RENNER QUALITY

The firm Louis Renner was founded in Stuttgart, Germany in 1882. Today its headquarters and main factory are located in Gärtringen, just outside Stuttgart, with an additional state-of-the-art factory in Meuselwitz, near Leipzig. Renner manufactures complete grand and upright piano actions in addition to special piano parts, piano hammers, accessories, piano tools, and professional literature. They supply the primary piano action components to the world’s leading piano makers and piano technicians in over 80 countries.

In 1988, Lloyd Meyer established Renner USA, a division of Lloyd Meyer & Company, to provide a stronger presence in North America and to create a U.S. based facility for the research and development of special piano action parts and tools specifically designed for vintage American pianos. These include original dimensioned piano action replacement parts for Baldwin, Chickering, Knabe, Mason & Hamlin, Steinway, and other fine American pianos. The company also provides original replacement parts for the great European piano makers, including Bechstein, Blüthner, Bösendofer, Fazioli, August Förster, Grotrian Steinweg, Schimmel, Seiler, Wilh, Steinberg, Steingraeber & Söhne, as well as the better quality Asian piano producers. Particularly in demand, are the top of the line Premium Blue piano hammers that do not require the addition of lacquers or other artificial hardeners; and special tools that have been developed for fine regulating.
# TABLE OF CONTENTS

ACTION PARTS.......................................................................................................................... 4
   Selecting the Correct Action Parts When Restoring a Vintage Piano............................................ 4

SHANKS & FLANGES..................................................................................................................... 5

GRAND WIPPENS....................................................................................................................... 11

HAMMERS..................................................................................................................................... 18
   Selecting Replacement Hammers ................................................................................................. 17

HAMMER SERVICES..................................................................................................................... 22

UNDERLEVER DAMPER SYSTEM .............................................................................................. 23

PARTS .......................................................................................................................................... 24

FELTS........................................................................................................................................... 27
   Flange and Key Bushing Cloth .................................................................................................. 27
   Damper Felt Strips .................................................................................................................... 28
   Flat Damper Strips .................................................................................................................... 29
   Pre-Cut Damper Sets ................................................................................................................ 29
   Punchings and Leathers ........................................................................................................... 30
   Key Bushing and Backcheck Leathers ..................................................................................... 30

TOOLS........................................................................................................................................ 31
   Regulating ............................................................................................................................... 31
   Tuning & Voicing ..................................................................................................................... 36
   Pliers ....................................................................................................................................... 42
   Rebuilding & Repair ............................................................................................................... 45
Selecting the Correct Action Parts When Restoring a Vintage Piano

The key factor in selecting correct replacement parts is to insure that the original action dimensions and relationships won’t change upon installation. To accomplish this, Renner maintains a century old manufacturing database with master action designs from which it can produce genuine Renner action parts with the same “original dimensions” as were used in the original piano manufacture. There is only one set of relationships through which the mechanism will operate properly, and you will find those relationships carefully engineered and built into every Renner part. The objective, simply stated, is to protect the authentic design of the piano and to carefully restore it to the original intent of the piano maker.

The drawings of our action parts are to exact scale and can be used for direct comparison, making it easy to determine the correct dimensions and dimensional relationships to perfectly suit your particular action. For greater precision in determining the correct replacement action part, we highly recommend using the Renner USA Sample Parts Kit (page 24). This special Kit is available to qualified piano technicians and allows the actual testing of factory engineered sample action parts in the piano.
Renner shanks and flanges are “dimensionally correct” ensuring that the original action dimensions and relationships are maintained when the part is installed. Recent entries into our business have borrowed this term to describe dimensions, that are not authentic, and will fundamentally change the original design. Extreme examples include moving the hammer shank knuckle to a distance of 18mm from the center pin in order to reduce action weight at the front of the key. Reducing the leverage ratio at the hammer shank will certainly result in making the key easier to press down, as piano makers have known for 300 years. Doing so, however will have detrimental consequences in other areas of the mechanism including:

- A reduced amount of available hammer blow distance with the same touch depth.
- Greater touch depth with the same hammer blow distance.
- Slower acceleration of the hammer towards the string, resulting in lower contact velocity.
- Greater hammer weight required to reach equivalent ability to displace the struck string.

