



MODEL LOCKWELT 7000

LOCKSTITCH POCKET WELT
MACHINE

PARTS AND SERVICE MANUAL

PART NUMBER 97. 6900.0.001

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SAFETY

1. INSTRUCTIONS

- o This machine has been produced in accordance with European Union directives mentioned on Compliance and Manufacturer's Declaration.
- o Do not neglect to consider general laws and other rules in force – also in the country of operator – as well as law decrees and valid environment protection directives!
- o Always observe valid provisions of local professional organizations and other inspection authorities.

2. GENERAL SAFETY WARNINGS

- o Machine may only be used by operators and technical specialists trained accordingly!
- o Safety rules and operating directions shall be read prior to operating the machine!
- o Danger and safety warnings about machine shall be taken into consideration!
- o Machine may only be operated in accordance with instruction and after taking protection measures with this regard; in addition, all safety rules shall be taken into consideration.
 - o While changing parts (for example needle, sewing foot and spool), inserting thread and leaving the premises and during maintenance of machine, main switch of the machine shall be shut down and unplugged!
 - o Daily maintenance may only be performed by trained individuals!
 - o During maintenance and repair regarding pneumatic hardware, machine shall be disconnected from pneumatic power network! Exceptions are only valid for trained specialist staff during adjustment and function control works!
 - o Repair and special maintenance works may only be performed by specialist personnel or trained personnel.
 - o Works regarding electrical installations may only be performed by qualified specialists!
 - o No operation may be performed on parts and hardware under tension! Exceptions are according to directives regarding EN 50110.
 - o Modifying the form of machine or other changes shall be made in accordance with safety instructions.
- Please use spare parts provided by AMF Reece for repair work! In cases where spare parts and accessories other than provided ones are used, machine will not be guaranteed by our AMF Reece. Installation and/or use of such products may affect the formal specifications of machine in some cases. No responsibility is accepted due to any damage arising from non original parts.

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SAFETY

3. SAFETY SYMBOLS



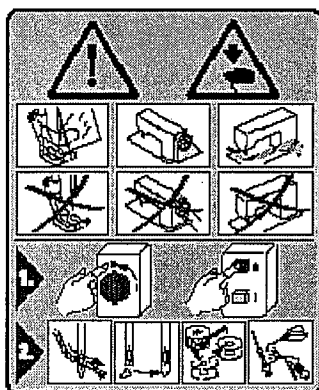
Dangerous Part!
Points to especially pay attention!



Danger of injury for user or specialized personnel!



Dangerous part due to laser beam!



Warning! Do not put your hand under mechanism and do not operate without safety equipments. Switch off the main switch before inserting thread, changing reel, changing and cleaning needle and etc.

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SAFETY

4. POINTS TO BE ESPECIALLY CONSIDERED BY OWNER

- o This handbook is an integral part of the machine and must be easily accessible by user personnel.
- o Handbook must be read before commissioning the machine for the first time.
- o User staff members and specialized personnel shall be trained about protection equipments of machine and safe working methods.
- o Owner shall only be obliged to completely operate the machine.
- o Owner shall ensure that no safety equipment is taken away or made inoperative.
- o Owner shall pay attention to employ only authorized individuals to work on the machine.
- o Other detailed information is available at authorized dealer.

5. MAINTENANCE PERSONNEL AND SPECIAL IZED PERSONNEL

- o Maintenance personnel
- o Maintenance personnel consists of individuals who are responsible from preparing the machine for use, operating and cleaning the machine.
- o Maintenance personnel are obliged to observe the following points:
 - o Safety measures in instructions manual shall be observed in all operations!
 - o All kinds of operation modification which damage safety of machine shall be avoided!
 - o Only authorized individuals shall be allowed to work on the machine!
 - o Any change that may affect the safety of machine shall immediately be informed to the owner!

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SAFETY

6. SPECIAL IZED PERSONNEL

- o Any individual professionally trained in Electrics/Electronics and Mechanics are considered as specialized personnel. Such individuals are responsible for lubricating, maintaining, repairing and adjusting the machine.
- o Specialized personnel shall be obliged to observe the following points:
- o He/she observe safety measures in instructions manual for all operations!
- o He/she switch off the main switch prior to adjustment and repair and shall take all safety measures against switching on of the machine!
- o Operation with parts and equipments under tension shall be prohibited!
- o Exceptions are regulated by EN 50110 instructions.
- o Protection cover shall closed after repair and maintenance works!

7. PROPER USE

- o This machine is intended to be used for pocket stitching production in garment industry.
- o Any use unauthorized by manufacturer shall be deemed as improper use.
- o Manufacturing company is not responsible from any damage which arises from improper use!
- o Proper use includes use, maintenance, adjustment and repair measures defined by the manufacturer!

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SAFETY

8. TECHNICAL SPECIFICATIONS

Speed	: 2100 min.-1
Stitch Length	: 19 cm
Stitch Type	: 301
Needle System	: 134-35 (R)
Needle Height	: 80-110 Nm
Stitching Motor	: See motor instructions manual
Electrical Voltage	: 230 V, 50 – 60 Hz alternate current
Power requirement	: 1,2 kW
Air pressure in operation	: minimum 5.5 bar – maximum 6 bar
Air Consumption	: about 5 3/times

Information about noise:

Pressure level for noise emission is 2000 minutes-1 1 stitch number at factory... LpA=74 dB (A)

(noise measures according to DIN 45 635-48-A-1; ISO 11204, ISO 3744, ISO 4871)

Sizes of machine:

Length: about: 1300 mm
Width: about: 1000 mm
Height: about: 1300 mm
Counter height: 850 mm

Net weight: 234 kg

- Technical modifications have been reviewed.
- KpA = 2,5 dB

9. MEASURES TO BE TAKEN IN CASE MACHINE IS SCRAPED

Measures to be taken in case machine is scraped

- The customer shall be liable from scraping the machine properly.
- The materials used in producing the machine consist of steel, aluminum, brass and various plastics.
- Electrical installation consists of plastic and copper.
- The machine is scraped in accordance with current environment protection laws in territory and probably with the help of a privately held company.
- Lubricated parts shall be disposed in accordance with local environment protection directives.

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SAFETY

10. TRANSPORT, PACKING AND STORING

- o **Transport in delivery of machine to customer**
- o Transport in delivery of machine to customer is not included in manufacturer's warranty.
- o Please ensure that machine is only transported in straight form.

- o **Disposal of Packing**

- o Packing of machine consists of wooden crate, paper, cardboard and nylon.
- o Customer is responsible from proper disposal.

- o **Storing**

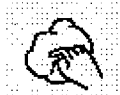
- o Machine may stored up to 6 months when not used. Machine shall be stored away from dirt and humidity.

11. WORK SYMBOLS

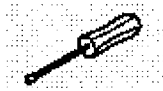
- o Detailed operations or important information are emphasized with symbols herein. Symbols used herein shall have the following meanings:



Information



Maintenance



Maintenance, Repair, Adjustment,
(to be performed only by specialized personnel)


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1-6

ASSEMBLY

1. ASSEMBLING AND PREPARING FOR FIRST OPERATION

- o After unpacking the machine, check if there is any damage due to transportation. Please notify transporter and ROBOTECH A.G representative of any possible damage.
- o  Machine must be assembled and operated by only qualified personnel! All relevant safety regulations specified herein shall be strictly observed!

2. ASSEMBLY

- o Please ensure that convenient electricity and supply connections for compressed air are available at the assembly place of machine (please refer to Technical Data, Section 3).
- o Machine should be lifted by forklift machine from transport pallet.
- o Machine shall be lifted horizontally from the ground and shall be placed in the place of assembly in a balanced manner on its four legs.

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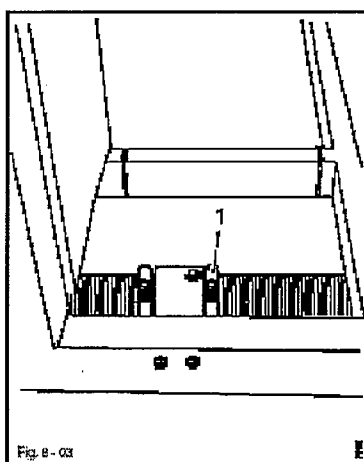
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ASSEMBLY

4. INSTALLING VACUUM (ABSORPTION) CONNECTION

- o Vacuum (absorption) connection;
- o Is inserted into hose bearings supplied with absorption and is fixed with clamp nr.1.
- o (This system is available in machines requiring vacuum installation).



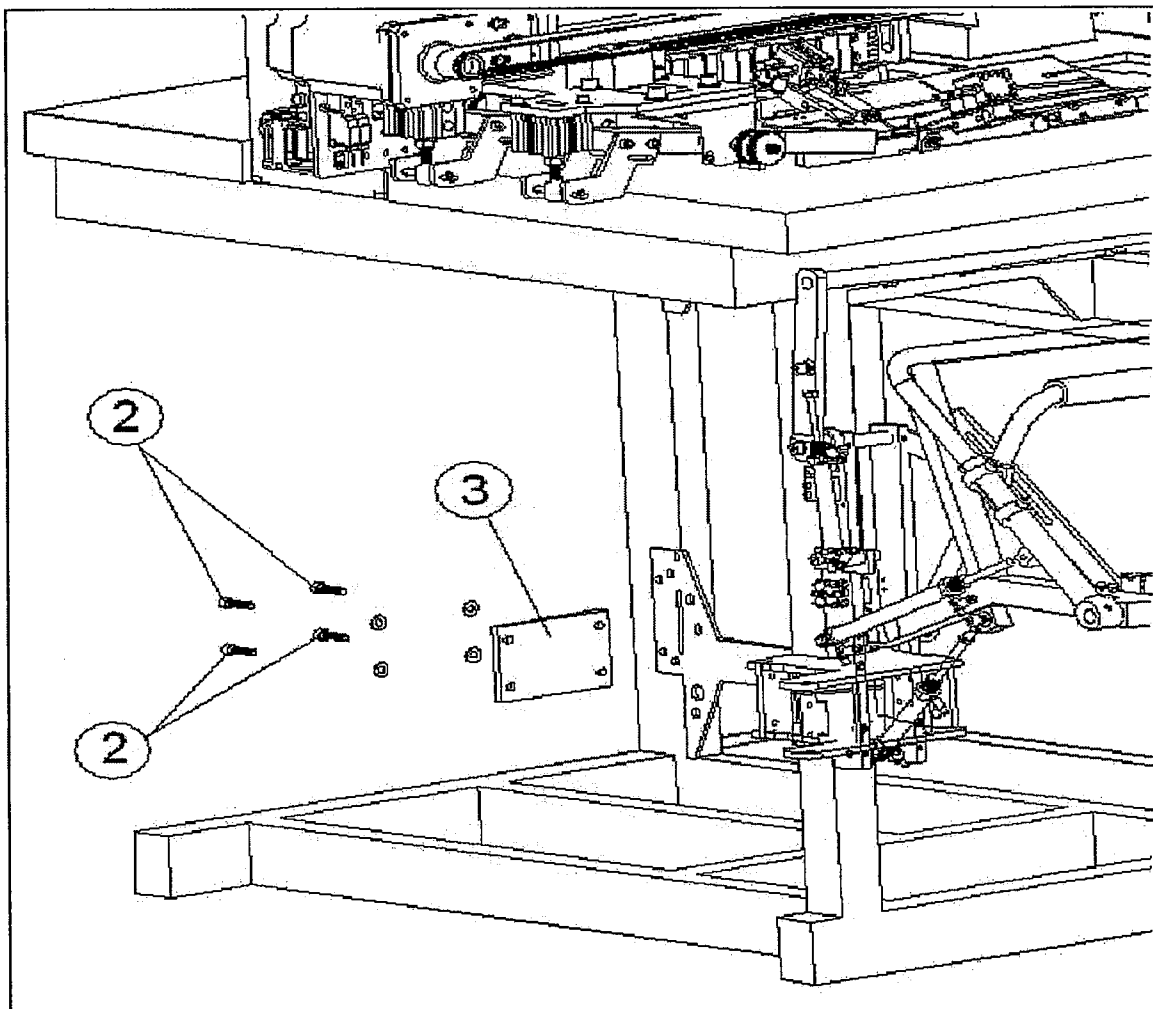
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ASSEMBLY

4. INSTALLATION OF STOWAGE MODULE



- Stowage module is connected to installation position on machine stand foot with parts numbered 3 and screw numbered 2.
- Pneumatic hoses are connected according to connection scheme

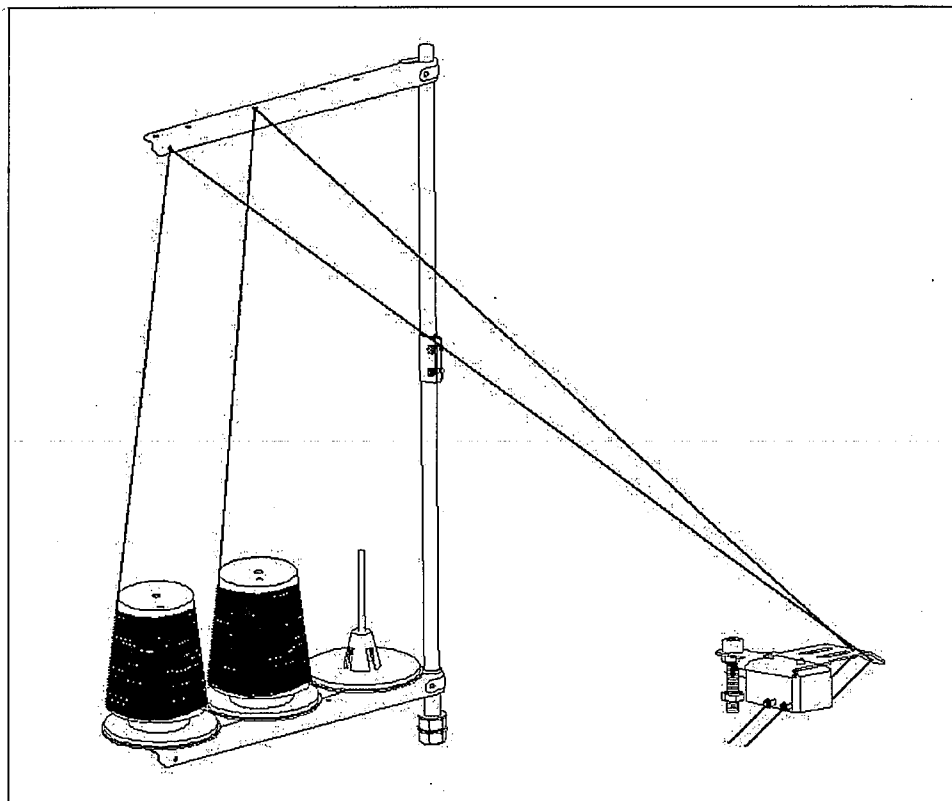
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ASSEMBLY

5. INSTALLING SEWING THREAD PATH



- o Rod of sewing thread spool is installed as shown in the figure.
- o Attach properly the thread reels to sewing thread spool.

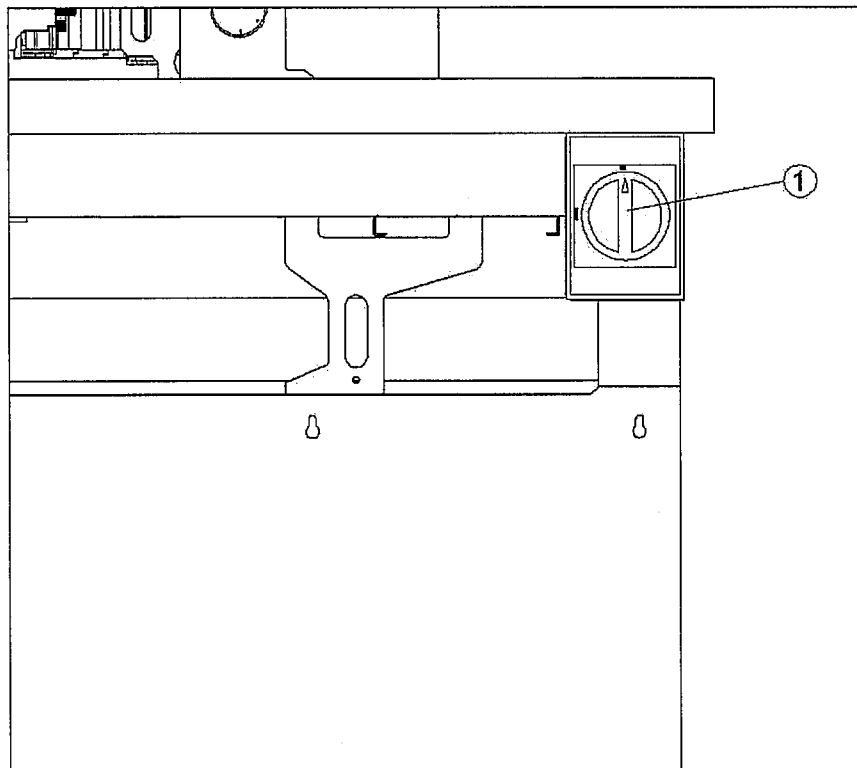
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FIRST OPERATION

- Switch on and off switch numbered 1 .



- Thoroughly clean the machine and check electrical cables and pneumatic hose connections for any damage.
- Check if current voltage is the same with the connection voltage of machine (see Machine Technical Specifications)
- Do not operate the machine in case of any conflict
- Allow only specialists to connect the machine to electricity network
- Lubricate the machine or put oil into machine (see Related Maintenance and Cleaning Section 1)
- Connect machine to compressed air system
- Nanometer on machine should read 6 bars
If necessary, adjust the value (see Related air pressure control/adjustment section)

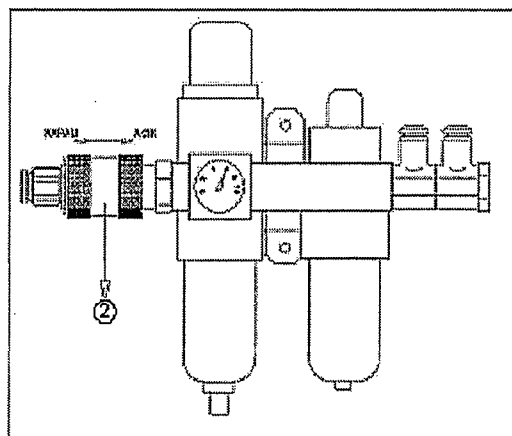
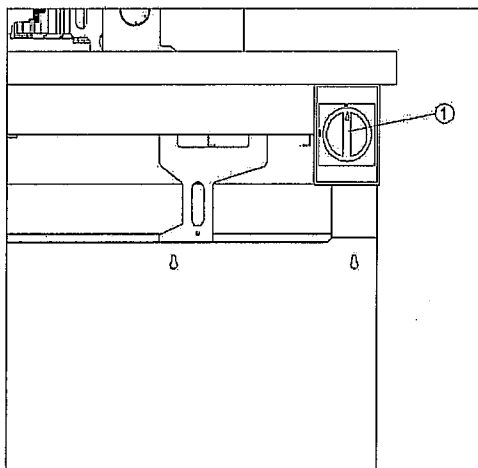
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FIRST OPERATION

1. SWITCHING ON/OFF THE MACHINE



- Open main air inlet nr. 2
 - Check air pressure and adjust if necessary
 - Adjust air pressure to at least 6 bars
 - Turn main electrical switch of machine (as in figure nr.1) to position "I".
-
- Motor switch indicated should be in on (I position) at all times.
 - Move main switch to "0" position to switch off the machine and main air inlet (figure nr.2) should be in off position.

