



FOLEY

**EXCELLENCE
IN SHARPENING
EQUIPMENT**

A DIVISION OF FOLEY-BELSAW COMPANY

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You're always as close as your telephone.



- **Need rush service?**
- **Got a question?**
- **Looking for something?**

Our service department can help you with any problem or question you might have. You can find out how to adjust a machine for a specific use or the right piece of equipment to handle a special job. Just pick up your phone and dial

toll free.

Explain your problem or ask your question by letter. We will promptly telephone or return the answer by mail. We want to help you be successful.

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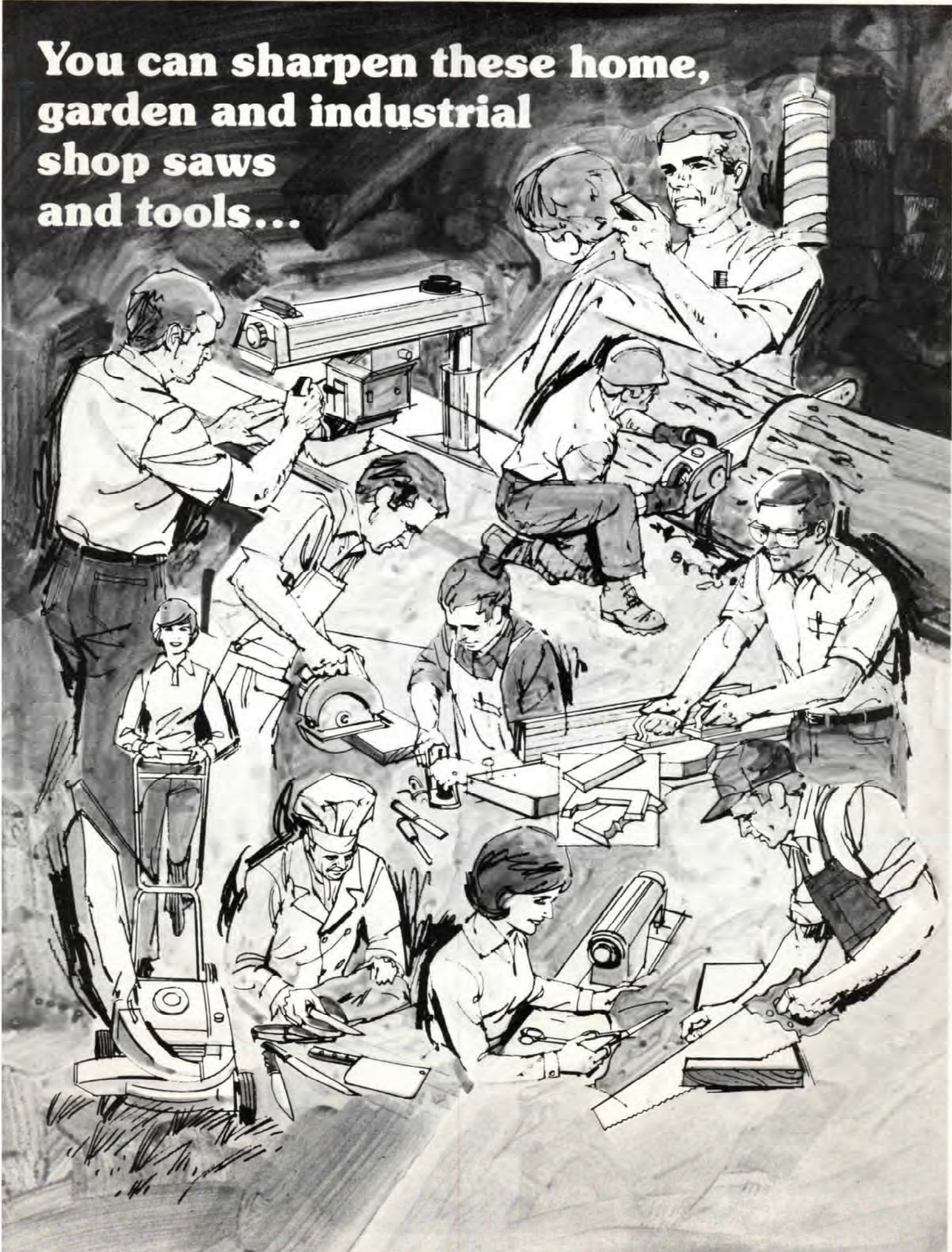
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Cable Foley Belsaw

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**You can sharpen these home,
garden and industrial
shop saws
and tools...**



THE MODEL

387 AUTOMATIC SAW FILER

SHARPENS HAND SAWS, CIRCULAR SAWS AND BAND SAWS.

The Model 387 provides perfectly uniform teeth with exact duplication of original tooth characteristics. Saws sharpened on the Model 387 cut faster and stay sharp longer.

AUTOMATICALLY SHARPENS HAND SAWS

The Model 387 Filer sharpens all types of hand saws . . . taper or flat ground-rip, crosscut, mitre, keyhole and crowned. The entire sharpening operation, from set-up to removal, takes only minutes.

AUTOMATICALLY SHARPENS CIRCULAR SAWS

The Model 387 completely sharpens wood cutting, meat cutting and nonferrous metal cutting circular saw blades with evenly spaced V-shaped teeth. Basically any circular saw capable of being sharpened with a 3-cornered file can be automatically sharpened on the 387. For steel and carbide circular saws which require grinding, see carbide and steel saw grinding section.

AUTOMATICALLY SHARPENS BAND SAW BLADES

The Model 387 sharpens wood and meat cutting band saw blades with evenly spaced V-shaped teeth . . . capable of being sharpened with a 3-cornered 60 degree file. Standard equipment supplied with the Model 387 makes band sharpening possible, but for high volume band sharpening we recommend the optional 3589578 wheel & rod assembly with the 3080510 floor stand.

STANDARD EQUIPMENT

- 1 each **3870901** Filer with 110 volt 60 cycle, phase motor
 - 1 each **3589982** straight handsaw carrier bar
 - 1 each **3589981** back or mitre saw carrier bar
 - 1 each **3589980** 3/16" crowned saw carrier bar
 - 1 each **3580540** band saw attachment
 - 1 each machine lamp
 - 1 each instruction manual
 - 1 each self adjusting cone for circular saw with arbors 1/2" to 2"
- ORDER NO. **38701G** Automatic Filer with 110 volt motor



OPTIONAL WHEELS AND RODS ATTACHMENT.

MODEL 387 SAW FILER SPECIFICATIONS

Indexing capacity . . . 4 points per inch to 16 points per inch
 Filing speed
 (60 cycle motor) . . . 45 to 50 teeth per minute
 Bevel adjustment . . . 0 to 30 degrees right and left
 File face . . . 7/32" to 5/8"
 File length . . . 6"
 Motor — 110 volt, 60 cycle, single phase, 1/4 HP standard
 (other voltages available on request)
 Mounting bench mount standard, floor stand optional
 Standard machine dimensions 24" h X 18" w X 30" deep
 Power Train—Gear reduction system powers cam action, indexing and push rod drive
 Circular saw . . . 5" to 24" standard
 diameter capacity . . . 2" to 24" with optional cup assembly
 Circular saw . . . 1/2" to 1 7/8" standard
 arbor capacity . . . up to 3/2" with optional cup and cone
 Length of feed
 on circular saw
 circumference . . . 0" to 2 1/4"
 Hand saw . . . (maximum with standard
 blade lengths . . . equipment — 30 1/2"
 Hand saws styles sharpened — (standard) Rip, Crosscut, Mitre and Back and 3/16" Crown
 Optional holders for Compass, Keyhole and Crowns other than 3/16" —
 Band saws blade width . . . 3/8" to 4 1/2"
 Shipping Weight . . . 141 lbs.

This attachment is solely for shops that handle a high volume of long band saws. Not used for short bands. Takes length to 24", width of 4-1/2", providing support for back loop. Mounts on, and requires, No. **3080510** Floor Stand (not included). No. **3589578** — Weight 32 lbs.



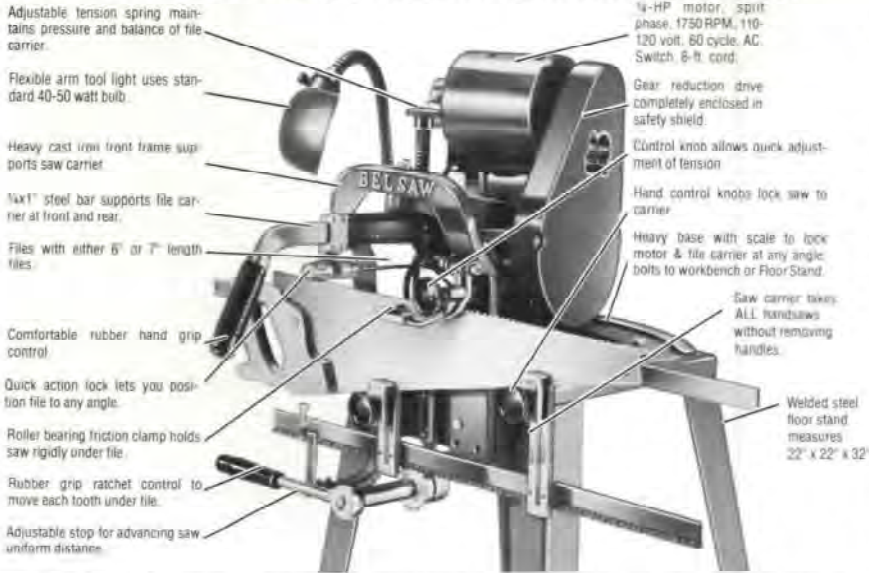
PAPER TUBE SAW ATTACHMENT (optional)

Used on Models 200-387

Provides precise, accurate, perfectly angled filing of circular paper tube saws. Engineered to position and holds paper tube saw at exactly the right angle. Specify arbor size when ordering. No. **3580505** Paper Tube Bracket No. **3619550** Saw Arbor (specify arbor size)

NOTE: To sharpen Paper Tube Saws you must order 1 each **3580505** and 1 each **3619550**. For each arbor size you require an additional **3619550**. Specify Arbor sizes.

MODEL 1200 MANUAL HANDSAW FILER



The Model 1200 Manual Filer features a motor-driven file arm you guide with one handle and advance the saw with a rubber grip ratchet control. This unit is designed as a low cost — yet reliable — method for sharpening handsaws. Included is an adaptor which enables the filing of some circular saws, having "V" shaped teeth — from 4 to 10 inches in diameter.

All Popular Handsaws . . .

Sharpens all kinds of carpenter's handsaws with teeth from 4 to 16 points-per-inch. No need to remove blade handle . . . special carriers not required.

EQUIPMENT INCLUDED:

Model 1200 with 1/4 HP Motor, Jointing tool with 4" File; Hook Gauge, Circular Saw Attachment Band Saw fixture and Back Saw Holder and tool light.
ORDER NO. 2171200 Model 1200 Bench mounted with standard equipment
ORDER NO. 2171202 Model 1200 Floor Stand optional

MODEL 1200 SPECIFICATIONS

Motor — 110 volt, 60 cycle, single phase	1/4 HP, 1725 RPM	Sharpens Circular Saws with Arbors	1/2" to 1-1/2"
File length	6" or 7"	Circular Saw Diameter capacity	4" to 10"
Filing speed	55-60 gear driven file strokes	Floor Stand	Optional
Bevel angle	0 to 30 degrees right or left	Shipping Weight	100 lbs.
Sharpens Handsaws	4 to 16 points-per inch		

CARRIER ASSEMBLIES



Used on Models
61-200-387-2400

The 387 Automatic Filer is equipped with three different hand saw carrier assemblies. Each is designed for use with a particular style of blade: straight edge, crowned edge and back or miter box. Blades are easy to mount on carrier assemblies . . . no tools required. Takes only seconds to mount and start filing.

- No. **3589982** Straight Saw Carrier (supplied w/Filer)
- No. **3589981** Back or Miter Carrier (supplied w/Filer)
- No. **3589980** Crowned Saw Carrier (supplied w/Filer)
- No. **3589984** Sandvik Hand Carrier 15/32" Crown (optional)
- No. **3589160** Extra long carrier hangers for wide miter saws (optional)

KEYHOLE SAW CARRIER

(optional)

Used on Models 61-200-387-2400, Accommodates both narrow and wide keyhole saws; provides fast, easy set-up. No. **3589402**.

Adjustable Angle Filing Vise for Dado Heads and Circular Saws



Because of their particular tooth style, Dado Heads must be hand filed. This vise is ideal for the job. It's a handy vise for quick touch-ups and general filing of other circular saw blades. Bench mounted, it holds saw firmly, without chatter, at any tilt angle from vertical to 45°. Handles all Dado and circular saw blades from 4" to 18" in diameter. Accepts blade arbors from 1/2" to 1 3/4".
 Model No. **3460901**.

Floor Stand (optional)



This pedestal stand makes the 387 Filer a free-standing unit. Required if **3589578** Band Saw Wheels and Rods Assembly is to be used.
 No. **3080510** — Weight 36 lbs.

FAMOUS FOLEY REISSAU SAW FILES



DOUBLE CUT:

Has two series of diagonal cutting teeth, the first called the "upcut" and the second row the "overcut". Having more exposed cutting surfaces, removes metal fastest but tends to produce slightly rougher finish than Single Cut file.

SINGLE CUT:

Has a single series of cutting teeth running in one direction. Single cut files are normally recommended for circular and band saw sharpening. They produce a smooth finish and leave a slight radius in gullets when machine filing.

Highest quality files for the professional sharpener. Our world famous files are manufactured to exacting specifications and specially designed to file saw-grade steel. Individually tested for uniform hardness and trueness to assure machine-filing accuracy . . . scientifically heat-treated to sharpen more saws and provide you maximum profits per file.

Here is a handy guide to help you select the proper file size for economical use . . . maximum profits!

TYPE OF FILE	6-INCH	7-INCH
Double Extra Slim Taper	13-16 pts./inch	10-13 pts./inch
Extra Slim Taper	11-13 pts./inch	8-10 pts./inch
Slim Taper	8-10 pts./inch	5-7 pts./inch
Taper	5-7 pts./inch	less than 5 pts./inch

MACHINE FILES:

CATALOG NO.	DESCRIPTION AND SIZE
2196201	6-INCH DOUBLE CUT
2196202	Double Extra Slim Taper
2196203	Extra Slim Taper
2196204	Slim Taper
2196115	6-INCH SINGLE CUT
2196116	Double Extra Slim Taper
2196117	Extra Slim Taper
2196118	Slim Taper
2196129	Taper
2196128	Slim Taper (for band & circular saws)
2196126	Taper (for band & circular saws)
2196134	Diamond Point (for 4-4 1/2 pt. saws)
2196105	Cant Saw (for less than 60° angles)
2197206	7-INCH DOUBLE CUT
2197208	Double Extra Slim Taper
2197210	Extra Slim Taper
2197107	7-INCH SINGLE CUT
2197109	Double Extra Slim Taper
	Extra Slim Taper

HAND FILES:

CATALOG NO.	DESCRIPTION — SIZE — CUT
2194114	Jointer — 4" — S.C.
2194145	Web — 6" — S.C.
2196230	Corrugating — 6" — D.C.
2196251	Pillar R.H. Corrugating — 6" — D.C.
2198111	Cant Saw — 8" — S.C.
2198112	Mill Bastard — 8" — S.C.
2198113	Mill Bastard 2Rd. Edge — 8" — S.C.
2198125	Mill Bastard — 10" — S.C.
2198126	Crosscut — 8" — D.C.

CHAIN SAW FILES

CATALOG NO.	FILE SIZE
2196001	1/8" Round 6" Long
2196002	5/32" Round 6" Long
2198001	3/16" Round 8" Long
2198002	13/64" Round 8" Long
2198003	7/32" Round 8" Long
2198004	1/4" Round 8" Long

DOUBLE FEED PAWL

For sharpening circular saws with V-shaped teeth with expansion slots; also permits automatic sharpening of handsaws with missing or broken teeth. No. **3879570** For Model 387

OFFSET CUP ASSEMBLY

Offset cup for sharpening small saws 4" or less in diameter. No. **3309530**

CUP AND CONE ASSEMBLY

Handles circular saws with larger bores, 1 3/8" to 3 1/2". No. **3580950**

REAR FILE HOLDERS

No. **3589123** Web File Holder, Point end.
 No. **3619136** Cant Saw File Holder.



FILE RELEASE LEVER ATTACHMENT

Aid removal and placement of files into Model 387. CATALOG NO. **3879544**

HAND SAW JOINTING AID

Use as a quick check to assure all teeth are at the same height. Mount the jointing aid to the saw and move it back and forth over the teeth, then continue the sharpening process on your Model 1200 or Model 387 Filer.
 Order No. **2179038**
JOINTING AID with 4 inch file
 Order No. **2179138**
JOINTING AID without file

THE MODEL 392 AUTOMATIC SAW SETTING MACHINE



FAST, PRECISION SETTING OF HANDSAWS, CIRCULAR SAWS AND BANDSAWS

The automatic feed and hammer action of the Model 392 is designed to feed saws thru the machine, achieving set on both sides of the saw — in one operation. Indexing is quickly established by positioning the Feed Selection Knob to the desired point setting.

The amount of set is quickly established by turning the Set Adjusting Knob which controls the amount of the saw tooth which overhangs the anvil.

SETTING HAND SAWS

Hand saws are clamped to a carrier bar to provide hands off operation. Hand saws from 4 - 16 points can be quickly indexed thru the machine. With optional crowned saw and mitre box saw carriers, crowned and mitre box saws can be set on the Model 392.

SETTING CIRCULAR SAWS

The Model 392 is capable of setting circle saws with evenly spaced V-Shaped teeth up to 12" in diameter with plate thickness of .060 or less. The Model 392 is equipped with a circular saw holding attachment. (See Models 330, 353 or 359 for more circular saw setting information.)

SETTING BAND SAWS

Band saw holding clips are designed into the machine to allow setting of band saws up to 1½" wide, with evenly spaced V-Shaped teeth.

EQUIPMENT INCLUDED

1 each Model 3920901 Automatic Setter with 110 volt, 60 cycle, 1 phase motor, machine lamp as pictured, 1 each 3589982 straight carrier bar, 1 each circular saw extension and cup and cone.
ORDER NO. 3920901

SPECIFICATIONS

Hand Saws	All common handsaws 4-16 points/inch
Circular Saws	3½" to 12" diameter (V-shaped teeth only)
Band Saws	up to 1½" wide, 4 to 16 points/inch
Blade Thickness	up to 16 ga. (.060")
Circular Saw Arbor Size	1/2" to 1-3/16" diameter
Bench Space Occupied	15" x 17"
Total Height	6"
Work Area Required	26" x 30"
Net Weight	37 lbs.
Shipping Weight	40 lbs.

THE TIME SAVING MODEL 330 AUTOMATIC SETTER FOR CIRCULAR SAW BLADES



FAST AND ACCURATE

One quick operation and both sides of the saw are set automatically. Positive and uniform setting force, is easily adjusted from light to heavy. Tooth configuration ranges — includes all types, where teeth are evenly spaced with tooth pitch 1/8" to 1/4" between teeth from .050" to .125" plate thickness.

A motor-drive feed pawl advances the saw automatically, tooth by tooth, synchronized with the setting action, teeth are set alternately, one up and one down with dependable precision.

EQUIPMENT INCLUDED:

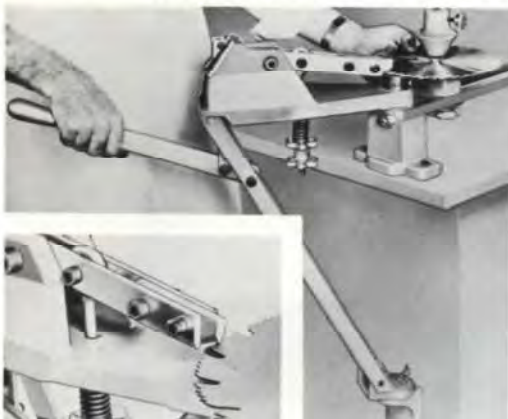
1 each Model 330 Automatic Setter with 1/4 HP — 110 volt motor, extension arm and cup with cone.
ORDER NO. 3300901

SPECIFICATIONS

Saw Diameters	4" to 24"
Arbor capacity with standard equipment	½" to 1⅞"
Blade thickness	.050 to .125" thick
Tooth Pitch	⅛" to ¼" between points
Feed Rate	120 teeth per minute on 60 hertz current
Motor	110 volt, 60 hertz, 1 phase ¼ HP
Dimensions	19" Long, plus 13⅞" Arm Extension, 16½" Wide, 11¾" High
Shipping Weight	88 lbs.

NOTE: The Model 330 does not set 4 - tooth and raker blades.

MANUAL SETTERS



MODEL 359 LEVER TYPE CIRCULAR SAW SETTER

The Model 359 is designed for fast, accurate and easy operation. Features a lever operated trip hammer with adjustable spring tension to assure uniform set.

Reversible hammers for coarse and fine tooth saws. Quick mounting cup and cone accommodates saw arbors from 1/2" to 2 1/2" in diameter. Heavy duty frame provides rigid support of all circular saws 5" to 38" in diameter.

ORDER NO. 3590901

MODEL 359 SPECIFICATIONS

Construction	Cast iron, steel and aluminum magnesium
Capacity, Blade Diameter	5" to 38"
Blade Thickness	1/4" to 1/2"
Arbor Capacity (with standard cone)	1/2" to 2 1/2"
Quadrant Adjustment (for tooth hook)	0° to 45° right or left
Bench Space Occupied	6" x 23"
Height needed to mount angle quadrant	24"
Work Area Required	22" x 36"
Net Weight	49 lbs.
Shipping Weight	52 lbs.

MODEL 353 ECONOMY CIRCULAR SAW SETTER



Convenient, Low Cost Saw Setting — sturdy construction throughout — accurate, dependable, inexpensive setting for rip, crosscut and combination blades from 5" to 36" in diameter. Quadrant provides settings to align hammer with tooth center, providing a high degree of tooth set uniformity.

ORDER NO. 3530901

MODEL 353 SETTER SPECIFICATION

Blade Diameter Capacity	5" to 36"
Blade Arbor Capacity	1/2" to 2"
Bench Area Occupied	26" x 6 1/2"
Work Area Required	36" x 36"
Quadrant Adjustment	0° to 40° left or right
Shipping Weight	24 lbs.

MODEL 381 ECONOMY HANDSAW SETTER



The Model 381 is a hand-fed, hammer-type setter for hand saws. The hammer force is adjustable and the hammer action is foot pedal operated. Operator feeds the saw by hand, setting one side at a time.

ORDER NO. 3810901

PISTOL GRIP SAW SETTER

This setter is slower and more tedious than other setters in our line, but is acceptable for small volume. Ideal for setting pruning saws, hand saws and light gauge circular saws.

ORDER NO. 3702704



MODEL 385 AUTOMATIC RETOOTHER



The Model 385 Retoother quickly and completely replaces all old teeth with new, precisely sized, accurately spaced teeth on rip or crosscut, straight edged and crowned hand saws. Saves time in any sharpening shop. Satisfies customers. Eliminates the need for jointing with the 387 Filer. Cuts any tooth size from 4 to 11 points per inch, as well as 13 points, with the standard ratchet bars; optional bars for 12-14, 15 and 16 points are available. Simple to operate.

The Depth Gauge indicates exact position of new teeth without guesswork while the indicator insures accurate setting for any tooth hook desired. The Hardened Tool Steel Punch cuts with shearing action; provides sharp, clean-cut teeth in hardest saw steel.

Standard equipment includes one straight saw carrier, five standard feed bars and depth gauge.



Standard equipment included for Model 385:

3589982 Straight Saw Carrier	3702026 Optional Machine Lamp
3859507 Ratchet Bar 13-7-4 Points	3859509 Ratchet Bar 9-5 Points
3859508 Ratchet Bar 8-4 1/2 Points	3859510 Ratchet Bar 10-5 1/2 Points
385016 Retoother with 110 volt motor	3859511 Ratchet Bar 11-6 Points

Snap-On Feed Bars for other tooth sizes (optional)

Special snap-on bars provide fast, easy set-up for tooth spacing for 12 through 16 points. Handles both crowned and straight retooling.

3859512 (6 1/2 and 12 pts.)	3859515 (4 1/2, 8 and 15 pts.)
3859514 (7 1/2 and 14 pts.)	3859516 (8 1/2 and 16 pts.)

MAKE YOUR OWN CUSTOM SAWS



An extra service for any sharpening shop to satisfy the demands of the craftsman who desires a certain tooth style. These blank saws are ready for custom toothing, filing and setting. Make any tooth style, rip or crosscut in any spacing from 4 to 16 points per inch. (These saws will cost up to \$10 and more if purchased with teeth.) Blank custom saws are sold in packages of four.

- No. 3899504 Pkg. of 4 Extra Fine Quality (High Grade Steel) blades will maintain sharpness better and last longer.
- No. 3899018 Saw Handles. Pkg. of 6-Universal design to fit almost any hand saw. Slotted, but not drilled.
- No. 3899023 Pkg. of 10 small handle screws. Aluminum.
- No. 3899024 Pkg. of 10 large (Medallion) Handle screws. Aluminum.

SAW SWAGE

For use in swaging printers and graphic art saws.

ORDER NO. 3702242

MODEL 311

COMPLETE SANDER GRINDER



BENCH MOUNT

The 311 is an all-in-one machine which maximizes safety and rugged versatility. This one machine sharpens, sands, grinds and finishes wood, metal, plastic and a wide variety of other materials — all with optimum safety and long-lasting dependability. The Model 311 Sander/Grinder is built for total safety with full versatility and rugged dependability. Check these features:

- Direct drive motor — totally enclosed for maximum efficiency, maximum safety.
- 1/2 HP 3450 R.P.M. Heavy Duty Motor
- Pre-lubricated, sealed ball bearings on all pulleys
- 1" wide standard sanding belt 42" long
- Separate on-off switch
- Sturdy die cast aluminum housing for maximum strength and protection

SANDING BELT TABLE

- 8" x 7" work support table with easy to read scale for adjustment from 45° downward to 15° upward

SANDING DISC TABLE

- 12" x 5 1/2" work support table with milled slot for mitre gauge offering table adjustments from 45° downward to 10° upward
- 8" diameter self adhering sanding disc for fast and easy installation and removal (no gluing necessary)
- Built-in connection outlet for dust collecting system

3110905 — Model 311 Sander/Grinder — bench mounted, with sanding disc, mitre gauge, heavy duty 1/2 HP double shaft motor, two 60 grit sanding discs, plus six abrasive sanding belts. Shipping weight 67 lbs.