One of the little known secrets of every Renner action part is the use of a special wood called Weissbuche - Hornbeam in English - which is naturally air-dried and aged over several years. The use of only the finest quality materials, including the famous Renner bushing cloth, are among the many reasons why genuine Renner parts are preferred by the world’s finest quality piano makers and rebuilders.
**#913 001 Standard Renner**
Note: Fits the standard Renner grand action found in many European pianos including Bechstein, Bösendorfer, Baldwin SD & SF and the older Yamaha.

**#913 002 Renner Small Knuckle**
Note: Same as #913 001 except with smaller knuckle. This execution was standard on most Bechstein and some other European pianos.

**#913 023 Renner Universal**
Note: Same as #913 001 except without screw hole. Can be adapted to many applications where a direct replacement is not available.
#913 021 Original Style
Note: Fits Steinway. These have the original dimensions that used a “Smaller Knuckle—Higher Ratio” combination.

#913 029 Modified Style
Note: Fits Steinway. A number of vintage, turn of the century pianos used a “larger knuckle - lower ratio” combination. This shank will also most often fit pianos from the teflon era.

#913 031 Hamburg Style
Note: Fits the post 1970 Hamburg Steinway, some 1980's B & D NY Steinway models and current production models.
#913 009  Mason & Hamlin
Note: Fits vintage Mason & Hamlin as well as a variety of other piano makes that used Wessel, Nickel and Gross actions.

#913 019  Old Baldwin Pre -1932
Note: For Baldwin models that were made before 1932.

#913 025  New Baldwin Post -1932
Note: Same as #913 019 except the screw hole is further from the center pin. For pianos built after 1932 that did not use a Renner action.
SHANKS & FLANGES

#913 013 Yamaha
Note: Fits Yamaha pianos.

#913 011 Pratt-Read
Note: Fits Pratt—Read standard actions.

#913 027 Pratt-Read Short
Note: Fits some Chickering and other Aeolian models.
SHANKS & FLANGES

#913 005 Adjustable
Note: For applications requiring the long flange where models 913 001 and 913 023 are not suitable.

#913 007 Adjustable
Note: Fits some Mason & Hamlin models and other applications where model 913 009 is not suitable.

#913 017 Knabe
Note: Fits most Knabes.
Renner wippens feature precision machined regulating screws and graduated spring tension for optimum regulation. On fine quality pianos this amazing action mechanism, perfected over a period of 300 years, is made from all natural living materials like fine woods, felt, and leather which depend on small action centers to precisely control their motion. These specific tolerances must also move naturally with the environment. Renner action centers are made with exclusive Renner-designed pre-glued and graphited bushing cloth and are designed to be activated millions of times over the lifetime of a piano.

**FINE ADJUSTMENT SCREW**

Designed for superior fine adjustments after initial rough regulations. Also prevents butterfly spring from wearing a noisy groove in the repetition lever.

The HIGH DEFINITION FLANGE provides a more accurate flange seating on the many different rails produced over the years for both vintage & modern pianos, creating stability in the action and a more accurate transmission of power from key to string.

One of the little known secrets of every Renner action part is the use of a special wood called Weissbuche - Hornbeam in English - which is naturally air-dried and aged over several years.

The use of only the finest quality materials, including the famous Renner bushing cloth, are among the many reasons why genuine Renner parts are preferred by the world's finest quality piano makers and rebuilders.
#913 048  Angled Heel
Note: Fits Steinway. Standard execution with angled heel for angled capstans.

#913 041  Straight Heel
Note: Fits Steinway pianos with straight capstans and some models with angled capstans. Trial fit from parts kit recommended for best results.
#913 042 Turbo Wippen
Note: Fits Steinway. The same as #913 041 but with wippen assist springs. Will compensate for pianos that would require excessive leading to achieve proper touchweight

#913 042E Turbo Wip Extender Kit
Our Turbo wippens include flange assist springs to note 72. This kit was created to allow the technician to go to note 88.

#913 040 Straight Heel
Note: Fits Steinway. Same as #913 041 but without fine adjustment screw
#913 010  Renner Standard
Note: Fits many European grands.

