



MODEL LOCKWELT 6000

**LOCKSTITCH POCKET WELT
MACHINE**

PARTS AND SERVICE MANUAL

PART NUMBER 97. 6800.0.001



LIMITED WARRANTY ON NEW AMF REECE EQUIPMENT

Warranty provisions:

A ninety (90) day limited service labor warranty to correct defects in installation, workmanship, or material without charge for labor. This portion of the warranty applies to machines sold as "installed" only.

A one (1) year limited material warranty on major component parts to replace materials with defects. Any new part believed defective must be returned freight prepaid to AMF Reece, Inc. for inspection. If, upon inspection, the part or material is determined to be defective, AMF Reece, Inc. will replace it without charge to the customer for parts or material.

Service labor warranty period shall begin on the completed installation date. Material warranty shall begin on the date the equipment is shipped from AMF Reece, Inc.

Exclusions:

Excluded from both service labor warranty and material warranty are: (1) Consumable parts which would be normally considered replaceable in day-to-day operations. These include parts such as needles, knives, loopers and spreaders. (2) Normal adjustment and routine maintenance. This is the sole responsibility of the customer. (3) Cleaning and lubrication of equipment. (4) Parts found to be altered, broken or damaged due to neglect or improper installation or application. (5) Damage caused by the use of non-Genuine AMF Reece parts. (6) Shipping or delivery charges.

There is no service labor warranty for machines sold as "uninstalled".

Equipment installed without the assistance of a certified technician (either an AMF Reece Employee, a Certified Contractor, or that of an Authorized Distributor) will have the limited material warranty only. Only the defective material will be covered. Any charges associated with the use of an AMF Reece Technician or that of a Distributor to replace the defective part will be the customer's responsibility.

NO OTHER WARRANTY, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, and FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER MATTER IS GIVEN BY SELLER OR SELLER'S AGENT IN CONNECTION HERewith. UNDER NO CIRCUMSTANCES SHALL SELLER OR SELLER'S AGENT BE LIABLE FOR LOSS OF PROFITS OR ANY OTHER DIRECT OR INDIRECT COSTS, EXPENSES, LOSSES OR DAMAGES ARISING OUT OF DEFECTS IN OR FAILURE OF THE EQUIPMENT OR ANY PART THEREOF.

WHAT TO DO IF THERE IS A QUESTION REGARDING WARRANTY

If a machine is purchased through an authorized AMF Reece, Inc. distributor, warranty questions should be first directed to that distributor. However, the satisfaction and goodwill of our customers are of primary concern to AMF Reece, Inc. In the event that a warranty matter is not handled to your satisfaction, please contact the appropriate AMF Reece office:

Europe

Prostejov, Czech Republic

Phone: (+420) 582-309-286

Fax: (+420) 582-360-608

e-mail: service@amfreece.cz



Warranty Registration Card

(Please Fax or Mail immediately after installation)

Note: All Warranty Claims Void, unless Registration Card on file at AMF Reece HQ

Machine model number:

(S101, S100, S104, S105, S211, Decostitch, S4000 BH, EBS Mark II, etc)

Manufacturer's serial or production number:

Installation Site Information:

Customer's Name:

Customer's Mailing Address:

Customer's Telephone Number:

Supervising Mechanic's or Technician's Name:

Signature of Supervising Technician:

AMF Reece Technician's Name:

AMF Reece Technician's Signature:

Type of garment produced at this location?

Average Daily Production Expected from this machine?

(number of buttonholes, jackets sewn, pants produced, buttons sewn, etc)

Any special requirements required at this location?

What other AMF Reece Machines are at this location?

How can we serve you better?

Tovární 837, 796 25 Prostějov, Czech Republic

Fax: +420 582 360 606, e-mail: service@amfreece.cz, website: www.amfreece.com

TABLE OF CONTENTS

	PAGE
SAFETY	
1. Introduction	1-1
2. General Safety Warnings	1-1
3. Safety symbols	1-2
4. Points to be especially considered by administration owner	1-3
5. Maintenance personnel and specialized personnel	1-3
6. Specialized personnel	1-4
7. Proper use	1-4
8. Technical data	1-5
9. Actions to take in case of scraping the machine	1-5
10. Transport, packing and storing	1-6
11. Work symbols	1-7
ASSEMBLY	
1. Assembling and preparing for first operation	1-8
2. Assembly	1-8
3. Installing side supporting boards	1-8
4. Installing vacuum (absorption) connection	1-9
5. Installing stacking module	1-10
6. Installing sewing thread path	1-11
FIRST COMMISSIONING	
1. Switching on/off the machine	1-13
2. Checking panel connection	1-14
3. Preparing machine for sewing	1-15
4. Inserting the needle	1-15
5. Winding (reels of) lower thread / tension adjustment of lower thread	1-16
6. Installing bobbin case & tension adjustment of lower thread	1-17
7. Attaching upper thread / tension adjustment of upper thread	1-18
8. Replacing tape fleece band	1-19
PEDAL BUTTONS & FUNCTIONS	
1. Functions of foot switch	1-20
2. Standard functions of foot switch	1-21
MACHINE PANEL	
Making Pocketwelts With Flap	1-24
Making Regular Pocketwelts	1-25
Angle Normal Pocket Operation	1-26
Making Slanted (Angle) Pocketwelts With Flap	1-28
Normal Pocket Work By Using 8 Cycles	1-30
Zipper Pocket Operation	1-31
Robot System Operation	1-32
Sewing function icons	1-33
Setting Screens	1-37
Top Thread Trimmer Settings	1-38
Bottom Thread Trimmer Settings	1-38
Auto Tape Feeding Adjustments	1-38

TABLE OF CONTENTS

	PAGE
Stacker Settings	1-39
Garment Roller Settings	1-39
Top Thread Monitor Sensitivity Settings	1-40
Input Test	1-40
Output testl	1-40
Testing Sewing Head and Motor	1-41
Vacuum Settings	1-41
Dart Stretcher Settings	1-41
Bobbin Length Settings	1-42
Testing the Flap Photocell	1-42
To run the test program	1-42
PLC Input List	1-43
PLC Output List	1-44
Screen Contrast Settings	1-44
Work Counter, Date & Time Screen	1-44
Information Screen	1-45
Main Settings	1-45
Marking Lihgts Settings	1-47
Corner Knife Settings	1-47
Clamp Settings	1-48
Saving Parameters	1-48
Download Adjustment	1-49
Sew Motor (Efka) Parameters	1-49
Servo Parameters	1-49
Panel Parameters	1-50
Motor Errors on the PLC	1-50
Aditonal Settings	1-50
Photocell Selection and Connection	1-52
Automatic Zipper Attachment System Settings	1-53
Angle Pocket System Enabled/Disabled	1-53
Auto Loaders Enabled/Disabled	1-54
Cycle Operation by 8 Enable/Disable	1-44

MACHINE CLEANING & LUBRICATING

1. Cleaning the machine.....	1-55
2. Cleaning the hook and base	1-57
3. Checking oil level	1-58
4. Air pressure setting of machine and cleaning pressure tube	1-58
5. Cleaning maintenance unit air filter	1-59
6. Lubricating clamp feet.....	1-61
7. Lubricating and cleaning the mechanisms on sewing machine.....	1-61
8. Lubricating all joints and moving parts on stacking machine	1-62
9. Lubricating corner knife mechanism	1-63
10. Periodical lubrication of machine	1-63

SAFETY

1. INSTRUCTIONS

- This machine has been produced in accordance with European Union directives mentioned on Compliance and Manufacturer's Declaration.
- 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!
- Always observe valid provisions of local professional organizations and other inspection authorities.

2. GENERAL SAFETY WARNINGS

- Machine may only be used by operators and technical specialists trained accordingly!
 - Safety rules and operating directions shall be read prior to operating the machine!
 - Danger and safety warnings about machine shall be taken into consideration!
 - 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.
 - 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!
 - Daily maintenance may only be performed by trained individuals!
 - 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!
 - Repair and special maintenance works may only be performed by specialist personnel or trained personnel.
 - Works regarding electrical installations may only be performed by qualified specialists!
 - No operation may be performed on parts and hardware under tension! Exceptions are according to directives regarding EN 50110.
 - 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.

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.

SAFETY

4. POINTS TO BE ESPECIALLY CONSIDERED BY OWNER

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

5. MAINTENANCE PERSONNEL AND SPECIALIZED PERSONNEL

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

SAFETY

6. SPECIALIZED PERSONNEL

- 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.
- Specialized personnel shall be obliged to observe the following points:
- He/she observe safety measures in instructions manual for all operations!
- He/she switch off the main switch prior to adjustment and repair and shall take all safety measures against switching on of the machine!
- Operation with parts and equipments under tension shall be prohibited!
- Exceptions are regulated by EN 50110 instructions.
- Protection cover shall closed after repair and maintenance works!

7. PROPER USE

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

SAFETY

8. TECHNICAL DATA

Speed:.....2100 minutes⁻¹
Length of Stitch:.....2,5 mm
Type of Stitch.....301
Needle System:.....134
Needle Size :80 – 110 Nm
Stitching Motor:.....See maintenance manual of motor
Electrical voltage230 V, 50 – 60 Hz alternate voltage
Power requirement:.....1,2 kW
Working air pressure:.....minimum 6 bar
Air consumption:.....about 5 3 /Time

Data on Noise:

Emission noise pressure level at 2000 minutes⁻¹ stitching number at plant:..... $L_{pA} = 74$ dB (A)

(noise measurements acc.to DIN 45 635-48-A-1, ISO 11204, ISO 3744, ISO 4871)

Dimensions of Machine:

Length:about 1300 mm
Width:about 1350 mm
Height:about 1300 mm
Table height: 850 mm

Net weight: 234 kg

- Technical modifications are reserved.
- $K_{pA} = 2,5$ dB

9. ACTIONS TO TAKE IN CASE OF SCRAPING THE MACHINE

- Actions to take in case of scraping the machine.
- Properly scraping the machine shall be borne by the customer.
- Materials used in production of machine consist of steel, aluminum, brass and various plastics.
- Electrical installation is of plastic and copper.
- Machine is scraped in accordance with provisions of regionally valid environment protection legislation and possibly by the help of a private company.
- Lubricated parts shall be removed in accordance with local environment protection instructions.

SAFETY

10. TRANSPORT, PACKING AND STORING

- **Transport in delivery of machine to customer**
- Transport in delivery of machine to customer is not included in manufacturer's warranty.
- Please ensure that machine is only transported in straight form.
- **Disposal of Packing**
- Packing of machine consists of wooden crate, paper, cardboard and nylon.
- Customer is responsible from proper disposal.

Storing

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

SAFETY

11. WORK SYMBOLS

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



- Warning, Information



- Cleaning, Maintenance




- Lubricating



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

ASSEMBLY

1. ASSEMBLING AND PREPARING FOR FIRST OPERATION

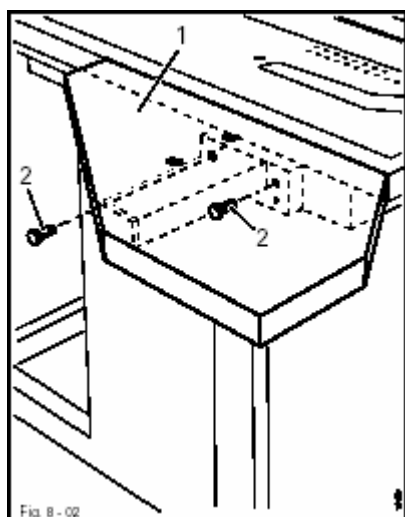
- After unpacking the machine, check if there is any damage due to transportation. Please notify transporter and AMF REECE representative of any possible damage.
-  Machine must be assembled and operated by only qualified personnel! All relevant safety regulations specified herein shall be strictly observed!

2. ASSEMBLY

- 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).
- Machine should be lifted by forklift machine from transport pallet.
- 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.

3. INSTALLING SIDE SUPPORTING BOARDS

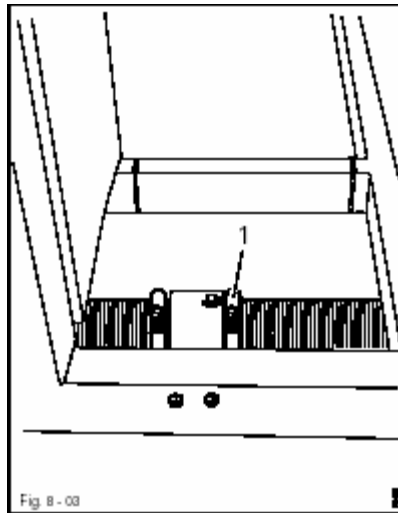
- Side Supporting Plate is mounted.
- Side Supporting Plate is attached to sewing machine table with screws nr. 2 in right and left lugs.



ASSEMBLY

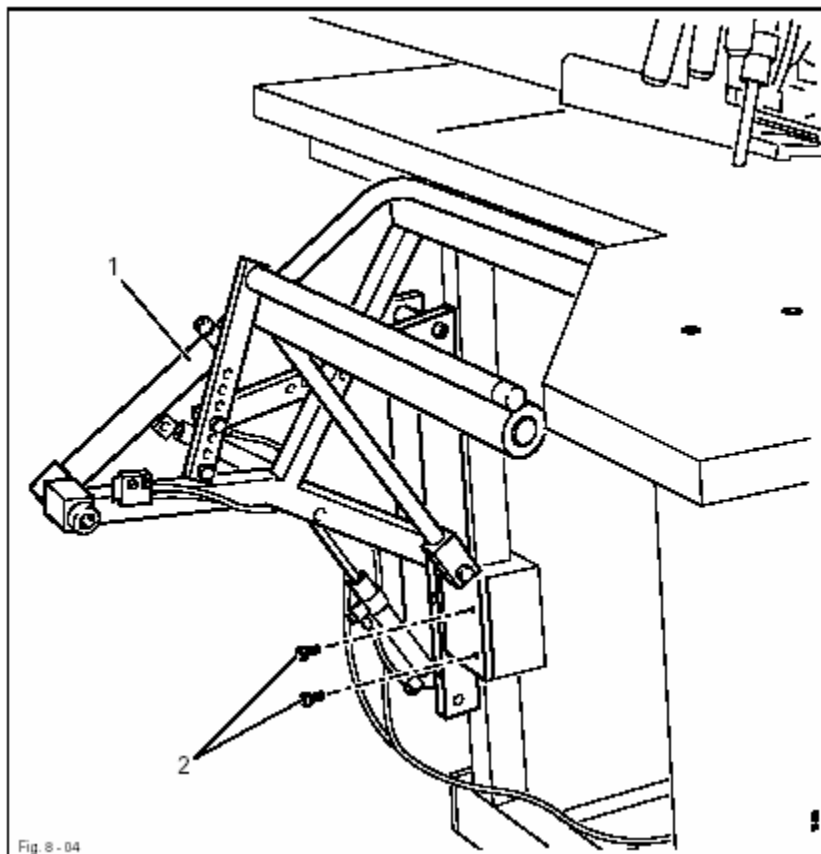
4. INSTALLING VACUUM (ABSORPTION) CONNECTION

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



ASSEMBLY

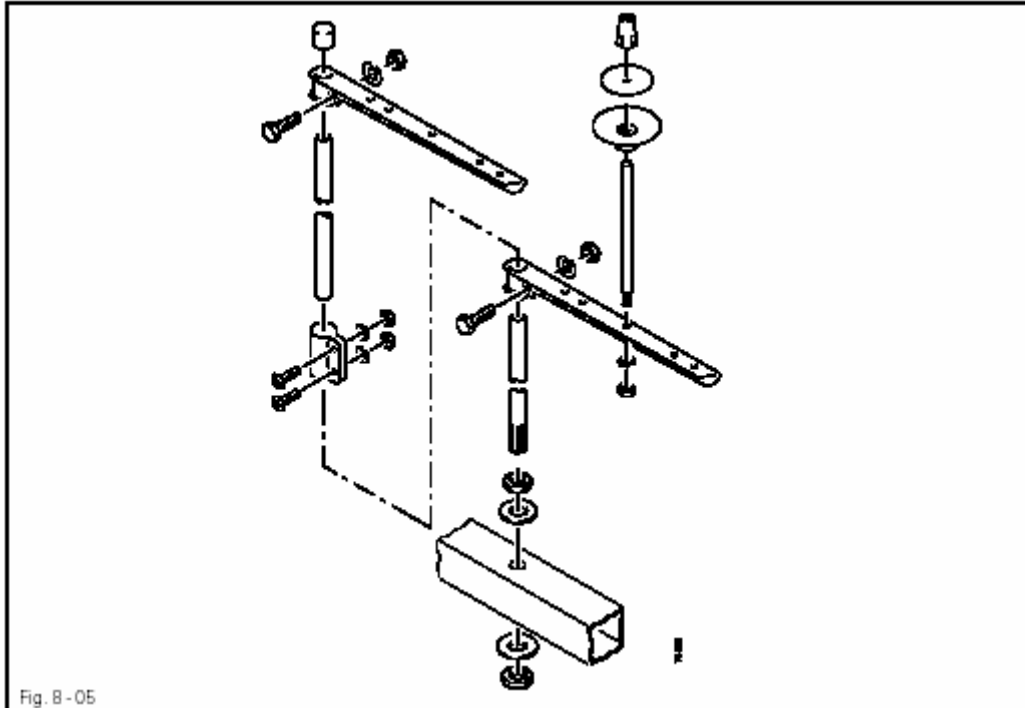
5. INSTALLING STACKING MODULE



- Stacking module is screwed to the installation position on the leg of machine stand through screw nr.2 (four screws).
- Pneumatic hoses are connected according to connection scheme.

ASSEMBLY

6. INSTALLING SEWING THREAD PATH



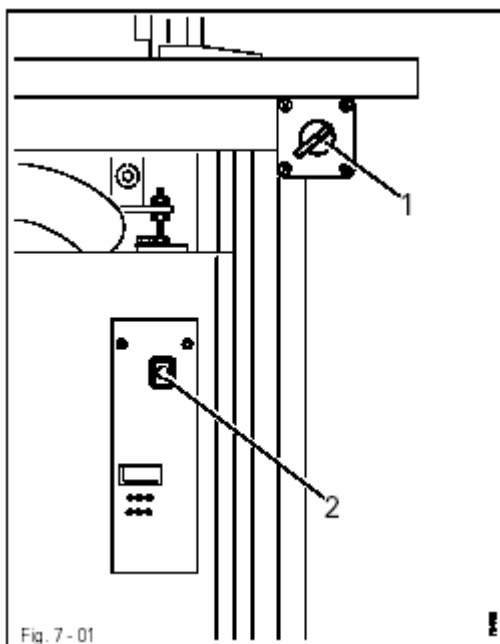
- Rod of sewing thread spool is installed as shown in the figure.
- Attach properly the thread reels to sewing thread spool.

FIRST COMMISSIONING

- Turn the main switch nr.1 to switch on and off the machine.



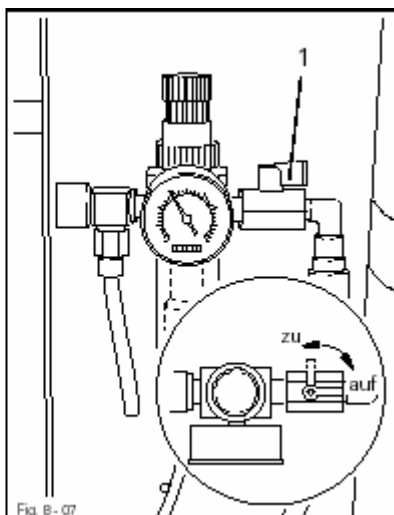
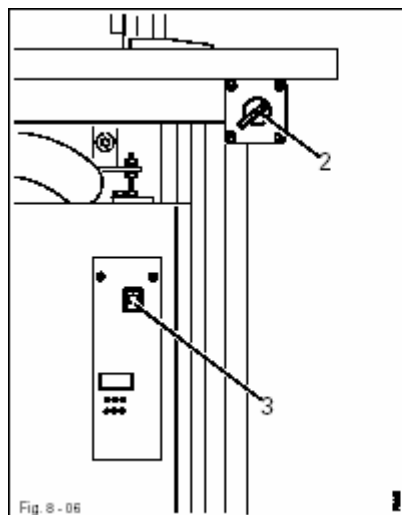
Motor switch shall always be at position nr.2



- Completely clean the machine and meanwhile check if there is any possible damage at electricity cables and pneumatic connection hoses.
 - Check if available voltage is the same with connection voltage of machine (see Technical Data of Machine).
 - In case of discrepancy, **do not** operate the machine!
 - Allow only specialists to connect the machine to the electric network.
 - Lubricate the machine or put lubricating oil in the machine. (See parts related to Maintenance and Cleaning in Section 1).
 - Connect the machine to compressed air system.
 - Nanometer on the machine shall read air of 6 bars.
- If necessary, adjust this value (see section related to air pressure control/adjustment).

FIRST COMMISSIONING

1. SWITCHING ON/OFF THE MACHINE



- Switch on main air inlet nr. 1
- Check and if necessary, adjust air pressure.
- Adjust air pressure to minimum 6 bars.
- Switch on the Main Electricity Switch of machine (figure nr. 2) to 'I' position.



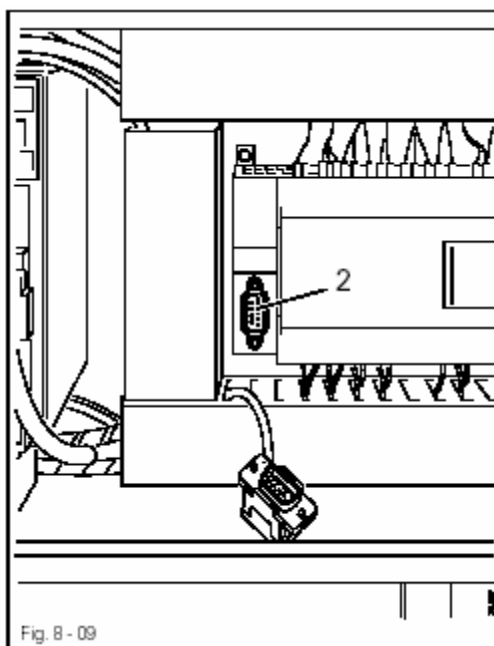
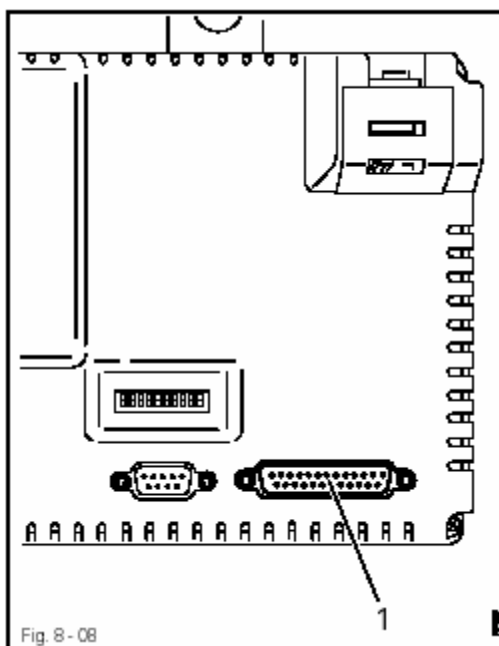
- Motor switch shown in figure nr. .shall always be in open position (I position).
- Turn the main switch to '0' position (figure nr.2) to switch off the machine and main air inlet (figure nr.1) must be closed.

FIRST COMMISSIONING

2. CHECKING PANEL CONNECTION

- If panel cable is not installed, socket nr.1 must be fixed in place and screwed as shown in the figure below.

(One end of communication cable must be connected to COM2 socket and the other end to communication socket of PLC inside Electronic control box).



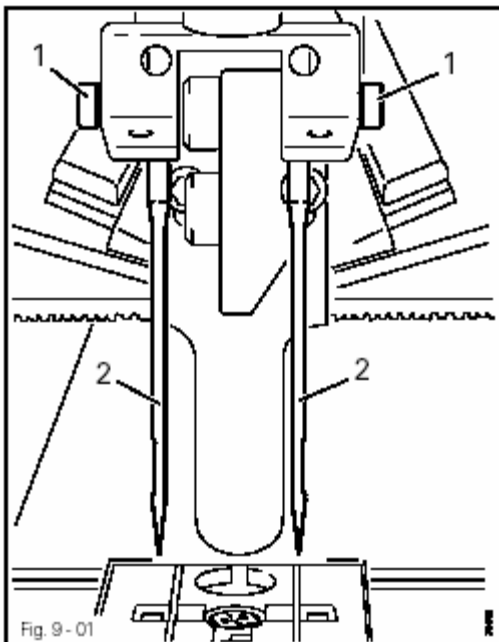
FIRST COMMISSIONING

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.

FIRST COMMISSIONING

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

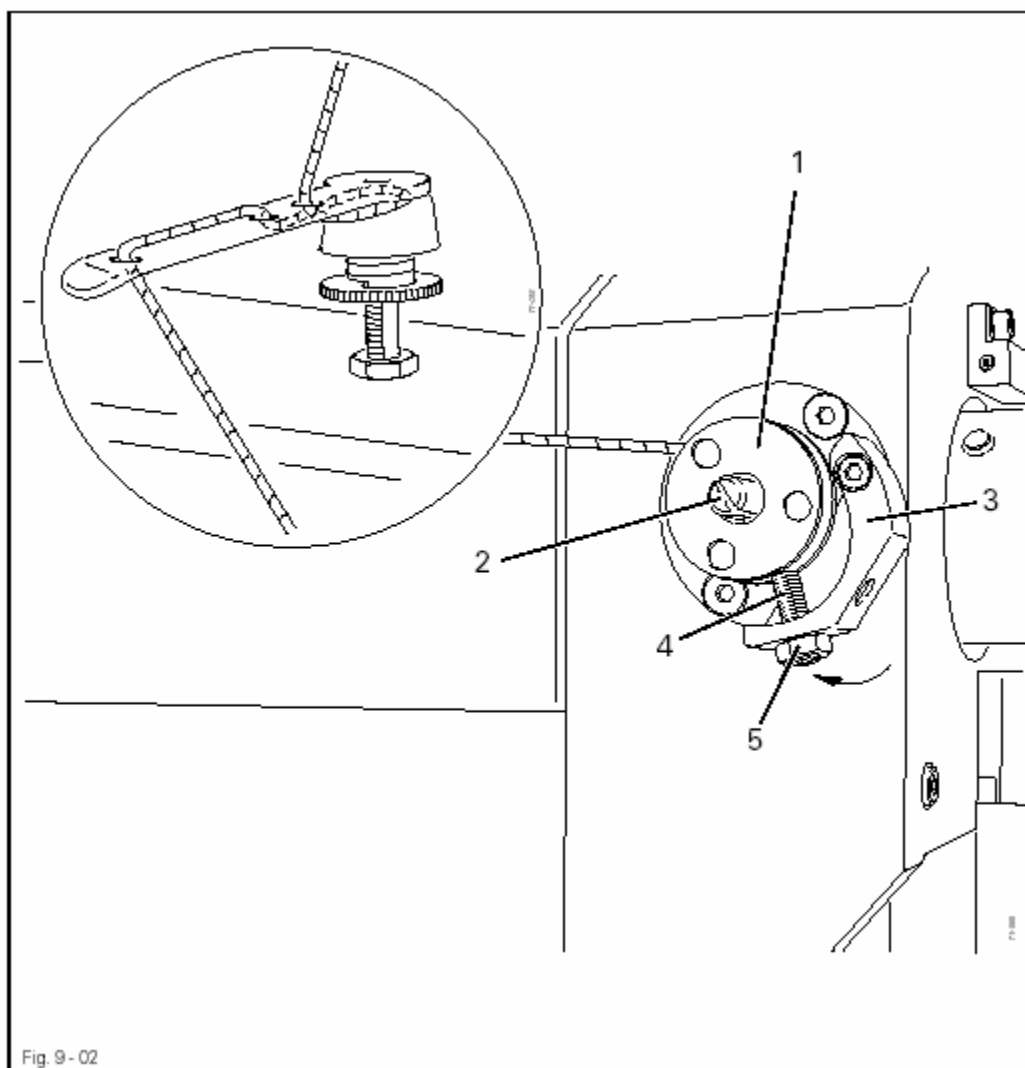
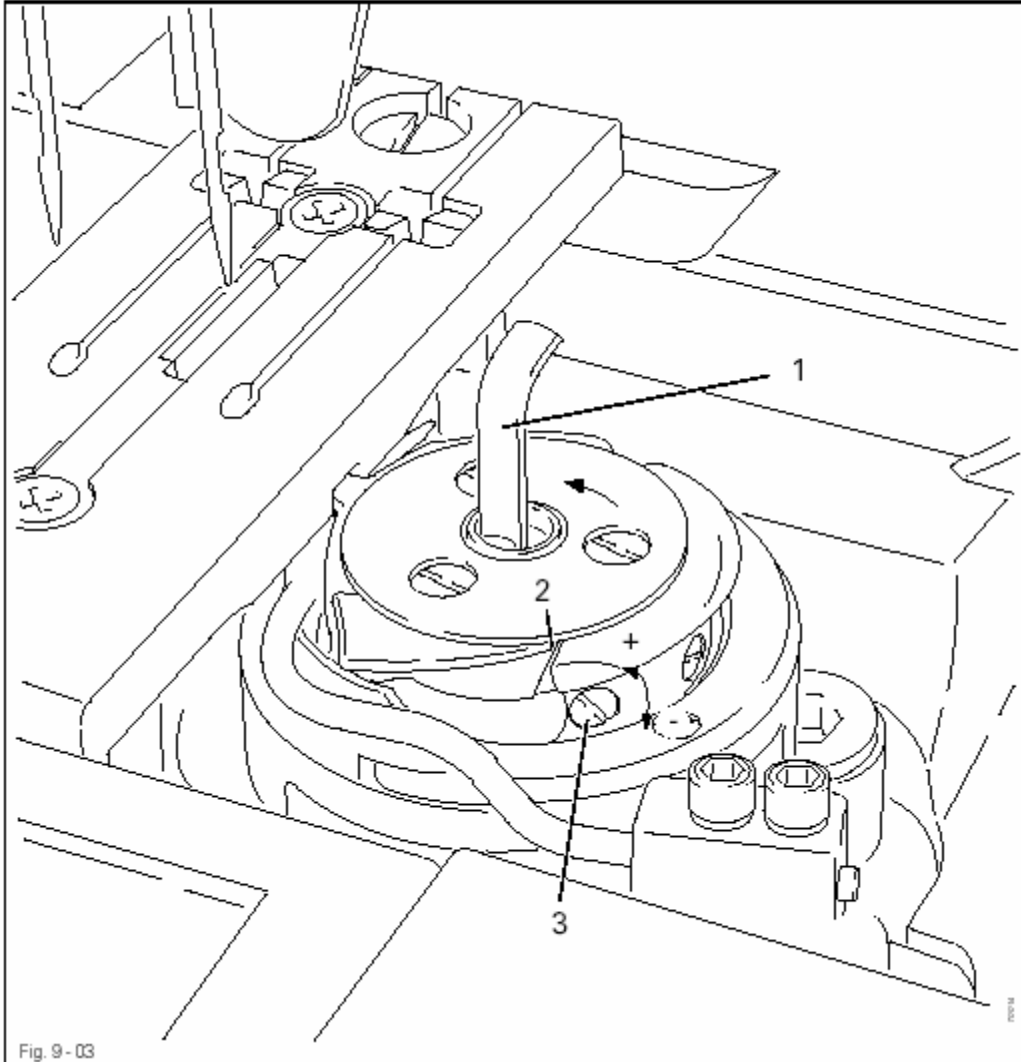


Fig. 9-02

- 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.

