

A 294.95

B 85.95

Powr-Kraft Back-Geared Screw-Cutting Lathes

CHOICE OF TWO SIZES... 24 AND 31 IN. BETWEEN CENTERS 294.95 AND 309.95

A 10-IN. SWING. A fine production tool developed for the machine shop requiring a high-speed lathe of sustained accuracy. Performs within .001 in., all lathe operations. Widely used by mechanics, garages, schools, machine shops, etc. Headstock has preloaded New Departure ball bearings which permit high-speed operation with minimum spindle deflection and greater sustained accuracy. Grease sealed—require no further lubrication for life. Self-lubricating bronze bearings at 18 other points of wear reduce maintenance—result in high-speed low-cost production.

CAPACITY. 10-inch swing over bed; 6½-inch swing over saddle cross slide. Bed made of seasoned alloy castings—internal stresses removed. Width of bed across ways is 6½ inches. Two flat and two prismatic "V" ways precision ground to within .0005-inch of parallelism over entire operating area, assure dependable accuracy.

GEARS. Machine cut semi-steel; precision made—far superior to usual die-cast type. Extra-wide face; bull gear, back gears ⅝ in. wide, change gears ⅞ in. wide. With gears for 46 thread selections—4 to 216 right and left-hand threads.

BACK GEARS ENCLOSED IN HEADSTOCK. Advanced back gear design permits placing patented back gear shifter rack where it belongs—at operator's finger tips; no reaching over headstock. Assembly kept free from dirt and chips.

HEADSTOCK: Tempered, precision-ground steel spindle rides on two sets of New Departure ball bearings. Spindle nose diameter 1½ in.—8 right-hand threads per inch. No. 3 Morse Taper spindle with adapter to No. 2 Morse Taper. Hole through spindle 25/32 inch. Collet capacity ½ inch.

TAILSTOCK, CARRIAGE AND COMPOUND REST: Tailstock spindle travels 2¾ in., graduated in 16ths—takes No. 2 Morse taper accessories. 1½-in. offset for taper turning. Self-ejecting center. Carriage has power cross feed, power longitudinal feed. Cross slide graduated in .001; travels 6¼ in. Cross feed screw mounted in bronze bearings. Compound rest top slide graduated in .001; travels 2¼ in.,

swivels 90° in both directions, locks at any angle.

Carriage has 9-inch bearing surface on "V" and flat ways. Tool post opening for tool holder shank is ¾ inch by ¾ inch. Use up to ¼-inch cutter bits.

DRIVE: Three-step cone pulley with flat belt drive to lathe. Two-step "V" belt drive from "V" type motor pulley to flat counter-shaft pulley. Counter shaft and motor bracket included, giving 12 spindle speeds—30 to 1450 RPM.

LATHES INCLUDE: 17 change gears (6 installed); 6-in. face plate; two 50° centers; tool post holder; thread cutting dial; flat belt; motor pulley—(with ½, ⅝ or ¾-in. bore—Be Sure to State Bore Size); wrenches, parts list, complete instruction book. Gray finish. Order motor separately, see 83 WM 4576M on Page 36. Use with 41-in. "V" belt on Page 9.

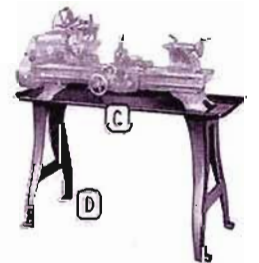
See following two pages for additional accessories to obtain maximum utility from lathe. *Not Mailable.* State bore size of motor pulley.

