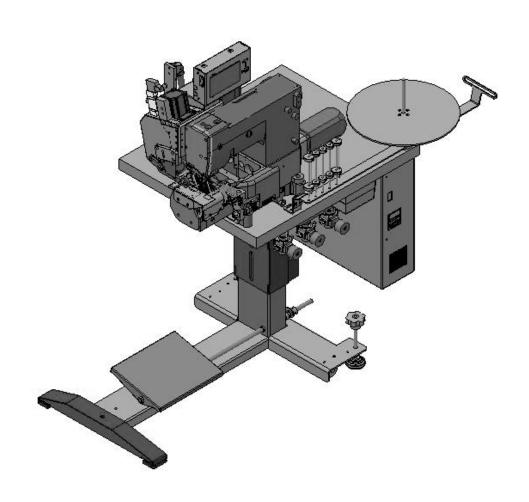
# JAM INTERNATIONAL

CONTINUOUS WESTBAND SEWING MACHINES, 4
NEEDLES 1/4 -1"- 1/4; CHAINSTICH NEEDLE FEED AND
FEED DOG, ELETTRONIC PULLER, DIRECT MOTOR,
PNEUMATIC PRESSER FOOT-LIFTER, PROGRAMMABLE
CUTTING SYSTEM, SKIP STICH AND STANDARD FOLDER

# JT418HSB ISTRUCTION MANUAL



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## **GENERAL WARNINGS**

The machine can be operated exclusively by authorized and trained staff and only after having read and understood the present manual.

The machine must be used exclusively for the purpose for which it has been produced and with the respective safety devices working. The manufacturer is not responsible in case of any different use.

Before doing any maintenance, replacing any part and when moving away from the working place it is absolutely necessary to deactivate the machine by turning off the main switch, remove the power cable from the socket and cut the air. Exceptions are possible only in case of set up and functionality checks made by authorized staff trained on purpose.

Interventions on the electric system must be made only by specialized electricians or by staff trained on purpose.

## MANUFACTURER RESPONSABILITY

JAM INTERNATIONAL is not responsible for any mishap, breaking, accidents due to the missing knowledge (or non application) of the instructions contained in the present manual. JAM INTERNATIONAL is not responsible as well for modifications, variations and/or installation of non previously authorized accessories.

Particularly JAM INTERNATIONAL declines any responsibility for damages due to:

- Natural calamities
- Wrong manoeuvring
- Maintenance missing
- Special interventions or machine overhauls made by non authorized staff.
- Incorrect use of the machine

# **MODIFICATIONS**



**WARNING!** JAM INTERNATIONAL reserves the right to modify the machine for any constructive or functional or commercial exigency, without being bounded to update opportunely the instructions manual and the parts book..

## **IDENTIFICATION PLATE**

On the machine frame there is the identification plate containing the following information:

- Manufacturer details
- CE mark
- ➤ Production year
- ➤ Machine model
- Serial no.

Ostra Vetere	(AN) Tet. +39 071 67872
0	0
MODELLO	
MATRICOLA	
ANNO	MADE IN

# **TECHNICAL SERVICE**

The **MANUFACTURER** or the **SELLER** offer to the Customer their Technical Service to solve any problem regarding the machine use and maintenance.

Any request for service or spare parts must be forwarded to:

## JAM INTERNATIONAL s.r.l.

Via G. Perini 2 60010 Ostra Vetere AN – ITALY Tel +39 071 67872 Fax +39 071 67873 e-mail parts@jaminternational.it

specifying the following:

- Machine model
- Serial number
- Details regarding the faults verified
- The checks made
- Any other useful information
- Part number and description of the required spare parts

### **SAFETY**



WARNIG! The use of the machine is allowed exclusively to authorized staff properly trained.

For a proper and safe use of the machine it is necessary to have entirely read and understood the present manual and the attached instructions.