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.

FIRST COMMISSIONING

7. ATTACHING UPPER THREAD / TENSION ADJUSTMENT OF UPPER THREAD

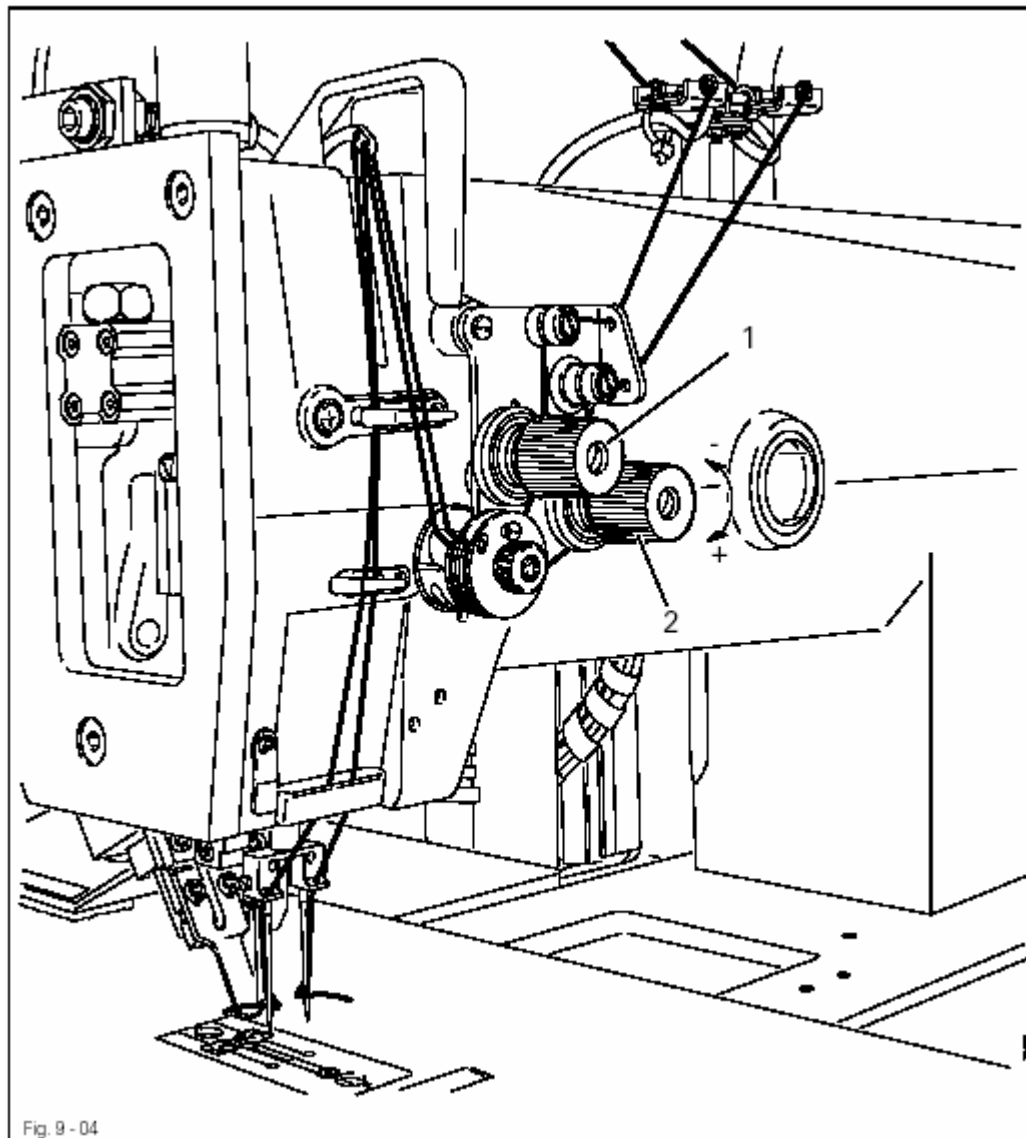
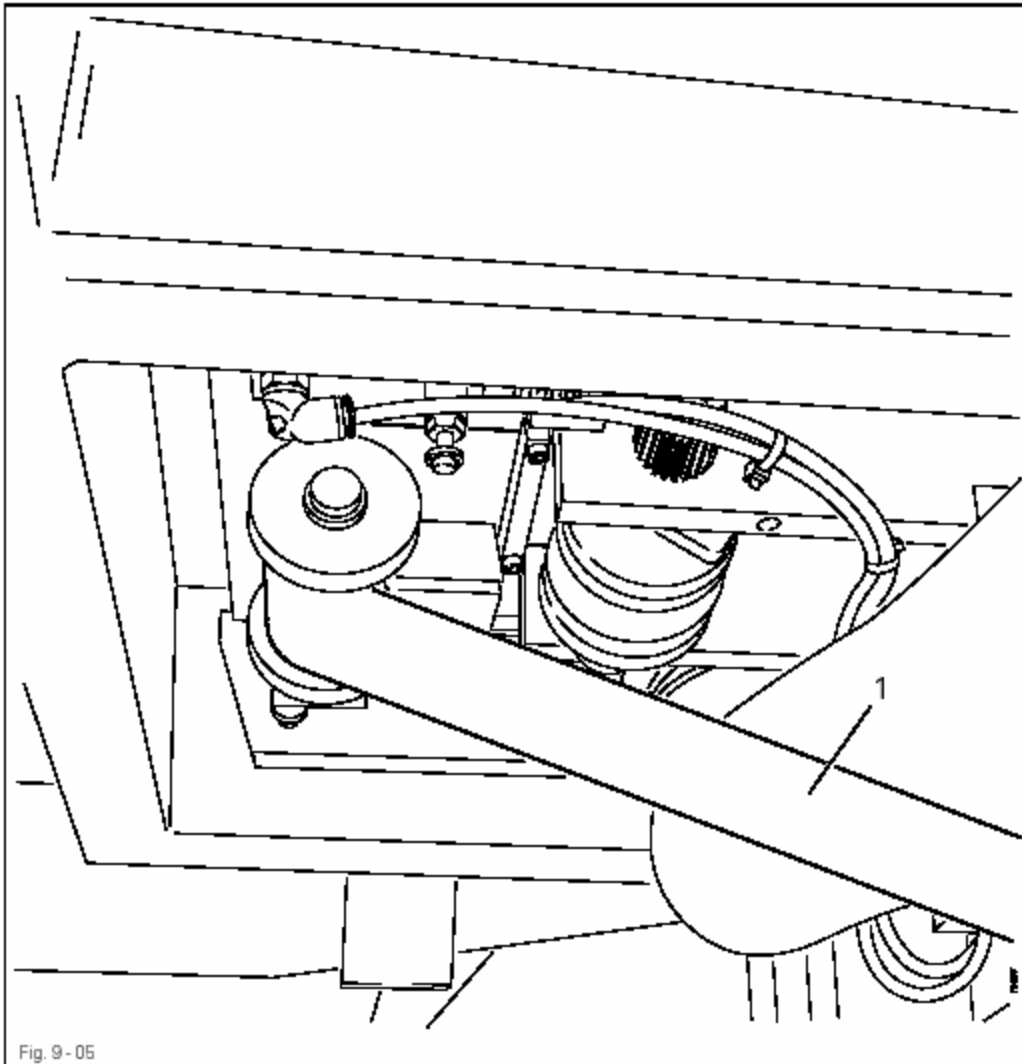


Fig. 9 - 04

- 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).

FIRST COMMISSIONING

8. REPLACING TAPE FLEECE BAND



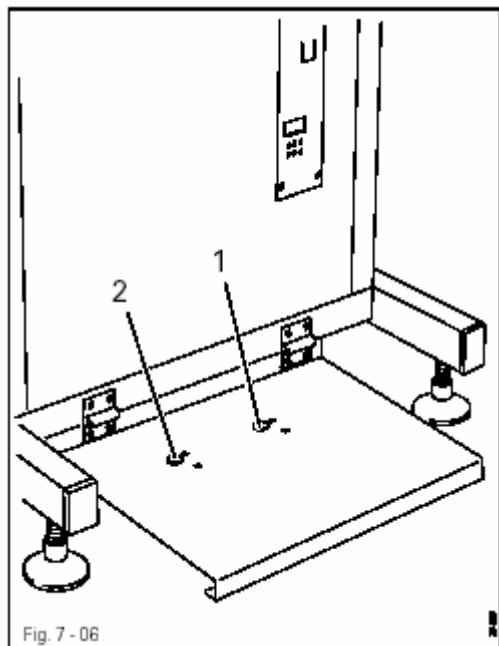
- Insert tape fleece band as shown in figure 9-05.
- Operate the machine.
- Find 'cut and drive fleece band' in any pocket program as shown in figure below:



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

Tape is driven and cut.

PEDAL BUTTONS & FUNCTIONS



1. FUNCTIONS OF FOOT SWITCH

Functions of foot switch nr. 1:

- If foot switch nr.1 is pressed when the machine is powered for the first time, Clamp carrier system will drive itself to (front) Home Sensor.
- It prepares the machine for sewing according to program and settings selected from machine panel.
- If clamp carriage is at the back and foot switch nr.1 is pressed, carriage comes forward.

Functions of foot switch nr. 2:

- It gradually returns functions made with foot switch nr.1.
- If foot switch nr. 2 is pressed after starting to sew, sewing machine is urgently stopped.

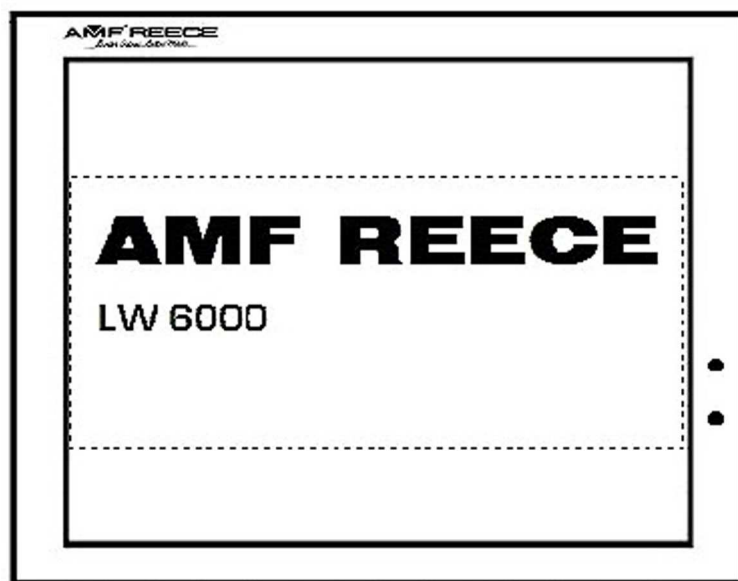
PEDAL BUTTONS & FUNCTIONS

2. STANDARD FUNCTIONS OF FOOT SWITCH NR. 1.

Operation of foot switch:

- 1.** Fabric Tension rod or Vacuum Motor is operated according to the selected position on control display of machine.
- 2.** Clamp carriage comes from back to front.
- 3.** Clamp goes down (according to the selected position of control display of machine: Clamps simultaneously or first to right and then to left or first to left and then to right)
- 4.** Front folding manual goes down and folding sheets operate.
- 5.** Cover holding arm operates (according to the selected position on control display of machine: cover arms simultaneously or first to right and then to left or first to left and then to right)
- 6.** Stitching is started.

MACHINE PANEL



When the machine is turned on, the first screen is AMF Reece logo.

It is necessary to touch any spot on the user friendly control panel to enter the main menu screen.

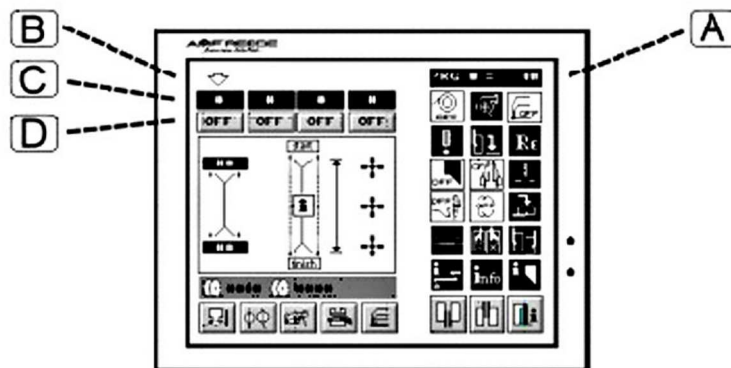
MACHINE PANEL

A - You can enter program number which is desired to be worked.

LW-6000 comes with 10 main sewing programs (20 in AP version).

Each program contains a further 4 pocket styles providing a total of 40 memory presets that can be programmed individually.

4 styles under each main program can be used for cycle sewing different types of pocketwelts.



Main programs 1 through 7 are used for regular pocketwelting.

Main programs 10, 11, and 12 are used for pocketwelting applications with flap.

Main programs 20 through 26 are used for angle pocketwelting. (Please note that you can only see these programs on AP version LW-6000 machines.)

Main programs 30, 31, and 32 are used for angle pocketwelting applications with flap. (Please note that you can only see these programs on AP version LW-6000 machines.)

It should be noted that each of the above programs have 4 pocket styles that can be preset for various applications.

B - The arrow icon above the pocket styles shows the next welt style in the cycle sewing. Please press on the number requested to move the arrow. (Please note that the selected pocket style needs to be in ON position otherwise the machine will not sew.)

C - To change the cycle sewing sequence of the 4 pocket styles. Some examples as shown below:

Example 1:	1	2	3	4
Example 2:	4	3	2	1
Example 3:	1	1	2	1
Example 4:	2	2	2	2
	:	:	:	:
	:	:	:	:

D - To activate the pocket styles required to be used in the cycle sewing sequence. (Please note that at least one pocket style Needs to be in ON position.)

Example 1:	ON	ON	ON	ON
Example 2:	OFF	ON	OFF	ON
Example 3:	OFF	ON	OFF	OFF
Example 4:	OFF	OFF	ON	ON
	:	:	:	:
	:	:	:	:

MACHINE PANEL

Making Pocketwelts With Flap

A - Main programs 10, 11, and 12 are used for Pocketwelting applications with flap. It is not possible to enter a welt length manually because it will be determined by the photocell automatically. You will see the screen on the right once you enter programs 10, 11, and 12.

B - To adjust the position of the start corner knife. This parameter can be changed in multiples of 0.5 mm to move the start corner cut inside or outside of the welt.

C - To adjust the position of the stop corner knife. This parameter can be changed in multiples of 0.5 mm to move the stop corner cut inside or outside of the welt.

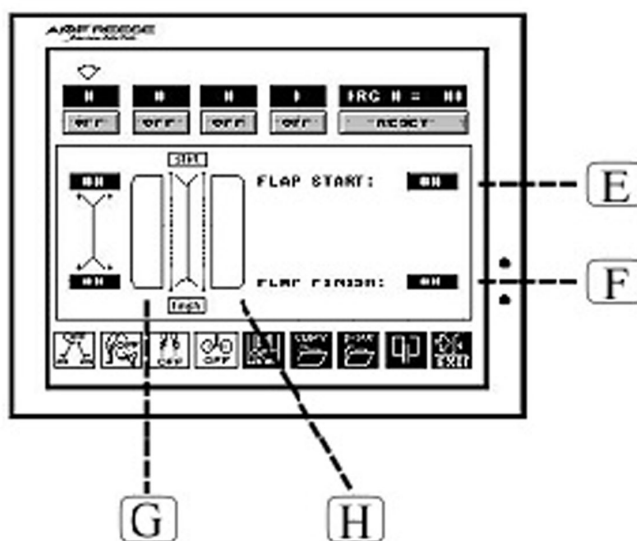
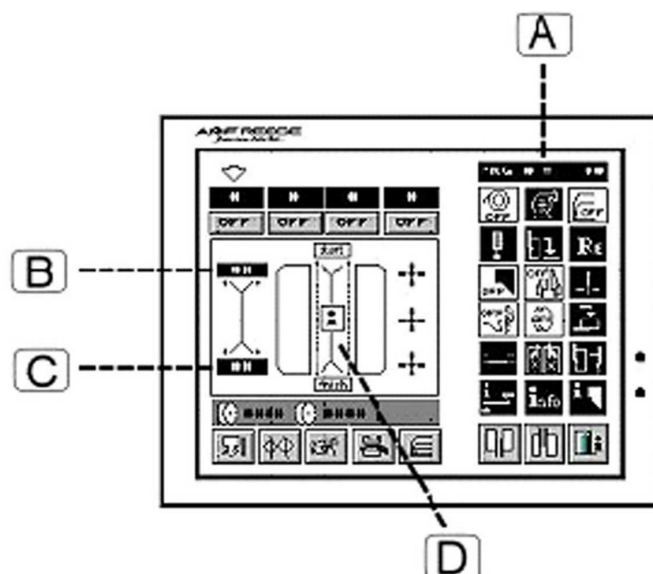
D - The following screen will appear if you press this icon.

E - To adjust the length of overlapping stitching on the flap start. This parameter can be changed in multiples of 0.5mm to adjust the stitching before or after the flap start is detected by the photocell.

F - To adjust the length of overlapping stitching on the flap finish. This parameter can be changed in multiples of 0.5mm to adjust the stitching before or after the flap finish is detected by the photocell.

G - Cover picture appearing on the left of panel indicates that photocell connection on the left hand of Photocell Section in Setup menu is activated or Double Photocell connection is activated.

H - Cover picture appearing on the right of panel indicates that photocell connection on the right hand of Photocell Section in Setup menu is activated or Double Photocell connection is activated.



MACHINE PANEL

Making Regular Pocketwelts

A - Main programs 1 through 7 are used for regular Pocketwelting without flaps. (Please note that each of the 7 programs have 4 pocket styles that can be individually programmed for various parameters.)

Using Active Marking Lights while making welts

B, C, & D can be used for selecting one of the three active marking lights (front, rear and middle) for positioning of the pocketwelt on the fabric. This eliminates the necessity of manual marking on the fabric panel and increases the productivity of the operation. The marking lights on this machine is called “active” because their positions can be changed from the control panel without physically moving them.

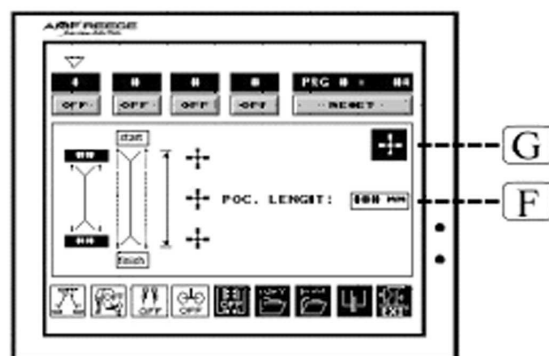
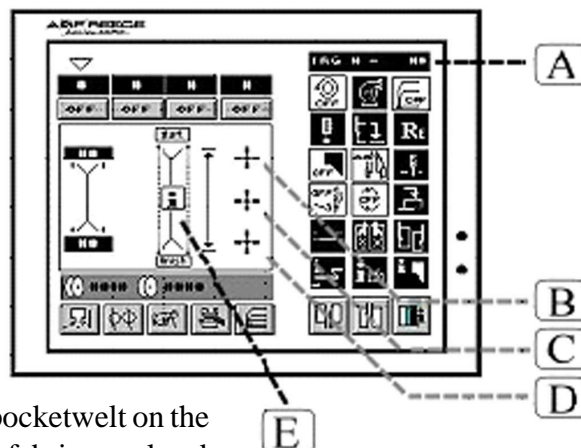
B - If selected the pocketwelt stitching will start from the position of rear marking light

C - If selected the pocketwelt stitching will be equally divided in both sides of the middle marking light

D - If selected the pocketwelt stitching will finish at the position of front marking light

In practical terms, the middle marking light is used as a guide for trouser back pocket applications where as the front and rear marking lights are used for jacket side pocket applications. The marking lights are generally matched against the dart seam on trousers or jackets.

E - The following screen will appear when you touch the program information icon

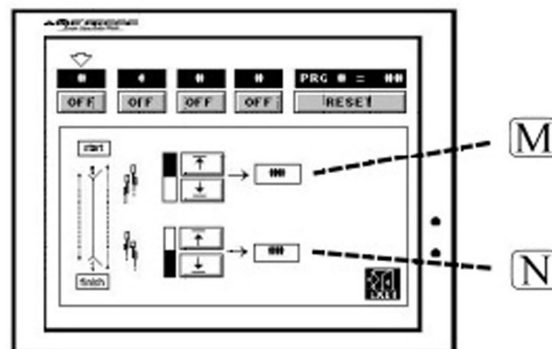


F - You can adjust the length of the pocketwelt in between 25 mm and 195 mm.

G - Touching this icon opens the laser adjustments screen which enables the user to alter the active marking lights position settings.

M - Normally the stitching would start at the position of rear marking light. It is possible to change the start position by pressing and icons in millimeters.

N - Normally the stitching would finish at the position of front marking light. It is possible to change the finish position by pressing and icons in millimeters.



MACHINE PANEL

Angle Normal Pocket Operation

You can work the Angle Normal pockets at Program No : 20,21,22,23,24,25,26.

A – Program 20, 21, 22, 23, 24, 25 and 26 are the memory areas reserved for Angle Normal pocket works. (There are 4 sub programs under each program.)

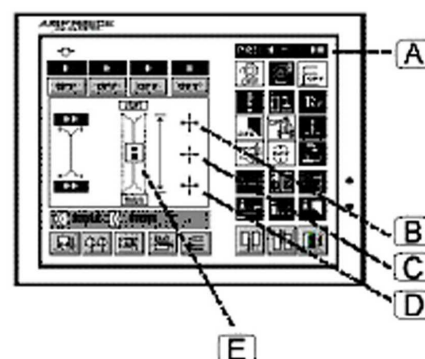
You can sew the length of the pocket you would like to sew by defining at “mm” unit type.

B – If you choose this laser, the sewing begins at the point where the start laser points.

C – If you choose this laser, half of the sewing will be before the place where the middle laser points, and half of the sewing will be after the middle point.

D – If you choose this laser, the sewing finishes at the place where the stop laser points.

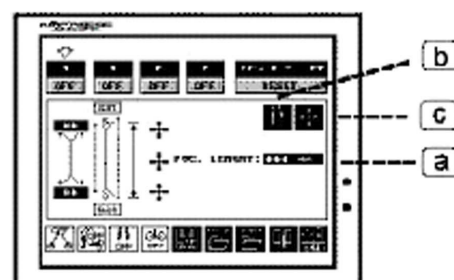
E – When you touch the program information button, the screen on the left displays.



a- Shows the area that you enter on the program the length of the Angle Pocket which will be sewn.

b- Shows the area that you enter the start and finish needle spaces of the Angle Pocket which will be sewn.

When you touch this button, the screen on the left displays.



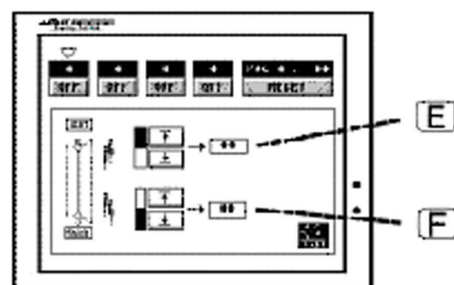
To set the beginning spaces (x) of the needles at the Start side ;

Button reduces the ‘x’ distance.

Button increases the ‘x’ distance.

‘E’ area shows the needle space in ‘mm’ unit.

Note: When the ‘E’ arrow shows ‘0’ or ‘1’ mm, the needles start to work together, however the needles of 2mm and above start working at different moments.



To set the finishing spaces (x) of the needles at the Finish side;

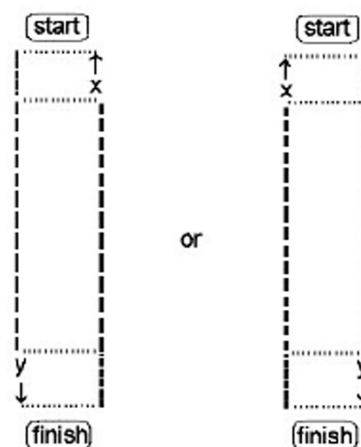
Button reduces the ‘y’ distance.

Button increases the ‘y’ distance.

‘F’ area shows the needle space in ‘mm’ unit.

Note: When ‘F’ arrow shows ‘0’ or ‘1’ mm, the needles finish together at the end, however the needles of 2mm and above finish working at different times.

c- When you touch this button, the following screen displays.

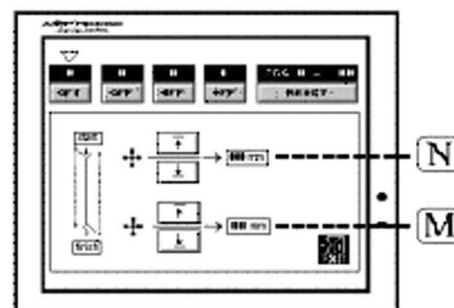


MACHINE PANEL

M - On normal conditions, the sewing begins at the place where the laser points. If you would like to change the beginning location without changing the place of the laser, you can benefit from this parameter.



You can change the beginning place of the sewing by using

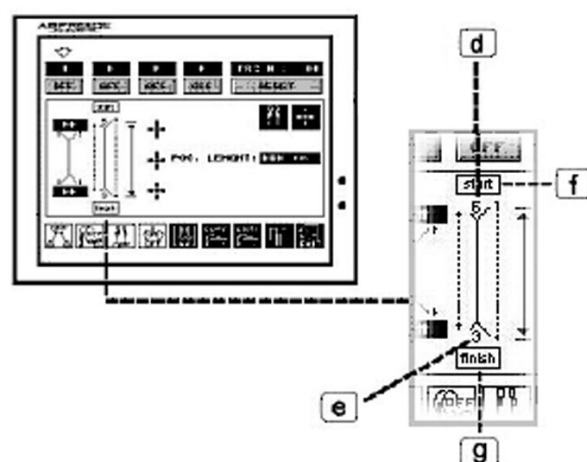
 (increases)  (decreases) buttons on the screen.



N - On normal conditions, the sewing ends at the place where the laser points. If you would like to change the ending location without changing the place of the laser, you can benefit from this parameter.

