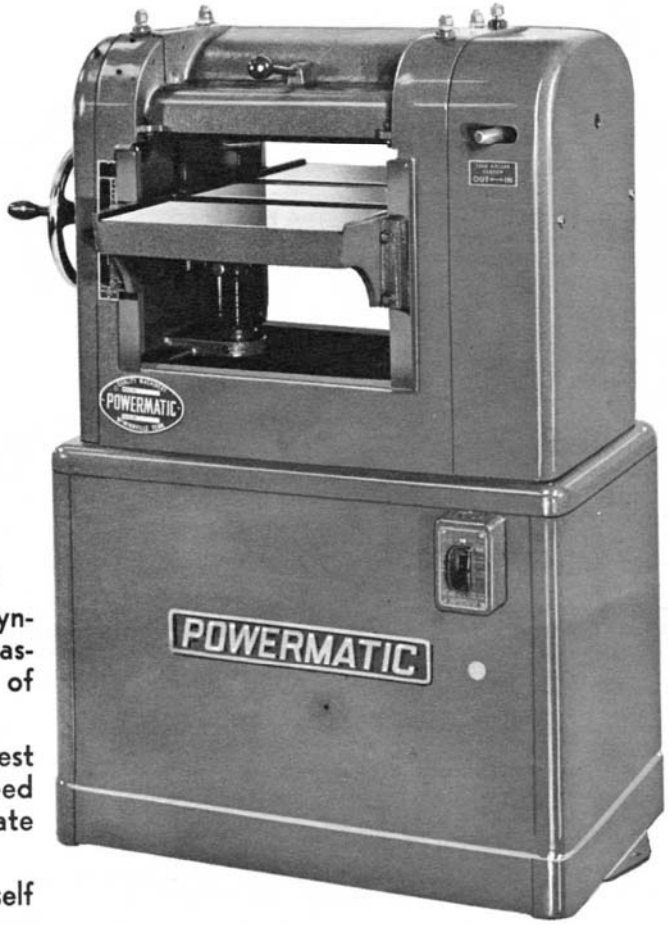
Model 100
12" Planer

ALL MACHINES PERFORMANCE-TESTED BEFORE SHIPMENT

Smaller shops everywhere applaud the features of this mighty mite of the Powermatic planer line. Though small in size, cabinet, school, pattern and light-duty millwork shops have found the Model 100 completely adequate for the most precise requirements.

Incorporating many famous features of the larger Powermatic planers, this low-cost model is proving its dependably superior performance year-in and year-out in every type of small shop.



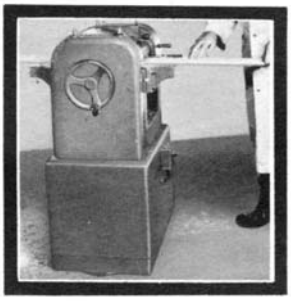
T.E.F.C. Motor Standard

smoother surfacing saves finishing time

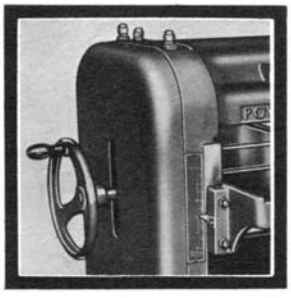
The unique chipbreaker construction and perfectly synchronized operation of cutterhead and feed rollers assure virtually gap-free surfacing for a wide variety of stocks at maximum speed.

The extra size 12" x 24" one-piece bed is the longest available on any 12" planer and assures greater infeed and outfeed support of longer stock for more accurate surfacing.

See how fast the Model 100 will start paying for itself in your shop with faster precision production.

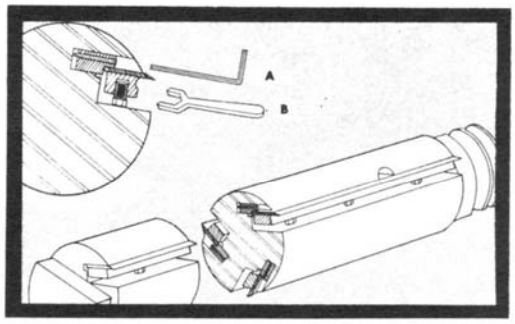


Extra Safety in Operation—the chipbreaker is mounted extremely near the cutterhead and extends completely over it to permit deep-cut surfacing without difficulty. All moving parts completely guarded.



Convenient Bed-Adjustment Hand-Wheel activates bed acme-thread screws which operate in ball thrust bearings. Easy-to-read thickness gauge. One-piece cast iron frame keeps perfect alignment.

Built For Heavy Work-Loads—Top rollers and pressure bar adjustments are fully visible and can be adjusted while machine is in operation. Positive clutch starts or stops feed rolls instantly.



Speeds Accurate Knife Setting—a standard feature!

Set and secure all cutterhead knives in as little as half the time. Adjust knife support jack-screws (A) with Allen wrench and pressure-lock knife safety shim (B) with end wrench. Cutter-head mounted in over-size sealed ball bearings. Finest carbon tool steel.

combining safety, precision and new economy

FEATURES

FRAME: Precision machined from extra heavy one-piece cast iron. All bearing housings are line bored for perfect bearing alignment.

BED: 12" x 24", the longest one-piece bed of all 12" planers. Built of heavily rib-reinforced cast iron, precision ground to satin smoothness for perfect finishing.

Convenient hand-wheel adjusts bed through full 5" range, with 1/16" movement upon each complete turn. Adjacent front-mounted gauge is calibrated for quick, easy reading.

CUTTERHEAD: Safety-type, milled from high carbon steel and fitted with 3 high-speed knives. Mounted in sealed ball bearings, the entire cutterhead unit may be lifted free by removing feed drive pulley and two locking screws from flange mounting.

Operating speed is 4400 RPM, making 13,200 cuts-per-minute (72 knife-cuts-per-inch) at 15 feet-per-minute feed rate. **See Knife Adjustment feature on opposite page.**

FEED ROLLS: Corrugated infeed roller and smooth outfeed roller are 2" in diameter and driven with extra heavy cut gears. 1" diameter feed roller journals are mounted in 3" shaft bearings for longer bearing life. Feed roll pressure springs are top mounted over roller and fully visible for quick adjustment.

PRESSURE BAR: Features extra wide foot and is mounted extremely close to cutterhead for perfect outfeed control. Easy to adjust from either end while machine is in operation.

CHIPBREAKER: Mounted adjacent to cutting circle for top quality finishing. Accurately machined foot is extra wide for longer wear.

POWER FEED CONTROL: Handy clutch lever to start and stop feed instantly without stopping power. 15 feet-per-minute feed rate at 4400 RPM.

STOCK CAPACITY: Surfaces stock up to 12" wide and from 1/16" to 5" thick. Stock length can be as short as 7½".

POWER: 2-HP motor is adequate for light and medium work; 3-HP motor is recommended for heavy-duty operation. Motor is furnished with 2-groove drive pulley.

FEED DRIVE: Positive action V-Belt drive assures smooth, trouble-free stock feed. Feed problems associated with gear transmissions are eliminated.

STANDARD EQUIPMENT

12" PLANER WITH STAND LESS MOTOR: Set of 3 high-speed steel knives, scaled B bearing cutterhead, Jack screws, cutterhead pulley, steel stand, set of wrenches and pivot type motor base—Less motor, motor pulley, belt, switch, and wiring.

12" PLANER WITH STAND AND MOTOR: Same as above except with motor, motor pulley, belt, switch, and wiring.

STANDARD MACHINES

120-01—Complete Model 100 Planer with stand, wrenches and knives, less motor.
120-02—Planer with 3-HP, 1-phase motor, O/L Switch #1-23.
120-03—Planer with 3-Hp, 3-phase motor, O/L Switch #3-27.
120-04—Planer with 2-HP, 1-phase motor, and Switch #1-21.
120-05—Planer with 2-HP, 3-phase motor, and Switch #3-25.
120-07—Planer with 1½-HP, 3-phase motor, and Switch #3-25.
120-08—Planer, less stand.

OPTIONAL ACCESSORIES

When planer is ordered with motor, all equipment is furnished to run same, including switch.

