

Grand Stop Rail Installation Instructions

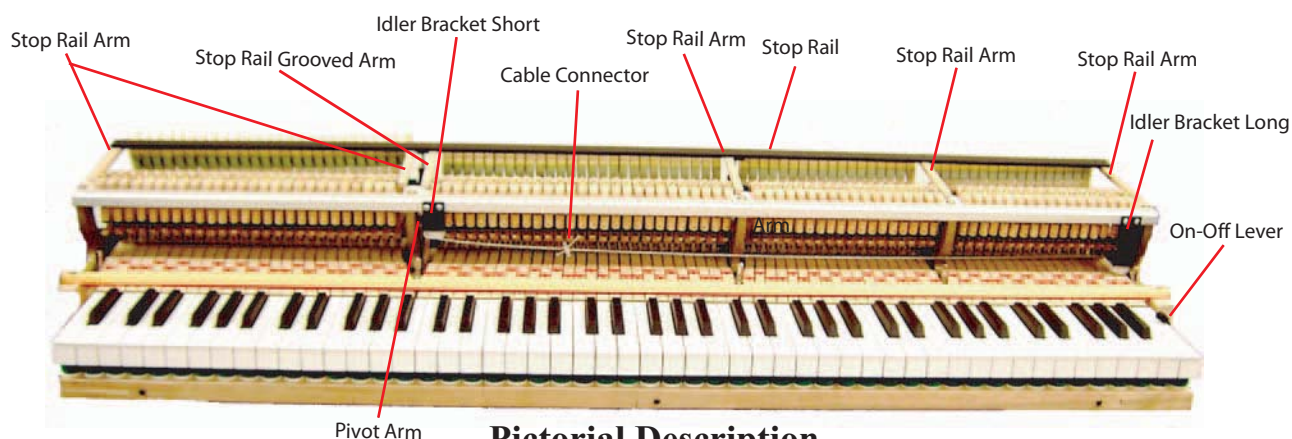
CATALOG #56022

Kit Consist of:

1 - ON-OFF LEVER SWITCH	#5602205
1 - IDLER BRACKET SHORT	#5602203
1 - IDLER BRACKET LONG	#5602204
1 - PIVOT ARM	#5602206
2 - REST BRACKETS	#5602202
5 - STOP RAIL ARMS	#5602201
1 - STOP RAIL BAR	#56034 or #560341
1 - SPONGE RUBBER STRIP	#56061
4 - 6-32 x 1/2 M SCREWS	#56134
6 - 4 x 1/2 TRUSS HEAD SCREWS	#56149
1 - INSTRUCTIONS	#56053
1 - CABLE CLIP ASSEMBLY	#5602207
1 - #6x1/2" PH SCREWS	#56144
2 - #4 X 3/4 TRUSS HEAD SCREWS	#56133
1 - STOP RAIL GROOVED ARM	#5602208

Required tools & supplies:

1 - POWER DRILL
1 - #2 PHILLIPS HEAD SCREW DRIVER
1 - HACKSAW
1 - CHISEL
1 - 1/8" DRILL BIT
1 - 5/64" DRILL BIT
1 - 6 - 32 TAP & WRENCH



Pictorial Description

Figure A

Notes:

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One-piece or split piece stop rail?

1. First determine whether your stop rail is to be a one piece or a two piece unit. The determining factor is in the bass-tenor section of the plate. Some pianos have an extra thick casting in this area which may protrude so far downward as to obstruct the installation of the bar, in which case the bar would have to be cut into two pieces. One for the bass section and one for the tenor-treble section and then the two "bridged together" (around this casting) to work again as one. This "bridging" is done with the two stop rail arms in the bass tenor area by connecting the two closer forward to the hinged end at a point that would sufficiently clear the casting. See Figure B.

