GMQ 16" Adapter Set

Assembly Instructions

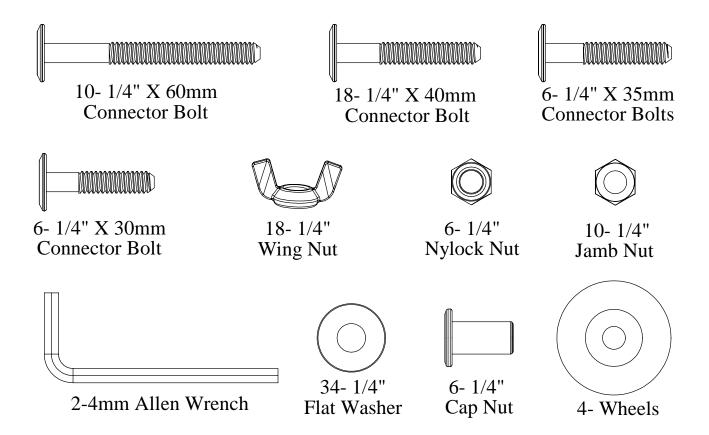
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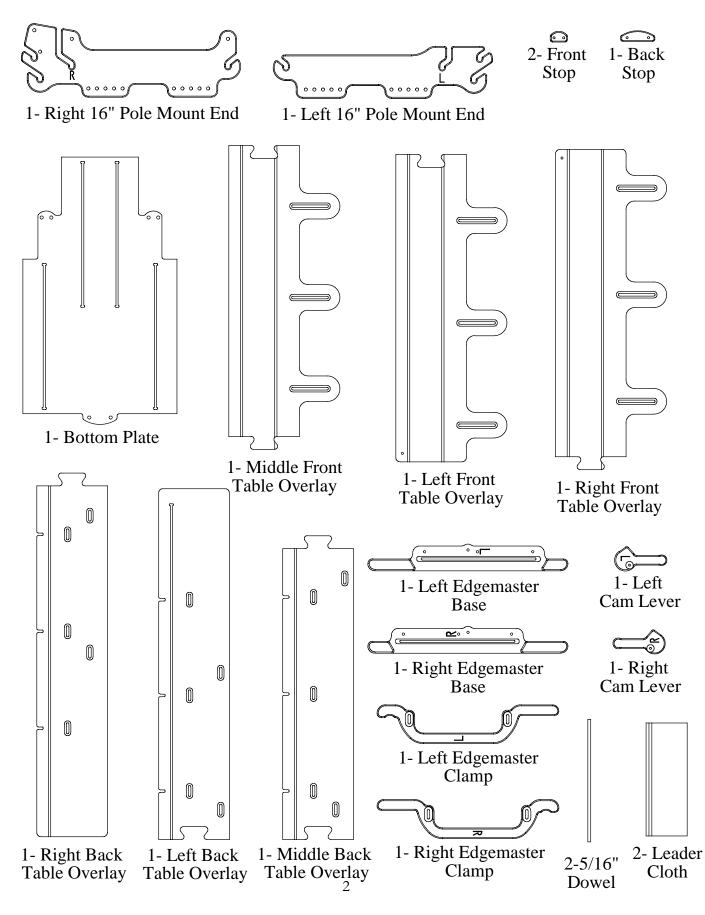
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Hardware Parts List

Drawings Display Hardware in Actual Size



Parts List

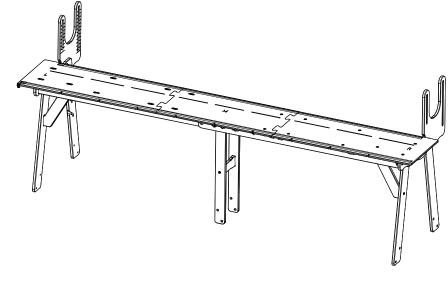


Before You Begin:

> Tools Needed: Allen Wrench (provided) and 7/16" & $\frac{1}{2}$ " wrench.

