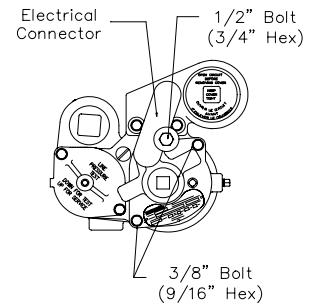


Lead Assembly Replacement

The lead assembly, otherwise known as the wire harness or pigtail, is a three wire female connector that runs from the motor discharge head to the cavity inside of the manifold discharge head. If it's necessary to replace the lead assembly on your FE Petro submersible turbine, follow the steps and precautions outlined below.

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. Please refer to the *STP/IST Fixed and VL Installation and Owner's Manual*, the *Installation and Owner's Manual* for this equipment, and any other related equipment for complete installation and safety information.**



Procedure

1. Turn off the power at the load center, and lock out and tag the circuit breaker. Disengage the electrical connector by turning the 1/2" (3/4" hexhead) bolt counterclockwise. When the electrical connector assembly is disconnected, lift and swing it out of the way. Remove the two 3/8" (9/16" hexhead) bolts from the extractable portion of the manifold.

Note: The Pump Motor Assembly (PMA) shell can be damaged by blows from hard surfaces, so use care when removing it.

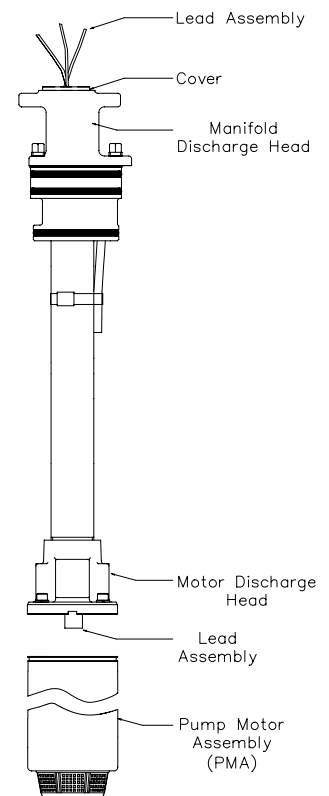
3. Remove the PMA from the motor discharge head.
4. Remove the cover of the manifold discharge head and disconnect the lead assembly from the male connector.
5. Using a flathead screwdriver, unscrew and remove the contractors plug (a 3-hole plug that the lead assembly passes through) from the discharge head.
6. Extract the lead assembly from the motor discharge head by pulling on the black female connector.

Note: If you are servicing a variable length pump, cut one wire from the lead assembly so it can later be used as a pull wire. Clean all areas of the motor discharge head with a clean, dry cloth, especially the area where the lead assembly connector inserts. Also, make sure the o-ring in the motor discharge head is not damaged.

7. Insert the new lead assembly into the motor discharge head until the black female connector is aligned properly and secured in the motor discharge head slot.

Note: If you have a variable length model unit, secure all three wires from the new lead assembly to the pull wire that was left in the pump.

8. Tighten the PMA onto the motor discharge head making sure that the locating pin on the motor is aligned with the hole in the motor discharge head.
9. Return the extractable portion of the assembly to the manifold (pump head) and secure it by tightening the electrical connector first and then tightening the two remaining 3/8" bolts. Make sure the o-ring is still in the electrical connector before installing.
10. Inside the manifold discharge head, cut the lead wires leaving approximately 6" exposed from the contractors plug. Pass the lead wires through the contractors plug and screw it in place.
11. Strip all three lead assembly wires, and, using the three wire nuts provided, connect them to the electrical connector wires by color. Red to red, orange to orange, and black to black.
12. Replace and tighten the manifold discharge head cover.
13. Finally, turn the pump on and visually check the assembly for leaks.



Please contact Technical Support if we may be of any assistance.