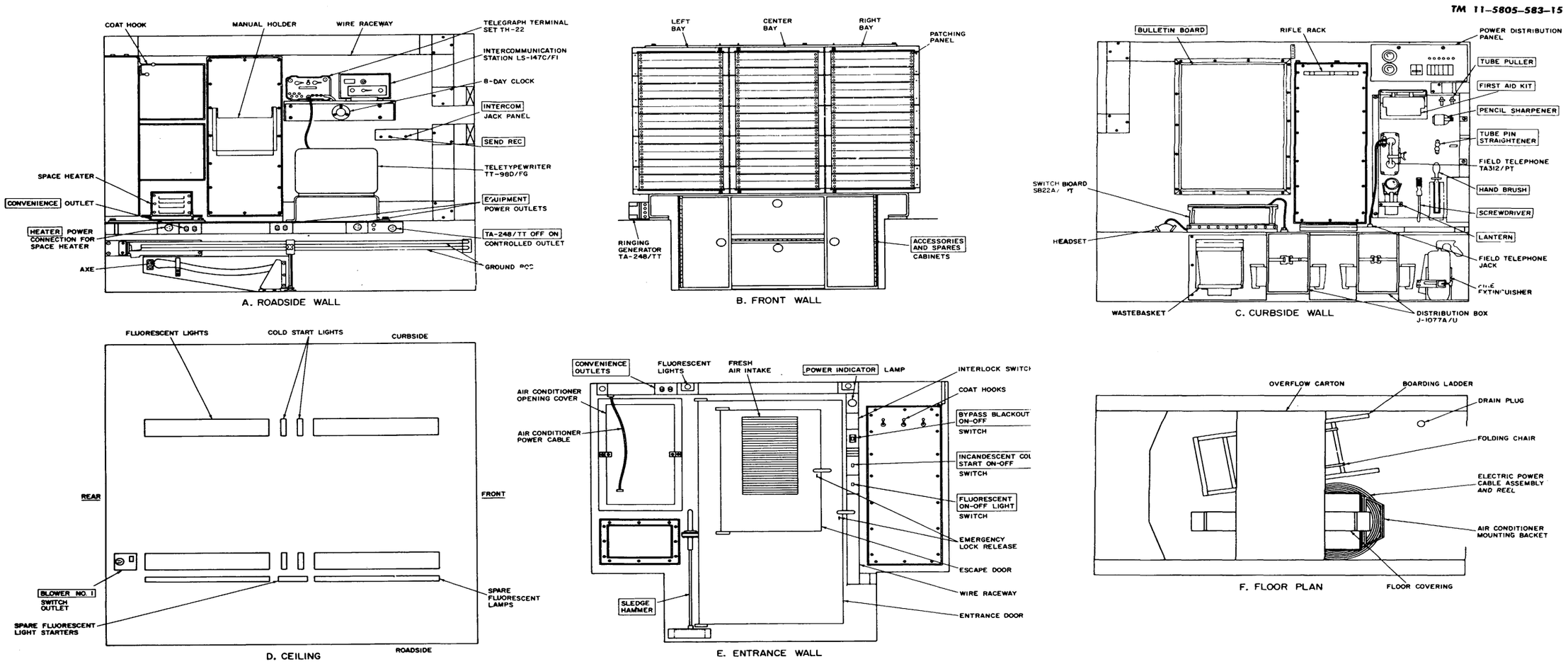

Fig. No. 5-1. AN/TSC-76, interior floor plan and elevation diagram.

