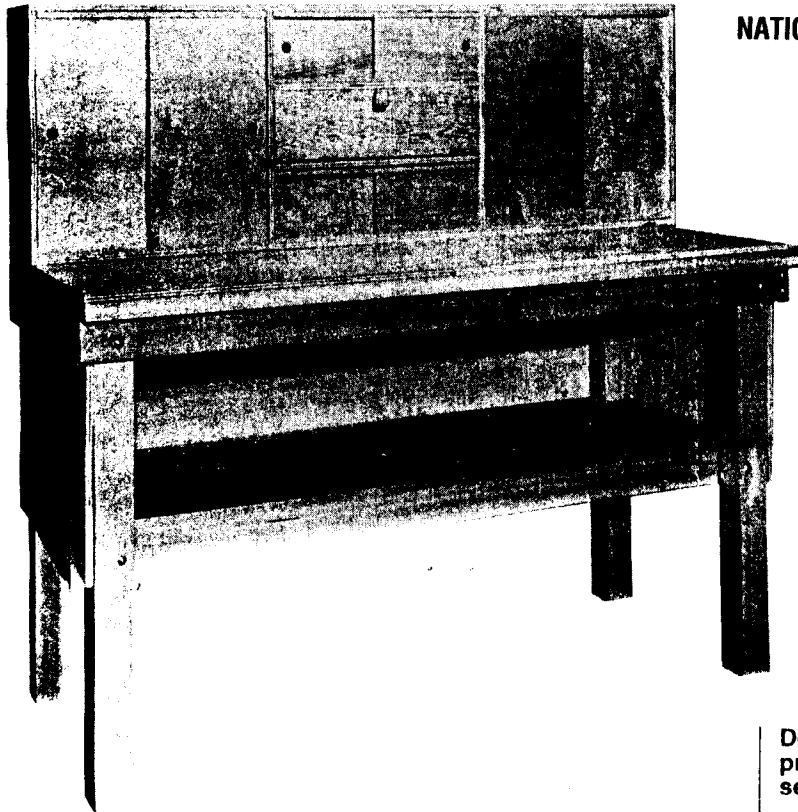


# RELOADING BENCH PLANS

NATIONAL RELOADING MANUFACTURERS ASSOCIATION  
 One Centerpointe Dr., #300  
 Lake Oswego, OR 97035



## BEFORE YOU START

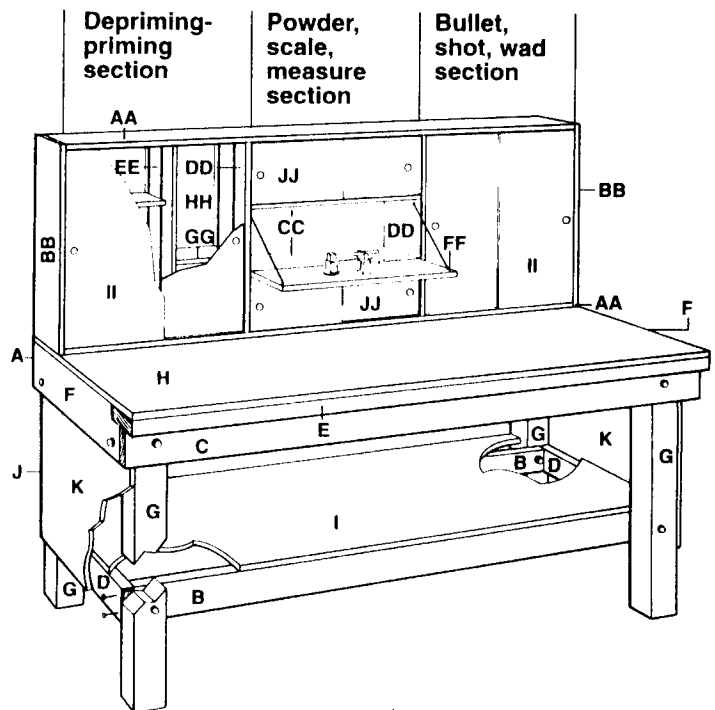
Please study the list of materials and this drawing to identify all components and their location on the bench. The bench section and the cabinet section should be built separately, then joined after completion. This is a very large bench which may not go through doorways when assembled. As with any project, it is best to assemble all components, hardware and tools before you start.

