

TOM'S
TPT
TILTING PLANER TABLE
PATENT PENDING

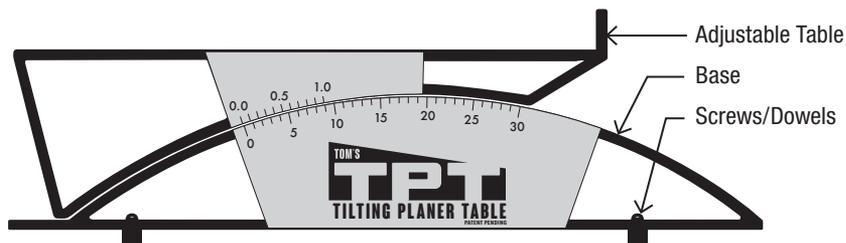


**OWNER'S
MANUAL**

1 TILTING PLANER TABLE

Introduction

The TPT is a new accessory for a wood planer, allowing you to plane one surface of a work piece on an angle rather than just parallel to the opposite surface. The TPT now gives you an easier option to plane beveled faces, transition trims, casing and picture frame profiles, and rough sawn surfaces.



Setup

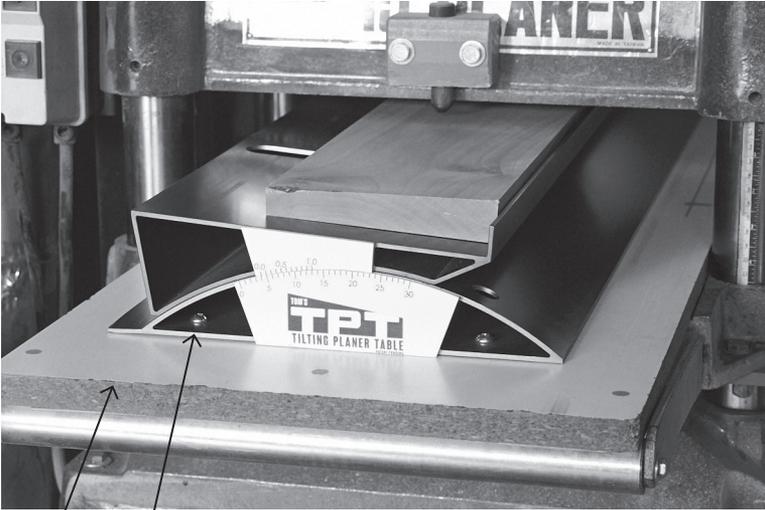
- ⚠** Read through these instructions before using the TPT. There are two main pieces: a base and an adjustable table. **The base must be secured to your planer bed. If not, the TPT will be pulled through your planer along with your work piece.**

Suggested methods for securing the base:

The TPT can be attached permanently or, as needed to a sacrificial bed. This can be done as follows:

- Mount the TPT permanently to a plywood base using the four enclosed screws, then set it into your planer as needed.
- Attach the four enclosed threaded dowels to the TPT base so they can fit into corresponding holes drilled into a sacrificial bed that remains in the planer; the TPT base can be used as a template for marking the hole positions.

- c. Attach a wood cleat to the underside of one end of the TPT, which will jamb against the planer infeed table or a sacrificial bed.



— Screw attaching threaded dowel (one at each corner) that secures the TPT in the sacrificial bed

— Sacrificial bed (not included) bolted to planer table

Personally, I prefer option (b): it is the safest because all four corners of the base are secured while still allowing easy mounting and removal. This option also allows for easy repositioning end-for-end if short grain in the work piece requires reversing the feed direction.

If you prefer not to have a permanently mounted sacrificial bed then mount the TPT to a plywood base 1/2-3/4 inch thickness, which can then be set into your planer as needed.