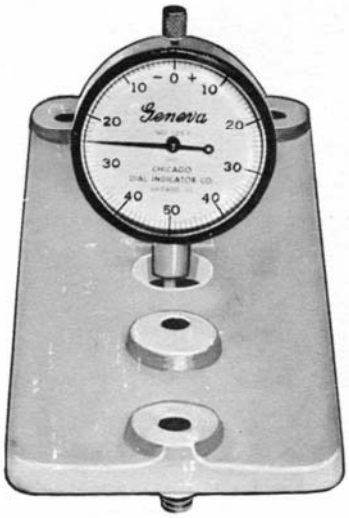
120-20—Motor Pulley (1725 RPM) 6½" Diameter (Specify bore). Wt. 2 lbs.
120-21—Motor Pulley (3450 RPM) 3.40" Diameter (Specify bore). Wt. 2 lbs.
120-22—2 Belts (3450 RPM) 4L660. Wt. 1 lb.
120-23—2 Belts (1725 RPM). Wt. 1 lb.
120-24—Knives (set of 3). Wt. 1 lb.
120-25—1-phase O/L Switch #1-23. Wt. ¾ lb.
120-26—3-phase O/L Switch, #3-27. Wt. 1 lb.
120-27—Magnetic 3-phase Switch, #3-30 & 1-3-32. Wt. 6 lbs.
120-28—Magnetic 1-phase Switch. #1-29 & 1-3-32. Wt. 6 lbs.
120-29—JIC electricals for one or 3-phase. Wt. 20 lbs.

SPECIFICATIONS

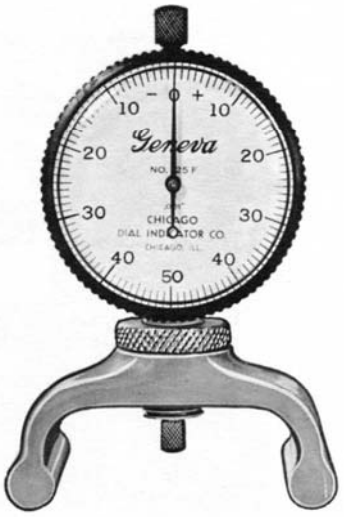
Bed	12" x 24"
Feed Roll Diameter (infeed and outfeed)	2"
Table Roll Diameter	1½"
Maximum depth of cut	¼"
Stock thickness range	1/16" to 5"
Widest stock	12"
Shortest planable stock (butted)	7½"
Cutterhead (3-knife) cutting arc	3"
Knife-cuts-per-inch	73
Recommended cutterhead speed	4500 RPM
Knife size	⅛" x ⅞" x 12"
Rate of feed	15 FPM
Power recommended for light and medium work	2-HP
Power recommended for heavy work	3-HP
Weight, net, less stand	300 lbs.
Weight, net, with stand	378 lbs.
Weight, domestic crated, less stand	350 lbs.
Weight, domestic crated, with stand	410 lbs.
Weight, domestic crated, with stand and motor	455 lbs.
Weight, export boxed, less stand (15.3 cu. ft.)	405 lbs.
Weight, export boxed, with stand (27.6 cu. ft.)	500 lbs.
Weight, export boxed, with stand and motor (27.6 cu. ft.)	560 lbs.

Quick...Easy to Use...Easy to Read

Planer Dial Gauges



Bed and Feed Roll Gauge—Dual purpose . . . gauge mounted with swivel on cast iron base with leveling screws for simplified operation. Dial face rotates for easy zeroing. **Part No. 19.**



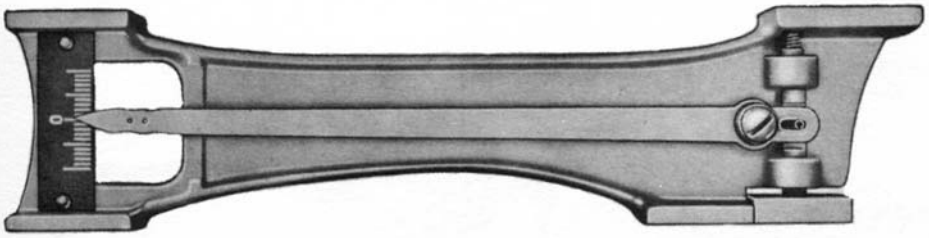
Cutter Head Gauge—Chrome plated plunger type gauge mounted on cast iron base. Designed to rest squarely on cutterhead for fast micrometer accuracy in setting knives. **Part No. 18.**

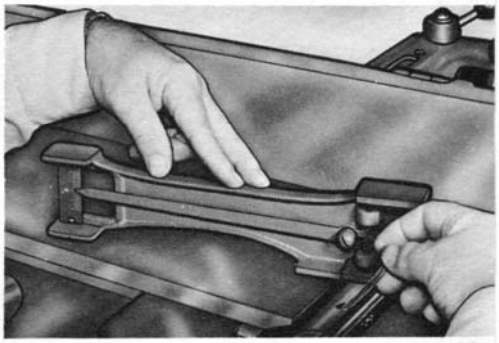
Knife Setting Made The Easiest Possible . . . Greater Precision . . .

Proper use of Micrometer Knife setting gauge will maintain equal knife height, assuring a smooth, even planed surface. Check knife height with Dial Indicator immediately upon receipt of your new machine. Knives are set approximately 1/16" above high point of chipbreaker in knife locking shim. When knives are ground or a new set installed, care should be taken to re-set to original height.

Model 150 Quik-Set Knife Gauge

Quik-Set® accuracy in JOINTER cutterhead





NEW, QUICK WAY TO SET KNIVES ACCURATELY

Anyone can set jointer knives or bed rollers speedily and precisely with this easy-to-use gauge. Variations are micrometer calibrated and are easy to read on this fool-proof measuring instrument.

If you've ever had to make settings by "guess," you quickly found out how important accurate positioning is . . . in outfeed and infeed efficiency as well as the cutterhead itself.

Avoid poor machine performance. Install every new or resharpened blade in perfect cutting position . . . adjust bed rollers fast and sure for top feed performance.

wt. 2 lbs.

