

Tentative Interim Amendment

## NFPA® 1901

## Standard for Automotive Fire Apparatus

## 2016 Edition

**Reference:** 28.8.3.1, 28.12.7, 28.12.7(5)(New) & (6)(New) and A.28.12.7(6)(New) **TIA 16-2** (*SC 16-8-19 / TIA Log #1229*)

Pursuant to Section 5 of the NFPA *Regulations Governing the Development of NFPA Standards*, the National Fire Protection Association has issued the following Tentative Interim Amendment to NFPA 1901, *Standard for Automotive Fire Apparatus*, 2016 edition. The TIA was processed by the Technical Committee on Fire Department Apparatus, and was issued by the Standards Council on August 4, 2016, with an effective date of August 24, 2016.

A Tentative Interim Amendment is tentative because it has not been processed through the entire standards-making procedures. It is interim because it is effective only between editions of the standard. A TIA automatically becomes a public input of the proponent for the next edition of the standard; as such, it then is subject to all of the procedures of the standards-making process.

## 1. Revise paragraph 28.8.3.1 to read as follows:

**28.8.3.1** A system shall be provided or the pump shall have operating characteristics that are capable of limiting the increase of net pump pressure to a maximum pressure rise of 40 percent over the rated pump pressure when all discharges are closed when the engine and pump controls are set to produce the rated capacity at the rated net pump pressure of the pump.

2. Revise subsection 28.12.7 and add new list items (5) and (6) to read as follows:

**28.12.7 Pressure Control Test.** The pressure control system of an ultra-high pressure fire pump shall be tested for pressure rise as follows:

(1) The ultra-high pressure fire pump shall be operated to deliver rated capacity at rated discharge gauge pressure.

(2) If a pressure control system is supplied, it shall be set in accordance with the manufacturer's instructions.

(3) All discharge valves shall be closed.

(4) Any rise in discharge pressure shall not exceed 40 percent of the rated discharge pressure.

(5) The pump shall be operated with the discharge lines closed for 3 minutes without the temperature of the pump exceeding  $140^{\circ}$ F (60°C).

(6\*) The final discharge pressure, any rise in discharge pressure, and the final pump temperature shall be recorded.

3. Add a new A.28.12.7(6) to read as follows:

**A.28.12.7(6)** Positive displacement UHP pumps equipped with trap pressure unloaders trap pressure between a check valve in the outlet of the unloader and the discharge nozzle when the spray nozzle is closed while bypassing pump output back to the pump intake or back to a tank. The pump recirculates water without building any more pressure than is required to overcome the friction loss of pushing the water through the unloader and through whatever passageway

(internal passageway or external hose, pipe, etc.) back to intake or tank. UHP systems on which the discharge pressure gauge is installed on the pump head will indicate a significant drop in the observed gauge pressure when the discharge is closed. If the observed final discharge pressure reading during the pressure control test fails to indicate a significant drop, this might indicate that the setting of the unloader is incorrect, the check valve is damaged or fails to fully close, or the bypass passageway has become restricted. Such changes indicate that the unloader should be investigated and repaired.

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