



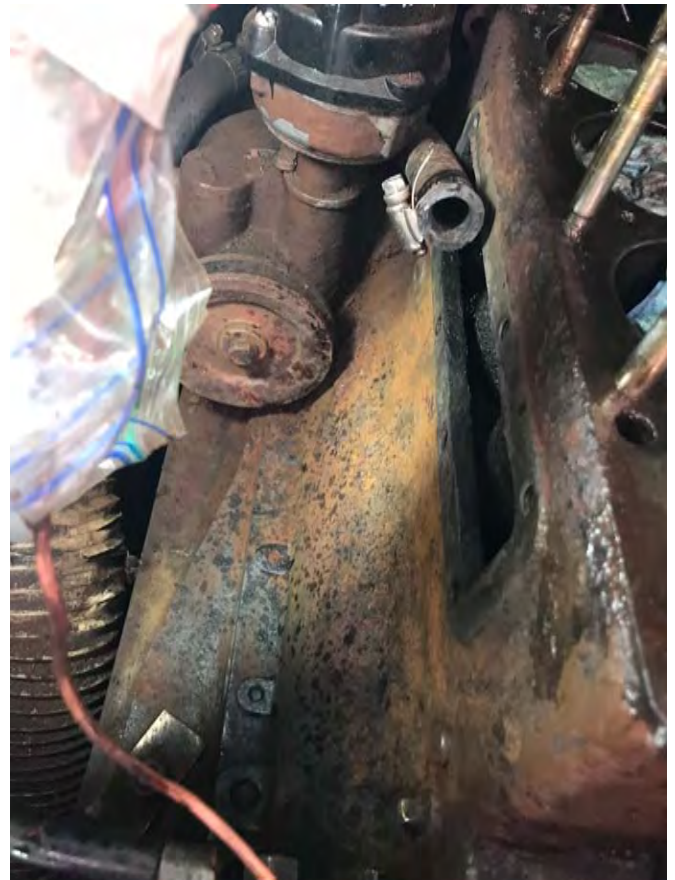
Major Maintenance and Repair Action

Hull 269 – Jade

Maintenance or Repair Action: Repaint Engine		Number: 006	
Reason for Action	Engine block and components rusting and corroding excessively	System	Engine
		Start	7/5/2018
		Complete	11/11/2018
		Cost	\$100.00
DESCRIPTION OF ACTION			
<p>The engine required descaling and painting due to excessive corrosion. Engine and parts coated with primer (at least two coats), except parts subjected to temperatures over 200 degrees. At least three coats of high temperature paint were applied to all components. All items were steel except where noted. The following components were removed (in conjunction with Repair Action #005, <i>Overhaul Cooling Water System</i>, and #004, <i>Replace Cylinder Head</i>), sandblasted, wire brushed, primed (except where noted), and painted with spray paint listed below:</p> <ul style="list-style-type: none"> • Cylinder Head (new, not primed) • Exhaust Jacket/Manifold (not primed) • Thermostat Housing (Bronze) • Jacket Water Side Plate • Alternator Support Bracket • Alternator Drive Pulley • Port and Starboard side of engine • Alternator (After painting, cleaned windings with electrical solvent) • Starter Motor and Solenoid • Cooling Water Pump (Bronze/Brass) • Fuel Pump (Aluminum) • Ignition Coil Bracket • Throttle Bracket • Dip Stick • Flywheel Cover • Oil Breather/Fill Cap • Flame Arrestor 			
NOTES			
<p>Cylinder Stud Nuts and various bolt heads and washers were also painted. Starboard side of engine showed the most corrosion. Interior side of Jacket Water Side Plate was primed. Only the aft end of the engine is uncoated and will be attended to in a future season. Aluminum bodied carburetor was not painted. Spare water pump, fuel pump, and carburetors will be painted when overhauled.</p> <p><i>See attached documents and pictures.</i></p>			
Tools, Materials, Manuals, and Diagrams Used		Parts Used	
		Name	Part Number
Sandblaster			
Drills and Wire Brushes			
Sanders and Sandpaper			
Carburetor cleaner (cleaning, preparation for painting)			
Rust-Oleum Self Etching Primer (ATO-52)			
Rust-Oleum Specialty High Heat Ultra Paint (SPC-29) (Color: Aged Copper, SKU 241232)			



