

## **Felt Feeding Sewing Unit**

# JTR-LK1900BN / FFU

## **INSTRUCTION MANUAL**



No.JTR001

LK1900BNFFU

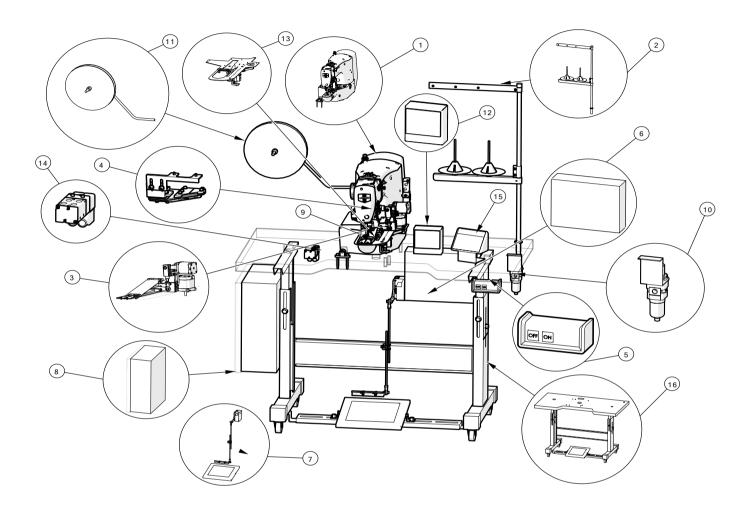


## **CONTENTS**

- 1) CONFIGURATION OF THE MACHINE
- 2) SPECIFICATION
- 3) INSTALLATION
- 4) PREPERATION FOR OPERATION
- 5) PANEL
- 6) ADJUSTMENT
- 7) LIST OF PATTERN DATA
- 8) CAUSES AND COUNTERMEASURES



## 1) CONFIGURATION OF THE MACHINE



1	MACHINE HEAD	9	PRESSER PLATE
2	THREAD STAND	10	AIR REGULATOR
3	PLATE UPPER GROUP	11	FELT STAND
4	CANAL	12	WECON PANEL
5	MAIN SWITCH	13	PLATE LOWER GROUP
6	JUKI CONTROL BOX	14	AIR VALVE BLOCK
7	PEDAL	15	JUKI PANEL
8	JTRON CONTROL BOX	16	CHASSIS GROUP



## 2) SPECIFICATION

No.	Category	Description
1	MACHINE HEAD	LK-1900BN-HS
2	MODEL NAME	JTR-LK1900BN-FFU
3	MAIN MOTOR	JUKI AC SERVO MOTOR
4	MAIN MOTOR DRIVE	JUKI MC-672N
5	MAXIMUM SEWING SPEED	3200sti/min - delivery speed: 3200sti/min
6	STITCH LENGTH	Min: 2 mm/ Max: 3.5 mm - Shipping pitch: 2.5 mm
7	NEEDLE TYPE	GB / DPX17 / #21
8	GAUGE	JTRON ORIGINAL GAUGE
9	FELT LENGTH	25 MM (Max.)
10	FELT WIDTH	20 MM (Max.)
11	FABRIC CUTTNG SYSTEM	PLC CONTROLLED FABRIC CUTTING SYSTEM
12	SEWING SPECIFICATIONS	THIN TO MEDIUM THICKNESS
13	TARGET PROCESS	FELT FEEDING
14	AIR PRESSURE	MIN: 0.5 MPa MAX: 0.7 MPa Standard: 0.6 Mpa
15	AIR CONSUMPTION	1 L / min
16	VOLTAGE CLASSSIFICATION	Single-phase 200V - 240V / 50Hz
17	CAPACITY	3200 - 3500 pcs / 9hrs
18	DAILY PIECE COUNTER	Available
19	POWER CONSUMPTION	880VA



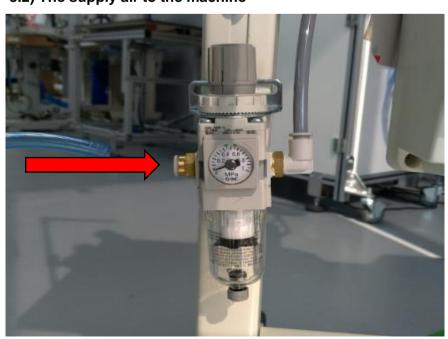
## 3) INSTALLATION

#### 3.1) The machine is delivered as below



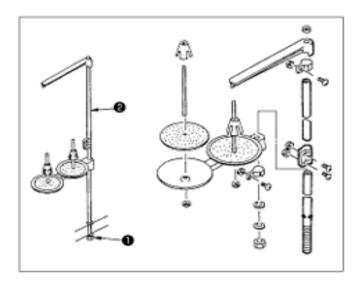
There is not any special occasion for transportation of the machine thus there is no need for extra installation notes.

