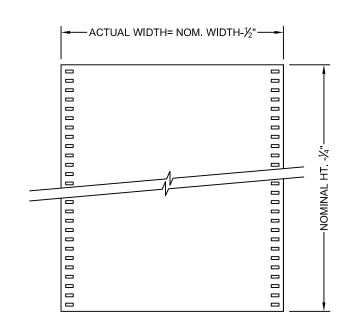
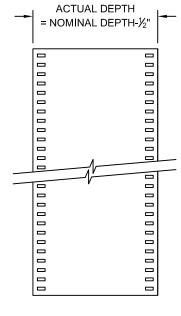
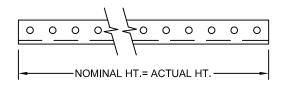
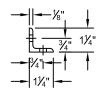
# , ACUALMOTH, HOMMALIA SECTION A-A **NUT & BOLT SHELF** PART NO.- NBS NOM. DEPTH x NOM. WIDTH EXAMPLE: NBS12X36



PART DESCRIPTION - TYPE NUT & BOLT

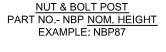






**NUT & BOLT BACK PANEL** PART NO. - NBBP NOM. WIDTH X NOM. HEIGHT EXAMPLE: NBBP36X87

**NUT & BOLT SIDE PANEL** PART NO. - NBBP NOM. DEPTH X NOM. HEIGHT EXAMPLE: NBSP12X87





1/4- 20 x 1" LG.



1/4-20NC SQUARE NUT



<u>½- 20 x ½" L</u>G. TRUSS HD. BOLT

PART NO.- NBB25X58

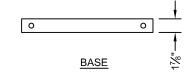
PART NO.- NBB25X1

TRUSS HD. BOLT

PART NO. - NBN25SQ



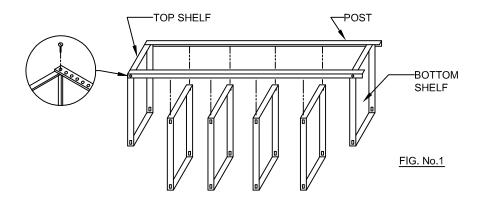
PART NO. TOGBLT316X3

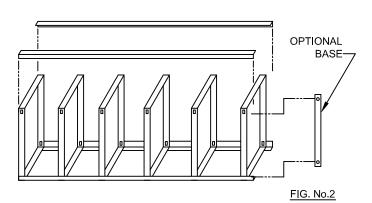


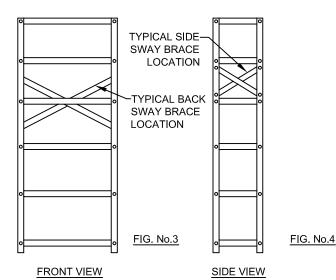
PART NO. - NBB NOM, HEIGHT X NOM, WIDTH EXAMPLE: NBB2X36



A division of Karp Associates, Inc. 54-54 43rd Street Maspeth, NY 11378 (718) 784-2105 Fax: (718) 784-9169







## INSTALLATION INSTRUCTIONS TYPE NUT AND BOLT

RECOMMENDED ASSEMBLY PERSONNEL - two (2)

#### REQUIRED TOOLS

 $\frac{7}{6}$ " open end wrench -- Level (for both horizontal and vertical) 24 in. Plumb bob -- Straight blade screw driver -- Chalk line -- Line level Electric drill – Small step ladder –  $\frac{7}{4}$ " masonry bit (if units are being fastened to a cement wall)

<u>STEP 1.</u> Place top shelf on edge (short side). Fasten posts with  $\frac{1}{2}$ "x $\frac{5}{6}$ " lg. bolts and square nuts (see Fig. No.1). Locate base shelf as required under posts - again as shown in Fig. No.1. refer to the layout drawing to see if this installation calls for a base under the base shelf. The base section is optional and, if required changes, the location of the base shelf - see Fig nos. 1 and 2 - page 2 of 2.

<u>STEP 2.</u> Install balance of shelves, usual clearance between shelves is  $10 \frac{3}{4}$ ", but check the assembly layout for clearance requirements.

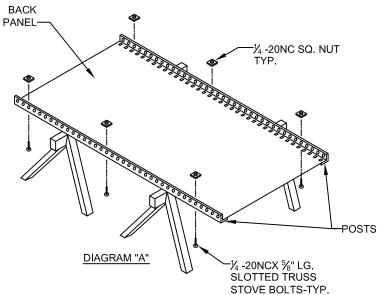
<u>STEP 3.</u> Turn the assembly over and fasten the two (2) remaining posts in place (see Fig.No.2). Attach back and side braces as shown in figure Nos. 3 and 4. Check the squareness of the assembly by measuring from top corner to opposite bottom corner - note the measurement. Now check the measurement from the remaining corner to the remaining opposite bottom corner. Compare measurements - they should not differ more then  $\frac{1}{16}$ ". If the unit is not square, loosen the bolts and make adjustment as required.

