Shooting Board Plan of Procedure

Materials (this is a guide; your requirements may vary)

Base	1 – 1/2" x 10" x 16" MDF or plywood (3/4" will also work)
Support	1 – 3/4" x 7 1/2" x 16" MDF or plywood
Guide Strip	$1 - \frac{1}{4}$ " x 7/8" x 17" hardwood (attach to long edge of support)
Runner	1 – 1/4" x 2 1/2" x 16" MDF (or tempered hardboard)
Fence	1 – 1" x 2 1/2" x 9" soft hardwood (poplar works well for this part)
Cleat	1 – 3/4" x 3/4" x 10" hardwood
Screws	3 – #8 x 1 1/4" flat head screws

- 1. Cut out the parts per the cut list. Glue the guide strip to the edge of the support and trim flush. Glue the runner to the base, and glue/screw the support to the base, with the guide strip against the runner. The alignment does not have to be perfect; you will straighten things up later.
- 2. After the glue has dried, rip the long edges of the assembly straight and parallel on a table saw. Then, crosscut the ends square to the long edges.
- 3. While at the table saw, set the blade height to cut the kerf between the support and the runner as shown below. The blade should not cut into the base. Cut the kerf using the table saw fence as a guide (don't use a sled).
- 4. Make the fence next. It should be about $2\frac{1}{4}$ " wide at one end, and about $1\frac{1}{2}$ " wide at the opposite end. Use the bandsaw to rough cut and then handplane the edges straight and square.
- 5. Install the box joint blade on a table saw. Using a sled, cut the tapered dado for the fence. Set the blade height to clear the runner by 1/4" 5/16". Make the first cut about 3½" from the end; the squareness of this cut will determine the accuracy of your shooting board. Use the fence (made in the previous step) to angle the base and make the opposite cut, locating it as needed to fit the fence in the dado so the narrow end will be about flush with the edge of the support.
- 6. Remove the remaining material in between the cuts by making multiple cuts about 1/8" apart, taking care not to cut the outside edges. When done, smooth the bottom of the dado as necessary with a shoulder plane or suitable tool.
- 7. Attach the cleat with the three screws.
- 8. Final fit the fence to the dado by trimming the tapered edge as needed. Chamfer the back corner as shown in the picture. Lightly tap into place. Cut the fence length so it barely hangs over the runner and plane to length with a jointer plane riding on the runner.
- 9. Sand all the edges to soften them a bit, wax the runner, and you're done.

