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.

FIRE PUMP WEEKLY INSPECTION

Property Name: _____ **Inspector:** _____

Property Address: _____ **Contract No.:** _____

Property Phone Number: _____ **Date:** _____

Inspections: Weekly			
			Pump House
❑ Yes	❑ No	❑ N/A	Heat in pump room is 40°F (4°C) or higher
❑ Yes	❑ No	❑ N/A	Ventilation louvers are free to operate
❑ Yes	❑ No	❑ N/A	Excessive water does not appear on the floor
❑ Yes	❑ No	❑ N/A	Coupling guard is in place
❑ Yes	❑ No	❑ N/A	Heat in pump room is not less than 70°F (21°C) for diesel 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 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 (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.: _____

IT'S A BIG WORLD.
LET'S PROTECT IT TOGETHER.

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