

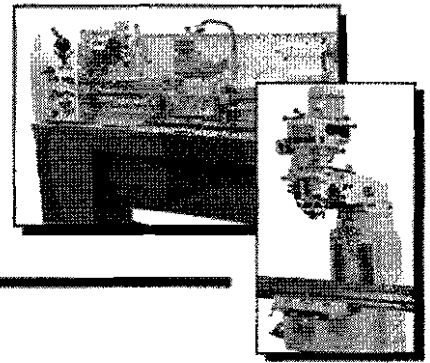


MACHINERY DIVISION

6465 18 MILE ROAD
STERLING HEIGHTS, MI 48314

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(586) 731-3600 • 1-800-860-1740

FAX:
(586) 731-7464 • 1-800-862-1740



MODEL WS-18 BANDSAW

THANK YOU FOR PURCHASING WITH KBC MACHINERY. ALL KBC MACHINES ARE BACKED BY OUR 1 YEAR PARTS REPLACEMENT WARRANTY. WHEN USED AS INTENDED, AND WITH PROPER MAINTENANCE THIS MACHINE WILL PROVIDE YOU WITH YEARS OF TROUBLE-FREE SERVICE. IF YOU NEED PARTS SIMPLY FILL OUT THE PARTS REQUEST FORM, AND FAX OR E-MAIL YOUR REQUEST. ALL OTHER QUESTIONS PLEASE CONTACT US @ :

**KBC MACHINERY
6465 18 MILE ROAD
STERLING HEIGHTS, MI 48314
PH (800) 860-1740
FAX (800) 862-1740
MACHINERY@KBCTOOLS.COM
WWW.KBCTOOLSANDMACHINERY.COM**



PARTS REQUEST FORM

YOUR COMPANY NAME:

STATE/PROVINCE

YOUR NAME

PHONE # + EXT

FAX #

MACHINE INFO:

MAKE/MANUFACTURER

MODEL NUMBER

YEAR MADE

SERIAL#

PARTS REQUESTED:

PART#

DESCRIPTION

PLEASE INCLUDE COPY(S) OF THE PARTS DRAWING FROM THE
MANUAL AND CIRCLE THE PARTS NEEDED

FAX PARTS REQUEST TO (800) 862-1740

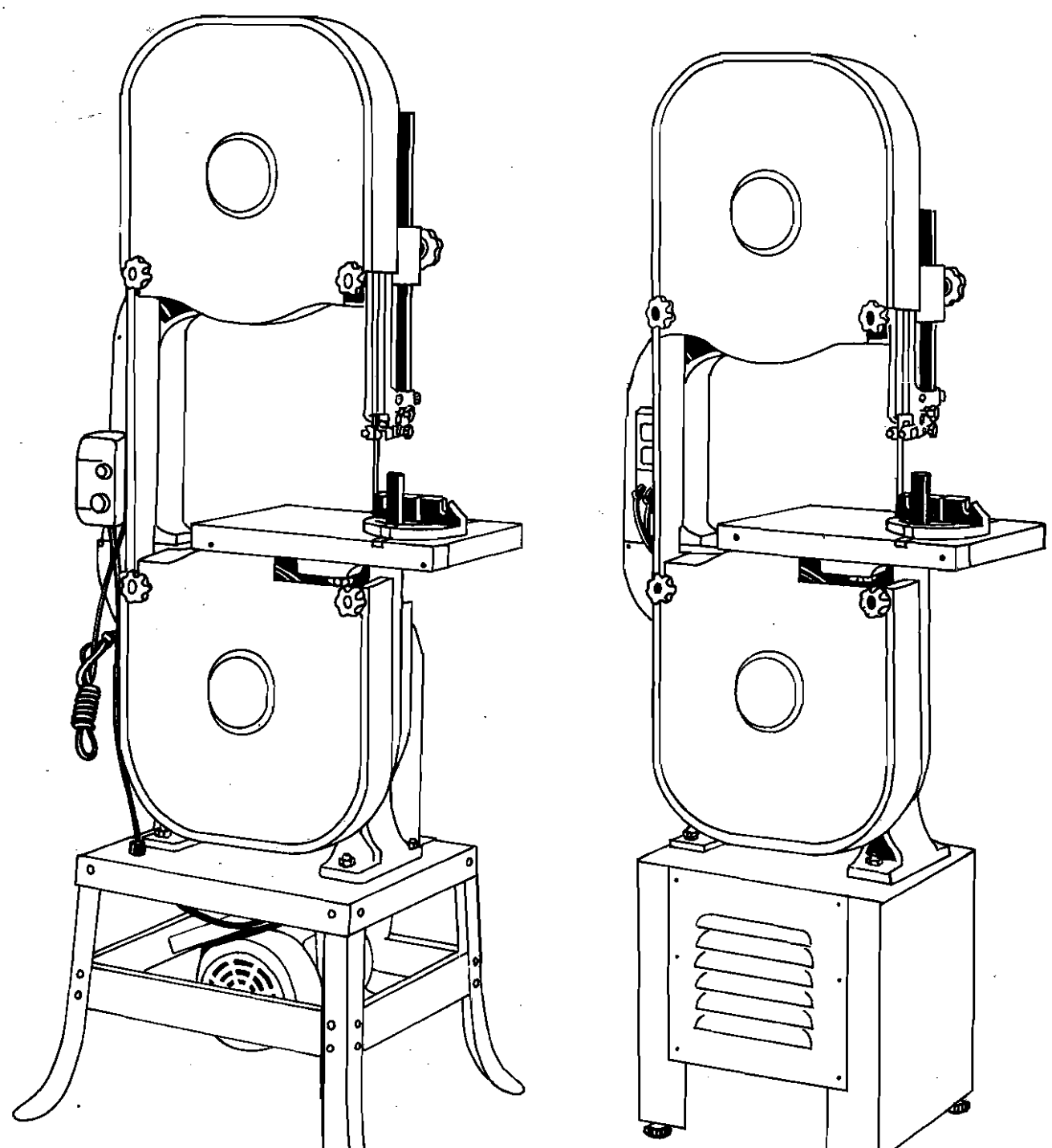
E-MAIL PARTS REQUEST TO: machinery@kbctools.com

