



Parts Information

系列名称	Bartacking Machine		
型号(产品)名称	LK-1900A/ LK-1900AN/ LK-1900B/ LK-1900BN	发行 No.	A18P-039
发行源	JUKI CORPORATION Customer Business Company	发行日	2018/0/6

☐ 编号新增设

☐ 编号取代

☐ 编号废除

☒ 其他

钉扣机小工具套装用文档

【对应機種】

LK-1900A/ LK-1900AN/ LK-1900B/ LK-1900BN

【内容】

关于 LK1900 用的钉扣机小工具套装，将刊登以下的文档，请您使用。

- ・ 使用说明书 P.2～18
- ・ 零件样本 P.19～23

咨询:

JUKI CORPORATION Customer Business Company

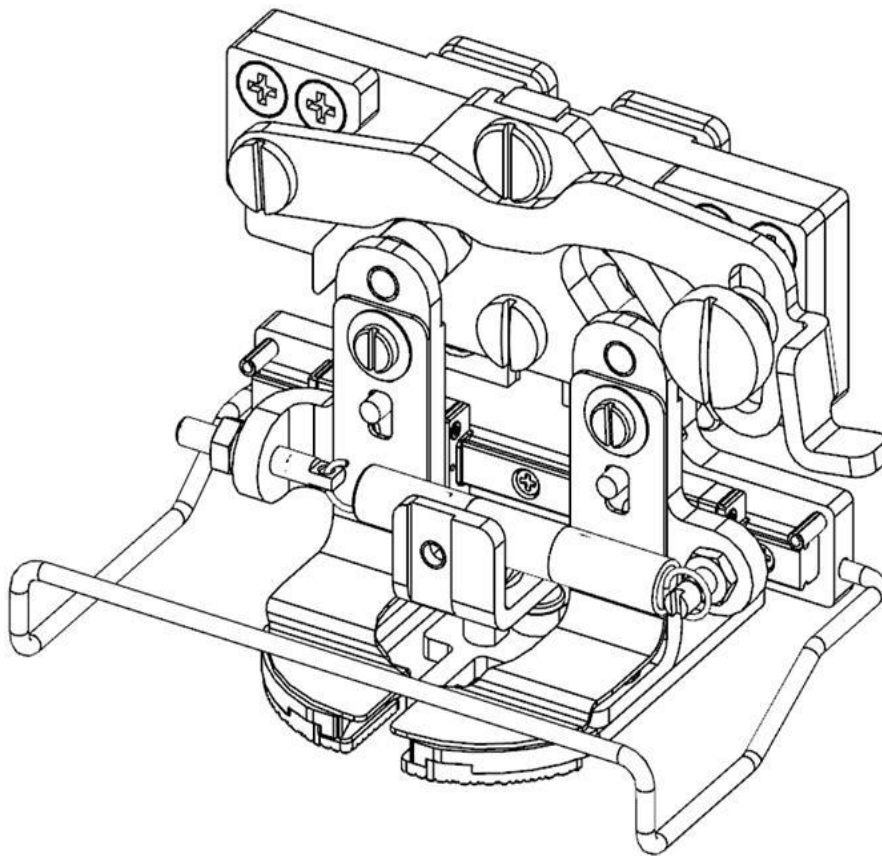
E-mail: parts@juki.skr.jp



Button sewing clamp kit

(Vertical button attach device)

Instruction Manual
72005824(for LK-1900A/AN/B/BN)



Rev.001
2018.06.08

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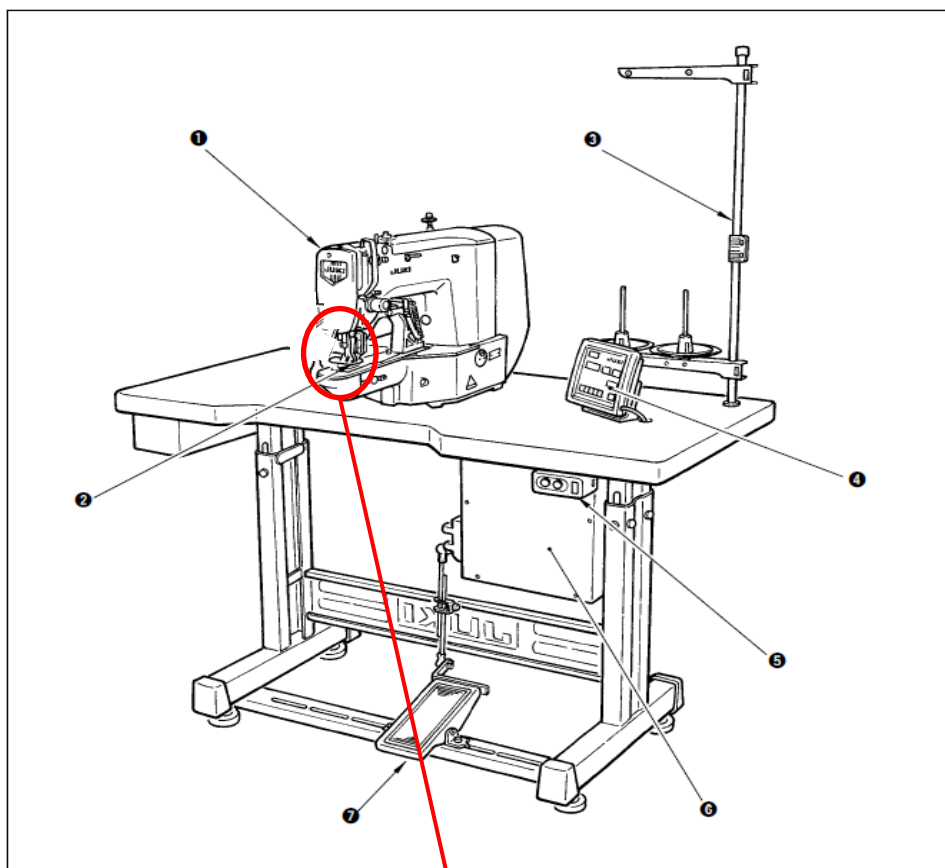
I. Precautions before operation

For safety precautions, pay attention to the following precautions before running

- When the power is turned on, there is a possibility that the buttoning device may operate, Do not place hands or objects under or in the vicinity of the device.
- When removing or installing parts, follow "IV. Installation."

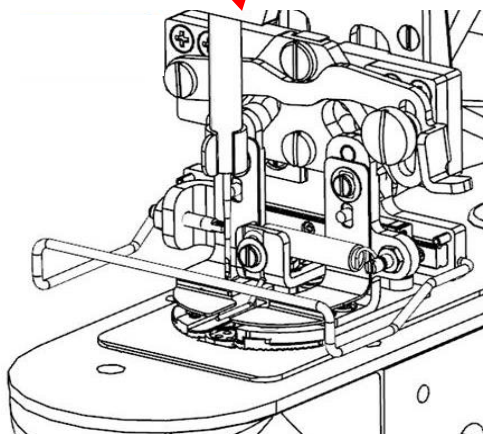
II. Name of main unit

1. Name of a component



- ① Machine head
- ② Work clamp foot
- ③ Thread stand
- ④ Operation panel
- ⑤ Switch box
- ⑥ Control box
- ⑦ Pedal