#### SAFETY INSTRUCTIONS

- Do not try to operate the machine until its functioning hasn't been clearly understood. Anyway the use of the machine is allowed exclusively to authorized staff properly trained. Do not allow unauthorized people and especially children to get near the machine.
- Before starting the machine, the operator must check the presence of clear faults on the safety devices and on the machine and immediately report what found to the person in charge.
- The only working position suitable for the operator is the fabric loading position, that is behind the fixed safety bar. Do not occupy other positions different from the above mentioned one during the machine functioning.
- Never start the machine before having advised and averted anyone present nearby it.
- Do not use the machine while wearing clothes, ornaments or accessories which can get caught on any moving part. Gather up long hairs under a cap. Wear clothes which allow to bear objects and tools in closed pockets.
- The machine user must know the safety devices installed on it, as well as the respective proper modalities
  of use. Check daily the proper functioning of the emergency buttons and of the safety devices. Never use
  the machine without its safety devices properly installed and working.
- Pay the maximum attention to every danger and prohibition symbol existing on the machine.
- Keep every plate with danger and prohibition symbols in perfect conditions, clearly visible and readable. In case of tear replace them quickly.
- Do not operate the machine with damp hands and objects when it is connected to the electric system.
- Replace the parts considered damaged with original ones or in any case authorized by the manufacturer. Never try hazardous solutions.
- It is extremely dangerous to use the machine without its safety devices (emergency button, belt protection and so on). Never use the machine without the safety devices.
- The safety devices removal is allowed exclusively during the machine maintenance and must be done exclusively buy specialized staff.

#### NOT ALLOWED USE

The machine JT418HSB is a continuous westband sewing machines, 4 needles 1/4 -1"- 1/4; chainstich needle feed and feed dog, elettronic puller, direct motor, pneumatic presser foot-lifter,programmable cutting system, skip stich and standard folder



The machine must never be used for not allowed purposes or for purposes different from those for which it has been produced. The manufacturer is not responsible for improper use of the machine.

#### INDIVIDUAL SAFETY DEVICES

- During the machine running as well as during the maintenance and clearing operations it is suggested to use the following individual safety devices: working clothes, shoes with anti-skid sole and gloves.
- Wear the protective glasses when using the machine to avoid that, in case of needle breaking, the possible splinters could hit the eyes.
- Use the protective glasses and gloves when using lubricants and greases, in order to avoid the contact with eyes and skin and the consequent risk of irritations and inflammations
- The employer is compelled to provide the operator with the Individual Safety Devices and to inform him about their proper use and maintenance.

#### **REMAINING RISKS**

The machine has been designed and produced with the suitable devices to assure the maximum operator safety.

Where remaining risks exist, these are pointed out through proper labels and danger and prohibition symbols.

#### **SAFETY SIGNS**

On the machine there are some labels showing the following symbols to highlight dangers and prohibitions existing on the machine.



#### **ELECTRIC DANGER**

This symbol points out the existence of a danger caused by the electric power.



#### HANDS CRUSHING DANGER



#### PROTECTION REMOVAL PROHIBITION

This symbols points out the prohibition to remove the safety devices.

# **MOVING - STORAGE - DISPOSAL**



WARNING! Any machine transport, moving and storage operation described in this chapter must be carried out exclusively by qualified staff having suitable knowledge to operate safely forklift trucks, crane trucks and anything else necessary to the purpose.

#### **MOVING**

- To avoid that any part may hurt the persons in case of machine fall, be sure that during the lifting and moving operations there are no persons inside the action range of the lifting machines.
- To lift up and move the machine it is necessary to use suitable means of transport according to its weight.
- Before starting moving the machine, check its stability.

#### **STORAGE**

- In case of long storage, keep the machine in a dry place, sheltered from rain and wind.
- Protect well the electrical parts from the dust and from external agents.
- The machine may suffer heavy damages if, while waiting for the installation, it is kept in environments with critical temperatures. Never expose it to temperatures lower that  $-10^{\circ}$  C and higher than  $+60^{\circ}$ C.
- Do not deposit the machine or its parts in structures which have not been suitably built.
- It is forbidden to put on the machine any material or equipments.

