



DAKE VDL-18

ASSEMBLY AND INSTRUCTIONAL MANUAL



⚠ WARNING! Read and understand all instructions and responsibilities before operating. Failure to follow safety instructions and labels could result in serious injury.



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DAKE Standard Limited Warranty

Finished Machines

- Dake warrants to the original purchaser the finished machine manufactured or distributed by it to be free from defects in material and workmanship under normal use and service within **1 year (12 months) from the delivery** date to the end user.

Parts

- Dake warrants to the original purchaser the component part manufactured or distributed by it to be free from defects in material and workmanship under normal use and service within **30 days** from the delivery date to the end user.
- The standard limited warranty includes the replacement of the defective component part at no cost to the end user.

Sale of Service (Repairs)

- Dake warrants to the original purchaser the component part repaired by Dake Corporation at the manufacturing facility to be free from defects in material and workmanship under normal use and service within 90 days from the return date to the end user, as it pertains to the repair work completed.
- The standard limited warranty includes repair of the defective component part, at no cost to the end user.

Warranty Process

- Subject to the conditions hereinafter set forth, the manufacturer will repair or replace any portion of the product that proves defective in materials or workmanship. The manufacturer retains the sole right and option, after inspection, to determine whether to repair or replace defective equipment, parts or components. The manufacturer will assume ownership of any defective parts replaced under this warranty.
- All requested warranty claims must be communicated to the distributor or representative responsible for the sale. Once communication has been initiated, Dake Customer Service must be contacted for approval:



- **Phone:** (800) 937-3253
- **Email:** customerservice@dakecorp.com

When contacting Dake, please have the following information readily available:

- Model #
- Serial #
- Sales Order #

Purchasers who notify Dake within the warranty period will be issued a Case number and/or a Return Material Authorization (RMA) number. If the item is to be returned per Dake's request, the RMA number must be **clearly** written on the exterior packaging. Any item shipped to Dake without an RMA will not be processed.

Warranty Exceptions

The following conditions are not applicable to the standard limited warranty:

- (a) Part installation or machine service was not completed by a certified professional, and is not in accordance with applicable local codes, ordinances, and good trade practices.
- (b) Defects or malfunctions resulting from improper installation or failure to operate or maintain the unit in accordance with the printed instructions provided.
- (c) Defects or malfunctions resulting from abuse, accident, neglect, or damage outside of prepaid freight terms.
- (d) Normal maintenance service or preventative maintenance, and the parts used in connection with such service.
- (e) Units and parts which have been altered or repaired, other than by the manufacturer or as specifically authorized by the manufacturer.
- (f) Alterations made to the machine that were not previously approved by the manufacturer, or that are used for purposes other than the original design of the machine.

Return & Refund Policy

- Thank you for purchasing from Dake! If you are not entirely satisfied with your purchase, we are here to help.



Returns

- All Dake manufactured / distributed machines, parts and couplings include a 30-day return option. These policies are valid from the date of final shipment to the end user. To be eligible for a return, the item must be unused and in the same condition as received. All requested warranty claims must be communicated to the distributor or representative responsible for the sale. Once communication has been initiated, Dake Customer Service must be contacted for approval:
- **Phone:** (800) 937-3253
- **Email:** customerservice@dakecorp.com
- Once the return request has been approved by Customer Service, a representative will supply a Return Material Authorization (RMA) number.
- The returned item must have the provided RMA number clearly marked on the outside packaging. Any item received without an RMA number clearly visible on the packaging will not be processed.
- An RMA number can only be provided by the Dake Customer Service team and must be obtained prior to the return shipment.

Refunds

- Once the item has been received and inspected for damages, a representative will notify the requestor referencing the provided RMA number. If the return is approved, a refund will be issued to the original method of payment, less a 20% restocking fee.
- The restocking fee may be waived if an order is placed at the time of return with like-value merchandise. Transportation costs are the responsibility of the end user and will not be credited upon return approval.
- Any item that is returned after the initial 30 days or has excessive/obvious use will not be considered for a full refund.



Specifications

Machine Specifications

VDL-18 Bandsaw	
Description	Dimensions
Motor Voltage/HP	115/ 230V (prewired 115V)/ 1-3/4HP
Breaker	15 amp for both 115V and 230V
Throat	18 7/32" (463mm)
Table cast iron	20" x 26" (508mm x 660mm)
Front table to center of blade	11" (280mm)
Table tilt	- 6 degrees + 45 degrees
Miter slot	3/8" x 3/4" (9.525mm x 19.05mm)
Table height	38" (965mm)
Fly wheel	Cast iron
Resaw capacity	16" (406.4mm)
Minimum blade length	143 3/4" (3,651mm)
Maximum blade length	145 1/2" (3,695mm)
Maximum blade width	1-1/4" (31.75mm)
Minimum blade width	1/8" (3mm)
Guides	Laguna ceramic
Blade speeds (FPM)	<u>Variable speeds</u> Low: 100-290 High: 1200-3500
Dust chute diameter (OD)	4" x 2
Height	77 3/4" (1,975mm)
Machine dimensions (W x D) Base footprint	36 3/16" x 36" (919mm x 915mm) 27" x 19 2/3" (688mmx500mm)
Machine dimensions with mobility kit (W x D)	43" x 36" (1093mm x 915mm)
Base footprint with mobility kit	37 3/8" x 24 11/32" (949mm x 618mm)
Weight gross	515 lbs (234 kg)
Weight net	480 lbs (218 kg)
Package size (W x D x H)	81 1/2" x 33 7/8" x 30-1/4" (2070mm x 860mm x 770mm)
Variable Foot Brake	Disk Rotor
Mobility kit	Optional
Industrial work-light	Optional



- In the space provided record the serial number and model number of the machine. This information is only found on the black Dake tag. If contacting Dake this information must be provided to assist in identifying the specific machine.

Model No:

Part No:

Serial No:

Date of Purchase:

Safety Warnings

BEFORE USE, ALL SAFETY INSTRUCTIONS *MUST BE READ*

- As you know, the vertical bandsaw is a universal saw for contour cutting. Blade selection is important and by choosing the right blade, you can make most any pattern cutting on most any material with this machine. However, the most important thing is to realize how to operate it in a safe and correct way and how to maintain it.
- We have tried to supply you all the information about these. Please be sure to look through all the contents in this manual so that you may obtain the maximum efficiency and the longest machine life with minimum expense.

- The specifications and information in this manual were current at the time this manual was approved for printing. Dake, whose policy is one of continuous improvement, reserves the right, however, to change specifications or design at any time without incurring obligations.
- Always include the part number, model number, and parts description, for parts orders or correspondence concerning your bandsaw, so we can supply you a rapidly after-sales service.

▲ WARNING

1. Read the operator's manual carefully. Learn the tools applications and limitations, as well as the specific potential hazards peculiar to it.
2. Always wear approved safety glasses/face shields while using this machine.
3. Make certain the machine is properly grounded.
4. Before operating the machine, remove tie, rings, watches, other jewelry, and roll up sleeves above the elbows. Remove all loose clothing and confine long hair. **DO NOT** wear gloves when operating.
5. Keep the floor around the machine clean and free of scrap material, oil and grease.
6. Always keep machine guards in place when the machine is in use. If removed for maintenance purposes, use extreme caution, and replace the guards immediately.
7. **DO NOT** overreach! Always maintain a balanced stance. **Do not fall or lean against blades or other moving parts.**
8. Use only sharp blades. Dull blades are dangerous.
9. Make all machine adjustments or maintenance with the machine unplugged from the power source.
10. Use the right tool. **DO NOT** force a tool or attachment to do a job which it was not designed for.
11. **DO NOT** make cuts requiring more power than is available on the machine.
12. Replace warning labels if they become obscured or removed.
13. Make certain the motor switch is in the OFF position before connecting the machine to power.
14. Give your work undivided attention. Looking around, carrying on a conversation. And "horse-play" is careless acts that can result in serious injury.

15. Make a habit of checking to see that keys and adjusting wrenches are removed before turning on the machine.
16. Keep visitors a safe distance from the work area.
17. Use recommended accessories; improper accessories may be hazardous.
18. Never place hands directly in line with the saw blade.
19. Always use push sticks when cutting small material.
20. Raise or lower the blade guide only when the machine has been turned off and the blade has stopped moving.
21. Read and understand warnings posted on the machine.
22. DO NOT use attachments for any other purpose than for what they were designed for.

Failure to comply with all these warnings could lead to serious injury.



This is the safety alert symbol.

- When you see this symbol on your press be alert to the potential for personal injury.

▲ WARNING

All electrical connections must be done by a qualified electrician. Failure to comply may cause serious injury!

All adjustment or repairs must be done with the machine disconnected from the power source. Failure to comply may result in serious injury!

Safety Labels:

SAFETY INSTRUCTIONS

LOCKOUT PROCEDURE

1. Announce lockout to other employees.
2. Turn power off at main panel.
3. Lockout power in off position.
4. Put key in pocket.
5. Clear machine of all personnel.
6. Test lockout by hitting run button.
7. Block, chain or release stored energy sources.
8. Clear machine of personnel before restarting machine.

Label Part # 84605

⚠ DANGER

High voltage. Can cause severe injury or death.

Service by authorized personnel only.

Use lockout.



⚠ PELIGRO ⚠

Alta tensión. Puede provocar lesiones severas o la muerte.

Para reparaciones, emplee personal autorizado solamente.

Use cierre eléctrico.

Label Part # 84395

SAFETY INSTRUCTIONS

1. Read the instruction manual thoroughly before operating this machine.
2. Wear safety glasses.
3. Wear gloves only when handling material or replacing blade.
4. Never wear gloves while blade is rotating.
5. Do not perform cutting operations which exceed machine capacity.
6. Do not force machine to stall blade or breakage might occur.
7. Clamp workpiece securely.
8. Always use stock stands on both sides of saw blade to support material.
9. Use blade with the correct specification for the material being cut.
10. Keep floor around machine clean and free from chips, scraps, oil, and coolant.
11. Turn electrical power off before performing maintenance, servicing, or changing blades.

Label Part # 84605

⚠ WARNING



Never reach into the point of operation.

Do not operate without all guards in place.

Label Part # 84604

⚠ WARNING



Never reach into the point of operation.

Do not operate without all guards in place.

Label Part # 82199

Introduction to Bandsaws.



This bandsaw is designed to give you years of safe service. Read this owner's manual in its entirety before assembly or use.

The bandsaw is generally defined as a saw blade in the form of an endless steel band that rotates around two or more wheels. This blade is a continuous metal band with teeth on one side. As the wheels rotate, so does the band, which creates the continuous sawing action.

Because the direction of the blade is always downward toward the table, there is little danger (except for special cuts) that the material will be thrown back at the operator, which is called a kickback.

The unique feature of the bandsaw is that the work piece can be rotated around the blade creating a curve. It is the tool most often used when curves have to be cut in

wood or metal.

Because the bandsaw blade is fairly thin, it can cut thick stock with a minimum of horsepower. For this reason, the bandsaw is often the machine of choice.

What you will receive with your Bandsaw.

Fence



Fence parts



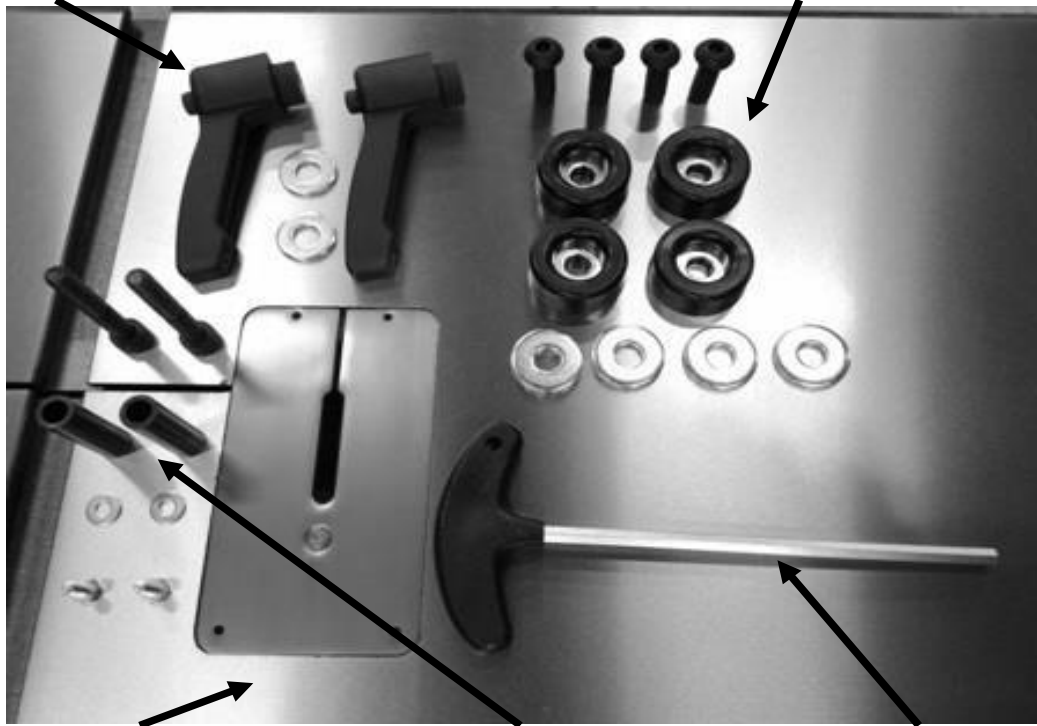
Fence guide bar



Fence stop

Table ratchet handles & washers

Rubber feet and hardware



Table

Fence guide bar attachment parts

T bar

Parts of the Bandsaw.

Note: The mobility kit and light are optional.

The bandsaw has many parts. The major parts are discussed in this manual. If you are not familiar with the bandsaw, take the time to read this section and become familiar with the machine.

