

DEPARTMENT OF THE ARMY

TM 5-6115-332-14

TECHNICAL MANUAL

DEPARTMENT OF THE NAVY

P-8-614-14

PUBLICATION

DEPARTMENT OF THE AIR FORCE

TO 35C2-3-424-1

TECHNICAL ORDERS

TECHNICAL MANUAL

OPERATOR, ORGANIZATIONAL, INTERMEDIATE
(FIELD), (DIRECT SUPPORT AND GENERAL SUPPORT),
AND DEPOT LEVEL MAINTENANCE MANUAL

GENERATOR SET, TACTICAL, GASOLINE ENGINE: AIR COOLED,
5 KW, AC, 120/240V SINGLE PHASE,
120/208V 3 PHASE, SKID MOUNTED,
TUBULAR FRAME (LESS ENGINE) MILITARY DESIGN

DOD MODEL	CLASS	HERTZ	NSN
MEP-017A	UTILITY	60	6115-00-017-8240
MEP-022A	UTILITY	400	6115-00-017-8241

This copy is a reprint which includes current
pages from Changes 1 through 9.

PUBLISHED UNDER THE AUTHORITY OF THE DEPARTMENTS OF THE ARMY,
AIR FORCE AND NAVY

DECEMBER 1977

TECHNICAL MANUAL
NO. 5-6115-332-14

HEADQUARTERS
DEPARTMENTS OF THE ARMY, THE NAVY AND THE AIR FORCE
WASHINGTON, D.C., 9 December 1977

OPERATOR, ORGANIZATIONAL, INTERMEDIATE (FIELD),
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MAINTENANCE MANUAL

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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 these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual directly to: Commander, US Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. You may also submit your recommended changes by E-mail directly to <mpmte/oavma2.8st-louis-emh7.army.mil>. A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

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*This manual supersedes TM 5-6115-332-12, dated 12 August 1970 and TM 5-6115-332-34, dated 10 August 1970.

Change 10 I

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CHAPTER 1

INTRODUCTION

SECTION I. GENERAL

1-1. Scope

a. This manual is for your use in operating and maintaining the Military Designed DOD Models MEP-017A and MEP-022A Generator Sets. Information is provided on the operation, preventive maintenance checks and services, troubleshooting, operator/crew, organizational, Intermediate (Field), (Direct Support and General Support) and Depot Maintenance

b. This manual is primarily concerned with the operation and maintenance of the generator sets less engine. However, where it becomes necessary for understanding, portions of the maintenance and operation instruction which apply to the engine are included. For complete maintenance information on the engine, refer to the engine manuals in Appendix A.

c. Appendix A contains a list of reference publications applicable to this manual. Appendix B contains the Basic Issue Items List and Items Troop Installed or Authorized List. Appendix C contains the Maintenance Allocation Chart (MAC), which determines the level of maintenance responsibility for Army and Marine Corps users

1-2. Limited Applicability

Some portions of this publication are not applicable to all services. These portions are prefixed to indicate the services to which they pertain, (A) for Army, (F) for Air Force, (N) for Navy and (MC) for Marine Corps. Portions not prefixed are applicable to both services.

1-3. Maintenance Forms and Records

a. This technical manual is used by the Army, Air Force, Navy and Marine Corps. The use of forms in compliance with directives as stated herein will be accomplished only by the personnel of the Service to which they apply.

b. (A) Forms and records used by the Army and prescribed by DA PAM 738-750 are as follows:

(1) DA Form 2408 (Equipment Log Assembly Records)

(2) DA Form 2408-1 (Equipment Daily and Monthly Log).

(3) DA Form 2408-5 (Equipment Modification Record)

(4) DA Form 2408-9 (Equipment Control Record).

(5) DA Form 2408-10 (Equipment Component Register)

(6) DA Form 2408-14 (Uncorrected Fault Record).

c. (F) Maintenance forms and records used by Air Force personnel are prescribed in AFM-66-1 and the applicable 00-20 Series Technical Orders.

d. (MC) Those used by the Marine Corps will be those prescribed by TM 4700-15/1

e. (N) Navy users should refer to appropriate specification/publications for equipment maintenance forms and records

1-4. Reporting of Errors

a. Reporting of errors, omissions, and recommendations for improvement of this publication by the individual user is encouraged. Response should be submitted as follows:

(1) (F) Air Force. AFM Form 22 in accordance with T.O. 00-5-1, direct to: Commander, Sacramento Air Logistics Center, ATTN: SM-ALC-MMEDTA, McClellan Air Force Base, CA 95652-5609.