#### **DEMOLITION AND DISPOSAL**

- The disposal of the waste which comes out from the machine demolition must be carried out respecting the environment, avoiding to pollute the ground, the air and the water.
- For a proper disposal it is necessary to respect the local laws in force.

# MOVING AND TRANSPORTATION

#### **LIFTING**

#### WARNING:

The lifting operation must be carried out with the maximum care and by AUTHORIZED STAFF only.

During the lifting operations no unauthorized people are allowed to stand nearby.

To lift up and to position the machine use a forklift truck of proportionate dimensions and sturdiness. Insert the forklift under the machine, be sure to take it for the entire width, fasten it well with belts or ropes and lift it paying attention that it doesn't tilt on one side.

#### **PACKAGE**

The kind of package may be different according to the machine, the mean of transport and the destination.

- In a wooden crate in case of transport by sea or by air.
- Wrapped in a protection film to be transported with road vehicles.

#### AIR NOISE UTTERED BY THE MACHINE

The machine described in this manual does not represent a risk factor itself as the peak level of the acoustic pressure on the workplace is minimum.

Therefore the possible high level of acoustic pressure existing in the environment where the machine runs cannot be charged to it.

The weighed acoustic pressure level on the working station does not exceed 70 dB(A)

### USE OF THE MACHINE

After having unpacked the machine put it in its working place in a flat and stable position.

#### MINUMUM DISTANCES FOR A PROPER MAINTENANCE

Leave a free space of at least 50 cm on each side of the machine.

#### CONNECTION TO THE ELECTRIC SYSTEM

Connect the power cable to the socket.

#### WARNING:

Be sure that the power tension corresponds to the one indicated by the manufacturer in the specifications written on this manual.

Be sure to connect properly the earth cable. If the connection of the earth is not safe, there could be the risk to get an electric shock and some problems with the correct machine functioning could occur.

Use the machine in areas electric/electromagnetic noise sources free. Such disturbs could cause problems to the correct machine running.

In case of lightning or electric storms, switch off the machine and disconnect the power cable from the socket to avoid functioning problems or damages to the machine.

#### CONNECTION TO THE PNEUMATIC SYSTEM

Connect the air pipe to the quick pipe fitting located on the pressure governor, let the air in and check that the air gauge signals a maximum pressure as described in the specifications.

If necessary adjust the pressure on the correct value by lifting and turning the knob of the pressure governor clockwise to increase it or anticlockwise to reduce it.

Block the knob when the air gauge indicates a correct pressure.

## **DESCRIPTION OF THE MACHINE**

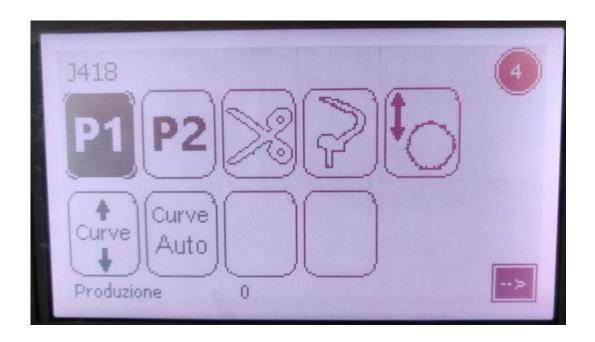
#### **MODEL**

JT418HSB is a continuous westband sewing machines, 4 needles 1/4 -1"- 1/4; chainstich needle feed and feed dog, elettronic puller, direct motor, pneumatic presser foot-lifter, programmable cutting system, skip stich and standard folder

# **SPECIFICATIONS**

Model	JT418HSB			
Electric power	220 V – L+N+Ground			
Worling oir processes	U.M.	[bar]	[MPa]	[Psi]
Working air pressure	Pressure	6	0.6	87
Weight	170 kg			
Dimensions [WxDxH]	1260 x 740 x 1750 cm			

