



Fire Protection Training

Procedures Handbook 4300

HOSE APPLIANCES & TOOLS

TOPIC: Functions of Hose Appliances

TIME FRAME: 1 Hour

LEVEL OF INSTRUCTION:

BEHAVIORAL OBJECTIVE:

Condition: A written quiz

Behavior: The student will list and describe the purpose and function of hose appliances.

Standard: With a minimum of 70% accuracy

MATERIALS NEEDED:

- Hose appliances
- Chalkboard
- Audio-visual equipment
- Appropriate visual aids

REFERENCES:

- IFSTA, Essentials of Fire Fighting, 2nd Edition, Chapter 10
- IFSTA, Hose Practices, 7th Edition, Chapter 3

PREPARATION: The fire service utilizes a variety of hose appliances that make it possible to function on the fire ground. Departments are not standardized when it comes to types, sizes or kinds of appliances. It is essential that you as a firefighter have a good working knowledge of these appliances in order to adapt to other agency's operations.



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FUNCTIONS OF HOSE
APPLIANCES

PRESENTATION	APPLICATION
<p>I. HOSE APPLIANCES</p> <p>A. A Device Used with Fire Hose Through Which Water Flows</p> <p>B. Examples:</p> <ol style="list-style-type: none">1. Adapters2. Nozzles3. Siamese & wyes4. Water thief5. Hose tee6. Elbows7. Flow control devices8. Hydrant valves <p>II. PURPOSE OF HOSE APPLIANCES</p> <p>A. Allows Unlike Hose Couplings to be Connected Together</p> <ol style="list-style-type: none">1. Different sizes2. Different types3. Different threads <p>B. Protect Hose</p>	<p>List different types of hose appliances</p> <p>Have students cite purposes of hose appliances and give examples</p>

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PRESENTATION	APPLICATION
<p>C. Allows Water Flow to be Restricted or Shut Off</p> <p>D. Allows Control of Hydrants</p> <p>E. Provides Greater Flexibility in Increasing or Decreasing Number of Hoselines</p> <p>III. FUNCTION OF HOSE APPLIANCES</p> <p>A. Adapters</p> <ol style="list-style-type: none">1. Connect hose couplings of different<ol style="list-style-type: none">a. Size<ol style="list-style-type: none">(1) Increases(2) Reducersb. Thread types<ol style="list-style-type: none">(1) National hose(2) National pipe straight hose(3) National pipe tapered2. Connect hose couplings of same gender<ol style="list-style-type: none">a. Double malesb. Double female <p>B. Siamese</p> <ol style="list-style-type: none">1. Connect two lines into one line<ol style="list-style-type: none">a. Two female couplingsb. One male coupling	<p>What does the siamese appliance do?</p>



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<ul style="list-style-type: none">2. May be clapped to shut off flow to unused inlet automaticallyC. Wyes<ul style="list-style-type: none">1. Divides one line into two lines<ul style="list-style-type: none">a. Two male couplingsb. One female coupling2. May be gated to control flow of water manuallyD. Water Thieves<ul style="list-style-type: none">1. Intended for use on 2 1/2" or larger diameter hose2. Divides one line into three lines<ul style="list-style-type: none">a. Three male couplingsb. One female coupling3. May be gated to control flow of water manually4. This device should not be confused with the hose teeE. Hose Tee<ul style="list-style-type: none">1. Intended for use with 1 1/2" diameter hose2. Divides one line into two<ul style="list-style-type: none">a. Two male outletsb. One female inlet3. May be gated to control flow of water manuallyF. Elbows	

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PRESENTATION	APPLICATION
<p>1. Used to eliminate bend in hose which may restrict water flow</p> <p>a. Used commonly at pump discharge or inlet</p> <p>G. Hydrant Valves</p> <p>1. Designed to provide a means of changing from an unsupported hydrant supply line to a supply line supported by an engine without interrupting the flow of water</p> <p>2. Can be used to:</p> <p>a. Increases number of hoselines</p> <p>b. Boost hydrant pressure</p> <p>3. Control may be</p> <p>a. Manual</p> <p>b. Automatic</p> <p>c. Radio</p> <p>H. Flow Control Devices</p> <p>1. Used to restrict or stop water flow</p> <p>2. May be a:</p> <p>a. Gate valve</p> <p>b. Butterfly valve</p> <p>c. Ball valve</p>	<p>Information sheet #2</p> <p>Information sheet #3</p>

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FUNCTIONS OF HOSE
APPLIANCES

SUMMARY:

Hose appliances allow the firefighter to adapt to special circumstances or situations. They provide greater flexibility during firefighting operations to increase or decrease the number of hoselines and to control water flow patterns and volumes.

EVALUATION:

A written quiz.

ASSIGNMENT:

To be determined by instructor(s).