

# HOW TO BUILD A WORKBENCH

**STEP BY STEP GUIDE**  
**No. 8**

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**8**

**EASY TO FOLLOW STEP BY STEP GUIDE**

**COMPLETE MATERIALS CHECK LIST**

**LIST OF ALL TOOLS REQUIRED**



**REFER TO COUPON ON BACK PAGE FOR MORE INFORMATION REGARDING THIS AND OTHER BOWENS PROJECTS**

## MATERIALS CHECK LIST

RECOMMENDED TIMBER – RADIATA PINE

- LEGS 90 x 90mm – 4 x 800mm Treated Pine
- TOP RAILS 90 x 45mm – 2 x 1800mm Treated Pine
- BOTTOM RAILS 90 x 45mm – 2 x 1710mm Treated Pine
- CROSS BARS (Top) 90 x 45mm – 4 x 810mm Treated Pine
- CROSSBARS (Bottom) 90 x 35mm – 2 x 540mm Treated Pine
- CROSSBARS (Ends) 90 x 35mm – 2 x 810mm Treated Pine
- BRACING (Rear) 90 x 45mm (allow 2000mm) Treated Pine
- BRACING (Ends) 90 x 35mm (allow 1200mm) Treated Pine
- BENCH TOP PLANK 240 x 45mm – 2 x 1800mm
- BENCH TOP 1800 x 900 x 18mm Particle Board or Fibron™ Board
- BOTTOM SHELF 1800 x 630 x 18mm Particle Board or Fibron™ Board
- BOLTS (Top to Legs) 150 x 10mm Coach Bolts – 8
- (Rear Bracing) 150 x 10mm Coach Bolts – 4
- (End Crossbars) 140 x 10mm Coach Bolts – 4
- (End Bracing) 140 x 10mm Coach Bolts – 8
- (Planks to Bench Top) 75 x 8 mm Coach Bolts – 14
- NAILS (Crossbars to Rails) 75 x 3.75mm Bullet Head
- (Benchtop and Shelf to Frame) 50 x 2.80mm Bullet Head
- GLUE P.V.A. Wood Glue

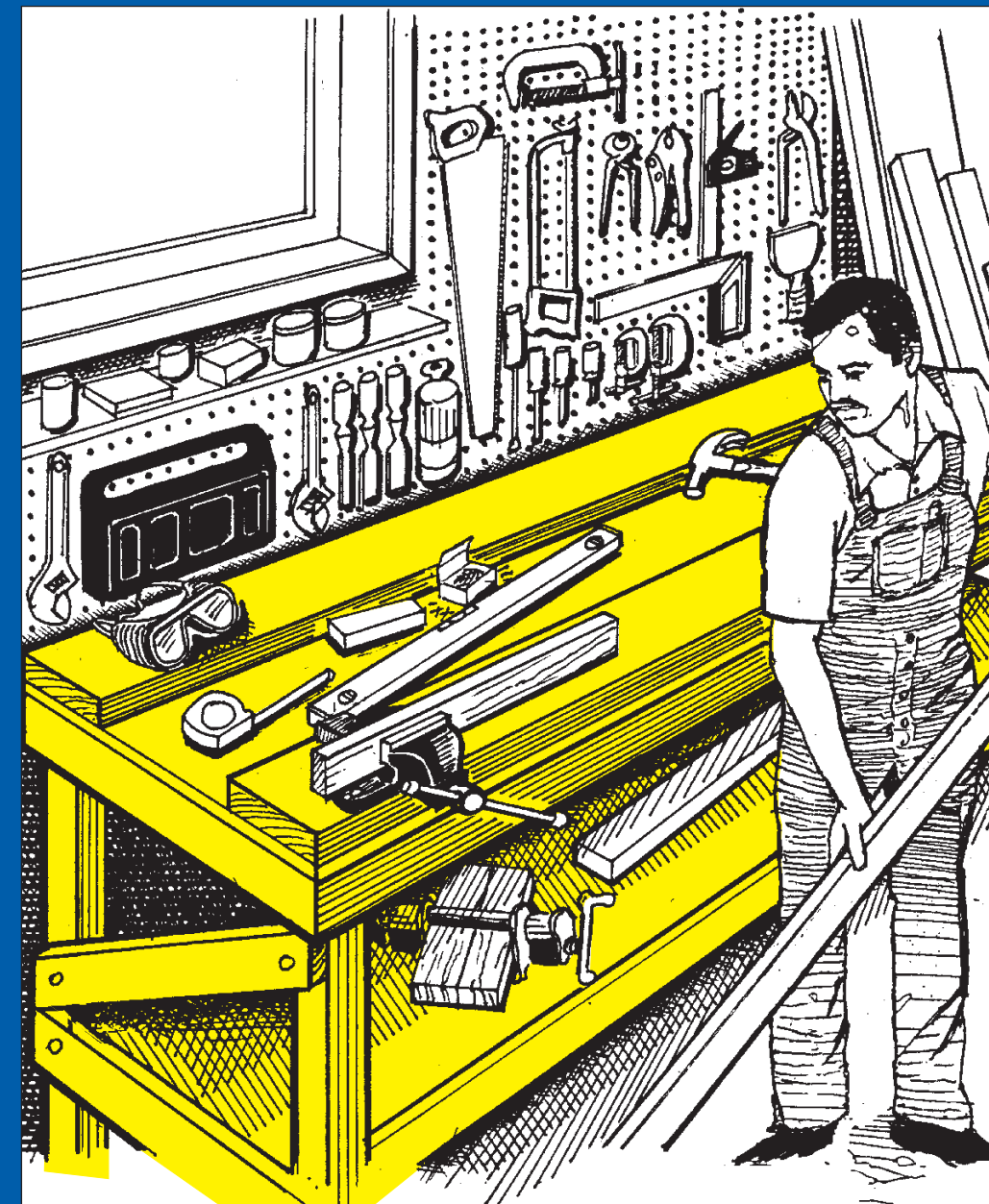
**SIZES QUOTED TO BE USED AS A GUIDE ONLY**

