

# LU-2810N,2810N-6,2810N-7, 2818N-7,2828N-6,2828N-7, 2860N,2860N-7 INSTRUCTION MANUAL

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This Instruction Manual for the LU-2810N,2810N-6,2810N-7,2818N-7,2828N-6,2828N-7,2860N,2860N-7 only describes their differences from the standard models (LU2810,2810-6,2810-7,2818-7,2828-6,2828-7,2860,2860-7).

For safety-related information, carefully read and fully understand "Safety precautions" described in the Instruction Manual for the standard models before using your sewing machine.

# 1. Specifications

No.	Item	Application	
1	Model	LU-2810N	LU-2860N
2	Model name	1-needle, unison-feed, lockstitch machine	2-needle, unison-feed, lockstitch machine
3	Application	Medium- to heavy-weight materials, car seat, furniture	
4	Sewing speed	Max. 3,000 sti/min (Refer to "6. SEWING SPEED TABLE" in the Instruction Manual for the standard model.)	Max. 2,700 sti/min (Refer to "6. SEWING SPEED TABLE" in the Instruction Manual for the standard model.)
5	Needle	GROZ-BECKERT 135 x 17 (Nm 12	25 to Nm 180) (Standard : Nm 160)
6	Applicable thread size for sewing	#30	to #5
7	Stitch length	Max. 9 mm (forw	ard/reverse feed)
8	Stitch length dial	1-pito	h dial
9	Presser foot lift	Hand lifter : 10 mm By knee lifter : 20 mm	
10	Stitch length adjusting mechanism	By dial	
11	Reverse stitch adjusting method	By lever	
12	Thread take-up	Link thread take-up	
13	Needle bar stroke	40 mm	
14	Amount of the alternate vertical movement	1 mm to 9 mm (Alternate vertical dial adjustment type)	
15	Hook	Full-rotary vertical-axis 2-fold hook (Latch type)	
16	Feed mechanism	Box feed	
17	Top and bottom feed actuation mechanism	Timing belt	
18	Lubrication	Automatic lubrication by oil tank (with oil gauge)	
19	Lubricating oil	JUKI New Defrix Oil No. 1 (equivalent to ISO standard VG7) or JUKI MACHINE OIL No. 7	
20	Bed size	643 mm × 178 mm	
21	Space under the arm	347 mm × 127 mm	
22	Hand wheel size	Effective diameter of the V belt section : ø76.0 mm Outer diameter : ø140 mm	
23	Motor/Control box	M51N 750W / SC-922A	
24	Machine head weight	56 kg	61 kg
25	Noise	- Equivalent continuous emission sound pressure level (L <sub>pA</sub> ) at the workstation: A-weighted value of 83.0 dB; (Includes K <sub>pA</sub> = 2.5 dB); according to ISO 10821-C.6.2 - ISO 11204 GR2 at 3,000 sti/min Sound power level (LwA); A-weighted value of 88.5 dB; (Includes KwA = 2.5 dB); according to ISO 10821-C.6.2 - ISO 3744 GR2 at 3,000 sti/min.	- Equivalent continuous emission sound pressure level (L <sub>pA</sub> ) at the workstation: A-weighted value of 83.0 dB; (Includes K <sub>pA</sub> = 2.5 dB); according to ISO 10821-C.6.2 - ISO 11204 GR2 at 2,700 sti/min Sound power level (L <sub>WA</sub> ); A-weighted value of 88.5 dB; (Includes K <sub>WA</sub> = 2.5 dB); according to ISO 10821-C.6.2 - ISO 3744 GR2 at 2,700 sti/min.

Model	LU-2810N-6 (1-needle sewing machine with a thread trimmer and V-belt)
	Max. 3,000 sti/min
Sewing speed	(Refer to "11. SEWING SPEED TABLE" in the Instruction Manual for the standard model.)
Stitch length (max.)	Normal feed : 9 mm Reverse feed : 9 mm
Needle	GROZ-BECKERT 135 x 17 (Nm 125 to Nm 180) (Standard : Nm 160)
Thread	#30 to #5 (US: #46 to #138, Europe: 20/3 to 60/3)
Hook	Vertical-axis 2.0-fold capacity hook
Lift of presser foot	Hand lifter lever : 10 mm By knee lifter, Auto-lifter: 20 mm
Lubricating oil	JUKI New Defrix Oil No.1 or JUKI MACHINE OIL #7
Noise *1	-Equivalent continuous emission sound pressure level (LpA) at the workstation: A-weighted value of 83.0 dB; (Includes KpA = 2.5 dB); according to ISO 10821- C.6.2 - ISO 11204 GR2 at 3,000 sti/minSound power level (LwA); A-weighted value of 88.5 dB; (Includes KwA = 2.5 dB); according to ISO 10821- C.6.2 - ISO 3744 GR2 at 3,000 sti/min.

