

Collar Rib Sewing Unit

JTR-MO6914CX / CRU Series

INSTRUCTION MANUAL



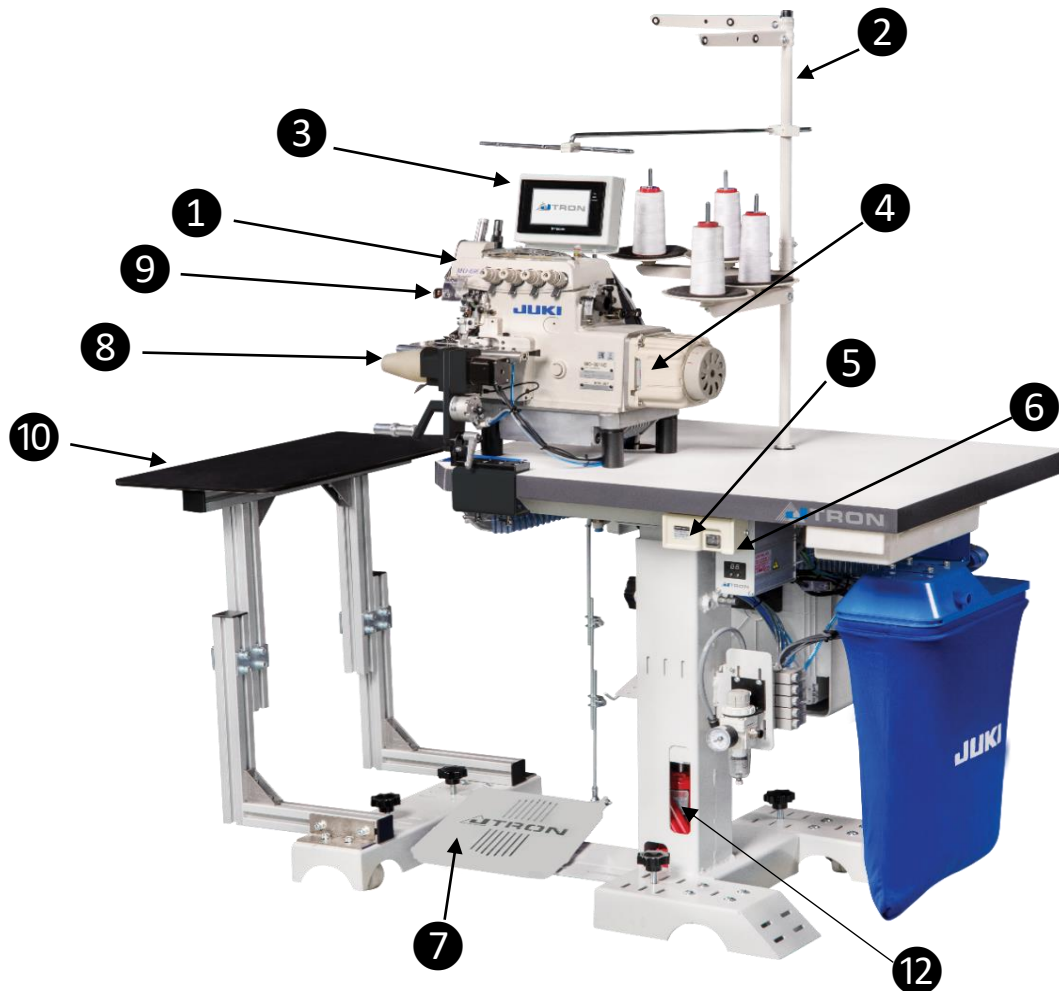
No.JTR000

MO6914CXCRU-TM

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1) CONFIGURATION OF THE MACHINE



①	MACHINE HEAD	⑦	PEDAL
②	THREAD STAND	⑧	RIB ROLLER UNIT
③	PANEL	⑨	RIB STRETCHING UNIT
④	DD MOTOR	⑩	STACKER
⑤	MAIN SWITCH	⑪	PLC CONTROL BOX
⑥	DD CONTROL BOX	⑫	BOTTLE JACK

