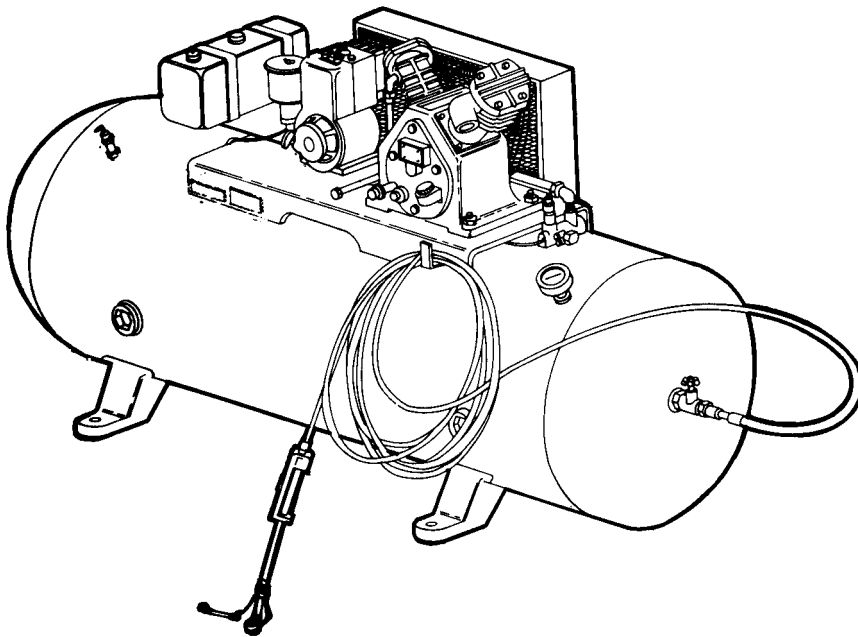


TM 5-4310-376-14

TECHNICAL MANUAL

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



COMPRESSOR, RECIPROCATING,
GASOLINE ENGINE DRIVEN,
15 CFM, 175 PSI, MODEL 50-6840
(NSN 4310-01-164-5544)

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HEADQUARTERS, DEPARTMENT OF THE ARMY

12 JULY 1985

TECHNICAL MANUAL
No. 5-4310-376-14

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 12 July 1985

Operator's, Organizational, Direct Support
and General Support Maintenance Manual
COMPRESSOR, RECIPROCATING, GASOLINE
ENGINE DRIVEN, 15 CFM, 175 PSI, MODEL 50-6840
(NSN 4310-01-164-5544)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual, If you find any mistake 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, U.S. Army Troop Support Command, ATTN: AMSTR-MCTS, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. 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 Manual.
MODEL NUMBER AND EQUIPMENT NAME:	Compressor, Reciprocating, Gasoline Engine Driven, 15 CFM, 175 PSI, Model 50-6840.
PURPOSE OF EQUIPMENT:	Stationary compressor used as a source of compressed air in normal operations at motor pools and vehicle maintenance shops.

1-2. MAINTENANCE FORMS AND RECORDS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-750, The Army Maintenance Management System (TAMMS).

1-3. DELETED.

1-4. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Destruction of Army materiel to prevent enemy use is described in TM 750-244-3.

1-5. PREPARATION FOR STORAGE OR SHIPMENT

Preparation will be performed in accordance with Chapter 4, Section VI of this manual.

1-6. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

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

1-6. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS - Continued

like the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at Commander, US Army Troop Support Command, ATTN: AMSTR-QX, 4300 Goodfellow Boulevard, St. Louis, MO) 63120-1798. A reply will be furnished to you.

1-7. NOMENCLATURE CROSS-REFERENCE LIST

Official nomenclature must be used when filling out report forms or looking up technical manuals.

<u>Common Name</u>	<u>Official Nomenclature</u>
Compressor	Compressor, Reciprocating, Gasoline Engine Driven 15 CFM, 175 PSI
Engine	Engine, Gasoline

Section II EQUIPMENT DESCRIPTION

1-8. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

Purpose of Compressor

Used as a source of compressed air in the normal operations conducted at motor pools or vehicle maintenance shops.

Capabilities and Features

Continuous operation at a rated capacity of 15 cubic feet per minute (CFM) at a discharge pressure of 175 pound-force per square inch (PSI). Automatically regulated.