Step One: Preparing Your Grace Machine Quilter

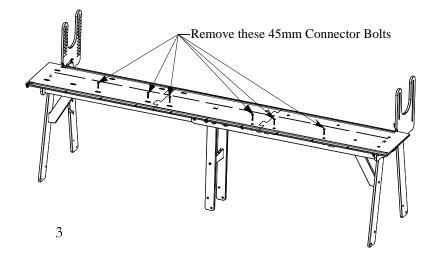
- Before you begin, you will need to remove the following parts from your Grace Machine Quilter:
 - 1. **All aluminum rails** (leave the end caps in place)
 - 2. Right and Left Pole Mount Ends (unscrew the wing nuts and slip the mount ends off the Left and Right End pieces. Remove the bolts and nuts from these pieces completely. You will reuse this hardware on the new Pole Mount Ends (Step 10).



- 3. **Carriage Assembly** (You may leave the wooden handles assembled on the top carriage, but if your longer arm sewing machine has speed control and handles built in, you will want to remove the handles and store them assembled in a safe place, or disassemble, if preferred. **NOTE!** If your machine is wider than the top platform allows, contact The Grace Company for assistance in making your platform compatible).
- 4. All Track pieces (you will reuse these in the new table overlays).
- 5. Front and back track stops (you will reuse the hex bolts for the new track stops).
- 6. Both Carriage Stops (these will not be used on the 16" Adapter Set).
- 7. **Pattern Perfect Accessory** (if you have the Pattern Perfect accessory, remove the support platforms with templates from the GMQ).
- Your frame should now look like the one pictured above if set up in queen size (or without the middle table if set up in crib).

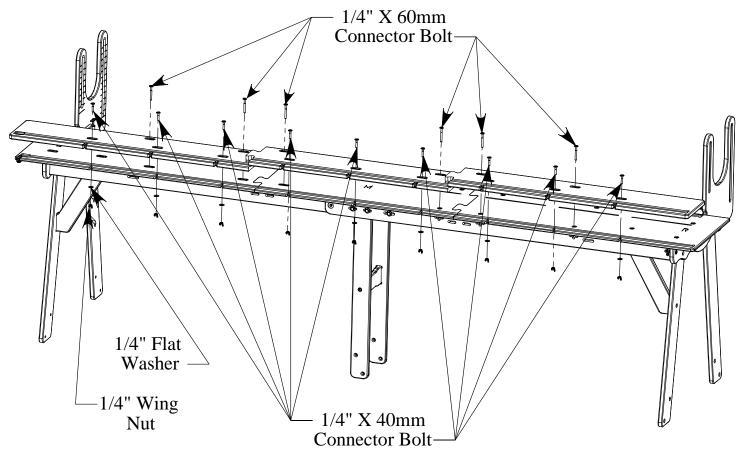
Step Two: Table-Top Hardware Removal

- NOTE: The following steps show the 16" Adapter Set assembly for queen size. If you are assembling in crib size, simply omit the middle table pieces and the appropriate hardware.
- First, remove six (6) 45mm connector bolts pictured below (leave the rectangle nuts in place for use in the next step.



