

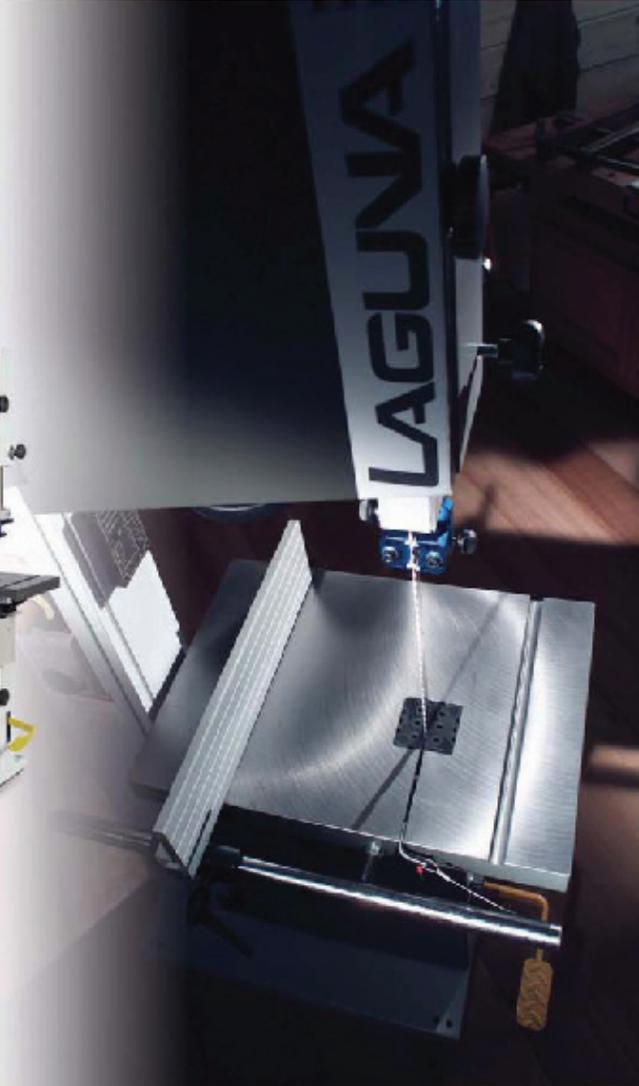
LAGUNA BANDSAWS

16HD-37 MANUAL

Laguna Bandsaws



16HD - 37
Manual



LAGUNA TOOLS
2072 Alton Parkway
Irvine, California 92606
Ph: 800.234.1976
www.lagunatools.com

<u>Chapter 1.Safety rules and warranty</u>	Pg. 4-5
<u>Chapter 2.Getting to know your bandsaw</u>	Pg. 6-13
Specification	Pg. 6
Noise emission	Pg. 7
Receiving your machine	Pg. 7
Introduction to bandsaws	Pg. 8
What you will receive with your machine	Pg. 9
Parts of the bandsaw	Pg. 10-13
Where to locate your bandsaw	Pg. 13
<u>Chapter 3. Assembling your bandsaw</u>	Pg. 14-36
Unpacking your machine	Pg. 14-15
Assembling your bandsaw	Pg. 16-22
Adjusting the bandsaw	Pg. 23-36
<u>Chapter 4. Using your bandsaw</u>	Pg. 37-40
<u>Chapter 5. Blades</u>	Pg. 41-39
Introduction	Pg. 41
Blade terms	Pg. 41-36
Blade selection	Pg. 36-48
<u>Chapter 6. Maintenance and troubleshooting</u>	Pg. 49-56
<u>Chapter 7. Accessories</u>	Pg. 57
<u>Chapter 8. Electrical drawings</u>	Pg. 58-62
<u>Chapter 9. Spare parts and exploded view drawings</u>	Pg. 63-64

Read First!!!

Safety Rules

As with all machinery there are certain hazards involved with the operation and use. Using each one with caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. If you have any questions relative to the installation and operation, do not use the equipment until you have familiarized yourself with the machine.

Read carefully before operating the band saw

- 1.** Keep the working area clean and be sure adequate lighting is available.
- 2.** Do not wear loose clothing, gloves, bracelets, necklaces or ornaments. Wear face, eye, respiratory and body protection devices as indicated for the operation or environment.
- 3.** Be sure that the power is disconnected from the machine before making adjustments or fitting and removing an attachment.
- 4.** Never leave the machine with the power on.
- 5.** Do not use dull, gummy or cracked blades.
- 6.** Be sure that the keys and adjusting wrenches have been removed and all the nuts and bolts are secured.

Limited Warranty

New machines and accessories sold by Laguna Tools carry a one-year warranty effective from the date of shipping. Machines sold through dealers must be registered with Laguna Tools within 30 days of purchase to be covered by this warranty. Laguna Tools guarantees all new machines and accessories sold to be free of manufacturers' defective workmanship, parts and materials. We will repair or replace, without charge, any parts determined by Laguna Tools, Inc. to be a manufacturer's defect. We require that the defective item/part be returned to Laguna Tools with the complaint. Any machines returned to Laguna Tools must be returned with packaging in the same manner in which it was received. If a part or blade is being returned it must have adequate packaging to ensure no damage is received during shipping. In the event the item/part is determined to be damaged due to lack of maintenance, cleaning or misuse/abuse, the customer will be responsible for the cost to replace the item/part, plus all related shipping charges. This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, lack of or inadequate dust collection, misuse/abuse or damage caused where repair or alterations have been made or attempted by others.

Laguna Tools, Inc. is not responsible for additional tools or modifications sold or performed (other than from/by Laguna Tools, Inc.) on any Laguna Tools, Inc. machine. Warranty maybe voided upon the addition of such described tools and/or modifications, determined on a case-by-case basis.

Software purchased through Laguna Tools Inc. is not covered under this warranty and all technical support must be managed through the software provider. Software is non-refundable.

Normal user alignment, adjustment, tuning and machine settings are not covered by this warranty. It is the responsibility of the user to understand basic machinery operation, settings and procedures and to properly maintain the equipment in accordance with the standards provided by the manufacturer.

Parts, under warranty, are shipped at Laguna Tools, Inc.'s cost either by common carrier, FEDEX ground service or a similar method. Technical support to install replacement parts is primarily provided by phone, fax, e-mail or Laguna Tools Customer Support Website. The labor required to install replacement parts is the responsibility of the user.

Laguna Tools is not responsible for damage or loss caused by a freight company or other circumstances not in our control. All claims for loss or damaged goods must be notified to Laguna Tools within twenty-four hours of delivery. Please contact our Customer Service Department for more information.

Only **new** machines sold to the original owner are covered by this warranty. For warranty repair information, **call 1-800-332-4094**.



Bandsaw Specifications (02/28/2008)

Model	16HD classic	16HD	LT18	Resaw Master	LT20	LT24x17	LT24x24	LT28	LT32	LT37
HP	4.5	4.5	4.5	6	6	6	6	7 ½	10	15
Resaw	13	16 3/8	18 3/8	18	20 3/8	17 5/8	24	18	20	24
Weight (net)lbs	435	465	510	561	585	725	755	1034	1137	1610
Volts	*220	*220	*220	*220	*220	*220	*220	220 3 ϕ	220 3 ϕ	220 3 ϕ
Amp Breaker	30	30	30	50/1 ϕ 30/3 ϕ	50/1 ϕ 30/3 ϕ	50/1 ϕ 30/3 ϕ	50/1 ϕ 30/3 ϕ	35/3 ϕ	40/3 ϕ	50/3 ϕ
Min blade	*1/16	*1/16	*1/16	†3/8-1 3/8	*1/8	*1/8	*1/8	*1/8	*1/8	*1/8
Max blade	1 3/8	1 3/8	1 3/8	2	1 1/8	1 ½	1 ½	1 ¾	1 ¾	2
Throat	15½	15½	17	17	19	23 ¼	23 ¼	27	30 ½	36
Table size	16½x22¾	16½x22¾	19x25	19x25	19x25	24x34 ½	24x34 ½	28x38	28x42	24x34 ½
Blade length	145	150	158	161	176	183	201	201	227	261
Table height	33 ½	33 ½	33 ½	33 ½	35	35	35	37	38 ½	42
Height	76 ½	76 ½	77 ½	77	86	96	96	87	99	113
Rack/pin	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Foot brake	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Guides	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG
Base size	15x27	15x27	15X27	15x27	15x29	15x41 3/8	15x41 3/8	15 ¾x41 3/8	21x47	23x54

All length in inches

Laguna Tools (LG)

* = With optional cool block kit.

* = 1 or 3 phase available.

† = With optional longer lower thrust shaft

ϕ = phase

Electrical subject to change base on special motor request (if available) and/or electrical codes in your local area.

Noise emission

Notes concerning noise emission: Given that there exists a relationship between noise level and exposure times, it is not precise enough to determine the need for supplementary precautions. The factors affecting the true level of exposure to operators are clearly the amount of time exposed, the characteristics of the working environment, other sources of dust and noise, etc.: for example, adjacent machines, in other words the level of ambient noise. It is possible that exposure level limits will vary from country to country.

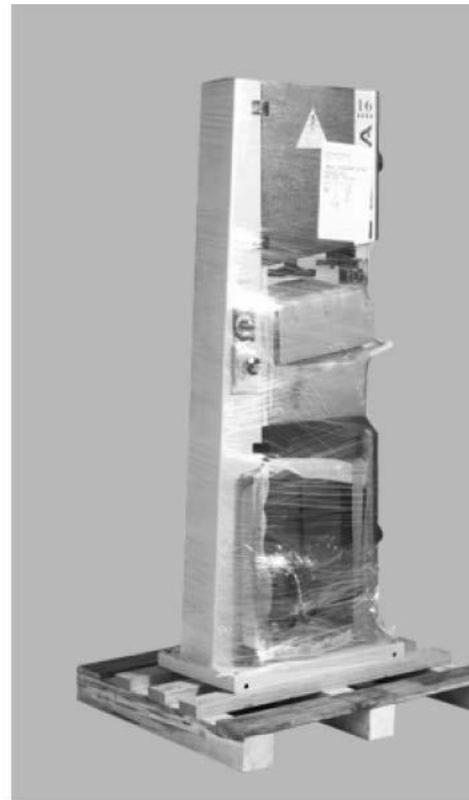
Measuring system Standard ISO 7960 - annex J (NFE 64-209)

Measuring system	Standard ISO 7960 - annex J (NFE 64-209)
Measurements tolerance	< 4 dB
Working, without aspiration	

L Aeq	LW (A)	Lpc
84,7 dB (A)	97,1 dBw (A)	5,1 mW (A) < 130 dB (A)

Receiving your machine

Note: It is probable that your machine will be delivered by a third party. Before you unpack your new bandsaw you will need to first inspect the packing, invoice and shipping documents supplied by the driver. Insure that there is no visible damage to the packing or the machine. You need to do this prior to the driver leaving. All damage must be noted on the delivery documents and signed by you and the delivery driver. You must then contact the seller [Laguna Tools] as soon as practical. If damage is found after delivery, contact the seller as soon as practical.



Introduction to bandsaws

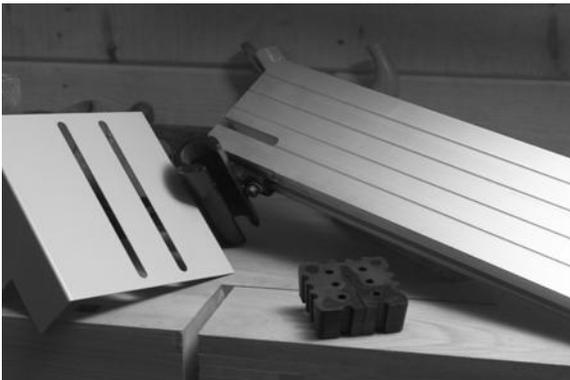
This bandsaw is designed to give you years of safe service. Read this owner's manual in its entirety before assembly or use.

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 wood will be thrown back at the operator, which is called a kickback. There is always danger of kickback when a circular saw is being used. For safety reasons many woodworkers prefer the bandsaw especially when cutting small pieces. 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. Because the bandsaw blade is fairly thin, it can cut thick stock with a minimum of horsepower. For this reason the bandsaw is often used when valuable pieces of wood are made into a thin piece of veneer.

What you will receive with the bandsaw.



Tool Kit



Fence, table insert, and door guard



Table



Cast-iron fence dependent on the machine ordered.

Parts of the bandsaw

The bandsaw does not have 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.

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.



Body

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

Table

The table supports the workpiece and can tilt 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 plastic table insert which the blade passes through. Should the blade wander off center, this table insert will protect the blade from damage as it is soft and will not damage the blade. The table also supports the adjustable fence, which is used for parallel cuts. There is an aligning pin, which joins both sides of the table and stops the table from warping [attached by a wire]. The pin must always be fitted in the table and only removed when removing or fitting a blade.

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. If you are using blades narrower than ¼", you will need to purchase a cool block guide system.

Guards

When running, the blade can be very dangerous and the amount of blade that is exposed must be kept to a minimum. 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 hinged guard on the guide vertical adjustment shaft. The guard is only opened to install or remove the blade. There is a clear plastic guard on the upper blade guide. This guard must be adjusted just above the wood being cut.

Drive

The drive [power] is supplied to the machine by an electric motor located at the back of the machine. It powers the lower flywheel through a rubber drive belt and is controlled by switches that are mounted on the frame vertical post at the front of the machine. It is also controlled by switches on the upper door and the

foot brake.

Electrical connection

This is achieved by connecting the electrical supply to a terminal box located at the back of the machine. Never connect directly to the electrical motor, and all electrical connections must be conducted by a qualified electrician. For detailed instructions see the assembly section of the manual.

Brake

The machine is supplied with a foot brake. It is located close to the ground on the righthand side of the machine. It has two functions. First, to remove the power to the motor, which is achieved with a switch that is mounted on the body of the machine. The second function is to slow the lower flywheel and this is achieved by applying a brake pad to the flywheel. The more pressure that is applied, the faster the flywheel slows.

Dust collection

The bandsaw produces a lot of sawdust, so extraction is very important. This is achieved by connecting a dust extraction hose to the back of the machine with a minimum capacity of 1,000 CFM.

Identification

There is a plate at the back of the machine listing all the manufacturing data including the serial number, model, blade length etc.

Tension scale

Tension scales 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 vertical post. The tension scale is a general reference and not a rule.

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 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 the wheel

and, when rotated, will move the wheel up or down. 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. The lower flywheel is also adjustable for tracking and has 4 bolts at the back of the machine that adjust the wheel shaft. The lower wheel is factory set and should not need adjustment.

Fence

The fence is located to the left of the blade and is used to assist in parallel cuts. It is adjustable for the drift of the blade and also the thickness of the cut.

Where to locate your bandsaw

Before you remove your bandsaw from the pallet, select the area where you will use your machine. There are no hard and fast rules for its location but below are a few guidelines.

- 1.** There should be an area at the front and back of the machine suitable for the length of wood that you will be cutting. If you intend to use your saw for scrollwork, this may not be important but should be considered at this stage.
- 2.** Adequate lighting. The better the lighting, the more accurate and safely you will be able to work
- 3.** Solid floor. You should select a solid flat floor, preferably concrete or something similar.
- 4.** Close to power source and dust collection.

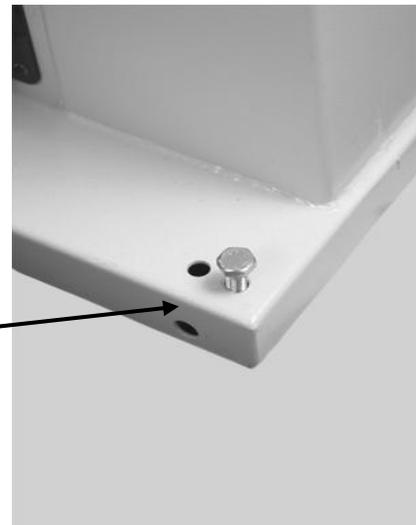
Unpacking your machine

To unpack your machine, you will need tin snips, knife and a wrench.

1. Using the tin snips, cut the banding that is securing the machine to the pallet.

WARNING: EXTREME CAUTION MUST BE USED BECAUSE THE BANDING WILL SPRING AND COULD CAUSE INJURY.

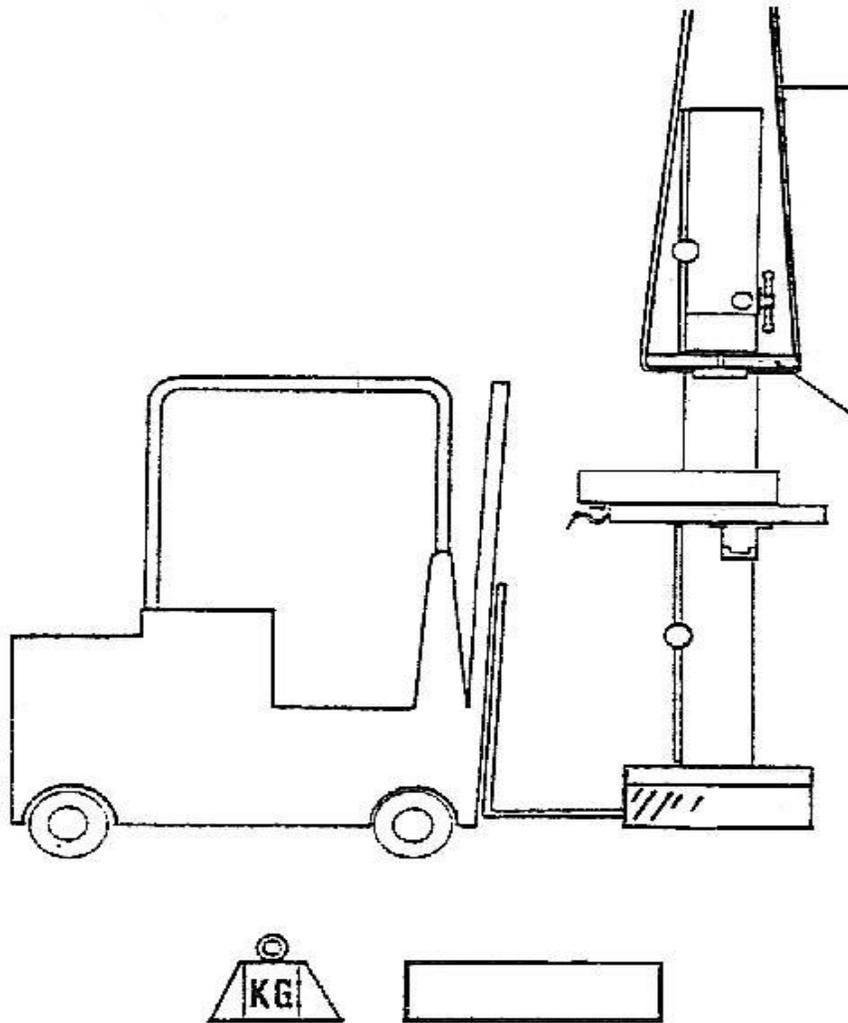
2. Lift the box off and discard.
3. Using the knife, cut the plastic wrap from the top. The table, motor, fence and accessories that were ordered could be attached to the side of the machine and extreme caution must be taken that the parts do not fall and cause injury or damage. Remove them in order from the top and set aside.
4. Place the motor on the pallet behind the machine. Ensure that there is no tension on the motor wiring. It is recommended that the motor be assembled to the bandsaw prior to removing the bandsaw from the pallet [see mounting motor]. If you decide to remove the bandsaw prior to assembling the motor to the bandsaw, ensure that there is no tension on the motor wiring at any stage of the operation.
5. Remove the base mounting bolts that secure the machine to the pallet [shown removed].
6. It is recommended that the machine be removed from the pallet by lifting it with a hoist or forklift. There is an eyebolt at the top of the machine, and this should **NEVER** be used to lift the machine. It is used to secure the machine horizontally during shipping only and is not designed to take the load of the machine.



Place a sling through the bandsaw as shown below behind the tension-adjusting wheel and lift vertically.

Remove the pallet and lower to the floor.

The machine can be lifted using a forklift truck, sliding it onto the forks or by using a forklift "SLING", as shown with a lifting capability of 2,000 Kg (440lb).



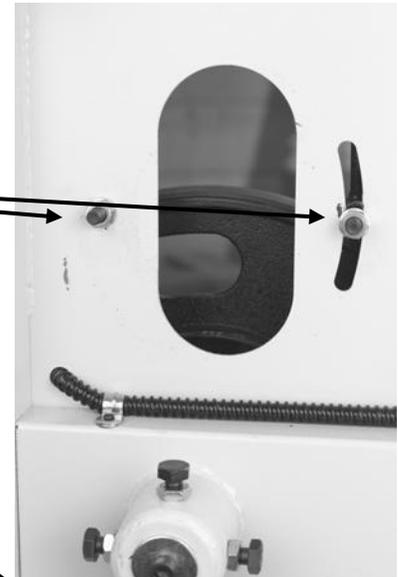
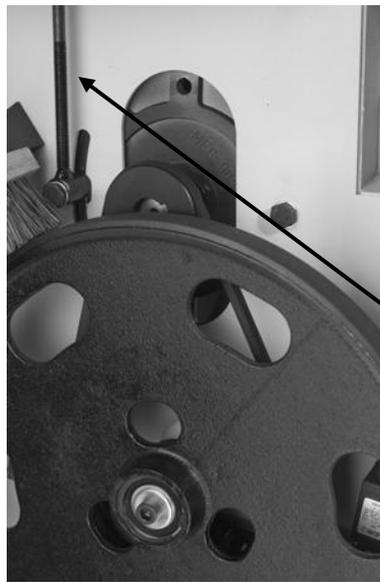
If no lifting device is available, the machine can be removed from the pallet as follows: **Note:** The machine is heavy, and if you have any doubt about the described procedure, seek professional assistance. Do not attempt any procedure that you feel is unsafe or that you do not have the physical capability of achieving. With two or more people, move the machine so that the base of the bandsaw is over the edge of the pallet. Tilt the bandsaw away from the pallet so that the base of the machine touches the floor, slide the pallet from under the machine and then move the bandsaw to the vertical position so that it is completely resting on the floor

Mounting the motor

Two people are required to assemble the motor to the bandsaw; build up wooden blocks to the right height to rest the motor on. One person holds the motor in position, and the other will fit the drive belt and the bolts.

1. Remove the two mounting nuts on the rear of the machine. Make sure that there are washers between the bolts and the inside face of the machine.
2. Hold the bolts to prevent them pushing through.
3. Using a block to support the motor, guide the motor onto the mounting bolts.

3. Using a block to support the motor, guide the motor onto the mounting bolts. Insure that the drive belt is on both the motor pulley and the fly wheel pulley. The drive belt can be fitted later if you prefer, but it is preferable to assemble it at this stage. If you decide to fit the drive belt after fitting the motor, you will have to adjust the motor to its lowest position and once fitted the motor back up to the tensioned position.



Belt tensioning bolt

4. Once the belt is mounted on both the pulley "V" grooves, apply tension by adjusting the tensioning bolt, using the supplied 17 mm wrench. The correct tension is 3/16" deflection when using your thumb on one side of the belt. If the tension is too tight, you will experience motor strain: if it is too loose you will experience belt slippage and lack of power. After a few hours of operation it is necessary to check that the tension is correct, as the belts will bed into the "V" grooves. As a guide, the belt should have the same tension/deflection as the fan or alternator belt on your car.



Mobility kit

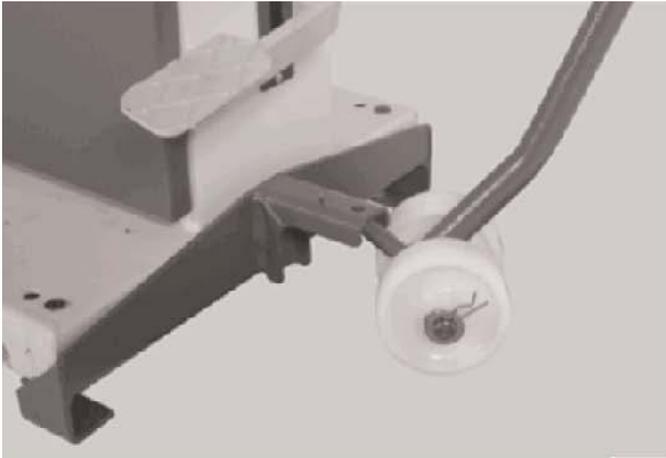
If you have purchased a mobility kit, now is the ideal time to fit it as the table has not been fitted to the machine and the bandsaw is lighter, but the mobility kit can be fitted later if you require it.

