

INSTRUCTIONS AND PARTS LIST FOR POWER KING 12 inch BAND SAW

CATALOG NO. 912

All of the equipment furnished with the Power King Band Saw is wrapped in the papers that support the saw in the carton. Be sure **everything** has been removed before carton and papers are destroyed.

MOUNTING SAW

Mount the saw on a sturdy level bench that's high enough so that top of saw table will be slightly lower than your elbows. Check to make sure the base rests solidly on ALL feet before bolting it down — use shims where necessary between base and bench top.

The motor can be mounted either behind or below the saw, whichever is most convenient.

MOTOR REQUIREMENTS

The Power King Band Saw requires a 1/3 or 1/2 HP, 1725 RPM motor, preferably a capacitor or repulsion-induction type. The 2-1/2" dia. motor pulley furnished gives a spindle speed of 640 RPM, and cutting speed of 2050 FPM — the correct speed for smooth cutting.

Motor pulley No. S10-62 is required for a motor with 1/2-inch diameter shaft.

STATIC ELECTRICITY

Sometimes a slight shock is experienced when touching the saw. This may be caused by a static electrical charge set up by friction of the moving parts and is not necessarily an indication of faulty motor windings or grounds. To correct, ground the saw to a water or heater pipe.

CONTROLS

1. The four-spoked knob on rear of saw controls the saw blade tension—see Fig. 2.

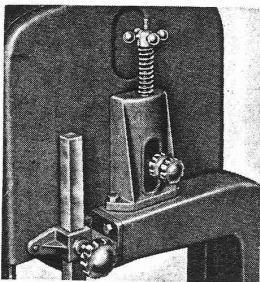


Fig. 2

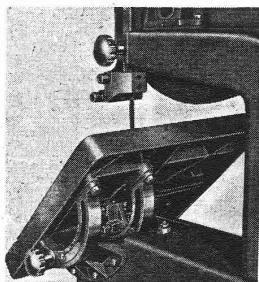


Fig. 3

2. The double set of knobs on rear of saw control the tilt of the upper wheel—see Fig. 2. Outside knob tilts wheel to properly track the blade—inside knob locks tilt setting.
3. The sliding bar controls the vertical position of the saw guide bracket. Place the guide just above the work when operating saw. To adjust, merely loosen the lock knob, place guide in position and retighten.
4. Knob beneath table controls table tilt—see Fig. 3. The table can be tilted and locked securely at any angle between 0 and 45 degrees—angle is shown on graduated scale.

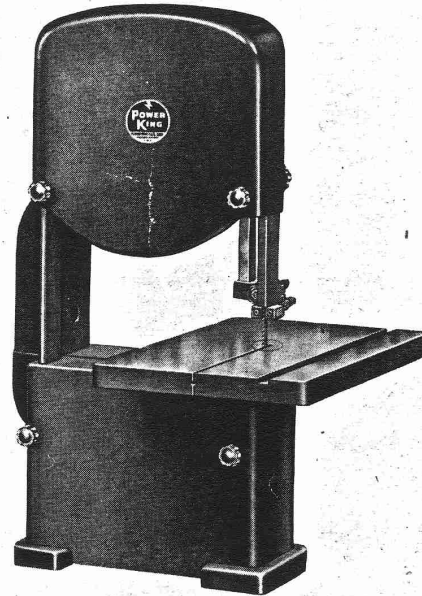


Fig. 1

5. The four knobs on front of saw hold the upper and lower wheel guards in position—see Fig. 1.
6. The four knurled knobs on the saw guide brackets, two above and two below the table, control the thrust wheel and blade guide blocks. Always release the set screws before adjusting the thrust wheel or guide blocks.

ADJUSTMENTS

1. Two screws beneath table stop the table at the 0 and 45 degree readings. To adjust, merely loosen nut and turn the screws. Always tighten the nut after the adjustment has been made.

NOTE: The table may be tilted about 3 degrees to the left by lowering the left stop screw.

2. To adjust the tilt gauge pointer, loosen the pointer screw.
3. If the table slot does not line up with the saw blade, loosen the four screws that hold the table to the trunnions and shift the table until it is properly aligned. Tighten the screws securely.

MOUNTING SAW BLADES

1. Remove the upper and lower wheel guards.
2. Turn the wheel tension knob until the tension is released.
3. Remove the set screw in table slot.
4. Pass the blade through the table slot — into the left blade guard — under the lower wheel — between the upper and lower blade guides — and then over the top wheel.
5. Turn the wheel tension knob until there's a slight tension on the blade.