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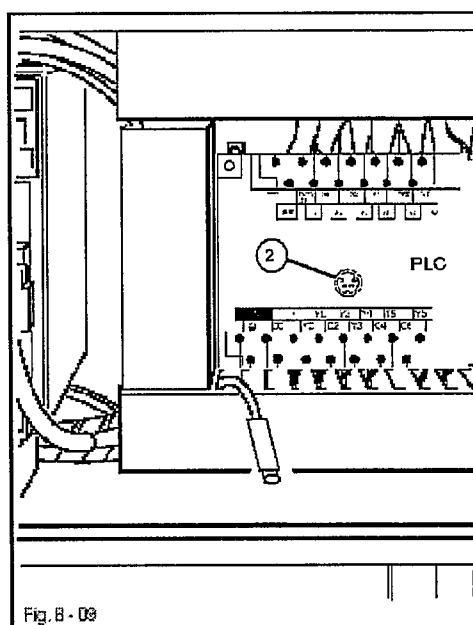
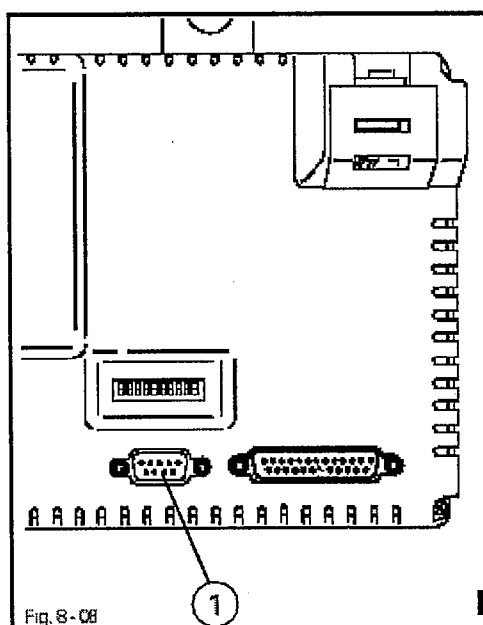
1-12

FIRST OPERATION

2. PANEL CONNECTION CONTROL

- If panel cable and pic cables are not plugged in (socket nr.1 – socket nr.2) they should be installed and screwed as below.

(One end of connection cables should be connected to COM1 socket and the other one to connection socket inside electronic control box)



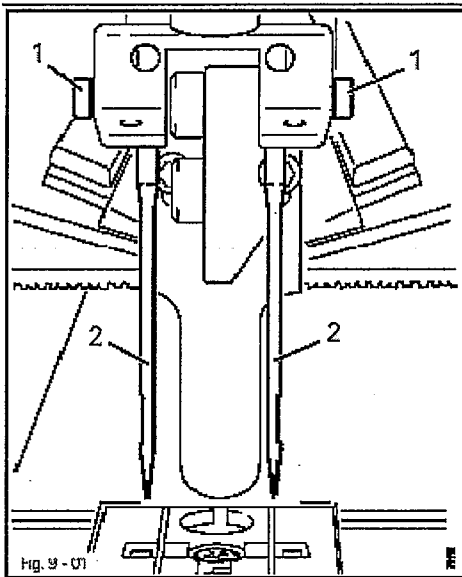
FIRST COMMISSIONING

3. PREPARING MACHINE FOR SEWING



All preparation work must only be performed by authorized personnel!

4. INSERTING THE NEEDLE



- Shut down the machine! (Danger of injury in case of sudden operation of machine!)
- Only use 134 DP 5 system needles!
- Carrier Clamp Carriage must be placed at the back
- Loosen screw nr. 1
- Mount the part nr. 2 (needle) until the lowest part in its housing.
- Groove of needles must be installed to face bobbin case.
- Properly tighten screws nr.1.

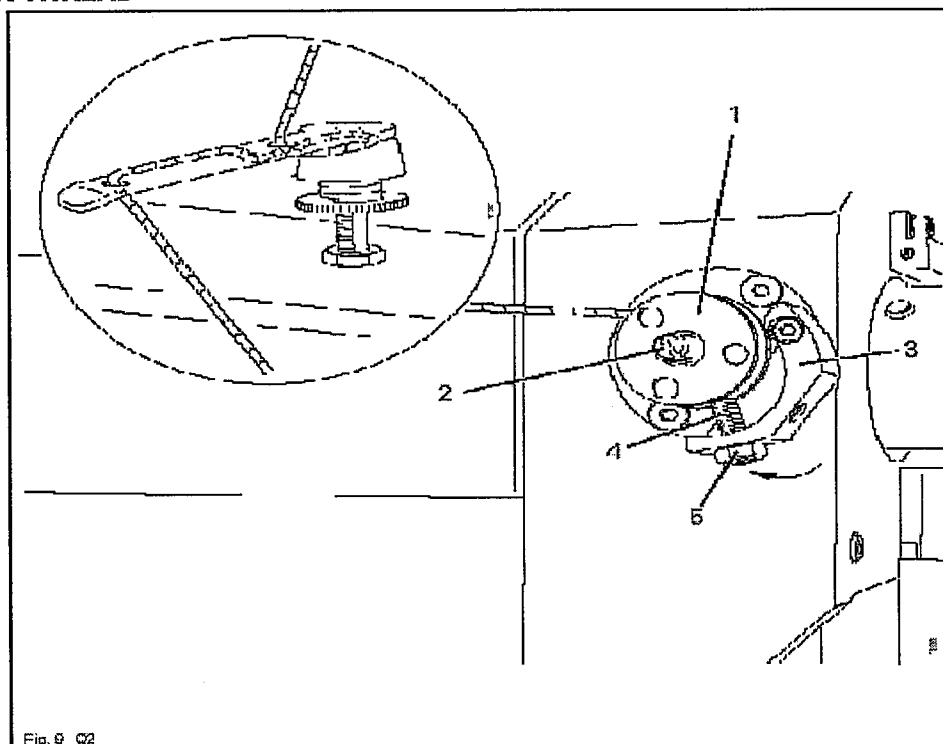
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1-14

FIRST COMMISSIONING

5. WINDING (REELS OF) LOWER THREAD/ TENSION ADJUSTMENT OF LOWER THREAD



- Insert empty bobbins (part nr.1) into bobbin housing.
- Insert thread into thread path as shown in the magnified figure and wind clockwise for
once on bobbin
- Press arm (part nr.3) and operate the bobbin in direction of arrow.
- Bobbin (part nr.1) is automatically filled during sewing.
- Once bobbin is sufficiently filled (part nr.1), it automatically stops.
- Filling quantity of bobbin may be changed according to the adjustment of screw (part nr.4) but the screw head (part nr.5) must be loosened for this.
- After adjusting, screw head (part nr.5) must be tightened again.

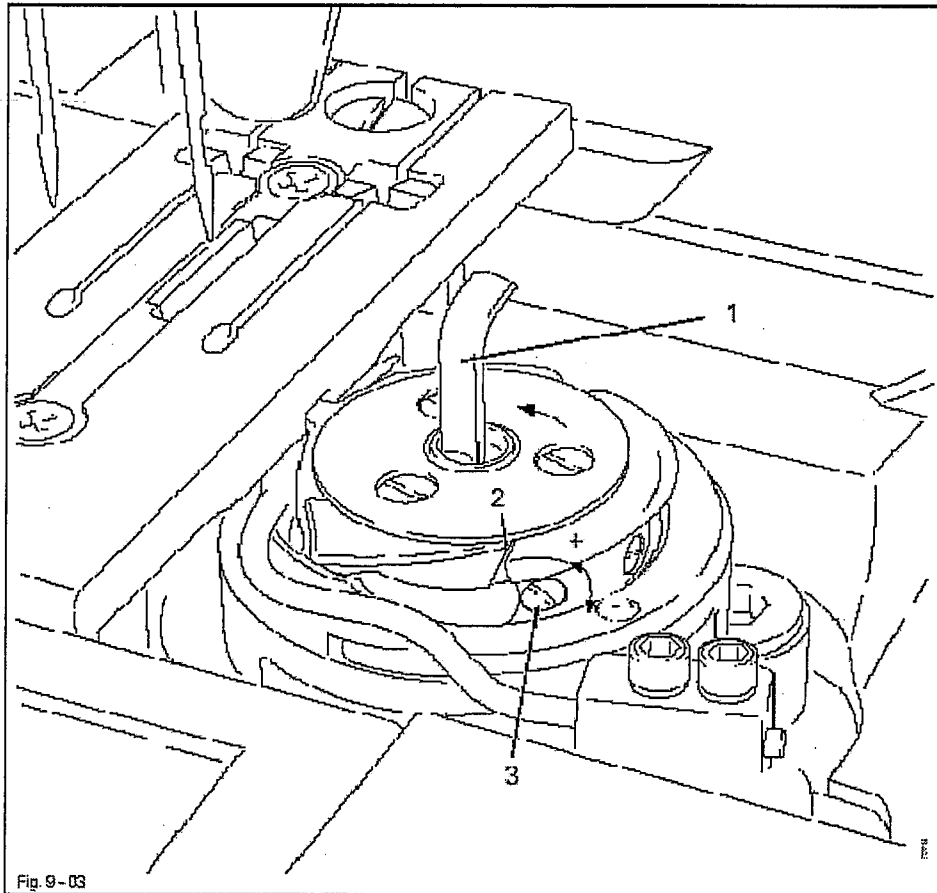
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FIRST COMMISSIONING

6. INSTALLING BOBBIN CASE & TENSION ADJUSTMENT OF LOWER THREAD



- Shut down the machine to check and replace the bobbin case.
- Pull bedplate to left and you will see the bobbin underneath.
- Lift the arm (part nr. 1) upwards and remove the empty bobbin case.
- Attach filled bobbin case to looper so that thread pulls off in the direction of arrow.
- Close the arm (part nr.1)
- Place the thread first to groove of bobbin case capsule (place nr.2) and then underneath the thread spring.
- Tension of lower thread is adjusted by turning the screw (screw nr.3).
- Pull (close) bedplate sheet to left.

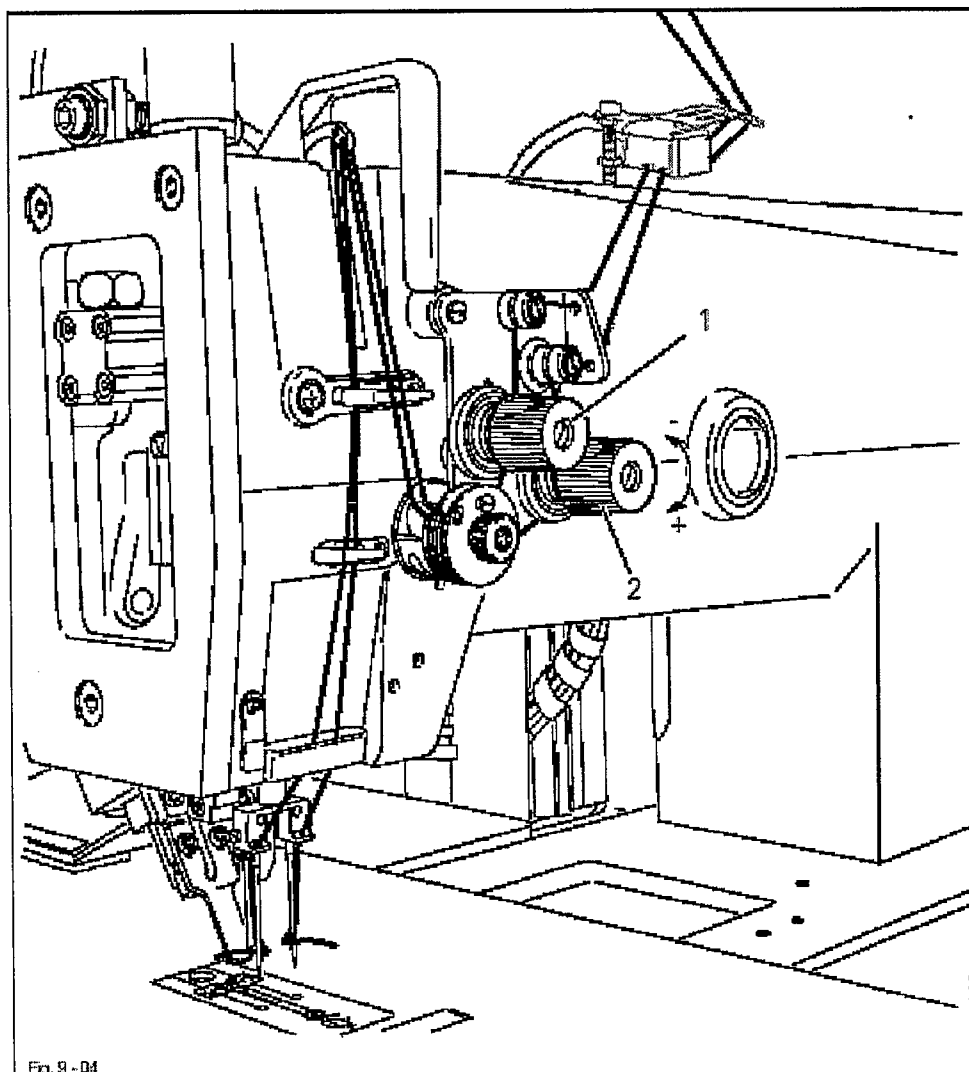
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1-16

FIRST COMMISSIONING

7. ATTACHING UPPER THREAD / TENSION ADJUSTMENT OF UPPER THREAD



- Switch of the machine.
- Push bedplate sheet to left.
- Insert completely both upper threads according to the graphic above.
- Tension of upper thread is adjusted by turning knurl screws (parts nr. 1 and 2).

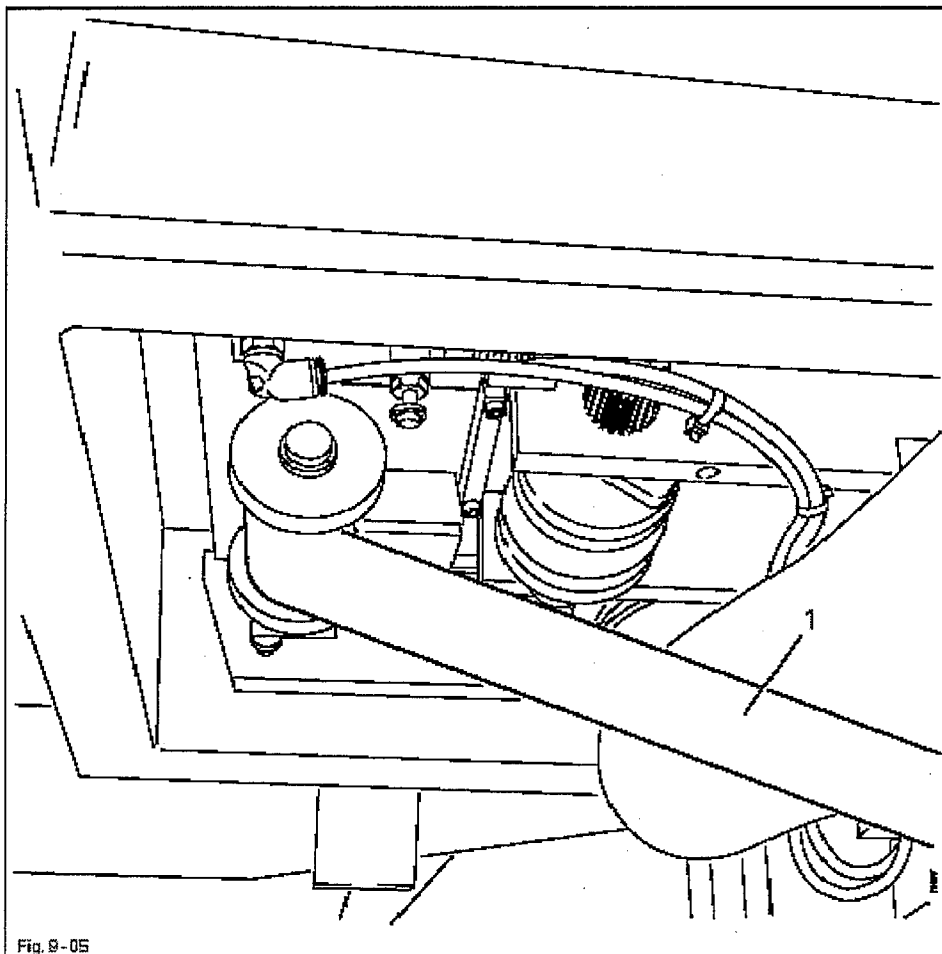
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FIRST COMMISSIONING

8. REPLACING TAPE FLEECE BAND



- Insert tape fleece band as shown in figure 9-05.
- Operate the machine.
- Find 'cut and drive fleece band' in any pocket program as shown in figure below:



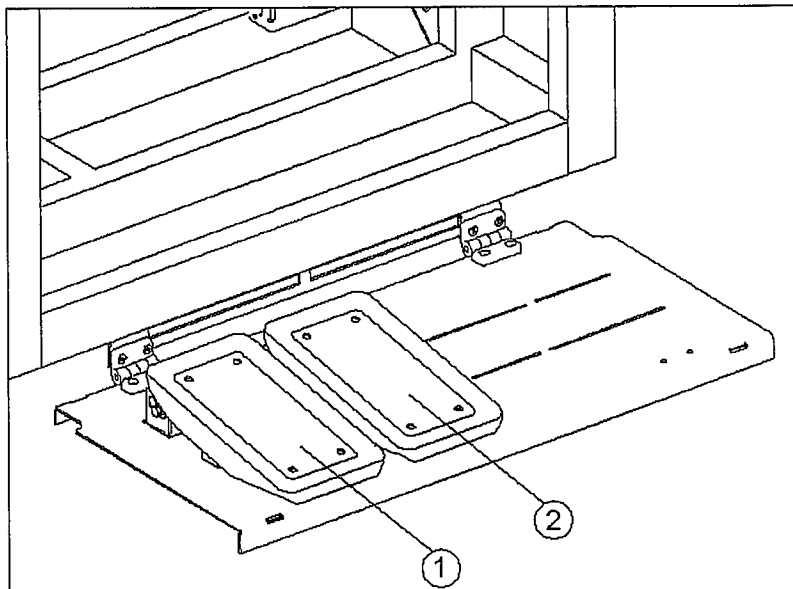
Press the button 'drive/cut tape functions' (as shown in the figure above).
Tape is driven and cut.