Step Three: Back Table Overlay Assembly

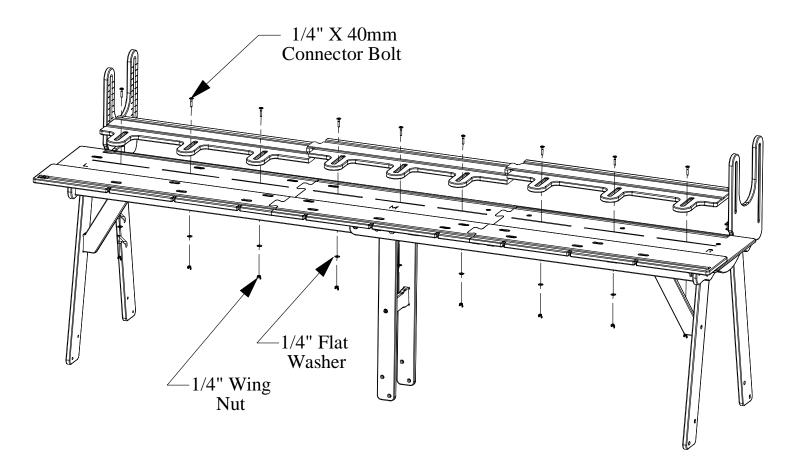
- Parts Needed: 1 Left Back Table Overlay
 - 1 Middle Back Table Overlay
 - 1 Right Back Table Overlay
 - $6 \frac{1}{4}$ x 60 mm Connector Bolt
 - $9 \frac{1}{4}$ " x 40 mm Connector Bolt
 - $9 \frac{1}{4}$ " Wing Nut
 - 9 $\frac{1}{4}$ " Flat Washer
 - Connect the Left, *Middle (if assembling in queen size)* and Right Back Overlays to the GMQ table tops by first putting in the ¹/₄" x 60 mm connector bolts in the row of holes furthest away from the track groove of the overlay.
 - These 60 mm bolts go through the same GMQ table top holes the 45mm bolts were removed from in the prior step. Use the rectangle nuts from the prior step to fasten the 60 mm bolts in place.



- Next, in the row of holes closest to the track groove, place 1/4" 40mm bolts. These will connect in the small slots on the edge of the GMQ table top. (The same slots the pattern perfect attached to).
- After placing these bolts through the overlay holes and table top slots, place a ¹/₄" flat washer and ¹/₄" wing nut onto the end of each bolt.

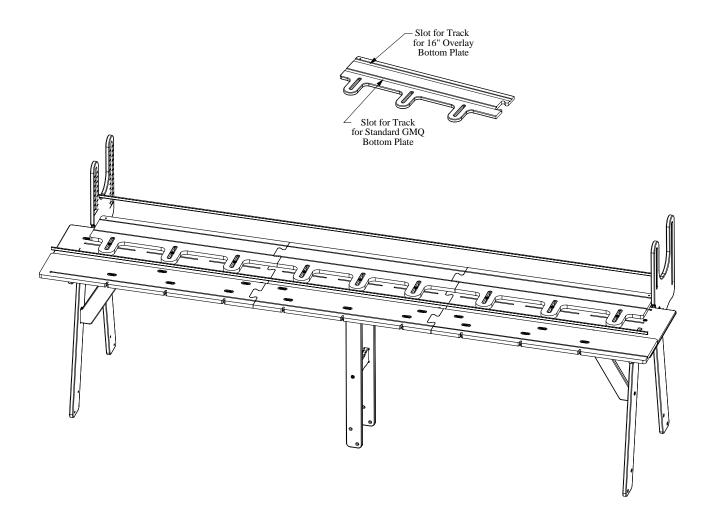
Step Four: Front Table Overlay Assembly

- Parts Needed: 1 Left Front Table Overlay
 - 1 Middle Front Table Overlay
 - 1 Right Front Table Overlay
 - $9 \frac{1}{4}$ " x 40 mm Connector Bolt
 - $9 \frac{1}{4}$ " Wing Nut
 - 9 $\frac{1}{4}$ " Flat Washer
 - > Place the Front Table Overlays onto the front (rail side) of the GMQ table top.
 - Place a ¹/₄" x 40mm connector bolt through each long slot of the overlays and into the long horizontal slots of the table tops as pictured below.
 - Thread a ¼" flat washer and ¼" wing nut onto the ends of each bolt, BUT DO NOT COMPLETELY TIGHTEN AT THIS TIME.