Vertical button attached device

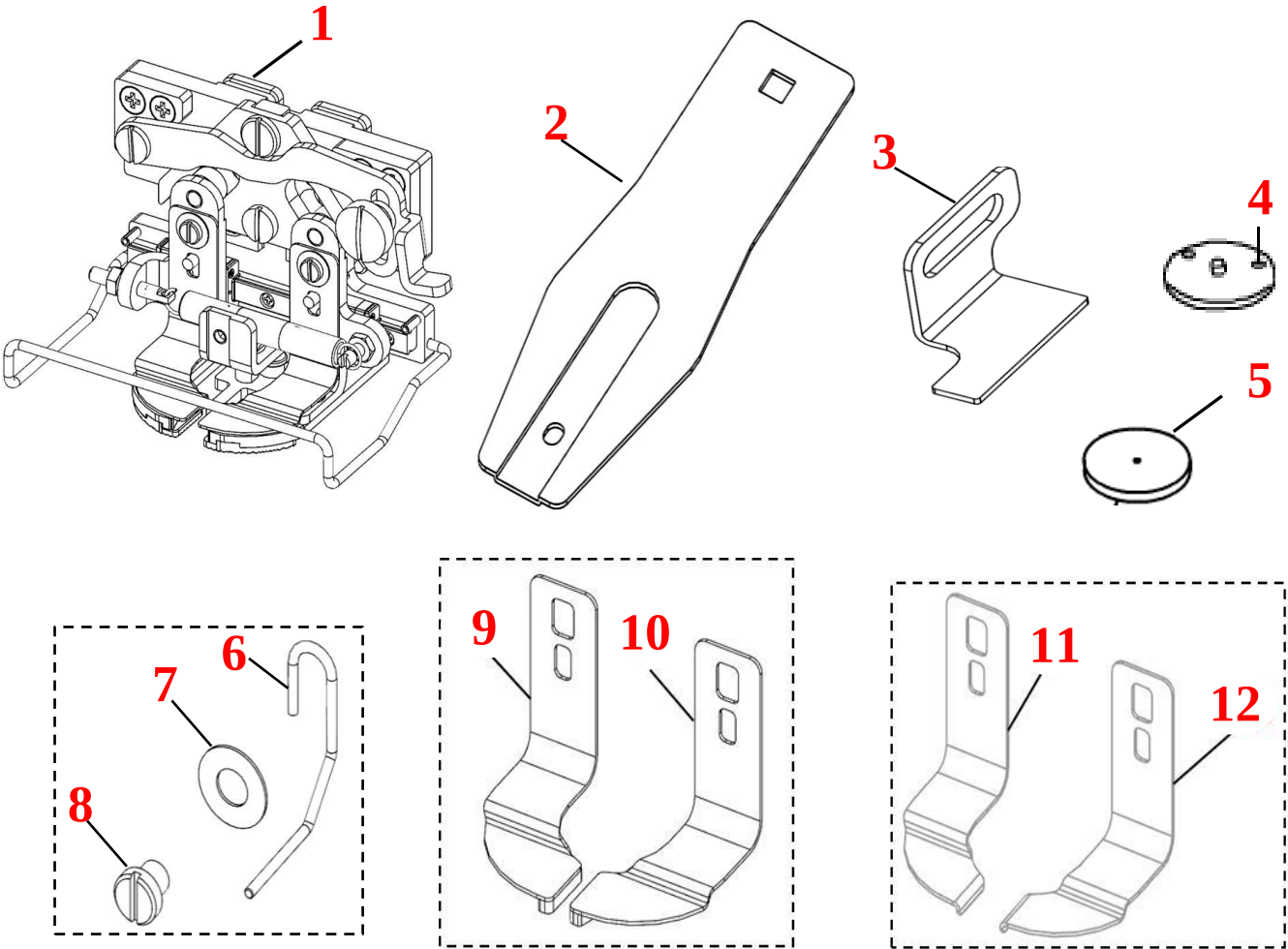


2. Standard accessories

Check the packaged parts before installation.
Product no.:72005824

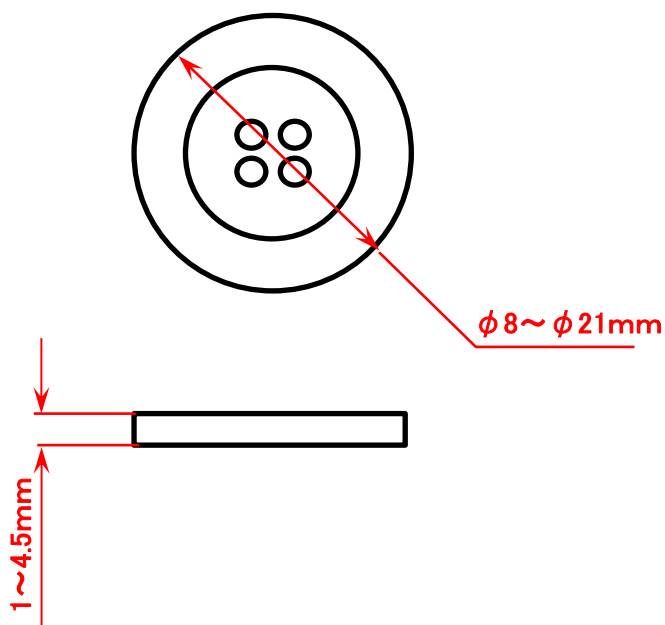
No.	Parts Number	Parts name	Qty
1	40205494	VERTICAL_BUTTON_ATTACH_DEVICE	1
2	72002988	FEED_PLATE_A	1*
3	72002987	LENGTHWISE_FEED_SENSOR_SLIT	1*
4	MAZ15601000	GUIDE	1*
5	40021011	SMALL GAUGE	1*
6	72003011	BUTTON_RISING_BAR	1*
7	WP0370316SD	PLAIN WASHER	1*
8	SS6080340SP	SCREW	1*
9	72005821	SPRING_LEFT_C (THIN LARGE BUTTON)	1*
10	72005822	SPRING_RIGHT_C (THIN LARGE BUTTON)	1*
11	72005816	SPRING_LEFT_B (THIN BUTTON)	1*
12	72005817	SPRING_RIGHT_B (THIN BUTTON)	1*

*Accessory_parts_components:40205495



III. Specifications

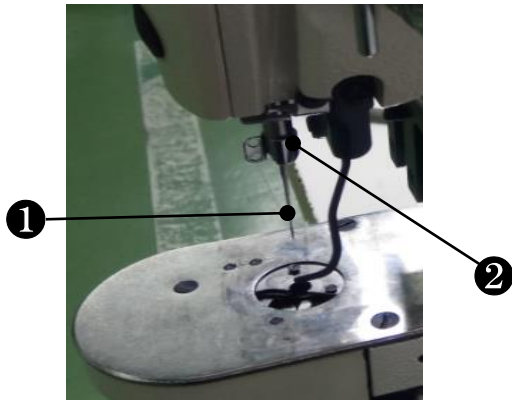
● Model name	Vertical button attached device
● Applicable model	LK-1900A LK-1900AN LK-1900B
● Sewing speed	Maximum 2700sti per minute
● Sewing area	4.5mm in length × 4.5mm in width (buttonhole spacing)
● Device dimension	W:55 mm、 L:88 mm、 H:70 mm
● Needle used	DPx17(#14)
● Lift of the work clamp	Maximal 12 mm
● Button size	Outer diameter: $\phi 8$ to $\phi 21$ mm Thickness :1~4.5 mm Button hole spacing 0-4.5 mm



IV. Installation

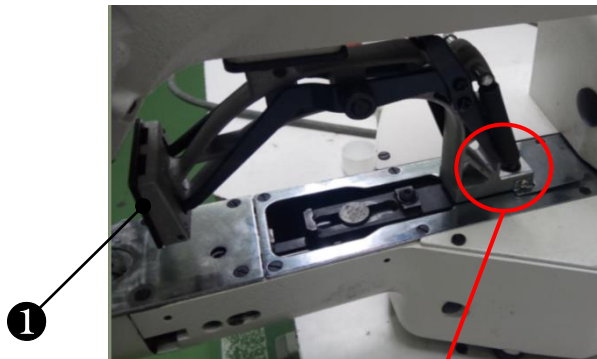
●CAUTION: To prevent accidents due to inadvertent activation, be sure to switch off the power before starting.

1. Removing the needle



1) Remove the set screw **2** to remove the needle **1**

2. Removal of the feed bracket



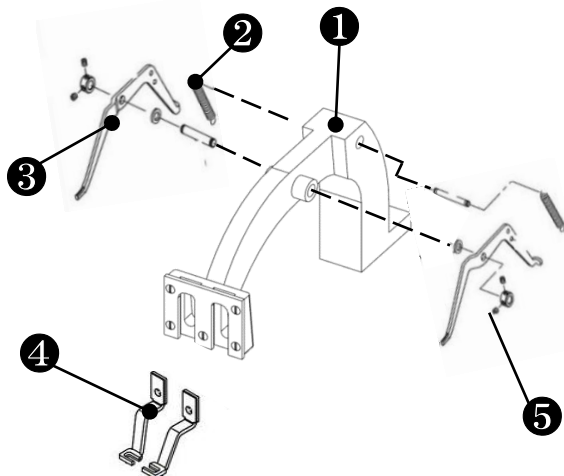
1) Remove the feed bracket **1** by loosening the screw **2** and the washer **3**



○NOTE: Be careful not to generate a ball because the metal ball is on top of the feed barrel.

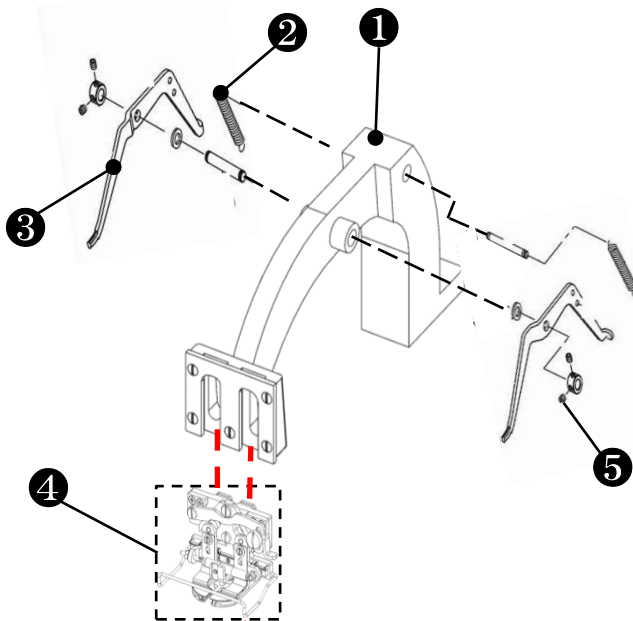


3. Removal of the work clamp kit



1) Secure the feed bracket **1**, remove the two springs **2**, loosen the four screws **5**, remove the two lifting levers **3**, and remove the two working feet **4**.

