JOINT 5X5 and 5x5 SUPER



USE AND MAINTENANCE MANUAL 2005

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- With the JOINT 5X5/5X5 SUPER there is a "Use and Maintenance Manual" . Read the Manual carefully to learn how to use the machine. Keep it always with the machine, it could be very useful.
- The JOINT 5X5/5X5 SUPER must be used only by grown-up and properly trained operators. Keep the children away from the machine and he working area.
- Pay great attention while using the machine. Do not use the JOINT 5X5/5X5 SUPER under he influence of drugs, alcoholics or medicines.
- Always work with good lighting.
- Check that the JOINT 5X5/5X5 SUPER is properly assembled on its support stand or safely placed on a table.
- The JOINT 5X5/5X5 SUPER is heavy. Be careful when moving it.
- Check periodically there are no loosened nuts and/or screws in the JOINT 5X5/5X5 SUPER.
- Place the frame to be joined with care and keep the hands off the working area.
- The JOINT 5X5/5X5 SUPER uses sharpened staples that could cause wounds. Handle the staples with care.
- Check periodically the integrity of the pneumatic feeding cable.
- Before doing any maintenance on the JOINT 5X5/5X5 SUPER always disconnect the pneumatic feeding line.
- Once finished working, always switch the machine off.

JOINT 5X5 AND JOINT 5X5 SUPER

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IMPORTANT! THIS MANUAL OR A COPY OF IT MUST ALWAYS BE AT OPERATOR'S DISPOSAL FOR CONSULTATION; THE MANUAL MUST BE KEPT TOGETHER WITH THE MACHINE IN CASE IT SHOULD BE LENT OR SOLD.

1. GENERAL SUGGESTIONS

- Keep the packing in case the machine should be sent back for repair or maintenance.
- Use compressed air and a wet cloth to clean the machine. Do not use alcohol or solvents especially on plastic parts, *plexiglas* protection and manometer panel.
- Do not feed the machine before reading the instructions carefully.
- Protection parts nad systems must be always in function; it is forbidden to misplace or remove them.

2. GUARANTEE

The machine and manufacturer identification label is placed on the back part of the machine. Do check the machine on delivery in order to verify possible transport damages. Each claim must be addressed to PILM in written within 3 days from receipt of the goods.

The warranty is valid for 24 months for mechanical parts and of 12 months for pneumatic parts. The wearable parts such as hammer, plates and hold down pads and the parts that are commonly used such as pedal and locking levers will be replaced in warranty only after check and authorization of the Manufacturer. No warranty for lost parts (tool box, tools, thickness compensators, etc...).

The guarantee consists in replacement or repair of parts having defects already at the origin. Transport freight is always at buyer's charge.

Direct and indirect compensations for damages are excluded.

The warranty is not valid in the following cases:

- Instructions in the present manual are not respected;
- Modifications are made without previous approval of the Manufacturer;
- Repairs are made by unauthorized personnel;
- The machine is not used properly;
- Original parts have been replaced with different brand ones;
- Staples of other Manufacturers have been used.

3. <u>SAFETY RULES</u>

The machine is not dangerous if used properly, as described in the instructions. In any case do please pay attention to the following points:

- Keep fingers away from the vertical and frontal clamps working area.
- During maintenance activity disconnect the pneumatic feeding from the machine.
- During setting of the machine, do not step the pedal!
- The machine has been created and built to joint mouldings using staples: each other use is strongly not suggested. The Manufacturer declines any responsibility.
- The Manufacturer will have no responsibility for possible damages coming from arbitrary modification made on the machine.



VERY IMPORTANT

THE MACHINE HAS A TRANSPARENT PROTECTION MADE OF PLEXIGLAS IN ORDER TO AVOID FINGERS OR HANDS GETTING CLOSE TO THE WORKING AREA. SUCH PROTECTION MUST ALWAYS STAY IN ITS POSITION. PLACED MAXIMUM 1 cm OVER THE MOULDING TO JOIN. IF THE PROTECTION IS NOT PROPERLY FIXED OR IF IT HAS BEEN REMOVED, THE MACHINE STOPS ITS ACTIVITY AND DOES NOT PROCEED WITH THE WORKING

CYCLE BECAUSE THE SAFETY VALVE INTERVENES (ONLY FOR MACHINES COMPLYING WITH "CE" RULES).

4. PREMISE

This operator manual is integral part of the machine, it gives all information concerning its functioning and maintenance. Before proceeding with any operation, it must be read carefully.