3 TILTING PLANER TABLE

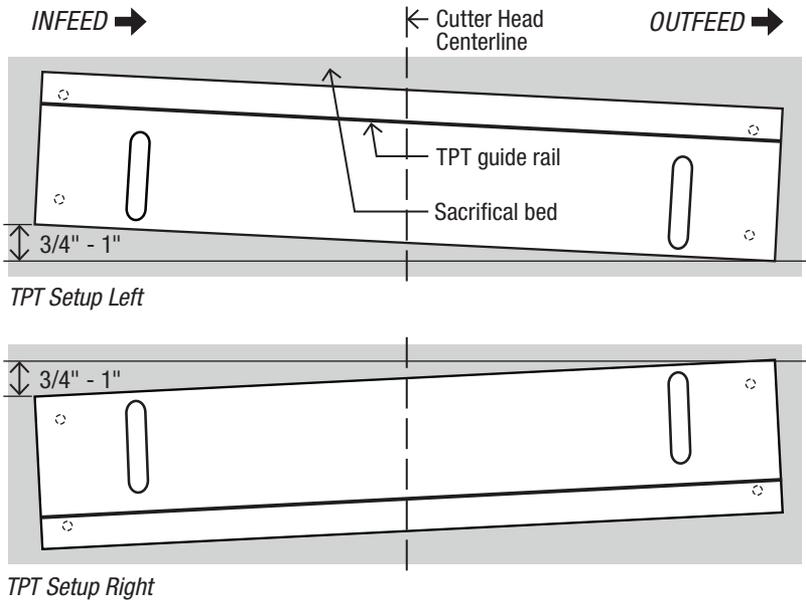


Figure 1 Plan View of TPT Setup (not to scale)

⚠ No matter how the TPT is secured, you MUST:

1. Prevent the TPT from being pulled through your planer.
2. Set the TPT base at a slight angle relative to the planer bed. By mounting it this way, the feed rollers will keep your work pieces in contact with the guide rail as well as the TPT table surface. *(Figure 1)*
3. Center the TPT lengthwise under the planer cutter head so that infeed and outfeed ends of the TPT are the same length. *(Figure 1)*

⚠ The TPT must remain in a fixed, secure position, otherwise you risk damage to your work pieces, the TPT, and/or your planer. Secure the base.

Setting the Degree and Vernier Scales

The degree or base scale reads from 0 to 30 degrees in 1 degree increments. The vernier or the table scale reads from 0 to 1 degree in 0.1 or one-tenth degree increments. Using these scales, you can set the TPT table at an angle relative to your planer bed and cutter head from 0 to 30 degrees in increments of 0.1 or one-tenth degree.

To set a given angle, first loosen the two locking nuts no more than one complete turn, then rotate the TPT table until 0.0 on the vernier scale is directly above the intended mark on the degree scale. Second, count off the number of tenths required on the vernier scale and continue rotating the TPT table until that tenths marker is directly above the next degree mark just to its right on the degree scale.

Examples:

15.0 degrees: Align the 0.0 mark on the vernier scale above the 15 degree mark on the degree scale. Since there are no one-tenth degree increments required no additional adjustment is needed. (*Figure 2*)

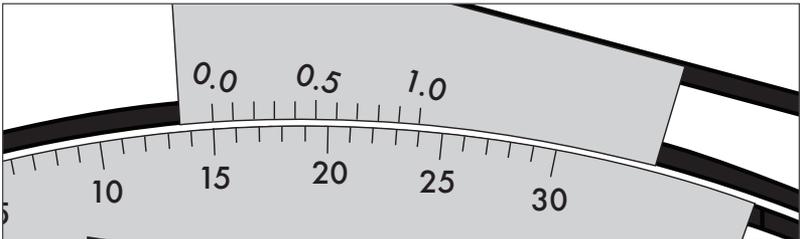


Figure 2

22.5 degrees: Align the 0.0 mark on the vernier scale, above the 22 degree mark on the degree scale. Locate the 0.5 degree mark on the vernier scale then continue rotating the TPT table until the 0.5 mark is directly over the degree mark to its right on the degree scale, which, in this case, is 27. (*Figure 3*)

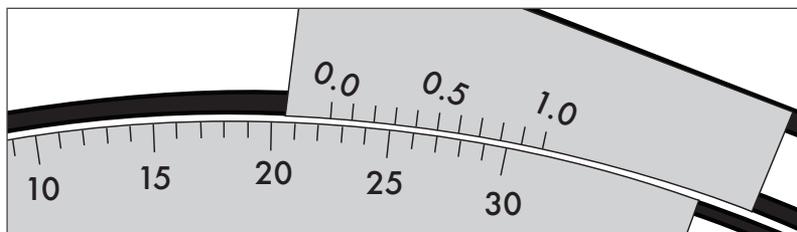


Figure 3

When you have set the required angle, tighten the locking nuts to approximately one quarter turn past hand tight. Double check your degree setting and adjust if necessary. Do not cause damage by over-tightening.