2) SPECIFICATION

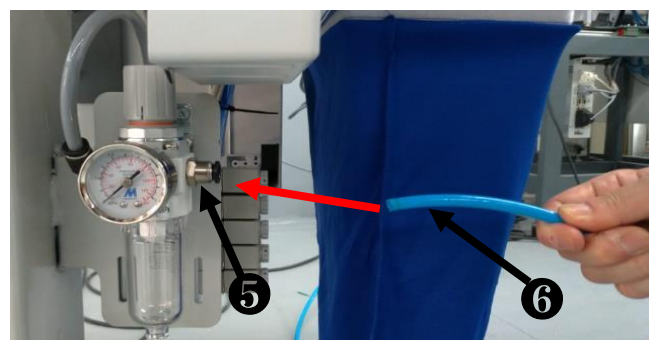
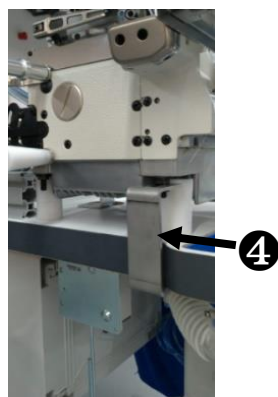
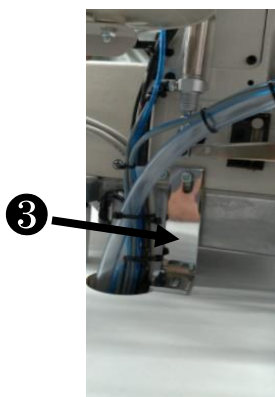
No.	Category	Description
1	MACHINE HEAD	MO-6914C / X81028
2	MODEL NAME	JTR-MO6914CX / CRU
3	MAIN MOTOR	M5-40-NA2AS-A by HO HSING (CE spec.) 400W
4	MAIN MOTOR DRIVE	HO HSING TD-654-0-MO2 (CE spec.)
5	MAXIMUM SEWING SPEED	6500sti/min - Shipping speed: 6500sti/min
6	STITCH LENGTH	Min: 2.5 mm / Max: 4 mm - Shipping pitch: 3.2 mm
7	NEEDLE TYPE	GB - DCX27 - #11
8	GAUGE	STANDART GAUGE BD6-307
9	COLLAR RIB LENGHT	200-500mm Length variation ± 10 mm (Length from end to end when folded in half)
10	COLLAR RIB WITDH	20-35mm Sewing variation ± 3 mm
11	FABRIC CUTTNG SYSTEM	PLC CONTROLLED FABRIC CUTTING SYSTEM
12	SEWING SPECIFICATIONS	THIN TO MEDIUM THICKNESS
13	TARGET PROCESS	Rib Attachment
14	AIR PRESSURE	MIN: 0.45 MPa MAX: 0.7 MPa Standard: 0.6 Mpa
15	AIR CONSUMPTION	7 L / min
16	VOLTAGE CLASSIFICATION	Single-phase 200-240V/50Hz
17	CAPACITY	3.200 - 3.500 t-shirts / 9 hours - JTR-MO6914CX/CRU/CJD/Z/E
		2.900 - 3.200 t-shirts / 9 hours - JTR-MO6914CX/CRU/Z/Z/E
		2.400 - 2.700 t-shirts / 9 hours - JTR-MO6914CX/CRU/Z/(NTA or NWT)/E
18	DAILY PIECE COUNTER	YES
19	POWER CONSUMPTION	1000 VA

3) INSTALLATION

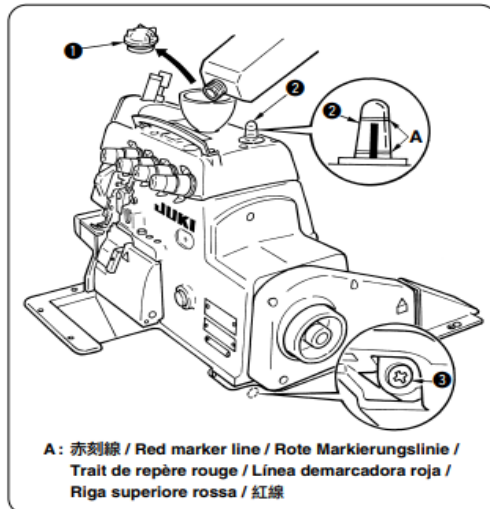
3.1) The machine is delivered as below



- 1) The original JUKIthread stand ① should be installed to the table
- 2)The machine should be stabilized to ground via tightening the foot screws ②.
- 3)Lock plate ③ should be removed after the machine delivered
- 4) Lock plate ④ should be removed after the machine delivered
- 5) "Connect the air tube ⑤ to the regulator plug ⑥"



3.2) Please put the Juki genuine oil 18 from upper cover of the machine head. (Please refer the instructions for MO-6904C / MO-6914C (P/N : 29358207)



- 1) 注油穴ふた ❶ を外します。
- 2) JUKI MACHINE OIL 18 を入れます。
- 3) オイルゲージ ❷ を横から見て、指示棒が上の赤刻線の
手前まで給油します。



上の赤刻線以上に給油すると、油量が多すぎて
油もれをおこす原因となりますので、必ず上の
赤刻線の手前で給油を止めてください。

- 4) 油を抜く時は排油ねじ ❸ を外します。

- 1) Remove oil cap ❶.
- 2) Pour JUKI Machine Oil 18 into the oil reservoir.
- 3) Supply oil until the pointer bar almost reaches the upper
red marker line when oil gauge ❷ is observed from the
side.



Be careful not to exceed the upper red marker
line, or else troubles due to excessive lubrication
may result.

- 4) Remove oil drain cap ❸ when draining the oil reservoir.

- 1) Den Öleinfüllverschluss ❶ entfernen.
- 2) JUKI Machine Oil 18 in den Ölbehälter einfüllen.
- 3) Soviel Öl einfüllen, bis der Zeiger bei Seitenansicht des
Ölstand-Schauglases ❷ fast die obere rote Markierungslinie
erreicht.



Die obere rote Markierungslinie darf nicht
überschritten werden, weil es sonst zu Störungen
durch übermäßige Schmierölmengen kommen
kann.

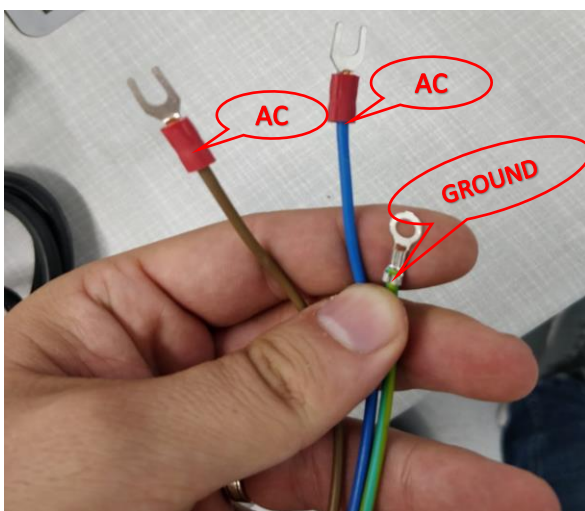
- 4) Zum Entleeren des Ölbehälters den Ölablassverschluss
❸ entfernen.



Ne pas dépasser le trait de repère rouge supérieur
car une lubrification excessive pourrait causer
des anomalies.