The JOINT 5x5/JOINT 5x5 SUPER is a good quality machine, it is fast and requires very simple maintenance. Following these instructions you will use the machine in the best way and it will always be efficient. In any case, our technical staff is always at your disposal for any request or question you may have.

5. TECHNICAL FEATURES

DIMENSIONS	depth 45 cm, width 35 cm, total height 32 cm, workingtop's height 15 cm.
WEIGHT	JOINT 5X5 SUPER: 32 kg; JOINT 5X5: 30 Kg.
FEEDING	lubricated and filtred pressed air (the lubrication filter should stay no more than 5 m from the machine, otherwise the underpinner should be equipped with its own lubricator).
MAX. PRESSURE	8 atm.
WORKING PRESSUSRE	min. 2,5 atm. / max. 7,5 atm.
TEMPERATURE	from -15° to +40°
USE	moulding angle junction having a min. height of 5 mm and a max. of 110 mm, a min. width of 5 mm and a max. of 130 mm, using PILM staples of 4-7-10-12 and 15mm.
WORKING SPEED	60 cycles per minute.
MATERIALS	supports and mechanical parts are made of steel treated for a long oxidation resistance. Workingtops, fences, rods, etc. are treated on the surface (chromated) for a long wearproof. Driving plates and hammer are made of tempered steel.Side and central cylinders are made to grant their efficiency for a very long time. The washers are made of antioil nitrilic rubber able to resist to substances normally present in the pneumatic circuits.

6. ACCESSORIES

- nr. 4 thickness compensators for staples.
- nr. 1 flat angular pad.
- nr. 1 round angular pad.
- nr 1 set of spanners for maintenance.
- nr. 1 magnet for the loader cleaning.
- nr. 2 staple pusher bosses: 1 for 4 and 7 mm, 1 for 10,12 and 15 mm.

JOINT 5X5 AND 5X5 SUPER





7. JOINT 5X5 - JOINT 5X5 SUPER: DESCRIPTION

- 1. Nailing head with driving plates and hammer
- 2. Loader with interchangeable thickness compensators to use all staples sizes
- 3. Staplepusher trolley with retractable tie-rod
- 4. 90° fence
- 5. Fence rod
- 6. Adjusting registers to insert 2 or more parallel staples
- 7. Frontal clamp unit (only for JOINT 5x5 SUPER)
- 8. Metric scale
- 9. Upper clamp unit, with adjustable height and interchangeable pad
- 10. Transparent protection with adjustable height
- 11. Pressure regulator: working range from 2,5 to 8 atm.
- 12. Manometer for indication of clamping pressure
- 13. Upper presser speed's descent regulator
- 14. Switch for manual or automatic cycle (only for JOINT 5x5 SUPER)
- 15. Pushbutton for insertion of more superimposed staples
- 16. Fence risers and for angle adjustment
- 17.Control pedal
- 18. Connection hoses pedal machine
- 19. Inlet compressed air feeding line
- 28. Interchangeable thickness compensators
- 29. Staples-pusher units
- 30. Interchangeable pads
- 31. Set chiavi a brugola
- 32. Magnet
- 33. Use and Maintenance Manual
- 34. Box for Tools



8. START-UP

The Joint 5x5 is supplied already assembled and ready to work with the staples. The start-up of the machine exclusively needs the connection to the feeding line and the connection of the pedal hoses to the machine, according to the colors.



BEFORE CONNECTING THE MACHINE TO THE FEEDING LINE, REMOVE THE UPPER CLAMP (REMOVE FRONTAL CLAMP TOO FOR JOINT 5X5 SUPER).

By stepping on the pedal the staple will be inserted. The pedal must be kept pressed until the entire hammer stroke is completed, then it must be released. When the machine is new or if it has been out of service for a certain period, it is suggested to use it without joining any moulding, by firing out 4 or 5 staples without shooting them into the wood.

9. HOW TO LOAD AND REPLACE THE STAPLES

For the first loading of the staples proceed according to the following instructions:

verify that the loader is empty, place the thickness compensator in the loader bottom (each thickness compensator shows the dimension of the staples to be used with - the 15 mm staples do not need any thickness compensator), check that the thickness compensator pivot is well inserted in the hole situated on the loader bottom. Draw back the staple pusher trolley and insert the staples with the sharpened part - the one with glue - positioned upward and the two points ahead according to the drawing. Considering the height of the staples, insert into the trolley the proper staple pusher boss and then release it again.

To put more staples into the loader just draw back the staple pusher trolley acting on the fitting tie-rod, introduce the new strip of staples and release the trolley again.