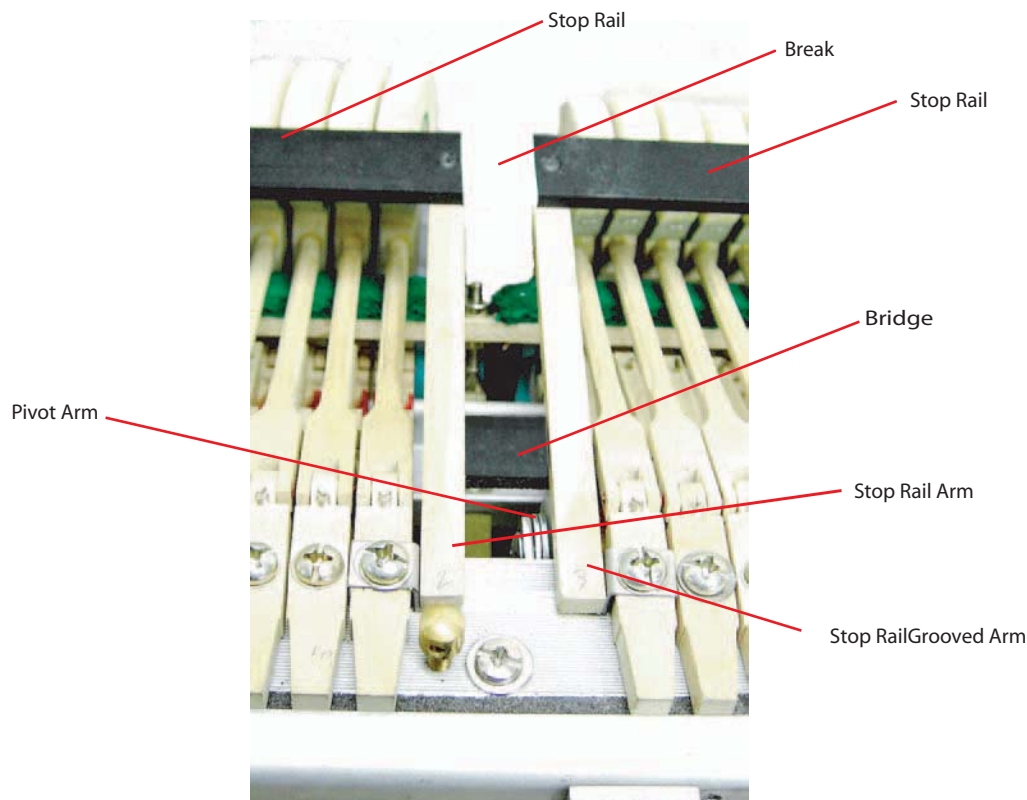


Figure B

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Stop Rail Arms

2. Install five STOP RAIL ARM #5602201 over hammer flanges at breaks in action. Keeping the arms in alignment with neighboring hammer shanks. See Figure A and C. Note one STOP RAIL ARM is GROOVED #5602208, this is intended to track the PIVOT ARM wheel when raised and lowered and installed third from the bass end. See Figure F

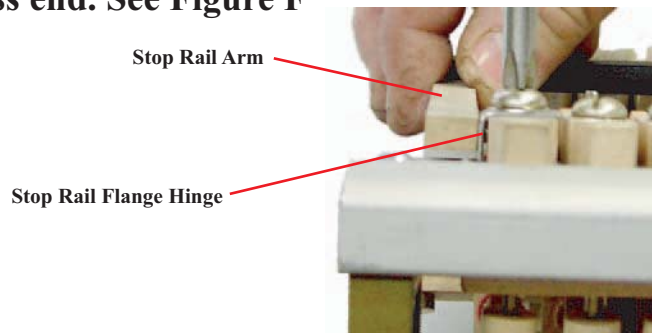


Figure C

Fitting the Rail

3. Cut bar to length, generally the same Length as the felted "hammer rest" rail. Lay bar over arms. The goal is to fit bar as close to hammers as possible without touching them (at any point of travel). Carefully mark position of each arm in relation to the bar and drill a 1/8" hole for each. Holes in arms should be 5/64" for #4x1/2 truss head screws attach bar. Attach foam strip to underside of bar, between arms. See Figure D.

