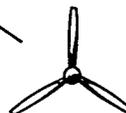
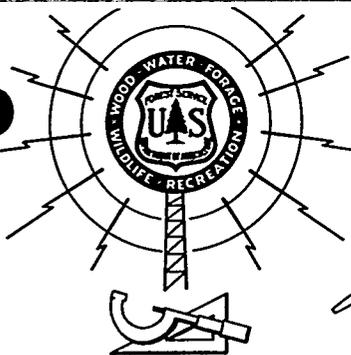


# EQUIP

# TIPS

5160



FOREST SERVICE

U. S. DEPARTMENT OF AGRICULTURE

February 1967

EQUIPMENT DEVELOPMENT CENTER

444 E. Bonita Avenue, San Dimas, California 91773



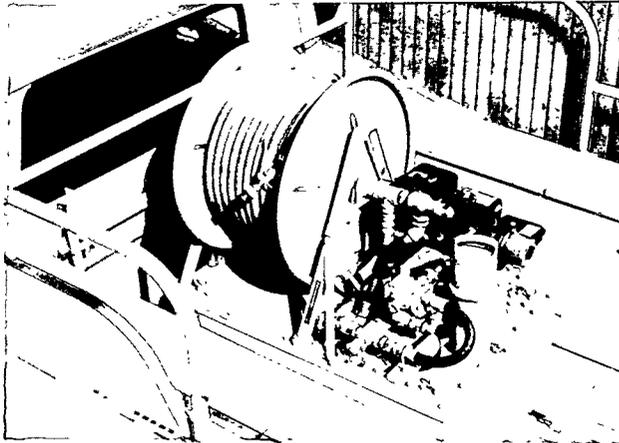
A NEW  
50-GALLON  
SLIP-ON  
TANKER

Small patrol tankers carrying about 50 gallons of water are used extensively in forest work. For initial attack on small fires, for mop-up, and a number of assignments where low volume and limited quantities of water are effective, this slip-on will fill the need.

This slip-on is designed for mounting in a 5000 GVW vehicle. The new design offers a low silhouette unit with improved appearance and performance. The tanker consists of a low, rectangular baffled tank and a live hose reel, engine-driven pumper, suction hose basket, and other accessories mounted on a full-size demountable top. The engine is equipped with a "kill feature" for pump protection. The plumbing can be drained easily. The filler spout and cap have been improved. This is the low-cost unit from the new Forest Service series. Recent fire supply house and construction prices range from \$525 to \$630.

## WEIGHT AND DIMENSIONS

The dry weight of the tanker complete is 360 pounds; filled with water, 778 pounds. A metal tie-down flange is provided on each side of the tank. The overall measurements in inches are: 26-1/2 width - 43 length - 41 height.



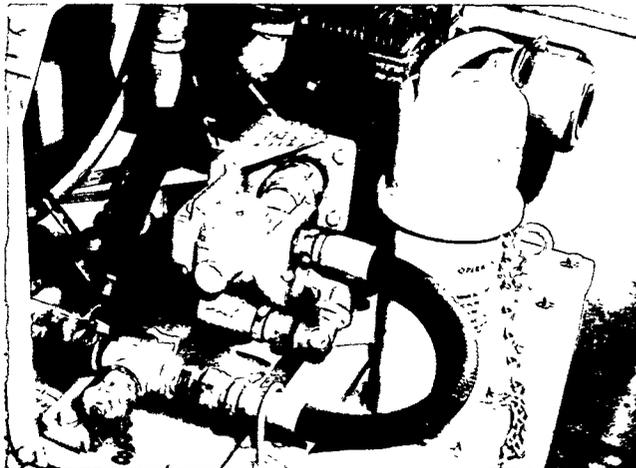
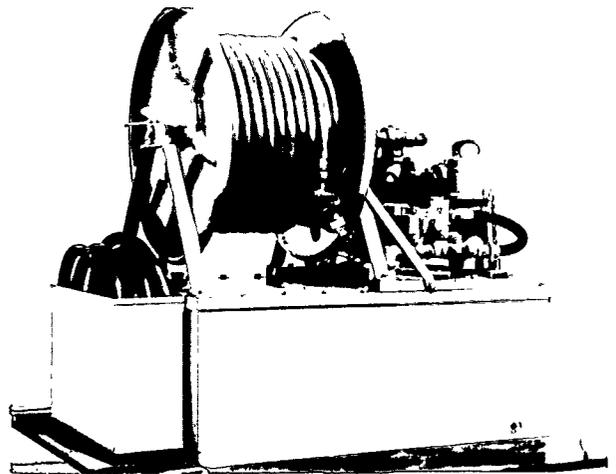
### TANK

The steel tank base is 24 by 36 inches by 14 inches high. A full top opening is provided to a galvanize-coated interior. A 4-inch filler opening is used with a standard lightweight metal cap. Capacity 50 gallons.

