



Fire Protection Training

Procedures Handbook 4300

PUMPING

TOPIC: HOW TO PUMP FROM TANK, CDF ENGINE MODEL #1

TIME FRAME: :30

LEVEL OF INSTRUCTION: Level II

BEHAVIORAL OBJECTIVE:

Condition: A CDF model #1 engine with spring brake set, transmission in neutral, a full tank of water, a predetermined engine pressure of 150 PSI and the following items and conditions: Tank suction valve open, tank fill valve closed, suction inlet valve closed, a pre-connected 100 foot length of 1 ½" or 1 ¾" hose with nozzle attached laying on the ground.

Behavior: The student will: Start and chock the engine in accord with CDF policy, engage the main pump, charge an 1 ½" or 1 ¾" line, and deliver an uninterrupted stream of water to a simulated fire using the tank as a water source. The student will then return the apparatus to its original condition.

Standard: With a minimum of 70% accuracy, within 1 minute and 15 seconds, according to the job breakdown

MATERIALS NEEDED:

- One (1) CDF Model #1 engine with a full tank of water
- One (1) 100 feet of 1 ½" or 1 ¾" hose with nozzle and shut off
- One (1) Stop watch

REFERENCES:

- Vehicle Operation and Maintenance Guide, (CDF Handbook 6804)

PREPARATION:

It is standard operating procedure in most fire departments to establish initial fire streams using tank water. The ability to expeditiously initiate a fire stream with tank water is a basic engine operator skill



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OPERATIONS

KEY POINTS

1. Start main engine
2. Set chock blocks
3. Place foot on brake
4. Engage midship pump
5. Shift transmission
6. Adjust pump panel throttle
7. Adjust pump panel throttle
8. State "water coming"
9. Open discharge valve
10. Adjust pump panel throttle

TIME STOP

11. State "SHUT DOWN"
12. Close discharge valve
13. Adjust pump panel throttle

- 1a. Place foot on service brake
- b. Allow engine to idle
- 2a. In accord with CDF policy
- b. Use gloves
- c. Failure to properly set chocks will be cause for failing the examination.
- 3a. Firmly apply brake
- 4a. Use pump lever/ switch
- 5a. Into 2/4
- 6a. Until transmission shifts into 4th gear
- 7a. To indicate 150 PSI on midship pump pressure gauge
- b. \pm 20 PSI
- 8a. Loudly
- 9a. Slowly
- b. Completely
- 10a. To indicate 150 PSI on midship pump pressure gauge
- b. \pm 20 PSI

Student raises hands to indicate completion of timed portion of exam

Failure to produce an effective fire stream will be cause for failing the examination.

- 11a. Loudly
- 12a. Slowly
- b. Completely
- 13a. Slowly
- b. Until main engine returns to idle



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OPERATIONS

KEY POINTS

14. Return to cab

15. Shift transmission

16. Disengage midship pump

17. Shift transmission

18. Shift transmission

19. Shut off main engine

20. Return chock blocks

14a. Place foot on service brake

15a. To neutral

16a. Using pump lever/switch

b. Acceptable to put transmission into reverse then back into neutral for ease in disengaging pump

17a. Into a road gear

b. With foot on brake

c. Until lurch is felt

18a. To neutral

20a. To proper place



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APPLICATION:

Student to practice until proficient.

EVALUATION:

A performance examination.

ASSIGNMENT:

To be determined by instructor(s).