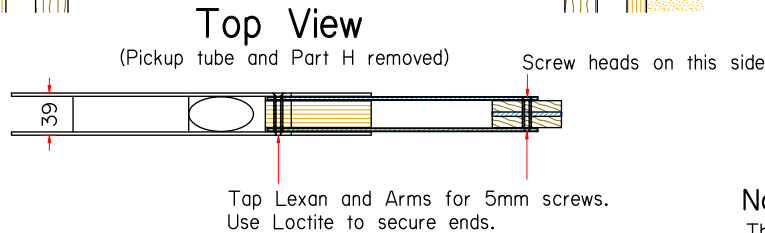
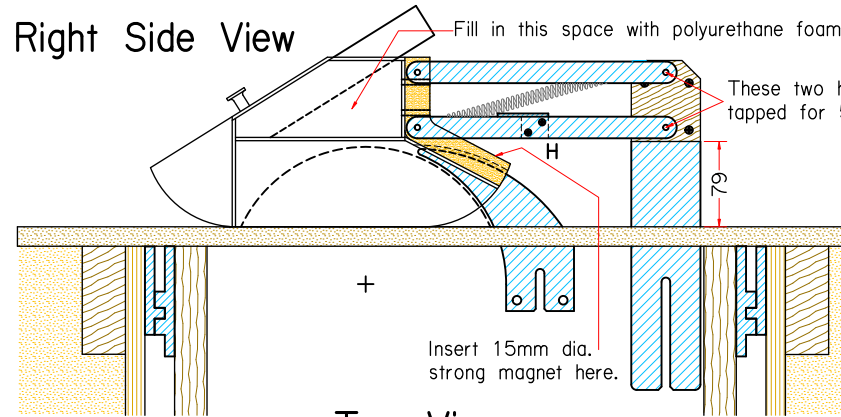


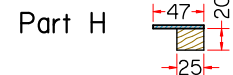
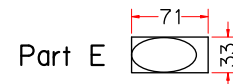
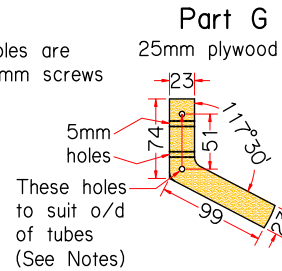
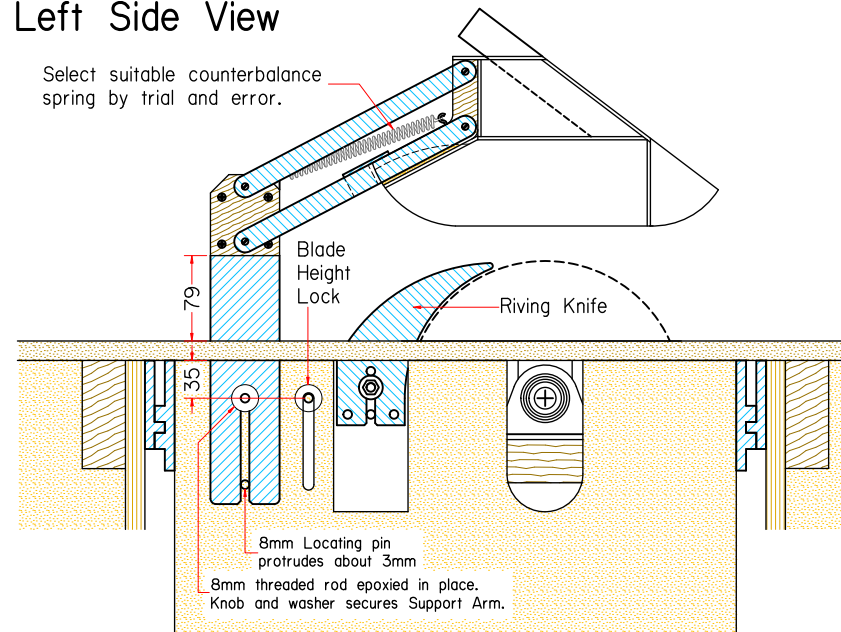
# DUST COLLECTION SYSTEM Improved Blade Guard

