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Operating Instructions and Parts Manual
Woodworking Band Saws
Model JWBS-15, JWBS-18, JWBS-20



JWBS-20 shown

For serial nos.:

JWBS-15: 17120226 and higher
JWBS-17: 18030001 and higher
JWBS-18: 17110021 and higher

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1.0 IMPORTANT SAFETY INSTRUCTIONS

WARNING – To reduce risk of injury:

1. Read and understand entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace warning labels if they become obscured or removed.
4. This band saw is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a band saw, do not use until proper training and knowledge have been obtained.
5. Do not use this band saw for other than its intended use. If used for other purposes, JET disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
6. Always wear approved safety glasses/face shield while using this machine. (Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.)
7. Before operating band saw, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do not wear gloves.
8. Keep work area clean. Cluttered areas and benches invite accidents.
9. Use proper extension cord. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Sect. 6.4, Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.
10. Secure work. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
11. Disconnect tools before servicing; when changing accessories, such as blade, bits, cutters and the like.
12. Direction of feed: Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
13. Maintain proper adjustment of blade tension, blade guides, and thrust bearings.
14. Adjust upper blade guides to just clear workpiece (approximately 1/8").
15. Make sure blade tension, tracking and blade guides are all properly adjusted.
16. Make relief cuts where possible, when cutting curved stock.
17. When feeding small work pieces into blade, always use push stick, fixture, or similar device to keep hands at a safe distance.
18. Hold stock firmly and flat against table.
19. Wear ear protectors (plugs or muffs) during extended periods of operation.
20. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
21. Make certain switch is in OFF position before connecting machine to power supply.
22. Make certain machine is properly grounded.
23. Do not back stock out of blade while blade is running.
24. Do not remove jammed cutoff pieces until blade has stopped.
25. Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
26. Keep safety guards in place at all times when machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately after completion of maintenance.
27. Check damaged parts. Before further use of machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
28. Keep floor around machine clean and free of scrap material, oil and grease.

29. Keep visitors a safe distance from work area. Keep children away.
30. Make your workshop child proof with padlocks, master switches or by removing starter keys.
31. Give your work undivided attention. Looking around, carrying on a conversation and “horse-play” are careless acts that can result in serious injury.
32. Maintain a balanced stance at all times so that you do not fall into blade or other moving parts. Do not overreach or use excessive force to perform any machine operation.
33. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and more safely.
34. Use recommended accessories; improper accessories may be hazardous.
35. Maintain tools with care. Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
36. Turn off machine before cleaning. Use a brush or compressed air to remove chips or debris — not your hands.
37. Do not stand on machine. Serious injury could occur if machine tips over.
38. Never leave machine running unattended. Turn power off and do not leave band saw until blade comes to a complete stop.
39. Remove loose items and unnecessary work pieces from area before starting machine.
40. Keep hands out of line of saw blade.
41. Don’t use in dangerous environment. Do not expose machine to rain or use in wet or damp locations. Keep work area well lighted.
42. Remove safety key from switch whenever band saw is turned “OFF”, and keep safety key out of reach of unauthorized persons or children.

⚠ **WARNING:** This product can expose you to chemicals including lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to http://www.p65warnings.ca.gov.

⚠ **WARNING:** Drilling, sawing, sanding or machining wood products generates wood dust and other substances known to the State of California to cause cancer. Avoid inhaling dust generated from wood products or use a dust mask or other safeguards for personal protection.

Wood products emit chemicals known to the State of California to cause birth defects or other reproductive harm. For more information go to http://www.p65warnings.ca.gov/wood.

Familiarize yourself with the following safety notices used in this manual:

⚠CAUTION This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

⚠WARNING This means that if precautions are not heeded, it may result in serious, or possibly even fatal, injury.

SAVE THESE INSTRUCTIONS

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3.0 **About this manual**

This manual is provided by JET, covering the safe operation and maintenance procedures for a JET Model JWBS-15, JWBS-18 and JWBS-20 Band Saw.

This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. Your machine has been designed and constructed to provide consistent, long-term operation if used in accordance with the instructions as set forth in this document.

This manual is not intended to be an exhaustive guide to band saw operational methods, use of jigs or after-market accessories, choice of stock, etc. Additional knowledge can be obtained from experienced users or trade articles. Whatever accepted methods are used, always make personal safety a priority.

If there are questions or comments, please contact your local supplier or JET. JET can also be reached at our web site: www.jettools.com.

Retain this manual for future reference. If the machine transfers ownership, the manual should accompany it.

⚠WARNING Read and understand the entire contents of this manual before attempting assembly or operation! Failure to comply may cause serious injury!

4.0 **Specifications**

The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, JET reserves the right to change specifications at any time and without prior notice, without incurring obligations.

4.1 **Specifications for JWBS-15**

Model number	**JWBS-15**	**JWBS-15-3**
Stock number	714600	714650
Band saw nominal size	15 in.	15 in.
Motor and electricals:		
Motor type	totally-enclosed fan-cooled, induction, capacitor start	
Horsepower	1.75 HP	3 HP
Phase	single	single
Voltage	115/230V (prewired 115V)	230V
Cycle	60Hz	60Hz
Listed FLA (full load amps)	15/7.5A	12A
Starting amps	75A	52A
Running amps (no load)	5.1A	2.4A
Start capacitor	300MFD 250VAC	300MFD 250VAC
Run capacitor	40µF 250VAC	60µF 300VAC
Power transfer	poly v-belt	poly v-belt
On/off switch	push button with paddle stop	push button, magnetic starter
Motor speed	1720 RPM	1720 RPM
Power cord length	6 ft. (183 cm)	6 ft. (183 cm)
Power plug installed	115V	230V
Recommended circuit size[1]	20A	20A
Sound emission[2]	75 dB at 40" (1000mm) from blade, without load	
Capacities and speeds:		
Wheel diameter	14-3/4 in. (375 mm)	14-3/4 in. (375 mm)
Resaw capacity (cutting height)	14 in. (356 mm)	14 in. (356 mm)
Throat capacity	14-1/8 in. (359 mm)	14-1/8 in. (359 mm)
Maximum rip left of blade with fence	12-3/8 in. (316 mm)	12-3/8 in. (316 mm)
Maximum rip right of blade with fence	2-7/8 in. (73 mm)	2-7/8 in. (73 mm)
Blade length	133 in. (min. 131.8; max. 133.5)	133 in. (min. 131.8; max. 133.5)
Minimum blade width	1/8 in.	1/8 in.
Maximum blade width	1 in.	1 in.
Blade speed	3100 FPM	3100 FPM
Blade provided	Hook, 1/2" x 0.0256 thk 6 TPI	Hook, 1/2" x 0.0256 thk 6 TPI
Main Materials:		
Table	ground cast iron	ground cast iron
Trunnion	cast iron	cast iron
Frame	steel	steel
Band wheels	cast iron	cast iron
Tires	yellow polyurethane	yellow polyurethane
Blade guides	ball bearing	ball bearing
Resaw fence	extruded aluminum	extruded aluminum
Paint finish	powder coating	powder coating
Table, fence, miter gauge:		
Table dimensions	21-1/2 x 16 x 2 in. (546 x 406 x 51 mm)	
Table tilt	Left 5°, Right 45°	Left 5°, Right 45°
Table height from floor	35 in. (889 mm)	35 in. (889 mm)
Miter T-slot	3/4 in. W x 0.35 in. H	3/4 in. W x 0.35 in. H
Resaw fence size LxWxH	18-1/8 x 1-3/4 x 6 in.	18-1/8 x 1-3/4 x 6 in.
Miter gauge angle	Left 45°, Right 45°	Left 45°, Right 45°
Fence fine adjust knob, travel per one revolution	0.05 in. (1.25 mm)	0.05 in. (1.25 mm)
Fence fine adjust knob, maximum travel	0.35 in. (9 mm)	0.35 in. (9 mm)
Dimensions:		
Footprint (base size), LxWxH	25-1/2 x 21-5/8 x 2 in. (648 x 549 x 51 mm)	
Overall dimensions, LxWxH	29-1/2 x 32 x 74 in. (750 x 812 x 1880 mm)	
Shipping package dimensions	30 x 24-1/2 x 79-1/2 in. (760 x 625 x 2020 mm)	
Dust collection:		
Dust port outside diameter	4 in. (100mm) x 2	4 in. (100mm) x 2
Minimum extraction volume required	400 CFM	400 CFM
Weights:		
Net	382 lbs (174 kg)	382 lbs (174 kg)
Shipping	446 lbs (203 kg)	446 lbs (203 kg)

[1] Subject to local/national electrical codes. [2] The specified values are emission levels and are not necessarily to be seen as safe operating levels. As workplace conditions vary, this information is intended to allow the user to make a better estimation of the hazards and risks involved only.

4.2 **Specifications for JWBS-18**

Model number	**JWBS-18**	**JWBS-18-3**
Stock number	714700	714750
Band saw nominal size	18 in.	18 in.
Motor and electricals:		
Motor type	totally-enclosed fan-cooled, induction, capacitor start	
Horsepower	1.75 HP	3 HP
Phase	single	single
Voltage	115/230V (prewired 115V)	230V
Cycle	60Hz	60Hz
Listed FLA (full load amps)	15/7.5 A	12 A
Starting amps	75A	53A
Running amps (no load)	5.1A	2.4A
Start capacitor	300MFD 250VAC	300MFD 250VAC
Run capacitor	40µF 250VAC	60µF 300VAC
Power transfer	poly v-belt	poly v-belt
On/off switch	push button with paddle stop	push button, magnetic starter
Motor speed	1720 RPM	1720 RPM
Power cord length	6 ft. (183 cm)	6 ft. (183 cm)
Power plug installed	115V	230V
Recommended circuit size[1]	20A	20A
Sound emission[2]	75 dB at 40" (1000 mm) from blade, without load	
Capacities and speeds:		
Wheel diameter	18-1/2 in.	18-1/2 in.
Resaw capacity (cutting height)	16 in.	16 in.
Throat capacity	18 in.	18 in.
Maximum rip left of blade with fence	16 in.	16 in.
Maximum rip right of blade with fence	4-1/2 in.	4-1/2 in.
Blade length	150 in. (max. 150.9; min. 149)	150 in. (max. 150.9; min. 149)
Blade width	1/8 to 1-1/4 in.	1/8 to 1-1/4 in.
Blade provided	Hook, 3/4" x 0.0256 thk 6 TPI	Hook, 3/4" x 0.0256 thk 6 TPI
Blade speed	2300 and 3800 FPM	2300 and 3800 FPM
Main Materials:		
Table	ground cast iron	ground cast iron
Trunnion	cast iron	cast iron
Frame	steel	steel
Band wheels	cast iron	cast iron
Tires	polyurethane	polyurethane
Blade guides	ball bearing	ball bearing
Resaw fence	extruded aluminum	extruded aluminum
Paint finish	powder coating	powder coating
Table, fence, miter gauge:		
Table dimensions	27-1/4 x 20 x 1-5/8 in.	27-1/4 x 20 x 1-5/8 in.
Table tilt	Left 5°, Right 45°	Left 5°, Right 45°
Table height from floor	37 in. (940 mm)	37 in. (940 mm)
Miter T-slot	3/4 in. W x 0.375 in. H	3/4 in. W x 0.375 in. H
Resaw fence size LxWxH	22-1/2 x 1-3/4 x 6 in.	22-1/2 x 1-3/4 x 6 in.
Miter gauge angle	Left 45°, Right 45°	Left 45°, Right 45°
Fence fine adjust knob, travel per one revolution	0.05 in. (1.25 mm)	0.05 in. (1.25 mm)
Fence fine adjust knob, maximum travel	0.35 in. (9 mm)	0.35 in. (9 mm)
Dimensions:		
Footprint (base size), LxWxH	29-1/2 x 21-5/8 x 2 in. (750 x 550 x 50.8 mm)	
Overall dimensions, LxWxH	36 x 34 x 80 in. (914 x 864 x 2032 mm)	
Shipping package dimensions	31 x 26 x 85 in. (780 x 660 x 2168 mm)	
Dust collection:		
Dust port outside diameter	4 in. (100mm) x 2	4 in. (100mm) x 2
Minimum extraction volume required	400 CFM	400 CFM
Weights:		
Net	502 lbs (228 kg)	502 lbs (228 kg)
Shipping	572 lbs (260 kg)	572 lbs (260 kg)

[1] Subject to local/national electrical codes. [2] The specified values are emission levels and are not necessarily to be seen as safe operating levels. As workplace conditions vary, this information is intended to allow the user to make a better estimation of the hazards and risks involved only.

4.3 **Specifications for JWBS-20**

Model number	**JWBS-20-3**	**JWBS-20-5**
Stock number	714800	714850
Band saw nominal size	20 in.	20 in.
Motor and electricals:		
Motor type	totally-enclosed fan-cooled, induction, capacitor start	
Horsepower	3 HP	5 HP
Phase	single	single
Voltage	230V	230V
Cycle	60Hz	60Hz
Listed FLA (full load amps)	12A	22A
Starting amps	54A	99A
Running amps (no load)	2.9A	8.1A
Start capacitor	300MFD 250VAC	300MFD 250VAC
Run capacitor	60µF 300VAC	45µF 450VAC
Power transfer	poly v-belt	poly v-belt
On/off switch	push button, magnetic starter	push button, magnetic starter
Motor speed	1720 RPM	1720 RPM
Power cord length	6 ft. (183 cm)	6 ft. (183 cm)
Power plug installed	230V	230V
Recommended circuit size[1]	20A	30A
Sound emission[2]	75 dB at 40” (1000mm) from blade, without load	
Capacities and speeds:		
Wheel diameter	20-1/4 in. (514 mm)	20-1/4 in. (514 mm)
Resaw capacity (cutting height)	16 in. (406.4 mm)	16 in. (406.4 mm)
Throat capacity	20 in. (508 mm)	20 in. (508 mm)
Maximum rip left of blade with fence	18-1/2 in. (470 mm)	18-1/2 in. (470 mm)
Maximum rip right of blade with fence	4-1/2 in. (114 mm)	4-1/2 in. (114 mm).
Blade length	158 in. (max 158.9; min. 157.1)	158 in. (max 158.9; min. 157.1)
Blade width	1/8 to 1-1/2 in.	1/8 to 1-1/2 in.
Blade speed	2530 and 4850 FPM	2530 and 4850 FPM
Blade provided	Hook, 1" x 0.035 thk 3 TPI	Hook, 1" x 0.035 thk 3 TPI
Main Materials:		
Table	ground cast iron	ground cast iron
Trunnion	cast iron	cast iron
Frame	steel	steel
Band wheels	cast iron	cast iron
Tires	rubber	rubber
Blade guides	ball bearing	ball bearing
Resaw fence	extruded aluminum	extruded aluminum
Paint finish	powder coating	powder coating
Table, fence, miter gauge:		
Table dimensions	27-1/4 x 20 x 1-3/4 in.	27-1/4 x 20 x 1-3/4 in.
Table tilt	Left 5°, Right 45°	Left 5°, Right 45°
Table height from floor at 90 degrees	37 in. (940 mm)	37 in. (940 mm)
Miter T-slot	3/4 in. W x 0.35 in. H	3/4 in. W x 0.35 in. H
Resaw fence size LxWxH	22-1/2 x 1-3/4 x 6 in.	22-1/2 x 1-3/4 x 6 in.
Miter gauge angle	Left 45°, Right 45°	Left 45°, Right 45°
Fence fine adjust knob, travel per one revolution	0.05 in. (1.25 mm)	0.05 in. (1.25 mm)
Fence fine adjust knob, maximum travel	0.35 in. (9 mm)	0.35 in. (9 mm)
Dimensions:		
Footprint (base size), LxWxH	31-1/2 x 21-5/8 x 2 in. (800 x 550 x 50.8mm)	
Overall dimensions, LxWxH	37 x 33-1/8 x 88 in. (940 x 842 x 2235 mm)	37 x 32-1/4 x 88 in (940 x 819 x 2235 mm)
Dust collection:		
Dust port outside diameter	4 in. (100mm) x 2	4 in. (100mm) x 2
Minimum extraction volume required	400 CFM	400 CFM
Weights:		
Net	544 lbs (247 kg)	588.5 lbs (267 kg)
Shipping	617 lbs (280 kg)	661 lbs (300 kg)

[1] Subject to local/national electrical codes. [2] The specified values are emission levels and are not necessarily to be seen as safe operating levels. As workplace conditions vary, this information is intended to allow the user to make a better estimation of the hazards and risks involved only.

4.4 **Base Hole Centers**

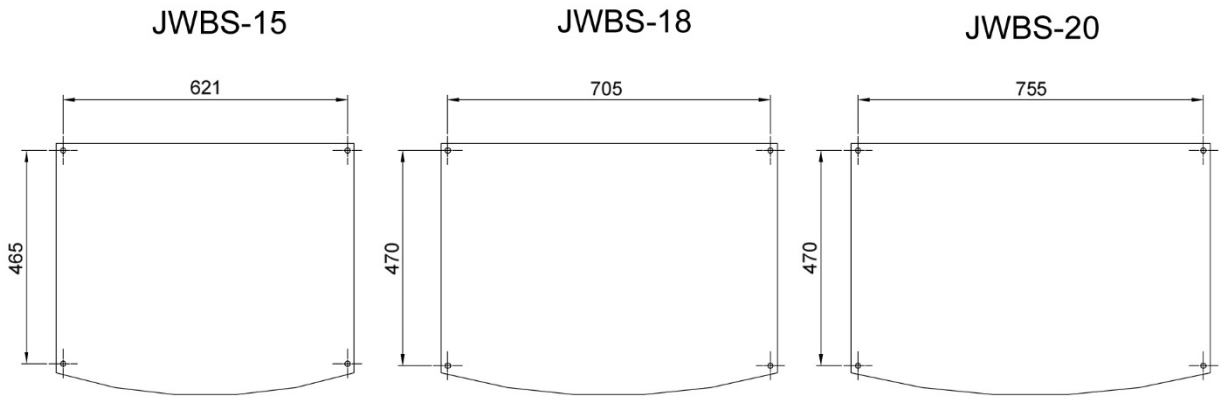


Figure 4-1: base hole centers (millimeters)

⚠WARNING Read and understand the entire contents of this manual before attempting assembly or operation. Failure to comply may cause serious injury.

5.0 Setup and assembly

5.1 Shipping contents

Refer to Figure 5-1.

1 Band saw (not shown)
1 Fence body – A
1 Resaw fence – B
1 Table – C
1 Table insert – D
1 Guide rail – E
1 Lifting ring – F
1 Handwheel with handle – G
1 Miter gauge assembly – H
1 Bracket *(model JWBS-20 only)* – J
1 Owner's manual (not shown)
1 Warranty card (not shown)

1 Hardware package containing:
- 2 Socket hd button screws – HP1
- 2 Flat washers – HP2
- 4 Hex cap screws – HP3
- 4 Lock washers – HP4
- 4 Flat washers – HP5
- 1 Table slot handle assembly – HP6

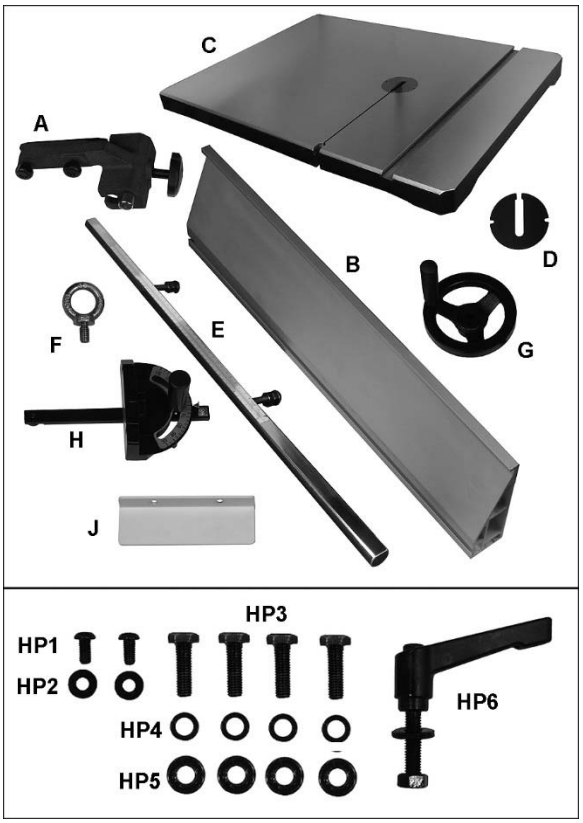


Figure 5-1: contents

5.2 Tools required for assembly

The tools listed below are not included but are required for assembly.

1 2.5mm hex key
1 3mm hex key
1 straight edge
1 17mm wrench
1 13mm wrench

5.3 Unpacking and cleanup

Remove crate and packing material from band saw except for the transport skid on the bottom. Inspect the machine for damage. Report any damage to your distributor and shipping agent. Do not discard packing material until machine is assembled and running satisfactorily.

Move the saw to its permanent working location. The site should be dry, well lit, and have enough room to handle long stock and servicing or adjustment of the machine from any side.

Install lifting ring atop band saw, and use hoist to move saw off skid. Clean all rust protected surfaces with a mild solvent or diesel fuel and a soft cloth. Do not use lacquer thinner, paint thinner, or gasoline, as these will damage painted surfaces.

5.4 Assembly

⚠WARNING Band saw must be disconnected from power source during assembly procedures. Failure to comply may cause serious injury.

5.5 Handwheel

Install handwheel (G, Figure 5-2) onto shaft, and tighten two set screws with 3mm hex key.

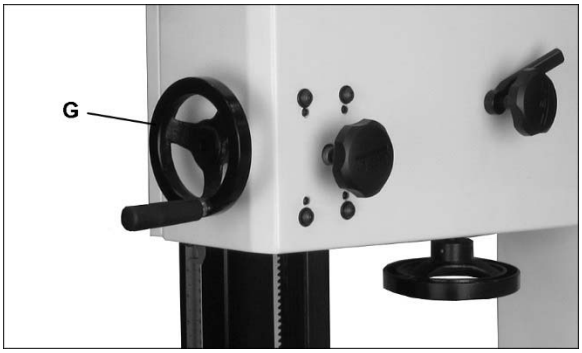


Figure 5-2

5.6 Installing and aligning table

⚠CAUTION Table is heavy. Mounting with the help of another person is recommended.

Refer to Figures 5-3 through 5-4:

1. Slide table so that saw blade passes through slot (A).

2. Line up table to trunnions, and insert four hex cap screws with lock washers and flat washers (Figure 5-4). Hand tighten screws only.
3. Check that table is parallel to blade: Move blade tension lever to *Full Tension* position (shown in Figure 7-9), and place a long straightedge flush against blade, making sure it contacts both front and back of blade. See Figure 5-5. (Do not deflect blade by pushing into it.)
4. Use a gauge to carefully measure distance from miter slot to straight edge. Take measurements at both front and back of table – these should be identical.
5. If miter slot is not parallel to blade, shift table as needed.
6. Tighten the four screws (Figure 5-4) securely.
7. Install table insert (D, Figure 5-3). (See sect. 7.5 to level insert with table.)
8. Install slot handle assembly (HP6), and tighten.

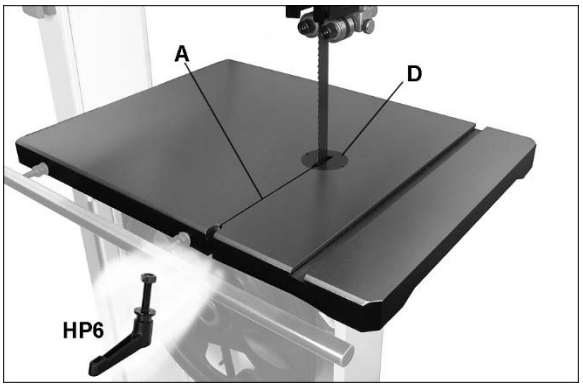


Figure 5-3



Figure 5-4

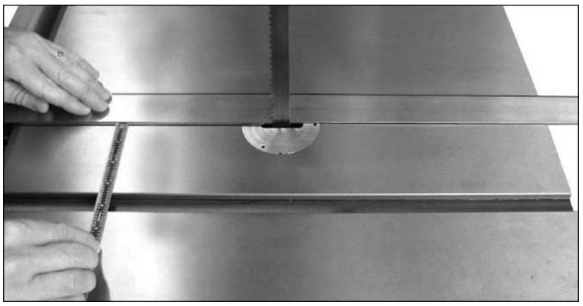


Figure 5-5

5.7 Installing guide rail

Refer to Figure 5-6.

1. Attach guide rail (E) to table by inserting the two threaded studs into the table edge. Secure with the included fasteners (see inset). Do not fully tighten yet until fence adjustments have been made in the following section.



Figure 5-6

5.8 Fence assembly and alignment

Refer to Figure 5-7.

1. Slide fence body (A, Figure 5-7) onto guide rail and move fence body to right of blade.
2. Install resaw fence (B) and tighten with two knobs (A_1).
3. Slide resaw fence against edge of miter slot, as shown, and tighten handle (A_2) to lock position. The fence should align parallel to miter slot along entire length of fence.

