Spring Pressure Keeps Ramps/ Bases/.45 Sights In Place

Cures the "ramp slips just as the solder melts" problem with a pointed, spring-loaded plunger that keeps constant pressure on the ramp or a .45 sight. Adjusts for height, angle and amount of spring pressure. Non-marring, "V" block base centers barrel under the plunger. Great torch clearance.



SPECS: 2" (5.1cm) long. aluminum Base. 4" (10.2cm) high overall

#080-739-000 Ramp Soldering Jig, 8K78G34 \$ 89.99

BROWNELLS RAMP SOLDERING JIG

TIX SOFT SOLDER

Melts At 275° F. For All Solderable Metals

"Hardest soft solder on earth." Melts at 275° F. Bond strength is 4,000 psi. For steel, gold, silver, stainless steel, alnico, pewter, most alloys. Will not tarnish. Contains no silver or bismuth. Works beautifully for attaching precious metal inlays. Works best with TIX Flux. SPECS: 125 grains, approximately 3" (7.6cm) sticks.

			,			
#030-001-125	TIX Solder	, 3	K15D11		 	\$ 17.99
#030-002-050	1/2 oz. TIX I	FLU	JX. 3K4D	15 .	 	4.99

BROWNELLS HOMOGENIZED SOLDER

Syringe Meters Exactly, Locates Precisely



Two solders-in-flux join most ferrous and non-ferrous metals, including stainless steel. Exceptions are aluminum and magnesium. Special homogenizing process ends solder/flux separation. Flux residue cleans up with warm water.

SPECS: 70PA Solder: 16,000 psi tensile strength, 425° F. bonding temp. Great for joining dissimilar metals. Can be Plated Over with Electroless Nickel. 80PA Silver Braze: 85,000 psi tensile strength, 1125° F. bonding temp. Excellent for nickel alloy, carbide and dissimilars. Can Be Plated Over. 1 oz. (28 a) net wt.

#080-601-070	70PA Solder, <i>8K32J99</i>	\$ 39.99
#080-602-080	80PA Silver Braze, <i>8K62A99</i>	79.99

HOW TO MAKE A FLAT OR "V" SPRING

The following method of spring tempering was the lifelong trade secret of John Frazier, Master Gunsmith of Chariton, Iowa. Of some 3,000 plus springs he made during his career, he knows of only three that broke.

Heavy "V" springs are best forged and finish-filed, then ground to shape. Be SURE all lines are absolutely true and all tapers are similar to a "buggy whip". Beyond the end of the taper of one leaf, leave part of the original steel attached. Hold the spring by this while hardening to prevent the heat bleed-off caused if the spring itself were held with pliers.

In a dark or unlighted corner of your shop, heat the spring until it just shows red color and quench. Now grind to exact shape and dimensions. Next, take a guart tin can and pound an indentation in one side, deep enough to hold the spring.

Place the spring in the indent and cover it with motor oil. Set the oil on fire and let it completely burn up. Then throw a handful of dry lime over the spring to "keep it dark" for a couple hours. The spring in now properly tempered. As John puts it: "You either have a spring or you don't. A complete compression in your vise will darned soon tell you!"

Abrasive Blasting401	Polishing 3978-400
Engraving/Stamping/ Jeweling . 401-402	Soldering & Welding395-396
Heat-Treating	Springs & Raw Materials 395

METAL WORK INDEX

GENERAL USE SPRINGS -

Solve Literally Hundreds Of Spring Needs With These Kits

WOLFF LIGHT-DUTY COIL SPRINGS - Kit #4

100 Coil springs. 10 designs. O.D.'s from .090" (2.3mm) to .250" (6.3mm). Overall lengths from 2" (5.1cm) to 4" (10.2cm). Pitch and wire diameter variations provide many loadings.

WOLFF HEAVY-DUTY COIL SPRINGS - Kit #5

100 Coil springs. 10 designs. For heavy loadings. O.D.'s from .090" (2.3mm) to .250" (6.3cm). 2" (5.1cm) to 4" (10.2cm) long. #969-100-510 Wolff Kit #5. 9F29Q14......\$ 36.99

WOLFF MASTER COIL SPRING KIT - Kit #345

Contains 1 each of these Kits: No. 3 and 4 English; No. 4 Metric; No. 5 English and No. 5 Metric. 5 Kits with a total of 550 highly usable springs. An excellent gun shop assortment.

WOLFF MINIATURE COIL SPRING PAK - Kit #1607

50 Miniature coil springs for firearms, O.D.'s from 1/16" (40.6cm) to 5/32" (4mm) with English and Metric variations.

WOLFF COIL SPRING COMBINATION KIT - Kit #1610A

The same 50 springs in Kit #1607, plus 40 more. 2 each of 10 designs in both light and heavy weights. Length 2" (5.1cm) - 4" (10.2cm), O.D.'s from 3/32" (2.4mm) to 1/4" (6.3mm).

#969-161-010 Wolff Kit #1610A. 9F23D36......\$ 28.99

NO. 69

Wire Diameters: .012" to .024" Coil O.D.'s from .110" to .210"

COMPRESSION SERVICE SPRINGS - Same outside diameters as in Assortment No. 71, but of softer action. Designed primarily for locks, sporting equipment and the softer acting gun and camera springs. Cut to 12" lengths.



#025-069-000 No. 69 Spring Assort., 8K00EAG...... \$ 18.99

NO.71

Wire Diameters: .016" to .058" Coil O.D.'s from .095" to .312"

COMPRESSION GUN SPRINGS - Twelve compression springs of medium to stiff action. Two each of six sizes, 12" long. Will cover many gun and shop needs.



#025-071-000 No. 71 Spring Assort., 8K23B14..... \$ 24.99

NO. 150

Wire Diameters: .020" to .062"

SMALL SPRING WIRE - One hundred, 12" long pieces of assorted music, spring, and piano wire. For making gun and miscellaneous small springs. An



extremely popular gunsmith and sports-repairman assortment.

#025-150-000 No. 150 Spring Assortment, 5B26F54 . . \$ 29.99

BROWNELLS MILD STEEL ROUNDS & FLATS

1018 Steel In Handy Lengths & Sizes

No more "Mystery Metals" from the junk yard. This quality 1018 steel is ideal for making shop projects. 18" lengths. Assortments contain one piece of each size.

#080-735-250 1/4" dia. x 18" Mild Steel Rod, 5L5P48 \$ 5.99 #080-735-750 3/4" dia. x 18" Mild Steel Rod. 5L21M45.... 24.99



BROWNELLS STEEL SHIM STOCK

Solves Most "Need A Little More Metal" Problems

For scope base adjustment, sight adjustment, head-space adjustment and checking, restoration of misaligned parts oldering on for buildup, inletting templates.

spacers. You name it, and somewhere along the line a shim can be used for everything from shimming, to measuring, to fixing!

KIT NO. AC-24 - consists of one piece, each, steel shim stock, 21/2" x 6" in the following thicknesses: .001" .002" .003" .005" .010" .015" #080-544-024 AC-24 Steel Shim Stk Kit. 8K19A99 \$ 19.99

KIT NO. AF-12 - consists of one piece, each, steel shim stock, 6" x 12" in the following thicknesses: .001" .0015" .002" .003" .004" .005" .006" .007" .008" .010" .012" .015"

#080-544-012 AF-12 Steel Shim Stk Kit, 5A55F31 \$ 62.99

MUSIC WIRE SPRING STOCK

#715-212-020 .020" Music Wire, 5A12F99...... \$ 14.99

Form Or Turn Your Own Special Springs

For Those Weird Ones

er for handy withdrawal of any length needed.

1/4 lb. rolls in a convenient "Tangle-Free" dispens-

BROWNELLS **GUNSMITH'S COIL SPRINGS**

BROWNELLS

EXTRA-WIDE SPRING STEEL

SPECS: 1095 cold rolled and annealed hi-carbon steel. 1/32" (.79mm), 1/16

(1.6mm), 3/32" (2.4mm) or 1/8" (3.2mm) thick x 16" (40.6cm) long. Available

in 1/2" (12.7mm) or 1" (2.5cm) widths. 1/2" (12.7mm) Assortment: two pieces

of each thickness. 1" (2.5cm) Assortment: one piece of each thickness. To

DRAW

900° F.

1000° F.

1100° F.

1200° F.

Rc

41

38

34

30

In-Hole & Over-Pin

Styles

PSI

189,000

176.000

155,000

138.000

59.99

69.99

harden: heat to 1450°-1500° F, and quench in oil. Yields Rc 66.

PSI

320,000

270.000

238.000

212.000

#080-036-000 1/2" Spring Stock Assort., 8K33B19

#080-037-332 10 Pk 1/2"x 3/32" Spring Stock, 8K48F86...

#080-037-018 10 Pk 1/2"x 1/8" Spring Stock, 8K62J98 ...

#080-037-132 10 Pk 1/2"x 1/32" Spring Stock, 8K25Q92 . . 30.99

#080-037-116 10 Pk 1/2" x 1/16" Spring Stock, 8K20B50... 23.99

#080-038-000 1" Spring Stock Assortment, 8K26I98 . . . 32.99

#080-038-132 4 Pk 1"x 1/32" Spring Stock, 8K28I99 34.99

#080-038-116 4 Pk 1"x 1/16" Spring Stock, 8K19E38..... 22.99

#080-038-332 4 Pk 1"x 3/32" Spring Stock, 8K26J99..... 31.99

#080-038-018 4 Pk 1"x 1/8" Spring Stock, 8K39P72 43.99

Two Widths & Four Thicknesses

For Custom Springs & Parts

springs on new and old muzzle-

loaders, double rifles and shotguns;

Rc

62

55

49

45

parts, too.

DRAW

400° F.

600° F.

700° F.

800° F.

Big enough to make those wide

Finest quality coil springs, controlled-tension wound for smooth operation without binding under compression. "Over-Pin" springs are designed to function over gun pins and plungers; "In-Hole" springs are made to fit inside restricted areas. SPECS: High tensile spring wire. 12" (30.5cm) long.

"OVER-PIN" KITS - 12 Coil Springs, 7 sizes, wound and sized to operate without binding over pins from 3/32" (2.4mm) to 3/16" (4.7mm). 12" long (30.5cm). **Kit #1, OD-12;** Light duty. **Kit #2, OD-12;** Heavy

#080-950-125 Light Duty, Over-Pin Kit #1, 8K20J99 . . \$ 20.99 #080-950-150 Heavy Duty, Over-Pin Kit #2, 8K20I99. . 20.99

"OVER-PIN" MASTER KIT - Combines Kit #1 OD-12 and Kit #2 **OD-12** for a total of 14 Coil springs for over-pin use.

#080-950-100 Over-Pin Master Kit #3 OD-14. 8K27L99......\$ 27.99

"IN-HOLE" KITS - 12 Coil Springs; 6 sizes made to function freely inside holes from 3/32" (2.4mm) to 1/4" (4.7mm). 12" long (30.5cm). Kit # 1, ID-12: Light duty, Kit #2, ID-12: Heavy duty.

#080-950-325 Light Duty, In-Hole Kit #1, 8K20Q99 ... \$ 20.99 #080-950-350 Heavy Duty, In-Hole Kit # 2, 8K20L99. 20.99

"IN-HOLE" MASTER KIT - Combines Kit #1 ID-12 and Kit #2 ID-12 for a total of 12 springs for in-hole use.

#080-950-300 In-Hole Master Kit Kit #3 ID-12, 8K17D99 \$ 20.99

NO. 152

Wire Diameters: .062" to .120"

SPECS: Length varies. 1/4 lb. (113g).

ROUND OIL-TEMPERED SPRING STOCK Seventy-two 18" lengths of oil-tempered spring wire. Ready to be made into springs. Much heavier than No. 150 Assortment. Can be annealed and re-tempered. 1070 Carbon Steel.



