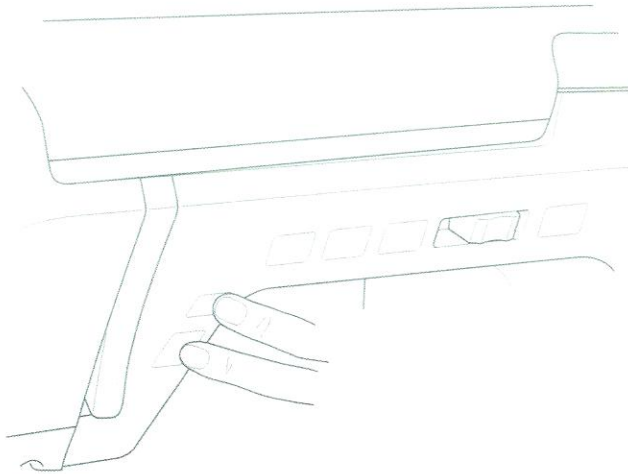


BLSO- BLSOG

■ With front cover

1. How to start test mode

Turn on the power while pressing the  (Start/Stop button) and the  (Reverse stitch button), then test mode starts (test mode screen is displayed).



01	02	03	04	05	06	07	08
09	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72

2. Contents of test mode

Test mode No.	Mode	Contents of test mode	Ref. page
01	Serial Numbers/Product ID	Serial number/Product ID and software version are displayed.	—
02	Fabric Thickness Setting/PF-PM Adjust	Adjust the fabric thickness setting / Knee lifter position.	4-20 /4-21
03	Pattern Adjustment	Test pattern is sewn, and set up the correction value of the vertical and horizontal.	4-26
04	3-Point Needle Drop	Change needle position (left, center, right)	4-13
06	Feed Dog Position	Feed dog is moves to front/center/left/right.	4-23
07	Presser Foot Height	Presser foot height and AD value are displayed.	—
10	Lower Thread	Check the operation of the Lower thread detection sensor. (+.: has lower thread, 0.0: empty lower thread) * Turn the pulley by hand and shows 0.0 (lower thread empty), then check the operation of sensor.	—
11	Upper Thread	Check operation of upper thread detection sensor. (+.: has upper thread, 0.0: empty upper thread) * Pulling up thread and move thread take up spring, then check the operation of sensor.	—
12	Upper Thread 1	Disable detection function of upper thread/lower thread and needle plate A/B. (Effective once when turning on at the next time.)	—
13	Forward and Reverse Feed	Sewing 100 forward stitches (left base line), and 100 reverse stitches (right base line).	4-24

Test mode No.	Mode	Contents of test mode	Ref. page
14	Speed	Display target and actual rotation speed of upper shaft.	—
15	Power	Running the machine with the maximum electric power.	—
19	Clearing Memory/Clearing Counter	Embroidery and utility stitch count. (Able to reset in maintenance)	—
22	NP Sensor	Check upper shaft angle with buzzer ON/OFF.	4-12
23	Embroidery Max Position	Trace the maximum size of embroidery.	4-32
24	LCD Check	Check LCD.	—
28	Threading Check	Check the needle threading operation.	4-18
29	Input Check	Check switches and sensors function. (+1: ON, 00: OFF)	4-5
32	VR AD Check	Display speed VR and foot controller AD value. Display target and actual rotation speed of upper shaft.	—
36	Side Feed Adjustment	Sewing side feed, 10 stitches right and left, and set the correction value from the results of side feed sewing.	4-25
42	Embroidery Position Adjust	Correct the initial position of embroidery by the 4 keys X direction (right and left) and Y direction (up and down).	4-33
46	Error List	Display previous 10 error messages appeared on the screen.	—
47	Z Initial Phase/F Initial Phase Check	Check initial phase of Z-PM/F-PM.	—
52	LED Check/Speaker Check	Check LED/Speaker operation.	—
53	Extended Unit Check	(Use only production line.)	—
54	Camera Calibration	Camera calibration.	4-36
57	Range of Camera View Check	Check range of camera view.	4-39
59	Camera calibration Check	(Use only production line.)	—
60	EEPROM USB HOST Write	(Use only production line.)	—

3. Check switches and sensors function (Test Mode No.29)

State: Current switch or sensor operation.

Record: Switch or sensor operating record. (Use in production line)

Clear button: Reset the record. (Use in production line)

+1	ON
00	OFF

Item:

Foot Jack	Foot controller jack
BWD	Bobbin winder SW
PFT	Presser foot SW
BH lever	Button hole Lever SW
BH Front	Button hole front SW
BH Back	Button hole back SW
PLATE 1	Needle plate A SW
PLATE 2	Needle plate B SW
F Initial Sensor	F-pulse motor initial sensor
Z Initial Sensor	Z-pulse motor initial sensor
PF Initial Sensor	Presser foot-pulse motor initial sensor
TH Initial Sensor	Threader-pulse motor initial sensor
TC Initial Sensor	Thread cut-pulse motor initial sensor
AT Initial Sensor	Auto tension-pulse motor initial sensor
X Initial Sensor	X carriage initial sensor
Y Initial Sensor	Y carriage initial sensor
Emb Machine	Embroidery unit connector
Frame SW 1	Embroidery frame PCB assy. SW 1
Frame SW 2	Embroidery frame PCB assy. SW 2
Frame SW 3	Embroidery frame PCB assy. SW 3
Frame SW 4	Embroidery frame PCB assy. SW 4
Frame Lock Lever	Embroidery frame Lock Lever SW