4. Mount the button attached device on the feed bracket

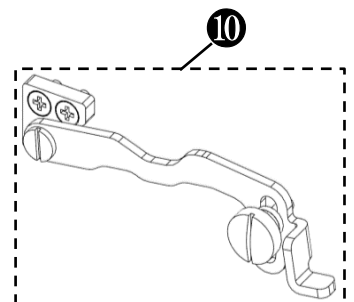
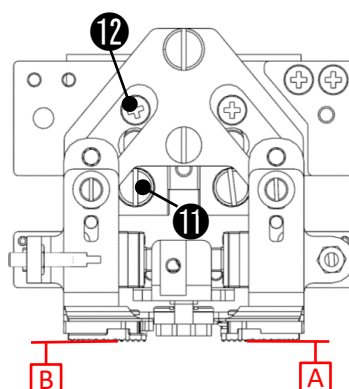
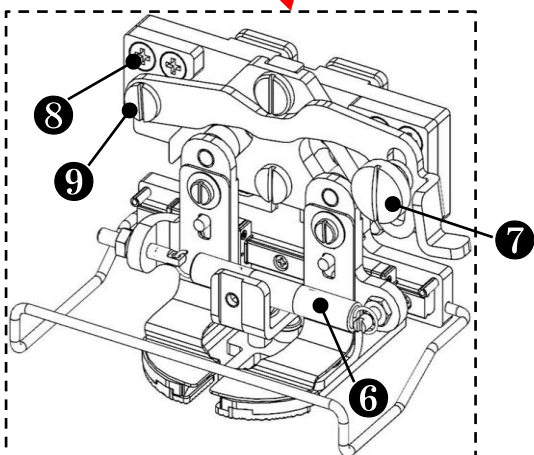


1) Put the button attached device **4** in the feed bracket **1**, attach two lifting levers **3**, tighten two collar **13** and four screws **5**, and then apply two springs **2**

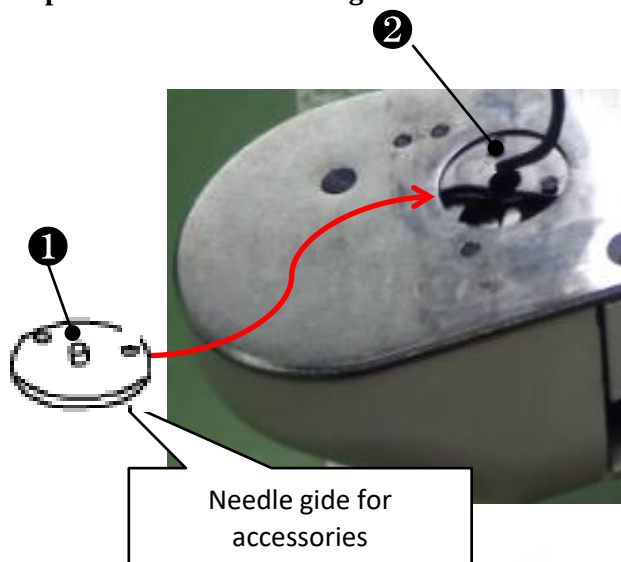
CAUTION: When the device **4** cannot be smoothly inserted into the feed bracket **1** remove the spring **6**, remove the set screw **7** and two screws **8**, and remove the lever assembly **10** without removing the screw **9**.

Then, loosen the two screws **11** and the two screws **12**, place the device **4** in the feed bracket **1**, and tighten the two screws **11** and the two screws **12** so that the A and B sides are in the same plane.

Then, attach a lever assembly **10** with two screws **8** and a set screw **7**, and then apply a spring **6**.

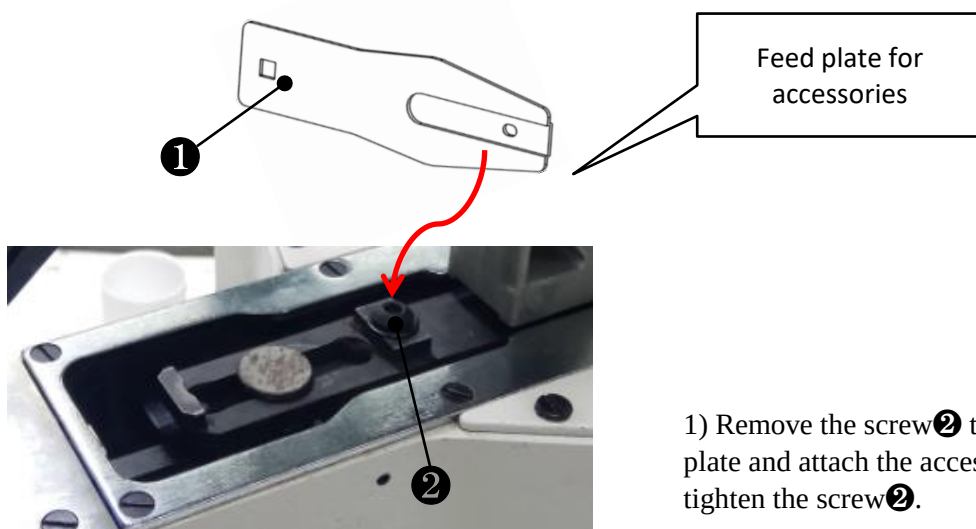


5. Replacement of the needle guide



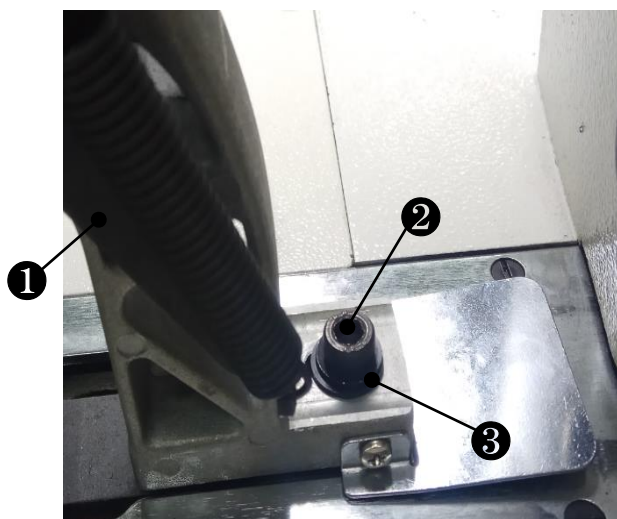
1) Loosen the two screws 2, remove the current needle guide, install the accessory needle guide 1 and tighten the two dishes screws 2.

6. Replacement of the feed plate



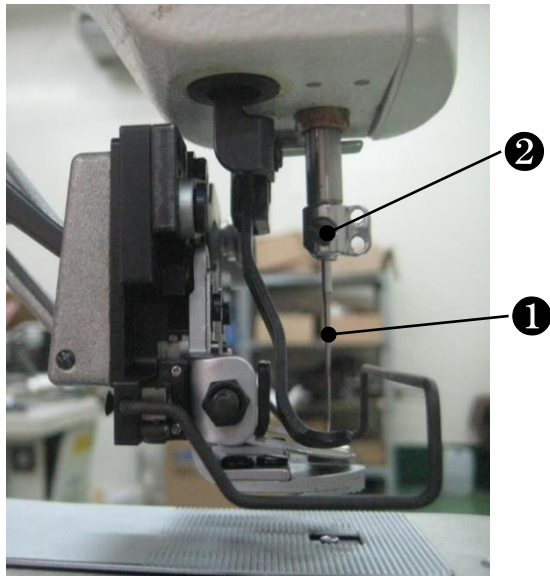
1) Remove the screw 2 to remove the current feed plate and attach the accessory feed plate 1. Then tighten the screw 2.

7. Attach a feed bracket (with a button attached device) to the arm bed.



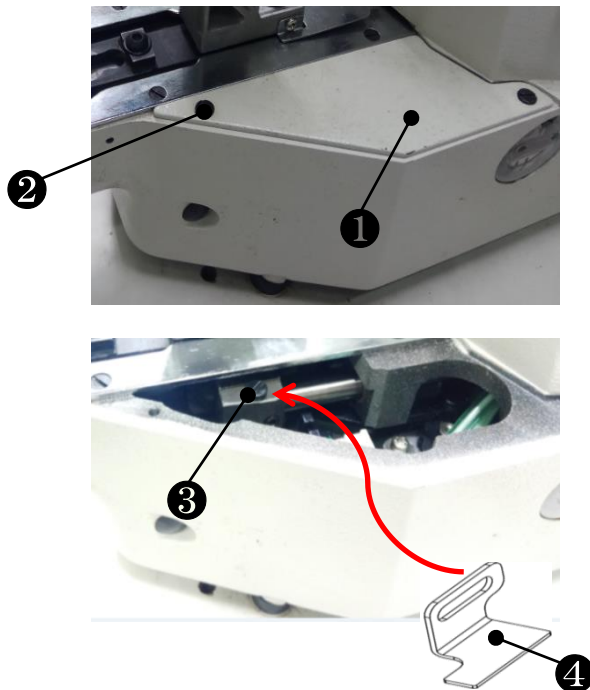
1) Attach the feed bracket 1 (with device) to the arm bed and tighten the washer 3 and screw 2

8. Attach a needle



1) Attach the needle **1** with the set screw **2**

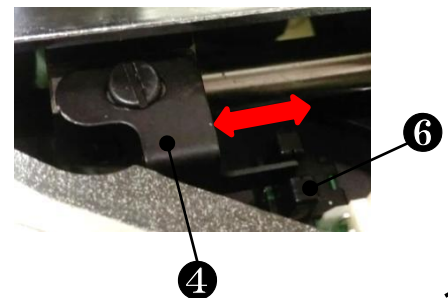
9. Replacement of lengthwise feed sensor slit



1) Loosen the two screws **2** to remove the right bed cover **1**

2) Loosen the screw **3**, remove the current feed sensor slit, install the accessory sensor slit **4** and temporarily secure the screw **3**.

