Thank you very much for buying a JACK sewing machine. Before using your new machine, please read the safety instructions below and the explanations given in the instruction manual.

With industrial sewing machines, it is normal to carry out work while positioned directly in front of moving parts such as the needle and thread take-up lever, and consequently there is always a danger of injury that can be caused by these parts. Follow the instructions from training personnel and instructors regarding safe and correct operation before operating the machine so that you will know how to use it correctly.

### SAFETY INSTRUCTIONS

#### [1] Safety indications and their meanings

This instruction manual and the indications and symbols that are used on the machine itself are provided in order to ensure safe operation of this machine and to prevent accidents and injury to yourself or other people.

The meanings of these indications and symbols are given below.

#### **Indications**



The instructions which follow this term indicate situations where failure to follow the instructions may result in death or serious injury.



The instructions which follow this term indicate situations where failure to follow the instructions could cause injury when using the machine or physical damage to equipment and surroundings.

### **Symbols**



This symbol ( $\triangle$ ) indicates something that you should be careful of. The picture inside the triangle indicates the nature of the caution that must be taken. (For example, the symbol at left means "beware of injury".)



This symbol ( $\bigcirc$ ) indicates something that you <u>must not</u> do.



This symbol ( ) indicates something that you <u>must</u> do. The picture inside the circle indicates the nature of the thing that must be done.

(For example, the symbol at left means "you must make the ground connection".)

# **A** DANGER



Wait at least 5 minutes after turning off the power switch and disconnecting the power cord from the wall outlet before opening the cover of the control box. Touching areas where high voltages are present can result in severe injury.

# **A** CAUTION

## **Environmental requirements**

Use the sewing machine in an area which is free from sources of strong electrical noise such as electrical line noise or static electric noise.

Sources of strong electrical noise may cause problems with correct operation.

Any fluctuations in the power supply voltage should be within ±10% of the rated voltage for the machine. Voltage fluctuations which are greater than this may cause problems with correct operation.

The power supply capacity should be greater than the requirements for the sewing machine's power consumption.

Insufficient power supply capacity may cause problems with correct operation.

The pneumatic delivery capability should be greater than the requirements for the sewing machine's total air consumption.

Insufficient pneumatic delivery capability may cause problems with correct operation.

The ambient temperature should be within the range of 5°C to 35°C during use.

Temperatures which are lower or higher than this may cause problems with correct operation.

The relative humidity should be within the range of 45% to 85% during use, and no dew formation should occur in any devices.

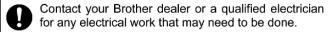
Excessively dry or humid environments and dew formation may cause problems with correct operation.

In the event of an electrical storm, turn off the power and disconnect the power cord from the wall outlet. Lightning may cause problems with correct operation.

#### Installation



Machine installation should only be carried out by a qualified technician.



The sewing machine weighs approximately 88 kg. The installation should be carried out by two or more people.

Do not connect the power cord until installation is complete. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.

Hold the machine head with both hands when tilting it back or returning it to its original position.

Furthermore, do not apply excessive force when tilting back the machine head. The sewing machine may become unbalanced and fall down, and serious injury or damage to the sewing machine may result.

Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.

All cords should be secured at least 25 mm away from any moving parts. Furthermore, do not

excessively bend the cords or secure them too firmly with staples, otherwise there is the danger that fire or electric shocks could occur.

Install the safety covers to the machine head and motor.

If using a work table which has casters, the casters should be secured in such a way so that they cannot move.

Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin. If the oil and grease get into your eyes or onto your skin, inflammation can result.

Furthermore, do not drink or eat the lubricating oil or grease. They may cause diarrhea or vomiting. Keep the oil out of the reach of children.



### Sewing



This sewing machine should only be used by operators who have received the necessary training in safe use beforehand.



The sewing machine should not be used for any applications other than sewing.



Be sure to wear protective goggles when using the machine.

If goggles are not worn, there is the danger that if a needle breaks, parts of the broken needle may enter your eyes and injury may result.



Turn off the power switch at the following times. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.

- · When threading the needle
- When replacing the bobbin and needle
- When not using the machine and when leaving the machine unattended



If using a work table which has casters, the casters should be secured in such a way so that they cannot move.



Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.



Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.



If an error occurs in machine operation, or if abnormal noises or smells are noticed, immediately turn off the power switch. Then contact your nearest Brother dealer or a qualified technician.



If the machine develops a problem, contact your nearest Brother dealer or a qualified technician.

## Cleaning



Turn off the power switch before carrying out cleaning. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.



Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin. If the oil and grease get into your eyes or onto your skin, inflammation can result.

Furthermore, do not drink or eat the lubricating oil or grease. They may cause diarrhea or vomiting. Keep the oil out of the reach of children.

## **Maintenance and inspection**



Maintenance and inspection of the sewing machine should only be carried out by a qualified technician.



Ask your Brother dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.



Turn off the power switch and disconnect the power cord before carrying out the following operations. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.

- Inspection, adjustment and maintenance
- Replacing consumable parts such as the rotary
  hook



Disconnect the air hoses from the air supply and wait for the needle on the pressure gauge to drop to "0" before carrying out inspection, adjustment and repair of any parts which use the pneumatic equipment.



Hold the machine head with both hands when tilting it back or returning it to its original position.

Furthermore, do not apply excessive force when tilting back the machine head. The sewing machine may become unbalanced and fall down, and serious injury or damage to the sewing machine may result.



If the power switch needs to be left on when carrying out some adjustment, be extremely careful to observe all safety precautions.



Use only the proper replacement parts as specified by Brother.



If any safety devices have been removed, be absolutely sure to re-install them to their original positions and check that they operate correctly before using the machine.



Any problems in machine operation which result from unauthorized modifications to the machine will not be covered by the warranty.

#### [3] Warning labels

The following warning labels appear on the sewing machine.

Please follow the instructions on the labels at all times when using the machine. If the labels have been removed or are difficult to read, please contact your nearest Brother dealer.



高電圧部分にふれて、大けがをする ことがある。電源を切り、5分たって

触摸高压电部分,会导致受伤 在切断电源5分钟后, 再开启盖罩

#### **▲ GEFAHR A DANGER**

Hazardous voltage will cause injury. Turn off main switch and wait 5minutes before opening this cover.

Hochspannung verletzungsgefahr! Bitte schalten sie den hauptschalter aus und warten sie 5 minuten, bevor sie diese abdeckung öffnen

Un voltage non adapte provoque des blessures . Eteindre l'interrupteur et attendre 5 minutes avan d'ouvrir le capot.

Un voltaje inadecuade puede provocar las heridas.Apagar el nterruptor principal y esperar 5 minutos ante de abrir esta cubierta.



#### <u> 注意</u>

触摸运动部分,易造成受伤。所以在装 上安全保护装置后,再进行缝纫操作。 在切断电源后,进行穿线,更换梭芯, 机针和做清扫,调整工作。

#### **A** CAUTION

Moving parts may cause injury. Operate with safe ty devices. Turn off main switch before threading, changing bobbin and needle, cleaning etc.

3

Be careful not to get your hand caught when tilting back the machine head and returning it to its original position.

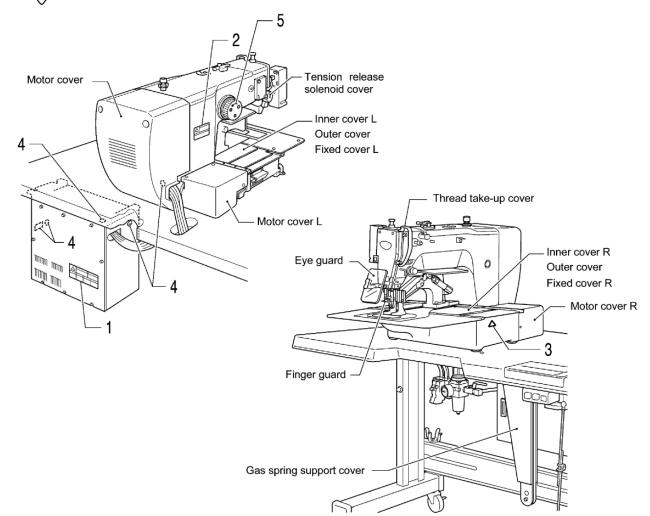
Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.

Safety devices

Devices such as eye guard, finger guard, thread take-up cover, motor cover, tension release solenoid cover, inner cover, outer cover, fixed cover and gas spring support cover

5

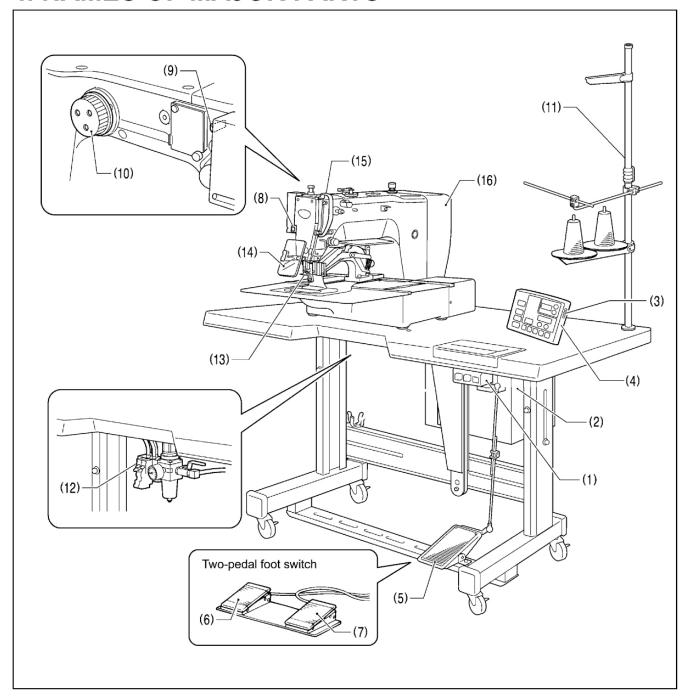
Direction of operation



# **CONTENTS**

1.	NAMES OF MAJOR PARTS······1	6.	<b>CLEANING</b> 23
2.	SPECIFICATIONS······2	6-1.	Cleaning the rotary hook23
		6-2.	Cleaning the control box air inlet ports
3.	INSTALLATION·····3		24
3-1.	Table processing diagram3	6-3.	Draining the oil·····24
3-2.	Installing the control box4	6-4.	Cleaning the eye guard24
3-3.	Installing the oil pan·····4	6-5.	Checking the needle 24
3-4.	Installing the machine head5	6-6.	Lubrication ·····24
3-5.	Tilting the sewing machine hea9	7.	STANDARD ADJUSTMENTS···25
3-6.	Installing the treadle unit (solenoid	7. 7-1.	Checking the machine head switch 25
	specifications) ······10		
3-7.	Installing the two-pedal foot switch	7-2.	Thread take-up spring
	(pneumatic specifications) ······10	7-3.	Arm thread guide R26
3-8.	Installing the cotton stand ······11	7-4.	Adjusting the needle bar height 27
3-9.	Installing the pneumatic unit(pneumatic	7-5.	Adjusting the needle bar lift amount 27
	specifications)12	7.6	
3-10.	Installing the eye guard ······13	7-6.	Adjusting the driver needle guard27
3-11.	Installing the motor cover ······13	7-7.	Adjusting the needle clearance 28
3-12.	Lubrication ·····14	7-8.	Adjusting the shuttle race thread
3-13.	Installing the machine head fixing	<b>.</b> .	guide28
	bolt15	7 <b>-</b> 9.	Rotary hook lubrication amount 28
4.	PREPARATION BEFOR	7-10.	Adjusting the position of the movable
4.	SEWING16		knife·····29
4-1.	Installing the needle·····16	7-11.	Replaceing the movable and fixed
4-1. 4-2.	Threading the upper thread······16	<b>7</b> 10	knives······31
4-2. 4-3.			Adjusting the thread wiper 32
	Winding the lower thread······18  Installing the bobbin case·····19		Presser foot installation position 32
4-4.	Thread tension20		Chaning the intermittent stroke······33
4-5.		7-15.	Adjusting the work clamp lift amoun
	4-5-1. Lower thread tension······20		35
	4-5-2. Upper thread tension······20	7-16.	Adjusting the air pressure(pneumatic
5.	<b>SEWING</b> 21		specification)35
5-1.	Sewing21	8.	TROUBLESHOOTING36
5-2.	Using the STOP switch22		
5-3.	Using the thread wiper switch 22		

# 1. NAMES OF MAJOR PARTS

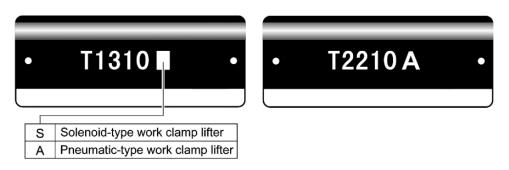


- (1) Power switch
- (2) Control box
- (3) USBslot
- (4) Operation panel
- (5) Foot switch (solenoid specifications)
- (6) Work clamp switch (pneumatic specifications)
- (7) Start switch (pneumatic specifications)
- (8) STOP switch
- (9) Thread wiper switch
- (10) Pulley
- (11) Cotton stand
- (12) Solenoid valve (pneumatic specifications)

#### Safety devices:

- (13) Finger guard
- (14) Eye guard
- (15) Thread take-up cover
- (16) Motor cover

# 2. SPECIFICATIONS



Sewing machine	Lock stitch, pattern tacking sewing machine (with large shuttle hook)		
Stitch formation	Single needle lock stitch		
Max. sewing speed	2,700 rpm		
Sewing area (XxY)	T1310: Max. 130 x 100 mm, T2210: Max. 220 x 100 mm		
Feed mechanism	Intermittent feed, pulse motor drive		
Stitch length	0.05 – 12.7 mm		
No. of stitches	500,000-stitch internal memory (*)		
Maximum no. of stitches	20,000 stitches (per program)		
No. of sewing data items that can be stored	Internal memory: 512 (*)		
Work clamp lift method	Solenoid specifications: Pulse motor drive method Pneumatic specifications: Pneumatic method		
Work clamp height	Solenoid specifications: Max. 25 mm, pneumatic specifications: Max. 30 mm		
2-step work clamp	Solenoid specifications: Integrated-type work clamp Pneumatic specifications: Separate-type work clamp		
Intermittent presser foot lift amount	22 mm		
Intermittent stroke	2 – 4.5 mm, 4.5 – 10 mm or 0 (Default setting 3 mm)		
Rotary hook	Double-capacity shuttle hook (standard shuttle hook sold separately)		
Wiper device	Standard equipment		
Thread trimmer	Standard equipment		
Data storage method	Internal memory (Flash memory)		
User programs	50		
Cycle programs	999		
Motor	750 W AC servo motor		
Weights	Machine head approx. 88 kg, operation panel approx. 0.6 kg Control box 14.2 – 16.2 kg (Differs depending on destination)		
Power supply	Single-phase 100 V/220 V, Three-phase 200 V/220 V/380 V/400 V 400 VA		
Air pressure	0.5 MPa 1.8 I/min.		

<sup>\*</sup> The number of data items and stitches that can be stored will vary depending on the number of stitches in each program.

## 3. INSTALLATION

# **A** CAUTION



Machine installation should only be carried out by a qualified technician.



Contact your Brother dealer or a qualified electrician for any electrical work that may need to be done.



The sewing machine head weighs approximately 88kg. The installation should be carried out by two or more people.



Do not connect the power cord until installation is complete.

If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.



Hold the machine head with both hands when tilting it back or returning it to its original position.

Furthermore, do not apply excessive force when tilting back the machine head. The sewing machine may become unbalanced and fall down, and serious injury or damage to the sewing machine may result.



All cords should be secured at least 25 mm away from any moving parts. Furthermore, do not excessively bend the cords or secure them too firmly staples, otherwise there is the danger that fire or electric shocks could occur.