#### 3.2) The supply air to the machine





#### 3.3) Installing the thread stand.



- Assemble the thread stand unit, and insert it in the hole in the machine table.
- 2) Tighten locknut 1 to fix the thread stand.
- For ceiling wiring, pass the power cord through spool rest rod ② .

#### 3.4) Installing the felt stand.



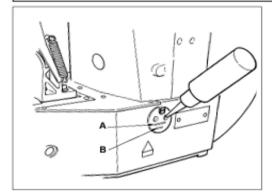
Loosen the screw(A). Place the felt stand by turning felt stand shaft and then tighten the screw(A).



#### 3.5) Lubrication



WARNING:
Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

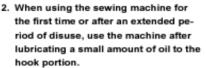


Check that the place between lower line B and upper line A is filled with oil. Fill there with oil using the oiler supplied with the machine as accessories when oil is short.

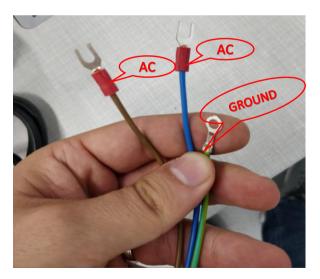
The oil tank which is filled with oil is only for lubricating to the hook portion. It is possible to reduce the oil amount when the number of rotation used is low and the oil amount in the hook portion is excessive.



1. Do not lubricate to the places other than the oil tank and the hook of Caution 2 below. Trouble of components will be caused.



#### 3.6) Connecting the power supply

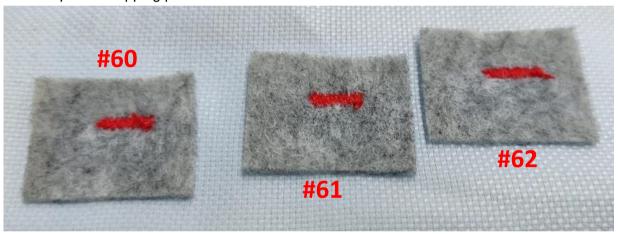


The machine is not supplied with a power plug. It is therefore necessarry for you to select to plug that maches the receptacle availabe under a given operating environment and attach it to the power cable.



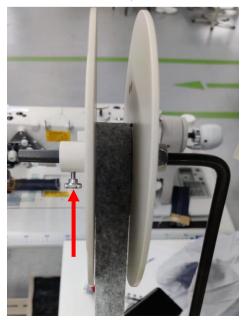
#### 4) PREPARATION FOR OPERATION

- **4.1)** Please put the Juki genuine oil 2 from upper cover of the machine head. (Please refer to machine head instructions –LK1900BN)
- **4.2)** Threading the machine. (Please refer to machine head instructions LK9000BN)
- **4.3)** Check the pattern number for sewing. If the pattern for sewing Felt is not called, call the pattern to the JUKI panel. Shipping pattern number: 60

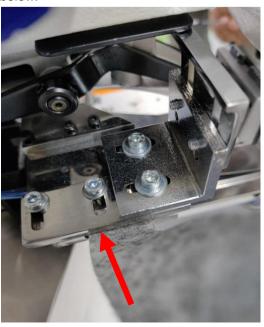


Note: For the operation method of the JUKI panel, refer to the instruction manual (JUKI) of the LK1900BN series.

- **4.4)** How to feed the Felt to pressing foot?
- **4.4.1)** Open/Close the Felt stand cover via"Knob screw" and place the Felt.



**4.4.2** ) Insert the Felt from the first gap as below.

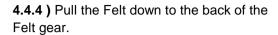


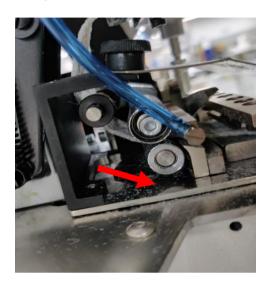


4.4.3) Pull and turn the Felt to insert it to the upper gap as shown below



4.4.5 ) Push the "Felt Feeding Fwd" button on the panel 4.4.6 ) Feed the Felt till it passes the slider and roll the felt until it comes out from the gear.



