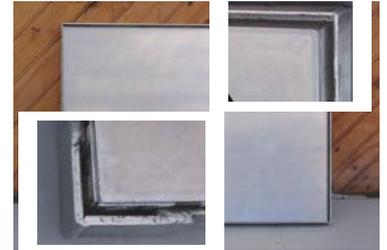




# THE FIRST SIZING BOX

The *FIRST* Inspection Sizing box consists of seven main components. They are:

**A. Base Assembly** – This is the floor section of the box. This piece is laid on a flat floor in the inspection area with the floor plate side up. The perimeter of the Base has a deep “U” channel on the narrower Rear panel side and on the wider Side panel location to hold those panels in place. A smaller “U” channel on the diagonal corner holds the support post. The Support post corner marks the “open” end of the inspection box and should be positioned where the robots will enter and depart the sizing box enclosure.



**B. Rear Panel Assembly** - The Rear panel assembly is 28” x 62”. The panel has a *FIRST* logo to mark the top edge of the panel and downward pointing arrows along the frame mark the bottom edge.

**C. Side Panel Assembly** – The larger Side panel is 38” x 62”. This panel also has a *FIRST* logo to mark the top edge of the panel with downward-pointing arrows on the frame marking the bottom edge.

**D. Support Post** - One end of this 63” aluminum post gets inserted in the corresponding “U” channels in the diagonal corner.

**E. Top Assembly** – The Top panel gets laid across and rests on the Side and Rear panels.

**F. Wood Ramp** – (not shown) The ramp can be placed on either side of the sizing box base assembly to allow a robot to be rolled into the box.

**G. Wand** – (shown in Operation section) Tool is used to verify if any part of a robot protrudes outside of the sizing box.



**ASSEMBLY:** Typically this is a two-person job performed in the following sequence:

1. Position the Base assembly on a flat floor in the inspection area with the floor plate side up. The position of the Support post corner slot should be located where the robots will enter and depart the sizing box enclosure. Check that all grooves are clear.



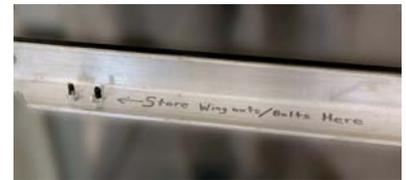
2. Using the aluminum braces as a handle, insert the wide Side panel, logo up/arrows down and framework outward into the base slot.
3. Using the aluminum braces as a handle, insert the narrow Rear panel, logo up/arrows down, framework outward into the base slot.

**IMPORTANT - SAFETY:**

Pick the panel up using the 2" framework to set the acrylic panel into the groove. Don't hold by the panel edge. Your fingers could get pinched between the panels.

4. Place the Support post into its corner slots.
5. Lay the Top Assembly over the panels. Slide the Top panel toward and capture the Support post into the tabs provided. Reach inside and push each panel wall outward and check that when the Top is pressed down, the panels will seat fully into the gap between the edge of the plastic and the aluminum rail.

6. When both panels are fully seated into the Top panel groove, locate the bolt and wing nut hardware stored in the Rear panel rail (see photo). Insert one 1/4" bolt through each hole in the top wall rail (see photo) and tighten the wing nuts supplied to lock the Top panel in place.



Depending on the hardware supplied, either an Allen wrench (supplied in the Scale Display kit box) or a Phillips screwdriver aids in fully seating and tightening the screw through the hole.



7. Final check is to verify with a tape measure the 28", 38" and 60" internal dimensions of the box to be accurate to +/- 1/8".

**OPERATION:**

- A. Place the robot into the Sizing Box enclosure. Slightly lift the top corner, if necessary, to release the Support post for removal and position the robot in the volume of the box. Replace the post and then commence the measurement.
- B. Place the Wand tool guide offset tab edge seated on the wall of the Support post in the photo below as shown. Sweep the wand up and down both open sides of the sizing box. Any protrusions or contact with the Wand tool signals a failure to meet the sizing requirements.



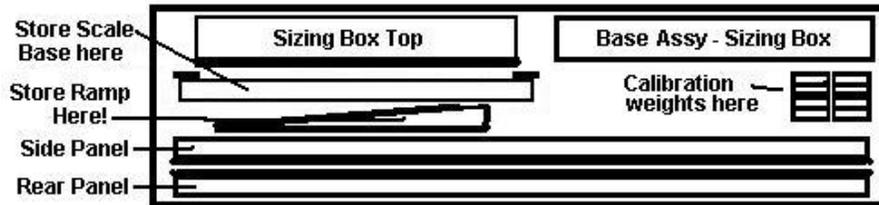
**DISASSEMBLY:**

1. Remove Wing nuts and bolt hardware from the top wall rails from step 6 (above) and bolt the hardware through the transit storage holes provided in the Rear panel frame. (maybe a foot away)
2. Remove top panel and lay aside.
3. Remove Support post & store with Wand in the designated tray on the top of the cart.
4. Remove Rear Wall and lay aside.
5. Remove Side Wall and lay aside.
- 6.

**Top section Layout**



**Bottom section Layout**



**2006 INSPECTION CART LAYOUT**

**PACK THE CART:**

1. Store Base assembly on lower cart platform
2. Store Top assembly on lower platform next to Base.
3. Store Side panel on opposite side of cart (plastic side out).
4. Store Rear panel next to Side (plastic side in).



(ramp not shown in the above picture)