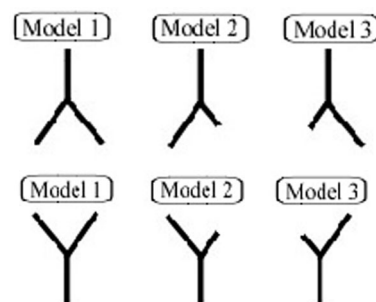
You can change the ending place of the sewing by using

 (increases)  (decreases) buttons on the screen.



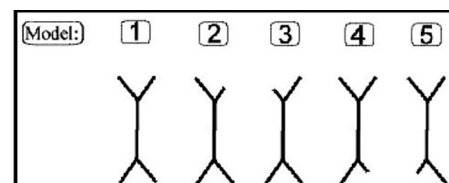
d- You can select the model of the start side of the angle pocket you would like to sew here.

e- You can select the model of the finish side of the angle pocket you would like to sew here.



Note: On the setup of the machine, when the Angle Pocket Covers are activated, the start and finish labels above the “f” and “g” marked areas continuously blink in order to show that these are active variables.

Note: The knife selection of the selected pocket model at the start and finish sides is automatically chosen and activated by the machine. You can select and work on the following angle pocket models here.



MACHINE PANEL

Making Slanted (Angle) Pocketwelts With Flap

The angle pocketwelting should be activated from Main Set-up Page in order to work with main programs 30, 31 and 32.

A- Main programs 30, 31, and 32 are used for slanted pocketwelting applications with flap. It is not possible to enter a welt length manually because it will be determined by the photocell automatically. You will see the screen on the left once you enter programs 30, 31, and 32.

The flap illustrations on the screen will appear on the right or left depending on the which side the photocell is installed on the machine. If the machine is equipped with both photocells, the flap will be seen or left or right depending on the cycle sewing pocket style selected at the moment which will enable the operator to make alternating left and right welts.

E- The screen on the left will appear when you touch the program information icon

a- To adjust the length of overlapping stitching on the flap start. This parameter can be changed in multiples of 0.5mm to adjust the stitching before or after the flap start is detected by the photocell.

b- To adjust the length of overlapping stitching on the flap finish. This parameter can be changed in multiples of 0.5mm to adjust the stitching before or after the flap finish is detected by the photocell.



c- To adjust the position of the start (rear) corner knife. This parameter can be changed in multiples of 0.5 mm to move the start corner cut inside or outside of the welt.

d- To adjust the position of the stop corner knife. This parameter can be changed in multiples of 0.5 mm to move the stop corner cut inside or outside of the welt.

e- Shows the place where we enter the Start and Finish needle spaces of the Angle Pocket to be sewn.

When you touch this button, the screen on the left displays.



To set the beginning spaces(x) of the needles at the Start side;

 Button reduces the 'x' distance.  Button increases the 'x' distance.

'E' area shows the needle space in 'mm' unit.

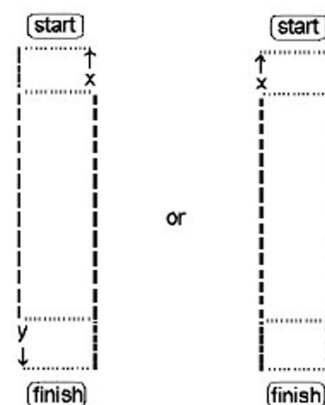
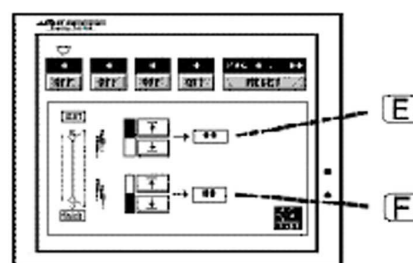
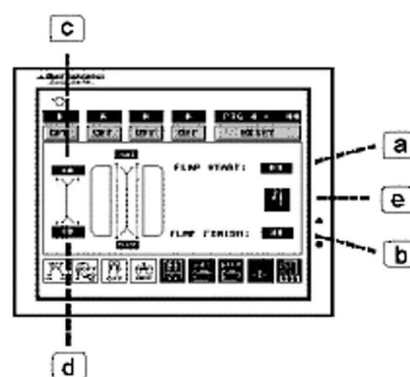
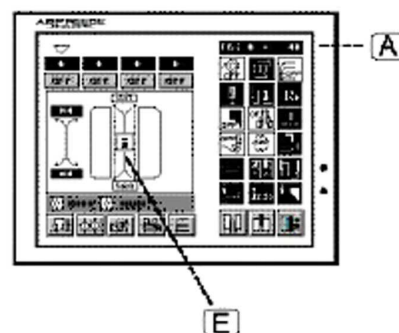
Note: When the 'E' arrow shows '0' or '1' mm, the needles start to work together, however the needles of 2 mm and above start working at different moments.

To set the finishing spaces(x) of the needles at the Finish side;

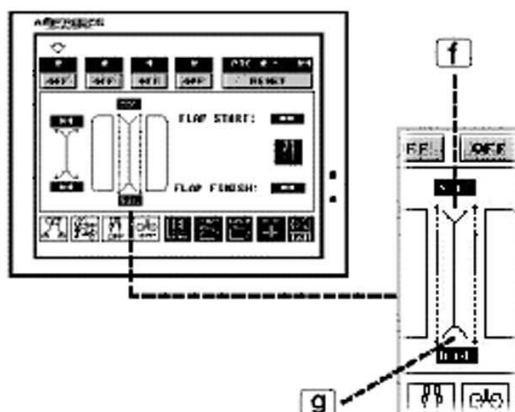
 Button increases the 'y' distance.;  Button reduces the 'y' distance.

'F' area shows the needle space in 'mm' unit.

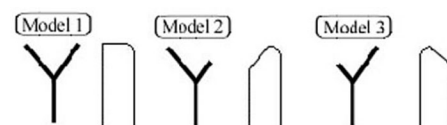
Note: When 'F' arrow shows '0' or '1' mm, the needles finish together at the end, however the needles of 2 mm and above finish working at different times.



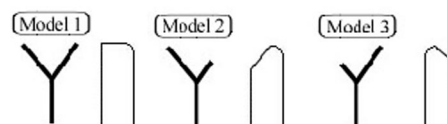
MACHINE PANEL



f- You can select the model of the start side of the angle pocket you would like to sew here.



g- You can select the model of the finish side of the angle pocket you would like to sew here.



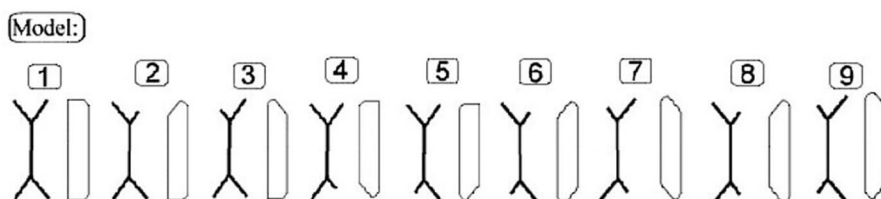
Note: The knife selection of the selected pocket model at the start and finish sides is automatically chosen and activated by the machine.

Note: On the setup of the machine, when the Angle Pocket Covers are activated, the start and finish labels above the “f” and “g” marked areas continuously blink in order to show that these are active variables.

The Angle Pocket Covers are located on the left of the screen.

Because the photocell selection at the machine main setup occurs under the condition of right Photocell Active or Double Photocell Active is chosen.

Note: When the Double Photocell is active, The cover picture is displayed on the right at cycle 2 and at cycle 4.

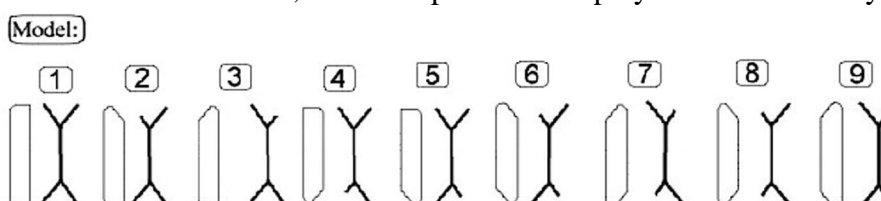


Angle Pocket Covers are located on the left side.

Because The photocell selection at the machine main setup occurs as the condition of Photocell Active or Double Photocell Active.

Note:

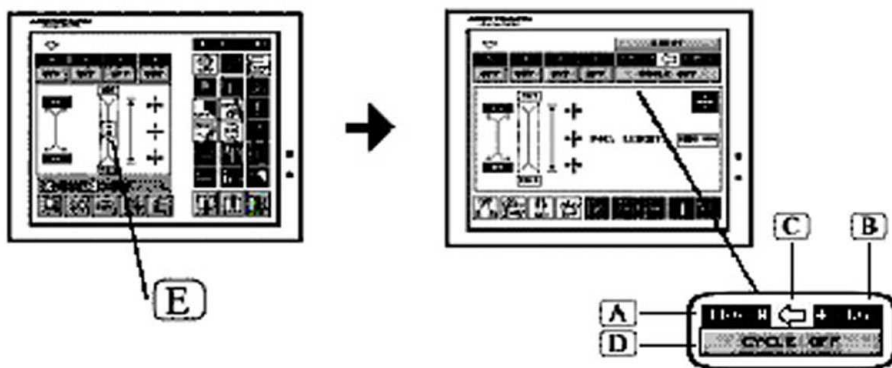
When the Double Photocell is active, the cover picture is displayed on the left at cycle 1 and at cycle 3.



MACHINE PANEL

Normal Pocket Work By Using 8 Cycles

After bringing 8 cycles into Enabled position and when we press information button indicated with “E” on normal working screen, then following screen will come out in front of us.



You can write any program number from 1,2... up to 7 instead of program number indicated by “A”. In similar way, a program number from 1,2 .. up to 7 can be written instead of program indicated by “B”. So, sequence order work can be assured between two programs. Button indicated by (‘D’) must be on Cycle OFF/ON, ON positions.

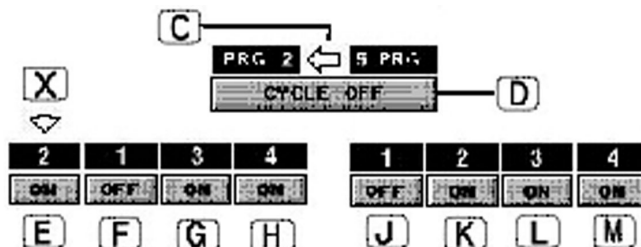
If Cycle ON/OFF button indicated by “D” is in OFF position, then “C” arrow will allow always left program number to work and will prevent passing into right side.

Arrow indicated by ‘C’ will show program sequence order on which program number. If “D” will show Cycle OFF/ON button is closed (if it is on OFF position), it will only make cycles on “A” side and will not make cycles on “B” side.

FOR EXAMPLE: We want to make cycles between program 5 and 8 by program

1- Cycle OFF/ON button indicated by “D” must be on “Cycle ON” position.

2-



Let us assume that program will be in above-mentioned way.

3-When “C” arrow is touched it will show right or left side. (It will show whether program will start from program number on right hand side of program or from program number on left hand side.)

4-If “C” arrow is selected as left side (if it starts from program 2)

- | | |
|-----------------------------------|-----------------------------------|
| 1. Process line Program 2 Cycle E | 4. Process line Program 5 Cycle K |
| 2. Process line Program 2 Cycle G | 5. Process line Program 5 Cycle L |
| 3. Process line Program 2 Cycle H | 6. Process line Program 5 Cycle M |

5- If “C” arrow is selected as right side (if it starts from program 5)

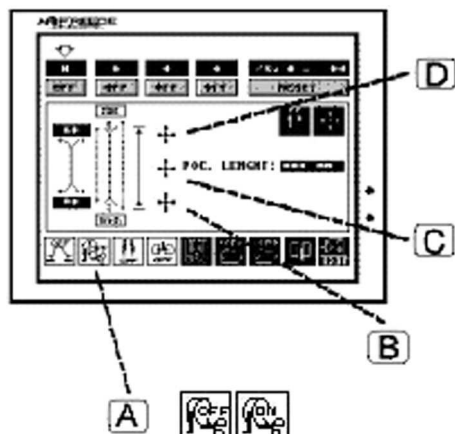
- | | |
|-----------------------------------|-----------------------------------|
| 1. Process line Program 5 Cycle K | 4. Process line Program 2 Cycle E |
| 2. Process line Program 5 Cycle L | 5. Process line Program 2 Cycle G |
| 3. Process line Program 5 Cycle M | 6. Process line Program 2 Cycle H |



Note: You may change cycle starting by touching any sub-program of program flow line in Cycle (X arrow). But, that cycle must be in OFF position.

MACHINE PANEL

Zipper Pocket Operation

After making zipper system active on Setup screen;



Zipper  /  indicator shown by "A" can be adjusted at different positions at desired each cycle pocket.



Zipper unit works on cycle pocket.





Zipper unit does not work on cycle pocket.

Programs where zipper pocket is used

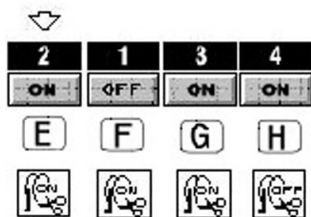
Normal Flat Pockets: Program Nr. 1,2,3,4,5,6 and 7

Note: Zipper Pockets can only be worked on normal pockets. They can not be used in Cover pockets and Angle pockets.

If zipper system is selected on worked pocket (), laser indicators shown by "C" and "D" will be out of cycle and laser shown by "B" will become active.

If zipper system is selected on worked pocket (), you can not make laser indicators shown by "C" and "D" active.

Example: Program Nr. 2



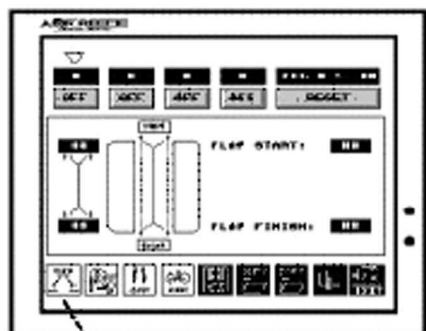
1st Process = Program Nr. 2 Cycle 1 Zipper Active

2nd Process = Program Nr. 2 Cycle 3 Zipper Active

3rd Process = Program Nr. 2 Cycle 4 Zipper closed

MACHINE PANEL

Robot System Operation



You can choose any of operation options for Robot System on icon shown with ,A‘.

All options can be adjusted in different positions for each Cycle program.



Robot System does not work in Cycle pocket.



Left Robot loading system works on Cycle pocket.



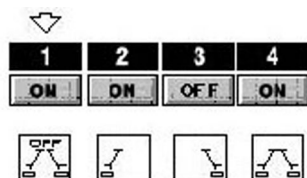
Right Robot loading system works on Cycle pocket.



Left and Right Robot loading system works on Cycle pocket.

Example Program:

Program Nr. : 1



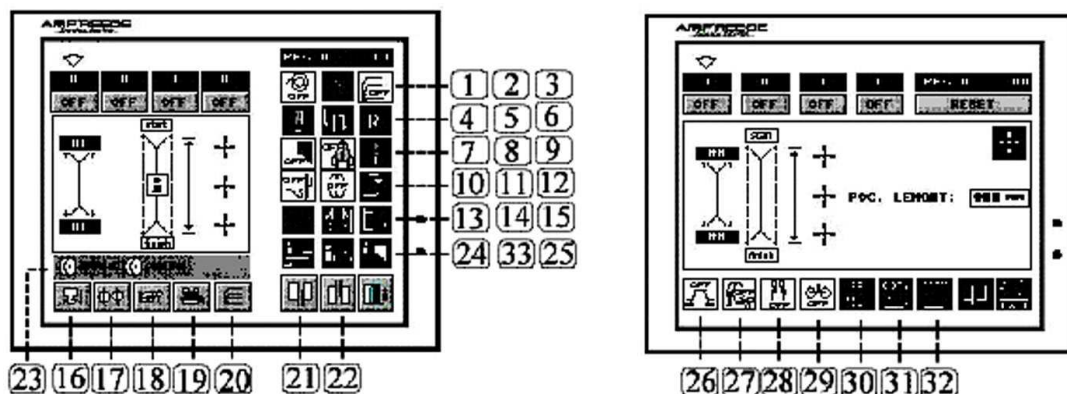
1st Process Program Nr. : 1 Cycle 1 Robot System OFF

2nd Process Program Nr. : 1 Cycle 2 Left Robot System Active






3rd Process Program Nr. : 1 Cycle 4 Left and Right Robot System Active


MACHINE PANEL







SEWING FUNCTION ICONS



There are 10 main memory programs in program options. Programs 1 through 7 can be utilized for making single and double welts without flap where as 10, 11 and 12 are to be used for with flap applications. Note: 8. and 9. are reserved for memory so not in use.


- 1 -  To activate or deactivate the Auto tape feeding
- 2 -  To activate or deactivate the vacuum motor
Note: To activate or deactivate this button, „Vacuum System“ is available under Main Setup settings. This button should be activated.
- 3 -  To activate or deactivate the stacker
- 4 -  To activate or deactivate the dart stretcher
Note: To activate or deactivate this button, „Holder System“ is available under Main Setup settings. This button should be activated.
- 5 -  To move carriage forward to load position automatically or manually by pressing foot treadle.


Clamps move
Forward automatically


Clamps move forward
by treadle
- 6 -  To reset the machine without using the main on/off switch
- 7 -  To activate or deactivate the center knife system. (Note: Tab knives will also not work when center knife system is deactivated.)
- 8 -  To activate or deactivate the tab knives.
- 9 -  To bring the needle to “up” position.
- 10 -  To activate or deactivate the needle thread monitor.

MACHINE PANEL

1 1 -  To activate or deactivate the Bobbin counter.


1 2 -  To Select if Main Clamps should go down automatically or manually by pressing foot treadle to hold the fabric.



Clamps go down
automatically



Clamps go down
by treadle


13 -  To activate or deactivate backtacking or dense stitching at start and finish of stitching.



Backtacking



Dense stitch

14 -  To select activation and working sequence of flap clamps.



Flap Clamps

Down at the same time



Flap clamp

first right then left down



Flap clamp

left then right down



first Flap Clamp

right off Left activated




Flap Clamp

left off right activated



Flap clamp

both off

15 -  To select working sequence of Main Clamps



Main clamps
Down at the same time




Main Clamps
first right then left down




Main Clamps
first left then right down

16 -  To activate Upper thread trimmer manually

17 -  To activate lower thread trimmer manually


18 -  To activate thread tension manually

19 -  To activate auto tape feeding cutting manually.

20 -  To activate stacker manually.

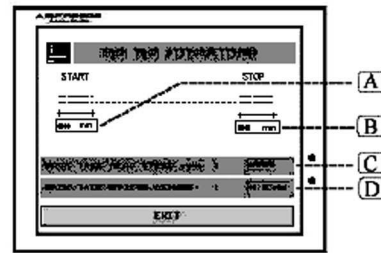
21 -  To send carriage from front to back.

22 -  To bring carriage from back to front

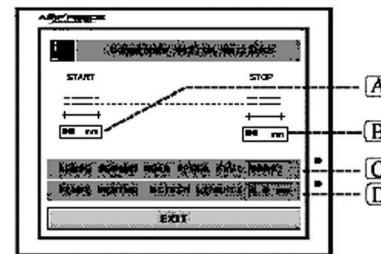
23 -  Shows remaining thread length in left bobbin in “cm”. When the saved thread length by user is over “bobbin finished” warning appears and machine stops. Press the icon and change the bobbin.

MACHINE PANEL


- 24 -  To adjust backtacking and dense stitching parameters from the following screens

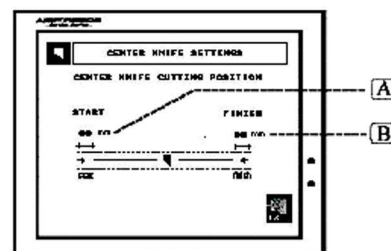


- A - Dense stitch length in 'mm' at seam start.
- B - Dense stitch length in 'mm' at seam end.
- C - Definition area of close stitch for head revolution in rpm
- D - Definition area for width of close stitch steps in mm.



- A - Backtack length in 'mm' at seam start.
- B - Backtack length in 'mm' at seam end.
- C - Definition area of zig-zag stitch for head revolution in rpm.
- D - Definition area for width of zig-zag stitch steps in mm.

- 25 -  The following screen appears when you select this icon for center knife settings for the pocket style selected at the time.




- A - To adjust the distance between seam start to center knife cut start in "mm"
- B - To adjust the distance between seam end to center knife cut end in "mm"

Note: Correct Start and Finish settings of center knife ensure longevity of the corner knives and maximum productivity.

Center knife settings should be adjusted according to the thickness of the fabric used.

MACHINE PANEL

- 26 -  To activate or deactivate the auto patch and flap loader Units.



No loaders available



Right auto loader available



Left auto loader available



right and left auto loader available


- 27 -  To activate or deactivate the zipper attachment unit.

Note: To activate or deactivate this button, „Zipper System“ is available under Main Setup settings. This button should be activated.

- 28 -  Indicates if inclined pocket program is activated or deactivated under Main setup.

- 29 -  Activates or deactivates Roller system within program.

Note: To activate or deactivate this button, „Zipper System“ is available under Main Setup settings. This button should be activated.

- 30 -  To activate and deactivate brush blades

Right & Left Brush
Blade ActiveRight brush blade active
left offLeft brush blade active
right off

Right & Left Brush off

It is general practice to activate both brush blades for double welt applications. De-activating left or right blades depending on the single welt application side will help the quality of sewing especially if a larger patch piece is in use.
















- 31 - To copy the parameters of the selected pocket style.

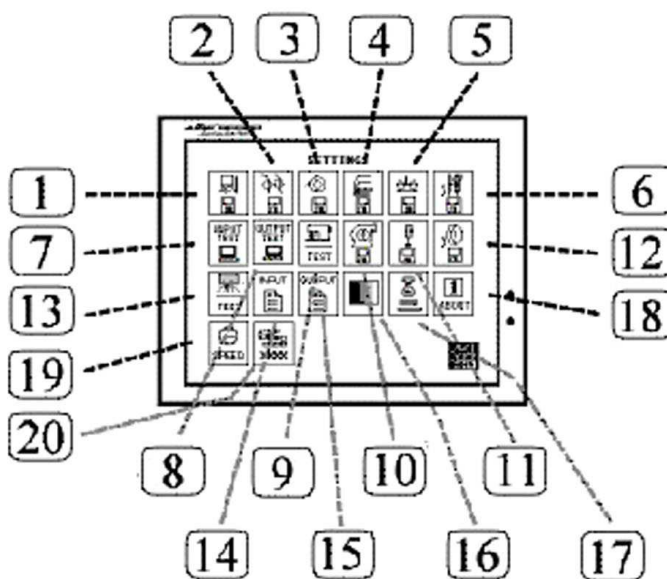
- 32 - To paste the copied parameters to another pocket style available in main programs






- 33 - Pressing this icon will open the main settings screen.

MACHINE PANEL

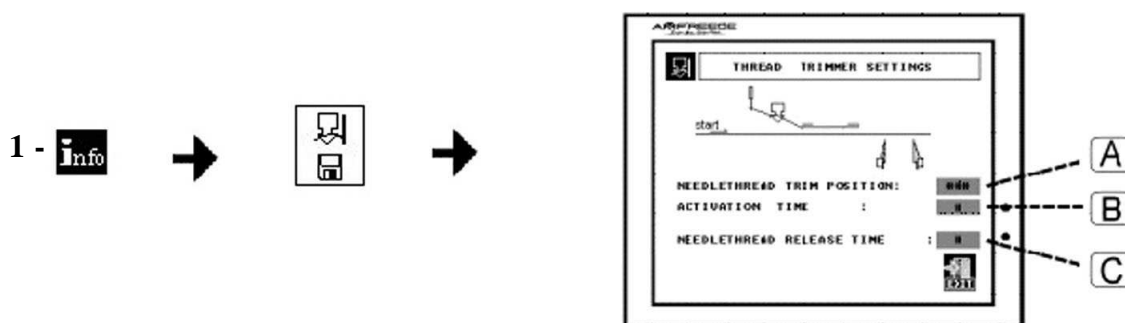
Setting Screens

- 1-  Top Thread Trimmer Settings
- 2-  Bottom Thread Trimmer Settings
- 3-  Auto Tape Feeding Settings
- 4-  Stacker Settings
- 5-  Garment Remover Settings
- 6-  Top Thread Monitor Settings
- 7-  Input Test
- 8-  Output Test
- 9-  Testing Sewing Head & Motor
- 10-  Vacuum System Settings
- 11-  Dart Stretcher Settings
- 12-  Bobbin Counter Settings
- 13-  Testing Flap Photocell
- 14-  PLC Input List
- 15-  PLC Output List



- 16-  Screen Contrast Settings
- 17-  Work Counter, Date & Time
- 18-  Information Screen
- 19-  Machine Performance Settings
- 20-  Main Settings

MACHINE PANEL

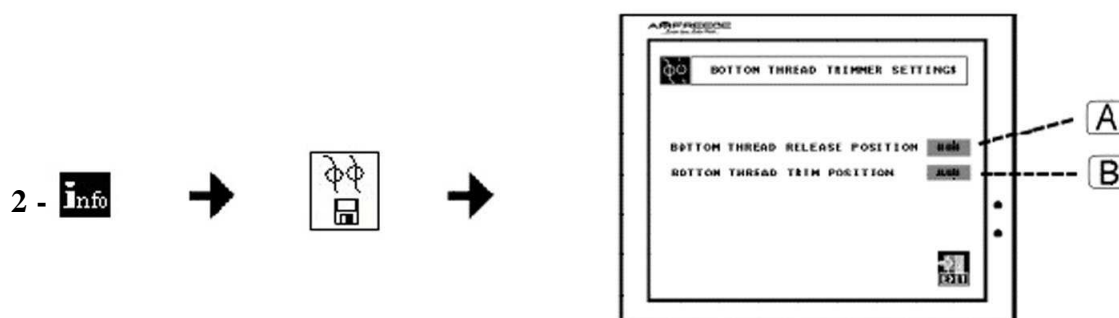


Top Thread Trimmer Settings

A - To set the trimming position of top thread after completion of sewing cycle. Adjustable in mm,s in relation to main clamp position.

B - To set the activation time of the top thread pick-up system.

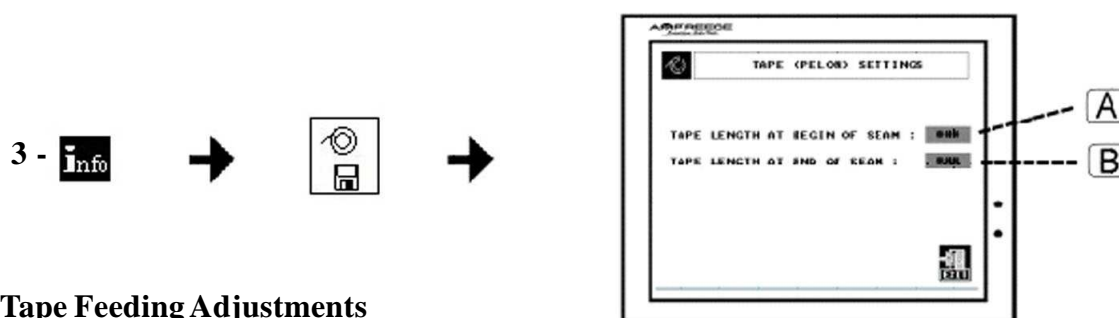
C - To set the timing of the top thread release at start of sewing cycle.



Bottom Thread Trimmer Settings

A - To set the the release position of bottom thread after start of sewing cycle. Adjustable in mm,s in relation to main clamp position.

B - To set the position of bottom thread pick-up and trim after completion of sewing cycle.