#913 015  Renner/Schwander
Note: Fits the Baldwin 9’ and other actions that used the Schwander-type wippen.
Replaces discontinued #913 059.
**#913 046 Mason & Hamlin**
Note: Original dimensioned Wessel, Nickel & Gross (without the strings). Fits Mason & Hamlin. Some models require a shorter flange, **#913 501A**, sold separately.

**#913 051 Baldwin**
Note: Will work on vintage Baldwin pianos with the Baldwin action. Wippen #913 015 will work on Baldwin pianos that used the Schwander wippen.
#913 008 Yamaha

Note: Fits most Yamaha grand pianos.
#913 053 Universal Wippen
Note: The flexibility of this design allows replacement of piano actions for pianos no longer in production and for which replacement parts are not available.

- 13.5 mm: 107 044
- 14.5 mm: 107 048
- 11.75 mm: 107 045
- 17.75 mm: 107 050
- 11.75 mm: 107 046
- 17.75 mm: 107 051
- 14.5 mm: 107 047
- 21.75 mm: 107 053
Selecting Replacement Hammers

Louis Renner & Company produces the hammerheads for the world’s finest piano makers, as they have done for over 130 years, and have grown to become the largest, independent, producer of hammerheads in the world. The German Steinway, Bösendorfer, Fazioli, Schimmel, Bechstein, Blüthner, Estonia, Förster, and Steingräber are among the world’s premium pianos that use Renner hammers which are produced to each manufacturer’s specifications. Our selection of hammers for the North & South American markets include the following premium product lines which incorporate the original designs developed early in the 20th century for vintage Steinway and other quality pianos and the latest advances in hammer making technology. These superior hammerheads are produced utilizing the most advanced technology and state-of-the-art machinery in the industry, combined with the finest German hand-craftsmanship.

The grand hammers are made in 3 basic weights, with an additional weight in the Hamburg Collection, and 2 boring sizes which will fit 80% of the pianos you are likely to encounter. 3 universal sizes are also available, which can be custom bored, shaped, and tailed, for the remaining 20% of the grand pianos. The upright hammers are available in two basic sizes which will fit nearly every upright piano.

Renner Premium Blue
The original Premium Blue hammer specially designed for vintage Steinway and other quality pianos.

Renner Premium “Blue Points”
Latest refinement of the classic Premium Blue line, incorporating Weickert Special felt, also designed for vintage Steinway and other quality pianos. Higher tension felt. Less voicing required.

Hamburg Collection
Special Features of the Renner Blue Point and Premium Blue Hammerheads

Hammer Felt
The special hammer felt used in the Renner hammer is produced by the Würzen Felt Company, in the former East Germany, which supplied vintage Steinway and other quality pianos their special hammer felt for over 100 years. The felt became unavailable for several decades following World War II, during the Russian occupation, and became available again with the reunification of Germany. It continues to be the finest hammer felt produced in the world, resulting in the widest possible harmonic and dynamic tonal range with a minimum of voicing required.

Hammer Molding
The molding used in the Renner Premium Blue and Blue Point hammers is a special species of Walnut wood, grown in Germany. It is carefully selected for its uniform, lighter weight, and responsiveness. It is aged naturally, prior to final conditioning, to assure long term stability and performance in different climatic environments.

Renner Compression Clasp
Each of our hammerheads incorporates the exclusive Renner T-Clasp™ to maintain the desired felt tension and even weight distribution within each hammer. This unique clasp is made from a proprietary, surface-coated, hardened steel, which is used to lock the felt to the base of the molding without damaging individual felt fibers. To assure uniformity, each clasp is optically sorted and matched by computer to assure the correct dimensions and alignment of the stems. The clasps are then inserted electronically into each hammerhead, one-at-a-time, applying equal pressure to both sides of the hammerhead, to assure uniform tension and perfect centering and alignment of each clasp. Each hammerhead is then hand inspected individually to assure absolute perfection.

