

## SHORT CIRCUIT PREVENTION - LAMP CIRCUITS

SERIES 40, 40R, 50, 80 and 90

Under certain conditions, there is a possibility of a short circuit as a result of the center lamp contact pin(s) in the switch/indicator assembly coming in contact with the lamp shell contact blade(s) in the pushbutton. These failure conditions require that the lamp circuit is energized (connected at both ends) and the pushbutton either has unfilled lamp holes or does not have a discard in place. Under these conditions, if the pushbutton is installed in the switch/indicator assembly and depressed as in actuating the switch, the contact pin(s) could touch the blade(s) and cause a short circuit.

Therefore, it is recommended that the four (4) lamp pockets in the pushbutton be filled at all times with either lamps or dummy (lamp) plugs (Ref. P/N 15001 for T1-3/4 size and P/N 15091 for T1 size lamp replacement), or when none of the lamp pockets are filled, then a discard (P/N 109109 for Series 40, 40R, 50 and 80 and P/N 109213 for Series 90 Pushbuttons) should be installed. (Note: These discards are always installed by the factory on any pushbuttons shipped without lamps or dummy plugs).

There is a secondary benefit of keeping the discards in place or replacing them with lamps or dummy plugs. The four (4) spring-loaded center lamp contact pins help to return the pushbutton to the fully elevated position, which facilitates removal of the pushbutton from the switch housing.