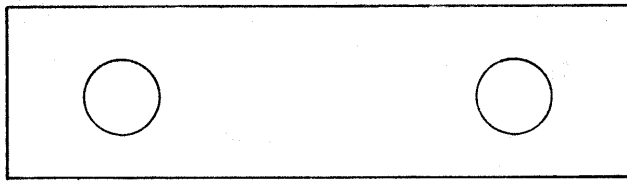


# SAW TABLE FOR 17" TUBULAR FRET SAW

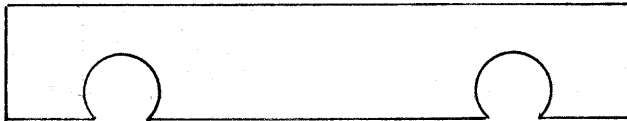
*by Jim MacKeracher*

from Canadian Marquetry May 1998

I have made many different versions of fret saw tables. The plans for my current model are at the end of the newsletter. Also included are the steps I take to make this model. I use a 17" tubular fret saw purchased from Lee Valley Tools.



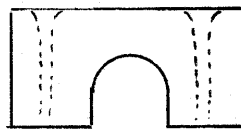
Drill 1/2" holes.



Cut off bottom.



Drill and counter sink holes for #6 screws.  
Cut off tabs.



Cross cut blocks.

## **Making Individual Components**

### CLAMP BLOCKS

Take a 5/8" thick piece of solid maple.

Follow the steps in the Figure 1 and 2 (not to scale).

### SWING ARM

Cut out the shape shown in the plans from 1" thick MDF (medium density fibreboard) with a band saw.

Drum sand the edges smooth.

Drill a 1/4" hole for the Hex bolt.

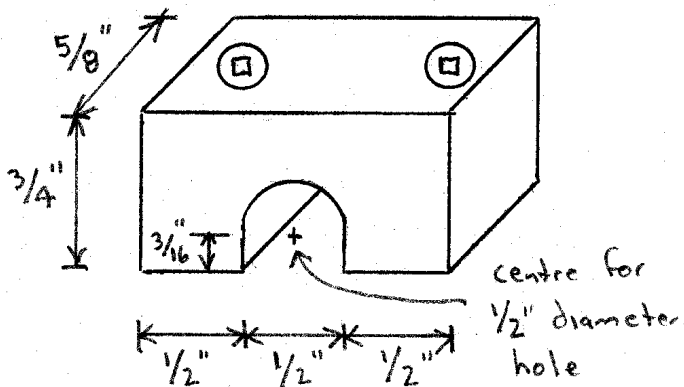
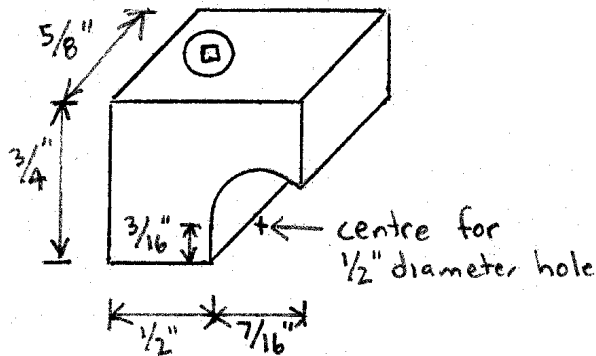
### PIVOT BLOCK

Cut a piece of 3/4" thick solid maple to 4" wide by 3-1/2" long. Grain direction is important.

Drill a 1/4" hole for Hex bolt. See plans for location.

Mortise the head of the bolt into the maple 1/4" deep on the hinge side.

### CLAMP BLOCK 1



### CLAMP BLOCK 2

### ANGLE BLOCK

Cut a piece of 3/4" thick MDF to 4-3/4" by 3-1/2".

Use the plan to mark out the slot for angle adjustment.

Drill out the ends of the slot with a 3/8" bit.

Cut the rest of the slot out with a scroll or jig saw.

Drill and counter sink holes, 'E' for #6 screws.

### INSERT BLOCK

Cut a piece of 3/4" thick poplar to 2" wide by 3" long. Grain direction is important.  
Drill and counter sink holes, 'F' for #6 screws.

### PLATE

Cut a piece of 11/16" thick PB (particle board) to 4" by 24".  
Drill and counter sink holes, 'A and B' for #6 screws.

### SUPPORT

Glue together 4 oversize pieces of 11/16" PB.  
Cut to 3" by 14" by 2-3/4".

### BASE

Cut a piece of 11/16" thick PB to 4" by 20".  
Drill and counter sink holes, 'C' for #6 screws.

### TOP

Cut a piece of 3/4" thick melamine to 16" by 21".  
Rout all the edges with a 1/4" round over bit.

Rout a 17 degree dovetail groove 5/8" wide and 5/32" deep.

### THROAT PIECE

Cut pieces of soft wood to fill the 17 degree dovetail groove flush with the TOP.

### PIANO HINGE

Cut 3/4" piano hinge to a of length 3-1/2".  
Drill extra holes for screws if necessary.