Mobility kit assembly procedure

- 1.** Rest the bandsaw on a 2" X 4" wood or something similar.
- 2.** Fit the shaft through the base of the bandsaw.
- 3.** Fit the wheels, washers and split pins as shown on both sides of the base.
- 4.** Fit the front bracket as shown. Note the number of holes in the bracket may vary depending on the bracket supplied.

Note: The mobility kit may be supplied with 2 spacers that are used to adapt it for other machines. Discard the spacers.

Note: Leveling bolts and a flat head counter sunk screw are provided with the machine. If you are fitting a mobility kit you will not need the bolts/screw. Discard them.



Close up of the back wheel assembly.



Installing the Table

Two people are required to mount the table to the machine.

1. Remove the lock-down bolt, handle and the pin from the trunnion.



2. Position the table on the trunnion, taking care not to damage any of the table or trunnion surfaces.

3. While one person supports the

table, the other person feeds the bolts and the lock down through the trunnion slots.

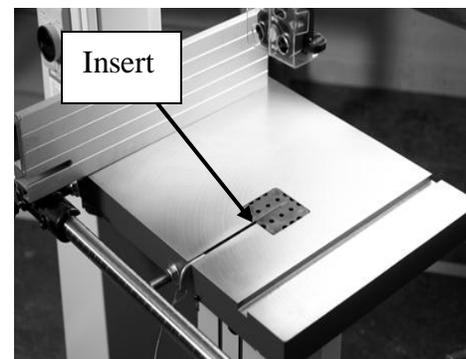
4. The table can be tilted to a maximum of 45 degrees away from the column. To angle the table, remove the table insert to allow the blade to pass through the hole. Loosen the lock-down handle, using the supplied wrench. Crank the trunnion gear so that the table moves to the required angle and lock in position. To return the table to the zero position, reverse the procedure.

The bandsaw is supplied with a zero stop that is adjustable and comes factory set



Table insert

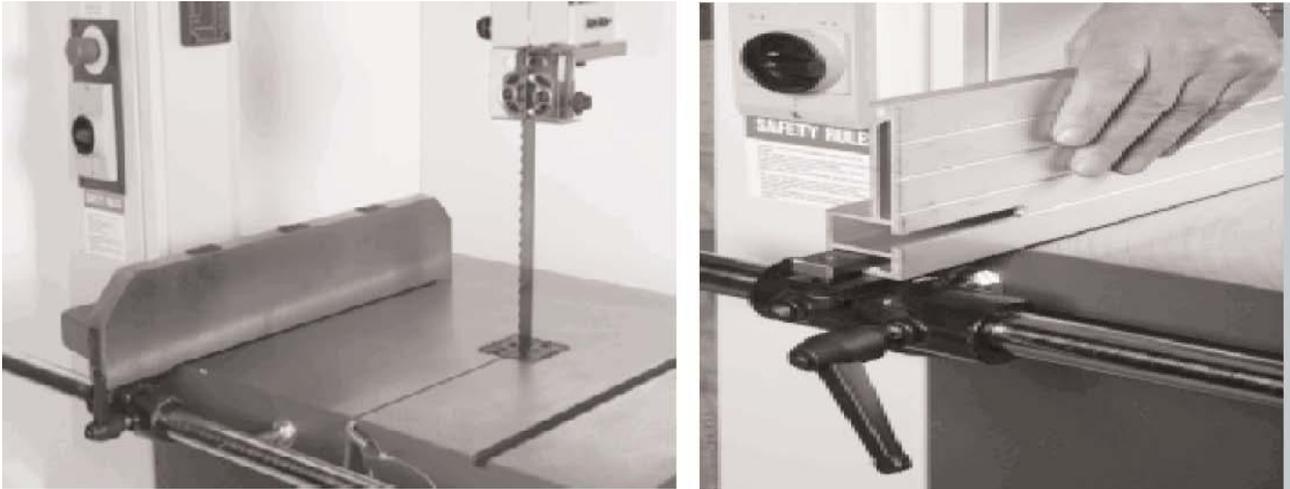
The machine is supplied with a removable table insert. The holes of the insert improve the dust collection near the blade. Adjusting screws at the bottom of the table allows the insert to be adjusted vertically so that the level between the table and the insert are level. It is recommended that the insert be replaced when the slot becomes



too wide; this will ensure that the job is supported efficiently and safely. When the insert is replaced, you will have to sand the sides so that the insert fits correctly in the table hole. You will also have to cut the blade slot to suit your machine.

Fence

The bandsaw is supplied with a cast iron or aluminum fence depending on the machine that you purchased. Assemble the fence to the cast-iron bracket with the bolts and steel block provided. Adjustment and squaring of the fence will be covered later in the manual. Slide the bracket onto the round steel bar [attached to the table]. The fence is used to the left of the blade, so ensure that it is on the correct side of the table before locking in position with the ratchet handle provided. **Note:** The aluminum fence can be fitted so that it can be used in high or low position [also covered later in the manual].



Dust collection

The bandsaw must be connected to a dust collection system or machine. As a general rule the stronger the extraction, the better; but 1,000 cubic feet a minute is the minimum that should be used. The diameter of the dust collection port on the bandsaw is 4". Most US standard hoses are 4" in diameter. You can purchase a step-down adaptor from Laguna Tools or from your local hardware store in the plumbing or heating department if you use a smaller hose.



Bottom blade guard

It is very important to have the blade covered for safety. A guard is provided at the top of the lower door. This guard must be moved vertically and clamped in position before operating the bandsaw. To open the door, the guard will have to be lowered.



Should the blade break, this guard protects the operator from the blade escaping under the table. To assemble the guard remove the thumbscrew that you will find stored on the inside of the door.

Align the guard on the bolt and install the thumbscrew on the outside of the door.

Foot brake

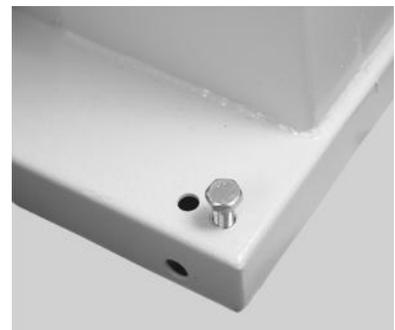
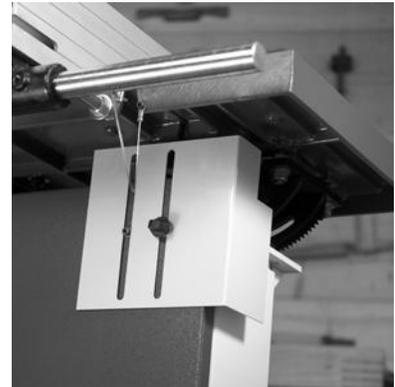
A foot brake is attached to an arm inside the machine with two bolts. As it is moved down, a switch removes power to the motor. Continued downward movement contacts a brake pad that slows the lower flywheel.

Should the blade break the foot brake only slows the lower flywheel and the upper flywheel may still be rotating, so care must be exercised when opening the doors. To assemble the foot brake, remove the bolts from the arm inside the bandsaw. Push the foot brake through the slot on the side of the bandsaw and assemble to the arm with the two screws.

Leveling the bandsaw

After you have located your bandsaw in its final position, you will have to level it [only applicable if you have not fitted a mobility kit]

- 1.** Place a spirit level on the table. You will have to level the saw in both directions [parallel with the saw blade and at 90 degrees to the saw blade].
- 2.** The base of the machine is provided with four threaded leveling holes and bolts. You can also bolt the machine to the floor [bolts not provided]
- 3.** If you decide to bolt the machine to the floor, you will have to level it with shims [shims not provided]. Do not over tighten the machine to the floor, as it could cause the machine to vibrate.
- 4.** When leveling the machine that is not bolted to the floor, insert the leveling bolts into the 4 corner holes. Make sure that you use the headless screw in the hole at the front on the lower door. If you use a bolt with a



head, the door will not be able to be opened.

- 5.** Adjust the bolts so that the machine is level in both planes and does not rock.

Electrical connection

Note the machine is not supplied with an electrical cord or plug, as the size of the cable and the type of plug will be dependent on the installation.

A qualified electrician must carry out the electrical installation. The main connection should be made using the terminal box shown. Ensure that the main supply corresponds with that of the machine, single phase or three-phases. Use wiring suitable for the power of the motor, which is 230 volts, and the cable is required.

Phase	Distance	Wiring suggested
1 phase	0-10 ft	12/3
1 phase	10-15 ft	10/3
1 phase	15+ ft	8/3
3 phase	0-10 ft	12/4
3 phase	10-15ft	10/4
3 phase	15+ ft	8/4

All machines require the minimum of a 30-amp circuit breaker regardless of the phase.



Connect the electrical wires to the terminals opposite the wires going to the machine. On a single-phase machine you will find 3 wires. On a 3-phase machine you will find 4. On the machine you will see a wire that is yellow and green, which is the ground wire; the other colored wires are power. In either 1-phase or 3-phase it does not matter what color combination you use. Green is ground; all other wiring is power (there is no neutral). On single-phase the wiring can be interchanged as you wish; it would not affect the rotation of the

motor. The direction of rotation of machines with a single phase supply is predetermined during production. On a 3-phase machine the lower wheel must rotate in a clockwise rotation. If it rotates in a counterclockwise direction you need to swap locations of 2 of the power leads, and it will rotate in the correct direction.

Before starting the machine

- 1.** Read and understand the instruction manual before operating the saw.
- 2.** If you are still not thoroughly familiar with the operation of the bandsaw, get advice from a qualified person.
- 3.** Make sure the machine is properly grounded and that the wiring codes are followed.
- 4.** Do not operate the bandsaw while under the influence of drugs, alcohol, medicine or if tired.
- 5.** Always wear eye protection, safety glasses or a safety shield, and hearing protection.
- 6.** Wear dust mask; long-term exposure to the fine dust created by the band saw is not healthy.
- 7.** Remove your tie, rings, watch and all jewelry. Roll up your sleeves; you do not want anything to get caught in the saw.
- 8.** 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.
- 9.** Make sure that the saw blade teeth point downward towards the table.
- 10.** Adjust the upper blade guard so that it is just clearing the material being cut.
- 11.** Make sure that the blade has been properly tensioned and tracked.
- 12.** Stop the machine before removing the scrap piece from the table.
- 13.** Always keep your hands and fingers away from the blade.
- 14.** Make sure that you use the proper size and type of blade.
- 15.** 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.
- 16.** 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.
- 17.** Hold the wood firmly and feed it into the blade at a moderate speed.
- 18.** Turn off the machine if you have to back the material out of an uncompleted or jammed cut.

Machine test

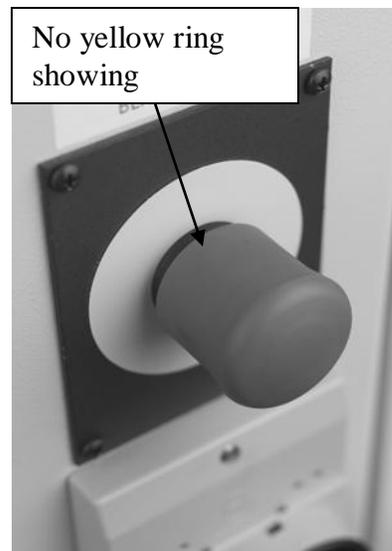
Now is the time to test the machine.

- 1.** Close the doors. If you try to start the machine with the doors open, the machine will not start, as the safety switch is not engaged.
- 2.** Check that the foot break is in the fully up position. The machine will not start if the foot break is not fully up, as the safety switch will not be engaged.
- 3.** Check that the red safety switch is in the fully out position.
- 4.** Check that the machine is clear of all tools and other loose objects.
- 5.** Check that all the adjusting and locking handles are tight.
- 6.** Check that there is no blade fitted; it is far safer to test the machine without a blade fitted.
- 7.** Start the bandsaw by turning the start switch fully to the right, and once started release the switch.
- 8.** The lower flywheel is now turning.
- 9.** Now is the time to check that all the safety switches are functioning correctly before you fit a blade. Never complete the following tests with a blade fitted as it could cause injury.
- 10.** With the machine running [no blade fitted], operate the foot break. The motor should have the power removed and the lower wheel slowed down.
- 11.** With the machine running [no blade fitted], operate the red stop switch by pressing towards the machine. The motor should have the power removed and slowed down.
- 12.** With the machine running [no blade fitted], open the doors very slowly until the top door switch functions. The motor should have the power removed and slowed down. Close the door and wait for the flywheels to completely stop before you fully open the doors.
- 13.** If any of the safety switches fail to operate correctly, do not use the machine until the fault has been corrected.



Yellow ring showing

Stop switch in the on/out position (should see yellow ring)



No yellow ring showing

Stop switch in the off/in position

Adjusting the bandsaw

Fitting a blade to the bandsaw

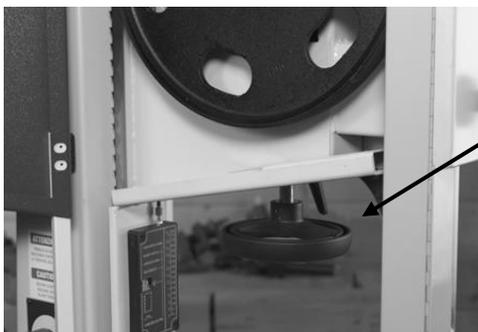
A lot of people do not like to change the blades and go to great lengths to avoid doing it. To use the bandsaw to its greatest advantage, you will have to use the appropriate blade and track it quickly. This is a habit that can be easily developed. If you use a step-by-step method of tracking, the procedure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

Installing the blade

Disconnect the power to the bandsaw.

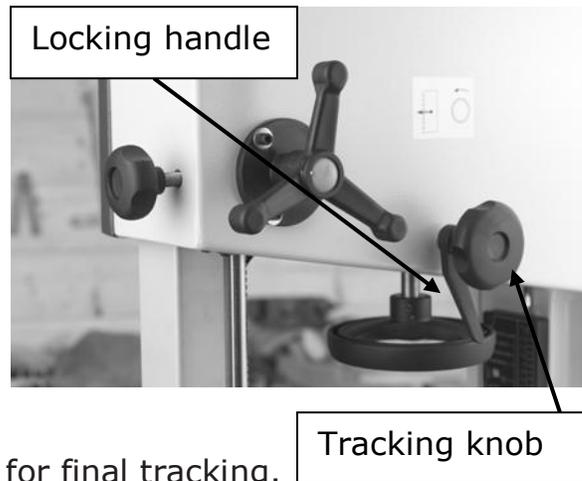
Adjust the side guide and back guide out as far as they will go [both upper and lower guides]. This will ensure that they do not interfere with the blade while you are fitting, tracking and tensioning the blade.

- 1.** Uncoil the blade. Remember to use gloves and safety glasses. The blade may have dirt or oil on it so by using a clean rag, clean the blade and pull rearwards so that the cloth does not hook on the teeth.
- 2.** 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. Remove the table pin.
- 3.** With the hinged guard on the guide support shaft open and the table insert removed, hold the blade with both hands with the teeth towards you. Slide it through the table slot and place it on the wheels. Hang the blade on the top wheel and then line it up with the lower wheel. If the top wheel needs to be lowered, rotate the tension handle wheel.



- 4.** Apply tension to the blade by adjusting the tension hand wheel. Do not fully tension the blade at this stage.

5. 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 the blade and re-track.

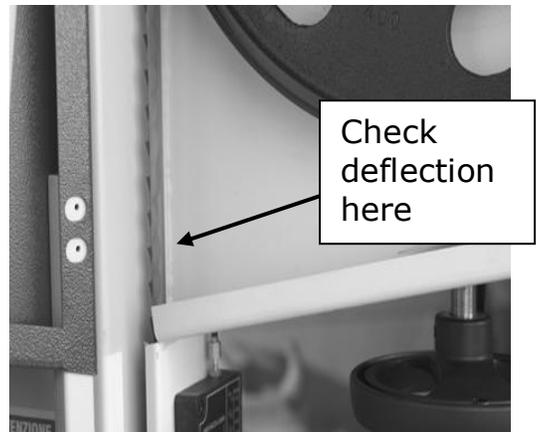
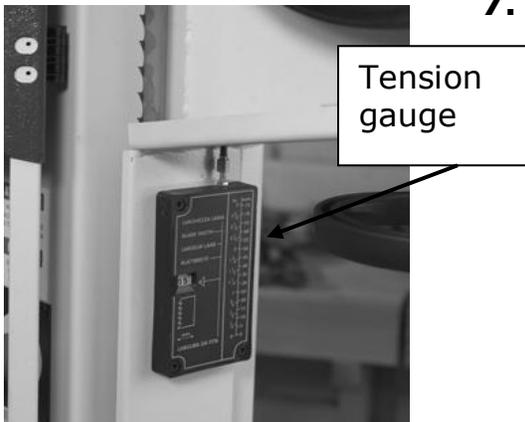


Note: The blade must be fully tensioned for final tracking.

Note: Never track the blade with the saw running.

6. Lock the tracking adjustment handle.

7. **Tensioning the blade** The blade tension indicator [mounted on the vertical post of the bandsaw]; is used as a general guide, and the following tensioning procedure is recommended.



Looking at the top wheel, place your finger at the 9 o'clock position. Move your finger down 6" and using moderate pressure with your thumb, press on the flat of the blade. You should get 3/16" to 1/4" of deflection.

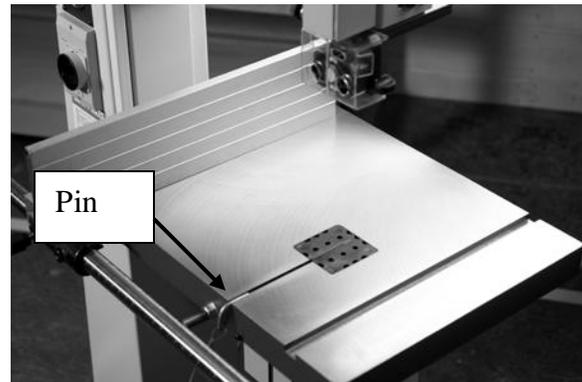
8. **Note:** If you are not using the bandsaw for extended periods of time [overnight], remove the tension on the blade. This will increase the life of your blade and the machine. If tension is left on the machine, flat spots or grooves can be formed in the rubber of the wheels which will detract from the performance of the machine and in extreme cases cause vibration when the machine is run.
9. Close the guard on the upper guide support post. Close the doors move the door blade guard up and lock in position. Replace the table insert, and check that the blade moves freely through the table insert. Replace the table pin. **Check** that all wrenches and loose parts are

removed from the machine.

- 10.** Plug the machine into the power, turn the machine on for a second and switch off. Watch how the blade runs. If the blade tracks well, then run the machine at full power.

Removing the blade from the band saw

1. Disconnect the power to the bandsaw.
2. Remove the pin that aligns the two table halves.
3. Open the upper-hinged blade guard.
4. Remove the table insert.
5. Remove the tension on the upper flywheel.
6. Open the doors and remove the blade from the wheels [use gloves and eye protection], and gently slide the blade through the table slot.



Tracking position of the blade on the wheels

Tracking large blades. There has been a lot of discussion on the position that the blade should be on the wheels. One group of people recommends that with large blades you should track the blade so that the teeth hang just over the front edge of the rubber. The second group recommends that all blades regardless of their size should run in the center of the wheel. The advantage of running the large blades with the teeth not contacting the rubber of the wheel is that they cannot damage the tire. The disadvantage is that the wheel is crowned and the blade is not tensioned in the center of the band, which gives the blade a tendency to wobble or flutter. The advantage of running large blades on the center of the wheels is that they are tensioned in the center of the band and have fewer tendencies to wobble and flutter. The disadvantage is that blades with a large set on the teeth have a tendency to damage the rubber of the tire. This does not have a great effect on the performance of the bandsaw as all blades are running on the center section of the tire which is not affected. We recommend that you balance all blades on the center of the wheels for optimum performance and a smoother cut.

Adjusting the blade guides

Introduction

Welcome to a new era in bandsawing. You have purchased a bandsaw with a revolutionary blade guide system [patent pending] 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 the back of the blade. This can allow the blade to twist as pressure from the wood

being cut pushes against the back blade guide. The Laguna Guide eliminates this by supporting the blade above and below the back blade guide, giving the blade unsurpassed stability. The Laguna 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 Laguna guide system.

- 1.** As with the roller guide systems, the Laguna 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, then adjust the surround guide blocks as detailed in this manual.
- 2.** When fitting a new blade to your bandsaw, adjust the guide blocks and run the blade by hand through the guide blocks for at least 2 complete revolutions. Note: 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 and 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 reduce 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 insure that the groove does not become too deep and will greatly extend the life of your guide.
- 5.** The Laguna guide system can be used with ¼" to 1¼" blades.
- 6.** The Laguna 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 Laguna 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 or green wood, 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 woods will gum the blade and the resin will have to be removed with solvent.

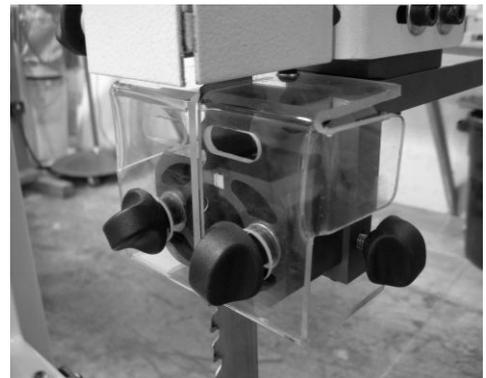
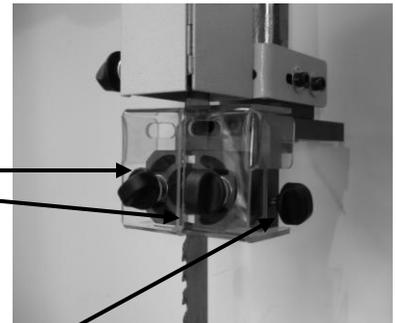
Adjusting the blade guides

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:

- 1. Top upper side guides parallel adjustment.** Loosen the clamp screw that attaches the guide to the vertical shaft and rotate the assembly until the side guide is parallel to the blade. Retighten the clamp screw. There is no adjustment on the lower guides.
- 2. Centralizing the back guide to the blade.** Loosen the 2 screws just above the 2 side guide blocks and move the assembly left or right so that the blade runs through the center of the back blade guide. Retighten the clamp screws. We are now ready to adjust the guides to the blade.

Top guide

- 1.** Rotate the blade by hand and ensure that it is tracking consistently in the correct position.
- 2.** Loosen the side guides.
- 3.** Loosen the 2 clamp screws that allow the guide assembly to move forward and back. Adjust so that the ceramic blocks are just behind the gullet of the tooth and retighten the clamp screws.
- 4.** Gently push one side guide so that it touches the blade and lock in position. Bring the other guide towards the blade so that there is minimal clearance between the blade and the guide. You can use 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. If the blade has a bad weld, dress the blade or return it to your supplier.
- 5.** 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.
- 6.** Rotate the blade by hand and check that the back of the blade does not hit the blade guide with a bad weld. If the back of the blade hits the back blade guide at the weld, then dress the blade or, in excessive cases, return the blade to the supplier.



