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AN 03-45B-1

Operation, Service and Overhaul Instructions with Parts Catalog

For

FIRE EXTINGUISHER

TYPE A-2

This publication replaces T. O. No. 03-45B-1 dated 1 August 1935

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TABLE OF CONTENTS

Figure 1—Type A2 Fire Extinguisher, Model 83

Figure 2—Type A2 Fire Extinguisher, Model 84

SECTION I
INTRODUCTION

This Handbook of Instructions with Parts Catalog contains Descriptive Data, and Operation, Service, and Overhaul Instructions covering the Type A2 Fire Extinguisher, Models 83 and 84, manufactured by the Fyr-Fyter Company, Dayton, Ohio.

SECTION II
DESCRIPTION

1. GENERAL DESCRIPTION.

a. The type A2 fire extinguisher is a 1 quart hand-operated type which expels the extinguisher fluid by air pressure. Pressure to discharge the fluid is obtained by means of a hand-operated air pump forming an integral part of the extinguisher.

b. The extinguisher uses, as the extinguishing medium, fire extinguishing liquid, Federal Specification No. O-F-380. This is a carbon tetrachloride base liquid. The fire extinguishing liquid is a nonconductor of electricity and may be employed safely on fires where electric current is involved.

c. The type A2 fire extinguisher is constructed largely of brass. It is 13½ inches in height, 3 inches in diameter, and weighs 6 pounds and 3 ounces when fully charged. It is so constructed that dents will not hamper its operation. The effective range of the extinguisher is from 20 to 30 feet and is not altered by low temperatures.

2. DETAILED DESCRIPTION.

(See figure 3.)

a. SHELL.

(1) The extinguisher shell (3) is a brass cylinder into which are permanently assembled the discharge nozzle (1), discharge tube (2), air tube (4), bypass tube (17), and pump barrel assembly. Permanently affixed to the extinguisher shell (3) is the head assembly (27) which contains an opening for the filler cap (26) and plunger rod (15) and the housings for the shut-off valve assembly and check valve assembly.

(2) The pump barrel assembly, housed in the extinguisher shell (3), consists of a gravity box (32) with two gravity valves (31 and 35) joined by a sliding sled (33). The positions of the gravity valves is changed by the lead ball (34) which rolls freely within the gravity box. When the ball strikes one of the gravity valves, the valve automatically opens as the other gravity valve closes. A flexible tube (30 and 36), with lead finder (29 and 37), is attached to each end of the gravity box. The flexible tubes carry the extinguisher fluid into the gravity box, where it is metered into the shut-off valve by the bypass tube (17) and carried out of the extinguisher by the discharge tube (2).

b. PUMP PISTON ROD ASSEMBLY.

(1) The plunger rod (15) fits into the pump barrel (16) which is permanently positioned in the extinguisher shell (3). The handle (24) is attached to the upper end of the rod by means of the handle pin.

(2) The pump plunger assembly, consisting of the pump leather (10), piston plunger (7), plunger spring (8), washer (11), and lock nut (12), are held at the bottom of the plunger rod (15), by the plunger nut (6). The seal spring (9) fits inside the plunger rod (15) and bears against the plunger seal pin (5) which fits inside the plunger nut (6). The pump plunger assembly acts as a slidable carrier for the pump leather (10) and a valve which lets air through the four splines of the piston plunger (7) and then into the pump barrel (16) when the handle is drawn up. On the down stroke, these splines are closed, thus forcing air into the extinguisher by opening the pump check valve (28).

(3) A leather washer (13) seats on the plunger rod (15) and bears against the pump plunger assembly. On the down stroke of the plunger rod (15) the splines in the piston plunger (7) slide against the washer (13) and are closed, thus forcing air into the extinguisher.

(4) The plunger rod spring (14) fits on the plunger rod (15) above the seat of the leather washer (13). The plunger rod spring (14) acts as a cushion for the pump plunger assembly on the outward stroke of the plunger rod.

(5) The plunger locking sleeve fits under the head insert nut (23). The head insert nut locks the pump piston rod assembly in the extinguisher. The plunger locking sleeve provides a lock for the locking pin permanently affixed to the plunger rod.

c. PUMP CHECK VALVE ASSEMBLY.—The pump check valve assembly (28) consists of a valve and gasket which fit into the pump check valve housing provided in the head assembly (27). It allows the air to pass into the extinguisher on the down stroke of the pump piston rod assembly but closes on the up stroke. This prevents liquid from backing up into the pump barrel (16).

