

WESSELL, NICKEL & GROSS

Assembly of the WNG Universal Sostenuto

INTRODUCTION:

The Wessell Nickel & Gross Universal Sostenuto is an adaptable system for replacing the existing sostenuto rod in any modern grand piano. It is constructed of aluminum that is anodized for a pleasing appearance. It consists of one over-length knife-edged tubular rod that must be cut into sections and several journals which link each of the sections together, and support hardware. To simplify assembly, the inside of the rod has two opposing ribs that mate with two opposing flutes in the journals limiting rotation between the parts. This ensures that alignment between all of the sections' knife edges is maintained. The journals rotate inside Teflon bushings in the support blocks for smooth and silent operation. Four-way mounting blocks and stout stainless steel mounting brackets offer flexible adjustment and keep everything firmly in place. The following procedure details how to fit your new sostenuto to the instrument of your choice.

MATERIALS NEEDED:

Parts

<u>Part Description</u>	<u>Quantity</u>
Belly Rail Bracket	6
Belly Rail Bracket Screws	12
Support Block w/bushing	6
Support Block Screws	6
Support Block Washers	6
Wire Hook	1
POM Washers	2
Sostenuto Rod Blank	1
Sostenuto Journal Rod – Mid 2 holes	1
Sostenuto Journal Rod - Mid	3
Sostenuto Journal Rod - End	2
Pitman Upper Parts	1
Pitman Upper Parts Screws	2
Cloth punchings	2

Other Materials

Five minute epoxy
Masking tape

Tools/equipment

Phillips screwdriver (short, right angle, or very long straight – see text)
Tape measure or equivalent
Pencil
Small scribe
Small file

Glue applicator stick or wire
5/32" Drill bit

Notes on install:

1. Measure height and depth of existing Sostenuto. (see ill. 1 & 2)



Ill. 1

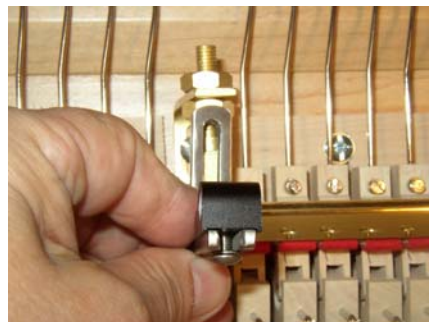


Ill. 2

2. Measure space at the breaks to see if WNG brackets and support blocks will fit. Or hold a bracket with a support block at each break location to verify that there is ample room. (See Ill. 3 & 4)



Ill. 3



Ill. 4

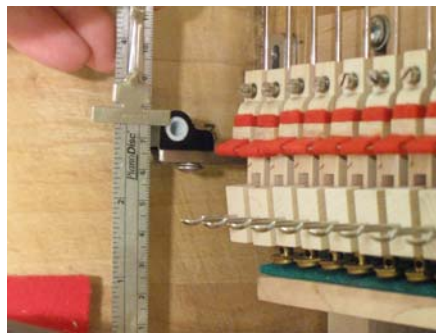
3. Check to see if there is enough space for the pitman assembly between the bass and tenor section. (See Ill. 3)

NOTE: If there is an existing sostenuto then you can use it as a template to make the new sostenuto rod. If there was never a sostenuto in this piano or it is missing, then follow the next steps.

4. Locate the Stainless Steel "L" mounting brackets in the kit.
5. Mount a support block on one of the brackets (open ended slot) just tight enough so that you can still slide it back and forth.
 - a. The support block can be mounted on either the top or bottom side of the bracket. The limiting factor is whether you have enough adjustment up and down.
 - b. If mounted on the bottom of the bracket, it will be easier to access the mounting screws (from the top side) with either a short phillips screwdriver, or a long phillip screwdriver

through the strings. However, this position may not allow for enough adjustment upwards.