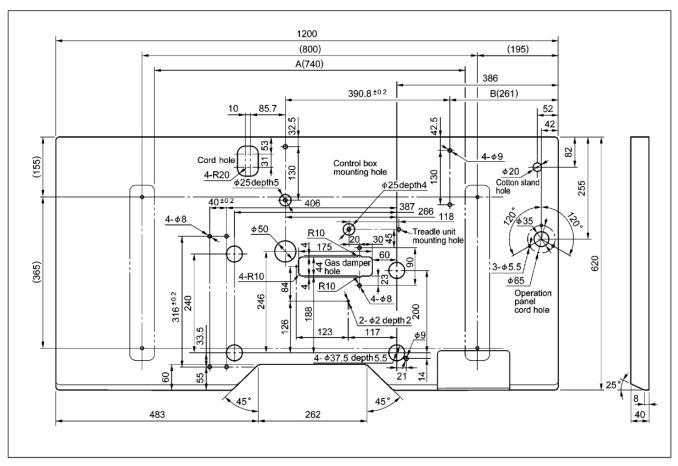
Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.



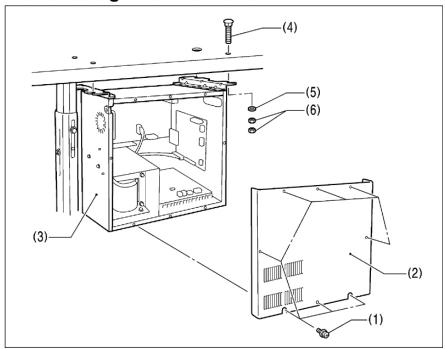
Install the safety covers to the machine head and motor

### 3-1. Table processing diagram

- The thickness of the table should be at least 40 mm, and it should be strong enough to bear the weight and vibration of the sewing machine.
- If the distance A between the insides of the legs is less than 740 mm, move the control box installation position to the left (B = 261mm).
- Check that the control box is at least 10 mm away from the leg. If the control box and the leg are too close together, it may result in incorrect sewing machine operation.



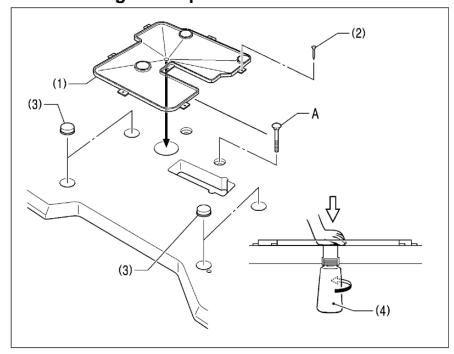
# 3-2. Installing the control box



Remove the eight screws (1), and then remove the control box cover (2).

- (3) Control box
- (4) Bolts [4 pcs.](5) Plain washers [4 pcs.]
- (6) Nuts [8 pcs.]

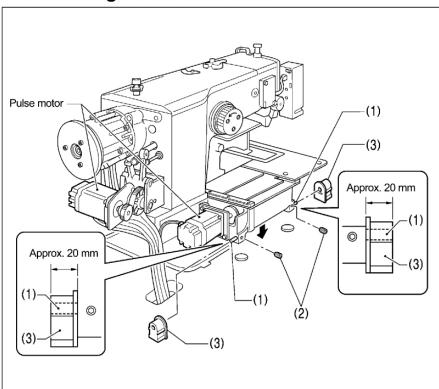
## 3-3. Installing the oil pan



For solenoid specifications, install the treadle unit mounting bolt (A) before installing the oil pan.

- Oil pan
   Nails [7 pcs.]
   Rubber cushions [4 pcs.]
   Waste oil tank

## 3-4. Installing the machine head

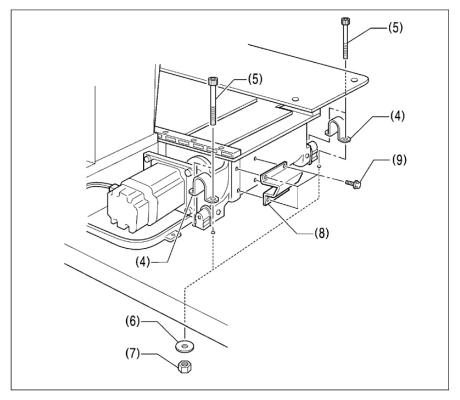


- Pins [2 pcs.]
- Set screws [2 pcs.]
- Hinge rubber assemblies [2 pcs.]

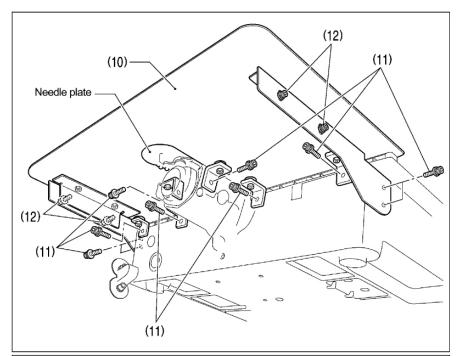
Place the machine head gently on top of the oil pan and the rubber cushions.

#### NOTE:

- Be careful not to get the cords clamped between the machine head and the oil pan.
- When holding the machine head, do not hold it by the pulse motor. This may cause problems with operation of the pulse motor.



- (4) Hinge holders [2 pcs.]
- Bolts [4 pcs.]
- Plain washers [4 pcs.] Nuts [4 pcs.]
- (7)
- (8) Head rest
- (9) Bolts with washer [4 pcs.]

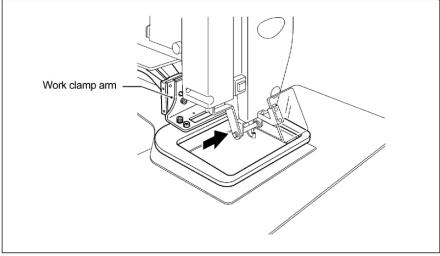


- (10) Auxiliary plate
- (11) Bolts with washer [10 pcs.]

Loosen the bolts with washer (12) and adjust so that the auxiliary plate (10) and the needle plate are at the same height.

#### NOTE:

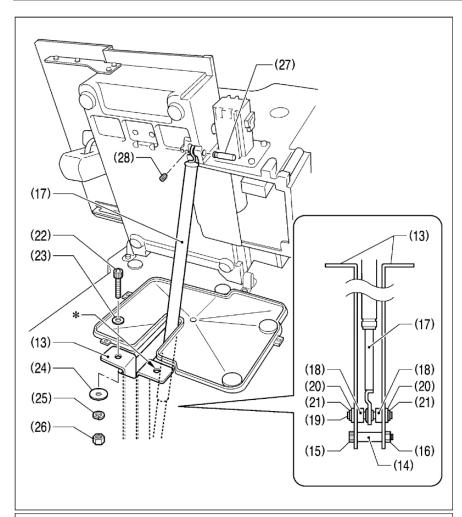
Install the auxiliary plate so that it is horizontal.



Move the work clamp arm all the way to the right when looking from the front of the sewing machine (the direction of the arrow in the illustration), and then gently tilt back the machine head.

### NOTE:

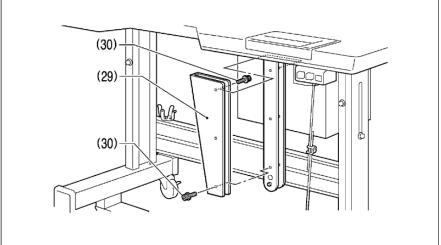
Two or more people should tilt back the machine head, and it should be tilted gently while being held with both hands.



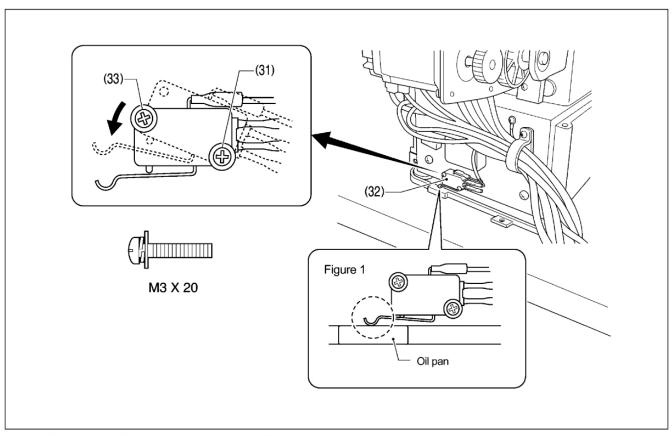
- (13) Gas spring holders [2 pcs.]
- (14) Spacer
- (15) Bolt
- (16) Nut
- (17) Gas spring
- (18) Shaft collars [2 pcs.]
- (19) Gas spring shaft D
- (20) Plain washers [2 pcs.]
- (21) Retaining rings E [2 pcs.]
- (22) Bolts [2 pcs.]
- (23) Plain washers (medium) [2 pcs.]
- (24) Plain washers (large) [2 pcs.]
- (25) Spring washers [2 pcs.]
- (26) Nuts [2 pcs.]
- (27) Gas spring shaft U
- (28) Set screw

#### NOTE:

For solenoid specifications, the bolts (22), plain washers (23), plain washers (24), spring washers (25) and nuts (26) in the places marked with \* are also used to install the treadle unit.

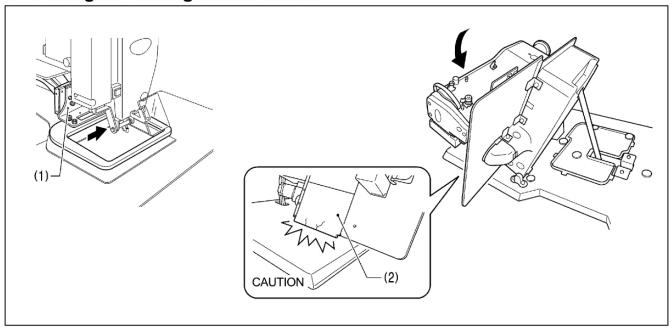


- (29) Gas spring support cover
- (30) Bolts with washer [6 pcs.]



- Gently return the machine head to its original position.
- Loosen the screw (31). Move the machine head switch (32) to the position shown in the illustration, and then secure the machine head switch (32) with the screw (31) and the accessory M3x20 screw (33).
  Check that the machine head switch (32) is turned on as shown in figure 1.

# 3-5. Tilting the sewing machine head

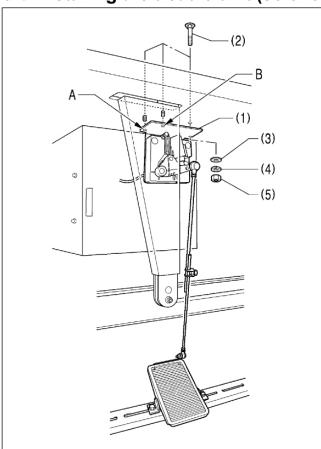


- 1. Move the presser arm assembly (1) as far as it will go in the direction of the arrow in the illustration (to the right when looking from the front of the sewing machine).
- 2. Stand at the left side of the table, and gently tilt the machine head towards you.

#### NOTE:

Always be sure to move the work clamp arm all the way to the right before tilting back the machine head. If you try to tilt back the machine head while the work clamp arm is still on the left side, it may damage the outer cover L (2).

## 3-6. Installing the treadle unit (solenoid specifications)



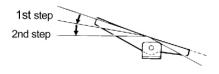
- (1) Treadle unit
- (2) Bolts [3 pcs.]
- (3) Plain washers [3 pcs.]
- 4) Spring washers [3 pcs.]
- (5) Nuts [3 pcs.]

#### NOTE:

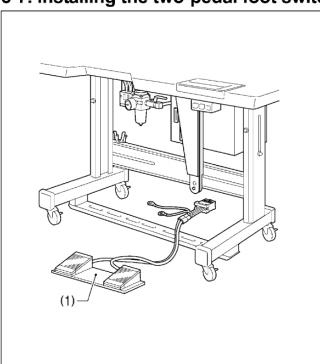
- Install the bolt for mounting hole A before installing the oil pan. (Refer to "3-3. Installing the oil pan.")
- Mounting hole B is used to install the gas spring supports with the bolt, plain washer, spring washer and nut. (Refer to "3-4. Installing the machine head".)
- \* Use a commercially-available foot switch and connecting rod.
- \* If changing the mounting position for the treadle unit, use the accessory bolts, plain washers, spring washers and nuts.

#### <Foot switch operating method>

When the foot switch is depressed to the 1st step, the work clamp is lowered, and when it is depressed to the 2nd step, the sewing machine starts sewing.



## 3-7. Installing the two-pedal foot switch (pneumatic specifications)

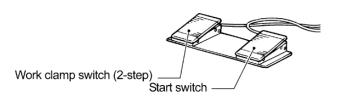


(1) Foot switch

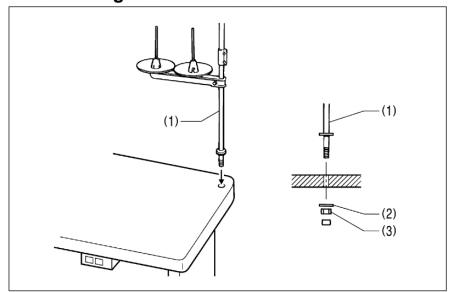
Insert the connector for the foot switch (1) into P6 (FOOT) on the main P.C. board.

#### <Foot switch operating method>

When the work clamp switch (left) is depressed, both work clamps are lowered, and when the start switch (right) is depressed, the sewing machine starts sewing.



# 3-8. Installing the cotton stand

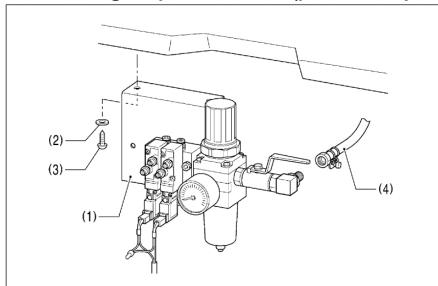


(1) Cotton stand

#### NOTE:

Fit the washer (2), and then securely tighten the nut (3) so that the cotton stand does not move.

## 3-9. Installing the pneumatic unit (pneumatic specifications)



Install underneath the work table.

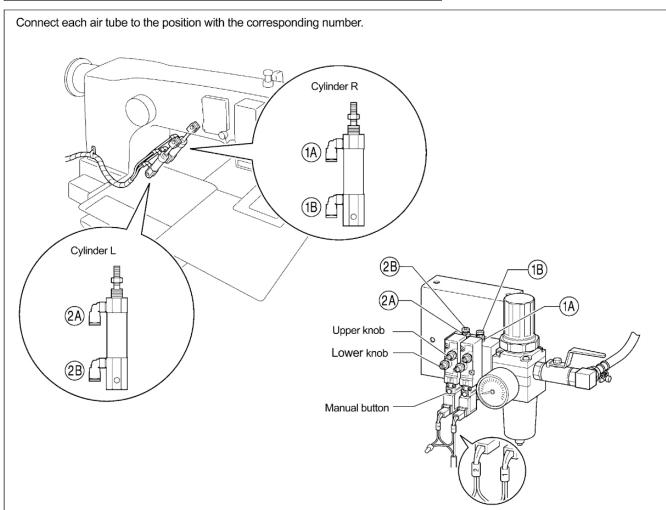
- (1) Solenoid valve assembly
- (2) Washers [2 pcs.]
- (3) Wood screws [2 pcs.]
- (4) Rubber hose

After installing the pneumatic unit, adjust the air pressure.

(Refer to "10-16. Adjusting the air pressure".)

#### NOTE:

Make sure that the pneumatic unit does not touch the control box or the work table leg.



#### <Adjusting the speed controller>

You can use the valve knobs to adjust the lifting and lowering speeds.

The valve knobs should be adjusted so that the left and right sides of the work clamp operate at the same speed.

- · When the upper knob is tightened, the lifting speed becomes slower. When it is loosened, the lifting speed becomes faster.
- When the lower knob is tightened, the lowering speed becomes slower. When it is loosened, the lowering speed becomes faster

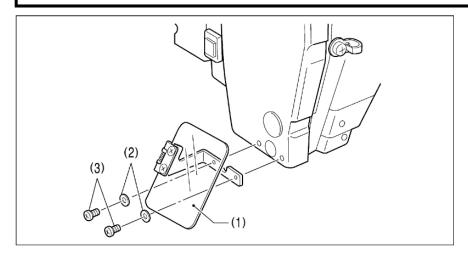
You can operate the work clamp while the power is turned off by pressing the manual button.