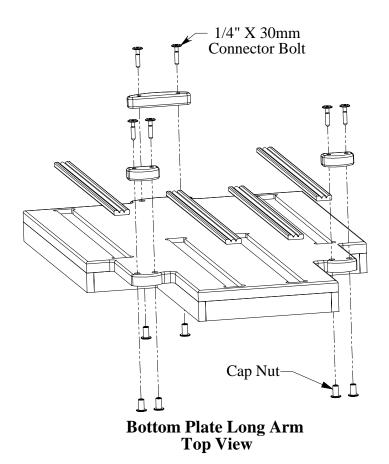
Step Five: Inserting Track

- Parts Needed: 1 72" Track
 - 1 80" Track
 - 1-106" Track (If Queen Size is Assembled.)
 - 1 114" Track (If Queen Size is Assembled.)
- Lay the track from your original GMQ assembly into the grooves of the overlay.
- Place track in the grooves of the Back Table Overlays, and in the grooves furthest away in the Front Table Overlays.
- If you want to use a regular, non-long arm sewing machine on this frame again, you may do so without removing the 16" Adapter Set. Simply move the front track to the back slots of the Front Table Overlays. You may use the regular black top and bottom platforms or the 16" set bottom platform.



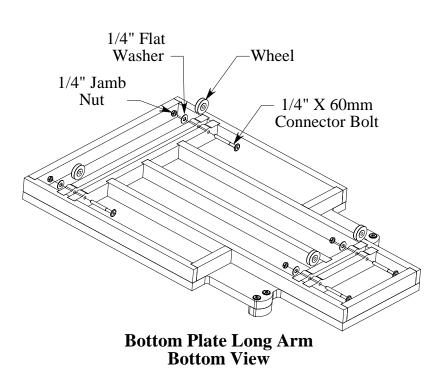
Step Six: Bottom Plate Sub-Assembly

- Parts Needed: 1 Bottom Plate
 - 1 Back Stop
 - 2 Front Stop
 - $6 \frac{1}{4}$ " x 30mm Connector Bolt
 - 6 Cap Nut
 - 4 17" Track
- Assemble the new Bottom Plate by fastening the two Front Stops. This will be done by placing two 1/4" x 30mm connector bolts through the stop holes and through the corresponding holes in the Bottom Plate.
- Place to cap nuts into the holes of the underside of the Bottom Plate. Thread these cap nuts onto the bolts.
- To fully tighten, hold the cap nut still on the underside of the Bottom Plate, and tighten the connector bolt using the allen wrench (provided).
- Follow the same steps to fasten the Back Stop to the Bottom Plate.



As you see pictured, the four 17" track pieces fit into the grooves of the Bottom Plate. You will put these into place following the next step.

Step Seven: Bottom Plate and Wheel Sub-Assembly

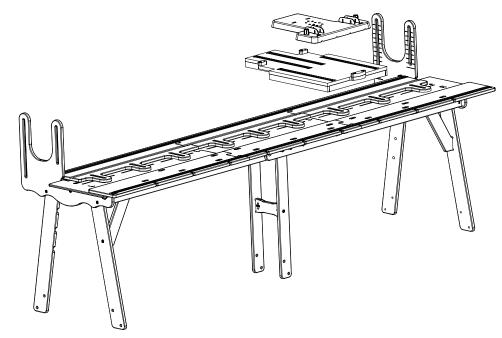


Parts Needed: 1 – Bottom Plate 4 – Wheel $4 - \frac{1}{4}$ " x 60mm Connector Bolt $4 - \frac{1}{4}$ " Jamb Nut $4 - \frac{1}{4}$ " Flat Washer

- Place a wheel in the slot, as pictured, centering the hole of the wheel with the hole in the wood.
- Put a 60mm connector bolt into the wood hole and through the hold of the wheel, until it comes through the wood hole on the other side.
- Fasten the bolt in place by putting a flat washer and ¹/₄" jamb nut onto the end of the bolt.
- Tighten these jamb nuts using a 7/16" wrench.

