



Pre-drilling the pickup cavity



The pre-drilled pickup cavity



Removing material with a chisel



The finished pickup cavity

Cutting the cavities

Cutting the pickup cavity

Mount the bridge again and mark the outline of the bridge pickup opening and the centers of the three pickup mounting holes on the body; then remove the bridge again. Align the *Telecaster* bridge pickup on the three mounting hole marks and trace the outline of its base onto the body. Pre-drill the $\frac{19}{32}$ "(15mm)-deep cavity with a $\frac{3}{4}$ "(20mm) Forstner bit. Use a smaller bit for the tighter radii and a chisel for removing the remaining material. Mount the pickup on the bridge and check if everything can be fitted correctly.



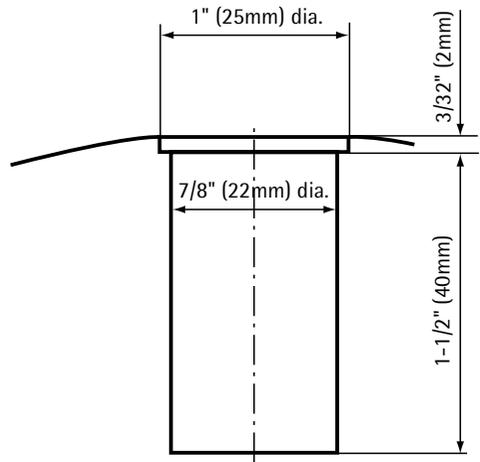
After mounting the bridge



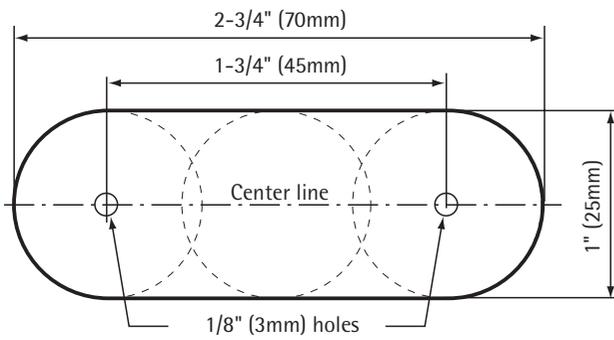
Marking the holes for the control pots



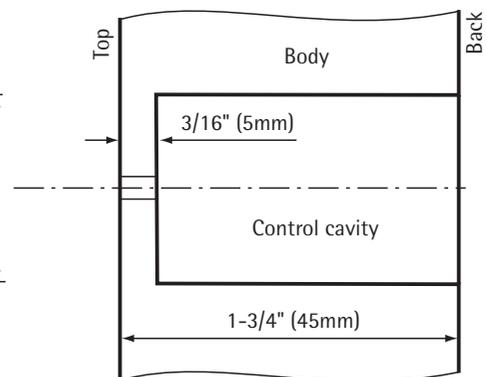
Pre-drilling the control cavity



Output jack hole at the side of the body



Control cavity





The output jack hole with jack mount



Connecting the pickup cavity with the control cavity

Cutting the control cavity

Place the potentiometer knobs on the body in the places you've chosen and mark their outlines. Their centers should be $1\frac{3}{4}$ " (45mm) apart. Drill one $\frac{1}{8}$ " (3mm) hole through the body at each knob center mark. Turn the guitar over, center the 1" (25mm) Forstner bit on one of the $\frac{1}{8}$ " (3mm) holes and start to drill. To be able to mount the potentiometer there must not be more than $\frac{3}{16}$ " (5mm) of material left at the bottom of the hole. If the body is $1\frac{3}{4}$ " ($1\frac{12}{16}$ ") thick, you'll have to drill $1\frac{9}{16}$ " deep ($1\frac{12}{16}-1\frac{9}{16}=\frac{3}{16}$ "). If the body is 44mm thick, you'll need to drill 39mm deep ($44-39=5$ mm). Do the same with the other $\frac{1}{8}$ " (3mm) hole before drilling a third hole in the middle. You can make this hole a little less deep so that the bottom of the control cavity is more rigid. Remove the remaining material between the holes with a chisel. I made the cover of the control cavity from $\frac{3}{32}$ " (2mm)-thick ebony veneer.

Cutting the output jack hole

The jack mount I used is held in place by two angled screws and is centered on the side of the body. I couldn't find a Forstner bit for the required $\frac{7}{8}$ " (22mm) hole, so I had to use the fairly large drill bit shown above. To give the jack mount a flat surface on the curved side of the body I drilled a $\frac{3}{32}$ " (2mm)-deep hole with a 1" (25mm) Forstner bit. The rest of the hole is $\frac{7}{8}$ " (22mm) in diameter and about $1\frac{1}{2}$ " (40mm) deep. I managed to meet the end of the control cavity, so I didn't need to drill a separate connecting channel.

Drilling the connection hole

The connection between the control cavity and the pickup cavity is made with a long, $\frac{1}{4}$ " to $\frac{5}{16}$ " (6-8mm) drill bit. Start as flat as possible and at the right angle to ensure that the bit really enters the electronic cavity or output jack cavity. If necessary, also drill a hole to connect the control cavity to the output jack hole.