

# TOOLBOX TALKS

## D7E Electrical Shutdown & Voltage Discharge Procedure

**SAFETY.CAT.COM™**

*Toolbox Talks are intended to facilitate health and safety discussions on the job site. For additional Toolbox Talks, please visit SAFETY.CAT.COM™.*

### TOPIC: D7E Electrical Shutdown & Voltage Discharge Procedure

The electric drive D7E has unique maintenance and servicing procedures. You must always de-charge the voltage and electricity from the machine before service or maintenance. Here are some tips to keep in mind. For the full process, view the specific Operation and Maintenance Manual for your D7E.

#### General Warnings

- Do not remove any covers that will expose energized electrical components while the engine is running
- Do not remove any covers that will expose energized electrical components while components remain energized for a period of time after shutdown
- Always perform the safe shutdown and de-energizing procedure before performing electrical service on the Power Train Electric Drive System or the Accessory Power System
- Do not perform any type of electrical maintenance on the orange hazardous voltage conductors, the power train components or the accessory power system components while the engine is operating

#### Process Tips

- Do not restart the engine after you have turned the key to the off position. Turn the key back only to the ON position, not the START position
- Use the Monitoring System in the cab to check the status of the machine voltage
- The amber colored "Hazardous Voltage Present Lamp" is only used as a visual aid, and therefore you must check the actual voltage to ensure all electricity has been discharged before performing service
- Report any problems with the machine or electrical system to the maintenance and/or dealer immediately
- The level in the circuit for each bus voltage must be below 50.0 VDC before the machine can be serviced

*What questions do you have about this topic?*

SAFETY.CAT.COM™  
<http://safety.cat.com/toolbox>

Discussion Date: \_\_\_\_\_

Employee Participants:

---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---

The material in this document is provided for informational purposes only and not as a comprehensive or exhaustive resource on this topic. This material has been compiled from a multitude of sources believed to be accurate; however, Caterpillar Inc. assumes no responsibility for the accuracy or currency of this information and encourages you to consult experts in this area for more information. In no event does the content of this document supersede any applicable local, state, or federal statutes or regulations.