Hammer Presses
Our unique hammerhead presses allow for the perfect centering of the outer and under felt on the hammer molding, with special sensors controlling the amount of pressure and temperature applied to each individual hammer across the scale. This protects the structure and integrity of the felt during the pressing process, and results in the optimum tension and responsiveness of each individual hammer.
Grand Hammers

<table>
<thead>
<tr>
<th>Model</th>
<th>Molding Material</th>
<th>Size (lbs)</th>
<th># Hammers Bass</th>
<th>Overall Length Bass</th>
<th>Hammer Bore Range Bass</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>G3-PB G3-PBP</td>
<td>Walnut</td>
<td>Gr.3 14 lb.</td>
<td>32</td>
<td>3 1/8&quot;</td>
<td>2-2 1/4&quot;</td>
<td>1 13/16-2 1/16&quot;</td>
</tr>
<tr>
<td>G4-PB G4-PBP</td>
<td>Walnut</td>
<td>Gr.4 16 lb.</td>
<td>26</td>
<td>79.5mm</td>
<td>51-57mm</td>
<td>43-49mm</td>
</tr>
<tr>
<td>G3L-PB G3L-PBP</td>
<td>Walnut</td>
<td>Gr.3 14 lb.</td>
<td>32</td>
<td>3 1/4&quot;</td>
<td>2 1/8-2 3/8&quot;</td>
<td>46-52mm</td>
</tr>
<tr>
<td>G4L-PB G4L-PBP</td>
<td>Walnut</td>
<td>Gr.4 16 lb.</td>
<td>26</td>
<td>83mm</td>
<td>54-60mm</td>
<td></td>
</tr>
<tr>
<td>G5-PB G5-PBP</td>
<td>Walnut</td>
<td>Gr.5 18 lb.</td>
<td>26</td>
<td>01</td>
<td>01</td>
<td></td>
</tr>
</tbody>
</table>

Renner USA offers a wide array of custom hammer technical services which include: custom hammerhead boring, pre-filing and pre-voicing the hammers, and hanging the hammers to the original factory specifications and precision.
### Premium Blue (PB) & Premium “Blue Point” (PBP) Grand Hammer Universal Molding Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Molding Material</th>
<th>Size (lbs.)</th>
<th># Hammers</th>
<th>Overall Length</th>
<th>Hammer Bore Range</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>G3U-PB</td>
<td>Walnut</td>
<td>Gr.3 14 lb.</td>
<td>32</td>
<td>2 11/16” 74mm</td>
<td>1 11/16-2 5/8” 43-67mm</td>
<td>27/64” 10.9mm</td>
</tr>
<tr>
<td>G4U-PB</td>
<td>Walnut</td>
<td>Gr.4 16 lb.</td>
<td>32</td>
<td>2 15/16” 74mm</td>
<td>2 1/8-2 3/8” 54-60mm</td>
<td>29/64” 11.5mm</td>
</tr>
<tr>
<td>G5U-PB</td>
<td>Walnut</td>
<td>Gr.5 18 lb.</td>
<td>32</td>
<td>3 27/32” 82mm</td>
<td>2 3/32-1 11/32” 53-59.5mm</td>
<td>29/64” 11.5mm</td>
</tr>
</tbody>
</table>

### Premium Blue Upright Hammer Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Molding Material</th>
<th>Size (lbs.)</th>
<th># Hammers</th>
<th>Overall Length</th>
<th>Hammer Bore Range</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>U3-PB</td>
<td>Hornbeam</td>
<td>Gr.3 14 lb.</td>
<td>32</td>
<td>2 11/16” 74mm</td>
<td>1 11/16-2 5/8” 43-67mm</td>
<td>27/64” 10.9mm</td>
</tr>
<tr>
<td>U4-PB</td>
<td>Hornbeam</td>
<td>Gr.4 16 lb.</td>
<td>32</td>
<td>2 15/16” 74mm</td>
<td>2 1/8-2 3/8” 54-60mm</td>
<td>29/64” 11.5mm</td>
</tr>
</tbody>
</table>