#025-152-000 No. 152 Spring Assortment, 8K26G49. . \$ 29.99

order on the web

brownells.com

Orders: 800-741-0015

BROWNELLS HI-TEMP HI-FORCE 44™ SOLDER



38,000 PSI; Flows At 650° F. Highest Silver-Bearing Content Of Any Non-Zinc Solder

Higher tensile strength for a stronger bond on ioints that are subject to a high degree of stress or vibration. Contains 95% Cadmium and 5% Silver that flows free at 640° to 650° F. (maximum temp. 740° F.). Bonds quickly to all types of steel including

stainless steel. Not affected by hot, caustic bluing solutions or by baking after spray-finish applications. Use with Copper Bond Flux and adequate ventilation.

SPECS: Wire - 1/16" (1.6mm) diameter.

\$ 080-649-501	1 oz. Hi Tmp Hi-Force 44 , <i>5L12L00</i> \$ 14.99
#080-649-525	¹ / ₄ lb. High Temp Hi-Force 44, 5L44L00 54.99
#080-649-590	1 lb. High Temp Hi-Force 44, 8K161Q99 202.99

BROWNELLS **HI-FORCE 44™ SOLDER**

28.000 PSI - Flows At 475° F. The Best All-Round Solder For Gunsmithing

Brownells Hi-Force 44 Solder is an alloy solder containing 4% silver and 96% tin. Excellent for steel, stainless steel, nickel, brass and copper. Completely non toxic. Flows free and smooth at about 475° F., greatly reducing heating time. No need for cumbersome oxyacetylene setups.



Prevents black oxide formation to reduce cleanup time. Provides 14,000 to 28,000 PSI tensile strength. Will not crack under stress as do other low temperature soldering materials. And, a big plus . . . customers report that parts joined with Hi-Force 44 Solder showed no effects when immersed in hot bluing tanks! Use #4 Comet Flux. SPECS: Wire - 1/16" (1.6mm) diameter. Ribbon - .015" (3.8mm) thick, 7/16"

#080-649-001	1 oz. H/F 44 Wire, 5L8D99	\$ 11.99
#080-649-250	¹ / ₄ lb. H/F 44 Wire, 5L24C99	30.99
#080-649-100	1 lb. H/F 44 Wire, 8K89P99	110.99
#080-649-301	1 oz. H/F 44 Ribbon, <i>5L7M99</i>	8.99
#080-649-325	¹ / ₄ lb. H/F 44 Ribbon, 5L24C99	29.99
#080-649-390	1 lb. H/F 44 Ribbon , <i>5L100F99</i>	118.99
#080-649-390	1 lb. H/F 44 Ribbon, 5L100F99	118.99

WOLVERINE JOINING TECHNOLOGIES BLACK FLUX



High-Temperature Range; **Recommended For Stainless Steel**

High-quality paste flux has a working range of 1,100°-1800° F that's perfect for high-temperature silver solder applications. Specifically designed for use with Silvaloy 355 silver solder, Black Flux works particularly well on stainless steel and

other refractory metals. Not for use on aluminum, magnesium, or Titanium. Paste formula is easy to apply exactly where you need it; cleans up with hot water.

SPECS: 8 oz. (227g) jar. Meets Fed. Spec 0-F-499 Type B, AMS 3411, AWS FB3-C. ISO 9002 certified.

#100-007-031	Black Flux,	4B16Q34	\$ 17.99
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SILVALOY 355 SILVER SOLDER

Now Color Matches To Stainless Steel; 56% Silver; Cadmium-Free

Silvaloy 355 is recommended for joining steel, stainless steel, copper, copper alloys, nickel, nickel allovs and precious metals to themselves or any combination of these. Has the lowest flow temperature, best wetting and best flow characteristics of any cadmium-free, high silver-content, commercial silver solder. Highly recommended for all silver solder jobs where sheet or flow method is desired. A "must" for installing sights and ramps on stainless steel guns since the almostwhite color matches stainless steel beautifully. Use with Ultra Flux®. SPECS: Melts at 1145° F., flows at 1205° F. 56% silver.

STOCK #	QUANTITY	LENGTH	PRICE		
.005(.13MM) RIBBON					
#080-538-305	1 ounce (28.3g)	74" (188.0cm)	5L84A49 \$ 109.99		
#080-538-405	1/2 ounce (14.2g)	37" (94.0cm)	5L42D17 \$ 54.99		
1/32" (.79MM) ROUND WIRE					
#080-538-332	1 ounce (28.3g)	20 ft. (609.6cm)	6Z49E99 \$ 64.99		
#080-538-432	1/2 ounce (14.2g)	10 ft. (304.8cm)	5L24C56 \$ 29.99		

BROWNFLLS FLUXED HI-FORCE 44™

Handy, Pre-Fluxed Saves Time, Mess

The same super-strong, easy-handling mixture as Hi-Force 44 but with its own "Blitz" flux right in the core of the wire. SPECS: 1.6 oz. (45 g) spool.

#080-649-110 Fluxed Hi-Force 44, 8K17G99 \$ 20.99



ULTRA FLUX®

Paste Flux For Silver Solders

Designed specifically for use with silver solders like Silvaloy 355. Protects the work piece and improves the flow characteristics of solder. Creamy texture applies easily with brush, resists drying and caking. Works up to 1600° F. on all

metals except aluminum, magnesium and titanium. SPECS: 1/2 lb. (227 g). Meets Fed. Spec OF499, Type-B, AMS 3410

#080-538-050 Ultra Flux, 4B18H99......\$ 20.99

NO. 4 COMET FLUX

Makes Solder Flow Smoothly; Gives Even, Professional Job

Improves solder jobs by promoting smooth, even, solder flow that results in stronger, professional looking solder joints. Special wetting agents assure total coverage of work. Works fast, eliminates need for pre-cleaning. Use with Brownells Hi-Force 44™ and other solid core solders on all metals except aluminum. No-spill application. SPECS: 6 fl. oz. (177 ml) plastic squeeze bottle.

478-100-004	No. 4 Comet Flux,	8G18D41	\$ 20.99
	This product will damage	or remove bluing.	

COPPER BOND FLUX

The Right One To Use With Brownells Hi-Temp, Hi-Force 44™ Solder

Designed for soldering in the 600° F. to 800° F. range, making it ideal when you're working with Hi-Temp, Hi-Force 44. Flows easily into tight spots, cleans up with warm water.

SPECS: 6 fl. oz. (177 ml) bottle.

#478-100-100 Copper Bond Flux, 8G22C70...... \$ 24.99

ACID BRUSH



Not Just For Soldering But A Host Of Other Uses

This old standby, the original tinner's acid brush, will also handle the 1,001 other odd shop jobs that call for a handy, inexpensive brush. Spread glue, brush on stain, apply solder flux, clean out an action, slap on oil or grease, brush metal filings from cutting tools - vou name it.

SPECS: Rolled tin handle, bristles tightly crimped: 2 sizes: #1 - 3/8" (9.5mm) and #3 - 9/16" (14.3mm). 6" (15.2cm) long.

#080-001-024	#1 Acid Brush, 2 dozen, <i>8K6A24</i>	\$ 7.99
#080-001-144	#1 Acid Brush, 1 gross, 8K17N44	18.99
#080-003-024	#3 Acid Brush, 2 dozen, 8K6N08	6.99
#080-003-144	#3 Acid Brush, 1 gross, <i>8K29L90</i>	32.99

BROWNELLS 3.5% NICKEL STEEL WELDING ROD



Blues Beautifully; No Blow Holes; Smoother, Nicer Welds

Developed for use in our space program to give the best possible welds, 3.5% Nickel Steel Welding

Rod is almost totally free of impurities and flows beautifully to produce an extremely smooth, non-porous weld with Oxy-Acetylene or TIG. Over the years many gunsmiths have asked for this rod to weld bolt handles and other items that will be polished after welding. Thanks to Jim Thompson, Maverick Gun Works of Topeka, Kansas, we located a supplier of 3.5% Nickel Steel Welding Rod.

Says Jim, "I finally located some 3½% Nickel Steel Rod and the first bolt I welded was perfect. The rod is expensive but worth its weight in gold when you are welding bolt handles and any other job where a perfect weld is desired. I find I get the best results as follows: bring parts to welding temperature with a rather large flame, then back off on the flame until it is just hissing. I use a No. 2 tip. (You might find another works better.) Take your time, don't get it too hot and you can work with it all day if you have to. The weld is easy to work with, file or machine. Be sure to use a neutral flame."

SPECS: Each piece is approximately .094" (2.4mm) or .045" (1.14mm) diameter x 12" (30.5cm) long. Sold in 4 oz. (113 g), 8 oz. (227 g) and 1 lb. (454 g) paks.

#080-547-025 🗞 4 oz094" Welding Rods, 8K21F99 \$	24.99
#080-547-050 🗞 8 oz094" Welding Rods, 8K31L10	34.99
#080-547-100 🗞 1 lb094" Welding Rods, 8K52G79	59.99
#080-547-104 🗞 4 oz045" Welding Rods, 8K25B99	29.99
#080-547-108 🗞 8 oz045" Welding Rods, 8K34C66 .	39.99
#080-547-110 🗞 1 lb045" Welding Rods, 8K53M99	59.99

BROWNELLS SOLDER BLACK

2 Solutions For Soft & Silver Solder. To Blend & Hide Solder Line

Blackens silver and soft solder joints, blends them into bluing for a professional looking finish. Impervious to solvents and oils.

BROWNELLS SILVER SOLDER BLACK - For hi-temp silver solders like Silvaloy 355. SPECS: 4 oz. (118 ml) bottle.

#083-032-004 Silver Solder Black, 8K11F99 \$ 13.99

BROWNELLS SOFT SOLDER BLACK - For soft solders like Hi-Force 44TM. Will also color silver bearing solders but color may rub to a medium gray.

SPECS: 4 oz. (118 ml) bottle.

#083-032-014 O Soft Solder Black, 8K9I99...... \$ 11.99

HEAT-TREATING ACCESSORIES

TEMPILAQ® - For furnace or open flame hardening and tempering of steel parts. Apply thin smear to surface to be treated. When desired temperature is reached, Tempilag melts sharply.

SPECS: 2 fl. oz. (59 ml) in brush top bottle.

STOCK #	DEGREE F.	PRI	CE
#877-450-002	450	7A20B22	\$ 26.99
#877-000-001	650	7A20P22	\$ 26.99
#877-700-002	700	7A18N14	\$ 21.99

#877-200-000 2 oz. Tempilaq Thinner, 7A9P24 \$ 12.19

STAINLESS STEEL HEAT TREAT FOIL - For scale-free, furnace heat

treating of tool steel without an atmosphere-controlled furnace. Make parts without losing tolerances due to scale. Wrap part with foil, fold edges double and seal. Heat treat as usual. Open foil, remove part and air cool or quench. Wear gloves; edges are very sharp!

SPECS: 24" (61cm) x 24" (61cm). .002" (.051mm) thick.

#080-656-001 SS Foil, 6Z20F20.....

TOUGH-QUENCH™ QUENCHING OIL - Gives predictable, controlled, fast quenching speed for uniform hardness. Wets out work rapidly, prevents formation of gas pockets. Less smoke, low rate of heat transfer to minimize distortion and cracking of the steel. Can be shipped UPS.

SPECS: 1 gt. (16 fl. oz./946 ml), 1 gal. (128 fl. oz./3.8 L) in cans. Flash point is 355° F. (179.4° C.); Fire point is 410° F. (210° C.).

#083-027-032 1 Qt. Tough-Quench, 5L17Q31 \$ 18.99 #083-027-128 1 Gal. Tough-Quench, 5L59Q99...... 59.99

NON-SCALING COMPOUND - Saves hours of rework time - parts can be made to exact dimensions before heat treating without fear of dimension change from scaling, pitting, decarb loss. Simple to use - for both hardening or annealing. Heat the work piece to about 500° F., coat with the dry compound powder, finish heating to temperature, and quench/cool as required. Parts come clean in boiling water.