○Note: The screw **3** is adjusted in the center of the long slit hole and is temporarily secured (be careful not to interfere with the slit **4** and sensor **6**).

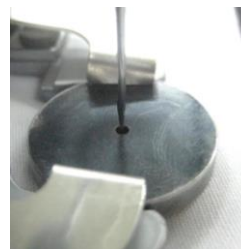


10. Origin Sensor Adjustment

● NOTE: Work with the power on. Never touch the switch other than necessary to prevention accidents due to malfunction.

- Turn on the power.
-  Press the key.
- Put the accessory small gauge into the device.
(If there is no button gauge, a small button may be used.)
- Turn on the power supply.
- Turn it on again.
- Turn on the power and make the following adjustments.

Small gauge



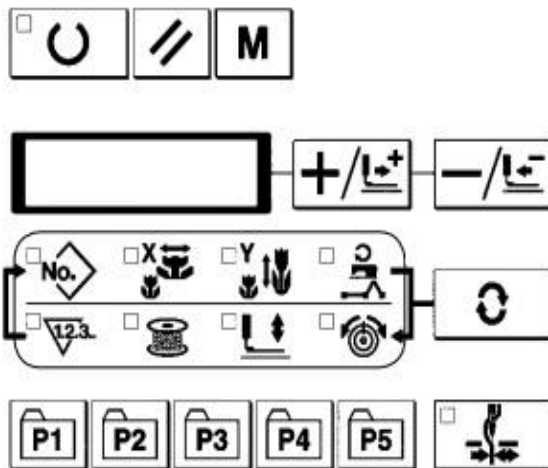
Small button



10.1 For LK1900A /AN

1. Starting XY Motor/Origin Sensor Check Mode



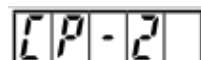


• Press the key  for 3 seconds while the sewing LED disappears (the buzzer sounds).

•  Press the key.

•  Press the key twice.

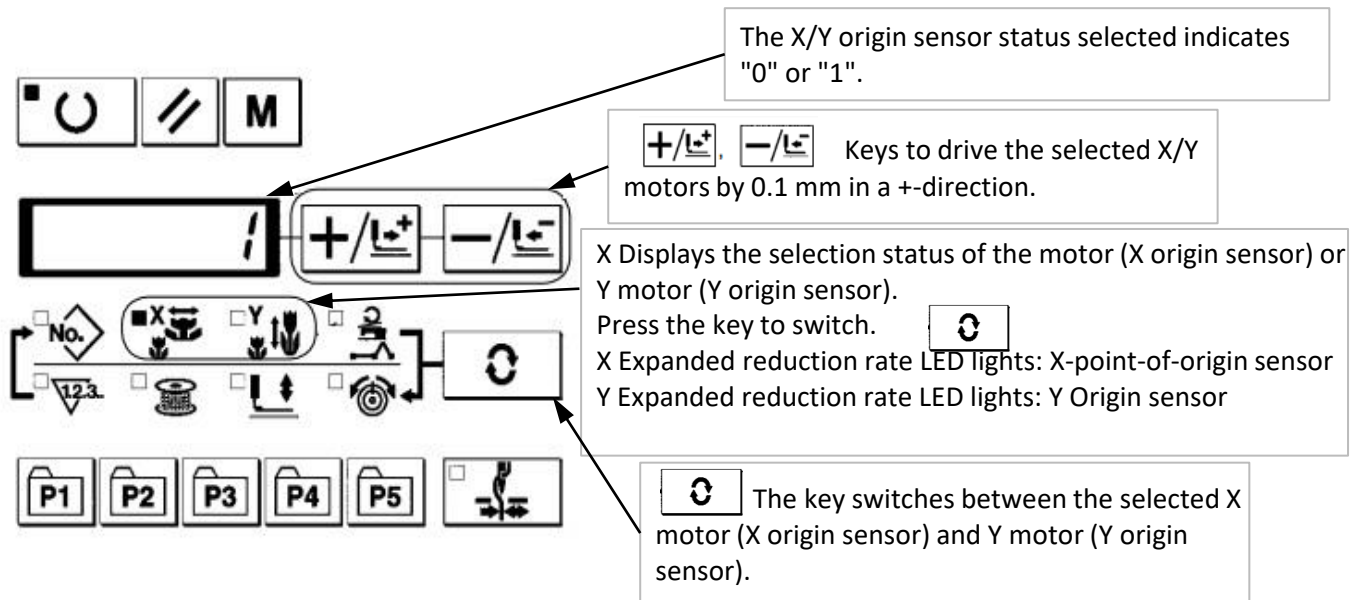
•   Press the key to change

 Select



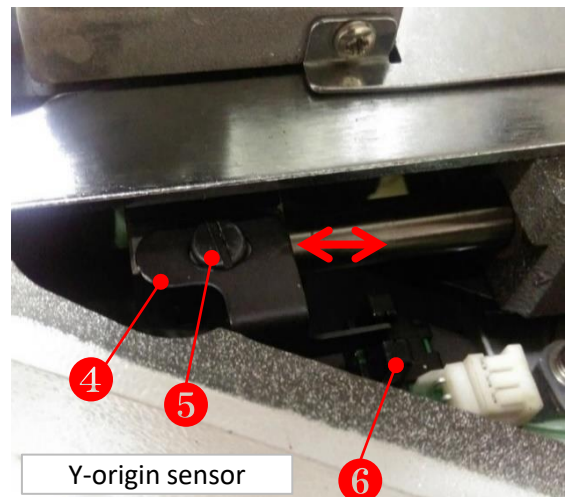
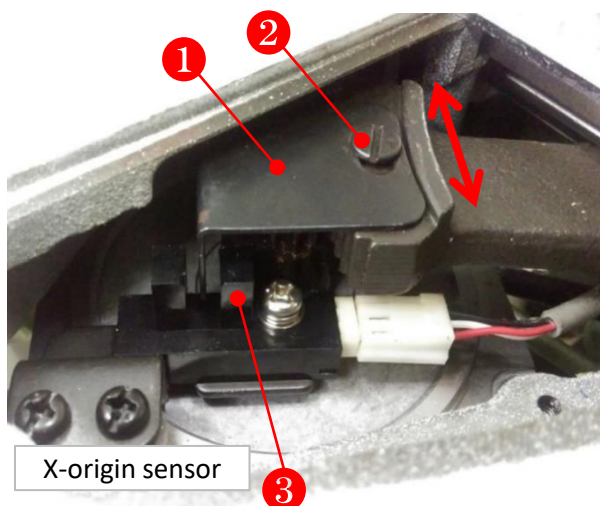
•  Press the key.

2. Origin Sensor Slit Adjustment



2 . 1  Press the key to select the X-Y origin sensor.

2 . 2  While pressing the key, check the coincidence between the central hole of the button gauge and the needle tip.



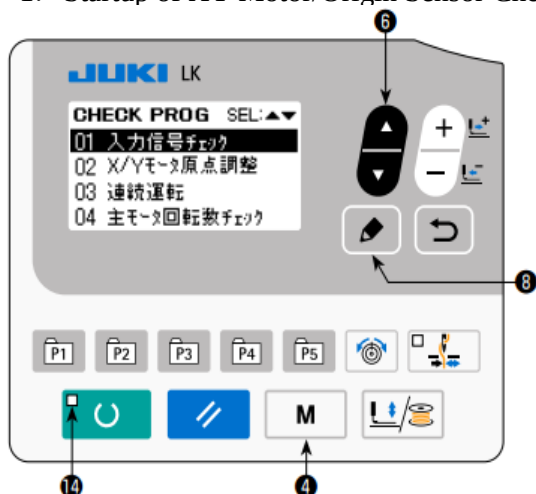
2 . 3 Adjust the X sensor slit **1** and Y sensor slit **4** by loosening the screws **2** **5** with the central hole of the button gauge and the needle tip aligned. While adjusting the sensor slit, look at the display of the panel and tighten screws **2** **5** when the display value is "1" to "0" (please note that when tightening, the sensor slit does not interfere with the sensor **3** **6**).

2 . 4 Press the key  to check that the center hole of the button gauge is combined with the tip of the needle when the display value of the panel is from 1 to 0 (check each X-Y origin sensor). If not combined. readjust by 2 . 1 - 2 . 4

※ After adjustment, attach the right and left bedcovers.

10.2 LK1900B

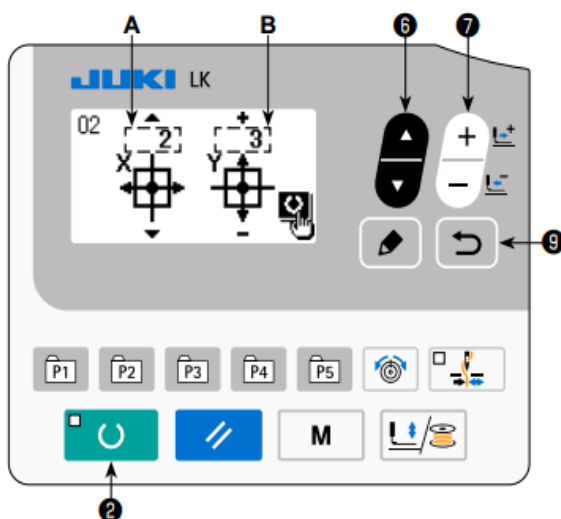
1. Startup of XY Motor/Origin Sensor Check Mode "02 X/Y Motor Origin Adjustment"



• When the Preparation LED **14** is turned off and the Mode key **4** is pressed for 3 seconds, the beeper will beep and the "13 Check Program" will appear on the Mode screen.

