

USER INSTRUCTIONS



VEGETABLE PREPARATION MACHINE RG-400i



Made in Sweden. Exclusively distributed and serviced in Australia by Roband Australia Pty Ltd.

All standard Hällde products are designed to run at 220-240V per phase, 50Hz.

All specifications are nominal only. All information contained in this instruction is subject to change without notice due to constant research and development. AB Hällde Maskiner reserves the right to make changes to machines, accessories and cutting tools.

All care has been taken to ensure correct information at time of printing. AB Hällde Maskiner accepts no responsibility for printing errors.



Vegetable Preparation Machine RG-400i

CAUTION!



Take great care not to injure your hands on the sharp blades of the cutting tools and feed cylinder and on moving parts.

The machine may be installed only by a qualified service mechanic.

Never put your hands in any of the feed attachments or feed cylinder A other than for cleaning.

Always use the pestles for cutting by means of the 4-tube insert.

Never put your hands in the machine outlet when the feed cylinder is lowered and the locking handle is raised.

The agitator device, locking bolt and decorating device must be tightened (by turning them anti-clockwise) and unscrewed (clockwise), by means of the wrench.

Always press the machine stop button before fitting or removing cutting tools, etc. even if the machine is not running.

Before cleaning, switch off the machine and remove the plug from the wall socket or turn off the main switch.

When using the 4-tube insert never use cutting tools larger than 10 mm.

Only a qualified service mechanic may repair the machine and open the machine housing.

Do not use the machine to cut frozen foods. Remove all hard parts from foods before cutting (e.g., apple stems, woody parts of turnips, etc.) to avoid damaging the cutting blades.

These appliances are not to be operated by children or persons with reduced physical, sensory or mental capabilities or persons lacking experience of such appliances, unless they are given adequate instruction or supervision.

The machine should only run continuously for 1 hour maximum when the speed control is set to "1". Let the machine rest for an hour before starting it again.

When the speed control is set to "2", no such restrictions apply.

UNPACKING

Check that all parts have been delivered, that the machine operates as intended, and that nothing has been damaged in transit.

The machine supplier should be notified of any shortcomings within eight days.

INSTALLATION

Connect the machine to an electric power supply that is suitable for the machine.

Remove the cutting tool before installing the machine.

Reset the adjustable feet as necessary to make sure that the machine stands firmly.

Locate the hanger for the cutting tools on the wall in the vicinity of the machine for convenient and safe use.

Check that the shaft rotates clockwise.

Check that the machine stops when the locking handle is folded down.

Check that the machine stops when the locking knob for the feed hopper attachment or 4-tube insert is turned clockwise to the unlocked position, and that the machine restarts when the locking knob is turned anti-clockwise to the locked position.

Check that the machine stops when the manual or pneumatic push feed attachment feed plate is swung to the side so that the feed cylinder opening is larger than 60 mm, and that the machine restarts when it is swung back over the feed cylinder.

If the machine does not function correctly, it must receive attention before it is taken into operation.

ALWAYS CHECK BEFORE USE

Remove the plug from the power supply socket or open the isolating switch, and then check that the electric cable is in good condition and is not cracked on the outside.

WITH THE MANUAL/PNEUMATIC FEEDER:

Check that, with a cutting tool fitted, the machine stops within 2 seconds as soon as the pusher plate is swung out to the side more than 60 mm, and re-starts when the pusher plate is swung back over the feeder. NOTE! Less than 60 mm is approved.

Check that the machine, during operation, stops when the lock handle is lowered.

If either of the two safety functions does not perform as intended or if the electric cable is cracked, call in a qualified service mechanic or electrician to remedy the fault before connecting the machine back to the power supply.

Check that the pusher plate shaft runs freely. If the shaft does not run freely, clean it carefully and lubricate it with a few drops of machine oil.

Check that the cutting tools are in good condition and are sharp.

With regard to cutting tools, see page 41.

WITH THE FEED HOPPER:

Remove the plug from the power supply socket or open the isolating switch, and then check that the electric cable is in good condition and is not cracked on the outside.

Check that the machine, with cutting tool mounted, stops within two seconds when the handle of the Feed Hopper is turned clockwise and starts when the handle is brought turned back.

Check that the machine, during operation, stops when the lock handle is lowered.

If the safety function does not perform as intended or if the electric cable is cracked, call in a qualified service mechanic or electrician to remedy the fault before connecting the machine back to the power supply.

Check that the cutting tools are in good condition and are sharp.

With regard to cutting tools, see page 41.

WITH THE 4-TUBE INSERT:

Remove the plug from the power supply socket or open the isolating switch, and then check that the electric cable is in good condition and is not cracked on the outside.

Check that the machine, with cutting tool mounted, stops within two seconds when the handle of the 4-tube insert is turned clockwise and starts when the handle is brought turned back.

Check that the machine, during operation, stops when the lock handle is lowered.

If the safety function does not perform as intended or if the electric cable is cracked, call in a qualified service mechanic or electrician to remedy the fault before connecting the machine back to the power supply.

Check that the cutting tools are in good condition and are sharp.

With regard to cutting tools, see page 41.

TYPE OF PROCESSING

Slices, dices, grates, shreds, cuts julienne, crimping slices and potato chips in a variety of dimensions, depending on the cutting tool selected. Processes vegetables, fruit, dry bread, cheese, nuts, mushrooms etc.

USERS

Restaurants, shop kitchens, hospitals, schools, fast food outlets, catering, pizzerias, ships, central kitchens, institution kitchens, food processing industries etc.