November, 1965

OPERATING INSTRUCTIONS

AND

PARTS LIST

MODEL 100-12″ PLANER

●

FOR SERIAL NUMBERS FROM 6200 UP

●

POWERMATIC, INC.
McMinnville, Tennessee

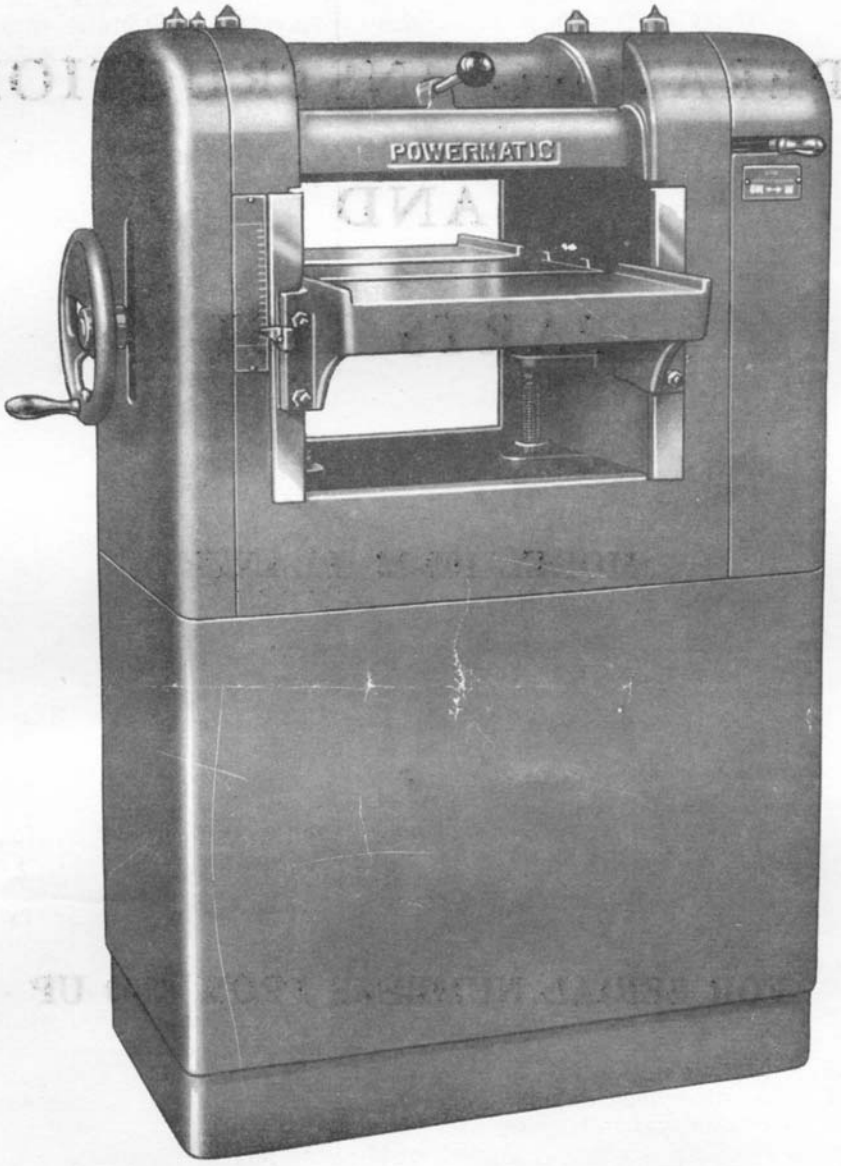


Figure 1

MACHINE DESCRIPTION AND SPECIFICATIONS

1.	**FRAME**	Complete cast iron construction with detachable motor base.
2.	**BED**	Heavy cast iron accurately machined and ribbed to withstand any type of abuse. Table size 12″ x 24″. Fitted with two adjustable idle rolls.
3.	**CUTTERHEAD**	Three knife safety type. Head diameter 3″. Mounted in oversized sealed ball bearings. Fitted with 3 high speed steel knives 12″ x ⅞″ x ⅛″.
4.	**CHIP BREAKER**	Solid one-piece cast iron construction. Exceptionally close fitted to cutterhead.
5.	**FEED ROLLERS**	Corrugated infeed roller and smooth outfeed roller. 2″ diameter. Adjustable feed pressure on both rollers. Driven by V belts from cutterhead shaft to oversized cut gears.
6.	**RATE OF SPEED**	15 feet per minute.
7.	**POWER FEED CONTROL**	Shift lever located conveniently to operator. Stops feed instantly without stopping power.
8.	**GUARDS**	Fully guarded over all moving parts with removable guards.
9.	**CAPACITY**	Thickest ..... 5″ Thinnest ..... 1/16″ Widest ..... 12″ Shortest not butted ..... 7½″ Maximum depth of cut ..... ¼″ Cuts per inch ..... 70 Weight, less stand ..... 300 lbs. Weight, with stand ..... 350 lbs. Floor space required ..... 15″ x 26″
10.	**POWER REQUIREMENTS**	2 HP for light and medium work; 3 HP for heavy duty planing. Furnished with 2 groove drive pulley.

SAFETY RULES

1. This machine has been designed with as many safety features as humanly possible, however, always remember that a planer is only as safe as its operator.
2. BEFORE starting planer be sure to check the following:
   (a) Table must be completely free of all foreign matter.
   (b) Cutterhead knives MUST be inspected *before* each operation. Check for tightness in cutterhead and make certain knives are not fractured in any place. Flying knives are DANGEROUS.
   (c) Knives for sharpness!!
3. Check material thickness and depth of cut desired. Never overload planer, or try to cut beyond its capacity.
4. As material is fed into machine, stand to side of board (never directly behind), nearest switch. "Kickback," caused by improper gripping of lumber by infeed roll and chipbreaker, can cause *serious* injury.
5. Never stand directly behind or walk behind machine when it is running. Direction of cutterhead rotation usually throws chips or any foreign material from rear of machine.
6. In case it is necessary to stop material as it is feeding through machine, disengage feed clutch and turn machine off. *Wait* until cutterhead has *completely* stopped before lowering table to remove material. Attempted removal while cutterhead is turning may cause "kickback."
7. *Never* horse around a running planer. "Play" should absolutely be forbidden as 9 out of 10 accidents are the results of carelessness and playing with machine as though it were a toy.
8. Always stop machine for adjustment or when leaving immediate area. Disconnect power source when working on or around any moving parts.
9. *Never* feed two boards through a planer with solid infeed rolls, at once (side by side or stacked). Kickback can result and board fly from machine with velocity of bullet.
10. Use *only* genuine Powermatic (or factory authorized) replacement parts and knives—otherwise all warranty and guarantees are null & void.
11. Keep all guards in place—and *use* them.
12. Do not wear long or loose sleeves or neckties when operating planer.
13. Extra care should be taken when running short pieces, butt with another piece of material of equal thickness and stand ASIDE.
14. Base of machine should be grounded to water pipe or central grounding system.

GENERAL SET-UP AND ALIGNMENT

1. RECEIVING

Uncrate and check for shipping damage. Clean all coated and greased surfaces. Read instructions thoroughly. Locate all lubrication points; adjustments; methods of drive.

2. MOUNTING

Mount machine securely to solid foundation. Locate in clean, dry and well ventilated building if possible. Motor and electrical connections should be protected when not in operation or if exposed to weather elements.

3. EXHAUST SYSTEM

Recommended as a must if efficient production operation required. Not a necessity where limited amount of operation being performed and machine can be kept clean of shavings.

4. INSPECTION

The above machine requires a minimum amount of attention and service. Periodic or regular inspection is recommended to insure that: machine is in proper adjustment; electrical connections are positive; no worn or loose V belts or bearings heating or loose.

5. BEFORE OPERATING

Check motor nameplate data or wiring diagram of motor and switch for proper voltage connection before wiring into line. Run motor without load to check the connections and direction of rotation. Always refer to motor nameplate data for rotation connections.

OPERATING ADJUSTMENTS

PLANER BED: The planer bed mounts in the main frame panels and is held rigid by the shims and adjusting screws (2) located in front of the machine. The bed is raised and lowered by the gears and thrust screws through the handwheel (1). Keep shims adjusted to hold planer bed rigid in ways but not too tight to restrict freedom of raising and lowering with handwheel. The planer bed must also be level with cutterhead. Check this by lowering bed to allow placing a small jackscrew type guage or block between one extreme end of cutterhead. Slide gauge to opposite end of cutterhead to determine if same measurement exists. If bed is out of level adjust in following manner. Loosen set screws in screw nut (3) on high side of bed and turn nut to left until bed is level and tighten set screw in nut.

PLANER BED IDLER ROLLERS: The adjusting screws (4) for the planer bed idler rollers are located directly under the bearings. Adjust .006″ to .010″ above bed level for planing smooth or dry material, and .015″ to .025″ for rough sawed or green material. Keep rollers adjusted to same height at both ends. When rollers are set too high a snipe or bite out will appear on both ends of planed material. If set too low, feeding will be restricted through material friction on planer bed.

POWER DRIVE FEED ROLLS: There are two power driven feed rollers. One corrugated infeed (7) and one smooth outfeed. The feed rollers are held with a spring loaded plunger slide with tension to regulate the pressure. Pressure on feed rollers is regulated with spring cap screw (12). To increase pressure, turn screw to right, to decrease, turn to left. The feed rollers are held up with stud bolts (13) and are raised or lowered by loosening lock nut on bolt (13) and turning to the right to raise, or to the left to lower rollers. Feed rollers should be set .030″ below the arc of the knife cut and the rollers should be parallel with planer bed. To set feed rolls, lower planer bed about 3″ below arc of cutterhead. Place gauge directly under cutterhead and turn head until one knife is down. Raise bed until gauge is .001″ below knife. Feed roller setting may be checked by feeding a short board through the machine, 8″ or 10″ wide and planing off a light cut. After the board has been fed through the machine, feed it through the machine until both feed rollers touch the board. (Stop with Clutch.) There should be 1/32″ clearance between the spring cap screw (12) and stud screw nut (13). If the rollers are not properly adjusted, they may be adjusted at this time.

CHIPBREAKER: The chipbreaker may be raised from the cutterhead with handle (18) exposing adjustments (15) that adjust the height of the chipbreaker. Chipbreaker should be set .030″ below arc of cutterhead knife. Chipbreaker should rest on material while it is being fed through the machine. When the material is fed through, chipbreaker should raise approximately 1/32″.

