

The drum-sander support system provides an innovative way to reduce quill damage on your drill press as a result of side loading, as well as to prevent long drum sanders from deflecting in use. A specially modified shaft is required to use this system in conjunction with the drum sanders sold by Lee Valley Tools Ltd.

System Set-Up

Replace the original shaft that came with your drum sander with the specially modified shaft that has a countersunk hole in the end.

Install the drum sander you wish to use into your drill-press chuck, securing it in place. Place the drum-sander bearing support on your drill-press table, roughly centered under the drum sander.

If your drill press contains a locking quill, slowly lower it, allowing the countersunk hole in the end of the shaft to engage the live center in the bearing support. If your drill press does not contain a locking quill, raise the drill-press table to allow the end of the shaft to engage the live center in a similar manner. As the two components come together, do not worry if the bearing support is slightly off center; it will align itself. Bring the two together such that the live center in the bearing support is snug inside the countersunk hole at the end of the shaft; the bearing may slide slightly on the drill-press table as you do this. Lock the quill or table so there is sufficient thrust to keep the drum sander from deflecting as you apply side pressure.

You will need to use a spacer board at least $\frac{7}{8}$ " thick to put under your workpieces in order to elevate them so that their edges make full contact with the drum sander. (**Figure 1.**)

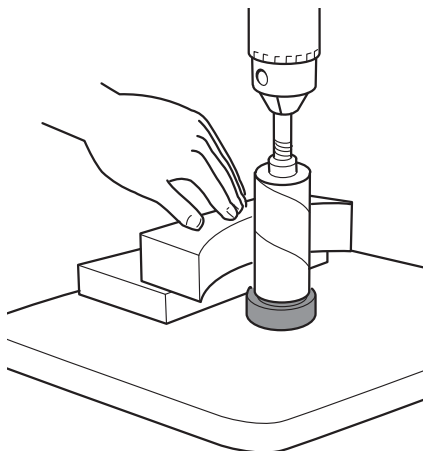


Figure 1: $\frac{7}{8}$ " thick spacer board.

For improved access to the sanding drum from any direction, you can make the spacer board cover the entire drill-press table (**Figure 2**). Just drill a 1½" dia. through hole if your spacer board is 7/8" thick, or 7/8" deep if it is thicker. Apply glue to the sidewalls of the hole and fit the bearing support in the hole so that it bottoms (5-minute epoxy works well). Ensure that the bearing support remains level as you insert it into the hole, and avoid getting any adhesive into the bearing or rotating center.

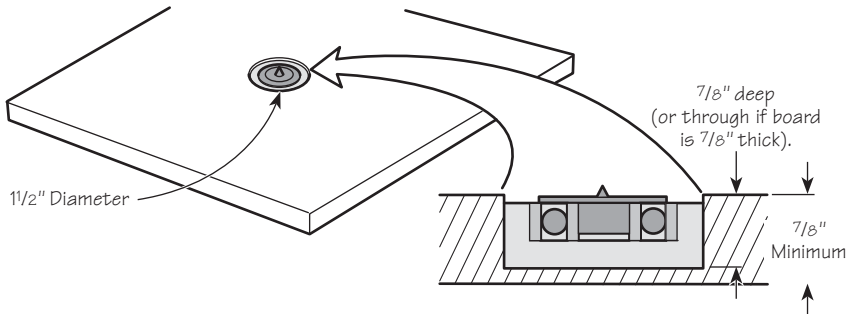


Figure 2: Spacer board with fitted bearing support.

Note: There will be a gap between the drum sander and the 1½" hole in the large spacer board, increasing up to ½" if the smallest (½") drum sander is used. This should be of no consequence unless you are sanding very small workpieces. In these instances, you may temporarily clamp the spacer board (shown in **Figure 1**) on top of the large spacer board and as close to the drum sander as possible.

Accessories

68Z02.21 Modified Shaft for 1½" and 2" long drums

68Z02.23 Adapter for 3" × 3" drum sander

(Lee Valley product number 68Z21.01)*

*Simply screw adapter into the end of this drum sander until it is finger tight. Use it the same way as described above.