• Press the Item Selection Key **6** on the Check Program screen, select 02 X/Y Motor Origin Adjustment, and then press Edit Key **8** to use the selected function.

2. Origin Sensor Slit Adjustment



• Press the Item Selection Key **6** to drive the X motor by ± 0.1 mm.

A This box indicates the X-ray motor encoder position information.

Pressing the data change key **7** drives Y motor by ± 0.1 mm in increments.

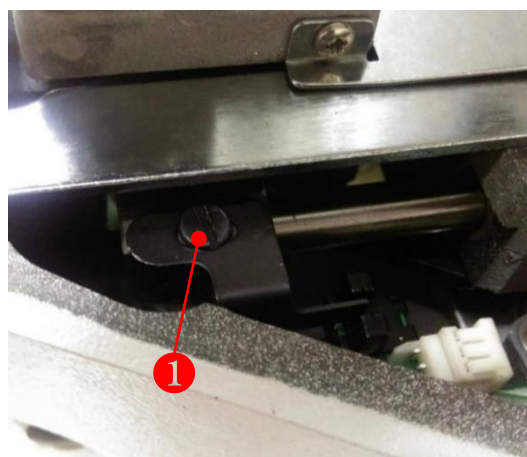
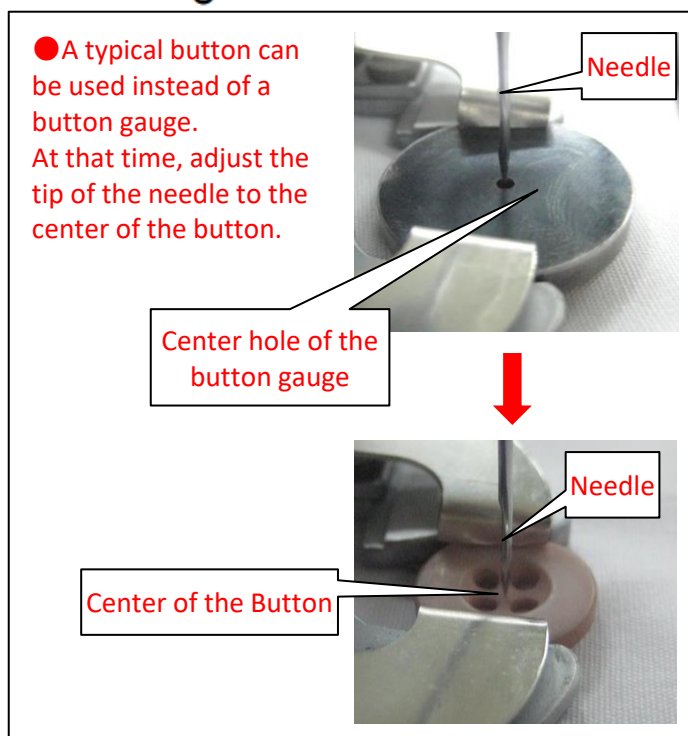
B This box indicates the Y motor encoder position information.

• Adjust the button gauge so that the center hole and needle tip are aligned by changing the selection key **6** and change key **7**.

• When the center hole of the button gauge is aligned with the tip of the needle, press the preparation key **2** for 2 seconds to bring the current position to the XY origin.

• Press the returning key **9** to return to the Check Program screen.

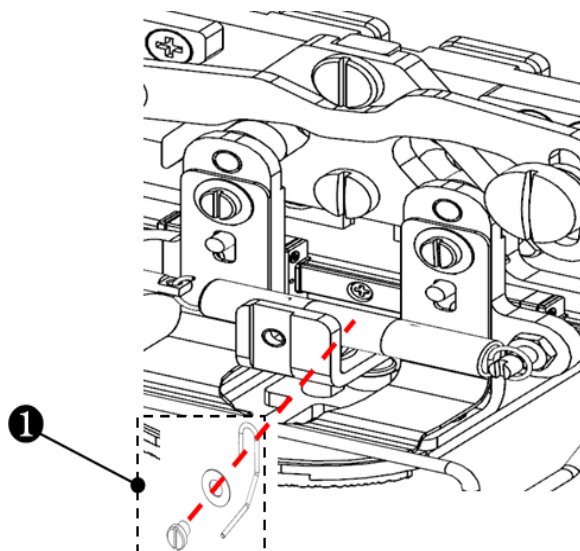
※After the adjustment, tighten the screws **1** and install the bed carver.



V. Operation

1. Preparation before Operation

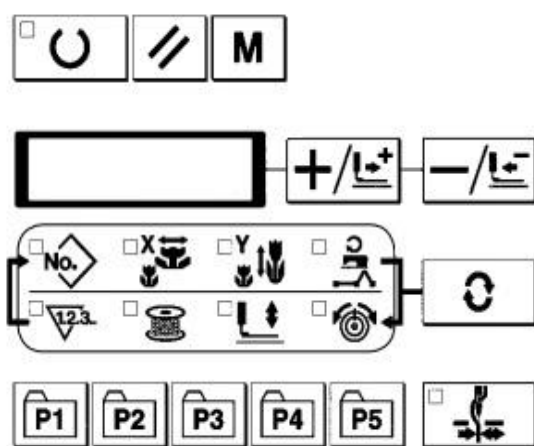
1.1 Button float bar (optional)



1) Use a button rising bar asm. ❶ to attach it like an image.

1.2 Changing product type

※For LK1900A /AN



• Press the key **M** for 6 seconds while the sewing LED has disappeared (in the service level setting mode of the memory switch).

• Modify with key **+/−**, **−/−** and mode **241.0** Select.

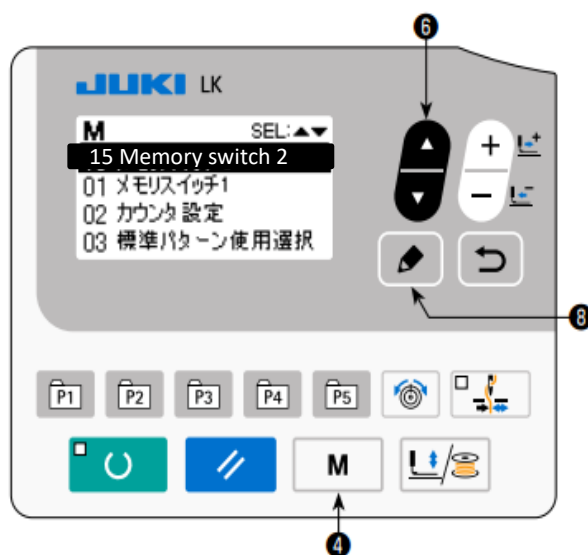
• Press the key. **□**

• Use the key **+/−**, **−/−** to change the memory switch from 0 to 7.

• Press the key **□** register the changes.



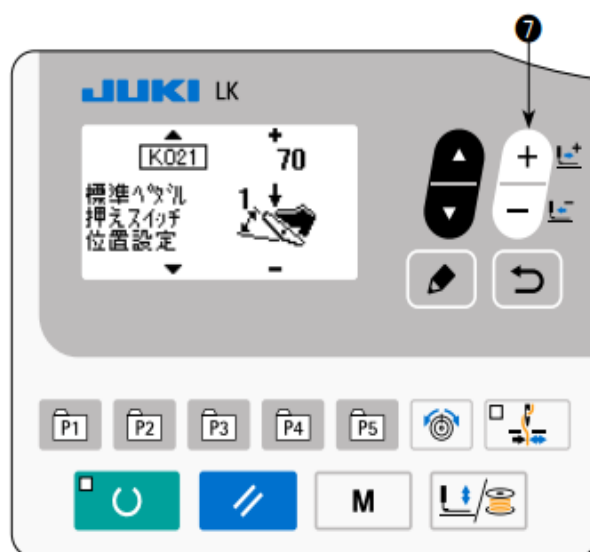
※For LK1900B



• Press Mode Key ④ for 6 seconds to display a 15 memory switch 2 on the Mode screen.

• Press the Item Selection Key ⑥ to select "15 Memory Switch 2" and then press Edit Key ⑧.

• Press the Item Selection Key ⑥ to select K241 and change the settings to "7" with the Data Change Key ⑦.



1.3 Standard Pattern List

Number of threads and standard sewing size of X and Y are as shown in the following list.