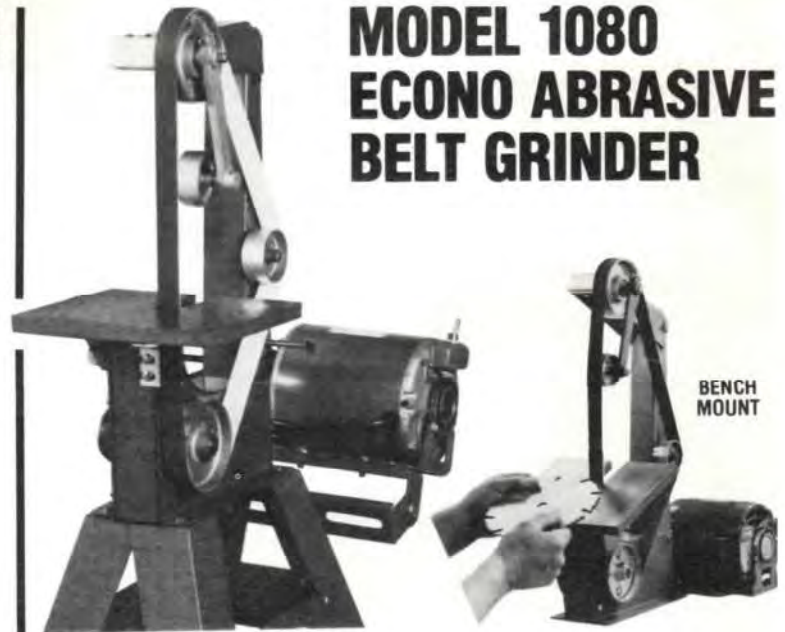
31120G — Model 311 same as 3110905 but includes 3110560 floor stand. Shipping weight 92 lbs.

3110560 — Floor stand only. Shipping weight 25 lbs.

ABRASIVE DISCS FOR MODEL 311

Highest quality abrasive discs may be used on the Sanding Disc Attachment. Each disc comes with its own self sticking adhesive back for quick and easy replacement.

CATALOG NO.	GRIT (All discs are 8" Diameter)	
3703100	Super Coarse	40
3703101	Coarse	60
3703102	Medium Coarse	80



BENCH MOUNT

SAVES TIME . . .

Saws and tools are sharpened 25% faster by belt than by hand filing at a fraction of the cost of a file.

SAVES WORK . . .

Instead of tedious hand filing at the vise, simply hold the tool on the work table and let the machine do the work.

SAVES MONEY . . .

This economical, yet quality built unit is designed to save every shop money

2301081 — Model 1080 Econo Grinder with three 1" x 44" abrasive belts less motor & stand

2301085 — Floor stand for Model 1080

3707100 — 1/4 HP 115 volt 1725 motor

3702058 — Tool Light

2301084 — Motor mount

SPECIFICATIONS

Over-all size	8-1/2" wide, 14" deep, 22" high
Table work surface	7" x 8-1/2"-table tilt (maximum)— 20°back, 75°forward
Bearing	Special sealed ball bearing in drive wheels
Abrasive Belt	1" wide 44" long available in 5 assorted grits
Motor	1/4 HP 1750 RPM 110 volt — 60 cycle — 1 phase
Belt Tension	Adjustable idler arm . . . self-aligning upper wheel

ATTACHMENTS FOR BOTH MACHINES

BELVEL-RITE JOINTING & TOPPING ATTACHMENT



3110570 — Bevel Rite

Attaches to Model 1080 and Model 311 Belt Grinders. Get complete beveling and jointing accuracy. Adjust blade to belt for desired clearance angle and place the spring-locking stop finger into position. Handles saw blades up to 12" diameter.



2307271 — Knife Fixture



2307264 — Universal Tool Holder

ABRASIVE BELTS FOR BOTH MACHINES

Finest quality Industrial Grade Belts with cool grinding Aluminum-Oxide abrasive on strong Resin-Bond cloth backing for fast, efficient grinding and maximum belt wear. Available in desirable grits to handle any grinding job and the need of the professional sharpener.

1 - INCH WIDE x 42 INCHES LONG			1 - INCH WIDE x 44 INCHES LONG		
CATALOG NO.	DESCRIPTION	GRIT	CATALOG NO.	DESCRIPTION	GRIT
3703000	Extra Coarse	50	3703020	Super Coarse	40
3703001	Medium Coarse	80	3703021	Coarse	60
3703002	Medium	100	3703022	Medium Coarse	80
3703003	Fine	180	3703023	Medium	100
3703004	Super Fine	320	3703024	Medium Fine	150

SOME OF THE MANY USES FOR THESE FINE MACHINES ARE ILLUSTRATED BELOW.



CIRCULAR SAWS

MOWER BLADES

KNIVES

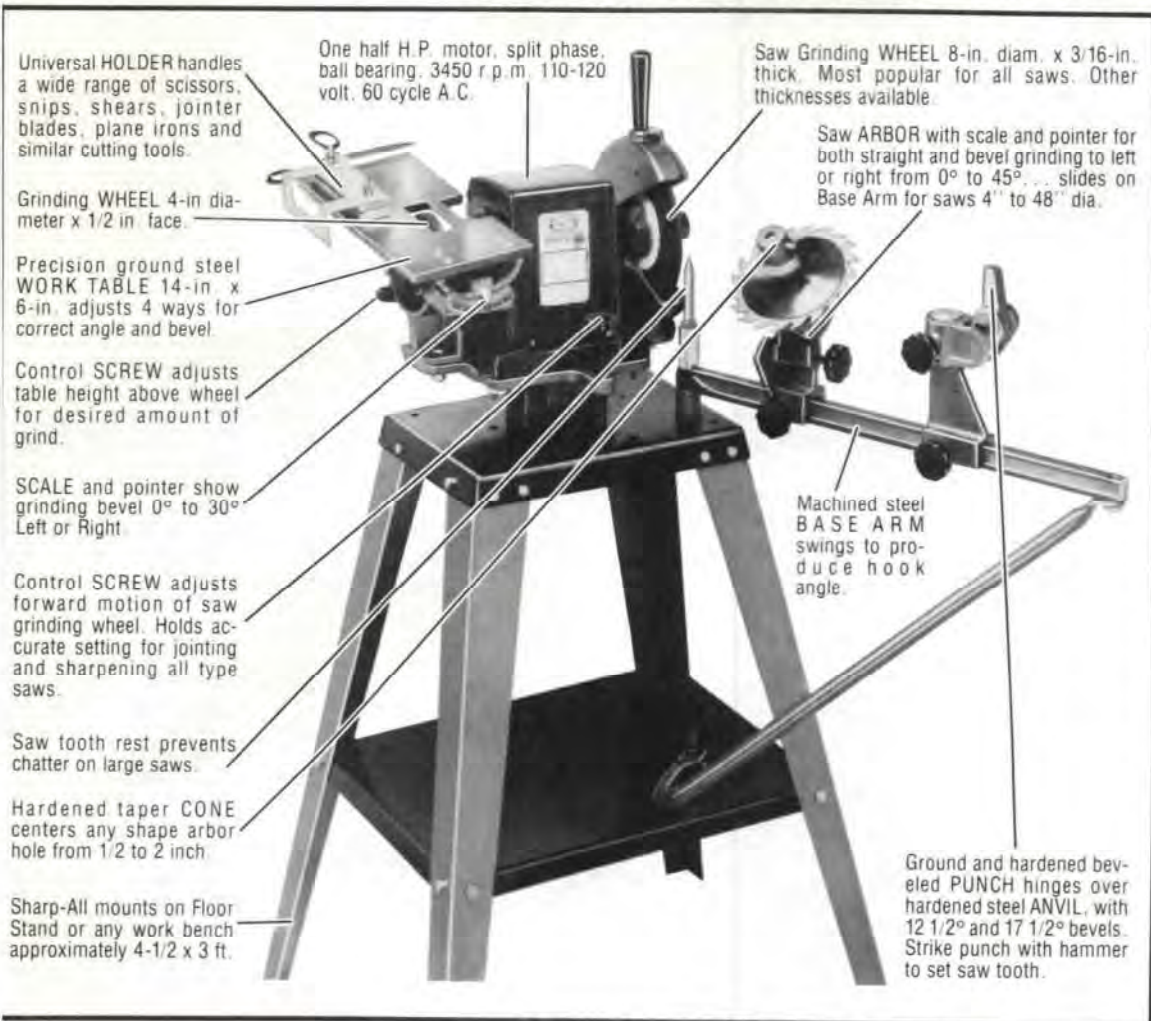
AXES

SCISSORS

CHISELS

WOOD

THE MODEL 1055 SHARP-ALL



Universal HOLDER handles a wide range of scissors, snips, shears, jointer blades, plane irons and similar cutting tools.

Grinding WHEEL 4-in diameter x 1/2 in face.

Precision ground steel WORK TABLE 14-in x 6-in, adjusts 4 ways for correct angle and bevel.

Control SCREW adjusts table height above wheel for desired amount of grind.

SCALE and pointer show grinding bevel 0° to 30° Left or Right.

Control SCREW adjusts forward motion of saw grinding wheel. Holds accurate setting for jointing and sharpening all type saws.

Saw tooth rest prevents chatter on large saws.

Hardened taper CONE centers any shape arbor hole from 1/2 to 2 inch.

Sharp-All mounts on Floor Stand or any work bench approximately 4-1/2 x 3 ft.

One half H.P. motor, split phase, ball bearing, 3450 r.p.m., 110-120 volt, 60 cycle A.C.

Saw Grinding WHEEL 8-in. diam. x 3/16-in. thick. Most popular for all saws. Other thicknesses available.

Saw ARBOR with scale and pointer for both straight and bevel grinding to left or right from 0° to 45°. ... slides on Base Arm for saws 4" to 48" dia.

Machined steel BASE ARM swings to produce hook angle.

Ground and hardened beveled PUNCH hinges over hardened steel ANVIL, with 12 1/2° and 17 1/2° bevels. Strike punch with hammer to set saw tooth.

The Model 1055 Sharp-All is designed to Joint, Gum, Bevel, Sharpen and Set Circular Saw Blades from 4" to 48" in diameter. The special Tool Holder supplied with the 1055 provides an excellent method for sharpening Chisels, Axes, Knives, Lawnmower Blades, Scissors and Pinking Shears.

EQUIPMENT INCLUDED

1 each Model 1055 Sharp-All, Bench mounted with 1/2 HP, 110-120 volt 60 cycle motor, 1 each 4" x 1/2" tool grinding wheel, 1 each 8" x 3/16" saw grinding wheel, 1 each dressing brick, and saw setting attachment. ORDER NO. 2100920

Optional Floor Stand — ORDER NO. 2100921

Floor Stand for Sharp-Alls purchased prior to March 1983 — ORDER NO. 2100922

MODEL 1055 SPECIFICATIONS

Motor Specifications	115 Volt, 3450 RPM, 1/2 HP
Blade Capacity	4" to 48"
Arbor Hole Capacity	1/2" to 2-3/16"
Stand Height	32"
Overall Height, Mounted on Pedestal	50"
Bench Space Occupied	12" x 14"
Space Required	22" x 22"
Emery Wheel Capacity	8" and 4" Diameters
Motor Shaft Diameter	1/2"
Machine Weight	90 lbs.
Stand Weight	40 lbs.

An excellent tool for starting your Sharpening Business.



Add attachments to the 1055 and you have a complete sharpening center. All attachments shown below are optional.



CHAIN SAW ATTACHMENT Quickly sharpens any kind of chisel or chipper chain. This attachment allows sharpening of both the cutters and the depth gauge. ORDER NO. 2100900



CLIPPER HONE ATTACHMENT Restores factory sharpness to barber and animal clipper blades. ORDER NO. 2100274



LONG KNIFE HOLDER ATTACHMENT This unit enables the 1055 to sharpen straight knives such as planer and jointer knives from 4" to 16" in length. ORDER NO. 2100270



BEVEL AID ATTACHMENT A definite aid for shaping Grinding Wheels, use with optional 3702450 Diamond Dresser. ORDER NO. 2100457 — Bevel Aid ORDER NO. 3702450 — Diamond Dresser



DRILL GRINDING ATTACHMENT A handy tool for sharpening drills from 1/8" to 3/4". An accurately calibrated angle adjustment provides precision grinding of all drills. ORDER NO. 2100251



CHISELS



AXES



KNIVES



SCISSORS



MOWER BLADES

HEAVY DUTY MODEL 360 SAW GRINDER & GUMMER



The Model 360 is designed for high volume circular saw grinding. It accommodates hours of heavy gumming — minimizing operator fatigue and maintains blade sharpening quality.

PROVIDES EXACT HOOK AND BEVEL

The convenient, easy to adjust quadrant allows quick pivot of blades for any desired tooth hook from 0° to 30° — calibrated in degrees for precise setting. Simple adjustment can be made without reversing blade to provide any tooth face bevel from 0° to 45° on blades 5" to 36" in diameter.

Excellent face grinder for carbide saws — equipped with an optional 6" diamond wheel the Model 360 becomes an excellent tool for face grinding carbide saws.

STANDARD EQUIPMENT INCLUDES

1 each Model 360 Grinder with 115 volt, 60 cycle, single phase motor, machine lamp, 1 each 8" x 3/16" grinding wheel, pedestal, indexing stop assembly, cone and quadrant for saws with 1/2" to 2-1/2" arbors, 5" to 36" in diameter.

ORDER NO. 3600901

ORDER NO. 3609910 — 45° Hook Extension Arm (optional)

ORDER NO. 3600540 — Large Bore Bushing Plate for arbors in excess of 2-1/2" diameter — optional (specify exact bore size when ordering)

MODEL 360 SPECIFICATIONS

Motor	115 volt, 60 cycle, single phase — sealed ball bearing 1/2 HP, 3450 RPM
Blade Diameter Capacity	5" to 36"
Blade Arbor Capacity	(Standard) 1/2" to 2-1/2"
Grinding Wheel	8" diameter maximum 5/8" arbor (only), 1/16" to 1/2" thick
Diamond Wheel	6" diameter (optional)
Over All Height	58"
Face Bevel Capacity	0° to 45° Left and Right
Top Bevel Capacity	0° to 15°
Shipping Weight	165 lbs.



FACE GRIND CARBIDE SAWS



GUMS STEEL SAWS



TOPS STEEL SAWS

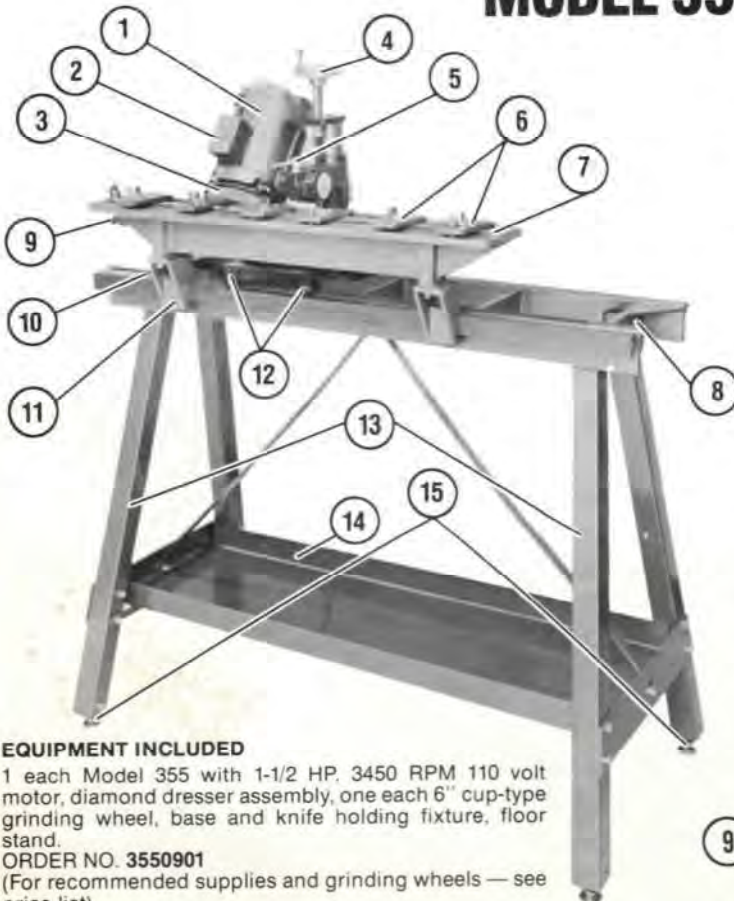
MODEL 355 INDUSTRIAL KNIFE GRINDER

Straight-line precision sharpening of knives to 36" in length. Matched sets of shorter blades can be clamped and ground at one time.

ONE MACHINE GRINDS BOTH STEEL AND CARBIDE

Rugged construction throughout, combined with full adjustability of grinding wheel angle and a precision ball-bearing motor... provides precision sharpening of Carbide as well as Steel.

- MOTOR** is powerful 1-1/2 H.P. High Speed 3450 R.P.M., with sealed and permanently lubricated ball bearings. Ruggedly built for heavy duty use; has precision shaft to make grinding wheel run straight and true.
- ON-OFF SWITCH**, conveniently located.
- GRINDING WHEEL**, Vitrified Ruby — Type 6 Straight Cup, 6" x 1" x 1-1/4" arbor hole (1/2" grinding face) 46 grit standard (cat. no. 3700266). Optional 60 grit wheel is best suited for High Speed Steel (cat. no. 3700265). Dish Type Diamond Wheel (cat. no. 3570360) can be used for Carbide Grinding.
- FEED ADJUSTMENT**, raises and lowers grinding wheel.
- PIVOT ADJUSTMENT**, for full 360 rotation of Grinding Wheel, to provide any desired grinding angle.
- STURDY CLAMPS** grip blade securely, vibration-free large size, easily tightened.
- KNIFE HOLDER PLATE**, cast iron, accurately machined.
- BASE**, ruggedly constructed, with milled way for Carriage travel.
- DIAMOND DRESSER ASSEMBLY**, attaches to knife holder plate for fast accurate truing of grinding wheel.
- PRECISION MILLED WAY** for Carriage travel.
- CLAMP**, Heavy Duty Cast Iron Clamps, assure vibration-free mounting of knife holder plate.
- BALL BEARINGS** insure smooth travel of Carriage, or straight-line grinding accuracy.
- FLOOR STAND**, sturdy steel braced and reinforced for firm support.
- TOOL TRAY** included as standard equipment.
- LEVELING SCREWS** align legs with floor.



EQUIPMENT INCLUDED

1 each Model 355 with 1-1/2 HP, 3450 RPM 110 volt motor, diamond dresser assembly, one each 6" cup-type grinding wheel, base and knife holding fixture, floor stand.

ORDER NO. 3550901

(For recommended supplies and grinding wheels — see price list)



ECONO POLISHER MODEL 363



Bench Model 363 Economy Saw Blade Polisher. This compact version of the 378 Polisher fits almost anywhere. Mounts on bench or table. Handles saw up to 18" in diameter, supplied with a taper cone to accept arbors 1/2" to 1" in diameter. Provides professional like-new polish to saws in minutes. Powerful 1/3 HP motor drives polishing wheel. Includes — 1 each 3700445 Flap Wheel.

ORDER NO. 3630901 Econo Polisher 115 volt
Shipping Weight 37 lbs.

ORDER NO. 3619247 — Tapered cone for arbors 1/2" to 1-7/8" (optional)



KLEEN E-Z PARTS WASHER

An AFFORDABLE Way To Professionally Clean —

- Small Engine Parts
- Saw Chain and Blades
- ALL Dirty Shop Tools!

Operates on LOW-COST mineral spirits

The Kleen E-Z Parts Washer is ideal for ANY size service shop! Yes, this compact unit requires only 2 1/4 sq. ft. of bench space, yet holds up to five gallons of solvent for soaking large items but uses as little as one gallon for maximum economy. And the unit is completely self-contained — needs no barrel or other container, no assembly — just plug it in and go.

The Kleen E-Z is designed for use with low-cost Mineral Spirits, a tough-job solvent that quickly cuts through grease and oil on engine parts . . . even gasket cement. And saw shop users will appreciate how fast mineral spirits removes pitch and gum build-up on saw chains, blades and other cutting tools.



- "Stay-Put" Flexible Metal Hose directs and holds Power Rinse solvent stream where you want it.
- Power Rinse feature needs only 1 gallon of solvent, but tank holds up to 5 gallons for soaking larger items.
- Fusible Safety Lid support, melts in case of fire and closes the cover.
- Heavy Gauge Steel construction throughout tough epoxy finish.
- Large Tank Capacity — Entire cylinder heads can be immersed in up to 5 gallons of solvent. After soaking, just a stroke or two with wire brush removes even tough gasket residue.

- Flo-Thru Parts Brush — Slips on flexible nozzle and solvent is pumped through tough nylon bristles to clean dirty parts and tools in nothing flat.
- Before Sharpening — Pitch and gum residues on chain saws, circular or handsaws and are quickly loosened to prolong life of files and grinding wheels.
- Removable Wash & Drain Tray — Keeps tiny parts from being lost . . . entire carburetors can be cleaned and inspected during disassembly.

SPECIFICATIONS:

Tank Capacity	Maximum — 5 Gal. Minimum — 1 Gal.	obtain locally from paint or hardware store.
Size (Cover Closed):	Height 10-in. Depth 18-in. Width 18-in.	Pump Specifications: Power 115V-AC, 60Hz. Speed Pumps at maximum rate of 65 Gal./Hr. at 1 ft. head with 4 gallons in reservoir. Shipping Weight 28 lbs.
Solvent	Recommended for use with Mineral Spirits only. Solvent not included —	

ORDER NO. 2375038 — Kleen E-Z Parts Washer

HEAVY DUTY SAW POLISHER MODEL 378



RESTORES ANY CIRCULAR SAW BLADE TO ORIGINAL BRIGHTNESS IN SECONDS

Saw blades last longer and cut better when maintained with the Model 378 Saw Blade Polisher. Blades up to 30" in diameter are rotated at slow speed on a neoprene turntable. A polishing wheel, turning at 3450 r.p.m., quickly scours away dirt and rust. A smooth uniform polish is insured without blade temperature build-up.

STABLE TURNTABLE PROVIDES UNIFORM POLISHING ACTION

Saw blade is power-rotated at 200 r.p.m. by a 1/3 H.P. motor housed inside polisher frame. Permanently sealed ball bearings support turntable shaft firmly at both ends, provides complete table stability for smooth, uniform rotation. A tough neoprene surface maintains wide area contact with blade, insures against blade slippage during polishing. Convenient hand brake stops rotation quickly for fast blade changeover.

LIGHT WEIGHT POLISHING ARM PROVIDES EXTREME EASE OF OPERATION

Polishing arm is constructed of strong cast aluminum — sturdy yet light weight to provide ease of movement and complete control over polishing action. Arm is bearing-mounted to pivot vertically and horizontally. Powerful 1/2 H.P. motor is mounted just behind pivot point of the arm to act as a counter balance provides "light touch" operations so operator effortlessly applies the precise pressure of wheel to blade required for a fast even polish.

SCOURS AWAY FOREIGN DEPOSITS — BOOSTS SAW'S EFFICIENCY

Gives a smooth uniform polish to new or old saw blades in seconds. Improves cutting efficiency. Foreign material build-up on blade sides may cause overheating and loss of tension. Clean glossy surfaces reduce friction; check deposit build-up; stop rust-out; help blades turn out more, clean, smooth cutting jobs. The Saw Blade Polisher provides longer service from each saw blade to reduce replacement expenses to a minimum. Blades cut better, look better, last longer.

ORDER NO. 3780901 Heavy Duty Saw Polisher, 115 volt

NOTE: (Polishing wheels optional)

ORDER NO. 3789560 — Dust Chute for Model 378 (optional)

SPECIFICATIONS

The 378 Saw Blade Polisher is available with either 115 volt or 220 volt motors. Model No. 378 comes equipped for 115 volt installations complete with electrical connections, ready to be plugged into shop outlets.

Floor Space Occupied	47" x 33-1/2"
Turntable Work Height	39"
Maximum unit height with arm extended	63-1/2"
Polishing motor, capacitor, ball bearing	1/2 H.P.
Turntable motor	1/3 H.P.
Blade capacity, diameter	30"
Net Weight	207 lbs.
Shipping Weight, domestic packed	251 lbs.
Comes equipped with seven centering plugs for 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", and 1-1/4" arbor blades.	

MODEL 361 ECONO-DIP

Add protection and professional appearance to your work. After sharpening and cleaning, protect the sharp edge against rust and scuffing with the Econo Dip. You will gain the competitive edge with the Model 361.

EQUIPMENT INCLUDED

1 each Model 361 Dip Tank with thermostat, circular saw holder, handsaw coating wheel, 3 pounds of plastic coating, complete instructions.

ORDER NO. 2361074 Dip Tank 110 volt.

ORDER NO. 2368010 Dip Seal Plastic — 10 lbs.

ORDER NO. 2368025 Dip Seal Plastic — 25 lbs.

