KNOWLEDGE BASE

Article Type: **Instruction**

Testing a Proximity Switch

Description:

Instructions on; “How to test a proximity switch

WARNING

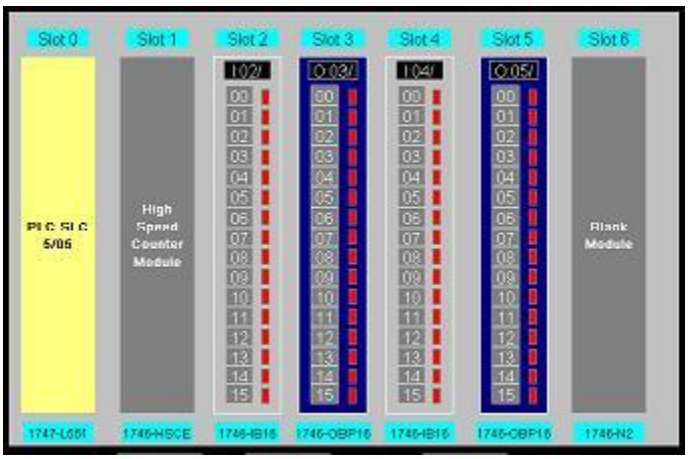
Never work on, clean or service this unit, control panel or any machine or open or remove any protective cover, guard, grate, door, or maintenance panel until the power or energy sources has been turned off, locked out / tagged out, and all moving parts have come to a complete stop and or blocked to prevent movement. Machinery is dangerous – avoid personal injury and or death by following manufacture, Local, and OHSA safety procedures. Contact Columbia Machine for safety decals, guards, horns and beacons.

CONCRETE PRODUCT SOLUTIONS

Testing a Proximity Switch

Many proximity switches have built in led indicators to let the user know if the device has power and if the target is in range of the switch. These indicators are very useful for adjustment; however, they are not the best way to troubleshoot the switch when there are problems with the system because they do not let the user know that the PLC is actually receiving the signal from the switch.

Most Columbia systems ship with an I/O status screen on the control panel. It is always best practice when testing a proximity switch to refer to this screen as well as your schematics. By manually positioning the machine so the proximity switch in question should be flagged then referring to this screen to be sure the appropriate input is energized, the user can then be confident that the switch is properly aligned and the wiring between the switch and the control panel is in good order.



It is not recommended that the user attempts to flag a proximity switch with a screw driver or other piece of metal because in doing so, there is a possibility to experience unexpected movement of the machine and consequently, possible injury to the operator. Additionally, this method of testing can lead to misleading results because it does not indicate that the actual alignment and distance in relation to the target is correct.