### REEL AND HOSE

A live hose reel is equipped with 200 feet of 5/8-inch I.D. oil-resistant industrial hose for multifunctional uses. Some Regions prefer 200 to 250 feet of 3/4-inch I.D. industrial hose. A 3/4-inch I.D. lever-valve shutoff and garden nozzle are usually preferred. 1/8 and 1/4-inch straight-stream nozzle tips are also included.

A hose basket is provided for the suction hose and strainer. One 25-foot length of 3/4-inch I.D. high-pressure hose is used for the suction assignment.



### PUMP

The Eco Model 251D is mounted on its side for easy drainage. Compound 107 impellers are now specified so these new units can handle special work assignments involving diesel oil. This inexpensive pump can be readily replaced.

## PUMPER

The self-priming positive displacement pumper selected is rated at 10 gpm at 150 psi. Actual field performance will be around 7-1/2 gpm at 125 psi. The basic pumper assembly is qualified and available at Edwards Manufacturing, Pacific Pumps, and Western Fire. Dry weight 42 pounds.



## ENGINE

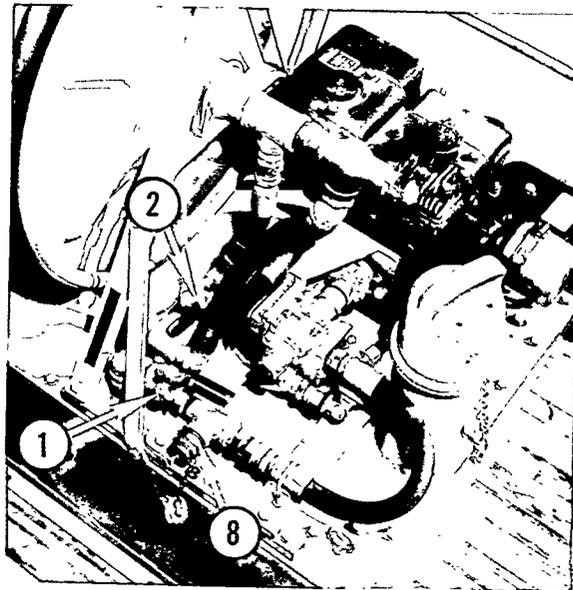
The pump is powered by a 3 hp Briggs & Stratton 4-cycle gasoline engine, Model 80332. A "kill feature" is provided when the tank is emptied. A qualified spark arrester (Gill 3C1P) is specified.

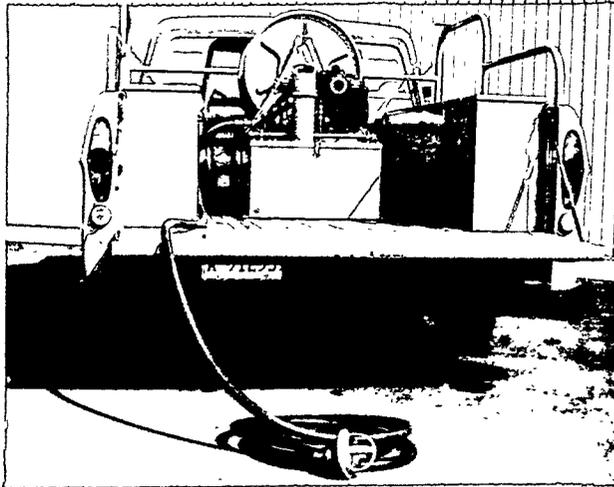
## PLUMBING

This tanker can pump from tank to fire, draft to fire, or draft to tank.

Two in-line valves (#1 & #2) and a draft connection hose cap (#8) control these basic operations. A carefully selected relief valve insures full flow to the selected bypass pressure.

The plumbing can be drained by removing the fire hydrant cap, opening the two in-line valves, and rotating the pump with the rope starter.





### DRAFTING

One 25-foot length of 3/4-inch I.D. high-pressure hose is carried in the suction hose bucket. One-inch I.P. rocker lug couplings are used on this hose with a one-inch suction strainer. The pump does not require priming on reasonable drafting assignments.

### AVAILABILITY

Several construction contracts have been issued using U.S. Department of Agriculture - Forest Service - SPECIFICATION 5100-346 (3/28/66) for 50-GALLON SLIP-ON TANKER and drawings F72-01, -02, -03, -04, and -05 and INTERIM SPECIFICATION 5100-00348 (4/12/66) FOR LIVE HOSE REEL, 300-600 PSI WORKING PRESSURE WITH BRAKE, and drawings F58-01 and -02. At least one West Coast fire supply company carries this slip-on complete for open market purchase.

PRELIMINARY INSTRUCTIONS FOR OPERATION AND CARE OF THE 50-GALLON SLIP-ON TANKER (revised December 1965) are also available from San Dimas Equipment Development Center.

### MULTIPLE USE

Design changes and careful accessory selection provide other uses for this basic unit. Compound 107 pump impellers and oilproof-type hose and connections make it possible to pump diesel fuels for flamethrower use. This is a separate development subject and will be described in a later EQUIP TIPS. Oil base sprays such as 2, 4-D and 2, 4, 5-T can be pumped for weed control work. The unit is often used by Recreation personnel to wash down latrines and tables and occasionally by others to wash off signs.