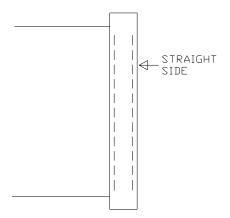
# **OPERATION PANEL**



<b>P1</b>	Program 1 (man) (activates / deactivates program 1)
<b>P2</b>	Program 2 (woman) (activates / deactivates program 2)
<b>3</b> 3	Manual cut (the knife cuts the belt when I press the button)
	Manual opening of the spreader
<b>t</b>	Manual lifting of pullers (the pullers are raised when I press the button; if I press it together with the pedal backward the pullers remain up
Curve	Curve program (activates / deactivate s the curve program)
Curve Auto	Automatic curve program (activates / deactivates the automatic curve program)
4	It indicates the number of the prescription loaded in the "AUTOMATIC CURVE" program

# **METHOD OF USE**

At the beginning of a work, before selecting the different programs P1, P2, CURVE, AUTOMATIC CURVE, it is necessary to make sure that the belt is straight after being sewn



If this is not the case, it is necessary to intervene on the pressure of the pressure gauge with the writing "STRAIGHT.

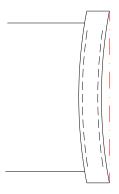
Generally if the belt tends to curve to the left, it means that there is too much pressure on the "STRAIGHT" pressure gauge, then reduce it; if the belt tends to curve to the right, it means that there is too little pressure on the "STRAIGHT" pressure gauge, then increase it.

If it is not enough, try to intervene on the "PULLER" pressure gauge.



Now that the belt is straight we can choose whether to sew straight (already set correctly) or sew in "CURVE" or "AUTOMATIC CURVE" modes

# **CURVE MODE**

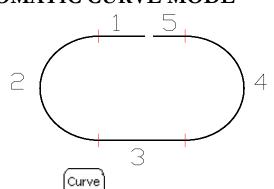


Press the button to activate the mode that allows to obtain a curved belt, by pressing the pedal forward to start the cycle. To change the shape of the curve it is necessary to intervene on the "CURVE" and "PULLER" manometers by changing the values of the relative pressures (the "STRAIGTH" manometer is

disabled)



## AUTOMATIC CURVE MODE

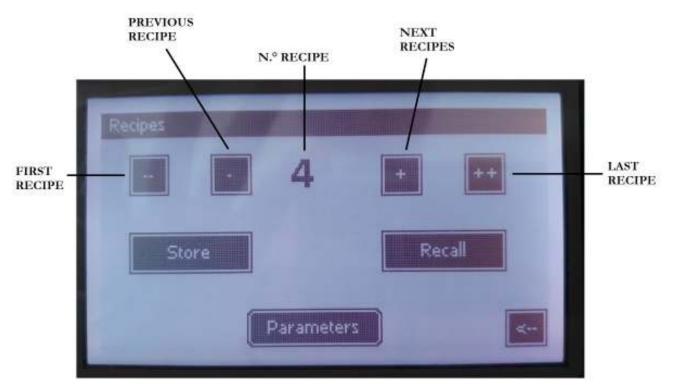


Press the button to activate the "automatic curve" program with which we are able to alternate straight sections with curved sections in the same trousers; the lengths of the single sections are managed through the following parameters:

- 11 → NUMBER OF STITCHES OF SECTION 1
- 12 → 0→STRAIGTH, 1→CURVED DURING SECTION 1
- 13 → NUMBER OF STITCHES OF SECTION 2
- 14 → 0→STRAIGTH, 1→CURVED DURING SECTION 1
- 15 → NUMBER OF STITCHES OF SECTION 3
- 16 → 0→STRAIGTH, 1→CURVED DURING SECTION 3
- 17 → NUMBER OF STITCHES OF SECTION 4
- 18 → 0→STRAIGTH, 1→CURVED DURING SECTION 1
- 19→ 0→STRAIGTH, 1→CURVED DURING SECTION 5

The values of these parameters can be saved in "prescriptions /programs").