1. Tension indicator window	10. Rip fence assembly
2. Switch	11. Dust port 4"
3. Motor	12. Quick-release blade tension lever
4. Frame	13. Blade tracking knob
5. Blade tension handle	14. Optional mobility kit
6. Blade tracking window	15. 110v power socket
7. Cast iron table	16. Blade guide shaft lock
8. Blade guide adjustment hand wheel	17. Flywheel
9. Blade guide	18. Brake foot pedal



1. Tension indicator

Tension indicators are designed to indicate the compression of a spring. As a rule, the greater the spring compression, the greater the tension on the blade. The tension scale does not register until the blade is relatively taut and is located on the inside of the body of the bandsaw. The tension scale is a general reference and not a rule. The tension indicator is visible with the upper door closed by looking through the tension indicator window.

2. Switch.

To start the machine press the "I" button on the start stop switch. To shut off the machine press the "O" on the start stop switch. When the safety switch is pressed it stops the power to the motor. To reset it, twist and it will pop out and allow power to be supplied to the motor.

3. Motor.

The bandsaw is supplied with a 120V motor. It drives the lower flywheel through a drive belt.

4. Frame.

The frame of the bandsaw is a U-shaped frame, which houses all the parts of the machine. This is the heart of the bandsaw and must be very rigid, as it takes the strain of the blade being tensioned.

5. Blade tension handle.

The blade tension handle moves the blade tension and tilt assembly vertically. The vertical action compresses a spring that ensures that the blade tension is constant and will not change dramatically as the blade length increases due to the heat generated by the cutting action.

6. Blade tracking window.

There is a blade tracking window on the side of the frame that allows the edge of the upper flywheel to be viewed. This allows the tracking of the blade to be achieved with the door closed.

7. Cast iron table.

The table supports the work piece and can tilt (-6 degrees to +45 degrees) to produce cuts at various angles. It has a groove to the right-hand side of the blade, which is used to guide the miter gauge. In the center there is a table insert which the blade passes through. Should the blade wander off center, this table insert will protect the

Emergency stop button



Start / Stop buttons

blade from damage, as it is soft and should not damage the blade. The table also supports the adjustable fence, which is used for parallel cuts. There is a nut and bolt that joins both sides of the table and stops the table from warping. The nut and bolt must always be fitted in the table and only removed when removing or fitting a blade.

8. Blade guide adjustment hand wheel.

The upper blade guides are attached to the blade guide shaft. The shaft is vertically adjustable with a hand wheel. The guides should be adjusted so the guides are just above the wood being cut. This gives the blade maximum stability and is also the safest way to operate the bandsaw.

9. Blade guides.

There are two sets of blade guides, one above and one below the table. The function of the guides is to give the blade stability and ensure that the blade movement left/right, forward/back is kept to a minimum. The guides above the table are fitted to a shaft that has vertical adjustment. The upper guides are adjustable so that the guides are held just above the job being cut. This gives the blade the maximum amount of stability and also keeps the amount of blade that is exposed to a minimum. The guides have ceramic inserts that can be adjusted for almost zero clearance.

10. Rip fence assembly.

The rip fence assembly consists of a guide rail, cast knuckle, fence attachment casting, rule and a high-low fence. The guide rail is attached to the table side. It guides the fence assembly across the table. The cast knuckle slides on the guide rail and is lockable in any position to suit the width of cut. The fence attachment casting is attached to the cast knuckle with three screws that when loosened allow the fence to be adjusted for drift. The fence is attached to the fence attachment casting with two studded knobs that allow the fence to be adjusted laterally across the table to suit the job being cut. The fence can be fitted in the low position or the vertical (7 1/4" height) position.

There is a rule that is fitted to the side of the table and can be used as a quick guide on the distance that the fence is from the blade. The Fence Stop can be used for non through cuts and can be set on any length of the fence with the quick release handle."

Note. The rule will have to be adjusted each time the fence is adjusted for drift, as this will change the distance the fence is from the blade

11. Dust ports 4".

The bandsaw produces a lot of sawdust, so extraction is very important. This is achieved by connecting a 4" dust extraction hoses with a minimum capacity of 1,000 CFM to the two dust ports located at the back of the machine. The stronger the suction

from the dust collector, the better for you and the machine.

12. Quick-release blade tension lever.

There is a quick-release tension lever at the back of the bandsaw. The lever is a convenient way of quickly releasing the tension on the blade and speeds up blade change dramatically.

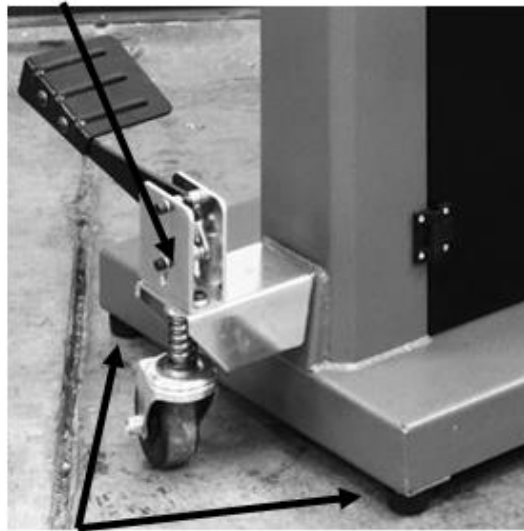
13. Blade-tracking knob.

The blade-tracking knob is located at the back of the bandsaw and is used to adjust the blade tracking. The knob must be locked once the adjustment is completed

14. Optional mobility kit.

The optional mobility kit is fitted to the base of the bandsaw and consists of two fixed wheels at the front of the bandsaw and a swivel wheel at the back of the band saw. The swivel wheel is activated and deactivated with a foot lever. With the swivel wheel deactivated, the bandsaw sits on two rubber feet.

Swivel wheel assembly



15. Optional light.

The optional light is fitted with four screws through pre-drilled holes at the top of the bandsaw. The bandsaw is provided with a 120V socket that the light can be connected to.

16. Blade guide shaft lock

Rubber feet

The upper blade guide is fixed to the blade guide shaft, which is vertically adjustable. Once the guides have been adjusted vertically; the shaft is locked in position with the lock knob

17. Flywheel.

The blade is suspended over two wheels that are covered with rubber called a "tire". The tire cushions the blade and protects the teeth from coming in contact with the metal of the flywheel. The lower wheel is the drive wheel and is attached to the motor with a rubber drive belt. The lower flywheel powers the blade and pulls the blade down through the work piece. The top wheel has two functions. One function is to balance or track the blade on the wheels, and the second one is to tension the blade. Both functions are adjustable.

18. Brake.

The bandsaw is provided with a brake that is operated by applying the foot pedal. When the foot pedal is applied, the power is interrupted from the motor and the flywheel is slowed by the disc brake.

19. Guards

When running, the blade can be very dangerous, and the amount of blade that is exposed must be kept to a minimum.



Disc brake on flywheel

The machine is supplied with a number of guards, all of which **MUST** be installed and used while the machine is running. There is a guard that is attached to the lower door and is adjustable vertically once the door is closed. There is a guard on the guide vertical adjustment shaft

20. Blade tilt and tension mechanism.

The upper wheel is attached to the tilt and tension mechanism. This mechanism adjusts the wheel so that the bandsaw blade can be adjusted for blade tracking. This is achieved by a screwed handle at the back of the machine that pushes on the mechanism and adjusts the axis of the wheel so that it runs true with the lower wheel. The second function is to tension the blade, which is achieved by adjusting the upper flywheel vertically. A handle is located below upper flywheel and, when rotated, will move the wheel up or down. The machine has a quick-acting blade release mechanism that is located at the back of the machine and will remove the tension from the blade to speed the removal and fitting of blades. The mechanism has a spring, which helps to keep the tension constant as the blade expands and contracts with the heat generated by the cutting action.

21. Electrical connection.

The bandsaw is provided with a cord and a 120v plug.

Assembly and set up.

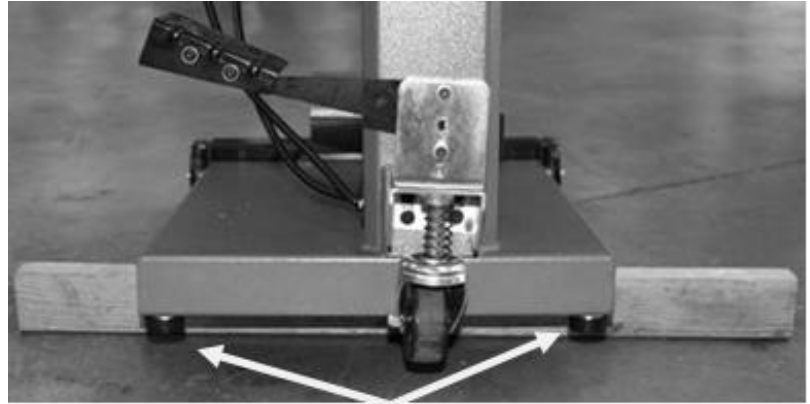
Assembling the rubber feet.

Method 1.

Fit the rubber feet to the bandsaw prior to removing it from the packaging.

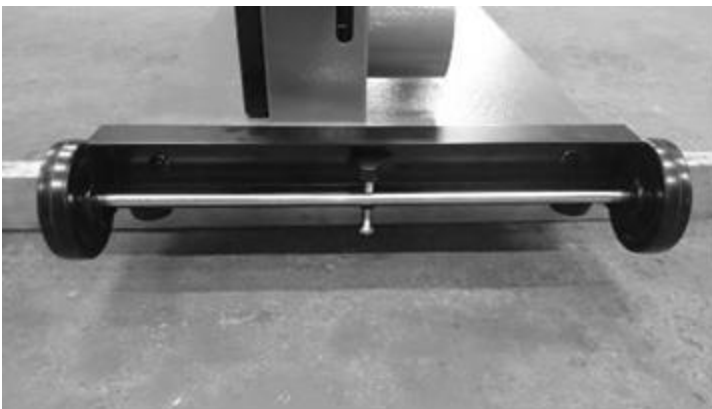
Method 2.

1. Support the bandsaw on wooden blocks.
2. Assemble the rubber feet with the hardware provide both at front and back of the bandsaw.



Rubber feet

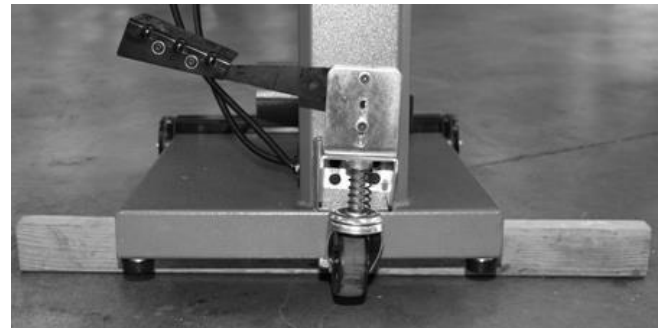
Assembling the optional mobility kit



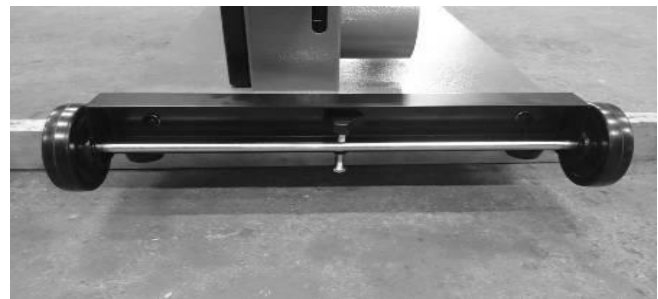
Bandsaw supported on wooden block

1. Support the bandsaw on wooden blocks.
2. Fit the swivel assembly to the back of the bandsaw with the provided bolts.
3. Fit the front wheels to the front of the bandsaw with the bolts provided and remove the two rubber feet that are close to the front wheels.

Note. Never operate the bandsaw with the mobility kit engaged or the front wheel assembly locking screw engaged.

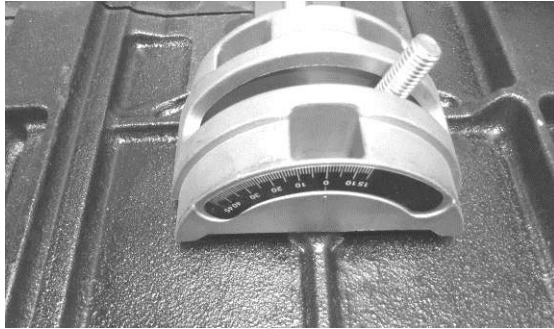


Rear swivel wheel



Front wheels

Locking screw



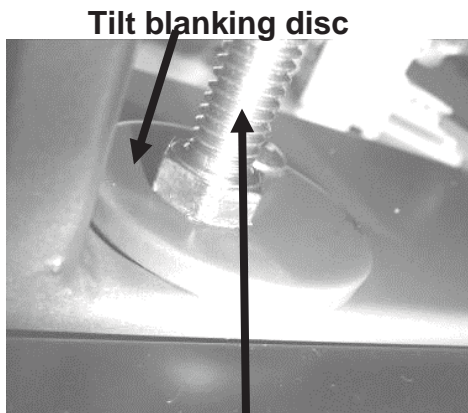
Trunion clamp stud



Tilt stop bolt

Fitting the table.

It is possible to fit the table to the bandsaw with one person but far easier if you have two people, one to lift the table and one to guide the trunion clamp studs



Tilt blanking disc

Tilt stop bolt

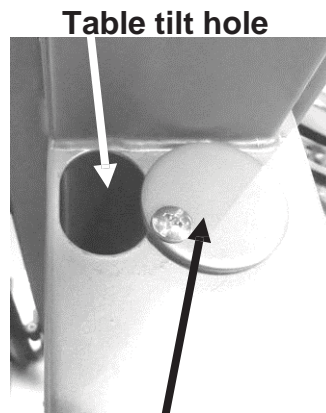


Table tilt hole

Tilt blanking disc

The table has a reference stop bolt that is used to quickly align the table after tilting. The stop bolt hits the tilt-blanking disc when it is positioned over the table tilt hole. When the tilt blanking disc is moved away from the hole, it allows the tilt stop bolt to pass through the table tilt hole, and the table can be moved to the maximum amount of tilt (-6 degrees).

