### DEPARTMENT OF THE ARMY TECHNICAL MANUAL

### OPERATOR'S, ORGANIZATIONAL, FIELD AND DEPOT MAINTENANCE MANUAL

**CENTRAL OFFICE** 

**TELEPHONE** 

**MANUAL** 

AN/MTC-9

This copy is a reprint which includes current pages from Changes 2, 4, 5, 7 and 8.

HEADQUARTERS, DEPARTMENT OF THE ARMY
MAY 1961

AGO 6389A

### **WARNING**

### **DANGEROUS VOLTAGES**

are used in this equipment.

### **DEATH ON CONTACT**

may result if safety precautions are not observed.

### **DANGEROUS VOLTAGES**

### **EXIST IN THE FOLLOWING UNITS:**

Intercommunication Station LS-147D/FI	270 volts do
POWER DISTRIBUTION PANELS	115 volts ac
Power Distribution Panel SB-1032/TTC	110 volts ac
POWER ENTRANCE PANELS	115 volts ac
Rectifier RA-91-C	110 volts ac
Manual Telephone Switchboard SB-249A/TTC	110 volts ac

### **WARNING**

### **VENTILATION**

To prevent asphyxiation, Central Office, Telephone, Manual AN/MTC-9 must be ventilated at all times when occupied.

Change No. 8

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 12 December 1983

# OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, GENERAL SUPPORT AND DEPOT MAINTENANCE MANUAL CENTRAL OFFICE, TELEPHONE, MANUAL AN/MTC-9 (NSN 5805-00-831-6063)

TM 11-5805-288-15, 26 May 1961, is changed as follows:

Inside front cover. The following warnings are added: Jack Box PHONE MTA-5 jacks. 90-100 volts ac. Under "VENTILATION" line 2 add the following:

### **DANGEROUS GASES**

The selenium rectifiers used in Central Office, Telephone, Manual AN/MTC-9 are capable of generating dangerous toxic selenium dioxide gas when overheated. Evacuate the shelter of personnel upon detection.

The following CAUTION is added under paragraph title in the following places:

Page 43, paragraph 12.

Page 51, paragraph 17.

Page 64, paragraph 29.

Page 70, paragraph 40.

Page 88, paragraph 60.

### **CAUTION**

Use grounding adapter plugs on all equipments which use the power distribution sockets in the shelter. Insure that the ground wire of the adapter plug is securely connected to the center screw of the receptacle cover plate. In shelters which have the three terminal receptacles in the distribution lines, insure that the equipment power cords and plugs are changed to the three-wire, three-prong type.

Page 2. Paragraphs 2, 2.1 and 2.2 are superseded as follows:

### 2. Consolidated Index of Army Publications and Blank Forms

whether there are new editions, changes or additional publications pertaining to the equipment.

2.1. Maintenance Forms, Records, and Reports

Refer to the latest issue of DA Pam 310-1 to determine

- a. Reports of Maintenance and Unsatisfactory Equipment Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750. The Army Maintenance Management System.
- b. Report of Packaging and Handling Deficiencies. Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73A/AFR 400-54/MCO 4430.3F.
- c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 566-38/NAVSUPINST 4610.33C/AFR 76-18/MCO P4610.19D/DLAR 4500.15.

### 2.2. 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 or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703. In either case, a reply will be furnished direct to you.

Page 2. Paragraphs 2.3, 2.4 and 2.5 are added as follows:

### 2.3. Reporting Equipment Improvement Recommendations (EIR)

If your Telephone Central Office needs improvement, let us know. Send us an EIR. You, the user,

<sup>\*</sup>This change supersedes C6, 9 Feb 77.

are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communication. Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703. Well send you a reply.

### 2.4. 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 mare operational readiness. Disassembly and repacking of equipment for shipment or limited storage are covered in chapter 6.

### 2.5. Destruction of Army Electronic Materiel

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

Page 42. Paragraph 9.1 is added after paragraph 9.

### 9.1. Rotary Card File

The rotary card file unit on the wire chief's bench is provided for maintaining data useful to the maintenance of the telephone center. These cards may be indexed to provide any type of data most convenient for the wire chief. The exact use of the card file is left to the discretion of the wire chief; however, some suggested uses may be as follows:

- a. Electrical drop and trunk characteristics. Loop resistance of lines and dates meas-red.
- b. Specific data on the subscribers equipment and line routing (repeaters, radio links, pbx, etc.).

Page 66. Paragraph 23d is deleted.

Page 67. Paragraph 23e, line 1. Delete "at position 1."

Paragraph 23f, line 1. Delete "at position 9."

Paragraph 24a, line 5. Change "1-20" to read "1-25."

Paragraph 24c, line 1. Delete "at position 1."

Paragraph 24d, line 1. Delete "at position 9."

Paragraph 24f, line 1. Delete "at position 9."

Paragraph 24g, line 1. Delete "at position 1."

Paragraph 24*h*, line 3. Change "2140" to read "26-50."Line 4. Change "41-60" to read "41-51." Line 5. Change "21" to read "26."

Page 67. The note below the CHAPTER 4 heading is superseded as follows:

### **NOTE**

Switchboard operators maintenance of the AN/MTC-9 is limited to preventive maintenance of the SB-249A/TTC. The maintenance procedures for Crew/Operator PMCS are outlined in paragraphs 34 through 36 and for Organizational, paragraphs 37 and 38. Field and depot maintenance responsibilities for the AN/MTC-9 are listed in appendix III.

Paragraphs 34, 35, 36 and 37 are superseded as follows:

### 34. General

### **NOTE**

Refer to TM 750-244-2 for proper procedures for destruction of this equipment to prevent enemy use.

- a. Operator/crew preventive maintenance is the systematic care, servicing and inspection of equipment to prevent the occurrence of trouble, to reduce downtime, and to maintain equipment in serviceable condition. To be sure that your equipment is always ready for your mission, you must do scheduled preventive maintenance checks and services (PMCS).
- (1) BEFORE OPERATION, perform your B PMCS to be sure that your equipment is ready to go.
- (2) When an item of equipment is reinstalled after removal, for any reason, perform the necessary B PMCS to be sure the item meets the readiness reporting criteria.
- (3) Use the ITEM NO. column in the PMCS table to get the number to be used in the TM ITEM NO. column on DA Form 2404 (Equipment Inspection and Maintenance Worksheet) when you fill out the form.
- b. Organizational preventive maintenance procedures are designed to help maintain equipment in serviceable condition. They include items to be checked and how to check them. These checks and services, described in paragraph 37, outline inspections that are to be made at specific monthly (M) and quarterly (Q) intervals.
- c. Routine checks like CLEANING, PRESERVATION, DUSTING, WASHING, CHECKING FOR FRAYED CABLES, STOWING ITEMS NOT IN USE, COVERING UNUSED RECEPTACLES, CHECKING FOR LOOSE NUTS AND BOLTS AND CHECKING FOR COMPLETENESS are not listed as PMCS checks. They are things that

you should do any time you see they must be done. If you find a routine check like one of those listed in your PMCS, it is because other operators reported problems with this item.

#### NOTE

When you are doing any PMCS or routine checks, keep in mind the warnings and cautions.

### **WARNINGS**

- Never operate the generator or shelter until it 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.
- Adequate ventilation should be provided while TRICHLOROTRIFLUOROETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since TRICHLOROTRI-FLUORŎETHANE dissolves natural oils, prolonged contact with skin should be avoided. When necessary, use gloves solvent which the cannot penetrate. If the solvent is taken internally, consult a physician immediately.
- 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. Goggles must be worn at all times while cleaning

with compressed air. Compressed air shall not be used for cleaning purposes except where reduced to less than 29 pounds per square inch gage (psig) and then only with effective chip guarding and personnel protective equipment. Do not use compressed air to dry parts when trichlorotrifluoroethane has been used.

#### **NOTES**

The PROCEDURES column in your PMCS charts instruct how to perform the required checks and services. Carefully follow these instructions and, if tools are needed or the chart so instructs, get organizational maintenance to do the necessary work.

If your equipment must be in operation all the time, check those items that can be checked and serviced without disturbing operation. Make the complete checks and services when the equipment can be shut down.

- d. Deficiencies that cannot be corrected must be reported to higher category maintenance personnel. Records and reports of preventive maintenance must be made in accordance with procedures given in TM 38-750.
- 35. Operator/Crew Preventive Maintenance Checks and Services

#### NOTE

The checks in the interval column are to be performed in the order listed

36. Operator/Crow Preventive Maintenance Checks and Services Chart

#### **B** - Before

Item No.	Interval B	Itom to be increated	Procedures - Check for and have repaired or adjusted as	Equipment is not Ready/Available
NO.	В	Item to be inspected	necessary	If:
1	•	Mission Essential Equipment	Check for completeness and sati- factory condition of the equip- ment. Report missing items.	Available equipment is insufficient to support the combat mission.
2	•	Grounding System	Check grounding system for proper and tight connections.	Unable to ground properly.
3	•	AN/ITCC-7	Perform operational checks as described in TM 11-2146.	Circuits do not operate properly.

<sup>\*</sup>Do this check before each deployment to a mission location. This will permit any existing problems to be corrected before the mission starts. The check does not need to be done again until redeployment.

Item No.	Interval B	Item to be inspected	Procedures - Check for and have repaired or adjusted as necessary	Equipment is not Ready/Available If:
		•	•	
4	*	TA-312/PT telephone set	Perform operational checks a described in TM 11-2155.	Telephone met fails to provide intelli- gible communica- tions
5	*	LS-147D/FI Intercommunica -tion Station	Perform operational check as described in TM 11-5830-221-12.	
6	*	AN/MTC-9	Perform operational checks on all circuits as described in paragraphs 23, 24, 25 and 31.	Circuits do not operate properly.
7	*	Dry Cell Batteries	Check emergency lighting circuit batteries for corrosion and operation.	If dry cell batteries do not operate properly. NOTE: if equipment will not be used for two weeks or more, remove batteries

<sup>\*</sup>Do this check before each deployment to a mission location. This will permit any existing problems to be corrected before the mission starts. The check does not need to be done again until redeployment.

### 37. Organizational Preventive Maintenance Checks and Services Chart

### M - Monthly

### Q - Quarterly

Item	Interva m		Item to be inspected	Procedures		
No.	M	Q	•			
1	•		Ground System	Clean ground connections with sandpaper and clean cloth		
2	•		Dry Cell Batteries	Replace dry cell batteries that show signs of leaking, swelling or corrosion.		
				Check closed circuit voltage of emergency lighting circuit batteries.		
3	•		Storage Batteries	Check voltage and specific gravity of all storage batteries. (12 volts each battery).		
4	•		Exhaust Blowers	Check for proper operation and lubricate at oiling points with PL Special or OE-10.		
5	•		AN/TCC-7	Perform organizational checks as described in TM 11-2146.		
6		•	Fire extinguishers	Check tag for inspection due date. Weigh cylinder and refill if necessary. Replace if seal is broken or valve assembly damaged.		
7		•	First Aid Kit	Check if seal is broken. Replace missing parts.		

Page 68. Paragraph 38 is rescinded.

Page 91. Section II is rescinded.

Page 92. Appendix I. The following publication is rescinded.

DA Pam 3104 Index of Technical Manuals, Technical Bulletins, Supply Bulletins, Lubrication Orders and

Modification Work Orders.

Appendix I. The following publications are added:

DA Pam 310-1 Consolidated Index of Army Publications and Blank Forms.

TM 740-90-1 Administrative Storage of Equipment.

By Order of the Secretary of the Army:	
	JOHN A. WICKHAM JR.
	General, United States Army
Official:	Chief of Staff

ROBERT M. JOYCE Major General, United States Army The Adjutant General

### DISTRIBUTION:

To be distributed in accordance with DA Form 12-51A-1, Operator's Maintenance requirements for AN/MTC-9.

CHANGE No. 7

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 14 January 1982

Operator's Organizational, Direct Support,
General Support and Depot Maintenance Manual
CENTRAL OFFICE, TELEPHONE, MANUAL AN/MTC-9
(NSN 5805-00-831-063)

TM 11-5805-288-15, 26 May 1961, is changed as follows:

Title is changed as shown above.

Inside front cover, Warning notice, "VENTILATION" is changed to read "VENTILATION IS ESSENTIAL." Under "VENTILATION IS ESSENTIAL", add the following sentence: "When the equipment is operating, be sure that either the air-conditioner vent is open and the air-conditioner is operating, or the door of the shelter is open."

The following warnings are added:

### **WARNINGS**

Adequate ventilation should be provided

while using TRICHLOROTRIFLUORETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since TRICHLOROTRIFLUOROETHANE dissolves natural oils, prolonged contact with skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician immediately.

Insure that the generator set or central power source is OFF before making any power connections, or disconnecting power cable.







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

### **WARNINGS**

To avoid injury to personnel, or damage to equipment, only personnel engaged in the actual loading or unloading operation should be permitted near the truck, lifting device and assemblage. To eliminate confusion, all instructions must come from the loading crew supervisor.

All personnel must remain clear of the truck while the assemblage is lowered onto or lifted off the truce

Compressed air shall not be used for cleaning purposes except where reduced to less than 29 pounds per square inch (psi) and then only with effective chip guarding and personnel protective equipment. Do not use compressed air to dry parts when TRICHLOROTRIFLUOROETHANE has been used. Compresses air is dangerous and can cause serious bodily harm if protective means or methods are not observe to prevent chip or particle (of whatever size) from being blown into the eyes or unbroken skin of the operator or other personnel.

### **WARNINGS**

### **BATTERY SHOP SAFETY PRACTICES**

Nickel-cadmium battery maintenance personnel should be thoroughly trained in the use of charging, discharging, and test procedures. The employment of properly trained personnel in the maintenance of nickel-cadmium batteries cannot be overemphasized. The nickel-cadmium battery shop must be used ONLY to maintain nickel-cadmium batteries. Anything associated with lead-acid batteries should never come in contact with nickel-cadmium batteries, including acid fumes. In addition to the equipment required to maintain nickel-cadmium batteries; the nickel-cadmium battery shop should have adequate ventilation; deluge shower, eyewash fountain, and fire extinguisher (CO<sub>2</sub>).

#### **TIGHTENING TERMINAL SCREWS AND STUDS**

Be extremely careful when tightening terminal screws and studs. Bodily injury and damage to the equipment may result if the torque wrench accidentally causes a short circuit.

### FIRE FIGHTING SAFETY PRACTICE

CO<sub>2</sub> is an acceptable fire extinguishing agent once a fire has developed. In no case should CO<sub>2</sub> be directed into a battery compartment to effect cooling or displace explosive gases. The static electricity generated by the discharge of the extinguishers' could explode hydrogen/oxygen gases trapped in the battery compartment.

Page 2, paragraphs 2, 2.1 and 2.2 are superseded as follows:

### 2. Reports of Maintenance Forms, Records and Reports

- a. Reports of Maintenance and Unsatisfactory Equipment. Department of Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System.
- b. Report of Packaging and Handling Deficiencies. Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73/AFR 400-54/MCO 4430.3E.
- c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33B/AFR 75-18/MCO 4610.19C/DLAR 4500.15.

### 2.1. Reporting Errors and Recommending Improvements

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### 2.2. Reporting Equipment Improvement Recommendations (EIR)

If your Central Office, Telephone, Manual AN/MTC-9 needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communications-Electronics Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. We'll send you a reply.

Page 7. paragraph 5.1. Change the title of the paragraph to read "Integral Components of the End Item."

Add the following note after paragraph heading.

### NOTE

These items, when assembled, comprise the AN/MTC-9 and must accompany it whenever it is transferred or turned in. The illustrations will help you identify these items.

Paragraph 5.1a. column 1, headed "FSN", changed to read "NSN."

Column 1, line 36, change "6110-649-8146" to read "6110-00-985-7574."

Column 1, line 37, change "6110-823-2886" to read "6110-937-4964."

Page 8, paragraph 5.1a. Change column 1, headed "FSN" to read "NSN."

Column 1, line 6, change "5965-682-2769" to read "5965-00-069-8885." Column 4, change "Handset-Headset H-144/U: H-144A,B/U" to read "Hand-set-Headset H-182/PT."

Column 1, line 15, change "5830-752-5357" to read "5830-01 008-3126." Column 4, change "Intercommunication Station LS-147C/FI" to read "Intercommunication Station LS-147/CI.

Paragraph 5.1*b*, column 1, headed "FSN", change to read "NSN."

Page 9, paragraph 5.1*b*. Change column 1, headed "FSN" to read "NSN."

Page 67, under "Note". Change the last sentence to read "Basic Issue Items List (BILL) for the AN/MTC-9 are listed in appendix II."

Paragraph 34b(1) is superseded as follows:

(1) Use a dry, clean, lint-free cloth or brush to remove dust and dirt. If necessary moisten the cloth or brush with cleaning compound TRICHLOROTRI-LUOROETHANE (NSN 6850-00-105-3084) to remove grease, oil, dirt, and dust. After cleaning, wipe dry with a clean cloth.

Paragraph 34b(2), line 1. Change "60" to read "29".

Paragraph 35b, line 3. Change to read "Cleaning compound, TRICHLOROTRIFLUOROETHANE..... 6850-00-105-3084".

Page 68. Paragraph 39.1 is added after paragraph 39.

### 39.1. Final Performance Check

- a. Initial Conditions.
- (1) The respective final performance checks on the following components of the AN/MTC-9 (if maintenance supplied in accordance with current BIIL), should have been successfully performed before assembly into the end item and the execution of this procedure.
- (a) 5805-00-855-9822 Trunk Relay Tele Circuit TA-453/GTA-14.
  - (b) 5805-00-543-0012 Telephone Set TA-312/PT.
- (c) 5805-00-855-9821 Line Relay Tele Circuit TA-4t52/GTA- 14V.
- (*d*) 5805-00-856- 048 Power Distribution Panel SB- 1399/GTA-14V.
- (e) 5805-00-892-1080 Manual Switchboard SB-1398/GTA- 14V.
- (*j*) 5830-01-008-3126 Intercommunication Station LS-147F/FI.
- (*g*) 6110-00-937-4964 Distribution Box J-2317, A/U.

- (h) 6110-00-985-7574 Distribution Box J-
- 1077, A/U.
- (i) 4120-00-892-1989 Air Conditioner Ellis/
- Watts A-18.
  - (/) 5965-00-669-6871 Headset-Microphone

H-91A/U.

(k) 5965-00-892-1068 Headset-Microphone

H-210/G.

(I) 5965-00-069-8885 Headset-Microphone

H-182/PT.

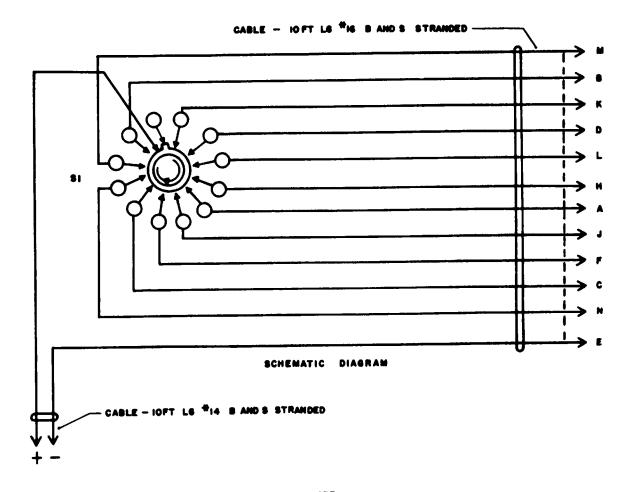
- (m) 6625-00-691-3066 Test Set TS-1361/G.
- (n) 6625-00-188-3232 Test Set TS-27B/

TSM.

- (2) Ground each van at the entrance box ground terminal. Connect 115 + 10V, 60 cyc, 1 phase power to the equipment in accordance with paragraph 16c of Tm 11-5805-288-15. Include any maintenance supplied power cables in this connection.
  - b. Semitrailer, Van M-348A2F and U-348A2D.
    - (1) Marking and refinishing.
      - (a) Refinishing.
- 1. Exterior: Lusterless dark green enamel in accordance with MIL-E-46061 (use until exhausted) or lusterless forest green enamel in accordance with MIL-E-52798.
- 2. Refer to TB SIG 355-2. Touchup of original finish is permitted. Where complete refinishing of walls and ceiling is required, use semigloss light green 22533 lacquer per MIL-L-52043. Doors will remain same finish as exterior finish.
- 3. Floor: Composition material of linoleum is used and not painted.
  - (b) Marking. Refer to TB 43-0209.
  - (2) Repair practice guideline. Body patches and

- other repair actions described in TB 43-0124 are acceptable in the repaired van.
- (3) Performance tests and inspection. Refer to TM 9-2330-246-14 (Sep 68), page 28, table 3-3.
- (a) Refer to sequence no. 5. Also perform the following:
- 1. Receptacle circuit test, M-348A2D. Refer to the electrical system schematic of figure 3-5 of TM 9-2330-246-14 (Sep 68). Using an ohmmeter, check the continuity of the wiring between the front and rear receptacles to verify that it conforms to figure 3-5. Continuity is a resistance of I ohm or less.
- 2. Receptacle circuit test, M-348A2F. Refer 19 the electrical system schematic of figure 3-6 of TM 9-2330-246-14 (Sep 68). Using an ohmmeter, check the continuity of the wiring between the front and rear receptacles to verify that it conforms to figure 3-6. Continuity is a resistance of I ohm or less.
- 3. Lighting system test. Connect the Trailer Light Tester SD-B-62-2038 (fig. 39.1) and the 24 vdc Nobatron #E-28-30 to the receptacle on the front of the semitrailer and check its lighting system to make certain that it is in working order.
- (b) Refer to sequence no. 6. Also perform the following test: The trailer will be sprayed with water in a manner to simulate rain allowing the water to run over the sides. Let the trailer remain closed for 1/4 hour, then open doors and check for water leaks. There shall be no indication of water entering the trailer.
- (c) Refer to sequence nos. 7, 8, 9, and 20; road test. For acceptance purposes, only one road test is required. Use a travel distance of about I mile within the confines of depot property.

Figure 39.1 is added after paragraph 39.1.



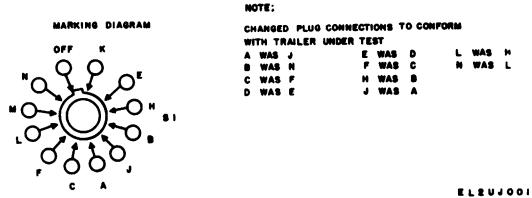


Figure 39.1 Trailer Lights Test Set.

- c. Heater Test.
- (1) Connect power cord through Ammeter ME-6A/U to an ac power source.
- (2) Place HEAT-OFF-FAN switch to the FAN position.
- (3) The fan shall operate, expelling unheated air through the adjustable louvers.
- (4) Place the HEAT-OFF-FAN switch to the HEAT position. Set thermostat to maximum heat.
- (5) The fan shall operate, expelling heated air through the adjustable louvers.
  - (6) Note ammeter reading.
- (7) Adjust thermostat to the point where the contacts just close as indicated by the current drain noted above.
- (8) Temporarily enclose the unit under test with an external cover (box).
- (9) Within a period of not more than 3 minutes, the thermostat contacts will c, e., as indicated by a drop in the current drain noted above.
  - (10) Remove the temporary cover.
  - (11) Remove the ac power source.
  - (12) Repeat above for remaining heaters.
- d. Ground System Test. With ac power removed, assure that each receptacle ground contact or raceway ground terminal has continuity (1 ohm or less) with the ground terminal in the SIGNAL and POWER ENTRANCE box (using ohmmeter).
- e. Panel Meters. Test in accordance with TB 11 662566650.
- f. Blowers or Fans with Motors. Test in accordance with TM 11-6105-200-50. The impeller is used as a load.
- g. Clocks (If Maintenance Supplied). The clock shall be accurate to an equivalent of 30 seconds per 24-hour period.
  - h. Power Distribution and Wiring Test.
- (1) AN/MTA-5. Check controls, indicators and functions as described on page 59, paragraph 27a, b, and c.
- (2) AN/MTA-7. Check controls, indicators and functions as described on page 62, paragraph 280, b, and c.
- (3) Use ac Outlet Tester, Hubbell 5200, to check for the presence of ac voltage at each unused receptacle as the associated power switch is operated to ON. Use improvised adapter for outlets other than standard three wire.

- *i.* Signal Circuits. Refer to the signal schematic diagram of figures 68, 69, 70, and 71. Perform the following tests on all wiring shown including the seven MDF's TA-454/GTA-14(V) or TA-257/TTC and all interconnecting cables. Omit test on the information turret, the night alarm bell, and the other operating components shown. Also perform test on any maintenance supplied 26-pair telephone cable assemblies CX-4566/G.
- (1) Continuity test. Perform a point-to-point continuity test using an ohmmeter (TS-352B/U) or DIT-MCO automatic circuit analyzer. Measured resistance shall not exceed 6 ohms. Use a test plug for connection to each jack to check circuit continuity.
- (2) Insulation breakdown/resistance test. At each 26-pair receptacle on both the AN/MTA-5 and AN/MTA-7 equipments and on all interconnecting cables, perform an insulation test between any one conductor and all the rest (including ground) using a 500V megohmeter ME-213A/U (GR-1862A) or DIT-MCO Automatic Circuit Analyzer. Measured insulation resistance shall be 500 megohms minimum.
  - j. System Operation Test.
- (1) Make the connections between the AN/MTA-5, A and the AN/MTA-7, A as indicated in paragraph 21a, items 2, 3, and 4.
- (2) Refer to the testing procedures on page 56, paragraphs 23, 24, and 25.

Page 91, paragraph 61.1 is added after paragraph 61.

### 61.1. 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 are covered in paragraphs 61 and 62.

Page 91, section II. Change title to read "Destruction of Army Electronics Materiel."

Paragraph 63 is superseded as follows:

### 63. Authority for Destruction

Destruction of the equipment will be accomplished only upon order of the commander. Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2 and paragraph 64.

### APPENDIX I REFERENCES

AR 310-25	Dictionary of United States Army Terms.
AR 310-50	Authorized Abbreviations and Brevity Codes.
AR 702-7-1	Reporting of Product Quality Deficiencies Within the U.S. Army.
DA Pam 310-4	Index of Technical Publications.
FM 21-6 FM 21-30	How to Program and Conduct Military Training.  Military Symbols.
SB 11-6	FSC Class 6135: Dry Battery Supply Data.
SB 11-573	Painting and Preservation of Supplies Available for Field Use for Electronics Command
3D 11-373	Equipment.
TB 11-6625-666-50	Inspection Requirements for Repaired Electrical Indicating Instruments.
TB SIG 355-2	Depot Inspection Standard for Refinishing Repaired Signal Equipment.
TB 43-0124	Maintenance and Repair Procedure for Shelters, Electrical Equipment S 141/G and S-141B/G (NSN 5410-00-752-9690), S-144/G, S-144A/G, S-144B/G, S-144C/G and S-144D/G (5410-00-542-2532), S-250/G (5410-00-999-4935), S-250/G (Shielded) (5410-00-489-6076), S-280/G (5410-00-999-5269), S-280A/G (5410-00-999-6022), S-280B/G (5410-00-117-2868), S-280B/G (Shielded) (5410-00-001-4093), S-280C/G and S-318/G (5410-00-763-2339) and S-318A/G (5410-00-16-7086).
TB 43-0209	Color, Marking and Camouflage Painting of Military Vehicles, Construction Equipment, and Materials Handling Equipment.
TB 385-4	Safety Precautions for Maintenance of Electrical/Electronic Equipment.
TM 9-2330-246-14	Operator's Organizational, Direct Support and General Support Maintenance Manual
	(Including Repair Parts and Special Tools List) for Semi Trailer, Van, Electronic M348A2 (FSN 2330-678-3838), M348A2C (2330-690-7724), M348A2D (2330-690-7725), M348A2F (2330-690-7726), M348A2F (2330-690-7726), M348A2G (2330-797-7405), M348A2H (2330-973-1262), M348A2K (2330-740-2322), M348A2N (2330-740-2329), M373A2 (2330-705-8932), M373A2C (2330-672-7496), M373A2D (2330-738-586), M373A3 (2330-937-4851), M373A4 (2330-937-4519), and M373AS (2330-781-7755).
TM 11-362	Reel Units, RL-31, RI-31-B, -C, -D, and -E (including Organizational Repair Parts and
	Special Tools Lists).
TM 11-2057A	Test Set TS-27B/TSM.
TM 11-2064	Panels BD-132 and BD-132-A, and Power Switchboard SB361/TT.
TM 11-2138	Terminal Box TA-125/GT; Telephone Repeating Coil Assembly TA-145/GT; Maintenance Kit MX-842/GT; and Switchboard Signal TA-123/GT.
TM 11-2146	Central Office, Telephone, Manual AN/TTC-7 (NSN 5805-00-395-9422) and AN/TTC-7A (5805-00-820-9549) and Telephone, Central Office Group, Manual AN/GTA-14(V) (5805-00-892-1081) and Telephone Circuit Trunk Relay TA-276A/TTC (5805-00-03-3347).
TM 11-3895-202-24P	Organizational, Direct Support and General Support Maintenance Repair Parts and Special Tools Lists (Including Depot Maintenance Repair Parts and Special Tools): Reel Units RL-31, RL-31B, RL-31D, and RL-31E (NSN 389-00-252-6896).
TM 11-5500	Multimeter TS-297/U.
TM 11-5805-201-20P	Organizational Maintenance Repair Parts and Special Tool Lists for Telephone Set TA-312/PT (NSN 5805-00-543-0012).
TM 11-5805-201-35	Direct Support, General Support, and Depot Maintenance Manual (Including Repair Parts and Special Tools List): Telephone Set TA-312/PT (NSN 5805-00-543-0012).

TM 11-5805-212-12 TM 11-5805-212-20P	Operator and Organizational Maintenance for Telephone Signal Convertor TA-187/U.  Organizational Maintenance and Repair Parts and Special Tool Lists for Convertor
TM 11-5805-212-34P	Telephone Signal TA-187/U, FSN 5805-581-9674.  Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools): Converter, Telephone Signal TA-187/U (FSN 5805-581-9674).
TM 11-5805-234-20P	Organizational Maintenance Repair Parts and Special Tool Lists: Central Office, Telephone, Manual, AN/TTC-7 .(FSN 5805-503-1210) and AN/TTC-7A (5805-820-9549).
TM 11-5805-234-34P	Direct Support and General Support Maintenance Repair Parts and Special Tools Lists (Including Depot Maintenance Repair Parts and Special Tools): Central Office, Telephone, Manual AN/TTC-7 (FSN 5805-503-1210) and AN/TTC-7A (5805-820-9549).
TM 11 -5805-269-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart: Dials, TA-45/GT, TA-4B/GT, and TA-45C/GT.
TM 11-5805-288-20P	Organizational Maintenance Repair Parts and Special Tools List: Central Office, Telephone, Manual AN/MTC-9 (FSN 5805-831-6063).
TM 11-5805-288-34P	Direct Support and General Support Maintenance Repair Parts and Special Tools Lists (Including Depot Maintenance Repair Parts and Special Tools): Central Office, Telephone, Manual AN/MTC-9 (FSN 5805-831-6063).
TM 11-5805-297-12P	Operator and Organizational Maintenance Repair Parts and Special Tools List for Generators, Ringing, Hand GN-41 and GN-41B.
TM 11-5805-298-15	Operator's, Organizational, Direct Support, General Support and Depot Maintenance Manual: Generator, Ringing, Static, TA-248/TT and TA-248A/TT (NSN 5805-00-503-1482).
TM 1-5805-298-24P	Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools): Generators, Ringing, Static TA-248/TT and TA-248A/TT (NSN 5805-503-1482).
TM 11-5805-29912P	Operator and Organizational Maintenance Repair Parts and Special Tools Lists and Maintenance Allocation Chart: Panel, Power Distribution SB-1032/TTC.
TM 11-5805-299-35P	Field and Depot Maintenance Repair Parts and Special Tools Lists for Panel, Power Distribution SB-1032/TTC.
TM 11-5830-221-12	Operator's and Organizational Maintenance Manual: Intercommunication Stations, LS-147A/F I, LS-147B/FI, LS-147C/FI, and LS-147D/FI (NSN 583-00-0752-5357).
TM 11-5830-221-24P	Organizational, Direct Support, and General Support Repair Parts and Special Tools List: Intercommunications Station; LS-147C/FI (NSN 5830-00-752-5357).
TM 11-5830-221-35	Field and Depot Maintenance Manual: Intercommunications Stations; LS-147A/FI, LS-147B/FI, LS-147C/FI, and LS-147D/FI.
TM I 1-5935-203-15P	Organizational, Direct Support, General Support, and Depot Maintenance Repair Parts and Special Tool Lists: Connectors, Receptacle, Electrical U-186A/G and U-186B/G.
TM 11-5935-212-13P	Operator's Organizational, and Direct Support Maintenance Repair Parts and Special Tool Lists: Connectors, Plug, Electrical U-185A/G (NSN 5935-577-8846) and U-185B/G (NSN 5935-00045-9830).
TM I 1-5965-206-14P	Operator's, Organizational, Direct Support, General Support Maintenance Repair Parts and Special Tools Lists (Including Depot Maintenance Repair Parts and Special Tools): Headset-Microphone H-91A/U, (FSN 5965-669 6871): Handset-Headset H-144/U, H-144A/U, H-144B/U, and H-144C/U (FSN 5965-682-2769) and Headset-Microphone H-210/G (FSN 5965-892-1068).
TM 11-5965-211-15P	Operator, Organizational, Field and Depot Maintenance Repair Parts and Special Tools List

and Maintenance Allocation Chart: Chest Set H-12/GT.

TM 11-5965-224-14P	Operator's, Organizational, Direct Support, General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools): Handset H-60/PT (FSN 5965-669-9145) and H-165/U (5965-543-1837).
TM 11-5965-230-12P	Operator's and Organizational Maintenance and Repair Parts and Special Tools Lists and Maintenance Allocation Chart for Headsets HS-30-A, -B, -C, -D, -E, -F, -G, -H, -J, -K, -L, -R and -U.
TM 11-6105-200-50	Depot Maintenance Manual for Fractional Horsepower Motors.
TM 11-6110-201-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools Lists for Distribution Boxes J-1077/U and J-1077A/U (NSN 6110-00-985-7574).
TM 11-6130-220-15	Operator's, Organizational, Direct Support, General Support and Depot Maintenance Manual for Rectifiers RA-91, -91A, -91B, and -91C (NSN 6130-00-222-6204).
TM 11-6625-203-12	Operator's and Organizational Maintenance Manual: Multimeter, AN/URM-105 and AN/URM-105C (Including Multimeter ME-77/U and ME-77C/U).
TM 11-6625-203-24P	Organizational, Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools): Multimeter, AN/URM-105 (Including Multimeter ME-77/U) (FSN 6625-581-2036).
TM 11-6625-203-24P-2	Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tool List (including Depot Maintenance Repair Parts and Special Tools): for Multimeter, AN/URM-105C (NSN 6625-00-999-6282).
TM 11-6625-203-35	Direct Support, General Support and Depot Maintenance Manual: Multimeters, AN/URM-105 (NSN 6625-00-581-2036) and AN/URM-105C (6625-00-999-6282) Including Multimeters ME-77/U (6625-00-284-0854) and ME-77C/U (6625-00-999-6625).
TM 11-6625-240-20P	Organizational Maintenance Repair Parts and Special Tools Lists: Test Set TS-27B/TSM (FSN 6625-188-3232).
TM 11-6625-240-40P	General Support Maintenance Repair Parts and Special Tool Lists (Including Depot Repair Parts and Special Tools): Test Set TS-27B/TSM (FSN 6625-188-3232).
TM 11-6625-510-24P	Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools): Test Set, Telephone TS-1361/G (FSN 6625-691-3066).
TM 38-750	The Army Maintenance Management System (TAMMS).
TM 750-244-2	Procedures for Destruction of Electronics Materiel to Prevent Enemy Use (Electronics Command).

Page 94, appendix II. section i. Paragraph I is superseded as follows:

This appendix lists the minimum essential items required to place the AN/MTC-9 in operation, to operate it, and to perform emergency repairs. Although shipped separately packed they must accompany the AN/MTC-9 during operation and whenever it is transferred between accountable officers. The illustrations will assist you with hard-to-identify items. This manual is your authority to requisition replacement BII, based on TOE/MTOE authorization of the end item.

Paragraph 3a(2) is superseded as follows:

(2) Location. The physical location of each item listed is given in this column. The lists are designed to inventory

all items in one area of the major item before moving to an adjacent area.

Paragraph 3b is superseded as follows:

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

Paragraph 3h is superseded as follows:

*h.* Quantity. This column is left blank for use during an inventory.

Section II. column (I)(B). Change the heading from "Item No." to "Location."

Column (2). Change the heading from "Federal stock number" to "National stock number."

Column (8). After column (7), add new column (8), "Quantity."

By Order of the Secretary of the Army:

E. C. MEYER General, United States Army Chief of Staff

Official:

ROBERT M. JOYCE Brigadier General, United States Army The Adjutant General

Distribution:

To be distributed in accordance with Special List.

CHANGE No. 5

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 17 December 1973

# Operator's, Organizational, Direct Support, General Support and Depot Maintenance Manual Including Repair Parts and Special Tool Lists CENTRAL OFFICE, TELEPHONE, MANUAL AN/MTC-9

TM 11-5805-288-15, 26 May 1961, is changed as follows:

Page 2, paragraph 1.1. Delete paragraph 1.1 and substitute:

### 1.1. Indexes of Publications

- a. DA Pam 310-4. Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.
- b. DA Pam 310-7. Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

Paragraph 2.

Delete paragraph 2 and substitute:

#### 2. Maintenance Forms and Records

Maintenance forms, records and reports which are to be

used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

### 2.1. Reporting of Errors

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028, Recommended Changes to Publications, and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-C Fort Monmouth, NJ 07703.

Page 7. After paragraph 5 add:

### 5.1 Components Comprising the Operable End Item

a. Telephone Terminal Group: AN/MTA-5 and AN/MTA-5A.

FSN	Qua	antity	
	AN/MTA-5	AN/MTA-5A	Nomenclature, part number., and mfr code
			NOTE  The part number is followed by the applicable 5-digit Federal supply code for manufacturers (FSCM) identified in SB 706-42 and used to identify manufacturer, distributor, or Government Agency, etc.
			NOTE  Dry batteries shown are used with the equipment but are not considered part of the equipment. They will not be preshipped automatically but are to be requisitioned in quantities necessary for the particular organization in accordance with SB 11-6.

EON	Qu	antity	
FSN	AN/MTA-5	AN/MTA-5A	Nomenclature, part number., and mfr code
5805-831-6064	1	1	Telephone Terminal Group AN/MTA-5; AN/MTA-5A: Contains subscriber and trk term and sw term groups w/w AN/MTA-7 to provide connecting facilities for ANIMTC-9
4420 002 4000	4		TELEPHONE TERMINAL GROUP ANI/TA-5 AND AN/MTA-5A
4120-892-1989 4120-289-1323	1	1	Air Conditioner: A-18, 98437
7520-753-4807	3	1 3	Air Conditioner: 61510  Basket; Wastepaper: 36, 85838
6135-120-1020	12	12	Battery, Dry BA-30
7920-291-8305	1	1	Broom, Upright: 54 in. lg; 1820, 45002
7920-811-1614	1	1 1	Brush, Dusting; Bench: Fibre; 378, 48092
5995-752-1298	8	8	Cable Assembly, Power, Electrical CX-3892/U: 48 v dc
1200	Ü		supply; 4 ft 9 in. Ig o/a incl term
5995-173-8254	2	2	Cable Assembly, Power, Electrical CX-3692/U: 48 v dc supply; 50 ft 6 in. lg o/a incl term; to be modified as required, stowed
5995-681-8507	2	2	Cable Assembly, Power, Electrical CX-4762/U: f/20 cyc ringing; 4 ft 2 in. lg excl term; to be modified as required
5995-686-5299	1	1	Cable Assembly, Power, Electrical CX-4845/U: 48 v dc supply; 31 ft 5 in. Iq o/la; to be modified as required
5995-823-2486	1	1	Cable Assembly; Power; Electrical: 2 cond; approx 25 ft Ig incl term; SM-D-350987; 80063
5995-752-2548	1	I	Cable Assembly; Power; Electrical CX-7705/U: 15 ft
5995-889-1500	1	1	power stub Cable Assembly; Power; Electrical CX-7453/U: 100 ft power cable
5995-889-0825	1	1 1	Cable Assembly; Power; Electrical CX-7453/U: 50 ft power cable
5995-823-2882	2	2	Cable Assembly; Special Purpose; Electrical: 2 cond: approx. 6 ft 6 in. lg o/a; 1041.515B3, 00542
5995-823-2620	1	1	Cable Assembly; Special Purpose; Electrical: 7 cond; F/H-144/U; 8 ft 1 in. lg o/s SM-C-382-35, 8p063
5995-284-6353	4	4	Cable Assembly, Telephone CX-2584A/U: line and trk; 8 ft
5995-284-6352	27	27	Ig excl term  Cable Assembly, Telephone CS2S84A/U: line and trk 50 ft Ig
5995-985-7571	78	78	excl term; installed in floor Cable Assembly; Telephone CX-4566/G: 52 cond; 15 ft lg
5995-889-0803	2	2	Cable Assembly; Telephone CX-4760Al/U: 52 cond; 15 ft lg
5995-823-2618	1	1	Cable Assembly; Telephone: 2 cond; approx 3 ft 3
0000 020 2010		'	in. Ig o/a; SM-C-37756311, 80063
5995-823-2807	2	2	Cable Assembly; Telephone: 2 cond; approx 2 ft 4 in
5995-823-2619	2	2	Ig o/a: SM-C-3775631, 80063 Cable Assembly; Telephone: 2 cond; approx 3 ft 7 in.
5005 000 0055	0		Ig o/a: SM-C-377563111, 80063
5995-823-2955   5995-985-8147	2 2	2 2	Cable Assembly, Telephone: 2 cond; approx 6 ft lg; 8M-C-377563, 80063
5995-823-2515	2 15	15	Cable Assembly, Telephone: 50 ft lg; f/special circuits; SM-C-377750, 80063 Cable Assembly and Reel: (Consists of CX-466AIGG, 250 ft and reel
0000-020-2010	10	13	RC-435/U)
7105-268-8214	2	2	Chair, Folding: Fed Spec AA-C-291, type 1, class 1
7110-273-8798	1	Ī	Chair; Rotary: Fed Spec AA-C-295, class 1, size 1;  (retain mtg bracket when replacing chair)
7910-753-5256	1	1	Cleaner; Vacuum: 2830, 29335
6645-892-4369	i	'	Clock; Wall: Type A; P-642, 11755
6645-526-4395	•	1	Clock, Wall: MIL -3956; M2 AN5743L2
5995-170-7918	4	4	Cord CD-409: 110 v ac supply; approx 50 ft 6 in.
			Ig o/a; to be modified as required
5995-170-7992	9	9	Cord CO-38: f/btry; 12 in. Ig
7210-753-3043	3	3	Cushion; Chair: Fed Spec ZZ-C-766, type III, class B
6110-649-8146	15	15	Distribution Box J-1077A/U
6110-823-2886	4	4	Distribution Box J-2317/U
5120-752-8862	1		Extractor; Electron Tube: ETP-7, 95344
5120-293-2692	1		Extractor; Electron Tube: ETP-9, 95344
4140-729-6001	1		Fan; Ventilating Assembly: K8802L, 82877
5120-408-1481		1	Extractor, Electron Tube: f/7 pin electron tube; 7113, 95344
5120-293-2692		1 1	Extractor, Electron Tube: f/9 pin electron tube; 9113, 95344

FON	Qua	antity	
FSN -	AN/MTA-5	AN/MTA-5A	Nomenclature, part number., and mfr code
4140-061-2056	1	1	Fan, Ventilating, Propeller: in battery compartment; BC2910F-20, 99743
7110-777-6860	1	1	File; Visible Index: 1024X, M84
4130-965-1230	2	2	Filter, Air Conditioning: 10-1/2,' w x 40" h x 2" thk approx; 810004, 8288
5120-776-9917	6	6	Grip; Cable; Jaw: EQA6-8P, 80063
5120-776-9918	119	119	Grip; Cable; Jaw: EQA26-S, 9344
5965-682-2769	1	1	Handset-Headset H-144/U: H-144A,B/U
4620-224-7900	3	3	Heater; Space; Electric: 115 v, 1,500 watts
6630-171-9572	1	1	Hydrometer: type V-2-B, 19481
5120-198-5413	1	1	Key: Socket; Head Screw: 1-1/8 in. Iq: 532L, 71159
5805-034-0968	1	1	Installation Kit: Marked bag I of 5; p/o passageway; SM-B-377677, 80063
5805-994-9126	1	1	Installation Kit: Marked bag 2 of 5; p/o passageway; SM-B-377678, 80063
5806-034-0970	1	1	Installation Kit: Marked bag 3 of 5; p/o passageway; SM-B-377679, 80063
5805-034-0971	1	1	Installation Kit: Marked bag 4 of 5; p/o passageway; SM-B-377680, 80063
5805-034-0962	1	1	Installation Kit: Marked bag 5 of 5; p/o passageway; SM-B-377681, 80063
5830-752-5357	2	2	Intercommunication Station LS-147C/FI
5120-198-5410	1	1	Key; Socket; Head Screw: 4-1/2 in. Iq; L shape; 316L, 71169
6230-729-9614	3	3	Lantern; Electric: 2106-7, 32572
6625-542-1761	2	2	Lead, Test CX-6100G: F/testing ckt w/o removing cables; 6 ft lg
6230 615-6385	1	1	Light, Extension: 25 ft lg; 506KS2516-128J, 79409
5805-855-9823	7	7	Main Distribution Frame; Telephone TA-464/GTA-14
5935-752-8011	1	1	Maintenance Kit; Electronic Equipment: For maintenance of connector,
			plug, Electrical U-77 U: Nos. SC-B-68419, SC-B-68420, SC-B-68421, SC-B-68424, 8C-B-68429, MIL std 18-35537-78; 80063
5805-856-0048	2	2	Panel: Power Distribution S8B-1399TA-14
5805-759-7430	1	1	Passageway Assembly: Incl installation kits No. 1, No. 2, No. 3, No. 4, No. 6, and platform assembly; 8M-D-377671, 80063
5120-392-8355	1		Pin Straightener; Electron Tube: General Cement pin 8665
5120-596-4303		1	Pin Straightener, Electron Tube: Duro Specialty Co. pin D-279-SN
5805-034-0967	1	1	Platform Assembly: p/o passageway; SM-D-377683, 80063
5120-752-9675	2	2	Screwdriver; Flat Tip: Fed Spec 000-8-121, type 1, class 5, style 1, design A, shape A
3895-252-6896	1	1	Reel, Cable RI-31
5120-708-5312	10	10	Screwdriver: Piloted, adj; N12348 (incl 2 ea spares), 04563
2330-690-7726	1	1	Semitrailer; Van: type No. M348A2F
7620-162-6178	1	1	Sharpener; Pencil: Model L, 08287
7110-281-4489	1	1	Stool, Drafting: Fed Spec AA-C-295, class 2, size 3
5805-855-9821	6	6	Telephone Circuit; Line relay TA-4652/GTA-14
5805-855-9822	3	3	Telephone Circuit Trunk Relay TA-453/GTA-14
5805-543-0012	4	4	Telephone Set TA-312/PT
6685-892-5669	1	1	Thermometer: 26929, 19481
6625-188-3232	1	1	Telephone Test Set TS-27B/TSM
6145-284-1499	2000 FT	2000 FT	Wire WD-15/U MDF Jumper Wire & 2 cond (Authorized allowances
5120-293-2437	1	1	will be a minimum of or a multiple of 2,000 ft) Wrench: T shape; 51-3/4 in. Is 965D, 23384
J120-233-2431	<u> </u>	1	ττιοποπ. 1 οπαρο, ο 1-ο/4 m. 10 ουσυς, 20004

### b. Telephone Switchboard Group: AN/MTA-7 and AN/TA-7A

FON	Quantity		
FSN	AN/MTA-7	AN/MTA-7A	Nomenclature, part number., and mfr code
5805-831-6065	1	1	Telephone Switchboard Group AN/MTA-7; AN/MTA-7A: A tel swbd group which provides swbd facilities and which, when u/w AN/MTA-7 forms AN/MTC9
4120-892-1989	1		Air Conditioner: A-18, 96437
4120-289-1323		1	Air Conditioner: 61510
6135-120-1020	4	4	Battery, Dry BA-30
7520-753-4807	4	4	Basket, Wastepaper: 36, 8538
6350-723-1556	1	1	Bell Assembly, Electrical: 8M-C-183I 44, 80063
7920-291-8305	1	1	Broom; Upright: 54 in. Ig; 1820, 41092
7920-811-1614	1	1	Brush; Dusting; Bench: fibre; 378, 41092
5995-752-1298	8	8	Cable Assembly, Power, Electrical CX-3602AU: 48 v dc supply; 4 ft 9 in. Ig o/a incl term

ECVI	Qua	antity	
FSN	AN/MTA-7	AN/MTA-7A	Nomenclature, part number., and mfr code
5996-173-6163	9	9	Cable Assembly, Power, Electrical CX-3694/U: Position grouping; 6 ft 6 in. lg o/a incl term; (incl 1 stowed)
5995-681-8507	7	7	Cable Assembly, Power, Electrical CX-4762/U: f 20-c6c ringing; 4 ft 2 in. lg excl term to be modified as required
5995-682-3440	2	2	Cable Assembly, Power, electrical CX-4762/U; f 20-c6c ringing; 50 ft o/a, incl. term to be modified as required
5995-823-2486	1	1	Cable Assembly; Power Electrical: 2 cond; approx 26 ft 6 in. lg incl term; 8M-D417, 80063
5996-752-2548	1	1	Cable Assembly; Power; Electrical: CX-770S1U: 15 ft power stub
5995-889-1500	1	1	Cable Assembly; Power; Electrical CX-7463U: 100 ft power cable
5995-284-6353	235	235	Cable Assembly, Telephone CX- A/U: line and trk; 8 ft  Ig excl term; to be modified as required: (incl r stowed)
5995-889-0803	2	2	Cable Assembly; Telephone CX-4780A/U: 52 cond; 16 ft lg stub
5995-823-2619	4	4	Cable Assembly, Telephone: Approx 3 ft Ig; PJ-047B one end, other end stripped and tinned; SM-C-3775-III, 80083
5995-823-2615	16	16	Cable Assembly and Reel: (consists of CX.4566A/G and Reel RC143/U)
7105-268-8214	1	1	Chair; Folding: Fed Spec AA-C-291, type 1, class 1
7110-817-0220	9	9	Chair, Rotary: r/operator; 776AR (mtg plate should be removed and reused when chair is replaced), 18216
7110-273-8798	1	1	Chair, Rotary: Fed 8pec AA-C26, class 1, size 1 (NOTE. Retain mtg bracket when replacing chair.)
6645-892-4369	9	2	Clock; Wall: P-642, type A, 11755
6645-526-4396	2		Clock:MIL-C-3946 M2 ANS74312
5995-164-6577	8		Cord CD-413: 110 v ac supply; 3 ft 4 in, Ig o/a incl term
7210-755-3043	1	1	Cushion; Chair: Fed 8pec ZZ-C-78, type III, class B
6110-649-8146	12	12	Distribution Box J-1077AIU
5120-765-8112	1		Extractor; Electron Tube: ETP-7, 95344
5120-293-2692		1	Extractor; Electron Tube: ETP-9, 95344
5120-406-1481	_	1	Extractor, Electron Tube: f/7 pin electron tub; type 7113, 85944
5120-293-2692	1		tractor, Electron Tube: f/r pin electron tube; type 9113, S9344
4140-729-6001	2		Fan; Ventilating Assembly: type KS802L, 82877
7110-777-6860	1	1	File; Visible Index: 1024X, 384
4130-965-1230	2 6	2 6	Filter, Air Conditioner: 10-1/2 w x 40- h x 2" thk approx; 810004, 82666 Grip; Cable; Jaw: EQA-6-8P, 96344
5120-776-9917 5120-776-9918	94	94	Grip; Cable; Jaw: EQA-6-6F, 96344
5965-699-6871	27	34	Handset-Headset H-91/U
5965-892-1068	27		Handset-Nicrophone H-21010
5065-682-2769	1	1	Handset-Headset H-144/U; H.144A, B/U
4520-224-7907	3	3	Heater; Space; Electrical: 116 v, 16500 watts
5830-752-3567	1	1	Intercommunication Station LS-147C/FI
5120-198-5410	l I	1	Key; Socket; Headscrew: 4-1/2 in. lg; L shape; 316L, 71169
5120-196-5413	1	1	Key; Socket; Headscrew: 4-1/8 in. lg; 5327, 71159
6230-729-9814	1	1	Lantern; Electrical: 2106-7, M3672
6625-542-1761	1	1	Lead, Test CX-61000/G For testing ckt w/o removing cables; 72 in. lg
6230-615-5385	1	1	Light; Extension: 26 ft Ig; 0825-16-2J, 7940
5936-752-8011	1	1	Maintenance Kit; Electronic Equipment: For maintenance of connector, plug, electrical U-77IU; SC-B-66419, 8C-B8, SC-B-68421, SC-D 6424, SC-B-68429, MIL Std 1B11357178, 80063
5120-392-8355	1		Pin Straightener. Electron Tube: General Cement Mfg Model 8665
5120-596-4303			Pin Straightener. Electron Tube: Duro Specialty Co. type D1279-SN
5120-752-9675	1	1	Screwdriver: Flat tip; 10-1/2" Ig Fed Spec GGG-S-121, type 1, class 5, style 1, design A, shape a
5120-690-6312	2	2	Screwdriver: Piloted, adj; N-2348, 04563
2330-860-7725	1	1	Semitrailer; Van: Type No. M348A2D
7520-162-6176	1	1	Sharpener Pencil: Model L, 0287
5805-892-1080	9	9	Switchboard; Telephone; Manual SB-1396/GTA-14
5805-543-0012	4	4	Telephone Set TA-312/PT
6625-891-3066	1	1	Test Set; Telephone T-1361/G

Page 43, paragraph 10. Delete "(para 2b)" from the last sentence.

Page 94, appendix II. Delete appendix II and substitute

## APPENDIX II BASIC ISSUE ITEMS LIST (BIIL) AND ITEMS TROOP INSTALLED OR AUTHORIZED LIST (ITIAL)

#### Section I. INTRODUCTION

### 1. Scope.

This appendix lists only basic issue items required by the crew/operator for installation, operation, and maintenance of Central Office, Telephone AN/MTC-9.

#### 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 III. Not applicable.

### 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. Not applicable.
- b. Federal Stock Number. Indicates the Federal stock number assigned to the item and will be used for requisitioning purposes.
- c. Part Number. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and

inspection requirements, to identify an item or range of items

- d. 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 identified in SB 708-42.
- e. Description. Indicates the Federal item name and a minimum description required to identify the item.
- f. Unit of Measure (U/M). 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.
- g. Quantity Furnished with Equipment (Basic Issue Items Only). Indicates the quantity of the basic issue item furnished with the equipment.
- h. Quantity Authorized (Items Troop Installed or Authorized Only). Indicates the quantity of the item authorized to be used with the equipment.

### 4. Special Information

Usable on codes are included in Column 5. Uncoded items are applicable to all models. Identification of the usable on codes are as follows:

lsed on
lain model
model

### Section II. BASIC ISSUE ITEMS LIST

(1 ILLUSTF	-	(2)	(3)	(4)	(5)	(6)	(7)
(A) FIG. NO.	(B) ITEM NO.	FEDERAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION USABLE ON CODE	UNIT OF MEAS	QTY FURN WITH EQUIP
18 18		4210-764-2905 4210-727-8111	SM-B-379209-2	80063	TELEPHONE TERMINAL GROUP AN/MTA-5 AN/MTA-5A AXE, PICKHEAD: 4-1/2 LB. 36" handle 2 AXE, PICKHEAD: Fed Spec GGG-A- 1,2 926, type 1, class 1, design B	EA EA	1 1

### Section II. BASIC ISSUE ITEMS LIST (Cont.)

(1)		(2)	(3)	(4)	(5)	(6)	(7)
(A) FIG. NO.	(B) ITEM NO.	FEDERAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION USABLE ON CODE	UNIT OF MEAS	QTY FURN WITH EQUIP
18 17,18,19 17,18,19		4210924900 4210270-4612 4210-23-912 654-822-316	164S 5F-1 SM-C34935 800D83	9017 33	AXE, PICKHEAD: 1 EXTINGUISHER: FIRE 1 EXTINGUISHER, FIRE: MIL-E-468 CE. 2 type 1, class FIRST AID KIT 1	EA EA EA	1 3 3
18 18		6854-6-9032 5120-251-4189 5210-2s8 fl16	15 AW-30	79796 79796	FIRST AID KIT: Pod Spec GG-K-392, 2 type 2,i l HAMMER, HAND: 8 lb 1.2 HANDLE, HAMMER: Wood; 1,2 sledge type. 30 in ls	EA EA EA	1 1 1
2 18 2		5410-782-2525 5975-224-5260	SM-B-352166	80063	LEAD, ELECTRICAL: For d trap 1,2 ROD, GROUND MX-148/G 1,2 STRAP, WEBBING: 20 in. Ig x 1 in. w 1.2 TELEPHONE SWITCHBOARD GROUP AN/MTA-7 AND AN/MTA-7A	EA EA EA	2 2 100
36 36 36 35,36,37		4210o92-800 4210-764-2906 4210-727-8111 4210-223-9912	16465 8SMB-37909-2	90617 80063	AXE PICKHEAD 1 AXE, PICKHEAD: 4-1/2 lb, 36, handle-2 AXE, PICKHEAD: Pod Spec GGG-A-926,1,2 type 1, class 1, design B EXTINGUISHER, FIRE: MIL-E-468 CE, 2	EA EA EA	1 1 1
35,36,37 37 37		4210-223-9912 4210-270-4612 6545-822-3166 6545-663-9032	5F-1 SM-349935	33525	type 1, class 1 EXTINGUISHER, FIRE 1 FIRST AID KIT 1 FIRST AID KIT: Fed Spec GGK392, 2 type 2, size 1	EA EA EA	3 1 1
36 36 36		5975-224-5260 5120-251-4489 5120-288-6565	15 AW-30	79796 79796	GROUND ROD MX-148/G 1,2 HAMMER, HAND: 8 lb. 1,2 HANDLE, HAMMER: wood: sledge type; 1,2 30 in. Ig	EA EA EA	2 1 1
2		5410-752-2525 5340-823-5235	SM-B-352166 FDC-1730-66-2 98313		LEAD, ELECTRICAL: For gnd strap 1,2 STRAP, WEBBING: 29 in. lg x 1 in. w 1,2	EA EA	2 100

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The Adjutant General

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Instl (2) except Fort Gordon (10) Fort Huachuca (10) WSMR (1) Fort Carson (6) Ft Richardson (ECOM Ofc) (2) Army Dep (2) except LBAD (14) **SAAD (30) TOAD (14)** ATAD (10) USA Dep (2) Sig Se USA Dep (2) Sig Dep (2) Sig FLDMS (1) USABRDAA (1) **USABRDAW (1)** USARMIS (1) Units org under fol TOE: (1 copy of each unit) 11-75 114-6 11-96 11-97 11-96 11-117 11-127 11-18 11-302 114-7 11400(AA-AC) 29-134 29-136

NG: None USAR: None

For explanation of abbreviations used, see AR 310-50.

CHANGE No. 4

HEADQUARTERS. **DEPARTMENT OF THE ARMY** WASHINGTON 25, D. C., 3 December 1965

Organizational, DS, GS, and Depot Maintenance Manual Including Repair Parts and Special Tool Lists

CENTRAL OFFICE, TELEPHONE, MANUAL AN/MTC-9

TM 11-5680-288-15, 26 May 1961, is changed as follows: Title is changed as shown above.

Note

The parenthetical reference to a previous change (example: "page 6 of C 2") indicates that pertinent material was published in that change.

Page 2. Delete paragraph 1.1, changed by C3, 20 May 1984, and substitute:

### 1.1. Index of Publications

Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes or additional publications pertaining to your equipment. DA Pam 310-4 is a current index of technical manuals, technical bulletins, supply manuals (types 7, 8, and 9), supply bulletins, lubrication orders, and modification work orders that are available through publications supply channels The index lists the individual parts (-10, -20, -85P, etc.) and the latest changes and revisions of each equipment publication.

Paragraph 2. Delete subparagraph c changed by C 3, 20 May 1964, and substitute:

Reporting **Equipment** Manual of C. Improvement. The direct reporting by the individual user of errors, omissions and recommendations for improving this manual is authorized and encouraged.

DA Form 2028 (Recommended Changes to DA Publications) will be used for reporting these This form will be completed using improvements. pencil, pen, or typewriter and forwarded direct to Commanding General, U.S. Army Electronics Command, ATTN: AMSEL MR-(NMP)-MA, Fort Monmouth, N.J., 07703.

Page 92, appendix I (page 6 of C2), make the following changes: Delete AR 700-88, TM 116180-220-12P, and TM 11-662-203-85P in their entirety. TM 11-2146, line 2. Change "AN/TCC-7" to AN/TTC-7. TM 11-5965-206-15P change title to: Operator, Organizational, Field, and Depot Maintenance Repair Parts and Special Headset-Microphone H-91/U, H-91A/U, Tool Lists: Handset-Headset H-144/U, H144A/U, H-144B/U, H-144C/U, and Headset-Microphone H-210/G. TM 11-5965-208-15P, line 1 preceding "Repair" add: Operator, Organizational, Field and Depot Maintenance. TM 11-596-221-15P, line 1 preceding; "Repair". Add Operator, Organizational, Field and Depot Maintenance.

Add the following references:

SB 11-573 Painting and Preservation Supplies Available for Field Use for Electronics

Command Equipment.

**TB SIG 364** Field Instructions for Painting and Preserving Electronics Command Equipment. TM 11-964

Rectifiers RA-91 and RA-91-A

TM 11-3895-202-20P Organizational Maintenance Repair Parts and Special Tool Lists: Reel Units RL-31, RL-31B, RL-31C, RL-31D, and RL-31E.

<sup>\*</sup>This change supersedes C1, 29 May 1962, end C3, 20 May 1964 and TM 11-5805-288-25P, 22 May 1962, including C1, 13 August 1963.

TM 11-3895-202-35P	DS, GS, and Depot Maintenance Repair Parts and Special Tool Lists: Reel Units RL-31, RL-31B, RL-31C, RL-31D, and RL-31E.
TM 11-5805-201-35P	Field and Depot Maintenance Repair Parts and Special Tool Lists: Telephone Set TA312/PT.
TM 11-5805-234-20P	Organizational Maintenance Repair Parts and Special Tool Lists: Central Office, Telephones, Manual AN/TTC-7 and AN/TTC-7A.
TM 11-5805-234-35P	Field and Depot Maintenance Repair Parts and Special Tool Lists: Central Office, Telephone Manual AN/TTC-7 and AN/T7C-A.
TM 11-5935-203-15P	Organizational, DS, GS, and Depot Maintenance Repair Parts and Special Tool Lists and Maintenance Allocation Chart: Connectors, Receptacle, Electrical U-186A/G and U-186B/G.
TM 11-5935-212-15P	Organizational, DS, GS, and Depot Maintenance Repair Parts and Special Tool Lists: Connectors, Plug, Electrical U-185A/G and U-185B/G.
TM 11-6110-201-15P	Operator, Organizational, Field and Depot Maintenance Repair Parts and Special Tool Lists and Maintenance Allocation Chart: Distribution Boxes J-1077/U and J-1077A/U.
TM 11-6625-203-45P	Field (Fourth Echelon) and Depot Maintenance Repair Parts and Special Tool Lists: Multimeter AN/URM-105.
TM 11-6625-240-20P	Organizational Maintenance Repair Parts and Special Tool Lists: Test Set TS-27B/TSM
TM 11-6625-240-45P	Field (Fourth Echelon) and Depot Maintenance Repair Parts and Special Tool Lists: Test Set TS-27B/TSM
TM 11-6825-510-25P	Organizational, Field and Depot Maintenance Repair Parts and Special Tool Lists: Test Set, Telephone TS-1361/G

Page 94, appendix II (as changed by C1, 29 May 1962). Delete and substitute:

### **APPENDIX II**

### **BASIC ISSUE ITEMS LIST**

### Section I. INTRODUCTION

#### 1. General

- a. This appendix lists items supplied for initial operation and for running spares. The list includes tools, parts, and material issued as part of the major end item. The list includes all items authorized for basic operator maintenance of the equipment. End items of equipment, are issued on the basis of allowances prescribed in equipment authorization tables and other documents that are a basis for requisitioning.
  - b. Columns are as follows:
  - (1) Federal stock number. This column lists the 11-digit Federal stock number.
  - (2) Designation by model. The dagger (†) indicates model in which the part is used.
  - (3) Description. Nomenclature or the standard item name and brief identifying data for each item are listed in this column. When requisitioning, enter the nomenclature, and description.
  - (4) Unit of issue. The unit of issue is each unless otherwise indicated and is the supply term by which the individual item is counted for procurement, storage, requisitioning, allowances, and issue purposes.

