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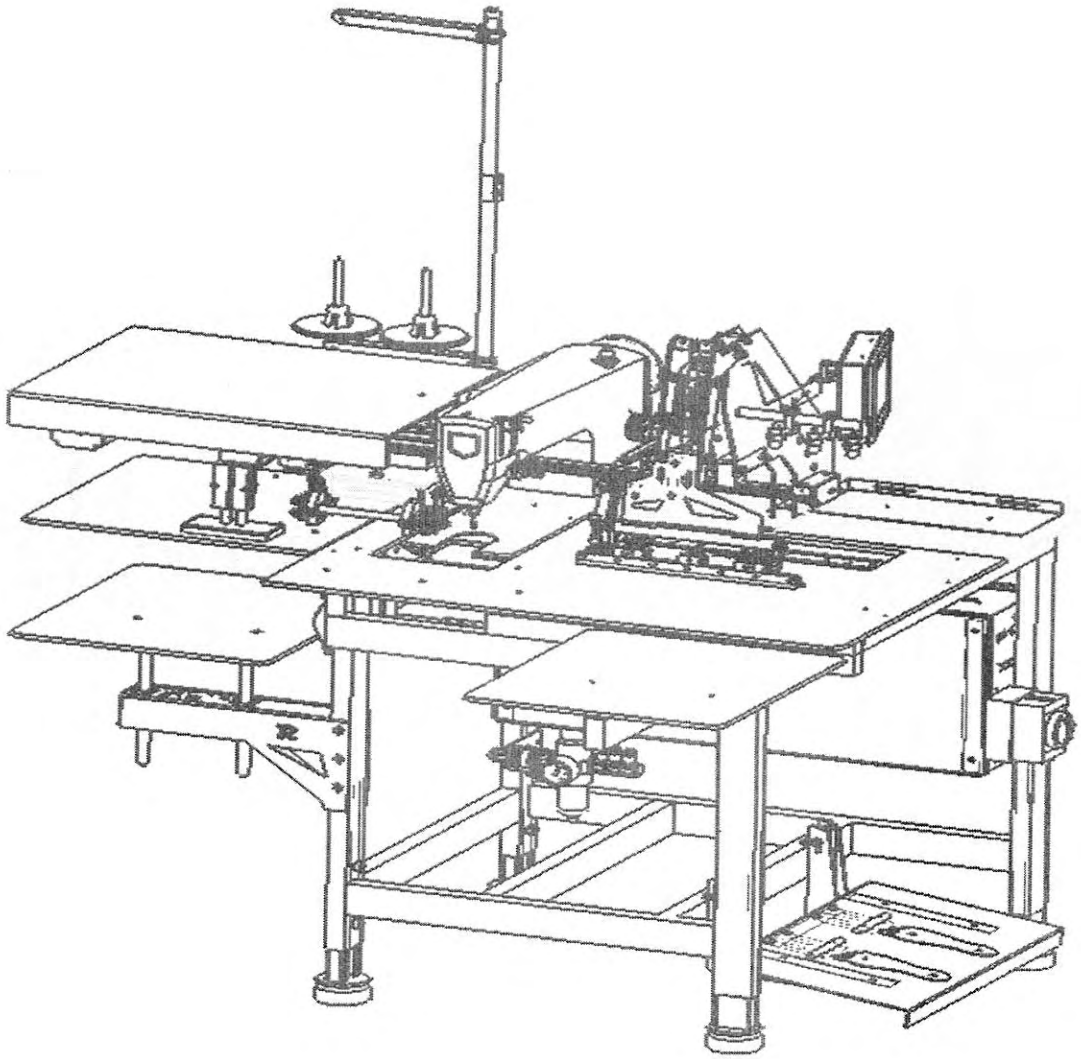


PF 2200

LEFT AND RIGHT AUTOMATIC SHORT SEAMER MACHINE

INSTRUCTION MANUAL

PART 1

GENERAL NOTES

PART 1 GENERAL NOTES

1.1 Safety instructions

Important information for the operator!

This machine has been manufactured in keeping with the latest technological developments and is operationally safe. However, it may present potential hazards, particularly if it is operated by inadequately trained personnel or if it is not used correctly:

- For personnel operating and handling the machine, the operator must prepare written instructions in a reasonable form and in the language of the operating personnel based on these working instructions.
- Use the operating instructions to familiarize the operating personnel with the functions, operation, and care of the machine and check to see if the operating personnel fully understands these instructions.
- Use the service instructions to familiarize the service personnel with the setting up and maintenance of the machine.
- Should you encounter problems that are not mentioned in these working instructions, please contact your supplier immediately for your own safety. Please do not hesitate to contact AMF Reece if you have any suggestions that help to improve this product.
- Keep these working instructions close to the machine so that safety instructions and information on operation, setting-up, and maintenance are always accessible.

1.1.1 Symbols used in the working instructions

⚠ WARNING!
is used if non-observance may cause serious or even lethal injuries.

⚠ CAUTION!
is used if non-observance may cause medium to minor injuries or damage.

☞ NOTE!
is used for hints and useful information.

1.1.2 Symbols used on the machine

⚠ WARNING: DANGER!
Caution! Observe working instructions.

⚠ WARNING: HIGH VOLTAGE!
Caution! Prior to opening, pull out power plug.

Compressed air supply

The machine must be supplied by an on-site compressed air source.

- Operating pressure: 6 bar.
- Compressed air quality: oil-free
- Compressed air consumption: 12 NL

Location and storage requirements

Installation in sheltered, closed rooms.

- Room temperature: +10 °C to 45 °C
- Relative humidity: 80 % max.

Disposal

- Please discard the packaging material in accordance with existing disposal directives. Part 3 , Delivery of the machine, contains a list of the packaging materials used.
- The machine contains reusable materials. Therefore, when discarding the machine, ask your local magistrate or community office about the possibilities of recycling.

PART 2

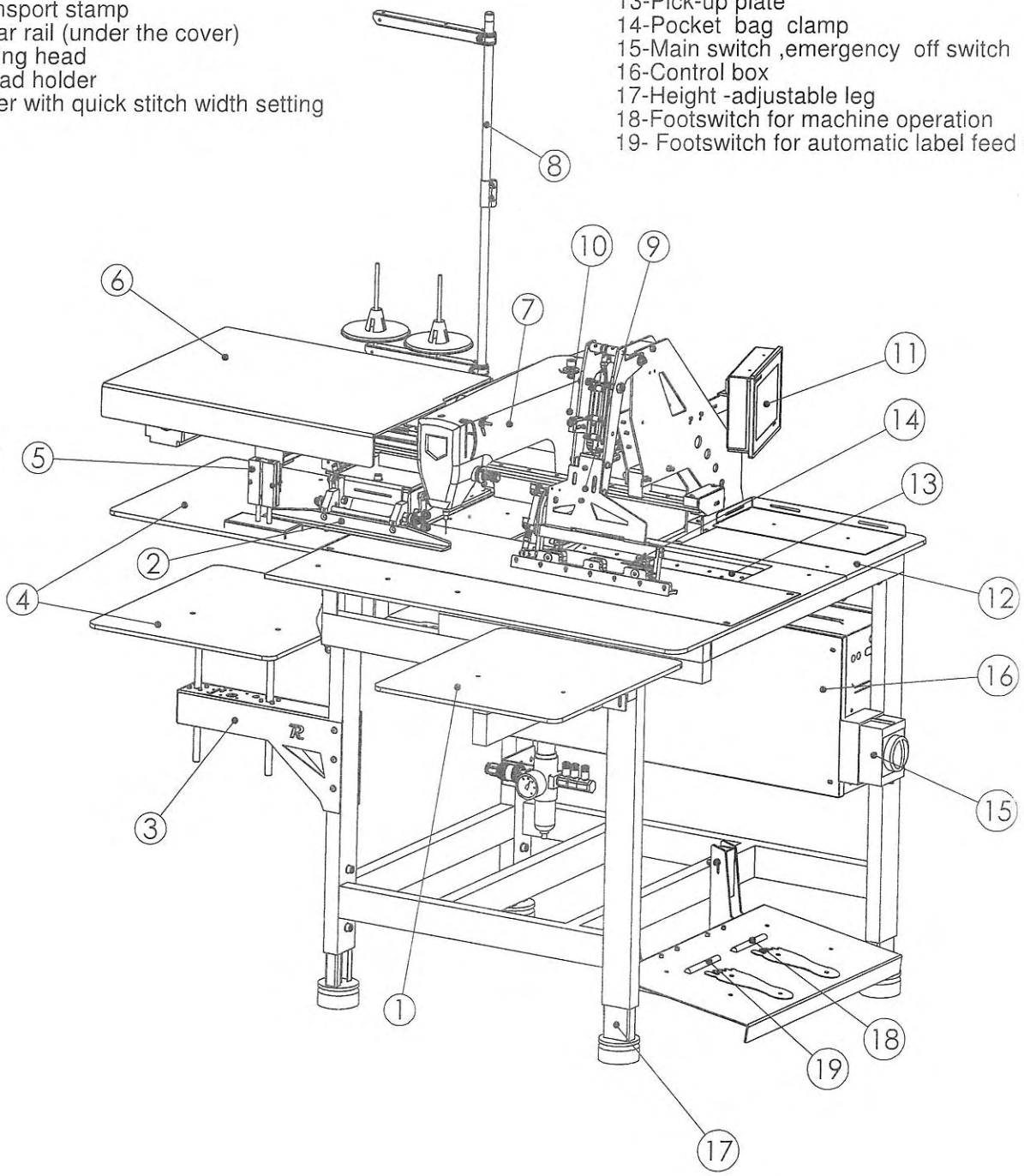
OPERATING INSTRUCTIONS

PART 2 OPERATING INSTRUCTIONS

2-1 Description of the machine

1-Work table
2- Main clamp
3-With lifting unit
4- Lift table
5- Transport stamp
6-Linear rail (under the cover)
7-Sewing head
8-Thread holder
9-Folder with quick stitch width setting

10- Laser
11-Operating panel
12-Working plate
13-Pick-up plate
14-Pocket bag clamp
15-Main switch ,emergency off switch
16-Control box
17-Height -adjustable leg
18-Footswitch for machine operation
19- Footswitch for automatic label feed system



2.2 Functions of the machine

2.2.1 Functional sequence

The POCKET FACING AUTOMAT allows the automatic crimping over of pocket facings and the tucking of pocket facings to pocket bags. The complete machine operation is performed using the following operational steps:

- Pocket facing and pocket bag are positioned manually.
- The pocket facing is crimped over and picked up.
- The folder transports the pocket facing to the pocket bag.
- The transport system automatically transports the pokket facing and the pocket bag to the sewing head where they are tucked.
- The finished piece is transported to the stacking table by the stacking system and put down.

2.2.2 Line-up and alignment

Fig. 3: Depending on how the pocket facing and the pocket bag are to be sewn to one another, the two pieces must be aligned at the line-up positions. The exact line-up position of the facing to the bag can be marked at the working plate or at the pick-up plate using tape or pen. Please note that the pocket bag (7) must be lined up within the operating range of the pocket bag clamp (6).

Fig. 2: Handwheel for fabric thickness, The handwheel (2) is used to set the maximal fabric thickness of the pocket facing. It can be adjusted steplessly.

Fig. 2: Handwheel for stitch width, The handwheel (1) is used to set the correct stitch width for the pocket facing. The stitch width depends on the thickness of the fabric. The thicker the fabric, the larger the stitch width.

Fig. 3: Line-up position for pocket facing,

The pocket facing (4) is lined up at the stop rail (5) of the pick-up plate (2). The exact alignment to the pocket bag (7) is marked by a marking (3) at the pick-up plate (see fig. 4 too).