In order to change size of the staples, just draw back the trolley and take off the staple pusher boss. Remove from the loader either all staples or the thickness compensator, make sure that the driving channel of the loader is perfectly clean (inserting the magnet supplied with the machine) then introduce the new thickness compensator and proceed with the loading as above described.



THICKNESS COMPENSATOR + STAPLES ON IT = 15MM

10. ADJUSTMENT AND USE OF THE UPPER CLAMP

The presser of the machine is adjustable in height and its pads, the parts touching the moulding, are interchangeable. The interchangeable pads are three and can be used according to operator's needs. The round pad is suggested for shaped mouldings and uneven surfaces, the nylon Ø 40 pad is for flat surfaces, the flat angular pad is suitable for round and wide shaped mouldings and in particular for tender wood in order to avoid deformations on the frame. Felts, rubbers or particular shapes can be used according to operator's needs.

The upper presser can be adjusted both in height and crosswise: it is suggested to place it at a height of 15÷20 mm from the moulding and crosswise in axis with the axis of the coming out staple. In order to insert more parallel staples, the correct procedure is to place the presser in the middle of the area where the staples have to be inserted. To avoid the sliding of the clamp, the presser's rod has notches where must enter the square pin of the locking lever.



ATTENTION! ONCE THE CLAMP'S ADJUSTMENT OPERATION IS OVER, REMEMBER TO PLACE AGAIN THE PROTECTION, MAXIMUM AT 10÷15 mm OVER THE MOULDING TO BE JOINED.

11. ADJUSTMENT AND USE OF THE FRONTAL CLAMP (ONLY FOR JOINT 5X5 SUPER)

The Joint 5x5/5x5 SUPER is equipped with a frontal clamp that works at the same pressure of the upper clamp and the pressure can be read on the manometer. The frontal clamp, which is operated always immediately before the upper clamp, allows the moulding to absorb the thickness of the staple, for a better closing of the angle. The use of the frontal clamp is very important with small-sized mouldings that require just one staple. Frontal clamp must be positioned at 10÷15 mm from the moulding. In order to change its position, unthread the bored rod from the fix pivot and introduce it in another hole.

12. ADJUSTMENT OF THE WORKING PRESSURE

The machine is equipped with a working pressure regulator and a monometer. The machine works normally between 2.5 atm and 7 atm, in particular $2.5 \div 4$ atm is used for tender woods, 4 \div 5.5 atm for medium woods and 6 \div 8 atm for hard woods. In order to adjust the pressure, draw the knob of the regulator and turn it clockwise to increase the pressure and in the opposite direction to decrease the pressure. The manometer will show the variations. Once the desired pressure has been found, press the regulator knob to block it and to avoid any changes.



ATTENTIONI: DO NOT TURN THE PRESSURE KNOB IF THE MACHINE IS NOT FEEDED.

13. ADJUSTMENT OF THE PRESSER'S DESCENT SPEED

Working with mouldings having refined finishing such as liming, lacquered or with particular shapes, it is important to adjust the descent speed of the upper presser. By turning clockwise the knob placed on the machine frontal panel, the speed will decrease. The speed can be checked by stepping on the pedal and checking the movement of the clamp. Standard finishings and wooden mouldings can be clamped with the maximum speed. Working at low speed, the hammer needs a longer time to come out and it is necessary to keep the pedal pressed till the complete exit of the hammer. The waiting time is due to the logic pneumatic circuit of the machine, which grants the maximal strength and a perfect tightness to the presser before inserting the staple.

14. WORKING IN MANUAL OR AUTOMATIC MODE (ONLY FOR JOINT 5x5 SUPER)

Before joining expensive mouldings (and therefore before inserting the staples), be sure that the machine's registration has been done correctly and that the angles are perfectly closed. In order to check the angle, the machine is equipped with a switch that enables to choose between operating in "automatic" or "manual" mode. In "automatic mode": each time the pedal is pressed, the machine makes a complete cycle, it means that it clamps the moulding and introduce the staple automatically (to insert more superimposed staples it is necessary to press the staple pushbutton); in "manual mode": each time the pedal is pressed, the machine only clamps the moulding, so the operator can check if the angle is closed accurately, then insert the staple with the staple pushbutton; pressing the latter for a number of times, more superimposed staples will be inserted.