# 3-10. Installing the eye guard

# **A** CAUTION

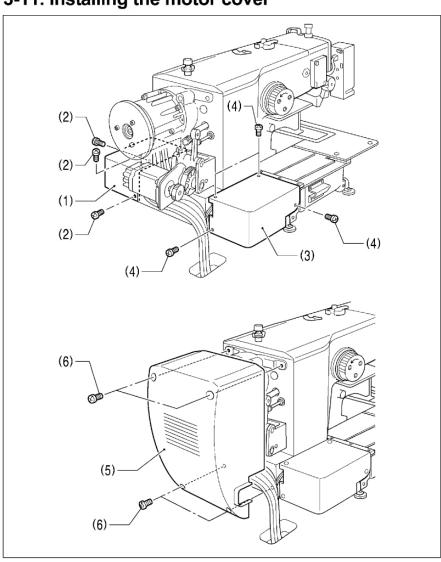


Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.



- (1) Eye guard assembly
- (2) Plain washers [2 pcs.](3) Screws [2 pcs.]

## 3-11. Installing the motor cover



- (1) Motor cover R
- (2) Screws [4 pcs.] (3) Motor cover L
- (4) Screws [4 pcs.]
- (5) Motor cover
- (6) Screws [4 pcs.]

#### NOTE:

Be careful not to clamp the cords when installing the motor cover.

#### 3-12. Lubrication

# **A** CAUTION



Do not connect the power cord until lubrication is complete.

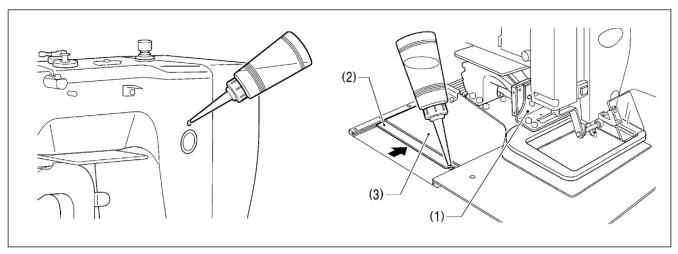
If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.



Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin. If the oil and grease get into your eyes or onto your skin, inflammation can result. Furthermore, do not drink or eat the lubricating oil or grease. They may cause diarrhea or vomiting. Keep the oil out of the reach of children.

The sewing machine should always be lubricated and the oil supply replenished before it is used for the first time, and also after long periods of non-use.

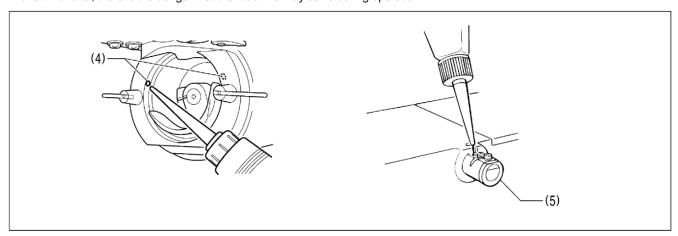
Use only the lubricating oil specified by Jack



- 1. Fill the arm-side oil tank with oil.
- 2. Move the work clamp arm (1) as far as it will go to the right when looking from the front of the sewing machine, and then slide the outer cover L (2) into the inner cover L (3) so that the lubrication hole in the bed is visible. Pour oil into the bed side oil tank through this hole.

#### NOTE:

Be sure to fill the machine with oil when the oil level is down to about one-third full in the oil sight glass. If the oil drops below the one-third level, there is the danger that the machine may seize during operation.



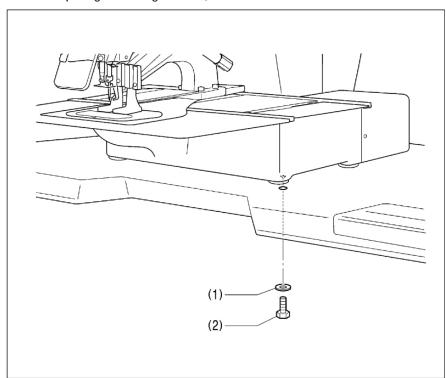
3. Pour oil in through the two holes (4) of the shuttle race base assembly so that the felt is lightly moistened.

If there is no more oil on the felt of the shuttle race base assembly, problems with sewing may result.

4. If using the liquid cooling tank (5), fill it with silicon oil (100 mm<sup>2</sup>/s).

# 3-13. Installing the machine head fixing bolt

When transporting the sewing machine, secure the machine head to the table with the machine head fixing bolt.



- (1) Plain washer(2) Machine head fixing bolt

#### NOTE:

When operating the sewing machine, remove the machine head fixing bolt.

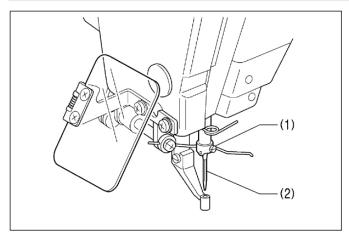
# 4. PREPARATION BEFORE SEWING

## 4-1. Installing the needle

# **A** CAUTION

Turn off the power switch before installing the needle.

If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.

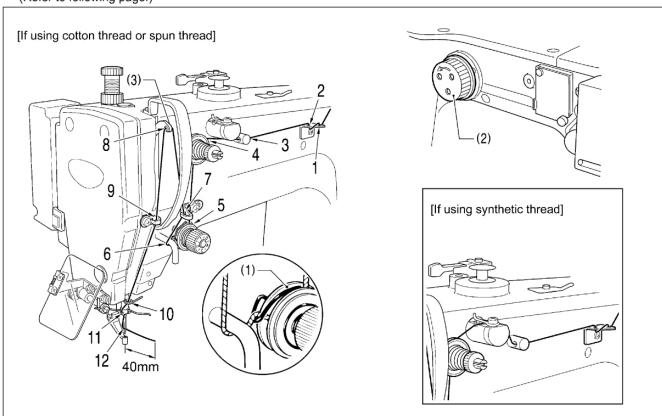


- 1. Loosen the set screw (1).
- Insert the needle (2) in a straight line as far as it will go, making sure that the long groove on the needle is at the front, and then securely tighten the set screw (1).

## 4-2. Threading the upper thread

Thread the upper thread correctly as shown in the illustration below.

\* When using threading mode for threading, the tension discs (1) will open so that the thread can be threaded more easily. (Refer to following page.)



- Turn the machine pulley (2) and raise the thread take-up (3) to its highest position before threading the upper thread.
   (This will make threading easier and it will prevent the thread from coming out at the sewing start.)
- When threading the thread through the needle, allow a distance of approximately 40 mm between the needle hole and the end of the thread.

If the trailing length of the thread is too long, it may cause the thread to become tangled.

## <Threading mode>

Threading mode is safe because the sewing machine will not start even when the foot switch is depressed.

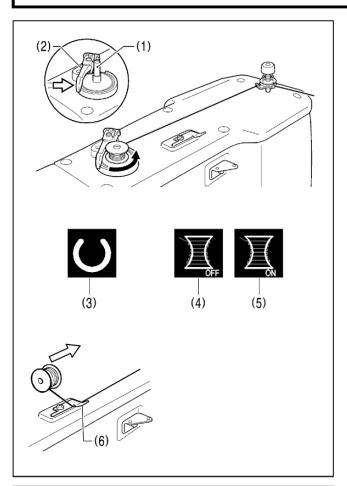
1		Turn on the power switch.
2	Press the home position key	Press the threading key, and the key
	O	The work clamp will drop.
3	Threading the thread.	
4	Ending threading mode	Press the threading key, and the key change
		The work clamp will return to where it was before threading mode was started.

### 4-3. Winding the lower thread

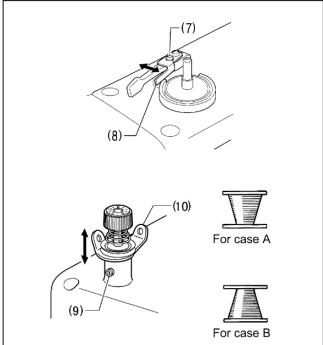
# **A** CAUTION

A

Do not touch any of the moving parts or press any objects against the machine while winding the lower thread. Injury or damage to the sewing machine may result.



- 1. Place the bobbin onto the bobbin winder shaft (1).
- Thread the thread as shown in the illustration, wind the thread around the bodoin several times, and then press the bodoin presser arm(2).
- 3. Turn on the power switch.
- Press the time position key(3), the sewing machine move to the time position.
- 5. Check that the needle does not touch the clamp, and then press the bobbin winder key (4), the bobbin winder key (4) change to key (4) change to the bobbin winder key (5), and it keep in the state "ON", depress the foot switch to the 2nd step, and it will start wind.
  - (If using a two-pedal foot switch, depressing the start switch two-pedal foot switch)
- Once winding of set amount of lower thread (80%-90% of the bobbin capacity) is completed, the bobbin presser arm(2) will return automatically.
- Remove the bobbin, hook the thread anto the knife(6), and then pull the bobbin in the direction of the arrow to out the thread.



#### Adjusting the bobbin winding amount

Loosen the screw (7) and move the bobbin presser (8) to adjust.

#### If the thread winds onto the bobbin unevenly

Loosen the set screw (9) and move the bobbin winder tension assembly (10)up and down to adjust.

\* For case A, move the bobbin winder tension assembly (10)down, and for case B, move it upward.

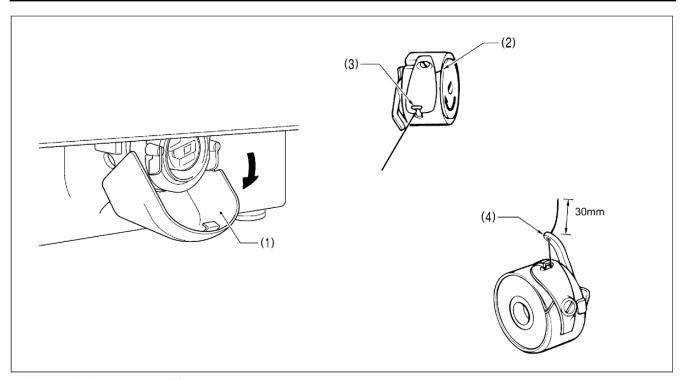
## 4-4. Installing the bobbin case

# **A** CAUTION

A

Turn off the power switch before installing the bobbin case.

If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.



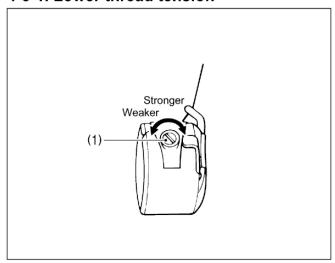
- 1. Pull the shuttle race cover (1) downward to open it.
- 2. While holding the bobbin so that the thread winds to the right, insert the bobbin into the bobbin case.
- 3. Pass the thread through the slot (2) and pull it out from the thread hole (3).
- 4. Check that the bobbin turns in the direction of the arrow when the thread is pulled.
- 5. Pass the thread through the lever thread hole (4), and then pull out approximately 30 mm of thread.
- 6. Hold the latch on the bobbin case and insert the bobbin case into the rotary hook.

## 4-5. Thread tension

#### [Thread tension reference]

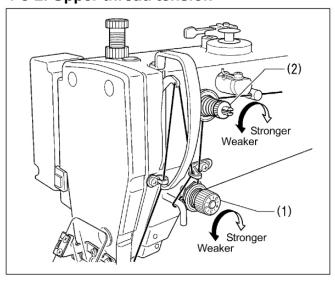
Specifications	Heavy-weight materials (-01)	Medium-weight materials (-02)	
Upper thread	#20 or similar	#50 or similar	
Lower thread	#20 or similar	#50 or similar	
Upper thread tension (N)	1.4 – 1.8	0.8 – 1.2	
Lower thread tension (N)	0.2 - 0.3		
Pre-tension (N)	0.1 – 0.6	0.1 – 0.3	
Needle	DP x 17 #19	DP x 5 #16	
Normal sewing speed	2,000 rpm	2,000 rpm	

#### 4-5-1. Lower thread tension



Adjust the thread tension to the weakest possible tension by turning the thread tension nut (1) until the bobbin case will not drop by its own weight while the thread end coming out of the bobbin case is held.

### 4-5-2. Upper thread tension



- 1. Turn the tension nut (1) (main tension) to adjust the tension as appropriate for the material being sewn.
- 2. Use the tension nut (2) (sub tension) to adjust the upper thread trailing length to about 40 mm.

## 5. SEWING

# **A** CAUTION



Turn off the power switch at the following times.

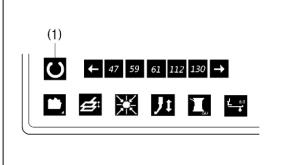
If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.

- . When threading the needle
- When replacing the bobbin and needle
- When not using the machine and when leaving the machine unattended

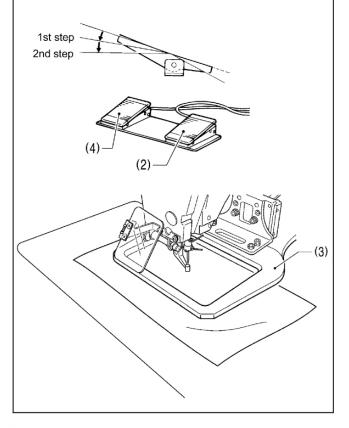


Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.

## 5-1. Sewing



- 1. Turn on the power switch.
- 2. Press the result or key to turn on the page, and press the data key to select the sewing program.



Press the time position key(1), the sewing machine will move to the loading position.

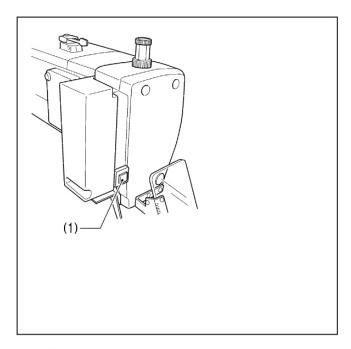
- Place the article to be sewn underneath the work clamp (3).
- Depress the foot switch to the 1st step. (If using a two-pedal foot switch, depress the work clamp switch (4).)
  - The work clamp (3) will drop.
- Depress the foot switch to the 2nd step.
   (If using a two-pedal foot switch, depress the start switch (2).)
  - The sewing machine will start sewing.
- 7. When sewing is complete, the thread will be trimmed and the work clamp (3) will rise.

Use a work clamp that hold the article being sewn firmly, without allowing it to slip.

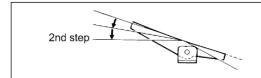
If using the standard work clamp and feed plate and the article being sewn is slipping, take measures to stop the work clamp and feed plate from being slippery.

## 5-2. Using the STOP switch

If you press the STOP switch (1) while sewing or test feeding is in progress, the sewing machine will stop immediately.



<Continuing sewing from a stopping point>
If you have pressed the STOP switch (1) at times such as if the thread breaks while sewing or the lower thread runs out, you can resume sewing from the point where the thread ran out.

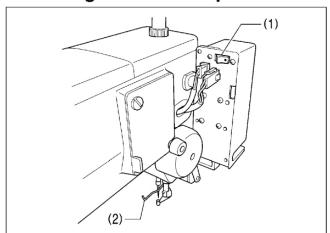


Depress the foot switch to the 2nd step.

(If using a two-pedal foot switch, depress the start switch.)

• The sewing machine will start operating and sewing will start.

## 5-3. Using the thread wiper switch



The thread wiper switch (1) can be used to turn the thread wiper (2) on and off.

# 6. CLEANING

# **A** CAUTION



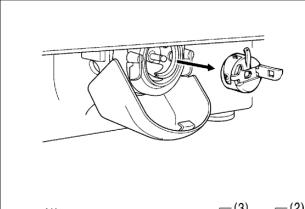
Turn off the power switch before carrying out cleaning.

If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.

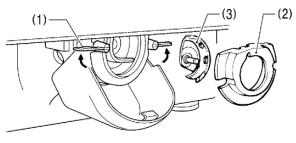


Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin. If the oil and grease get into your eyes or onto your skin, inflammation can result. Furthermore, do not drink or eat the lubricating oil or grease. They may cause diarrhea or vomiting. Keep the oil out of the reach of children.