84 WM 2130R—24 in. between centers; 43½-in. bed length. Ship. wt. 320 lbs. \$29.50 Down.....or Cash \$294.95
84 WM 2136R—31 in. between centers; 50-in. bed length. Ship. wt. 357 lbs. \$31 Down.....or Cash \$309.95

B QUICK CHANGE GEAR BOXES. Convert Powr-Kraft metal lathes (A) to quick change gear lathes. Corrected lead screw included. Provides 48 threads and leads in either direction to carriage. By adjusting two levers, screw threads from 8 to 224 per in. are available. Changing 24-tooth stud gear for 48-tooth stud gear furnished with lathe, adds threads from 4 to 7 per in. Longitudinal power feeds .0015 to .1000 in. per revolution of spindle. Power cross feed .294 times longitudinal feed. Semi-steel gears, bronze self-lubricating bearings.

84 WM 2138K—Fits 84 WM 2130R above and old lathe No. 700. Ship. wt. 16 lbs. *Mailable.* \$9 Down.....or Cash \$85.95
84 WM 2139K—Fits 84 WM 2136R lathe listed above. Ship. wt. 25 lbs. *Mailable.* \$9 Down.....or Cash \$87.95

See Page 43 for details on Wards Monthly Payment Plan.



CHIP PAN AND LEGS

C STEEL CHIP PAN. For Powr-Kraft lathes only. Heavy-gauge steel. Fits Lathes (A) above. Use with legs (D) below. Rounded corners for extra strength. Rolled trim. *State Cat. No.* Ship. wts. 22 and 27 lbs.

84 WM 2141M—Fits 24-inch lathe only. *Mail.*.....\$12.95
84 WM 2137M—Fits 31-inch lathe only. *Mail.*.....\$16.50

D CAST-IRON LEGS. Gray finish. Fit Powr-Kraft lathes only. For lathes (A) above. Give steady support—feet have bolt holes for fastening legs firmly to floor. Bolts not included. Ship. wt. per pair, 81 lbs. 84 WM 2140R—*Not Mailable.* \$2.50 Down.....or Cash \$29.95

POWR-KRAFT BELT-DRIVEN POWER HACK SAW... STATIONARY TYPE 48.95

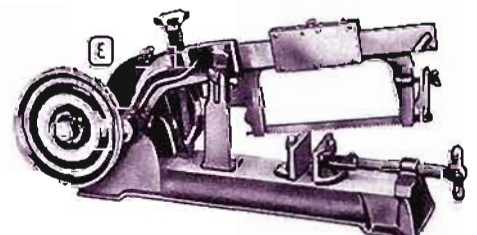
E Use in small production shops or for general, everyday run of small stock cutting. Castings of close-grained gray iron. Cam is integral with machine cut gear—controls pressure on forward stroke of blade, insures pressure relief on back stroke—for smooth cutting, longer blade life. Bronze bushed bearings give dependable performance.

Equipped with cast-iron vise—jaws 4 in. wide, 2 in. deep—opens to 4 in. Swivels to permit angle cutting from 0 to 45 degrees. Capacity 4x4 in. Length of stroke 4½ in.—80 to 100 strokes per min.

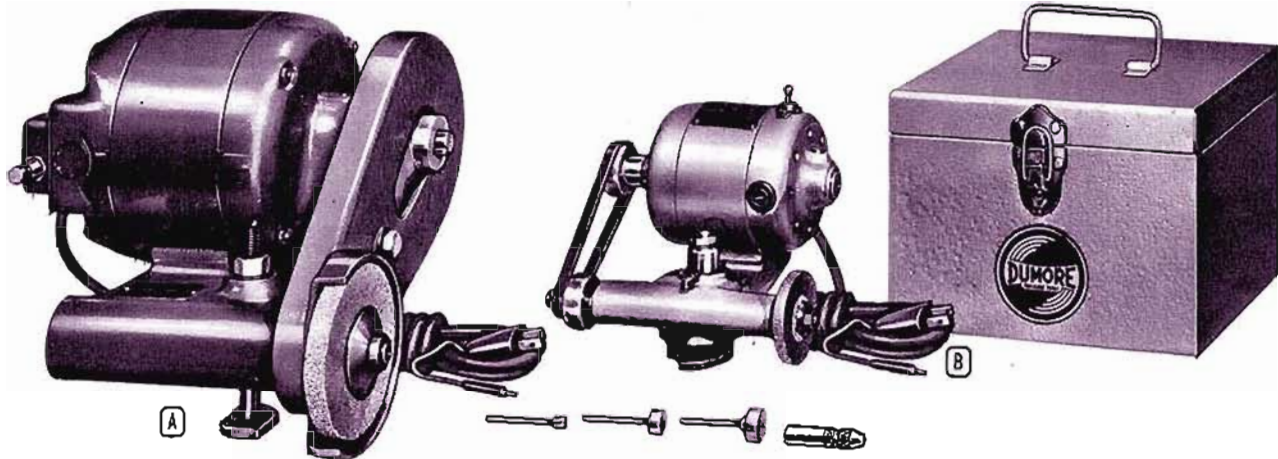
Size overall: 8¼. wide, 29 in. long, 13 in. high.