### Hamburg Collection Grand Hammer Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Molding Material</th>
<th>Size (lbs.)</th>
<th># Hammers</th>
<th>Overall Length</th>
<th>Hammer Bore Range</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/M/O</td>
<td>Maple</td>
<td>Gr.5 18 lb.</td>
<td>26</td>
<td>3 27/32” 82mm</td>
<td>2 3/32-1 11/32” 53-59.5mm</td>
<td>29/64” 11.5mm</td>
</tr>
<tr>
<td>A/B</td>
<td>Maple</td>
<td>Gr.5 18 lb.</td>
<td>20</td>
<td>2 27/32” 72mm</td>
<td>2 1/8-2 3/8” 54-60mm</td>
<td>29/64” 11.5mm</td>
</tr>
<tr>
<td>C/D</td>
<td>Maple</td>
<td>Gr.6 20 lb.</td>
<td>20</td>
<td>2 27/32” 72mm</td>
<td>2 3/32-1 11/32” 53-59.5mm</td>
<td>29/64” 11.5mm</td>
</tr>
</tbody>
</table>
Renner USA now offers comprehensive hammer services at our Arizona facility. All Renner hammers can be custom bored to your specifications with the hammer tails properly radiused. To improve side clearance and to reduce weight Renner USA can precisely taper each hammer. This taper, extending the whole length of the hammer from the crown to the tail, recreates the configuration found on fine American grands from the classic era. For the ultimate in “out of the box” convenience your hammers can also be pre-filed and pre-voiced.

Renner USA will hang any of our grand hammer sets on any of our grand shanks. Our hammer hanging services are available to technicians in two levels of precision. Factory Level Placement: the hammers are hung to a uniform and fixed distance on the shank. This is the procedure used by most factories and is adequate for many situations. Custom Level Placement: If you wish to preserve the original placement of the hammers, we will duplicate your original samples to determine the original strike point. Our custom level placement can be ordered to achieve this higher standard of accuracy.

OPTIONAL SERVICES:

Pre-Voicing
Pre-Filing
Full Side Tapering
With the introduction of the revolutionary Renner USA underlever system designed several years ago for the professional piano technician, it is now possible to completely replace both of the actions in most American grand pianos. The Renner USA Custom Damper Underlever System or Back Action Kit enables the professional piano technician to completely replace or retrofit the grand piano damper back action in many fine, vintage, American grand pianos. The kit is produced in component form which allows the action to be custom tailored to fit the many different grand piano scales produced over the past 150 years.

The kit includes the underlever tray, the tray ending blocks, pivot pins, a complete set of underlevers, flange screws, the wire flange keeper, tray cushion felt, stop rail cushion felt, damper lever assist springs, and a roll of mylar tape for creating the template.

A special commercial grade, extended shank, drill bit is available for creating the flange screw holes, and will remain precision sharp for many underlever system replacements.

The Renner Back Action can be used to replace:

- Early Steinway back actions that have been damaged or worn out.
- Early back actions that require the conversion of plain-wood socket set screws to metal bushed socket screws.
- Conversions of early underlever sets having a veneer sostenuto pick-up tab to a new spring activated pick-up tab.
- Conversions of the later Teflon type back actions with the short-arm underlever.
- Early bushed type short-arm underlevers that react poorly with the geometry required for back actions.
Back Checks with Wires
#706B

Renner Replacement Knuckles
Two sizes available:
- large - 9.5mm diameter
- small - 9.0mm diameter

Wippen Assist Springs
#0691
Set in three different thicknesses which go to note 72.

Renner Flange Screws
#621A

Upright Hammer Butt
#481 Pratt-Read Style
Now with Renner quality, will fit most of the quality upright pianos produced in North America during the past 100 years.

Let Off Buttons
- LOB 4.2 Small Size 4.2mm
- LOB 7.5 Medium Size 7.5mm
- LOB 8.4 Large Size 8.4mm
Our Action Parts Kit Can Make Finding the Right Part a Breeze

The Renner USA Sample Parts Kit can help solve the common problem of identifying and sourcing the correct replacement parts for most vintage pianos. Containing an assortment of over 40 original dimension wippens, shanks and flanges, hammers, damper felt samples, and other internal piano parts, technicians can test fit actual parts inside the piano to determine the best fit. This is critically important in order to maintain the original design and excellence of the instrument, particularly with vintage Steinway and other quality pianos, due to the way they were handcrafted at that time.

Original dimension Renner action parts for Steinway grand pianos include three different executions of shanks & flanges and two different wippens, to accommodate the different configurations over the years including current. There are also different executions of wippens and shanks & flanges for Baldwin, Mason & Hamlin, Boesendorfer, Bechstein, and others, depending on the model and year manufactured. For pianos where original dimensioned parts are no longer available, Renner USA offers parts that can be custom fitted to many particular pianos. For example, the Renner Universal Wippen offers multiple heel size options that can be configured to produce 15 different executions that fit most vintage American and European pianos, as well as many Asian made pianos.