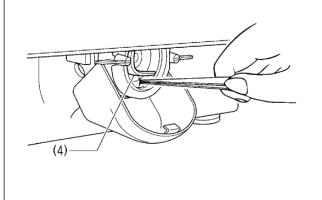
## 6-1. Cleaning the rotary hook



1. Pull the shuttle race cover downward to open it, and then remove the bobbin case.

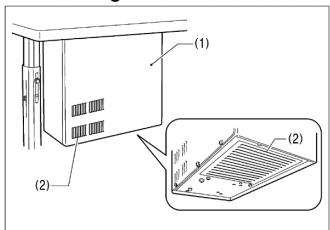


Open the setting claw (1) in the direction indicated by the arrow, and then remove the shuttle race base (2) and the shuttle hook (3).



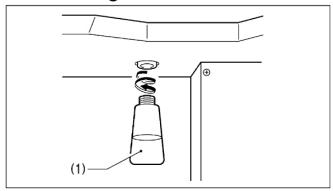
 Clean all the dust and thread ends from around the driver (4), the top of the rotary hook thread guide and the shuttle race.

## 6-2. Cleaning the control box air inlet ports



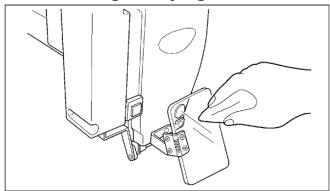
Use a vacuum cleaner to clean the filter in the air inlet ports (2) of the control box (1) at least once a month.

# 6-3. Draining the oil



- Remove and empty the waste oil tank (1) whenever it is full.
- 2. After emptying the waste oil tank (1), screw it back into its original position.

## 6-4. Cleaning the eye guard

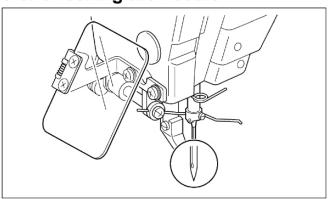


Wipe the eye guard clean with a soft cloth.

#### NOTE:

Do not use solvents such as kerosene or thinner to clean the eye guard.

## 6-5. Checking the needle



Always check that the tip of the needle is not broken and also that the needle is not bent before starting sewing.

#### 6-6. Lubrication

Lubricate the sewing machine while referring to "3-11. Lubrication".

# 7. STANDARD ADJUSTMENTS

# **A** CAUTION



Maintenance and inspection of the sewing machine should only be carried out by a qualified technician.



Ask your Brother dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.



Turn off the power switch and disconnect the power cord before carrying out the following operations. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.

- · Inspection, adjustment and maintenance
- Replacing consumable parts such as the rotary hook



Hold the machine head with both hands when tilting it back or returning it to its original position.

In addition, do not apply excessive force when tilting back the machine head. The sewing machine may become unbalanced and fall down, and serious injury or damage to the sewing machine may result.

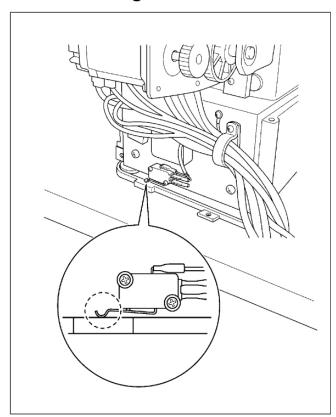


If the power switch needs to be left on when carrying out some adjustment, be extremely careful to observe all safety precautions.



If any safety devices have been removed, be absolutely sure to re-install them to their original positions and check that they operate correctly before using the machine.

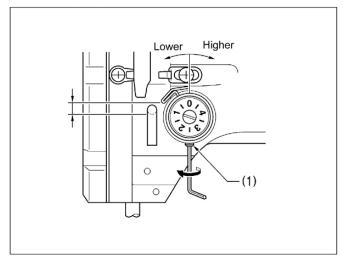
## 7-1. Checking the machine head switch



Check that the machine head switch is turned on as shown in the illustration.

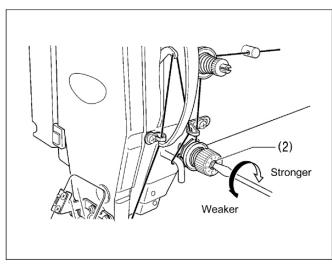
### 7-2. Thread take-up spring

Specifications	Heavy-weight materials (-01)	Medium-weight materials (-02)
Thread take-up spring height (mm)	7 – 10	
Thread take-up spring tension (N)	0.6 – 1.2	0.2 – 0.5



#### <Thread take-up spring height>

Loosen the set screw (1) and turn the adjuster to adjust.



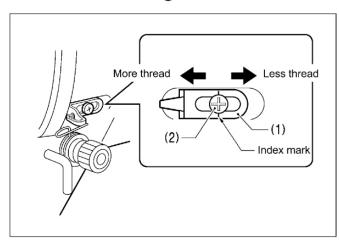
#### <Thread take-up spring tension>

Turn the tension stud (2) with a screwdriver to adjust the tension.

#### NOTE:

If the thread tension spring is not adjusted correctly, the upper thread trailing length will be uneven after thread trimming.

## 7-3. Arm thread guide R

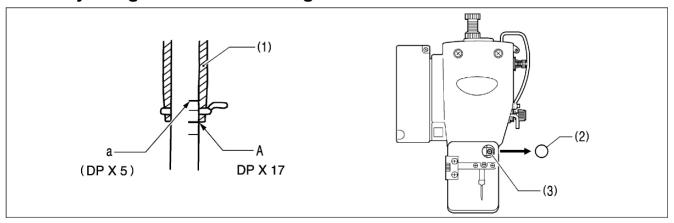


The standard position of arm thread guide R (1) is when the screw (2) is aligned with the index mark.

Loosen the screw (2) and move arm thread guide R (1) to adjust.

- \* When sewing heavy material, move arm thread guide R (1) to the left. (The thread take-up amount will become greater.)
- \* When sewing light material, move arm thread guide R (1) to the right. (The thread take-up amount will become less.)

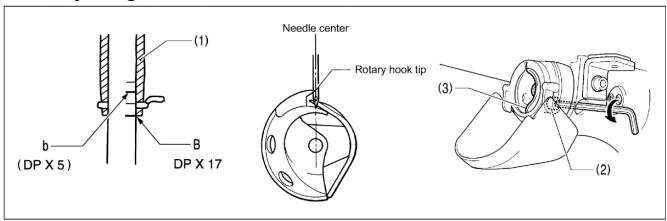
## 7-4. Adjusting the needle bar height



Turn the machine pulley to move the needle bar to the lowest position. Then remove the rubber plug (2), loosen the screw (3) and then move the needle bar up or down to adjust so that the second reference line from the bottom of the needle bar (reference line A) is aligned with the lower edge of the needle bar bush (1).

If using a DP X 5 needle, use the highest reference line (reference line a).

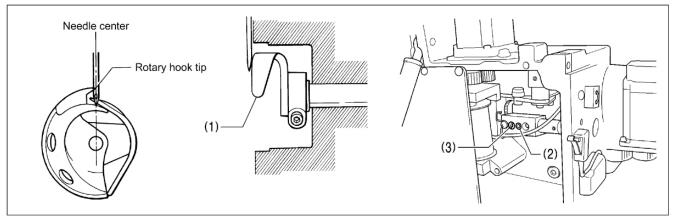
### 7-5. Adjusting the needle bar lift amount



Turn the machine pulley to raise the needle bar from the lowest position until the lowest reference line on the needle bar (reference line B) is aligned with the lower edge of the needle bar bush (1), and then loosen the bolt (2) and move the driver (3) so that the tip of the rotary hook is aligned with the center of the needle.

\* If using a DP X 5 needle, use the second reference line from the top of the needle bar (reference line b).

## 7-6. Adjusting the driver needle guard

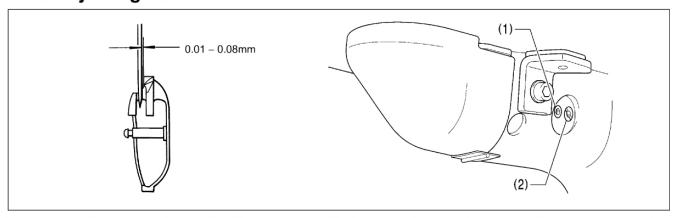


Turn the machine pulley to align the tip of the rotary hook with the center of the needle, and then loosen the set screw (2) and turn the eccentric shaft (3) to adjust so that the driver needle guard (1) is touching the needle.

#### NOTE:

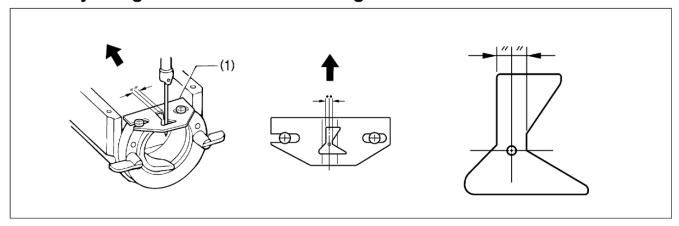
If it crosses the needle more than necessary, it will place a load on the needle, or it may cause poor thread tension. Furthermore, if it does not cross the needle at all, the tip of the rotary hook will interfere with the needle and skipped stitches may occur.

### 7-7. Adjusting the needle clearance



Turn the machine pulley to align the tip of the rotary hook with the center of the needle, and then loosen the set screw (1) and turn the eccentric shaft (2) to adjust so that the clearance between the needle and the rotary hook is 0.01 - 0.08 mm.

### 7-8. Adjusting the shuttle race thread guide



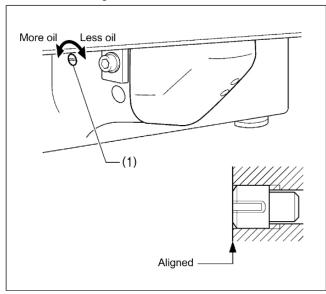
Install the shuttle race thread guide (1) by pushing it in the direction of the arrow so that the needle groove is aligned with the center of the needle plate hole.

#### NOTE:

If the shuttle race thread guide is in the wrong position, thread breakages, soiled thread or tangling of the thread may occur.

The position of the shuttle race thread guide is adjusted at the time of shipment from the factory. It should not be changed if possible.

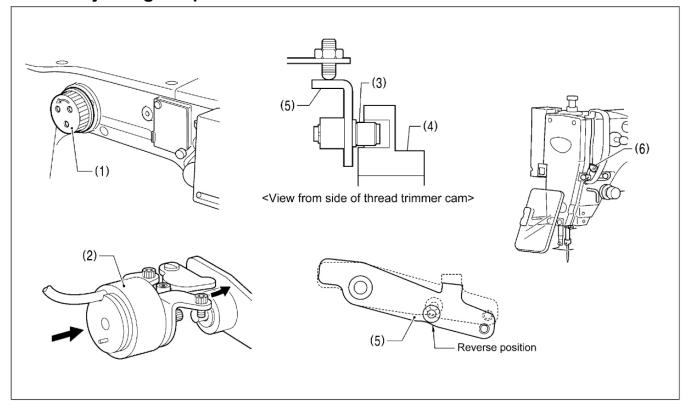
## 7-9. Rotary hook lubrication amount



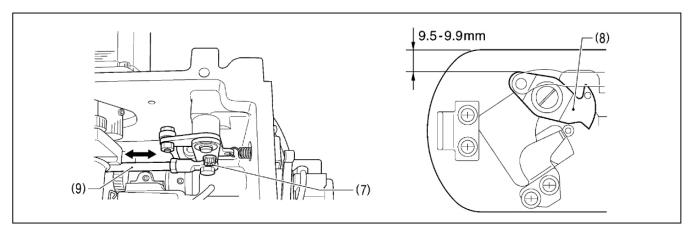
The optimum position is when the head of the set screw (1) is aligned with the edge of the bed. The rotary hook lubrication amount can be adjusted within three turns to the right from that position.

- If the set screw (1) is turned clockwise, the lubrication amount becomes smaller.
- If the set screw (1) is turned counterclockwise, the lubrication amount becomes greater.

## 7-10. Adjusting the position of the movable knife

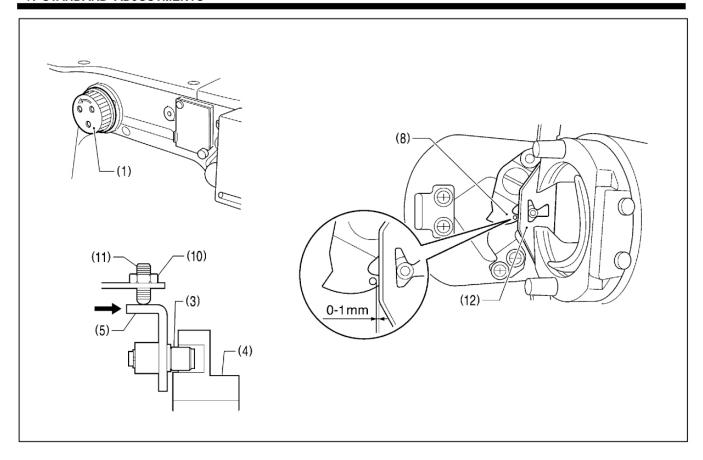


- 1. Open the top cover and tilt back the machine head.
- 2. Turn the pulley (1) by hand to lower the needle bar to its lowest position, and push the thread trimmer solenoid (2) as far as it will go.
- 3. With the collar (3) inserted into the groove of the thread trimmer cam (4), turn the pulley (1) by hand to set the driving lever (5) to the reverse position (when the thread take-up (6) is close to its lowest position).



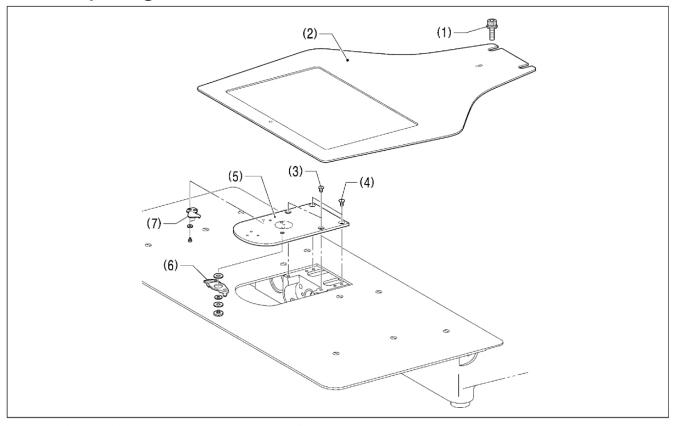
- 4. Loosen the bolt (7).
- 5. Move the thread trimming rod H (9) forward or back to adjust so that the distance from the ridge line on the right side of the needle plate to the ridge line on the movable knife (8) is 9.5 9.9 mm.
- 6. After tightening the bolt (7), check the above position once more.

#### 7. STANDARD ADJUSTMENTS

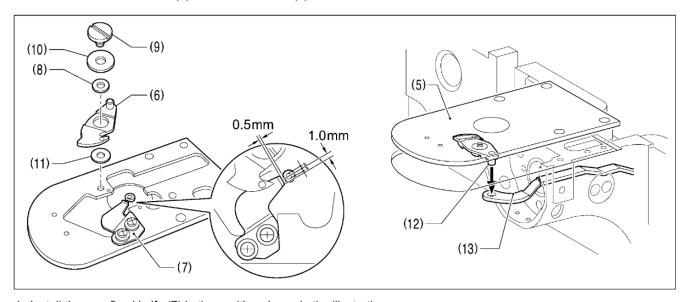


- 7. Turn the pulley (1) by hand to move the needle bar to its lowest position.
- 8. Loosen the nut (10), tighten the set screw (11) until the collar (3) is touching the inside of the groove in the thread trimmer cam (4), and then turn it back in the counterclockwise direction by approximately 1/4 of a turn.
- 9. Tighten the nut (10), and then check that the collar (3) is not touching the inside of the groove in the thread trimmer cam (4). In addition, push the driving lever (5) by hand toward the thread trimmer cam until the collar (3) touches the groove of the thread trimmer cam (4), and then check that the driving lever (5) returns smoothly to its original position when it is released.
- 10. Check that there is a gap of about 0 1 mm between the outside of the hole in the movable knife (8) and the ridge line on the shuttle race thread guide (12) when there is still play between the parts.

