

Panel Layout Using Microsoft PowerPoint*

By Bill Sepulveda, K5LN

How many times have you built a really great project? Or maybe not such a great project, but you built it and you struggle to figure out how to label the front panel so you can make it look good?

Struggle no longer! With some double-sided rug tape, clear contact shelf paper, your computer, and Microsoft PowerPoint* you can complete a professional looking front panel and have a work of art that you can be proud of. Your friends will marvel at how good it looks, and with your heart jumping out of your chest from being so proud you will calmly reply, it was easy, I just used PowerPoint* to create the front panel. Now be careful, you just might have to teach someone else how easy it is. But be a good Elmer and jump in with both feet. Isn't this what the hobby is all about!

The only term I can think of at this time is, "Try it you'll like it". It sounds corny but appropriate because you will like it, and you will find out how much fun the final part of kit or scratch building can be when you have the knowledge and tools to do the job. It is really easy, well after you do a few. It is like anything else "Everything is simple once you know the answer".

Tape:

The double-sided rug tape can be purchased from any hardware store. Or if you find another type, try it.

Clear Cover:

The Matte finish clear contact paper with adhesive backing can be purchased at most Craft store. I call it "Clear Contact Shelf Paper". Just make sure that you get the stuff with the adhesive backing. The second type of clear coat material can be purchased from any Drafting Supply store and it is a Glossy Clear film with contact adhesive backing. Both of these coatings work well. It will depend on the type of finish you want. I have used both on different projects. By the way I don't recommend spaying the paper with a clear coat. It will make the print run and the paper wrinkle.

Features:

There are features to gain when using this method of creating the front panel, and it doesn't only have to be used for front panels. Try it on different things, like instructions, Rear Panels, Cards, and so on.

You know how frustrating it can get sometimes when building or modifying a kit. You have to be extra careful where you put holes to mount additional parts. Or, when you're planning the front panel layout for that special scratch built home brew project and you miss the hole location (ouch)! You just created an extra piece of metal you will have to save for another project because it cost too much to throw away. Or, you want to mount some push button switches on the front panel, but you don't want the hardware to show. How do you do that? Now you can experiment with component locations, make changes, and not have to worry about replacing that costly panel. You will be able to add flat head screws to mount switch brackets and just have more freedom in your creation without worrying about mistakes, scratches, or ugly hardware showing.

With this method of labeling all these worries are gone. You will be able to make more use of hidden assembly hardware like flat head screws, salvage missed component holes, and panel scratches because they will be covered with the panel label. So don't worry, be happy, and let your imagination run wild. You never know, you might even create your own Picasso. And so on, and so on, and

Paper:

Most of us use white paper to print our computer items. But with this method don't limit yourself to only white paper and depend on the computer to create the right background color. I was lucky to have the right color Red in my computer to match my Red Hot NORCAL 20. But on other projects I have used colored paper and it worked very well, and gave a very good contrast to the project.

Use the Keyer example in the following instructions as a guide and give it a try. You will have an opportunity to create a work of art and make your project look like a professional piece of equipment.

Oh don't worry about being an expert in PowerPoint* the instructions cover some of the features used in PowerPoint* to achieve the effects, or you can contact me by email and I'll be happy to help.

Program setup:

After opening PowerPoint*, select a new Presentation. When the New Slide window opens and asks to “**Choose an AutoLayout**”, select the **blank page** and click OK. This will open a blank presentation slide. Depending on the size of the project, you may wish to change the page layout from Landscape to Portrait. To do this, click on “**File**”, when the drop down window appears click on “**Page Setup**” and change the orientation of the page to your satisfaction.

The **Ruler** in PowerPoint* should be used to help create the proper panel sizes and the different component locations and labeling information. If the Ruler is already displayed just skip this part. If it isn't, just clicking on “**View**” and when the drop down window appears, left mouse click on the word “**Ruler**”.