CAPACITY

Up to 3 000 portions per day, 15 kg per minute with the manual feeder and 40 kg per minute with the feed hopper.

USING THE FEEDERS

MANUAL FEEDER, ERGO LOOP/ PNEUMATIC PUSH FEEDER:

These two feeders can be used for all types of products, small and large.

Feed Cylinder A with three internal knives fix and divide up the product during preparation and is optimized for preparation of cabbage.

MANUAL FEEDER, ERGO LOOP

Feed Cylinder B with one internal wall is optimized for manually orienting of products, stacking.

THE FEED HOPPER:

Is used for continuous cutting of large quantities of round products like potatoes, onions etc.

THE 4-TUBE INSERT:

Is used for cutting long products such as cucumbers into slicers, see picture.

ASSEMBLING AND DISMANTLING

THE FEED CYLINDER

When fitting, fold down the locking handle.

Push the feed cylinder onto the hinge pins of the machine, and lower the feed cylinder.

Raise the locking handle.

When removing, first remove the feed attachment.

Lower the locking handle.

Remove the feed cylinder from the hinge pins of the machine.

THE 4-TUBE INSERT

Press the stop button.

When fitting, fit feed cylinder A or B.

Place the 4-tube insert in the feed cylinder with the shaft in the feed cylinder tube.

Press down the 4-tube insert and turn the locking knob anti-clockwise.

When removing, turn the locking knob clockwise and remove the 4-tube insert.

THE MANUAL PUSH FEED ATTACHMENT

Press in the machine stop button.

When fitting, fit feed cylinder A or B.

Move the lever up all the way.

Fit the manual push feed attachment shaft into the feed cylinder tube.

Press down the manual push feed attachment and swing it in anti-clockwise.

When removing, press down the stop pad and swing out the manual push feed attachment clockwise and remove it.

THE PNEUMATIC PUSH FEED ATTACHMENT

Press in the machine stop button.

When fitting, fit feed cylinder A.

Fit the pneumatic push feed attachment shaft into the feed cylinder tube.

Press down the pneumatic push feed attachment and swing it anti-clockwise.

Push the compressor hose snap coupling onto the pneumatic push feed attachment nipple.

Set the speed controls of the machine and of the pneumatic push feed attachment to suit the cutting tool being used as specified in the instructions under the heading SETTING THE SPEED CONTROLS.

Start the compressor and adjust its delivery pressure to 5,5 bar. Handle the compressor in accordance with the manufacturer's instructions.

Check the air pressure on the pressure gauge. The recommended air pressure is 5 bar but the actual value needed may vary. If the air pressure reading on the pressure gauge is different, pull the control upwards and then turn it until the pressure gauge reading is 5 bar, and then press it back down again.

When removing, switch off the compressor and then disconnect the compressor hose snap coupling from the pneumatic push feed attachment nipple.

Press down the stop pad and swing out the pneumatic push feed attachment clockwise, and then remove it.

THE FEED CYLINDER FOR FEED HOPPER

When fitting, fold down the locking handle.

Push the feed cylinder onto the hinge pins of the machine, and lower the feed cylinder.

Raise the locking handle.

When removing, first remove the feed attachment.

Lower the locking handle.

Remove the feed cylinder from the hinge pins of the machine.

THE FEED HOPPER

Press in the stop button.

When fitting, fit the feed cylinder with two internal guides.

Place the feed hopper in the centre of the feed cylinder, with the shaft in the feed cylinder tube.

Press down the feed hopper and turn the locking knob anti-clockwise.

When removing, turn the locking knob clockwise and remove the feed hopper.

FITTING THE CUTTING TOOLS AND TRAY

While using the manual or pneumatic feeder, make sure the pusher plate is in the upper position and swing it out the feeder to the left. If the feed hopper or 4-tube insert is being used, lift the shaft out of its mounting at the back of the machine.

Lower the locking handle and tilt the feeder backwards.

If the tray is to be used, the ejector plate is placed in the bottom of the tray. Ensure that the machine's knife housing has been thoroughly cleaned. The tray, containing the ejector plate, is then mounted around the shaft of the machine's knife housing. Turn/push down the ejector plate down into its coupling.

Place the chosen cutting tool on the shaft and rotate the cutting tool so that it drops firmly into its position.

When using Dicing Grid or French Fry Grid: place the ejector plate in the bottom of the tray, which is, in turn, mounted around the shaft of the machine's knife housing. Turn the ejector plate down into its coupling. Then mount the chosen grid onto the shaft followed by the slicer, ensuring that both fall properly into place.

Secure the agitator device when using the feed hopper, the locking bolt when using the 4-tube insert, or the decorating device when using the manual or the pneumatic push feed attachment, by turning them anti-clockwise by means of the wrench onto the centre shaft of the cutting tool.

REMOVAL OF THE CUTTING TOOLS AND TRAY

Unscrew the screw cap, drill sleeve or lock bolt clockwise using the key and remove the cutting tool/tools, and the ejector plate together with the tray.

SETTING THE SPEED CONTROLS

The machine speed control is normally set to position "2" for all cutting other than dicing, when the speed control should be in position "1".

When cutting with the pneumatic push feed, set the speed control of the machine and push feed attachment in accordance with the following table.

PF = Pneumatic push feed attachment.
M = Machine.

SLICER

0.5–1.5 mm:.....PF = 1. M = 2.

2–3 mm:.....PF = 2. M = 2.

4–7 mm:.....PF = 3. M = 2.

8–14 mm:.....PF = 3. M = 1.

15–20 mm:.....PF = 3. M = 1.