## TOOLS REQUIRED

For most workbench projects you will need:

- Handsaw
- Circular saw
- Power drill and bits
- Wood chisel
- Tape measure
- Carpenters pencil
- Nail punch
- Hammer
- Countersink bit
- Spanner
- Level
- Square
- Sandpaper
- Screwdriver
- Paintbrush

**FOR SAFETY USE GOGGLES, GLOVES AND DUST MASK.**



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PLEASE SEND ME THE INFORMATION I HAVE MARKED HERE

<input type="checkbox"/> 1 Timber Deck	<input type="checkbox"/>
<input type="checkbox"/> 2 Pergola	<input type="checkbox"/>
<input type="checkbox"/> 3 Timber Fence	<input type="checkbox"/>
<input type="checkbox"/> 4 Feature Wall	<input type="checkbox"/>
<input type="checkbox"/> 5 Carport	<input type="checkbox"/>
<input type="checkbox"/> 6 Gazebo	<input type="checkbox"/>
<input type="checkbox"/> 7 Cubby House	<input type="checkbox"/>

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**HELPING YOU BUILD IT BETTER! HELPING YOU BUILD IT BETTER!**

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# STEP BY STEP GUIDE TO BUILDING YOUR OWN WORKBENCH

Build this great workbench yourself and save!

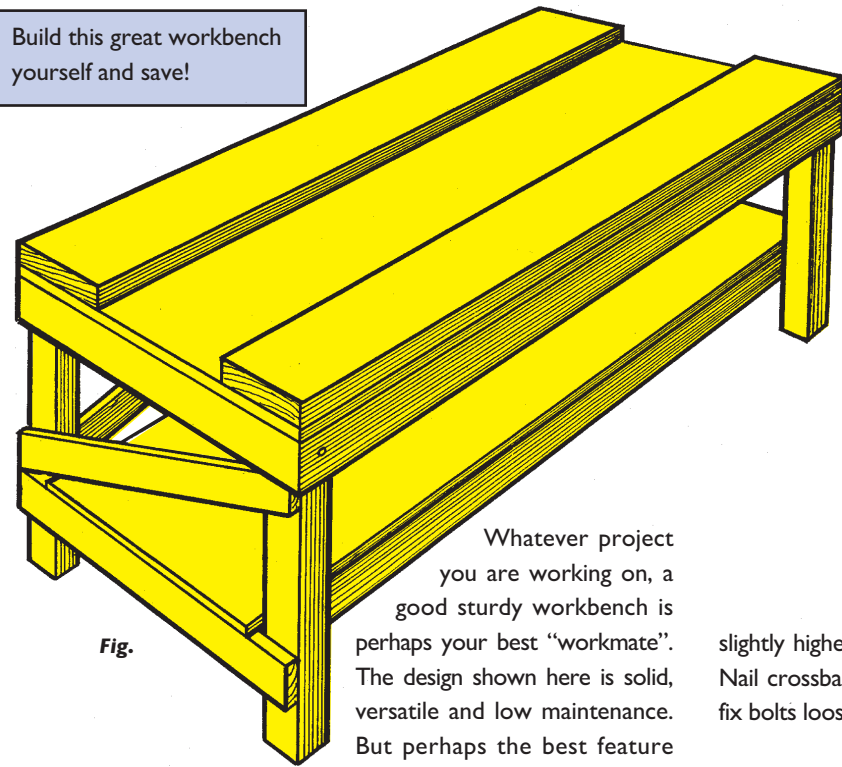


Fig.