< Sewing program list >

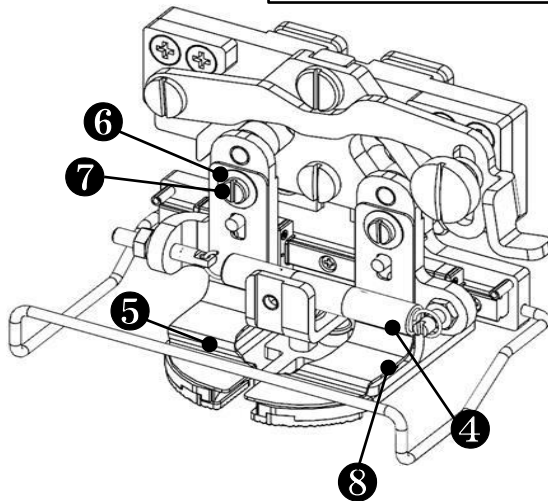
Pattern No.	Stitch shape	Number of threads (thread)	Standard sewing size X (mm)	Standard sewing size Y (mm)	Pattern No.	Stitch shape	Number of threads (thread)	Standard sewing size X (mm)	Standard sewing size Y (mm)
1 • 34		6-6	3.4	3.4	18 • 44		6	3.4	0
2 • 35		8-8			19 • 45		8		
3		10-10			20		10		
4		12-12			21		12		
5 • 36		6-6			22		16		
6 • 37		8-8			23 • 46		6	0	3.4
7		10-10			24		10		
8		12-12			25		12		
9 • 38		6-6			26 • 47		6-6	3.4	3.4
10 • 39		8-8			27		10-10		
11		10-10			28 • 48		6-6		
12 • 40		6-6			29		10-10		
13 • 41		8-8			30 • 49		5-5-5	3.0	2.5
14		10-10			31		8-8-8		
15 • 42		6-6			32 • 50		5-5-5		
16 • 43		8-8			33		8-8-8		
17		10-10							

* The standard sewing sizes of X and Y are when the enlargement / reduction rate is 100%.
Use the pattern No. 34 to No.50 when the button hole is small (ø1.5 mm or less).

2. Sewing procedure

1. Check the power supply "off",
2. Select the button hold spring and replace.

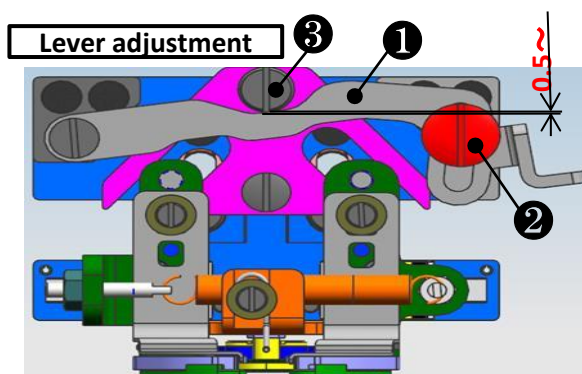
Replacement of button hold spring



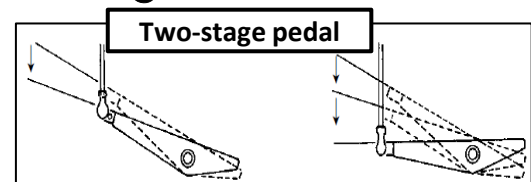
Replace the button hold spring: remove the spring④ and remove the two washers⑥ and the two screws⑦ and replace the button hold spring⑤ and ⑧. Then attach two washers⑥ and two screws⑦ and apply a spring④.
※Please refer to the button hold spring chart during replacement.

3. Turn on the power,
4. Select the sewing pattern (refer to "V.1/1.3 Standard Pattern List"),
5. Put the button into the device to adjust the lever (see Image of Lever Adjustment),
6. Press the Preparation key,
7. Put the sewn button into the clamp foot to adjust,
8. The fabric is placed on the feed plate.
9. Push down when stepping on the pedal switch and rise when leaving it (two-stage pedal),
10. Sewing begins when the pedal is pushed into the second stage,
11. After the sewing is finished, the presser automatically rises and returns to the sewing start position.
 - Repeat 7 to 10 for the sewing operation
 - When changing the button specification, repeat 1.-10.

Button hold spring table			
No	Part Number	Button thickness	Remarks
1	72005814	2.6～4.5mm	
2	72005815		
3	72005821	1～2.6mm	Note that when sewing small buttons, Nos. 3 and 4 may interfere with the needle. In doing so, use No. 5 and No. 6.
4	72005822		
5	72005816		
6	72005817		

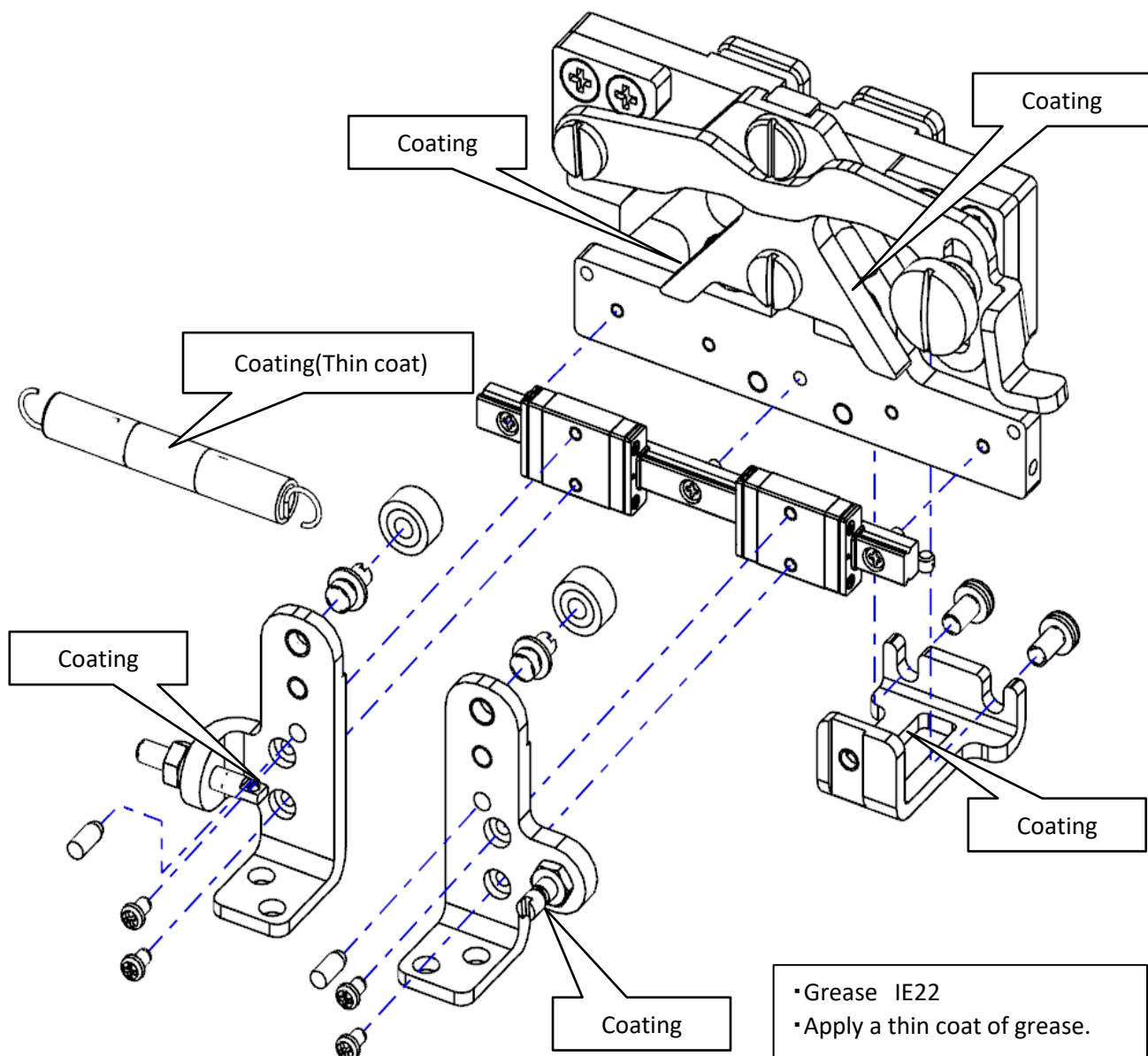


Lever Adjustment: Loosen the set screw②, set the sewing button, and adjust the clearance between the lever① and the screw③ to 0.5-1 mm as shown in the image. Then, tighten the set screw②.