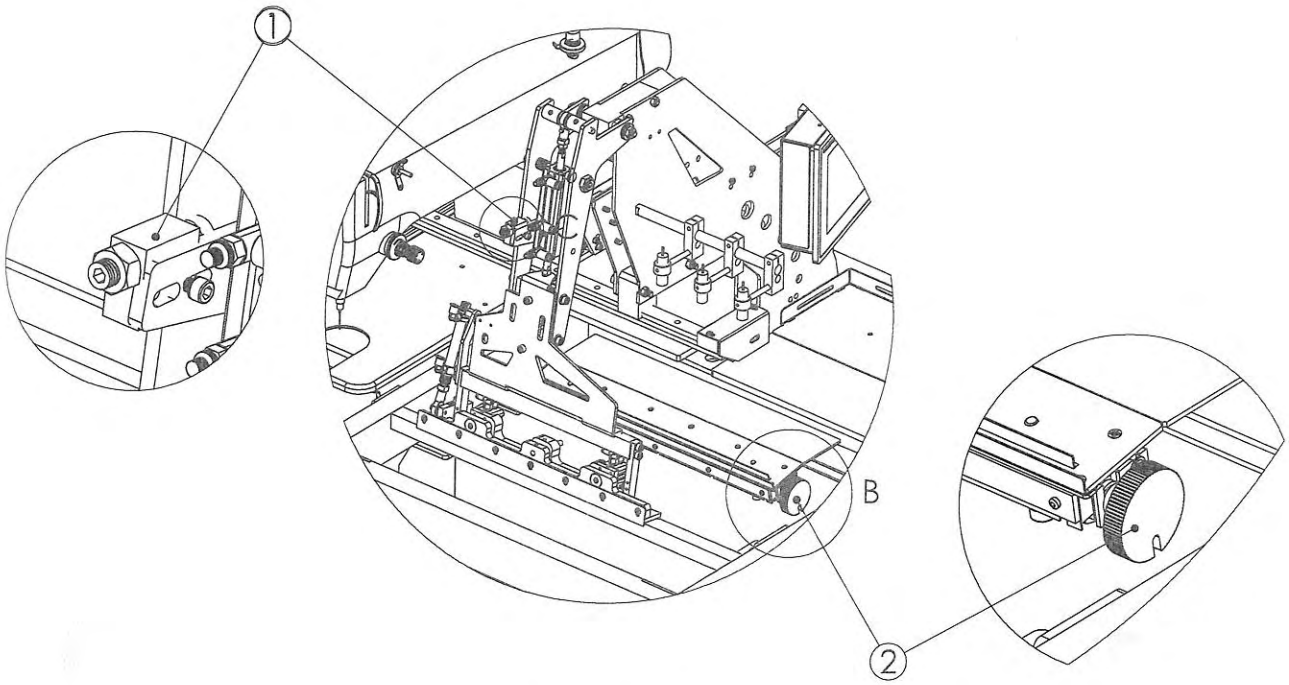


Fig.2 Functions of the machine

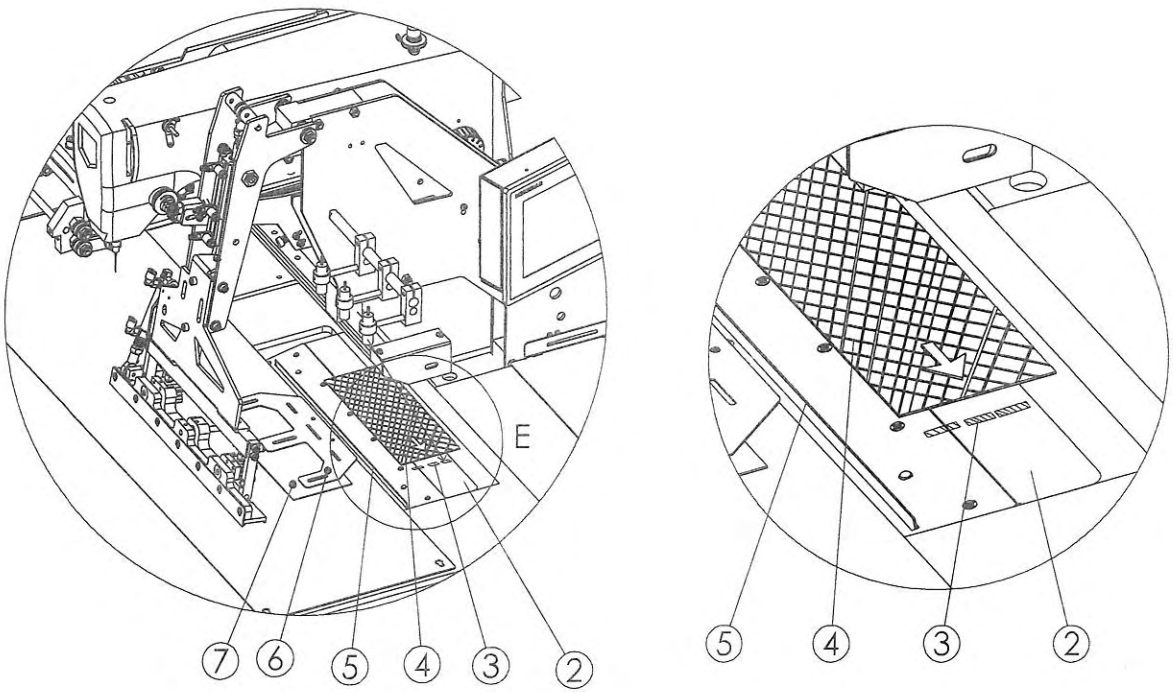


Fig.3 Functions of the machine

2.2.2 Line -up alignment

Crimping over and picking up pocket facing
The folder (1) moves to the right to the pick-up plate (2) The pocket facing is crimped over and picked up

-During this time,the pocket bag (7) is positioned on the working plaet.Pocket bag line-up position,The pocket bag(7) is lined up within the operating range of the pocket bag clamp (6)The exact position to the pocket facing (4) is determined by a marking

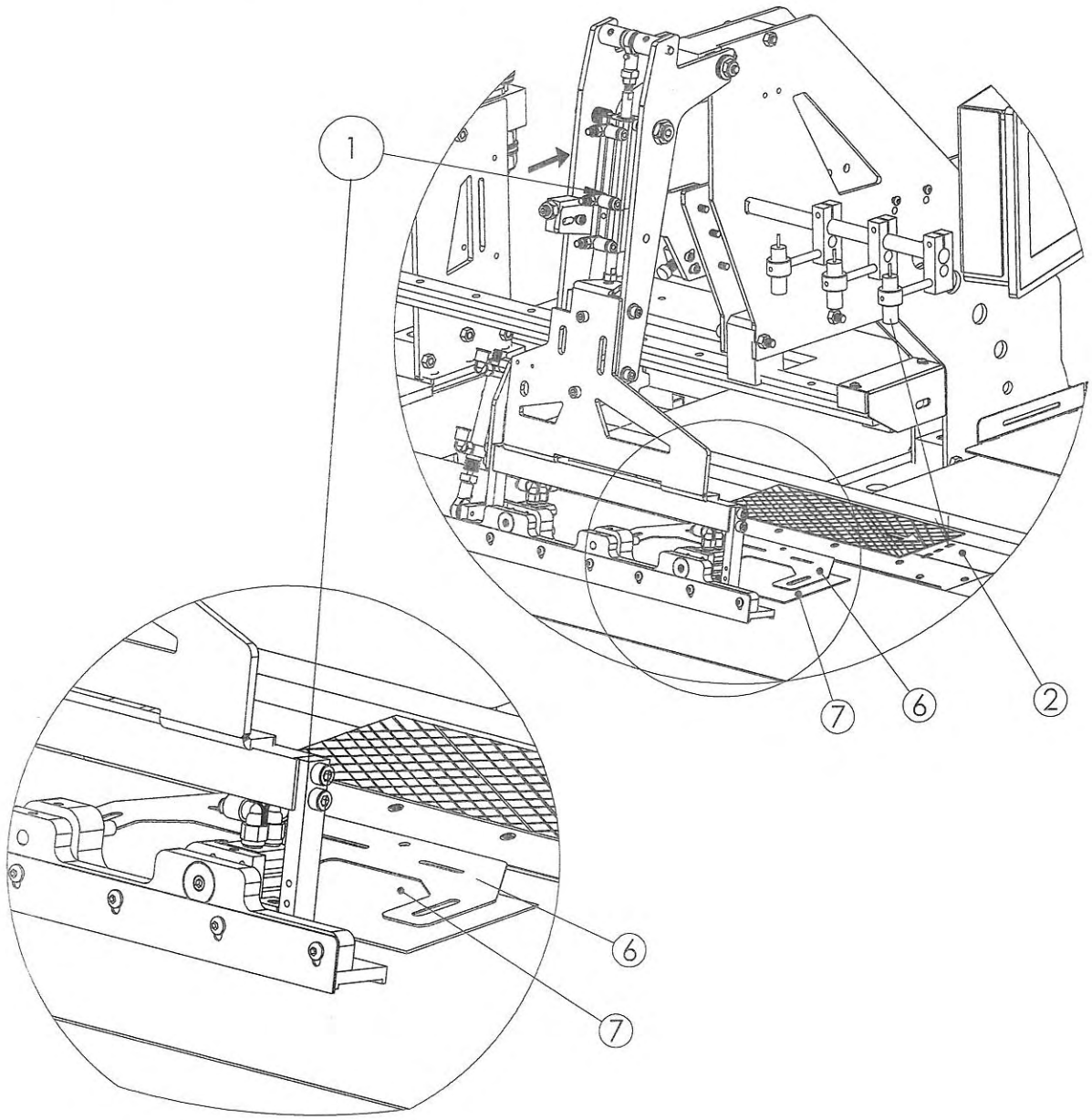


Fig.3 Functions of the machine

2.2.3 Transport and sewing

Folder

The folder(6) moves to the left with the pocket facing ,is lowered and puts the pocket facing onto the pocket bag.

Pocket bag clamp

The pocket bag clamp(7) fixes the pocket bag to the working plate until the main clamp picks up the sewing pieces and transports them to the sewing head. The pocket bag clamp closes while the folder moves to the left.

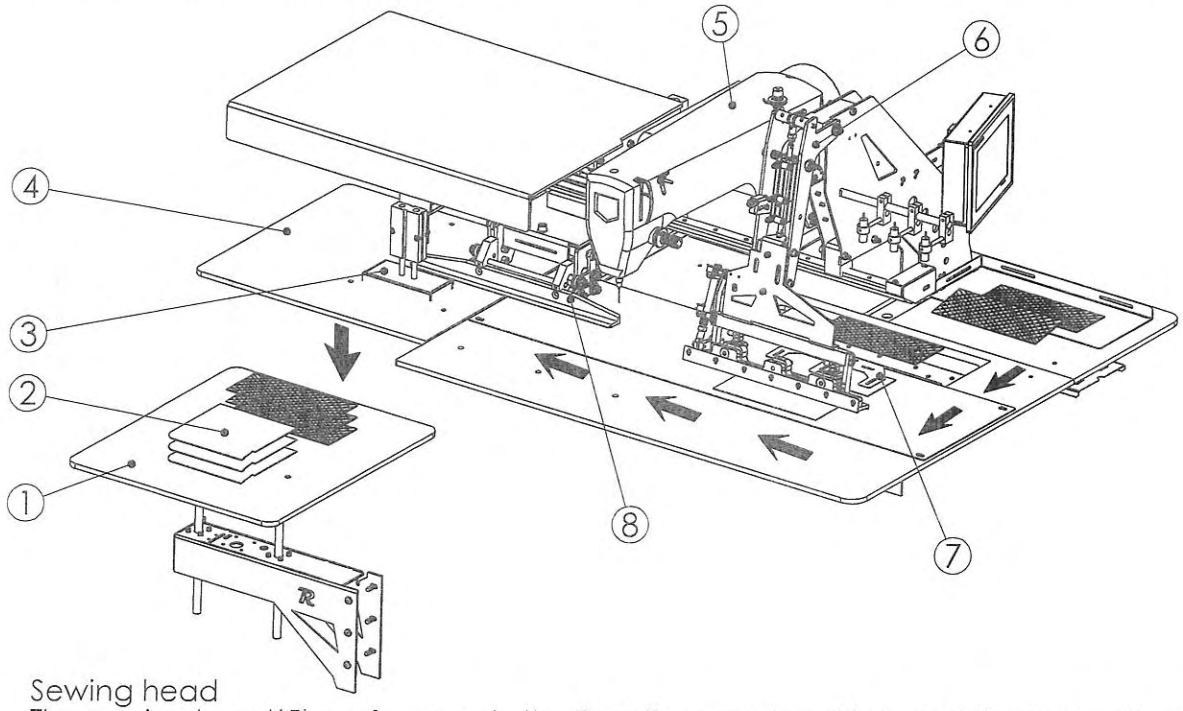
Automatic label feed system (optional),

The automatic label feed system positions folded on the pocket facing.

Main clamp

The main clamp (8) moves to the inserting station and picks up the sewing pieces. The folder moves kacj up to its start position.

The main clamp pushes the sewing piece on the working plate from the inserting station to the sewing head .



Sewing head

The sewing head(5) performs only the functions sewing stitch and therad cutting.All other funtions,susch as seam length or determining the beginning and the end of the seam,are acquried by the sensor system and controlled by the program control unit in accordance with the set values .

Thread supply and thread feeding are monitored by sensors(top thread monitor and bobbin rest thread monitor).

The reel stand can hold two reels.

Transport stamp

After tucking ,the sewing piece is blown even and transferred by the transport stamp (3) to the stacker.

Stacker

The stacker consists of a sliding table of the stacker .The sliding table then moves backward, and the sewing pieces (2)fall onto the lift table where they are stacked .

The lift table is lowered automatically (photocell control) or is lowered is preset steps in accordance with the input numbers.

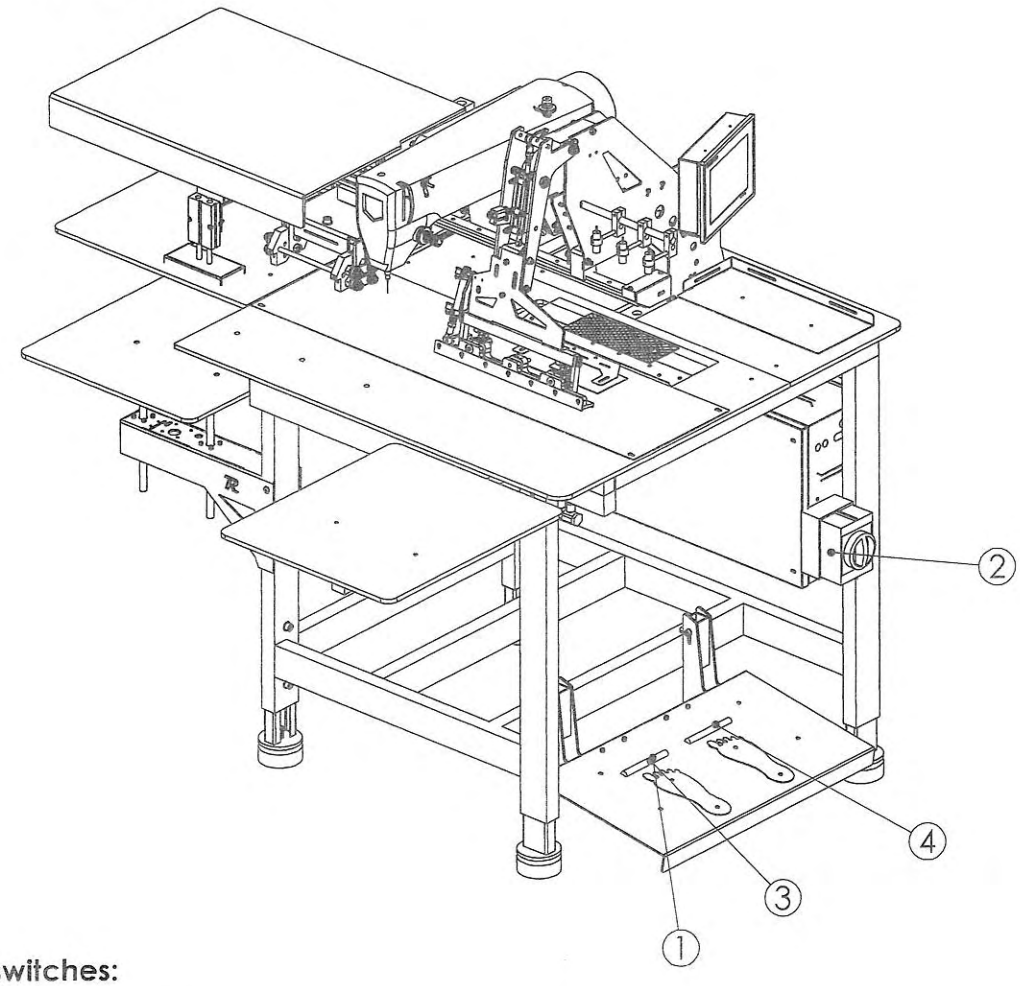
Fig.6 Transport and sewing

2.2.4 Switches

The short seam automat is equipped with three different types of switches :
-Emergency switch for stopping a sewing program,
-Supply switches for current ,
-Control switches for controlling the machine operation.

