



G.A.L. Manufacturing Corporation

50 East 153rd Street, Bronx, N.Y. 10451
Phone (718) 292-9000 Fax (718) 292-2034

Solutions for the poor conductivity of interlock devices.

Problems:

1st. Modern electronics may not work well with the mechanical contacts. The current for a computer input is far below the requirement for contacts to conduct.

2nd. Oxidation is also another contributing factor for the poor conductivity of interlock devices.

3rd. Sanding contacts by emery paper or filing devices may compound the poor conductivity problems after times.

Solutions:

1st. Increasing the current to 40mA by connecting a resistor in parallel with the input based on the applied voltage.

Example:

Applied Voltage = 120VAC

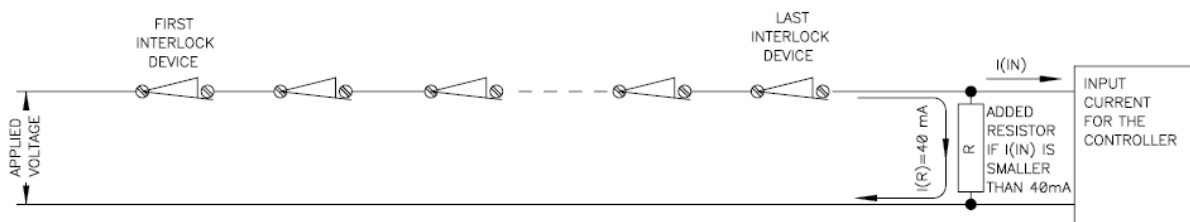
The Resistor Value will be:

$$\text{Resistor Value} = \frac{120}{0.040} = 3000 \Omega = 3K\Omega$$

The minimum wattage of the Resistor is calculated as shown:

$$\text{Resistor Wattage Value} = 3000 \times 0.040^2 = 4.8 \text{ Watts}$$

Practically, a resistor of 3K Ω , 20W should be used in this example.





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2nd. The contact cleaner, DeoxIT DN5 Spray DN5S-6N, from CAIG Laboratories, Inc. (USA) should be used to spray on the contacts. The link to CAIG Laboratories, Inc. is provided here for convenience:

<http://www.caig.com>

DeoxIT® DN5 Spray

Contact Cleaner & Rejuvenator

Part No.: DN5S-6N

Container Size: 163 g

Product Description:

Unique contact cleaner, rejuvenator, conductivity enhancer and lubricant; dissolves oxidation and corrosion on metal surfaces, fills in microscopic gaps and reseals surface for better contact to enhance flow of electricity. Improves connector performance/reliability.
Temperature range: -34 to +200°C.



Features/Benefits:

Spray - Quick Dry, Non Drip and Safe on Plastics.

DeoxIT® D100L concentrate has approximately 20% chemical cleaning action. Excellent cleaning/deoxidizing, good protection, no ozone depletion. Improves conductivity and reduces intermittent connections. Reduces arcing, RFI, wear and abrasion.

Cleaner Audio - Clearer Video - Reliable Data.

Formulation:

5%	DeoxIT® D100L
70-74%	1,1,1,3,3-PENTAFLUOROPROPANE (460-73-1)
1-5%	isopropyl alcohol (67-63-1)
20%	hydrocarbon propellant (75-28-5, 74-98-6)

3rd. If contacts were sanded prior to the problem of poor conductivity of the interlock devices, then the old sanded interlock contacts should be replaced with the new un-sanded interlock contacts.

March 19, 2009

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