

Faceplates

A Simple Solution to Attachment

Jim Rodgers

Faceplates are a practical and effective way of mounting work on the lathe. They have many advantages over other methods.

- They are inexpensive.
- They allow for multiple remounting of the work without loss of alignment.
- They can be sized to the project.
- They are often used in place of a scroll chuck for mounting bowl blanks.

Safety considerations

Faceplates are simple mounting devices; however, there are things you need to consider in order to make them work safely and properly.

- Match the size of the faceplate to the size of your project. The faceplate and glueblock must be of sufficient size to properly support the work, especially while being roughed out and off balance.
- Use steel faceplates for larger, heavier projects. Steel does not deform or flex like aluminum might.
- Match the screw size to the faceplate holes. Using the largest diameter screw possible prevents the faceplate from shifting slightly during use, especially when catches happen.
- Use machine screws when your faceplate has chamfered holes. This also reduces shifting.
- Pre-drill glueblock holes. This eliminates “mushrooming” of the wood next to the back of the faceplate, allowing the glueblock to lay flat. It also reduces the possibility



of splitting the glueblock when threading the screw into the wood.

- Avoid using MDF, plywood, or soft woods for glueblocks. Those materials will fail on large or heavy projects.
- Don't use an endgrain glueblock. Screws do not hold well in endgrain and may pull out. Additionally, the glue joint will be far weaker when your bowl stock is glued to endgrain.
- For your glueblock, use wood that is thick enough to accept a long screw and will still allow enough thickness to turn away part of the glueblock if need be.

When purchasing a faceplate for your lathe, be sure its threaded shaft is of sufficient length to seat properly on the shoulder of the lathe's headstock shaft in order to provide proper registration. If the shoulders don't meet flush, there will be alignment problems, and a remounted project may not register properly. If the faceplate happens to have a shaft that is too short, add a flat spacer between the headstock and the faceplate to ensure better alignment. Some lathe manufacturers sell washers for this purpose. They are machined to be flat enough for provide proper registration



Glueblock with holes not pre-drilled. Mushrooming of the wood will prevent getting a good glue joint.



The threaded shaft of this faceplate is too short for the faceplate's shoulder to rest on the shoulder of the lathe's headstock.

and alignment of faceplate shaft to lathe shaft.

When attaching a faceplate to your lathe, be sure it is securely seated on the spindle. I back off the last quarter turn and retighten with a quick jerk to be sure of tightness. A hexagonal treaded shaft or a hole for a tommy bar is important for easy removal of the work.



Faceplate, glueblock, and platter, assembled and ready to turn.

Considerations for the use of screws

Many accidents have occurred from the use of inappropriate screws when attaching a glueblock to the faceplate. In addition to selecting screws of large enough diameter to fill the screw holes in the faceplate, the following are some other points to consider.

- Drywall screws may snap off during installation or during use.
- Use chamfered head screws for faceplates with chamfered holes and flat machine head screws for faceplates with holes that are not chamfered.
- Square drive screws provide the most control on installation and removal. The driver will not slip or tear the head of the screw.
- Be cautious of iron/steel screws when attaching wet wood. The screws will eventually rust, discolor the wood, and freeze to the steel faceplates. They may weaken due to rusting. ■

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Types and uses of common faceplates

Custom made locally

Many turners have found local individuals who make inexpensive faceplates. While these faceplates might not be perfectly true, the use of a screw-mounted glueblock, trued up on your lathe, solves this problem. However, be sure not to mount this faceplate on other lathes unless re-trued to that specific lathe. Projects may not be easily moved from one lathe to another with these faceplates.



Locally made faceplate with threads relieved.



Back side of the locally made faceplate.

Commercial aluminum faceplates

These faceplates also are inexpensive and, when used for smaller projects, will perform very well. Some even have holes for tommy bars to aid removal and set screws for securing to the spindle of your lathe. Be aware, though, that with heavy projects mounted, these aluminum faceplates may deform and cause problems.



Commercial aluminum faceplate.

Commercial steel faceplates

These are the more expensive faceplates, but they are also more reliable, especially for larger-sized projects. Many of the larger ones have abundant screw holes to securely mount your project. The better brands of steel faceplates will have set screws to secure them to the lathes for reverse turning.



Commercial steel faceplate.