


STP Capacitor Assembly Wiring

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The STP Capacitor Assembly provides the starting voltage and running torque that a single phase Submerged Turbine Pump (STP) motor requires to ensure proper operation.

Warning  Highly flammable vapors or liquids may be present in the environment in which this equipment is installed or serviced. Installing or working on this equipment means working in an environment that presents risks of severe injury or death if instructions and standard industry practices are not followed.

Follow all applicable codes governing the installation and servicing of this product and the entire system. Always lock out and tag electrical circuit breakers while installing or servicing this equipment and related equipment. Refer to the STP/IST Fixed and VL Installation and Owner's Manual, the Installation and Owner's Manual for this equipment, and all other relevant manuals for related equipment for complete installation and safety information.

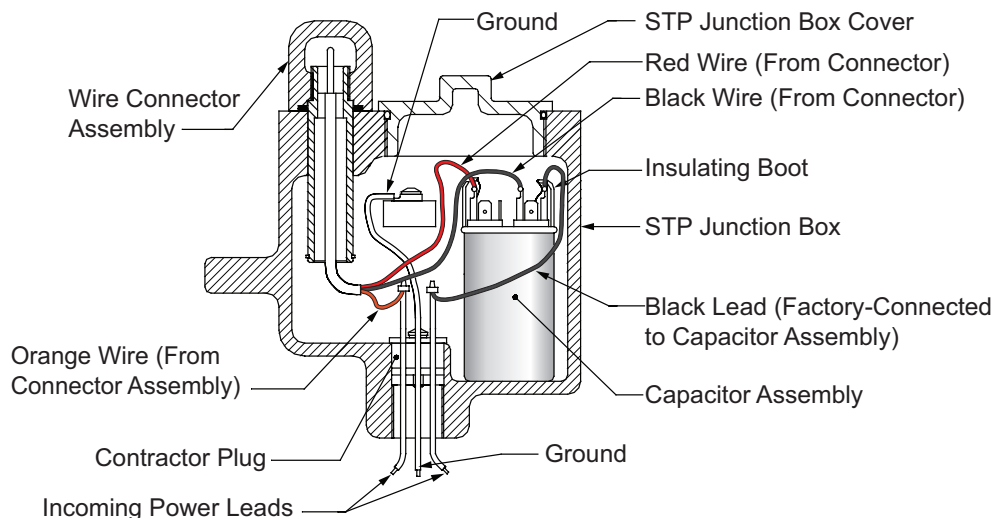
Note that the original capacitor supplied by Franklin Fueling Systems is equipped with an internal shunt resistor that bleeds down the residual voltage within the capacitor when incoming power is removed from the submersible. Failure to utilize the original capacitor, or failure to install a capacitor with a shunt resistor, greatly increases the risk of severe injury or death when servicing the STP.

Description of Figure 1

Two incoming power leads plus a ground run from a pump controller inside the station to the STP Junction Box. Inside the STP Junction Box, one power lead is wired directly to the orange wire of the wire connector assembly. The other power lead is wired to the black lead coming from one side of the capacitor housed inside the pump junction box. The ground is landed to the STP Junction Box Lug.

The two remaining wires coming off of the wire connector assembly are: a black wire, which is wired to the same side of the capacitor that the incoming power wire is connected to, and a red wire, which is connected to the opposite side of the capacitor from where the black leads are terminated.

Ensure that the insulating boot is covering the capacitor terminals and the STP Junction Box Cover is securely mounted before applying power to the STP.



**Figure 1: Junction Box
(cutaway-Side view)**