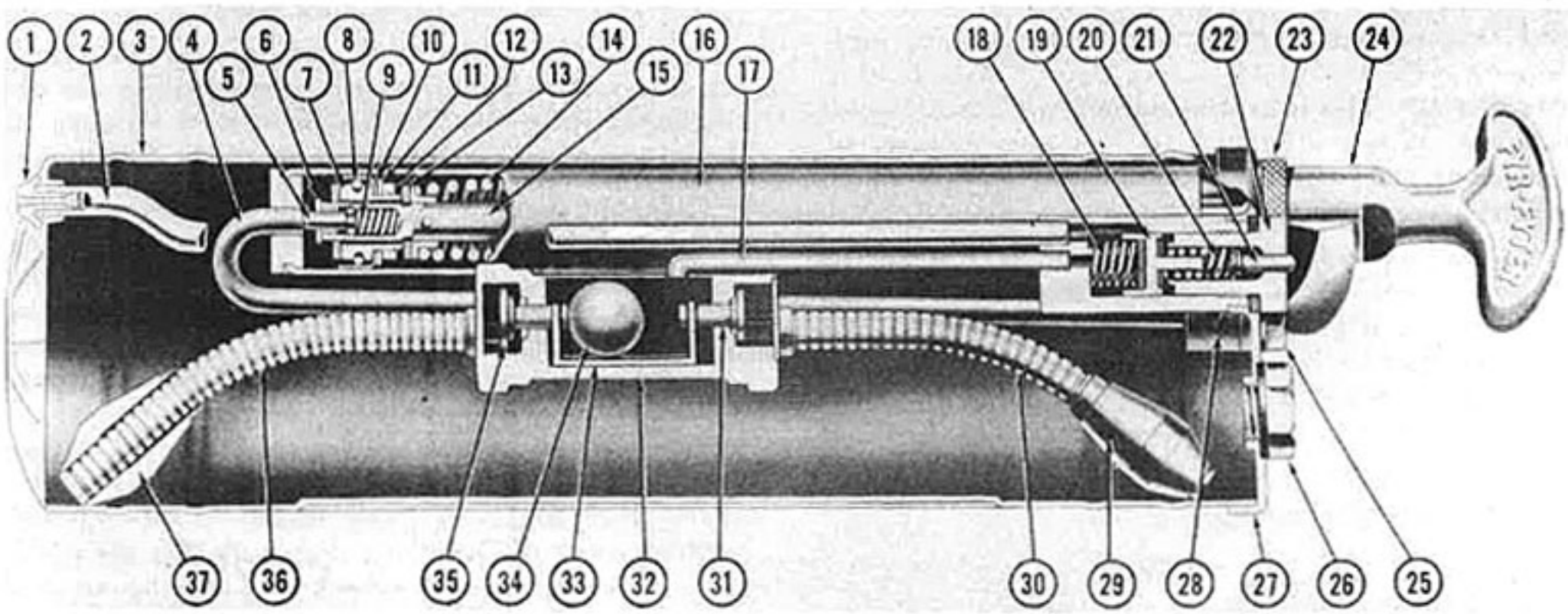
Note

On the model 84 the pump check valve assembly is an integral part of the extinguisher head and is permanently assembled into the head.

d. SHUT-OFF VALVE ASSEMBLY.—The shut-off valve assembly fits in the housing provided in the head assembly (27). The shut-off valve plunger (21) seats in the shut-off valve nut (22) and is held in position by the plunger spring (20). When the handle (24) is turned and releases the shut-off valve plunger (21), the plunger shut-off valve assembly (19) allows the liquid to bypass the plunger shut-off valve assembly (19) into the discharge tube (2). The plunger spring (20) maintains a pressure between the shut-off valve plunger (21) and the plunger shut-off valve assembly (19). When the handle (24) is locked in position, the plunger spring (20) maintains a pressure on the plunger shut-off valve assembly (19) which, in turn, forms a seal and prevents the liquid from leaking out of the extinguisher through the discharge tube (2). The release spring (18) bears against the underside of the plunger shut-off valve assembly (19). When the handle (24) releases the shut-off valve plunger (21), the release spring (18) forces the plunger shut-off valve assembly (19) off the discharge tube seat and allows the liquid to pass through the discharge tube (2).

e. FILLER CAP.—The filler cap (26) fits in the opening provided for refilling the extinguisher. A gasket fits under the filler cap (26) and prevents the fluid from leaking out of the extinguisher.

f. MOUNTING BRACKET.—The steel mounting bracket is attached to the desired extinguisher mounting location and holds the extinguisher in place ready for use. The extinguisher handle fits under the mounting bracket clip which prevents the handle from turning. A steel band fits around the extinguisher and retains it in position.



1. Discharge nozzle
2. Discharge tube
3. Extinguisher shell
4. Air tube
5. Plunger seal pin
6. Plunger nut
7. Piston plunger
8. Plunger spring
9. Plunger seal spring
10. Pump leather
11. Washer
12. Lock nut
13. Washer
14. Plunger rod spring
15. Plunger rod
16. Pump barrel
17. Bypass tube
18. Release spring
19. Plunger shut-off valve assembly
20. Plunger spring
21. Plunger
22. Shut-off valve nut
23. Head insert nut
24. Handle
25. Pump check valve nut
26. Filler cap
27. Head assembly
28. Pump check valve
29. Finder
30. Flexible tube
31. Gravity valve
32. Gravity box
33. Sliding sled
34. Lead ball
35. Gravity valve
36. Flexible tube
37. Finder

Figure 3—Cutaway View—Type A2 Fire Extinguisher

SECTION III
INSTALLATION

1. GENERAL.

Refer to the applicable aircraft engineering drawings for correct location of fire extinguishers on each aircraft.

2. MOUNTING POSITION.

Fire extinguishers may be mounted either horizontally or vertically. When mounted in a vertical position, the nozzle must be at the bottom. Those extinguishers that are accessible both from the aircraft and the ground are to be located on the side of the aircraft normally approached for entrance.

3. INSTALLING BRACKET.

Attach the extinguisher bracket to its mounting position with the six screws. Position the extinguisher in the bracket so that the bracket clip firmly retains the extinguisher handle. Close the bracket strap.

SECTION IV
OPERATION

1. PRINCIPLES OF OPERATION.

(See figure 3.)

a. As the handle is unlocked, by turning either to the right or left, and is pulled out, the pump plunger assembly slides forward on the plunger rod and air rushes through the splines filling the pump barrel with air. When the pump piston rod assembly is pushed in, the pump plunger assembly closes. The air is compressed and forced into the extinguisher shell past the pump check valve. The pump check valve closes automatically and prevents air from leaking back into the pump, on the outward stroke.

b. The air pressure within the extinguisher shell forces the liquid into the pick-up tubes. The pick-up tube lead finders always fall to the lowest point within the shell regardless of the position in which the extinguisher is held. The liquid will be picked up even though only a small quantity is left.

c. A gravity valve is located at each end of the gravity box. These valves are joined by a sliding sled. When one valve is opened, the other valve is automatically closed. Pointing the extinguisher upward or downward, the lead ball in the gravity box will roll to the lowest point, thus striking the stem of the lower valve, or opening it, and instantly closing the upper valve, preventing the entrance of compressed air. The liquid is then forced through the pick-up tube and into the gravity box. The fluid is carried through the bypass tube into the open shut-off valve and into the discharge tube, where it passes from the extinguisher nozzle in a continuous stream.

2. OPERATION INSTRUCTIONS.

a. Open the bracket and lift the extinguisher out.

b. Turn the handle sharply to the right or left to break wire and open the shut-off valve.

c. Operate the pump.

d. Direct stream of liquid on the base of the fire.

WARNING

Extinguish the fire promptly and avoid exposure to smoke and fumes.

e. To shut off the extinguisher, push the handle in and turn until the shut-off valve plunger is depressed.

SECTION V
SERVICE INSPECTION, MAINTENANCE, AND LUBRICATION

1. SERVICE TOOLS REQUIRED.

There are no special tools required.

2. SERVICE INSPECTION.

Airplane General

Daily Inspection

Inspect the outside of the fire extinguisher and bracket for cleanliness. Make certain the lead seal is intact and the dated inspection tag is less than 1 year old. Check the fire extinguisher for visual leaks and exterior condition. Make certain the fire extinguisher can be removed easily from its bracket. Check the discharge nozzle for obstructions.