If adjustment is needed:

4. Loosen and rotate hex nuts on guide rail studs (A_3) as needed, until resaw fence is parallel to miter slot.
5. Tighten nuts on guide rail studs.

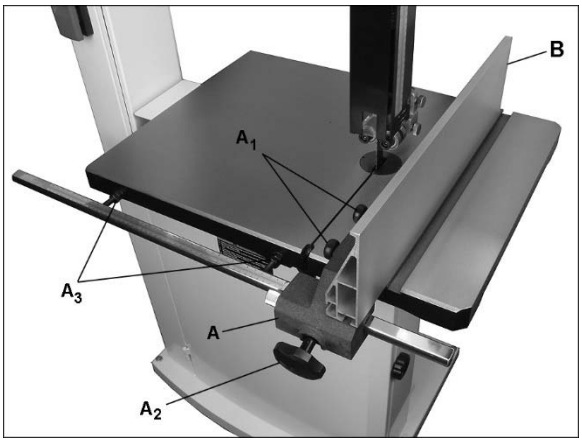


Figure 5-7

5.9 **Table bracket (JWBS-20 only)**

Install bracket (J, Figure 5-8) to back edge of table. Level with top surface of table and tighten screws.

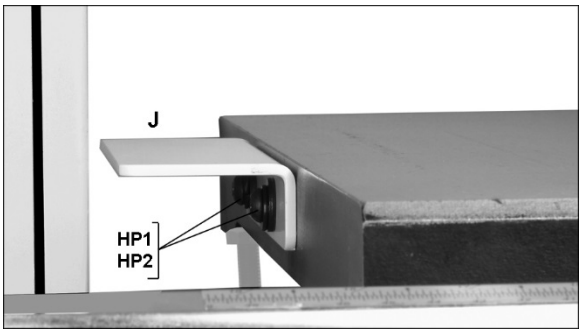


Figure 5-8

5.10 **Miter gauge**

Refer to Figure 5-9.

1. Slide miter gauge into table slot.
2. Use a square to verify that miter gauge face is square to blade.
3. If miter gauge is not square to blade, loosen lock knob (H_1, Figure 5-9) and adjust to proper setting. Tighten lock knob.
4. If pointer is not at 90 degrees, loosen screw (H_2) and shift pointer to 90 degrees.
5. Tighten screw.

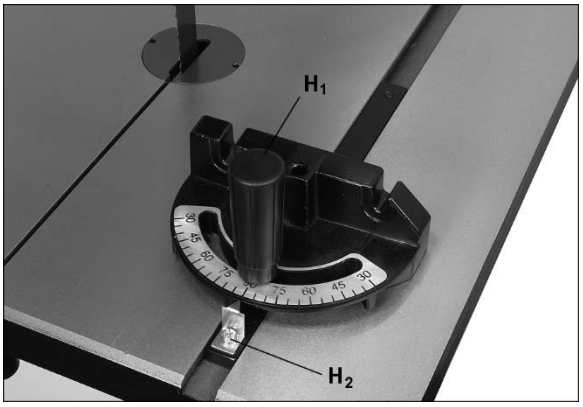


Figure 5-9

6.0 **Electrical connections**

⚠WARNING Electrical connections must be made by a qualified electrician in compliance with all relevant codes. This machine must be properly grounded to help prevent electrical shock and possible fatal injury.

6.1 **GROUNDING INSTRUCTIONS**

This machine must be grounded. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Before connecting to power source, be sure the switch is in *off* position.

⚠WARNING Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded. Failure to comply may cause serious or fatal injury.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn cord immediately.

6.2 **Models JWBS-15, JWBS-18**

Model JWBS-15 and JWBS-18 Band Saws are wired from the factory for 115 volt operation, but can be rewired for 230 volts.

115 Volt Operation

The JWBS-15 and JWBS-18 Band Saw are for use on a nominal 115-V circuit, and have a grounded plug that looks like the plug illustrated in sketch A in Figure 6-1. A temporary adaptor that looks like the adaptor illustrated in sketches B and C may be used to connect this plug to a 2-pole receptacle as shown in sketch B if a properly grounded outlet is not available. The temporary adaptor should be used only until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear, lug, or the like extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by a metal screw.

In Canada, the use of a temporary adaptor is not permitted by the Canadian Electrical Code, C22.1.

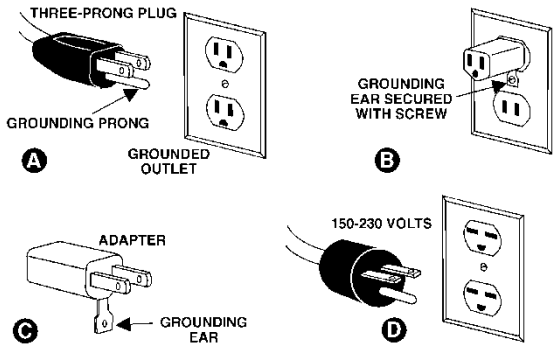


Figure 6-1

230 Volt Operation

To convert the JWBS-15 or JWBS-18 from 115V to 230V, single phase operation, the following is strongly recommended:

Contact your local Authorized JET Service Center or qualified electrician for proper procedures to install the plug. The band saw must comply with all local and national codes after the 230V plug is installed.

1. Switch the motor lead wires inside the motor junction box, according to the diagram found inside the junction box cover.
2. The 115V attachment plug supplied with the band saw (A, Figure 6-1) must be replaced with a UL/CSA listed plug suitable for 230V operation (D, Figure 6-1).

The band saw with a 230V plug should only be connected to an outlet having the same configuration (D, Figure 6-1). No adapter is available or should be used with the 230V plug.

Important: In all cases (115 or 230 volts), make certain the receptacle in question is properly grounded. If you are not sure, have a registered electrician check the receptacle.

6.3 Models JWBS-15-3, JWBS-18-3, JWBS-20-3, JWBS-20-5

Band saw models JWBS-15-3, JWBS-18-3, JWBS-20-3, and JWBS-20-5 are wired from the factory for 230 volt operation only. Refer to *Specifications* for phase and HP ratings.

This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in **D,** Figure 6-1. The tool has a grounding plug that looks like the plug illustrated in **D**. Make sure the tool is connected to an outlet having the same configuration as the plug. No adapter is available or should be used with this tool. If the tool must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel; and after reconnection, the tool should comply with all local codes and ordinances.

6.4 Circuit Information (all models)

The Band Saw should be connected to a dedicated circuit with a circuit breaker or time delay fuse rated "D" with the appropriate amperage rating. See Table 1 for recommended circuit sizes. **Local codes take precedence over recommendations.**

Model	Voltage	Recommended Circuit*
714600, JWBS-15	115 V	20A
714650, JWBS-15-3	230 V	20A
714700, JWBS-18	115 V	20A
714750, JWBS-18-3	230 V	20A
714800, JWBS-20-3	230 V	20A
714850, JWBS-20-5	230 V	30A

*** Local codes take precedence over recommendations.**

Table 1

6.5 Extension cords

The use of extension cords is discouraged; try to position your machine within reach of the power supply. If an extension cord becomes necessary, make sure the cord rating is suitable for the amperage listed on the machine's motor plate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.

Use the chart in Table 2 as a general guide in choosing the correct size cord. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Recommended Gauges (AWG) of Extension Cords

Ampere Rating		Volts	Total length of cord in feet			
More Than	Not More Than	120 240	25 50	50 100	100 200	150 300
			AWG			
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

Table 2

7.0 Adjustments

7.1 Aluminum resaw fence

Refer to Figures 7-1 and 7-2.

Loosen knobs (A_1) until lock bar protrudes enough on which to slide the aluminum fence plate from one end, as shown in Figure 7-1. Retighten knobs.

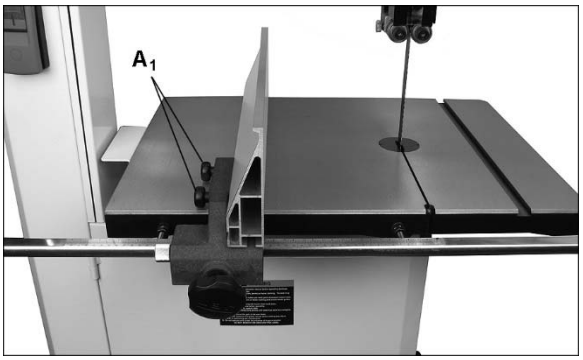


Figure 7-1: vertical position

The aluminum fence plate can be installed in one of two positions; vertically (resaw position), as shown in Figure 7-1; or horizontally as shown in Figure 7-2.

Horizontal position is useful for smaller workpieces. (Zero setting of cursor cannot be used with horizontal fence position.)

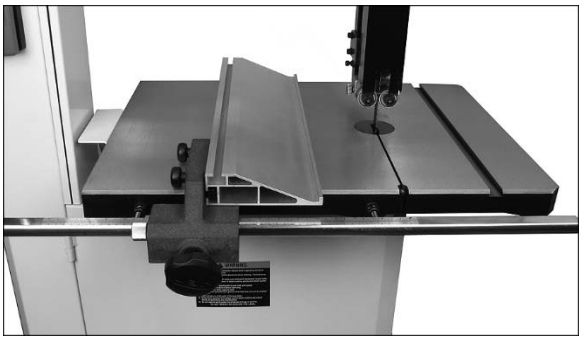


Figure 7-2: horizontal position

7.2 Fence fine adjust

Refer to Figure 7-3.

1. Loosen fence lock knob (A, Figure 7-3).
2. Loosen knob (B).
3. Slide fence to approximate position, based on the scale measurement aligning with the right side of resaw fence.
4. Tighten knob (B).
5. Rotate knurled knob (C) to achieve fine adjustment.
6. When setting is reached, tighten fence lock knob (A).

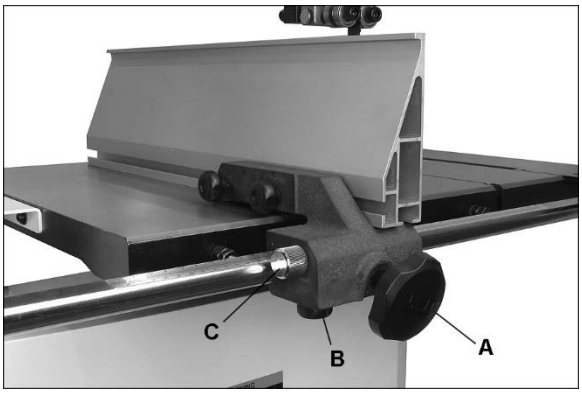


Figure 7-3

7.3 Table tilt

Refer to Figure 7-4.

1. Disconnect machine from power source.
2. Loosen lock handle (D).
3. Tilt table up to 45 degrees to the right (as viewed from operator side), or up to 5 degrees to the left.
4. Tighten lock handle.

Note: Table stop bolt (F, Figure 7-4) must be pivoted out of the way to tilt table to the left.

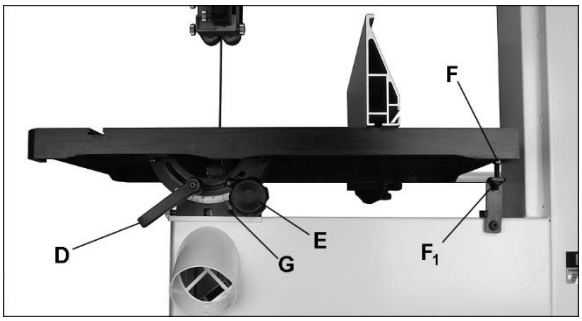


Figure 7-4

7.4 Adjusting 90-degree table stop

Before adjusting the 90º table stop, the blade tension must be properly adjusted (see sect. 7.7)

To adjust 90º table stop:

1. Loosen lock handle (D, Figure 7-4) and use knob (E) to tilt table until it rests against table stop bolt (F). Retighten lock handle.
2. Use a square (Figure 7-5) placed on table and against blade to verify that table is 90 degrees to blade.
3. If an adjustment is necessary, loosen lock handle (D). Tilt table until it is square to blade; then retighten lock handle.
4. Loosen lock nut (F_1) and turn table stop bolt (F) until it contacts table. Tighten lock nut to hold table stop in place. When tightening the nut hold the table stop bolt in place with a wrench to prevent movement.

5. If necessary, adjust pointer (G, Figure 15) to zero.

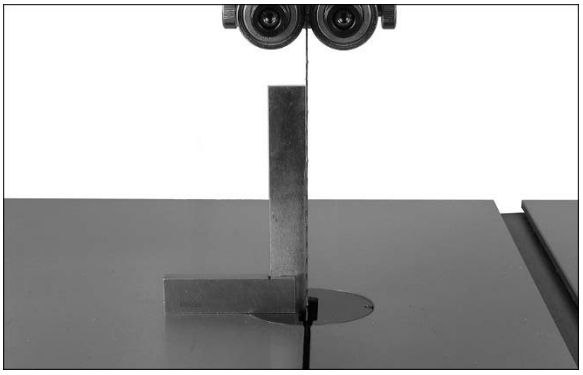


Figure 7-5

7.5 Leveling table insert

Remove table insert to expose set screws in the table ledge. Rotate screws as needed (2mm hex key) until insert sits flush with table surface.

7.6 Installing/changing blades

⚠CAUTION Wear gloves when handling blades. New blades are usually packaged in coiled position; to prevent injury uncoil them slowly and carefully while wearing work gloves and safety glasses.

See sect. 4.0 for specific blade sizes for your model Band Saw.

Refer to Figures 7-6, 7-7 and 7-8.

1. Disconnect machine from power source.
2. Loosen handle and remove it from table (see HP6, Figure 5-3).
3. Adjust upper and lower blade guides away from blade *(see sections 7.11 through 7.13).*
4. Move quick tension lever to “Full Release (Blade Change)” position.
5. Open upper and lower doors by rotating door knobs.
6. Pivot guide post cover out of the way (Figure 7-6).
7. Swing lower guard (H, Figure 7-7) to the left. Tilt table slightly if more clearance is needed to swing guard.
8. Remove dust block (J, Figure 7-8).
9. Carefully remove blade from top wheel, then from between upper and lower blade guides and lower wheel. Slide blade out through slot in table.
10. Guide new blade through table slot. Place blade loosely in upper and lower blade guides. Make sure blade teeth point down toward table, and toward front of saw.

    (If the teeth will not point down, no matter how you orient blade, then blade is inside-out. Twist it into correct position and re-install it.)

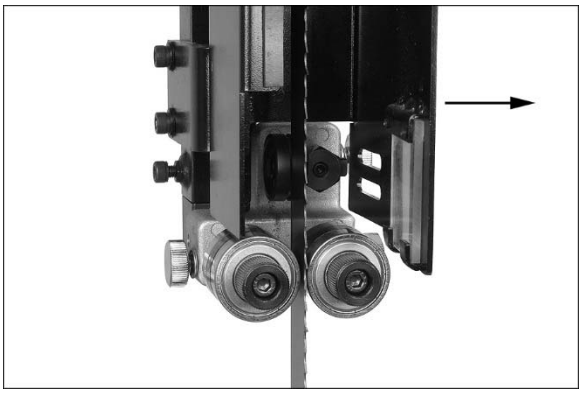


Figure 7-6

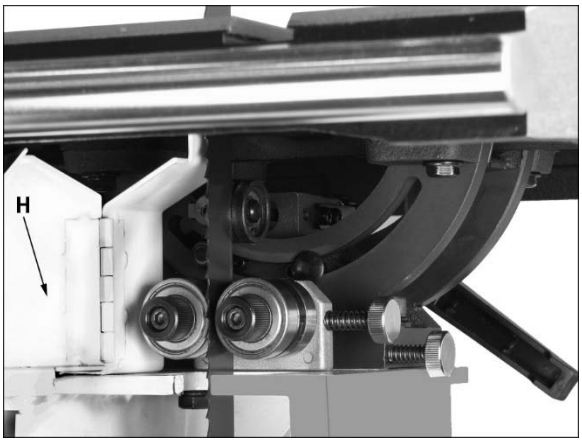


Figure 7-7



Figure 7-8

11. Position blade at center of upper and lower wheels.
12. Reinstall dust block (J, Figure 7-8) and table slot handle (HP6, Figure 5-3).
13. Before operating band saw, the new blade must be tensioned and tracked, in that order. Find instructions for tensioning and tracking the blade in *sections 7.7 and 7.9*.
14. The blade guides must also be set properly according to instructions in *sections 7.11 through 7.13.*

7.7 Blade tension

Blade tension is set with the blade tension handwheel (L, Figure 7-10) and is performed following blade replacement and periodically as the blade stretches from use.

⚠WARNING Disconnect machine from power source before making any adjustments.

Refer to Figures 7-9 and 7-10.

1. Place tension lever (K, Figure 7-9) in *Full Tension* position.
2. Set blade tension by rotating handwheel (L) according to the arrow directions shown in Figure 7-10, clockwise to tighten, counterclockwise to loosen.
3. The gauge (M) indicates approximate tension according to the width of the blade in inches. Initially, set the blade tension to correspond to the width of your blade.

As you become familiar with the saw, you may find it necessary to change the blade tension from the initial setting.

Keep in mind that too little or too much blade tension can cause blade breakage and/or poor cutting performance.

Tip: When the band saw is not being used, place tension lever to *Partial Tension* position – this will prolong the blade's life.



Figure 7-9

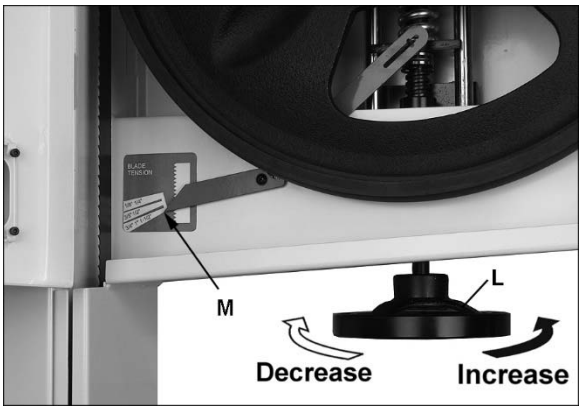


Figure 7-10

7.8 Adjusting blade tension lever

The blade tension lever has an adjustment screw or stop bushing that allows you to adjust how much tension is released when lever is used.

To adjust tension lever:

1. Disconnect machine from power source.
2. Move lever to *Blade Release* position and remove blade.
3. Move tension lever to *Full Tension* position.
4. **Models JWBS-15 and JWBS-18**: Turn adjustment screw (Figure 7-11) until gap between screw and wheel shaft hinge is 1/8 to 3/16 in.

   Model JWBS-20: Move stop bushing (Figure 7-12) until gap between stop bushing and wheel shaft hinge is 1/8 to 3/16 in.

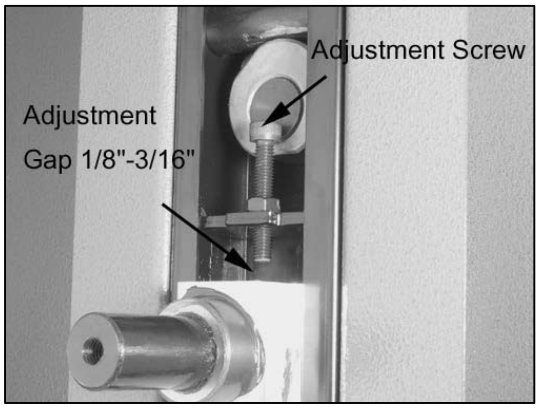


Figure 7-11

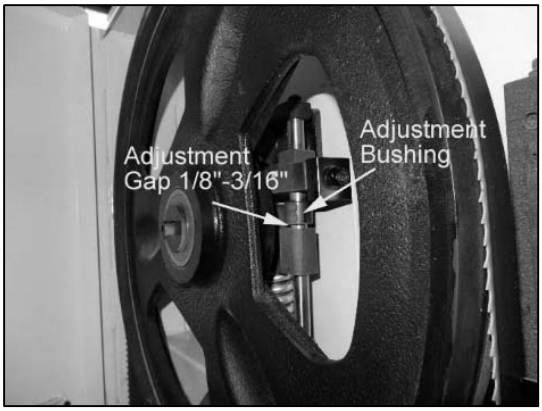


Figure 7-12

7.9 Blade tracking

Refer to Figures 7-13 and 7-14.

After proper tensioning, the blade must be tracked. "Tracking" refers to position of blade on the wheels while machine is in operation. Tracking should be checked periodically, and is mandatory after every blade change. Blade tracking is done by hand with machine disconnected from power.

1. Disconnect machine from power source.
2. Blade must be correctly tensioned *(sect. 7.7).*

3. Make sure blade guides and other parts of machine will not interfere with blade movement. Use handwheel (N) to lower guide post until you can see blade through tracking window (O, Figure 7-13).

4. Set blade tension lever initially to *Partial Tension-Idle/Tracking* position.

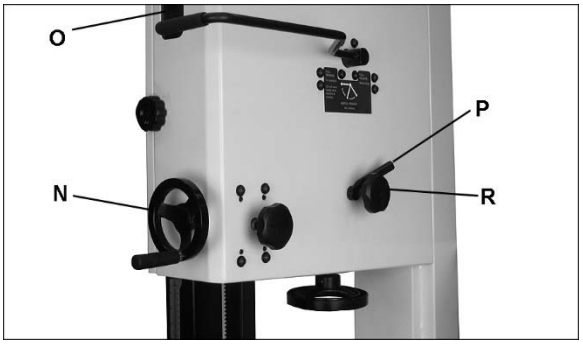


Figure 7-13

5. Open upper door to expose wheel.

6. Rotate wheel by hand, observing position of blade through tracking window. As you rotate wheel, move tension lever to *Full Tension* position. The blade should continue to ride upon center of tire (Figure 7-14).

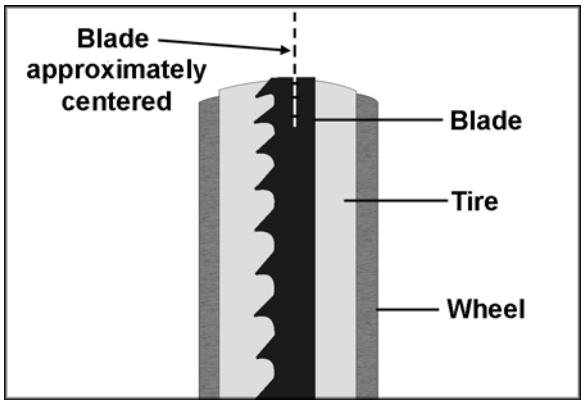


Figure 7-14

7. If blade tends to move toward edge of wheel, set lever to *Partial Tension-Idle/Tracking*.

8. Loosen locking handle (P, Figure 7-13) and slightly rotate tracking knob (R) with your right hand while continuing to rotate wheel with your left. Observe blade through tracking window. Rotating knob clockwise will cause blade to move toward rear edge of wheel. Rotating knob counterclockwise will cause blade to move toward front edge of wheel.

   IMPORTANT: This adjustment is sensitive; perform in small increments and give blade time to react to changes.

9. When blade is tracking in center of wheel, re-tighten locking handle (P), and close upper door.

10. Move tension lever to *Full Tension* position, and connect band saw to power. Turn it on for a brief time to observe blade in action through tracking window.

11. If further adjustments are needed, disconnect from power and repeat above procedure.

7.10 Overview – bearing adjustments

Thrust (back support) *bearings* are located behind saw blade and provide support to back of blade when saw is in operation.

Guide bearings are located on either side of saw blade and provide stability for the blade when saw is in operation. These bearings rotate on an eccentric shaft so distance from blade can be adjusted for optimal performance.

7.11 Upper blade guides

⚠WARNING Unplug machine from power source before making any adjustments! Blade teeth are sharp – use care when working near blade. Failure to comply may cause serious injury.

The bearing guides should be set so that contact between blade and guides will occur only when blade is under pressure from a workpiece. To adjust upper bearing guides for proper blade control, proceed as follows.

Refer to Figures 7-15 and 7-16.

1. Disconnect machine from power source.

2. Blade must already be tensioned and tracking correctly. Place tension handle in *Full Tension* position.

3. Lower guide post until upper guide bearings are a few inches off table. (The reason for this will be evident later in *sect. 7.15*)

4. Loosen lock knob (A, Figure 7-15).

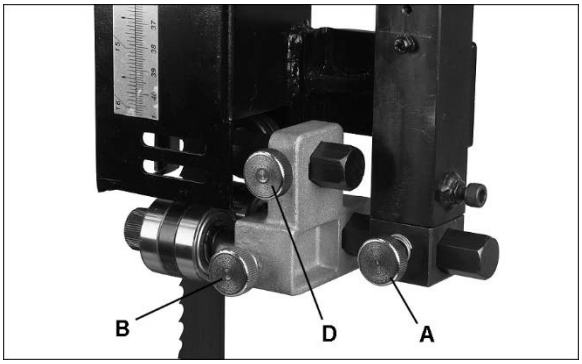


Figure 7-15

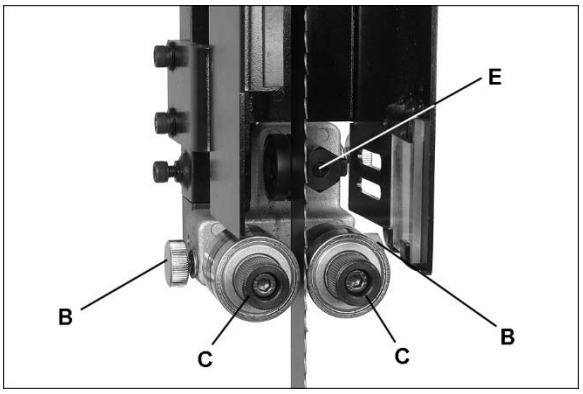


Figure 7-16

5. Slide entire guide bracket until front of guide bearings are about 0.015" (1/64") behind the blade's gullet (curved area at base of tooth). See Figure 7-17.