VI. Maintenance

1. Grease coating





ボタン付けクランプキット/Button sewing clamp kit
(垂直方式ボタン付け装置/Vertical button attach device)

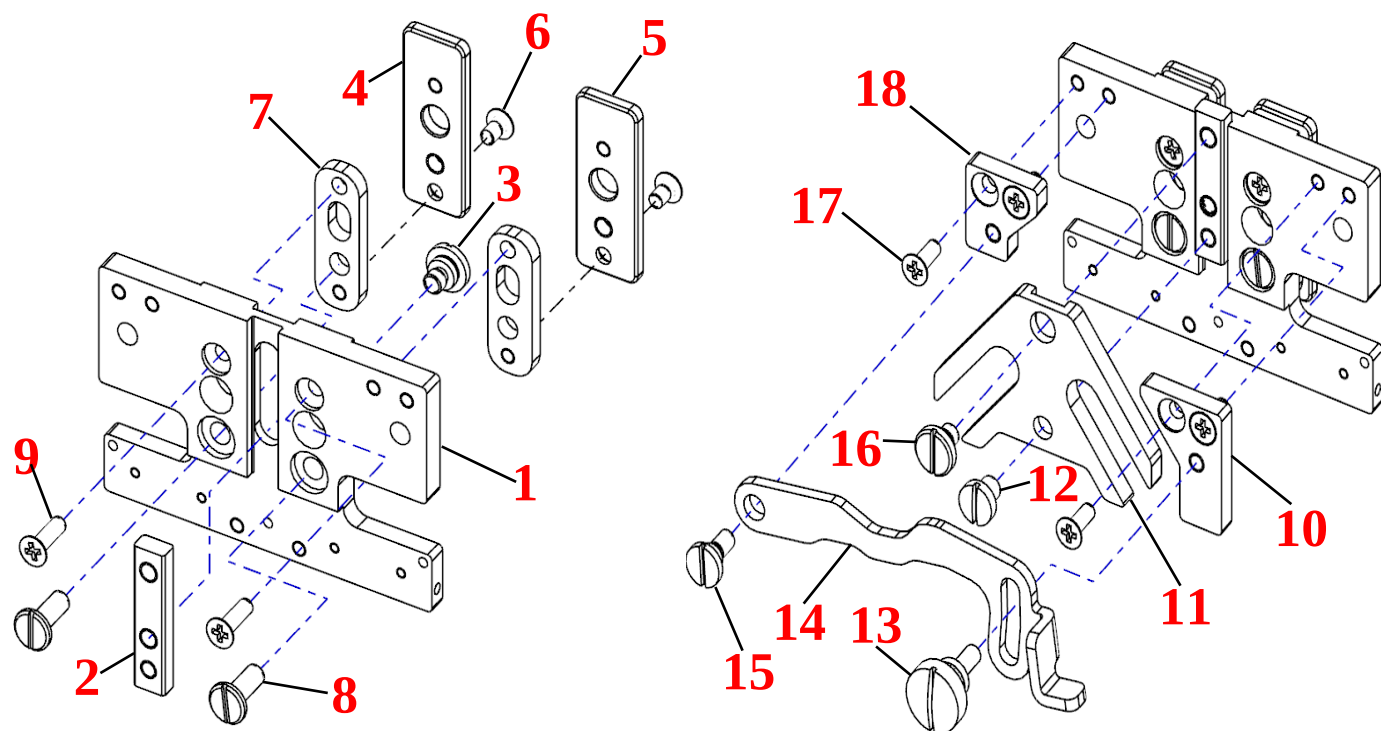
72005824

(LK-1900A/AN/B/BN用/for LK-1900A/AN/B/BN)

PARTS LIST

1. 垂直ボタン付け装置 (1) 40205494

1. VERTICAL BUTTON ATTACH ASM (1) 40205494

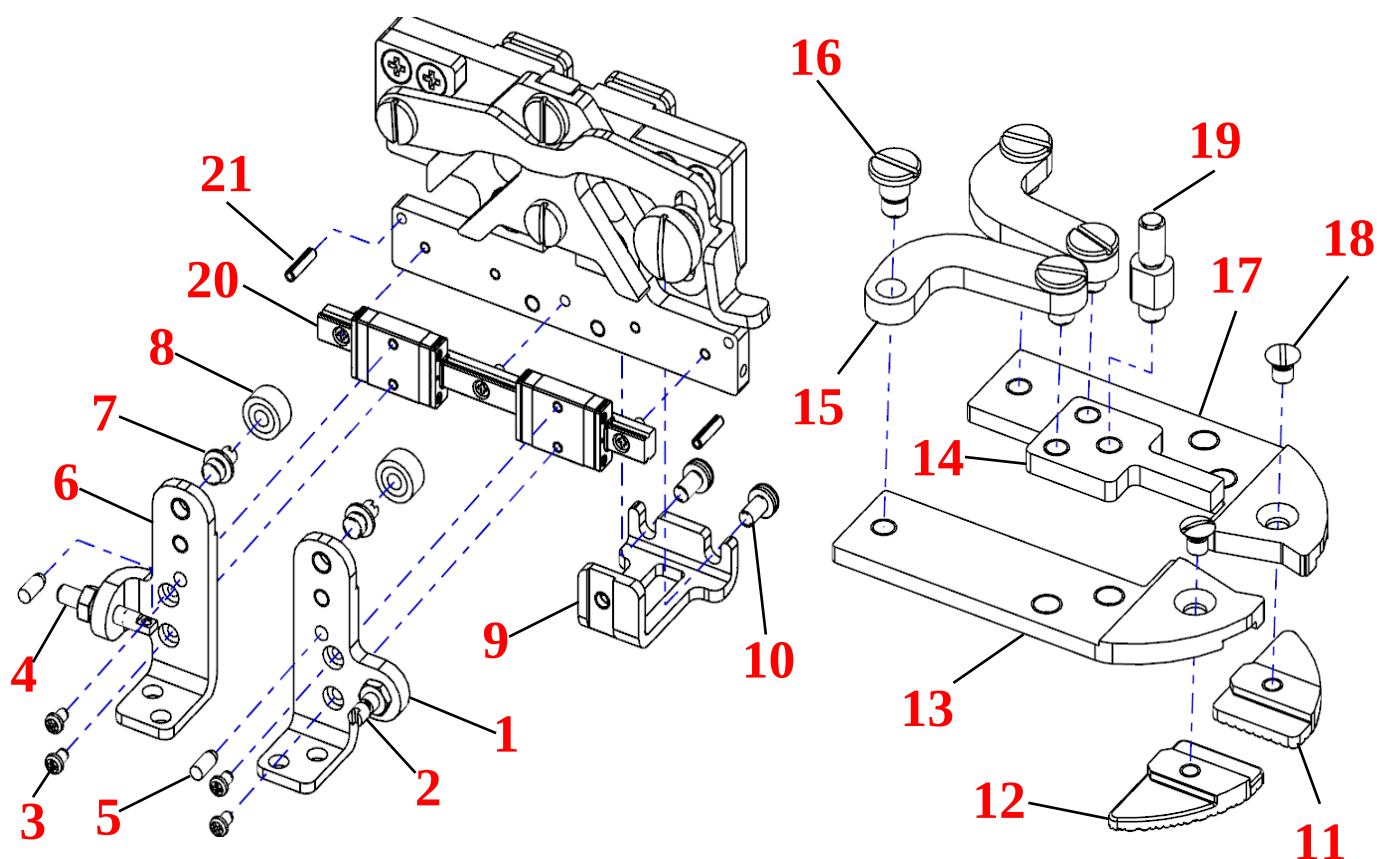


40205494(1)

No.	Part No.	パーツ名	Parts name	Qty
1	72002990	つまみ足取付台	FOOT_INSTALLING_BASE	1
2	72002994	スライド板	SLIDE_PLATE	1
3	SD0600208TP	段ねじ	SHOULDER_SCREW	1
4	72002992	スライド板左	SLIDE_PLATE_LEFT	1
5	72002991	スライド板右	SLIDE_PLATE_RIGHT	1
6	SM1030501SC	サラコネジ	SCREW	2
7	72002993	サポート板	SUPPORT_PLATE	2
8	SM6041050TP	ヒラネジ	SCREW	2
9	SM1031001SC	サラコネジ	SCREW	2
10	72005742	サポート板右	SUPPORT_PLATE_RIGHT_A	1
11	72002995	ボタンガイド足	BUTTON_GUIDE_FOOT	1
12	SS7110510SP	マルヒラネジ	SCREW	1
13	B2549372R00	ボタンヒラキレパートメネジ	CLAMP SCREW A	1
14	72002999	つまみ足開きレバー	CLAMP_RELEASE_LEVER	1
15	SD0500251SP	段ねじ	SHOULDER_SCREW	1
16	SD0600208TP	段ねじ	SHOULDER_SCREW	1
17	SM1030801SC	サラコネジ	SCREW	4
18	72002997	サポート板左	SUPPORT_PLATE_LEFT	1

