

35kV Bell Replacement

Chief Judge: Richard Boley, Orlando Utilities Commission

Mean Time: **10 minutes**

Drop Dead Time: **13 minutes**

Event Summary:

This event is replacing the top set of 35kV suspension bells (4 - 10" porcelain) bells with rated hotsticks. The conductor is 336 Alum. A shotgun stick should be all that is required to unhook the bells from the shoe. However, you may use the hotstick attachment of your choice. The hook has a hotstick ring welded on it. You can get a slip hook from the hardware store and weld a 3/4 lock washer on it to practice with. This will eliminate the need to purchase any special Hotstick attachments.

Event Specifics:

1. Teams will be allowed a 5 minute setup time before starting the event.
2. Time starts at the judge's signal with the fall restraint detached from the pole.
3. Both sides of lower phases must be covered before climbing above them.
4. Hard cover must be slid up to the suspension shoe and must remain there during the event.
5. Minimum approach distance must be maintained on 35kV (2'-7") at all times during the event.
6. Two positive points of control, other than a lineman's strength must be used to control the phase during this event.
7. Teams must use an approved hotstick method with a mechanical advantage to move the conductor out of minimum approach distance before replacing bells.
8. Bells must be sent to the ground and replaced with new set. Deducts will be given for any chipped and/or broken bells.
9. The hardware must be transferred to the new bells by the groundman. Ball and socket hardware will be used. Deducts will be given for any damaged hardware.
10. Time stops when both Linemen are back on the ground.

Teams will provide their own:

- Tarp 10'x10'
- Wire tongs
- Blocks/hoist
- Nose bags
- Shotgun stick/hotsticks
- Saddles
- Handline
- Stove pipes or hard covers

Materials

- 2-10' Cross arms
- 12 - 10" bells
- 4 - 1/2" machine bolts
- 4 - 5/8" machine bolts
- 3 - Ball hooks
- 336 Alum. conductor
- 4 - Wooden push braces
- 1 - Slip hook w/welded ring eyes
- 3 - 5/8" Eye bolts
- 3 - Suspension shoes (336 4 bolt)
- 3 - Clevis sockets
- 3 - 336 Armor guards

Pole is framed 6" from the top of the pole for the top arm bolt and 7' down for that bolt to the bottom arm bolt.

35kV Bell Replacement



35kV Bell Replacement