For pianos where original dimensioned parts are no longer available, Renner USA offers parts that can be custom fitted to many particular pianos. For example, the Renner Universal Wippen offers multiple heel size options that can be configured to produce 15 different executions that fit most vintage American and European pianos, as well as many Asian made pianos.

The Renner USA Parts Kit is available to professional piano technicians FREE of change with the first purchase of a complete set of action parts (wippens, shanks & flanges, and hammerheads. Or, the kit may be purchased in advance, and the purchase price would be credited back with the first complete order.
Renner Action Model

This 3-note grand piano action model is manufactured by the Louis Renner company exclusively for the Piano Technician’s Guild, and is the official testing model used in the examination process to achieve the classification of Registered Piano Technician. It features Genuine Renner action parts, Premium Blue Point hammerheads, and includes working sustain and sostenuto levers. This model is a useful resource for grand action regulation training, and as a working public display model to demonstrate the intricate mechanisms and functioning of a grand piano action. For questions or to purchase, please visit www.ptg.org.
Flange and Key Bushing Cloth

Superior flange and key bushing cloths available in strips, squares and large 30x120cm pieces.

Flange Bushing Strips

20cm long with pre-formed (shoelace) ends, pre-glued and graphited.

#1049

Renner supplies special pre-glued and graphited flange bushing cloth strips that are exceptionally easy to use. These strips have pre-formed “shoelace” ends for easy insertion into the flange holes. A water activated glue coating on the outside surface eliminates the need to apply any other adhesive, and the light graphite application on the inside surface provides quiet, trouble free operation. Use with sizing tool #1855

Bushing Cloth Strips
For Spurlock System

9mm wide x 100cm long Strips

#1050S 1.00mm thick
#1051S 1.20mm thick
#1052S 1.35mm thick
#1048S 1.50mm thick

Bushing Cloth Squares

25x25cm

#1050B 1.00mm thick
#1051B 1.20mm thick
#1052B 1.35mm thick
#1048B 1.50mm thick

Bushing Cloth - Large Pieces

30x122cm

#1050C 1.00mm thick
#1051C 1.20mm thick
#1052C 1.35mm thick
#1048C 1.50mm thick
**Mono-chord**

#850136  
Width 10mm  
Height 11mm

**Bi-chord**

#850132  
Width 9mm  
Height 11.5mm  
Narrow point for lowest bi-chords

**Bi-chord**

#850140  
Width 9mm  
Height 10.5mm  
Medium point for remaining bi-chords

**Bi-chord**

#850138  
Width 9.5mm  
Height 11mm  
Wide point for bi-chords on tenor bridge

**Tri-chord**

#850139  
Width 9.5mm  
Height 11mm  
Narrow point for wound tri-chords

**Tri-chord**

#850143  
Width 9.5mm  
Height 11mm  
Wide point for plain wire tri-chords
**Flat Damper Strips**

- **#1021A**
  - Standard tapered
  - 5cm - 3cm x 49cm
  - 10.5mm thick

- **#1021C**
  - No taper thin execution
  - 4cm x 40cm
  - 8.0mm thick

**Pre-Cut Damper Sets**

Renner quality red-felt backed. Pre-cut dampers to fit various scale designs.

- **#1033 S**
  - Bass: 10 notes single, 18 notes double
  - Treble: 4 notes double, 9 notes tri-chord, 10 notes combination, 20 notes flats

- **#1033 M**
  - Bass: 10 notes single, 18 notes double
  - Treble: 3 notes double, 9 notes tri-chord, 10 notes combination, 20 notes flats

- **#1033 L-O**
  - Bass: 10 notes single, 18 notes double
  - Treble: 13 notes tri-chord, 10 notes combination, 20 notes flats

- **#1033 A**
  - Bass: 8 notes single, 14 notes double
  - Treble: 5 notes double, 8 notes tri-chord, 10 notes combination, 28 notes flats

- **#1033 B**
  - Bass: 8 notes single, 14 notes double
  - Treble: 18 notes tri-chord, 8 notes combination, 25 notes flats

- **#1033 C**
  - Bass: 8 notes single, 14 notes double
  - Treble: 18 notes tri-chord, 13 notes combination, 25 notes flats

- **#1033 D**
  - Bass: 8 notes single, 7 notes double, 7 notes tri-chord
  - Treble: 32 tri-chord, combination 13+13, Flats 50

- **#1033 Generic set**
  - 15 notes single, 15 notes double, 42 notes flat tapered, 22.5 cm tri-chord strip
Punchings and Leathers

3mm
4mm
5mm
6mm
7mm
8mm

Front Rail Punchings

#1158
Superior quality felt front rail punchings, available in six different sizes.

