

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

TECHNICAL MANUAL

OPERATOR, ORGANIZATIONAL, DIRECT SUPPORT

AND GENERAL SUPPORT MAINTENANCE MANUAL

C O M P R E S S O R ,

RECIPROCATING AIR,

15 CFM, 175 PSI, TANK MOUNTED, GED,

(CHAMPION PNEUMATIC MODEL HGR5-8M-1)

NSN 4310-00-880-0186

C O M P R E S S O R , R E C I P R O C A T I N G A I R ,

15 CFM, 175 PSI, TRAILER MOUNTED, GED,

(CHAMPION PNEUMATIC MODEL BGR-5M-1)

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

**COMPRESSOR, RECIPROCATING AIR,
15 CFM, 175 PSI, TANK MOUNTED, GED,
(CHAMPION PNEUMATIC MODEL HGR5-8M-1)**

AND

(CHAMPION PNEUMATIC MODEL HGR5-8M-6)

NSN 4310-004880-0186

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15 CFM, 175 PSI, TRAILER MOUNTED, GED,
(CHAMPION PNEUMATIC MODEL BGR-5M-1)**

NSN 4310-00-852-1745

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

This manual is for your use in operating and maintaining the reciprocating air compressor; Champion Pneumatic Machinery Company Models BGR-5M-1 and HGR5-8M-1.

1-2. Maintenance Forms and Records

Maintenance forms and records that you are required to use are as follows:

- a. DA Form 2404 (Equipment Inspection and Maintenance Worksheet).
- b. DA Form 2407 (Maintenance Request Used for Requesting Support Maintenance).
- c. DA Form 2407-1 (Continuation Sheet Used for Requesting Support Maintenance).
- d. For further information, refer to DA PAM 738-750. The Army Maintenance Management System (TAMMS).

1-3. Equipment Serviceability Criteria (ESC)

This equipment is not covered by an ESC.

1-4. Destruction of Army Materiel to Prevent Enemy Use

Refer to the below listed instructions on the destruction of the reciprocating air compressors to prevent enemy use and to TM 750-244-3.

a. General. When capture or abandonment of the air compressor to an enemy is imminent, the responsible unit commander must make the decision either to destroy the equipment or render it inoperative. Based on this decision, orders are issued which cover the desired extent of destruction. Whatever method of demolition is employed, it is essential to destroy the same vital parts of all the air compressors' and all corresponding repair parts.

b. Demolition to Render the Equipment Inoperative. Use sledge hammers, crowbars, pick, axes, or other heavy tools to damage the engine, air cleaner, hose gage, cylinder block, air tubing, inter-cooler and aftercooler manifolds, drive belts, and valves.

c. Demolition by Explosives or Weapons Fire.

(1) Explosives. Place the following charges and detonate them simultaneously with a detonating cord and suitable detonator.

(a) Two 1/2-pound (0.225 kg) charges on compressor crankcase.

(b) One 1/2-pound charge between engine block and air intake pipe.

(c) One 1/2-pound charge on engine block assembly.

(d) One 1/2-pound charge beneath compressor and engine platform (Model BGR-5M-1).

(e) One 1/2-pound charge beneath air tank (Model BGR-5M-1).

(f) One 1/2-pound charge beneath receiver tank mounting platform (Model HGR5-8M-1 and HGR5-8M-6).

(2) Weapons fire. Fire on the air compressor with the heaviest practicable weapons available.

d. Other Demolition Methods.

(1) Scattering and concealment. Remove all easily accessible parts such as air cleaners, air hose assembly, draincock, globe valve, and safety valves. Scatter them in foliage, bury them in dirt or sand, or throw them in a lake, stream, well, or other body of water.

(2) Burning. Pack rags, clothing or canvas around the air compressor. Pour gasoline, oil, or diesel fuel over this material and ignite.

(3) Submersion. Totally submerge the air compressor in a body of water to provide water damage and concealment. Salt water will do greater damage than fresh water.

1-5. Administrative Storage

a. Placement of equipment in Administrative Storage should be for short periods of time when a shortage of maintenance effort exists. Items should be in mission readiness within 24 hours or within the time factors as determined by the directing authority. During the storage period, appropriate maintenance records will be kept.

b. Before placing equipment in Administrative Storage, current maintenance services and equipment serviceable criteria (ESC) evaluations should be completed, shortcomings and deficiencies should be corrected and all modification work orders (MWOs) should be applied.