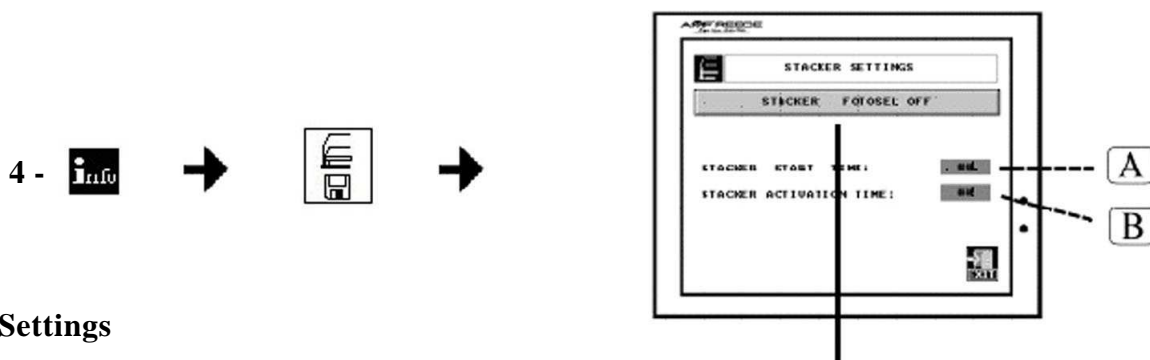
Auto Tape Feeding Adjustments

A - To set the tape length at start of sewing

B - To set tape length at finish of sewing

Important Note: Please use non-sticky and medium thickness tape to ensure best results with your auto tape feeding system

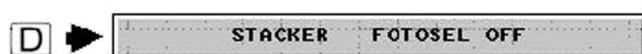
MACHINE PANEL



Stacker Settings

A – To set the timing of stacker after sewing cycle

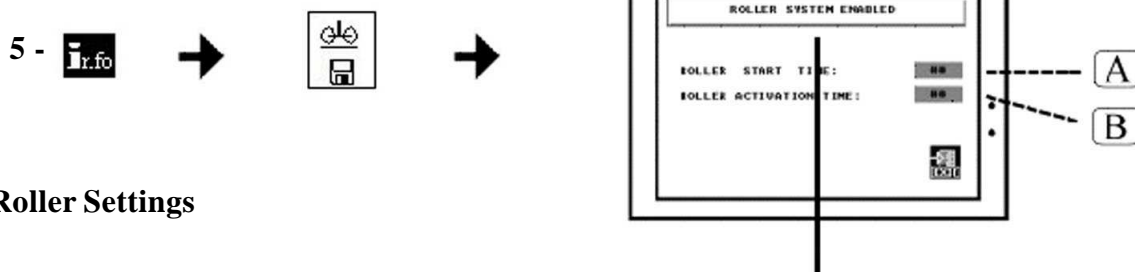
B - To set the activation time of the stacker



Important Note: If you select a low parameter, the stacker can close before opening to its full extend

C – The stacker photocell is on. This photocell detects if the finished garment piece is moved out of the machine by hand or a stacking system. The photocell ensures the main clamps stay at rear position if the garment is still on the machine.

D - The stacker photocell is turned off.



Garment Roller Settings

A - To set the start time of garment roller after sewing cycle

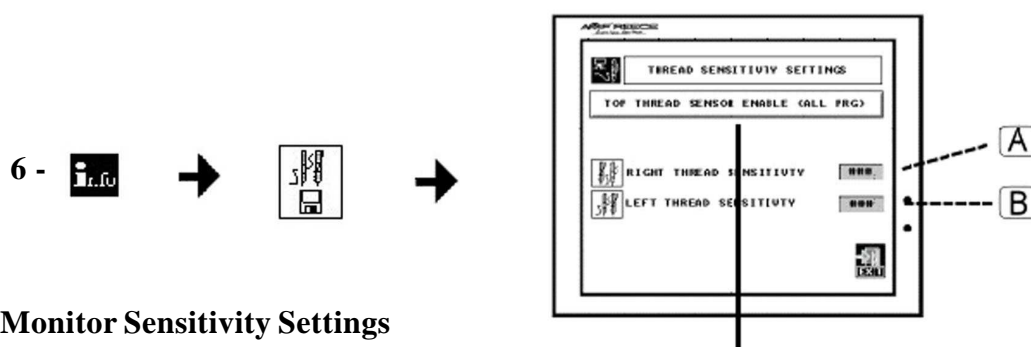
B - To set the activation time of the garment roller.



C - The garment roller is enabled. Please note that the garment roller indicator in parameter settings are also turned on/off from this icon.

D - The garment roller should be disabled if the system is not supplied with the machine.

MACHINE PANEL



Top Thread Monitor Sensitivity Settings

A - To set the sensitivity on right thread

B - To set the sensitivity on left thread

C → TOP THREAD SENSOR ENABLE (ALL PRG)

D → TOP THREAD SENSOR DISABLED (ALL PRG)

The sensitivity of top thread monitor would be increased by lowering parameters A and B.

- Parameters A and B should be decreased if the machine does not stop despite a thread breakage

- Parameters A and B should be increased if the machine indicates a thread breakage eventhough the thread is not broken.

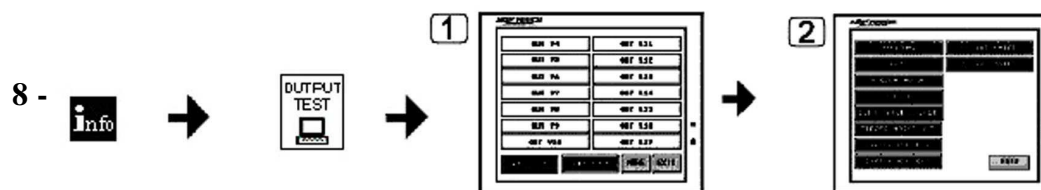
C - To turn on the top thread monitor

D - To disable the top thread monitor. Top thread monitor indicator under sewing programs will display off.



Input Test

To test sensors, switches and photocells that are on the machine.



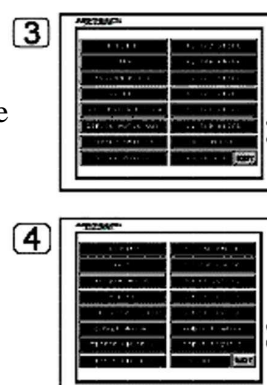
Output Test

To test the pneumatically activated mechanisms and motors on the machine

Screen 1 and 2: Exist in straight pocketwel machines

Screen 1 and 3: Exist in angle (slanted) pocketwelt machines

Screen 1 and 3: Exist in pocketwelting machines with automatic loaders



MACHINE PANEL



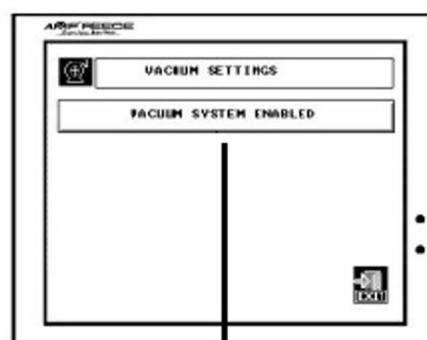
Testing Sewing Head and Motor

This screen is to test the sewing motor and head.

A – To start and stop test cycle

B – To set the test speed

Important Note: Please make sure the top threads are Taken off the needles before starting this test.



Vacuum Settings

A - To enable the vacuum system if this option is Installed on the machine.

B - To disable the vacuum system. When disabled the vacuum

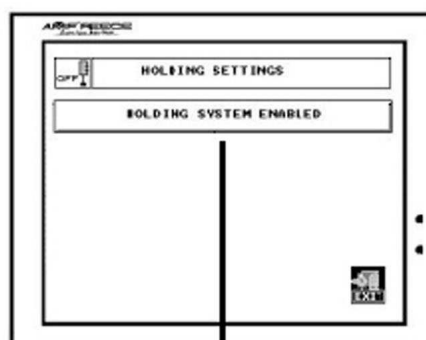
Indicator under sewing programs is a utomatically turned off,



VACUUM SYSTEM ENABLE



VACUUM SYSTEM DISABLED



Dart Stretcher Settings

A - To enable the dart stretcher if this option is installed on the machine




HOLDING SYSTEM ENABLE

B - To disable the dart stretcher option. When disabled the dart stretcher indicator under sewing programs displays off

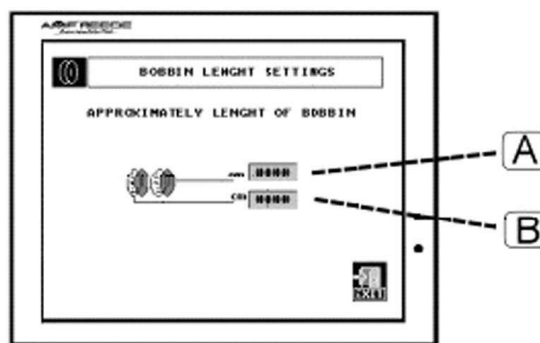


HOLDING SYSTEM DISABLED

MACHINE PANEL

12 - 

Bobbin Length Settings



A - To set the length of thread inserted into right bobbin in centimeters.

B - To set the length of thread inserted into the left bobbin centimeters.

Important Note: The bobbin thread length parameters decrease by the value of the pocket length in each sewing cycle. If bobbin thread length indicator shows a lower value than the pocket length, the machine does not operate and displays a warning.

13 - 

Testing the Flap Photocell



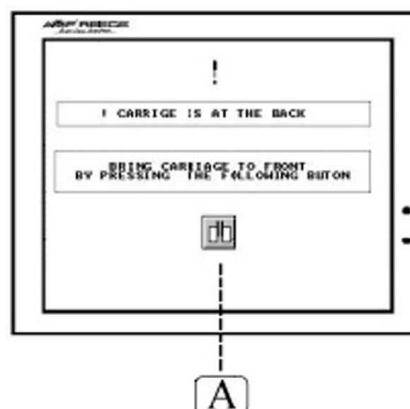
A – This button activates a testing program for the flap photocell or photocells which detects the flap start and finish on pocketwelting applications with a flap. In order to ensure an accurate operation, the photocell needs to detect the reflector tape on the main clamps without an error. This section of the software is dedicated to test this feature.

To run the test program

1 – When the test button is pressed and if the main clamps are at rear position, there will be a warning message on the screen.

Press A button (icon) to bring the clamps to front position

2 - When the test button (icon) is pressed, the screen will change to test mode if the clamps are in front position



MACHINE PANEL

A – Displays if right, left or both photocells are installed
And active on the machine

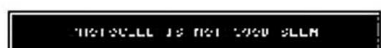
B – To start the test

Important Note: Please place a flat and clean piece of fabric under the clamps before starting the test. The fabric should be large enough to cover the area under clamp rubbers. The clamp rubbers should not be in direct contact with the main plate otherwise they can be worn out quickly due to friction.

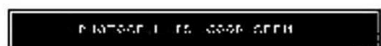
The following screen comes up when the test is started

A - Displays if right, left or both photocells are
Installed and active on the machine

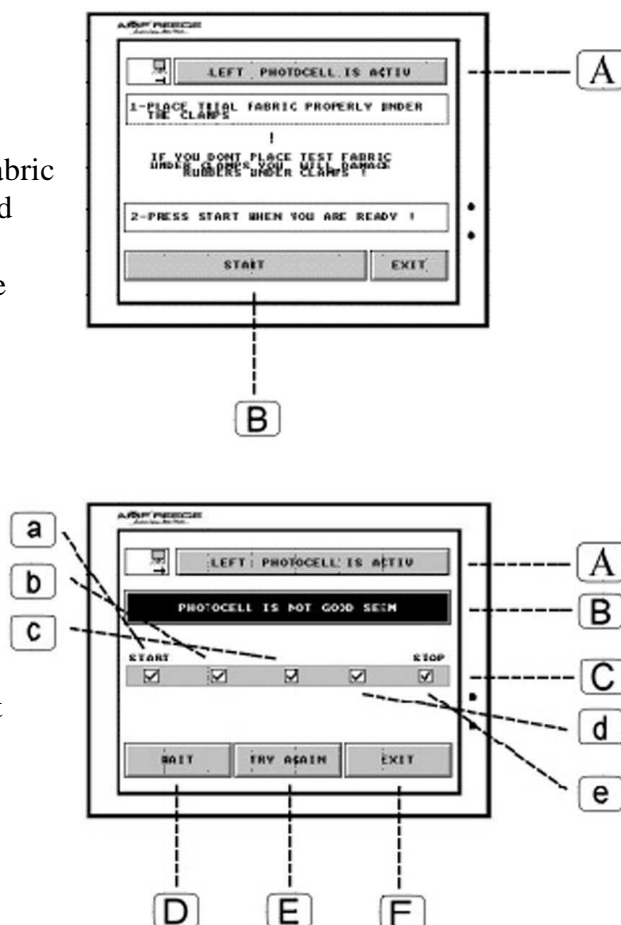
B – Displays the final status report about the
photocell test



Photocell is not
working well



Photocell is
working well



C – Displays the detection points on the reflector tape while the clamp is moving backwards. All the boxes should be ticked to get a “Photocell is working well” message. One unticked box will activate a “Photocell is not working well” message.

If you get a “Photocell is not working well” message

1 – Check the photocell and reflective tape is on the same direction...

2 – Ensure the reflective tape is un-deformed and clean

D – To pause the photocell test in a certain position. Pressing the button again will resume the test

E – To start test from beginning

F - Exit the Photocell Test Screen

14 -



PLC Input List

Informative screen showing numbers of input cables connected to PLC module in the control box.

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e-mail: service@amfreece.cz; parts@amfreece.cz; website: www.amfreece.com

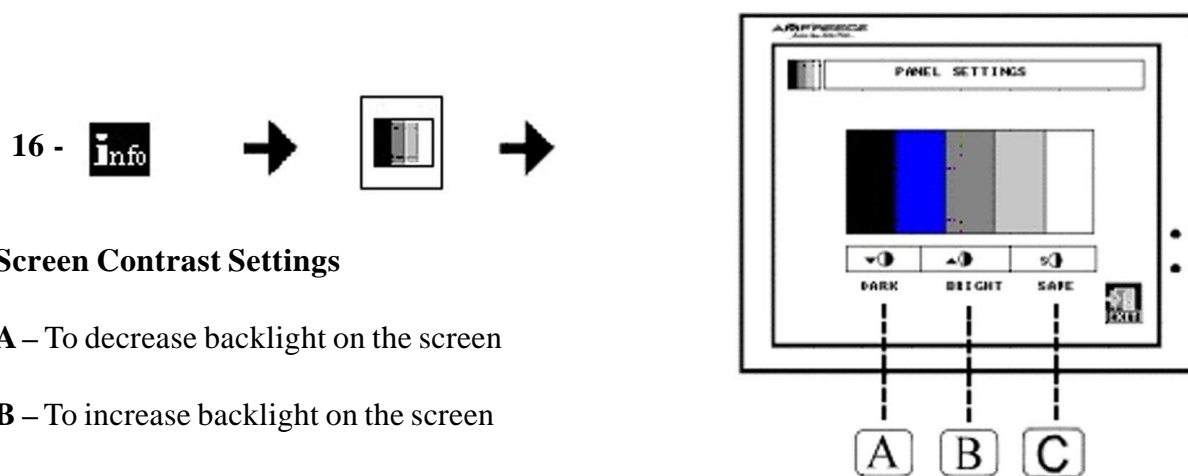
Phone: +420 582 309 146 (Service), +420 582 309 286 (Spare Parts); Fax: +420 582 360 606

MACHINE PANEL



PLC Output List

Informative screen showing numbers of output cables connected to PLC module in the control box

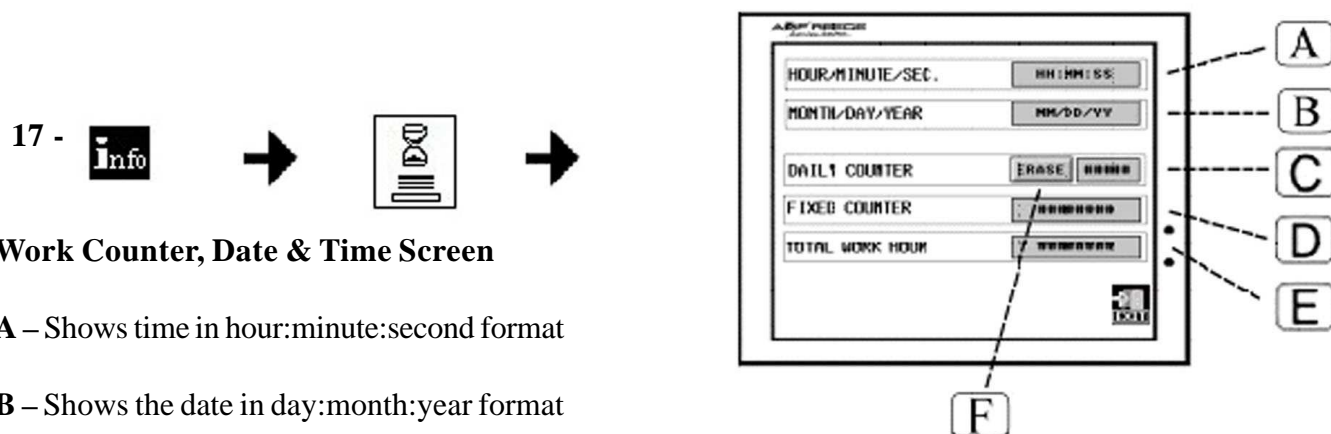


Screen Contrast Settings

A – To decrease backlight on the screen

B – To increase backlight on the screen

C - To save the last setting



Work Counter, Date & Time Screen

A – Shows time in hour:minute:second format

B – Shows the date in day:month:year format

C – Daily work counter

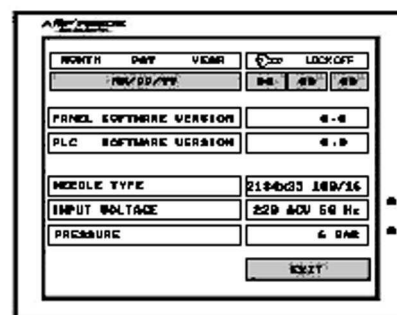
D – Total Work Counter

E – Total Work Hours

F – Resets number of works stitched per day at the machine.

MACHINE PANEL

18 –

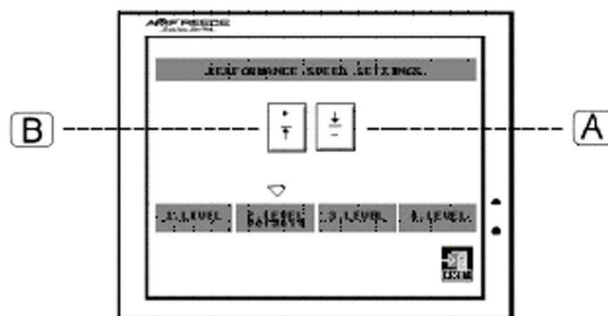


Information Screen

This screen displays date, software version, and some other information about the machine

- 1 – Displays date in day/month/year format
- 2 – Displays software version of the control panel
- 3 – Displays version number of PLC system
- 4 – Displays needle type used on the machine
- 5 – Displays electrical requirements
- 6 – Displays air pressure requirement

19 –



This operation enables us to change operation speeds of machine either upwards or downwards at certain stages.

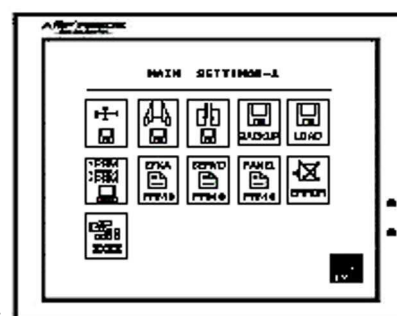
Selected level will directly effect performance of machine.

A - An upper level is selected button.

B - An lower level is selected button.

- 1.Level :** Considering forwarding of clamp, entering speed of clamp into stitch, entering speed of clamp into edge blades are at minimum, machine should be operated at the slowest level.
- 2.Level :** At the outlet of factory, machine is loaded up to Level 2. Clamp actions are one step faster than Level 1.
- 3.Level :** Clamp actions are one step faster than Level 2.
- 4.Level :** Clamp actions are upgraded to a quite high speed level compared to other Levels.

20 –



Main Settings

A password will be required to enter into this section of the software.

Please find overleaf the explanations of Main Setup settings.

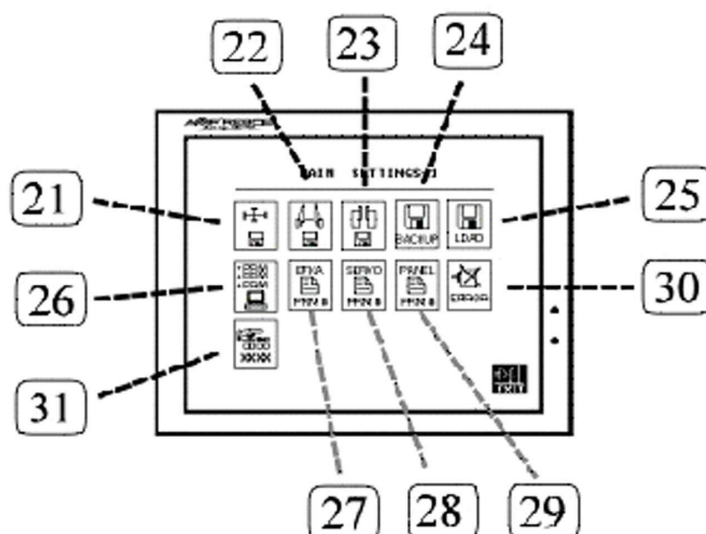
Password : 11111111












Revised 10/2006

e-mail: service@amfreece.cz; parts@amfreece.cz; **website:** www.amfreece.com

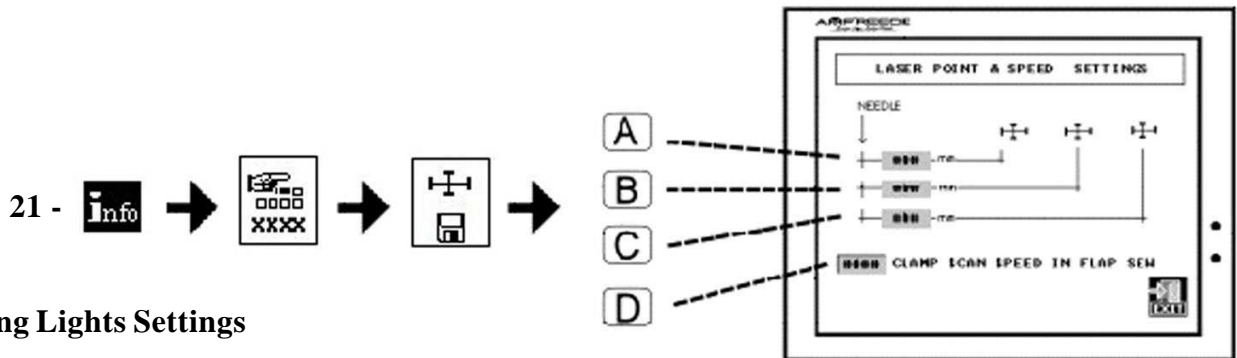
Phone: +420 582 309 146 (Service), +420 582 309 286 (Spare Parts); **Fax:** +420 582 360 606

MACHINE PANEL



- 21-  Marking Lights Settings
- 22-  Corner Knife Settings
- 23-  Main Clamp Settings
- 24-  Save Parameters
- 25-  Load Saved Parameters to PLC.
- 26-  Section Where Certain General Parameters are Available
- 27-  Efka PRM List
- 28-  Servo PRM List
- 29-  Panel Setting & PRM List
- 30-  Error Pages
- 31-  Main Settings (Requires password).

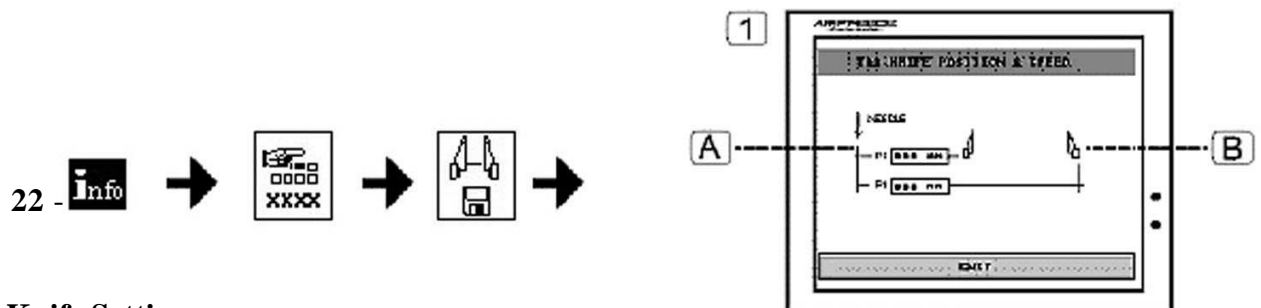
MACHINE PANEL



Marking Lights Settings

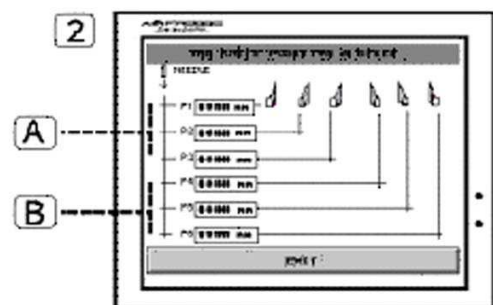
- A** - Allows to adjust distance between the front marking light and the needle in mm's
- B** - Allows to adjust distance between the middle marking lights and the needle in mm's
- C** - Allows to adjust distance between the rear marking light outside and the needle in mm's
- D** - To adjust the speed of the main clamp from sewing start to photocell detection point in pocketwelting applications with flap

Note : Please refer to page XXX for sewing start and finish settings in relation to marking light positions



Corner Knife Settings

- A** - Allows to adjust distance between the needle and Front Corner Knife in mm's
- B** - Allows to adjust distance between the Front Corner Knife and Rear Corner Knife in mm's



Note : Adjustments 'A' & 'B' are used by AMF Reece technicians Please refer to page XXX for operator corner knife settings

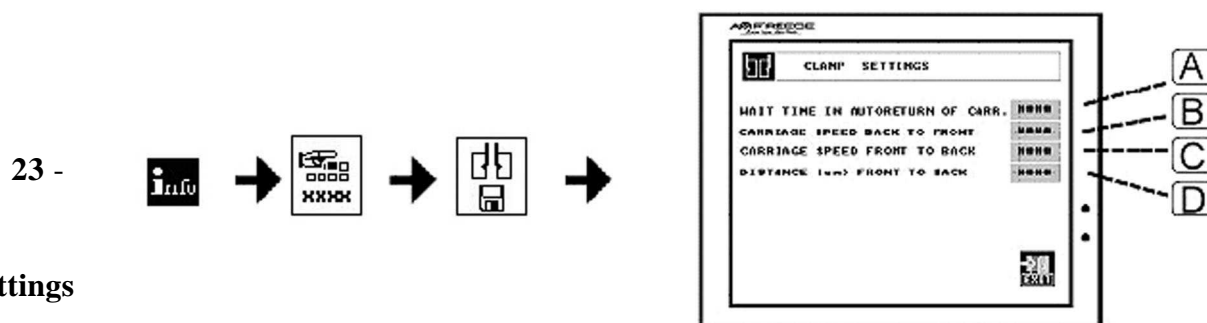
Note : Screen #1 will appear in straight welting machines Screen #2 will appear in slanted (Angle) welting machines

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e-mail: service@amfreece.cz; parts@amfreece.cz; website: www.amfreece.com

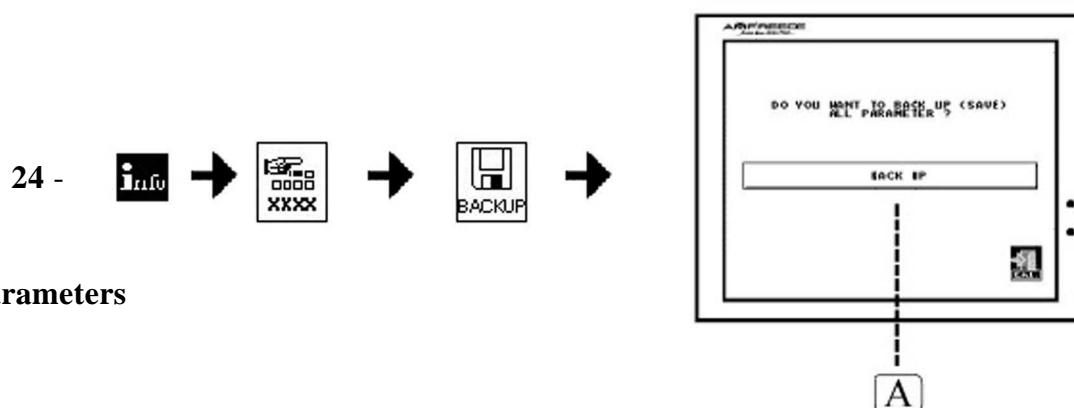
Phone: +420 582 309 146 (Service), +420 582 309 286 (Spare Parts); Fax: +420 582 360 606

MACHINE PANEL



Clamp Settings

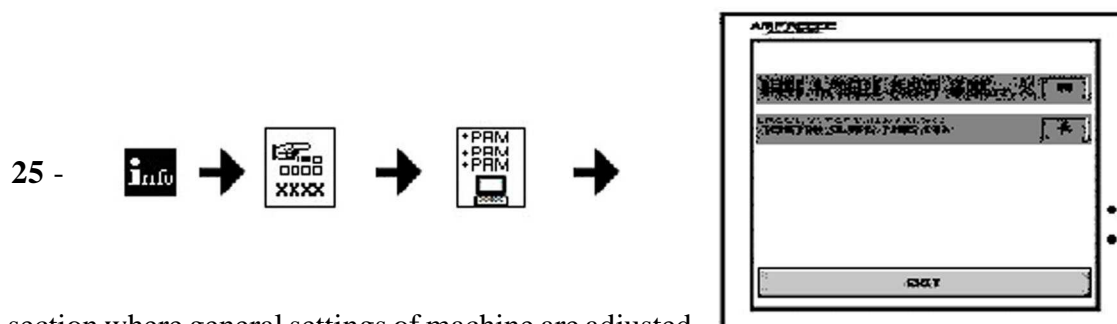
- A** - To adjust the waiting time for the carriage before it comes back to the front of the machine after the operation
- B** – To adjust speed of the carriage from back to front of the machine
- C** - To adjust speed of the carriage from front to the back of the machine
- D** - To adjust distance of the carriage to the back of the machine in mm's



Saving Parameters

- A** – When pressed existing sewing functions and parameters are saved under the current pocket style

Backup button automatically saves your existing adjustments on the machine
You also can save the latest adjustments your self by pressing this button, too.