The final step in the setup is to display the **Drawing** Toolbar so it can be used to create all the information needed to complete the project. Move the mouse pointer to the light gray area in the upper right side of the window, (to the right of the **Standard** and **Formatting** Toolbars). Click the right mouse button and a drop down window will appear. Click on the word “**Drawing**”. This will display a **Drawing** Toolbar on the screen. Move the mouse pointer to the Blue area on the Toolbar, press and hold the left mouse button and drag the Toolbar to the left side of the screen until it re-displays itself, then release the mouse button. The Toolbar will remain displayed vertically on the side of the display.

Planning:

Now we are ready to start laying out the project. For this example I am going to use a Keyer Kit I installed in an aluminum box.

The box is 1.25” High X 3.00” Deep X 5.50” Wide. Since I want to make the Height of the box the Front and Rear and use the top of the box (the Depth) for the Keyer Instructions, the size of the label will equal the Front plus the Top plus the Rear of the box. This turns out to be 1.25” for the Front, plus 3.00” for the Top (Depth), plus 1.25” for the Rear, which equals a total label size of 5.50” wide by 5.50” high. See Fig 1 for details.

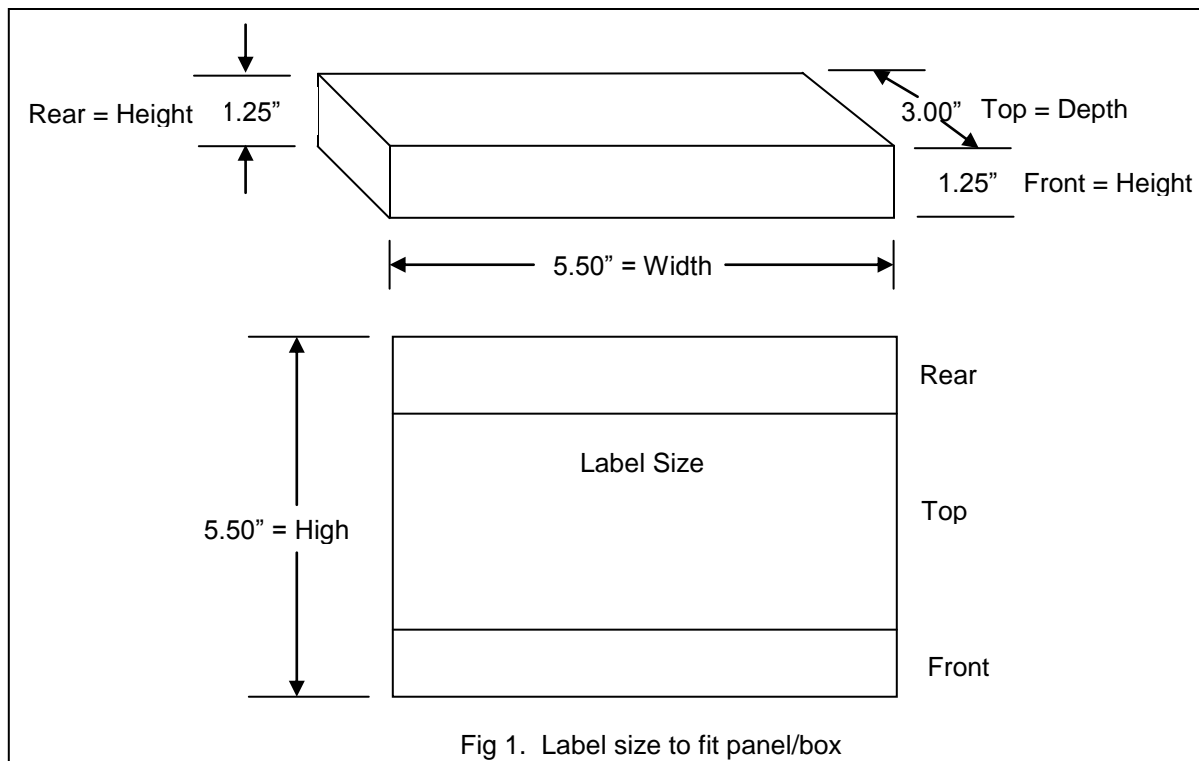
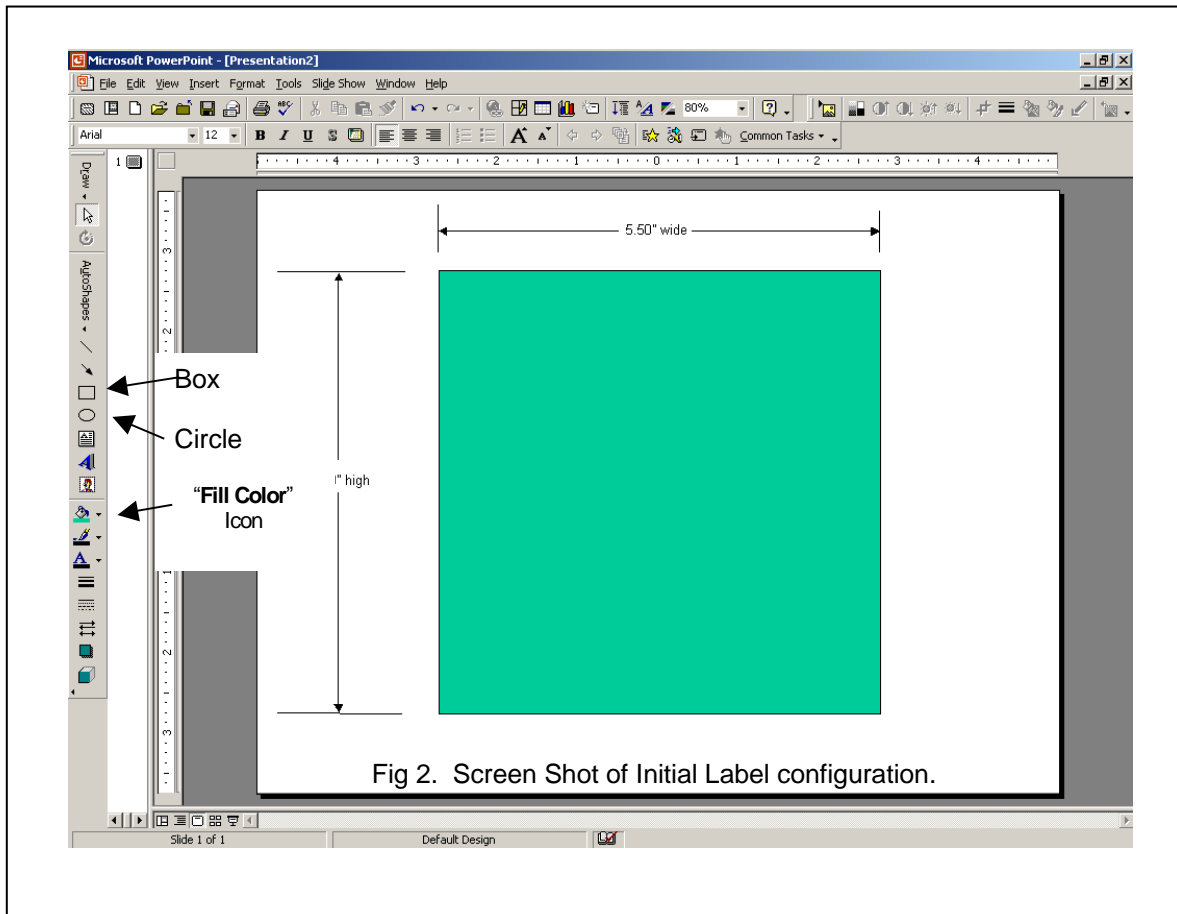


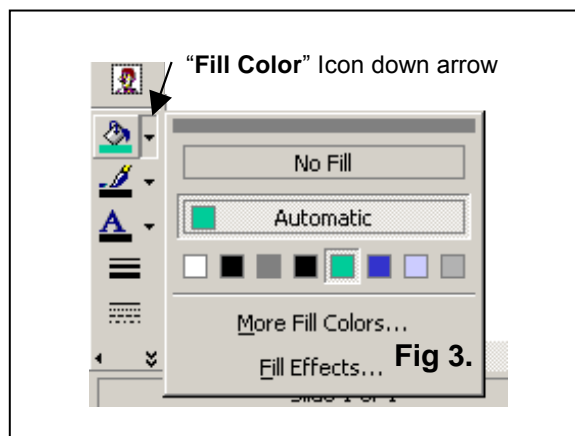
Fig 1. Label size to fit panel/box

Phase 1 – Making the Label:

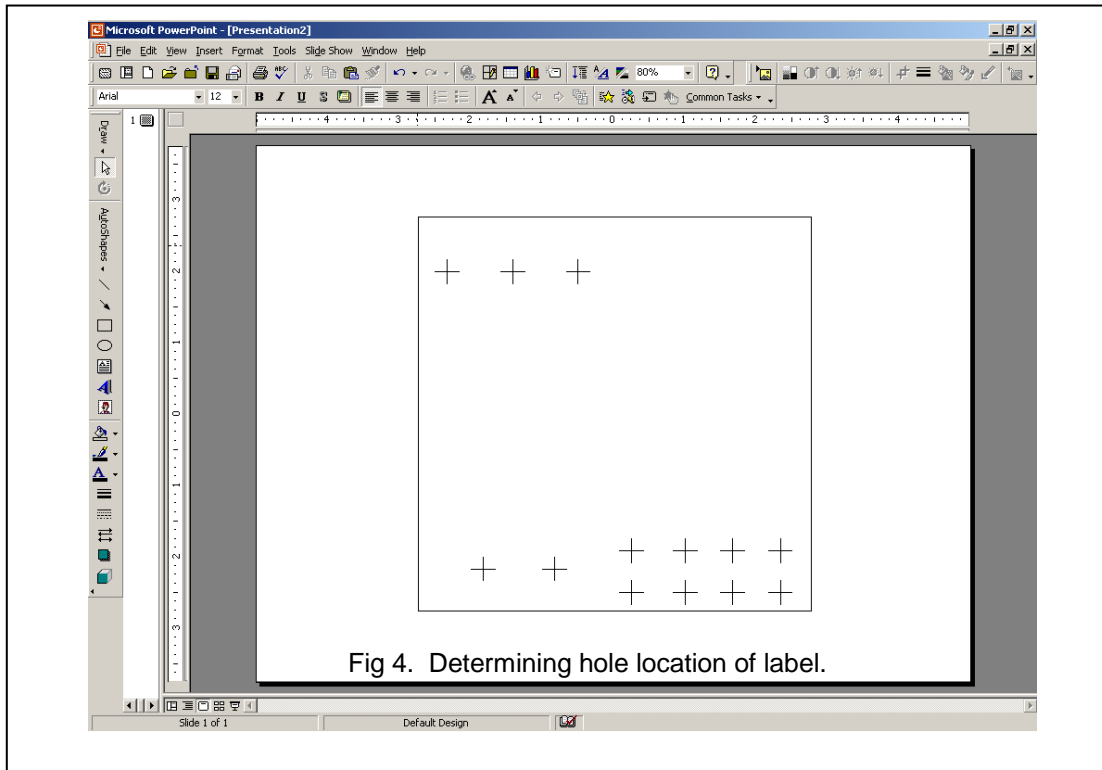
Step 1: Make the label outline by using the Box or Circle Icon to match the size of the area to be covered. The Icons are found in the **Drawing Toolbar**. See Fig 2 for Icon location. Click on the Icon and move the mouse pointer to a location on the screen. In this example I will move the mouse pointer so I can start making a box for the label size of 5.50" by 5.50".



