Breadboards

Identification and Basics
PTL 4 Breadboard
PTL 3

• Look at connections on the PTL 3:
  o 1a through 1e
  o 1f through 1j

• There is continuity between 1a through 1e
• There is continuity between 1f through 1j
• There is not continuity between:
  - 1e and 1f
  - 1a and 2a
  - 1f and 2f
PTL 3

• Only the five connections have continuity.

• There is not continuity horizontally between the numbered rows.
• Look at connections on the PTL 4:
  o 1a through 1e
  o 1f through 1j
• There is continuity between 1a through 1e
• There is continuity between 1f through 1j
PTL 4

• Look at the PTL 4.
• There are also rows of connectors which have a red and blue line above and below them.
PTL 4

• The Blue lines are sometimes used as ground, negative and/or common connections, for the Pwr Supply
• The connections under the blue line all have continuity.
• There is not continuity between the two blue lines of connections.
PTL 4

- The Red lines are sometimes used as Positive connections, for the Pwr Supply.
- The connections above the red line all have continuity.
- There is not continuity between the two red lines of connections.
PTL 4

• There is not continuity between:
  o 1e and 1f
  o 1a and 2a
  o 1f and 2f
PTL 4

- Remember; only the five connections have continuity.
- There is not continuity between the numbered rows.
- There is also not continuity between the red and blue rows.
The best jumper wire size is 22 gauge TelCo type solid wire. (versus stranded wire)
  - Never use stranded wire
• Do not strip off more than 3/16 to 1/4 inch of the insulation from the ends.
PTL 3 and PTL 4

• Only place one wire or component lead in a connection hole at one time.
  o That is why there are five common connections in each row.
    o Example: 1a through 1e etc...
PTL 3 and PTL 4

• Remember to make posts from small jumper wires to clip your alligator clips to.
  o Clipping to the wire posts keeps the chance of shorting to other component’s leads down to a minimum.