# JET

# **JTS-315SP**

**Construction Saw** 

Original:

GB

**Operating Instructions** 

Translations:

D

Gebrauchsanleitung

F

Mode d'emploi



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M-10000910SM/ST 10000914M 2009-10

# **CE-Conformity Declaration**

Product: Circular Saw Bench

# JTS-315SP

Stock Number: 10000910SM, 10000910ST, 10000914M

Brand: JET

Manufacturer:

Walter Meier (Fertigung) AG, Bahnstrasse 24, 8603 Schwerzenbach, Switzerland

On our own responsibility we hereby declare that this product complies with the regulations

\* 2006/42/EC Machinery Directive

\* 2004/108/EC EMC Directive (Electro Magnetic Compatibility)

\* 2006/95/EC Low Voltage Directive

\* 2002/95/EC RoHS Directive (Reduction of Hazardous Substances)

designed in consideration of the standards

\*\* EN 61029-1, EN 61029-2-1 EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3

Technical file compiled by: Marcel Hofstetter, Head of Product Management

CE type examination

\*\*\* BM 60007827 0001

performed by

\*\*\*\* TÜV Rheinland Product Safety GmbH, Am Grauen Stein, DE-51105 Köln (notified body No 0197).

2009-10-30 Carl Müller, General Manager

Cal Rulle

Walter Meier (Fertigung) AG, Bahnstrasse 24, 8603 Schwerzenbach, Switzerland

# **GB - ENGLISH**

# **Operating Instructions**

Dear Customer,

Many thanks for the confidence you have shown in us with the purchase of your new JET-machine. This manual has been prepared for the owner and operators of a JET JTS-315SP table saw to promote safety during installation, operation and maintenance procedures. Please read and understand the information contained in these operating instructions and the accompanying documents. To obtain maximum life and efficiency from your machine, and to use the machine safely, read this manual thoroughly and follow instructions carefully.

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#### 1. Declaration of conformity

On our own responsibility we hereby declare that this product complies with the regulations\* listed on page 2. Designed in consideration with the standards\*\*. CE type examination\*\*\* performed by\*\*\*\*.

#### 2. Warranty

The Seller guarantees that the supplied product is free from material defects and manufacturing faults. This warranty does not cover any defects which are caused, either directly or indirectly, by incorrect use, carelessness, accidental damage, repair, inadequate maintenance or cleaning and normal wear and tear.

Guarantee and/or warranty claims must be made within twelve months from the date of purchase (date of invoice). Any further claims shall be excluded.

This warranty includes all guarantee obligations of the Seller and replaces all previous declarations and agreements concerning warranties.

The warranty period is valid for eight hours of daily use. If this is exceeded, the warranty period shall be reduced in proportion to the excess use, but to no less than three months.

Returning rejected goods requires the prior express consent of the Seller and is at the Buyer's risk and expense.

Further warranty details can be found in the General Terms and Conditions (GTC). The GTC can be viewed at <a href="https://www.jettools.com">www.jettools.com</a> or can be sent by post upon request.

The Seller reserves the right to make changes to the product and accessories at any time.

#### 3. Safety

#### 3.1 Authorized use

This machine is designed for sawing wood, wood derived materials as well as similar to be machined hard plastics only.

Machining of other materials is not permitted and may be carried out in specific cases only after consulting with the manufacturer.

No metal workpieces may be machined.

The workpiece must allow to safely be loaded, supported and guided.

Do not cut round stock without suitable jigs or fixtures. The rotating saw blade could turn the work-piece.

The proper use also includes compliance with the operating and maintenance instructions given in this manual.

The machine must be operated only by persons familiar with its operation, maintenance and repair and who are familiar with its hazards. The required minimum age must be observed

The machine must only be used in a technically perfect condition When working on the machine, all safety mechanisms and covers must be mounted.

In addition to the safety requirements contained in this operating instructions and your country's applicable regulations, you should observe the generally recognized technical rules concerning the operation of woodworking machines.

Any other use exceeds authorization. In the event of unauthorized use of the machine, the manufacturer renounces all liability and the responsibility is transferred exclusively to the operator.

# 3.2 General safety notes

Woodworking machines can be dangerous if not used properly. Therefore the appropriate general technical rules as well as the following notes must be observed.