15. FRAME ASSEMBLING: ADJUSTMENT OF THE FENCE

After choosing the suitable staple for joining the moulding according to the general indications of Drawing 1, place the fence so that the staple can be inserted, as per Drawing 2. Loosen the two registers and move the fence to the required position then lock one of the two register in touch with the fence guide support; act the same way to set the second position then lock the lever for the JOINT 5x5; while for the JOINT 5x5 SUPER the fence locking is pneumatic by steppingthe pedal. The pneumatic fence locking eases the insertion of more parallel staples. Then place the frontal clamp 5÷10 mm from the moulding (only for JOINT 5X5 SUPER). Place the upper clamp with the suitable pad accordino to the mouding type, approximately 15 mm over the moulding and lock it with he lever. Place the two parts of the frame against the fence sides, match the parts, step the pedal for joining the frame that release it once the hammer has inserted the staple. Your angle is done!



Drawing 1 Frame assembling with one staple



Drawing 2

16. FRAME ASSEMBLING WITH MORE PARALLEL STAPLES

When working with mouldings thicker than 15 mm, it is necessary to insert more parallel staples to obtain a good junction.

Using the JOINT 5x5 to insert 2 or more parallel staples release the blocking fence lever, place the fence to insert the internal staple and block the inner register against the fence guide support. Then place the fence to insert the outer staple and block the outer register against the fence guide support. Manually moving the fence together with the frame backward and forward alternatively and repeating each time the machine working cycle, insert the staples in the required two positions. More staples can be inserted in the intermediate positions. Using the JOINT 5x5 SUPER, the insertion of parallel staples is greatly eased by the pneumatic fence clamp that allows a safer clamp of the fence in each inserting position. This allows a perfect locking of the frame and easier joining operations.

17. FRAME ASSEMBLING WITH MORE SUPERIMPOSED STAPLES

Working with very thick frames – more than 20 mm – it is useful to insert two or more superimposed staples, in order to reach the best angletight. To reach this, follow the instructions as per the operations with just one staple and keeping everything blocked with the first pedal's stroke, repeat the second pedal's stroke many times as the superimposed staples you have to introduce.







Drawing 3

Frame assembling with more parallel and superimposed staples.

18. CHECKING AND ADJUSTMENT OF THE JUNCTION

With the JOINT 5x5 and 5x5 SUPER it is possible only to open and close the angle, acting on the holes and the screws of the fence risers. Note that only Drawing B defect can be solved; for Drawing A and C defects the operator must check the quality of the moulding and the accuracy of the cutting.

ATTENTION!

- 1) The fence has a 90° angle, it means that if you should have defects and negative results also having adjusted each angle perfectly, the reason must be found in a defective cut or in the twisted moulding rods.
- 2) Working with the staple on hard or medium hard frames 8÷10 mm wide; the angle will always have a small opening in the low part, due to the staple thickness which is not absorbed into the wood. You can reduce the problem using the frontal presser and, if possible, a smaller staple.



Angle open above:

Turn the small wheels to loosen (tilt the fence sides toward inside) outside)



Angle open below or back:

Turn the small wheels to open or close the fence sides



Angle open below:

Turn the small wheels to tighten (tilt the fence sides toward

19.MAINTENANCE

The JOINT 5x5/SUPER machine is equipped with reliable **pneumatic parts** that normally do not need any maintenance. But the working area and the pressed air type in the feeding line can be very important for the life of the parts.

Clean, dry and slightly oil vaporized air guarantees a longer life. Should you need maintenance on connections, pay attention to reassemble the units when using some *Teflon* tape: you have to leave free the first connection's thread in order to avoid that some tape goes inside the pneumatic components.

Each 4-5 days it is better to clean the pedal with air; repeat the operation more times if the working room is particularly dusty.

Each 20-30 days repeat the same operation for the inner parts of the machine and in particular on the silent filters assembled on the valves' plugholes.

The **mechanical components** of the JOINT 5x5A/AS are made with special surface treatments to protect from wear and rust: it's very important do not damage these parts with hard and sharpened objects or do not use solvents or diluents for cleaning. The cleaning must be done with a damp or slightly greased cloth. It's important to clean the plate, the fence, the pad and the staples insertion area if has been used glue.

HOW TO REPLACE THE HAMMER. The hammer's life can be longer or shorter according to the hardness of the wood to be joined: with soft wood it's longer, with hard woods is shorter.

End user (better if he has mechanical knowledge) can replace by himself the hammer following these instructions. The operation has to be done with machine without pneumatic feeding, remove the thickness compensator, the staple pusher boss and the staples from the loader.

Turn the machine on its side if the machine is tabletop, work form the bottom if the machine is on the tilting stand, once tilted to a vertical position.