Emergency switch:

Program stop switch
When the program stop switch (1) is pressed,all machine movements and the sewing process ara stopped immediately.
The control program performs a reset.



Supply switches:

Main switch
The main switch (2) is used to turn the power supply of the machine on or off.For safety reasons,the machine must be turned off using the main switch when it is standing still for an extended period;in this case ,all functional units are deactivated.
The main switch also serves as an additional emergency off switch.

Control switches:

Footswitch for machine operation
This footswitch (4) is used to control the individual operating steps of the machine or for starting the fully automatic machine operation.
Footswitch for automatic label feed
When this footswitch (3) is depressed,the automatic label feed system is activated.

2.3 Preparing the machine

2.3.1 Installing the needle

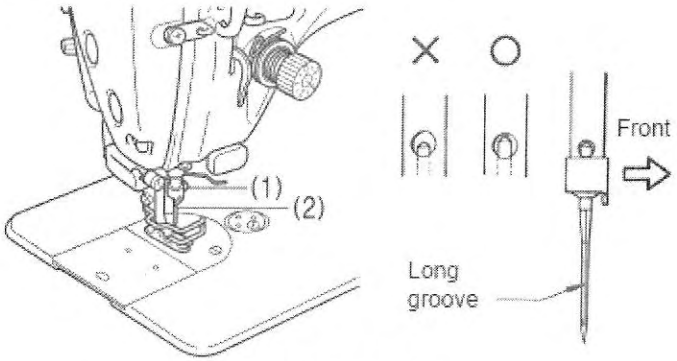


Fig. 8 Installing the needle

1. Turn the machine pulley to move the needle bar to its highest position.
2. Loosen the screw (1).
3. Insert the needle (2) in a straight line as far as it will go, making sure that the long groove on the needle is at the left, and then securely tighten the screw (1).

2.3.2 Removing the bobbin case

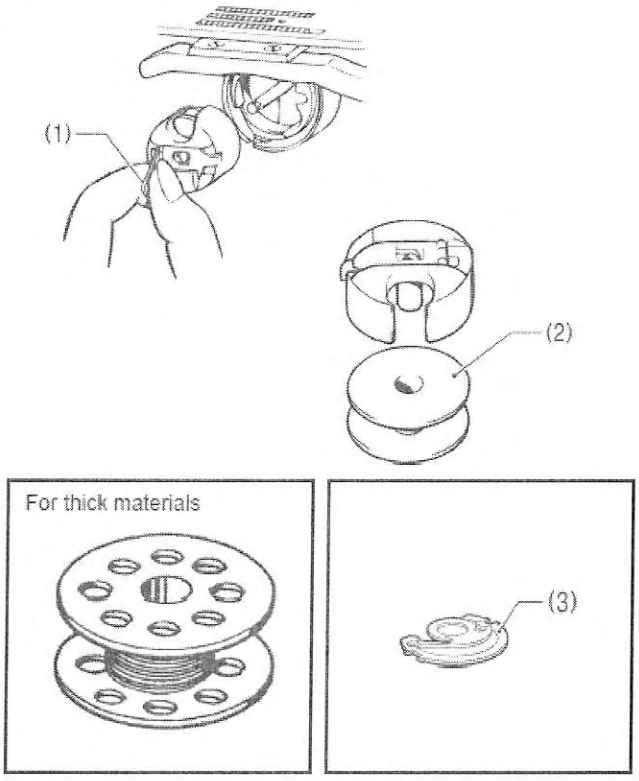


Fig. 9 Removing the bobbin case

1. Turn the machine pulley to raise the needle until it is above the needle plate.
2. Pull the latch (1) of the bobbin case upward and then remove the bobbin case.
3. The bobbin (2) will come out when the latch (1) is released.

There is an anti-spin spring (3) inside the bobbin case.

The anti-spin spring (3) prevents the bobbin from racing at times such as during thread trimming.

Use bobbins (2) made of light alloy as specified by

2.3.3 Winding the lower thread

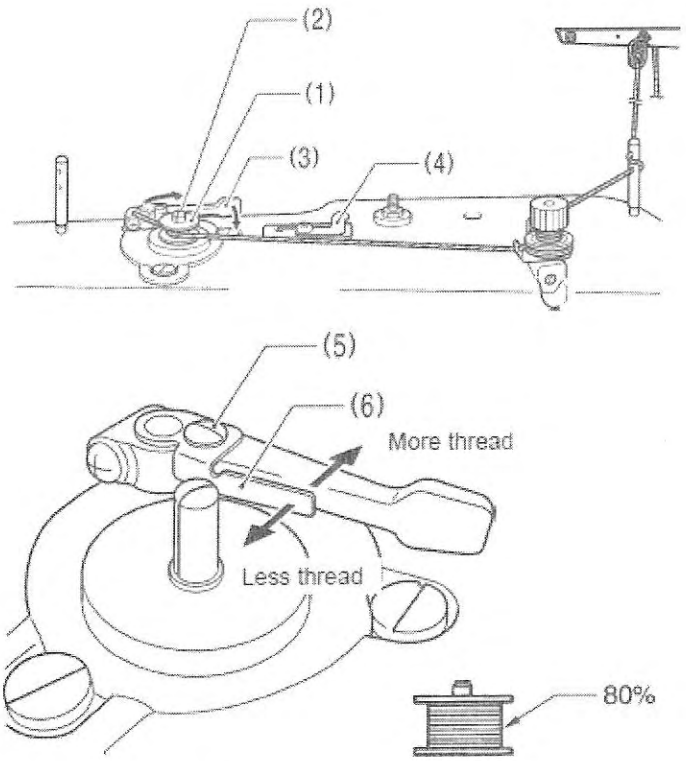


Fig. 10 Winding the lower thread

1. Turn on the power switch.
2. Place the bobbin (1) onto the bobbin winder shaft (2).
3. Wind the thread several times around the bobbin (1) in the direction indicated by the arrow.
4. Push the bobbin presser arm (3) toward the bobbin(1).
5. Raise the presser foot with the lifting lever.
6. Depress the treadle. Lower thread winding will then start.
7. Once winding of the lower thread is completed, the bobbin presser arm (3) will return automatically.
8. After the thread has been wound on, remove the bobbin and cut the thread with the knife (4).

Loosen the screw (5) and move the bobbin presser (6) to adjust the amount of thread wound onto the bobbin.

☞ **NOTE:**

The amount of thread wound onto the bobbin should be a maximum of 80 % of the bobbin capacity.

2.3.4 Installing the bobbin case

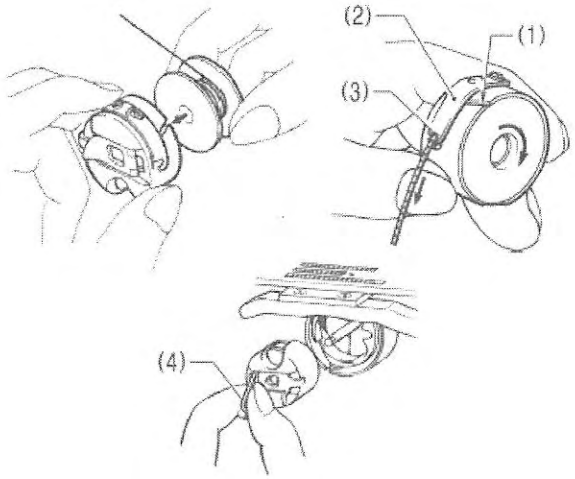


Fig. 11 Installing the bobbin case

1. Turn the machine pulley to raise the needle until it is above the needle plate.
2. While holding the bobbin so that the thread winds to the right, insert the bobbin into the bobbin case.
3. Pass the thread through the slot (1) and under the tension spring (2), and then pull it out from the thread guide (3).
4. Check that the bobbin turns clockwise when the thread is pulled.
5. Hold the latch (4) on the bobbin case and insert the bobbin case into the rotary hook.

2.3.5 Threading the upper thread

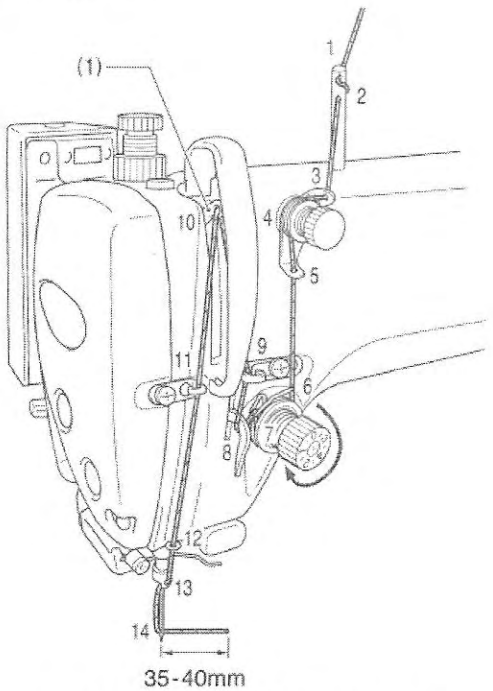


Fig. 12 Threading the upper thread

Turn the machine pulley and raise the thread take-up (1) before threading the upper thread.

This will make threading easier and it will prevent the thread from coming out at the sewing start.

2.3.6 Lubrication

The sewing machine should always be lubricated and the oil supply replenished before it is used for the first time,
and also after long periods of non-use.
Use only the lubricating oil (Nisseki Mitsubishi Sewing Lube 10N; VG10) specified by Brother.
* If this type of lubricating oil is difficult to obtain, the recommended oil to use is <Exxon Mobil Essotex SM10; VG10>.
1. Tilt back the machine head.
2. Remove the rubber cap (1), and pour 150 ml of lubricating oil from the accessory oil bottle (2) into the oil tank (3). (Use the reference line (4) as a guide when pouring.)
3. Replace the rubber cap (1).
4. Return the machine head to its original position.
5. Check that the oil gauge (6) comes to the upper reference line in the oil gauge window (5).
Be sure to add more oil if the oil gauge (6) is below the lower reference line.

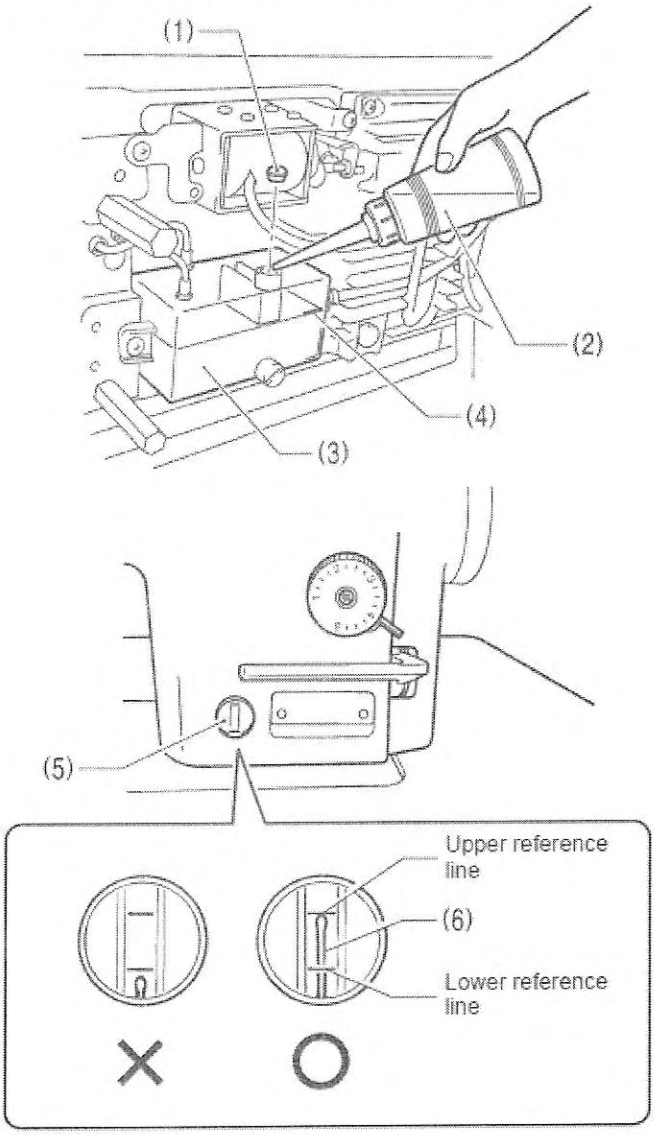


Fig. 13 Lubrication

Prior to the production start, check the supply connections, connect the machine to the compressed air and power supply systems and prepare the sewing head.