THANKS; KBC MACHINERY - MICHIGAN

WS-18

16" 18" WOOD CUTTING BAND SAW

LK WBS-1603 3 SPEED YS 1603N 3 SPEED



UNPACKING AND CLEANING

Carefully unpack the band saw, stand, and all loose items from the cartons. Remove the protective coating from the machined surfaces of the band saw. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover all unpainted surfaces with a good quality paste wax.

ASSEMBLING STAND, MOTOR PLATE, MOTOR AND MOTOR PULLEY

If you purchased your band saw with separate stand and electricals NOT factory mounted and wired, the stand is supplied as shown in Fig. A. then proceed as follows to assemble the motor plate, motor and motor pulley.

1. Turn the stand upside down.

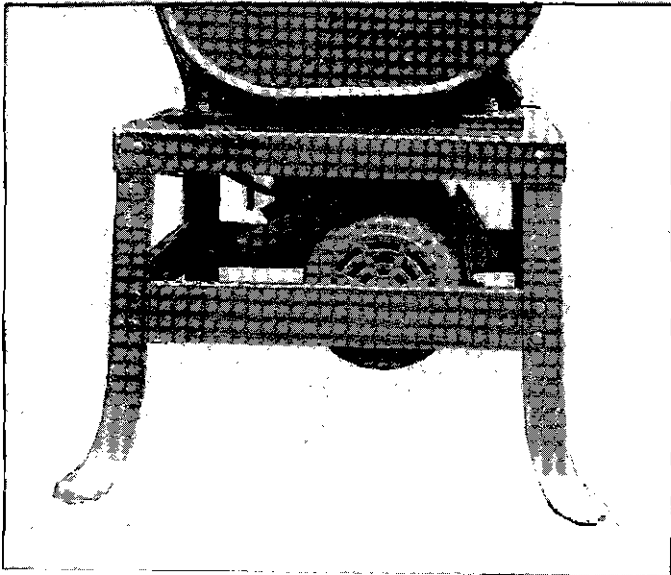
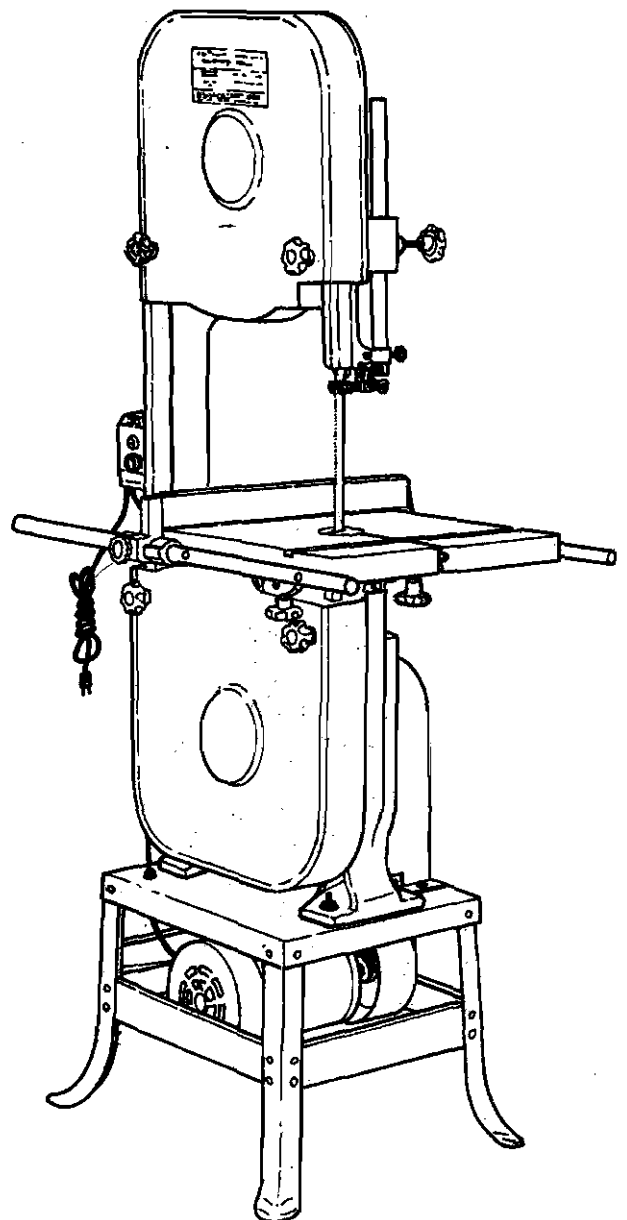


Fig. A

2. Return the stand to the upright position and assemble band saw to stand using four head screws, flat washers, lock-washers and nuts, as shown in Fig. B.