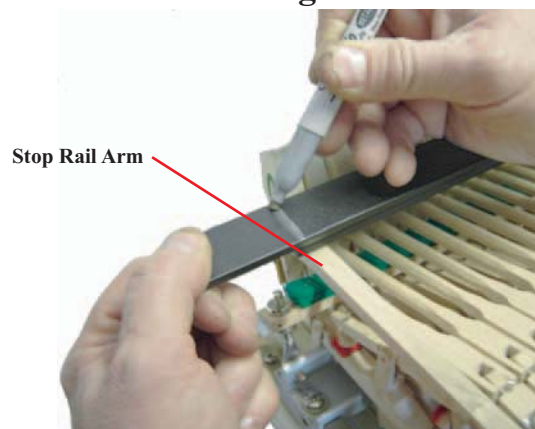


Figure D

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Rest Brackets and Trip Adjustment

4. REST BRACKETS #5602202 attach over rear action mounts in mid section's. Figure E. To rough in trip adjustment, adjust bar up or down to a point where the "hammer trip" is near the point of "blocking", fine adjustment is done at end of installation.

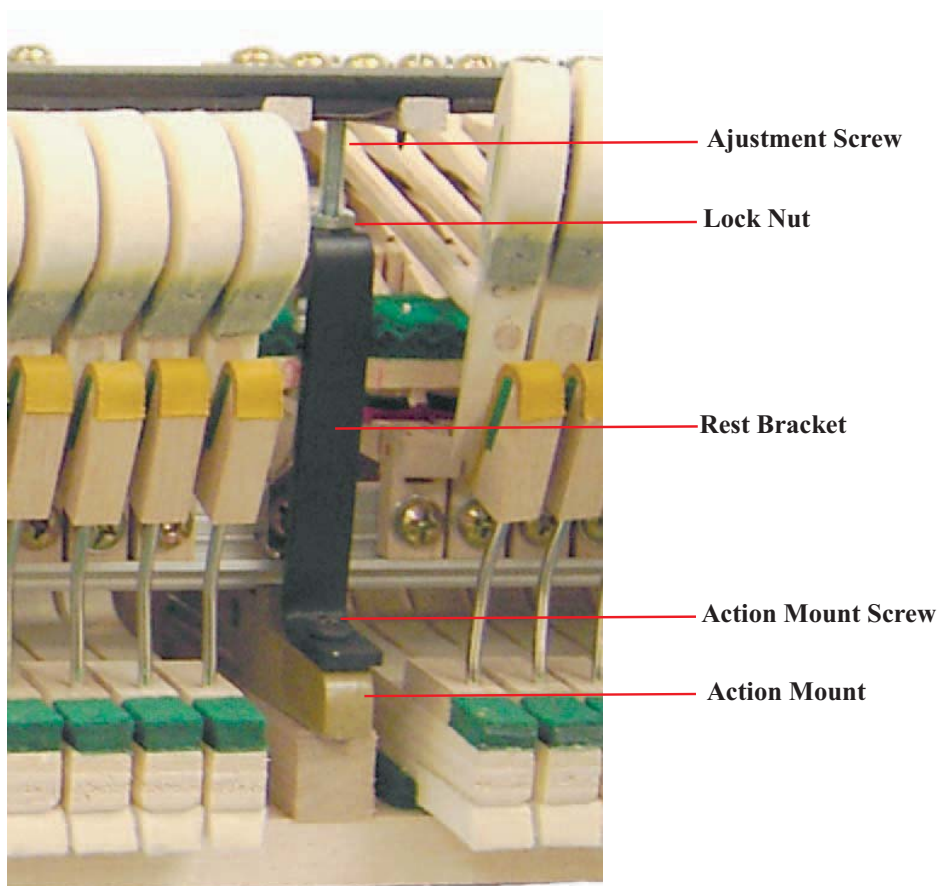


Figure E

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Pivot Arm

5. PIVOT ARM # 5602206 is screwed to action bed just right of metal frame in the bass-tenor section using a #6 x 1/2" PH screw. Careful examination will determine best placement. Roller rides along the third bracket arm raising the arm upward as pivot arm is drawn forward. See Figure F.