Includes: One 12 by ¾-in. power blade (for extra blades see below); and 8-in. diam. machine "V" pulley. Recommended: ½-HP. 1725 RPM motor (see Page 36), 2½-in. diam. "V" motor pulley and 44-in. "V" belt on Page 9.
84 WM 2403R—Power Hack Saw. Ship. wt. 30 lbs. *Not Mailable.* \$5 Down.....or Cash \$48.95

POWER HACK SAW BLADES (not shown). Use with Saw above. High-speed Molybdenum steel. 12 in. long, ¾ in. wide. 14 teeth per in.
84 WM 4486—Ship. wt. pair, 5 oz.....Pair \$1.15



Gr. 1-2 WARDS 33



Powr-Kraft, Dumore and Globe Attachments

NEW DUMORE UTILITY TOOL POST GRINDER 70.00

(A) Heavy-duty tool post grinder for use in machine shops, garages, repair and welding shops. Has plenty of power and stamina for full shift production work. Precision-built for accuracy to within .0002 in. A powerful portable unit that converts your Powr-Kraft or Logan 9 to 13-in. lathe to a precision external grinding machine. Also fits most other nationally known lathes with 9 to 13 in. swing. Can also be quickly and easily mounted on bench or lock in vise for other grinding jobs such as: Burring castings, cleaning welds, grinding, polishing, wire brushing and buffing, etc.

Heavy cast-iron frame for rigid mounting with minimum of vibration. Spindle speed 5,000 RPM. Permanent-mount 1/2-in. diam. spindle has precision grease-sealed ball bearings... lubricated for life. Takes up to 4-in. diameter wheels. 1/4-HP constant-speed, continuous duty split-phase motor for 115-volt, 60-cycle AC. Handy on-off switch mounted in motor housing.

Securely mounted on heavy T-bolt for fast lathe, vise and bench mounting. Easily portable—set where wanted for buffing and grinding. Quickly moved from one job to another. Actual weight 33 lbs. Distance from center line of spindle to frame base 3/4 in.; from spindle to mounting post base 1 1/4 in.

With 1/4-HP Split-phase motor, protective belt-wheel guard and one 4x1/2x1/2 in. Dumore balanced general purpose grinding wheel.

84 WMP 2240K—Only \$7 Down on Monthly Terms...Cash Price \$70.00

DUMORE PRECISION TOOL POST GRINDER 50.50

(B) For small precision jobs in machine shops, industrial schools and home workshops. Accurate to within .0001 in. Mounts on the compound rest of Powr-Kraft and Logan 10-in. lathes. Used for sharpening tools, cylindrical grinding, industrial precision grinding of small parts.

Armature and rotating parts are all dynamically balanced to prevent vibration and increase precision. Unique frame-type construction assures rigid mounting which is essential in precision grinding. Two spindle speeds—10,000 and 22,500 RPM. 1/14-HP universal motor operates on 110-120-volts AC or DC. Uses 1/8 to 2-in. diameter wheels.