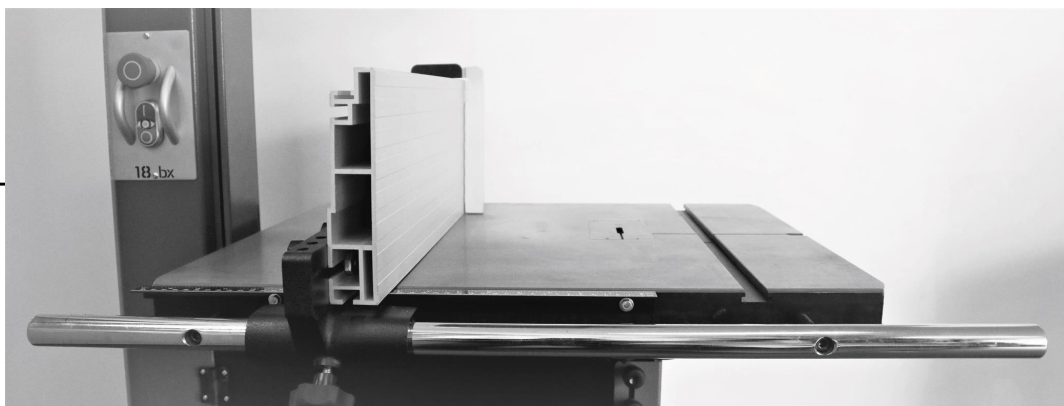
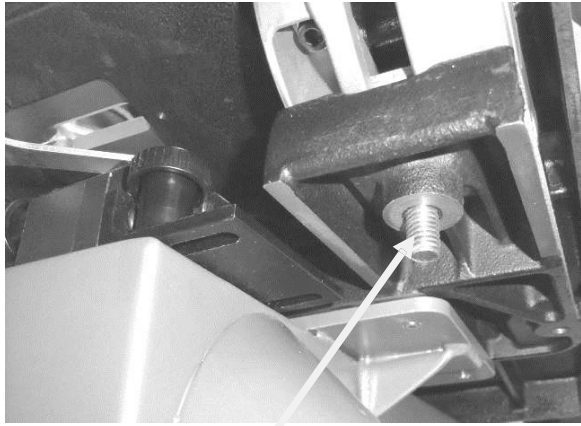
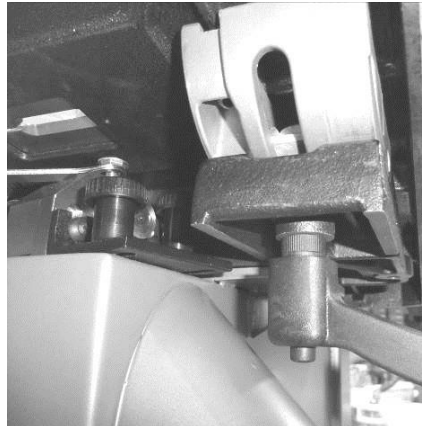


Table mounted to the bandsaw



Trunion clamp stud



Ratchet handle

With the table fitted to the trunions, assemble the two ratchet handles and flat washers. How to adjust the table for square to the blade. This will be detailed later in the manual.

Fitting the table rule.

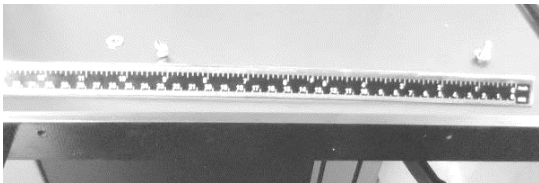


Table rule with fixings

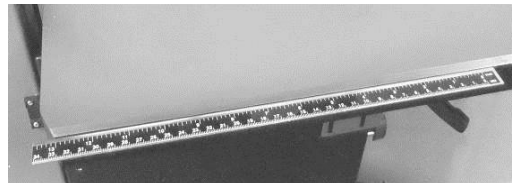
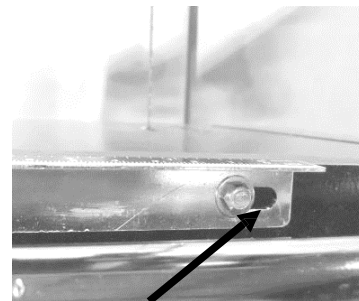


Table with rule mounted

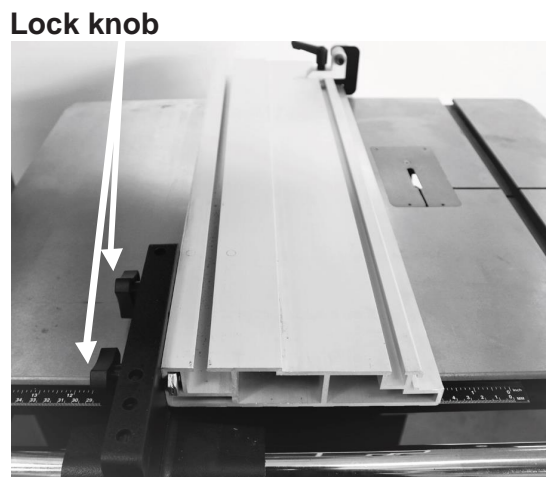
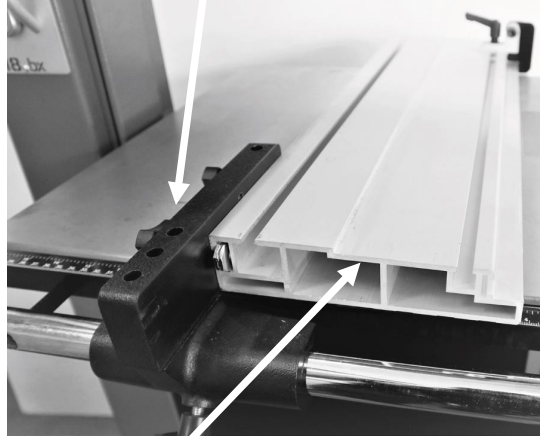
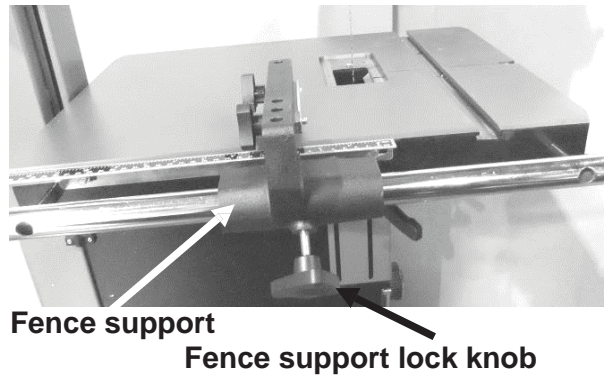
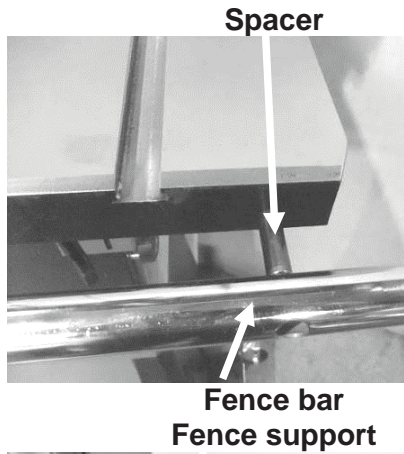
Attach the rule to the table with the hardware supplied. Do not fully tighten the bolts, as the position of the rule will have to be adjusted to suit the blade, which will be detailed later in the manual.

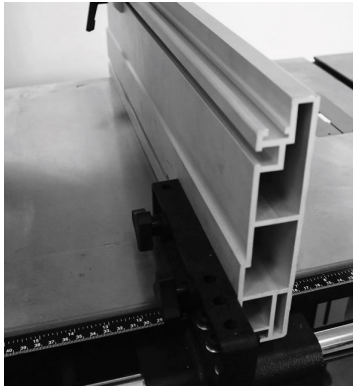


Rule adjustment slot

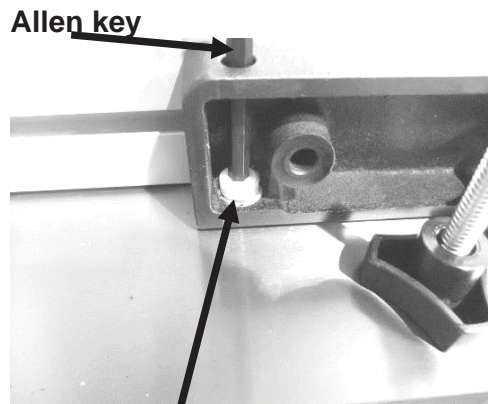
Fitting the fence.

1. Fit the fence bar to the table with the screws and spacers supplied.
- Note.** The distance between the fixing holes and the end of the bar is not symmetrical, and the end that has the longest distance must be at the back of the bandsaw (closest to the column).
2. Slide the fence support onto the fence bar and fit the fence support clamp screw.
 3. Slide the fence onto the clamping strip.
 4. Lift the fence just clear of the table and secure it in position with the clamping screws.





Fence in high position



Support Allen screw

The fence support and the fence are held off the table with a nylon-support Allen screw. This screw ensures that the fence and the fence support do not damage the table. The screw is adjustable to compensate for wear.

Fitting the table insert and Fence Stopper

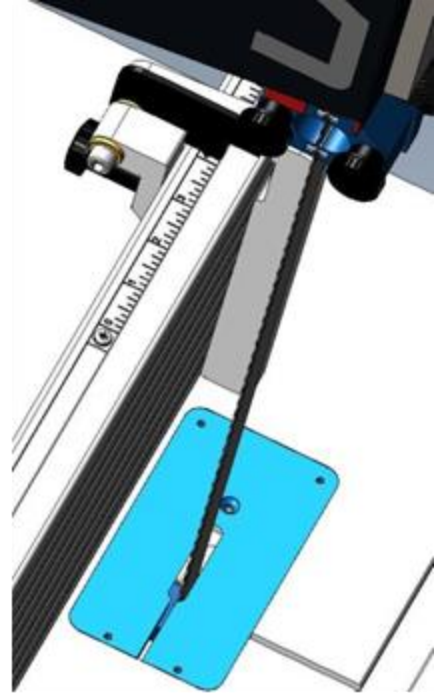
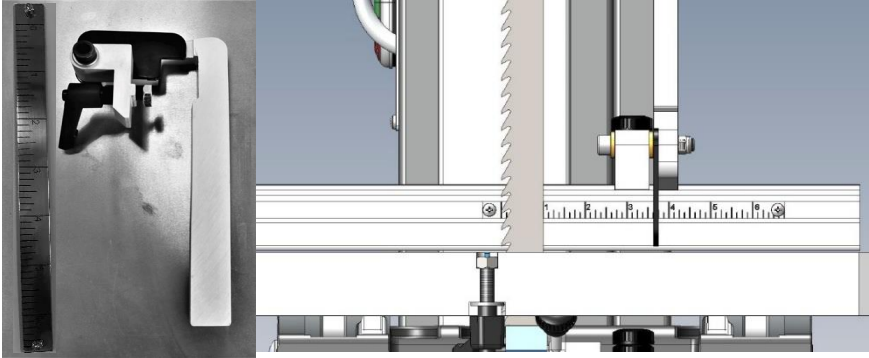
The machine is supplied with a removable table insert that is held in position with a screw. The table insert is removed when blades are removed or fitted to the machine. The insert is made of soft aluminum so that if the blade wanders and contacts the insert, there is less chance of damaging the blade. Adjusting screws are provided to adjust the insert vertically level with the table. The insert comes factory set, but should adjustment become necessary, place the insert in the table with the screw fitted. Place a straight edge across the table and insert and adjust the screws so that the table insert is level with the top of the table.



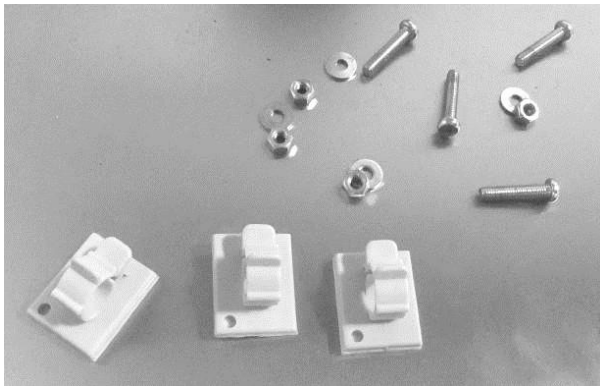
Table insert

Fitting the Fence Stop

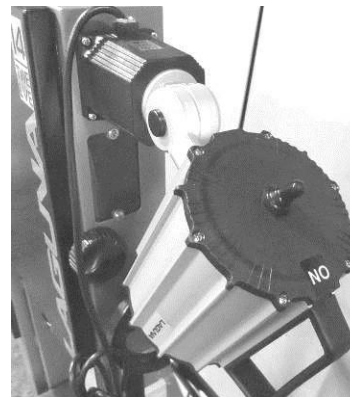
The fence stopper can be used to control the length of cut for non through cuts. To set the stop in place, the scale should be attached into the T-slot on top of the fence when it is on the vertical position. The "0" on the scale should be adjusted and set to be align up to the front tip of the blade. Then refer to the scale, slide the fence stopper to the desired cutting length behind the front tip of the blade as shown in the scale, then fix the fence stopper in place by tightening down the quick release handle.