MODEL 361 SPECIFICATIONS

Current	110 volt A.C. Electric Power Supply (thermostat controlled)
Dip Plastic Life	70 hours at 360° F
Recommended Temperature for Coating Tools	350° F
Plastic Flush Point	395° F

THE ALL NEW AUTOMATIC

MODEL 368 COMPLETE CARBIDE SAW GRINDER

- AUTOMATICALLY INDEXES THE SAW BLADE
- AUTOMATICALLY COUNTS SAW TEETH PROGRAMED TO BE GROUND
- AUTOMATICALLY ADVANCES GRINDING HEAD INTO SAW TOOTH
- AUTOMATICALLY SHUTS OFF WHEN PROGRAM IS COMPLETED
- AUTOMATICALLY REDUCES YOUR WORK LOAD

FIRST REAL AUTOMATIC

The Model 368 costs thousands of dollars less than other automatics

Simple, Economical and Versatile

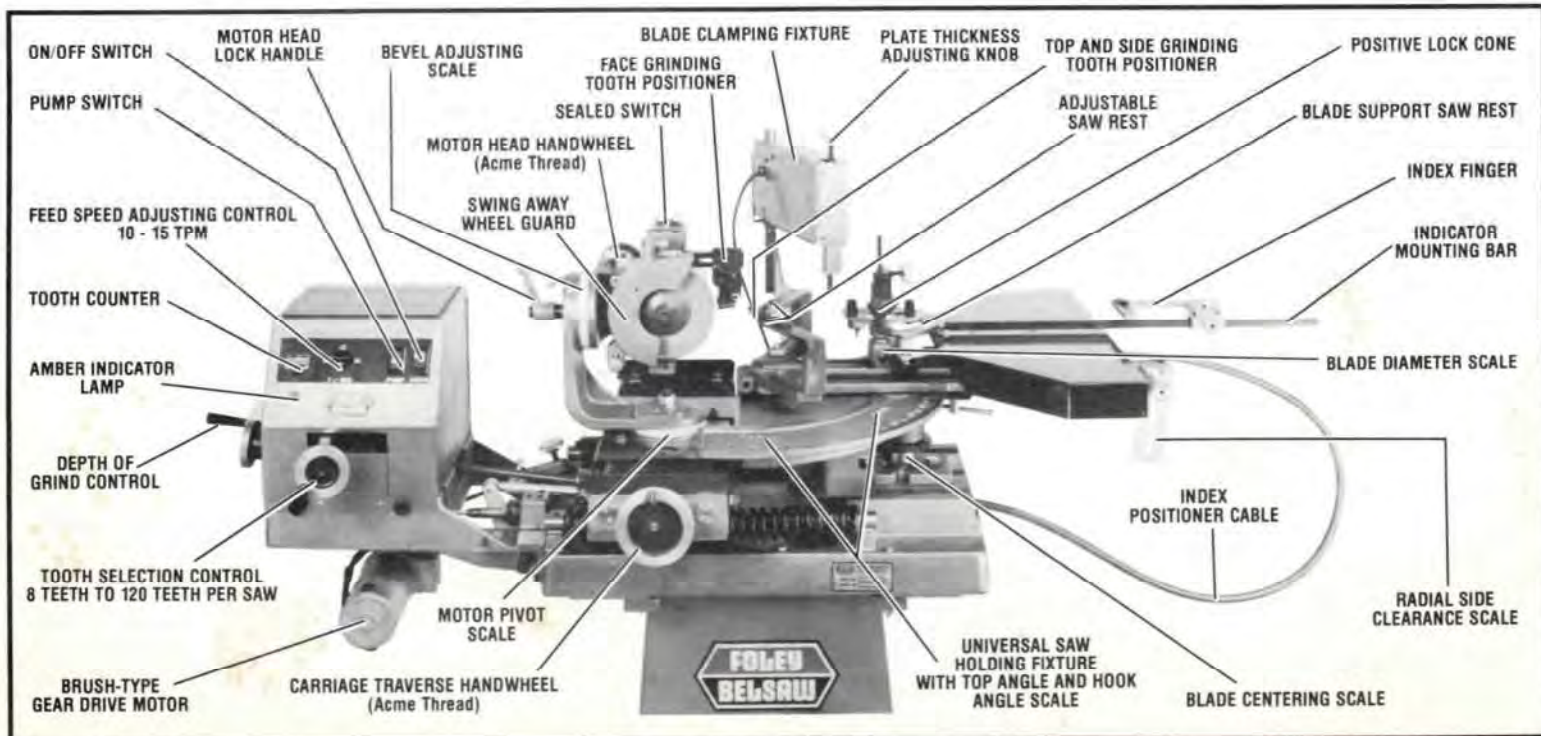
While other automatics can handle only one or two of the operations necessary to fully sharpen a carbide saw, you get FULL RANGE capability with the Model 368. Grind Face, Top and Sides of teeth at speeds up to 15 teeth-per-minute without tedious or complicated adjustments. Just make the same simple setup you would on our manual grinders, dial in the number of teeth to sharpen and the built-in 'brain' does the rest. And our unique system of both fixed and incremental stops makes the Model 368 ideal for handling those blades where only a few teeth require heavy grinding. Ruggedly built to stand up to the demands of a professional sharpening shop, the Model 368 eliminates the need for messy, leak-prone hydraulic systems ... no need for expensive yet inconsistent pneumatic drive systems and maintenance. The Model 368 utilizes time-proven mechanical feeds coupled with sturdy electrical relays and counters that will last a virtual lifetime.

STANDARD EQUIPMENT INCLUDED

1 each Model 368 Automatic Carbide/Steel Saw Grinder with 1/3 HP — 115 volt motor, automatic control system, floor stand, saw holding fixture for saws 5" to 40" in diameter with arbors 3/8" to 2"; Saw alignment plate and pin, complete instruction manual.

ORDER NO. 3680920

Shipping Weight 600 lbs.



EFFICIENTLY PERFORMS ALL 3 CARBIDE SAW GRINDING OPERATIONS AUTOMATICALLY

The 368 accomplishes the work usually requiring three separate carbide grinders...

SIDE GRIND



FACE GRIND • AUTOMATICALLY GRINDS FACES TO SMOOTH SHARP SURFACES. Face grinding tooth positioner assures each tooth is indexed to an exact location — saves excessive tip grinding, producing cleaner faces with precise spacing between teeth, adjustable to create stock removal of .001 to .010 in one pass. **HOOK QUADRANT** — precisely calibrated to eliminate guesswork adjusts from -30° to +40°.

FACE GRIND



SIDE GRIND • AUTOMATICALLY GRINDS TEETH TO UNIFORM WIDTH, EXACT RADIAL CLEARANCE AND EXACT TANGENTIAL CLEARANCE. Automatically grinds teeth to uniform width. Radial clearance adjusts from 0° to 10° allowing all radial angles to be maintained. Motor Head rotates to 90°, to provide set-up to achieve tangential side clearance relief infeeds — 1/1000 of an inch tolerances providing uniformity of tip widths.

QUICK POSITION STOP FINGER. Easily switches to provide grinding of both sides of the tip — assures minimal change over from one side to the other.

TOP GRIND • AUTOMATICALLY GRINDS TOPS AND EXACT O.D. AND BEVEL DESIRED. Top grind index finger. One set-up accommodates positioning for top grinding on all saws 5 inches to 40 inches in diameter, assures trouble free, accurate and fast set-up when changing from one diameter blade to the next.

GRINDING HEAD. Provides straight across top grinding or adjusts to any bevel from 0° to 45° degrees up or down. Calibrated infeed hand wheel utilizing Acme Threads assures positive infeed in .001".

ADJUSTABLE BLADE HOLDING AND CENTERING FIXTURE. Designed with calibrated scale — used to center the saw blade to the wheel shaft — aids in minimizing grinding time — assures proper grinding tolerances.

TOP CLEARANCE QUADRANT. Precisely calibrated to assure proper clearances are maintained adjusts from 0° to 20°.



TOP GRIND



COOLANT SYSTEM

Equip your 368 with the 3670950 Flood Coolant System and obtain optimum performance. Special coolant is flood dispersed under pressure at the grinding point. Your wheels will grind cooler, faster and last longer. Built-in pump recirculates coolant for maximum economy.

ORDER NO. 3670950 (optional) Flood Coolant System

AUTOMATIC CONTROLS

Features Automatic Counter, Automatic Shut-off, Cycle time 10 to 15 teeth per minute. Electro mechanical drive, Solid state controls, Printed circuit boards.

SPEED UP YOUR STEEL SAW SHARPENING

Simply change from a diamond wheel to a grinding wheel and your 368 becomes an automatic steel saw sharpening machine. Sharpen Rip and Combination saws automatically.

SPECIFICATIONS MODEL 368 AUTOMATIC CARBIDE SHARPENER

BLADE SPECIFICATIONS

Type Saws Handled	Carbide (All Styles)
Saw Blade Diameter	5" to 40"
Saw Arbor Capacity	3/8" to 2" (Standard)
Number of Teeth	8 to 120 per saw
Face Bevel Adjustment	0° to 25°
Hook Angle Adjustment	-30° to +40°
Top Bevel Adjustment	0° to 45°
Top Clearance Adjustment	0° to 20°
Radial Side Clearance Adjustment	0° to 10°
Tangential Side Clearance Adjustment	0° to 6°

ELECTRICAL SPECIFICATIONS

Grinding Head Motor — Sealed 1/3 HP — 115/230 volt — Single Phase — 50/60 Cycle — 2850/3450 — 1.2" Shaft
 Feed Motor — Brush Type D.C. Gear drive motor with solid state variable speed control.
 Blade Clamping Fixture — 12 volt D.C. solenoid.

AUTOMATIC CONTROLS

Indexing Speed — Variable 10 to 15 teeth per minute.
 Indexing Number of Teeth — Variable setting 8 to 120 teeth per blade.
 Grinding Head Stroke — Variable 3/8" to 1-1/2"
 Automatic Stop Sensor — Variable digital setting 0 to 999
 amber light indicates completion of cycle.

MODEL 367 COMPLETE CARBIDE MAINTENANCE MACHINE

EFFICIENTLY PERFORM ALL 3 CARBIDE SAW GRINDING OPERATIONS



The 367 accomplishes work usually requiring three separate carbide grinders. Provides extreme efficiency and totally accurate results every time. Original set-up is easy — change over from one operation to the next is fast. It is three machines in one.

STANDARD EQUIPMENT INCLUDES

1 each Model 367 Grinder, 115 volt motor, floor stand, complete saw holding fixture for saw 4" to 40" in diameter, cone for saw arbors 3/8" to 2", face grinding finger, top and side grinding finger and line-up plate and center pin.

ORDER NO. **36701G** — Grinder with stand, 115 volt.

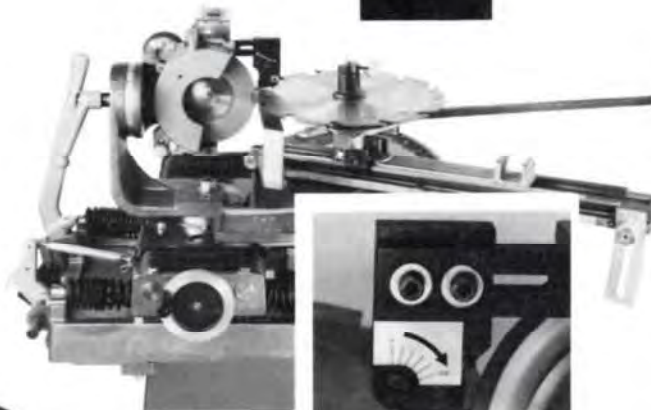
SPECIFICATIONS

Saw Blade Diameter Capacity	4" to 40"
Saw Arbor Capacity (Standard)	3/8" to 2"
Carriage Travel	5 1/2"
Cross Feed Travel	8 3/4"
Face Bevel Adjustments	0° to 25°
Hook Angle Adjustments	-30° to +40°
Top Bevel Adjustment Scale	0° to 45°
Top Clearance Adjustment Scale	0° to 20°
Radial Side Clearance Adjustment Scale	0° to 10°
Tangential Side Clearance Adjustments	0° to 6°
Grinding Head Infeed Hand-wheels (Acme Thread)	.001
Carriage Infeed Hand-wheels (Acme Thread)	.001
Grinding Wheel Capacity	6" up to 1/4" Thick

FACE
GRIND

TOP
GRIND

SIDE
GRIND



GRINDS FACES TO SMOOTH SHARP SURFACES

FACE GRINDING TOOTH POSITIONER. Assures each tooth is indexed to an exact location — save tips producing cleaner faces with precise spacing between teeth. Adjustable to create stock removal of .001 to .010 in one pass.

GRINDING HEAD. Provides straight across face grinding or adjusts to bevel angles when required. Sealed motor and precision wheel flanges assure recommended tolerances are maintained.

HOOK QUADRANT. Precisely calibrated to eliminate guesswork, assures fast, accurate set-up.

GRINDS TOPS TO EXACT O.D. AND BEVEL DESIRED

TOP GRIND INDEX FINGER. One set-up accommodates positioning for top grinding on all saws 4 inches to 40 inches in diameter, assures trouble-free, accurate and fast set-ups when changing from one diameter blade to the next.

GRINDING HEAD. Provides straight across top grinding or adjusts to any bevel from 0° to 45° up or down. Calibrated infeed hand wheel utilizing Acme Threads assures positive infeed in .001".

ADJUSTABLE BLADE HOLDING AND CENTERING FIXTURE. Designed with a calibrated scale — used to center the saw blade to the wheel shaft — aids in minimizing grinding time — assures proper grinding tolerances are maintained.

TOP CLEARANCE QUADRANT. Precisely calibrated to assure proper clearances are maintained. Adjusts from 0° to 20°.

SIDE GRINDS TEETH TO UNIFORM WIDTH

RADIAL CLEARANCE SCALE. Adjusts from 0° to 10° allowing all radial angles to be maintained.

MOTOR HEAD. Rotates to 90° to provide set-ups to achieve tangential side clearance relief — infeeds in .001 of an inch tolerances providing uniformity of tip widths.

QUICK POSITION STOP FINGER. Easily switches to provide grinding of both sides of the tip — assures minimal change over from one side to the other.

INCREASE THE CAPABILITIES OF YOUR 367 WITH ATTACHMENTS



ROUTER BIT ATTACHMENT

Our Router Bit Attachment handles a wide range of straight-flute routing and cutting tools. The Grinding Head and Work Head allow grinding for any desired angle, sharpens high speed steel, solid carbide and carbide tipped router bits. Includes: a 12-division work-head-mounting assembly, and 3579526 Housing and 2" wheel spindle assembly. ORDER NO. 3570510 Weight 26 lbs.

(For recommended collets, diamond wheels and grinding wheels — see price list.)
(Can be used on Model 357, Model 367 and Model 368.)

Converts your Model 357, 367 or 368 to a precision sharpening machine for straight and spiral bits and cutters. Sharpens both carbide and high speed steel when equipped with proper grinding wheels. Handles cutters up to 5" in diameter and to 5 1/2" long. Accommodates standard commercial lathe mandrels from 1/4" to 1 1/4" in diameter.

ORDER NO. 3570570 Weight 26 lbs.

(For recommended collets, diamond wheels and grinding wheels — see price list.)

CENTER - GRINDING ATTACHMENT



SMALL SAW AND DADO ATTACHMENT

Handles adjustable Dados and small saws 2" to 4" in diameter with 3/8" to 1" arbor holes, for use on Model 367 and 368. (NOTE: if used on Model 368 you must grind manually.)

ORDER NO. 3670954

STROB ATTACHMENT

Required to equip your Model 367 or 368 to face and side grind the strob slots on strob saws. Includes: motor extension block, short tail stock, large cone for saw arbors 2" to 6" in diameter, cup support and saw rest index pivot.

ORDER NO. 3670951 — Strob attachment

NOTE: Order No. 3570360 Diamond Wheel and 3579124 Flange are required for side grinding.



COOLANT SYSTEM

Equip your 368 or 367 with the 3670950 Flood Coolant System and obtain optimum performance. Special coolant is flood dispersed under pressure at the grinding point. Your wheels will grind cooler, faster and last longer. Built-in pump recirculates coolant for maximum economy.

ORDER NO. 3670950 (optional) Flood Coolant System

LARGE CONE

Used on Models 367 and 368 for saws with arbors 2" to 6" in diameter.

ORDER NO. 3679543



TOOTH HEIGHT INDICATOR

Jointing Gauge (Dial Indicator) — Here's the ideal way to check for uniform tooth height and blade roundness of circular saws. The easy to read, accurately calibrated dial indicator face is graduated for precision measurements in .001" increments. Comes complete with fittings to easily install on your Carbide Grinder.

For use with Model No. 367 and 368.

CATALOG NO. 3670955



REFIT AND CONVERSION KITS FOR MODEL 357 and 367 CARBIDE GRINDERS

357 REFIT KIT

Simplify Set Ups on your 357.



Refit your 357 with our new saw holding REFIT KIT. This one kit eliminates your existing top and face grinding attachment, side grinding attachment, stop finger and blade rest. With this new method of holding the saw, you will cut your grinding and set up time by 50%. This attachment gives your 357 the capabilities of our Manual 367 Grinder.

CATALOG NO. 36703G



AUTOMATE YOUR 367 GRINDER.

One simple set up and your 367 becomes an automatic grinder. No special tools required. The automatic attachment gives your 367 all the capabilities of our Model 368 Carbide Grinder. If your shop isn't ready for an automatic at this time — rest assured, we can turn the 367 into an automatic when you need it.

CATALOG NO. 3680900



MODEL 357 OWNERS

Automate Your Model 357 Grinder



It is our recommendation if your carbide business has grown to the point you need automation — add the Model 368 to your shop. If your budget doesn't allow an entire machine at this time... we have the answer for you. Our Automatic Refit Kit enables your 357 to face, side and top grind saws from 5" to 40" in diameter. To mount the Automatic Refit Kit to your 357, it will be necessary to drill and tap five holes to mount the attachments. Complete instructions are provided.

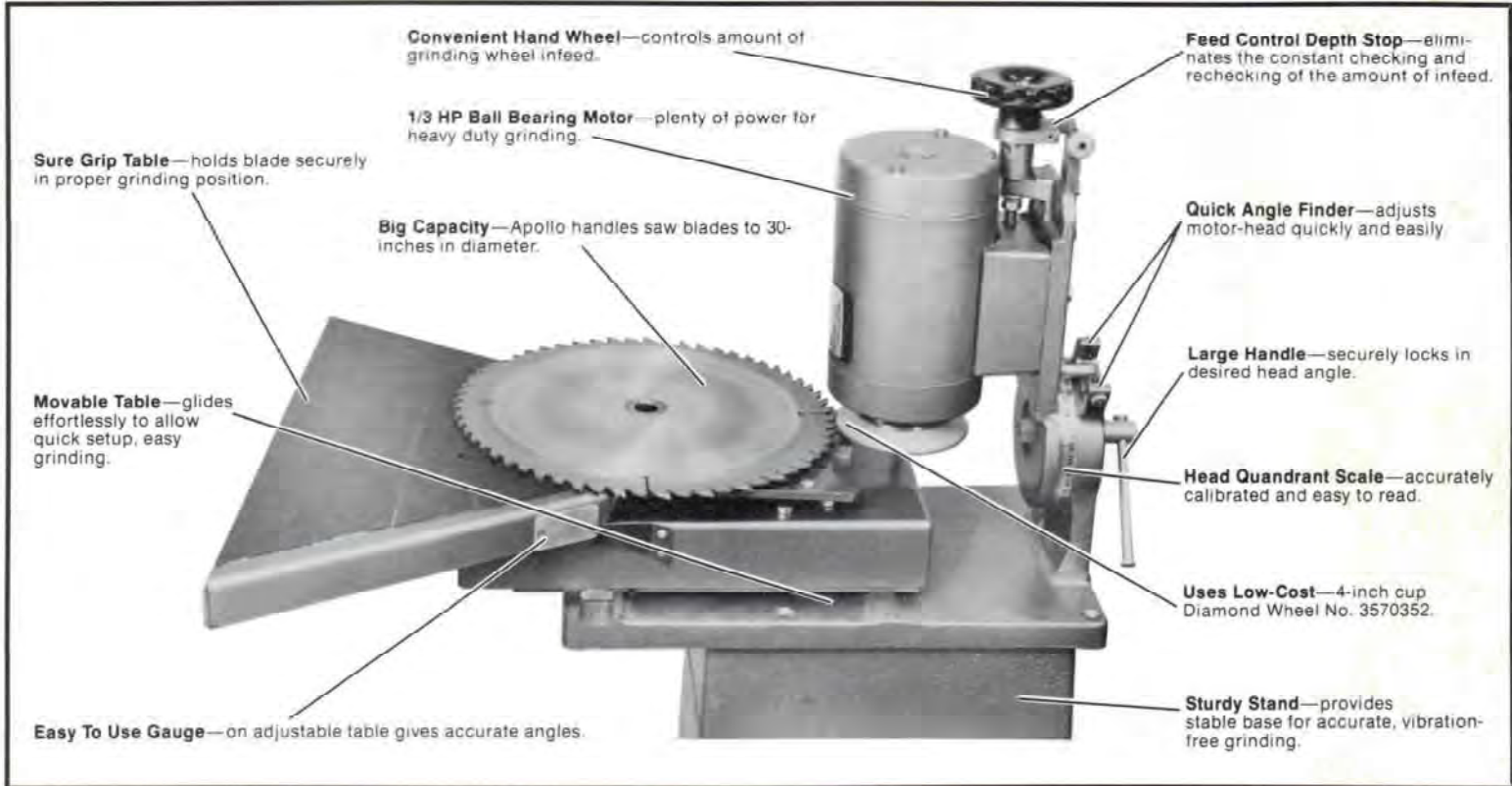
CATALOG NO. 36857G Automatic Refit Kit with saw holding fixturing, drive system and control panel.

CATALOG NO. 36858G Drive system control panel for 357 owners who have already purchased the 36703G Manual Refit Kit.

MODEL 338 APOLLO CARBIDE SAW SIDE GRINDER

A perfect companion to our other carbide saw grinders, especially Model 368 or other automatics. Because the Apollo is designed for side grinding only — you will find it the fastest way to do your side grinding. If your shop is

equipped with an automatic carbide machine... maximize your shop time... side grind on the Apollo while your automatic does the face and top sharpening automatically.



ORDER NO. **33801G** — Apollo Side Grinder, 115 volt, 60 cycle, single phase motor, with 1 each 4" — 180 grit Cup type Diamond Wheel, bench mounted

ORDER NO. **3389551** — Floor Stand

ORDER NO. **33820G** — Same as 33801G, but includes: 1 each 3380550 flood coolant attachment and 1 each 3389551 floor stand



FLOOD COOLANT ATTACHMENT

ORDER NO. **3380550** — Flood Coolant Attachment for Model 338, includes: pump, splash guards, 1 quart of coolant, coolant reservoir, spray nozzle and hose.

COOLANT SPECIFICATIONS

Pump Motor	115 volt, 60 cycle, single phase
Current Draw	5 amps
Coolant Flow	Adjustable
Pump Capacity	2 gallons per minute
Tank Capacity	5 gallons



QUICK ANGLE LOCATER

This exclusive feature assures all teeth are ground exactly alike.



FEED CONTROL DEPTH STOP

Speeds up the entire side grinding operation, by eliminating slow stop and go grinding and repetitive stopping to measure each tooth.

MODEL 338 SPECIFICATIONS

Materials Handled	Carbide (Side grind only)
Maximum Blade Diameter	30"
Maximum Arbor Diameter	Any
Diamond Wheel Specs.	4" Cup 1/2" arbor
Maximum amount of Vertical Infeed	5/8"
Maximum Horizontal Table Infeed	13/8"
Radial Clearance	0° to 6°
Tangential Angle Adjustment	0° to 5° left and right
Floor Space Required	24" x 36"
Construction	Cast iron and steel
Motor Specifications	1/3 HP, 115 Volt, 60 HZ, 1 PH, Totally enclosed
Shipping Weight	100 lbs.
Stand Weight	85 lbs.

THE MODEL 310 SPARTAN GRINDER

- JOINTS, GUMS AND BEVELS STEEL SAWS
- SHARPENS ALL TEETH UNIFORMLY

This machine is the perfect unit for someone serious about starting a profitable sharpening business. The Spartan offers precision, versatility and economy. The Spartan completely sharpens steel and carbide saws up to 12" in diameter. The Spartan is the perfect building block to help your shop grow into a 367 Grinder.

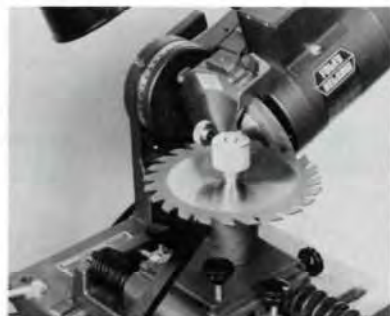
ORDER NO. 3100901 Bench mount with 115 volt motor, 60 cycle, 1 phase. Includes 1 each 3700393 wheel, 1 each machine lamp, 1 each dressing brick and instruction manual.

ORDER NO. 3109550 Floor Stand

ORDER NO. 31031G Same as 3100901 except includes 3109550 Floor Stand and 1 each 3570349 Diamond Wheel.



- FACE GRINDS
 - SIDE GRINDS
 - TOP GRINDS
- CARBIDE SAWS**



ATTACHMENTS & ACCESSORIES FOR THE SPARTAN GRINDER



SHARPEN ICE SKATES

The Spartan Ice Skate Attachment quickly hollow grinds all figure skates, hockey skates and speed skates. Built in diamond dresser uniformly dresses the grinding wheel to proper radius. Includes 1 each special 6" skate grinding wheel.

ORDER NO. 3109580



GRIND INDUSTRIAL KNIVES

The Spartan's Knife Grinding Attachment handles all straight knives up to 6" long. Includes special knife grinding wheel.

ORDER NO. 3109584



HONE CLIPPER BLADE

The Honing Attachment provides a fast, accurate method for sharpening clipper blades. Attaches in minutes. Assures sharp edges every time. Includes 2 oz. of Honing Compound and compound brush.

ORDER NO. 3109581



SHARPEN HOLE SAWS

Increases the capabilities of the Spartan Grinder to include hole saws. It provides precise sharpening of hole saws from 1" to 6" in diameter. Produces accurate hook angles. Set up is fast and simple. One bolt is all it takes to attach to the grinder.

ORDER NO. 3109586



BLADE ROUNDNESS GAUGE

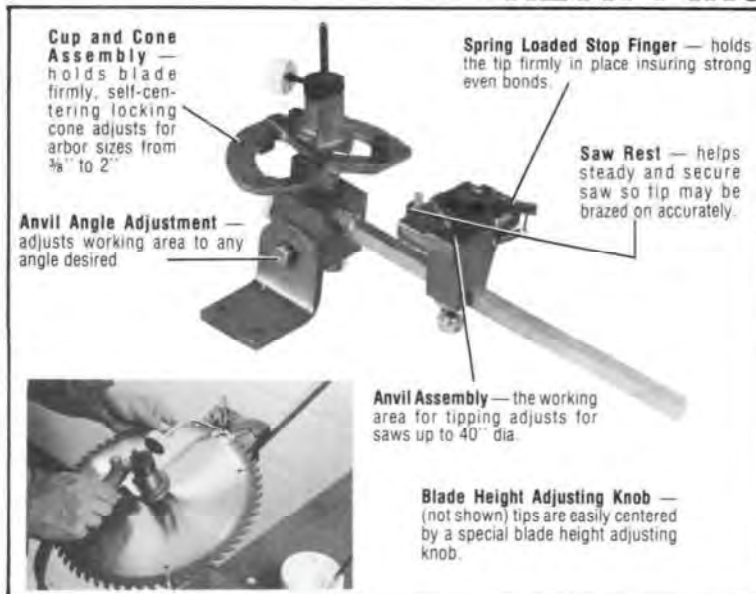
Used to check for uniform tooth height and blade roundness for circular and carbide tipped saws. Easy to read... adjustable with a calibrated dial indicator face graduated in measurements of .001" increments.