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PEDAL BUTTONS AND FUNCTIONS



1. FOOT PEDAL FUNCTIONS

Function of foot pedal nr. 1:

- Prepares the machine according to the settings and stitching program selected on panel.
- If trolley is behind, then trolley comes forward when foot pedal nr.1 is pressed on.

Function of foot pedal nr. 2:

- Cancels operations made with foot pedal nr. 1.
- If pedal nr.2 is pressed after starting to stitch, stitching machine immediately stops, and if pedal nr.2 is pressed again, the operation resumes.

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2. STANDARD FUNCTIONS OF FOOT PEDAL NR. 1

Operating Foot Switch:

1. Fabric Tension rot or vacuum motor runs according to the position preferred on control indicator of machine.
2. trolley comes from backwards to forwards.
3. Clamps (according to the position preferred on control indicator of machine: clamps automatically or first from right to left and left to right) descends downwards.
4. Front folding level lowers and folding plates run.
5. Cover holder lever runs (according to the position preferred on control indicator of machine)
6. Stitching starts.

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MACHINE CLEANING & LUBRICATING

MACHINE CLEANING & LUBRICATING

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MACHINE CLEANING & LUBRICATING

Cleaning entire machine	Weekly
Cleaning bobbin case section	several times per day
Checking oil level	prior to operation everyday
Lubricating latch levers	once a month
Checking air pressure	prior to operation everyday
Cleaning maintenance unit air filter	whenever necessary



Time intervals for maintenance have been calculated according to average working time of machine at a single shift factory. In case machine is operated for more, it is highly recommended to keep maintenance intervals more frequent.

1. CLEANING THE MACHINE

Time interval necessary for cleaning and lubricating the machine depends on the following Factors:

- Single or multiple shift operation
- Possibility of sewn material to get dusty

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MACHINE CLEANING & LUBRICATING

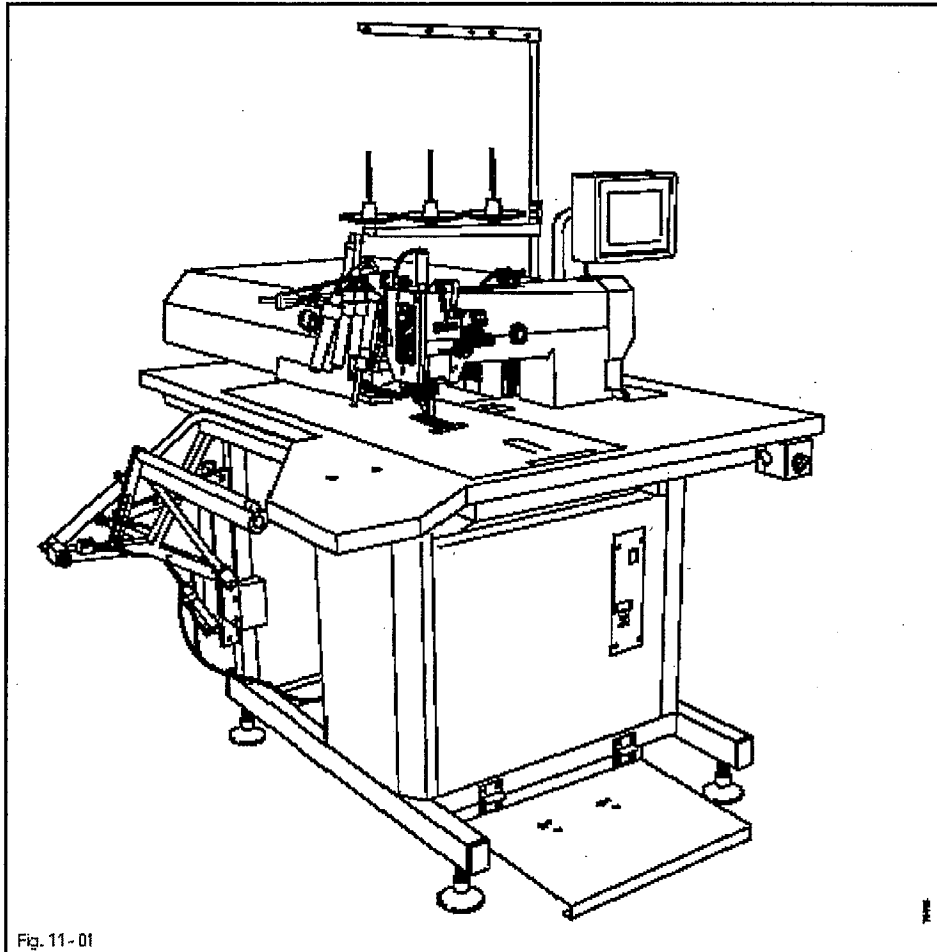


Fig. 11-01

It is recommended to carry out the following cleaning processes in order to prevent any operative failures in single shift operations:

The entire machine must be cleaned for at least once a week.

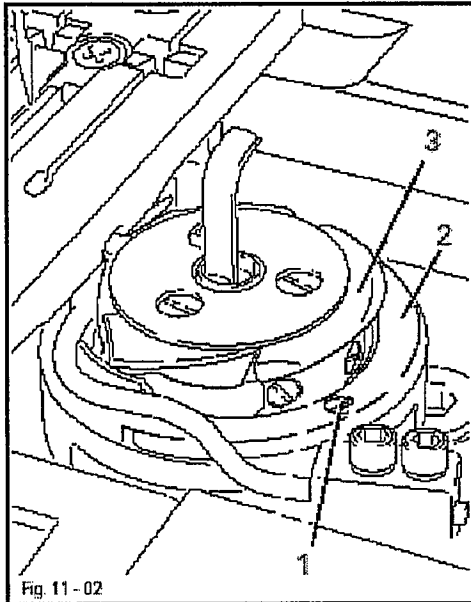
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3-3

MACHINE CLEANING & LUBRICATING

2. CLEANING THE HOOK AND BASE



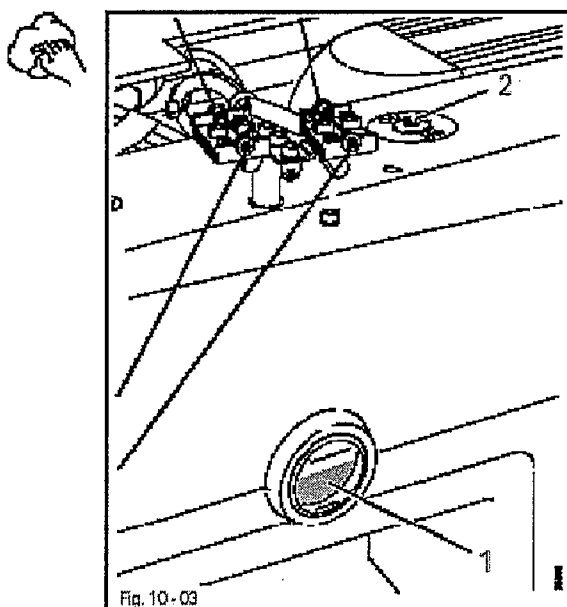
Bobbin case section and needle part must be cleaned for several times per day.

- Switch off the machine!
- Turn of air pressure!
- Remove screws nr.1
- Remove base retainer nr.2
- Turn hand pulley of head until base side stops horizontally at capsule ventilator.
- Remove base nr.3
- Clean hook and base.
- And lubricate thoroughly.
- Insert spool capsule nr. 3.
- Remove base retainer nr. 3.

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3-4

MACHINE CLEANING & LUBRICATING**3. CHECKING OIL LEVEL**

- Switch off the machine!
- Check oil level from window (figure nr.1) prior to operation every day.
- If oil is at lower level, it must be refilled until 1 oil level reaches between upper and lower level on windows.



- Use only 22,0 mm²/s oil with medium center viscosity at 40°C and density of 0,865 g/cm³ at 40°C!

4. AIR PRESSURE SETTING OF MACHINE AND CLEANING PRESSURE TUBE**Air pressure setting of machine:**

- Air pressure must be checked with manometer prior to each operation of machine.
- Manometer shall be adjusted according to air pressure of 6 bars. (Button nr.1 is pulled upwards and turned until manometer reads pressure of 6 bars and button nr.2 is pressed and fixed in place. Please see figure below).

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3-5

MACHINE CLEANING & LUBRICATING

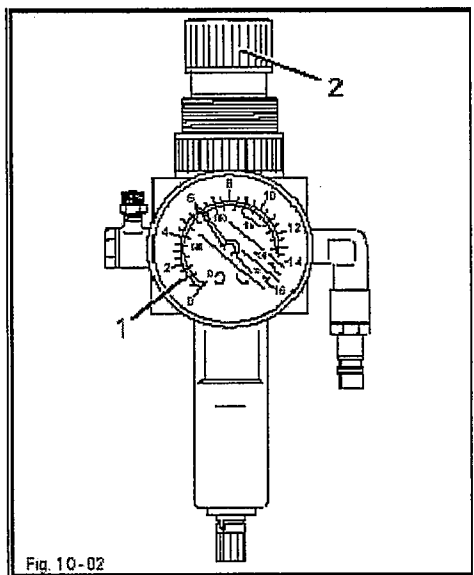


Fig. 10-02

E. CLEANING MAINTENANCE UNIT AIR FILTER

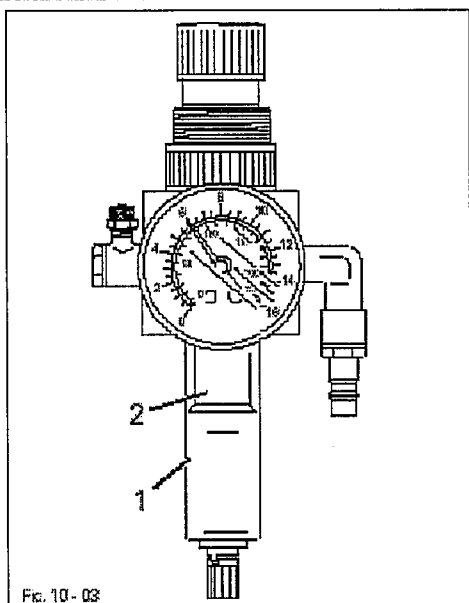


Fig. 10-03

- ⌘ Switch off the machine!
- ⌘ Remove compressed air pipe on maintenance unit.
- ⌘ Water container (figure nr. 1) is discharged.
- ⌘ Water container nr.1 is automatically discharged after removing maintenance unit compressed air pipe.

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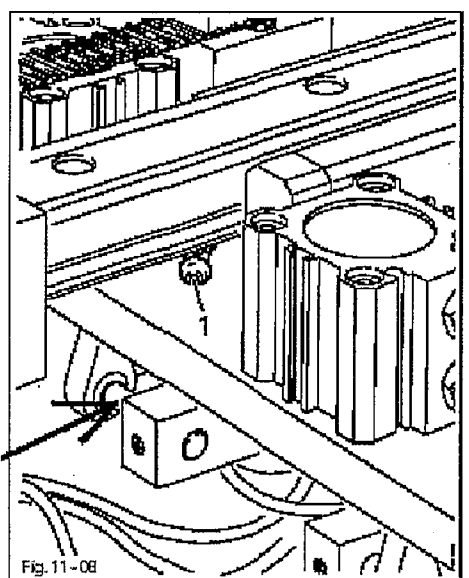
3-6

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MACHINE CLEANING & LUBRICATING

Cleaning Filter 2:

- ⌘ Water container nr.1 is removed.
- ⌘ Filter nr.2 is removed.
- ⌘ Filter nr.2 is cleaned with compressed air or isopropyl alcohol.
- ⌘ Filter nr.2 is turned and assembled and water container nr.1 is turned and assembled.



- Switch off the machine
- And prevent it from running again.
- Send clamp carriage mechanism backwards.
- Zone indicated with arrow nr.1 must be lubricated with permanent grease pump.
- This lubrication shall be performed once every two months for single shift operations and once a month for two shift operations.
- After cleaning the zone indicated with arrow
- It must be lubricated with lubricating oil once a month.

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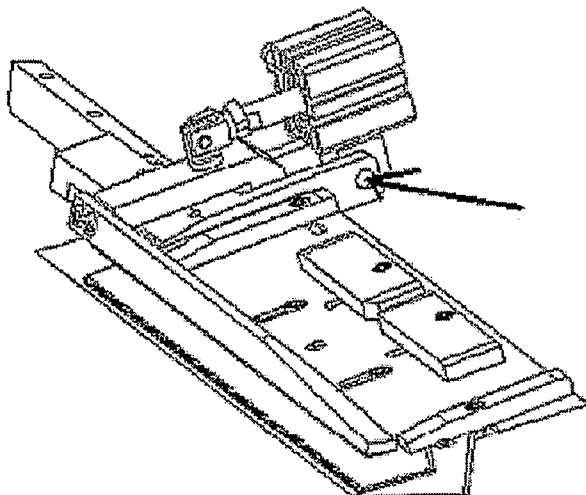
3-7

MACHINE CLEANING & LUBRICATING

6. LUBRICATING CLAMP FEET



Clamp feet must be cleaned with air everyday and the zone indicated must be lubricated with machine oil once a week.



7. LUBRICATING AND CLEANING THE MECHANISMS ON SEWING MACHINE



All lubricating holes on sewing machine and zones indicated with arrow must be properly wiped and cleaned once a week and must be regularly lubricated.

Zones on sewing head must also be lubricated.

Upper thread cutting equipment must also be cleaned several times per day.



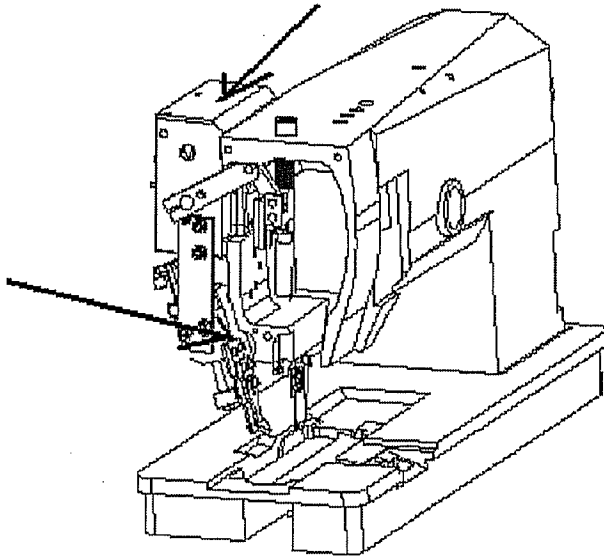
Touch 'cut and hold thread' sign on pocket programs, and clean waste thread parts accumulated at the mouth of upper thread cutting mechanism.

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3-8

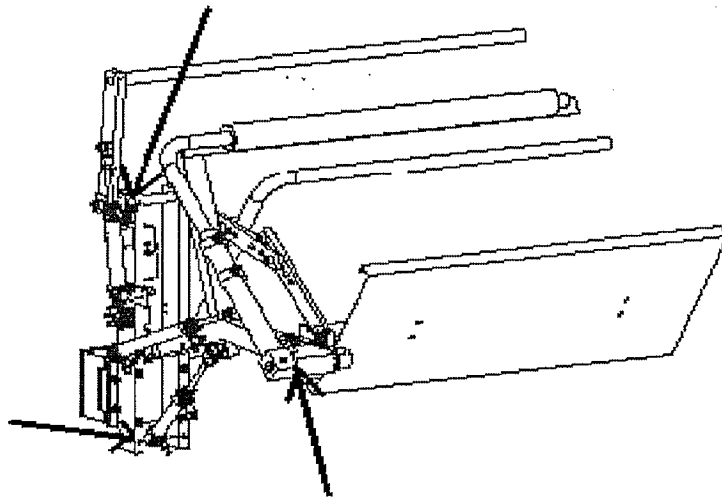
MACHINE CLEANING & LUBRICATING



8. LUBRICATING ALL JOINTS AND MOVING PARTS ON STACKING MACHINE



All joints and moving parts on stacking machine must be properly cleaned with air everyday and lubricated with machine oil for once a week.



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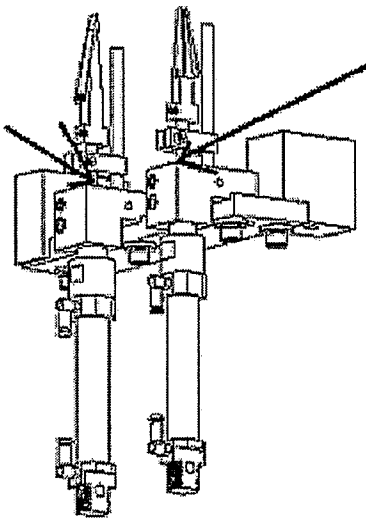
3-9

MACHINE CLEANING & LUBRICATING

9. LUBRICATING CORNER KNIFE MECHANISM

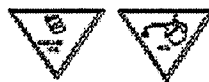
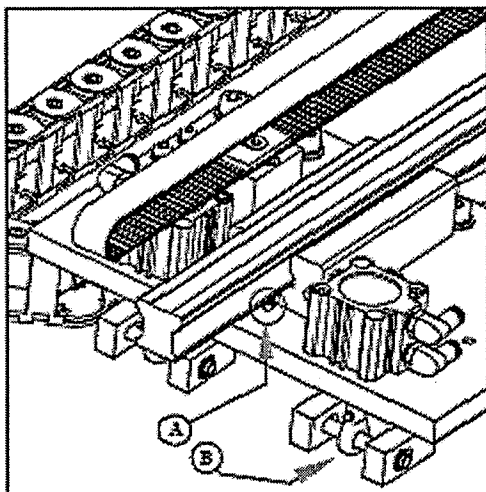


Corner knife mechanism must be cleaned with air everyday and spindles and moving parts must be lubricated with machine oil once a week.



10. PERIODICAL LUBRICATION OF MACHINE

Clamp Carrier and Clamps



- A -** You need to make oiling in 6 month periods with grease oil.
- B -** It is necessary first to clean and then to make normal oiling in 3 month periods.