- 4) Pour vidanger le réservoir d'huile, retirer le bouchon de
vidange d'huile ❸.

3.3) Connecting the power supply



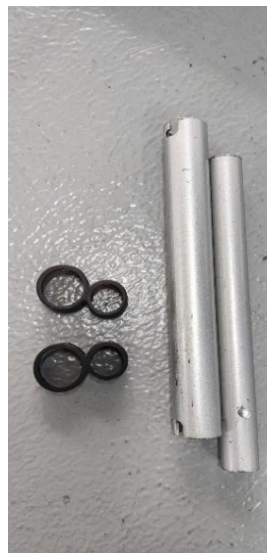
The machine is not supplied with a power plug. It is therefore necessary for you to select a plug that matches the receptacle available under a given operating environment and attach it to the power cable.

3.4) How to adjust the table height?

3.4.1) Remove the hexagon-head bolt (2 pieces).



3.4.2) Prepare the bottle jack arm.



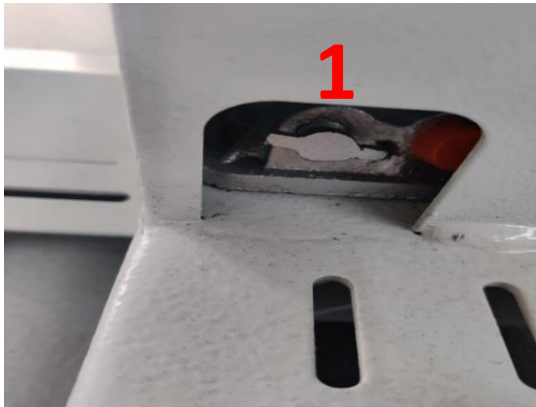
3.4.3) Remove handle bolt.



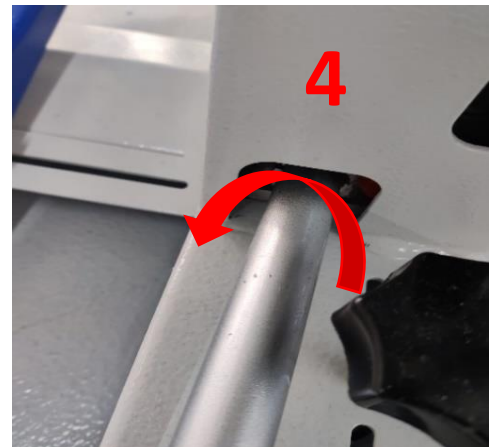
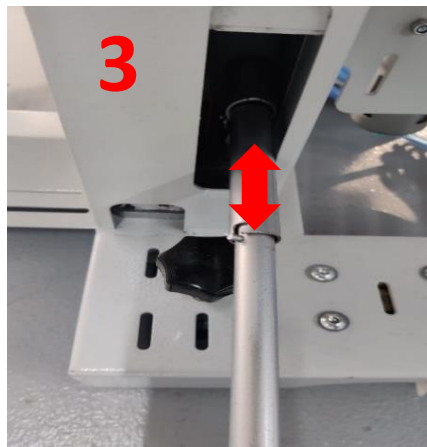
If the handle bolt does not turn, reduce the load by moving the arm up and down(1) or counterclockwise(2).

Loosening the hand bolt may cause the table to be lowered sharply.

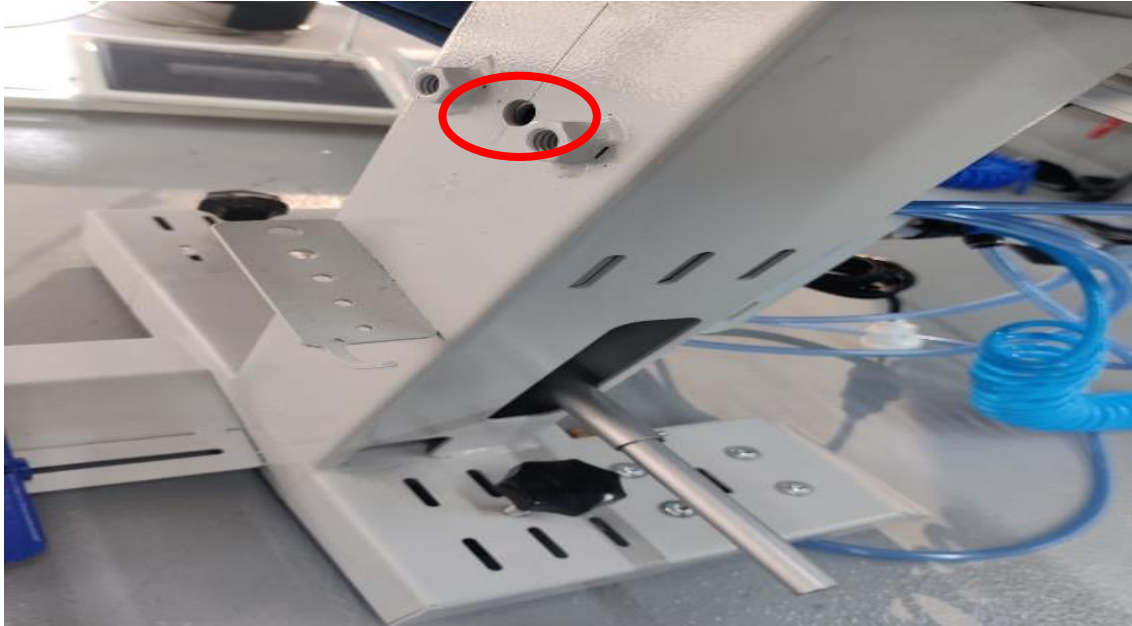
3.4.4) Put the arm into knob (1) and turn clockwise until they no longer turn. If the bolts are tight, it cannot be lifted.



