

TUNING HAMMERS

WATANABE EXTENSION TUNING HAMMER

Professional Watanabe extension tuning hammer features hexagon shaft for added strength and durability. Well-balanced rosewood handle. 11½" in length. Comes with standard #2 star tip and 1¼" 15° removable head. Accepts most other brands of heads and tips.

#TH-1E Professional Extension Tuning Hammer



#TH-1E/S Replacement Hexagonal Shaft

WATANABE STATIONARY TUNING HAMMER

Professional Watanabe tuning hammer with hardwood handle. 11½" in length. Comes with standard #2 star tip & 1¼" 15° removable head. Compatible with most other brands of heads and tips.

#TH-1 Professional Tuning Hammer



WATANABE HEADS & TIPS

Watanabe tuning hammer heads and tips provide a positive fit on the tuning pin.



1¼" long (not including threaded portion).
#HT-JM Medium 15° Head



1⅝" long (not including threaded portion).
#HT-JS Short 15° Head



1" long tips

#HT-J1 No. 1 Star Tip
#HT-J2 No. 2 Star Tip
#HT-J3 No. 3 Star Tip



2-1/2" long tips

#HT-J2X No. 2 Star Tip, Long
#HT-J3X No. 3 Star Tip, Long

TIP WRENCH

For easy removal or tightening of star tips on any tuning hammer. Hardened tool steel will not damage hammer tips. Features comfortable black plastic handle. Overall length 7¼".

#TW-2 Tip Wrench



TUNING HAMMERS

JAHN EXTENSION TUNING HAMMER

Uniquely designed head features a web-shaped arch that spans the inner angle of the head, providing unequalled strength & stability. Hardwood handle, hexagonal inner shaft. With 1 1/4" #2 star tip and choice of 15° or 5° head. Overall length 11". Exceptionally solid fit.



Arch design eliminates a threaded joint at the head, giving positive feedback to the tuner.

#TH-8 Jahn Extension Tuning Hammer

Kit includes TH-8 hammer with 1 1/4" long #2 star tip, 1 1/4" long #3 star tip, a 1 5/8" long #2 star tip, and tip wrench.

#TH-8K Jahn Extension Tuning Hammer Kit

JAHN HEADS & TIPS



1-1/4" long tips

#TH-8S2 No. 2 Star Tip
#TH-8S3 No. 3 Star Tip

(Lengths do not include threaded portion.)



1-5/8" long tips

#TH-8S2L No. 2 Star Tip
#TH-8S3L No. 3 Star Tip
#TH-8S2N No. 2 Narrow Wall



2-3/4" long tips

#TH-8S2X No. 2 Star Tip
#TH-8S3X No. 3 Star Tip



REVERSIBLE HEADS

Unique reversible arched heads provide increased strength and stability. Design eliminates a threaded joint at the head, giving positive feedback to the tuner. Both ends are threaded the same, so that the head can be reversed. This special feature allows you a choice of lengths. Measures 1 3/4" x 1".

#TH-8H5 5° Jahn Head
#TH-8H15 15° Jahn Head



#TH-8RS Replacement Hexagonal Shaft

TUNING HAMMERS



#TH-7B Jahn Ball-Handle Extension Tuning Hammer

JAHN BALL-HANDLE TUNING HAMMER

With 1/4" #2 star tip and choice of 15° or 5° head. Overall length 10 3/4".

Extendable, with hexagonal inner shaft. Ball-shaped hardwood handle offers more comfortable grip.

Kit includes TH-7B hammer with 1/4" long #2 star tip, 1/4" long #3 star tip, a 1 5/8" long #2 star tip, and tip wrench.

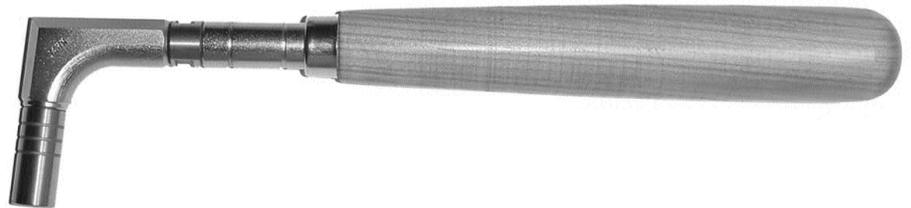
#TH-7BK Jahn Ball-Handle Extension Tuning Hammer Kit

JAHN LIGHTWEIGHT TUNING HAMMER

Lightweight, stationary hardwood handle. With 1/4" #2 star tip and choice of 15° or 5° head. 11" overall.

#TH-6

Jahn Lightweight Tuning Hammer



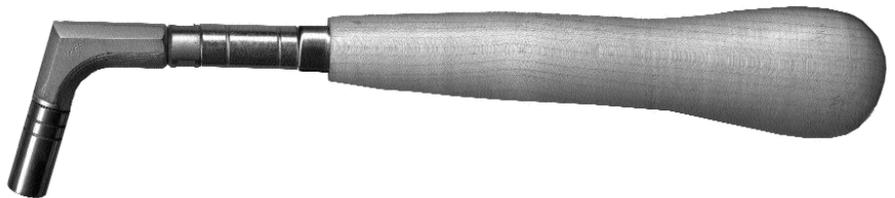
Kit includes TH-6 hammer with 1/4" long #2 star tip, 1/4" long #3 star tip, a 1 5/8" long #2 star tip, and tip wrench.

#TH-6K Jahn Lightweight Tuning Hammer Kit

JAHN PEAR-HANDLE TUNING HAMMER

Pear-shaped hardwood handle. Lightweight, stationary tuning hammer. With 1/4" #2 star tip and choice of 15° or 5° head. Overall length 11".

#TH-5P Jahn Pear-Handle Tuning Hammer



Kit includes TH-5P hammer with 1/4" long #2 star tip, 1/4" long #3 star tip, a 1 5/8" long #2 star tip, and tip wrench.

#TH-5PK Jahn Pear-Handle Tuning Hammer Kit



ECONOMY TUNING HAMMER

Recommended for occasional use by students or amateurs. Single piece removable #2 star head is 2 1/2" long. Hardwood handle.

#TH-3

Economy Tuning Hammer

#TH-3X

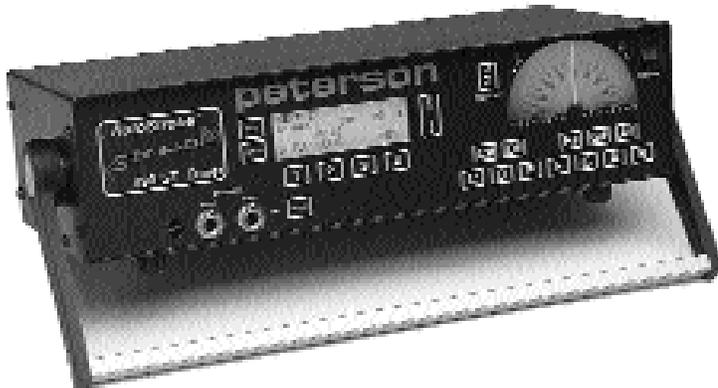
Replacement head/tip only

ELECTRONIC TUNERS

PETERSON AUTOSTROBE 490-ST STRETCH TUNER

- * Automatic note selection.
- * Shifted octave display for extreme ranges.
- * Accuracy to 1/10 of a cent.
- * Digital pitch offset control.
- * Adjustable Concert A in 1 Hz increments, from 350 Hz to 550 Hz.
- * Preset (10) & Custom Temperaments.
- * Preset (8) & Custom Stretch Tables (up to 31).
- * Optional Dual Footswitch for hands-free note and octave increments.
- * Built-in microphone.
- * 1/4" jack.
- * AC operation.
- * 13.4" x 3.5" x 6.375"
- * Weighs 8 lbs.
- * Carrying Case included.

#490-ST Peterson 490-ST Stretch Tuner



Peterson Tuners come with a 1-year parts and labor warranty.

The economical tuners below are suggested for use by amateurs, or for use on stringed instruments.

VIRTUAL STROBE TUNER

- Accurate to 1/10 cent.
- Automatic or manual selection.
- Selectable historical temperaments.
- Stores custom user settings.
- Weight 1½ lbs.
- Built-in microphone.
- Transposition to all keys.
- Adjustable Concert A reference in 0.5 Hz increments from 433 Hz to 477 Hz.
- 9-octave range of line-out reference tones.
- In and thru 1/4" jacks.
- Rubber covering for protection & better grip.
- Backlit display. (Light can be turned off.)
- 3 AA batteries or 3v AC adapter (included).
- Measures 7½" high x 4½" wide x 2½" deep.



#VS-1 Peterson Virtual Strobe Tuner

SEIKO ST-1100 TUNER



Selectable Auto-Tuning, Manual Tuning, & Sound Generation

- Tuning range A0 - B7.
- Wide concert pitch including Baroque 415 Hz, 438 - 446 Hz.
- 5-octave sound generation (C2 - B6).
- Lumi-Brite VU-meter.
- Built-in microphone.
- 9v battery, input/output jacks.
- 5½" x 3¾" x 1".

#ST-1100 Seiko ST-1100 Tuner

SEIKO ST-757 TUNER



Auto-Tuning, Manual Tuning

- Tuning range A0-C8.
- 435 Hz - 446 Hz.
- Analog/Digital combination.
- LCD display.
- Built-in microphone.
- 2 AAA batteries.
- Input/output jacks.
- 3¼" x 3" x 5/8".

#ST-757 Seiko ST-757 Tuner

ELECTRONIC TUNERS

SANDERSON ACCU-TUNER III

- * FAC 88-Note Stretch Calculator sets note & cents for entire piano automatically with just 3 measurements.
- * Auto-Stepping Filter Circuit steps automatically to the next note.
- * Double Octave Beat adjustment lets you create the perfect amount of stretch.
- * Pitch-Raise Calculator gives *accurate* pitch raises in 20 minutes or less.
- * Rotating LED display instantly shows tuning error to a resolution of ± 0.05 cents.
- * Store up to 198 of your own tunings, with serial numbers.
- * Memory that can be written and overwritten without limit.
- * Includes 165 generic tunings.
- * Tunings can be calculated with early music temperaments.
- * Sealed Long-life Keyboard.
- * Foot pedal steps up or down from note to note.
- * Battery or AC operation with charger.
- * Auto-shutdown.
- * PTG Tuning Exam program included.
- * Built-in MIDI ports.
- * Small: 6" wide, 3" high and 4½" deep.
- * Weighs only 1 lb.

Comes complete with battery charger, foot switch, & manual.

SATIII Sanderson Accu-Tuner III

Probably the single most important investment you can make in your service work.



Sanderson Accu-Tuner III

ACCESSORIES

Magnetic pickup attaches to the plate and plugs directly into MAG IN jack. Automatically disables the internal microphone. Essential when tuning in noisy environment.

MAG-P **Magnetic Pickup**

Use instead of the footswitch to change notes. Attaches easily to tuning hammer with Velcro. Includes coil cord.

TH-SW **Tuning Hammer Thumbswitch**

Sanderson Accu-Tuners are covered by a 1-year parts & labor warranty.

SANDERSON ACCU-TUNER II

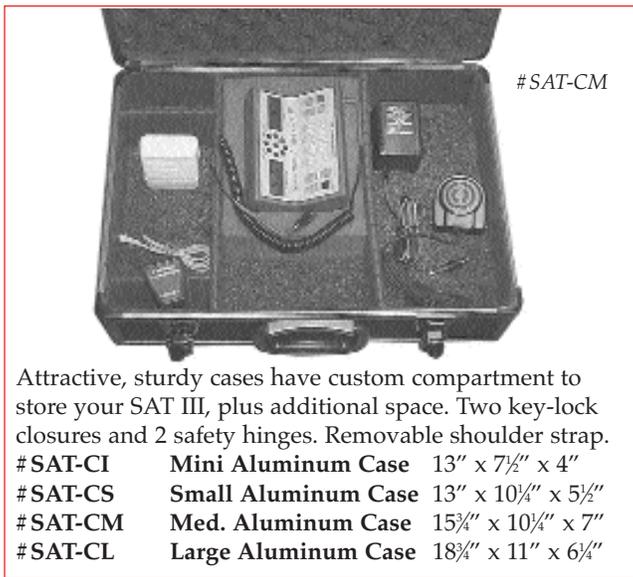
FAC 88-Note Stretch Calculator. Includes 60 memories, expandable to 206. Comes with 20 generic tunings. Includes battery charger, foot switch, & manual. Built-in MIDI. Measures 7½" wide x 4" high x 5" deep, and weighs 2 lbs.

SATII Sanderson Accu-Tuner II

SANDERSON ACCU-TUNER

FAC 88-Note Stretch Calculator. Includes 40 memories. Comes with 20 generic tunings. Battery charger, foot switch, and manual. Does not include MIDI. Measures 7½" wide x 4" high x 5" deep, and weighs 2 lbs.

SAT Sanderson Accu-Tuner



Attractive, sturdy cases have custom compartment to store your SAT III, plus additional space. Two key-lock closures and 2 safety hinges. Removable shoulder strap.

- # SAT-CI **Mini Aluminum Case** 13" x 7½" x 4"
- # SAT-CS **Small Aluminum Case** 13" x 10¼" x 5½"
- # SAT-CM **Med. Aluminum Case** 15¾" x 10¼" x 7"
- # SAT-CL **Large Aluminum Case** 18¾" x 11" x 6¼"

TUNING FORKS

SANDERSON ACCU-FORK II

Like 4 tuning forks in one! The SAF II is guaranteed accurate at room temperature to within 1/2 of 1 cent at A-440.

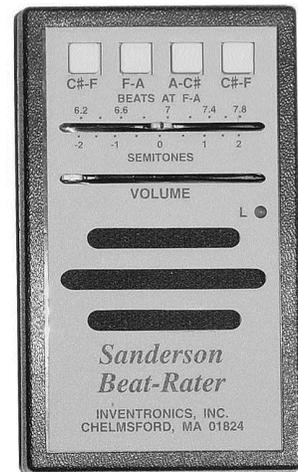
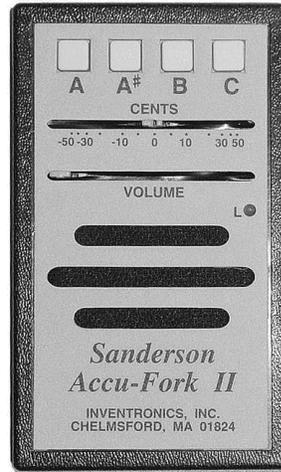
Compact, lightweight. Produces pleasant overtone-rich tone on 4 notes: A4, A#4, B4, & C5. Features a 50-cents flat or sharp scale to allow measuring pitch of a piano. Perfect for pitch raising. (A touch-scale is available for sight-impaired technicians.)

#SAFII Sanderson Accu-Fork II

SANDERSON BEAT RATER

Clicks beat rates for all major thirds in temperament region: from B2-D#3 up to D#4-G4. Four pushbuttons set beats of 4 contiguous major thirds. Beat rates can be adjusted. 4 1/2" x 2 5/8" x 15/16".

#SBR Sanderson Beat Rater

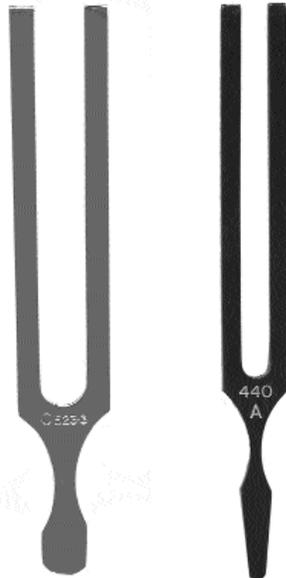


John Walker TUNING FORKS Sheffield Steel

HEAVY DUTY POLISHED CHROME TUNING FORKS

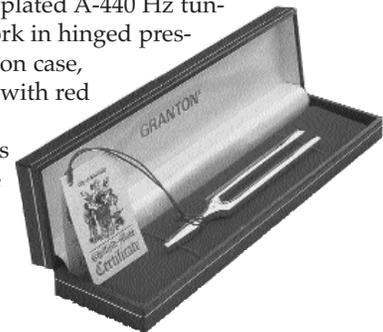
Premium quality Sheffield steel tuning fork with polished chrome finish. Heavy duty construction provides a clearer timbre, more sustained tone, and less variance. 5 1/2" overall. Includes plastic case.

#TF-A440HD A-440 Hz Heavy Fork
#TF-C523HD C-523.3 Hz Heavy Fork



GOLD PLATED A FORK

Gold-plated A-440 Hz tuning fork in hinged presentation case, lined with red felt. Makes a nice gift.



#TF-A440GP Gold Plated A Fork

BLUED TUNING FORKS

Standard 5 1/2" blued steel tuning fork in plastic case.

#TF-A440 A-440 Hz Blued Fork
#TF-A442 A-442 Hz Blued Fork
#TF-C523 C-523.3 Hz Blued Fork

CHROMATIC SET OF 13 FORKS

Range from C-261.6 Hz. to C-523.3 Hz, by half-steps. Includes hinged presentation case with formed interior.

#TF-13S Chromatic Set of 13 Forks

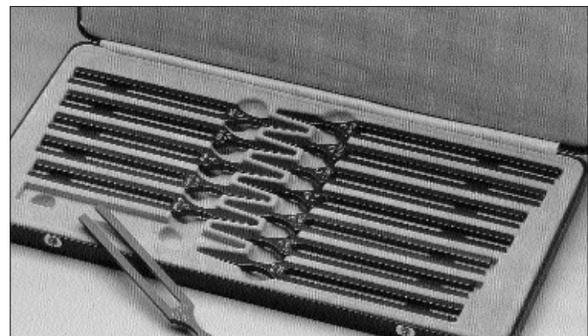


SET of 4 A-FORKS

Set of 4 Blued A-Forks in a black vinyl case. Includes these A's:

- A-415 Hz (Baroque)
- A-435 Hz. (Continental)
- A-440 Hz (Standard)
- A-444 Hz. (Medium)

#TF-4XA Set of 4 A Forks
(Not sold individually.)



TEMPERAMENT STRIP

High quality felt temperament strip. 1" x 50".

#TS-1 Temperament Strip



RUBBER MUTES

Black rubber wedges.

#MR-1M Rubber Mute
4 1/4" x 1/2"

#MR-1L Rubber Mute
5 3/4" x 1/2"

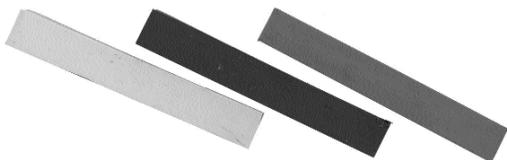
#MR-1S Rubber Mute
2 3/4" x 3/8"



COLORED RUBBER MUTES

Rubber wedges in bright colors – easy to see! Colors include yellow, blue, and red, and will be assorted unless otherwise specified. 4 1/4" x 1/2".

#MR-1C Colored Rubber Mute



RUBBER MUTE WITH WIRE



Black rubber mutes with 7" long wire handles that make tuning uprights easier. Square wedge measures approximately 2 3/4" x 3/8".