Lower blade guide

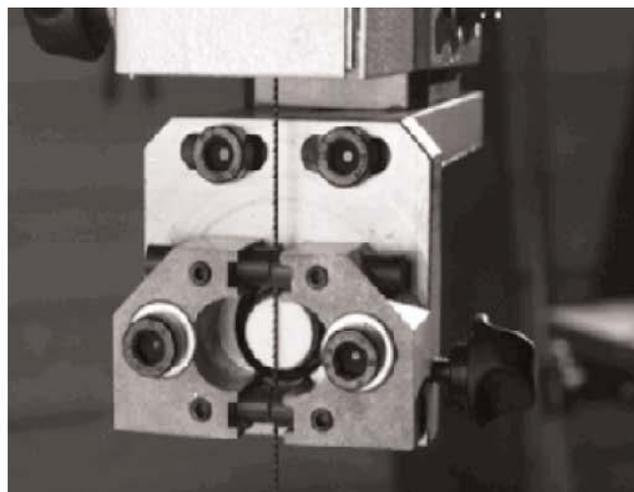
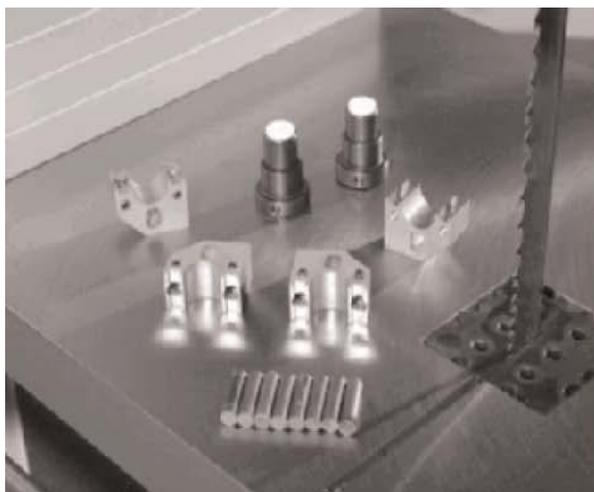
The lower blade guide is attached to a plate, which is slotted. The objective of the slots is to move the lower guide as close to the underside of the table as possible and give the blade maximum support. The shorter the distance that the blade is unsupported, the better the cut. If the bandsaw is operated with the table at an angle, the guide will have to be adjusted down as it could hit the table and reduce the amount of table movement.

1. Rotate the blade by hand and ensure that it is tracking consistently in the correct position.
2. Loosen the side guides.
3. Loosen the 2 clamp screws that allow the guide assembly to move forward and back. Adjust so that the ceramic blocks are just behind the gullet of the blade and retighten the clamp screws.
4. Place a dollar bill or piece of paper of similar thickness between the guide blocks and the blade. Gently bring both side guides towards 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 blocks, as this will cause damage. If the blade has a bad weld, dress the blade or return it to your supplier.
5. 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.
6. Rotate the blade by hand and check that the back of the blade does not hit the blade guide with a bad weld. If the back of the blade hits the rear blade guide at the weld then dress the blade or in excessive cases return the blade to the supplier.



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.

Fitting cool block guide system [Optional, not supplied with the machine].



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

Using the bandsaw

Although the bandsaw is usually associated with cutting curves, a variety of straight cuts are easily made with the saw. In fact, it is often used to rip wood because it is much safer than a radial arm saw and also has a smaller saw cut, so wastes less wood. This becomes very important when using expensive wood where wastage must be kept to a minimum. The cut is safer because the force of the cut is straight down on the table, the work cannot be pulled back or kicked back which sometimes happens with table or radial arm saws.

The bandsaw can also cut very thick stock, which the radial arm, or table saw cannot do. The disadvantage of cutting with the bandsaw is that the surface finish of the cut is not as good as with the table or radial arm saw. This can be overcome to a great degree by using the Resaw king blade from Laguna. The blade has a lot of advantages such as superior surface finish to the cut, thin kerf [low wood wastage], can be re-sharpened, will cut hard woods and a long life.

Ripping

Ripping is a cut made with the grain of the wood. The four most common cuts made with the grain of the wood are rip, bevel, taper and resaw cuts.

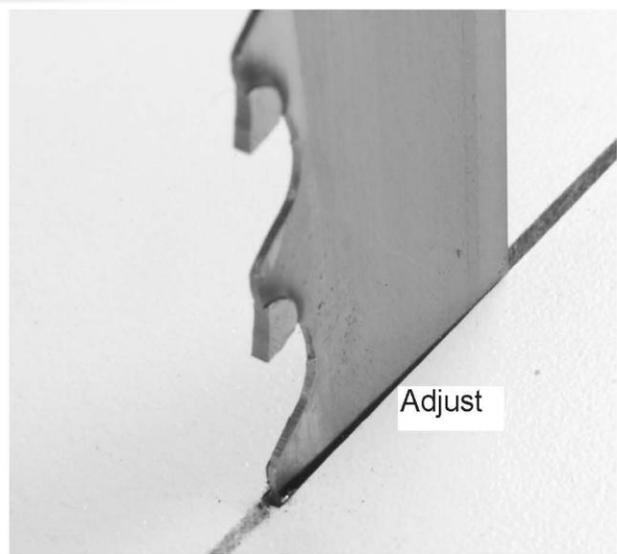
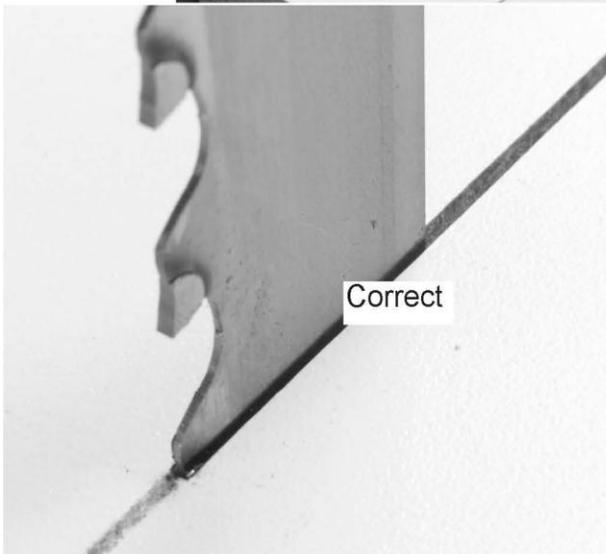
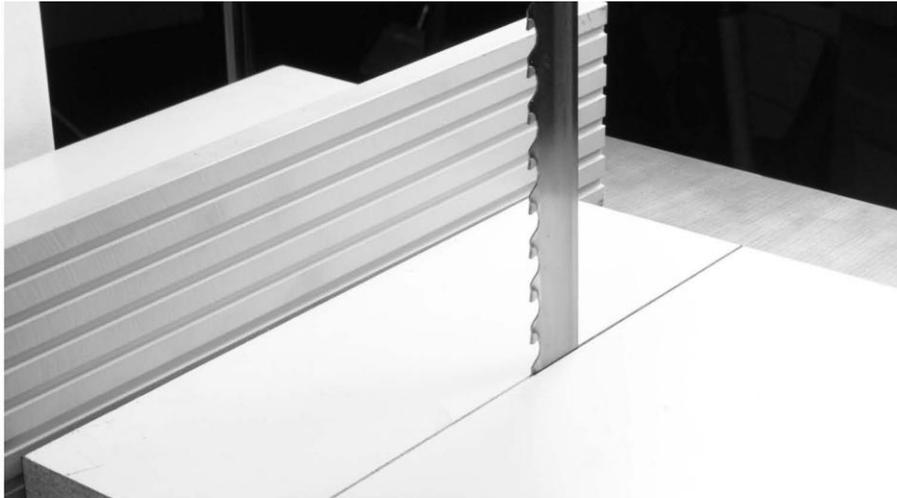
There are two frequently used techniques for making straight bandsaw cuts. One technique is to use a single point to guide the work. The rationale for using a single point is that the saw may tend to cut at a slight angle. This is called drift or lead. The single point allows the operator to compensate for the drift and cut the wood straight. With a little practice, you will obtain satisfactory results using this method. However, you own a real bandsaw, so this method is not recommended.

Another method is to use the rip fence as a guide. Once set up, this takes the guesswork out of cutting, reduces the stress on the operator and is a must for volume work. Once you have mastered the setup procedure, you will tend to use the single point method less and less.

Adjusting the fence

Method 1

- 1.** Make a straight pencil line on the edge of a board.
- 2.** Feed the wood into the blade cutting next to the pencil mark. If the blade is drifting, you will have to compensate by angling the wood to keep the cut straight.
- 3.** Stop the cut in the middle of the wood and mark [pencil] the angle on the table. This is the angle of drift and you will have to set the fence to the pencil line.
- 4.** To adjust the fence, loosen the clamp bolts that attach it to the cast-iron bracket. Move the fence so that it lines up with the pencil mark on the table and retighten the clamp screws.



Method 2

1. Set the fence parallel with the blade by loosening the clamp screws that hold it to the cast-iron bracket. It is not important that it is exact as you will be readjusting later in the procedure.
2. Using a piece of scrap wood, make a cut while holding the wood against the fence. Stop the cut in the middle of the wood.
3. Look at the position of the back of the blade within the saw cut. The back of the blade should be in the center of the slot, but you will probably find that it is closer to one side.
4. Slightly loosen the clamp screws and adjust the fence to compensate.
5. Repeat 2, 3 and 4 until the blade is centered. **Note:** you may have to do several fine adjustments, and it is better to do several small adjustments until you become skilled at the procedure. Once you have mastered the process, it should only take a minute to perform the adjustment.

Note: Each blade has a slightly different drift, and each time you change a blade, you must check and readjust if necessary.

Note: It is worth taking the time to set the fence accurately as it will save frustration and enhance the performance of your machine.

Fence positions

The aluminum fence can be used in two height positions [high and low] the low position is handy for cutting thin wood and is used were the fence in the high position would make it awkward to complete cuts. The fence in the high position is used for supporting tall work.



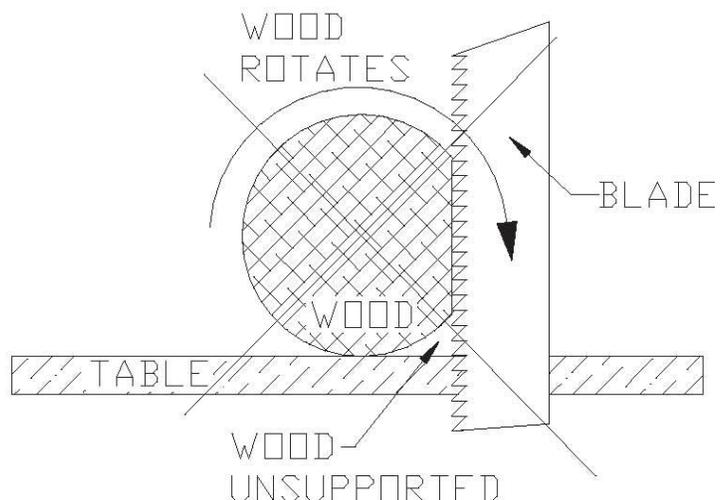
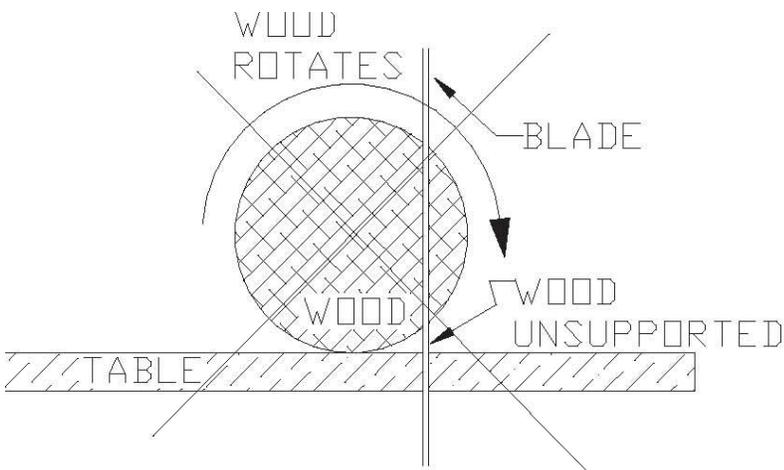
Changing the fence height

1. Loosen the two clamp screws that are located on the cast-iron bracket.
2. Slide the aluminum fence off the cast iron bracket.
3. Slide the aluminum fence back onto the bracket using the second slot and retighten the clamp screws.

Resawing

Resawing is the process of cutting a board in half along its height. The bandsaw is perhaps the most creative tool in the shop because of its ability to cut thick or thin, straight or curved. The ability to cut thick stock such as re-sawing, making veneers, book matching or cutting flitches from small logs has great appeal to the woodworker. These capabilities greatly enhance the woodworker's design ability without the need for additional equipment. When a board is re-sawed and the two pieces are lying next to each other you will note that they are mirror images of each other. When these two boards are glued together, it is called book-matching.

Note: It is unsafe to cut wood that is unsupported by the table and should never be attempted. This is especially important to note when cutting round logs.



Blades

Introduction

The selection and use of blades is a very extensive subject and there have been many books written on the subject. This section of the manual is intended as a general guide only.

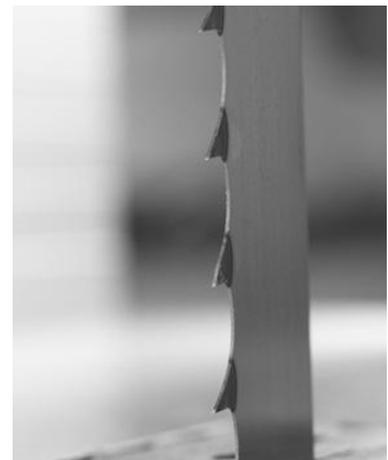
Selecting a blade

Using the correct blade is important, as it is the first step in attaining good bandsaw performance. The most frequently asked question is "How do I decide on the correct blade to use?" The answer is not simple, and we will explore it in this section of the manual. Firstly, there is NO ideal blade that will do everything. The blades that you choose will be determined by the type of work that you are doing. Large-tooth wide blades are selected for fast course cuts, and fine thin blades are used for intricate scrollwork. You will find that you will need a large selection of blades if you do a lot of varied work and fewer blades if you are concentrating on one section of band-sawing such as re-sawing. Using the wrong blade is the best way to abuse it. Using a blade for its intended purpose allows for maximum efficiency and is the best way to prolong its life.

Blade terms

Set

The amount that the teeth are wider than the thickness of the backing material. The larger the set the larger the saw cut and the smaller the radius that can be cut. This can also be an advantage if you are cutting a job that has a tendency to nip the blade. The smaller the set, the smaller the saw cut and the larger the radius that can be cut, but the wood that is wasted is less. On tipped blades [Resaw king] there is no set as the tip is wider than the backing material



Thickness

The thicker the blade, the stiffer the blade and the straighter the cut. The thicker the band the greater the tendency for the blade to break.

Pitch

The size of the teeth. This is usually quoted in teeth per inch [T.P.I.] The larger the tooth, the faster the cut because the tooth has a large gullet and has a greater capacity to transport large amounts of sawdust through the job. The larger the tooth, the coarser the cut and the poorer the surface finish of the cut. The smaller the tooth, the slower the cut as the tooth has a small gullet and can not transport large amounts of sawdust through the job. The smaller the tooth, the finer the cut and the better the surface finish of the cut

Material Hardness

When choosing the blade with the proper pitch, one factor you should consider is the hardness of the material that is being cut: the harder the material, the finer the pitch that is required. For example, exotic hardwoods such as ebony and rosewood require blades with a finer pitch than American hardwoods such as oak or maple. Soft wood such as pine will quickly clog the blade, decreasing its ability to cut. Having a variety of tooth configurations in the same width will most likely give you an acceptable choice for a particular job.

There are certain things that indicate if a blade has a proper pitch, too fine a pitch or too coarse a pitch. Some are listed below:

Proper Pitch

- Blades cut quickly.
- A minimum amount of heat is created when the blade cuts.
- Minimum feeding pressure is required.
- Minimum horsepower is required.
- The blade makes quality cuts for a long period.

Pitch is Too Fine

The blade cuts slowly.· There is excessive heat which causes premature breakage or rapid dulling.· Unnecessarily high feeding pressure is required.· Unnecessarily high horsepower is required.· The blade wears excessively.

Pitch that is Too Coarse

The blade has a short cutting life.
The teeth wear excessively.
The bandsaw vibrates.

Width

The dimension from the back of the blade to the front of the teeth. The wider the blade, the stiffer the blade and the straighter the cut. This is usually called beam strength. But wide blades cannot cut small radiuses.

The narrower the blade, the more flexible the blade and the greater the tendency the blade has to wander. They have low-beam strength, but can cut small radiuses. Blades are available from 1/16" up for your machine, but for very narrow blades the normal guides have to be replaced with cool blocks [not supplied with the machine].

Kerf

The width of the saw cut. The larger the kerf, the smaller the radius that can be cut. But the greater the amount of wood the blade has to be removed by the blade and the greater the horse power that is needed as the blade is doing more work. The greater the kerf, the larger the amount of wood that is being wasted by the cut.

Hook or rake

The cutting angle or shape of the tooth. The greater the angle, the more aggressive the tooth and the faster the cut. But the faster the cut, the faster the tooth will blunt and the poorer the surface finish the cut will have. Aggressive blades are suitable for soft woods but will not last when cutting hard woods. The smaller the angle, the less aggressive the tooth, the slower the cut and the harder the wood that the blade is suitable to cut. Hook teeth have a progressive cutting angle and take the form of a progressive radius. They are used for fast cutting where finish is not important. Rake teeth have a flat cutting angle and are used for fine surface finish of the cut.

Gullet

The area for the sawdust to be transported through the wood in. The larger the tooth [pitch], the bigger the gullet.

Relief

The angle from the tip of the tooth back. The greater the angle, the more aggressive the tooth but the weaker the tooth.

Beam strength

This is the ability of the blade to resist bending backwards. The wider the blade the stronger the beam strength, therefore a 1" blade has far greater beam strength than a 1/8" blade and will cut straighter and is more suitable for re-sawing.

Blade selection

As you will have seen from the previous section there are a great number of variables. The blade selection that you will make will greatly depend on the type of work that you are doing or intend to do with your machine. If you have experience with the bandsaw, you will probably have a good idea of the blades that are suitable for you.

If you lack the experience or are unsure of the type of work you will be doing with your machine, we recommend that you purchase a selection similar to that listed below which is a good general selection and will tackle most jobs. As you gain experience, you will settle on the blades that suit you.

- 1.** 1/4" 6 T.P.I. This is a small aggressive blade that is suitable for tight curves and fast cutting where good surface finish of the cut is not important.
- 2.** 1/4" 14 T.P.I. This is a small fine blade suitable for reasonably tight cuts where the surface finish is important but speed of cut is less important.
- 3.** 1/2" 3 T.P.I. This is a general-purpose blade that can cut large radiuses and short sections of straight cuts. The cut is fast and the surface finish of the cut is poor.
- 4.** 3/4" 3 T.P.I. This is a general-purpose blade, which will be used for straight cuts and is suitable for large radiuses.
- 5.** 1" 2 T.P.I. This is a re-saw blade, which will be used for straight cuts and is suitable for processing veneers.
- 6.** If you are going to be cutting hard woods or require superb surface finish then you should consider purchasing a Resaw king blade from Laguna.

Rounding the back of the blade

With most guide systems it is recommended that the back of the blade be rounded with a stone. As the machine is supplied with Laguna ceramic guides, this is not imperative as the ceramic will round the back of the blade as it is used. However, if you decide that you want to round the back of the blade, below is a procedure.

A round blade back creates smooth interaction between the thrust bearing and the blade. If the blade rotates slightly, there is no sharp blade corner to dig into the thrust bearing; also, the rounding process smoothes the weld. A blade with a round back makes tight turns better because the round back has smooth interaction with saw kerfs. After the guides have been adjusted and the machine is running, hold the stone against the back corner of the blade for about a minute. Wear safety glasses when rounding the blade. Then, do the same thing on the opposite corner. Next, slowly move the stone to round the back. The more pressure you put on the back, the faster you will remove the metal. Be careful that the inside of the machine is free of sawdust because sparks could start a fire. On small blades such as a 1/8" blade, the pressure on the back of the blade may bring the blade forward off the front of the wheels. Therefore be careful not to put too much pressure on the stone. When doing this, it is also important that the upper guides are positioned right above the stone.

The blade has teeth and extreme caution must be exercised, as your hands will be very close to them.

Causes of Blade Breakage

- Excessive blade thickness in relation to the flywheel diameter.
- Defective welding.
- Incorrect tension, particularly if the blade is over tensioned, the tension spring no longer fulfills its function.
- After use it is recommended to slacken the tension, especially overnight (placing a visible notice of this operation).
- Misalignment of the flywheels.
- Irregularity of flywheel surface, e.g. an accumulation of sawdust while cutting resinous materials.
- You can correct these problems by readjusting the machining, changing the way you operate it, or by changing the blade. Try only one change at a time.

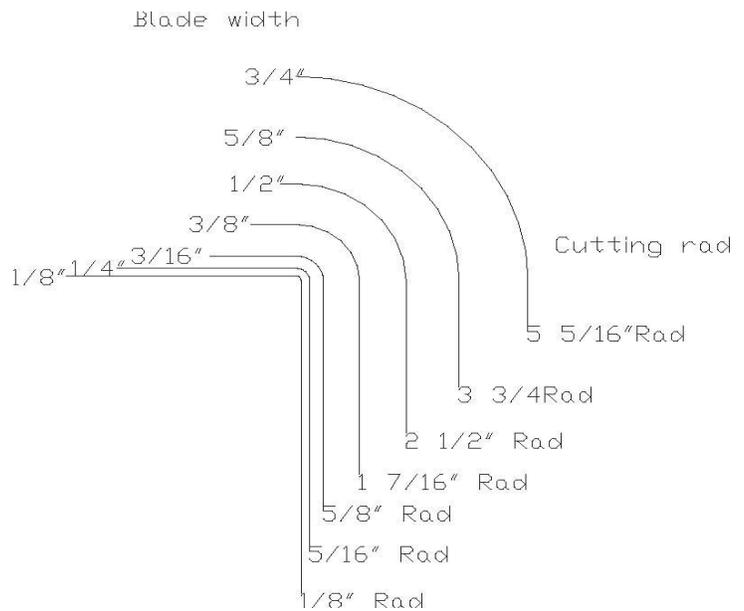
Causes of the blade dulling

- Poorly set side guides and/or rear thrust guide.
- Poor tracking.
- Wrong blade selection. If the blade is too narrow, it will flex more easily and decrease the quality of the cut. The blade should also have the correct pitch and width.
- The tooth pitch is too fine (too many teeth per inch).
- Certain woods will dull a steel blade very quickly, specially tropical hardwoods [teak, koa, etc]. Other woods with a high silicon content will also dull the blade quickly; even a cut as short as 6" will cause damage to the blade.
- On certain exotic woods the ends have been painted. This is done to control the drying. The paint is very abrasive and will dull the blade is you cut through it. It is recommended that you cut the painted ends off your wood.

Using a radius chart

Until you become well acquainted with your saw it is best to use the contour (radius) chart to determine which size blade to use for a specific application. Radius charts can be found in many woodworking books, magazine articles, and on blade boxes. They differ slightly from one another but are good as rough indicators of how tightly a curve can be cut with a particular blade. Each blade saw, and operator is different so it is impossible to make a truly accurate chart. A blade can cut continuously without backtracking any curve that has a radius as much as or more than is shown on the chart. For example: a 3/16" blade will cut a circle with a 5/16" radius or a 5/8" diameter. To test if a 3/16" blade would work for a particular curve place a dime, this is roughly 5/8" over the pattern. The 3/16" blade can cut a curve bigger than the dime, but not smaller. You can use everyday items such as coins or a pencil to determine which blade to use. A quarter is the size of the tightest cut that can be made with a 1/4" blade. A dime is the size of the tightest curve that can be cut with a 3/16" blade. A pencil eraser is the size of the tightest turn that you can make with a 1/8" blade. After a while you won't even need an object to size the possible curve of a blade because you will have become familiar with this process. There are options to matching the blade to the smallest curve pattern. If there is only one very tight cut, it may be best to use a turning hole, a relief cut, successive passes, or to change the blade. If you have a lot of cutting to do, you can use a wider blade for the bigger curves and then switch to a narrower blade for the tighter curves. Changing the blades can often save cutting and finish time.

The chart to the right, is only a rough guide and is **not to scale**, but from the information you can construct your own guide.