With the bottom part of the staples inserting cylinder opened, release the screws, remove the cylindrical box (sleeve) and extract the piston with its rod where is assembled the hammer. **BE CAREFUL THE LUBRICATING OIL DOESN'T LEAK OR SOIL**, if so, clean and oil again. By means of a clamp remove the damaged hammer, after unscrewing the pin, and replace it. Check that the hammer moves to the bottom of the hole, on the rod-piston. The check has to be done by measuring the portion between plate head hammer and plate of pivot/piston, which has to be 28 mm. Fix the pin – that must completely enter - and assemble again the cylinder. Be careful not to damage the gaskets. Align the summit of the hammer on the two plates. If the hammer is correctly positioned, it must stick out of 0,5mm. Reassemble the cylinder and restart working.



All PILM INTERNATIONAL machines use only staples patented by PILM.

The special shape of PILM staples allows to joint the angle putting in traction the two pieces, in order to reach a very good quality in the joint.

PILM special staples having double sharpening edge have been created purposely for particular woods, such as hard woods as oak, walnut etc. or when it is necessary to superimpose several staples for a better result. The use of PILM double sharpening staples is recommended with at least two parallel staples in order to obtain a good fastening of the moulding.

SUPERIMPOSED STAPLES

PARALLEL STAPLES



NORMAL SHARPENING STAPLES

Size	Quantity per box	Quantity per multipack	Weight Kg.					
4 mm	6.000 pcs.	144.000 pcs.	21,600					
7 mm	4.000 pcs.	96.000 pcs.	23,500					
10 mm	3.000 pcs.	72.000 pcs.	24,000					
12 mm	3.000 pcs.	72.000 pcs.	30,000					
15 mm	2.000 pcs.	48.000 pcs. 24						
DOUBLE SHARPENING	STAPLES							
Size	Quantity per box	Quantity per multipack	Weight Kg.					
7 mm	4.000 pcs.	96.000 pcs.	23,500					
10 mm	3.000 pcs.	72.000 pcs.	24,000					
12 mm	3.000 pcs.	72.000 pcs.	30,000					
15 mm	2.000 pcs.	48.000 pcs.	24,000					

Important!: every size of staples, except 15mm staples, must be used with its relevant thickness compensator so that: thickness compensator + staples on it = 15mm

21. OPTIONAL ACCESSORIES

HEXAGONAL FENCE (120°) AND OCTAGONAL FENCE (135°)

To change from 90° fence to 120° or 135° fence unscrew the fixing screws and replace the fence with the hexagonal or octagonal one. For joining follow the instructions as described for the 90° fence.

FILTER-LUBRICATOR GROUP

The machine needs clean and good lubricated air. The **Filter-Lubricator** has these important functions:

- the filter stops all impurities coming from the compressor, the dust, the rust of the air pressed net and the humidity that may arrive to the cylinders and valves;
- the lubricator gives the correct oil quantity to the compressed air allowing a continuous lubrication of the machine's parts.

For the maintenance of the filter check each 10-15 days the condensation water into the cup. If there is water, drain it by acting on the cap of the cup itself.

ATTENTION! This operation must be done with air pressure in line!

Each 30 days, if the room is very dusty, will be necessary to clean the filter using an air blow. For the lubricator check the oil level and add it if necessary. To do that unscrew the cup.



ATTENTION! Be careful to disconnect the feeding line first!

The adjustment of the oil quantity is done acting on the screw placed on the upper part of the lubricator: the correct regulation is one oil drop each 30-40 pedal actions (complete working cycles).

ATTENTION! THE FILTER CLEANING AND THE ADDITION OF OIL MUST BE DONE WITHOUT PRESSURE IN LINE!



ATTENTION! FOR THE RUBBER GASKETS USE ONLY HYDRAULIC OIL – NOT AGGRESSIVE!

We suggest to use oil with a viscosity of 6-8°E at 20°C. This type of oil if sold by pneumatic equipments sellers or you can order it directly to your DEALER.

GLUING DEVICE

This device has a cylinder at the end of it is screwed a glue-holder rod for small mouldings or a bored net for big mouldings. Check that the glue-holder is plunged into the cup when stepping the pedal and lifted with the pedal released.

While working with glue is always important to keep the staple-introducing area clean, in order to avoid problems with the frame-closing angle or staples' jamming.

At the end of the work, we suggest to clean the glue-holder device and all dirty parts and then to close the tank hermetically with its own lid.

THICKNESS COMPENSATORS FOR 4 AND 12MM STAPLES

To complete the thickness compensators serie in order to use every size of staples, available in this case for 4 and 12mm staples.