## 7-11. Replacing the movable and fixed knives

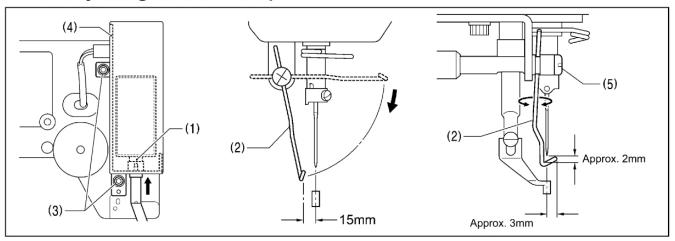


- 1. Loosen the two bolts (1) and then remove the feed plate (2).
- 2. Open the shuttle race cover, remove the two screws (3) and the two flat screws (4), and then remove the needle plate (5).
- 3. Remove the movable knife (6) and the fixed knife (7).



- 4. Install the new fixed knife (7) in the position shown in the illustration.
- 5. Apply grease to the outside of the collar (8) and to the shoulder screw (9), and then install the new movable knife (6) together with the thrust washer (10) and the movable knife spacer (11).
- 6. Check that the movable knife (6) and fixed knife (7) cut the thread cleanly. Replace the movable knife spacer with accessory spacers (t=0.2, 0.3, 0.4) so that the knives trim the thread accurately.
  - \* If the knife pressure is too weak and the thread is not completely cut, use a thinner movable knife spacer.
  - \* If the knife pressure is too strong and the movable knife (1) turns stiffly, use a thicker movable knife spacer.
- 7. Apply grease to the pin (12), place it into the movable knife connecting plate (13), and install it to the needle plate (5).
- 8. Check that the needle is aligned with the center of the needle hole.

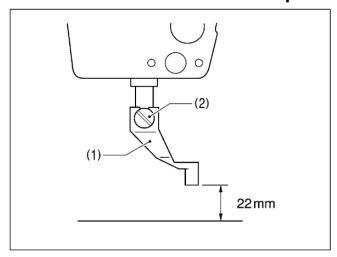
## 7-12. Adjusting the thread wiper



- 1. Loosen the two screws (3) and shift the entire solenoid setting plate (4) up or down to adjust so that the thread wiper (2) is 15 mm in front of the needle center when the plunger (1) of the thread wiper solenoid is driven to the full stroke.
- 2. Loosen the screw (5) and adjust the position of the thread wiper (2) so that the distance from the thread wiper to the tip of the needle is approximately 2 mm and the tip of the thread wiper (2) is approximately 3 mm from the center of the needle when the thread wiper (2) passes below the needle during operation.

Note: Check that the thread wiper (2) does not touch the finger guard.

## 7-13. Presser foot installation position

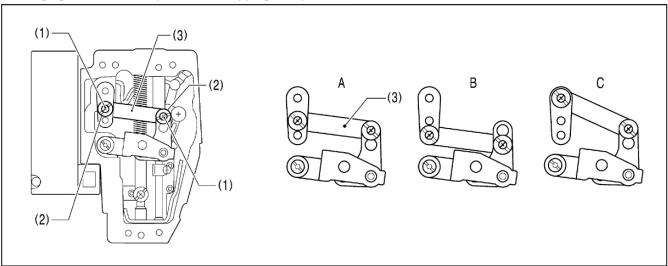


Install the presser foot (1) with the screw (2) so that the distance from the bottom of the presser foot to the top of the needle plate is 22 mm when the sewing machine is stopped and the presser foot (1) is raised.

## 7-14. Changing the intermittent stroke

The intermittent stroke can be adjusted to within 2-10 mm by adjusting the position of the stepping clamp connecting rod and changing the installation position of stepping clamp link A.

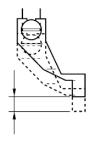
#### <Changing the installation position of stepping clamp link A>



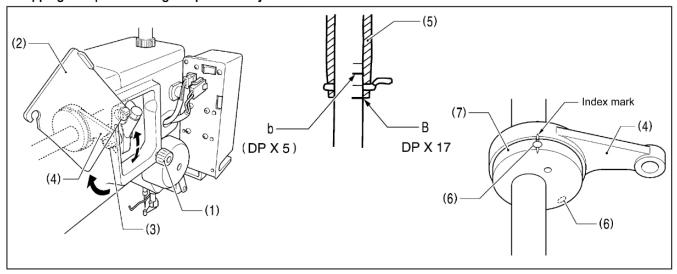
- 1. Remove the face plate.
- 2. Remove the two screws (1) and the two shoulder screws (2), and then remove stepping clamp link A (3).
- 3. Change the installation position for stepping clamp link A (3) to either A, B or C above.

  If the position of the stepping clamp connecting rod is adjusted as described in the following at any one of the installation positions, the adjustment range for the intermittent stroke will as given in the following table.

Installation position	Intermittent stroke range
Α	2 – 4.5mm
В	4.5 – 10mm
С	0 mm (Presser foot does not move up and down)



#### <Stepping clamp connecting rod position adjustment>

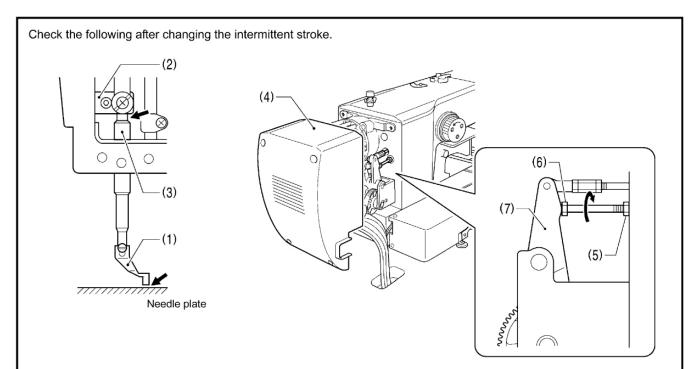


- 1. Loosen the screw (1), and then open the cover (2).
- 2. Loosen the nut (3), and then adjust the position of the stepping clamp connecting rod (4).
  - When the stepping clamp connecting rod (4) is raised, the intermittent stroke will increase.
  - When the stepping clamp connecting rod (4) is lowered, the intermittent stroke will decrease.

Next, adjust the needle bar and presser foot timing.

- 3. Turn the machine pulley to raise the needle bar from the lowest position until the lowest reference line on the needle bar (reference line B) is aligned with the lower edge of the needle bar bush (5).

  (If using a DP x 5 needle, align with the second reference line from the top (reference line b).)
- 4. Open the top cover and loosen the two set screws (6).
- 5. Align the index marks on the stepping clamp cam (7) and the stepping clamp connecting rod (4), and then tighten the set screws (6).



- 1. With the intermittent presser foot (1) lowered, turn the pulley to move the intermittent presser foot (1) to its lowest position.
- 2. Check that the presser foot (1) does not touch the needle plate and that the presser bar clamp (2) does not touch the presser bar bush (3).

#### <If they are touching>

Remove the motor cover (4).

Loosen the nut (5), and turn the bolt (6) until it is pressing against the intermittent drive lever (7), and then adjust until the two points mentioned above are not touching.

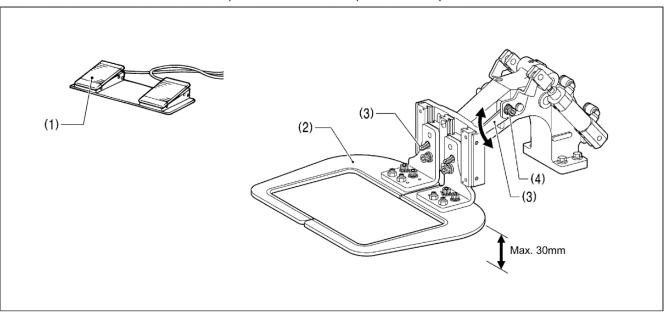
## 7-15. Adjusting the work clamp lift amount

#### <Solenoid specifications>

The operation panel settings can be used to adjust the height to within 15 – 25 mm. (Refer to "5-7. Setting the work clamp lift amount.")

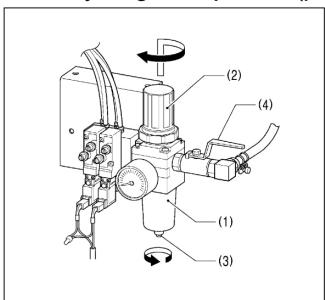
#### <Pneumatic specifications>

The maximum lift amount for the work clamp is 30 mm above the top of the needle plate.



- 1. Turn on the air, and depress the work clamp switch (1) to raise the work clamp (2).
- 2. Loosen the two bolts (4) of the work clamp arm lever (3), and move the work clamp arm lever (3) up or down to adjust.

# 7-16. Adjusting the air pressure (pneumatic specifications)



Lift up the handle (2) of the regulator (1) and then turn it to adjust the air pressure to 0.5 MPa.

After adjustment is complete, push the handle (2) downward to lock it.

If water has collected in the bottle of the regulator (1), turn the drain cock (3) in the direction indicated by an arrow to drain the water.

#### NOTE:

Open the air cock (4) slowly.

# 8. TROUBLESHOOTING

- Please check the following points before calling for repairs or service.
- If the following remedies do not fix the problem, turn off the power switch and consult a qualified technician or the place of purchase.

# **A** CAUTION



Turn off the power switch and disconnect the power cord before carrying out troubleshooting.

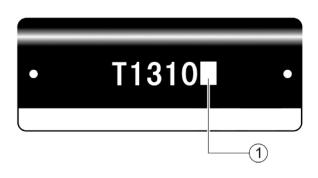
If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.

Problem	Cause	Remedy	Reference
Work clamp does not lift.	Work clamp moves stiffly.	Apply a suitable amount of grease to the sliding parts of the work clamp.	
	Air tube of presser lifter cylinder is bent or damaged (Pneumatic specifications).	Straighten the bend in the tube or replace the tube.	
Work clamp does not drop.	Work clamp moves stiffly.	Apply a suitable amount of grease to the sliding parts of the work clamp.	
	Air tube of presser lifter cylinder is bent or damaged (Pneumatic specifications).	Straighten the bend in the tube or replace the tube.	
Work clamp lift amount is incorrect.	Work clamp lift amount setting at operation panel is incorrect (Solenoid specifications).	Change the work clamp lift amount setting.	
	Work clamp arm lever position is incorrect. (Pneumatic specifications)	Adjust the position of the work clamp arm lever.	P. 35
Work clamp does not lift to the maximum height.	Work clamp arm stopper position is incorrect (Solenoid specifications).	Adjust the position of the stopper.	
	Cylinder joint position is incorrect. (Pneumatic specifications)	Adjust the position of the cylinder joint.	
Thread wiper does not operate correctly.	The thread wiper is obstructing the	Adjust the height of the thread wiper.	P. 32
	needle.	Adjust the stroke of the thread wiper.	P. 32
	Thread wiper position is incorrect.	Adjust the stroke of the thread wiper.	P. 32
Lower thread winds to one side.	Bobbin winder tension assembly height is incorrect.	Adjust the height of the bobbin winder tension assembly.	P. 18
Lower thread winding amount is incorrect.	Bobbin presser position is incorrect.	Adjust the position of the bobbin presser.	P. 18
Thread slips out of the needle.	Stitches being skipped at the sewing start.	Refer to "Skipped stitches occur".	P. 37
	Upper thread length is irregular.	Adjust the sub-tension.	P. 20
	Position of shuttle race thread guide is incorrect	Adjust the position of the shuttle race thread guide.	P. 28

Problem	Cause	Remedy	Reference
Upper thread breaks.	Upper thread tension is too strong.	Adjust the upper thread tension.	P. 20
	Needle is incorrectly installed.	Install the needle correctly.	P. 16
	Thread is too thick for the needle.	Select a thread that matches the needle.	P. 20
	Thread take-up spring tension and height are incorrect.	Adjust the tension and height of the thread take-up spring.	P. 26
	Damage or burring of the rotary hook, needle hole plate or needle.	Repair or replace the problem part.	
	Thread breaking from heat (Synthetic thread)	Use a cooling tank.	P. 16
	Thread is threaded incorrectly.	Thread the thread correctly.	P. 16
Lower thread breaks.	Lower thread tension is too strong.	Adjust the lower thread tension.	P. 20
	Damage to corners of needle hole plate or bobbin case.	Repair or replace the problem part.	
Skipped stitches occur.	Clearance between needle and rotary hook tip is too great.	Adjust the needle clearance.	P. 28
	Needle and rotary hook timing is incorrect.	Adjust the needle bar lift amount.	P. 27
	The driver is covering the needle more than necessary.	Adjust the driver needle guard.	P. 27
	Needle is bent.	Replace the needle.	
Skipped stitches occur.	Needle is incorrectly installed.	Install the needle correctly.	P. 16
Needle is broken.	than necessary.  Needle is bent.  Replace the needle.  Needle is incorrectly installed.  Install the needle correctly.  Adjust the driver needle guard.  Replace the needle.  Adjust the needle correctly.	P. 28	
	hook tip is too great.	Adjust the needle bar lift amount.	P. 27
	Needle is bent.	Replace the needle.	
	Needle deflection	Select a needle that is suitable for the sewing conditions. Reduce the sewing speed.	P. 20
	Needle is too thin.	Select a needle that is suitable for the sewing conditions.	P. 20
Thread jamming.	Thread take-up spring tension and height are incorrect.	Adjust the tension and height of the thread take-up spring.	P. 26
	Needle and rotary hook timing is incorrect.	Adjust the needle bar lift amount.	P. 27
	Shuttle race thread guide is not separating the threads.	Adjust the position of the shuttle race thread guide.	P. 28

Problem	Cause	Remedy	Reference
Upper thread is not trimmed.	Movable knife is not cutting cleanly.	Replace with a new one.	P. 31
	Fixed knife is not cutting cleanly.	Sharpen the fixed knife or replace it with a new one.	P. 31
	Movable knife is not picking up the	Adjust the position of the shuttle race thread guide.	P. 28
	upper thread.	Adjust the needle bar lift amount.	P. 27
	Movable knife is not picking up the upper thread because the last stitch is being skipped.	Refer to "Skipped stitches occur".	P. 37
	Movable knife position is incorrect.	Adjust the position of the movable knife.	P. 29
	Sub-tension is too weak.	Turn the sub-tension nut to adjust the tension.	P. 20
Poor stitch finish on underside of material.	Shuttle race thread guide is not separating the threads enough.	Adjust the position of the shuttle race thread guide.	P. 28
	Incorrect tightening of the upper thread	Adjust the upper thread tension.	P. 20
	Upper thread length is irregular.	Adjust the sub-tension.	P. 20
Incorrect tightening of the thread	Upper thread tension is too weak.	Adjust the upper thread tension.	P. 20
	Lower thread tension is too weak.	Adjust the lower thread tension.	P. 20
	Thread take-up spring tension and height are incorrect.	Adjust the tension and height of the thread take-up spring.	P. 26
	Position of arm thread guide R is incorrect.	Adjust the position of arm thread guide R.	P. 26
Upper thread length is irregular.	Thread take-up spring tension and height are incorrect.	Adjust the tension and height of the thread take-up spring.	P. 26
	Sub-tension is too weak.	Turn the sub-tension nut to adjust the tension.	P. 20
	Fixed knife is not cutting cleanly.	Sharpen the fixed knife or replace it with a new one.	P. 31
Sewing machine does not operate when the power is turned on and		Check if the machine head switch cord is disconnected.	
the foot switch is depressed.	Machine head switch does not work.	Adjust the position of the machine head switch.	P. 8
		If the machine head switch is malfunctioning, replace it with a new one.	