1. 垂直ボタン付け装置 (2) 40205494

1. VERTICAL BUTTON ATTACH COMPONENTS (2) 40205494

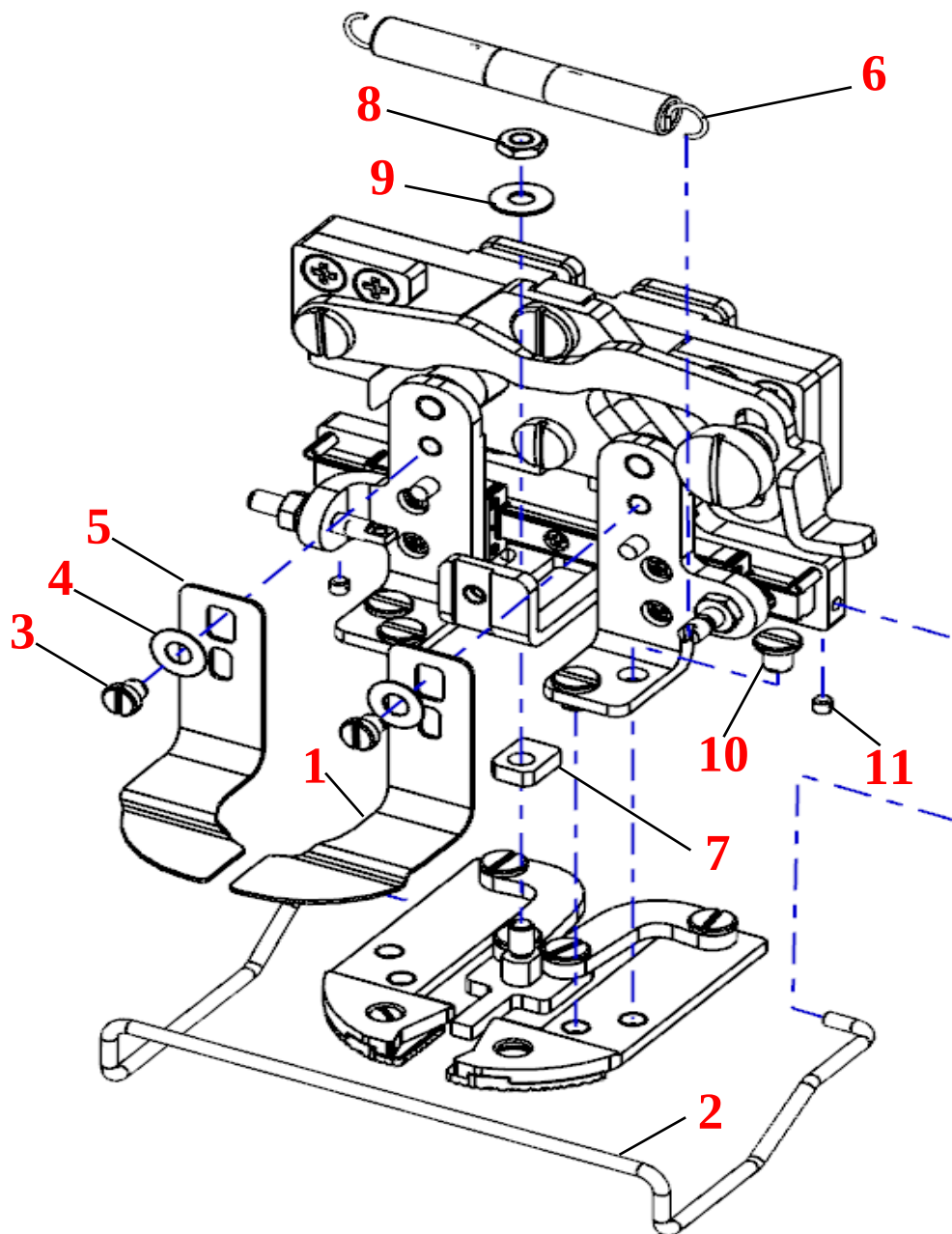


40205494(2)

No.	Part No.	パーツ名	Parts name	Qty
1	72003000	ボタンつまみ足右	BUTTON_CLAMP_LEVER_RIGHT	1
2	72003247	ばね掛け	SPRING HOOK	1
3	72003447	ねじ	SCREW	4
4	72003248	ばね掛け	SPRING HOOK	1
5	B2559372000	ツマミアシ イタパネ ガイドピン	BUTTON_CLAMP_LOCATING_PIN	2
6	72003001	ボタンつまみ足左	BUTTON_CLAMP_LEVER_LEFT	1
7	72002998	ボタンガイド軸	GUIDE_SCREW	2
8	SB103000200	ころがり軸受	BEARING	2
9	72005737	ストッパー板滑りベース	THREADING_GUIDE_ARM	1
10	SL4030641SE	座金付きなべ小ねじ	SCREW	2
11	72005813	ボタン置き右板	BUTTON_CLAMP_FOOT_PLATE_RIGHT	1
12	72005812	ボタン置き左板	BUTTON_CLAMP_FOOT_PLATE_LEFT	1
13	72005731	つまみ足(左)	BUTTON_CLAMP_JAW_LEVER_LEFT	1
14	72005744	ボタンストッパー	BUTTON_STOPPER_PLATE	1
15	72005743	ボタンストッパーリンク	BUTTON_STOPPER_LINK	2
16	72005738	回りねじ	BUTTON_STOPPER_SHOUDER_SCREW	4
17	72005732	つまみ足(右)	BUTTON_CLAMP_JAW_LEVER_RIGHT	1
18	SS2060310SP	マルサラネジ	SCREW	2
19	72005735	ボタンストッパー	BUTTON_STOPPER_GUIDE	1
20	40195303	LMガイド	LM_GUIDE	1
21	PS0200082KH	スプリングピン	SPRING_PIN	2

1. 垂直ボタン付け装置 (3) 40205494

1. VERTICAL BUTTON ATTACH COMPONENTS (3) 40205494

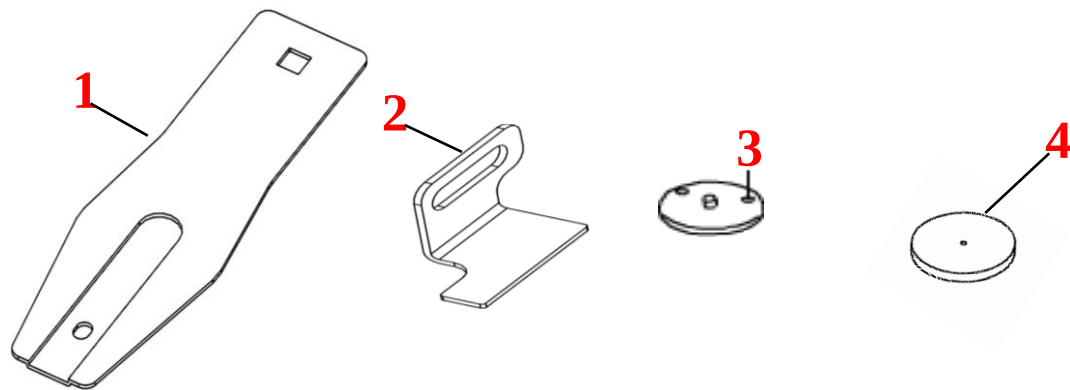


40205494(3)

No.	Part No.	パーツ名	Parts name	Qty
1	72005815	右板ばねA	SPRING_RIGHT_A (THICK BUTTON)	1
2	72003014	指ガード	FINGER_GUARD	1
3	SS6080340SP	ヒラネジ	SCREW	2
4	WP0370316SD	ヒラザガネ	PLAIN_WASHER	2
5	72005814	左板ばねA	SPRING_LEFT_A (THICK BUTTON)	1
6	72003012	ボタンつまみ足ばね	SPRING	1
7	72005739	滑りブロック	SLIDE_BLOCK	1
8	NM6030003SC	六角 ナット	NUT	1
9	72005741	平座金	SLIDE_BLOCK_FIX_WASHER	1
10	SS6090420SP	ヒラネジ	SCREW	4
11	SS8060210TP	トメネジ	SCREW	2

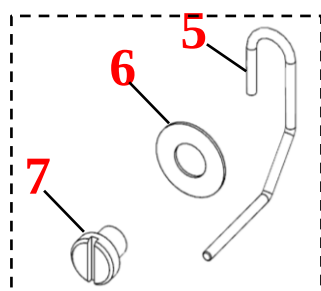
2. 付属品関係 40205495

2. ACCESSORY PARTS COMPONENTS 40205495



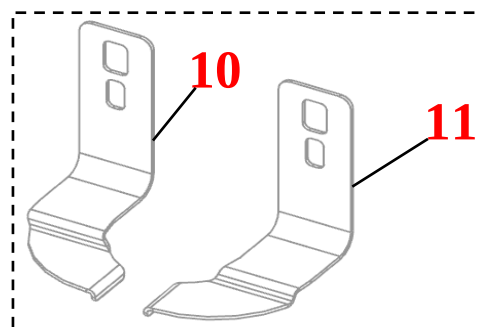
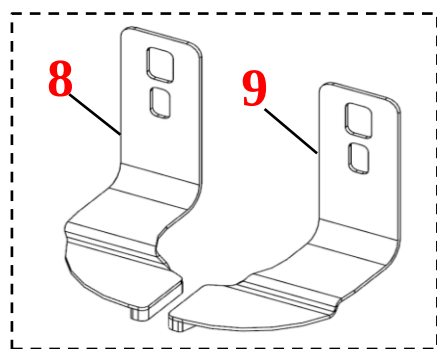
2.1 ボタン浮かし棒

2.1 BUTTON RISING BAR COMPONENTS



2.2 薄ボタン用板ばね

2.2 BUTTON CLAMP SPRING COMPONENTS



40205495

No.	Part No.	パーツ名	Parts name	Qty
1	72002988	布押え下板	FEED_PLATE_A	1
2	72002987	縦送りセンサースリット	LENGTHWISE_FEED_SENSOR_SLIT	1
3	MAZ15601000	ハリアナガイド	GUIDE	1
4	40021011	ショウゲージ	SMALL GAUGE	1
5	72003011	ボタン浮かし棒	BUTTON_RISING_BAR	1
6	WP0370316SD	ヒラザガネ	PLAIN_WASHER	1
7	SS6080340SP	ヒラネジ	SCREW	1
8	72005821	左ばねC組	SPRING_LEFT_C (THIN LARGE BUTTON)	1
9	72005822	右ばねC組	SPRING_RIGHT_C (THIN LARGE BUTTON)	1
10	72005816	左板ばねB	SPRING_LEFT_B (THIN BUTTON)	1
11	72005817	右板ばねB	SPRING_RIGHT_B (THIN BUTTON)	1