

Recommended Annual Maintenance for Espar AIRTRONIC Heaters

To ensure a trouble-free cold weather season, annual or pre-season maintenance is recommended for all Espar Airtronic heaters. Please use the recommended tools and follow the procedures, as outlined in the heater manual, while removing and reinstalling the different heater components. It should be noted that periodic heater maintenance is the responsibility of the owner of the heater and is not covered under Espar's warranty. If the heater needs repair, please contact an Espar trained mechanic.

- **Heater Clearances:** Before initial operation ensure that the heater is not being subjected to external loads by heavy objects being placed over it. This may cause damage to the heater parts and affect its normal operation. Ensure that sufficient clearances, as recommended in the heater manual, are being maintained around the heater, even while the vessel or vehicle is in operation.
- **Air Inlet & Outlet:** Check the return air inlet port and hot air outlet port for any blockages. Inspect the length of ducting for any damage and replace as necessary. Ensure all ducting connections are secure. Discourage heat sensitive materials from being placed too close to the heater, ducting components or hot air outlet ports.
- **Wiring & Electrical Connections:** Check all electrical connections from the heater to the batteries. Check for wear and abrasion along the length of the harnesses. Repair or replace the harness whenever the harness insulation is broken or damaged. Check the battery connections. Clean any corrosion at the terminals. Replace the battery terminals if the corrosion is severe. Check the fuse for corrosion and the correct rating.
- **Glow Pin & Glow Plugs:** Remove the glow pin/plug and if necessary, clean it. If the glow pin/plug shows signs of dissimilar color or distortions, replace it. Inspect the glow pin/plug wires for damage and if necessary, replace it. Remember to clean the chamber and ensure the ventilation hole is clear of any obstructions, then replace the glow pin/plug.
- **Glow Pin/Plug Screen:** Regardless of its condition, remove and replace the glow pin screen annually. Make sure that the new screen is installed correctly.
- **Exhaust:** Check the condition of the exhaust pipe. Look for any holes or breaks in the exhaust piping. Make sure all connections are sealed securely. Replace if necessary. Ensure the exhaust pipe is securely located and correctly routed.
- **Combustion Air Intake:** Check the condition of the combustion air intake tube. Clear any blockages. If damaged, replace it. Ensure that the combustion air intake tube is securely located and correctly routed.

- **Fuel Metering Pump:** Ensure the mounting angle of the fuel metering pump is in between 15-35°. An incorrectly mounted fuel metering pump may lead to excessive carbon issues. Check the fuel lines for possible leaks, loosened clamps, etc. Inspect the integrated fuel filter on the suction side of the fuel metering pump - clean or replace as necessary. If there is an excessive amount of carbon buildup, this can indicate an issue with the fuel metering pump. Consulting a certified Espar technician is recommended to address excessive carbon buildup.
- **Burner Tube:** If the heater is smoking excessively during operation then remove and check the condition of the burner tube. The burner should be light brown in color. Clean any carbon build up inside the burner tube. Check the inside of the heat exchanger and scrape out any loose carbon.
- **Gaskets:** When reassembling the burner and the heat exchanger, use a new thermal insulator each time. Likewise, when reassembling the blower motor assembly use a new blower gasket each time.
- **Run Once A Month:** Regardless of the season, run the heater every month for a minimum period of 20 minutes, preferably using kerosene. This will help the heater to burn away any combustion residue in the burner chamber. It will ensure that the fuel in the lines to the heater does not gel and solidify and that the heater will start reliably when heating season arrives. It is recommended to run the heater on kerosene for at least 20 minutes prior to extended periods of non-use.