ORDER NO. 3109510 — Blade Roundness Gauge (optional)

MODEL 310 SPECIFICATIONS

Materials Handled	Carbide and High Speed Steel
Saw Diameters	5" to 12"
Saw Arbors	1/2" to 1 1/4"
Bevel Adjustments	0° to 45° left and right
Hook Angle Adjustments	All standard hook angle
Radial Side Clearance	0° to 6°
Tangential Side Clearance	0° to 6°
Construction	Cast iron and steel
Grinding Wheel Capacity	6" maximum dia. 3/8" maximum thickness
Bench or Floor Space Occupied	24" x 24"
Machine Weight	80 lbs.
Floor Stand Weight	70 lbs.
Motor	115 volt, 60 cycle, single phase sealed-ball bearing, totally enclosed

RETIPPING FIXTURES



Our 3670925 Retipping Fixture is recommended for shops with 367 or 368 Carbide Grinders. With this fixture you can handle all different styles carbide blades — up to 40" in diameter. Standard Equipment includes: silver solder flux and dispenser. CATALOG NO. 3670925 Shipping Weight 16 lbs.

SPECIFICATIONS FOR 3670925 FIXTURE:	
Maximum Blade Diameter up to 40"
Blade Arbor Capacity 3/8" to 2" standard 3/8" to 6" with optional cone
Recommended torch heat used 5000° to 6000°
Recommended Gas mixtures Oxy-Acetylene or Mapp Gas — Oxygen
Recommended Solders to use Silver solder — ribbon type or Silver flux (standard) or Rod type Silver Solder

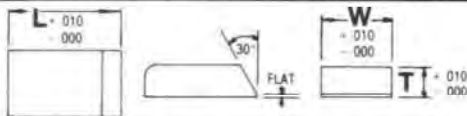
ECONO RETIPPING FIXTURE 1600



Our Model 1600 Econo Retipping Fixture is recommended for shops using the Model 310 or 20/20 Carbide Grinders. This unit is excellent for carbide saws up to 30" in diameter. The 1600 provides a low cost method for retipping. (Note: Not for use on Strob Saws) CATALOG NO. 3670928 ECONO RETIPPING FIXTURE

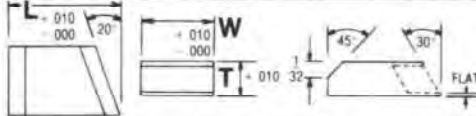
Replacement Carbide Saw Tips

STANDARD REPLACEMENT TIPS



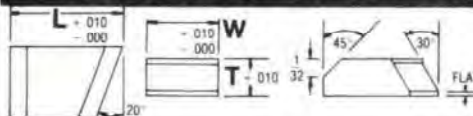
CATALOG NUMBER	PKG. OF:	DIMENSIONS		
		L	T	W
F002010	25	25 (1/4")	062	065
F002011	25	25 (1/4")	062	080
F002012	25	25 (1/4")	062	100
F002013	25	25 (1/4")	062	115
F002014	25	25 (1/4")	062	135
F002015	25	25 (1/4")	062	145
F002016	25	281 (9/32")	078	080
F002017	25	281 (9/32")	078	100
F002018	25	281 (9/32")	078	115
F002019	25	281 (9/32")	078	130
F002020	25	281 (9/32")	078	150
F002021	25	281 (9/32")	078	165
F002022	25	281 (9/32")	078	180
F002023	25	281 (9/32")	078	195
F002024	25	281 (9/32")	078	215
F002063	25	281 (9/32")	093	100
F002064	25	281 (9/32")	093	115
F002065	25	281 (9/32")	093	130
F002066	25	281 (9/32")	093	150
F002067	25	281 (9/32")	093	165
F002068	25	281 (9/32")	093	180
F002069	25	281 (9/32")	093	200
F002025	25	312 (5/16")	093	150
F002026	25	312 (5/16")	093	165
F002027	25	312 (5/16")	093	180
F002028	25	312 (5/16")	093	200
F002029	25	312 (5/16")	093	215
F002030	25	312 (5/16")	093	230
F002031	25	312 (5/16")	093	250
F002032	25	343 (11/32")	125	165
F002033	25	343 (11/32")	125	180
F002034	25	343 (11/32")	125	200
F002035	25	343 (11/32")	125	220
F002036	25	343 (11/32")	125	240
F002037	25	343 (11/32")	125	265
F002038	25	375 (3/8")	156	165
F002039	25	375 (3/8")	156	200
F002040	25	375 (3/8")	156	265
F002041	10	375 (3/8")	156	300
F002042	10	375 (3/8")	156	335
F002043	10	375 (3/8")	156	365
F002044	10	375 (3/8")	156	400
F002045	10	375 (3/8")	156	460
F002046	10	375 (3/8")	156	530

TOP BEVEL TIPS (Right Hand Bevel)



CATALOG NUMBER	PKG. OF:	DIMENSIONS		
		L	T	W
F002047	25	312 (5/16")	093	150
F002049	25	312 (5/16")	093	165
F002051	25	312 (5/16")	093	180
F002053	25	312 (5/16")	093	195
F002055	25	312 (5/16")	093	215
F002090	25	312 (5/16")	078	150
F002091	25	312 (5/16")	078	185
F002092	25	312 (5/16")	078	218
F002093	25	312 (5/16")	090	190
F002094	25	375 (3/8")	097	240
F002080	25	343 (11/32")	078	150
F002082	25	343 (11/32")	078	185
F002084	25	343 (11/32")	078	218
F002086	25	343 (11/32")	095	190
F002088	25	343 (11/32")	095	240

TOP BEVEL TIPS (Left Hand Bevel)



CATALOG NUMBER	PKG. OF:	DIMENSIONS		
		L	T	W
F002048	25	312 (5/16")	093	150
F002050	25	312 (5/16")	093	165
F002052	25	312 (5/16")	093	180
F002054	25	312 (5/16")	093	195
F002056	25	312 (5/16")	093	215
F002095	25	312 (5/16")	078	150
F002096	25	312 (5/16")	078	185
F002097	25	312 (5/16")	078	218
F002098	25	312 (5/16")	097	190
F002099	25	375 (3/8")	097	240
F002079	25	343 (11/32")	078	150
F002081	25	343 (11/32")	078	185
F002083	25	343 (11/32")	078	218
F002085	25	343 (11/32")	095	190
F002087	25	343 (11/32")	095	240

PRE-FORMED TIPS (For Rip Saws)



CATALOG NUMBER	PKG. OF:	DIMENSIONS		
		L	T	W
F002101	10	5 (1/2")	125	200
F002102	10	5 (1/2")	125	280
F002103	10	5 (1/2")	125	260
F002104	10	5 (1/2")	125	300
F002105	10	5 (1/2")	125	220
F002106	10	5 (1/2")	125	240

BLANK CARBIDE TIPS

These carbide tips can be ground for any desired angle for any style of carbide saw blade. Used mostly in Strob saws.

CATALOG NUMBER	PKG. OF:	DIMENSIONS		
		L	T	W
F002107	10	1 25 (1-1/4")	125	180
F002108	10	1 25 (1-1/4")	125	260
F002109	10	1 25 (1-1/4")	125	280

***TIP ASSORTMENT** — Contains 200 fast moving blanks. You get 25 each of these popular numbers. F002020 F002022 F002025 F002026 F002027 F002014 F002065 F002067
ASSORTMENT NO. F002057

****TIP ASSORTMENT** — Contains 120 fast moving blanks. You get 10 each of these popular numbers. F002011 F002014 F002016 F002017 F002021 F002023 F002024 F002064 F002067 F002032 F002049 and F002050
ASSORTMENT NO. F002110

BRAZING & WELDING



PRO-WELDING OUTFIT

(Does not include Acetylene or Oxygen Tanks) To be used with commercial oxy-acetylene tanks (obtainable locally). This professional welding outfit is perfect for replacing carbide tips. Contains: Two regulators (Acetylene and Oxygen), Torch Body, 2 Safety Valves, 3 Welding-Brazing tips, flint lighter, hose, safety goggles, and cutting torch.

CATALOG NO. 3570582



GAS MISER

**SAVES TIME!!
SAVES MONEY!!**

Save time and money. Cut the flow of oxygen and acetylene or mapp gas to 25% of normal usage. Saves time of relighting and adjusting brazing flame. This unit is a MUST for high volume tip replacement. Simple to install . . . easy to operate. Comes complete with hose and adaptors.

CATALOG NO. 3572565 For oxy-acetylene welding kits
CATALOG NO. 3672501 For oxy-map gas kits

Replacing tips requires a welding torch that supplies a hot enough flame to heat the carbide tip and melt the silver solder, and our Aircro Tote-Weld Kit gives you everything you need. It comes with a disposable 1 lb. canister of safe to use MAPP Gas and a refillable oxygen tank. This means you do not have to rent or buy expensive large tanks. By using MAPP Gas you also avoid using acetylene, a dangerous fuel that should be used only by professional welders and which in many localities would violate zoning ordinances if used in a home workshop setup. MAPP Gas is inexpensive, readily available in every locality and is safe when used according to instructions.

The Model 1650 TOTE-WELD also comes with a complete Cutting Torch & Tip Assembly, and while not used in connection with carbide retipping, you'll find lots of uses for this additional convenience feature. The Torch can handle cuts on steel up to 3/8".



TOTE-WELD RETIPPING TORCH Model 1650

EQUIPMENT INCLUDED:

- Torch Assembly —
 - Complete with 8' red and green twin hose
 - No. 3 Welding tip assembly
 - Cutting Attachment
 - Cutting Tip
 - 1 lb. (Disposable) Cylinder of MAPP Gas (8.85 cu. ft.)
 - MAPP Gas tank regulator
 - 20 Cubic ft. Oxygen cylinder (refillable-shipped full)
 - Oxygen tank regulator and gauge
 - Sparklighter (w/flint)
 - Goggles (w/elastic headstrap)
 - Torch cleaner
 - Tote-Weld Carrying Case
 - Complete Instructions
- CATALOG NO. 2024 G

BRAZING & WELDING ACCESSORIES —



"NEW" SYRINGE TYPE SILVER/FLUX — A combination of flux and silver solder in paste form ready to use in a syringe. This new method saves time, decreases waste and simplifies your retipping work. Syringe with 2 oz. of silver/flux.
ORDER NO. 3672502



SILVER FLUX APPLICATOR — This applicator is designed for users of 3579599 solder. Load applicator cavity with solder, insert applicator plunger and you have an effective tool for placing solder to tips.
CATALOG NO. 3572592 Applicator



TORCH CLEANER — This handy set of 13 cleaners is ideal for cleaning the orifices or holes in your welding tips with hole sizes No. 75 to 49.
ORDER NO. 3572054



PRE-TINNING BLOCK — This block prevents the burning of your bench. It's ideal for use with Rod type solder.
ORDER NO. 3572339



FLUX BRUSH — Designed for brushing flux on the blade or when cleaning. Tin handle, 6" long.
CATALOG NO. 3572369



SILVER SOLDER — RIBBON TYPE — Another method of attaching carbide tips to the blade. Just as simple to use. First the ribbon is cut with a scissor and next placed on the saw tooth. Then the tip is laid in place and soldered to the blade. 1 ounce.
CATALOG NO. 3572162



SILVER FLUX — A combination of flux and silver solder. Paste-form makes this solder extremely easy to apply and use.
CATALOG NO. 3579599
1 1/2 oz. jar



RETIPPING TONGS — Convenient tong for handling the carbide tips. Prevents handling tips with your fingers.
CATALOG NO. 3572122



STEEL WIRE BRUSH — 14" Long Wire Brush, perfect for cleaning welded tips, tip removal and cleaning other saws and tools.
ORDER NO. 3572126



MICROMETER — This precision built measuring instrument is ideal for any sharpening business. It accurately records the thickness of any blade from 0 to 1". Determining the thickness of the blade helps establish what its "set" should be.
CATALOG NO. 3702118



SILVER SOLDER ROD TYPE — For attaching carbide tips to the blade. Easy to use. First the tips are laid out on the 3572339 Tinning Block, then heated and solder affixed to them. Then the tips are put in place and soldered to the blade. 5 oz. of silver solder in 1/16" dia rods 10" long.
CATALOG NO. 3572340

FLUX — Prevents discoloration of the blade when being heated. Adds extra adhering power to soldered carbide tip. 1 lb. can.
CATALOG NO. 3572502



TORCH LIGHTER

ORDER NO. 3572053 (includes 1 flint)
ORDER NO. 3572362 Package of 6 flints



SIDE DIAL INDICATOR — Saw Set Gauge (Dial Indicator) — This handy, yet precision tool is highly recommended for every sharpening professional. Eliminates guesswork when setting hand and circular saw blades. Accurately measures the amount of side clearance on carbide tipped saws and the amount of set on regular steel hand and circular saws. Easy to use . . . easy to read. Dial indicator face shows measurement in precise .001" increments.
CATALOG NO. 3570500

MODEL 380 TOOL AND CUTTER GRINDER



PRECISION SHARPENS END MILLS, SPIRAL PLANERS, ROUTER BITS, REAMERS, TAPS... CARBIDE AND HIGH SPEED STEEL CUTTING TOOLS

... SUPERIOR-DESIGN FEATURES

- Easily adjustable bearings assures precision accuracy.
- Ring Scales measure exact grinding tolerances to .001".
- Rigid floor stand completely eliminates vibration.
- Completely new index system for greater accuracy.
- Eliminates guesswork... Precision sharpens metal working tools.
- Easier to read precision calibrated wheels.
- New cam activated work head speeds up operation.

MANDRELS

These are precision engineered. Tapered for mounting milling cutters and other cutting tools with straight-through holes (optional)

ORDER NUMBER	DIA.	LENGTH
3709225	1/4"	3-3/4"
3709223	9/16"	5-1/6"
3709224	5/8"	5-1/6"
3709226	5/16"	4"
3709227	3/8"	4-1/4"
3709228	7/16"	4-1/2"
3709229	1/2"	5"
3709230	11/16"	5-3/4"
3709232	13/16"	6-1/4"
3709233	7/8"	6-1/2"
3709234	15/16"	6-3/4"
3709235	1"	7"
3709236	1-1/16"	7-1/4"
3709237	1-1/8"	7-1/2"
3709238	1-3/16"	7-3/4"
3709239	1-1/4"	8"

STANDARD EQUIPMENT

ORDER NO. **38001G** — Model 380 Complete Tool and Cutter Grinder consisting of: Machine Work Head, subtable and centers, 110 volt, 60 cycle, 1 phase motor, (Specify if other voltage is required), 1 each 3700010 straight cup wheel, 1 each 3709093 — 5/8" collet, 1 each 3709083 — 1/2" collet, 1 each 3709590 collet extender 5/8" to 1/4", 1 each 3709591 collet extender 5/8" to 5/16", 1 each 3709589 collet extender 5/8" to 3/8", 1 each 3702026 Machine lamp and 1 each 3740524 Welded steel floor stand.

COLLETS

They make it possible to sharpen router bits and other cutting tools. Sizes available with inside diameters from 1/8" to 3/4" as listed. Type 4C.

- No. 3709084 — 1/8" Collet
- No. 3709081 — 1/4" Collet
- No. 3709082 — 3/8" Collet
- No. 3709083 — 1/2" Collet
- No. 3709093 — 5/8" Collet
- No. 3709095 — 3/4" Collet
- No. 3709085 — 3/16" Collet
- No. 3709087 — 5/16" Collet
- No. 3709091 — 7/16" Collet
- No. 3709092 — 9/16" Collet
- No. 3709094 — 11/16" Collet
- No. 3709590 Collet Extender for 1/4" Shanks
- No. 3709591 Collet Extender for 5/16" Shanks
- No. 3709589 Collet Extender for 3/8" Shanks (Optional)

MODEL 325

SHEAR AND SCISSOR SHARPENER



The Model 325 Shear & Scissor Sharpener is a great business booster as well as a business of its own. It's easy to operate and precision sharpens all types and sizes of shears and scissors... including pinking shears and right and left hand scissors. The 325 sharpens shears and scissors without taking them apart. This compact machine will fit and work anywhere there is electricity. The Model 325 includes 2 ea. 3700697 Grinding Wheels, built-in lamp, 110 volt motor.

ORDER NO. 3250901

Weight: 14 lbs.

No. 3700697 Extra grinding wheel 4 1/2" x 1/4", 100 grit

No. 3700698 Extra grinding wheel 4 1/2" x 1/4" Rubber Bond, 120 grit



SCISSOR VISE

Add this vise to hold scissors while corrugating. Attaches to any bench.

ORDER NO. 3250928



BENCH MOUNT SCISSOR SCREW EXTRACTOR

Ideal for tightening and adjusting scissor screw tension, or extracting and replacing scissor screws. Equipped with two extractor handle assemblies... one having a large head extractor bit and the other with a small head extractor bit.

ORDER NO. 3250917

ORDER NO. 3259510 Replacement extractor bit and handle assembly (large bit)

ORDER NO. 3259512 Replacement extractor bit and handle assembly (small bit)

SCISSOR SCREW ASSORTMENT...

50 assorted sized scissor screws to handle most replacements.

ORDER NO. 3702159

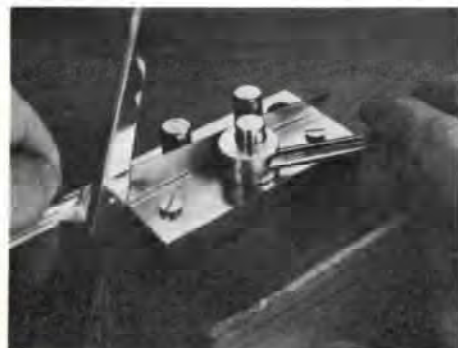


SCISSOR SCREW PLIERS

Designed for removal of pivot screws in shears.

Order No. 3709982 Pliers

Order No. 3709981 Replacement bit



SCISSOR PRESS

Restores cutting action to bent, misused scissors.

ORDER NO. 3702278 Scissor Press



HAND CORRUGATING FILE

Hand corrugating files are made for corrugating the edges of barber's shears and other edge tools. Made of rectangular section and double cut, they are designed to corrugate the blade when stroked straight across or at right angles to the blade.

ORDER NO. 2196250 6" long, 23/32" wide, 5/32" thick.



PILLAR RIGHT HAND CORRUGATING FILES

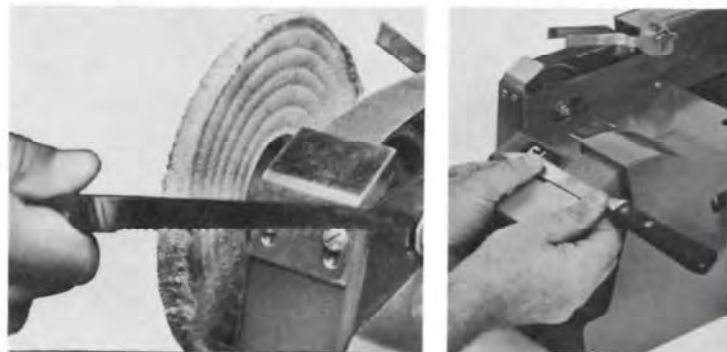
Pillar Right Hand Corrugating files are made for corrugating the edge of barber's shears and other edged tools. Place the file on the shear blades as close as possible to the pivot point; stroke with motion forward and to the right, allowing the file to "track" and form corrugations.

ORDER NO. 2196251 6" long, 15/32" wide, 9/64" thick.

MODEL 390 KNIFE SHARPENER



ORDER NO. 39001G



SHARPENS SERRATED KNIVES Regular Knives Plus

Sharpens hundreds of different knives used in the home, the butcher shop and restaurants. From the large bone splitting cleaver to the small steak knife.

The internal crush dresser allows you to match or reserrate most patterns. The abrasive grinding belt removes the dullness fast and without heating the knife. The exact cutting angle is locked in with one simple adjustment . . . no guess work, perfectly beveled and sharp edges every time!!

The buffing wheel allows polishing that gives the knife a professional look.

STANDARD EQUIPMENT:

- 1 each: 3900901 Knife Serrator 120 volt, 60 cycle 1 motor
- 1 each: 3703690 1" x 30" 240 grit belt
- 1 each: 3703691 1" x 30" 180 grit belt
- 1 each: 3703692 1" x 30" 100 grit belt
- 1 each: 3702733 buffing rouge
- 1 each: 3702734 Buffing Wheel
- 4 each: 3700693 6" x 2" x 1/2" Grinding Wheels
- 1 each: 3909035 1/8" crush dresser
- 1 each: 3909036 5/32" crush dresser
- 1 each: 3909037 1/4" crush dresser
- 1 each: 3909038 5/16" crush dresser

REPLACEMENT ABRASIVE BELTS FOR MODEL 390

Finest quality Industrial Grade Belts with cool grinding Aluminum-Oxide abrasive on strong Resin-Bond cloth backing for fast, efficient grinding and maximum belt wear. Available in desirable grits to handle any grinding job and the need of the professional sharpener.

CATALOG NO.	DESCRIPTION	GRIT
	1-INCH WIDE X 30-INCHES LONG	
3703692	Medium	100
3703691	Fine	180
3703690	Extra Fine	240

MODEL 1019 ALL NEW BORAZON FACED POWER HONE



SHARPEN ALL THESE TOOLS

- Hollow Ground Oster Clipper Blades
- Flat-Ground Clipper Blades
- Wood Chisels and Gouges
- Lathe Tools
- Engraving Tools

The Model 1019 is built to utilize an 8" flat ground plate for sharpening flat ground clippers and to hone sharp edge tools such as woodchisels, plane irons, knives and lathe tools. When equipped with our Patented Hollow Ground Plate, you can maintain the touchy Oster Hollow Ground Clippers.

Each of our plates are precision milled, 8 inches in diameter and powered by the Model 1019 at 240 RPM. The working surface of each plate comes fully prepared with a permanently bonded borazon-lap, which means there are no powders to pour, no pastes to spread, no plate preparation of any kind. A special borazon plate cleaner supplied with the 1019 keeps the plate surface lubricated and clean.

No mounting needed . . . compact 10"D x 6"W x 6 1/2"H unit stores out of way. The 1019 is equipped with a special clipper blade support bar which can be removed in seconds when honing large tools.

Equipped with: motor, 7 ft. cord w/3-prong plug and front mounting on/off switch.

ORDER NO. **2311019** — Model 1019 PowerHone with motor, clipper blade support and plate cleaner (does not include honing plate)

ORDER NO. **2311017** — 8" dia., 600 grit, borazon faced flat ground plate for Model 1019

ORDER NO. **2311016** — 8" dia., 600 grit, borazon special oster plate

ORDER NO. **2311015** — 1 oz. jar of Plate Cleaner

OPTIONAL — TOOL HOLDING FIXTURE

No freehand skill required with this handy fixture. You get a precision super-sharp edge without operator assistance on chisels, plane blades, turning tools, carver's blades and similar flat-ground edges. Just adjust for desired bevel on calibrated dial, insert tool in springloaded clamp . . . combined weight of tool and fixture applies required honing pressure.

CATALOG NO. **2311018**

MULTI OIL STONE



Our highest quality oil stone provides the ultimate for sharpening fine cutlery. Stone holding assembly provides 3 stones (course, medium and fine) that easily rotates leaving 2 stones not in use preserved in oil. Includes one pint of superior honing oil.

CATALOG NO. **3702037**

CATALOG NO. **3702046** . . . Bear Oil (1 qt.)

CATALOG NO. **3702038** . . . replacement stone (fine grit)

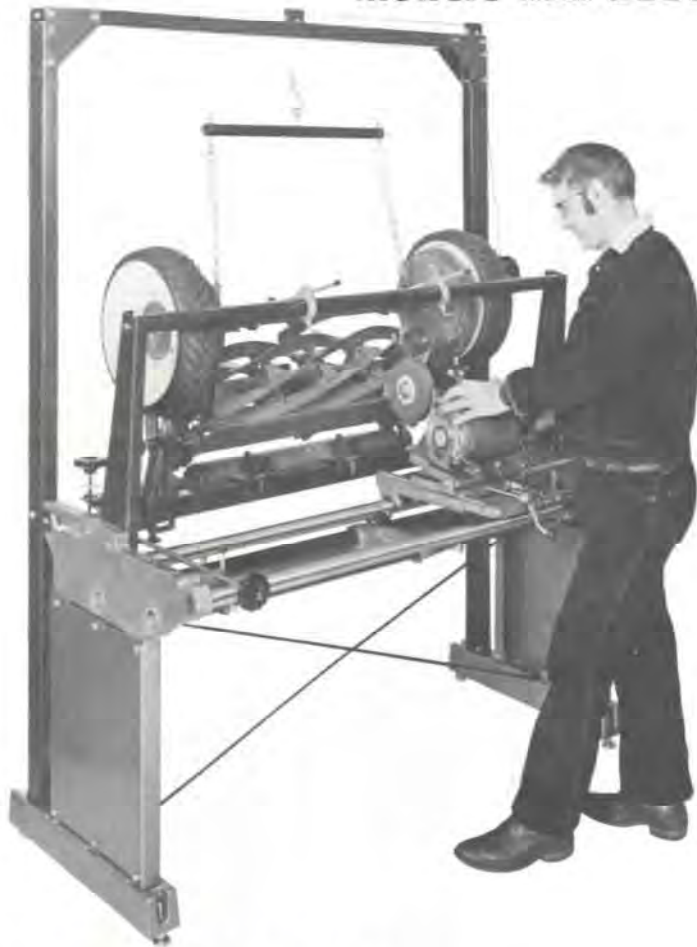
CATALOG NO. **3702039** . . . replacement stone (medium grit)

CATALOG NO. **3702040** . . . replacement stone (course grit)

LAWN MOWER/KNIFE SHARPENING

*Maintain Gang, Fairway and Greens
Mowers with a.....*

LAWN MOWER GRINDER



The Model 388 Lawn Mower Grinder provides all the necessary features for easy one-person operating of Reel Mowers. A hand operated winch (optional) lifts even the heaviest mowers from the floor with a minimum of operator effort to any desired height. Set-up for precision sharpening is quick and simple. It handles all reel-type mowers with blades up to 36" long. Ideal for maintaining gang mowers used in parks, cemeteries and on golf courses. The built-in diamond dresser assures accurate grinding.

No need to dismantle the mower. The Model 388 lets you precision sharpen any reel-type mower without completely dismantling mower. Place the mower next to the grinder, attach to the elevator hoist and raise to desired height. It's that fast and simple.

No. **38815G** Grinder only — shipping weight 375 lbs.

No. **38830G** Grinder w/Elevator Assembly.