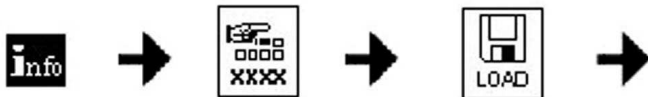


This is the section where general settings of machine are adjusted.

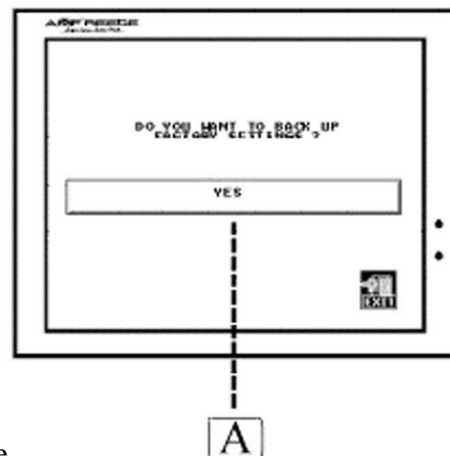
- A – ??**
B – To adjust tension closing time

MACHINE PANEL

26 -



Download Adjustment

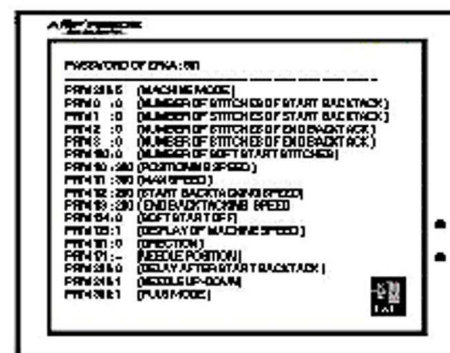


A – When this button is pressed the BACK UP info is up loaded on the For any reason if the machines settings are jammed you can return it to its previously saved correct settings (which are BACKED UP before)

27 -



Sew Motor (Efka) Parameters

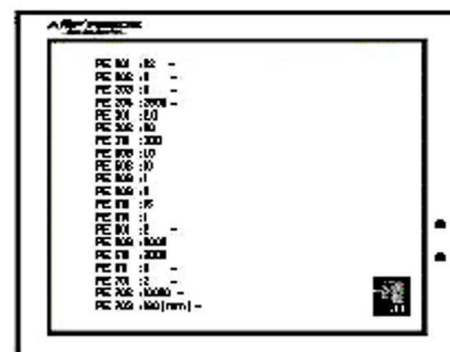


This is the info screen that lists parameters on the sewing motor.

28 -



Servo Parameters

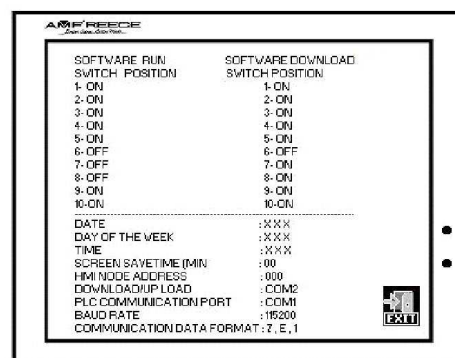


This is the info screen that lists parameters on the servo motor.

MACHINE PANEL



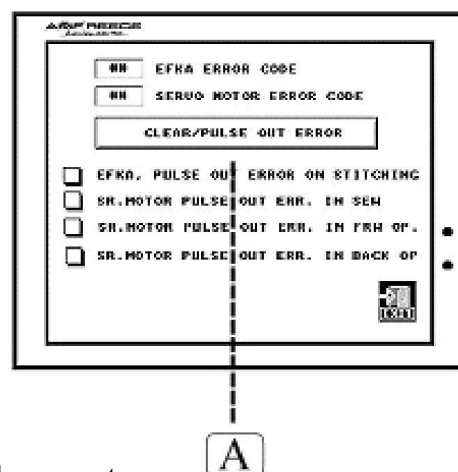
Panel Parameters



This is the info screen to see the list of switches and parameters on the Panel



Motor Errors on the PLC

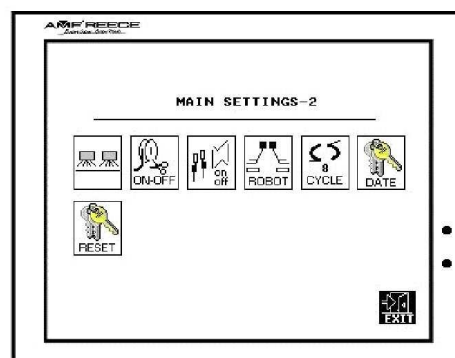


A – Button to eliminate and correct the motor errors on the PLC

It allows to see any error caused by external effects like voltage changes etc.



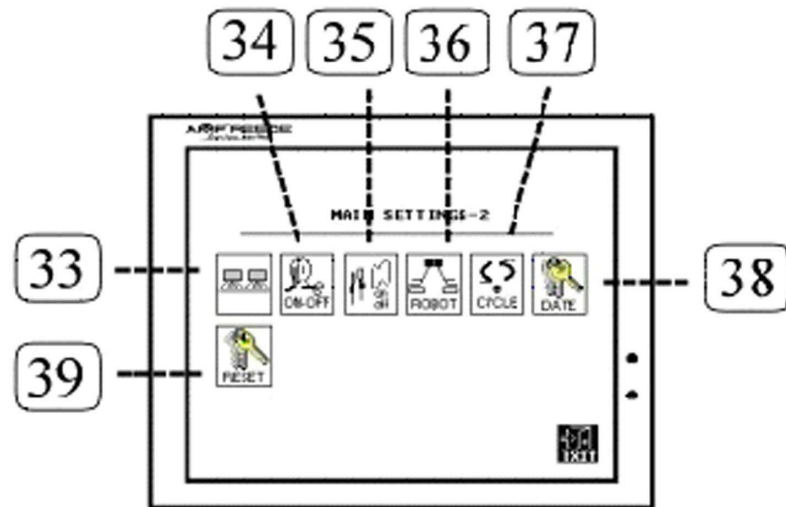
Additional Settings

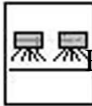








Entering this section will require a password.

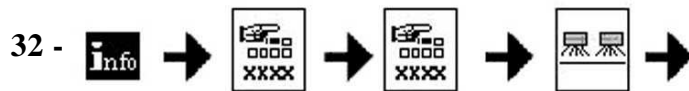
Password : 15661566

MACHINE PANEL



- 33 -  Right Photocell, Left Photocell and Double Photocell Selection
- 34 -  Zipper System Enabled / Disabled Selection
- 35 -  Angle Pocket System Enabled / Disabled Selection
- 36 -  Robot Loading Enabled / Disabled Selection
- 37 -  Octave Cycle Operation Program Enabled/Disabled Selection
- 38 -  Private Chapter
- 39 -  Private Chapter

MACHINE PANEL



Photocell Selection and Connection

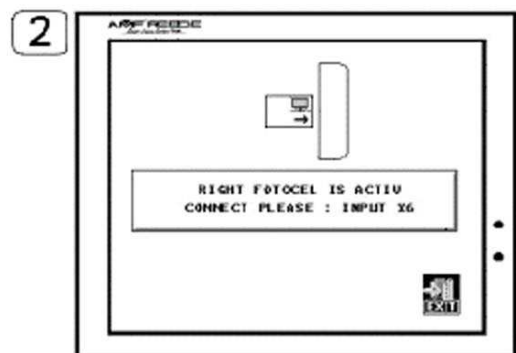
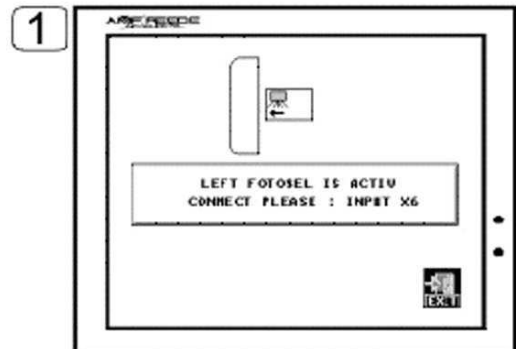
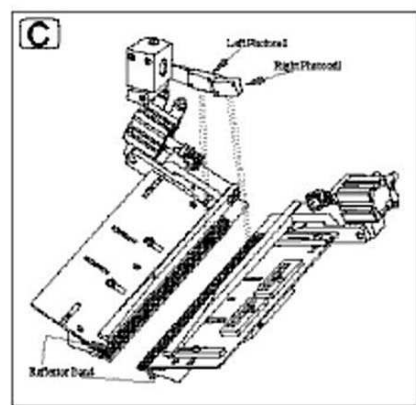
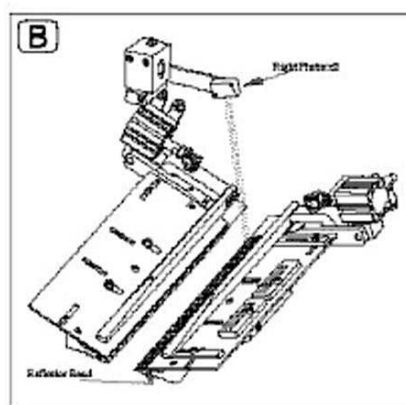
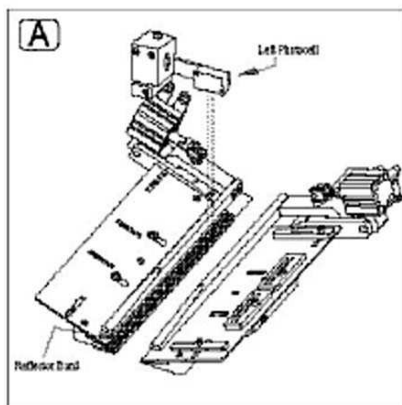
3 Different Variations of Photocell Connection and Operation can be selected on the LW-6000.

1 – If there is only one flap photocell on the machine and if the photocell is facing towards the left clamp foot (**Graphic A below**), choose this option from the Main Setup Screen (**Graphic 1 on the right**).

2 - If there is only one flap photocell on the machine and if the photocell is facing towards the right clamp foot (**Graphic B below**), choose this option from the Main Setup Screen (**Graphic 2 on the right**).

3 - If there are both flap photocells installed on the machine and if the photocells are facing towards both clamp feet (**Graphic C below**), choose this option from the Main Setup Screen (**Graphic 3 on the right**).

Note: Check to confirm that Right Photocell is connected to **X6** jack on the **PLC** and Left Photocell is connected to **X12** jack on the **PLC**



MACHINE PANEL



Automatic Zipper Attachment System Settings



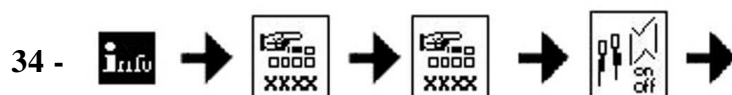
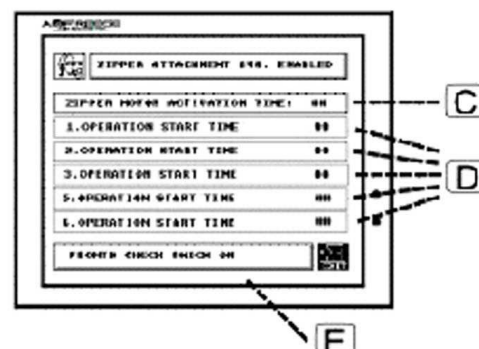
To alter these settings the machine must be equipped with an Automatic Zipper Attachment System
To begin operating the Zipper System, '**ZIPPER ATTACHMENT ENABLED**' (A) must be set on the screen

C- To adjust the activation time for the zipper feeder motor in order to allow enough zipper to be fed from the roll through the special patch guide onto the fabric

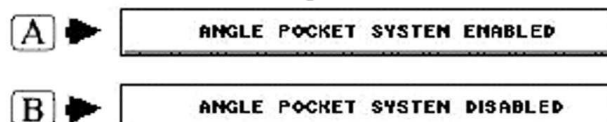
D- To adjust timing for zipper cutter to move front, to stay Activated, and to move backwards to its original position

E- To enable stacker photocell to control zipper cutter
For security reasons.

SUGGESTION: Keep this at '**ON**' at all times.



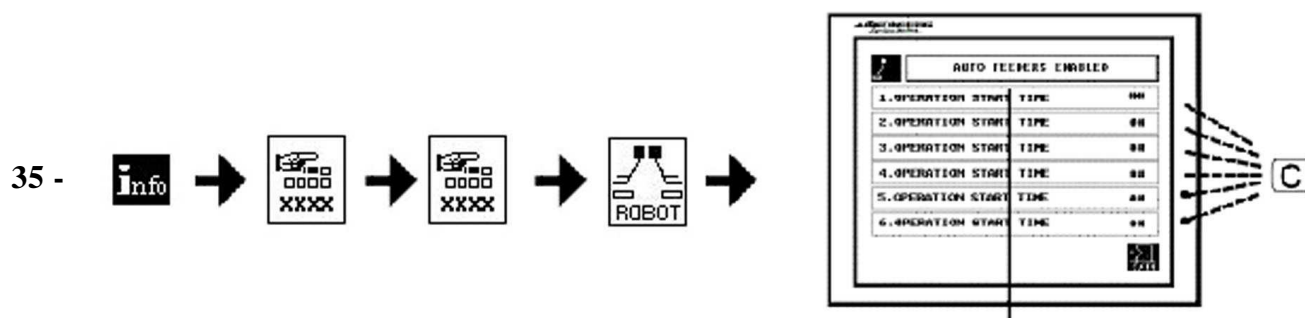
Angle Pocket System Enabled/Disabled



To use this system your machine must be manufactured with the ANGLE POCKET system which includes a split needle sewing head and 6 sets of corner knives.

To use Angle Pocket System press '**ENABLED**' (A) position.

MACHINE PANEL

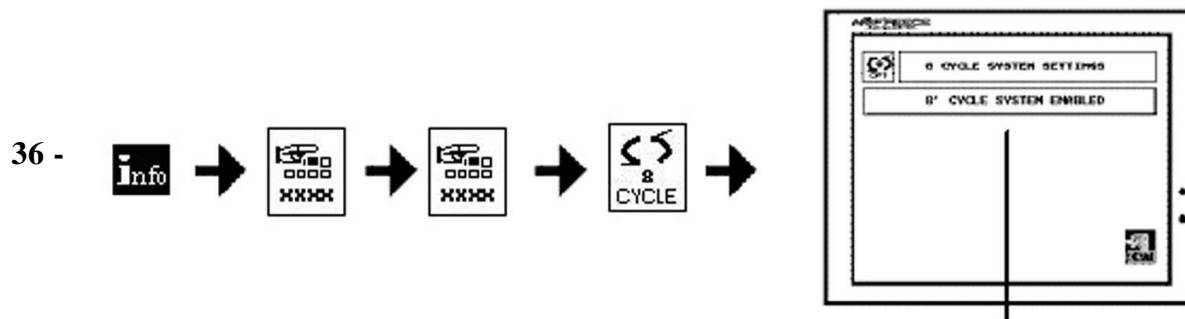


Auto Loaders Enabled/Disabled

To use this system your machine must be manufactured with the Auto patch and flap loader systems.

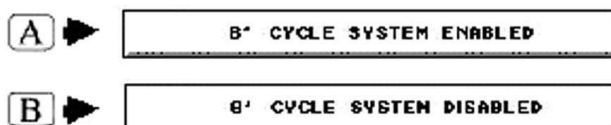
To use Loader System bring it to **'ENABLED'** (A) position.

During operation times indicated with C-, operation timings of actions are adjusted according to the automatic receiving and loading unit process order of machine.



Cycle Operation by 8 Enable/Disable

To use this function bring it to **'ENABLED'** (A) position.



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.

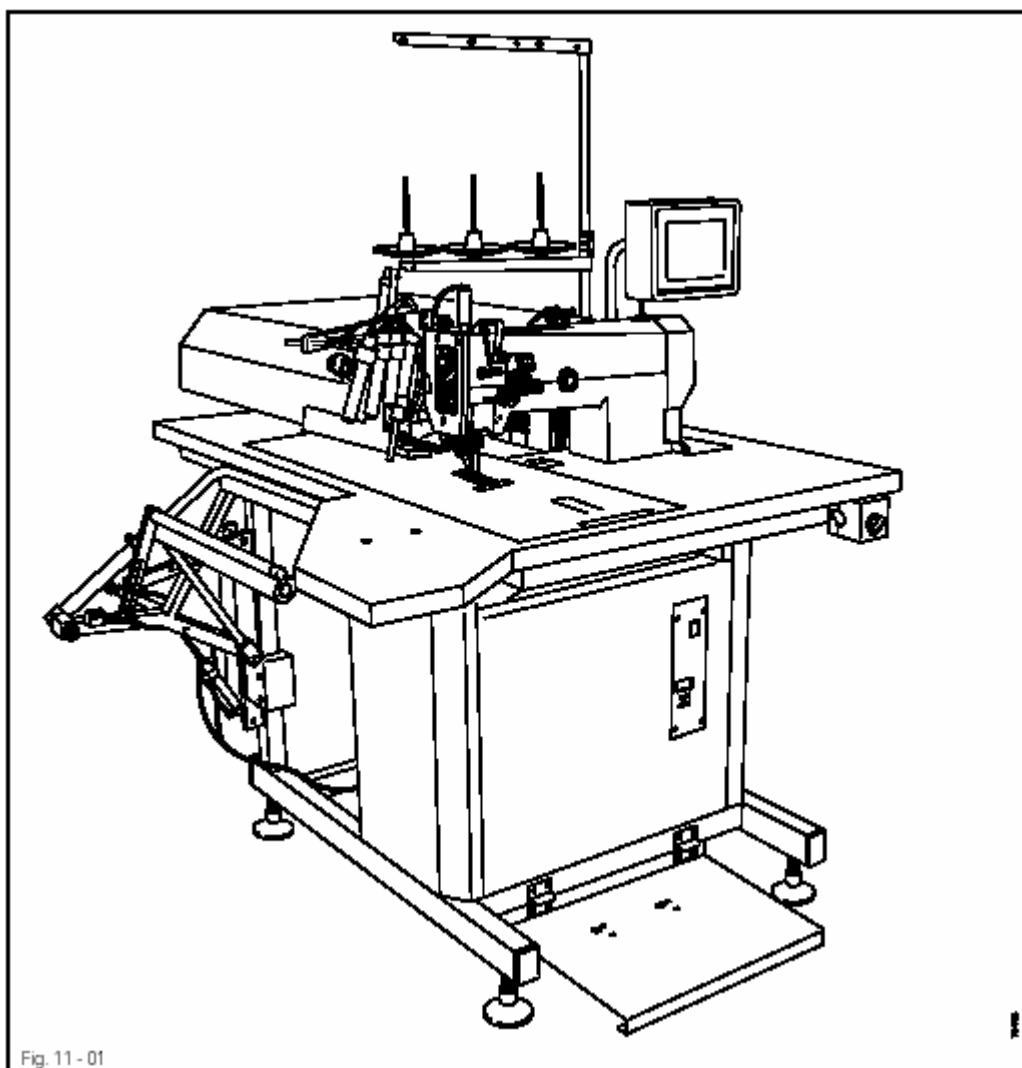
In case machine is operated for more, it is highly recommended to keep maintenance intervals more frequent.

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

MACHINE CLEANING & LUBRICATING

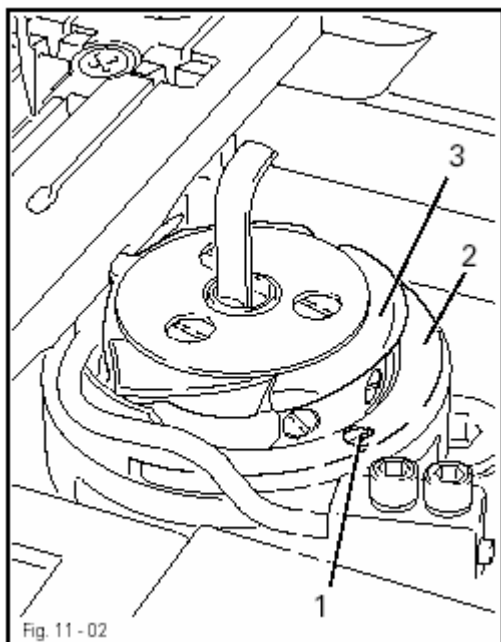


It is recommended to carry out the following cleaning processes in order to prevent any operative failures in single shift operations:

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

MACHINE CLEANING & LUBRICATING

2. CLEANING THE HOOK AND BASE

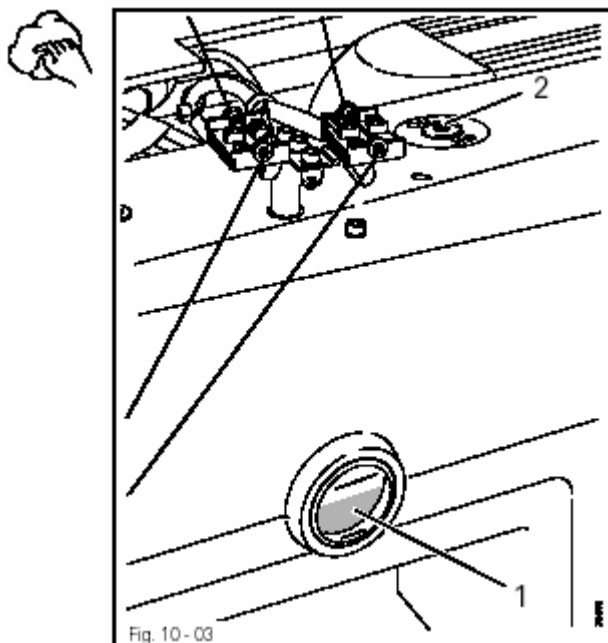


Bobbin case section and needle part must be cleaned for several times per day.


- 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.

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.

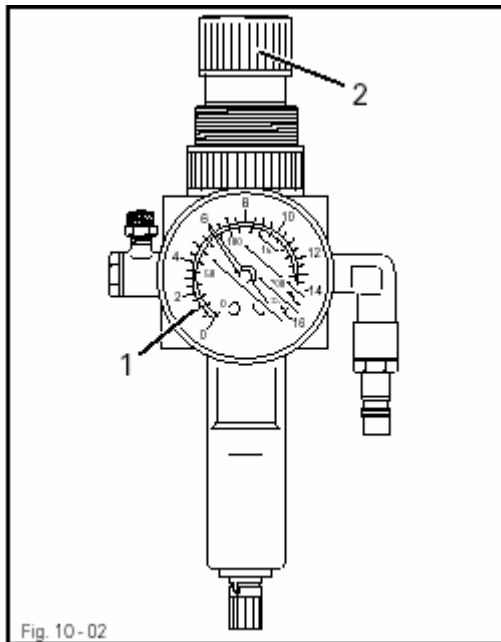
-  Use only 22,0 mm²/s oil with medium center viscosity at 40°C and density of 0,865 g/cm³ at 40°C!

4. AIR PRESSURE SETTING OF MACHINE AND CLEANING PRESSURE TUBE

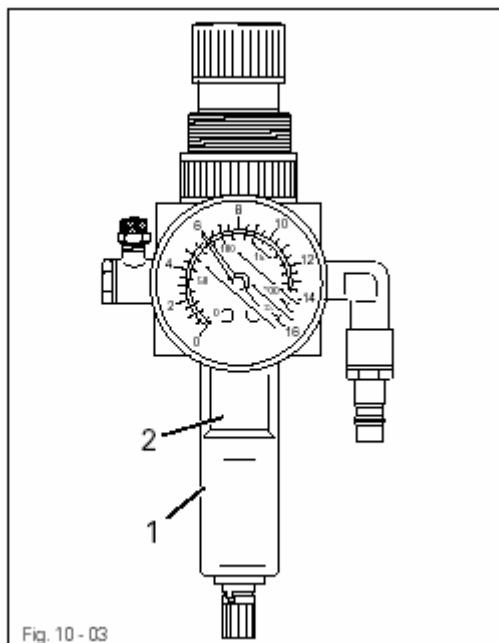
Air pressure setting of machine:

- 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).

MACHINE CLEANING & LUBRICATING



5. CLEANING MAINTENANCE UNIT AIR FILTER

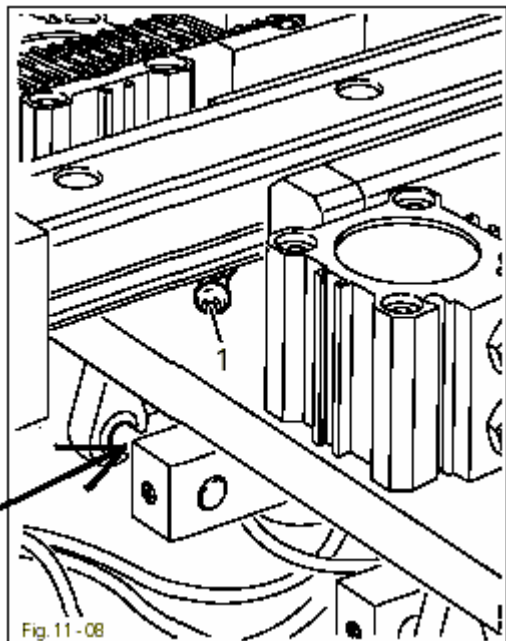


- Switch off the machine!
- Remove compressed air pipe on maintenance unit.
- Water container (figure nr. 1) is discharged.
- Water container nr.1 is automatically discharged after removing maintenance unit compressed air pipe.

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.



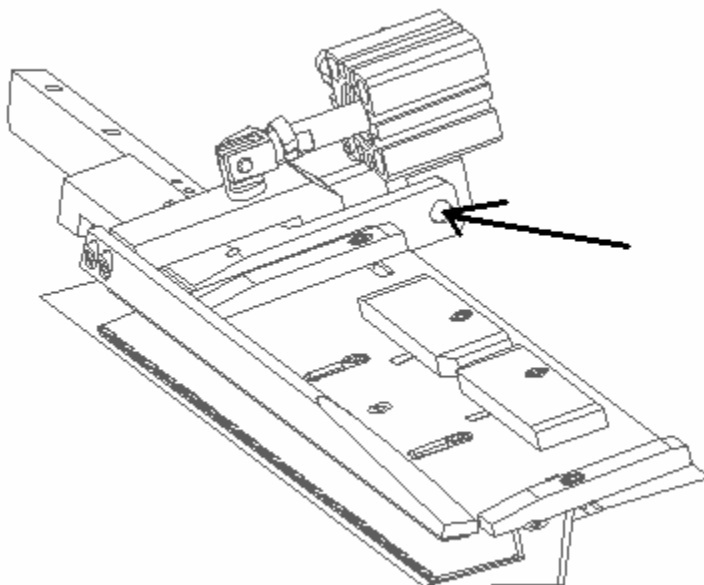
- Switch off the machine
- And prevent it from running again.
- Send clamp carriage mechanism backwards.
- Zone indicated with arrow nr.1 must be lubricated with permanent grease pump.
- This lubrication shall be performed once every two months for single shift operations and once a month for two shift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

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.

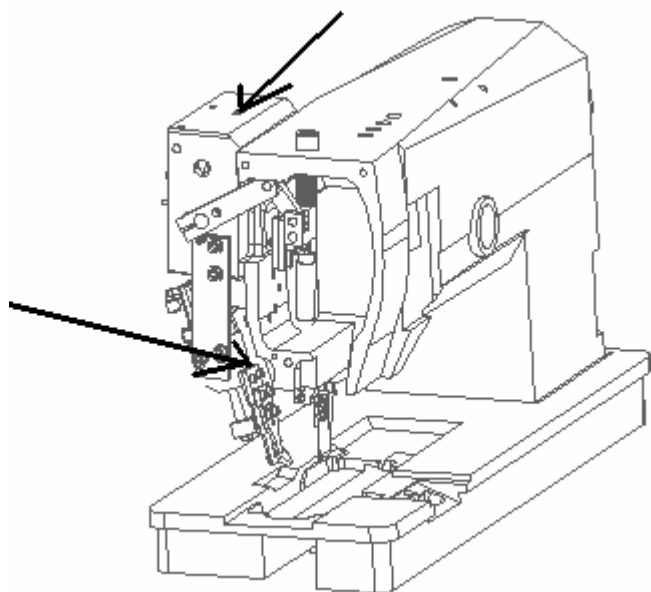
Zones on sewing head must also be lubricated.