3. Using the four bolts, flat washers and hex. head nuts. Consult your Dealer or Catalog for the recommended motor for use with your saw.

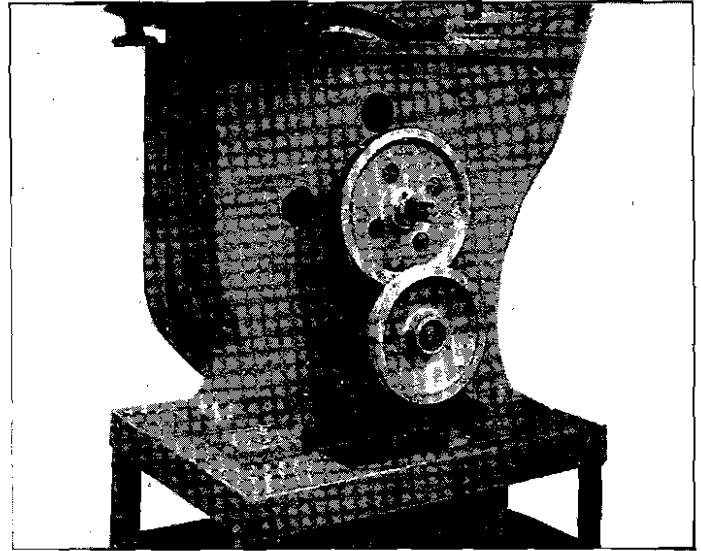


Fig. C

4. Assemble motor pulley (1) Fig. D to the motor shaft. Make sure the set screw in the motor pulley engages with key in motor shaft. Using a straight edge, make sure the motor pulley (1) and driven pulley (2) are in alignment. If necessary, both pulleys can be moved in or out. The motor can also be moved if necessary.

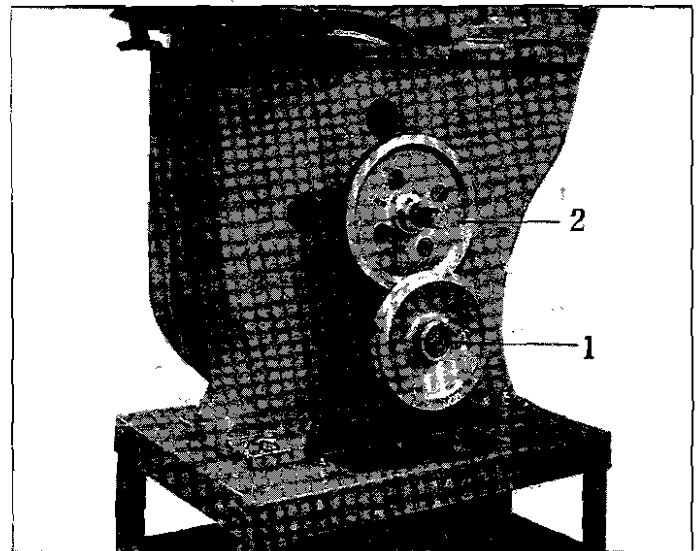


Fig. D

5. Assemble the V-Belt (3) Fig. E, to the two pulleys and adjust for proper belt tension by forwarding or backwarding the motor. Keep pulleys in alignment when doing this. Correct belt tension is obtained when there is approximately 1" deflection in the center span of the pulleys with light finger pressure.

ASSEMBLING BELT AND PULLEY GUARD

Place the belt and pulley guard (1) Fig. E, on the surface of base "shelf". Use the three hex. head screws to fasten in place.

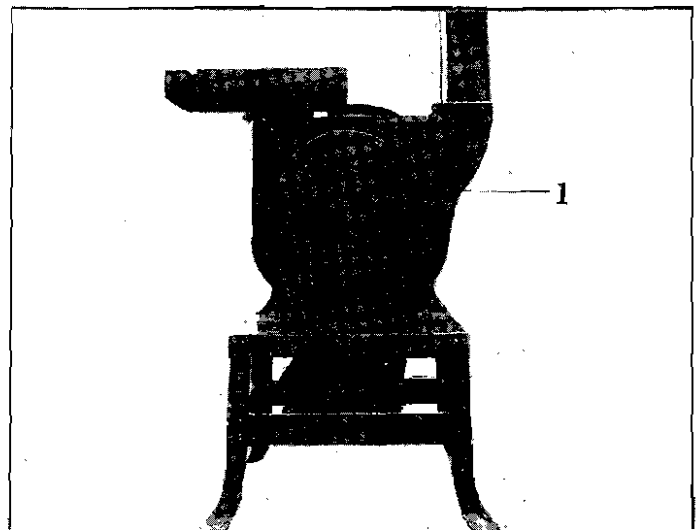


TABLE INSERT

Place table insert (1) Fig. F, in the hole provided in the table making sure the pin in the table engages one of the indents in the table insert.