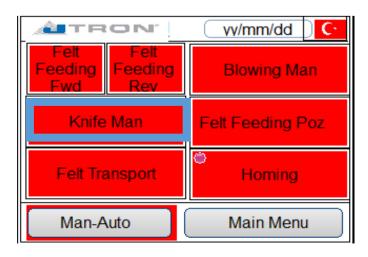


as seen below





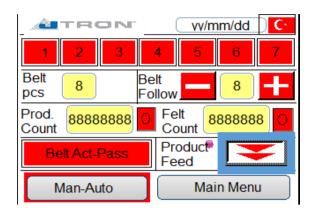
**4.4.7** ) Cut the surplus Felt by pressing the "Knife Man" button.





## **4.4.8** ) Switching on the auto mode by pressing the "Man-Auto" button below





To feed the Felt to sewing position press the indicated button.

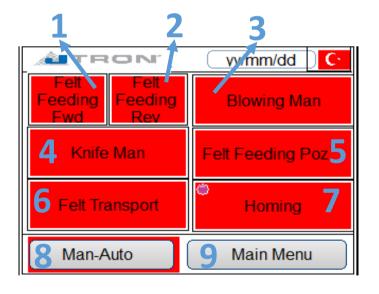
When this button is pressed, machine is set to the origin position automatically.

**4.5)** Start sewing by pressing the pedal.

When the sewing is finished, remove the fabric from the presser by pulling forward.

#### 5) PANEL

#### 5.1) Maintenance Settings Page

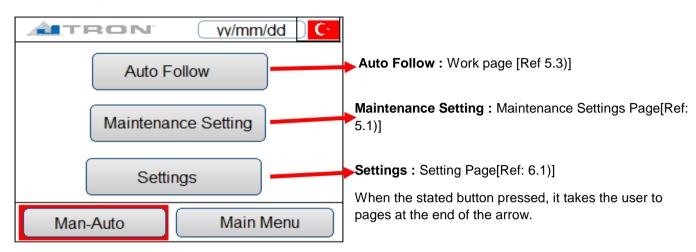


#### No. Description

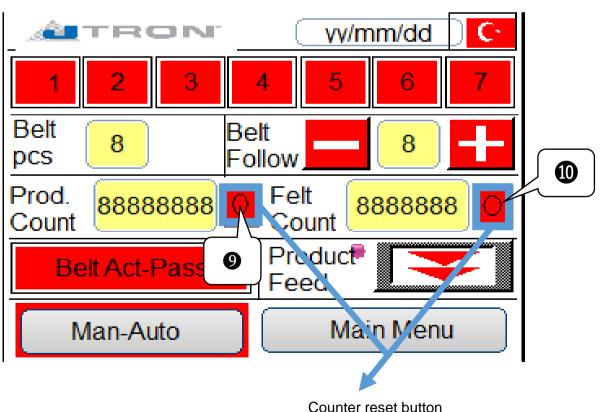
- 1) Feed roller moves towards knife
- 2) Feed roller moves towards needle
- 3) Test of the blower at the joint
- 4) Activate/ Test the knife
- 5) Feed gears feed the predetermined Felt length set on the panel.
- 6) Carrier arm test (Up&Down)
- 7) Carrier arm moves origin position
- 8) Activates/Deactivates the auto mode.
- 9) Takes the user to Main Page



#### 5.2) Main Page



#### 5.3) Work Page(Auto Follow)



Counter reset button (press 3 seconds continuously)



#### 6) ADJUSTMENT

#### 6.1) Felt - Carrier Lenght Adjustments

ATRON'		yy/mm/dd C·
Product Size mm		#### 1
Product Transport	Cycle	888.88 <b>2</b>
Prod. Count		88888888
Count		8888888 4
Man-Auto		Main Menu

#### 6.1.1) Enter Felt length value

The factory value is 20 mm but the length is varies depending on the type of tape. In that case, adjust the product size within the range of-/+1mm

- 6.1.2) You can adjust the feed length of carrier arm according to length set in product size
- **6.1.3)** This is product counter and can be reset.

Note; This value changes in conjunction with **9** of work Page. [Ref: 5.3)]

**6.1.4)** This is the cumulative counter and cannot be reset.

**Important Note!** Machine has to be in the manual mode to use the cycle button.

If you press the Cycle button, it will be fed with the set "Carrier length".