HC SLICER

2 mm:PF = 2. M = 2.

4–6 mm:.....PF = 3. M = 2.

8–20 mm:.....PF = 3. M = 1.

CRIMPING SLICER

3 mm:.....PF = 2. M = 2.

4–6 mm:.....PF = 3. M = 2.

HC CRIMPING SLICER

2–3 mm:.....PF = 2. M = 2.

4–6 mm:.....PF = 3. M = 2.

JULIENNE

2x2–3x3 mm:.....PF = 2. M = 2.

2x6 mm:.....PF = 2. M = 2.

4x4–6x6 mm:.....PF = 3. M = 2.

8x8–10x10 mm:.....PF = 3. M = 1.

HC JULIENNE

2x2 mm:.....PF = 2. M = 2.

4x4–6x6 mm:.....PF = 3. M = 2.

8x8–10x10 mm:.....PF = 3. M = 1.

GRATER/ SHREDDER

1.5 mm:.....PF = 1. M = 2.

2–6 mm:.....PF = 2. M = 2.

8–10 mm:.....PF = 3. M = 1.

FINE GRATER

.....PF = 1. M = 2.

EXTRA FINE GRATER

.....PF = 1. M = 2.

HARD CHEESE GRATER

.....PF = 1. M = 2.

DICING

6x6–25x25 mm:.....PF = 1. M = 2.

POTATO CHIP/ FRENCH FRIES

10 mm:.....PF = 1. M = 2.

CLEANING

Read all of the instructions before you begin to clean the machine.

BEFORE CLEANING: Always switch off the machine and remove the power supply plug from the socket. Alternatively, if the machine does not have a plug, turn off the main switch. Remove all parts that are to be cleaned.

CLEANING IN A DISHWASHER: All removable parts can be cleaned in a dishwasher machine, except for the Pneumatic Feeder.

CLEANING BY HAND: Always use hand dishwashing liquid. Be careful of the three sharp knives in feed cylinder A!

CLEANING MATERIALS: Use the brush supplied with the machine or a similar one to clean the food zones. The knife shaft in the centre of the machine can be cleaned with a small bottlebrush. Use a damp cloth to wipe down the other surfaces on the machine.

DISINFECTION: Use isopropyl alcohol (65–70%). Isopropyl alcohol is highly inflammable so use caution when applying it.

WARNING:

- Do not pour or spray water onto the sides of the machine.
- Do not use boiling or hot water.
- Do not use sharp objects or any objects not intended for the purpose of cleaning.
- Do not use abrasive detergents or cleaning products.

AVOID: Do not use cleaning sponges with

scouring pads (e.g. Scotch-Brite™) unless absolutely necessary.

ADVICE ON CARE:

- Clean the machine immediately after use.
- Dry the machine immediately after cleaning to avoid oxidation and discoloration of the surface.

TROUBLE SHOOTING

To eliminate the risk of damage to the motor, the RG-400i is fitted with thermal motor protection that automatically switches off the machine if the temperature of the motor should become too high. The thermal motor protection has automatic reset, which means that the machine can be started again when the motor has cooled down, which usually takes between 10 and 30 minutes.

FAULT: The machine cannot be started or stops while it is running and cannot be restarted.

REMEDY: Check that the plug is securely fitted into the power supply socket, or turn off the main switch. Press the starter button. Fit a feed cylinder and a feed attachment according to the instructions under “Assembling” Check that all components are correctly fitted and that the safety arm is raised. Check that the fuses in the fuse box for the premises have not blown, and that they have the correct rating. Wait for a few minutes and try to restart the machine. If the machine fails to run, call a qualified service mechanic.

FAULT: Low capacity or poor cutting results.

REMEDY: Make sure that you are using the correct cutting tool or combination of cutting tools. Fit the decoring device (manual/ push feeder attachment), locking bolt (4-tube insert) or agitator device (feed hopper). Make sure that the speed controls for the machine and the pneumatic push feeder are in the right position in accordance with the table under the heading **SETTING THE SPEED CONTROLS**, and that the reading on the pressure gauge is about 5.5 bar. Check that the pneumatic push feeder feed piston is set to the right speed. Position “1” - about 12 seconds/piston cycle, position “2” - about 8 seconds/piston cycle, and position “3” - about 4 seconds/piston cycle. If necessary, the speed should be adjusted by a qualified service mechanic. Check that the knives and grater/shredder plates are in good condition and are sharp. Press the food down with less force.

FAULT: The cutting tool cannot be removed.

REMEDY: Always use the ejector plate. Use a thick leather glove or other glove that the knives of the cutting tool cannot cut through, and turn the cutting tool clockwise to release it.

FAULT: The agitator device, locking bolt or decoring device cannot be removed.

REMEDY: Use the wrench to unscrew it clockwise.

TECHNICAL SPECIFICATION HALLDE RG-400i

MACHINE: Motor: Two-speed, 1.5/0.9 kW, 208 V, 3-phase, 60 Hz, 230 V, 3-phase, 50 Hz, 400 V, 3-phase, 50 Hz, 415 V, 3-phase, 50 Hz, with the motor protection set to 3.7

A. Transmission: gear. Safety system: Three safety switches. Degree of protection: IP45, buttons IP65. Power supply socket: Earthed, 3-phase, 16 A. Fuse in fuse box for the premises: 10 A, delayed. Sound level LpA (EN31201): 70 dBA.

PNEUMATIC FEEDER: Three speeds and pressure. Recommended compressed air capacity and pressure: 5.5 bar.