3.4.5) Put the arm (3) into the joint (2) of bottle jack and swing the arm up and down to lift up the table. If the screw (4) is loosened slightly, the down speed is slow. If the screw is loosened a lot, the down speed is fast.

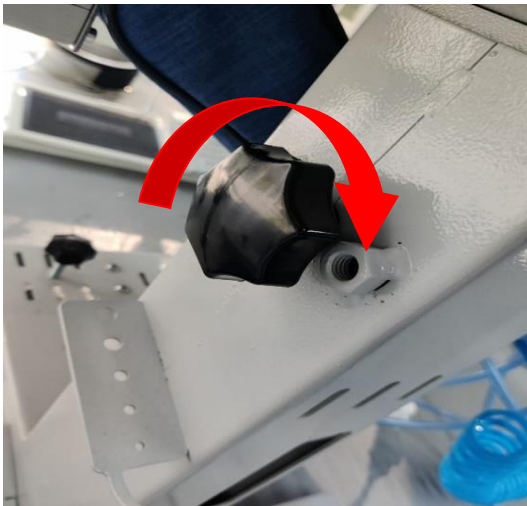


3.4.6) Adjust the table height



Adjust the table height by moving the arm up and down or counterclockwise. The table height can be changed at certain distances. Therefore, adjust according to the hole marked in red.

3.4.7) Install handle bolt.



3.4.8) Install the hexagon-head bolt (2 pieces).

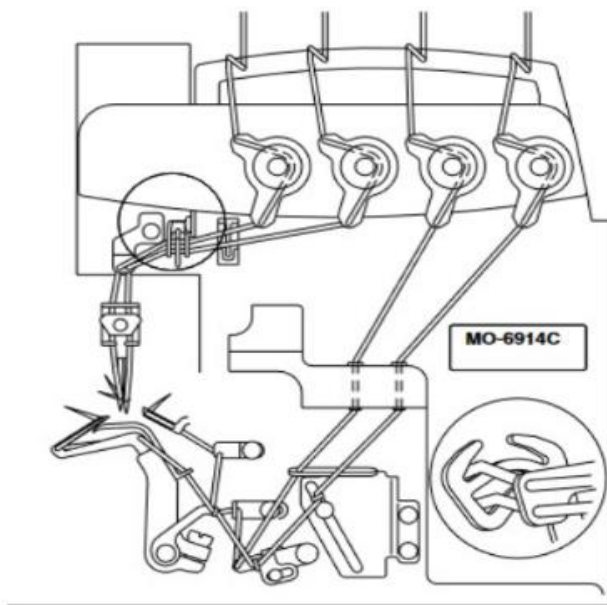


4) PREPARATION FOR OPERATION

4.1) Please put the Juki genuine oil 18 from upper cover of the machine head. (Please refer the instructions for MO-6904C / MO-6914C (P/N : 29358207)

4.2) Threading the machine. (Please refer to machine head instructions – MO-6904C / MO-6914C (P/N : 29358207)

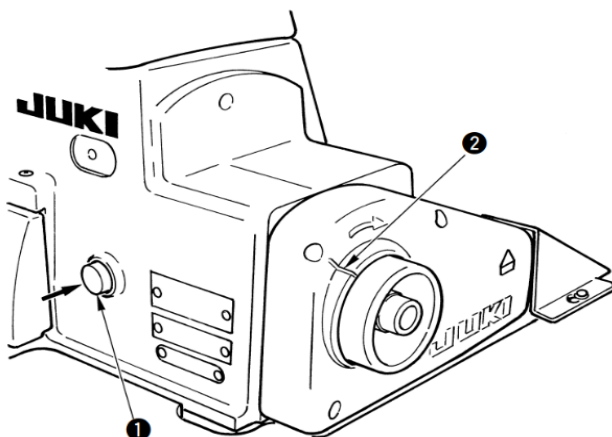
MO-6914C



4.3) Prepare machine head.

Please refer to the instructions for MO-6904C / MO-6914C (P/N : 29358207) for following adjustments.

4.3.1) Stitch length setting.

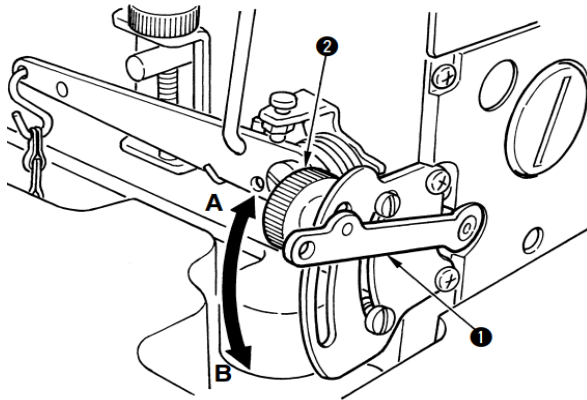


Slowly turn the handwheel as you keep depressing.

Pushbutton (1).

With the above condition maintained, align the desired scale mark on the handwheel with mark (2) on the belt cover.

4.3.2) Differential feed setting.



Loosen differential feed lock nut (2). Move lever (1) up for stretching stitch or down for gathering stitch.

