## **Stearns**<sup>®</sup> Brakes

## **COIL FAILURE**

Cause	Correction
Supply Voltage	
Line voltage>110% of coil rating	Reduce voltage or replace with proper rated coil
AC input on a DC coil	Replace rectifier or replace with proper rated coil
Excessive voltage drop during inrush time	Increase current rating of power supply
Wiring	
Leadwires interfering with plunger pull in	Reroute wiring away from plunger and other moving components
Excessive voltage drop during inrush time	Increase leadwires size from power supply
Coil leadwire shorted to ground	Replace coil or leadwire and protect with wire sleeving
Solenoid Assembly	
Plunger not seating flush against solenoid frame	Loosen solenoid mounting screws and reposition frame to allow full face contact
Plunger cocked in coil preventing pull in	Link arm assembled backwards (vertical 81, 82, and 86 Series only) Plunger support bracket missing?
Excessive solenoid/plunger wear at mating surface	Replace solenoid assembly
Broken shading coils	Replace solenoid assembly
Worn Parts	
Pinion teeth worn/self adjust binding	Replace lever arm/pinion assembly
Excessive wear of solenoid link arm and/or shoulder bolt	Replace link arm and link bolt; also inspect plunger thru-hole for elongation.
Plunger guides worn down and interfering with plunger movement	Replace guides
Application	
Machinery cycle rate is exceeding coil rating	Reduce coil cycle rate or use alternate control method
High ambient temperature (>110°F) and thermal load exceeding coil insulation rating	Use Class H rated coil and/or find alternate method of cooling brake
Brake coil wired with windings of an Inverter motor or other voltage/current limiting device	Wire coil to dedicated power source with instantaneous coil rated voltage
Miscellaneous	
Wrong or over tightened torque spring	Replace with proper spring or refer to Service Instruction sheet for proper spring height
Excessive air gap	Reset, refer to Service Instruction Sheet

Consult factory (414) 277-4328 if you need further assistance.