TOOLS: Diameter: 215 mm. Speed: 400/200 rpm.

NET WEIGHTS: Machine: 54 kg. Feed cylinder: 6 kg. Feed hopper with cylinder: 12 kg. Pneumatic push feed attachment: 11 kg. Manual push feed attachment: 5 kg. 4 tube insert: 5 kg. Cutting tools: About 1 kg on average.

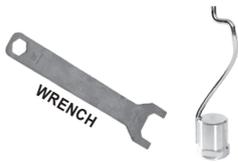
NORMS/STANDARDS: See declaration of conformity.

PARTS / ASSEMBLING

FEED HOPPER



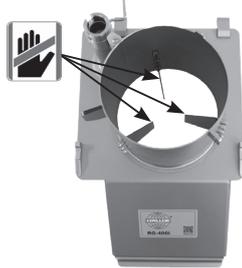
FEED CYLINDER FOR FEED HOPPER



AGITATOR DEVICE FOR FEED HOPPER



MANUAL PUSH FEEDER



FEED CYLINDER A



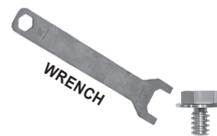
DECORING DEVICE FOR MANUAL PUSH FEEDER



4-TUBE INSERT



FEED CYLINDER B



LOCKING BOLT FOR 4-TUBE INSERT



PNEUMATIC PUSH FEEDER



FEED CYLINDER A



DECORING DEVICE FOR PNEUMATIC PUSH FEEDER



OR

ASSEMBLING / DISMANTLING CUTTING TOOLS: SEE PAGE 44-45.



MACHINE BASE

**ASSEMBLING
FEED CYLINDER**



ASSEMBLING TRAY



INSERT EJECTOR PLATE



TRAY WITH EJECTOR PLATE



MACHINE BASE

ASSEMBLING FEED ATTACHMENT

MANUAL PUSH FEEDER



SHAFT

FEED HOPPER



SHAFT

4-TUBE INSERT



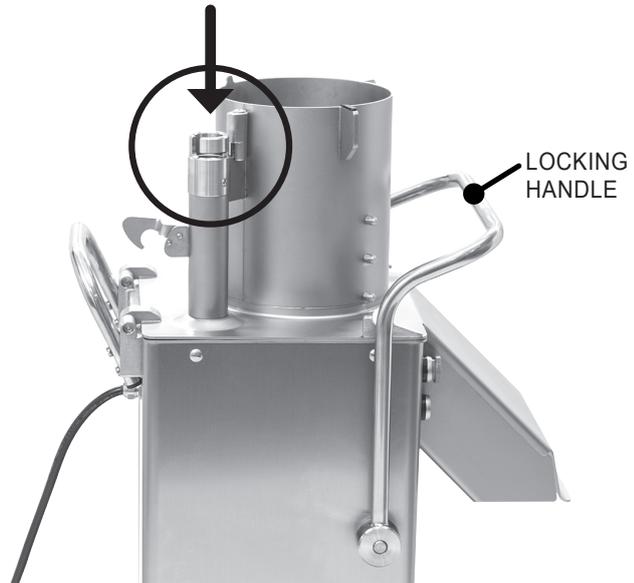
SHAFT

PNEUMATIC PUSH FEEDER



SHAFT

SHAFT INTO THE FEED CYLINDER TUBE



LOCKING HANDLE

MACHINE BASE



Cutting Tools

CAUTION!

Take great care when handling the cutting tools. They have very sharp blades.

UNPACKING

Check that all parts have been delivered, and that nothing has been damaged in transit.

The supplier should be notified of any shortcomings within eight days.

CHOOSING CUTTING TOOLS

The QR-code above leads you to our Cutting Tool Guide at hallde.com. The guide shows which cutting tool is recommended to use depending on desired result and which cutting tools are suitable for use with YOUR Vegetable Preparation Machine/Combi Cutter.

FITTING THE CUTTING TOOLS

Place the ejector plate on the shaft and turn/press down the ejector plate into its coupling.

In RG-400i, the ejector plate is placed in the tray, which is, in turn, mounted in the knife housing of the machine. The tray is always to be mounted when using grids. When using other cutting tools, use of the tray is optional.

Ensure that the machine's knife housing has been cleaned before mounting the tray.

For dicing, first place a suitable dicing grid, with the sharp edge of the knives upward, in the machine so that the recess in the side of the dicing grid fits into the guide groove of the machine. Then choose a suitable slicer. Fit this to the shaft and then turn it so that it drops into its coupling (cutting tools for that have a sprint in the center of the cutting tool tap), or that they go down firmly at the same height as the shaft of the machine (the cutting tool without a sprint).

For slicing, shredding and grating, fit instead only the selected cutting tool to the shaft and

turn the cutting tool so that it drops into its coupling. (cutting tools for that have a sprint in the centre of the cutting tool tap), or that they go down firmly at the same height as the shaft of the machine (the cutting tool without a sprint).

RG-200, RG-250, RG-350 AND RG-400i:

On these machines all cutting tools must be locked with a locking device. These devices have different names and appearance depending on machine and accessory to be used.

See page 42-45 for information on which locking device to use.

Lock the cutting tool by turning the locking device counter anti-clockwise onto the centre shaft of the cutting tool. Use the wrench supplied for the final few turns to make sure it locks securely. Use the same wrench to unlock the locking device.

REMOVING THE CUTTING TOOLS

Remove the cutting tool/cutting tools and the ejector plate.

RG-200, RG-250, RG-350 AND RG-400i:

Unscrew the locking device by turning it clockwise using the wrench.