## THE NRMA RELOADING BENCH

Here is an easy-to-follow set of plans for building a sturdy, practical and simple bench for reloading rifle, handgun or shotgun ammunition. The bench is designed to be extremely sturdy to withstand the pressures of any reloading press or tool. It has plenty of room to mount presses and other equipment, plus storage areas for accessories and components, with a special drop-down shelf for your powder scale.

While many reloading benches have been designed and built by reloaders everywhere, this bench has been designed to be as versatile as possible to meet the needs of most reloaders. However, this plan also can be called a starting place for the imaginative builder who wants to customize his bench to meet his own specific needs. For instance, it can be made larger or smaller to meet space requirements or quantities of equipment and components. As it is designed, the work area will be about waist high for a 6'2" person. This can be adjusted simply by making the legs longer or shorter.

These plans include drawings and photos of construction details, a materials list and a guide to cutting pieces from ordinarily available plywood. If your home workshop does not include a table saw, you might wish to have a cabinet shop accurately cut the components for you. A precise fit not only will make your bench better looking, but will make using it more enjoyable. The entire bench is assembled with bolts and screws for strength. After the construction is completed, you may wish to paint or stain your bench to fit into the area where it will be used.



In use, this bench permits you to separate the three major reloading processes and keep the necessary accessories and components separated and ready for use. The left hand compartments are for the process involving resizing, removing spent primers and priming the hull or shell. The middle compartments contain the powder scale, powder measuring devices, and the powder canisters themselves. The right hand compartments are for bullets, shot, wads and other final components for the completed shell, as well as accessories. There also is a generous lower shelf for storing larger quantities of components.

## MATERIALS LIST

(NOTE: Materials are listed for the lower "Bench" section and the upper "Cabinet" section.)

### BENCH LUMBER

ITEM	SIZE	NO. OF PIECES	LENGTH	LOCATION ON DRAWING
Top frame	2 x 6	1	69"	A
Bottom frame	2 x 4	2	66"	B
Top frame	2 x 4	1	72"	C
Bottom frame	2 x 4	2	22"	D
Top frame	2 x 6	1	72"	E
Top frame	2 x 6	2	30 1/2"	F
Legs	4 x 4	4	42"	G

*Material Purchase Suggestion:* Two 8-foot 2 x 4s and one 6-foot 2 x 4.  
Three 6-foot 2 x 6s.  
Two 8-foot 4 x 4s.

### BENCH PLYWOOD

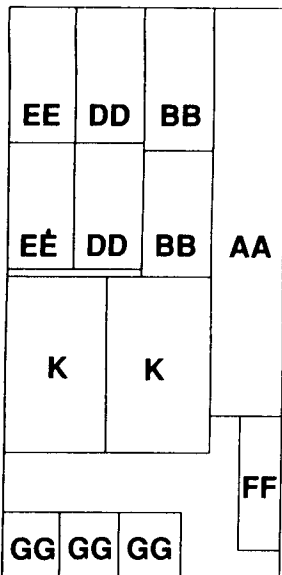
ITEM	SIZE	NO. OF PIECES	DIMENSIONS	LOCATION ON DRAWING
Top	3/4"	1	34" x 72"	H
Lower shelf	3/4"	1	25 1/2" x 69"	I
Back panel	3/4"	1	18" x 69"	J
End panels	3/4"	2	18" x 29 3/4"	K

*Material Purchase Suggestion:* Three 4' x 8' sheets of 3/4" plywood for the above pieces plus those 3/4" pieces for the cabinet. Cutting guide below.

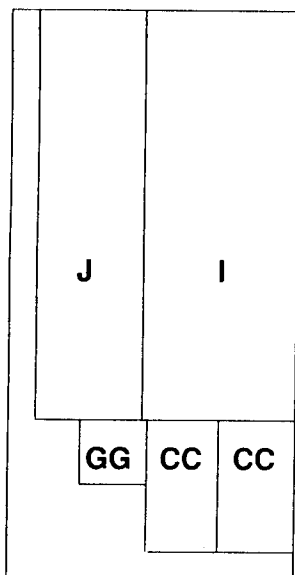
### BENCH HARDWARE

12 - 3/8" x 6" carriage bolts, nuts & washers  
25 - 1/4" x 3" flat head wood screws  
9 doz. - 3/16" x 1 3/4" flat head wood screws