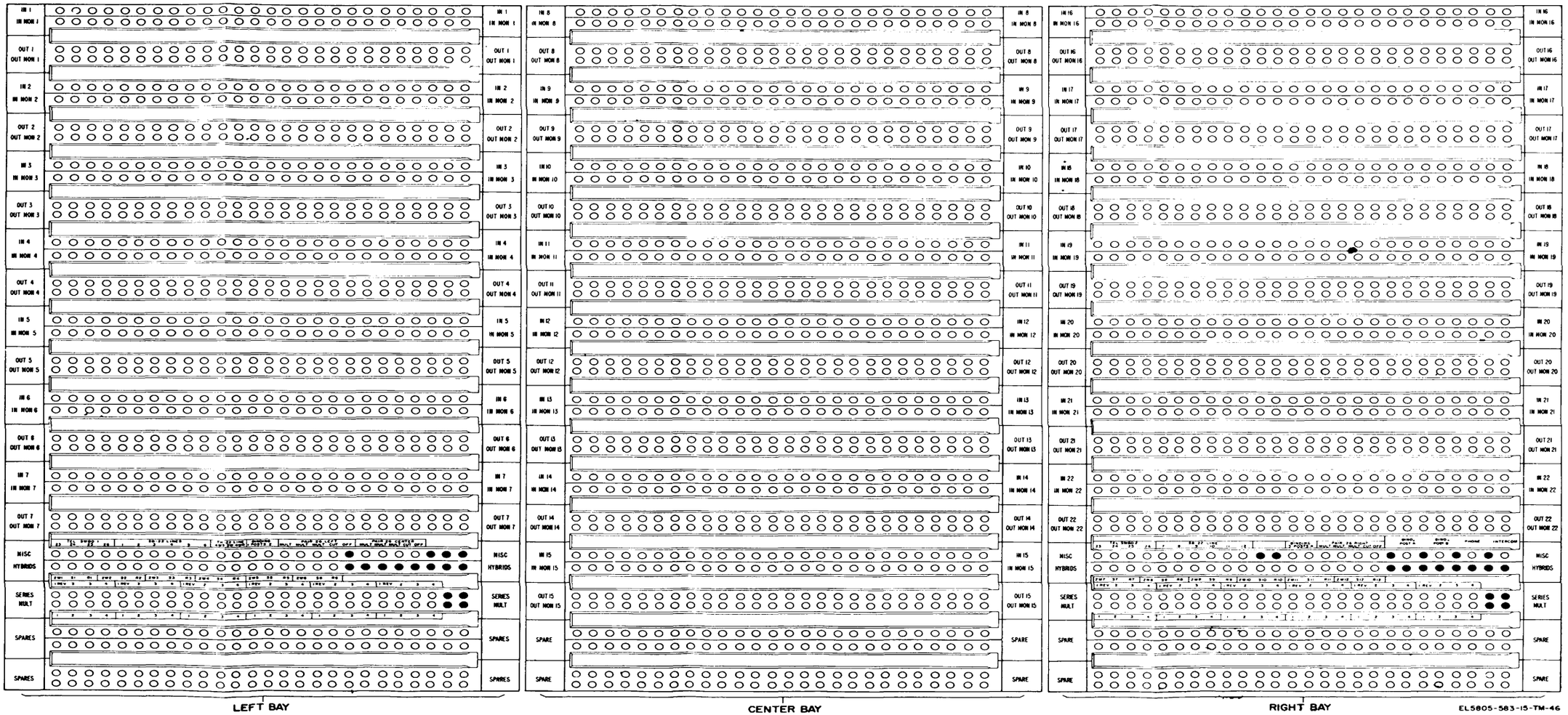

Fig. No. 5-2. Patching panel.

