

TM 9-6625-2803-14&P

TECHNICAL MANUAL

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT
AND GENERAL SUPPORT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS LIST**

FOR

**ANALYZER, ELECTRICAL POWER,
AC PORTABLE
MODEL NO. 5173
(A&M INSTRUMENTS, INC.)
(NSN 6625-00-624-4846)**

HEADQUARTERS,

DEPARTMENT

OF

THE

ARMY

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Technical Manual
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DEPARTMENT OF THE ARMY
Washington, DC, 8 February 1982

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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 the procedures, please let us know. Mail your letter, 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, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island, IL 61299. A reply will be furnished direct to you.

NOTE

This manual is published for the purpose of identifying an authorized commercial manual for the use of the personnel to whom this equipment is issued.

Manufactured by: A&M INSTRUMENTS, INC.

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Procured under Contract No. DAAA09-78-B-6617

This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

PRECAUTIONARY NOTES

1. High Voltages produce lethal shocks - BE CAREFUL!
2. Open Circuit Breaker before hooking up Analyzer.
3. Do not change connections or tighten terminals without opening Circuit Breaker. Remove terminal tightening tool before energizing.
4. Set Voltmeter and Power Switches to 500 volts before connecting.
5. Connect load leads to terminals having no less than the expected current rating. When in doubt, connect to the 220A terminals.
6. Use on AC only with voltage less than 600 volts and frequency between 45 and 425Hz.
7. If external CT's are used, secondaries must not be open circuited, or lethal voltages may occur.

ANALYZER, ELECTRICAL POWER
ALTERNATING CURRENT, PORTABLE
NSN 6625-00-624-4846

1.0 GENERAL DESCRIPTION

1.1 The Analyzer is designed for alternating current circuits and should not be used on direct current.

1.2 It consists of a Voltmeter, Ammeter, Watt/Var Meter, and Frequency Meter, and the necessary switches connected to facilitate the industrial testing of three-phase, three and four-wire, as well as single-phase, two and three-wire loads.

1.3 As long as the currents and voltages to be measured are within the ranges of the Analyzer, including the overload limits, it may be left in circuit continuously.

1.4 See Drawing 1462 for ranges, size, etc.

2.0 VOLTMETER

2.1 TYPE - The Voltmeter is the moving iron type having RMS sensing. Transformers with taps are used to obtain the three ranges.

2.2 SCALES AND CONTROLS - The Voltmeter has three full scale voltage readings -- 500, 250 and 125 volts. Two switches are used. These are indicated by the "Select Volts" label. Full scale voltage is selected by the "Set Range" switch. The second switch allows any Line to Line or Line to Neutral (4-wire only) voltage to be selected.