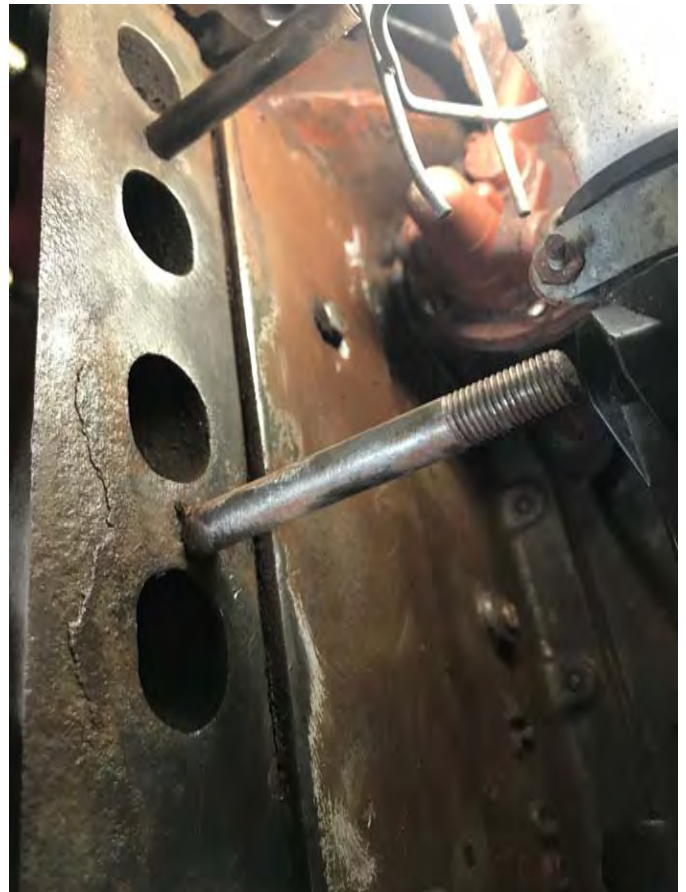
Engine as found, November 2017



Starboard side of engine with Jacket Water Plate off, descaling in progress



Close up of excessive corrosion on starboard side of engine block



Port side of engine with Manifold removed, descaling in progress



Manifold, Alternator Pulley, and Spark Arrester before sandblasting and cleaning



Jacket Water Plate, Starter Motor, Alternator and Alternator Support Bracket before



Components after sandblasting



Components after sandblasting



Manifold coated with high temperature paint, other pieces painted with self-etching primer



Coating alternator bracket, thermostat housing, jacket water plate, and flame arrester



Spray painting alternator with self-etching primer (passages to windings closed with tape)



Painting bolts for Jacket Water Plate



High temperature spray paint on Starter Motor/Solenoid



Setting components to dry for at least 24 hours



Alternator



Flame Arrester



Thermostat Housing



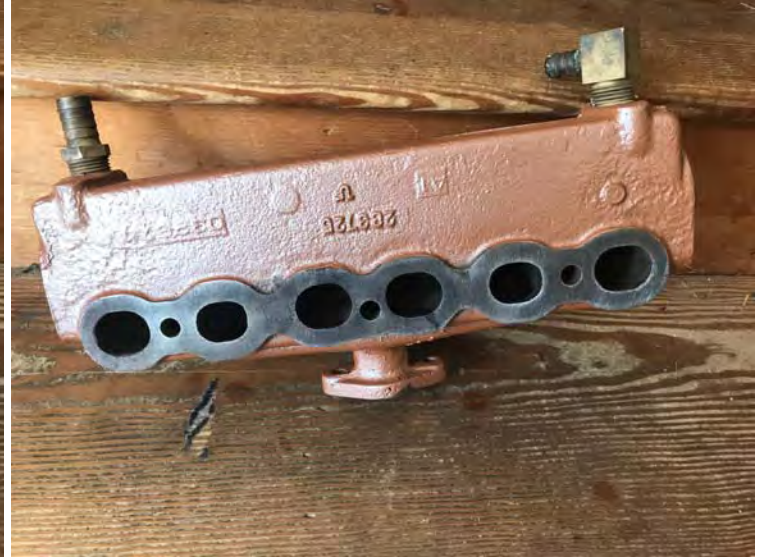
Alternator Drive Pulley



Alternator Support Bracket



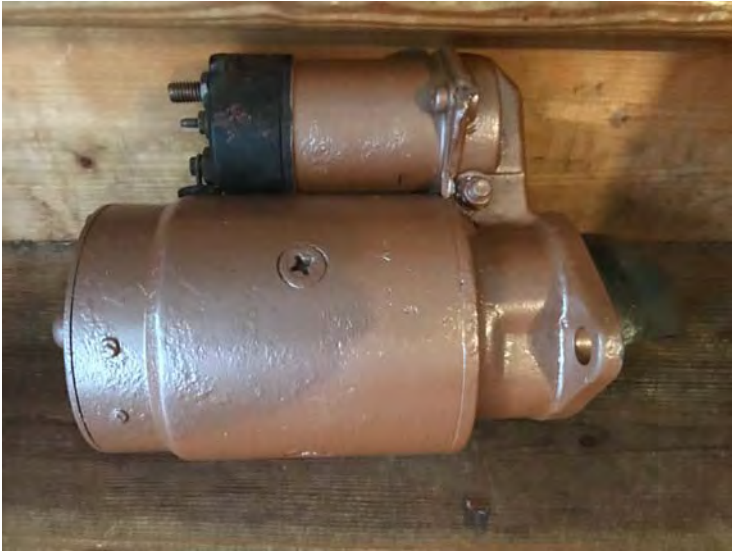
Cylinder Head



Exhaust Jacket/Manifold



Jacket Water Plate



Starter Motor/Solenoid



Fuel Pump Body with priming coat



Finished Fuel Pump and Sediment Bowl



Final engine (starboard) descaling and cleaning



Final engine (port side) descaling and cleaning



Final engine descaling and cleaning before self-etching primer coat



Primer Coat applied to engine (starboard side)



Primer coat applied to port side of engine



Final primer coat applied to engine



Applying "antique copper" high temperature spray paint to engine



Finishing coat (starboard side)



Finishing coat on port side of engine



Ignition Coil Bracket, Dipstick,
and Throttle Bracket before cleaning



Oil Breather/Fill Cap with primer coat



Finished results



Engine (starboard side) painted and components reassembled



Engine (port side) painted and components reassembled



Engine reassembled without Flywheel Cover and Starter Motor



Engine with all painted comonents reassembled