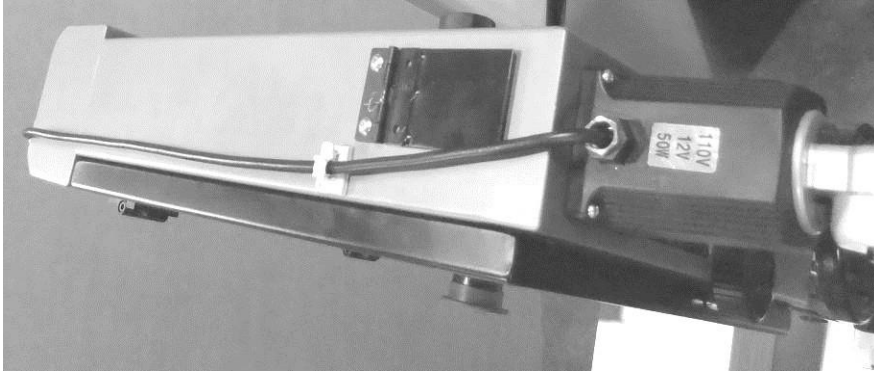
Fitting the optional light.



Fixing screws and cable clips



Light fitted in position



Suggested cable route

Light plugged into socket

The light is fitted to the top of the bandsaw as shown. The light is supplied with a plug 120V. The cable must be held in position with the clips provided and positioned so that the cable is safe and will not in any way come close to the blade or cabinet door. Above is the suggested cable route. Use the sticky cable clamps to secure the cable along the top of the bandsaw. Ensure that the cable is not over the vertical shaft hole, as it could be damaged when the shaft exits the hole.

Before starting the bandsaw.

Read and understand the instruction manual before operating the saw.

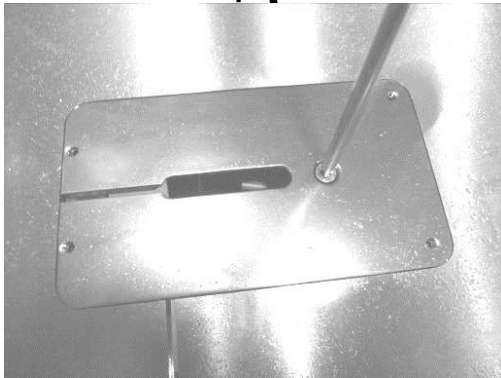
1. If you are still not thoroughly familiar with the operation of the bandsaw, get advice from a qualified person.
2. Make sure the machine is properly grounded and that the wiring codes are followed.
3. Do not operate the bandsaw while under the influence of drugs, alcohol or medicine or if tired.
4. Always wear eye protection, safety glasses or a safety shield, and hearing protection.
5. Wear a dust mask; long-term exposure to the fine dust created by the bandsaw is not healthy.
6. Remove your tie, rings, watch and all jewelry. Roll up your sleeves; you do not want anything to get caught in the saw.
7. Make sure that the guards are in place and use them at all times. The guards protect you from coming in contact with the blade.
8. Make sure that the saw blade teeth point downward toward the table.
9. Adjust the upper blade guard so that it is just clearing the material being cut.
10. Make sure that the blade has been properly tensioned and tracked.
11. Stop the machine before removing the scrap piece from the table.
12. Always keep your hands and fingers away from the blade.

13. Make sure that you use the proper size and type of blade.
14. Hold the work piece firmly against the table. Do not attempt to saw stock that does not have a flat surface facing down, unless a suitable support is used.
15. Use a push stick at the end of a cut. This is the most dangerous time because the cut is complete, and the blade is exposed. Push sticks are commercially available.
16. Hold the wood firmly and feed it into the blade at a moderate speed.
17. Turn off the machine if you must back the material out of an uncompleted or jammed cut.

Installing a blade to the bandsaw.

A lot of people do not like to change the blades and go to great lengths to avoid doing it. To use the bandsaw to its greatest advantage, you will have to use the appropriate blade and track it quickly. This is a habit that can be easily developed. If you use a step-by-step method of tracking and tensioning, the procedure should only take a minute or two. Be careful when using blades, especially wide ones. Always use gloves and safety glasses.

Clamp screw



Throat plate

Table split clamp screw

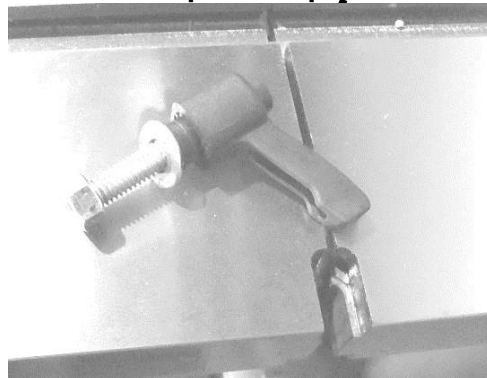
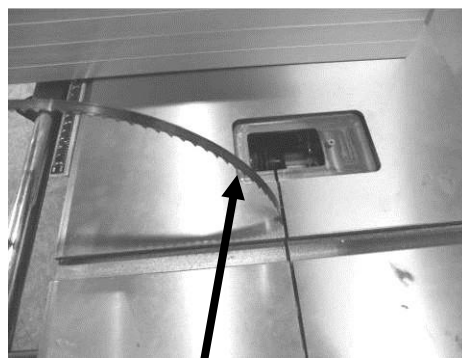


Table split clamp slot

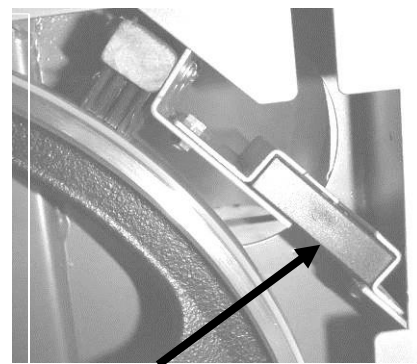
Disconnect the power from the bandsaw.

1. Remove the throat plate by removing the clamp screw.

Part# VDL-18



Blade in table split



Plastic blanking block

2. Remove the table split clamp ratchet handle.
3. Remove the plastic blanking plate.
4. Adjust the side guide and back guide out as far as they will go (both upper and lower guides). This will ensure that they do not interfere with the blade while you are installing, tracking and tensioning the blade.
5. Uncoil the blade. Remember to use gloves and safety glasses. The blade may have dirt or oil on it, so use a clean rag to clean the blade by pulling rearwards so that the cloth does not hook on the teeth
6. Inspect the teeth and the general condition of the blade. If the teeth are pointing in the wrong direction when you hold the blade up to the machine, you will have to turn it inside out. To do this, hold the blade with both hands and rotate.
7. Slide the blade through the table split.
8. Open the blade guard door. Slide the blade over the top flywheel and feed through the slot at the side of the vertical column. Then feed the blade into the blade guard slot and close the blade guard door.
9. Deactivate the quick action blade tension lever and rotate the blade tension wheel so that the blade can fit over the lower flywheel.
10. Activate the quick action blade tension lever.
11. Apply light tension to the blade with the blade tension wheel.

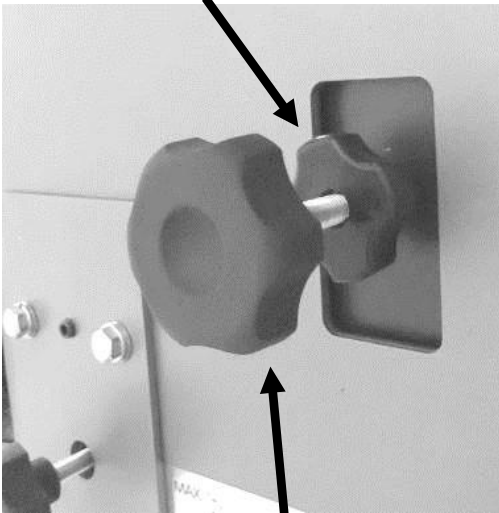
Tracking the blade.

1. To track the blade, start rotating the wheels by hand in the normal direction. As you do this, watch the blade to determine where the blade wants to track. If the blade is tracking too far forward or backward, make small adjustments with the tracking adjustment knob located at the back of the bandsaw while still rotating the wheel. Once the blade is tracking in the correct position, fully tension the blade and re-track. Lock the tracking adjustment handle.

Note: The blade must be fully tensioned for final tracking.

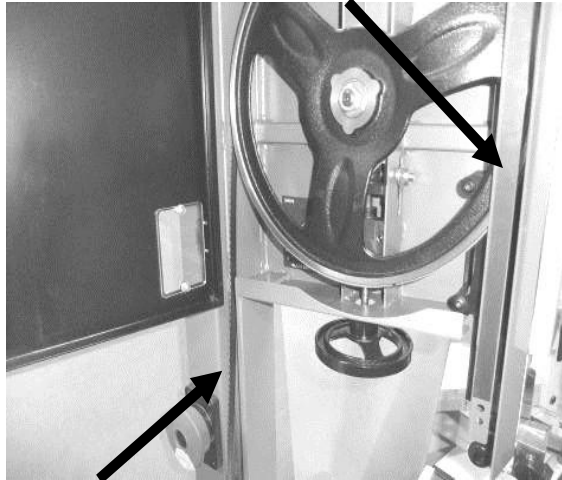
Note: Never track the blade with the saw running.

Lock knob



Tracking knob

Blade guard door



Blade in column slot



Tracking window

Blade tension wheel

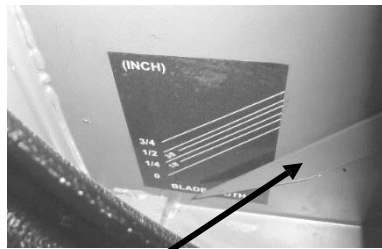


Quick action tension lever (activated)

Tensioning the blade.

1. Deactivate the quick action blade tension lever and rotate the blade tension wheel so that the blade can fit over the lower flywheel.
2. Activate the quick action blade tension lever.
3. Apply light tension to the blade with the blade tension wheel.
4. The scale inside the top half door of the bandsaw is a good reference to use determining what tensions are good based off the width of the blades for many applications

Blade tension indicator



Adjusting the blade guides.

Introduction.

Welcome to a new era in bandsawing. You have purchased a bandsaw with a revolutionary blade guide system that is designed to give you years of safe, high-quality bandsawing. Most blade guides are designed to support the blade on the sides and either above or below the side guides at the back of the blade. This can allow the blade to twist as pressure from the material being cut pushes against the back-blade guide. The Ceramic Guide eliminates this by supporting the blade above and below the back blade guide, giving the blade unsurpassed stability. The Ceramic Guide also incorporates patented ceramic as the blade support material. The advantage of this material is its ability to resist wear, and with care it should give years of safe service.

Please read the following notes as they will assist you in getting the optimum performance from your ceramic guide system.

As with the roller guide systems, the ceramic guide system will damage your blade if it is not adjusted correctly. The guide blocks must not come in contact with the teeth of the blade. It is advisable to run the blade by hand with the guide blocks completely clear of the blade, and only when you are completely sure that the blade is running consistently in the correct position, you may then adjust the surround guide blocks as detailed in this manual.

Note on using the ceramic guide system.

1. When fitting a blade to your bandsaw, adjust the guide blocks as detailed later and run the blade by hand through the guide blocks for at least two complete revolutions.
2. The weld on a new blade may not be perfectly aligned, and the misalignment could hit the ceramic blocks (side and back), causing damage to the blocks or the blade. If the blade has a bad weld, return it to your blade supplier or side dress and file the back of the blade as needed.
3. The back blade guide is manufactured from ceramic, so as the blade pushes against it, friction between the blade and the ceramic occurs. This action generates a certain amount of sparks. This is normal and will become less with time as the back of the blade guide smooths out the back of the blade.
4. The back blade guide will slowly form a small groove as the blade is used (this is normal). It is recommended that for approximately every 8 hours of use, the guide be rotated 15 degrees.

This will ensure that the groove does not become too deep and will greatly extend the life of your guide.

5. The ceramic guide system can be used with 1/8" to 1-1/4" blades.
6. The ceramic guide system uses ceramic to support and guide the blade. This has many advantages (very poor conductor of heat, very resistant to wear, etc.). The disadvantage is that it is very brittle, so the guides must never be dropped, exposed to hard knocks, hit with hard objects or used with badly welded blades. Any of the above actions may cause the ceramic to chip or break and will detract from the performance of the ceramic guide system. Any mistreatment of the guide system will render the warranty void.
7. The side guide blocks must be tightened before running the machine to avoid jamming the blade and damaging the machine and/or guide blocks.
8. When cutting gummy material, the blade can become covered with resin. You will find that the surround guide system ceramic blocks remove the resin as the blade is moved through the guide blocks and keep that part of the blade clean. For this reason, it is recommended that the blocks be adjusted as close to the gullet as possible, but the teeth must not come in contact with the blocks, as they will become damaged. Although the guide blocks clean the blade, some materials will still gum the blade and the resin will have to be removed with solvent.

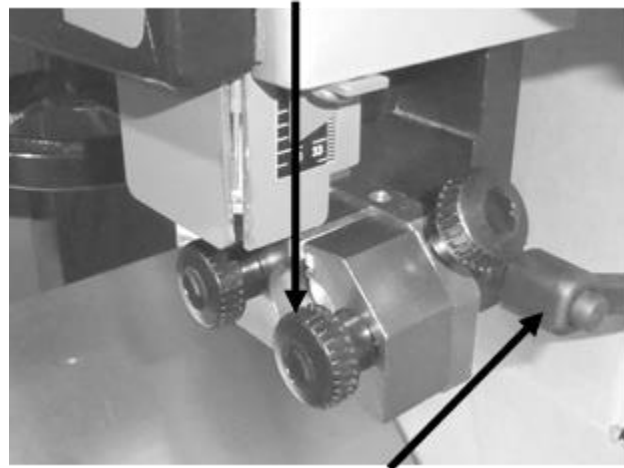
Adjusting the blade guides.