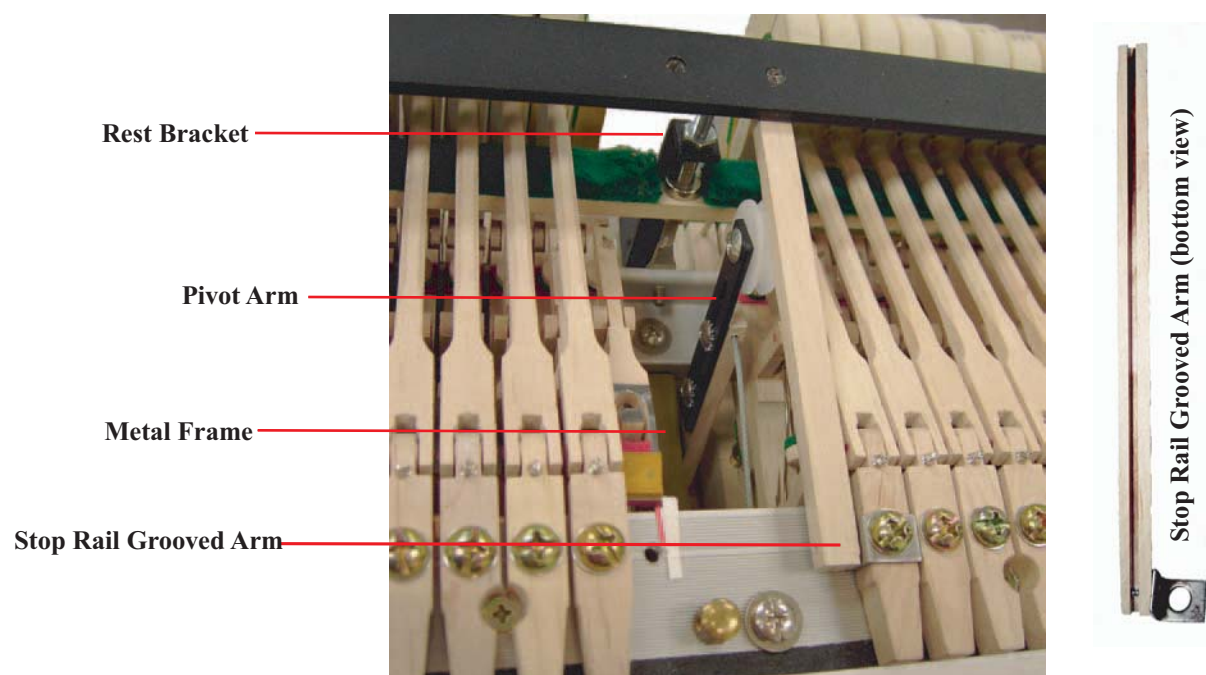


Figure F

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Cable Idler Pulley "Short"

6. The IDLER BRACKET SHORT # 5602203 is mounted to front of hammer action in alignment with PIVOT ARM. Mark and drill holes with a #36 bit, tap with a 6/32" tap and attach with #6 x 1/2" ph machine screws #56134. See Figure G.