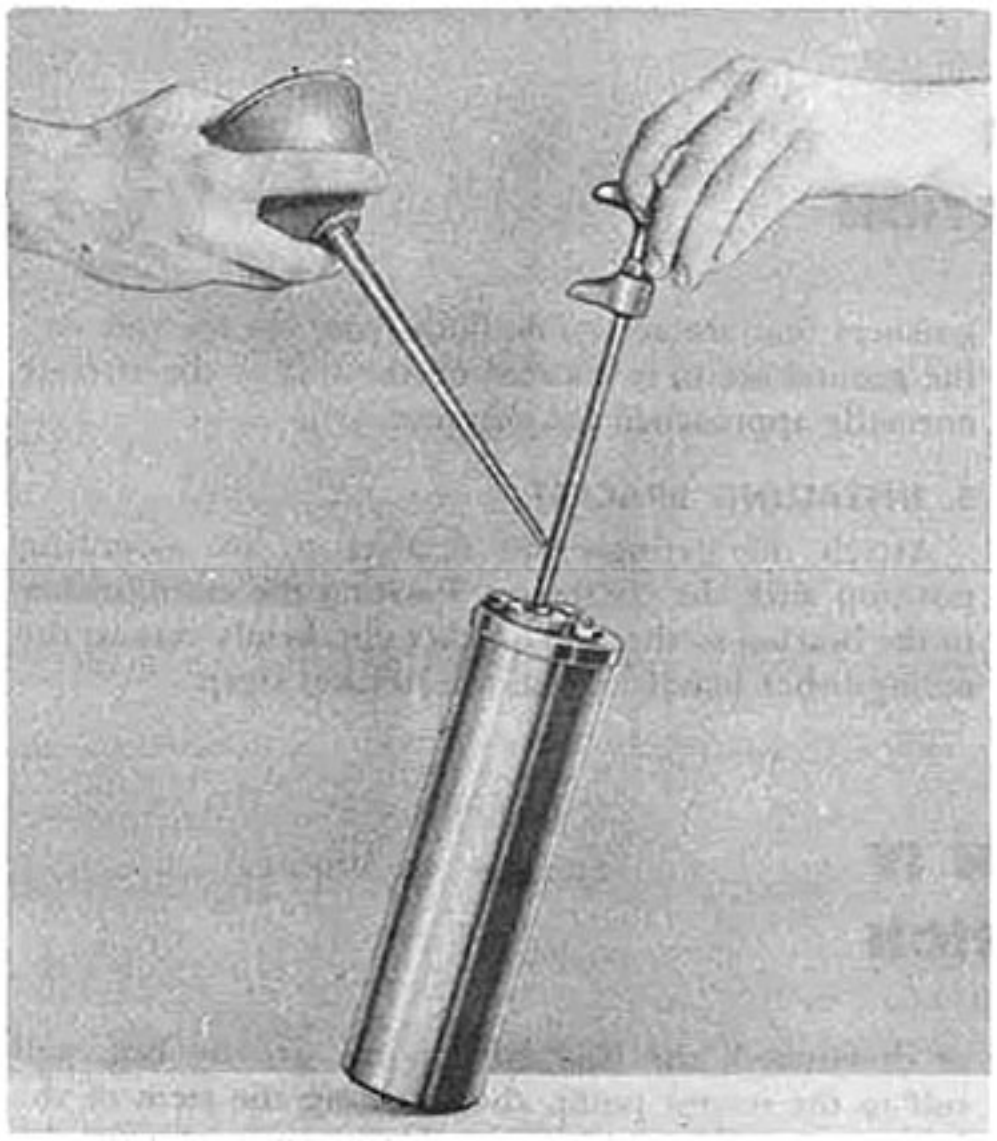


Figure 4—Lubricating Pump Leather

Make certain the bracket is firmly attached and in good condition.

Make certain the bracket holds the extinguisher securely and the bracket clip prevents the handle from turning.

