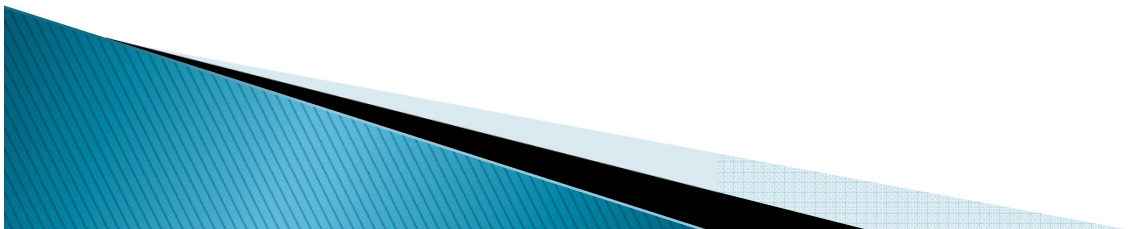


Lightning Damage

Correlation is not Causation

- ▶ On Average there are 60 Thunderstorms per Year in Illinois. [80 in Southern Illinois]
- ▶ That means $[60/365]$ $1/6$ of the time that an electronic device fails it will be during a Thunderstorm.



Evidence of Lightning Damage

- ▶ Evidence of High Voltage Surge (e.g. flashovers at terminals and relay gaps)
- ▶ High voltage damage to a capacitor (usually “run” capacitor)
- ▶ Verification of high voltage surge with power company
- ▶ High voltage damage to delicate circuit boards
- ▶ In motors – evidence that winding is grounded out. (usually run vs. start winding)

Lightning Damage Photos