<sup>\*1</sup> The noise level show in the table is the level generated in the case JUKI's control box (SC-922) is used.

No.	Item	Application	
1	Model	LU-2810N-7	LU-2818N-7
2	Model name	1-needle, unison-feed, lockstitch machine with automatic thread trimmer	1-needle, unison-feed, lockstitch machine with automatic thread trimmer (with 2.7-fold vertical axis hook/long pitch type)
3	Application	Medium- to heavy-weight materials, car seat, furniture	
4	Sewing speed	Max. 3,000 sti/min (Refer to <b>"6. SEWING SPEED TABLE"</b> in the Instruction Manual for the standard model.) *1	
5	Needle	GROZ-BECKERT 135 x 17 (Nm 12	25 to Nm 180) (Standard : Nm 160)
6	Applicable thread size for sewing	#30	to #5
7	Applicable thread size to be cut	#30	to #5
8	Stitch length	Max. 9 mm (forward/reverse feed)	Max. 12 mm (forward/reverse feed)
9	Stitch length dial	2-pito	h dial
10	Presser foot lift	Hand lifter : 10 mm Automatic presser foot lifter : 20 mm	
11	Stitch length adjusting mechanism	By dial	
12	Reverse stitch adjusting method	Air cylinder type (with touch-back switch)	
13	Thread take-up	Link threa	nd take-up
14	Needle bar stroke	40 mm	
15	Amount of the alternate vertical movement	1 mm to 9 mm (Alternate vertical dial adjustment type)	
16	Hook	Full-rotary vertical-axis 2-fold hook (Latch type)	Full-rotary vertical-axis 2.7-fold hook (Latch type)
17	Feed mechanism	Вох	feed
18	Top and bottom feed actuation mechanism	Timing belt	
19	Thread trimming method	Cam-driven scissors type	
20	Lubrication	Automatic lubrication by oil tank (with oil gauge)	
21	Lubricating oil	JUKI New Defrix Oil No. 1 (equivalent to ISO standard VG7) or JUKI MACHINE OIL No. 7	
22	Bed size	643 mm × 178 mm	
23	Space under the arm	347 mm × 127 mm	
24	Hand wheel size	Outer diameter : ø123 mm	
25	Motor/Control box	SC-922B	
26	Machine head weight	61 kg	66 kg
27	Rated power consumption	180VA	120 VA
28	Noise	- Equivalent continuous emission sound pressure level (L <sub>pA</sub> ) at the workstation: A-weighted value of 83.0 dB; (Includes K <sub>pA</sub> = 2.5 dB); according to ISO 10821-C.6.2 - ISO 11204 GR2 at 3,000 sti/min Sound power level (L <sub>WA</sub> ); A-weighted value of 88.5 dB; (Includes K <sub>WA</sub> = 2.5 dB); according to ISO 10821-C.6.2 - ISO 3744 GR2 at 3,000 sti/min.	- Equivalent continuous emission sound pressure level (L <sub>pA</sub> ) at the workstation: A-weighted value of 84.0 dB; (Includes K <sub>pA</sub> = 2.5 dB); according to ISO 10821-C.6.2 - ISO 11204 GR2 at 2,750 sti/min Sound power level (LwA); A-weighted value of 84.0 dB; (Includes KwA = 2.5 dB); according to ISO 10821-C.6.2 - ISO 3744 GR2 at 3,000 sti/min.

<sup>\*1</sup> The speed setting according to the amount of the alternating vertical movement of the walking foot and presser foot is automatically carried out.

