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www.PerihelionDesign.com

FOR USE IN EXPERIMENTAL
 AIRCRAFT ONLY

Bi-Directional **SnapJacks**[™] Replace Coil Diodes!

Mechanical relays and contactors depend upon magnetism generated by an electric current running through a wire coil. When the current stops, the magnetic field collapses. But the relay does not know the difference between a wire coil moving in a magnetic field (as in a generator) or a magnetic field moving in a wire coil (as in a collapsing magnetic field). Thus a large voltage—1000V to 1500V typically—is induced in the coil. This current goes the same direction the original

current did—so it slows the contact opening—allowing arcing, chatter, bouncing, contact welding and even re-closure! Yikes! This coil-craziness has to be suppressed for things to function at all. Perihelion Design sells 18V 600W Bi-Directional Zener Transils[™] (for 14.5V systems) that provide the most modern technical solution to relay coil suppression. We sell these as a set of twelve with the typical hardware needed to retrofit a typical small airplane.

Technical Stuff 	Schematic	Type	Polarity +/-	Effect on Release Time and Bounce	Relay Life Reduction
Also ran...		Diode	Req'd !	Excessive	Excessive
Fourth Best		Resistor +Cap	None	Considerable	Considerable
Third Best		Varistor	None	Minor	Minor
Second Best		Zener +Diode	Req'd !	Negligible	Negligible
 1st	 SnapJack[™]	Bi-Dir. Zener	None	Negligible	Negligible

Ref: Potter and Brumfield

US\$29.89/Set

Shipping Free to
 US-Canada –
 Foreign UPS or
 FedEx at cost.
 Paypal payment
 preferred.