#MR-1W Rubber Mute with Wire (Wedge)

ROUND RUBBER MUTE WITH WIRE

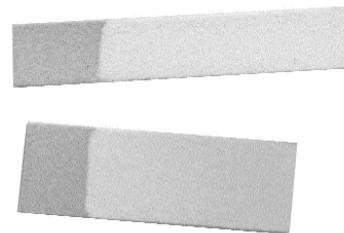


Special round rubber mute formed around 7" wire handle. Slim round shape reduces bulkiness to allow for easier fit in tight places. Rubber mute portion is approximately 3" x 3/8".

#MR-1R Round Rubber Mute with Wire

FELT WEDGES

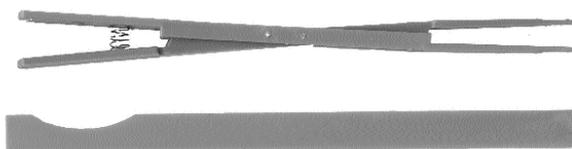
Very effective felt wedge mutes, especially useful in bass section where rubber mutes can sometimes discolor copper windings.



#MF-2M Felt Mute 4 3/8" x 3/4"

#MF-2L Felt Mute 3 3/4" x 1 1/4"

PAPPS SPRING MUTE



For fast treble muting. Special spring design gives quick contact and release. Long-lasting molded nylon, about 8" long. Comes with protective plastic case.

#MP-1 Papps Spring Mute

WOODEN MUTE

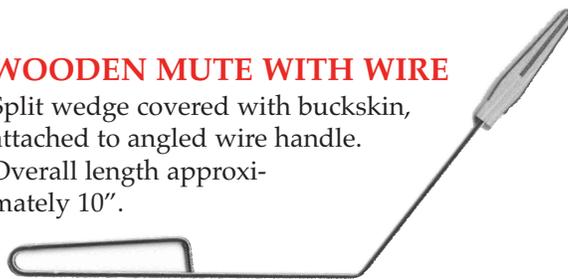


Very effective wood stick mute with buckskin. Double-ended with one split wedge and one regular wedge. 9" in length.

#MJ-2 Double-Ended Wooden Mute

WOODEN MUTE WITH WIRE

Split wedge covered with buckskin, attached to angled wire handle. Overall length approximately 10".



#MJ-1 Wooden Mute with Wire

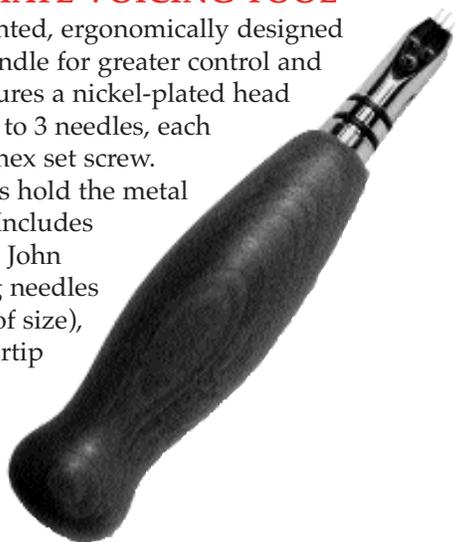
VOICING TOOLS

The ULTIMATE VOICING TOOL

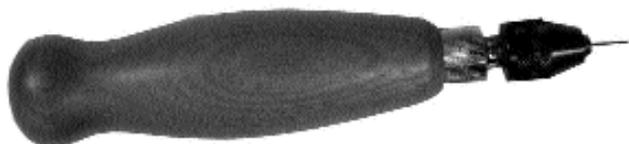
Slightly weighted, ergonomically designed hardwood handle for greater control and comfort. Features a nickel-plated head that holds up to 3 needles, each with its own hex set screw.

Rubber inserts hold the metal cap in place. Includes package of 25 John James voicing needles (your choice of size), and one fingertip rotation hex screwdriver for a quick change of needles. A beautifully designed German-made tool.

#VT-3W The Ultimate Voicing Tool



SINGLE-NEEDLE ULTIMATE VOICER



Same ergonomically crafted handle as above, with precision-machined collet. This tool is actually a heavy duty pin vise that holds one voicing needle or other small tool (i.e. reamers, files). Design allows for very quick change of needles.

#VT-1P Single-Needle Ultimate Voicer

UPRIGHT VOICING TOOL

A convenient tool for voicing upright hammers without removing the action. Holds up to 3 needles. Includes needle cover and hex wrench.

#JVT-2 Upright Voicing Tool



HART VOICING TOOL



Through-the-string grand voicing tool for fine voicing of individual hammers. This slender 9" brass tool allows easy access to hammers — without pulling out the action! Single needle is held by set screw, and is replaceable. Includes hex wrench.

#HVT Hart Single-Needle Voicing Tool

#HVT/W Replacement Wrench

#HVT/S Replacement Set Screw

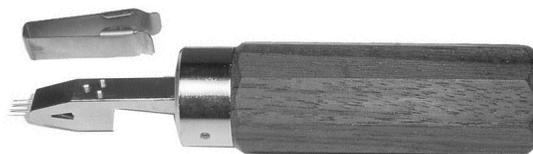
SMALL VOICING TOOL



Petite 5¼" voicing tool with hardwood handle and solid brass head. Holds up to 3 replaceable needles. Comes with hex wrench. High quality.

#VT-600 Small Voicing Tool

HEAVY DUTY VOICING TOOL

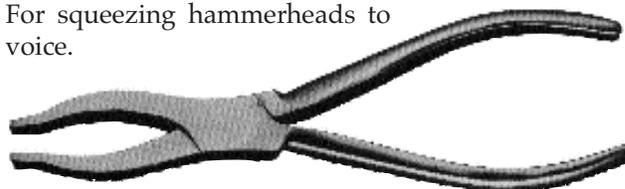


Factory style Japanese voicing tool. Holds up to 3 needles, held by set screws. Hardwood handle and protective aluminum cover. 6" overall.

#JVT-1 Factory Voicing Tool

HAMMER VOICING PLIERS

For squeezing hammerheads to voice.



7" in length. High-polish nickel-plated finish.

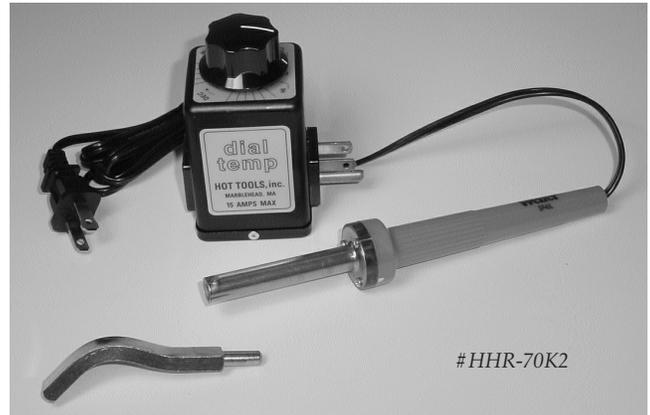
#JHP-1 Hammer Voicing Pliers

VOICING TOOLS

HAMMER HEAD IRON

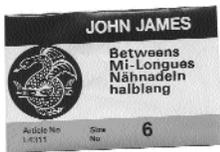
Shaped brass head for ironing hammerheads to a smoother surface. 1/4" shank is part of one-piece construction. Machined from solid brass and die formed for better heat transfer. Fits into Weller SP-40 soldering iron with set screw. Available separately or in kits below.

- # HHR-70 Brass Hammer Iron only
- # HHR-70K1 Brass Iron, Soldering Iron, & In-Line Control
- # HHR-70K2 Brass Iron, Soldering Iron, & Dial-Temp
- # SP-40 Weller Soldering Iron only
- # HDL-1 Dial-Temp Control only



VOICING NEEDLES

John James voicing needles are highest quality English needles, made of nickel-plated steel. Known worldwide in the textile industry for their exceptional quality, we strongly recommend these needles for their durability & fine finish.



Glovers needles are also available, with their distinctive triangular-shaped point. Used widely for sewing leather, many technicians find the triangular point penetrates hard hammerheads more easily.

Packages of 25 needles.

- # VN-5 #5 Voicing Needles (.030")
- # VN-6 #6 Voicing Needles (.027")
- # VN-5G #5 Glovers Needles (.030")
- # VN-6G #6 Glovers Needles (.027")

HAMMER SOFTENER

Apply to hammerheads to soften felt and create a more mellow tone. In 8 oz. applicator bottle. (Also used to ease (size) center pin bushings.)

- # THS Tek Hammer Softener



HAMMER HARDENING PELLETS

Acrylic pellets to mix with acetone. Dries fast. Half-pound makes about forty 8 oz. bottles. Easily needed through if needed. Also available pre-mixed.

- # HHP-1 Hammer Hardener Pellets

HAMMER HARDENING SOLUTION

Same as above, but pre-mixed in an 8 oz. flip-top bottle.

- # MAX HammerMax Hardening Solution

VOICING RESTS

Small, curved hardwood voicing rest with felt inlay, for safe voicing of hammers. 2" w x 3" long.

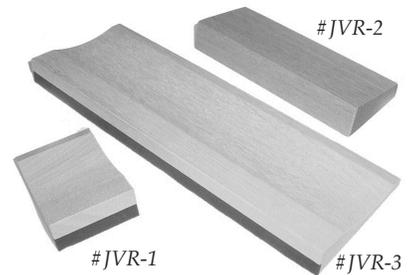
- # JVR-1 Small Voicing Rest

5 1/2" x 2 1/4" voicing rest.

- # JVR-2 Medium Voicing Rest

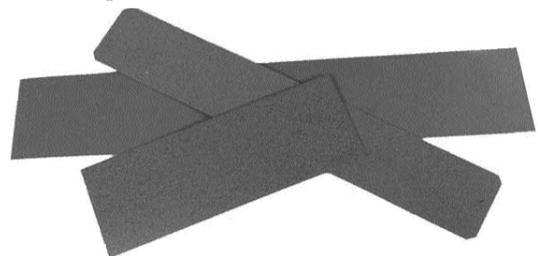
Large, shaped hardwood voicing rest with felt inlay, for supporting hammers and shanks during voicing. 9 3/4" x 3".

- # JVR-3 Large Voicing Rest



PERMAGRIT SANDING PADDLES

Ideal for hammer filing, these sanding paddles feature tungsten carbide grit brazed to flat steel. Virtually won't wear out. For hammers, wood, plastic, etc.



RIGID STEEL 9" x 1 1/2"

- # F-100 60-grit one end, 120-grit other end

- # F-101 120-grit only

FLEXIBLE STEEL 11" x 2"

- # FXT-103 Flexible 120-grit

- # FXT-104 Flexible 60-grit

FLEXIBLE STEEL 5 1/2" x 2"

- # FXT-106 Flexible 120-grit

- # FXT-107 Flexible 60-grit



REGULATING TOOLS

High quality, plated tools fit snugly into combination handles. Great for tool kits where space is limited.

ROSEWOOD COMBINATION HANDLE



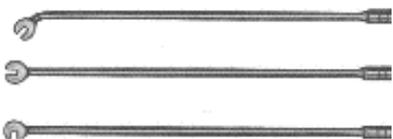
5" handle of rosewood snugly holds all combination style tools.
#JCH-1 Rosewood Handle

SPOON BENDER



The best tool for the job. 6" long.
#JCH-15 Spoon Bender

DAMPER WIRE REGULATORS



45°, 90°, or no angle. 7¼" in length.
#JCH-18A 90° angle
#JCH-18B No angle
#JCH-18C 45° angle

OFFSET DAMPER TOOL



For bending upright damper wires side to side. 7¼".
#JCH-20 Offset Damper Tool

JACK SCREW DRIVER



5/32" opening for turning grand flat jack screw heads. 6½".
#JCH-19 Jack Screw Driver

BACKCHECK WIRE REGULATOR



5½" tool for bending backcheck or bridle wires in any direction.
#JCH-13 Backcheck Tool

MULTI-WIRE BENDER



Unique 7¼" tool with multiple slots for bending wires.
#JCH-35 Multi-Wire Bender

SPOON BENDING TOOL



Tool has 2 bends in shaft, for access around wippen without removing action. 6" overall.
#JCH-34 Spoon Bending Tool

DROP SCREW DRIVER



Recessed opening fits over drop screw heads for easy turning. Overall length 9".
#JCH-32 Drop Screw Driver

SLOTTED SCREWDRIVERS



1/8" blade; 6" long.
#JCH-14 Small Screwdriver
1/4" blade; 8" long.
#JCH-16 Large Screwdriver

ACTION SCREWDRIVERS



3/8" blade; 4½" long.
#JCH-21 Short Action Driver
3/8" blade; 8" long.
#JCH-22 Long Action Driver

PHILLIPS SCREWDRIVER



8¼" overall length.
#JCH-37 Phillips Screwdriver

FLANGE SPACER



11/16" blade for moving action flanges, especially upright hammer butt or wip flanges. 9¼" in length.
#JCH-33 Flange Spacer

REGULATING TOOLS

CAPSTAN REGULATOR



Slim design. 7½" overall.
#JCH-17 Capstan Regulator

LET-OFF REGULATORS



Opening 3/8" wide. 7¼".
#JCH-12 Let-Off Tool

Opening 5/16" wide. 9¾".
#JCH-31 Let-Off Tool

LET-OFF REGULATOR



For easy finding and regulating of let-off eye screws, this tool has oval opening that cross at 90°. 7¾" long.
#JCH-24 Let-Off Tool

OFFSET KEY SPACER

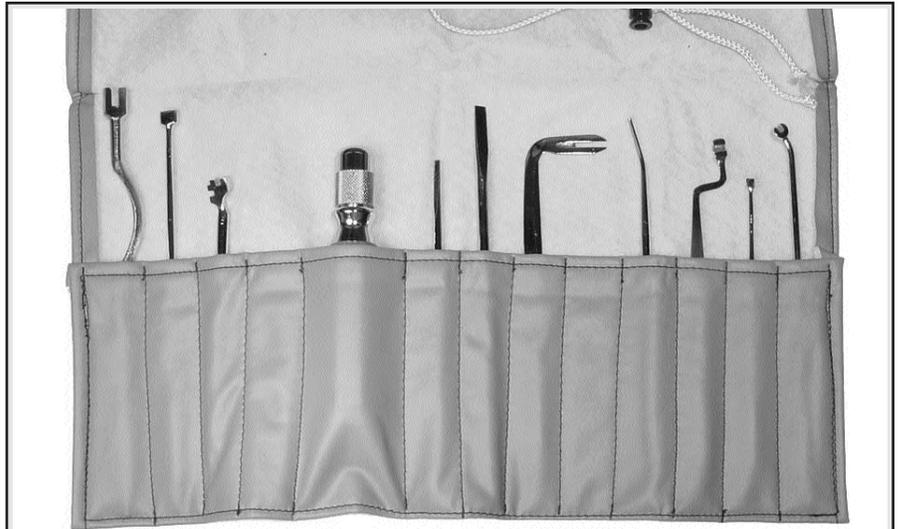


Offset specially designed to reach past front rail pins for easy access to balance rail pins.
#JCH-11 Offset Key Spacer

BALANCE HOLE EASER



Triangular head for easing balance rail holes. Length is 3¼".
#JCH-23 Balance Hole Easer



COMBINATION HANDLE REGULATING KIT

Regulating Kit includes one each:

#JCH-11 Key Spacer #JCH-12 Let-Off Tool #JCH-13 Backcheck Tool
#JCH-14 Small Driver #JCH-16 Large Driver #JCH-15 Spoon Bender
#JCH-17 Capstan Tool #JCH-34 Damper Tool #JCH-19 Jack Screwdriver
#JCH-18C Damper Tool #JCH-1 Combo Handle #CSE-160 Tool Roll

#JRK-12 Combination Handle Regulating Tool Kit

#CSE-160 Vinyl Tool Roll only (without tools)

BRIDGE WIRE POSITIONER



Slotted end holds music wire so it can be more easily manipulated between bridge pins. About 5" long.
#JCH-40 Bridge Wire Positioner

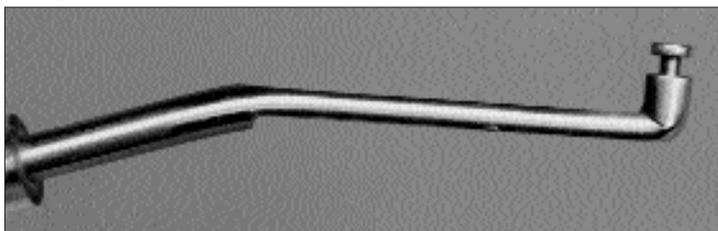
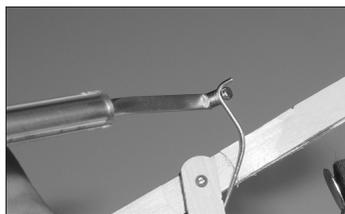
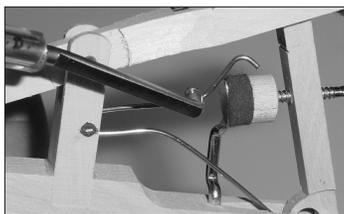
UPRIGHT LID PROP

For holding upright lids open during servicing.

#ULP-1 Upright Lid Prop



REGULATING TOOLS



HART SPRING TOOL

The Hart Spring Tool is designed specifically for regulating tension of the butterfly type spring. The circular notch allows use from any position, and cannot kink the spring. Absolutely the best spring regulation tool made. Works great on hammer butt and damper lever springs. Well-crafted in stainless steel for a lifetime of use. Measures 6½" in length.

#HST Hart Spring Tool

UPRIGHT SPRING TOOL



For adjusting action springs. Long and slim for easy access in upright actions. 11" long.

#JSA-1 Upright Spring Tool

ACTION SCREWDRIVER



Mounted on its own wooden handle for more positive driving. 1/4" blade for use on action screws. 9¾" long.

#JAD-1 Action Screw Driver

CAPSTAN WRENCH

Features angled handle for easier access to capstan screws. 1/4" opening. Black oxide finish. Approximately 6¾" in length.

#JCW-1 Capstan Wrench



SQUARE CAPSTAN REGULATOR



Fits most square-shouldered capstan screws. 8" long.

#SCR-1 Square Capstan Regulator

LONG CAPSTAN REGULATOR



With lightweight wooden handle and long shaft. 9¾" in length.

#JCR-1 Long Capstan Regulator

GRAND CAPSTAN REGULATOR



Especially for grands. Handle is close to tip for better control when reach is not a factor. 6" long.

#JCR-2 Grand Capstan Regulator

CAPSTAN REGULATOR



Medium length of 7¼". With wooden handle.

#JCR-3 Capstan Regulator

STEINWAY CAPSTAN REGULATOR



Flat steel, double-ended. For Steinways. 7½".

#SCR-2 Steinway Capstan Regulator

REGULATING TOOLS

LET-OFF REGULATOR



Features unique oval openings that cross at 90°, for easy regulation of let-off eye screws.

#JLR-1 Let-Off Regulator

GRAND REGULATING BUTTON PLIERS



Jaws are shaped to quickly & securely grasp regulating buttons or dowel capstans.

#JBP-1 Grand Regulating Button Pliers

UPRIGHT JACK SCREWDRIVER



Jack screw driver with lightweight wooden handle. 7".

