

TM 9-4910-456-14

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

**OPERATOR, ORGANIZATIONAL, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE MANUAL,
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST AND
DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)**

TEST SET, GENERATOR AND VOLTAGE REGULATOR

AUTOMOTIVE: 12-AND 24-VOLT SYSTEMS

(ALLEN ELECTRIC AND EQUIPMENT COMPANY

MODEL NO. 30-92) (4910-092-9136)

This copy is a reprint which includes current
pages from Changes 1 and 2.

HEADQUARTERS, DEPARTMENT OF THE ARMY

15 OCTOBER 1971

Chapter 1

INTRODUCTION

Section I. GENERAL

1-1. Scope.

a. This manual contains instructions on the test set for operation and organizational maintenance by the using organization, and field maintenance at direct and general support levels.

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

c. Appendix B contains the Maintenance Allocation Chart for the test set, listing all maintenance and repair operations authorized by maintenance echelons.

d. Appendix C contains Repair Parts and Special Tools List (including Depot maintenance repair parts and special tools) for operating and performing organizational Direct Support, and General Support maintenance on the test set.

1-2. 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.

1-3. Equipment Serviceability Criteria (ESC)

Deleted.

1-4. Reporting of Errors.

Report 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, Headquarters, U.S. Army Weapons Command, ATTN: AMSWE-MAS-SP, Rock Island, IL 61201.

1-5. Destruction of Army Materiel to Prevent Enemy Use.

Refer to DOD 4160.21-M-1 for destruction of materiel to prevent enemy use.

1-6. Calibration.

Refer to TB 9-4910-521-50 for calibration procedure of circuit tester.

Section II. DESCRIPTION AND DATA

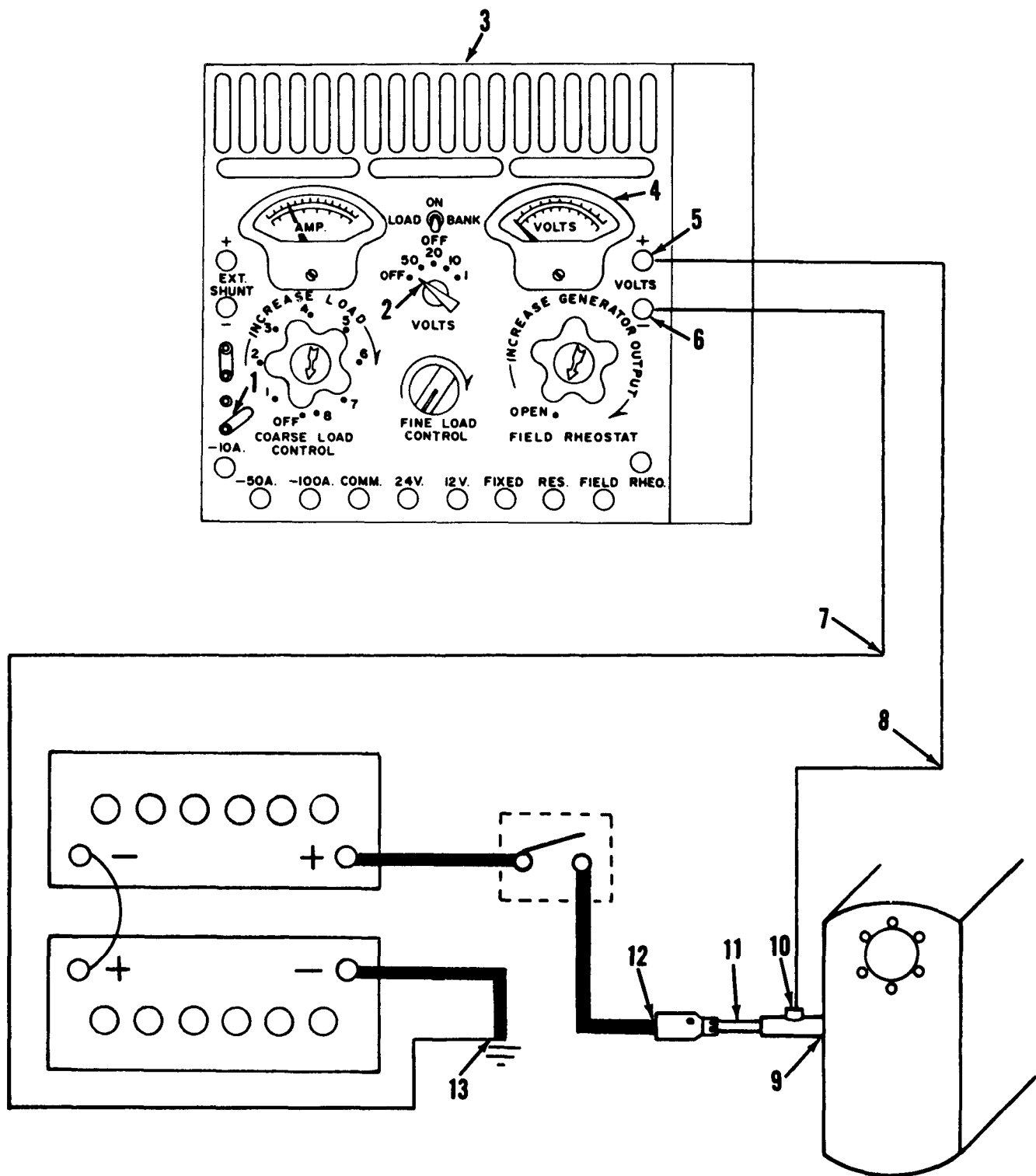
1-7. Description.

The test set (Fig. 1-1) is a self-contained, portable instrument, used for checking and analyzing the low voltage direct current electrical circuits of vehicles. The test set consists of four independent sections: voltmeter circuit, field rheostat circuit, ¼-OHM load resistor and a combination ammeter and load bank circuit. The ammeter and load bank may be used independently or in series, as they are interconnected by the load bank switch. The test set is equipped with the necessary test leads and a separate external shunt assembly to perform the tests described in this manual. A compartment is provided in the test set for stowing the test leads and external

shunt. A bracket is provided in the cover for retaining any pertinent publications provided. Refer to table 1-1 for component items.

Table 1-1. Component Items

Part	Part no.	FSCM
LEAD TEST NEGATIVE	TV186B	0205
LEAD TEST POSITIVE	TV186R	02805
LEAD TEST POSITIVE	TV188R	02805
LEAD TEST NEGATIVE	TV188B	02805
LEAD TEST FIELD	TV167	02805
LEAD TEST	TV189	02805
SHUNT ASSEMBLY	TV102	02805



KEY to fig. 2-25:

- | | |
|---------------------------------------|---|
| 1. 12-Volt load bank link | 8. Red voltmeter positive test lead |
| 2. Voltmeter range selector switch | 9. Distributor |
| 3. Tester | 10. Terminal - ignition unit adapter |
| 4. Voltmeter | 11. ADAPTER, ENGINE, ELECTRICAL TEST, ignition unit |
| 5. Voltmeter positive binding post | 4910-356-7508 |
| 6. Voltmeter negative binding post | 12. Primary cable connector |
| 7. Black voltmeter negative test lead | 13. Ground |

WE 38595

Figure 2-25. Primary ignition test.