- (5) Expandability. Nonexpendable items are indicated by NX. Expendable items are not annotated.
- (6) Quantity authorized. Under "Items Comprising an Operable Equipment", the column lists the quantity of items supplied for the initial operation of the equipment. Under "Running Spare Items" the quantities listed are those issued initially with the equipment as spare parts. The quantities are authorized to be kept on hand by the operator for maintenance of the equipment.
- (7) Illustration. The "Figure No." column lists the figure and reference numbers used for identification of the items in the illustration.

### 2. Batteries

Dry batteries shown are used with the equipment but are not considered part of the equipment. They will not be preshipped automatically but are to be requisitioned in quantities necessary for the particular organization, in accordance with SB 11-6.

### **SECTION II. FUNCTIONAL PARTS LIST**

				 	T						
FEDERAL STOCK NUMBER				TION		DESCRIPTION	UNIT OF ISSUE	EXP	QTY AUTH	FIGURE NO.	ITEM NO.
		<u>_</u>	L	Н	4					1	
5805-831-6063						CENTRAL OFFICE; TELEPHONE MANUAL AN/MTC-9: Provides signal area with facilities for interconnecting 600 tel lines and 60 manual or dialtrunks; Pri power may be obtained from engine gen set or local commercial power source.		NX			
						ITEMS COMPRISING AN OPERABLE EQUIPMENT					
ORD THRU AGC						TECHNICAL MANUAL TM 11-5805-288-15			2		
ORD THRU AGC	t	t				TECHNICAL BULLETIN TB-SIG-354			2		
						NOTE: For maintainable equipment listed below, only 2 each Technical Manuals are authorized.					
5805-831-6064						TELEPHONE TERMINAL GROUP AN/MTA-5; AN/MTA-5A: Contains subscriber and trk term and sw term groups w/w AN/MTA-7 to provide connecting facilities for AN/MTC-9		NX	1		
5805-831-6065						TELEPHONE SWITCHBOARD GROUP AN/MTA-7; AN/MTA-7A: A swbd group which provides swbd facilitates and which, when u/w AN/MTA-7 forms AN/MTC-9		NX	1		
						TELEPHONE TERMINAL GROUP AN/MTA-5, AN/MTA-5A: Model column 1 for plain model, model column 2 for A model.					
4120-892-1989	t					AIR CONDITIONER: Ellis and Watts p/n A-18		NX	1	27	
4120-289-1323		t				AIR CONDITIONER: Thermo-King		NX	1	27	
4210-764-2905		t				AXE, PICKHEAD: 4-½ lb, 36" handle, Sig dwg SM-B-379209-2			1	18	
4210-727-8111	t	t				AXE, PICKHEAD: Fed Sped GGG-A-926, type 1, class 1, design B			1	18	
4210-892-5900	t					AXE, PICKHEAD: Tru Temper p/n 1645			1	18	
7520-753-4807	t	t				BASKET; WASTEPAPER: Erie Air Metal p/n 36			3	18, 19	
6135-120-1020	t	t				BATTERY, DRY BA-30:			12		
7920-291-8305	t	t				BROOM, UPRIGHT: 54 in lg; Osborn p/n 1820			1	18	
7920-811-1614	†	†				BRUSH, DUSTING, BEHCH: Fibre; Osborn p/n 378			1	18	
5995-752-1298	t	†				CABLE ASSEMBLY, POWER, ELECTRICAL CX-3692/U: 48 v dc supply; 4 ft 9 in Ig o/a incl. term			8		
5995-173-8251	t	t				CABLE ASSEMBLY, POWER, ELECTRICAL CX-3692/U: 48 v dc supply; 50 ft 6 in Ig o/a incl. term; to be modified an required, stowed			2		

AN/MTC-9 (continued)  5995-681-8507  † †	
Ig excl term; to be modified as required  5995-686-5299   †   †   CABLE ASSEMBLY, POWER, ELECTRICAL CX-4845/U: 48 v dc supply; 31 ft 5 in 1	
5995-686-5299   †   †     CABLE ASSEMBLY, POWER, ELECTRICAL CX-4845/U: 48 v dc supply; 31 ft 5 in   1	
5995-823-2486	
5995-752-2548	
5995-889-1500   t   t	
5995-889-0825   t   t	
5995-823-2882	
5995-823-2620   t   t   CABLE ASSEMBLY; SPECIAL PURPOSE; ELECTRICAL: 7 cond; F/H-144/U: 8 ft   1   2	
5995-284-6353   †   †	
5995-284-6352   †   †     CABLE ASSEMBLY, TELEPHONE CS2584A/U: line and trk; 50 ft lg excl term installed in floor	
5995-985-7571   t   t	
5995-889-0803   †   †	
5995-823-2618	
5995-823-2807   t   t	
5995-823-2619	
5995-823-2955   †   †	
5995-985-8147   †   †	
5995-823-2515	
7105-268-8214	

FEDERAL STOCK NUMBER			NATIO DDEI		DESCRIPTION	UNIT OF ISSUE	EXP	QTY AUTH	ILLUSTF FIGURE NO.	RATION ITEM NO.
			$\frac{\perp}{1}$	<u> </u>	AN/MTC-9 (continued)					
7110-273-8798	t	t			CHAIR; ROTARY: Fed Spec AA-C-295, class 1, size 1; (retain mtg. bracket when replacing chair)		NX	1	12	
7910-753-5256	t	t			CLEANER; VACUUM: Hoover No. 2830		NX	1		
6645-892-4369	†				CLOCK; WALL: Chelsea Model P-642, type A		NX	1	19	
6645-526-4395		t			CLOCK, WALL: MIL-C-3956; M2 AN5743L2		NX	1	19	
5995-170-7918	t	t			CORD CD-409: 110 vac supply; approx 50 ft 6 in lg o/a; to be modified as required			4		
5995-170-7992	t	t			CORD C0-38: f/btry; 12 in lg			9		
7210-753-3043	t	t			CUSHION; CHAIR: Fed Spec ZZ-C-766, type III, class B			3		
6110-649-8146	t	t			DISTRIBUTION BOX J-1077A/U		NX	15	9	
6110-823-2886	t	t			DISTRIBUTION BOX J-2317/U:		NX	4	9, 19	
4210-270-4512	1				EXTINGUISHER; FIRE: Walter Kidde Model No. 5F-1		NX	3	17, 18, 19	
4210-223-9912		t			EXTINGUISHER, FIRE: MIL-E-468 CE, type 1, class 1		NX	3	17, 18, 19	
5120-752-8862	1				EXTRACTOR; ELECTRON TUBE: Economy Cable p/n ETP-7			1	18	
5120-293-2692	1				EXTRACTOR; ELECTRON TUBE: Economy Cable p/n ETP-9			1	18	
4140-729-6001	l t				FAN; VENTILATING ASSEMBLY: Rotron Mfg. Co. p/n KS802L		NX	1		
5120-408-1481		t			EXTRACTOR, ELECTRON TUBE: f/7 pin electron tube; Economy Cable Grip type 7113			1	18	
5120-293-2692		t			EXTRACTOR, ELECTRON TUBE: f/9 pin electron tube; Economy Cable Grip type 9113			1	18	
4140-061-2056	t	t			FAN, VENTILATING, PROPELLER: in battery compartment Induction Motor Corp. p/n BC2910F-20		NX	1		
7110-777-6860	t	t			FILE; VISIBLE INDEX: Zephyr American p/n 1024X			1	17	
6545-822-3166	t				FIRST AID KIT: Sig dwg No. SM-C-349935			1		

FEDERAL STOCK NUMBER	ı		SIGN	ION EL	DESCRIPTION	UNIT OF ISSUE	EXP	QTY AUTH	ILLUSTF FIGURE NO.	ATION ITEM NO.
					AN/MTC-9 (continued)					
4130-965-1230	t	t			FILTER, AIR CONDITIONING: 10-½" w x 40" h x 2" thk approx; Research Products Corp. p/n 810004			2		
6545-663-9032		t			FIRST AID KIT: Fed Spec GG-K-392, type 2, size 1			1		
5120-776-9917	t	†			GRIP; CABLE; JAW: Economy Cable p/n EQA6-8P			6	2	
5120-776-9918	t	t			GRIP; CABLE; JAW: Economy Cable p/n EQA26-S			119	2	
5120-251-4489	t	†			HAMMER; HAND: 8 lb; Woodings-Verona p/n 15			1	18	
5965-682-2769	t	†			HANDSET-HEADSET H-144/U; H-144A, B/U		NX	1	2	
4520-224-7909	t	†			HEATER; SPACE; ELECTRIC: 115 v, 1, 500 watts		NX	3	21, 28	
6630-171-9572	t	†			HYDROMETER: Exide p/n 13142, type V-2-B			1	18	
5120-198-5413	t	†			KEY; SOCKET; HEAD SCREW: 1-1/8 in lg; Bristol p/n 532L			1	17	
5805-034-0968	t	t			INSTALLATION KIT: Marked bag 1 of 5; p/o passageway; Sig dwg SM-B-377677			1	21, 50	
5805-994-9126	t	t			INSTALLATION KIT: Marked bag 2 of 5; p/o passageway; Sig dwg SM-B-377678			1	21, 50	
5805-034-0970	t	t			INSTALLATION KIT: Marked bag 3 of 5; p/o passageway; Sig dwg SM-B-377679			1	21, 50	
5805-034-0971	t	t			INSTALLATION KIT: Marked bag 4 of 5; p/o passageway; Sig dwg SM-B-377680			1	21, 50	
5805-034-0962	t	t			INSTALLATION KIT: Marked bag 5 of 5; p/o passageway; Sig dwg SM-B-377681			1	21, 50	
5830-752-5357	t	t			INTERCOMMUNICATION STATION LS-147C/FI:		NX	2	17	
5120-198-5410	t	t			KEY; SOCKET; HEAD SCREW: 4-½ in lg; L shape & Bristol p/n 316L			1	17	
6230-729-9614	t	t			LANTERN; ELECTRIC: Justrite p/n 2106-7			3	20	
5410-752-2525	t	t			LEAD; ELECTRICAL: For grd strap; Sig dwg SM-B-352166			2	2	
6625-542-1761	t	t			LEAD, TEST CX-6100/G: F/testing ckt w/o removing cables; 6 ft lg			2		

FEDERAL STOCK NUMBER			SIC		ON L		DESCRIPTION	UNIT OF ISSUE	EXP	QTY AUTH	ILLUSTF FIGURE NO.	RATION ITEM NO.
				Ī	Ì	Ī	AN/MTC-9 (continued)					
6230-615-5385	t	1	-				LIGHT, EXTENSION: 25 ft lg; Woodhead p/n 506KS25-16-2SJ			1	2	
5805-855-9823	t	1	-				MAIN DISTRIBUTION FRAME; TELEPHONE TA-454/GTA-14		NX	7	10, 21	
5935-752-8011	t	1	-				MAINTENANCE KIT; ELECTRONIC EQUIPMENT: For maintenance of connector, plug, Electrical U-77/U; Sig dwg Nos. SC-B-68419, SC-B-68420, SC-B-68421, SC-B-68424, SC-B-68429, MIL std MS-35537-78			1		
5805-856-0048	t	1	-				PANEL; POWER DISTRIBUTION SB-, 399/GTA-14		NX	2	10, 13	
5805-759-7430	t	1	-				PASSAGEWAY ASSEMBLY: Incl. installation kits #1, #2, #3, #4, #5, and platform assembly; Sig dwg SM-D-377671			1		
5120-392-8355	t						PIN STRAIGHTENER; ELECTRON TUBE: General Cement p/n 8655			1	18	
5120-596-4303		1	-				PIN STRAIGHTENER, ELECTRON TUBE: Duro Specialty Co. p/n D-279-SN			1	18	
5805-034-0967	t	1	-				PLATFORM ASSEMBLY: p/o passageway; Sig dwg SM-D-377683			1	50	
5120-752-9675	t	1	-				SCREWDRIVER; FLAT TIP: Fed Spec GGG-S-121, type 1, class 5, style 1, design A, shape A			2		
3895-252-6896	t	1	-				REEL, CABLE PL-31			1		
5975-224-5260	t	1	-				ROD, GROUND MX-148/G:			2	18	
5120-708-5312	t	1	-				SCREWDRIVER: Piloted, adj; P. K. Neuses p/n N12348 (incl. 2 ea spares)			10		
2330-690-7726	t	1	-				SEMITRAILER; VAN: type No. M348A2F		NX	1	18	
7520-162-6178	t	1	-				SHARPENER; PENCIL: Hunt Boston Model L			1	17	
7110-281-4469	t	1	-				STOOL, DRAFTING: Fed Spec AA-C-295, class 2, size 3			1	21	
5340-823-5235	t	1	-				STRAP; WEBBING: 20 in lg x 1 in w; Davis Aircraft p/n FDC11730-65-2			100	2	
5805-855-9821	t	1	-				TELEPHONE CIRCUIT; Line relay TA-452/GTA-14		NX	6	15, 21	
5805-855-9822	t	1	-				TELEPHONE CIRCUIT TRUNK RELAY TA-453/GTA-14		NX	3	21	
5805-543-0012	t	1	-				TELEPHONE SET TA-312/PT		NX	4	19, 20	

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FEDERAL STOCK NUMBER			ODE		DESCRIPTION	UNIT OF ISSUE	EXP	QTY AUTH	FIGURE NO.	ITEM NO.
			<u> </u>	+						
					AN/MTC-9 (continued)					
6685-892-5669	†	t			THERMOMETER: Exide p/n 26929			1	18	
6625-188-3232	†	t			TELEPHONE TEST SET TS-27B/TSM			1	19, 20	
6145-284-1499	t	t			WIRE WD-15/U: MDF Jumper wire & 2 cond (Authorized allowances will be a minimum of or a multiple of 2, 000 ft)		ft	2000		
5120-293-2437	t	t			WRENCH: T shape; 51¼ in lg International Fermond Mch p/n 965D			1		
					TELEPHONE SWITCHBOARD GROUP AN/MTA-7, AN/MTA-7A					
4120-892-1989	t				AIR CONDITIONER: Ellis and Watts p/n A-18		NX	1	27	
4120-289-1323		t			AIR CONDITIONER: Thermo-King		NX	1	27	
4210-892-5900	t				AXE; PICKHEAD: True Temper p/n 1645			1	36	
4210-764-2905		t			AXE, PICKHEAD: 4-½ lb, 36" handle, Sig dwg SM-B-379209-2			1	36	
4210-727-8111	†	t			AXE, PICKHEAD: Fed Spec GGG-A-926, type 1, class 1, design B			1	36	
6135-120-1020	t	t			BATTERY, DRY BA-30:			4		
7520-753-4807	†	t			BASKET, :WASTEPAPER: Erie Air Metal p/n 36			4	35, 36, 37	
6350-723-1556	t	t			BELL ASSEMBLY, ELECTRICAL: Sig dwg SM-C-183244			1	38	
7920-291-8305	t	t			BROOM; UPRIGHT: 54 in lg; Osborn p/n 1820			1	36	
7920-811-1614	t	t			BRUSH; DUSTING; BENCH: fibre; Osborn p/n 378			1	36	
5995-752-1298	t	t			CABLE ASSEMBLY, POWER, ELECTRICAL CX-3692/U: 48 v dc supply; 4 ft 9 in lg o/a incl. term			8		
5995-173-6163	t	t			CABLE ASSEMBLY, POWER, ELECTRICAL CX-3694/U: Position grouping; 5 ft 6 in lg o/a incl. term; (incl. 1 stowed)			9		
5995-681-8507	t	t			CABLE ASSEMBLY, POWER, ELECTRICAL CX-4762/U: f 20-c6c ringing; 4 ft 2 in lg excl term to be modified as required			7		
5995-682-3440	t	t			CABLE ASSEMBLY, POWER, ELECTRICAL CX-4762/U; f 20-c6c ringing; 50 ft lg o/a incl term to be modified as required			2		

FEDERAL STOCK NUMBER		IGNATION MODEL	DESCRIPTION	UNIT OF ISSUE	EXP	QTY AUTH	FIGURE NO.	ITEM NO.
	Щ							
			AN/MTC-9 (continued)					
5995-823-2486	† †		CABLE ASSEMBLY; POWER; ELECTRICAL: 2 cond; approx 25 ft 6 in lg incl. term; Sig dwg SM-D-350987			1	2	
5995-752-2548	t t		CABLE ASSEMBLY; POWER; ELECTRICAL: CX-7705/U: 15 ft power stub			1	2	
5995-889-1500	t t		CABLE ASSEMBLY; POWER; ELECTRICAL CX-7453/U: 100 ft power cable			1	3	
5995-284-6353	† †		CABLE ASSEMBLY, TELEPHONE CX-2584A/U: line and trk: 8 ft lg excl term; to be modified as required: (incl. r stowed)			235		
5995-889-0803	t t		CABLE ASSEMBLY; TELEPHONE CX-4760A/U: 52 cond; 15 ft lg stub			2	2	
5995-823-2619	† †		CABLE ASSEMBLY, TELEPHONE: Approx 3 ft 16; PJ-047B one end, other end stripped and tinned; Sig dwg SM-C-377563-III			4	2	
5995-823-2515	t t		CABLE ASSEMBLY AND REEL: (consists of CX-4566A/O and Reel RC1435/U)			16		
7105-268-8214	t t		CHAIR, FOLDING: Fed Spec AA-C-291, type 1, class 1			1	38	
7110-817-0220	† †		CHAIR, ROTARY: f/operator; Domore p/n 776AR (mtg. plate should be removed and reused when chair is replaced)		NX	9	31, 39	
7110-273-8798	† †		CHAIR, ROTARY: Fed Spec AA-C-295, class 1, size 1 (NOTE: Retain mtg. bracket when replacing chair)			1		
6645-892-4369	t		CLOCK; WALL: Chelsea model P-642, type A		NX	2	37, 38	
6645-526-4395	†		CLOCK: MIL-C-3946 M2 AN5743L2		NX	2	37, 38	
5995-164-6577	t t		CORD CD-413: 110 vac supply; 3 ft 4 in lg 0/a incl. term			8		
7210-753-3043	t t		CUSHION; CHAIR: Fed Spec ZZ-C-(66, type III, class B			1		
6110-649-8146	t t		DISTRIBUTION BOX J-1077A/U		NX	12	30	
4210-223-9912	t		EXTINGUISHER, FIRE: MIL-E-468 CE, type 1, class 1			1	35, 36, 37	
4210-270-4512	t		EXTINGUISHER; FIRE: Walter Kidde Model No. 5F-1		NX	3	35, 36, 37	
5120-752-8862	t		EXTRACTOR; ELECTRON TUBE: Economy Cable p/n ETP-7			1	35	
5120-293-2692	t		EXTRACTOR; ELECTRON TUBE: Economy Cable p/n ETP-9			1	35	

FEDERAL STOCK NUMBER	С	DESIGNATION BY MODEL			DESCRIPTION		EXP	EXP AUTH FIGURE NO. ITEM		ATION ITEM NO.	
				Ì	İ	AN/MTC-9 (continued)					
5120-408-1481		†				EXTRACTOR, ELECTRON TUBE: f/7 pin electron tube; Economy Cable grip type 7113			1	35	
5120-293-2692		t				EXTRACTOR, ELECTRON TUBE: f/9 pin electron tube; Economy Cable grip type 9113			1	35	
4140-729-6001	t					FAN; VENTILATING ASSEMBLY: Rotron Mfg Co type KS802L		NX	2		
7110-777-6860	t	t				PILE; VISIBLE INDEX: Zephyr American p/n 1024X			1	38	
6545-822-3166	t					FIRST AID KIT: Sig dwg No. SM-C-349935			1	37	
6545-663-9032		t				FIRST AID KIT: Fed Spec GGK392, type 2, size 1			1	37	
4130-965-1230	t	t				FILTER, AIR CONDITIONER: 10-½ "w x 40" h x 2" thk approx; Research Products Corp. p/n 81D004			2		
5120-776-9917	†	t				GRIP; CABLE; JAW: Economy Cable p/n EQA-6-8P			6	2	
5120-776-9918	t	t				GRIP; CABLE; JAW: Economy Cable p/n EQA 26-S			94	2	
5975-224-5260	t	t				GROUND ROD MX-148/G			2	36	
5120-251-4489	t	t				HAMMER; HAND: 8 lb; Woodings-Verona p/n 15			1	36	
5965-669-6871	t					HANDSET-HEADSET H-91/U:			27		
5965-892-1068		t				HANDSET-MICROPHONE H-210/0:			27		
5065-682-2769	t	t				HANDSET-HEADSET H-144/U; H-144A, B/U		NX	1	2	
5065-682-2769	t	t				HANDSET-HEADSET H-144/U; 11-144A, B/U		NX	1	2	
4520-224-7909	t	t				HEATER; SPACE; ELECTRICAL: 115 v, 1500 watts		NX	3	28, 39	
5830-752-5357	†	t				INTERCOMMUNICATION STATION LS-147C/FI		NX	1	29, 38	
5120-198-5410	t	t				KEY; SOCKET; HEADSCREW: 4-1/2 in Ig; L shape; Bristol p/n 316L			1	35	
5120-198-5413	t	t				KEY; SOCKET; HEADSCREW: 4-1/8 in lg; Bristol p/n 5327			1	35	

FEDERAL STOCK NUMBER				TION	N	DESCRIPTION	UNIT OF ISSUE	EXP	QTY AUTH	ILLUSTF FIGURE NO.	RATION ITEM NO.
						AN/MTC-9 (continued)					
6230-729-9614	t	1				LANTERN; ELECTRICAL: Justrite p/n 2106-7			1	36	
5410-752-2525	t	1				LEAD; ELECTRICAL: For grd strap; Sig dwg SM-B-352166			2	2	
6625-542-1761	t	1				LEAD; TEST CX-6100/G: For testing ckt w/o removing cables; 72 in Ig			1		
6230-615-5385	1	1				LIGHT; EXTENSION: 25 ft lg; Woodhead p/n 506KS25-16-2SJ			1	2	
5935-752-8011	t	1	-			MAINTENANCE KIT; ELECTRONIC EQUIPMENT: For maintenance or connector, plug, electrical U-77/U; Sig dwgs Nos. SC-B-68419, SC-B-68420, SC-B-68421, SC-B-68124, SC-B-68429, MIL Std MS135537178			1		
5120-392-8355	1					PIN STRAIGHTENER, ELECTRON TUBE: General Cement Mfg Model 8655			1		
5120-596-4303		1				PIN STRAIGHTENER, ELECTRON TUBE: Duro Specialty Co. type D1279-SN					
5120-752-9675	t	1	-			SCREWDRIVER: Flat tip; 10-½ "Ig Fed Spec GGG-S-121, type 1, class 5 style 1, design A, shape a			1	35	
5120-708-5312	t	1	-			SCREWDRIVER: Piloted, adj; P. K. Heuses p/n N-2348			2		
2330-690-7725	t	1	-			SEMITRAILER; VAN: Type No. M348A2D		NX	1		
7520-162-6178	t	1				SHARPENER PENCIL: Hunt Boston Model L			1		
5340-823-5235	t	1				STRAP; WEBBING: 29 in lg x 1 in w & Davis Aircraft p/n FDC-1730-65-2			100	2	
5805-892-1080	t	1				SWITCHBOARD; TELEPHONE; MANUAL SB-1398/GTA-14		NX	9	31, 39	
5805-543-0012	t	1				TELEPHONE SET TA-312/PT		NX	4	38	
6625-691-3066	1	1				TEST SET; TELEPHONE TS-1361/G:		NX	1		
						RUNNING SPARE ITEMS					
						CENTRAL OFFICE; TELEPHONE MANUAL AN/MTC-9					
						TELEPHONE TERMINAL GROUP AN/MTA-5, AN/MTA-5A					
5960-262-0152	t	1				ELECTRON TUBE: MIL type 6AU6WA			2	6	
5960-262-0152						ELECTRON TUBE: MIL type 6AU6WA			2	6	

FEDERAL				UNIT		QTY	ILLUSTRATION				
STOCK NUMBER		B	ΥM	OD 	EL 	DESCRIPTION	OF ISSUE	EXP	AUTH	FIGURE NO.	ITEM NO.
						AN/MTC-9 (continued)					
5960-188-0880	t	t				ELECTRON TUBE: MIL type 6X4w			2	6	
5960-669-6861		†				ELECTRON TUBE: NIL type 6005/6AQSW			2	6	
5920-636-3047	†					FUSE, CARTRIDGE: 1 amp, 250 v; Littelfuse p/n 313001			5	6	
5920-538-5986	·					FUSE, CARTRIDGE: 1 amp; Littelfuse p/n 3AG			5		
5920-156-0840		†				FUSE, INDICATOR ALARM: 1-1/3 amp, 48 v; Sig dwg SM-B-142343			30		
5920-296-1519		t				FUSE; CARTRIDGE: 5 amp, 250 v; Bus type No. MTH5			5	6	
5120-288-6565	t					HANDLE; HAIR: Wood; sledge type, 30 in lg; Woodings-Verona p/n AW-30			1	18	
6240-155-7786		†				LAMP LM-35: 2.4 v, 0.5 amp, mtd behind lantern reflector			1		
6240-538-8447		t				LAMP; FLUORESCENT: Sylvania p/n F2OT12/SW			7	6	
6240-179-1814		t				LAMP; GLOW ¼ w; 65 vac; MIL type NE-45			3	6	
6240-179-1816	t	t				LAMP; GLOW: NIL type NE-30			1	6	
6240-143-3070	t					LAMP; INCANDESCENT: GE p/n 50A/RS			5	6	
6240-044-6914	t	t				LAMP; INCANDESCENT: 28 v, 1.02 amp; Fed spec No. WL1111b, Trade No. 1683			2	6	
6250-299-2884		t				STARTER; FLUORESCENT LAMP: Bryant Elec p/n FS2			12	6	
						TELEPHONE SWITCHBOARD GROUP AN/MTA-7, AN/MTA-7A					
5920-262-0152	t	t				ELECTRON TUBE: MIL type 6AU6WA			1	6	
5960-188-0880	t	t				ELECTRON TUBE: MIL type 6X4W			1	6	
5960-669-6861	t	t				ELECTRON TUBE: MIL type 6005/6AQ5W			1	6	
5920-636-3047	t	t				FUSE, CARTRIDGE: 1 amp, 250 v; Littelfuse p/n 313001			5	6	

FEDERAL STOCK NUMBER	DESIGNATION BY MODEL	DESCRIPTION	UNIT OF ISSUE	EXP	QTY AUTH	ILLUSTF	ATION ITEM NO.
310CK NUMBER		DESCRIPTION	OF ISSUE	EAF	AUTH	FIGURE NO.	ITEWINO.
		AN/MTC-9 (continued)					
5920-538-5986	t   t	FUSE, CARTRIDGE: 1 amp, Littelfuse p/n 3AG			5		
5920-156-0840	t   t	FUSE, INDICATOR ALARM; 1-1/3 amp, 48 v; Sig dwg SM-B-142343			5		
5920-2961519	†   †	FUSE; CARTRIDGE: 5 amp, 250 v, Buss type MTH5			5	6	
5120-288-6565	† †	HANDLE; HAMMER: Wood; sledge type; 30 in lg; Woodings-Verona p/n AW-30			1	36	
6240-155-7786	†   †	LAMP LM-35: 2.4 v, 0.5 amp, mtd behind lantern reflector			1		
6240-538-8447	†   †	LAMP; FLUORESCENT: Sylvania p/n F2OT12/SW			7	6	
6240-179-1816	' t	LAMP; GLOW: MIL type NE-3Q			1	6	
6242-179-1814	†   †	LAMP; GLOW: ¼ w; 65 vac; MIL type NE-45			3	6	
6240-223-9100	† †	LAMP; GLOW: 1/25 w; 65 vac; GE p/n NE-51			2	6	
6240-715-0037	†   †	LAMP, INCANDESCENT: Call 1 amps f/lines and trunk; Sig dwg SM-B-142803			40		
6240-237-7877	†   †	LAMP, INCANDESCENT: Tele swbd type; Sig dwg SM-B-142912			15		
6240-044-6914	†   †	LAMP; INCANDESCENT: 28v, 1.02 amp; Fed Spec No. WL-1111b, trade No. 1693			2	6	
6240-143-3070	t   t	LAMP; INCANDESCENT: GE p/n 50A/RS			3	6	
5905-299-1749	t t	RESISTOR, CURRENT REGULATING: Gen resistance, 1 amp, 10v; type T-9 per MIL-E-1B			2		
6250-299-2884	† †	STARTER; FLUORESCENT LAMP: Bryant Elec p/n FS2			12	6	

#### **APPENDIX III**

#### **MAINTENANCE ALLOCATION**

#### Section I. INTRODUCTION

#### 1. General

- a. This appendix assigns maintenance functions to be performed on components, assemblies, and subassemblies by the lowest appropriate maintenance category.
- b. Columns in the maintenance allocation chart are as follows:
  - (1) Part or component. This column shows only the nomenclature or standard item name. Additional descriptive data are included only where clarification is necessary to identify the component. Components, assemblies, and subassemblies are listed in top-down order. That is, the assemblies which are part of a component are listed immediately below that component, and subassemblies which are part of an assembly are listed immediately below that assembly. Each generation breakdown (components, assemblies, or subassemblies) is listed in disassembly order or alphabetical order.
  - (2) Maintenance function. This column indicates the various maintenance functions allocated to the categories.
    - (a) Service. To clean, to preserve, and to replenish lubricants.
    - (b) Adjust. To regulate periodically to prevent malfunction.
    - (c) Inspect. To verify serviceability and detect incipient electrical or mechanical failure by scrutiny.
    - (d) Test. To verify serviceability and to detect incipient electrical or mechanical failure by use of special equipment such as gages, meters, and other test devices.
    - (e) Replace. To substitute serviceable components, assemblies, or subassemblies, for unserviceable

- components, assemblies, or subassemblies.
- (f) Repair. To restore an item to serviceable condition through correction of a specific failure or unserviceable condition. This function includes but is not limited to welding, grinding, riveting, straightening, and replacement of parts other the trial and error replacement of running spare type items such as fuses, lamps, or electron tubes.
- (g) Align. To adjust two or more components of an electrical system so that their functions are properly synchronized.
- (h) Calibrate. To determine, check, or rectify the graduation of an instrument, weapon, or weapons system, or components of a weapons system.
- (i) Overhaul. To restore an item to completely serviceable condition as prescribed by serviceability standards. This is accomplished through employment of the technique of "inspect and repair only as necessary" (IROAN). Maximum utilization of diagnostic and test equipment, is combined with minimum disassembly of the item during the overhaul process.
- (j) Rebuild. To restore an item to a standard as near as possible to original or new condition in appearance, performance, and life expectancy. This is accomplished through the maintenance technique of complete disassembly of the item, inspection of all parts or components, repair or replacement of worn or unserviceable elements using original manufacturing tolerances and/or specifications and subsequent reassembly of the item.

- (3) Operator, organization, direct support, general support, and depot. The symbol X indicates the categories responsible for performing that particular maintenance operation, but does not necessarily indicate that repair parts will be stocked at that level. Categories higher than those marked by X are authorized to perform the indicated operation.
- (4) Tools required. This column indicates equipment, test equipment, and maintenance equipment referenced. The group-codes assigned to each individual tool ing of codes in this column of the maintenance allocation chart indicates the tool, test, and maintenance equipment required to perform the maintenance function.
- (5) Remarks. Entries in this column will be utilized when necessary to clarify any of the data cited in the preceding column.
- c. Columns in the allocation of tools for maintenance functions are as follows:

- (1) Tools required for maintenance functions. This column lists tools, test, and maintenance equipment required to perform the maintenance functions.
- (2) Operator, organization, direct support, general support, and depot. The dagger (f) symbol indicates the categories normally allocated the facility.
- (3) *Tool code.* This column lists the tool code assigned.

# 2. Maintenance by Using Organizations

When this equipment is used by signal services organizations organic to theater headquarters or communication zones to provide theater communications, those maintenance functions allocated up to and including general support are authorized to the organization operating this equipment.

PART OR COMPONENT	MAINT		EC	HEL	ON		TOOLS	
TART OR COMM CNERT	FUNCTION	O/C	0	DS	GS	D	REQUIRED	REMARKS
CENTRAL OFFICE TELEPHONE, MANUAL AN/MTC-9	service inspect	X X						Van facility & exterior of components
	test	X						System operation using built-in facilities
			X				1, 4, 6	Continuity checks of signal, lighting and power circuits except 26 pair cable
				Х			2, 4, 5, 6	Test in accordance with component maintenance allocation chart
					Х		2, 3, 4, 5, 6	Test in accordance with component maintenance allocation chart
	repair	X						Repair as determined by component maintenance allocation chart
			X				4, 5, 6	Repair as determined by component maintenance allocation chart
				Х			4, 5, 6	Repair as determined by component maintenance allocation chart
					X		4, 5, 6	Repair as determined by component maintenance allocation chart
TELEPHONE TERMINAL GROUP AN/MTA-5	overhaul service				Х		5	Overhaul by component  Van facility & exterior of components
TELEPHONE TERMINAL GROUP AN/INTA-5	inspect	X						
	test	X	,,					System operation using built-in facilities
			X				1, 4, 6	Continuity checks of signal, lighting and power circuits except 26 pair cable
				Х			2, 4, 5, 6	Test in accordance with component maintenance allocation chart
					X		2, 3, 4, 5, 6	Test in accordance with component maintenance allocation chart
	repair	X						Repair as determined by component maintenance allocation chart
			X				4, 5, 6	Repair as determined by component maintenance allocation chart
				Х			4, 5, 6	Repair as determined by component maintenance allocation chart
					Х		4, 5, 6	Repair as determined by component maintenance allocation chart
	overhaul				X		5	By component
CABLE ASSEMBLY CX-4566/G	test replace		X		Х		2, 3	
	repair				Х		4	

DADT OF COMPONENT	MAINE		EC	HEL	ON		T0010	
PART OR COMPONENT	MAINT FUNCTION	O/C	0	DS	GS	D	TOOLS REQUIRED	REMARKS
AN/MTC- 9 (continued)								
CONNECTOR, PLUG, ELECTRICAL U-185/G	test repair align				X X		2 4	See TM 11-5935-212-15P for maintenance allocation
CABLE ASSEMBLIES, POWER	test repair		X X				1 4	
CHEST SET, H-18/GT	repair							See TM 11-5965-221-15P for maintenance allocation
CHEST UNIT, T-51	repair							See TM 11-5965-208-15P for maintenance allocation
CLOCK	repair							Ordinance item
CONNECTOR, RECEPTACLE, ELECTRICAL U-187/G	repair							See TM 11-5935-205-15P for maintenance allocation
DISTRIBUTION BOX J-1077A/U	repair							See TM 11-6110-201-15P for maintenance allocation
EXTINGUISHER, FIRE	repair							Engineers item
GENERATOR GN-41B	repair							See TM 11-5805-297-12P for maintenance allocation
GENERATOR, RINGING, STATIC TA-248A/TT	repair							See TM 11-5805-298-12P for maintenance allocation
HEADSET-MICROPHONE H-91A/U	repair							See TM 11-5965-206-15P for maintenance allocation
HEADSET-MICROPHONE M-144A/U AND R-144B/U	repair							See TM 11-5965-206-15P for maintenance allocation
HEADSET-MICROPHONE H-210/G	repair							See TM 11-5965-206-15P for maintenance allocation
INTERCOMMUNICATION STATION LS-147A/FI AND LS-147B/I	repair							See TM 11-5830-221-12 for maintenance allocation
MAIN DISTRIBUTING FRAME, TELEPHONE TA-454/GTA-14(V)	repair							See TM 11-2146 for maintenance allocation
PANEL, POWER DISTRIBUTION SB-1399/GTA-14(V)	repair							See TM 11-2146 for maintenance allocation

DART OR COMPONENT	MAINTENANCE		ECI	HELC	N		TOOL 6	
PART OR COMPONENT	MAINTENANCE FUNCTION	O/C	0	DS	GS	D	TOOLS REQUIRED	REMARKS
AN/MTC-9 (continued)								
PANEL BD-132A	repair							See TM 11-2064 for maintenance allocation
RECTIFIER, RA-91A, 91B, and 91C	repair							See TM 11-964 and TM 11-964A for maintenance allocation
TELEPHOME CIRCUIT, LINE RELAY, TA-452/GTA-14(V	') repair							See TM 11-2146 for maintenance allocation
TELEPHOME CIRCUIT, TRUNK RELAY, TA-453/GTA-1(Y)	repair							See TM 11-2146 for maintenance allocation
TELEPHONE SET TA-312/PT	repair							See TM 11-2155 for maintenance
GENERATORS, RINGING, HAND, G-42A/PT	repair							See TM 11-5805-257-12P for maintenance allocation
HANDSETS, H-60/PT; N-165/U	repair							See TM 11-5965-224-15P for maintenance allocation
TEST SET TS-27B/TSM	repair							See TM 11-2057A for maintenance allocation
TELEPHONE SWITCHBOARD GROUP AN/MTA 7	service	X						Van facility & exterior of components
	inspect	X						·
	test	X						System operation using built-in facilities
			X				1,4,6	Continuity checks of signal, lighting and power circuits
							2,4,5,6	except 26 pair cable
				X			2,4,5,6	Test in accordance with component maintenance allocation chart
					X		2,3,4,5,6	Test in accordance with component maintenance allocation chart
	repair	X						Repair as determined by component
			X				4,5,6	maintenance allocation chart Repair as determined by component
			^				4,5,0	maintenance allocation chart
				Х			4,5,6	Repair as determined by component maintenance allocation chart
					X		4,5,6	Repair as determined by component maintenance allocation chart
	overhaul				X		5	By component

PART OR COMPONENT	MAINTENANCE		ECI	HELC	N		TOOLS	
TAKT OK OOM ONEN	FUNCTION	O/C	0	DS	GS	D	REQUIRED	REMARKS
AN/MTC- 9 (continued)								
CABLE ASSEMBLY CX-4566/G	test replace		X		Х		2,3	
	repair		^		x		4	
CONNECTOR, PLUG, ELECTRICAL U-185/G	test				X		2	
	repair				X		4	
	align							See TM 11-5935-212-15P for maintenance allocation
CABLE ASSEMBLIES, POWER	test		Х				1	
	repair		Х				4	
CLOCK	repair							Responsibility of ordinance corps
DISTRIBUTION BOX J-1077A/U	repair							See TM 11-6110-201-15P for
EXTINGUISHER, FIRE	ropair							maintenance allocation Responsibility of engineers corps
HANDSET-HEADSET H-144A/U AND H-144B/U	repair repair							See TM 11-5965-206-15P for
	ropan							maintenance allocation
SWITCHBOARD, TELEPHONE, MANUAL	repair							See TM 11-2146 for maintenance
SB-1398/GTA-14(V)								allocation
DIAL, TA-45/GT	repair							See TM 11-5805-269-12P for
TELEPLIONE CET TA 242/PT								maintenance allocation See TM 11-2155 for maintenance
TELEPHONE SET TA-312/PT	repair							allocation
GENERATOR, RINGING, HAND G-42A/PT	repair							See TM 11-5805-257-12P for
	i opan							maintenance allocation
HANDSET H-60/PT; H-165/U	repair							See TM 11-5965-224-15P for
								maintenance allocation
TEST SET, TELEPHONE TS-1361/GTA-14(V)	repair							See TM-2146 for maintenance
								allocation

				TOOL	
0	DS	GS	D	CODE	REMARKS
t t t	t t t	t t t t	t t t T	1 2 3 4 5 6	Allocation based on separate MAC'S
	t t t	t t t t t t t t t	t t t t t t t t t t t t t t t t t t t	O DS GS D  t	t t t t 2 t t 3 t t t t 5

#### **APPENDIX IV**

# ORGANIZATIONAL, DIRECT AND GENERAL SUPPORT, AND DEPOT MAINTENANCE REPAIR PARTS LIST

#### Section I. INTRODUCTION

#### 1. General

- a. This appendix includes organizational, direct and general support, and depot maintenance special tool lists.
  - (1) The organizational maintenance repair parts and special tools list lists the repair part authorized for organizational maintenance and is a basis for requisitioning by organizations which are authorized the major item of equipment. End items of equipments are issued on the basis of allowances prescribed in equipment authorization tables and other documents that are a basis for requisitioning.
  - (2) The direct and general support and depot maintenance repair parts and special tools list lists the quantities of repair parts authorized for direct and general support maintenance and is a basis for requisitioning authorized parts. It is also a guide for depot maintenance in establishing initial levels of spare parts.

## b. Columns are as follows:

- (1) Source, maintenance, and recoverability code. Source, maintenance, and recoverability codes indicate the supply command responsible for supply, the maintenance category at which an item is stocked, categories at which an item is installed or repaired, and whether an item is repairable or salvageable. The source code column is divided into four parts.
  - (a) Column A. This column indicates the materiel code and designates the arm of responsibility for supply. AR 810 1 defines the basic numbers used to identity the materiel code If the part is Signal materiel responsibility, the column -is blank.

- (b) Column B. This column indicates the point within the maintenance system where the part is available. P indicates that the repair part is a high mortality part; procured by supply commands, stocked in and supplied from the command depot system, and authorized for use at indicated maintenance category.
- (c) Column C. This column indicates the lowest maintenance category authorized to install the part.
  - O—Organizational maintenance (operator and organizational).
  - F—Direct support maintenance
  - H—general support maintenance.
- (d) Column D. Not used.
- (2) Federal stock number. This column lists the 11-digit Federal stock number.
- (3) Designation by model. The dagger (†) indicates model in which the part is used.
- (4) Description. Nomenclature or the standard item name and brief identifying data for each item are listed in this column. When requisitioning, enter the nomenclature and description.
- (5) Unit of issue. The unit of issue is each unless otherwise indicated and is the supply term by which the individual item is counted for procurement, storage, requisitioning, allowances, and issue purpose.
- (6) Expendability. Nonexpendable items indicated by NX. Expendable items are not annotated.
- (7) Quantity incorporated in unit. This column lists the quantity of each part found in a given assembly, component, or equipment. A/R indicates that the item may be requisitioned "as required", however, estimated minimum quantities

may be stocked to cover immediate needs. This symbol applies to common hardware and bulk materials only.

- (8) Organizational. See note 3.
- (9) Direct support. This column indicates quantities of repair parts authorized for initial stockage for use in direct support maintenance and in supply support to organization. The quantities are based on 100 equipments to be maintained for a 15-day period.
- (10) General support. The numbers in this column indicate quantities of repair parts authorized for initial stockage for use in general support maintenance. The quantities are based on 100 equipments to be maintained for a 15-day period.
- (11) Depot. The numbers in this column indicate quantities of repair parts authorized for depot maintenance and for initial stockage for maintenance, and for supply support to lower categories. The entries are based on the quantity required for rebuild of 100 equipments.
- (12) Illustration. The "Item No." column lists the reference symbols used for identification of the items in the illustration or text of the manual.

### 2. Parts for Maintenance

When this equipment is used by signal service organizations organic to the theater headquarters of communication zones to provide theater communications, those repair parts authorized up to and including general support are authorized for stockage by the organization operating this equipment.

## 3. Additional Repair Parts Authorization

An asterisk (\*) indicates that an item is not authorized for stockage but if required, may be requisitioned for immediate use only.

# 4. Requisitioning Information

a. The allowance factors are based on 100 equipments. In order to determine the number of parts authorized for initial stockage for the specific number of equipments supported, the following formula will be used and carried out to two decimal placed

Specific number of equipments supported

X allowance factor =

100

Number of parts authorized for initial stockage.

- b. Fractional values obtained from above computation will be rounded to whole numbers as follows:
  - (1) When the total number of parts authorized is less than 0.5, the quantity authorized will be zero.
  - (2) When the total number of parts authorized is between 0.5 and 1.0, the quantity authorized will be one.
  - (3) For all values above one, fractional values below 0.5 will revert to the next lower whole number and fractional value 0.5 and above will advance to the next higher whole number.
- c. The quantities determined in accordance with the above computation represent the initial stockage for a 15-day period.

FEDERAL	DESIGNATIO		UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER	BY MODEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	IZATIONAL	FIGURE NO.	ITEM NO.
5805-831-6063		CENTRAL OFFICE; TELEPHONE; MANUAL AN/MTC-9 CENTRAL OFFICE; TELEPHONE; MANUAL AN/MTC-9: Provides signl area with facilities for interconnecting 600 tel lines and 60 manual or dial trunks; pri power my be obtained from engine gen set or local commercial power source.		NX				
		TELEPHONE TERMINAL GROUP AN/MTA-5, AN/MTA-5A Model Column 1 is for plain modeL; Column 2 for "A" model						
5410-792-6335		ADAPTER, TIE DOWN, FLOOR: Davis Aircraft part FDC-1225MS			18	*		
5805-856-0797	+ + +	ADAPTER; TIE DOWN; FLOOR: Devis Aircraft p/n FDC-1225M8-1			4	*		
6625-752-8464		AMMETER; 60 cyc; 0-100 cw; MIL type MR36W100ACAAR			1	*		
4210-764-2905		AXE, PICK HEAD: 3-1/2 lb, 35" Ig approx; Fed Spec GGG-A-926, type 1, class 1, design A			1	*		
4210-727-8111	t   t	AXE, PICK HEAD: 2-1/4 lb, 27" lg approx; Fed pec GGG-A-926, type 1, class 1, design B			1	*		
6250-500-4845		BALLAST; LAMP; F/fluorescent; GE p/n 89G381			22	*		
5805-034-0974		BRACKET, ROOF SUPPORT: P/o passageway; one for each van; 35" 1g x 5-1/2" h x 3-1/2" d approx; Sig dwg SM-B-377690			2	*		
5805-034-0973		BRACKET, SUPPORT ASSEMBLY: P/o passageway; f/supporting crosswalk; 36" lg x 5-3/4" w x 6"h; Sig dwg SM-C-377682			2	*		
7920-291-8305		BROOM; UPRIGHT: Fed Spec H-B-51, class 1, type C			1	*		
7920-178-8315	't 't	BRUSH; DUSTING; BENCH: Fed Spec H-B-201, class B			1	*		
5935-752-2473		CABLE; POWER; ELECTRIAL; 3 cond; Sig dwg SC-A-46608; (Authorized allowances will be a minium of or a multiple of 165 ft.)	ft		165	*		
6145-985-7704		CABLE; POWER; ELECTRIAL; 2 cond; f/fan; MIL type CO-02MGF(2/16)0338  (Authorized allownces will be a minimum of or a multiple of 6 ft.)	ft		6	*		
6145-752-2562		CABLE; POWER; ELECTRICAL: For better; 2 cond; GE p/n S1-5325 type 65/.0063 (Authorized allowances will be a minimum of or a multiple of 6 ft.)	ft		18	*		

FEDERAL			SIGNATI			UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER		E	Y MODE	L 	DESCRIPTION	OF issue	EXP	IN unit	IZATIONAL	FIGURE No	ITEM No
					AN/MTC-9 (continued)						
5995-823-2955	†	1			CABLE ASSEMBLY, TELEPHONE: 6 ft lg o/a; 1-PJ-047B one end, other			2	*		
					end stripped and tinned; Sig dwg SM-C-377563 GRV						
5995-965-8146	†	1			CABLE ASSEMBLY, TELEPHONE: 2 cond; 61" lg .approx; Sig dwg			1	*		
					SM-C-377563-IV						
5805-764-5899	†	1			CABLE ACCESSORY ASSEMBLY; P/o 50 ft special circuits cable			4	*		
					assembly; Bendix p/n QWLDIO-313004-284						
5995-889-1500	†	1			CABLE ASSEMBLY; POWER; ELECTRICAL CX-7453/U: 100 ft power cable			1	*		
5995-823-2807	†	1			CABLE ASSEMBLY, TELEPHONE: 2 cond; approx 2 ft 4 in lg o/a; Sig dwg			2	*		
					SM-C-377563-I						
5995-823-2618	†	1			CABLE ASSEMBLY, TELEPHONE: 2 cond; approx 3 ft 3 in lg o/a; Adler			1	*		
					p/n 1041-300C1-2; Sig dwg SM-C-377563-II						
5995-823-2619	†	1			CABLE ASSEMBLY, TELEPHONE: 2 cond; approx 3 ft 7 in lg o/a; Sig dwg			2	*		
					SM-C-377563-III						
5910-553-6096	†	1			CAPACITOR; FIXED; PAPER DIKLECTRIC: 10,000 uuf; ±10%; Hopkins			22	*		
	١.				type No. 591A			_			
5910-713-8313	†				CAPACITOR; FIXED; PAPER DIKLECTRIC: 4 uf ±10%; Aerorox p/n P150F63			2	*		
5910-880-6898	†	1			CAPACITOR, FIXED; PAPER DIKLECTRIC: F/fan; 1 sect; 5 uf, ±10%,			2	*		
		١.			330 V; GE p/n 49F3319			l .			
5910-892-7496	†	1			CAPACITOR; FIXED; PAPER DIKLECTRIC: For btryfan; 5 uf ±10%; Cornell-			1	*		
	١.	١.			Dubilier p/n KKT23A50			١.			
5925-752-6642	†	†			CIRCUIT BREAKER: Air arc quenching; Square D p/n QO-270			1	*		
5925-523-5764	†				CIRCUIT BREAKER: Air arc quenching; Square D p/n QO-120			3			
5925-682-1061	†	†			CIRCUIT BREAKER: Air arc quenching; Square D p/n QO-115			8			
5925-682-4096	†	†			CIRCUIT BREAKER: Air arc quenching; Square D p/n QO-130			1	*		
5930-734-5202	†	†			CIRCUIT BREAKER: For heater; GH p/n 10172H334A			3			
5925-532-9142	†	†			CIRCUIT BREAKER: Air arc quenching; Square D p/n QO-140			1			
5925-823-2485	†	17		l l	CIRCUIT BREAKER: Air arc quenching; Square D p/n QO-150	I		1	1 ^	1	

FEDERAL			SIGN		N		UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER			BY MO	DDEL		DESCRIPTION	OF issue	EXP	IN unit	IZATIONAL	FIGURE No	ITEM No
						AN/MTC-9 (continued)						
6645-892-4369	<i>t</i>					CLOCK; WALL: Chelsea Model P-642, type A			1	*		
6645-526-4395	'	1				CLOCK: Mil Spec MIL-C-3956 M2 - AN5743 L2			1	*		
5935-064-5731	<i>†</i>	1				CONNECTOR, PLUG, ELECTRICAL U-237/G: F/power cables			5	*		
5935-518-9653		1				CONNECTOR PLUG, ELECTRICAL UP-120/M: F/heater;			3	*		
5935-764-5900	<i>†</i>	1				CONNECTOR PLUG, ELECTRICAL: P/o 50 ft special circuits cable			4	*		
		-				assembly; Bendix p/n QWLD-194628-12P						
5935-429-5511	1					CONNECTOR PLUG, ELECTRICAL: 2 cont; Hubbell p/n 7102			3	*		
5935-646-5908	<i>†</i>	1				CONNECTOR PLUG, ELECTRICAL: 2 cont; Hubbell p/n 9754			2	*		
5935-149-3988	<i>†</i>	1				CONNECTOR PLUG, ELECTRICAL: 2 cont; Hubbell p/n 7545			1	*		
5935-045-9832	†					CONNECTOR; RECEPTACLE, ELECTRICAL: U-187A/G:			109	*		
5935-199-6675	1	1				CONNECTOR; RECEPTACLE, ELECTRICAL: Crouse-Hinds p/n QE-8302			1	*		
5935-764-5897	†	†				CONNECTOR; RECEPTACLE, ELECTRICAL: F/special circuits; Bendix p/n QWLD10-194228-128			1	*		
5935-064-5732	<i>†</i>	1				CONNECTOR; RECEPTACLE, ELECTRICAL: U-238/G: In pwr ent box			2	*		
5935-359-6025	<i>†</i>	1				CONNECTOR; RECEPTACLE, ELECTRICAL: 2 cont; Hubbell p/n 9210			7	*		
5935-549-3562	<i>†</i>	1				CONNECTOR; RECEPTACLE, ELECTRICAL: 4 cont; Hubbell p/n 9200			13	*		
		-				COVER BROOM: Sig dwg SM-B-379217; † † M4CW10-A898			1	*		
5805-034-0969	<i>†</i>	1				COVER, CANVAS, PASSAGEWAY: Nylon, neoprene covered; 216" lg x 120"			1	*		
		-				w approx; Sig dwg SM-D-377694						
5805-764-5898	1	1				COVER ELECTRICAL CONNECTOR: F/special circuits receptacle; Bendix			1	*		
						p/n QWLD10-350694-28						
5805-871-5703	1	1				DOOR, FOLDING: Holcomb & Hoke p/n 2F2385			2	*		
5127-752-8862	<i>†</i>	1				EXTRACTOR; ELECTRON TUBE: Economy Cable p/n ETP-7			1	*		
5120-293-2692	' +	1				EXTRACTOR; ELECTRON TUBE: Economy Cable p/n ETP-9			1	*		

FEDERAL	DESIGNATION		UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER	BY MODEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	IZATIONAL	FIGURE NO.	ITEM NO.
		AN/MTC-9 (continued)						
4140-856-4501	†	FAN; IMPELLAR: For btry fan; 5 blades; Inductiion Motors p/n 68-15-2			1	*		
6210-855-9091	†	FIXTURE; LIGHT: Specialty Electronics p/n E-24BM			4	*		
	†	FIXTURE; LIGHT: Electrospace Corp p/n EST-184 † † M4CW10-B257			4	*		
5920-296-0679	†   †	FUSE; CARTRIDGE: 5 amp; 250v; Buss type No. MTH5			1	*		
5920-686-0021	†   †	FUSEHOLDER: Extractor post type; accom 1 cartridge fuse; Buss type			1	*		
		No. HKL						
5120-776-9917	†   †	GRIP; CABLE; JAW: Economy Cable p/n EQA 6-8P			6	*		
5120-776-9918	†   †	GRIP; CABLE; JAW: Economy Cable p/n EQA 26-8P			119	*		
5120-251-4489		HAMMER HAND: 8 lb; Fed Spec GGG-H-86, type SA, class II			1	*		
4540-892-5899		HEATING ELEMENT; ELECTRICAL: 120v, 125v, 1.04 amp: Wiegand p/n FT-512			5	*		
4540-404-9232		HEATING ELEMENT; ELECTRICAL: For heater; Electromode p/n 3954-E			3	*		
5965-892-3201	†   †	HOOK HEADSET: Tiebout p/n 5565-1			2	*		
6630-171-9572	†   †	HYDROMETER: Exiode p/n 13142 type V-2-B			1	*		
4140-855-9079	†	IMPELLER; FAN; AXIAL: 5 blades; cw; Rotron p/n 12706-1			1	*		
4140-856-4501	†	IMPELLER; FAN; CENTRIFUGAL: F/fan, batry compartment box;			1	*		
		Induction Motors Corp p/n 68-15-2				*		
4520-792-8398	†   †	IMPELLER; FAN; AXIAL: 5 blades; cw; Botron p/n 12706-1			3	*		
5935-192-4826	†   †	JACK; TELEPHONE: MIL type JJ-086			8	*		
6210-665-5376	†   †	KNOB: For fuseholder; bayonet type; Buss type No. 6279-1/2			1	*		
6240-155-7786	†   †	LAMP: IM-35: 2.4 V, 0.5 AMP			3	*		
6240-152-2996	†   †	LAMP; FLUORESCENT: Sylvania p/n F20f12/CW			22	*		
6240-179-1814	†   †	LAMP; GLOW: ¼ w; 65v ac; MIL type NE-45			16	*		
6240-179-1816	†   †	LAMP; GLOW: MIL ype NE-30			3	*		

FEDERAL		_	ESIGN			UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER			BY MC	DDEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	IZATIONAL	FIGURE NO.	ITEM NO.
					AN/MTC-9 (continued)						
6240-044-6914	†	1			LAMP; INCANDESCENT: F/emergency lighting; Fed Spec No. WL-111b, Trade No. 1683			3	*		
6240-143-3070	+	1	.		LAMP; INCANDESCENT: GE p/n 50W/RS			4	*		
6240-153-6517	<i>†</i>	<i>†</i>	.		LAMP: INCANDESCENT: 48v; 1-3/4" lg o/a; Sylvania p/n 48B			2	*		
6240-158-8918	<i>†</i>	1 +	.		LAMPHOLDER: Dialco p/n 6-08			1	*		
6250-299-6093	<i>†</i>	<i>†</i>	.		LAMPHOLDER: Hubbell p/n 2937			22	*		
6250-299-6697	<i>†</i>	+	.		LAMPHOLDER: Hubbell p/n 2943			22	*		
6250-892-4365	1	1	.		LAMPHOLDER: Leviton p/n 9062			3	*		
6250-752-1233	1	+	.		LAMPHOLDER: Med screw type; Dialite p/n 4-74-6			15	*		
6230-729-9614	1	1	.		LANTERN; ELECTRIC: Justrite p/n 2106-7			3	*		
5410-752-2525	†	1	.		LEAD; ELECTRICAL: For grd strap; Sig dwg SM-B0352166			2	*		
6230-615-5384	†	1	.		LIGHT; EXTENSION: 25 ft lg; Woodhead p/n 506KS25-18-2SJ			1	*		
6105-876-8624	†				MOTOR; ALTERNATING CURRENT: For btry fan; 115v, 60 cyc, single ph; Induction Motors p/n BC2910-27			1	*		
6105-560-5739	†	†			MOTOR; ALTERNATING CURRENT: For heater; 115v, 60 cyc, single ph; GE p/n 5KSP51AL74			3	*		
6105-792-8384	†				MOTOR; ALTERNATING CURRENT: 115v, 50-60 cyc, single ph; Roton p/n 23396-01			1	*		
5805-034-0966	†	<i>†</i>			PANEL, FLOOR: p/o passageway; 37" lg x 8" w x 2" thk; Sig dwg SM-C-377689			6	*		
5940-223-5293	' <sub>†</sub>	1 '+	.		POST BINDING: U-106/U:			26	*		
5940-823-1804	' <sub>†</sub>	1 7	.		POST BINDING: Sig dwg No. SC-C-136011, GR III			1534	*		
5805-034-0975	<i>†</i>	†			RAIL, OVERHEAD ASSEMBLY: p/o passageway; 126-1/2" lg x 36" w approx; Sig dwg SM-D-377691			1	*		
5805-034-0972	†	†			RAMP: p/o passageway; 37-1/4" lg x 10-1/2" w x 2" h; approx; Sig dwg SM-C-377714			2	*		

FEDERAL			SIGNATION		UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER		В,	MODEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	IZATIONAL	FIGURE NO.	ITEM NO.
				AN/MTC-9 (continued)						
8130-656-1090	†	†		REEL CABLE RC-435/U:			16	*		
5945-615-7738	†	†		RELAY; SWITCH: dpdt:; Potter and Brownfield p/n PRLLAY			1	*		
5410-793-2021	†	†		REPAIR KIT, ELECTRICAL EQUIPMENT, SHELTER MK-680/G: To repair punctures to shelter skin;			A/R	*		
				Note: To be requisitiioned for immediate use onluy, order direct from depot stock						
	†	†		RETAINER, LAMP FLUORESCENT: Holds lamps in sockets; Laduby part P-40 + + M4CW10-B226			1	*		
5975-224-5260	†	<i>†</i>		ROD. GROUND MX-148/G:			1	*		
6210-757-8134	<i>†</i>	<i>†</i>		SHIELD, LIGHT,: Sig dwg SM-C-349983			22	*		
6250-299-2884	'+	<i>†</i>		STARTER, FLUORESCENT LAMP: Bryant Elec p/n FS2			22	*		
5340-857-1424	<i>†</i>	†		STRAP, RETAINING:Holds cable in cradle clamps; neoprene; 1-1/16" lg x 15/16" w x 3/32" d; Electrovert p/n N-1			496	*		
5805-856-6202	†	†		STRAP, RETAINING: Secures cables to cradle clamps; neoprene; 1.624" lg x 1" w x .115" thk; Electrovert p/n N-3			171	*		
5340-884-9983	†	†		STRAP, RETAINING: Secures cables to cradle clamps; neoprene; 3.179" lq x 1" w x 1" w x 0.135" thk; Electrovert p/n N-7			14	*		
	†	†		STRAP; WEBBING: 18" in lg; Davis Aircraft p/n FDC-1730-58-3  † † M4CW10-A926			1	*		
5340-823-5235	†	†		STRAP; WEBBING: 20 in lg x 1 in w; Davis Aircraft p/n FDC-1730-65-2			100	*		
5340-823-5261	<i>†</i>	<sub>†</sub>		STRAP; WEBBING: 24" in lg; Davis Aircraft p/n FDC-1730-56-3			3	*		
5340-823-5232	' <sub>†</sub>	' <sub>+</sub>		STRAP; WEBBING: 24 in lg x 1 in w; Davis Aircraft p/n			1	*		
00.0 020 0202	'	'		FDC-1730-58-1						
5340-823-5234	†	†		STRAP; WEBBING: 34 in lg x 1 in w; Davis Aircraft p/n FDC-1730-58-2			2	*		
5340-823-5262	†			STRAP; WEBBING: 38 in lg x 1 in w; Davis Aircraft p/n FDC-1730-57-2			2	*		