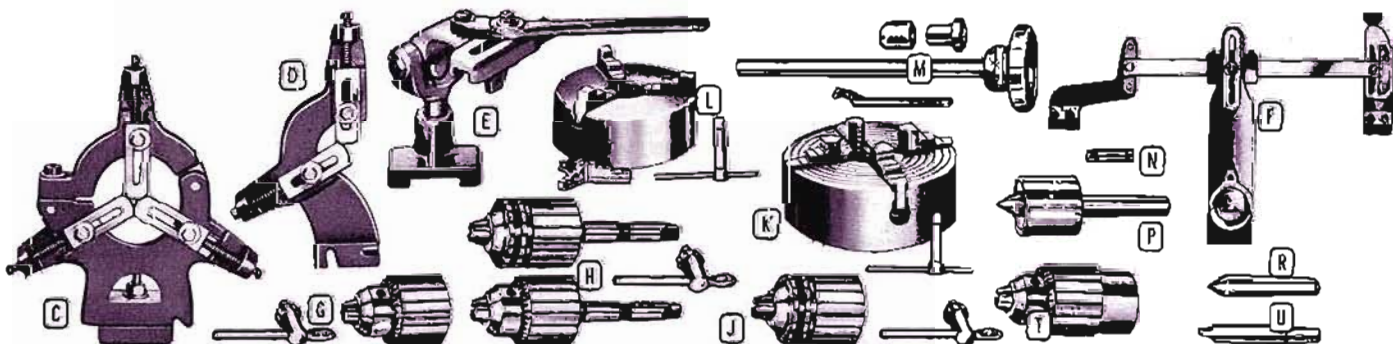
Internal grinding capacity from 1/2-inch or larger diameter to 2 1/4 inch deep. Pre-loaded ball bearing spindle with Dumore patented oiling system, removable tool post, and interchangeable chuck set-up for internal work. Mounted on "T" bolt. Distance from center line of spindle to frame base 1/2 inch; from spindle to mounting post base, 3/4 inch.

Accessories include: 1/8-in. chuck assembly for internal grinding; 2 belts, 10 1/2 x 3 1/2 in.; can of oil; straight wheel 2x1 1/2 x 1/4 inch; 3 mounted wheels; steel carrying case. Actual weight 6 1/4 lbs. \$5.50 Down on Terms.

84 WMP 2237K—External and internal grinder, complete...Cash \$50.50

84 WMP 2236K—External grinder only. Same as above less 1/8-inch chuck assembly, 1 belt, 3 mounted wheels, carrying case. \$5 Down. Cash \$45.50

Note: You may use Wards Convenient Monthly Payment Terms to purchase Power Tools and accessories. See Page 43 for details.



Accessories "C" to "F" below will fit all Powr-Kraft and Logan 10-in. metal-cutting lathes.

(C) CENTER REST. Clamps to inner bed ways. Top is hinged for inserting or removing shafts. Cast-iron frame; adjustable cast-iron jaws. 84 WM 2165—Ship. wt. 10 lbs....\$9.75

(D) FOLLOWER REST. Used for supporting thin work. Mounts on back of carriage and follows cutting tool. Sturdy cast-iron frame. Jaws adjust. 84 WM 2164—Ship. wt. 4 lbs....\$5.75

(E) MICA UNDERCUTTER. For armatures up to 5-inch diameter. Mounts on back of cross slide. 2-in. stroke. With one each .035 and .020 size. 84 WM 2208K—Ship. wt. 8 lbs....\$21.00

EXTRA SAWS FOR (E). Size .015 or .020. State size. 84 WM 2209K—Ship. wt. 6 oz....Pkg. of 6....75c

(F) TAPER ATTACHMENT. Tapers up to 4 inches per foot in either direction. Replace lathe cross slide with taper attachment cross slide—becomes permanent part of lathe. All parts except cross slide are easily detached when straight turning is performed. Microscrew adjustment of slide bar. 84WM2206K—Ship. wt. 18 lbs. \$55.00. Cash \$52.95