#JJS-1 Jack Screwdriver

DOUBLE DROP SCREWDRIVER



For grand drop & jack screws. Features 2 ends: one for small spade heads, one for slotted screw heads. 7¼".

#JDD-3 Double Drop Screwdriver

DROP SCREW TOOL



Grand drop screw regulator for slotted screws. Round casing prevents slippage. 5½" long.

#DS-62 Drop Screw Tool

GRAND DROP SCREWDRIVER



Drop screw driver with shaped wooden handle.

#JDS-2 Grand Drop Screwdriver

PRECISION LET-OFF TOOL



Let-off tool for Steinway and all other grands. Precision-machined for perfect eye-screw fit. Measures 5½" long. Two profiles (one end deep, one shallow) for ease of use. An essential, very high quality tool.

#LFT-4 Double End Let-Off Tool

LET-OFF RATCHET *Also works on Damp-Chaser screws!*

For Steinway & most grands or uprights with let-off eye-screws. Smooth ratchet action allows quick adjustment in either direction. 3¾" in length.



#CM-13 Let-Off Ratchet

Also available in kit with 2 slotted and 2 Phillips tips.

#CM-13K Ratchet Kit with 4 Screwdriver Tips (1/4", 3/8", No. 1 & 2 Phillips)



MAGNETIC STRIPS

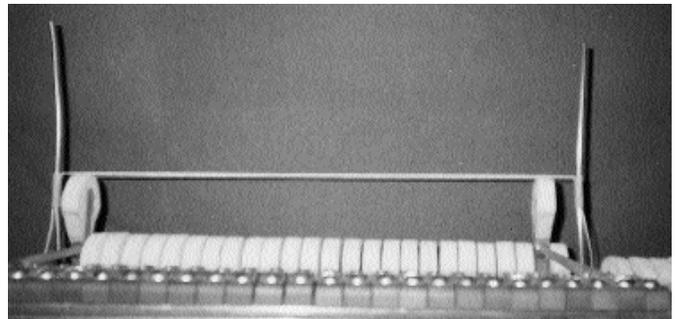
For setting vertical or grand let-off. 36" long strips stick to plain music wire. Two thicknesses.

#MAG8 1/8" Magnetic Strip

#MAG16 1/16" Magnetic Strip



TAUTLINE TOOL



Clever fixture for setting grand let-off on the bench. Quickly mounts to action bracket screws. Easily adjusted to any height. Works on all grands.

#TLRG Tautline Tool

TOOLS

ELBOW SPINNER



Fits easily into a power drill for quick removal and installation of elbows. Secure the lifter wire with pliers or vise, and place the elbow spinner slot onto the elbow. A real time-saver.

#EL-100 Elbow Spinner

3-in-1 GAUGE



Plastic gauge for quickly measuring:

- * Let-off 1/8",
- * Hammer Blow Distance 1 7/8",
- * Backcheck Distance 5/8".

#HDG-31 3-in-1 Gauge

SCREW STARTER/MAGNET



Combination screw starter and magnetic retriever. Simply twist the bit and screw is held in place. After starting, screw is released and bit is reset. Magnetic tip retrieval at opposite end. 9" long, pen-sized. Made of lightweight aluminum.

#SSR-1 Slotted Screw Starter

#SSR-2 Phillips Screw Starter

CHROME VANADIUM TUNING HAMMER SCREWDRIVERS



Screwdriver blades for tightening plate screws. Made from hardened tool steel to ANSI specifications. Fits in tuning hammer tip for convenience and increased leverage. 4 1/8" long.

#SD-S Slotted Screwdriver

#SD-P Phillips Screwdriver

GRAM TENSION GAUGES

#31-003-7



CORREX TENSION GAUGES

Heavy duty Correx gauges accurately measure gram resistance. Features memory pointer that holds the highest reading.

Two models: 2-15 grams in 1/2-gram increments for action center repinning, and 10-100 grams in 2-gram increments for grand underlevers and upright jack springs. Plastic case included.

#31-003-7 Correx 15-gram Gauge

#31-006-0 Correx 100-gram Gauge

NEUSES TENSION GAUGE

Measures up to 10 grams of tension in 1-gram increments. Includes arm for setting highest tolerance. Built-in guard folds up for protection, when not in use.

#TG-10 Neuses 10-gram Gauge



#TG-10

6-PIECE PRECISION SCREWDRIVER SET

Consists of 6 ergonomically shaped, lightweight screwdrivers. Shafts are molybdenum steel, hardened and chrome-plated for strength. Precision-ground tips allow sure fit and control. Contoured, non-roll, swivel handles fit comfortably in the hand, and allow fingertip rotation.

Includes 4 slotted head sizes (1.5, 2, 2.5, 3mm) and 2 phillips sizes (#00, #0). Hard plastic storage case.

#SD-850 6-pc. Precision Screwdriver Set



ACTION CENTER TOOLS

STRAIGHT REAMERS

Straight (not tapered) reamers with 4 cutting edges. High speed steel. Use for more precise action center reaming, as well as for teflon bushings. Precision ground tools. Use for best professional results.

- #RM-S48 .0480" Reamer (#19)
- #RM-S49 .0490" Reamer (#19½)
- #RM-S50 .0500" Reamer (#20)
- #RM-S51 .0510" Reamer (#20½)
- #RM-S52 .0520" Reamer (#21)
- #RM-S53 .0530" Reamer (#21½)
- #RM-S54 .0540" Reamer (#22)
- #RM-S55 .0550" Reamer (#22½)



One each of all 8 straight reamers.

- #RM-S8 Straight Reamer Set

TAPERED REAMERS & BURNISHERS



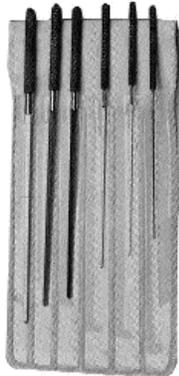
Tapered action center reamers & burnishers with small knurled handles. (Pin vise not needed.)

- #RM-2 Tapered Reamer with Knurled Handle
- #RM-2B Tapered Burnisher with Knurled Handle



Tapered reamer for action center bushings. Use with pin vise.

- #RM-1 Tapered Action Center Reamer



Set of 6 knurled handle tapered reamers in a vinyl pouch. Sizes range from .017" to .095"

- #RM-6R Set of 6 Tapered Reamers (with knurled handles)



Tapered rat-tail file for action centers. Use with pin vise.

- #RM-F1 Rat-Tail File

#37 (.104") drill for cleaning action centers before bushing. Use with pin vise.

- #137 #37 Drill



DOUBLE END PIN VISE



Each end has reversible collet which adjusts to desired size. Capacity 0 to 1/4". Hex heads prevent rolling.

- #PV-2 Double End Pin Vise

HEAVY DUTY PIN VISE *Works as single-needle voicer!*



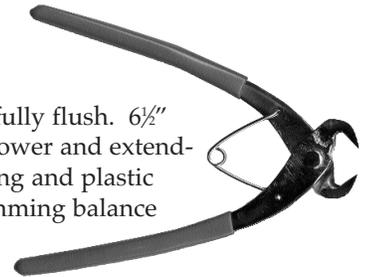
Heavy duty collet with 1/4" capacity. For reamers, files, small drills, small tools. Try it as a single-needle voicing tool! 6" long with 1" diameter plastic handle.

- #PV-93 Heavy Duty Pin Vise

CENTER PIN NIPPER

Center pin nipper cuts fully flush. 6½" length provides more power and extended comfort. Return spring and plastic grips. (Excellent for trimming balance rail bushings.)

- #JNP-1 Center Pin Nipper



CENTER PIN NIPPER

High quality German center pin nipper is 4½" in length. Cuts fully flush. Return spring & plastic grips. (Great for trimming balance rail bushings.)

- #NP-4 Center Pin Nipper



CENTER PIN TOOL

One side of this spring-loaded tool for inserting new center pins, the other for removing old ones.

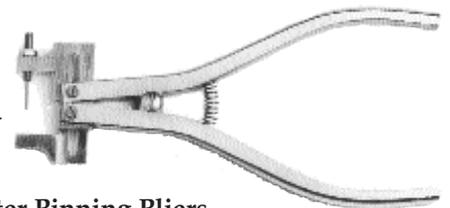
- #CPT-1 Center Pin Tool
- #CPT-1/R Replacement Punch



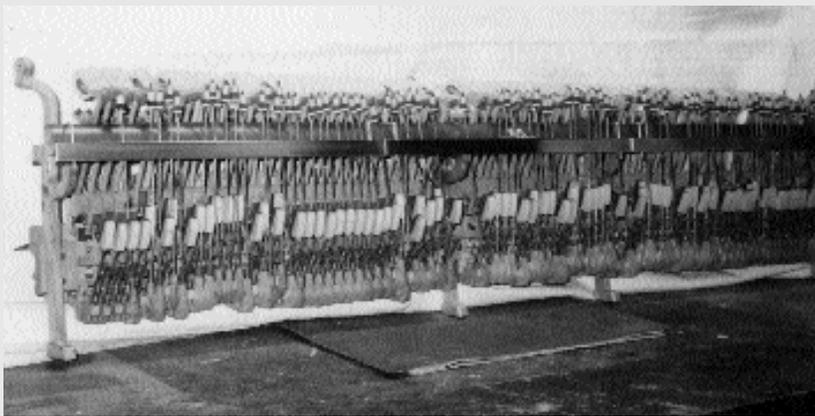
CENTER PINNING PLIERS

High quality, parallel-action pliers for punching center pins. 7" long.

- #CPT-2 Center Pinning Pliers
- #CPT-2/R Replacement Punch



ACTION SUPPORTS



DROP ACTION SUPPORT KIT

For spinet pianos. Keep lifter wires and regulation buttons under control while removing the action. Three aluminum sections with clips at both ends, will cover entire length of hammer rail. Sections are about 18" in length.

#DLW-3 Drop Action Lifter Wire Support Kit

VERTICAL ACTION TRANSPORT BRACES



Braces for transporting vertical piano actions safely. Also for supporting vertical actions on the workbench. Only 8 1/4" long, the pair of braces easily fits in your tool case. Anodized aluminum with rugged hardware. Can even be used for drop actions.

#TBC-2 Vertical Action Transport Braces

GRAND ACTION SUPPORT KIT



Allows technician to slide the action out during regulation. Kit screws into the underside of any grand keybed. The hardwood arm unfolds and extends to create a stable support for the action.

#JGK-1 Grand Action Support Kit



ACTION CRADLE

For all vertical actions. Locks into any position. Heavy duty, all metal construction. Interchangeable leg & sled assemblies for solid support.

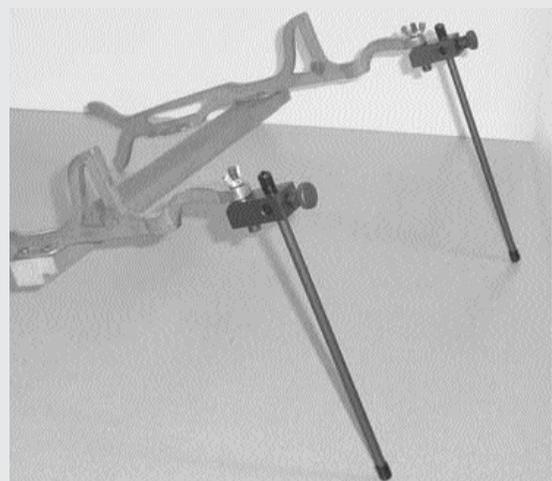
#ACC-1 Action Cradle

WORKBENCH ACTION SUPPORTS

Supporting upright actions for repairs is always a difficult task. These action supports allow you to repair upright actions on any flat surface without using cumbersome action cradles.

Great for your workbench, a *life saver* for in-home repairs when you must pull the action. A simple turn of the lock nut allows the legs to slide through so you can quickly flip the action to the other side. Finely machined anodized aluminum. Breaks down into a small tube to fit in your tool case.

#WBS-2 Workbench Action Supports





Measures 11" x 5" x 13". Weighs 3½ lbs.

SPECIAL EDITION CASE

Small, compact, great for travel. Soft black vinyl has feel of real leather. Removable, adjustable, padded shoulder strap. Front side features 5 small pockets for business cards, etc. This side unfolds to reveal middle section with bigger pouches for pliers, etc., and right-hand section which holds a built-in toll roll! Back side holds 1 long & 3 short moveable, padded dividers that attach with velcro. This side can accommodate a variety of large or small tools, and supplies. Full size pocket on back of case.

CSE-180 Special Edition Case



*Front side: Built-in tool roll.
Back side: Moveable dividers.*



TECHNICIAN'S ZIPPER CASE

Soft-side case of black Cordura Plus canvas is lightweight, yet very durable. Measures 17" x 12½" x 6". Features 3 outside velcro storage pockets for documents or supplies. Inside has 2 separate zippered sections: one for tools, the other for documents & supplies. Removable shoulder strap. Weighs about 5½ lbs.

CSE-13 Technician's Zipper Case

Tools are not included with tool cases shown on D-17 & D-18.

CSE-13



CSE-157



DOUBLE ZIPPER CASE

Soft-side case of black canvas features 2 separate zippered sections for small & large tools. Includes 3 built-in clear plastic pouches for miscellaneous supplies. 17" x 12½" x 6". Three outside storage pouches. Detachable shoulder strap. Weighs about 5 lbs.

CSE-157 Double Zipper Tool Case

CSE-153



CSE-7482



SINGLE ZIPPER CASE

Smaller soft-side case of black canvas with single section for tuning & regulation tools. Includes 1 built-in clear plastic pouch for supplies. Measures 15" x 12" x 4½". Three outside pockets. Weighs about 2½ lbs.

CSE-153 Single Zipper Tool Case

DOUBLE COMPARTMENT CASE

Attractive satchel-style case molded from rugged copolymer resins, features comfortable handle, double positive latches, pinned hinges and translucent cover.

DOUBLE CASE: Flip it over to find an exact duplicate case. MOVEABLE DIVIDERS: Make 9 to 24 compartments on each side. 15½" x 11¼" x 5".

CSE-7482 Double Compartment Case

CANTILEVER BOX

Ideal for organizing tools and small parts. Durable, lightweight, scratch-resistant. Tough recessed handles. Positive latches. 18½" x 10¾" x 10¾".

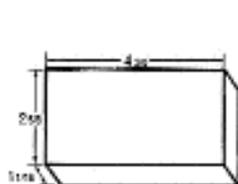
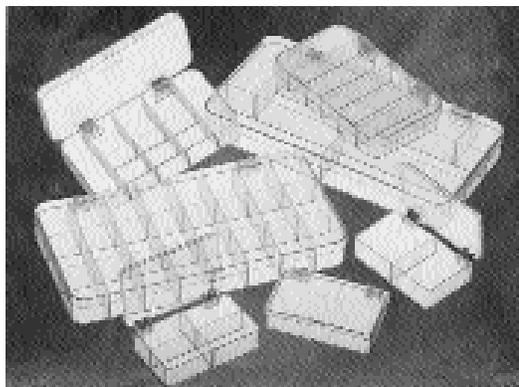
CSE-1962 Cantilever Box

CSE-1962

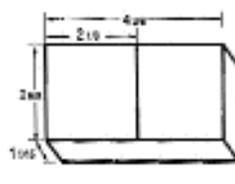


STORAGE & CASES

MIGHTY-TUFF™ PLASTIC STORAGE BOXES



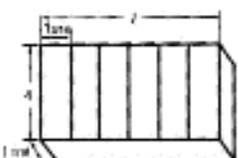
1-compartment
CSE-C1P



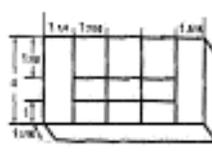
2-compartment
CSE-C2P



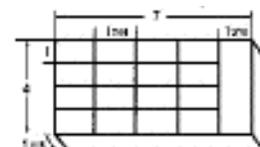
4-compartment
CSE-C4P



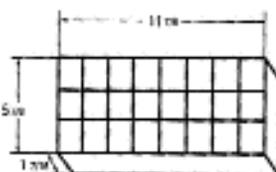
6-compartment
CSE-C6P



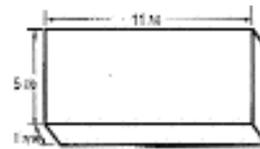
11-compartment
CSE-C11P



17-compartment
CSE-C17P



24-compartment
CSE-C24P



Large 1-compartment
CSE-L1P

The sturdiest transparent storage boxes available. Made with transparent cellulose propionate, these boxes rate higher than styrene, K-resin, or any polypropylene on impact resistance, durability, and solvent resistance. Moreover, they incorporate a metal hinge to ensure years of dependable use.

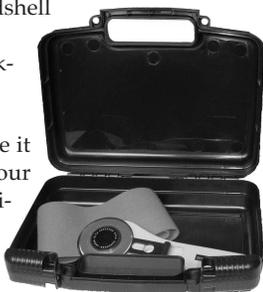
HANDY TOOL ROLL



13 pockets for combination handle & multiple tools. Durable vinyl, soft fleece lining. Adjustable tie. Colors will vary. 9" x 15".
CSE-160 Handy Tool Roll

SMALL TOOL CASES

Durable, hardshell black plastic case with lockable handle (padlock not included). Use it to organize your tools into various kits. 10" x 8" x 3" and 14" x 10" x 3 1/2".



CSE-6775 10" Tool Case
CSE-6780 14" Tool Case

PARTS STATION™ STORAGE CABINET

Stack or wall-mount. 20 clear drawers with drawer-stops. 11 1/2" h x 12" w x 6" deep.



CSE-C20P Storage Cabinet

UTILITY BOX WITH TRAY



Dentproof, scratch resistant, rugged plastic tool box with removable tray. Brass hinge pins & latch pins. 16 1/2" x 8 1/4" x 7 1/8".
CSE-1782 Utility Box with Tray

FOLD-OUT TOOL CASE



Special 3-panel hinged tool pallet in lid plus additional pallet in bottom. Tough, black polyethylene. 17 1/4" x 12 3/8" x 5 3/8".
CSE-100MB Fold-Out Tool Case

UTILITY BENCH BOX

Spacious 20" x 8" x 4" top. Two securable drawers. Dividers included for customization. 2-tone gray.



CSE-2182 Utility Box w/ Drawers

RETRIEVING TOOLS

FLEX-LITE INSPECTOR

Specially designed inspection light provides illumination in small openings. Features one of the smallest cable & bulb combinations available. The pre-focused bulb and cable can be inserted into an aperture as small as 9/32". Approximately 18" in length. Gold anodized finish.

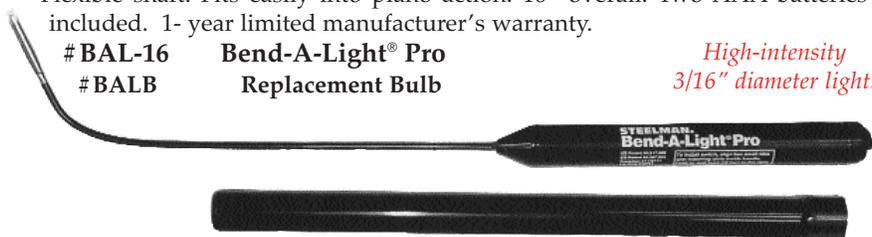


- Heavy gauge solid copper core Flex-Cable.
- Sealed push button switch.
- Bright uniform beam.
- Touch pocket clip.
- Anodized aircraft aluminum construction.
- Powered by 2 AA batteries (not included).

