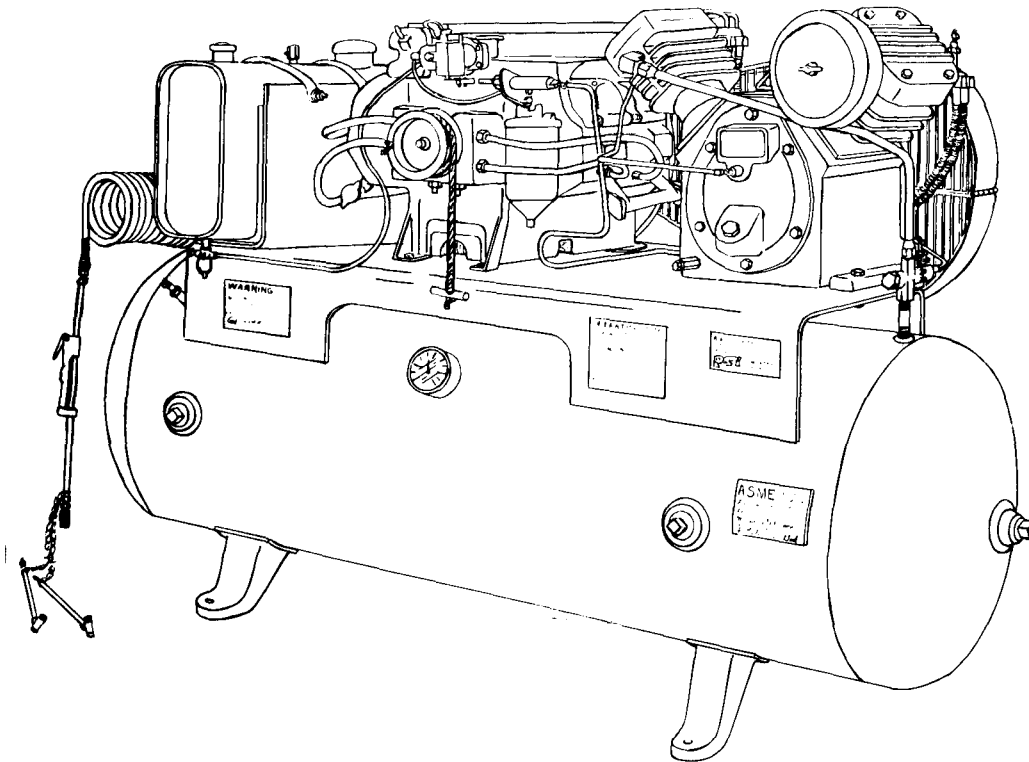


TM 5-4310-372-14

TECHNICAL MANUAL
OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT AND
GENERAL SUPPORT MAINTENANCE MANUAL



INTRODUCTION
PAGE 1-1

OPERATING
INSTRUCTIONS
PAGE 2-1

OPERATOR'S
MAINTENANCE
PAGE 3-1

ORGANIZATIONAL
MAINTENANCE
PAGE 4-1

DIRECT SUPPORT
MAINTENANCE
PAGE 5-1

GENERAL SUPPORT
MAINTENANCE
PAGE 6-1

**COMPRESSOR, RECIPROCATING: AIR,
TANK MOUNTED, GASOLINE
ENGINE DRIVEN, 15 CFM, 175 PSI
(NSN 4310-01-128-1826)**

HEADQUARTERS, DEPARTMENT OF THE ARMY

20 SEPTEMBER 1983

TECHNICAL MANUAL
NO. 5-4310-372-14

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D. C., 20 September 1983

**OPERATOR’S, ORGANIZATIONAL, DIRECT SUPPORT AND
GENERAL SUPPORT MAINTENANCE MANUAL
COMPRESSOR, RECIPROCATING: AIR,
TANK MOUNTED, GASOLINE ENGINE DRIVEN, 15 CFM, 175 PSI
NSN 4310-01-128-1826**

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 Aviation and Troop Command, ATTN: AMSAT-I-MTS, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished directly to you.

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

TABLE OF CONTENTS

	Page
CHAPTER 1. INTRODUCTION	
Section I. General	1-1
Section II. Equipment Description	1-3
Section III. Technical Principles of Operation	1-6
CHAPTER 2. OPERATING INSTRUCTIONS	
Section I. Description and Use of Operator’s Controls and Indicators	2-1
Section II. Preventive Maintenance Checks and Services (PMCS)	2-4
Section III. Operation Under Usual Conditions	2-11
Section IV. Operation Under Unusual Conditions	2-16