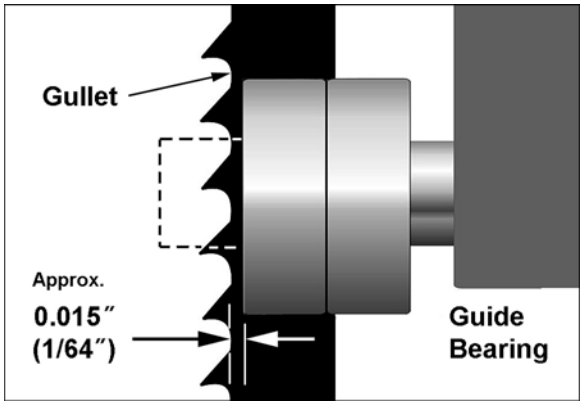


Figure 7-17

6. Tighten lock knob (A) to secure this position.
7. Loosen lock knob (B) for either of the front guide bearings.
8. The guide bearing rotates on an eccentric shaft. Adjust guide bearing by rotating the knurled knob (C) until guide bearing is approximately 0.004" from blade. A quick way to achieve this spacing is by placing a single thickness of a crisp dollar bill (a dollar bill is approximately 0.004" thick) between blade and guide bearing. Adjust guide bearing until it just lightly grips the dollar bill.

   NOTE: Do not force guide bearing against side of blade. It should generally only make contact with blade when there is pressure from the cutting operation.
9. Tighten lock knob (B).
10. Repeat process for opposite guide bearing.

7.12 Upper thrust bearing

Refer to Figures 7-15 and 7-16.

The thrust bearing prevents backward deflection of blade during cutting. A groove in the bearing surface helps stabilize the moving blade.

1. Loosen lock knob (D) and slide thrust bearing up to back of blade.
2. Adjust thrust bearing until space between groove bottom and back edge of blade is approximately 0.015" (1/64"). Tighten lock knob (D).
3. If lateral adjustment of bearing is needed to align groove with blade, loosen set screw (E) at front of bearing assembly, and shift bearing as needed. Retighten set screw.
4. Make sure all lock knobs on upper guide bearing assembly are tightened when adjustments are finished.

7.13 Lower blade guides

⚠WARNING Unplug machine from power source before making any adjustments! Blade teeth are sharp - use care when working near saw blade. Failure to comply may cause serious injury.

Refer to Figures 7-18 and 7-19.

1. Disconnect band saw from power source.
2. Open lower door and swing lower guard out of the way.
3. Adjust lower guide bearings and lower thrust bearing below table in similar manner to that of upper guide and thrust bearings.
4. Movement summary: Loosen lock knob (F) to move entire guide bearing assembly. Loosen lock knob (G) and rotate knob (H) to adjust guide bearing in relation to blade. Thrust bearing is controlled by locking knob (J) and lateral adjustment by set screw (K).
5. Make sure all knobs and handles are tightened after adjustments are complete.

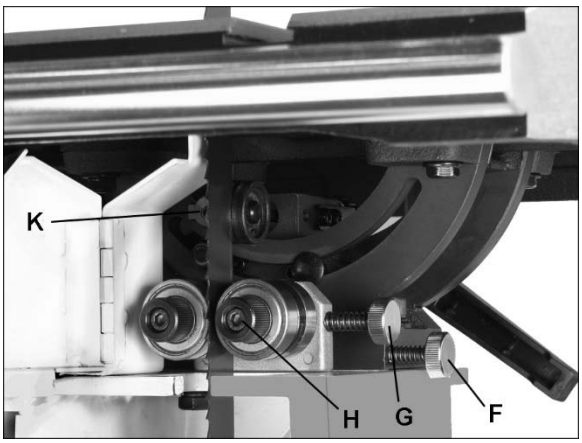


Figure 7-18

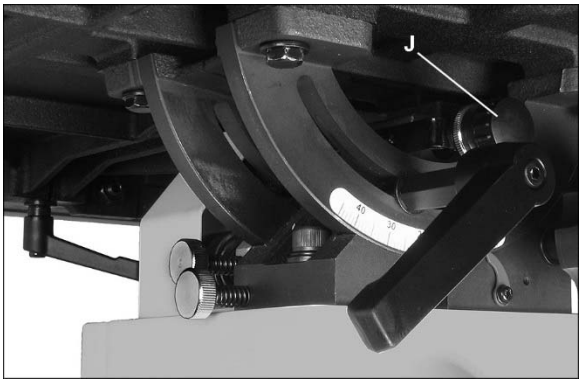


Figure 7-19

7.14 Guide post

Refer to Figure 7-20.

1. Disconnect band saw from power source.
2. Loosen lock knob (L) and raise or lower guide post using handwheel (M).

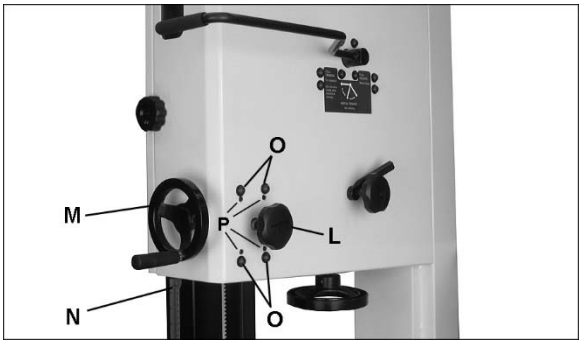


Figure 7-20

3. Position blade guide assembly so that bottom of guide bearings are about 1/8" above material to be cut. Or, simply lower guide post until scale pointer (N) indicates height of your workpiece. This provides minimal clearance between workpiece and bottom of guide bearings, which will minimize blade deflection as well as enhance operator safety.
4. Tighten lock knob (L).

7.15 Guide post parallelism

The guide post should be parallel to blade throughout vertical travel of the guide post; thus the guide bearings will maintain their relationship to blade at any height from the table and won't require re-setting each time guide post is moved. This setting has been accurately made by the manufacturer and should not require immediate attention, but may be checked in future as follows:

1. Disconnect band saw from power source.
2. Move blade tension lever to *Full Tension* position.
3. The guide bearings in low position should already be set in relation to blade (see *sect. 7.11)*. Also, the table must be square with blade *(see sect. 7.4).*
4. Loosen lock knob (L, Figure 7-20) and raise guide post to a high position.
5. Confirm that guide post travels straight up and down, and guide bearings maintain their relationship to blade.
6. If guide post does not go straight up and down (blade begins deflecting when guide post is raised), slightly loosen the screws (O) and turn any of the set screws (P) as needed to bring guide post into line.
7. When finished adjusting, securely tighten the four screws (O).
8. Verify the setting by raising and lowering guide post.

7.16 Changing blade speed

⚠WARNING Disconnect machine from power source before making any adjustments.

The JWBS-18 and JWBS-20 band saws have two blade-speed options which is determined by the position of the pulley drive belt. Refer to *sect. 4.0* for speed specifications.

1. Loosen lock handle (A, Figure 7-21).

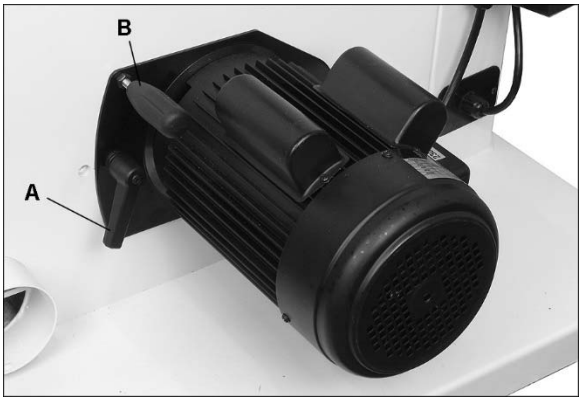


Figure 7-21

2. Release belt tension by pulling handle (B) up, then tighten lock handle (A) to maintain raised position.
3. Open lower wheel *door*.
4. Refer to Figure 7-22:

   For higher blade-speed – place poly V-belt in inner position on spindle and motor pulleys as shown.

   For lower blade-speed – place poly V-belt in outer position on pulleys.

After repositioning belt:

5. Loosen lock handle (A, Figure 7-21). Apply belt tension by slightly pushing down handle (B).

6. Tighten lock handle (A) to secure motor position.

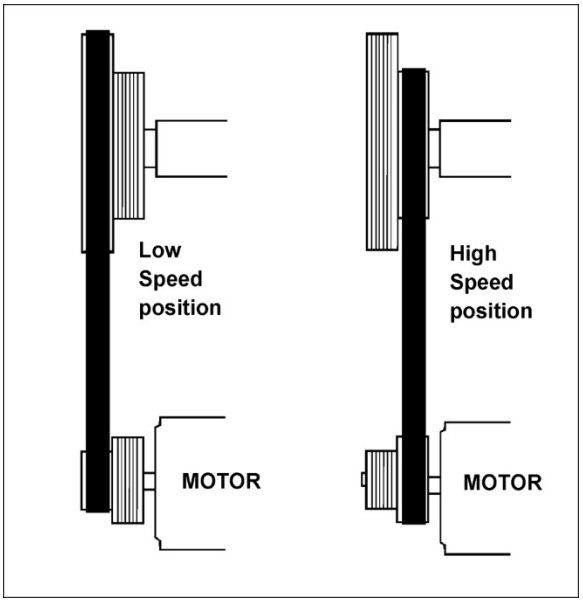


Figure 7-22

7.17 Drive belt replacement and tensioning

The drive belt and pulleys are properly adjusted by the manufacturer. However, belt tension should be occasionally checked when the band saw is new, as a new belt may stretch slightly during the breaking-in process.

⚠WARNING Disconnect machine from power source before making any adjustments.

If belt becomes worn, cracked, frayed or glazed, it should be replaced as follows:

1. Disconnect machine from power source.
2. Open upper and lower doors and remove blade.
3. Loosen motor lock handle (A, Figure 7-21).
4. Raise motor lift handle (B) and retighten lock handle (A) to hold motor in raised position.
5. Open lower wheel door. Remove bolt and washers, and remove wheel. If lower wheel does not come off easily you may need to use a pulley puller to remove it.
6. Remove old belt from around motor pulley, and then from around lower wheel pulley.
7. Install new belt, making sure it seats properly in pulley grooves. **Note:** See *sect. 7.16* for speed positioning.
8. Check pulley alignment. Refer to *sect. 7.18*, then return here to step 9.
9. Reinstall lower wheel, bolt and washers, and tighten.
10. Loosen motor lock handle (A, Figure 7-21) and allow motor to lower. Check tension by pushing with moderate pressure on the belt halfway between the pulleys. An adequately tensioned belt will deflect about 1/2". If tension isn't strong enough, push down on motor.
11. Tighten motor lock handle (A).
12. Install blade, and verify blade tension and tracking before operating (*sect 7.7 and 7.9).*

7.18 Pulley alignment

Pulley alignment is done in conjunction with poly V-belt replacement.

If you are just beginning the alignment, start with *sect. 7.17.*

If you were directed here, proceed as follows:

1. Place a straight edge against wheel pulley and motor pulley. If straight edge does not sit flush against both pulleys, alignment is necessary.

If alignment is necessary:

2. Loosen two set screws on motor (lower) pulley with 4mm hex wrench.
3. Adjust motor pulley by sliding in or out.
4. Confirm alignment of poly V-belt using the straight edge.
5. Retighten the two set screws on the motor pulley.

7.19 Brushes

An adjustable brush is located in the lower wheel housing. It should remain in constant contact with blade and wheel to prevent buildup of gum and debris. Loosen screw and adjust as needed, then retighten screw.

8.0 Operating controls

8.1 Start/stop switch

Press the green *on* button (A, Figure 8-1) to start. Press the red *stop* button (B) to stop.

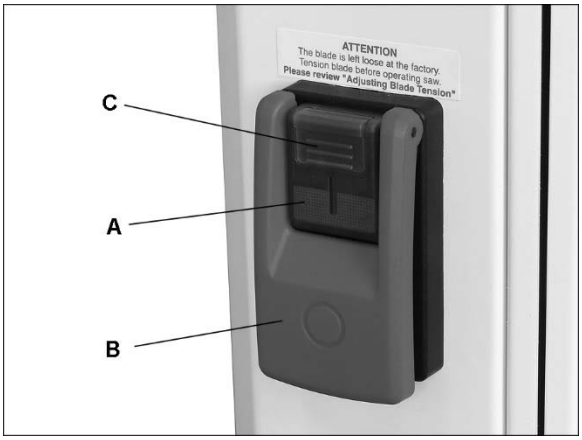


Figure 8-1 – Start/Stop Switch

On 3- and 5-horsepower models, the *on* button will light up when it is pushed and saw is operating. (There is no light on 1-3/4 HP models.)

The switch has a safety feature that prevents unauthorized or accidental starting of the machine. With band saw turned off, slide safety key (C, Figure 8-1) up and remove it from switch. This piece must be re-inserted before band saw can operate.

9.0 Operation

The following section contains basic information, and is not intended to cover all possible applications or techniques using the band saw. Consult published sources of information, acquire formal training, and/or talk to experienced band saw users to gain proficiency and knowledge of band saw operations.

(The following figures may or may not show your specific band saw, but procedures are the same.)

9.1 General procedure

1. Make sure the blade and upper and lower bearings are properly adjusted for tension and tracking.
2. Adjust blade guide assembly so that the guide bearings are just above workpiece (about 3/16") allowing minimum exposure to blade. See Figure 9-1.
3. If using the fence, move it into position and lock it to the guide rail. If you are using the miter gauge for a crosscut, the fence should be moved safely out of the way.
4. Turn on band saw and allow a few seconds for the machine to reach full speed.

⚠WARNING Whenever possible, use a push stick, hold-down, power feeder, jig, or similar device while feeding stock, to prevent your hands getting too close to the blade.

5. Place the straightest edge of the workpiece against the fence, and push the workpiece slowly into the blade. Do not force the workpiece into the blade.

⚠CAUTION When cutting, do not overfeed the blade; overfeeding will reduce blade life and may cause the blade to break.

6. When cutting long stock, the operator should use roller stands, support tables, or an assistant to help stabilize the workpiece.

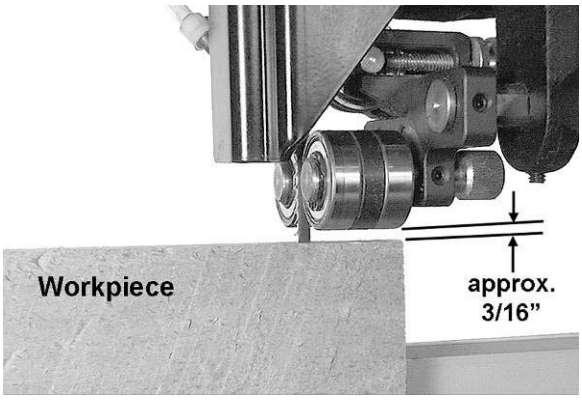


Figure 9-1

9.2 Ripping

Ripping is cutting lengthwise through the workpiece, and with the grain (of wood stock). See Figure 9-2.

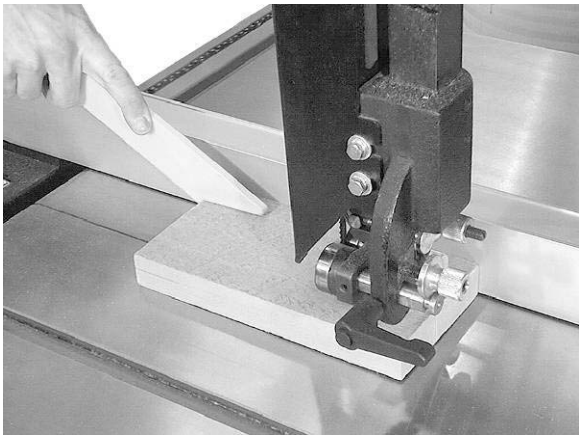


Figure 9-2

9.3 Crosscutting

Crosscutting is cutting across the grain of the workpiece, while using the miter gauge to feed the workpiece into the blade.

Slide the bar of the miter gauge into the end of the slot on the table.

The right hand should hold the workpiece steady against the miter gauge, while the left hand pushes the miter gauge past the blade, as shown in Figure 9-3.

Do not use the fence in conjunction with the miter gauge. The offcut of the workpiece must not be constrained during or after the cutting process.

⚠CAUTION Using the fence in conjunction with the miter gauge can cause binding and possible damage to the blade.

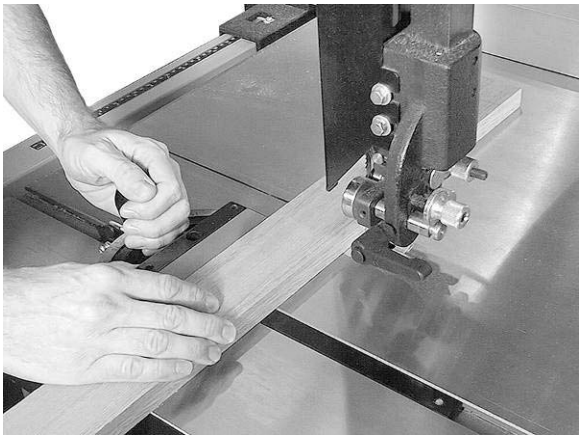


Figure 9-3

9.4 **Resawing**

Resawing is the process of slicing stock to reduce its thickness, or to produce boards that are thinner than the original workpiece. Figure 9-4 demonstrates resawing.

The ideal blade for resawing is the widest one the machine can handle, as the wider the blade the better it can hold a straight line.

When resawing thin stock, use a push block, push stick, or similar device to keep your hands away from the blade.

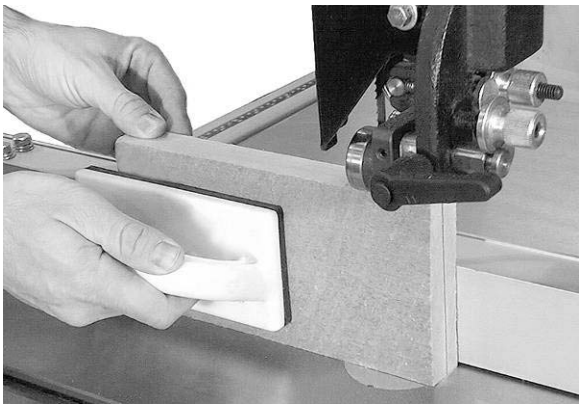


Figure 9-4

9.5 **Blade lead**

Blade lead, or drift, is when the blade begins to wander off the cutting line even when the band saw fence is being used. Figure 9-5 shows an example of blade lead. It is more common with small, narrow blades, and is almost always attributable to poor blade quality, or lack of proper adjustments. Inspect the band saw for the following:

- Fence not parallel to miter slot and blade.
- Blade not tensioned correctly.
- Blade is dull.
- Teeth have excessive “set” on one side of blade.
- Workpiece being fed too quickly.

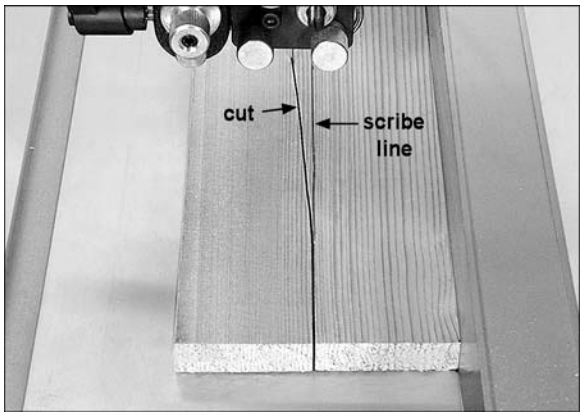


Figure 9-5

9.6 **Saw blade selection**

Using the proper blade for the job will increase the operating efficiency of your band saw, help reduce necessary saw maintenance, and improve your productivity. Thus, it is important to follow certain guidelines when selecting a saw blade.

Here are factors to consider when selecting a blade:

- ❒ The type of material you will be cutting.
- ❒ The thickness of the workpiece or part.
- ❒ The features of the workpiece or part, such as bends or curves with small radii.

These factors are important because they involve basic concepts of saw blade design. There are five (5) blade features that are normally changed to meet certain kinds of sawing requirements. They are:

1. width
2. pitch (number of teeth per inch)
3. tooth form (or shape)
4. the "set" of the teeth
5. the blade material itself.

9.7 **Width**

Band saw blades come in different standard widths, measured from the back of the blade to the tip of the tooth. Generally, wider blades are used for ripping or making straight cuts; narrower blades are often used when the part being cut has curves with small radii. When cutting straight lines with a narrow blade, the blade may have a tendency to wander, causing *blade lead*. (refer to *sect. 9.5).*

9.8 **Pitch**

Pitch is measured in "teeth per inch" (TPI). Figure 9-6 shows blades with different pitches. A fine pitch (more teeth per inch) will cut more slowly but smoother. A coarse pitch (fewer teeth per inch) will cut rougher but faster. As a rule of thumb, the thicker the workpiece, the coarser will be the blade pitch. If you have to cut a hard or very brittle material, you will probably want to use a blade with a finer pitch in order to get good clean cuts.

General rule: Use a blade that will have no fewer than 6 and no more than 12 teeth in the workpiece at any given time.

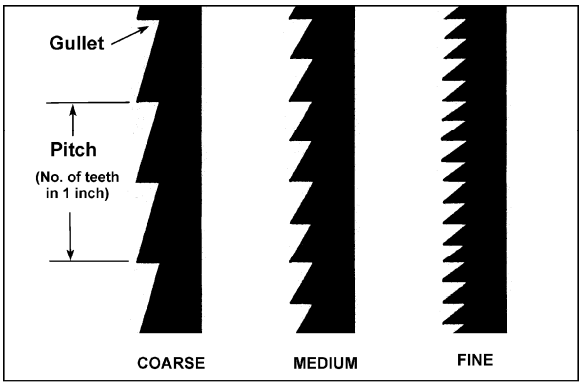


Figure 9-6

9.9 **Shape**

Figure 9-7 shows common types of tooth shape. Tooth shape has an effect on cutting rate, and with few exceptions, the Skip and Hook types are used to obtain higher feed rates when cutting thick workpieces. Variable-tooth blades are also available, which combine features of the other styles.

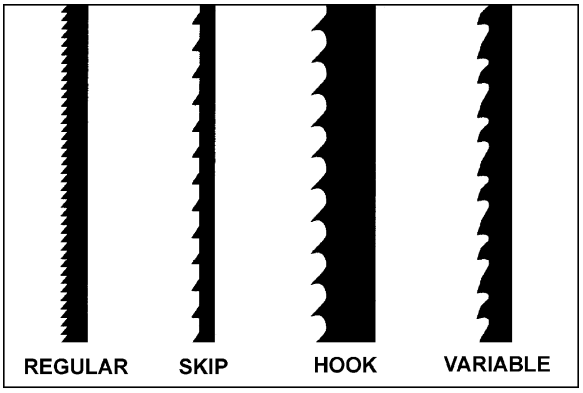


Figure 9-7

9.10 **Set**

The term "set" refers to the way in which the saw teeth are bent or positioned. Set patterns are usually selected depending on the type of material that needs to be cut. Three common set patterns are shown in Figure 9-8.

Generally, the *Raker* set is used for cutting metal workpieces; the *Wave* set, when the thickness of the workpiece changes, such as cutting hollow tubing or structurals. The *Straight* set is most often preferred when cutting wood or plastics.

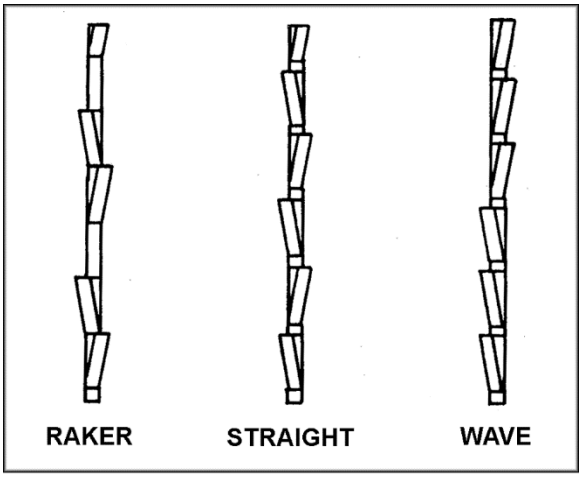


Figure 9-8

9.11 **Material**

Band saw blades can be made from different types of materials. Some of the most common include spring steel, carbon steel, carbon steel equipped with a high speed or welded edge (bi-metal), or carbide tips. A special type of saw blade is made from "high speed steel"; these should not be used on band saws with low rates of speed.