## **Assembly**

Attach the 17" tubular fret saw to the SWING ARM with CLAMP BLOCKS 1 and 2 using 1-1/2", #6 wood screws.

Attach the PLATE to the SUPPORT with 2", #6 wood screws.

Glue and screw together the ANGLE BLOCK and PIVOT BLOCK with 1-1/2", #6 wood screws.

Insert the 2" by 1/4" Hex bolt into the PIVOT BLOCK.

Attach the piano hinge to the PIVOT BLOCK with 3/4", #5 wood screws.

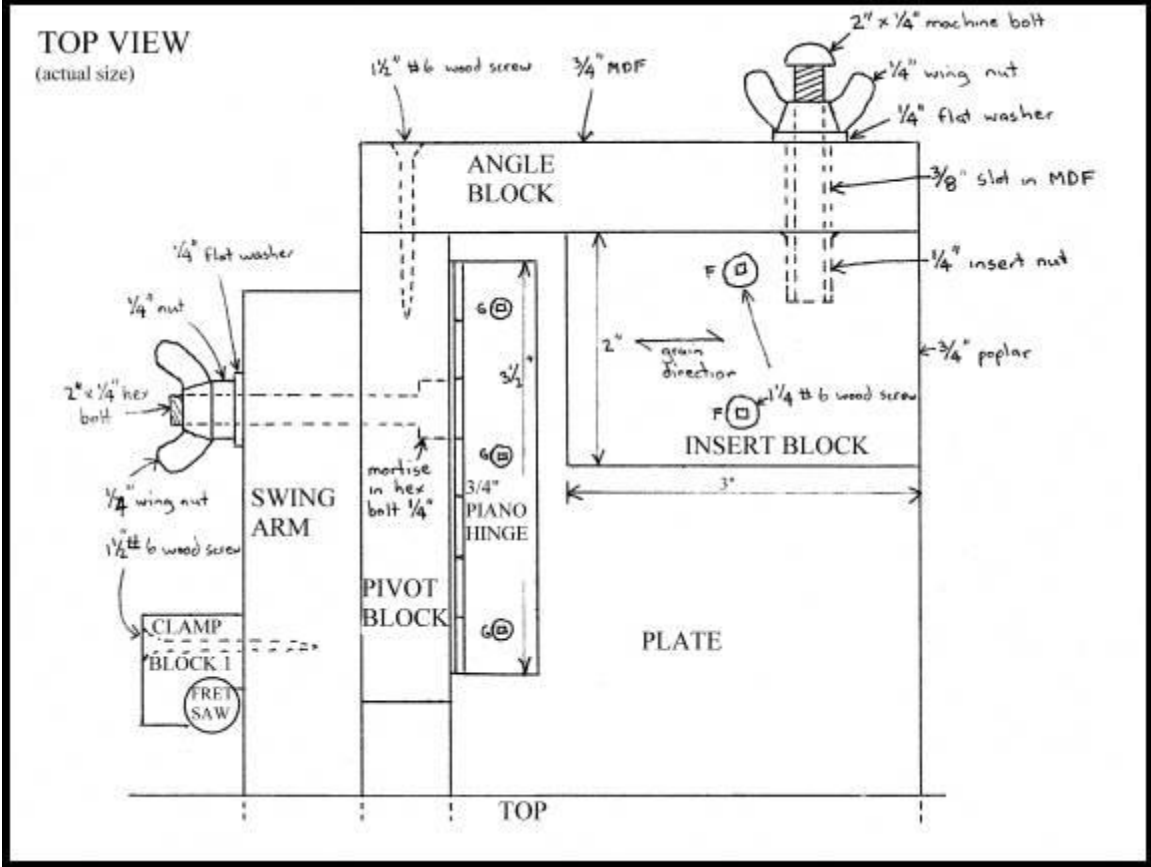
Glue and screw the INSERT BLOCK to the PLATE with 1-1/4", #6 wood screws.

Attach the piano hinge to PLATE with 3/4", #5 wood screws.