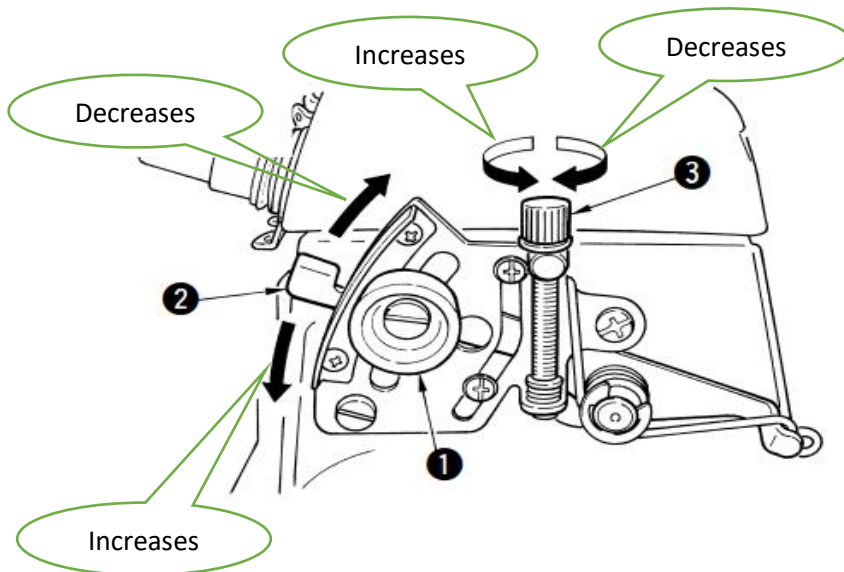
A : Stretching stitch

B : Gathering stitch

4.3.3) Pressure setting of the pressure foot.

Please refer to The instructions for MO-69++R / MO-69++R (P/N : 29356409) for following adjustments.

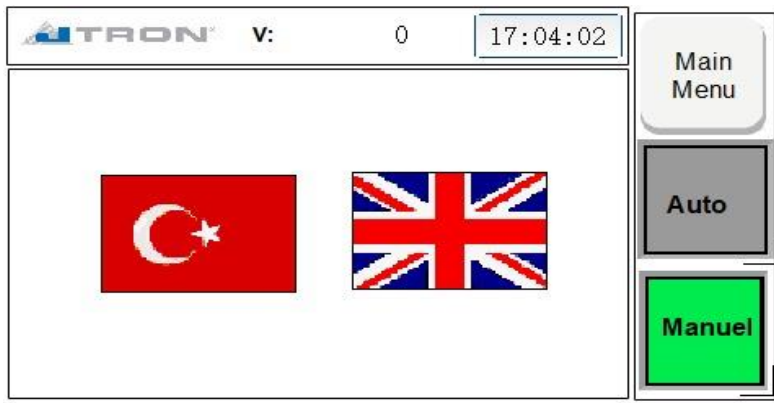
4.3.4) Top feed setting.



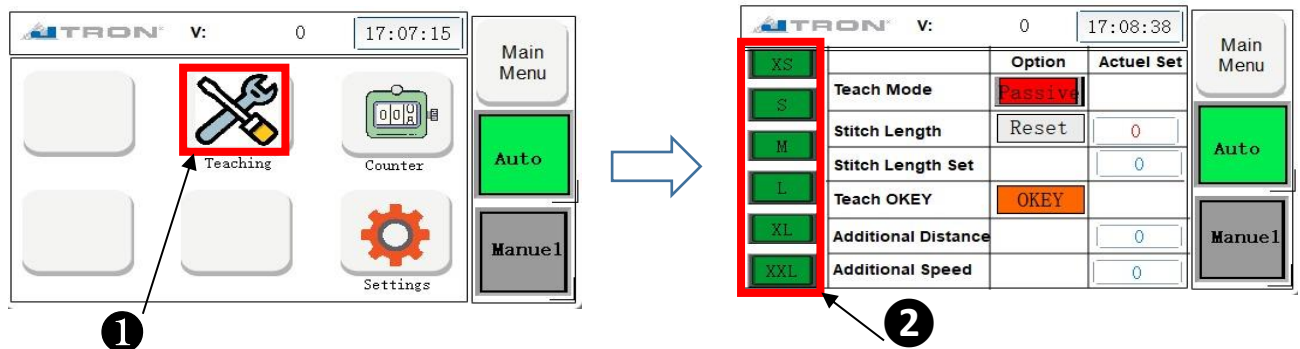
The top feed amount (horizontal stroke) is changed by loosening the locknut (1) and moving the top feed adjusting lever (2). In this case, the top feed adjusting lever (2) can be finely moved by using feed fine-adjustment screw (3).

4.4) Switch on the machine.

4.5) Enter manual model.



4.6) Enter teaching mode & selecting model size



4.6.1) Press the indicated icon (1) to get into teaching mode.

4.6.2) Selecting the model size from icons(3).

Note ! Please make sure to enter (click) manuel mode to activate the teaching mode.

If you enter auto mode instead of manuel mode at the step [4.5]] you cannot activate the teaching mode. So the teach mode will remain passive.

4.7) Teaching mode

4.7.1) Model size & rib start position adjustment.



(A) Place sample to the machine and adjust the stretching.

(B) Loosen up screw ⑥ and move air cylinder ⑦ to the left or right to adjust the body size.

Note: When adjusting the model size it should not be too stretched.



(C) Attach the rib and press the back of the pedal.



(D) When the back of the pedal pressed the rib rotates and automatically takes position and the stretching arms(5) opens.

(E) Adjust the overlapping of the rib and rib guide by Loosing screw of it

JTRON V: 0 17:08:38		Main Menu	
XS	Teach Mode	Passive	
S	Stitch Length	Reset	0
M	Stitch Length Set		0
L	Teach OKEY	OKEY	
XL	Additional Distance		0
XXL	Additional Speed		0

(F) Enter values to the additional distance ④ from the panel to adjust the stopping position of the junction point of the rib.

Note:

- 1) "distance ④" is the length (mm) from when the sensor detects the junction point of the rib to when it stops.
- 2) If the junction point stays behind make it bigger value, otherwise make it smaller value.