Read and understand the entire instruction manual before attempting assembly or operation.

Keep this operating instruction close

Keep this operating instruction close by the machine, protected from dirt and humidity, and pass it over to the new owner if you part with the tool.

No changes to the machine may be made.

Daily inspect the function and

existence of the safety appliances before you start the machine. Do not attempt operation in this case, protect the machine by unplugging the mains cord.

Remove all loose clothing and confine long hair.

Before operating the machine, remove tie, rings, watches, other jewellery, and roll up sleeves above the elbows.

Wear safety shoes; never wear leisure shoes or sandals. Always wear the approved working outfit

Always wear ear protection when operating a table saw.

- safety goggles
- ear protection
- dust protection

Do **not** wear gloves while operating this machine.

For the safe handling of sawblades wear work gloves.

Observe the chapter "save operation" in this manual.

Check the correct rotation of the sawblade before operating the machine.

Do not start cutting operation until sawblade is at full speed.

Control the stopping time of the machine, it may not be longer than 10 seconds.

Do not use side pressure to stop rotating blade.

Insure that the work piece does not roll when cutting round pieces.

Use suitable table extensions and supporting aids for difficult to handle workpieces.

Always hold and guide the workpieces safely during machining.

Pay particular attention to instructions on reducing the risk of kickback.

The supplied raving knife must always be used. Adjust the space to the sawblade to be max 5mm.

Do not perform any operation for which the tool has not been designed for, e.g. do not use this table saw to cut logs or firewood.

Do not perform any operation freehand.

Never reach around or over the saw blade.

When ripping narrow workpieces (smaller than 120mm) use as push-stick or push-wood.

Push stick or push wood must stay with the machine when tool is stored and not in use.

Always use the mitre gauge for cutting off.

The use of dado-blades and groove cutters is not permissible.

Make sure that small cut off workpieces will not be caught and thrown away by the rising saw blade teeth.

Remove cut and jammed workpieces only when motor is turned off and the machine is at a complete standstill.

Install the machine so that there is sufficient space for safe operation and work piece handling.

Keep the inside of the cabinet clear of sawdust and wood chips. Make sure the motor fan and fan cover are kept clear of sawdust.

Keep work area well lighted.

The machine is designed to operate in closed rooms and must be placed stable on firm and levelled ground.

Make sure that the power cord does not impede work and cause people to trip.

Never use the power cord to carry the tool.

Do not expose the power cord to heat, oil or any sharp corners. Do not pull the cord to unplug.

Keep the floor around the machine clean and free of scrap material, oil and grease.

Stay alert!

Give your work undivided attention. Use common sense.

Keep an ergonomic body position. Maintain a balanced stance at all times

Pull the mains plug if the tool is not in use.

Pull the mains plug prior to any maintenance or change of accessory (e.g. sawblade).

Before starting the machine make sure that operating and measuring tools are removed from the machine.

Do not operate the machine when you are tired.

Do not operate the machine under the influence of drugs, alcohol or any medication. Be aware that medication can change your behaviour.

Keep children and visitors a safe distance from the work area.

Never reach into the machine while it is operating or running down.

Never leave a running machine unattended. Before you leave the workplace switch off the machine.

Do not operate the electric tool near inflammable liquids or gases.

Observe the fire fighting and fire alert options, for example the fire extinguisher operation and place.

Do not use the machine in a dump environment and do not expose it to rain.

Wood dust is explosive and can also represent a risk to health.

Dust form some tropical woods in particular, and from hardwoods like beach and oak, is classified as a carcinogenic substance.

Always use a suitable dust extraction device

Before machining, remove any nails and other foreign bodies from the work piece.

Specifications regarding the maximum or minimum size of the work piece must be observed.

Cut thin or thin-walled work-piece only with fine-toothed saw blades.

Never cut several work-pieces at the same time – and also no bundles containing several individual pieces. Risk of personal injury if individual pieces are caught by the saw blade uncontrolled.

When cutting round stock, use a suitable jig to prevent the work-piece from turning.

Never cut work-pieces containing the following materials:

-Ropes, strings, cords, cables and wires.

Do not force the power tool. It will do a better and safer job and give you much better service if it is used at the rate for which it was designed.

Do not remove chips and work piece parts until the machine is at a complete standstill.

Never operate with the guards not in place – serious risk of injury!

