



Lauderdale-By-The-Sea Volunteer Fire Department

S.O.P Number:	Effective Date: October 1, 2010
Section:	
Subject: Annual Hose Testing	
By Order of the Fire Chief: Steven Paine	

Section 1002 - Annual Hose Testing

Purpose

The following procedures outline the initial acceptance, annual service and repaired hose test procedures for all Fire-Rescue Department hose. SAFETY IS OUR FIRST CONSIDERATION.

Procedures:

- A. Initial Acceptance and Annual Service Tests - each length of hose shall be inspected to determine that the hose has not been damaged by chemicals, burns or cuts. Inspect each coupling to see that it is in serviceable condition. Inspect for gaskets, damaged threads, corrosion, slippage on the hose, out-of-round, swivel rotating freely, missing lugs, or cracks. Remove from the test area any hose failing the visual inspection. All hose failing shall be tagged,(listing defect and location of defect), removed from service. A distinguishing marker rag or magic marker) noting the location of the defects shall be placed on the hose.
- B. Each length of hose is to be tested simultaneously at the same service test pressure. The total length of any test layout shall not exceed 300 feet. The layout shall be straight and without twists or kinks; and a nozzle must be securely attached.
- C. All personnel involved in testing hose will wear fire helmets, steel-toed safety shoes or fire boots, and gloves.
- D. Discharges to be used:
 - a) Top mount pump panel-all discharges available for use.
 - b) Side pump panel - only discharges not located on operator's pump panel can be used.



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- E. Volume reducer plates will be inserted at each female coupling attached to a discharge gate.
- F. A Driver/Engineer will remain at the pump panel for the duration of the hose test.
- G. With a Firefighter at each open nozzle, the pressure shall be gradually raised to 45 PSI at each discharge gate. In some cases, the hydrant alone will supply this initial pressure and the discharge gate may even have to be partially shut so as not to exceed 45 PSI. After the test hose is full of water, all air in each hose line shall be exhausted by raising the discharge end of each hose line above the highest point in the system. The nozzle shall then be closed slowly to the fully shut position.
- H. At the 45 PSI pressure, the hose shall be checked for leakage at the coupling and tightened with a spanner wrench where necessary. Each hose shall be marked at the coupling to determine if the coupling has slipped during the test. A black marking pen should be used.
- I. All personnel shall clear the area other than those persons required to perform the remainder of the procedure.
- J. The pressure shall be raised slowly to the service test pressure (in-service test, 250 PSI - annual service test) and tested for five minutes.
- K. While the layout is at the appropriate pressure, the hose shall be inspected from a minimum distance of 15 feet for leaks.
- L. If during a test a section of hose is leaking or a section bursts, the test shall be terminated and that length of hose shall have failed the test. The layout shall be drained and the defective hose removed from the layout. The service test shall then be restarted beginning with Procedure "G".
- M. After five minutes at the appropriate pressure, the pump shall be shut down, the pressure allowed to equalize with the water source, the pump discharge gates closed, and each nozzle opened to drain the test layout.
- N. The marks placed on the hose at the back of the couplings shall be observed for coupling slippage. If the coupling has slipped, the hose shall have failed the test.



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Test Records

- A. Upon completion of an acceptance test, annual service test, or repaired hose test, a Notification will be sent to the Support Services electronically and shall include the following:
- Fire Station Number
 - Apparatus Number
 - Hose Diameter - number of lengths tested
 - Number of lengths failed
- B. New hose purchased from this date on will have I.D.'s stenciled on the hose jackets for use in tracking repairs, service tests, warranties, etc., via the fire station computers.