

Shop-Made Clamp

There are times when you just don't have enough clamps. But don't worry – you don't have to blow your budget on new ones. Here's an easy-to-build clamp that will work great for most projects.

What's unique about these clamps is how the pressure is applied. Instead of tightening a threaded screw, a wood wedge is tapped between the clamp and the workpiece.

The clamps are easy to make. As you can see in the drawing at right, each one consists of a long, wood rail with two clamp heads.

A fixed clamp head is screwed to one end of the rail. And to accommodate different size objects, an adjustable clamp head is positioned along the length of the rail.

To make this work, you'll need to drill a series of holes in the rail. These holes accept a pin that's mounted into a hole in the adjustable clamp head. (I used a dowel for the pin.)

In use, this pin allows the adjustable clamp head to pivot as you tap in the wedge, as shown in the detail. The farther you tap in the wedge, the more pressure it applies against the workpiece.

ADJUSTABLE CLAMP HEAD
(2" x 8")

NOTE: ALL PIECES EXCEPT PIN ARE MADE FROM 3/4"-THICK STOCK

#8 x 1 1/4" Fh WOODSCREW

1/2"-DIA. HOLE

SPACE HOLES 2" APART

FIXED CLAMP HEAD
(2" x 8")

PIN
(1/2" x 1 1/2" DOWEL)

1/2"-DIA. HOLE

RAIL
(2" x CUSTOM LENGTH)