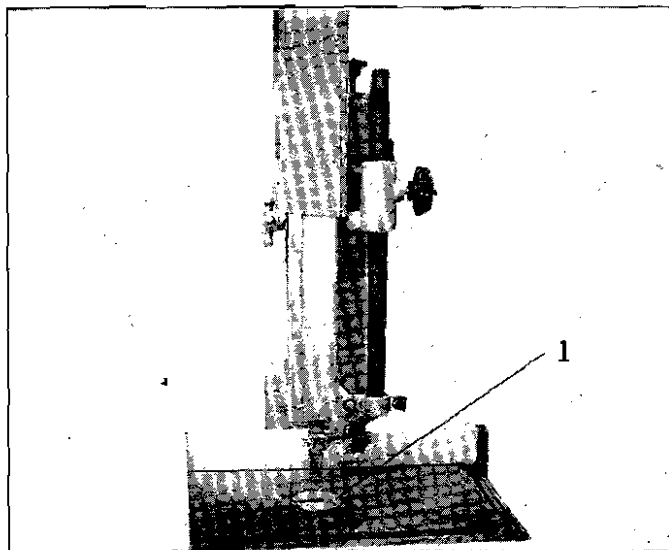


Fig. F

TILTING THE TABLE

The table on your band saw can be tilted 45 degrees to the right and 10 degrees to the left. To tilt the table, loosen the two star wheels (1) Fig. G, tilt the table to the desired angle and tighten the two star wheels (1).

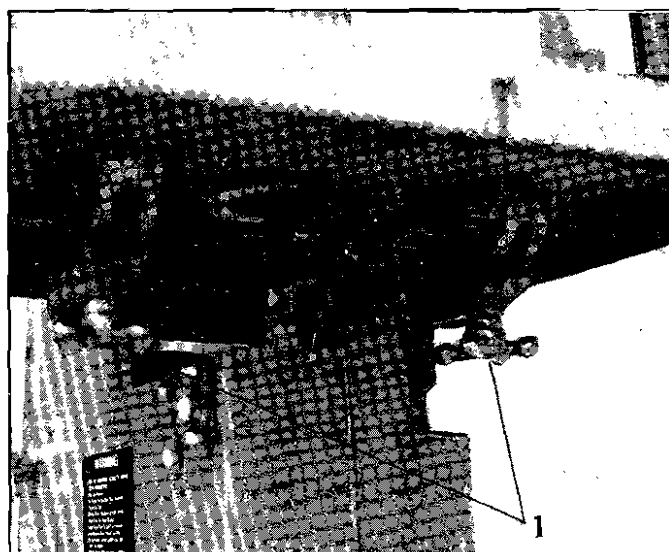
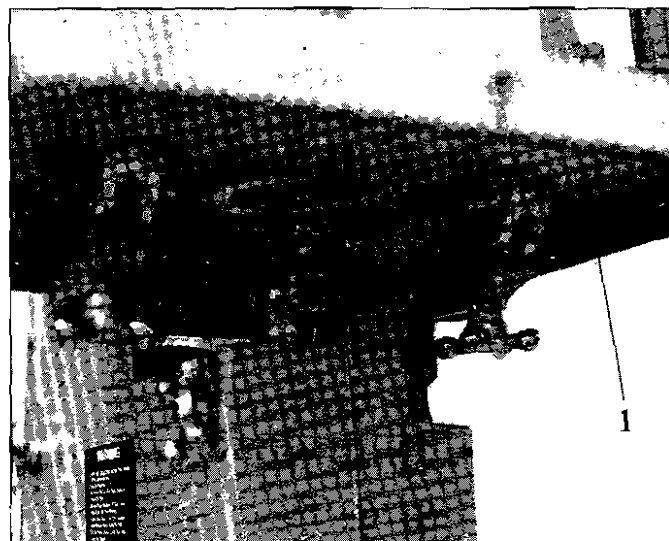


Fig. G

90 DEGREE TABLE ADJUSTMENT

Your band saw is equipped with an adjustable stop to insure that the table is at 90 degrees to the blade. To adjust:

1. Tilt the table to the right slightly.
2. Place the stop (1) Fig. H, on the adjusting screw.
3. Tilt the table until it is at 90 degree to the blade, making sure by placing a square on the table and against the blade.
4. When the table is at 90 degrees to the blade, the stop (1) should come into contact with the bottom of the table. If an adjustment is necessary, loosen nut (1) Fig. H, and turn adjusting screw until the stop contacts the table.
5. It is necessary to remove the stop (1) Fig. H,



ADJUSTING BLADE TENSION

On the back of the upper wheel there is a slide bracket to get the proper tension for various widths of blades. With the blade on the wheels, turn the star wheel (1) Fig. (I) to raise or lower the wheel until you provide the right tension to your blade. Over straining is a common cause of blade breakage and other unsatisfactory blade performance.

Relax the tension when the machine is not in use.