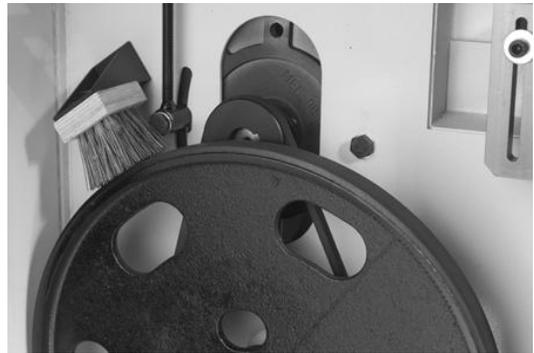


Maintenance and troubleshooting

All tools and machines require regular maintenance, and the bandsaw is no exception. This section details the general maintenance and care of your bandsaw. In general, we recommend that you only use a Teflon-based lubricant on the bandsaw. Regular oil attracts dust and dirt and the Teflon tends to dry and has fewer tendencies to accumulate dirt and sawdust on your machine.

Cleanliness and tire maintenance

One of the major concerns is the cleanliness, in particular, how clean the tires are. As the saw cuts, some sawdust lands on the tire of the lower wheel. As the wheel rotates, the sawdust becomes compressed on the tire. This is especially true for woods such as pine. The compressed sawdust could have a negative effect, such as vibration, short blade life and cause the blade to drift.



A brush contacts the lower wheel and helps to prevent buildup. You should inspect the tires regularly to check that buildup is not happening, especially the lower wheel. The tires are made of rubber and wear just like car tires. They wear in the middle, which causes a concavity in the tire. The deformation makes it hard to track the blades, and for this reason it is important to maintain the original shape of the tire.

The best way to clean the tire surface and maintain the original shape is to sand it with sand paper. The old tire surface often hardens and glazes over and should be redressed occasionally. This can be done by sanding the wheel with 100-grit sandpaper. This will take off a little of the rubber and expose new rubber, which is desirable. Rotate the wheels by hand with the blade removed.

Guides

The ceramic side and back guides should be inspected regularly for cracks and chips. If they are damaged, they should be replaced as they could damage your blades and bad guides will detract from the performance of the bandsaw. The guides should be cleaned regularly and any wood gum or dirt removed. Any commercially available solvent can be used, and after cleaning they should be lubricated with Teflon-based lubricant.

Drive belt/s

The drive belt should last for many years [depending on the usage] but needs to be inspected regularly for cracks, cuts and general wear. If damage is found, replace the belt. If your machine is a 2-belt system, then both belts must be replaced at the same time, as they are a matched pair. Never change only one belt as this could cause vibration.

Replacing the drive belt(s)

To replace the belt/s you will have to remove the lower wheel.

- 1.** Remove the allen screw that clamps the wheel to the axel.
- 2.** Using a gear puller remove the lower wheel. Take care not to damage the clamp screw thread.
- 3.** Replace the drive belts.
- 4.** Refit the lower wheel and re-clamp with the allen screw.

It is better to replace the drive belt/s early than to have a breakdown during an important job.

Table insert

The table insert [throat plate] is made of plastic and is designed not to damage the blade should they come in contact. If the blade slot becomes too wide or the insert becomes damaged by the blade, it should be replaced. The replacement insert will have to be fitted to the table hole, and you will have to sand the sides. You will also have to cut the blade slot, and this should be done prior to sanding the sides as the insert could spring and change size. The table is provided with 4 jacking screws that can be adjusted so that the insert is level with the top of the table.

Bearings

All bearings are sealed for life and do not require any maintenance. If a bearing becomes faulty, replace it.

Rust

The bandsaw is made from steel and cast iron. All non-painted surfaces will rust if not protected.

It is recommended that the table and fence bar be protected by coating with wax if the machine is not in constant use. All moving non-painted surfaces [guides, rack and pinion, etc.] should be lubricated / protected with a Teflon-based lubricant.

Rack and pinion

The band saw is fitted with a rack and pinion, which rises and lowers the upper guides. It should run smoothly. If there is excessive play or it is too tight, the following adjustment can be made.

- 1.** Loosen the 3 allen screws that clamp the vertical adjustment handle to the band saw.
- 2.** There is clearance in the holes and the vertical adjustment handle can be adjusted.



Note: the machine comes factory-set, and no adjustment should be required.

Lower wheel tracking

This adjustment is achieved by loosening the shaft clamp screw and moving the shaft with the 4 bolts provided. The two vertical bolts control one axis and the two horizontal bolts control the other axis.

Adjustment procedure

Install a blade, tension and track. Use a 1/4" wide blade. **Note** the position of the blade on the lower wheel.

Vertical adjustment

Mark the bolts so that you have a reference to their original position. If you get confused, you can go back to the original position.

Correction for fig. A

Loosen the shaft clamp screw that is positioned in the center of the 4 adjusting bolts. Loosen the top vertical bolt $\frac{1}{4}$ turn and tighten the bottom bolt.

Do not try to do big adjustments, but rather complete several small adjustments.

Turn the wheel by hand and notice the change in position of the blade on the lower wheel.

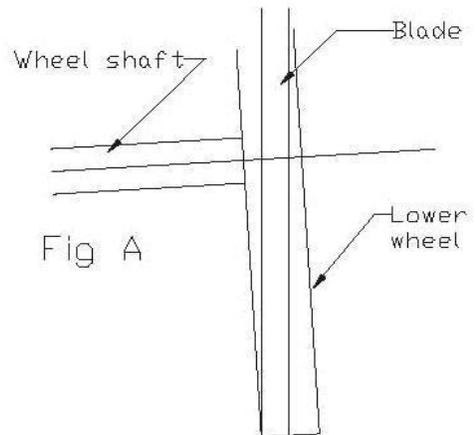
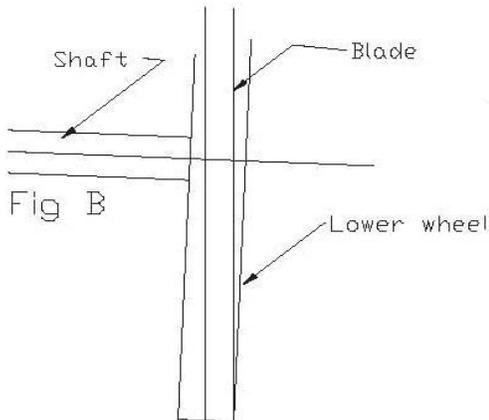
Repeat the adjustment procedure if required.

Once the adjustment is completed retighten the shaft clamp screw.



Correction for fig. B

The procedure is the same as for Fig. A, but loosen the bottom bolt and tighten the top bolt.



Correction for horizontal

If the right-hand side of the wheel needs to come forward. Loosen the shaft clamp screw that is in the center of the 4 adjusting bolts. Loosen the bolt that is directly behind that side of the wheel $\frac{1}{4}$ turn and tighten the bolt opposite. Turn the wheel by hand and notice the change in position of the blade on the wheel. Repeat the adjustment procedure if required. Once the adjustment has been completed, tighten the shaft locking screw. If the left-hand side of the wheel needs to come forward, the procedure is the same as above, but loosen the left-hand bolt and tighten the right hand side bolt.



Note: Before connecting the machine to the power, ensure that all bolts and locking nuts are tight, including the shaft clamp screw.

Top guide vertical adjustment shaft

The top guide when moved vertically tracks the blade and comes factory-set. Adjustment is provided should that mechanism become misaligned. There is a plate at the top of the shaft with two bolts. This guides the top of the shaft. If the bolts are loosened the tracking of the guide can be adjusted. This is a tricky operation and should only be attempted if an extreme error has occurred.



Adjustment procedure

1. With the guide at its highest position, adjust the side guides so that there is approximately 1/16" clearance on each side.
2. Adjust the back guide so that it is 1/16" behind the back of the blade.
3. Attach a piece of paper to the table with scotch tape/ masking tape in the area covered by the blade guide.
4. Lower the guide and mark its position on the paper. This will give you a reference point to work from.
5. Move the guide up and down and note any change in the relationship between the blade and the guide [both side and back].
6. Only if adjustment is needed, loosen the two bolts on the guide plate & move the guide back / forward, left / right depending on the adjustment needed.
7. Tighten the two bolts on the guide plate, move the guide up, down, noting the relationship between the blade and the side and back guide.
8. If the adjustment needs to be refined, repeat the procedure.

Troubleshooting Bandsaw will not start

1. Check that the start switch is being turned fully to the right.
2. Check that the red stop switch is fully out. Press the switch in and then pull the switch out. You will then hear a click.
3. Check that the electrical power cord is plugged into the power outlet.
4. Check that the electrical supply is on [reset the breaker].
5. Check that both doors are closed.
6. Check that the foot brake is fully in the up position.
7. With the power disconnected from the machine, check that the wiring in the terminal box is correct. Check that the rubber insulation is stripped enough and is not causing a bad connection. Check that all the screws are tight.
8. Test the safety circuit. With the power disconnected from the machine, use a multi-meter / circuit tester, to check that there is continuity

between 5L3 [red wire] and the red wire beside 2T1. To gain access to the terminals, you will have to remove the switch plate from the front of the machine. This circuit is a loop that has the foot brake, stop switch and door switch. It is designed to be fail-safe, and any switch that is not functioning or set correctly will cause the machine not to start. If there is no continuity you will have to trace the switch that is open or faulty and correct the fault.

9. Check that you have the correct power 220V not 110V
10. Check that the earth wire is wired correctly.

The machine will not stop

This is a very rare occurrence as the machine is designed to be fail-safe. If it should occur and you cannot fix the fault, seek professional assistance. The machine must be disconnected from the power and never run until the fault has been rectified.

1. Stop switch faulty. Replace the stop switch.
2. Internal breaker faulty. Replace the breaker.

Motor tries to start but will not turn

1. With the power disconnected from the machine open the doors and try to turn the wheel by hand. If the wheel is not turning, check the reason for the jamming. Typical reasons are: guides too tight, wood jammed in the wheel.
2. Capacitor faulty. Replace the capacitor.
3. Motor faulty. Replace the motor.

Motor overheats

The motor is designed to run very hot, but should it overheat it has an internal terminal overload protector that will shut it down until the motor has cooled down and then it will reset automatically. If the motor overheats, wait until it has cooled down and restart. If the motor shuts down constantly, instantly check for the reason. Typical reasons are dull blade, over feeding the wood, motor cooling fan clogged or faulty, motor cooling fins clogged and excessive ambient temperature.

Squeaking noise

1. Check that the motor cooling fan is not contacting the fan cover.
2. Check the bearings.
3. Check the drive belt.
4. Check that the guides are adjusted correctly.

Upper guide shaft is tight or loose

1. Clean and lubricate.

2. Adjust rack and pinion.
3. Bent rack. Replace the rack.

Blade slows down during a cut

1. Loose drive belt. Re-tension the belt.
2. Dull blade. Replace the blade or have it re-sharpened.
3. Feeding the wood too fast. Slow down the feed rate.
4. Insufficient set on the teeth [wood nipping the blade]. Change blade for a blade with the correct set.
5. Oil or dirt on the drive belt. Clean or replace the drive belts.
6. Fence not aligned correctly. Align fence.

Blade will not track on fly wheels

1. Bad blade. Change the blade.
2. Crown on the wheels worn or damaged tire. Dress the tires.
3. Wheels not co-planning. Adjust the lower wheel.

The blade kicks

Bad blade. Replace the blade.

The blade makes a clicking noise

Bad weld. Dress the weld or change the blade.

Blade overheats

1. Dull blade. Change the blade or re-sharpen the blade.
2. Pitch is too small for the depth of cut. Change to a blade with the correct pitch.
3. Guides too tight. Adjust the guides.
4. Wood too hard for the selected blade. Change the blade.
5. Blade too thick for the diameter of the wheels. Change the blade.

Machine vibrates

1. Machine not level on the floor. Re-level the machine ensuring that it has no movement.
2. Damaged drive belt. Replace the belt.
3. Double drive belt system. Only one belt changed and the belts are not balanced. Replace both belts with a matched pair.

Accessories

The following accessories are available from Laguna Tools.

Miter gage

Mobility kit.

Extension tables.

Work benches.

Tool cabinet [wall mounted].

Tool cabinet [floor standing].

Tool box.

Bandsaw blades.

Cool blocks.

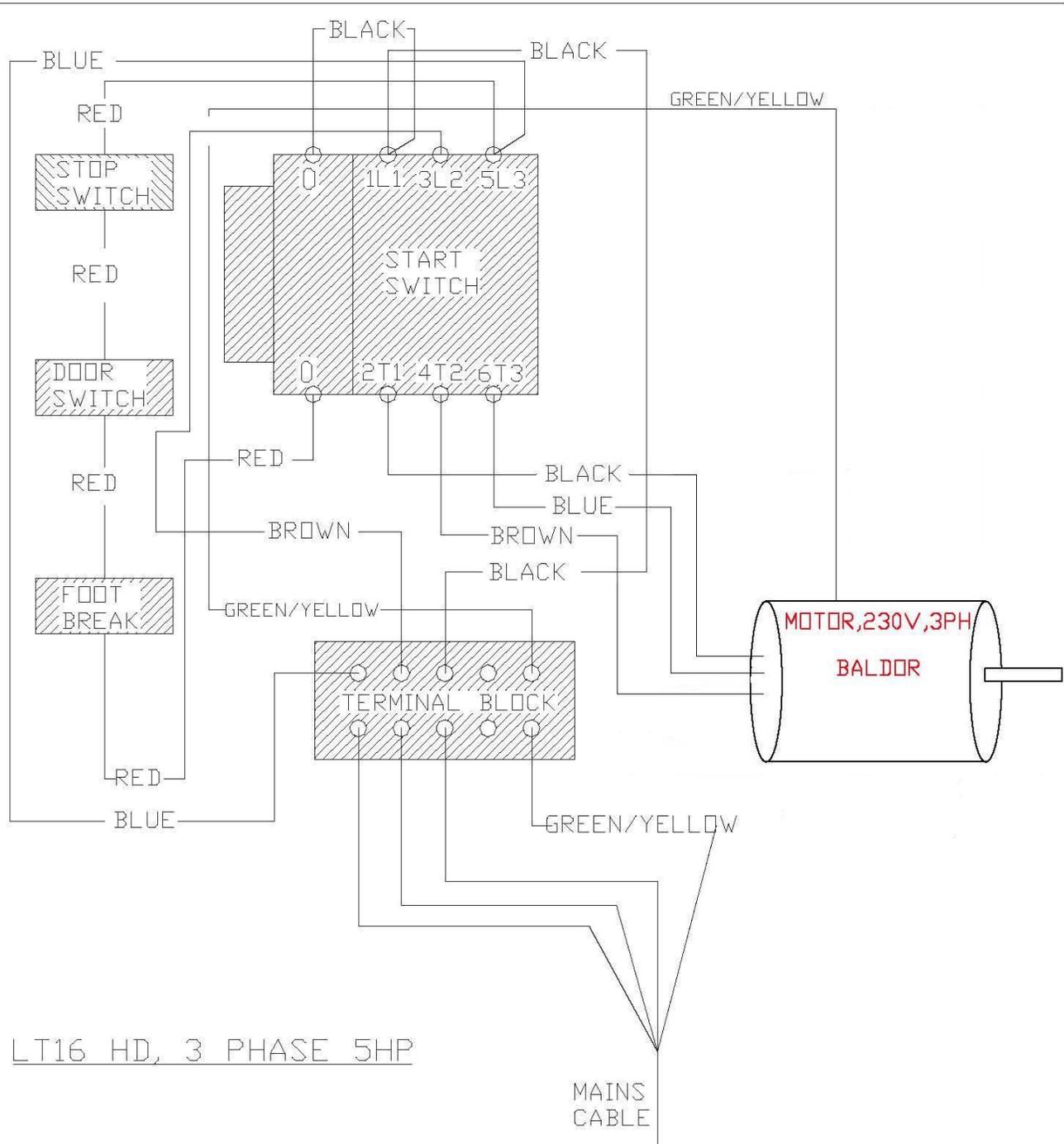
Cast-iron fence.

Large Laguna

Guides.

Power feeder.

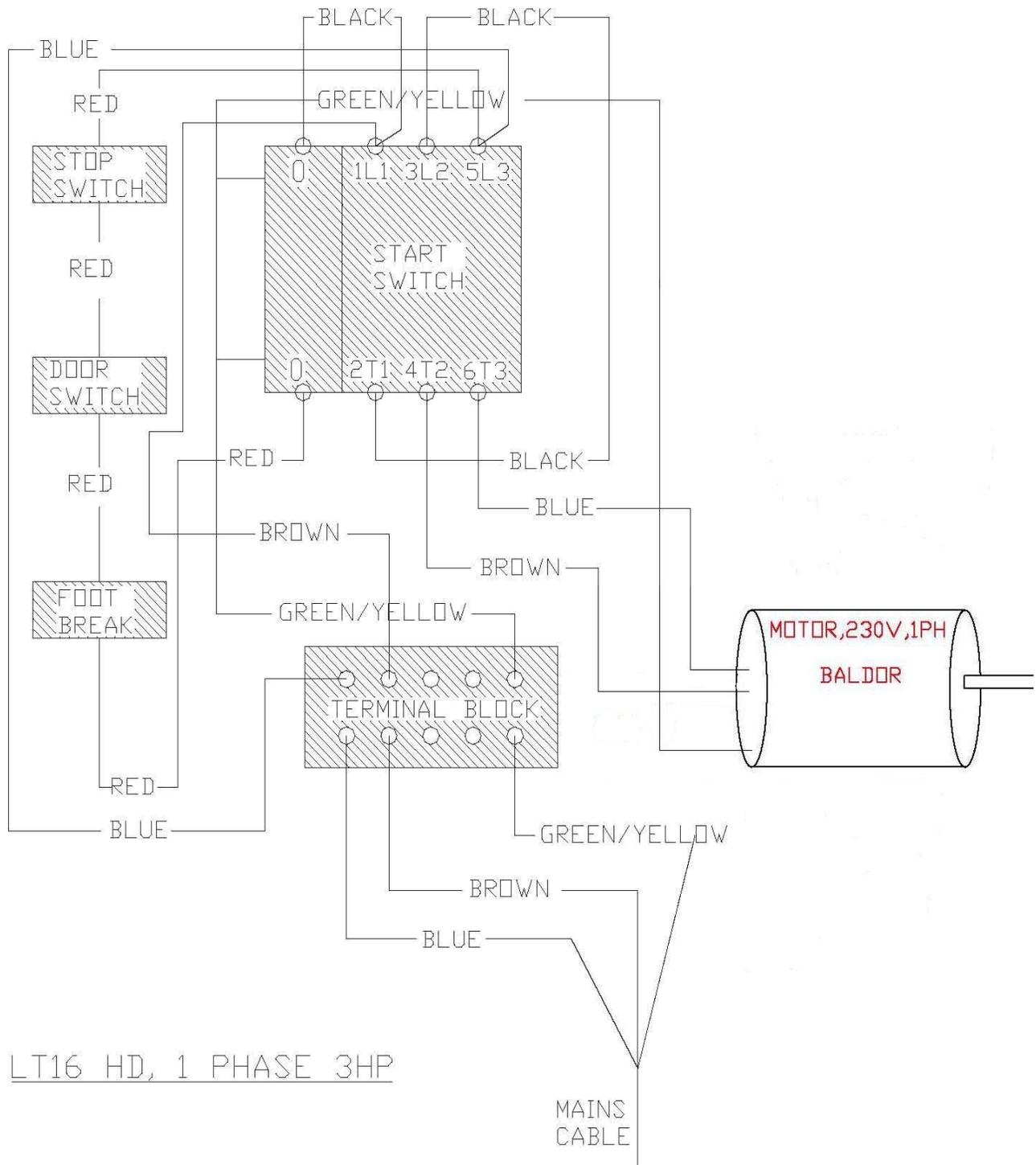
Electrical system drawing with switch (ON) knob



LT16 HD, 3 PHASE 5HP

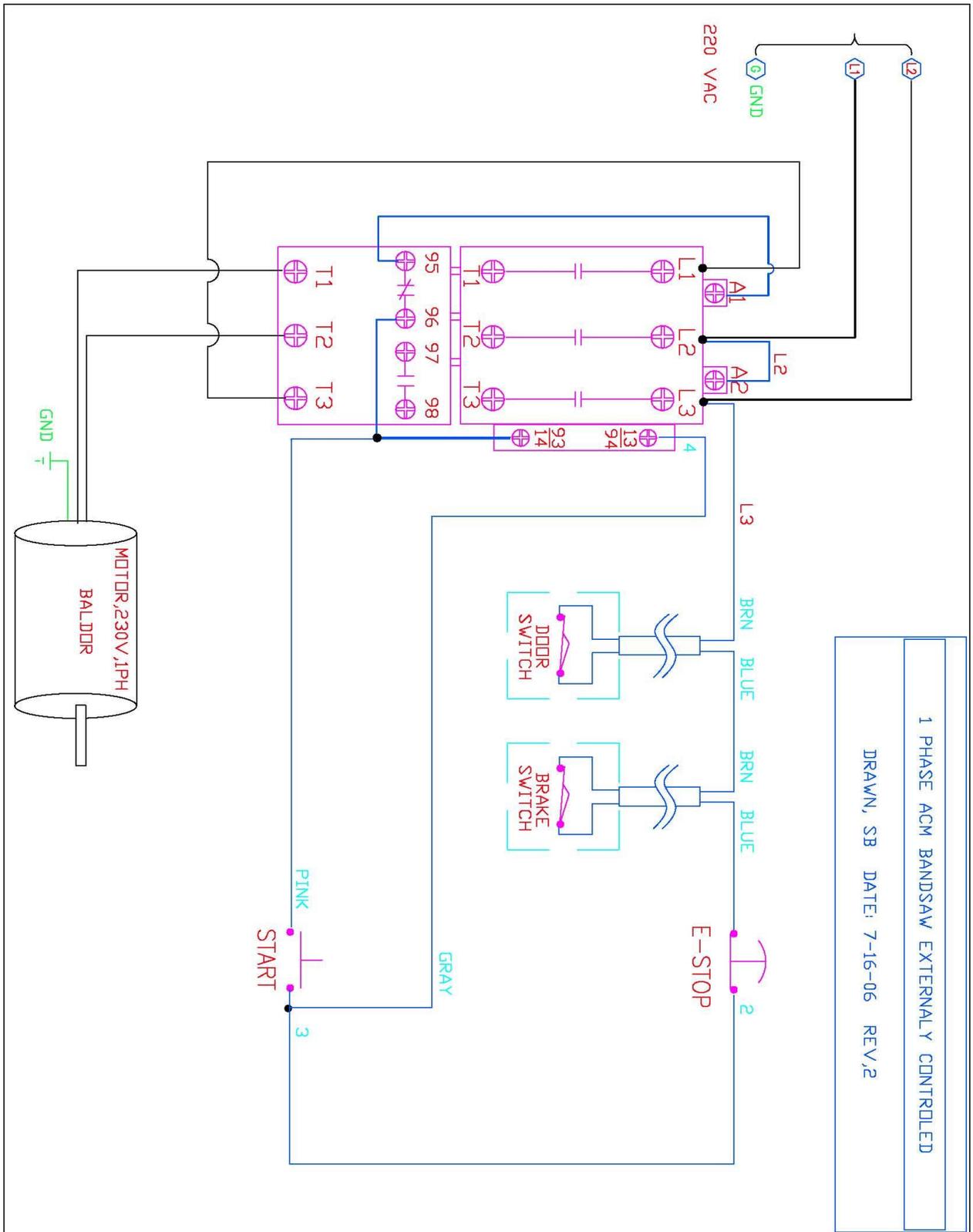
MAINS
CABLE

Electrical system drawing with switch (ON) knob



LT16 HD, 1 PHASE 3HP

Electrical system drawing with push (ON) button



Ordering spare-parts

When ordering spare parts, specify:

Machine Model and serial number.

Part number required, taken from the exploded view drawing on the following page.

