



# FIRE PUMP INSPECTION CHECKLIST

Fire pumps are an essential part of many water-based fire protection systems. The right design, installation, and acceptance testing of these pumps will help ensure that they are ready to protect the building on the day of the acceptance test. After that, once “the keys” are handed over to the building owner, there is no guarantee that the pump will remain in a ready state to work as designed unless it undergoes routine inspection, testing, and maintenance (ITM). This checklist from Exhibit 8.21 of the *NFPA 25 Handbook: ITM of Water-Based Fire Protection Systems*, covers just one aspect of an ITM program in weekly inspections. For more information on fire pumps and other NFPA products and solutions, visit: [nfpa.org/fpssolutions](http://nfpa.org/fpssolutions).



## FIRE PUMP WEEKLY INSPECTION

Property Name: \_\_\_\_\_

Inspector: \_\_\_\_\_

Property Address: \_\_\_\_\_

Contract No.: \_\_\_\_\_

Property Phone Number: \_\_\_\_\_

Date: \_\_\_\_\_

### Inspections: Weekly

- Yes  No  N/A
- Yes  No  N/A
- Yes  No  N/A
- Yes  No  N/A
- Yes  No  N/A

### Pump House

- Heat in pump room is 40°F (4°C) or higher
- Ventilation louvers are free to operate
- Excessive water does not appear on the floor
- Coupling guard is in place
- Heat in pump room is not less than 70°F (21°C) for diesel engine pump without engine heater

### Pump Systems

- Yes  No  N/A Pump suction, discharge, and bypass valves are open
- Yes  No  N/A No piping or hoses leak
- Yes  No  N/A Fire pump leaking one drop of water per second at seals
- Yes  No  N/A Suction line pressure is within acceptable range
- Yes  No  N/A System line pressure is within acceptable range
- Yes  No  N/A Suction reservoir is full
- Yes  No  N/A Wet pit suction screens are unobstructed and in place
- Yes  No  N/A Waterflow test valves are in closed position, hose connection valve is closed, and the line to test valves is free of water

### Electrical Systems

- Yes  No  N/A Controller pilot light (power on) is illuminated
- Yes  No  N/A Transfer switch normal power light is illuminated
- Yes  No  N/A Isolating switch for standby power is closed
- Yes  No  N/A Reverse-phase alarm light is not illuminated
- Yes  No  N/A Normal-phase rotation light is illuminated
- Yes  No  N/A Oil level in vertical motor sight glass is within acceptable range
- Yes  No  N/A Pressure maintenance (jockey) pump has power

### Diesel Engine Systems

- Yes  No  N/A Diesel fuel tank is at least two-thirds full
- Yes  No  N/A Controller selector switch is in “auto” position
- Yes  No  N/A Voltage readings for batteries (2) are within acceptable range
- Yes  No  N/A Charging current readings are within acceptable range for batteries
- Yes  No  N/A Pilot lights for batteries are “on” or battery failure pilot lights are “off”



# FIRE PUMP INSPECTION CHECKLIST *(continued)*

## FIRE PUMP WEEKLY INSPECTION (Continued)

### Inspections: Weekly

- Yes  No  N/A All alarm pilot lights are "off"
- Yes  No  N/A Record engine running time from meter
- Yes  No  N/A Oil level is within acceptable range in right angle gear drive pumps
- Yes  No  N/A Crankcase oil level is within acceptable range
- Yes  No  N/A Cooling water level is within acceptable range
- Yes  No  N/A Electrolyte level in batteries is within acceptable range
- Yes  No  N/A Battery terminals are free of corrosion
- Yes  No  N/A Water-jacket heater is operational
- Yes  No  N/A Battery cranking voltage exceeds 9 volts for a 12 volt system and 18 volts for a 24 volt system (Alternative ITM A.8.1.1.2)
- Yes  No  N/A Water pump(s) is not leaking (Alternative ITM A.8.1.1.2)
- Yes  No  N/A Jacket water heater operational (Alternative ITM A.8.1.1.2)
- Yes  No  N/A Flexible hose and connections are in good operating condition (Alternative ITM A.8.1.1.2)
- Yes  No  N/A Check lube oil heater for operation (Alternative ITM A.8.1.1.2)
- Yes  No  N/A Oil lube level is within acceptable range (Alternative ITM A.8.1.1.2)
- Yes  No  N/A Check for water in diesel fuel tank (Alternative ITM A.8.1.1.2)
- Steam System**
- Yes  No  N/A For steam-driven pumps, steam pressure is within acceptable range
- Exhaust System**
- Yes  No  N/A Examine exhaust system for leaks (Alternative ITM A.8.1.1.2)
- Yes  No  N/A Drain condensate trap (Alternative ITM A.8.1.1.2)

### Comments

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor Name: \_\_\_\_\_

Contractor Address: \_\_\_\_\_

License/Certification No.: \_\_\_\_\_

This information is provided to help users navigate NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, 2020 edition. It is not intended to be a comprehensive list of requirements under NFPA 25. Check with the local jurisdictions for specific requirements. This material does not represent the official position of NFPA or its technical committees on any referenced topic, which is represented solely by the NFPA documents in their entirety. For free access to the complete and most current version of all NFPA documents, please go to [nfpa.org/docinfo](http://nfpa.org/docinfo). NFPA disclaims liability for any personal injury, property, or other damages of any nature whatsoever resulting from the use of this information. In using this information, you should rely on your independent judgment, and when appropriate, consult a competent professional.



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