(G) JACOBS DRILL KEY CHUCKS. Fit headstock or tailstock on all lathes. Use with arbors at right to adapt chucks to No. 2 Morse taper. Postpaid. 84 WMP 2146—Capacity 0 to 1/2 in....\$ 8.00

84 WMP 2147—Capacity 3/16 to 3/4 in.... 11.95

(H) JACOBS COMMUTATOR KIT. Chucks hold armature shaft during reconditioning. Includes 1/4 to 3/4-in. cap. armature driving and center rest chucks. No. 2 Morse taper arbors included to fit headstock and tailstock. Metal box. Postpaid. 84WMP2151—Complete Kit. \$2.50 Dn., Cash \$22.55

(J) JACOBS CENTER REST CHUCK. Requires No. 2 Morse taper arbor (84 WMP 2153) to mount in tailstock to support centerless work. Postpaid. 84 WMP 2150K—1/4 to 3/4-in. capacity....\$11.00

(K) LOGAN 4-JAW, 6-IN. INDEPENDENT CHUCK. Fits lathes having 1 1/2-in. 8-thread spindle. Semi-steel—outer edge and face ground. Reversible jaws with independent screw adj. For round or irregular work—outside or inside grip. 84 WM 2143—Ship. wt. 13 lbs....\$22.50

UNION 4-JAW CHUCK. Like above. 6-in. 84 WM 2247—Ship. wt. 10 lbs....\$23.00

(L) 3-JAW, 5-IN. UNIVERSAL CHUCKS. Fit 1 1/2-in. 8-thread spindle. Self-centering jaws. 84WM2142—Logan Medium Duty. Wt. 9 lbs....\$31.50

84WM2207—Logan Heavy Duty. Wt. 11 lbs.... 39.95

84WM2246—Union Med. Duty. Wt. 7 lbs. 8 oz.... 36.50

(M) DRAW-IN COLLET CHUCK ATTACHMENT. Chucks round work 1/16 to 1/2 in. Hollow draw-in bars. Includes: spindle cap, closing sleeve, wrench. 84 WM 2150K—Mailable. Ship. wt. 5 lbs....\$25.95

(N) DRAW-IN COLLETS. Sizes: 1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 13/32, 7/16, 1/2 in. 84 WM 2162K—Mail. Wt. 6 oz. State size. Each \$4.25

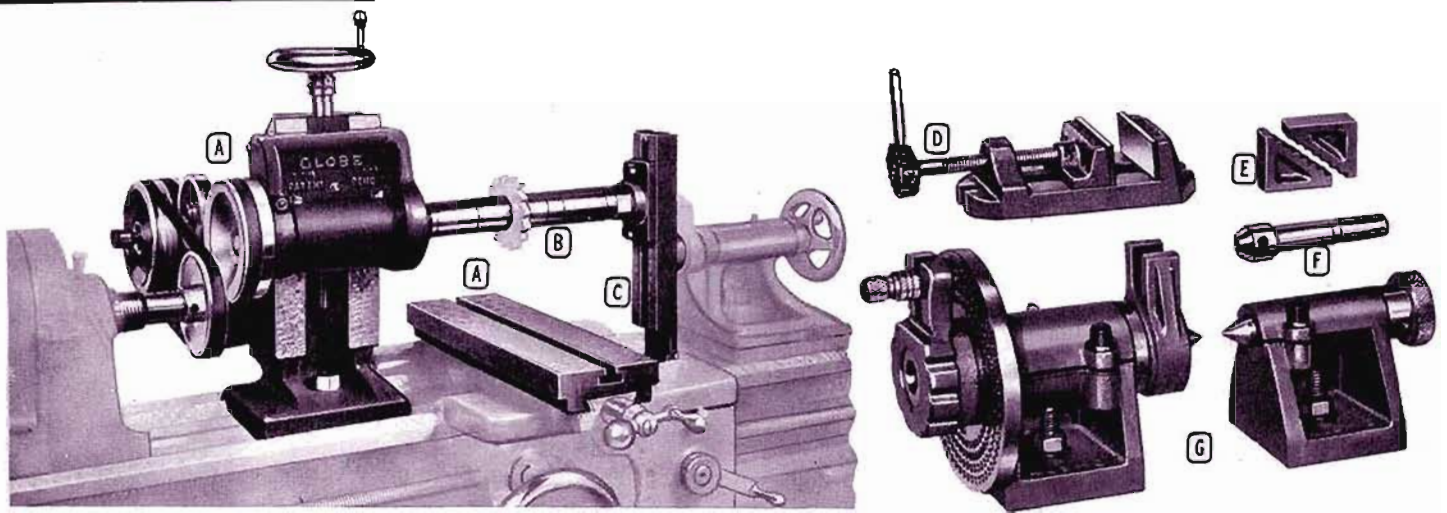
(P) 60° CENTERS. No. 2 Morse taper shank. Shipping weights 2 lbs.; 8 oz. (P) 84 WM 2200K—Anti-Friction 60° Center. Ball and roller bearings. \$3 Down on Terms, Cash \$26.95 (R) 84 WM 2201K—Regular 60° Center.... 2.25