Remove the cutting tool/cutting tools and ejector plate and tray.

ALWAYS CHECK

BEFORE USE:

Check that the knife blades, knife barks and grater/ shredder plates are intact and are firmly attached and that the cutting tools are in good condition.

DURING USE:

Check at regular intervals, as above, that all the knives are in good condition. Knives can be damaged and come loose if foreign objects such as stones enter the machine.

AFTER USE:

Check after cleaning that the cutting tools are in good condition and that the knife blades, knife barks and grater/ shredder plates are intact and are firmly attached.

CLEANING

STAINLESS STEEL:

These cutting tools can be washed in a dishwasher.

WARNING:

- Be very careful of the sharp knives!
- Do not use sodium hypochlorite (chlorine) or any agent containing this substance.
- Do not use sharp objects or any objects not intended for the purpose of cleaning.
- Do not use abrasive detergents or cleaning products.
- Do not use cleaning sponges with scouring pads (e.g. Scotch-Brite™).

ADVICE ON CARE:

- Clean the cutting tools immediately after use. Use a dishwashing brush and hand dishwashing liquid if it is done by hand.
- Dry them immediately after cleaning and store them in a well-ventilated place. Do not put them into drawers.

TIPS:

DICING GRIDS: With the grid still in the machine, use the brush supplied with your machine to press out any remains. If any food is still stuck in the grid, a good idea is to push out the cubes with a carrot. With the grid still in the machine, push carefully with a large, long carrot. Keep the grid in the machine by placing your fingers on the outer ring of the grid. Do not push from the underside as this can damage the grid.

TROUBLE-SHOOTING

FAULT: Strange sounds or noises can be heard from inside the machine, while using a cutting tool.

REMEDY: Check that the locking device is properly tightened. If the machine is not fitted with a locking device, look for heavy wear and tear on the cutting tools or machine. If the cutting tool is damaged it can wobble in the machine and cause wear. The cutting tool must then be replaced. Check that the right combination of tool is being used in accordance with the list on page 42-45.

FAULT: Poor cutting result.

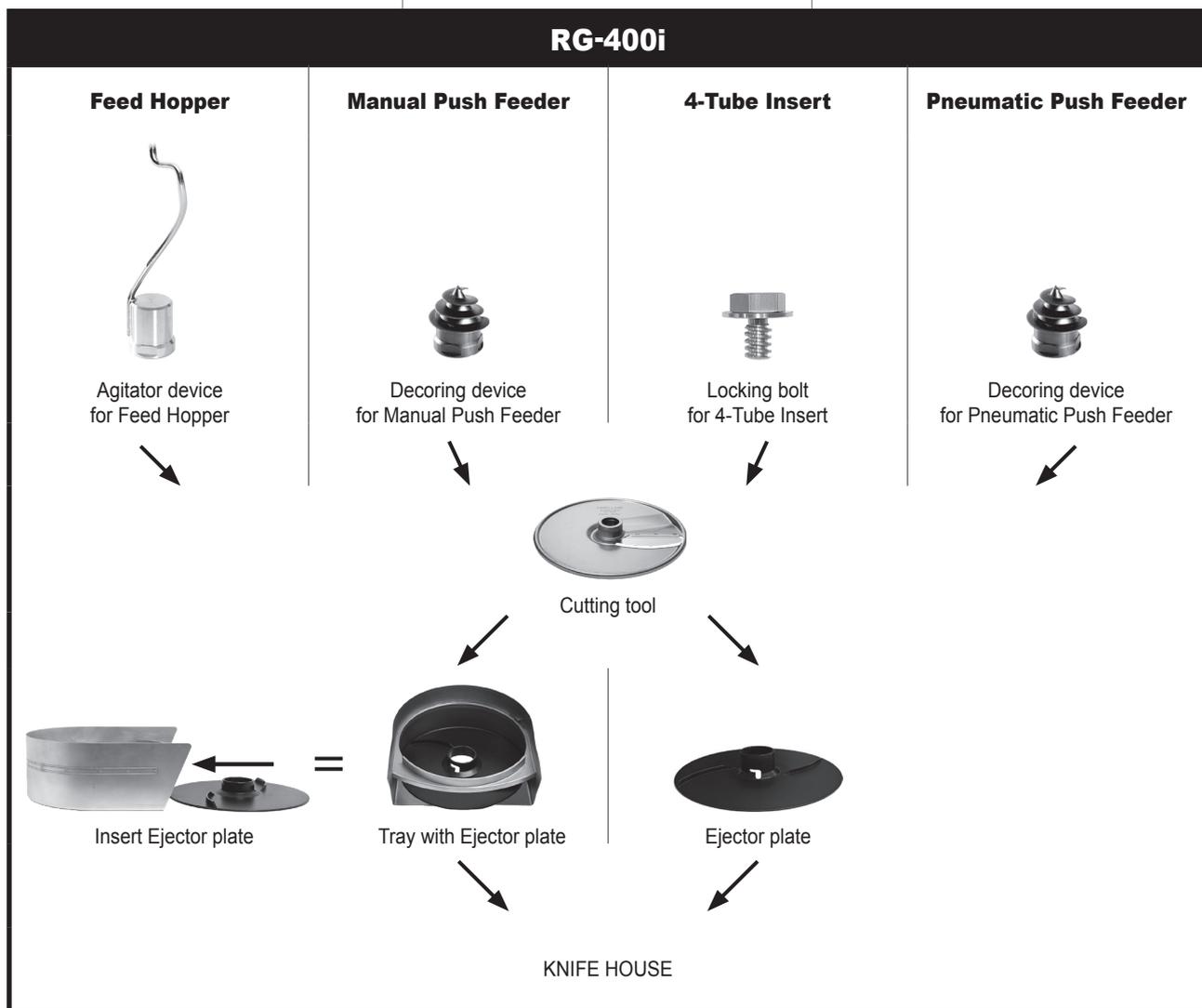
REMEDY: Check that the knife blades/ knife barks/ grater/ shredder plates on the cutting tools are sharp. Check that the right combination of cutting tool is being used in accordance with the list on page 42-45.