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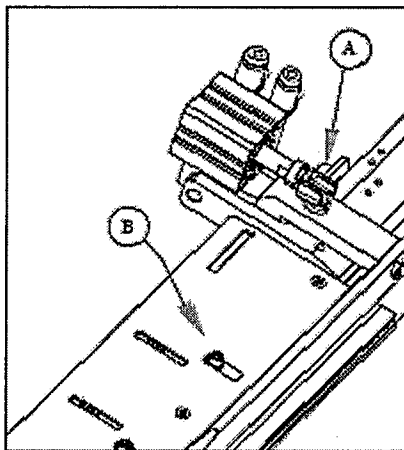
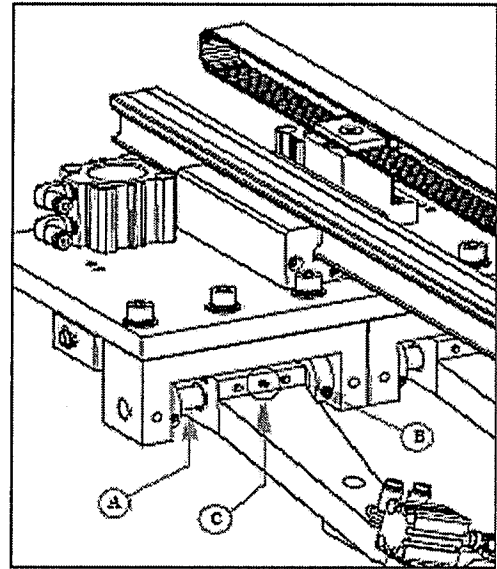
3-10

MACHINE CLEANING & LUBRICATING



A & B- It is necessary first to clean and then to make normal oiling in 3 month periods.

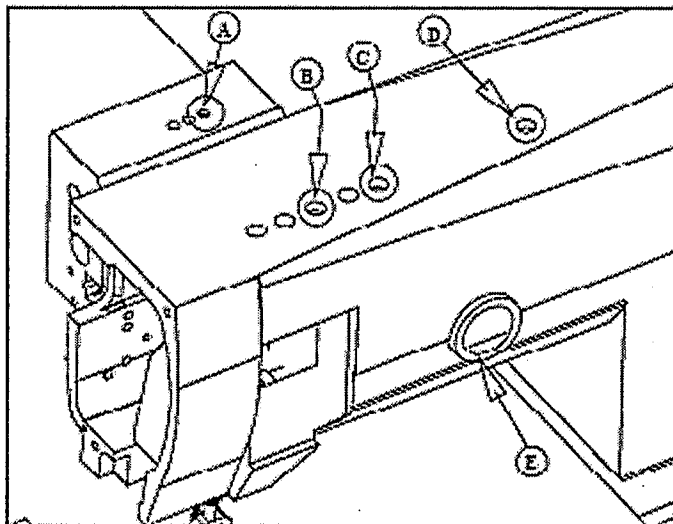
C- You need to make oiling in 6 month periods with grease oil.



A- It is necessary first to clean and then to make normal oiling in 3 month periods.

B- It is necessary to continuously clean in 1 month periods and to make normal oiling in 3 month periods.

Oil Inlets and Front of Section



A- It is necessary to make oiling in 1 month periods.

B & C- It is necessary to make oiling in 3 month periods.

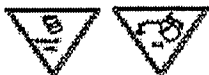
D- The oilbox "E" on top of the machine head is the place I which normal oil is added. When the oil level in the Oilbox becomes lower than the minimum required level, add oil to the oilbox from the "D" point.

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MACHINE CLEANING & LUBRICATING



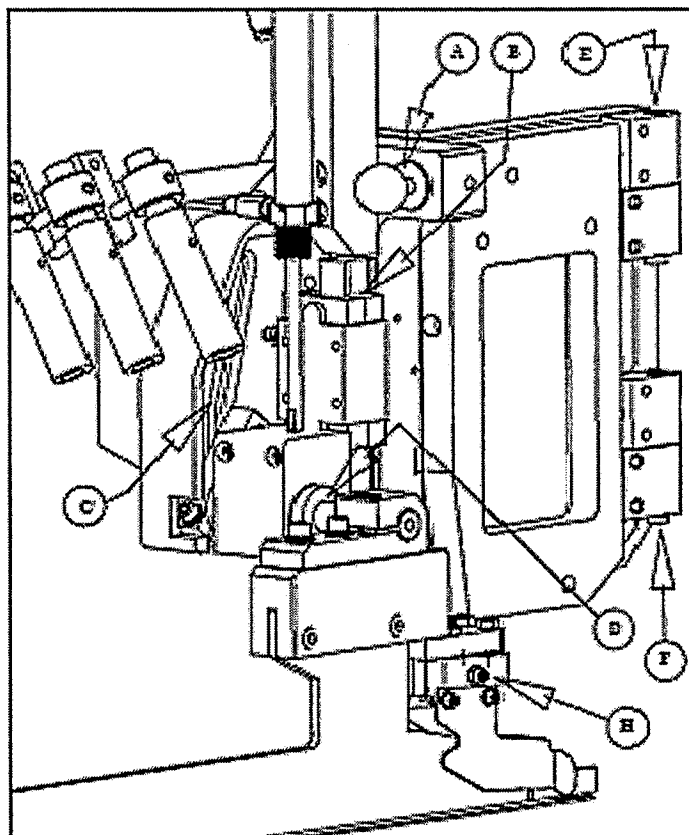
A - It is necessary to clean in 1 month periods and to make normal oiling in 3 month periods.

B - It is necessary first to clean and then to make normal oiling in 6 month periods.

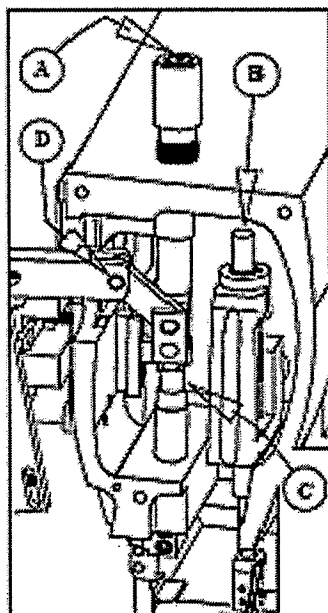
C - It is necessary first to clean and then to make normal oiling in 6 month periods.

D - It is necessary first to clean and then to make normal oiling in 6 month periods.

E & F - It is necessary first to clean and then to make normal oiling in 6 month periods.



Clamp Carrier and Clamps



A - It is necessary first to clean and then to make normal oiling in 3 month periods.

B - It is necessary first to clean and then to make normal oiling in 3 month periods.

C - It is necessary first to clean and then to make normal oiling in 3 month periods.

D - It is necessary first to clean and then to make normal oiling in 3 month periods.

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3-12

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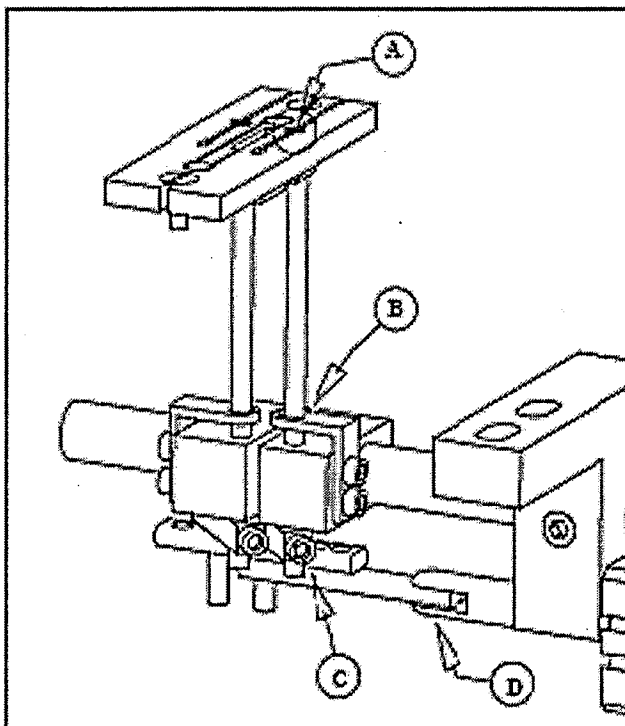
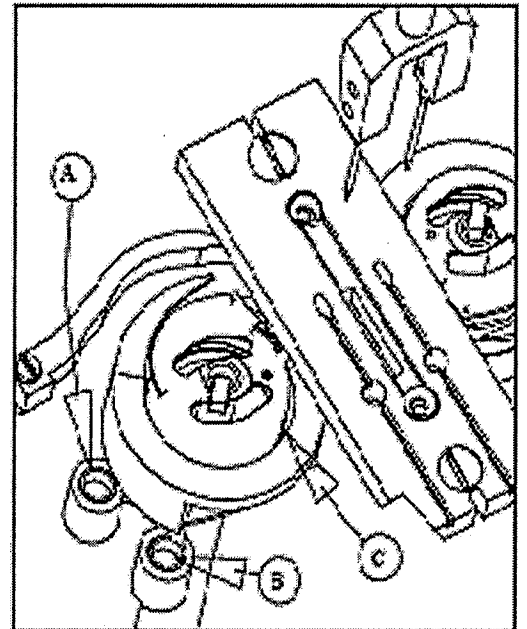
MACHINE CLEANING & LUBRICATING

A & B -

It is necessary first to clean in one week periods and then to make normal oiling carefully.

C -

It is necessary first to clean in one week periods and then to make normal oiling carefully.



A -

It is necessary to clean in weekly periods carefully.

B -

It is necessary first to clean and then to make normal oiling in 3 month periods.

C -

It is necessary first to clean and then to make normal oiling in 3 month periods.

D -

It is necessary first to clean and then to make normal oiling in 3 month periods.

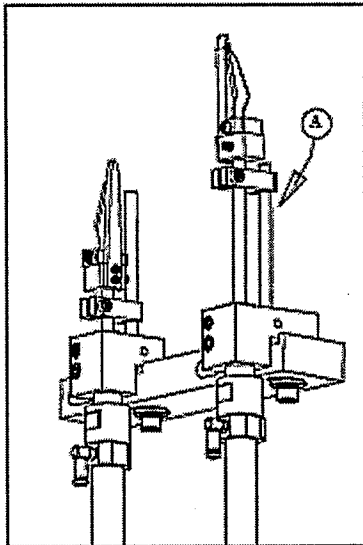
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3-13

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MACHINE CLEANING & LUBRICATING

Corner Knife, Top Thread Trimmer and Arm Thread Guide



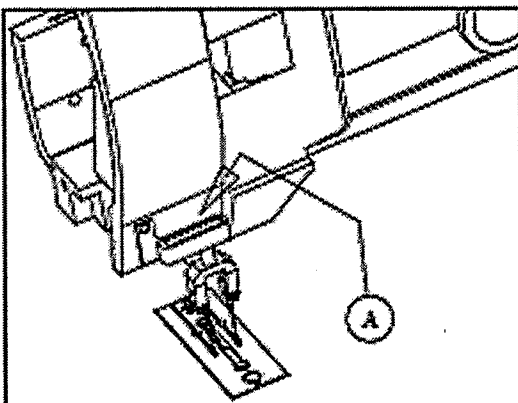
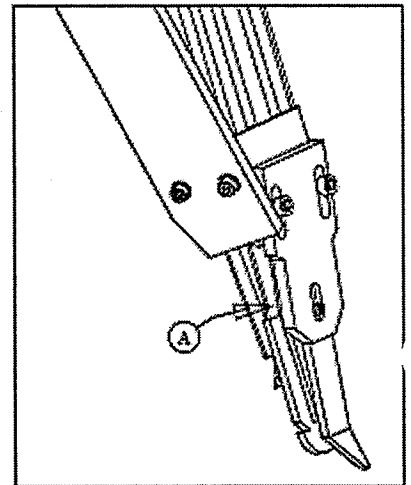
A -

It is necessary to clean very well in 1 month periods and then make normal oiling very carefully.



A -

It is necessary to clean in weekly periods and to make normal oiling in 1 month periods.



A -

You need to make oiling with special silicone oil in 1 Month periods and replace the thread bag every Month.

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3-14

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4-1

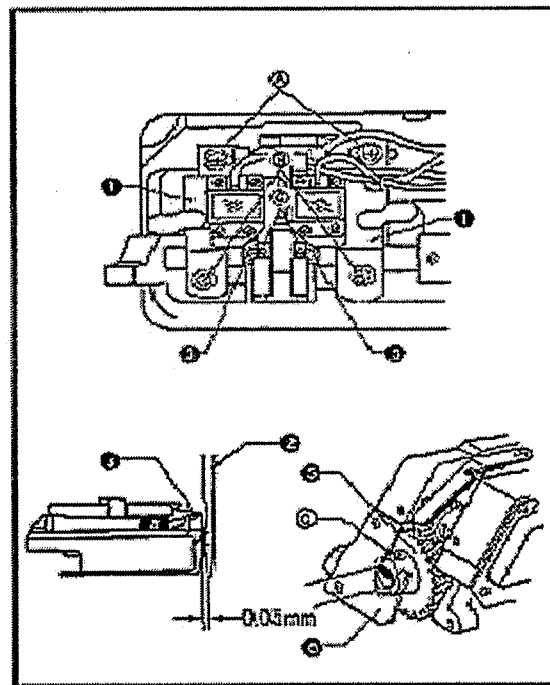
TROUBLESHOOTING

ADJUSTING THE NEEDLE AND ROTARY HOOK TIMING

Needle to Rotary Hook Point Gap

- 1- Tilt back the machine head.
- 2- Loosen screws "A", "B" and "C"
- 3- Move the rotary hook base "1" to the left or right so that the clearance between the needle "2" and the rotary hook tip "3" is 1 – 3 mm.
- 4- After adjusting, securely tighten screws "A", "B" and "C".

Note: Tighten screw "C" so that the lower shaft gear "5" is gently touching the thread guide plate "6". Furthermore, tighten screw "C" without moving it from its screw stop.



ADJUSTING THE THREAD TENSION SPRING

Thread take – up tension

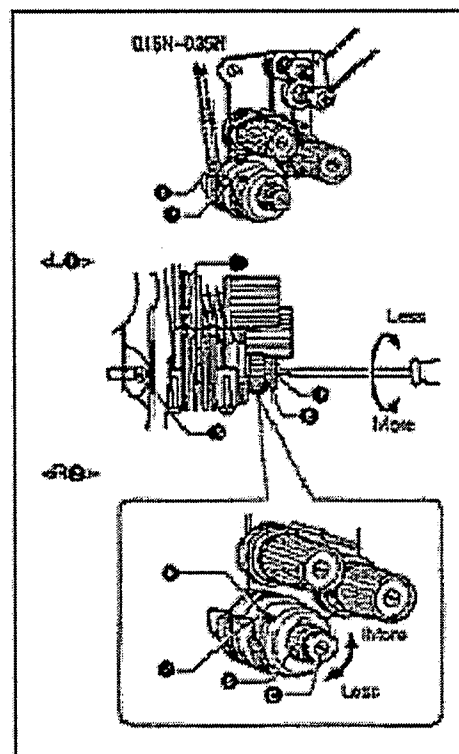
The standard tension for thread take – up spring "L 1" and thread take – up spring "R 2" is 0.15 – 0.35 N for both springs.

<Thread take – up spring L 1>

- 1- Open the face plate.
- 2- Loosen the screw "5"
- 3- Loosen the knob "6", and then turn the threadtension stud "7" to adjust the tension.
- 4- Tighten the screw "5", and then tighten the knob "6".

<Thread take – up spring R 2>

- 1- Loosen the set screw "8"
- 2- Loosen the knob "6" and then turn the adjustmentknob "9" to adjust the tension.
- 3- Tighten the screw "8", and then tighten the knob "6"



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4-2

TROUBLESHOOTING

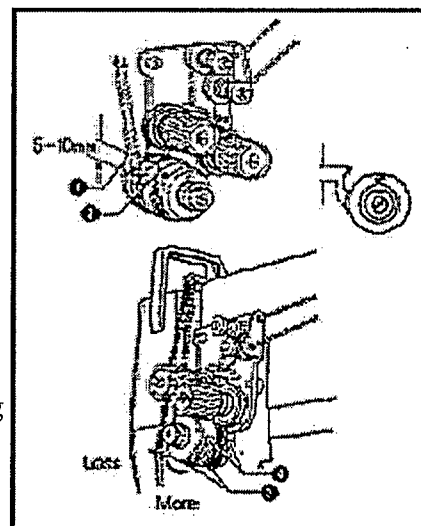
Operating range of thread – up spring the standart

Operating range for thread take – up spring “L 1” and thread take – up spring “R 2” is 5 – 10 mm for both springs.

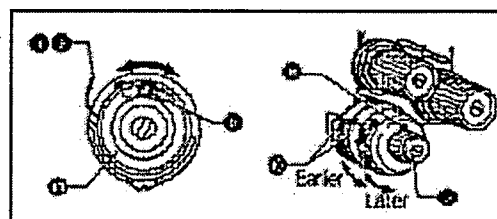
- 1- Loosen the left and right screws “3” and than turn the left and right thread take – up spring stoppers “4” to adjust the operating range.
- 2- Tighten the screws “3”

Thread take – up spring operation timing.

The standart operation timing for thread take – up spring “R 2” is the middle position within the operating range of the thread take – up spring guide “10”

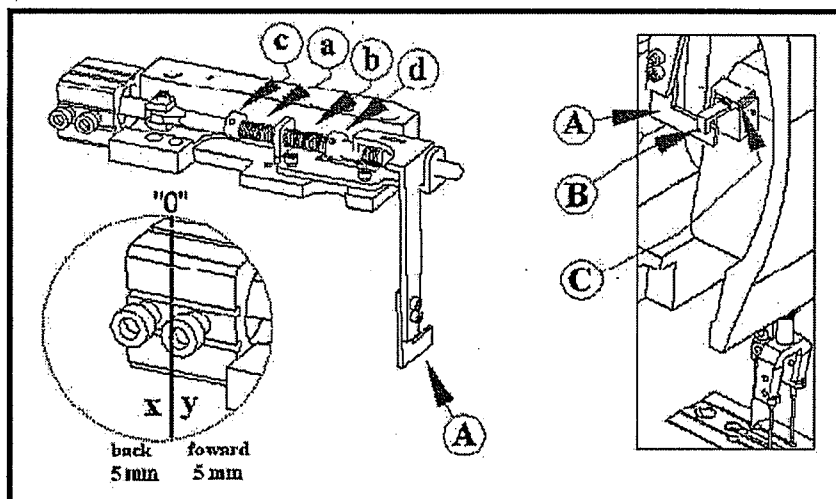


- 1- Loosen the screw “11”
- 2- Loosen the knob “6”, and then turn the left and right thread – up spring guides “10” to adjust the tension.
- 3- Tighten the screw “11”, and then tighten the knob “6”.



ANGLE POCKET NEEDLE SYSTEM ADJUSTMENT

The piston must stand right in the middle at “0” point. To make the piston stay in the middle or to adjust its stopping :



- 1-Bring the machine to one of the **NORMAL POCKET** (not angle) programs (1,2,3...7)
- 2-Springs number “a” and “b” control the piston to stop in the middle. The balance adjustment of the springs is controlled by bearings “b” and “d”
- 3-When the piston is adjusted to stay on “0” point, the pin number “B” that controls the needles separate motions must ,must be exactly on the line. If pn no “B” is not exactly at line “B” is even a little out side this line split needle timings will not be correct while stitching.