The blade should run through the center of the rear blade guide, and the side guides should be parallel with the blade. If they have been moved out of adjustment, adjust as follows:

Top Upper Side Guides Parallel Adjustment.

Loosen the side guides and move out as far as possible. Loosen the guide assembly and move back away from the blade. Move the back blade guide forward so it just touches the back of the blade and lock in position.

Side guide clamp screw



Back guide clamp screw

Loosen the guide clamp screw that allows the side guides to move forward and back. Adjust so that the ceramic blocks are just behind the gullet of the teeth and are parallel to the blade. Retighten the clamp screws.

Gently push one side guide so that it touches the blade and lock it in position. Bring the other guide toward the blade so that there is minimal clearance between the blade and the guide. You can put a thin piece of paper to put between the blade and the guide to obtain the correct.

clearance until you gain experience. Tighten the clamp screws and remove the paper. Rotate the blade by hand, ensuring that the weld of the blade does not hit the ceramic blocks, as this will cause damage.

Lower blade guide

The lower blade guides have two locking screws that, when released, allow the guide assembly to be moved forward and back. Rotate the blade by hand and ensure that it is tracking consistently in the correct position

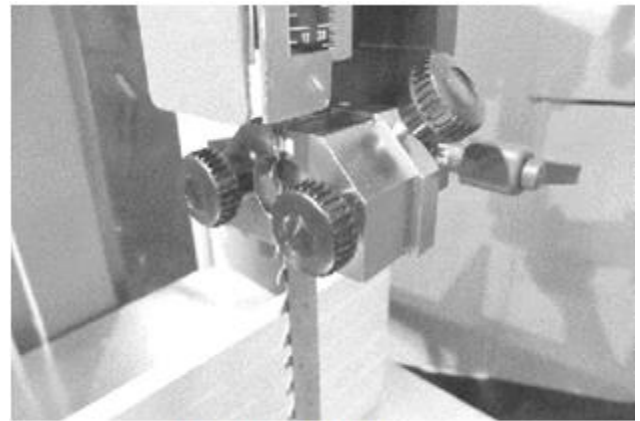
Loosen the side guides and move out from the blade. Loosen the two clamp screws that allow the guide assembly to move forward and back. Adjust it so that the ceramic blocks are just behind the gullet of the blade and retighten the clamp screws.

Place a dollar bill or piece of paper of similar thickness between the guide blocks and the blade. Gently bring both guides toward the blade so that slight pressure is exerted on the blade. Tighten the clamp screws and remove the paper.

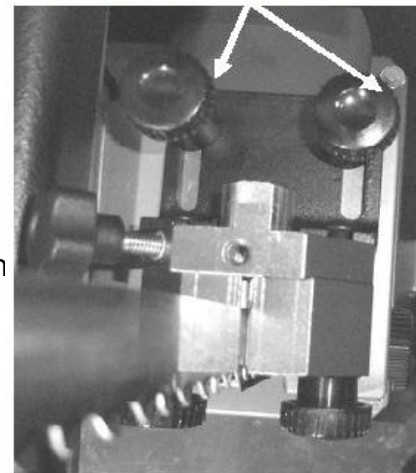
Rotate the blade by hand, ensuring that the weld of the blade does not hit the ceramic block



Back guide touching back of the blade



**Adjusted guide
Guide locking screws**



**Lower blade guide shown with
the table removed for clarity**

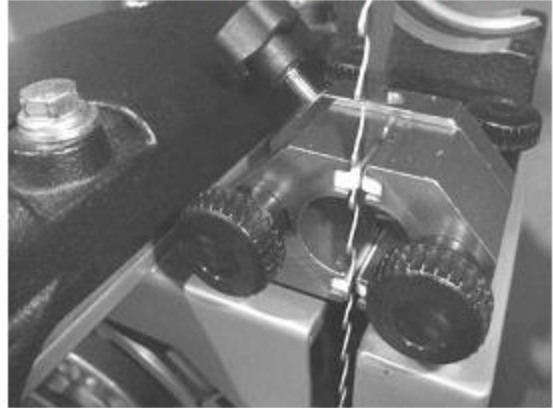
Loosen the rear guide clamp screw and push the guide forward so that it just touches the back of the blade. Tighten the guide in position. Rotate the blade by hand and check to see that the back of the blade does not hit the blade guide with a bad weld..

Note: You will probably find that the guides can be adjusted more easily by tilting the table to 45 degrees.

Note: Rotate the back guide by approximately 15 degrees after every 8 hours of use. This will greatly extend the life of the back-blade guide, as it will even out the wear

Before you cut any metal or wood, read the safety rules at the front of this manual

Lower blade guide shown with the table removed for clarity



Side guides adjusted with ceramic just behind the gullet



Table tilted 45 degree

General Instructions:

Below are some basic instruction to properly operate the VDL-18 bandsaw machine.

1. Make sure the blade is properly adjusted for tension and tracking.
2. Adjust blade guide assembly so that the guide guides are just above the workpiece (about 3/16") allowing minimum exposure to the blade.
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 the machine on and wait a few seconds for the machine to fully get up to speed.
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. Let the blade do the work.
NOTE: (DO NOT over feed that bandsaw blade. This will reduce blade life and have a greater chance of breaking the blade).
6. When cutting long stock, the operator should use roller stands, support tables, or an assistant to help stabilize the workpiece.
7. When cutting at an angle with a tilted table, provide a guide against which the material being cut can rest. Freehand cutting at an angle can result in injury, and maintaining an accurate cut is difficult.
9. Deactivate the quick action blade tension lever and rotate the blade tension wheel so that the blade can fit over the lower flywheel.
10. Activate the quick action blade tension lever.
11. Apply light tension to the blade with the blade tension wheel.
12. The scale inside the top half door of the bandsaw is a good reference to use determining what tensions are good based off the width of the blades for many applications.

High to Low Setting & FPM setting:

- First will explain the procedure to change the VDL-18 from high gear to low gear or vice versa. The same procedure applies both ways.



Disconnect the machine from the power source before making any adjustments.

1. Turn the machine off and unplug from the power source.
NOTE: (The motor MUST BE OFF before going to the next step)
2. Once the motor is completely off, slide the lever to the desired high to low setting. You may run into situations where the lever does not fully go into low or high. If so, carefully

rotate the blade while trying to put the motor into gear. The lever will fully go into to gear.

Blade Speed Ranges (FPM)	
High Gear Range	1200 – 3500 FPM
Low Gear Range	100 – 290 FPM

- Below is the procedure to change the FPMs of the bandsaw (**SAW ON, AND RUNNING**).

1. To change to the desired RPM on the bandsaw, the bandsaw **MUST** be on and the blade rotating in the required gear prior changing the speed.
2. Locate the motor locking level located on the back side of the bandsaw near the bottom by the motor. Loosen the lever handle.
3. The adjuster hand wheel located on the bottom right of the bandsaw adjusts the blade speed. Referencing to the dial located on the back of the motor.
4. Slowly rotate the handwheel CW to increase the blade speed, or CCW to decrease the blade speed.
5. Tighten the motor locking lever back in place immediately.

 **USE CAUTION: Never start the VDL-18 bandsaw with any slack in the drive belt. Doing so can cause machine damage as the belt is forced to pull through the slack.**

Blade Guidepost Adjustment:

- The following steps are to properly adjust the Blade Guidepost height on the VDL-18 Bandsaw.
 1. Locate the guidepost locking screw located on the rear top half of the bandsaw. To make any adjustments, loosen the locking screw to allow the blade guidepost to freely move horizontally.
 2. The hand wheel located above the blade guidepost on the side of the machine adjusts the horizontal movement of the guidepost.

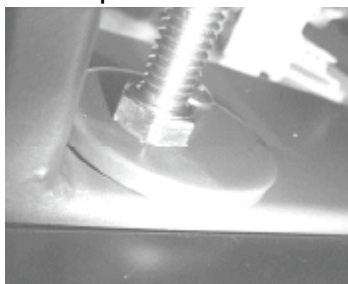
NOTE: (Maintain a clearance of 3/16 inch between the blade guidepost and the workpiece to allow minimum exposed blade to prevent injury).
 3. After correctly adjusting the height of the blade guidepost, **ALWAYS** tighten the guidepost screw for the guide will stay in the desired position.

Table Tilt:

- The following steps are to properly adjust the Table Tilt angle on the VDL-18 Bandsaw.
 1. For tilting the table to right (max. 45°), you have to loosen the two ratchet handles, then tilt the table to your desired angle.

2. For tilting the table to left (max. -6°), the table has a reference stop bolt that is used to quickly align the table after tilting. The stop bolt hits the tilt-blanking disc when it is positioned over the table tilt hole. When the tilt blanking disc is moved away from the hole, it allows the tilt stop bolt to pass through the table tilt hole, and the table can be moved to the maximum amount of tilt (-6 degrees).

Tilt stop bolt



Tilt blanking disc

Tilt blanking disk



Table tilt hole

Fence Assembly Adjustment:

- The following steps are to properly adjust the Fence Assembly Adjustment on the VDL-18 Bandsaw. This will change the accuracy length cut of the workpiece. Check the clearance between the table and the fence. The fence should not rub against the table surface but be slightly above it. This gap should be the same at the front of the table as it is at the rear.
 1. Loosen the fence locking wheel located on the fence assembly.
 2. The fence is now free to move vertically along the worktable.
 3. Once in the desired spot, lock the fence in place by tightening the locking screw.

Maintenance

 **Before performing any maintenance to the machine, make sure to unplug the cord from the power source before cleaning.**

- Maintain bearing guides clean and free of build-up.
- 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.
- The table surface should be always kept clean and free of rust for best results. talcum powder applied with a blackboard eraser rubbed in vigorously once a week; this will fill casting pores and form a moisture barrier. This method provides a tabletop that is slick and allows rust rings to be easily wiped from the surface.



- Clean and grease all mechanical movement components such as gears, bars, if it becomes difficult to adjust.
- Clean and oil the tensioning mechanism if it becomes difficult to adjust.
- Check the drive V-belt for cracks overtime. Replace if any irregular wear is present.

Trouble Shooting:

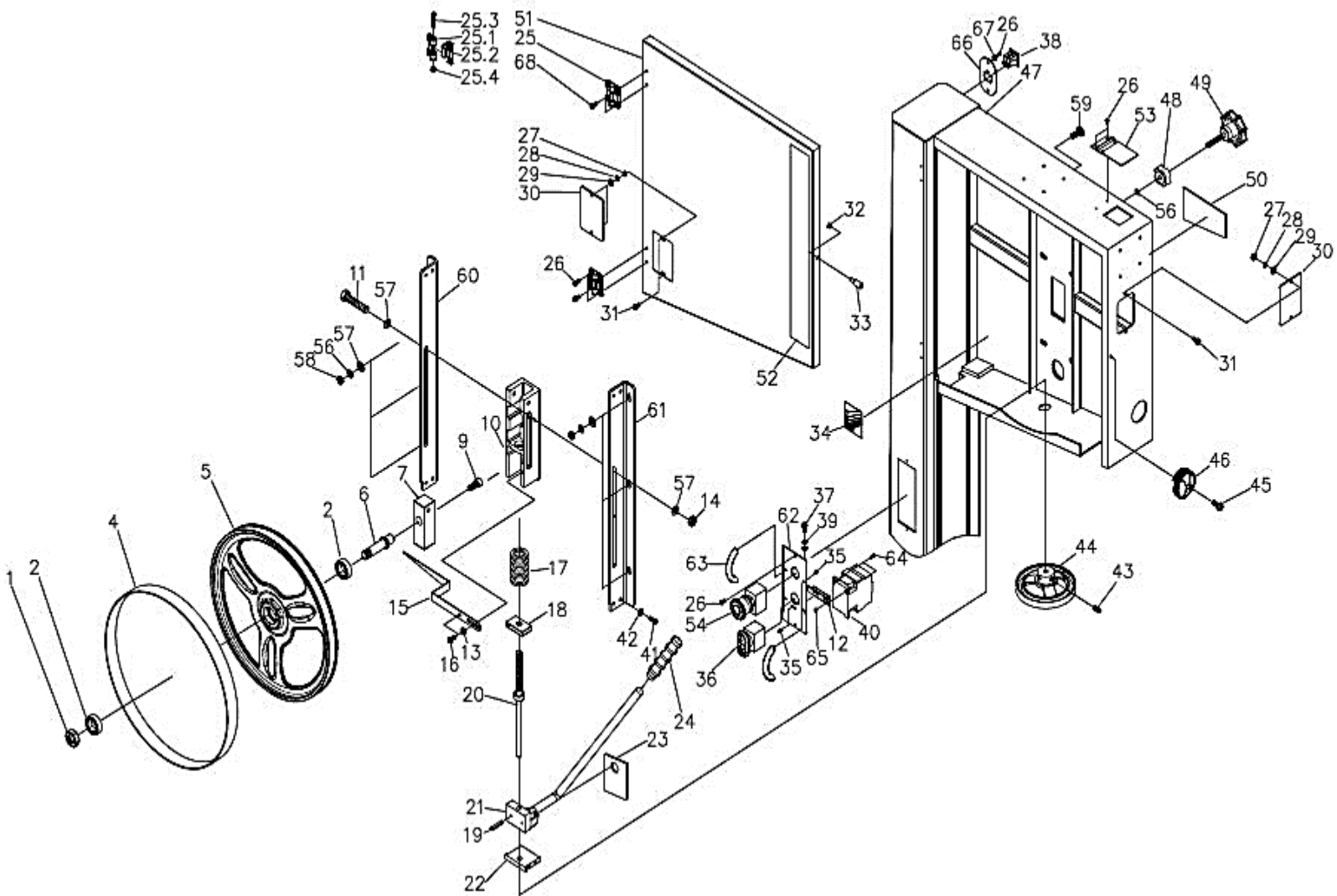
Item	Action	Interval	Maintenance
Saw Blade	Listen for sound of missing teeth.	Whenever operating saw	Replace blade when teeth are broken.
	Observe cutting action for cleanness and accuracy.	Whenever operating saw	Replace blade when bent or worn; use a wider blade for more accurate straight cuts.
	Listen for a poor weld – a “click” as it passes through the guide bearings.	When changing blade	Use a different blade or dress the weld with a grinder.
	Watch for signs of slippage on the drive wheels (blade occasionally slows or comes to a stop while sawing).	Whenever sawing	Be sure you are using the correct blade tension; check rubber tires for cleanliness and adherence to drive wheel – replace if necessary.
Lower Drive Wheel	Check bearing area for leakage of lubricant.	Monthly	Replace bearing if leakage occurs.
Upper Drive Wheel	Check bearing area for leakage of lubrication.	Monthly	Replace bearing if leakage occurs.
Drive Wheel Rubber Tires	Check for cleanliness.	Daily and when changing blade	Wipe or brush clean.
Drive Belt	Check for smooth surfaces and adherence to drive wheel. Check for glazing.	Monthly or when blade slippage occurs Monthly, or when slippage occurs (squealing belt)	Clean when necessary – replace if damaged or excessively worn. Replace a glazed belt – DO NOT USE BELT DRESSING.