To save or open a prescription / program, press the button at the right top of the main screen and the following screen will appear



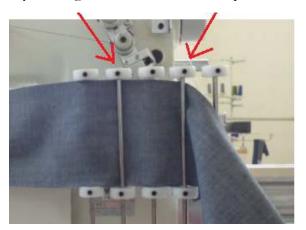
Setting a number of prescription and pressing Save the previously set parameters (from 11 to 19) will be saved in the selected program number.

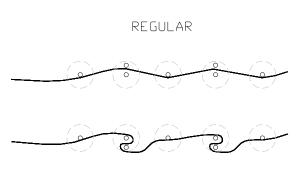
By setting a prescription / program number and pressing recall, a "prescription / program" previously saved in that number will be loaded.

In order to open the list of parameters to change (from 11 to 19) press on "parameters" and, once modified, it can be saved again (by pressing "Save"); use the button to return to the main screen.

# The "AUTOMATIC CURVE" mode works only when a P1 or P2 program is active

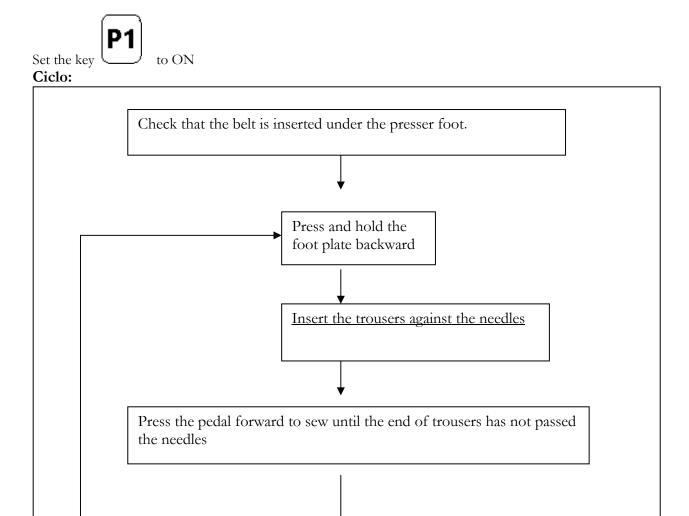
Sometimes it is not sufficient to change the parameters to obtain the desired curve but it is necessary to intervene on the belt tension by working on the 2nd and 4th tensioner (please refer to the following picture) by rotating them a little in order to pull the belt more



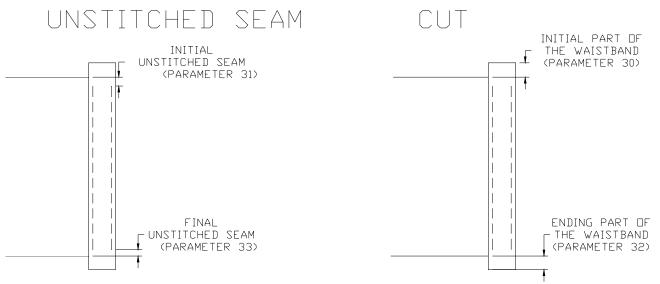


TIGHTER BELT AFTER TURNING THE 2ND AND 4TH TENSIONERS

# PROGRAM P1 (MAN)



Modify the distances (mm) of the initial/final **UNSTITCHING** and initial/final **NIB** as shown in the following figure