No.	Item	Application	
1	Model	LU-2828N-7	LU-2828N-6
2	Model name	1-needle, unison-feed, lockstitch machine with automatic thread trimmer (with 2.7-fold vertical axis hook/needle thread clamp function/direct drive type)	1-needle, unison-feed, lockstitch machine with automatic thread trimmer (with 2.7-fold vertical axis hook/needle thread clamp function/V belt type)
3	Application	Medium- to heavy-weight n	naterials, car seat, furniture
4	Sewing speed	Max. 3,000 sti/min (Refer to "6. SEWING SPEED TABLE" in the Instruction Manual for the standard model.) *1	
5	Needle	SCHMETZ 134-35 (Nm 125 to	Nm 180) (Standard : Nm 140)
6	Applicable thread size for sewing	#30 t	to #5
7	Applicable thread size to be cut	#30 t	to #5
8	Stitch length	Max. 9 mm (forwa	ard/reverse feed)
9	Stitch length dial	2-pitc	h dial
10	Presser foot lift	Hand lifter : 10 mm Automatic presser foot lifter : 20 mm	
11	Stitch length adjusting mechanism	By dial	
12	Reverse stitch adjusting method	Air cylinder type (with	h touch-back switch)
13	Thread take-up	Link thread take-up	
14	Needle bar stroke	40 mm	
15	Amount of the alternate vertical movement	1 mm to 9 mm (Alternate vertical dial adjustment type)	
16	Hook	Full-rotary vertical-axis 2.7-fold hook (Latch type)	
17	Feed mechanism	Box feed	
18	Top and bottom feed actuation mechanism	Timing belt	
19	Thread trimming method	Cam-driven scissors type	
20	Lubrication	Automatic lubrication by oil tank (with oil gauge)	
21	Lubricating oil	JUKI New Defrix Oil No. 1 (equivalent to ISO standard VG7) or JUKI MACHINE OIL No. 7	
22	Bed size	643 mm × 178 mm	
23	Space under the arm	347 mm × 127 mm	
24	Hand wheel size	Outer diameter : ø123 mm	
25	Motor/Control box	SC-922B	-
26	Machine head weight	62	kg
27	Rated power consumption	180	)VA
28	Noise *2	<ul> <li>Equivalent continuous emission sound pressure level (L<sub>pA</sub>) at the workstation: A-weighted value of 81.0 dB; (Includes K<sub>pA</sub> = 2.5 dB); according to ISO 10821- C.6.2 - ISO 11204 GR2 at 3,000 sti/min.</li> <li>Sound power level (L<sub>WA</sub>); A-weighted value of 85.5 dB; (Includes K<sub>WA</sub> = 2.5 dB); according to ISO 10821- C.6.2 - ISO 3744 GR2 at 3,000 sti/min.</li> </ul>	

<sup>\*1</sup> The speed setting according to the amount of the alternating vertical movement of the walking foot and presser foot is automatically carried out.

<sup>\*2</sup> The noise level show in the table is the level generated in the case JUKI's control box (SC-922) is used.

No.	Item	Application	
1	Model	LU-2860N-7	
2	Model name	2-needle, unison-feed, lockstitch machine with automatic thread trimmer	
3	Application	Medium- to heavy-weight materials, car seat, furniture	
4	Sewing speed	Max. 2,700 sti/min (Refer to <b>"6. SEWING SPEED TABLE"</b> in the Instruction Manual for the standard model.)	
5	Needle	GROZ-BECKERT 135 x 17 (Nm 125 to Nm 180) (Standard : Nm 160)	
6	Applicable thread size for sewing	#30 to #5	
7	Applicable thread size to be cut	#30 to #5	
8	Stitch length	Max. 9 mm (forward/reverse feed)	
9	Stitch length dial	2-pitch dial	
10	Presser foot lift	Hand lifter : 10 mm Automatic presser foot lifter : 20 mm	
11	Stitch length adjusting mechanism	By dial	
12	Reverse stitch adjusting method	Air cylinder type (with touch-back switch)	
13	Thread take-up	Link thread take-up	
14	Needle bar stroke	40 mm	
15	Amount of the alternate vertical movement	1 mm to 9 mm (Alternate vertical dial adjustment type)	
16	Hook	Full-rotary vertical-axis 2-fold hook (Latch type)	
17	Feed mechanism	Box feed	
18	Top and bottom feed actuation mechanism	Timing belt	
19	Thread trimming method	Cam-driven scissors type	
20	Lubrication	Automatic lubrication by oil tank (with oil gauge)	
21	Lubricating oil	JUKI New Defrix Oil No. 1 (equivalent to ISO standard VG7) or JUKI MACHINE OIL No. 7	
22	Bed size	643 mm × 178 mm	
23	Space under the arm	347 mm × 127 mm	
24	Hand wheel size	Outer diameter : ø123 mm	
25	Motor/Control box	SC-922B	
26	Machine head weight	66 kg	
27	Rated power consumption	110VA	
28	Noise	-Equivalent continuous emission sound pressure level ( $L_{PA}$ ) at the workstation: A-weighted value of 83.0 dB; (Includes $K_{PA}$ = 2.5 dB); according to ISO 10821- C.6.2 - ISO 11204 GR2 at 2,700 sti/minSound power level ( $L_{WA}$ ); A-weighted value of 88.5 dB; (Includes $K_{WA}$ = 2.5 dB); according to ISO 10821- C.6.2 - ISO 3744 GR2 at 2,700 sti/min.	