TILTING STAND

The JOINT 5X5 /JOINT 5X% SUPER is a tabletop machine. The machine can be also used on a tilting stand and extension wings and a wider working surface can be assembled. With tilting stand it's easier to join medium and big size frames tilting the stand at 80°. The tilting stand is supplied with instruction for assembling and use.

EXTENSIONS WINGS

To be assembled to both sides of the machine for supporting big frames to be joined. While assembling the wings, be careful they are at the same level with the machine working top.

WIDENING WORKING TABLE

To join medium-big sized frames using the tilting stand and extension arms, it's possible to assemble a widening table to have a bigger working surface to support the frame.

FENCE RISERS

Superimposable Bars of 7 mm height, which allow increasing the fence sides for a better support to the frame. Moreover, for a better adjustment of the angle, act on the hole and fixing screws.

FLEXIBLE HALOGENOUS LAMP

Suitable for all PILM machines. Perfect to light up the working area. Its flexibility allows reaching even the less visible zones.

22. WHAT YOU HAVE TO DO IF PROBLEMS AND SOLUTIONS

- 1) THE MACHINE HAS BEEN CONNECTED TO THE LINE, AND YOU HEAR A DEEP OR SOFT BLOW
 - a) Check if there is a leaking in the machine's circuit, once found the loosen connection, tighten it with the spanner.
 - b) If pressing the pedal the blow desappears, check the connection between pedal and machine. If the connections are correct, maybe a pipe is not perfectly introduced in the connection; introduce it better.
 - c) The leaking is on the pressure regulator, which is at its maximum stroke, the manometer shows more than 8 atm, decrease the pressure using the regulator.
 - d) Particular air leaks:
 - If you have an air leaking on the control valve head both with machine stopped or working, the valve can be damaged or there is a leaking on the nailing head cylinder.

• If in the same conditions as above, you have an air leaking on the control valve of the presser-cylinder, the reason can be the damaged valve or a leaking on the presser-cylinder. For both conditions contact PILM Customer Service.

- 2) THE MANOMETER DOES NOT SHOW THE PRESSURE AFTER THE CONNECTION TO THE AIR LINE
 - a) Verify that the pressure regulator is not in position 0.
 - b) Verify to have pressure in the feeding line.
- 3) THE MACHINE IS CONNECTED TO THE LINE, BUT IT DOES NOT WORK
 - a) If the manometer does not give the pressure, check as per point no. 2.
 - b) The speed regulator is on 0; turn it to maximum speed.
 - c) The safety protection is not correctly placed and it doesn't allow the safety valve to intervene (only for machines complying with CE rules).
- 4) ONCE THE PRESSURE HAS BEEN REGULATED, THE HAMMER DOES NOT GO OUT
 - a) Working pressure too low, the minimum is 2.5 atm.
 - b) If the pressure is good, proceed as per following point no. 6.
 - c) If you have changed the hammer, maybe it touches under the upper staple guide plate; repeat the operation checking that the hammer is in plane and that the head's edge is not damaged.
- 5) ACTING ON THE PRESSURE REGULATOR, THE MANOMETER DOES NOT MOVE
 - a) The regulator is out of service, replace the part.
 - b) The manometer is out of service, replace the part.
 - c) You hear a continuous and heavy blow, it means that a pipe is disconnected, look for the trouble and solve it.
- 6) THE HAMMER DOES NOT GO OUT
 - a) The staples strip is placed opposite from the exit zone.

- b) One staple is placed across the channel near the hammer: stop the push staple trolley, pull out the staples, introduce the magnet and remove the staple. If it is blocked and the operation is difficult, take off the staple-guide upper plate unscrewing the two screws with the correct spanner, then remove the staple. <u>NEVER UNSCREW THE FRONTAL HAMMER</u> <u>GUIDE PLATE</u>. Re-assemble the plate, placing it perfectly in line with the hammer-guide plate. Introduce the staples and release the staple pusher.
- 7) THE STAPLE DOES NOT COME OUT
 - a) There are no staples: the minimum quantity is 3/4 of a strip.
 - b) The pedal has been left too fast and the hammer did not have enough time to operate: try again more slowly!
 - c) Obstruction at the hammer exit: procede as per point no. 6b.
 - d) The push staple boss does not push the strip: verify that is free or check the condition of the spring and if there are enough staples inside the loader.
 - e) The thickness compensator is wrongly positioned (its position is under the staples and with the pivot on the hole on the bottom of the loader).
 - f) Staples strip placed in opposite position.
 - g) The edge of the hammer is damaged and can not push the staple.
 - h) The strip has inclined staples.

