

Table 8.5.3 Summary of Fire Pump Inspection, Testing, and Maintenance

Complete as Applicable	Visual Inspection	Check	Change	Clean	Test	Frequency
A. Pump System						
1. Lubricate pump bearings			X			Annually
2. Check pump shaft end play		X				Annually
3. Check accuracy of pressure gauges and sensors		X	X			Annually (change or recalibrate when 5% out of calibration)
4. Check pump coupling alignment		X				Annually
5. Wet pit suction screens		X		X		After each pump operation
B. Mechanical Transmission						
1. Lubricate coupling			X			Annually
2. Lubricate right-angle gear drive			X			Annually
C. Electrical System						
1. Exercise isolating switch and circuit breaker					X	Monthly
2. Trip circuit breaker (if mechanism provided)					X	Annually
3. Operate manual starting means (electrical)					X	Semiannually
4. Inspect and operate emergency manual starting means (without power)	X				X	Annually
5. Tighten electrical connections as necessary		X				Annually
6. Lubricate mechanical moving parts (excluding starters and relays)		X				Annually
7. Calibrate pressure switch settings		X				Annually
8. Grease motor bearings			X			Annually
D. Diesel Engine System						
1. Fuel						
(a) Tank level	X	X				Weekly
(b) Tank float switch	X				X	Weekly
(c) Solenoids valve operation	X				X	Weekly
(d) Strainer, filter, or dirt leg, or combination thereof				X		Quarterly
(e) Water and foreign material in tank				X		Annually
(f) Water in system		X		X		Weekly
(g) Flexible hoses and connectors	X					Weekly
(h) Tank vents and overflow piping unobstructed		X			X	Annually
(i) Piping	X					Annually
2. Lubrication System						
(a) Oil level	X	X				Weekly
(b) Oil change			X			50 hours or annually
(c) Oil filter(s)			X			50 hours or annually
(d) Lube oil heater		X				Weekly
(e) Crankcase breather	X		X	X		Quarterly
3. Cooling System						
(a) Level	X	X				Weekly
(b) Antifreeze protection level					X	Semiannually
(c) Antifreeze			X			Annually
(d) Adequate cooling water to heat exchanger		X				Weekly
(e) Rod out heat exchanger				X		Annually
(f) Water pump(s)	X					Weekly
(g) Condition of flexible hoses and connections	X	X				Weekly
(h) Jacket water heater		X				Weekly
(i) Inspect duct work, clean louvers (combustion air)	X	X	X			Annually
(j) Water strainer				X		Quarterly
4. Exhaust System						
(a) Leakage	X	X				Weekly
(b) Drain condensate trap		X				Weekly
(c) Insulation and fire hazards	X					Quarterly
(d) Excessive back pressure					X	Annually
(e) Exhaust system hangers and supports	X					Annually
(f) Flexible exhaust section	X					Semiannually
5. Battery System						
(a) Electrolyte level		X				Weekly
(b) Terminals clean and tight	X	X				Quarterly
(c) Remove corrosion, case exterior clean and dry	X		X			Monthly
(d) Specific gravity or state of charge					X	Monthly
(e) Charger and charge rate	X					Monthly
(f) Equalize charge		X				Monthly
6. Electrical System						
(a) General inspection	X					Weekly
(b) Tighten control and power wiring connections		X				Annually
(c) Wire chafing where subject to movement	X	X				Quarterly
(d) Operation of safeties and alarms		X			X	Semiannually
(e) Boxes, panels, and cabinets				X		Semiannually
(f) Circuit breakers or fuses	X	X				Monthly
(g) Circuit breakers or fuses			X			Biennially