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.

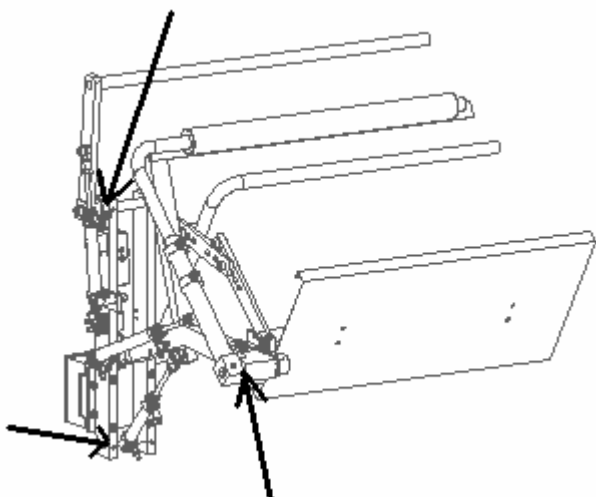
MACHINE CLEANING & LUBRICATING



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.

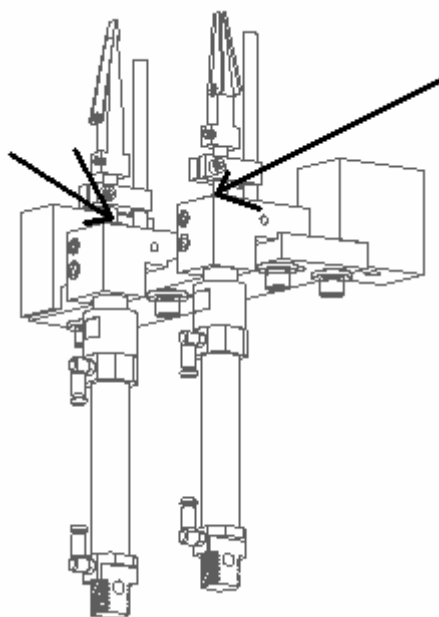


MACHINE CLEANING & LUBRICATING

9. LUBRICATING CORNER KNIFE MECHANISM

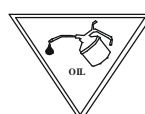
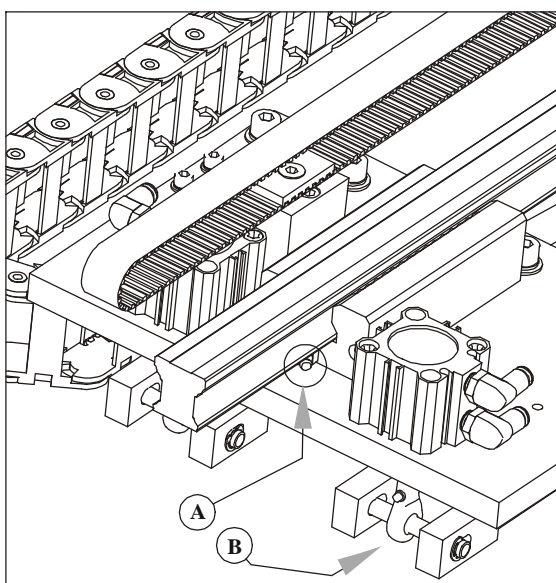


Corner knife mechanism must be cleaned with air everyday and spindles and moving parts must be lubricated with machine oil once a week.



10. PERIODICAL LUBRICATION OF MACHINE

Clamp Carrier and Clamps



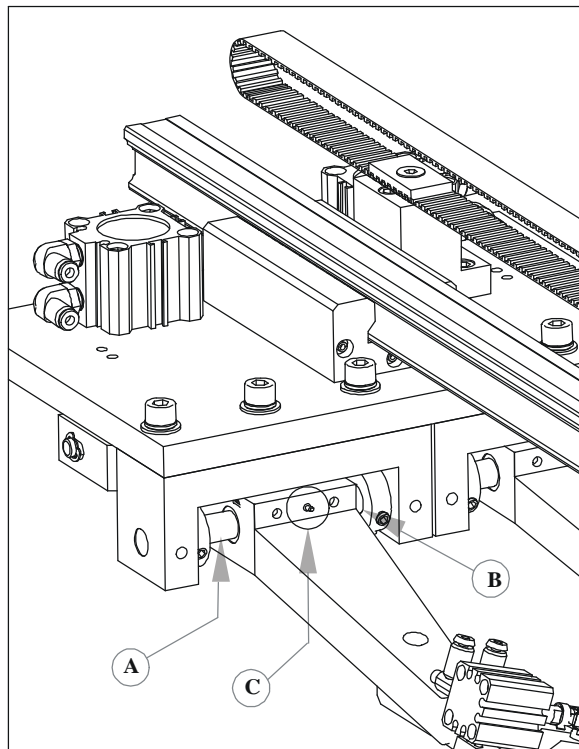
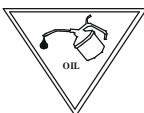
- A -** You need to make oiling in 6 month periods with grease oil.
- B -** It is necessary first to clean and then to make normal oiling in 3 month periods.

Revised 10/2006

e-mail: service@amfreece.cz; parts@amfreece.cz; website: www.amfreece.com

Phone: +420 582 309 146 (Service), +420 582 309 286 (Spare Parts); Fax: +420 582 360 606

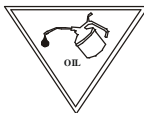
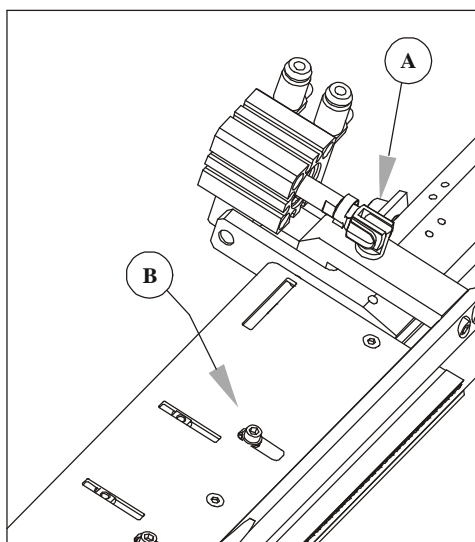
MACHINE CLEANING & LUBRICATING


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.

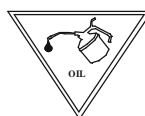
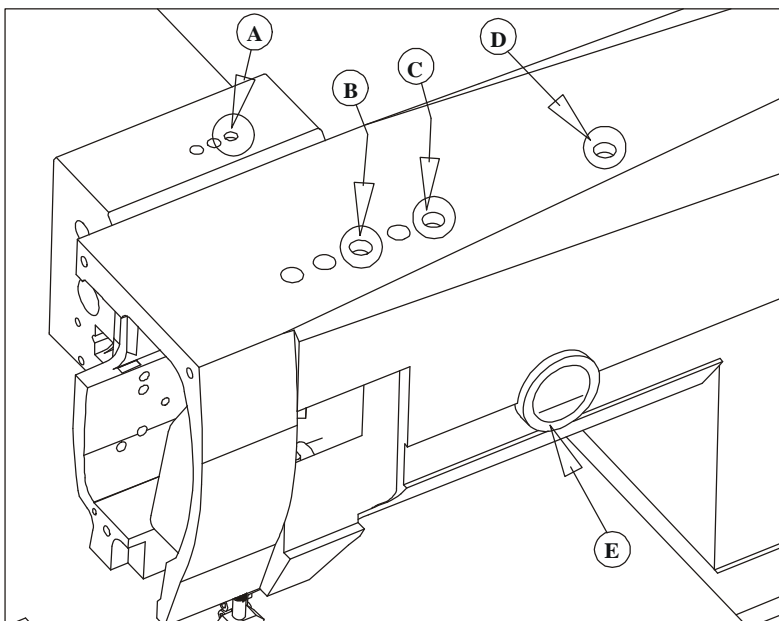

A -

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.

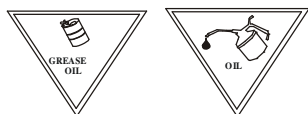
B & C -

It is necessary to make oiling in 3 month periods.

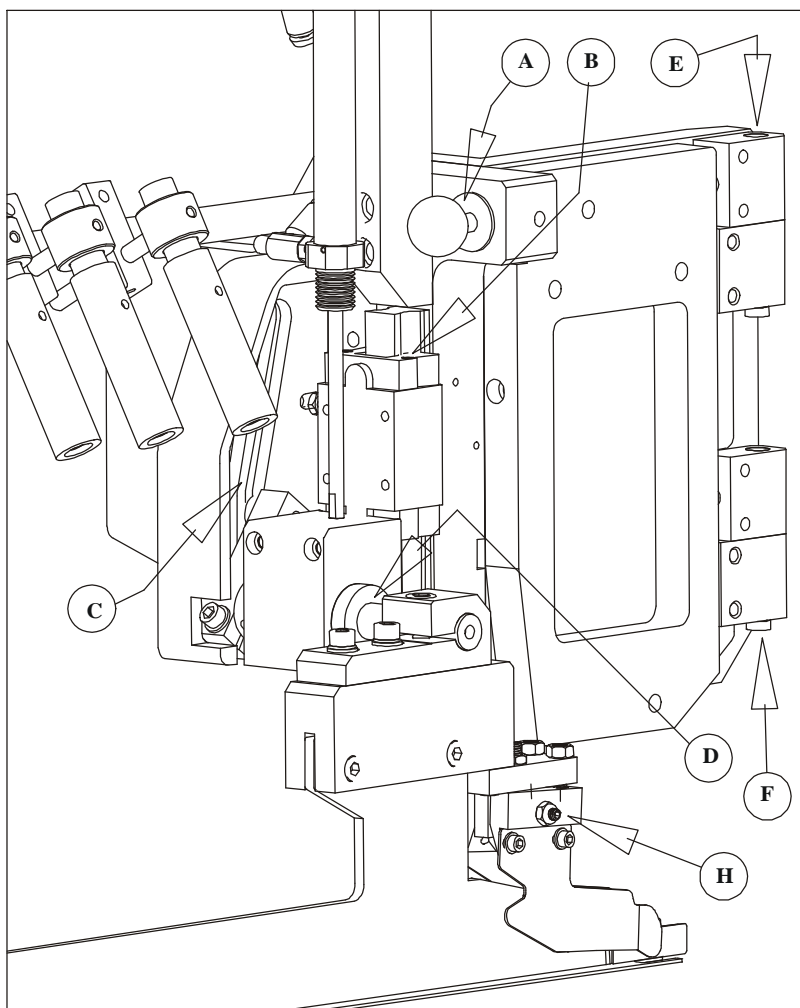
D -

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.

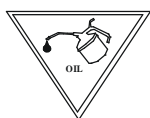
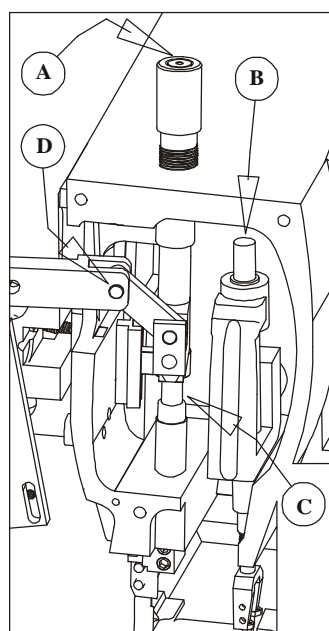
MACHINE CLEANING & LUBRICATING



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

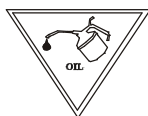


Clamp Carrier and Clamps



- 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.

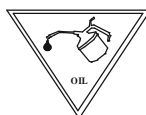
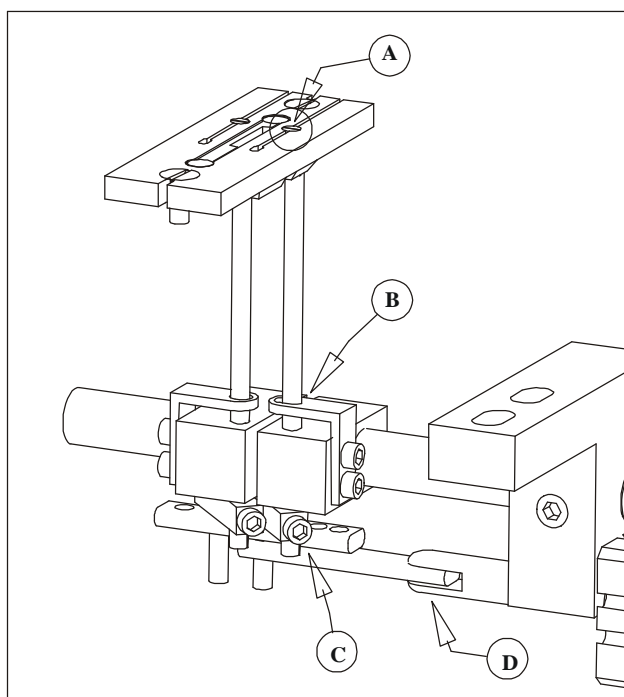
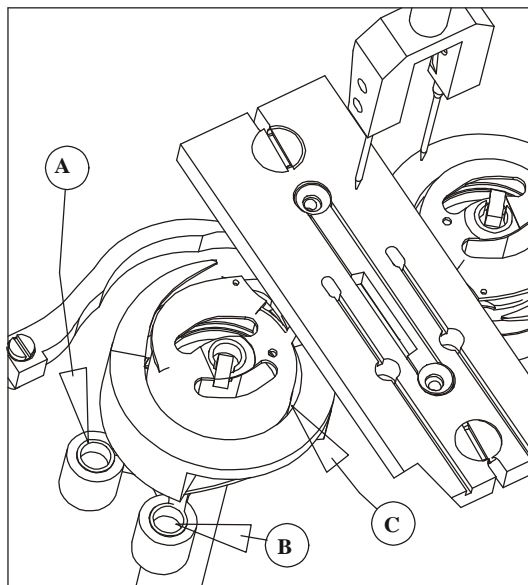
MACHINE CLEANING & LUBRICATING


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 -

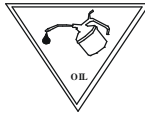
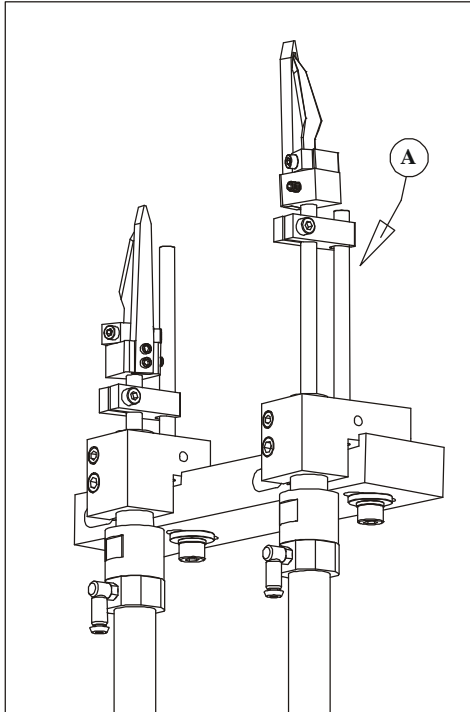
It is necessary first to clean and then to make normal oiling in 3 month periods.

D -

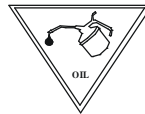
It is necessary first to clean and then to make normal oiling in 3 month periods.

MACHINE CLEANING & LUBRICATING

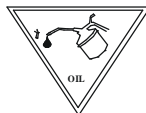
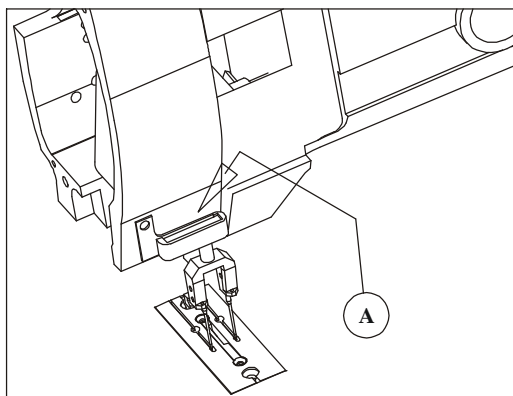
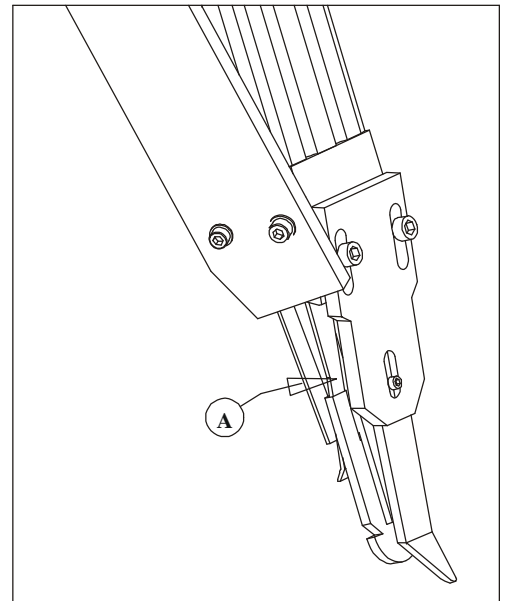
Corner Knife , Top Thread Trimmer and Arm Thread Guide



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.

TROUBLESHOOTING

TABLE OF CONTENTS

	Page
ADJUSTING THE NEEDLE AND ROTARY HOOK TIMING	2-2
ADJUSTING THE THREAD TENSION SPRING.....	2-2
ANGLE POCKET NEEDLE SYSTEM ADJUSTMENT	2-3
CLAMP SETTINGS	2-4
CLEARANCES BETWEEN ROTARY HOOKS AND PLATE	2-4
CRUCIAL POINTS WHEN ADJUSTING THE CENTRAL GUIDE FOR THE FIRST TIME	2-4
HOW TO ADJUST THE BOTTOM THREAD CUTTER?	2-6
HOW TO ADJUST THE END SEWING, IN THE BEGINNING ON THE POCKET COVER AND AT THE END?.....	2-8
HOW TO ADJUST THE FRONT POSITION SHAPE OF THE CLAMP?.....	2-8
HOW TO ADJUST THE LASER POINTERS?	2-9
HOW TO MAKE KNIFE CUTTING POSITIONS FROM THE PANEL?	2-10
THE SOLUTION FOR THE CORNER KNIFE CUTTING PROBLEMS	2-11
HOW TO MAKE PHOTOCCELL SETTING?	2-12
HOW TO MAKE SETTINGS OF THE WING PLATES OF THE DIRECTIONING GUIDE?.....	2-13
HOW TO MAKE THE ADJUSTMENT OF THE CENTRAL KNIFE'S?	2-14
HOW TO MAKE THE SQUARE ADJUSTMENT OF THE CENTRAL GUIDE?	2-15
INSTALLATION OF DOUBLE-SINGLE FILLET APPARATUS TO THE MACHINE AND CLAMP SETTINGS	2-18
INSTALLING THE BOBBIN AND THE CUP.....	2-19
NEEDLE BAR HEIGHT	2-20
ROTARYHOOK TIMING.....	2-21
SENSOR SETTINGS OF HEAD POSITION SENSOR	2-22
THE ISSUES TO BE TAKEN CARE OF ABOUT THE POCKET COVERS	2-23
THE ISSUES TO BE TAKEN CARE OF ABOUT THE POKET COVERS	2-24
THREAD SENSOR SENSITIVITY SETTING	2-25

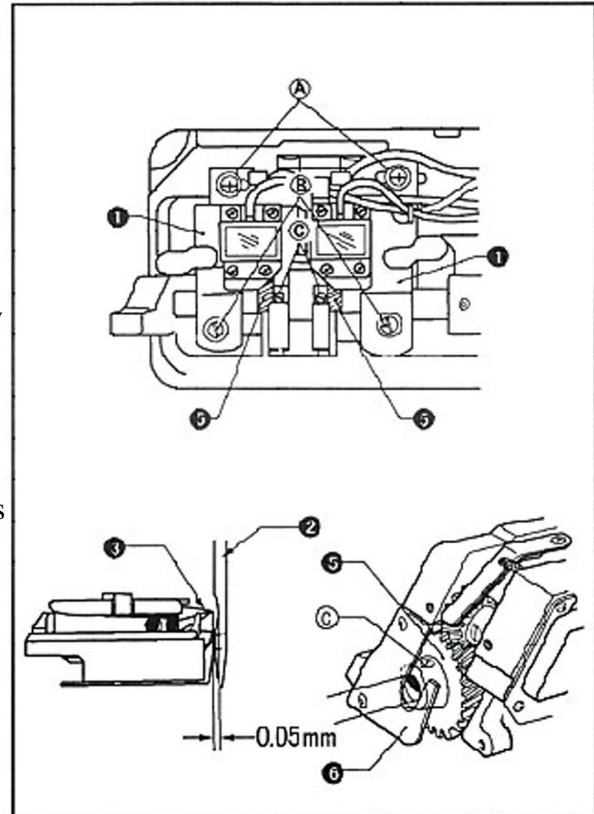
TROUBLESHOOTING

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

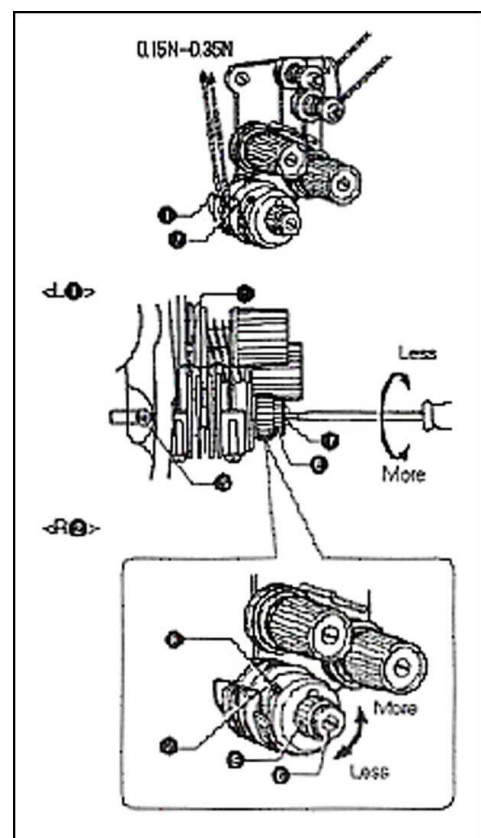
The standard tension for thread take – up spring "L 1" and thread take – up spring "R 2" is 0.15 – 0.35 N for both springs.

<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 thread tension 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 adjustment knob "9" to adjust the tension.
- 3- Tighten the screw "8", and then tighten the knob "6"



TROUBLESHOOTING

Operating range of thread – up spring the standart

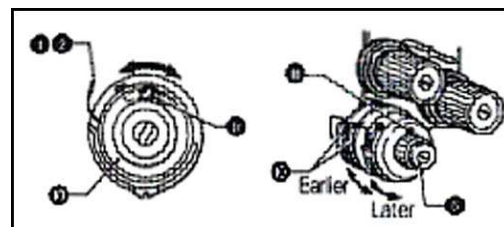
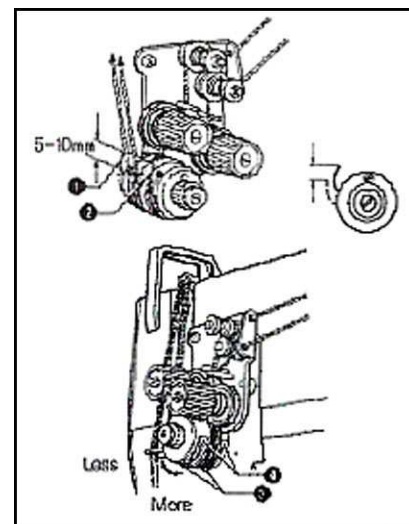
Operating range for thread take – up spring “L 1” and thread take – up spring “R 2” is 5 – 10 mm for both springs.

- 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.

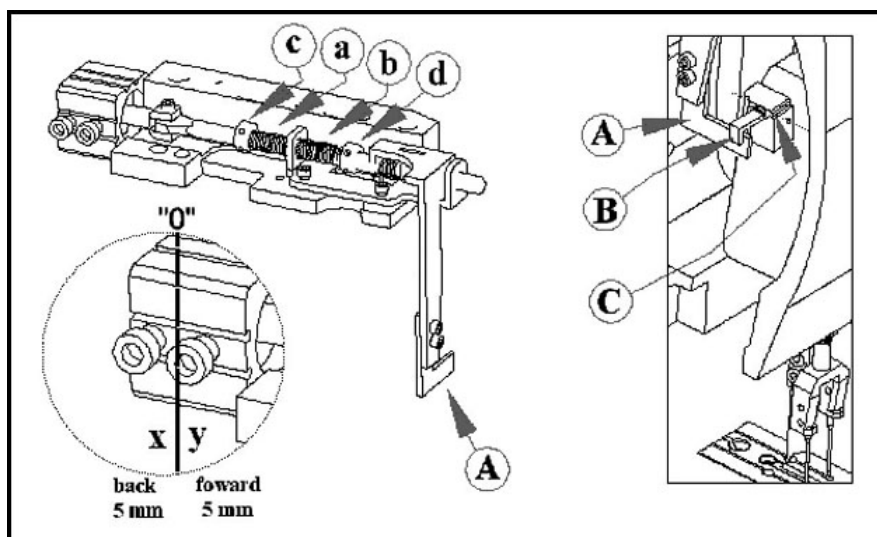
The standart operation timing for thread take – up spring “R 2” is the middle position within the operating range of the thread take – up spring guide “10”

- 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 :



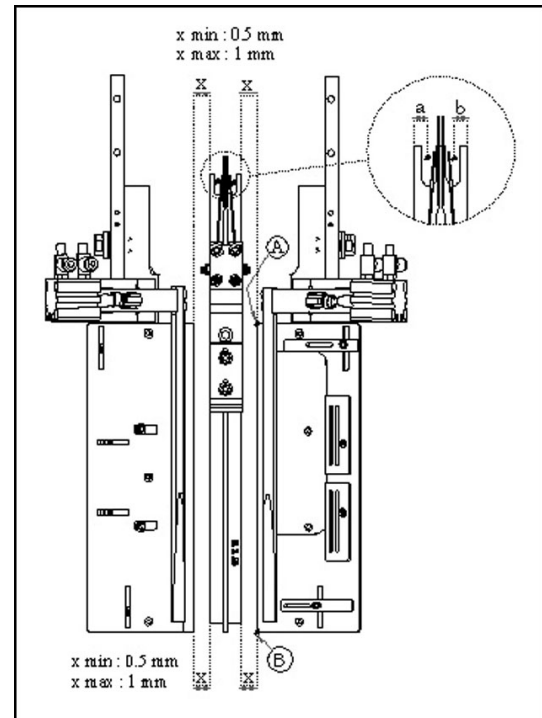
- 1-Bring the machine to one of the **NORMAL POCKET (not angle)** programs (1,2,3...7)
- 2-Springs number “a” and “b” control the piston to stop in the middle. The balance adjustment of the springs is controlled by bearings “b” and “d”
- 3-When the piston is adjusted to stay on “0” point, the pin number “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.

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.

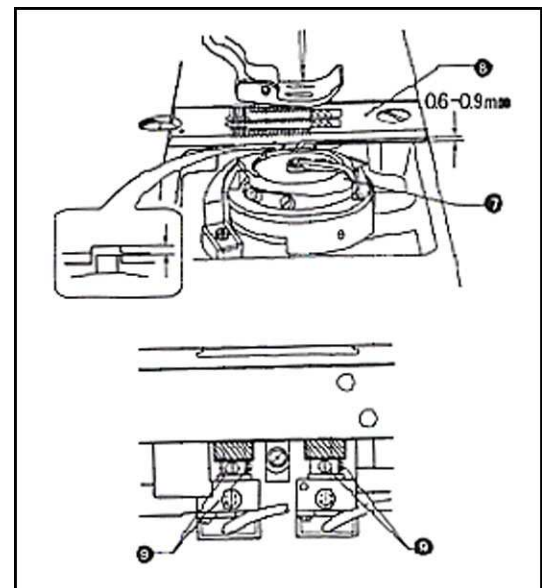


CLEARANCES BETWEEN ROTARY HOOKS AND PLATE

- 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”.