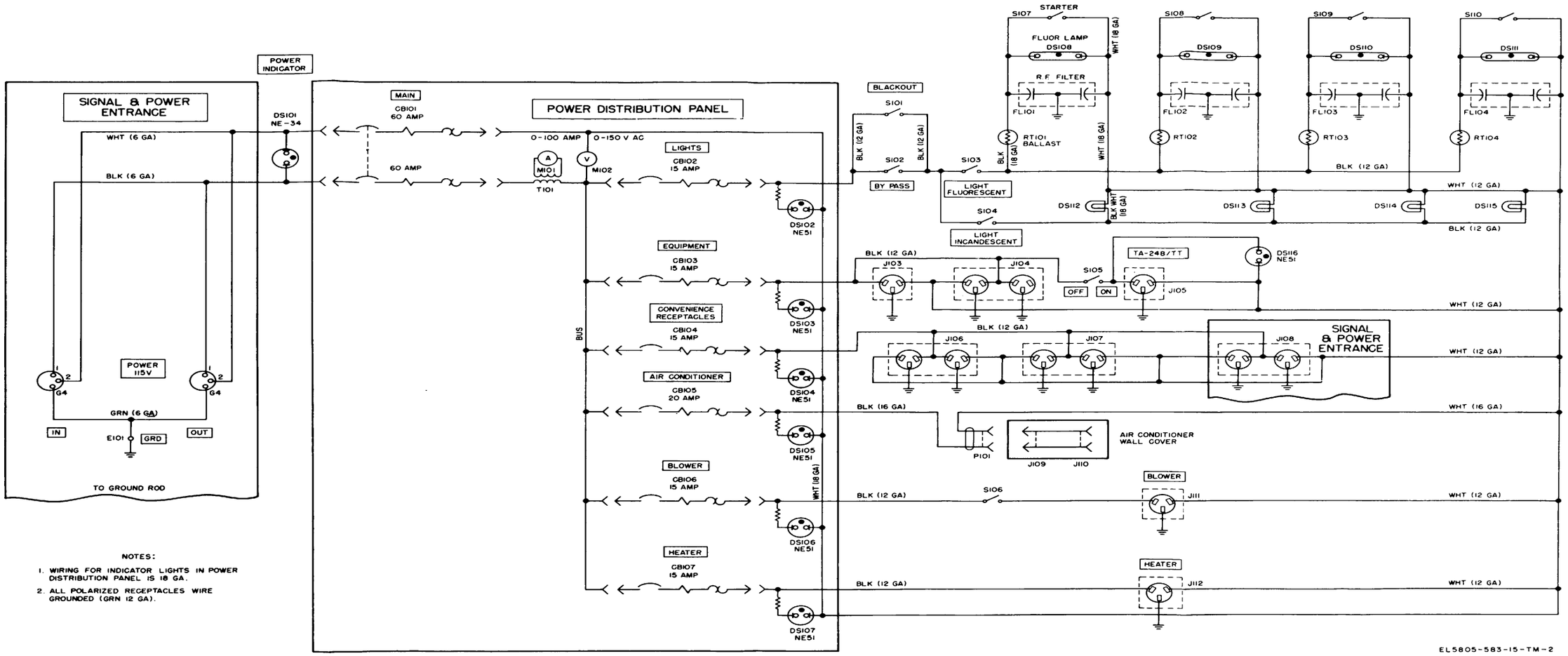

Fig. No. 5-3. AN/TSC-76 power distribution wiring diagram.

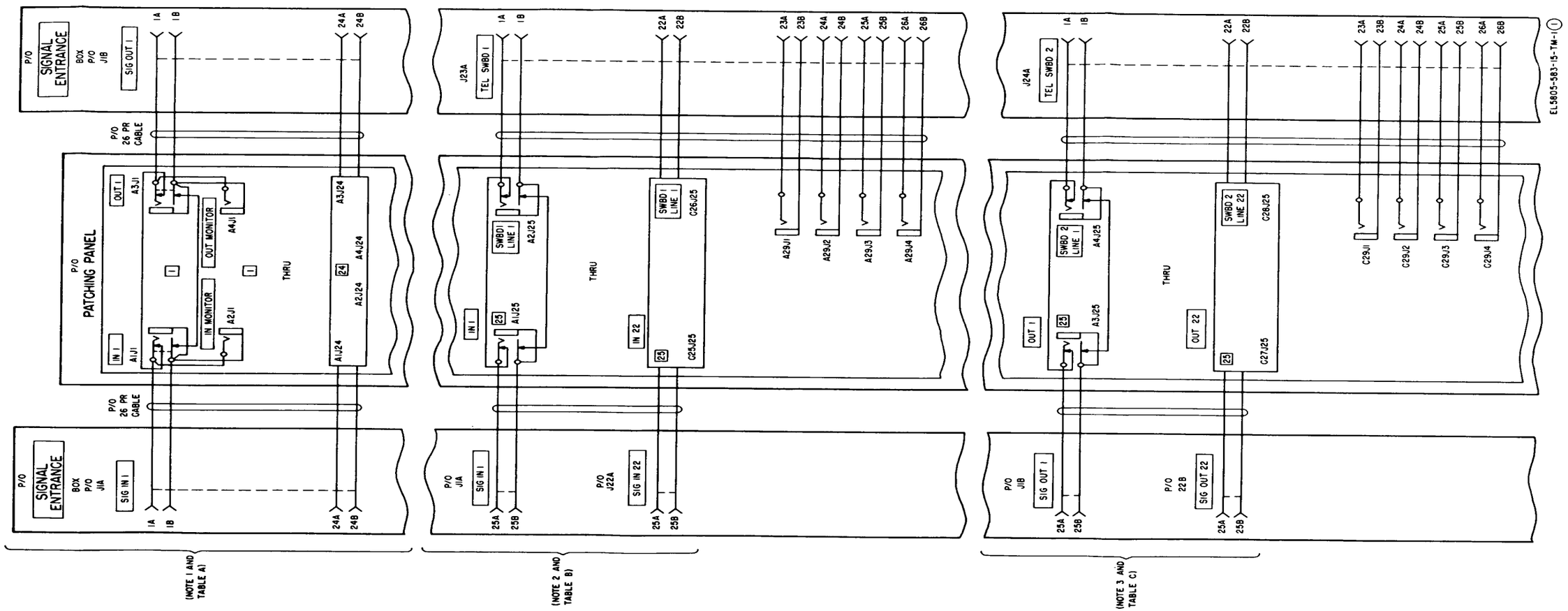

Fig. No 5-4 (1). AN/TSC-76 signal schematic diagram (sheet 1 of 4).

