
TECHNICAL MANUAL

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT AND
GENERAL SUPPORT MAINTENANCE MANUAL FOR
COMPRESSOR, RECIPROCATING, AIR:
ELECTRIC MOTOR DRIVEN
5 CFM, 175 PSI
MODEL 20-904
NSN 4310-01-064-2386**

HEADQUARTERS, DEPARTMENT OF THE ARMY

1 JULY 1980

TECHNICAL MANUAL
No. 5-4310-362-14

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D.C., 1 July 1980

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General Support Maintenance Manual for
COMPRESSOR, RECIPROCATING, AIR:
ELECTRIC MOTOR DRIVEN
5CFM, 175 PSI
MODEL 20-904
NSN 4310-01-064-2386
MODEL 20911
NSN 4310-01-125-0934**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake or if you know of any 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, U.S. Army Troop Support & Aviation Materiel Readiness Command, ATTN: DRSTS-MPSD, 4300 Goodfellow Boulevard, St. Louis, MO 63120. A reply will be furnished directly to you.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE

Type of Manual: Operator's, Organizational, Direct Support and General Support Maintenance Model Number and Equipment Name:

20-04	5 cfm, 175 psi
20-911	Electric Motor Driven Air Compressor Unit

Purpose of Equipment: Supplies compressed air for general shop use.

1-2. MAINTENANCE FORMS, RECORDS AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System.

1-2.1. HAND RECEIPT

Hand receipts for Components of End Item (COEI), Basic Issue Items (BII), and Additional Authorization List (AAL) items are published in a Hand Receipt Manual, TM 54310-362-14-HR. This manual is published to aid in property accountability and is available through: Commander, US Army Adjutant General Publication Center, ATTN: AGDL-OD, 1655 Woodson Road, St. Louis, MO 63114.

1-3. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR'S)

If your compressor needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at Commander, US Army Troop Support and Aviation Materiel Readiness Command, ATTN: DRSTS-MPSD, 4300 Goodfellow Blvd., St. Louis, MO 63120. We'll send you a reply.

1-4. WARRANTY INFORMATION

All components of the Air Compressor Unit are warranted by C & H Distributors Inc. for a period of 17 months. The warranty starts on the date found in block 23, DA Form 24089, in the logbook. Report all defects in material or workmanship to your supervisor, who will take appropriate action through your organizational maintenance shop.

Section II. EQUIPMENT DESCRIPTION AND DATA

1-5. PURPOSE, CAPABILITIES AND FEATURES

Purpose of the Air Compressor Set

An electric motor driven air compressor for general shop use.

Capabilities and Features

- 2-stage compressor provides compressed air at 5 cfm and 175 psi.
- Electric motor driven.
- Motor starter with melting alloy relay protects motor against overload.
- Pressure switch provides for automatic compressor cut in at 160 psi and cut out at 180 psi, and automatic unloading for model 20-911.
- Air discharge system with inflator gage can be used to directly inflate tires to proper pressure.
- Tank mounted pressure gage gives constant reading of air pressure in tank.

1-6. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

1. PRESSURE SWITCH. Diaphragm senses pressure and opens and closes switch contacts. Cutout pressure and pressure difference between cut in and cutout are adjustable with 2 screws.
2. MOTOR STARTER. Contacts are magnetically clod when power is applied. Also contains a melting alloy relay which opens the circuit when a current overload is sensed.
3. BELT GUARD. Steel mesh and sheet metal construction protects belts and personnel.