Quantity required

EXAMPLE: TO ORDER LOWER FLY WHEEL FOR LT16HD

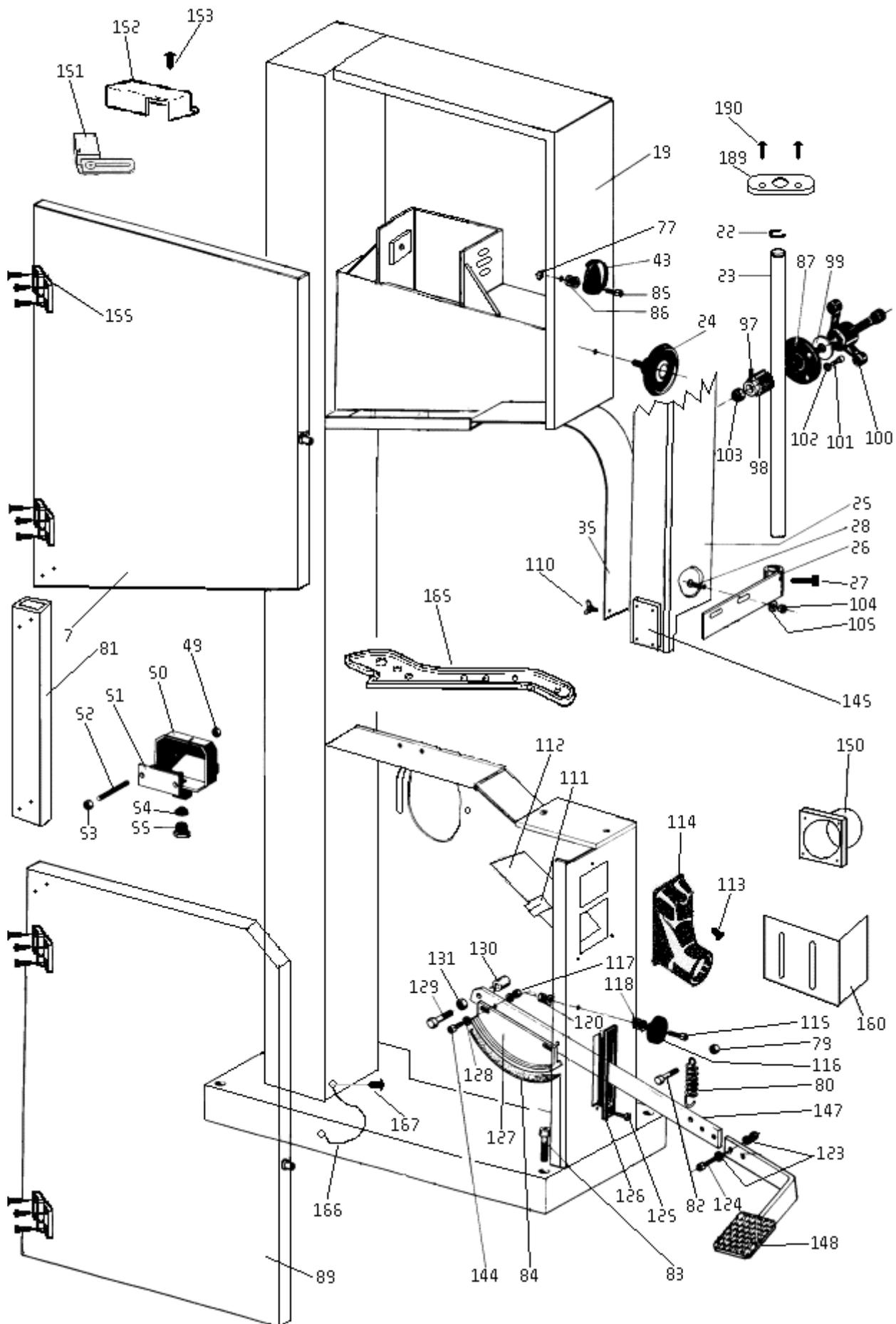
Model : LT16HD

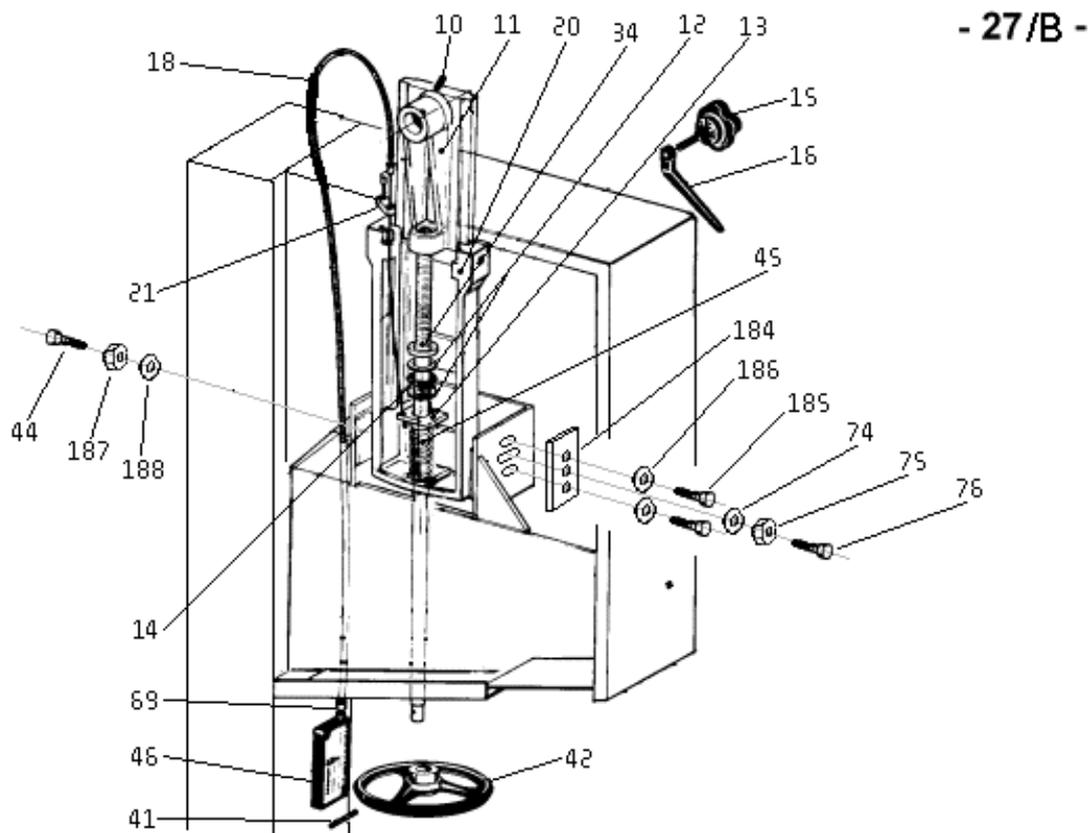
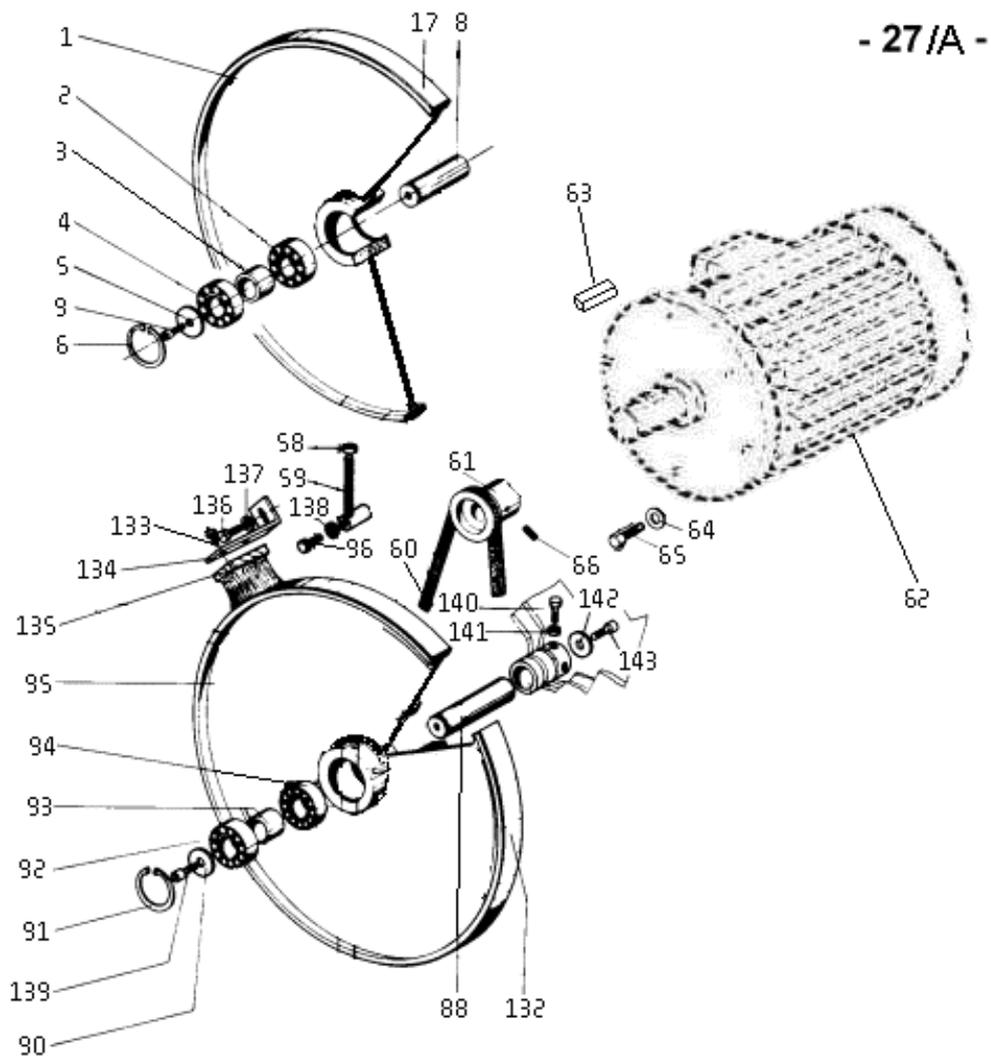
Part name: Lower fly wheel

Serial number: 12345

Part number: 95

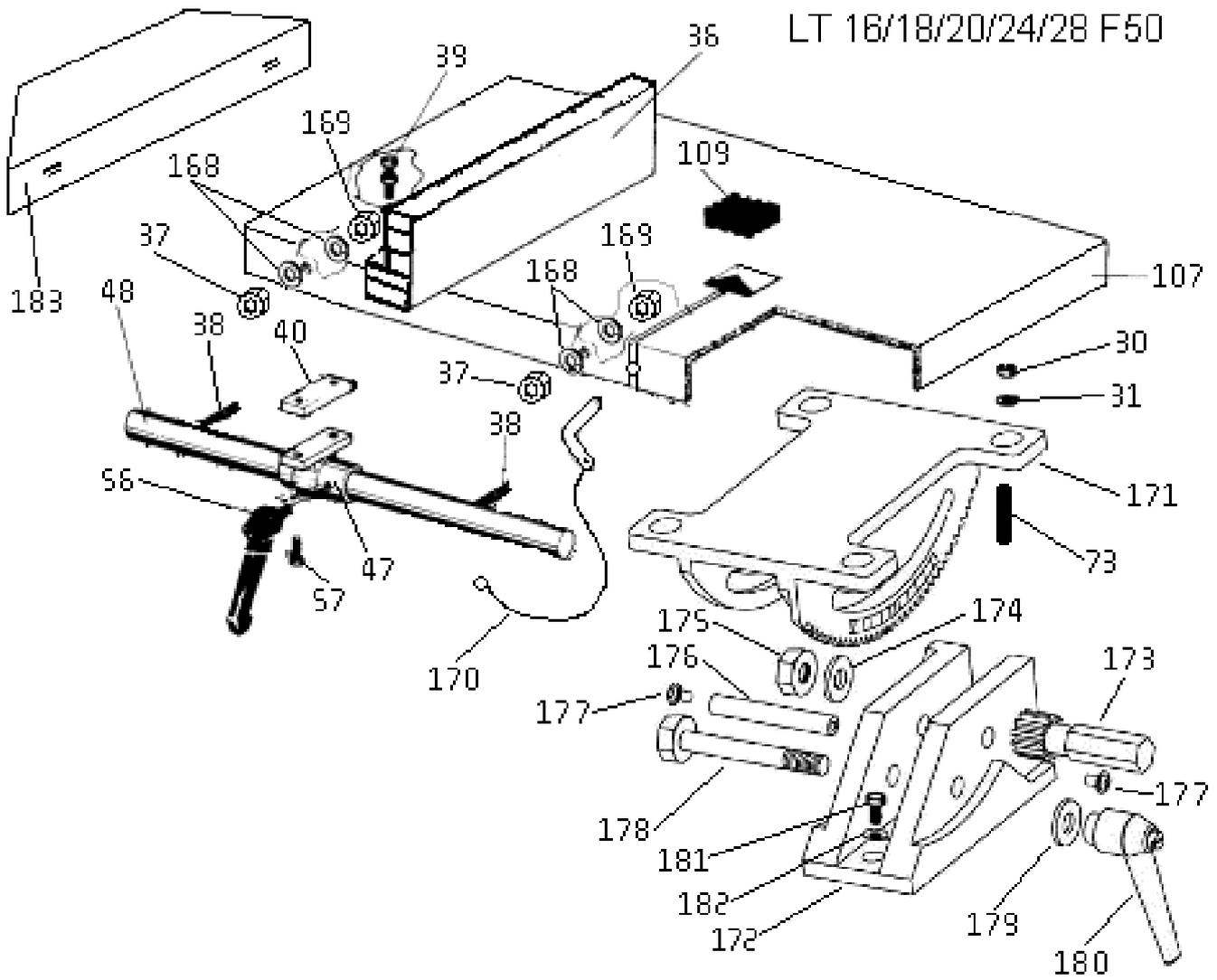
Quantity: 1 piece





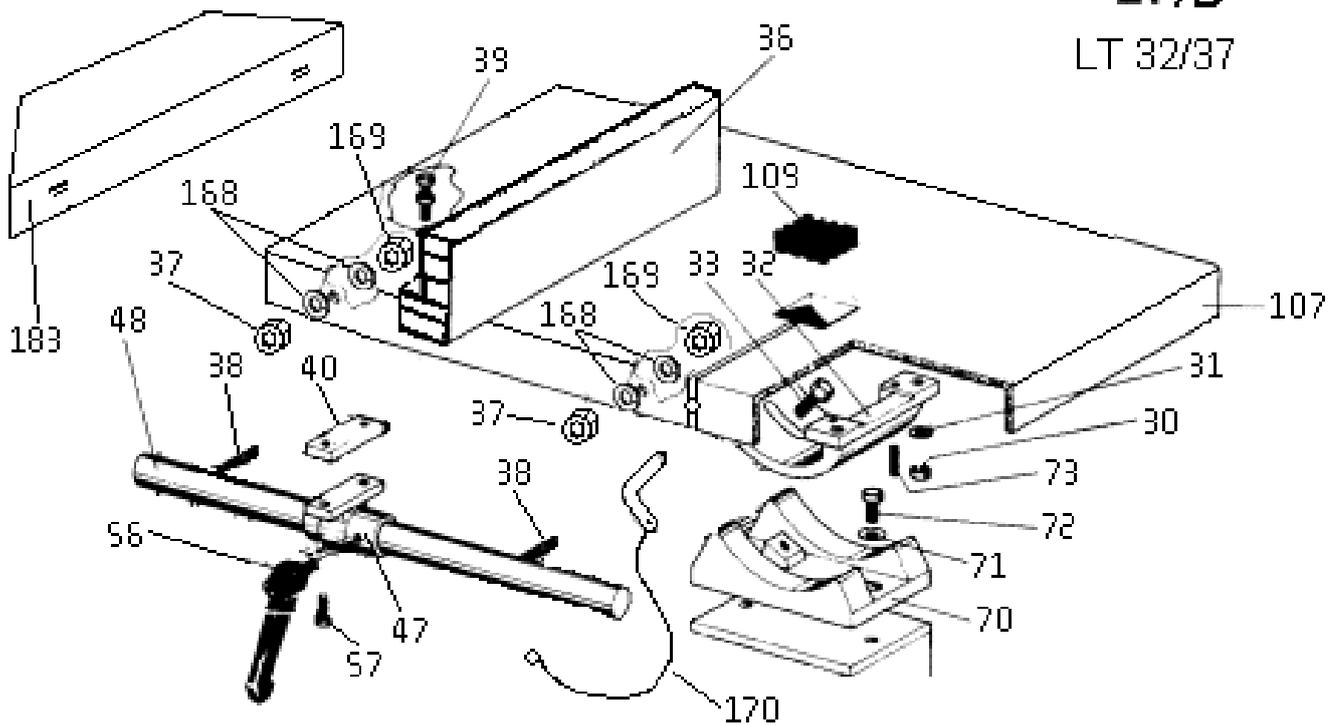
- 27/C -

LT 16/18/20/24/28 F50

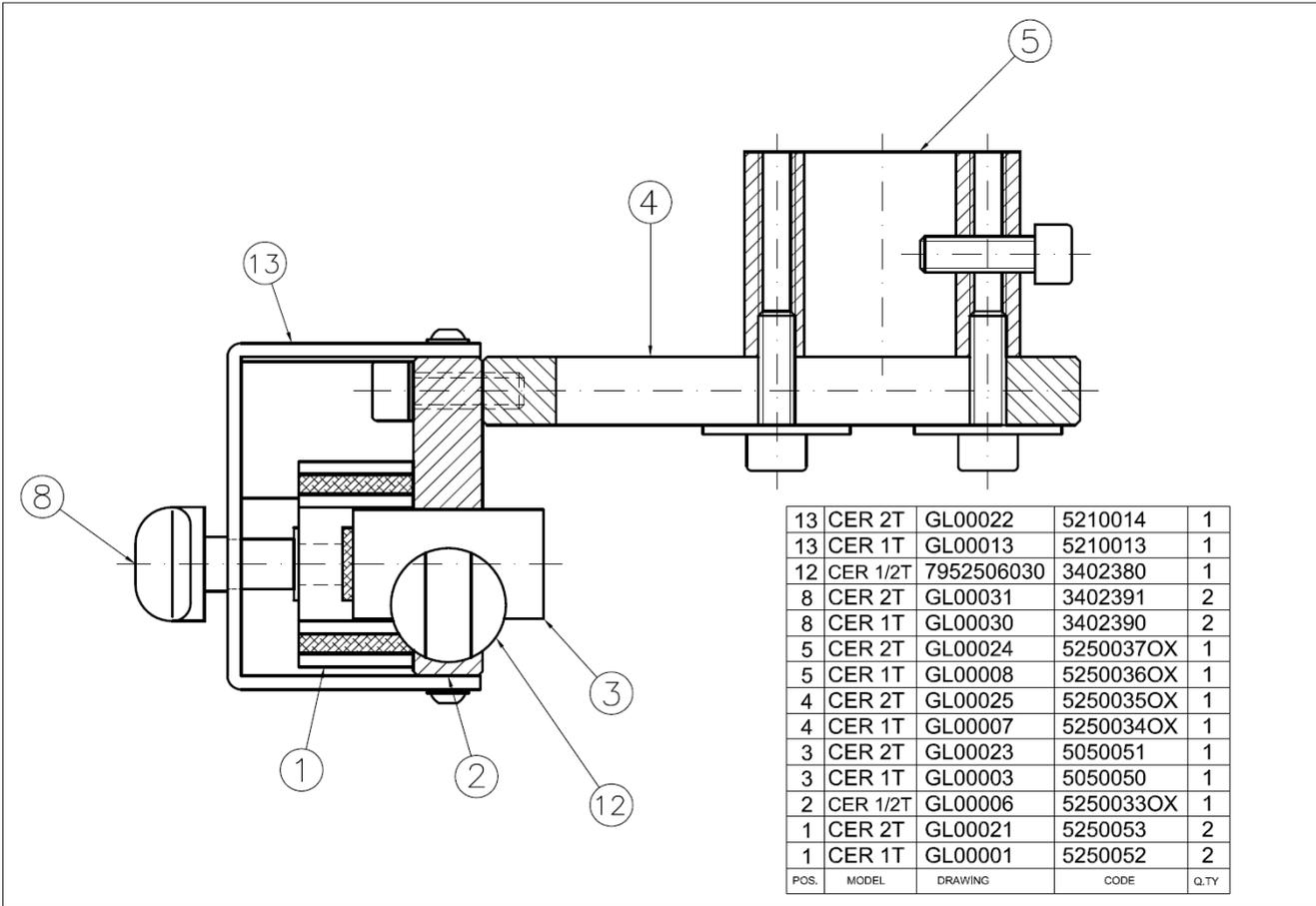


- 27/D -

LT 32/37

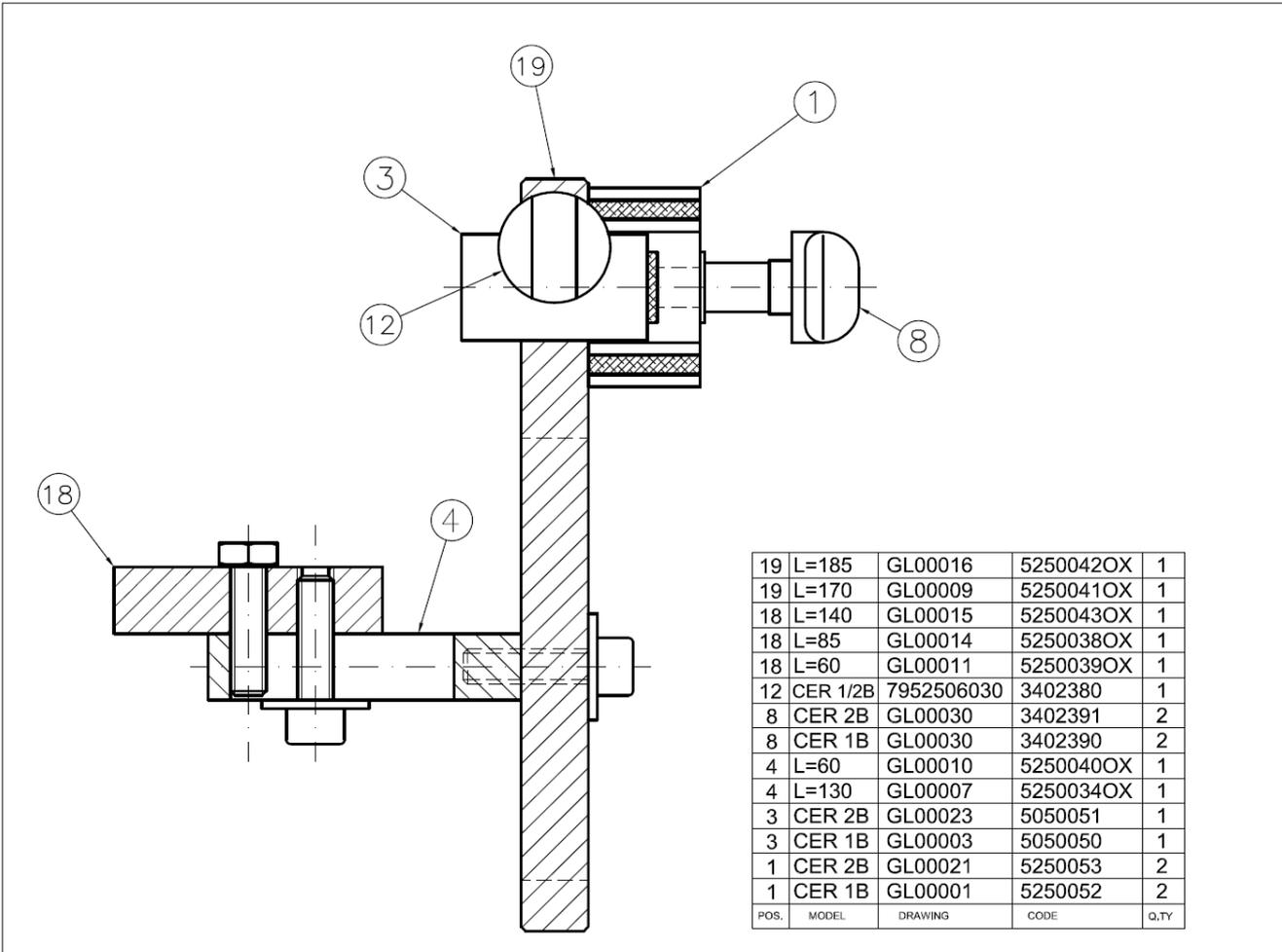


TOP GUIDE



13	CER 2T	GL00022	5210014	1
13	CER 1T	GL00013	5210013	1
12	CER 1/2T	7952506030	3402380	1
8	CER 2T	GL00031	3402391	2
8	CER 1T	GL00030	3402390	2
5	CER 2T	GL00024	5250037OX	1
5	CER 1T	GL00008	5250036OX	1
4	CER 2T	GL00025	5250035OX	1
4	CER 1T	GL00007	5250034OX	1
3	CER 2T	GL00023	5050051	1
3	CER 1T	GL00003	5050050	1
2	CER 1/2T	GL00006	5250033OX	1
1	CER 2T	GL00021	5250053	2
1	CER 1T	GL00001	5250052	2
POS.	MODEL	DRAWING	CODE	Q.TY