TECHNICAL SPECIFICATION HALLDE CUTTING TOOLS

DIAMETER: 185/215 mm.

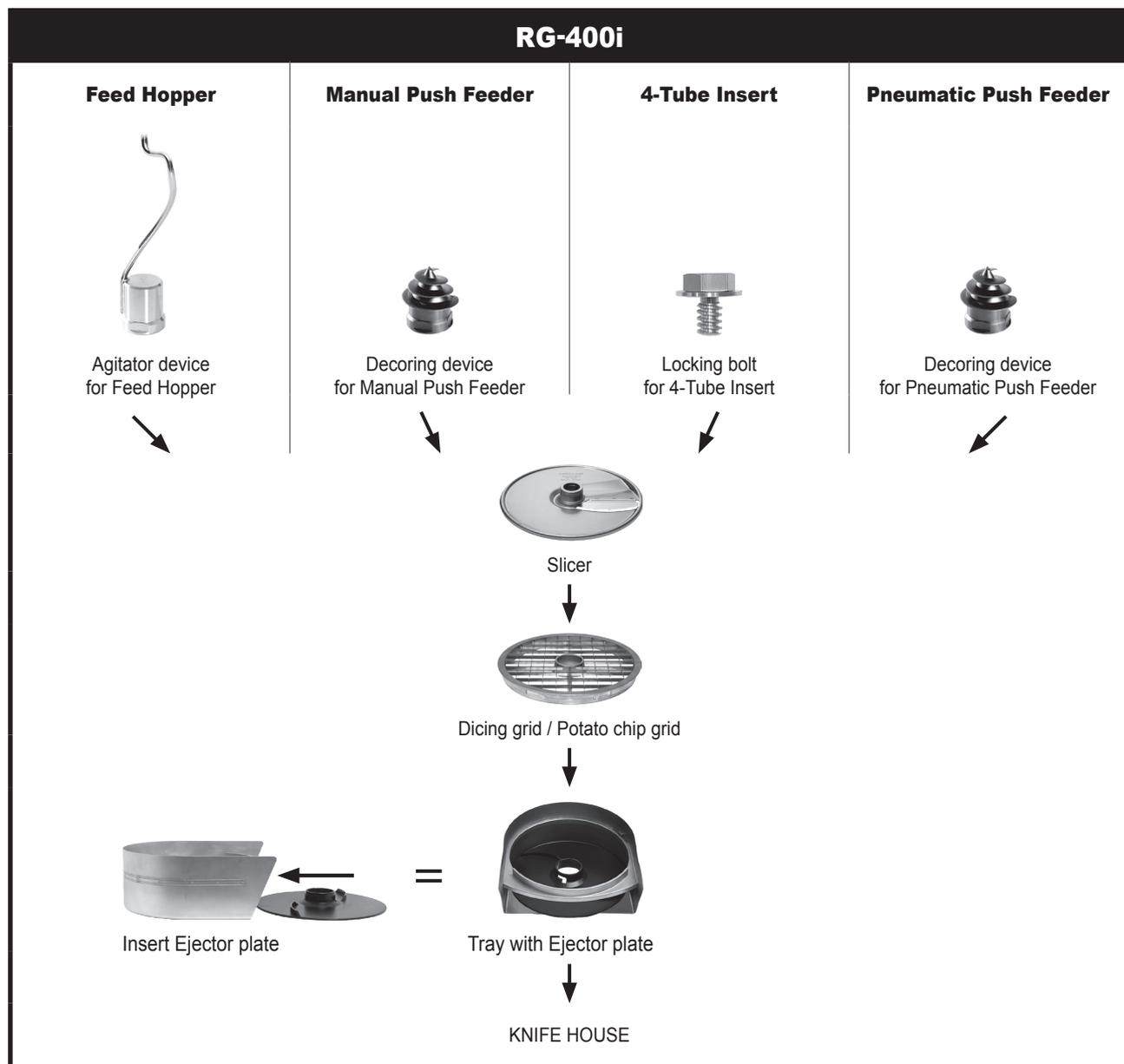
FITTING THE CUTTING TOOLS

WHEN USING SLICER, CRIMPING SLICER, JULIENNE OR GRATER/SHREDDER



FITTING THE CUTTING TOOLS

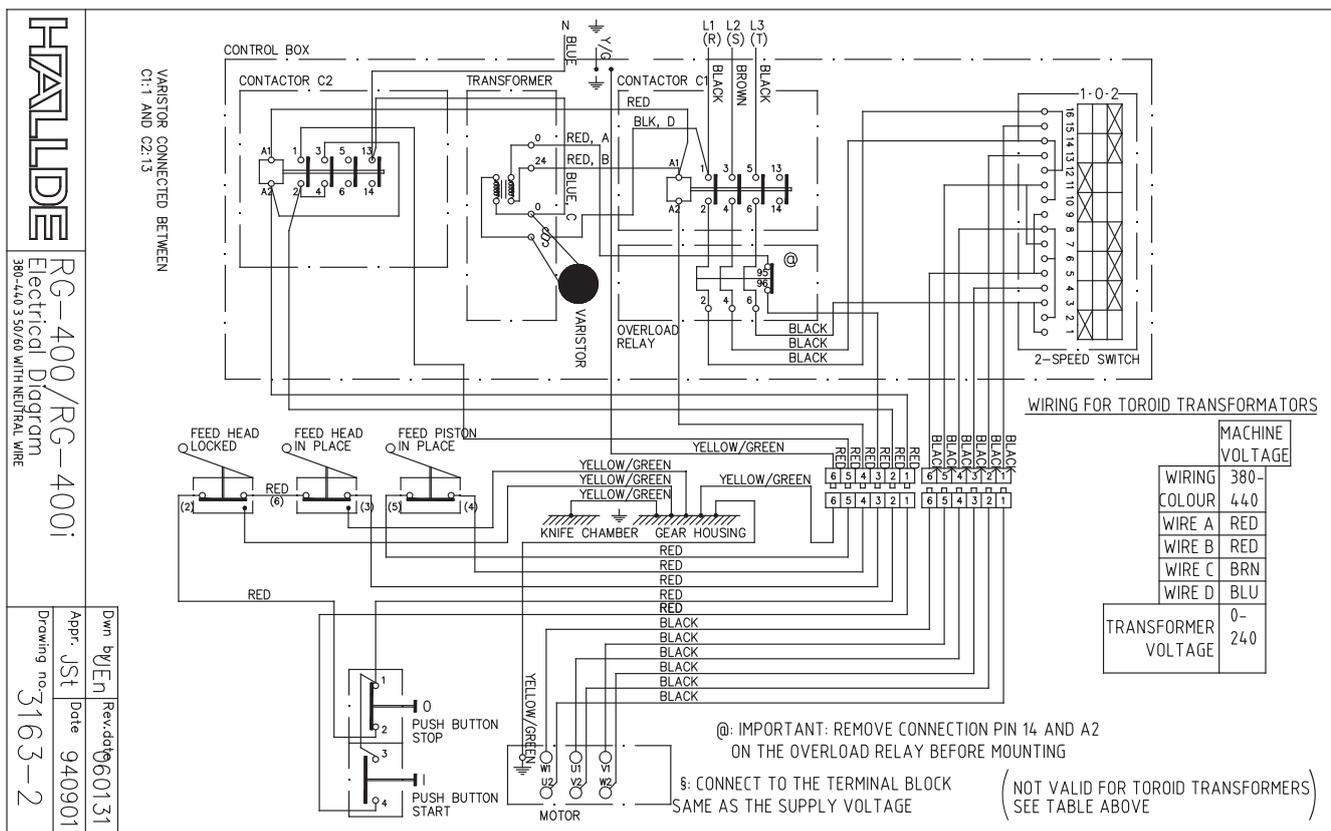
WHEN USING DICING OR POTATO CHIP GRID