8) THE STAPLE DOES NOT ENTER COMPLETELY IN THE WOOD

- a) Working pressure too low and the frame is lifted up by the staple push.
- b) The hammer does not go out completely: check if there is something between hammer holder pivot and hammer guide plate, remove the obstacle with the magnet if it is metallic, or using a screwdriver or a press-air blow.
- c) The presser does not block the frame: adjust the presser's height at 10-20 mm from the frame.
- d) The hammer edge is worn and the staple slides: replace the hammer (see chap. 20. REPLACEMENT OF THE HAMMER).
- 9) THE FRAME IS NOT BLOCKED
 - a) The presser is too far from the frame: adjust it 10-20 mm far from it.
 - b) The pressure is not enough: increase it.
- 10) THE FENCE IS BLOCKED DURING ITS STROKE
 - a) The adjusting registers are blocked: release them.
 - b) There is something under the fence: remove the fence and clean it.
- 11) ONCE THE STAPLE HAS BEEN DRIVEN, THE FRAME LIFTS UP, THE ANGLE IS OPEN AND THE STAPLE DOES NOT ENTER COMPLETELY INTO THE WOOD
 - a) The presser is not well adjusted: place it 10-20 mm far from the frame.
 - b) The working pressure is too low.

12) THE STAPLE PUSHER DOES NOT PUSH THE STAPLES

- a) It's blocked at the end of the stroke.
- b) The srping is unhooked: hook it.
- c) The spring is extended or has lost the load: replace it.
- d) It is in touch with something inside the machine: verify it.
- e) There aren't enough staples inside the loader: add a new strip.

THE ABOVE DESCRIBED ARE SITUATIONS THAT MAY OCCUR. FOR ANY FURTHER PROBLEM OF FUNCTIONING, LEAK, JAM AND/OR ANY STRANGE SITUATION PLEASE CALL THE AFTER SELLING SERVICE OF YOUR DEALER BEFORE TRYING TO FIX THE MACHINE BY YOURSELVES FOR YOUR SAFETY AND FOR NOT DAMAGING THE MACHINE.

JOINT 5X5 – SPARE PARTS – FRONTAL VIEW





18 19 17 20 16 15 9/10 14、 8í 22 23/24 25/26 27

JOINT 5X5 SUPER – SPARE PARTS – FRONTAL VIEW



JOINT 5x5 / SUPER – SPARE PARTS - FRONTAL VIEW

POS.	CODE	DESCRIPTION	ONLY FOR
1	PC1/4VIE	Complete pedal for 5x5 A/AS	
1A	VALV1/4-5VIE	Pedal Valve	
2	801.8.1/4	Pedal-Machine connections	
3	RILSAN8/6	Tubes for Pedal-Machine Coupling	
4	CONT001	JOINT box	
5	TCEIM6X10	Working plate fixing screw	
6	PIA000	5x5 Working plate with Pneumatic Fence Clamp	SUPER
7	SQ007	Fence Guide Support	
8	SQ002	Fence Axis	
9	FR55	Pneumatic Fence Clamp Ø 80 Cylinder	
10	VOLM5X15	Register Knob	
11	SQ009	Forward and Backward Registers	
12	PIA081	Plexiglas protection right support	
13	TEM8X45	Hexagonal headed screw M8x45	
14	PIA015	Plate Lid	SUPER
15	PS004A	Crossbeam	
16	TCEIM8X20	Crossbeam fixing screw	
17	R2-MA304UL	Safety Valve	
18	PIA082	Plexiglas protection left support	
19	VOLM6X10	Plexiglas protection fixing M6 knob	
20	PIA007	5x5 Plexiglas protection	
21	XXF4012C	Flange pressure gauge Ø 40 0/8 BAR	
22	MRBIT1/408	Pressure regulator 0/8 BAR	
23	CONT12	5x5 Super Frontal panel	
24	2.9X10AF	Frontal panel/pressure gauge fixing screw	
25	TECIM4X6	Fence riser fixing screw	
26	SQ005	Fence riser	
27	SQ004	90° Fence for 5x5	
28	PF003	Frontal clamp plate	SUPER
29	PF020	Special screw	SUPER
30	PF105	Frontal clamp drilled rod	SUPER
66	BTPM8X40R63	Presser locking lever	
80	904.1003	Presser descent speed regulator	
81	105.52.7/2	Push button/valve test inserting staples	
82	105.52.4/2	Aut/Man Switch	SUPER
200	CASS00	Complete Tools Box	
201	BRU2,5-6	Spanners Set	
202	MAGN	Magnet for Staples	
203	CAS-N	Box for Tools	
204	J5X5S05	User's Manual	