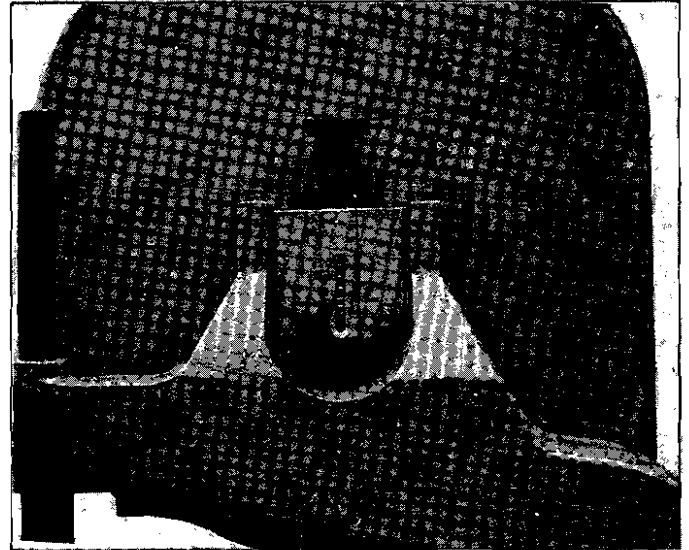


Fig. I

TRACKING THE BLADE

After tension has been applied to the blade, revolve the wheels slowly forward by hand and watch the blade (1) Fig. (J) to see that it travels in the center of the upper tire. If the blade begins to creep toward the front edge, turn the black knob to the left and this will tilt the top of the wheel toward the back of the machine and will draw the blade toward the center of the tire. If the blade creeps toward the back edge, turn the black knob to the right. Adjust the black knob (2) only a fraction of a turn at a time. Never track the blade while the machine is running.

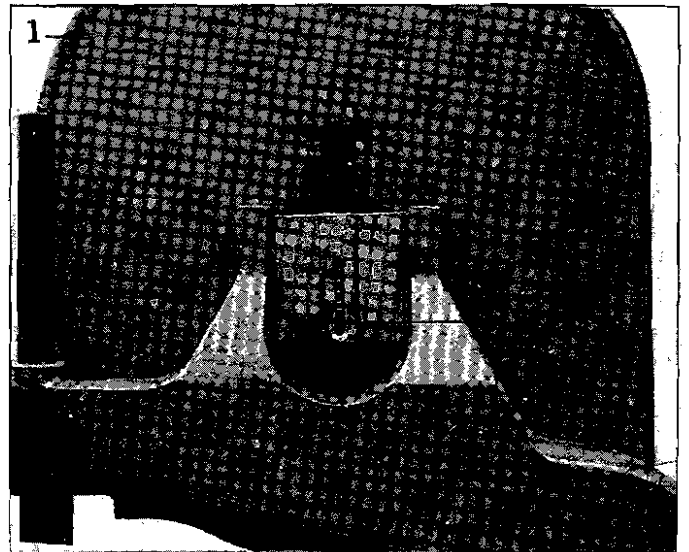
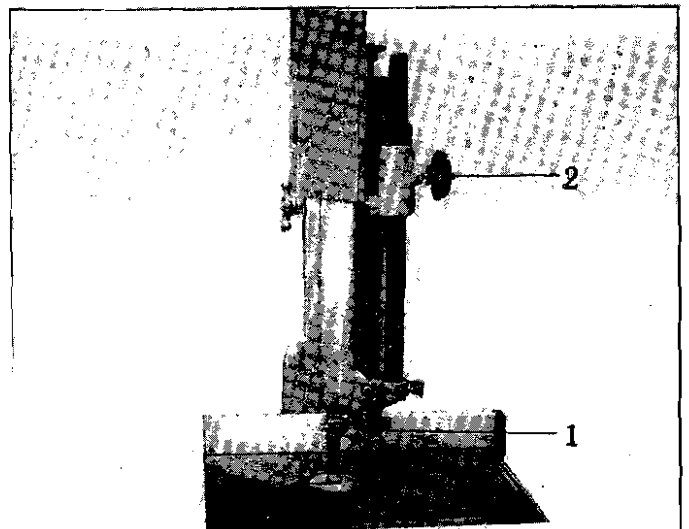


Fig. J

ADJUSTING UPPER BLADE GUIDE ASSEMBLY

The upper blade guide assembly (1) Fig. K, should always be set as close as possible to the top surface of the material being cut by loosening lock handle (2) and moving the guide assembly (1) to the desired position.



The upper blade guide assembly should also be adjusted so that the blade guides (1) Fig. L, are flat with the blade.

ADJUSTING UPPER BLADE GUIDES AND BLADE SUPPORT BEARING

The upper blade guides and blade support bearings are adjusted only after the blade is tensioned and tracking properly. To adjust proceed as follows:

1. The upper blade guides (1) Fig. M, are held in place by means of the set screws (2). Loosen the set screws (2) to move the guides (1) as close as possible to the side of the blade, being careful not to pinch the blade. Then tighten the screws (2).
2. The upper blade support bearing (3) Fig. M, prevents the blade from being pushed too far to the back which could damage the set in the saw teeth. The support bearing (3) should be set (1/64") behind the blade by loosening knob screw (3) to move the support bearing (3) in or out.
3. The blade support bearing (3) should also be adjusted so the back edge of the blade overlaps the outside diameter of the ball bearing by about 1/16". The bearing (3) is set on an eccentric and to change position remove knob screw (4) and bearing (3) Fig. M. Loosen knob screw (4), and reposition shaft that bearing (3) is attached to.