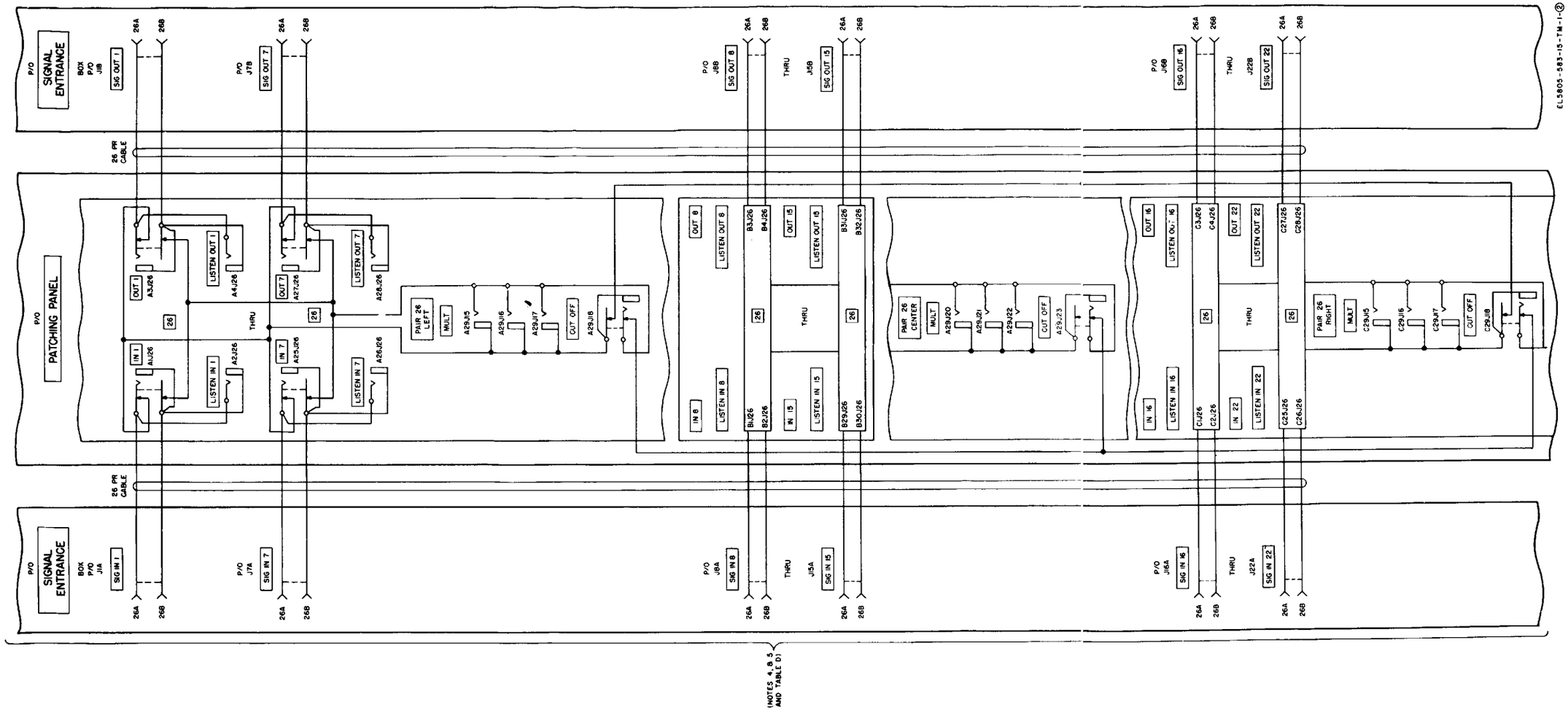

Fig. No. (5-4(2)) . AN/TSC-76 signal schematic diagram (sheet 2 of 4).