(2) (A) Army. DA Form 2028 (Recommended Changes to Publications, and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. A reply will be furnished directly to you.

(3) (N) Navy. Letter, direct to: Commanding Officer, Naval Construction Battalion Center, ATTN: Code 15741, Port Hueneme, CA 93043-5000.

(4) (MC) Marine Corps. NAVMC Form 10772 direct to: Commandant, U.S. Marine Corps Logistic Base, ATTN: Code 850, Albany, GA 31704-5000.

b. (A) Applicable Army Forms, excluding Standard Form 46 (United States Government Motor Vehicles Operator's Identification Card) which is carried by the operator, shall be kept in manual compartment mounted on equipment.

1-5. Levels of Maintenance Accomplishments

a. (A,MC) Army and Marine Corps users shall refer to the Maintenance Allocation Chart (MAC) for tasks and levels of maintenance to be performed.

b. (F) Air Force users shall accomplish maintenance at the user level consistent with their capability in accordance with policies established in AFM 66-1.

c. (N) Navy users shall determine their maintenance levels in accordance with their service directives.

1-6. (A, MC) Destruction of Materiel To Prevent Enemy Use

a. **Fire.** Use fire to destroy equipment when quantities of fuel and flammable materials are at hand. Burn assemblies and components on a priority basis, if possible. Proper concentration of equipment to be burned will produce a hotter, more destructive fire. Fires should be lit after mechanical destruction has been accomplished.

b. **Gunfire.** Fire on equipment with the heaviest weapons available aiming at the major assemblies and controls. Continue fire until the equipment is completely destroyed.

c. **Mechanical Destruction.** Using an axe, pick, mattock, sledge or any other heavy implements, damage or destroy all vital elements such as controls, and any other major assemblies and components.

d. For further information, refer to TM 750-244-3 (Procedures for Destruction of Equipment to Prevent Enemy Use for U.S. Army).

1-7. Administrative Storage

If the generator sets must be placed in administrative storage, proceed as follows:

a. (A) Army.

(1) Store equipment so as to provide maximum protection from the elements and to provide access for inspection, maintenance, and exercising. Anticipate removal or deployment problems and take suitable precautions. For example, strategically locate recovery vehicles, snowplows, slave-units, and similar items, likely to be needed on short notice.

(2) Take into account environmental conditions, such as extreme heat or cold; high humidity; blowing sand, dust, or loose debris; soft ground; mud; heavy snows; earthquakes; or combinations thereof and take adequate precautions.

(3) Establish a fire plan and provide for adequate fire fighting equipment and personnel.

(4) For further information, refer to TM 740-90-1 (Administrative Storage).

b. (AF) **Air Force.** Refer to TO 35-1-4 (Processing and Inspection of Aerospace Ground Equipment).

c. (MC) **Marine Corps.** Refer to MCO-P4450-7.

1-8. Preparation For Shipment and Storage

a. (A) **Army.** Shipment and storage for U.S. Army will be in accordance with the following:

(1) Select the best available site for administrative storage. Separate stored equipment from equipment in use. Conspicuously mark the area "Administrative Storage."

(2) Covered space is preferred. When sufficient covered space for all items to be stored is not available, priority should be given to items which are most susceptible to deterioration from the elements.

(3) Open site should be improved hardstand, if available. Unimproved sites should be firm, well drained, and kept free of excessive vegetation.

(4) Truck, vans, Conex containers, and other containers may be used if they provide the best available protection.

(5) Prior to storage, perform the next scheduled major preventive maintenance service.

(6) For further information, refer to TB 740-97-2 (Preservation of USATSARCOM Mechanical Equipment for Shipment and Storage).

b. (F) **Air Force.** Reference TO 35-1-4 for end item generator set and TO 38-1-5 for installed engine.

c. (N, MC) **Navy and Marine Corps.** Reference individual service directives for requirements.

d. Placement of equipment in administrative storage should be for short periods of time when a storage of maintenance effort exists. Items should be in mission readiness within 24 hours or within the time factors are determined by the directing authority. During the storage period appropriate maintenance records will be kept.

e. Before placing equipment in administrative storage, current maintenance services and equipment serviceable criteria (ESC) evaluations should be corrected and all modification work orders (MWO's) should be applied.

f. **Storage site selection.** Inside storage is preferred for items selected for administrative storage. If inside storage is not available, trucks, vans, conex containers and other containers may be used.