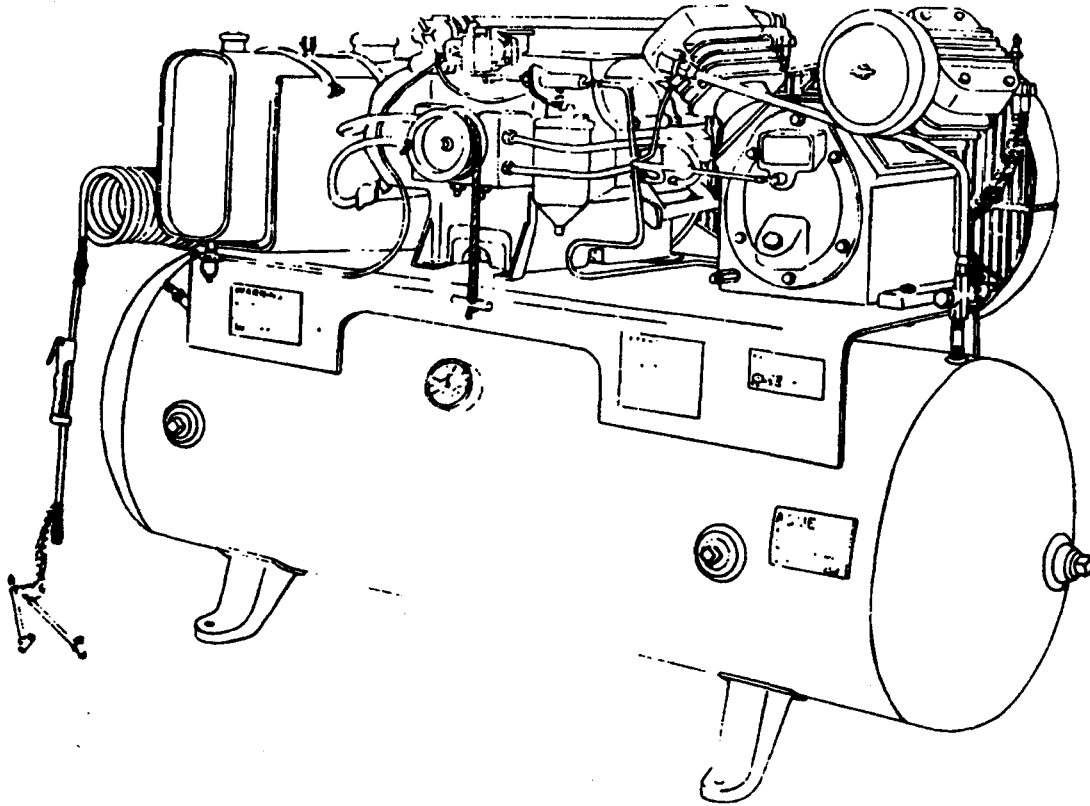
TABLE OF CONTENTS - continued

		Page
CHAPTER	3. OPERATOR'S MAINTENANCE INSTRUCTIONS	
Section I.	Lubrication Instructions	3-1
Section II.	Troubleshooting	3-5
Section III.	Maintenance Procedures	3-10
CHAPTER	4. ORGANIZATIONAL MAINTENANCE INSTRUCTIONS	
Section I.	Repair Parts, Special Tools, and Equipment	4-1
Section II.	Service Upon Receipt	4-1
Section III.	Preventive Maintenance Checks and Services (PMCS)	4-5
Section IV.	Troubleshooting	4-7
Section V.	Compressor Drive Maintenance	4-13
Section VI.	Fuel System Maintenance	4-19
Section VII.	Capacity Control System Maintenance	4-26
Section VIII.	inlet Air Filter, Cylinder Head, and Valve Maintenance	4-34
Section IX.	Air Receiver Tank and Air Discharge System Maintenance	4-45
Section X.	Engine Maintenance	4-52
CHAPTER	5. DIRECT SUPPORT MAINTENANCE INSTRUCTIONS	
Section I.	Repair Parts, Special Tools, and Support Equipment	5-1
Section II.	General Maintenance	5-2
CHAPTER	6. GENERAL SUPPORT MAINTENANCE INSTRUCTIONS	
Section I.	Repair of Pneumatic Equipment	6-1
Section II.	Engine	6-1
APPENDIX	A. REFERENCES	A-1
	B. COMPONENTS OF END ITEM LIST	B-1
	c. MAINTENANCE ALLOCATION LIST	C-1
	D. ADDITIONAL AUTHORIZATION LIST	D-1
	E. EXPENDABLE SUPPLIES AND MATERIALS LIST	E-1

CHAPTER 1

INTRODUCTION

Section I. GENERAL



1-1. Scope. This manual is for your use in operating and maintaining the MODEL C-20X-80/6E Reciprocating Air Compressor. Chapters 2 and 3 provide information on operation, preventive maintenance services, and operator's maintenance of equipment, accessories, components and attachments. Chapters 4 through 6 provide maintenance information for the organizational, direct support and general support levels. Maintenance for each major functional group is covered in a separate chapter. Also included are descriptions of main units and their functions in relationship to other components.

1-2. MAINTENANCE FORMS AND RECORDS. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 736-750, The Army Maintenance Management System (TAMMS).

