



Fire Protection Training

Procedures Handbook 4300

HOSE APPLIANCES & TOOLS

TOPIC: How To Operate An In-Line Foam Eductor

TIME FRAME: 30 Minutes

LEVEL OF INSTRUCTION:

BEHAVIORAL OBJECTIVE:

Condition: An engine with the pump operating at 150 P.S.I. An in-line foam eductor, 200' of 1 1/2" hose, 2 1/2" x 1 1/2" adapter, 95 GPM or foam nozzle and spanner wrench

Behavior: Student shall demonstrate how to produce a foam stream using an in line eductor.

Standard: With a minimum of 70% accuracy

MATERIALS NEEDED:

- Engine
- 1-1/2" fire hose
- 2 1/2" x 1 1/2" adapter
- In-line eductor
- Foam
- Foam nozzle
- Spanner wrench

REFERENCES:

- IFSTA, Essentials of Fire Fighting, 2nd Edition, Chapter 9 Information Sheets

PREPARATION:

The ability to set up a foam producing operation in a minimum amount of time could mean the difference between life and death in a critical situation.

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HOW TO OPERATE AN IN-LINE
FOAM EDUCTOR

OPERATIONS

KEY POINTS

1. Remove 2 1/2" pump discharge cap
2. Attach 2-1/2" to 1-1/2" reducer to pump discharge
3. Remove 50 or 100 foot section of 1-1/2" hose and attach to discharge
4. Attach opposite end of 1-1/2" to in-line eductor
5. Attach 100 feet of 1-1/2" hose to outlet of eductor
6. Attach foam maker or fog nozzle
7. Advance hose
8. If eductor so designed return to eductor, set eductor to "foam or water"
9. Turn percentage of foam to appropriate setting
10. Insert eductor tube into foam supply
11. Open appropriate discharge valve at engine
12. Return to pump panel and set pressure
13. Open nozzle

- 1a. Counter clockwise
- 2a. Clockwise
 - b. Spanner tight
- 3a. Clockwise
 - b. Spanner tight
- 4a. Female swivel on eductor counter clockwise
 - b. Spanner tight
- 5a. Clockwise
- 6a. Foot tilt method
 - b. At least 95 GPM nozzle
- 7a. Kink free
- 8a. To indicate foam or water
- 9a. Determined by the type of concentrate being used
- 11a. Slowly
- 12a. Turn throttle counter clockwise
 - b. To manufacturer's recommended pressure
 - c. Approximately 150 P.S.I.13
- 13a. Slowly
 - b. Adjusted to give appropriate pattern/range for fire encountered

Note: When operation is completed, eductor should be washed with soap and water, then flushed with clean water.



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HOW TO OPERATE AN IN-LINE
FOAM EDUCTOR

APPLICATION:

Student will practice until proficient.

EVALUATION:

A performance examination.

ASSIGNMENT:

To be determined by instructor(s).

Performance Examination

	<u>POINTS</u>
1. Remove 2 1/2" pump discharge cap	<u>5</u>
2. Attach 2 1/2" to 1 1/2" reducer to pump discharge	<u>10</u>
3. Remove 50 or 100 foot section of 1 1/2" hose and attach to discharge	<u>10</u>
4. Attach opposite end of 1 1/2" hose to in-line eductor	<u>10</u>
5. Attached 100 feet of 1 1/2" hose to outlet of eductor	<u>10</u>
6. Attach foam maker or fog nozzle to advanced line	<u>5</u>
7. Advance hose to remove all kinks	<u>5</u>
8. Return to eductor, set eductor to "foam or water"	<u>10</u>
9. Turn percentage of foam to appropriate setting	<u>10</u>
10. Insert eductor tube into foam supply	<u>5</u>
11. Open appropriate discharge valve at engine	<u>5</u>
12. Return to pump panel and set pressure at manufacturers specification or 150 P.S.I.	<u>10</u>
13. Open nozzle and apply foam to simulated fire	<u>5</u>

POINTS POSSIBLE: 100

POINTS DEDUCTED:

FINAL SCORE:

EVALUATOR'S SIGNATURE:

DATE:

COMMENTS:
