



# LOVE CONTROLS

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## Application Note: Use of Snubbers for Relay Output Devices

If you operate a contactor or solenoid with your control's relay output, you must use a snubber to protect the control from damage due to electrical noise. This noise is generated when the magnetic field collapses through the coil. This also causes arcing across the relay contacts, severely reducing the relay's life. A snubber is a capacitor and resistor in series.

For most contactors and solenoids a snubber with a 0.5  $\mu\text{f}$  capacitor (600V) in series with a 100  $\Omega$  resistor (1/4 W) will provide adequate protection. Love Controls offers a general purpose snubber (P/N 541-0014). If you can not find a snubber, you may be able to make your own with parts from a local electronics supplier.

Connect snubber leads to each coil terminal of the contactor or solenoid. Always connect the snubber as close to the coil as possible.

For simplicity, this drawing shows only the wiring from a controller to the coil. See the instruction sheet for your specific controller for additional wiring.