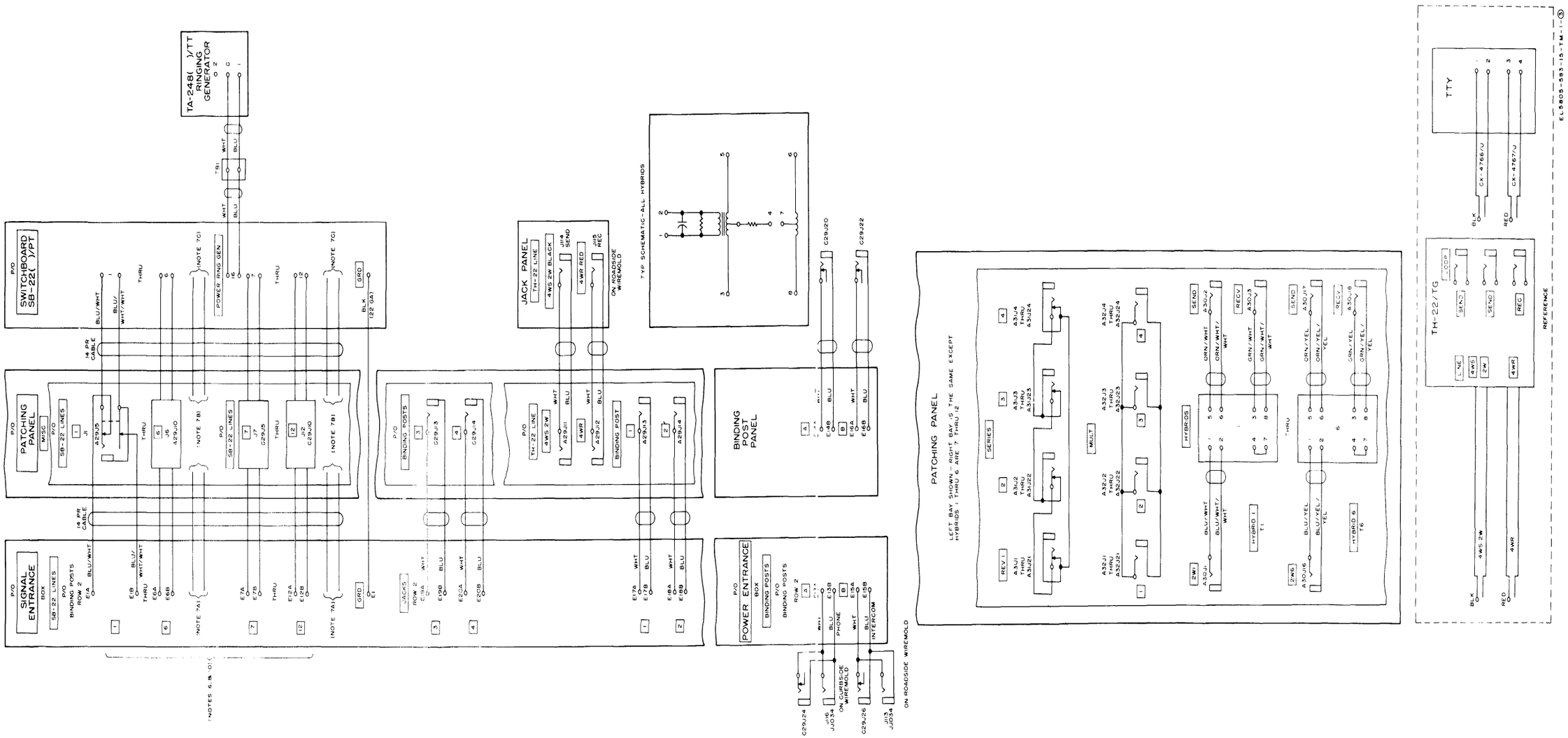

Fig. No. 5-4(3). AN/TSC-76 signal schematic diagram (sheet 3 of 4).

TABLE A

26-PR RECP		JACK DESIGNATION										26 PR RECP	
		IN		IN MONITOR		OUT MONITOR		OUT					
EQUIP MARKING	REF DESIGNATION	LEFT BAY										REF DESIGNATION	EQUIP MARKING
SIG IN 1	J1A	A1J1	THRU	A1J24	A2J1	THRU	A2J24	A4J1	THRU	A4J24	A3J1	THRU	A3J24	J1B	SIG OUT 1
SIG IN 2	J2A	A5J1		A5J24	A6J1		A6J24	A8J1		A8J24	A7J1		A7J24	J2B	SIG OUT 2
SIG IN 3	J3A	A9J1		A9J24	A10J1		A10J24	A12J1		A12J14	A11J1		A11J24	J3B	SIG OUT 3
SIG IN 4	J4A	A13J1		A13J24	A14J1		A14J24	A16J1		A16J24	A15J1		A15J24	J4B	SIG OUT 4
SIG IN 5	J5A	A17J1		A17J24	A18J1		A18J24	A20J1		A20J24	A19J1		A19J24	J5B	SIG OUT 5
SIG IN 6	J6A	A21J1		A21J24	A22J1		A22J24	A24J1		A24J24	A23J1		A23J24	J6B	SIG OUT 6
SIG IN 7	J7A	A25J1		A25J24	A26J1		A26J24	A28J1		A28J24	A27J1		A27J24	J7B	SIG OUT 7
		CENTER BAY													
SIG IN 8	J8A	B1J1	THRU	B1J24	B2J1	THRU	B2J24	B4J1	THRU	B4J24	B3J1	THRU	B3J24	J8B	SIG OUT 8
SIG IN 9	J9A	B5J1		B5J24	B6J1		B6J24	B8J1		B8J24	B7J1		B7J24	J9B	SIG OUT 9
SIG IN 10	J10A	B9J1		B9J24	B10J1		B10J24	B12J1		B12J24	B11J1		B11J24	J10B	SIG OUT 10
SIG IN 11	J11A	B13J1		B13J24	B14J1		B14J24	B16J1		B16J24	B15J1		B15J24	J11B	SIG OUT 11
SIG IN 12	J12A	B17J1		B17J24	B18J1		B18J24	B20J1		B20J24	B19J1		B19J24	J12B	SIG OUT 12
SIG IN 13	J13A	B21J1		B21J24	B22J1		B22J24	B24J1		B24J24	B23J1		B23J24	J13B	SIG OUT 13
SIG IN 14	J14A	B25J1		B25J24	B26J1		B26J24	B28J1		B28J24	B27J1		B27J24	J14B	SIG OUT 14
SIG IN 15	J15A	B29J1		B29J24	B30J1		B30J24	B32J1		B32J24	B31J1		B31J24	J15B	SIG OUT 15
		RIGHT BAY													
SIG IN 16	J16A	C1J1	THRU	C1J24	C2J1	THRU	C2J24	C4J1	THRU	C4J24	C3J1	THRU	C3J24	J16B	SIG OUT 16
SIG IN 17	J17A	C5J1		C5J24	C6J1		C6J24	C8J1		C8J24	C7J1		C7J24	J17B	SIG OUT 17
SIG IN 18	J18A	C9J1		C9J24	C10J1		C10J24	C12J1		C12J24	C11J1		C11J24	J18B	SIG OUT 18
SIG IN 19	J19A	C13J1		C13J24	C14J1		C14J24	C16J1		C16J24	C15J1		C15J24	J19B	SIG OUT 19
SIG IN 20	J20A	C17J1		C17J24	C18J1		C18J24	C20J1		C20J24	C19J1		C19J24	J20B	SIG OUT 20
SIG IN 21	J21A	C21J1		C21J24	C22J1		C22J24	C24J1		C24J24	C23J1		C23J24	J21B	SIG OUT 21
SIG IN 22	J22A	C25J1		C25J24	C26J1		C26J24	C28J1		C28J24	C27J1		C27J24	J22B	SIG OUT 22