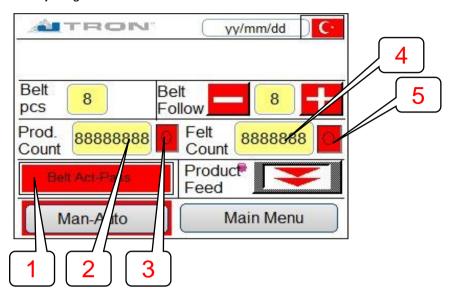
This operation allows you to check if the "Carrier length" is appropriate.

If the Felt is clamped by the clip of the front, then the "Carrier length" is determined to be appropriate.



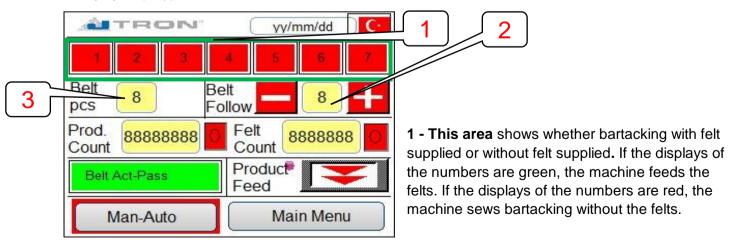
#### 6.2) Single mode and cycle (loop) mode

#### 6.2.1) Single mode



- 1 Cycle mode (loop mode) On/Off: When it is green, it means enabled.
- 2 Piece Counter: The number of completed bartacking.
- 3 Piece Counter reset button (Press 3 second)
- 4 Felt Counter: The number of attached felts.
- 5 Felt Counter reset button (Press 3 second)

#### 6.2.2) Cycle (loop) mode



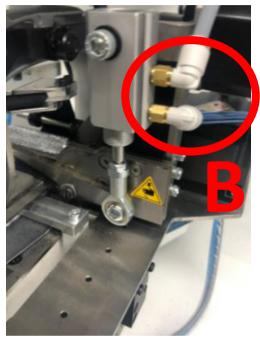
- 2 Belt Follow: Displays the current number of bartaking in a cycle.
- **3 Belt pcs**: The pieces of belts in a cycle(Belt pieces on a jean).



#### 6.3) Replacing the Tape Cutting Knife

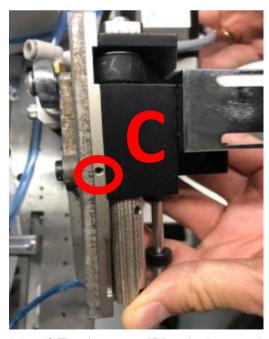
- 6.3.1) Removing the knife
- **6.3.1.1)** First step should be cutting air compression from the machine.
- **6.3.1.2)** The "A" screws (two pieces) should be opened with allen driver.





**6.3.1.3)** Air tubes "B" should be taken out from the motor cable.

#### NOTE! Remove the unit with the motor cable attached from the head.



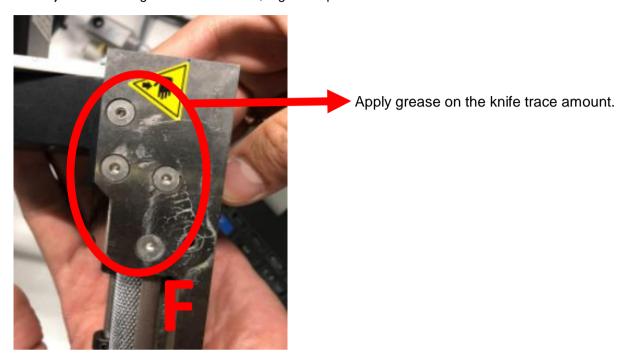


**6.3.1.4)** The tiny screw "B" at the bottom should be loosened.

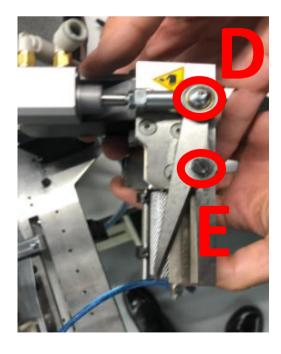
**6.3.1.5)** The "D" screw should be removed and "E" screw on the scissors should be removed. Then the moving knife can be removed.