BOTTOM GUIDE



19	L=185	GL00016	5250042OX	1
19	L=170	GL00009	5250041OX	1
18	L=140	GL00015	5250043OX	1
18	L=85	GL00014	5250038OX	1
18	L=60	GL00011	5250039OX	1
12	CER 1/2B	7952506030	3402380	1
8	CER 2B	GL00030	3402391	2
8	CER 1B	GL00030	3402390	2
4	L=60	GL00010	5250040OX	1
4	L=130	GL00007	5250034OX	1
3	CER 2B	GL00023	5050051	1
3	CER 1B	GL00003	5050050	1
1	CER 2B	GL00021	5250053	2
1	CER 1B	GL00001	5250052	2
POS.	MODEL	DRAWING	CODE	Q.TY

Bandsaw LT 16 X 16			
Drawing N°	MACHINE	CODE	Part description
1	16-16	5020081	Upper fly wheel
2	16-16	3205040	Ball bearing
3	16-16	5210030	Spacer
4	16-16	3205040	Ball bearing
5	16-16		Washer UNI6593 ZNT M10 11x30x2,5
6	16-16		Seeger D=52 (hole)
7	16-16	5150089	Upper door
8	16-16	5050063	Shaft upper wheel
9	16-16		Screw TCEI 8.8 UNI5931 M10x20
10	16-16		Screw STEI UNI5927 M10x35
11	16-16	5030010	Sliding support upper wheel (Group with #20)
12	16-16	3262009	Thrust bearing (Group with #14)
13	16-16	5120036	Tension blade steel plate
14	16-16	3261009	Thrust bearing (Group with #12)
15	16-16	3402081	Handle for inclination
16	16-16	3401501	Block for inclination handle
17	16-16	3458001	Wheel rubber cover
18	16-16	3177002	Steel wire for tension blade indication
19	16-16		Frame
20	16-16	5030011	Support sliding part (Group with #11)
21	16-16	5120034	Tension cable stop
22	16-16		Seeger D=30 (shaft)
23	16-16	5051111	Rack support blade protection
24	16-16	3402080	Handle locking rack
25	16-16	5120500	Blade protection
26	16-16	5250020	Support of blade protection
27	16-16		Screw TCEI 8.8 UNI5931 M6X16
28	16-16		Screw TSPEI 10.9 UNI5933 M6X16
30	16-16		Nut UNI5588 PG ZNT M12
31	16-16		Washer M12 12,5x28x3
34	16-16	5080002	Tensioning blade screw
35	16-16	5270011	Spring steel blade protection
36	16-16	5031032	Parallel fence
37	16-16	5051250	Special nut
38	16-16	5060011	Spacer (Group with part #48)
39	16-16	5400608	Table level register
40	16-16	5120027	Fence locking plate
41	16-16		Fixing pin (included #42)
42	16-16	3410640	Hand-wheel for upper wheel rise and fall
43	16-16	3401270	Upper door closing handle
44	16-16		Screw TE 8.8 UNI5739 M12x60
45	16-16	5140001	Tension blade spring
46	16-16	7100900	Tension blade indication box
47	16-16	5030044	Support of parallel fence (included #56)
48	16-16	5400501	Round bar support fence (included #38)
49	16-16		included #50,51,52,53,54,55
50	16-16	5320150	Connection box (included #49,51,52,53,54,55)
51	16-16	3450001	Included #50,49,52,53,54,55
52	16-16		Included #49,50,51,53,54,55

53	16-16		included #50,51,52,49,54,55
54	16-16		Included #50,49,52,53,51,62
55	16-16		Included #50,49,52,53,54,51
56	16-16	3407257	Locking handle fence support
57	16-16		Screw TCEI 8.8 UNI5931 M8x25
58	16-16		Nut UNI5588 PG ZNT M10
59	16-16	5400604	V-Belt tensioning (included #58,138)
60	16-16	3417006	V Belt, per unit
61	16-16		Motor pulley
62	16-16		Electric motor : see separate price-list
63	16-16		Key
64	16-16		Washer UNI6593 ZNT M10 11x30x2,5
65	16-16		Screw TE 8.8 UNI5739 M10x35
66	16-16		Screw STEI UNI5923 M8x10
69	16-16	3179100	Tension cable adjustment (Group with #46)
73	16-16	3104110	All thread Screw M12x60
74	16-16		Washer M12 12,5x28x3
75	16-16		Nut UNI5588 PG ZNT M12
76	16-16		Screw TE 8.8 UNI5739 M12x60
77	16-16		Locknut DIN985 PG ZNT M10
79	16-16		Washer UNI6593 ZNT M6 6,6x18x2
80	16-16	5140006	Foot brake spring
81	16-16	5150091	Doors connection
82	16-16		Screw TCEI 8.8 UNI5931 M6x20
83	16-16		Screw TE 8.8 UNI5739 M12x70
84	16-16		Brake pad (Group with #127)
85	16-16		Screw TCEI 8.8 UNI5931 M10x25
86	16-16		Washer UNI6592 ZNT M10 10,5x21x2
87	16-16	5210003	Pinion flange
88	16-16	5050064	Shaft of bottom wheel
89	16-16	5150090	Bottom door
90	16-16		Washer UNI6593 ZNT M10 11x30x2,5
91	16-16		Seeger D=52 (hole)
92	16-16	3205040	Ball bearing
93	16-16	5210030	Spacer
94	16-16	3205040	Ball bearing
95	16-16	5020085	Bottom fly wheel
96	16-16		Screw TE 8.8 UNI5739 M12x70
97	16-16		Screw STEI UNI5923 M8x10
98	16-16	5190001	Pinion
99	16-16	3086114	Spring washer
100	16-16	3410740	Post rise and fall handle
101	16-16		Screw TCEI 8.8 UNI5931 M6x20
102	16-16		Washer UNI6593 ZNT M6 6,6x18x2
103	16-16		Locknut DIN985 PG ZNT M16
104	16-16		Nut UNI5588 PG ZNT M6
105	16-16		Washer UNI6592 ZNT M6 6,4x12,5x1,6
107	16-16	5010012	Table
109	16-16	5210005	Table insert
110	16-16		Screw UNI5449 ZNT M6x16
115	16-16		Screw TCEI 8.8 UNI5931 M10x25
116	16-16	3401270	Lower door closing handle
117	16-16		Nut UNI5588 PG ZNT M10

118	16-16		Washer UNI6592 ZNT M10 10,5x21x2
120	16-16		Locknut DIN985 PG ZNT M10
123	16-16		Washer UNI6593 ZNT M6 6,6x18x2
124	16-16		Screw TCEI 8.8 UNI5931 M6x20
125	16-16		Blind Rivet alluminium body 4x8
126	16-16	5210007	Plastic cover
127	16-16	5120010	Brake lining (included #84)
128	16-16		Washer UNI6592 ZNT M8 8,4x17x1,6
129	16-16		Screw TE 8.8 UNI5739 M10x40
130	16-16		Nut UNI5588 PG ZNT M10
131	16-16		Washer UNI6592 ZNT M10 10,5x21x2
132	16-16	3458001	Wheel rubber cover
133	16-16		Screw TPS-TC 7505A ZNT 4x20
134	16-16		Brush support (Group with #135)
135	16-16	5400000	Bottom wheel brush (Group with #134)
136	16-16		Screw TCEI 8.8 UNI5931 M6x10
137	16-16		Washer UNI6592 ZNT M6 6,4x12,5x1,6
138	16-16		Washer UNI6592 ZNT M10 10,5x21x2
139	16-16		Screw TCEI 8.8 UNI5931 M10x20
140	16-16		Screw TE 8.8 UNI5739 M12x35
141	16-16		Nut UNI5589 PG ZNT M12
142	16-16		Washer UNI6593 ZNT M10 11x40x2,5
143	16-16		Screw TCEI 8.8 UNI5931 M10x20
144	16-16		Screw TCEI 8.8 UNI5931 M6x20
145	16-16	5210008	Polycarbonate blade protection
147	16-16	5150200	Foot brake lever
148	16-16	5180001	Foot brake pedal
150	16-16	5210012	Side dust outlet
151	16-16	4505010	Doors microswitch
152	16-16	5120022	Microswitch protection
153	16-16		Screw TC-TC UNI8118 3,9x16
155	16-16	3162053	Hinge with fixing screws
160	16-16	5125020	Bottom table protection
166	16-16	5700031	Earth connecting cable
167	16-16		Screw TCEI 8.8 UNI5931 M4x14
168	16-16		Washer UNI6593 ZNT M10 11x30x2,5
169	16-16		Nut UNI5588 PG ZNT M10
170	16-16	5400609	Table-cut locking pin
171	16-16	5070021	Table trunnion
172	16-16	5070023	Support trunnion tilting table
173	16-16	5070027	Tilting pinion
174	16-16		Washer UNI6592 ZNT M10 10,5x21x2
175	16-16		Locknut DIN985 PG ZNT M10
176	16-16	5050240	Guide fence
177	16-16		Screw TBEI M6x10
178	16-16		Screw TE 8.8 UNI5737 M12x100
179	16-16		Washer M12 12,5x28x3
180	16-16	3406132	Block handle
181	16-16		Screw TE 8.8 UNI5739 M10x30
182	16-16		Washer UNI6592 ZNT M10 10,5x21x2
184	16-16	1030382	Adjustment plate
185	16-16		Screw TE 8.8 UNI5739 M10x16
186	16-16		Washer UNI6592 ZNT M10 10,5x21x2

187	16-16		Nut UNI5588 PG ZNT M12
188	16-16		Washer M12 12,5x28x3
189	16-16	1030344	No-rotation post plate
190	16-16		Screw TE 8.8 UNI5739 M6x16
191	16-16	5320100	Brake microswitch

Bandsaw LT18 X 18			
Drawing N°	MACHINE	CODE	Part description
1	18-18	5020089	Upper fly wheel
2	18-18	3205040	Ball bearing
3	18-18	5210035	Spacer
4	18-18	3205040	Ball bearing
5	18-18		Washer UNI6593 ZNT M10 11x30x2,5
6	18-18		Seeger D=52 (hole)
7	18-18	5150093	Upper door
8	18-18	5050065	Shaft upper wheel
9	18-18		Screw TCEI 8.8 UNI5931 M10x20
10	18-18		Screw STEI UNI5927 M10x35
11	18-18	5030010	Sliding support upper wheel (Group with #20)
12	18-18	3262009	Thrust bearing (Group with #14)
13	18-18	5120036	Tension blade steel plate
14	18-18	3261009	Thrust bearing (Group with #12)
15	18-18	3402081	Handle for inclination
16	18-18	3401501	Block for inclination handle
17	18-18	3458001	Wheel rubber cover
18	18-18	3177002	Steel wire for tension blade indication
19	18-18		Frame
20	18-18	5030011	Support sliding part (Group with #11)
21	18-18	5120034	Tension cable stop
22	18-18		Seeger D=30 (shaft)
23	18-18	5051103	Rack support blade protection
24	18-18	3402080	Handle locking rack
25	18-18	5120501	Blade protection
26	18-18	5250020	Support of blade protection
27	18-18		Screw TCEI 8.8 UNI5931 M6X16
28	18-18		Screw TSPEI 10.9 UNI5933 M6X16
30	18-18		Nut UNI5588 PG ZNT M12
31	18-18		Washer M12 12,5x28x3
34	18-18	5080003	Tensioning blade screw
35	18-18	5270012	Spring steel blade protection
36	18-18	5031033	Parallel fence
37	18-18	5051250	Special nut
38	18-18	5060011	Spacer (Group with part #48)
39	18-18	5400608	Table level register
40	18-18	5120027	Fence locking plate
41	18-18		Fixing pin (included #42)
42	18-18	3410640	Hand-wheel for upper wheel rise and fall
43	18-18	3401270	Upper door closing handle
44	18-18		Screw TE 8.8 UNI5739 M12x60
45	18-18	5140001	Tension blade spring
46	18-18	7100901	Tension blade indication box
47	18-18	5030044	Support of parallel fence (included #56)
48	18-18	5400511	Round bar support fence (included #38)
49	18-18		included #50,51,52,53,54,55
50	18-18	5320150	Connection box (included #49,51,52,53,54,55)
51	18-18	3450001	Included #50,49,52,53,54,56
52	18-18		Included #49,50,51,53,54,55

53	18-18		included #50,51,52,49,54,55
54	18-18		Included #50,49,52,53,51,63
55	18-18		Included #50,49,52,53,54,51
56	18-18	3407257	Locking handle fence support
57	18-18		Screw TCEI 8.8 UNI5931 M8x25
58	18-18		Nut UNI5588 PG ZNT M10
59	18-18	5400602	V-Belt tensioning (included #58,138)
60	18-18	3417008	V Belt, per unit
61	18-18		Motor pulley
62	18-18		Electric motor : see separate price-list
63	18-18		Key
64	18-18		Washer UNI6593 ZNT M10 11x30x2,5
65	18-18		Screw TE 8.8 UNI5739 M10x35
66	18-18		Screw STEI UNI5923 M8x10
69	18-18	3179100	Tension cable adjustment (Group with #46)
73	18-18	3104110	All thread Screw M12x60
74	18-18		Washer M12 12,5x28x3
75	18-18		Nut UNI5588 PG ZNT M12
76	18-18		Screw TE 8.8 UNI5739 M12x60
77	18-18		Locknut DIN985 PG ZNT M10
79	18-18		Washer UNI6593 ZNT M6 6,6x18x2
80	18-18	5140006	Foot brake spring
81	18-18	5150095	Doors connection
82	18-18		Screw TCEI 8.8 UNI5931 M6x20
83	18-18		Screw TE 8.8 UNI5739 M12x70
84	18-18		Brake pad (Group with #127)
85	18-18		Screw TCEI 8.8 UNI5931 M10x25
86	18-18		Washer UNI6592 ZNT M10 10,5x21x2
87	18-18	5210003	Pinion flange
88	18-18	5050066	Shaft of bottom wheel
89	18-18	5150094	Bottom door
90	18-18		Washer UNI6593 ZNT M10 11x30x2,5
91	18-18		Seeger D=52 (hole)
92	18-18	3205040	Ball bearing
93	18-18	5210035	Spacer
94	18-18	3205040	Ball bearing
95	18-18	5020093	Bottom fly wheel
96	18-18		Screw TE 8.8 UNI5739 M12x70
97	18-18		Screw STEI UNI5923 M8x10
98	18-18	5190001	Pinion
99	18-18	3086114	Spring washer
100	18-18	3410740	Post rise and fall handle
101	18-18		Screw TCEI 8.8 UNI5931 M6x20
102	18-18		Washer UNI6593 ZNT M6 6,6x18x2
103	18-18		Locknut DIN985 PG ZNT M16
104	18-18		Nut UNI5588 PG ZNT M6
105	18-18		Washer UNI6592 ZNT M6 6,4x12,5x1,6
107	18-18	5010019	Table
109	18-18	5210005	Table insert
110	18-18		Screw UNI5449 ZNT M6x16
115	18-18		Screw TCEI 8.8 UNI5931 M10x25
116	18-18	3401270	Lower door closing handle
117	18-18		Nut UNI5588 PG ZNT M10

118	18-18		Washer UNI6592 ZNT M10 10,5x21x2
120	18-18		Locknut DIN985 PG ZNT M10
123	18-18		Washer UNI6593 ZNT M6 6,6x18x2
124	18-18		Screw TCEI 8.8 UNI5931 M6x20
125	18-18		Blind Rivet alluminium body 4x8
126	18-18	5210007	Plastic cover
127	18-18	5120011	Brake lining (included #84)
128	18-18		Washer UNI6592 ZNT M8 8,4x17x1,6
129	18-18		Screw TE 8.8 UNI5739 M10x40
130	18-18		Nut UNI5588 PG ZNT M10
131	18-18		Washer UNI6592 ZNT M10 10,5x21x2
132	18-18	3458001	Wheel rubber cover
133	18-18		Screw TPS-TC 7505A ZNT 4x20
134	18-18		Brush support (Group with #135)
135	18-18	5400000	Bottom wheel brush (Group with #134)
136	18-18		Screw TCEI 8.8 UNI5931 M6x10
137	18-18		Washer UNI6592 ZNT M6 6,4x12,5x1,6
138	18-18		Washer UNI6592 ZNT M10 10,5x21x2
139	18-18		Screw TCEI 8.8 UNI5931 M10x20
140	18-18		Screw TE 8.8 UNI5739 M12x35
141	18-18		Nut UNI5589 PG ZNT M12
142	18-18		Washer UNI6593 ZNT M10 11x40x2,5
143	18-18		Screw TCEI 8.8 UNI5931 M10x20
144	18-18		Screw TCEI 8.8 UNI5931 M8x16
145	18-18	5210008	Polycarbonate blade protection
147	18-18	5150200	Foot brake lever
148	18-18	5180001	Foot brake pedal
150	18-18	5210012	Side dust outlet
151	18-18	4505010	Doors microswitch
152	18-18	5120022	Microswitch protection
153	18-18		Screw TC-TC UNI8118 3,9x16
155	18-18	3162052	Hinge with fixing screws
160	18-18	5125020	Bottom table protection
166	18-18	5700031	Earth connecting cable
167	18-18		Screw TCEI 8.8 UNI5931 M4x14
168	18-18		Washer UNI6593 ZNT M10 11x30x2,5
169	18-18		Nut UNI5588 PG ZNT M10
170	18-18	5400609	Table-cut locking pin
171	18-18	5070021	Table trunnion
172	18-18	5070023	Support trunnion tilting table
173	18-18	5070027	Tilting pinion
174	18-18		Washer UNI6592 ZNT M10 10,5x21x2
175	18-18		Locknut DIN985 PG ZNT M10
176	18-18	5050240	Guide fence
177	18-18		Screw TBEI M6x10
178	18-18		Screw TE 8.8 UNI5737 M12x100
179	18-18		Washer M12 12,5x28x3
180	18-18	3406132	Block handle
181	18-18		Screw TE 8.8 UNI5739 M10x30
182	18-18		Washer UNI6592 ZNT M10 10,5x21x2
184	18-18	1030382	Adjustment plate
185	18-18		Screw TE 8.8 UNI5739 M10x16
186	18-18		Washer UNI6592 ZNT M10 10,5x21x2

187	18-18		Nut UNI5588 PG ZNT M12
188	18-18		Washer M12 12,5x28x3
189	18-18	1030344	No-rotation post plate
190	18-18		Screw TE 8.8 UNI5739 M6x16
191	18-18	5320100	Brake microswitch

Bandsaw LT 20 X 20			
Drawing N°	MACHINE	CODE	Part description
1	20-20	5020097	Upper fly wheel
2	20-20	3205040	Ball bearing
3	20-20	5210031	Spacer
4	20-20	3205040	Ball bearing
5	20-20		Washer UNI6593 ZNT M10 11x30x2,5
6	20-20		Seeger D=52 (hole)
7	20-20	5150101	Upper door
8	20-20	5050067	Shaft upper wheel
9	20-20		Screw TCEI 8.8 UNI5931 M10x20
10	20-20		Screw STEI UNI5927 M10x35
11	20-20	5030010	Sliding support upper wheel (Group with #20)
12	20-20	3262009	Thrust bearing (Group with #14)
13	20-20	5120036	Tension blade steel plate
14	20-20	3261009	Thrust bearing (Group with #12)
15	20-20	3402081	Handle for inclination
16	20-20	3401501	Block for inclination handle
17	20-20	3458002	Wheel rubber cover
18	20-20	3177002	Steel wire for tension blade indication
19	20-20		Frame
20	20-20	5030011	Support sliding part (Group with #11)
21	20-20	5120034	Tension cable stop
22	20-20		Seeger D=30 (shaft)
23	20-20	5051104	Rack support blade protection
24	20-20	3402080	Handle locking rack
25	20-20	5120502	Blade protection
26	20-20	5250020	Support of blade protection
27	20-20		Screw TCEI 8.8 UNI5931 M6X16
28	20-20		Screw TSPEI 10.9 UNI5933 M6X16
30	20-20		Nut UNI5588 PG ZNT M12
31	20-20		Washer M12 12,5x28x3
34	20-20	5080004	Tensioning blade screw
35	20-20	5270013	Spring steel blade protection
36	20-20	5031033	Parallel fence
37	20-20	5051250	Special nut
38	20-20	5060011	Spacer (Group with part #48)
39	20-20	5400608	Table level register
40	20-20	5120027	Fence locking plate
41	20-20		Fixing pin (included #42)
42	20-20	3410640	Hand-wheel for upper wheel rise and fall
43	20-20	3401270	Upper door closing handle
44	20-20		Screw TE 8.8 UNI5739 M12x60
45	20-20	5140001	Tension blade spring
46	20-20	7100902	Tension blade indication box
47	20-20	5030044	Support of parallel fence (included #56)
48	20-20	5400511	Round bar support fence (included #38)
49	20-20		included #50,51,52,53,54,55
50	20-20	5320150	Connection box (included #49,51,52,53,54,55)
51	20-20	3450001	Included #50,49,52,53,54,57

52	20-20		Included #49,50,51,53,54,55
53	20-20		included #50,51,52,49,54,55
54	20-20		Included #50,49,52,53,51,64
55	20-20		Included #50,49,52,53,54,51
56	20-20	3407257	Locking handle fence support
57	20-20		Screw TCEI 8.8 UNI5931 M8x25
58	20-20		Nut UNI5588 PG ZNT M10
59	20-20	5400603	V-Belt tensioning (included #58,138)
60	20-20	3417011	V Belt, per unit
61	20-20		Motor pulley
62	20-20		Electric motor : see separate price-list
63	20-20		Key
64	20-20		Washer UNI6593 ZNT M10 11x30x2,5
65	20-20		Screw TE 8.8 UNI5739 M10x35
66	20-20		Screw STEI UNI5923 M8x10
69	20-20	3179100	Tension cable adjustment (Group with #46)
73	20-20	3104110	All thread Screw M12x60
74	20-20		Washer M12 12,5x28x3
75	20-20		Nut UNI5588 PG ZNT M12
76	20-20		Screw TE 8.8 UNI5739 M12x60
77	20-20		Locknut DIN985 PG ZNT M10
79	20-20		Washer UNI6593 ZNT M6 6,6x18x2
80	20-20	5140006	Foot brake spring
81	20-20	5150103	Doors connection
82	20-20		Screw TCEI 8.8 UNI5931 M6x20
83	20-20		Screw TE 8.8 UNI5739 M12x70
84	20-20		Brake pad (Group with #127)
85	20-20		Screw TCEI 8.8 UNI5931 M10x25
86	20-20		Washer UNI6592 ZNT M10 10,5x21x2
87	20-20	5210003	Pinion flange
88	20-20	5050068	Shaft of bottom wheel
89	20-20	5150102	Bottom door
90	20-20		Washer UNI6593 ZNT M10 11x30x2,5
91	20-20		Seeger D=52 (hole)
92	20-20	3205040	Ball bearing
93	20-20	5210031	Spacer
94	20-20	3205040	Ball bearing
95	20-20	5020101	Bottom fly wheel
96	20-20		Screw TE 8.8 UNI5739 M12x70
97	20-20		Screw STEI UNI5923 M8x10
98	20-20	5190001	Pinion
99	20-20	3086114	Spring washer
100	20-20	3410740	Post rise and fall handle
101	20-20		Screw TCEI 8.8 UNI5931 M6x20
102	20-20		Washer UNI6593 ZNT M6 6,6x18x2
103	20-20		Locknut DIN985 PG ZNT M16
104	20-20		Nut UNI5588 PG ZNT M6
105	20-20		Washer UNI6592 ZNT M6 6,4x12,5x1,6
107	20-20	5010020	Table
109	20-20	5210005	Table insert
110	20-20		Screw UNI5449 ZNT M6x16
115	20-20		Screw TCEI 8.8 UNI5931 M10x25
116	20-20	3401270	Lower door closing handle