ADJUSTING LOWER BLADE GUIDES AND BLADE SUPPORT BEARING

The lower blade guides and blade support bearing should be adjusted at the same time as the upper guides and bearing as follows:

1. Loosen the two screws (1) Fig. N, and move the guides (2) as close as possible to the side of the blade, being careful not to pinch the blade. Then tighten screws (1).
2. The lower blade support bearing (3) Fig. N, should be adjusted so it is about (1/64") behind the back of the blade by turning the knob (4).

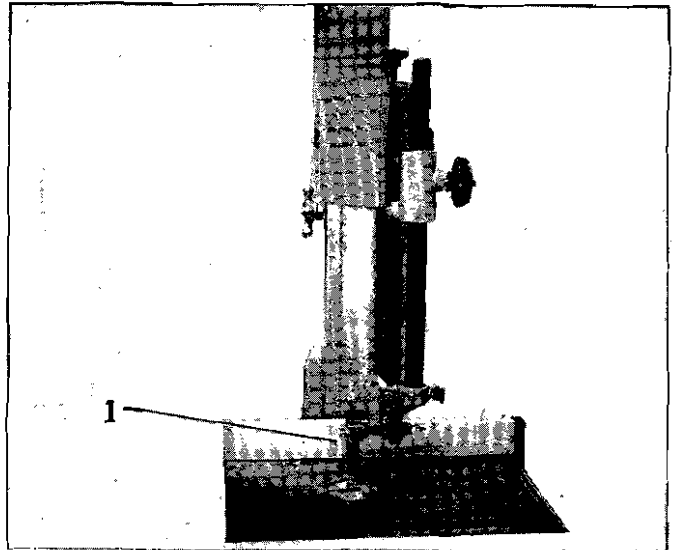


Fig. L

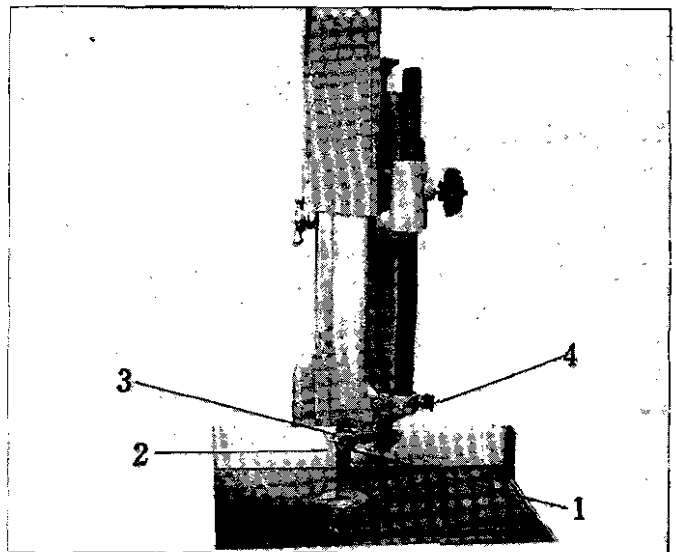
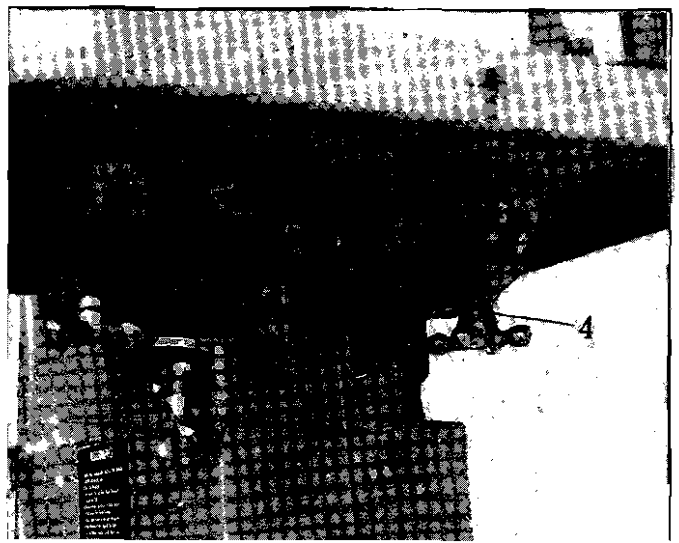


Fig. M



CHANGING BLADES

To change blades, proceed as follows:

1. Remove the upper and lower wheel guards.
2. Release tension on the band saw blade.
3. Remove the table adjustment pin and table insert.
4. Slip the blade off the wheel and guide it out through the slot in the table.
5. To install a new blade, reverse the above procedure.

BAND SAW BLADES

A band saw blade is a delicate piece of steel that is subjected to tremendous strain. You can obtain long use from a band saw blade if you give it fair treatment. Be sure you use blades of the proper thickness, width and temper for the various types of material to be cut.

Always use the widest blade possible. Use the narrow blades only for sawing small, abrupt curves and for fine delicate work. This will save blades and will produce better work. Band saw blades may be purchased, welded, set and sharpened ready for use. For cutting wood and similiar materials we can supply them in widths of 1/8, 3/16, 1/4, 3/8, 1/2 and 3/4 inches.

File and set the wood cutting blades whenever you find it requires pressure to make them cut. If a blade is broken it can be brazed or welded; however, if it has become badly work-hardened it will soon break in another place. If you are not equipped to file, set and braze or weld blades take them to a saw filer for reconditioning. Under average conditions, blades should be resharpener after 4 hours of operation.