(T) JACOBS HEADSTOCK CHUCKS. Fit 1 1/2-in. 8-thread spindle. Hollow body. Postpaid. 84 WMP 2148K—1/8 to 3/8 in. capacity....\$16.20

84 WMP 2149K—3/16 to 3/4 in. capacity.... 19.73

(U) JACOBS CHUCK ARBORS. Adapt chucks to No. 2 Morse taper in lathe. Postpaid. 84 WMP 2152—Fits chuck (84 WMP 2146)....99c

84 WMP 2153—Fits chucks (84 WMP 2147, 2150) 99c



Make Your Metal Lathe More Versatile

GLOBE MILLING HEAD... QUICKLY AND EASILY CHANGES LATHE TO MILLING MACHINE

A Globe Milling unit quickly attaches to Power-Kraft and Logan 10-inch lathes. Unit consists of: column, spindle assembly complete with drive pulleys, "V" belts, clamp and milling table with nut and gib. **EASY TO OPERATE.** Spindle moved into position to engage work, rather than work lifted to engage spindle. Simple and accurate. **EASY TO INSTALL.** Can be attached to lathe in three minutes. Base is accurately machined to fit ways of lathe and to insure that face of column is parallel with ways. **USES ALL LATHE SPEEDS.** Speed ratio between lathe and miller spindle is 1 to 1. Faster speeds possible with larger pulley. **DURABLY BUILT.** Large double-shielded grease-sealed ball bearings and rugged construction throughout enable it to withstand the hardest use. Shipped Prepaid. 84 WMP 3415F—\$18 Down, or Cash \$178.60

B MILLING ARBORS. Alloy steel, complete with hardened end and ground spacers in standard increments. Tapped for draw-in bolt. No. 9 Brown and Sharpe taper. Arbor Support (C) should be used with 8-in. arbor (cutter not included). 84 WMP 3417K—Postpaid. 1x4 in....\$22.10; 1x8 in....\$31.85

C BALL BEARING ARBOR SUPPORT. Double sealed. Serves same purpose as over-arm on large millers. Use with 8-in. arbor 84 WMP 3417K. \$3 Down on Terms. 84 WMP 3416K—Postpaid.....Cash \$27.30

D MILLING TABLE VISE. Close-grained casting; replaceable jaw plates. Jaws 3½ in. wide, 2⅞-1/2-in. opening, 1⅞ in. deep. 84 WMP 3420K—⅜-in. Acme thread screw.....\$28.10