117	20-20		Nut UNI5588 PG ZNT M10
118	20-20		Washer UNI6592 ZNT M10 10,5x21x2
120	20-20		Locknut DIN985 PG ZNT M10
123	20-20		Washer UNI6593 ZNT M6 6,6x18x2
124	20-20		Screw TCEI 8.8 UNI5931 M6x20
125	20-20		Blind Rivet alluminium body 4x8
126	20-20	5210007	Plastic cover
127	20-20	5120012	Brake lining (included #84)
128	20-20		Washer UNI6592 ZNT M8 8,4x17x1,6
129	20-20		Screw TE 8.8 UNI5739 M10x40
130	20-20		Nut UNI5588 PG ZNT M10
131	20-20		Washer UNI6592 ZNT M10 10,5x21x2
132	20-20	3458002	Wheel rubber cover
133	20-20		Screw TPS-TC 7505A ZNT 4x20
134	20-20		Brush support (Group with #135)
135	20-20	5400000	Bottom wheel brush (Group with #134)
136	20-20		Screw TCEI 8.8 UNI5931 M6x10
137	20-20		Washer UNI6592 ZNT M6 6,4x12,5x1,6
138	20-20		Washer UNI6592 ZNT M10 10,5x21x2
139	20-20		Screw TCEI 8.8 UNI5931 M10x20
140	20-20		Screw TE 8.8 UNI5739 M12x35
141	20-20		Nut UNI5589 PG ZNT M12
142	20-20		Washer UNI6593 ZNT M10 11x40x2,5
143	20-20		Screw TCEI 8.8 UNI5931 M10x20
144	20-20		Screw TCEI 8.8 UNI5931 M8x16
145	20-20	5210008	Polycarbonate blade protection
147	20-20	5150206	Foot brake lever
148	20-20	5180001	Foot brake pedal
150	20-20	5210012	Side dust outlet
151	20-20	4505010	Doors microswitch
152	20-20	5120022	Microswitch protection
153	20-20		Screw TC-TC UNI8118 3,9x16
155	20-20	3162052	Hinge with fixing screws
160	20-20	5125020	Bottom table protection
166	20-20	5700031	Earth connecting cable
167	20-20		Screw TCEI 8.8 UNI5931 M4x14
168	20-20		Washer UNI6593 ZNT M10 11x30x2,5
169	20-20		Nut UNI5588 PG ZNT M10
170	20-20	5400609	Table-cut locking pin
171	20-20	5070021	Table trunnion
172	20-20	5070023	Support trunnion tilting table
173	20-20	5070027	Tilting pinion
174	20-20		Washer UNI6592 ZNT M10 10,5x21x2
175	20-20		Locknut DIN985 PG ZNT M10
176	20-20	5050240	Guide fence
177	20-20		Screw TBEI M6x10
178	20-20		Screw TE 8.8 UNI5737 M12x100
179	20-20		Washer M12 12,5x28x3
180	20-20	3406132	Block handle
181	20-20		Screw TE 8.8 UNI5739 M10x30
182	20-20		Washer UNI6592 ZNT M10 10,5x21x2
184	20-20	1030382	Adjustment plate
185	20-20		Screw TE 8.8 UNI5739 M10x16

186	20-20		Washer UNI6592 ZNT M10 10,5x21x2
187	20-20		Nut UNI5588 PG ZNT M12
188	20-20		Washer M12 12,5x28x3
189	20-20	1030344	No-rotation post plate
190	20-20		Screw TE 8.8 UNI5739 M6x16
191	20-20	5320100	Brake microswitch

Bandsaw Resawmaster			
Drawing N°	MACHINE	CODE	Part description
1	F50 - RSM	5020201	Upper fly wheel
2	F50 - RSM	3205046	Ball bearing
3	F50 - RSM	5210036	Spacer
4	F50 - RSM	3205046	Ball bearing
5	F50 - RSM		Washer UNI6593 ZNT M10 11x40x2,5
6	F50 - RSM		Seeger D=62 (hole)
7	F50 - RSM	5150125	Upper door
8	F50 - RSM	5050079	Shaft upper wheel
9	F50 - RSM		Screw TCEI 8.8 UNI5931 M10x20
10	F50 - RSM		Screw STEI UNI5927 M10x35
11	F50 - RSM	5030014	Sliding support upper wheel (Group with #20)
12	F50 - RSM	3262010	Thrust bearing (Group with #14)
13	F50 - RSM	5120036	Tension blade steel plate
14	F50 - RSM	3261010	Thrust bearing (Group with #12)
15	F50 - RSM	3402081	Handle for inclination
16	F50 - RSM	3401501	Block for inclination handle
17	F50 - RSM	3458006	Wheel rubber cover
18	F50 - RSM	3177002	Steel wire for tension blade indication
19	F50 - RSM		Frame
20	F50 - RSM	5030015	Support sliding part (Group with #11)
21	F50 - RSM	5120034	Tension cable stop
22	F50 - RSM		Seeger D=30 (shaft)
23	F50 - RSM	5051103	Rack support blade protection
24	F50 - RSM	3402082	Handle locking rack
25	F50 - RSM	5120506	Blade protection
26	F50 - RSM	5250020	Support of blade protection
27	F50 - RSM		Screw TCEI 8.8 UNI5931 M6X16
28	F50 - RSM		Screw TSPEI 10.9 UNI5933 M6X16
30	F50 - RSM		Nut UNI5588 PG ZNT M12
31	F50 - RSM		Washer M12 12,5x28x3
34	F50 - RSM	5080017	Tensioning blade screw
35	F50 - RSM	5270006	Spring steel blade protection
36	F50 - RSM	5031033	Parallel fence
37	F50 - RSM	5051250	Special nut
38	F50 - RSM	5060011	Spacer (Group with part #48)
39	F50 - RSM	5400606	Table level register
40	F50 - RSM	5120027	Fence locking plate
41	F50 - RSM		Fixing pin (included #42)
42	F50 - RSM	3410641	Hand-wheel for upper wheel rise and fall
43	F50 - RSM	3401270	Upper door closing handle
44	F50 - RSM		Screw TE 8.8 UNI5739 M12x60
45	F50 - RSM	5140012	Tension blade spring
46	F50 - RSM	7100912	Tension blade indication box
47	F50 - RSM	5030044	Support of parallel fence (included #56)
48	F50 - RSM	5400511	Round bar support fence (included #38)
49	F50 - RSM		included #50,51,52,53,54,55
50	F50 - RSM	5320150	Connection box (included #49,51,52,53,54,55)
51	F50 - RSM	3450001	Included #50,49,52,53,54,62
52	F50 - RSM		Included #49,50,51,53,54,55

53	F50 - RSM		included #50,51,52,49,54,55
54	F50 - RSM		Included #50,49,52,53,51,69
55	F50 - RSM		Included #50,49,52,53,54,51
56	F50 - RSM	3407257	Locking handle fence support
57	F50 - RSM		Screw TCEI 8.8 UNI5931 M8x25
58	F50 - RSM		Nut UNI5588 PG ZNT M10
59	F50 - RSM	5400603	V-Belt tensioning (included #58,138)
60	F50 - RSM	3417008	V Belt, per unit
61	F50 - RSM		Motor pulley
62	F50 - RSM		Electric motor : see separate price-list
63	F50 - RSM		Key
64	F50 - RSM		Washer UNI6593 ZNT M10 11x30x2,5
65	F50 - RSM		Screw TE 8.8 UNI5739 M10x35
66	F50 - RSM		Screw STEI UNI5923 M8x10
69	F50 - RSM	3179100	Tension cable adjustment (Group with #46)
73	F50 - RSM	3104110	All thread Screw M12x60
74	F50 - RSM		Washer M12 12,5x28x3
75	F50 - RSM		Nut UNI5588 PG ZNT M12
76	F50 - RSM		Screw TE 8.8 UNI5739 M12x60
77	F50 - RSM		Locknut DIN985 PG ZNT M10
79	F50 - RSM		Washer UNI6593 ZNT M6 6,6x18x2
80	F50 - RSM	5140006	Foot brake spring
81	F50 - RSM	5150127	Doors connection
82	F50 - RSM		Screw TCEI 8.8 UNI5931 M6x20
83	F50 - RSM		Screw TE 8.8 UNI5739 M12x70
84	F50 - RSM		Brake pad (Group with #127)
85	F50 - RSM		Screw TCEI 8.8 UNI5931 M10x25
86	F50 - RSM		Washer UNI6592 ZNT M10 10,5x21x2
87	F50 - RSM	5210003	Pinion flange
88	F50 - RSM	5050080	Shaft of bottom wheel
89	F50 - RSM	5150126	Bottom door
90	F50 - RSM		Washer UNI6593 ZNT M10 11x40x2,5
91	F50 - RSM		Seeger D=62 (hole)
92	F50 - RSM	3205046	Ball bearing
93	F50 - RSM	5210036	Spacer
94	F50 - RSM	3205046	Ball bearing
95	F50 - RSM	5020205	Bottom fly wheel
96	F50 - RSM		Screw TE 8.8 UNI5739 M12x70
97	F50 - RSM		Screw STEI UNI5923 M8x10
98	F50 - RSM	5190001	Pinion
99	F50 - RSM	3086114	Spring washer
100	F50 - RSM	3410740	Post rise and fall handle
101	F50 - RSM		Screw TCEI 8.8 UNI5931 M6x20
102	F50 - RSM		Washer UNI6593 ZNT M6 6,6x18x2
103	F50 - RSM		Locknut DIN985 PG ZNT M16
104	F50 - RSM		Nut UNI5588 PG ZNT M6
105	F50 - RSM		Washer UNI6592 ZNT M6 6,4x12,5x1,6
107	F50 - RSM	5010019	Table
109	F50 - RSM	5210005	Table insert
110	F50 - RSM		Screw UNI5449 ZNT M6x16
111	F50 - RSM	5210102	Wooden Insert chute
112	F50 - RSM	1030584	Chute
113	F50 - RSM		Screw TC-TC UNI8118 3,9x16

114	F50 - RSM	5210009	Front aspiration outlet
115	F50 - RSM		Screw TCEI 8.8 UNI5931 M10x25
116	F50 - RSM	3401270	Lower door closing handle
117	F50 - RSM		Nut UNI5588 PG ZNT M10
118	F50 - RSM		Washer UNI6592 ZNT M10 10,5x21x2
120	F50 - RSM		Locknut DIN985 PG ZNT M10
123	F50 - RSM		Washer UNI6593 ZNT M6 6,6x18x2
124	F50 - RSM		Screw TCEI 8.8 UNI5931 M6x20
125	F50 - RSM		Blind Rivet alluminium body 4x8
126	F50 - RSM	5210007	Plastic cover
127	F50 - RSM	5120011	Brake lining (included #84)
128	F50 - RSM		Washer UNI6592 ZNT M8 8,4x17x1,6
129	F50 - RSM		Screw TE 8.8 UNI5739 M10x40
130	F50 - RSM		Nut UNI5588 PG ZNT M10
131	F50 - RSM		Washer UNI6592 ZNT M10 10,5x21x2
132	F50 - RSM	3458006	Wheel rubber cover
133	F50 - RSM		Screw TPS-TC 7505A ZNT 4x20
134	F50 - RSM		Brush support (Group with #135)
135	F50 - RSM	5400002	Bottom wheel brush (Group with #134)
136	F50 - RSM		Screw TCEI 8.8 UNI5931 M6x10
137	F50 - RSM		Washer UNI6592 ZNT M6 6,4x12,5x1,6
138	F50 - RSM		Washer UNI6592 ZNT M10 10,5x21x2
139	F50 - RSM		Screw TCEI 8.8 UNI5931 M10x20
140	F50 - RSM		Screw TE 8.8 UNI5739 M12x35
141	F50 - RSM		Nut UNI5589 PG ZNT M12
142	F50 - RSM		Washer UNI6593 ZNT M10 11x40x2,5
143	F50 - RSM		Screw TCEI 8.8 UNI5931 M10x20
144	F50 - RSM		Screw TCEI 8.8 UNI5931 M8x16
145	F50 - RSM	5210008	Polycarbonate blade protection
147	F50 - RSM	5150200	Foot brake lever
148	F50 - RSM	5180001	Foot brake pedal
150	F50 - RSM	5210012	Side dust outlet
151	F50 - RSM	4505010	Doors microswitch
152	F50 - RSM	5120022	Microswitch protection
153	F50 - RSM		Screw TC-TC UNI8118 3,9x16
155	F50 - RSM	3162052	Hinge with fixing screws
160	F50 - RSM	5125030	Bottom table protection
166	F50 - RSM	5700031	Earth connecting cable
167	F50 - RSM		Screw TCEI 8.8 UNI5931 M4x14
168	F50 - RSM		Washer UNI6593 ZNT M10 11x30x2,5
169	F50 - RSM		Nut UNI5588 PG ZNT M10
170	F50 - RSM	5400609	Table-cut locking pin
171	F50 - RSM	5070021	Table trunnion
172	F50 - RSM	5070023	Support trunnion tilting table
173	F50 - RSM	5070027	Tilting pinion
174	F50 - RSM		Washer UNI6592 ZNT M10 10,5x21x2
175	F50 - RSM		Locknut DIN985 PG ZNT M10
176	F50 - RSM	5050240	Guide fence
177	F50 - RSM		Screw TBEI M6x10
178	F50 - RSM		Screw TE 8.8 UNI5737 M12x100
179	F50 - RSM		Washer M12 12,5x28x3
180	F50 - RSM	3406132	Block handle
181	F50 - RSM		Screw TE 8.8 UNI5739 M10x30

182	F50 - RSM		Washer UNI6592 ZNT M10 10,5x21x2
184	F50 - RSM	1030382	Adjustment plate
185	F50 - RSM		Screw TE 8.8 UNI5739 M10x16
186	F50 - RSM		Washer UNI6592 ZNT M10 10,5x21x2
187	F50 - RSM		Nut UNI5588 PG ZNT M12
188	F50 - RSM		Washer M12 12,5x28x3
189	F50 - RSM	1030344	No-rotation post plate
190	F50 - RSM		Screw TE 8.8 UNI5739 M6x16
191	F50 - RSM	5320100	Brake microswitch

Bandsaw LT 24 X 24			
Drawing N°	MACHINE	CODE	Part description
1	24-24	5020113	Upper fly wheel
2	24-24	3205046	Ball bearing
3	24-24	5210032	Spacer
4	24-24	3205046	Ball bearing
5	24-24		Washer UNI6593 ZNT M10 11x40x2,5
6	24-24		Seeger D=62 (hole)
7	24-24	5150105	Upper door
8	24-24	5050075	Shaft upper wheel
9	24-24		Screw TCEI 8.8 UNI5931 M10x20
10	24-24		Screw STEI UNI5927 M10x35
11	24-24	5030014	Sliding support upper wheel (Group with #20)
12	24-24	3262010	Thrust bearing (Group with #14)
13	24-24	5120037	Tension blade steel plate
14	24-24	3261010	Thrust bearing (Group with #12)
15	24-24	3402082	Handle for inclination
16	24-24	3401501	Block for inclination handle
17	24-24	3458003	Wheel rubber cover
18	24-24	3177002	Steel wire for tension blade indication
19	24-24		Frame
20	24-24	5030015	Support sliding part (Group with #11)
21	24-24	5120034	Tension cable stop
22	24-24		Seeger D=30 (shaft)
23	24-24	5151109	Rack support blade protection
24	24-24	3402080	Handle locking rack
25	24-24	5120503	Blade protection
26	24-24	5250020	Support of blade protection
27	24-24		Screw TCEI 8.8 UNI5931 M6X16
28	24-24		Screw TSPEI 10.9 UNI5933 M6X16
30	24-24		Nut UNI5588 PG ZNT M12
31	24-24		Washer M12 12,5x28x3
34	24-24	5080005	Tensioning blade screw
35	24-24	5270014	Spring steel blade protection
36	24-24	5031034	Parallel fence
37	24-24	5051250	Special nut
38	24-24	5060011	Spacer (Group with part #48)
39	24-24	3104085	Table level register
40	24-24	5120027	Fence locking plate
41	24-24		Fixing pin (included #42)
42	24-24	3410641	Hand-wheel for upper wheel rise and fall
43	24-24	3401270	Upper door closing handle
44	24-24		Screw TE 8.8 UNI5739 M12x60
45	24-24	5140002	Tension blade spring
46	24-24	7100904	Tension blade indication box
47	24-24	5030044	Support of parallel fence (included #56)
48	24-24	5400503	Round bar support fence (included #38)
49	24-24		included #50,51,52,53,54,55
50	24-24	5320150	Connection box (included #49,51,52,53,54,55)
51	24-24	3450001	Included #50,49,52,53,54,58

52	24-24		Included #49,50,51,53,54,55
53	24-24		included #50,51,52,49,54,55
54	24-24		Included #50,49,52,53,51,65
55	24-24		Included #50,49,52,53,54,51
56	24-24	3407257	Locking handle fence support
57	24-24		Screw TCEI 8.8 UNI5931 M8x25
58	24-24		Nut UNI5588 PG ZNT M10
59	24-24	5400602	V-Belt tensioning (included #58,138)
60	24-24	3417010	V Belt, per unit
61	24-24		Motor pulley
62	24-24		Electric motor : see separate price-list
63	24-24		Key
64	24-24		Washer UNI6593 ZNT M10 11x30x2,5
65	24-24		Screw TE 8.8 UNI5739 M10x35
66	24-24		Screw STEI UNI5923 M8x10
69	24-24	3179100	Tension cable adjustment (Group with #46)
73	24-24	3104110	All thread Screw M12x60
74	24-24		Washer M12 12,5x28x3
75	24-24		Nut UNI5588 PG ZNT M12
76	24-24		Screw TE 8.8 UNI5739 M12x60
77	24-24		Locknut DIN985 PG ZNT M10
79	24-24		Washer UNI6593 ZNT M6 6,6x18x2
80	24-24	5140006	Foot brake spring
81	24-24	5150107	Doors connection
82	24-24		Screw TCEI 8.8 UNI5931 M6x20
83	24-24		Screw TE 8.8 UNI5739 M12x70
84	24-24		Brake pad (Group with #127)
85	24-24		Screw TCEI 8.8 UNI5931 M10x25
86	24-24		Washer UNI6592 ZNT M10 10,5x21x2
87	24-24	5210003	Pinion flange
88	24-24	5050076	Shaft of bottom wheel
89	24-24	5150106	Bottom door
90	24-24		Washer UNI6593 ZNT M10 11x40x2,5
91	24-24		Seeger D=62 (hole)
92	24-24	3205046	Ball bearing
93	24-24	5210032	Spacer
94	24-24	3205046	Ball bearing
95	24-24	5020117	Bottom fly wheel
96	24-24		Screw TE 8.8 UNI5739 M12x70
97	24-24		Screw STEI UNI5923 M8x10
98	24-24	5190001	Pinion
99	24-24	3086114	Spring washer
100	24-24	3410740	Post rise and fall handle
101	24-24		Screw TCEI 8.8 UNI5931 M6x20
102	24-24		Washer UNI6593 ZNT M6 6,6x18x2
103	24-24		Locknut DIN985 PG ZNT M16
104	24-24		Nut UNI5588 PG ZNT M6
105	24-24		Washer UNI6592 ZNT M6 6,4x12,5x1,6
107	24-24	5010047	Table
109	24-24	5210005	Table insert
110	24-24		Screw UNI5449 ZNT M6x16
115	24-24		Screw TCEI 8.8 UNI5931 M10x25
116	24-24	3401270	Lower door closing handle

117	24-24		Nut UNI5588 PG ZNT M10
118	24-24		Washer UNI6592 ZNT M10 10,5x21x2
120	24-24		Locknut DIN985 PG ZNT M10
123	24-24		Washer UNI6593 ZNT M6 6,6x18x2
124	24-24		Screw TCEI 8.8 UNI5931 M6x20
125	24-24		Blind Rivet alluminium body 4x8
126	24-24	5210007	Plastic cover
127	24-24	5120013	Brake lining (included #84)
128	24-24		Washer UNI6592 ZNT M8 8,4x17x1,6
129	24-24		Screw TE 8.8 UNI5739 M10x40
130	24-24		Nut UNI5588 PG ZNT M10
131	24-24		Washer UNI6592 ZNT M10 10,5x21x2
132	24-24	3458003	Wheel rubber cover
133	24-24		Screw TPS-TC 7505A ZNT 4x20
134	24-24		Brush support (Group with #135)
135	24-24	5400001	Bottom wheel brush (Group with #134)
136	24-24		Screw TCEI 8.8 UNI5931 M6x10
137	24-24		Washer UNI6592 ZNT M6 6,4x12,5x1,6
138	24-24		Washer UNI6592 ZNT M10 10,5x21x2
139	24-24		Screw TCEI 8.8 UNI5931 M10x20
140	24-24		Screw TE 8.8 UNI5739 M12x35
141	24-24		Nut UNI5589 PG ZNT M12
142	24-24		Washer UNI6593 ZNT M10 11x40x2,5
143	24-24		Screw TCEI 8.8 UNI5931 M10x20
144	24-24		Screw TCEI 8.8 UNI5931 M8x25
145	24-24	5210008	Polycarbonate blade protection
147	24-24	5150207	Foot brake lever
148	24-24	5180001	Foot brake pedal
150	24-24	5210012	Side dust outlet
151	24-24	4505010	Doors microswitch
152	24-24	5120022	Microswitch protection
153	24-24		Screw TC-TC UNI8118 3,9x16
155	24-24	3162052	Hinge with fixing screws
160	24-24	5125020	Bottom table protection
166	24-24	5700031	Earth connecting cable
167	24-24		Screw TCEI 8.8 UNI5931 M4x14
168	24-24		Washer UNI6593 ZNT M10 11x30x2,5
169	24-24		Nut UNI5588 PG ZNT M10
170	24-24	5400609	Table-cut locking pin
171	24-24	5070021	Table trunnion
172	24-24	5070023	Support trunnion tilting table
173	24-24	5070027	Tilting pinion
174	24-24		Washer UNI6592 ZNT M10 10,5x21x2
175	24-24		Locknut DIN985 PG ZNT M10
176	24-24	5050240	Guide fence
177	24-24		Screw TBEI M6x10
178	24-24		Screw TE 8.8 UNI5737 M12x100
179	24-24		Washer M12 12,5x28x3
180	24-24	3406132	Block handle
181	24-24		Screw TE 8.8 UNI5739 M10x30
182	24-24		Washer UNI6592 ZNT M10 10,5x21x2
183	24-24	5150250	Table extension
184	24-24	1030382	Adjustment plate

185	24-24		Screw TE 8.8 UNI5739 M10x16
186	24-24		Washer UNI6592 ZNT M10 10,5x21x2
187	24-24		Nut UNI5588 PG ZNT M12
188	24-24		Washer M12 12,5x28x3
189	24-24	1030344	No-rotation post plate
190	24-24		Screw TE 8.8 UNI5739 M6x16
191	24-24	5320101	Brake microswitch