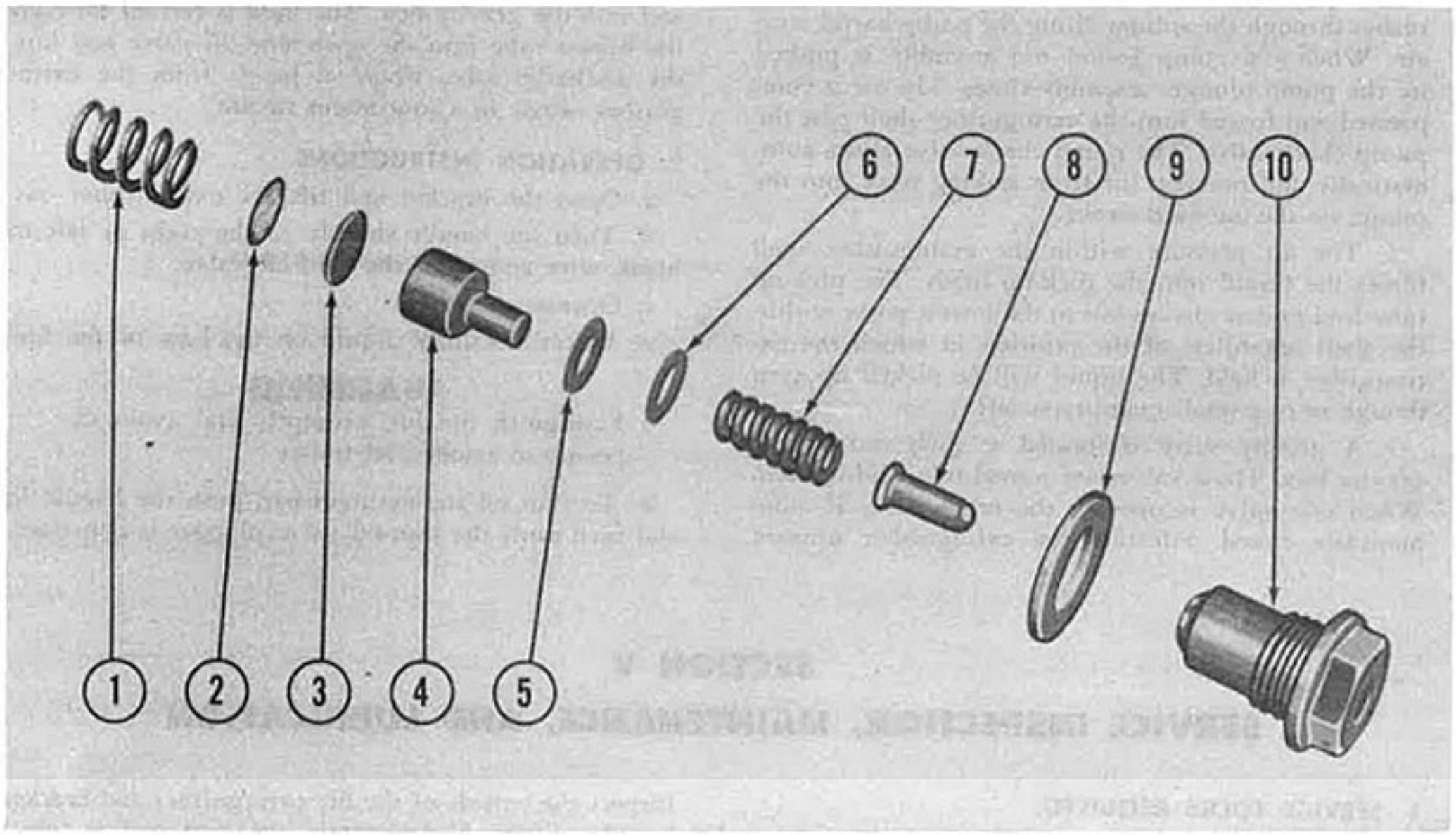
Annual Inspection

Operate the pump piston rod assembly with the discharge nozzle held in the up and down positions to check for sufficient pump action. Discharge approximately 20 percent of the extinguisher contents into a container. The discharged liquid must be clear and free from a brown or milky appearance.

3. MAINTENANCE.

a. Polish the pump piston plunger rod if necessary. Place a few drops of neat's-foot oil, Federal Specification No. C-O-388, on the plunger rod so that the oil will run down the rod and lubricate the pump leather. *(See figure 4.)* Apply a small amount of grease, Federal Specification No. VV-G-681, to the pump rod.

b. If the extinguisher did not discharge when pumped, remove the filler cap and empty the contents into a clean container. Remove the shut-off valve nut *(10, figure 5)* and remove the plunger (8), and plunger



1. Release spring
2. Shut-off valve disc
3. Sealing washer
4. Plunger
5. Sealing washer
6. Plunger washer
7. Plunger spring
8. Plunger
9. Gasket
10. Shut-off valve nut

Figure 5—Shut-off Valve Components Removed

spring (7). Lift out the plunger shut-off valve assembly and separate the plunger washer (6), sealing washer (5), plunger (4), sealing washer (3), and shut-off valve disc (2). Lift out the release spring (1). Wash all parts in dry-cleaning solvent, Federal Specification No. P-S-661, and dry thoroughly. Using an air hose, blow through the discharge nozzle to loosen any accumulated dirt. If this does not loosen the dirt, insert a small wire or pin through the discharge nozzle and then blow through the nozzle again. If the gasket (9) is worn, replace with a new gasket. Replace the shut-off valve parts and tighten the shut-off valve nut (10).

c. Operate the pump piston rod assembly with the discharge nozzle held in the up and down positions to check for sufficient pump action. If pump action is insufficient, remove the pump check valve nut (4, *figure 6*), pump check valve spring (2), and pump check valve assembly (1). Wash all parts in dry-cleaning solvent, Federal Specification No. P-S-661, and dry thoroughly. Replace the gasket if defective. Replace the pump check valve parts and tighten the pump check valve nut (4).

Note

The foregoing procedure cannot be accomplished on the model 8-I fire extinguishers as the pump check valve assembly is permanently assembled in the extinguisher head.

d. Refill the extinguisher and seal in accordance with the following instructions:

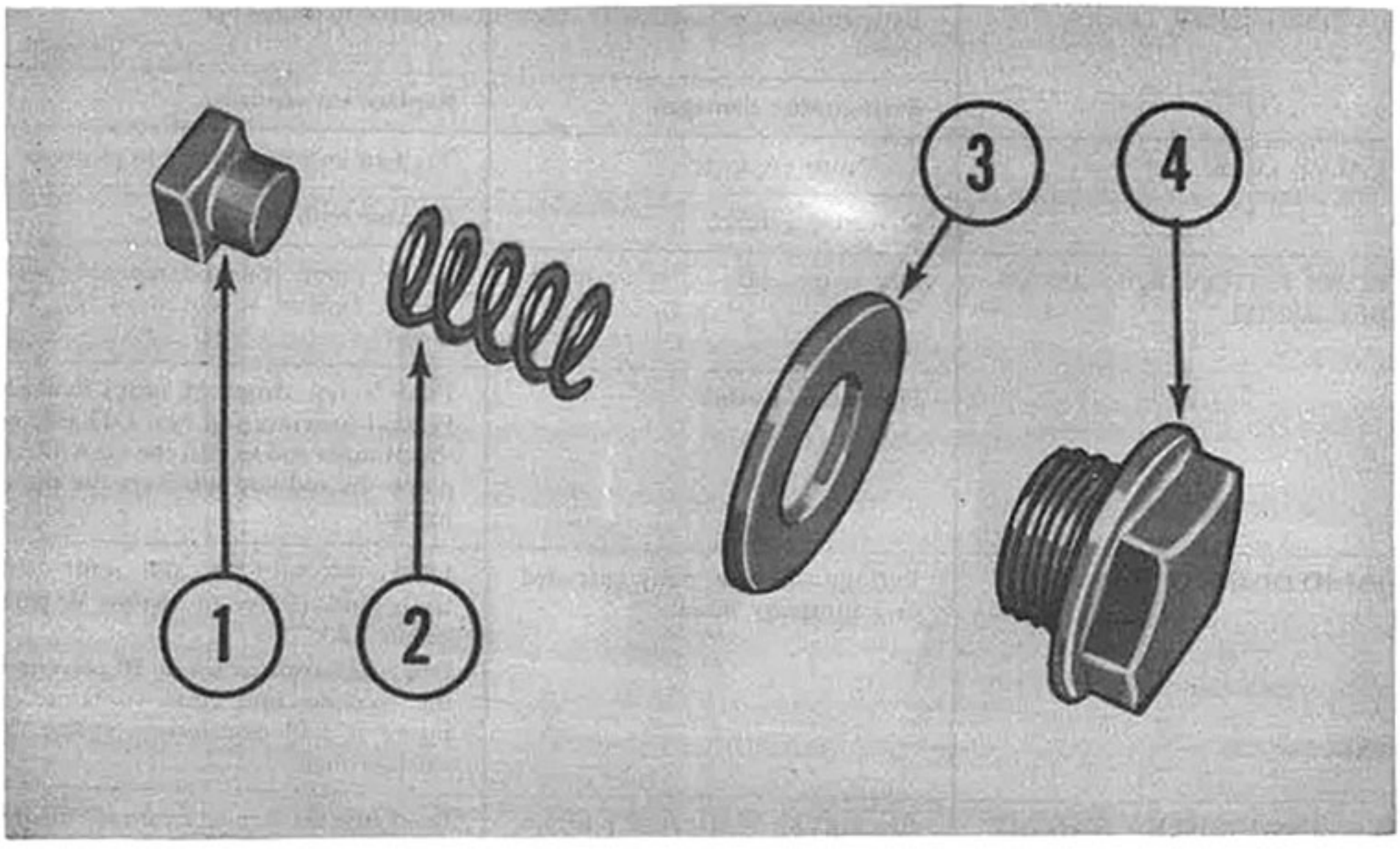
(1) After each use inspect the remaining extinguisher fluid to ascertain that it is not brownish or milky. If the fluid is discolored, remove the filler cap and empty the extinguisher.