④



overlapping place

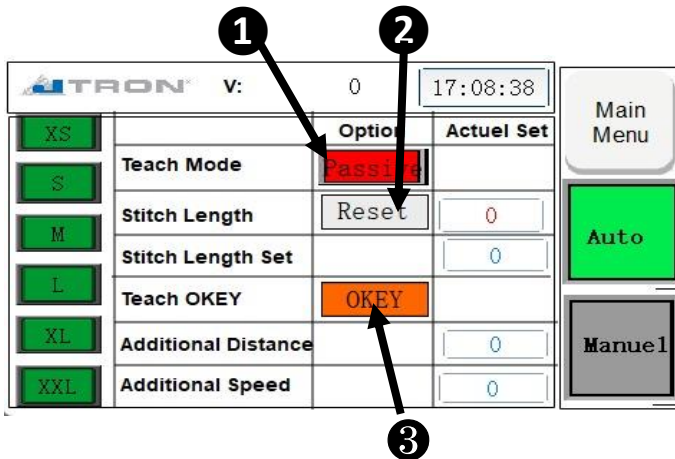
(G) After adjusting the stop position of the overlapping place of the rib, Check if the settings are correct.

- 1) Set the rib on the carrier and press "the back of the pedal".
- 2) If the junction point is the same as seen in the picture it means adjustment is done.

Note: If it is operated repeatedly several times, it is normal if it stops within the range of ± 20 mm.

Note: If the test is done with the same rib with more than 3 times the result may be concise since the rib will start to enlarge after the 3 times.

4.7.2) Rib stitch lenght input.



(A) Make teaching mode active by touching ① on the panel.

(B) Reset stitch length by touching ②

NOTE: Also could be from the panel or by pressing the back of the pedal.

(C) Set the rib on the carrier .

NOTE: Match the junction point of the rib with any landmarks.

(D) Make a sample sewing with body and the rib (Ribs alone are fine). Press "OKEY" ③ button when starting stitches and the ending stitches overlap (When the rib goes around and the junction point matches the landmark).

(E) After completing the teaching mode, Turn off the auto mode then turn on.

(F) After inputting rib length, check if the settings are correct.

1) Set the rib on the carrier and press "the back of the pedal" for placing in the start position

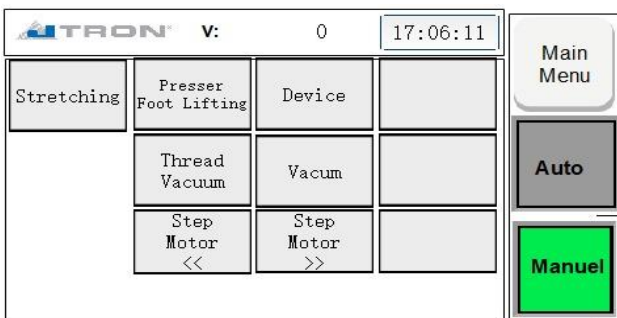
2) Do step (A) and step (B). Duling pressing " the front of the pedal ", Sew 1 lap of ribs.

3) Check the number of stitches when the "junction point" returns to the initial position.

If the number of stitches is almost the same as the number of stitches saved, the process is complete.

5) PANEL SETTINGS

5.1) Panel manual test



- Stretching: stretching piston testing
- Presser Foot Lifting: Presser foot piston testing
- Device Attachment test
- Thread Vacuum: The thread suction testing
- Vacuum: Fabric suction testing
- Step motor <<: Rotate the step motor forward only while pressing the button
- Step motor >>: Reverse rotation of the step motor only while pressing the button

5.2) Teaching mode

JTRON V: 0 17:08:38			
XS		Option	Actual Set
S	Teach Mode	Passive	
M	Stitch Length	Reset	0
L	Stitch Length Set		0
XL	Teach OKEY	OKEY	
XXL	Additional Distance		0
	Additional Speed		0

Main Menu

Auto

Manual

- Model Sizes; XS,S,M,L,XL,XXL
- Teach Mode: Select the setting size from this
- Stitch length: Stitch counter resetting
- Stitch length: set: shows saved stitch number
This is the value that captures the stitch number counted by "stitch Length".
- Teach ok: Registers the actual stitch number to stitch length set section
- Side seam distance(mm Length from the sensor to rib stopping position. Side seam speed(%): Roller speed

5.3) Auto mode

JTRON V: 0 17:06:34			
Automatic Mode			
XS	M	XL	
S	L	XXL	
Actual Pieces		Step Counter	
0		0	
Reset			

Main Menu

Auto


Manual

This is the screen of the model selecting page.
In normal production display this screen.

Actual Pieces : the piece counter.

Step counter: needle counter.