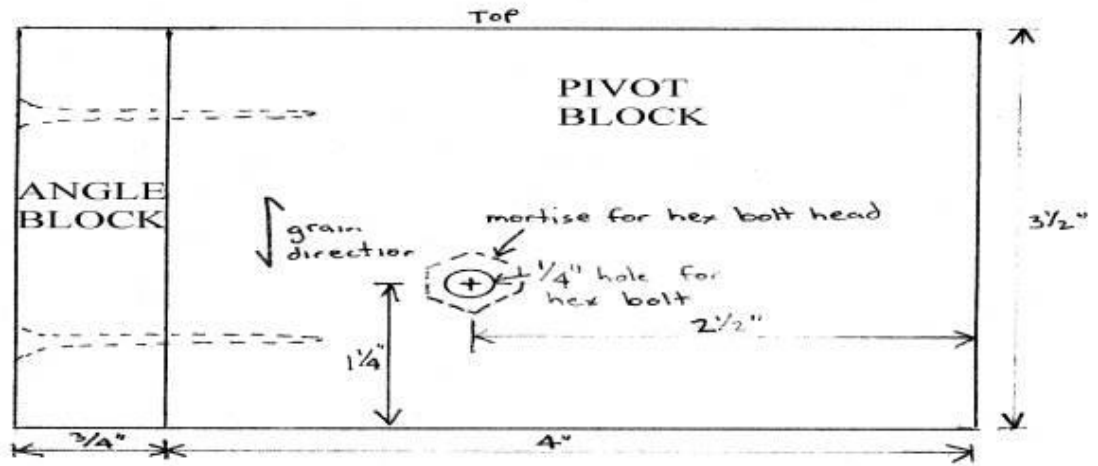
Mark the centre of the insert nut through the slot in the ANGLE BLOCK at the joint between the INSERT BLOCK and PLATE.  
Remove the screws holding the piano hinge to the PLATE and set the assembly aside. Drill and put in 1/4" insert nut.  
Reattach piano hinge to PLATE. Place 1/4" wing nut and washer on 2" by 1/4" machine bolt.  
Thread bolt all the way into insert nut and tighten. Use wing nut to secure ANGLE BLOCK in vertical position.  
Clamp entire assembly to table making sure clamps position will not interfere with installation of TOP.  
Slide SWING ARM over Hex bolt and secure snugly with 1/4" washer, nut and wing nut.  
Place TOP on plate under top fret saw arm and clamp lightly in place.  
Insert coarse fret saw blade through hole in TOP and tighten in fret saw under tension.  
Check clearance with blade tilted and reposition TOP if necessary.  
Tighten clamps holding TOP to PLATE securely. Remove clamp holding assembly to table and turn over.  
Attach PLATE to TOP with 1-1/4", #6 wood screws.  
Remove clamps holding TOP to PLATE. Attach BASE to SUPPORT using 2", #6 wood screws.  
Turn over and clamp BASE to table.

## **Fine Tuning**

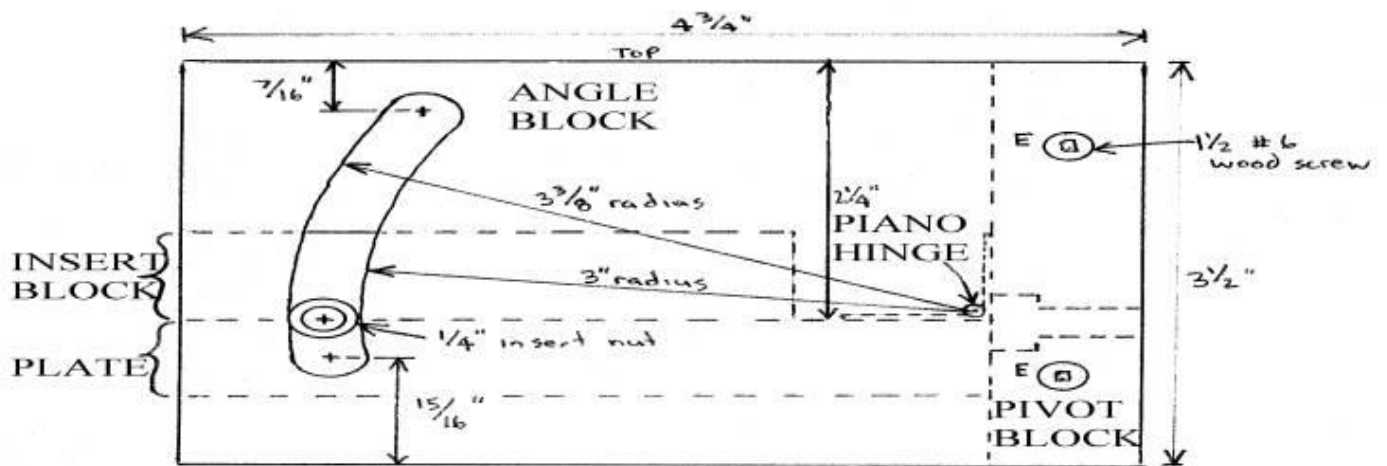
For quick, accurate tilt angle adjustment, set the fret saw tilt to vertical by using a protractor sitting on the TOP and lined up against a tensioned fret saw blade.  
Mark a pencil line on the ANGLE BLOCK using the top of INSERT BLOCK as a guide.  
Label as '0'. Set other commonly used angles and mark for quick adjustments (10, 12, 15).  
Adjust the wing nut and nut so SWING ARM moves freely but not sloppily.  
Cut 2 throat pieces and insert from either side of dovetail until they touch the fret saw blade.  
Secure to the TOP with a piece of cellophane tape.  
Bevel the ends of the throat pieces so that they conform to the most commonly used tilt angle. As the ends wear, re-trim.



PIVOT BLOCK SIDE VIEW



ANGLE BLOCK SIDE VIEW



# TABLE ASSEMBLY EXPLODED VIEW

(not to scale)