Section II. DESCRIPTION AND DATA

1-9. Description

a. General. The Department of Defense generator sets, DOD model MEP-017A (fig. 1-1 and 1-2) and DOD model MEP-022A (fig. 1-3 and 1-4) are powered

by a gasoline-fueled, 10-horsepower, Military Standard Engine, either the Model 2A042-2 or the Model 2A042-3. The engine is directly coupled to the generator.

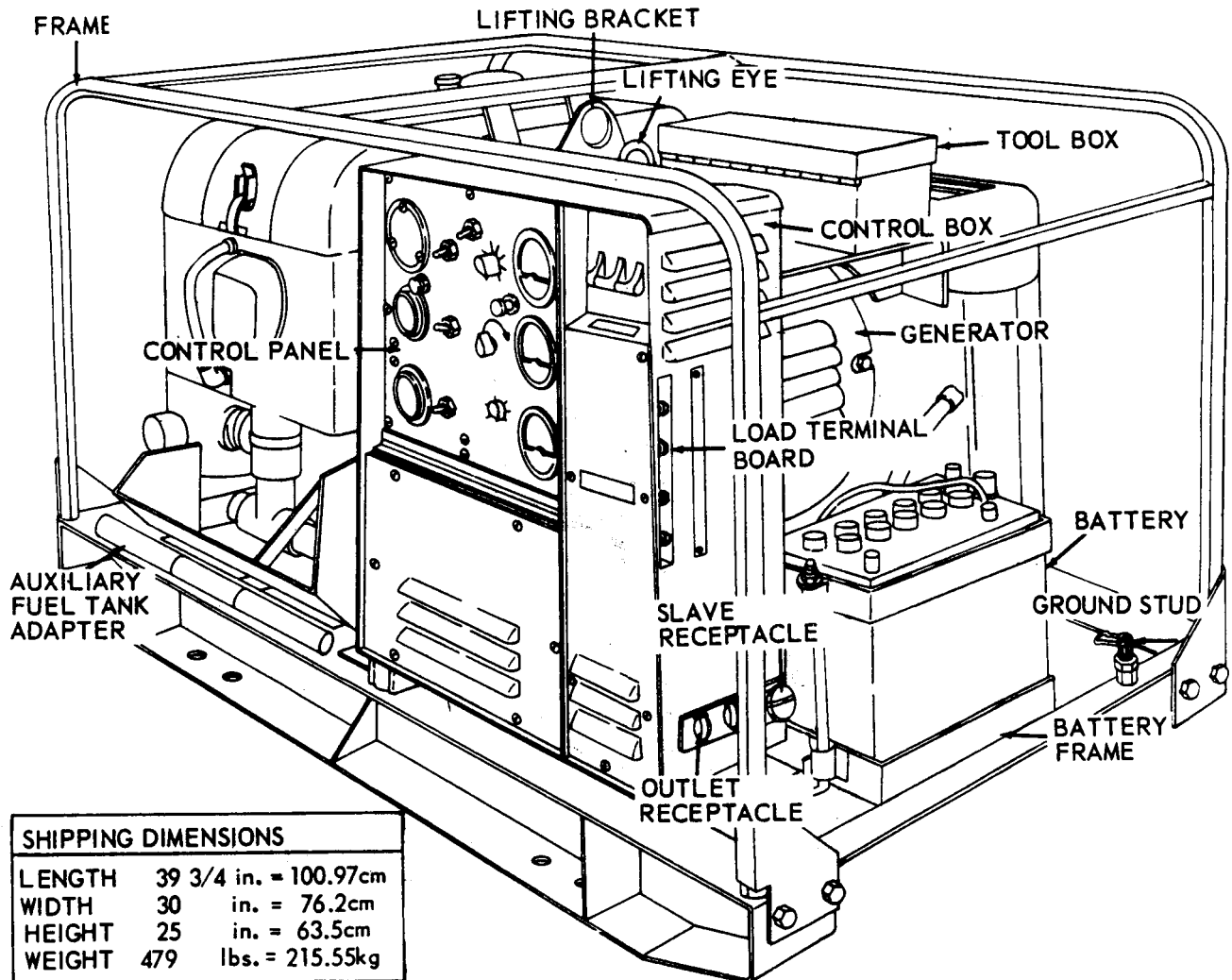


Figure 1-1. Generator set, left rear, three-quarter view (Model MEP-017A, 60 Hertz)