

TECH TIP

Understanding Wiring Diagrams

At times it is hard to decipher wiring diagrams, especially as the newer cars become more and more sophisticated. In order to effectively diagnose electrical and electronic systems it is important that we become comfortable with wiring diagrams. Here are some suggestions that can demystify the complexity of wiring schematics.

- Whether you use a computer printout, FAX or photocopy, get a copy of the wiring diagram (Fig A) that you can mark on and easily carry.
- Begin with the diagram at the component that is not working properly (blend door motor, compressor, blower motor, etc.)
- Identify which wire supplies the power (positive voltage). Follow the wires back to a fuse, fusible link, or the battery. If the wire goes to a switch, pretend that the switch is closed.
- Use something like a highlighter or a crayon, to mark the wire that you have identified as supplying power to the part that you are checking.
- Use a different color to mark the wire, that provides the ground circuit to the part being checked. Follow the wire back to where it shows a ground symbol or describes a common ground.
- If you are checking a relay (Fig B), you should have four different colors at the relay.
- When two wires cross on the diagram (Fig C), it does not mean that they are connected. If the wires are connected (Fig D), there will be an enlargement at the connection. You may have to use a magnifying device to read all the colors or numbers.