HOLDDOWN BAR: The holddown bar is adjusted with adjusting nuts (14) and should be adjusted .003″ below arc of cutterhead knife. To adjust holddown bar, loosen lock nut and turn adjusting screw (14) to the right to raise and to the left to lower.

FEED DRIVE BELTS: To adjust feed belts, loosen nuts (20) on the inside of planer frame and slide studs in slots until belts have proper tension. If machine does not feed properly remove guard and check for belt slippage.

LUBRICATION: The infeed and outfeed rollers have grease fittings (8) and (9). Feed drive sheaves are lubricated at (16) and (17). These fittings require greasing every ten (10) hours of operation with No. 1 grease, or a light weight type.

Planer bed ways, bed raising screws, bed idle roller bearings should be greased every ten (10) hours of operation with SAE No. 10 oil or equivalent.

MATERIAL THICKNESS GAUGE: To set the indicator on the material thickness scale (6) to indicate properly after changing knives, loosen the screw in the planer bed which holds the brass pointer and set to the thickness the material measures when planed or fed through the machine. The hole which mounts the brass pointer is slotted and will permit proper adjustment.

CUTTERHEAD: The cutterhead is equipped with three knives held in position with the lock shims and set screws (10). Knives must be adjusted to set evenly and level in the cutterhead. Before removing knives from cutterhead, the knife gauge should be adjusted to the height of the knives so the height of the knives will not be changed relative to the other parts of the head when the knives are replaced. The feed rollers, chipbreaker and pressure bar are adjusted to the arc of the knife cut. If the height of the knives are raised or lowered, the feed rollers, chipbreaker and pressure bar should be adjusted accordingly. Knives should not protrude more than .030″ beyond radius of cutterhead. When replacing knives after sharpening, place the "jack screw" studs in place making sure the "step" will act as a seat for the knife. Drop knife and shim into cutterhead slot so that the beveled edge of knife is just below the surface of the head. Tighten the two outside knife shim screws just enough to hold the knives snugly in the head. With knife setting gauge in place over one extreme end of the head, turn the allen screw in "jack screw" plugs, raising knife until knife touches stop on knife setting gauge. Repeat operation on other end of the cutterhead. *Next,* tighten the center knife locking shim bolt. Set the other knives in the cutterhead *before* tightening remainder of the shim bolts. After the knives have been set, final locking of knives should be done by rotating cutterhead and locking all shims uniformly. CAUTION—If one knife is locked tightly before the others, it may spring the cutterhead and cause vibration or uneven knife height.

KNIFE CARE: IMPORTANT: Knives should be kept sharp. The knives do all of the work and they will not do satisfactory work if they are DULL. The sets of knives are matched and balanced at the factory. When the knives are sharpened, care should be taken that they are kept in balance.