FEDERAL			SIGNA			UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER		В	Y MOE	DEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	IZATIONAL	FIGURE NO.	ITEM NO.
					AN/MTC-9 (continued)	İ					
5340-823-5236	†	†			STRAP WEBBING: 54 in lg x 1 in w; Davis Aircraft p/n			6	*		
		١.			FDC-1730-57-1						
5930-823-0895	1	†			SWITCH; SENSITIVE: dpdt; Microswitch p/n DT-2RS1-A7			1	*		
5930-682-0508	†	†			SWITCH; SENSITIVE: dpdt; Microswitch p/n BZ-2RS-P4			2	*		
5930-855-9058	†	†			SWITCH; SENSITIVE: dpdt; Microswitch p/n DTF2-2RQ9-RH			1	*		
5930-738-8204	/	/			SWITCH; SENSITIVE: dpdt; Microswitch p/n DTF2-2RQ9-LH			1 -	*		
5930-823-0797	†	†			SWITCH; SENSITIVE: dpdt; Microswitch p/n BZE6-2RQ81			5	*		
5930-615-9376	<i>†</i>	1			SWITCH; TOGGLE: dpdt; MIL part MS35059-21			1	*		
5930-655-1575	T	T			SWITCH; TOGGLE: dpdt; MIL part MS35059-22			1	1		
5930-504-9923	T	T			SWITCH; TOGGLE: dpdt; MIL p/n MS35059-21			3	1		
5930-258-4314		T			SWITCH; TOGGLE: spst; Hubbell; p/n 9641			3	1		
5930-636-4014	†	1			SWITCH; TOGGLE: spst; Hubbell; p/n 9711			/	*		
5930-615-7896	†	†   +			SWITCH; TOGGLE: spst; MIL p/n MS-25068-22			1	*		
5930-577-2523	†	T			SWITCH; TOGGLE: MIL type MS-25068-24			1	1		
6685-892-5669	/	1			THERMOMETER: f/batterys Exide p/n 26969			1			
6680-793-9575	1	1			THERMOSTAT: FLOW CONTROL: Bimetallic type; White Rogers type			3	*		
E0E0 000 0000	+	+			No. H-2727-A						
5950-892-8208	T	T +			TRANSFORMER; CURRENT: Midwest Electronics p/n 3CT-11B			1	1		
6625-883-4272	1	1			VOLTMETER: MIL type MR36W150ACVVR			1	*		
0005 750 0404		4			TELEPHONE SWITCHBOARD GROUP AN/MTA-7						
6625-752-8464	†	<i>†</i>			AMMETER: 60 cyc; 0-100 cw; MIL type MR36W100ACAAR			1			
4210-764-2905	T	T			AXE, PICKHEAD: 3-1/2 LB, 35" lg approx; Fed Spec GGG-A-926,			1			
1010 707 0111	+	١,			type 1, class 1, Design A						
4210-727-8111	1	†			AXE, PICKHEAD: 2-1/2 LB, 27" Ig approx; Fed Spec GGG-A-926, type 1, class 1, design B			1	_ ^		

FEDERAL			NATION		UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER		BYN	IODEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	IZATIONAL	FIGURE No	ITEM No
				AN/MTC-9 (continued)						
5340-823-5236	†	†		BALLAST; LAMP; F/fluorescent; GE p/n 89G381			28	*		
	†	<i>†</i>		BELL., ELECTRICAL: Right alarm; adj tone; Sig dwg No. SM-C-183246			1			
	1	<i>†</i>		BROOM; UPRIGHT; Fed Spec H-B-51, class 1, type C			1	*		
	1	<i>†</i>		BRUSH; UPRIGHT; BENCH: Fed Spec H-B-201, class B			1	*		
	†	<i>†</i>		CABLE; POWER, ELECTRICAL: For heater; 2 cond; GE p/n S1-5325 type	ft		18	*		
				65/.0063 (Authorized allowances will be a minimum of or a multiple of 6 ft.)						
	<i>†</i>	†		CABLE; POWER, ELECTRICAL: 2 cond; f/fan; MIL type CO-02MGF(2/16)0338	ft		6	*		
	<i>'</i>	<del>'</del>		(Authorized allowances will be a minimum of or a multiple of 6 ft.)						
	<i>†</i>	<del>'</del>		CABLE; POWER, ELECTRICAL: 3 cond; Sig dwg SC-A-46608 (Authorized			115	*		
	<i>†</i>	<del>'</del>		allowances will be a minimum of or a multiple of 115 ft.)						
	'+	+		CABLE ASSEMBLY; POWER, ELECTRICAL CX-7453/U: 100 ft power cable			1	*		
	'+	+		CABLE ASSEMBLY; TELEPHONE; 2 cond; approx 3 ft 7 in lg o/a; Sig dwg			4	*		
	'	'		SM-C-377563-II						
6210-299-7107				CAP, LENS: Amber; 15/16 in dia; Dialco 52-993			1	*		
6210-299-6064	+	+		CAP, LENS: Red; 15-16 in dia; Dialco p/n 52-991			1	*		
210-163-2614	' <sub>+</sub>	' <sub>+</sub>		CAP, LENS: Red; St-Carl p/n 801413-31B			2	*		
5910-880-6898	'			CAPACITOR: FIXED; PAPER DIELECTRIC: f/fan; 1 sect, 5 uf, ±10%			2	*		
	١.	l . l		330v; GE p/n 49F3319						
5910-553-6096	†	†		CAPACITOR: FIXED; PAPER DIELECTRIC: 10,000 uuf ±10%; Hopkins type No. 591-A			28	*		
5910-713-8313	†	1		CAPACITOR: FIXED; PAPER DIELECTRIC: 4 uf ±10%; Aerovox p/n P150F63			2	*		
5925-682-1061	†	1		CIRCUIT BREAKER: Air arc quenching; Square D p/n QO115			10	*		
925-752-6642	†	<i>†</i>		CIRCUIT BREAKER: Air arc quenching; Square D p/n QO-270			1	*		
5925-823-2485	†	<i>†</i>		CIRCUIT BREAKER: Air arc quenching; Square D p/n QO-150			1	*		
925-523-5764	†	<i>†</i>		CIRCUIT BREAKER: Air arc quenching; Square D p/n QO-120			3	*		

FEDERAL STOCK NUMBER			SIGN Y MO	ATION	DESCRIPTION	UNIT OF	EXP	QTY IN	ORGAN-	ILLUST	RATION
STOCK NUMBER			I IVIC		DESCRIPTION	issue	EAF	unit	IZATIONAL	FIGURE No	ITEM No
					AN/MTC-9 (continued)						
5930-734-5202	1	†			CIRCUIT BREAKER: For heater; C-H p/n 10172H334A			3	*		
6645-892-4369	†	†			CLOCK; WALL: Chelsea Model P-642, type A			2	*		
6645-526-4395	1	†			CLOCK: MIL Spec Mil-C-3956 M2-AN5743 I2			2	*		
5935-518-9653	1	†			CONNECTOR, PLUG, ELECTRICAL UP-120/M: F/heater			3	*		
	†	1			CONNECTOR; RECEPTACLE; ELECTRICAL: 2 cond; Hubbell p/n 9768			1	*		
					CONNECTOR; PLUG; ELECTRICAL: F/heater; 2 cond; Hubbell p/n 7102			3	*		
					CONNECTOR; PLUG; ELECTRICAL: 2 cond; Hubbell p/n 7545			1	*		
	†	†			CONNECTOR; PLUG; ELECTRICAL: 2 cond; Hubbell p/n 9754			2	*		
	1	†			CONNECTOR; PLUG; ELECTRICAL U-237/G: F/power cables			3	*		
	†	†			CONNECTOR; RECEPTACLE; ELECTRICAL: U-187A/G			66	*		
	†	†			CONNECTOR; RECEPTACLE; ELECTRICAL: 2 cont; Hubbell p/n 9210			6	*		
	†	†			CONNECTOR; RECEPTACLE; ELECTRICAL:Crouse-Hinds p/n QE-8302			1	*		
	†	†			CONNECTOR; RECEPTACLE; ELECTRICAL: F/special circuits; Bendix p/n			1			
					QWLD10-194228-12S						
					CONNECTOR; RECEPTACLE; ELECTRICAL: 4 cont; Hubbell p/n 9200			14	*		
					CONNECTOR; RECEPTACLE; ELECTRICAL U-238/G: In power entrance box			2	*		
	1	†			COVER, BROOM: Sig dwg SM-B-379217 † † M4CW10-A898			1	*		
5805-764-5498	†	†			COVER,ELECTRICAL CONNECTOR; F/special circuits receptacle; Bendix			1	*		
	١.	١.			p/n QWLD10-350694-28						
5805-764-5703	†	†  -			DOOR, FOLDING, Holcomb & Hoke p/n 2F238F			1			
5120-752-8862	†	<i>'</i>			EXTRACTOR; ELECTRON TUBE: Economy Cable p/n ETP-7			1			
5210-293-2692	1	†			EXTRACTOR; ELECTRON TUBE: Economy Cable p/n ETP-9			1	. *		
6210-855-9091	†				FIXTURE, LIGHT, Mtd in ceiling; 9-5/8" lg x 5-1/2" dia; Spec			10	*		
					Elec Dev Corp p/n E-24BM						

FEDERAL				TION		UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER		B\	/ MOI	DEL	DESCRIPTION	OF issue	EXP	IN unit	IZATIONAL	FIGURE No	ITEM No
					AN/MTC-9 (continued)						
		+			FIXTURE, LIGHT: Electrospace Corp p/n EST-184 † † M4CW10-B257			10	*		
5920-296-0679	1	+			FUSE; CARTRIDGE: 5 amp, 250 v: Buss type No. MTH5			1	*		
5920-686-0021	†	†			FUSEHOLDER: Extractor post type; accom 1 cartridge fuse; Buss type  No. HKL			1	*		
5120-776-9917	<i>†</i>	+			GRIP; CABLE: JAW: Economy Cable p/n EQA6-8p			6	*		
5120-776-9918	<i>†</i>	+			GRIP; CABLE: JAW: Economy Cable p/n EQA26-s			94	*		
5120-251-4489	<i>†</i>	+			HAMMER; HAND: 8 lb; Fed Spec GGG-H-86, type SA, Class II			1	*		
4540-404-9232	<i>†</i>	+			HEATING ELEMENT; ELECTRICAL: For heate; Electromode p/n 3954-E			3	*		
4540-892-5899	<i>†</i>	+			HEATING ELEMENT; ELECTRICAL: For heater; Wiegand p/n PT 512			5	*		
4140-855-8398	1	+			IMPELLAR; FAN; AXIAL: For heater; Terrington p/n 20			2	*		
4140-855-9079	<i>†</i>	+			IMPELLAR; FAN; AXIAL: 5 blades cw; Rotron p/n 12706-1			4	*		
5935-192-4826	1	†			JACK; TELEPHONE: MIL type JJ-086			1	*		
5120-198-5410	1	+			KEY, SOCKET HEADSCREW: Bristol p/n 316L			1	*		
5120-198-5413	1	†			KEY, SOCKET HEADSCREW: Bristol p/n 532L			1	*		
6210-665-5376	1	1			KNOB: For fuseholder; bayonet type; Buss type No. 6271-1/2			1	*		
6240-155-7786	1	+			LAMP LM-35; 2.4 v, 0.5 amp			1	*		
6240-152-2996	1	+			LAMP; FLUORESCENT: Sylvania p/n F20T12/CW			28	*		
6240-223-9100	1	+			LAMP; GLOW: 1/25w; 65v ac; GE p/n NE-51			2	*		
6240-179-1814	<i>†</i>	+			LAMP; GLOW: 1/4 w; 65v ac; MIL type NE-45			16	*		
6240-179-1816	1	+			LAMP; GLOW: MIL type NE-30			1	*		
6240-143-3070	1	+			LAMP, INCANDESCENT: GE p/n 50W/RS			11	*		
6240-153-6571	†	†			LAMP, INCANDESCENT: For infor uturret; 48 v; St-Carl p/n 801374-48B2			2	*		

FEDERAL			IGNA			UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER		B	MOD	PEL	DESCRIPTION	OF issue	EXP	IN unit	IZATIONAL	FIGURE No	ITEM No
					AN/MTC-9 (continued)						
6240-044-6914	† †	<i>†</i>			LAMP: INCANDESCENT: F/emergency lighting; Fed Spec No. WL-111b, Trade No. 1683			5	*		
6250-782-9040	1	' <sub>†</sub>			LAMPHOLDER: F/glow lamps; 125 v, 75 w; Leecraft p/n 4-74-18			15	*		
6250-158-8918	<i>†</i>	' <sub>†</sub>			LAMPHOLDER: Candelabra screw base; Dialco p/n 6-08			1	*		
6250-299-6093	<i>†</i>	' <sub>†</sub>			LAMPHOLDER: Hubbell p/n 2937			28	*		
6250-299-6697	<i>†</i>	<i>†</i>			LAMPHOLDER: Hubbell p/n 2943			28	*		
6250-892-4365	<i>†</i>	<i>†</i>			LAMPHOLDER: Leviton p/n 9062			1	*		
6230-729-9614	†	<i>†</i>			LANTERN; ELECTRIC: Justrite p/n 2106-7			1	*		
5410-752-2525	<i>†</i>	<i>†</i>			LEAD; ELECTRICAL: For grd strap; Sig dwg SM-B-352166			2	*		
6230-615-5387	<i>†</i>	1			LIGHT; EXTENSION: 25 ft lg; Woodhead p/n 506KS36-18-2SJ			1	*		
6210-238-2766	†	1			LIGHT; INDICATOR: Red; Dialco p/n 52408H991			1	*		
	†	†			LIGHT, INDICATOR: F/info turrent; St-Carl p/n 801421(13)  † # M4CW10-C868			2	*		
	†	†			LIGHT, INDICATOR: Amber; Dialco p/n 52408H933			1	*		
		١.			† † M4CW10-C870						
6105-560-5739	†	†			MOTOR; ALTERNATING CURRENT: For heater; 115 v, 70 cyc, single ph; GE p/n 5KSP51AL74			3	*		
6105-792-8384	†	†			MOTOR; ALTERNATING CURRENT: 115 v, 50-60 CYC, SINGLE PH; Roton p/n 23396-01			2	*		
5340-823-5247	†	1			PADLOCK SET: 3 padlocks; with chain; Chicago Lock p/n 1742C			1	*		
6240-155-7786	<i>†</i>	' <sub>†</sub>			POST. BINDING: U-106/U:			26	*		
5940-823-1804	<i>†</i>	' <sub>†</sub>			POST, BINDING: Sig dwg No. SC-C-136011, Gr III			6	*		
5410-793-2021	<i>†</i>	<i>†</i>			REPAIR KIT, ELECTRICAL EQUIPMENT, SHELTER MK-680/g: To repair			A/R	*		
	'	'			punctures to shelter skin;						
					NOTE: To be requisitioned for immediate use only, order direct						
					from depot stock						
	†	1			RETAINER, LAMP FLUORESCENT: Holds lamps in sockets; Laduby p/n			56	*		
					P-40† † M4CW10-B226						

FEDERAL			GNAT			UNIT		QTY	ORGAN-	ILLUST	RATION
STOCK NUMBER		ВY 	MODI	L	DESCRIPTION	OF issue	EXP	IN unit	IZATIONAL	FIGURE No	ITEM No
					AN/MTC-9 (continued)						
5975-224-5260	1	†			ROD, GRUND MX-148/G:			2	*		
6210-754-8134	1	†			SHIELD, LIGHT: Sig dwg SM-C-349983			28	*		
5945-615-7738	1	†			RELAY; SWITCH: dpdt; Potter and Brownfield p/n PRLLAY			1	*		
5905-252-5428	<i>†</i>	†			RESISTOR; FIXED; COMPOSITION: 680 ohms ±10%; MIL type			2	*		
					RC20GF680K						
5210-855-9077	<i>†</i>	†			SPIRIT LEVEL ASSEMBLY: For leveling van; incl lecel and L bkt;			4	*		
					Sig dwg SM-C-377560						
6250-299-2884	<i>†</i>	†			STARTER; FLUORESCENT LAMP; Bryant Elec p/n FS2			28	*		
5340-857-1424	<i>†</i>	†			STRAP, RETAINING: Holds cables in cradle clamps; neoprene; 1-1/16"			479	*		
					lg x 1" w x 15/16 w x 3/32" d; Electrovert p/n N-1						
5975-705-5841	<i>†</i>	†			STRAP, RETAINING: Holds cables in cradle clamps; neoprene; 1-5/8"			221	*		
		•			lg x 1" w x 1/8" thk; Electrovert p/n N-3						
5340-884-9983	<i>†</i>	†			STRAP, RETAINING: Secures cables to cradle clamps; neoprene; 3.179"			14	*		
		•			lg x 1" w x 0.135" thk; Electrovert p/n N-7						
	<i>†</i>	†			STRAP, WEBBING: 18" lg; Daivs Aircraft p/n FDC-1730-58-3DC-1730-65-2			34	*		
		'			t t M4CW10-A926						
5340-823-5235	<i>†</i>	†			STRAP; WEBBING: 29 in lg x 1 in w; Daivs Aircraft p/n FDC-1730-65-2			100	*		
5340-823-5232	1	+			STRAP; WEBBING: 24 in Ig x 1 in w; Daivs Aircraft p/n FDC-1730-58-1			18	*		
5340-823-5233	<i>†</i>	<del>'</del>			STRAP; WEBBING: 30 in Ig x 1 in w; Daivs Aircraft p/n FDC-1730-57-3			2	*		
5340-823-5234	<i>†</i>	+			STRAP; WEBBING: 34 in Ig x 1 in w; Daivs Aircraft p/n FDC-1730-58-2			2	*		
5340-823-5236	<i>†</i>	+			STRAP; WEBBING: 54 in lg x 1 in w; Daivs Aircraft p/n FDC-1730-57-1			1	*		
5930-823-0827	1	+			SWITCH; LEVER: Used on info turret assy; 4 in lg x 1-11/16 in h x2			2	*		
	'	'			5/8 in w; St Carl p/n 206790-000 Code 175-B			_			
5930-855-9058	†	+			SWITCH; SENSITIVE: dpdt; Microswitch p/n DTF2-2RQ9-RH			1	*		
5930-682-0508	<i>†</i>	+			SWITCH; SENSITIVE: dpdt; Microswitch p/n BZ-2RS-P4			1	*		
5930-823-0797	' <sub>†</sub>	'+			SWITCH; SENSITIVE: spdt; Microswitch p/n BZE6-2RQ81			3	*		

FEDERAL STOCK NUMBER			 ATION DEL	I	DESCRIPTION	UNIT	EXP	QTY IN	ORGAN-	ILLUST	RATION
STOCK NOWIBER					DESCRIPTION	issue	LAF	unit	IZATIONAL	FIGURE No	ITEM No
					AN/MTC-9 (continued)						
5930-504-9923	†	†			SWITCH; TOGGLE: dpdt; C-11 p/n 7563K4			3	*		
5930-615-9376	†	+			SWITCH; TOGGLE: dpdt; MIL p/n MS-35059-21			1	*		
5930-655-1575	<i>†</i>	†			SWITCH; TOGGLE: dpdt; MIL p/n MS-3505922			2	*		
5930-615-7896	†	+			SWITCH; TOGGLE: spst; MIL p/n MS-25098-22			3	*		
5930-258-4314	<i>†</i>	†			SWITCH; TOGGLE: spst; Hubbell p/n 9641			2	*		
5930-636-4014	†	†			SWITCH; TOGGLE: spst; Hubbell p/n 9711			8	*		
6680-793-9575	†	†			THERMOSTAT; FLOW CONTROL: Bimetall ic type; White Rogers type No.			3	*		
E0E0 900 9009	_	_			H-2727-A						
5950-892-8208	Ţ	T			TRANSFORMER; CURRENT: Midwest Electronics p/n 3CT-11B			1			
6625-883-4272	T	T			VOLTMETER: MIL type MR36W150ACVVR			I			

s	OUR	CE		FEDERAL		DI	ESIGN	ATIO	N		UNIT		QTY				ILLUS	TRATION
	COD	E		STOCK NUMBER			BY MO	DEL		DESCRIPTION	OF ISSUE	EXP	IN UNIT	<b>DIRECT</b> SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ПЕМ NO.
А	В	С	D							CENTRAL OFFICE; TELEPHONE; AN/MTC-9								
				5805-831-6063						CENTRAL OFFICE; TELEPHONE; MANUAL AN/MTC-9: Provides signal area with facilities for interconnecting 600 tel lines and 60 manual or dial trucks; pri power may be obtained from engine gen set or local commerical power source TELEPHONE TERMINAL GROUP AN/MTA-5, AN/MTA-5A Model Column 1 is for plain model; Column 2		NX						
		0		5410-792-6335	<sub>†</sub>	†				for "A" model ADAPTER, TIE DOWN, FLOOR: Davis Aircraft p/n			18	4.0	3.1	90.0		
		_		5005 050 0707						FDC-1225M5				1.5		00.0		
		0		5805-856-0797	†	†				ADAPTER, TIE DOWN, FLOOR: Davis Aircraft p/n FDC-1225M8-1			4	1.5	1.1	20.0		
		0		6625-752-8464	†	†				AMMETER: 60 cyc; 0-100 cw; MIL type			1	1.7	1.3	5.0		
		0		4210-727-8111	†	†				MR36W100ACAAR AXE; PICK HEAD: 2-1/4 lb, 27" lg approx; Fed Spec GGG-A-926, type 1, class 1, design B			1	1.7	1.3	5.0		
		0		6250-500-4845	<i>†</i>	†				BALLAST; LAMP: F/fluorescent GE p/n 89G381			22	6.7	5.5	220.0		
		0		5805-034-0974	†	†				BRACKET, ROOF SUPPORT: P/o passageway; one for each van; 35" lg x 5-1/2" h x 3-1/2" d approx; Sig dwg SM-B-377690			2	1.5	1.1	4.0		
		0		5805-034-0973	†	†				BRACKET, SUPPORT ASSEMBLY: P/o passageway; f/supporting crosswalk; 36" lg x 5-3/4" w x 6" h; Sig dwg SM-C-37762			2	1.0	0.8	2.0		
		0		7920-291-8305	<i>†</i>	†				BROOM; UPRIGHT: 54 in Ig; Osborn p/n 1820			1	1.3	1.0	3.0		
		0		7920-178-8315	1	†				BRUSH; DUSTING; BENCH: Fibre; Osborn p/n 378			1	1.3	1.0	3.0		
		0		5935-752-2473						CABLE, POWER ELECTRICAL: 3 cond; Sig dwg SC-A-46608 (Authorized allowances will be a minimum of or a multiple of 165 ft.)	ft		165	*	*	1650.0		
		0		6145-985-7704	†	†				CABLE; POWER; ELECTRICAL: 2 cond; MIL type CO-02MGF(2/16)0338 (Authorized allowances will be a min of or a multiple of 6 ft.)	ft		6	*	*	60.0		

_	OURCE		FEDERAL			ESIGNATION		UNIT		QTY				ILLUS	TRATION
'	CODE		STOCK NUMBER			BY MODEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	DIRECT SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.
Α	ВС	D	-				AN/MTC-9 (continued)								
	0		6145-752-2562	†	t		CABLE; POWER; ELECTRICAL: For heater; 2 cond GE p/n S1-5325 type 65/.0063 (Authorized allowances will be a minimum of or a multiply of 6 ft.)	ft		18	*	*	180.0		
			6145-823-2259	†	†		CABLE; SPECIAL PURPOSE; ELECTRICAL WM-111AU (Authorized allowances will be a minimum of or a multiple of 8 ft.)	ft		8	*	*	80.0		
			6145-577-8480	†	†		CABLE; TELEPHONE WM-130/G; WM-130A/G: Used with CX-4566/G; 54 cond (Authorized allowances will be a minimum of or a multiple of 290 ft.)	ft		5280		900.0	50000.0		
			5995-889-1500		†		CABLE ASSEMBLY; POWER; ELECTRICAL CX7453/U:			1	1.0	0.5	5.0		
			5995-823-2955	†	†		CABLE ASSEMBLY; TELEPHONE: 6 ft lg o/a; 1 PJ-047B one end, other end stripped and tinned: Sig dwg SM-C-377563 GRV			2	1.9	1.5	12.0		
			5995-985-8146	†	†		CABLE ACCESSORY; TELEPHONE: 2 cond; 61" Ig approx; Sig dwg SM-C-377563 GRV			1	1.3	0.6	6.0		
			5805-764-5899	†	†		CABLE ACCESSORY ASSEMBLY: P/o 50 ft special circuits cable assembly; Bendix p/n QWLD10-313004-284			4	2.6	2.0	20.		
			5995-823-2807	†	†		CABLE ASSEMBLY; TELEPHONE: 2 cond; approx 2 ft 4 in lg o/a; Sig Dwg SM-C-377563-l			2	1.9	1.5	12.0		
			5995-823-2618	†	†		CABLE ASSEMBLY; TELEPHONE: 2 cond; approx 3 ft 3 in Ig o/a; Sig Dwg SM-C-377563-II			1	1.3	0.6	6.0		
			5995-823-2619	†	†		CABLE ASSEMBLY; TELEPHONE: 2 cond; approx 3 ft 7 in lg o/a; Sig Dwg SM-C-377563-III			2	1.9	1.5	12.0		
			5910-553-6096	†	†		CAPACITOR, FIXED, PAPER DIELECTRIC: f/fluorescent; 10,000 uuf ±10%; Hopkins type No. 591A			22	8.5	7.1	132.0		
			5910-713-8313	†			CAPACITOR, FIXED, PAPER DIELECTRIC: F/fan 4 uf ±10%; Aerorox p/n P150F83			2	1.9	1.5	12.0	C1	
	0		5910-880-6898		†		CAPACITOR, FIXED, PAPER DIELECTRIC: F/fan 1 sect, 5 uf, ±10%, 330 V; GE p/n 49F3319			2	1.9	1.5	12.0	C1	

	JRCE	FEDERAL			SIGNATION		UNIT		QTY				ILLUST	TRATION
CC	DDE	STOCK NUMBER		 	Y MODEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	DIRECT SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.
A B	B C D					AN/MTC-9 (continued)								
	0	5910-892-7496	†			CAPACITOR; FIXED; PAPER DIELECTRIC: For Btryfan; 5 uf ±10%; Cornell-Dublier p/n KKT23a50			1	1.3	0.6	6.0		
	0	5925-752-6642	†	†		Circuit BREAKER: Air arac quencing; Square D p/n QO-270			1	1.3	1.0	6.0		CB15
	0	5925-523-5764	†	†		Circuit BREAKER: Air arac quencing; Square D p/n QO-1201			3	2.5	1.9	18.0		CB6,CB8
	0	5925-532-9142	†	†		Circuit BREAKER: Air arac quencing; Square D p/n QO-140			1	1	1.3	1.0		CB9 CB7
	0	5925-823-2485	†	†		Circuit BREAKER: Air arac quencing; Square D p/n QO-150			1	1.3	1.0	6.0		CB-3
	0	5925-682-1061	†	†		Circuit BREAKER: Air arac quencing; Square D p/n QO-115			8	4.5	3.6	48.0		CB1-2 CB4-5- CB11-14
	0	5925-682-4096	†	†		Circuit BREAKER: Air arac quencing; Square			1	1.3	1.0	6.0		CB11-14
	0	5930-734-5202		†		D p/n QO-130 Circuit BREAKER: Air arac quencing; Square 10172H334A			3	2.5	1.9	18.0		
	0	6645-892-4369	+			CLOCK; WALL: Chelsea Model P-642, type A			1	1.7	1.0	5.0		
	0	6645-526-4395	'	+		CLOCK: MIL Spec MIL-C3956 M2-AN5743L2			1	1.3	1.0	5.0		
	0	5935-283-2950	+	†		CONNECTOR; PLUG U-77/U: 10 cont			1	1.3	0.6	6.0		
	0	5935-283-2884	+	† † †		CONNECTOR; PLUG U-78/U: 10 cont			1	1.3	0.6	6.0		
	H	5935-045-9830	†	t		CONNECTOR; PLUG; ELECTRICAL U-185B/G: 104 cont (Maintenance parts listed under Connector, Plug; Electrical U-185/G; U-185A/G Group)			182		21.3	900.0		
	0	5935-429-5511	†			CONNECTOR, PLUG, ELECTRICAL: F/heater; 2 cont; Hubbell p/n 7102			3	2.5	1.9	15.0		
	0	5935-064-5731	†	†		CONNECTOR, PLUG, ELECTRICAL U-237/G: F/power cables			5	3.4	2.6	25.0		
	0	5935-518-9653		†		CONNECTOR, PLUG, ELECTRICAL UP-120/M: F/heater			3	2.5	1.9	15.0		

	OURCE	FEDERAL			ESIGNATION		UNIT		QTY				ILLUST	TRATION
	CODE	STOCK NUMBER			BY MODEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	DIRECT SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.
А	B C D					AN/MTC-9 (continued)								
	0	5935-764-5900	†	†		CONNECTOR; PLUG; ELECTRICAL: P/o 50 ft p/n QWLD-194628-12P			4	2.6	2.0	20.		
		5935-646-5908	†	†		CONNECTOR; PLUG; ELECTRICAL: 2 cont; Hubbell p/n 9754			2	1.9	1.5	10.0		
	0	5935-149-3988	†	†		CONNECTOR; PLUG; ELECTRICAL: 2 cont; Hubbell p/n 7545			1	1.3	0.6	5.0		
		5935-045-9832	+	+		CONNECTOR; RECEPTACLE, ELECTRICAL: U-187A/G:			109	26.6	13.7	654.0		
	o	5935-064-5732	't	†		CONNECTOR; RECEPTACLE, ELECTRICAL: U-238/G:			2	1.9	1.5	10.0		J67,J68
	0	5935-199-6675	†	†		CONNECTOR; RECEPTACLE, ELECTRICAL: Crouse- Hinds p/n QE-8302			1	1.3	1.0	5.0		J69
	0	5935-764-5897	†	†		CONNECTOR; RECEPTACLE, ELECTRICAL: F/special circuits; Bendix p/n QWLD10-194228-12S			1	1.3	1.0	5.0		J70
	0	5935-359-6025	†	†		CONNECTOR; RECEPTACLE, ELECTRICAL: 2 cont, Hubbell p/n 9210			7	4.0	1.8	35.0		J73 thru J79
	0	5935-549-3562	†	†		CONNECTOR; RECEPTACLE, ELECTRICAL: 4 cont, Hubbell p/n 9200			13	5.7	4.8	65.0		J71,J72 J80 thru J89
	0		†	†		COVER, BROOM: Sig dwg SM-B-379217 + + M4CW10-A898			1	1.0	0.8	2.0		
	0	5805-034-0969	†	†		COVER, CANVA, PASSAGEWAY: Nylon, neopren covered; 216" lg x 120" w approx; Sig dwg SM-D-377694			1	1.7	1.3	5.0		
	0	5805-764-5898	†	†		COVER, ELECTRICAL CONNECTOR: F/special circuits receptacle; Bendix p/n QWLD10-350694-28			1	1.0	0.8	2.0		
	0	5805-871-5703	+	+		DOOR, FOLDING: Holcomb & Hoke p/n 2F2385			2	1.0	0.8	2.0		
	0	5120-752-8862	†	†		EXTRACTOR, ELECTRON TUBE: Economy Cable p/n ETP-7			1	1.0	0.5	5.0		
	0	5120-293-2692	†	†		EXTRACTOR, ELECTRON TUBE: Economy Cable p/n ETP-9			1	1.0	0.5	5.0		
	0	4140-856-4501	†			FAN, IMPELLER: For brty fan, 5 blades Introduction Motors p/n 68-15-2			1	1.0	0.5	7.0		
	0	6210-855-9091	†			FIXTURE, LIGHT: Speciality Electronics p/n E-24BM			4	2.3	1.7	8.0		

	SOUR			FEDERAL		_	ESIGNA			UNIT		QTY				ILLUST	TRATION
	COE	DE		STOCK NUMBER			BY MOE	DEL 	DESCRIPTION	OF ISSUE	EXP	<b>IN</b> UNIT	DIRECT SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.
Α	В	С	D						AN/MTC-9 (continued)								
		0				†			FIXTURE, LIGHT: Electrospace Corp p/n EST-184 † † M4CW10-B257			4	2.3	1.7	8.0		
		0		5920-296-0679	†	†			FUSE, CARTRIDGE: 5 amp, 250v, Buss type No MTH5			1	19.4	9.1	200.0		F1
		0		5920-686-0021	†	†			FUSEHOLDER: Extractor post type; accom 1 cartridge fuse; Buss type No. HKL			1	0.7	0.5	1.0		
		0		5120-776-9917	1	<sub>†</sub>			GRIP, CABLE, JAW: Economy Cable p/n EQA6-8p			6	8.2.7	4.0	120.0		
		0		5120-776-9918	<i>†</i>	+			GRIP, CABLE, JAW: Economy Cable p/n EQA6-s			119	89.8	48.6	2380.0		
		Ō		5120-251-4489	<i>†</i>	† †			HAMMER, HAND: 8 lb; Fed Spec GGG-H-86, type- SA. Class II			1	1.7	0.8	5.0		
		0		4540-892-5899	†	†			HEATING ELEMENT, ELECTRICAL: 120 v 125 w, 1.04 amp; Wiegand p/n PT-512			5	0.4	1.5	15.0		
		0		4540-404-9232	†	†			HEATING ELEMENT, ELECTRICAL: For heater Electromode p/n 3954-E			3	2.5	1.9	9.0		
		0		5965-892-3201	1	+			HOOK, HEADSET: W and J Tiebout p/n 5565-1			2	1.0	0.5	6.0		
		0		6630-171-9572	'	<i>†</i>			HYDROMETER: Exiode p/n 13142 type V-2-B			2	1.3	0.6	6.0		
		ŏ	1	4140-855-9079	<i>†</i>	†			IMPELLER, FAN AXIAL: 5 blades; cw Roton			1	1.3	0.6	3.0		
		0		4520-792-8398	†	†			IMPELLER, FAN AXIAL: For heater; Terrington p/n 20			3	2.5	1.9	9.0		
		0		4140-856-4501	†				IMPELLER, FAN, CENTRIFUGAL: F/fan, btry compartment box; Induction Motors Corp p/n 68-15-2			1	1.3	0.6	3.0		
		0		5935-192-4826	†	†			JACK TELEPHONE: Cont arr J1; MILtype JJ-086			8	2.3	1.7	80.		
		0		6210-665-5376	1	†			KNOB: For fuseholder; bayonet type; Buss type No. 6279-1/2			1	1.0	0.5	5.0		
		0		6240-153-6517	<i>†</i>	†			LAMP, INCANDESCENT: 48v; 1-3/4" lg o/a Sylvania p/n 48B			2	4.0	1.8	100.0		
		0		6240-155-7786	†	†			LAMP LM-35: f/lanter, electric; 2.4 v, 0.5 amp			3	5.2	2.5	150.		

	SOUF			FEDERAL			SIGNATION	ı		UNIT		QTY				ILLUST	TRATION
	COI	DE		STOCK NUMBER			Y MODEL		DESCRIPTION	OF ISSUE	EXP	IN UNIT	<b>DIRECT</b> SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.
Α	В	С	D						AN/MTC-9 (continued)								
		0		6240-152-2996	†	+			LAMP, FLUORESCENT: SIvania p/n F20T12/CW			22	19.4	9.9	1100.0		
		0		6240-179-1814	1	<i>t</i>			LAMP, GLOW: 1/4 w; 65 v ac; MIL type NE-45			16	9.8	8.3	800.0		
		0		5920-686-0021	+	† †			LAMP, GLOW: MIL type NE-30			3	3.4	2.6	150.0		132-34
		0		6240-044-6914	1	†			LAMP, INCANDESCENT: F/emergency lighting:			3	3.4	2.6	150.0		
									28 v, 102 amp; Fed Spec No. WL-111b								
									Trade No. 1683								
		0		6240-143-3070	†	†			LAMP, INCANDESCENT: GE p/n 50A/RS			5	6.2	5.0	250.0		
		0		6250-158-8918	†	†			LAMPHOLDER: 1-3/32" h x 7/16" dia; Dialco p/n 6-08			1	0.7	0.5	1.0		DS31
		0		6250-299-6093	1	†			LAMPHOLDER: Hubbell p/n 2937			22	4.0	3.1	110.0		
		0		6250-299-6697	†	† † †			LAMPHOLDER: Hubbell p/n 2943			22	4.0	3.1	110.0		
		0		6250-892-4365	†	†			LAMPHOLDER: Leviton p/n 9062			3	1.3	1.0	30.0		DS32-34
		0		6250-752-1233	†	†			LAMPHOLDER: med screw type, Dialite p/n 4-74-6			15	3.4	2.6	75.0		DS35 thru 49
		0		6230-729-9614	1	†			LANTERN, ELECTRIC: Justrite p/n 2106-7			3	3.4	2.6	30.0		
		0		5410-752-2525	†	†			LEAD, ELECTRICAL: For grd strap; Sig dwg SM-B-352166			2	5.2	2.5	30.0		
		0		6230-615-5384	†	†			LIGHT, EXTENSION: 25 ft Ig, Woodhead p/n 506KS25-18-2SJ			1	1.7	0.8	10.0		
		0		5935-752-8011	†	†			MAINTENANCE KIT, ELECTRONIC EQUIPMENT: For maintenance of Connector, Plug U-77/U:			1	1.3	0.6	3.0		
									Sig dwgs Nos. SC-B-68420, MS-35537-78								
		0		5410-973-2936	†	†			MAINTENANCE KIT, ELECTRONIC EQUIPMENT, SHELTER MX-679/G: To repair punctures in			A/R	*				
									shelter skin; NOTE: To be requistioned for immediate								
									use only, order direct from depot stock								
				6105-876-8624	+				MOTOR, ALTERNATING CURRENT: For btry fan;			1	1.9	1.3	0.6		
					'				115 v, 60 cyc, single ph; Indcution Motors p/n BC2910-27								
									110000 pm 502010 21								

SOURCE	FEDERAL		DE	SIGNATION		UNIT		QTY				ILLUS*	TRATION
CODE	STOCK NUMBER			BY MODEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	DIRECT SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.
A B C D					AN/MTC-9 (continued)								
0	6105-560-5739		†		MOTOR, ALTERNATING CURRENT: For heater; 115v			3	2.5	1.9	9.0		
	6105-792-8384				60 cyc, single ph; GE p/n 5KSP51AL74 MOTOR, ALTERNATING CURRENT: 115 v, 50-60			1	1.9	1.3	0.6		
	5805-034-0966	+	†		cyc, single ph; Rotron p/n 23396-01 PANEL, FLOOR: P/o passageway; 37" lg x 8" w			6	1.9	1.5	6.0		
	5940-223-5293		†		x 2" thk; Sig dwg SM-C-377689 POST. BINDING: U-106/U:			26	4.5	3.6	260.0		
	5940-823-1804	't	†		POST, BINDING: Sig dwg No. SC-C-136011, Gr III			2358	172.4	93.5	23000.0		
	5805-034-0975	†	†		RAIL, OVERHEAD ASSEMBLY: P/o passageway 126-1/2" lg x 36" w approx; Sig dwg SM-D-377691			1	0.7	0.5	1.0		
	5805-034-0972		†		RAMP: P/o passageway; 37-1/4" lg x 10-1/2" w x 2" h approx; Sig dwg SM-C-377714			2	1.0	0.8	2.0		
	8130-656-1090		†		REEL CABEL RC-435/U			16	5.2	2.5	32.0		
	5945-615-7738	†	†		RELAY, SWITCH: dpdt; Potter and Brownfield p/n PRLLLAY			1	1.3	1.0	3.0		
0	5410-771-3354	†	†		REPAIR KIT, ELECTRICAL EQUIPMENT SHELTER MK-681/G: To repair punctures to shelter skin; NOTE: To be requisitioned for immediate			A/R	*				
0 0		†	†		use only, order direct from depot stock RETAINER, LAMP FLUORESCENT: Holds lamps in sockets; Laduby p.n P-40 † † M4CW10-B226			44	6.7	5.5	440.0		
	5975-224-5260		†		ROD, GROUND MX-148/G			2	5.2	4.2	30.0		
	6210-754-8134		†		SHIELD, LIGHT: Sig dwg SM-C-349983			22	6.7	5.5	220.0		
	6250-299-2884	†	†		STARTER, FLUORESCENT LAMP: Bryant Elec p/n FS2			22	12.5	6.3	320.00		
0	5340-857-1424	†	†		STRAP, RETAINING: Holds cable in cradle clamps; neoprene; 1-1/16: lg x 15/16" w x 3/32" d; Electrovert part N1			496	40.0	21.3	5000.0		
	5805-856-6202	†	†		STRAP, RETAINING: Holds cable in cradle clamps; neoprene; 1.64" lg x 1" w x .115" thk Electrovert p/n N3			171	17.2	8.7	1710.0		

SOURCE	FEDERAL		DE	SIGNATION		UNIT		QTY				ILLUS	TRATION
CODE	STOCK NUMBER			Y MODEL	DESCRIPTION	OF ISSUE	EXP	IN UNIT	<b>DIRECT</b> SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.
A B C D					AN/MTC-9 (continued)								
	6105-560-5739		†		MOTOR, ALTERNATING CURRENT: For heater; 115v			3	2.5	1.9	9.0		
	6105-792-8384				60 cyc, single ph; GE p/n 5KSP51AL74 MOTOR, ALTERNATING CURRENT: 115 v, 50-60			1	1.9	1.3	0.6		
	5805-034-0966		t		cyc, single ph; Rotron p/n 23396-01 PANEL, FLOOR: P/o passageway; 37" lg x 8" w			6	1.9	1.5	6.0		
					x 2" thk; Sig dwg SM-C-377689								
0 0	5940-223-5293 5940-823-1804	† †	† †		POST, BINDING: U-106/U: POST, BINDING: Sig dwg No. SC-C-136011, Gr III			26 2358	4.5 172.4	3.6 93.5	260.0 23000.0		
	5805-034-0975	†	†		RAIL, OVERHEAD ASSEMBLY: P/o passageway 126-1/2" Ig x 36" w approx; Sig dwg SM-D-377691			1	0.7	0.5	1.0		
	5805-034-0972	†	†		RAMP: P/o passageway; 37-1/4" lg x 10-1/2" w x 2" h approx; Sig dwg SM-C-377714			2	1.0	0.8	2.0		
	8130-656-1090		†		REEL CABEL RC-435/U			16	5.2	2.5	32.0		
	5945-615-7738		†		RELAY, SWITCH: dpdt; Potter and Brownfield p/n PRLLLAY			1	1.3	1.0	3.0		
0	5410-771-3354	†	t		REPAIR KIT, ELECTRICAL EQUIPMENT SHELTER MK-681/G: To repair punctures to shelter skin; NOTE: To be requisitioned for immediate			A/R	*				
0 0		†	†		use only, order direct from depot stock RETAINER, LAMP FLUORESCENT: Holds lamps in sockets; Laduby p.n P-40 † † M4CW10-B226			44	6.7	5.5	440.0		
	5975-224-5260		†		ROD, GROUND MX-148/G			2	5.2	4.2	30.0		
	6210-754-8134	†	†		SHIELD, LIGHT: Sig dwg SM-C-349983			22	6.7	5.5	220.0		
	6250-299-2884	†	†		STARTER, FLUORESCENT LAMP: Bryant Elec p/n FS2			22	12.5	6.3	320.00		
	5340-857-1424	†	†		STRAP, RETAINING: Holds cable in cradle clamps; neoprene; 1-1/16: lg x 15/16" w x 3/32" d; Electrovert part N1			496	40.0	21.3	5000.0		
0	5805-856-6202	†	†		STRAP, RETAINING: Holds cable in cradle clamps; neoprene; 1.64" lg x 1" w x .115" thk Electrovert p/n N3			171	17.2	8.7	1710.0		

	SOUF			FEDERAL	DESIGNA			UNIT		QTY				ILLUST	TRATION
	COI	DE		STOCK NUMBER	BY MOI	DEL 	DESCRIPTION	OF ISSUE	EXP	<b>IN</b> UNIT	<b>DIRECT</b> SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.
Α	В	С	D	-			AN/MTC-9 (continued)								
		0 0 0 0		5930-636-4014 5930-615-7896 5930-577-2523 6685-892-5669 6680-793-9575			SWITCH, TOGGLE: spst; Hubbell p/n 9711 SWITCH, TOGGLE: spst; MIL p/n MS-25098-22 SWITCH, TOGGLE: spst; MIL type MS25098-24 THERMOMETER: F/batterys; Exide p/n 26929 THERMOSTAT, FLOW CONTROL: Bimetallic type;			7 1 1 1 3	3.4 1.3 1.3 1.7 2.5	2.6 1.0 1.0 0.8 1.9	14.0 3.0 3.0 5.0 18.0		S13 S2
		0		5950-892-8208			White Rogers type No. H-2727-A1.3 TRANSSFORMER CURRENT: Midwest Electronics p/n 3CT-11B			1	1.3	1.0	3.0		
		0		6625-883-4272			VOLTMETER: MIL type MR36W150ACVVR CABLE ASSEMBLY GROUP			1	1.7	1.3	5.0		
	Р	F		6454-643-0053			CABLE, POWER, ELECTRICAL: F/fabricating CD-409; MIL type CO-02-HGF(2/18)ST0830 (Authorized allowances will be a minimum of or a multiple of 202 ft)	ft		202	*	*	2020		
	Р	F		6145-681-8505			CABLE, POWER, ELECTRICAL: F/fabricating CX-4762; MIL type CO-02-HGF(2/18)SJ0400 (Authorized allowances will be a minimum of or a multiple of 8 ft)	ft		8	*	*	80.0		
	Р	F		6145-635-3740			CABLE, POWER, ELECTRICAL: F/fabricating CX-3692/U and CX-4845/U; MIL type CO-02HGF(2/8)0800 (Authorized allowance will be a minimn of or a multiple of 276 ft)			276	*	*	2760.0		
	Р	F		6145-545-7148			CABLE,TELEPHONE: 27 PR No. 24 AWG: F/fabricating CX-2584A/U; St. Carl dwg No. 602387 (Authorized allowances will be a) minimum of or a multiple of 3032 ft)	ft		3032	*	*	30,320		
				5935-201-8924			CONNECTOR, PLUG, ELECTRICAL: P/o CX 2584A/U: 104 rd cont 52 male, 52 female; Sig dwg No. SM-C-339862			128	14.1	7.1	256.0		
							CONNECTOR, PLUG, ELECTRICAL: P/o CD 409 2 curved male cont; Hubbell p/n HC 11476 CONNECTOR, PLUG, ELECTRICAL: P/o CX 4762/U; 2 female cont; Sig dwg No. SM-B-143101			5 4	2.6	1.5 1.2	25.0		

	URC	_	FEDERAL			ESIGNATIO			UNIT		QTY				ILLUST	RATION
C	ODE		STOCK NUMBER			BY MODE	L 	DESCRIPTION	OF ISSUE	EXP	IN UNIT	DIRECT SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.
АВ	С	D						AN/MTC-9 (continued)								
	Р	F	5935-201-8910	<i>†</i>	†			CONNECTOR, PLUG, ELECTRICAL: P/o CX-3692/U, CD-409, CX-4845/U; 2 cond; Sig dwg No. SM-B-143121			31	11.0	5.4	155.0		
	Р	F	5307-527-5753	†	†			SCREW, MACHINE: Fastens retaining cup; P/o conn f/CX-2584A/U; Buggle p/n A3873-15			256	40.0	21.3	2560.0		
	Р	F	5307-532-3287	†	†			STUD, EXTENSION: Secures plug to receptacle, p/o con for CX-2584A/U; Cinch dwg No. 403-94-22-168			256	40.0	21.3	1280.0		
		F	5940-187-5056 5310-527-5768	† †	† †			TERMINAL TM 200: p/o CX-4845/U WASHER, FLAT: u/w spring f/extension stud; p/o conn f/CX-254A/U; Cinch p/n 600-17893-4			2 256	1.5 40.0	0.6 21.3	20.0 2560.0		
								TELEPHONE SWITCHBOARD GROUP AN/MTA-7, AN/MTA-7A Model Column 1 is for plain model; Column 2 for "A"model								
	0		6625-752-8464	†	†			AMMETER: 60 cyc; 0-100 cv; MIL type MR36W100ACAAR			1	1	1.3	5.0		
	0		4210-764-2905	†	†			AXE, PICK HEAD: 3-1/2 lb, 35" lg approx; Fed Spec GGG-A-926, type1, class 1,			1	1.7	1.3	5.0		
	0		4210-727-8111	<i>†</i>	†			design A AXE, PICK HEAD: 2-1/2 lb, 27" 1g approx; Fed Spec GGG-A-926, type 1, class 1,			1	1.7	1.3	5.0		
	0		6250-500-15	† †	† †			design B BALLAST, LAMP: F/fluorescent; GE p/n 89G381 BELL, ELECTRICAL: Night alarm; adj tone; Sig			28 1	7.7 1.3	6.3 1.0	56.0 3.0		
			7920-291-8305		†			dwg 183246 BROOM, UPRIGHT: Fed Spec H-B-51, class 2, type C			1	1.3	1.0	3.0		
	0		7920-178-8315	†	†			BRUSH, DUSTING,BENCH: Fed 8pec H-B-201, class B			1	1.3	1.0	3.0		
	0		6145-752-2562	†	†			CABLE, POWER, ELECTRICALICICAL: For heater; 2 cond GE p/n S1-5325 type 65/.0063 (Authorized allowances will be minlmum of or a multiple of 6 ft.)	ft		18	*	*	180.0		

	SOUF			FEDERAL		_	ESIGNA			UNIT		QTY				ILLUST	TRATION
	COI	DE		STOCK NUMBER			BY MO	DEL 	DESCRIPTION	OF ISSUE	EXP	IN UNIT	<b>DIRECT</b> SUPT	GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.
Α	В	С	D			Ì			AN/MTC-9 (continued)								
		0		6145-985-7704	†	†			CABLE, POWER, ELECTRICAL: 2 cond; MIL type CO-02MGP(2/16)0338(Authoried allowances will be a minimum of or a multiple of 6 ft)	ft		6	*	*	40.0		
		0		6645-982-4369	†	†			CABLE, POWER, ELECTRICAL: 3 cond; Sig dwg SC-A-46608; (Authorized allowances will be	ft		115	*	*	1150.0		
		н		6145-577-8480	†	†			a-minimum of or a- multiple of 115 ft.)  CABLE, TELEPHONE; WM-130A/G: Used with  CY-4566/G; (Authorized allowances will be a-minimum of or a- multiple of 265 ft.)	ft		4030		765.5	40000.0		
		o		5995-889-1500	†	†			CABLE ASSEMBLY, POWER, ELECTRICAL CX-7453/U 100 ft power cable			1	1.3	1.0	6.0		
		0		5995-823-2619	†	†			CABLE ASSEMBLY, TELEPHONE; 2 cond; approx 3 it 7 in lg o/a; Sig dwg 8SC-377563-II			4	2.6	2.0	24.0		
		0		6210-299-7107	†	†			CAP, LENS: Amber; 15/16 in dia; Dialco 52-993			1	1.0	0.5	2.0		
		0		6210-299-6064	†	†			CAP, LENS: Red; 5/16 in dia;-Dialco p/n 52-991			1	1.0	0.5	2.0		
		0		6210-163-2614 5910-553-6096	† †	† †			CAP, LENS: Red; St-Carl p/n 801413-31B CAPACITOR, FIXED, PAPER DIELECTRIC: F/fluorescent; 10,000 uuf ±10%; Hopkins type No. 591-A			2 28	1.0 10.5	0.8 5.2	2.0 84.0		
		0		5910-713-8313	†				CAPACITOR, FIXED, PAPER DIELECTRIC: 4 uf ±10%; Aerovox p/n P150F83			2	1.9	1.5	12.0		C1
		0		5910-880-6898		†			CAPACITOR, FIXED, PAMR DC : F/fan; 1 sect, 5 uf, ±10%, 330 v GE p/n 49F3319			2	1.9	1.5	12.0		C1
		0		5925-682-1061	†	†			CURf BREAKER: Air arc quenching; Square D p/n QO-115			10	5.2	4.2	60.0		CB1-2 CB4-7 CB11-14
				5925-752-6642	†	†			CIZIT BREAKER: Air arc quenching; Square D p/n QO-270			1	1.3	1.0	6.0		CBM1, CBM2
				5925-823-2485	†	†			CIRCUIT BREAER: Air arc quenching; Square D p/n QO-150			1	1.3 1.0	6.0	10.0		CB3
		0		5925-523-5764	†	†			CIRCUIT BREAER: Air arc quenching; Square D p/n QO-120			3	2.5	1.9	18.0		CB-10

SOURCE	FEDERAL			ESIGNA"			UNIT		QTY				ILLUST	TRATION
CODE	STOCK NUMBER			BY MOD	EL 	DESCRIPTION	OF EXP IN DIRECT SUPT		GENERAL SUPPORT	DEPOT	FIG. NO.	ITEM NO.		
A B C D						AN/MTC-9 (continued)								
0	5930-734-5202	†	†			CIRCUIT BREAKER: For heater; C-H p/n			3	2.5	1.9	18.0		
	6645-892-4369	<i>†</i>				CLOCK, WALL: Chelsea Model P-642, type A			2	1.9	1.5	10.0		
	6645-526-4395	'	+			CLOCK: MIL Spec MIL-C-3956 M2-AN5743 L2			2	1.9	1.5	10.0		
H	5935-045-9830	†	t			CONNECTOR, PLUG, ELECTRICAL U-185/B/G: 26			34		6.0	170.0		
	5935-518-9653		†			CONNECTOR, PLUG, ELECTRICAL UP-120/M: f/heater			3	2.5	1.9	15.0		
	5935-429-5511	†	†			CONNECTOR, PLUG, ELECTRICAL: F/heater; 2 cond: Hubbell p/n 7102			3	2.5	1.9	15.0		
	5935-149-3988	†	†			CONNECTOR, PLUG, ELECTRICAL: 2 cond; Hubbell p/n 7545			1	1.3	0.6	5.0		
	5935-646-5908	†	†			CONNECTOR, PLUG, ELECTRICAL: 2 cond; Hubbell p/n 9754			2	1.9	1.5	10.0		
	5935-064-5731	+	+			CONNECTOR, PLUG. ELECTRICAL U-237/G			3	2.5	1.9	18.0		
	5935-045-9832	+	†			CONNECTOR, RECEPTACLE, ELECTRICAL U-187A/G			66	19.4	9.9	330.0		
	5935-061-2042	†	†			CONNECTOR, RECEPTACLE, ELECTRICAL: 2 cont; Hubbell p/n 9768			1	1.3	1.0	5.0		
	5935-199-6675	†	†			CONNECTOR, RECEPTACLE, ELECTRICAL: Crouse- Hinds p/n QE-8302			1	1.3	1.0	5.0		J69
	5935-764-5897	†	†			CONNECTOR, RECEPTACLE, ELECTRICAL: F/special circuits; Bendix p/n QWLD10-194228-12S			1	1.3	1.0	5.0		J70
	5935-359-6025	†	†			CONNECTOR, RECEPTACLE, ELECTRICAL: 2 cont; Hubbell p/n 9210			6	4.0	3.1	30.0		J72 thru J77
	5935-549-3562	†	†			CONNECTOR, RECEPTACLE, ELECTRICAL: 4 cont; Hubbell p/n 9200			14	6.2	5.0	65.0		J71,J78 thru J89
	5935-064-5732	+	+			CONNECTOR, RECEPTACLE, ELECTRICAL: U-238/G:			2	1.9	1.5	10.0		J67,J68
	333 301 0702					COVER, BROOM: Sig dwq SM-B-379217  † #M4CW10-A898  COVER, ELECTRICAL CONNECTOR: F/special			1	1.0	0.8	2.0		35.,300
0	5805-764-5898	†	†			circuits receptacle; Bendix p/n QWLD10-350694-28			ľ	1.0	0.8	2.0		

SOURCE CODE	FEDERAL	- 1	_	IGN									DEPOT	ILLUST	RATION		
	COI	DE	STOCK NUMBER	2	BY	/ мс 	DEI	L 	DESCRIPTION	UNIT OF ISSUE	EXP	QTY IN UNIT	DIRECT SUPPORT			FIGURE NO.	ITEM NO
A E	3	С															
									AN/MTC-9 (continued)								
	-	0	5805-871-5703	1	<u> </u>	4			DOOR, FOLDING: Holcomb & Hoke p/n 2F2385			1	0.7	0.5	1.0		
		0	5120-752-8862	7	<u>-</u>	lΙ			EXTRACTOR, ELECTRON TUBE: Economy Cable p/n ETP-7			1	1.0	0.5	5.0		
		0	5120-293-2692	7	<u>'</u>   <sub>+</sub>	4			EXTRACTOR, ELECTRON TUBE: Economy Cable p/n ETP-9			1	1.0	0.5	5.0		
		0	6210-855-9091	1	<u>-</u>				FIXTURE, LIGHT: Mtd in ceiling; 9-5/8" lg x			10	2.6	2.0	10.0		
		0			1	4			5-1/2" dia; Spec Elec Dev Corp p/n E-24BM FIXTURE, LIGHT: Electrospace Corp p/n EST-184 +			10	2.6	2.0	10.0		
			5920-296-0679	7	<u>'</u>   +	4			FUSE, CARTRIDGE: 5 amp, 250 v; Buss type No. MTH5			1	19.4	9.9	200.0		F1
		0	5920-686-0021	7	<u>'</u>   +	4			FUSEHOLDER: Extractor post type; accom 1 cartridgefuse; Buss type No. HKL			1	1.0	0.8	2.0		
		0	5120-776-9917	1	<u>'</u>   +	1			GRIP, CABLE, JAW: Economy Cable part No. EQA26-8P			6	8.2	4.0	120.0		
		0	5120-776-9918	1	<u>'</u>   +	4			GRIP, CABLE, JAW : Economy Cable part No. EQA26-S			94	65.1	35.4	1000.0		
		0	5120-251-4489	7	<u>'</u>   +	4			HAMMER HAND: 8 lb; Fed Spec GGG-H-86, type SA, class II			1	1.7	0.8	5.0		
		0	4540-404-9232	1	<u>'</u>   +	4			HEATING ELEMENT ELECTRICAL: For heater Electromode p/n 3954			3	2.5	1.9	9.0		
		0	4540-892-5899	7	<u>'</u>   +	4			HEATING ELEMENT ELECTRICAL: For heater Wiegand p/n PT512-E			5	3.4	1.5	15		
		0	4520-792-8398	7	<u>'</u>   +	1			IMPELLER FAN AXIAL: For heater; Torrington p/n 20			3	2.5	1.9	18.0		
		0	4140-855-9079	1	<u>'</u>				IMPELLER, FAN AXIAL: 5 blades cw; Rotron p/n 12706-1			2	1.9	0.8	6.0		
		0	5935-192-4826	7	<u>'</u>   +	1			JACK TELEPHONE: cont arr J1; MIL type JJ-086			4	1.5	1.1	4.0		
		0	5120-198-5410	1	<u> </u>	1			KEY, SOCKET HEADSCREW: Bristol part 316L			1	1.0	0.8	2.0		
		0	5120-198-5413	1	<u>-</u>   +	1			KEY, SOCKET HEADSCREW: Bristol part 532L			1	1.0	0.8	2.0		
		0	6210-665-5376	7	<u>'</u>   +	1			KNOB: For fuseholder; bayonet type; Buss TYPE No. 6279-1/2			1	1.0	0.5	5.0		

	SOURCE CODE			FEDERAL		ESIG		_	N			271	DID 505	05NED41	25225	ILLUST	RATION
	CC	וטכ	Ε.	STOCK NUMBER		BY N	//OL	)EL	DESCRIPTION	UNIT OF ISSUE	ЕХР	QTY IN UNIT	DIRECT SUPPORT	GENERAL SUPPORT	DEPOT	FIGURE NO.	ITEM NO
Α	В	С	D														
									AN/MTC (continued)								
		0		6240-155-7786	$ _{\neq} $	4			LAMP LM-35: F/lantern; 2.4 4 v 0.5 am			1	2.6	1.2	50.0		
		0		6240-153-6517	<i>†</i>	1			LAMP INCANDESCENT: For info turret; 4BV; St. Carl p/n 801374-48B2			2	4.0	3.1	100.0		
		0		6240-152-2996	$ _{\neq} $	4			LAMP FLUORESCENT: Sylvania p/n F20T12/CW			28	30.0	15.8	1750.0		
		О		6240-223-9100	$\left  \frac{1}{t} \right $	A			GLOW 1/25 6 5 v ac; E p/n NE-51			2	2.6	1.2	100.0		
		О		6240-179-1814	$ _{\neq} $	A			LAMP GLOW: 1/4 w; 65 v ac;MIL type NE-45			16	9.8	8.3	900.0		146-60
		0		6240-179-1816	$ _{\neq} $	4			LAMP GLOW: MIL type NE-30			1	1.7	1.3	50.0		144
		0		6240-143-3070	+	4			LAMP INCANDESCENT: GE p/n 50A/RS			11	12.0	6.0	550.0		
		0		6240-044-6914	+	4			LAMP INCANDESCENT: F/emergency light Fed spec No WL-111b trade No. 1683			5	7.3	3.6	250.0		
		0		6250-158-8918	+	4			LAMPHOLDER: Candelabra screw base Dialco p/n 6-08			1	0.7	0.5	5.0		DS45
		0		6250-782-9040	+	4			LAMPHOLDER: F/glow lamps 125 v, 75 w Leecraft p/n 4-74-18			15	3.4	2.6	95.0		DS46-60
		О		6250-299-6093	$ _{\neq} $	4			LAMPHOLDER: Hubbell p/n 2937			28	5.2	4.2	140.0		
		0		6250-299-6697	$ _{\neq} $	4			LAMPHOLDER: Hubbell p/n 2943			28	5.2	4.2	140.0		
		0		6250-892-4365	+	4			LAMPHOLDER Leviton p/n 9062			1	0.7	0.5	5.0		DS44
		0		6230-729-9614	+	4			LANTERN ELECTRIC: Justrite p/n 2106-7			1	1.7	1.3	10.0		
		0		5410-752-2525	+	4			LEAD ELECTRICAL: For grd strap; Sig dwg SM-B-352166			2	4.0	1.8	20.0		
		0		6230-615-5384	+	4			LIGHT EXTENSION: 25 ft lg; Woodhead p/n 506KS25-18-2SJ			1	1.7	0.8	10.0		
		0		6210-238-2766	$ _{\neq} $	4			LIGHT INDICATOR: Red; Dialco p/n 52408 H 991			1	1.3	1.0	3.0		
					+	4			LIGHT INDICATOR: F/info turret; St. Carl p/n 801421(13) + M4CW10-C868			2	1.0	0.8	10.0		
					+	4			LIGHT ASSEMBLY, INDICATOR: Amber; Dialco p/n 52408H933 + + IN M4CW10-C870			1	1.3	1.0	3.0		
		F		5935-752-8011	+	+			MAINTENANCE KIT, ELECTRONIC EQUIPMENT: For maintenance of Connector Plug U-77/U; Sig dwgs Nos SC-B-68419, SC-B-68420, SC-B-68421, SC-B-68424, SC-B-68429, MS-35537-78			1	1.3	0.6	10.0		

	SOURCE CODE	FEDERAL		_	_	ATIC		LINIT		ОТУ	DIDECT	CENEDAL	DEDOT	ILLUSTI	RATION	
	CO	DE	STOCK NUMBER		вт	MO 	DEL	DESCRIPTION	UNIT OF ISSUI	EXP	QTY IN UNIT	DIRECT SUPPORT	GENERAL SUPPORT	DEPOT	FIGURE NO.	ITEM NO
Α	В	C D														
		Н	5410-973-2936	+	+			AN/MTC (continued)  MAINTENANCE KIT ELECTRONIC EQUIPMENT SHELTER MK-679/G: To repair punctures shelter skin NOTE: To be requisitioned for immediate			A/R	*				
		0	6105-560-5739	+	4			use only, order direct from depot stock  MOTOR ALTERNATING CURRENT: For heater  115v, 60 cyc single ph; GE p/n  5KSP51AL74			3	2.5	1.9	6.0		
		0	6105-792-8384	+				MOTOR, ALTERNATING CURRENT: 115 v, 50-60 cyc single ph; Rotron p/n 23396-01			2	1.9	0.8	6.0		
		0	5940 823-5247	+	1			PADLOCK SET 3 padlocks; with chain Chicago Lock p/n 1742C			1	1.7	0.8	5.0		
		0	5940 223-5293	+	1			POST BINDING U-106/U:			26	4.5	3.6	26.0		
		0	5940 823-1804	+	1			POST, BINDING: Sig dwg No. SC-C-136011, Gr III			6	1.9	1.5	6.0		
		0	5945-615-7738	+	1			RELAY SWITCH: dpdt: Potter and Brownfield p/n PR11AY			1	1.3	1.0	3.0		K1
		F	5410-771-3354	+	#			REPAIR KIT, ELECTRONIC EQUIPMENT MK-684/G: To repair punctures to shelter skin; NOTE: To be requisitioned for immediate only order direct from depot stock			A/R	*				
		0	5905-252-5428	+	1			RESISTOR, FIXED, COMPOSITION: 68 ohm ±10%; MIL type RC20GF680K			2	1.5	1.1	8.0		R1, R2
				+	#			RETAINER, LAMP FLUORESCENT: Holds lamps in sockets; Laduby p/n P-40  + + M4CW10-B226			56	7.7	6.3	560.0		
		0	5975-224-5260	1				ROD, GROUND MX-148/G:			2	5.2	4.2	30.0		
		0	6210-754-8134	+	1			SHIELD LIGHT: Sig dwg SM-C-349983			28	7.7	6.3	56.0		
		0	5210-855-9077	+	1			SPIRIT ;LEVEL ASSEMBLY: For leveling van; incl level and L bkt; Sig dwg SM-C-377560			4	3.4	2.6	16.0		
		0	6250-299-2884	+	1			STARTER, FLUORESCENT LAMP: Bryant Elec p/n FS2			28	19.4	9.9	400.0		
		0	5340-857-1424	+	#			STRAP, RETAINING: Holds cable in cradle clamps; neoprene; 1 1/16" lg x 15/16 w x 3/32 " d; Electrovert part N1			479	38.3	20.4	4790.0		