Do not stand on the machine.

Connection and repair work on the electrical installation may be carried out by a qualified electrician only.

Always unwind any extension cords fully.

Have a damaged or worn cord replaced immediately.

Do not use the machine when the ON-OFF switch does not operate correctly.

The use of accessories other than those recommended in this manual can create a safety hazard.

Make all machine adjustments or maintenance with the machine unplugged from the power source.

When installing a new sawblade make sure that it matches the raving knife.

The raving knife thickness must be in between sawblade body thickness and width of cut.

Make sure that the sawblade is suitable for the work piece material to be cut.

Use only sawblades according to EN 847-1

Never use sawblades made from High Speed Steel (HSS).

Remove defective sawblades immediately.

A worn table insert must be replaced.

# 3.3 Remaining hazards

When using the machine according to regulations some remaining hazards may still exist

The moving sawblade in the work area can cause injury.

Broken saw blades can cause injuries.

Thrown workpieces can lead to injury

Wood chips and sawdust can be health hazards. Be sure to wear personal protection gear such as safety goggles ear- and dust protection.

Use a suitable dust exhaust system.

The use of incorrect mains supply or a damaged power cord can lead to injuries caused by electricity.

#### 4. Machine specifications

#### 4.1 Technical data

Machine Table	550x800 mm
Rear table extensions	550x800 mm
Sawblade diameter	315 mm
Blade bore diameter	30 mm
Blade body thickness	1,8-2,2 mm

Raving knife thickness 2,3 mm
Blade speed 50Hz 2990rpm
(Blade speed 60Hz 3550 rpm)
Cutting height & 90°/45° max90/60mm
Tilting range of blade 90°- 47°
Dust port diameter 100 mm
Working height 800 mm
Weight 74 kg

Mains 230V~ L/N/PE 50(60)Hz
Motor input power 1600W S1-100%
Reference current 7,0 A
Extension cord (H07RN-F) 3G1,5mm²
Installation fuse protection 16A
Protection class

Mains 400V ~3L/PE 50Hz
Motor input power 2000W S1-100%
Reference current 3,5 A
Extension cord (H07RN-F) 4G1,5mm²
Installation fuse protection 16A
Protection class

Mains 110V~ L/N/PE 50Hz
Motor input power 1600W S1-100%
Reference current 18,6 A
Extension cord (H07RN-F) 3G2,5mm²
Installation fuse protection 25A
Protection class

#### 4.2 Noise emission

Determined according to EN ISO 3744 (Inspection tolerance 4 dB) Work piece plywood 16mm:

Acoustic power level (according to EN ISO 3746):

Idling LwA 99,6 dB(A) Operating LwA 104,8 dB(A)

Acoustic pressure level (according to EN ISO 11202):

Idling LpA 86,7 dB(A) Operating LpA 95,5 dB(A)

The specified values are emission levels and are not necessarily to be seen as safe operating levels. This information is intended to allow the user to make a better estimation of the hazards and risks involved.

#### 4.3 Content of delivery

Machine stand
Rear table extension
Rip fence
Sawblade dia 315mm
Raving knife
Saw guard
Dust connection hose and Y-adapter
2 Wheels
2 Carry handles
Push stick
Operating tools
Operating manual
Spare parts list

#### 4.4 Description of machine

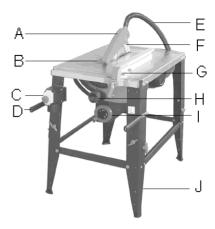


Fig 1

A.....Saw guard

B.....Table insert

C....On/Off switch

D.....Carry handle

E..... Dust connection hose

F..... Raving knife

G..... Rip fence

H.... Tilting handle

I.... Blade rising handle

J.....Foldable leg stand

#### 5. Transport and start up

#### 5.1 Transport and installation

Never lift the tool on it's guards.

The sawblade must be covered by the saw guard during transport.

The machine is designed to operate in dry rooms and must be placed stable on firm and levelled ground.

For packing reasons the machine is not completely assembled.

#### WARNING:

To avoid injury, if any parts are missing, do not attempt to assemble the machine, do not plug in the power cord, do not turn the switch on until the missing parts are obtained and installed correctly.

#### 5.2 Assembly

Assemble tool in strict accordance with these instructions. Only if you follow the instructions exactly does the machine conform to the safety regulations and can be safely operated.

