

Sample Forms

FIRE PUMP WEEKLY INSPECTION CHECKLIST

PLANT			DATE INSPECTED
LOCATION			
PUMP NUMBER	TYPE	MAKE OF PUMP	LOCATION OF PUMP
RATED FLOW	RATED PRESSURE	RATED SPEED	INSPECTED BY

SECTION A — ALL PUMP INSTALLATIONS

NO.	DESCRIPTION	YES	NO
1	Is jockey pump controller switch on?	✓	✓
2	Is jockey pump running normally?		
3	Is fire pump controller in "automatic" position?		
4	Does pump start automatically upon drop in pressure?		
5	Is pump starting pressure proper (psi)?		
6	Is "churn pressure" normal (psi)?		
7	Is circulation relief valve operating at churn pressure?		
8	Are pump bearings and seals running at the proper operating temperatures?		
9	Did local and remote pump running alarms and supervisory (pump in "off" position) signals operate properly?		
10	Is valve to hose header shut, and drained?		
11	Is pump room free of excess combustibles?		
12	Is pump room adequately heated?		

SECTION B — INTERNAL COMBUSTION ENGINE-DRIVEN FIRE PUMP

1	Is weekly program timer operating properly?		
2	Did the engine cooling water system discharge?		
3	Is primary cooling water valve sealed open? Is manual bypass placarded?		
4	Did the pump start on each set of batteries?		
5	Is liquid at proper level in all batteries?		
6	Are battery hydrometer readings within acceptable limits?		
7	Is each battery pilot light on?		
8	Is battery charger functioning properly?		
9	Is fuel tank full?		
10	Is valve on fuel tank discharge sealed open?		
11	Is lubricating oil level correct?		
12	Is engine coolant level correct?		
13	Did low oil pressure alarm test satisfactorily		
14	Did high engine temperature alarm test satisfactorily?		
15	Did interruption of AC power to the controller cause engine to start or initiate a remote supervisory signal?		
16	Is controller locked, and are keys accessible to authorized personnel?		
17	Was pump run for 30 minutes?		
18	Did engine achieve and maintain proper operating temperature?		

SECTION C — ELECTRIC MOTOR-FIRE PUMP

NO.	DESCRIPTION	YES	NO
1	Is power "available" light on??	<input type="checkbox"/>	<input type="checkbox"/>
2	Was pump run for a minimum of 7 minutes?	<input type="checkbox"/>	<input type="checkbox"/>
3	Did AC power supervisory alarm test satisfactorily?	<input type="checkbox"/>	<input type="checkbox"/>
4	Did emergency power source operate correctly?	<input type="checkbox"/>	<input type="checkbox"/>

SECTION D — STEAM-DRIVEN FIRE PUMP

1	Is proper supply of lubrications on hand, and is lubrication system operable?	<input type="checkbox"/>	<input type="checkbox"/>
2	Is sufficient steam pressure available at pump inlet?	<input type="checkbox"/>	<input type="checkbox"/>
3	Was the pump run for a minimum of 5 minutes?	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS

TEST PROCEDURES

1. Precautions

- a. Be sure system air and water pressure are at zero, before removing cover plate. The drain valve should be fully open and control valve fully closed.
 - b. Where there is central station supervision of flow alarms, make arrangements to avoid calling out fire department.
 - c. Care should be taken to make sure that valve operation will not result in water damage.
 - d. Extreme caution should be used to prevent damage to sprinkler systems in freezers.
 - e. Special care should be taken to remove water from any low point sprinklers or trapped portions of system.
 - f. So far as possible, make trip tests when there are no plant operations in area.
 - g. When there are several valves, test alternate systems to avoid impairments to large areas.
 - h. Never trip a dry pipe valve against a closed valve on system side, even with water supply throttled. This may cause severe water hammer.
2. The main control valve should be closed up to three turns of full closed position. Open the inspector's test connection. Immediately after valve trips, the main control valve should be closed and drain valve opened. This will prevent flooding of system. Note: some insurance and municipal jurisdictions require notification when sprinkler system valves are closed.
 3. Each valve should be operated under approximate service conditions. Corrosion, deposits, obstructions, or minor displacement of parts may impede complete operation of valve. Therefore, it is necessary to thoroughly flush water supply line to valve. It may be necessary to flow a hydrant before drain valve is opened.
 4. The throttling of supplies will not allow complete tripping of some models that require a high rate of flow to complete movements of the parts. With other valves, clapper may not open fully and it could return to low or anticolumn latch.
 5. After the system has been thoroughly drained, remove cover plate from valve. Examine the position of parts to determine whether valve has opened fully.
 6. Rubber rings or seats should be carefully examined. If these have deformed or deteriorated, they should be replaced with new equipment supplied by valve manufacturer.
 7. Grease, soap, shellac, white lead, varnish, paper gaskets, or other such material must never be used on air or water seat of valves. If valve cannot be made tight without use of these, it should be repaired by a contractor or replaced by an approved valve.

REPORTING TRIP TESTS

1. Unsatisfactory (U)

- a. The valve does not open immediately following reduction of air pressure to zero (verify that system air pressure has been reduced to zero and that there is water available at sufficient pressure and volume to complete operation), OR
- b. The failure of latching mechanisms of a differential type valve permits return of clapper to "set" position following entrance of water to system, OR
- c. Mechanical failure of parts occurs.

2. Partly Satisfactory Performance (PS)

- a. A differential type valve, which has a differential up to 7 to 1, does not trip until differential is 10 to 1 or greater, OR
- b. A mechanical type valve shows a trip point of 5 psi (.35 kg/sq cm) or less, OR
- c. The valve trips and water flows through it, but some parts of the assembly do not function properly. However, the operation is such that no major obstruction is offered to passage of water through valve. For instance, the drip valve failed to close; rubber rings are swollen or deteriorated or valve seats or parts are coated with grease, paint, or other foreign material.

IMPORTANT: Dry pipe valves and quick opening devices reported PARTLY SATISFACTORY or UNSATISFACTORY should be retested, after problem has been corrected.

1 (800) 472-7819
24-Hour Impairment Hotline

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