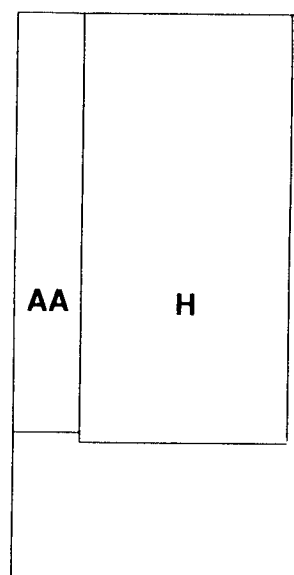
### GUIDE TO PLYWOOD CUTTING



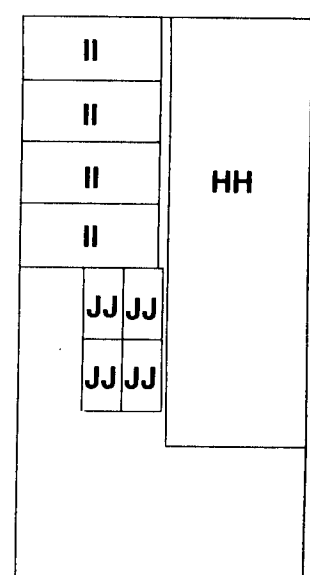
4' x 8' x 3/4" plywood



4' x 8' x 3/4" plywood



4' x 8' x 3/4" plywood



4' x 8' x 1/4" plywood

### CABINET PLYWOOD

ITEM	SIZE	NO. OF PIECES	DIMENSIONS	LOCATION ON DRAWING
Top & bottom	3/4"	2	12" x 70 1/2"	AA
Ends	3/4"	2	12" x 24"	BB
Center shelves	3/4"	2	12" x 23"	CC
Center uprights	3/4"	2	12" x 22 1/2"	DD
Shelf dividers	3/4"	2	10 3/4" x 22 1/2"	EE
Center door	3/4"	1	6 3/4" x 23"	FF
Shelves	3/4"	4*	10 3/4" x 10 5/8"	GG
Cabinet back	1/4"	1	24" x 72"	HH
Sliding doors	1/4"	4	22 1/4" x 12"	II
Sliding doors	1/4"	4	6 3/4" x 12"	JJ

\*One for each compartment. Additional shelves can be added as desired.

### CABINET HARDWARE

4 sets, each 23" long, double track for sliding doors  
32' adjustable shelf track, with sufficient brackets (4 per shelf) and 1/2" flat head nails  
3 dozen 3/16" x 1 3/4" flat head wood screws  
2 dozen 1-inch wood screws for cabinet back  
1 piano hinge 23" long, with mounting screws  
1 length of chain, 10 inches long, plus 2 screw eyes, for shelf support  
8 finger grips for sliding doors  
1 door pull for shelf door  
1 latch for shelf door

# Bench Construction

## STEP ONE

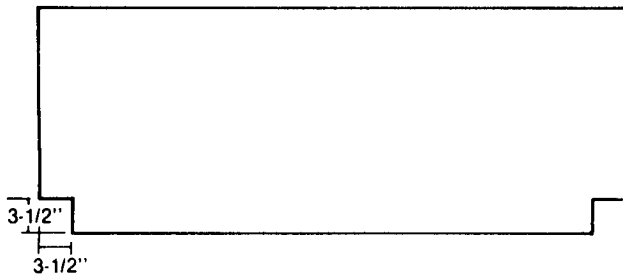
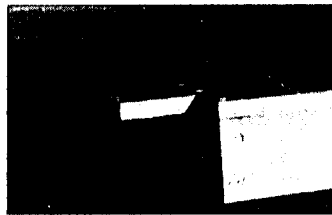
Saw all lumber and plywood for bench. Double check dimensions, and sand any rough edges. **Be sure to drill and countersink all screws.**

## STEP TWO

Assemble lower shelf frame. Use two 3" wood screws at each corner.

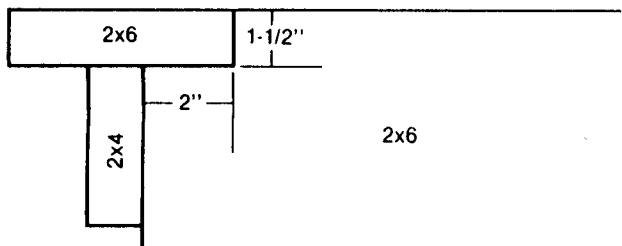
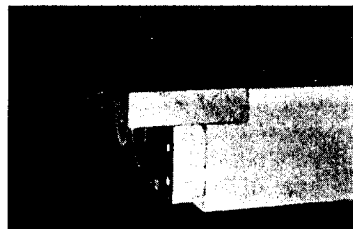
## STEP THREE

Saw a 3-1/2" x 3-1/2" notch at both rear corners of lower shelf plywood. This will accommodate the rear 4 x 4 legs.



