

MCR Circuit

The master control relay is the 24VDC power supply gateway for the start control, control panel switches, control modules, radio, modem, etc. The power-up scenario is as follows:

1. The operator pushes the **CONTROL POWER** button and holds for 3 seconds. During this time,
 - a. The master display receives a 24V input.
 - b. The master display sends a 24V output to energize the MCR coil.
 - c. The MCR coil closes the 24V power circuit to the control system, including the master display.

2. The powered-up master display sends power to the MCR coil, keeping the coil circuit energized.
3. The operator can now allow the **CONTROL POWER** button to raise. The control system is powered.

If an E-stop is pushed in: The 24V output from the master display is prevented from completing the circuit to the coil. If the operator holds down the **CONTROL POWER** button, the LED on the control panel E-stop button will come on to alert the operator that an E-stop somewhere on the machine is pushed in.

If the remote transmitter stop button is pressed: A signal is sent to the master display which then unlatches the output to the coil. The effect is the same as if an E-stop were pressed.

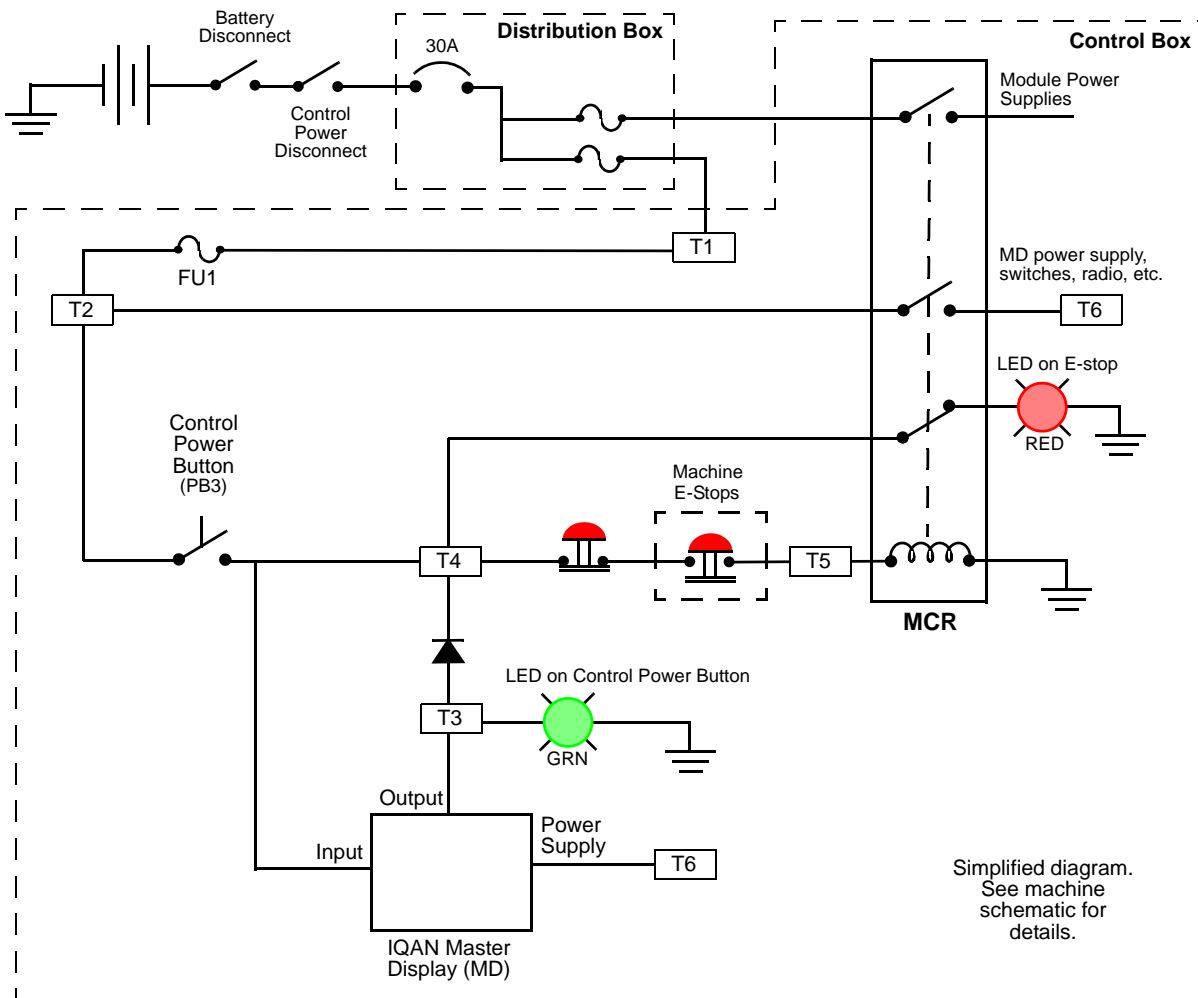


Figure 128: Master Control Relay Circuit (Coil De-energized)