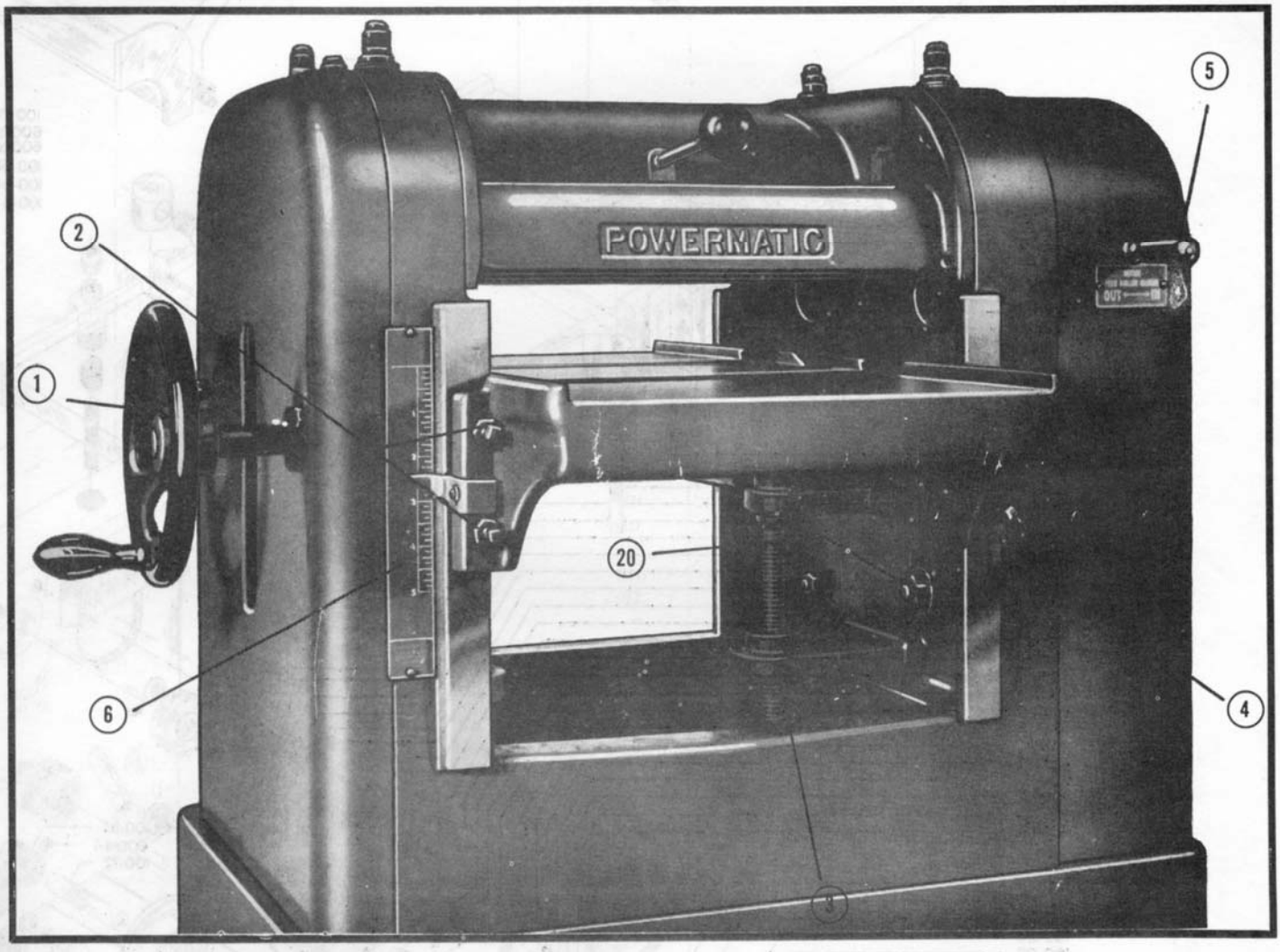
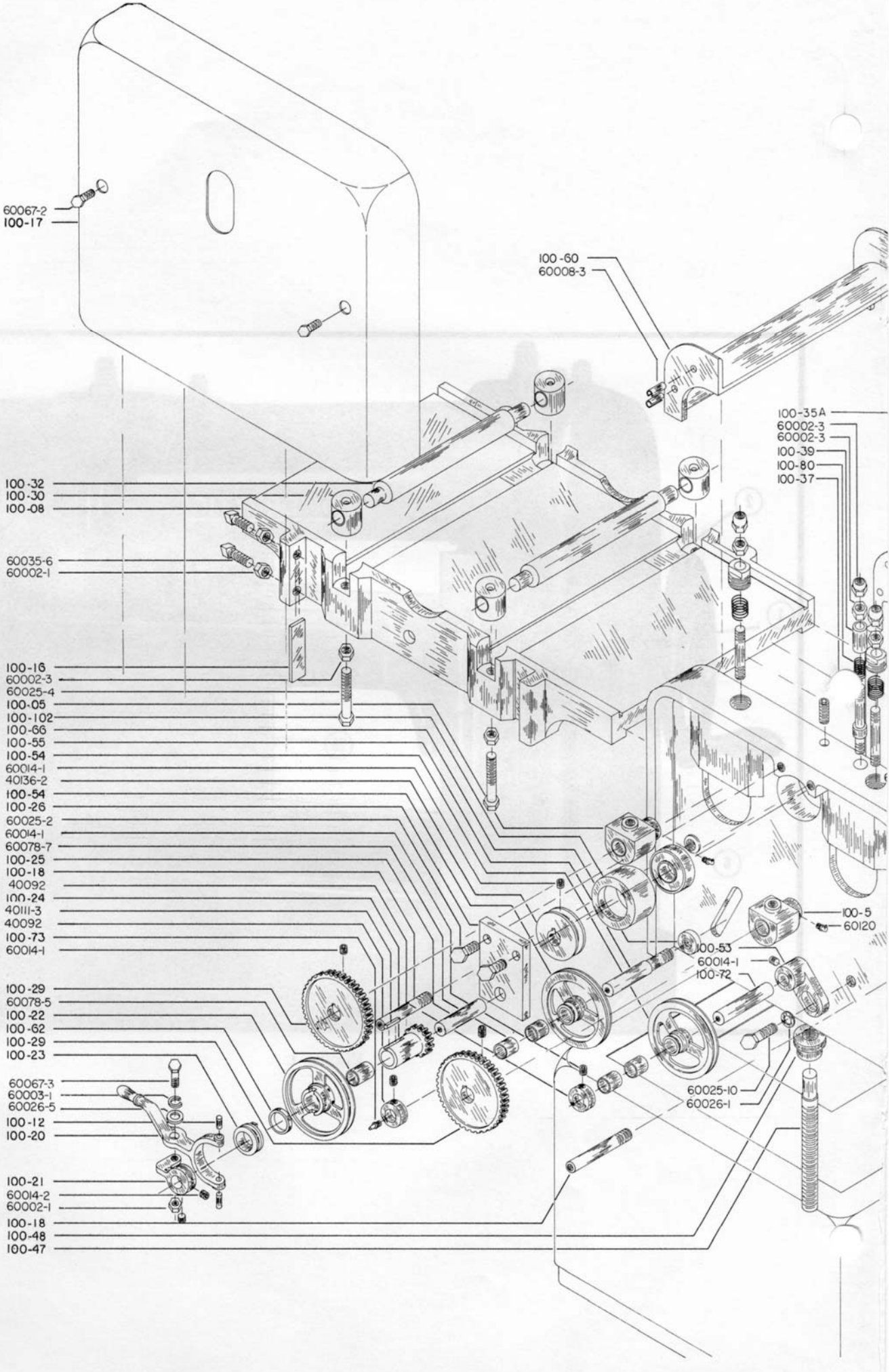
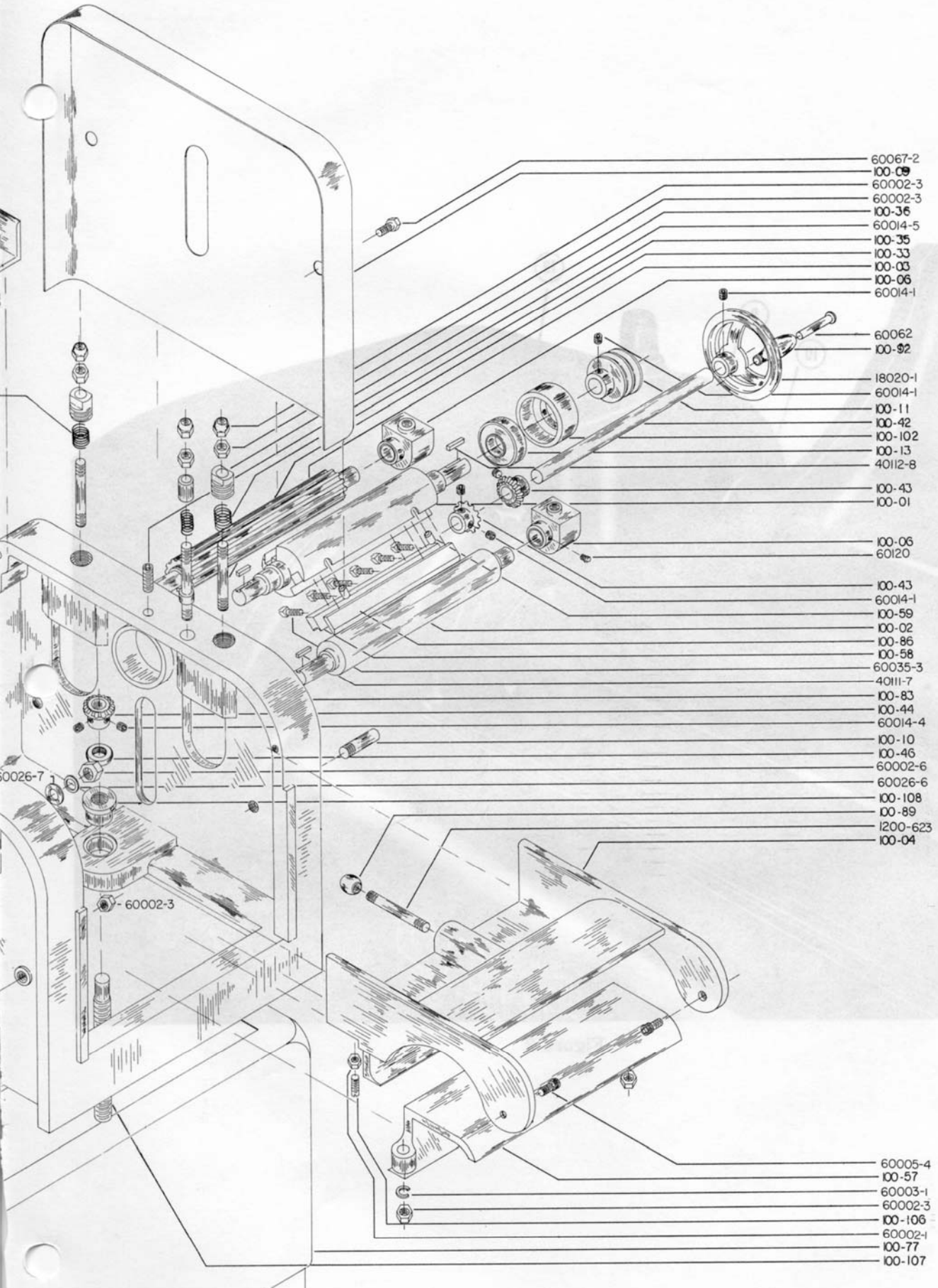


Figure 1


60067-2
100-17
100-60
60008-3
100-35A
60002-3
60002-3
100-39
100-80
100-37
100-32
100-30
100-08
60035-6
60002-1
100-16
60002-3
60025-4
100-05
100-102
100-66
100-55
100-54
60014-1
40136-2
100-54
100-26
60025-2
60014-1
60078-7
100-25
100-18
40092
100-24
40111-3
40092
100-73
60014-1
100-5
60120
100-53
60014-1
100-72
100-29
60078-5
100-22
100-62
100-29
100-23
60025-10
60026-1
60067-3
60003-1
60026-5
100-12
100-20
100-21
60014-2
60002-1
100-18
100-48
100-47


60067-2
100-09
60002-3
60002-3
100-36
60014-5
100-35
100-33
100-03
100-06
60014-1
60062
100-92
18020-1
60014-1
100-11
100-42
100-102
100-13
40112-8
100-43
100-01
100-06
60120
100-43
60014-1
100-59
100-02
100-86
100-58
60035-3
40111-7
100-83
100-44
60014-4
100-10
100-46
60002-6
60026-6
100-108
100-89
1200-623
100-04
60026-7
60002-3
60005-4
100-57
60003-1
60002-3
100-106
60002-1
100-77
100-107

