

## knife Drive Rack DC Power Status Monitor & Capacitor Bleed Down System

Upgrade

### Upgrade Applications

Applicable to Model I, II, and III DDCO knives. All levels must be up-graded simultaneously on multi-level knives.

### Upgrade Description

Under certain conditions, such as loss of one of the three phase power legs to the knife, the existing contactor-based capacitor bank bleed-down circuit may be rendered inoperable. Failure of this circuit can result in the failure of the 50-watt, 100-ohm resistor used to bleed off the electrical energy stored in each of the drive rack capacitor banks. Due to an excessive amount of heat generated, if the resistor were to fail, further component damage can occur resulting in a potential fire hazard. If the bleed-down resistor fails, the capacitors will be unable to discharge during periods of non-operation. Having these capacitors charged creates a potentially hazardous situation to maintenance personnel should service be required on the knife. For these reasons, MarquipWardUnited has developed a drive rack DC power status monitor and electronic capacitor bank regen/bleed-down system.

The drive rack DC power status monitor provides operator/maintenance personnel with a visual indicator which can be used to determine if the high voltage DC bus is present for each drive rack when machine power is applied. It also indicates if power has been dissipated after the machine is powered down.

The electronic drive rack capacitor bank regen/bleed-down system has proven to be more reliable than the older contactor-based circuit, and it functions even during machine power phase loss situations which can cause a contactor-based circuit to fail.

### Upgrade Benefits

- More robust and reliable capacitor bleed-down device
- Visual indication of the presence of high voltage DC bus
- Additional safety feature for operators and maintenance personnel



**CAUTION:** Before working on machine, perform lock-out procedure per Manual Operation Section.