OPERATING THE BAND SAW

Before starting the machine, see that all adjustments are properly made and the guards are in place. Turn the pulley by hand to make sure that everything is correct BEFORE turning on the power.

Keep the top guide down close to the work at all times. Do not force the material against the blade too hard. Light contact with the blade will permit easier following of the line and prevent undue friction, heating and work-hardening of the blade at its back edge.

KEEP THE SAW BLADE SHARP and you will find that very little forward pressure is required for average cutting. Move the stock against the blade steadily and no faster than will give an easy cutting movement.

Avoid twisting the blade by trying to turn sharp corners. Remember you must saw around corners.

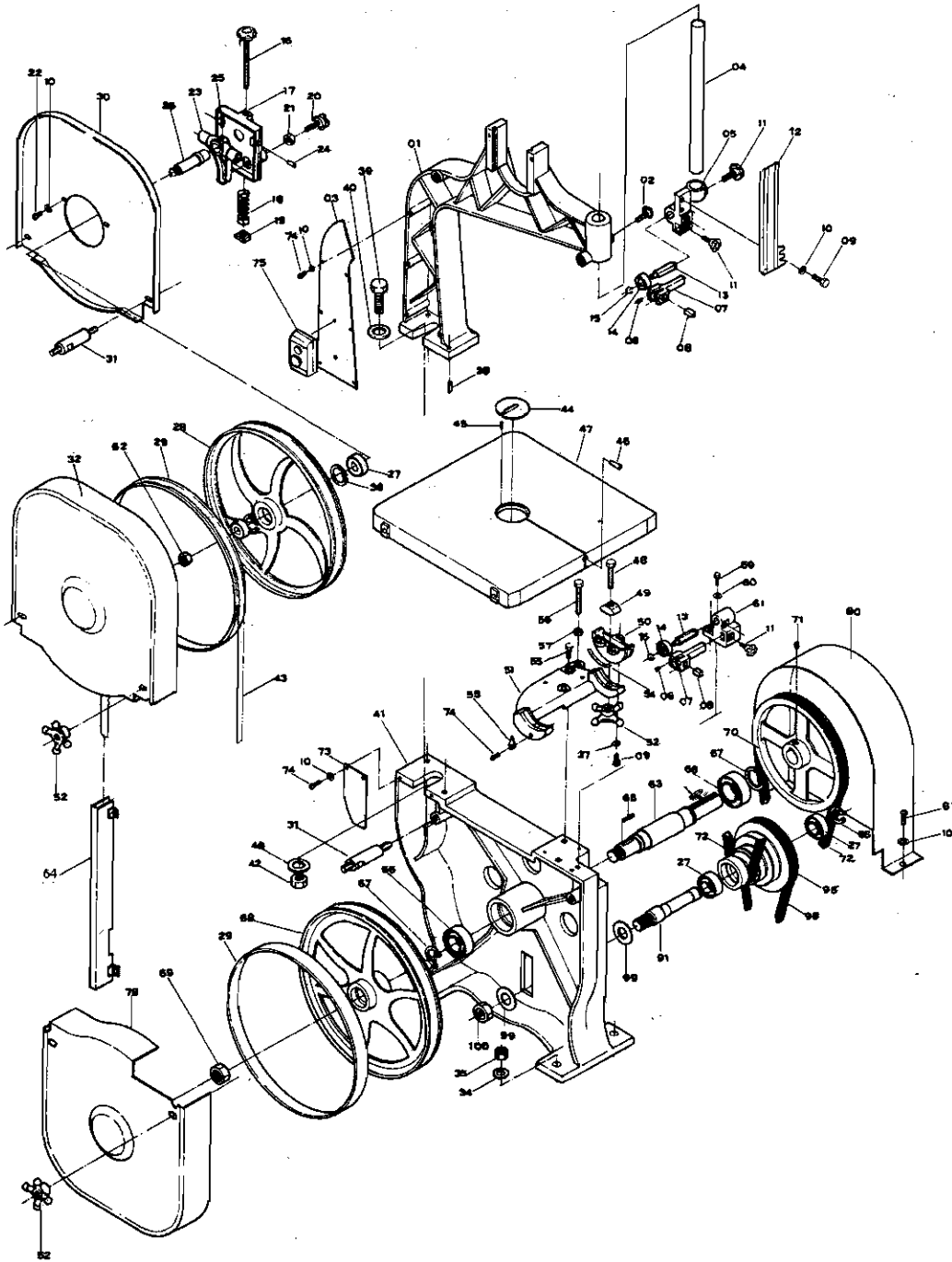
Any one of a number of conditions may cause a band saw blade to break. Blade breakage is, in some cases, unavoidable, being the natural result of the peculiar stresses to which such blades are subjected. It is, however, often due to avoidable causes, most often to lack of care or judgment on the part of the operator in mounting or adjusting the blade or guides. The most common causes of blade breakage are: (1) faulty alignments and adjustments of the guides, (2) forcing or twisting a wide blade around a curve of short radius, (3) feeding too fast, (4) dullness of the teeth or absence of sufficient set, (5) excessive tightening of the blade, (6) top guide set too high above the work being cut, (7) using a blade with a lumpy or improperly finished braze or weld and, (8) continuous running of the saw blade when not in use for cutting.