(2) Place a few drops of neat's-foot oil, Federal Specification No. C-O-388, on the plunger rod so that the oil will run down the rod and lubricate the pump leather. *(See figure 4.)* Apply a small amount of grease, Federal Specification No. VV-G-681, to pump rod.

(3) Refill the extinguisher immediately after use with fire extinguisher liquid, Federal Specification No. O-F-380, for all-weather use. For winter conditions, refill the extinguisher with a mixture consisting of 70 percent fire extinguishing liquid, Federal Specification No. O-F-380, and 30 percent stabilized trichloroethlene, Specification No. AN-T-37. When the fire extinguisher is winterized, paint a yellow dot approximately 5/16 inch in diameter immediately above the extinguisher name plate. Place the gasket on the filler cap and tighten the cap into position.

CAUTION

Do not fill the extinguisher to the top. Fill to ¼ inch below the top.



1. Pump check valve assembly
2. Pump check valve spring
3. Gasket
4. Pump check valve nut

Figure 6—Pump Check Valve Components Removed

(4) Prepare a dated inspection tag in the following manner: Use brass or aluminum tape, or similar sheet stock, approximately ½ inch wide and .010 to .015 inch thick, the length being held to the minimum required for the stamping of the date. This stamping will be in letters ¼ inch in height and will consist of numerals representing the month, day of month, and year. For example, if an extinguisher is filled on 15 September 1945, the tag will be stamped "9-15-45."

(5) Using a length of copper wire .020 inch in diameter, pass one end of the wire through the shut-off valve nut and the pump check valve nut. Pass both ends of the wire through the filler cap and draw the wire taut. Pass one end of the wire through the drilled hole in the handle. Place the dated tag on the wire and seal the free ends of the wire with a standard Army Air Forces lead seal between the handle and the filler cap.

e. If the bracket clip does not prevent the extinguisher handle from turning, bend the clip down so that it fits more firmly against the extinguisher handle.

f. Tighten the bracket firmly in position.

4. LUBRICATION.

Place a few drops of neat's-foot oil, Federal Specification No. C-O-388, on the plunger rod so that the oil will run down the rod and lubricate the pump leather. *(See figure 4.)* Apply a small amount of grease, Federal Specification No. VV-G-681, to the pump rod.

5. SERVICE TROUBLES AND REMEDIES.

Trouble	*Probable Cause*	*Remedy*
EXTINGUISHER DOES NOT DISCHARGE	Nozzle clogged	Remove shut-off valve and blow through nozzle.
	Check valve dirty	Remove pump check valve and clean. Remove check valve and clean.
	Pump piston rod assembly defective	Overhaul extinguisher. Refer to section VI.
EXTINGUISHER LEAKS	Extinguisher is internally corroded	Replace extinguisher.
	Extinguisher damaged	Replace extinguisher.
VALVE LEAK	Lock nuts are loose	Tighten lock nuts firmly in position.
	Defective gaskets	Replace with new gaskets.
PUMP PISTON ROD ASSEMBLY BINDS	Dry pump rod	Polish pump rod and lubricate with grease. Federal Specification No. VV-G-681.
	Dry pump leather	Place a few drops of neat's-foot oil, Federal Specification No. C-O-388, on the plunger rod so that the oil will run down the rod and lubricate the pump leather.
FLUID DISCOLORED	Extinguisher internally corroded or improperly filled	Empty extinguisher and refill with fresh fluid. (Refer to section V, paragraph 3.*d.*) Discharge approximately 20 percent of the contents into clean container. If liquid is still discolored, replace the extinguisher.
EXTINGUISHER HANDLE ROTATES WHEN IN BRACKET	Bracket clip bent out of position	Bend bracket clip to fit firmly against handle.

SECTION VI

DISASSEMBLY, INSPECTION, REPAIR, AND REASSEMBLY

1. OVERHAUL TOOLS REQUIRED.

There are no special tools required.

2. DISASSEMBLY.

Note

Prior to the disassembly of the fire extinguisher, remove the sealing wire and tag from the top of the extinguisher. Unscrew the filler cap *(3, figure 7)* and remove with gasket (2). Empty the extinguisher contents into a suitable receptacle.

a. PUMP PISTON ROD ASSEMBLY.

(1) Turn the handle to right or left to release the pump piston rod assembly (18). Pull the plunger rod out as far as possible.

(2) Unscrew the head insert nut *(13, figure 8)* and pull the pump piston rod assembly from the extinguisher shell.

(3) Unscrew the plunger nut (1) and remove the plunger nut, plunger seal pin (2), and seal spring (3).

(4) Lift the plunger assembly from the plunger rod (10) and remove the leather washer (9).

(5) To disassemble the plunger assembly, remove the lock nut (8) and washer (7). Lift the pump leather (6) and plunger spring (4) from the piston plunger (5).

(6) Drive the handle pin (15) out of the handle (14) and separate the handle (14) from the plunger rod (10).

(7) Lift the head insert nut (13), plunger locking sleeve (12), and plunger rod spring (11) from the plunger rod (10).

b. SHUT-OFF VALVE.

(See figure 7.)

(1) Unscrew the shut-off valve nut (17). As the shut-off valve nut (17) is lifted from the extinguisher head, the plunger spring (14) and plunger (15) will come out of the extinguisher. Do not remove the gasket (16) unless it is damaged. If it is necessary to remove the gasket (16), pry it off with a thin-bladed knife.