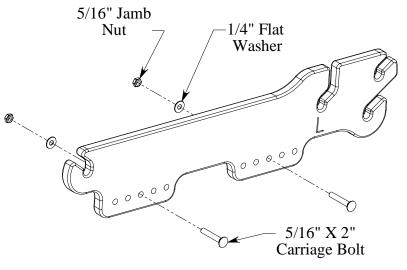
Step Eight: Plates to Carriage and Overlay Adjustments

- This step will enable you to adjust the Front Table Overlays, making sure they are properly aligned.
- Place the Bottom Plate onto the tracked grooves and the Top Plate on the Bottom Plate.
- It is also recommended that you temporarily place your sewing machine onto the Top Plate for added weight.
- Roll your carriages back and forth the entire length of the table a couple of times.



After doing this, your Front Table Overlays should be straightened in relation to the Back Overlays. The Front Overlays are now ready to be secured in place. Do this by tightening each wing nut underneath the Overlays, being careful not to move the Tables out of place.

Step Nine: New Pole Mount End Assembly

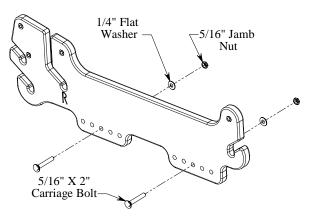


Left Pole Mount End Long Arm Inside View

- Be sure to place the bolts in the same holes in relation to their position (see above: both bolts go through the third hole from the front).
- Be sure to *completely* tighten the 5/16" jamb nuts onto the bolts so that there is no movement in the bolts or washers.

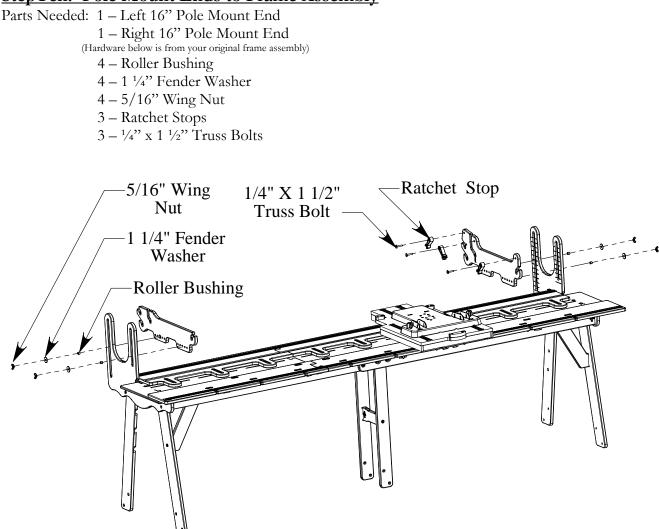
Parts Needed: 1 – Left 16" Pole Mount End 1 – Right 16" Pole Mount End (Hardware below is from your original frame assembly) 4 - 5/16" x 2" Carriage Bolt 4 - 5/16" Jamb Nut $4 - \frac{1}{4}$ " Flat Washer

- Next, assemble the new 16" Pole Mount Ends using the hardware you removed from your existing Pole Mount Ends.
- This is done in the same manner as the original assembly.