Whatever project you are working on, a good sturdy workbench is perhaps your best "workmate". The design shown here is solid, versatile and low maintenance. But perhaps the best feature about this design is that it is easy

to build. If the recommended size does not suit you it can easily be adjusted to your required size. If so, you will also need to adjust the size of the pre-cut "timber components" listed on the opposite page. A carpenter's well (that's the trough in the centre) has been designed into the bench. It will make cutting, sawing and planing easier and will help stop tools falling off the bench while you are working.

## PREPARE MATERIALS

Cut all timbers to size using a carpenter's square and a fine tooth cross cut panel saw. Mark components in pencil as per timber component list on opposite page.

## BENCH TOP

Take 4 cross bars (B) add 2 rails (E) and nail together as illustrated (Fig. 2) to form a frame. Now take a piece of particle board or Fibron™ size 1800mm x 900mm x 18mm and attach to the frame

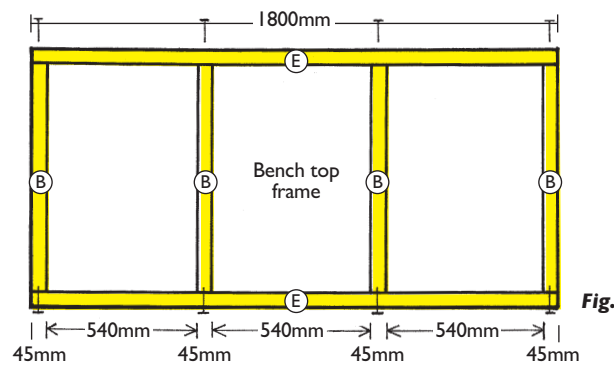


Fig.

(glue and nail with 40mm nails). The board can be cut ready to size and hence will be square. The edges of the frame and the particle board should be flush. This now makes up the bench top.

## END FRAMES

Take the 4 legs (A) and 2 leg crossbars (D) and make up 2 end frames as illustrated (Fig. 3). Drill holes through crossbars and legs and bolt each frame together loosely.

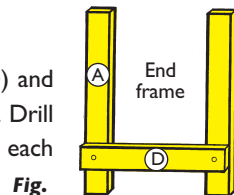


Fig.

## BOTTOM RAILS AND CROSSBARS

Take 2 bottom rails (F) and 2 bottom crossbars (C) and attach to end frames. (Fig. 4) Drill holes through crossbars and posts. Make sure holes are drilled

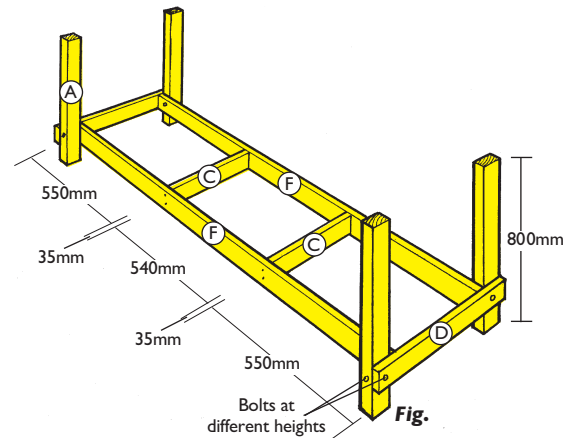


Fig.

slightly higher or lower through posts than end frame bolts (Fig. 4). Nail crossbars to rails using two 75mm nails as per illustration then fix bolts loosely (Fig. 4).

## FIX TOP TO ENDS

You are now ready to attach the bench top to the leg assembly. The leg will slide inside the bench top and the two assemblies can be secured temporarily by nailing through the particle board into the top to the legs (Fig. 5). Because the leg assembly is only bolted together loosely at this stage, the bench will be unstable. Using a square the bench can be adjusted until the legs are all standing at right angles to the bottom rails and the bench top. Drill holes through the rails, cross bars and legs at different heights (Fig. 5) and bolt top to legs firmly.