FLX-112 Flex-Lite Inspector
FLX-112B Replacement Bulb

BEND-A-LIGHT® PRO

High-intensity fiber optic light bends and stays in any position. Lightweight. Flexible shaft. Fits easily into piano action. 16" overall. Two AAA batteries included. 1- year limited manufacturer's warranty.



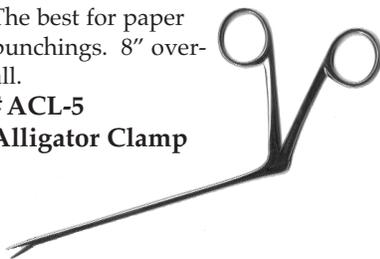
BAL-16 Bend-A-Light® Pro
BALB Replacement Bulb

High-intensity
3/16" diameter light.

ALLIGATOR CLAMP

The best for paper punchings. 8" overall.

ACL-5
Alligator Clamp



FLAT NOSE PLIERS

Smooth jaws. 5 1/4" long. Vinyl grips.

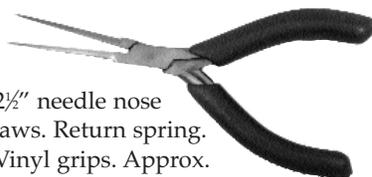
FNP-1
Flat Nose Pliers



NEEDLE NOSE PLIERS

2 1/2" needle nose jaws. Return spring. Vinyl grips. Approx. 6" long.

NPX-314 Needle Nose Pliers



BENT NEEDLE NOSE

Same as above, with jaws bent approx. 90°.

NPX-313 Bent Needle Nose



MAGNETIC RETRIEVER



Telescoping shaft with magnetic tip. Extends from 6" to 24".

MR-2 Magnetic Retriever

FLEX MAGNETIC PICKUP



24" reach. Flexible shaft. Push on/off.

MR-382 On/Off Magnetic Pickup

MECHANICAL PICKUP



4-prong pickup with 24" reach.

MR-396 Mechanical Pickup

TWEEZER/MAGNIFIER

3/8" tool for detailed projects.



TW-425
Tweezer/Magnifier

RETRIEVING TWEEZERS



Nickel-plated, with serrated tips.

TW-10 10" Tweezer/Bent Tips

TW-12 12" Straight Tweezer

TWEEZER SET

Set of 5 nickel-plated tweezers:

- * 4 1/2" sharp,
- * 4 3/4" stamp,
- * 6" curved,
- * 6" retriever,
- * 6 1/2" cross-locking.

TW-5 Tweezer Set



HAMMER TOOLS



HAMMER HEAD IRON

Shaped brass head for ironing hammerheads to a smoother surface. Machined from solid brass and die formed for better heat transfer. 1/4" shank fits into Weller SP-40 soldering iron with set screw. Available separately or in kits:



- # HHR-70 Brass Hammer Iron only
- # HHR-70K1 Brass Iron, Soldering Iron, & In-Line Control
- # HHR-70K2 Brass Iron, Soldering Iron, & Dial-Temp
- # SP-40 Weller Soldering Iron only
- # HDL-1 Dial-Temp Control only

GRAND HAMMERHEAD EXTRACTOR



HHR-22 Grand Hammerhead Extractor

Pliers feature adjustable punch for removing grand hammerheads from shanks. 8 3/4" long.

HAMMERHEAD FELT CLAMP

For field repairs of loose hammer felt. This clamp fits snugly to hold loose hammer felt until glue dries.

HCL-4 Hammer Felt Clamp



See page A-7 for hammer boring drills.

HAMMERHEAD REAMER



HSS reamer tapers from .2294" to .1813". Straight flutes are 2 5/8" long. For all grand hammerheads. Works in combination handle.

HHR-3 Hammerhead Reamer

HAMMERHEAD RASP



Round 6" rasp for cleaning dried glue or other matter from hammer bore holes. Tapers from 3/16" to 7/32" in diameter.

HHR-6 Hammerhead Rasp

CHECKERING FILE



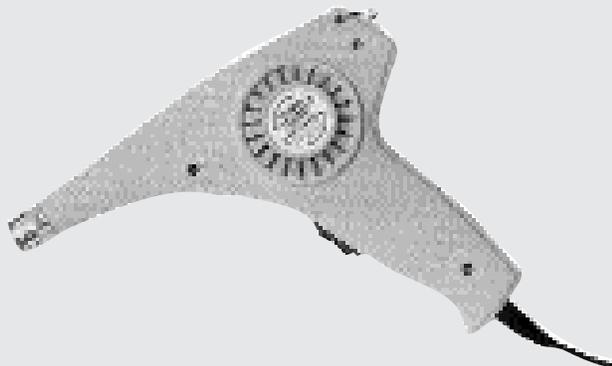
6" x 3/4" file for roughing hammer tails.

FL-C Checkering File

PRINCESS HEAT GUN

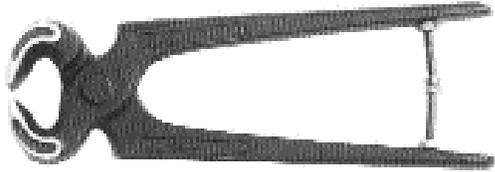
The best heat gun for piano repair. The Weller "Princess" Heat Gun features a narrow nozzle for controlled air flow. Reaches approximately 750° F within seconds. Includes attachments for directing air flow to exactly where you need it. Extremely useful for bending hammer shanks or curing epoxy, etc. (Formerly made by Ungar.)

UNG-1 Weller Princess Heat Gun



SHANK & FLANGE TOOLS

KNUCKLE REMOVING PLIERS



Adjustable 7" pliers safely remove knuckle from shank, without cutting knuckle flange. Jaws are slightly less than 1" wide. Black oxide finish.

#KPL-6 Knuckle Removing Pliers

HAMMER SHANK REDUCER

For removing old glue from hammer shanks. Fits combination handle.



#HSR-1 Hammer Shank Reducer

HAMMER SHANK CUTTER



Heavy duty hammer shank cutter with stainless steel jaws and plastic handle. Built-in lock and return spring. 6½" overall length.

#HSC-1 Heavy Duty Shank Cutter

HAMMER SHANK CUTTER

Guillotine style shank cutter with replaceable blade.

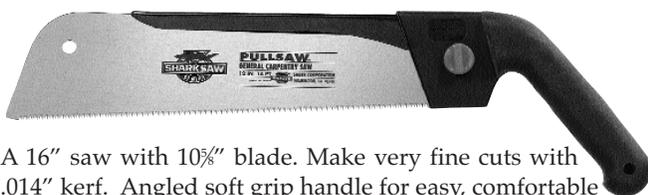


#HSC-3 Hammer Shank Cutter

#HSC-3B Replacement Blade

FINE CUT SAW

Outstanding for trimming hammer shanks!



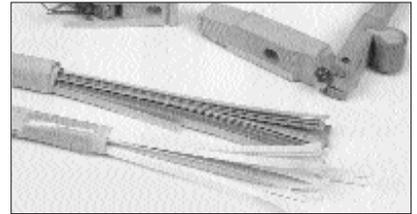
A 16" saw with 10½" blade. Make very fine cuts with .014" kerf. Angled soft grip handle for easy, comfortable control. 17 point blade. The best for hammer shanks.

#JBS-2410 Shark Fine Cut Saw

#JBS-2410B Replacement Blade

TRAVEL PAPER

12" strips of adhesive travel paper, available in 2 thicknesses. Simply wet the adhesive side to stick. Bundle of 25 strips.



#TRP-1 .1mm Travel Paper

#TRP-2 .2mm Travel Paper

FLANGE SPACER

Heavy duty 7" flange spacer for tapered flanges.



#JFS-2 Flange Spacer

FLANGE SPACER



Heavy duty 12" flange spacer with one end for Renner-style flanges, and one end for Aeolian-style flanges.

#FS-4 Flange Spacer

FLANGE SPACER



Double-end flange spacer for use on Baldwin and Steinway flanges. Measures 9" overall.

#FS-5 Flange Spacer

FLANGE SPACER



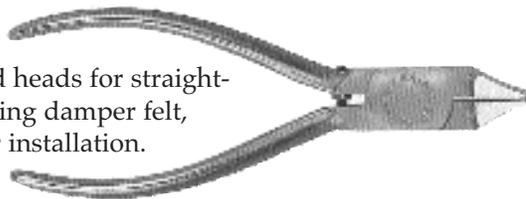
11/16" blade for moving action flanges, especially upright hammer butt or wip flanges. 9¼" in length. For combination handle.

#JCH-33 Flange Spacer

DAMPER TOOLS

DAMPER FELT PLIERS

Features wedge-shaped heads for straightening or creasing damper felt, before or after installation.

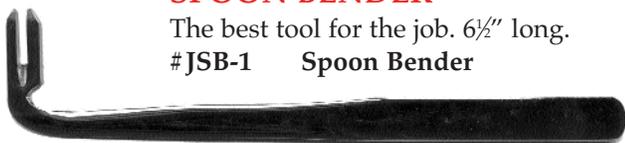


#DPL-5 Damper Felt Pliers

SPOON BENDER

The best tool for the job. 6½" long.

#JSB-1 Spoon Bender



DAMPER SCREW TOOL



Grand damper screw regulator for adjusting damper wire height. Plastic handle. 9" overall.

#DS-33 Damper Screw Tool

DAMPER WIRE BENDER



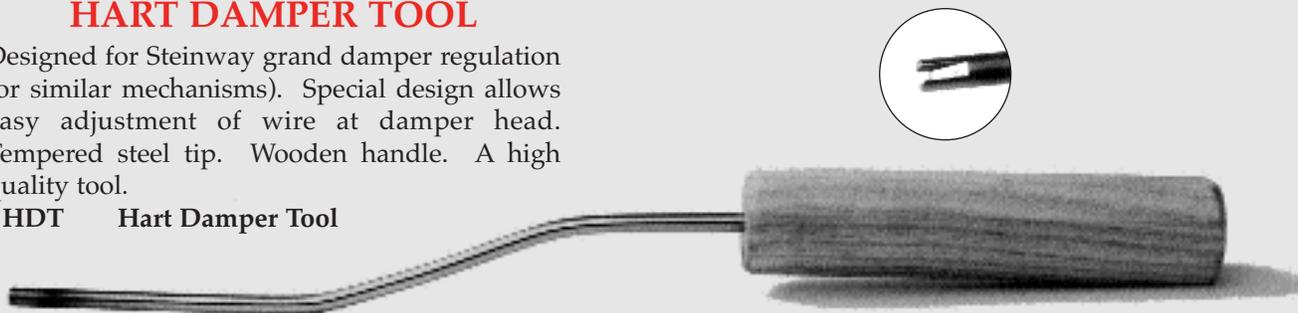
For upright damper regulation. Unique curved shaft for better access. Total length 9".

#JDW-1 Damper Wire Bender

HART DAMPER TOOL

Designed for Steinway grand damper regulation (or similar mechanisms). Special design allows easy adjustment of wire at damper head. Tempered steel tip. Wooden handle. A high quality tool.

#HDT Hart Damper Tool



DUCK BILL PLIERS

High quality duck bill pliers measure 7" overall. Bills measure about 5/16" wide, with smooth inside surface. Cushion grips.



#DBL-5 Duck Bill Pliers

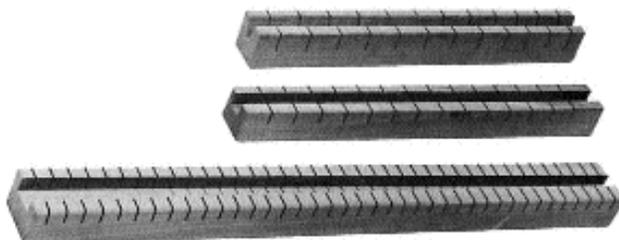
JAPANESE FELT KNIFE

Chisel-shaped knife for trimming felt in various applications. Excellent for trimming grand damper rail bushings and balance rail bushings. Also makes a fantastic fine wood chisel.

#JFK-1 Japanese Felt Knife



DAMPER FELT CUTTING BLOCKS



For accurate, efficient cutting of damper felt strips. Includes wooden blocks for treble damper felt, as well as bass. Grand set includes 4 blocks. Upright has 3.

#DCB-G4 Grand Damper Felt Cutting Blocks (4)

#DCB-U3 Upright Damper Felt Cutting Blocks (3)

BACKCHECK TOOLS

WIRE BENDING PLIERS



Compound leverage allows easier bending of backcheck, bridle, and damper wires. Bends wires side to side with convex/concave jaw combination. Durable construction, high quality mechanism.

#JWP-1 Wire Bending Pliers

PARALLEL PLIERS



Inside surfaces of the smooth jaws are parallel at about 10mm apart. Perfect for positioning damper felt or action parts, including grand backchecks. With cushion grips. About 7½" long.

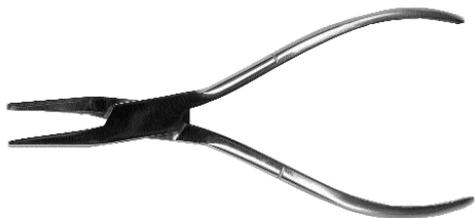
#PPL-1 Parallel Pliers

WIRE BENDING PLIERS

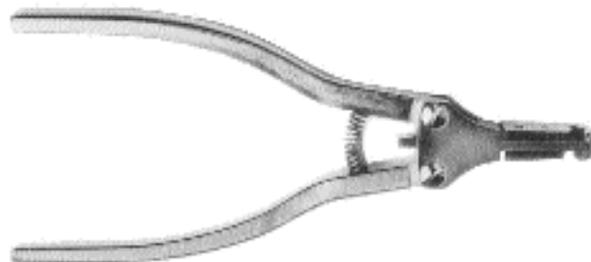
Smaller wire bending pliers for bending bridle or damper wires.

Perfect for lighter or occasional use. One jaw is convex and the other concave, for bending wires side to side.

#WP-2 Wire Bending Pliers



BACKCHECK WIRE BENDING PLIERS



Specially designed for bending backcheck wires, these professional-quality 7" pliers are double sided. One side bends the wire forward, and the other bends it backward. Very easy to use, and very high quality construction. Features return spring.

#BPL-1F Backcheck Wire Bending Pliers

GRAND BACKCHECK WIRE BENDER



Heavy duty 7" tool for bending grand backcheck wires forward or back. With hardwood handle.

#GBC-70 Grand Backcheck Wire Bender

BACKCHECK REGULATOR

Lightweight wooden tool for positioning of backchecks. (Tip on opposite end can be used to push in temperament strip.)

#JBR-1 Japanese Backcheck Regulator



BACKCHECK WIRE REGULATOR

5/8" tool for regulating backcheck or other wires.

For combination handle.

#JCH-13 Backcheck Tool



KEY REPAIR TOOLS

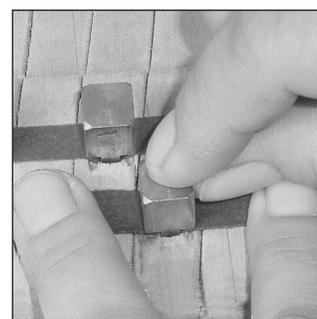
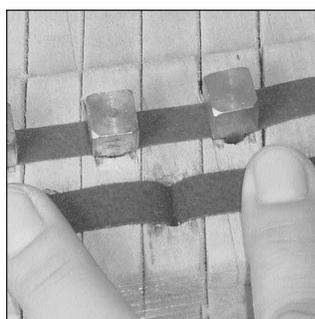
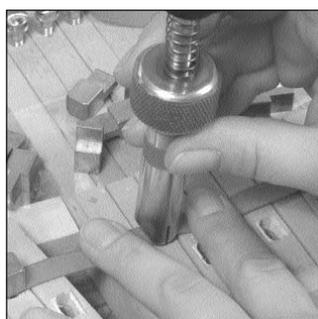
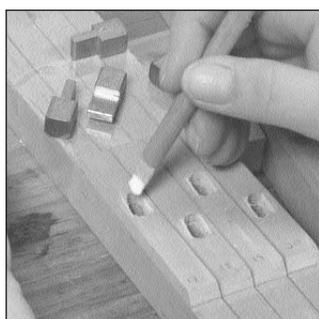
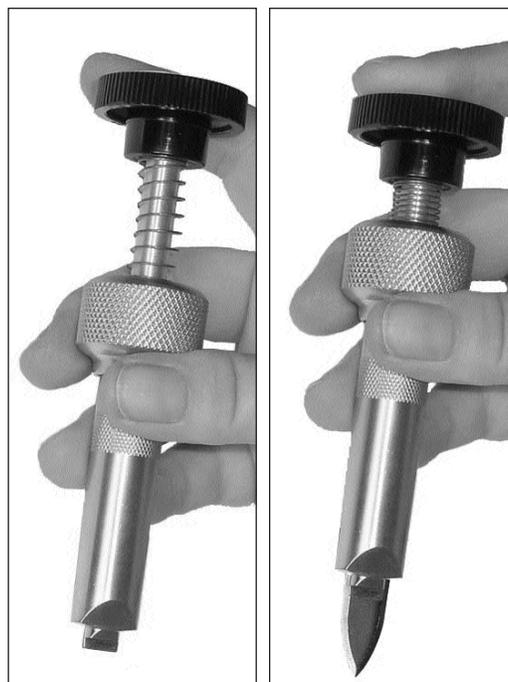
BUSHMASTER™ *The most efficient & accurate way to rebush keys.*

The Bushmaster™ key bushing tool automatically inserts bushing cloth to the correct depth in the key mortise. This finely-crafted brass tool allows you to install new bushings quickly and efficiently, eliminating guesswork.

The function of the Bushmaster™ is to simultaneously produce a uniform cloth depth and cut. With glue in several mortises, use the Bushmaster™ to push the cloth into a mortise until the Bushmaster™ bottoms out. Push the spring-loaded handle to project the double-edged blade. This foolproof method produces exacting results. Each side and every mortise will have the same length of cloth. This factory-style method guarantees accuracy and profitability.

Directions include numerous photos and helpful tips to assist you in creating very professional results. Machined in brass and aluminum. Measures 5" in length. Lifetime warranty.

- # BM-1 Bushmaster™
- # RB-5 Replacement Blade 5-pack



ACCU-CAULS™

For professional results, use Accu-Cauls™, the finest key cauls manufactured. Finely machined from solid brass, guaranteed accurate to $\frac{1}{1000000}$ ". Front rail cauls are manufactured from 3/8" stock, while balance rail cauls are manufactured from 11/32" stock to allow insertion into all balance rail mortises.

Solid brass offers the advantage of precision fit, and can be heated for sizing, if necessary. Easy clean-up.



The purpose of the key caul is to size the bushing cloth to slightly larger than the key pin. Use a micrometer to measure the pin diameter. We suggest using an Accu-Caul™ approximately .004" to .005" larger than your front rail pin, and about .002" larger than the balance rail pin. Doing so should provide key bushings that require minimal or no easing.