Dicing combinations
available at hallde.com



Vegetable Preparation Machine 400i



HALLDE
 RG-400/RG-400i
 Electrical Diagram
 380-440 V 50/60 WITH NEUTRAL WIRE

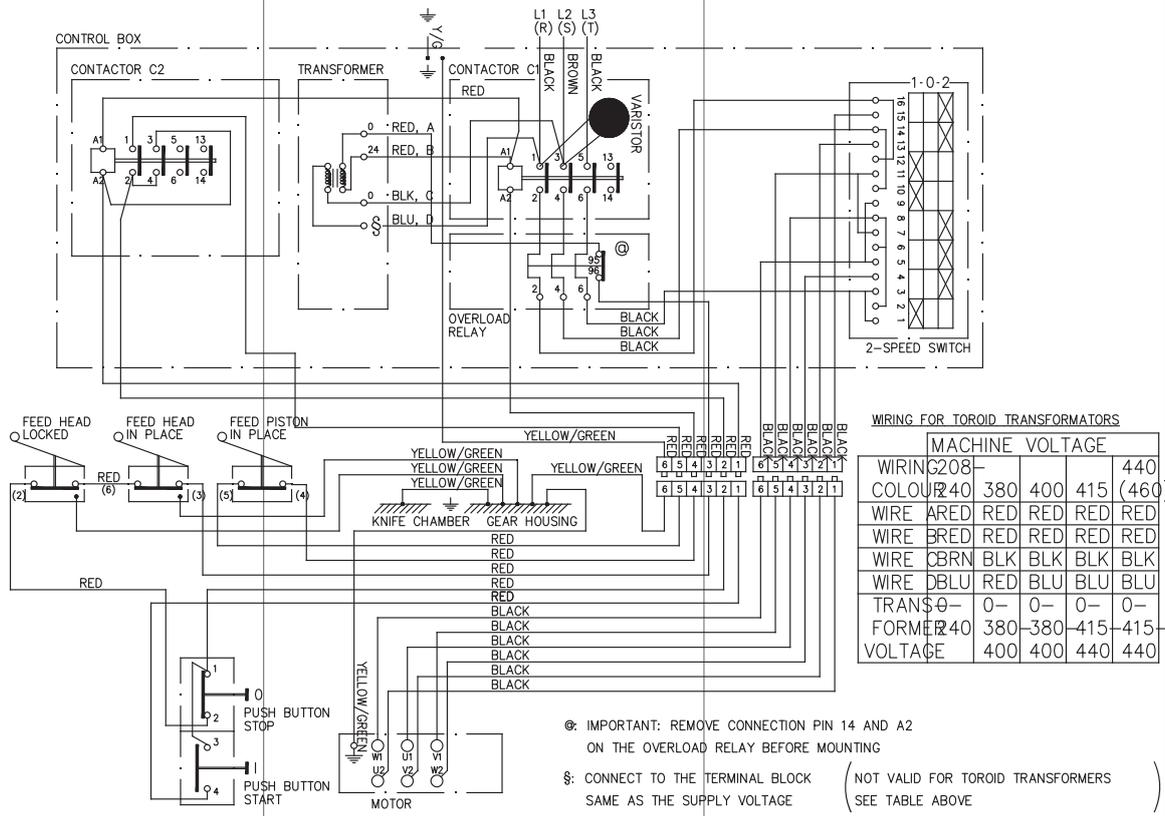
Dwn by JEN Rev'd 060131
 Appr. Jst Date 940901
 Drawing no. 3163-2

