

Fire Pumpsets

Last Issue Date: 07/12/2016		Type Of Service				
Activity		A	B	C	D	E
1	Check pump areas are unobstructed and have adequate lighting.		Y	Y	Y	Y
2	Check signage and ID plates.		Y	Y	Y	Y
3	Check pump water supply valves are in open or closed position as required.		Y	Y	Y	Y
4	Check the readings of the pressure gauges.		Y	Y	Y	Y
5	Check for visual signs of damage or deterioration.		Y	Y	Y	Y
6	Check batteries (where present).		Y	Y	Y	Y
7	Check engine warning devices.		Y	Y	Y	Y
8	Check that the fuel tank is full and: (a) Check and recalibrate the fuel tank gauge to show the correct level. (b) Check and adjust the fuel tank "low level" warning devices.		Y	Y	Y	Y
9	Check pump controller: (a) enclosure for corrosion and cleanliness. (b) operation of all visual indicators, switches and sounders. (c) controller status. (d) lights are functional by pressing indicator test button.		Y	Y	Y	Y
10	Undertake the pre-test checks for: (a) safety guards. (b) water supply. (c) non-electric drive. Check the: - water, oil, belt drives, exhaust condensate drains, cooling water valves correct position and fuel water trap/filter for water contamination. (d) check that all isolating valves are in the correct position. (e) check pressure switches mountings and cleanliness.		Y	Y	Y	Y
11	Function test for diesel pumps: (a) Start each pumpset by reducing the applied water pressure to the starting device and for compression ignition engines run engine continuously for not less than 10 minutes on the first automatic start and check that the driver achieves full speed within 15 seconds. (b) Restart using manual device. (c) Verify and record cut in pressure is within the required range and that the pump operates at the correct discharge pressure. (d) Check pump gland and drain. (e) Check for abnormal balance condition or noises. (f) Check alarms. (g) Check running speed. (h) Check for water, oil, fuel leaks. (i) Check fittings on ancillary equipment are secure. (j) Check battery charger or generator. (k) Check engine stop mechanism returns to start position automatically. (l) Check belt drives are in good condition.		Y	Y	Y	Y

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	(m) Check battery charger failure alarm. (n) Check engine instrumentation and record results. (o) Check flow is evident from the circulation relief valve at pump shut-off head and ceases at the required pressure. (p) Check exhaust system is leak free. (q) Check cooling water is discharging (where applicable).					
12	Function test for electric pumps: (a) Start each pumpset by reducing the applied water pressure to the starting device and run the motor continuously for at least 3 minutes. (b) Restart the pumpset using the manual starting device and run continuously for another 3 minutes. (c) Verify and record cut in pressure is within the required range and that pump operates at the correct discharge pressures. (d) Check pump controller status. (e) Check pump glands and drain. (f) Check for abnormal balance condition or noises. (g) Check both local and remote pump alarms and lights.		Y	Y	Y	Y
13	Controller batteries: (a) Check battery complies with details on identification plate. (b) Check for corrosion, physical damage and security. (c) Check battery enclosure for corrosion and cleanliness. (d) Check float voltage.		Y	Y	Y	Y
14	After completion of testing procedures return all equipment to the operational condition.		Y	Y	Y	Y
15	For alternative power-supplies (electric motor-driven pumpset) - if applicable: Run the pump(s) continuously for not less than 3 minutes off the alternative supply.			Y	Y	Y
16	Hydro-pneumatic accumulator (where fitted): Check the accumulator air pressure.			Y	Y	Y
17	Undertake a full flow test for diesel pumps. Refer to 3.4.3 item 3.2 from AS1851 for details.				Y	Y
18	Undertake a full flow test for electric pumps. Refer to 3.4.3 item 3.3 from AS1851 for details.				Y	Y
19	Check batteries for any condition likely to indicate an adverse effect on its function. Where batteries are replaced they shall comply with the applicable version of AS 4029.				Y	Y
20	Replace all engine starting batteries after a maximum of 2 years.				Y	Y
21	When battery has not been replaced discharge battery to verify condition.				Y	Y
22	Test and record battery charger output voltage.				Y	Y
23	Diesel Pumps: (a) Replace engine oil.				Y	Y

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	(b) Replace engine oil filter, fuel filter and if necessary air filters. (c) Check condition of the fuel, if suspect test or replace. (Note: The testing or replacement of fuel is an additional cost). (d) Check cooling hoses, replace where necessary. (e) Flush engine cooling system and replace with approved coolant. (f) Pressure test cooling system. (g) Check cooling system pressure reducing valve. (h) Clean heat exchanger. (i) Check pump / driver coupling. (j) Grease pump bearings (if applicable). For oil lubricated type replace bearing oil. (k) Replace oil in right angle gearboxes. (l) Carry out any other routine service required by the manufacturer.					
24	Electric pumps: With all electrical equipment isolated from all power supplies: (a) Check condition of contacts. (b) Check driver couplings for wear and poor alignment. (c) Grease pump and motor bearings (if applicable). (d) For oil lubricated bearings replace oil.				Y	Y
25	Check non return valves.				Y	Y
26	Check pipework for corrosion.				Y	Y
27	Check operation of pressure relief valve.				Y	Y
28	Check operation of overspeed shutdown.				Y	Y
29	Check operation of variable speed control.				Y	Y
30	Check operation of remote pump start / stop function.				Y	Y
31	Repack pump glands if applicable.					Y
32	Overhaul the circulation and pressure relief valves, engine cooling and pressure regulating valves.					Y
33	Check stop valves for leakage, service or replace as necessary.					Y
34	Replace engine air filter.					Y
35	Record the results in the log book.		Y	Y	Y	Y

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## Special Comments and Technical Data

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B SERVICE MONTHLY.

C SERVICE 6 MONTHLY.

D SERVICE ANNUALLY.

E SERVICE EVERY 5 YEARS.

NOTE: SEALED BATTERIES THAT CANNOT BE TOPPED UP WITH WATER AND ARE ON CONSTANT CHARGE SHOULD NOT BE USED AS THEY MAY EXPLODE.

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