SOURCE CODE		_	FEDERAL		_	_	ATIO				071/	DIDECT	05115041		ILLUST	RATION
	CO	DE	STOCK NUMBER		вү	мо 	DEL 	DESCRIPTION	UNIT OF ISSUE	ЕХР	QTY IN UNIT	DIRECT SUPPORT	GENERAL SUPPORT	DEPOT	FIGURE NO.	ITEM NO
Α	в	С	)				T									
	1							ANIATO (continue I)								
			5975-705-5841	Ι,				AN/MTC (continued) STRAP, RETAINING: Holds cables in cradle			221	19.4	9.9	2210.0		
			3973-703-3641	+	+			clamps, neoprene; 1-5/8" lg x 1" w x 1/8" thk; Electrovert part N3			221	19.4	9.9	2210.0		
		0	5340-884-9983	+	1			STRAP, RETAINING: Secures cables to cradle clamps 3.179" lg x 1" x 0/135" thk; Electrovert part N7			14	3.4	2.6	140		
		0		+	1			STRAP WEBBING: 18" lg; Davis Aircraft p/n FDC-1730-58-3 + + M4CW10-A926			34	9.0	4.5	170.0		
		0	5340-823-5235	+	1			STRAP WEBBING: 20 in lg X 1 in w; Davis Aircraft p/n FDC-1730-65-2			100	19.4	9.0	1000.0		
		0	5340-823-5232	+	1			STRAP WEBBING: 24 in X lg x 1 in w: Davis Aircraft p/n FDC-1730-58-1			18	5.7	4.8	90.0		
		0	5340-823-5233	+	1			STRAP, WEBBING: 30 in lg x 1 in w; Davis Aircraft p/n FDC-1730-57-3			2	1.5	1.1	12.4		
		0	5340-823-5234	+	1			STRAP, WEBBING: 34 in lg x 1 in w; Davis Aircraft p/n FDC-1730-58-2			2	1.5	1.1	12.4		
		0	5340-823-5236	+	1			STRAP, WEBBING: 54 in Ig x 1 in w; Davis Aircraft p/n FDC-1730-57-1			1	1.0	0.8	5.0		
		0	5930-823-0827	+	1			SWITCH, LEVER: V Used d on info turret assy; 4 in lg X 1 - 11/1;6 in D X 5/8 in w; w; St Carl p/n 206790000 Code 175-h			2	1.5	1.1	4.0		S1-S2
		0	5930-823-9058	+	1			SWITCH SENSITIVE: dpdt: Microswitch p/n DTF2 -2R09			1	1.7	1.3	5.0		S16
		0	5930-682-0508	+	1			SWITCH, SENSITIVE dpst; Microswitch p/n BZ-2RS-P4			1	1.7	1.3	5.0		S17
		0	5930-823-0797	+	1			SWITCH, SENSITIVE: spdt; Microswitch p/n BZE6-2RQ81			3	3.4	2.6	15.0		S14,S15, S18
		0	5930-504-9923	1	1 4			SWITCH, TOGGLE: dpdt; C-H p/n 7563X4			3	2.5	1.9	18.0		
		0	5930-615-9376	+	1 4			SWITCH, TOGGLE: dpdt; MIL p/n MS-35059-21			1	1.3	1.0	3.0		S1
		0	5930-655-1575	1	1 4			SWITCH, TOGGLE: dpdt; MIL p/n MS-35059-22			2	1.9	1.5	6.0		S2-S19
		0	5930-615-7896	+	1			SWITCH, TOGGLE: dpdt; MIL p/n MS-25098-22			3	2.5	1.9	9.0		S13, S20 S21
		0	5930-258-4314	+	1			SWITCH, TOGGLE: spst; Hubbell p/n 9641			2	1.9	1.5	6.0		S10, S12

SOURCE CODE	FEDERAL		_	_	ATIO	- 1				OTV	DIDECT	OFNEDAL	DEDGE	ILLUST	RATION			
(	CO	DE	•	STOCK NUMBER		BY	MO 	DEI		DESCRIPTION	UNIT OF ISSUE	EXP	QTY IN UNIT	DIRECT SUPPORT	GENERAL SUPPORT	DEPOT	FIGURE NO.	ITEM NO
A E	3	С	D															
										AN/MTC-9 (continued)								
					+	4				SWITCH TOGGLE: spst; Hubbell p/n 9711			8	3.4	2.6	16.0		S-3 thru S-9, S-11
				6680-793-9575	+	4				THERMOSTAT, FLOW CONTROL: Bimetallic type; White Rogers type No. H-2727			3	2.5	1.9	9.0		
				5950-892-8208	+	1				TRANSFORMER, CURRENT: Midwest Electronic p/n 3CT-11B			1	1.3	1.0	3.0		T1
				6625-883-4272	+	1				VOLTMETER: MIL type MK36W150ACVVR  CABLE ASSEMBLY GROUP			1	1.7	1.3	5.0		
F		F		5935-259-9825	+	4				ADAPTER CABLE TO CONNECTOR u/w CX-36-94/U: 1/2 in cable opening ; Amphenol p/n AN-3057-6			18	5.7	2.8	36		
F		F		6145-635-3740	+	4				CABLE POWER, ELECTRIC: F//fabricating CX-3692/U and CX-4845/U; MIL type CO-02HGF(2/8)0800 (Authorized allowances will be a minimum of or a multiple of 90 ft)			90	*	*	900.0		
F		F		6145-681-8505	+	4				CABLE POWER, ELECTRICAL; F/fabricating CX-4762/U; MIL type a CO-02-HGF(2/18)SJ0400 (Authorized allowances will be a minimum be of or a multiple of 129 ft)			129	*	*	1290		
F		F		6145-160-1844	+	4				CABLE POWER, ELECTRICAL: F/fabricating CX-3694/U; MIL type CO (Authorized allowances will be a minimum of or a multiple of 50 ft	ft		50	*	*	500.0		
F	9	F		6145-112-8619	+	#				CABLE, POWER, ELECTRICAL: F/fabricating CD-413: 2 No. 14 AUG cond; National Board of AWG; Underwriters Std type 2, NEC (Authorized allowance will be a of or a multiple of 27 ft))			27	*	*	270.0		
F		F		6145-545-7148	+	#				CABLE TELEPHONE F/fabricating CX-2584A/U: 27 pr PD. 24 AWG; St. Carl dwg No. 602387 No. 24 AWG; St. Carl dwg No. be 602 (Authorized allowances will be art)			3540	*	*	35400		
F		F		5935-201-8924	+	4				CONNECTOR, PLUG, ELECTRICAL: P/o CX-2584A/U: 104 rd cont 52 male, 52 female Sig dwg Jo SM-C-339862			536	40.0	21.3	1072.0		

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Α	В	С	D															
					,					AN/MTC-9 (continued)								
	Р	F		5935-201-8910	+	1				CONNECTOR, PLUG, ELECTRICAL: P/o CX-3692/U, CD-409, CX-4845/U; 2 cont; Sig dwg No SM-B-143121			18	7.7	3.8	90.0		
	Р	F		5935-229-7387	+	4				CONNECTOR, PLUG, ELECTRICAL: P/o CX-4762/U; 2 female cont; Sig dwg SM-B-143101			18	7.7	3.8	90.0		
	Р	F		5935-539-2655	+	4				CONNECTOR, PLUG, ELECTRICAL: P/o CX-4762/U; 4 cont; MIL part MS-3106A14S-2S (C)			18	7.7	3.8	90.0		
	Р	F		5935-149-3563	+	4				CONNECTOR, PLUG, ELECTRICAL: P/o CD-413; 2 curved female cont; Hubbell p/n 7224			8	4.5	2.1	40.0		
	Р	F		5935-201-8474	+	1				CONNECTOR, PLUG, ELECTRICAL: P/o CD-413; 2 curved male cont; Hubbell p/n 7238			8	4.5	2.1	40.0		
	Р	F		5307-527-5753	+	1				SCREW, MACHINE: Fastens retaining cup; p/o conn f/CX-2584A/U; Buggie p/n A3873-15			1072	71.2	39.0	2000.0		
	Р	F		5307-532-3287	+	4				STUD , EXTENSION: Secures plug to receptacle; p/o conn for CX-2584A/U: Cinch dwg No 403-94-22-168			1072	71.2	39.0	2000.0		
	P	F		5310-527-5768	+	+				WASHER, FLAT: u/w spring f/extension stud;; p/o conn f/CX-2584A/U- Cinch p/n 600-17893-4			1072	71.2	39.0	2000.0		

Major General, United States Army, Chief of Staff. Official: J. C. LAMBERT, Major General, United States Army, The Adjutant General. Distribution: Active Army: USASA (2) LOGCOMD (2) FTWOAD (10) CNGB (1) USAMICOM (4) LEAD (7) CC-E (7) USASMC (2) SHAD (8) Dir of Trans (1) USASCC (4) NAAD (5) CofEngrs (1) MDW (1) SVAD (5) TSG (1) Armies (2) CHAD (3) CofEngrs (1) Corps (2) ATAD (10) USACDCEA (1) USAC (8) LBAD (14) **USACDOCBRA (1)** 11th Air Aslt Div (8) Gen Dep (2) USACDCCEA (1) Instl (2) except Sig Sec, Gen Dep (5) USACDCCEA (Ft Huachuca) (1) Ft Monmouth (70) Sig Dep (12) Ft Hancock (4) Sig FLDMS (2) USACDCOA (1) **AMS** (1) USACDCQMA (1) Ft Gordon (10) **USAERDAA (2)** USACDOTA (1) Ft Huachuca (10) **USAERDAW (13)** USACDCADA (1) **WSMR (5) USACDCARMA (1)** Ft Carson (25) WRAMC (1) Army Pic Cen (2) Ft Knox (12) **USACDCAVNA (1)** Svc Colleges (2) Units organized under following USACDCARTYA (1) USACDCSWA (1) Br Svc Sch (2) TOE's (2 copies each): 11-57 USACDCEC (10) USATC Armor (2) 11-357 11-97 11-500 (AA-USAMC (5) USAECFB (2) USCONARC (5) USATC Inf (2) 11-98 AC) ARADCOM (5) USASTC (2) 11-117 11-587 ARADCOM Rgn (2) Army Dep (2) except 11-127 11-592 0S Maj Comd (4) except SAAD (80) 11-155 11-597 USAREUR (5) TOAD (14) 11-157 NG: None.

USAR: None.

For explanation of abbreviations used, see AR 320-50.

HAROLD K. JOHNSON,

#### **TECHNICAL MANUAL**

#### Operator, Organizational, Field and Depot Maintenance Manual

#### **CENTRAL OFFICE, TELEPHONE, MANUAL AN/MTC-9**

TM 11-5805-288-15

**CHANGES No. 2** 

HEADQUARTERS, DEPARTMENT OF THE ARMY WASHINGTON 25, D. C., 5 June 1963

TM 11-5805-288-15, 26 May 1961, is changed as follows:

Page 2, paragraph 1. Add paragraph 1.1 after paragraph 1.

#### 1.1. Index of Publications

Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to your equipment. DA Pam 310-4 is an index of current technical manuals, technical bulletins, supply bulletins, lubrication orders, and modification work orders which are available through publications supply channels. The index lists the individual parts (-10, -20, -35P, etc.) and the latest changes to and revisions of each equipment publication.

Delete paragraph 2 and substitute:

#### 2. Forms and Records

- a. Reports of Maintenance and Unsatisfactory Equipment. Use equipment forms and records in accordance with instructions in TM 38-750.
- b. Report of Damaged or Improper Shipment. Fill out and forward DD Form 6 (Report of Damaged or Improper Shipment), as prescribed in AR 700-58 (Army), NAVSANDA Publications 378 (Navy), and AFR 71-4 (Air Force).
- c. Comments on Manual. Forward all comments on this publication direct to: Commanding Officer, U.S. Army Electronics Materiel Support Agency, ATTN: SELMS-MP, Fort Monmouth, N.J. (DA Form 1598 (Record of Comments on Publications), DA Form 2496 (Disposition Form), or letter may be used.)

Page 11, paragraph 8, line 21. Delete the sentence beginning with "Fluorescent and incandescent lamps" and substitute: Fluorescent and incandescent lamps provide illumination throughout the van (fig. 22). The main compartment of the van is provided with a 48-or 24-volt emergency lighting system.

Page 25, figure 23. Make the following changes: Change "SIG. CONN. 25 (TRKS 1-20)" to: SIG. CONN. 25 (TRKS 1-25).

Change "SIG. CONN. 26 (TRKS 21-40)" to: SIG. CONN. 26 (TRKS 26-50).

Change "SIG. CONN. 27 (TRKS 41-60)" to: SIG. CONN. 27 (TRKS 51-60).

Page 29, paragraph 8*i*(4), line 6. Change "nine" to: 10.

Page 36, paragraph 9, line 2. Delete the sentence beginning with "Fluorescent and incandescent lamps" and substitute: Fluorescent and incandescent lamps provide illumination throughout the van (fig. 40). The main compartment of the van is provided with a 48- or 24-volt emergency lighting system.

Page 67. Delete paragraph 34 and substitute:

#### 34. Scope of Maintenance and Procedures

#### a. General.

- (1) Operator maintenance consists of first echelon preventive maintenance. Preventive maintenance is the systematic care, servicing, and inspection of equipment to prevent the occurrence of trouble, to reduce downtime, and to maintain the equipment in combat-serviceable condition. Operator preventive maintenance is performed daily; specific procedures are provided in paragraph 36.
- (2) Organizational maintenance consists of second echelon preventive maintenance, troubleshooting. and replacement of authorized repair parts (par. 41). Second echelon preventive maintenance performed on a monthly and quarterly basis; specific procedures provided are in paragraphs 37 and 38.
- (3) The preventive maintenance checks and

services provided in paragraphs 36, 37, and 38 outline inspections to be made at specific intervals; they are designed to help maintain equipment in combat serviceable condition, and indicate what items should be checked and how they should be checked. Also included are procedures for authorized repairs and references to text, illustrations, and other manuals that contain supplementary information.

- (4) Defects that cannot be corrected must be reported to higher echelon maintenance personnel. Records and reports of repair and preventive maintenance must be made in accordance with procedures given in TM 3-750.
- b. Cleaning.

#### Warning

Cleaning compound s flammable and Its flames are toxic. Do not use near a flame; provide adequate ventilation.

(1) Use a dry, clean, lint-free cloth or brush

to remove dust and dirt. If necessary, moisten the cloth or brush with cleaning compound (Federal stock No. 790-89 9542) to remove grease, oil, dirt, and dust. After cleaning, wipe dry with a cloth.

#### Warning

Compressed air is dangerous and can cause serious bodily harm. It can also cause mechanical damage to the equipment. Do not use compressed air to dry parts where cleaning compound has been used.

- (2) Dry, compressed air, not to exceed 60 pounds per square inch, may be used to remove dirt and dust from inaccessible places.
- c. Touchup Painting. Clean rust and corrosion from metal surfaces by lightly sanding them with fine sandpaper. Brush two thin coats of the proper paint on bare metal to protect it from further corrosion. Refer to the applicable cleaning and refinishing practices specified in TM 9-213.

Delete paragraph 36 and substitute:

#### 36. Daily Preventive Maintenance Checks and Services

Sequence Number	ltem	Procedure	Reference
		EXTERIOR	
1	Van skin	Check for skin punctures, cracks, or open seams that could permit moisture to enter van wall.	Figs. 7 and 8.
2	Grounding system	a. Check grounding system to see that it is properly installed b. Tighten loose ground lead connections	a. Par. 15. b. None.
3	Landing gear assembly	Check for settling of area around bearing plates and leveling jack pads.	Figs. 47 and 48; par. 12 <i>b.</i>
4	Power and signal entrance boxes and distribution boxes.	a. Clean area around binding posts and receptacles with cleaning compound.     b. Put covers on unused receptacles to keep out. moisture, dirt, and sand, and to protect contacts.	a. Par. 18. b. Par. 18; fig. 55.
5	Power and signal cable assemblies	a. Clean cable insulation and connectors with clean cloth. b. Tighten loose connections	<ul><li>a. None.</li><li>b. None.</li><li>c. None.</li><li>d. None.</li></ul>
_		INTERIOR	
6	Signal and power cables, cords, wires, and patching cords	Tighten loose connections of plugs and connectors.	a. None.
		<ul> <li>Check to see that insulation is not cut; remove kinks and strains.</li> </ul>	b. None.
7	Lighting system	Replace defective lamps and fluorescent lamp starters; use spares.	Par. 43.

# 36. Daily Preventive Maintenance Checks and Services-Continued

Sequence Number	ltem	Procedure	Reference
8	Walls, ceiling, and floor	Check for holes, open seams, or signs of leaks or water seepage.	None.
9	Wastepaper receptacle	Empty and clean receptacle	None.
10	Cabinets	Remove articles that are not authorized	App. III.
11	Dry cell batteries	a. Check hand lantern batteries for signs of corrosion, replace if hand lantern does not operate.	a. Par. 42.
		b. Check emergency lighting circuit batteries for signs of corrosion; replace if emergency lights do not operate.	b. None.
12	Distribution boxes J-1077A/U and J-2317/U, (if stored in van).	Perform procedures liven in sequence No. 4 above.	
13	Clock	Wind and set to correct time, if necessary	Figs. 19 and 88.
14	Power distribution panel	Check to see that voltmeter indicates approximately 115 volts ac, and that ammeter indication	Par. 47; figs. 41 and 63.
		is normal for amount of lighting and equipment in use. Replace neon lamps (use spares) that fail to light when associated circuit breaker	
15	Communication equipments	is operated.  a. Perform the required daily checks and services for the AN/TTC-7.	a. TM 11-2146.
		Perform the required daily checks and services     for the TA-312/PT.	b. TM 11-2155.
		<ul> <li>Perform the required daily checks and services for the LS-147D/FI.</li> </ul>	c. TM 11-5830-221- 12.
16	Equipment operation	Check to see that all equipment performs satisfactorily,     especially communication equipment	a. Pars. 23, 24, 25, and 31.
		b. Report operation failure of any equipment or circuit.	b. TM 88-750.
		Replace defective item for which authorized spare parts are provided.	c. App. III (for van equipment); app. I (for major equipment tech-
			nical manuals).

Page 68. Delete paragraphs 37 and 88 and substitute:

## 37. Monthly Preventive Maintenance Checks and Services

Sequence Number	ltem	Procedure	Reference
		EXTERIOR	
1	Van skin and hardware	Check for blistered paint, pitted and flaking areas, and bare metal spots (such as steps, signal entrance box covers, doors, etc.).	Par. 34c.
2	Ground system	Clean ground lug connections with sandpaper and clean cloth.	
3	Personnel ladders	Clean parts and paint bare metal spots	Fig. 49; par. 34c.
4	Canvas canopy	Check for proper installation; tighten ropes; mend all tears in the canvas.	Fig. 52; par. 14.
5	Van doors	a. Clean and paint bare metal spots	<ul><li>a. Par. 34c.</li><li>b. None.</li><li>c. None.</li></ul>

# 37. Monthly Preventive Maintenance Checks and Service--Continued

Sequence Number	Item	Procedure	Reference
6	Power and signal entrance boxes	d. Put gasket adhesive on loose door and entrance box gaskets.  a. Remove corrosion from connection and wires  b. Lubricate piano-type hinges of covers with oil,	a. None. b. None.
7	Power and signal cable assemblies	PL Special or OE-10. c. Paint bare metal spots	c. Par. 84c. a. None.
		b. Inspect cable layout and relocate cables as     necessary so that they are not endangered by,     or hazardous to, vehicles and personnel.      INTERIOR	b. None.
8	Signal and power cabling, cords,	a. Tighten screws and clamps that hold wires to	a. None.
	wires, and patchcords.	terminals.  b. Repair insulation cuts and abrasions with electrical insulation tape.	b. None.
		c. Polish metal plugs (such as those on telephone or intercom connecting cords) with metal paste polish (Federal stock No. 3930-269-5270).	c. None.
9	Signal, power, and lighting system ducts	a. Tighten loose screws, bolts, and clips b. Repair or replace defective switches, switch-	<ul><li>a. None.</li><li>b. Par. 49.</li></ul>
10	Lighting and power system	plates, outlets, receptacles, and jacks.  a. Tighten loose screws and nuts that hold lighting fixtures, lights, and parts of power distribution panel.	a. Par. 43.
		<ul> <li>Repair or replace defective parts in lighting system and on power distribution panel.</li> </ul>	b. Par. 48.
11	Walls, ceiling, and floor	Clean all parts; repair skin punctures and cracked seams.	Par. 55 and TB SIG 354.
12 13	CabinetsEquipment mountings	Repair or replace broken doors and latches	None. None.
		b. Check to see that equipment mountings, such as racks, frames, shelves, braces, and clamps are not bent, broken, or out of shape so as to endanger the equipment or personnel.	
14	Dry cell batteries and storage batteries	a. Replace all dry cell batteries that show signs of swelling, leaking, and corrosion. Check the closed-circuit voltage of the emergency lighting circuit batteries.  b. Check the specific gravity of all storage batteries.	<ul><li>a. None.</li><li>b. None.</li></ul>
15	Exhaust blowers	Clean the battery compartment.  a. Lubricate at oiling points with oil, PL Special	a. None.
16	Blackout curtain	or OE-10.  b. Clean motor and fan housing  Tighten all mounting screws that secure fixtures to wall and Ceiling. Repair or replace blackout curtain	b. Pars. 45 and 46.
17	Electric heaters	If torn, ripped, or frayed.  a. Clean Inside and outside of ease	a. Par. 44. b. Par. 44.
18	Distribution box	b. Repair or replace defective parts  Perform procedures given in sequence No. 6 above	D. Par. 44. None.
19	Clock	Replace wall dock if correct time cannot be maintained on a daily basis.	
20	Communication equipments	<ul> <li>Perform preventive maintenance cheeks and service for the AN/TTC-7.</li> </ul>	a. TM 11-2146.

# 37. Monthly Preventive Maintenance Checks and Services-Continued

Sequence Number	ltem	Procedure	Reference
21	Equipment performance	<ul> <li>b. Perform preventive maintenance checks and services for the TA-312/PT.</li> <li>c. Perform preventive maintenance checks and services for the LS-147D/FI.</li> <li>Replace and/or repair any defective or inoperable component.</li> </ul>	b. TM 11-2156. c. TM 11-5830-221- 12. Par. 39.

# 38. Quarterly Preventive Maintenance Checks and Services

Sequence Number	ltem	Procedure	Reference
		GENERAL	
1	Components:  a. Inventory  b. Location of parts	a. Inventory equipment; requisition missing and defective parts. b. Check to see that all components are mounted	<ul><li>a. App. III.</li><li>b. Figs. 21 and 39.</li></ul>
	·	or stowed in assigned places, except those that are being used (such as power cables, signal cables, distribution boxes, etc.).	Ç
	c. Publications	Requisition all operator and organizational     maintenance manuals and all parts manuals     covering the AN/MTC-9 and its components,     that are not on hand or in usable condition     (including all current Changes publications).	c. DA Pam 810-4 (par. 1.1).
2	Modification work orders	Check to see whether any MWO's are required for the AN/MTC-9 or its components. Check equipment to see if applicable MWO's have been applied and MWO number is stamped on equipment as required. Perform modifications or request modification as applicable.	See applicable MWO; see DA Pam 310-4 for MWO listing; refer to TM 38- 750.
		EXTERIOR	
3	Van skin and hardware	Repair skin punctures, cracks, or open seams     that would permit moisture to enter van walls     or ceiling.	a. TB SIG 354.
4	Grounding system	Repair or replace defective hardware     Replace ground rod if ground lead cannot be     securely tightened. Replace ground lead if it is     cut, corroded, or broken.	b. None. None.
5	Van door	Replace defective or missing rubber gaskets, or those that do not provide watertight seal. Replace broken door hinges and latches.	None.
6	Power and signal entrance boxes, and distribution boxes.	a. Carefully remove sand, dirt, and moisture from among contacts of 26-pair cable receptacles.	a. None.
		<ul> <li>Tighten locknuts, screws, and bolts that hold receptacles and binding posts.</li> </ul>	b. None.
		Replace all defective parts (such as binding posts, rubber caps on binding posts, cable receptacles, etc.).	c. Par. 48.
7	Power and signal cable assemblies	Replace cable assemblies in which wiring, insulation, or connectors are defective.	Par. 48.
		INTERIOR	
8	Signal and power cables, and telephone and intercom connecting cords.	Dress all cables, wires, and cords neatly; use cable and cord clips provided in the van, or use electrical-insulation tape or twine. Repair or replace defective cables, cords, and wires.	
9	Walls, ceiling, and floor	Paint blistered, pitted, or flaking areas and all bare metal surfaces.	Par. 34 <i>c</i> .

#### 38. Quarterly Preventive Maintenance Checks and Services-Continued

Sequence Number	ltem	Procedure	Reference
10	Fire extinguishers	<ul> <li>a. Refill if weight of cylinder is less than that indicated on nameplate, or if cylinder valve seal is broken.</li> <li>b. Replace extinguisher if valve assembly is damaged.</li> </ul>	a. Appropriate maintenance personnel. b. App. III.
11	First aid kit	Replace if case is broken or damaged. Replace parts that have been used. (See parts list inside cover of first aid kit.)	
12	Distribution box (if stored inside van).	Perform the procedure given in sequence No. 6 above.	
13	Reel Unit RL-31	Check to see that reel rotates freely. Repair or replace parts that are bent or broken.	a. None.
		<ul> <li>Paint blistered, pitted, or flaking areas and all bare metal surfaces.</li> </ul>	<i>b</i> . Par. 34 <i>c</i> .
14	Chair and chair cushion	Repair or replace if chair parts are bent or broken, or if chair is unsafe for use. Repair or replace cushion that is torn or cut, or has split seams or exposed padding.	None.
15	Axes and sledge hammer	Replace the handle if it is broken or split, or does not fit tightly.	None.
16	Personnel ladder- and 12-foot ladder.	Paint blistered, pitted, or flaking areas and all bare metal surfaces. Repair or replace if step, frame, or parts are bent or broken, or if ladder is unsafe for use.	Par. 34 <i>c</i> .

Page 85, paragraph 57a, line 5. Insert the following sentence after the first sentence: The wiring for the SB-1082/TTC has been modified (figs.

71.1 and 71.2) for use in the AN/MTC-9.

Page 87. Add figures 71.1 and 71.2 before figure 72:

Figure 71.1. Power Distribution Panel SB-1032/TTC (modified for use in AN/MTC-9), schematic diagram.

(Located in back of changes)

Page 92. Delete appendix I and substitute:

#### **APPENDIX I**

#### **REFERENCES**

The following applicable references are available to the operator and repairman of Central Office, Telephone, Manual AN/MTC-9.

AR 320-5	Dictionary of United States Army Terms.	FM 21-5 FM 21-6	Military Training. Techniques of Military
AR 32-50	Authorized Abbreviations and Brevity Codes.	FM 21-80	Instruction. Military Symbols.
AR 700-38	Unsatisfactory Equipment Report (Reports Control Symbol CSGID-247(R2)).	SB 11-6 TB SIG 208	Dry Battery Supply Data. Installation, Adjustment, and Maintenance of Interrupter
DA Pam 108-1	Index of Army Motion Pictures Film Strips, Slides and Phono-Recordings.		PE-250 and Static Ringing Generator TA-S248/ and TA-248A/TT.
DA Pam 810S4	Index of Technical -Manuals, Technical Bulletins, Supply Bulletins, Lubrication Orders, and Modification Work Orders.		

TB SIG 54	Maintenance and Repair Procedures for Lightweight Field and Mobile Shelters of Aluminum Stressed Skin Foam-Core Construction (Covering S-141/G and S-	TM 11-5805- 297-12P	TA-45B, C/GT. Operator and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart: Generator GN-41
TM 9-213	144/G Type Shelters). Painting Instructions for Field Use.	TM 11-5805- 298-12P	and GN-41B. Operator and Organizational Maintenance Repair Parts
TM 11-362	Reel Units RL-31, RL31-B, RL-31-C, RL-31-D, and RL-31-E.		and Special Tools List and Maintenance Allocation Chart: Generator, Ringing,
TM 11-96A	Rectifiers RA-91-B and RA- 91-C.		Static TA-248/TT and TA -248A /TT.
TM 11-2057A TM 11-2064	Test Set TS-27B/TSM. Panels BD-132, BD-132-A, and Power Switchboard SB-361/TT.	TM 11-5805- 299-12P	Operator and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation
TM 11-2096	Test Set TS-140/PCM; Signal Generators SG-15/ PCM and SG-15A/PCM; and Decibel Meters ME- 22/PCM and ME-22A/	TM 11-5830- 221-12	Chart: Panel, Power Distribution SB-1032/TTC. Operator's and Organizational Maintenance Manual: Intercommunication Stations
TM 11-2138	PCM. Terminal Box TA-125/GT; Telephone Repeating Coil Assembly TA-146/GT; Maintenance Kit MX-842/ GT; and Switchboard	TM 11-5830- 221-20P	LS-147A/FI, LS-147B/FI, LS-147C/FI, and LS- 147D/FI. Organizational Maintenance Repair Parts and Special Tools List: Intercommunication
TM 11-2146	Signal TA-123/GT. Central Office, Telephone, Manual AN/TCC-7 and AN/TTC-7A and Telephone	TM 44 5020	Stations LS-147A/ FI, LS-147B/FI, LS- 147C/FI, and ILS147D/ FI.
TM 11-2155 TM 11-5500	Central Office Group Manual AN/GTA-14(V). Telephone Set TA-312/PT. Multimeter TS-297/U.	TM 11-5830- 221-4865	Field and Depot Maintenance Manual: Intercommunication Stations LS-147A/FI, LS-147B/FI, LS-147C/FI,
TM 11-5805- 201-20P	Organizational Maintenance Repair Parts and Special Tool Lists: Telephone Set TA312/PT.	TM 11-6830- 221-35P	and LS-147D/FI. Field and Depot Maintenance Repair Parts and Special Tools List: Intercommuni-
TM 11-5805- 257-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation		cation Stations LS-147A/ Fl. LS-147B/Fl, LS- 147C/Fl, and LS-147D/ Fl.
	Chart for Generators, Ring- ing, Hand G-42/PT and G-42A/PT.	TM 11-5935- 205-15P	Operator, Organizational, Field and Depot Mainte- nance Repair Parts and
TM 11-5806- 269-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart for Dial TA-45/GT;		Special Tools List and Maintenance Allocation Chart: Connector, Receptacle, Electrical U-187/G and U-187A/G.

TM 11-5965- 206-15P	Operator, Organizational, Field and Depot Mainte- nance Repair Parts and Special Tools List: Micro- phone H-91/U, H-91A/U; Handset-Headsets H-144/ U, H-144A/U, and H- 144B/U.	TM 11-6965- 230-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart for Headsets HS-30- A, HS-30-B, HS-30-C, HS-30-D, HS-30-E, HS- 30-F, HS-30-G, HS-30-H,
TM 11-5965- 208-15P	Repair Parts and Special Tools List and Maintenance Allocation Chart for Chest	TM 44 0400	HS-30-J, HS-30-K, HS- 30-L, HS-30-R, and HS- 30-U.
TM 11-5965- 211-15P	Unit T-51. Operator, Organizational, Field, and Depot Mainte- nance Repair Parts and Special Tools List and Maintenance Allocation	TM 11-6130- 220-12P	Operator and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart: Rectifier RA-91, -91A, -91B, and -91C.
TM 11-5965-	Chart: Chest Set H-12, / GT. Operator and Organizational	TM 11-6625- 203-12	Operator and Organizational Maintenance: Multimeter AN/URM-105, including
219-12P	Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart for Chest Unit H- 17/GT.	TM 11-6625- 203-20P	Multimeter ME-77/U. Organizational Maintenance Repair Parts and Special Tools List for Multimeter AN/URM-105.
TM 11-5965- 221-15P	Repair Parts and Special Tools List and Maintenance Allocation Chart for Chest Set H-18/GT.	TM 11-6625- 203-35	Field and Depot Mainte- nance: Multimeter AN/ URM-105 including Multimeter ME-77/U.
TM 11-5965- 224-15P	Operator, Organizational, Field and Depot Mainte- nance Repair Parts and Special Tool Lists and	TM 11-6625- 203-35P	Field and Depot Maintenance Repair Parts and Special Tools List for Multimeter AN/URM-105.
	Maintenance, Allocation Chart: Handsets H-O/PT and H-165/U.	TM 38-750	The Army Equipment Record System and Procedures.

Figure 71.2. Power Distribution Panel SB-1032/TTC (modified for use in AN/MTC-9), wiring diagram. (Located In back of changes)

Figure 53 (foldout). Delete figure 53 and substitute new figure 53.

### Figure 53. Central Office, Telephone, Manual AN/MTC-9, cabling diagram.

Figure 68 (foldout). At the bottom of the BINDING POST SUBSCRIBER TERMINATION PANEL, change the binding post designations as follows:

Change "1-20" to: 1-25. Change "21-40" to: 26-50. Change "41-60" to: 51-60.

Figure 70 (foldout). In the lower right-hand section, delete the two boxes designated "SB-1032/TTC NO. 1" and "SB-1032/TTC NO. 2."

Figure 73 (foldout). Delete figure 73 and substitute new figure 73.

# Figure 73. Telephone Terminal Group AN/MTA-5, power schematic-wiring diagram. (Located in back of change)

Figure 74 (foldout). Delete figure 74 and substitute new figure 74.

Figure 74. Telephone Switchboard Group AN/MTA-7, power schematic diagram.

(Located in back to changes)

#### By Order of the Secretary of the Army:

EARLE G. WHEELER, General, United States Army, Chief of Staff.

#### Official:

J. C. LAMBERT, Major General, United States Army, The Adjutant General.

#### Distribution:

#### Active Army:

NG: None. USAR: None.

For explanation of abbreviations used, me AR 320-50.

TECHNICAL MANUAL
No. 11-5805-288-15

HEADQUARTERS, DEPARTMENT OF THE ARMY WASHINGTON 25, D.C., 26 May 1961

# OPERATOR, ORGANIZATIONAL, FIELD AND DEPOT MAINTENANCE MANUAL CENTRAL OFFICE, TELEPHONE, MANUAL AN/MTC-9

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#### CHAPTER 1

#### INTRODUCTION

#### Section I. GENERAL

#### 1. Scope

This manual describes Central Office, Telephone, Manual AN/MTC-9 and covers the installation, operation, theory, and maintenance of those major components of the AN/MTC-9 that are not covered in any other technical manual. A list of applicable technical manuals is contained in appendix I.

#### 2. Forms and Records

- a. Unsatisfactory Equipment Reports. Fill out and forward DA Form 468 (Unsatisfactory Equipment Report) or DD Form 787-1 (Electronic Failure Report-Signal Equipment) to the Commanding Officer, U.S. Army Signal Materiel Support Agency, ATTN: SIGMS-ML, Fort Monmouth, N.J. as prescribed in AR 70038 (for DA Form 468) or AR 700-89 (for DD Form 787-1).
  - b. Report of Damaged or Improper Shipment. Fill

- out and forward DD Form 6 (Report of Damaged or Improper Shipment) as prescribed in AR 700-58.
- c. Preventive Maintenance Forms. Prepare preventive maintenance forms for components of the AN/MTC-9 as specified in their respective technical manuals (app. I).
- d. Parts List Form. Forward DA Form 2028 (Recommended Changes to DA Form Technical Manual Parts Lists or Supply Manual 7, 8, or 9) direct to the Commanding Officer, U.S. Army Signal Materiel Support Agency, ATTN: SIGMS-ML, Fort Monmouth, N.J., with comments concerning the maintenance allocation chart in appendix II.
- e. Comments on Manual. Forward all other comments concerning this manual direct to the Commanding Officer, U.S. Army Signal Materiel Support Agency, ATTN: SIGMS-PA2d, Fort Monmouth, N.J.

#### Section II. DESCRIPTION AND DATA

#### 3. Purpose and Use

Central Office, Telephone, Manual AN/MTC-9 (Telephone Terminal Group AN/MTA-5 and Telescope Switchboard Group AN/MTA-7) is an air-transportable manual-switching facility. The AN/MTC-9 contains components of Central Office, Telephone, Manual AN/TTC-7A (TM 11-2146) which provide termination for

local or common-battery subscriber circuits and manual or dial trunk circuits. Components of the AN/MTC-9 are housed in Semitrailer, Van, Electronic Equipment M-348A2D or M-348A2F, (figs. 7 and 8) which are interconnected as shown in figure 1. The AN/MTC-9 is used at Army signal centers in an area-type communications system.

#### 4. Technical Characteristics

Voltage requirements	115 v, 60 cps, single-phase, 3-wire	
Power consumption (watts, maximum):	AN/MTA-5	AN/MTA-7
Lights	700	1,160
Exhaust blowers	150	300
Battery exhaust fan	20	
Electric heaters	4,500	4,500
Signal extension panel heaters	625	625
Air conditioner	3,000	3,000

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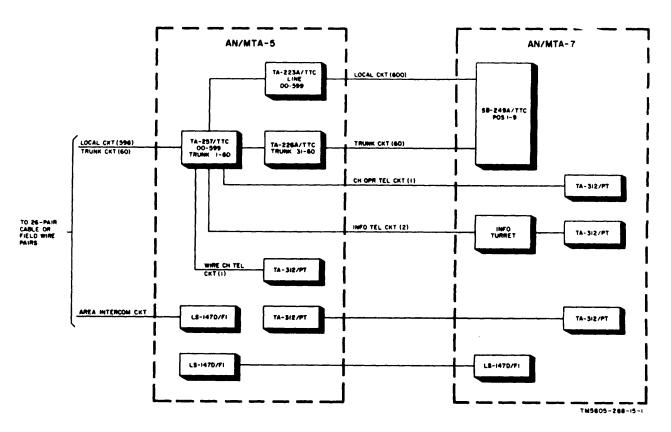


Figure 1. Central Office, Telephone, Manual AN/MTC-9, signal circuits, block diagram.

Power consumption (watts, maximum)-Continued	AN/MTA-5	AN/MTA-7
Intercommunication Station LS-147D/FI	32	32
Power Distribution Panel SB-1032/TTC	600	
Subtotals	9,059	9,617
Total wattage	18	3,676
Switching facilities:		
Local or common-battery subscriber circuits	596	
Manual or dial trunk circuits	60	
Information circuits	2	
Intervan communication facilities:		
Telephone circuit	1	
Intercommunication circuit (LS-147D/FI)	1	
Intra-area communication facilities:		
Telephone circuits:		
AN/MTA-6 (wire chief)	1	
AN/MTA-7 (chief operator)	1	
Intercommunication circuit (AN/MTA-5 only) (LS-147D/FI)	1	
Weight:		
ÅN/MTA-5	17,940 lb.	
AN/MTA-7	19,600 lb.	

#### **AGO 6389D**

Outside dimensions (AN/MTA-5 or AN/MTA-7):	
Length	319 in.
Width	96 in.
Height	139 in.

# 5. Components of Central Office, Telephone, Manual AN/MTC-9 a. Telephone Terminal Group AN/MTA-5.

Quantity	Items	Fig. No.
1	Semitrailer, Van, Electronic Equipment M-348A2F	9
1	Air conditioner	27
2	Air conditioner spare filters	19
1	Allen wrench, 3/16-in. (for assembling passageway)	17
1	Allen wrench, 5/32-in. (for assembling passageway)	17
1	Ax, 3-ft	18
1	Ax, 2-ft	19
4	Batteries BB-46	19
1	Broom, with cover	18
15	Cable Assemblies, Telephone CX-4566/G (250 ft) with Reels RC-435/U	3
78	Cable Assemblies, Telephone CX-4566/G (25 ft)	3
2	Cable Assemblies, Telephone CX-4760/U (15 ft)	2
4	Cable Assemblies, Telephone CX-2584/U (50 ft).	
2	Cable Assemblies, Electrical Power CX-3692/U (50 ft)	3
2	Cable Assemblies, Electrical Power CX-3692/U (4 ft).	
1	Cable Reel Unit RL-31	21
1	Canopy (van roof)	19
1	Cross-connection (jumper wire) wire and reel (2,000 ft)	21
15	Distribution Boxes J-1077A/U (storage compartment)	9
3	Distribution Boxes J-2317/U	9,19
1	Droplight, with 25-ft cord	2
3	Electric heaters	21,28
3	Fire extinguishers, 5-lb	17,18, 19
1	First aid kit.	
1	Folding chair with cushion	18
2	Ground rods	18
2	Ground straps, 10-ft	2
1	Hand brush	18
3	Hand lanterns	20
1	Handset-Headset H-144/U	2
1	H-144/U extension cord, 8-ft	2
1	Hydrometer	18
2	Intercommunication Stations LS-147D/FI	17
1	Ladder (personnel, 4-step)	49
2	Ladder (personnel, 3-step)	49
1	Ladder (12 ft)	47
1	Line cord with duplex receptacle, 25-ft	2
6	Line Relay Telephone Circuits TA-223A/TTC	15, 21
1	Multimeter TS-297/U.	,
1 set	Passageway components, consisting of	21, 50
	Item Bag No.	,
	1 canvas cover1	
	6 floor panels	
	2 ramp panels 2	
	1 overhead rail assembly	
	2 overhead rail assembly supports	
	2 floor assembly supports	
	2 handrails	
	4 vertical rails (with fittings)	
	6 vertical rails (plain) 5	
	1 floor assembly.	1

Quantity	Items	Fig. No.
1	Pencil sharpener	17
i i	Power cable assembly, 100-ft	3
i i	Power cable assembly, 50-ft	3
6	Power cable grips	2
1	Power cable stub, 15-ft	2
1	Pioneer kit, consisting of-	5
<b>'</b>		5
	1 ax 1 shovel	
	1 pick mattock	
	1 pick mattock handle	
4	1 mounting bracket	47
1	Rotary card file	17
3 sets	Running spares (p/o AN/TTC-7A).	
1 set	Running spares, consisting of	6
	7 fluorescent lamps, 20 w	
	12 fluorescent starters FS-2	
	5 cartridge fuses, 5 amp	
	5 cartridge fuses, 1 amp	
	3 glowlamps NE-45	
	1 incandescent lamp, 6 v	
	2 incandescent lamps, 24 v	
	1 incandescent lamp, 50 w, 125 v	
	1 neon lamp NE-30	
	1 electron tube 6AQ5	
	1 electron tube 6AU6	
	1 electron tube 6X4W	
1	Screwdriver, 10 1/4 in	18
119	Signal cable grips	2
1	Sledge hammer	18
1	Sledge hammer handle (spare)	18
2	Special circuit cable assemblies, 26-pair, 50-ft	8
1	Stool, drafting, with cushion	21
1	Swivel chair	21
1 set	Technical manuals.	
2	Telephone and intercom cords, 23-in	2
1	Telephone and intercom cord, 34-in.	2
2	Telephone and intercom cords, 38-in	2
1	Telephone and intercom cord, 56-in.	2 2
7	Tolophone Main Distributing Frames TA 257/TTC	10, 21
4	Telephone Main Distributing Frames TA-257/TTC Telephone Sets TA-312/PT	19, 20
2	Test cords	
1	Test Set TS-27B/TSM.	20
1	l <del></del>	10
	Thermometer	18
3 sets	Tools (p/o AN/TTC-7A).	
	Tool Equipment TE-49.	2
1	Tool roll kit, consisting of	2
	1 adjustable wrench, 15/16-in. max.	
	1 Allen wrench set	
	1 common pliers	
	1 Knife TL-29	
	1 lineman's pliers	
	1 long-nosed pliers	
	1 screwdriver, 2-in. bit	
	1 screwdriver, 4-in. bit	
	1 screwdriver, 6-in. bit	
	1 socket wrench set	
	1 vise-grip pliers	
3	Trunk Relay Telephone Circuits TA-226A/TTC	21
1	Tube pin straightener, 7- and 9-pin	18
1	Tube puller, 7-pin	18

Quantity	Items	Fig. No.
1 1 3 100	Tube puller, 9-pin	18 18, 19 2

# b. Telephone Switchboard Group AN/MTA-7.

Quantity	Items	Fig. No.
4	Comitrailer Van Flortrania Fauinment M 249A2D	30
	Semitrailer, Van, Electronic Equipment M-348A2D	
1	Air conditioner	27
2	All an arrange 2/46 in (for accomplishing a complete comp	37
1	Allen wrench, 3/16-in(for assembling passageway)	35
1	Allen wrench, 5/32-in. (for assembling passageway)	35
1	Ax, 3-ft	36
1	Bell (p/o AN/TTC-7A night alarm)	38
1	Broom, with cover	36
16	Cable Assemblies, Telephone CX-4566/G (260 ft) with Reels RC485/U	3
2	Cable Assemblies, Telephone CX-4760/U (15 ft)	2
12	Cable Assemblies, Telephone CX-2684/U (4 ft).	
2	Cable Assemblies, Electrical Power CX-3692/Ú (4 ft).	
4	Cable Assemblies, Electrical Power CX-3693/U (4 ft).	
4	Cable Assemblies, Electrical Power CX-3694/U (4 ft).	
1	Canopy (van roof)	52
2	Clocks, with keys	37, 38
12	Distribution Boxes J-1077A/U (storage compartment)	30
1	Droplight, with 25-ft cord	2
3	Electric heaters	28, 39
3	Fire extinguishers, 5-lb.	35, 36, 37
3		
1	First aid kit	37
1	Folding chair, with cushion	38
2	Ground rods	36
2	Ground straps, 10-ft	2
1	Hand brush	36
1	Hand lantern	36
1	Handset-Headset H-144/U	2
27	Handset-Headsets H-91/U.	
1	Intercommunication Station LS-147D/FI	29,38
2	Jack sleeve tools (p/o AN/TTC-7A).	
1	Ladder (personnel, 4-step)	49
2	Ladder (personnel, 3-step)	49
1	Ladder (12-ft)	47
1	Line cord with duplex receptacle 25-ft	2
9	Line cord with duplex receptacle, 25-ft	31,39
9	Operators' chairs	31,39
1	Pencil sharpener.	01,00
2	Piloted screwdrivers.	
1	Power cable assembly, 100-ft	
6	Power cable grips	2
1		2
1	Power cable stub, 15-ft	
1		5
	1 ax	
	1 shovel	
	1 pick mattock	
	1 pick mattock handle	
	1 mounting bracket	
1	Rotary card fileRunning spares (p/o AN/TTC-7A).	38
3 sets	Running spares (p/o AN/TTC-7A).	
1 set	Running spares, consisting of	6
	7 fluorescent lamps, 20 w	

12 fluorescent starters FS-2 5 cartridge fuses, 6-amp 5 cartridge fuses, 1-amp 8 glowlamps NE-45 1 glowlamp NE-51 8 incandescent lamps, 50 w, 125 v 1 incandescent lamp, 48 v 1 incandescent lamp, 6 v 2 incandescent lamp, 24 v 1 neon lamp NE-30 1 electron tube 6AQ6 1 electron tube 6AU6 1 electron tube 6X4W  1 Screwdriver, 10 1/4 in. 35 94 Signal cable grip 2 1 Sledge hammer. 36	No.
1       Sledge hammer handle (spare)       36         1       Swivel chair       39         1 set       Technical annual       2         4       Telephone and intercom cords, 38-in       2         900       Telephone jack covers (p/o AN/TTC-7A).       38         1 sets       Tools (p/o AN/TTC-7A)       38         1 cols (p/o AN/TTC-7A)       2         1 adjustable wrench, 15/16-in. max.       2         1 Allen wrench set       1 common pliers         1 Knife TL-29       1 lineman's pliers         1 long-nosed pliers       1 screwdriver, 2-in. bit         1 screwdriver, 4-in. bit       1 screwdriver, 6-in. bit         1 socket wrench set       1 visegrip pliers	
1 Tube pin straightener, 7- and 9-pin 35 1 Tube puller, 7-pin 35	
1 Tube puller, 7-pin	
	36, 37
100 Web straps, 20in. 2	, J

#### 6. Common Names

The following is a list of components to which common names have been assigned.

names have been assigned.			
Component	Common name		
Cable Assembly, Telephone CX-4760/	26-pair cable		
U (15 ft).	stub		
Cable Assembly, Telephone CX-4566/ G (250 ft).	26-pair cable stub		
Cable Assembly, Telephone CX-4566/ G (25 ft).	26-pair inter- van cable.		
Connector, Plug, Electrical U-185A/G	26-pair receptacle		
Connector, Plug, Electrical U-185B/G	26-pair connector		
Semitrailer, Van, Electronic	Van		
Equipment M-348A2D or M-			
348A2F			

# 7. Description of Central Office, Telephone, Manual AN/MTC-9

a. The AN/MTC-9 consists of Telephone Terminal Group AN/MTA-5 (fig. 7 and par. 5a) and Telephone Switchboard Group AN/MTA-7 (fig. 8 and par. 5b). External connections to the vans are made at the power entrance panels (power entrance boxes), local line and cable entrance box, signal or the connector panels interconnection entrance (signal boxes). Alternating current (ac) power for the AN/MTC-9 must be obtained from a local source (par. 16).

b. A weatherproof and lightproof passageway (fig. 50) provides convenient intervan ac

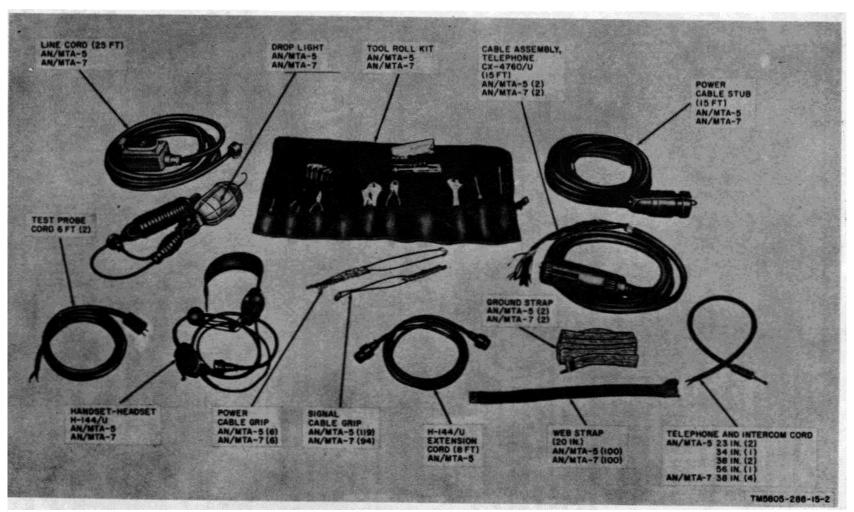


Figure 2. Central Office, Telephone, Manual AN/MTC-9, tools and accessories.

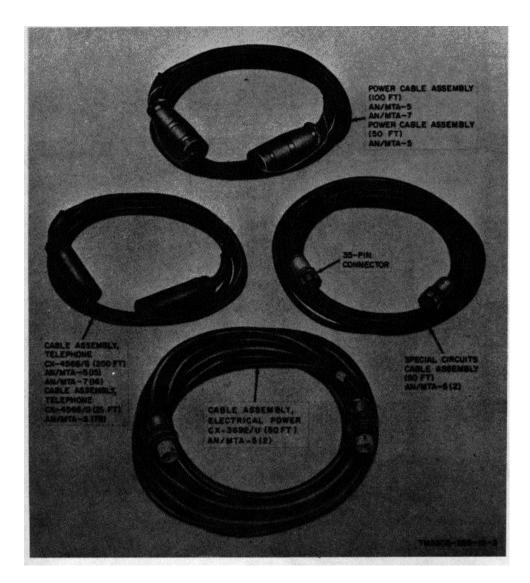


Figure 3. Central Office, Telephone, Manual AN/MTC-9, cable assemblies.

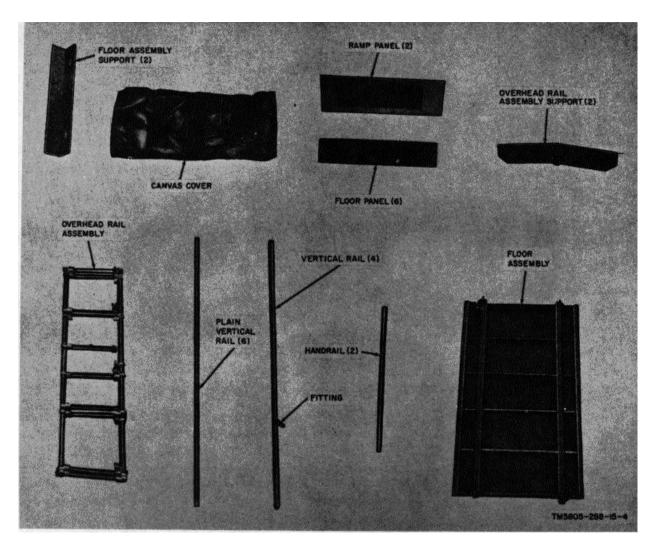


Figure 4. Central Office, Telephone, Manual AN/MTC-9, passageway components.

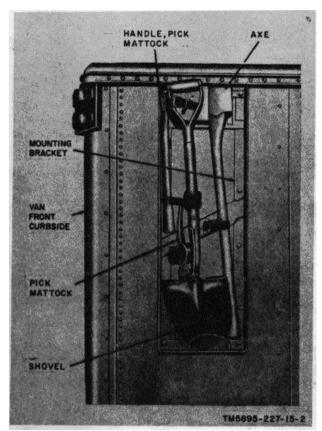


Figure 5. Telephone Terminal Group AN/MTA-5 and Telephone Switchboard Group AN/MTA-7, pioneer kit components.

cess when the AN/MTA-5 and AN/MTA-7 are located side by side.

# 8. Description of Telephone Terminal Group AN/MTA-5

The components of the AN/MTA-5 are housed in Semitrailer, Van, Electronic Equipment M-348A2F (figs. 9 - 16). The fully insulated and weatherproofed van can be moved by tractor or transported by cargo aircraft. The interior of the van is divided into three compartments (figs. 17 - 21); each compartment has its own entrance door and intercompartment speaking tube. The front compartment provides storage facilities as well as access to the central office batteries and to the rear of the air conditioner (fig. 27). The airconditioned center compartment contains the central office power panels, line cases, trunk cases, main

distributing frame (mdf) cases, and a wire chiefs workbench. The rear compartment contains the subscriber connector (fig. 23) and the binding post (fig. 24) termination panels for incoming cable and field wire A lighted vestibule to the rear and center lines. compartments is formed by two folding blackout doors. Fluorescent and incandescent lamps and a 24-volt emergency lighting system provide illumination in all three compartments (fig. 22). Power and signal wiring is contained in metal ducts with removable covers. Convenience and equipment receptacles are distributed along the wall and ceiling power ducts. distribution panel (fig. 25) is located on the roadside center compartment wall. The power entrance box (fig. 26), the signal entrance boxes (figs. 42 - 45), and the local line and cable entrance box (fig. 7) are equipped with covers and rain shields for weather protection. Light tight vents for the air conditioner and exhaust blowers are on the outside walls (fig. 9).

- a. Air Conditioner (fig. 27). The air conditioner is mounted on the floor and extends through the front wall partition (fig. 21). It can be used for cooling or ventilating (par. 31*d*). An air duct, connected from the rear of the air conditioner to a light tight air conditioning outlet vent (fig. 9), provides condenser air discharge to the outside of the van. The air duct connected to the front of the air conditioner distributes conditioned air throughout the center compartment.
- b. Electric Heater (fig. 28). Three heaters are secured in their mounting bases on the floor of the van (fig. 21). Each heater contains a 1.5-kilowatt heating element and a fan for air circulation. The fan operates when the heating element is turned on, but it may also be operated independently. Horizontal louvers on the front of the unit are adjustable to deflect the air stream. Operating controls are on top of the heater. The power cord extends through a hole in the right side of the back cover plate.
- c. Intercommunication Station LS-147D/FI (fig. 29). Each LS-147D/FI (fig. 17) provides two-way nonprivate communication to another LS-147D/FI or equivalent equipment; one LS-147D/FI is used with the intercommunication (intercom) circuit to the AN/MTA-7, and the other is used in the local area intercom net.
- d. Distribution Box J-1077A/U. Fifteen J1077A/U's are stored in the exterior storage

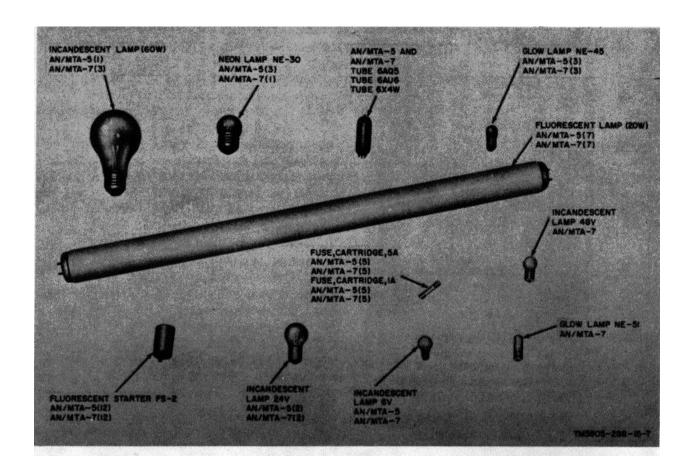


Figure 6. Telephone Terminal Group AN/MTA-5 and Telephone Switchboard Group AN/MTA-7, running spares.

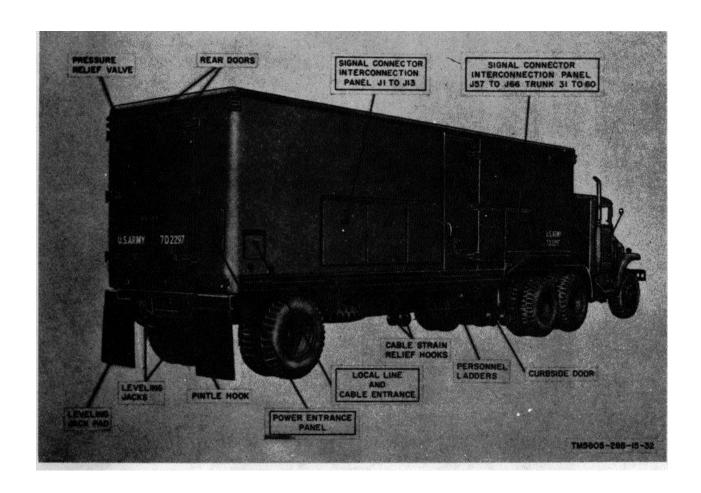


Figure 7. Telephone Terminal Group AN/MTA-5 and tractor, rear curbside view.

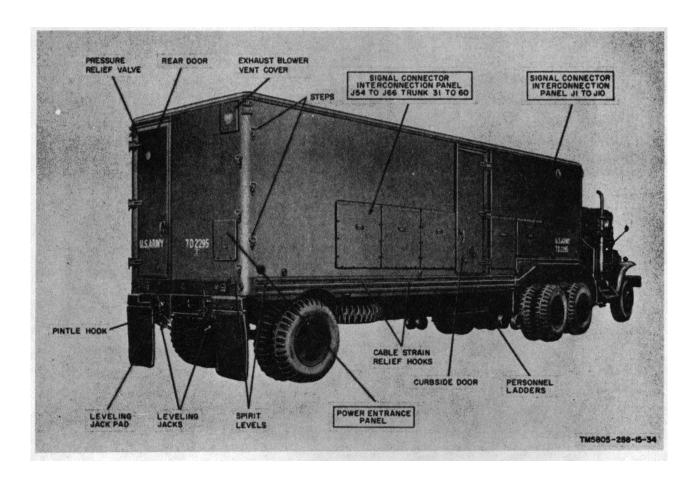


Figure 8. Telephone Switchboard Group AN/MTA-7 and tractor, rear curbside view.

Figure 17. Telephone Terminal Group AN/MTA-5, curbside wall, elevation diagram. (Located in back of manual)

Figure 18. Telephone Terminal Group AN/MTA-5, curbside wall, elevation diagram. (Located in back of manual)

Figure 21. Telephone Terminal Group AN/MTA-5, floor plan. (Located in back of manual)

Figure 22. Telephone Terminal Group AN/MTA-5, ceiling plan. (Located in back of manual)

Figure 24. Binding post subscriber termination panel. (Located in back of manual)

**AGO 6389A** 

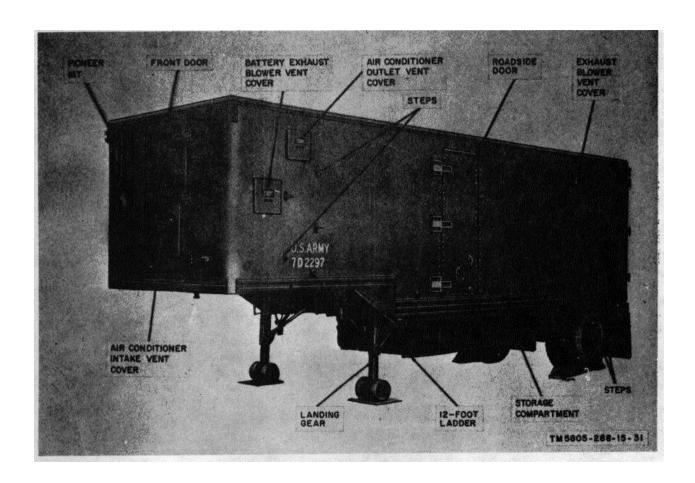


Figure 9. Telephone Terminal Group AN/MTA-5, exterior front roadside view.

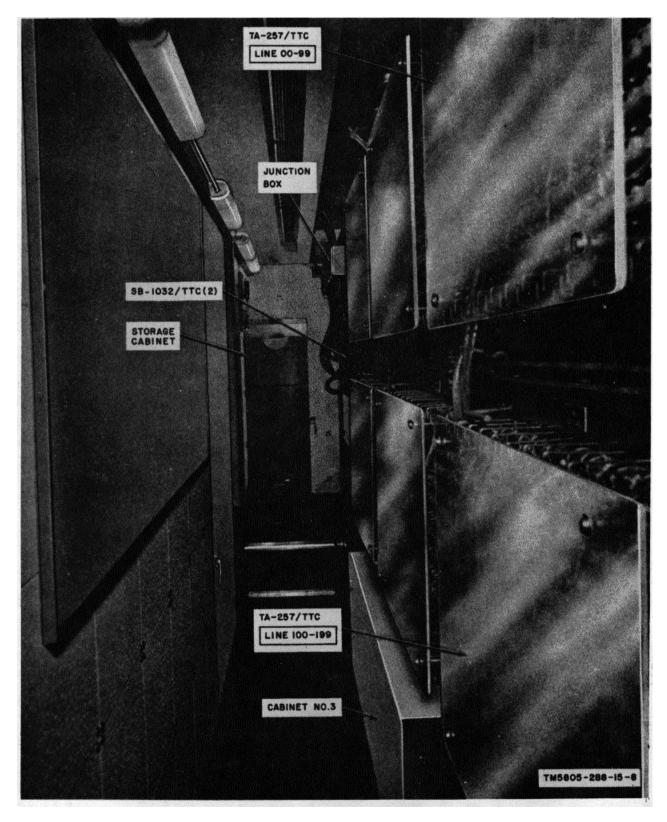


Figure 10. Telephone Terminal Group AN/MTA-5, interior front roadside view.