Vegetable Preparation Machine 400i

HALLDE

RG-400/RG-400i
Electrical Diagram
208-460 3 50/60 w/o NEUTRAL WIRE

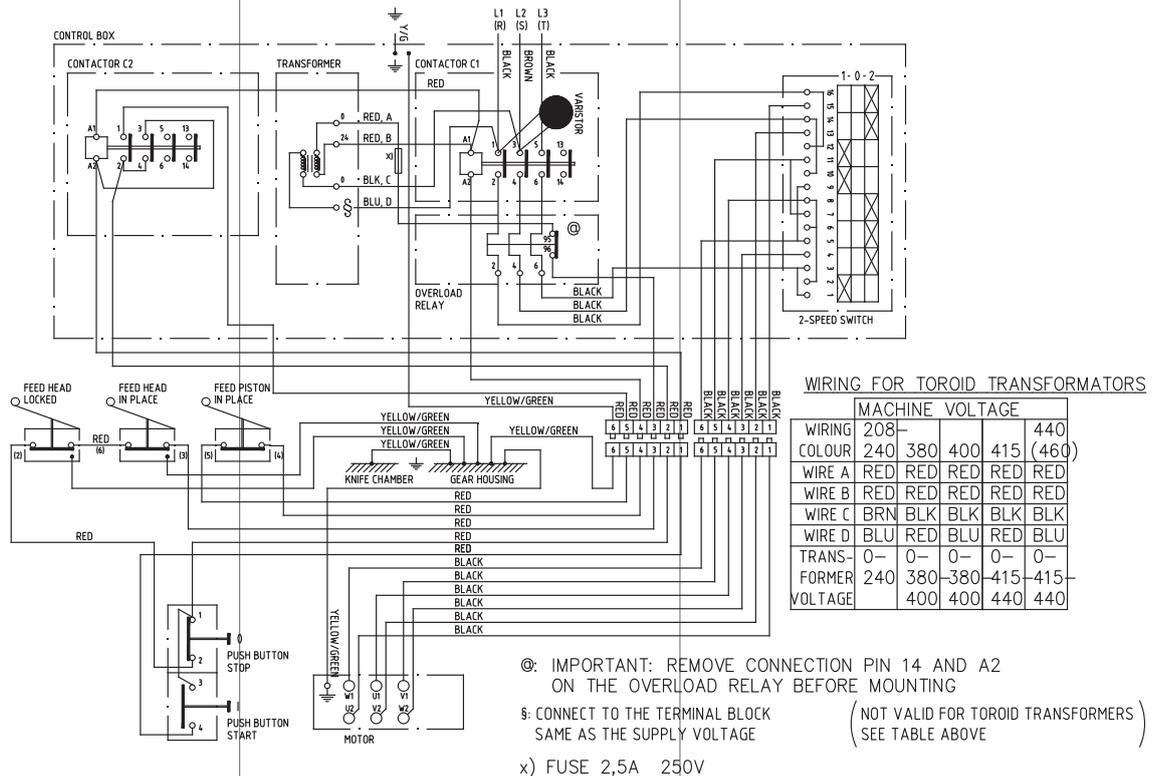
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Appr. JSt
Date 940901
Rev/date 981118
Drawing no. 3163-3



HALLDE

RG-400/RG400i MARINE EL. DIAGRAM
208-460 3 50/60 w/o NEUTRAL WIRE

Drawn by RS
Appr. JSt
Date 020814
Rev/date
Drawing no. 3163-6





DECLARATION OF CONFORMITY

SUPPLIER AB Hällde Maskiner
ADDRESS P.O. Box 1165, SE-164 26 KISTA, Sweden

DECLARE UNDER OUR SOLE RESPONSIBILITY THAT THE FOLLOWING PRODUCTS:

MODEL NAME RG-50S, RG-50, VPU/FP-50, RG-100, VPU/FP-100, FP-150, RG-200, VPU/FP-200, RG-250, VPU/FP-250, RG-7, RG-350, VPU/FP-350, RG-400, VPU/FP-400 RG-400i, VPU-400i, FP-400i.

SERIAL NUMBER

CONFORM TO THE FOLLOWING DIRECTIVES AND STANDARDS

TITLE AND DATE OF ISSUE OF STANDARD Standards:
EN 1678+A1:2010

Following the provisions of Directive and Regulation:
2014/30/EU, 2014/35/EU, 2006/42/EG, 2011/65/EU, NO 10/2011.

PLACE AND DATE OF ISSUE Kista 2019-01-04

Henrik Artursson
Manager Design and Engineering |

Andreas Eriksson
Quality Coordinator