MOWER ELEVATOR. Hand-operated winch provides easy one-person hoisting of mower from floor. Lifts mower to any desired height effortlessly, no matter how heavy. Ratchet level lock. (Standard with No. **38830G**)

ORDER NO. **3880950** Elevator

ORDER NO. **3709796** Winch

BED KNIFE GRINDING ATTACHMENT. Permits grinding of bed knives on home-owner reel-type mowers with up to six blades without removing them from the mower. (Optional). No. **3880931**

SPECIFICATIONS:

Height (including base): 50"
Height (elevator to ground): 76"
Length (end to end): 59½"
Width (front to back): 33"
Motor, 115V, ½ H.P., 3450 RPM

BED KNIFE GRINDER

Grinds Bed Knives and Straight Knives up to 36"

Ideal for sharpening gang, fairway and greens mowers. Tough and sturdy — quick and convenient. One fast set-up assures properly ground bed knives. The head is easily rotated for grinding the top face of the bed knife, then grinding the front face. Built-in protractor guarantees exact angle as recommended by the manufacturer. The grinding flash can be removed from the shearing edge with a hand hone while bed knife is mounted in grinder.

No. **3840901** Shipping weight 246 lbs.

SPECIFICATIONS:

Motor: 110 Volt, 60 Hertz (cycle) 1 phase 1/2 H.P. totally enclosed Ball Bearing, 3450 RPM.

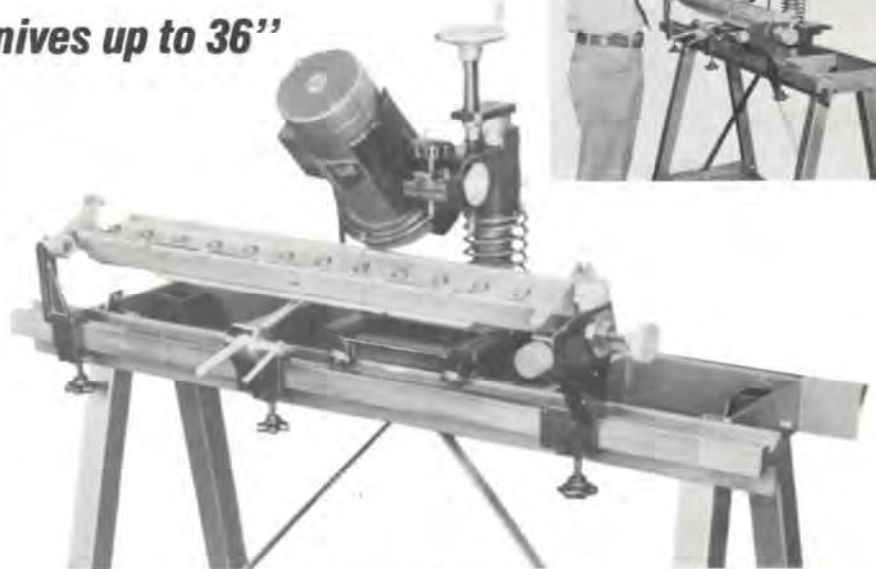
Construction: Precision milled cast iron base for accurate carriage travel.

Carriage: Machined cast iron assembly with six (6) precision sealed ball bearings.

Work Stand: Sturdy 2" square steel legs braced and reinforced for firm support. Leveling screws are provided on each leg.

Heavy gauge Steel Tool Tray is supplied as standard. Wheel guard is ruggedly constructed for safety of the operator when grinding wheel is in any position. Centers and bed knife supports are machined cast iron assembly with large, easy to use hand wheels.

Grinding Wheel: 6"
Floor space required: 24" x 48"



BED KNIFE GRINDER OPTIONS

No. **3840553** Mounting Kit for Toro mowers

No. **3550520** Straight Knife grinding attachment for 36" length knives with serial numbers above 600

No. **3700266** Cup wheel 6" x 1" x 1", 1/4" bore, 46 grit

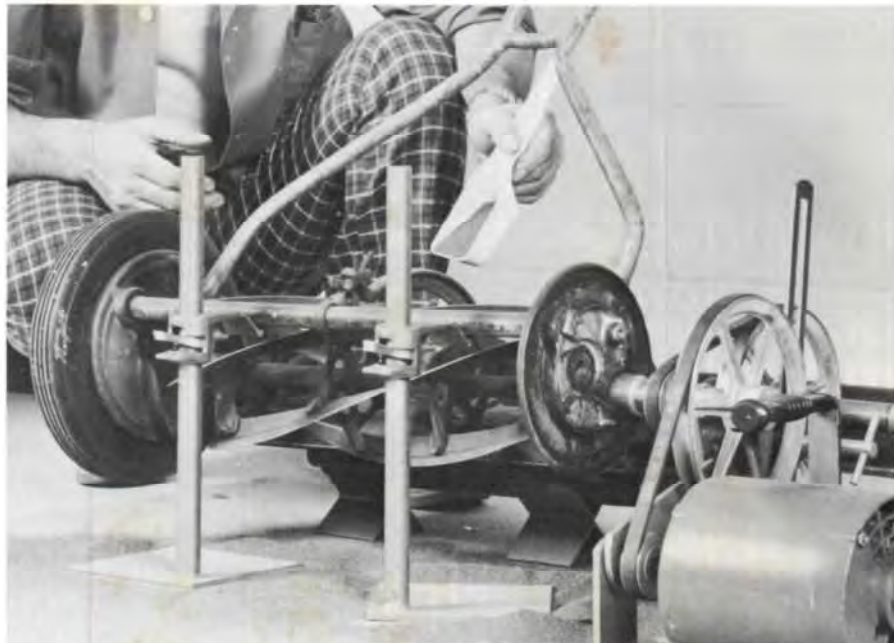
No. **3700265** Cup wheel for high speed steel. Straight 6" x 1" x 1", 1/4" bore, 60 grit

No. **3700061** Grinding Wheel for Roseman Bed Knives

LAWN MOWER SHARPENERS/ACCESSORIES

Sharpen Reel-Type Lawn Mowers with the Versatile.....

LAPPING MACHINE



Ideal for the small shop where some reel-type mowers have to be sharpened. Can be used for complete sharpening. The 365 Lapper adds flexibility to any shop. It's completely portable, works equally well in the shop or in the field. Quickly services gang mowers while connected to frame and tractor. Provides precision work every time. Comes complete with reversible motor, connecting chucks, mower supports and special Speed Compound for fast lapping and smooth finish.

No. 3650902 Lapper w/110V Motor.

SPECIFICATIONS:

Operating speed — 140 RPM
 Reel width: Any Reel diameter up to 12"
 Motor, 115V, 1/4 H.P.: 1725 RPM
 Shipping weight: 56 lbs.

No. 365 Lapper Optional Equipment
 No. 3659904 Trimmer Adaptor
 No. 3659905 Locke Adaptor
 No. 3659906 Greenmaster Adaptor

ROTARY MOWER BLADE GRINDER



Sharpens Any Rotary Blade in Five Minutes

This compact unit provides everything you need for servicing rotary lawn mower blades. Easy to adjust — hand wheel adjusts grinding wheel for any degree of hollow grind. Precision sharpens every blade with uniform grinding contact. This machine is ideal for any size shop. Simple to operate... no special training required. The Model 398 Grinder includes a built-in blade balancer.

No. 39801G Grinder 110V., Shipping weight 49 lbs.

LAPPING COMPOUND

3659924 5 pounds — 60 Grit — Dry
 3659925 5 pounds — 80 Grit — Dry
 3659926 10 pounds — 60 Grit — Dry
 3659927 10 pounds — 80 Grit — Dry

3650581 1 Quart — NuGel Compound — 120 Grit
 3650580 1 Quart — NuGel Compound — 80 Grit
 3650912 6 PK — Quarts — NuGel Compound — 120 Grit
 3650911 6 PK — Quarts — NuGel Compound — 80 Grit



MODEL 281 BENDER PRESS

This easy-to-use tool enables straightening of bent rotary mower blades... hedge trimmers and other edge tools... pressing action restores cutting action on tools up to 2½ inches in width.

Order No. 3980281



ROTARY MOWER BLADE BALANCER

Simple, easy to use design that gives completely accurate balancing for any rotary mower blade. Assures vibration-free mower operation. Balances any blade, any length with 3/8" to 1 3/4" diameter center hole.

No. 3702277 Shipping weight 2 lbs.

SAW CHAIN GRINDERS

HEAVY DUTY MODEL 308

Quickly Sharpens any Style Saw Chain

- Super 70
- 72 LP
- Barracuda
- Extended Pitch
- Super Pro
- Skip Chain
- Ripping Chain
- Low Profile
- Safety Chain
- Super Chisel
- Micro Chisel
- Chipper
- Micro Bit
- Guard Link



The 308 Grinder sharpens any type of Chisel or Chipper Saw Chain. The 308 eliminates guesswork... provides professional precision accuracy every time. A great money maker for the growing chain saw market.

SAVES MONEY!! SAVES TIME!!

The 308 Saw Chain Grinder eliminates the need for any other grinder. This one machine sharpens any cutter style as well as maintains depth gauge.

SIMPLE TO OPERATE

A convenient foot control allows easy chain insertion... secure clamping and fast indexing from cutter to cutter. A cutter positioning finger holds each cutter to be ground in the exact same location to the grinding wheel. The 308's reversing motor assures all cutters are ground to sharp, smooth cutting edges.

STANDARD EQUIPMENT INCLUDES:

1—Model 3080901 Grinder 115 volt, 60 cycle, 1 phase reversing motor, safety shield, dressing brick, wheel radius gauge, 5" x 3/16" Grinding Wheel and complete instructions.

ORDER NO. 3080901



PRECISION WHEEL DRESSER AND TEMPLATES:

Optional Floor Stand
ORDER NO. 3080510



Provide accurate wheel dressing without guesswork.
ORDER NO. 3089551

SPECIFICATIONS: NO. 308

Size: 12" high x 15 1/2" long x 12" wide
Weight: 32 lbs.

Motor: 1/8 HP, reversible, 3450RPM, permanent slip cap, totally enclosed switch, 3 positions.
Grinding Wheel, 5" maximum diameter, 15/16" maximum thickness, 1/2" arbor.
Construction: Steel and aluminum cast

SAW CHAIN IDENTIFICATION CHART

ORDER NUMBER	PITCH	GAUGE	STYLE	CARLTON	HOMELITE	LASER	MCCULLOUGH	OREGON	PIONEER	SANDVIK	WINDSOR	FILE SIZE
5919041	1/4	.050	F C		25-CSI	81	7MA25H	75			50K	5/32
5919019	3/8 LP	.050	S C	N1-C		19	3FD-0	91 S		2-5P	50R	5/32
5919026	.325	.050	S C	K1-C		11		30AP 37		W-5P	50J	9/16
5919027	.325	.058	S C	K2-C		12		21P 88		4-8P	58J	3/16
5919020	3/8	.050	S C	A1-S A1-C	38-CSI	9	PM-379	72D	87EL 88R50	1-5P	50A	1/32
5919021	3/8	.058	S C	A2-S A2-C		7		73D 73LP	88R55	1-8P	58A	7/32
5919022	3/8	.063	S C	A3-S A3-C		8	PM-37E	75E 75LP		1-6P	58B	7/32
5919023	.404	.050	S C	B1-S B1-C		10		50C 50LP		U-5P	50R	7/32
5919024	.404	.058	S C	B2-S B2-C		3	6TPM408	58AC 51AC 51LP	404R5E CRH	U-8P	58B	7/32
5919025	.404	.063	S C	B3-S B3-C	40-C63	4	PM-403	52AC 52LP	404R63	U-6P	53E	7/32
5919000	3/8	.050	C				SPR-3700	72LP		1-5P	58AL	13/64
5919003	.404	.050	C	B1-L				58AL		U-5V		13/64
5919004	.404	.058	C					51AL		U-8V		13/64
5919005	.404	.063	C	B3-L				52AL		U-6V		13/64
5919030	1/2	.063	F C	DF3-S	50-C63	6	PM-303	104C	FRJ	1-6P	62U	1/2

*-F C = Fast Cut *-S C = Semi-Chisel *-C = Chisel

LOGGER CHAIN GAUGE

Calibrated to indicate exact drive link count of all popular chain pitches, drive link gauges and file sizes.
ORDER NO. 5936702.



CHAIN MATE MODEL 399

NEW!
ECONOMICAL!
MONEY-MAKER!

CHAIN SAW SHARPENING IS MORE PROFITABLE NOW THAN EVER BEFORE AS MANUFACTURERS REPORT CHAIN SAW SALES BOOMING!



OPERATING HANDLE — Lowers and raises the grinding wheel. Grinding head is balanced and spring tensioned for smooth, tireless movement.

DEPTH CONTROL — This adjustment regulates downward travel of the grinding wheel to limit depth of grind into the chain cutter.

MOTOR — Totally enclosed — 110 volt, 60 cycle.

GRINDING WHEEL — 5" diameter for rapid cutting and economical operation.

ADJUSTABLE STOP FINGER — To properly index each cutter in exactly the right position under the grinding wheel. Assures that all cutter top plates will be ground to the same length.

CHAIN VISE — Chain inserts between front and rear guide plates, can be advanced freely, and is gripped securely in grinding position with the clamp plate. Takes all chain sizes and designs up to .062 drive link thickness.

BEVEL ADJUSTMENT — Quadrant scale is graduated at 22° - 30° - 35° right and left, for positive bevel adjustments for the different chain styles.

WISE TRAVEL — As required by original factory design, chain may be positioned squarely under the grinding wheel, or may be offset both forward and back.

SPECIFICATIONS:

Maximum Gauge Thickness	For drive links up to .062"
Maximum Pitch	up to 1/2" pitch
Style of Chain	All styles including chipper, chisel, and Oregon
Grinding Wheel Diameter	5"
Grinding Wheel Thicknesses	1/8", 3/16", 1/4", 5/16"
Grinding Wheel Shaft Diameter	1/2"
Motor	110 volt-60 cycle-1.1A at 3000 R.P.M.
Machine Height	9"
Machine Width	7"
Machine Depth	12"
Machine Weight	12 Lbs.

No. 3990901 — includes — Model 399 with 110 volt, 60 cycle, 1 phase motor, 1 each 5" x 1/8" grinding wheel, 1 each 5" x 3/16" grinding wheel, 1 each dressing brick and instruction manual. (Bench mount only)

BENCH-MOUNTED RIVET SPINNER



Sturdy cast iron constructed saw chain rivet spinner for fast, accurate chain repairing. Precision aligned to give factory look to rivet heads.

Equipped with thrust and needle bearings, this machine makes rivet spinning effortless. Replaceable, steel threaded bushing installed on tension handle side for long life. A high quality shop tool for repairing all saw chains from 1/4" thru 3/4" pitch. Supplied with (2) two tension handles and (3) three spinning anvils.
ORDER NO. 3702717.

BENCH-MOUNTED SAW CHAIN BREAKER



Sturdy cast iron, bench mounted chain breaker for easily pressing out saw chain rivets. Furnished with single 6 channel heat-treated electro-plated anvil for 1/4" - 3/8" low pro; .325" - 3/8"; .354/.404" - 7/16" and 1/2" pitch chains. A necessary tool for every chain saw repair shop.
ORDER NO. 3702710.

BAR REPAIR KIT

Tools for reconditioning bars by closing rails to original gauge. Kit includes 3 bar groove gauges .050", .058", .063". Also includes special file with holder to recondition top of bar groove.
ORDER NO. 5936704.



SAW CHAIN TOOLS AND PARTS

INCREASE YOUR PROFITS WITH SAW CHAIN

MAKE YOUR SMALL ENGINE REPAIR OR SHARPENING SHOP HEADQUARTERS FOR SAW CHAIN REPAIRS

You can double your money when you buy reels of chain at these low prices. Figure for yourself. Double the dollar amount of the reels you buy. This is the amount of cash money you'll bring in when you custom make loops for your customers. Making chain saw loops can be one of the biggest money-makers in your shop. All chain is brand name, professional quality to satisfy both the casual user and the pro. Your customers will know that you care about quality when you fill their chain needs.

★ **FOR DETAILS ON SAW CHAIN, SEE CHART ON PAGE 23**



BAR GROOVE CLEANER

Useful for bar maintenance — cleans grooves and oil holes.
ORDER NO. 5936706.



PLASTIC BAR GUARDS

Protect the Chain and You!
Mini Saws 8" to 20" (ORDER NO. 5948058).
Standard Saws 17" to 20" (ORDER NO. 5948060).



SAW CHAIN BREAKER

- Six-Way saw chain repair tool.
 - Heat treated anvil and punch, make on the job saw chain repairs when chain parts break, become damaged or worn.
 - Designed with six channels to accommodate all chain sizes from 1/4" thru 1/2" pitch.
 - Chain parts easily removed by placing damaged section of chain over correct anvil and punching out rivets.
- ORDER NO. 5931563



PITCH-N-GAUGE SAW CHAIN CHECK TOOL

Eight Different Measurement Checks in ONE HANDY TOOL...

- Bar Groove Gauge Check.
 - 30 Degree Filing Angle.
 - File Sizes Check.
 - 35 Degree Filing Angle.
 - Depth Gauge Check.
 - Drive Link Gauge Check.
 - Pitch Check.
 - Tooth Length Check.
- ORDER NO. 5935492.



GREASE GUN FOR SPROCKET NOSE OR ROLLER NOSE BAR BEARINGS

Will use light or heavy grease.
ORDER NO. 5938735.
Refills for Grease Gun (No. 5938735).
ORDER NO. 5948736.



WORLD'S BEST FILE HOLDER

Used by professionals for accurate filing results. One Piece Construction.
ORDER NO. 5938706.



PISTON LOCKING SCREW

A must tool for removal of flywheel nuts, clutches, sprockets, etc., from chain saws. Made out of hard plastic for long life and efficiency.
ORDER NO. 5936705.

CHAIN RAKER DEPTH GAUGE

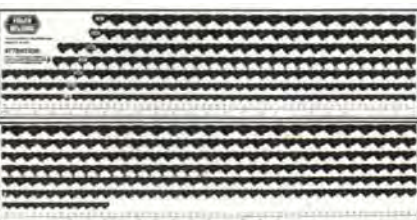


Adjustable depth gauge for filing rakers on Saw Chain to proper depth.
ORDER NO. 5938707



THE FILEMATE

Accurately hand file a saw everytime with this handy tool. Correct Angle - Depth. Complete with Flat File.
ORDER NO. 5938705.



CHAIN IDENTIFICATION & MEASURING CHART

Plastic chart shows actual chain sizes. Lay the chain down on the chart and it's measured. Faster and accurate loop assembly. Attaches to work table.
ORDER NO. 5938744.

"PROFESSIONAL" CHROME-ALLOY DELUXE FILES FOR SAW CHAIN

Sold by box of 12 only.
Swiss Steel — the very finest chrome alloy we have found. Sizes below.

FILE SIZE	ORDER NO.	LENGTH
1/8"	2196001	6"
5/32"	2196002	6"
3/16"	2198001	8"
13/64"	2198002	8"
7/32"	2198003	8"
1/4"	2198004	8"



FILE HANDLES

5 in a Package.
ORDER NO. 5938759.

GRINDING WHEELS



A wide choice available to exactly fill every grinding need. All emery wheels are highest quality. Completely round and true for wobble-free, vibration-free operation.

VITRIFIED BONDED WHEELS

These are held together with a blend of clay and other ceramic material resulting in a more porous grinding wheel which runs cooler. They are not as strong as the resinoid wheel.

RESIN BOND WHEELS

These are held together with synthetic resins and other compounds. They are not normally as porous as vitrified, therefore, they are much stronger wheels.

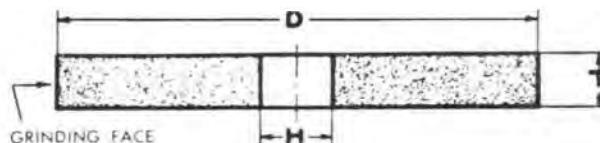
RUBY

The term Ruby used with both resin bond and vitrified wheels indicates the type grit used in the wheel. Ruby means the abrasive is a Chromium alloyed aluminum oxide; wheel is very sharp and tough.

NORZON

NorZon wheels are made with NZ Alundum, an advanced zirconia alumina abrasive alloy. As the NZ Alundum grains wear and heat up during use the grains self-fracture to produce new sharp cutting edges.

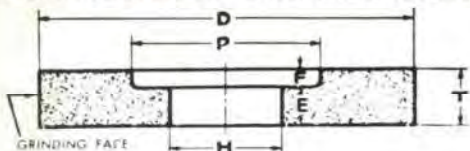
TYPE 1 STRAIGHT WHEELS



ORDER NUMBER	FITS MODEL	DIA.	T	H	G	TYPE
3700164	Router Attach. 374 - 380	2	1/8	3/8	60	Vitrified Ruby
3700165	Router Attach. 374 - 380	2	1/4	3/8	60	Vitrified Ruby
3700166	Router Attach. 374 - 380	2	3/8	3/8	60	Vitrified Ruby
3700167	Router Attach. 374 - 380	2	1/2	3/8	60	Vitrified Ruby
3700581	374 - 380	3	1/8	3/8	60	Vitrified Ruby
3700582	374 - 380	3	1/4	3/8	60	Vitrified Ruby
3700583	374 - 380	3	3/8	3/8	60	Vitrified Ruby
3700584	374 - 380	3	3/16	3/8	60	Vitrified Ruby
3700033	550	4	1/8	1/2	46	Resin
3700032	550	4	3/16	1/2	46	Resin
3700031	1055	4	1/2	1/2	60	Vitrified
3700698	325 - 1285	4-1/2	1/4	1/2	120	Rubber Bond
3700697	325 - 1285	4-1/2	1/4	1/2	100	Vitrified
3700588	308 - 399 - 394	5	1/8	1/2	46	Resin Ruby
3700587	308 - 399 - 394	5	3/16	1/2	46	Resin Ruby
3700589	308 - 399 - 394	5	1/4	1/2	46	Resin Ruby
3700576	308 - 399 - 394	5	5/16	1/2	46	Vitrified Ruby
3700035	310	6	1/8	1/2	60	Resin
3700030	310	6	3/16	3/4	60	Resin
3700036	310	6	1/4	1/2	60	Resin
3700037	310	6	3/8	1/2	60	Resin
3700667	310, 357, 367, 375 & 309	6	3/8	1/2	80	Vitrified
3700029	279, 375, 309	6	1/2	1/2	60	Vitrified
3700443	375, 309, 314	6	3/4	1/2	36	Vitrified
3700693	390	6	2	1/2	80	Vitrified
3700802	8800	6	1/8	13/16	60	Vitrified
3700801	8800	6	3/16	13/16	60	Vitrified
3700803	8800	6	1/4	13/16	60	Vitrified

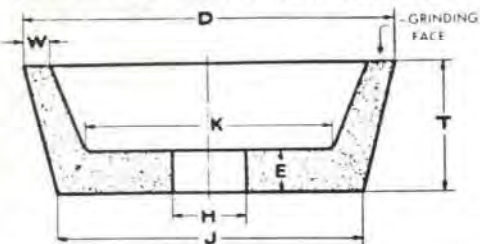
ORDER NUMBER	FITS MODEL	DIA.	T	H	G	TYPE
3700394	310, 357, 367	6	1/8	1-1/4	46	Resin
3700393	310, 357, 367	6	3/16	1-1/4	46	Resin
3700392	310, 357, 367	6	1/4	1-1/4	46	Resin
3700363	388, 398	6	3/8	1-1/4	46	Vitrified Ruby
3700158	314	6	1/2	1-1/4	60	Vitrified
3700400	314	6	1/2	1-1/4	46	Vitrified
3700597	S.I.P.	6	5/8	1-5/8	46	Vitrified
3700404	310, 357, 367	6	3/8	1/2	46	Vitrified
3700403	310, 357, 367	6	1/4	1/2	46	Vitrified
3700667	310, 357, 367	6	3/8	1/2	80	Vitrified
3700972	314	7	1/16	1/2	46	Resin Bond
3700161	314	7	1/8	1-1/4	46	Resin Bond
3700159	314	7	3/16	1-1/4	46	Resin Bond
3700160	314	7	1/4	1-1/4	36	Resin Bond
3700156	314	7	3/8	1-1/4	36	Resin Bond
3700157	314	7	1/2	1-1/4	36	Resin Bond
3700021	1055, 375, 309	8	1/16	1/2	60	Resin Bond
3700022	1055	8	1/8	1/2	60	Resin Bond
3700023	1055	8	3/16	1/2	60	Resin Bond
3700024	1055	8	1/4	1/2	60	Resin Bond
3700025	1055	8	3/8	1/2	60	Resin Bond
3700026	1055	8	1/2	1/2	60	Resin Bond
3700971	360	8	1/16	5/8	46	Resin Bond
3700398	360	8	1/8	1-1/4	36	NorZon
3700399	360, 309, 375	8	3/16	1-1/4	36	NorZon
3700397	360	8	1/4	1-1/4	36	NorZon
3700396	360	8	3/8	1-1/4	36	NorZon
3700395	360, 309, 375	8	1/2	1-1/4	36	Resin Bond
3700958	309, 375, 360	8	1/8	1-1/4	46	Resin Bond
3700960	309, 375, 360	8	1/4	1-1/4	46	Resin Bond
3700961	309, 375, 360	8	3/8	1-1/4	46	Resin Bond
3700959	375, 360	8	3/16	1-1/4	46	Resin Bond

TYPE 5 RECESSED ONE SIDE WHEELS



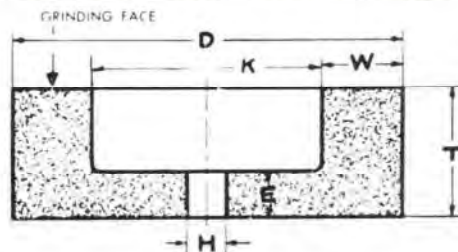
ORDER NUMBER	FITS MODEL	D	E	F	H	P	T	GRIT	TYPE
3700402	377 & 388	2-1/2	1/4	1/8	3/8	1-3/4	3/8	46	Vitrified

TYPE 11 FLARING CUP WHEELS



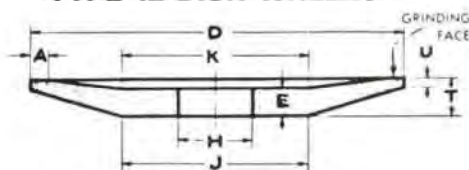
ORDER NUMBER	FITS MODEL	D	E	H	J	K	T	W	GRIT	TYPE
3700168	Router Att. 374-380	2	5/16	3/8	1-1/2	7/8	1-1/4	1/2	60	Vitrified Ruby
3700585	374	3	3/8	3/8	2-1/4	1-5/8	1-1/4	1/4	60	Vitrified Ruby
3700478	388	5	1/2	1-1/4	3	2-1/8	2	1/2	36	Resin Bond
3700610	377	5	1/2	1-1/4	3-3/4	3	1-3/4	1/4	46	Vitrified
3700476	388	5	1/2	1-1/4	3-3/4	3	1-3/4	1/4	46	Vitrified Ruby
3700061	384	6	3/4	1-1/4	3	3	2	1/2	46	Vitrified

TYPE 6 STRAIGHT CUP WHEELS



ORDER NUMBER	FITS MODEL	D	E	H	K	T	W	GRIT	TYPE
3700411	314 - 355	6	1/2	1-1/4	5	2	1/2	46	Vitrified
3700265	355 - 384	6	1/2	1-1/4	5	1	1/2	60	Vitrified Ruby
3700266	384	6	1/2	1-1/4	5	1	1/2	46	Vitrified Ruby
3700010	380	2-1/4	3/8	3/8	1-3/4	1-1/2	1/4	80	Vitrified

TYPE 12 DISH WHEELS



ORDER NUMBER	FITS MODEL	A	D	E	H	J	K	T	U	GRIT	TYPE
3700438	310, 357 & 384	1/2	6	3/8	1-1/4	3	3	3/4	1/8	46	Vitrified Ruby
3700439	310, 357 & 384	1/2	6	3/8	1-1/4	3	3	3/4	1/8	60	Vitrified Ruby

CLEANING, BUFFING, POLISHING WHEELS

We can provide you with wheels to meet all your needs and to fit all the machinery that uses them. These are all high-quality, precision engineered wheels.