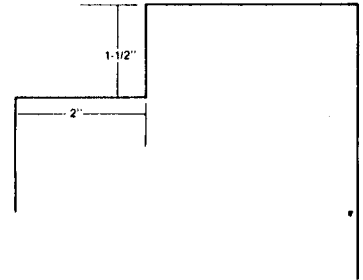
## STEP FOUR

Assemble top frame. A notch must be sawn in the two 2 x 6 pieces that form the ends of the frame. Each notch should be 2" long and 1-1/2" deep. This accommodates the 2 x 6 front edge support and allows for the necessary overhang. (See photo.) Use two 3" wood screws at each corner and to fasten the 2 x 6 front edge support.



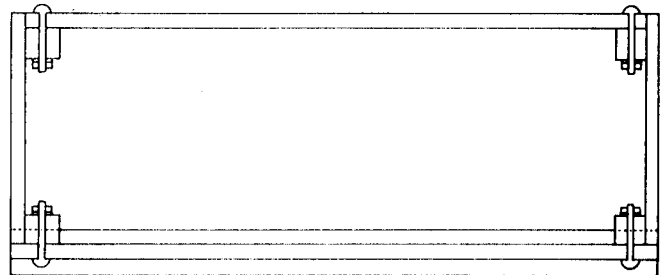
## STEP FIVE

A notch must be sawn into the top of both 4 x 4 front legs. **No notch should be cut into rear legs.** The notch is 1-1/2" deep from the top of the 4 x 4, and 2" from the side. (See drawing.) This will enable the leg to nest under the front 2 x 6 edge support. (See photo.)



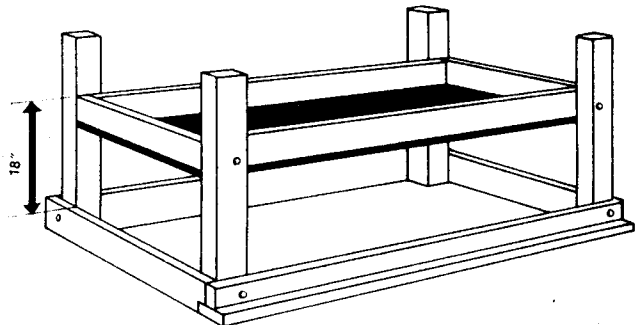
## STEP SIX

Turn top frame upside down on workbench or floor and position all four legs. Using a 3/8" drill bit, drill holes through frame and legs. Insert bolts, add washers and lightly tighten nuts.



## STEP SEVEN

With bench still upside down, hold end panels against legs so they are flush against the 2 x 6 end pieces. The edge of the end panel determines the bottom edge of the lower shelf frame. Mark the legs, then drill 3/8" holes for bolts in both the legs and the lower shelf frame.



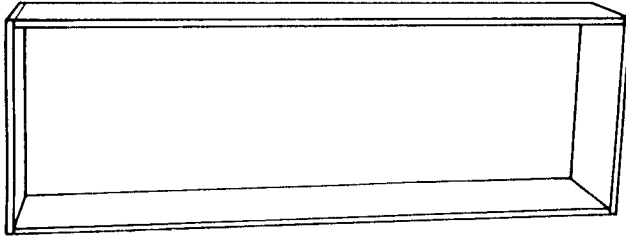
## STEP EIGHT

Before bolting lower frame to legs, attach plywood shelf to frame with 1-3/4" screws. Then bolt frame to legs. Check to make sure all pieces are properly assembled, then tighten all bolts. Turn bench right side up, and attach plywood top, end panels and back panel with 1-3/4" wood screws. Bench is now complete.

# Cabinet Construction

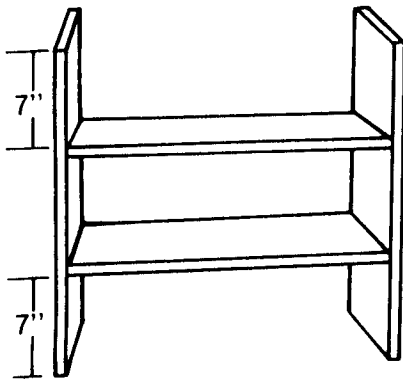
## STEP ONE

Assemble top, bottom and ends of cabinet with 1<sup>3</sup>/<sub>4</sub>" wood screws. Attach plywood cabinet back to outer frame. This will automatically square up the cabinet for subsequent steps.