Balance Rail Punchings

#1157
Available in one execution our very popular balance rail punching, red felt.

Key Bushing and Backcheck Leathers

Backcheck Leather
Wider width will fit the older longer style backchecks. Narrow width will fit standard backchecks.

#1105W
6.2cm x 90cm

#1105N
4.4cm x 90cm

Key Bushing Leather
Available in two thicknesses:

#1108A 1.00mm thick
90cm x 3cm

#1109A 1.20mm thick
90cm x 3cm
Regulating

Regulating Tool
#1520
This tool is used to regulate grand jack alignment and repetition lever height.

Flange Spacing Tool
#1527
This flange spacing tool works especially well on vertical actions.

Grand Damper Regulating Tool
#1533
This tool is used to regulate the side-to-side spacing of damper heads.
Regulating

Wire Bender
#1555
Used for precision bending of wires.

Multi Purpose
Upright Regulating Tool
#1558
Direct from the Renner factory, this tool handles a variety of intricate adjustments.

Capstan Regulating Tool
#1560
Simply the best tool available for regulating grand and upright capstans. Straight and angled ends for ease.
Regulating

Spoon Bender

#1565
Used to bend damper spoons in upright pianos.

Flange Spacer for Steinway/Baldwin

#1567
Also fits current Mason & Hamlin and Yamaha and our replacement parts for Baldwin. Designed to fit on flanges and is used to align hammers and strings. Particularly well suited for tightly spaced flanges.

Renner/Mason Flange Spacer

#1568
Fits current Renner flanges as found on Bösendorfer, Schimmel, Bechstein, Fazioli, and our replacement parts for Mason & Hamlin as well as other fine pianos.
Regulating

Let-Off Regulating Tool for Steinway

#1569
Traditional design used on Steinway and other pianos that use an eyelet type of let-off regulating screw.

Let-Off Regulating Tool

#1570
Ratchet design used on pianos that use an eyelet type of let-off regulating screw.

Key Spacing Tool

#1649
Fits over the key front rail pin to allow side to side spacing of keys.
Regulating

Balance Rail Hole Reaming Tool

#1656
Used for accurate reaming of the balance rail hole.

Medium Screw Starter

#1795A
Holds screw for easy installation. Use for installing vertical hammer butt and damper lever.

Large Screw Starter

#1795B
Holds screw for easy installation. Use for installing vertical hammer butt and damper lever.
Tuning & Voicing

Tuning Wedge

#1420
This tuning wedge is made out of wood and covered with premium grade leather. Designed to mute a single string or between strings.

Rubber Tuning Wedge
Felt Tuning Wedge

#1421 & #1425
Commonly used rubber wedge for upright pianos.
Felt wedge designed specifically for grand pianos. Preferred by some technicians to rubber wedges.

Straight and Angled Voicing Tools

#1430 A/B
Four needle light duty voicing tools available with straight or angled head for ease of use.
Tuning & Voicing

Upright Voicing Tool

#1430D
The perfect voicing tool designed specifically for upright piano actions.

Deluxe Voicing Tool

#1430E
Tool of choice for professional technicians. Ergonomic grip and special designed head reduces needle breakage. Custom cap seals to protect needles and technician.
Tuning & Voicing

Grand String Height Gauge

Provides a direct reading of string height in a grand piano. Magnetic indicator spindle attaches to strings, even heavy wound strings, for a hands-free reading. Rule is scaled in 1/32 inch increments. Metric rule available. Accurate readings can be taken in a few minutes with no transfer errors. Will also take plate height readings. Constructed of tropical wood, HDPE, nylon and Delrin. Instructions included, including simple re-calibration procedure.

