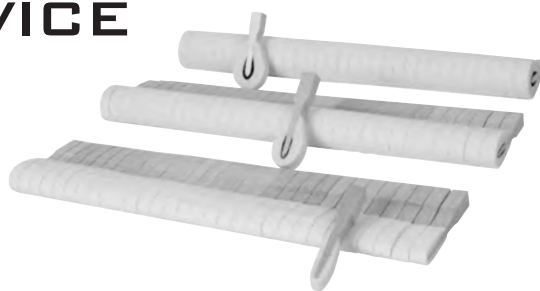


SCHAFF HAMMER REPLACEMENT & DUPLICATION SERVICE

With six generations of service, Schaff's goal is to provide you with the finest selection of piano hammers available. We are unparalleled in the industry in providing quick and efficient hammer duplication.



We offer two types of hammers that are designed and made exclusively for us.

Abel - "Royal Blue Hammers" - Imported from Germany (shown above)

We have worked closely with Helmut Abel to design a hammer that sounds and performs similar to those made in the early twentieth century. In order to do this we have selected Laoureux top felt due to its ability to produce a rich, clear, and satisfying tone that most people desire. Schaff "Royal Blue Hammers" have blue underfelt, and are available in 15, 17, and 19 lb. weights.

Imadegawa - Imported From Japan

These hammers are firmer than our Abel hammers thus providing a more brilliant tone throughout the piano. Our Imadegawa hammers have magenta underfelt, and are available in 15, 17, and 19 lb. weights.

We offer three ways of ordering piano hammers:

1. CUSTOM HAMMERS - MATCHED TO YOUR SAMPLES - RECOMMENDED

- Carefully remove the **end hammers** from each section and **number** these as they lie in the scale. When sending in your hammer samples, please leave the **shanks attached** to the hammer heads as removing the shank can damage the bore hole and result in inaccurate readings.
- If using a shank other than the original, please specify the diameter. If using new Schaff shanks, specify part number.
- State exactly how many hammers are in each section.
- Indicate Abel "Royal Blue Hammers" or Imadegawa.
- See Page 198 for custom Hammer Duplication Form.

2. UNBORED

- Select the type of hammer by stock number.
- Indicate the number of bass hammers your piano requires.

3. STANDARD BORE/STOCK HAMMERS

- Determine which weight and striking distance you require.
- Standard bore hammers are shelf items and **CAN NOT** be matched to samples. If you send sample hammers, we will assume you want custom bored hammers. **DO NOT USE** standard bore stock numbers when sending sample hammers. All stock hammers have 30 bass and approximately 65 tenor/treble hammers.

Square Grand Hammers

Please call for pricing and ordering information.

"BRIT-TONE" HAMMER HEAD SOLIDIFIER

For restoring lost tone to soft hammers. In use, apply a small amount along top and bottom surface of hammer to within 1/2" of striking point. Do not apply on striking surface.

No. 499-2 - 2 oz. Bottle. Each

No. 499-8 - 8 oz. Bottle. Each



HAMMER FELT HARDENER

Lacquer free formula. May be applied to the shoulders of the hammer as well as the striking surface. 8 oz. Bottle.

No. 1404 - Hammer Felt Hardener. Each.



ABEL "ROYAL BLUE" GRAND HAMMERS

UNBORED

FULL SETS - BLUE UNDERFELT - MAHOGANY MOLDINGS

(APPROXIMATE OVERALL LENGTH)