New blades for the standard 18 inch Band Saw are 120 inches long. The adjustment will accommodate blades up to a maximum length of 121 inches and to a minimum length of 119-1/2" inches.

CUTTING CURVES

When cutting curves, turn the stock carefully so that the blade may follow without being twisted. If a curve is so abrupt that it is necessary to repeatedly back up and cut a new kerf, either a narrow blade is needed or a blade with more set is required. The more set a blade has, the easier it will allow the stock to be turned, but the cut is usually rougher than where a medium amount of set is used.

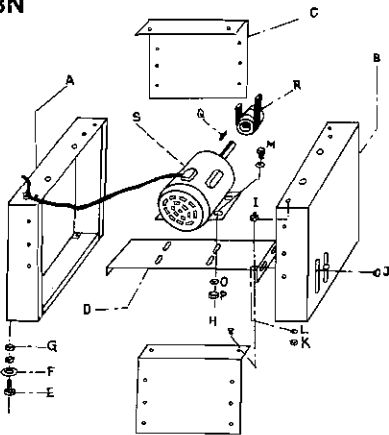
In withdrawing the piece being cut, in order to change the cut, or for any other reason, the operator must be careful that he does not accidentally draw the blade off the wheels. In most cases it is easier and safer to turn the stock and saw out through the waste material, rather than try to withdraw the stock from the blade.



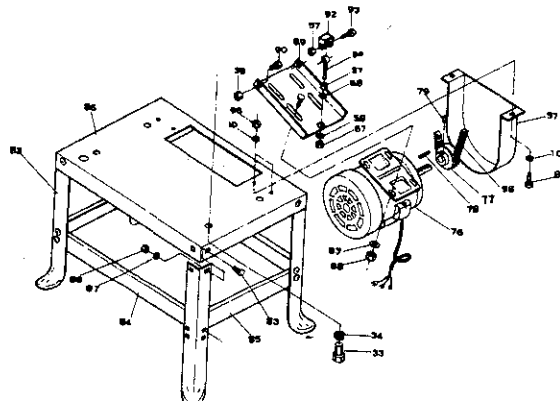
YS-1603N

YS-1603N

Part	QTY
A	1
B	1
C	2
D	4
E	4
F	8
G	16
H	16
I	4
J	4
K	4
L	4
M	4
O	4
P	4
Q	1
R	1



LK-1603



PARTS LIST

Item	Description	Size No.	QTY.
1	Upper Frame Arm		1
2	Lock Handle		1
3	Switch Plate		1
4	Guide Post		1
5	Support Bracket For Upper Guide		1
6	Screw		4
7	Guide Block		2
8	Square Guide Block		4
9	Cross Screw		8
10	Flat Washer		20
11	Knob Screw		4
12	Guard Plate		1
13	Spacking Sleeve		2
14	Ball Bearing	6200ZZ	2
15	C-Clip		2
16	Blade Adjust Screw		1
17	Upper Wheel Sliding Brkt.		1
18	Spring		1
19	Square Bolt		1
20	Knob Screw		1
21	Nut		1
22	Pan Screw		1
23	Upper Wheel Shaft Hinge		1
24	Pin		2
25	Spring Pin		1
26	Upper Wheel Shaft		1
27	Ball Bearing	6202ZZ	4
28	Upper Wheel		1
29	Wheel Protector		2
30	Upper Wheel Guard (Inner)		1
31	Stud		4
32	Upper Wheel Guard (Outter)		1
33	Screw		4
34	Flat Washer		8
35	Nut		6
36	C-Ring		4
37	Flat Washer		6
38	Pin		2
39	Screw		1
40	Flat Washer		2
41	Base		1
42	Nut		1
43	Saw Blade		1
44	Table Insert		1
45	Spring Pin		1
46	Pin		1
47	Working Table		1
48	Stud		2
49	Trunnion Clamp Shoe		2
50	Trunnion		2

Item	Description	Size No.	QTY.
51	Trunnion Support Brocket		1
52	Cross Knob		6
53	Indicator		1
54	Gauge		1
55	Screw		2
56	Hexagon Stud		1
57	Hexagon Nut		4
58	Flat Washer		4
59	Hexagon Screw		2
60	Flat Washer		2
61	Support Bracket For Lower Guide		1
62	Nut		1
63	Lower Wheel		1
64	BLADE COVER		1
65	Key		1
66	Ball Bearing		2
67	C-Clip		2
68	Lower Wheel Shaft		1
69	Nut		1
70	Motor Pulley (Large)		1
71	Screw		1
72	Belt		1
73	Plate		1
74	Cross Screw		10
75	Switch		1
76	Motor		1
77	Motor Pulley (Small)		1
78	Key		1
79	Screw		1
80	Pulley Guard		1
81	Screw		4
82	Stand Foot		4
83	Screw		24
84	Adjusting Plate (L)		2
85	Adjusting Plate (S)		2
86	Stand		1
87	Washer		28
88	Nut		28
89	Motor Base		1
90	Screw		2
91	Shaft		1
92	Holder Base		1
93	Screw		1
94	Screw		1
95	Pulley		1
96	Nut		4
97	Motor Pulley Guard		1
98	Belt		1
99	Washer		2
100	Nut		1

MEASUREMENTS: 52" x 23.2"x15" CUFT 10.5 N.W.