Because of the importance of blade selection, it is recommended that you use the *Blade Selection Guide* in *sect. 11.0*.

9.12 **Blade breakage**

Band saw blades are subject to high stresses and breakage may sometimes be unavoidable. However, many factors can be controlled to help prevent most blade breakage. Here are some common causes for breakage:

1. Misalignment of blade guides
2. Feeding work too fast
3. Using a wide blade to cut a short radius curve
4. Excessive tension
5. Teeth are dull or improperly set
6. Upper guides are set too high off workpiece
7. Faulty weld on blade

10.0 User-maintenance

⚠WARNING Before any intervention on the machine, disconnect it from the electrical supply by pulling out the plug. Failure to comply may cause serious injury.

Clean band saw regularly to remove any resinous deposits and sawdust.

Keep miter slot, and guide bearings, clean and free of resin.

Keep blade clean and sharp. Check it periodically for cracks or other signs of wear.

The drive belt should be checked periodically. If it looks worn, frayed, glazed or otherwise damaged, replace it.

Check that the cleaning brush over the band wheel is working properly, and remove any deposits from the band wheels to avoid vibration and blade breakage.

Do not let saw dust build up in the upper and lower wheel housings. Vacuum or blow out dust from inside cabinet. (Use proper dust mask equipment).

The table surface must be kept clean and free of rust for best results. If rust appears, it can often be removed with a mixture of household ammonia, good commercial detergent and #000 steel wool. Alternatively, commercial rust removers can be found at many hardware stores.

Apply a light coat of paste wax to the table surface. Aerosol protectants are also available in major hardware stores and supply catalogs. Whatever method is chosen, the coating should protect the metal and provide a smooth surface, without staining workpieces.

If the power cord is worn, cut, or damaged in any way, have it replaced immediately.

Connect the band saw to a JET dust collection system of appropriate capacity.

Vacuum out the motor fan cover.

10.1 Lubrication points

1. Periodically apply a light, non-hardening grease to rack and pinion system of guide post.
2. Grease sliding surfaces of the table trunnions.
3. Oil any pins, shafts, and joints. (Do not get oil on pulleys or belts.)
4. Clean and oil the tensioning mechanism if it becomes difficult to adjust.

Note: Bearings on the band saw are pre-lubricated and sealed, and do not require attention.

10.2 Additional servicing

Any other servicing should be performed by an authorized service representative.

11.0 **Blade Selection Guide**

Table 3

Identify the material and thickness of your workpiece. The chart will show the recommended PITCH, blade TYPE, and FEED RATE.

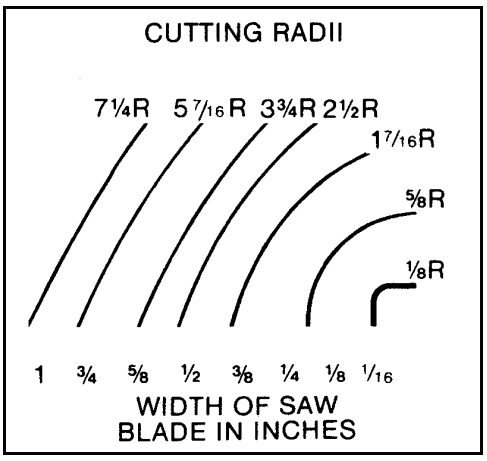
Key: H – Hook L – Low
S – Skip M – Medium
R – Regular H – High

Example: 10/H/M means 10 teeth per inch / Hook Type Blade / Medium Feed

Material/s		Workpiece Thickness			
		1/2"	1"	3"	6+"
Woods	Hardwood	10/R/L	8/R/L	3/H/M	3/H/M
	Softwood	10/R/L	8/R/L	3/H/M	3/H/M
Non-Metals	Carbon	10/R/L	6/R/L	3/S/M	3/S/M
	Mica	32/R/L	--	--	--
	Asbestos	8/R/L	6/R/L	3/S/M	3/S/M
	Hard Rubber	10/R/L	8/R/L	6/R/M	2/S/H
Plastics	Formica	14/R/M	10/R/M	4/H/H	4/H/H
	Masonite	10/R/L	4/S/L	3/S/M	3/H/M
	Micarta	14/R/M	10/R/M	4/H/H	3/H/H
	Plexiglas	10/R/L	6/R/L	3/S/M	3/S/M
	Paper	14/R/L	10/R/L	4/S/L	3/S/M

Study the part drawing or prototype, or actually measure the smallest cutting radius required, and locate this radius (in inches) on the chart at the right. Follow the curve to where the approximate blade width is specified. If a radius falls between two of the curves, select the widest blade that will saw this radius.

This procedure should be used for making initial blade selections. These recommendations can, of course, be adjusted to meet specific requirements of a cutting job. Compromises may be necessary if you cannot find all needed specifications in a single blade.



12.0 **Troubleshooting JWBS-series Band Saws**

12.1 **Operational problems**

Table 4

Symptom	Probable Cause	Correction *
Table tilt does not hold position under load.	Lock handle not tight.	Tighten lock handle.
	Trunnion locking mechanism is broken or worn.	Replace trunnion locking mechanism.
Table will not tilt.	Trunnion not lubricated.	Lubricate trunnion.
	Trunnion jammed.	Disassemble and replace jammed parts.
Table vibration while sawing.	Drive belt too slack.	Increase tension on drive belt. Replace belt if worn.
	Incorrect choice of saw blade pitch.	Check blade selection chart and use correct blade.
	Saw dust or debris on band wheel. Or tire is worn/damaged.	Keep band wheels clean. Replace tires if necessary.
Surface finish on workpiece is rough.	Blade pitch too coarse.	Change to finer pitch blade.
	Workpiece being fed too strongly.	Reduce feed force.
Blade cutting inaccurately. Cuts not straight.	Gum or pitch on blade.	Clean blade.
	Worn blade teeth or damaged blade.	Replace blade.
	Fence not parallel to blade.	Align fence properly.
	Incorrect adjustment of blade guides.	Adjust blade guides properly.
	Workpiece being fed too strongly.	Reduce feed force.
	Upper blade guides not located close enough to workpiece.	Position guides about 1/8" above workpiece.
	Incorrect choice of saw blade for that particular operation.	Install correct blade.
	Blade tension too light.	Increase tension.
Blade cannot be tensioned properly.	Tension spring is fatigued.	Replace tension spring (contact JET service representative).
Blade binds in workpiece.	Incorrect blade tension or damaged blade.	Correct accordingly.
	Blade too wide for desired radius.	Select narrower blade.
Blade forms cracks at base of teeth.	Teeth not suitable for operation, or incorrectly set.	Replace with proper blade.
	Blade thickness not suitable for band wheel diameter.	Replace with proper thickness blade.
	Blade sharpened incorrectly, becomes overheated.	Sharpen blade properly or replace.
	Band wheels have become misaligned.	Contact service representative.
Cracks on back edge of blade.	Workpiece being fed too quickly.	Reduce feed speed to lessen strain on blade.
	Welding on blade not perfectly aligned.	Eliminate welded part, and re-weld properly; or acquire a new blade. Round the back edge of a new blade.
	Thrust bearing is worn; caused by constant contact with back of blade.	Replace thrust bearing. Adjust new bearing according to instructions.

Symptom	Probable Cause	Correction *
Blade breaks prematurely.	Feed force too great.	Reduce feed force.
	Blade pitch too coarse.	Refer to blade selection chart; use finer pitch blade.
	Guide bearings not properly supporting blade.	Check guide bearings for correct position and signs of wear. Adjust or replace as needed.
	Blade tensioned too tightly.	Reduce tension.
Blade breaks close to weld.	Blade overheated during welding.	Have blade annealed, or eliminate brittle part and weld correctly.
	Blade cooled too rapidly after welding.	Have blade annealed, or eliminate brittle part and weld correctly.
Premature dulling of saw teeth.	Blade pitch too fine.	Refer to blade selection chart. Use blade with coarser pitch.
	Feed pressure too light.	Increase feed pressure.
	Cutting rate too low.	Increase feed pressure and cutting rate.
	Incorrect choice of blade.	Re-examine material. Select proper blade from chart.
	Chipped tooth or foreign object lodged in cut.	Stop saw and remove lodged particle. Replace blade if damaged.

* **WARNING:** Some corrections may require a qualified electrician.

12.2 **Mechanical and electrical problems**

Table 5

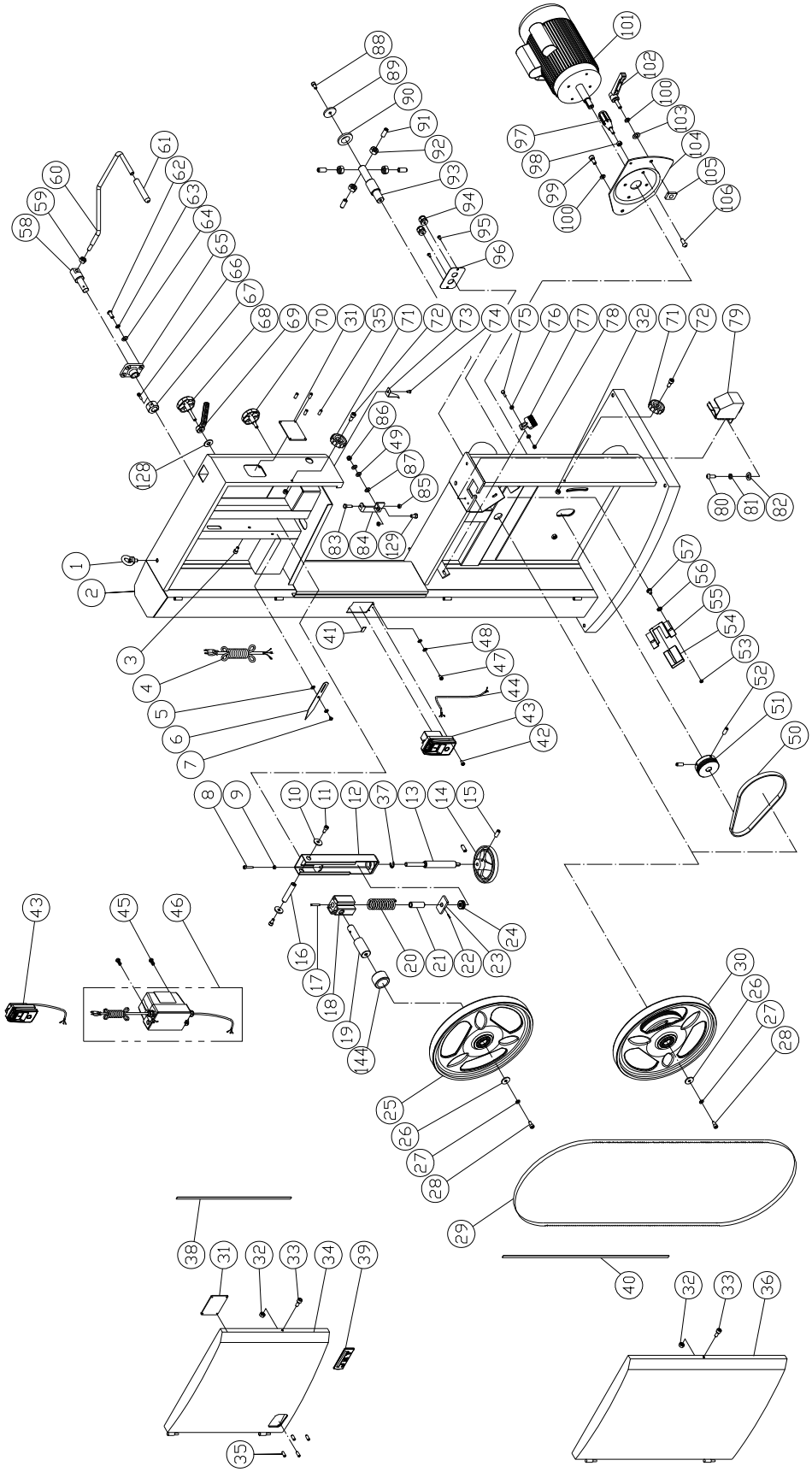
Symptom	Probable Cause	Correction *
Machine will not start/restart or repeatedly trips circuit breaker or blows fuses.	No incoming power.	Verify machine connections.
	Cord damaged.	Replace cord.
	Band Saw frequently trips.	One cause of overloading trips which are not electrical in nature is too heavy a cut. The solution is to reduce feed pressure into the blade. If this does not resolve the issue, check for loose electrical lead.
	Building circuit breaker trips or fuse blows.	Verify that band saw is on a circuit of correct size. If circuit size is correct, there is probably a loose electrical lead. Check amp setting on motor starter.
	Overload automatic reset has not reset.	When the 3HP and 5HP Band Saw overloads on the circuit break built into the motor starter, it takes time for the machine to cool down before restart. Allow machine to adequately cool before attempting restart. If problem persists, check amp setting on the motor starter inside the electrical box.
	Switch or motor failure (how to distinguish).	If you have access to a voltmeter, you can separate a starter failure from a motor failure by first, verifying incoming voltage at 115 +/-10% (or 230+/-10%) and second, checking the voltage between starter and motor at 115 +/-10% (or 230+/-10%). If incoming voltage is incorrect, you have a power supply problem. If voltage between starter and motor is incorrect, you have a starter problem. If voltage between starter and motor is correct, you have a motor problem.
	Motor overheated.	Clean motor of dust or debris to allow proper air circulation. Allow motor to cool down before restarting.
	Motor failure.	If electric motor is suspect, you have two options: Have a qualified electrician test the motor for function or remove the motor and take it to a qualified electric motor repair shop for testing.
	Miswiring of unit.	Double check to confirm all electrical connections are correct. Refer to wiring diagram to make needed corrections.
	Switch failure.	If the start/stop switch is suspect, you have two options: Have a qualified electrician test the switch for function, or purchase a new start/stop switch and establish if that was the problem on change-out.
Band Saw does not attain full speed.	Extension cord too light or too long.	Replace with adequate size and length cord.
	Low current.	Contact a qualified electrician.

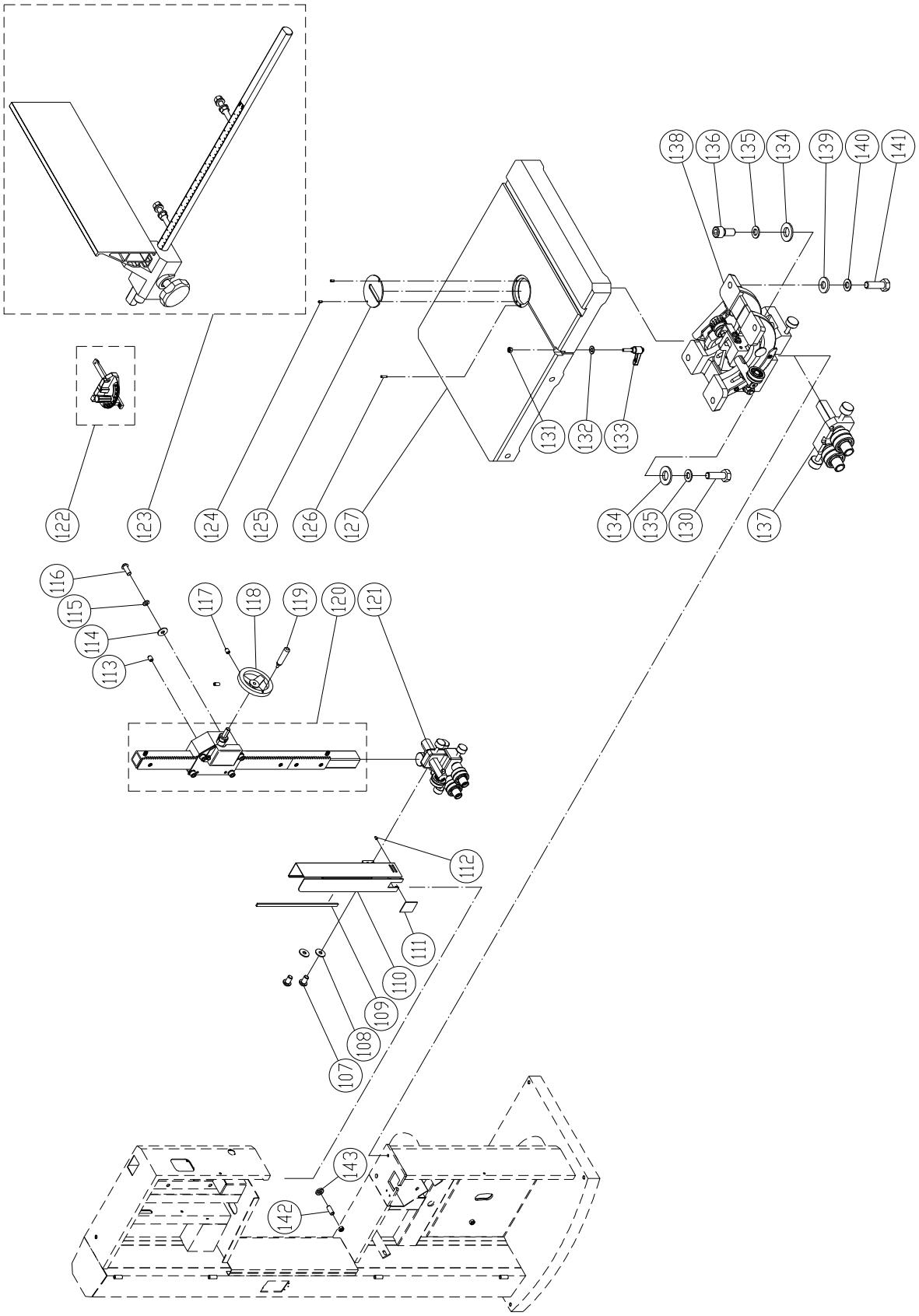
* **WARNING:** Some corrections may require a qualified electrician.

13.0 **Replacement Parts**

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

13.1.1 **JWBS-15 Assembly – Exploded View**




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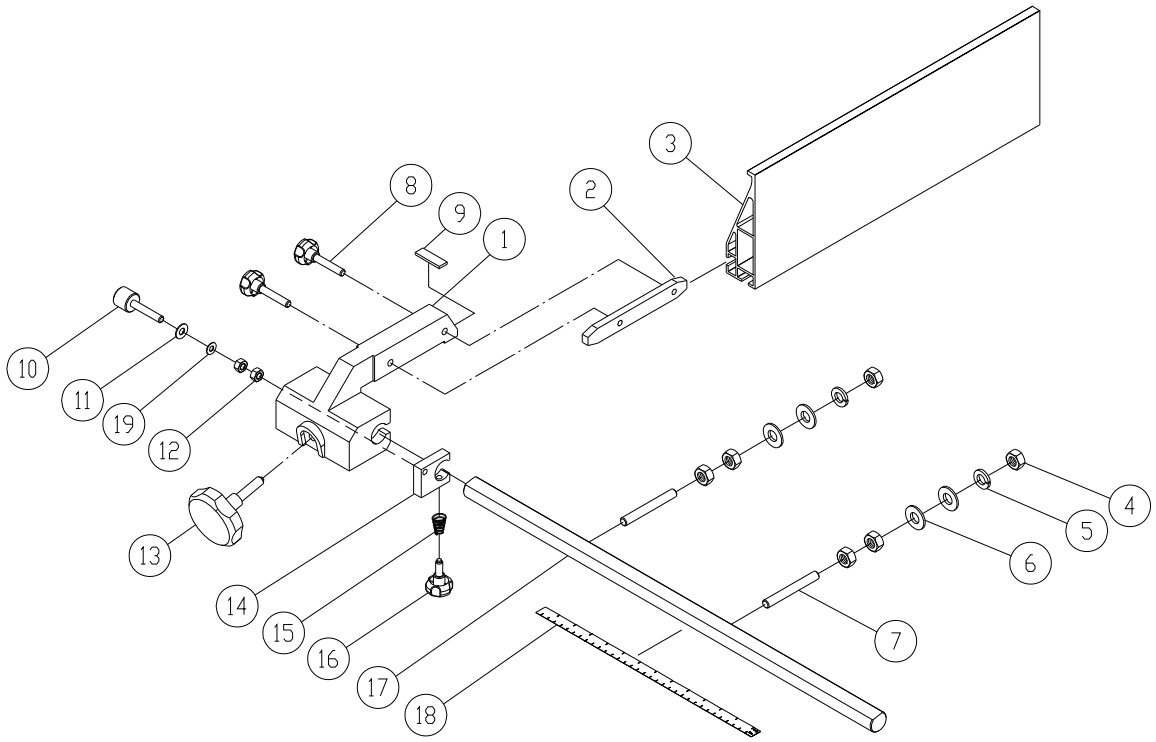
13.1.2 **JWBS-15 Assembly – Parts List**

Index No.	Part No.	Description	Size	Qty
1	PM1500-004	Lifting Ring	M10	1
2	JWBS15-102	Machine Main Body Frame		1
3	TS-1482021	Hex Cap Bolt	M6x12	1
4	JWBS15-104	Power Cord	1-3/4HP	1
	JWBS15-104B	Power Cord	3HP	1
5	TS-1550041	Flat Washer	M6	2
6	PM1500-011	Tension Pointer		1
7	PM1500-012	Step Screw		1
8	TS-1503111	Socket Head Cap Screw	M6x50	1
9	TS-2311061	Hex Nut	M6	1
10	TS-1550061	Flat Washer	M8	2
11	TS-1504031	Socket Head Cap Screw	M8x16	2
12	JWBS15-112	Upper Wheel Sliding Bracket		1
13	JWBS15-113	Adjusting Bolt		1
14	JWBS15-114	Handwheel	6"	1
15	TS-1503051	Socket Head Cap Screw	M6x20	2
16	JWBS15-116	Upper Shaft		1
17	JWBS15-117	Spring Pin	Ø5x36	1
18	JWBS15-118	Upper Wheel Sliding Bracket		1
19	JWBS15-119	Upper Wheel Shaft		1
20	JWBS15-120	Spring		1
21	PM1500-010-02	Bushing		1
22	JWBS15-122	Pin	Ø3x20	1
23	JWBS15-123	Locate Block		1
24	BB-51201	Bearing	51201	1
25	PM1500-019	Upper Wheel Assembly	Ø15"	1
26	TS-1550061	Flat Washer	M8	2
27	TS-2361081	Spring Washer	M8	2
28	TS-1504041	Socket Head Cap Bolt	M8x20	2
29	JWBS15-129	Saw Blade	133"L x 1/2" W x 0.026"T x 6 TPI	1
30	PM1500-020	Lower Wheel Assembly	Ø15"	1
31	PM1500-050	Viewing Window		2
32	TS-1541021	Nylon Nut	M6	4
33	TS-1503021	Socket Head Cap Screw	M6x10	2
34	JWBS15-134	Upper Door		1
35	JWBS15-135	Socket Head Cap Screw	M4x8	8
36	JWBS15-136	Lower Door		1
37	PM1800B-027-026	Retaining Ring	E15	1
38	JWBS15-138	Sponge		1
39	JET-138-R2000	Jet Logo	138x57mm	1
40	JWBS15-140	Sponge	760x10mm T=1	1
41	JWBS15-141	Sponge	16x5mm T=2	1
42	TS-1532032	Pan Head Screw	M4x10	1
43	JOSS-S-213	On/Off Switch Assembly	1-3/4HP	1
	JOSS-S-213SK	Safety Key for JOSS-S-213 (not shown)		1
	JWBS15-143B	Control Switch Assembly	3HP	1
	JWBS15-143BSK	Safety Key for JWBS15-143B (not shown)		1
44	JWBS15-144	Motor Cord	14AWGx3C	1
45	TS-1533052	Pan Head Screw	M5x16	2
46	JWBS15-146	Magnetic Switch Assembly	3HP only	1
	JWBS15-146CS	Contactor Switch		1
	JWBS15-146OP	Overload Protector		1
47	TS-1533032	Pan Head Screw	M5x10	2
48	TS-0733041	Ext. Tooth Lock Washer	M5	4
49	PM1800B-159	Special Washer	Ø16x8.2x0.4T	2
50	JWBS15-150	Poly V Belt	350J9	1
51	PM1500-025	Motor Pulley		1
52	TS-1523041	Set Screw	M6x12	2
53	TS-2311061	Hex Nut	M6	2
54	JWBS18DX-249	Dust Collect Insert		1