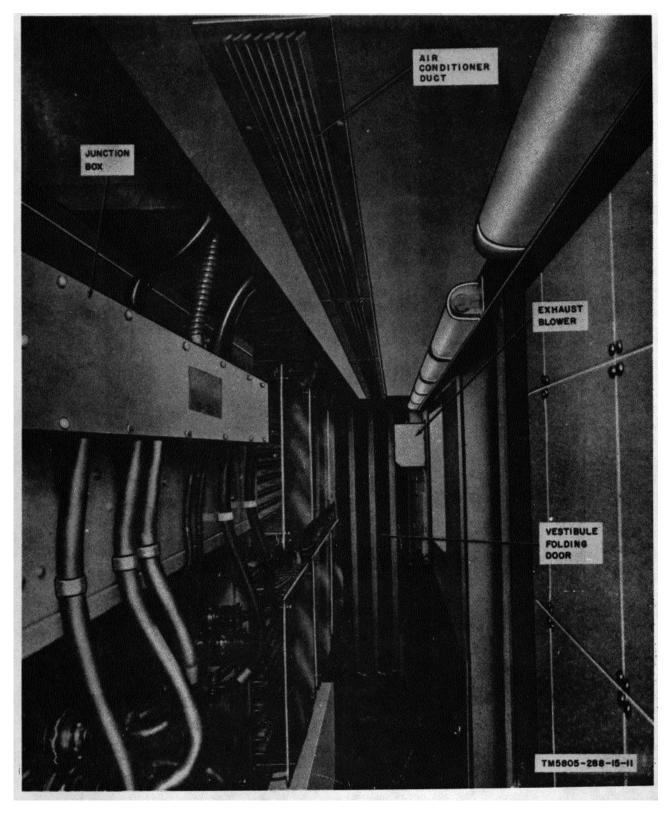


Figure 11. Telephone Terminal Group AN/MTA-5, interior rear roadside view.

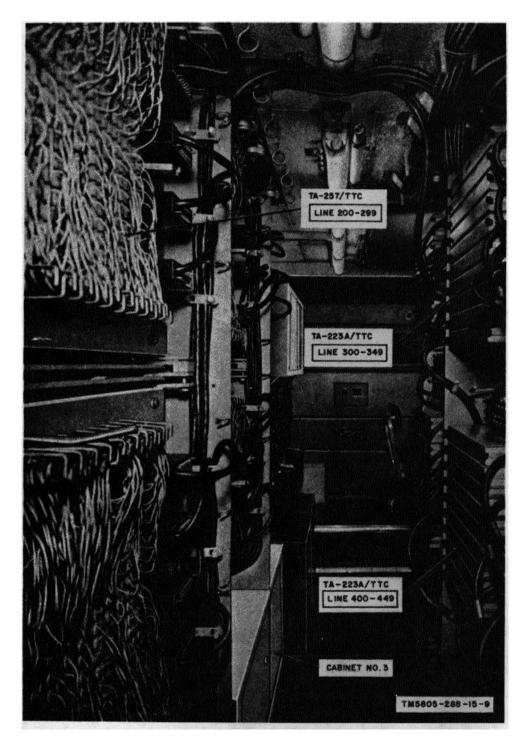


Figure 12. Telephone Terminal Group AN/MTA-5, front center-aisle view.

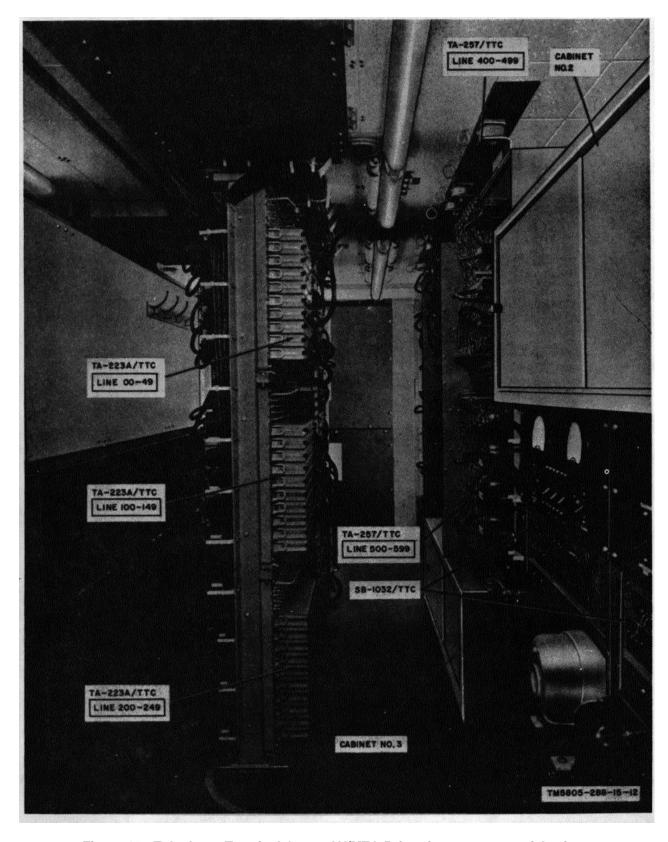


Figure 13. Telephone Terminal Group AN/MTA-5, interior rear center-aisle view.

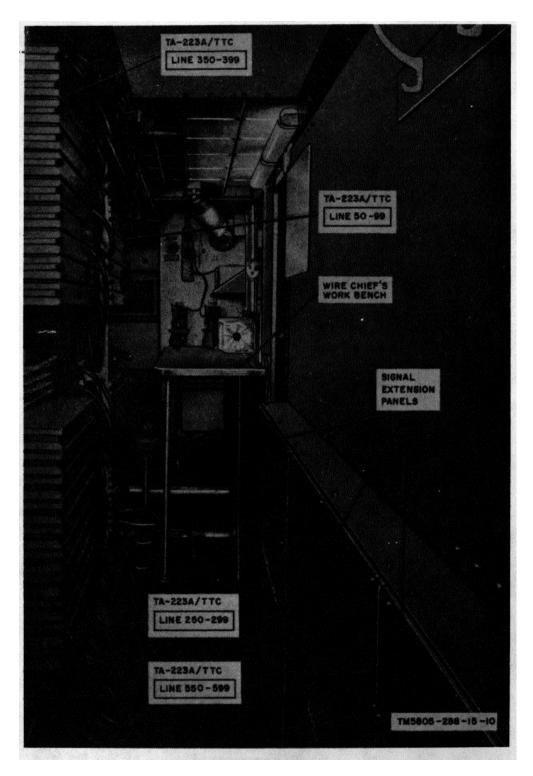


Figure 14. Telephone Terminal Group AN/MTA-5, interior front curbside view.

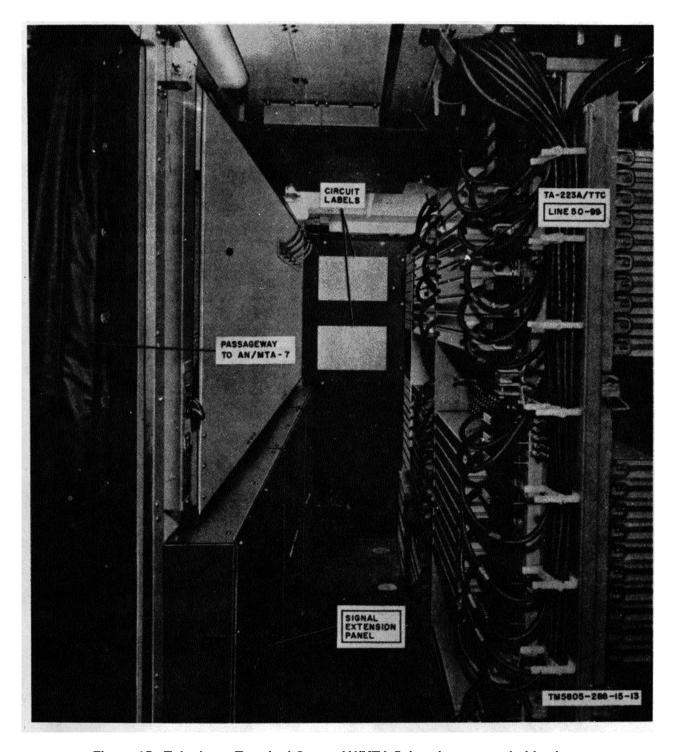


Figure 15. Telephone Terminal Group AN/MTA-5, interior rear curbside view.

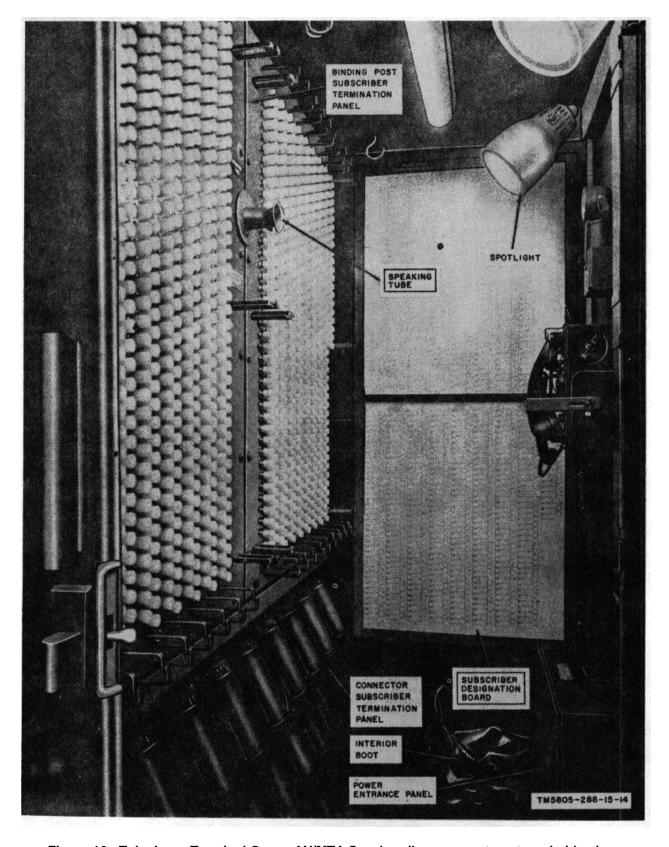


Figure 16. Telephone Terminal Group AN/MTA-5, subscriber compartment, curbside view.

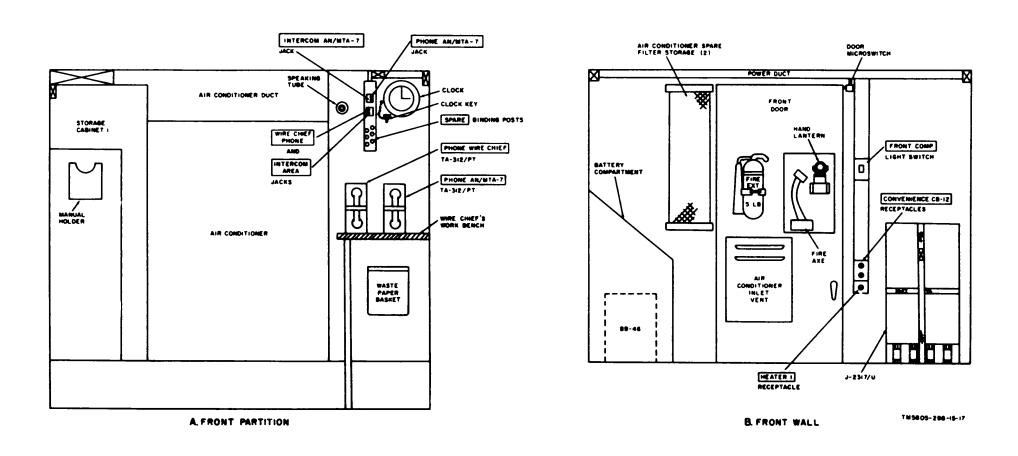


Figure 19. Telephone Terminal Group AN/MTA-5, front partition and wall, elevation diagram.

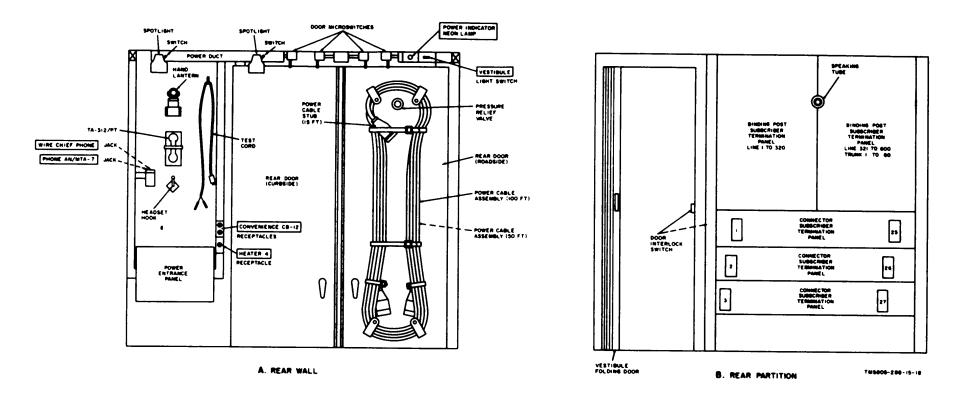
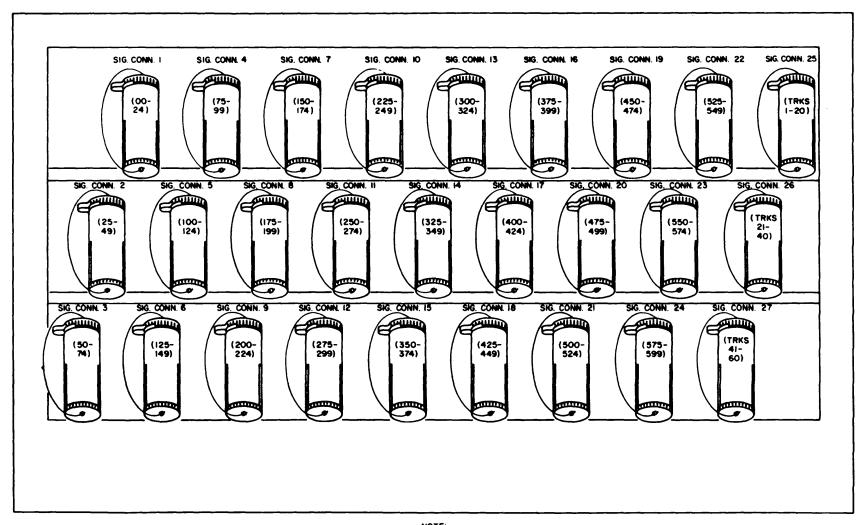


Figure 20. Telephone Terminal Group AN/MTA-5, rear partition and wall, elevation diagram.



NOTE:
NUMBERS IN PARENTHESES ( ) ON RECEPTACLE COVERS ARE CIRCUIT NUMBERS.

TM5805-288-15-41

Figure 23. Connector subscriber termination panel.

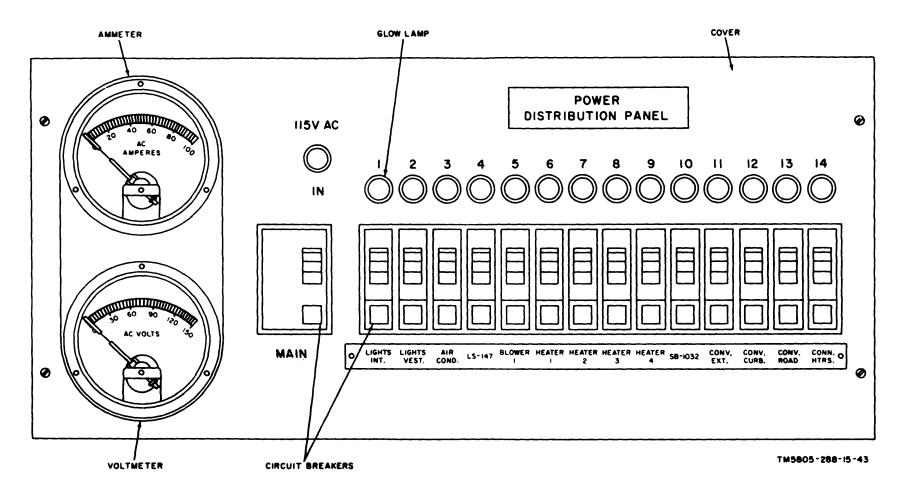


Figure 25. Power distribution panel.

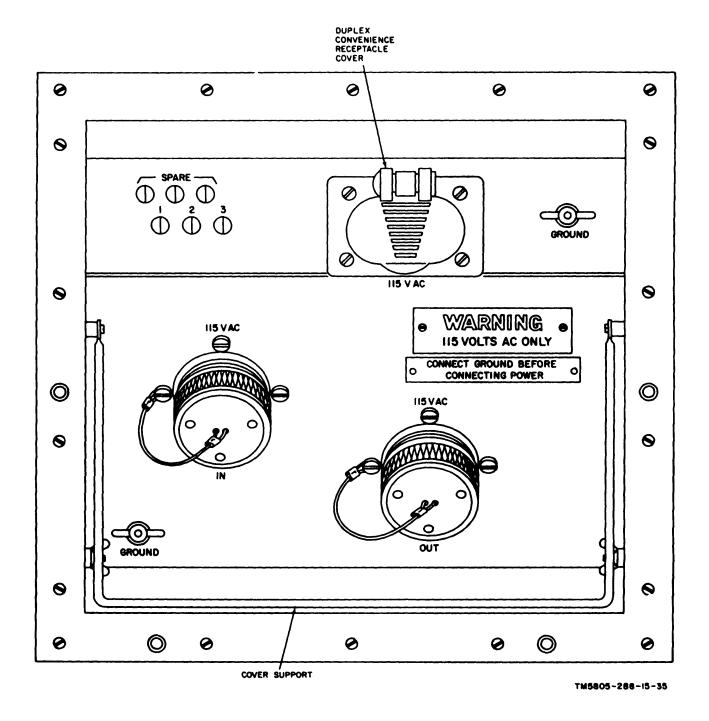


Figure 26. Power entrance box.

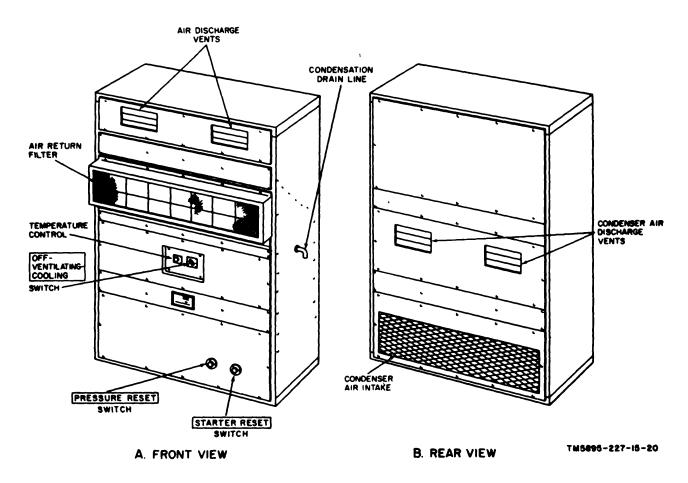


Figure 27. Air conditioner.

compartments (fig. 9). The J-1077A/U contains 26 pairs of binding posts which are housed in a weather-resistant box and connected in parallel to two 26-pair cable receptacles. The cover of the box can be locked in the raised position when wire and cable connections are being made. The J-1077A/U can be used to connect field wire to 26-pair cables or to terminate and provide cross-connection facilities for cable circuits.

- e. Distribution Box J-2S17/U. One J-2317/ U is stored in the front compartment (B, fig. 19) and two are stored in the exterior storage compartments (fig. 9). Each J-2317/U contains four 26-pair receptacles and 104 parallel-connected binding posts housed in a weather-resistant box; the cover of the box can be locked in the raised position when wire and cable connections are being made. Each J-2317/U can be used as an intermediate distributing frame (idf).
  - f. Telephone Set TA-312/PT. Two TA-312/

PT's are mounted on the front curbside wall (A, fig. 19), one on the side of the TA-257/TTC (fig. 21), and one in the subscriber's compartment (A, fig. 20). The TA-312/PT's are arranged for common-battery operation and are used for the wire chief's circuit, interval communication with the AN/MTA-7 and local area telephones.

- g. LINE/BATTERY LIGHTING POWER TRANSFER relay. The LINE/,BATTERY LIGHTING POWER TRANSFER relay K1 (lights control relay) is contained in a box mounted on the roadside center compartment wall (fig. 18). The relay transfers lighting power to the dome lights during failure of the ac power supply.
- h. Handset-Headset H-144/U and Extension Cord. The H-144/U and the. 8-foot extension cord are provided for connection to the TA-312/PT located in the subscriber's compartment

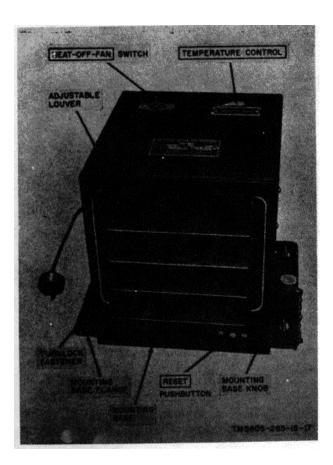


Figure 28. Electric heater.

or at the mdf and provide personnel with a means of communicating over the local telephone circuit during connection and installation procedures.

- i. Cord and Cable (figs. 2 and 8).
  - (1) Power cable assemblies (fig. 3). A 50-foot and a 100-foot power cable assembly are secured on the rear door (fig. 20). They are threeconductor cable assemblies with watertight connectors on each end. The 100-foot cable is used to connect the van to an ac power source, and the 50-foot cable is used to connect power from the AN/ MTA-5 to the AN/MTA-7.
  - (2) Power cable stub (fig. 2). The power cable stub is secured on the rear door (fig. 20). It is a 15-foot, threeconductor cable with a watertight connector on one end and prepared leads on the other end. It is used to connect the van to an ac power source.

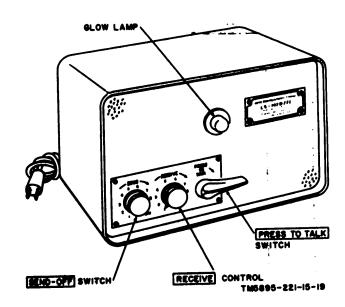


Figure 29. Intercommunication Station LS-147D/FI.

- (3) Cable Assemblies, Telephone CX-4566/G (250-ft and 25-ft) (fig. 8). Seventy-eight 25-foot inter van cable assemblies are coiled and stored in the signal extension cable storage rack in the forward compartment (fig. 17); they are used for signal connections between the AN/MTA-6 and the AN/ MTA-7. Fifteen-foot 26-pair cable assemblies, wound on reels, are secured in the exterior storage compartments (fig. 9); they \*re used for connecting signal lines to the AN/MTA-5.
- (4) Special circuits cable assemblies (fig. 8). Two 50-foot cable assemblies are coiled and stored in the signal extension cable storage rack in the forward compartment (fig. 17). They are 26-pair cables with nine pairs terminated in connectors on each end. One cable assembly is used for intervan connection of special circuits (SIG. CONN. 1); the other is a spare.
- (5) Cable Assembly, Electrical Power CX-3692/U (50-ft) (fig. 3). Four CX-8692/U cable assemblies are coiled and stored in the signal extension cable storage rack in the forward compartment. They are two-conductor cables with connectors on each end. One CX-3692/U is used for intervan

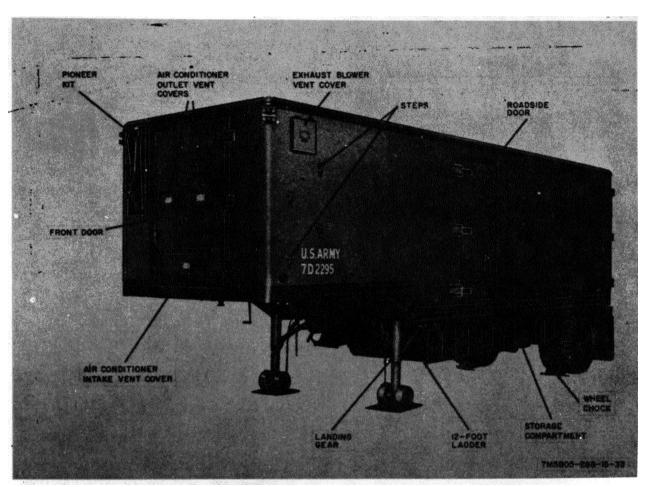


Figure 30. Telephone Switchboard Group AN/MTA-7, exterior front roadside view.

connection of the 48-volt power circuit; the other is a spare.

- (6) Cable Assembly, Telephone CX-4760/ U (15-ft) (fig. 2). Two 26-pair cable stubs are stored in cabinet No. 1 (fig. 18). They are equipped with a watertight connector on one end and prepared leads on the other end and are used to adapt a 26-pair cable for connection to binding posts.
- (7) Telephone and intercom cord (fig. 2). Six telephone and intercom cords are provided in lengths varying from 23 to 56 inches. They are two-conductor cords with a telephone plug on one end and prepared leads on the other end. The cords are installed for use with the four TA-312/PT's and the two LS-147D/FI's.
- (8) Test probe cord (fig. 2). One test cord is located on the subscriber's

compartment (A, fig. 20) and the other on the end of the TA-257/TTC. They are 6-foot, two-conductor cords with test probes on one end and prepared leads on the other end. The cords are used with Test Set TS-27/TSM. or a TA312/PT when the circuits at the binding posts on the TA-257/TTC or in the subscriber's compartment are being checked.

- *j.* Test Set TS--7B/TSM. The TS-27B/TSM (TM 11-2057A) is mounted on the center compartment roadside wall (fig. 18). It is used to measure insulation resistance and capacitance, and to locate grounds, crosses, shorts, and opens in wire lines.
- *k.* Reel Unit RL-31. The RL-31 (TM 11362) is stored in the front compartment (fig. 17). The RL41 is used for dispersing and recovering field wire on 26-pair cables.

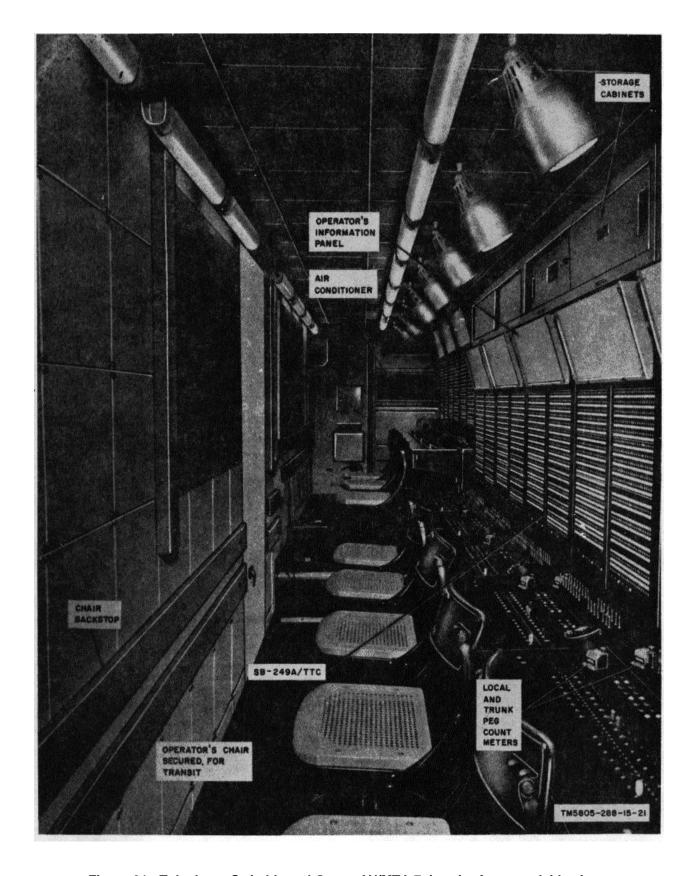


Figure 31. Telephone Switchboard Group AN/MTA-7, interior front roadside view.

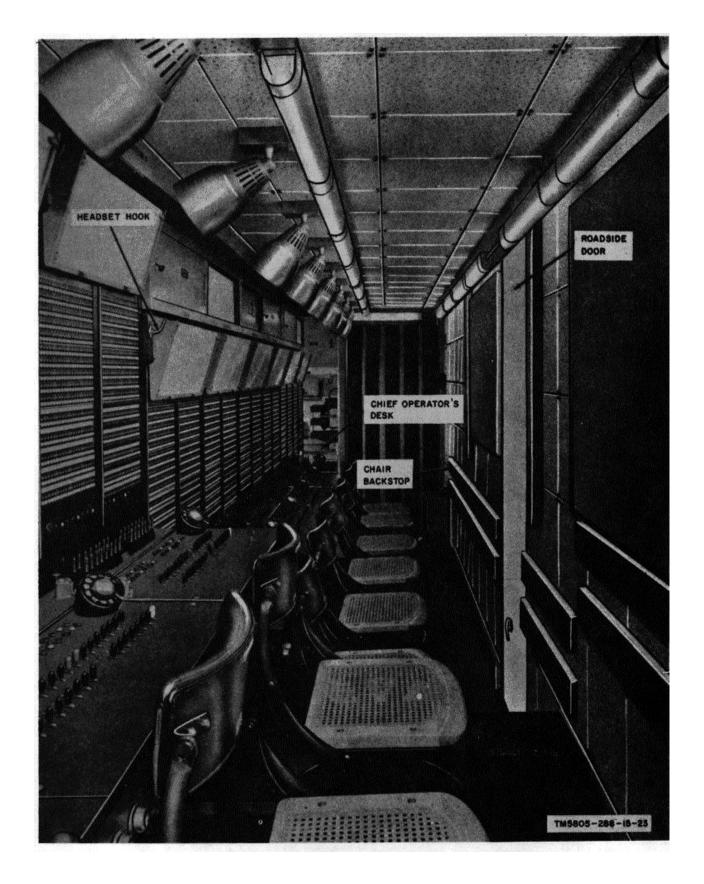


Figure 32. Telephone Switchboard Group AN/MTA-7, interior rear roadside view.

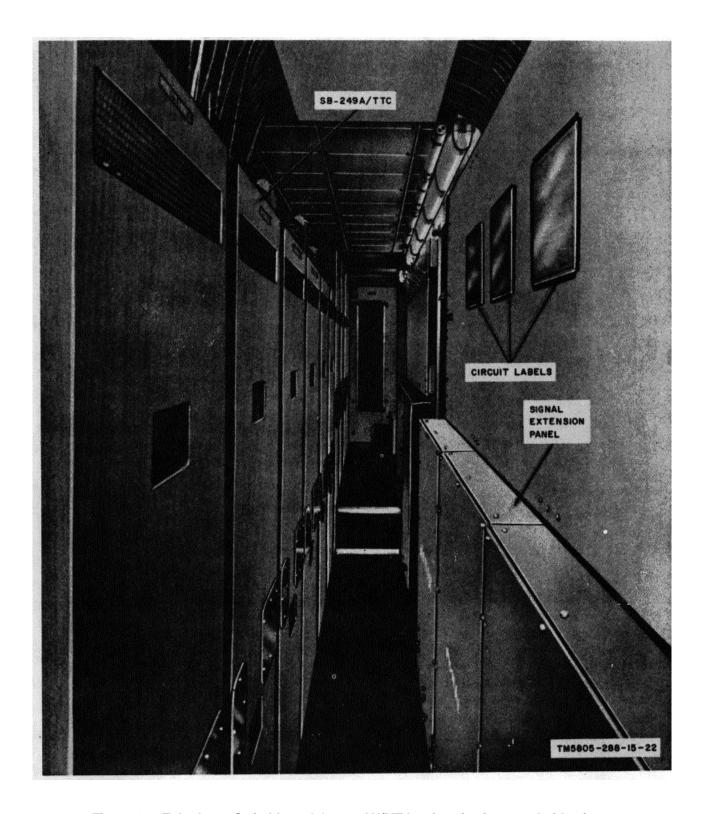


Figure 33. Telephone Switchboard Group AN/MTA-7, interior front curbside view.

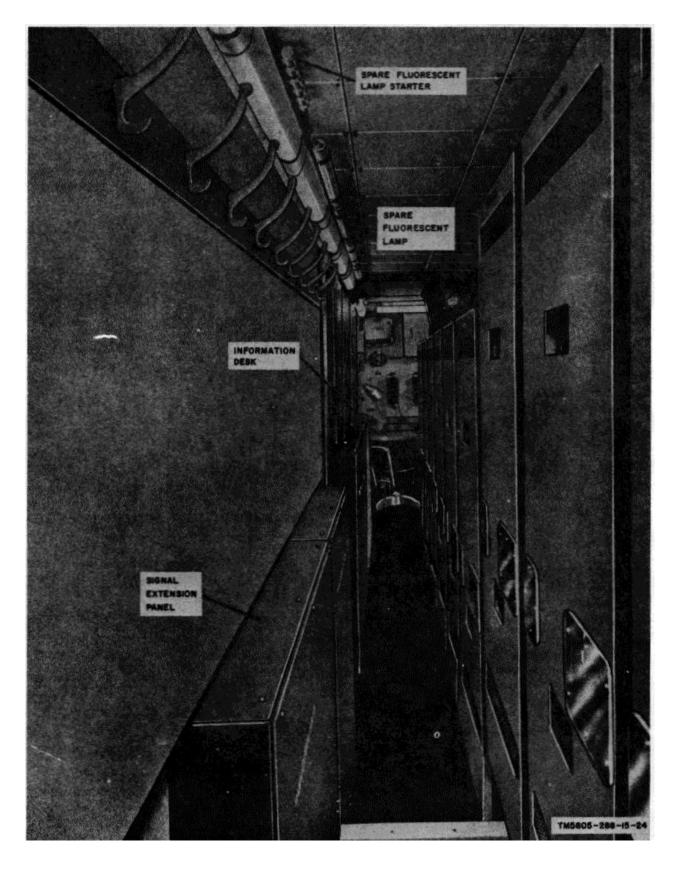


Figure 34. Telephone Switchboard Group AN/MTA-7, interior rear curbside view.

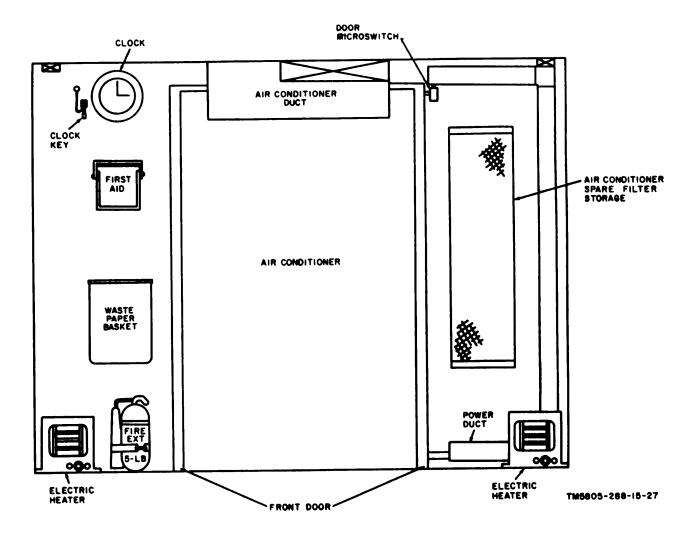


Figure 37. Telephone Switchboard Group AN/MTA-7, front wall, elevation diagram.

### 9. Description of Telephone Switchboard Group AN/MTA-7

The components of the AN/MTA-7 are housed in Semitrailer, Van, Electronic Equipment M-348A2D (figs. 30-34). The fully insulated and weatherproofed van can be moved by tractor or transported by cargo aircraft. The air-conditioned interior of the van contains nine manual telephone switchboards and a combined chief

operator's and information desk. An information turret (fig. 46) at the information desk is used to answer, originate, and hold calls. Entrance to the van is provided by the roadside and rear doors. The curbside door provides access by passageway to the AN/MTA-5, and the front door provides access to the rear of the air conditioner. A lighted vestibule at the

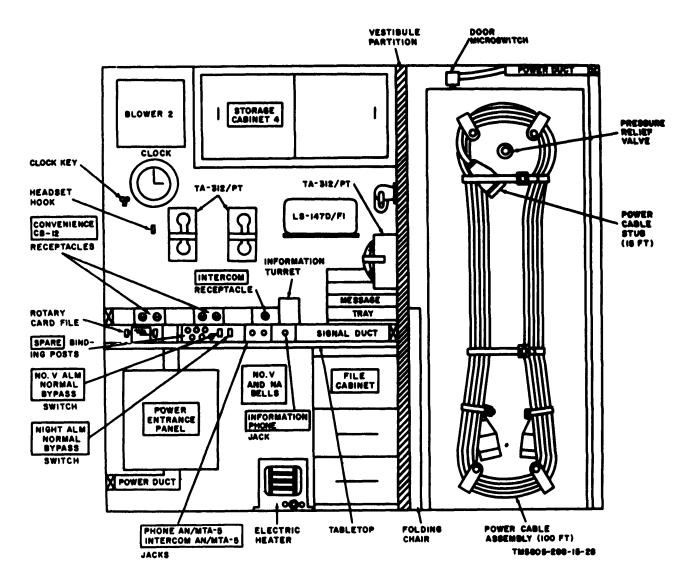


Figure 38. Telephone Switchboard Group AN/MTA-7, rear wall, elevation diagram.

rear of the van is formed by a wall partition and a folding blackout door. Fluorescent and incandescent lamps and a 24-volt emergency lighting system provide illumination throughout the van (fig. 40). Power and signal wiring ii contained in ducts with removable covers. Convenience and equipment receptacles are distributed along the wall and ceiling power ducts. A power distribution panel (fig. 41) is located near the rear of the curbside wall. The power entrance box (fig. 26) and the signal entrance

boxes (figs. 49 45) are equipped with covers and rain shields for weather protection. Light tight vents for the air conditioner and exhaust blowers are on the outside walls (fig. 80).

a. Air Conditioner (fig. 27). The air conditioner is mounted on the floor at the front of the van (fig. 39). It can be used for cooling or

Figure 39. Telephone Switchboard Group AN/MTA-7, floor plan. (Located a back of manual)

Figure 40. Telephone Switchboard Group AN/MTA-7, ceiling plan. (Located in back of manual)

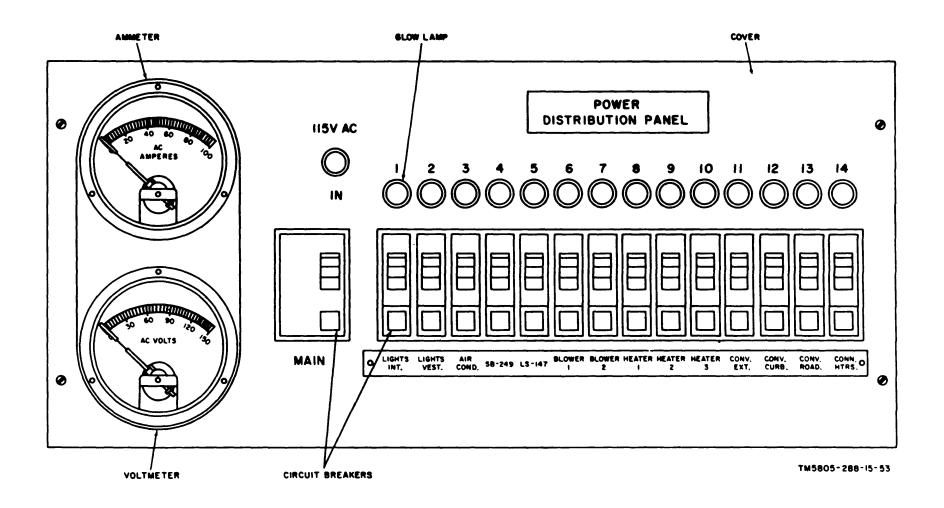
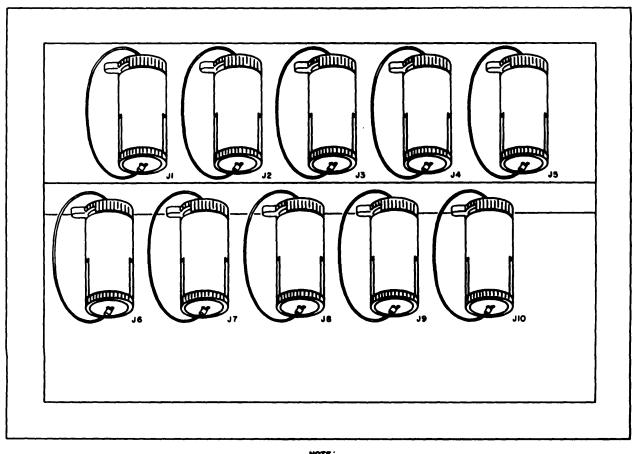


Figure 41. Power distribution panel.



NOTE:

SIGNAL CONNECTOR INTERCONNECTION PANEL JS7 TO J66 TRUNK 31 TO 60

ON THE AN/MTA-5 IS THE SAME EXCEPT FOR THE RECEPTACLE DESIGNATIONS.

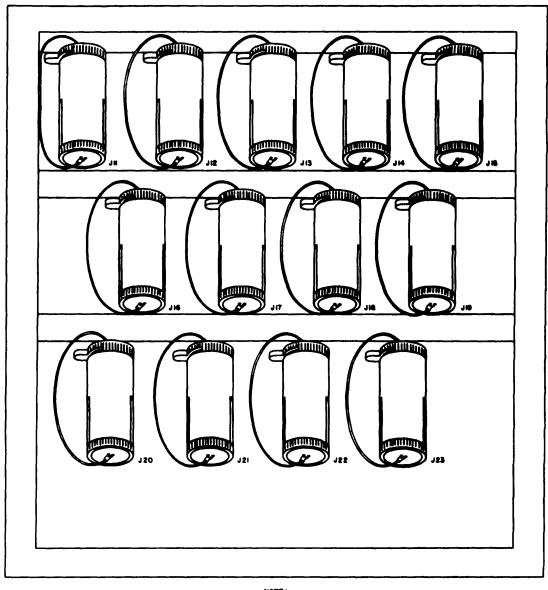
TM5805-288-15-37

Figure 42. Signal connector interconnection panel J1 to J10.

ventilating (par. 31d). An air duct, connected from the rear of the air conditioner to a light tight air-conditioning outlet vent (fig. 30), provides condenser air discharge to the outside of the van. The air duct connected to the front of the air conditioner distributes conditioned air throughout the entire van.

b. Electric Heater (fig. 28). Three heaters are secured in their mounting bases on the floor of the van

(fig. 39). Each heater contains a 1.5-kilowatt heating element and a fan for air circulation. The fan operates when the heating element is turned on, but it may also be operated independently. Horizontal louvers on the front of the unit are adjustable to deflect the airstream. Operating controls are on top of the heater; the power cord extends through a hole in the right side of the back cover plate.



HOTE:

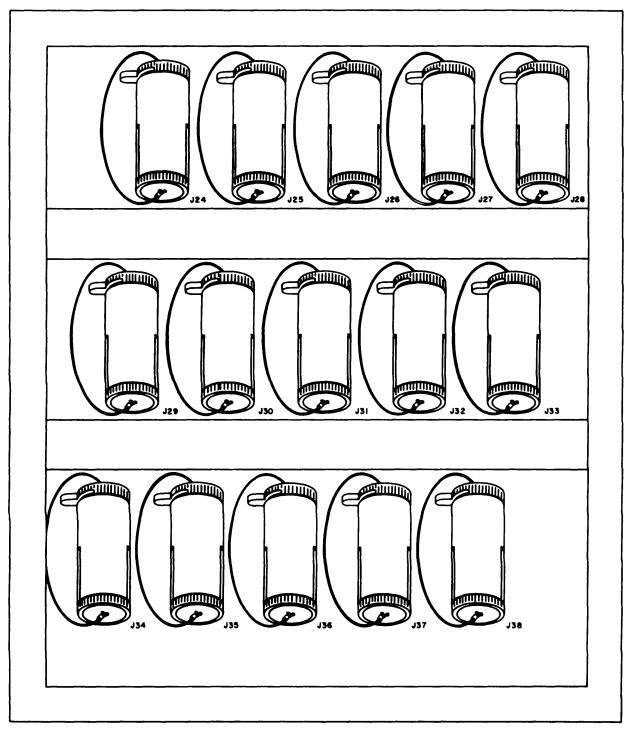
SIGNAL CONNECTOR INTERCONNECTION PANEL J44 TO JSS ON THE AN/MTA-5 IS THE SAME EXCEPT FOR THE RECEPTACLE DESIGNATIONS.

TM5006-200-15-30

Figure 43. Signal connector interconnection panel J11 to J23.

- c. Interconnection Station LS-147D/FI (fig. 29). The LS-147D FI (fig. 38) provides two-way nonprivate communication with another LS-147D/FI located in the AN/MTA-5 (fig. 17). Signal connections are made to the binding posts at the rear of the unit.
- d. Distribution Box J-1077A/U. Twelve J-1077A/U's are stored in the exterior storage

compartments (fig. 30). The J-1077A/U contains 26 pairs of binding posts which are housed in a weather-resistant ,box and connected in parallel with two 26-pair cable receptacles. The cover of the box can be locked in the raised position when wire and cable connections are being made. The J-1077A/U can be used to connect field wire to 26-pair cables or to terminate and provide cross-connection facilities for cable circuits.

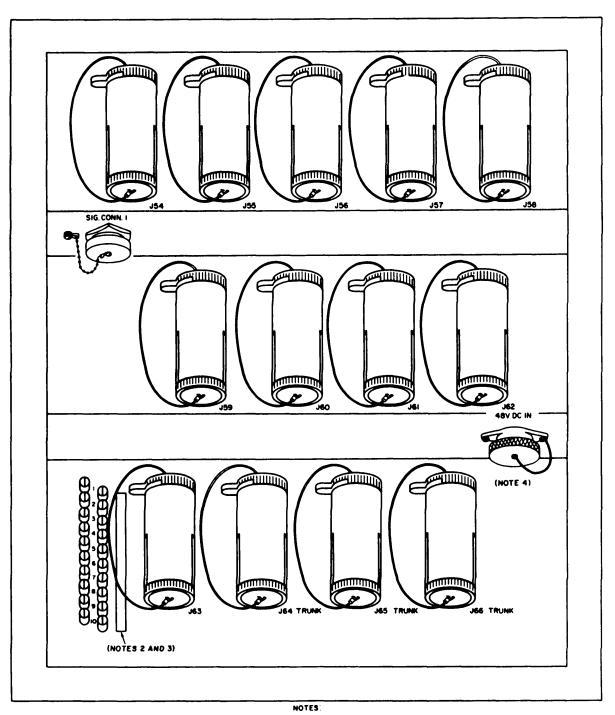


#### NOTES:

- SIGNAL CONNECTOR INTERCONNECTION PANEL J39 TO J53 ON THE AN/MTA-7 IS THE SAME EXCEPT FOR THE RECEPTACLE DESIGNATIONS.
- 2. SIGNAL CONNECTOR INTERCONNECTION PANEL JI4 TO J28 ON THE AN/MTA-5 IS THE SAME EXCEPT FOR THE RECEPTACLE DESIGNATIONS.
- 3. SIGNAL CONNECTOR INTERCONNECTION PANEL J29 TO J43 TRUNK I TO 30 ON THE AN/MTA-5 IS THE SAME EXCEPT FOR THE RECEPTACLE DESIGNATIONS.

  TMS805-288-15-39

Figure 44. Signal connector interconnection panel J24 to J38, trunk 1 to 30.



SIGNAL CONNECTOR INTERCONNECTION PANEL JI TO JIS ON THE AN/MTA-5 IS THE SAME EXCEPT FOR THE RECEPTACLE DESIGNATIONS

2. BINDING POST PAIRS ON THE AN/MTA-7 ARE DESIGNATED AS FOLLOWS: 9. 20 ~ RING 1 10. 20 ~ RING 2 LCL LCL INTERCOM

3. BINDING POST PAIRS ON THE AN/MTA-5 ARE THE SAME AS ON THE AN/MTA-7. EXCEPT PAIR 8 WHICH IS DESIGNATED INTERCOM AREA

4. RECEPTACLE DESIGNATED 48V DC OUT ON AN/MTA-5.

TM5805-288-15-40

Figure 45. Signal connector interconnection panel J54 to J66, trunk 31 to 60.

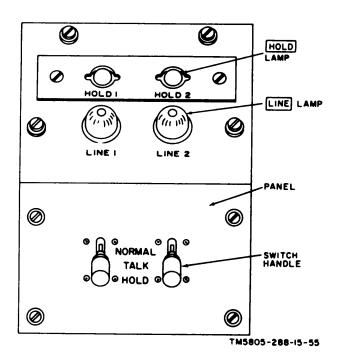


Figure 46. Information turret.

- e. Telephone Set TA-312/PT. Three TA312/PT's are mounted on the rear wall and vestibule partition (fig. 38); one is stored in cabinet No. 4 until needed. The TA-312/PT's are arranged for commonbattery operation and are used for the chief operator's circuit, the information circuit, and for intervan communication with the AN/MTA-5.
  - f. Cords and Cables (figs. 2 and 3).
    - (1) Power cable assembly (fig. 3). The 100-foot power cable assembly is secured on the rear door (fig. 38). It is a three-conductor cable with watertight connectors on each end, and is used to connect the van to an ac power source.
    - (2) Power cable stub (fig. 2). The 15foot power cable stub is secured on

- the rear door (fig. 38). It is a threeconductor cable with a watertight connector on one end and prepared leads on the other end. It is used to connect the van to an ac power source.
- (3) Cable Assembly, Telephone CX-4566./G (250-ft) (fig. 3). Sixteen .26-pair cable assemblies, wound on reels, are secured in the exterior storage compartments (fig. 30). They are use(d for connecting signal lines to the AN, MTA-5.
- (4) Cable Assembly, Telephone CX-4760/ U (15-ft) (fig. 2). Two 26-pair cable stubs are stored in cabinet No. 2. They are equipped with a watertight connector on one end and prepared leads on the other end, and are used to adapt a 26-pair cable for connection to binding posts.
- (5) Telephone and intercom cord (fig. 2). The four telephone and intercom cords are 38-inch, two-conductor cords with a telephone plug on one end and prepared leads on the other end. The telephone cords are installed for use with the three TA-312/PT's and the LS-147D/FI.
- g. Handset-Headset H-144/U and Extension Cord. The H-144/U and the 8-foot extension cord are provided for connection to a TA-312 PT when it is convenient to use a headset instead of a handset at the wire chief's and information desk.
- h. LINE/BATTERY LIGHTING POWER TRANSFER relay. The LINE/BATTERY LIGHTING POWER TRANSFER relay K1 (lights control relay) is contained in a box mounted on the rear of the curbside wall (fig. 35). The relay transfers lighting power to the dome lights during failure of the ac power supply.

#### **CHAPTER 2**

#### INSTALLATION

#### Section I. PREOPERATIONAL PROCEDURES

#### 10. Removing and Checking Contents

Check the contents of the AN/MTA--5 and the AN/MTA-7 against the packing list. If the packing list is not available, use the table of components (par. 5) to check the equipment that probably was packed. Examine the equipment for damage and prepare DD Form 6 (par. 2b) as required.

#### 11. Siting

a. General. The location of the AN/MTC-9 will depend on the tactical situation, the standard operating procedure (SOP), and the location of the other assemblages in the area communications network. Normally, the AN/ MTC-9 should be located near the heaviest concentration of telephone stations to reduce outside plant requirements. However, the location of the carrier terminals, radio equipment, operations centers, and other facilities should be considered before the AN./MTC-9 is installed. Position the vans with the curbside doors adjacent and alined as described in b below. Uncouple and level the vans (par. 12), install the passageway (par. 13), and erect the van canopy (par. 14) as required.

#### b. Positioning Vans.

- (1) Drive the first van into position on firm, dry ground. Select a location that is level and free from large rocks, logs, or debris.
- (2) Drive the second van into position so that the curbside doors are exactly alined. Be sure that the vans are not closer than 6 feet or farther apart than 10 feet.
- (3) While the vans are being leveled (par. 12c), be sure that there is no more than a 3-inch difference in height from the ground to the bottom of each van door.

#### 12. Installation of Vans

- a. Coupling Van. After each van has been positioned (par. 11b), uncouple each van from its tractor.
  - Apply the van brakes by operating the airbrake controller in the tractor cab.
  - (2) Place the wheel chocks under the rear wheels of the van (fig. 48).
  - (3) Loosen the fasteners that secure the bearing plates (fig. 47) to the underside of the van; place a bearing plate on the ground below each landing gear.

Caution: Make sure that the bearing plates are on a hard surface before lowering the landing gear. If the bearing plates (and landing gear) settle deeply into a soft surface, leveling (c below) and recoupling the van will be extremely difficult.

- (4) Unhook the cranks from their hangers on the underside of the van.
- (5) Insert a crank into each crankshaft (pushed in for high-speed operation) and station a man at each crank.
- (6) Turn the cranks simultaneously until the wheels of each landing gear rest on the bearing plate.
- (7) Close the cutoff cocks on the tractor airbrake hoses.
- (8) Disconnect both airbrake hoses from the van by raising each hose coupling until it is free. Disconnecting the airbrake hoses automatically sets the airbrakes on the van.
- (9) Couple the tractor hoses together. Place the dust caps on the van : couplings.
- (10) Disconnect the lighting cable and the directional signal cable from the van

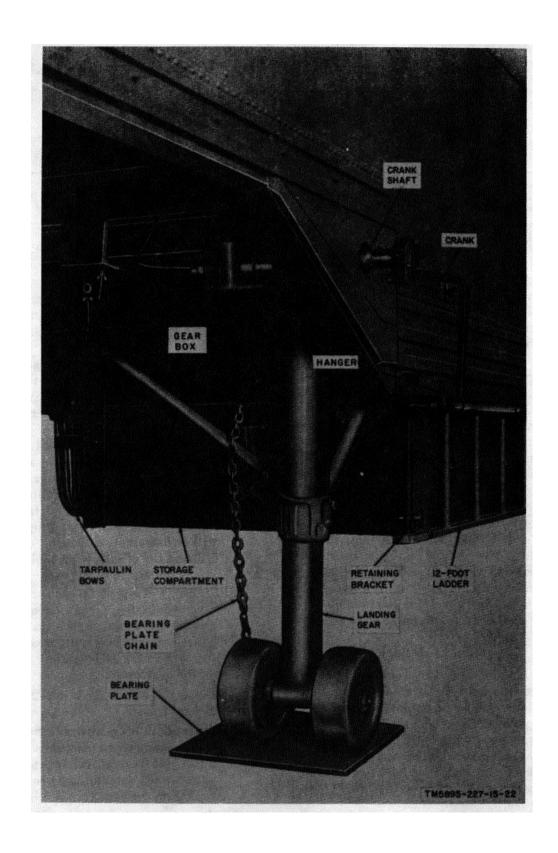


Figure 47. Van landing gear and external storage facilities.

- and close the hinged cover of the lighting cable receptacle.
- (11) Move the coupler release (on the fifth wheel of the tractor) to the unlocked position.
- (12) Drive the tractor forward slowly and allow the van coupler to slide down the ramp of the fifth wheel. Low tractor speed will minimize the impact when the weight of the van is transferred to the landing gear.
- b. Lowering Van-Leveling Jacks. Both leveling jacks (figs. 7 and 8) must be lowered to level the van (c below).
  - (1) Remove clevis pins A and B (fig. 48) which secure the side support arm and the leveling jack in the retracted position (not shown) on the van. Allow the leveling jack assembly to swing downward.
  - (2) Position the free end of the side support arm into the leveling jack bracket and insert clevis pins A and B as shown.
  - (3) Remove clevis pin C which secures the forward support arm to the underside of the van. Position the forward support arm on the leveling jack and insert clevis pin C as shown.
  - (4) Remove the leveling jack pads from their storage locations (figs. 7 and 8) and position a pad at each leveling jack (fig. 48).
  - (5) Remove the lever bars adjacent to the pintle hook, (figs. 7 and 8). Insert a lever bar into the hole at the base of each leveling jack.
  - (6) Rotate the lever bar until the leveling jack is seated in the leveling jack pad. Subsequent rotation may be required for leveling the van (c below).
  - c. Leveling Van.
    - Suspend and center a plumbline from the roof at the rear of the AN/MTA-5 van. Use the 12-foot ladder (d below).

#### Note. The spirit levels at the rear of the AN/MTA-7 van (fig. 8) are used instead of a plumbline.

(2) Adjust the landing gear (a above) and the leveling jacks (b above) by rotating the landing gear cranks and

the leveling jack levers as required until the plumbline and the spirit levels indicate that the vans are level.

Caution: Both vane must be leveled so that their floors are within 3 inches of being o the mm plane to facilitate installation of the passageway (par. 13).

- d. Removing and Replacing Ladders.
  - (1) Ladder (12-foot) (figs. 9 and 30).
    - (a) Rotate the locking knob counterclockwise to loosen the ladder-retaining braking (fig. 47) and remove the ladder from the hanger.
    - (b) Replace the 12-foot ladder; follow the procedures in (a) above in the reverse order.
  - (2) Personal ladders (figs. 7 and 8).
    - (a) Remove the three-step ladder by loosening the locking knob on the personnel ladder bracket holders (fig. 49) and removing the brackets. Remove the fourstep personnel ladder by loosening and rotating the fasteners on the underside of the van chassis.

Note. Install a four-step personnel ladder at the van front door and the three-step personnel ladders at the roadside and rear doors of the van by inserting the eccentric cams (locking handles vertical) into the holes provided and turning the locking handles to the horizontal position.

(b) Replace the personnel ladders; follow the procedures in (a) above in the reverse order.

#### 13. Installation of Passageway

(fig. 50)

Remove the passageway components (bags No. 1 through No. 5 and the floor assembly) from the center and forward compartments of the AN/MTA-5 (fig. 21).

- a. Installing Floor Assembly (A, fig. 50).
  - (1) Remove the two floor assembly supports from bag No. 1.
  - (2) Position and lock each floor assembly support beneath the curbside door of



Figure 48. Van-leveling jack arrangement.

- each van by inserting the eccentric cams into the holes provided and turning the locking handles.
- (3) Loosen the four floor assembly wingnuts (not shown) to permit adjustment of the floor assembly telescoping supports.
- (4) Remove the wingnuts from the four U-bolts on the telescoping supports.

- (5) Position one end of each telescoping support on a floor assembly support; insert the U-bolts through the holes in the floor assembly support. Replace and tighten the wingnuts on the U-bolts.
- (6) Position the other end of each telescoping support on the floor assembly support of the adjacent van. Insert 46

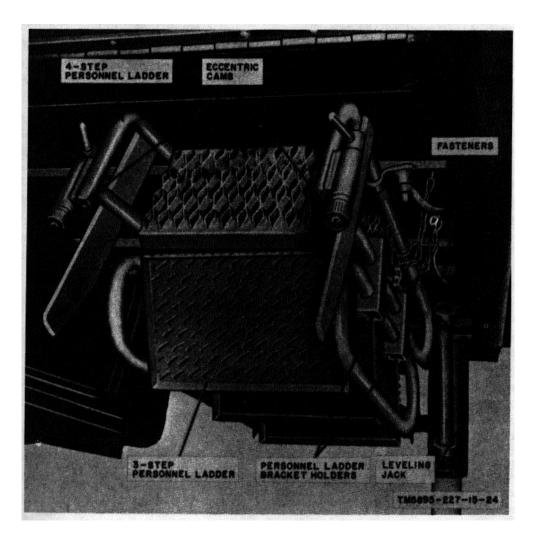


Figure 49. Van personnel ladder storage.

- the U-bolts ((5) above) and replace and tighten the wingnuts.
- (7) Tighten the four wingnuts on the floor assembly to lock the telescoping supports.
- (8) Remove the required number of floor panels from bag No. 2 and lock each one in place on the floor assembly; use the captive thumbscrews (not shown) fastened to each floor panel.
- (9) Remove the ramp panels from bag No. 2 and secure one on each end of the floor assembly; use the captive thumbscrews (not shown) fastened to each ramp panel.

- b. Installing Overhead Rail Assembly (B, fig. 50).
  - (1) Remove the two overhead rail assembly supports' from bag No. 4.
  - (2) Position an overhead rail assembly support above the curbside door of each van and secure the support by inserting and tightening the two captive bolts in the tapped holes located above the door. Us the 12-foot ladder (par. 12d).
  - (3) Remove the overhead rail assembly from bag No. 8.
  - (4) Loosen the three thumbscrews on each end of the overhead rail assembly to

Figure .50. Passageway installation diagram. (Located In back of manual) 47

permit adjustment of the telescoping sections.

- (5) Place one end of the overhead rail assembly on the overhead rail assembly support and secure it with the wingnut attached to the stud on the end of the center support rail.
- (6) Extend the telescoping overhead rail assembly to the adjacent van and me cure the other end to the overhead rail assembly support ((5) above).
- (7) Remove the vertical rails from bag No. 5.
- (8) Place the vertical rails (plain and with fittings) into the holes in the floor assembly and the floor panels as shown. Rotate the rails Y4 turn to lock them in place.
- (9) Insert the vertical rails into the couplings on the overhead rail assembly and tighten the thumbscrews.
- (10) Remove the handrails from bag No. 5 and insert them through the fittings on the vertical rails. Secure the handrails by tightening the thumbscrews on the fittings.
- c. Installing Canvas Cover (C, fig. 50).
  - (1) Remove and unfold the canvas cover from bag No. 1.
  - (2) Drape the canvas cover over the overhead rail assembly; aline the hinge flaps and the socket fasteners on the canvas cover with the door hinges and snap fasteners mounted on the angle assemblies along each curbside door.
  - (3) If the canvas cover is longer than the adjusted passageway, form the slack into an accordion fold in the middle of the passageway.
  - (4) Secure the canvas cover web straps to the overhead rail assembly center rail with the button fasteners.
  - (5) Tighten the web straps that extend underneath the floor assembly.

#### 14. Installation of Canopy

A canopy is supplied with each van for use in

shading the roof of the van from direct sunlight in hot climates, or as warranted by other climatic conditions. Follow the procedures in a through j below to install the canopy.

- a. Remove the tarpaulin and two lashing ropes from the storage compartment (figs. 9 and 80) and remove the tarpaulin bows (fig. 51).
- b. Install a curved bow at the front and rear of the van roof (fig. 52); install the straight bows along the sides; position the bow-locating pins and secure the bow wingnuts. Use the 12-foot ladder (par. 12d).
- c. Place the folded tarpaulin on the front of the van roof with the edge marked FRONT parallel with the front edge of the roof.
- *d.* Unfold the tarpaulin one fold and center the tarpaulin center rope.
- e. Tie one end of a lashing rope to the bowhook on the curbside of the front tarpaulin bow.
- f. Loop the lashing rope around the curved bow and through each grommet on the front edge of the tarpaulin; tie the other end of the lashing rope to the bowhook on the roadside of, the front tarpaulin bow.
- g. Tie the front tarpaulin center rope to the cleat on the front edge of the van roof.
- h. Unfold the tarpaulin (work from front to rear) and tie the side tarpaulin ropes to the bowhooks on both sides of the van.
- *i.* Tie down the rear end of the tarpaulin as instructed in procedures e through g above.
- *j.* Tighten the rear tarpaulin center rope sufficiently to pull the tarpaulin securely over the bows.

#### 15. Grounding

The AN/MTA-5 and AN/MTA-7 must be properly grounded before input power is connected. Select a grounding site that will not interfere with the entrance doors, field wires, power cables, or intervan and subscriber signal cables. Ground each van as follows:

- a. Loosen the captive screws and lift the cover of the power entrance box (fig. 26).
- b. Use the cover support to secure the cover in the open position.
- c. Remove the ground rod and the sledge hammer (figs. 18 and 36).

