TM 9-4910-458-12

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR AND ORGANIZATIONAL MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOL LISTS)

TEST STAND, AUTOMOTIVE GENERATOR, ALTERNATOR, AND STARTER, FLOOR MOUNTED, 10 TO 50-V, 500-AMP, DC, AND 25 TO 50-V, 100 TO 400 AMP, AC, TESTING RANGES, W/800 TO 11,000-RPM, 22½-HP, 220/440-V, 60-C, 3-PH DUAL HEAD VARIDRIVE ASSEMBLY (UNITED MANUFACTURING COMPANY MODEL AGARTS, TYPE II, PART NUMBER 7336-1, MODEL AGARTS, TYPE II, PART NUMBER 7336-2 AND MODEL AGARTS, TYPE II, PART NUMBER 7336-3 (4910-767-0218) AND TYPE II, PART NUMBER 7336 (4910-316-5252))

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OPERATOR AND ORGANIZATIONAL MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOL LISTS) TEST STAND, AUTOMOTIVE GENERATOR, ALTERNATOR, AND STARTER, FLOOR MOUNTED, 10 TO 50-V, 500-AMP, DC, AND 25 TO 50-V, 100 TO 400 AMP, AC, TESTING RANGES, W/800 TO 11,000-RPM, 22½-HP, 220/440-V, 60-C, 3-PH DUAL HEAD VARIDRIVE ASSEMBLY (UNITED MANUFACTURING COMPANY MODEL AGARTS, TYPE II, PART NUMBER 7336-1, MODEL AGARTS, TYPE II, PART NUMBER 7336-2 AND MODEL AGARTS, TYPE II, PART NUMBER 7336-3 (4910-767-0218) AND TYPE II, PART NUMBER 7336 (4910-316-5252))

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

a. This technical manual contains instructions on operation and maintenance of the test stand for the operator and instructions for organizational maintenance of the test stand by personnel of the using organization.

b. Appendix I contains a list of current references, including supply manuals, forms, technical manuals, and other available publications applicable to the test stand.

c. Appendix II contains a list of the basic issue items. It is composed of those items which make up the major end item of equipment and the operator tools, equipment, and repair parts that are issued with the equipment and are required for stockage for operating and performing operator or crew maintenance on the test stand.

d. Appendix III contains the maintenance allocation chart for the test stand listing all maintenance and repair operations authorized for all maintenance categories.

e. Appendix IV contains a list of repair parts which are required by the using organization for performing organizational maintenance on the test stand.

f. Reports by the individual user, of errors, comments, and suggestions are encouraged. They should be reported on DA Form 2028 (Recommended Changes to DA Publications) and forwarded directly to Commanding General, Headquarters, U.S. Army Weapons Command, ATTN: AMSWE-SMM-P, Rock Island Arsenal, Rock Island, Ill, 61201.

2. Maintenance Allocation

a. Operator or Crew Maintenance Allocation. The prescribed maintenance to be performed by the operator or crew will apply as reflected in the maintenance function column of the maintenance allocation chart (app. III), under the category of maintenance C.

b. Organizational Maintenance Allocation. The prescribed maintenance to be performed by maintenance personnel of the using organization will apply as reflected in the maintenance function column of the maintenance allocation chart (app. III), under category of maintenance O. In all cases, where the nature of the repair, modification, or adjustment is beyond the scope or facilities of the using organization, the supporting category of maintenance should be informed so that trained personnel with suitable tools, and equipment may be provided or other instructions issued.

