

TM 9-4910-448-10

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S MANUAL

INCLUDING BASIC ISSUE ITEMS LIST

TEST SET, GENERATOR AND
VOLTAGE REGULATOR,
AUTOMOTIVE (ALLEN
ELECTRIC AND EQUIPMENT
CO. MODEL 30-82)

(4910-270-3780)

This copy is a reprint which includes current
pages from Change 1.

HEADQUARTERS, DEPARTMENT OF THE ARMY

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OPERATING INSTRUCTIONS

MODEL 30-82

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OPERATING INSTRUCTIONS

ALLEN Model 30-82

GENERATOR, VOLTAGE REGULATOR TEST SET

The Allen Model 30-82 Generator, Voltage Regulator Test Set is designed to test on the vehicle nonwaterproof 6, 12, and 24 volt electrical systems of passenger and commercial type vehicles. Note: The vehicle's battery must be serviceable and fully charged prior to performing tests on the charging system.

The Allen Model 30-82 Heavy Duty Test Set consists of: a Voltmeter, Ammeter with an external Shunt, adjustable Carbon Pile with a Push to Operate Switch, adjustable Field Rheostat, four selectable Fixed Resistances, and accessories to facilitate connecting the Test Set to the vehicle.

Each circuit of the Test Set terminates with separate leads, allowing universal connection procedure.

Leads are color coded as follows:

1. Field Rheostat leads terminate in GREEN insulators.
2. Fixed Resistance leads terminate in YELLOW insulators.
3. Voltmeter leads terminate in a RED and a BLACK insulator.
4. Load Control leads terminate in SPADE terminals.
5. Ammeter lead terminates in a NON-POLARIZED PLUG.
(For use with external shunt)

VOLTMETER CIRCUIT

The Voltmeter has three (3) scales. A rotary selector switch is provided to select either the 8 volt range for 6 volt systems, 16 volt range for 12 volt systems, or 32 volt range for 24 volt systems. The Black Insulated Clip is Negative and the Red Insulated Clip is Positive. The Black Clip is attached to Ground on Negative Ground System, and the Red Clip is attached to Ground on Positive Ground System.

AMMETER CIRCUIT

The Ammeter has three (3) scales. The -8 to + 120 amp., top scale, is to be used with the 120 ampere external shunt furnished. The Ammeter lead terminates in a two (2) prong plug which is inserted into the external shunt. (Continued next page)