5.4) Counter

JTRON V: 0 17:09:09		
	Option	Actual Set
Actual Counter	Reset	0
Total Counter		0

Main Menu

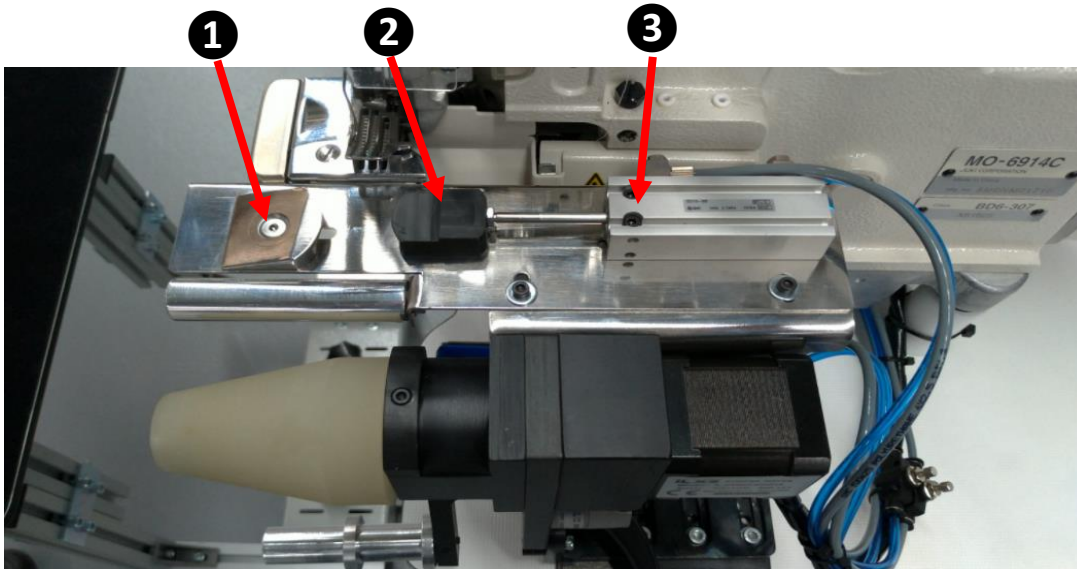
Auto

Manual

- Actual Counter: Shows the actual piece counter and can be reset from the reset button.
- Total Counter: Cumulative counter. (It cannot be reset.)

6) ADJUSTMENT

6.1) Adjustment of collar rib width



A. When “B” is open position, by loosening screw ❶ adjust the rib guide at left-hand side according to the width of rib.

When adjusting the guide, mind that should pass comfortable without getting stuck.

B. The rib cutting gap adjustment should be done via when ❷ in open position loosen the screws ❸ (2 pieces) and steer the rib cutting gap piston to the left or to the right.

6.2) Height adjustment of attachment table

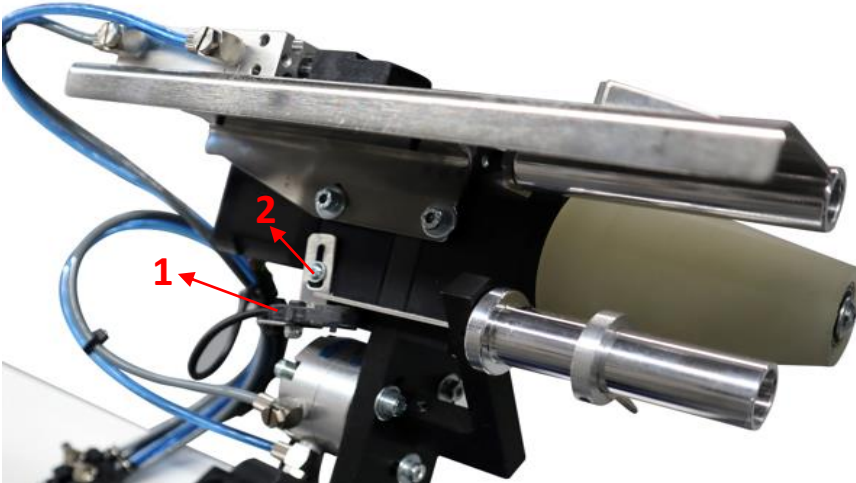
6.2.1) Loosen the two screws(1). Then adjust the height of attachment table by turning clamping lever(2).

6.2.2) Tighten the two screws(1) while holding the guide (3) against the bottom of the attachment table interbase.



6.3) Sensors

6.3.1) Collar rib joint detection sensor

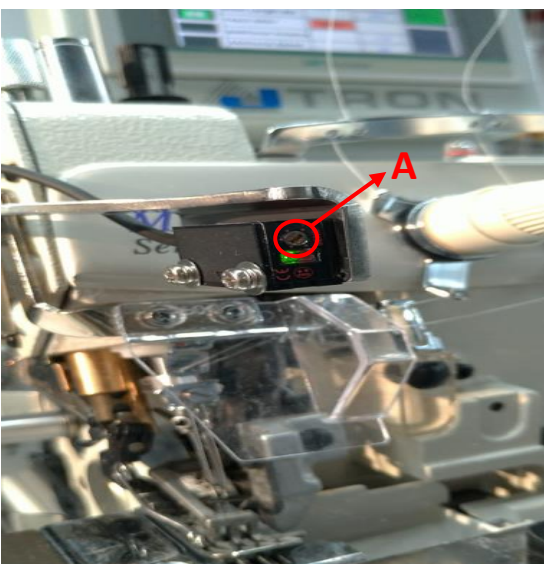


The joint part of the collar rib is thicker, and the sensor detects the thicker part. This allows the connection point to be placed in the same position every time, making it easy to start sewing. The connection point is used as a reference for the stopping position, and when the sensor lamp " 1 " goes out, it indicates that connection point is detected. If the sensor lamp does not turn off at the step section, loosen the screw " 2 " on the sensor bracket and adjust the height of the sensor bracket.

< COLLAR RIB JOINT DETECTION sensor lamp meaning >

Red lamp: Lights when "COLLAR RIB JOINT" is detected.

6.3.2) Fabric sensor



The sensor detects the fabric.