Index No.	Part No.	Description	Size	Qty
55	JWBS15-155	Fixed Plate		1
56	TS-2361061	Spring Washer	M6	2
57	TS-2246122	Socket Head Button Screw	M6x12	2
58	PM1500-074	Tension Quick Release Lever Shaft		1
59	TS-1540083	Hex Nut	M12	1
60	JWBS15-160	Tension Quick Release Lever		1
61	JWBS15-161	Grip		1
62	TS-2248202	Socket Head Button Screw	M8x20	4
63	TS-2361081	Spring Washer	M8	4
64	TS-1550061	Flat Washer	M8	4
65	PM1500-070	Shaft Fixed Block		1
66	TS-1503061	Socket Head Cap Screw	M6x25	1
67	PM1500-069	Cam		1
68	JWBS15-168	Lock Knob	M10x53	1
69	PM1500-068	Lock Handle	M10	1
70	JWBS15-170	Lock Knob	M10x25	1
71	135041	Knob		2
72	TS-1503051	Socket Head Cap Screw	M6x20	2
73	JWBS15-173	Pointer		1
74	6286494	Pan Head Screw	M5x6	1
75	TS-1482051	Hex Cap Screw	M6x25	1
76	TS-1550041	Flat Washer	M6	2
77	PM1500-058	Brush		1
78	TS-1541021	Hex Nylon Lock Nut	M6	1
79	JWBS15-179	Lower Blade Guard		1
80	TS-2246082	Socket Head Button Screw	M6x8	2
81	TS-2361061	Lock Washer	M6	2
82	TS-1550041	Flat Washer	M6	2
83	TS-1490041	Hex Cap Screw	M8x25	1
84	JWBS15-184	Support Plate		2
85	TS-1541031	Hex Nut	M8	1
86	TS-1541031	Nylon Nut	M8	1
87	TS-1550061	Flat Washer	M8	2
88	TS-1504041	Socket Head Cap Screw	M8x20	1
89	PM1500-077	Washer		1
90	PM1500-137	Plate		1
91	TS-1524051	Set Screw	M8x20	4
92	TS-1540061	Hex Nut	M8	4
93	JWBS15-193	Lower Wheel Shaft		1
94	PM1500-062	Strain Relief	PG13.5	2
95	PM1500-039	Tapping Screw	M4x8	2
96	PM1500-083	Strain Relief Fixed Plate	for 1-3/4 HP	1
	JWBS15-196A	Strain Relief Fixed Plate	for 3HP	1
97	JWBS15-197	Handle		1
98	TS-1540061	Hex Nut	M8	1
99	TS-149105	Hex Cap Screw	M10x35	1
100	TS-2361101	Spring Washer	M10	2
101	JWBS15-1101	Motor	1-3/4HP	1
	JWBS18B-1101FM	Motor Fan (not shown)		1
	JWBS18B-1101FMC	Motor Fan Cover (not shown)		1
	JWBS18B-1101SC	Start Capacitor (not shown)	300MFD, 250VAC	1
	JWBS18B-1101RC	Running Capacitor (not shown)	40μF, 250VAC	1
	JWBS18B-1101JB	Junction Box (not shown)		1
	JWBS18B-1101JBC	Junction Box Cover (not shown)		1
	JWBS18B-1101CS	Centrifugal Switch (not shown)		1
	JWBS15-1101A	Motor	3HP/230V	1
	JWBS18B-1101AMF	Motor Fan (not shown)		1
	JWBS18B-1101AMFC	Motor Fan Cover (not shown)		1
	JWBS18B-1101ASC	Start Capacitor (not shown)	300MFD, 250VAC	1
	JWBS18B-1101ARC	Running Capacitor (not shown)	60μF, 300VAC	1
	JWBS18B-1101AJB	Junction Box (not shown)		1
	JWBS18B-1101AJBC	Junction Box Cover (not shown)		1

Index No.	Part No.	Description	Size	Qty
	JWBS18B-1101ACS	Centrifugal Switch (not shown)		1
102	PM1500-015	Motor Bracket Lock Handle	M10x33	1
103	TS-1550071	Flat Washer	M10	1
104	JWBS15-1104	Motor Bracket		1
105	PM1500-038	Locating Block		1
106	TS-2248202	Socket Head Button Screw	M8x20	4
107	TS-1502031	Socket Head Cap Screw	M5x12	2
108	TS-1550031	Flat Washer	M5	2
109	JWBS15-1109	Magnet	7x340mm	1
110	JWBS15-1110	Blade Guard Cover		1
111	PM1800B-093	Viewing Window		1
112	TS-1521011	Set Screw	M4x4	2
113	5302731	Set Screw	M8x6	4
114	TS-1550061	Flat Washer	M8	4
115	TS-2361081	Spring Washer	M8	4
116	TS-2248202	Socket Head Button Screw	M8x20	4
117	TS-1523041	Set Screw	M6x12	2
118	JWBS15-1118	Handwheel	5"	1
119	JWBS15-1119	Handle	M8	1
120	JWBS15-1120	Guide Bar Bracket Assembly		1
121	JWBS15-1121	Upper Blade Guide Assembly		1
122	JWBS15-1122	Miter Gauge Assembly		1
123	JWBS15-1123	Rip Fence Assembly		1
124	JWBS15-1124	Roll Pin	Ø4x8	2
125	JWBS15-1125	Table Insert		1
126	TS-1522011	Set Screw	M5x5	3
127	JWBS15-1127	Table	21-1/2"x16"	1
128	TS-1550071	Flat Washer	M10	1
129	TS-1490021	Hex Cap Screw	M8x16	1
130	TS-149105	Hex Cap Screw	M10x35	1
131	TS-1540061	Hex Nut	M8	1
132	TS-1550061	Flat Washer	M8	1
133	JWBS15-1133	Handle	M8x45	1
134	TS-1550071	Flat Washer	M10	2
135	TS-2361101	Spring Washer	M10	2
136	TS-1505051	Socket Head Cap Screw	M10x35	1
137	JWBS15-1137	Lower Blade Guide Assembly		1
138	JWBS15-1138	Trunnion Support Bracket Assembly		1
139	TS-1550061	Flat Washer	M8	4
140	TS-2361081	Spring Washer	M8	4
141	TS-1490041	Hex Cap Screw	M8x25	4
142	7015-48	Set Screw	M8x30	1
143	TS-1541031	Hex Nylon Lock Nut	M8	1
144	JWBS15-1144	Bushing		1

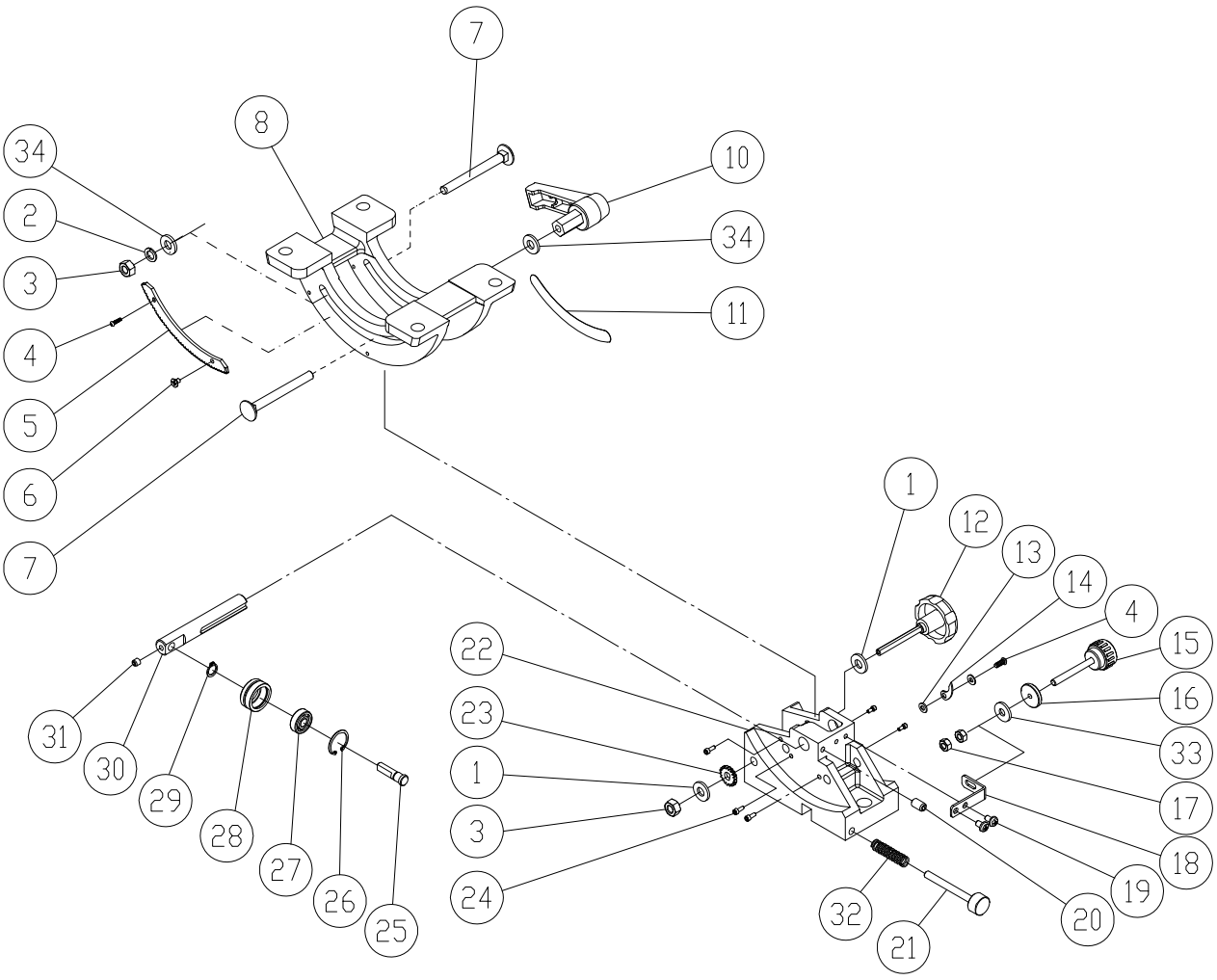
13.2.1 **JWBS-15 Rip Fence Assembly – Exploded View**



13.2.2 **JWBS-15 Rip Fence Assembly – Parts List**

Index No.	Part No.	Description	Size	Qty
.....	JWBS15-1123	Rip Fence Assembly (#1 thru 18)	.....	.....
1	JWBS15-1123-201	Fence Body	.....	1
2	JWBS15-1123-202	Lock Bar	.....	1
3	JWBS15-1123-203	Fence, Aluminum	462mm	1
4	TS-2311101	Nut	M10	6
5	TS-2361101	Spring Washer	M10	2
6	TS-1550071	Flat Washer	M10	4
7	JWBS15-1123-207	Set Screw	M10x80	2
8	JWBS15-1123-208	Knob	M8x40	2
9	PM1500-107-10	Resistance Pad	.....	1
10	JWBS15-1123-210	Adjustment Knob	M8x50	1
11	JWBS15-1123-211	Fiber Washer	.....	1
12	TS-1540061	Nut	M8	2
13	JWBS15-1123-213	Knob	M8x40	1
14	JWBS15-1123-214	Locate Block	.....	1
15	PM1800B-059-017	Cone Spring	.....	1
16	JWBS15-1123-216	Knob	M6x14	1
17	JWBS15-1123-217	Fence Guide Rail	640mm	1
18	JWBS15-1123-218	Scale	350mm	1
19	JWBS15-1123-219	Wave Washer	Ø8x13 mm	1

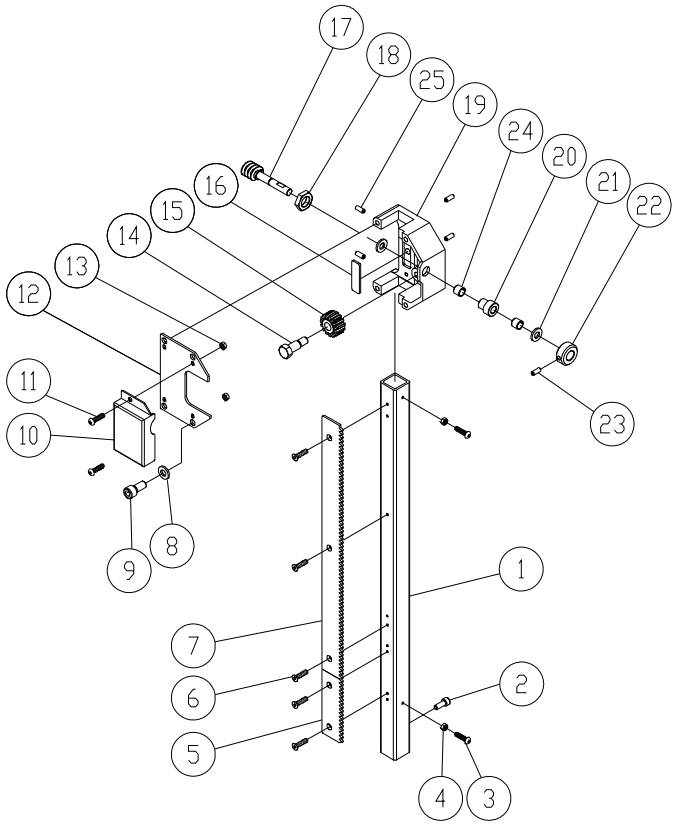
13.3.1 **JWBS-15/18/20 Trunnion Support Bracket Assembly – Exploded View**



13.3.2 **JWBS-15/18/20 Trunnion Support Bracket Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	JWBS15-1138A	Trunnion Support Bracket Assembly (#1 thru 34)		
1	TS-1550061	Flat Washer	M8 x Ø23	2
2	TS-2361081	Lock Washer	M8	1
3	TS-1541031	Nylon Lock Hex Nut	M8	2
4	TS-2171012	Phillips Pan Head Machine Screw	M4x6	2
5	PM1500-085-05	Gear Rack		1
6	TS-2284061	Phillips Flat Head Machine Screw	M4x6	1
7	JWBS15-1138-307	Carriage Bolt	M8x90	2
8	PM1500-085-08	Trunnion Block		1
10	JWBS15-1138-310	Lock Handle		1
11	PM1500-085-11	Tilt Scale		1
12	PM1500-085-12	Adjustment Knob Bolt		1
13	TS-1550021	Flat Washer	M4 x Ø8	2
14	PM1500-085-14	Angle Pointer		1
15	JWBS15-1138-315	Adjustment Knob Bolt	M6	1
16	PM1500-085-16	Locking Ring		1
17	TS-2311061	Hex Nut	M6	2
18	PM1500-085-18	Adjustment Plate		1
19	5712561	Phillips Pan Head Machine Screw	M5x8	2
20	PM1500-085-20	Set Screw		1
21	PM1500-085-21	Lock Knob		1
22	JWBS15-1138-322	Trunnion Support Bracket		1
23	PM1500-085-23	Gear		1
24	TS-2235061	Socket Head Cap Screw	M5x6	6
25	PM1500-085-25	Adjustment Shaft		1
26	PM1500-085-26	Retaining Ring	R22	1
27	BB-608ZZ	Ball Bearing	608ZZ	1
28	PM1500-085-28	Thrust Bearing Holder		1
29	PM1500-085-29	Retaining Ring	S8	1
30	JWBS15-1138-330	Adjustment Bar		1
31	TS-1523011	Socket Set Screw	M6x6	1
32	JWBS15-1138-332	Spring		1
33	TS-1550041	Flat Washer	M6 x Ø19	1
34	JWBS15-1138-334	Flat Washer	M8 x Ø23x5t	2

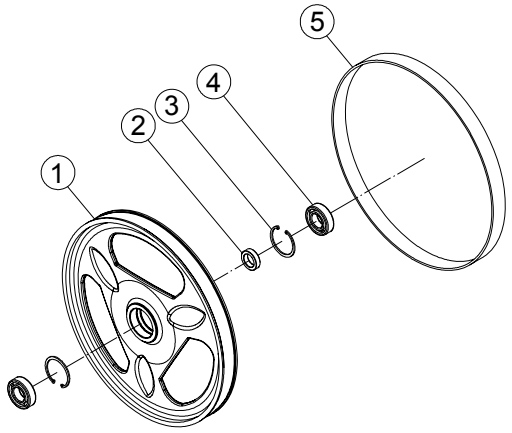
13.4.1 JWBS-15 Guide Bar Bracket Assembly – Exploded View



13.4.2 JWBS-15 Guide Bar Bracket Assembly – Parts List

Index No	Part No	Description	Size	Qty
	JWBS15-1120	Guide Bar Bracket Assembly (#1 thru 25)		
1	JWBS15-1120-401	Guide Bar		1
2	TS-1503021	Socket Head Cap Screw	M6x10	2
3	TS-1532032	Pan Head Screw	M4x10	2
4	TS-1540021	Nut	M4	2
5	PM1500-091-08	Guide Bar Rack (Short)		1
6	TS-2284081	Phillips Flat Head Machine Screw	M4x8	5
7	PM1500-091-20	Guide Bar Rack (Long)		1
8	TS-2361081	Spring Washer	M8	4
9	TS-1504031	Socket Head Cap Screw	M8x16	4
10	PM1500-091-04	Cover		1
11	TS-1534041	Pan Head Screw	M5x10	2
12	PM1500-091-09	Cover		1
13	TS-1540031	Hex Nut	M5	2
14	PM1500-091-10	Fixed Pin		1
15	PM1500-091-11	Gear		1
16	PM1500-091-12	Fixed Plate		1
17	PM1500-091-13	Worm Shaft		1
18	JWBS15-1120-418	Nut		1
19	PM1500-091-15	Guide Bracket		1
20	PM1500-091-18	Bushing		1
21	PM1500-091-25	Fiber Washer		2
22	PM1500-091-19	Collar		1
23	TS-1522011	Set Screw	M5x5	2
24	JWBS15-1120-424	Bushing Bearing	DU 10x12	2
25	JWBS15-1120-425	Plastic Nylon Set Screw	M7x10	4

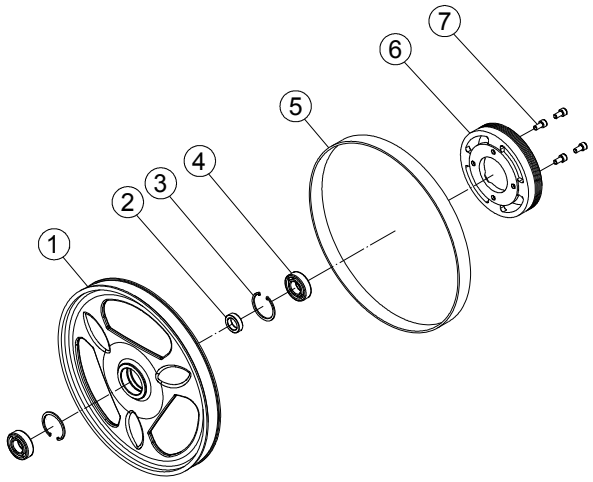
13.5.1 **JWBS-15 Upper Wheel Assembly – Exploded View**



13.5.2 **JWBS-15 Upper Wheel Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	PM1500-019	Upper Wheel Assembly (#1 thru 5)		
1	PM1500-019-01	Upper Wheel	Dia.15 inches.	1
2	PM1500-019-02	Spacer		1
3	JWBS20QT-504	Retaining Ring	R52	2
4	BB-6205LLU	Ball Bearing	6205LLU.	2
5	PM1500-019-05	Tire		1

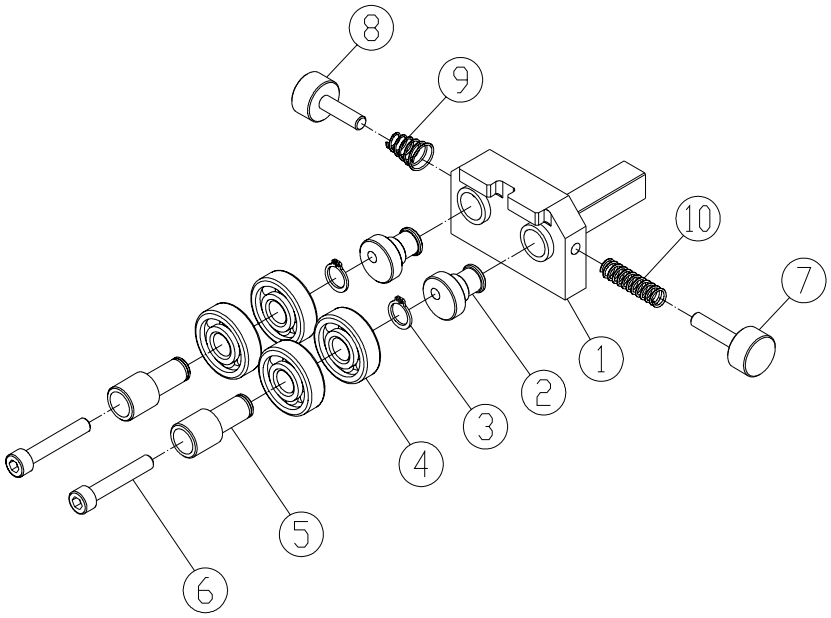
13.6.1 **JWBS-15 Lower Wheel Assembly – Exploded View**



13.6.2 **JWBS-15 Lower Wheel Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	PM1500-020	Lower Wheel Assembly (#1 thru 7)		
1	PM1500-020-01	Lower Wheel	Dia.15 inches.	1
2	PM1500-019-02	Spacer		1
3	JWBS20QT-504	Retaining Ring	R52	2
4	BB-6205LLU	Ball Bearing	6205LLU.	2
5	PM1500-019-05	Tire		1
6	PM1500-020-06	Drive Pulley		1
7	TS-1504031	Socket Head Cap Screw	M8x16	4

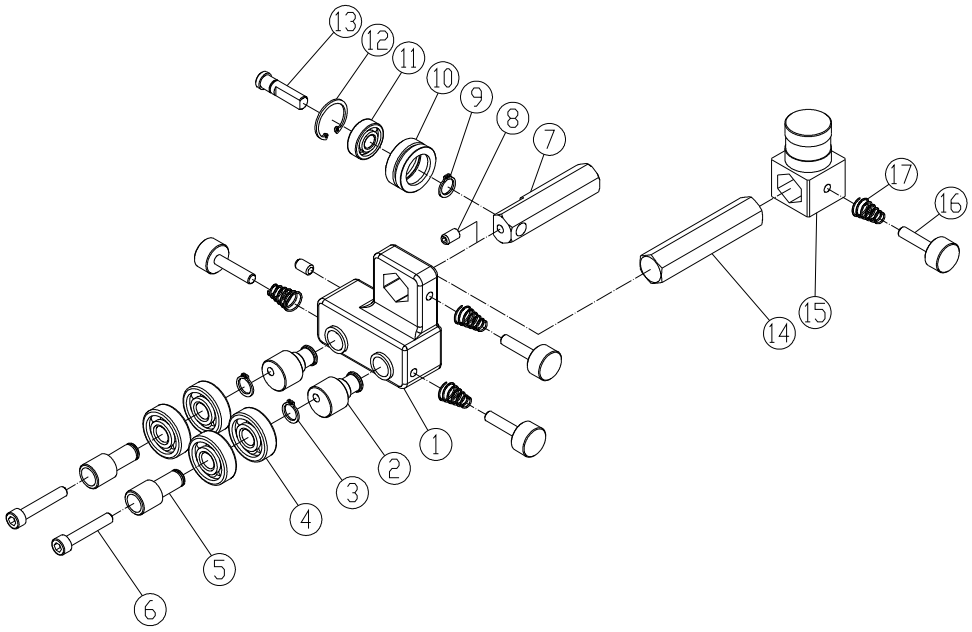
13.7.1 **JWBS-15 Lower Blade Guide Assembly – Exploded View**



13.7.2 **JWBS-15 Lower Blade Guide Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	JWBS15-1137	Lower Blade Guide Assembly (#1 thru 10)		
1	PM1500-096-01	Lower Blade Guide Support		1
2	PM1500-096-02	Eccentric Shaft		2
3	6286478	E Ring	S12	2
4	BB-6201ZZ	Ball Bearing	6201ZZ	4
5	PM1500-095-05	Knurled Knob		2
6	TS-1503081	Socket Head Cap Screw	M6x35	2
7	PM1500-095-16	Lock Knob		1
8	JWBS15-1137-508	Lock Knob		1
9	PM1800B-059-017	Cone Spring		1
10	JWBS15-1138-332	Spring		1

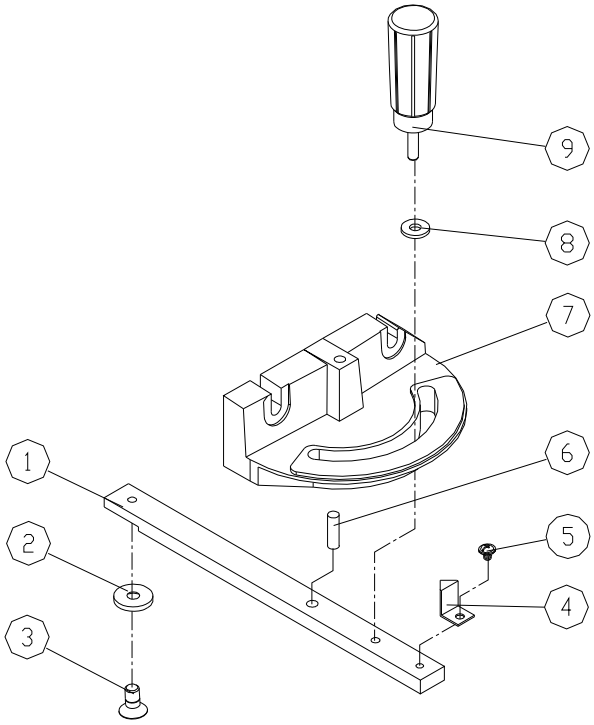
13.8.1 **JWBS-15 Upper Blade Guide Assembly – Exploded View**



