



Fire Protection Training

Procedures Handbook 4300

PUMPING

TOPIC: Portable Pumps - Waterous Floto - Pump

TIME FRAME: 1 Hour

LEVEL OF INSTRUCTION:

BEHAVIORAL OBJECTIVE:

Condition: A written quiz

Behavior: The student will be able to list and describe the parts, safety requirements and operating procedures for the Waterous Floto – Pump.

Standard: With a minimum of 70% accuracy

MATERIALS NEEDED:

- Waterous Floto - Pump
- Appropriate visual aids
- Audio visual equipment

REFERENCES:

- Manufacturer's literature

PREPARATION: Portable pumps are used to supply water to fire engines from water sources such as lakes, creeks, and swimming pools and are also used to relay water in long hose lays or remove unwanted water from structures. Where the fireline or the water source is not readily accessible to engines portable pumps are essential.



Fire Protection Training

Procedures Handbook 4300

PORTABLE PUMPS—WATEROUS
FLOTO-PUMP

PRESENTATION	APPLICATION
<p>I. PARTS</p> <ul style="list-style-type: none">A. Float Assembly<ul style="list-style-type: none">1. Polyethylene shell2. Polyurethane foam fillingB. Fuel Tank<ul style="list-style-type: none">1. Vented2. 5 quart capacity3. 1 - 1 1/2 hour running timeC. Pull StarterD. Air CleanerE. Muffler<ul style="list-style-type: none">1. Muffler guardF. Carrying Handles<ul style="list-style-type: none">1. Top mount2. Side mountG. Suction InletH. Pump Discharge<ul style="list-style-type: none">1. 1 1/2" National Standard thread <p>II. SPECIFICATIONS</p> <ul style="list-style-type: none">A. Single Stage Centrifugal PumpB. Two Cycle Air Cooled Gasoline Engine	<p>Information sheet #1</p>



Fire Protection Training

Procedures Handbook 4300

PORTABLE PUMPS—WATEROUS
FLOTO-PUMP

PRESENTATION	APPLICATION																		
<ul style="list-style-type: none"> 1. 8 horsepower 2. Chrysler Model 82011L C. Floats in Water with Submerged <ul style="list-style-type: none"> 1. Pump suction 2. Impeller 3. Volute D. Size 28" x 16" x 20" E. Weighs 45 pounds F. Performance data 																			
<table border="0"> <tr> <td>PRESSURE</td> <td>25</td> <td>50</td> <td>75</td> <td>100</td> <td>125</td> <td>150</td> <td>175</td> <td>190</td> </tr> <tr> <td>GPM</td> <td>58</td> <td>56</td> <td>50</td> <td>43</td> <td>31</td> <td>21</td> <td>8</td> <td>0</td> </tr> </table>	PRESSURE	25	50	75	100	125	150	175	190	GPM	58	56	50	43	31	21	8	0	
PRESSURE	25	50	75	100	125	150	175	190											
GPM	58	56	50	43	31	21	8	0											
<h3>III. OPERATING INSTRUCTIONS</h3>																			
<ul style="list-style-type: none"> A. Starting Procedures <ul style="list-style-type: none"> 1. Check suction screen 2. Connect discharge hose to pump 3. Attach rope to pump for anchoring purposes 4. Start engine before placing unit in water 5. Open vent in fuel tank cap 6. Move ignition switch to run (on) 7. Close choke by moving lever in direction of the arrow 8. Anchor pump by placing either hand on top of pump on the handle 9. Pull starter handle with free hand 																			



Fire Protection Training

Procedures Handbook 4300

PORTABLE PUMPS-WATEROUS
FLOTO-PUMP

PRESENTATION	APPLICATION
<p>10. When engine starts, open choke by moving lever toward engine</p> <p>11. Throttle (automatic)</p> <p>“Note of caution” throttle may be opened manually for short "burst" by lifting throttle control float assembly, but prolonged high speed operation with the unit out of water may damage it.</p> <p>B. Operating Procedures</p> <ol style="list-style-type: none">1. When engine warmed up i.e., running smoothly place flo-to-pump slowly into water2. Throttle will open wide at outset. Size of hose and type of nozzle used will automatically dictate throttle setting.3. Unit is self priming once floating, but may take up to 30 seconds to fully prime the pump4. Must have at least 6" of water to safeguard pump5. Refueling<ol style="list-style-type: none">a. Use 20:1 fuel mixture<ol style="list-style-type: none">(1) One gallon of gasoline(2) 1/3 pint of #30 outboard oilb. Fuel only after engine cools off <p>C. Shut Down Procedure</p> <ol style="list-style-type: none">1. Turn ignition switch to stop or off position2. Close fuel tank cap vent3. Drain fuel from carburetor, do not run the engine dry	



Fire Protection Training

Procedures Handbook 4300

PORTABLE PUMPS—WATEROUS
FLOTO-PUMP

PRESENTATION	APPLICATION
<p>IV. SAFETY PRECAUTIONS</p> <ul style="list-style-type: none">A. To Avoid Kick Back When Starting Floto-Pump<ul style="list-style-type: none">1. Pull starter rope part way through stroke to bleed off some compression2. Then, pull remainder of way with a quick continuous strokeB. Do Not Refuel While Engine is RunningC. Do Not Touch the Muffler During Pumping OperationsD. Install a Muffler Guard to Prevent Burn Injuries<ul style="list-style-type: none">1. Fix-N-Fax #145 dated June 12, 1980E. Use Ear Protection When PumpingF. Carry Fuel in an Approved ContainerG. Do Not Smoke Near Fueling Area	



Fire Protection Training

Procedures Handbook 4300

PORTABLE PUMPS—WATEROUS
FLOTO-PUMP

SUMMARY:

A well maintained portable pump can save firefighters an enormous amount of time and effort when a fire is burning in an area which is not accessible or in an area where a water source is not otherwise accessible to engines.

EVALUATION:

A written quiz.

ASSIGNMENT:

To be determined by instructor(s).