- c. If mounted on the top of the bracket, you will need a right angled Phillips screwdriver to access the screws (from the bottom).
 - d. The blocks can also be rotated front to back to allow maximum flexibility in positioning the rod.
6. Mount the bracket at the bass end of the belly rail so that the support block will be approximately the same height as the original sostenuto at the pivot point. Use only one screw at this time. Often you may use the one of the screw holes that were used for the original sostenuto. If there was no sostenuto, mount the bracket so that the support block is slightly higher than the sostenuto tabs on the damper levers at the pivot point. (See Ill. 5)



Ill. 5

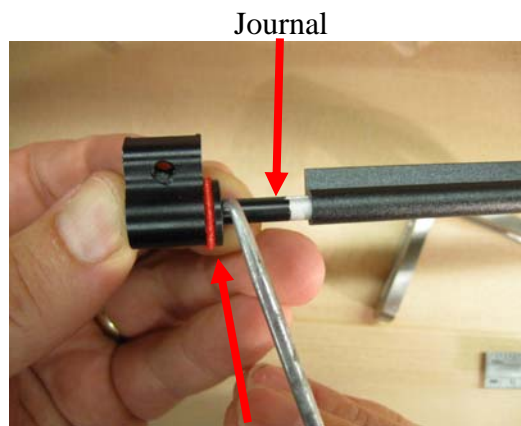
7. Install the mounting brackets at each break (except bass/tenor break) at the same height as the bass bracket. This is just a rough placement for the brackets.
- a. Determine whether you have enough up and down adjustment at each bracket. Often there will be a block of wood in the treble section that limits the range of adjustment. (See Ill. 5a) This may need to be trimmed to allow for adjustment.



Ill. 5a

NOTE: It may be necessary to dowel the original screw hole if they are larger than the screws in the kit and re-drill new holes

8. Measure and cut the sostenuto rod into the correct lengths.
 - a. Make sure the end sections (bass & treble) are long enough that they will reach to the end support blocks, allowing for the thickness of the POM and felt washers at each end.
 - b. Use a small file to clean and dress up the ends that were cut.
 - c. Number each section from bass to treble to keep them in their proper order.
9. Locate one of the end connecting journals in the kit. Place a POM washer and a felt washer on the blackened end of the journal and insert it into one of the support blocks.
 - a. The felt washer goes against the support block and the black end of the journal rod is flush with the edge of the block. (See Ill. 6)
10. Scribe a line on the Journal next to the POM washer. (See Ill. 6)



Ill. 6 felt & POM washers



Ill. 7

11. Apply glue to the inside of the sostenuto rod (Ill. 7) and insert the silver end of the journal to the depth of the line that was scribed earlier.
12. Insert the bass sostenuto section into the support block on the bass bracket.
13. Now, looking at the bass/tenor break, determine the pitman location and mounting bracket. This can be a very tight area and must be carefully planned. (See Ill. 8)
 - a. Use the connecting journal that has two holes drilled in it for the pitman wire connector.



Ill. 8

14. Determine if this is a “Push” or “Pull” type sostenuto.
- If it is a “Push” type, glue the wire connector into the journal so that the wire is on same side as the sostenuto knife edge. (See Ill. 8a)
 - If it is a “Pull” type, glue the wire connector into the journal so that wire is on the opposite side of the sostenuto knife edge.(See Ill. 8b)
 - Position the pitman so that the screws can be accessed from the front of the piano.



Ill. 8a. push type



Ill. 8b pull type

15. Apply glue to the inside of the sostenuto rod. Insert the journal through the support block and into the sostenuto rod. (See Ill. 8) Be careful that no glue gets on the support block as the rod must be allowed to turn freely inside the bushing.
16. Continue to assemble each section in the same manner until you get to the last treble section. Be sure to include a support block between each section.
17. Before assembling the last treble section, glue the end journal into the sostenuto section (treble end) in the same way as the bass section was done. (steps 9 – 11)
18. Place a support block on the end journal along with the two washers (POM & felt).
19. Glue the last treble section to the previous section and slide the end support block onto the treble bracket. Slide the section to the right (toward the treble bracket) to maintain proper spacing and alignment while the glue sets. (See Ill. 9)



Ill. 9

20. Connect the Pitman assembly to the pedal trap lever

21. Drill and fasten the remaining screws in each of the brackets. Position the screws in the slots so that there is room for adjustment up and down. (See Ill. 10 & 11)



Ill. 10



Ill. 11

22. Make final adjustments so that the sostenuto system operates properly and tighten all the screws.