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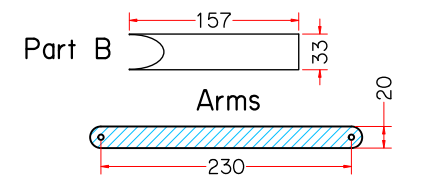
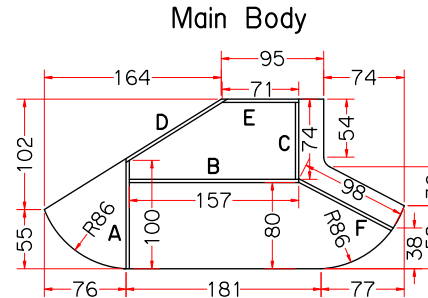
## Parts



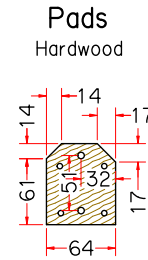
## Left Side View



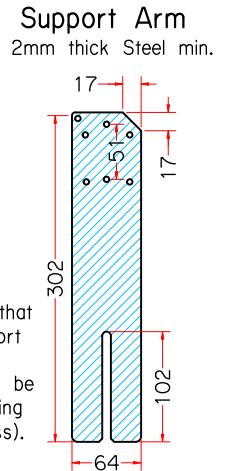
Thickness for a snug fit between parallel arms.



Make four from 3mm thick aluminum. Holes to fit 5mm i/d tubing



Make two Pads of equal thickness so that total including Support Arm is 25mm. Support Arm should be as thick as the Riving Knife (or slightly less). Minimum 2mm.



## Notes

The entire Guard body is built from 3mm thick polypropylene (Lexan) bonded with methylene chloride. Work in a well ventilated room. It is essential to make parts with straight, smooth edges. Place parts in place and use a syringe to apply a thin bead along the joint. The bonding agent will be sucked by capillary action and acts almost immediately. Let joints cure overnight. Cut the two sides first. The remaining Lexan parts are all rectangular, 33mm wide. Pickup Tube is a 32mm o/d PVC pipe. Methylene chloride will not bond PVC to Lexan. See below how the Pickup Tube is attached.

Make Part G out of 25mm plywood (19+6). For safety reasons use a larger workpiece and cut the slot for the Riving Knife first. Raise the blade to 16.5mm. Set the rip fence so the cut falls right on the middle of the material thickness. Stick masking tape to the rip fence face and mark a line 82mm from the place the blade starts the cut. Cut up to this mark. Proceed with caution and stop the saw to remove the workpiece. Finish cutting the final shape and drill all holes as indicated.

Cut four 5mm i/d 33mm long metal tubes. Insert in the holes for the parallel arms. These work as bearings for them. Copper or brass tubing is adequate. Use the other two tubes in the Support Arm.

The elliptical cutouts for the pickup tube are difficult. The one in Part B must be filed carefully to final size before assembly. Tap the holes for 5mm screws in Part C. Assemble Parts A, B, C and D in this order. Shape and insert the Pickup Tube. Hold in place with the knob and a small screw at the upper end. Screw Part G in place and use it to place and bond Part F at the correct angle. Fill the indicated space with Polyurethane Foam (in aerosol). Work in stages as the foam expands rapidly. Cut away any surplus with a knife. Close with Part E. Ignore any small voids. The foam is used to keep the Pickup Tube in place, You can paint the Lexan on the outside for a nice finish as shown in the photos.

Remove Part G and reassemble with the Parallel Arms. Use Mylar or UHMW hand-made washers on the tubes for smooth operation. Use Loctite on the screws to secure ends.