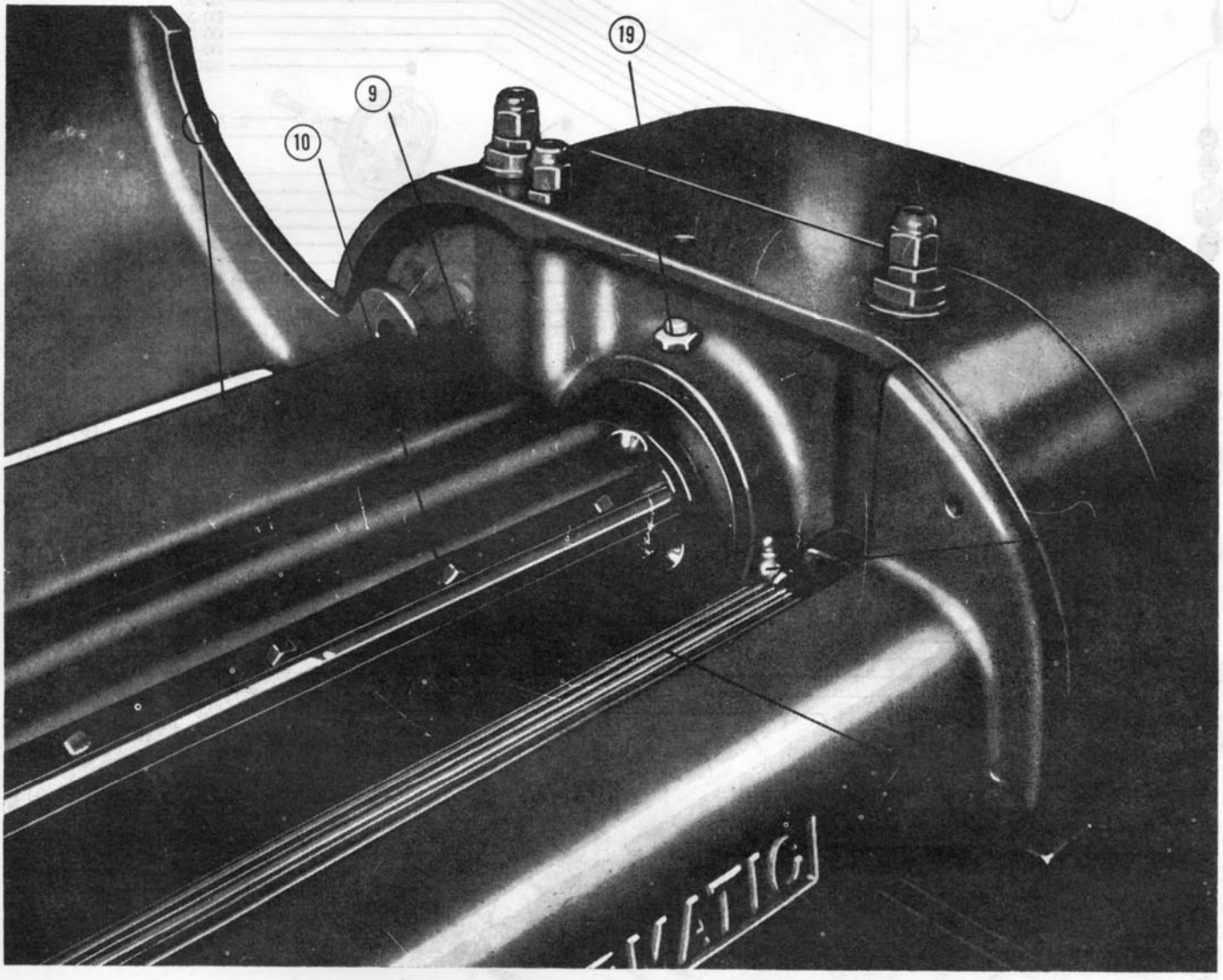


Figure 2

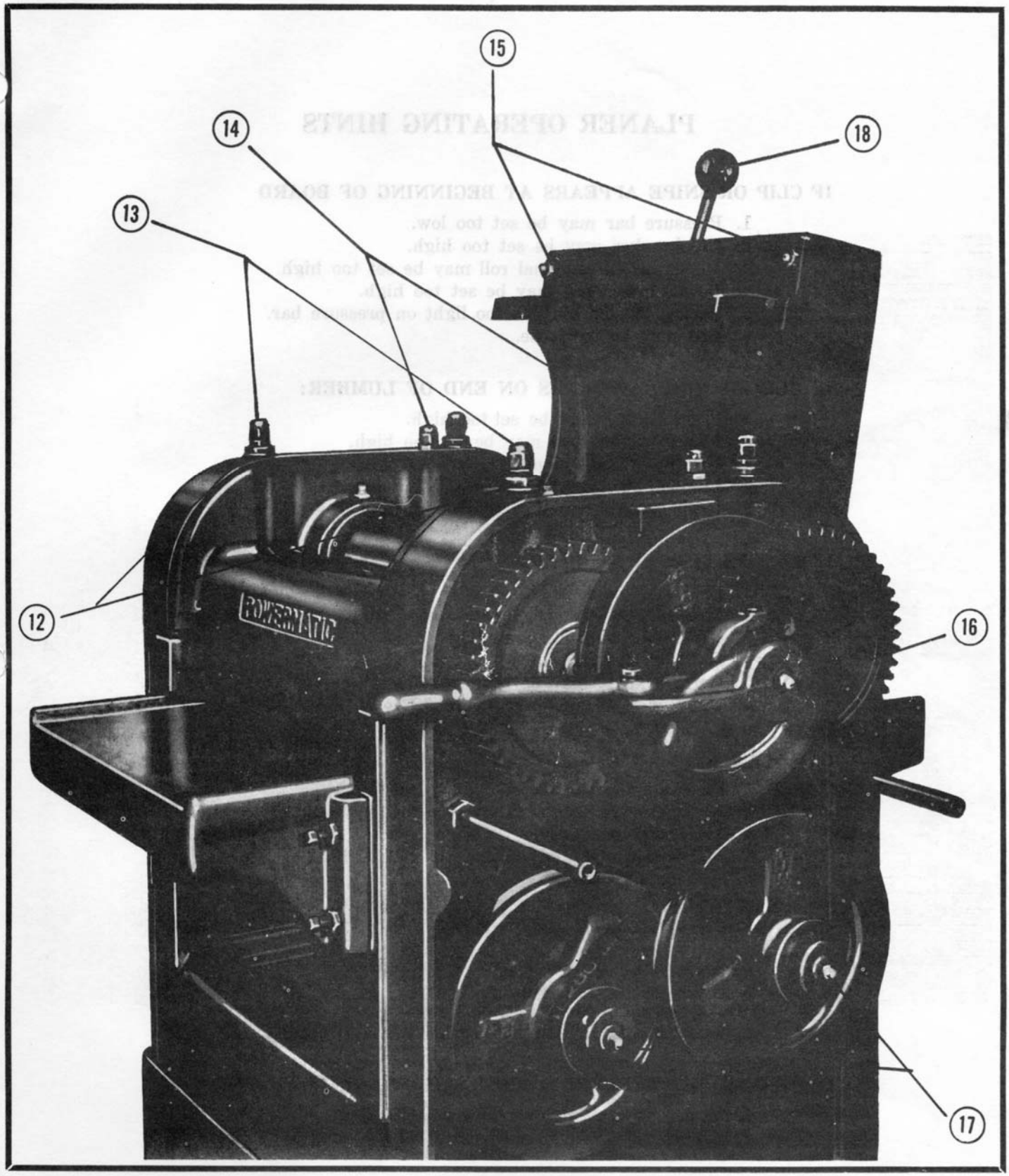


Figure 3

PLANER OPERATING HINTS

IF CLIP OR SNIPE APPEARS AT BEGINNING OF BOARD

1. Pressure bar may be set too low.
2. Chipbreaker may be set too high.
3. Upper infeed sectional roll may be set too high.
4. Lower infeed roll may be set too high.
5. Spring tension may be too light on pressure bar.
6. Bed may be too loose.

IF CLIP OR SNIPE APPEARS ON END OF LUMBER:

1. Pressure bar may be set too high.
2. Lower outfeed roll may be set too high.
3. Upper outfeed roll may be set too low.
4. Lumber may not be butted.
5. Grain may be running against knives.

IF KNIVES TEAR OUT LUMBER:

1. Feed may be too fast.
2. Moisture content may be too high.
3. Head may be running too slowly.
4. Cut may be too heavy.
5. Cutting angle may be too large.
6. Grain may be running against knives.

IF KNIVES RAISE THE GRAIN:

1. Feed may be too fast.
2. Cutting angle may be too large.
3. Head may be running too slowly.
4. Moisture content of lumber may be too high.
5. Cut may be too heavy.