SPECS: 1 lb. (454 g). Not for steels that harden above 1650° F.

#083-015-100 Non-Scaling Compound, 5L22F67.....\$ 24.99

BROWNELLS PAGE 396

GUARANTEED. FOREVER.® **SINCE 1939**

Office/Tech: 641-623-5401

BROWNELLS SURFACE HARDENING COMPOUND

Produces A Super Hard Surface On Plain & Low Carbon Steels

Easy-to-use compound case hardens plain and low carbon alloy steels. Carburizes surfaces quickly to uniform depth while retaining the toughness of the core. Also protects delicate, highly finished work, and helps eliminate the need for remachining. Simply



apply the hardening compound to your metal parts, heat to the required temperature, then quench in oil or water for a professional grade, heattreatment. Helps keep the edge sharp on expensive drill bits, milling and grinding tools, punches, firing pins, hammer davits, trigger pins, sears, and cocking pieces. Water soluble for easy cleanup. Complete instructions included.

SPECS: 1 pound (453.6g) can.

#083-000-033 Surface Hardening Compound,



ATP SUPLLY CO., INC. **ANTI SCALE COATING**

Eliminates Scaling

Liquid anti-scale compound can be sprayed, flow coated, brushed or dipped onto parts to minimize the formation of oxide scale

and drastically reduce pitting, decarb loss, cuts down on rework time, too. Has a hot working range of 1000° to 2300° Fahrenheit, crumbles on cooling, and parts rinse clean in hot water. SPECS: 1 pint (16 fl. oz./473ml). Set furnace between 1000° to 2300°.

#100-002-607 Anti Scale Coating, 6B15B81 \$ 18.99

BROWNELLS **HEAT-TREAT THERMOMETER**

Positive Temperature Control For Lead, Heat-Treat Baths

F.: intermittent use above 800° F.

Easy, positive way to know that you have the casting pot operating at ideal temperature for perfect cast bullets each time. Makes a cheap pot as accurate as the expensive ones. SPECS: 2" (5cm) dial, 8" (20.3cm) long stem, .150" (3.8mm) diameter (immerse at least 2" (5cm) in liquids). 304 stainless. Rustproof, dustproof, leadproof, hermetically sealed. Guaranteed accurate to 1/2 of 1% around entire dial range. Uses bi-metallic helix coils - Range is 200° - 1000° F in 10-degree increments. Recommended for continuous use below 800°

#084-069-225 Lead Thermometer, 4K39F99 \$ 39.99

BROWNELLS HEAT-TREATING CHARCOAL



Produces Dramatic Color & Swirl Patterns

Wood and bone charcoal with just the right sieve size for crucible packing of steel parts to be hardened. Hi-carbon content without waxes or fillers gives brilliant color patterns. Mixing types by specific ratio provides additional control over color and pattern.

SPECS: Packed in 5 gal. bucket. Bone - 10x28 sieve size, 25 lb. (11 kg) weight. Wood - #6 size. 10 lb. (4.5 kg) weight.

BROWNELLS **COLOR CASE HARDENING KIT**

Produce Beautiful Color Case Hardening Like The Pros

The subtle shades of blue, gray, and straw on color case parts give a gun a true custom look. Cowboy Action Shooting has brought many guns out of retirement that need to have faded colors restored. We've assembled two, easy-to-use systems with all the items you need to immediately begin a case color hardening operation



(except a guenching tub). Complete system includes our 1.37 cu. ft. heat treat furnace, 11" x 4" cylindrical crucible big enough for a rifle action, 30" long crucible tongs for handling ease and safety, Kevlar gloves for protection against high temps (also sold separately), a full face shield to protect your face, 10 pounds of high carbon content wood charcoal, 25 pounds of high carbon content filler-free bone charcoal, five disposable filter masks to keep dust out of your lungs, a long shop apron, and complete instructions explaining the color case hardening process. Kit Without Furnace has the same, large capacity crucible, charcoal, and supplies, only without the furnace, for those who already have a heat source capable of heating the crucible to 1 450° F

#100-011-091	Case Hardening Kit w/Furnace, 3Z2170P11	\$ 2380.99
#080-951-501	Case Hardening Kit w/o Furnace, 8K491J36	543.99
	Hi-Temp Gloves, 4D75E12	79.99
"NOte	e. Shipped Truck Only, Flease Call for freight charges.	

COLOR CASE HARDENING CRUCIBLE & TONGS - If you already have a furnace, these two tools will make the job easier. Crucible - 138 cu. in. of space lets you color case harden a rifle action or large revolver frame with space for the necessary blocking. Round shape is easy to handle with no wasted corner space. Clamping rings position the canister securely in the tongs when carrying and dumping. Tongs - 30" long handles keep you back, away from the furnace heat, makes grabbing the hot crucible safer and more

SPECS: Steel. Crucible - 11" (28cm) high, 4" (10cm) diameter. Tongs - 30" (76cm) lona

#080-951-000	Crucible, 8K97M89	113.99
#080-951-100	Tongs, 8K92P20	99.99
#080-951-200	Crucible & Tongs, 8K149F00	159.99

BROWNELLS MARVELUX® -

BULLET CASTING FLUX

rosive to iron and steel, and does not produce fumes which can

cause corrosion, as does sal-ammoniac (ammonium chloride). In

fact, regular use will keep your pot free from rust! Reduces dross

formation dramatically while increasing fluidity of bullet alloys, mak-

ing it easier to obtain well filled-out bullets. MARVELUX is well suited

to any lead alloy intended for casting bullets or swaging cores. Non

smoking, flameless and non-smelling. Superior to beeswax, tallow,

paraffin, and other grease-type fluxes. Even better than rosin and it

doesn't smell like you're burning down an old shed.

MARVELUX

Non-Smoking,

Non-Fuming Odorless Flux

successful - bullet casting flux, MARVE-LUX has been on the market since 1971

filling the needs of knowledgeable and

successful professional and hobbyist bullet casters. MARVELUX is non-cor-

Far and away the most popular - and

EVENHEAT KILN HT-1 HEAT TREAT OVEN

Programmable For Hands-Off Heat-Treating & Color Case-Hardening

Programmable oven makes easy work of any heat-treating job, including color-case harden-



ing. Compact chamber is the right size for receivers, bottom metal, buttplates, knife blades, custom screws, and other small parts. Numerical control with extra-large keypad lets you create and store up to 12 repeatable custom programs for consistent results. You determine the temperature ranges, hold-time, alarm set-points, and make easy on-the-fly adjustments to fine tune your program. Even allows you to pre-program the start time to take advantage of variable electric rates. Backlit, four character display provides accurate real-time temperature/time monitoring. Cool-touch door handle allows comfortable operation when the oven is hot. Innovative safety interrupt automatically removes power from all heating elements when the door opens and reapplies power after it closes. Built with a durable, corrosion-resistant stainless steel outer shell and a firebrick lining for maximum heating efficiency. Includes Type-K thermocouples for quick and reliable temperature control.

SPECS: Stainless steel, natural finish, firebrick liner, External Dimensions - 181/2" (47cm) long, 26" (66cm) wide, 27" (69cm) high w/legs. Internal Dimensions - 13¹/₂" (34.3cm) long, 13" (33cm) wide, 13¹/₂" high. 94 lb. (57kg) weight. Maximum Temperature: 2,000° F (1,093° C). Current Draw - 18 amps 240 volts AC, 4320 watts. UL approved heating elements

#100-004-956 Heat Treat Oven, 3Z1731B38 \$ 1836.99



POLISHING GLOVES

Stop Rust-Causing Fingerprints

Cotton canvas gloves keep fingerprints off freshly polished steel, and keep your hands clean while polishing, too. Stretch knit cuff for stay-in-place fit.

SPECS: Industrial cotton, off-white. Sold in pak of 6 pairs only. #599-000-001 Polishing Gloves, 6 Pr., 9E16G32 \$ 17.99

POLISHING WHEEL CLEANING BRICK

Restores Polishing & Buffing Wheels

Crystolon block quickly knocks off the old caked-on, used-up abrasive and residue from the surface of muslin, felt and grinding wheels.

SPECS: 2" (5cm) high x 2" (5cm) wide x 4"

#657-024-000 Wheel Cleaning Brick, 7E26P12 \$ 30.99



SPECS: Available in 1/2 lb. (227 g), 1 lb. (454 g) or 4 lb. (1.8 kg) jar. Carton contains 12. 1/2 lb. or 12. 1 lb. iars.

#083-030-050	¹/₂ lb. MARVELUX, 5L8P00	\$ 9.99
#083-030-100	1 lb. MARVELUX, <i>5L12P19</i>	15.99
#083-030-400	4 lb. MARVELUX, <i>5L36E63</i>	46.99
#083-030-052	1 Carton, 1/2 lb. MARVELUX, 3H87C27	102.99
#083-030-102	1 Carton, 1 lb. MARVELUX, 3H150G00	189.99

BROWNELLS **BUFFING WHEEL RAKE**

Fast, Efficient Truing Of Felt & Muslin Wheels



Seen in use at a major

arms maker, designed specifically for truing felt and muslin wheels. Far easier to use and more effective than the traditional wood rasp: a wheel trued with this rake will literally "suck-up" the polish. No need to hand clip the threads on a stitched wheel before truing, the Rake does that for you. The wood handle gives a solid, two-hand hold and light pressure with just two of the four rows of aggressive, steel teeth makes quick work of wheel imperfections. Simplifies reshaping of wheels for special jobs.

SPECS: 15¹/₄" (38.7cm) lg. Cutting face is 4¹/₂" (11.4cm) long x 2" (5cm) wide. Wood handle is ¹⁵/₄" (20.6mm) thick

#082-077-001	Buffing Wheel Rake, 8K34L99	\$ 34.99
#082-077-002	Replacement Rake Teeth, 8K18I89	20.99

BROWNELLS SCREW HEAD POLISHING/PIN VISE



No More Burnt Fingers Or Lost Screws & Pins

Steel vise securely holds screws and pins in place during polishing to prevent them from flying into the far corners of your shop. Knurled collar tightens evenly, without crushing. SPECS: Steel vise and collar, plastic handle. 4.75" (12cm) long.

#080-000-316 Screw Head Polishing/Pin Vise.

SCREW HEAD POLISHING VISE

Polish Screws & Pins Safely



when polishing heads. Prevents burned fingers. Screws won't be snapped out of grip by wheel and "lost" in shop. SPECS: 53/4" (14.6cm) overall. 1/4" (6.35mm) max. cap.

#345-093-000 Screw Polishing Vise, 5D12Q87 \$ 13.99

CLYMER BARREL SPINNER



Save Polishing Time, Prevent Ripples & Flat Spots

Fastest way to polish barrels and magazine tubes with no ripples or flat spots. Cheaper and easier to use than a lathe. Just secure the barrel between the non-marring, Delrin® centers, turn on the buffer, and touch the barrel to the buffing wheel or Scott Murray drum. As the barrel spins, slide it across the wheel, varying the angle and pressure to get the best cut.

SPECS: Extruded aluminum. Frame - 36" (91.4cm) long, 1" (2.5cm) square. Accepts 32" (81.3cm) barrels. Spinner Centers - Delrin, replaceable. Support Arms - 41/2" (11.4cm) x 17/8" (4.8cm), socket head lock screws. 11/2" . (3 8cm) swina

#184-020-000 Std Barrel Spinner, 4H146Q38 \$ 146.38 **#184-020-002** Std Bbl Spinner Centers, 4H18J00.... **18.00**

order on the web

brownells.com

BROWNELLS PAGE 397

Orders: 800-741-0015

ABRASIVE WOOLS -

Bronze Wool - Can be used for just about everything that steel wool is used for. Will not rust, nor is it as abrasive as steel wool. It's just about perfect for rubbing down a nicely blued gun that has just a bit of rust or crud that must be removed. It will not rub through blue and the long, soft strands resist break down and sharding off into work. Great for removing stripper-softened stock



ililisti, or writskering during linistiling.	
SPECS: #00 (Fine) and #1 (Medium) #3 (Coarse).	
Packed 3 pads in bag per grade.	