13.8.2 **JWBS-15 Upper Blade Guide Assembly – Parts List**

Index No	Part No	Description	Size	Qty
.....	JWBS15-1121	Upper Blade Guide Assembly (#1 thru 17)	.....	.....
1	PM1500-095-01	Upper Blade Guide Support	.....	1
2	PM1500-095-02	Eccentric Shaft	.....	2
3	6286478	Retaining Ring	S12	2
4	BB-6201ZZ	Ball Bearing	6201ZZ	4
5	PM1500-095-05	Knurled Knob	.....	2
6	TS-1503081	Socket Head Cap Screw	M6x35	2
7	PM1500-095-07	Sleeve	.....	1
8	TS-1523011	Set Screw	M6x6	2
9	PM1500-085-29	S Ring	S8	1
10	PM1500-085-28	Thrust Bearing Holder	.....	1
11	BB-608ZZ	Ball Bearing	608ZZ	1
12	PM1500-085-26	Retaining Ring	R22	1
13	PM1500-085-25	Adjust Shaft	.....	1
14	PM1500-095-14	Hex Post	.....	1
15	PM1500-095-15	Upper Guide Support Block	.....	1
16	PM1500-095-16	Lock Knob	.....	1
17	PM1800B-059-017	Cone Spring	.....	4

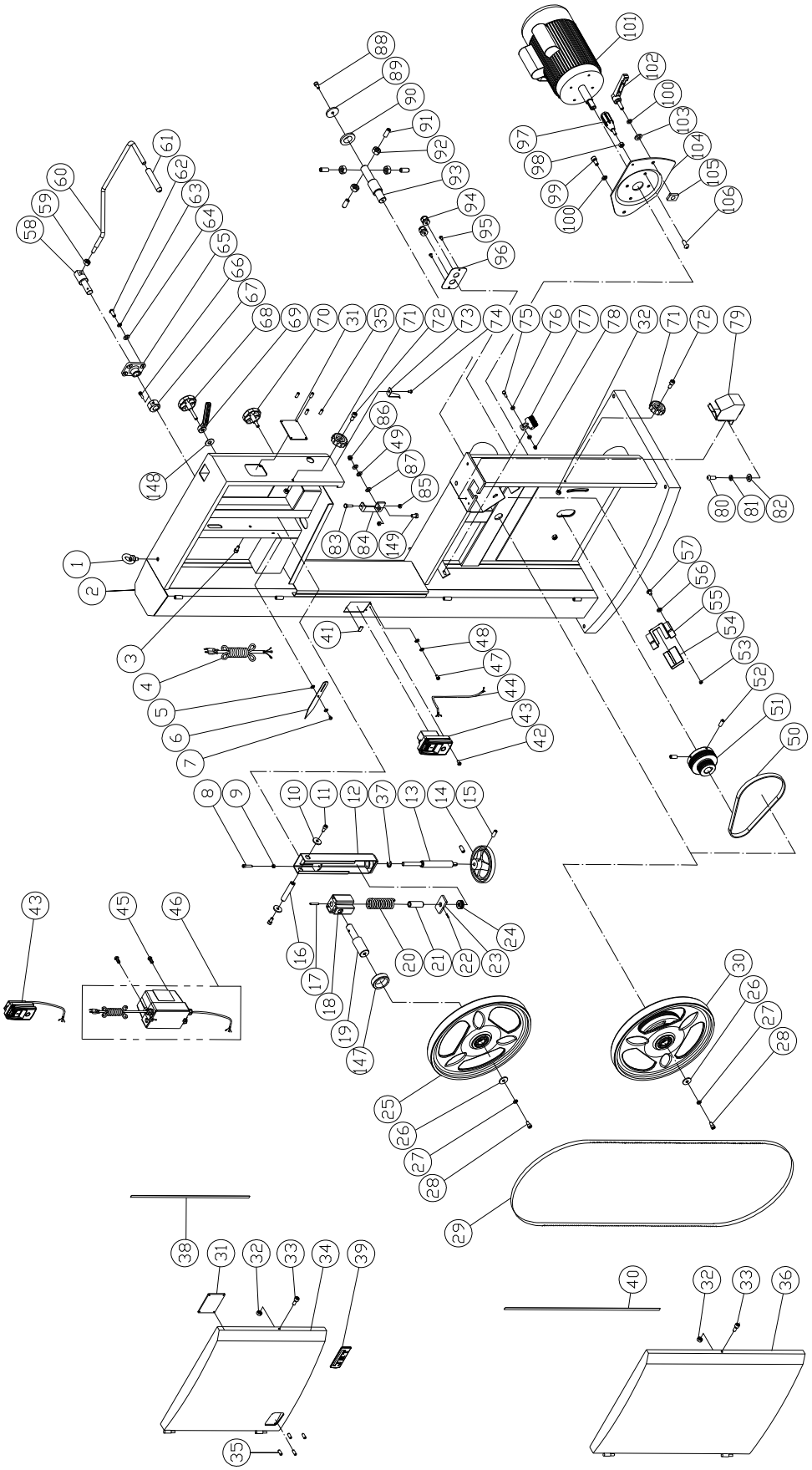
13.9.1 **JWBS-15/18/20 Miter Gauge Assembly – Exploded View**

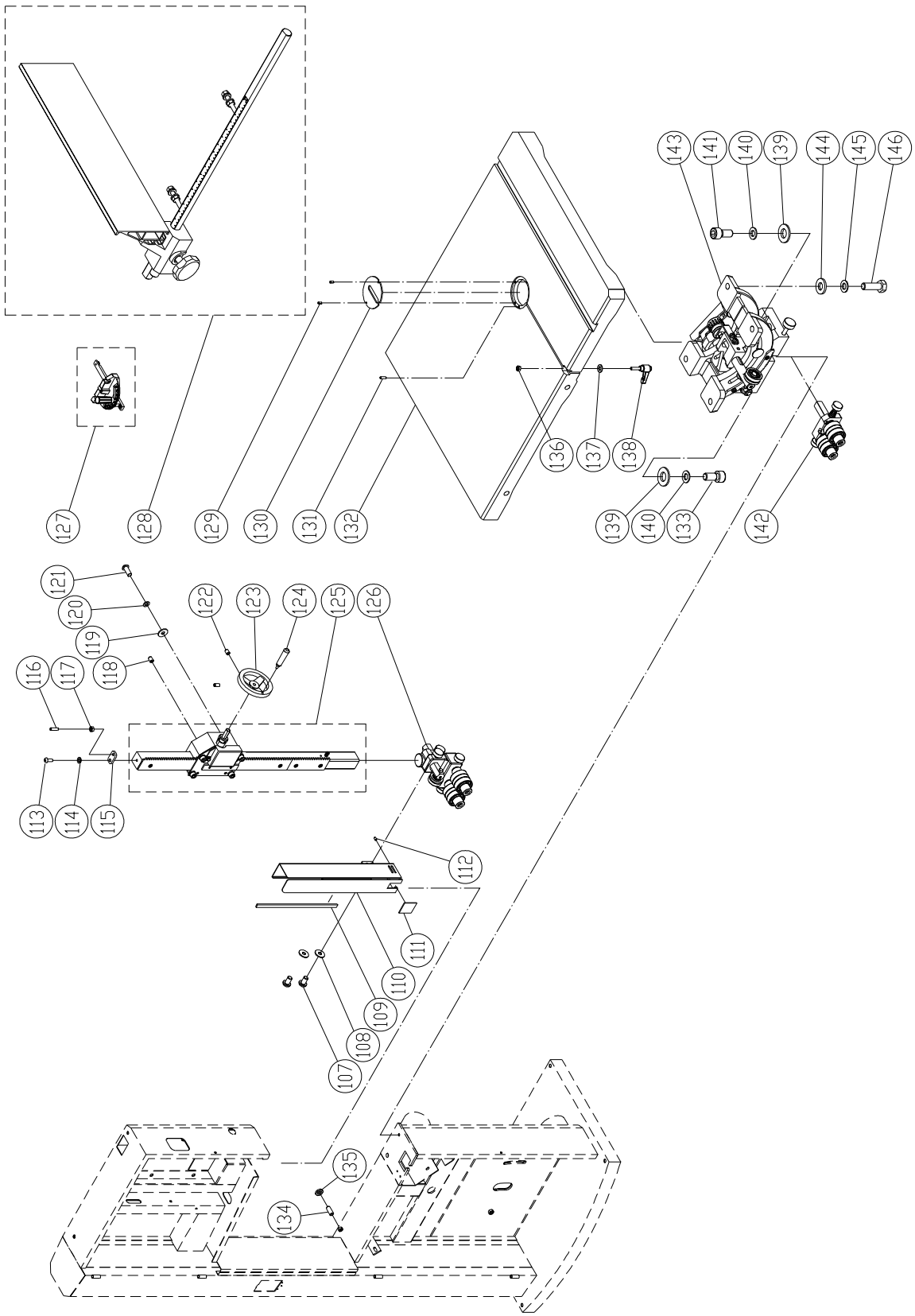


13.9.2 **JWBS-15/18/20 Miter Gauge Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	JWBS15-1122	Miter Gauge Assembly (#1 thru 9)		
1	JWBS15-1122-701	Guide Bar		1
2	JWBS15-1122-702	Guide Piece		1
3	JWBS15-1122-703	Countersunk Bolt	M6x6	1
4	JWBS15-1122-704	Pointer		1
5	PWBS14-251-5	Pan Head Flanged Screw	M5x8	1
6	JWBS15-1122-706	Steel Pin	Ø6x10mm	1
7	JWBS15-1122-707	Miter Gauge Body		1
8	JWBS15-1122-708	Nylon Washer		1
9	JWBS15-1122-709	Handle		1

13.10.1 **JWBS-18 Bandsaw Assembly – Exploded View**




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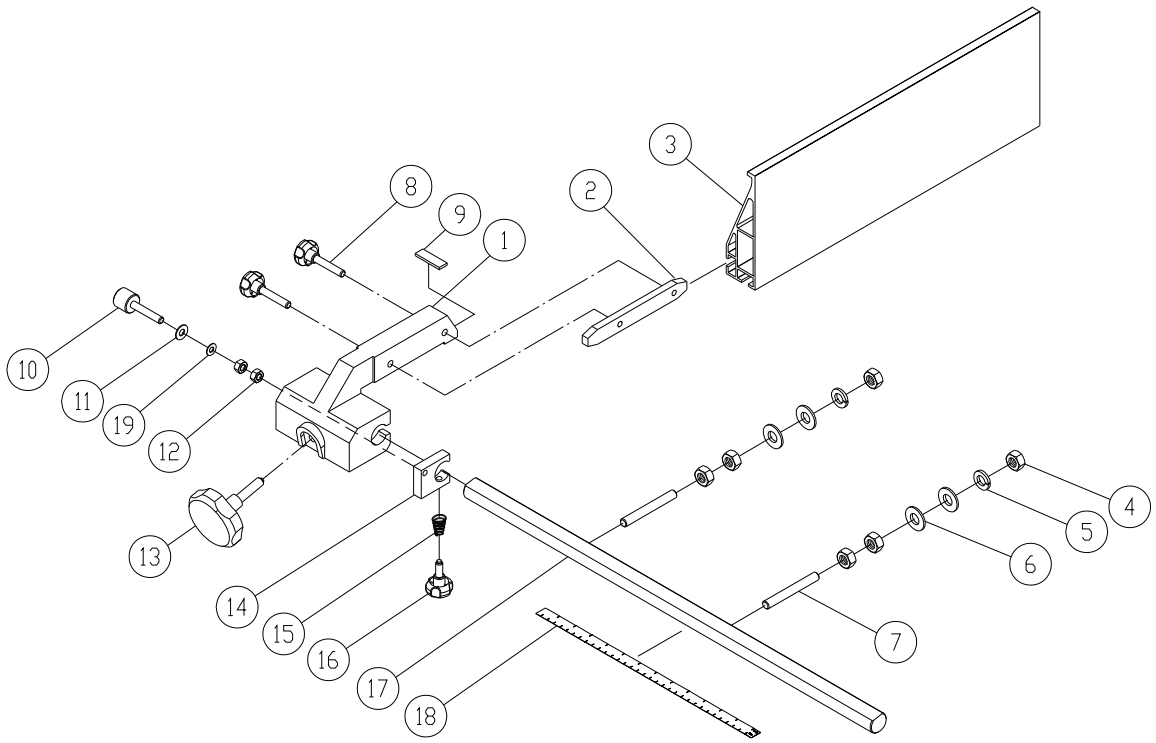
13.10.2 **JWBS-18 Bandsaw Assembly – Parts List**

Index No.	Part No.	Description	Size	Qty
1	PM1500-004	Lifting Ring	M10	1
2	JWBS18B-102	Machine Main Body Frame		1
3	TS-1482021	Hex Cap Bolt	M6x12	1
4	JWBS15-104	Power Cord	1-3/4HP	1
	JWBS15-104B	Power Cord	3HP	1
5	TS-1550041	Flat Washer	M6	2
6	JWBS18B-106	Tension Pointer		1
7	PM1500-012	Step Screw		1
8	TS-1503111	Socket Head Cap Screw	M6x50	1
9	TS-2311061	Hex Nut	M6	1
10	TS-1550061	Flat Washer	M8	2
11	TS-1504031	Socket Head Cap Screw	M8x16	2
12	JWBS15-112	Upper Wheel Sliding Bracket		1
13	JWBS18B-113	Adjusting Bolt		1
14	JWBS15-114	Handwheel	6"	1
15	TS-1503051	Socket Head Cap Screw	M6x20	2
16	JWBS15-116	Upper Shaft		1
17	JWBS15-117	Spring Pin	Ø5x36mm	1
18	JWBS15-118	Upper Wheel Sliding Bracket		1
19	JWBS18B-119	Upper Wheel Shaft		1
20	JWBS15-120	Spring		1
21	PM1500-010-02	Bushing		1
22	JWBS15-122	Pin	Ø 3x20mm	1
23	JWBS15-123	Locate Block		1
24	BB-51201	Bearing	51201	1
25	PM1800B-018	Upper Wheel Assembly	Ø18"	1
26	PM1800B-017	Washer		2
27	TS-2361081	Spring Washer	M8	2
28	TS-1504041	Socket Head Cap Bolt	M8x20	2
29	JWBS18B-129	Saw Blade	150"L x 3/4" x 0.026" T x 6 TPI	1
30	JWBS18B-130	Lower Wheel Assembly	Ø18"	1
31	PM1500-050	Viewing Window		2
32	TS-1541021	Nylon Nut	M6	4
33	TS-1503021	Socket Head Cap Screw	M6x10	2
34	JWBS18B-134	Upper Door		1
35	JWBS15-135	Socket Head Cap Screw	M4x8	8
36	JWBS18B-136	Lower Door		1
37	PM1800B-027-026	Retaining Ring (E)	E15	1
38	JWBS15-138	Sponge		1
39	JET-138-R2000	Jet Logo	138x57mm	1
40	JWBS15-140	Sponge	760x10x1T mm	1
41	JWBS15-141	Sponge	16x5x2T mm	1
42	TS-1532032	Pan Head Screw	M4x10	1
43	JOSS-S-213	On/Off Switch Assembly	1-3/4HP	1
	JOSS-S-213SK	Safety Key for JOSS-S-213 (not shown)		1
	JWBS15-143B	Control Switch Assembly	3HP	1
	JWBS15-143BSK	Safety Key for JWBS15-143B (not shown)		1
44	JWBS15-144	Motor Cord	14AWGx3C	1
45	TS-1533052	Pan Head Screw	M5x16	2
46	JWBS15-146	Magnetic Switch Assembly	3HP only	1
	JWBS15-146CS	Contactor Switch		1
	JWBS15-146OP	Overload Protector		1
47	TS-1533032	Pan Head Screw	M5x10	2
48	TS-0733041	Ext. Tooth Lock Washer	M5	4
49	PM1800B-159	Special Washer	16x8.2x0.4T	2
50	JWBS18B-150	Poly-V Belt	430J10	1
51	JWBS18B-151	Motor Pulley		1
52	TS-1523041	Set Screw	M6x12	2
53	TS-2311061	Hex Nut	M6	2
54	JWBS18DX-249	Dust Collect Insert		1

Index No.	Part No.	Description	Size	Qty
55	JWBS15-155	Fixed Plate		1
56	TS-2361061	Spring Washer	M6	2
57	TS-2246122	Socket Head Button Screw	M6x12	2
58	PM1500-074	Tension Quick Release Lever Shaft		1
59	TS-1540083	Hex Nut	M12	1
60	JWBS18B-160	Tension Quick Release Lever		1
61	JWBS15-161	Grip		1
62	TS-2248202	Socket Head Button Screw	M8x20	4
63	TS-2361081	Spring Washer	M8	4
64	TS-1550061	Flat Washer	M8xØ18	4
65	PM1500-070	Shaft Fixed Block		1
66	TS-1503061	Socket Head Cap Screw	M6x25	1
67	PM1500-069	Cam		1
68	JWBS15-168	Lock Knob	M10x53	1
69	PM1500-068	Lock Handle	M10	1
70	JWBS15-170	Lock Knob	M10x25	1
71	135041	Knob		2
72	TS-1503051	Socket Head Cap Screw	M6x20	2
73	JWBS15-173	Pointer		1
74	6286494	Pan Head Screw	M5x6	1
75	TS-1482051	Hex Cap Screw	M6x25	1
76	TS-1550041	Flat Washer	M6	2
77	PM1500-058	Brush		1
78	TS-1541021	Hex Nylon Lock Nut	M6	1
79	JWBS18B-179	Lower Blade Guard		1
80	TS-2246082	Socket Head Button Screw	M6x8	2
81	TS-2361061	Lock Washer	M6	2
82	TS-1550041	Flat Washer	M6	2
83	TS-1490071	Hex Cap Screw	M8x40	1
84	JWBS15-184	Support Plate		1
85	TS-1541031	Hex Nut	M8	2
86	TS-1541031	Nylon Nut	M8	1
87	TS-1550061	Flat Washer	M8	2
88	TS-1504041	Socket Head Cap Screw	M8x20	1
89	PM1800B-088	Washer		1
90	PM1800B-087	Plate		1
91	TS-2279301	Set Screw	M10x30	4
92	TS-1541041	Hex Nut	M10	4
93	PM1800B-084	Lower Wheel Shaft		1
94	PM1500-062	Strain Relief	PG13.5	2
95	PM1500-039	Tapping Screw	M4x8	2
96	PM1500-083	Strain Relief Fixed Plate	1-3/4 HP	1
	JWBS15-196A	Strain Relief Fixed Plate	3HP	1
97	JWBS15-197	Handle		1
98	TS-1540061	Hex Nut	M8	1
99	TS-149105	Hex Cap Screw	M10x35	1
100	TS-2361101	Spring Washer	M10	2
101	JWBS18B-1101	Motor	1-3/4HP	1
..	JWBS18B-1101FM	…Motor Fan (not shown)		1
	JWBS18B-1101FMC	…Motor Fan Cover (not shown)		1
	JWBS18B-1101SC	…Start Capacitor (not shown)	300MFD, 250VAC	1
	JWBS18B-1101RC	…Running Capacitor (not shown)	40µF, 250VAC	1
	JWBS18B-1101JB	…Junction Box (not shown)		1
	JWBS18B-1101JBC	…Junction Box Cover (not shown)		1
	JWBS18B-1101CS	…Centrifugal Switch (not shown)		1
	JWBS18B-1101A	Motor	3HP/230V	1
	JWBS18B-1101AMF	…Motor Fan (not shown)		1
	JWBS18B-1101AMFC	…Motor Fan Cover (not shown)		1
	JWBS18B-1101ASC	…Start Capacitor (not shown)	300MFD, 250VAC	1
	JWBS18B-1101ARC	…Running Capacitor (not shown)	60µF, 300VAC	1
	JWBS18B-1101AJB	…Junction Box (not shown)		1
	JWBS18B-1101AJBC	…Junction Box Cover (not shown)		1

Index No.	Part No.	Description	Size	Qty
	JWBS18B-1101ACS	…Centrifugal Switch (not shown)		1
102	PM1500-015	Motor Bracket Lock Handle	M10x33	1
103	TS-1550071	Flat Washer	M10	1
104	JWBS15-1104	Motor Bracket		1
105	PM1500-038	Locating Block		1
106	TS-2248202	Socket Head Button Screw	M8x20	4
107	TS-1482031	Hex Cap Screw	M6x16	2
108	TS-1550071	Flat Washer	M6	2
109	JWBS15-1109	Magnet	7x340mm	1
110	JWBS18B-1110	Blade Guard Cover		1
111	PM1800B-093	Viewing Window		1
112	TS-1521011	Set Screw	M4x4	2
113	TS-2246122	Socket Head Button Screw	M6x12	1
114	TS-2361061	Spring Washer	M6	1
115	PM1800B-163	Locate Plate		1
116	F010432	Set Screw	M6x35	1
117	TS-1540041	Hex Nut	M6	1
118	5302731	Set Screw	M8x6	4
119	TS-1550061	Flat Washer	M8	4
120	TS-2361081	Spring Washer	M8	4
121	TS-2248202	Socket Head Button Screw	M8x20	4
122	TS-1523041	Set Screw	M6x12	2
123	JWBS15-1118	Handwheel	5"	1
124	JWBS15-1119	Handle	M8	1
125	JWBS18B-1125	Guide Bar Bracket Assembly		1
126	JWBS18B-1126	Upper Blade Guide Assembly		1
127	JWBS15-1122	Miter Gauge Assembly		1
128	JWBS18B-1128	Rip Fence Assembly		1
129	F012085	Roll Pin	Ø4x8 mm	2
130	JWBS15-1125	Table Insert		1
131	TS-1522011	Set Screw	M5x5	3
132	JWBS18B-1132	Table		1
133	TS-149105	Hex Cap Screw	M10x35	1
134	7015-48	Set Screw	M8x30	1
135	TS-1541031	Hex Nylon Lock Nut	M8	1
136	TS-1540061	Hex Nut	M8	1
137	TS-1550061	Flat Washer	M8	1
138	JWBS18B-1138	Handle	M8x35	1
139	TS-1550071	Flat Washer	M10	2
140	TS-2361101	Spring Washer	M10	2
141	TS-1505051	Socket Head Cap Screw	M10x35	1
142	JWBS18B-1142	Lower Blade Guide Assembly		1
143	JWBS15-1138	Trunnion Support Bracket Assembly		1
144	TS-1550061	Flat Washer	M8	4
145	TS-2361081	Spring Washer	M8	4
146	TS-1490041	Hex Cap Screw	M8x25	4
147	JWBS18B-1147	Bushing		1
148	TS-1550071	Flat Washer	M10	1
149	TS-1490021	Hex Cap Screw	M8x16	1

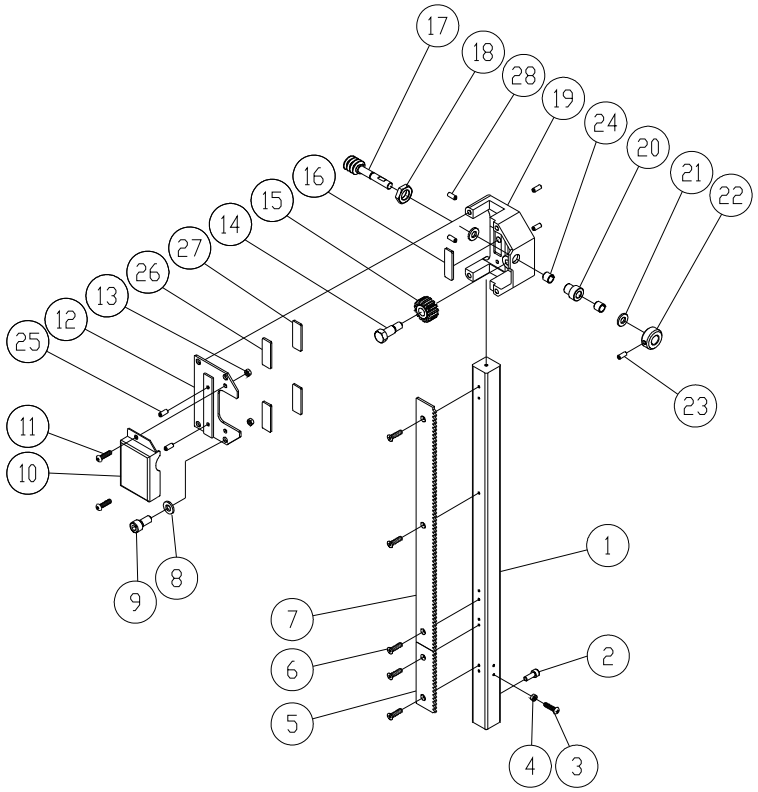
13.11.1 **JWBS-18/20 Rip Fence Assembly – Exploded View**