# 零件样本 PARTS BOOK

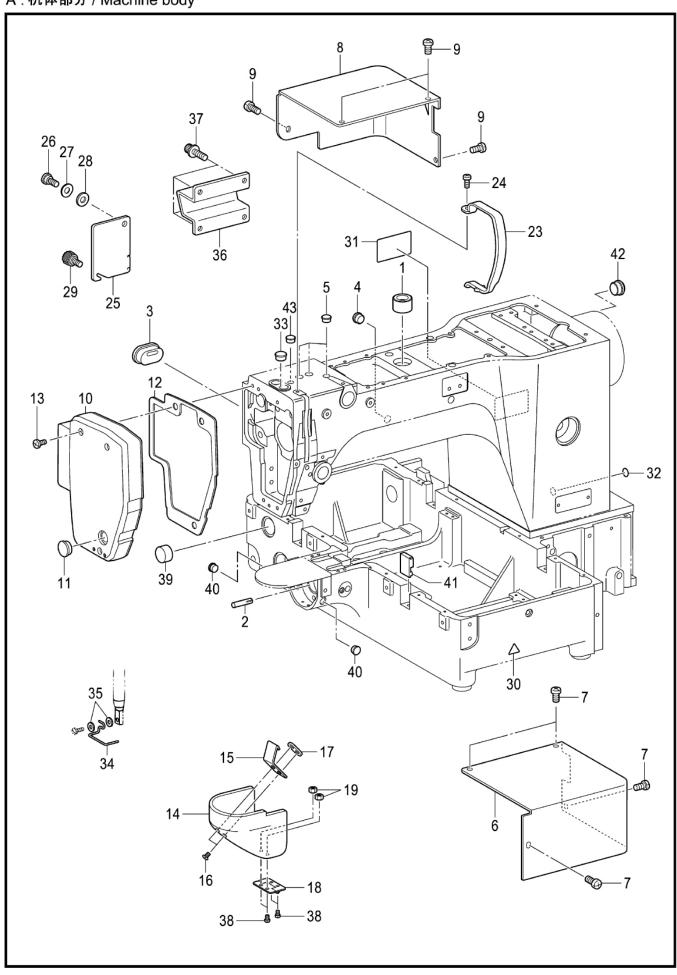


1 S: 电磁式抬压脚 / Solenoid-type work clamp lifter
A: 空压式抬压脚 / Pneumatic-type work clamp lifter

• T2210A •

# 目录/CONTENTS

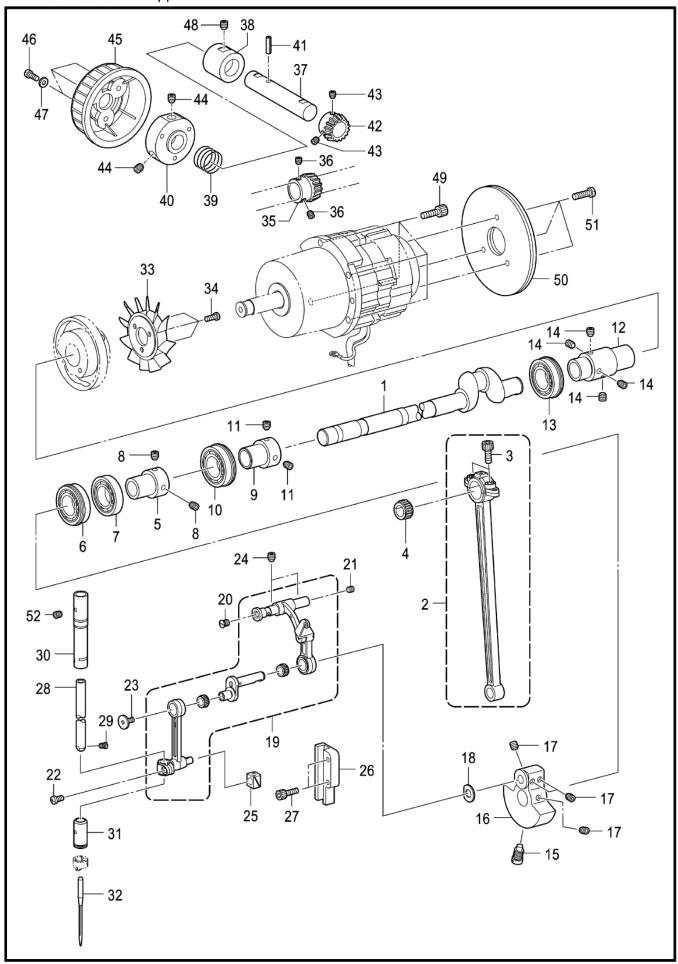
Α.	机体部分 / Machine body······1
В.	上轴、针杆装置 / Upper shaft and needle bar machanis3
C 1.	送料装置 / Feed mechanism······5
С2.	送料装置 / Feed mechanism ·······7
С3.	送料装置 / Feed mechanism 11
C 4.	送料装置 / Feed mechanism·····13
D1.	抬压装置 / Work clamp lifter mechanism 15
D 2.	抬压装置 / Work clamp lifter mechanism 17
D 3.	抬压装置 / Work clamp lifter mechanism 19
Ε.	下轴装置 / Lower shaft mechanism 21
F.	供油润滑装置 / Lubrication ·······23
G.	穿线装置 / Threading mechanism······27
Η.	卷线装置 / Bobbin winder mechanism······29
J .	切线装置 / Thread trimmer mechanism31
Κ.	扫线装置 / Thread wiper mechanism ·······35
L.	松线装置 / Tension release mechanism ··········37
Р.	空压装置 / Air pressure mechanism39
Q.	电气部品装置 / Power supply equipment mechanism41
S.	马达装置 / Motor mechanism······43
Т.	踏板关系 / Foot switch pedal mechanism·······45
Ζ.	附件 / Accessories·······47
Ga.	工模具一览表 / Gauge parts list51



## A、机体部分/Machine body

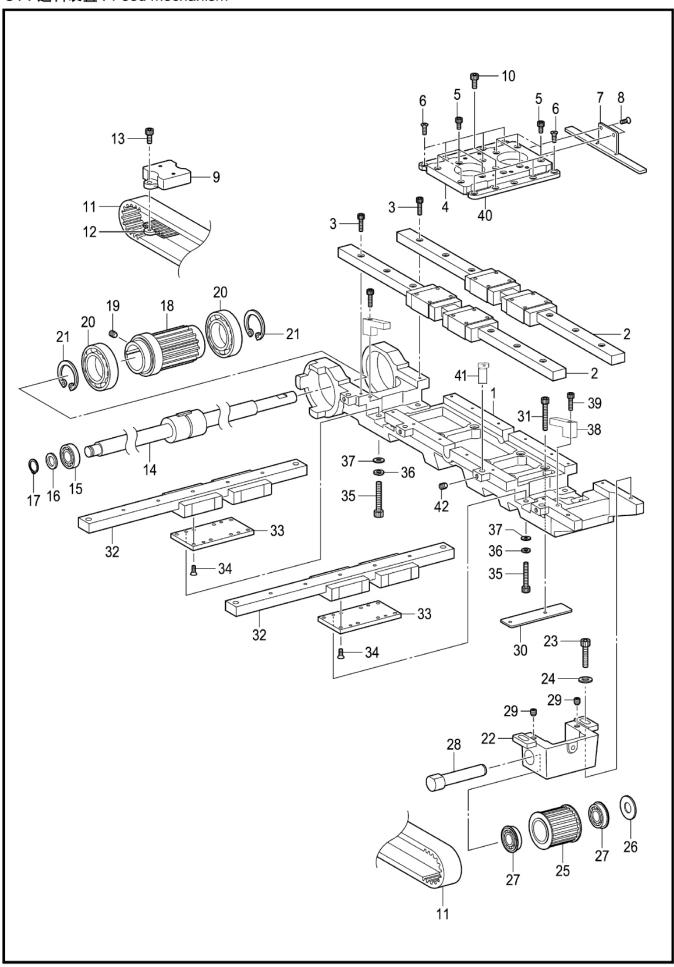
序号 No.	件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41703001	SA4594001	轴套 U	BUSHING U	1	T1310
2	41729001	117608001	开口销	DOWEL PIN	1	11010
3	41722001	SA4596001	橡皮塞 20-15	RUBBER CAP 20-15	1	
4	41722002	117934001	橡皮塞 13.5	RUBBER CAP, 13. 5	1	
5	41722003	104821001	橡皮塞 10.5	RUBBER CAP, 10.5	3	
6	41711050	SA4597001	马达盖 R	MOTOR COVER R	1	
7	S04038	062061016	螺钉 M6×10	SCREW PAN M6×10	4	
8	41711051	SA4598001	马达盖 L	MOTOR COVER L	1	
9	S04038	062061016	螺钉 M6×10	SCREW PAN M6×10	4	
10	41701001	SA4600001	面板	FACE PLATE	1	
11	41722004	104449001	橡皮塞 15.5	RUBBER CAP, 15.5	1	
12	41712003	SA4601001	面板垫片	F-PLATE PACKING	1	
13	S04038	062061016	螺钉 M6×10	SCREW PAN M6×10	3	
14	41712004	SA4603101	大旋梭盖	SHUTTLE RACE COVER	1	
15	41712005	SA6272001	大旋梭盖挂钩 D	SHUTTLE RACE COVER HOOK D	1	
16	S02031	004300513	螺钉 M3×5	SCREW, PLAT M3×5	2	
17	41712006	SA3264001	板螺母	NUT PLATE	1	
18	4171220200	SA6207001	铰链	HINGE	1	
19	N01013	021300103	螺母 M3	STEPPING COVER	2	
23	41712007	SA3200101	挑线杆防护罩	THREAD TAKE-UP COVER	1	
24	S04079	062401006	螺钉 M4×10	SCREW PAN M4×10	1	
25	41712008	SA4604001	间歇盖板	STEPPING COVER	1	
26	417S30012	SA3306001	段螺钉 7-3	SHOULDER SCREW, 7-3	1	
27	41728020	120265002	弹簧垫圈	SPRING WASHER	1	
28	41728035	S07350002	垫圈	WASHER PLAIN	1	
29	41711005	S36475000	螺钉 M5	SCREW, M5	1	
30	41737001	S36924001	警告标记	MARK, INJRY	1	
			〈用于日本〉	<for japan="" only=""></for>		
31	41737002	SA2040001	操作注意标签(日/英)	LABEL, CAYTION JPN/END	1	
			〈用于日本以外〉	<for except="" japan=""></for>		
31	41737003	SA2040001	操作注意标签(中/英)	LABEL, CAYTION CHN/END	1	
32	41737004	S37060001	接地标记	LABEL, GROUNDING	1	
33	41722009	S20164001	橡皮塞 13	RUBBER CAP, 13	1	
34	41712009	S02445001	护指器	FINGER GUARD	1	
35	41728025	025350332	平垫圈 L3.5	WASHER PLAIN L3.5	2	
36	41712010	SA4605001	机头撑杆	HEAD REST	1	
37	417S30037	S42446001	螺栓 M6×14	BOLT, SOCKET (S/P WASHER) M6×14	4	
38	S04075	062300506	螺钉 M3×5	SCREW PAN M3×5	4	
39	41722006	SA6194001	橡皮塞 26	RUBBER CAP 26	1	
40	41722007	S44010001	橡皮塞 11.5	RUBBER CAP 11.5	2	
41	41722008	SA6441001	橡皮盖	RUBBER CAP	2	
42	41722009	S20164001	橡皮塞 13	RUBBER CAP 13	1	
43	41722013	104450101	橡皮塞 8	RUBBER CAP 8	2	

## B . 上轴·针杆装置 / Upper shaft and needle bar mechanism



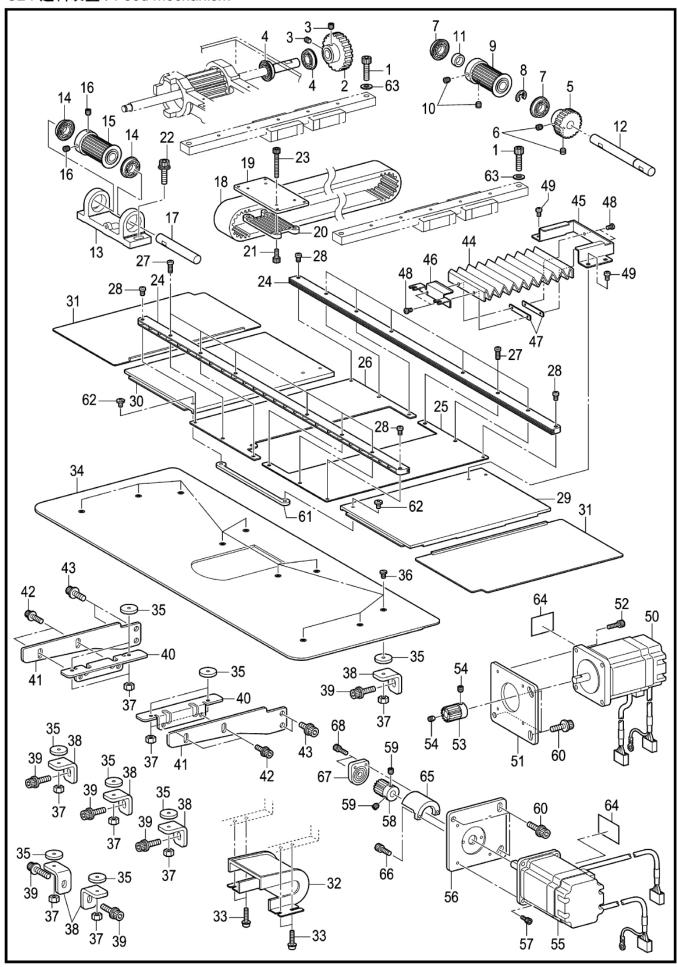
# B、上轴·针杆装置/Upper shaft and needle bar mechanism

序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41702001	SA4606001	上轴	UPPER SHUFT	1	
2	4170501100	SA3499001	曲柄轴组件	CRANK ROD ASSY	1	
3	S05124	018501636	螺栓 M5×16	BOLT SOCKET M5×16	2	
4	41724001	SA4172001	滚针轴承 K15×18×14	NEEDLE BEARING:BLUE	2	
4	41724001	SA4173001	滚针轴承 K15×18×14	NEEDLE BEARING: BLACK	2	
4	41724001	SA4174001	滚针轴承 K15×18×14	NEEDLE BEARING:GRAY	2	
4	41724001	SA4175001	滚针轴承 K15×18×14	NEEDLE BEARING: YELLOW	2	
5	41703002	SA3206001	轴承套	BALL BEARING BUSH	1	
6	B10014	SA4179001	轴承 6904DDUNR	BALL BEARING 6904DDUNR	1	
7	B06005	SA4180001	轴承 R-6904DDU	BALL BEARING 6904DDU	1	
8	S10018	S23651001	固定螺钉 M6×0.75-6	SET SCREW SOCKET(FT)M6×6	2	
9	41703002	SA3206001	轴承套	BALL BEARING BUSH	1	
10	B10012	SA4177001	轴承 6004DDUNR	BALL BEARING 6004DDUNR	1	
11	S10018	S23651001	固定螺钉 M6×0.75-6	SET SCREW SOCKET (FT) M6×6	2	
12	41703004	SA4608101	管接头 G	JOINT G	1	
13	B10013	SA4178001	轴承 6204DDUNR 固定螺钉 M6×0.75-6	BALL BEARING 6204DUNR SET SCREW SOCKET (FT) M6×6	1	
14 15	S10018 417S30002	S23651001 S25235001	螺钉 M8	SCREW, M8	1	
16	41704001	SA4609101	针杆曲柄 G	THREAD TAKE-UP CRANK G	1	
17	S10018	S23651001	固定螺钉 M6×0.75-6	SET SCREW SOCKET (FT) M6×6	4	
18	41712133	110367001	型圈 8	WASHER, PLAIN SPECIAL 8	1	
19	4170501200	SA6182001	针杆连杆组件 FK	THREAD TAKE-UP LEVER FK SET	1	
20	417S17003	SA2958001	螺钉 M5×6	SCREW FLAT M5×6	1	
21	S09019	012500536	螺钉 M5×5	SET SCREW SOCKET (FT) M5×5	1	
22	S04078	062400816	螺钉 M4×8	SCREW PAN M4×8	1	
23	417S14001	145465001	螺钉 SM3.57-40×6L	SCREW SM3.57-40×6L	1	
24	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
25	41709001	142211001	滑块	SLIDE BLOCK	1	
26	41709002	SA3528001	滑块导向 B	SLIDE BLOCK GUIDE	1	
27	S05118	018401636	螺栓 M4×16	BOLT SOCKET M4×16	2	
28	41702002	SA4622001	针杆	NEEDLE BAR	1	
29	417S15002	144458001	螺钉 SM3. 57-40×4. 5	SET SCREW, SM3. 57-40×4. 5	1	
30	41703005	SA4666001	针杆轴套 UK	NEEDLE BAR BUSH UK	1	
31	41703006	SA3224001	针棒轴套 D	NEEDLE BAR BUSH D	1	
32	41217002	*P. 67	机针	NEEDLE	1	
32	41217002	*F. 07	1761	NEEDLE	1	
33	12411002	S38713100	叶轮	FAN	1	
34	S04078	062400816	螺钉 M4×8	SCREW PAN M4×8	3	
35	41225010	SA6108001	齿轮 R	PULLEY GEAR R	1	
36	S09019	012500536	螺钉 M5×5	SET SCREW SOCKET (FT) M5×5	2	
37	41702003	SA4626001	上轮轴	PULLEY SHUFT	1	
38	41703007	SA4627001	上轮轴套	PULLEY BUSH	1	
39	41727001	SA4628001	上轮弹簧	PULLEY SPRING	1	
40	41703008	SA4629001	上轮基座	PULLEY BASE	1	
41	P03027	047401242	弹簧销 4×12	PIN SPRING ROLL AW4	1	
42	41725002	SA4624001	齿轮	PULLEY GEARL	1	
43	S09019	012500536	螺钉 M5×5	SET SCREW SOCKET (FT) M5×5	2	
44	S10018	S23651001	固定螺钉 M6×0.75-6	SET SCREW SOCKET (FT) M6×6	2	
45	41711001	SA4630001	上轮	PULLEY	1	
46	S04079	062401006	螺钉 M4×10	SCREW PAN M4×10	3	
47	41728024	SA5158001	垫圈 L4	WASHER PLAIN L4	3	
48	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
49	S05124	018501636	螺栓 M5×16	BOLT SOCKET M5×16	4	
50	41712011	SA5230001	惯性轮 2	FRIES WHEEL 2	2	
51	417S30021	062401016	螺钉 M4×10	SCREW PAN M4×10	3	
52	S09041	012060536	螺钉 M6×5	SET SCREW SOCKET(FT)M6×5	1	