#### GENERAL NOTES:

- 1.) Units may require full back or side panels in lieu of sway braces. A combination of both may also occur. If this is the case, refer to page 2 of 2 for assembly instructions.
- 2.) Back to back (double faced units) will <u>share</u> a common back panel or sway brace set. In this case only one of the adjoining units will require the back panel or sway set.
- 3.) Side by side units in a "run" of shelving will share a common side panel or sway brace set.
- 4.) IMPORTANT! Single face units must be toggled to the wall one toggle per post or adjoining post set. Single face units should not be installed freestanding (away from a wall)! Toggling to a wall, bracing to the ceiling or near units is required!

Adjustable

A division of
Karp Associates, Inc.
54-54 43rd Street
Maspeth, NY 11378
(718) 784-2105 Fax: (718) 784-9169





A division of Karp Associates, Inc. 54-54 43rd Street Maspeth, NY 11378 (718) 784-2105 Fax: (718) 784-9169

<u>STEP 1.</u> Place two (2) (Part No. NBP87) on work stand. Place a back panel (Part No. NBBP36X87) in between the posts -resting on the flanges-see Diagram A. Align the slots in back panel with the holes in post. Connect the back panel to the posts with finger tight  $\frac{1}{4}$ -20 X  $\frac{5}{8}$  lg. bolts and nuts (part Nos. NBB25X58 & NBN25SQ). Note that in all cases, during the assmebly process, the square nut is to be located on the interior of the units! Be sure to use the slot/hole locations that will not be used later on for the fastening of shelves.

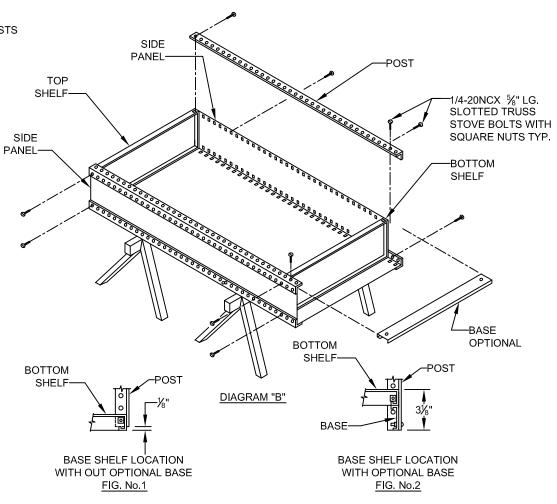
<u>STEP 2.</u> Locate the top shelf at the top of the posts. Locate the base shelf off the post bottom as inicated in Diagram B. Slip the side panels in place between the post flanges and the shelf sides. Align and fasten the shelf in place using  $\frac{1}{4}$  -20 X  $\frac{5}{8}$  bolts & nuts.

STEP 3. Place two (2) posts on the corners of the top and base shelves - see Diagram B. Fasten the shelf in place using  $\frac{1}{4}$  -20 X  $\frac{5}{8}$  lg. bolts.

<u>STEP 4.</u> Locate the remaining shevles within the posts by tilting each at an angle and then leveling. Refer to the installation drawing for the correct shelf spacing.

<u>STEP 5.</u> Square up the unit by measuring from corner to opposite corner - note measurent - measure reamining corner to remaining opposite corner and compare measurements. These should not differ by more then  $\mathcal{V}_8$ ". If necessary, loosen bolts as required and make adjustment of posts until unit is square.

STEP 6. Tighten all bolts and nuts. Unit is now complete and can be stood up and moved into location.



## Step One-Select Shelf Location and Spacing

- 1. Place all four posts together nesting them inside one another.
- 2. Using a piece of chalk or marker, select the bottom shelf's location by marking the edges of all four posts. **Please Note:** If the installation includes a 2" base, then the bottom shelf must be located 3" (generally 3rd hole) from the post's bottom. If you are not installing a 2" Base, then you can place the bottom shelf as low as 1" from bottom of post.
- 3. Using the same marking technique, select and mark the intermediary shelf locations.

### Step Two-Shelving Unit Assembly

- 1. Lean any shelf's shelving surface against a wall.
- 2. Select a post, holding it parallel to the floor, place it flush against the shelf.
- 3. Using one of the  $\frac{5}{8}$ " screws and nuts that came with the unit, loosely bolt the post to the shelf. fasten the post to the shelf along the shelf's lengthwise side (see picture).
- 4. Select a bottom shelf and position it so that the shelving surface is facing the wall.
- 5. Locate first shelf marking nearest to the post's bottom and loosely bolt bottom shelf to the post.
- 6. using the same shelf surface position and bolting technique, loosely bolt intermediary shelves to marked shelf positions on the posts.
- 7. Align and attach second post across from attached post. Loosely bolt from the inside/out starting with the center shelf.
- 8. Tighten all bolts.
- 9. Flip unit over so that the bolted posts are resting on the floor.
- 10. Repeat sub-steps 7 and 8 for the remaining posts.
- 11. If installation includes 2" Base, see step Three for specific instructions.
- 12. Stand up unit.
- 13. If the installation includes side or back Sway Braces, see Step Three for specific instructions.

## Step Three-Installation of any options

- 1. Sway Braces
  - a. After standing up unit, attach side and back Sway Braces to the unit's posts at approximately \(^{3}\)4 of the unit's height.
  - b. Side and back Sway Braces should form an "X" and should have identical termination points on each post. (see picture)
- 2. Shelf Reinforcement



(718) 784-2105 Fax: (718) 784-9169