Stock#	Weights	Width Bass/Treble		Bass	Treble
A125	15, 17	3/8" (9.5mm)	13/32" (10.5mm)	3.15" (80mm)	2.75" (70mm)
*A125GX-20	17	13/32" (10.5mm)	13/32" (10.5mm)	3.15" (80mm)	2.85" (72mm)
*A125GX-26	17	13/32" (10.5mm)	13/32" (10.5mm)	3.15" (80mm)	2.85" (72mm)
A130	15, 17, 19	13/32" (10.5mm)	13/32" (10.5mm)	3.20" (81mm)	2.87" (73mm)
A135	15, 17, 19	13/32" (10.5mm)	13/32" (10.5mm)	3.23" (82mm)	3.00" (76mm)
A145	15, 17, 19	13/32" (10.5mm)	13/32" (10.5mm)	3.30" (84mm)	3.10" (79mm)
A420	15, 17, 19	13/32" (10.5mm)	13/32" (10.5mm)	3.50" (88mm)	3.15" (80mm)

- Specify weight and # of bass hammers when ordering.
- Styles *A125GX-20 and 26 are designed for Steinways.
- 15 lb. hammers are machine pinned.
- 17 and 19 lb. hammers are T-pinned.

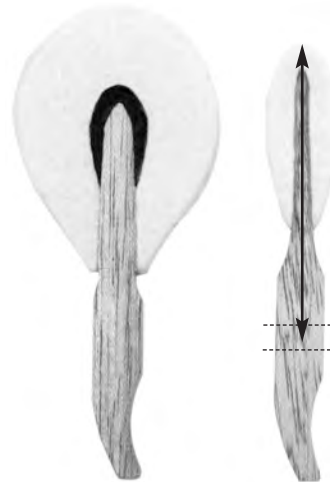
ABEL STANDARD BORE/STOCK GRAND HAMMERS

-Standard bore hammers are shelf items and CAN NOT be matched to samples

DRILLING SPECIFICATIONS

Section	Bass	Tenor/Treble		
# of hammers	30	14	12	39
Bore Angle	12°	9°	6°	0°
Pitch/Rake	0°	0°	0°	0°
Hole Dia.	.204"	.204"	.204"	.204"

- Mahogany Moldings.
- Blue Underfelt.
- Available in 15,17,and 19 lb. felt.
- All stock sets are available in the following striking distances: 1-7/8", 2", and 2-1/8". (This measurement is taken from the center of the bore hole to the top of the felt allowing for wear on #88 treble hammer.)



Complete Sets

- 902-15GM1-7/8"** - 15 lb. Felt Hammers. Per set
- 902-15GM2"** - 15 lb. Felt Hammers. Per set
- 902-15GM2-1/8"** - 15 lb. Felt Hammers. Per set
- 902-17GM1-7/8"** - 17 lb. Felt Hammers. Per set
- 902-17GM2"** - 17 lb. Felt Hammers. Per set
- 902-17GM2-1/8"** - 17 lb. Felt Hammers. Per set
- 902-19GM1-7/8"** - 19 lb. Felt Hammers. Per set
- 902-19GM2"** - 19 lb. Felt Hammers. Per set
- 902-19GM2-1/8"** - 19 lb. Felt Hammers. Per set

Abel Standard Bore/Stock "Steinway" Grand Hammers

-Mahogany Moldings - Long Blue Underfelt - T-Pinned
-17lb Top Felt - available in 20 and 26 Bass

Section	Bass	Tenor/Treble					Balance
# of hammers	20	8	6	6	4	7	
Bore Angle	5.5°	10.5°	8°	6°	4°	2°	0°
Pitch/Rake	0°	0°	0°	0°	0°	0°	0°
Hole Dia.	.196"	.196"	.196"	.196"	.196"	.196"	.196"

Section	Bass	Tenor/Treble					Balance
# of hammers	26	7	6	7	7	7	
Bore Angle	5.5°	9.5°	7°	4.5°	2°	0°	
Pitch/Rake	0°	0°	0°	0°	0°	0°	
Hole Dia.	.196"	.196"	.196"	.196"	.196"	.196"	

No. 903-20GM - 20 Bass, 1-13/16" striking distance - Per set

No. 903-26GM - 26 Bass, 1-13/16" striking distance - Per set



IMADEGAWA GRAND HAMMERS

UNBORED

FULL SETS - STAPLED - MAGENTA UNDERFELT - HORNBEAM MOLDINGS

(APPROXIMATE OVERALL LENGTH)