# C1、送料装置/Feed mechanism

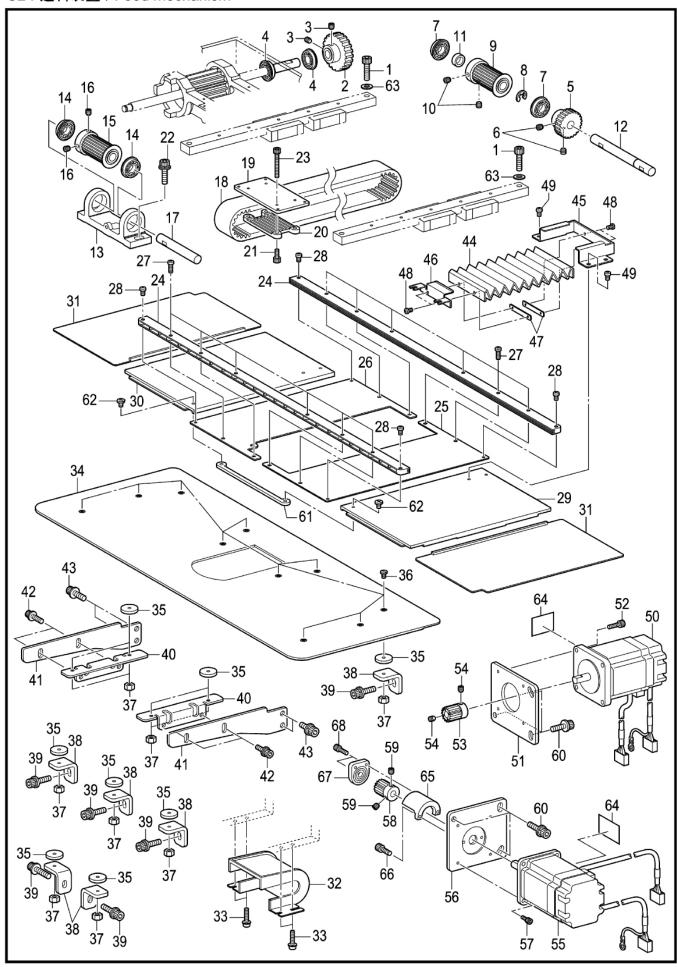
序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41701002	SA5229101	送布基座组件	FEED BRACKET ASSY	1	
2	41724006	SA4637001	X-LM 导向	X-LM GUIDE	2	
3	S05114	018301436	螺栓 M3×14	BOLT SOCKET M3×14	15	
4	41701003	SA4635101	送布台 (X)	FEED BRACKET X	1	
5	S05113	018300636	螺栓 M3×6	BOLT SOCKET M3×6	8	
6	S02032	061300616	螺钉 M3×6	SCREW FLAT M3×6	8	
7	41709004	SA4636101	传感器板 (X)	X-SENSOR PLATE	1	
8	S02032	061300616	螺钉 M3×6	SCREW FLAT M3×6	2	
9	41709005	SA4641001	皮带支架	X-BELT HOLDER	1	
10	S05116	018400836	螺栓 M4×8	BOLT SOCKET M4×8	2	
11	41735001	SA4649001	X-GT 皮带	X-GT BELT	1	
12	41712012	SA4640001	皮带支架板 (X)	X-BELT HOLDER PLATE	1	
13	S05116	018400836	螺栓 M4×8	BOLT SOCKET M4×8	2	
14	41702004	SA4639001	花键轴 (Y)	Y-BALL SPLINE	1	
15	B06006	076000600	球轴承 6000VV	BALL BEARING RADIAL 6000W	1	
16	41728001	S20356001	平垫圈 10	WASHER PLAIN 10	1	
17	Н03008	048100142	轴用挡圈 C10	RETAINING RING EXTERNAL C10	1	
18	4173500200	SA4638001	X-左轮组件	X-LEFT PULLEY	1	
19	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
20	B06007	076806606	球轴承 6806VV	BALL BEARING 6806VV	2	
21	H01004	048420242	孔用挡圈 C42	RETAINING RING EXTERNAL C42	2	
22	41701004	SA4642001	X-轮基座	X-PULLEY BRACKET	1	
23	S05124	018501636	螺栓 M5×16	BOLT SOCKET M5×16	2	
24	W01009	025050236	平垫圈 M5	WASHER PLAIN M5	2	
25	4173500300	SA4643001	X-右轮组件	X-RIGHT PULLEY ASSY	1	
26	41728001	S20356001	平垫圈 10	WASHER PLAIN 10	1	
27	B10015	SA4647001	球轴承 6900ZZNR	BALL BEARING 6900ZZNR	2	
28	41702005	SA4648001	X-轮支点轴	X-PULLEY FULCRUM SHAFT	1	
29	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	2	
30	41712013	SA4650001	Y-传感板	Y-SENSOR PLATE	1	
31	S05119	018402036	螺栓 M4×20	BOLT SOCKET M4×20	2	
32	41724007	SA4651101	Y-LM 导向	Y-LM GUIDE	2	
33	41728002	SA4652101	Y-LM 垫片	Y-LM SPACER	2	
34	S02032	061300616	螺钉 M3×6	SCREW FLAT M3×6	16	
35	S05119	018402036	螺栓 M4×20	BOLT SOCKET M4×20	16	
36	W01001	025040236	平垫圈 M4	WASHER PLAIN M4	8	
37	W02008	028040246	弹簧垫圈 2-4	WASHER SPRING 2-4	8	
38	41709032		挡块	CLAMP H-POSITION	2	T1310
39	S05119	018402036	螺栓 M4×20	BOLT SOCKET M4×20	2	T1310
40	41711062		固定板	HOLDER PLATE	2	
41	41726020	SA5220001	调节销	ADJUST PIN	4	
42	S09005	012030536	螺钉 M3×5	SCREW FLAT M3×5	4	



## C2、送料装置/Feed mechanism

亨号 No.	公司件号 Part. No.	参考件号 Ref.No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	S05111	018062036	螺栓 M6×20	BOLT SOCKET M6×20	4	
2	41725003	SA4653001	X-送布齿轮	X-FEED GEAR	1	
3	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET(FT)M6×6	2	
4	B10015	SA4647001	球轴承 6900ZZNR	BALL BEARING 6900ZZNR	2	
5	41725004	SA4654001	Y-送布齿轮	Y-FEED GEAR	1	
6	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET(FT)M6×6	2	
7	B10015	SA4647001	球轴承 6900ZZNR	BALL BEARING 6900ZZNR	2	
8	Н05033	048080342	挡圈 E8	RETAINING RING E8	1	
9	4173501100	SA4655101	Y-轮组件	Y-PULLEY ASSY	1	
10	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET(FT)M6×6	2	
11	41703009	SA4658001	Y-轮轴套	Y-PULLEY COLLAR	1	
12	41702006		Y-驱动轴	Y-PULLEY DRIVING SHAFT	1	
13	41701005	SA4661001	Y-轮基座	Y-PULLEY BRACKET	1	
14	B10015		球轴承 6900ZZNR	BALL BEARING 6900ZZNR	2	
15	4173502100	SA4655101	基座带轮组件	Y-PULLEY ASSY	1	
16	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET(FT)M6×6	2	
17	41702007	SA4662001	Y-轮支点轴	Y-PULLEY FULCRUM SHAFT	1	
18	41735005	SA4663001	Y-GT 皮带	Y-GT BELT	1	
19	41712014	SA4664001	Y-皮带支架板	BELT SUPPORT PLATEY	1	
20	41712015	SA4665001	Y-皮带支撑板	Y-BELT WORK CLAMP PLATE	1	
21	S05116	018400836	螺栓 M4×8	BOLT SOCKET M4×8	4	
22	417S30031	SA2972001	螺栓 M6×18	BOLT SOCKET(S/P WASHER) M6×14	2	
23	S05119	018402036	螺栓 M4×20	BOLT SOCKET M4×20	4	
24	41711061	SA4667101	盖轨道	COVER RAIL	2	
25	41712017	SA4671001	固定盖 (R)	FIXATION R	1	
26	41712018	SA4672001	固定盖(L)	FIXATION L	1	
27	417S30021	062401016	螺钉 M4×10	SCREW FAN M4×10	12	
28	417S30009	062400416	螺钉 M4×6	SCREW FAN M4×6	4	
29	4171201900	SA4860101	内盖组件 R	INSIDE COVER R ASSY	1	
30	4171202000	SA4861101	内盖组件 L	INSIDE COVER L ASSY	1	
31	4171202100	SA4670101	外盖组件	OUTSDE COVER ASSY	2	
32	41711002	SA4673001	Y-皮带轮盖	BELT COVER Y	1	
33	417S30025	0A5401006	螺栓 (带垫圈) M4×10DB	SCREW PAN(S/P WASHER) M4×10	4	
34	41712022	SA4675201	补助板	AUXILIARY PLATE	1	
35	41722010	SA4677101	补助板缓冲	AUXILIARY PLATE CUSHION	10	
36	417S15003	S23849001	螺钉 M4×16	SCREW M4×16	10	
37	N01015	021400216	六角螺母 M4	NUT 2 M4	10	
38	41712023	SA4676001	补助板支架	AUXILIARY PLATE BRACKET	6	
39	417S30037	S42446001	螺栓 M6×14	BOLT SOCKET(S/P WASHER) M6×14	6	
40	41712024	SA6434001	补助板支架 U	SUPPORT PLATE GUIDE U	2	
41	41712025	SA6435001	补助板支架 D	SUPPORT PLATE GUIDE D	2	
42	417S30035	S55484002	螺栓(带垫圈)M5×10	BOLT SOCKET(S/P WASHER) M5×10	4	
43	417S30037	S42446001	螺栓 M6×14	BOLT SOCKET (S/P WASHER) M6×14	4	
44	41722011	SA4679101	蛇纹管	BELLOW	1	
45	41712026	SA4680101	蛇纹管支架 R	BELLOW PRESSER R	1	
46	41712027	SA4681001	蛇纹管支架 F	BELLOW PRESSER F	1	
47	41712060	SA4682001	板螺母	BELLOW NUT	2	
48	S04036	062300416	螺钉 M3×4	SCREW FAN M3×4	4	
49	S04030 S04080	062400416	螺钉 M4×4	SCREW FAN M3×4	4	
50	41730041	SA4820201	脉冲马达组件 X	PULSE MOTOR ASSY X	1	
51	41712029	SA4684001	马达安装板	MOTOR BRACKET PLATE	1	
52	S05048	018401036	<u> </u>	BOLT SOCKET M4×10	4	
53	41725005	SA3707001	聚动齿轮 16	GEAR 16	1	
54	S09041	012060536	螺钉 M6×5	SET SCREW SOCKET (FT) M6×5	2	
55	41730042	SA4823101	脉冲马达组件 Y	PULSE MOTOR ASSY Y	1	
56	41730042	SA4823101 SA4684001	马达安装板	MOTOR BRACET PLATE	1	
57	S05048	018401036	与还安表板   螺钉 M4×10	BOLT SOCKET M4×10	4	
58		SA3707001		GEAR 16	1	
JQ	41725005		<u>驱动齿轮 16</u>   螺钉 M6×5	SET SCREW SOCKET (FT) M6×5	2	
50	C00041					
59 60	S09041 417S30037	012060536 S42446001	螺栓 M6×14	BOLT SOCKET (S/P WASHER) M6×14	6	

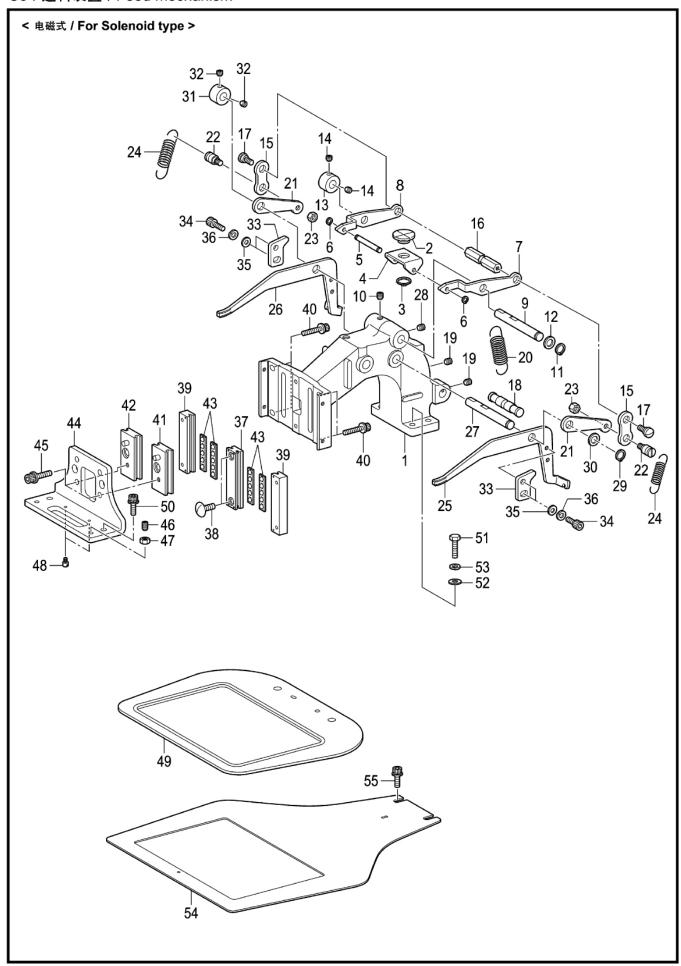
## C2. 送料装置 / Feed mechanism



## C2、送料装置/Feed mechanism

序号 No.	公司件号 Part. No.	参考件号 Ref.No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
62	417S15006	S23418002	螺钉 M4×5	SCREW M4×5	2	
63	41728012	118735001	垫圈	WASHER	4	
64	41737005	SA4224001	注意符号 30×40	MARK ATTENTION 30×40	2	
65	41712100	SA6450101	轴承支架座	BEARING HOLDER BASE	1	
66	S05121	018501036	螺栓 M5×10	BOLT SOCKET M5×10	2	
67	4171210100	SA6451101	轴承支架组件	BEARING HOLDER ASSY	1	
67	41712101	SA6449001	轴承支架	BEARING HOLDER	1	
67	41724005		调心球轴承 126	BALL BEARING 126	1	
68	S05048	018401036	螺钉 M4×10	BOLT SOCKET M4×10	2	·