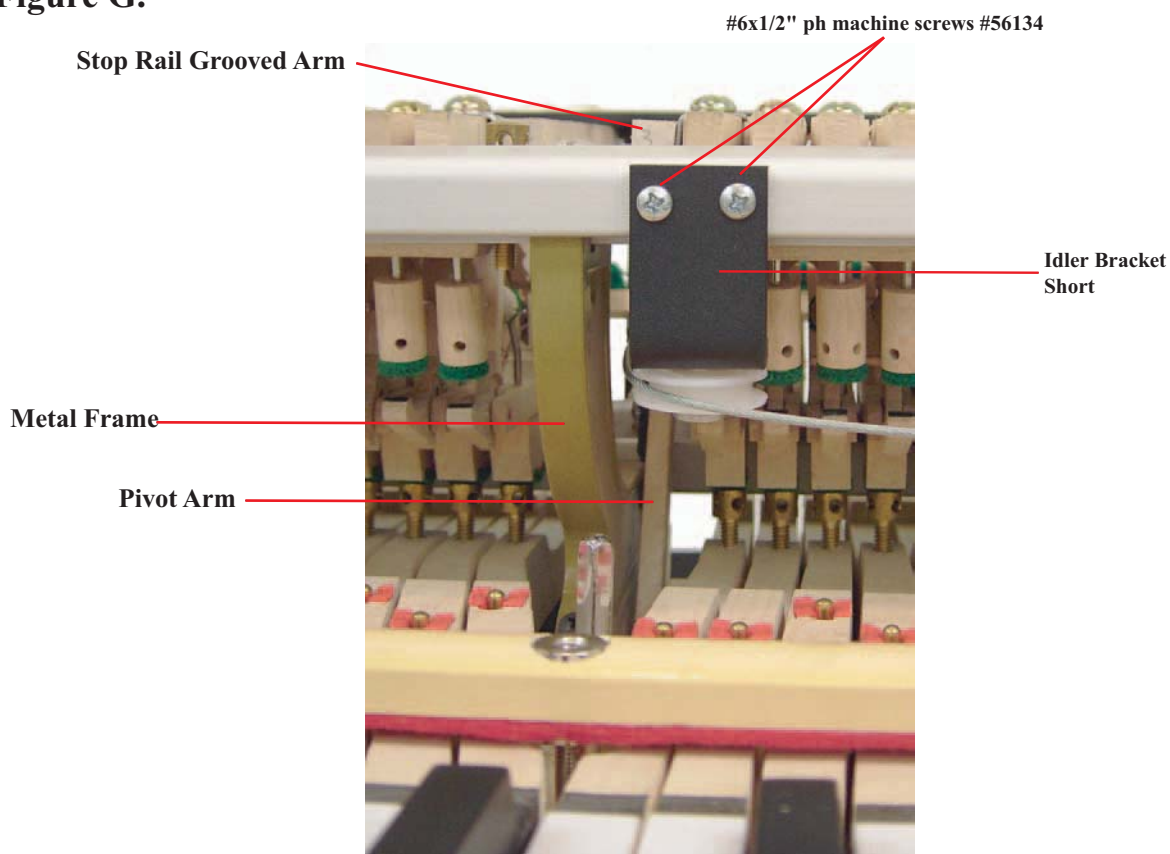


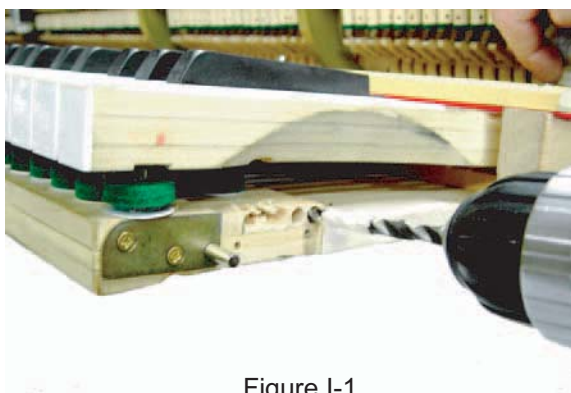
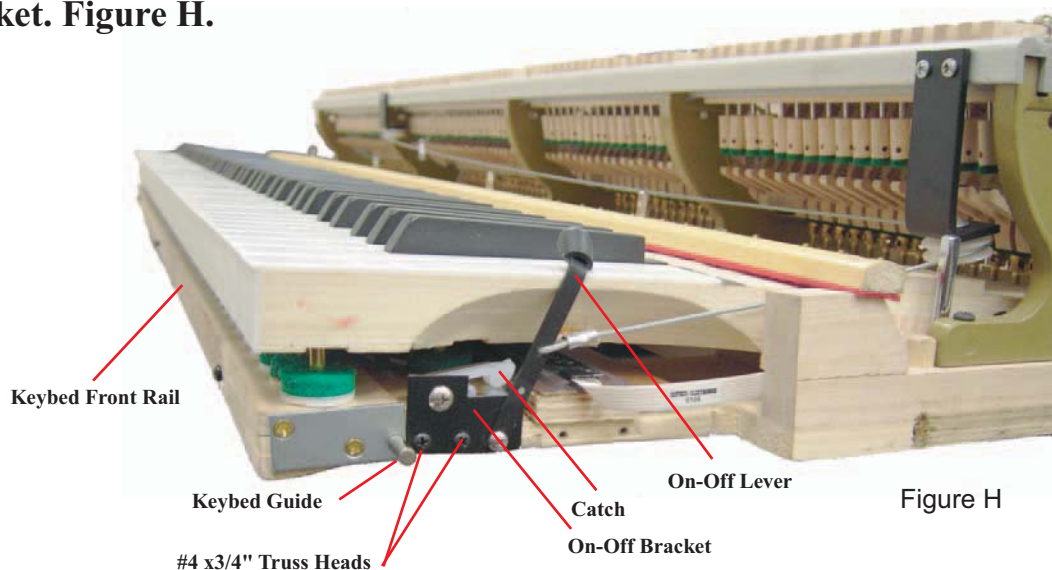
Figure G

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On-Off Lever

7. On-off lever mounts to right side of key frame with two #4x3/4" truss head screws. Figure H. In order to achieve adequate clearance of the record strip, it will be necessary to place the on-off lever closer to the front of the key frame and will incur some minor removal of wood from the edge to accommodate the nylon catch Figure I. It may also be necessary to trim the back half of the key bed guide pin flange as well Figure I-1 & 2. Trimming wood from the key frame edge can be done by drilling small holes along the top edge and cleaning it square with a chisel or by using a zip cutter or dremel tool. It will also be necessary to drill a shallow hole on the side of the key frame to accommodate the screw used to connect the on-off lever to its bracket. Figure H.



