TECH BULLETIN

APPION
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Voltage Drop thru Extension Cords

- Recovery equipment is used primarily in the hot summer months when supply voltage can be at the lowest point of the year due to the demand from A/CR equipment operating at peak conditions

- When low supply voltage and a long, undersized extension cord are combined, it will have a disastrous effect on equipment performance and can lead to electrical equipment failure.

  - The **G5 Twin** is designed with features that allow the unit to shut itself off when subjected to overheating due to low voltage.

- Extension cords, when sized properly, and kept as short as possible, will deliver the available supply power without excessive voltage drop to the equipment through the cord itself.

- **Oversized** extension cords have less resistance, less voltage drop, and operate at lower temperatures, increasing the efficiency and life expectancy of both the equipment and cord itself.

- However, extension cords that are **undersized**, or **longer than needed**, have higher resistance, greater voltage drop, run hotter, and are the primary reason for poor equipment performance and field service electrical equipment failures.

Recommended Extension cord sizes for industrial-duty field service electrical equipment:

- **Up to 25 feet – 12/3 UL/CSA cord**
- **25 to 100 feet – 10/3 UL/CSA cord**

Service tip: ***Always use the shortest length and largest gauge extension cord possible when operating industrial-duty field service electrical equipment.***