Gearbox	Check sight glass for level – should be to halfway point on sight glass.	Daily Annually	Fill up to halfway point on sight glass with 90 wt. gear oil. Drain and refill.
Blade Support Bearings	Check for wear, damage, or lubricant leakage.	Monthly and when changing blade	Replace when necessary.
Carbide Blade Guides	Check for excessive wear.	When changing blade	Replace if excessively worn.

Parts List

Upper Wheel Assembly: (Parts List Below)



Upper Wheel Assembly					
<u>Index</u>	<u>Part Number</u>	<u>Item Description</u>	<u>Specifications</u>	<u>Quantity</u>	<u>Dake Part Number</u>
1	PBAND18BX2203-1	Hex Nut	5/8-18UNF-LH	1	
2	PBAND18BX2203-2	Ball Bearing	6204LLU	2	
4	PBAND18BX2203-4	PU Tire		1	
5	PBAND18BX2203-5	Upper Wheel		1	
6	PBAND18BX2203-6	Upper Wheel Shaft		1	
7	PBAND18BX2203-7	Upper Wheel Shaft Bracket		1	
9	PBAND1412-175-9	Socket Head Cap Screw	3/8"-16x5/8"	1	
10	PBAND18BX2203-10	Sliding Bracket		1	
11	PBAND18BX2203-11	Hex Cap Screw	M8x80	1	
12	PBAND1412-175-170	Switch Plate		1	
13	PBAND18BX2203-13	Bushing		1	
14	PBAND18BX2203-14	Nylon Inserted Lock Nut	M8	1	
15	PBAND18BX2203-15	Pointer		1	
16	PBAND18BX2203-16	Special Bolt		2	
17	PBAND18BX2203-17	Spring		1	
18	PBAND18BX2203-18	Bracket		1	
19	PBAND1412-175-19	Pin	Ø4x20	1	
20	PBAND18BX2203-20	Adjusting Screw		1	
21	PBAND18BX2203-21	Blade Tension Arm Assembly		1	
22	PBAND18BX2203-22	Support Block		1	
23	PBAND1412-175-23	Plate		1	
24	PBAND1412-175-24	Handle		1	
25	PBAND1412-175-25	Door Hinge Set		2	
25.1	PBAND1412-175-25-1	Door Hinge, Left		2	
25.2	PBAND1412-175-25-2	Door Hinge, Right		2	

25.3	PBAND1412-175-25-3	Socket Head Cap Screw	M5x0.8x35	2	
25.4	PBAND1412-175-25-4	Nylon Inserted Lock Nut	M5x0.8	2	
26	PBAND1412-175-26	Screw	M3.5x10mm	10	
27	PBAND1412-175-27	Hex Nut	#10-24	4	
28	PBAND1412-175-28	Lock Washer	#10	4	
29	PBAND1412-175-29	Flat Washer	#10	4	
30	PBAND1412-175-30	Tracking Window		2	
31	PBAND1412-175-31	Screw	#10-24x1/2"	4	
32	PBAND1412-175-32	Hex Nut	1/4"-20	1	
33	PBAND1412-175-33	Door Stud		1	
34	PBAND18BX2203-34	Tension Gauge		1	
35	MBAND14BX110-175-35	Phillips Flat Head Screw	M3x6	6	
36	MBAND14BX110-175-36	ON/ OFF Switch		1	
37	PBAND1412-175-37	Screw	M5x0.8x16	2	
38	PBAND1412-175-38	Outlet		1	
39	PBAND1412-175-39	Washer, Lock-Int. Tooth	M5	3	
40	MBAND14BX110-175-40	Contactor		1	
41	PBAND1412-175-41	Hex Cap Screw	1/4"-20x5/8"	4	
42	PBAND1412-175-42	Lock Washer	1/4"	4	
43	PBAND1412-175-43	Set Screw	1/4"-20x3/8"	2	
44	PBAND18BX2203-44	Handwheel		1	
45	PBAND1412-175-45	Screw	1/4"-20x3/4"	1	
46	PBAND1412-175-46	Lock Knob		1	
47	PBAND18CX110175-47	Saw Body		1	
48	PBAND1412-175-48	Lock Knob		1	
49	PBAND1412-175-49	Adjusting Knob		1	
50	PBAND1412-175-50	Tension Label		1	
51	PBAND18BX2203-51	Upper Door		1	
52	PBAND18CX110175-52	Logo Label		1	
53	PBAND1412-175-53	Hinge Cover		1	



54	MBAND14BX110-175-54	Emergency Stop		1	
55	PBAND1412-175-55	Warning Label		1	
56	PBAND1412-175-2-13	Lock Washer	5/16"	7	
57	PBAND1412-175-2-11	Flat Washer	5/16"	8	
58	PBAND1412-175-3-38	Hex Nut	5/16"-18	6	
59	PBAND18BX2203-59	Carriage Bolt	5/16-18x1"	6	
60	PBAND18BX2203-60	Upper Wheel Bracket- Left		1	
61	PBAND18BX2203-61	Upper Wheel Bracket- Right		1	
62	PBAND18CX110175-62	Control Panel		1	
63	MBAND14BX110-175-63	Handle		2	
64	MBAND14BX110-175-64	Hex Cap Screw	M4x0.7x12	2	
65	MBAND14BX110-175-65	Hex Nut	M4x0.7	2	
66	MBAND14BX110-175-66	Plate		1	
67	MBAND14BX110-175-67	Washer, Lock-Int. Tooth	M4	2	
68	MBAND14BX110-175-68	Screw	M4x0.7x8	4	

Table and Fence Assembly: (Parts List Below)

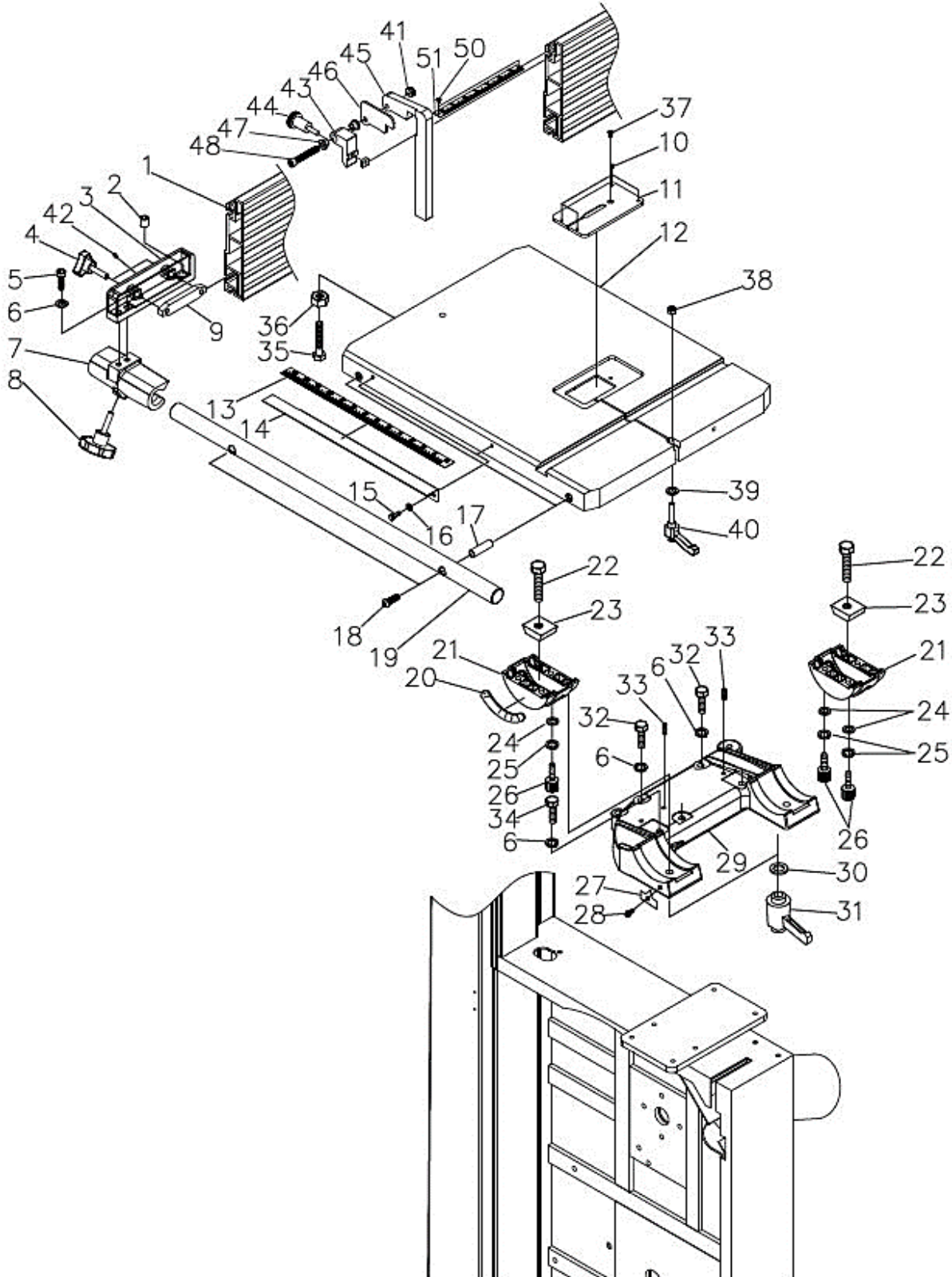


Table & Fence Assembly Parts List

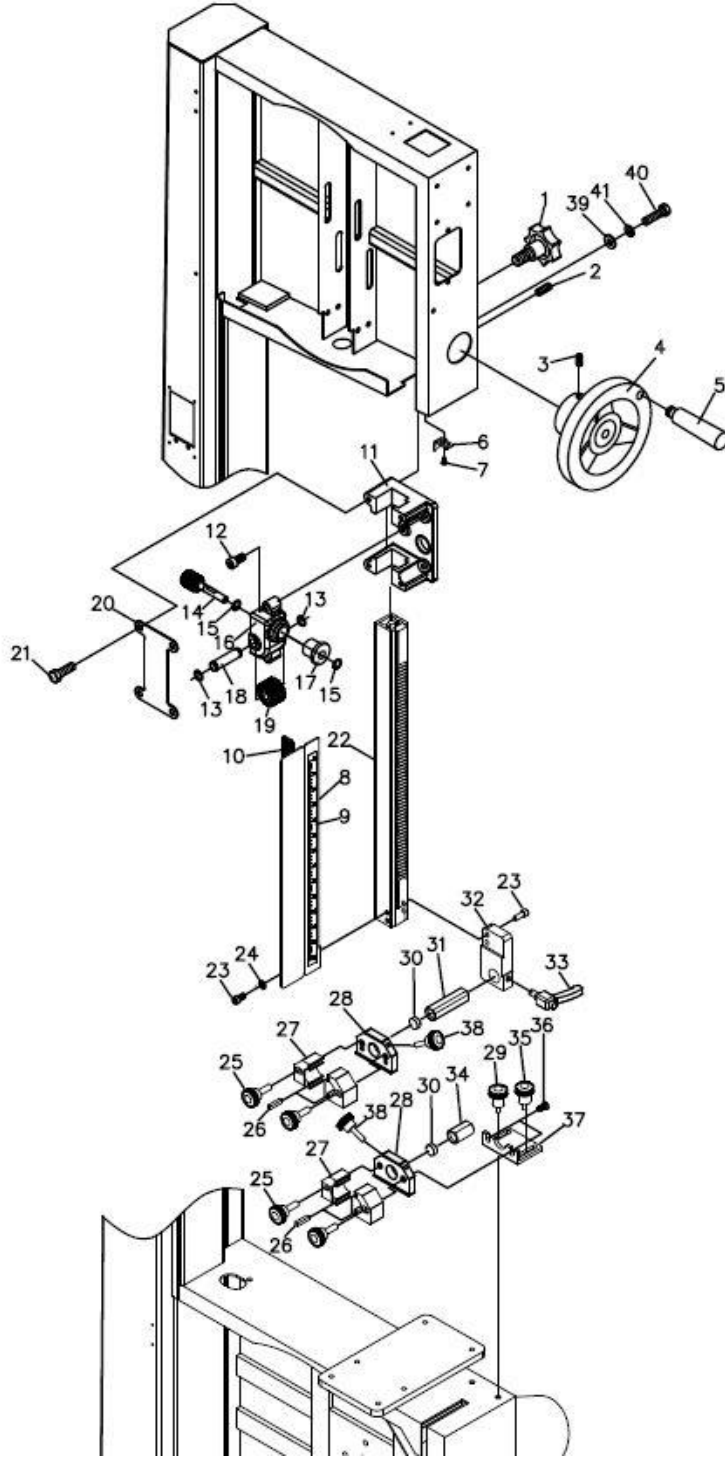
<u>Index</u>	<u>Part Number</u>	<u>Dake Part Number</u>	<u>Item Description</u>	<u>Specifications</u>	<u>Quantity</u>
1	PBAND18BX2203-3-1		Aluminum Fence		1
2	PBAND1412-175-3-2		Plastic Adjusting Screw		1
3	PBAND1412-175-3-3		Fence Body		1
4	PBAND1412-175-3-4		Lock Knob		2
5	PBAND1412-175-3-5		Socket Head Cap Screw	5/16"-18x3/4"	3
6	PBAND1412-175-2-13		Lock Washer	5/16"	10
7	PBAND1412-175-3-7		Fence Head		1
8	PBAND18BX2203-3-8		Lock Knob		1
9	PBAND1412-175-3-9		Lock Bar		1
10	PBAND1412-175-3-10		Set Screw	M4x0.7x4	4
11	PBAND1412-175-3-11		Table Insert		1
12	PBAND18BX2203-3-12		Table		1
13	PBAND18BX2203-3-13		Scale		1
14	PBAND18BX2203-3-14		Scale Plate		1
15	PBAND1412-175-3-15		Hex Cap Screw	M5x0.8x10	2
16	PBAND1412-175-29		Flat Washer	M5	2
17	PBAND1412-175-3-17		Bushing		2
18	PBAND1412-175-3-18		Socket Head Cap Screw	5/16"-18x2-1/2"	2

