



Fire Protection Training

Procedures Handbook 4300

PUMPING

TOPIC: HOW TO PUMP FROM TANK - CDF HYDROSTAT ENGINE
MODEL #5, #14, OR #15

TIME FRAME: :30

LEVEL OF INSTRUCTION: Level II

BEHAVIORAL OBJECTIVE:

Condition: A CDF Model #5, #14, or #15 hydrostat 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 a 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) Model #5, #14, or #15 Hydrostat engine
- One (1) Length 1 ½" hose or:
- Two (2) Lengths 1 ¾" hose
- One (1) 1 ½" combination nozzle with 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 engine

TIME START

3. Set chock blocks

4. Set engine tank suction valve switch

5. Return to cab

6. Set transfer valve

7. Adjust throttle

8. Engage midship pump lever

9. State "Water coming"

10. Open discharge valve

11. Return to cab

12. Adjust pump lever

13. Turn 4-way valve

14. Set relief valve

TIME STOP

2a. Allow engine to idle

3a. In accord with CDF policy

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

c. Use gloves

4a. To open position

5a. Place foot on brake

6a. In "pressure" position

7a. To 2000 RPM (+/- 200 RPM)

8a. To indicate 100 PSI on pump pressure gauge

9a. Loudly

b. After returning to pump panel

10a. Slowly

b. Completely

11a. Place foot on brake

12a. To indicate 150 PSI on pump pressure gauge

b. \pm 20 PSI

13a. To the "On" position

14a. To 150 PSI (+/- 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

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OPERATIONS

KEY POINTS

15. State "Shut down"

16. Close discharge valve

17. Return to cab

18. Disengage pump

19. Adjust pump panel throttle

20. Turn 4-way valve

21. Shut off engine

22. Return chock blocks

15a. Loudly

b. After returning to pump panel

16a. Slowly

b. Completely

17a. Place foot on service brake

18a. Using pump lever

19a. Slowly

b. Until engine returns to idle

c. For a minimum of 1 minute

20a. To "off" position

22a. 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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