



Thursday, May 08, 2025

Arrive on site (4/21/25) to evaluate diesel fire pump system after system was tripped in automatic and overheated. The controls system was investigated to determine that based on the events recorded its likely the test solenoid on the controller got weak and temporarily opened when not desired which caused the system to start and then shut down as designed after a 30-minute timer elapsed. The test solenoid on the controller was plugged to prevent this from happening in the future. Perform full-service PM on the diesel engine to include change engine oil, engine oil filter, fuel filter, and antifreeze. During PM removed engine thermostat to find that it was over extended from the overheat condition, replaced thermostat with new thermostat.

Performed pressure test on the engine to determine that the cooling system is still properly sealed and was not damaged elsewhere due to the overheat. When operating the system, I found that the cooling loop regulator was stuck closed, I was able to get the regulator to open for the duration of testing and determine that the malfunctioning regulator was the main cause of the overheat condition. To prevent this from happening again the cooling loop regulators will need to be replaced. Also found that the batteries are 7 years old and tested at 70 percent capacity, it is recommended that the batteries are changed every 2 years. System was otherwise found to be in overall good condition and operating as designed at this time, system has been left on and in auto with all valves open.

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Thank you,
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