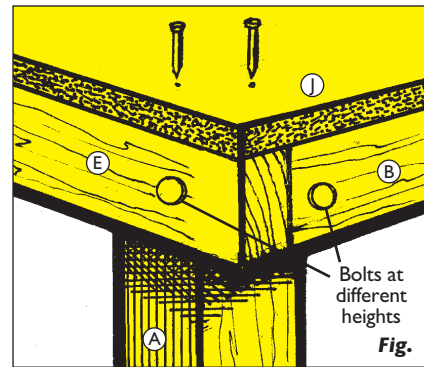


Fig.

## REAR AND END BRACING

To prevent further movement add bracing to end frames (Fig. 6) and to rear of frame (Fig. 7). The bracing can be drilled and bolted (2 bolts per joint) and then trimmed to size once in place. Using a square, check that frame is in a square position and firmly tighten all other bolts.

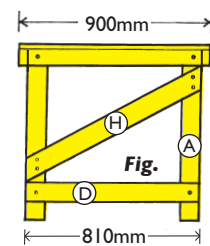


Fig.

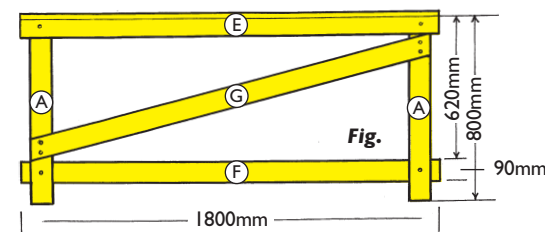


Fig.

## TIMBER COMPONENTS RECOMMENDED TIMBER AUSTRALIAN RADIATA PINE

- (A) LEGS 90 x 90mm - 4 x 800mm
- (B) CROSSBARS (TOP) 90 x 45mm - 4 x 810mm
- (C) CROSSBARS (BOTTOM) 90 x 35mm - 2 x 540mm
- (D) CROSSBARS (ENDS) 90 x 35mm - 2 x 810mm
- (E) TOP RAILS 90 x 45mm - 2 x 1800mm
- (F) BOTTOM RAILS 90 x 45mm - 2 x 1710mm
- (G) BRACING (REAR) 90 x 45mm (allow 2000mm)
- (H) BRACING (ENDS) 90 x 35mm (allow 1200mm)
- (I) BENCH TOP PLANKS 240 x 45mm - 2 x 1800mm
- (J) BENCH TOP 1800 x 900 x 18mm PARTICLE BOARD OR FIBRON™ M.D.F. BOARD
- (K) BOTTOM SHELF 1800 x 630 x 18mm PARTICLE BOARD OR FIBRON™ M.D.F. BOARD

## FIX BOTTOM SHELF

Now fix the bottom shelf – particle board or Fibron™ 1800mm x 630mm x 18mm. Glue and nail firmly into place using 50mm nails. The edges of the shelf should be flush with the outside edges of the bottom rails and leg crossbars (Fig. 8).

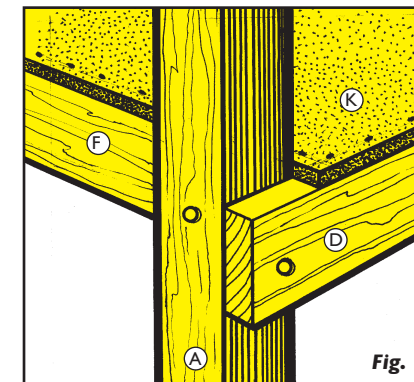


Fig.

Note that edges of shelf are flush.

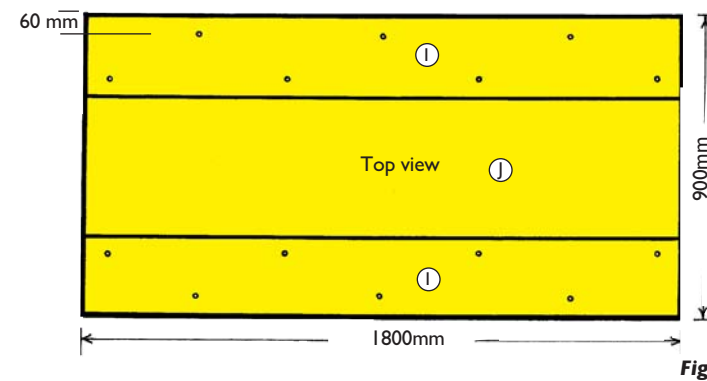


Fig.