1. Insert needle, pass top thread through needle and insert bobbin for bottom thread into sewing head (see working instructions of sewing head manufacturer or supplier).
2. Connect machine to compressed air supply by inserting the plug-in connector of the compressed air supply hose into the compressed air receptacle in the operating room. The pressure of the compressed air is reduced to the required operating pressure of 6 bar by a pressure reducer. Check manometer to see if the correct operating pressure is set. The pressure reducer is installed at the side mounting wall of the worktable.
3. Connect machine to power supply system.

⚠ **WARNING - Electric shock:**

Contact with current-carrying components may cause a lethal electric shock. Check plug and cable before connecting machine to power supply system.

- Do not use damaged plugs, sockets or cables to connect the machine to the power supply system!
- The machine is connected to a power source of 230 V ±10 % at 50/60 Hz.
- Before connecting the machine to the power supply system, check to see if the ratings of the power supply system in the operating room correspond with the ratings on the nameplate at the rear of the machine.
- If the ratings for voltage (V) and maximum current (A) do not match, the machine must not be connected.
- Insert the grounding plug into a properly grounded and fused power socket.
- Make sure that the power supply cable is not subject to tensile or pressure forces.

4. Turn machine on by moving the main switch 1 into the position **I**.

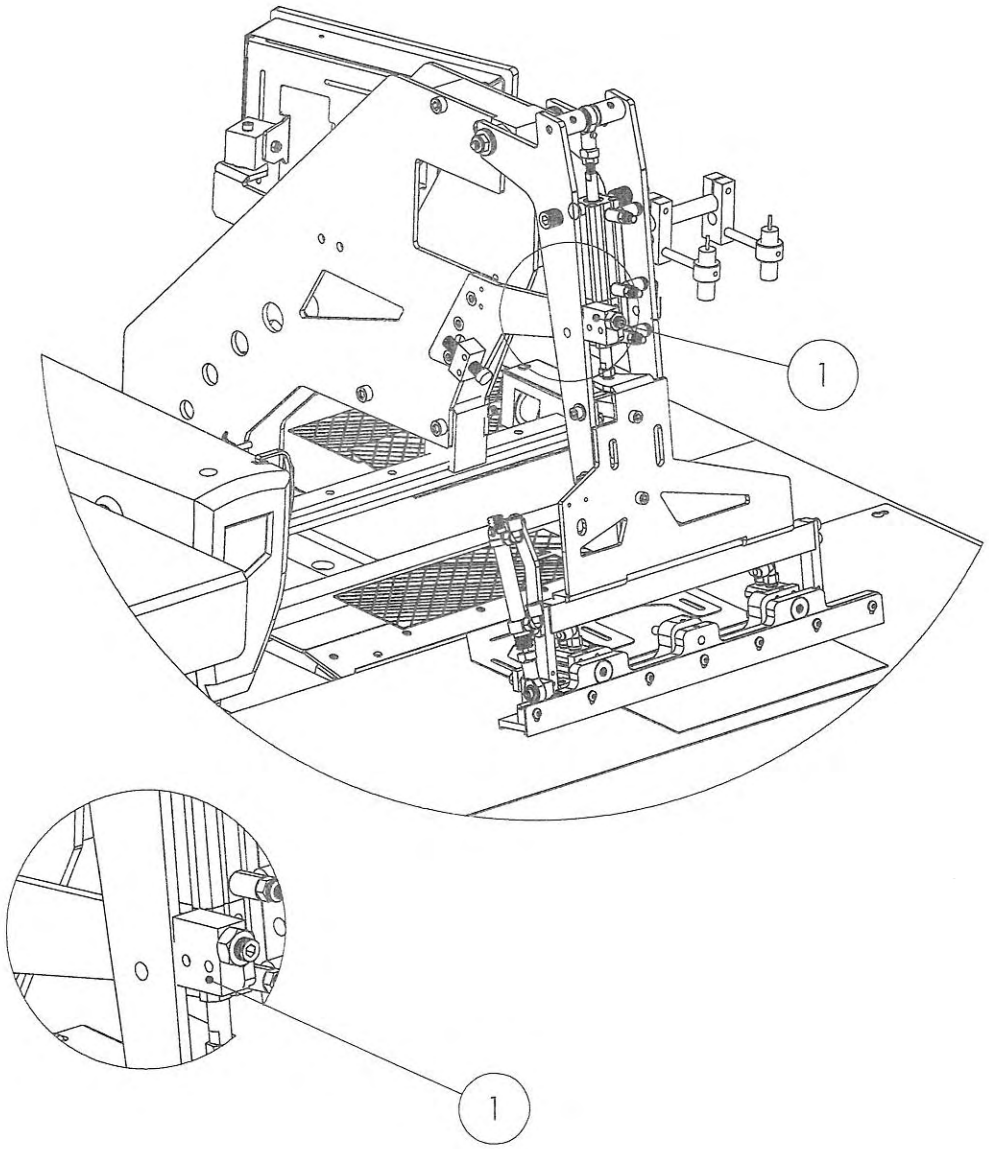
The machine is ready for operation.

2.4.2 Quick stitch width setting

The quick stitch width adjustment makes the selection of 4 preadjusted different stitch widths posssible.

NOTE-Stitch width!

The stitch width depends on the thickness of the fabric.The thicker the sewing material used, the wider the stitch width.
The correct stitch width for thr material is determined by trial end error in several machine cycles.
-By rotating the handwheel (1),the stitch width can be set to the desired grid position 1-4



2.4.3 Turning the machine off

For extended work intermissions, the machine must be turned off completely.

1. Turn power supply off by moving main switch to 0 position.

2.4.4. Periodic cleaning of the machine

The machine must be cleaned after large production series or at least once a day, whichever occurs first.

⚠ CAUTION - Danger of injuries!

If the machine is put in motion accidentally, persons in its direct vicinity may be caught by moving parts which may cause injuries.

Prior to any cleaning work, disconnect the machine from the power supply!

- Turn the machine off using the main switch.
- Remove the power plug from the socket and protect it from accidental reconnection.

Periodic cleaning:

1. Remove fabric residues.
2. Using compressed air, blow off dust and thread residues at the sewing head, at the working plate, at the main clamp and at the linear rail.

PART 3

SERVICE INSTRUCTIONS

PART 3 SERVICE INSTRUCTIONS

3.1 Delivery of the machine

3.1.1 Packaging

The machine is delivered in a solid packaging box on a pallet. All packaging materials can be separated and reused.

- Pallet made of pine wood
- Packaging box made of plywood / transport carton
- Polyethylene film (PE)

☞ **NOTE - Shipping braces!**

During shipping, moving machine parts are protected with shipping braces (cable ties). The positions of all parts fitted with shipping braces are marked with red labels. After the machine has been installed and aligned, the shipping braces must be removed.

☞ **NOTE - Damages in transit!**

If any damage presumably caused by incorrect transport is found when the machine is unpacked, please contact your supplier immediately.

3.1.2 Scope of delivery

The machine is delivered in an operative condition. The scope of delivery comprises:

Short seam automat with sewing head:

- The machine is equipped with several customerspecific accessories. For checking the exact layout, the information on the delivery note is authoritative.
- Service kit with machine oil.

Operating panel and program control:

- Preinstalled (ready-for-use) operating panel.
- Memory stick with factory-programmed standard sewing program.

Technical documents:

- Operating instructions.
- Service instructions
- Programming instructions.

3.2 Storage and location requirements

3.2.1 Floor quality

The floor of the room where the machine is to be installed must have a sufficient surface strength. The location of the machine must be free of vibrations.

If several machines are to be installed in one room, the static load bearing capacity of the ceiling must be considered.

Weight:

- Machine with accessories approx 210 kg

3.2.2 Interior climate

Climatic requirements for the operating room:

The machine must only be stored or operated in closed operating rooms.

- Room temperature +10 °C to +45 °C
- Relative humidity 80 % max.

3.2.3 Floor space required

For operation during production and for service works, the machine must be freely accessible from all sides. On all sides, there must be a minimum clearance of 1 m.

Machine dimensions:

- L x W x H 1700 x 1200 x 1600 mm

☞ **NOTE - Electromagnetic interference!**

The machine must not be installed in the immediate vicinity of devices or electrical components (e.g. transformers) generating a strong magnetic field as otherwise the correct function of the program control may be impaired.

3.2.4 Supply connections

The machine requires on-site power and compressed air sources.

Power connection:

The power supply of the machine requires a properly grounded power connection with:

- Grounding plug 230 V ± 10 %, 50/60 Hz
- Fusing 16 A

☞ **NOTE - Peak voltages!**

The correct function of the machine requires that the power system supplies a constant current. Peak voltages may particularly impair the stability of the program control.

Compressed air supply:

The on-site compressed air supply system must meet the following requirements:

- Operating pressure 6 bar
- Compressed air quality oil-free
- Compressed air consumption 4.16 NL

3.3 Start-up

3.3.1 Machine table alignment

After the machine has been installed at the desired location, the machine table must be aligned:

- Set machine table to required height.
- Align machine table horizontally on all sides.

Setting table height:

1. **Fig. 16:** Lift machine: Connect lifting device at lift points (arrows) below the crossmembers. If the machine is equipped with optional transport rollers, release brakes before lifting.
2. **Fig. 17:** Loosen lockscrews (2) on all guide rails.
3. Pull table legs (3) out to the desired length and retighten lockscrews (2).
4. Lower machine to floor.

Horizontal positioning of the machine table:

1. Place bubble level onto working plate.
2. **Fig. 17:** Loosen table leg lock nuts (1).
3. Align machine table horizontally on all sides by raising or lowering table legs as required.
4. Retighten table leg lock nuts.

NOTE-Shipping braces

Before the machine is connected to the power supply system all shipping braces must be removed .

-Cut off cable ties.
-Remove labels.

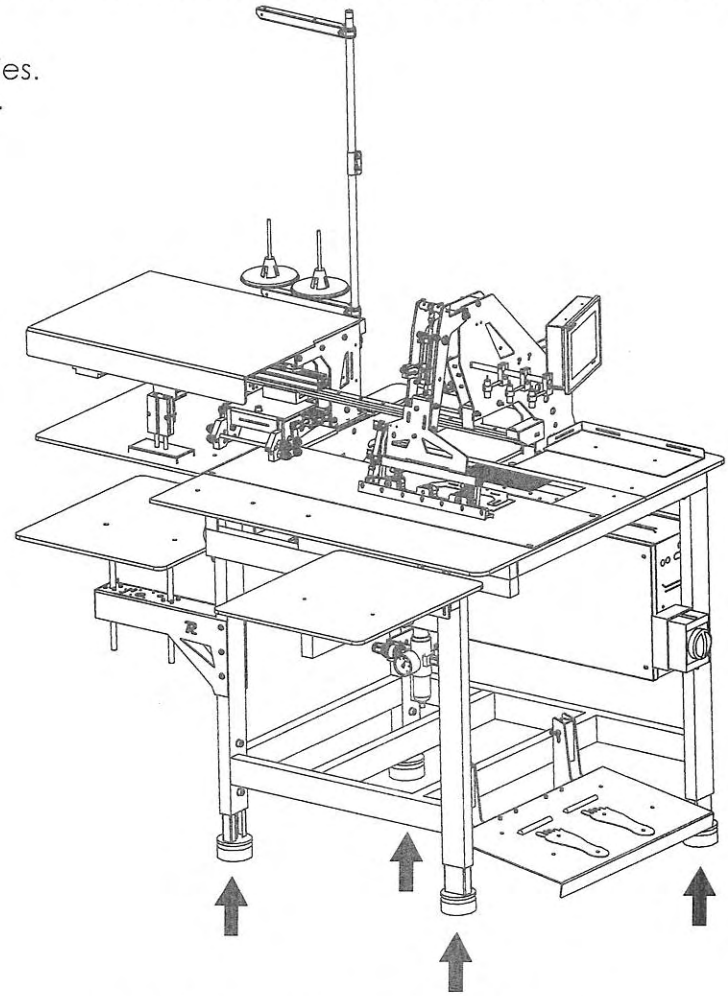


Fig.16 machine table alignment

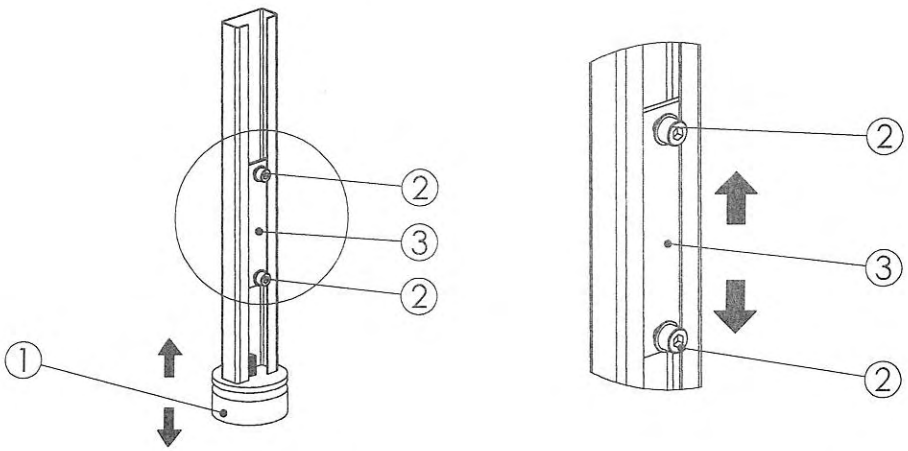


Fig.17 machine table alignment

3.3.2 Compressed air connections

Fig.18: The compressed air connection is preinstalled on the machine. It comprises the follewing components :
-Pressure reducer (2) with manometer (4) and water separator (5),
-Pressure hose with push-in plug(1).
The pressure reducer is installed at the side mounting wall of the worktable.
Connecting the machine to the compressed air suppl y system :
1.Connect pressure hose plug to on-site terminal unit .
2.Open on-site compressed air supply.
3.Set pressure reducer to a machine operating pressure of 6 bar by rotating pressure reducer knob(3) and read value on manometer(4):
-To increase pressure,rotate in clokckwise direction.
-To reduce pressure ,rotate in counter-clokcwise direction.

