

TM 5-3431-225-15

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR, ORGANIZATIONAL, DIRECT
AND GENERAL SUPPORT AND DEPOT
MAINTENANCE MANUAL

WELDING MACHINE, ARC: GENERAL AND
INERT GAS SHIELDED TRANSFORMER;
300 AMP; 5 TO 460 AMP AC: 5 TO 350
AMP DC (MILLER MODEL 330A/B/SP)
FSN 3431-620-0858



HEADQUARTERS, DEPARTMENT OF THE ARMY

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

a. These instructions are published for the use of the personnel to whom the Miller Model 330A/B/SP Welding Machine is issued. Chapters 1 through 3 provide information on the operation, daily preventive maintenance services, and organizational maintenance of the equipment, accessories, components, and attachments. Chapter 4 provides information for direct and general support and depot maintenance. This manual also provides descriptions of the main units and their functions in relationship to other components.

b. Appendix A contains a list of publications applicable to this manual. Appendix B contains the list of basic issue items authorized for the initial operation. Appendix C contains the maintenance allocation chart. The organizational, direct and general support and depot maintenance repair parts lists are listed in TM-5-3431-225-25P (when published).

c. Numbers in parentheses on illustrations indicate quantity,

d. DA Form 2028 (Recommended Changes to DA Publication) will be used for reporting dis-

crepancies and recommendations for improving this equipment manual. This form will be completed by the individual using the manual and forwarded direct to Commanding General, U.S. Army Mobility Equipment Command, ATTN: AMSME-MPP, 4300 Goodfellow Blvd., St. Louis, Mo. 63120.

e. Report all equipment improvement recommendations as prescribed by TM 38-750 (Army Equipment Record Procedures).

1-2. Record and Report Forms

a. DA Form 2258 (Depreservation Guide for Vehicles and Equipment).

b. DA Form 1397 (Processing and Reprocessing Record for Shipment, Storage, and Issue of Vehicle and Spare Engines).

c. For other record and report forms applicable to the operator and organizational maintenance, refer to TM 38-750.

Note. Applicable forms shall be kept in a canvas bag mounted on the equipment, excluding Standard Form 46 (States Government Motor Vehicles Operator's Identification Card) which is carried by the operator.

Section II. DESCRIPTION AND DATA

1-3. Description

The Miller Model 330A/B/SP AC/DC general and inert gas shielded welding machine (fig. 1-1 and 1-2) is operated from an external power source of either 208, 230 or 460 volt, alternating current, and by single phase or three phase connections. This welder provides an electrically controlled current output for use in either shielded inert gas welding or metallic arc welding. The entire control section is located on a front panel at the top of the welding machine.

1-4. Identification and Tabulated Data

a. *Identification.* The welding machine has two identification plates, which are the Corps of

Engineers' plate, and the manufacturer's identification and data plate. The Corps of Engineers' plate is located on the upper right side of the housing near the front of the welding machine. It specifies the nomenclature, make, model, serial number, and contract number. The manufacturer's identification and data plate is located on the upper front panel. It specifies the nomenclature, manufacturer, model, serial number, secondary rated output amperage, load voltage, duty cycle percent, open circuit voltage, primary input voltage, input amperage, rated kilo-volt amperage, power factor percent, and cycles.