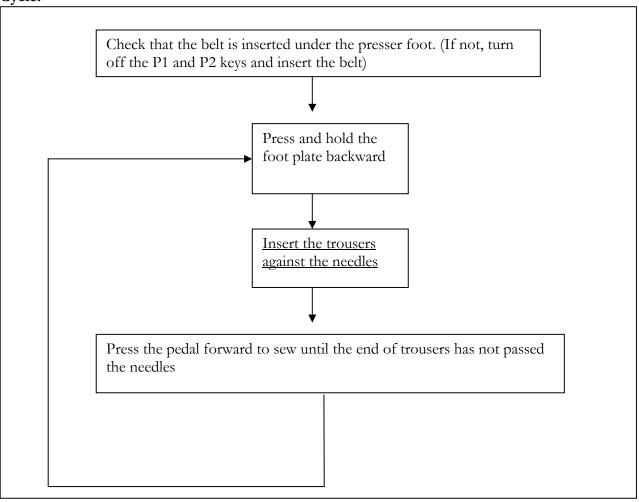


N.B. if the values of the unstitching and cut parameters are set to 0, the unstitching and cut are not made

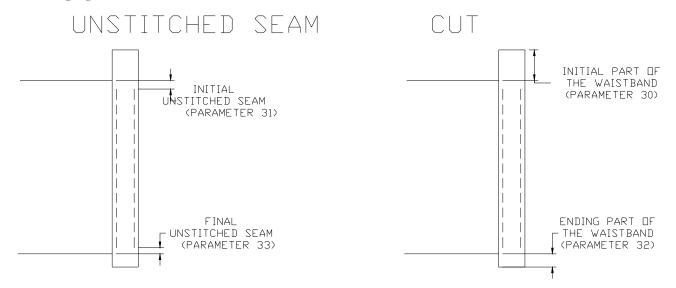
## PROGRAMMA P2 (DONNA)



Cycle:



Modify the distances (mm) of the initial/final **UNSTITCHING** and initial/final **NIB** as shown in the following figure



N.B. if the values of the unstitching and cut parameters are set to 0, the unstitching and cut are not made

#### MODIFYING A PARAMETER

If we want to change a parameter and we are on the main screen we have to press the button which is at the bottom right and the following screen will appear:

Configuration Ver: 2.0

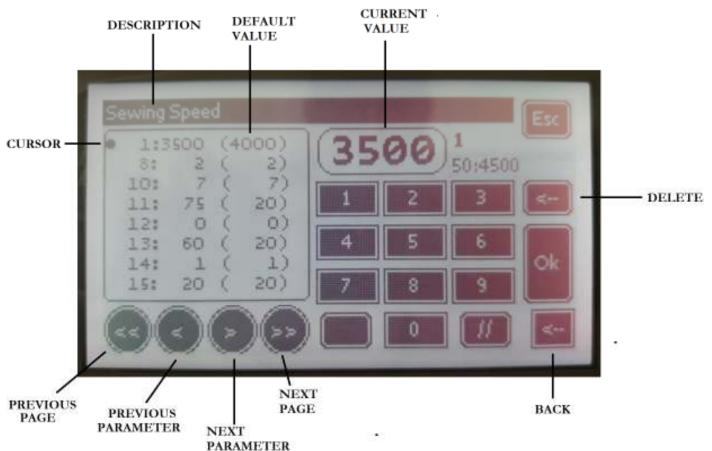
Parameters Italian Spanish

English Turkish

Reset production count Enable

Reset parameters Enable

Now, pressing the "Parameters" button, another screen will appear (please refer to the following figure)



To change the value of a parameter, simply move the black dot to the desired parameter, delete the current value, write the new value with the numeric keypad and finally confirm the value by pressing OK

# **RESET PARAMETERS**

To reset the parameters, press "enable" → press "reset parameters"

# **RESET PIECES PRODUCED**

To reset the pieces produced "press " enable "→ Press "reset pieces produced"

# **LANGUAGE**

To change the language, simply press the button with the desired language

# **MANUAL CUTTING**

With P1 and P2 deactivated, the sewing machine sews in a continuos way (controlled by the pressure of the foot on the pedal forward)