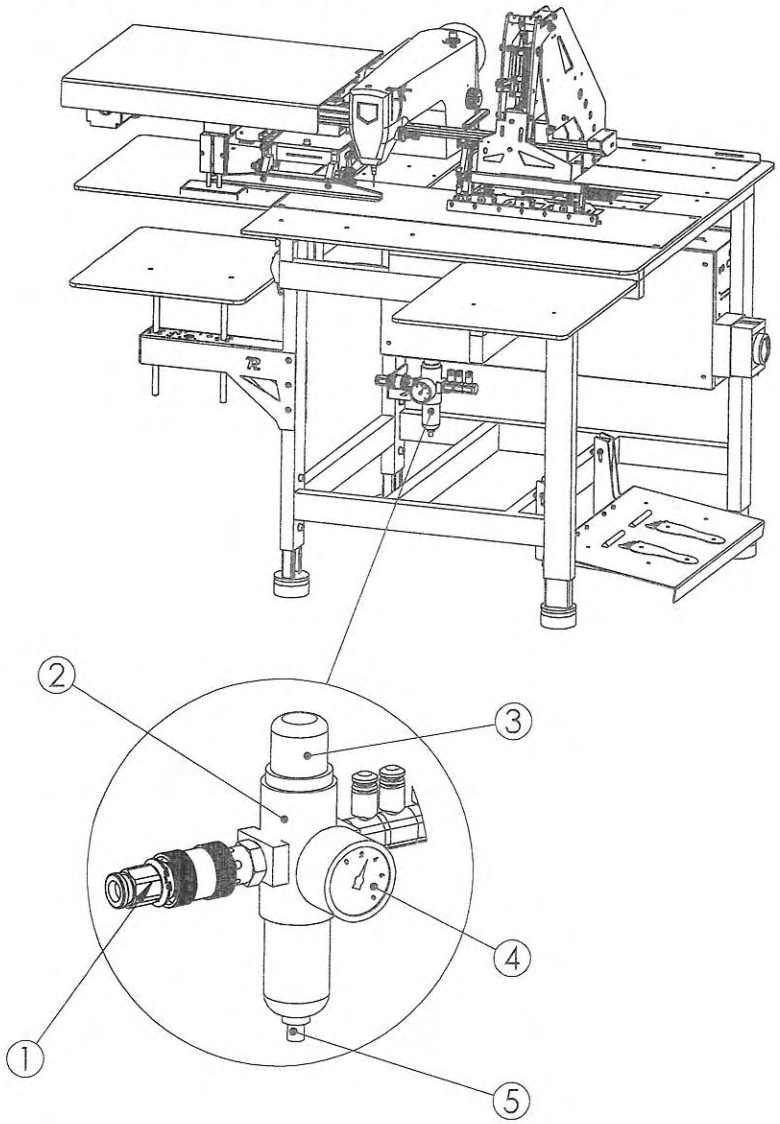


Fig.18 Compressed air connections

C.3.3 Connecting the machine to the power supply

The power cable and the power plug are preinstalled on the machine. The footswitches for controlling the machine operation and the bundle clamps are installed as well.

Connecting the machine to the power supply system:

1. Put footswitches for machine operation and for bundle clamp onto desired locations on floor at front side of machine.
2. Insert power plug into socket.

⚠ WARNING - Electric shock!

Contact with current-carrying components may cause a lethal electric shock. Check plug and cable before connecting machine to power supply system.

- Do not use damaged plugs, sockets or cables to connect the machine to the power supply system!
- The machine is connected to a power source of 230 V ±10 % at 50/60 Hz.
- Before connecting the machine to the power supply system, check to see if the ratings of the power supply system in the operating room correspond with the ratings on the nameplate at the rear of the machine.
- If the ratings for voltage (V) and maximum current (A) do not match, the machine must not be connected.
- Insert the grounding plug into a properly grounded and fused power socket.
- Make sure that the power supply cable is not subject to tensile or pressure forces.
- Route the power supply cable in a way that ensures free access to and around the machine.

☞ NOTE - Works to the electrical system!

Works to the electrical system of the machine must only be carried out by qualified and authorized expert personnel.

Tampering with the machine without authorization makes the warranty void.

3.3.4 Safety check

Before the machine is released for operation, all safety devices must be checked for their correct operation.

⚠ CAUTION - Danger of injuries!

The safety devices protect the operating and service personnel while working on or with the machine.

If the safety devices are fully or partially inoperative, the machine must not be started up.

Perform safety check:

1. Check to see if the cover above the clamp transport unit is correctly and safely installed.
2. Check to see if the finger protection at the sewing head covers the needle effectively.
3. Make sure that the guide laser is not directed into the view area of the machine operator.
4. The main switch also serves as an emergency off switch. To check the function of this switch, turn the machine on, start a machine cycle and turn the machine off during the tucking process using the main switch.
All operational movements of the clamp and of the sewing head must stop, and the program control must switch off.
5. Check the function of the key STOP. Start a machine cycle and press the key. All operational movements of the clamp and of the sewing head must stop.
6. Unlock the key **STOP** twice in rapid succession.. The program control starts a reset, and the clamp must return to its start position.

The machine is ready for operation.

3.4. Machine shut-down

When the machine is to be shut down, it must be disconnected from all supply sources.

Disconnecting the machine from the power supply system:

1. Turn machine off using main switch. Move switch to position "0".
2. Remove power plug from socket and protect it against accidental reconnection.

Disconnecting the machine from the compressed air supply system:

1. Shut off on-site compressed air.
2. Remove compressed air hose plug from terminal unit.

☞ **NOTE - Dust-proof protection!**

If the machine is to be shut down for an extended period of time, it should be covered with a plastic tarpaulin.

3.5 Maintenance

3.5.1 Cleaning

The machine must be cleaned after large production series, or at least once a day, whichever occurs first.

Cleaning the machine surfaces:

1. Disconnect machine from power supply system.
2. Remove fabric residues.
3. Using compressed air, blow off dust and thread residues at the sewing head, at the working plate, at the clamp and at the linear rail.
4. Wipe machine parts dry using a dry, clean cloth.

☞ **NOTE - Plastic surfaces!**

Some parts of the machine surfaces are made of plastic materials. Solvents may dissolve plastics and make them unusable.

Do not clean the machine surfaces (particularly the operating panel) with cleaning agents that contain solvent.

⚠ **WARNING - Electric shock!**

Contact with current-carrying components may cause a lethal electric shock

If the machine is put in motion accidentally, persons in its direct vicinity may be caught by moving parts which may cause injuries.

Prior to any service, cleaning or maintenance works, disconnect the machine from the power supply system!

- Turn the machine off using the main switch.
- Remove power plug from socket and protect it against accidental reconnection.
- If the power supply is not required for repair or setup work, the machine must be disconnected from the power supply system.

3.5.2 Inspection

The machine must be inspected annually.

The inspection comprises particularly the following items:

- safety devices of the machine,
- operativeness of the program control,
- correct function of inputs and outputs.

3.5.3 Service

The following service works must be carried out in weekly intervals.

Oiling the clamp rail:

1. Disconnect machine from power supply.
2. Wipe clamp rails clean using a soft, oil-saturated cloth. The scope of delivery comprises 0.25 l of oil. When this oil is used up, you can order the special machine oil for service from the manufacturer or supplier of the machine.

Emptying the water separator:

1. Disconnect machine from power supply.
2. **Fig. 19:** Drain water at pressure reducer water separator into suited container.

Press button (1) at pressure reducer collector and keep pressed until all the water has been drained.

☞ **NOTE - Sewing head!**

For information about service of the sewing head, please refer to the working instructions of the sewing head.

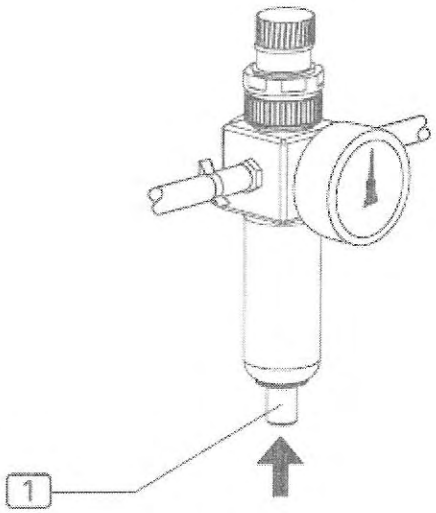


Fig. 19 Emptying the water separator

3.5.4 Repairs

Any repairs to the machine must only be carried out by:

- authorized Technical Service,
- personnel that has been instructed about the setting up and maintenance of the machine on the occasion of a training by the supplier or manufacturer.

Use only original spare parts for installing or replacing machine components.

Manufacturer and supplier will not be held responsible for spare parts from third parties.

☞ **NOTE - Programming instructions!**

Repairs require that machine components carry out their individual movements and that the machine movements are tested. These functions are controlled on level 1 of the service menu.

For the necessary instructions, please refer to the programming instructions Part 4.

Clamp transport belt replacement:

1. Disconnect machine from power supply system.
2. Slide clamp to left until it reaches stop position.
3. **Fig. 20:** Remove retaining screws (3) from drive roller cover (2) and remove cover.
4. Remove two retaining screws from slide roller cover (8) and remove cover (9).
5. Loosen two belt lock screws (4) and release belt tension (7).
6. Loosen lock nuts (6) of set screws (5) and rotate two set screws backward.
7. **Fig. 21:** Remove two connecting screws c from main clamp pedestal. Remove belt.
8. **Fig. 20:** Install new belt to drive roller (1) and to guide roller.
9. **Fig. 21:** The ends of the belt are fitted with holes.

Position the two ends of the belt with the belt clamp exactly over the holes on the pedestal and secure them using screws.

10. **Fig. 20:** Tension belt by tightening two set screws (5) until the belt can be depressed approx 10 mm with distinct counterpressure at the middle of the transport rail.

Tighten lock nuts (6) and lock screws (4).

11. Install the two covers (2) and (9).

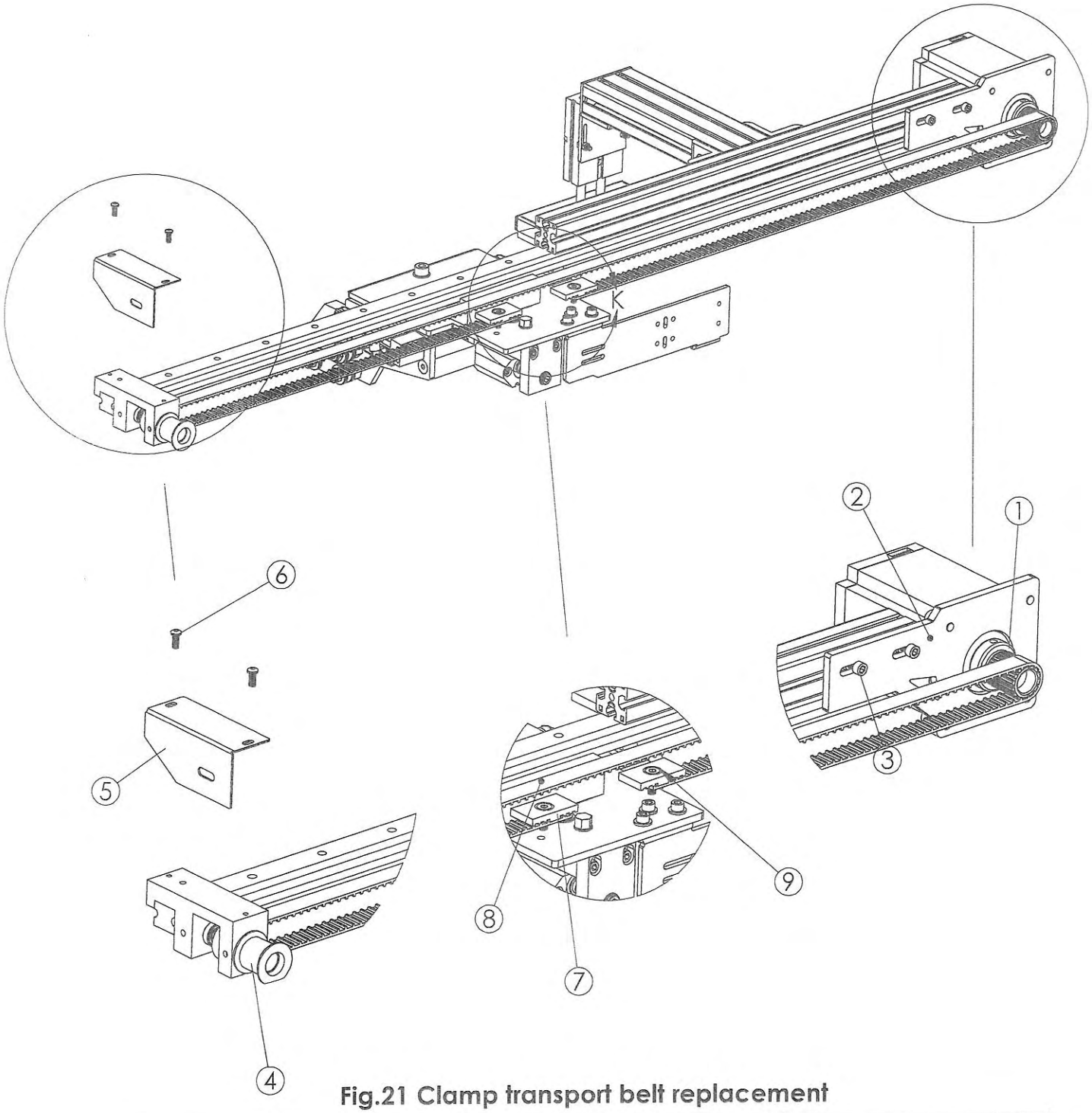


Fig.21 Clamp transport belt replacement

Clamp rail replacement:

The clamp rail must be replaced if the protective lining at the bottom side of the rail is worn.