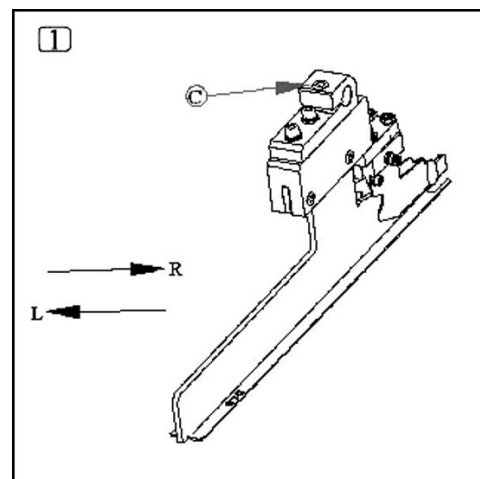
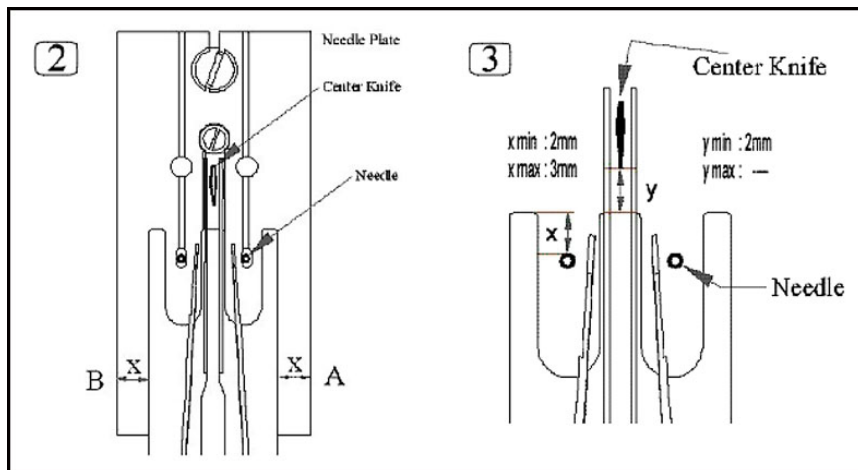
CRUCIAL POINTS WHEN ADJUSTING THE CENTRAL GUIDE FOR THE FIRST TIME

- 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)

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)

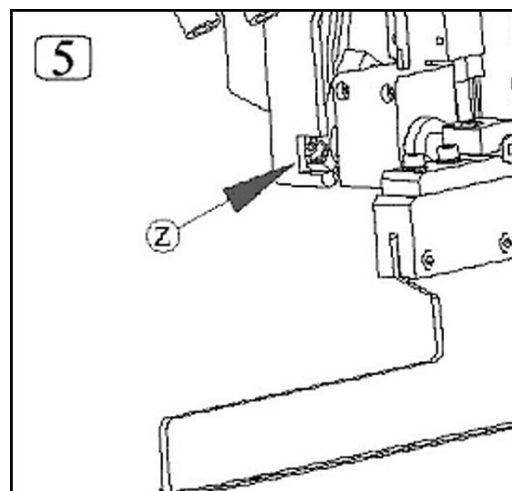
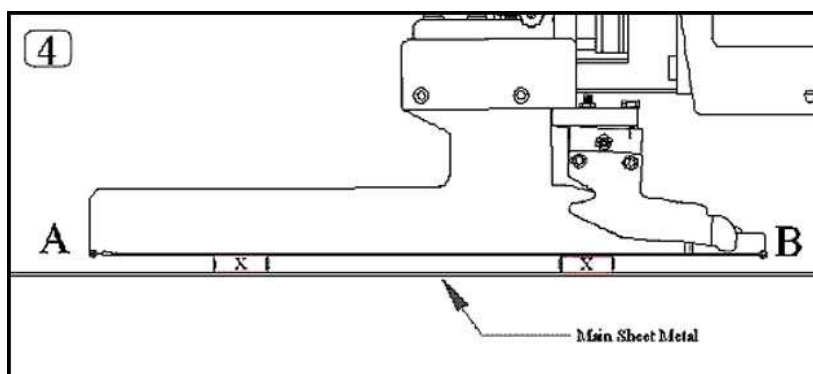
You can make the angle adjustment of the guide and the bottom base by the Z screw on the Figure 16. The bottom of the guide should be parallel with the base.

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.



TROUBLESHOOTING

HOW TO ADJUST THE BOTTOM THREAD CUTTER?

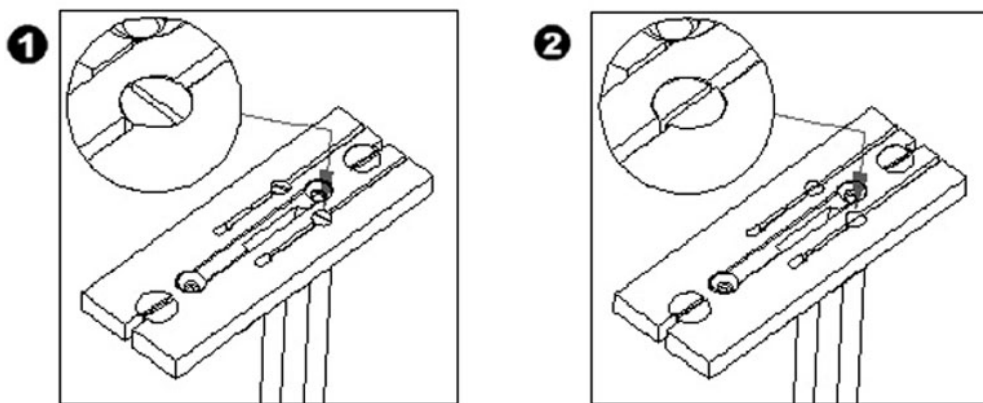
At the end of the sewing, the threads coming from the bottom bobbin are cut by the bottom cutter and they are held in order for the threads not to be free.

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

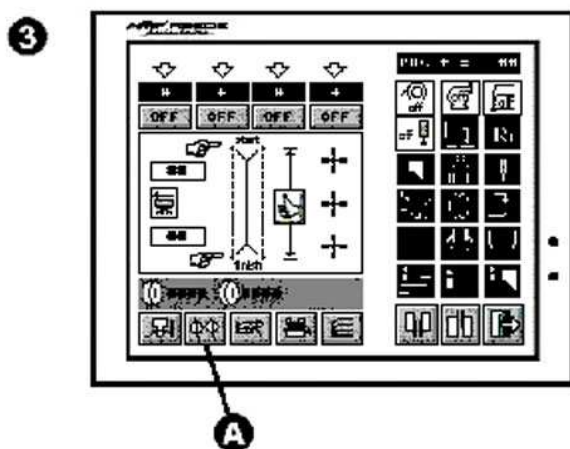
Important Issues While Making the Adjustments.

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.



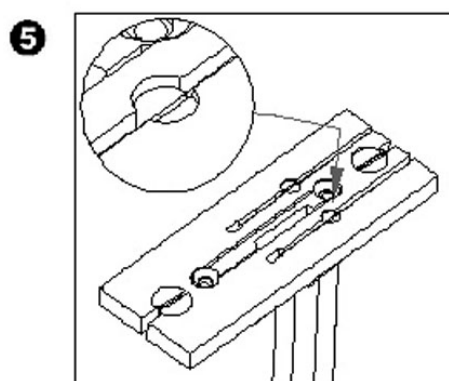
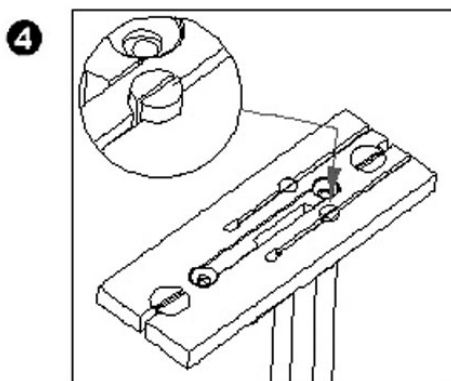
You can test the thread cutting knives manually at the “A” button shown on Figure 3



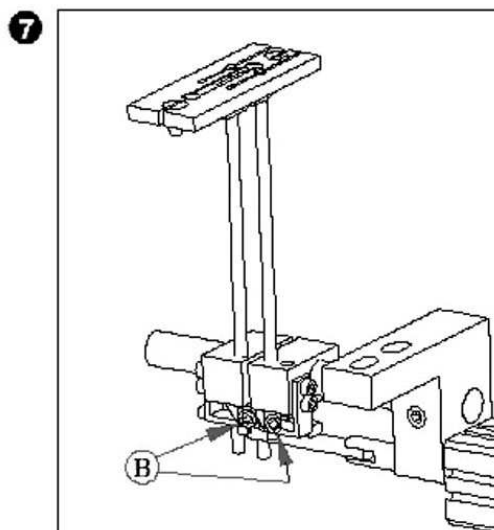
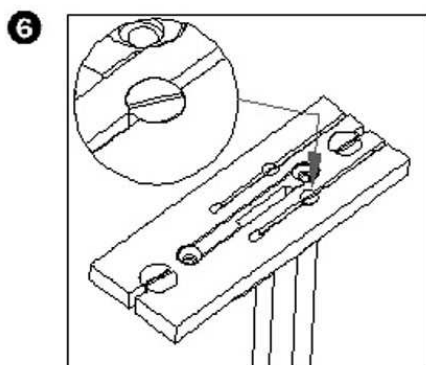
TROUBLESHOOTING

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.

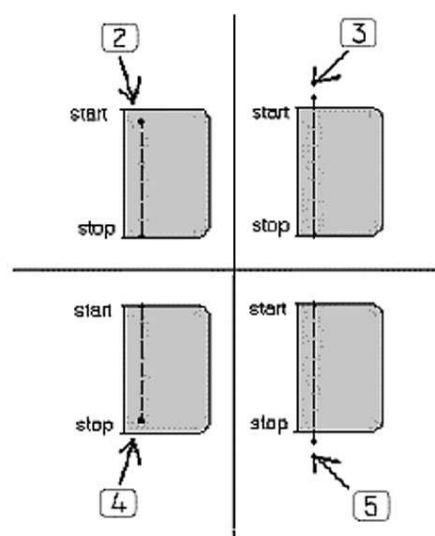
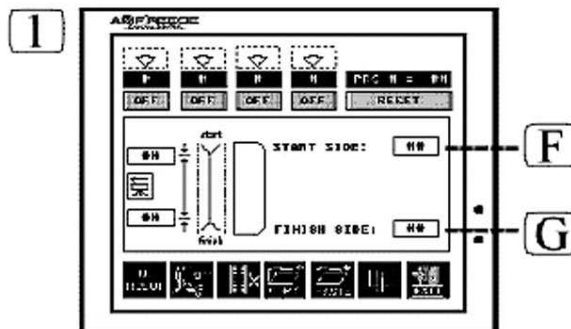
TROUBLESHOOTING

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.

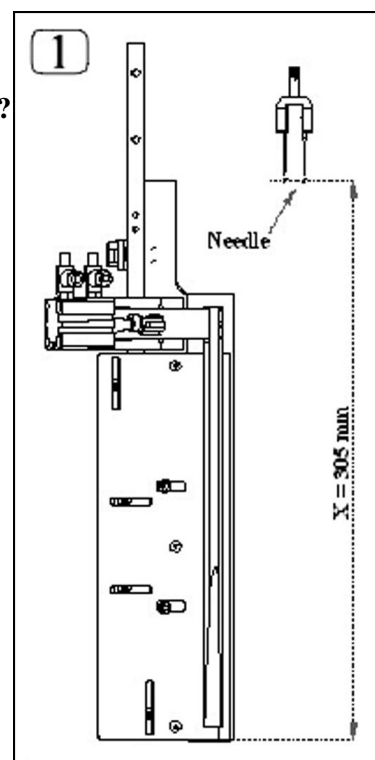
The many positioning settings on the machine are directly related to this setting. If the clamp stands on a different location than the one it should, it might change all the settings completely and you might face many problems.

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).

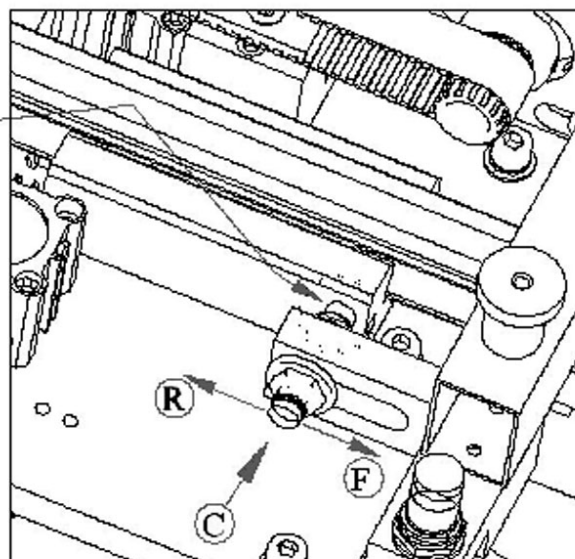
If the clamp passes 305 mm and stands more in the front, slip the sensor shown by "C" on Figure 18 on the direction of arrow "R" and adjust it by necessary mm.

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.



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)

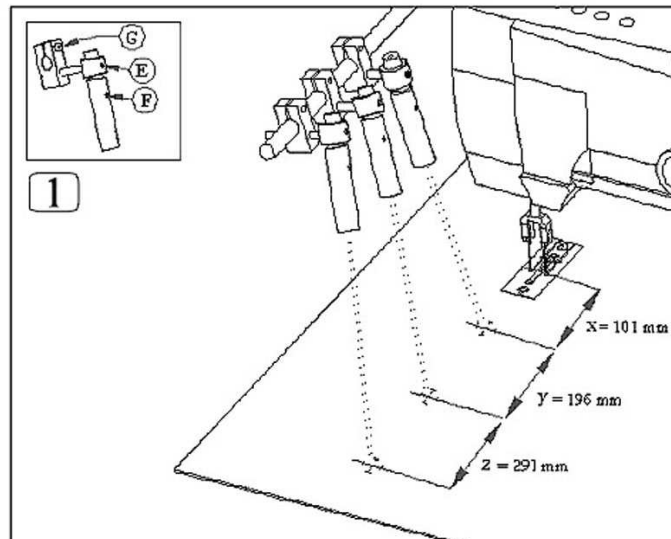
You can also see the places that the laser pointers will leave, labeled on the base plate of your machine. In case of any adjustment change or loss of adjustment, you can set the laser pointers to their standard adjustment by benefitting from here.

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

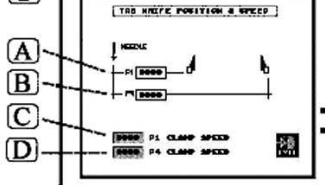
If you would like to adjust the clarity of these laser pointers, you can adjust it from the screw shown by "F".

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).

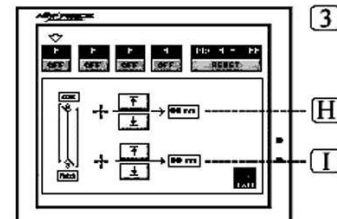
If you would like to make basic changes on some measurements, you can benefit from parameters shown by "C" and "D" on Figure 2 under the control of a technician. (Technics Manual-Page XXX).



2



3

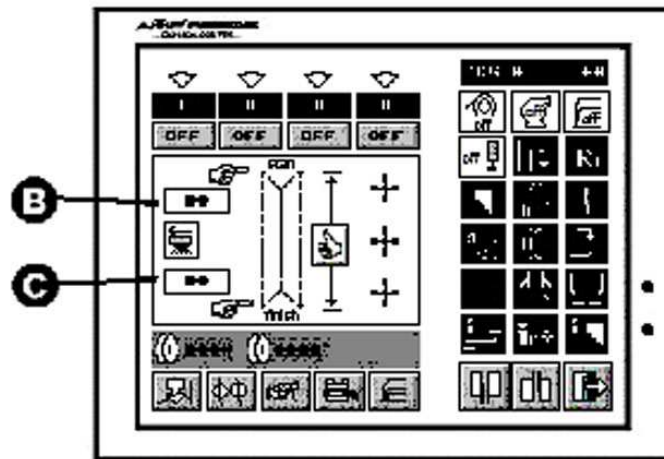


TROUBLESHOOTING

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 0.5 mm.

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 0.5 mm.

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**



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):

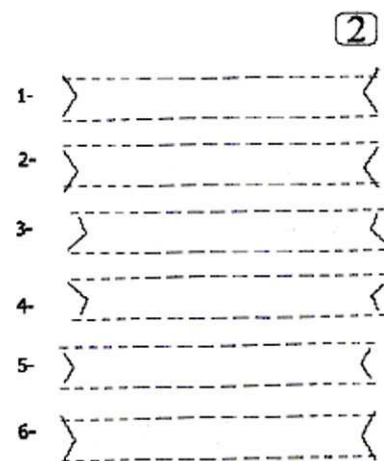
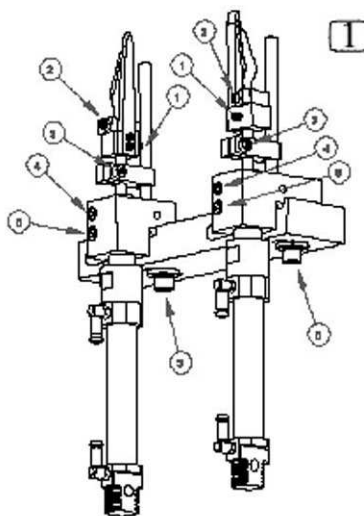
Solution: The screw of the corner knife cutting mechanism that cuts the sewings, shown with the arrow 5 has to be opened (Picture-1) and from the in/out adjustment screw shown by the arrow 6, you can adjust the knife unit, on the opposite of cutted sewing direction.

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.



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 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.

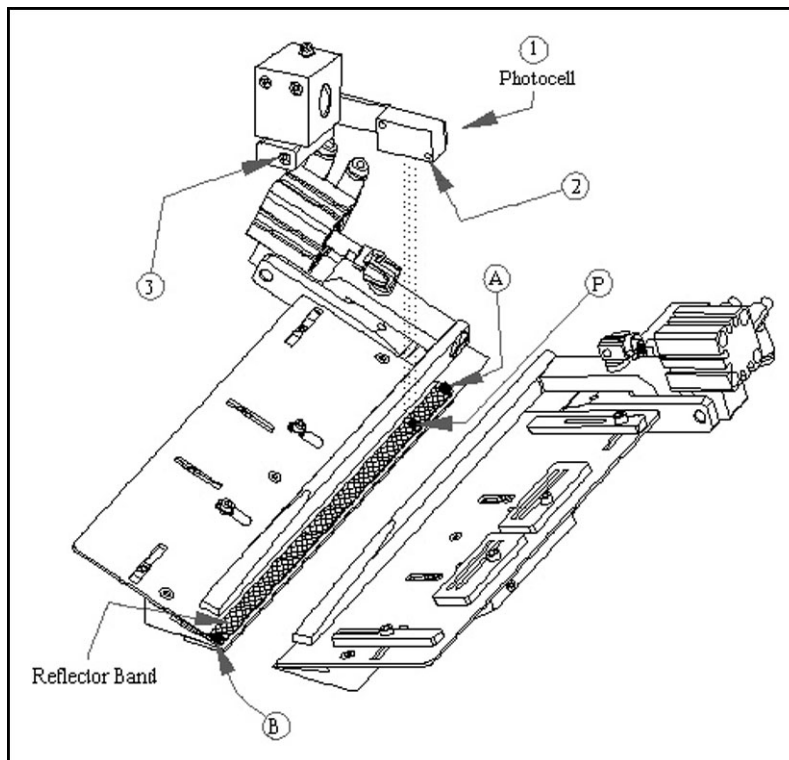
After making sure that the reflector is very new and clean, the photocell has to be facing the reflector strip perpendicularly with 90 degree angle. (point P)

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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e-mail: service@amfreece.cz; parts@amfreece.cz; website: www.amfreece.com
 Phones: +420 582 309 146 (Service), +420 582 309 286 (Spare Parts); Fax: +420 582 360 606

TROUBLESHOOTING

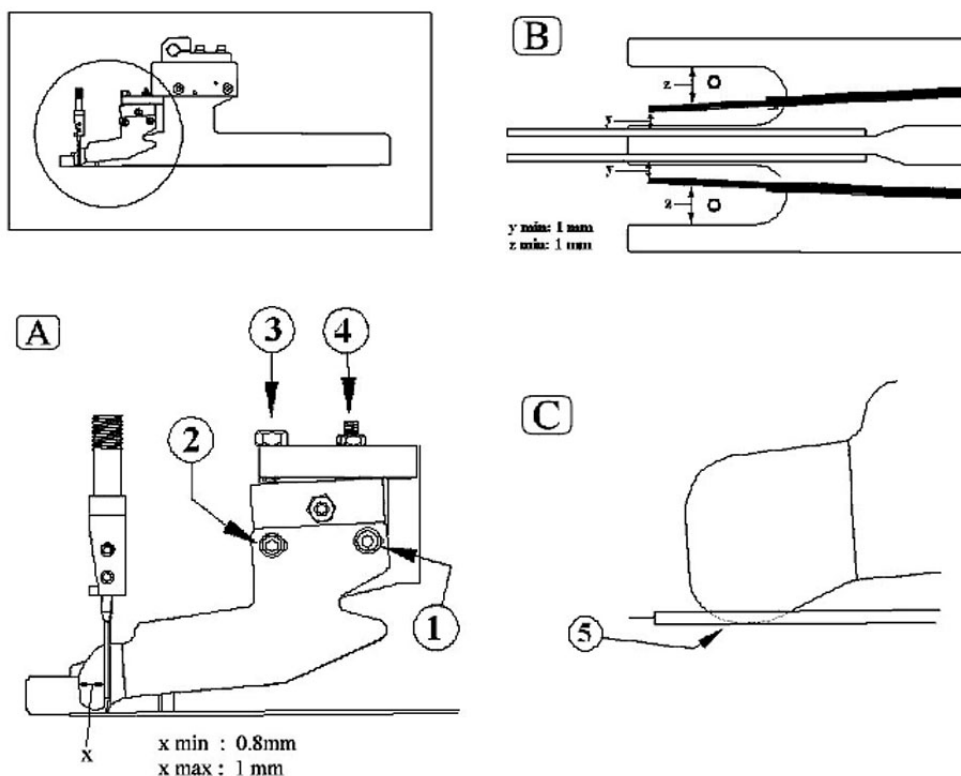
HOW TO MAKE SETTINGS OF THE WING PLATES OF THE DIRECTIONING GUIDE?

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 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)



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.

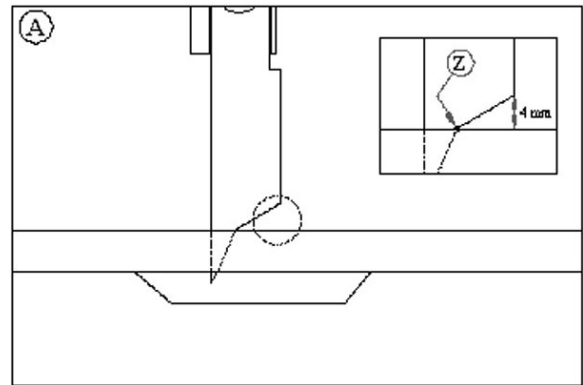
If the works are cotton or linnen, check the adjustments of the central knives in periods of 4 or 5 months and replace the knives.

How to Make the Height Setting of the Central Knife?

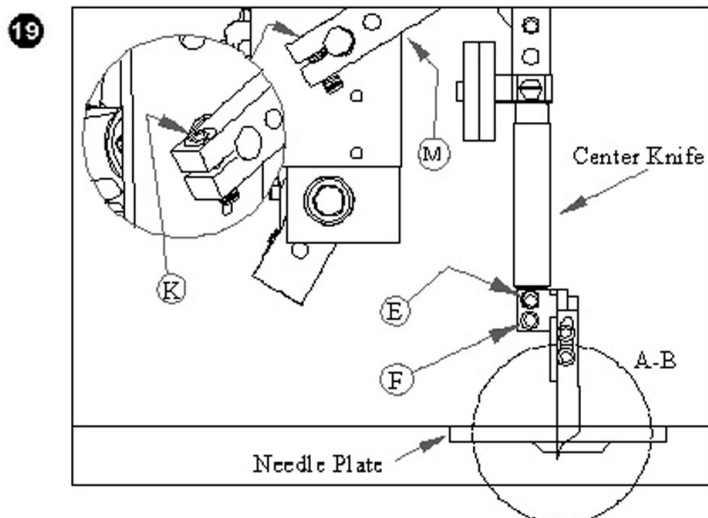
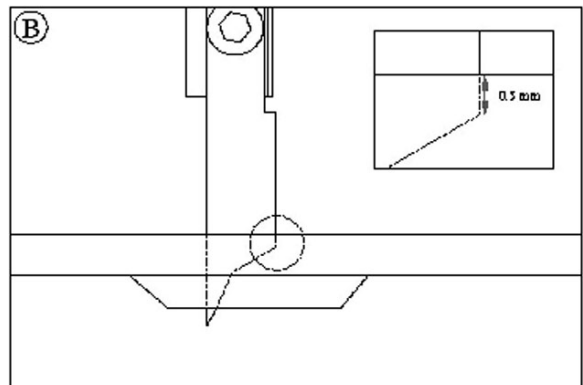
By entering the test screen from the panel, pass the button A and activate the central knife.

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).



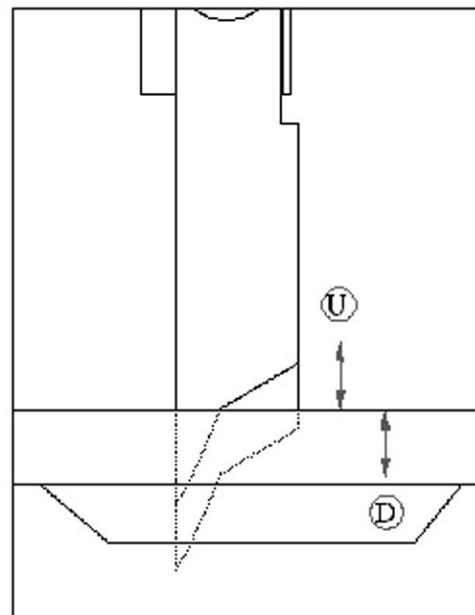
When replacing the central knife with a new one, lift the central knife to the very top point and tighten the "E" and "F" screws (Figure-19). (Tighten the screws definitely when the central knife is at the very top point).

TROUBLESHOOTING

You can make the cutting adjustment from the plate level 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)

20



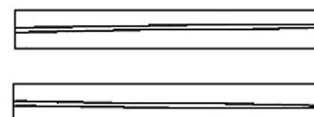
HOW TO MAKE THE SQUARE ADJUSTMENT OF THE CENTRAL GUIDE?

Note : The gönya adjustment of the central guide has to be made by a technical service personnel or by someone who has done a gönya 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)



1



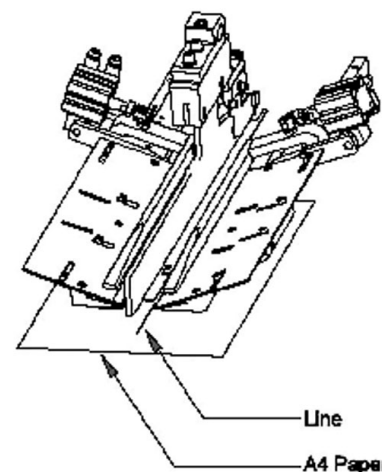
2

3

How to make these gönye adjustments?