TABLE B

26 PR RECP		JACK DESIGNATION			26 PR RECP
EQUIP MARKING	REF DESIGNATION	IN		SWBD 1	J23A CONTACT DESIGNATIONS
SIG IN 1	J1A	A1J25	LEFT BAY	A2J25	1A&B
SIG IN 2	J2A	A5J25		A6J25	2A&B
SIG IN 3	J3A	A9J25		A10J25	3A&B
SIG IN 4	J4A	A13J25		A14J25	4A&B
SIG IN 5	J5A	A17J25		A18J25	5A&B
SIG IN 6	J6A	A21J25		A22J25	6A&B
SIG IN 7	J7A	A25J25		A26J25	7A&B
SIG IN 8	J8A	B1J25	CENTER BAY	B2J25	8A&B
SIG IN 9	J9A	B5J25		B6J25	9A&B
SIG IN 10	J10A	B9J25		B10J25	10A&B
SIG IN 11	J11A	B13J25		B14J25	11A&B
SIG IN 12	J12A	B17J25		B18J25	12A&B
SIG IN 13	J13A	B21J25		B22J25	13A&B
SIG IN 14	J14A	B25J25		B26J25	14A&B
SIG IN 15	J15A	B29J25		B30J25	15A&B
SIG IN 16	J16A	C1J25	RIGHT BAY	C2J25	16A&B
SIG IN 17	J17A	C5J25		C6J25	17A&B
SIG IN 18	J18A	C9J25		C10J25	18A&B
SIG IN 19	J19A	C13J25		C14J25	19A&B
SIG IN 20	J20A	C17J25		C18J25	20A&B
SIG IN 21	J21A	C21J25		C22J25	21A&B
SIG IN 22	J22A	C25J25		C26J25	22A&B

TABLE D

26 PR RECP		JACK DESIGNATION				26 PR RECP	
EQUIP MARKING	REF DESIGNATION	IN	LISTEN IN	LISTEN OUT	OUT	REF DESIGNATION	EQUIP MARKING
		LEFT BAY					
SIG IN 1	J1A	A1J26	A2J26	A4J62	A3J26	J1B	SIG OUT 1
SIG IN 2	J2A	A5J26	A6J26	A8J26	A7J26	J2B	SIG OUT 2
SIG IN 3	J3A	A9J26	A10J26	A12J26	A11J26	J3B	SIG OUT 3
SIG IN 4	J4A	A13J26	A14J26	A16J26	A15J26	J4B	SIG OUT 4
SIG IN 5	J5A	A17J26	A18J26	A20J26	A19J26	J5B	SIG OUT 5
SIG IN 6	J6A	A21J26	A22J26	A24J26	A23J26	J6B	SIG OUT 6
SIG IN 7	J7A	A25J26	A26J26	A28J26	A27J26	J7B	SIG OUT 7
		CENTER BAY					
SIG IN 8	J8A	B1J26	B2J26	B4J26	B3J26	J8B	SIG OUT 8
SIG IN 9	J9A	B5J26	B6J26	B8J26	B7J26	J9B	SIG OUT 9
SIG IN 10	J10A	B9J26	B10J26	B12J26	B11J26	J10B	SIG OUT 10
SIG IN 11	J11A	B13J26	B14J26	B16J26	B15J26	J11B	SIG OUT 11
SIG IN 12	J12A	B17J26	B18J26	B20J26	B19J26	J12B	SIG OUT 12
SIG IN 13	J13A	B21J26	B22J26	B24J26	B23J26	J13B	SIG OUT 13
SIG IN 14	J14A	B25J26	B26J26	B28J26	B27J26	J14B	SIG OUT 14
SIG IN 15	J15A	B29J26	B30J26	B32J26	B31J26	J15B	SIG OUT 15
		RIGHT BAY					
SIG IN 16	J16A	C1J26	C2J26	C4J26	C3J26	J16B	SIG OUT 16
SIG IN 17	J17A	C5J26	C6J26	C8J26	C7J26	J17B	SIG OUT 17
SIG IN 18	J18A	C9J26	C10J26	C12J26	C11J26	J18B	SIG OUT 18
SIG IN 19	J19A	C13J26	C14J26	C16J26	C15J26	J19B	SIG OUT 19
SIG IN 20	J20A	C17J26	C18J26	C20J26	C19J26	J20B	SIG OUT 20
SIG IN 21	J21A	C21J26	C22J26	C24J26	C23J26	J21B	SIG OUT 21
SIG IN 22	J22A	C25J26	C26J26	C28J26	C27J26	J22B	SIG OUT 22