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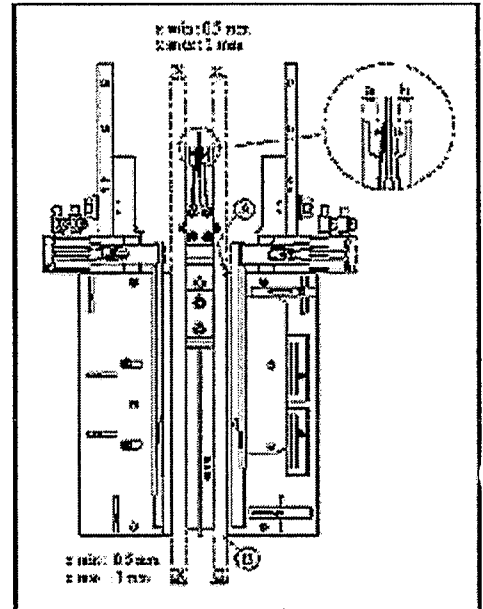
4-3

TROUBLESHOOTING

CLAMP SETTINGS

Fabric folding gap between clamp and middle guide should be between 0.5 mm and 1 mm according to the thickness of fabric stitched.

It should be exactly the same from point A up to point B between clamp and guide.

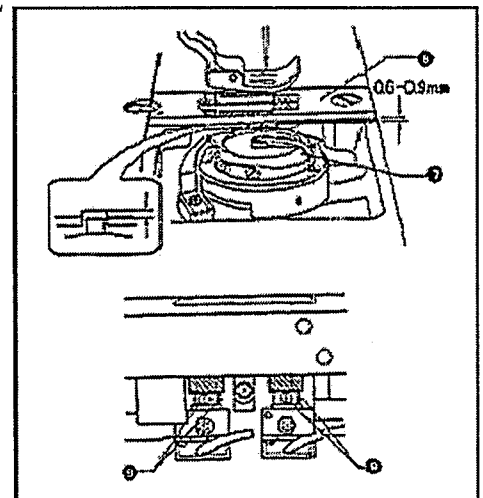


CLEARANCES BETWEEN ROTARY HOOKS AND PLATE

- 1 – Remove the slide plates.
- 2 – Tilt back the machine head.
- 3 – Loosen the set screws “9” and move the rotary hook “7” up and down to adjust so that the clearance between the rotary hook “7” and the needle plate “8” is 0.6 – 0.9 mm.

Note: Do not turn the rotary hook while the set screws “9” are loosened, otherwise it will change the timing between the needle and the rotary hook.

- 4 – Tighten the set screws “9”.



CRUCIAL POINTS WHEN ADJUSTING THE CENTRAL GUIDE FOR THE FIRST TIME

- 1- If we refer to the sides of the needle plate when we assemble the central guide (Figure 13-A and B), the guide has to be at equal distances to these two points. We can realize the right-left slip setting of the guide to the desired direction (Right-Left) by loosening the C screw on the Figure 12.
- 2- The second crucial aspect of the central guide is how much the back of the guide needs to pass the needle.

This distance (x) should be ‘minimum 2 mm’, ‘maximum 3 mm’. (Figure 14)

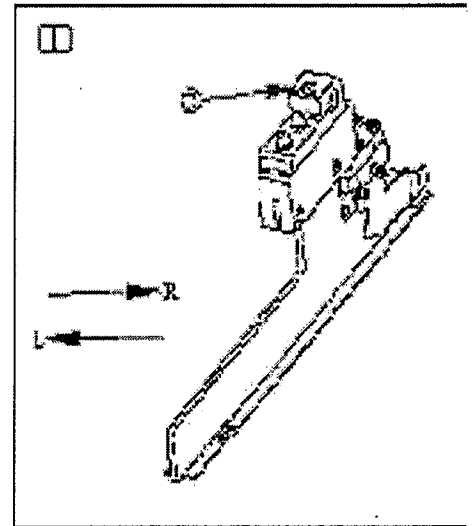
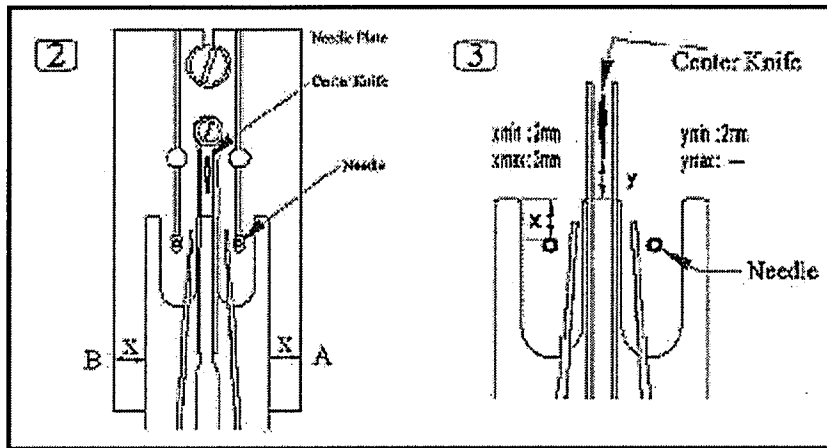
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4-4

TROUBLESHOOTING

Note: At this point, there is a very important point to be taken care of. The knife protector of the guide should not hit the central knife, (the space shown by 'y' on Figure 14 should be minimum '2'mm) if the "y" distance is less than 2mm, the central guide hits the central knife while coming down and damages the knife, it also damages the square of the guide and blocks the it to work properly. (Figure 14-y)



3- When the central guide comes down, the bottom of the guide and the bottom base should be parallel and flat.(Figure 15 A and B point)

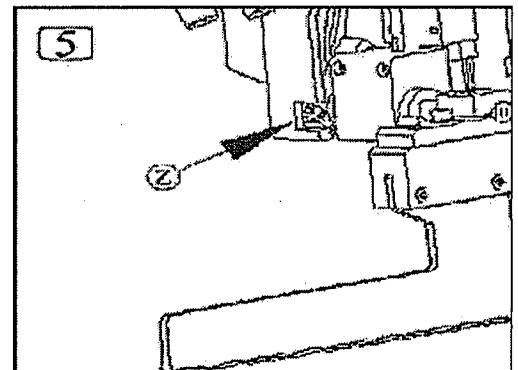
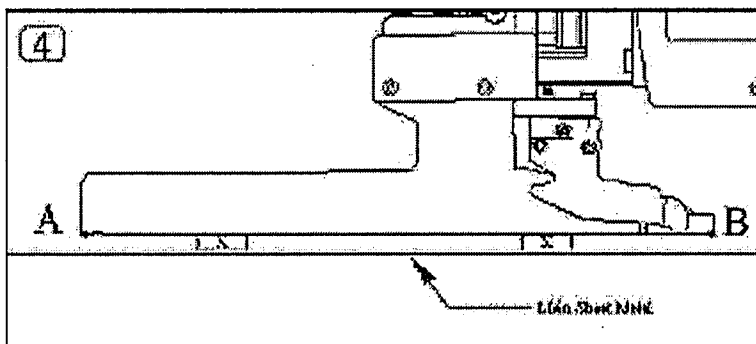
You can make the angle adjustment of the guide and the bottom base by the Z screw on the Figure 16. The bottom of the guide should be parallel with the base.

Bottom space at thin works should be $X = 1\text{mm}$

Bottom space at middle works should be $X = 1.5\text{mm}$

Bottom space at thick works should be $X = 2\text{mm}$ olmalidir.

Note: If the back and front ends of the central guide(Figure A-B points) are not at equal distance from the base plate, your machine would collect and büzmek the fabric while you are sewing.



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4-5

TROUBLESHOOTING

HOW TO ADJUST THE BOTTOM THREAD CUTTER?

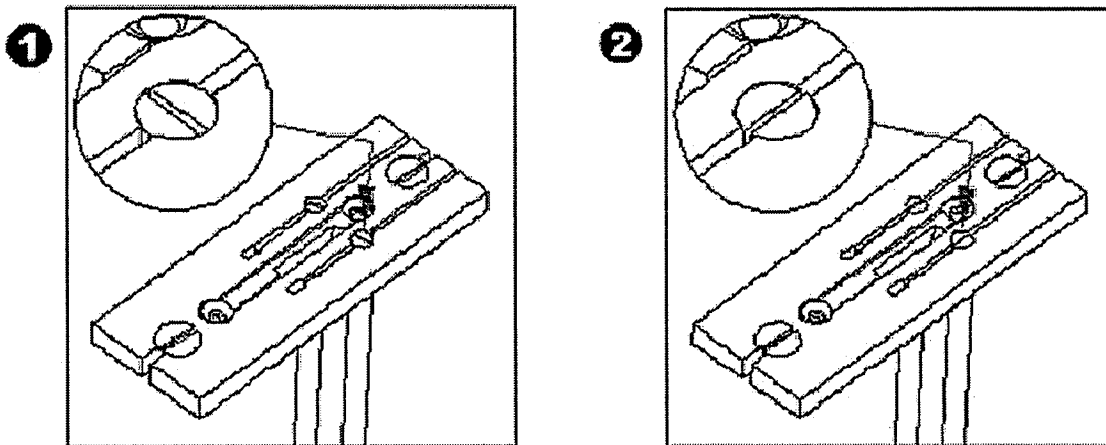
At the end of the sewing, the threads coming from the bottom bobbin are cut by the bottom cutter and they are held in order for the threads not to be free.

The cutting process of the bottom thread is handled by the cylindrical stick shape steel knives which are located inside the needle plate.

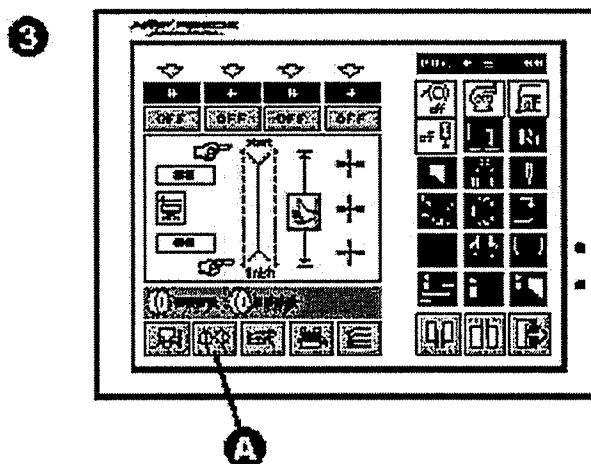
Important Issues While Making the Adjustments.

The normal position of the bottom thread cutting knives inside the plate should be as shown on Figure

1) When your machine starts sewing, the bottom thread cutting knives rotate 80 degrees counter clock wise and take the flat position as shown on Figure 2, and at the end of the sewing, they again take their initial position as shown on Figure 1. During this stage, the threads are being cut and held in order not to become free.



You can test the thread cutting knives manually at the “A” button shown on Figure 3



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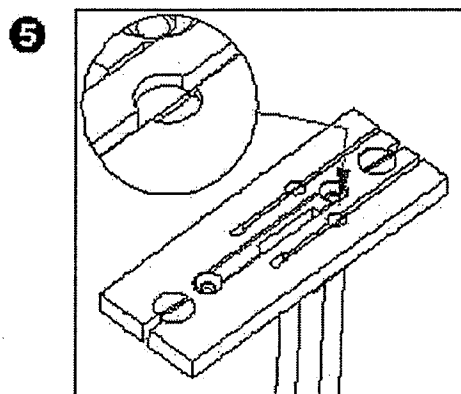
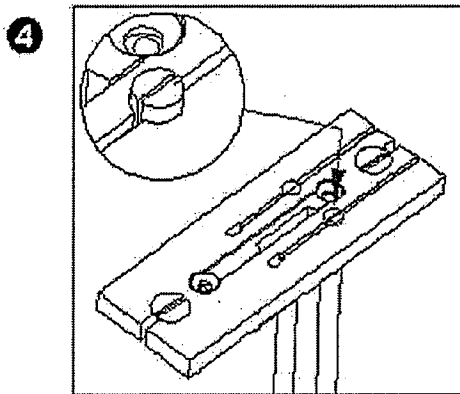
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4-6

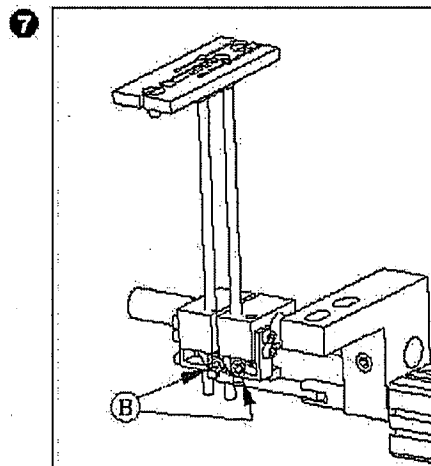
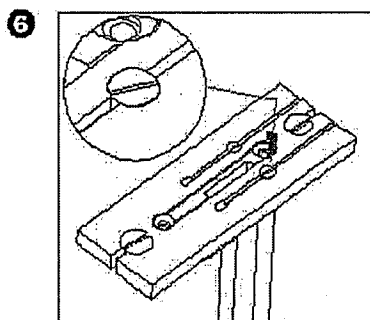
TROUBLESHOOTING

Important Issues to be taken care of while Adjusting the Bottom Thread Cutting Knife Inside the Plate.

- 1 – Bottom thread cutting knives must definitely be on the same level as the plate, and may even be very little (0,2mm) below the top level of the plate.(Figure 1-2).
- 2 – Bottom thread cutting knives should not be adjusted to be higher or too much lower than the plate. (Figure 4-5). If the bottom cutting knives are adjusted this way, your machine would collect the fabric and it causes the stopping problem.



- 3 – By using the button “A” on the Figure 3, activate the bottom thread cutting knives manually and make sure that the canal inside the knife and the thread way are adjusted correctly. If few or a lot of canals are not in compliance (Figure 6), the thread might not be cutted, in this kind of situation you can make your adjustments by loosening the screws shown by “B” on Figure 7. The final position of your adjustment must be as shown on Figure 2.



Note: Please replace your bottom thread cutting knives periodically at least once a year or turn the cutting axle upside down. Both bottom surfaces of the axles are convenient to be used as spare knives.

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4-7

TROUBLESHOOTING

HOW TO ADJUST THE END SEWING, IN THE BEGINNING ON THE POCKET COVER AND AT THE END?

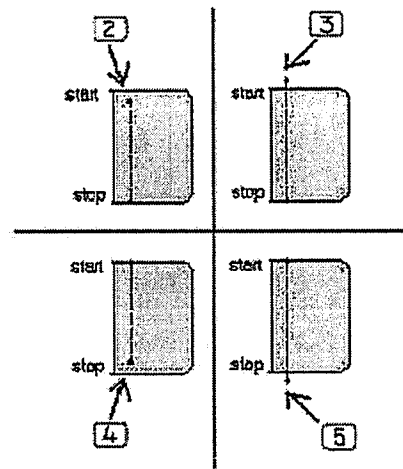
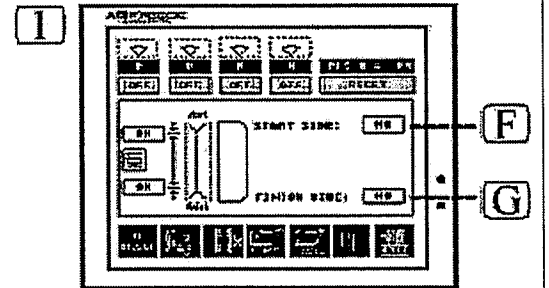
Choose one of the Programs 10 , 11 or 12.
(Because the photocell scans the cover length in these programs and the machine makes the cover's beginning and ending lengths automatically.)

1- On the cover being sewn, if the beginning sewing starts inside the cover (**Picture 2**), increase the 'F' parameter on the image '1' for the necessary distance. (every point is= 0,5 mm)

2- On the cover being sewn, if the beginning sewing starts outside the cover (**Picture 3**), decrease the 'F' parameter on the image '1' for the necessary distance. (every point is= 0,5 mm)

3- On the cover being sewn, if the ending sewing ends inside the cover (**Picture 4**), increase the 'G' parameter on the image '1' for the necessary distance. (every point is= 0,5 mm)

4- On the cover being sewn, if the ending sewing ends outside the cover (**Picture 5**), decrease the 'G' parameter on the image '1' for the necessary distance. (every point is= 0,5 mm)



HOW TO ADJUST THE FRONT POSITION SHAPE OF THE CLAMP?

Clamp finds the Home position when first turned on and stops. It is important that the Clamp stays on the front.

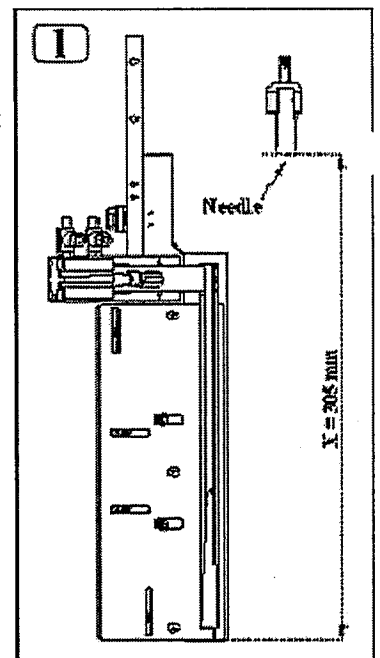
The many positioning settings on the machine are directly related to this setting. If the clamp stands on a different location than the one it should, it might change all the settings completely and you might face many problems.

How to Make This Adjustment?

The distance between the needle and the clamp's standing point in the front after taking the home position should be exactly **305 mm** (Figure 1).

If the clamp passes 305 mm and stands more in te front, slip the sensor shown by "C" on Figure 18 on the direction of arrow "R" and adjust it by necessary mm.

If the clamp stops before reaching mm, slip the sensor shown by "C" on Figure 2 on the direction of arrow "F" and adjust it by necessary mm.

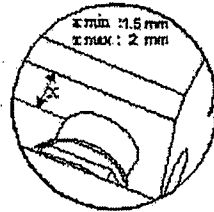


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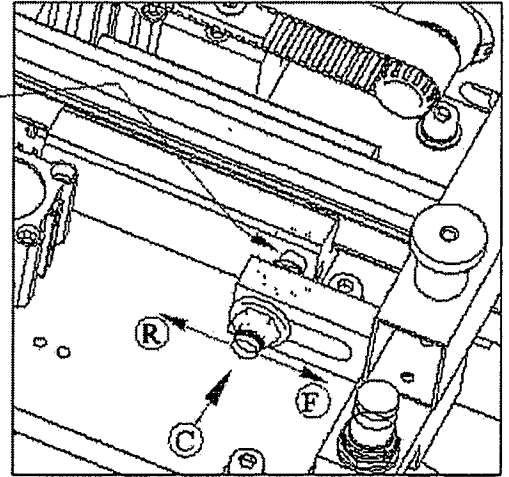
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TROUBLESHOOTING

2



Note : While the linear cart stands on the front, the distance between the position sensor should be 'min : 1.5 mm - max : 2 mm. (Figure 2)



HOW TO ADJUST THE LASER POINTERS?

