

MECHANICAL SWITCH INSTALLATION INSTRUCTIONS

FM0733
0298
Supersedes
0397

WARNING: ALWAYS DISCONNECT OR UNPLUG PUMP FROM ELECTRICAL OUTLET BEFORE REMOVING, TOUCHING OR WHILE SERVICING.

WARNING: All electrical systems must be installed by a qualified licensed electrician according to the National Electrical Code.

(1) Detach the rubber float rod guide from the float rod by stretching the float rod guide over the bottom of the rod. Remove float and float rod by turning them 90 degrees and slipping float rod off the switch arm. Check the rubber float rod guide for deterioration or damage. Replace if required.

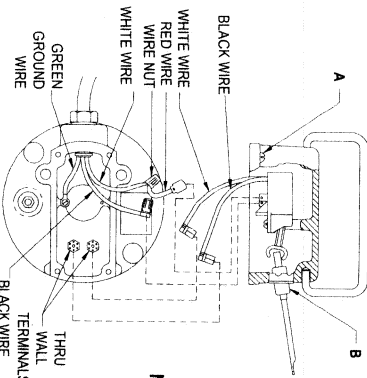


FIGURE 1

- (2) Remove four (4) screws at (A) (see Fig. 1) and remove cover and wires from switch. Check for burned, broken, or damaged wires and replace as needed. Note wire locations.
- (3) Clean motor housing seal, making sure surfaces are smooth. Install new switch and stabilizer bar. Tighten screws (12 in. #). Note stabilizer bar's rib must touch switch assembly between mounting holes (see Fig. 3). Check for free movement of the switch arm up and down. If there is any resistance other than the switch snap, replace the arm and seal assembly.
- (4) With a volt-ohms meter (Set at RX1), check between each of the two (2) thru-wall terminals and motor shell for resistance. If any resistance (needle should not move) is measured, take to an Authorized Service Station for repair. Also, check between the ground pin terminal at the plug and motor housing with volt-ohms meter (Set at RX1). There should be no resistance (needle should move to (0)). If a resistance is measured or there is no needle movement, repair as needed or take to an Authorized Service Station.

NOTE: Replace guard and install a new gasket. Reattach wires as noted in (2) above. See wiring diagram. Place cover over gasket and start the four (4) screws at (A) and tighten uniformly (22 inch pounds). **NOTE:** Make sure wires are not between the gasket, cover or motor shell.

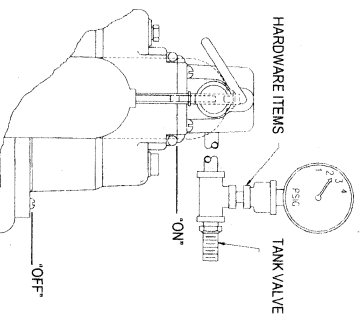


FIGURE 2

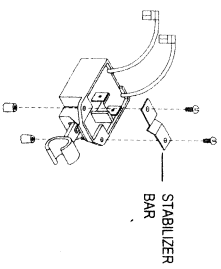


FIGURE 3

- (5) Replace guard and install a new gasket. Reattach wires as noted in (2) above. See wiring diagram. Place cover over gasket and start the four (4) screws at (A) and tighten uniformly (22 inch pounds). **NOTE:** Make sure wires are not between the gasket, cover or motor shell.
- (6) Pressure test switch cavity at 2 to 3 PSI. (See Fig. 2) Look for air bubbles under water at the gasket, (A), screw heads, switch arm (B) and at cord. **NOTE:** If bubbles are seen, repairs are required. Take unit to an Authorized Service Station for repair. **(THIS TEST IS REQUIRED TO REDUCE A POSSIBLE SHOCK HAZARD.)**
- (7) If no leaks are seen in pressure test, install the new test plug provided and tighten so that two (2) threads or less are showing under the head of the plug.
- (8) Install float, float rod and guide in reverse order to #1. Without touching pump, plug unit into a grounded outlet and with an insulated tool, gently lift and lower float to test on/off operations. **UNPLUG UNIT.**
- (9) Re-install pump in pit with piping in place, plug in and test on/off levels in the sump pit by running water in same (See Fig. 2). Do not touch the unit or piping when performing this test.