<u>Accu-Caul size</u>	<u>Recommended for these pin sizes</u>
<i>11/32" square</i>	<i>BALANCE RAIL</i>
# AC162 (.162")	.160"
# AC147 (.147")	.145"
# AC139 (.139")	.137"
# AC088 (.088")	.087"
<i>3/8" square</i>	<i>FRONT RAIL</i>
# AC150 (.150")	.145"
# AC143 (.143")	.139"
# AC136 (.136")	.131"
# AC134 (.134")	.129"
# AC129 (.129")	.125"

KEY REPAIR TOOLS



ROTARY FELT CUTTER

Cut your own bushing cloth, felts, and leather accurately and with ease. Rotary cutters cut cleanly without pulling. Absolutely the best for custom-cutting cloth.

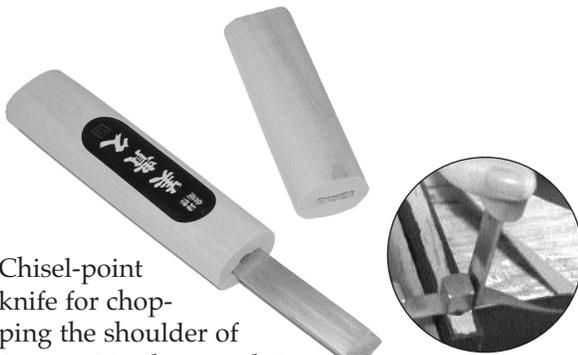
Standard Kit includes 45mm Rotary Cutter, an extra 45mm blade, and a 12" x 18" cutting mat.

- # RFC-1 Standard Rotary Felt Cutter Kit
- # RFC-2 45mm Blade only
- # RFC-3 Cutting Mat only
- # RFC-4 45mm Rotary Cutter only

Extra Large Kit includes Rotary Cutter with 60mm blade, an extra 60mm blade, and a 12" x 18" cutting mat. This kit is recommended for thicker cloths and felts.

- # RFC-1X Extra Large Rotary Felt Cutter Kit
- # RFC-2X 60mm Blade only
- # RFC-3 Cutting Mat only
- # RFC-4X 60mm Rotary Cutter only

BUSHING CLOTH CUTTER



Chisel-point knife for chopping the shoulder of front rail bushings, while the key bushing caul is still in place. About 3/8" wide. Lightweight wood handle, with protective cap.

JCC-1 Bushing Cloth Cutter

PRECISION KNIFE No. 5

Big 4 1/4" plastic handle with slightly angled #19 blade, perfect for chopping materials such as bushing cloth. 3/8" wide blade will work for most front rail mortises.

- # X-K5 Precision Knife No. 5
- # X-B19 Replacement #19 Blades (5-pack)



KEY MORTISE SPRING CLAMP

For use in repairing damaged wood in key mortises. (Not recommended for key bushing.) Spring steel clamp measures approximately 2 1/4" long x 11/32" wide.

KMC-2 Key Mortise Clamp



CAPSTAN INSTALLATION KIT



Install capstans efficiently and easily. Kit includes 1/2" countersink, drill, capstan driving tool for power tool, and one set of grand capstans.

KCK-5 Capstan Installation Kit

AUTOMATIC NUMBERING MACHINE

Ideal for numbering keys and hammers. Can be set to repeat the same number indefinitely, or to advance the number automatically. Prints from 1 to 6 digit numbers. Ink pad removes easily for re-inking.

DL-67B Auto Numbering Machine



KEY REPAIR TOOLS

KEY EASING IRON with 5 TAPERED BROACHES

For professional easing of keys. The Key Easing Iron consists of 5 tapered brass broach tips that fit into a 40-watt soldering iron (included). For temperature control, choose a separate Dial-Temp control or in-line dimmer switch.

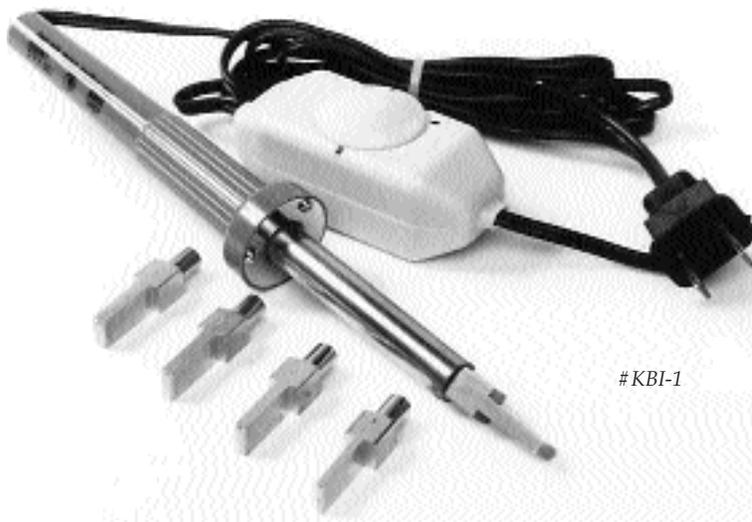
The heated broach tip is inserted into the key mortise to iron the felt to the correct size. Ironing reduces friction, flattens irregular surfaces, & provides permanent results. A tremendous time-saver.

Includes 5 precision-machined broach tips:

- #1 tapered tip: .085" to .095"
- #2 tapered tip: .125" to .135"
- #3 tapered tip: .135" to .145"
- #4 tapered tip: .145" to .155"
- #5 tapered tip: .155" to .165"

- # KBI-1A Key Easing Iron with Dial-Temp
- # KBI-1 Key Easing Iron with in-line dimmer
- # KBI-2 5 Tapered Broach Tips only

See page D-20 for hammer head iron accessory.

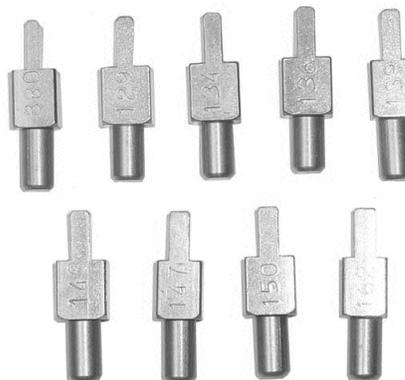


KBI-1

KEY EASING IRON with 9 STRAIGHT BROACHES

Same as above, but with 9 straight (not tapered) broaches. Broach sizes include: .162", .150", .147", .143", .139", .136", .134", .129", .088" (same as our Accu-Caul sizes). An efficient, foolproof method.

- # KBI-9A 9-pc. Key Easing Iron with Dial-Temp
- # KBI-9D 9-pc. Key Easing Iron with in-line dimmer
- # KBI-99 9 Straight Broach Tips only



KBI-99

LARGE KEY DIP BLOCK

Rosewood key dip block 48 x 20mm, tapers from 8 to 10mm (13/32") in thickness.



#JKD-1 Large Key Dip Block

SMALL KEY DIP BLOCK

Aluminum key dip block 44 x 20mm, tapers from 8 to 9.5mm (3/8") in thickness.

#JKD-2 Small Key Dip Block



ALUMINUM STRAIGHT EDGE



Approximately 2-octave span for key leveling. 15" long. Also great for use with rotary cutter kit, and for hammer travel.

#JSE-1 Aluminum Straight Edge

CLIP-ON GRAND KEY LEVELING LEADS

With spring clips that hook over backchecks. Set comes in heavy duty box with strap.

- # KLL-52 Grand Key Leveling Leads, Set of 52
- # KLL-12 Grand Key Leveling Leads, dozen



KEY REGULATING TOOLS

KEY EASING PLIERS



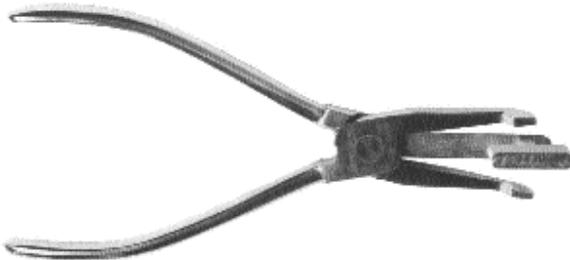
Japanese pliers for easing front rail key mortises in any piano. Outstanding design includes plate for protecting exterior of mortise from breaking through. 7" in length.
#JKE-2 Key Easing Pliers

KEY EASING PLIERS



For easing mortises. *Parallel action* assures flat, even pressure. Exceptional quality. 7½" overall. Features return spring.
#KPL-4F Parallel Action Key Easing Pliers

KEY EASING PLIERS



Pivoting center plate moves to either side to protect outside of key from damage. 7" in length.
#KPL-5F Key Easing Pliers

BALANCE HOLE REAMER

Use to make thickness of balance rail hole (between key bottom and mortise bottom) the same throughout keyboard. Also removes any debris at bottom of mortise. 7¼" long with shaped wooden handle.
KCS-1B Balance Hole Reamer



BALANCE HOLE EASER



Triangular-shaped head for easing balance rail holes. With lightweight wooden handle.
#JKE-1 Balance Hole Easer

DOUBLE-END KEY EASER



One end for balance rails, the other for front rails. Beautiful wooden handle in the center.
#JKE-3 Double-End Key Easer

BALANCE HOLE EASER

Triangular head for easing balance rail holes.



Length is 3¼". For combination handle.
#JCH-23 Balance Hole Easer

KEYFRAME SCREW TOOL



For adjusting grand keyframe screws (glide bolts).

#JKR-1
Keyframe
Screw Tool

MULTI-PURPOSE TOOL

Works for grand let-off, glidebolts, & tapered flange spacing.

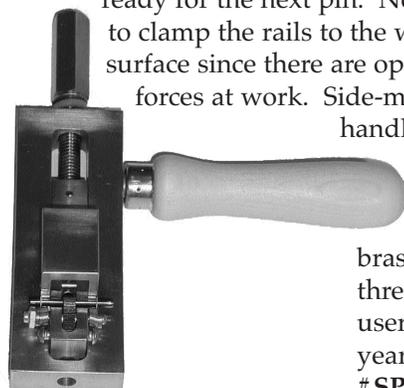
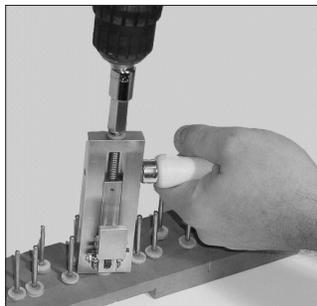


#LFT-2 Multi-Purpose Wrench

KEY TOOLS

STERNER KEY PIN PULLER

For removing balance rail or front rail pins, without distorting the hole. Position the tool over the keypin, quickly turn the hex head until it bottoms out. The cam automatically locks onto the pin. Using a drill or closed-end 1/2" wrench, spin the the hex head until the pin is out. Simply press the cam lever to release the pin. Quickly reposition the slide to the bottom again, and you're



ready for the next pin. No need to clamp the rails to the work surface since there are opposing forces at work. Side-mount handle

securely supports the tool during operation. The Sterner Pin-Puller boasts beautifully machined, solid brass construction with locking cam, threaded side handle, and includes full user-friendly instructions. Designed for years of rugged use.

#SPP-40 Sterner Key Pin Puller

OVAL KEY PIN TOOL



For straightening all front rail pins. 13" length for increased leverage. Wooden handle.

#KPS-30 Oval Key Pin Tool

OVAL KEY PIN TOOL



Fits snugly on most Asian & European front rail pins. For bending side to side. Heavy duty. 9 1/2" long.

#JKP-1 Oval Key Pin Tool

FORSTNER DRILL BITS

Makes smooth flat-bottomed hole. The correct drill for installing key leads. Manufactured from top quality high-carbon steel.



- # 570-3005 1/4" Forstner Bit
- # 570-3006 3/8" Forstner Bit (for small key leads)
- # 570-3007 7/16" Forstner Bit (for medium key leads)
- # 570-3008 1/2" Forstner Bit (for large key leads)
- # 570-3010 5/8" Forstner Bit (for x-large key leads)
- # 570-3012 3/4" Forstner Bit
- # 570-3014 7/8" Forstner Bit
- # 570-3016 1" Forstner Bit

CORE DRILL



37/64" core drill for enlarging existing key lead holes, to enable installation of key lead plugs.

37-PD Core Drill for Key Plugs

KEY LEAD PUNCHES



Punches for setting lead weights into keys. Patterned head. 8mm or 12mm diameter.

- # JLP-1/8 8mm Key Lead Punch
- # JLP-1/12 12mm Key Lead Punch

KEY LEAD HOLE PLUGS

Poplar side-grain plugs for filling hole left in key after removal of old key leads. 9/16" diameter x 19/32", not tapered.

KLD-P9 Poplar Key Plugs



WEIGH OFF TOOLS

PIANOTEK GRAM WEIGHTS

Designed specifically for piano technicians to allow **easy combination and selection of weights**. For key weighing, you will never find it necessary to use more than 2 weights together. Smaller weights (1-9 grams) are ring-shaped, allowing them to be hooked onto the posts of the large weights (10 through 70, in 10-gram increments).

No difficult combinations. For example, to achieve 52 grams, simply combine the 50-gram weight with the 2-gram weight. Guaranteed accurate to within .05 gram. And, these weights are slim, the largest being only 11/16" in diameter, small enough to fit on one key without touching the next. Manufactured in brass & aluminum. Cherry wood case with brass hardware. Certificate of calibration included.

#PGW16 Pianotek Gram Weights



STANWOOD TOUCH DESIGN KIT

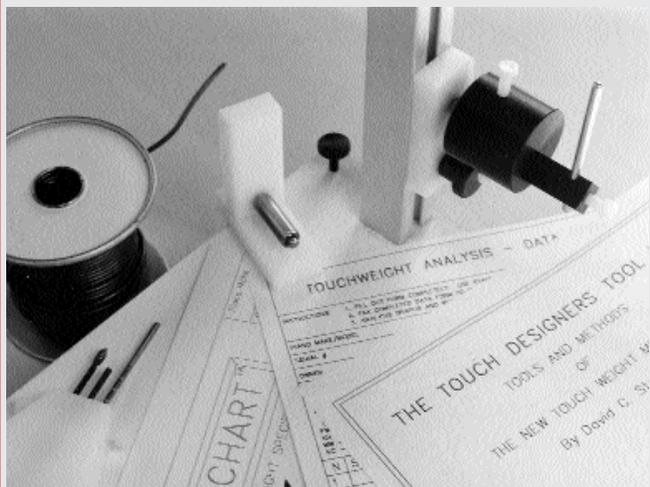
The advanced analysis system for measuring and improving touch weight on grands.

Kit includes:

- * Jig Table with Fixtures & Adjustable Feet.
- * Jigs for Front Weight, Strike Weight, and Key Ratio.
- * Swage Jig to Mount Hammer Leads.
- * Instruction Manual.

#STD-3K Touch Design Kit

Touchweight services also available.



OHAUS SCOUT SCALE

Portable, precision digital gram scale with a 400-gram capacity.

#SC-4010

Ohaus Scout Scale



SMART CHART

Detailed chart for plotting hammer strike weight.

#483SC Smart Chart

SHANK CLIPS

Small (3/4" length) clips (.7 gram) for regular shanks.
Mini (9/16" length) clips (1.5 gram) for oval or tapered.

#STD-34C Small Shank Clips

#STD-96C Mini Shank Clips

HAMMER LEAD

5-lb. spool of .105" diameter lead, for leading hammer mouldings.

#KLD-H5 Hammer Lead Roll



KEY LEAD WIRE

1/4" diameter lead wire for key leading. 5-lb. spool.

#KLD-W4 Key Lead Wire

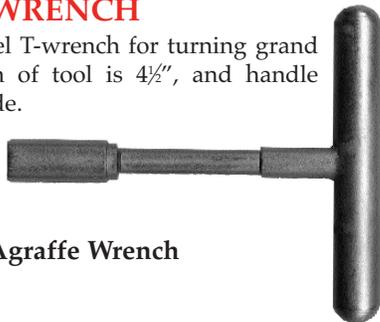


See page A-21 for more Key Leads.

AGRAFFE TOOLS

AGRAFFE WRENCH

Heavy duty steel T-wrench for turning grand agraffes. Length of tool is 4½", and handle measures 4" wide.



AGR-W7 Agraaffe Wrench

AGRAFFE TURNING TOOL

Steel tool fits combination handle.



ATT-1 Agraaffe Turning Tool

POWER AGRAFFE TURNER



Turn agraffes fast! Steel tool for use in hand drill or other power tool. 3/8" diameter shaft. Length 5¼".

AGR-W8P Power Agraaffe Tool

AGRAFFE COUNTERBORE

For removing material from base of agraffes, to allow them to be turned farther down for alignment. Use by hand.



2332 Agraaffe Counterbore

AGRAFFE TAPS



Taps for repairing threaded holes in plate. Fit #TW-164.

AGT-1 Tap for 7/32" Agraffes (36/inch)

AGT-2 Tap for 1/4" Agraffes (36/inch)

AGT-3 Tap for 1/4" Metric Agraffes (32/inch)

TAP WRENCHES

T-style wrenches for agraaffe taps, etc.



TW-164 Tap Wrench
(fits 3/64" to 1/4" shank)

TW-166 Tap Wrench
(fits 15/64" to 1/2" shank)

AGRAFFE WASHERS

Brass washers for shimming agraffes on installation.



AGR-W0311 .012" Brass Agraaffe Washers

AGR-W0511 .020" Brass Agraaffe Washers

AGRAFFE REAMER

High speed steel combination drill & countersink is perfect for reaming agraaffe holes. Drill diameter 1/16", body diameter 3/16". Both ends same. Use either in flexible shaft tool or by hand. Overall length 1¾".



AR-12 Agraaffe Reamer

SCREW EXTRACTORS



Reverse thread extractors for removing broken agraffes, tuning pins, screws, etc. Step 1: Drill a hole into the broken screw. Step 2: Insert extractor and turn counterclockwise to remove screw. Step 3: If needed, run a tap through the hole to repair any damaged threads.

EX-1S # 1 Screw Extractor for screws 3/32" to 5/32"

EX-2A # 2 Screw Extractor for Agraffes

EX-3B # 3 Screw Extractor for Tuning Pins

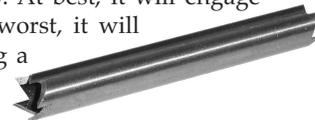
EX-D1 5/64" Drill for # 1 Screw Extractor

EX-D2 7/64" Drill for # 2 Screw Extractor

EX-D3 5/32" Drill for # 3 Screw Extractor

BROKEN SCREW EXTRACTORS

Use with hand drill in reverse mode. Cuts counterclockwise around broken screw. At best, it will engage screw and remove it. At worst, it will core around screw, leaving a neat hole. Both ends same.



BSE-1 1/4" Broken Screw Extractor

BSE-2 3/8" Broken Screw Extractor

ABRASIVE CORD

.055" diameter abrasive cord for deburring agraffes.

AB-52 Abrasive Cord



WIRE CUTTERS

STARRETT PIANO WIRE CUTTERS



*Choose carbide-tipped
or hardened-steel jaws!*

Professional wire cutters designed for heavy, extended usage. Powerful leverage allows efficient, clean cutting. Jaws can be detached, reground to sharpen, and adjusted when replaced for proper clearance. Each jaw has 1/4" allowance for regrinding. Features stop screw and safety spring. Replacement jaws and screws available. Choose either carbide-tipped or hardened steel jaws.