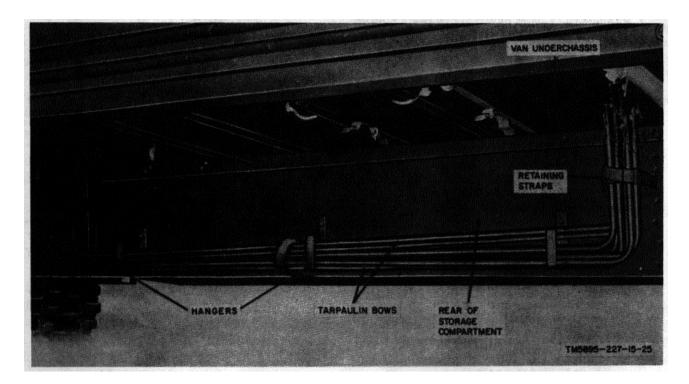


Figure 51. Storage of tarpaulin bows.

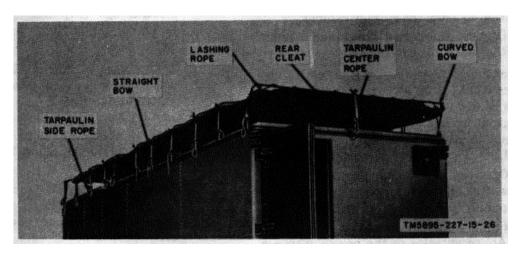


Figure 52. Canopy installed.

- d. Select a grounding site within 10 feet of each power entrance box; scoop out a small hole about 6 inches deep at the sites.
- e. Remove any paint or grease from the ground rods.
- f. Drive a ground rod into each hole until the top of the ground rod is approximately 3 inches above the bottom of the hole.
- g. Saturate the ground around the rods with water.
- h. Remove a 10-foot ground strap from the storage cabinet.
- *i.* Connect one end of the ground strap to the ground rod. Connect the remaining end of the ground strap to the lower GROUND terminal in the power entrance box (fig. 26).

*j.* Replace the sledge hammers in their mountings (figs. 18 and 36).

#### 16. Power Connections

### Caution: Ground each van (par 15) before connecting power.

Obtain ac power for the AN/MTA-7 from a nearby assemblies, or from a central for commercial power source.

- a. Preliminary Procedure. Use the dome lights as required until ac power is connected to the AN/MTA-5 and the AN/MTA-7. Operate the DOME lights switch (figs. 18 and 36) to the TRACT BAT position if the tractor is connected to the van, and to the INT BAT after the tractor has been disconnected. Operate the DOME lights switch to INT BAT after the lighting circuit is energized (par. 29).
  - Operate all circuit-breaker and equipment switches in both vans to OFF.
  - (2) Remove the 100-foot power cable assembly and the 50-foot power cable assembly (fig. 20) from the AN/MTA-5.
  - (3) Remove a 15-foot power cable stub (fig. 2) from the storage cabinet.
  - (4) Unwind the power cables and remove the connector covers.
- b. Obtaining Power From Adjacent Assemblage. The total power consumption of an AN/MTC-9 is 18,676 watts. Be sure that the power source output rating for the adjacent assemblage is not exceeded when the AN/MTC-9 is connected.
  - (1) Operate the main circuit breaker switch on both van power distribution panels (figs. 256 and 41) to OFF.
  - (2) Remove the cover from the IN 115 V AC receptacles in the power entrance box (fig. 26) on the AN/MTA-5 and the AN/MTA-7, remove the cover from the OUT 115 V AC receptacle at the AN/MTA-5.
  - (3) Connect one end of the 50-foot power cable to the OUT 115 V AC receptacle at the AN/MTA-5; connect

- the other end to the IN 115 VAC receptacle at the AN/MTA-7.
- (4) Connect one end of the 100-foot power cable to the IN 115 V AC receptacle at the AN/MTA-5.
- (5) Remove the cover of the OUT POWER 115 V AC receptacle on its equivalent, in the power entrance box of the adjacent assemblage and connect the other end of the 100-foot power cable.
- c. Using Commercial or Central Power.
  - (1) Turn off or disconnect the power from the commercial or central power source terminals before making any connections.
  - (2) Connect the 50-foot power cable assembly between the AN. MTA-5 and the AN/MTA-7 as described in b (1) through (3) above.
  - (3) If the power source is a 50- to 60-cycle-per-second (cps), 120-240-volt, single-phase, three-wire distribution system, connect the red and the white leads of the power cable stub to the neutral bus ,bar, and the black lead to one of the 120-volt bus bars of the power source.
  - (4) If the power source is a 50- to 60-cps, 120 to 208-volt, three-phase, four-wire distribution system, connect the red and the white leads of the power cable stub to the neutral bus bar, and the black .lead to the phase-i, phase-2, or phase-S bus bar.
  - (5) Remove the cover from the power cable stub connector. Connect the power cable stub to one end of the AN/MTA-5 power cable.
  - (6) At the AN/MTA-5, remove the cover from the IN 115 VAC receptacle in the power entrance box (fig. 26) and connect the other end of the power cable.
  - (7) Restore power to the commercial or central power source terminals.

#### Section II. SIGNAL CONNECTIONS

## 17. General (fig. 53)

- Circuit Planning Data. Local and trunk circuits can be terminated at the AN/MTA-5 with 26-pair cables (par. 18a-c) or field wire (par. 18e); these circuits are interconnected between the AN/MTA-5 and the AN/MTA-7 with 26-pair patching cables. Other information circuits, such as circuits, intercommunication circuits, 20-cps ringing circuits, and 48-volt direct current (dc) circuits, are interconnected between the AN/MTA-5 and the AN/ MTA-7 with appropriate cables (par. 18d). Circuits from other communications centers that are routed over field wire pairs and 26-pair cables can be interconnected by the use of Distribution Boxes J-1077A/U or J-2317/U before they are terminated in the AN/MTA-5 (par. 21). Signal line circuits within the AN/ MTA-5 (A, fig. 53) are initially cross-connected on a straight through line-to-line basis at the TA-257/TT's; however, cross connections at the TA-257/TTC's can be changed by the wire chief, when necessary, to satisfy tactical requirements or to conform with standard operating procedures. Circuit assignments and arrangements for miscellaneous circuits in the AN/MTA- and the AN/MTA-7 (B, fig. 53) may also be changed by the wire chief, when necessary. Additional informational covering circuit assignment and arrangements is contained in the technical manual for the AN/ TCC-7A (app. I).
- b. Connections and Tests. After the connections specified in the chart in paragraph 21a (items 2, 3, and 4) have been made between the AN/MTA-5 and the AN/MTA-7, perform the preoperational testing procedures outlined in paragraph 22; then complete the connections specified for item 1 of the chart in paragraph 21a.

Figure 53. Central Office, Telephone, Manual AN/MTC-9, cabling diagram.
(Located in back of manual)

#### 18. Signal Connection Procedures

Subscriber's lines (26-pair cable or field wire) for local circuits or trunks are terminated at the AN/MTA-5 on 26-pair receptacles or binding posts located in the subscriber's compartment (fig. 16). Signal circuits between the AN/MTA-5 and the AN/MTA-7 are interconnected by sixty-six 26-pair patching cables connected between identically designated receptacles mounted in the van signal connector interconnection panels (figs. 7 and 8). The intervan telephone and intercom circuits, 20-cps ringing current, information and chief operator's circuits, the night alarm circuit, and 48-

volt de power are completed by cable connections between signal connector interconnection panel J1 to J13 on the AN/MTA-6, and signal connector interconnection panel J54 to J66, trunk 31 to 60 on the AN/MTA-7 (fig. 45).

#### a. Preliminary Procedures.

Note. When connecting local and trunk circuits to the AN/MTA-d refer to item 1 of the chart in paragraph 21a for cable connection data. When connecting local and trunk circuits between the AN/MTA-5 and the AN/MTA-7, refer to item 2 of the chart in paragraph 21a for cable connection data.

- (1) Subscriber's component.
  - (a) Open the local line and cable entrance cover (fig. 7). Secure the cover in the open position with the cover support.
  - (b) Inside the van (fig. 16), pull out the inside half of the canvas boot and loosen the drawstrings. At the outside of the van, withdraw the outside half of the canvas boot and loosen the drawstrings.
  - (c) Insert the 26-pair cables and field wire pairs through the boots; connect the 26-pair cables (b and c below) or field wires (e below) as required. After all cables and field wires have been connected, tighten and tie the drawstrings on both canvas boots.
  - (d) Inside the van, use the web straps to secure the cables and field wires in a neat form within the cable trough.
  - (e) Outside the van, fasten the signal cable grips (fig. 2) to the 26-pair cables and suspend the cables from the cable strain relief hooks

mounted along the rub rail on the van (fig. 7').

- (2) Signal connector interconnection panels
  - (a) Open the signal connector interconnection panel covers on each van. Secure the covers in the open position with the cover supports.
  - (b) Connect the 25-foot patching cable (c below), the CX-3692/U cable, and the special circuits cable assembly (d below).
  - (c) Fasten the signal cable grips to the cables and suspend the cables from the cable strain relief hooks mounted along the rub rail on the vans (figs. 7 and 9).
- b. Coupling 26-Pair Connectors (fig. 54).

Caution: Handle the 26-pair connectors carefully during the coupling and uncoupling procedure. Do not force or twist the connectors during installation. Do not drop or place an uncovered 26-pair connector on the ground.

- (1) Cover removal.
  - (a) With each hand, grasp the knurled collar on each end of the connector and turn the collars until the open position is reached (A, ft. 54).
  - (b) Disengage the cam on top of the cover from the slot on the connector collar. Lift and remove the cover (B, fig. 54).
- (2) Coupling procedure.
  - (a) Position the two 26-pair connectors so that the cams drop into the slots of the knurled collars and the male contacts are alined with the female contacts (C, .fig. 54).
  - (b) Carefully press the two connectors together (D, fit. 54).
  - (c) Lock the two connectors by turning the knurled collars until the closed position is reached (E, fig. 54).
  - (d) Lock the two connector covers together.
- (3) Uncoupling procedure.
  - (a) Unlock the 26-pair connectors by turning the knurled collars until the open position is reached (A, fig. 54).
  - (b) Carefully pull the connectors apart.
  - (4) Cover replacement.

- (a) Unlock the two connector covers.
- (b) Position the cover on top of the 26-pair connector.
- (c) Engage the cam on the top of the cover in the slot on the connector collar (A, fig. 54).
- (d) Lock the cover to the connector by turning the collars until the closed position is reached.

### Figure 54. Coupling 26-pair connectors.

#### (Located in back of manual)

c. Coupling 26-Pair Connector to 26-Pair Receptacle. The cover removal and replacement procedures for a 26-pair receptacle are the same as those described for the 26-pair connector (b(1) and (4) above). Connect and disconnect a 26-pair connector at the 26-pair receptacle as follows:

## Note. The cable end of the connectors is used as a reference for clockwise or counterclockwise rotation.

- (1) Coupling procedure.
  - (a) Remove the covers and lock them together.
  - (b) Position the 26-pair connector on the receptacle so that the cams drop into the slots of the knurled collars, and the male contacts are alined with the female contacts (E and F, fig. 55).
  - (c) Carefully press the connector into the receptacle (G, fig. 55).
  - (d) Turn the lever on the receptacle knurled collar counterclockwise until the collar *just* engages the cam.
  - (e) Turn the knurled collar on the connector clockwise until the sleeve just engages the cam.
  - (f) Simultaneously turn the receptacle collar lever and the connector collar until the closed position is reached.
- (2) Uncoupling procedure.
  - (a) Simultaneously turn the receptacle collar lever and the connector collar until the open position is reached.
  - (b) Carefully pull the connectors apart.
  - (c) Replace the covers (b(4) above).

### Figure 55. Coupling a 16-pair connector to a 16-pair receptacle.

#### (located in back of manual)

- d. Connecting Special Circuits Cable Assembly (50 ft) and Cable Assembly, Electrical Power CX-3692 (50 ft).
  - Unscrew the SIG. CONN. 1 and the 48V DC IN and OUT receptacle covers (fig. 45).
  - (2) Seat the cable connectors in their respective receptacles. Secure the cables by turning the locking collars in a clockwise direction.
  - e. Field Wire Connections.
    - (1) Remove one-half inch of insulation from the end of each wire that is to be connected.
    - (2) Press on the top of the binding posts to open the hole (fig. 24) or the wire slot, depending on the type of binding post. Place the field wire in the hole or wire slot and release the binding post.
    - (3) Distribute and retain all wires in the bridle rings or fanning rings associated with the rows of binding post pairs.

### 19. Procedure for Connecting Distribution Box J-1 077A/U

- a. Preliminary Procedures.
  - (1) Remove the J-1077A/U from the roadside storage compartments under the van.
  - (2) Release the fasteners on the J-1077A/U and open the cover.
- b. Procedure for Interconnecting 26-Pair Cables With J-1077A/U. If local or trunk circuits from each of two communications centers are routed to the AN/MTA-5 with a separate 26-pair cable, and if the combined number of circuits on the two cables does not exceed 26, these circuits can be routed to a single connector receptacle on the AN/MTA-5 by use of the J-107'7A/U and a cable stub, as described in (1) through (3) below.
  - (1) Connect the 26-pair cable connector of each 26-pair cable to the binding posts of the J-1077A/U, use two 26pair cable stubs.

# Note. The wire colors of the 26-pair cable stub are the same as the wire colors of the 26-pair cable.

- (2) Connect a 26-pair cable between the appropriate 26-pair receptacle on the connector subscriber termination panel (fig. 16) and the J-1077A/U.
- (3) Use a grease pencil to record all connection data on the circuit record card located inside the cover of the J-1077A/U; close and fasten the cover.
- c. Procedure for Interconnecting Field Wire Pairs and 26-Pair Cable With J-1077A/U. If local or trunk circuits are to be routed from a remote location to the AN/MTA-5 over field wire, use the J-1077A/U as a junction box for the interconnection of field wire pairs and a 26-pair cable, as described in (1) through (4) below.
  - (1) Connect the field wire pairs to the binding posts in the J-1077A, U; start with binding post pair No. 1.
  - (2) Connect the 26-pair connector on one end of a 26-pair cable to one of the receptacles on the J-1077A/U.
  - (3) Connect the 26-pair connector on the other end of the 26-pair cable to the appropriate 26-pair receptacle on the connector subscriber termination panel -in the AN/MTA-6.
  - (4) Use a grease pencil to record all connection data on the circuit record card located inside the cover of the J-1077A/U; close and fasten the cover.
- d. Other Applications of J-1077A/U. In addition to the two possible applications of the J-1077A/U described in procedures b and c above, the J-1077A/U. can be used as a junction box to fulfill many other circuit termination and interconnection requirements that will be governed by standard operating procedures and tactical situations.

### 20. Procedure for Connecting Distribution Box J-2317/U

a. General. The use of the J-2317A/U as an externally mounted idf at the AN/MTC-9 site will provide facilities to make cross connections of 26-pair cables to reduce the number of cross connections required within the AN/ MTA-5. An idf can also be used in Army area signal centers that have established an SOP

for the use of each line in a local wire system. When used in this manner, the J-2317/U's would speed installation time of local communication facilities and reduce or eliminate wiring mistakes.

- b. Preliminary Procedures.
  - (1) Remove one or more J-2817/U's from the front compartment of the AN/MTA-5 (fig. 19) or the roadside storage compartments under the van.
  - (2) Use field wire or the canvas carrying strap and secure the J-2317/U to the side of a vehicle, to a tree, or to an improvised H-frame.
  - (3) Release the fasteners and raise and lock the cover in the open position.
- c. Procedure for Connecting J-2317/U as Idf.
  - (1) Connect three incoming 26-pair cables to 26-pair receptacles A, B, and C on the J-217/U.
  - (2) Use field wire and cross-connect between the binding posts associated with the working cable pairs and the binding posts associated with 26-pair receptacle D on the J-2317/U.

- Distribute and retain 'the wires in the bridle rings.
- (3) Use a grease pencil to record all connection data on the circuit record card
- (4) Connect one end of a 26-pair patching cable to receptacle D. Connect the other end of the 26-pair patching cable to the appropriate 26-pair receptacle on the connector subscriber termination panel in the AN/MTA-5.
- (5) Secure the cover on the J-2317/U.

## 21. Connection Data (fig. 53)

Connect local and trunk circuits to the AN/ MTA-5 as directed in item 1 of the chart in a below. Connect circuits between the AN/ MTA-5 and the AN/MTA-7 as directed in items 2 through 4 of the chart. If field wire is to be used instead of cable for some circuits, references are provided in the chart in a below to applicable instructions in the chart of b below. Supplementary connection information is provided in paragraphs 17 and

#### a. Cable Connection Chart.

Item	Circuits	Connecting facility	Connect from-	Connect to—	Remarks
1	Local and trunk	Cable, 250-ft, 26-pr (CX- 4566/G) (fig. 3). (See note 1.)		Connector subscriber termination panel in AN/MTA-5 (fig. 23).	Connector receptacle as signments are made by the wire chief at the time of installation.
2	Local and trunk	Cable, 25-ft, 26-pr (CX-4566/G) (fig. 3).	Signal connector interconnection panels on AN/MTA-5: J1 to J13; J14 to J28; J29 to J43 Trunk 1 to 30; J44 to J56; J57 to J66 Trunk 31 to 60.	Signal connector interconconnection panels on AN/MTA-7: J1 to J10; J11 to J23; J24 to J38 Trunk 1 to 30; J39 to J53; J54 to J66 Trunk 31 to 60.	Connect in corresponding numerical sequence.
3	Information, chief operator, local telephone, local intercom, no-voltage alarm, 20-cps ringing and night alarm.	Special circuits cable assembly, 50-ft, 26-pr (fig. 3). (See note 2.)		Signal connector intercon- nection panel J54 to J66, Trunk 31 to 60 on AN/ MTA-7.	Connect to SIG. CONN. 1 receptacles.
4	48 volts dc	Cable, 50-ft, 1-pr (CX-3692/U).	Same as item No. 3 above.	Same as item No. 3 above.	Connect to 48V DC IN receptacles.

Note 1. Field wire can be used instead of 250-ft cables. In this case, connect local and trunk circuits to the AN/MTA-5 as directed in item No. 1 of the chart in b below.

Note 2. Field wire can be used instead of the 50-ft cable. In this case, connect the circuits as directed in items No. 2 through 9 of the chart in b below.

# b. Field Wire Connection Chart.

Item	Circuits	Conne	et from—	Co	nnect to-	Remarks
1	Local and trunk	T .	or other com- ns centers.	termin	ost subscriber ation panel in A-5 (fig. 24).	Specific binding post number assignments are made by the wire chief at the time of installation.
		AN/M	ITA-5 Io. Designation		MTA-7	
2	Information line No. 1		INFO 1	Dinaing post	No. Designation INFO 1	
-	Information line No. 2		INFO 2	2	INFO 2	
3	Chief operator	1	CH OPR	3	CH OPR	
4	Intervan telephone	4	LCL	4	LCL	
5	Intervan intercom	5	LCL IN-	5	LCL IN-	
_ [			TERCOM		TERCOM	
6	Night alarm	6	NIGHT	6	NIGHT	
	<b>8</b>		ALM.	Ĭ	ALM.	
7	No voltage alarm	7	NO V ALM.	7	NO V ALM.	This circuit is wired, but equipment is not provided with AN/TTC-7A (TM 11-2146).
8	Area intercom	8	INTERCOM			An LS-147D/FI for the
			AREA	8	:	area intercom net is not provided with AN/
9	20-cps ringing current saurce No. 1.	9	20~RING 1	9	20~RING 1	^^
	20-cps ringing current source No. 2.	10	20~RING 2	10	20~RING 2	

# Section III. PREOPERATIONAL TESTING

# 22. General

- a. After the connections have been made between the AN/MTA-5 and the AN/MTA-7 (par. 21a, items 2, 3, and 4) but before incoming local and trunk circuit connections have been made at the AN/MTA-5 (par. 21a, item 1), perform the testing procedures in paragraphs 23, 24, and 25. Supplement the testing procedures by performing the preoperational testing procedures given in the technical manual for the AN/TTC--7A (app. I).
- b. Complete the grounding and power connections (pars. 15 and 16) and energize the ac circuits (par. 29) before starting the tests.
  - c. Remove the cord circuit straps (par. 30).

#### 23. Line Circuits

a. In the subscriber's compartment of the AN/MTA 5, connect a 26-pair patching cable, in turn, between the SIG.
 CONN. receptacles specified in the chart -below.

Connect from-		Connect to-	
SIG. CONN.	Circuits	SIG. CONN.	Circuit
1	00-24	13	300-324
2	25-49	14	825-349
3	60-74	15	350-374
4	75-99	16	375-399
5	100-124	17	400-424
6	125-149	18	425-449
7	150-174	19	425-474
8	175199	20	475-499
9	200-224	21	600-524
10	225-249	22	626-549
11	250-274	23	660-574
12	275-299	24	575-599

- b. Operate the CB-LB switches to LB and the NA switch to ON at each TA-223A/TTC.
- c. In the AN/MTA-7, operate the NIGHT ALM NORMAL BYPASS switch (fig. 38) to NORMAL.
- d. Assign an operator to SB-249A/TIPC position 1 and another to SB-249A/TTC position 9.

- e. At position 1, originate a call over LB line 00. The line lamp for line 300 should light.
  - f. At position 9, answer the call on line 300.
  - g. Remove the cord plugs at each position.
- h. Repeat the procedures in e through g above in sequence for LB lines 01 through 299. The line lamps for lines 801 through 599 should light in sequence.

### 24. Trunk Circuits

- a. In the subscriber's compartment of the AN/MTA-5, disconnect the 26-pair patching cable from the SIG. CONN. 24 receptacle and connect it to the SIG. CONN. 25 receptacle (trunks 1-20).
- b. Operate the CB-LB switches to CB on the TA-223A/TTC associated with lines 275299.
- c. At position 1, insert a call cord plug into line 275. Momentarily operate the ring call talk switch to the ring call position. The line lamp for trunk 1 should light.
- d. At position 9, insert an answer cord plug into the trunk 1 jack. The line lamp should go out. The operators can now talk.
  - e. Remove the cord plugs.
- f. At position 9, insert a call cord plug into the trunk 1 jack. Do not ring. The line lamp for line 276 should light.
- *g*. At position 1, insert an answer cord plug into the line 275 jack. The line lamp should go out.
- h. Remove the cord plugs. Connect, in tun, the 26-pair patching cable to SIG. CONN. receptacle 16 (trunks 21-40) and SIG. CONN. receptacle 27 (trunks 41-60), and repeat the procedures in b through g above for trunks 21 through 60.

### 25. Miscellaneous Circuits

- a. Information Turret (fig. 46).
  - (1) In the AN/MTA-7 (fig. 38), arrange the INFORMATION TA-312/PT for CB operation and insert the TA-312/ PT cord plug into the INFORMATION PHONE jack in the signal duct.

- (2) At switchboard position 1, insert a call cord into the line jack assigned to information line 1. Operate the ring call-talk switch to the ring call position. The LINE 1 lamp should light at the information turret.
- (3) At the information desk (fig. 38), operate the NORMAL-TALK-HOLD switch on the information turret to TALK. The information operator and the switchboard operator can now talk.
- (4) Remove the cord plug at the switchboard and restore the NORMALTALK-HOLD switch to NORMAL.
- (5) Repeat the procedures in (2) through (4) above for information line 2.
- b. Chief Operator's and Wire Chief's Circuits.
  - (1) In the AN/MTA 5 (fig. 19), arrange the WIRE CHIEF TA- 312/PT for CB operation and insert the TA312/PT cord plug into the WIRE CHIEF PHONE jack in the signal duct.
  - (2) In the AN/MTA-7 (fig. 38), arrange the CHIEF OPERATOR TA-312/PT for CB operation and insert the TA312/PT cord plug into the CHIEF OPERATOR PHONE jack in the signal duct.
  - (3) Remove the handset of each TA-312/ PT, in turn, from the cradle. The line lamps associated with each circuit at the switchboard should light.
  - (4) Answer the call from both circuits at the switchboard.
  - (5) Restore the handsets to their cradles and remove the switchboard cord plugs.
- c. Intervan Communication Circuits.
  - (1) TA.312/PT circuits.
    - (a) In the AN/MTA-5 (fig. 19), arrange the TA-312/PT PHONE AN/MTA-7 for LB operation and insert the cord plug into the PHONE AN/MTA-7 jack in the signal duct.
    - (b) In the AN/MTA-7 (fig. 38), arrange TA-312/PT PHONE AN/ MTA-5 for LB operation and insert the cord plug into the PHONE

- AN/MTA-5 jack in the signal duct.
- (c) Check for proper signaling and transmission between the two vans.
- (2) LS-147/FI circuits.
  - (a) In the AN/MTA-5 (figs. 17 and 19), insert the LS-147D/FI cord plug into the INTERCOM AN/ MTA-7 jack in the signal duct.
- (b) In the AN/MTA-7 (fig. 38), Insert the L-147D/FI cord plug into the INTERCOM AN/MTA-6 jack in the signal duct.
- (c) Check for proper communication between the two vans (par. 81c).

# **CHAPTER 3**

# **OPERATION**

# Section I. CONTROLS AND INDICATORS

# 26. General

This chapter contains operating procedures for all components of the AN/MTC-9, except the AN/TTC-7A, the TS-27B/TSM, and the TA-312/PT. Refer to the operating procedures in the applicable technical manuals (app. I) for those components not included.

# 27. Telephone Terminal Group AN/MTA-5

a. Power Distribution Panel (fig. 25).

Control or indicator	Description and function		
MAIN circuit breaker	Two 70-ampere internally ganged circuit breakers. Provides overload protection for 115-volt ac input power source; provides on-off control for ac power applied to individual circuit breakers.		
Individual circuit breakers:	Provide on-off control and overload protection for individual circuit as follows:		
1 LIGHTS INT	Sw	Function	
2 LIGHTS VEST- 15	15	Center-compartment lights. Vestibule, forward compartment, and subscriber's compartment lights.	
3 AIR COND	40	Air conditioner	
4 LS-147	15	LS-147D/FI INTERCOM duplex receptacle.	
5 BLOWER 1	15	Exhaust blower receptacle.	
6 HEATER 1	20	Electric heater receptacle HEATER 1.	
7 HEATER 2	40	Electric heater receptacles HEATER 2 and HEATER 5.	
8 HEATER 3	20	Electric heater receptacle HEATER 3.	
9 HEATER 4	20	Electric heater receptacle HEATER 4.	
10 SB-1032	30	SB-1032/TTC No. 1 and No. 2 and battery compartment blower receptacle BATTERY BLOWER.	
11 CONV. EXT	15	Duplex convenience receptacle in power entrance box (fig. 26).	
12 CONV. CURB	15	CONVENIENCE CB-12 receptacles in curbside power duct.	
13 CONV. ROAD	15	CONVENIENCE CB-13 receptacles in roadside power duct.	
14 CONN. HTRS	15	Electrical heaters inside signal extension panels (fig. 64).	
Voltmeter	Ac voltmeter source.	with 0- to 150-volt scale. Indicates ac input voltage from external power	
Ammeter	Ac ammeter with 0- to 100-ampere scale. Indicates total current drain from external power source by AN/MTA-5 components in use.		
Glowlamps (14)		Glow when associated circuit breaker is at ON.	
115V AC IN lamp	Neon lamp. Lights when ac power is connected at van power entrance box.		

b. Lighting (figs. 17-20 and 22).

Control or indicator	Description and function
POWER INDICATOR NEON LAMP (3) (figs. 19, 20, and 22).	Neon lamps. Light when ac power is connected at van power entrance box.
BLACKOUT BYPASS-NORMAL switch (fig. 18).	Two-position switch. Controls all lighting in AN/MTA-5 for blackout operation as follows:

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	D : :: : : : : : : : : : : : : : : : :
Control or Indicator	Description and function
	Sw pos Permit;  BLACKOUT All van lights to be controlled by the individual light  BYPASS switches.
Curbside door BLACKOUT BY- PASS-NORMAL switch (fig. 17).	NORMAL All van lights to be controlled by door microswitches.  Two-positions switch. Controls center compartment lighting for blackout  Operation follows:
The Hermitz ewiter (fig. 17).	Sw pos Permits
	BLACKOUT Main-compartment lights to be controlled by individual BYPASS light switches. NORMAL Main-compartment lights to be controlled by curbside
Vestibule folding door microswitch.	door microswitches.  Microswitch. Extinguishes main-compartment lights when folding vestibule and roadside rear doors are opened (BLACKOUT BYPASS-NORMAL
Subscriber's compartment-it folding door microswitch	switch in NORMAL position).  Microswitch. Extinguishes lights in subscriber's compartment when subscriber's compartment folding door and rear doors are opened (BLACK-OUT BYPASS-NORMAL switch in NORMAL position).
Roadside rear door microswitch	Microswitch. Extinguishes vestibule light when roadside rear door is opened (BLACKOUT BYPASS-NORMAL switch in NORMAL position).
Curbside door microswitch	Microswitch. Extinguishes subscriber's compartment lights when curbside rear door is opened (BLACKOUT BYPASS-NORMAL switch in NORMAL position).
Front compartment door microswitch	Microswitch. Extinguishes lights in front compartment when front door is opened (BLACKOUT BYPASS-NORMAL switch in NORMAL position).
Roadside door microswitch (fig. 18)	Microswitch. Extinguishes center-compartment van lights when roadside door is opened (BLACKOUT BYPASS-NORMAL switch in NORMAL position).
Curbside door microswitch	Microswitch Extinguishes center-compartment lights when curbside door is opened (both BLACKOUT BYPASS NORMAL switches in NORMAL position).
DOME lights switch (fig. 18)	Three-position switch. Controls application and selection of de power source to dome lights
	Sw Function
	TRACT BAT Applies de power from tractor to dome lights circuit.  OFF Disconnects dc power from dome lights.
CURB switch (fig. 18)	INT BAT Applies de power from SB-1032/TTC to dome lights. Two-position ON-OFF switch. Controls fluorescent lights on the curbside wall (fig. 22).
CENTER-ODD switch	Two-position ON-OFF itch. Controls four (odd-numbered) fluorescent lights on the center of the ceiling.
CENTER EVEN lights switch	Two position ON-OFF switch. Controls four (even-numbered) fluorescent lights on the center of the ceiling.
ROAD ODD lights switch	Two-position ON-OFF switch. Controls four (odd-numbered) fluorescent lights on the roadside wall.
ROAD EVEN lights switch	Two-position ON-OFF #witch. Controls four (even-numbered) fluorescent lights on the roadside wall.
FRONT COMP light switch (fig. 19).	Two-position ON-OFF switch. Controls fluorescent lights on the forward-compartment ceiling.
SPOTLIGHTS switch (fig. 18)	Two-position ON-OFF witch. Controls application of ac power to spot lights over wire chief's workbench. Each spotlight has built-in ON-OFF switch.
SUBSCRIBER COMP light switch (fig. 22).	Two-position ON-OFF switch. Controls spotlights and fluorescent lights in subscriber's compartment. Each spotlight has built-in ON-OFF switch.
VESTIBULE light switch (fig. 20).	Two-position ON-OFF switch. Controls fluorescent light in vestibule.

c. Miscellaneous Switches (figs. 17 and 22).

Control or indicator	Description and function
CONN COMP HTRS switch and	Two-position ON-OFF switch and neon lamp. Controls ac power to the
glowlamp (fig. 17).	heaters in the signal extension panels. Neon lamp lights when switch is operated to ON.
BLOWER 1 switch (fig. 22)	Two-position ON-OFF switch. Controls ac power to the van exhaust blower.

# d. Signal Duct (figs. 19 and 20)

Jack or binding post	Description and function		
PHONE All/MTA-7 jacks (3)	Two-conductor, parallel-connected jacks. Provides means of connecting TA-312/PT to telephone circuit between vans.		
PHONE WIRE CHIEF jacks (3).	Two-conductor, parallel-connected jacks. Provides means of connecting TA-312/PT to wire chief's telephone circuit.		
INTERCOM AN/MTA-7 jack	Two-conductor terminating jack. Provides means of connecting LS-147D/FI to the AN/MTA-7 intercom circuit.		
INTERCOM AREA jack	Two-conductor terminating jack. Provides means of connecting LS-147D/FI to army-area intercom network.		
SPARE 1 through 8 binding posts (3 pairs).	Binding posts. Extend the spare binding post circuits located in the power entrance box (fig. 26) for connection inside the van.		

# e. Intercommunication Station LS-147D/FI (fig. 29).

Control or instrument	Description and function
OFF-SEND control	Ganged on-of potentiometer. Turns ac power on and off and controls volume of output signal. Switch must be on to originate a call.
PRESS TO TALK switch RECEIVE control Glowlamp	Two-position nonlocking switch. Switch must be pressed to originate a call.  Potentiometer. Controls speech volume from loudspeaker.  Neon lamp. One-half of lamp glows when internal de power supply is operating.

# f. Electric Heater (fig. 28).

Control	Description and function		
HEAT-OFF-FAN switch	Three-position toggle switch.		
	Sw Function		
	HEAT Applies ac power to heater element and fan motor.		
	OFF Disconnects ac power from heater element and fan motor.		
	FAN Applies ac power to fan motor only.		
TEMPERATURE CONTROL	Thermostat control. Regulates -the temperature provided by the heating		
	element.		
RESET pushbutton	Pushbutton that resets the protective circuit breaker within the heater.		

# g. Air Conditioner (fig. 27).

Control		Description and function	
Temperature control (knob control)	Thermostat. Select and +95SF.	s temperature desired for conditioned air between +65'F.	
Ventilating-Cooling Switch.	Three-position rotary switch.		
	Sw	Function	
	OFF	Disconnects ac power from air conditioner.	
	VENTILATING	Connects ac power to air-conditioner fan only.	
	COOLING	Connects ac power to air-conditioner refrigerating and fan circuits.	
STARTER RESET switch	Pushbutton thermal-electric overload switch. Automatically opens circuit from ac source when circuit is overloaded.		
PRESSURE RESET switch	Cutout switch that opens circuits to compressor and condenser fan when the refrigerant head discharge pressure exceeds 300 pounds per square inch.		

a. Power Distribution Panel (fig. 41).

Control or indicator	Description and	function		
MAIN circuit breaker	Two 70-ampere internally ganged circuit breakers. Provides overload pro-			
	tection for 11	-volt ac input power source; provides on-off control for ac		
	power applie	d to individual circuit breakers.		
Individual circuit breakers:	Provide on-oc c	Provide on-oc control and overload protection for individual circuits as		
	follows:			
	Rating(amp)	Circuit		
1 LIGHTS INT.	15	Van lights.		
2 LIGHTS VEST.	16	Vestibule lights.		
3 AIR COND.	40	Air conditioner.		
4 SB-249	15	SB-249A/TTC positions 1 through 9 heaters.		
5 LS-147	16	INTERCOM receptacle.		
6 BLOWER 1	16	Exhaust blower receptacle BLOWER 1.		
7 BLOWER 2	16	Exhaust blower receptacle BLOWER 2.		
8 HEATER 1	20	Electric heater receptacle HEATER 1.		
9 HEATER 2	20	Electric heater receptacle HEATER 2.		
10 HEATER 3	20	Electric heater receptacle HEATER 3.		
11 CONV. EXT.	15	Duplex convenience receptacle in power entrance box (fig. 26).		
12 CONV. CURB.	15	CONVENIENCE CB-12 receptacles in curbside power duct.		
13 CONV. ROAD.	15	CONVENIENCE CB-13 receptacles in roadside power duct		
14 CONN. HTRS.	15	Electric heaters inside signal extension panels (fig. 64).		
Voltmeter	As voltmeter with 0- to 150-volt scale. Indicates ac input voltage from			
	external powe	r source.		
Ammeter	Ac ammeter with 0- to 100-ampere scale. Indicates total current drain from			
		r source by AN/MTA-7 components in use.		
Glowlamps (14)	Neon lamps. G	low when associated circuit breaker is at ON.		
115V AC IN lamp	Neon lamp. Lights when ac power is connected at van power entrance box.			

b. Lighting (figs. 3538, and 40).

Control or Indicator	Description and function		
POWER INDICATOR NEON LAMP (fig. 40).	Neon lamp. Lights when ac power is connected at van power entrance box.		
BLACKOUT BYPASS-NORMAL switch (fig. 36).	Two-position switch. Controls lighting in AN/MTA-7 for blackout operas follows:	eration	
	Sw pos Permits		
	BLACKOUT All van lights to be controlled by the individual BYPASS switches.	light	
	NORMAL Vestibule and switchboard position lights to be by door microswitches.	controlled	
Curbside door BLACKOUT BY- PASS-NORMAL switch (fig. 35).	Two-position switch. Controls lighting for blackout operation as follows:	ows:	
	Sw pos Permits		
	BLACKOUT All van lights to be controlled by individual ligh	t switches	
	NORMAL All van lights to be controlled by curbside door switches.	micro-	
Vestibule folding door mircroswitch	Microswitch. Extinguishes all van lights when folding vestibule door and rear door are opened (BLACKOUT BYPASS-NORMAL switch in NOR-MAL position).		
Rear door microswitch (fig. 38)	Microwsitch. Extinguishes vestibule light when rear door is opened (BLACK- OUT BYPASS-NORMAL switch in NORMAL position).		
Front door microswitch (fig. 87)	Microswitch. Extinguishes all van lights when front door is opened (BLACK-OUT BYPASS-NORMAL switch in NORMAL position).		
Curbside door microswitch (fig. 35)	Microswitch. Extinguishes all van lights when curbside door is oper BLACKOUT BYPASS-NORMAL switches in NORMAL position).	ned (both	

Control or Indicator	Description and function
DOME lights switch (fig. 36)	Three-position switch. Controls application' and selection of de power source
	to dome lights.
	Sw pos Function
	TRACT BAT Applies de power from tractor to dome lights circuits.
	OFF Disconnects de power from dome lights.
	INT BAT Applies de power from SB-1032/TTC to dome lights.
CURB ODD lights switch (fig. 36)	Two-position ON-OFF switch. Controls four (odd-numbered) fluorescent
	lights on the curbside wall (fig. 40).
CURB EVEN lights switch	Two-position ON-OFF twitch. Controls four (even-numbered) fluorescent
	lights on the curbside wall.
CENTER-ODD lights switch	Two-position ON-OFF switch. Controls four (odd-numbered) fluorescent
	lights in the center of the ceiling.
CENTER-EVEN lights switch	Two-position ON-OFF switch. Controls four (even-numbered) fluorescent
	lights in the center of the ceiling.
ROAD-ODD lights switch	Two-position ON-OFF switch. Controls four (odd-numbered) fluorescent
	lights on roadside wall.
ROAD-EVEN lights switch	Two-position ON-OFF switch. Controls four (even-numbered) fluorescent
	lights on the roadside wall.
SPOTLIGHTS switch	Two-position ON-OFF switch. Controls application of ac power to spotlights.
	Each spotlight has built-in ON-OFF switch.
VESTIBULE light switch (fig. 40)	Two-position ON-OFF switch. Controls fluorescent light in the vestibule.

# c. Miscellaneous Switches (figs. 35, 36, and 40).

Control or indicator	Description and function
CONN COMP HTRS switch and glowlamp (fig. 35).	Two-position ON-OFF switch and neon lamp. Controls ac power to the heaters in the signal extension panels. Neon lamp lights when switch is operated to ON.
BLOWER 1 switch (fig. 36)	Two-position ON-OFF switch. Controls ac power to BLOWER 1.
BLOWER 2 switch (fig. 40)	Two-position ON-OFF switch. Controls ac power to BLOWER 2.

# d. Information Turret (fig. 46).

Control or indicator	Description and	Description and function			
NORMAL-TALK-HOLD switch (2)	Three-position,	, bent-handle switch.			
	Sw pos	Function			
	NORMAL	Disconnects telephone set from line. and connects LINE lamp to line.			
	TALK	Disconnects LINE lamp from line and connects telephone set to line.			
	HOLD Disco	nnects telephone set from line and connects HOLD			
	lamp to line.				
LINE lamp (2)	Glowlamps. Li	Glowlamps. Light to indicate an incoming ring.			
HOLD lamp (2)	Incandescent I	Incandescent lamps. Light when associated line is in the hold status.			

# e. Signal Duct (fig. 38).

Control or jack		Description and Function				
NO. V ALM NORMAL-BYPASS	Two-position s	Two-position switch. Wired but not used with SB-1032/TTC. (Refer to				
switch.	TM 11-214	TM 11-2146.)				
NIGHT ALM NORMAL-BYPASS	Two-position tv	vitch.				
switch.						
	Sw pos	Function				
	NORMAL	Incoming signal at any SB-249A/TTC position causes night				
		alarm bell beneath chief operator's desk to sound.				
	BYPASS	Disconnects night alarm bell from SB-249A/TTC line cir-				
		cuits.				

Control or jack	Description and function
PHONE AN/MTA-5 jack	Two-conductor terminating jack. Provides a means of connecting TiA-12/i/ri
	to telephone circuit between vans.
INFORMATION phone jack	Two-conductor terminating jack. Provides a means of connecting TA-12/PT
	to information turret circuit.
CHIEF OPERATOR PHONE jack	Two-conductor terminating jack. Provides a means of connecting a TA-12/
	PT to the chief operator's circuit.
INTERCOM AN/MTA-5 jack	Two-conductor terminating jack. Provides a means of connecting LS-147D/
	FI to the AN/MTA- intercom circuit.
SPARE 1, 2, 3 binding posts (3	Binding posts. Extend the spare binding post circuits located in the power
pairs).	entrance box (fig. 26) for connection inside the van.

- f. Intercommunication Station LS147D/FI (fig. 29). This equipment is identical with that in the AN/MTA-. Refer to paragraph 27e.
  - g. Electric Heater (fig. 28). This equipment is

identical with that in the AN/MTA-5. Refer to paragraph 27f.

h. Air Conditioner (fig. 27). This equipment is identical with that in the AN/MTA-5. Refer to paragraph 27g.

# Section II. OPERATING INSTRUCTIONS

# 29. Energizing Ac Circuits

Warning: To prevent asphyxiation, the vans must be ventilated during operation.

Prepare the AN/MTA-5 and the AN/MTA-7 for full operation as follows:

- a. When power is supplied from a commercial or central power source, restore or turn on the power at the source terminals.
- b. Operate the MAIN circuit breaker on the power distribution panel (figs. 25 and 41) to ON.
- c. Operate the BLACKOUT BYPASS.NORMAL switch (figs. 18 and 36) to the BLACKOUT BYPASS position. When blackout conditions are required, operate the switch to the NORMAL position.
- d. If the lighttight passageway has been installed (par. 13), operate the curb door BLACKOUT BYPASS-NORMAL switch (figs. 17 and 35) to the BLACKOUT BYPASS position.
- e. Operate circuit breaker No. 1 (LIGHTS INT.) and No. 2 (LIGHT VEST.) to ON.
- f. Operate the light switches on the roadside wall (figs. 18 and 36) to ON, as required.

*Note.* The DOME lights switch (figs. 18 and 36) should be operated to the INT BAT position during operation of the AN/MTA-5 and the AN/MTA-7. Operate the switch to OFF when the vans are not in use.

- g. Check to see that the voltmeter (figs. 25 and 41) indicates 115 volts ac  $\pm 10$  and that the ammeter indicates nearly 0 ampere.
- h. Operate circuit breakers No. 3 through No. 14 to ON.

# 30. Proportional Procedures

Components within the AN/MTA-5 and the AN/MTA-7 are equipped with transit tiedown bars, clamps, and straps. Except for the SB249A/TTC's in the AN/MTA-7, all the tiedown facilities are exposed and are easily recognized. Remove all tiedown bars, clamps, and straps before operation; store them in cabinets inside the van or in the van exterior storage compartments. Remove the tiedown strap from the switchboard cords at each SB-249A/TTC as instructed below.

- a. Remove the four captive screws that hold the kick plate underneath the key shelf. Lift out the kick plate.
- b. Unbuckle the web strap that holds the switchboard cords. Check the cords to see that they are not tangled and that the cord weights hang free.
- c. Replace the kick plate and tighten the captive screws.

# 31. Operating Procedures

Operating procedures for components of both the AN/MTA-5 and the AN/MTA-7 are given in a through f below. The operating procedure

for the information turret, which is included in the AN. MTA-7, only, is given in e below. Refer to paragraphs 27 and 28 for descriptions and functions of controls and instruments of the AN iMTC-9 components.

*Note.* Refer to the applicable technical manuals (app. I) for operating procedures for the AN/TTC-7A, the TS-27/TSM, and the TA-312/PT.

a. Electric Heaters (fig. 28). The electric heaters may be moved (par. 44) to any location accessible to a HEATER receptacle. Insert the power cord connector plug into the appropriate HEATER receptacle and operate the HEAT-OFF-FAN switch to the desired position.

*Note.* If the HEAT-OFF-FAN switch is operated to HEAT, set the TEMPERATURE CONTROL to the desired setting.

Caution: Open the exhaust blower vent covers on the outside of the vans (fig. 7, 8, 9, and 30) before operating the blowers

- b. Exhaust Blowers. Connect the power cord connector plug into the appropriate BLOWER receptacle and operate the BLOWER switch to ON.
- c. Intercommunication Station LS-147D/FI (fig. 29).
- (1) Insert the power cord connector plug into the appropriate INTERCOM power duct receptacle.
- (2) Insert the signal cord plug into the appropriate INTERCOM signal duct jack adjacent to the LS-147D/FI.
- (3) Operate the OFF-SEND switch to 5 (approximately midposition). The glowlamp will light.
- (4) Operate the PRESS TO TALK switch and speak into the speaker-microphone on the front panel; release the PRESS TO TALK switch to receive.

*Note.* The OFF-SEND switch does not have to be operated to receive a call.

- (5) Operate the RECEIVE control to regulate the volume of an incoming call.
  - d. Air Conditioner (fig. 27).

Caution: Open the air conditioner intake (fig. 9) and outlet (fig. 30) vents before operating the air conditioner.

(1) Ventilating. Operate the OFF-VEN TILATING-COOLING switch to the VENTILATING position.

Caution: When the temperature outside the van is 500 F. or less, operate the OFF-VENTILATING-COOLING switch from OFF to COOLING for 1 second, and then from COOLING to OFF for 2 seconds. Repeat the procedure until the air conditioner compressor starts quietly.

- (2) Cooling. Set the temperature control for the desired temperature and operate the OFF-VENTILATINGCOOLING switch to the COOLING position.
  - e. Information Turret (fig. 46).

*Note.* When not in use, both NORMAL-TALK-HOLD switches must be in the NORMAL position.

- (1) When a LINE lamp lights, operate the associated NORMAL-TALKHOLD switch to TALK and answer on the INFORMATION TA-312/PT. The LINE lamp will be extinguished when the NORMAL-TALK-HOLD switch is operated.
- (2) When it is necessary to hold a call, operate the associated NORMALTALK-HOLD switch to HOLD. The HOLD lamp will light.
- (3) To complete the call on HOLD, operate the associated NORMALTALKHOLD switch from HOLD to TALK. The HOLD lamp will be extinguished. When a call is completed, operate the NORMAL-TALK-HOLD switch to NORMAL.
- f. Night Alarm Bell (fig. 38). During slow traffic hours, the switchboard positions in the AN/MTA-7 are not closely attended. Operate the NIGHT ALM NORMALBYPASS switch to NORMAL during these hours. When the night alarm bell is not required, operate the NIGHT ALM NORMAL-BYPASS switch to BYPASS.

### 32. Operation Under Unusual Climatic Conditions

The AN/MTC-9 has been designed to meet conditions of extremely cold or hot climates Install the canvas canopy (par. 14) as required. The AN/MTA-5 and the AN/MTA-7 provide

complete protection from the elements for personnel and equipment; however, when the signal and power entrance boxes are exposed to bad weather, the following precautions are necessary:

- a. Cold Climates. Extreme cold causes cables and wires to become hard, brittle, and difficult to handle. Be careful when handling the cables and connecting them to the shelter so that kinks and unnecessary loops will not result in permanent damage. To make sure that the binding posts and the 26-pair receptacle on the outside of the shelter are kept free of frost, snow, and ice, replace the covers over the connectors and close the covers over the signal and power entrance boxes when they are not in use. Lower the folding side panels when the entrance box covers are open. To prevent condensation from forming inside the signal extension panels (figs. 17 and 35), operate the CONN COMP HTRS switches to ON. Replace the cover on each 26pair cable connector as soon as the cable is disconnected from the equipment; never drag or place an open connector in snow.
- b. Hot Climates. In hot, dry climates, the 26-pair connectors and receptacles and binding posts are subject to damage from dirt and dust. Close the covers on the signal and power entrance boxes when they are not in use; replace the covers over the connectors and receptacles. Never drag or place an open connector on the ground.
- c. Warm, Damp Climates. In warm, damp climates, the equipment is subject to damage from moisture and fungi. Operate the signal extension panel heaters (a above) as required. Wipe all moisture and fungi from the exterior of the equipment with a lint-free cloth.

# 33. Stopping Procedures

Note. To turn the power off in an emergency, operate the MAIN circuit breaker (fig. 25 and 41) to OFF.

- a. Refer to the applicable technical manual (app. I) for stopping procedures for the AN/ TTC-7A (SB-1032/TTC). All individual equipment switches must be turned off before operating the appropriate circuit breakers on the power distribution panels to OFF.
- b. Operate the LS-147D/FI OFF-SEND switch to OFF.
- c. When applicable, operate the electric heater TEMPERATURE CONTROL to its lowest setting and the HEAT-OF F-FAN switch to OFF.
- d. When applicable, operate the air conditioner OFF-VENTILATING-COOLING switch to OFF.

Caution: Operate the OFF-VENTILATIN COOLING switch to OFF before operating circuit breaker No. 3 (AIR COND.) to OFF.

- *Note.* After the SB-1032/TTC and the electric heaters have been turned off, allow the blowers to remain in operation for at least 10 minutes before completing the stopping procedures (e and f below) and closing the van doors.
- e. Operate all BLOWER 1 and BLOWER 2 switches to OFF. Close the air vent covers and the blower vent covers on the AN/MTA-5 and AN/MTA-7.
- f. Operate all light switches and circuit breakers to OFF.

#### **CHAPTER 4**

# **MAINTENANCE**

*Note.* Switchboard operator's maintenance of the AN/MTC-9 is limited\* to preventive maintenance of the SB-249A/TTC. The maintenance procedures (first and second echelon) outlined in paragraphs 84 through 55 below will be performed by organizational maintenance personnel. Field and depot maintenance responsibilities for the AN/MTC-9 are listed in appendix II.

### 34. General Maintenance

Clean and inspect all components of the AN/ MTC-9 regularly. Detailed maintenance procedures pertaining to the TA-312/PT and the components of the AN/TTC-7A are described in the appropriate technical manuals (app. I).

- a. Use a clean, dry, lint-free cloth or brush for dusting.
- b. If cleaning is necessary, moisten a cloth or brush with Cleaning Compound (FSN 7930395-9542); after cleaning, wipe dry with a cloth. Do not use cleaning compound on electrical contacts.

Warning: Cleaning compound is flammable and its fumes are toxic. Do not use near an open flame; provide adequate ventilation.

c. Either dry, compressed air, not exceeding 60 pounds per square inch, or the vacuum cleaner may be used to remove dust from inaccessible places.

Warning: Compressed air is dangerous and can cause serious injury to the eyes, ears, nose, and other parts of the body. It can also cause mechanical damage to the equipment Do not use compressed air to dry parts where cleaning compound or solvent has been applied.

# 35. Tools, Test Equipment, and Materials

a. Tools and Test Equipment. The tools and test equipment required for maintenance of the TS-27D/TSM, the TA-312/PT, and the components of the AN/TTC-7A are listed in the applicable technical manuals (app. I). The tool roll kit (fig. 2) and the items listed in appendix II are authorized for maintenance of the AN/MTC-9.

### b. Materials.

Item		Federal stock
No	Item	No.
1	Abrasive, sheet; crocus cloth, 9 by 11 in.	(Ord) <sup>d</sup>
2	Abrasive, sheet; sandpaper No. 0000, 9 by 12 in.	627500-0000 <sup>a</sup>
3	Cleaning compound	7930-395-9542
4	Cloth, textile; cheesecloth, lint-free, 36 in.	408-2701 <sup>b</sup>
5	Grease, graphite, aircraft (GCA).	9150-223-4001 <sup>e</sup>
6	Lubricating oil, general purpose, preservative (PL special).	14-2834-10 <sup>d</sup>
7	Lubricating oil, internal combustion engine (OE-10).	9150-2659425 <sup>r</sup>
8	Orangestick	65120408-4036
9	Polish, metal; paste	6G16516 <sup>a</sup>
10	Tape TL-83	5970-184-2003

<sup>&</sup>lt;sup>a</sup> Signal Corps stock number.

# 36. Daily Preventive Maintenance

- a. Check for completeness and general condition of the vans, equipment, and spare parts.
- b. Remove dirt, dust, grease, and moisture from the exposed parts.
- c. Remove rust, corrosion, fungi, dirt, and moisture from the binding posts, connectors, and receptacles.
- *d.* Inspect the field wire connections at the binding posts for good contact.
- e. Inspect the lettering on the designation strips for legibility.
- f. Inspect the ground rods and ground strap connections. Feel the power cables to see if they are overheating.

<sup>&</sup>lt;sup>B</sup> Interim Federal sock number.

<sup>&</sup>lt;sup>c</sup> Quartermaster Corps stock umber.

<sup>&</sup>lt;sup>d</sup> Ordnance Corps Item.

- 9. Inspect all exposed cables for kinks, strains, moisture, fungi, and loose terminals, and for frayed, cut, or damaged insulation.
  - h. Tighten loose mounting hardware.

# 37. Weekly Preventive Maintenance

- a. Clean and tighten the components, racks, mountings, installations, cables, and connectors.
- b. Inspect the components, racks, mountings, installations, and the exposed metal surfaces for rust, corrosion, and moisture.
- c. Inspect the cables and wires for cuts, breaks, fraying, deterioration, kinks, and strain.
- d. Inspect for looseness of accessible items, such as switches, signal and ac electrical power assemblies, and glowlamps.
- e. Clean the air filters, nameplates, meters, and clocks.
- f. Inspect the meters and clocks for damaged glass and cases.
  - g. Wind the clocks (figs. 19, 37, and 38).
- h. Inspect the vans for proper support and installation. Check the exterior surfaces for rust, corrosion, punctures, or cuts.
- *i.* Check the entrance panels and boxes, the exhaust blower vents, and the filter covers for cracks, leaks, damaged gaskets, dirt, and grease.
  - j. Check for normal operation (par. 39).

# 38. Monthly Preventive Maintenance and Lubrication

- a. Lubricate the door locks and latches. 'Use grease (GGA).
- b. Lubricate the door hinges and the hinges on the entrance box covers, exhaust blower vent covers, and air filter covers. Use oil (PL special) or oil (OE-10).
  - c. Lubricate all metal-to-metal moving parts.

# Caution: More frequent lubrication may be required in excessively hot, humid, or dusty areas Do not overlubricate.

- d. Remove the air filters and soak them in cleaning compound, benzine, or naphtha. Shake loose dirt from air filters, air-dry them, and replace them in their mountings.
- e. Inspect each fire extinguisher for a broken wire seal on the trigger mechanism. If an extinguisher has been used or if there. are signs of leakage, request that the extinguisher be recharged.

# 39. Equipment Performance Checklist

This checklist is used to systematically check the ac circuits of the AN/MTA- and the AN MTA-7 after ac power has been connected. Only the first and second echelon maintenance corrective measures are given in the Corrective measures column. If the corrective measures given do not correct the fault, request higher echelon maintenance. When using the checklist, start at the beginning and follow each step consecutively for the AN/MTA- and the AN MTA-7 separately. If the trouble is suspected in a particular area, start checking at that point and continue the steps sequentially. Refer to the AN/MTA- and the AN/MTA-7 power schematicwiring diagrams (figs. 73 and 74) when checking circuits. When a fault or trouble is suspected in the TA-312/PT or in the components of the AN/TTC-7A, refer to the applicable technical manual (app. 1).

Item	<u> </u>					
No.		Item	Action or condition	Normal indication	Corrective measures	
PREPARA. TORY	1	Ac circuits	All equipment and duct switches turned off; energize ac circuits in the sequence given in paragraph 29.	As each circuit breaker is operated to ON, the associated glowlamp lights	<ul> <li>a. Reset circuit breaker. b. Check ac power source. Check power cable assembly and re- place if defective.</li> <li>c. Perform appropriate repair procedure (pars. 42 through</li> </ul>	
					55).	
EQUIPMENT PERFORMANCE	2	Heaters, blowers, etc	Operate as outlined in paragraph31; observe heater and air conditioner operation cautions	Glowlamp associated with components lights, as appropriate. As components re operated, current indication on power distribution panel ammeter increases (approximately 3 amperes for each blower and 10 amperes for the electric heater).	<ul> <li>a. Replace fuses or glowlamp as required.</li> <li>b. Perform appropriate repair procedure (par 42 through 55).</li> </ul>	
	3	AN/TTC-7A and TA-312/PT	Operate as outlined in appropriate technical manuals App. I).	Should function a described in appropriate technical manual	Perform operator's maintenance as outlined in appropriate technical manual (App. I).	
STOP	4	AN/TTC-7A and TA412/PT	Perform stopping procedures outlined in appropriate technical manuals (app. I).			
	5	Components (heaters, blowers, etc).	Perform stopping procedures as outlined in paragraph 3.			

# 40. Troubleshooting Information

- a. The procedures for localizing trouble within the AN/MTA-5 and the AN/MTA-7 are given in the equipment performance checklist (par. 39).
- *b.* The procedures for troubleshooting components, parts, and wiring of the AN/MTA-5 and the AN/MTA-7 are given in paragraph 41.
- c. The procedure for troubleshooting the AN/TTC-7A and the TA-312/PT are given in the applicable technical manuals (app. I). Refer to paragraphs 42 through 55 for removal and replacement procedures for the components of the AN/MTA-5 and the AN/MTA-7.

# 41. Troubleshooting and Repair Procedures

Warning: Be extremely careful when performing troubleshooting procedures; dangerous voltages are present in the equipment.

Isolate the defective components, parts, or wiring of the AN/MTA-5 and the AN/MTA-7 by making appropriate voltage, resistance, or continuity tests with Multimeter AN/UIRM105 and Test Set TS-27B/TSM. Refer to figure 73 or figure 74 when isolating trouble in the power circuits, and figures 68 through 72 for signal circuits. Repair or replace the components, parts, or wiring. Use the chart below for references to repair procedures.

	References		
Part or component	Par.	Fig.	
Ammeter	47 <i>d</i>	63	
Batteries BB-46	51	18,19, and	
Battorico BB 10		21	
Circuit-breaker switches	47 <i>b</i>	68	
Current transformer	47 <i>c</i>	63	
Dome lights	43 <i>e</i> , <i>f</i>		
Door microswitch	4 9 <i>b</i>		
Exhaust heater	44	68 and 59	
Exhaust blower (van compart ments).	45	60 and 62	
Exhaust blower (battery	46	61 and 62	
compart			
ment).			
Exterior of AN/MTA-4 and AN/			
65 MTA-7.			
Fluorescent light fixture	43	57	
Hand lantern	42	56	
Information turret switch	49 <i>d</i>		
Intercommunication Station LS-147D/FI.	52		
Lights control relay	54	18 and 85	

	References		
Part or component	Par.	Fig.	
NIGHT ALM toggle switches	49 <i>c</i>		
Power duet switches	49a		
Signal extension panel heaters	50	64	
Spotlight	43g	4	
Telephone Set TA-812/PT	53	67	
Voltmeter	47 <i>d</i>	63	
26-pair cable receptacle	48	64, 65, and	
		66	

# 42. Hand Lantern (fig. 66)

The hand lantern requires four Batteries BA30 which are not supplied. A spare bulb is stored behind the reflector.

- a. Inserting Batteries.
  - (1) Pull the latch forward and raise the battery case cover.
  - (2) Insert all four cells with the center brass caps up.
  - (3) Snap the battery case cover shut.

# b. Replacing Bulb.

- (1) Press in on the button and lift out the reflector.
- (2) Unscrew the brass cap at the rear of the bulb and remove the bulb and spring.
- (3) Remove the spare bulb from inside the reflector case. Insert the bulb and spring in the reflector and tighten the brass insert.
- (4) Replace the reflector in the reflector case and snap it securely in position.

# 43. Lights

- a. Removal and Replacement of Fluorescent Lamp.
  - (1) Pull gently to remove the light shield from the fluorescent light fixture.
  - (2) Rotate the lamp in its sockets /4 turn and remove it from the fixture.
  - (3) Remove a spare lamp from its storage brackets.
  - (4) Aline the pins on each end of the lamp with the slots in the fixture sockets.
- (5) Press in and rotate the lamp 1/ turn to seat the pins firmly.

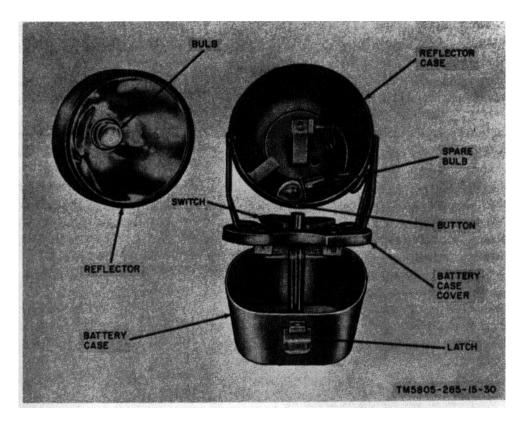


Figure 56. Hand lanterns, partially disassembled.

- (6) Replace the light shield on the fluorescent light fixture.
- b. Removal and Replacement of Fluorescent Lamp Starter.
  - (1) Remove the lamp (a(1) and (2) above) to expose the starter.
  - (2) Press in and twist the starter 1/4 turn counterclockwise, and withdraw it.
  - (3) Remove the spare starter from its storage bracket. Insert the new starter, press in, and turn it clockwise until it seats.
  - (4) Replace the lamp and the light shield (a(4) through (6) above).
- c. Removal and Replacement of Neon and Incandescent Lamps. To remove a defective neon or incandescent lamp, unscrew it from its socket.
- d. Removal and Replacement of Fluorescent Light Fixture Components.

Note. The fluorescent light fixtures a fabricated as part of the power duct. The radio frequency filters are sealed units; they are not repairable and are replaced as a complete unit.

- (1) Operate the associated light switch to the OFF position; remove the light shield and the fluorescent lamp (a above).
  - (2) Carefully pry off the appropriate power duct cover.
  - (3) Tag and disconnect the wires from the defective component (fig. 57) and remove the defective component from the power duct.
  - (4) Secure the replacement component in the power duct.
  - (5) Connect the wires to the replacement component.
  - (6) Replace the cover on the power duct.
  - (7) Replace the fluorescent lamp and the light shield (a above).
- e. Removal and Replacement of Dome Lamps.
  - (1) Loosen the captive screw to release the lamp panel.
  - (2) Remove the lens and unscrew the bulb.
  - (3) Replace the lens and lamp; follow the

procedures in (1) and (2) above in reverse.

- f. Removal and Replacement of Dome Light Fixtures.
  - (1) Operate the DOME lights switch to OFF.
  - (2) Remove the screws to release the fixture from the ceiling.
  - (3) Tag and unsolder the wires from the defective fixture.
  - (4) Solder the wires to the replacement fixture.
- (5) Replace the screws and secure the fixture.
  - g. Removal and Replacement of Spotlight.
    - (1) Operate the SPOTLIGHTS or the SUBSCRIBER COMP switch, as appropriate, to OFF.
    - (2) Remove the incandescent lamp from the spotlight.
    - (3) Remove the screws that secure the lamp socket in the spotlight assembly; tag and disconnect the socket wiring.
    - (4) Tag and disconnect the wiring to the spotlight switch (on the spotlight assembly), and remove the switch.
    - (5) Remove the screws that secure the spotlight assembly to the power duct.
    - (6) Replace the spotlight; reverse the procedures in (1) through (5) above.
- 44. Electric Heater (figs. 58 and 59)
  - a. Removal of Electric Heater.

