

TM 5-4310-256-15

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR, ORGANIZATIONAL, DS, GS AND DEPOT MAINTENANCE
MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOL LISTS

**COMPRESSOR, RECIPROCATING,
AIR, HAND TRUCK MOUNTED, GASOLINE ENGINE,
8 CFM, 175 PSI**

(CHAMPION PNEUMATIC MODEL LP-832-ENG-2)

FSN 4310-788-8969

**5 CFM, 175 PSI. (CHAMPION PNEUMATIC
MODEL LP-512-ENG-2) FSN 4310-733-2210**

This copy is a reprint which includes current
pages from Change 1 through 7.

HEADQUARTERS, DEPARTMENT OF THE ARMY
MAY 1966

TECHNICAL MANUAL }
No. 5--4310-256-15 }

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 4 May 1966

**OPERATOR, ORGANIZATIONAL, DS, GS, AND DEPOT
MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOL LISTS:**

COMPRESSOR, RECIPROCATING: **AIR HAND TRUCK MOUNTED GASOLINE
ENGINE 8 CFM, 175 PSI.** (CHAMPION PNEUMATIC MODEL LP-832-ENG-2)

FSN 4310-788-8969

5 CFM, 175 PSI. (CHAMPION PNEUMATIC MODEL LP-512-ENG-2)

FSN 4310-733-2210

	Paragraph	Page
CHAPTER 1. INTRODUCTION		
Section I. General	1, 2	2
II. Description and data	3-5	2
CHAPTER 2. INSTALLATION AND OPERATION INSTRUCTIONS		
Section I. Service upon receipt of equipment	6-10	8
II. Movement to a new worksite	11, 12	9
III. Controls and instruments	13, 14	9
IV. Operation of equipment	15-24	10
V. Operation of materiel used in conjunction with the equipment	26-28	14
CHAPTER 3. OPERATOR AND ORGANIZATIONAL MAINTENANCE INSTRUCTIONS		
Section I. Operator and organisational maintenance tools and equipment	29-31	16
II. Lubrication	32, 33	16
III. Preventive maintenance services	34-36	19
IV. Operator's maintenance	37-41	24
V. Troubleshooting	42-52	24
VI. Radio interference suppression	53-55	25
VII. Gasoline engine and accessories	56-63	25
VIII. Compressor assembly and components	64-74	28
IX. Controls and instruments	75-79	37
X. Wheels and tires	80, 81	38
CHAPTER 4. DIRECT AND GENERAL SUPPORT AND DEPOT MAINTENANCE INSTRUCTIONS		
Section I. General	82, 83	39
II. Description and data	84, 85	39
CHAPTER 5. GENERAL MAINTENANCE INSTRUCTIONS		
Section I. Special tools and equipment	86-88	41
II. Troubleshooting	89-91	41
CHAPTER 6. COMPRESSOR REPAIR INSTRUCTIONS	92-94	42
APPENDIX I. REFERENCES		
II. BASIC ISSUE ITEMS LIST AND MAINTENANCE AND OPERATING SUPPLIES		
III. MAINTENANCE ALLOCATION CHART		
IV. REPAIR PARTS LIST		

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

a. These instructions are published for the use of the personnel to whom air compressor is issued. Chapters 1 through 3 provide information on the operation, preventive maintenance services, and organizational maintenance of the equipment, accessories, components, and attachments. Chapters 4 through 6 provide information for direct and general support and depot maintenance. Also included are descriptions of main units and their functions in relationship to other components.

b. Appendix I contains a list of publications applicable to this manual. Appendix II contains the list of Basic Issue Items authorized the operator of this equipment and the list of Maintenance and Operating Supplies required for initial operation. Appendix III contains the Maintenance Allocation Chart. The Organizational, Direct and General Support, and Depot Maintenance Repair Parts and Special Tools are listed in Appendix IV.

c. Numbers in parentheses on illustrations indicate quantity. Numbers preceding nomenclature callouts on illustrations indicate the preferred maintenance sequence.

d. The direct reporting by the individual user, of errors, omissions, and recommendations for improving this manual is authorized and encouraged. DA Form 2028 (Recommended Changes to DA Publications) will be used for reporting these improvements. This form will be completed using pencil, pen, or typewriter and forwarded direct to Commanding General, U. S. Army Mobility Equipment Center, ATTN: SMOME-MPD, 4300 Goodfellow Blvd., St. Louis, Mo. 63120.

e. Report all equipment improvement recommendations as prescribed by TM 38-750.