If you notice any transport damage while unpacking, notify your supplier

immediately. Do not operate the machine!

Dispose of the packing in an environmentally friendly manner.

Clean all rust protected surfaces with a mild solvent.

# Requirements for machine assembly:

- -Philips screwdriver
- -22mm wrench
- -17mm wrench
- -10mm wrench
- -8mm wrench
- -pair of work gloves

## Stand assembly:

The four legs have been folded before shipment.

To assemble the stand:

- unfold the four legs ( J, Fig 2) and tighten the nuts securely.
- insert the short crossbeams and tighten the nuts.



Fig 2

- insert the short crossbeams (Fig 3) and tighten the nuts



Fig 3

NOTE: The carriage bolts (L, Fig 4) must be positioned in the groove to fasten through wing nut.

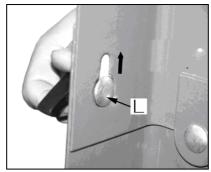


Fig 4

#### Install dust port:

Attach the dust port with 3 taping screws (M, Fig 5).

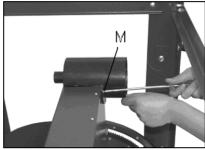


Fig 5

#### Install switch:

Fit the switch (C, Fig 6) on the left front leg, using two M4 self-locking nuts and two M4X60 screws.

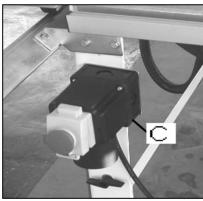


Fig 6

# Install saw blade:

See chapter 7.1

#### Install raving knife:

See chapter 7.2

## Install table insert:

Position the table insert into the Table top, and lock with 6 screws.

# Install blade guard:

See chapter 7.3

#### Install rip fence carrier:

Attach the rip fence carrier to the machine table front with

- -2 Carriage bolts M6X20
- 2 Nuts M6

#### Install rip fence:

Use 2 bots and wing nuts (W, Fig 7) to attach the aluminium profile (G) to the rip fence body

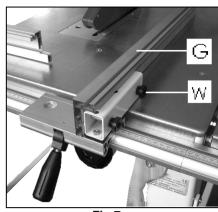


Fig 7

#### Install rear extension table:

Fit the rear table extension (X, Fig 8).

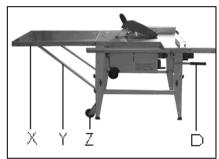


Fig 8



Fig 9

Attach two support arms (Y, Fig 10). Adjust the table to be level and tighten the nuts.

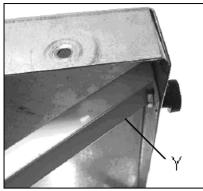


Fig 10

#### Install wheels:

Attach the wheels (X, Fig 11) with 4 bolts and nuts.

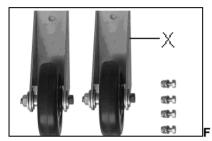


Fig 11

#### Install sliding table:

Mount the sliding table guide profile with the supplied L-brackets (Fig 12)

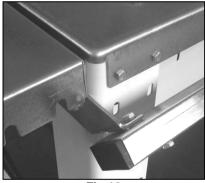


Fig 12

Install the sliding table. The sliding table must be aligned to run parallel to the sawblade and table surface to be approximately 0,5 mm higher than the machine table (Fig 13).



Fig 13

#### 5.3 Dust connection

Before initial operation, the machine must be connected to a dust extractor. The suction should switch on automatically when the saw is switched on.

Attach the connecting hose to the saw guard and the Y-piece

A 100mm dust collection hose can be connected.

#### 5.4 Mains connection

Mains connection and any extension cords used must comply with applicable regulations.

The mains voltage must comply with the information on the machine licence plate.

The mains connection must have a 16A surge-proof fuse.

Only use connection cables marked H07RN-F

Connections and repairs to the electrical equipment may only be carried out by qualified electricians.

# 5.5 Starting operation

You can start the machine with the green ON button. The red OFF-button on the main switch (C, Fig 1) stops the machine.

# 6. Machine operation

# Correct working position:

In front of the machine standing out of the line of cutting (danger zone).

#### Work piece handling:

Hands placed flat on the work piece outside the cutting area.