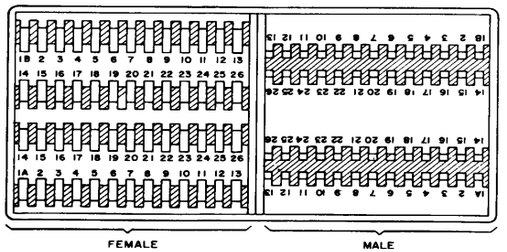

DIAGRAM OF/UG 187

TABLE C

26 PR RECP		JACK DESIGNATION			26 PR RECP
EQUIP MARKING	REF DESIGNATION	OUT		SWBD 2	J24A CONTACT DESIGNATIONS
SIG OUT 1	J1B	A3J25	LEFT BAY	A4J25	1A&B
SIG OUT 2	J2B	A7J25		A8J25	2A&B
SIG OUT 3	J3B	A11J25		A12J25	3A&B
SIG OUT 4	J4B	A15J25		A16J25	4A&B
SIG OUT 5	J5B	A19J25		A20J25	5A&B
SIG OUT 6	J6B	A23J25		A24J25	6A&B
SIG OUT 7	J7B	A27J25		A28J25	7A&B
SIG OUT 8	J8B	B3J25	CENTER BAY	B4J25	8A&B
SIG OUT 9	J9B	B7J25		B8J25	9A&B
SIG OUT 10	J10B	B11J25		B12J25	10A&B
SIG OUT 11	J11B	B15J25		B16J25	11A&B
SIG OUT 12	J12B	B19J25		B20J25	12A&B
SIG OUT 13	J13B	B23J25		B24J25	13A&B
SIG OUT 14	J14B	B27J25		B28J25	14A&B
SIG OUT 15	J15B	B31J25		B32J25	15A&B
SIG OUT 16	J16B	C3J25	RIGHT BAY	C4J25	16A&B
SIG OUT 17	J17B	C7J25		C8J25	17A&B
SIG OUT 18	J18B	C11J25		C12J25	18A&B
SIG OUT 19	J19B	C15J25		C16J25	19A&B
SIG OUT 20	J20B	C19J25		C20J25	20A&B
SIG OUT 21	J21B	C23J25		C24J25	21A&B
SIG OUT 22	J22B	C27J25		C28J25	22A&B

NOTES:

1. SHOWS SIG IN 1 AND SIG OUT 1 RECEPTACLES ONLY. SIG IN 2 THRU SIG IN 22 AND SIG OUT 2 THRU SIG OUT 22 RECEPTACLES ARE WIRED IDENTICALLY. SEE TABLE A FOR CORRESPONDING JACK DESIGNATIONS.
2. SHOWS J23A TEL SWBD 1 RECEPTACLES 1 AND 22. RECEPTACLES 1 THRU 22 ARE WIRED IDENTICALLY. SEE TABLE B FOR CORRESPONDING JACK DESIGNATIONS.
3. SHOWS J24A TEL SWBD 2 RECEPTACLES 1 AND 22. RECEPTACLES 1 THRU 22 ARE WIRED IDENTICALLY. SEE TABLE C FOR CORRESPONDING JACK DESIGNATIONS.
4. SHOWS SIG IN 1 THRU SIG IN 7 AND SIG OUT 1 THRU SIG OUT 7. SIG IN 1 THRU SIG IN 22 AND SIG OUT 1 THRU SIG OUT 22 RECEPTACLES ARE WIRED IDENTICALLY. SEE TABLE D FOR CORRESPONDING JACK DESIGNATIONS.
5. PATCHING PANEL WIRING FOR IN 8, OUT 8 THRU IN 15, OUT 15 AND IN 16, OUT 16 THRU IN 22, OUT 22 IS IDENTICAL TO IN 1, OUT 1 THRU IN 7, OUT 7.
6. SHOWS TERMINAL POSTS 1 THRU 6 AND 7 THRU 12. TERMINAL POSTS 1 THRU 12 ARE WIRED IDENTICALLY.
7. SPARE WIRES ARE AS FOLLOWS:
   (A) TURNED BACK & TAPED IN SIGNAL ENTRANCE BOX
   (B) TURNED BACK & TAPED IN PATCHING PANEL
   (C) TURNED BACK & TAPED IN SWITCHBOARD
8.
9. SEE CONNECTOR UG/187 FOR WIRE COLOR CODE FOR ALL 26 PAIR CABLES.
10. WIRE COLORS FOR 14 PAIR CABLES ARE THE SAME AS PAIR 1 THRU 14 IN CONNECTOR UG/187.
11. ALL WIRING IS 24 GA UNLESS OTHERWISE SPECIFIED.
12. [ ] INDICATES EQUIPMENT MARKING.
13. 26 PAIR RECEPTACLE IS VIEWED FROM PIN & SOCKET SIDE.
14. PREFIX LETTERS OF JACK DESIGNATIONS INDICATE EITHER LEFT BAY (A), CENTER BAY (B) OR RIGHT BAY (C).
15. ONLY FEMALE CONTACTS (>———) OF 26 PAIR RECEPTACLES ARE SHOWN. EACH FEMALE CONTACT IS CONNECTED IN PARALLEL WITH A MALE CONTACT 