#439-200-101	#00 Bronze Wool Pads	s, 8K14M39 \$	15.99
#439-200-201	#1 Bronze Wool Pads,	8K12N79	16.99
#439-200-300	#3 Bronze Wool Pads,	8K13C61	15.99





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#439-300-400	#0000 Steel Wool, 8K4M49	5.99
#439-300-300	#000 Steel Wool, 8K4K49	5.99
#439-300-200	#00 Steel Wool , 8K4B49	5.99
#439-300-100	#0 Steel Wool, 8K4I49	5.99
#439-300-101	#1 Steel Wool , 8K4K49	5.99

WHAT DO I NEED TO POLISH GUNS?

Here's a quick look at the basic supplies for polishing guns.

BASIC EQUIPMENT

First, you need something to turn the wheels. You can use salvaged electric motors from a variety of machinery but we like the 1800 RPM BALDOR BUFFER_- It's the number one choice of professional bluing and plating shops. The long shafts get the wheels away from the motor body for good clearance. As in cars, more horsepower is always better. It lets you turn a bigger wheel which has a higher surface speed and, therefore, polishes faster.

You can bolt the buffer directly to a bench or table but that can limit access around the wheels for odd shaped objects. Our choice for a rock solid mount would be the BALDOR BUFFER PEDESTAL.

6" or 8" STITCHED MUSLIN POLISHING WHEELS - The workhorse wheel of polishing. Use for cleaning and/or roughing with the coarser grits. You'll need three wheels per grit (glue them together with Elmers, etc.). Power the 6" with ½ hp motors; a ¾ or 1 hp will turn the 8" nicely.

6" or 8" LOOSE MUSLIN POLISHING WHEELS - Softer touch for that final polish with the finer grits. The 90 ply wheel is wide enough for most work without stacking.

POLISHES

Of course, you'll need polishing compound and our **POLISH-O-RAY**™ greaseless polishing compound is made with uniform, screened, mesh size grit for very best results. Except for mirror finishes and aluminum work, P-O-R will do it all. For mirror finishes on steel and soft metals like aluminum and brass, our grease-base, NO. 555™ POLISHES are the best choice. Far easier to work with than tripoli and rouge.

ADDITIONAL HELPFUL TOOLS

When you first mount the new wheels, they will be out of round. In that condition they won't "take" compound evenly and will bounce when you touch the work to them. True them using the BUFFINGWHEEL RAKE. As you polish and remove metal, the wheel surface will load up with metal particles and quit cutting efficiently; clean it and get it ready for fresh polish using the POLISHING WHEEL CLEANING BRICK.

STUFF YOU WON'T WANT TO BUY, BUT REALLY NEED

Protect your eyes from flying grit and airborne particles by always wearing a FULL FACE SAFETY SHIELD.

3M DISPOSABLE FILTER MASKS - Helps keep harmful polishing dust out of your lungs. Blow your nose after a session without wearing one, if you get black stuff, you need a mask.

LONGRIFLES BARREL SPINNER



Billet Aluminum Construction Gives Long Service Life

Precision lathe arms for polishing barrels is machined from high-grade billet aluminum, so it won't crack and fail under heavy use. Delrin centers have O-rings to prevent them from falling out of the inner-bearing race. Centers are beefy enough to with-

stand extensive use, and extra material on the taper side allows them to be resurfaced. Spinner accepts any standard 1" rectangular steel or aluminum tube to allow easy use with a polishing wheel. Quick-release

handle for fast, eas	y removal from lathe. 💳	
#100_014_402 Ba	rrel Spinner 78116420	\$ 125 NN

SANDING BELTS

Popular Sizes & Grits

Tough, aluminum oxide grain, bonded to strong drill cloth with special, hi-temp Resinal. Gives excellent finish, resistant to dulling, runs cooler. Particularly suited for metal finishing

STOCK #	GRIT	PRIC	PRICE	
1" (2.5CM) X 30" (76CM) SAND	DING BELTS		
#925-130-220	220	5B6D33	\$ 7.99	
#925-130-320	320	5B6N40	\$ 7.99	
#925-130-400	400	5B5I71	\$ 6.99	
1" (2.5CM)	X 42" (106.7CM) SAN	NDING BELTS		
#925-142-080	80	5B5K78	\$ 6.99	
#925-142-120	120	5B6E36	\$ 7.99	
#925-142-220	220	5B5D69	\$ 6.99	
#925-142-320	320	5B6N33	\$ 7.99	
#925-142-400	400	5B6J36	\$ 7.99	
2" (5.1CM)	X 48" (121.9CM) SAN	NDING BELTS		
#925-248-120	120	5B7A51	\$ 8.99	

SANDING BELTS

To Fit Raytech Expanding Sanding Drums Resin bonded, aluminum oxide. Sold singly.

STOCK #	GRIT	SIZE	PRI	CE
#925-118-060	60	11/2" (3.8cm) x 1815/16" (48.1cm)	5B4A93	\$ 5.99
#925-118-080	80	11/2" (3.8cm) x 1815/16" (48.1cm)	5B5H52	\$ 6.99
#925-118-120	120	1 ¹ / ₂ " (3.8cm) x 18 ¹⁵ / ₁₆ " (48.1cm)	5B5N59	\$ 6.99
#925-118-220	220	11/2" (3.8cm) x 1815/16" (48.1cm)	5B5C59	\$ 6.99
#925-118-320	320	1 ¹ / ₂ " (3.8cm) x 18 ¹⁵ / ₁₆ " (48.1cm)	5B5Q59	\$ 6.99
#925-118-400	400	11/2" (3.8cm) x 1815/16" (48.1cm)	5B5N59	\$ 6.99
#925-118-600	600*	11/2" (3.8cm) x 1815/16" (48.1cm)	5B7D44	\$ 8.99
#925-225-060	60	2" (5cm) x 251/2" (64.8cm)	5B5D77	\$ 6.99
#925-225-220	220	2" (5cm) x 251/2" (64.8cm)	5B5N74	\$ 6.99
#925-225-400	400	2" (5cm) x 251/2" (64.8cm)	5B5D74	\$ 6.99
#925-325-060	60	3" (7.6cm) x 25 ⁷ / ₃₂ " (64cm)	5B7C46	\$ 8.99
#925-325-080	80	3" (7.6cm) x 25 ⁷ / ₃₂ " (64cm)	5B7A33	\$ 8.99
#925-325-120	120	3" (7.6cm) x 25 ⁷ / ₃₂ " (64cm)	5B7H99	\$ 9.99
#925-325-220	220	3" (7.6cm) x 25 ⁷ / ₃₂ " (64cm)	5B7B33	\$ 8.99
#925-325-320	320	3" (7.6cm) x 25 ⁷ / ₃₂ " (64cm)	5B6J62	\$ 7.99
#925-325-400	400	3" (7.6cm) x 25 ⁷ / ₃₂ " (64cm)	5B6C62	\$ 7.99

*About "Compact Grain" Belts - Aluminum Oxide Belts in super-fine grit (like 600) are only available in what the maker calls "Compact Grain". This process layers grit in a special adhesive and greatly increases belt life. Compact grain belts are easily identified; they are ugly! The 600 grit belt shown looks like it should be a 60 grit but **IT ISN'T.** It really will give an excellent 600 grit finish and will last extremely well. "

DICO ABRASIVE WOOL



Long-Lasting, Rust-Free Alternative To Steel Wool

Synthetic, non-metallic alternative to steel wool is long lasting and won't rust or shed fibers. Use on wood, plastic, or metal to produce

a desired finish, or to clean away rust, carbon, dirt, or crud deposits. Lasts longer than steel wool—when the fibers get clogged with debris, just wash the pad with cold water, air dry, and it's ready to reuse on other projects. Safe for use with cleaning and stripping solvents. Coarse is for fast rust removal and smoothing rough wood; Fine is for metal and wood surface finishing. SPECS: Synthetic abrasive material.

#032-000-011	Abrasive Wool, Coarse, 2C3D38	\$ 4.99
#032-000-009	Abrasive Wool, Fine, 2C4J59	4.99

BROWNELLS STAINLESS STEEL SPONGE



Removes Lead & Rust From Steel: Cleans Fouling From Black **Powder Shooting**

Stainless steel sponge cleans down to the original surface. Ideal

for cleaning rust from loading dies, bullet molds, and guns without damaging the bluing. Won't leave steel whiskers like steel wool. Cut up and wrap around jags or bore brushes to scrape plastic fouling out of shotgun barrels, or lead and powder gunk out of black powder rifles and pistols. Sponge won't rust and can be cleaned for multiple uses.

SPECS: Stainless steel. Sold in paks of two sponges.

#080-000-321 Stainless Steel Sponge, 8K9A99 \$ 12.99

SANDING DISCS

Fast Off/On Disc & Grit Change

Resinal Metalite Pressure-Sensitive Discs lay flat for longer life. Resists disc clogging For coarse-to-fine metal finishing and all



STOCK #	DISCS	PRICE	
	6" (15.2CM)		
#925-060-220	220	5B8J28	\$ 9.99
	8" (20.3CM)		
#591-080-060	60	1E11P99	\$ 13.99
#591-080-080	80	1E11F90	\$ 13.99
#591-080-120	120	1E11B70	\$ 13.99
#591-080-220	220	1E11C17	\$ 12.99
#591-080-320	320	1E12G57	\$ 14.99
	10" (25.4CM)		
#591-100-060	60	1E20I28	\$ 23.99
#591-100-080	80	1E13G57	\$ 20.99
#591-120-036	36	1E23P95	\$ 36.99
#591-120-060	60	1E21E28	\$ 29.99
#591-120-120	120	1E26E52	\$ 30.99
#591-120-220	220	1E17B89	\$ 24.99
#591-120-320	320	1E18J17	\$ 27.99

DURITE WATERPROOF

When Wet Or Dry Paper Is A Must -**Durite Is The Answer**

Sanding media developed especially for wet sanding of wood finishes to get the Dull London look, or on steel before polishing. Great on 1911 frames and slides. Works great wet or dry. Silicon carbide grain; strong, waterproof, backing paper. SPECS: 9" (22.9cm) x 11" (27.9cm)



STOCK #	GRIT	STOCK #	GRIT
#657-250-220	220	#657-250-400	400
#657-250-320	320	#657-250-600	600
— Advise # —	50 Sheets Du	rite, one grit, not asst.	,

DOUBLE ULTRA-FINE 1200 GRIT WET OR DRY PAPER - For folks wanting the "high-shine" finishes. Follow with our Five "F" Compound for an eye-popping gleam.

SPECS: 12" (30.5cm) x 12" (30.5cm) sheets. 1200 grit.

#657-251-900 1200 Grit Durite, 5 or more sheets, each. 7E3B64.....\$ **4.99**

METALITE CLOTH ROLLS



Heavy, Cloth-Backed Abrasive; First Choice For Tough Metal Removal

First choice of metalworking pros for use in coarse sanding to fine polishing of the hard or ferrous metals. Ideal for removing old rust, scouring, deburring, finishing. Tough, rugged, aluminum oxide grain, bonded on flexible, jean weight, cloth backing. Follows contours, flexes during use without flaking off. Gives a very long use-life. Tears straight without shredding at edge. SPECS: 1" (2.5cm) or 11/2" (3.8cm) wide.