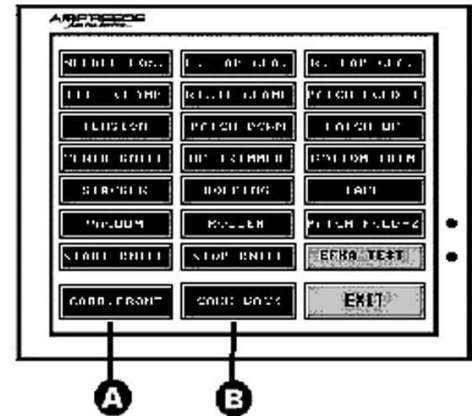
- 1- Place a white A4 paper under the Clamps.
- 2- Draw a 3 cm long line on the side of the central guide. (Figure 4)

4

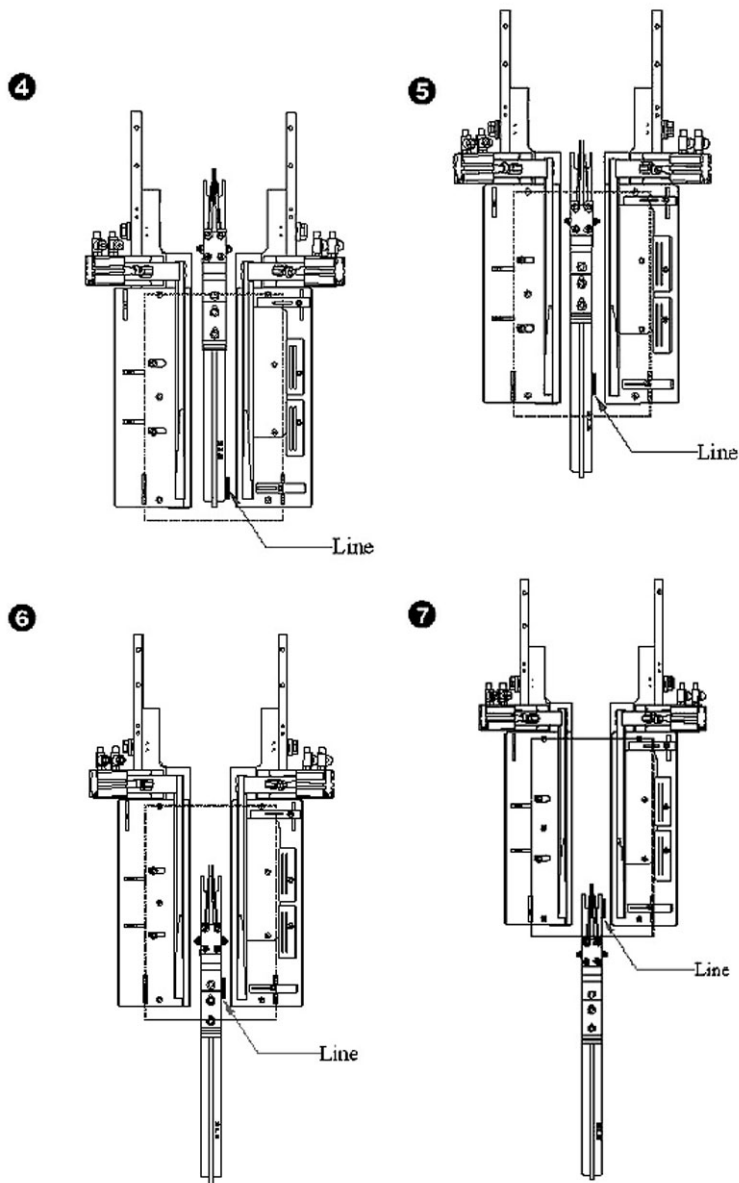


TROUBLESHOOTING

- 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)



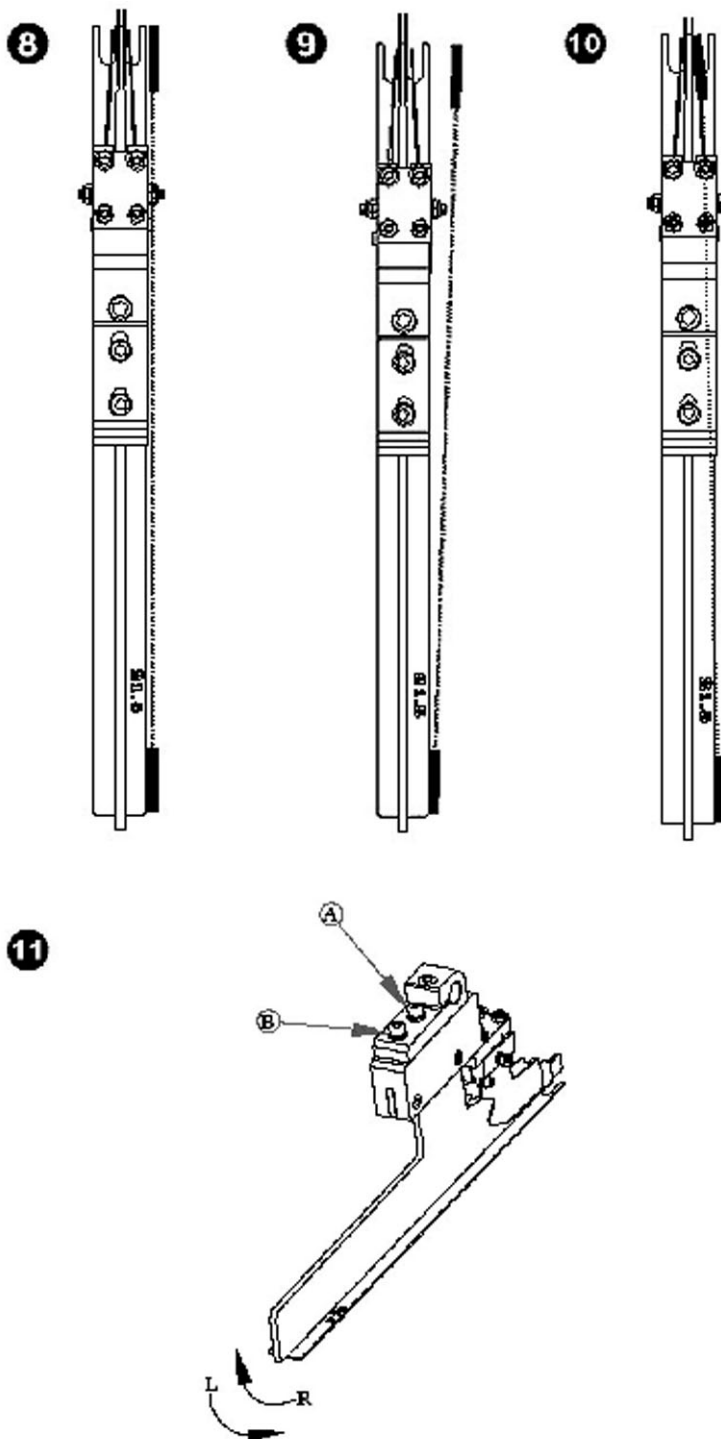
TROUBLESHOOTING

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.

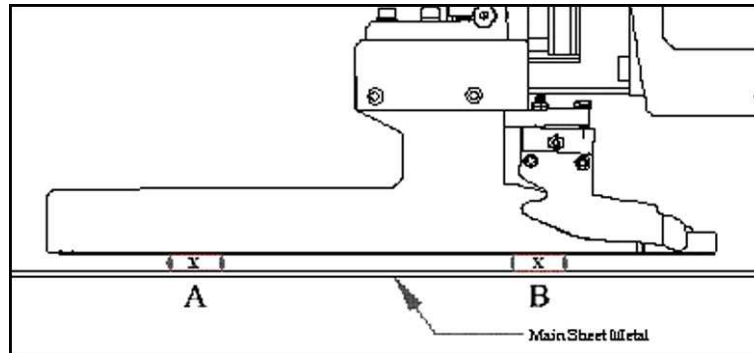


TROUBLESHOOTING

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.

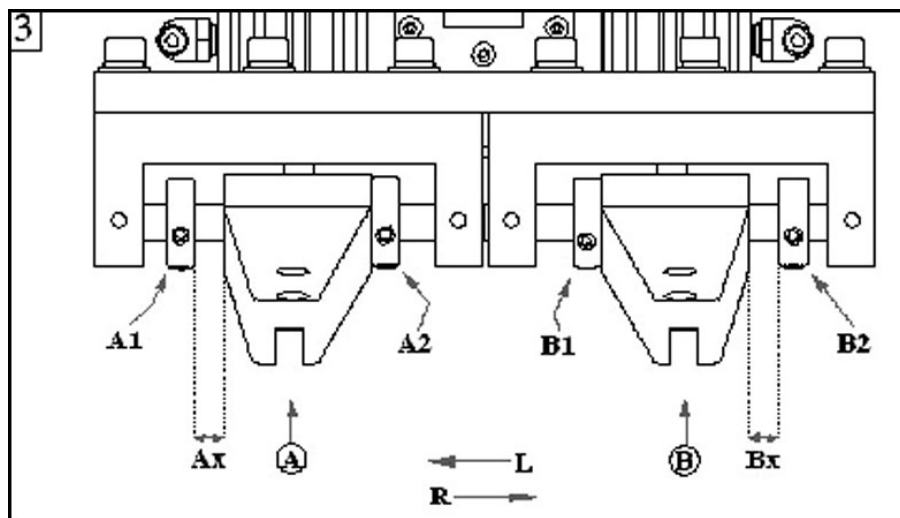


- 1 –Points “A” and “B” should be equally away from the ground.
- 2 –Clamps will be automatically located depending on the apparatus installed on the machine (machine detects this as “D” sensor).
- 3 –assuming that we work with double fillet apparatus, clamps work basing on rings A2 and B1.

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.

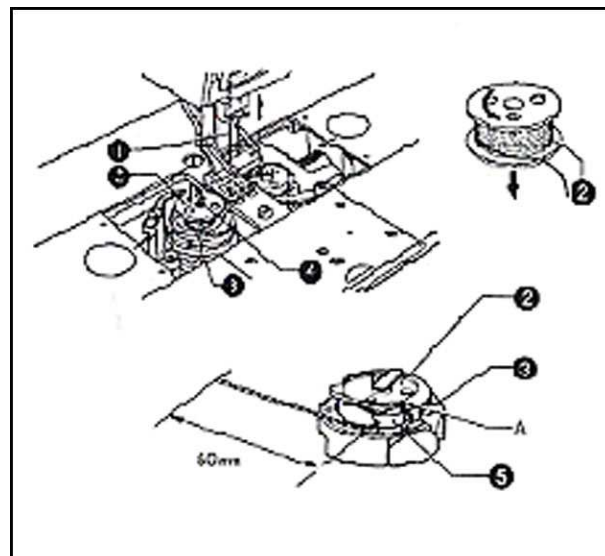


TROUBLESHOOTING

INSTALLING THE BOBBIN AND THE CUP

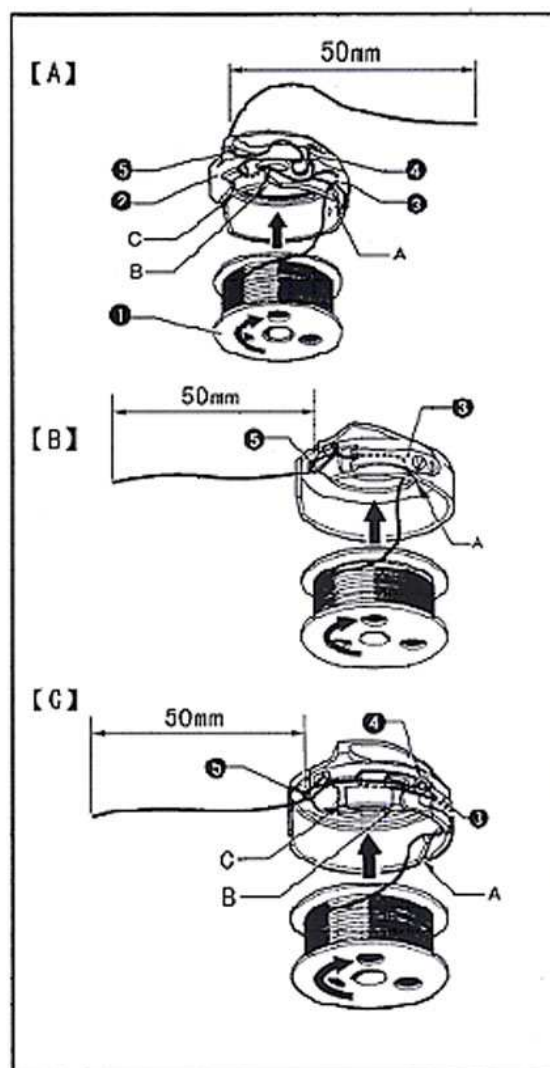
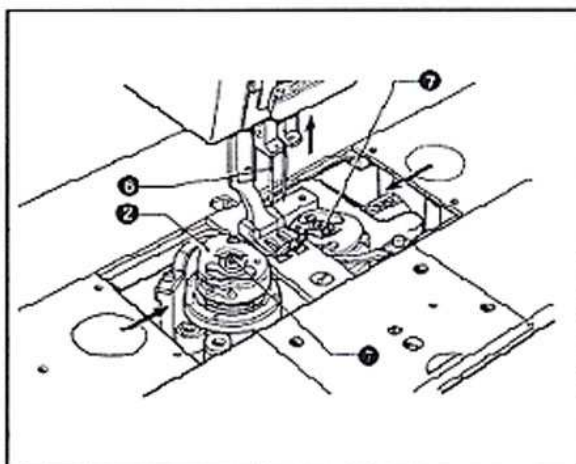
Installing The Bobbin

- 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

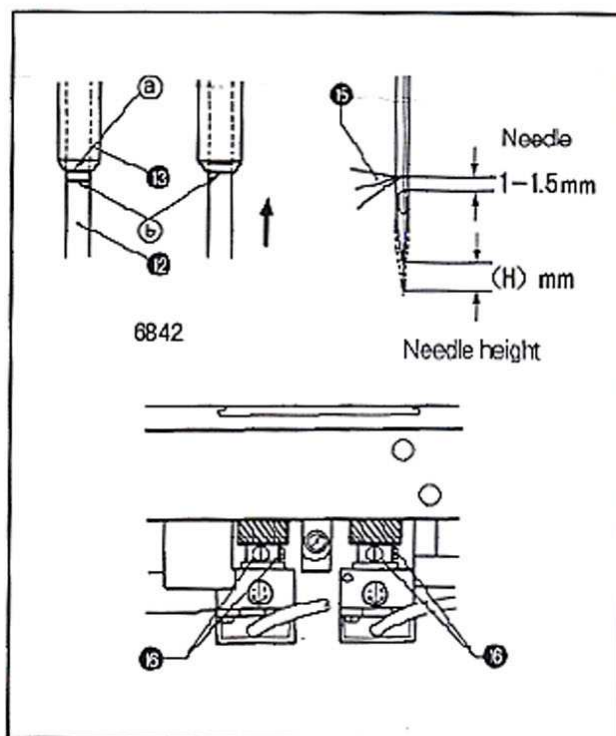
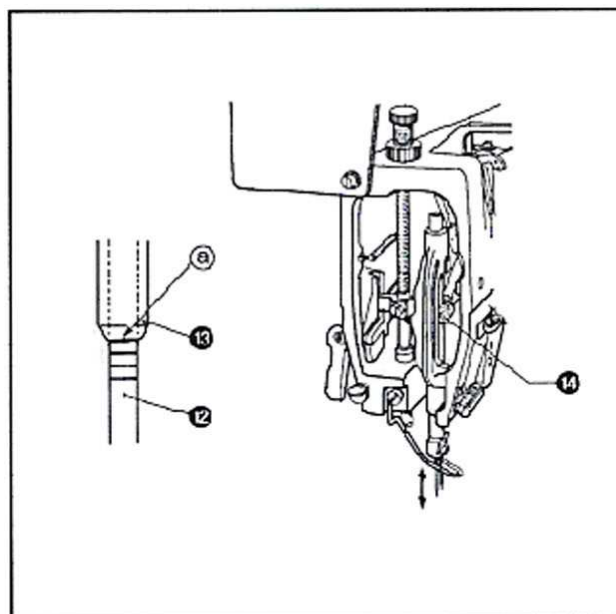
- 1 – Insert the bobbin “1” into the cap “2” so that the winding direction is as shown in the illustration.
- 2 – Thread the thread by one of the following methods in accordance with the shape of the cap being used.
 - a) Pass the thread through slots A and under the tension spring “3”
 - b) Pass the 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



TROUBLESHOOTING

NEEDLE BAR HEIGHT

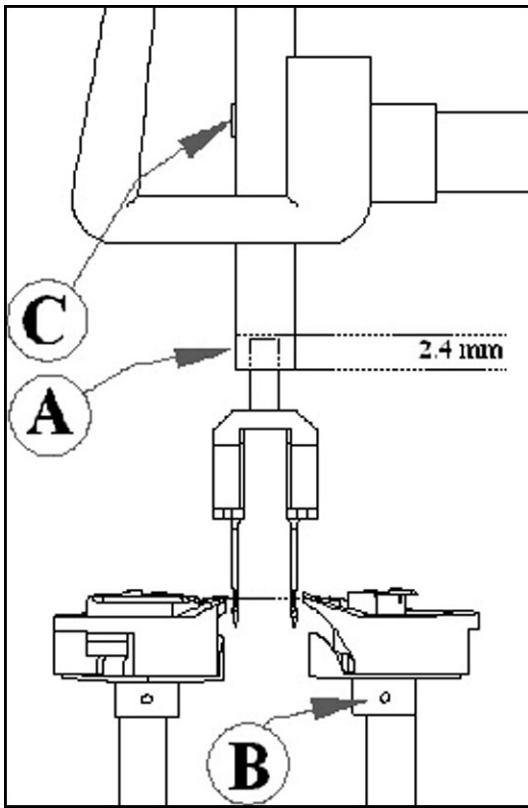
- 1 – Change the stitch length to the smallest possible setting.
- 2 – Open the face plate.
- 3 – Turn the machine pulley to move the needle bar “12” to its lowest position. Reference line a at the top of the needle bar “12” must be aligned with the lower edge of the needle bar supporter “13” at the 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	

TROUBLESHOOTING

ROTARYHOOK TIMING

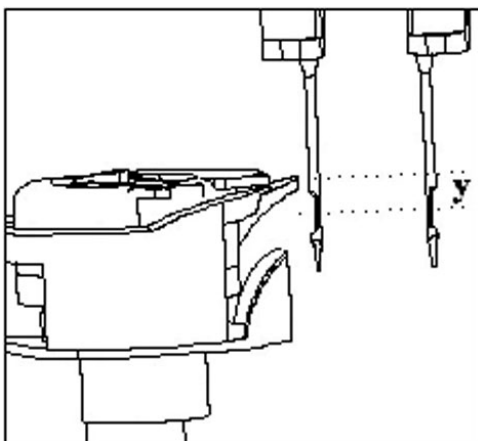
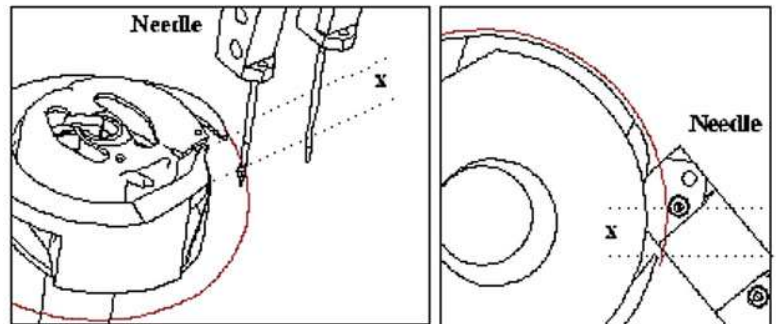


A – When needle rises 2.4 mm above from the bottom dead point, pinhole of rotaryhook point should be 1-1.5mm above pinhole.

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.

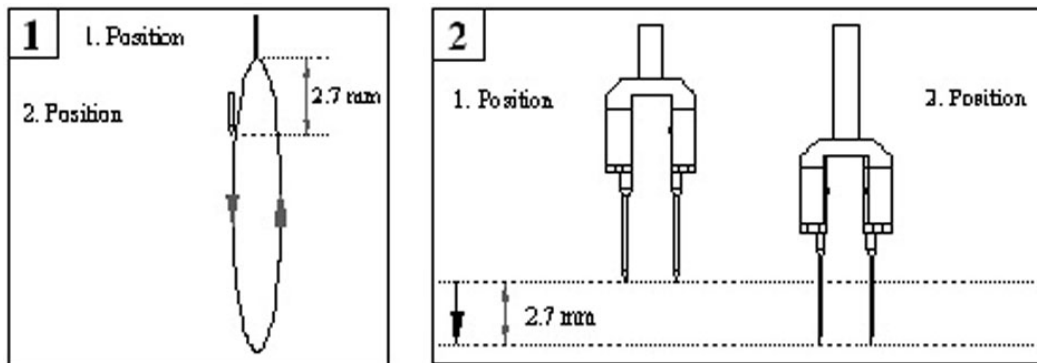
Rotaryhook is behind the needle, advance rotaryhook by removing screws.



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

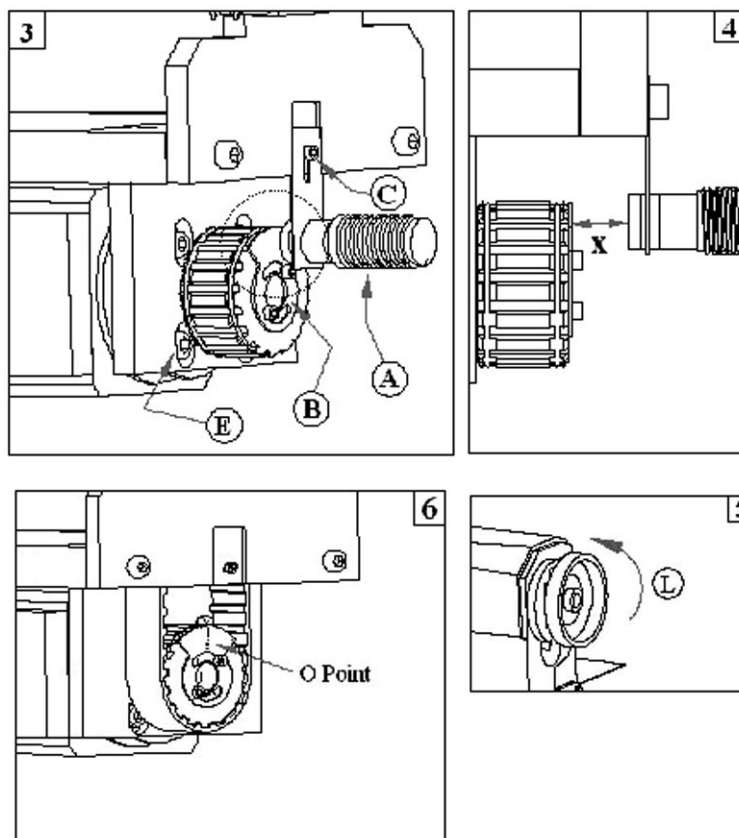
TROUBLESHOOTING

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 **min = 1 mm , max = 1,5 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”



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.

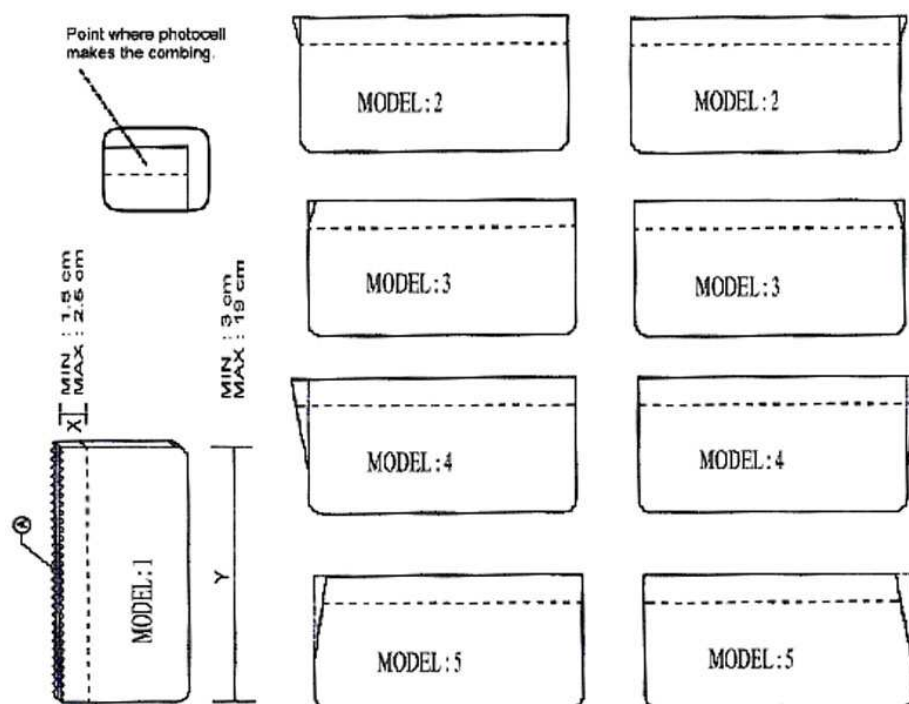
Therefore, the neatness of the side borders affects the quality of the work directly.

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.



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.

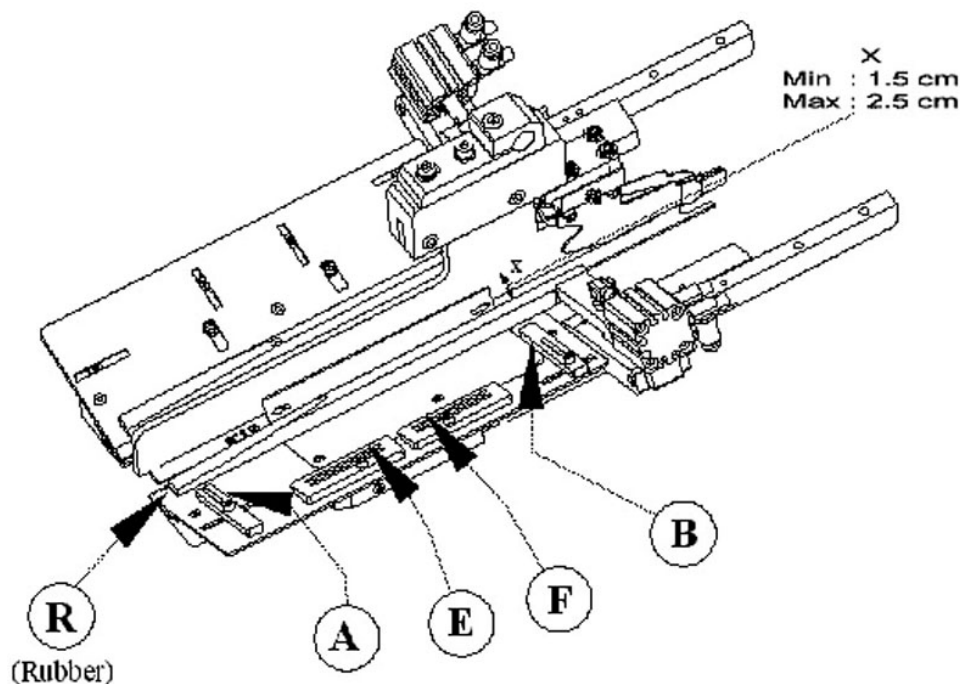
When the cover is located on the clamp, the next action of squeezing the cover and holding arm is activated, by pushing the pedal button.

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.

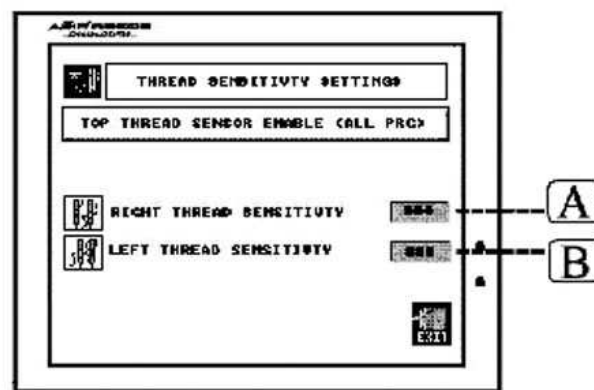
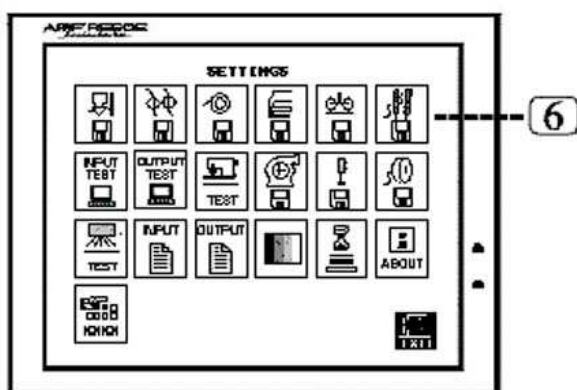
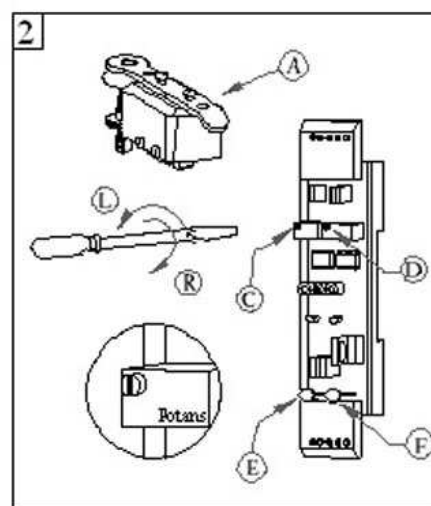
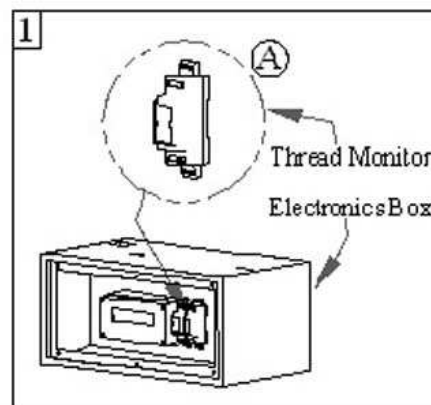


TROUBLESHOOTING

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.(Figure 1-A)



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)..