2. Record and Report Forms

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

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

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

Section II. DESCRIPTION AND DATA

3. Description

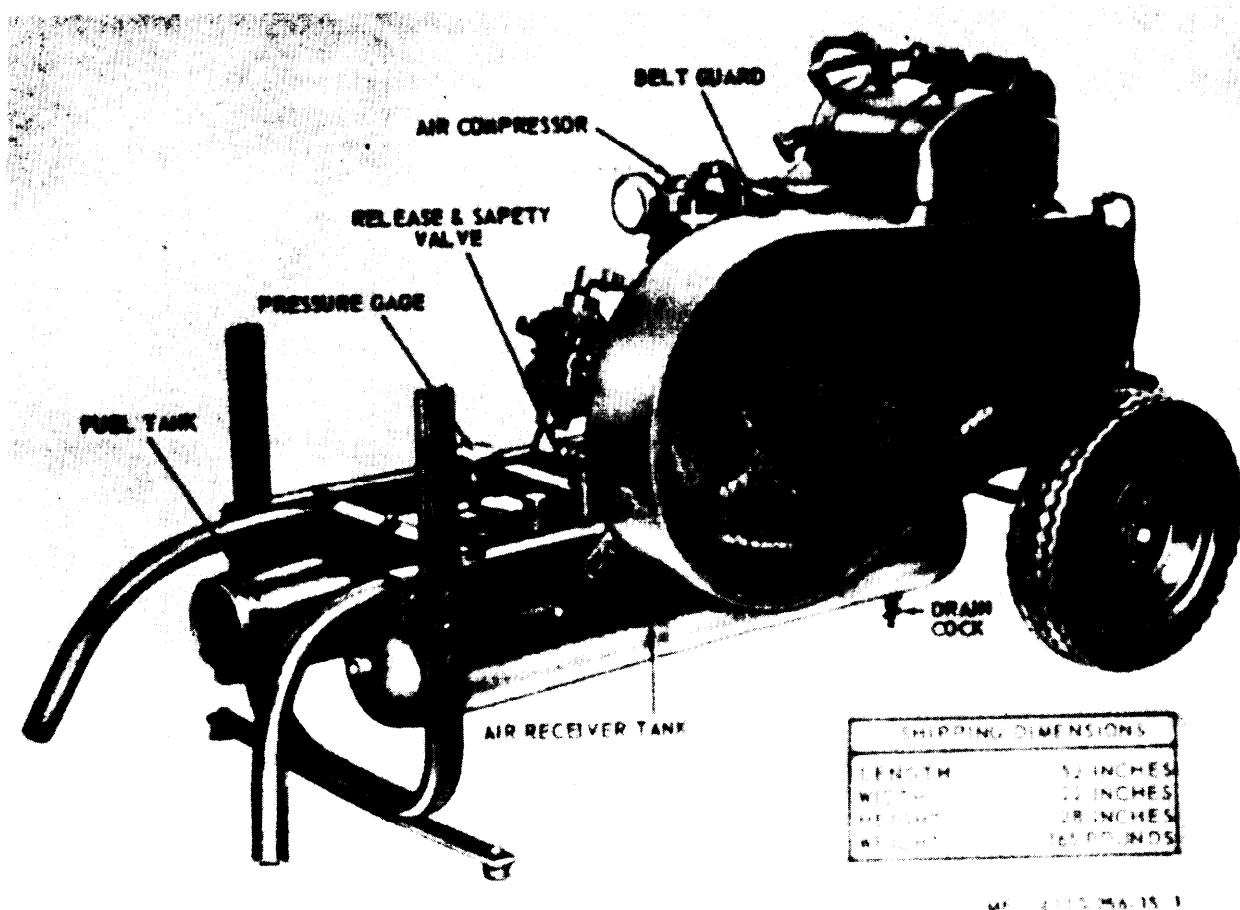
a. *General.* The Champion air compressor Model LP-832-ENG-2 (figs. 1 ① and 2 ①) is designed to deliver 8 CFM (cubic feet per minute) of air compressed to 175 psi (pounds per square inch) pressure to the air receiver tank at 710 rpm (revolutions per minute). The Champion air compressor Model LP-512-ENG-2 (figs. 1 ① and 2 ②) is designed to deliver 5 CFM of air compressed to 175 psi pressure to the air receiver tank at 710 rpm. Both models are gasoline engine driven, hand truck mounted, and constructed of steel materials.

b. *Engine.* Air Compressor Model LP-832-ENG-2 is driven by a Military Standard Model 2A06-III, 3 hp (horsepower) engine and Air Compressor Model LP-512-ENG-2 is driven by a Military Standard Model 1A08-III, 1.5 hp engine.

4. Identification and Tabulated Data

a. *Identification.* The air compressor has two major identification plates. The information contained on these plates is listed below.

- (1) Corps of Engineers plate. The Corps of Engineers plate specifies the name of the



1 Model LP-832-ENG-2

Figure 1. Air compressor, right rear, three-quarter view with shipping instructions.

manufacturer, make, model, number, date of manufacture, serial number and the Federal Stock Number of the air compressor. The plate is mounted on the left rear of the hand truck.

- (2) *Air compressor plate.* The air compressor plate specifies the name of the manufacturer, the model, and the serial number of the compressor. The plate is mounted on the governor housing of the compressor.

b. *Tabulated Data.* Data is the same for both models unless otherwise indicated.

(1) *Compressor Assembly*

(a) Model LP-832-ENG-2

Manufacturer Champion Pneumatic Machinery Co.
Model LP-832-ENG-2

output 8 CFM at 175 psi
Type Hand truck mounted, engine driven

Serial
Numbers 4534 through 4757

(b) Model LP-512-ENG-2

Manufacturer Champion Pneumatic Machinery Co.

Model LP-512-ENG-2
output 5 CFM at 175 psi
Type Hand truck mounted, engine driven

Serial
Numbers 1 through 4533

(2) *Compressor*

Manufacturer Champion Pneumatic Machinery Co.
Model CAW