EL5805-583-15-TM-1-④

Fig. No ⑤-④(4). AN/TSC-76 signal schematic diagram (sheet 4 of 4).

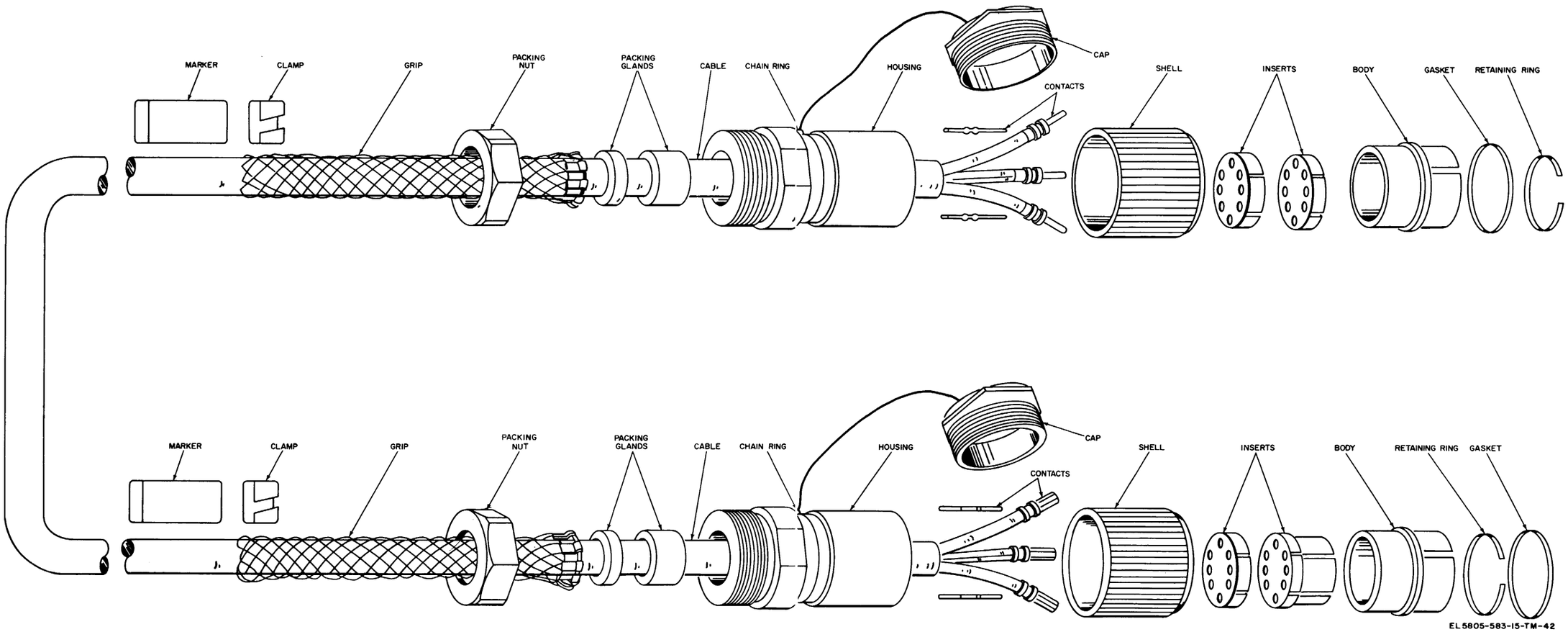

Fig. No. 5-5. Power cable connectors, exploded view.

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TSG (1)Army Deps (2) except
LBAD (14)
SAAD (30)
TOAD (14)
LEAD (7)
NAAD (5)
SVAD (f)
ATAD (10)
Gen Dep (2)
Sig Sec Gen Dep (5)
Sig Dep (10)
Sig FLDMS (2)
ATS (I)
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USAERDAW (5)
USACRREL (2)
MAAG (1)
Units org under fol TOE:
(2 copies each unit)
11-
11-18
11-35
11-75
11-85
11-97
11-18
11-117
11-137
11-158
11-237
11-302
11-500 (AA-AC)
2-134

NG: None
USAR: None.
For explanation of abbreviations used, see AR 310-50.

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