(2) Invert the extinguisher shell (1). The plunger shut-off valve assembly and release spring (8) will fall from the extinguisher head.

(3) Lift the plunger washer (13) and sealing washer (12) from the top of the plunger (11).

(4) Using a pin, pry the shut-off valve disc (9) and sealing washer (10) from the inside of the plunger (11).

c. PUMP CHECK VALVE ASSEMBLY.

Note

The following operations can be performed on the model 83 fire extinguishers only.

(1) Unscrew the pump check valve nut (7). Invert the extinguisher shell (1). The pump check valve spring (5) and pump check valve assembly (4) will fall from the extinguisher head.

CAUTION

Do not further disassemble the pump check valve assembly.

(2) If the lead gasket (6) is damaged, pry it off with a thin-bladed knife.

CAUTION

Do not further disassemble the fire extinguisher.

3. CLEANING, INSPECTION, AND REPAIR.

a. CLEANING.—Wash all metal parts in dry-cleaning solvent, Federal Specification No. P-S-661, and dry thoroughly. Polish the plunger rod if required.

CAUTION

Do not wash the extinguisher in hot or cold water. Once water has been introduced into the extinguisher body, corrosion is apt to set up.

b. INSPECTION AND REPAIR.

(1) Inspect metal parts for damage or excessive wear. Replace damaged and worn parts.

(2) Inspect leather parts for damage or excessive wear. Replace damaged parts.

(3) Inspect the springs for tension.

4. REASSEMBLY.

a. PUMP CHECK VALVE ASSEMBLY.

(See figure 7.)

Note

The following operations can be performed on the model 83 fire extinguishers only.

(1) Insert the pump check valve assembly (4) in the pump check valve opening provided in the extinguisher head. The square end of the pump check valve assembly seats in the extinguisher head.

(2) Place the pump check valve spring (5) over the pump check valve assembly (4).

(3) If the gasket (6) was removed, place a new gasket on the pump check valve nut (7) and position the nut over the pump check valve spring. Tighten the nut firmly into position.

b. SHUT-OFF VALVE.

(1) Insert the release spring (8) into the extinguisher head shut-off valve opening.

(2) Position a new sealing washer (10) and shut-off valve disc (9) inside the plunger (11). Place a sealing washer (12) and plunger washer (13) over the plunger pin so that they fully seat against the plunger body. The flat side of the plunger washer (13) must fit against the sealing washer (12).

(3) Insert the plunger shut-off valve assembly in the extinguisher head so that the plunger shut-off valve assembly base seats against the release spring.

(4) From the underside of the shut-off valve nut (17), insert the plunger (15) so that the round end fits through the nut opening. Place the plunger spring (14) in the shut-off valve nut (17).

(5) If the gasket (16) was removed, place a new gasket on the shut-off valve nut (17) and tighten the nut firmly into position.

c. PUMP PISTON ROD ASSEMBLY.
(See figure 8.)

(1) Place the plunger rod spring (11) on the plunger rod (10). The small diameter end of the spring fits against the base of the plunger rod.

(2) Place the plunger locking sleeve (12) on the plunger rod (10). Place the head insert nut (13) on the plunger rod (10).

(3) Position the handle (14) on the plunger rod (10). Aline the pin holes in the handle with those in the plunger rod. Insert the handle pin (15).

(4) From the underside of the plunger rod, place the leather washer (9) on the plunger rod (10). The washer must be fully seated against the base.

(5) Place the plunger spring (4) in the groove provided in the piston plunger (5).

(6) Position the pump leather (6) and washer (7) on the piston plunger (5) and tighten the lock nut (8) firmly into position.

(7) Insert the seal spring (3) into the open end of the plunger rod (10). Position the flat end of the plunger seal pin (2) against the seal spring (3) and firmly tighten the plunger nut (1) into position.

(8) Lubricate the plunger rod with grease, Federal Specification No. VV-G-681. Place a few drops of neat's-foot oil, Federal Specification No. C-O-388, on the pump leather.

(9) Using brass shim stock .005 inch thick, fabricate a funnel which can be inserted in the extinguisher shell *(1, figure 7)* pump piston rod assembly opening. Insert the pump piston rod assembly (18) through the funnel into the extinguisher shell (1).

CAUTION

If the foregoing procedure is not followed, the pump leather will be injured.

(10) Fit the pump piston rod assembly locking insert into the slots provided in the extinguisher head and tighten the head insert nut into position.

SECTION VII
TEST PROCEDURE

1. GENERAL.

a. Operate the pump piston rod assembly up and down a number of times to insure that the pump action is free. Should the pump piston rod assembly bind, pull the rod out as far as possible and place a few drops of neat's-foot oil, Federal Specification No. C-O-388, on the rod so that the oil will run down the rod and lubricate the pump leather.

b. Fill the extinguisher with 1 quart of fire extinguishing liquid, Federal Specification No. O-F-380, for all-weather use. For winter conditions, fill the extinguisher with a mixture consisting of 70 percent fire extinguishing liquid, Federal Specification No. O-F-380, and 30 percent stabilized trichloroethylene, Specification No. AN-T-37. When the fire extinguisher is winterized, paint a yellow dot approximately 5/16 inch in diameter immediately above the extinguisher name plate. Place the gasket on the filler cap and tighten the cap into position.

CAUTION

Do not fill the extinguisher to the top. Fill to ¼ inch below the top.

(1) Operate the pump piston rod assembly with the nozzle pointing "up" and "down" for a number of strokes to check for satisfactory pump action. Discharge approximately 20 percent of the extinguisher contents into a container. Make certain that the discharged liquid is neither brown nor milky. If the liquid is discolored, overhaul the extinguisher in accordance with instructions given in section VI.

(2) Remove the filler cap and gasket. Refill the fire extinguisher in accordance with instructions given in paragraph 1.*b.*, this section, and replace the filler cap and gasket.

2. SEALING.

a. Prepare a dated inspection tag in the following manner: Use brass or aluminum tape, or similar sheet stock, approximately ½ inch wide and .010 to .015 inch thick, the length being held to the minimum required for the stamping of the date. This stamping will be in letters at least ¼ inch in height, and will consist of numerals representing the month, day of the month, and year. For example, if an extinguisher is filled on 15 September 1945, the tag will be stamped "9-15-45."

b. Using a length of copper wire .020 inch in diameter, pass one end of the wire through the shut-off valve nut and the check valve nut. Pass both ends of the wire through the filler cap and draw the wire taut. Pass one end of the wire through the drilled hole in the handle. Place the dated inspection tag on the wire and seal the free ends of the wire with a standard Army Air Forces lead seal between the handle and filler cap.