- (1) Operate the HEAT-OFF-FAN switch to OFF.
  - (2) Remove the power cord connector plug from the appropriate HEATER receptacle.
  - (3) Loosen the turnlock fasteners that secure the heater to the mounting base.
  - (4) Loosen the red mounting base knob.
  - (5) Slide the heater toward the right until it clears the flange on the mounting base, and lift out the heater.
- b. Preliminary Repair Procedures. To perform the repair procedures in c and d below, remove the heater from its mounting base (a above) and remove the backplate and bottom plate as follows:
  - (1) Remove the screws that secure the bottom plate to the heater.
  - (2) Remove the screws that secure the backplate to the bottom plate, and remove the bottom plate.
  - (3) Loosen the power cord clamp on the backplate.
  - (4) Remove the screws that secure the backplate to the heater, and remove the backplate.
- Removal and Replacement of AC Power Cord.
  - (1) Loosen the screws that secure the power cord leads to the terminal board.
  - (2) Pull the power cord out of the clamp in the backplate.
  - (3) Insert a new power cord through the clamp in the backplate.
  - (4) Connect the leads to the terminal board (fig. 59).

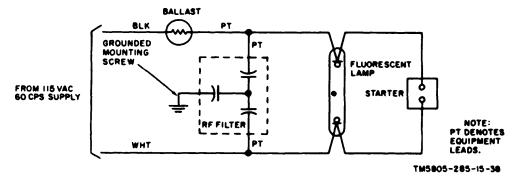


Figure 57. Fluorescent light fixture, schematic-wiring diagram.

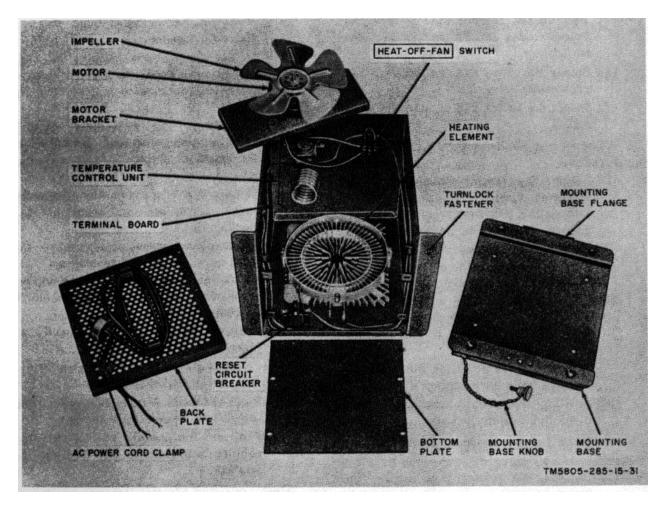


Figure 58. Electric heater, disassembled.

- d. Removal and Replacement of Temperature Control Unit.
  - (1) Loosen the screws that connect the two wires to the temperature control unit.
  - (2) Remove the screws that secure the unit to the cabinet, and remove the unit.
  - (3) Insert the TEMPERATURE CONTROL switch through the slot in the cabinet. Replace and tighten the screws.
  - (4) Connect the wires to the temperature control unit.
- e. Removal and Replacement of HEAT-OFF FAN Switch.
  - (1) Tag and unsolder the wires and the strap that are connected to the switch.

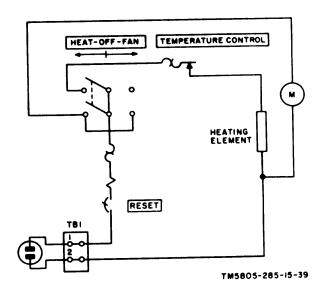


Figure 59. Electric heater, schematic diagram.

- (2) Remove the ringnut that secures the switch to the cabinet and remove the switch.
- (3) Solder the strap and the wires to the replacement switch.
- (4) Insert the switch and tighten the ringnut.
- f. Removed and Replacement of RESET Circuit Breaker.
  - (1) Loosen the screws that connect the insulated wires to the circuit breaker. Loosen the bolt that secures the bare copper wire to the heating element.
  - (2) Remove the screws that fasten the circuit breaker to the cabinet, and remove the circuit breaker.
  - (3) Connect the insulated wires to the re placement circuit breaker. Connect the bare copper wire to the heating element.

Caution: Do not alter the shape or length of the bare copper wire.

- (4) Position the circuit breaker and replace and tighten the screws.
- g. Removed and Replacement of Motor and Impeller.
  - (1) Remove the screws that secure the motor bracket to the cabinet and lift out the motor and bracket.
  - (2) Disconnect the motor leads at the HEAT-OFF-FAN switch and at the taped splice in the heating element cable.
  - (3) Remove the screws that secure the motor to the bracket.
  - (4) Unscrew the metal fastener that secures the impeller to the motor shaft and remove the impeller.
  - (5) Position and secure a replacement motor in the bracket. Slide the impeller onto the motor shaft and tighten the fastener.
  - (6) Replace the motor bracket in the cabinet and connect the motor leads ((2) above).
  - i. Removal and Replacement of Heating Element.
    - Remove the screws that secure the motor bracket to the cabinet. Remove the motor bracket.

(2) Loosen the bolt that secures the bare copper wire from the circuit breaker to the heating element and remove the wire.

Caution: Be extremely careful when removing this lead. Do not alter the length or shape of the bare copper wire.

- (3) Remove the wire connections from the plug-in terminals on the heating element.
- (4) Remove the screws that secure the heating element to the cabinet. Be careful not to bend the louvers on the front of the cabinet during the removal procedure.
- (5) Position the replacement element; replace and tighten the screws.
- (6) Connect the wires to the plug-in terminals of the heating element.
- (7) Replace the bare wire connected from the circuit breaker ((2) above).
- (8) Position the motor bracket in the cabinet and replace and tighten the screws.
- i. Replacement of Electric Heater.
  - (1) Slide the heater onto the mounting base so that it engages the flange.
  - (2) Tighten the turnlock fasteners.
  - (3) Replace and tighten the mounting base knob.

# 45. Van Compartment Exhaust Blower (figs. 60 and 62).

Note. Before performing the repair procedures in b through d below, remove the exhaust blower cover (a below) and remove the power cord connector plug from the appropriate BLOWER receptacle. Replace the cover after repairs are completed.

- a. Removal and Replacement of Exhaust Blower Cover.
  - (1) Operate the appropriate blower switch to the OFF position.
  - (2) Remove the power cord connector plug from its receptacle.
  - (3) Remove the screws that secure the cover to the van wall, and lift off the cover.

- (4) Replace the cover; follow the procedures in (1), (2), and (3) above in reversed order.
- b. Removal and Replacement of Capacitor.
  - (1) Loosen the capacitor clamp screw.
  - (2) Remove the power cord clamp from the motor bracket.
  - (3) Slide the capacitor out of the clamp.
  - (4) Disconnect the motor leads and the power cord from the capacitor terminals.
  - (5) Connect the motor leads and the power cord to the replacement capacitor (fig. 62).
  - (6) Slide the capacitor into the clamp and tighten the screw.
  - (7) Replace the power cord clamp.
- c. Removal and Replacement of Power Cord.
  - (1) Remove the capacitor from the clamp (b(2)-4) above).
  - (2) Disconnect the power cord leads from the capacitor and motor leads.
  - (3) Connect the new power cord to the capacitor and motor leads (fig. 62).
  - (4) Slide the capacitor into the clamp and tighten the screw.
  - (5) Replace the power cord clamp.
- d. Removal and Replacement of Motor and Impeller.
  - (1) Remove the screws from the .bottom of the plate that holds the exhaust blower to the wall.
  - (2) Lift the blower away from the wall.
  - (3) Remove the bolts that secure the blade guard and motor brackets to the blower ring.
  - (4) Tag and disconnect the motor leads from the capacitor and power cord.
  - (5) Remove the power cord clamp.
  - (6) Remove the screws that secure the motor mounting bracket to the motor.
  - (7) Loosen the Allen-head setscrews that secure the impeller to the motor shaft, and remove the impeller.
  - (8) Slide the impeller (setscrews toward the motor) onto the shaft of the new motor and tighten the setscrews.

- (9) Secure the motor bracket to the new motor.
  - (10) Connect the motor leads to the capacitor and power cord (fig. 62).
  - (11) Replace the power cord clamp.
  - (12) Position the motor bracket and blade guard on the blower ring.
  - (13) Replace and tighten the bolts that secure the motor bracket and blade guard to the blower.
  - (14) Replace the exhaust blower; follow the procedures in (1) and (2) above in reversed order.
  - (15) Replace the exhaust blower cover (a above).

# 46. Battery Compartment Exhaust Blower (figs. 61 and 62)

Before performing the repair procedures in b through d below, remove the battery compartment cover and remove the exhaust blower from the wall as described in a below.

Warning: Battery acid is injurious and its fumes are harmful. Wear protective clothing when working near the batteries, and provide adequate ventilation.

- a. Removal and Replacement of Blower.
  - (1) Loosen the knurled screws and lift off the battery compartment cover (fig. 18).
  - (2) Remove the power cord plug from the BLOWER receptacle.
  - (3) Remove the screws from the mounting plate and remove the exhaust blower from the wall.
  - (4) Replace the exhaust blower by reversing the procedures in (1) through (3) above.
- b. Removal and Replacement of Capacitor.
  - (1) Remove the power cord clip from the blower ring.
  - (2) Remove the capacitor bracket.
  - (3) Slide the capacitor out of the capacitor bracket.
  - (4) Disconnect the motor leads and the power cord from the capacitor terminals.
  - (5) Connect the motor leads and the

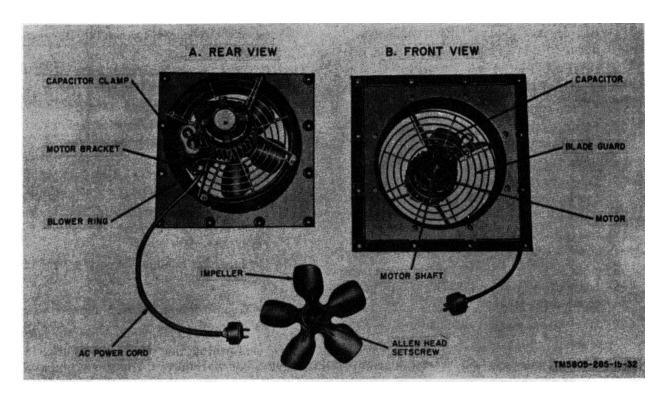


Figure 60. Van compartment exhaust blower, disassembled

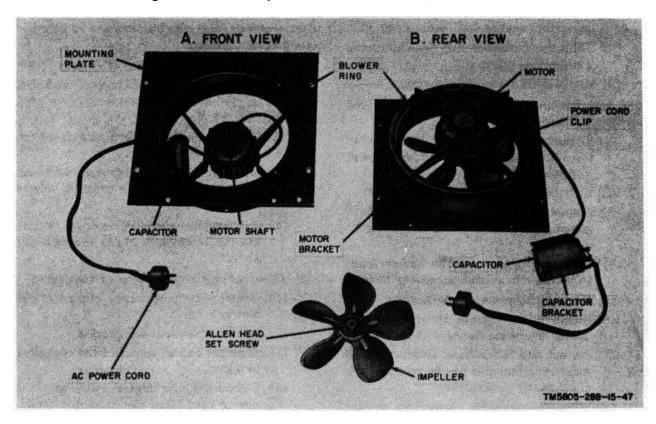
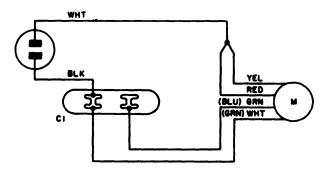


Figure 61. Battery compartment exhaust blower, disassembled.



NOTE: (BLU) AND (GRN) DENOTES WIRING OF VAN COMPARTMENT EXHAUST BLOWER. TM 5805 - 288-15-52

Figure 62. Battery compartment exhaust blower, schematic wiring diagram.

power cord to the replacement capacitor (fig. 62).

- (6) Replace the capacitor bracket. Slide the capacitor into the bracket.
- (7) Replace the power cord clip.
- c. Removal and Replacement of Power Cord.
  - (1) Remove the capacitor from the bracket (b (1) through (3) above).
  - (2) Disconnect the power cord leads from the capacitor and the motor leads.
  - (3) Connect the replacement power cord to the capacitor and the motor leads (fig. 62).
  - (4) Replace the capacitor bracket. Slide the capacitor into the bracket.
  - (5) Replace the power cord clip.
- d. Removal and Replacement of Motor and Impeller.
  - (1) Remove the bolts that secure the motor brackets to the blower ring.
  - (2) Disconnect the motor leads from the capacitor and from the power cord.
  - (3) Remove the ac power cord clip.
  - (4) Remove the screws that secure the motor brackets to the motor.
  - (5) Remove the slotted-head setscrew that secures the impeller to the motor shaft, and remove the impeller.
  - (6) Slide the impeller (setscrew toward the motor) onto the shaft of the motor and tighten the setscrew.
  - (7) Fasten the motor brackets to the motor.

- (8) Connect the motor leads to the capacitor and to the power cord (fig. 62).
- (9) Replace the power cord clip.
- (10) Position the motor brackets on the blower ring.
- (11) Insert and tighten the bolts that secure the motor bracket to the blower ring.

#### 47. Power Distribution Panel

- a. Preliminary Procedure. Operate the MAIN circuit breaker to OFF and disconnect the ac power cable at the power entrance panel (figs. 7 and 8). Remove the screws that secure the power distribution panel cover, and remove the cover.
  - b. Removal and Replacement of Circuit Breaker.
    - (1) Grasp the defective circuit breaker and pull it straight out from the panel.
    - (2) Tag and disconnect the wires connected to the circuit breaker.
    - (3) Connect the wires ((2) above) to the replacement circuit breaker and press the circuit breaker back into the panel.
- c. Removal and Replacement of Current Transformer.
  - (1) Remove the screws that hold the meter panel to the power distribution panel.
  - (2) Tag and disconnect the current transformer leads from the ammeter.
  - (3) Remove the bolts that secure the current transformer inside the panel, and remove the current transformer.

Note. Count the number of turns of the heavy black wire around the current transformer before performing procedure (4) below.

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

Caution: Be sure that the number of turns is the same as on the original transformer. Reconnect the black

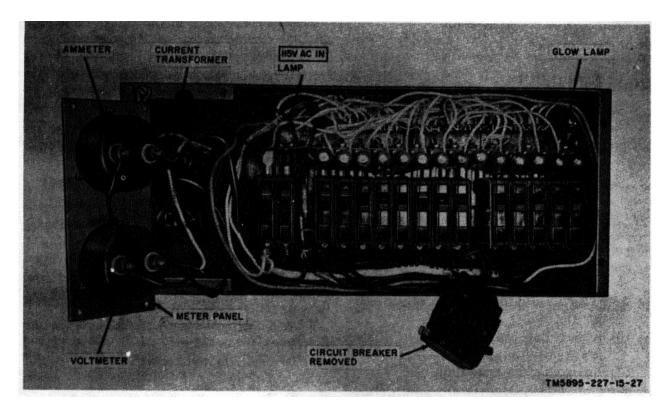


Figure 63. Power distribution panel, meter panel and one circuit breaker removed.

# wire to the MAIN circuit breaker (fl 73 and 74).

- (6) Position the replacement transformer inside the panel; replace and tighten the bolts.
- (7) Connect the transformer leads to the ammeter.
- (8) Replace the meter panel and tighten the screws.

# d. Removal and Replacement of Meters.

- (1) Remove the bolts that hold the meter to the meter panel and lift out the meter.
- (2) Tag and disconnect the leads from the meter terminals.
- (3) Connect the leads to the replacement meter.
- (4) Position the meter in the panel and tighten the bolts.

# 48. Removal and Replacement of 26-Pair Cable Receptacle Insert (figs. 64, 65, and 66)

#### a. Removal.

- (1) Outside the van, open the appropriate panel cover to reach the front of the defective 26-pair cable receptacle; remove the cover from the 26-pair cable receptacle.
- (2) Inside the van, remove the screws that secure the appropriate panel cover (figs. 14 and 33) to reach the rear of the 26-pair cable receptacle; remove the cover.
- (3) Remove the screws that secure the insert bars (A, fig. 65) or the insert clip mounting screws (B, fig. 65), as appropriate.
- (4) Unfasten the cable clamp nearest the receptacle mounting (fig. 64).
- (5) Lift the receptacle insert from the front of the 26-pair receptacle housing.
- (6) Tag and unsolder the wires from the connector insert.

### b. Replacement.

(1) Connect the cable wires to the appropriate replacement receptacle insert (fig. 66).

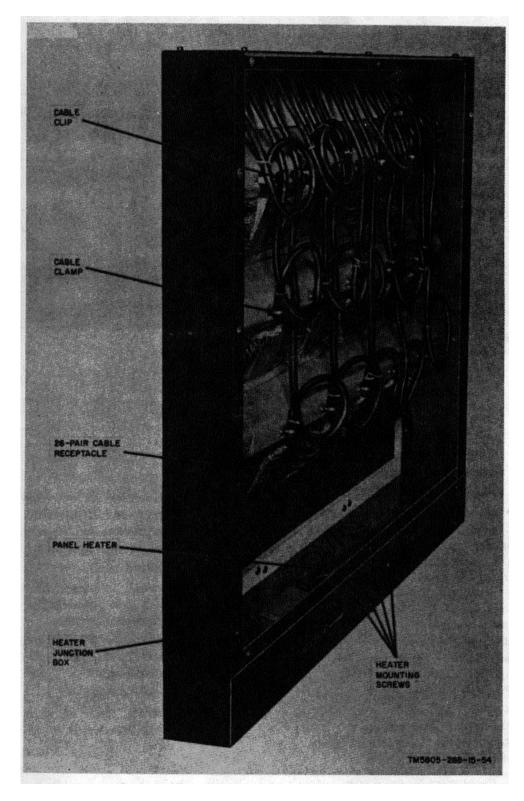


Figure 64. Signal extension panel (rear of signal connector interconnection panel).

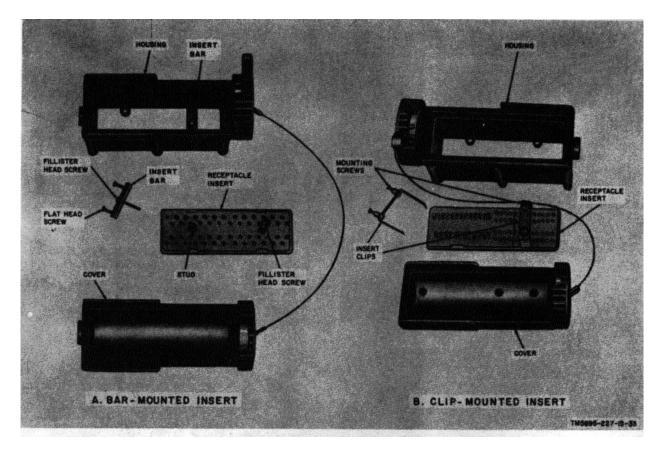


Figure 65. Disassembled 26-pair cable receptacles.

Caution: Be extremely careful when connecting and soldering wires. Excessive heat or pressure will damage the inserts

(2) Carefully place the appropriate insert in the receptacle housing (fig. 65).

Caution: Be extremely careful not to damage the wires when replacing the screws.

- (3) Replace the screws that secure the insert bar (A, fig. 65) or insert clip (B, fig. 65) in the housing.
- (4) Fasten the cable clamp (fig. 64).
- (5) Replace the panel cover, and replace and tighten the screws.
- (6) Replace the receptacle cover (par. 18c).

### 49. Removal and Replacement of Switches

- a. Power Duct Switch.
  - (1) Operate the appropriate circuit breaker to the OFF position (figs. 25 and 41).

- (2) Remove the screws from the brackets at each end of the switch. Remove the two brackets and the switchplate.
- (3) Remove the switch-mounting screws and the switch.
- (4) Tag and disconnect the wires from the switch and connect the wires to the replacement switch.
- (5) Replace the switch; follow the procedures in (1) through (4) above in reversed order.
- b. Door Miscroswitch.
  - (1) Operate the appropriate circuit breaker to the OFF position (figs. 25 and 41).
  - (2) Carefully pry off the signal duct cover near the microswitch.
  - (3) Tag and remove the wires from the NO and C terminals of the switch (fig. 73 or fig. 74).
  - (4) Unscrew the ringnut from the door

						0	
BLK-BRN	1.5		BRN-BLK	BRN-BLK	•		BRN-BLK-BLK
GRN - RED	, i		RED - GRN	GRN - VIO			GRN- VIO- VIO
BLK-ORN		0 -	ORN - BLK	BRN-YEL			BRN-YEL-YEL
RED - GY	- ·	السهرية ا	GY - RED	BLU-BLK			BLU-BLK-BLK
DLK - GRN			GRN-BLK	BRN - WHT	• •		BRN-WHT-WHT
ORN-YEL	•		YEL-ORN	BLU - YEL	• •		BLU-YEL-YEL
BLK - GY			BY - DLK	ORN-BLK	<u>,</u>	~ ~	ORN-BLK-BLK
ORN - GY		2	GY-ORN	BLU - WHT		2	BLU-WHT-WHT
BRN-YEL	•		YEL-BRN	ORN-YEL	•	•	ORN-YEL-YEL
YEL-BLU	3	عه ا	BLU - YEL	GY-RED		3	GY-RED-RED
BRN - BLU			BLU - BRN	ORN - WHT			ORN-WHT-WHT
GRN - BLU	, s	1 * n	BLU - GRN	GY-VIO	a_	3 -	8Y-VIO-VIO
RED - ORN		ا ق	ORN-RED	GRN-RED	<u> </u>	ق ق	GRN-RED-RED
GY-GRN	8	2	GRN-GY	GY-WHT	2	2	GY - WHT - WHT
BRN - GY			GY - BRN	GRN-BLK		0	GRN - BLK - BLK
YEL - GY		20.	GY-YEL	GY-YEL	Q,	20-	GY - YEL - YEL
BRN - GRN	3 -0		GRN-BRN	ORN-VIO		8	ORN- VIO- VIO
YEL - GRN		300	GRN - YEL	GY-BLK		0.00	GY-BLK-BLK
BRN-RED		1	RED - BRN	ORN-RED			ORN-RED-RED
ORN - BLU	3	80.	BLU - ORN	BLU - VIO		80	BLU-VIQ-VIQ
BLK-BLU	• -		BLU-BLK	RED-WHT	•••	. •	RED - WHT - WHT
BRN - ORN			ORN - BRN	BLU - RED		0.5	BLU-RED-RED
BLK-YEL			YEL - BLK	BRN-VIQ	•••	-	BRN-VIQ-VIQ
RED-BLU			DLU-RED	GRN-WHT	,		GRN - WHT - WHT
BLK-RED		۔۔۔	RED-BLK	BRN-RED		•	BRN-RED-RED
RED-YEL			YEL-RED	GRN-YEL	ا م	2.0	GRN-YEL-YEL
		1					
		<i></i>					

### A. SIGNAL EXTENSION PANEL RECEPTACLES

### B. SUBSCRIBER TERMINATION PANEL RECEPTACLES

#### NOTES:

- I. RECEPTACLE AS SEEN FROM WIRING SIDE.
- 2. WIRES CONNECTED TO TERMINALS IA AND IB, 2A AND 2B ETC., ARE PAIRED WIRES.
- 3. BLUE AND RED SPARE WIRES (NOT SHOWN) ARE TURNED BACK AND SEWN INTO FORM.

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Figure 66. Wiring diagram for 26-pair cable receptacles.

side of the switch and remove the switch.

- (5) Replace the switch; follow the procedures in (1) through (4) above in reversed order.
- c. NIGHT ALM Toggle Switches.
  - (1) Disconnect the cable that supplies 48 volts dc to the night alarm circuit in the AN/MTA-7 (fig. 53).
  - (2) Carefully pry off the signal duct cover.
  - (3) Unscrew the hexagonal nut and remove the switch.
  - (4) Tag and disconnect the wires from the switch.
  - (5) Connect the wires to the replacement switch (fig. 73 or fig. 74).
  - (6) Replace the switch; follow the procedures in (1) through (3) above in reversed order.

- d. Information Turret Switches (fig. 72).
  - (1) Remove the screws that secure the front panel to the information turret (fig. 46) and remove the front panel.
  - (2) Unscrew the switch handle from the switch.
  - (3) Tag and disconnect the wires from the switch. Remove the flathead screws that secure the switch to the panel; remove the switch.
  - (4) Replace the switch; follow the procedures in (1) through (3) above in reversed order.

# 50. Removal and Replacement of Signal Extension Panel Heaters

- a. Removal.
  - Remove the screws that secure the signal extension panel cover, and remove the cover.

- (2) Remove the screws that secure the heater junction box cover (fig. 64), and remove the cover.
- (3) Tag and disconnect the heater leads from the terminals in the junction box, and pull the leads out of the box (4) Remove the mounting screws that secure the heater to the bottom plate, and remove the heater.

# b Replacement.

- (1) Position the heater behind the bottom plate and secure it in place with the mounting screws (a(4) above).
- (2) Connect the heater lads to the terminal in the heater junction box (figs. 78 and 74).

Caution: Connect the white heater wire to the silver-colored terminal. The shield on the terminal end of the heater protects the insulation of the wires from the heat damage. Keep the w/r on the outside of the shield.

- (3) Replace the heater junction box cover.
- (4) Replace the cover on the signal extension panel.

# 51. Removal and Replacement of Batteries B46 (p. 18, 19, and 20)

Warning: Do not short-circuit the battery terminals with the battery cables; escaping gases may be ignited and cause serious injury to personnel and damage to the equipment.

- Loosen the knurled-head bolts from the top and front covers of the battery compartment and remove the covers.
- b. Disconnect the battery cables from the batteries.
- c. Slide the batteries out of the rack, one at a time, and 'lower them to the floor.
- Replace the batteries; follow the procedures in a through c above; be careful to observe the correct battery polarity.

# 52. Removal and Replacement of Intercommunication Station LS-1 47D/FI

 Remove the power cord connector plug from the appropriate INTERCOM receptacle in the power duct.

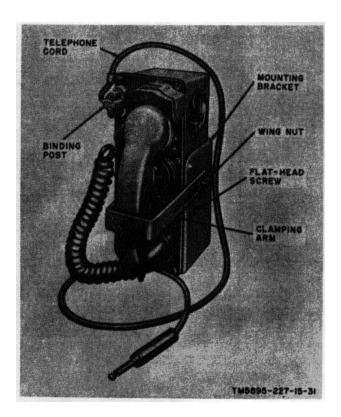


Figure 67. Telephone Set TA-312/PT, installed for transit.

- b. Disconnect the signal cord plug from the INTERCOM jack.
- c. Loosen the captive wingnuts and slide the LS147D/FI retaining bracket forward.
- d. Lift the LS-147D/FI from the shelf.
- e. Replace the LS-147D/FI; follow the procedures in a through d above in reversed order.

# 53. Removal and Replacement of Telephone Set TA-312/PT (fig. 67)

- a. Remove the prepared leads from the TA312/PT binding posts.
- b. Loosen the wingnut on the side of the mounting bracket and rotate the clamping arm upward.
- c. Remove the flathead screw on the side of the mounting bracket.
- Lift the TA-312/PT out of the mounting bracket and remove the holding plate from the buzzer recess.
- e. Remove the replacement TA-312/PT from its carrying case, insert the holding plate into

the buzzer recess, and place the TA-312/PT into the mounting bracket.

- f. Replace and tighten the flathead screw.
- g. Operate the LB-CB-CBS switch to the appropriate position.
- h. Position the clamping arm over the handset and tighten the wingnut.
- i. Connect the prepared leads of the telephone cord to the TA-312/PT binding posts.
- 54. Removal and Replacement of Lights Control (LINE/BATTERY LIGHTING POWER TRANSFER) RELAY K1

Warning: Disconnect the ae power from the appropriate van and use the hand lantern during replacement or repair procedures

- a. Remove the screws that secure the relay box cover (figs. 18 and 35), and remove the cover.
- b. Tag and disconnect the wires from relay K1 (figs. 78 and 74).
- c. Remove the relay from its mounting.
- d. Fasten the replacement relay in place.
- e. Resolder the wires to the relay.
- f. Replace the cover on the relay box.

# 55. Repair of Exterior of AN/MTA-5 and AN/ MTA-7

- a. The replacement of racks, frame brackets, and assorted hardware is accomplished by the removal and replacement of screws or bolts. When any exterior component of a van is replaced, be sure that the gasket is adequately sealed to the van to prevent leakage. The responsibilities for van maintenance are listed in the maintenance allocation chart (app. II).
- b. The exterior skin of the van is susceptible to puncturing or gouging during the loading and siting procedures. Use the electrical equipment shelter patch kit (Federal stock No. 5410-786250) to repair the roof or sides of the van as described in the instructions provided with the patch kit and as given below.
  - (1) Use emery cloth, sandpaper, a knife, or scraper, and remove all paint or foreign matter within a 3-inch radius around the hole to be patched. Do not touch the cleaned area with the hands or dirty cloths.

- (2) If the insulation has been gouged out, fill the hole with clean noncombustible material, if possible. Do not use the glass cloth for this purpose.
- (3) Cut out a piece of glass cloth that will extend 2 inches beyond the edges of the hole to be repaired.

Warning: R -in No. 797 and curing agent No. 237 are harmful to the skin. Wash thoroughly with water any area of the body that may have come in contact with the liquid resin or curing agent.

- (4) Pour 8 ounces of resin No. 797 into the mixing cup for each square foot of surface area to be covered. Shake the can thoroughly before pouring out the resin. Temperature and climate will determine the quantity of curing agent and cold weather promoter to be added to the resin. Use the eye dropper and prepare the mixture as follows:
  - (a) For temperatures above 55° F., fill the eye dropper to the redline with curing agent No. 237. Add the curing agent to the resin and mix thoroughly.
  - (b) For temperature between 20° F.and 55° F., fill the eye dropper to the redline with curing agent No. 287. Fill the eye dropper to the halfway mark with cold weather promoter No. 847. Add the cold weather promoter to the combined curing agent and resin and mix thoroughly.
  - (c) For temperatures below 20° F., fill the eye dropper to the redline with curing agent No. 287; add the curing agent to the resin and mix thoroughly. Fill the eye dropper to the redline with cold weather promoter No. 347. Add the cold weather promoter to the combined curing agent and resin and mix thoroughly.
- (5) Use the spatula (or the brush in hard toreach areas or when the temperature is above 55° F.) and spread a liberal coating of the prepared mixture over the surface to be patched.

Place the glass cloth ((8) above) over the coating and press it lightly with the applicator. Spread a second liberal coating of the mixture over the glass cloth; work from the center of the patch toward the edges.

(6) Examine the patch to see that the edges are flat and firmly embedded in the mixture. Be sure that the patch is completely covered by the mixture. Prepare and apply an additional mixture, if necessary.

Note. To accelerate curing during cold weather, heat the patch with warm, dry air or radiant heat. Do not me am open Name

(7) The patched surface may be sanded and painted within 4 to 24 hours after application of the patch, depending on the temperature and drying conditions. After the mixture in the cup and on the spatula has hardened, flex the cup and spatula to crack the mixture. Clean the cup and spatula and store them for future use. Discard the used brush; recap and store the containers.

Caution: Shelf life is severely limited by heat; recap the containers tightly and store them in a cool, dry place.

# **THEORY**

# 56. Signal Circuits

- a. General. The AN/MTC-9 provides manual telephone switching facilities for 596 local circuits, 60 manual or dial trunk circuits, and information circuits. The line and trunk relay equipments (TA-223A/TTC and TA-226A,' TTC) and the main distributing frames (TA257/TTC) are included in the AN/MTA-5; the telephone switchboard positions (SB-249A/ TTC) and the information facilities are included in the AN/MTA-7. The SB-1032/TTC and the central office batteries (BB-46), which are located in the AN/MTA-5, provide 48volt dc power for operation of the central office components.
- b. Local Lines (figs. 63, 68. and 69). The local lines are wired from receptacles SIG CONN 1 through SIG CONN 24 and the parallel-connected binding posts, in the subscriber's compartment of the AN/MTA-5 to the line side of the main distributing frame (TA-257/TTC) in The switchboard side of the main the AN/MTA-5. distributing frame is connected, through cables, to the line relay equipment (TA-223A, TTC). The line relay equipment is connected, through cables, to receptacles J1 through J30 and J34 through J63, located in the signal connector interconnection panels on the outside of the AN/MTA-5. Receptacles J1 through J30 and J34 through J68 on the AN/MTA-5 are connected, through locally installed cables, to identically designated receptacles in the signal connector interconnection panels on the outside of the AN/ MTA-7. Receptacles JI through J80 are wired to switchboard POSITION 1 and multiplied to POSITION 3, 5, 7, and 9. Receptacles J34 through J36 are wired to switchboard POSITION 8 and multiplied to POSITION 2, 4, and 6. Cross connections

- on the main distributing frame in the AN/MTA-5 are initially provided on a straight-through line-for-line basis; however, the cross connections may be rearranged as required.
- c. Trunk Lines (figs. 53, 68, and 69). The manual or dial trunk lines are wired the same as the local lines (b above) except for the designation of the receptacles located in the subscriber's compartment of the AN, MTA-5, and the receptacles located in the signal connector interconnection panels of the AN/MTA-5 and the AN/MTA-7.

# 57. Central Office .Power and Miscellaneous Circuits

- a. Central Office Power (figs. 53, 78, and 74). The SB-1032/TTC No. 1 and No. 2 and the BB46's (central office battery) supply the 48-volts dc for the operation of the central office equipment. The SB-1032/TTC's are wired, through the junction box, to the line relay equipment (TA-223A,/TTC), the trunk relay equipment (TA-226A/TTC), and to 48V DC OUT receptacle J69. Receptacle J69 in signal connector interconnection panel J1 to J3 (fig. 45) on the AN/MTA-6 is connected, through a locally installed cable, to 48V DC IN receptacle J69 (fig. 45) on the AN/MTA-7; J69 on the AN/ MTA-7 is wired to POSITION 9 of the switchboard.
- b. Ringing Current (figs. 53, 73, and 74). The 20-cps ringing current from SB-1032/TTC No. 1 is wired to pins H and J of SIG CONN 1 receptacle J70 and to the 20 CY RING 1 binding posts on the AN/MTA-5. The circuit is connected through a locally installed cable, or field wire, to an identically designated receptacle or binding posts on the AN/MTA-7. Receptacle J70 on the AN/MTA-7 is wired to switchboard POSITION 9. The 20-cps ringing current from SB-1082/TTC No. 2 is wired in a similar manner except for the designation of

the binding posts and the pins in receptacle J70. The circuit is wired to switchboard POSITION 5.

- c. Night Alarm (figs. 53, 70, and 71). The night alarm circuits of the line relay equipment (TA-223A/TTC) and the trunk relay equipment (TA-226A/TTC) are wired directly to SIG CONN 1 receptacle J70 and the NIGHT ALM binding posts on the AN/MTA-5, and connected by a locally installed cable or field wire, to receptacle J70 or the NIGHT ALM binding posts on the AN/MTA-7. Receptacle J70 on the AN/MTA-7 is connected to the night alarm bell through NIGHT ALM. BYPASS-NORMAL switch S1.
  - d. Emergency Lighting-Circuits.
    - In the AN, MTA-5 (figs. 53 and 73), the (1) 48-volt emergency lighting circuit is wired from SB-1032/TTC No. 1 through fuse FI to the contacts of lights control relay K1. The 48-volt circuit is also wired to pins L and N of SIG CONN 1 receptacle J70 for connection to the AN/MTA-7 ((2) below). When ac power fails, relay kl releases and applies dc power through the INT BAT contacts of the DOME lights switch to the dome emergency lights. When the tractor is connected to the van, the 24-volt emergency lighting circuit is wired from the tractor battery through the tractor cable and receptacle and the TRACT BAT. contacts of the DOME lights switch to the dome emergency lights.
    - (2) In the AN/MTA-7 (figs. 53 and 74), the 48-volt emergency lighting circuit power is wired from the AN/ MTA-5, through a locally installed cable, to pins L and N of SIG CONN 1 receptacle J70. The 48and

24volt emergency lighting circuits function as described in (1) above.

# 58. Information Circuits

- a. Information Turret (figs. 53 and 72). The information turret contains two circuits that operate identically. INFO 1 circuit is described below.
  - (1) Answering incoming call. Ringing current applied to INFO 1 circuit from the switchboard causes LINE 1 lamp to light. Switch S1 is operated to the TALK position; this connects INFORMATION telephone TA-312/PT to the INFO I line.
  - (2) Holding call. Switch S1 is operated to the HOLD position. Contacts of switch S1 close a circuit through resistor R1 across the INFO 1 line, open the circuit to the INFORMATION telephone, and apply 48volts dc to the HOLD 1 lamp.
- b. Information Circuits (figs. 53, 70, and 71). Two information circuits from the information turret are connected to SIG CONN 1 receptacle J70, pins A-B and U-V, and the parallel-connected binding posts on the AN/ MTA-7. Receptacle J70 on the AN/MTA-7 is connected to receptacle J70 on the AN/MTA5 through a locally-installed cable or field wire. Receptacle J70 on the AN/MTA-6 is wired to the main distributing frame (TA-257/TTC).

# 59. Chief Operator's and Wire Chief's Circuits

a. Chief Operator's Circuit (figs. 8, 70, and 71). The chief operator's telephone circuit in the AN/MTA-7 terminates in the SB-249A/T'C; the switchboard line is assigned by the wire

- Figure 68. Telephone Terminal Group AN/MTA-, switchboard circuits, schematic-wiring diagram. (Located in back of manual)
- Figure 69. Telephone Switchboard Group AN/MTA-7, switchboard circuits, schematic-wiring diagram. (Located In back of manual)
  - Figure 70. Telephone Terminal Group AN/MTA4, special circuits, schematic-wiring diagram. (Located in back of manual)
  - Figure 71. Telephone Switchboard Group AN/MTA-7, #special circuits, schematic-wiring diagram. (Located in hack of manual)

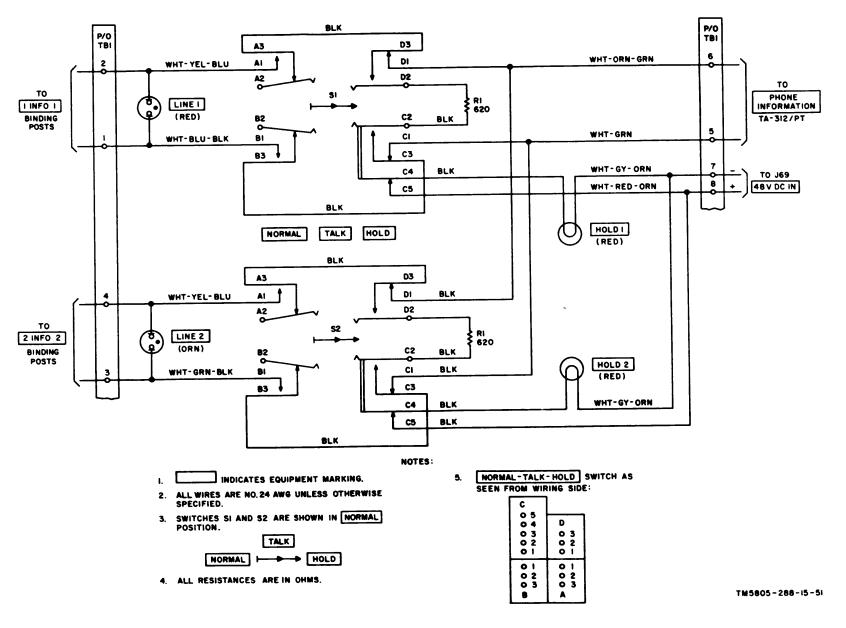


Figure 72. Telephone Switchboard Group AN/MTA-7, information turret, schematic-wiring diagram.

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chief. The circuit from the CHIEF OPERATOR TA-312/PT is extended through the CHIEF OPERATOR jack to SIG CONN 1 receptacle J70, pins C and D, or to the parallel connected binding posts. The circuit is wired to the AN/MTA-5, through locally installed cable or field wire, to SIG CONN 1 receptacle J70 (1) or the parallel-connected binding posts and wired to the line side of TA-257/TTC TRUNK 51-60 (pair 83). The signal is wired through the interconnecting jumper on the switchboard side to the assigned line circuit.

b. Wire Chief's Circuit (figs. 53 and 70). The WIRE CHIEF jacks located in the subscriber's compartment, the TA-257/TTC area, and the work-bench area in the AN/MTA-5 are connected in parallel and wired -to the line side of the TA-257/TTC TRUNK 1-60 (pair 82); the switchboard line is assigned by the wire chief. The signal is wired through the interconnecting jumper on the switchboard side to the assigned line circuit.

# 60. Ac Power Circuits

( (figs. 73 and 74)

*Note.* The function of each switch and indicator in the AN/MTA-5 and the AN/MTA-7 is given in paragraphs 27 and 28. Information in this paragraph applies equally to the AN/MTA-5 and the AN/MTA-7.

- a. Ac Power Distribution.
  - (1) Ac power is applied to either the AN/ MTA-5 or the AN/MTA-7 through IN 115V AC receptacle J67 in the power entrance box, parallelconnected OUT receptacle J68 of the van to which the ac power is connected, through a

- locally installed cable, to IN 115V AC receptacle J67 of the other van.
- (2) Ac power from receptacle J67 is applied through the power duct wiring to MAIN circuit breaker CB15 in the power distribution panel. Circuit breakers CB1 through CB14 (parallel connected) are connected in series with CB15. Wiring to the equipment and convenience receptacles is distributed through the power duct from circuit breakers CB1 through CB14. The POWER INDICATOR NEON LAMPS and the 115V AC IN lamps are connected across the ac input lines to CB15 and light when ac power is applied to the Glowlamps are connected across the circuits controlled by CB1 through CB14 and light individually as each circuit breaker is operated to ON.
- b. Grounding. The AN/MTA-5 and the AN/MTA-7 are grounded (par. 15) to reduce electrical shock hazards.
  - c. Voltmeter and Ammeter.
    - Voltmeter M1 is connected across the ac input circuit beyond MAIN circuit breaker CB15. It indicates the voltage applied from the power source to the AN/MTA-6 or the AN/MTA-7.
    - (2) Ammeter M2 is connected to the ac input circuit through current -transformer T1. It indicates the total current being drawn by the operating components of the AN/MTA-5 or the AN/MTA-7.

Figure 73. Telephone Terminal Group AN/MTA-5, power schematic-wiring diagram. (Located in back of manual)

Figure 74. Telephone Switchboard Group AN/MTA-7, power schematic-wiring diagram. (Located in back of manual) 88

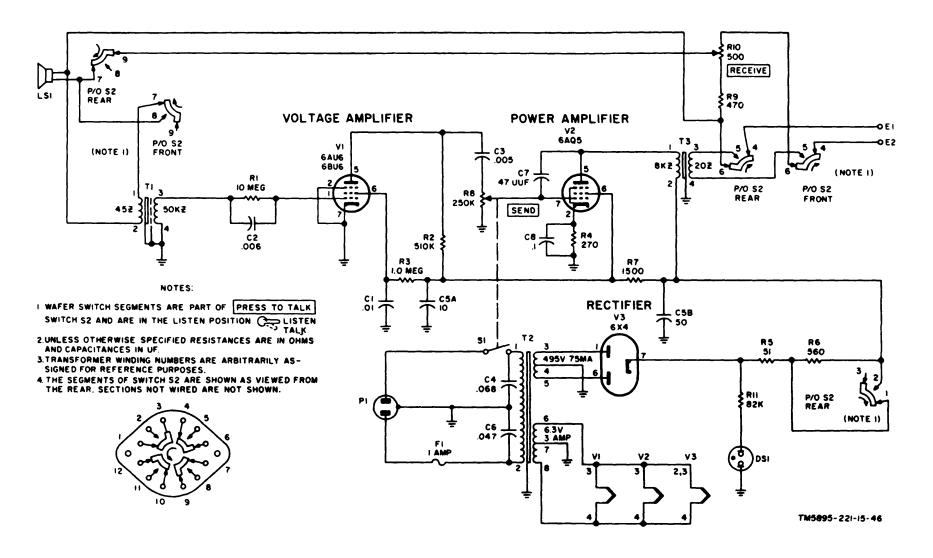


Figure 75. Intercommunication Station LS-147D/F1, Schematic diagram.

### **CHAPTER 6**

### SHIPMENT AND LIMITED STORAGE AND DEMOLITION

# TO PREVENT ENEMY USE

#### Section I. SHIPMENT AND LIMITED STORAGE

# 61. Disassembly of Equipment

Perform the following procedures when the AN/I C is to be moved to a different location or placed in storage.

- a. Operate all ac power switches and circuit breakers to OFF, except the light switches (pars. 27b and 28b), circuit breaker No. 1 (.LIGHTS INT.) and No. 2 (LIGHTS VEST.), and the MAIN circuit breaker.
- b. Secure all components in their cases, mounting, or holders.
- c. Place the miscellaneous items in the storage drawers and secure the drawers and cabinets for transit.
- d. Check to see that all switchboard and equipment items are secured in position for transit. Secure the switchboard position cords.
- e. Disconnect all external field wire circuits from the binding posts.
- f. Disconnect all external 26-pair cables and special cables and replace the covers on the connectors and receptacles.
- g. Wind the 26-pair cables on their reels and store them in the storage compartments underneath the vans. Coil the 26-pair intervene cables and store them in the front compartment of the AN/MTA-5.
- h. Push the cable boot inside the local line and cable entrance box on the AN/MTA-5 (fig.7) and secure the cover.
- *i.* Dismantle and store the passageway assembly by reversing the procedures in paragraph 18.
- *j.* Remove and store the canopy by reversing the procedures in paragraph 14.
- k. Operate the light switches, circuit breakers No. 1 (LIGHTS INT.) and No. 2 (LIGHTS VEST.), and the MAIN circuit breaker in each van to OFF.

*Note.* Light the dome lights (DOME lights switch in DOME INT BAT position) during completion of the disassembly procedure.

- I. If power was obtained from an adjacent shelter or van, disconnect the AN/MTC-9 power cable from the OUT 115V AC receptacle at the adjacent assemblage. Replace the receptacle and connector cover.
- m. If power was obtained from a central or commercial source, proceed as follows:
  - (1) Turn off or disconnect the power.
  - (2) Disconnect the power cable connector from the power cable stub connector. Replace both connector covers.
  - (3) Disconnect the power cable stub from the power source.
- n. Disconnect the power cables from the IN and OUT 115V AC receptacles in the power entrance boxes and replace the covers on the receptacles and connectors.
- o. Disconnect the ground straps from the GROUND terminals in the power entrance boxes. Close and secure the covers on the power entrance boxes.
- p. Store the power cable assemblies and power cable stubs (figs. 20 and 88).
- q. Remove the ground straps and store them in storage cabinet No. 1.
- *r*. Close and secure the covers on all exterior vents and entrance boxes.
- s. Remove the ground rods and store them in the vans (figs. 18 and 86).
- t. Recheck the area for any loose items. Be sure that all items are properly stored in the vans.

- u. Clean the vans thoroughly.
- v. Operate the DOME lights switch to OFF.
- w. Close and lock the entrance doors and store the personnel ladders (par. 12d).

# 62. Transportation

The AN/MTC-9 can be moved by tractor or transported by cargo aircraft. Follow the procedures in paragraph 12 in reversed order to couple the van to a tractor.

# Section II. DEMOLITION OF MATERIEL TO PREVENT ENEMY USE

# 63. Authority for Demolition

Demolition of the equipment will be accomplished only upon the order of the commander. The destruction procedures in paragraph 64 will be used to prevent further use of the equipment.

#### 64. Methods of Destruction

Use any or all of the following methods to destroy the equipment.

- a. Smash. Smash the controls, tube, coils, relays, switches, capacitors, transformers, and meters; use sledges, axes, handwaes, pickaxes, hammers, or crowbars.
  - b. Cut. Cut all cables and cords and slash

the wiring on the components; use axes, handwaxes, or machetes.

c. Burn. Burn the cords and technical manuals; use gasoline, kerosene, oil, flame-throwers, or incendiary grenades.

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

- d. Bend. Bend panels and cabinets.
- *e. Explode.* If explosives are necessary, use firearms, grenades, or TNT.
- *f. Dispose.* Bury or scatter the destroyed parts in slit trenches or foxholes, or throw them into streams

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# **APPENDIX I**

## **REFERENCES**

The following references are applicable for the operator and repairman of Central Office, Telephone, Manual AN/MTC-9.

AR 320-5 AR 320-60 AR 700-38	Dictionary of United States Army Terms. Authorized Abbreviations and Brevity Codes. Unsatisfactory Equipment Report (Reports Control Symbol CSGID-247(R2)).
DA Pam 108-1 DA Pam 310- series	Index of Army Motion Pictures, Film Strips, Slides and Phono-Recordings. Military Publications Indexes (as applicable).
FM 21-5	Military Training.
FM 21-6	Techniques of Military Instruction.
FM 21-30	Military Symbols.
SB 11-6	Dry Battery Supply Data.
TB SIG 203	Installation, Adjustment, and Maintenance of Interrupter PE-250 and Static Ringing Generators TA-248/TT and TA-248A/TT.
TM 11-362	Reel Units RL-31, RL-31-B, RL-31-C, RL31-D, and R31-E.
TM 11-964A	Rectifiers RA-91-B and RA-91-C.
TM 11-2057A	Test Set TS-27B/TSM.
TM 11-2064	Panels BD-132, BD-132-A, and Power Switchboard SB-361/TT.
TM 11-2096	Test Set TS-140/PCM; Signal Generators SG-15/PCM and SG-15A/ PCM; and Decibel Meters ME-22/PCM and ME-22A/PCM.
TM 11-2138	Terminal-Box TA-125/GT; Telephone Repeating Coil Assembly TA-145/ GT; Maintenance Kit MX-842/GT; and Switchboard Signal TA-123/GT.
TM 11-2146	Manual Telephone Central Offices AN/TTC-7 and AN/TTC-7A.
TM 11-2155	Telephone Set TA-312/PT.
TM 11-5500	Multimeter TS-297/U.
TM 11-5805-201-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart: Telephone Set TA-312/PT.
TM 11-5805-257-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart for Generators, Ringing Hand G-42/PT and G-42A/PT.
TM 11-5805-269-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance, Allocation Chart for Dial TA-46/GT; TA-45B, C/GT.
TM 11-5805-297-12P	Operator and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart: Generator GN-41 and GN41B.
TM 11-5805-298-12P	Operator and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart: Generator, Ringing, Static TA- 248/TT and TA-248A/TT.
TM 11-5805-299-12P	Operator and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart: Panel, Power Distribution SB- 1032/TTC.

TM 11-5935-204-15P	Operator, Organizational, Field and Depot Maintenance Repair Parts and Special Tools List end Maintenance Allocation Chart: Connector, Plug, Electrical, U-185A/G.
TM 11-5935-205-15P	Operator, Organizational, Field and Depot Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart: Connector, Receptacle, Electrical U-187/G.
TM 11-5965-208-15P	Repair Parts and Special Tools List and Maintenance Allocation Chart for Cheat Unit T-51.
TM 11-5965-219-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart for Chest Unit H-17.
TM 11-5965-221-15P	Repair Parts and Special Tools List and Maintenance Allocation Chart for Chest Set H-18/GT.
TM 11-5965-224-12P	Operator and Organizational Maintenance Repair Parts and Special Tool List and Maintenance Allocation Chart: Handsets H40/PT and H-165/U.
TM 11-5965-230-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart for Headsets HS-30-A, HS-30-B, HS-30-C, HS-30-D, HS-30-E, H8-30-F, HS-30,G, HS-30-J, HS-30-K, HS-30-L, HS-30-M, and HS-30-U.
TM 11-5965 233-12P	Operator and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart: Headset-Microphones H-91/U and H-91A/U.
TM 11-6225-203-12	Operation and Organizational Maintenance: Multimeter AN/URM-105, including Multimeter ME-77/U.
TM 11-6625-203-12	Operator's and Organizational Maintenance Repair Parts and Special Tools List for Multimeter AN/URM-106.
TM 11-6625-203-35	Field and Depot Maintenance: M s AN/URM-105 including Multimeter ME-77/U.
TM 11-6625 -203-35P	Field and Depot Maintenance Repair Parts and Special Tools List for Multimeter AN/URM-105.

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#### **APPENDIX II**

### MAINTENANCE ALLOCATION

### 1. General

- a. This appendix assigns maintenance functions and repair operations to be performed by the lowest appropriate maintenance echelon.
- b. Columns in the maintenance allocation chart are as follows:
  - (1) Part or component. This column shows only the nomenclature or standard item name. Additional descriptive data is included only where clarification is necessary to identify the part. Components and parts comprising a major end item are listed alphabetically. Assemblies and subassemblies are in alphabetical sequence with their components listed alphabetically immediately below the assembly listing.
  - (2) Maintenance function. This column indicates the various maintenance functions allocated to the echelon capable of performing the operation. These are as follows:
    - (a) Service. To clean, to preserve, and to replenish fuel and lubricants.
    - (b) Adjust. To regulate periodically to prevent malfunction.
    - (c) Inspect. To verify serviceability and to detect incipient electrical or mechanical failure, by scrutiny.
    - (d) Test. To verify serviceability and to detect incipient electrical or mechanical failure, by use of special equipment such as gages, meters, etc.
    - (e) Replace. To substitute service assemblies, subassemblies, and parts for unserviceable components.
    - (f) Repair. To restore an item to serviceable condition through correction of a specific failure or unserviceable condition. This

- function includes, but is not limited to, inspecting, cleaning, preserving, adjusting, replacing, welding, riveting, and straightening.
- (g) Aline. To adjust two or more components of an electrical system so that their functions are properly synchronized.
- (h) Calibrate. To determine, check, or rectify the graduation of an instrument, weapon, or weapons system, or components of a weapons system.
- (i) Rebuild. To restore an item to a standard as near as possible to original or new condition in appearance, performance, and life expectancy. This is accomplished through the maintenance technique of complete disassembly of the item. inspection of all parts or components, or replacement of worn or unserviceable elements using original manufacturing tolerances and/ specifications and subsequent reassembly of the item.
- (j) Overhaul. To restore an item to completely serviceable condition as prescribed by serviceability standards developed and published by heads of technical services. This is accomplished through employment of the technique of "Inspect and Repair Only as Necessary" (IROAN). Maximum utilization of diagnostic and test equipment is combined with minimum disassembly of the item during the overhaul process.
- (3) 1st, 2d, 3d, 4th, 5th echelon. The symbol X indicates the echelon responsible for performing that particular maintenance operation, but does not necessarily

indicate that repair parts will be stocked at that level. Echelons higher than the echelon marked by X are authorized to perform the indicated operation.

- (4) Tools required. This column indicates codes assigned to each individual tool equipment, test equipment, and maintenance equipment referenced. The grouping of codes in this column of the maintenance allocation chart indicates the tool, test, and maintenance equipment required to perform the maintenance function.
- (5) Remark. Entries in this column will be utility when necessary to clarify any of the data cited in the preceding columns.
- c. Columns in the allocation of tools for maintenance functions are as follows:

- (1) Tools required for maintenance function. This column lists tools, test, and maintenance equipment required to perform the maintenance functions.
  - (2) Ist, 2nd, 3d, 4th, 5th echelon. The dagger (+) symbol indicates the echelons allocated the facility.
  - (3) *Tool code.* This column lists the tool code assigned.

## 2. Maintenance by Using Organizations

When this equipment is used by signal service organizations organic to theater headquarters or communications zones to provide theater communications, those maintenance functions allocated up to and including fourth echelon are authorized to the organization operating this equipment.

# 3. Mounting Hardware

The basic entries of the maintenance allocation chart do not include mounting hardware, such as screw, nuts, bolts, washers, brackets, and camp.

# MAINTENANCE ALLOCATION CHART

PARTS OF COMPONENT N  CENTRAL OFFICE, TELEPHONE MANUAL AN/MTC-9	MAINTENANCE FUNCTION services	1st ECH	2nd ECH	3rd	4 th	5th	TOOLS	REMARKS
CENTRAL OFFICE, TELEPHONE MANUAL AN/MTC-9				ECH	ECH			KEWAKKO
TELEPHONE TERMINAL GROUP AN/MTS-5  CABLE ASSEMBLIES CENTRAL OFFICE, TELEPHONE MANUAL AN/TTC-7() CLOCK CONDUIT ASSEMBLES DOOR ASSEMBLES, EXTERIOR DOORS, FOLDING FAN, VENTILATING HANDSET-HEADSET H-144/U HEATERS, SPACE, ELECTRICAL INTERCOMMUNICATIONA: STATION LS-147()/FI JACK AND SWITCH PANEL ASSEMBLIES PANEL, POWER, DISTRIBUTION AN/MTC-9 (CONTINUED) PANEL, POWER ENTRANCE PANEL, SIGNAL ENTRANCE TELEPHONE SETS TA-312/PT TIE DOWN ASSEMBLIES TELEPHONE SWITCHBOARD GROUP AN/MTA_7  CABLE ASSEMBLIES CENTRAL OFFICE, TELEPHONE MANUAL AN/TTC-7 CLOCKS CONDUIT ASSEMBLES DOOR ASSEMBLIES, EXTERIOR DOORS, FOLDING FANS VENTILATING HANDSET-HEADSET H-144/U HEATERS, SPACE, ELECTRICAL INTERCOMMUNICATION STATION LS-147()/FI JACK AND SW ITCH PANEL ASSEMBLIES PANEL, POWER DISTRIBUTION PANEL, POWER DISTRIBUTION PANEL, POWER ENTRANCE TELEPHONE SETS TA-312/PT TIE-DOBIN ASSEMBLIES	repair rebuild repair r	x	x x x x x x x x x x x x x x x x x x x	x x	X X	X X	3,4 1 2 3,4 3,4 3,4 3,4 3,4 3,4 3,3 3 3,4 3,4 3	Interior Exterior Interior and Exterior Continuity (Signal and Power circuits) Continuity (Signal and Power circuits)  See separate MAC for Connector U-185/G See separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC  See Separate MAC

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## ALLOCATION OF TOOLS FOR MAINTENANCE FUNCTIONS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TOOLS REQUIRED FOR MAINTENANCE FUNCTION	1st ECH	2nd ECH	3rd ECH	4 th ECH	5th ECH	TOOLS CODE	REMARKS
AN/MTC-9 (continued)							
MULTIMETER AN/URM-105		†				1	
MULTIMETER TS-352/U		'	t	†	t	2	
TOOL KIT, GENERAL MECHANIC		t	†	+	+	3	
SOLDERING IRON TL-117		+	+	+	+	4	
SOLDERING IRON 1L-117						4	

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NG: None.

USAR: None.

For explanation of abbreviations used. see AR 320-50.

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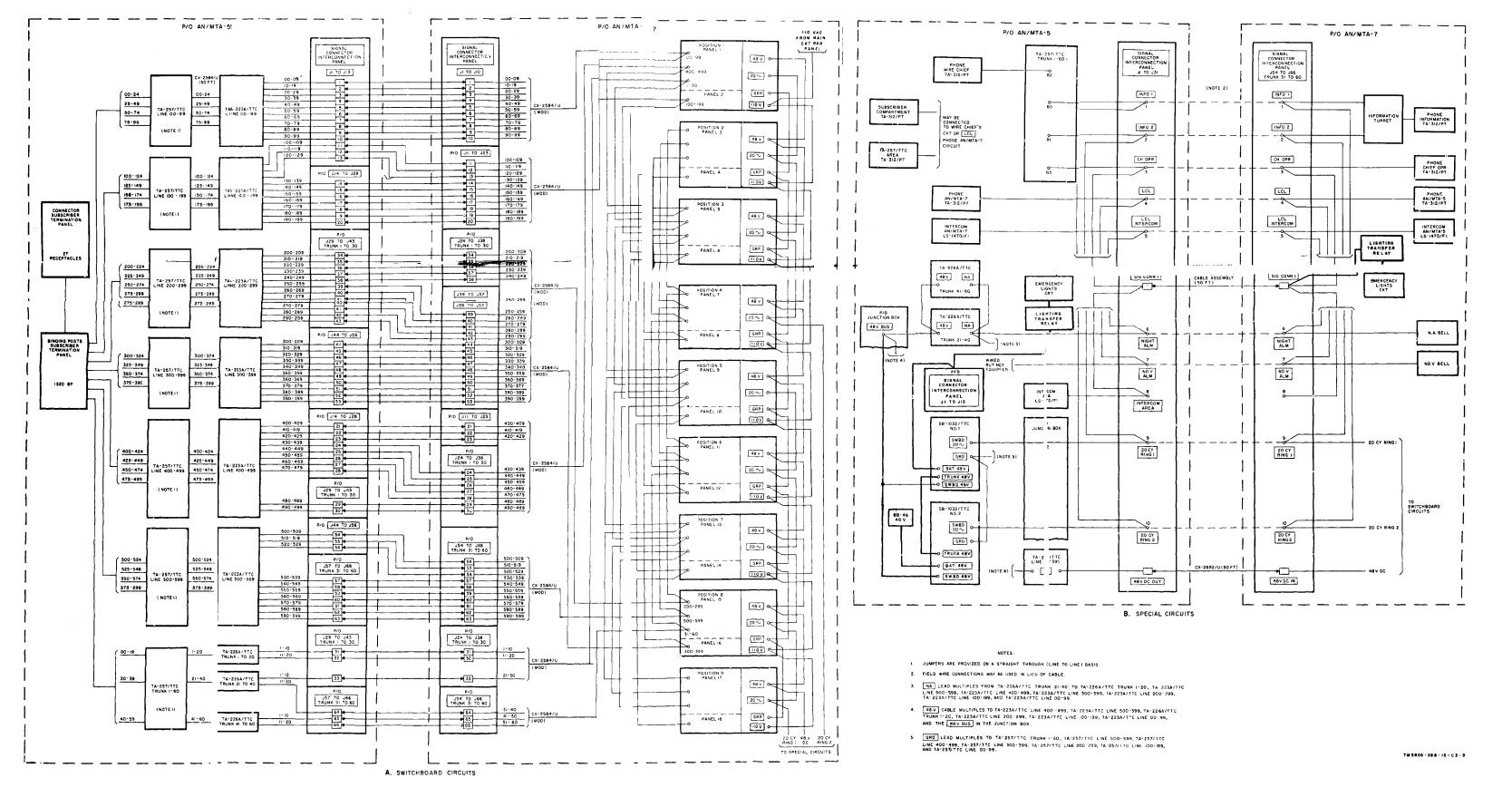


Figure 53. Central Office, Telephone, Manual AN/MTC-9, cabling diagram.

