

# INSTRUCTION SHEET

## **PLANER BLADE SETTING JIG -RED SERIES-**

***Fits most 2 Bladed Steel Cutterheads for Small Portable Planers up to 13 inches wide. DOES NOT FIT planer/molder combination machines***

Congratulations! You have just purchased the finest blade setting gauge for your woodworking planer. By now, you've probably examined the carefully; if not, do so now to become familiar with the surface features and the dial indicator. The indicator has incremental hash marks around the perimeter of the face. Each one of these hash marks represents a travel distance of .001 inches [1/1000 inch].

To help visualize how small .001 inches is: a human hair is approximately .001 inches and this piece of bond paper is approximately .003 inches thick. A good eye and steady touch can stop the dial hand between the hash marks. The bezel (and dial face), of the indicator can be rotated relative to the dial hand. To rotate the bezel, simply loosen the lock screw shown in the drawing – Do not remove it. The bezel (and dial face) will rotate freely.

- STEP 1. UNPLUG THE POWER TO YOUR PLANER - ALL adjustments must be made with power OFF.
- STEP 2. SETTING TO ORIGINAL ZERO. This step is CRITICAL to getting the most from your **PLANER BLADE SETTING JIG**, AND SHOULD NOT BE AVOIDED. The good news is that you only need to set the original zero setting once. Do not loosen or remove the planer blades yet. Set the **PLANER BLADE SETTING JIG** on your planer according to STEP 3, then return to this step. After setting to original zero, loosen the lock screw on the indicator and rotate the dial face to 0 (zero). Now, when you change blades, you know where to set the location of the dial hand. Be careful not to allow the dial hand to rotate around fully (a full revolution is equal to .100 inches (approx. 3/32) enough to cause a serious accident and ruin your blades.
- STEP 3. Find the drawing on the back of this sheet that best represents your planer shaft/blade configuration. Set your **PLANER BLADE SETTING JIG** in the middle of your planer shaft as shown, with the dial facing you. The dial indicator tip should be contacting the blade edge. USE CAUTION – the blade is extremely sharp. Move your gauge base away from the blade so the contact edge of the base is touching the inside edge of the blade slot, you should feel it stop. Ensure that the base is parallel to the blade slot. If you need to set the dial face to 0, now is the time to do it.
- STEP 4. Remove the **PLANER BLADE SETTING JIG** from your planer. Change and adjust one blade at a time. Do not completely tighten the retaining screws yet – leave them slightly loose to allow for adjust of the blades. You will eventually get the “feel” for the approximate distance your blades need to be set to. It is best to have the blade slightly higher to start with, and move them closer to the centerline of the shaft.
- STEP 5. Re-mount the **PLANER BLADE SETTING JIG** in the center of the blade as before, being careful to keep the base parallel to the blade slot. You should be able to see the height of the blade with the dial. To raise the blade, loosen the retaining screw. If your blade is spring loaded, it should move the dial hand with the spring pressure. If your blade is not spring loaded, then manually move the blade and watch the dial hand, being careful of the sharp blade. It is best to start the fine adjustment with the dial hand at .001 to .020 above the zero setting you made earlier. Reminder, be careful you do not allow the dial to revolve completely.
- STEP 6. Using a small wood block or soft mallet, lightly tap the blade edge until the dial hand goes back to 0 (zero). Lightly tighten the retaining screws that are nearest to the point you are testing. After roughly setting the blade height in the center, move the gauge to one end of the blade. Accurately

set one end of the blade by the same method. Tighten the retaining screw closest to the gauge. Move the gauge towards the other side of the planer shaft, moving one retaining screw at a time. It is best to pick up the gauge and reposition it on the shaft. Tighten the retaining screws as you move from one side to the other. Double check the height of the blade along its entire length before moving to the next blade. Some blades will flex in the middle, causing a slight bow in the blade. If your blade flexes, simply loosen the retaining screws around the bowed or flexed portion of the blade and tap the blade back to zero with the mallet. Be sure that all the retaining screws are tight before proceeding to the next blade. Repeat this step for all the blades on the planer cutterhead.

**STEP 7. MAKE SURE ALL OF THE RETAINING SCREWS ARE TIGHT**, before turning the power on. Replace the dust chute and plug in the planer power. Set the cutting depth as you normally do. Slide a piece of wood through your planer and marvel at the finish you get –no sanding required!

**TIPS:**

- To get the full potential from your **PLANER BLADE SETTING JIG**, make sure that all blades are set as close as possible with each other. Alignment within one hash mark (.001) is an excellent setting.
- Keep the **PLANER BLADE SETTING JIG** in the storage box to prevent damaging the dial indicator – it is very fragile. Use a clean dry cloth only to clean the dial indicator lens.
- When planing materials that seem to bog down the motor or are too soft or slippery, you can reduce the depth of cut by adjusting the blades closer to the cutterhead. Going more than .020 inches (twenty thousandths of an inch) below the 0 setting is not recommended.
- If your planer has rubber drive rollers, when they start to wear, simply reduce the blade depth to compensate.
- Visit the [MasterGage.com](http://MasterGage.com) website for more quality precision woodworking tools.