JOINT 5X5 – SPARE PARTS – INTERNAL VIEW





JOINT 5x5 / SUPER - SPARE PARTS - INTERNAL VIEW

POS.	CODE	DESCRIPTION	ONLY FOR
2	801.8.1/4	Pedal-Machine connections	
4	CONT001	JOINT Box	
6	PIA000	5x5 SUPER working plate	SUPER
8	SQ002	Fence Axis	
21	XXF4012C	Flange pressure gauge \emptyset 40 0/8 BAR	
22	MRBIT1/408	Pressure adjusting knob 0/8 BAR	
33	AT11001	Feeding line fast connections	
35	K20500030P	Ø 50 C 30 Cylinder	
35A	MR-GP20307	Head gasket for presser cylinder	
35B	HT-H026K1	Gaskets Set for Ø 50 C 30 Cylinder	
35C	HT-H026K5	\varnothing 50 Cylinder rod with piston	
37	PIA016	Frontal presser support	SUPER
38	SOHTG03000	Frontal presser cylinder	SUPER
38A	MR-NSW1620	Head gasket for frontal cylinder	SUPER
38B	HT-G030K1	Gaskets Set for frontal cylinder	SUPER
38C	HT-G030K5	Frontal cylinder rod with piston	SUPER
39	PF016	Frontal clamp guiding axis	SUPER
40	NH5x5	Punch device with loader	
50	SGP006	Loader	
80	904.1003	Presser descent speed regulator	
81	105.52.7/2	Push button/valve test inserting staples	
82	105.52.4/2	Aut/Man switch valve	SUPER
83	ZC-81504025	Logical device	
84	CM500/PNV25	Staple pusher cylinder control valve	
85	4601/8	1/8 distributing block	
86	RR61880	Locking valve	
87	R10/R9Ø4	Fastenings with tap for gluing device	
88	4601/4	¹ / ₄ distributing block	



JOINT 5X5 / SUPER - SPARE PARTS - DETAILS



JOINT 5x5 / SUPER - SPARE PARTS - DETAILS

POS.	CODE	DESCRIPTION	
40	NH5X5	Nailing head complete	
41	TCEIM5X18	Staple guide plate fixing screw	
42	JTES 101	Hammer guide plate	
43	JTES102	Staple guide plate	
44	M6X30	Hammer auide plate fixing screw	
45	JTES105	Hammer	
46	GREIM6X8	Hammer fixing pin	
47	SGP008	Loader spring	
48	TCEIM6X16	Nailing head/working plate fixing screw	
49	GP007	Staple pusher Trolley	
50	SGP006	Loader	
51	TCEIM5X20	Loader fixing screws	
52	FPM5X10	Snap-on screw for thickness compensator	
53	TECIM4X8	spring fixing screw	
54	55M10	Thickness for nailing head	
55	DADM6	Nut	
56	GP016	Guide for spring support	
57	JMAN05	Spring guide	
58	TSEIM6X16	Guide for spring fixing screw	
59	SGP009	Trolley tie-rod	
60	PS001C	Clamp for Presser	
61	BTPM8X25R63	Presser locking lever	
62	PS003A	Presser guide	
63	TCEIM8X30	Presser guide fixing screw	
64	8RING	Elastic O-ring	
65	PS002A	Presser Shaft	
66	BTPM8X40R63	Fixing lever	
70	HT-L02700	Staple pusher Ø63 Cylinder	
70A	MR-UPI2230	Head Gasket for Ø63 Cylinder	
70B	HT-L027K1	Gaskets Set for Ø63 Cylinder	
70C	HT-L027K5	Ø63 Cylinder Rod with piston	
88	BOTM5X7	Fixing pin for bush	
89	PS12A	Round angular presser	
90	PS12B	Bush for round angular presser	
91	PS040	Ø40 Nylon presser	
92	PS080	Flat angular presser	
93	BOTM5X14	Fixing pin for pressers	
105	GP010	4 mm staples thickness compensator	
106	GP011	7 mm staples thickness compensator	
107	GP012	10 mm staples thickness compensator	
108	GP013	12 mm staples thickness compensator	
111	GP017	4/7 mm staple pusher unit	
112	GP018	10/12/15 mm staple pusher unit	

NOTES

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