Machine starts and completes by referring to the place left by the laser point which is chosen on the panel.

That is why, the user places the material to be sewn under the machine, referring to these laser pointers. Laser pointers are assembled and adjusted on the machine at standard distances from the needle. (Figure-1)

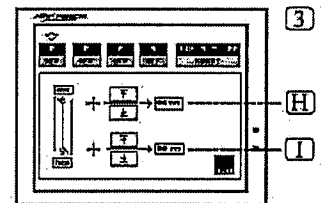
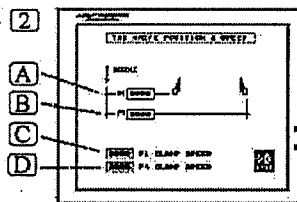
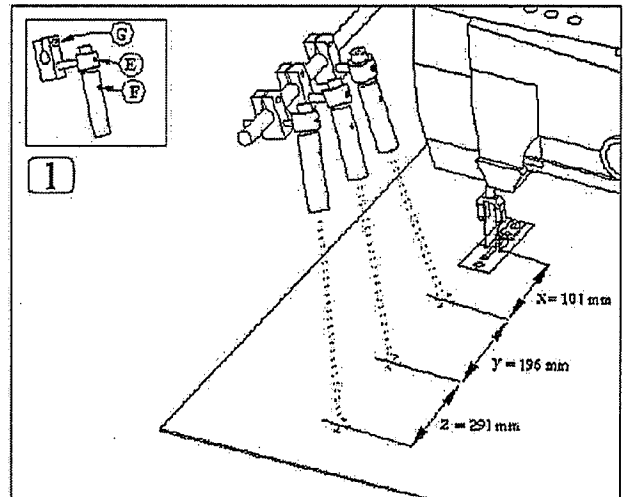
You can also see the places that the laser pointers will leave, labeled on the base plate of your machine. In case of any adjustment change or loss of adjustment, you can set the laser pointers to their standard adjustment by benefitting from here.

You can make this adjustment from the "G" and "E" screw shown on Figure 1.

If you would like to adjust the clarity of these laser pointers, you can adjust it from the screw shown by "F".

On some special applications, if you would like to change the beginning and ending locations of the sewing without changing the location of the laser pointers, you can take advantage of the parameters shown by "H" and "I" on Figure 3. (Technics Manual-Page XXX).

If you would like to make basic changes on some measurements, you can benefit from parameters shown by "C" and "D" on Figure 2 under the control of a technician. (Technics Manual-Page XXX)



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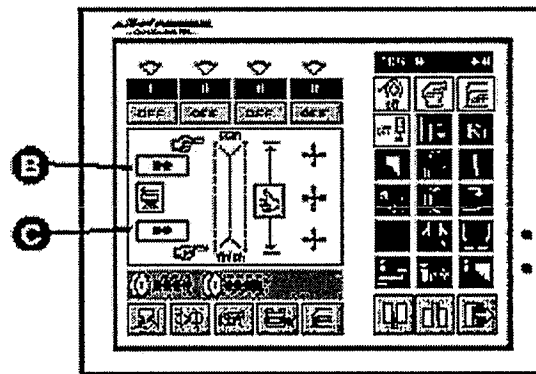
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TROUBLESHOOTING

HOW TO MAKE KNIFE CUTTING POSITIONS FROM THE PANEL?

No matter how long is the sewn pocket or the cover, the cutting position of the corner knives is realized automatically by the machine.

The settings of the corner knife cutting positions of the sewn pockets are made from the Panel as shown below.



B - You adjust the cutting position of the Start corner knife.

By changing the parameter, you can let in or out the position of the corner knife by multiples of 0.5mm.

C - You adjust the cutting position of the Stop corner knife.

By changing the parameter, you can let in or out the position of the corner knife by multiples of 0.5mm.

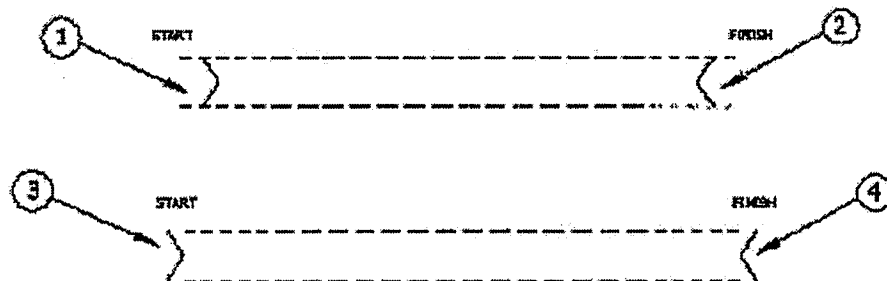
For example :

When the **B** parameter value is reduced, the Start corner knife proceeds inside the sewing. Shown by the arrow labeled 1

When the **B** parameter value is increased, Start corner knife proceeds outside the sewing. Shown by the arrow labeled 3

When the **C** parameter value is reduced, Stop corner knife proceeds inside the sewing. Shown by the arrow labeled 2

When the **C** parameter value is increased, Start corner knife proceeds outside the sewing. Shown by the arrow labeled 4



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4-10

TROUBLESHOOTING

THE SOLUTION FOR THE CORNER KNIFE CUTTING PROBLEMS

For the perfect and correct cutting of the corner knives at the pocket beginnings and ends;
 1- It is necessary that the knife which cuts the center of the sewing is new and not rusty.

2- The settings of the middle knife which cuts the center of the sewings has to be correct and perfect.

Note: The problematic middle knife cuttings directly affect the corner knife cuttings and cause problematic corner knife cuttings; because it cuts the fabric while gathering it and it creates sewing with breaks. And it also causes the start corner knife to lose its position.

3- The corner knives need to be replaced periodically in periods of 2 to 4 months depending on the type of the fabric. You cannot get perfect sewings with bad sewing quality knives.

After the above three main factors are controlled, you will face the below problems in corner knife cuttings.

Apply the mechanical solutions as described below;

Problem 1: Instead of dropping the corner knives at exact places, if it drops on the sewing by cutting one of them, (Picture-2):

Solution: The screw of the corner knife cutting mechanism that cuts the sewings, shown with the arrow 5 has to be opened (Picture-1) and from the in/out adjustment screw shown by the arrow 6, you can adjust the knife unit, on the opposite of cutted sewing direction.

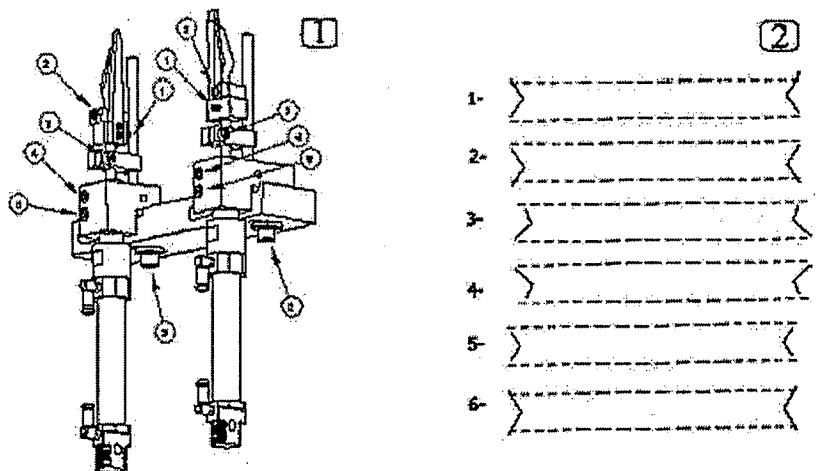
Problem 2: The corner knives make angled cuttings to any direction instead of exact cuttings (Picture-4);

Solution: By opening the screw shown by the arrow 3 of the problematic corner knife mechanism that makes angled cuttings, and making the adjustment by the sufficient angle, you can set the cutting angles again.(Picture-1)

Problem 3: If the corner knives cut much less than they are supposed to cut and the corner knife cut appears to be too small (Picture-2) or if they cut too much than it has to and the corner knife cutting appears

to be too big (Picture-2);

Solution: Open the screw shown with the arrow 4 (Picture-31) of the knife unit which makes smaller corner knife cuttings and lift the knife piston unit a little bit up. If the corner knife makes larger cuttings, loosen the screw shown by the arrow 4 (Picture-1) of the problematic side and drop the knife piston unit a little bit below.



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TROUBLESHOOTING

HOW TO MAKE PHOTOCELL SETTING?

In the pocket cover sewings, the length of the cover is totally distinguished by the photocell. Therefore, the setting of the photocell has to be very neat and perfect.

Firstly, it is necessary that the reflector strip on the clamp is scratchless, very clean and not deformed.

Do not forget that this strip has to be renewed in 2-month periods.

It is necessary that from the beginning of the reflector strip at point A until the end of the reflector at point B have to be taped. If the reflector strip is deformed at even a very slight degree, the photocell perceives this deformed place during sewing and causes the cover to be on a different length than it is supposed to be.

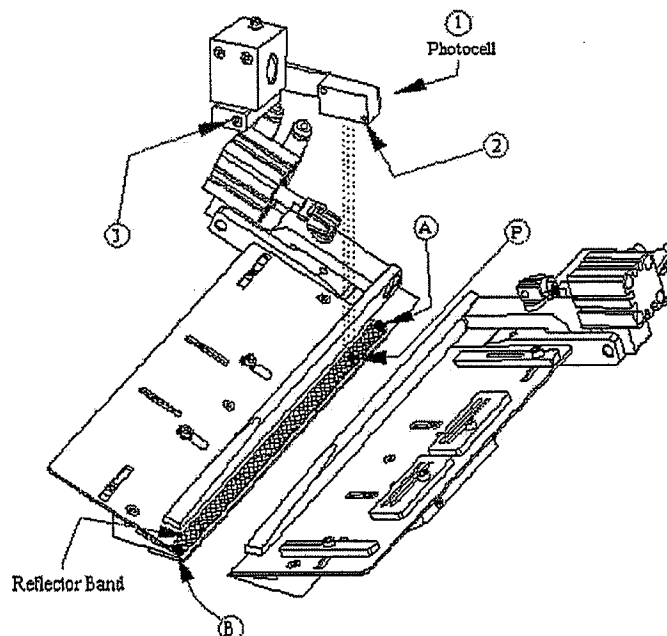
After making sure that the reflector is very new and clean, the photocell has to be facing the reflector strip perpendicularly with 90 degree angle. (point P)

When the photocell (item no 1) sees the reflector strip, orange led lights.

Photocell has to see the reflector strip from point A to point B of the clamp without turning off. If it does not see it, check the strip and then check the facing angle of the photocell with the reflector strip.

You can check if the photocell can see the point A and point B on the Clamp by benefitting the test screen on the page XXX and by moving the clamp manually.

If the viewing angle of the photocell and the reflector strip is not 90 degrees, adjust the viewing angle from the screw shown by the arrow 2, behind the photocell. If the photocell still does not see the reflector strip and it faces the side of the reflector, then you can adjust by moving the photocell right or left by the screw shown by the arrow 3.



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4-12

TROUBLESHOOTING

HOW TO MAKE SETTINGS OF THE WING PLATES OF THE DIRECTIONING GUIDE?

In order to adjust the wing plates;

1- Bring the needles to the level of the plate hole openings as shown on the picture.(Picture A)

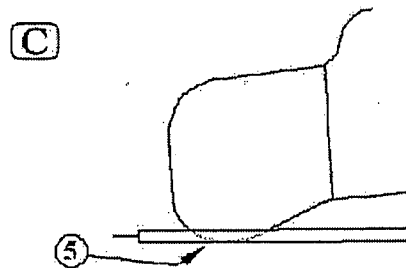
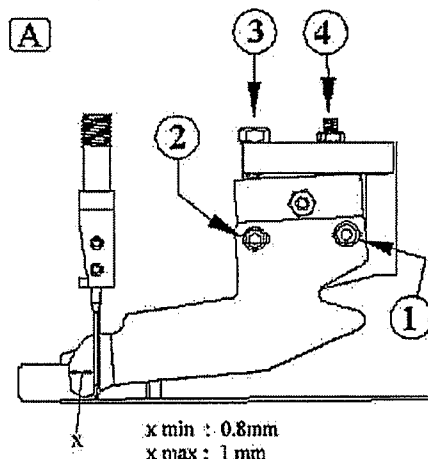
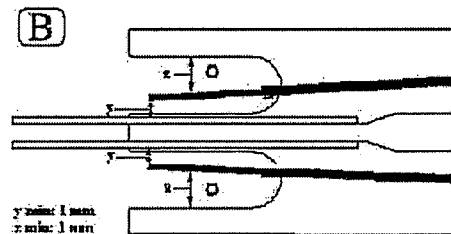
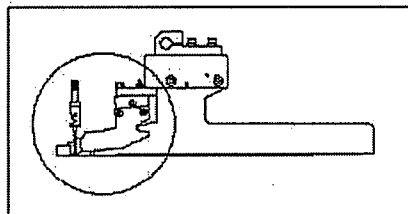
2- Wing plates have to pass the needle ends by 0.8mm to 1 mm.(as shown on the Picture A with x)
 You can make the back/forward settings of the plates by loosening the screws numbered 1 and 2.

3- It is necessary that the wing plates does not run longer from under the lower guide plate (as shown by the arrow 5). The plates have to be adjusted on the same level of the lower part of the lower guide plate. You can make these adjustments by loosening the screw numbered 4 and moving the plates up/ down.

You can arrange the pressures of the wing plates by the screw numbered 3. The pressure setting of the plates has to be neither too hard nor too soft.

Note: The wing plate setting is very important. The wing plates should never touch the needles. If they touch them during the sewing, then it causes the thread cutting problems.

The settings on both sides of the plates and the needles have to be equal and balanced.(Picture B)



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4-13

TROUBLESHOOTING

HOW TO MAKE THE ADJUSTMENT OF THE CENTRAL KNIFE'S?

Central knife adjustment is one of the most important adjustments at the Pockt Fleto Automat.

If the adjustment of the central knife is with problems, when the machine begins the sewing the central knife would not cut neatly and the cuttings would not be correct.

At this kind of a problem, the users tend to first mūdahale the adjustments of the corner knife cuttings. The problem does not occur because of the corner knives. The basic reason of the problem is caused by the adjustments of the central knife.

The maintenance of the central knife in the machine must be made neatly and periodically. If the works are polyester and with Lycra, check the adjustments of the central knives in periods of 2 or 3 months and replace the knives.

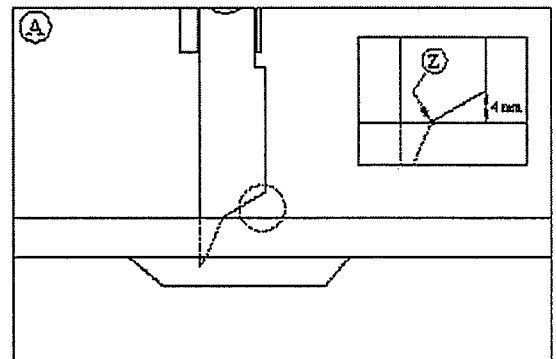
If the works are cotton or linnen, check the adjustments of the central knives in periods of 4 or 5 months and replace the knives.

How to Make the Height Setting of the Central Knife?

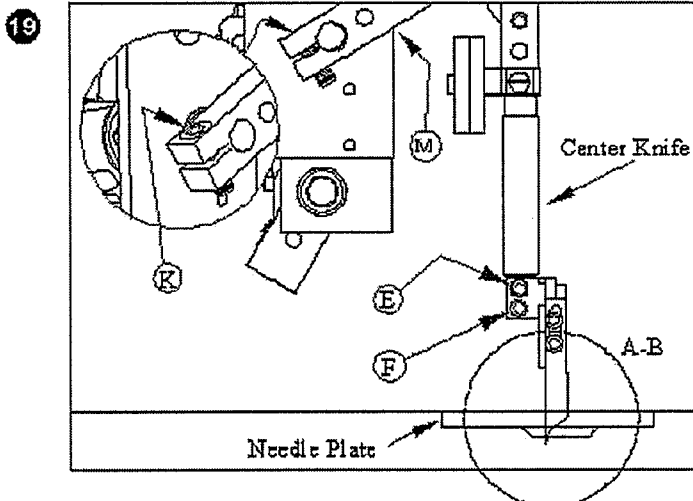
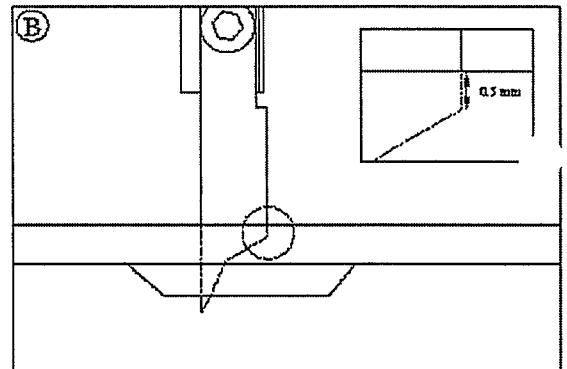
By entering the test screen from the panel, pass the button A and activate the central knife.

Turn the hand pulley of the machine head slowly. When the central knife is at the very top point, it has to be above the plate's toppest level and Z corner by 4 – 4.5 mm (Figure-A)

It has to be exactly equalized with the plate's top point (Figure-A).



Turn the machine's hand pulley slowly once again. When the central knife is at the very bottom point, the cutting edge of the should be below the plate surface by at least 0.5 mm (Figure-B).



When replacing the central knife with a new one lift the central knife to the very top point and tighten the "E" and "F" screws (Figure-19). (Tighten the screws definitely when the central knife is at the very top point).

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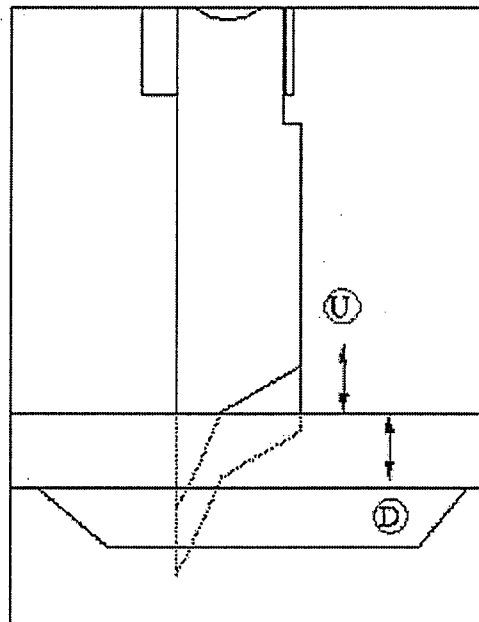
4-14

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TROUBLESHOOTING

You can make the cutting adjustment from the plate level **20** by the "K" screw on the figure 19.