Tips for Using the TPT

- Check for staples, nails, grit, etc. that might be embedded in your work pieces. They will damage the TPT table or nick your planer knives. Debris between the TPT table and base curved pieces, or between the TPT and planer will affect accuracy of the cut and stability of the TPT.

⚠ Feed work pieces on the TPT just as you would normally through your planer with one important precaution: **your work pieces must always remain in contact with the TPT guide rail** to prevent upward drift into the planer cutter head creating an uneven cut or, worse, possible damage to the TPT and planer. Having the TPT set at a slight angle relative to the cutter head, as shown in Figure 1, will ensure your work pieces remain in contact with the guide rail.

- Raise the planer bed for successive cuts just as you would without using the TPT. Long work pieces must be well supported and controlled to prevent any drift away from the guide rail. Unlike during regular planer use where sideways movement of your work pieces is rarely a problem, sideways movement while using the TPT will cause damage.

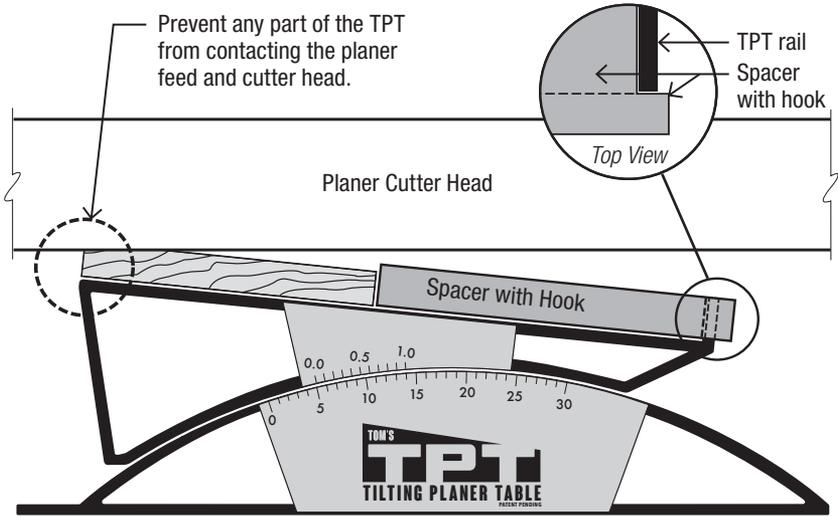


Figure 4

- When work is narrower than the TPT table, cut a spacer that rests against the TPT guide rail for its full length. Be sure to cut the spacers so there is a “hook” at the infeed end. This “hook” will catch against the TPT guide rail and prevent the spacer from being pulled through the planer with your work pieces. (Figure 4)
- When you are planing short grain wood with a tendency for tear-out, turn the TPT end for end so your work pieces can also be turned end for end to minimize or eliminate the problem. Setup method b on page one makes reversing simple.
- ⚠ When you are planing thin stock, you will need a spacer between your work pieces and the TPT table, again with a “hook” at the infeed end, to ensure that work pieces are always above the guide rail. As long as your work is thick enough and wide enough to prevent any part of the TPT from contacting your planer feed rollers and cutter head you do not need to use spacers. **Otherwise, cut and use appropriately sized spacers.**

⚠ Never attempt to plane work that is wider than the TPT table. Doing so will cause the TPT table to change position or, worse, cause the TPT assembly to flip up into the cutter head. If you need to build a tapered section wider than the TPT table, plane it in sections and join them together.

- NOTE about planer table rollers: Set high, they will prevent the TPT from resting fully on the planer table. This will likely cause the TPT to rock up and down slightly during use. Either lower the planer table rollers or use a sacrificial bed that is relieved on its underside to provide clearance over the table rollers.

The TPT is hard anodized and will resist wear. However, an occasional application of paste wax or appropriate aerosol lubricant to the TPT table and guide rail will reduce friction and wear. In closing, plan ahead, work safely and do good work.

Tom

Thomas Whitaker