13.11.2 **JWBS-18/20 Rip Fence Assembly – Parts List**

Index No.	Part No.	Description	Size	Qty
	JWBS18B-1128	Rip Fence Assembly (#1 thru 18)		
1	JWBS15-1123-201	Fence Body		1
2	JWBS15-1123-202	Lock Block		1
3	JWBS18B-1128-203	Aluminum Fence	572mm	1
4	TS-2311101	Nut	M10	6
5	TS-2361101	Spring Washer	M10	2
6	TS-1550071	Flat Washer	M10	4
7	JWBS15-1123-207	Set Screw	M10x80	2
8	JWBS15-1123-208	Knob	M8x40	2
9	PM1500-107-10	Nylon Pad		1
10	JWBS15-1123-210	Adjustment Knob	M8x50	1
11	JWBS15-1123-211	Fiber Washer		1
12	TS-1540061	Nut	M8	2
13	JWBS15-1123-213	Knob	M8x40	1
14	JWBS15-1123-214	Locate Block		1
15	PM1800B-059-017	Cone Spring		1
16	JWBS15-1123-216	Knob	M6x14	1
17	JWBS18B-1128-217	Fence Guide Rail		1
18	JWBS18B-1128-218	Scale		1
19	JWBS15-1123-219	Wave Washer	Ø8x13 mm	1

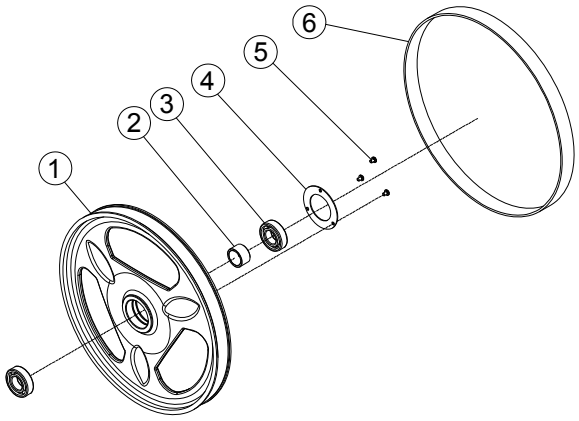
13.12.1 JWBS-18/20 Guide Bar Bracket Assembly – Exploded View



13.12.2 JWBS-18/20 Guide Bar Bracket Assembly – Parts List

Index No	Part No	Description	Size	Qty
	JWBS18B-1125	Guide Bar Bracket Assembly (#1 thru 28)		
1	JWBS18B-1125-401	Guide Bar		1
2	TS-1503021	Socket Head Cap Screw	M6x10	2
3	TS-1532032	Pan Head Screw	M4x10	1
4	TS-1540021	Nut	M4	1
5	PM1500-091-08	Guide Bar Rack (Short)		1
6	TS-2284081	Phillips Flat Head Machine Screw	M4x8	5
7	PM1500-091-20	Guide Bar Rack (Long)		1
8	TS-2361081	Spring Washer	M8	4
9	TS-1504031	Socket Head Cap Screw	M8x16	4
10	PM1500-091-04	Cover		1
11	TS-1534041	Pan Head Screw	M5x10	2
12	JWBS18B-1125-412	Cover		1
13	TS-1540031	Hex Nut	M5	2
14	PM1500-091-10	Fixed Screw		1
15	PM1500-091-11	Gear		1
16	PM1500-091-12	Fixed Plate		1
17	PM1500-091-13	Worm Shaft		1
18	JWBS15-1120-418	Nut		1
19	PM1500-091-15	Guide Bracket		1
20	PM1500-091-18	Bushing		1
21	PM1500-091-25	Fiber Washer		2
22	PM1500-091-19	Collar		1
23	TS-1522011	Set Screw	M5x5	2
24	JWBS15-1120-424	Bushing Bearing	DU 10x12	2
25	TS-1523011	Set Screw	M6x6	2
26	JWBS18B-1125-426	Plate		2
27	JWBS18B-1125-427	Nylon Piece		2
28	JWBS15-1120-425	Plastic Nylon Set Screw	M7x10	4

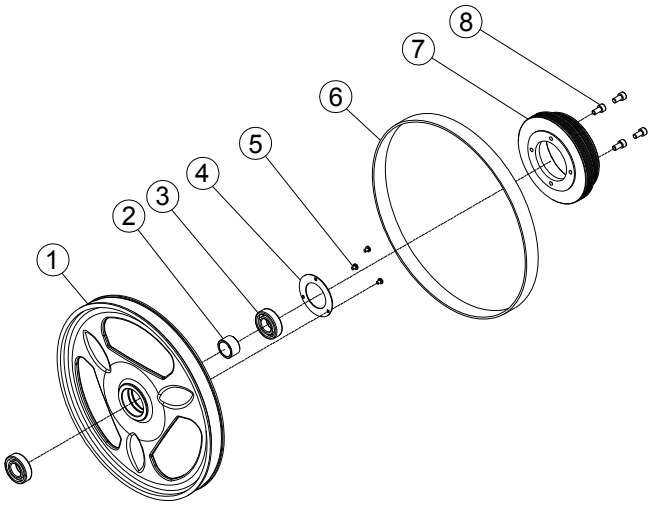
13.13.1 **JWBS-18 Upper Wheel Assembly – Exploded View**



13.13.2 **JWBS-18 Upper Wheel Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	PM1800B-018	Upper Wheel Assembly (#1 thru 6)		
1	PM1800B-018-01	Upper Wheel		1
2	PM1800B-018-02	Spacer		1
3	BB-6306LLU	Ball Bearing	6306LLU	2
4	PM1800B-018-04	Bearing Press Plate		1
5	PM1800B-018-05	Phillips Pan Head Machine Screw	M6 x 8	3
6	PM1800B-018-06	Tire		1

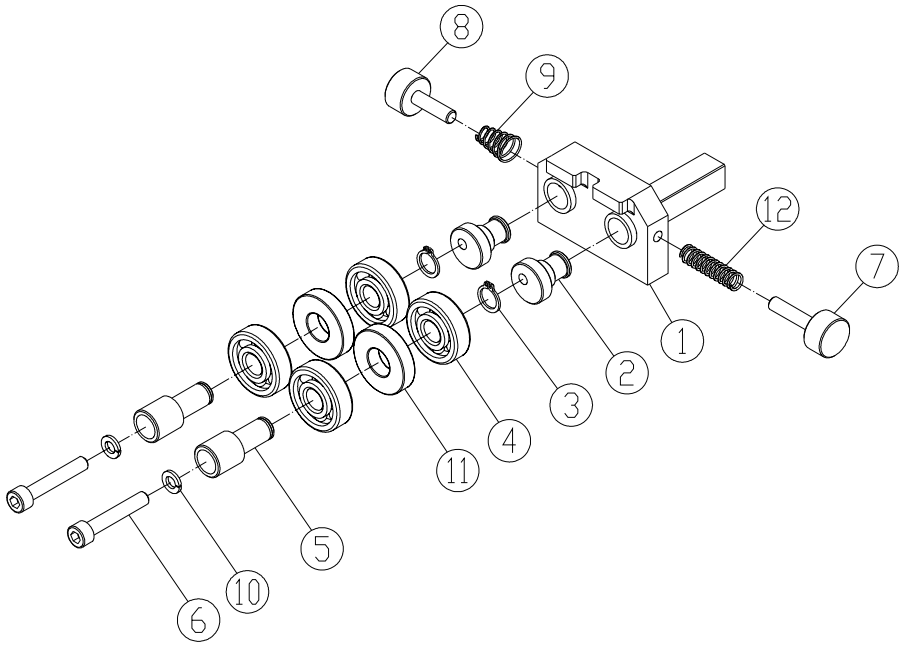
13.14.1 **JWBS-18 Lower Wheel Assembly – Exploded View**



13.14.2 **JWBS-18 Lower Wheel Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	JWBS18B-130	Lower Wheel Assembly (#1 thru 8)		
1	PM1800B-022-01	Lower Wheel	18"	1
2	PM1800B-018-02	Bushing		1
3	BB-6306LLU	Ball Bearing	6306LLU	2
4	PM1800B-018-04	Bearing Press Plate		1
5	PM1800B-018-05	Pan Head Bolt	M6x8	3
6	PM1800B-018-06	Tire	PU	1
7	JWBS18B-130-807	Pulley		1
8	TS-1504041	Hex Socket Cap Screw	M8x20	4

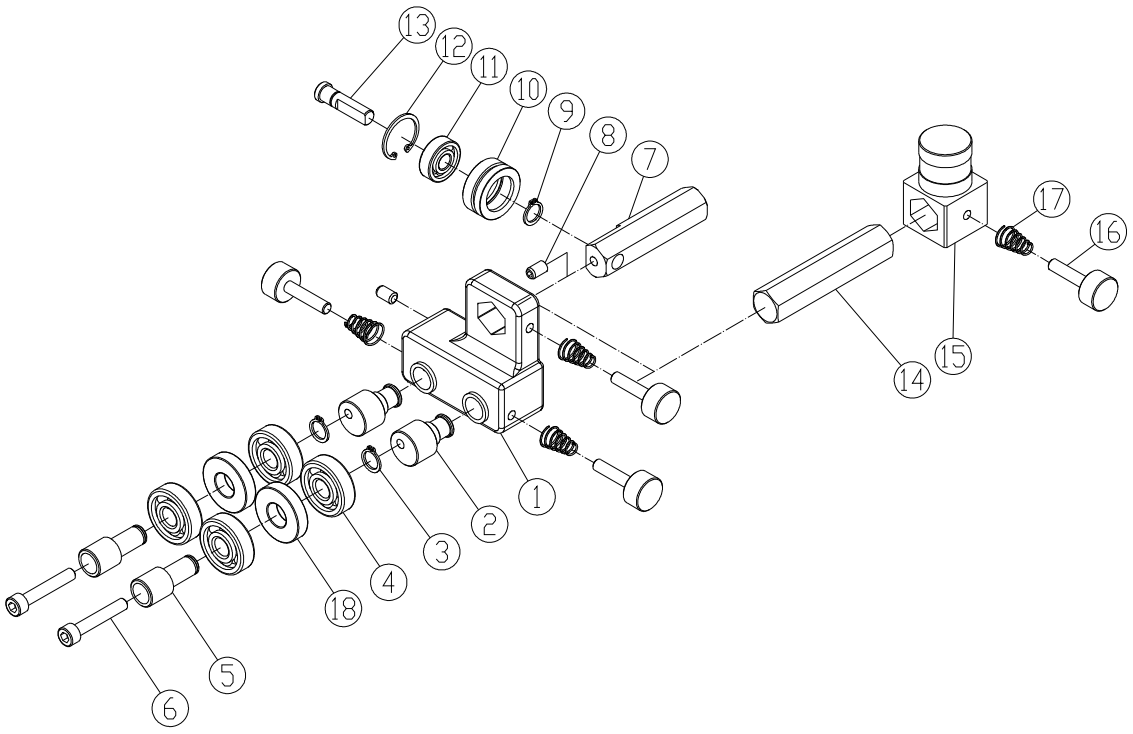
13.15.1 **JWBS-18/20 Lower Blade Guide Assembly – Exploded View**



13.15.2 **JWBS-18/20 Lower Blade Guide Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	JWBS18B-1142	Lower Blade Guide Assembly (#1 thru 12)		
1	PM1500-096-01	Lower Blade Guide Support		1
2	PM1500-096-02	Eccentric Shaft		2
3	PM1800B-059-05	Retaining Ring	S15	2
4	BB-6202ZZ	Ball Bearing	6202ZZ	4
5	PM1800B-059-02	Knurled Adjusting Knob		2
6	TS-1503101	Socket Head Cap Screw	M6x45	2
7	PM1500-095-16	Lock Knob		1
8	JWBS15-1137-508	Lock Knob		1
9	PM1800B-059-017	Cone Spring		1
10	TS-2361061	Spring Washer	M6	2
11	PM1800B-059-04	Spacer		2
12	JWBS15-1138-332	Spring		1

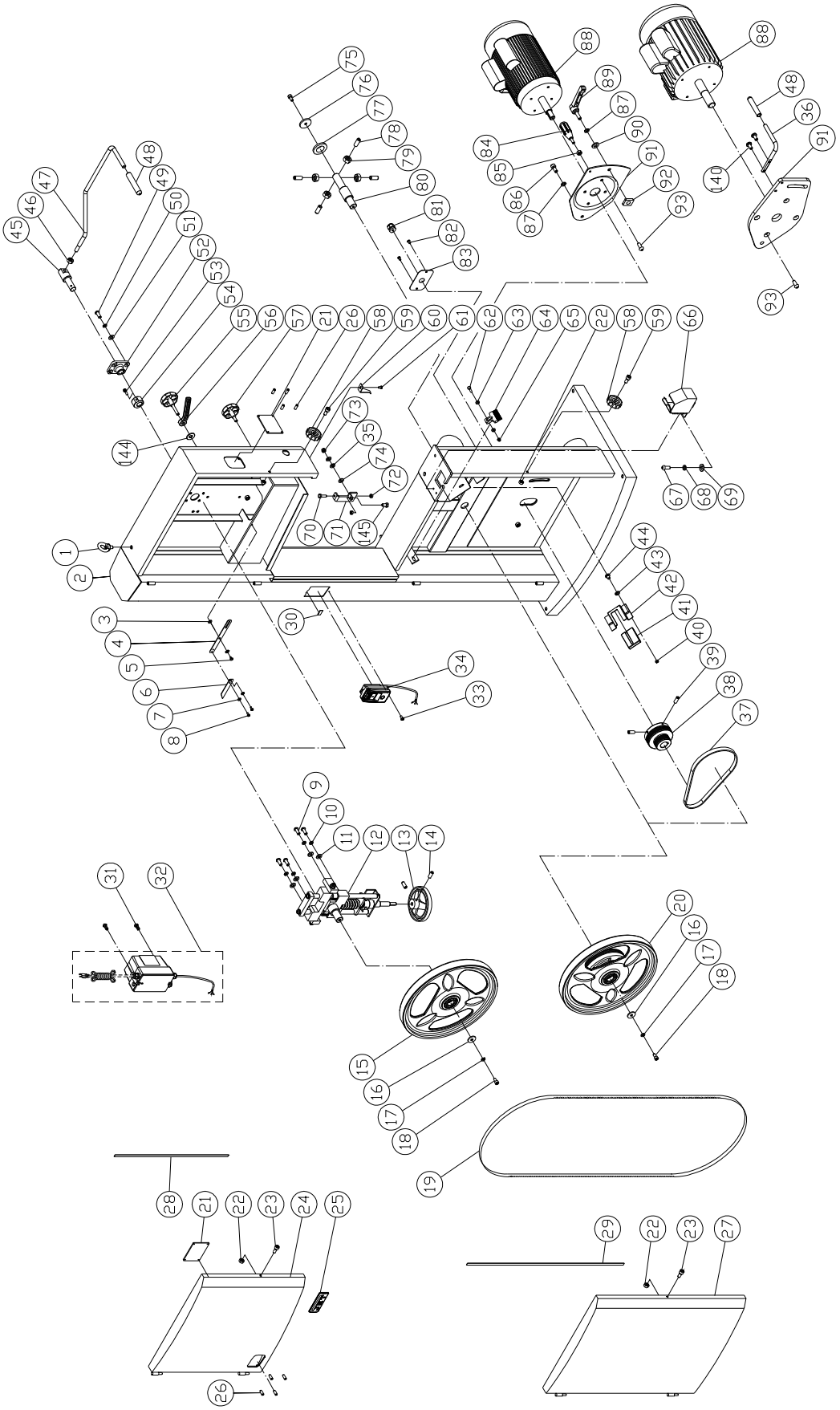
13.16.1 **JWBS-18/20 Upper Blade Guide Assembly – Exploded View**

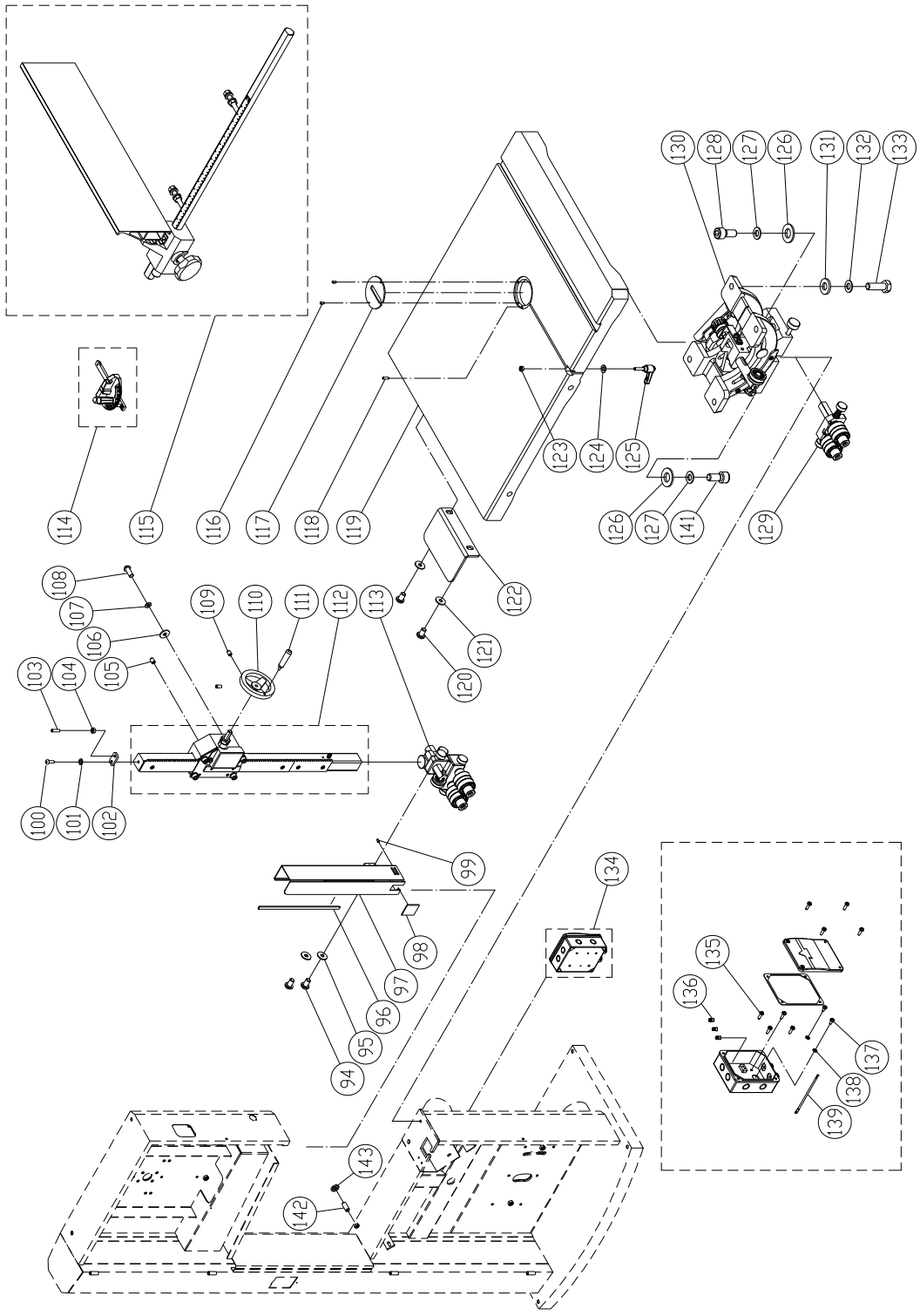


13.16.2 **JWBS-18/20 Upper Blade Guide Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	JWBS18B-1126	Upper Blade Guide Assembly (#1 thru 18)		
1	PM1500-095-01	Upper Blade Guide Support		1
2	PM1500-095-02	Eccentric Shaft		2
3	PM1800B-059-05	Retaining Ring	S15	2
4	BB-6202ZZ	Ball Bearing	6202ZZ	4
5	PM1800B-059-02	Knurled Knob		2
6	TS-1503101	Socket Head Cap Screw	M6x45	2
7	PM1500-095-07	Spacing Sleeve		1
8	TS-1523011	Set Screw	M6x6	2
9	PM1500-085-29	Retaining Ring	S8	1
10	PM1500-085-28	Thrust Bearing Holder		1
11	JWBS15-1121-611	Ball Bearing	608ZZ	1
12	PM1500-085-26	Retaining Ring	R22	1
13	PM1500-085-25	Adjust Shaft		1
14	PM1500-095-14	Hex Post		1
15	PM1500-095-15	Upper Guide Support Block		1
16	PM1500-095-16	Lock Knob		1
17	PM1800B-059-017	Cone Spring		4
18	PM1800B-059-04	Spacer		2

13.17.1 **JWBS-20 Bandsaw Assembly – Exploded View**




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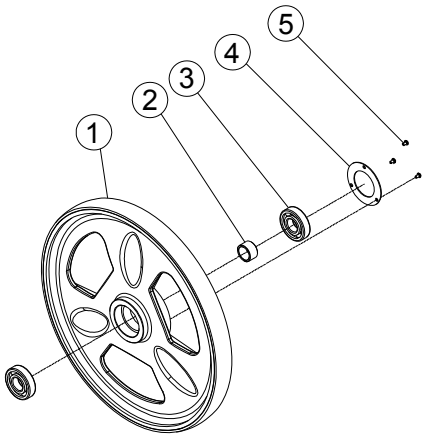
13.17.2 **JWBS-20 Bandsaw Assembly – Parts List**

Index No.	Part No.	Description	Size	Qty
1	PM1500-004	Lifting Ring	M10	1
2	JWBS20B-102	Machine Main Body Frame		1
3	TS-1550041	Flat Washer	M6xØ13	2
4	JWBS18B-106	Tension Pointer		1
5	PM1500-012	Step Screw		1
6	PM2013B-169	Tension Scale Indicator		1
7	TS-1550021	Flat Washer	M4	2
8	F001171	Pan Head Screw	M4x5	2
9	TS-2248202	Socket Head Button Screw	M8x20	4
10	TS-2361081	Spring Washer	M8	4
11	TS-1550061	Flat Washer	M8	4
12	JWBS20B-112	Upper Wheel Sliding Bracket Assembly		1
13	JWBS15-114	Handle Wheel	6"	1
14	TS-1503051	Socket Head Cap Screw	M6x20	2
15	PM2013B-018	Upper Wheel Assembly	20"	1
16	PM1800B-017	Special Washer		2
17	TS-2361081	Spring Washer	M8	2
18	TS-1504041	Socket Head Cap Screw	M8x20	2
19	JWBS20B-119	Saw Blade	158"Lx 1" W x 0.036" T x 3 TPI	1
20	JWBS20B-120	Lower Wheel Assembly	Ø20"	1
21	PM1500-050	Viewing Window		2
22	TS-1541021	Nylon Nut	M6	4
23	TS-1503021	Socket Head Cap Screw	M6x10	2
24	JWBS20B-124	Upper Door		1
25	JET-138-R2000	Jet Logo	138x57mm	1
26	TS-1501021	Socket Head Cap Screw	M4x8	8
27	JWBS20B-127	Lower Door		1
28	JWBS20B-138	Sponge	585x10mm T=1	1
29	JWBS15-140	Sponge	760x10mm T=1	1
30	JWBS15-141	Sponge	16x5mm T=2	1
31	TS-1533052	Pan Head Screw	M5x16	2
32	JWBS15-146	Magnetic Switch Assembly	3HP only	1
	JWBS15-146CS	Contactor Switch (not shown)		1
	JWBS15-146OP	Overload Protector (not shown)		1
	JWBS20B-132A	Magnetic Switch Assembly	5HP 230V	1
	JWBS20B-132ACS	Contactor Switch (not shown)		1
	JWBS20B-132AOP	Overload Protector (not shown)		1
	JWBS15-104B	Power Cord	3HP	1
33	TS-1532032	Pan Head Screw	M4x10	1
34	JWBS15-143B	Control Switch Assembly	3HP/ 5HP	1
	JWBS15-143BSK	Safety Key for JWBS15-143B (not shown)		1
35	PM1800B-159	Special Washer	16x8.2x0.4T	2
36	JWBS20B-136	Motor Adjust Handle		1
37	JWBS18B-150	Poly-V Belt	430J10	1
38	JWBS20B-138MP	Motor Pulley		1
39	TS-1523041	Set Screw	M6x12	2
40	TS-2311061	Hex Nut	M6	2
41	JWBS18DX-249	Dust Collect Insert		1
42	JWBS15-155	Fixed Plate		1
43	TS-2361061	Spring Washer	M6	2
44	TS-2246122	Socket Head Button Screw	M6x12	2
45	PM1500-074	Tension Quick Release Lever Shaft		1
46	TS-1540083	Hex Nut	M12	1
47	JWBS18B-160	Tension Quick Release Lever		1
48	JWBS15-161	Grip		2
49	TS-2248202	Socket Head Button Screw	M8x20	4
50	TS-2361081	Spring Washer	M8	4
51	TS-1550061	Flat Washer	M8xØ18	4
52	PM1500-070	Shaft Fixed Block		1
53	TS-1503061	Socket Head Cap Screw	M6x25	1