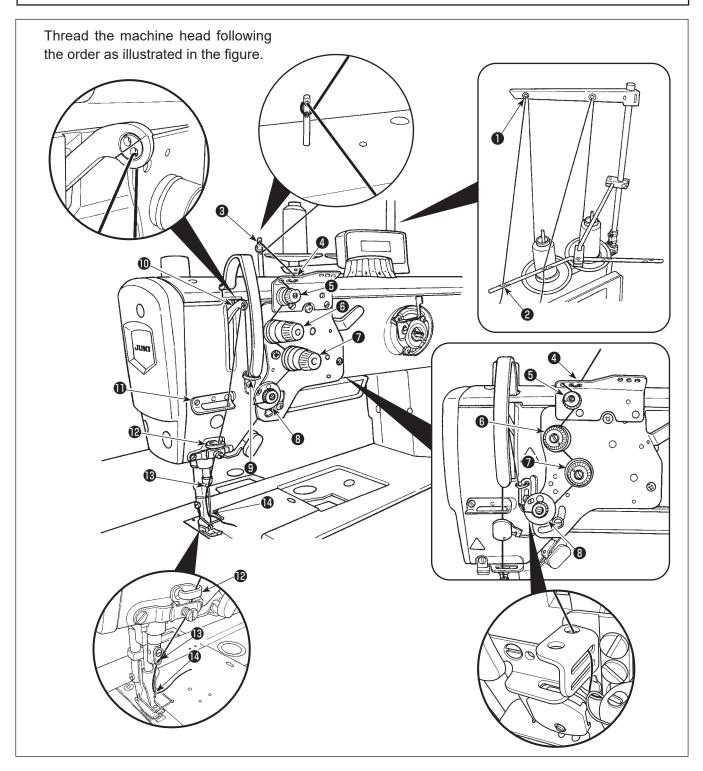
# 2. Threading the machine head

# [LU-2810N,2810N-6,2810N-7,2818N-7]



#### **WARNING:**

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



1. Thread guide **②** is necessary to prevent the thread from slipping off the needle eyelet when performing thread trimming at a position which is outside the material.



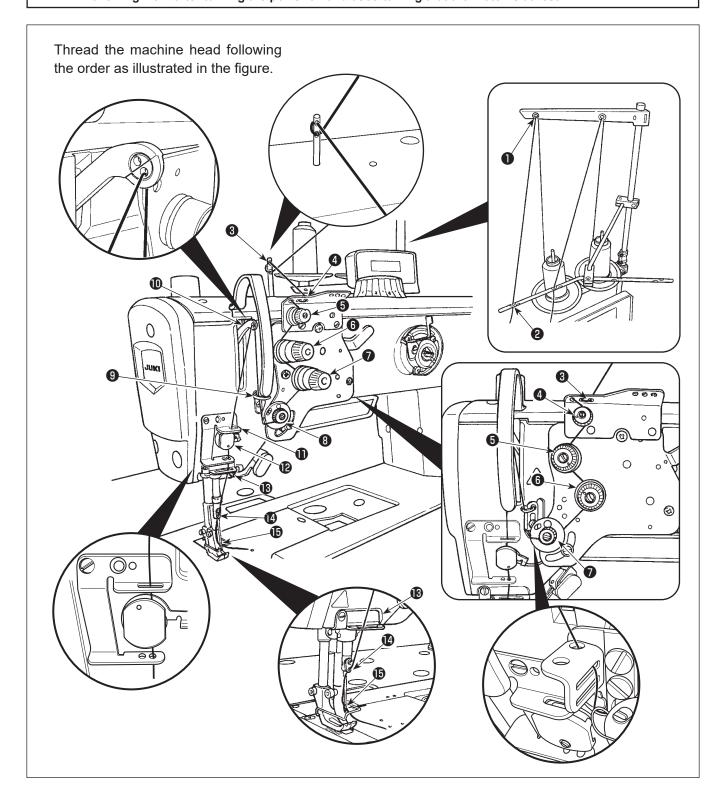
2. If thread tangling failure occurs when starting sewing from the material edge, the thread should be removed from the location where it is clamped with the spring of thread guide ② , or thread guide ② should be changed with another one. The replacement thread guide is separately available. Part number of replacement thread guide: 40169642

# [LU-2828N-6, 2828N-7]



# **WARNING:**

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



# [LU-2860N, 2860N-7]



# **WARNING:**

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.