If you loosen the "K" screw and lift the "M" handle, cutting space slips up from the plate level. (Figure 20-U)
if you loosen the "K" Screw and take down the "M" handle, cutting space slips down from the plate level. (Figure 20-D)

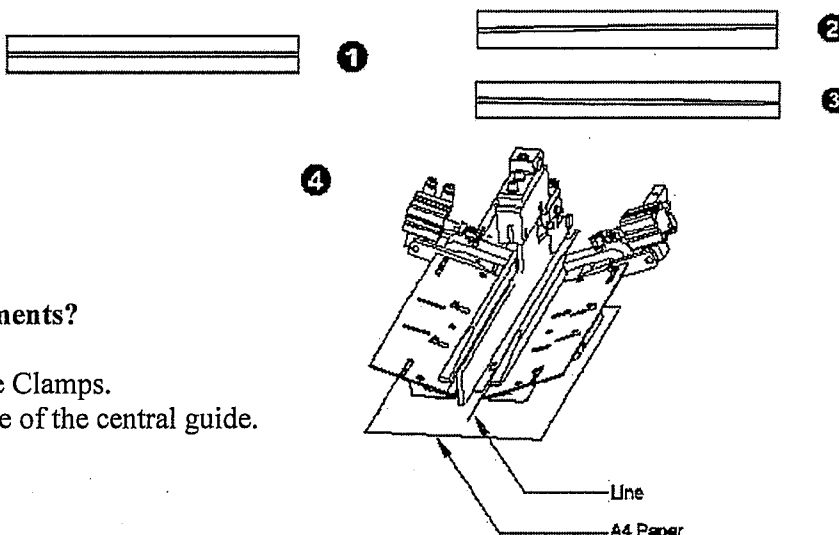


HOW TO MAKE THE SQUARE ADJUSTMENT OF THE CENTRAL GUIDE?

Note : The gönye adjustment of the central guide has to be made by a technical service personnel or by someone who has done a gönye adjustment before. And also, no fluctuation should be made unless the central guide square adjustment is necessary.

1- Gönye adjustment of the central guide according to the needle is very crucial. If the parallelity setting of the central guide and needle are not the same, there might be variations on the fleto width of the sewn pockets at the beginning and at the end. (Figure 2 , 3)

2- When the gönye adjustment of the central guide according to the needle is correct, the fleto width of the sewn pockets will be correct at the beginning and at the end. (Figure 1)



How to make these gönye adjustments?

- 1- Place a white A4 paper under the Clamps.
- 2- Draw a 3 cm long line on the side of the central guide. (Figure 4)

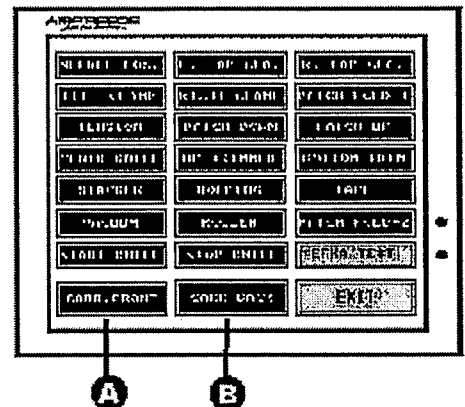
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TROUBLESHOOTING

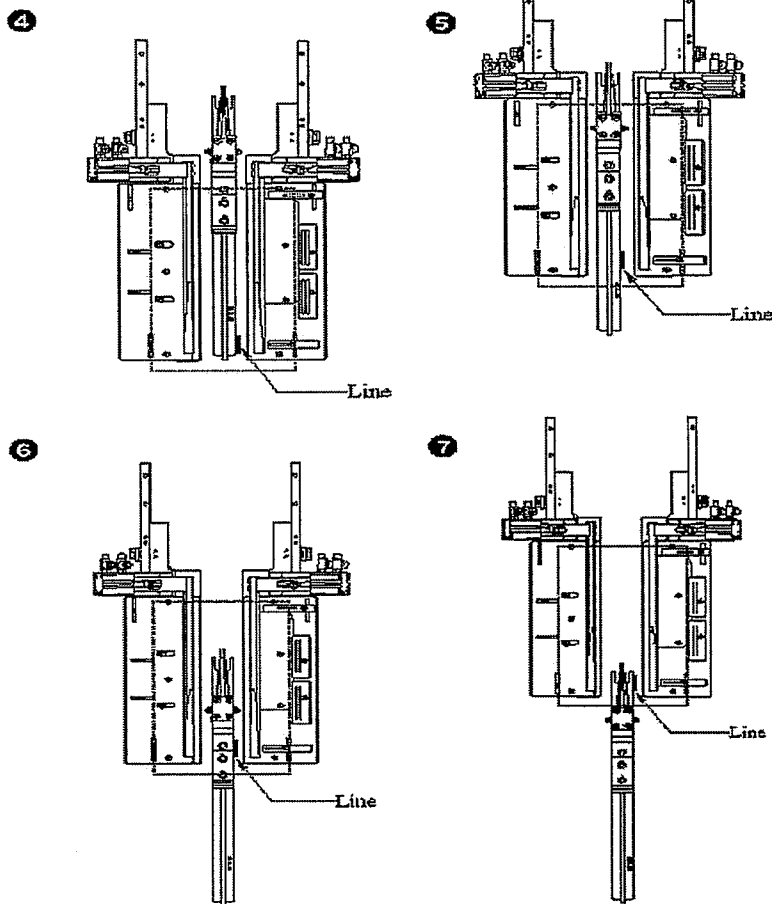
3- From the test section on the panel (Technics Manual- Page XXX) send the clamps back by 5-6 cm manually by the button shown by 'A'.



4- Overview the parallelism of the the drawn line's getting remote – closer from the central guide. (Figure 5)

5- After 5,6 cm, overview the location of the line once again. (Figure 6)

6- When the line comes to the rearest part of the central guide; (Figure 7)



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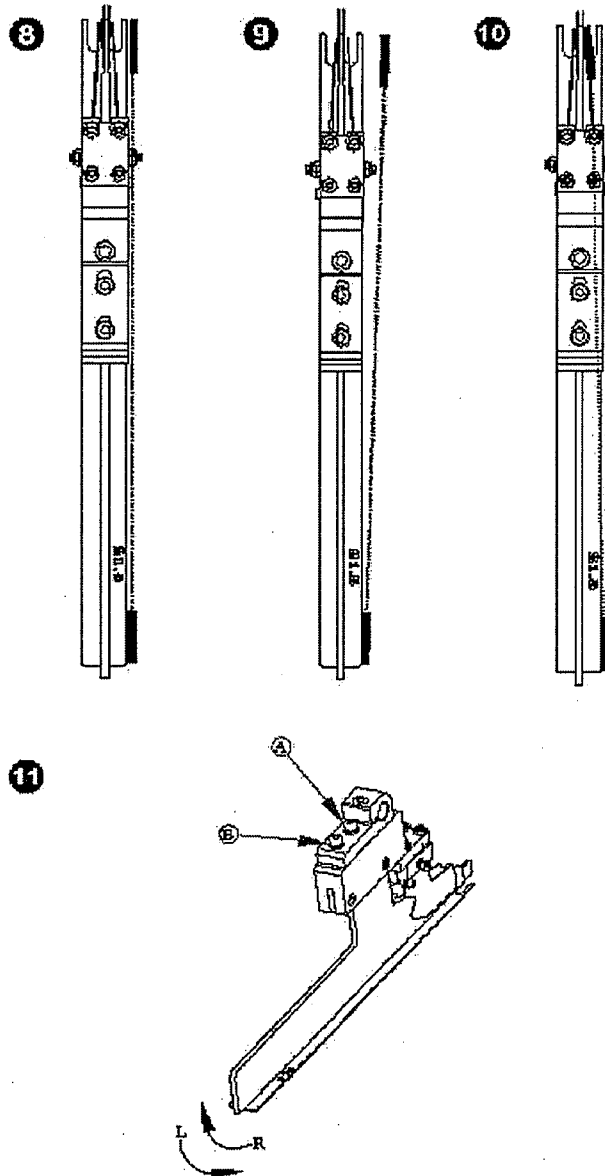
TROUBLESHOOTING

If the line drawn on the paper goes parallel to the guide until the end of the central guide, it means that the square adjustment is correct. (Figure 8)

If the line drawn on the paper slips outside the guide instead of going parallel to the central guide until the end of the guide (Figure 9), please rotate slightly the guide clockwise (arrow R) by loosening the "A" and "B" screws on figure 11.

If the line drawn on the paper slips inside the guide instead of going parallel to the central guide until the end of the guide (Figure 10), please rotate slightly the guide clockwise (arrow L) by loosening the "A" and "B" screws on figure 11.

After these processes, check the correctness of the adjustments you have made by repeating the whole operation.



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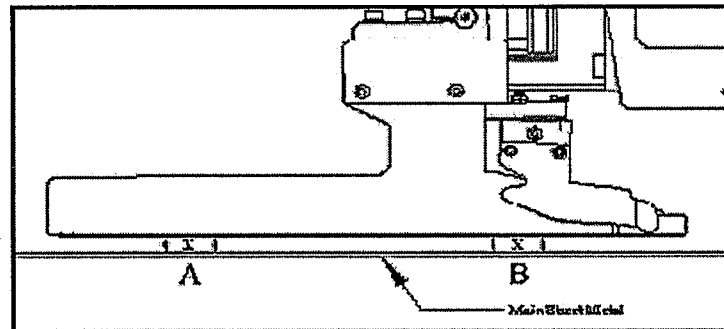
4-17

TROUBLESHOOTING

INSTALLATION OF DOUBLE-SINGLE FILLET APPARATUS TO THE MACHINE AND CLAMP SETTINGS

It is possible to use either double or single fillet apparatus basing on the pocket model to be stitched on the machine. Double and single fillet apparatuses are changed by loosening screws A and B in Figure 2 and installing other apparatus to housing C.

Note: Check if bottom part of apparatus is in parallel with main sheet after changing apparatus.



1 –Points “A” and “B” should be equally away from the ground.

2 –Clamps will be automatically located depending on the apparatus installed on the machine (machine detects this as “D” sensor).

3 –assuming that we work with double fillet apparatus, clamps work basing on rings A2 and B1.
Note: Tensioning piston under clamps pull clamps to each other when double fillet apparatus is installed.

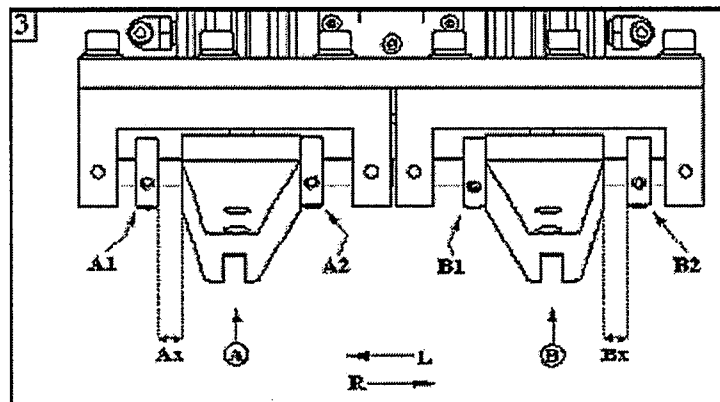
Tensioning piston under clamps separate clamps from each other when single fillet apparatus is installed.

Assuming that double fillet apparatus is replaced with left-hand expanded fillet apparatus, machine will detect only single fillet apparatus and clamps will shift externally to lean on “Ay” ring.

“Ax” distance is as much as the excessive distance of single fillet apparatus.

Clamp based on A1 ring and left single fillet apparatus newly installed on the machine should be 0.5mm and 1mm away from the clamps on both sides. If such a distance is not possible, loosen ring A1 and take necessary direction. In a like manner, if only right single fillet apparatus is installed, make necessary settings

from B2 ring position.



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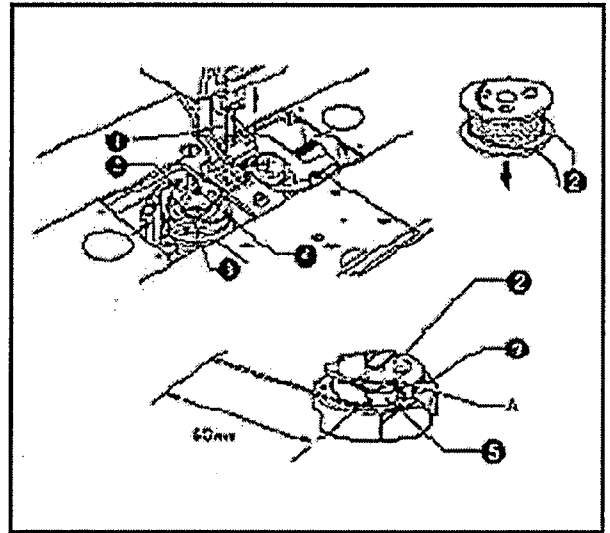
4-18

TROUBLESHOOTING

INSTALLING THE BOBBIN AND THE CUP

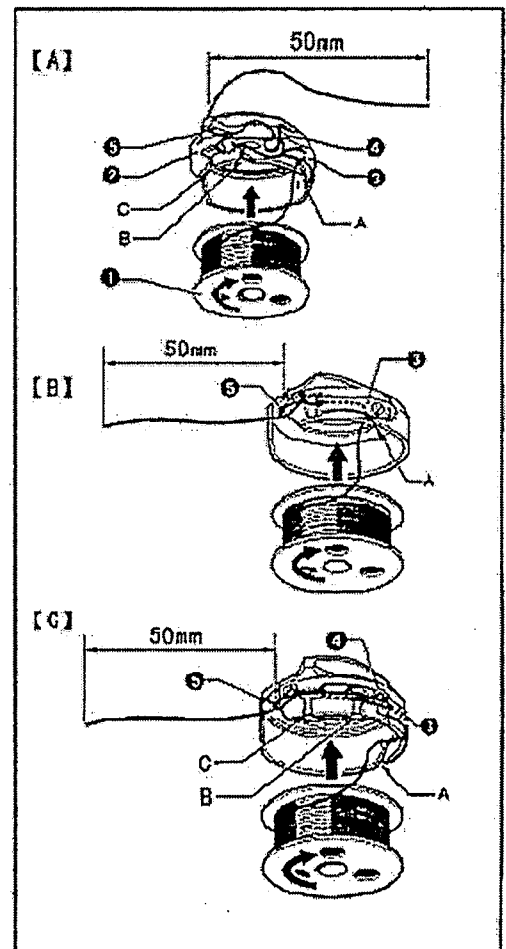
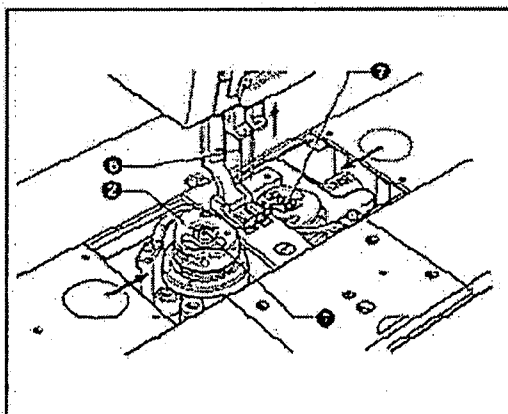
Installing The Bobbin

- 1 – Turn the machine pulley to raise the needle “1” to its highest position.
- 2 – Insert the bobbin “2” into the rotary hook “3” so that the winding direction is as shown in the illustration.
- 3 – Return the rotary hook latch “4” to its original position.
- 4 – Turn the machine pulley to rotate the rotary hook “3” until the tension spring “5” is visible.
- 5 – Pass the thread through slit A in the rotary hook and then pass it under the thread tension spring “5”
- 6 – Pull out the thread to a length of approximately 50 mm
- 7 – Close the slide plates.



Installing The Cap

- 1 – Insert the bobbin “1” into the cap “2” so that the winding direction is as shown in the illustration.
- 2 – Thread the thread by one of the following methods in accordance with the shape of the cap being used.
 - a) Pass the thread through slots A and under the tension spring “3”
 - b) Pass the thread through slots B and C, and then through the thread – loosening – prevention spring “4”
 - c) Pass the thread through the thread hole “5” and pull out about 50 mm



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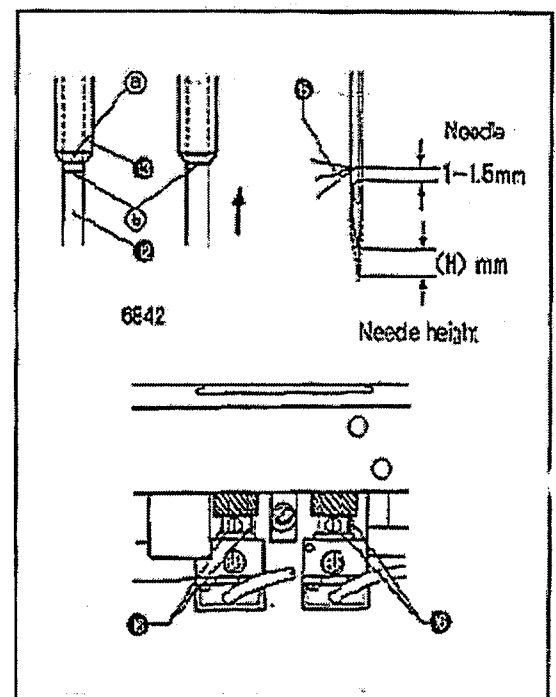
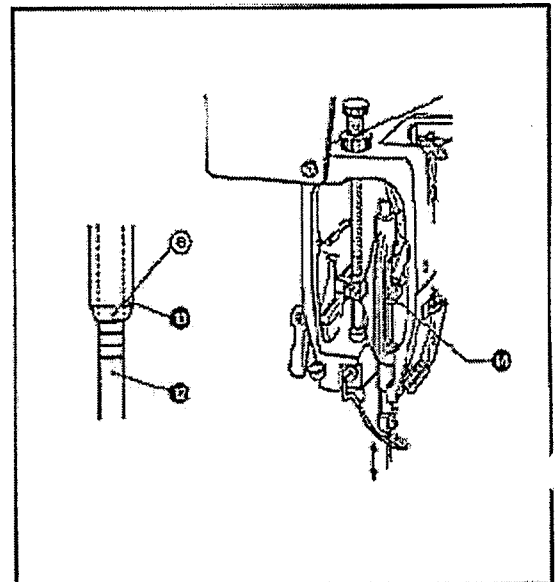
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4-19

TROUBLESHOOTING

NEEDLE BAR HEIGHT

- 1 –Change the stitch length to the smallest possible setting.
- 2 –Open the face plate.
- 3 –Turn the machine pulley to move the needle bar “12” to its lowest position. Reference line a at the top of the needle bar “12” must be aligned with the lower edge of the needle bar supporter “13” at the time.
- 4 –Loosen the screw “14” and move the needle bar “12” up and down to adjust the height.
- 5 –Tighten the screw “14”
- 6 –Turn the machine pulley and check that the needle goes into the middle of the needle hole in the feed dog.
- 7 –Remove the needle plate.
- 8 –Remove the feed dog.
- 9 –Set the stitch length to either 2 (**approx. 2 mm**) or 3 (**approx. 3mm**) on the scale, depending on the model and specifications of the machine.(refer to the table)
- 10 – Turn the machine pulley to raise the needle bar “12” by H mm from its lowest position (refer to the table below for the value for H).
- 11 – The reference line “b” on the needle bar “12” will be aligned with the lower edge of the needle bar supporter ”13”.
 The rotary hook tip “15” must be aligned With the center of the needle at this time.
- 12 – Tilt back the machine head , loosen the three screws “16” , and then align the rotary hook tip “15” with the center of the needle.
- 13 – Tighten the screws “16”
- 14 – The distance from the upper edge of the needle hole to the rotary hook tip “15” must be 1 –1.5 mm when the rotary hook tip “15” is aligned with the center of the needle.
- 15 – Install the feed dog.
- 16 – Install the needle plate.