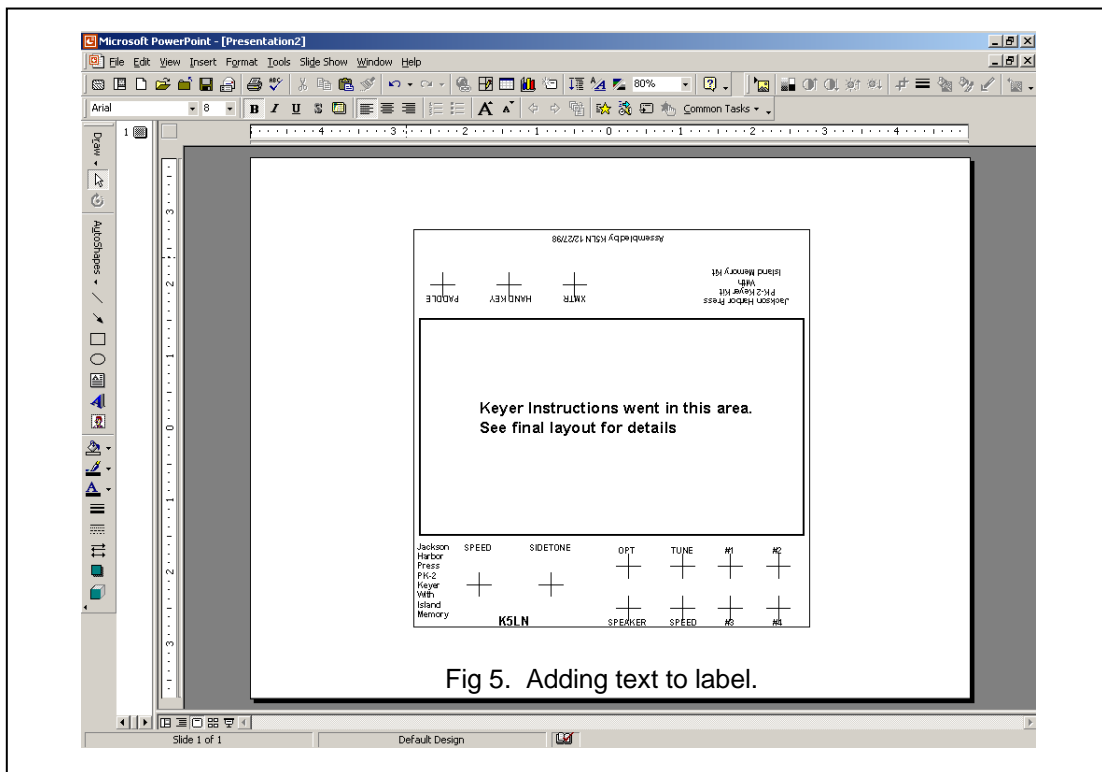
When the initial box is created a default color will show up in the Box. Clicking the **"Fill Color"** Icon down arrow on the **Drawing Toolbar** and left mouse click on **"No Fill"** window will remove the color. See Fig 3 for details.



Step 2: Measure the locations of all holes and identify them by creating a cross hair location for the center of each hole. Do this for all holes. See Fig 4. Save the file.