GRIT	10 YD X 1" ROLL	10 YD X 1" ROLL	10 YD X 1" ROLL	50 YD X 1" ROLL	50 YD X 1" ROLL	50 YD X 1" ROLL	10 YD X 1-1/2" ROLL	10 YD X 1-1/2" ROLL	50 YD X 1-1/2" ROLL
	\$11.99	\$14.99	\$12.99	\$52.99	\$43.99	\$45.99	\$12.99	\$13.99	\$58.99
120	#657-110-120	NA	NA	#657-150-120	NA	NA	#657-151-120	NA	NA
220	NA	#657-110-220	NA	NA	#657-150-220	NA	NA	#657-151-220	#657-155-220
320	NA	#657-110-320	NA	NA	#657-150-320	NA	#657-151-320	NA	#657-155-320
400	NA	NA	#657-110-400	NA	NA	#657-150-400	#657-151-400	NA	NA
600	NA	NA	#657-110-600	NA	#657-150-600	NA	#657-151-600	NA	NA

* About "Compact Grain" Belts - Aluminum Oxide Belts in super-fine grit (like 600) are only available in what the maker calls "Compact Grain". This process layers grit in a special adhesive and greatly increases belt life. Compact grain belts are easily identified; they are ugly! The 600 grit belt shown looks like it should be a 60 grit but IT ISN'T. It really will give a 600 grit finish and will last extremely well.

CARDING BRUSHES —

GUNSMITH CARDING BRUSH - Compact head provides better control. Three rows of soft, .003", stainless steel bristles won't scratch through existing

caustic blued finishes. 7-ply, laminated, hardwood handle. **SPECS:** .003" (.07mm) diameter bristles, 7/16" (11mm) long, 3/8" (9.6mm) wide, 13/8" (3.5cm) long, 73/4" (19cm) long overall.

#353-012-003 Gunsmith Carding Brush, 3E9N23..... \$ 9.99

HAND CARDING BRUSH - Cards light rust from any part without scratching; you can do Dicropan IM™ or rust bluing without a power buffer.

SPECS: 121/2" (31.7cm.) long, 5/8" (15.8mm.) wide, .005" (.13mm.) stainless steel wire bristles. Curved hardwood handle.

#084-091-006 Hand Carding Brush, 5A12K99\$ 12.99



.0025" STAINLESS STEEL **BRUSHING WHEELS**

Super-Soft Carding Wheel For Rust/IM Bluing At Economical Price

Found for us by Ray Hall, Griffith, IN, these baby-soft wire wheels are perfect for carding between coats when rust bluing, or when using the Hot Water Method with Dicropan IM Bluing Solution. Won't remove metal, or give satin look.

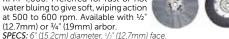
SPECS: 6" (15.2cm) diameter wheels available in 2 row and 4 row. .0025" diameter stainless steel wire. Staggered rows of 13/4" (4.44cm) long, tufted bristles. 1/4" (6.35mm) hole through 2" (51mm) diameter wood center (drill to fit). 2 row has 1/2" (13mm) wide face. 4 row has 11/4" (32mm) wide face. Maximum RPM 3500.

#360-164-581 🗞 2 Row Brushing Wheels, 6C18L57 . . . \$ 24.99 #360-164-631 4 Row Brushing Wheels, 6C22N43 . . 26.99

MATTE & CARDING WHEELS

Knock Off the Rust & Do Heavy Carding, Too

RIEHL WHEELS - .005" wire, max. RPM 4,000. Preferred for rust or hot water bluing to give soft, wiping action at 500 to 600 rpm. Available with 1/2" (12.7mm) or 3/4" (19mm) arbor.



#671-230-500 6" Riehl Wheel. 1/2" Arbor. 1G64K41 \$ 95.99 #671-230-750 6" Riehl Wheel, 3/4" Arbor, 1G64H57..... 91.99

MONITOR WHEELS - .006" wire, max. RPM 6,000. For harsher carding action, or for giving light matte finish. Not stiff enough to remove rust, scale, or grime from abused guns.

SPECS: 6" (15.2cm) diameter, 1/2" (12.7mm) face. Available with 1/2" (12.7mm) arbor only

#671-210-500 6" Monitor Wheel, 1/2" Arbor, 1G48A02 .. \$ 60.99

NOTE: - DO NOT use the same wire wheel for two different metals. The little bits of one metal left in the wheel can transfer to the next metal causing spots and discolor-ation in bluing and plating baths, or leaving rustable mild steel bits in brushed stainless.



BLENDING WHEELS

Polishing, Cleaning, Blending

A wire wheel without the "Gotcha"! Woven synthetic material impregnated with silicon carbide abrasive. Follows curves well. 3000 rpm, maximum.

SPECS: 6" (15.2cm) dia. 1" (2.5cm) thick. 2" (5.1cm) arbor hole. Arbor adapt-

ers solu iri pairs.		
#657-586-020	Fine Blending Wheel, 7E49P63	64.99
#657-586-060	Medium Blending Wheel, 7E49A71	64.99
#671-751-500	1/2" Blending Wheel Arbor Adapter, pair,	
	1G5A79	6.99

1"THICK LOOSE MUSLIN WHEELS

Economical - Equals 41/2, 20-ply Wheels

Easy to handle, economical way to set up 1" face wheel. Arbor stitched only. SPECS: 1" (2.5cm) thick: equals 41/2, 20-ply wheels. Arbor: 1/2" (12.7mm), 5/8" (15.9mm), 3/4" (19mm), 7/8" (22.2mm), 1" (2.5cm). Wheel Dia.: 6" (15.2cm), 8" (20.3cm), 10" (25.4cm).

	6"	8"	8"	10"	10"
ARBOR	\$17.99	\$19.99	\$20.99	\$27.99	\$28.99
2 1/2"	#032-061-500	NA	NA	NA	NA
3/4"	#032-061-750	#032-081-750	NA	#032-091-750	NA
1/2"	NA	#032-081-500	NA	NA	NA
5/8"	NA	NA	#032-081-625	NA	NA
7/8"	NA	NA	#032-081-875	NA	#032-091-875
1"	NA	#032-081-001	NA	#032-091-001	NA

FELT POLISHING WHEELS

Polish-O-Ray™ tube describes felt wheel technique. It is best to use

a different wheel for each polish grit. 1/2 hp or under, use 6" wheels

at 3600 RPM, ¹/₂ hp or over, 8" at 1800, ³/₄ hp or over can use 10" at

1800. 10" for experienced polishers only. Use the soft felt for most

SPECS: All are 1" (2.5cm) thick. All made with 1" (2.5cm) arbor. Adapters

convert to 1/2" (12.7mm), 5/8" (15.9mm), 3/4" (6.4mm) and 7/8" (22.2mm).

SOFT FELT POLISHING WHEELS

\$67.99

#088-081-625

NΑ

NA

#088-161-500 6" Med. Felt Polshing Wheel - 1/2" Arbor,

#088-161-625 6" Med. Felt Polishing Wheel - 5/8" Arbor,

#088-181-625 8" Med. Felt Polishing Wheel - 5/8" Arbor,

#088-181-750 8" Med. Felt Polishing Wheel - 3/4" Arbor,

#088-261-500 6" Hard Felt Polishing Wheel - 1/2" Arbor,

#088-261-625 6" Hard Felt Polishing Wheel - 5/8" Arbor,

MEDIUM FELT POLISHING WHEELS

HARD FELT POLISHING WHEELS

work, medium, or hard wheel for 555™ Polish.

One Adapter supplied with each wheel (except 10"x1").

#088-061-500 #088-081-500

#088-061-750 #088-081-750

ARBOR

1/2"

3/4"

7/8"

\$42.99

ΝΔ

NΑ

NA

Professional, Gunsmith-Proven

carefully selected and factory trued.

(Final touch-up truing may be re-

quired.) Only the closely controlled

density of felt wheels will give the

superb finish that marks the real pro-

fessional Complete instructions on

\$68.99

NΑ

NA

NA

#088-081-875

NA

8H38D86......\$ 57.99

8H39K07.....\$ **51.95**

SERIOUS ABOUT FIREARMS

SINCE 1939

8H38Q83

8H66N50.....

10"

\$105.99

NA

NA

NA

NΑ

#088-091-001

85 99

Finest quality 1" wide felt wheels,

SISAL WHEELS

Fast Removal Of Rough Metal & Rust

Woven jute with outer muslin cover. Aggressive surface removes rough metal and rust. Use with fine grits for a "brushed" finish.

STOCK#



STOCK #

SPECS: 6" (15.2cm) for 1/2" arbor only, or 8" (20.3cm) dia., both 3/8" (9.5mm) wide. 7-ply, spiral stitched.

ARBOR

#032-837-500	1/2 (12.7mm)	#032-837-750	3/4 (19mm)
#032-837-625	⁵/8 (15.9mm)	#032-837-875	⁷ / ₈ (22.2mm)
		2C7N99	
# 00E 007 000	o bisat writes,	2001101	

MUSLIN WHEELS



Mainstay Of Any **Polishing Room For Most** Polishing Jobs

ARBOR

Spiral Stitched - used primarily for first cleaning operation on the gun with

No. 140 Polish- O-Ray™ to knock off old blue, dirt and rust and bring the metal to a bright finish. Also used by some operators instead of Soft Felt wheels - being of a more flexible nature, great care must be exercised to not round edges, or funnel and elongate screw and

Loose Muslin - used following each change of grit to smooth out grit marks and prepare the surface for the next finer grit. Also used to finish off the gun just prior to bluing.

Note: - Use enough sections to make each wheel as wide as your polishing motor will handle - a minimum of three sections to each wheel. Never try to use the same wheel for different grit numbers. After a wheel is broken-in and in use, mark it with the grit number to be used on it and direction of rotation to be turned. Will increase wheel life, give better finishes and save hours of work.

SPECS: Stitched wheels have 3/8" (.5mm) face. Loose wheels are 20 ply Arbor: 1/2" (12.7mm), 5/8" (15.9mm), 3/4" 919mm), 7/8" (22.2mm), 1" (22.5cm). Wheel Diameter: 6" (15.2cm), 8" (20.3cm), 10" (25.4mm).

STITCHED MUSLIN WHEELS

STOCK #	WHEEL DIA.	ARBOR	PRICE	
#032-638-500	6" Stitched	1/2"	2C5H15	\$ 5.99
#032-638-625	6" Stitched	5/8"	2C5K54	\$ 5.99
#032-838-500	8" Stitched	1/2"	2C12I99	\$ 12.99
#032-838-625	8" Stitched	5/8"	2C11D99	\$ 12.99
#032-838-750	8" Stitched	3/4"	2C11N05	\$ 11.99
#032-838-875	8" Stitched	7/8"	2C11J07	\$ 12.99
#032-838-001	8" Stitched	1"	2C9D56	\$ 10.99
#032-938-750	10" Stitched	3/4"	2C9C34	\$ 11.99
#032-938-875	10" Stitched	7/8"	2C9P34	\$ 11.99
#032-938-001	10" Stitched	1"	2C12G84	\$ 13.99

LOOSE MUSLIN WHEELS

STOCK #	WHEEL DIA.	ARBOR	PRICE
#032-620-500	6" Loose	1/2"	2C4G98 \$ 5.99
#032-820-500	8" Loose	1/2"	2C5N16 \$ 5.99
#032-820-625	8" Loose	5/8"	2C5L99 \$ 5.99
#032-820-750	8" Loose	3/4"	2C5H99 \$ 5.99
#032-820-875	8" Loose	7/8"	2C5P12 \$ 5.99
#032-820-001	8" Loose	1"	2C5B14 \$ 5.99
#032-920-750	10" Loose	3/4"	2C6B85 \$ 7.99
#032-920-875	10" Loose	7/8"	2C6L85 \$ 7.99
#032-920-001	10" Loose	1"	2C7I99 \$ 7.99

BROWNFLLS **FELT BOB POLISHING KIT**

Eases Polishing Of Odd Shapes & Tough-To-Reach Places

Mounted Bobs have 1/8" (3.1mm) shanks. Kit contains 3 each of the bobs listed below plus a compartmented bench box.