E STEP BLOCKS. Hold pieces firmly. High quality, close grained casting with finished bases. State size. 84 WMP 3419K—2½ in. high..Pr. \$1.55; 4½ in. high..Pr. \$5.85

F END MILL HOLDER. Alloy steel holders for double end mills are made with No. 9 Brown and Sharpe taper and topped for draw-in bolts. ½-in. size—fits Woodruff Cutters. 84 WMP 3418K—Postpaid.....\$12.35

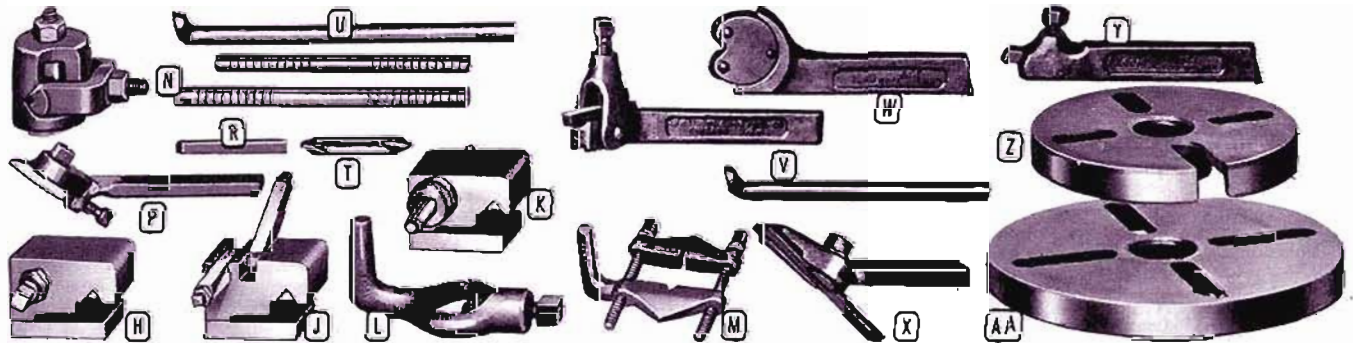
GLOBE DIVIDING HEAD 81.90

G Can be used for nearly all kinds of indexing work—cutting of spur gears, milling of index plates, milling of counterbore and reamer flutes, splined shafts, multiple key-ways, squares, opposed flats, etc.

Has swing of 4¾ in. when mounted directly on base. Larger swing when mounted on raising block. Headstock and tailstock carry 7/16-in. wide removable tongue. Headstock spindle carries No. 2 Morse taper center, has 9/16-in. diam. through hole, 1⅞ in., 8-thread spindle nose to receive standard chuck and dog blocks (dog blocks included). Four-hole index plate gives following divisions: All numbers 1-10, 11, 12, 14, 15, 18, 20, 22, 27, 28, 30, 44, 54, 56, 60.

Spindle, tailstock center and thrust collar bearing face hardened and ground. Center hole smoothly taper reamed. \$8.50 Down. 84 WMP 3421K—Postpaid.....Cash \$81.90

For complete Index of Power Tools and Accessories listed in this book see Page 30



H CARRIAGE STOP. Gives positive position stop for lathe carriage. Use either to right or left. Adjustment screw with locknut. 84 WM 2197K—Ship. wt. 2 lbs.....\$3.98

J DOUBLE CARRIAGE STOP. Adjustable screw in end of each finger sets carriage for two desired positions. 84 WM 2196K—Ship. wt. 3 lbs.....\$2.65

K LOGAN MICROMETER CARRIAGE STOP. Accurately locates carriage position on lathe bed. Micrometer graduated in .001 in. 84 WM 2195K—Ship. wt. 3 lbs.....\$10.45

L STANDARD LATHE DOGS. Highest quality heavy drop-larged bar steel. 84 WM 2183—State Size. Weight each, 10 oz. ½-inch.....\$1.04; ¾-inch.....\$1.19 1-inch.....1.45; 1½-inch.....1.75