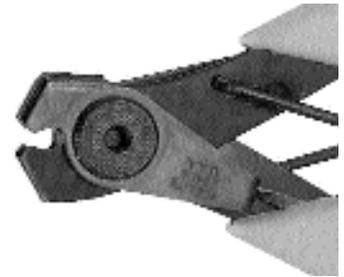
<u>Maximum wire diameter capacity</u>		<u>Jaw Width</u>
5½" cutter	.050"	21/32"
7" cutter	.080"	13/16"

- # WC-S5 5½" Starrett Wire Cutter
with premium Carbide-Tipped Jaws
- # WC-S7 7" Starrett Wire Cutter
with premium Carbide-Tipped Jaws
- # WC-S5JC Replacement Carbide-Tipped Jaws
for 5½" Cutter
- # WC-S7JC Replacement Carbide-Tipped Jaws
for 7" Cutter
- # WC-S1938 Pair of Replacement Screws for Jaws
- # WC-S5HS 5½" Starrett Wire Cutter
with standard Hardened Steel Jaws
- # WC-S7HS 7" Starrett Wire Cutter
with standard Hardened Steel Jaws
- # WC-S5JS Replacement Hardened Steel Jaws
for 5½" Cutter
- # WC-S7JS Replacement Hardened Steel Jaws
for 7" Cutter

WIRE CUTTER

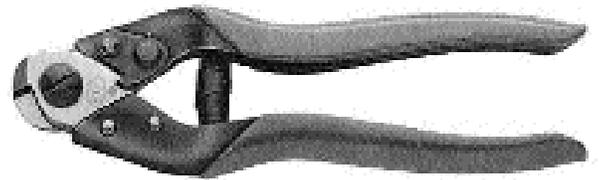
Our favorite wire cutter. Cuts all piano wire fully flush. Patented design holds the cut ends in place until you release the tension. No fly-away ends! Overall 5½". Return spring, cushion grips. Wire capacity up to .062" (larger than size 25).

WC-134 Wire Cutter



Holds cut end!

PORTER WIRE CUTTER



A superior quality cutter, excellent for piano wire. About 7½" long, weight approximately 10 oz. With vinyl grips.

HKP HK Porter Wire & Cable Cutter

MUSIC WIRE HOLDER & CASE



Designed to hold small amounts of music wire for field repairs. Up to 10 different sizes can easily be carried in this compact holder. Vinyl case with snap closure keeps wire and holder clean. Case can also be used to store a 1-lb. coil of wire or 2 to 3 smaller coils.

CSE-4 Music Wire Holder
CSE-5 Case for Wire Holder

STRINGING TOOLS

THE STRINGER II

Fix a broken string under the bass strings in a fraction of the time. Upright strings can be replaced without removing the action! The Stringer II is used to insert copper wound strings, unisons, & single strings on grands and uprights. Especially effective on overstrung strings. Kit includes 3 sections of threaded brass which can be combined for lengths of 16", 32", or 48". Also includes string separator cap, used to insert unison wire or copper wound strings. Bridge wire positioner and thorough instructions included.

#STG-2000

The Stringer II



BRIDGE WIRE POSITIONER



Included with the Stringer II, the bridge wire positioner is great for seating new wire between bridge pins. Fits combination handle. About 5" long.

#JCH-40 Bridge Wire Positioner

STRING EXPANDER

Easily hold bass strings apart with this simple to use acrylic tool. Offers spread of 3/4" or 7/8" for larger strings.

#STX-2 String Expander



STARRETT MUSIC WIRE GAUGE

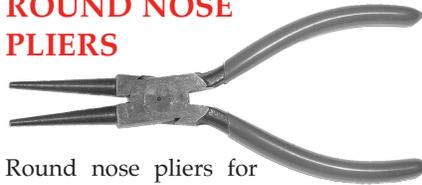
For measuring steel music wire. Decimal equivalents of wire gauge numbers conveniently

stamped on back side. Hardened for long life and continued accuracy. Gauge measures #12 to #28 wire.

#WG-280 Piano Tuners' Gauge



ROUND NOSE PLIERS



Round nose pliers for forming loops or bends in wires. Both jaws round with blunt point, tapering to 1/32" at tips. Lightweight, 4 1/2" long. Jaws are 1" long. With plastic comfort grips.

#RNP-5 Round Nose Pliers

BASS STRING TWISTER



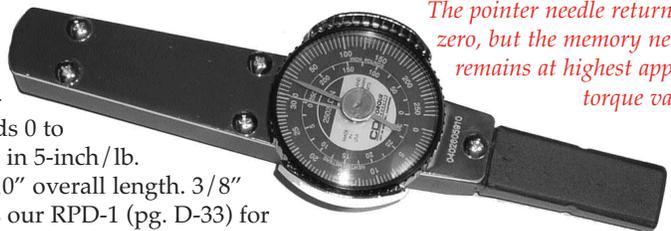
The retractable tip goes into bass string loop. After twisting the string, place the recessed tip onto the hitch pin. Press downward so tip retracts and forces the loop onto hitch pin.

#BST-1 Bass String Twister

DIAL TORQUE WRENCH

State-of-the-art torque wrench with memory needle dial. Reads 0 to 250 inch/lbs. in 5-inch/lb. increments. 10" overall length. 3/8" drive accepts our RPD-1 (pg. D-33) for measuring tuning pin torque.

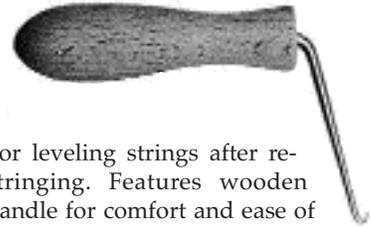
#TQ-250 Dial Torque Wrench



MEMORY NEEDLE

The pointer needle returns to zero, but the memory needle remains at highest applied torque value.

STRINGING HOOK



For leveling strings after restringing. Features wooden handle for comfort and ease of use.

#JSH-1 Stringing Hook

COIL LIFTER

Well-designed coil lifter with 4 1/2" shaft and offset 4" wood handle.

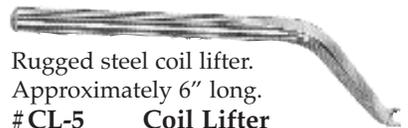
#CL-8 Coil Lifter with Handle



COIL LIFTER

Rugged steel coil lifter. Approximately 6" long.

#CL-5 Coil Lifter



COIL LIFTER & STRING SPACER



One end for tightening coils, the other for spacing strings.

#JCL-1 Coil Lifter/ String Spacer

STRINGING TOOLS

COIL SETTER



High quality coil setter with knurled handle. For setting coils evenly on tuning pins.

#JCS-1 Coil Setter

STRINGING KEY

For fast winding of coils on tuning pins, this stringing key features square tip and swivel handle.

#STK-1

Stringing Key



BECKET BREAKER

Punch for breaking becketts off flush with pin.



#JBB-3
Becket Breaker

BROKEN TUNING PIN EXTRACTOR



Use with tuning hammer or hand brace. Inside threads cut into tuning pin for secure removal.

#BPE-1 Broken Tuning Pin Extractor

TUNING PIN BUSHING PUNCH



High quality punch for driving wooden tuning pin bushings.

#JPP-2 Plate Bushing Punch

TUNING PIN SETTER



For driving pins farther into pinblock. Holds pin securely, so it will not turn. Features spring mechanism and 5½" handle.

#TPS-1 Tuning Pin Setter

TUNING PIN SOCKET



Fastest method of removing tuning pins from pinblock. Star head and triangular shank. Use with power tool.

#TPS-2 Tuning Pin Socket

RATCHET TUNING PIN DRIVER



3/8" square socket end for fitting on torque wrench, ratchet or power tool. For fast driving of tuning pins. Star head.

#RPD-1 Ratchet Pin Driver

TUNING PIN HOLE BRUSH



Steel brush for cleaning (not reaming) tuning pin holes in old pinblocks. Use by hand.

#TPB-1 Tuning Pin Hole Brush

TUNING PIN REAMERS



Straight flute reamers, 6" overall with 1½" flutes. Sizes shown are of flute diameter.

#TPR-208 .266" Reamer

#TPR-209 .272" Reamer

#TPR-210 .277" Reamer

#TPR-211 .281" Reamer

#TPR-212 .290" Reamer

#TPR-213 .295" Reamer

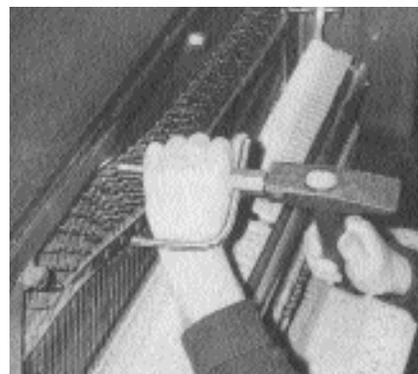
TUNING PIN PUNCH



For driving tuning pins into pinblock. Very high quality.

#JPP-1 Tuning Pin Punch

SPECIAL TUNING PIN PUNCH



Unique tuning pin punch with brace. Prevents tuning pin from turning and de-tuning, when driving pins deeper into pinblock.

#TPP-X10 Punch with Brace

REBUILDING TOOLS

TRANSFER PUNCH SET

For punching centering dimples prior to drilling pinblock. Various sizes allow for differing sizes of plate holes. Set includes 28 punches in metal index. One each of sizes 3/32" through 1/2" in 64ths, plus 17/32". Heat-treated tempered steel. Black oxide finish.
#NTP-28 Transfer Punch Set



SOUNDBOARD SHIMMING TOOL

Well-crafted tool with hook at end, for use in enlarging soundboard cracks prior to installing shims. With hardwood handle. 11" long.

#SBT-450 Soundboard Shimming Tool



AUTOMATIC CENTER PUNCH

Great for bridges!

Spring-loaded for single hand operation.

#CP-79 Automatic Center Punch



Replacement tips available.

#B-PC20



BOLDUC PINBLOCK REMOVAL JIGS

UPRIGHTS

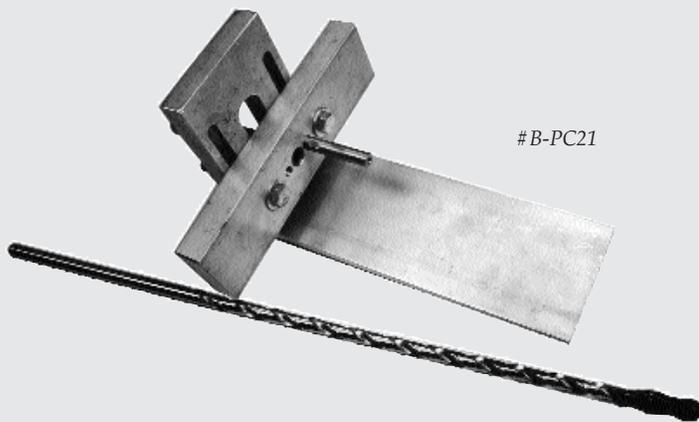
Fast and easy way to remove upright pinblocks. Includes machined, aluminum drilling guide jig and 18" long, 3/8" diameter drill bit.

#B-PC21 Bolduc Upright Pinblock Removal Jig

GRANDS

Professional set-up for fast & accurate removal of grand pinblocks. Includes roller bearing guide & 4" diameter saw blade. Unique design uses stretcher bar as guide. Roller bearing requires router with 1/2" diameter capacity & not exceeding 16,000 RPM. (Router not included.)

#B-PC20 Bolduc Grand Pinblock Removal Jig



#B-PC21

DELUXE PINBLOCK SUPPORT

A must for supporting grand pinblocks while tuning pins are driven in. Approximately 11" x 4", top and bottom are made of laminated maple for extreme durability. Easy height adjustment made by simply turning wing nuts by hand.
#PBS-1 Deluxe Pinblock Support



See page E-15 for Bolduc pinblock & soundboard videotapes.

PINBLOCK SUPPORT JACK

Small jack for supporting grand pinblock while driving in pins. Includes high quality Starrett jack, 1" extension, & 2" extension.

#PBS-2 Starrett Pinblock Support Jack with Extensions



REBUILDING TOOLS

HOT GLUE POT

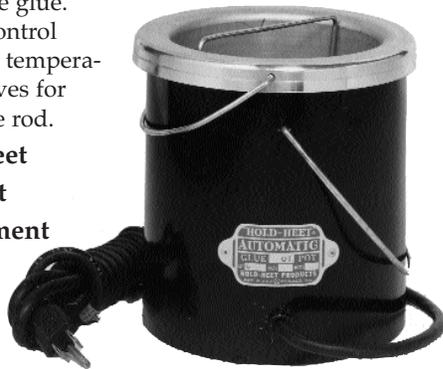
Automatic 1-quart glue pot for accurate heating of hide glue. Internal thermostatic control keeps glue at optimum temperature. Liner easily removes for cleaning. Includes wipe rod.

G-1151 **Hold-Heet
Glue Pot**

G-1151/C **Replacement
Liner**

G-1151/L **Acrylic
Lid**

(with hole for glue stick)



EXAIR VORTEX SPOT CHILLER

Ideal for drilling pin-blocks. Spot Chiller keeps drill bits cool & consistent.

Utilizing only compressed air as an energy source, it delivers a steady stream of clean, cool air at 50° to 60°F below the compressed air. Magnetic base allows positioning unit on drill press. Includes snap-loc directional tubing.

VTX **Vortex Spot Chiller with Magnetic Base**



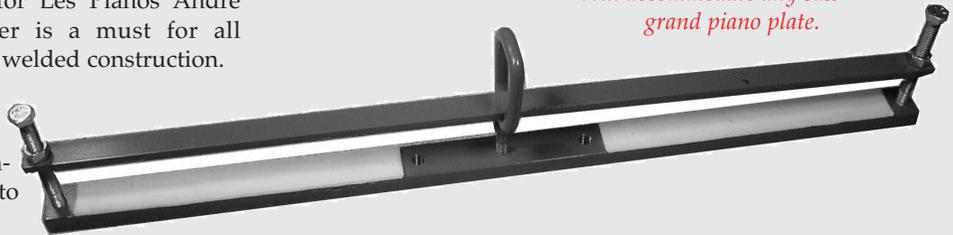
BOLDUC GRAND PLATE PULLER

Designed by Christian Bolduc for Les Pianos André Bolduc, the Bolduc Plate Puller is a must for all rebuilders. Made of solid steel & welded construction.

Easy to use. Simply remove top bar, position under the braces toward the front, bring under tension, & tap with a rubber mallet to locate balance point. Once you have balance, re-attach the top, tighten down & pull. Middle ring moves 45° left or right.

Felt cushioning on bars will not mar or scratch the plate. Weight 15 lbs. Total length 32".

Will accommodate any size grand piano plate.



B-GP32 **Bolduc Grand Plate Puller**

LOWELL DOWNBEARING GAUGE

Patented gauge features special bubble-type level to correctly measure not only **net** bearing, but also **rear** & **front** bearings as well.

Easy to use:

(1) Place the tool on the first piano wire segment, (2) Rotate the vial leveling screw to center the air bubble, (3) Place tool on second piano wire segment, (4) Observe which direction the air bubble has traveled, and count how many lines it has crossed.

Also used for plate & bridge height adjustments, glidebolt adjustments, calculation of downbearing force in pounds.

CDB-2 **Component Downbearing Gauge**



WOOD MOISTURE METER

From the renowned Delmhorst Instrument Co., the Model J-4 Wood Moisture Meter is a favorite among woodworkers.

Portable, resistance-type moisture meter features a temperature stable circuit (calibration not affected by ambient temperature), as well as built-in battery and calibration checks.

Integral electrodes penetrate wood up to 5/16". (Optional external electrode may be special-ordered.) Moisture content range 6% to 30%, displayed on popular analog readout. 9v battery included. 8" x 3" x 1 1/2". Hardshell case.

DJ-4 **Wood Moisture Meter**



DRILLS

PINBLOCK DRILLS

Fast spiral, wide flute bits aid in chip ejection. High speed steel, 118° point.

Cat No. Size Decimal

6¼" drills used when drilling inside the piano, through the plate:

# 203	C	.242"
# 204	D	.246"
# 205	E	.250"
# 206	F	.257"
# 207	G	.261"
# 208	H	.266"
# 209	I	.272"
# 210	J	.277"
# 211	K	.281"



4" jobber drills used when drilling outside the piano:

# 203J	C	.242"
# 204J	D	.246"
# 205J	E	.250"
# 206J	F	.257"
# 207J	G	.261"
# 208J	H	.266"
# 209J	I	.272"
# 210J	J	.277"
# 211J	K	.281"

Tek TIP Recommended

drills for installing 2/o pins:

Bolduc .257" (F)

Delignit .272" (I)

Multi-Lam .261" (G) or .266" (H)

COBALT PINBLOCK DRILLS



Size F (.257") only for new Bolduc Pinblocks. 2" precision cutting edge for longevity and increased stability.

B-CF6 Cobalt Bit 6¼" overall

B-CF3 Cobalt Bit 3½" overall

HAMMER DRILLS

Professional HSS spiral drills for hammer boring. Pianotek's custom short length ensures accuracy, eliminating the need for pre-centering or brad points. Lengths from 2¼" to 2½".



# HBD-1875	3/16"	(.1875")
# HBD-1879	#12	(.189")
# HBD-203	13/64"	(.203")
# HBD-205	#5	(.205")
# HBD-213	#3	(.213")
# HBD-2165	5.5mm	(.2165")
# HBD-2188	7/32"	(.2188")
# HBD-220	5.6mm	(.220")
# HBD-221	#2	(.221")
# HBD-224	5.7mm	(.224")
# HBD-10PK	All 10 Drills above	

BRIDGE DRILLS

High speed steel. Fast spiral, wide flute. Overall lengths range from 2" to 2¼".



# 150	#50 (.0700")	# 141	#41 (.0960")
# 149	#49 (.0730")	# 138	#38 (.1015")
# 148	#48 (.0760")	# 136	#36 (.1065")
# 146	#46 (.0810")	# 134	#34 (.1110")
# 143	#43 (.0890")	# 132	#32 (.1160")
# 142	#42 (.0935")	# 130	#30 (.1285")

See page A-18 for size recommendations.

FORSTNER DRILLS



The correct drill for installing key leads. Makes flat-bottomed hole. Top quality high carbon steel.

# 570-3005	1/4" Forstner
# 570-3006	3/8" Forstner (small lead)
# 570-3007	7/16" Forstner (med. lead)
# 570-3008	1/2" Forstner (large lead)
# 570-3010	5/8" Forstner (x-lge. lead)
# 570-3012	3/4" Forstner
# 570-3014	7/8" Forstner
# 570-3016	1" Forstner

DRILL STOP COLLARS



Positive depth control assures exact hole depth. Black oxide finish on cold rolled steel. Set includes hex wrench and 1 each: 3/16", 1/4", 5/16", 3/8", 7/16", and 1/2" diameter collars.

DS-838 Drill Stop Collar Set

DRILL GAUGES



To quickly identify drill bit sizes. Permanently etched markings.

DG-12 Drill Gauge (A to Z)

DG-14 Drill Gauge (¼" to ½")

DG-15 Drill Gauge (#1 to #60)

HAND COUNTERSINK



Precision-machined countersink with 7 flutes. Great for deburring drilled holes, countersinking screws, etc. Wooden handle. Quick & easy to use.