Stock#	Weights	Width Bass/Treble		Bass	Treble
GW/125	15, 17	3/8" (9.5mm)	13/32" (10.5mm)	3.15" (80mm)	2.75" (70mm)
*GW/125GX-20	17	13/32" (10.5mm)	13/32" (10.5mm)	3.15" (80mm)	2.85" (72mm)
*GW/125GX-26	17	13/32" (10.5mm)	13/32" (10.5mm)	3.15" (80mm)	2.85" (72mm)
GW/130	15, 17, 19	13/32" (10.5mm)	13/32" (10.5mm)	3.20" (81mm)	2.87" (73mm)
GW/135	15, 17, 19	13/32" (10.5mm)	13/32" (10.5mm)	3.23" (82mm)	3.00" (76mm)
GW/145	15, 17, 19	13/32" (10.5mm)	13/32" (10.5mm)	3.30" (84mm)	3.10" (79mm)
GW/420	15, 17, 19	13/32" (10.5mm)	13/32" (10.5mm)	3.50" (88mm)	3.15" (80mm)

-Specify weight and # of bass hammers when ordering.

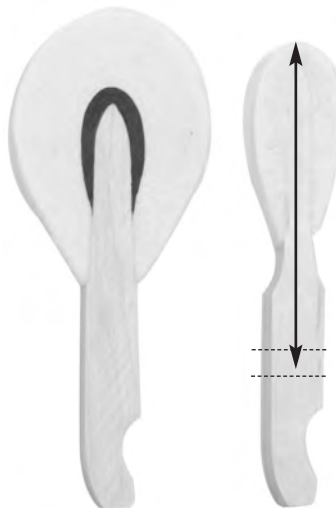
-Styles *GW/125GX-20 and 26 have walnut moldings and are designed for Steinways.

IMADEGAWA STANDARD BORE/STOCK GRAND HAMMERS

-Standard bore hammers are shelf items and CAN NOT be matched to samples

DRILLING SPECIFICATIONS

Section	Bass	Tenor/Treble		
# of hammers	30	14	12	39
Bore Angle	12°	9°	6°	0°
Pitch/Rake	0°	0°	0°	0°
Hole Dia.	.204"	.204"	.204"	.204"



-Hornbeam Moldings. Except for Steinway type which are walnut.

-Magenta Underfelt.

-All stock sets are available in the following striking distances: 1-7/8", 2", and 2-1/8". (This measurement is taken from the center of the bore hole to the top of the felt allowing for wear on #88 treble hammer.)

Complete Sets

902-15J1-7/8" - 15 lb. Felt Hammers. Per set

902-15J2" - 15 lb. Felt Hammers. Per set

902-15J2-1/8" - 15 lb. Felt Hammers. Per set

902-17J1-7/8" - 17 lb. Felt Hammers. Per set

902-17J2" - 17 lb. Felt Hammers. Per set

902-17J2-1/8" - 17 lb. Felt Hammers. Per set

902-19J1-7/8" - 19 lb. Felt Hammers. Per set

902-19J2" - 19 lb. Felt Hammers. Per set

902-19J2-1/8" - 19 lb. Felt Hammers. Per set

Imadegawa Standard Bore/Stock "Steinway" Grand Hammers

-Walnut Moldings - Long Magenta Underfelt - 17lb Top Felt

-Available in 20 and 26 Bass

Section	Bass	Tenor/Treble				Balance
# of hammers	20	8	6	6	4	7
Bore Angle	5.5°	10.5°	8°	6°	4°	2°
Pitch/Rake	0°	0°	0°	0°	0°	0°
Hole Dia.	.196"	.196"	.196"	.196"	.196"	.196"