Right Pole Mount End Long Arm Inside View

StepTen: Pole Mount Ends to Frame Assembly

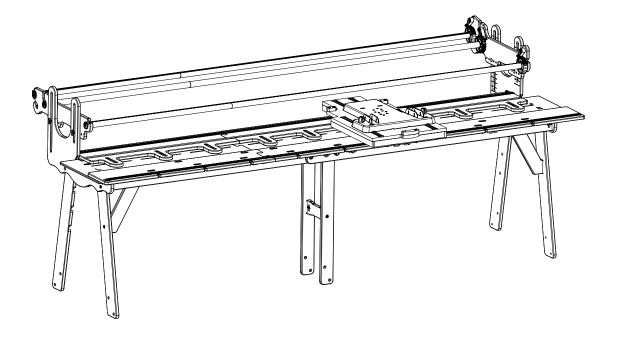


- You will now fasten the 16" Pole Mount Ends to your existing frame. Again, this is done in the exact manner as the original assembly.
- Fasten the left Pole Mount End to the Left End piece, placing it on the inside with the carriage bolts facing toward the outside.
- > Place the carriage bolts through the long slots of the Left End.
- > Slide a roller bushing onto each bolt, followed by a $1 \frac{1}{4}$ fender washer.
- Now thread a 5/16" wing nut onto each bolt and tigthen.
- > Repeat these steps for the Right Pole Mount End and Right End piece.
- NOTE: If the carriage bolts do not properly align with the slots in the Left or Right End piece, the bolts were not put in the corresponding holes (see lower diagrams on page 8).
- Fasten the Ratchet Stops to the Right Pole Mount End using the three truss bolts. NOTE! DO NOT OVERTIGHTEN THE TRUSS BOLTS! FINGER-TIGHTEN ONLY.

Step Eleven: Rails to Frame Assembly

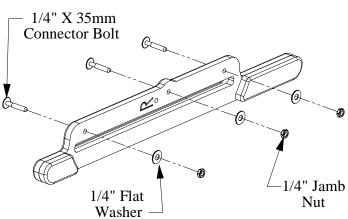
Parts Needed: 3 – 70" Rails 3 – 34" Rails (queen size assembly)

Place the three rails into the Mount Ends in the same manner as with the original frame. Notice you now have 16" of space between the front and middle rail.



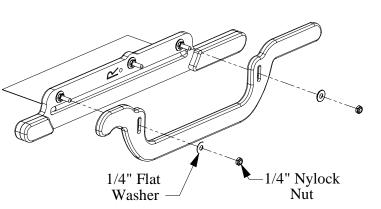
Step Twelve: EdgeMaster[™] Assembly

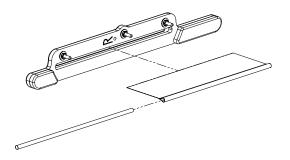
- Step Twelve: EdgeMaster Master Master Master Base1 Left EdgeMaster Base1 Right EdgeMaster Clamp1 Left EdgeMaster Clamp1 Left Cam Lever1 Right Cam Lever2 5/16" Dowel2 Cloth Leader6 1/4" x 35mm Connector Bolts10 1/4" Jamb Nuts2 1/4" Nylock Nuts
 - 12 1/4" Flatwasher



- First, place three 35mm connector bolts through the three holes in the top of the Right EdgeMaster Base.
- Fasten these bolts in place by placing a $\frac{1}{4}$ " flat washer and $\frac{1}{4}$ " jamb nut onto the ends of each bolt.
- > Completely tighten each jamb nut until there is no movement with the bolts or flat washers.
- ▶ Repeat these steps for the Left EdgeMaster Base.

- > Next, slide the 5/16" dowel through the Cloth Leader.
- Insert the cloth sleeve (end opposite the dowel) through the slot of the EdgeMaster Base and pull through until the dowel comes up against the Base.





- Now, attach the Right EdgeMaster Clamp to the base, as pictured. This will keep the cloth sleeve with dowel in place.
- Fasten the Clamp and Base together by placing a flat washer and nylock nut onto the ends of each bolt.
- IMPORTANT: Do not completely tighten the nylock nuts. Leave them just loose enough so the flat washer moves freely on the bolt.
- ➢ Repeat this step for the Left EdgeMaster.
- Next, fasten the Right Clamp Lever to the Right Base by placing the Clamp onto the remaining middle bolt.
- Place a flat washer and nylock nut onto the end of the bolt.
- Again, do not completely tighten the nylock nut. Keep it just loose enough to still allow the flatwasher to spin on the bolt.
- ▶ Repeat these steps for the Left Cam Lever.

