Some electric locks do not come with factory installed protection for “kickback voltage” that can occur when a lock is powered down. If the lock you are using has no internal protection IEI has included a filter kit for this issue. The filter kit includes:

For DC powered locks IEI supplies an **IN4004 Diode** (pictured below)
For AC powered locks IEI supplies a **MOV** (see on back of this page)

When properly installed these components will keep “kickback voltage” localized at the lock.

**FOR THESE COMPONENTS TO BE EFFECTIVE IN PROTECTING YOUR IEI EQUIPMENT AGAINST ELECTRICAL KICKBACK PLEASE FOLLOW THESE INSTRUCTIONS.**

**For electric locking devices powered with DC voltage**

The diode must be installed across the DC powered lock. DC voltage is polarized the diode must be installed in the direction shown in the illustrations. The side with the silver band must be connected to the positive leg of power.

**IMPORTANT:** THE DIODE MUST BE INSTALLED AS CLOSE TO THE LOCK AS POSSIBLE. THE BEST SCENARIO IS DIRECTLY ACROSS SCREW TERMINALS ON THE LOCK (IF AVAILABLE) AS SHOWN IN FIGURE 2.

IF THE ELECTRIC LOCK HAS POWER LEADS INSTEAD OF SCREW TERMINALS SPLICE IT IN PARALLEL AS SHOWN IN THE EXAMPLE BELOW (FIGURE 3).
For electric locking devices powered with AC voltage

The MOV must be installed across the AC powered lock. AC voltage is non-polarized so the MOV can be installed in either direction as shown in the illustrations.

IMPORTANT: THE MOV MUST BE INSTALLED AS CLOSE TO THE LOCK AS POSSIBLE. The best scenario is directly across screw terminals on the lock (if available) as shown in Figure 1.

If the electric lock has power leads instead of screw terminals splice it in parallel as shown in the example below (Figure 2).

Figure 1
connection to AC Strike

Figure 2
connection to lock terminals