1-9. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

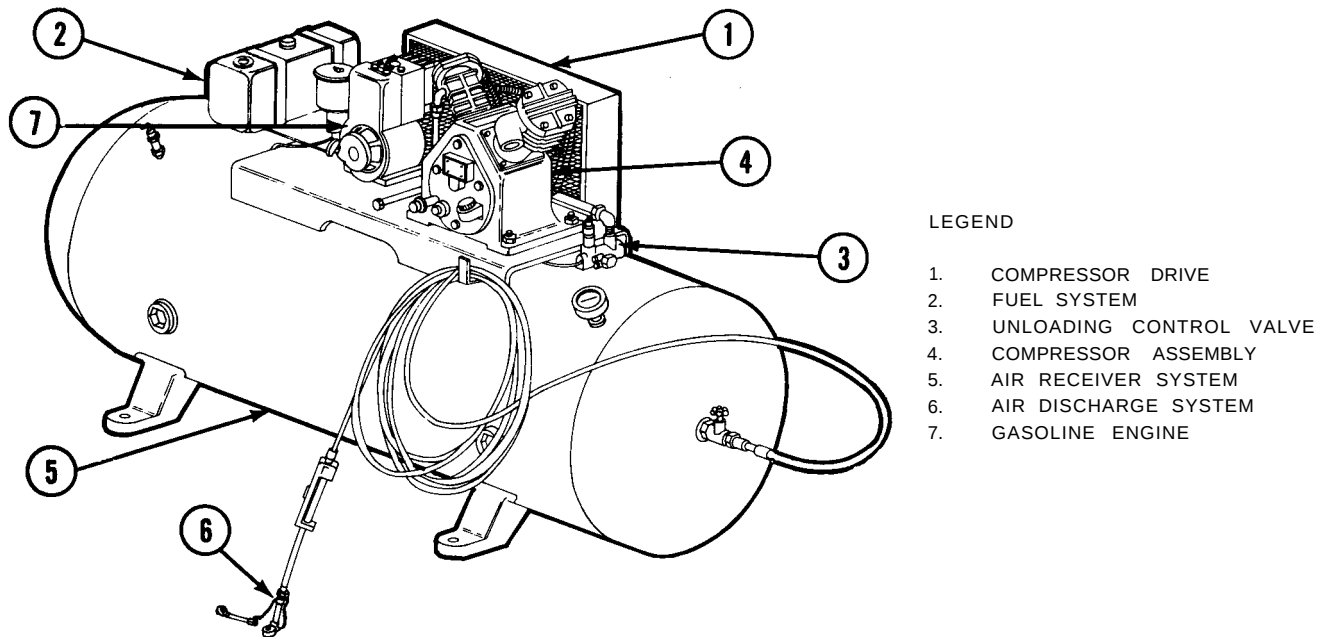
COMPRESSOR DRIVE (1). Matched V-belts and a grooved pulley on the gasoline engine. A belt guard assembly totally encloses front, back, top and sides, for protection of personnel.

FUEL SYSTEM (2). Consists of a fuel tank equipped with a fuel level indicator and a fuel shutoff valve. Provides up to four hours of continuous operation.

UNLOADING CONTROL VALVE (3). Prevents air in receiver tank from flowing back into the compressor. It also vents air into atmosphere when rated pressure is reached and provides engine throttle control (manual and automatic unloading).

COMPRESSOR ASSEMBLY (4). A 2-cylinder, 2-stage, air-cooled, reciprocating type compressor.

AIR RECEIVER SYSTEM (5). Consists of an 80 gallon air tank, with a safety valve to provide overloading protection and a drain cock to provide condensation drain. Has a rated working pressure of 200 psi at -25°F (-31.7°C) to 120°F (49°C).

1-9. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued

AIR DISCHARGE SYSTEM (6). Globe valve and air hose assembly with inflator gage for simultaneous reading and use of pressurized air.

GASOLINE ENGINE (7). A single cylinder, 4 cycle, L-head, air-cooled, gasoline-driven engine. Manually started.

1-10. DIFFERENCES BETWEEN MODELS

Model 50-6840 is the only model compressor covered in this manual.

1-11. EQUIPMENT DATA**WEIGHTS AND DIMENSIONS**

Weight	408 lbs (185 kg)
Length	63 inches (160 cm)
Width	22 inches (59 cm)
Height	45 inches (114 cm)

PERFORMANCEGasoline Engine

Displacement	22 cu. in. (362 cc)
Bore	3.4 in. (87.3 mm)
Stroke	2.4 in. (60.3 mm)
Horsepower	10 max. @ 3600 RPM
Speed Set-No Load	2800 RPM
Fuel consumption	0.78 Gallons per hour