FLAP & POLISHING WHEELS

Used on both Saw Polishers (No. 378 and No. 363). The rotating sand paper removes rust and polishes the saw blades. Easy to attach . . . easy to use.

ORDER NUMBER	FITS MODEL	SIZE	BORE	GRIT	TYPE
3700444	363 & 378	6 x 1	1/2	—	Solid type Unsegmented Silicon Carbide Impregnated
3700448	363 & 378	6 x 1	1/2	—	Polybond Fiber
3700445	363 & 378	6 x 1	1/2	80	Flexible Flap
3700446	363 & 378	6 x 1	1/2	120	Flexible Flap
3700447	363 & 378	6 x 1	1/2	180	Flexible Flap

FIBER WHEEL



A Tampico Fiber Wheel for cleaning, buffing and polishing. 6" x 1/2" x 1/2" ORDER NO. 3700107



WIRE WHEEL

A stiff wire wheel for cleaning and removing rust. It's 6" x 1/2" x 1/2" ORDER NO. 3700105

KOOL GRIND

5 ROLLS OF KOOL GRIND IN A PACKAGE SHARPEN COOLER & FASTER



KOOL-GRIND coats and lubricates the grinding wheel, prevents clogging and glazing, increases grinding wheel life. Simply hold stick to wheel for a second every 2 or 3 teeth sharpened. You'll notice immediately how much cooler and faster you sharpen.

ORDER NO. 5935494

REDUCING BUSHINGS (NO CHARGE)

Reducing bushings are used in the center of certain wheels to reduce the size of the bore so that they will fit on your machinery. All grinding wheels shown as having 1-1/4" bore are supplied with tough plastic reducing bushings, as follows:



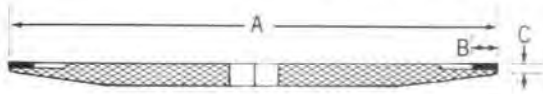
CATALOG NO.	WHEEL THICKNESS	TO REDUCE BORE SIZE
3700430	3/16" (Fiber Type)	From 3/4" to 1/2"
3700431	3/16" (Fiber Type)	From 3/4" to 5/8"
3700427	1/8" and 3/16"	From 1-1/4" to 1/2"
3700428	1/8" and 3/16"	From 1-1/4" to 5/8"
3700408	1/4" and thicker	From 1-1/4" to 1/2"
3700409	1/4" and thicker	From 1-1/4" to 5/8"
3700429	1/4" and thicker	From 1-1/4" to 3/4"



DIAMOND AND BORAZON GRINDING WHEELS

Manufactured to our exact specifications expressly for the professional sharpener. Each of our wheels are individually hand formulated with specified concentration and high quality. To assure long lasting trouble free professional results, use ONLY our wheels on your carbide equipment.

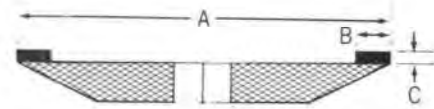
GENERAL CARBIDE SAW GRINDING WHEELS



For Use on Models 310-360-20/20-357-367 and 368
Modified Type D12A2

Catalog Number	Dia. (A)	Face (B)	Depth (C)	Conc.	Grit
3570117	6"	3/16"	1/8"	75	180
3570160	6"	1/4"	1/16"	100	120
3570180	6"	1/4"	1/16"	75	400
3570176	6"	1/4"	1/16"	100	180
3570349	6"	1/4"	1/16"	50	120
3570350	6"	1/4"	1/16"	100	220
3570357	6"	1/4"	1/16"	75	180
3570369	6" thin rim	9/32"	1/32"	100	180
3570184	6" thin rim	9/32"	1/32"	75	400
3570372	6"	3/16"	1/16"	100	180

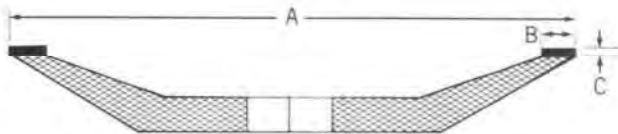
DIAMOND WHEEL FOR ROUTER BIT GRINDING



For use on Model 380 and 374

Catalog Number	Dia. (A)	Face (B)	Depth (C)	Conc.	Type	Grit
3570586	3"	1/4"	1/16"	100	Diamond	180

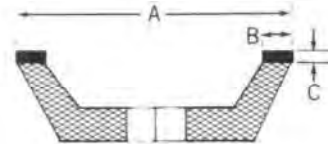
TOP-SIDE AND STROB WHEEL



TYPE D12A2
(For use on Models 20/20, 310, 357, 367 and 368)

Catalog Number	Dia. (A)	Face (B)	Depth (C)	Conc.	Grit
3570360	6"	3/16"	1/8"	75	180
3570183	6"	3/16"	1/8"	75	400

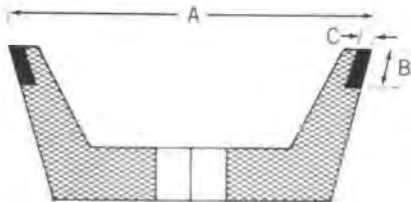
DIAMOND AND BORAZON WHEELS FOR ROUTERS AND CUTTERS (STRAIGHT)



For use on Router Bit Attachment — Model 380 and 374

Catalog Number	Dia. (A)	Face (B)	Depth (C)	Conc.	Type	Grit
3570263	2"	1/8"	1/16"	100	Diamond	180
3570182	2"	1/8"	1/16"	75	Diamond	400
3700687	2"	1/8"	1/16"	75	Borazon	120
3700690	2"	1/8"	1/16"	75	Borazon	400

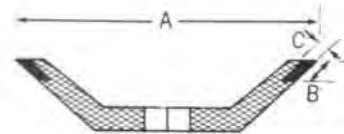
BORAZON AND DIAMOND WHEELS



For Grinding Spiral Cutters and End Mills (in workhead)
Used on Model 380 and 374

Catalog Number	Dia. (A)	Face (B)	Depth (C)	Conc.	Type	Grit
3570790	3"	1/4"	1/16"	75	Diamond	180
3700694	3"	1/4"	1/16"	75	Borazon	180
3700692	3"	1/4"	1/16"	75	Borazon	400

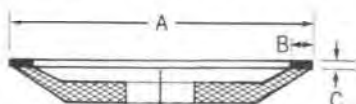
WHEELS FOR SPIRAL CUTTERS, ROUTERS AND PLANERS WHEN GRINDING BETWEEN CENTERS



For Models 380 and 374

Catalog Number	Dia. (A)	Face (B)	Depth (C)	Conc.	Type	Grit
3570169	2"	1/16"	1/4"	100	Diamond	180
3570181	2"	1/16"	1/4"	75	Diamond	400
3700688	2"	1/16"	1/4"	75	Borazon	120
3700691	2"	1/16"	1/4"	75	Borazon	400

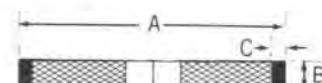
DIAMOND WHEELS FOR SIDE GRINDING



Used on Model 338

Catalog Number	Dia. (A)	Face (B)	Depth (C)	Conc.	Type	Grit
3570353	4"	1/4"	1/16"	75	Diamond	180

WHEELS FOR SOLID CARBIDE ROUTERS



For use on Router Attachment, Model 380 and Model 374

Catalog Number	Dia. (A)	Face (B)	Depth (C)	Conc.	Type	Grit
3570513	2"	1/8"	1/8"	100	Diamond	180
3570689	2"	1/8"	1/8"	75	Borazon	120

DRESSING TOOLS



DRESSING BRICK

Most popular general purpose dresser for use on emery wheels.
CATALOG NO. 3702238



DESMOND DRESSER

Most ideal dresser for shaping emery wheels. Long handle allows you to hold it tight and steady for perfect dressing of emery wheel.
CATALOG NO. 3702422



DIAMOND TIPPED DRESSER

Perfect for quick shaping of emery wheels. Man-made diamond tip is extremely hard and long lasting. Ideal for use with No. 2100457 Bevel Aid on Model 1055 Sharp-All to easily dress grinding wheels to desired bevels.
CATALOG NO. 3702450 Diamond tipped dresser
CATALOG NO. 2100457 Bevel Aid



ROTARY DRESSER

This heavy-duty, easy to use dresser can be held very stable permitting quick and simple shaping of emery wheels.

CATALOG NO. 3702531
CATALOG NO. 3702259 ... replacement stone

CLEANING STICK FOR DIAMOND WHEELS

Removes pitch and other foreign material from the grinding wheel. This stick is made of a very soft material and cleans diamond wheels exceptionally fast. Should be used minimally (excessive use will wear out diamond wheel faster).

CATALOG NO. 3572426

ABRASIVE STICK WHEEL DRESSER

This small dressing stick is used for touching up grinding wheels. Made of Boron Carbide, it is extremely hard. Ideal for use on the 360 Saw Grinder, 380 Tool Grinder 399 and 308 Saw Chain Grinders and the router bit grinding attachment of the 357 Carbide Grinder. Norton Norbide Dressing Stick (Boron Carbide.)

CATALOG NO. 3702999

HONES AND HONE SUPPLIES



MULTI OIL STONE

Our highest quality oil stone provides the ultimate for sharpening fine cutlery. Stone holding assembly provides 3 stones (course, medium and fine) that easily rotate, leaving 2 stones not in use preserved in oil. Includes one pint of superior honing oil.

CATALOG NO. 3702037
CATALOG NO. 3702046 ... Bear Oil (1 qt.)
CATALOG NO. 3702038 ... replacement stone (fine grit)
CATALOG NO. 3702039 ... replacement stone (medium grit)
CATALOG NO. 3702040 ... replacement stone (course grit)



BEAR OIL

Special made for grinder, power tools, hinges, locks, generators, distributors, electric fans, office machines and hundreds of other uses.

CATALOG NO. 3702046

CATALOG NO. 2109277 — 1 jar of abrasive compound for the model 274 Honing Att.
CATALOG NO. 2109279 — 1 jar of adhesive for the 274 Honing Attachment.



MACHINE KNIFE STONE

Ideal for removing burrs and rough edges after grinding knives, scissors and other flat edge cutting tools. Combination course and fine grit with groove around circumference to protect operator's finger.

CATALOG NO. 3702991



CATALOG NO. 3549002 — Testing Bluing



CATALOG NO. 3549001 — 1 can of Abrasive Compound for Model 354 Clipper Hone.

LUBRICANT • PAINT • SAW CLEANER • COOLANT



SPACE AGE SUPER LUBRICANT

Excels in lubricity. Not oil — not a silicone. Lubricates without oily residue. Frees sticking and rusty parts. Displaces unwanted moisture. Won't attract dust or grime. Prevents corrosion. Tube holds 1/2 fluid ounce, ample for hundreds of applications. Non-aerosol applicator puts each drop right where wanted. Self-selling package makes excellent impulse sales builder.

ORDER NO. 5786944



SAW CLEANER

A Bio-degradable Saw Cleaner. This cleaner can be mixed up in a ratio of 10 to 1 and still work effectively on pitch and gum. (one gallon)
ORDER NO. 3702000



SPRAY PAINT — FOLEX GREEN

Touch up those scratches and nicks with our special green spray paint.
ORDER NO. 3709015



LUBRICATING GRAPHITE GUN

- Refillable
- Clog-Proof
- Leak-Proof

This all purpose lubricant comes in a durable, refillable gun. Each gentle squeeze releases a fine spray of graphite. Perfect for spraying tight spots!

ORDER NO. 5786643
ORDER NO. 5786636 1 lb. bulk Graphite Refill

COOLANT

1 Quart of Water soluble Coolant. Mixes 20 to 1.
ORDER NO. 3679560

GAUGES AND INDICATORS

The Gauges and Indicators listed in our Catalog are selected specifically... to aid the Professional Sharpener and assure that top quality work is performed.

If you need a tool to aid you in checking blade run-out, tooth height, side clearance or to level or line up a machine, you will find we have quality Gauges and Indicators to meet your needs.



COMBINATION DIAL INDICATOR-CALIPER RULE

Designed for Long Life. • 0-6" • Adjustable Dial • Thumb wheel for fine adjustment • Graduated .001
The highest quality stainless steel. Stress-relieved and chrome plated. Bar and measuring faces fully hardened. Face of bar recessed to protect graduations from wear. VERSATILE. Same scale for outside, inside and depth measurements. Furnished in an attractive case.
CATALOG NO. 5746864



MICROMETER

This precision built measuring instrument is ideal for any sharpening business. It accurately records the thickness of any blade from 0 to 1". Determining the thickness of the blade helps establish what its 'set' should be.
CATALOG NO. 3702118



PRECISION MICROMETER

Machinist Quality... Forged Steel Frame... Satin Chrome Finish... Clear-Cut Precise Graduations... Precision Cut Anvil for Accurate Readings.
CATALOG NO. 5746660



MAGNETIC BASE LEVEL

A handy, time saving device. Permits simple, accurate readings of any angle. Ideal for setting angles on machines without protractors. Has hundreds of other shop uses too!
For use with No. 355 and No. 384 Knife Grinders. Also with No. 311 & No. 1080 Belt Grinders.
CATALOG NO. 3702707



TOOTH HEIGHT INDICATOR

Jointing Gauge (Dial Indicator) — Here's the ideal way to check for uniform tooth height and blade roundness of circular saws. The easy to read, accurately calibrated dial indicator face is graduated for precision measurements in .001" increments. Comes complete with fittings to easily install on your Carbide Grinder.
For use with Model No. 367 and 368
CATALOG NO. 3670955

JOINTING GAUGE (Dial Indicator)



Here's the ideal way to check for uniform tooth height and blade roundness of circular saws. The easy to read, accurately calibrated dial indicator face is graduated for precision measurement in .001" increments. Comes complete with fittings to easily install on either Carbide Grinder.
For use with Model No. 310 & 20-20
CATALOG NO. 3109510
For use with Model 357
CATALOG NO. 3570502



SIDE DIAL INDICATOR

Saw Set Gauge (Dial Indicator) — This handy, yet precision tool is highly recommended for every sharpening professional. Eliminates guesswork when setting hand and circular saw blades. Accurately measures the amount of side clearance on carbide tipped saws and the amount of set on regular steel hand and circular saws. Easy to use... easy to read. Dial indicator face shows measurement in precise .001" increments.
CATALOG NO. 3570500



G CLAMP FOR INDICATORS

Attaches to machine, bench or surface plate. Holds indicators securely for precise readings, 5/16" spindle, 3" long. Takes Universal Clamp No. F000621. Clamping capacity 1-1/4" diameter.

CATALOG NO. **F000619**

CATALOG NO. **F000620** 1/4" spindle, 5-1/4" long for use with Nos. F000621 & F000623 & F000622



1/4 INCH SPINDLE

5 1/4" long, used with G-Clamp or magnetic base indicator holder, and universal clamps.

CATALOG NO. **F000620**



MAGNETIC BASE INDICATOR HOLDER

Attaches to machine and securely holds the indicator for precise readings. (Use with indicator No. F000613 and Universal Clamp No. F000624). Has precision adjustment for zeroing indicators. Includes 3" long rod and swivel adapter.

CATALOG NO. **F000388**



DIAL INDICATOR — BACK PLUNGER

Ideal for work requiring the face of the indicator dial to be perpendicular to travel such as checking the angles of knives being ground on the 355 Grinder. It has an easy to read dial face that's 1-11/16" diameter. Holding bracket — 1/4" diameter 1-1/4" long. Shank — 5/16" diameter.

CATALOG NO. **F000613**

DIAL INDICATOR ANVILS

Provides precise reading of any shape or size of angle; flat or indented. Attaches to Back Plunger of Dial Indicator (No. F000613)

CATALOG NO. **F000614**

Domed Anvil 3/8"

CATALOG NO. **F000615**

Domed Anvil 1/2"

CATALOG NO. **F000616**

Conical Anvil

CATALOG NO. **F000617**

Flat Anvil 1/8" diam.

CATALOG NO. **F000618**

Flat Anvil 3/8" diam.



UNIVERSAL CLAMPS

Designed to securely hold dial indicator at any desired position. Attaches the dial indicator to the tool post or "G" clamp. (For use with indicator No. **F000613**).

CATALOG NO. **F000621** 5/16 holes

CATALOG NO. **F000622** 3/8" holes

CATALOG NO. **F000623** 1/4" holes

CATALOG NO. **F000624** 1/8"-1/4" holes

INCH AND METRIC DOUBLE END FEELER GAUGE SET

Unique design contains both standard and tapered blades. 26 blades. Blade sizes as follows:
Inches .0015 to .025
Metric .037mm to .635mm

CATALOG NO. **5955417**



MULTI - USE RULE AND GAUGE

A popular pocket tool for mechanics, homeowners and all tool users.

1. A 4" Quick Reading 32nds. and Metric scale.
 2. A drill point gage for checking 59° angle drill.
 3. A square.
 4. A bevel protractor for measuring and laying out of angles.
 5. A center finder for locating centers of shafts or circles.
 6. A circle divider — up to 9 equal parts; for dividing circles into sectors, regular polygons and polygrams.
 7. A tap drill table showing popular size taps with correct drill sizes for National Form of thread.
- Made of stainless steel with vinyl plastic case and instructions.

CATALOG NO. **F000391**



SQUARE HEAD STEEL PROTRACTOR

This precision instrument measures the bevel or hook angle of one saw or tool and transfers it to another saw or tool via a sharpening machine. This stainless steel protractor has a 6" arm and graduations from 0 to 180° in opposite directions. **No. 3702121**



TOOL LAMPS AND PLUG IN ACCESSORIES

GOOSENECK LAMP



Ideal for any shop. Boosts comfort. Reduces strain. 24" flexible neck provides precise lighting angle needed. Comes complete with 72" cord; safe, molded plug; durable reflector shade and handy mounting bracket.
ORDER NO. 3702026 — GOOSENECK LAMP
ORDER NO. 3702144 — SHADE REPLACEMENT
ORDER NO. 3702188 — SOCKET REPLACEMENT

PORTABLE BENCH LAMP



- Clamps to any table or work bench!
 - Operates on any standard household current!
 - Strong, gooseneck support puts the light anywhere you need it!
- ORDER NO. 3702058 LAMP**



HAND-LIGHT REEL PORTABLE LIGHT

- 20-FT. CORD
- 18/2 GAUGE
- 6-1/2" DIAMETER
- 2" WIDE

Portable light and Electric Power where you want it. Wall mounted 180° free swivel. Pulls out to any desired length, locks, retracts automatically.
ORDER NO. 5975354

POWER-MATE



Touch, durable cyclocac case for years of heavy use.

22' or 50', 14 Gauge — 105° C 3 Conductor cord eliminates voltage drop.

Smooth, no kink wind-up storage.

Circuit breaker for safety. Guards against overload above 10 AMPS.

Easily handles 20 AMP surge.

Six grounded 3 prong outlets.

The convenience of an extension cord and a power distribution panel in one compact, self-storing unit! Every one should have a power-mate for his workshop or mobile unit. If you are still fighting with a dirty old knotted up extension cord that is bulky to carry, too short, or not heavy enough for your tools, then you need our power-mate. This professional multi-use cord reel is heavy enough for your powerful drills, routers, lights, etc. It has 6 outlets with each grounded and 22 feet of 14 gauge 3 conductor power cord. It also has a built in breaker for safety's sake that guards against overload above 10 amps. Its case is made of indestructible space age plastic that will last for years of heavy use. The Power-Mate is also available with 50 feet of cord.
NO. 5787284 ... Power-mate with 22 foot cord
NO. 5787311 ... Power-mate with 50 foot cord

POWER STRIP



Have you ever wanted to plug in one more tool but didn't have enough outlets? Here's something new to solve those problems in any workshop or van. With the new power strip you have the convenience of all the electrical outlets you will ever need, without the inconvenience and dangers of an extension cord or multi-outlet plug. The power strip is safe. It comes with a 14 gauge, 3-wire grounded cord. It's circuit breaker protected and trips above 15 amps. It provides fool-proof protection for you and your shop employees. What's more, each power strip is hand assembled to meet vigorous standards for quality and safety. It bears the UL symbol and will last for years of use. The power strip comes with sturdy brackets for convenient mounting anywhere. Also a handy on-off switch lets you keep your tools and machines plugged in but with the main switch off they cannot be accidentally turned on.
ORDER NO. 5787285

FLUORESCENT WORK LIGHT



Hold it or hang it. Stays cool. Shatter resistant. Glare-free. Uses 1/10th electricity of regular bulb. 18 inches long.
ORDER NO. 5975353

FACE AND EYE PROTECTION

TILTING FACE SHIELD



Ideal for protecting entire face while sanding, buffing, light grinding or welding. The large plastic window visor provides a big full view and is flame-resistant and reinforced with an aluminum edging. It's lightweight, sturdy and adjusts quickly for comfortable wear. The Vinyl Sponge Sweat-Band is easily removed for washing.
No. 3702338
No. 3702339 8" Replacement Visor



ONE PIECE PLASTIC GOGGLE

Protects your eyes when sawing, sanding, grinding or spraying. Can be worn with regular prescription glasses. Made of lightweight, one-piece, non-shatterable, non-fogging plastic.
ORDER NO. 3702051



FLEXIBLE FILTER MASK

Protects against dust, pollen, paint and other non-toxic sprays and fumes. The Latex filter provides easy breathing. It can be easily cleaned or replaced. A double frame keeps the filter in place. The mask can be comfortably worn with eyeglasses or goggles and has an adjustable elastic web head band.
ORDER NO. 3702265
ORDER NO. 3702266 ... replacement filters (package of 2)

MAGNIFIERS

OPTI-VISOR . . . Optical Glass

Binocular Magnifier



Magnifies 2-1/2 times to eliminate eye strain, improve vision and increase your efficiency when working on delicate jobs! Wear with or without eye glasses — in shop or on the job!

*LIGHTWEIGHT CONSTRUCTION for all day comfort, but made of extremely durable, completely washable, impact resistant heavy gauge Durmel. All parts are completely guaranteed for one full year against any defect in manufacturing or materials.

TILTING VISOR — Just a touch of the finger-tip raises the visor for normal viewing. Adjustable pivot gives the desired tension. Hooded design completely blocks out glaring light when working in close quarters.

HEADBAND — No elastic here to rot or stretch out of shape. Solid band adjusts easily by turning one knob to make larger or smaller — fits any head size. For maximum comfort our forehead piece is lined with soft felt and covered with smooth leather.

OPTI-VISOR TOP QUALITY LENSES — Most off-brand magnifiers on the market have one-piece plastic lens that are flat-ground. Inferior lenses cause distorted viewing and can damage your vision. Our lens are the finest quality optical glass available. Each separate lens is prismatically ground to assist the eyes in converging at a given focal distance. Inferior plastic lenses also scratch and shatter easily, affording no protection to your precious vision.

Each Opti-visor is equipped with a No. 5 lense plate which magnifies 2-1/2 times and has a focal length of 8 inches.

CATALOG NO. 3702267

Has an optical grade polished glass lens that gives clear magnification with no distortion.

Jumbo 4" x 2" lens that makes tiny objects easy to see. Lamp and lens are independently adjustable. So you can get the viewing angle you want and direct the light precisely where you need it!



Instant adjustment to any angle at the desired height provides maximum working space under the lens for hands and objects being worked on . . . tools won't get in the way.

Sturdy metal frame with non-slip tips on base. It folds easily so you can put it in your tool box and take it right to the job with you! Compact, folds to 7" x 7" x 2". Shipped complete with cord, switch and bulb.

CATALOG NO. 5746688



ILLUMINATED MAGNIFICATION SYSTEM

FEATURES

- 5-inch Diameter Lens (Mag. 3/4 times)
- Uses a 22-watt circline fluorescent tube (included)
- Flexible over a full 360 degrees (except FE model which has a weighted base)
- Tension control knob at arm joint to adjust movement to desired touch
- Heavy duty cast aluminum shade
- Finger tip control on/off switch

- Perfect balance in any position due to individually calibrated steel springs
- Baked enamel finish
- Non-friction precision joints
- Equipped with 3 conductor cord set and molded plug
- Underwriter's Laboratory listed
- Warranted against defective parts and workmanship
- Extends to an amazing 45-inch reach

Illuminated Magnification System is designed for total working freedom. The massive five-inch lens is a window into the world of miniatures. By placing your eyes about 3" from the lens, you forget that it's there and then are free to manipulate your tools or work material. The 22 watt circline fluorescent tube softly bathes the work area from all sides, in optimum shadow free light balanced for clarity and lack of eye strain.

CATALOG NO. 5786964

MAGNIFIED SAFETY EYE SHIELD

Tough flexible vinyl plastic comfortably fits face contour. Worn over eyeglasses if necessary. Provides f2.50 magnification to enlarge small objects clearly. Brings fine work up close while protecting worker's eyes.

CATALOG NO. 3702454

CATALOG NO. 3702452 . . . Replacement lens for 3702454 or for addition to front section of holder as a second lens if greater magnification is desired.