Figure 53

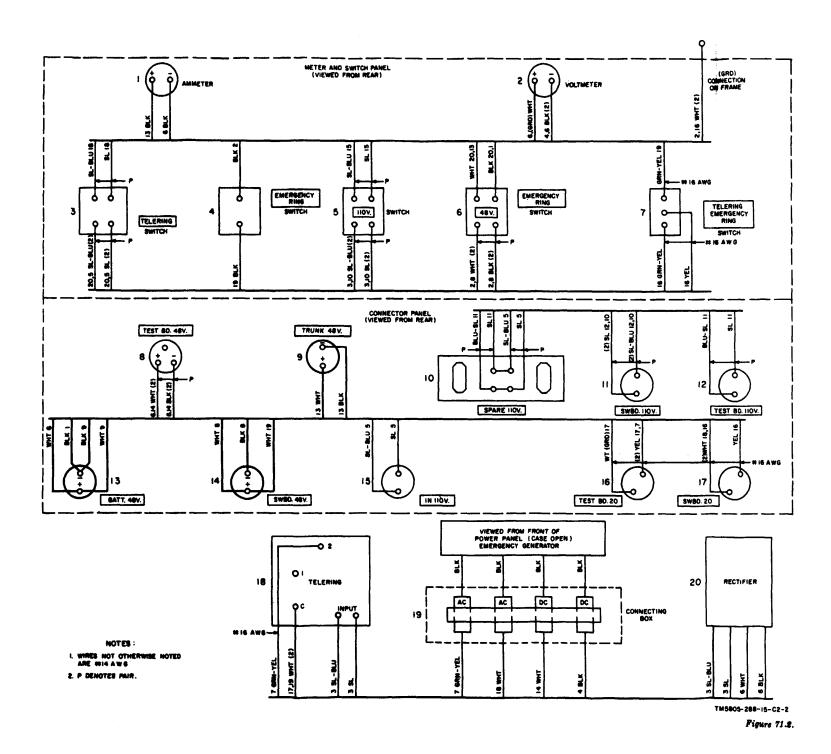


Figure 71.2 Power Distribution Panel SB-1032/TTC (modified for use in AN/MTC-9, wiring diagram. Figure 71.2

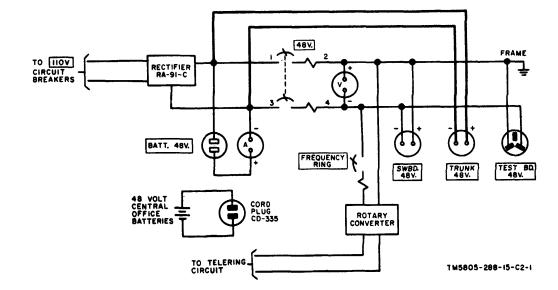


Figure 71.1 Power Distribution Panel SB-1032/TTC (modified for use in AN/MTC-9, schematic diagram. Figure 71.1

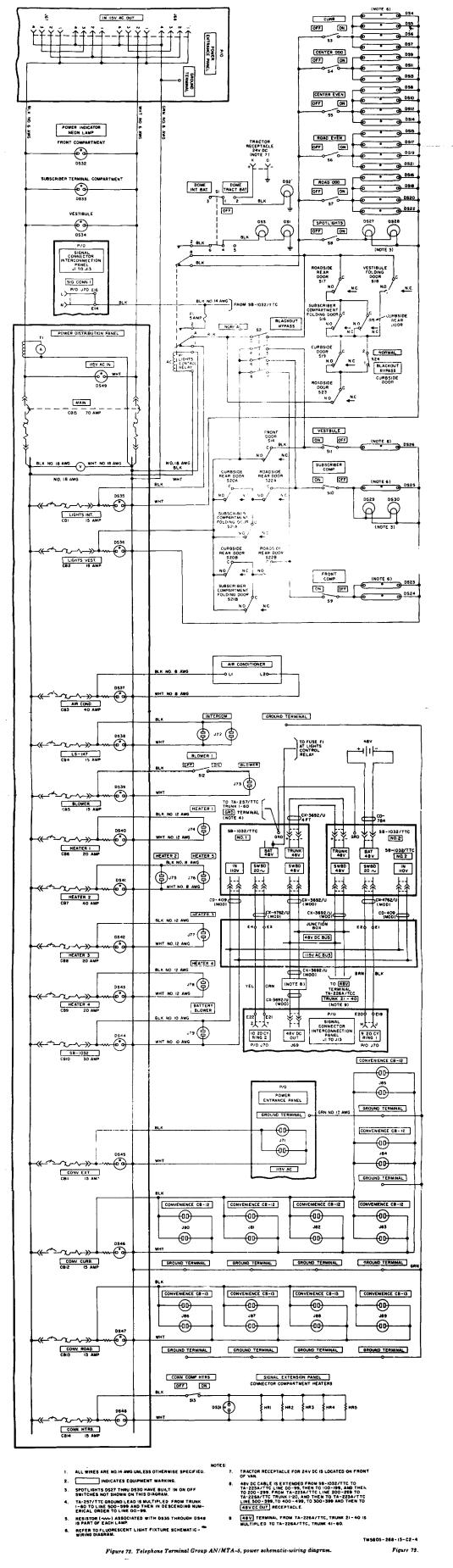


Figure 73. Telephone Terminal Group AN/MTA-5, power schematic-wiring diagram.

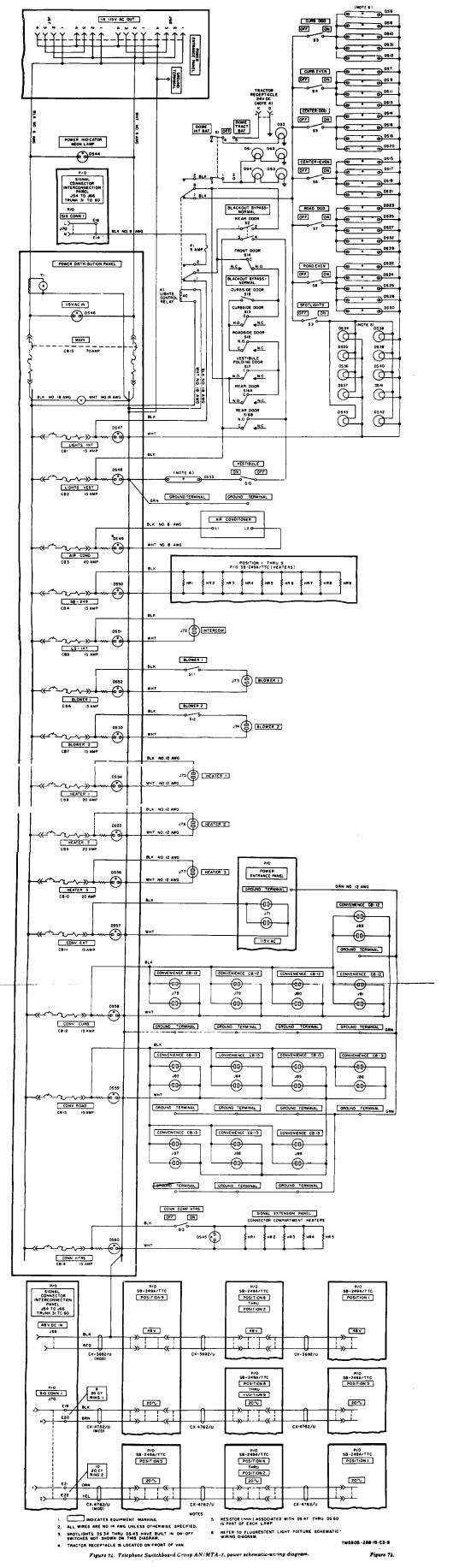


Figure 74. Telephone Switchboard Group AN/MTA-7, power schematic-wiring diagram.

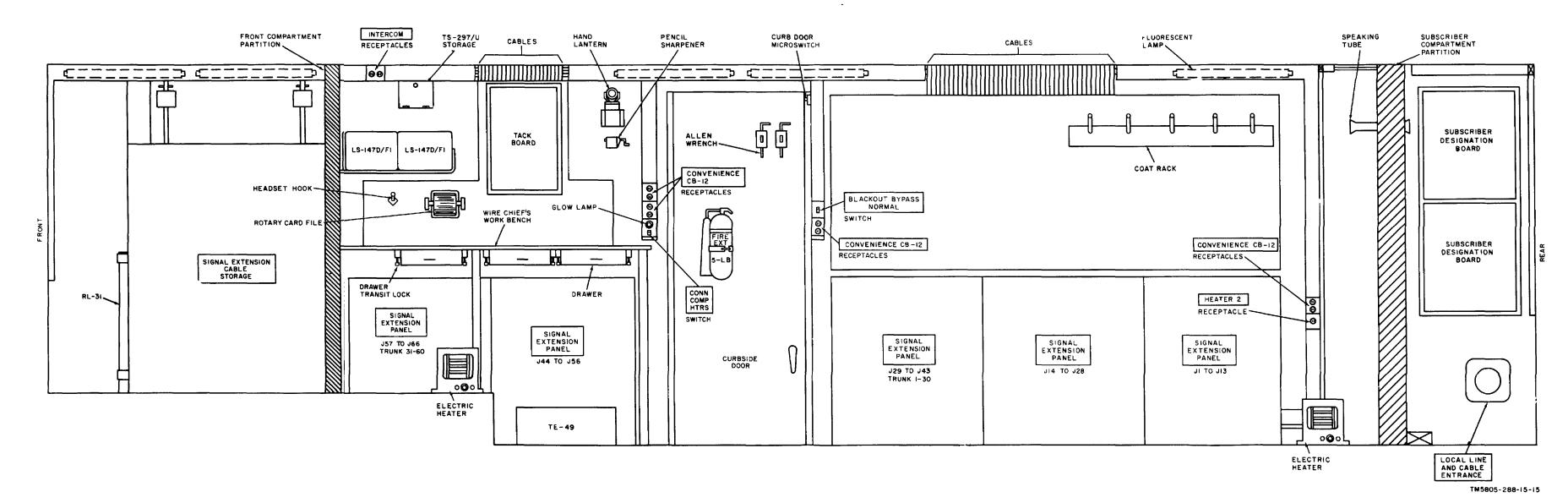


Figure 17. Telephone Terminal Group AN/MTA-5, curbside wall elevation diagram.

Figure 17

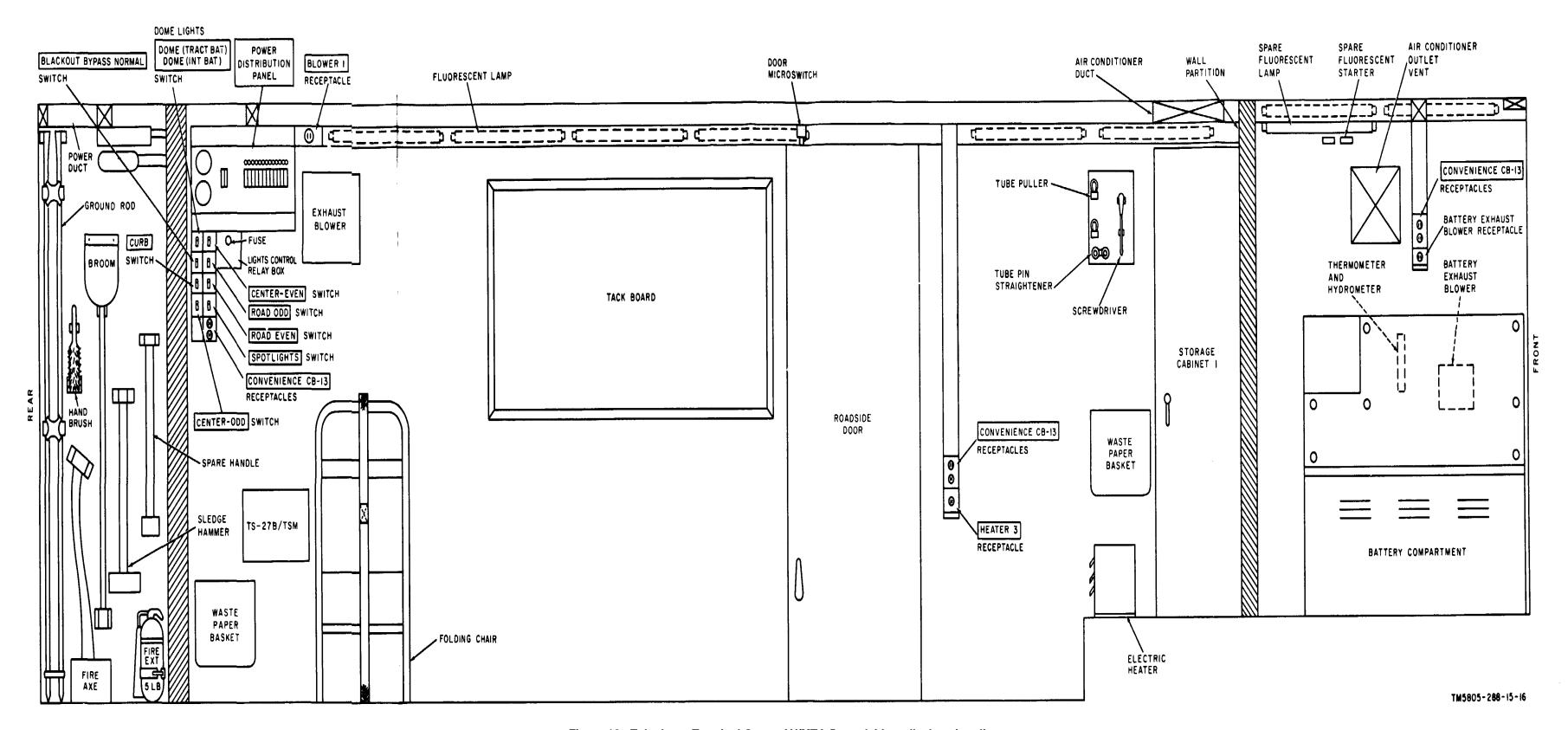


Figure 18. Telephone Terminal Group AN/MTA-5, roadside wall, elevation diagram.

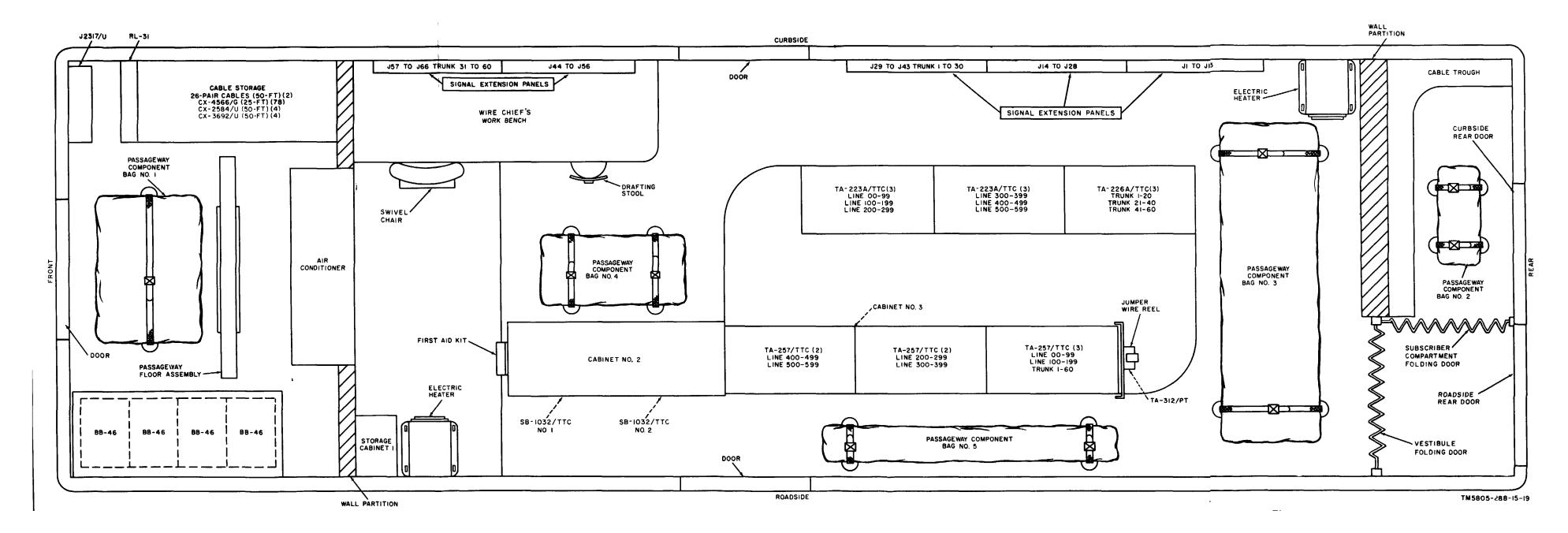


Figure 21. Telephone Terminal Group AN/MTA-5, floor plan.

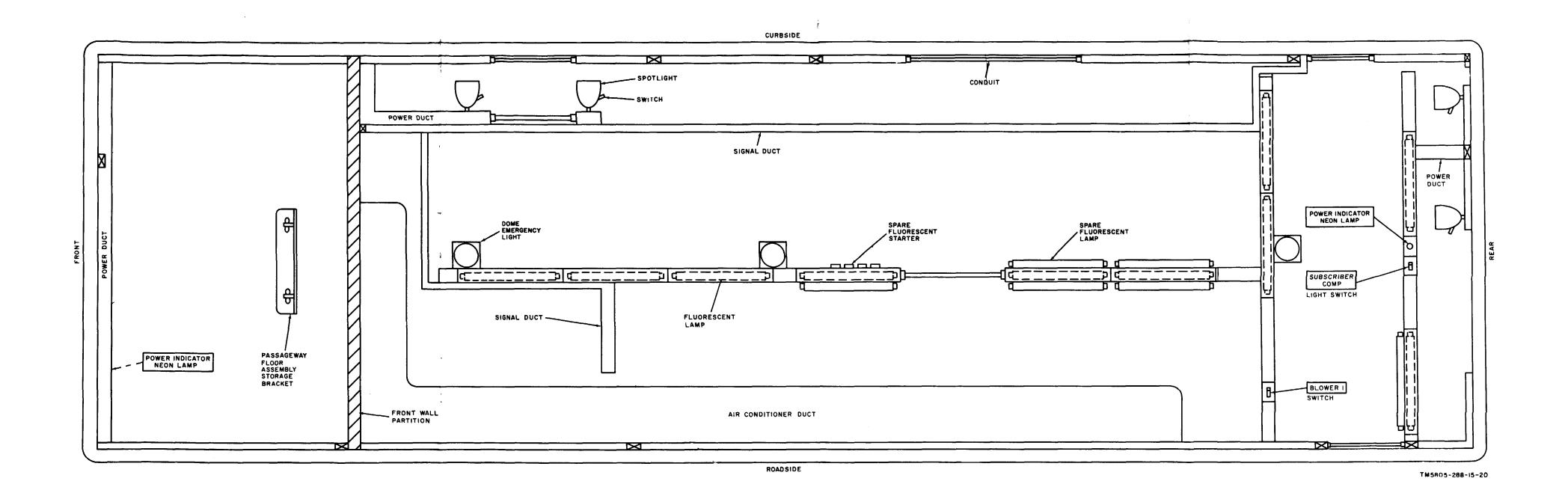


Figure 22. Telephone Terminal Group AN/MTA-5, ceiling plan.

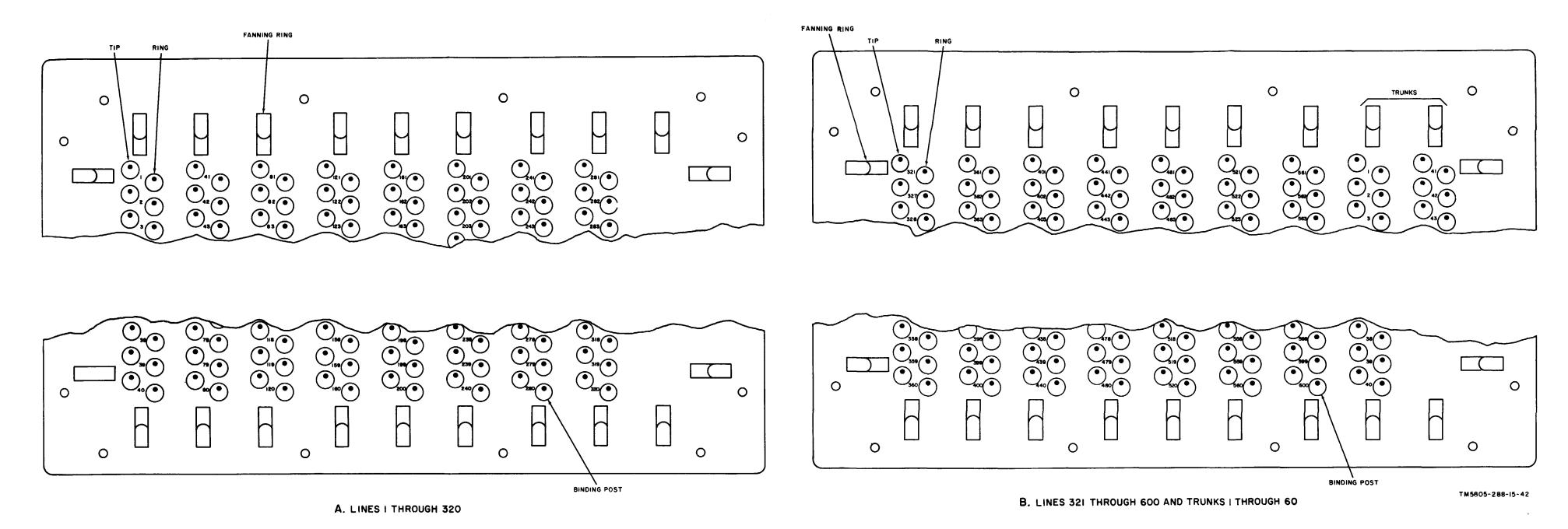


Figure 24. Binding post subscriber termination panel.

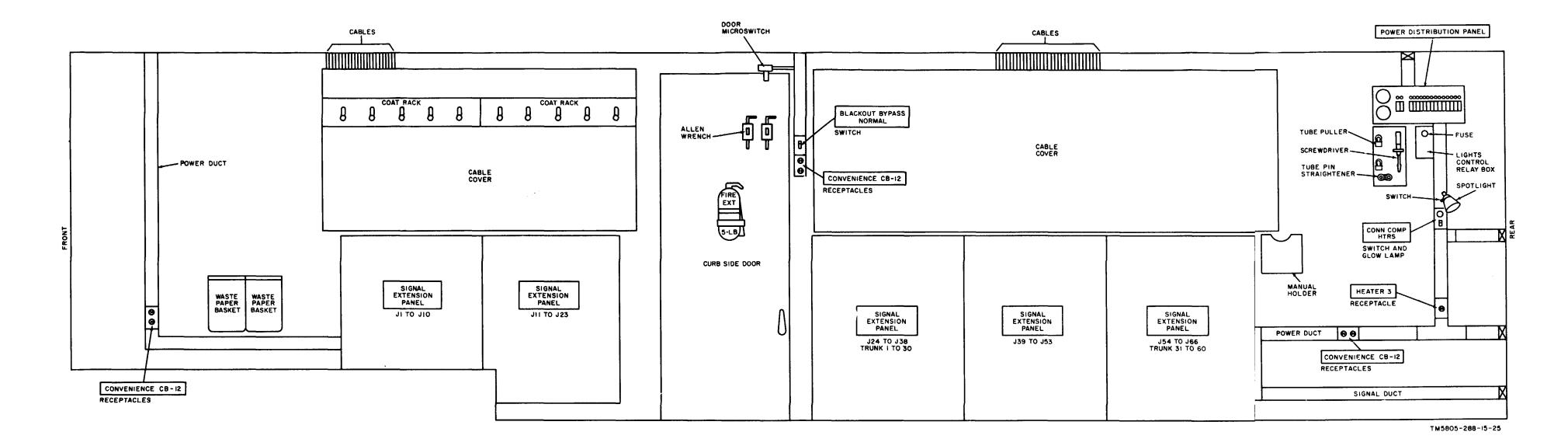


Figure 35. Telephone Switchboard Group AN/MTA-7, curbside wall, elevation diagram.

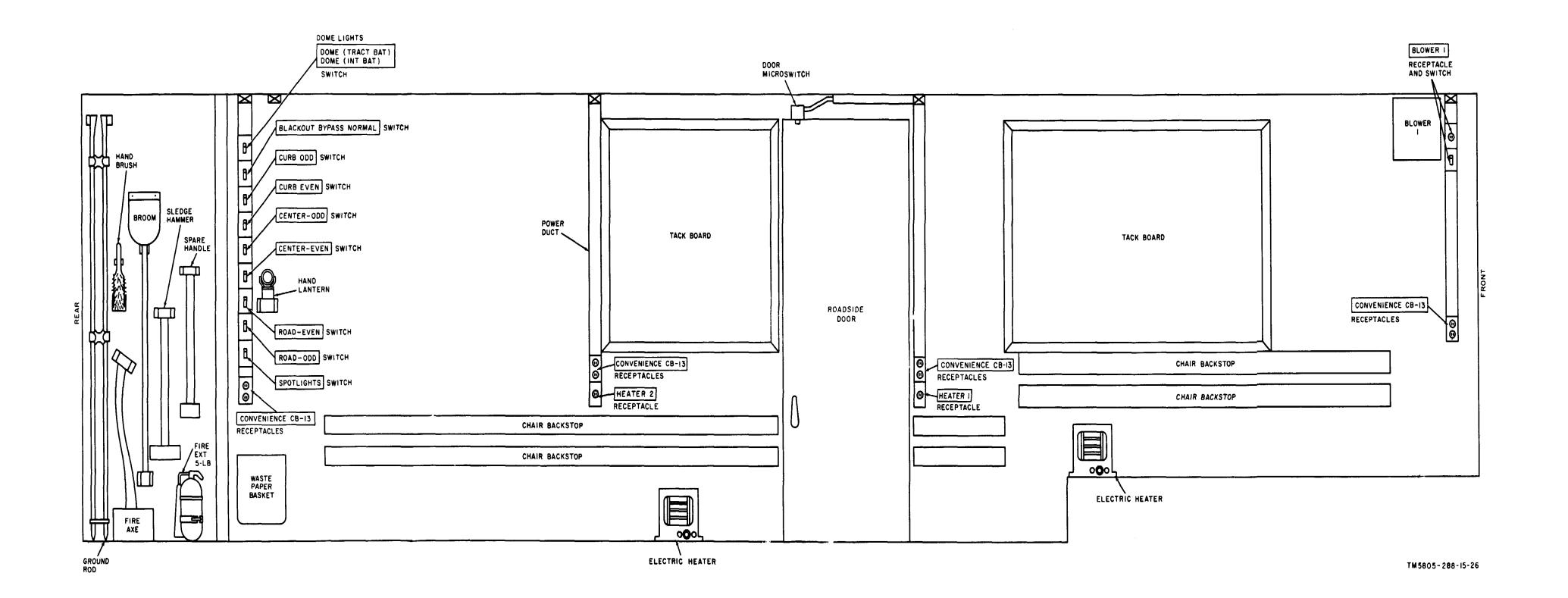


Figure 36. Telephone Switchboard Group AN/MTA-7, roadside wall, elevation diagram.

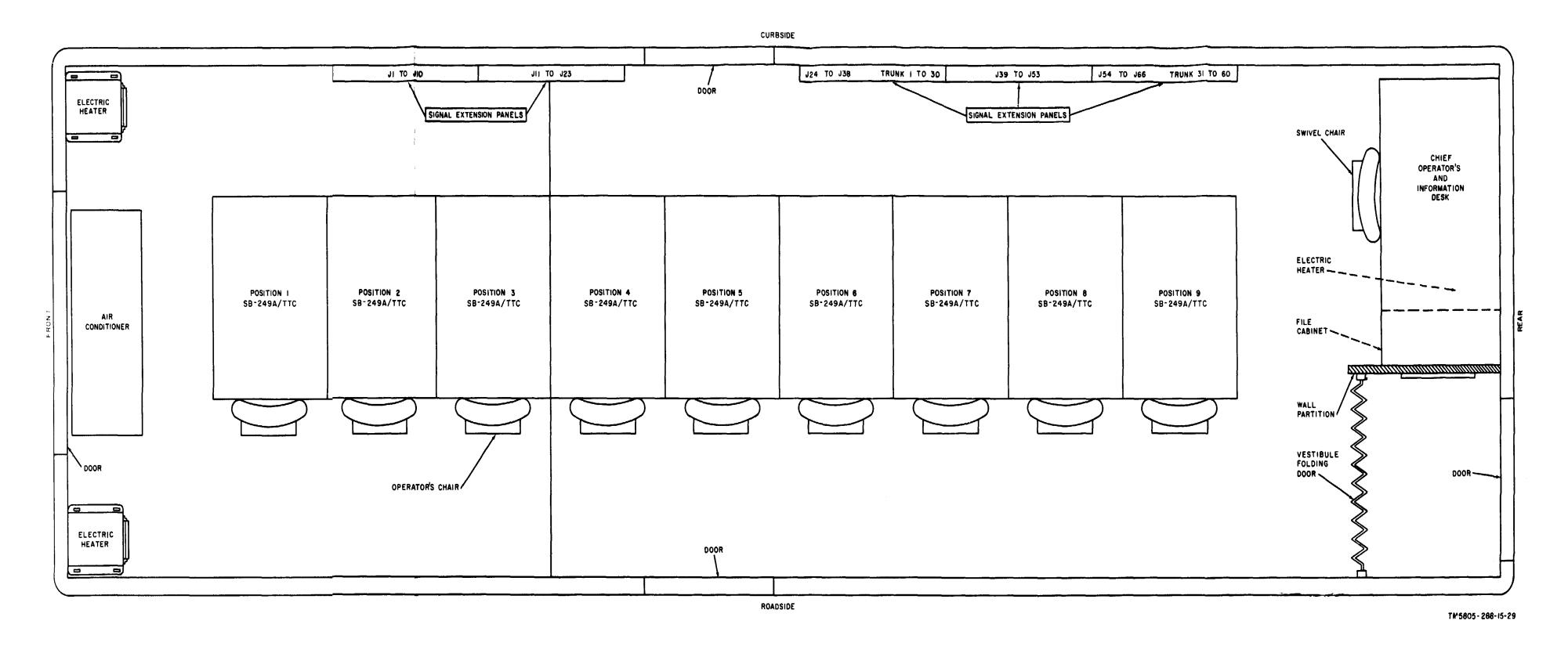


Figure 39. Telephone Switchboard Group AN/MTA-7, floor plan.

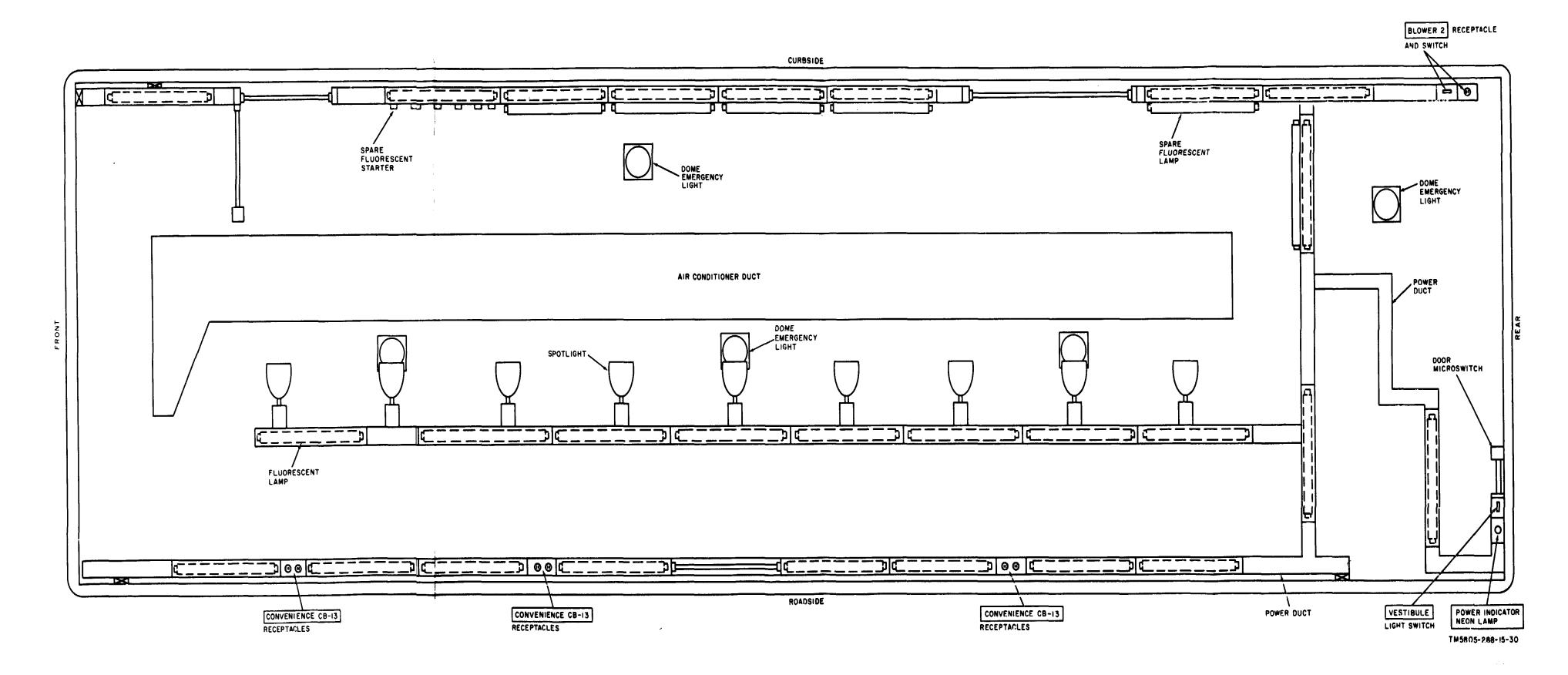


Figure 40. Telephone Switchboard Group AN/MTA-7, ceiling plan.

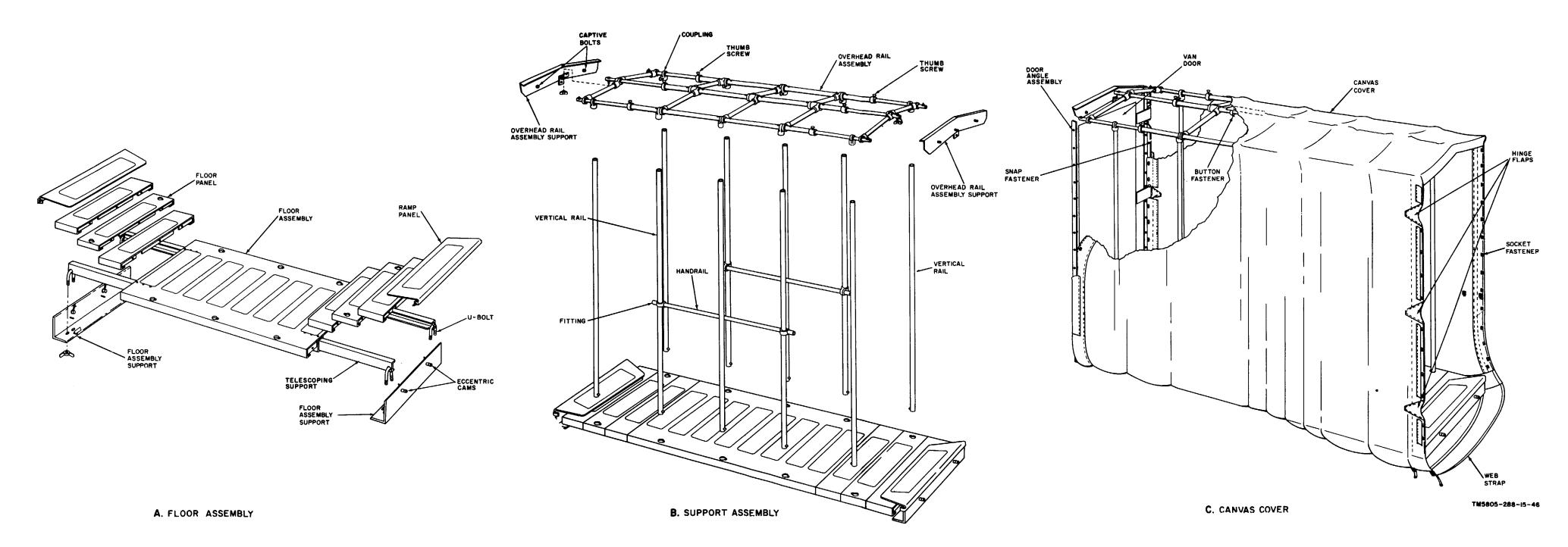


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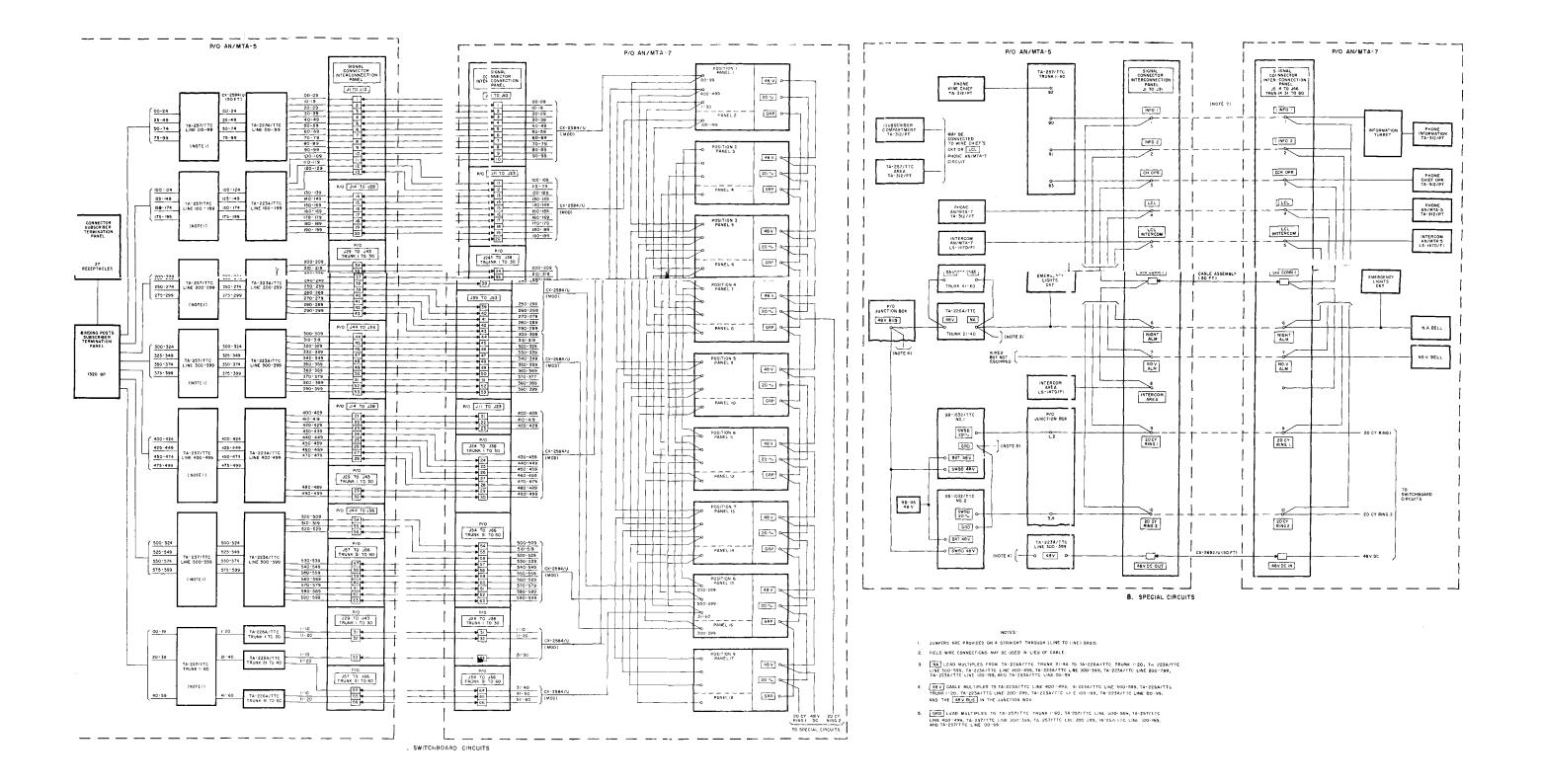


Figure 53. Central Office, Telephone, Manual AN/MTC-9, cabling diagram.

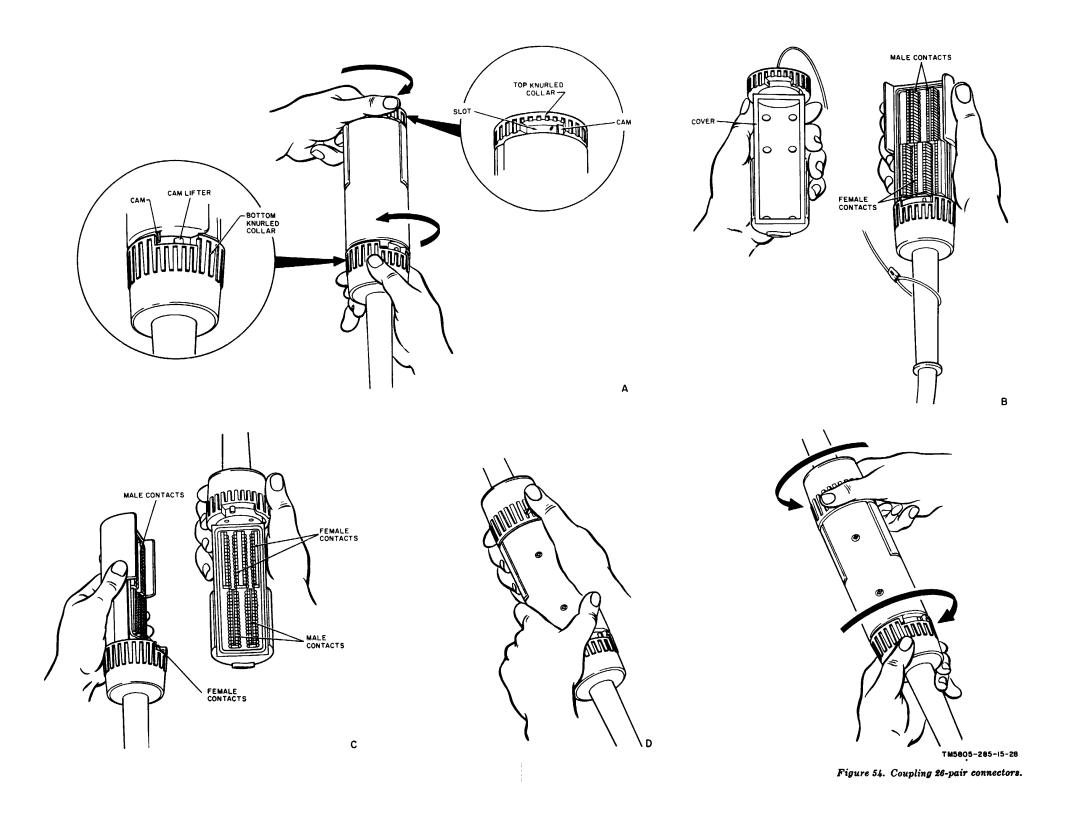


Figure 54. Coupling 26-pair connectors.

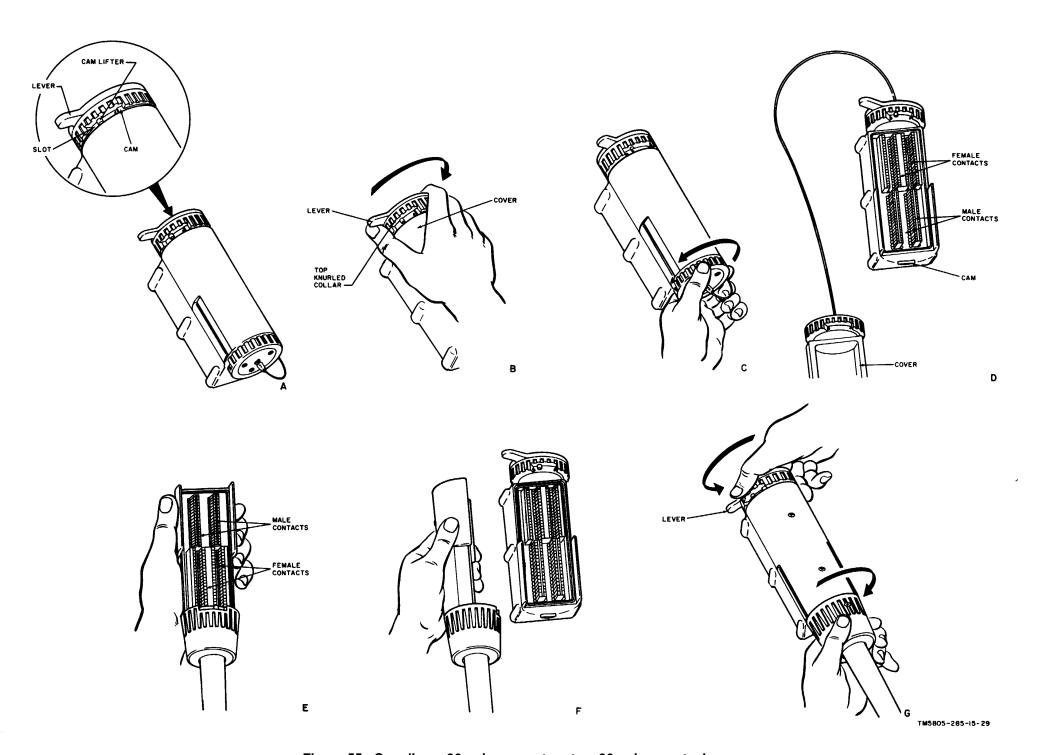


Figure 55. Coupling a 26-pair connectors to a 26-pair receptacle.

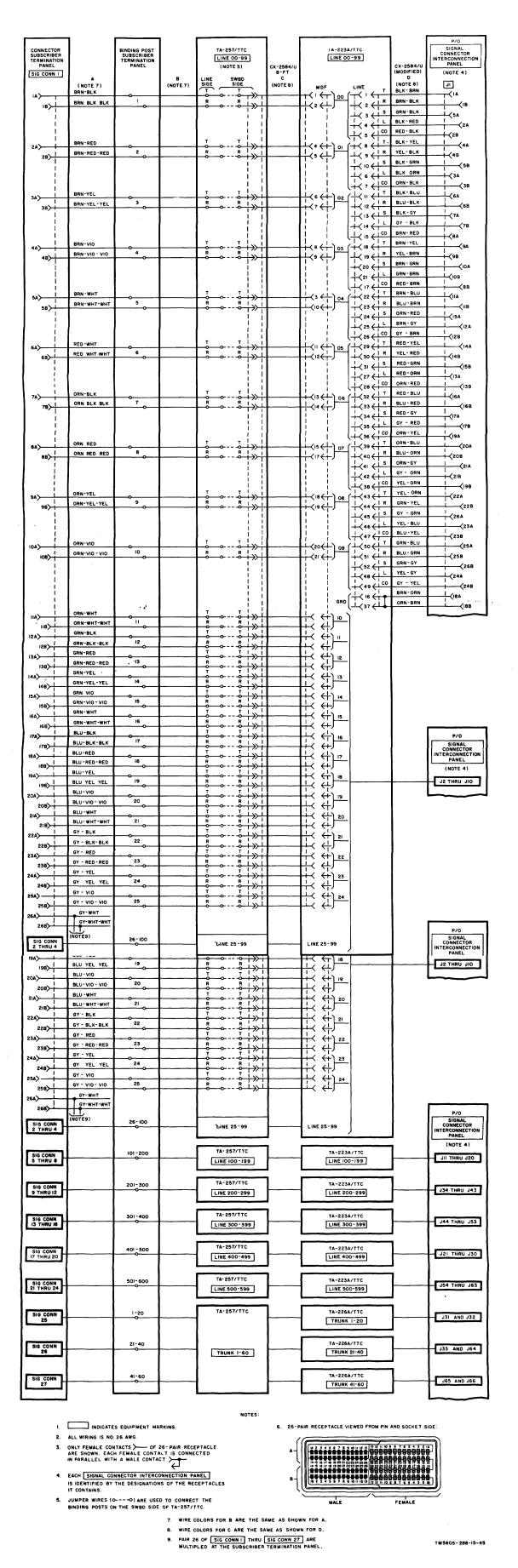


Figure 68. Telephone Terminal Group AN/MTA -5, switchboard circuits, schematic-wiring diagram.

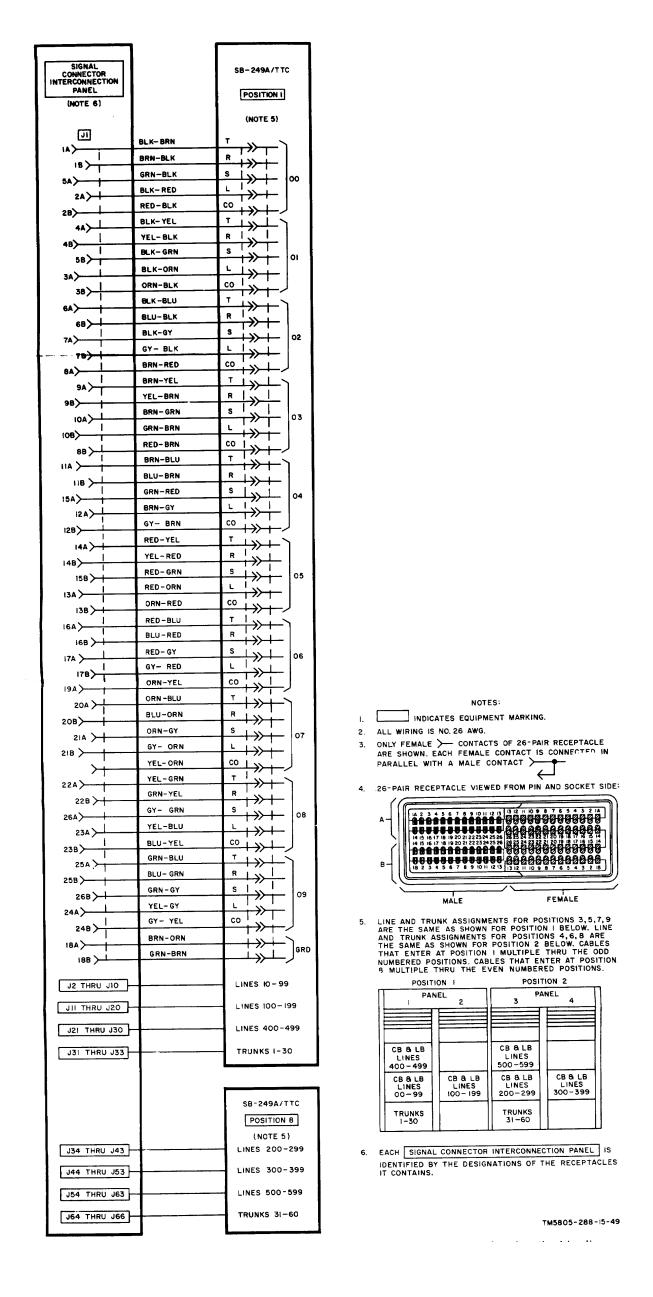
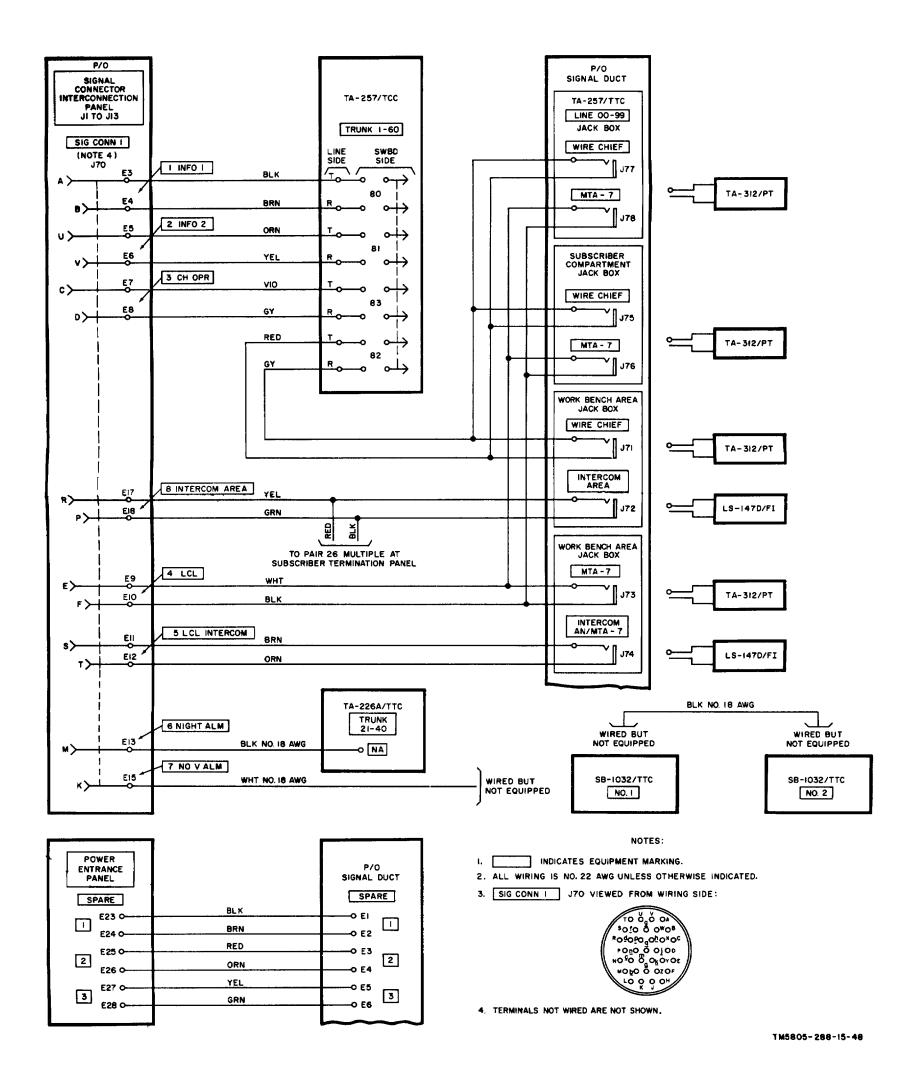


Figure 69. Telephone Switchboard Group AN/MTA-7, switchboard circuits, schematic-wiring diagram.



 $\textbf{Figure 70. Telephone Terminal Group AN/MTA-5}\ ,\ \textbf{special circuits},\ \textbf{schematic-wiring diagram}.$ 

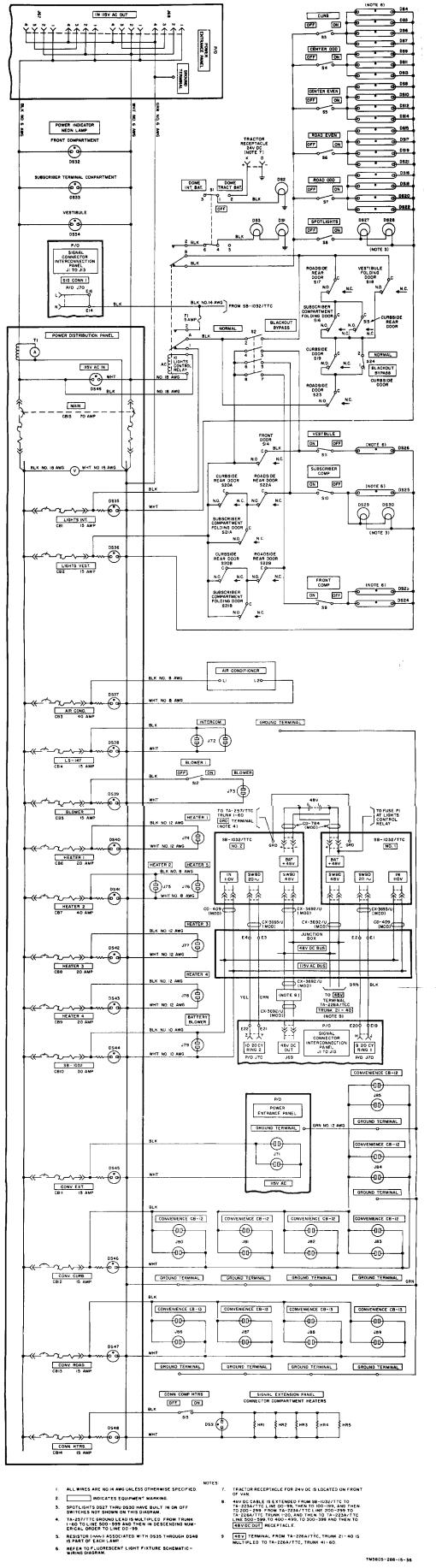


Figure 73. Telephone Terminal Group AN/MTA-5, power schematic, wiring diagram.

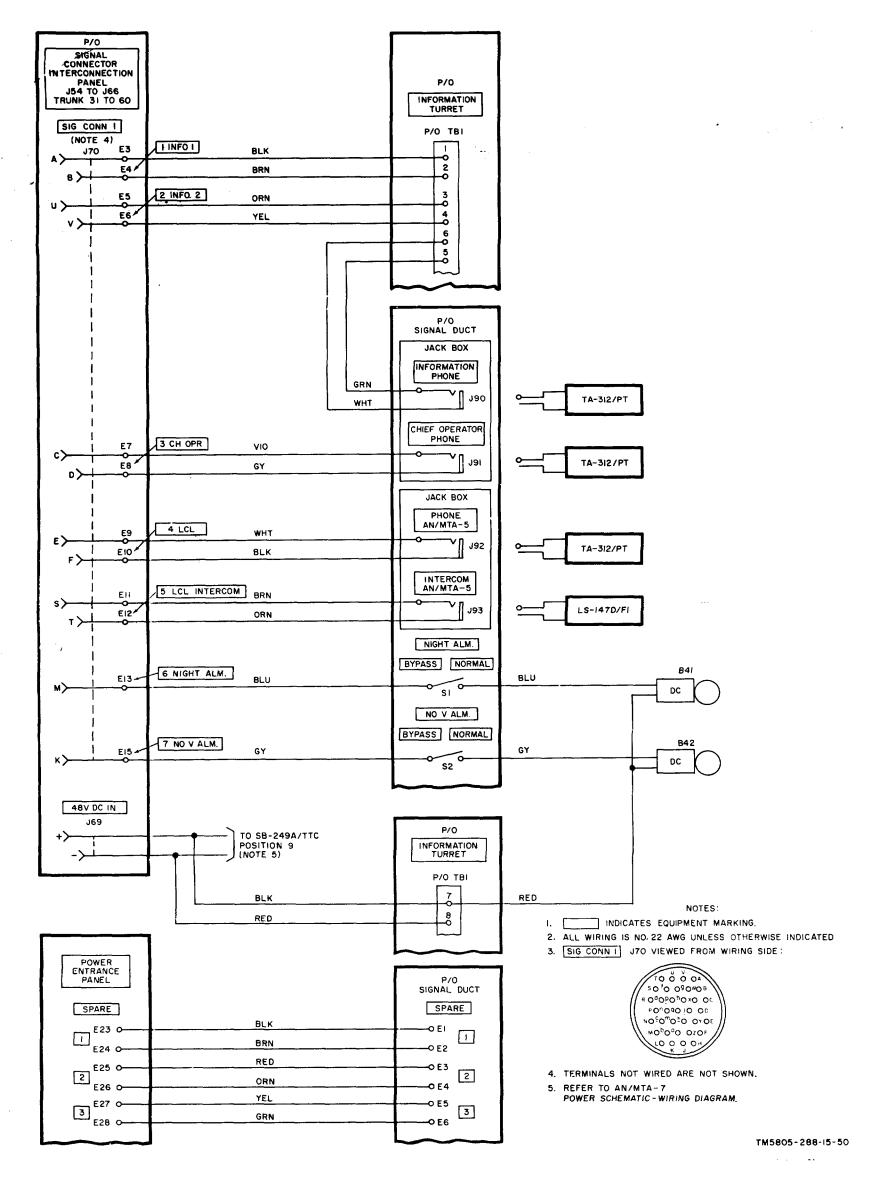


Figure 71. Telephone Switchboard Group AN/MTA-7, special circuits, schematic-wiring diagram.

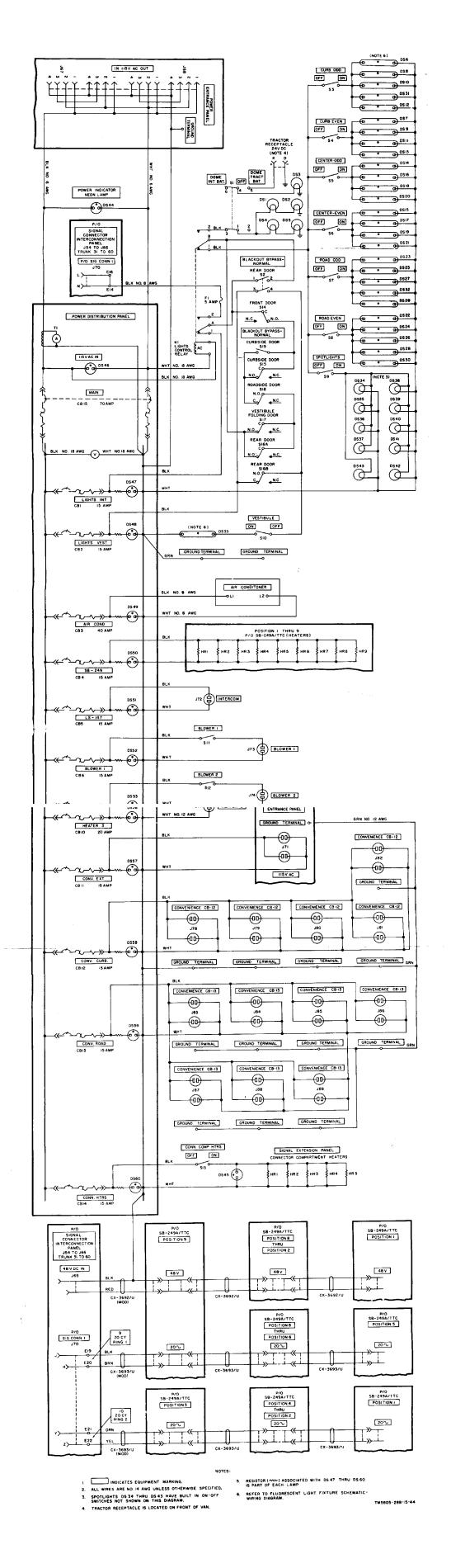


Figure 74. Telephone Switchboard Group AN/MTA-7, power schematic-wiring diagram.

# RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

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**DA** 1 FORM 2028-2

PREVIOUS EDITIONS ARE OBSOLETE. P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

### The Metric System and Equivalents

#### Linear Measure

- 1 centimeter = 10 millimeters = .39 inch
- 1 decimeter = 10 centimeters = 3.94 inches
- 1 meter = 10 decimeters = 39.37 inches
- 1 dekameter = 10 meters = 32.8 feet
- 1 hectometer = 10 dekameters = 328.08 feet
- 1 kilometer = 10 hectometers = 3,280.8 feet

### Weights

- 1 centigram = 10 milligrams = .15 grain
- 1 decigram = 10 centigrams = 1.54 grains
- 1 gram = 10 decigram = .035 ounce
- 1 decagram = 10 grams = .35 ounce
- 1 hectogram = 10 decagrams = 3.52 ounces
- 1 kilogram = 10 hectograms = 2.2 pounds
- 1 quintal = 100 kilograms = 220.46 pounds
- 1 metric ton = 10 quintals = 1.1 short tons

#### Liquid Measure

- 1 centiliter = 10 milliters = .34 fl. ounce
- 1 deciliter = 10 centiliters = 3.38 fl. ounces
- 1 liter = 10 deciliters = 33.81 fl. ounces
- 1 dekaliter = 10 liters = 2.64 gallons
- 1 hectoliter = 10 dekaliters = 26.42 gallons
- 1 kiloliter = 10 hectoliters = 264.18 gallons

#### Square Measure

- 1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
- 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
- 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
- 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
- 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
- 1 sq. kilometer = 100 sq. hectoneters = .386 sq. mile

#### **Cubic Measure**

- 1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
- 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
- 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

### **Approximate Conversion Factors**

To change	То	Multiply by	To change	То	Multiply by
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29,573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

## Temperature (Exact)

°F	Fahrenheit	5/9 (after	Celsius	°C
	temperature	subtracting 32)	temperature	

PIN: 028964-000