



Fire Protection Training

Procedures Handbook 4300

PUMPING

TOPIC: HOW TO PUMP FROM TANK, CDF ENGINE MODEL #9 OR #11

TIME FRAME: :30

LEVEL OF INSTRUCTION: Level II

BEHAVIORAL OBJECTIVE:

Condition: A CDF model #9 or #11 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 preconnected 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, 1 minute and 10 seconds without relief valve, 1 minute and 20 seconds with relief valve, according to the job breakdown

MATERIALS NEEDED:

- One (1) CDF Model #9 and #11 engine with a full tank of water
- One (1) 100 feet of 1 ½" or 1 ¾" hose with a nozzle and shut off
- One (1) Stop watch
- One (1) Performance examination per student
- Two (2) Red pens for scoring
- One (1) Clipboard
- One (1) Tally sheet

REFERENCES:

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

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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. Place foot on service brake

2. Start main engine

TIME START

3. Set engine idle

4. Set chock blocks

5. Start pump engine

6. If equipped with pressure relief valve,
turn 4-way valve

7. Adjust pump panel throttle

8. State "Water coming"

9. Open discharge valve

10. Adjust pump panel throttle

11. If equipped with pressure relief valve,
set relief valve

TIME STOP

12. State "Shut down"

3a. At 1200 RPM (\pm 200 RPM)

4a. In accord with CDF policy

b. Failure to set chock blocks properly
will be cause for failing the
examination

c. Use gloves

5a. At pump panel

6a. To "ON" position

7a. To indicate 100 PSI on pump
pressure gauge

b. \pm 20 PSI

8a. Loudly

9a. Slowly

b. Completely

10a. To indicate 150 PSI on the pump
pressure gauge

b. \pm 20 PSI

11a. At 150 PSI (\pm 20 PSI)

Student raises hands to indicate
completion of timed portion of examination

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

12a. Loudly



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OPERATIONS

KEY POINTS

13. Close discharge valve

13a. Slowly

b. Completely

14. Adjust pump panel throttle

14a. Slowly

b. Until pump engine returns to idle

c. Idle pump engine approximately 30 seconds

15. If equipped with relief valve, turn 4-way valve switch

15a. To "OFF" position

16. Shut off pump engine

17. Return to cab

17a. Place foot on service brake

18. Reduce main engine RPM

18a. Slowly

b. To idle

19. Shut off main engine

20. Return chock blocks

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).



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