IF CHIP MARKS APPEAR ON LUMBER:

1. Blower system may not be strong enough.
2. Feed may be too fast.
3. May be loose connection in blower system—no suction.
4. Exhaust pipe may join at too large an angle to main blower pipe.

IF PANELS ARE TAPERED ACROSS THE WIDTH:

1. Planer bed out of level with cutterhead.
2. Knives not set even with cutterhead.

IF UNDESIRED POUNDED GLOSSY FINISH APPEARS:

1. Knives may be dull.
2. Feed may be too slow.

IF WASHBOARD FINISH APPEARS:

1. Knives may have been driven back into the head.
2. Machine may be completely out of adjustment.
3. Planer bed loose and rocking in ways.

IF REVOLUTION MARKS SHOW UP:

1. Knives may be ground poorly.
2. Knives not set properly or evenly.

IF LINES APPEAR AT RIGHT ANGLES TO THE KNIFE MARKS:

1. Knives may have checkered and nicked up by overgrinding and taking temper out of steel.
2. Chips may have wedged between rolls and tables.
3. Pressure bar may be dragging.

IF STOCK TWISTS IN MACHINE:

1. Pressure bar may be cocked.
2. Upper outfeed roll may be cocked.
3. Upper outfeed roll may have uneven spring tension on it.
4. Lower rolls may be cocked.

IF STOCK STICKS OR HESITATES IN MACHINE:

1. Pressure bar may be set too low.
2. Lower rolls may be set too low.
3. Upper rolls may not be set low enough.
4. Cut may be too heavy.
5. Coaxer board may help lumber through machine.
6. Feed belts may be slipping.

IF MACHINE IS NOISY AND VIBRATES AND POUNDS:

1. Knives may be too dull.
2. Machine may not be leveled up correctly.
3. Machine may not be on solid foundation.
4. Pressure bar may be set too low.

IF MOTORS KICK OUT:

1. Knives may be dull, thus overloading motors.
2. Pressure bar may be set too low, putting drag on motors.
3. Motors may be drawing high current because other machinery in the plant in use has pulled down the voltage.
4. Machine may be out of adjustment.
5. Lower rolls may be set too low.

PARTS LIST FOR MODEL 100-12" PLANER

STATE PLANER SERIAL NUMBERS WHEN ORDERING PARTS

Part No.	Description	No. Required
100-1	Cutterhead	1
100-2	Roller, Outfeed	1
100-3	Roller, Infeed	1
100-4	Chipbreaker	1
100-5	Bearing Housing, R	2
100-6	Bearing Housing, L	2
100-8	Table	1
100-9	Belt Guard	1
100-10	Stud, Cutterhead Guard	2
100-11	Pulley, 2 AK 27	1
100-12	Pin	2
100-13	Bearing, Fafnir, 206KLL	2
100-16	Shim, Table Adj	2
100-17	Feed Drive Guard Assy	1
100-18	Stud Feed Drive Guard Mtg	2
100-20	Lever, Clutch	1
100-21	Brkt, Clutch Lever Mtg	1
100-22	Sheave, Clutch	1
100-23	Collar & Clutch	1
100-24	Pinion, Clutch Lever	1
100-25	Shaft, Clutch Pinion	1
100-26	Brkt, Clutch Mtg	1
100-29	Gear, Feed Roller Drive	2
100-30	Bearing Housing	1
100-32	Table Roller	2
100-33	Stud, Feed Roller Bearing	1
100-35	Spring, Outfeed Press Stud, 12102	2
100-35A	Spring, Infeed Press Stud, 12101	2
100-36	Nut, Feed Roll Spring	4
100-37	Stud, Pressure Bar	1
100-39	Bushing Pressure Bar	1
100-42	Shaft	1
100-43	Gear	2
100-44	Gear	2
100-46	Bearing, Thrust, Nice 605	2
100-47	Screw (LH)	1
100-48	Nut	1
100-50	*Belt, Clutch, Browning 33A	1
100-51	*Belt, Cutterhead, Browning 36A	1
100-52	*Belt, Compound Drive, Brwng 28A	1
100-53	Hanger, Compound Sheave	1
100-54	Sheave, Compound	2
100-55	Shaft, Threaded	1
100-57	Pressure Bar	1
100-58	Shim, Cutterhead Knife	3
100-59	Jackscrew Peanut	1
100-60	Brace Front Panel	1
100-62	Spacer, Clutch	1
100-66	Spacer, Comp Feed Roller	1
100-72	Shaft Compound Sheave	1
100-73	Grease, Alemite, ⅛ Pipe	1
100-77	Stand Assembly	1
100-83	Main Frame	1
100-86	Cutterhead Knife	3
100-89	Knob	1
100-92	Handwheel	1
100-102	Bearing Housing	2
100-106	Slotted Head SS, 5/16 - 18 x 1	2
100-107	Screw	1
100-108	Nut	1
18020-1	Handwheel	1
40092	Collar	1
40111-3	Key, 3/16 x 3/16 x 1	1
40111-7	Key, 3/16 x 3/16 x 1½	2
40112-8	Key, ¼ x ¼ x 1⅝	1
40136-2	Pulley, AS-26	1
60002-1	Nut, Hex, 5/16 - 18	6
60002-3	Nut, Hex, ⅜ - 16	10
60002-6	Nut, Hex, ½ - 13	1
60003-1	Lock Washer, 5/16	2
60005-4	Socket Cap Screw, 5/16 - 18 x ½	2
60008-3	Split Pin, ¼ x 1¼	4
60014-1	Socket Set Screw, 5/16 - 18 x ⅜	14
60014-2	Socket Set Screw, 5/16 - 18 x ½	2
60014-5	Socket Set Screw, 5/16 - 18 x 1	4
60025-2	Hex Head Cap Screw, ⅜ - 16 x 1	2
60025-4	Hex Head Cap Screw, ⅜ - 16 x 1¾	4
60025-10	Hex Head Cap Screw, ⅜ - 16 x 1¼	1
60026-1	Washer Flat, ⅜	5
60026-5	Washer Flat, 5/16	1
60026-6	Washer Flat, ½	1
60026-7	Washer Flat, ⅝	1
60035-3	Square Head Set Screw, 5/16 - 18 x ½	18
60035-6	Square Head, Set Screw, 5/16 - 18 x 1½	4
60062	Rivet, ¼ x 3	1
60067-2	Hex Head Cap Screw, 5/16 - 18 x ½	4
60067-3	Hex Head Cap Screw, 5/16 - 18 x 1¼	2
60078-5	Bushing, Oilite	1
60078-7	Bushing, Oilite	4
60120	Grease, Alemite	4
60025-4	Hex Head Cap Screw, ⅜ - 16 x 1¾	4
100-80	Spring	2
1200-623	Handle	1

