



Figure 2-2

Overvoltage

If the neutral conductor of a multiwire branch circuit is opened, the multiwire branch circuit changes from a parallel circuit into a series circuit. Instead of two 120V circuits, there is now one 240V circuit which can result in fires and the destruction of the electric equipment because of overvoltage.

To determine the operating voltage of each load in an open multiwire branch circuit, use the following steps:

- Step 1:* Determine the resistance of each appliance, $R = E^2/P$.
- E = Appliance voltage nameplate rating.
 - P = Appliance power nameplate rating.