

1. Unpack and lay out pieces to assemble. Verify that the parts, quantity, and dimensions match those on the enclosed bill of material.
2. Begin by loosely assembling the bench end castings to the back support tube. **See diagram 1.**
3. Lay one 100029 end casting back side down and attach the back support tube 100035. Place the support tube into the back receiving hole of the casting and fasten with a 1/2 x 1 1/2 cap screw through a plastic spacer, through the casting, and into the threaded end of the support tube. **See diagram 1.** Hand snug the cap screw, do not tighten.
4. Lay the second 100029 end casting back side down and attach the back support tube 100035 following the same procedure as step 3.
5. Place the center support 100031 casting(s) at the proper location(s) on the back support tube. Rest support against the tubing. Reference from inside edge of one end casting to inside edge of support casting. **See diagram 2.**
6. 5 foot bench center supports at 17 3/8 inches to edge of first support and 36 5/8 inches to edge of second support tube is 100035
7. Place a bull nose board (best side facing you) nose down, into the lower pocket of one end casting and then into the lower pocket of the other end casting. Make certain that the support casting(s) behind the board and the radius portion of casting(s) is on the tubing. May need to spread the end castings outward at upper ends in order to get board in between the end casting flanges. This can be accomplished by loosening the cap screws a little. **See diagram 2.**
8. Continue to place boards into one pocket of an end casting and then into the other pocket in the order shown until last board for seat is in place. Keep best side facing out. Keep boards in front of the support casting(s). Make sure that boards center between the lugs on the support casting(s)
9. Install the front support tube 100035 between the two end castings seating the tubing in the radius portion of the support casting(s) and fasten with a 1/2 x 1 1/2 cap screw through a plastic spacer, through the casting, and into the threaded ends of the support tube. **See diagram 3.**
10. Hand snug all cap screws to square up the frame made by the tubing and end castings.
11. Go around to the back and line up the support castings so they are vertical (parallel with end casting) and properly dimensioned.
12. From the back side drill a 5/32 pilot hole approximately 1/2 inch deep and install a 1/4 x 1 screw into the seat boards at each slotted hole in the support casting(s).
13. Set the bench upright to finish the assembly.
14. Place a bull nose board (best side facing out) nose down, into the lower pocket of one end casting and then into the lower pocket of the other end casting. Make certain that the support casting is behind the board. May need to spread the end castings outward at upper ends in order to get board in between the end casting flanges. This is accomplished by loosening the cap screws slightly. **See diagram 3.**
15. Continue to place boards into one pocket of an end casting and then into the other pocket in the order shown until last board for back is in place. Keep best side facing out. Keep boards in front of the support casting(s). Make sure that boards center between the lugs on the support casting(s)
16. Tighten the four cap screws to secure the end castings to the support tubes. Make certain that the alignment between the end castings is plumb when tightening so bench doesn't rock.
17. From the back side drill a 5/32 pilot hole approximately 1/2 inch deep and install a 1/4 x 1 screw into the back boards at each slotted hole in the support casting(s).
18. The bench is now ready for mounting. **Mounting is shown in diagram 4.**

Assembly and Installation Instructions for the center Arm Rest

1. Unpack and lay out pieces in the kit. Verify that the parts, quantity, and color match those on the enclosed bill of material.
2. Begin with the arm casting (100030-X_) and set it upright on the bench, near desired location with the long length facing toward the back of the bench. See diagram 1.
3. Insert the back end of the arm with its lug between the bottom and next lower boards on the back of the bench. See diagram 1
4. Move the arm so it is at an angle to the back of the bench. Push down on the arm to set the front leg with the lug between the two outer boards on the seat of the bench. See diagram 1.
5. Straighten the arm so it is perpendicular to the back of the bench. Slide the arm into the location desired on the bench. (Usually the arm mounts at a center position between ends.)
6. Place one anchor plate 100083 at back of bench opposite lug of 100030 and install two tamper proof screws (71-TP1420134BH) through two lock washers (71-14LW-SS) into the threaded holes of the spacing lug at end of arm. Snug the screws but do not tighten at this time. See diagram 2.
7. Place one anchor plate 100083 under seat of bench opposite lug of 100030 and install two tamper proof screws (71-tp1420134BH) through two lock washers (71-14LW-SS) into the threaded holes of the spacing lug at end of arm. Snug the screws but do not tighten at this time. See diagram 2.
8. Make certain the arm is oriented vertically to the seat, perpendicular to the back of the bench, and in location desired. Tighten the four screws. NOTE: Use care when tightening screws to avoid stripping the threads in the cast aluminum spacing lug. See Diagram 3

Diagram 1 Locating Arm Rest

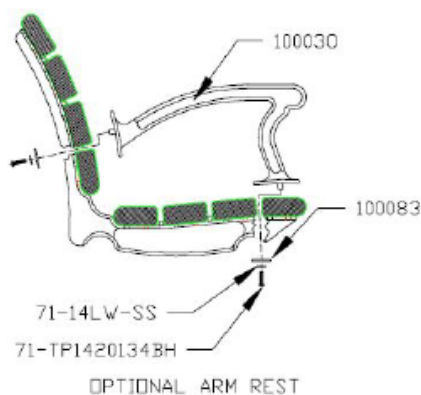


Diagram 2 - Location of Anchor Plates

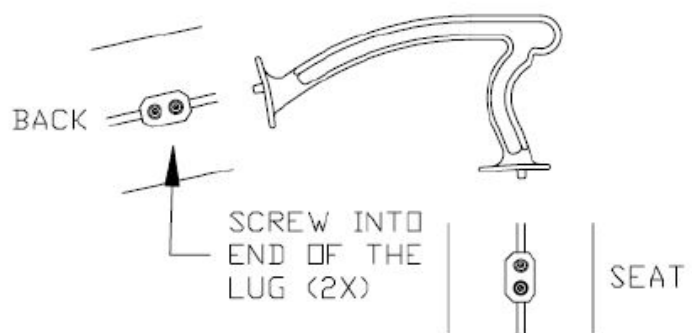


Diagram 3 - Alignment, Frontal View