Feed the work piece towards the saw blade in the direction of the saw line. Push the work piece steadily forward; complete the cut as a single movement.

Support long and wide workpieces with helping roller stands.

#### Operating hints:

Always observe the safety instructions and adhere to the current regulations.

Ensure that the saw blade protective cover is in the correct position before you start sawing.

The cutting blade must first reach the

maximum rpm before cutting may begin.

#### Attention:

The condition of the blade should be checked before each machining process.

Work only with a sharp and flawless sawblade.

Never use a sawblade rated with a blade speed lower than the machine.

Use a suitable wedge to prevent round timber from turning under the pressure of the cut

Use suitable table extensions and supporting aids for difficult to handle workpieces.

Always hold and guide the workpieces safely during machining.

Do not perform any operation freehand.

Do not perform any grooving, tenoning or splitting operations on this machine.

When ripping narrow workpieces (width less than 120mm) use a pushstick (Fig 14) or push-wood.

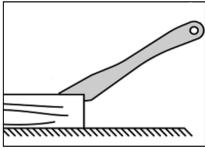


Fig 14

Make sure that small cut off workpieces will not be caught and thrown away by the rising saw blade teeth.

Remove cut and jammed workpieces only when motor is turned off and the machine is at a complete standstill.

Pay particular attention on reducing the risk of kickback.

The supplied raving knife must always be used. Inspect for correct adjustments.

For the authorized use of the machine observe the appendix A "safe operation" (on the last pages of this

#### operating manual)

# (on the last pages of this operating manual)

A.1.: Ripping

A.2.: Ripping of narrow stock

A.3.: Crosscutting on rip fence

A.4.: Mitre cutting

A.5.: Ripping of big board

#### 7. Setup and adjustments

#### General note:

Setup and adjustment work may only be carried out after the machine is protected against accidental starting by pulling the mains plug.

## 7.1 Changing sawblade

The sawblade has to meet the technical specification.

# Use only sawblades according to EN 847-1

Check sawblade for flaws (cracks, broken teeth, bending) before installation. Do not use faulty sawblades.

The sawblade teeth must point in cutting direction (down)

Always wear suitable gloves when handling sawblades.

#### WARNING:

When installing or changing saw blade, always disconnect saw from power source, unplug!

Remove the saw guard (A, Fig 1)) and table insert (B).

Raise sawblade fully.

Loosen the arbor nut while stopping the arbor against rotation with the supplied tools (S, T, Fig 15)

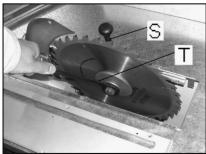


Fig 15

Attention: left hand thread.

Remove the arbor nut (R, Fig 16 and flange (Q).

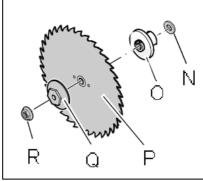


Fig 16

Place saw blade(P) on arbor shaft making sure teeth point down at the front of the saw.

Reinstall flange and arbor nut and securely tighten.

#### Order for installation:

- -adjusting washer (N)
- -centring flange (O)
- -saw blade (P)
- -tightening flange (Q)
- -left handed nut (R)

Reinstall the table insert and the saw guard.

#### 7.2 Mounting the raving knife

The supplied raving knife must always be used.

Disconnect saw from power source, unplug!

The raving knife (F, Fig 17) is clamped with 1 nut (U).

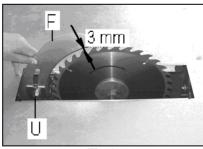


Fig 17

Adjust the space between sawblade teeth and raving knife to be 2 to 5mm.

Well tighten the locking nut (U).

#### 7.3 Mounting the saw guard

The saw guard must always be used.

Attach the saw guard (A, Fig 18) to the raving knife (F) with 1 carriage bolt, washer and wing nut

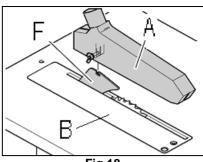


Fig 18

The saw guard must be lowered to the work piece to minimise the amount of exposed teeth.

#### 7.4 Rising and tilting of sawblade

Setup adjustments of the sawblade shall never be performed when the machine is running.

Use the front handle (I, Fig 1)to raise the sawblade.

Use the tilting handle (H, Fig 1) to tilt the sawblade. Tighten knob to lock in place.