Clamp rail removal:

1.Fig.22: Lift main clamp (4)
2.Loosen retaining screw(2)
3.Pull clamp rail (1)down and remove

Clamp rail installation :

1.Insert clamp rail (1) into fixture (3) and push up until it reaches the stop.Make sure the clamp rail is positioned evenly in the fixture .
2.Tighten retaining screw(2).

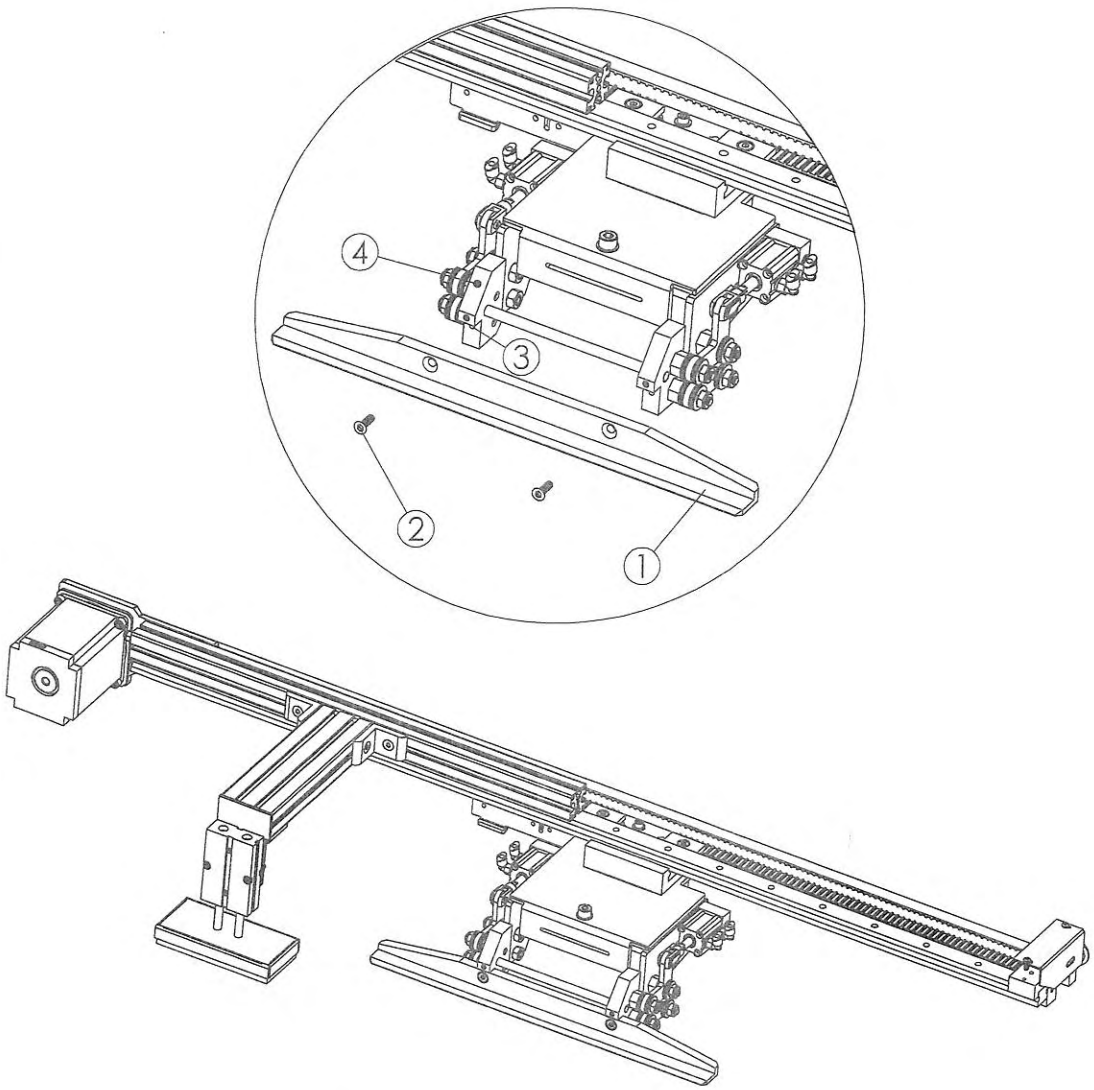


Fig.22 Clamp rail replacement

3.5.5 Machine set-up

NOTE-Activating inputs/outputs

To allow for testing machine movements or interval operation ,the individual stages of movement can be activated with the inputs/outouts of the machine control unit (see programming instructions).
Usually ,the setting up to the machine is controlled by parameter values of the sewing programs (special parameters)and the parameter values of the machine control unit (global parameters).The following mechanical modifications may be required additionally to ensure correct seams with the set parameter values .

Guide laser adjustment

The guide laser marks the line-up position of simple labels on the pocket facing .The position of the guide laser can be adjusted vertically and horizontally.

Fig.23:Adjusting the bracket height:

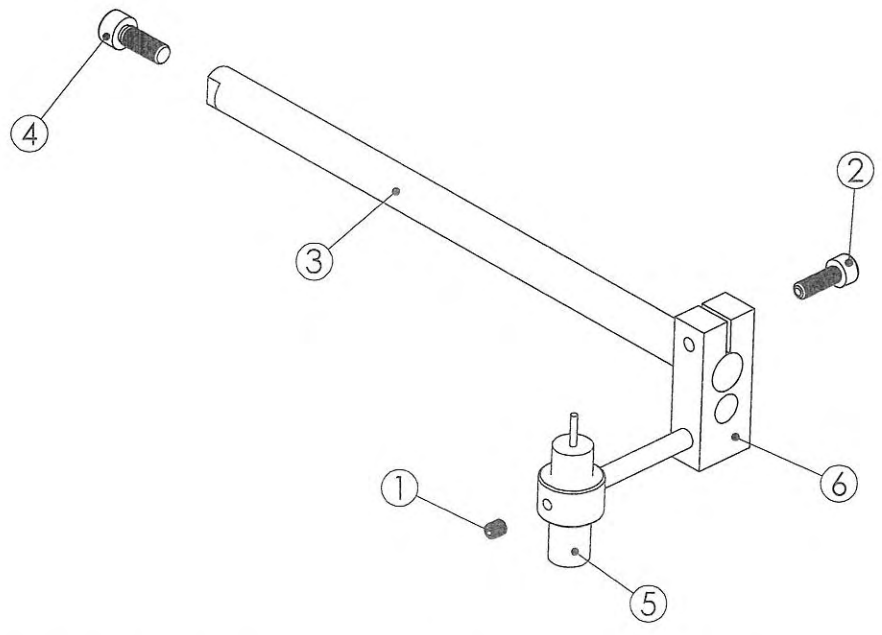
1.Loosen lock screw(4) at rear of worktable .
2.Position laser light bracket(3) in the desired height.
3.Tighten lock screw (4)

Horizontal adjustment:

1.Loosen lock screw(1)
2.Rotate laser light (5) to desired position.
3.Tighten lock screw (1)

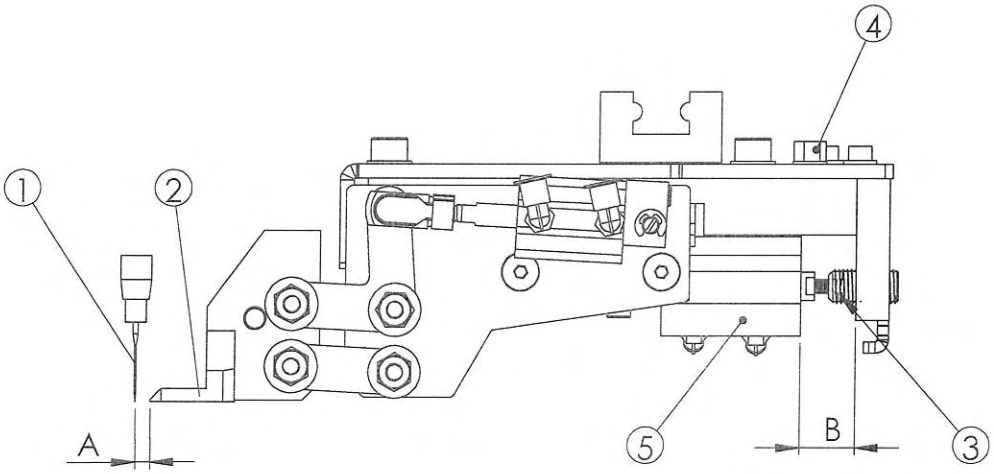
Vertical adjustment for tilting the laser light into the desired position:

1.Loosen lock screw (2)
2.Rotate laser light angular bracket(6) to desired position.
3.Tighten lock screw(2).



After any works tothe main clamp,the clamping pressure and the alignment of the clamp rail to the needle must be checked.

Fig.23 Guide laser adjustment



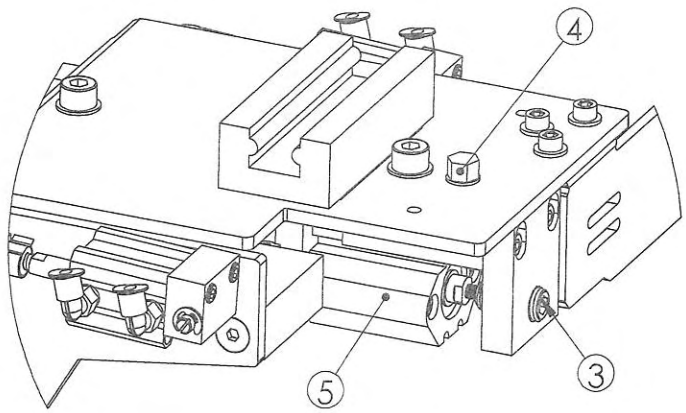


Fig.26 Adjustment of clamp slide disengagement position

Folder to clamp rail alignment:
The lowered folder must be absolutely parallel to and in slight contact with the clamp rail along it's entire length.
Folder position adjusment:
1.Move main clamp to position using input/output control functions:
-Move main clamp to front stop point.
-Lover main clamp.
2.Move folder to position using input/output control functions:
-Rotate folder .
-Close folder clamp.
-Lower folder.
3.**Fig.28:** Check parallel alignment of folder clamp(3) to clamp rail(4).To change the folder clamp alignment:
4.Loosen lock screw(1)
5.Rotate folder clamp bracket(2) to parallel position.
6.Tighten lock screw(1).

