TM 9-4910-463-10

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S MANUAL

TESTER, ENGINE DISTRIBUTOR, BENCH TYPE, 115-VOLTS, 60-CYCLE, SINGLE-PHASE, FOR TESTING 6, 12, AND 24-VOLT DISTRIBUTORS (ALLEN ELECTRIC AND EQUIPMENT COMPANY MODEL 30-89) (4910-392-2939)

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HEADQUARTERS, DEPARTMENT OF THE ARMY

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OPERATING INSTRUCTIONS
ENGINE DISTRIBUTOR TESTER
FSN: 4910-392-2939
Allen Model No. 30-89

SECTION I

DESCRIPTION

The Distributor Tester (Syncrograph) is designed to allow the serviceman to duplicate "on-the-car" operation fo the distributoer in order to make sure it conforms to specifications after repairs have been made.

It will indicate the Cam Angle, Centrifugal and Vacuum Advance mechanism operation, Synchronization of dual breaker points, engine and distributor RPM and so forth.

The Cam Angle Meter indicates the distributor cam angle on a direct reading scale of 0-60 degrees for 4, 6, and 8 lobe distributors.

The Vacuum Gauge is calibrated from 0 to 25 inches of mercury on 0.1 inch divisions for accurate measurements.

The Tachometer employs two scales (500 and 2500) calibrated in Distributor RPM. Engine RPM and Degree readings for 4 cycle engines are double the distributor RPM and degree readings.

The Protractor Scale is calibrated in 360 Distributor Degrees of rotation.

SECTION II

MOUNTING DISTRIBUTOR

1. Adjust distributor support arm height in relation to distributor shaft length. Place distributor in support arm with drive end of distributor shaft in chuck jaws.

2. Tighten chuck jaws on distributor shaft (or gear) using chuck wrench provided. Align distributor in support arm, then tighten support arm clamp. Turn chuck assembly by hand to make sure alignment of distributor in chuck and support arm is correct. Securely tighten both Chuck and Support Arm Jaws.
   NOTE: Sleeve adapters are furnished for mounting distributors having separate vacuum control units. The correct sleeve adapter should be clamped in the Support Arm, then the distributor placed in the Adapter and secured in the Chuck. An adjustable bracket is attached to the Support Arm for use in holding the separate vacuum units.

SECTION III

DISTRIBUTOR TESTING - Mechanical

1. Plug power cord into AC outlet. 115 Volt 60 cycle ONLY.

2. Connect the Tester "Clip Lead" to distributor primary terminal on