# **OPERATOR PARAMETERS**

1	MAX SPEED IN MANUAL STITCHING
8	DISABLED THE CLAMP BEHIND THE PULLER:  0→ DISABLED, 1→ ONLY BEGINNING, 2→ ONLY END, 3→ BEGINNING AND END
10	CUT IMPULSE TIME
11	NUMBER OF STITCHES OF SECTION 1
12	0→ STRAIGTH, 1→ CURVED DURING SECTION 1
13	NUMBER OF STITCHES OF SECTION 2
14	0→ STRAIGTH, 1→ CURVED DURING SECTION 2
15	NUMBER OF STITCHES OF SECTION 3
16	0→ STRAIGTH, 1→ CURVED DURING SECTION 3
17	NUMBER OF STITCHES OF SECTION 4
18	0→ STRAIGTH, 1→ CURVED DURING SECTION 4
19	0→ STRAIGTH, 1→ CURVED DURING SECTION 5
30	LENGHT OF THE INITIAL PART OF THE WAISTBAND
31	LENGHT OF THE INITIAL UNSTITCHED SEAM
32	LENGHT OF THE ENDING PART OF THE WAISTBAND
33	LENGHT OF THE ENDING UNSTITCHED SEAM
35	HOW MANY MM BEFORE THE CUT I CLOSE THE UNDOLADING CLAMP
45	ENABLE/DISABLE THE INITIAL CUT
46	ENABLE/DISABLE THE ENDING CUT
60	ELECTRONIC PULLER STITCH LENGHT
98	DEBUG MODE
99	SOFTWARE VERSION

# **TECHNICAL PARAMETERS**

To view also the parameters reserved to technicians, follow the below procedure:

• Switch off the machine and push the button pointed out by the arrow and, while keeping it pressed, switch on the machine from general switch. If the procedure has been followed correctly the light above the button becomes flashing.



2	STITCHING SPEED DURING THE ENDING UNSTITCHING WAITING
3	STICHING SPEED WITH OPEN SPREADER
4	STITCHING SPEED DURING THE CUT
5	NEEDLE SPEED WHILE THE NEEDLE IS SEARCHING FOR ITS POSITION
6	NEEDLE MOTOR ROTATION DIRECTION
7	SPEED OF THE THRESHOLD FOR THE BLOW IGNITION
28	DELAY BETWEEN THE UNLOADING CLAMP CLOSED AND BACKWARD MOVEMENT
34	AT HOW MANY MM FROM THE CUT I LOWER THE STITCHING SPEED
40	SPREADER SENSOR OFFSET
41	CUT SENSOR OFFSET
47	STITCHING STOP AFTER ENDING UNSTITCHING
50	NEEDLE STOP POSITION ANGLE
54	ELECTRONIC PULLER STARTING ANGLE
55	ELECTRONIC PULLER FEEDING ANGLE

# **ERROR LIST**

This error may appear on the touch screen panel:

# 11 → ALLARME HEAD MOTOR ALARM

While in the box display these:

ERROR NUMBER	PROBLEM	SOLUTION
1	MOTOR HEAD DRIVER	
2	EPROM	
4	1. OVER VOLTAGE 2. WRONG CONNECTION 3. FUSE F2 BURNED	CHECK 220AC POWER SUPPLY CHECK FUSE.
5	1. UNDER VOLTAGE 2. WRONG CONNECTION	CHECK 220AC POWER SUPPLY
6	PULLER MOTOR ERROR	CHECK PULLER MOTOR DRIVER
7	1. HEAD MOTOR BAD CONNECTION. 2. WRONG SYNCHRONIZER SETTING. 3. MACHINE CAN NOT TURN. 4. FABRIC IS TOO HARD.	CHECK MOTOR CONNECTION. CHECK SYNCHRONIZER OR CHECK SYNCHRONIZER SETTING.
8	OPERATION PANEL BUT COMMUNICATION	CHECK OPERATION PANEL
9	OVER CURRENT ON SOLENOID TRANSISTOR.	CHECK SOLENOIDS
11	NEEDLE UP MISSING.	
12	WAITING EXTERNAL SYNCHRONIZER	EXTERNAL SYNCHRONIZER IS MISSING OR NOT SETTING

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