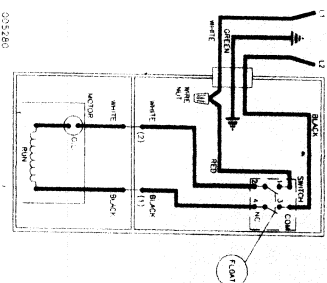
ARM ASSEMBLY REPLACEMENT INSTRUCTIONS

- (1) Remove switch (see instructions 2-4 above).
- (2) Drive out arm assembly from inside cap with a punch, screw driver, or other appropriate tool.
- (3) Clean out old sealer from casting.
- (4) Apply the sealer (enclosed) completely around the new arm and seal cup where it will meet the casting.
- (5) Locate the new arm assembly in the casting so the travel is like that pictured above. Using installation tool such as 3/4" O.D. tubing and a hammer, seat the assembly to the shoulder.
- (6) Replace switch, adjust and test as instructed above.

WARNING: AFTER THIS SWITCH IS INSTALLED, A PRESSURE TEST OF THE SWITCH COVER IS REQUIRED TO REDUCE A POSSIBLE SHOCK HAZARD. (SEE (7) ABOVE)

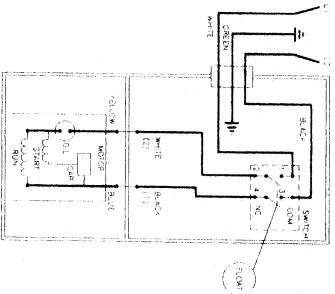
SWITCH APPLICATIONS AND CONFIGURATIONS.

Switch P/N	Used On Pump Model	Lead Lg.	Terminations
004705	53, 55, 57, 59, 97, 98, 264, 1053, 1057, 1059, & 1097, 1098, & 1264	3 1/2" to 4"	Two (2) Pin Terminals
004740	137, 139, 267, 268, 1137, & 1267	4" to 5"	A Pin and A Flag Terminal
004744	161, 163, 165, 185, 188, 189, 284, 293, 294, 295	5 1/2" to 5 7/8"	Two (2) Flag Terminals
004755	282	6 1/4" to 6 7/8"	A Pin and a Flag Terminal



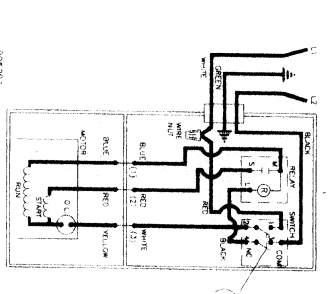
SWITCH P/N 004705

SWITCH P/N 004705



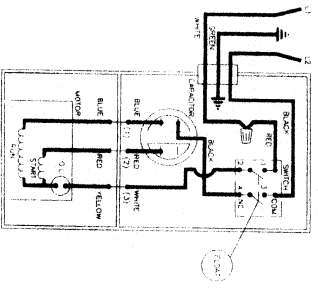
PUMP MODELS
98, 264, 1264

SWITCH P/N 004740



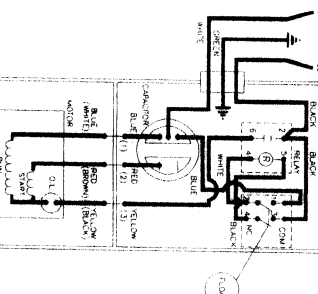
PUMP MODELS
137, 139
267, 268, 1137, 1267

SWITCH P/N 004755



PUMP MODELS
282

SWITCH P/N 004744



PUMP MODELS
161, 163, 165, 185, 188, 189,
284, 293, 294, 295