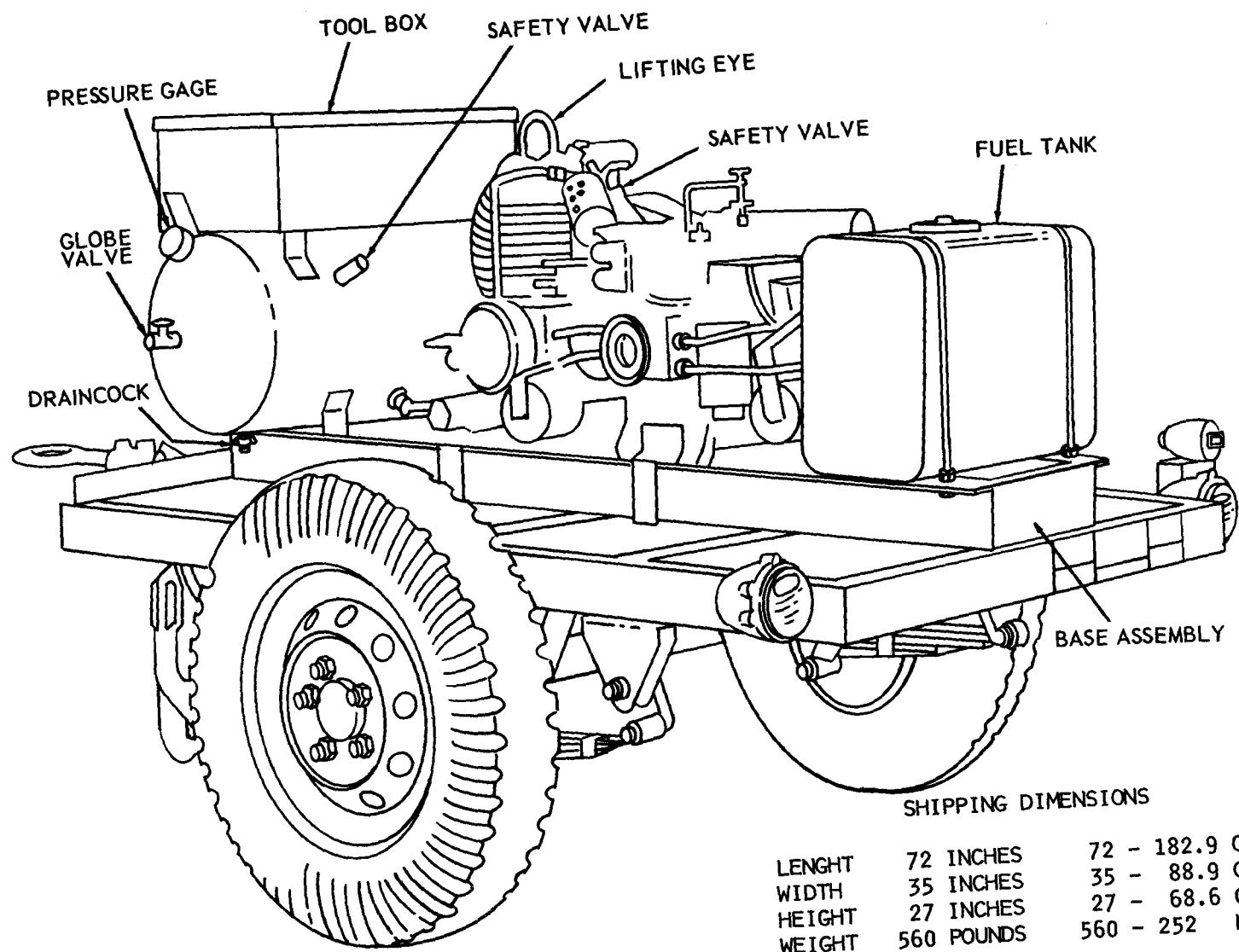
c. Storage site selection. Inside storage is preferred for items selected for Administrative Storage. If inside storage is not available, trucks, vans, conex containers and other containers may be used.

Section II. DESCRIPTION AND DATA

1-6. Description

a. General. The Model BGR-5M-1 air compressor consists of a reciprocating type compressor, gasoline engine, fuel tank, and air receiver assembly which are all attached to

a base. The base is mounted to a trailer (figs. 1-1, 1-2, and 1-3). Model HGR5-8M-1 and HGR5-8M-6 are similar, except that the compressor engine and fuel tank are attached to a platform welded to a free standing horizontal air receiver tank (figs. 1-4, 1-4.1, 1-5, 1-5.1, and 1-6).



TS 023926

Figure 1-1. Air compressor model BGR-5M-1, left rear, three quarter view with shipping dimensions.