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Cable Idler Pulley "Long"

8. Cable Idler Pulley "Long" mounts in the same manner as the short one, keeping in alignment with the on-off lever with lever in the back position, (toward fallboard) connect the two cables using Cable Buckle Clip #5602207 as shown in Figure K . See Figure J and K.

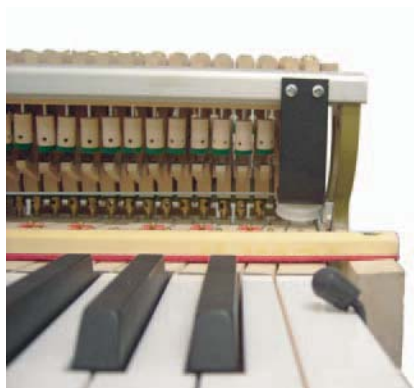


Figure J



Figure K

Bar Travel

Lastly, you want to make sure the bar clears the hammer shanks when in the up position, by either adjusting the cables or height of the pivot arm wheel.

Adjusting Key Dip

Lever must be in (bar down) position when installing or removing action. The goal is to adjust the bar, so that keys dip as close to let-off as possible, without striking the strings when struck moderately hard. Upon completion of adjustment, secure machine screws in place by tightening Lock Nuts in Figure E on each Rest Brackets.