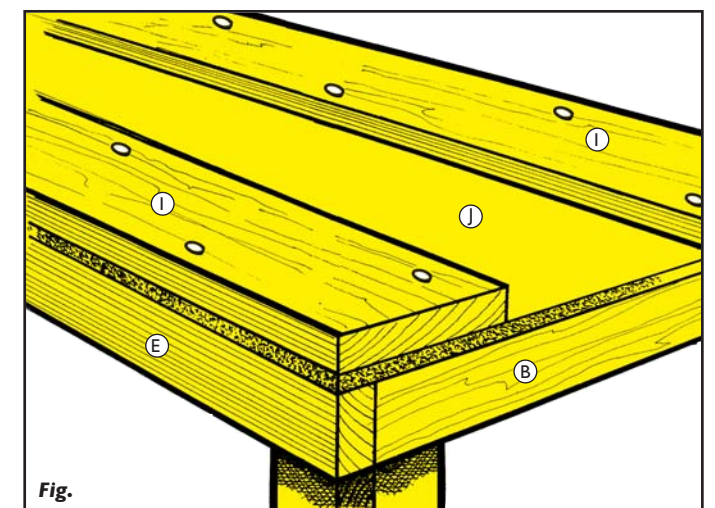


Fig.

## EXPLODED DIAGRAM

Setting out all components  
Note: Bottom shelf illustrated beside main drawing.

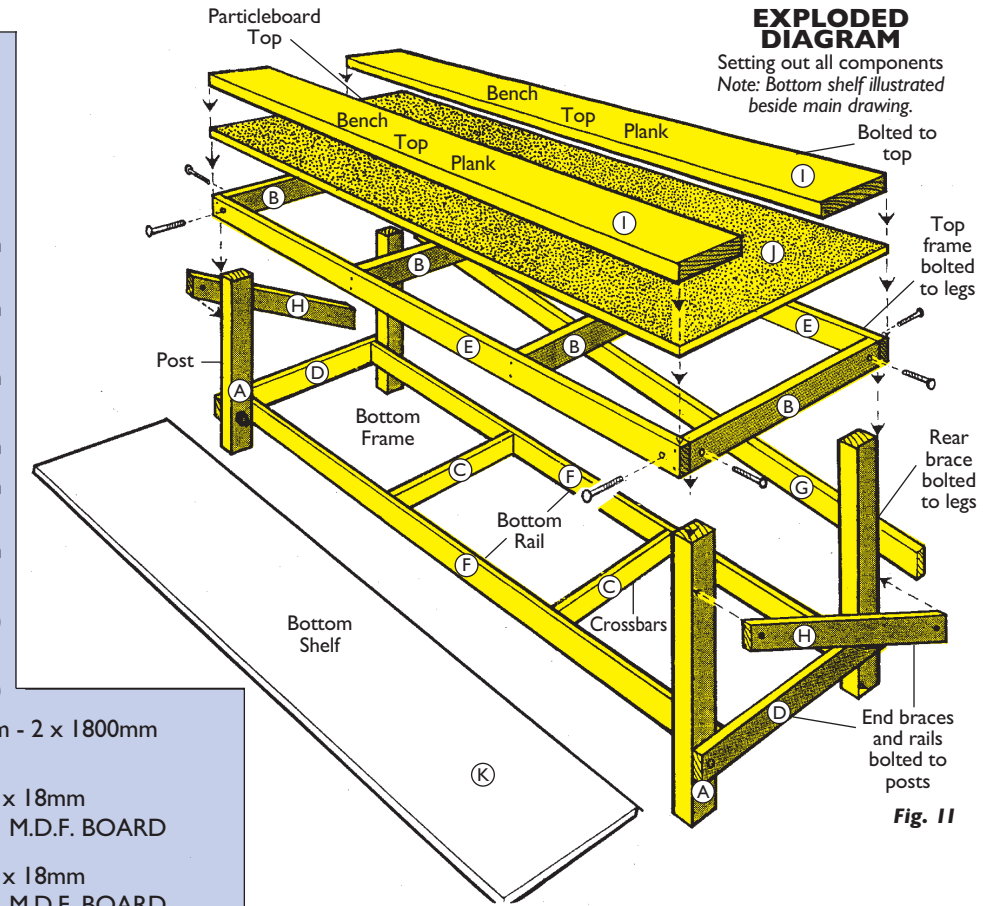


Fig. 11

## BENCH TOP PLANKS

You have now reached the final stage, the addition of the two bench top planks to the top of the bench. These planks have a number of functions. They add strength to the top so that a vice or bench grinder can be attached and the bench will withstand more hammering and other hard work. They also form a well in the middle of the bench where tools can be placed.

The planks should be attached to the top using P.V.A. glue and coach bolts. Drill 8mm holes through bench top and planks in two rows per plank, placed at approx. 300mm intervals in an offset pattern as per illustrations (Fig. 9 & 10).

NOTE: Tighten all bolts until bolt heads are below surface of plank.