

Graham Industrial Coatings, LLC

Equipment: MEP-803A Genset diesel engine

S/N: FZ42844

Hours: 2519

JOB ID# GIC-2024-001

Customer Concern: fuel leaks & troubleshoot charging system

Date: 10.10.2024 **Tech:** Tyler Jenkins

JOB ID# GIC-2024-001

WORK PERFORMED: Customer dropped off the heater with a complaint of a fuel leak on the generator and the alternator not charging. Began removing the sheet metal as it has to be removed as this is a custom built unit. Slid the generator unit back after unbolting. Jumped the generator off with a charger as the battery was dead. Started the generator and saw that the fuel leak was coming from the injector return lines. The generator had to be slid back so we could access the backside where the alternator is located. Removed a cover to access the alternator. Tested the alternator, and it is not putting out the 24V that it is supposed to. Disconnected the fuel lines and brought the generator into the shop. Called Alaska Rebuilders in Anchorage to source an alternator. I ordered one, and it is being Gold Streaked to Fairbanks. Disconnected the batteries so I could charge them. The battery on the outside that you can access is arched out on the engine and has caused the battery to crack overtime. Load tested the other battery, and it is also bad. Drove over to Power & Transmission and picked up two interstate batteries and terminal covers. Went to a few different vendors to find 1/8 inch fuel line to replace the clear fuel line that is on the machine. Bought the fuel line for the injectors. Drove back to the shop and removed the old fuel injection lines.

Date: 10.11.2024 **Tech:** Tyler Jenkins

JOB ID# GIC-2024-001

WORK PERFORMED: Drove over to Alaska Air Cargo to pick up the new alternator. After picking up, I drove back to the shop and removed the old alternator. Switched the pulley over to the new alternator. Installed the new alternator on the generator and hooked up the wiring. Finished installing the fuel injection return lines with new clamps and spring clamps. Adjusted the belt tension. Installed the batteries so they cannot arch on anything. Installed the fuel return hose that goes to the tank.

Date: 10.14.2024 **Tech:** Tyler Jenkins

JOB ID# GIC-2024-001

WORK PERFORMED: Loaded the generator up onto the skid steer and took it outside, placed the generator on the trailer, and hooked up the fuel lines. Primed the fuel system, and then started the machine. Checked the fuel lines that I replaced to ensure they weren't leaking. The lines are no longer leaking. Tested the alternator to ensure it was putting out 24V. The alternator is now putting out 24 V. Mounted the generator to the trailer and installed sheet metal. Hooked up the wiring for the generator and then tested the heaters. The heater closest to the generator was plugged in and fires up and works properly. The heater in the front fired up, but the fan did not kick on. Flame ended up going out. Called the customer that dropped it off, and he gave me another number of a guy to call, but had no luck getting a hold of him. Informed my supervisor that the front heater was unplugged and that I could not get a hold of the customer who had run the machine before. Parked the trailer, typed today's job notes, and informed my supervisor of completion.

Date: 10.25.2024 **Tech:** Wesley Croteau

JOB ID# GIC-2024-001

WORK PERFORMED: Pull machine in the shop and tested heater functionality. Heater started but fan would not come on. Tested the fan system for resistance and had an open circuit. Removed the controller cover, removed the fan wiring cover and capacitor cover. Tested the spare capacitor and ran. Fan still does not start. Removed the cover to the overheat shutdown and tested the unit. Overheat shutdown was good. Jumped the fan with the test cord, and the fan turned on momentarily. Found a short in the controller wiring for the fan circuit. Cut the old connector off and replaced. Tested the heater for functionality, and it turned on along with the fan.