SECTION VIII
PARTS CATALOG INTRODUCTION

1. This Parts Catalog contains a Group Assembly Parts List, Section IX, with referenced exploded views for the type A2 fire extinguishers, models 83 and 84, manufactured by the Fyr-Fyter Company, Dayton, Ohio. The model 83 is considered the standard type fire extinguisher.

2. Both type A2 fire extinguishers supplied by the Fyr-Fyter Company to the Army Air Forces are grouped together in the Group Assembly Parts List. The "Part Number" and "Nomenclature" columns contain the part numbers and nomenclature of both type A2 parts regardless of the model of the complete assembly. Following the "Nomenclature" columns, two columns list the different models of the type A2. An "x" placed in one of these columns indicates that a part is used on that specific model fire extinguisher. In this manner, it is possible to show the interchangeability of parts among the models of the type A2 fire extinguisher. The "Units per Assembly" column gives the number of parts for each model extinguisher at the point the part is used and is not necessarily the total number used for the complete assembly.

3. The Group Assembly Parts List consists of a breakdown of the complete unit into serviceable subassemblies and detailed parts. Each assembly is indented properly to show its relationship to the complete assembly.

4. The Group Assembly Parts List is referenced to the exploded view by index numbers. Only those parts which are procurable as subassemblies or detailed parts are shown and referenced by an index number on the exploded view.

5. All parts in the Group Assembly Parts List marked with a symbol (*) are not procurable as individual parts but must be purchased as parts of the complete assembly.

SECTION IX
GROUP ASSEMBLY PARTS LIST

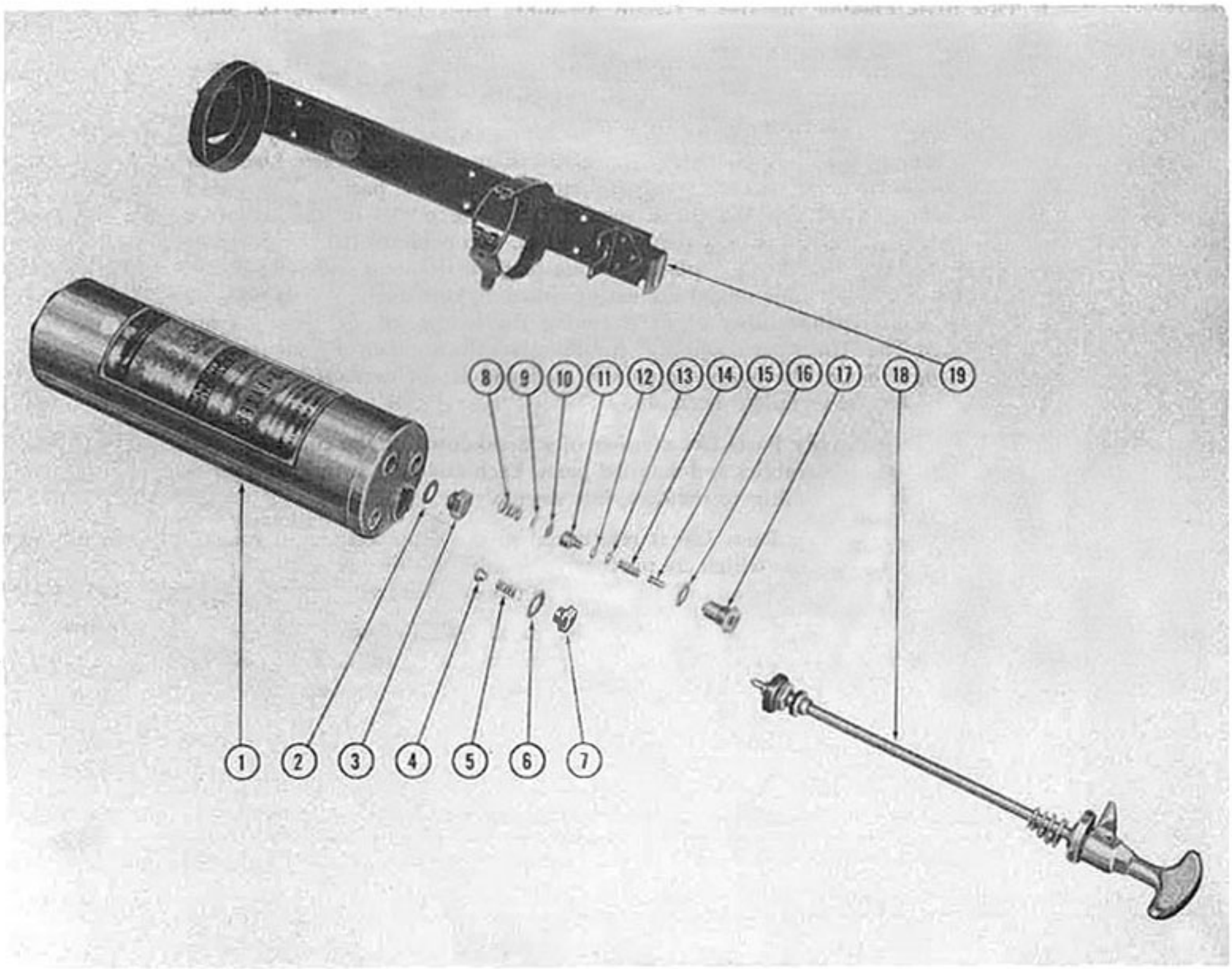


Figure 7—Exploded View—Type A2 Fire Extinguisher

Fig. & Index No.	*Part No.*	*Nomenclature* 1 2 3 4 5 6	*Model 83*	*Model 84*	*Units per Assy*
7	83	Extinguisher Assembly—Fire, type A2	x		1
7	84	Extinguisher Assembly—Fire, type A2		x	1
7-1	*ND	Shell Assembly—Extinguisher	x	x	1
7	*3019	Shell—Extinguisher	x		1
7	*1003	Shell—Extinguisher		x	1
7	*1022	Nozzle—Discharge	x	x	1
7	*1033	Tube—Discharge	x	x	1
7	*452	Head Assembly	x		1
7	*407	Head Assembly		x	1
7	*2007	Tube—Air	x		1
7	*539	Pump Assembly	x		1
7	*749	Pump Assembly		x	1
7	*2306	Tube—Bypass	x		1
7	*1035	Tube—Bypass		x	1