CATALOG NO. 3702453 . . . Replacement plastic cover plate.



VACUUMS & BLOWERS

METRO VAC'N'BLOW Combo Vacuum-Power Blower

200 mph
PORTABLE ELECTRIC

Air-Power Blower & Vacuum Cleaner

Now own the one industrial, portable electric blower/vacuum with literally hundreds of uses. Blows out carbs, dries small parts, clears lines. Cleans, dries, Air Sweeps™ in seconds without compressed air. Cuts maintenance costs and time. Provides a powerful, continuous 200 mph blast of air. Handy way to aerate, blow, air dry, vacuum-clean, pump, ventilate, exhaust, disinfect, vaporize, even clean up chips. Solid, all-steel body, industrial construction, light-weight and easy to carry. Heavy-duty industrial type 1.17 H.P. flo-thru motor, 3-conductor power supply. Colorful orange baked enamel finish. Includes: 20" extension wand, Powerizer™ air maximizer, flexible hose and shoulder strap. Weighs just 5 lbs. Packaged 7 1/2 lbs. Size: 15" overall length with Powerizer™.

CATALOG NO. 5970346



MODEL 2304 DUST BLOWER and EXHAUST SYSTEM

The "heart" of the Model 2304 is our newly designed solid-cast impellor assembly. The wider blades move more waste and fumes than the narrow spoke-type impellor blades which cannot efficiently move solid waste materials such as shavings, and that are easily broken. And plenty of power to the impellor assembly is provided by our direct-drive 1/3 HP 3450 RPM sealed ball bearing motor, so there are no belts to ever slip, wear or adjust.

Shipped with full 1/3 HP, 3450 RPM Drip-Proof motor, 6 ft. cord and On/off switch.

CATALOG NO. 4500590 Dust Blower 110V, 60 cycle, single phase motor
CATALOG NO. 4509265 5' Hose and Clamp

THE KEY TO A PROFITABLE BUSINESS

**CONVERTIBLE KEY MACHINE
OUR MOST POPULAR MANUAL**



**MODEL
H2584CV**

Diversify your Sharpening business with a Key Manufacturing Service. Add to your profits and satisfy your customers' needs. Key making will be a real traffic builder.

The H2584CV Convertible machine comes with a 34MC Milling Cutter, and a "Soft Touch Super Brush" for deburring keys.

A heavy-duty, manually operated machine engineered for precision and reliability. Ideal for the person who knows he will be cutting a large volume of keys and needs a basic machine that will offer many years of trouble-free service. The Convertible is easy to setup and easy to use. Reversible vises provide versatility to cut single or double sided keys.

Precision gauge fork aligns key blanks accurately. Extended carriage travel allows key blanks to be gauged from the tip... including Best type keys without special adapters.

Fully enclosed motor is protected against dust metal chips for longer, trouble-free service. Operates on 110VAC. Also available in 12VDC and 220VAC models. Meets OSHA requirements.

NO. 5727224

KEY ASSORTMENTS

No. 5736996 AUTOMOTIVE ASSORTMENT

This kit contains 150 of the fastest moving automotive blanks. It contains 25 of the most popular keyways that will fit the majority of cars being used today.

No. 5736997 CYLINDER KEY ASSORTMENT

This kit contains 378 of the most popular cylinder key blanks. These blanks have been carefully selected to include 6 each of the fastest moving blanks. It includes 63 different keyways.

No. 5736998 FLAT STEEL KEY ASSORTMENT

This kit contains 100 of the most popular flat and corrugated steel keys. It includes 20 different keyways.

No. 5736999 FOREIGN CAR ASSORTMENT

Taylor introduces a line of brass foreign car blanks that can be cut on any key cutting equipment. Kit contains 150 of the most popular, fastest movers to fit VW, Toyota, Datsun, Volvo, Mercedes, Mazda, Honda, Fiat, Opel, Audi and others. You get 6 each of 25 popular numbers.

No. 5736712 SPECIAL COMBINATION HOUSE & PADLOCK KEY ASSORTMENT

This kit contains 1200 of the fastest moving, most popular house and padlock keys. The most complete assortment offered anywhere. You receive 6 each of 200 popular numbers. Have the blanks you need when you need them — order this assortment today.

MASTER PADLOCK DISPLAY



Impulse buyers will "stop, look and buy" when you feature one of these eye-catching self-service rack displays. Each rack is dual purpose — with removable base — and can be used as a stand-up counter display or hung on pegboard (hooks provided). Constructed of heavy wire, gold-finished, with colorful MASTER nameplate.

One tier, 4-hook display — height 12 in., width 12 1/2 in., depth 7 in. — given FREE with purchase of 18 Master blister-packed Secret Service padlocks at regular price (6 each of 7D, 3D — 4 each of 1D — 2 each of 5D).

ORDER NO. 5757423 Self Service Display



Two tier, 6-hook display — height 17 in., width 9-1/2 in., depth 7 in. — Given FREE with purchase of 30 popular Master Blister-packed padlocks at regular price (6 each of 22D, 105D, 500D — 4 each of 7D, 3D, 1500D).

ORDER NO. 5757424 Self Service Display

MASTER PADLOCK DISPLAY



The finest padlock merchandiser ever offered. You'll get extra sales, faster turnover with this compact, permanent padlock department — only 13 in. x 25 in. Each of MASTER's 15 most popular padlocks, individually showcased in a 3-dimensional frame. Easy to hang on wall or pegboard. Mar-proof mahogany-grained antique finish and gold MASTER nameplate. This attractive merchandising unit is yours FREE with purchase of only 29 fast-selling Master padlocks — 2 each of Nos. 1, 3, 5, 7, 9, 10, 17, 22, 44, 55, 105, 500, 510, 1500 and one only No. 15.

Description: Padlock Display No. 5757422

FOREIGN AUTOMOTIVE KEY BLANKS

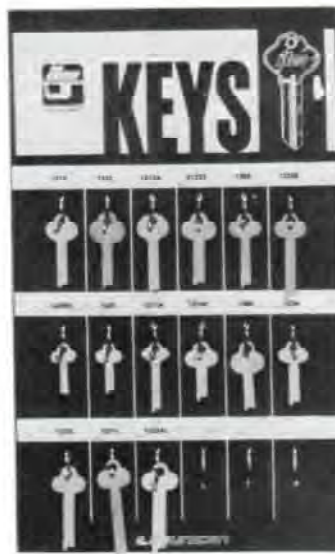
Introducing the new ESP Foreign Automotive Key Blank Assortment (FKBA-50). This truly unique assortment makes the job of properly identifying, locating and cutting Foreign Automotive Keyblanks quick, easy and most importantly — profitable!



Features of the FKBA — 50

- Every keyblank contains the name of the car on the head for easy identification!
- All keyblanks are made of highest quality American-made Nickel plated brass!
- Keyblank comparison chart is conveniently located on the display back-up card for quick and easy cross-referencing!
- Attractive versatile display rack can be used as a free-standing counter display, or as a wallhanging unit!
- Contains total of 230 key-blanks (5 each of 46 popular numbers)!
- Geared for high impulse point-of-purchase sales!

ORDER NO. 5737000



FLAT STEEL KEY ASSORTMENT

This kit contains 100 of the most popular flat and corrugated steel keys. It includes 20 different keyways.

ORDER NO. 5736998

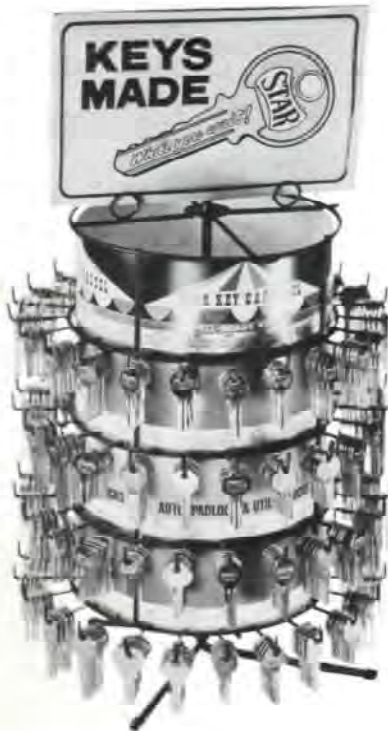


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Smart new compact rotary display with big 96 hook capacity. Another first from Star, to help you display better, sell better. Carousel — For Auto, Padlock, & Utility Lock Regular Brass Key Blanks — printed with Star Number Headings, Comparative Numbers, and Make of Lock above hooks — size 12" diameter by 18" height. With Hooks. Wt. 5 lbs. ORDER NO. 5786685

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TECHNICAL REPAIR MANUALS

SMALL ENGINES Service Manual Order No. G-6030 336 Pages

Now you can repair your own engines on lawnmowers, mixers, garden tractors, tillers, sprayers and other power equipment! Virtually everything using a small air-cooled engine! This latest 12th edition of our most popular manual covers twenty-four different brands, over 500 basic model types and hundreds of variations on air-cooled engines with under 15 cubic inch displacement (both 2 and 4 cycle).

IT'S THE ONLY UNIVERSAL REPAIR MANUAL OF ITS KIND! And now it's bigger and better than ever before with over 300 pages and over 900 illustrations. Special sections on fundamentals, troubleshooting, preventive maintenance, tune-ups and repair take you through every process, step by step.

Covers the following brands:

- Advance Engine Products • Briggs & Stratton • Chrysler
- Clinton • Cox • Continental • Craftsman • Deco-Grand
- Homelite • Honda • Jacobsen • Kohler • Lawson • Lawn Boy • McCulloch • O & R • Onan • Pincor
- Power Products • Roper • Solo • Tecumseh
- West Bend • Wisconsin

CHAIN SAW Service Manual Order No. G-6031 312 Pages

Here's everything you need to know to tear down, repair, reassemble and adjust most popular chain saws. It's the only UNIVERSAL source of complete chain saw specifications and repair data.

Section on service fundamentals lists symptoms of common saw failures and outlines troubleshooting procedures. There is a complete section on engine fundamentals and repair fundamentals. Extensive coverage is also given to saw chain maintenance to enable you to service the cutting chain as well as the engine.

Also includes expanded information on electric chain saws! Homelite, McCulloch, Poulan, Remington, Skil and Stihl.

Covers the following brands:

- Advance • Allis-Chalmers • Clinton • Danarm
- John Deere • Dolmar • Echo • Ford • Frontier
- Homelite • Husqvarna • Jonsereds • Lancaster
- Lombard • McCulloch • Mono • Partner • Pioneer
- Poulan • Remington • Roper • Skil • Solo • Stihl
- Tecumseh • Wright

AIR COOLED POWER UNITS Service Manual Order No. 5955303 228 Pages

A much needed service manual devoted exclusively to engines with 15 cubic inch displacement and over.

This comprehensive service manual features many exploded views and easy to understand photos that enable you to repair these larger engines.

The fundamentals section covers Engine, carburetor and ignition system fundamentals. Also covers engine power and torque and TROUBLESHOOTING. The service section includes ignition system, carburetor, and engine service.

The following brands are covered in this manual:

- Briggs & Stratton • Clinton • Craftsman • Kohler
- Lawson • Onan • Tecumseh • Wisconsin
- Wisconsin Robin

SNOWMOBILE Service Manual Order No. 5955304 376 Pages

Contains all the know-how you need to service both vehicle and engine of virtually every make and model. The ONLY universal snowmobile repair manual on the market today! Covers the most popular models through 1978. Generously illustrated with photos and exploded views. Includes "speed tuning" section for 2-cycle engines. There is a comprehensive vehicle service section, (both for early production models as well as late production models). A complete engine section, a converter (belt drive) section, track drive, track and suspension, and skis and steering sections are also included.

Engines covered in this edition include BSE, Bolens, CCW, Chaparral, Chrysler, Cuyuna, Harley-Davidson, Hirth, Husqvarna, JLO, Kawasaki, Kiekhaefer, Kioritz, Kohler, Lloyd, Mercury, OMC, Polaris, Rotax, Rupp, Sachs, Scorpion, Solo, Spirit, Suzuki, Xeniah, Yamaha.

Covers over 300 models of the following machines:

- Alouette • Alsport • Artic Cat • Ariens Arrow • Auto Ski
- Arlberg • BOA Ski • Boatel • Bolens • Chaparral
- Columbia • Dauphin • John Deere • Eskimo • Evinrude
- Fox Trac • Fredrick-Willys • Gilson • Harley-Davidson
- Herter • Homelite • Hornet • Hustler-Rustler • Jac-Trac
- Jetstar • Johnson • Kometik • Larson • Mallard
- Mercury • Montgomery Sears Snowcruiser



- Silverline T-Bird • Ski-Bee • Ski-Daddler • Ski-Dog
- Ski-Jet • Skiroule • Ski-Whiz • Ski-Zoom • Sno-Flite
- Sno-Ghia • Sno Jet • Sno-Pac • Snow Cat
- Snow Cruiser • Snow Flake • Starcraft • Suzuki
- Trade Winds • Trans-Ski • Wildcat • Yamaha
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SMALL ENGINE and CHAIN SAW Flat Rate Manual Order No. 5955305 68 Pages

Easiest way ever to increase shop's hourly yield, simplify accounting methods and boost job quality.

This revised manual covers 1,000 plus models of over 35 popular-make small engines and chain saws. Suggest time allowances for completion of each specific service job. Lets you instantly estimate labor price, to customer.

Times are based on actual time-and-motion studies conducted by either our experienced editors or factory technicians and can be met by any competent mechanic.

Covers these manufacturers:

- Advanced Engine Products • Allis-Chalmers Chain Saws
- Briggs & Stratton • Chrysler • Clinton • Cox
- Craftsman • Danarm Chain Saws • Deco Grand
- John Deere Chain Saws • Domar Chain Saws
- Ford Chain Saws • Forester Chain Saws
- Frontier Chain Saws • Homelite • Honda
- Indian Chain Saws • Jacobsen • Jonsereds Chain Saws
- Kohler • Lawn Boy • Lombard Chain Saws
- Massey-Ferguson Chain Saws • McCulloch
- O & R Engines • Onan • Orlin Chain Saws • Partner
- Pincor • Pioneer Chain Saws • Poulan Chain Saws
- Remington Chain Saws • Roper • Skil Saw
- Solo Chain Saws • Stihl Chain Saws
- Tecumseh 4-Cycle • Tecumseh 2-Cycle • Wisconsin • Wright

SNOWTHROWER Service Manual Order No. 5955306 172 Pages

Finally, here's a guide to the servicing and maintenance of snowthrower engines and chassis written in a style that's straightforward and easy to understand.

Most major brands are featured in two sections covering engines and chassis.

The engine section includes complete step-by-step procedures for engine service and overhaul accompanied by dozens of exploded views and detailed illustrations.

The chassis section provides thorough coverage in the areas of lubrication, adjustment, maintenance and overhaul. 172 pages.

Covers the following brands and engines:

- Atlas • Briggs & Stratton • John Deere • FMC Bolens
- Gilson • International Harvester • Jacobsen • MTD
- Tecumseh • Toro • White • Yard-Man

SMALL MOTORCYCLE Service Manual Order No. 5955307 144 Pages

Both 2 and 4 cycle engines up to 85 cc displacement and 14" and above wheels. All phases of repair in exploded views and pictures. Brakes, Ignition, Batteries, Troubleshooting.

Covers the following:

- Allstate • Alsport • Benelli • Bridgestone • Chaparral
- Ducati • Fox • Garelli • Gemini • Honda • HPE-Muskini
- Indian • Kawasaki • Montesa • Rupp • Rockford-Tora
- Sachs • Speedway • Suzuki • Xeniah • Yamaha

MOTORCYCLE Service Manual Order No. 5955308 208 Pages

Repair procedures for 2 cycle Single Cylinder engine over 85cc. Covers most street and trail models and some competition (Trails, Moto-Cross, Flat Track and Enduro) machines. SPEED TUNING, RACING, PORT SPECIFICATIONS for many models with detailed procedures.

Covers these makes:

- Allstate • Benelli • Bridgestone • BSA • Bultaco • Ducati
- Garelli • Hodaka • Honda • Kawasaki • Maico • Montesa
- Mito Beta • Ossa • Puch • Sachs (Engines) • Suzuki
- Villiers (Engines) • White • Yamaha

MOTORCYCLE Service Manual Order No. 5955309 184 Pages

2 stroke cycle MULTI cylinder, with engines over 85 cc. From tune-ups to major overhauls—fully illustrated.

Covers these models:

- Allstate • Bridgestone • Kawasaki • Suzuki • Yamaha

MOTORCYCLE Service Manual Order No. 5955310 136 Pages

Service Repair, specifications and procedures for 4 stroke cycle SINGLE CYLINDER models with more than 85 cc displacement.

Covers these makes:

- Allstate • BMW • BSA • Benelli • Ducati • Gilera
- Harley-Davidson • Honda • Moto Guzzi • Norton
- Triumph • Velocette

MOTORCYCLE Service Manual Order No. 5955311 264 Pages

Covers 4 stroke MULTI-CYLINDER models with over 85 cc engine displacement. Tear down and repair, fully illustrated, specifications and tuning data.

Covers these brands:

- BMW • BSA • Benelli • Gilera • Harley-Davidson
- Honda • Kawasaki • Moto Guzzi • Norton • Royal Enfield
- Triumph • Yamaha

MOTORCYCLE Flat Rate Manual Order No. 5955312 104 Pages

Suggested time allowances for each job. Estimate your price to the customer quickly. Covers every job for 290 models of 8 manufacturers.

Covers these brands:

- BMW • BSA • Hodaka • Honda • Kawasaki • Suzuki
- Triumph • Yamaha

COMPACT TRACTOR Service Manual Order No. 5955313 192 Pages

Tractors with air cooled engines OVER 14 H.P. are covered in this manual. Complete service, maintenance, troubleshooting and "specs" are provided for the following engines and brands.

Brands of tractors:

- Briggs & Stratton • Kohler • Onan • Tecumseh
- Wisconsin • Allis-Chalmers • Ariens • Bolens
- J. I. Chase • John Deere • Engineering Products Co
- FMC • Ford • Gilson • Gravely • Homelite

BY INTERTECH PUBLICATIONS



COMPACT TRACTOR Service Manual Order No. 5955314 156 Pages

Over 14 H.P. tractors are covered in this manual. Anyone servicing these tractors will find this manual invaluable. Engines: Briggs, Kohler, and Tecumseh.

Brands of tractors:

- International Harvester • Jacobsen • Massey-Ferguson
- MTD • Simplicity • Western Auto • Wheel Horse • White

SMALL TRACTOR Service Manual Order No. 5955315 260 Pages

A very complete and up to date manual for tractors with air cooled engines up to 14 H.P. A manual for all phases of service on the engine and tractor. Step by step instruction with exploded views and pictures. Engine section includes Briggs, Kohler, Onan, Tecumseh and Wisconsin.

Tractor brands covered in this manual:

- Allis-Chalmers • AMF • Ariens • Big Ten • Bolens
- J I Case • Jim Dandy • John Deere • Economy
- Engineering Products • Ford • Gilson • Gravely
- Homelite • Homesteader • Husky • Power King
- Special

SMALL TRACTOR Service Manual Order No. 5955316 272 Pages

All the repair procedures of STS-4 but covering the following brands under 14 H.P.

Brands of tractors:

- Baron • Broadmoor • Commando • Chief • Cub Cadet
- International Harvester • Raider • Ranger • Charger
- Sovereign • Lawn Ranger • Jacobsen • Landlord
- Massey-Ferguson • Meteor • Minneapolis-Moline • MTD
- Panzer • Pennsylvania Lawn Products • Serf • Simplicity
- Super Chief • Western Auto
- Wheel Horse (Gear Drive and Hydrostatic Drive)
- Wizard • Yard-Man • Yeoman • Workhorse • White

LIGHT UTILITY TRACTOR Service Manual Order No. 5955317 224 Pages

Liquid cooled engines of less than 35 H.P. powering utility tractors are covered in this manual. Tune-ups to major overhaul.

Covering these makes:

- John Deere 820 and 830 • Ford 2000
- Int'l Harv. Int'l Cub 154 Lo-Boy • Int'l Harv. Farmall
- Cub, Int'l Cub and Int'l Cub Lo-Boy • Int'l Harv. 100, 130 and 140 • Kubota L 175, L225, L210P and L260P
- Satoh S650G

OUTBOARD MOTOR Service Manual Order No. 5955327 236 Pages

Here's everything you need to service most major brands of outboard motors below 30 hp.

A comprehensive fundamentals section provides detailed tips on periodic servicing, troubleshooting, general maintenance and general repairs.

The special service section contains specifications and step-by-step servicing procedures on hundreds of models with less than 30 hp. Virtually every major brand is included. In most cases, 1969 through 1978 model years are covered.

No other manual on the market has such complete coverage of small outboard motors.

The following brands are included:

- Chief • Chrysler • Clinton • Eska • Evinrude • Explorer
- Federal • Golden • Jet • Hamimex • Hiawatha • Honda
- Johnson • Manner • Mercury • Pathfinder • Seaco
- Seacruiser-Grant • Seagull • Sea Hawk • Sea King
- Sears • Spirit • Sportfisher • Volvo • Wizard

OUTBOARD MOTOR Service Manual Order No. 5955328 232 Pages

Provides the same detailed fundamentals on periodic servicing, troubleshooting, general maintenance and general repairs as volume 1.

The special service section on specifications and servicing procedures for motors with 30 hp and above.

The following brands are included:

- Chrysler • Evinrude • Johnson • Manner • Mercury
- Sea King • Spirit

INBOARD/OUTDRIVE Service Manual Order No. 5955325 240 Pages

The only full coverage service manual for inboard outboard drives on the market.

Beginning with complete specifications, service and overhaul procedures are detailed and illustrated for engines and outdrives. Disassembly and assembly sequences are covered in order of performance with all adjustment steps.

This manual is a must for servicing tilt, trim, shift and steering systems. Includes data on water pumps, hydraulic transmission, controls and all electric circuitry.

Coverage includes the following makes and models—from the early Sixties through 1976 for most models:

- Chrysler (80 hp, Commando, Drive 90°)
- Crusader Models B and C • Eaton • Evinrude
- Graymarne • Johnson • Mercruiser (60, 80 & 90 series 1, 1A, 1B, 1C) E-Z Shift Models 110, 120, 140 (4), 140 (6), 150, 160, 165 & II, V-8 Models 888, 215 E, 215H, 225 S & 223, III IITR & IITRS POWER EQUIPMENT • Marine Drive Systems • Outboard • Marine Corp. • (DU Series, NU Series, 100 to 245 hp) • Pleasurecraft • Volvo • (Engines, Aquamatic 100, Aquamatic 200, 50 & 270) • Waukesha
- West Bend (Shark-O-Matic)

OUTBOARD MOTOR Flat Rate Manual Order No. 5955326 36 Pages

Job-time breakdown is made for single jobs in each of these repair areas: Inspection and Adjustment, Fuel, Ignition and Cooling Systems, Manual and Electric Starters, Alternator, Generator and Regulator, Power Head tuning, Lower Unit, Mounts and Controls.

Completely revised sixth edition covers almost 1,000 models of 21 popular outboards—through 1975.

Covers these manufacturers:

- Chrysler • Clinton • Coast-to-Coast • Eska • Evinrude
- Federal • Goldenjet • Hamimex • Hiawatha • Johnson
- Mercury • Pathfinder • Seabreeze • Seaco
- Seacruiser-Grant • Sea Hawk • Sea King • Sears
- Skipper • Sportfisher • Wizard

SMALL AC GENERATOR Service Manual Order No. 5955331

This brand new service manual contains maintenance, service and troubleshooting procedures, as well as wiring

schematics for most generator models.

Covers electrical powerplants under 8 kw which generate alternating current and are driven by air-cooled engines. Covers most current models, as well as models from five to ten years old. Models covered may be stationary or portable, and weigh approximately 300 pounds or less.

This service manual features hundreds of exploded views, along with step-by-step instructions to help you through the complete repair process.

Covers the following generator manufacturers:

- Dayton • Homelite • Honda • Kohler • McCulloch
- Onan • Pincor • Yamaha

HYDRAULIC SYSTEM DIAGNOSIS Order No. 5955332

This is an in-depth follow-up by Melvin E. Long to his 'Let's Get Into Hydraulics'. This new series emphasizes the interaction of the components in the hydraulic system. It's designed to help develop a systems approach to problem diagnosis — rather than using a hit-and-miss method until the problem goes away.

LET'S GET INTO HYDRAULICS Order No. 5955333

This is the outstanding 14-part series, authored by Melvin E. Long, focusing on the science of hydraulics as it applies to the farm equipment industry. Let's Get Into Hydraulics is a 48-page clear, illustrated review you'll want to have.

FARM EQUIPMENT ELECTRICAL SYSTEMS Order No. 5955334

A comprehensive, 36-page reprint, authored by Melvin E. Long, Farm Equipment Electrical Systems is a clear, illustrated review of semiconductors, transistors, storage batteries, charging circuits, ignition circuits, lights and more. Special chapter on diagnosing and testing.

FARM MACHINERY & TRACTOR FACTS '81 Order No. 5955335

New edition—available April, 1981. Now includes specs on combines, windrowers, conditioners, mowers, balers, stack wagons, forage harvesters, front loaders, grinders-mixers. Plus 24 Nebraska Tests and how to interpret, 1980 tractor specs tune-up data, PTO HP's, 10-year Nebr. Test summary, tractor serial numbers since 1950, and more.

RIDING LAWNMOWER Service Manual Order No. 5955336 192 Pages

This manual contains hundreds of sharply detailed photographs and line illustrations to give you step-by-step instructions from tear down to assembly. Also covers transmission and differential overhaul. Mower drive overhaul is also included. There is a fundamentals section and a section on blade care (sharpening and balancing), too.

All engine identification data (bore, stroke and displacement) are listed for each make and model along with complete specifications covering bearings, tolerances and sizes plus the makes and models of standard component parts—i.e. carburetors, spark plugs, magnetos, generators, starting motors, etc.

Brands covered in riding mowers, engines, transmissions, and differentials sections:

- Allis-Chalmers • AMF • Briggs & Stratton • Columbia
- FMC-Bolens • John Deere • Dixon XTR • Dynamark
- Foote • Gilson • Homelite • Indus Wheel
- International Harvester • Jacobsen • Lawn Boy
- Massey-Ferguson • MTD • Murray • Peerless • Roper
- Simplicity • Snapper • Wheel Horse • White

WALKING LAWNMOWER Service Manual Order No. 5958088 128 Pages

This manual is a complete guide to the care and repair of your walk-behind push-type lawnmower.

