

Paper Dolls

1. Paper dolls are a way of “proving” that our measurements and layout are correct before we start bending metal. Several times with a new design we find that there are “oopsies” that make one part conflict with another part. Sometimes (rarely) we find that we took all the variables into account and that the project will fit as designed.
2. To do this we use cardboard to make the parts instead of aluminum. “Cardboard” may be hard to come by, but heavy paper will work almost as well. Heavy paper can be cut from manila file folders and used to model the chassis, cover, and parts.
3. It is important to get the paper parts to resemble their real-life parts, but it is **very** important to get the dimensions for the parts inside the chassis to be real.
4. Here are the parts we need to make:
 - a. Chassis bottom
 - b. Chassis top
 - c. Transformer
 - d. Line Cord & grommet
 - e. Fuse holder
 - f. Meter
 - g. Voltage control potentiometer
 - h. On-off switch
 - i. 3 small voltage output jacks
 - j. Pc board including off-board integrated circuit(s) bolted to the back of the chassis
 - k. LED indicator light
5. The parts do not have to EXACTLY look like the real parts, but the dimensions must be such that we can tell that there will not be any interference fits.
6. The “tools” are scissors, magic tape, and glue.
7. We will divide the class up into “teams” so that everybody has a chance to make at least one part. This will be discussed in class.
8. There may be prizes for the best team model, the most creative, etc. This will be discussed in class.
