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WATER SUPPLY OPERATIONS – WILDLAND (1.1)

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- NFPA 1142 and 1231 Standard on Water Supplies for Suburban and Rural Firefighting

TASK SKILL DESCRIPTION AND DETAIL

Properly securing an uninterrupted water supply in the wildland firefighter arena helps to ensure successful completion of the incident.

Establishing a water supply on a wildland fire helps to minimize fire spread and can help ease firefighting efforts. A number of water sources can be utilized such as but are not limited to cisterns, swimming pools, lakes, streams, ponds, and personal wells. Engine 216 and 236 are equipped with 3 different types of pumps to aid in obtaining a water supply on wildland fires. The pumps are:

1. Main Apparatus Pump (Honda 4 Stroke 125 GPM)
2. Portable Pump (Honda 115 GPM)
3. Floto Pump (Waterous 140 GPM)

This training manual will focus on how to set up and use each pump.

Floto Pump

1. Both Engine 216 and 236 are equipped with Floto Pumps and are located in the bed section of each engine (see Figure 1).

Figure 1

2. Each pump can be placed into service after connecting a 1 ½" diameter wildland hose to the pump or securing the pump with the attached tie off rope. The Floto Pump can be used to fill Porta tanks, fire apparatus, or operate a 1 ½ hand line. These pumps can be placed into service on any water source as long as the water is a minimum of 6 inches deep (see Figure 2).

Figure 2

Portable Pump

1. Both Engine 216 and 236 are equipped with portable pumps. These pumps are comprised of 3 different pieces (see Figure 3):
    a. Pump (Located on right side compartments on both engines.)
    b. Suction Hose (Green approx. 20 ft. Long)
    c. Collapsible Bucket (Yellow)

Figure 3

2. Due to the mobility the portable pumps can be utilized in a variety of ways:
    a. Fire Attack
    b. Mop Up
    c. Structure Protection
    d. Fill Sites

3. The setup of the portable pump can be accomplished in the following manner:
    a. Two hoses will be used to place this pump into service.
    b. The first hose is the suction hose which is on the bottom male coupling (Example 1 in Figure 4).
    c. Second hose is the discharge; this is placed on the 1 ½ inch female coupling (Example 2 in Figure 4).
    d. Once the intake hose is placed in the water the pump should be filled from the top with water (Example 3 in Figure 4). This is done using the collapsible bucket (Example 4 in Figure 4).
    e. Once the prime has been established the pump can be idled up and water supply has been established. Ensuring the strainer is in adequate water depth is the key to maintaining the draft. Weighting the strainer down will stop the suction hose from rolling to the surface of the water.

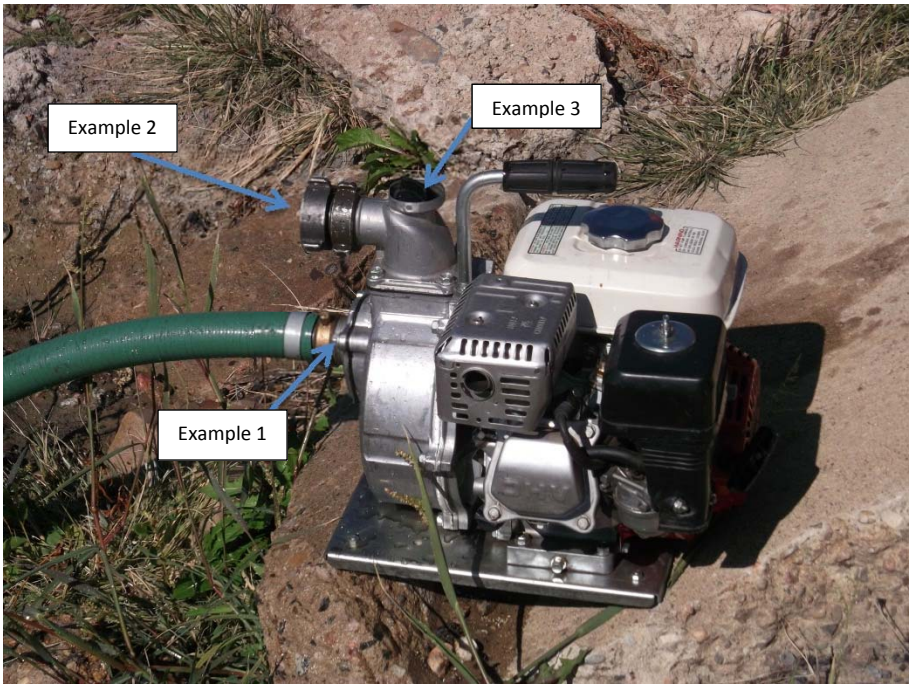

Figure 4

1. Both Engine 216 and 236 are equipped with main apparatus pumps (see Figure 5). These pumps are placed on the rear of each engine. They both have 2 sections of suction hose which are located on top of the tank or the rear of the apparatus. The strainers are located in the driver side rear compartment.

Figure 5

2. The apparatus pumps are hard mounted to the engine and are ideal for running fire attack/progressive hose lays. They are fully capable of drafting operations and are set up by doing the following steps (see Figure 6):
    a. Pull the suction hose out of the holders built into the frame
    b. Place the strainers on the suction hose.
    c. Once the suction hose has been placed ensure there is adequate water around the strainer.
    d. Increase the RPM prime the pump, keep continuous water flow to avoid losing the draft.

Figure 6

REFERENCE INFORMATION

For further information on water supply needs in the wildland fire arena reference the following training guides

- Rural Water Supply Training Manual
- Z:\Fire\Suppression\Wildland\Wildland Training\Wildland training powerpoints
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