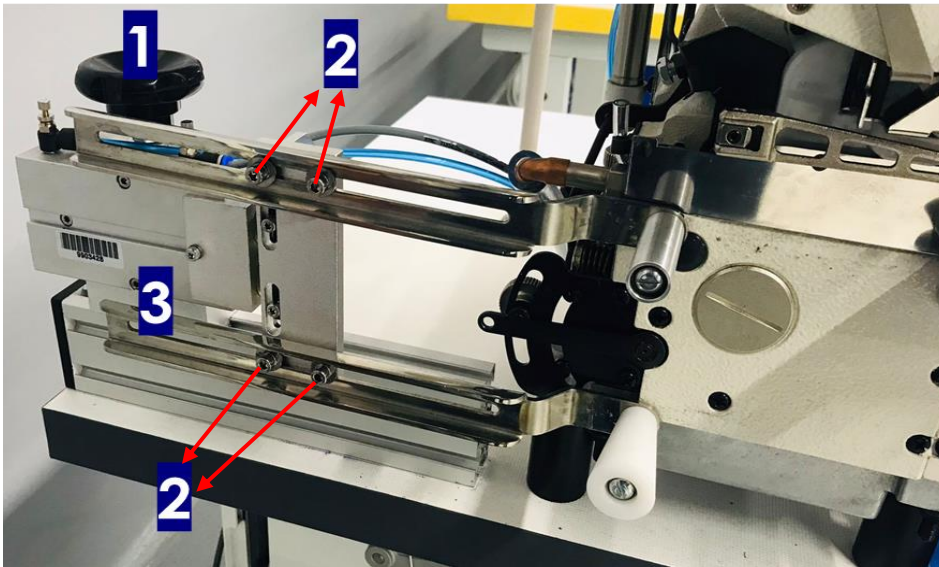
If the sensor does not work properly due to color change, by the help of the adjusting screw "A" the adjustment can be done according to the light of the sensor.

< fabric sensor lamp meaning >

Green lamp: Always lights

Red lamp: Lights when the fabric is detected

6.3.3) Collar rib length setting



- a)** Loosen the size adjustment screw ① and adjust the position of the manual stretch block according to the collar rib size (S, M, L, XL, etc.).
- b)** Loosen screw ② and adjust the arm position according to the size of the collar rib. In principle, the roller position is determined by the size adjustment screw ①, so use this adjustment here for fine adjustment. When setting the collar ribs, adjust the position so that the collar ribs are easy to hang on each roller and that the collar ribs can be fed without slipping when tension is applied to the collar ribs.
- c)** Loosen the screw ③ and adjust the stretching arm height.

7) MAINTENANCE



Loosen the clamping lever at the front, and the roller unit opens to the operator side.

When the roller unit opened , threading and cleaning the machine become easier.

Clean the machine by air gun.

After cleaning is finished , raise the roller unit back and tighten the clamping lever.

8) LIST OF PATTERN DATA(SHIPPING VALUES)

M size;

Stitch length: 270 mm

Additional distance: 115 mm

Additional speed : 80

9) CAUSES AND COUNTERMEASURES

Q.1) Thickness sensor detection problem.

A1) Adjustment of the sensitivity of the sensor(Please refer to 6.2.1.)

Q.2) Thickness sensor detection problem.

A2) Adjustment of the sensitivity of the sensor(Please refer to 6.2.2.)

Company Name	:	JUKI SINGAPORE PTE LTD.
ADD	:	20 BENDEMEER ROAD,#04-12 BS BENDEMEER CENTRE SINGAPRE 339914
PHONE	:	(65) 6553-4388
HTTP	:	http://www.juki.com.sg
E-Mail	:	we.sgp-sales@ml.juki.com
Company Name	:	JUKI Machinery Vietnam Company Ltd
ADD	:	153 HOA LAN STR.,WARD 2, PHU NHUAN DIST., HO CHI MINH CITY, VIETNAM
PHONE	:	(84) 28-35178833
FAX	:	(84) 28-35178318
E-Mail	:	sales@jukimv.com
Company Name	:	JUKI Machinery Bangladesh Ltd
ADD	:	NATORE TOWER(5TH FLOOR) PLOT#32-D & 32-E, ROAD#2, SECOR#03 ,UTTARA MODEL TOWN, DHAKA, BANGLADESH
PHONE	:	(880)2-48954731
FAX	:	(880)2-48954733
E-Mail	:	vl.mbl-info@ml.juki.com
Company Name	:	JUKI India Private Limited
ADD	:	GAOUND AND 1ST FLOOR, NO.1090/I, 18TH CROSS ROAD,3RD SECTOR, HSR LAYOUT BANGALORE-560 102, KARNATAKA STATE, INDIA
PHONE	:	(91)80-4251-1900
FAX	:	(91)80-4251-1999
HTTP	:	http://jukiindia.com
E-Mail	:	jukiblr@jukiindia.com
Company Name	:	JUKI CENTRAL EUROPE
ADD	:	UL. POLECZKI 21(PLATAN PARK C) 02-822 WARSAW, POLAND
PHONE	:	(48)22-545-0400
FAX	:	(48)22-545-0411
HTTP	:	http://jukieurope.com
Company Name	:	JUKI America INC
ADD	:	8500 NW 17TH STREET, SUITE 100, DORAL, FL 33126-1035, U.S.A.
PHONE	:	(1)305-594-0059
HTTP	:	https://juki.com
Company Name	:	JUKI MIDDLE EAST (JUKI SINGAPORE PTE. LTD. UAE BRANCH)
ADD	:	OFFICE NO, 2511. BLOCK A JAFZA 1, PO BOX 18031, JEBEL ALI, DUBAI UAE
PHONE	:	(971)4-8833228
FAX	:	(971)4-8833230
HTTP	:	http://www.juki.com.sg
Company Name	:	JUKI (China) CO LTD.
ADD	:	ROOM 901-903, HAILIANG BUILDING, NO.22, LANE 118 ZHONGJIANG ROAD, PUTUO DISTRICT SHANGHAI, CHINA, 200062
PHONE	:	8621-6236-8888
HTTP	:	http://www.jukichina.com



JUKI CORPORATION

SEWING MACHINERY & SYSTEMS BUSINESS UNIT

2-11-1, Tsurumaki, Tama-shi, Tokyo 206-8551, Japan

Phone: (81) 42-357-2211