(Continued on Page 4)

OPERATING INSTRUCTIONS

6. Replace the set screw in the saw table.
TRACKING THE BLADE — Rotate upper wheel by hand in a clockwise direction viewed from front of saw. If blade runs off the wheels, adjust as follows:

- (a) Move both the upper and lower thrust wheels and blade guide blocks away from the blade.
- (b) Turn the lower wheel by hand, adjusting upper wheel with tilt knob until blade tracks in the center of both wheels.
- (c) Tighten tilt lock knob securely.

BLADE TENSION — Correct blade tension is a matter of feel and can only be acquired by experience. The best general rule is to keep blade just tight enough to produce a low tone when struck.

ADJUSTING BLADE GUIDE BLOCKS AND THRUST WHEELS
Two pair of blade guide blocks, one above and one beneath saw table, align the blade and prevent its twisting. To adjust, loosen set screws and position the blocks so they just clear the sides of the blade, checking clearance with a piece of paper. **CAUTION:** Rotate upper wheel by hand to make certain blade passes freely between blocks. After correct setting is obtained, tighten set screws securely.

Loosen the upper and lower guide block slide set screws and position so that the front edge of the blocks are even with the bottom of the blade teeth. Retighten the screws. Loosen the set screws which lock the thrust wheels and position so they just touch the saw blade — be sure to tighten the set screws.

SAWING OPERATIONS

The selection of the proper blade for each job is of great importance. Always use the widest blade that will cut the sharpest contours of your pattern. A 3/8" blade should cut a circle 2-1/2" in diameter; a 1/4" blade, a 2" circle; a 3/16" blade, a 1-1/2" circle. For all straight and general cutting, a 3/8" blade is recommended.

NOTE: Before starting the saw, always lower blade guide until it's just above the work. Never feed the work through the blade too rapidly.

Cut through the waste stock when it is impossible to continue a cut — "back out" only as a last resort, drawing the work very slowly away from the saw blade and making sure the blade follows the saw cut. Failure to do this may force the blade off the wheels.

If the pattern to be cut has a number of sharp curves it is best to make a series of saw kerfs in the waste stock opposite each curve before starting the cut.

A mitre gauge attachment which slides in the table slot can be used to hold the work when doing straight cutting. The work should be held firmly against the guide. Keep the blade sharp. If it seems hard to feed the work past the blade, or if it becomes difficult to saw along a marked line, the blade should be sharpened.

Generally, filing is all that's required to sharpen the blade. However this becomes ineffective after several filings and it is then necessary to joint and reset the teeth — if you're unfamiliar with the process, it is best to have your blades sharpened by someone who specializes in such work.

LUBRICATION

See Fig. 4

KEEP YOUR SAW CLEAN — LUBRICATE REGULARLY WITH S.A.E. NO. 10 MACHINE OIL

1. Upper and lower wheel bearings — Oil the bearings every month if the machine is used frequently, if used infrequently oiling every six months will be adequate.

2. Table Trunnions — Oil at regular intervals.
3. Upper Wheel Tilt and Tension Screws — Oil at regular intervals.
4. Blade Guide Blocks — Oil occasionally. Keep saw table and blade guide bracket slide covered with a light film of oil when saw is not in use.