570-6100 Hand Countersink

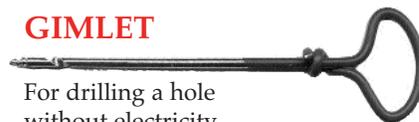
COUNTERSINK

1/2" countersink for power tool.



335-1030 1/2" Countersink

GIMLET



For drilling a hole without electricity.

# 520-3050	3mm Gimlet
# 520-3060	4mm Gimlet
# 520-3070	5mm Gimlet
# 520-3080	6mm Gimlet

FOREDOM FLEXIBLE SHAFT TOOLS

Foredom Flexible Shaft Power Tools are versatile shop tools for hand grinding, deburring, sanding, cleaning, carving, buffing & polishing of all types of materials. With variable speed, smooth-running handpieces, & permanently lubricated, ball-bearing motors.

S MOTOR KIT



Powerful 1/8 horsepower S motor operates up to 18,000 RPM. 39" long, .150" diameter shaft in protective sheath with steel liner & silencer.

Money-saving kit includes:

- Series S Motor
- No. 30 Handpiece
- FCT Foot Control
- No. 20 Accessory Kit
- Grease

DP-4SK S Motor Kit

DP-4S S Motor with FCT

SR MOTOR



Same powerful 1/8 horsepower S motor as above, but also reversible. (The reversible motor is not available in the above kit.)

DP-4SR SR Motor with FCT

NO. 30 HANDPIECE



5 1/4" long handpiece with geared 3-jaw chuck. Accepts any accessory with shank up to 5/32" diameter.

DP-4H30 No. 30 Handpiece

FOOT CONTROL

Speed control pedal with great stability, comfort, smooth control.

DP-4FCT

FCT Foot Control



MOTOR HANGER

Hang-up motors save valuable workspace. Comes with mounting clamp for attaching to bench tops. Includes accessory tray & handpiece rest.

DP-4MH5

Motor Hanger



MAINTENANCE KIT

Includes shaft, pair of motor brushes, grease, & operating manual. (Not pictured.)

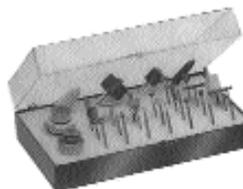
DP-4MK8

Maintenance Kit

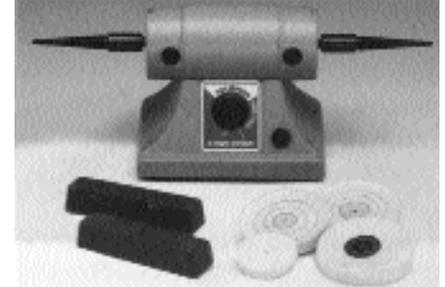
ASSORTED ACCESSORY KIT

35 pieces: steel cutters, burs, mounted points, wire & bristle brushes, abrasives, sanding drums, felt bobs.

DP-4K20 No. 20 Accessory Kit



POLISHING LATHE KIT



Compact but powerful 1/6 horsepower motor. Mount buffs for polishing key-tops, hardware, etc. Attach the Flexade flexible shaft (sold separately), and it becomes a flexible shaft tool! Variable speed 1800 to 7000 RPM with dial control. Heavy duty cast iron base with 4 mounting holes. Accepts 1 1/8" to 4" buffs. Accepts brushes & wheels up to 2". Includes tapered mounting spindles. Weight 7 1/2 lbs. 5 1/8" high x 13" wide between spindle tips.

Kit includes:

- Polishing Lathe with Spindles
- 4 oz. each Tripoli and Red Rouge
- 2" x 3/8" Felt Buff
- 3" Cotton Buffs: coarse, loose, & fine

DP-4BL15 Polishing Lathe Kit

ACCESSORIES

30" Neoprene sheath turns the lathe into a flexible shaft tool.

DP-4BO516N

Flexade only

3" Cotton Buffs:

DP-4CBC3 Coarse

DP-4CBF3 Fine

DP-4LCB3 Loose

2" Felt Buff:

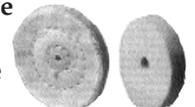
DP-4W305 Felt Buff

DP-4CK0

Extra Chuck

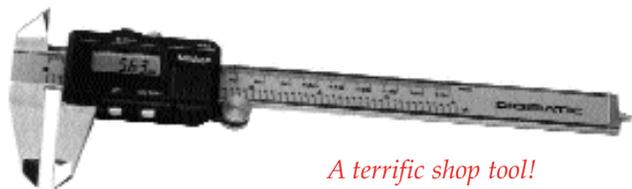
Key

Handpiece sold separately.



MICROMETERS

MITUTOYO DIGITAL CALIPER



A terrific shop tool!

LCD display & imprinted line scale. Rugged construction. Inside, outside diameters & depth. Set zero at any point for tolerances – excellent for tuning pins. Converts inches to metric. 6" capacity with resolution of .0005" / .01mm. Comes with hard fitted case.

#MT500-351 Mitutoyo Digital Caliper

GENERAL TOOL DIGITAL CALIPER



Electronic digital 6" caliper reads to .001" and 0.1mm in accuracy. For inside, outside and depth measurements. Set zero at any point for plus/minus tolerances. Converts inches to metric. Lightweight plastic scale.

#MIC-143C General Tool Digital Caliper

BRASS POCKET CALIPER

Handy 4" brass pocket caliper measures by 1/16" or 1mm graduations.

#590-1100



Brass Pocket Caliper

STARRETT 1/2" MICROMETER

Compact & accurate. Precision micrometer measures up to 1/2", in .0001" graduations.

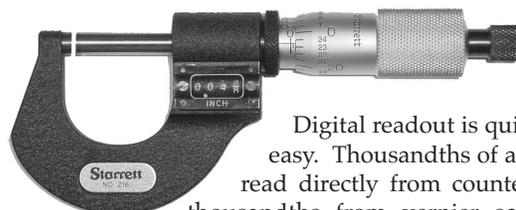
Carbide faces, ratchet stop & lock nut.

#MIC-S 1/2 Starrett 1/2" Micrometer

#MIC-S 1/2 ZZ Deluxe Padded Case only



STARRETT DIGITAL MICROMETER

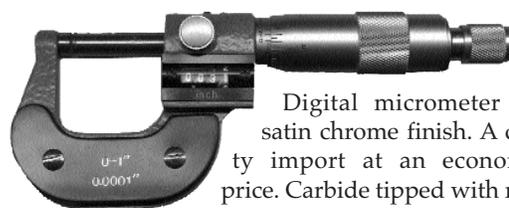


Digital readout is quick and easy. Thousandths of an inch read directly from counter, ten-thousandths from vernier scale on sleeve. Ratchet stop, lock nut, carbide faces for longevity. Range 0 to 1".

#MIC-SD1 Starrett Digital Micrometer

#MIC-SD1ZZ Deluxe Padded Case only

DIGITAL MICROMETER



Digital micrometer with satin chrome finish. A quality import at an economical price. Carbide tipped with ratchet stop & lock nut. Measures 0 to 1", in .0001" graduations. Hardshell case included.

#CDM-1 Digital Micrometer

GENERAL TOOL UTILITY MICROMETER



Vernier micrometer with full satin finish. Range 0 to 1" in .001" graduations. Decimal equivalents, friction stop, adjustable.

#MIC-102 Utility Micrometer

STARRETT 2-ANVIL MICROMETER



Measure the diameter of strings still in the piano!

Bottom nut loosens nosepiece for insertion of either flat or round anvils. Anvils are thin enough to fit even between unisons. Tungsten carbide faces, friction thimble, lock nut. Range 0 to 1", in thousandths of an inch.

#MIC-2A Starrett 2-Anvil Micrometer

#MIC-2AZZ Deluxe Padded Case only

THICKNESS GAUGES

For measuring felt, cloth, leather, and more.



#7300

MITUTOYO THICKNESS GAUGE

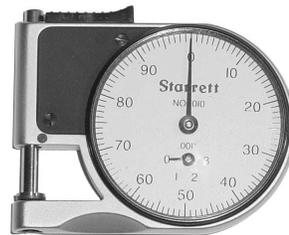
Spring-loaded thickness gauge for fast micrometer readings, especially felt & tuning pins. Range up to .400", in .001" graduations. Easy, one-hand operation. Measures 4½" h x 3¾" wide.

#7300 Mitutoyo Thickness Gauge

STARRETT POCKET THICKNESS GAUGE

Compact, accurate thickness gauge measures up to 3/8", in .001" graduations. 2¼" x 1¾".

#MIC-S1010 Starrett Pocket Thickness Gauge



#MIC-S1010

Tek TIP When measuring felt or cloth, control the pressure of the gauge, so that it just brushes the surface.

PROTRACTOR

For measuring hammer bore angles, etc. Stainless steel, etched graduations from 0 to 180°. Features brushed chrome finish & locking nut.

#PR-17 Protractor



STARRETT MUSIC WIRE GAUGE

For measuring steel music wire.

Decimal equivalents of wire gauge numbers conveniently stamped on back side.

Hardened for long life & continued accuracy. Gauge measures #12 to #28 wire.

#WG-280 Music Wire Gauge



SCREW & WIRE GAUGE



For wood screws #0 to 30, and 1/16" to 7/16". Also English & American wire. (Not for music wire.) Steel. 4" x 1¾".

#WG-26 Screw & Wire Gauge

DEPTH & ANGLE GAUGE



Stainless steel 6¼" rule with etched graduations in 32nds & 64ths.

2½" base measures 30, 45, 60 & 90 degrees.

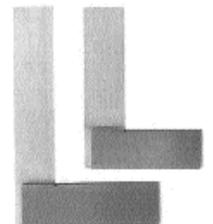
#DA-44 Depth & Angle Gauge

STEEL SQUARES

Beam riveted to fully ground & polished carbon steel blade.

#SQ-3 3" Steel Square

#SQ-6 6" Steel Square



SURFACE HEIGHT GAUGE

Use to measure distance of hammershank center pin from keybed. Subtracting this from string height gives you perfect length of bore. Scriber point, and spindles of 4" & 7" lengths.

#231 Surface Height Gauge



T-BEVEL SQUARE

8" sliding T-bevel with mahogany handle. For duplicating angles, i.e. pinblock angles.

#TB-829 T-Bevel Square



DIVIDER

To measure action spread. Spring-joint 8" divider. Hardened, heat-treated points. Quick nut adjustment.

#DI-8 8" Divider



SCALES & RULERS

OHAUS SCOUT SCALE



Portable, precision digital gram scale with a 400-gram capacity. Easy to use. 6 $\frac{3}{4}$ " w x 8 $\frac{1}{4}$ " d x 2 $\frac{3}{8}$ " h. Ideal for weighing hammers and action parts.

#SC-4010 Ohaus Scout Scale

DIGITAL SCALE

Ohaus digital 320-gram scale accurate to plus or minus 1/10 gram.

Lightweight and totally portable. User-friendly 4-button keypad. Measures in 1/10 gram graduations. Luminescent display. Auto off feature. Includes snap-on protective cover. Low battery indicator. 2 AAA batteries included.

Capacity up to 320 grams. Can also read in ounces, up to 11.28 oz., in .01 oz. increments.

#SC-320 Ohaus 320-gram Scale



GRAM SCALE

Fulcrum action of this precision scale eliminates the need for weights & springs. Leveling screw for calibrating on uneven surface. 100-gram capacity.

#SC-2 Gram Scale

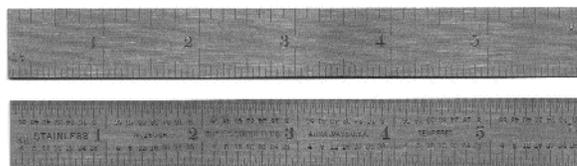
STARRETT DIGITAPE RULE



Electronic 16' tape measure is great for measuring grand string height. Inside/outside measure. Inside feature automatically adds case length. English/metric conversion. Zero reset. Memory holds measurement on display — ideal in dark or restricted areas.

#SR-D34 Starrett Digtape Electronic Rule

STARRETT 6" STEEL RULE



6" rule of hardened, tempered stainless steel. 8ths, 16ths on one side. 32nds, 64ths on other.

#SR-6S4R 6" Starrett Rule

FLEXIBLE STEEL RULE



Precision made, 6" (150mm) rule of flexible stainless steel. Etched graduations on one side only. Metric graduations in millimeters across upper half, English graduations in 32nds across bottom.

#SR-6 6" Flexible Steel Rule

6" RULERS WITH POCKET CLIP



Flexible 6" rulers with sliding pocket clip. 1/4" wide. 2 styles to choose from.

#SR-301 6" Rule with Clip, 32nds & 64ths

#SR-301/M 6" Rule with Clip, millimeters & 16ths

PRECISION KNIFE No. 5



Big 4/4" plastic handle for comfort and manageability. Comes with one #19 blade. Because blades are replaceable, you can always have a sharp cutting edge.

#X-K5 No. 5 Precision Knife

PRECISION BLADES



Sharp angle for precision cutting of medium to heavyweight materials.

#X-B2 No. 2 Blades, 5-pack



Slightly angled, useful for chopping. 3/8" wide blade will work for trimming bushing cloth on most front rail mortises. Also for light chiseling, deburring, and trimming.

#X-B19 No. 19 Blades, 5-pack

INDUSTRIAL RAZOR BLADES

Industrial one-edge razor blades for general shop use.



Economical box of 100.

#KN-867 Razor Blades, box

HEAVY DUTY BENCH KNIVES



High quality knives for felt, leather, etc. Rosewood handles riveted, designed for comfort. High quality carbon steel blades.

#KN-7 Knife with Straight Blade

#KN-6 Knife with Curved Blade

ROTARY FELT CUTTER

Cut your own bushing cloth, felts, and leather accurately and with ease. Rotary cutters cut cleanly without pulling.

Standard Kit includes 45mm Rotary Cutter, an extra 45mm blade, and a 12" x 18" cutting mat.

#RFC-1 Standard Rotary Felt Cutter Kit

#RFC-2 45mm Blade only

#RFC-3 Cutting Mat only

#RFC-4 45mm Rotary Cutter only



Extra Large Kit includes Rotary Cutter with 60mm blade, an extra 60mm blade, and a 12" x 18" cutting mat. This kit is recommended for thicker cloths and felts.

#RFC-1X Extra Large Rotary Felt Cutter Kit

#RFC-2X 60mm Blade only

#RFC-3X Cutting Mat only

#RFC-4X 60mm Rotary Cutter only



JAPANESE FELT KNIFE



Chisel-style knife for trimming felt. Especially useful for trimming grand damper rail bushings and balance rail bushings. Also works as a fine wood chisel.

#JFK-1 Japanese Felt Knife

JAPANESE KNIFE



Small knife with wooden sheath, suitable for cutting felt. Blade made from high carbon steel sandwiched between 2 layers of stainless steel. Handle riveted to blade. 8" overall.

#JKN-8 Japanese Knife

UTILITY KNIFE



Opens instantly to any one of 3 cutting positions. Blade retracts for safety. Comes with 5 heavy duty blades.

#KN-855 Utility Knife

#KN-852 Utility Knife Blade

BREAKAWAY KNIFE



Black plastic handle, snap-off blade.

#RFC-180 Olfa Snap-Off Knife

#RFC-180B Replacement Blade

BREAKAWAY KNIFE



Yellow plastic handle with anti-slip rubber grip. Blade easily renewed by snapping off used portion.

#RFC-A2 Olfa Snap-Off Knife

#RFC-A2B Replacement Blade

SAWS

SHARK SAWS

High quality Japanese saws cut on the pull stroke for increased control and accuracy. Blades are replaceable at the push of a button.

DOWEL SAW



A fine-toothed, flexible saw designed for trimming dowels, like hammer shanks. Soft grip handle features single button control for replacing blade. An essential shop tool. 12½" in length, with 6½" blade. 26 point blade with .021" kerf.

JBS-2204 Shark Dowel Saw

JBS-2204B Replacement Blade

DOUBLE-EDGED SAW

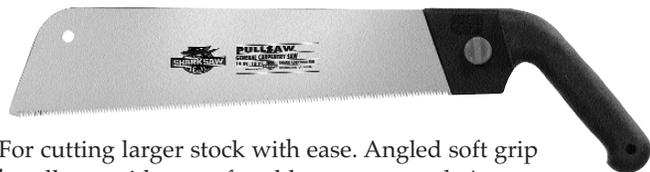


Traditional Ryoba-style Japanese saw with double cutting edge. Designed to allow very close cuts by flexing blade. 23¾" overall length, with 8½" blade. 24 point & 9 point cutting edges, with .030" kerf.

JBS-2450 Shark Double-Edge Saw

JBS-2450B Replacement Blade

GENERAL PURPOSE SAW



For cutting larger stock with ease. Angled soft grip handle provides comfortable, easy control. A great general purpose saw. 22" in length, with 15" blade. 10 point with .050" kerf.

JBS-2315 Shark General Purpose Saw

JBS-2315B Replacement Blade

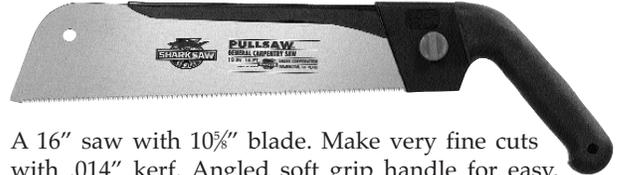
JAPANESE BEADING SAW



Excellent for bridge work, trimming shanks, etc. Lightweight, easy to use. Cuts on pull stroke for greater manageability. Very fine cut. Permanent blade made from high quality saw steel. Traditional softwood handle. Overall length 12".

JBS-1 Japanese Beading Saw

FINE CUT SAW

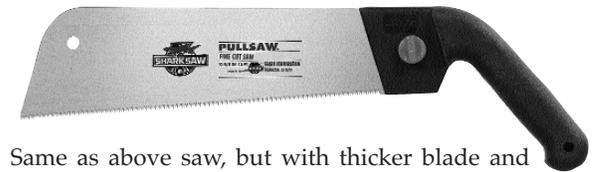


A 16" saw with 10½" blade. Make very fine cuts with .014" kerf. Angled soft grip handle for easy, comfortable control. 17 point blade. The best for trimming hammer shanks!

JBS-2410 Shark Fine Cut Saw

JBS-2410B Replacement Blade

FINE CUT SAW



Same as above saw, but with thicker blade and larger (15 point) teeth for heavier cutting action. Shorter spine for longer cuts. 16" overall, with 10½" blade. .028" kerf.

JBS-2420 Shark Fine Cut Saw

JBS-2420B Replacement Blade

SANDVIK DOVETAIL SAWS



Fine cutting saws of highest quality Swedish steel & construction. The straight dovetail has fine, 14-point universal toothing. Model 312 features extra-fine 16-point fleam toothing on reversible blade. Offset handle allows flush-cut with either hand when access is restricted. Both models feature orange lacquered wood handles. 10" blade.