SPECS: The 3 each of our 8 most popular sizes and shapes - for a total of 24 felt bobs.

#080-560-000	Felt Bob Polishing Kit,	<i>8K57A66</i>	\$ 62.99
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FELT BOB REFILL PAKS - Paks of three.

MANIDDEL MOUNTED BODG

MANDREL MOU	INTED BOBS	
#080-560-101	Square, 1"x 1/2", 8K13C95	\$16.99
#080-560-102	Square, 1/2"x 3/8", 8K9M99	9.99
#080-560-103	Tapered Cone, 1"x 1/2", 8K12M20	14.99
UNMOUNTED B	SOBS only	
#080-560-201	Knife, 1", 8K6F99	7.99
#080-560-202	Knife, 5/8", 8K4M99	4.99
#080-560-211	Square, 1"x 1/4", 8K4M99	5.99
#080-560-212	Square, 1"x ³ / ₈ ", 8K12N99	12.99
#080-560-213	Square, 1"x 1/8", 8K4M99	4.99

FELT BOBS MANDREL MOUNTED



Get Into Those Tight Places

Ideal for polishing around triggerguards, cylinder flutes, ramps, hammers, triggers, etc. Made of best hard felt. Use with Polish-O-Ray®.

STOCK #	DIAMETER	FACE	MANDREL	PRICE
#839-500-025	1/4"(6.3mm)	3/8"(9.5mm)	¹/s"(3.1mm)	2C8I99 \$ 8.99
#839-500-750	3/4"(19mm)	1"(2.5cm)	1/8"(3.1mm)	2C6F47 \$ 8.99

BROWNELLS No. 555™ POLISH

Three Finer-Than-Fine Cake Polishes For Gorgeous Mirror Finishes On Steel, Aluminum And More



"Good Old Five-Fifty-Five" as the boys call it. This is the "secret" that master polishers use to give that mirror finish to the gun after Polish-O-Ray™ 500. For the brightest possible finishes, we recommend hard felt, followed by loose muslin for each grit as you progress through them. You can stop with any of the three grits when the desired level of finish is achieved. Suggest you experiment to find the combo and sequence you like best in your shop.

SPECS: All packed 3 lb. (1.4 kg) net weight in cardboard tube.

555 BLACK - The coarsest of the three, so you can move to the 555 family sooner. Great as a "Coloring" polish for aluminum after the final sanding steps. Follow with "Gray" on steel, skip to "White" on aluminum

555 GRAY - Although extremely "fine", it's "coarser" than 555 White. Gray removes 500 P-O-R™ marks while leaving slight marks which clean up with 555 White.

555 WHITE - For the absolutely most gorgeous finish you've ever seen, follow 555 Gray with this. Often used to buff plated surfaces. this grade takes out 555 Gray marks leaving a mirror finish. Does a nice job on aluminum too.

order on the web

brownells.com

BROWNELLS POLISH-O-RAY®

Shop-Proven Premium-Grade Polish For The Professional

The answer to a gun polisher's dream! Made to the highest standards of quality with carefully screened, true-sized grits for reliable, repeatable results and a natural, greaseless base that doesn't leave a residue to mess up bluing or plating jobs. Packed in a formed, flexible plastic tube to stay fresh between uses.

1) Unlike hard drying abrasives, Polish- ORay sets up to a medium soft surface without flinty hard flakes which, regardless of grit size being used, can do serious damage to a polished surface.

2) It is easily applied to polishing wheels without stopping the motor. Simply press the open end of the tube to your wheel; the polish adheres to the moving surface, hardens in a few seconds and is ready for use.

3) Because of its softer nature, a true, ripple-free surface is guickly obtained on all wheels. The best possible polished surface, free from ripples and bounce marks, is your assurance of a superior, professional refinishing job. Polish-O-Ray does this for you.

4) Polish-O-Ray has been used by gunsmiths, metal finishers, and aircraft manufacturers since the early 1940's. Wherever a quality surface, free from chatter marks, scratch marks and imperfections is required, the use of Polish-O-Ray is a MUST. One precision manufacturer in the southeast orders by the keg. And, where else but on a gun does a perfect finish draw more praise and admiration? These beautiful finishes are the reason for Polish-O-Ray's continuing popularity among our country's gunsmiths and serious hobbyists.

By following the "Master Metal Polisher's" technique, it is possible to obtain a top quality finishing job in a minimum of time with P-O-R. Complete instructions are in our Bluing Instruction Booklet (#076-200-113, free) and the book Gunsmith Kinks®. It consists; mainly, of starting with the coarsest grit and polishing the surface in one direction: then, with the next finer grit on a different wheel polishing at 45° angles to the first "pass". By following this procedure down through the finer grit numbers, the final surface is unequaled for quality and perfection.

Polish-O-Ray is shipped in a resealable outer bag. Put the tube back in the bag, seal with a twist tie and ALWAYS store all your Polish-O-Ray - brand new or partially used - in the refrigerator for longest life. SPECS: Packed in 21/2 lb. (1.1 kg) net contents (min.) plastic tube.

		8K13P99	
#080-505-240 🗞	240 Polish-O-Ray,	8K13I99	16.99
#080-505-320 🗞	320 Polish-O-Ray,	8K13K99	16.99
#080-505-400 🗞	400 Polish-O-Ray,	8K14A99	16.99
#080-505-500 🗞	500 Polish-O-Ray,	8K14C99	16.99

FORMAX SATIN-GLO POLISHING COMPOUND

Greaseless Compound For Effortless Polishing



Loads quickly and produces

a smooth, great-looking finish without a lot of hard work. Uniform, aluminum oxide abrasive in a water-soluble, glue base removes machine marks, pits and surface imperfections in all types of steel, leaves the parts clean, dry and ready to complete your favorite finish. Conveniently packed in three pound, resealable tubes. For best results, store unused portions of tubes in the refrigerator. SPECS: Packed in approximately 3 lb. (1.4 kg) tubes.

#330-100-100	100 Grit Satin-Glo Compound, 3C11G05	\$ 12.99
#330-100-150	150 Grit Satin-Glo Compound, <i>3C11M80</i>	13.99
#330-100-220	220 Grit Satin-Glo Compound, 3C13Q84	16.99
#330-100-320	320 Grit Satin-Glo Compound, 3C9G78	12.29
#330-100-400	400 Grit Satin-Glo Compound, 3C12B00	13.99

DIVINE BROTHERS COMPOUNDS POLISHING COMPOUNDS



Covers All Polishing Needs From Coarse Grit To Mirror Finish

Polishing abrasives have a myriad of uses in the shop. Cream Bobbing abrasive is coarse and aggressive for starting on metals with a rough surface. Brown Tripoli general purpose compound is a medium abrasive and safe for all metals. Gray Star is a medium cutting compound for harder metals like steel. White Ice is a fine abra-

sive compound for softer metals that require a delicate touch or as the final step in polishing steel. Green Flexible Multi-Purpose has a medium-to-fine cut and is safe for all metals; a good, all-around polish. Plastic Blue gives a mirror-smooth finish to acrylic, plastic, or fiberglass. Works great on plastic grip caps or forend tips. Green Rouge is a good choice for nickel, silver, or white gold. Blizzard Premium is a white compound that leaves an almost mirror finish on harder metals.

SPECS: Packed in cardboard; approximately 5" (12.7cm) long x 1" (2.5cm)

WIGE X 1 Tall.		
#032-000-012	Cream Bobbing Compound, 2C3C37\$	3.99
#032-000-013	Brown Tripoli Compound, 2C3H37	3.99
#032-000-014	Gray Star Compound, 2C3J41	3.99
#032-000-015	White Ice Compound, 2C3A41	3.99
#032-000-016	Green Flexible Compound, 2C3M69	3.99
#032-000-017	Plastic Blue Compound, 2C3F43	3.99
#032-000-023	Green Rouge, 2C6Q03	6.99
#032-000-024	Blizzard Premium Compound, 2C5M39	5.99

BROWNELLS SISAL WHEEL POLISH

The Right Grit & Base For Effective Sisal Wheel Polishing

Get fast cut and color on steel when used with Sisal Wheels. Alumina abrasive and tallow base loads easily



O. 200 acrea .	7 0 to: (1: 7 tig) caraboara tabe.	
#080-599-100	Fine Sisal Polish, 8K16K99	\$ 16.99
#080-599-105	Medium Sisal Polish, 8K13J99	16.99
#080-599-110	Coarse Sisal Polish, 8K13C99	16.99

BROWNELLS WHEEL PREPTM



Conditions Your Wheels, **Conserves Your Polish**

Saves time and saves polish by putting it on the wheel

and not on the walls or floor. Apply after the wheel is trued but before you apply your greaseless polish. Instantly conditions and prepares the wheel to accept the maximum amount of polish in a single loading. Works on all types of wheels. For greaseless polishes ONLY. Not for use with Brownells 555 or other grease/tallow based polishes. SPECS: Cardboard tube, approximately 11/2 lb. (.68 kg) wt. #080-505-000 Wheel Prep, 8K15P99 \$ 15.99

FLITZ POLISH



High Luster On Blued Steel, Aluminum, Brass, Plastic, Glass & More

Absolutely non-abrasive polish for all metals, fiberglass and most hard plastics. Removes corrosion, tarnish and discolorations. Brings finishes up to superb brightness, but its greatest asset in the gunshop is the ability to remove surface rust from blued finishes without damaging the bluing

underneath. Leaves a protective film that resists further rust, corrosion, etc., for up to six months. Contains no acids.

3FEC3. 30 9 (17/4	02) 01 130 g (3.3 02) tube.
#314-100-050	50 gram Flitz Polish, <i>4A7B82</i>
#314-100-150	150 gram Flitz Polish, <i>4A16H84</i> 22.99
FLITZ LIQUID F	POLISH - Non-abrasive liquid applies easier, leaves

a protective film coating. SPECS: 100 ml (3.5 oz.) bottle.



FLITZ RIFLE, GUN & KNIFE WAX

Water-Repelling Protectant Your Guns Will Thank You For

Non-abrasive, silicone-free protectant shields firearms and knives from rust and the corrosive effects of powder residue, fingerprints, water spots, tree sap, blood, and more, Rifle, Gun & Knife Wax

contains a unique blend of Brazilian Carnauba wax and beeswax to provide a tough, protective finish that lasts up to six months in fresh water conditions and three months in salt water environments. Safe for all metals - blued steel, stainless steel, brass, aluminum, and nickel plating - as well as wood and fiberglass stocks, paint, acrylics, and plastic. Won't attract dust, and leaves no white residue or buildup.

SPECS: 7.6 fl oz. (225ml) flip-top bottle.

#314-101-100 0 100 mL Flitz Liquid, 4A9D04 \$ 9.09 #314-000-006 Flitz Rifle, Gun & Knife Wax, 4A11N56 \$ 13.04

SIMICHROME POLISH

For Brass, Chrome, Gold, Silver, Aluminum, Glass & Plastic



Not only for cleaning up brass but is the most fantastic stuff you have ever seen on chrome, gold, silver, aluminum, glass and plastic. The people who import it from Germany put it this way: "Absolutely guaranteed to be the best polish in the world or your money back"!! One of the big

problems in the gun shop is polishing Plexiglas, and other plastic spacers and inserts. Simichrome will do it "Quick as a Wink". SPECS: 1.76 oz. (50 g) tube, a 8.82 oz. (250 g) can.