19	PBAND18BX2203-3-19		Steel Tube		1
20	PBAND1412-175-3-20		Scale		1
21	PBAND1412-175-3-21		Trunnion		2
22	PBAND1412-175-3-22		Hex Cap Screw	M10x1.5x50	2
23	PBAND1412-175-3-23		Slide Block		2
24	PBAND1412-175-3-24		Flat Washer	1/4"	6
25	PBAND1412-175-2-42		Lock Washer	1/4"	6
26	PBAND1412-175-3-26		Socket Head Cap Screw	M6x1x16	6
27	PBAND1412-175-3-27		Pointer		1
28	PBAND1412-175-3-28		Screw	M5x0.8x8	1
29	PBAND1412-175-3-29		Bracket		1
30	PBAND1412-175-2-42		Flat Washer	3/8"	2
31	PBAND1412-175-3-31		Lock Handle		2
32	PBAND1412-175-3-32		Hex Cap Screw	5/16"-18x1-1/4"	3
33	PBAND1412-175-3-33		Set Screw	5/16"-18x5/8"	2
34	PBAND1412-175-3-34		Hex Cap Screw	5/16"-18x1-3/4"	3
35	PBAND1412-175-3-35		Hex Cap Screw	3/8"-16x2"	1
36	PBAND1412-175-3-36		Hex Nut	3/8"-16	1
37	PBAND1412-175-3-37		Phillips Flat Head Screw	M4x0.7x8	1
38	PBAND1412-175-3-38		Hex Nut	5/16"-18	1



39	PBAND1412-175-2-11		Flat Washer	5/16"	1
40	PBAND1412-175-3-40		Lock Handle		1
41	PBAND18BX2203-3-41		Nylon Inserted Lock Nut	5/16-18UNC	1
42	PBAND1412-175-3-42		Set Screw	1/4"-20x1/4"	2
43	PBAND18BX2203-3-43		Fence Stop Hinge		1
44	PBAND18BX2203-3-44		Lock Handle		1
45	PBAND18BX2203-3-45		Fence Stop-A		1
46	PBAND18BX2203-3-46		Fence Stop-B		1
47	PBAND1412-175-6-26		Bushing		2
48	PBAND18BX2203-3-48		Socket Head Cap Screw	5/16-18UNCx2"	1
49	PBAND18BX2203-3-49		Square Nut	1/4-20UNC	1
50	PBAND18BX2203-3-50		Screw	M3x0.5x4	2
51	PBAND18BX2203-3-51		Scale		1

Upper & Lower Blade Guides Assembly: (Parts List Below)



Upper & Lower Blade Guides Assembly Parts List

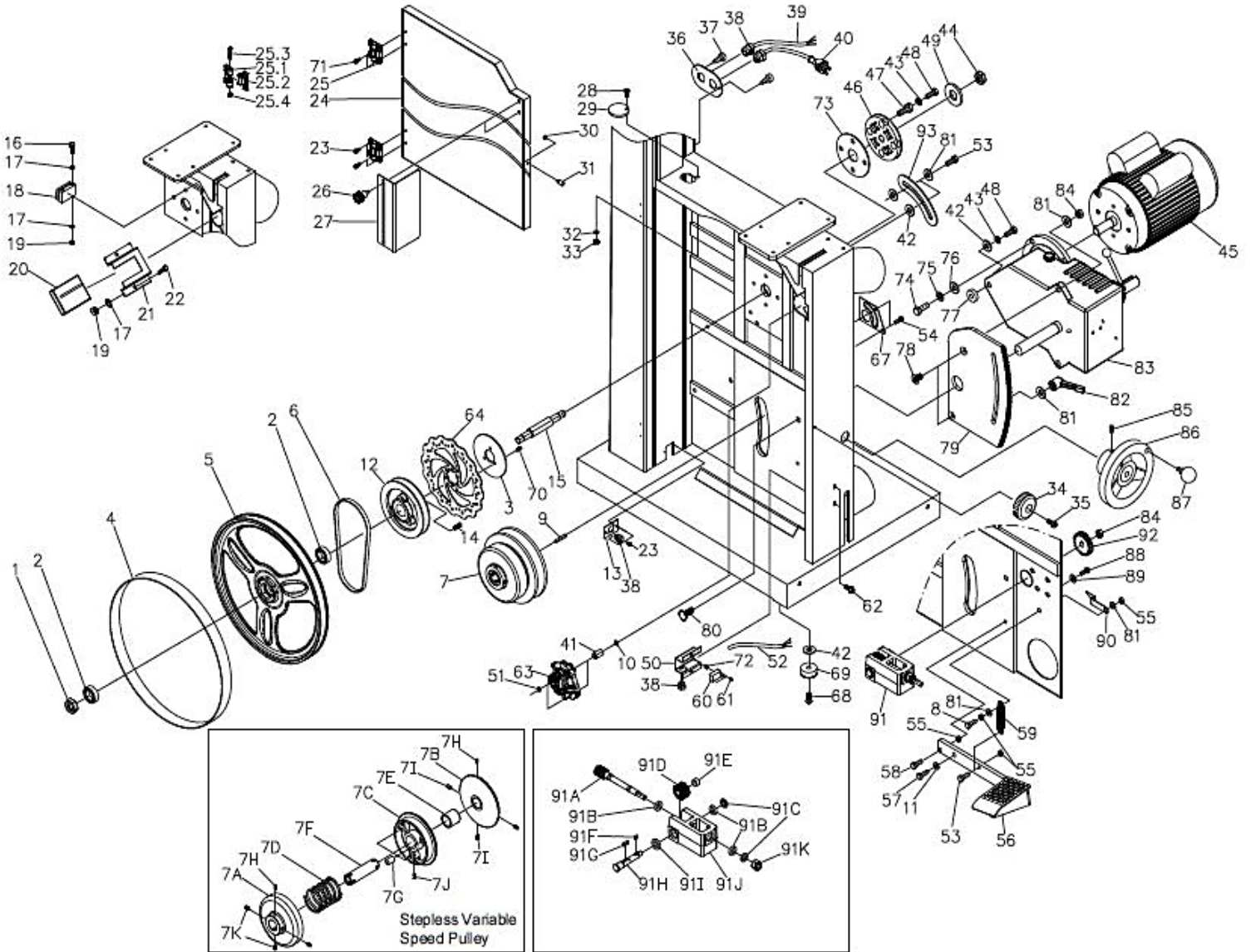
<u>Index</u>	<u>Part Number</u>	<u>Dake Part Number</u>	<u>Item Description</u>	<u>Specifications</u>	<u>Quantity</u>
1	PBAND1412-175-4-1		Lock Knob		1
2	PBAND1412-175-2-8		Set Screw	5/16"-18x3/8"	2
3	PBAND1412-175-43		Set Screw	1/4"-20x3/8"	1
4	PBAND1412-175-4-4		Hand wheel		1
5	PBAND1412-175-4-5		Handle		1
6	PBAND18BX2203-4-6		Pointer		1
7	PBAND1412-175-4-7		Screw	1/4"-20x3/8"	1
8	PBAND18BX2203-4-8		Upper Blade Guard		1
9	PBAND18BX2203-4-9		Height Scale		1
10	PBAND18BX2203-4-10		Magnet		1
11	PBAND1412-175-4-11		Guide Bar Bracket		1
12	PBAND1412-175-4-12		Socket Head Cap Screw	5/16"-18x1-1/4"	2
13	PBAND1412-175-4-13		C-Ring	S12	2
14	PBAND1412-175-4-14		Worm		1

15	PBAND1412-175-4-15		E-Ring	E8	2
16	PBAND1412-175-4-16		Gear Base		1
17	PBAND1412-175-4-17		Bushing		1
18	PBAND1412-175-4-18		Shaft		1
19	PBAND1412-175-4-19		Gear		1
20	PBAND1412-175-4-20		Plate		1
21	PBAND1412-175-4-21		Socket Head Button Screw	5/16"-18x1/2"	4
22	PBAND18BX2203-4-22		Guide Bar		1
23	PBAND1412-175-4-23		Socket Head Cap Screw	1/4"-20x5/8"	4
24	PBAND1412-175-42		Lock Washer	1/4"	2
25	PBAND1412-175-4-25		Lock Knob		4
26	PBAND1412-175-4-26		Ceramic Guide		8
27	PBAND1412-175-4-27		Adjusting Block		4
28	PBAND1412-175-4-28		Fixed Block		2
29	PBAND1412-175-4-29		Lock Knob		1
30	PBAND1412-175-4-30		Ceramic Guide		2
31	PBAND1412-175-4-31		Support Shaft		1
32	PBAND1412-175-4-32		Guide Bracket		1
33	PBAND1412-175-4-33		Lock Handle		1
34	PBAND1412-175-4-34		Support Shaft		1



35	PBAND1412-175-4-35		Lock Knob		1
36	PBAND1412-175-4-36		Socket Head Button Screw	1/4"-20x1/2"	2
37	PBAND18BX2203-4-37		Base		1
38	PBAND1412-175-4-38		Special Bolt		2
39	PBAND1412-175-2-11		Flat Washer	5/16"	4
40	PBAND1412-175-4-40		Hex Cap Screw	5/16"-18x1"	4
41	PBAND1412-175-2-13		Lock Washer	5/16"	4

Lower Wheel & Motor Assembly: (Parts List Below)



Lower Wheel & Motor Assembly Parts List

<u>Index</u>	<u>Part Number</u>	<u>Dake Part Number</u>	<u>Item Description</u>	<u>Specifications</u>	<u>Quantity</u>
1	PBAND18BX2203-1		Hex Nut	5/8-18UNF-LH	1
2	PBAND18BX2203-2		Ball Bearing	6204LLU	2
3	PBAND18BX2203-2-3		Plate		1
4	PBAND18BX2203-4		PU Tire		1
5	PBAND18BX2203-2-5		Lower Wheel		1
6	PBAND18CX110175-2-6		V-Belt		1
7	PBAND18CX110175-2-7		Motor Pulley, Variable Speed		1
7A	PBAND18CX110175-2-7A		Motor Pulley, Cover		1
7B	PBAND18CX110175-2-7B		Motor Pulley, Holder		1
7C	PBAND18CX110175-2-7C		Motor Pulley, Slide		1
7D	PBAND18CX110175-2-7D		Motor Pulley, Spring		1
7E	PBAND18CX110175-2-7E		Motor Pulley, Bushing		1
7F	PBAND18CX110175-2-7F		Motor Pulley, Coupling		1
7G	PBAND18CX110175-2-7G		Motor Pulley, Plastic Support Post		3
7H	PBAND1412-175-2-8		Motor Pulley, Set Screw	5/16"-18x3/8"	4
7I	PBAND18CX110175-2-7I		Motor Pulley, Pin	6x16	2
7J	PBAND18CX110175-2-7J		Motor Pulley, Pin	5x10	1
7K	PBAND18CX110175-2-7k		Motor Pulley, Pin	6x12	2
8	PBAND18CX110175-2-8		Hex Cap Screw	3/8-16UNCx1-3/4"	1
9	PBAND18CX110175-2-9		Key	7x7x100	1

10	MBAND14BX110-175-2-10		Flat Washer	1/4"	2
76	PBAND1412-175-2-11		Flat Washer	5/16"	2
12	PBAND18CX110175-2-12		Spindle Pulley		1
13	MBAND14BX110-175-2-13		Plate		1
14	MBAND14BX110-175-2-14		Phillips Flat Head Screw	5/16"-18x1-1/2"	3
15	PBAND18BX2203-2-15		Lower Spindle		1
16	PBAND1412-175-2-16		Hex Cap Screw	M5x0.8x30	2
17	PBAND1412-175-29		Flat Washer	M5	6
18	PBAND1412-175-2-18		Brush		1
19	PBAND1412-175-2-19		Hex Nut	M5x0.8	4
20	PBAND1412-175-2-20		Insert Block		1
21	PBAND1412-175-2-21		Shelf		1
22	PBAND1412-175-2-22		Hex Cap Screw	M5x0.8x12	2
23	PBAND1412-175-26		Screw	M3.5x10mm	6
24	PBAND18BX2203-2-24		Lower Door		1
25	PBAND1412-175-25		Door Hinge Set		2
25.1	PBAND1412-175-25-1		Door Hinge, Left		2
25.2	PBAND1412-175-25-2		Door Hinge, Right		2
25.3	PBAND1412-175-25-3		Socket Head Cap Screw	M5x0.8x35	2
25.4	PBAND1412-175-25-4		Nylon Inserted Lock Nut	M5x0.8	2
26	PBAND1412-175-2-26		Lock Knob		2

