

HOW TO INSPECT VOLTAGE DROP IN CONDUCTORS

It is important to ensure that the conductors selected for carrying the current and voltage are powerful. Replace the conductors if the fault is detected. It is necessary to keep a severe check on the voltage. The simple method to check the voltage is to measure it at the origin of the circuit and then at the end of it. Their difference will be a volt drop. Use copper wires. Concentric layer of insulation over conductors will cause voltage drop. Since the problem in the voltage can cause serious harm, one should very careful in selecting the products, i-e, wires, conductors etc.

The products of famous companies that provide guarantee or warrantee, must be used. There are the meters that help in maintaining the level of voltage in the wire. Keep an eye on that. If any negative change is felt, urgent attention is needed.

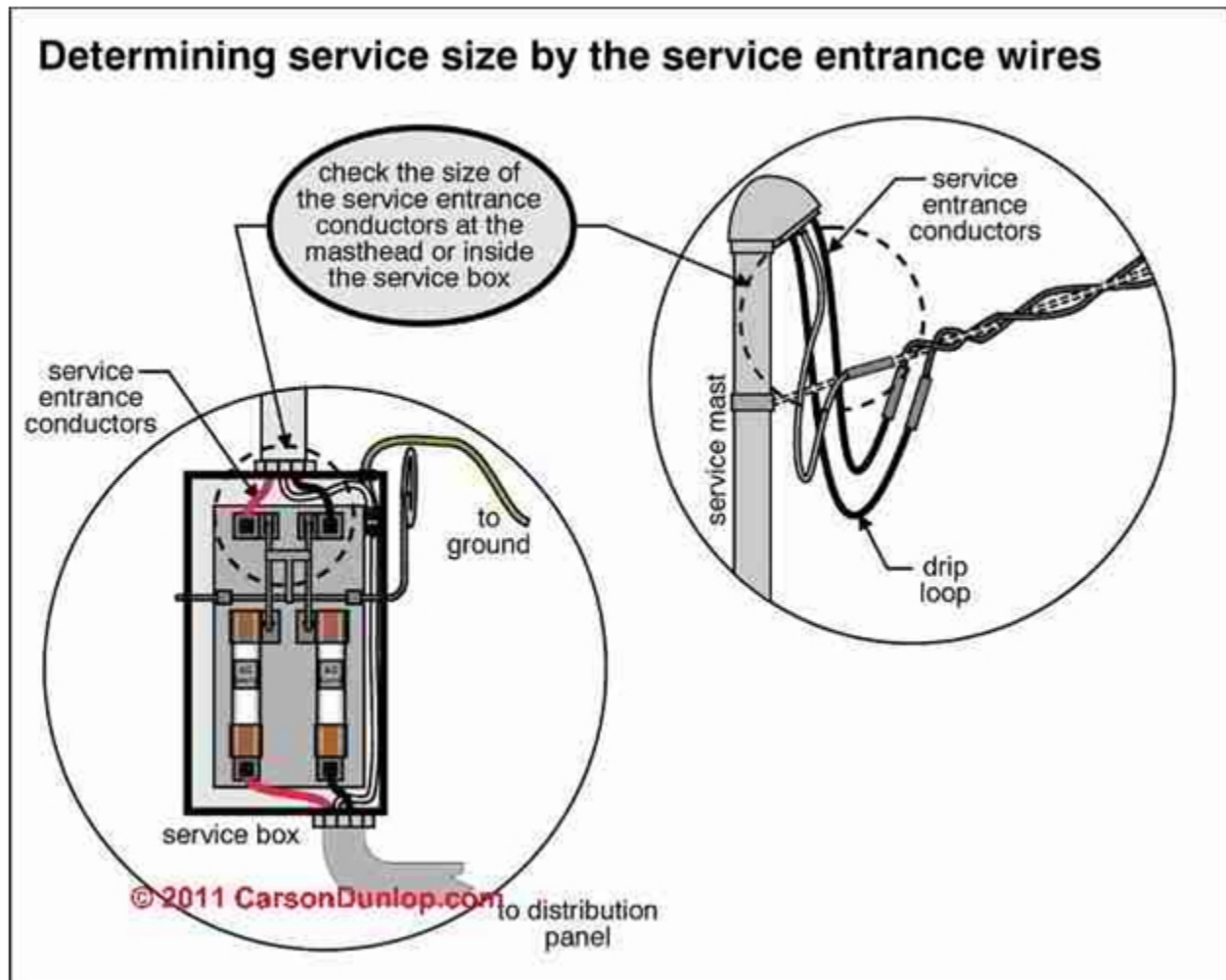
Rectification

There are few tests that help in fixing the problems regarding voltage. These drops vary according to the flow of current. Unless you operate it, voltage drop can't be measured. Resistance free cables, wires, conductors are best in this condition, but sometimes, even in them, voltage drop occurs. If the manuals fail to provide voltage drop values, use the following values as maximum limits:

- 0.00V for a connection
- 0.20V for a wire or cable
- 0.30V for a switch
- 0.10V at the ground

Digital multimeters (DMM's) have 10-magohm impedance in them. Using DMM is the fastest way to control the voltage drops. It will help in measuring the voltage drop values accurately. A low-voltage scale (0-1 V) will also help in testing the voltage drop. Safe electrical service will

help in solving the electrical problems quicker. When the conductor resistance causes the voltage drop, increase the size immediately.



Conclusion

It is important to keep a check on the conductors. Try hard to avoid the unnecessary condition. Little carelessness can cause great damage so take strict measures if you feel any issue.

Source : <http://engineering.electrical-equipment.org/safety/inspection-of-voltage-drop-in-conductors.html>