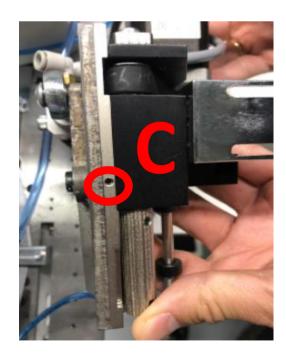


**6.3.1.6)** After installing fixed knife to base, Tighten 4 pieces of "F" screws.



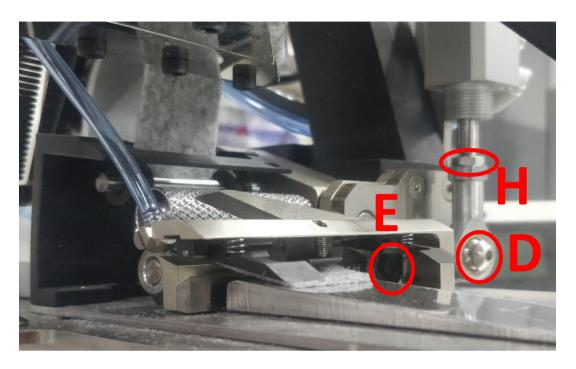
**6.3.1.7)** Tighten "E" screw until the knife cuts the tape well enough. Test the knives' pressure by cutting felt manually.Please be careful not to apply too much pressure to avoid knives' wearing too fast. Tighten the tiny bottom C screw to stabilize the E screw.

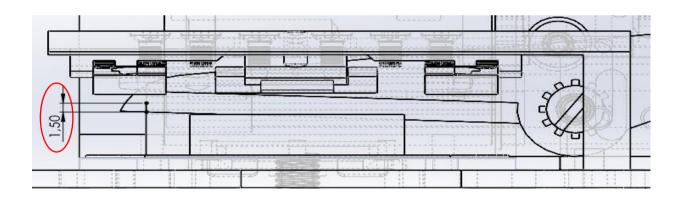






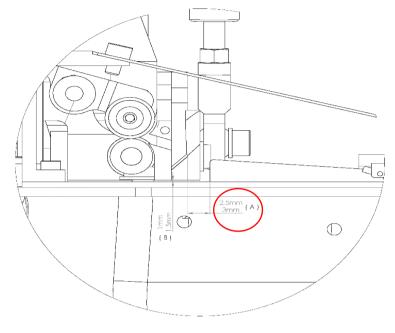
**6.3.1.8)** Loosen locknut "H" and turn the rod of air cylinder to adjust the amount of overlap between the moving and fixed knives. Check by moving the rod of the air cylinder in and out. The overlap is 1.5 mm. Once adjusted, tighten locknut "G".







**6.3.1.9)** Last the "F" screws "4" pieces should be removed from the scissors frame. Then the fixed knife can be removed and install new knife..



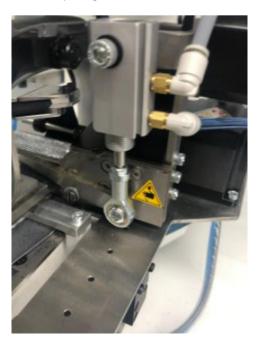


Adjust the A distance between 2,5 to 3 mm.

Feed enough amount of felt to slide inside to feeding canal.

Set felt tape as paralel to canals entrence and tighten the screw G.

6.3.1.10) Plug the air tubes and turn the air on.





# 7) LIST OF PATTERN DATA(SHIPPING VALUES) 7.1) JUKI PANEL



**7.1.1)** Pattern Number : 60

## 7.2) JTRON PANEL

ATRON'		vv/mm/dd C·
Product Size mm		#####
Product Transport Cycle		888.88
Prod. Count		88888888
Count		8888888
Man-Auto		Main Menu

7.2.1) Product Size: 20mm -/+1mm

7.2.2) Product Transport Size: 110mm -/+1mm



## 8) CAUSES AND COUNTERMEASURES

- Q.1) Tape carriage is problematic.
- A1) Check Felt size from the panel. Check the Felt canal. Find the Felt size and re-feed the canal.
- Q.2) Felt size is problematic.
- A2) Check the width of the tape. Feed the canal suitable tape.



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





SEWING MACHINERY & SYSTEMS BUSINESS UNIT

2-11-1, Tsurumaki, Tama-shi, Tokyo 206-8551, Japan Phone: (81) 42-357-2211