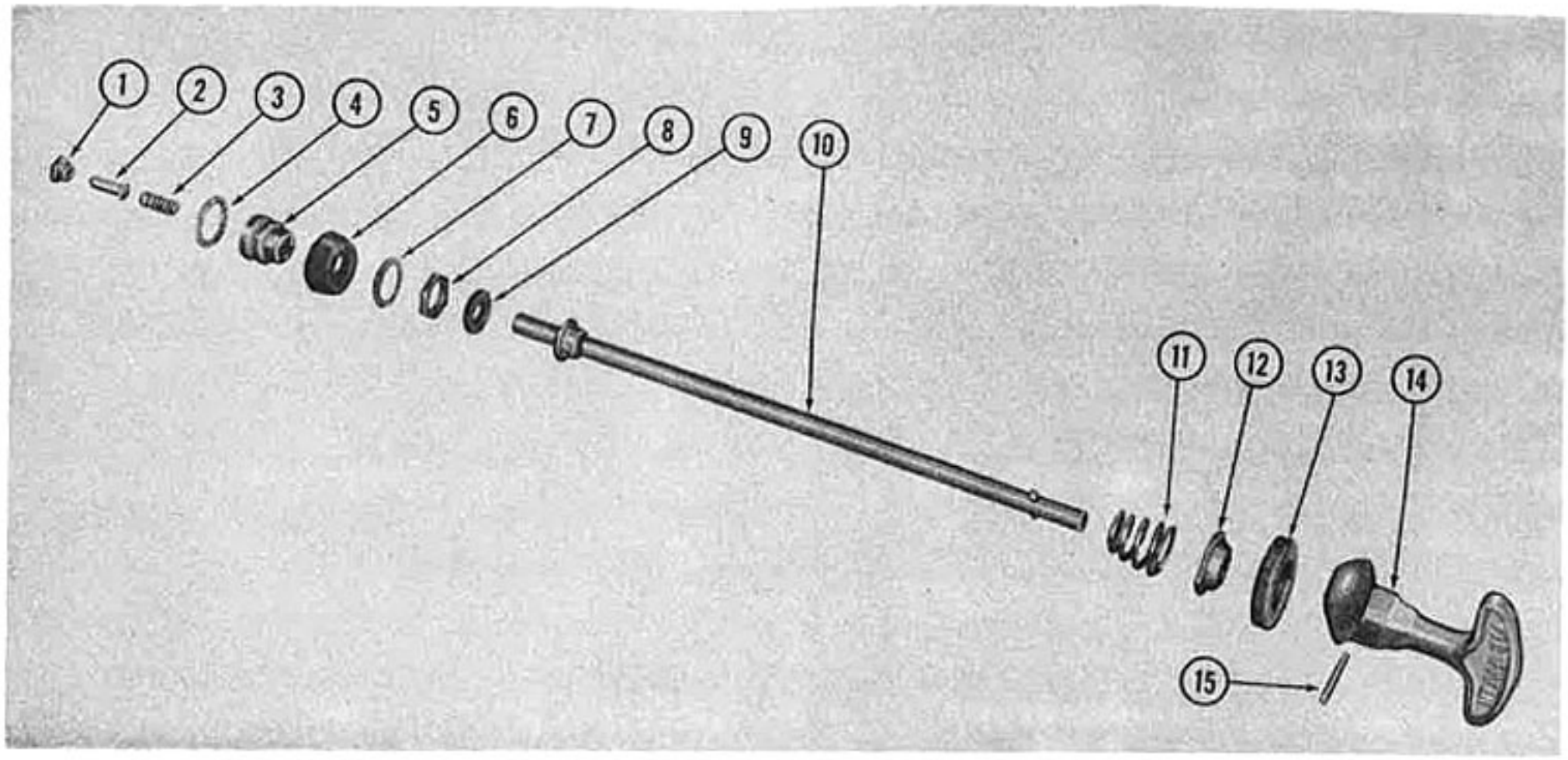


Figure 8—Exploded View—Pump Piston Rod Assembly

Fig. & Index No.	*Part No.*	*Nomenclature* 1 2 3 4 5 6	*Model 83*	*Model 84*	*Units per Assy*
7-2	1028	Gasket	x	x	1
7-3	2257	Cap—Filler	x		1
7	1027	Cap—Filler		x	1
7-4	10G	Valve Assembly—Pump check	x		1
7-5	1039	Spring—Pump check valve	x		1
7-6	2245	Gasket	x		1
7-7	2757	Nut—Pump check valve	x		1
7-8	1043	Spring—Release	x	x	1
7	10K	Valve Assembly—Plunger shut-off	x	x	1
7-9	1480	Disc—Shut off valve	x	x	1
7-10	1005	Washer—Sealing	x	x	1
7-11	1007	Plunger	x	x	1
7-12	1023	Washer—Sealing	x	x	1
7-13	2591	Washer—Plunger	x	x	1
7-14	1041	Spring—Plunger	x	x	1
7-15	1024	Plunger	x	x	1
7-16	1028	Gasket	x	x	1
7-17	2756	Nut—Shut off valve	x		1
7	1006	Nut—Shut off valve		x	1
7-18	399	Rod Assembly—Pump piston	x		1
7	406	Rod Assembly—Pump piston		x	1
8-1	1011	Nut—Plunger	x	x	1
8-2	2006	Pin—Plunger seal	x		1
8-3	1040	Spring—Seal	x	x	1
8	10H	Plunger Assembly—Pump	x	x	1
8-4	1038	Spring—Plunger	x	x	1
8-5	1012	Plunger—Piston	x	x	1
8-6	1044	Leather—Pump	x	x	1
8-7	1015	Washer	x	x	1
8-8	1045	Nut—Lock	x	x	1
8-9	1048	Washer—Leather	x	x	1
8-10	1030	Rod—Plunger	x	x	1
8-11	2008	Spring—Plunger rod	x	x	1
8-12	2002	Sleeve—Plunger locking	x	x	1
8-13	2099	Nut—Head insert	x		1
8	2001	Nut—Head insert		x	1
8-14	2101	Handle	x		1
8	2011	Handle		x	1
8-15	1037	Pin—Handle	x	x	1
7-19	196	Bracket	x	x	1
	1051	Screw	x	x	6