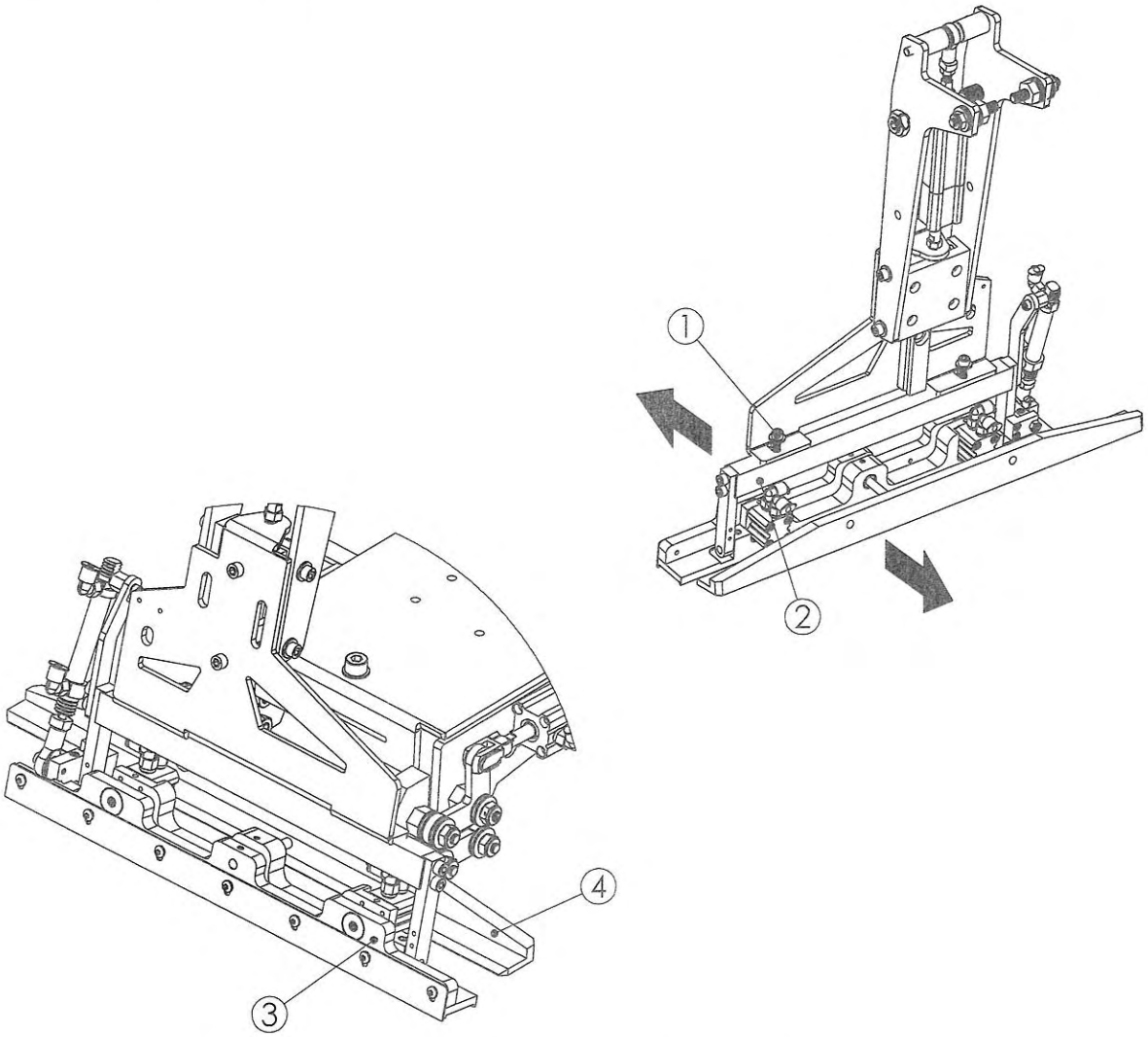


Fig.28 Folder to clamp rail alignment

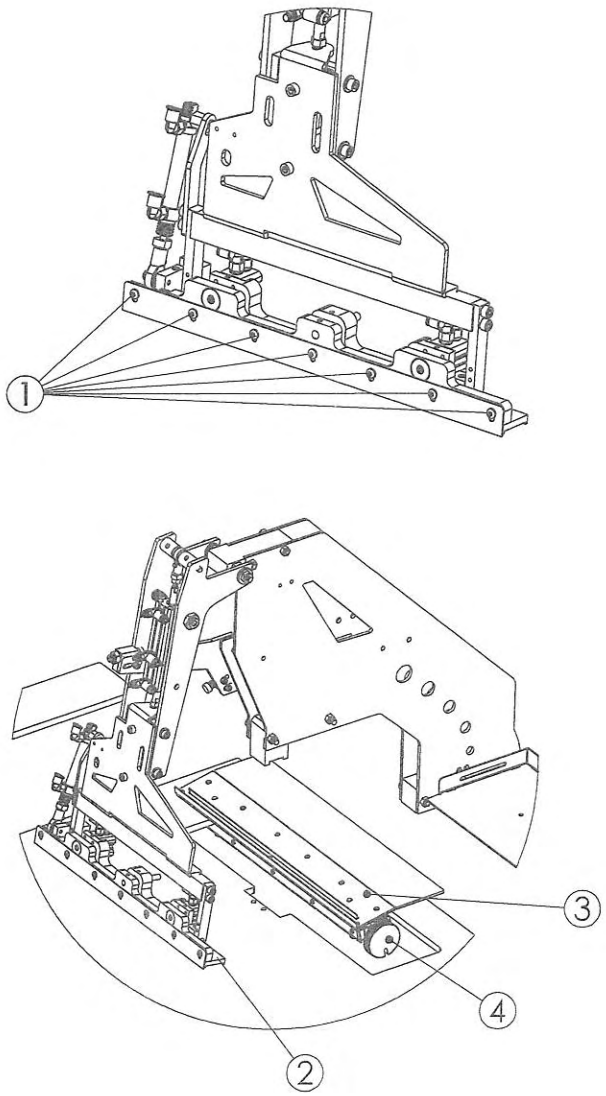


Fig.29 Pick-up plate inclination adjustment

Folder to pick-up plate alignment:
To ensure that the folder can pick up the pocket facing evenly, the folder must lie upon the pick-up plate along its entire length.
Pick-up plate inclination adjustment:
1. **Fig. 29:** Fasten pick-up plate by rotating handwheel (4) completely to minus range.
2. Move folder (2) to pick-up plate (3) using input/output control functions:
• Move folder to right.
• Lower folder.
3. Adjust pick-up plate inclination so that the folder lies absolutely even on the pick-up plate by loosening the two retaining screws (7) of the pick-up plate bracket (5) on the worktable underside and rotate the bracket at the holder (6).
4. Tighten retaining screws.
5. Readjust folder rail (2). Slightly loosen retaining screws (1) and depress folder rail evenly onto pick-up plate.
6. Tighten retaining screws (1).

Folder bar to folder clamp alignment:
To ensure that the folder can crimp over the pocket facing evenly, the folder clamp (1) must pe positioned centrically above the folder bar (2).
Folder bar adjustment:
1. **Fig. 30:** Fasten pick-up plate by rotating handwheel (3) completely to minus range. Loosen retaining screw (4) of folder bar bracket at the worktable underside and reposition bracket (5).
2. Tighten retaining screw.

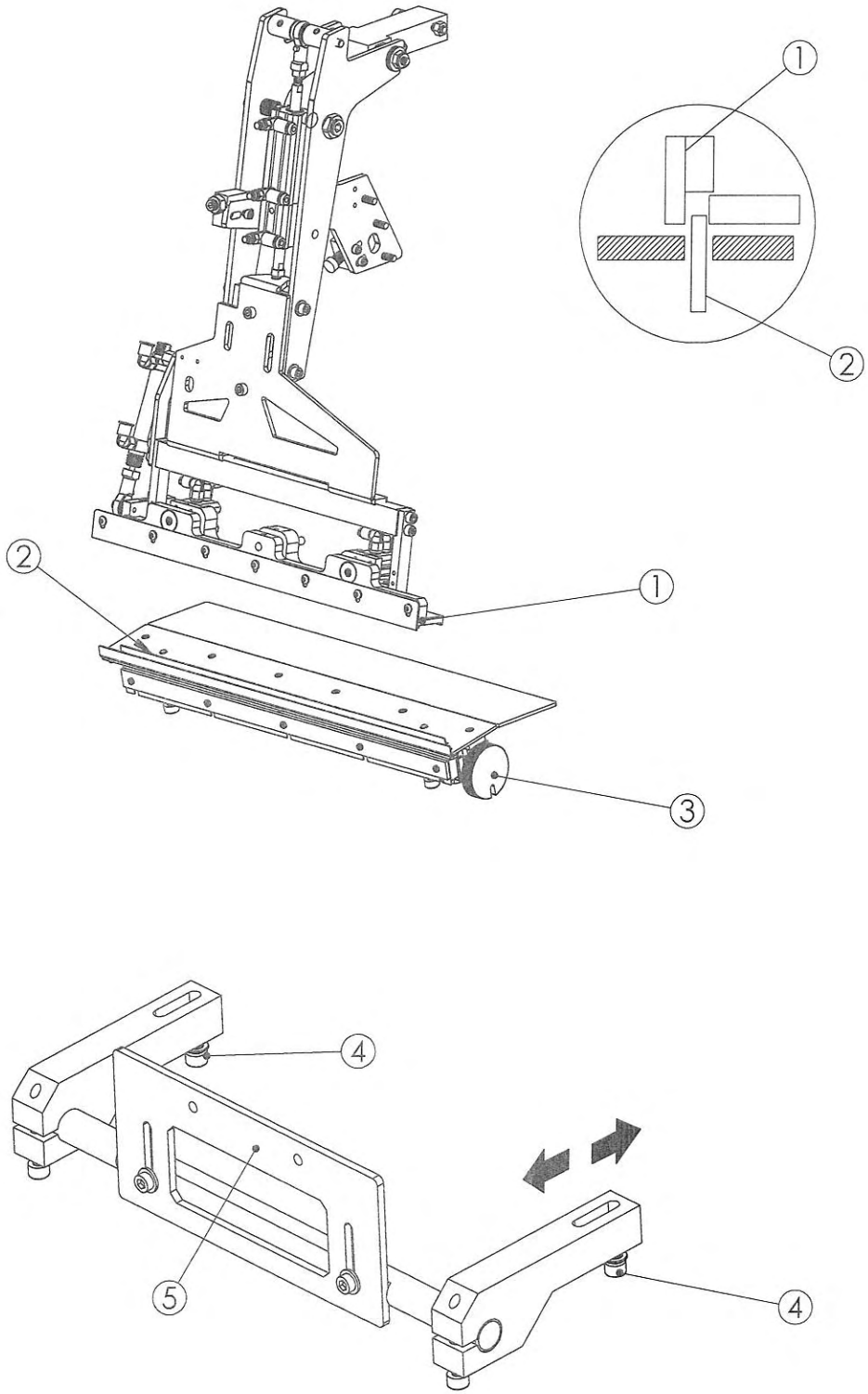


Fig.30 Folder bar adjustment

Checking the rest thread monitor:
The rest thread monitor is checked using a photocell. If the messages on the display do not match the filling state of the spool, the photocell sensitivity must be checked.
1. **Fig. 32:** Fill bobbin to half its capacity so that filling state indicators (2) of upper chamber (1) are covered.
2. Insert bobbin and sew until display shows:
BOBBIN: 003 M.
Keep sewing until display shows: BOBBIN EMPTY
3. Remove spool, unwind rest thread and measure remaining length (should be 0.5 m).

Adjusting the photocell:
• If the thread on the spool is sewn off over the rest length of 0.5 m without the message BOBBIN EMPTY being displayed, the photocell sensitivity must be increased:
• Rotate potentiometer at photocell in clockwise direction.
• If the message BOBBIN EMPTY is displayed even though the spool contains more than 0.5 m thread, the photocell sensitivity must be reduced:
• Rotate potentiometer at photocell in counter-clockwise direction.

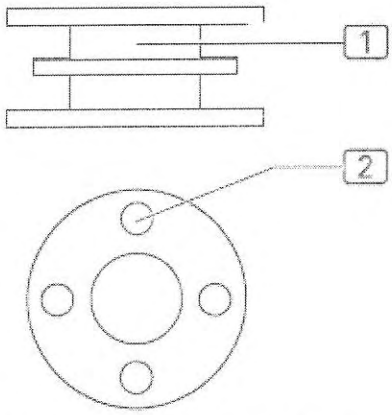


Fig. 32 Checking the rest thread monitor

Folder to clamp rail alignment:
The lowered folder must be absolutely parallel to and in slight contact with the clamp rail along it's entire length.
Folder position adjusment:
1.Move main clamp to position using input/output control functions:
-Move main clamp to front stop point.
-Lover main clamp.
2.Move folder to position using input/output control functions:
-Rotate folder .
-Close folder clamp.
-Lower folder.
3.**Fig.28:** Check parallel alignment of folder clamp(3) to clamp rail(4).To change the folder clamp alignment:
4.Loosen lock screw(1)
5.Rotate folder clamp bracket(2) to parallel position.
6.Tighten lock screw(1).

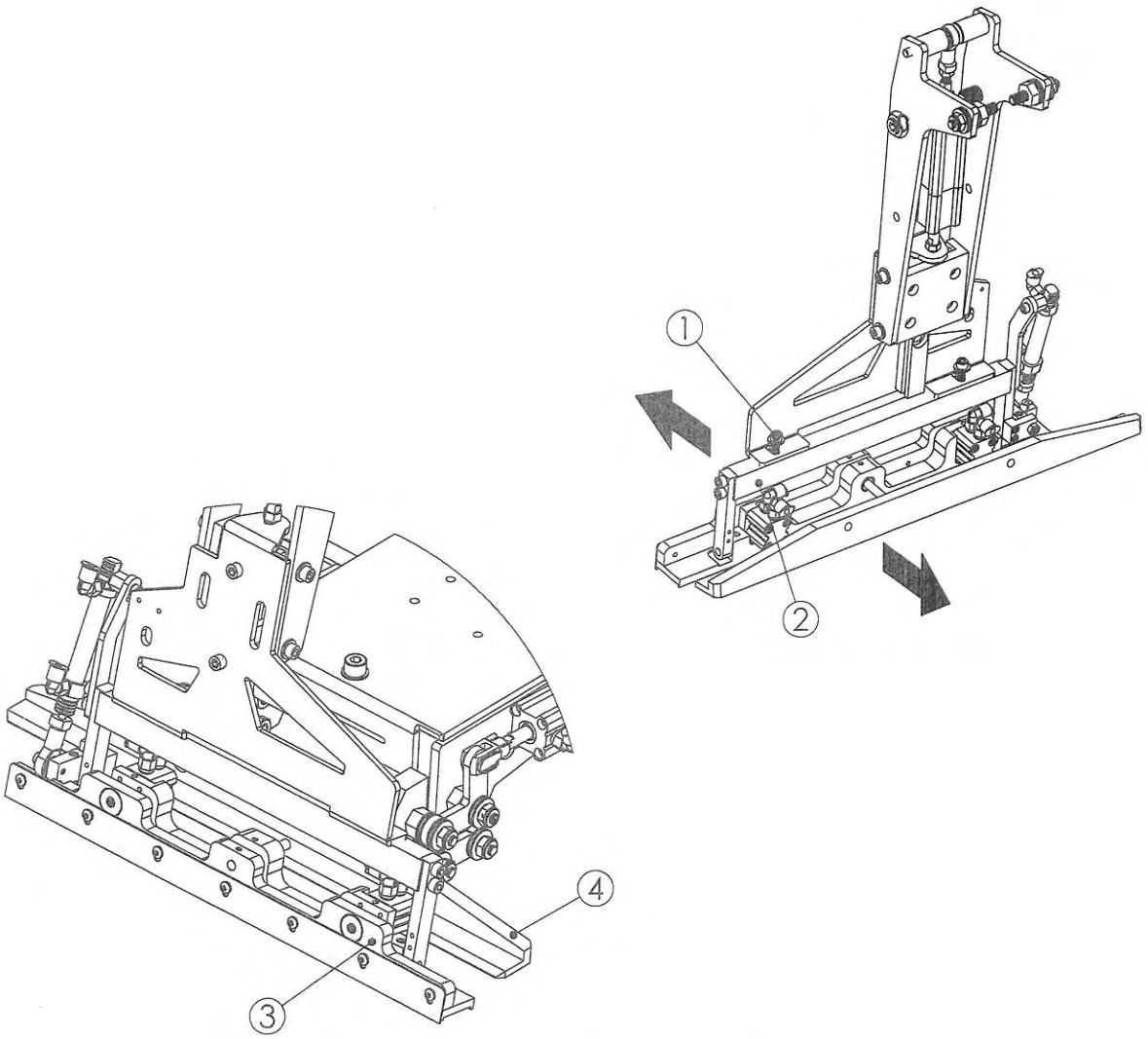


Fig.28 Folder to clamp rail alignment

Adjust stitch width:

The quick stitch width adjusment makes the presetting of different stitch widths possible.