SK-310 Straight Dovetail Saw

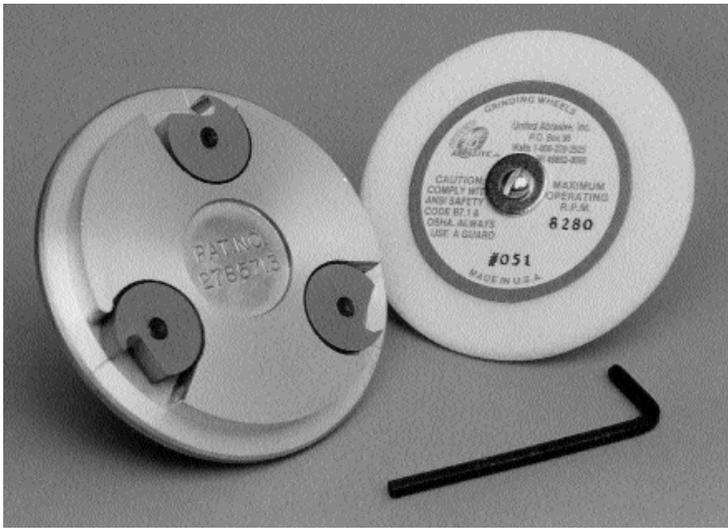
SK-312 Offset Dovetail Saw

WOODWORKING TOOLS

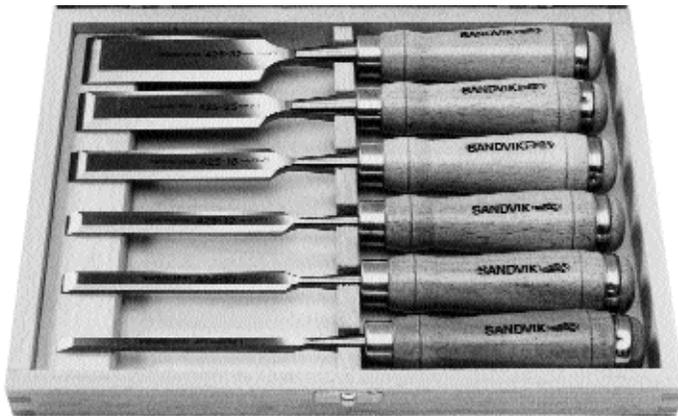
SAFE-T-PLANER

For use with drill press. Impossible to grab or kick back. Three cutters of longlife high-speed tool steel. Comes with resharpening tools. Use the head flat for thickness planing. Or, cut with the edge for square corners or decorative cuts. Right hand rotation, cuts 1/4" deep, diameter 3 3/8" overall. Fits any 1/2" capacity chuck.

#DP-1 Safe-T-Planer



SANDVIK CHISEL SET



Beechwood handled chisels made of the finest tool steel. Shoulder & tang are of a lower hardness and a tougher structure than the blade, enabling the chisel to withstand heavy impact & breaking forces. The face and bevel edge are specially ground to reduce friction and keep the chisel sharp throughout its life. All handles are banded in brass to ensure long life. Set of 6 chisels comes in a sturdy, wooden case. Includes blades widths: 1/4", 3/8", 1/2", 3/4", 1", and 1 1/4". All blades are 5 1/2" long.

#SK-425S Sandvik Chisel Set

DEADBLOW HAMMERS



For fitting pinblocks or restringing. Reduces noise, increases effectiveness. Unicast construction, no exposed metal. Metal core fully encased in highly impact-resistant polyurethane. Shot-filled to produce intensive impact with less striking force.

#CH-1 1 lb. Deadblow Hammer

#CH-3 1 1/4 lb. Deadblow Hammer

#CH-5 3 lb. Deadblow Hammer

MINI SLEDGE HAMMER



Excellent for fitting pinblocks or driving pins. Four-lb. tool steel head is beveled for striking in areas where a full swing is restricted. 10" overall length.

#CH-48 Mini Sledge Hammer

POCKET PLANES



For small work. These German-made planes are 3 1/2" long with 1" blade.

#580-2300 Pocket Plane

#580-2200 Pocket Plane with Raised Handle

BENT SHANK CHISEL



The chisel for bridge work. Shank is bent for hand clearance. 3/4" wide blade. Japanese chisel is hand-forged from soft and high-carbon white steels.

#JBC-1 Japanese Bent Shank Chisel

SCRAPERS

SANDVIK SCRAPERS

The superior quality of Sandvik scrapers is known worldwide. Their tungsten carbide blades are 2½ times harder than hardened steel, and stay sharp & productive 50 times longer than a typical steel scraper. Replacement blades available.



HEAVY DUTY SCRAPER

Features 2½" wide blade for greater scraping ability, and an extra grip on the handle for increased scraping pressure. Double-edged blade is clamped for work on the pull stroke. Cast aluminum shaft & ergonomic plastic handle designed for comfortable, non-tiring grip.

#SK-450 Sandvik Heavy Duty Scraper
#SK-451 Replacement Blade

UTILITY SCRAPER

2" tungsten carbide blade ideal for removing paint, glue, varnish & rust. Cast aluminum shaft, ergonomic plastic grip. Blade ground to slight curve to reduce risk of corners scratching. Blade can be clamped for pull or push strokes, and has 2 very long-lasting edges.

#SK-440 2" Utility Scraper
#SK-442 Replacement Blade

MINI SCRAPER

Triangular 1" wide blade designed for scraping in restricted areas. Blade ground to slight curve. Cast aluminum shaft, ergonomic grip. Blade can be clamped for either push or pull stroke, and with either a straight edge or a corner in the working position. All 3 edges of blade can be used.

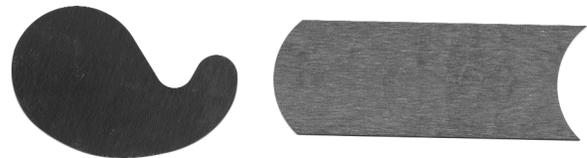
#SK-448 Sandvik Mini Scraper
#SK-449 Replacement Blade

SANDVIK CABINET SCRAPER



Special Swedish steel will take and hold an edge beyond comparison. Ideal tool for final smoothing. A favorite among cabinetmakers. 6" x 2½" x .030".
#SK-474CS Sandvik Cabinet Scraper

CABINET SCRAPERS



Fine German steel cabinet scrapers. Convex and concave curves, or a classic gooseneck shape.

#520-5060 Curved Cabinet Scraper
#520-5070 Gooseneck Cabinet Scraper

ABRASIVE CORD

.055" diameter abrasive cord for removing finish on intricate carvings. Also for deburring agraffes. 1/4" tape for larger work. 23 meters of 150-grit aluminum oxide-coated cord or tape.

#AB-52 Abrasive Cord
#AB-59 Abrasive Tape



INDUSTRIAL RAZOR BLADES

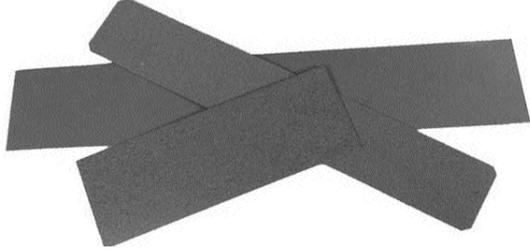
Industrial one-edge razor blades for scraping or for general shop use. Economical box of 100.
#KN-867 Industrial Razor Blades, box



FILES & SHARPENING TOOLS

PERMAGRIT SANDING PADDLES

Ideal for hammer filing, these sanding paddles feature tungsten carbide grit brazed to flat steel. Virtually won't wear out. For hammers, wood, plastic, etc.



RIGID STEEL 9" x 1½"

F-100 60-grit one end, 120-grit other end

F-101 120-grit only

FLEXIBLE STEEL 11" x 2"

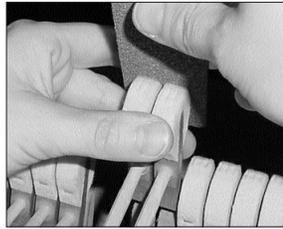
FXT-103 Flexible 120-grit

FXT-104 Flexible 60-grit

FLEXIBLE STEEL 5½" x 2"

FXT-106 Flexible 120-grit

FXT-107 Flexible 60-grit



CHECKERING FILE



6" x 3/4" hand file for checkering hammer tails. Use with File & Tool Handle shown below.

FL-C Checkering File

SANDVIK MILL FILE



Suitable for hand filing of plastic and wood. Bastard cut provides quick cutting action. 10" long.

SK-143 Sandvik Mill Bastard File

FILE & TOOL HANDLE

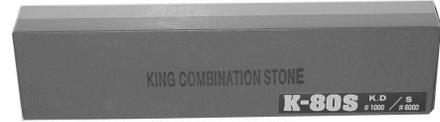
Wooden adjustable file & tool handle.

Gripping mechanism holds any shape shank whether round, oval, or flat.

295-1030 File & Tool Handle



JAPANESE WATERSTONE



Cuts very fast, yet leaves the finest edge. Will out-perform any oil stone. Double-sided with 1000-grit on one side for coarse sharpening, and 6000-grit on other side for final sharpening to razor sharpness. 8" x 2" x 1".

K-80S King Deluxe Japanese Waterstone

BURNISHERS

For sharpening cabinet scraper blades. All styles include handle. German-made. Tools work best when sharpened!

520-5080 Oval Burnisher

520-5085 Triangular Burnisher

520-5090 Round Burnisher

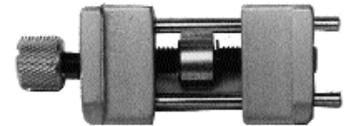


See page E-16 for books on sharpening.

HONING GUIDE

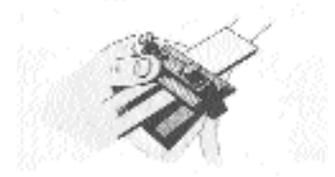
Simple to use. Securely holds wood chisels and plane irons at correct angle to sharpening stone, and ensures a square edge.

240-1030 Honing Guide



Ideal for use with Japanese waterstone.

SHARPENING JIG



Holds chisels or plane irons in precise relationship to grinding wheel.

143-1000 Sharpening Jig

TUNGSTEN POINT FILE



5¼" overall. Double cut. Thin rectangular shape and light weight make this file ideal for filing notches on keytops.

FL-TP73 Tungsten Point File

TOOLS

REVOLVING PUNCH PLIERS



For punching holes in leather, paper, cloth, rubber, etc. Made of plated steel with 6 hollow, hardened steel punches up to 3/16" diameter.

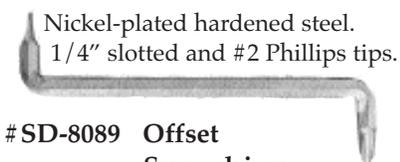
#RPP-6 Revolving Punch Pliers

POCKET LEVEL



Handy 5" level fits easily in your pocket or tool case. Plastic housing.
#LV-827 Pocket Level

OFFSET SCREWDRIVER



Nickel-plated hardened steel.
1/4" slotted and #2 Phillips tips.
#SD-8089 Offset Screwdriver

SOFF-JAWS™

Magnetic strips hold Soff-Jaws to your bench vise. Cushioned pads grip odd shapes, and prevent marring. 3/2" wide to fit 3" or 4" vises.
#SJ-35 Soff-Jaws™



JUMBO SCREWDRIVER

Rugged, super long screwdriver for plate or case screws. Blade 1/2" x 19". Overall length 25".



#6019
Jumbo Screwdriver

ARCH PUNCHES

For punching leather, felt, and rubber, etc. High quality.

- #1271AA 3/16"
- #1271A 1/4"
- #1271B 5/16"
- #1271C 3/8"
- #1271D 7/16"
- #1271E 1/2"
- #1271F 9/16"
- #1271G 5/8"
- #1271H 11/16"
- #1271-I 3/4"
- #1271J 13/16"
- #1271K 7/8"
- #1271L 15/16"
- #1271M 1"
- #1271N 1 1/8"
- #1271-O 1 1/4"
- #1271P 1 3/8"
- #1271Q 1 1/2"



ARCH PUNCH SET



Set includes vinyl roll and 7 arch punches:
1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1".

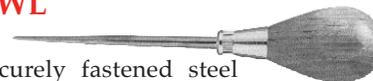
#1271ST 7-Piece Arch Punch Set

4-in-1 SCREWDRIVER



Converts in seconds to 4 most often needed tips: 3/16" & 1/4" slotted, and No. 1 & No. 2 Phillips. Plastic handle.
#SD-41 4-in-1 Screwdriver

AWL



Securely fastened steel blade runs through hardwood handle.
#AW-818 Awl

CURVED LOCKING PLIERS



Curved jaw with inner wire cutter. Adjustable. Compound action for powerful non-slip locking grip. One-hand release lever. Durable black oxide finish.

#LPL-7 Curved Locking Pliers

LONG NOSE LOCKING PLIERS

Long nose with inner wire cutter. Adjustable. Compound action for powerful non-slip locking grip. Convenient one-hand release. Black oxide finish.



#LPL-6 Long Nose Locking Pliers

DIAGONAL PLIERS



Diagonal cutting plier, 5 1/2" long.
#DPL-126 Diagonal Pliers

SPRING CLAMPS

- #SPC-1 1" Spring Clamp
- #SPC-2 2" Spring Clamp



ACOUSTICRAFT STRATE-MATE

Improved version of the original Chris Robinson design. This is a must-have tool for any re-stringing project. After restringing, the time required for tuning stability can be long. The Strate-Mate addresses this problem by dramatically speeding the settling-in process. The primary function of the Strate-Mate is to level the strings by removing the "slow-bend" at the agraffe and capo-bar, thereby reducing the number of "chip-up" tunings normally required. Damper installation and hammer fitting will also be easier. Pianotek has carefully re-engineered this tool to ensure many years of rugged use.

- Solid steel bar stock.
- Powder coat finish.
- Precision die press bending for accurate alignment.
- Full instructions included.
- Comfortable grip handle.
- Lifetime warranty.



An essential stringing tool!

SM-2004 Acousticraft Strate-Mate

MAXI-SHEAR™ FLUSH CUTTER



Great for trimming damper felt!

High carbon steel, *fully flush* side cutters for center pins, even size 26. Hidden spring mechanism and rubber grips for comfort even during extended use.
WC-135 Xuron Maxi-Shear 2175A Side Cutter

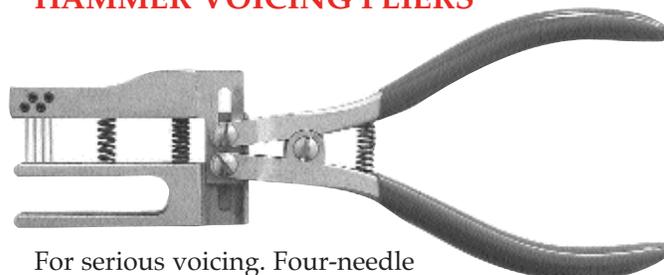
MUSIC WIRE CANNISTER



High quality 2-part cannister for storing and dispensing 1-lb. coil of music wire. Fits any piano wire gauge.

WC-200 Music Wire Cannister

HAMMER VOICING PLIERS



For serious voicing. Four-needle parallel-action pliers are applied to side of hammers, softening the inner portions of the hammer, while leaving outside tension intact. Same as used in upscale piano factories. Particularly effective for opening up tone in treble section. Length is 8½".

VT-900 Hammer Voicing Pliers

ADJUSTABLE VOICING TOOL



Easily adjust the depth of this quality 3-needle voicing tool by simply turning the collet. Ergonomic hardwood handle. Superior craftsmanship. 6" in length.

VT-400 Adjustable Voicing Tool

TOOLS

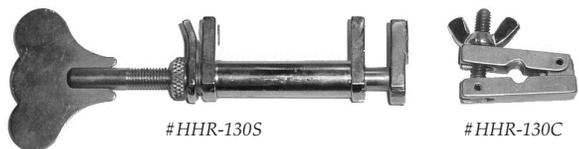
STRAIGHT BALANCE HOLE REAMERS



Straight fluted reamers for easing key balance holes from key bottom. Will not over-ease hole. Use with our #PV-93 Pin Vise (page D-15).

PART #	DIAMETER	FOR PIN SIZE
#KCS-1475	.1475" Reamer	.145" / .146"
#KCS-1630	.1630" Reamer	.160"
#KCS-1395	.1395" Reamer	.137"

HAMMER HEAD & BUTT EXTRACTOR

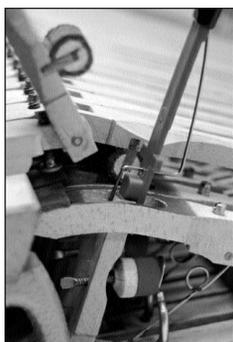


For removing either hammer head or butt from shank without damage. Upright extractor for shanks greater than 3/4" in length. Spinet extractor for shanks 2/4" or shorter. If the shank is broken, you must use the clamp in conjunction with either extractor.

- #HHR-130X Upright Hammer Extractor
- #HHR-130S Spinet Hammer Extractor
- #HHR-130C Clamp for Hammer Extractor

GRAND JACK ALIGNMENT TOOL

Jack alignment you can see. Simply adjust the jack until the small side wing on the tool meets the back of the adjacent knuckle core. Really simplifies the task. Approximately 2 7/8" in length.



#NL-100 NuckLJac Tool

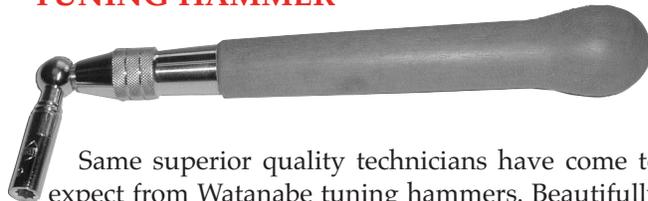
VIENNESE ACTION PLIERS



Reverse pliers for adjusting friction between the kapsel fork and hammershank axel pins in Viennese fortepiano actions.

#VKP-10 Viennese Action Pliers

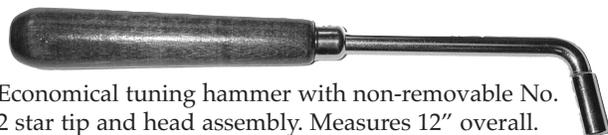
WATANABE BALL-HANDLE TUNING HAMMER



Same superior quality technicians have come to expect from Watanabe tuning hammers. Beautifully finished hardwood handle with ball end for increased comfort. 11" in length. Includes No. 2 star tip.

#TH-2B Watanabe Ball-Handle Tuning Hammer

GOOSENECK TUNING HAMMER



Economical tuning hammer with non-removable No. 2 star tip and head assembly. Measures 12" overall.

#TH-3G5 Gooseneck Tuning Hammer

T-HANDLE TUNING HAMMER



Rugged T-handle with non-removable square tip and head assembly. 6" long.

#TH-12T T-Handle Tuning Hammer

CORK INSERTING TOOL



Lightweight tool for inserting bridle strap corks into catcher hole. 4" in length. For combination handle.

#CK-141 Bridle Cork Inserter

JACK SPRING HOLE REAMER



Serrated end quickly removes dried glue from jack spring hole. 4 7/8" in length.

#JR-127 Jack Spring Hole Reamer

PERMA-GRIT CHAMFER BIT



Rough-grit tungsten carbide abrasive bit for chamfering holes in wood, such as capstan holes. Will not chatter.

#F-15LC Perma-Grit Chamfer Bit