		6842	
		M	H
Stitch length		2mm	3mm
Needle bar height (H)	needle feed	2.4mm	

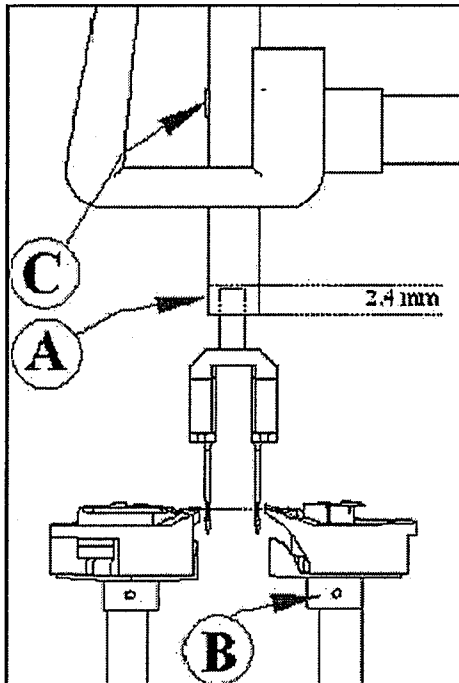
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4-20

TROUBLESHOOTING

ROTARYHOOK TIMING

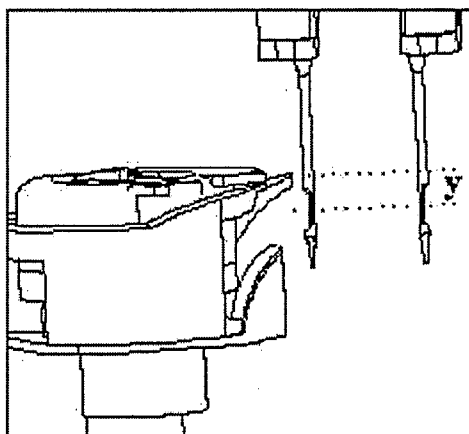
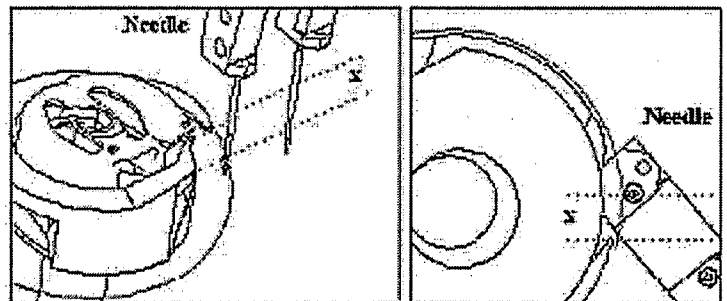


A – When needle rises 2.4 mm above from the bottom dead point, pinhole of rotaryhook point should be 1-1.5mm above pinhole.

B – When needle rises 2.4mm above from the bottom dead point, if pinhole of çapnoz point is backwards or forwards the needle, loosen screw B and align point of çagnoz with the center of needle.

C – When needle rises 2.4mm above from the bottom dead point, if rotaryhook point is at the same center with needle but if the height between pinhole and rotaryhook point is not 1 – 1.5 mm, adjust needle axle so that it can move upwards and downwards.

Rotaryhook is behind the needle, advance rotaryhook by removing screws.



Needle pinhole is very lower than rotaryhook point, screw C and rise needle axle.

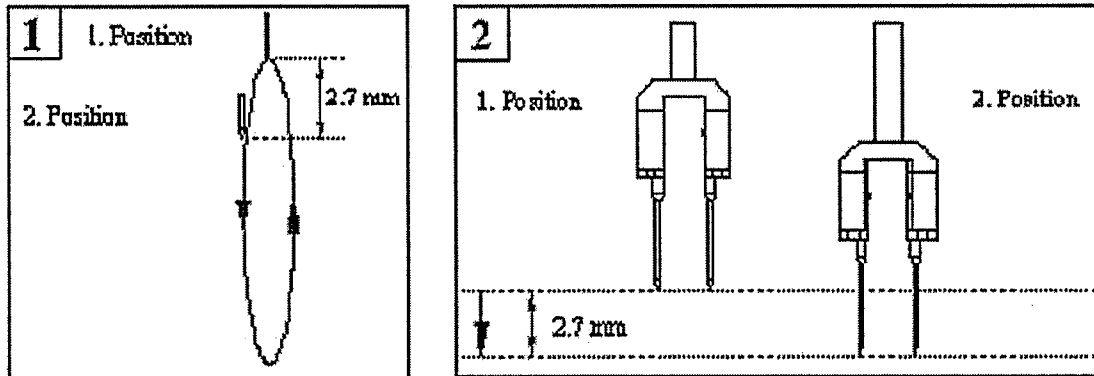
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4-21

TROUBLESHOOTING

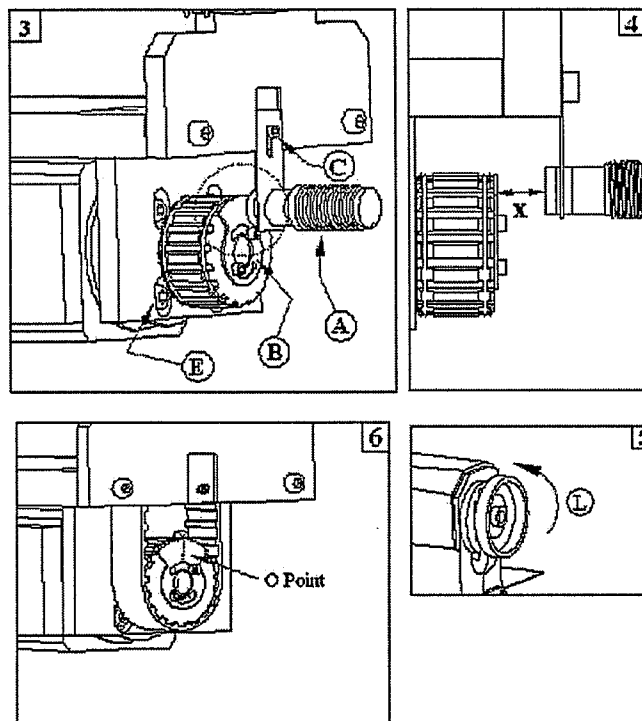
SENSOR SETTINGS OF HEAD POSITION SENSOR



1 –Position of stitching head is adjusted by sensor A in Figure 3. The distance between sensor A and positioning part on gear pulley should be $\text{min} = 1 \text{ mm}$, $\text{max} = 1,5 \text{ mm}$ (Figure 4 , x distance)

2 –Turn hand pulley of machine forwards so that needles face the top point (Figure 5 , arrow direction “L”). When needles reach the top point (Figure 1 and Positions 2 , 1) take from the top point of needles again in the same direction about 2 , 7 mm downwards and stop (Figure 1 and positions 2 , 2.). At that point the center of part shown with “b” in figure 3 should be exactly against sensor A (Figure 5 , point “O”) (necessary settings can be done with screws on “B”).

Note: If slots on part “B” are not sufficient for settings, loosen motor connecting screw “E”



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4-22

TROUBLESHOOTING

THE ISSUES TO BE TAKEN CARE OF ABOUT THE POCKET COVERS

Sewing Quality on the Pocket Cover Applications:

- 1- It depends on the technical specifications of the machinery and the perfection of the settings.
- 2- It depends on the form of the cover and the production quality.
- 3- During sewing, the machine distinguishes the length of the cover when the photocell perceives the side borders of the cover.

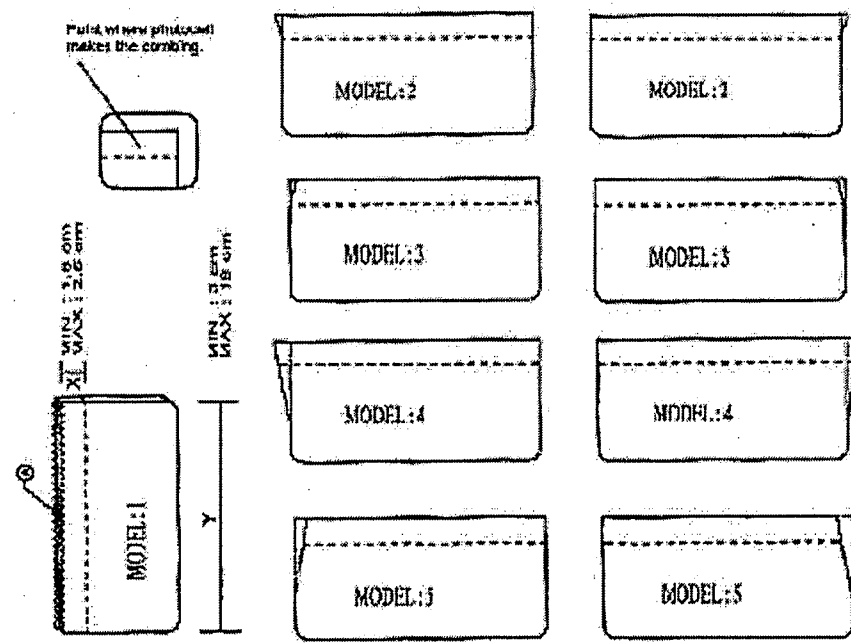
Therefore, the neatness of the side borders affects the quality of the work directly.

Model-1 is a correct example for the cover sewing and neatness of the side borders.

Model-2, Model-3, Model-4, Model-5, are good examples for the wrong cover and side sewings.

This kind of wrong cover sewings blocks the machine to perceive the cover length correctly, that way you will get different results than the original length of the cover. While working with this type of incorrect cover examples, do not change the machine settings unnecessarily. Solve the real problem (cover sewing quality) first.

On the covers sewn from thin and delicate fabrics, always use interfacing or a hardener, a material to keep the cover hard and thick, inside the cover which consists of two separate parts. The place shown with an arrow labeled A. This will provide the cover's form to look neat and does not create puckering or waviness on the cover during sewing.



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4-23

TROUBLESHOOTING

THE ISSUES TO BE TAKEN CARE OF ABOUT THE POKET COVERS

How to Locate the Pocket Carrier on the Clamp?

The A and B stops on the clamp have a role on the beginning and the ending of the cover to be sewn according to the work reference pointers(Lasers).

They are put under the clamps, according to the body reference lamps of the cover that is to be sewn.

According to the right and left position of the body that the cover is to be sewn, the cover is sewn on the exact location on the body, benefitting the A and B leaning points.

The E and F leaning points on the clamp are the stops to be used to adjust the width of the cover by the user after the sewing.

If you are working on a jacket pocket cover on the machine, put the cover on the left clamp,

If you are working on a pants pocket cover on the machine, put the cover on the right clamp, while working.

When the pocket cover is being sewn on the right and left body(fabric), it is sewn by first leaning on the

A leaning point and then on the B leaning point, respectively.

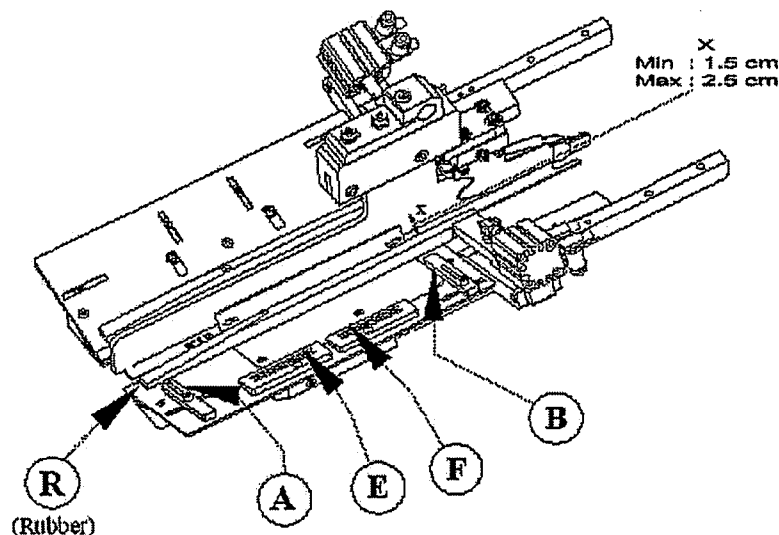
When the cover is located on the clamp, the next action of squeezing the cover and holding arm is activated, by pushing the pedal button.

Note: The rubber(R) under the holding arm here has to be necessarily clean and neat. The cover held by an incorrect rubber, might slip and the sewing is done with breaks, therefore, the sewing outcome will be incorrect.

These rubbers have to be periodically replaced in 3-6 month periods.

Before starting the sewing, we have to correct the cover with a finger or a long object first to the X direction and then to the Y direction, so that we provide the 90 degree refraction.

If this action is done continuously before the sewing of every cover, the beginning and ending sides of the covers will be sewn neatly and cleanly.



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4-24

TROUBLESHOOTING

THREAD SENSOR SENSITIVITY SETTING

Upper thread sensor is an electronic device which detects if any of those threads feeding the needle is broken or is not freely fed to the needle while machine performs stitching as per figure 2-A and stops the machine. During stitching, "thread broke" warning message is displayed on screen although thread is not broken and at that time machine stops or does not stop even if thread is broken (since it does not detect such a break).

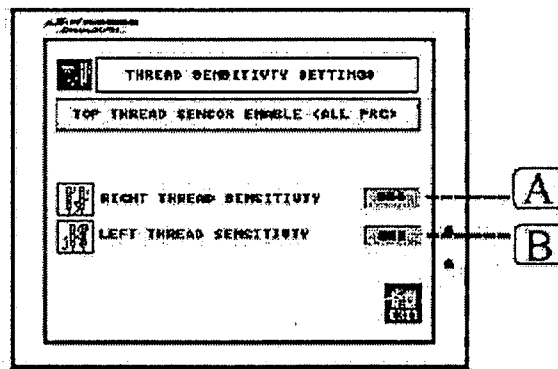
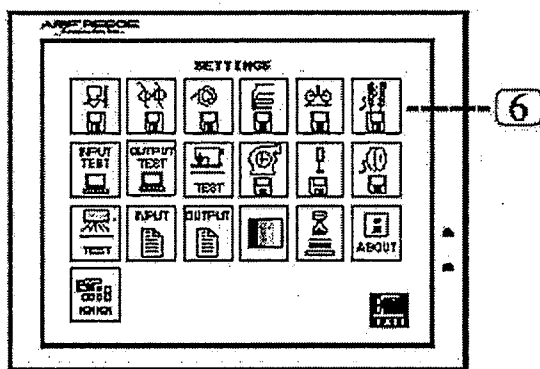
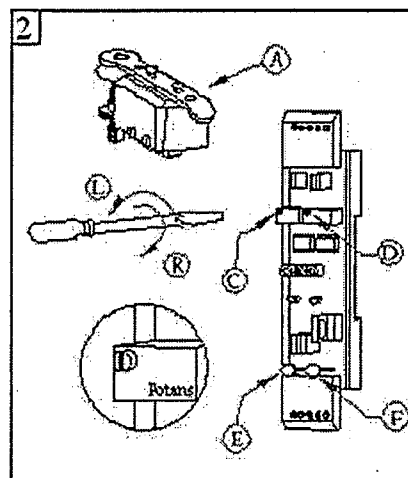
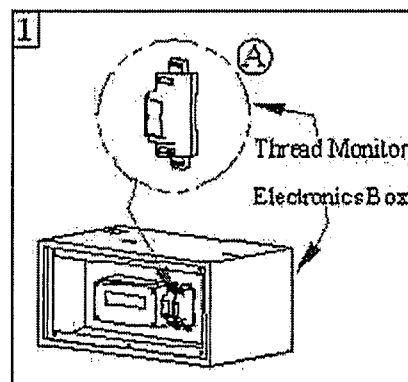
1 – Press button 6 on **Settings** screen. You will see a screen to adjust thread sensor as follows. If a warning message is received indicating that right thread was broken even if it is not;

Increase parameter value "A" . If a warning message is received indicating that left thread was broken even if it is not;

Increase parameter value "B". If machine keeps on stitching although right thread is broken during stitching;
Decrease parameter value "A". If machine keeps on stitching although left thread is broken;

Decrease parameter value "B".

2 – If problem persists even if parameter value has been extremely increased or decreased, then you must recheck sensitivity settings of electronic card where thread sensors are connected with.(Figure1-A)



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4-25

TROUBLESHOOTING

How to adjust sensitivity of electronic cards

Sensor detects vibrations of thread passing over thread sensor and detects flow of thread (consumed for stitching).

We can observe threads flowing over sensor basing on the flashing positions of leds indicated in Figure 2-E for left thread and Figure 2-F for right thread. Such leds should be either always or intermittently on once stitching has started.

If leds are always on with large intervals, sensor supposes that thread was broken during those time when sensor leds were off and stops stitching or if leds are always on during stitching, sensor will not understand or lately understand any broken thread.

Therefore, led position from the very beginning of stitching until the end is of great importance. It should be neither continuous nor intermittent.

Potentiometer on figure 2-c is used for left thread and 2-d for right thread for sensitivity of leds.

Note: Prior to changing potency settings on card, observe leds for a while during stitching and ensure that thread in the mouth of left needle flows over left led while in the mouth of right needle flows over right led.

To understand this, pull one of the threads in the mouth of needle slowly and detect which of those leds react to.

Note: When we turn left the screw on Figure 2 and potency "C" and "D" (direction L) sensor will detect better (leds will be always on) and if we turn right the screw on potency, (direction R) sensor hardly detects (leds will be on intermittently)..