#189-001-000 1.76 oz. Tube Simichrome, 9H12A40 \$ 14.99 #189-002-882 8.82 oz. Can Simichrome, 9H36M68.... 46.99

BROWNELLS SILICON CARBIDE **ABRASIVE COMPOUND**

Sharp-Edged Silicon Carbide Self-Lubricating Petroleum Base





STOCK # **GRIT SIZE** PRICE 5L16E99 \$ 16.99 #083-045-120 120 #083-045-180 180 5L15J42 \$ 16.99 #083-045-240 240 5L15H53 \$ 16.99 #083-045-320 320 5L15Q07 \$ 17.99 #083-045-400 400 5L17Q99 \$ 17.99 #083-045-600 600 5L24E99 \$ 29.99 #083-045-800 800 5L27M46 \$ 29.99

SILICON CARBIDE ABRASIVE KIT - Puts the most useable selection of our shop proven, oil-based, silicon carbide abrasive compound together in a convenient try- pak. Handy, 2 oz. jars give you just the right amount of long lasting, sharp-edged abrasive that cuts longer and won't break down.



The best choice for close fitting of hardened and tempered steels. 4 oz. replacement containers listed above. SPECS: 2 fl. oz. (59 ml). Kit contains 120, 180, 240, 320, 400, 600 and 800 grit

#080-905-000 Silicon Carbide Abrasive Kit, 8K55B24 . . \$ 61.99

SILICON CARBIDE ABRASIVE GRIT - Very fine abrasive powders you can use to "rub in" parts. Make an abrasive/cutting-oil paste for metal work or use dry on a soft pad to bring a cured stock finish to a gloss. Follow with Brownells Stock Rub-



bing Compound. SPECS: 120 grit (coarse); 600 grit (fine). 1 lb. net wt. in plastic jar

#080-537-120	120 Grit Silicon Carbide,	5L12M99	14.99
#080-537-600 🗞	600 Grit Silicon Carbide,	5L20P99	24.99

BROWNELLS LAPPING COMPOUNDS



Aluminum Oxide In A Water Soluble Base For Easy Cleanup

The right abrasive for lapping the final fit between semi-auto slides and frames, rifle bolts and receiver raceways, and any other application where a super-close fit or silksmooth mechanism is required, #600 and #800 grit

aluminum oxide abrasive crystals in a long lasting petroleum base that's water soluble for fast, easy cleanup in soap and water. Aluminum oxide crystals are smooth and rounded in shape, so they won't embed and continue to wear the part after cleanup.

SPECS: Aluminum oxide. 4 fl. oz. (118 ml). Available in #600 and #800 grit. Twin Pak contains one jar of each grit.

#083-041-600 #600 Lapping Compound, 8K25G99 ...\$ 29.99 #083-041-800 #800 Lapping Compound, 8K25H99 ... 29.99 #083-041-002 Twin Pak Lapping Compound, 3H45I96. 49.99

GARNET LAPPING COMPOUNDS - Fast-working, but absolutely non-embedding, petroleum abrasive paste for honing close-fitting parts to an ultra-smooth, friction-free fit. A natural substance, Garnet can be safely used on cast iron, brass, bronze or softer steels without embedding or galling.

SPECS: Garnet, oil-base paste. 4 oz. (113 g). GK-5 = 600 grit. GK-7 = 800 grit, GK-10 = 5 microns.

#083-047-005 🗞 GK-5 Lapping Compound, 6A16G99. 💲 19.99 #083-047-007 🗞 GK-7 Lapping Compound, 6A16M12. 19.99 #083-047-010 GK-10 Lapping Compound, 6A16K99

GUARANTEED. FOREVER.® **SINCE 1939**

BROWNELLS ALUMINUM OXIDE ABRASIVE BLASTING GRIT

Produces Matte "French Grav" Finishes

By using controlled, abrasive blasting with these extremely fine, aluminum-oxide grits, you can "color", "texture" or "tone" any metal surface to produce the desired cosmetic effect without washing out detail. Professional instructions in-



5L49I99 \$ 59.99

SPECS: 6 lbs. in screw-top, plastic jar. 15 lbs. in snaptop pail

15 lbs. (6.8kg)

STOCK #	QUANTITY	GRIT	PRI	CE
#084-206-060	6 lbs. (2.7kg)	Ex-Coarse	5L20G99	\$ 24.99
#084-212-060 🗞	15 lbs. (6.8kg)	Ex-Coarse	5L47J99	\$ 56.99
#084-206-120 🗞	6 lbs. (2.7kg)	Coarse	5L20B47	\$ 24.99
#084-212-120	15 lbs. (6.8kg)	Coarse	5L49E99	\$ 56.99
#084-206-240	6 lbs. (2.7kg)	Fine	5L21l18	\$ 25.99

BROWNELLS GLASS BEADS

plated, or left in-the-white.

SPECS: Two sizes. U.S. Sieve Size #60-100 (.0098-.0059") for deep matte

coverage; field or utility guns. #270+ (.0021-.0005") for softer, matte look

matching stainless steel finishes. 50 lb. (22.7 kg) of beads in sealed pail,

#084-063-100 #60-100 Glass Beads. 8K69L99 \$ 84.99

#084-063-270 #270+ Glass Beads, 8K74L99 84.99

Fine

Lets You Do Popular Matte Finish Right In

Your Own Shop

finish that is so highly sought after. Fast to do;

easy to get results wanted. Must be done in

enclosed blast cabinet. Used by many custom

rifle and pistol builders. Finish can be blued,

Glass beads are used to make the matte

DONEGAN OPTICAL OptiVISOR

Continuous Headband: Dial Adjustable

DIAL ADJUSTABLE CONTINUOUS HEADBAND - Specially formed to fit. A simple twist of the adjusting dial changes head size. Sealed-in mechanism is self-locking and trouble-free. Gives better balance and even more comfort.



IT TILTS - Adjustable pivots make the OptiVISOR unique - and the most handy magnifier vet. It's up, out of the way of normal vision when not in use, and there at your fingertips when you need it for magnified pinpoint clarity back at the job.

CONFORMING HEADBAND - Of electrically nonconductive ABS material. Designed to fit and locate the scope in a natural, comfortable position. Total weight just 4 oz. So light you hardly know

GENUINE LEATHER COMFORT BAND - Padded with orthopedic felt, making the OptiVISOR the most comfortably worn magnifier available.

ABS HI-IMPACT VISOR - This tough, durable material is practically indestructible, yet always keeps its new appearance.

OPTICAL GLASS LENSES - Ground and polished to precise optical standards. Beveled edges and mounted in interchangeable plastic frames. Five scientifically computed prismatic powers are available for use with any OptiVISOR.

FITS OVER REGULAR GLASSES - No need to take them off with the OptiVISOR.

SPECS: No. 2, 11/2 X at 20" (51.0cm); No. 3, 13/4 X at 14" (35.6cm); No. 5, 21/2 X at 8" (20.3cm); No. 7, 23/4 X at 6" (15.2cm); No. 10, 31/2 X at 4" (10.2cm).

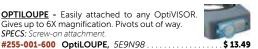
#255-002-000	No. 2 OptiVISOR, 5E43D80	\$ 56.99
#255-003-000	No. 3 OptiVISOR, 5E43P80	56.99
#255-005-000	No. 5 OptiVISOR, 5E43G80	56.99
#255-007-000	No. 7 OptiVISOR, 5E47F46	61.99
#255-000-000	No. 10 OptiVISOR, 5E48D14	61.99
	·	

EXTRA LENS PLATES

#255-003-030	No. 3 Lens Plate, 5E28F05	\$ 35.99
#255-005-050	No. 5 Lens Plate, 5E28L05	35.99
#255-007-070	No. 7 Lens Plate, 5E28I25	37.99
#255-010-100	No. 10 Lens Plate, 5E32E40	39.99

OPTILOUPE - Easily attached to any OptiVISOR.

Gives up to 6X magnification. Pivots out of way.
SPECS: Screw-on attachment.





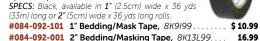
shipped by UPS.

#084-212-240

BROWNELLS **BEDDING/MASKING TAPE**

Extra-Heavy Duty For Abrasive Blasting

High-density, PVC tape easily protects carefully polished sides of 1911 Auto slides, pistol frames, or shotgun and rifle receivers from abrasive grit in the blast cabinet. Withstands high blast pressures up to 100 psi.



Orders: 800-741-0015

DONEGAN OPTICAL VISOR LIGHT™

Improves Visibility For Detail Work

Hands-free light clips to OptiVISOR and directs bright light right where you look. Vertical swivel adjustment lets you aim the light precisely. Self-contained battery pack clips to the headband. SPECS: Uses 2 AA batteries, not included. 1 spare bulb included.

#255-000-001 Visor Light, 5E21K63 \$ 27.99

BROWNELLS	Append Pendel 2804	MAIL	LOOKING FOR A DEAL? Go online and click on our
EMME ANDRESS	SHIRT THE TO SHOP	SAME A COMMONTO	SALE & CLEARANCE tab!!

LUXO LAMP KFM-1A

Magnifies - Illuminates. **Brings Hard Jobs Into Focus**

Serves double-duty as an illuminated magnifier and as a shadow-free fluorescent bench light. 5" diameter, ground and polished, optical glass, magnifying lens set in the center of the

all-metal, doughnut-shaped, lamp head. Suspended on 45" long, internal spring-tensioned adjustable arm, the head can be moved into high position for light only, or lowered for use as illuminated magnifier. 1-3/4X magnification at a working distance of 13", ideal for working on hard-to-see small parts, engraving or checkering. On/off switch in lamp head. Heavy duty metal clamp secures lamp to bench or desk top. Fluorescent tube included.

SPECS: 45" (114.3cm) long adjustable arm. 5" (12.7cm) dia. lens.

#538-100-002 Luxo KFM-1A, 8C00FWB \$ 425.33

BROWNELLS JAMES MEEK'S **BEGINNER'S KIT**

Basic Engraver Set Selected By Author Of Art Of Engraving

We asked James B. Meek, author of The Art Of Engraving for his recommendations. This is what he wrote: "Perhaps 90% of all the

scroll work in engraving can be done with the following tools". Point Graver No. 4 will cut most scrolls. Fine detail is cut with 0 Point. Knife No. 2 is also for detail. The Square is perhaps the most widely used, can also be sharpened as a point, or a chisel, Flat Nos. 36 and 37, and Round Nos. 50 and 54 are needed for lettering on high relief. Kit contains: Point - Nos. 0 and 4; Square - (2) GlenSteel Blanks; Flat - Nos. 36 and 39: Knife - No. 2: Round - Nos. 50 and 54. 9 gravers total. Deluxe Beginner's Engraving Kit includes all of the engraving tools from the Beginner's kit, plus a copy of Mr. Meek's authoritative book The Art of Engraving to get you started.

SPECS: Approximately 43/8" (11.1cm) long. Shank tapers from 3/16" (4.8mm) to 1/16" (1.6mm). Blanks are 4" (10.2cm) long. Steel.

	James B. Meek Beginner's Kit, 8K78M99 \$78.99	
#100-008-129	Deluxe Beginner's Engraving Kit, 8K00QKD	

ENGRAVING ACCESSORIES

MAGNIFIER - Compact, folding pocket magnifier. Double lens system gives combined 8X. Get a closer look at any-



SPECS: 11/4" (3.2cm) diameter glass.

#345-534-002 Double Lens Magnifier, 5D14/66...... \$ 16.99

ENGRAVER'S PRACTICE PLATES - Made from drawing quality, steel plate, aluminum "killed" to prevent age hardening. Works easily. Soft, matte finish. SPECS: Steel. 71/4" (18.4cm) x 3" (7.6cm) x 1/8



#084-001-005 5 Practice Plates, 6D12B06

MODEL 643 TOOL & CHISEL HANDLE - Specially shaped for your own, unique tools. Nicely finished with sturdy metal ferrule.

SPECS: 11/2" x 13/16". Approximately .010" (.25mm) diameter drilled hole. Sold in Pak of 3.

#249-640-643 Model 643 Handle, 3-Pak,

9D8E49 \$ 9.99



STRAIGHT GRAVERS

Hand Tools Give You Maximum Control & Refinement - Just Go Easy on the Coffee

Precision-ground and finished, ready for final touch-up and stoning to exact shape. Hand gravers are slow, but they give you maximum control and precision in your cuts. Just don't drink a lot of coffee before you use them!

