



FIRE PROTECTION TRAINING

Procedures Handbook 4300

PUMPING

TOPIC: HOW TO MOBILE PUMP - MODEL 34 OR 35

TIME FRAME: :30

LEVEL OF INSTRUCTION: Level II

BEHAVIORAL OBJECTIVE:

Condition: A CAL FIRE Model 34 or 35 engine with a full tank of water and the following items and conditions: water, tank to pump valve open, tank fill valve set appropriately, suction inlet valve closed, a pre-connected 15 – 25 foot length of 1-½” or 1-¾” hose with a combination nozzle and a suitable area to mobile attack. The student and assistant in appropriate PPE per CAL FIRE policy.

Behavior: The student will spot the engine, brief the assistant, direct the assistant to pull the appropriate pre-connected hoseline, adjust auxiliary pump pressure to 100 PSI (± 20). The student will mobile pump with the assistant mobile attacking for at least 50 feet. After completing the evolution, the apparatus will be returned to its original condition.

Standard: With a minimum 80% accuracy, within one (1) minute and fifteen seconds (00:01:15), according to the job breakdown

MATERIALS NEEDED:

- One (1) CAL FIRE Model 34 or 35 engine with a full tank of water
- One (1) 15 – 25 ft. length of 1-½” or 1-¾” hose with nozzle and shut off bale
- One (1) assistant
- Appropriate PPE per CAL FIRE policy for student and assistant
- Suitable area for mobile pumping, slight uphill incline recommended
- Traffic cones, flagging or other markers to delineate mobile exam course

REFERENCES:

- Vehicle Operation and Maintenance Guide

PREPARATION:

Effective mobile pumping is possible in a variety of different terrain. In many cases, determining how to gain access to the fire is more difficult than extinguishing it. Mobile pumping can be a quick and safe operation when done properly.



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SPECIAL CONDITIONS:

Students do not need to wear their wildland web gear while driving the apparatus.

NOTES:

If using a Model 34 engine for testing purposes, during off road (wildland) conditions, 4-wheel drive shall be engaged. If a Model 34 is used on road (dirt, gravel, paved conditions), 4-wheel drive may be engaged at the discretion of the proctor. There is no 4-wheel drive requirement for a Model 35 engine.



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A MODEL 34 OR 35

PRESENTATION

OPERATIONS	KEY POINTS
1. Respond Code 3 to simulated incident per CAL FIRE policy	1a. All occupants wearing seat belts, windows up b. Driving at a safe speed, headlights and code 3 lights on, no siren c. Student must verify that the assistant is wearing all appropriate PPE per CAL FIRE policy before they pull any hose d. Gloves are to be used anytime equipment is used or when chock blocks are set
2. Spot engine safely in a safe location	
3. Shift transmission to neutral	
4. Set spring brake	
5. Prepare the engine and brief the assistant for mobile attack	5a. Provide assistant with safety briefing advising of an anchor point and safety zone as a minimum
6. Have an assistant deploy the correct hoseline for mobile pumping	6a. Hoseline cannot be deployed from the back of the engine or longer than 25'
7. Start auxiliary pump and adjust hand throttle to 100 psi (\pm 20)	7a. Using cab or pump panel controls
8. Engage front axle if needed	8a. Engage front axle by moving switch to on position
9. Shift transfer case, if appropriate, to low range and shift transmission to low gear	



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PRESENTATION

OPERATIONS	KEY POINTS
10. Have assistant charge hoseline, establish an anchor point	10a. Assistant may charge the line at any time during this step as long as the student has advised them to do so b. Student confirms the evaluator heard the anchor point established with the assistant
11. Release spring brake	
12. Drive along a simulated fireline.	12a. Engine will move at least 50 feet while applying an effective fire stream in a continuous pattern b. Controlling the engine's speed with the foot throttle and/or service brake, as necessary. (Evaluator will tell the student when the fireline is complete) c. Alternate nozzle pattern from medium fog to straight stream d. Ensure safety of assistant at all times e. Ensure no damage to engine or equipment occurs
13. Stop engine	13a. Using service brake b. Notify the assistant you are shutting down the operation c. Do not "slam" on the brakes, make a controlled stop d. Spot engine in a safe location
14. Place transmission in neutral	



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PRESENTATION

OPERATIONS	KEY POINTS
15. Apply spring brake	
16. Shut down mobile pumping operation	16a. Notify assistant to shut down the pre-connected hoseline
17. Idle down auxiliary pump by adjusting hand throttle	17a. Idle for thirty seconds cool down
18. Turn off auxiliary pump switch	
19. Return engine to response ready condition	19a. Re-bed hose b. Refill the tank with water – If instructed by evaluator



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APPLICATION:

The student will practice performing the operations in the job breakdown while under supervision.

EVALUATION:

The student will complete a manipulative performance test at a time determined by the instructor.

ASSIGNMENT:

Practice this job in order to prepare yourself for the upcoming performance test. Study for our next session.