M CLAMP TYPE LATHE DOG. For square, hex, rectangular, round work. Mounts without removing work. Drop-forged steel. 84 WM 2182—1¾ in. Ship. wt. 1 lb. 4 oz.....\$3.85

N GLOBE BORING BAR SET. For 9 or 10-in. Logan or Power-Kraft lathes. Holder has ⅜-¼-in. diam. cap. ¼-in. calibrations. Tool bit holes broached 90° one end, 45° other. Incl.: holder; ⅜, ½-in. boring bars; 2 wrenches. 84 WMP 2238K—Postpaid.....\$12.95

EXTRA GLOBE BORING BARS. With bit. 84 WMP 2239K—Postpaid. State size.

Bar size	Bit size	Ship. Wt.	Each
¾x 7 in.	⅜ in. sq.	4 oz.	\$3.50
½x 8 in.	⅜ in. sq.	8 oz.	3.75
⅜x 9 in.	⅜ in. sq.	12 oz.	3.85
¾x 10 in.	⅜ in. sq.	1 lb.	3.95
¾x 11 in.	¼ in. sq.	1 lb. 8 oz.	4.50

TOOL BITS. Fit bars above. Wt. 8 oz. 84 WMP 2249K—Postpaid. State size.

Size, In.	6 for	Size, In.	6 for
½x 1⅜	\$1.20	¾x 2½	\$1.80
⅜x 2½	1.80	¾x 1½	1.50
¾x 1½	1.50	½x 2½	2.10
¾x 1⅜	1.20		

P THREADING TOOL HOLDER. ⅜x¾-in. shank. Drop forged. 84 WM 2171—Ship. wt. 8 oz.....\$4.75

R BLANK CUTTER BITS. ¼x¼x2". 84WM2203—Wt. 11lb. Set of \$31.35

HIGH-SPEED FORMED TOOL STEEL BITS (not shown). Includes round nose, right and left turning, right and left facing and threading bit. 84WM2204—Wt. 1 lb. Set of 6, \$1.98 84WM2205—Like above but Tungsten carbide tipped. Set of 6, \$2.75

T 60° CENTER DRILL, COUNTER-SINK. Wt. 3 oz. State size. 84WM2181—⅜ 49c; ⅜ 54c; ½ 59c

U BORING BARS. Fit holder (V). 84WM2180—Wt. 3 oz. State size. ½x4 in....89c; ¾x4½ in....95c ¼x5, \$1.15; ⅜x6, \$1.39; ¾x7, \$1.85

V BORING TOOL HOLDER. With ½-in. boring bar, bit, wrench. 84 WM 2179—Wt. 1 lb. 4 oz.....\$5.59

W KNURLING TOOL HOLDER. With Medium Knurl. 84 WM 2175—Wt. 10 oz.....\$5.65

DIAMOND FORMED KNURLS. Ship. wt. pair, 2 oz. 84 WM 2173—Fine...Pr. \$1.85 84 WM 2177—Med...Pr. 1.85 84 WM 2178—Coarse...Pr. 1.85

X CUT-OFF TOOL HOLDER. Ship. wt. each, 9 oz. 84WM2173—Rt. Hand...\$2.79 84WM2172—Straight...2.79 84WM2174—Extra blade.

Ship. wt. 1 oz.....1.25

Y DROP-FORGED HOLDERS. For ¼-in. sq. bits. ¾x¾-in. shank. Av. ship. wt. 9 oz. 84WM2168—Right Hand \$2.35 84WM2169—Left Hand...2.35 84WM2170—Straight...2.35

Z FACE PLATES. Fit Power-Kraft, Logan and others with ½-in. 8-thread spindle. Machined and balanced. (Z) 84 WM 2154—6-in. diam. Ship. wt. 3 lbs. 6 oz.....\$3.98 (AA) 84 WM 2155—8-in. diam. Ship. wt. 5 lbs. 12 oz.....\$5.98