SPECS: H.S. Steel. 4¹/₂" (11.4cm) to 5⁵/₁₆" (13.5cm) overall length. Approx. 11/2" (3.8cm) tapered shank.

STOCK #	# #/WIDTH PRICE		CE
	FLAT GRAVERS		
#615-030-036	#36/.0130	8K9D11	\$ 9.99
#615-030-039	#39/.0215	8K9F17	\$ 9.99
	ROUND GRAVER		
#615-050-050	#50/.0115	8K9P12	\$ 9.99
	ONGLETTE POINT GRAVERS		
#615-010-000	#0/.0170	8K9J11	\$ 9.99
#615-010-004	#4/.0175	8K9D17	\$ 9.99
	KNIFE GRAVER		
#615-020-002	#2/.0090	8K9B12	\$ 9.99

GRS ENGRAVING GRAVERMEISTER

Quick, Efficient, Precise Way To Engrave Metal

In just a few hours even a beginner can be cutting clean, sharp lines with the GraverMeister. It's a tremendous time saver for pros. A miniature, self-contained jackhammer (we're talking 1,600



to 2,400 impacts per minute!) that's driven by its own, built-in air compressor. With precise control of stroke power and speed, you can cut delicate lines or remove heavy background material. SPECS: 115V, 60Hz. 16" (40.6cm) long, 9" (22.9cm) high, 7" (17.8cm) deep. Includes: Power Unit, Hand Tool, Connection Tubing, Power Cord, 3 Gravers, Accepts most standard gravers.

#351-001-500 Gravermeister, 1E1957Q37......\$ 2124.99

CHASERS HAMMER

Designed & Balanced To Give You Day-Long Control Of Each Stroke



The hammer most frequently seen on the benches of engravers. silversmiths and other artisans who use a hammer for light, ultraprecision tapping. The large, flat face enables user to watch his work and still properly strike the tool he is using. Oval shaped handle is slenderly tapered near the head for proper rebounding action. Both flat and round faces of this hammer are highly polished and smooth finished.

SPECS: Steel head, hardwood handle, Approx, 10" (25.4cm) overall length. Face sizes: 15/16" (23.8mm), 11/8" (2.9cm), 11/4" (3.2cm).

#249-746-220	15/16" Chasers Hammer,	9D19Q91 \$	29.99
#249-746-280	11/8" Chasers Hammer,	9D19I99	26.99
#249-746-320	11/4" Chasers Hammer,	9D18P06	26.99

order on the web

brownells.com

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METAL CHECKERING FILES

Dead-On Spacing For Grip Frames, Hammer Spurs and More

The only way to get true, accurate line spacing when checkering backstraps, triggerguards, grip frames, ribs and hammer spurs; anywhere an improved gripping surface is needed. Finer cuts give a nice matting effect to reduce glare and light distortion. Layout your master lines (or use a guide like our .45 Checkering Guide), establish the pattern by moving the file a few teeth each time using the previous lines as the guide. Once the pattern is fully laid out, bring to final depth with a 60° needle file.

SPECS: 8" (20.3cm) length x 1/2" (12.7mm) wide. Cutting area: 6" (15.2cm) x 1/2" (12 7mm)

LPI	PRICE
20 (#00)	6C44H10 \$ 49.99
25 (#00)	6C69G33 \$ 75.99
30 (#0)	6C43D98 \$ 49.99
40 (#1)	6C45Q46 \$ 51.99
50 (#2)	8K46Q82 \$ 53.99
75 (#4)	8K57K99 \$ 57.99
	20 (#00) 25 (#00) 30 (#0) 40 (#1) 50 (#2)

FORSTER/BONANZA **BRUSHING INLAY**

Gold Powder In An Easy-To-Use Kit

Do-it-yourself kit fills engraving and lettering on all guns with an attractive gold colored fill. Gives production guns a personalized appear-

ance. Complete kit comes with easily followed instructions and includes enough gold powder to do many, many jobs. Made for gun work, but definitely not limited to guns; will work on any metal. SPECS: Kit contains gold powder, liquid base, cleaner, (3) 2" (5.1cm) diameter cloths, and complete instructions.

#319-056-000 OGold Kit, 9A16G79	\$ 22.49
#319-056-001 Gold Powder, 9A6A43	6.99
#319-056-002 U Liquid Base, 9A5A36	5.99
#319-056-003 Ocleaner, 9A5D36	5.99

BROWNELLS ENGINE TURNING KIT



Save & Get Everything You Need

Two money saving kits that have everything needed to produce an attractive, ieweled finish on hammers, triggers, rifle bolts, etc. Select the kit that best meets your needs and save the time and cost of buying individual pieces. The Standard Kit contains two of our E/T Brush sets and a container

of 120 grit silicon carbide abrasive; the Deluxe Kit adds our E/T Brush Holder Assembly that gives just the right amount of brush pressure against the work piece. Use the Standard Kit if you primarily work on flat surfaces. The Deluxe Kit produces a great finish on flat or curved surfaces. To get the best results, the kits should be used in

SPECS: Each kit contains twelve E/T brushes, 24 O-rings, two 4" lengths of heat shrink tubing, one 4 oz. container 120 grit Silicon Carbide Abrasive, a 1 oz. bottle of Do-Drill and complete instructions. The deluxe Kit adds

#080-558-100	Standard Engine Turning Kit, 8K55D98 \$ 61.99	
#080-558-101	Deluxe Engine Turning Kit, 8K80D86 88.21	

LACQUER-STIK®



Hi-Lights Engraving, Stamped #'s And Names

Highly specialized compound wipes on to bring out stamped or engraved impressions on ALL smooth surfaces, Ideal for guns, parts. accessories. Semi-solid in stick form when used, but soon hardens and becomes permanent.

SPECS: 45/8" (11.7cm) long. Red, White, Gold, or Black.

#517-100-001 🗞 Red Lacquer Stik, 7A6L44	\$ 7.99
#517-100-002 White Lacquer Stik, 7A7102	8.99
#517-100-003 Gold Lacquer Stik, 7A7K96	9.99
#517-100-004 🗞 Black Lacquer Stik, 7A5M99	7.99

LA BOUNTY STEEL STAMP GUIDE



For Precision Alignment When Marking Barrels

Precisely aligns individual steel stamps to help ensure characters are straight and evenly spaced when stamping caliber designations on barrels. Allen head screws allow adjustment for accurate

character spacing, so you get truly professional looking results. Machined port allows an unobstructed view of the first stamp head to ensure correct positioning on workpiece prior to tapping with your hammer. Accepts 1/4" square stamps with 1/16", 3/32", or 1/8" character sizes. Fits barrels up to 13/8" diameter.

SPECS: Aluminum, natural finish with steel U-bolt and hardware. 23/8" (6cm) long x 3¹/₄" (8.2cm) wide, 1¹/₂" (3.8cm) high.

521-104-000 Steel Stamp Guide,	1B43N94 \$ 58.99
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MORELANDS PRECISION BARREL STAMPING TOOL

For Precise Letter & Number **Alignment On Barrels**

Precision tool spaces and aligns metal stamps for perfectly straight letters and numbers when marking barrels. Length adjustable slide locks stamps firmly in place with easy-to-grasp,



wing-nuts that also allow fast, easy stamp removal and installation Stamping tool mounts to the barrel with two steel U-clamps that prevent slipping and mis-alignment. Includes fifteen 3/32" thick shims and fifteen 1/8" thick shims for precise character spacing of up to thirty 1/4" square stamps. Fits barrels up to 15/16" diameter.

SPECS: Aluminum, natural finish with steel U-bolts and hardware. 8' (20cm) long, 21/2" (6.4cm) wide, 2" (5.1cm) high. Fits barrels up to 15/16" diameter. Requires 1/4" square stamps.

STEEL LETTERS & FIGURES

transmit the hammer blow. Each stamp is individually inspected

and marked with index on thumb side so you'll always know which

way the character is facing.

Letter Sets consist of 27 characters, including a period. Number

Sets consist of nine characters from 0 to 8, the 6 also being used

for the 9. Sets come packed in sturdy wooden box with lid. NOTE:

Steel stamps are intended for softer steels, barrels, etc. DO NOT

use on hardened or plated steels, knife blades, tough alloys. Misuse

SPECS: Steel Stamps stocked in 1/16" (1.6mm) and 3/32" (2.4mm) sizes. The

characters are cut into the end of a steel bar measuring 1/4" (6.4mm) square

#990-500-100 1/16" Letter Stamp Set, 9Z98P40..... \$ 114.99

#990-500-200 3/32" Letter Stamp Set, 9Z68/12...... 100.99 #990-600-100 1/16" Number Stamp Set, 9Z33P55..... 39.99

#990-600-200 3/32" Number Stamp Set, 9Z31D41..... 36.99

x 23/8" (6cm) long. Purchase as sets or by the individual piece.

voids guarantee.

Stamp Your Own Combination

Of Numbers & Specs In Softer Steels & Metals

on custom rifle barrels and other metal objects. Made from the finest quality

steel, selected for its proven ability to

withstand hard use, then heat-treated to three distinct hardnesses. The char-

acter end is hardened to Rc 62 to pre-

vent chipping. Hammer end is crowned

and hardened to prevent mushroom-

ing, and the center is hardened to

#100-004-268 Barrel Stamping Tool, 3B164P77..... \$ 214.99

BROWNELLS **ENGINE TURNING BRUSH SET**

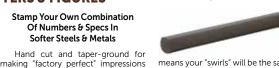
High Grade Brushes, Plus Two Ways To Control Brush Spread

Easy-to-fit, heat shrink tubing or roll-on O-rings squeeze engine turning brush bristles together so they don't spread out. Keeps the "swirls" crisp and sharp, adding a new dimension to your jeweling capabilities; increases brush life, too!

SPECS: Set includes: (6) 3/16" (4.8mm) dia. brushes; (12) 1/4" (6.3mm) dia. O-rings; (1) 4" (10cm) length of heat shrink tubing.

#080-558-000 E/T Brush Set. 8K19E58...... \$ 23.99

CRATEX ABRASIVE RODS



No Messy Oil For Cleaner Bolt Jeweling

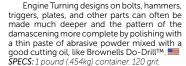
Medium grit rods for bolt jeweling. The close size control

means your "swirls" will be the same, time after time. SPECS: 3/16" (4.8mm) or 1/4" (6.3mm) diameter, 6" (15.2cm) long

#190-036-002 3/16" x 6" Abrasive Rod, 9A9F22...... \$ 10.99 #190-046-002 1/4" x 6" Abrasive Rod, 9A10A18 11.99

BROWNELLS ENGINE TURNING ABRASIVE

For Deeper, More Beautiful Jewels



#080-537-120 120 Grit Silicon Carbide, 5L12M99..... \$ 14.99

BROWNELLS **ENGINE TURNING BRUSHES**



Produce Beautiful, Deep Patterns With Minimal Trouble; Customer Recommended!

Use for engine turning rather than abrasive tips. Brush wires follow the contours of rounded gun parts better, and does a superb job on flat surfaces, with long tool life. Use Engine Turning Abrasive and Do-Drill as explained in the listing elsewhere in this section. SPECS: Brush diameter 3/16" (4.8mm), .005" diameter (.13mm) wire, 1/6"

(3.2mm) shaft, 17/8" (4.4cm) overall,

#080-558-003 3 Engine Turning Brushes, 8K10Q17 \$ 11.49

ENGINE TURNING BRUSH HOLDER -

Spring-loaded plunger assembly with just the right amount of "give" keeps brush bristle pressure constant to produce consistent, accurate "swirls." Fits in drill press chuck. SPECS: Machined steel. 4" (10 cm) long.

#080-558-001 E/T Brush Holder, 8K36E39 \$ 39.99







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