29 Input check		
Item Panel	State	Record
Main		
FootJack	00	00
BWD	00	00
PFT	00	+1
BH Lever	+1	+1
BH Front	00	00
BH Back	00	00
PLATE 1	+1	+1
PLATE 2	+1	+1
F Initial Sensor	00	+1
Z Initial Sensor	00	+1
PF Initial Sensor	00	+1
TH Initial Sensor	00	+1
TC Initial Sensor	+1	+1
AT Initial Sensor	00	+1
X Initial Sensor	00	00
Y Initial Sensor	00	00
Emb Machine	00	00
Frame Sw 1	00	00
Frame Sw 2	00	00
Frame Sw 3	00	00
Frame Sw 4	00	00
Frame Lock Lever	00	00

CLOSE

CLEAR

[Adjustment standard]

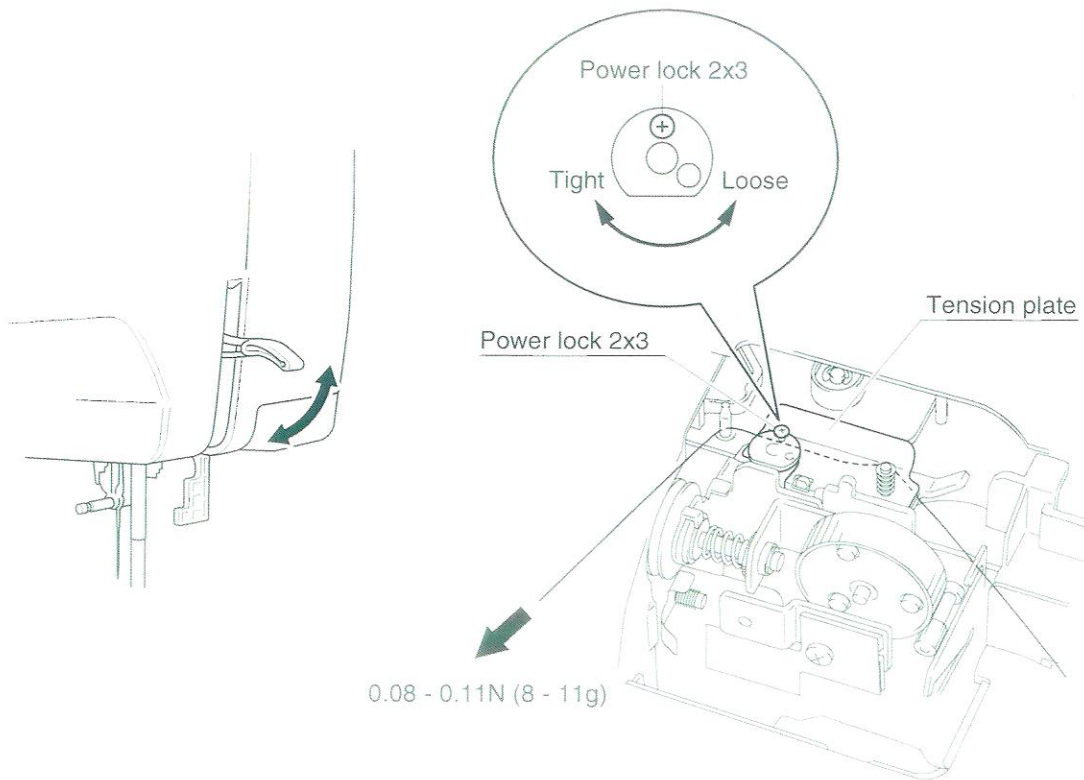
Start test mode, pass the schappe spun thread #60 through tension plate and pull it by tension gauge, then adjust tension must be in 0.04 to 0.05N (4 to 5g).

[Adjustment procedure]

1. Remove the front thread guard cover.
2. Start the test mode.
3. Raise the presser foot lever.
4. Pass the schappe spun thread #60 through the thread guide and then tension plate.
5. Lower the presser foot lever.
6. Pull thread by a tension gauge, and turn the power lock (2x3) and adjust tension to 0.08 to 0.11N (8 to 11g).

XA9153001

Tension gauge (0.3N)



[Adjustment standard]

Start test mode, pass the schappe spun thread #60 through tension plate, tension disk and plate assy., and pull it by tension gauge, then adjust tension must be in 0.33 to 0.41N (34 to 42g).

[Adjustment procedure]

1. Remove the front thread guard cover.
2. Start the test mode.
3. Raise the presser foot lever.
4. Pass the schappe spun thread #60 through the thread guide, tension plate, tension disk and plate assy. in this order.
5. Lower the presser foot lever.
6. Pull thread by tension gauge, and turn the thread tension adjusting screw, and adjust the tension to 0.38 to 0.48N (39 to 49g).
7. Apply a small amount of thread locker to thread tension adjusting screw.

XC2276001

Tension gauge (1.0N)