3. Forms, Records, Reports

a. General. Responsibility for the proper execution of forms, records, and reports rests upon the officers of all categories of maintenance maintaining this equipment. However, the value of accurate records must be fully appreciated by all personnel responsible for their compilation, maintenance, and use. Records, reports, and authorized forms are normally utilized to indicate the type, quantity and condition of materiel to be inspected, to be repaired, or to be used in repair. Properly executed forms convey authorization and serve as records for repair or replacement of materiel in the hands of troops and for delivery of materiel requiring further repair to shops in arsenals, depots, etc. The forms, records, and reports establish the work required, the progress of the work within the shops, and the status of the materiel upon completion of its repair.

b. Authorized Forms. The forms generally applicable to units operating or maintaining this

materiel are listed in appendix I. For a listing of all forms, refer to DA Pam 310-2. For instructions on use of these forms, refer to TM 38-750.

c. *Equipment Improvement Recommendation.* Any deficiencies detected in the equipment covered herein which occur under the circumstances indicated in AR 750-5, should be immediately reported in accordance with the applicable instructions in cited regulation.

d. Field Reports of Accidents. The reports necessary to comply with the requirements of Army safety program are prescribed in detail in AR 385-40. These reports are references whenever accidents involving injury to personnel or damage to materiel occur.

Section II. DESCRIPTION AND DATA

4. Description

The test stand (figs. 1, 2, 3, and 4) is an electrically operated device having a 10 to 50 volt, 50 to 500 ampere, dc testing range and a 25 to 50 volt, 100 to 400 ampere, ac testing range. Its electrical construction consists of a multiple of circuits which are utilized to test direct-drive or pulley-driven generators, generator regulators, generator control boxes, ac/dc systems (alternator, rectifier, and generator regulator), and starters (cranking motors). A built-in manually operated battery charging unit is supplied with the test stand to provide a means to keep the storage batteries of the internal battery circuit in a fully charged condition (this battery charging unit is not supplied with the type II, part number 7336 (4910-316-5252) test stand). Basically its physical construction consists of a steel cabinet containing a control panel; 22½-horsepower, 220/440-volt, 60-cycle, 3-phase varidrive motor with a 800 to 11,000-revolution per minute dual-head take-off assembly; load bank with a blower both of which are enclosed within a sheet metal hous-

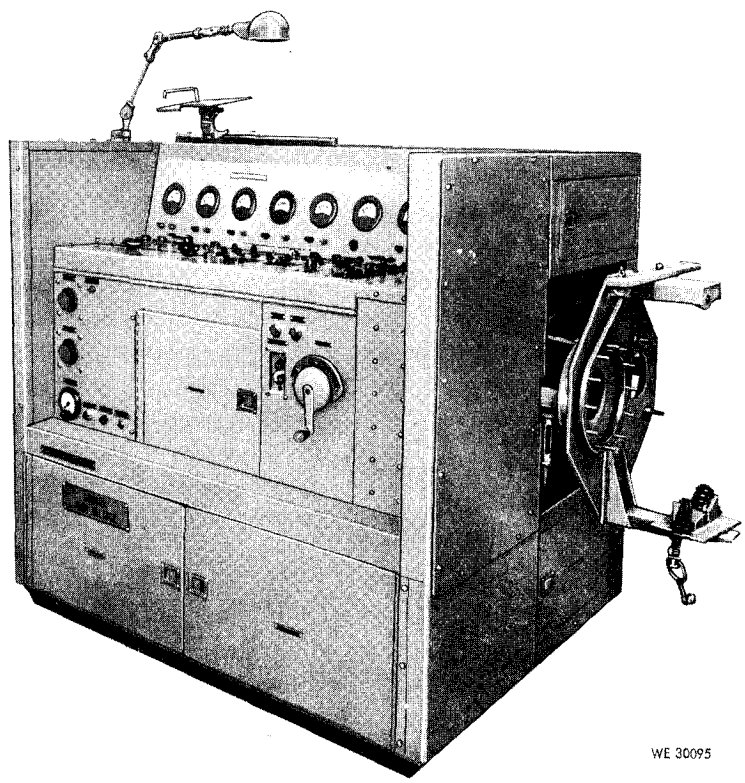

Figure 1. Test stand (model AGARTS, type II, part number 7336-1) (4910-767-0218) - right front view.