1-3. **HAND RECEIPT (-HR) MANUALS.** This manual has a companion document with a TM number followed by “-HR” (which stands for Hand Receipt). The TM 5-4310-372-14-HR consists of preprinted hand receipts (DA Form 2062) that list end item related equipment (i.e., COEI, BII, and AAL) you must account for. As an aid to property accountability, additional -HR manuals maybe requisitioned from the following source in accordance with procedures in Chapter 3, AR 310-2:

The US Army Publications Center
2800 Eastern Blvd.
Baltimore, MD 21220

1-4. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR'S). If your Air Compressor needs improvement, let us know. Send us an EIR, You, the user, are the only one who can tell us why you don't like the design , or performance. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at the address below. We'll send you a reply.

U.S. Army Aviation and Troop Command
ATTN: AMSAT-I-MDO
4300 Goodfellow Blvd.
St. Louis, MO 63120-1798

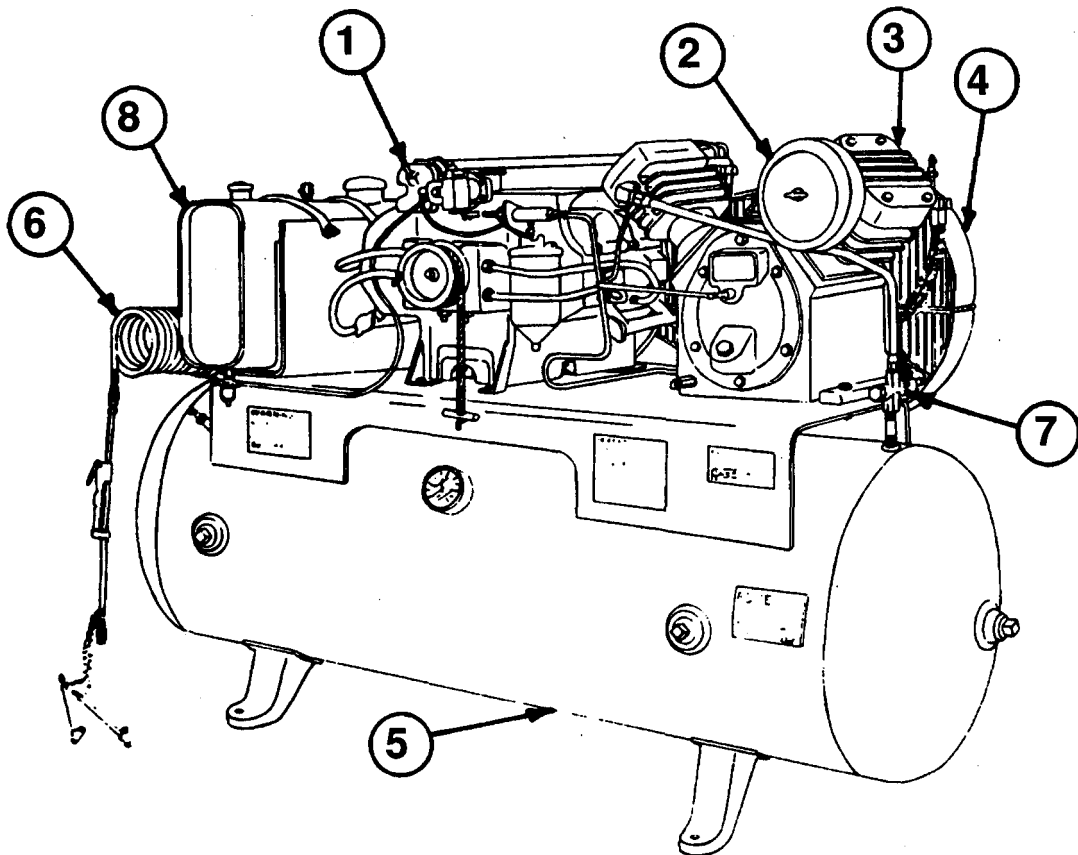
Section II. EQUIPMENT DESCRIPTION

1-5. PURPOSE OF THE AIR COMPRESSOR. A gas engine driven, tank mounted air compressor for inflating tires and running pneumatic equipment in the field.

1-6. CAPABILITIES AND FEATURES.

- Delivers 15 cfm of air at 175 psi
- Tank mounted
- Gasoline engine driven
- Includes air hose and inflator gauge

1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.



ENGINE (1). Four cylinder, 4 cycle, air cooled, 6 HP gasoline engine. Refer to TM 9-2805-262-14 for detailed description. ■

AIR CLEANER (2). Dry type. Filter element may be removed and replaced.

COMPRESSOR (3). Two-stage design, 15 cfm, 175 psi output.

COMPRESSOR DRIVE AND BELT GUARD (4). Two matched V-belts transmit power. Belt guard protects operator as well as pulley and flywheel.