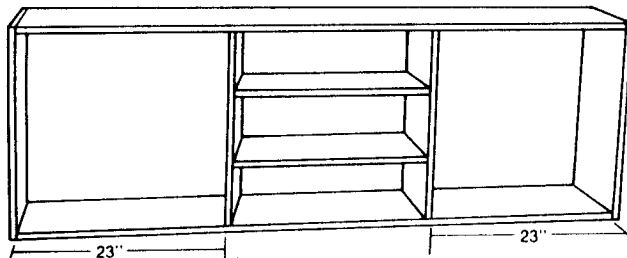
## STEP TWO

Assemble center section, made up of two center uprights and two center shelves. Place a mark exactly 7 inches from the top and bottom of the uprights. This marks the location of the top of the top shelf and the bottom of the bottom shelf, creating a 7-inch center section. Measure carefully, then assemble with 1<sup>3</sup>/<sub>4</sub>" wood screws.



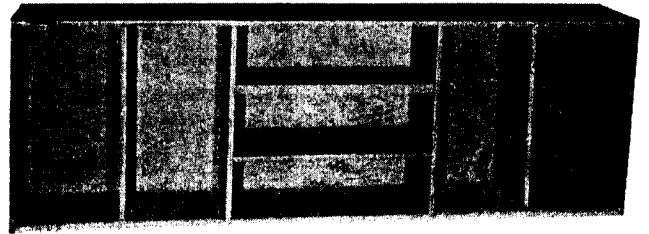
## STEP THREE

Place center section in the cabinet frame. Center this section, leaving a 23-inch opening at either end. Measure carefully, then assemble with 1<sup>3</sup>/<sub>4</sub>" wood screws.



## STEP FOUR

Position shelf dividers in the end compartments. When they are precisely centered, there will be an 11<sup>1</sup>/<sub>8</sub>" opening on either side of each divider. Measure carefully, then assemble with 1<sup>3</sup>/<sub>4</sub>" wood screws.

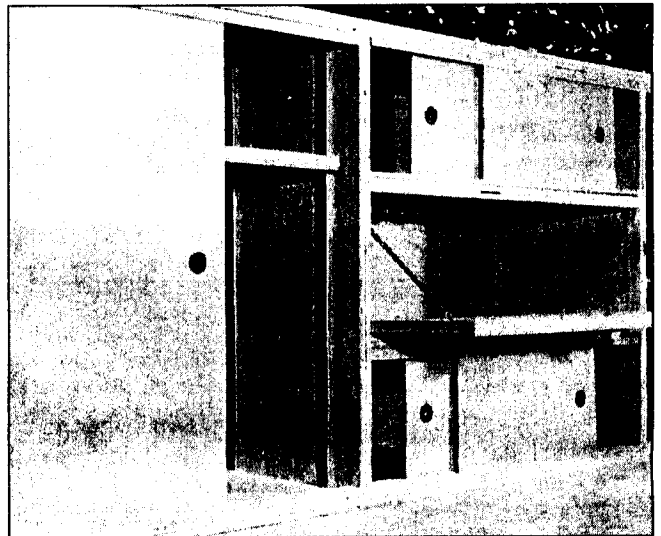


## STEP FIVE

Cut shelf track to size, then nail into place. Add brackets for each shelf and place shelves into position.

## STEP SIX

Drill 1/2" holes for finger grips and glue finger grips into place. Fit double track, making sure deep track is at top, shallow track at bottom so doors can be properly inserted. Glue or nail track into place **only** after making sure everything fits properly. (You may want to delay permanently attaching track until after painting or staining is done.)



## STEP SEVEN

Attach powder scale door with piano hinge. Assemble so door is flush with cabinet when closed. Use chain with screw eyes to hold door in a level position when open. **Be very careful to make sure this shelf is level for best operation of your powder scale.** Attach drawer pull and your choice of catch to hold door closed. (Note: fitting door may require additional sanding, depending on type of piano hinge you choose.) Cabinet is now complete.

## FINAL ASSEMBLY

When bench and cabinet are complete, join them with wood screws to avoid any possibility of movement when operating reloading presses. Be sure bench rests solidly on the floor, with the top of the bench absolutely level to prevent components from rolling.