*Not Pictured

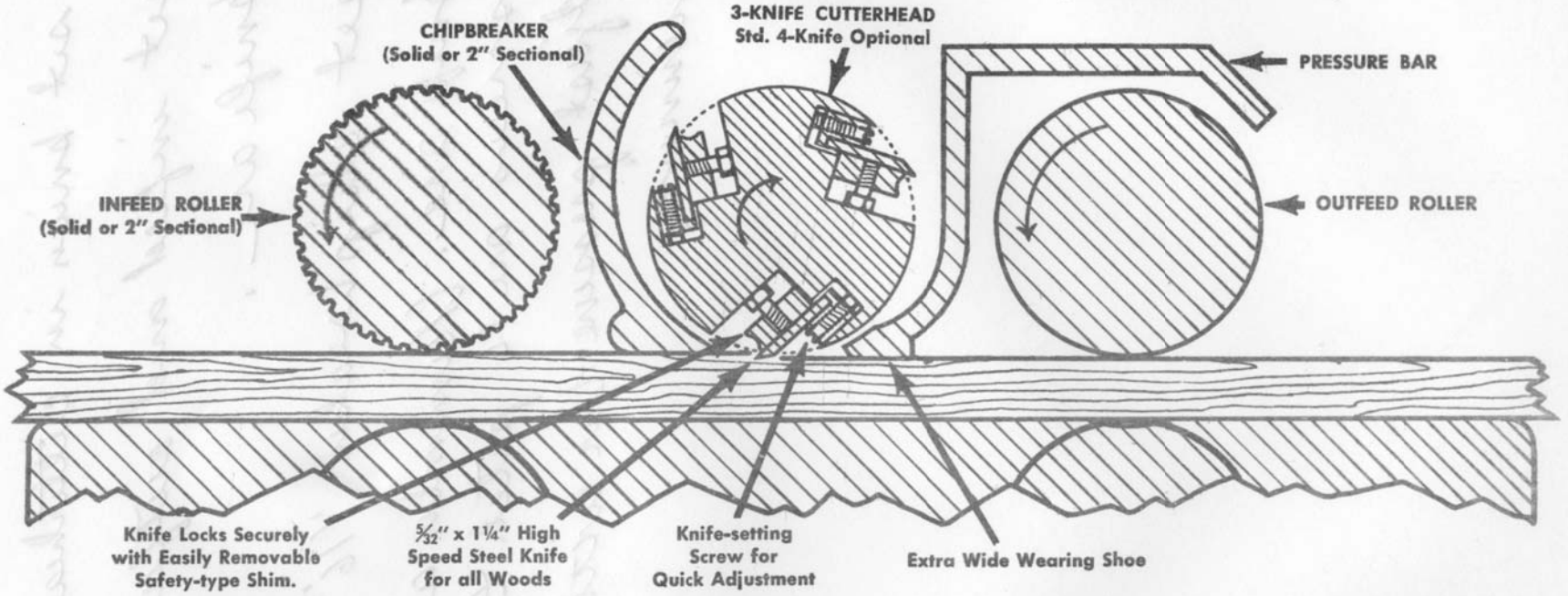
PARTS LIST FOR MODEL 100-12" PLANER

PART NO.	DESCRIPTION	NUMBER	PRICE
100-1	Cutterhead	1	65.00
100-2	Roller, outfeed	1	10.50
100-3	Roller, infeed, corrugated	1	12.50
100-4	Chipbreaker	1	16.00
100-5	Bearing, feed roller, R. H.	2	6.00 Each
100-6	Bearing, feed roller, L. H.	2	6.00 Each
100-7	Grease fitting, feed roller bearing	4	.30 Each
100-8	Table, Planer	1	45.00
100-9	Guard, cutterhead belt	1	8.50
100-10	Stud, cutterhead belt guard	1	.75
100-11	Pulley, cutterhead, 2AK27, 1" bore	1	3.50
100-12	Housing, cutterhead bearing	2	6.00 Each
100-13	Bearing, cutterhead, Fafnir 206KLL	2	4.50 Each
100-14	Cap screw, cutterhead belt guard	2	.25 Each
100-15	Screw, table shim adjusting	4	.25 Each
100-16	Shim, table adjusting	2	1.00 Each
100-17	Guard, feed drive	1	6.50
100-18	Stud, feed drive guard	2	1.25
100-19	Cap screw, feed drive guard	2	.25 Each
100-20	Lever clutch	1	3.00
100-21	Bracket, clutch lever	1	2.50
100-22	Sheave, clutch	1	8.50
100-23	Collar, clutch	1	2.50
100-24	Pinon, clutch lever	1	6.00
100-25	Shaft, clutch pinion	1	2.25
100-26	Bracket, clutch mounting	1	2.00
100-27	Pulley, cutterhead feed drive, AK22	1	1.50
100-28	Bolt, clutch lever	1	.10
100-29	Gear, feed roller drive	2	8.00 Each
100-30	Bearing housing, table roller	4	3.00 Each
100-31	Adjusting screw, table roller bearing housing	4	.10 Each
100-32	Roller table	2	8.50 Each
100-33	Stud, feed roller bearing	4	.75 Each
100-34	Lock nut, feed roller bearing stud	4	.25 Each
100-35	Spring, feed roller	4	.50 Each
100-36	Cap, feed roller pressure spring	4	2.00 Each
100-37	Stud, pressure bar	2	1.50 Each
100-38	Lock Nut, pressure bar	2	.25 Each
100-39	Bushing, pressure bar	1	.25
100-40	Nut, pressure bar stud	2	.25 Each
100-41	Handwheel, table raising	1	2.50
100-42	Shaft, table raising	1	4.00
100-43	Mitre gear, table raising	2	4.50 Each
100-44	Bevel gear, table raising	2	4.50 Each
100-45	Lock, table	2	.75 Each
100-46	Bearing, table raising screw thrust	2	1.25 Each
100-47	Screw, table raising, L. H.	1	6.00

PART NO.	DESCRIPTION	NUMBER	PRICE
100-47A	Screw, table raising	1	6.00
100-48	Nut, table raising Screw, L. H.	1	3.00
100-48A	Nut, table raising screw, R. H.	1	3.00
100-49	Screw, table raising screw nut locking	2	.10 Each
100-50	Belt, clutch sheave drive	1	1.35
100-51	Belt, cutterhead feed drive	1	1.40
100-52	Belt, compound drive	1	1.30
100-53	Hanger & Shaft, compound sheave	1	2.00
100-54	Sheave, compound	2	10.50 Each
100-55	Shaft, compound sheave	1	1.00
100-56	Collar, compound shaft	2	.50 Each
100-57	Pressure bar	1	16.00
100-58	Shim and Stud, cutterhead knife	3	3.00 Each
100-59	Jack Screws, cutterhead	6	.25 Each
100-60	Brace, front panel	1	10.00
100-61	Washer, compound feed roller drive Pulley 3/8"	1	.50
100-62	Spacer, clutch	1	1.00
100-63	Set screw, shift lever bracket	1	.10
100-64	Key, cutterhead drive pulley	1	.25
100-65	Washer, compound feed roller drive Pulley 1/2"	1	.50
100-66	Spacer, compound feed roller drive Pulley 1/2"	1	.50
100-67	Bolt, compound sheave mounting	1	.25
100-68	Nut, feed roller drive pulley mounting 3/8"	1	.25
100-69	Bearing housing, outfeed roller, R. H.	1	6.00
100-70	Bearing housing, outfeed roller, L. H.	1	6.00
100-71	Screw, clutch bracket mounting	1	.25
100-72	Stud, feed roller drive pulley mounting	1	1.00
100-73	Stud, feed roller adjusting	1	.75
100-74	Screw, frame mounting	1	.25
100-75	Screw, holddown adjusting	1	1.50
100-76	Shim, table	1	1.00
100-77	Base	1	25.00
100-78	Pulley, compound drive NO. 1	1	10.50
100-79	Motor base	1	6.00
100-80	Spring, holddown pressure	1	.25
100-81	Belt guard, feed roller drive	1	6.50
100-82	Nut, holddown adjusting	1	.25
100-83	Main frame	1	125.00
100-84	Nut, spring retainer	1	2.00
100-85	Nut, feed roller adjusting	1	.10
100-86	Knife, cutterhead	1	4.00
100-87	Handle, chipbreaker raising	1	1.50
100-88	Clutch key	1	.25
100-89	Collar, compound sheave mounting	1	.50
100-90	Pulley, compound drive No. 2	1	10.50

PART NO.	DESCRIPTION	NUMBER	PRICE	
100-91	Rod, handwheel handle	1	.50	
100-92	Handle, handwheel No. 2	1	.75	
100-93	Set screw, head pulley	1	.10	
100-94	Nut, head bearing housing	1	.10	
100-95	Set screw, head bearing housing	1	.10	
100-96	Set screw, handwheel	1	.10	
100-97	Nut, stud guard	4	.25	Each
100-98	Set screw, feed roller gear	2	.10	Each
100-99	Nut, adjusting screw bearing housing	4	.10	Each
100-100	Nut, table shim locking screws	4	.10	Each
100-101	Bearing, Head	1	4.50	
100-102	Head, bearing housing	1	6.00	

CUTTING–ROLLER ASSEMBLY (SIDE VIEW)



POWERMATIC COMPANY
A DIVISION OF Houdaille Industries, Inc.
McMINNVILLE, TENNESSEE 37110

MODEL 221 20" SINGLE SURFACER

(over)

1. check bed to see if it is tight
2. check bed for parallel to cutterhead
3. set knives in cutterhead
4. set infeed and outfeed 1/16" below knife arc.
5. set chipbreaker 1/16" below knife arc. (Remember all adjusting screws are 16 pitch thread)
6. adjust pressure bar with machine running.