1 and 2 gauge can change the stitch width adjusting screws

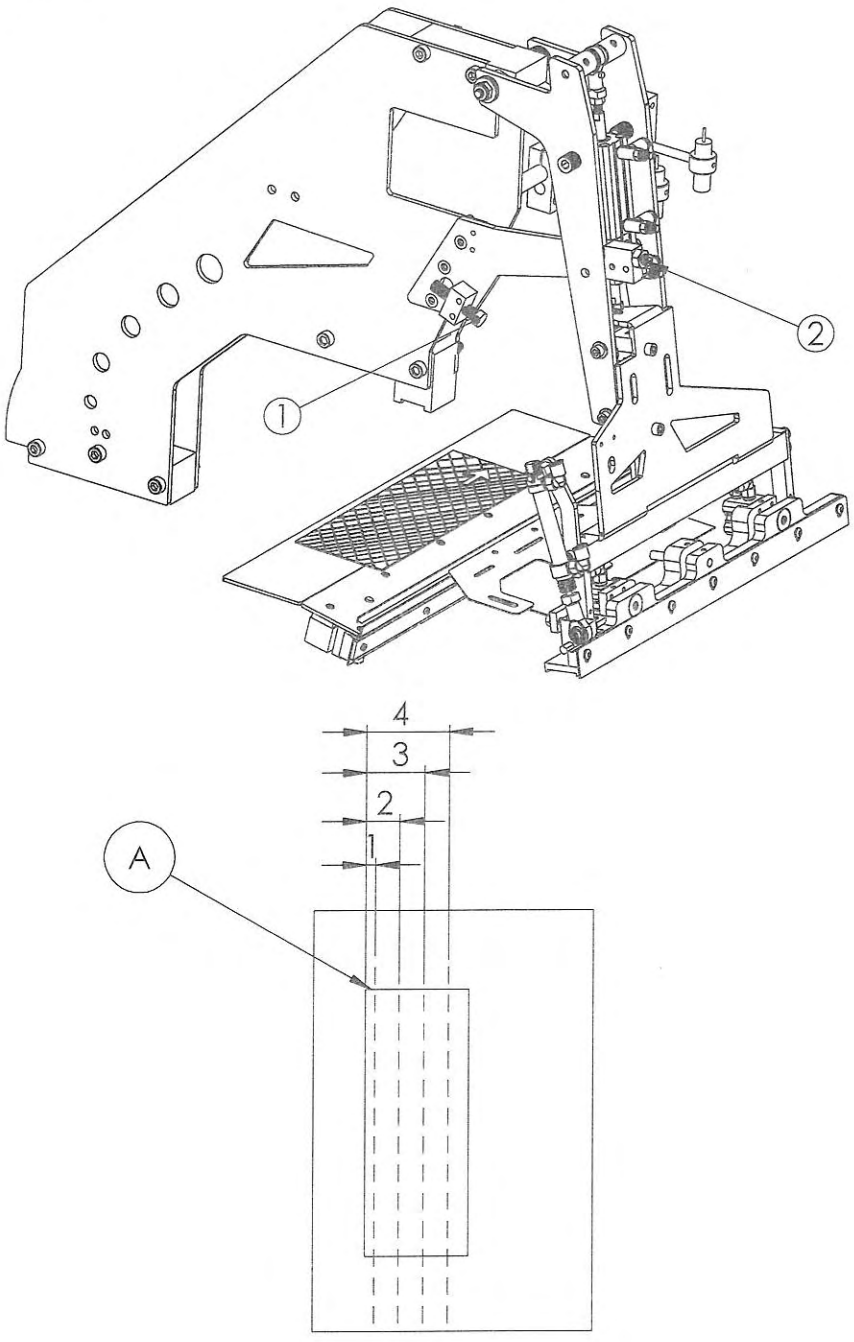


Fig.33 Adjust stitch width

PART 4

PROGRAMMING INSTRUCTIONS

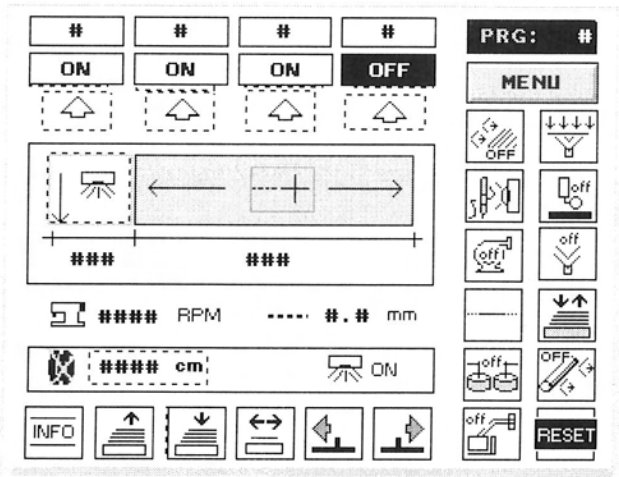
PART 4 PROGRAMMING INSTRUCTIONS

4.1 Operating panel

AMF REECE PF 2200 has a touch screen operation panel.

When the machine is started the logo below will appear on operation panel screen

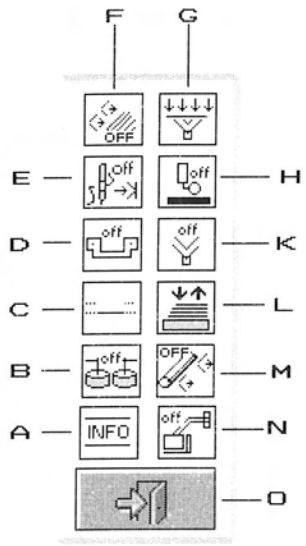
For starting up the machine;
When you touch anywhere on touch screen menu the screen below will appear on operation panel screen



You can find informations below about labels on screen .

PRG: # The sewing programs can be saved in machine's memory. 10 different program can be saved from 1 to 10. so different works can be saved with different numbers.

4.2 Function Buttons On Panel



A: When info button is chosen the subscreens for machine set up and information will shown.

B: After sewing pieces, the stacker can be activated (ON) or deactivated (OFF) with this button.

C: Subscreens about stitch settings can be selected with this button. (e.g. backtack, stitch area, etc.)

D: The clamp can be activated (ON) or deactivated (OFF) with this button.

E: The upper thread sensor of sewing head can be activated (ON) or deactivated (OFF) with this button.
If this button is activated (ON) and thread breakage happens the machine will stop automatically and will end the sewing operation.

F: The transport after sewing and blowing units can be activated (ON) or deactivated (OFF) with this button.

G: The blowing units can be activated (ON) or deactivated (OFF) with this button.

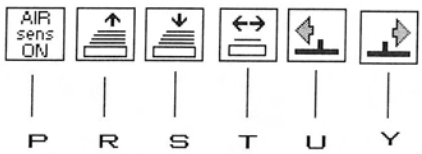
H: The presser roller on clamp can be activated (ON) or deactivated (OFF) with this button.

K: The upper thread sucking unit (after sewing) can be activated (ON) or deactivated (OFF) with this button.

L: The stacker can be activated (ON) or deactivated (OFF) with this button.

M: The blowing units first station can be activated (ON) or deactivated (OFF) with this button.

N: The first station can be activated (ON) or deactivated (OFF) with this button.



P: The air pressure sensors can be activated (ON) or deactivated (OFF) with this button.
If this button is active (ON) and the air pressure is less than 5 bar the machine will be stop until the pressure becomes higher than 5 bar. This button also can be (ON/OFF) from machine settings.

R: The stacker table can be moved up manually with this button.

S: The stacker table can be moved down manually with this button.

T: The stacker can be moved right or left manually with this button.

U: The clamp unit can be moved to back stop manually with this button.

Y: The clamp unit can be moved to front stop manually with this button.

cm

Bobin thread counter:
during sewing operation; the lower thread is decreasing as much as sewing length. the remaining thread length will be shown on monitor. when the bobbin finished, cross on bobin will appear on monitor and the machine will stop. after replacement a new bobin you must select this button again to continiue the operation.

ON

A fotocell to see the sewing pieces is placed on the machine. Sewing start-stop fotocell shows ON when there is no piece for sewing operation. Sewing start-stop fotocell shows OFF when there is piece for sewing operation.
If it doesn't work as described above it means fotocell error.

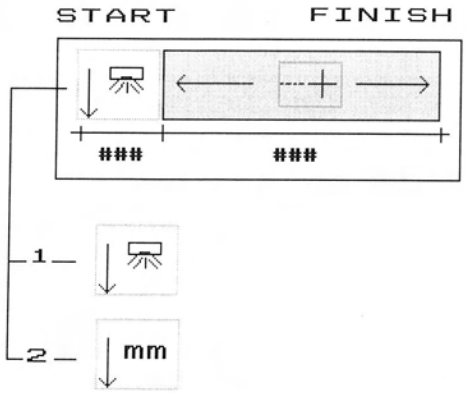
RPM

Sewing head revolution monitor. The rev of sewing head can be changed by setup screen.

----- #.# mm

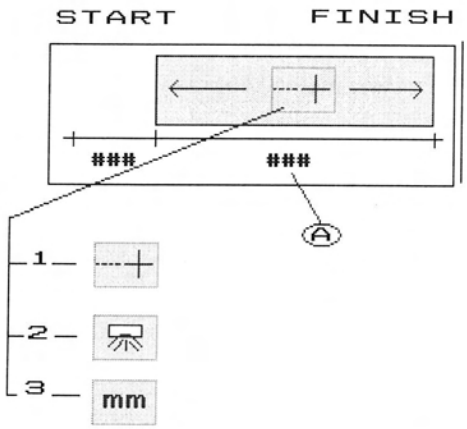
Sewing head stitch length monitor. The stitch length of sewing head can be changed by setup screen.

4. 3. Start and finish sewing operation



There are two alternatives to start sewing operation on start point of piece:

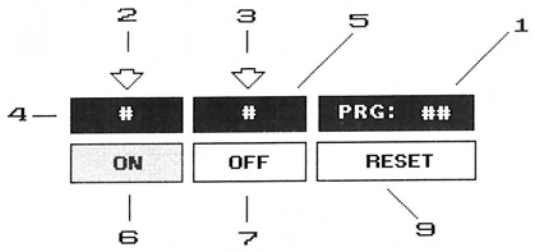
1. Starting with fotocell: The start point of sewing piece is defined by fotocell. The distance difference between start point and the edge of pieces can be arranged with program.
2. Starting with measurement(mm): The start point of sewing piece is defined by distance to needle.



There are three alternatives to finish sewing operation on finish point of piece:

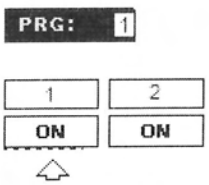
1. Finishing with laser reference: When the end of laser is positioned to the end of sewing, the operation will finish at the same point everytime. this setting can be changed by program A.
2. Finishing with fotocell reference: When the end of piece is defined by fotocell, the operation will finish at this point. Length of piece is defined by fotocell automatically. This setting can be changed by program A.
3. Finishing with measurement (mm): The end point of sewing piece is defined by distance to needle. This setting can be changed by program A.

4. 4 Cycle Programming



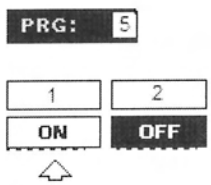
1. Program Number:
A new program number can be saved or a saved program number can be called with this button.
Here is the area for program entering.
Two more sub program number (area 4 and area 5) can be saved under each program.
These both saved subprogram can be used for cycle programming. By cycle programming, the operator doesn't need to change program number everytime and the efficieny increases.
The area 2 and 3 shows to operator which cycle program is working (4 or 5). this buttons help operator to understand which cycle program is working.
The area 4 and 5 are entering areas for cycle program (subprogram).
The button 6 and 7 activate (ON) or deactivate (OFF) cycle programming. If one of these cycle program is OFF, the other program works only.

You will find some cycle program samples below.
Sample 1:



Two cycle programs are entered under program 1 and both programs are activated (ON). Machine works with these cycle programs one by one. The arrow under cycle program labels show the working (active) cycle program.

Sample 2:



Two cycle programs are entered under program 5 and only subprogram 1 is activated (ON). Machine works with subprogram 1 only. The arrow under cycle program 1 label shows only the working (active) cycle program.
For cycle programming subprogram 2 must be activated.