TM 9-4940-452-14&P

TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT AND
GENERAL SUPPORT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS LIST

F O R

SPRAY GUN, PAINT
MODEL 9700-A
(METALCRAFT, INC.)
(NSN 4940-00-261-8413)

HEADQUARTERS, DEPARTMENT OF THE ARMY

APRIL 1980

Technical Manual
NO. 9-4940-452-14&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, *28 April 1980*

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL INCLUDING REPAIR PARTS LIST FOR SPRAY GUN, PAINT MODEL 9700-A (METALCRAFT, INC.) (NSN 4940-00-261-8413)

REPORTING OF ERRORS

You can help improve this manual. If you find any mistakes or 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 Armament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock IsIand, IL 61299. A reply will be furnished direct to you.

NOTE

This manual is published for the purpose of identifying an authorized commercial manual for the use of the personnel to whom this spray gun is issued.

Manufactured by: Metalcraft, Inc.
718 Debelius Avenue
Baltimore, Maryland 21205

Procured under Contract No: DAAA09-77-C-6242

This technical manual is an authentication of the manufacturer's commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

INSTRUCTIONS FOR REQUISITIONING PARTS

NOT IDENTIFIED BY NSN

When requisitioning parts not identified by National Stock Number, it is mandatory that the following information be furnished the supply officer.

1 - Manufacturer's Federal Supply Code Number - 06535

2 - Manufacturer's Part Number exactly as listed herein.

3 - Nomenclature exactly as listed herein, including dimensions, if necessary.

4 - Manufacturer's Model Number - Model 9700-A

5 - Manufacturer's Serial Number (End Item)

6 - Any other information such as Type, Frame Number, and Electrical Characteristics, if applicable.

7 - If DD Form 1348 is used, fillin all blocks except 4,5,6, and Remarks field in accordance with AR 725-50.

Complete Form as Follows:

(a) In blocks 4, 5, 6, list manufacturer's Federal Supply Code Number - 06535 followed by a colon and manufacturer's Part Number for the repair part.

(b) Complete Remarks field as follows:

Noun: (nomenclature of repair part) SPRAY GUN, PAINT
For: NSN: 4940-00-261-8413
Manufacturer: Metalcraft, Inc.

Model: 9700-A
Serial: (of end item) N/A

Any other pertinent information such as Frame Number, Type, Dimensions, etc.

OPERATING AND MAINTENANCE INSTRUCTIONS
PRODUCTION HEAVY DUTY SPRAY GUN

MODEL – B–9700–A----------FSN: 4940–261–8413

DESCRIPTION

Model B–9700–A is a Pressure–Feed Pressure-Feed Spray Gun, designed for use with 2-60 Gallon capacity Pressure Feed Tanks and Pressure Cups.

Model No.	TYPE	NSN	AIR CONSUMPTION	SPECIFICATION AND TYPE
B–9700–A	Pressure Feed	4940-00-261-8413	7-8CFM @ 50-60PSIG	MIL–S–12877E Type I

Service Replacement parts are shown on Page 5

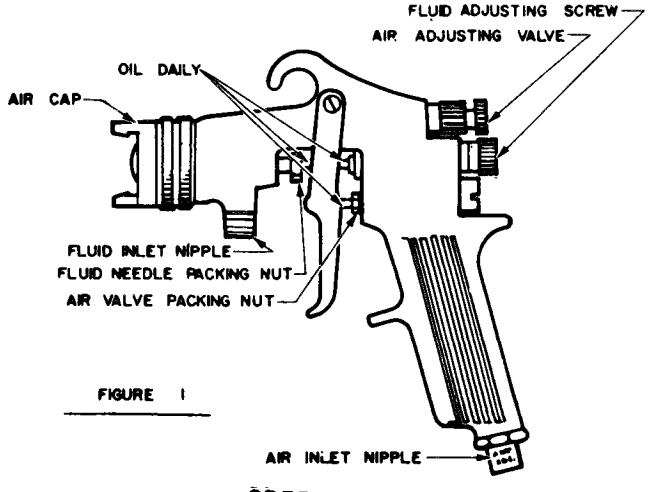

FIGURE 1

OPERATIONS

CONNECTIONS:

When used with a Siphon Feed Cup, attach the gun to the Fluid Inlet Nipple and connect the Air Hose to the Air Inlet Nipple (see Fig. 1). When used with a Pressure Feed Tank, Air Hose and Fluid Hose both are required to connect the Spray Gun to the Tank. The Fluid Hose is Black, the Air Hose is Red. Attach one end of the Fluid Hose to the Fluid Outlet on the Pressure Tank and the other end of the Fluid Hose to the Fluid Inlet Nipple on the Spray Gun. Attach one end of the Air Hose to the Air Outlet Valve on the Pressure Tank and connect the other end of the Air Hose to the Air Inlet Nipple of the Spray Gun (Fig. 1).

Note: It is recommended Air Hose of not less that 5/16 I.D. and Fluid Hose of not less than 3/8 I.D. be used. Never use too small of Air Hose as this will starve the Spray Gun due to the excessive Pressure Drop in the Atomizing Air Pressure.

OPERATIONS

GENERAL:

The first step of Spray Gun operation is the adjustment of the Spray for uniformity over the desired width, too much Air Pressure, i. e., too much atomizing Air Pressure at the Nozzle for the particular material being used will thin out the center of the spray pattern. It will cause excessive atomization or vapor about the main body of the spray. This condition can be controlled by lowering either Air Pressure at the Air Separator or adjusting the Regulator on top of the Pressure Tank or by properly setting the Air Adjustment Valve. An insufficient Air Pressure, i.e., too little air pressure at the Spray Gun Nozzle for the particular material to be used causes a spatter effect, the material covering the surfaces in small beads, drops or dots. This condition is controlled by increasing the Air Pressure at the Air Separator or at the Pressure Tank.

The width of the Spray is controlled by the Air Adjustment Valve (Fig. 1). Turn the Air Adjustment Valve clockwise to decrease the spray, counter clockwise to increase the spray. To produce a round spray pattern or spot, close the Air Adjustment Valve.

The amount of material flow is controlled by the fluid Adjustment Screw (Fig. 1). Turn Adjusting Screw to the right to decrease the amount of Fluid flow and to the left to increase it.

With certain materials, too wide a spray adjustment will cause the spray pattern to split, i.e., the pattern becomes thin in the center and heavy at the ends, when this occurs, reduce the width of the spray.

Excessive material flow for the speed of stroke will cause runs or sags on the surface. Regulate the fluid flow to your speed of stroke.

The atomizing air pressure passing into the Spray Gun Nozzle is regulated to meet varying conditions of size of Gun Nozzle, weight or viscosity of paint, the material of the surfaces to be sprayed and the desired speed of gun operation. The atomization pressure will range from 20 to 80 pounds. Although for average materials and conditions, pressure from 40 to 60 pounds will be most satisfactory. Always use the lowest pressure that will give the desired results. A little experience will teach the Operator the most satisfactory pressures for the materials used.

Materials should be stirred thoroughly and reduced according to manufacturer's instructions; then strained into material container through cheese cloth or wire screen of such mesh or gauge as to remove all lumps, skins, etc. The straining of all material before introduction into the material container is of utmost importance, as it will prevent the consequent obstruction of spray gun passages.

A short practice period, using a cardboard, wood or metal surface is recommended so as to become familiar with the adjustments and operation of the spray gun. Do not attempt to operate the spray gun too rapidly at first. Learn to adjust and handle it and speed will follow.

The stroke is made with a free arm motion, keeping the gun body perpendicular to, and from an equal distance from the surface at all points of the stroke. Keep the gun 6 to 8 inches from the surface to be sprayed and move it across the surface with steady, even strokes.