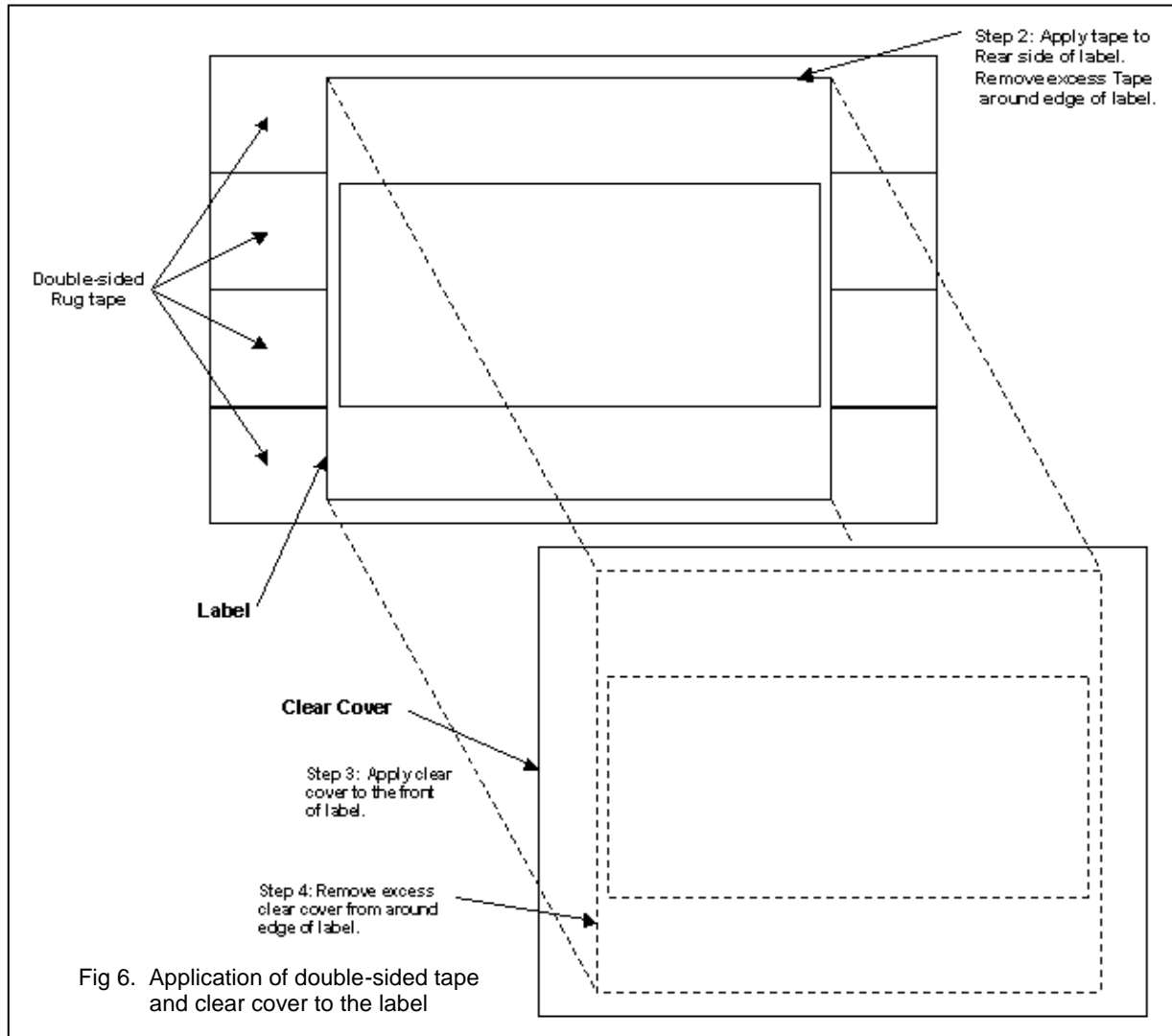
Step 3: Add labeling around the areas identified for mounting Components. See fig 5. Save the file.



Step 4: Print a copy. Cut out the label and match it to the panel. Make corrections as needed to align the mounting holes and/or center the information on the holes. Repeat until correct.

Phase 2 – Applying the Double-sided Tape and Clear Cover to the label:

- Step 1:** Remove all hole cross hair marks from the label. Print the final label and cut it to size.
- Step 2:** With the label cut out, apply the double-sided rug tape to the backside of the label. Multiple pieces will be required, so take care when you place the tape side by side. Trim off the access around the edges of the paper label. (*Note: rug tape is available at most local hardware stores*). See Fig 6.