27	PBAND18BX2203-2-27		Lower Blade Guard		1
28	PBAND1412-175-2-28		Screw	1/4"-20x3/4"	1
29	PBAND1412-175-2-29		Plate		1
30	PBAND1412-175-32		Hex Nut	1/4"-20	1
31	PBAND1412-175-33		Door Stud		1
32	PBAND1412-175-2-32		Flat Washer	1/4"	1
33	PBAND1412-175-2-33		Nylon Inserted Lock Nut	1/4"-20	1
34	PBAND1412-175-46		Lock Knob		1
35	PBAND1412-175-45		Screw	1/4"-20x3/4"	1
36	PBAND1412-175-2-36		Plate		1
37	PBAND1412-175-2-37		Screw	#10-24x3/8"	2
38	PBAND1412-175-2-38		Strain Relief	6N-4	4
39	MBAND14BX110-175-2-39		Motor Cord		1
40	MBAND14BX110-175-2-40		Power Cord		1
41	MBAND14BX110-175-2-76		Bushing		2
42	PBAND1412-175-2-42		Flat Washer	3/8"	7
43	PBAND1412-175-8		Lock Washer	3/8"	5
44	PBAND18BX2203-2-44		Hex Nut	3/4"-16UNF	1
45	PBAND18CX110175-2-45		Motor		1
	MBAND14BX110-175-2-45MF		Motor Fan (not shown)		1
	MBAND14BX110-175-2-45MFC		Motor Fan Cover (not shown)		1
	MBAND14BX110-175-2-45JB		Junction Box (not shown)		1

	MBAND14BX110-175-2-45JBC		Junction Box Cover (not shown)		1
46	PBAND1412-175-2-46		Spindle Holder		1
47	PBAND1412-175-2-47		Adjusting Screw		4
48	PBAND1412-175-2-48		Hex Cap Screw	3/8"-16x1-3/4"	5
49	PBAND18BX2203-2-49		Flat Washer	3/4"	1
50	PBAND18BX2203-2-50		Switch Cover		1
51	MBAND14BX110-175-2-51		Hex Nut	M6x1.0	2
52	MBAND14BX110-175-2-52		Limited Switch Cord		1
53	MBAND14BX110-175-2-53		Hex Cap Screw	3/8"-16x3/4"	3
54	MBAND14BX110-175-2-54		Hex Cap Screw	M6x1.0x35	2
55	PBAND1412-175-3-36		Hex Nut	3/8"-16	4
56	PBAND18CX110175-2-56		Foot Brake		1
57	MBAND14BX110-175-2-57		Hex Cap Screw	5/16-18UNCx1/2	1
58	MBAND14BX110-175-2-58		Hex Cap Screw	3/8-16UNCx1-1/4"	1
59	MBAND14BX110-175-2-59		Spring		1
60	MBAND14BX110-175-2-60		Limited Switch		1
61	MBAND14BX110-175-2-61		Screw	M3x20mm	2
62	MBAND14BX110-175-2-62		Screw	1/4"-20x3/8"	2
63	MBAND14BX110-175-2-63		Brake Assembly		1

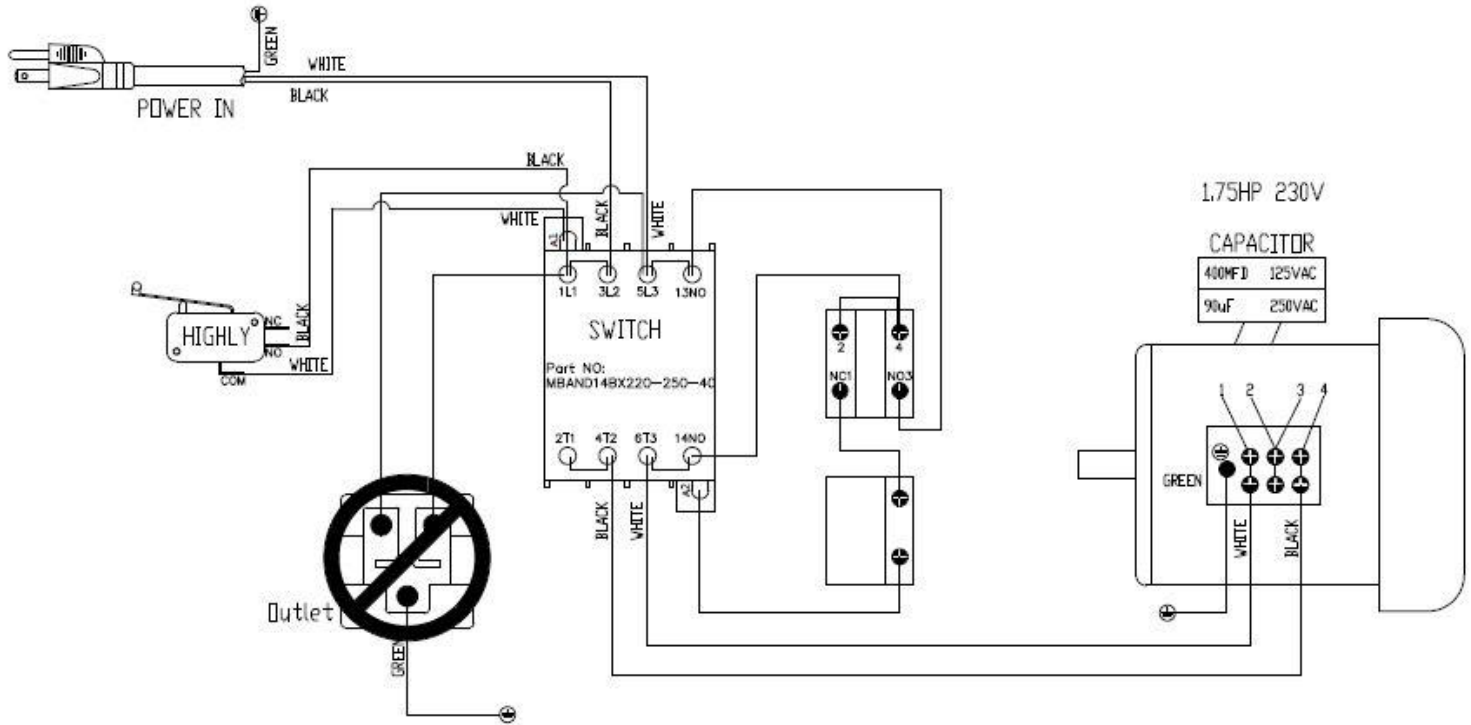
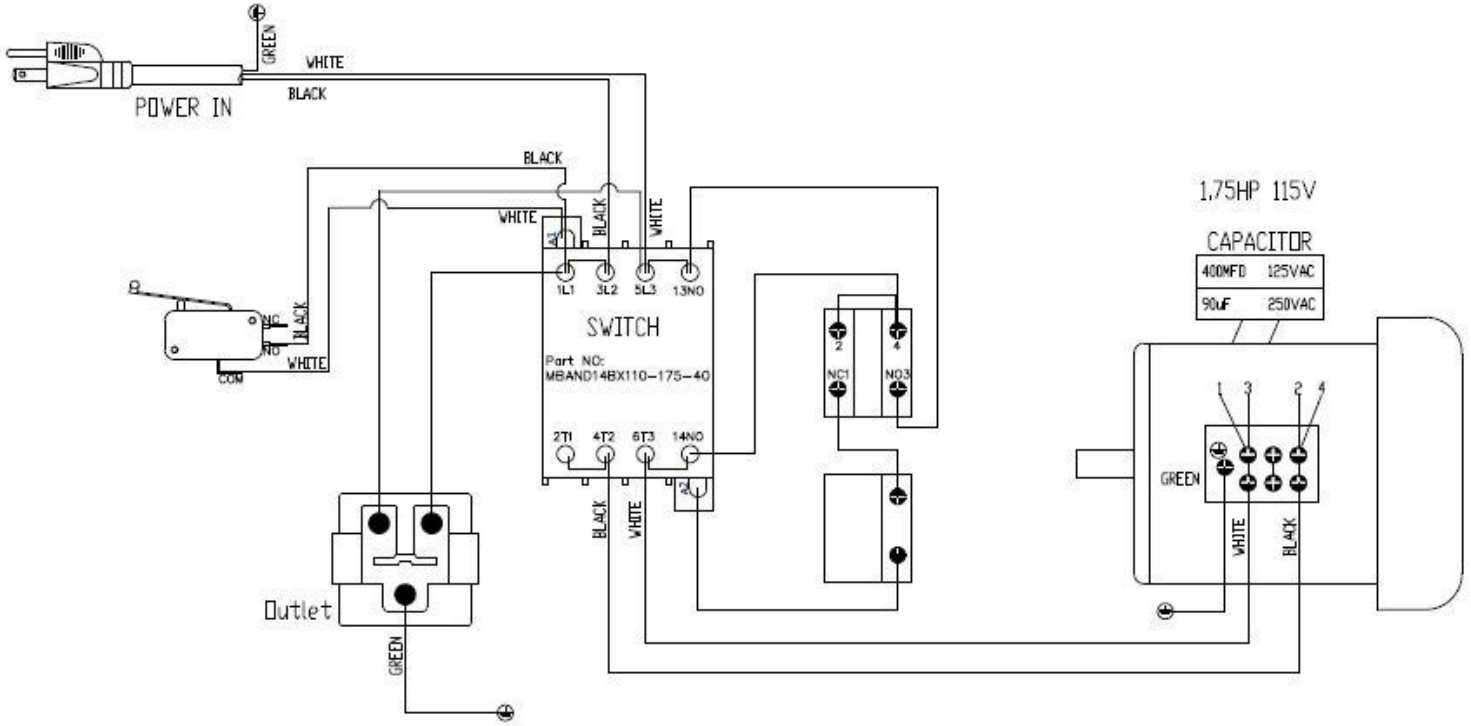
	MBAND14BX110-175-2-63P		Brake Pad (not shown), 2 pieces		
64	MBAND14BX110-175-2-64		Disc		1
65	MBAND14BX110-175-2-65		Inner Cable		1
66	MBAND14BX110-175-2-66		Housing		1
67	MBAND14BX110-175-2-67		Plate		1
68	MBAND14BX110-175-2-68		Socket Head Button Screw	3/8"-16 x1"	4
69	MBAND14BX110-175-2-69		Rubber Pad		4
70	MBAND14BX110-175-2-70		Socket Head Button Screw	M5x0.8x12	3
71	MBAND14BX110-175-68		Screw	M4x0.7x8	4
72	MBAND14BX110-175-2-72		Spacer		2
73	MBAND14BX110-175-2-73		Plate		1
74	PBAND1412-175-4-40		Hex Cap Screw	5/16-18UNCx1"	4
75	PBAND1412-175-2-13		Lock Washer	5/16"	4
76	PBAND1412-175-2-11		Flat Washer	5/16"	4
77	PBAND18CX110175-2-77		spacer sleeve		1
78	PBAND18CX110175-2-78		Phillips Flat Head Screw	3/8-16UNCx1-1/2"	2
79	PBAND18CX110175-2-79		Gear Plate		1
80	PBAND18CX110175-2-80		Carriage Bolt	3/8-16UNCx1-1/4"	1
81	PBAND18CX110175-2-81		Flat Washer	3/8"	7

82	PBAND18CX110175-2-82		Lock Handle		1
83	PBAND18CX110175-2-83		Gear Box Assembly		1
84	PBAND18CX110175-2-84		Nylon Inserted Lock Nut	3/8-16UNC	3
85	PBAND1412-175-43		Set Screw	1/4"-20UNCx3/8"	1
86	PBAND18CX110175-2-86		Handwheel		1
87	PBAND18CX110175-2-87		Knob		1
88	PBAND18CX110175-2-88		Hex Cap Screw	5/16-18UNCx5/8"	4
89	PBAND18CX110175-2-89		Flat Washer	5/16"	4
90	PBAND18CX110175-2-90		Pointer		1
91	PBAND18CX110175-2-91		Worm Gear Assembly		1
91A	PBAND18CX110175-2-91A		Worm		1
91B	PBAND18CX110175-2-91B		Ball Bearing	6801ZZ	3
91C	PBAND18CX110175-2-91C		spacer sleeve		2
91D	PBAND18CX110175-2-91D		Gear		1
91E	PBAND18CX110175-2-91E		spacer sleeve		1
91F	PBAND18CX110175-2-91F		Key	4x4x8mm	1
91G	PBAND18CX110175-2-91G		Key	4x4x18mm	1
91H	PBAND18CX110175-2-91H		Shaft		1
91I	PBAND18CX110175-2-91I		Ball Bearing	6802ZZ	1
91J	PBAND18CX110175-2-91J		Gear Bracket		1



91K	PBAND18CX110175-2-91K		Nylon Inserted Lock Nut	M12x1.75	1
92	PBAND18CX110175-2-92		Gear		1
93	PBAND18CX110175-2-93		Plate		1
94	PBAND18CX110175-2-94		Speed Label		1

VDL-18 Wiring Diagram:





Order Information

- *Please contact factory for current prices*
- Parts are available for direct purchase from Dake or through a distributor. When placing a parts order, you will need to provide the part number, name of part, and model number. All parts shipped F.O.B. Factory in Grand Haven, MI.
- If a customer has any questions or concerns regarding a Dake product that was purchased, please email customer service at customerservice@dakecorp.com