Universal Hammer Gang Clamp

For pre-filing and pre-voicing of all hammer styles. Two-way clamping pressure securely holds 1/3 set (up to 36 hammers). Adjusts for all molding sizes. Use on bench top; removeable base for securing in wood vise. Special canting feature. Simple setup, directions and wrench included. Constructed of PVC.
TOOLS

Pliers

Hammerhead Removing Pliers
#1574
These pliers are designed to remove entire sets quickly and easily.

Compound Bending Pliers
#1600
Commonly used for backcheck and damper wire bending to insure proper alignment. Has compound joint for increased leverage.

Check Bending Pliers
#1602
This design allows for fore and aft bending of wires. Creates the perfect angle for new backcheck installation.
Pliers

Grand Damper Pliers
#1606
Grand Damper Pliers used for holding the damper head while bending the damper wire.

Damper Felt Easing Pliers
#1607
The unique parallel jaw design of these pliers allows for even compression of damper trichord felt.

Center Pin Remover Pliers
#1609
These compound spring-loaded pliers feature an adjustable extraction pin.
Pliers

Damper Felt Squeezing Pliers

#1613
This tool reduces damper felt diameter and works great on bichord felt. Made from stainless German steel.

Key Easing Pliers

#1615
These compound leverage easing pliers feature parallel jaws and a free pivoting outer jaw for angled key bushings.

Key Easing Pliers

#1616
These compound leverage easing pliers feature parallel jaws and allow for regulation of front rail bushings without removal of the action stack.
Pliers

Key Easing Pliers

#1617
These easing pliers feature a pivoting center jaw. Allows for regulation of front rail bushings without the removal of the action stack.

Piano Wire Side Cutter

#1630
These diagonal side cutters feature high-tempered, polished jaws at an angle allowing for maneuvering in tight spaces.

Center Pin Wire Cutter

#1632
An unique contoured head design allows for flush cutting of center pins. The best tool available for this job.
TOOLS

Pliers

Flat Nose Pliers

#1637
These pliers are great for wire bending and a variety of other uses.

Round Nose Pliers - 140mm

#1640A
These pliers are great for making string splices and individual ties.

Round Nose Pliers - 130mm

#1642A
These pliers are great for making string splices and individual ties. Rubber handle gives easy grip. Jaws are slightly longer than 1640A.
TOOLS

Rebuilding & Repair

Coil Lifter

#1482A
This tool is used to lift coils on tuning pins. A special indentation (groove) uses the adjacent pin for leverage in tight situations. Made from extra duty German steel.

Coil Lifter with Angled Shaft

#1482B
This tool is used to lift coils on tuning pins. It has an angled shaft for increased leverage.

Bridge Pin Punches

#1492
This tool is used to mark bridge pin holes prior to drilling.
Rebuilding & Repair

Grand Hammerhead Extractor
#1571
This small convenient tool is used to extract hammerheads from shanks on grand pianos. A must for the traveling technician.

Upright Hammerhead Extractor
#1572
Same function as 1571 but for upright pianos.
Rebuilding & Repair

Hammershank Cutter

#1588
This handy tool is excellent for quick field repairs.

Knuckle Removing Pliers

#1589
This tool is designed to remove knuckles from grand piano hammershanks.

Hammershank Reamer

#1591
This tool is used to reduce the diameter of hammershanks and allows proper dressing of hammershank after hammerhead extraction.
Rebuilding & Repair

Hammer Reamer

#1853
This tool is used for reaming hammer heads for custom fit prior to glueing.

Offset Screwdriver

#1793
A useful tool in tight spaces.

Flange Bushing Cloth Calibration Tool

#1855
This handy tool sizes bushing cloth prior to installation. Design for use with Renner’s exclusive pre-glued and pre-cut flange bushing cloth.
Rebuilding & Repair

Gram Gauge Scale

#1854
A product of exacting German engineering, this gauge scale provides a very accurate method of determining flange resistance.

Renner Deluxe Hammer Boring Jig

We are proud to introduce and recommend the newly designed and completely handmade Hammer Boring Jig which is now being offered exclusively by Renner USA. This unique tool has been carefully developed and refined over the past 4 years by talented engineers and leading piano technicians and is the same device used by Renner USA in the custom boring of all their Premium Blue hammers.