Wire Connector Assembly: Disconnecting and Reconnecting

The wire connector assembly is disconnected when removing the Pump Motor Assembly (PMA), or when other maintenance on a Submerged Turbine Pump (STP) or Intelligent Submerged Turbine (IST) is being performed. Improperly disconnecting and reconnecting the wire connector assembly may cause a pump failure, so, to ensure proper servicing, follow the outlined steps below and refer to Figure 1 for graphical representation.

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.

Disconnecting the Wire Connector Assembly
1. Turn the power off to the STP at the electrical supply box. Lock out and tag the power supply to prevent anyone from accidentally turning the power back on during this procedure.
2. If it becomes necessary when the wire connector binds, loosen the hex head bolt until the wire connector assembly is free.
3. Rotate the wire connector assembly away from the discharge head so that it is out of the way so that work may be performed.

Reconnecting the Wire Connector Assembly
1. Rotate the wire connector assembly in the opposite direction of Step 4, so that it aligns with the hole in the STP discharge head. It is important to rotate the wire connector assembly in the reverse direction of Step 4 because continuous rotation in the same direction can cause the wires to twist sufficiently to create an electrical short circuit.
2. If the two junction box mounting bolts were not loosened during the disconnection process, loosen them now.
3. Supporting the junction box and moving it slightly to help align the connector with the discharge head, carefully insert the wire connector assembly into the hole in the discharge head. Do not force the connector into the discharge head.
4. Apply a small amount of non-conductive lubricant on the threads of the hex head bolt and to both brass sleeves to enable the connector to be easily removed in the future and then tighten it down. If binding occurs during this step, do not force it; simply adjust the junction box so that binding is eliminated.
5. Tighten the junction box mounting bolts down.

Figure 1

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