Start the machine with care.

# 7.5 Rip fence setup

Rip fence setup shall never be performed when the machine is running.

Use 2 bots and wing nuts (W, Fig 19) to attach the aluminium profile (G) to the rip fence body

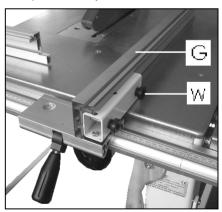


Fig 19

#### Note:

The rip fence profile can be placed flat and adjusted in length.

- -Use in upright position (Fig 19) for cutting wide stock:
- -The cutting of small workpieces (width less than 120mm) and tilted cuts shall only be performed with the rip fence profile placed flat (Fig 20).

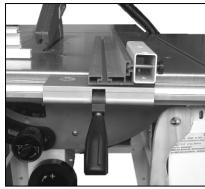


Fig 20

Start the machine with care.

## 7.6 Adjusting 90°stop

The positive stop is adjusted at the factory.

If out of alignment:

Disconnect saw from the power source, unplug.

Readjust the positive 90° stop.

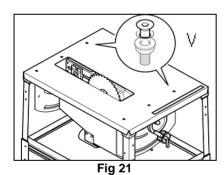
#### 7.7 Adjusting sawblade parallel

The sawblade is adjusted parallel to the machine table at the factory.

If out of alignment:

Disconnect saw from the power source, unplug.

Loosen the screws on the tabletop (V, Fig 21) and readjust saw unit.



8. Maintenance and inspection

#### **General notes:**

Maintenance, cleaning and repair work may only be carried out after the machine is protected against accidental starting by pulling the mains plug.

Repair and maintenance work on the electrical system may only be carried out by a qualified electrician.

Consult a qualified repair shop if a malfunction or damage occurs to this tool, including sawblades and quards.

# Cleaning:

Clean the machine regularly.

Inspect the proper function of the dust extraction daily.

Keep the inside of the cabinet clear of sawdust and wood chips.

All protective and safety devices must be re-attached immediately after completed cleaning, repair and maintenance work.

Defective safety devices must be replaced immediately.

#### Saw blades:

The servicing of saw blades should only be performed by a trained person.

Defective safety devices must be replaced immediately.

Check saw blades regularly for faults. Replace a defective sawblades immediately.

#### **Motor Break:**

The motor break works electromechanically (break motor). If breaking time should exceed 10 seconds, the motor break assembly needs to be replaced. Contact your Jet service station immediately.

#### 9. Trouble shooting

#### Motor doesn't start

\*No electricitycheck mains and fuse.

\*Defective switch, motor or cordconsult an electrician.

#### Machine vibrates excessively

\*Stand on uneven flooradjust stand for even support.

\*dust on saw flangesclean saw arbor and flanges.

\*defective sawblade replace sawblade immediately

# Cut is not accurately square \*90° stop not adjusted correctly-

check with square and adjust stop.

#### Material binds blade when ripping

\*Rip fence not parallel to sawbladecheck and adjust rip fence.

\*Wrapped woodselect another piece of wood.

\*Excessive feedratereduce feedrate.

#### Material kicked back from blade

\*Fence not aligned with sawbladecheck and adjust rip fence.

\*Raving knife not in placehigh danger, mount immediately with guard.

#### Cutting surfaces is bad

- \*Wrong sawblade used
- \*Blade mounted backwards
- \*resin collection on sawblade
- \*sawblade is dull
- \*work piece inhomogeneous
- \*Feed pressure too high-Do not force the work piece.

# 10. Environmental protection

Protect the environment.

Your appliance contains valuable materials which can be recovered or recycled. Please leave it at a specialized institution.

#### 11. Available accessories

(A, Fig 22) Stock No.: 10000811 Right table extension 550 x 800mm including rip fence base extension.



Fig 22

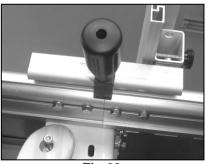


Fig 23

Refer to the JET-Pricelist for various saw blades.

#### 12. Safe operation

See appendix A (on the last pages of this operating manual)

A.1.: Ripping

A.2.: Ripping of narrow stock

A.3.: Crosscutting on rip fence

A.4.: Mitre cutting

A.5.: Ripping of big board