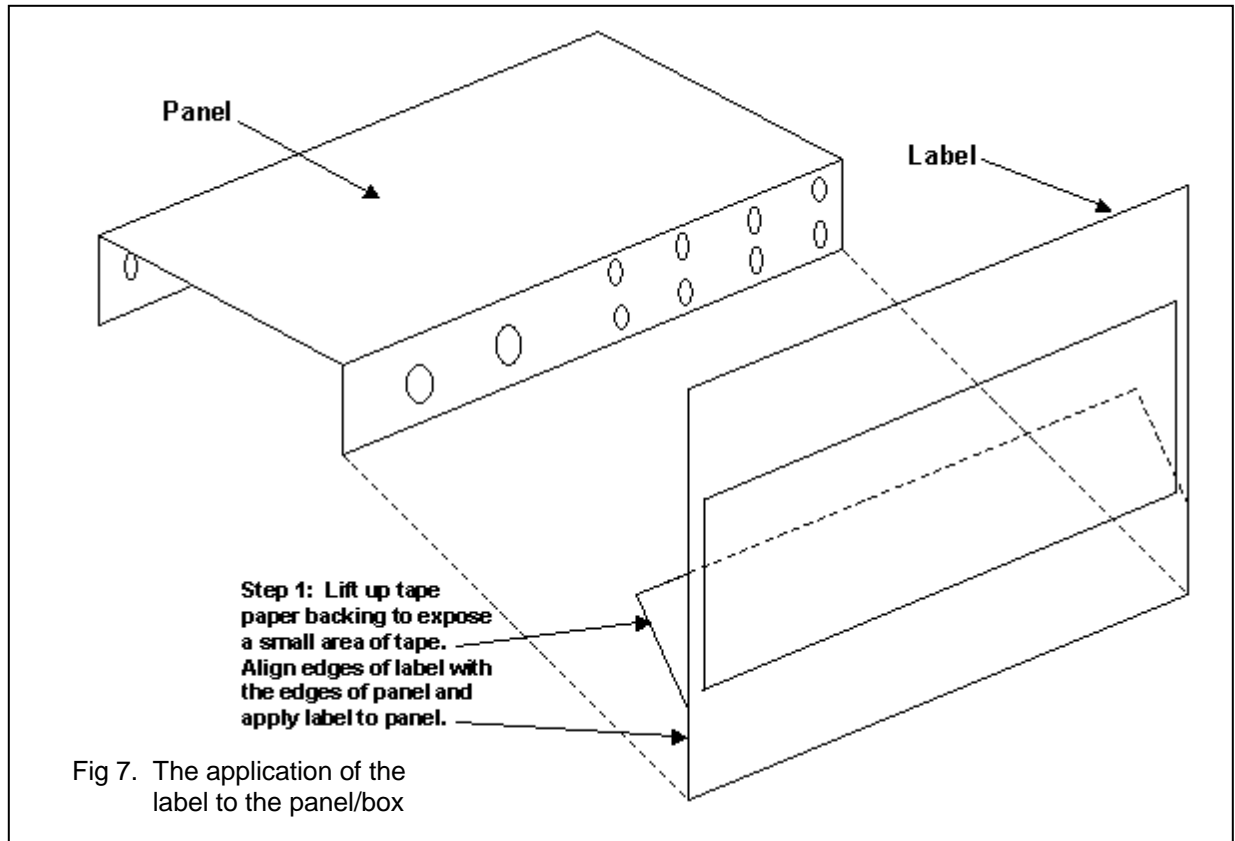


- Step 3:** After the tape is applied to the rear of the label, the clear cover is applied. Cut the clear cover larger than the actual label, about 1 inch overlap. Apply the label carefully so not to create air bubbles. (*Note: There are two types of clear cover to use. The first type is a matte finish and is available at Craft stores and it is identified as a Clear Shelf-Adhesive covering. The second type is a little thicker and is a glossy clear plastic film, which is available at drafting material stores*). See Fig 6.

- Step 4:** After the clear cover is applied trim off the access around the edges. The label is now ready to apply to the panel/item. See Fig 6.

Phase 3 – Applying the label to the panel/box:

Step 1: On the front bottom edge of the label, fold back about a half inch of paper backing from the double-sided tape. Align the bottom edge and sides of the label to the bottom and side of panel. This is best accomplished by laying the panel on a flat surface and the edge of the label on the same surface. Gently apply pressure with your fingers to the front of the label to stick it to the panel. Now remove the paper backing on the tape and slowly rub the label on the panel. Repeat this for each section of tape until the label is completely attached to the panel. See Fig 7.



Step 2: With the label now attached to the panel, cut out the holes to remount the components. Use an Exacto knife to smoothly remove the label material in the holes.

Panel is complete,

Congratulations!

The project now looks like a production piece of equipment that can be proudly displayed.

73's
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*Microsoft Corporation Trademark Name.