Index No.	Part No.	Description	Size	Qty
54	PM1500-069	Cam		1
55	JWBS15-168	Lock Knob	M10x53	1
56	PM1500-068	Lock Handle	M10	1
57	JWBS15-170	Lock Knob	M10x25	1
58	135041	Knob		2
59	TS-1503051	Socket Head Cap Screw	M6x20	2
60	JWBS15-173	Pointer		1
61	JWBS15-174	Pan Head Screw	M5x6	1
62	TS-1482051	Hex Cap Screw	M6x25	1
63	TS-1550041	Flat Washer	M6	2
64	PM1500-058	Brush		1
65	TS-1541021	Nylon Nut	M6	1
66	JWBS18B-179	Lower Blade Guard		1
67	TS-2246082	Socket Head Button Screw	M6x8	2
68	TS-2361061	Lock Washer	M6	2
69	TS-1550041	Flat Washer	M6	2
70	TS-1490071	Hex Cap Screw	M8x40	1
71	JWBS15-184	Support Plate		1
72	TS-2311081	Hex Nut	M8	1
73	TS-1541031	Hex Nylon Lock Nut	M8	1
74	TS-1550061	Flat Washer	M8	2
75	TS-1504041	Socket Head Cap Screw	M8x20	1
76	PM1800B-088	Washer		1
77	PM1800B-087	Plate		1
78	TS-2279301	Set Screw	M10x30	4
79	TS-1541041	Hex Nut	M10	4
80	PM1800B-084	Lower Wheel Shaft		1
81	PM1500-062	Strain Relief	PG13.5	1
82	PM1500-039	Tapping Screw	M4x8	2
83	JWBS15-196A	Strain Relief Fixed Plate		1
84	JWBS15-197	Handle		1
85	TS-1540061	Hex Nut	M8	1
86	TS-149105	Hex Cap Screw	M10x35	1
87	TS-2361101	Spring Washer	M10	2
88	JWBS20B-188	Motor	3HP/230V	1
..	JWBS18B-1101FM	Motor Fan (not shown)		1
	JWBS18B-1101FMC	Motor Fan Cover (not shown)		1
	JWBS18B-1101SC	Start Capacitor (not shown)	300MFD, 250VAC	1
	JWBS18B-1101RC	Running Capacitor (not shown)	60µF, 300VAC	1
	JWBS18B-1101JB	Junction Box (not shown)		1
	JWBS18B-1101JBC	Junction Box Cover (not shown)		1
	JWBS18B-1101CS	Centrifugal Switch (not shown)		1
	JWBS20B-188A	Motor	5HP/230V	1
	PM1800B-120MF	Motor Fan (not shown)		1
	PM1800B-120MFC	Motor Fan Cover (not shown)		1
	PM1800B-120SC	Starting Capacitor (not shown)	300MFD, 250VAC	1
	PM1800B-120RC	Running Capacitor (not shown)	45µf, 450VAC	1
	PM1800B-120CC	Capacitor Cover (not shown)		1
	PM1800B-120JB	Junction Box (not shown)		1
	PM1800B-120JBC	Junction Box Cover (not shown)		1
	PM1800B-120CS	Centrifugal Switch (not shown)		1
89	PM1500-015	Motor Bracket Lock Handle	M10x33	1
90	TS-1550071	Flat Washer	M10	1
91	JWBS15-1104	Motor Bracket		1
	JWBS20B-191A	Motor Bracket	5HP	1
92	PM1500-038	Locating Block		1
93	TS-2248202	Socket Head Button Screw (3HP)	M8x20	4
	TS-1515031	Socket Flat Head Screw (5HP)	M8x25	4
94	TS-1482031	Hex Cap Screw	M6x16	2
95	TS-1550041	Flat Washer	M6	2
96	JWBS15-1109	Magnet	7x340mm	1
97	JWBS18B-1110	Blade Guard Cover		1

Index No.	Part No.	Description	Size	Qty
98	PM1800B-093	Viewing Window		1
99	TS-1521011	Set Screw	M4x4	2
100	TS-2246122	Socket Head Button Screw	M6x12	1
101	TS-2361061	Spring Washer	M6	1
102	PM1800B-163	Locate Plate		1
103	F010432	Set Screw	M6x35	1
104	TS-1540041	Hex Nut	M6	1
105	JWBS15-1113	Set Screw	M8x6	4
106	TS-1550061	Flat Washer	M8	4
107	TS-2361081	Spring Washer	M8	4
108	TS-2248202	Socket Head Button Screw	M8x20	4
109	TS-1523041	Set Screw	M6x12	2
110	JWBS15-1118	Handwheel	5"	1
111	JWBS15-1119	Handle	M8	1
112	JWBS18B-1125	Guide Bracket Assembly		1
113	JWBS18B-1126	Upper Blade Guide Assembly		1
114	JWBS15-1122	Miter Gauge Assembly		1
115	JWBS18B-1128	Rip Fence Assembly		1
116	F012085	Roll Pin	Ø4x8 mm	2
117	JWBS15-1125	Table Insert		1
118	TS-1522011	Set Screw	M5x5	3
119	JWBS18B-1132	Table		1
120	TS-2246122	Socket Head Button Screw	M6x12	2
121	TS-1550041	Flat Washer	M6	2
122	JWBS20B-1122	Extension Plate		1
123	TS-1540061	Hex Nut	M8	1
124	TS-1550061	Flat Washer	M8	1
125	JWBS18B-1138	Handle	M8x35	1
126	TS-1550071	Flat Washer	M10	2
127	TS-2361101	Spring Washer	M10	2
128	TS-1505051	Socket Head Cap Screw	M10x35	1
129	JWBS18B-1142	Lower Blade Guide Assembly		1
130	JWBS15-1138	Trunnion Support Bracket Assembly		1
131	TS-1550061	Flat Washer	M8	4
132	TS-2361081	Spring Washer	M8	4
133	TS-1490041	Hex Cap Screw	M8x25	4
134	PM1800B-077	Wire Connection Box		1
135	PM1800B-155	Phillips Pan Head Machine Screw (Big)	M5x10	4
136	PM1800B-154	Wire Cap	P4	3
137	TS-1533032	Phillips Pan Head Machine Screw	M5x10	2
138	JWS25X-405	Star Washer	M5	2
139	PM1800B-151	Ground Wire		1
140	TS-2248202	Socket Head Button Screw	M8x20	2
141	TS-149105	Hex Cap Screw	M10x35	1
142	7015-48	Set Screw	M8x30	1
143	TS-1541031	Hex Nylon Lock Nut	M8	1
144	TS-1550071	Flat Washer	M10	1
145	TS-1490021	Hex Cap Screw	M8x16	1

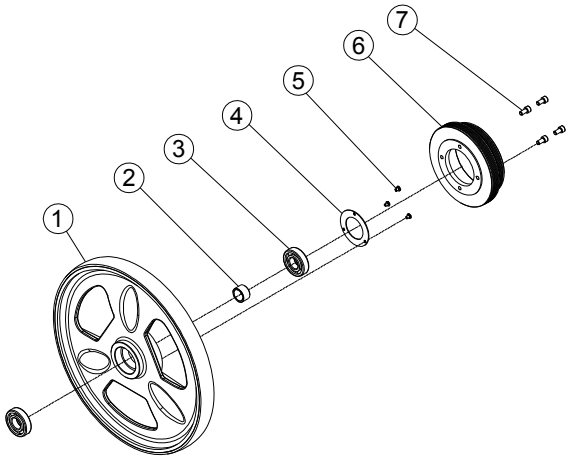
13.18.1 **JWBS-20 Upper Wheel Assembly – Exploded View**



13.18.2 **JWBS-20 Upper Wheel Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	PM2013B-018	Upper Wheel Assembly (#1 thru 5)		1
1	PM2013B-018-01	Upper Wheel (Rubber Coating)		1
2	PM1800B-018-02	Spacer		1
3	BB-6306LLU	Ball Bearing	6306LLU	2
4	PM1800B-018-04	Plate		1
5	PM1800B-018-05	Phillips Pan Head Machine Screw	M6x8	3

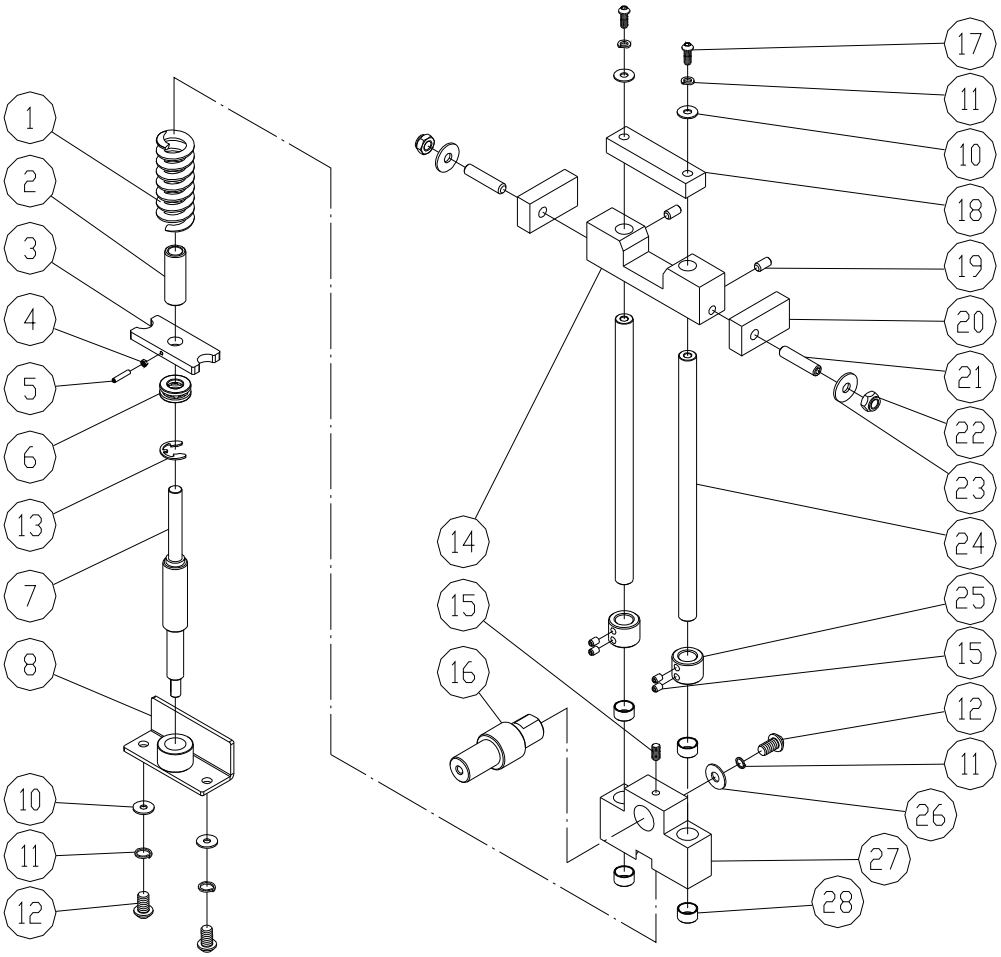
13.19.1 **JWBS-20 Lower Wheel Assembly – Exploded View**



13.19.2 **JWBS-20 Lower Wheel Assembly – Parts List**

Index No	Part No	Description	Size	Qty
	JWBS20B-120	Lower Wheel Assembly (#1 thru 7)		
1	PM2013B-022-01	Lower Wheel (Rubber Coating)		1
2	PM1800B-018-02	Spacer		1
3	BB-6306LLU	Ball Bearing	6306LLU	2
4	PM1800B-018-04	Plate		1
5	PM1800B-018-05	Phillips Pan Head Machine Screw	M6x8	3
6	JWBS18B-138-807	Pulley		1
7	TS-1504041	Socket Head Cap Screw	M8x20	4

13.20.1 **JWBS-20 Upper Wheel Sliding Bracket Assembly – Exploded View**

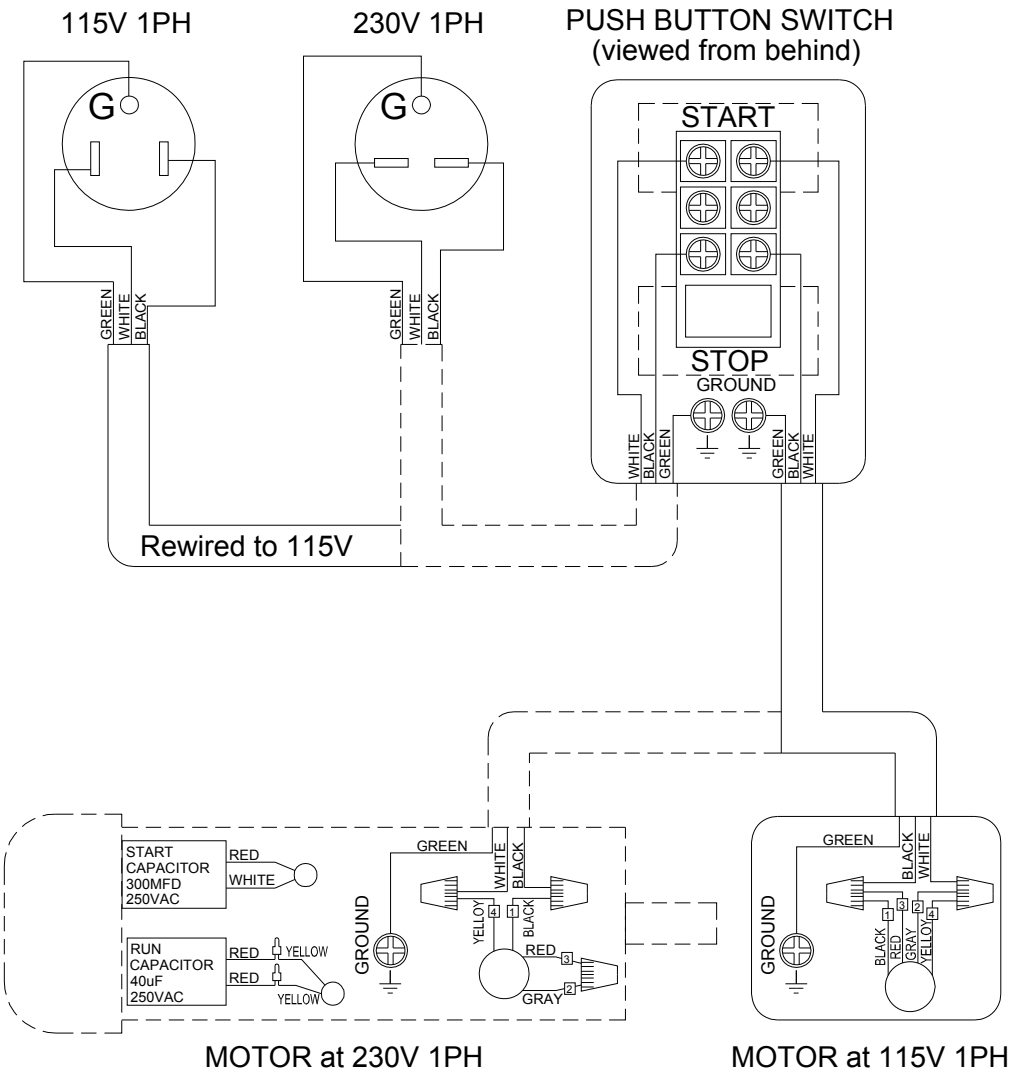


13.20.2 **JWBS-20 Upper Wheel Sliding Bracket Assembly – Parts List**

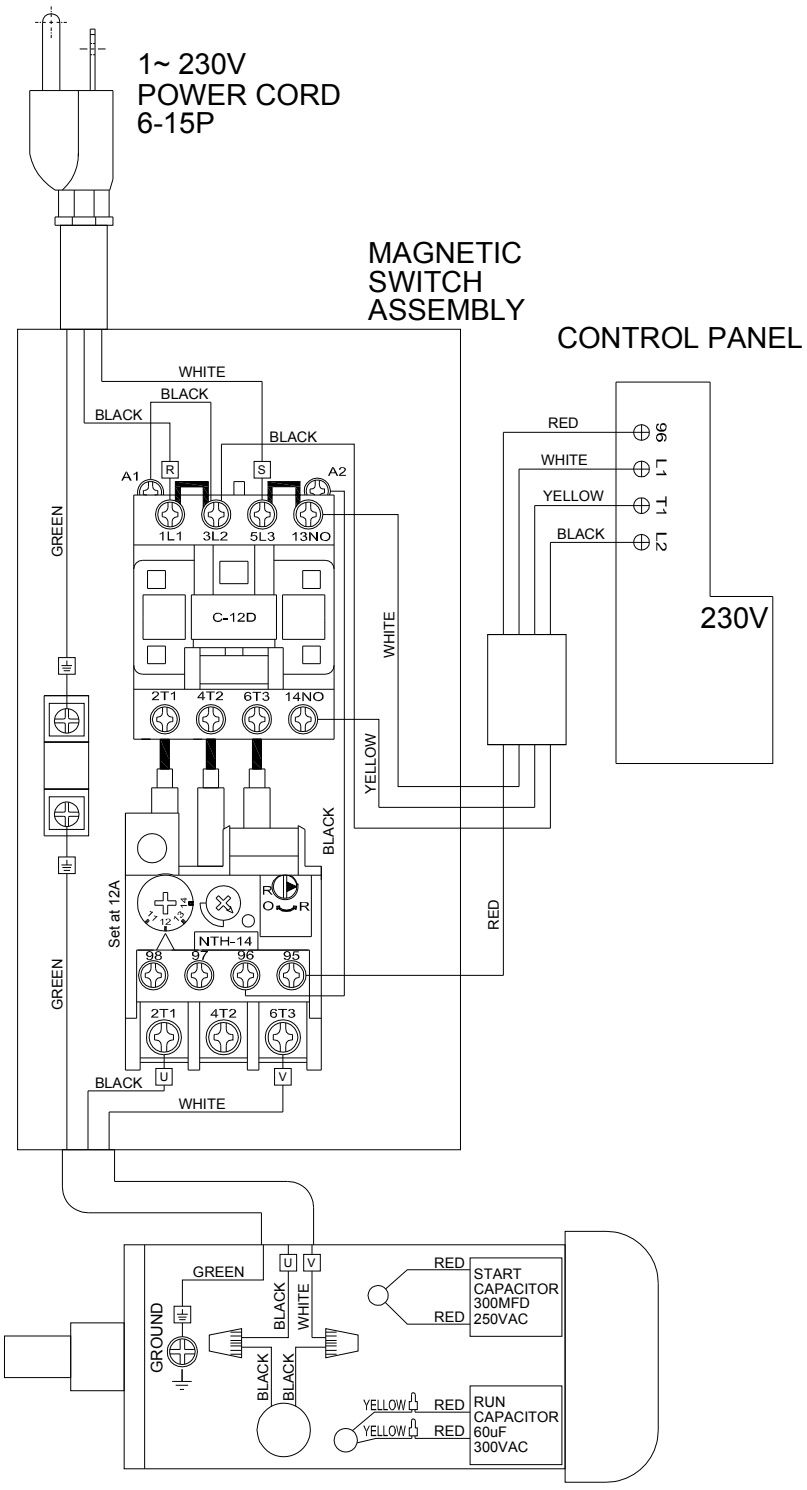
Index No	Part No	Description	Size	Qty
1	JWBS20B-112-801	Spring		1
2	JWBS20B-112-802	Bushing		1
3	JWBS20B-112-803	Plate		1
4	TS-1540021	Hex Nut	M4	1
5	JWBS20B-112-805	Set Screw	M4x35	1
6	BB-51201	Bearing	51201	1
7	JWBS20B-112-807	Adjusting Bolt		1
8	JWBS20B-112-808	Adjust Plate Weldment (includes #9 Nut)		1
10	TS-1550061	Flat Washer	M8	4
11	TS-2361081	Spring Washer	M8	5
12	TS-2248202	Socket Head Button Screw	M8x20	3
13	PM1800B-027-026	E Ring	E15	1
14	JWBS20B-112-814	Block		1
15	5302731	Set Screw	M8x6	5
16	JWBS20B-112-816	Wheel Shaft		1
17	TS-2248302	Socket Head Button Screw	M8x30	2
18	JWBS20B-112-818	Block		1
19	TS-1523031	Set Screw	M6x10	2
20	JWBS20B-112-820	Locate Block		2
21	JWBS20B-112-821	Set Screw	M10x50	2
22	TS-2342102	Nylon Nut	M10	2
23	TS-1550071	Flat Washer	M10	2
24	JWBS20B-112-824	Shaft		2
25	JWBS20B-112-825	Collar		2
26	TS-1550061	Flat Washer	M8	1
27	JWBS20B-112-827	Upper Wheel Sliding Bracket		1
28	PM1500-010-28	Bushing Bearing	DU1610	4

14.0 **Electrical Connections**

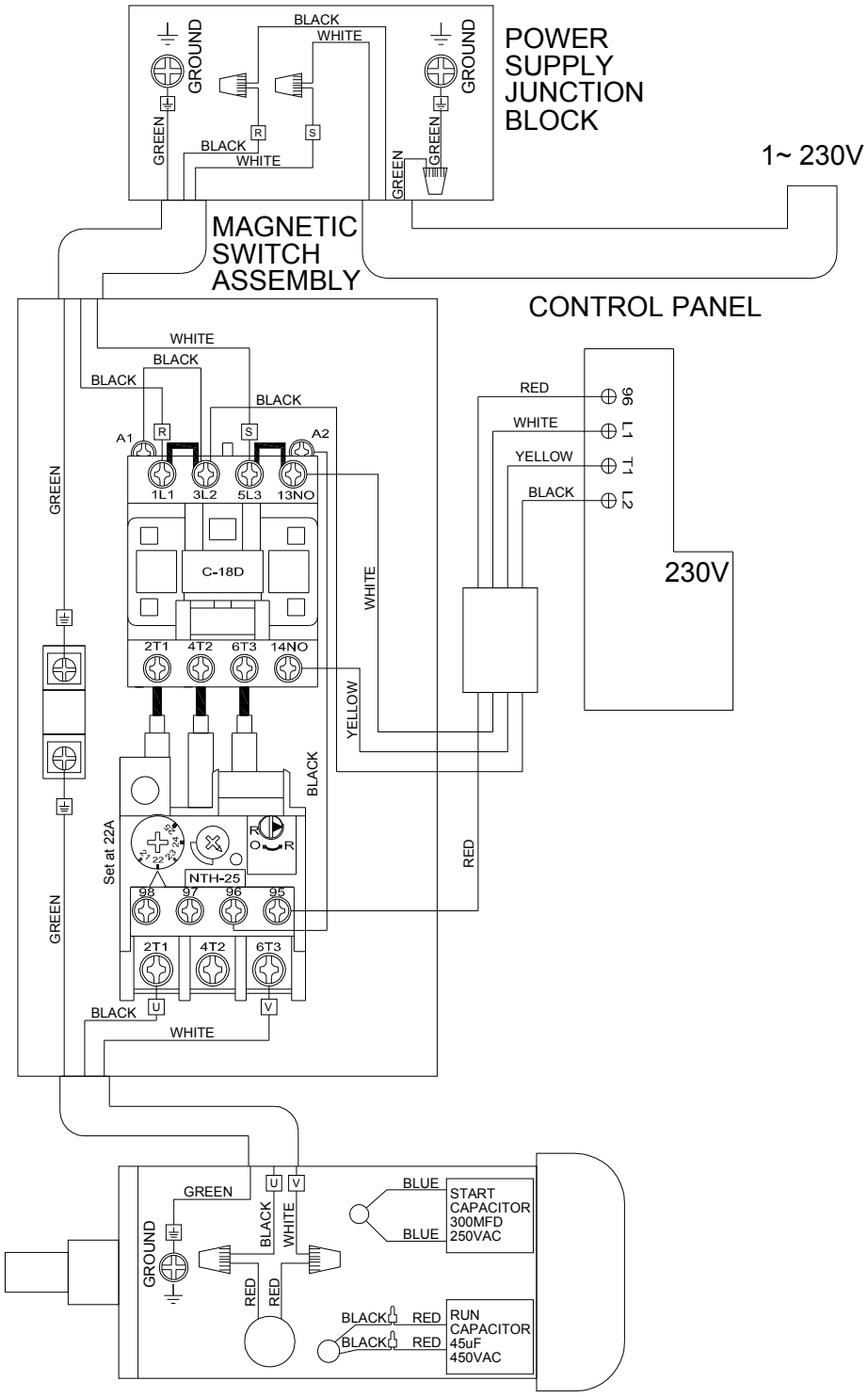
14.1 **Connections for 1.75HP (models 714600, 714700)**



14.2 **Connections for 3HP (models 714650, 714750, 714800)**



14.3 **Connections for 5HP (model 714850)**



15.0 **Warranty and service**

JET warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

Warranty Period
The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website.

- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

Who is Covered
This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered
This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance. JET woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials outside recommended guidelines may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

Warranty Limitations
Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support
Please contact Technical Service by calling 1-800-274-6846. **Please note that you will be asked to provide proof of initial purchase when calling.** If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET website.

More Information
JET is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website.

How State Law Applies
This warranty gives you specific legal rights, subject to applicable state law.

Limitations on This Warranty
JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.
JET SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

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Product Listing with Warranty Period

90 Days – Parts; Consumable items
1 Year – Motors; Machine Accessories
2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes
5 Year – Woodworking Machinery
Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools; Air Tools

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