Section	Bass	Tenor/Treble				Balance
# of hammers	26	7	6	7	7	7
Bore Angle	5.5°	9.5°	7°	4.5°	2°	0°
Pitch/Rake	0°	0°	0°	0°	0°	0°
Hole Dia.	.196"	.196"	.196"	.196"	.196"	.196"

No. 903-20J - 20 Bass, 1-13/16" striking distance - Per set

No. 903-26J - 26 Bass, 1-13/16" striking distance - Per set



UPRIGHT HAMMERS

UNBORED

ABEL "ROYAL BLUE" UPRIGHT HAMMERS - FULL SETS - BLUE UNDERFELT - HORNBEAM OR MAHOGANY MOLDINGS

Stock#	Weights	Width Bass/Treble	(APPROXIMATE OVERALL LENGTH)	
			Bass	Treble
A10	15	3/8" (9.5mm) 13/32" (10.5mm)	2.52" (64mm)	2.85" (72mm)
A37	15, 17	13/32" (10.5mm) 13/32" (10.5mm)	2.52" (64mm)	2.85" (72mm)
A3715	15, 17	13/32" (10.5mm) 13/32" (10.5mm)	2.65" (67mm)	2.95" (75mm)

-Please specify weight of felt and number of bass hammers when ordering.
 -If mahogany moldings are desired add a "M" at the end of the stock#.
 (Example: A37-15M)

IMADEGAWA UPRIGHT HAMMERS - FULL SETS - MAGENTA UNDERFELT - HORNBEAM MOLDINGS

Stock#	Weights	Width Bass/Treble	(APPROXIMATE OVERALL LENGTH)	
			Bass	Treble
HM10	15	3/8" (9.5mm) 13/32" (10.5mm)	2.52" (64mm)	2.85" (72mm)
HM37	15, 17	13/32" (10.5mm) 13/32" (10.5mm)	2.52" (64mm)	2.85" (72mm)
HM3715	15, 17	13/32" (10.5mm) 13/32" (10.5mm)	2.65" (67mm)	2.95" (75mm)

-Please specify weight of felt and number of bass hammers when ordering.

STANDARD BORE/STOCK UPRIGHT HAMMERS

DRILLING SPECIFICATIONS

Section	Bass	Tenor/Treble		
# of hammers	30	14	14	36
Bore Angle	14°	12°	6°	0°
Pitch/Rake	1°	1°	1°	1
Hole Dia.	7/32"	7/32"	7/32"	7/32"



ABEL

IMADEGAWA

-Hornbeam Moldings

-All upright hammers in 15 and 17 lb. are available in a 13/32" wide molding. 15 lb. uprights are also available with a 3/8" narrow base molding.

-All stock sets are available in the following striking distances: 2-3/8", 2-7/16" and 2-1/2" (This measurement is taken from the center of the bore hole to the top of the felt allowing for wear on # 88 treble hammer).

Abel-Standard bore/stock Upright Hammers

- 501-15GM2-3/8"** - 15 lb. Felt Hammer. Per Set
- 501-15GM2-7/16"** - 15 lb. Felt Hammer. Per Set
- 501-15GM2-1/2"** - 15 lb. Felt Hammer. Per Set
- 501-17GM2-3/8"** - 17 lb. Felt Hammer. Per Set
- 501-17GM2-7/16"** - 17 lb. Felt Hammer. Per Set
- 501-17GM2-1/2"** - 17 lb. Felt Hammer. Per Set

Imadegawa-Standard bore/stock Upright Hammers

- 501-15J2-3/8"** - 15 lb. Felt Hammer. Per Set
- 501-15J2-7/16"** - 15 lb. Felt Hammer. Per Set
- 501-15J2-1/2"** - 15 lb. Felt Hammer. Per Set
- 501-17J2-3/8"** - 17 lb. Felt Hammer. Per Set
- 501-17J2-7/16"** - 17 lb. Felt Hammer. Per Set
- 501-17J2-1/2"** - 17 lb. Felt Hammer. Per Set