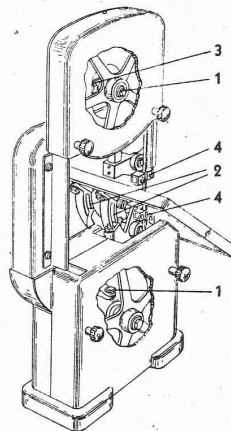
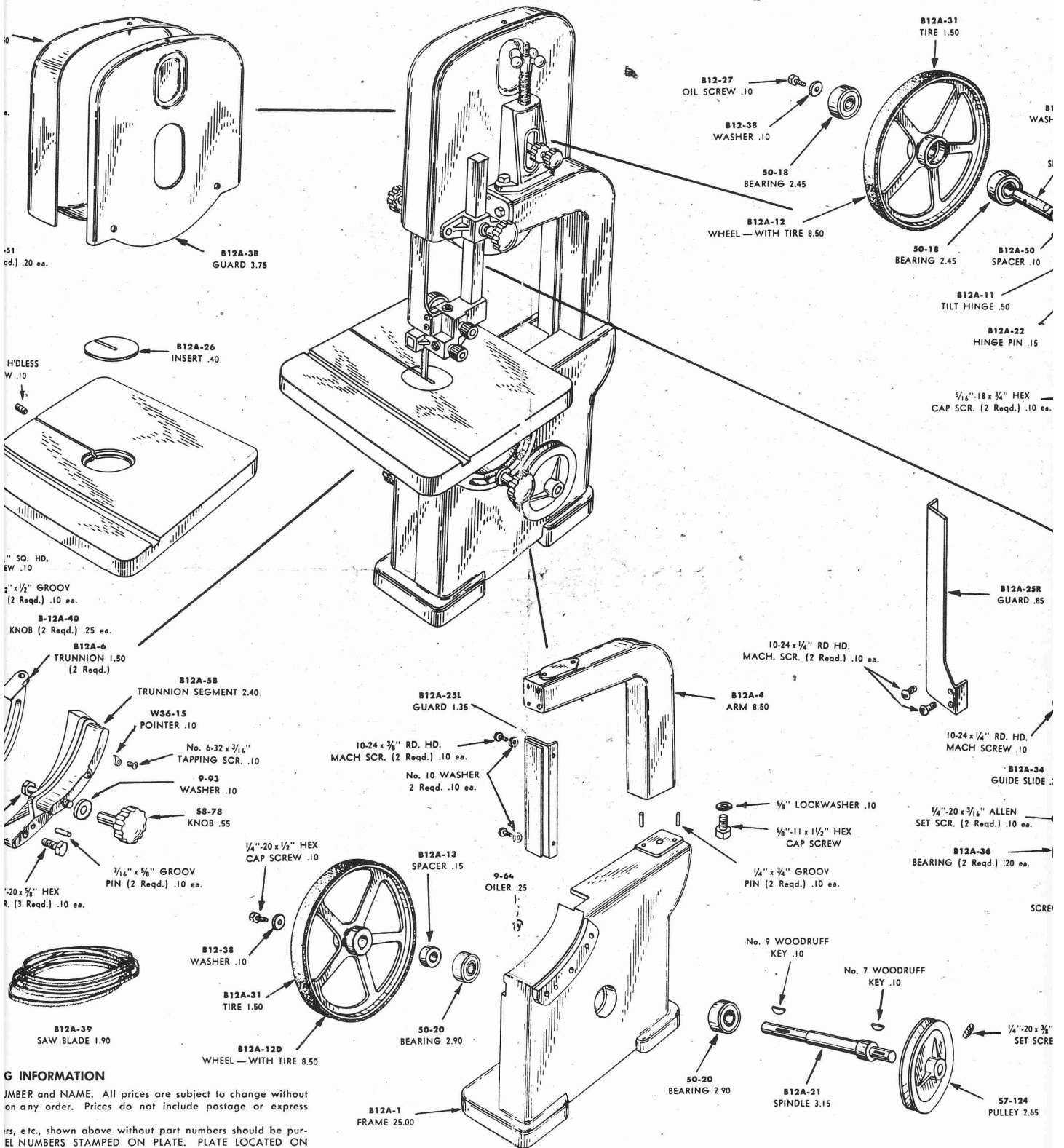


Fig. 4

SUGGESTIONS FOR OPERATION AND MAINTENANCE

- ★ Maintain proper belt tension — keep belt just tight enough to prevent its slipping.
- ★ Use correct blade — the largest one, with the coarsest teeth, that will cut your stock cleanly and follow the sharpest curve in your pattern.
- ★ Always lower the blade guide close to the work to insure accurate cutting and to prevent the blade from twisting.
- ★ Examine stock carefully before sawing to make sure it's free of nails.
- ★ Feed work evenly and slowly so as not to twist blade or crowd it beyond its cutting capacity.
- ★ Apply beeswax to the blade when cutting hard wood or wood with considerable pitch — it helps the blade cut freely.
- ★ Clean saw dust from table trunnions frequently.
- ★ Before operating saw check blade for proper tension and that it is mounted properly — teeth should point down on the downward stroke.
- ★ Always keep motor and spindle pulleys aligned.
- ★ Keep set screws in motor and pulleys tight to prevent scoring of motor shaft and spindle.
- ★ When saw is not in use, release the blade tension.
- ★ To prevent rust, keep saw table covered with film of oil when saw is not in use.
- ★ Be sure wheels turn clockwise viewed from the front of the saw — arrow on motor pulley indicates direction of rotation.

REPAIR PARTS FOR POWER KING No. 912 12-inch BAND SAW



GENERAL INFORMATION

NUMBER AND NAME. All prices are subject to change without notice on any order. Prices do not include postage or express charges, etc., shown above without part numbers should be purchased from the factory. PART NUMBERS STAMPED ON PLATE. PLATE LOCATED ON

WARSAW, INDIANA

ING No. 912 12-inch BAND SAW