Bandsaw LT 28

Drawing N°	MACHINE	CODE	Part description
1	28	5020129	Upper fly wheel
2	28	3205046	Ball bearing
3	28	5210033	Spacer
4	28	3205046	Ball bearing
5	28		Washer UNI6593 ZNT M10 11x40x2,5
6	28		Seeger D=62 (hole)
7	28	5150113	Upper door
8	28	5050075	Shaft upper wheel
9	28		Screw TCEI 8.8 UNI5931 M10x20
10	28		Screw STEI UNI5927 M10x35
11	28	5030014	Sliding support upper wheel (Group with #20)
12	28	3262010	Thrust bearing (Group with #14)
13	28	5120037	Tension blade steel plate
14	28	3261010	Thrust bearing (Group with #12)
15	28	3402082	Handle for inclination
16	28	3401501	Block for inclination handle
17	28	3458004	Wheel rubber cover
18	28	3177002	Steel wire for tension blade indication
19	28		Frame
20	28	5030015	Support sliding part (Group with #11)
21	28	5120034	Tension cable stop
22	28		Seeger D=30 (shaft)
23	28	5051104	Rack support blade protection
24	28	3402081	Handle locking rack
25	28	5120504	Blade protection
26	28	5250020	Support of blade protection
27	28		Screw TCEI 8.8 UNI5931 M6X16
28	28		Screw TSPEI 10.9 UNI5933 M6X16
30	28		Nut UNI5588 PG ZNT M12
31	28		Washer M12 12,5x28x3
34	28	5080007	Tensioning blade screw
35	28	5270004	Spring steel blade protection
36	28	5031035	Parallel fence
37	28	5051250	Special nut
38	28	5060011	Spacer (Group with part #48)
39	28	5400606	Table level register
40	28	5120027	Fence locking plate
41	28		Fixing pin (included #42)
42	28	3410641	Hand-wheel for upper wheel rise and fall
43	28	3401270	Upper door closing handle
44	28		Screw TE 8.8 UNI5739 M12x60
45	28	5140002	Tension blade spring
46	28	7100906	Tension blade indication box
47	28	5030044	Support of parallel fence (included #56)
48	28	5400504	Round bar support fence (included #38)
49	28		included #50,51,52,53,54,55
50	28	5320150	Connection box (included #49,51,52,53,54,55)
51	28	3450001	Included #50,49,52,53,54,59

52	28		Included #49,50,51,53,54,55
53	28		included #50,51,52,49,54,55
54	28		Included #50,49,52,53,51,66
55	28		Included #50,49,52,53,54,51
56	28	3407257	Locking handle fence support
57	28		Screw TCEI 8.8 UNI5931 M8x25
58	28		Nut UNI5588 PG ZNT M10
59	28	5400601	V-Belt tensioning (included #58,138)
60	28	3417011	V Belt, per unit
61	28		Motor pulley
62	28		Electric motor : see separate price-list
63	28		Key
64	28		Washer UNI6593 ZNT M10 11x30x2,5
65	28		Screw TE 8.8 UNI5739 M10x35
66	28		Screw STEI UNI5923 M8x10
69	28	3179100	Tension cable adjustment (Group with #46)
73	28	3104111	All thread Screw M12x70
74	28		Washer M12 12,5x28x3
75	28		Nut UNI5588 PG ZNT M12
76	28		Screw TE 8.8 UNI5739 M12x60
77	28		Locknut DIN985 PG ZNT M10
79	28		Washer UNI6593 ZNT M6 6,6x18x2
80	28	5140006	Foot brake spring
81	28	5150115	Doors connection
82	28		Screw TCEI 8.8 UNI5931 M6x20
83	28		Screw TE 8.8 UNI5739 M12x70
84	28		Brake pad (Group with #127)
85	28		Screw TCEI 8.8 UNI5931 M10x25
86	28		Washer UNI6592 ZNT M10 10,5x21x2
87	28	5210003	Pinion flange
88	28	5050076	Shaft of bottom wheel
89	28	5150114	Bottom door
90	28		Washer UNI6593 ZNT M10 11x40x2,5
91	28		Seeger D=62 (hole)
92	28	3205046	Ball bearing
93	28	5210033	Spacer
94	28	3205046	Ball bearing
95	28	5020133	Bottom fly wheel
96	28		Screw TE 8.8 UNI5739 M12x70
97	28		Screw STEI UNI5923 M8x10
98	28	5190001	Pinion
99	28	3086114	Spring washer
100	28	3410743	Post rise and fall handle
101	28		Screw TCEI 8.8 UNI5931 M6x20
102	28		Washer UNI6593 ZNT M6 6,6x18x2
103	28		Locknut DIN985 PG ZNT M16
104	28		Nut UNI5588 PG ZNT M6
105	28		Washer UNI6592 ZNT M6 6,4x12,5x1,6
107	28	5010052	Table
109	28	5210005	Table insert
110	28		Screw UNI5449 ZNT M6x16
111	28	5210102	Wooden Insert chute
112	28	1030607	Chute

113	28		Screw TC-TC UNI8118 3,9x16
114	28	5210009	Front aspiration outlet
115	28		Screw TCEI 8.8 UNI5931 M10x25
116	28	3401270	Lower door closing handle
117	28		Nut UNI5588 PG ZNT M10
118	28		Washer UNI6592 ZNT M10 10,5x21x2
120	28		Locknut DIN985 PG ZNT M10
123	28		Washer UNI6593 ZNT M6 6,6x18x2
124	28		Screw TCEI 8.8 UNI5931 M6x20
125	28		Blind Rivet alluminium body 4x8
126	28	5210007	Plastic cover
127	28	5120013	Brake lining (included #84)
128	28		Washer UNI6592 ZNT M8 8,4x17x1,6
129	28		Screw TE 8.8 UNI5739 M10x40
130	28		Nut UNI5588 PG ZNT M10
131	28		Washer UNI6592 ZNT M10 10,5x21x2
132	28	3458004	Wheel rubber cover
133	28		Screw TPS-TC 7505A ZNT 4x20
134	28		Brush support (Group with #135)
135	28	5400001	Bottom wheel brush (Group with #134)
136	28		Screw TCEI 8.8 UNI5931 M6x10
137	28		Washer UNI6592 ZNT M6 6,4x12,5x1,6
138	28		Washer UNI6592 ZNT M10 10,5x21x2
139	28		Screw TCEI 8.8 UNI5931 M10x20
140	28		Screw TE 8.8 UNI5739 M12x35
141	28		Nut UNI5589 PG ZNT M12
142	28		Washer UNI6593 ZNT M10 11x40x2,5
143	28		Screw TCEI 8.8 UNI5931 M10x20
144	28		Screw TCEI 8.8 UNI5931 M8x25
145	28	5210008	Polycarbonate blade protection
147	28	5150208	Foot brake lever
148	28	5180001	Foot brake pedal
150	28	5210012	Side dust outlet
151	28	4505010	Doors microswitch
152	28	5120022	Microswitch protection
153	28		Screw TC-TC UNI8118 3,9x16
155	28	3162051	Hinge with fixing screws
160	28	5125030	Bottom table protection
166	28	5700031	Earth connecting cable
167	28		Screw TCEI 8.8 UNI5931 M4x14
168	28		Washer UNI6593 ZNT M10 11x30x2,5
169	28		Nut UNI5588 PG ZNT M10
170	28	5400609	Table-cut locking pin
171	28	5070026	Table trunnion
172	28	5070023	Support trunnion tilting table
173	28	5070027	Tilting pinion
174	28		Washer UNI6592 ZNT M10 10,5x21x2
175	28		Locknut DIN985 PG ZNT M10
176	28	5050240	Guide fence
177	28		Screw TBEI M6x10
178	28		Screw TE 8.8 UNI5737 M12x100
179	28		Washer M12 12,5x28x3
180	28	3406132	Block handle

181	28		Screw TE 8.8 UNI5739 M10x30
182	28		Washer UNI6592 ZNT M10 10,5x21x2
183	28	5150253	Table extension
184	28	1030382	Adjustment plate
185	28		Screw TE 8.8 UNI5739 M10x16
186	28		Washer UNI6592 ZNT M10 10,5x21x2
187	28		Nut UNI5588 PG ZNT M12
188	28		Washer M12 12,5x28x3
189	28	1030344	No-rotation post plate
190	28		Screw TE 8.8 UNI5739 M6x16
191	28	5320101	Brake microswitch

Bandsaw LT32			
Drawing N°	MACHINE	CODE	Part description
1	32	5020153	Upper fly wheel
2	32	3205048	Ball bearing
3	32	5210034	Spacer
4	32	3205048	Ball bearing
5	32		Washer UNI6593 ZNT M10 11x40x2,5
6	32		Seeger D=72 (hole)
7	32	5150117	Upper door
8	32	5050081	Shaft upper wheel
9	32		Screw TCEI 8.8 UNI5931 M10x20
10	32		Screw STEI UNI5927 M10x35
11	32	5030022	Sliding support upper wheel (Group with #20)
12	32	3262010	Thrust bearing (Group with #14)
13	32	5120038	Tension blade steel plate
14	32	3261010	Thrust bearing (Group with #12)
15	32	3402082	Handle for inclination
16	32	3401501	Block for inclination handle
17	32	3458005	Wheel rubber cover
18	32	3177002	Steel wire for tension blade indication
19	32		Frame
20	32	5030023	Support sliding part (Group with #11)
21	32	5120034	Tension cable stop
22	32		Seeger D=30 (shaft)
23	32	5051105	Rack support blade protection
24	32	3402081	Handle locking rack
25	32	5120504	Blade protection
26	32	5250021	Support of blade protection
27	32		Screw TCEI 8.8 UNI5931 M6X16
28	32		Screw TSPEI 10.9 UNI5933 M6X16
30	32		Nut UNI5588 PG ZNT M12
31	32		Washer M12 12,5x28x3
32	32	5070013	Tunnion tilting table
33	32		Screw TE 8.8 UNI5739 M12x40
34	32	5080008	Tensioning blade screw
35	32	5270005	Spring steel blade protection
36	32	5031036	Parallel fence
37	32	5051250	Special nut
38	32	5060011	Spacer (Group with part #48)
39	32	5400606	Table level register
40	32	5120027	Fence locking plate
41	32		Fixing pin (included #42)
42	32	3410641	Hand-wheel for upper wheel rise and fall
43	32	3401270	Upper door closing handle
44	32		Screw TE 8.8 UNI5739 M12x60
45	32	5140016	Tension blade spring
46	32	7100908	Tension blade indication box
47	32	5030044	Support of parallel fence (included #56)
48	32	5400505	Round bar support fence (included #38)
49	32		included #50,51,52,53,54,55
50	32	5320150	Connection box (included #49,51,52,53,54,55

)
51	32	3450001	Included #50,49,52,53,54,60
52	32		Included #49,50,51,53,54,55
53	32		included #50,51,52,49,54,55
54	32		Included #50,49,52,53,51,67
55	32		Included #50,49,52,53,54,51
56	32	3407257	Locking handle fence support
57	32		Screw TCEI 8.8 UNI5931 M8x25
58	32		Nut UNI5588 PG ZNT M10
59	32	5400601	V-Belt tensioning (included #58,138)
60	32	3417014	V Belt, per unit
61	32		Motor pulley
62	32		Electric motor : see separate price-list
63	32		Key
64	32		Washer UNI6593 ZNT M10 11x30x2,5
65	32		Screw TE 8.8 UNI5739 M10x35
66	32		Screw STEI UNI5923 M8x10
69	32	3179100	Tension cable adjustment (Group with #46)
70	32	5070015	Trunnion support
71	32		Washer M12 12,5x28x3
72	32		Screw TE 8.8 UNI5739 M10x40
73	32	3104111	All thread Screw M12x70
74	32		Washer M12 12,5x28x3
75	32		Nut UNI5588 PG ZNT M12
76	32		Screw TE 8.8 UNI5739 M12x60
77	32		Locknut DIN985 PG ZNT M10
79	32		Washer UNI6593 ZNT M6 6,6x18x2
80	32	5140006	Foot brake spring
81	32	5150119	Doors connection
82	32		Screw TCEI 8.8 UNI5931 M6x20
83	32		Screw TE 8.8 UNI5739 M12x70
84	32		Brake pad (Group with #127)
85	32		Screw TCEI 8.8 UNI5931 M10x25
86	32		Washer UNI6592 ZNT M10 10,5x21x2
87	32	5210003	Pinion flange
88	32	5050082	Shaft of bottom wheel
89	32	5150118	Bottom door
90	32		Washer UNI6593 ZNT M10 11x40x2,5
91	32		Seeger D=72 (hole)
92	32	3205048	Ball bearing
93	32	5210034	Spacer
94	32	3205048	Ball bearing
95	32	5020157	Bottom fly wheel
96	32		Screw TE 8.8 UNI5739 M12x70
97	32		Screw STEI UNI5923 M8x10
98	32	5190001	Pinion
99	32	3086114	Spring washer
100	32	3410746	Post rise and fall handle
101	32		Screw TCEI 8.8 UNI5931 M6x20
102	32		Washer UNI6593 ZNT M6 6,6x18x2
103	32		Locknut DIN985 PG ZNT M16
104	32		Nut UNI5588 PG ZNT M6
105	32		Washer UNI6592 ZNT M6 6,4x12,5x1,6

107	32	5010076	Table
109	32	5210005	Table insert
110	32		Screw UNI5449 ZNT M6x16
111	32	5210102	Wooden Insert chute
112	32	1030637	Chute
113	32		Screw TC-TC UNI8118 3,9x16
114	32	5210009	Front aspiration outlet
115	32		Screw TCEI 8.8 UNI5931 M10x25
116	32	3401270	Lower door closing handle
117	32		Nut UNI5588 PG ZNT M10
118	32		Washer UNI6592 ZNT M10 10,5x21x2
120	32		Locknut DIN985 PG ZNT M10
123	32		Washer UNI6593 ZNT M6 6,6x18x2
124	32		Screw TCEI 8.8 UNI5931 M6x20
125	32		Blind Rivet alluminium body 4x8
126	32	5210007	Plastic cover
127	32	5120018	Brake lining (included #84)
128	32		Washer UNI6592 ZNT M8 8,4x17x1,6
129	32		Screw TE 8.8 UNI5739 M10x40
130	32		Nut UNI5588 PG ZNT M10
131	32		Washer UNI6592 ZNT M10 10,5x21x2
132	32	3458005	Wheel rubber cover
133	32		Screw TPS-TC 7505A ZNT 4x20
134	32		Brush support (Group with #135)
135	32	5400002	Bottom wheel brush (Group with #134)
136	32		Screw TCEI 8.8 UNI5931 M6x10
137	32		Washer UNI6592 ZNT M6 6,4x12,5x1,6
138	32		Washer UNI6592 ZNT M10 10,5x21x2
139	32		Screw TCEI 8.8 UNI5931 M10x20
140	32		Screw TE 8.8 UNI5739 M12x40
141	32		Nut UNI5589 PG ZNT M12
142	32		Washer UNI6593 ZNT M10 11x40x2,5
143	32		Screw TCEI 8.8 UNI5931 M10x20
144	32		Screw TCEI 8.8 UNI5931 M8x25
145	32	5210008	Polycarbonate blade protection
147	32	5150204	Foot brake lever
148	32	5180001	Foot brake pedal
150	32	5210012	Side dust outlet
151	32	4505010	Doors microswitch
152	32	5120022	Microswitch protection
153	32		Screw TC-TC UNI8118 3,9x16
155	32	3162051	Hinge with fixing screws
160	32	5125030	Bottom table protection
166	32	5700031	Earth connecting cable
167	32		Screw TCEI 8.8 UNI5931 M4x14
168	32		Washer UNI6593 ZNT M10 11x30x2,5
169	32		Nut UNI5588 PG ZNT M10
170	32	5400609	Table-cut locking pin
183	32	5150254	Table extension
184	32	1030382	Adjustment plate
185	32		Screw TE 8.8 UNI5739 M10x16
186	32		Washer UNI6592 ZNT M10 10,5x21x2
187	32		Nut UNI5588 PG ZNT M12

188	32		Washer M12 12,5x28x3
189	32	1030344	No-rotation post plate
190	32		Screw TE 8.8 UNI5739 M6x16
191	32	5320102	Brake microswitch

Bandsaw LT37			
Drawing N°	MACHINE	CODE	Part description
1	37	5020170	Upper fly wheel
2	37	3205060	Ball bearing
3	37	5210039	Spacer
4	37	3205060	Ball bearing
5	37		Washer UNI6593 ZNT M18 20x56x4
6	37		Seeger D=90 (hole)
7	37	5150121	Upper door
8	37	5050087	Shaft upper wheel
9	37		Screw TCEI 8.8 UNI5931 M10x20
10	37		Screw STEI UNI5927 M10x35
11	37	5030026	Sliding support upper wheel (Group with #20)
12	37	3262010	Thrust bearing (Group with #14)
13	37	5120039	Tension blade steel plate
14	37	3261010	Thrust bearing (Group with #12)
15	37	3402090	Handle for inclination
16	37	3047059	Nut EN24032 PG ZNT M14
17	37	3458006	Wheel rubber cover
18	37	3177002	Steel wire for tension blade indication
19	37		Frame
20	37	5030027	Support sliding part (Group with #11)
21	37	5120034	Tension cable stop
22	37		Seeger D=35 (shaft)
23	37	5051107	Rack support blade protection
24	37	3402082	Handle locking rack
25	37	5120505	Blade protection
26	37	5120059	Support of blade protection
27	37		Screw STEI UNI5923 M8x16
28	37		Screw TSPEI 10.9 UNI5933 M6X16
30	37		Nut UNI5588 PG ZNT M12
31	37		Washer M12 12,5x28x3
32	37	5070013	Tunnion tilting table
33	37		Screw TE 8.8 UNI5739 M12x40
34	37	5080013	Tensioning blade screw
35	37	5270008	Spring steel blade protection
36	37	5031037	Parallel fence
37	37	5051250	Special nut
38	37	5060011	Spacer (Group with part #48)
39	37	3069010	Table level register
40	37	5120027	Fence locking plate
41	37		Fixing pin (included #42)
42	37	3410641	Hand-wheel for upper wheel rise and fall
43	37	3401270	Upper door closing handle
44	37		Screw TE 8.8 UNI5740 M18x70
45	37	5140016	Tension blade spring
46	37	7100909	Tension blade indication box
47	37	5030045	Support of parallel fence (included #56)
48	37	5400510	Round bar support fence (included #38)
49	37		included #50,51,52,53,54,55

50	37	5320150	Connection box (included #49,51,52,53,54,55)
51	37	3450001	Included #50,49,52,53,54,61
52	37		Included #49,50,51,53,54,55
53	37		included #50,51,52,49,54,55
54	37		Included #50,49,52,53,51,68
55	37		Included #50,49,52,53,54,51
56	37	3407257	Locking handle fence support
57	37		Screw TCEI 8.8 UNI5931 M8x25
58	37		Nut UNI5588 PG ZNT M10
59	37	5400603	V-Belt tensioning (included #58,138)
60	37	3417033	V Belt, per unit
61	37		Motor pulley
62	37		Electric motor : see separate price-list
63	37		Key
64	37		Washer UNI6593 ZNT M10 11x30x2,5
65	37		Screw TE 8.8 UNI5739 M10x35
66	37		Screw STEI UNI5923 M8x10
69	37	3179100	Tension cable adjustment (Group with #46)
70	37	5070015	Trunnion support
71	37		Washer M12 12,5x28x3
72	37		Screw TE 8.8 UNI5739 M10x40
73	37	3104112	All thread Screw M12x80
74	37		Washer UNI6592 ZNT M18 19x34x3
75	37		Nut UNI5589 PF ZNT M18
76	37		Screw TE 8.8 UNI5740 M18x70
77	37		Locknut DIN985 PG ZNT M10
79	37		Washer UNI6593 ZNT M6 6,6x18x2
80	37	5140006	Foot brake spring
81	37	5150123	Doors connection
82	37		Screw TCEI 8.8 UNI5931 M6x20
83	37		Screw TE 8.8 UNI5739 M12x70
84	37		Brake pad (Group with #127)
85	37		Screw TCEI 8.8 UNI5931 M10x25
86	37		Washer UNI6592 ZNT M10 10,5x21x2
87	37	5210003	Pinion flange
88	37	5050088	Shaft of bottom wheel
89	37	5150122	Bottom door
90	37		Washer UNI6593 ZNT M18 20x56x4
91	37		Seeger D=90 (hole)
92	37	3205060	Ball bearing
93	37	5210039	Spacer
94	37	3205060	Ball bearing
95	37	5020173	Bottom fly wheel
96	37		Screw TE 8.8 UNI5739 M12x70
97	37		Screw STEI UNI5923 M8x10
98	37	5190001	Pinion
99	37	3086114	Spring washer
100	37	3410746	Post rise and fall handle
101	37		Screw TCEI 8.8 UNI5931 M6x20
102	37		Washer UNI6593 ZNT M6 6,6x18x2
103	37		Locknut DIN985 PG ZNT M16

104	37		Nut UNI5588 PG ZNT M6
105	37		Washer UNI6593 ZNT M6 6,6x18x2
107	37	5010083	Table
109	37	5210005	Table insert
110	37		Screw UNI5449 ZNT M6x16
111	37	5210102	Wooden Insert chute
112	37	1030811	Chute
113	37		Screw TC-TC UNI8118 3,9x16
114	37	5210009	Front aspiration outlet
115	37		Screw TCEI 8.8 UNI5931 M10x25
116	37	3401270	Lower door closing handle
117	37		Nut UNI5588 PG ZNT M10
118	37		Washer UNI6592 ZNT M10 10,5x21x2
120	37		Locknut DIN985 PG ZNT M10
123	37		Washer UNI6593 ZNT M6 6,6x18x2
124	37		Screw TCEI 8.8 UNI5931 M6x20
125	37		Blind Rivet alluminium body 4x8
126	37	5210007	Plastic cover
127	37	5120019	Brake lining (included #84)
128	37		Washer UNI6592 ZNT M8 8,4x17x1,6
129	37		Screw TE 8.8 UNI5739 M10x40
130	37		Nut UNI5588 PG ZNT M10
131	37		Washer UNI6592 ZNT M10 10,5x21x2
132	37	3458006	Wheel rubber cover
133	37		Screw TPS-TC 7505A ZNT 4x20
134	37		Brush support (Group with #135)
135	37	5400003	Bottom wheel brush (Group with #134)
136	37		Screw TCEI 8.8 UNI5931 M6x10
137	37		Washer UNI6592 ZNT M6 6,4x12,5x1,6
138	37		Washer UNI6592 ZNT M10 10,5x21x2
139	37		Screw TCEI 8.8 UNI5931 M10x20
140	37		Screw TE 8.8 UNI5739 M12x40
141	37		Nut UNI5589 PG ZNT M12
142	37		Washer UNI6593 ZNT M10 11x40x2,5
143	37		Screw TCEI 8.8 UNI5931 M10x20
144	37		Screw TCEI 8.8 UNI5931 M8x20
145	37	5210008	Polycarbonate blade protection
147	37	5150205	Foot brake lever
148	37	5180001	Foot brake pedal
150	37	5210012	Side dust outlet
151	37	4505010	Doors microswitch
152	37	5120022	Microswitch protection
153	37		Screw TC-TC UNI8118 3,9x16
155	37	3162051	Hinge with fixing screws
160	37	5125030	Bottom table protection
166	37	5700031	Earth connecting cable
167	37		Screw TCEI 8.8 UNI5931 M4x14
168	37		Washer UNI6593 ZNT M10 11x30x2,5
169	37		Nut UNI5588 PG ZNT M10
170	37	5400609	Table-cut locking pin
183	37	5150256	Table extension
184	37	5250003	Adjustment plate
185	37		Screw TE 8.8 UNI5739 M10x16

186	37		Washer UNI6592 ZNT M10 10,5x21x2
187	37		Nut UNI5589 PF ZNT M18
188	37		Washer UNI6592 ZNT M18 19x34x3
189	37	1030753	No-rotation post plate
190	37		Screw TE 8.8 UNI5739 M6x16
191	37	5320102	Brake microswitch

LAGUNA

2072 Alton Parkway. Irvine, CA 92606
Ph: 800.234.1976 | www.lagunatools.com

Laguna Tools is not responsible for errors or omissions.
Specifications subject to change. Machines may be shown with optional accessories.

© 2018, Laguna Tools, Inc. LAGUNA® and the LAGUNA Logo® are the
registered trademarks of Laguna Tools, Inc. All rights reserved.