Special sections focus on the fundamentals of engine repair, blade care and routine maintenance. Reference pages show you how to determine the exact engine make and model used on your mower.

The diagnostic section features a symptomatic troubleshooting chart to help you isolate problems and determine remedies.

Finally, the engine repair section provides dozens of exploded views and diagrams that take you inside your engine bolt-by-bolt. Each illustration is accompanied by easy to understand step-by-step servicing instructions.

Covers the following engine makes found on dozens of lawnmowers brands:

- Briggs & Stratton • Clinton • Craftsman • Jacobsen
- Lawn Boy • Tecumseh

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PART NO.	CAPACITY	GRADUATIONS	DRIVE SIZE	HEAD STYLE
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5955360	500 In. Lbs.	In. Lbs.	3/8"	Fixed

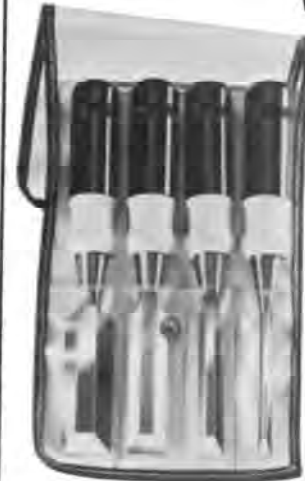
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Designed for use on small engines, automatic transmissions, and other applications requiring small, accurate torque measurements. Wrench has floating ball handle and is graduated in inch pounds. 100 in. lb. capacity. 3/8" square drive fixed style head.

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1/4", 1/2", 3/4", 1"
General precision ground, heavy duty tang chisels have high impact plastic handles which are shock-proof, splinter-proof and are designed to fit the hand comfortably. Blade and tang made from one piece high grade forged tool steel.

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2 TOOLS in 1

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- Exposed metal parts heavily plated
- Automatic Spring return
- Used for driving or removing screws
- High impact transparent handle with chrome plated cap holds blades and points
- Made in England for General

10" Extended (250mm) 7/32" closed (196.8 mm)
Complete with 2 screwdriver blades. 1/4" and 5/32" and 2 drill points.
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For removal of broken studs, set screws, pipe and alemite fittings. Screw extractor packaged in a plastic kit, printed with complete information on bolt size, drill size, minimum depth of hole and pipe size. Includes the following, also available separately:

U.S.S. SCREW, STUD OR BOLT SIZE	DRILL SIZE	MIN. DEPTH OF HOLE	PIPE SIZE
1/4, 5/16	1/8	3/8	
3/8	3/16	1/2	
7/16	15/64	1/2	1/8
1/2, 9/16	5/16	1/2	1/4
5/8	3/8	5/8	3/8



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9 PIECE SCREWDRIVER SET

Includes the most popular sizes and a handy hole starter. Set comes in handy plastic carded tray which has an eyelet for wall mounting. Also contains handy ratchet screwdriver which allows tightening and loosening fasteners in the most restricted spaces. Every workbench and tool box should include this popular set.

CONTENTS: Standard pocket screwdriver, standard Stubby Screwdriver 1/4" x 1-1/2", Standard Screwdriver 3/16" x 3", Standard Screwdriver 1/4" x 4", Standard Ratchet Screwdriver 3/16" x 3", Standard EZ Hold Screwdriver 6", Phillips Head Screwdriver #1-3", Phillips Head Screwdriver #2-4", and a hole starter.

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COMBINATION WRENCH SET



(9-pc. Plus Pouch)

SIZES:

1/4" 5/16" 3/8"
7/16" 1/2" 9/16"
5/8" 11/16" 3/4"

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DESCRIPTION

3/8" 6 pt. Std. Skt.	13/16" 12 pt. Std. Skt.	11/16" 6 pt. Dp. Skt.
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9/16" 6 pt. Std. Skt.	7/16" 6 pt. Dp. Skt.	1 1/2" Extension
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This excellent tool set is an absolute necessity for cutting, crimping and general wire repair. Complete with most popular wire terminals and connectors.
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This handy multi-purpose tool makes retainer removal or replacement quick and easy! This special tool is 12 tools in 1. With a simple push of the button, you can change the action from ring spreading to ring compressing. And, you can do this with 6 different size tips including two different sizes of offset needles. This tool will work on all types of locks and comes with a one year guarantee. Replacement tips are available.
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Compresses internal rings in one position. Move the quick change reversing lever to expand external rings. Comes with four sets of color keyed tips in plastic box.
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Cuts Wire To Desired Lengths And Then Crimps Perfect Bend In Wire. Also Used As General Purpose Side Cutting Pliers.
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Interchangeable nozzle bushings fit right on the gun. Spring loaded handle for automatic ejection of mandrel. Smooth, easy, one-hand operation. Contour grip handle with vinyl cover for added comfort.
20-Piece 1/8" Rivets, 10-Piece 5/32" Rivets, 10-Piece 3/16" Rivets
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BENCH VISE

This rugged heavy duty vise has a 360° swivel base, drop forged steel jaws, chrome plated screw for smooth operation. The oversized heat treated steel jaws are replaceable for added years of use. Polished anvil back. Positive locking action. Engineered to work easily and efficiently for long life and service.
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MULTI-ANGLE SWIVEL-ACTION PORTABLE VACU-VISE

- SWIVELS 360°
- TILTS 90°



This portable vacu-vise has a swivel-base feature. A necessary tool for every locksmith. It has an adjustable head that swivels 360°, tilts 90° — locks into any position. No need to bend down to small delicate work — tilt it in your direction! No locksmith shop is complete without it!
ORDER NO. 5746682
Vacu-Vise

HOLE SAW KIT FOR METAL DOORS

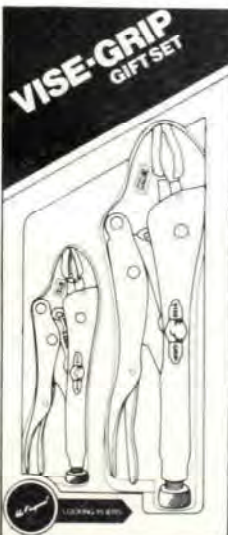


These hole saws are constructed with a high speed cutting edge welded to a resilient alloy back. They will saw 1 3/8" deep holes in any material that can be cut with a hack saw blade. Anything from wood to plastic to harder metals such as stainless steel. This kit has all the sizes you need to install popular locks, deadbolts, drawer locks, file cabinet locks, etc. Also included are 4 pilot drills and a screwdriver, all neatly packed in a heavy duty compact carrying case. Order your kit today and be ready for any lock installation. Sizes included: 3/4, 7/8, 1, 1 1/8, 1 1/2, 1 3/8, 1 3/4, 2 1/8.
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5-PIECE HOLE SAW SET



Set includes 5 basic hole saws — 1 1/4", 1 1/2", 2" and 2 1/8" — and a mandrel for use on wood, plaster, plastic and light metal. Heat treated steel saws cut concentric holes quickly. Fits all electric drills and are interchangeable with Black & Decker, Stanley, Nicholson, Millers Falls, and Sears. Packaged in a durable plastic box.
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This new tool instantly magnetizes or demagnetizes small tools. To magnetize: Insert tool into magnetizer several times. Remove magnetizer and tool is now magnetized. To demagnetize: Pull tool over rounded side of magnetizer cover. Magnetizer can be left on tool if desired. Ideal for magnetizing screwdriver, wrenches and other small tools. Magnetize the end of long steel rod to use as a retriever of keys locked in the trunk or pull them through a window that is barely open. Use also for speeding up repair and assembly work, retrieving small parts, cleaning up filings and scraps.
ORDER NO. 5747314

MAGNETIC BASE COOLANT ATTACHMENT

Sprays atomized coolant on grinding wheel. Saves time and money. Permits heavier cuts on each wheel pass. Cools grinding operation. Increases the efficiency and life of the wheel. Must be used with a compressor.
ORDER NO. 3579410



CIRCULAR SAW SHARPENER



This popular unit lets you convert any ordinary bench grinder into a low-cost saw sharpener. A perfect back-up for the busy shop. Tilting saw arbor allows for accurate bevel-grinding right or left from 0 to 30-degrees. Tapered cone centers saws with arbors from 1/2 to 1 1/2 inches. Shipped complete with 6 x 3/16-in. grinding wheel to fit 3/4, 5/8 and 1/2-in. shafts, dressing brick and operating instructions.
CATALOG NO. 2330300

ONE-WAY TAMPER-PROOF SCREW ASSORTMENT



- Just the right amount of every size
 - Replace conventional fasteners with one-way screws
 - Durable compact compartmentalized boxes
 - Handy lid chart for easy reference
- Contains over 325 screws to solve hundreds of security problems.
ORDER NO. 5786988



WING NUTS 175 PIECES

For all uses. Part No., price area and size printed by the photo of part.
ORDER NO. 5966019

WASHERS—STAR, LOCK, FLAT 720 Washers



Every size and shape of washer you will normally use on engines. Keep this assortment at your bench.
ORDER NO. 5966023

ALLEN SOCKET HEAD SCREWS 106 PIECES



9 Sizes of Screws. A fast moving, low cost assortment. Order restock as needed from handy Part No., description in box.
ORDER NO. 5966026

ROLL PINS — 315 PIECES

Contents

SIZE	LENGTH	QUAN.	SIZE	LENGTH	QUAN.
5/32	5/8	10	1/4	5/8	10
5/32	1	10	1/4	1 1/4	10
5/32	1 1/2	10	1/4	1 3/4	10
5/64	1/4	10	5/16	3/4	10
5/64	1/2	10	5/16	1 1/2	10
5/64	1	10	5/16	2	10
1/16	3/16	10	3/8	3/4	5
1/16	3/4	10	3/8	1 1/2	5
1/16	5/16	10	3/8	2	5
3/32	5/8	10	7/32	5/8	10
3/32	1	10	7/32	1 1/4	10
3/32	1 1/4	10	7/32	1 3/4	10
1/8	5/8	10	3/16	5/8	15
1/8	1	10	3/16	1	15
1/8	1 1/4	10	3/16	1 1/4	15



ORDER NO. 5960009

PEG BOARD HOOKS PERFECT FOR YOUR KEY BOARDS

Use these heavy duty hooks to display your key blanks or locks and retail items. This strong husky longer lasting hook fits 1/8" and 1/4" panels. The prong is formed of 3/16" rod. Plenty strong for large items yet not too bulky for the smallest card or key. Three popular lengths available.

ITEM NO.	LENGTH
5787180	2 1/2"
5787181	4 1/2"
5787182	6 1/2"



PLANING/JOINTING/

The 684 JOINTER/PLANER/MOLDER GIVES YOU 3 MOST NEEDED TOOLS . . .
 so you can perform "no compromise" woodcrafting.

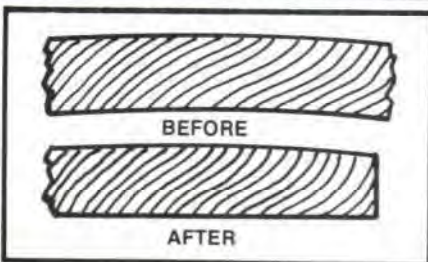


MODEL 684
 ORDER NO. 4540684



MODEL 804
 ORDER NO. 4540804

This page explains the features, capacities and specifications of our Model 684 (which includes 6-inch Jointer) and Model 804 Planer/Molder (pictured at left). Except for extra features included with Jointers on Model 684, both machines are identical.

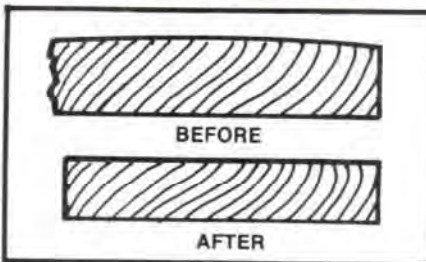
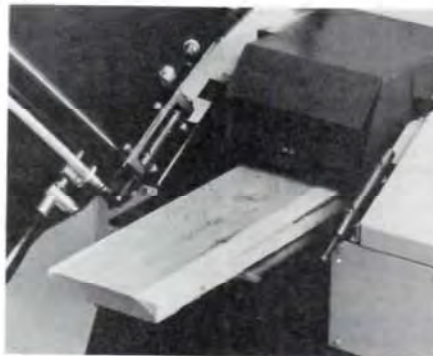


JOINTING

(Model 684 only)

The jointer on the Model 684 lets you square the concave surface or edge on twisted, cupped or warped lumber into cabinet-quality, straight true boards. Typical wood looks like the board shown above. Passing the concave surface over the jointing table gives a flat smooth surface on one side.

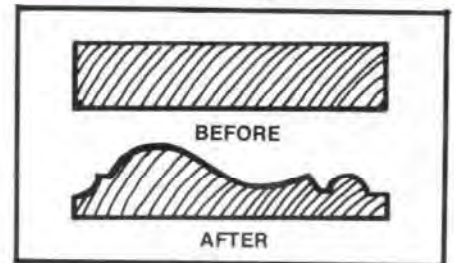
The fence of the jointer then serves as a guide for this trued surface. A second pass will result in one edge being milled flat, smooth and, most importantly, at 90° to the first surface.



PLANING

Even after jointing, a convex or tapered surface is likely to remain. Milling of this type can only be accomplished on a thickness planer. An adjustable table below a stationary cutterhead assures boards are planed to an exact thickness. Because the board has already been jointed, a perfect board with parallel sides at 90° corners is produced.

You now have wood that will give your projects flush, smooth, even surfaces that can be worked on other tools to produce the exact results you desire.



MOLDING

Or, take your Model 684 or 804 that one extra step. As simply as changing a knife, you can produce molding of the finest quality for use in grandfather clocks, master-crafted furniture or cabinets of never before obtainable precision. Only the constant feed speed giving the same number of knife cuts-per-inch throughout the length of the molding can produce this type of unmatched quality. You also get large capacity and flexibility that permits you to make molding up to 8" wide in any pattern you choose.

JOINTING SPECIFICATIONS Model 684 Jointer-Planer-Molder Only	
Maximum width of cut	6½"
Maximum depth of cut	⅞"
Knife cuts per minute	12,000
Bed length	36½"
Bed height	35½"
Height to top of fence	40"

SPECIFICATIONS Model 684 Jointer-Planer-Molder and Model 804 Planer-Molder			
Maximum width stock	8"	Planing bed length	28½"
Maximum depth stock	4½"	Shortest piece (not butted)	7½"
Maximum depth of cut	5/32"	Maximum depth of cut, molding	¾"
Minimum thickness	¼"	Maximum width of cut, molding	8"
Feed speed	28-fpm	Motor	1 hp, 3450 RPM, 115v-ac
Cuts per inch	36		

MOLDING EQUIPMENT



MODEL 910
ORDER NO. 4500910



MODEL 912
ORDER NO. 4500912

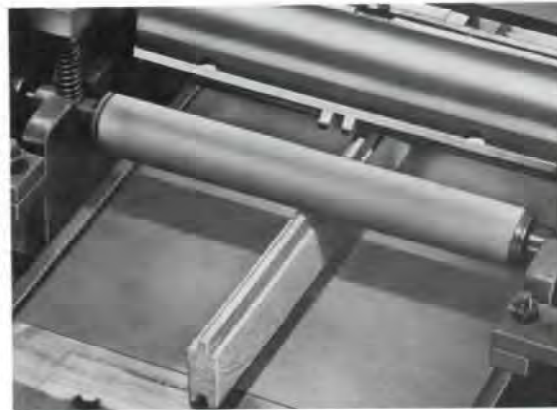
Same as the Model 910, but without sawing attachment. This versatile power tool features an extra extension table on the infeed side in place of the saw table. Gives you a full 42-inch bed length.

PLANES up to 12¼" wide, up to 6" thick
MOLDS face up to 12" wide, edge up to 6" wide
SAWS up to 2¼" thick
SELF FEEDS at 12' per minute

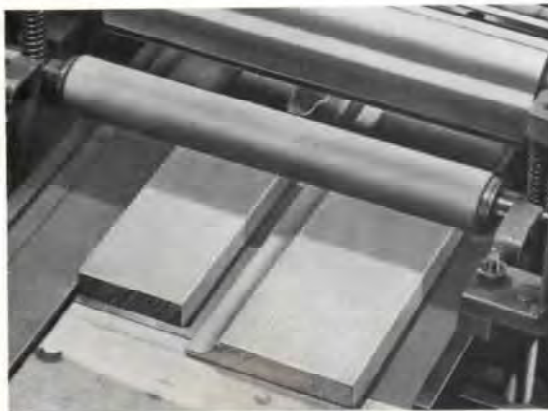
PLANES up to 12¼" wide, up to 6" thick
MOLDS face up to 12" wide, edge up to 6" wide
SELF FEEDS 12' per minute



PLANING — Cutterhead uses three planer knives to surface stock up to 12¼-in. wide and up to 6-in. thick. Above photo shows a full 12-in. wide board coming out surfaced on one side.



EDGE MOLDING — Tongue-and-Groove Molding is a simple operation. One of many molding operations possible by easily and quickly changing the cutters.



FACE MOLDING — This board is emerging sawed to width, planed to the desired thickness and molded for baseboard use, all with power feed.



SAWING — Rip stock up to 2¼-inches thick and surface it to desired thickness and pattern in one continuous pass... all by power feed.

SPECIFICATIONS:

SAWING	Maximum width 12¼-inch, maximum thickness 2¼-inch.	CUTTERHEAD	3-knife solid round steel, 3¼-in. diameter.
MOLDING	Face up to 12-in. wide and edge up to 6-in. wide.	BEARINGS	1½-in. self-aligning, ball bearings.
PLANING	Maximum depth of cut each pass 3/16-in.	BED	One piece machined cast iron 12¼-in. by 18-in. Saw table adds extra 16 inches, outfeed table extra 12 inches, for total of 46-inches.
	Maximum width of cut 12-1/4-in.	BED SUPPORTS	Four corner screws, synchronized with endless roller chain and sprockets. Each complete turn of control handle moves bed 1/16-in.
	Maximum thickness of stock 6-in.	POWER REQUIRED	2 to 5 HP (We supply 3.8-in. diameter 2-groove drive pulley. Use 9-in. diameter pulley on 1750 RPM motor or 5-in. diameter pulley on 3450 RPM motor.)
	Minimum thickness stock 3/16-in.		3 HP for moderate duty, 5 HP for heavier use or faster feed.
	Shortest piece (not butted) 7-in.		
FEED SPEED	Standard 12-ft. per minute, optional 22-ft. per minute.		
CUTS PER INCH	80 at 4,000 R.P.M. cutterhead speed, 12-ft. feed speed.		
OVERALL SIZE	24-in. wide x 46-in. long x 16-in. high.		

Mandrel — is 1 3/4" diameter (milled to 1 3/8" at saw end), 56" long. High strength steel shaft runs in precision ball bearings.

Fingertip pressure on control handle — tightens feed belts to give smooth, steady feed at any rate between 0 and 1.33 inch each saw revolution. Gigs back at triple speed.

Upright Scale — has column marked to show inches of headblocks from saw; a second column shows number of 1-in. boards and three blank columns for your own special markings.

Setworks — controls amount of headblock movement to vary thickness. **Heavy steel setworks shaft** assures even advancement of headblocks.



MODEL M-14
THE ONLY
ONE-MAN
Portable Sawmill
of Its Kind
in the world!

High speed, slide action top dogs — Steel spike slides in and out to desired horizontal position... downward stroke of lever drives spike into log and locks pawl against steel post. Upward stroke withdraws spike and loosens pawl for quick releases.

Upright board splitter — keeps board away from back side to eliminate binding.

40-INCH inserted tooth blade — is preferred by experienced sawyers. Teeth are quickly removed with IP wrench when worn which maintains full diameter of blade and minimizes filing.

Five grooved guide rollers — on front side and five smooth rollers on back side are mounted under carriage of electrically welded frame. Rollers turn on hardened steel axles with friction-free roller bearings. Front grooved roller self-center on rib of double angle iron guide track... back smooth rollers ride on solid flat track.

Carriage — Holds log for travel through sawblade. Main Steel Carriage is 10-ft. long, 40-in. wide, heavy welded steel construction. Jig welded for perfect alignment.

Easily handles the larger logs up to 14 ft. in length and up to 18 in. in diameter.



Adjustable Saw Guide — can be quickly adjusted without tools.



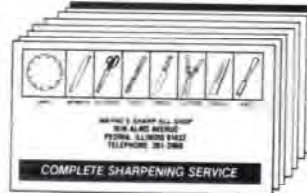
Variable-Speed Power Feed — lets you operate mill with as little as 25 HP. Forward feed variable from 0 to 1.33-in. each saw revolution... gigs back at triple speed. Full slipping V-belt gets power direct from mandrel shaft. Furnished complete with all pulleys, belting, cable and attachment bolts.

Sawmill Only — Order No. M-14
Steel Base Only — Order No. G4400

CUSTOM DESIGNED ADVERTISING AND SALES AIDS



SHOP SIGNS. An economical, effective way to advertise your services. Made of tough, durable, white vinyl. Completely waterproof. Adhesive back sticks to wood, plastic or metal surface.
No. 2124276



BUSINESS CARDS. These professional quality business cards are an ideal way to advertise your services. Available with your company name, address and telephone number imprinted.
No. 2124109



STATEMENTS. Keep your regular accounts in an orderly manner through regular use of these business statements. Give one to each customer when he picks up his tools. Make a carbon copy for yourself and have a permanent record of each customer.
No. 2124106



SHOP TAGS. A handy item to tag and identify your customers' tools. Available with your company name, address and telephone number imprinted.
No. 2124113

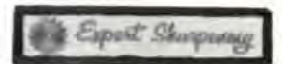
PROFESSIONAL IDENTIFICATION EMBLEMS AND PATCHES



BACK PATCH. For your shirt or jacket. Bright orange and green on a crisp white background. Help build customer confidence with these professional quality identification emblems.
No. 2124302



SHOULDER AND CAP PATCHES. Bright orange and green on a crisp white background helps sell your services. Enhance your professional appearance.
No. 2124303
No. 2124304



POCKET PATCH. Bright green on a crisp white background. All patches are made of wear-resistant washable materials.
No. 2124305



FOLEY-BELSAW CRAFTSMAN'S CAP. Bright Red Cap. Foley-Belsaw emblem is Red, White and Black.
No. 2124301

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Here's your opportunity to receive over 50 years of expert information covering the basics of saw & tool sharpening at a Special Price! Over 300 illustrations make this manual easy to understand... written in plain, simple language.

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To Attend
One Of The
Foley Belsaw Sharpening Schools



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You and the quality service you provide are the biggest cash money-makers in your saw and tool sharpening business. Your business grows each day when you let our experts show you how to start and operate a profitable sharpening business... how to increase the profits from your present shop. Learn shortcut techniques and 'tricks of the trade'... You get personalized instruction PLUS 'hands-on' training from the pros that wrote the book on sharpening for a profit.

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To assure that you receive individual, personalized attention from our expert staff of Instructors, we accept only a specified number of students for each class. We must accept enrollments on a first-come basis, so to reserve the class date you prefer (even several months off) we urge you to send the En-

rollment Form right away and avoid disappointment.

A small deposit reserves any date (subject to availability), and you are fully protected by our 2-Way Tuition Protection Agreement.

The Saw & Tool School is devoted to proper machine operation, starting and building a business, and concentrates on the broad spectrum of regular steel and carbide saws and tools.

SAW AND TOOL MAINTENANCE SCHOOL — You get classroom instruction and actually operate the equipment that sharpens regular steel and carbide saws and tools. You'll learn all about handsaws, circular saws, chainsaws, dados, clippers and all types of carbide and steel edge tools. You get supervised instruction operating Foley Belsaw equipment with ample free time scheduled to let you receive additional assistance in areas of your particular needs and interest.

Business guidance sessions are devoted to how to charge for your services, how and where to advertise, what markets are most profitable in your locality, and other general business practices.

YOU TAKE NO RISK WITH FOLEY BELSAW'S 2-WAY TUITION PROTECTION AGREEMENT — If for any reason you find you are unable to attend school on the dates you reserve, by simply notifying us 10 days in advance you have the option of selecting an alternate starting date, or to cancel your enrollment and receive full refund of any tuition fees or deposit paid in advance.

In addition, once your enrollment is accepted and confirmed by Foley Belsaw, should we find it necessary to increase tuition fees, we guarantee your enrollment at the tuition rates in effect at the time you enroll. Register NOW for the dates you prefer!

THE TUITION FEE COVERS EVERYTHING!



• **LODGING** — Reserved rooms are provided at the Inn at Executive Park. This modern facility is conveniently located near Foley Belsaw headquarters and school facilities. Complete with all the luxuries you want including game room, indoor/outdoor pool and lounges. Your fee provides for double occupancy with a fellow Foley Belsaw student. Different accommodations can be made with prior notice. Rooms are available the evening prior to the start of class throughout checkout time the last day of your class.



• **ALL MEALS** — We provide all meals during your stay, beginning with dinner on the evening prior to the first day of class, through lunch on the last day of class. Breakfast and dinner are ordered direct from the menu and your only limit is how much you can hold. Lunch will be catered to provide maximum effective use of class time. Special diets can be accommodated with sufficient advance notice of your special requirements.



• **STUDENT MATERIALS** — All equipment and supplies you will use at the school are furnished, including saws and tools for practice, shop coats and required safety equipment. Everything you need to complete your training is provided for you — no 'extras' to buy or rent... no additional fees of any kind.



• **TRANSPORTATION** — We supply your transportation to and from school daily. If you arrive by airline the Inn at Executive Park provides a shuttle service.

• **DIPLOMAS** — Upon completion of the school you receive a handsomely framed Certificate of Completion recognizing your accomplishments. This certifies your expertise as a Foley Belsaw Factory Trained Professional.

CLIP OUT AND MAIL

Yes, I am interested in learning how to increase the profit of my sharpening business. Please send me enrollment information on the Foley-Belsaw 5-Day Saw and Tool Sharpening School. Let me know if you have openings on:

Month _____ Day _____ Year _____

To receive additional information on the areas listed below, simply check the box and mail to Foley-Belsaw.

- 910-912 Planer/Molder/Saw
- 684-804 Jointer/Planer/Molder
- M-14 One-Man Sawmill
- Modern Upholstery
- Vinyl-Pro
- Small Engine Repair
- Professional Locksmithing
- Outdoor Power Equipment Parts Catalog

Name _____

Address _____

Town _____ State _____ Zip _____

HOT-LINE REGISTRATION

Reserve the class date you prefer by phoning our Registration Department TOLL FREE at

1-800-821-3452

and send Enrollment Form by mail. Completed application must be on file before we can process your enrollment.



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