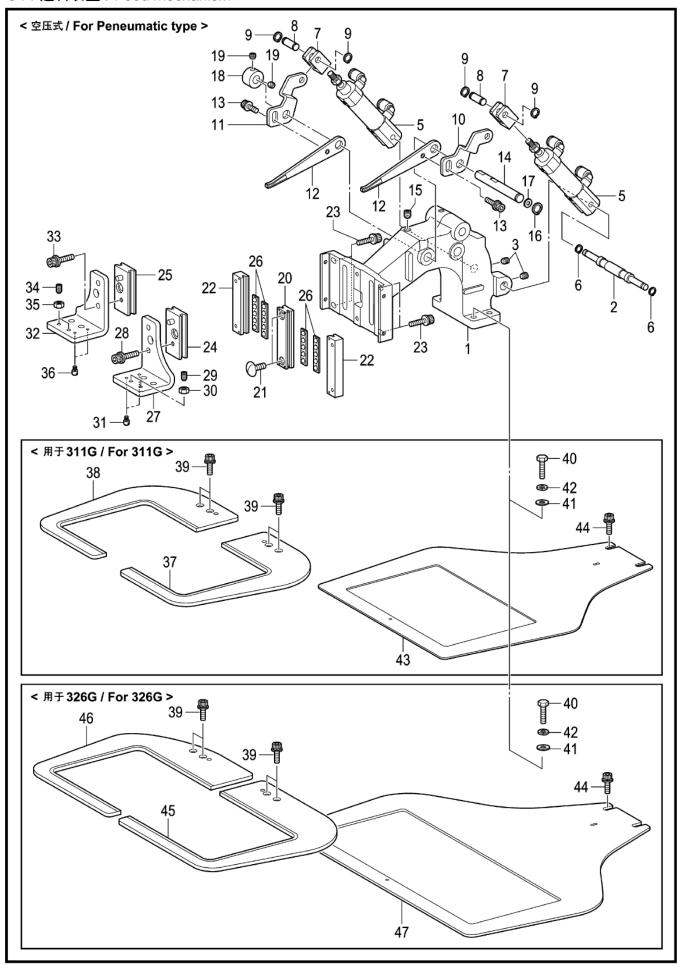
## C3. 送料装置 / Feed mechanism



#### C3、送料装置/Feed mechanism (T1310)

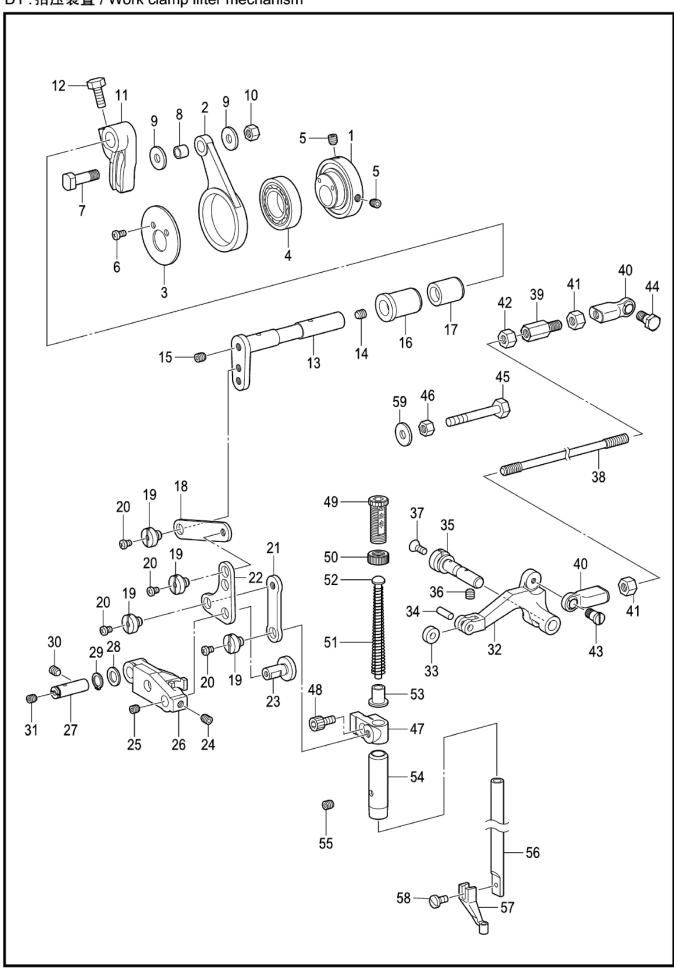
序号 No.	公司件号 Part. No.	参考件号 Ref.No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
			〈电磁式〉	⟨For Solenoid type⟩		
1	41701006	SA4686101	压脚臂	WORK CLAMP	1	
2	41711007	SA4687101	滑块	SLIDER	1	
3	H03008	048100142	轴用挡圈 C10	RETAINING RING EXTERNAL C10	1	
4	41712031	SA4688001	滑块支架	SUPPORT SLIDER	1	
5	41726001	SA4689001	滑块支架轴	SUPPORT SHAFT SLIDER	1	
6	Н03018	048040142	轴用挡圈 C4	RETAINING RING EXTERNAL C4	2	
7	41712032	SA4690001	压脚柄 R	WORK CLAMP LIFTER LEVER R	1	
8	41712033	SA4691001	压脚柄 L	WORK CLAMP LIFTER LEVER L	1	
9	41702012	SA4692001	压脚臂杆轴 	WORK CLAMP LIFTER SHAFT	1	
10	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
11	H03006	048080142	轴用挡圈 C8	RETAINING RING EXTERNAL C8	1	
12	41712133	110367001	垫圈 8	WASHER PLAIN SPECIAL 8	1	
13	41708002	SA3231001	紧圈 B	SET SCREW COLLAR B	1	
14	S09041	012060536	螺钉 M6×5	SET SCREW SOCKET (FT) M6×5	2	
15	41712034	SA4696001	连杆	CONNECTING ROD	2	
16	41702021	SA4693001	弹簧挂钩轴A	SPRING HOLDER SHAFT A	1	
17	417530003	SA4697001	段螺钉 M5	SHOULDER SCREW M5	2	
18	41702009	SA4694001	弹簧挂钩轴B 螺钉 M6×6	SPRING HOLDER SHAFT B SET SCREW SOCKET (FT) M6×6		
19	S10019 41727002	012060636	際钉 Mb×b 弾簧	SPRING LIFT	2	
20 21		SA4695001	连接板	CONNECTING LINK	2	
22	41712035 417S12002	SA4698001 SA4700001	弹簧挂钩	WORK CLAMP SPRING HOLDER	2	
23	N01017	021500216	六角螺母 M5	NUT 2 M5	2	
24	41727003	SA4701001	弹簧	WORK CLAMP SPRING	2	
25	41727003	SA4701001 SA4702001	压脚臂杆 R	WORK CLAMP SPRING WORK CLAMP LIFTER LEVER R	1	
26	41712037	SA4702001 SA4703001	压脚臂杆 L	WORK CLAMP LIFTER LEVER K WORK CLAMP LIFTER LEVER L	1	
27	41702012	SA4692001	压脚臂杆轴	WORK CLAMP LIFTER LEVER L	1	
28	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
29	H03006	048080142	轴用挡圈 C8	RETAINING RING EXTERNAL C8	1	
30	41712133	110367001	<b>垫圈 8</b>	WASHER PLAIN SPECIAL 8	1	
31	41708002	SA3231001	紧圈 B	SET SCREW COLLAR B	1	
32	S09041	012060536	螺钉 M6×5	SET SCREW SOCKET (FT) M6×5	2	
33	41712038	SA4699001	定位	STOPPER	2	
34	S05120	018500836	螺栓 M5×8	BOLT SOCKET M5×8	4	
35	W01009	025050236	平垫圈 M5	WASHER PLAIN M5	4	
36	W02001	028050246	弹簧垫圈 2-5	WASHER SPRING 2-5	4	
37	4170901300	SA4863001	压脚导向组件 A	WORK CLAMP GUIDE A ASSY	1	
38	417S15003	S23849001	螺钉 M4×16	SCREW M4×16	2	
39	4170901400	SA4864001	压脚导向组件 B	WORK CLAMP GUIDE B ASSY	2	
40	417S30034	S55482001	螺栓(带垫圈)M4×14	BOLT SOCKET(S/P WASHER) M4×14	4	
41	4170901500	SA4712001	压脚滑块组件 R	WORK CLAMP SLIDER ASSY R	1	
42	4170901600	SA4714001	压脚滑块组件 L	WORK CLAMP SLIDER ASSY L	1	
43	41724002	SA4706101	压脚挡板组件	WORK CLAMP RETAINER ASSY	4	
44	41712039	SA4708001	压脚	WORK CLAMP	1	
45	417S30036	S55485001	螺栓 (帯垫圏) M5×12	BOLT SOCKET(S/P WASHER) M5×12	2	
46	S09009	012501031	螺钉 M5×10	SET SCREW SOCKET (FT) M5×10	2	
47	N01017	021500216	六角螺母 M5	NUT 2 M5	2	
48	417S20001	SA4709001	定位段螺钉	SHOULDER SCREW	2	
49	41712040	SA4866101	压板组件 1310	WORK CLAMP 1310 ASSY	1	
50	417S30035	S55484002	螺栓 (帯垫圏) M5×10	BOLT SOCKET (S/P WASHER) M5×10	2	
00	411200000	555454002	※11年 (甲 王国 / MJ / 10	DOLI DOORLI (O/I WADIER) MOXIO		
51	L01011	017501616	螺栓 M5×16	BOLT M5×16	Α	
52	W01009	025050236	 野性 M5×10 平	WASHER PLAIN M5	4	
53	W02001	028050246	一	WASHER SPRING 2-5	4	
54	41712041	SA4715001	送料板 1310	FEED PLATE 1310	1	
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## C4. 送料装置 / Feed mechanism



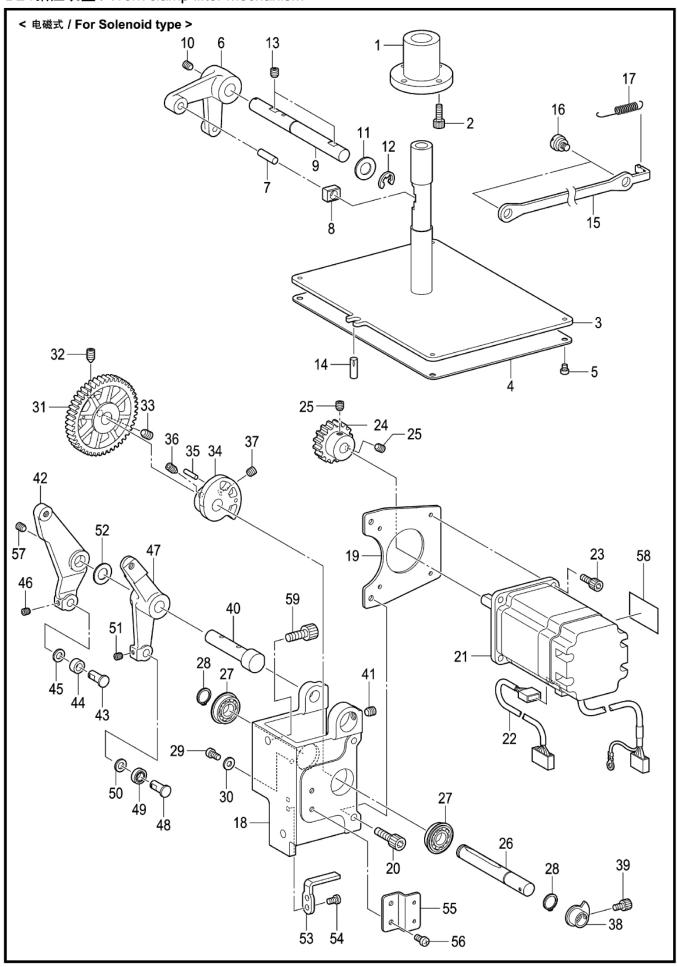
## C4、送料装置/Feed mechanism

序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41701006	SA4686101	压脚臂	WORK CLAMP	1	
2	41702011	SA4717001	气缸轴	CYLINDER SHAFT	1	
3	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	2	
5	41730035	SA4719001	气缸组件 R	AIR CYLINDER ASSY	2	
6	H03019	048050142	轴用挡圈 C5	RETAINING RING EXTERNAL C5	2	
7	41709012	SA4720001	气缸接头	CYLINDER JOINT	2	
8	41726002	SA4721001	气缸接头轴	CYLINDER JOINT SHAFT	2	
9	Н05027	048060142	轴用挡圈 C6	RETAINING RING EXTERNAL C6	4	
10	41712042	SA4722001	压脚柄 R(气压)	WORK CLAMP LIFTER LEVER R AIR	1	
11	41712043	SA4723001	压脚柄 L(气压)	WORK CLAMP LIFTER LEVER L AIR	1	
12	41712044	SA4724001	压脚臂杆(气压)	WORK CLAMP LIFTER SHAFT AIR	2	
13	417S30033	S55479001	螺栓(带垫圈)M4×8	BOLT SOCKET(S/P WASHER) M4×8	2	
14	41702012	SA4692001	压脚臂杆轴	WORK CLAMP LIFTER SHAFT	1	
15	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
16	Н03006	048080142	轴用挡圈 C8	RETAINING RING EXTERNAL C8	1	
17	41712133	110367001	垫圈 8	WASHER PLAIN SPECIAL 8	1	
18	41708002	SA3231001	紧圈 B	SET SCREW COLLAR B	1	
19	S09041	012060536	螺钉 M6×5	SET SCREW SOCKET(FT)M6×5	2	
20	4170901300	SA4863001	压脚导向组件 A	WORK CLAMP GUIDE A ASSY	1	
21	417S15003	S23849001	螺钉 M4×16	SCREW M4×16	2	
22	4170901400	SA4864001	压脚导向组件 B	WORK CLAMP GUIDE B ASSY	2	
23	417S30034	S55482001	螺栓 (带垫圈) M4×14	BOLT SOCKET(S/P WASHER) M4×14	4	
24	4170901500	SA4712001	压脚滑块组件 R	WORK CLAMP SLIDER ASSY R	1	
25	4170901600	SA4714001	压脚滑块组件 L	WORK CLAMP SLIDER ASSY L	1	
26	41724002	SA4706101	压脚挡板组件	WORK CLAMP RETAINER ASSY	4	
27	41712045	SA4725001	压脚 R	WORK CLAMP R	1	
28	417S30036	S55485001	螺栓 (帯垫圏) M5×12	BOLT SOCKET (S/P WASHER) M5×12	1	
29	S09009	012501031	螺钉 M5×10	SET SCREW SOCKET (FT) M5×10	2	
30	N01017	021500216	六角螺母 M5	NUT 2 M5	2	
31	417S20001	SA4709001	定位段螺钉	SHOULDER SCREW	2	
32	41712046	SA4726001	压脚 L	WORK CLAMP L	1	
33	417S30036	S55485001	螺栓 (帯垫圏) M5×12	BOLT SOCKET(S/P WASHER) M5×12	1	
34	S09009	012501031	螺钉 M5×10	SET SCREW SOCKET (FT) M5×10	2	
35	N01017	021500216	六角螺母 M5	NUT 2 M5	2	
36	417S20001	SA4709001	定位段螺钉	SHOULDER SCREW	2	
30	417520001	5A4105001	足世权赊订	SHOOLDER SCREW	2	
			〈用于1310〉	⟨For 1310⟩		
37	41712047	SA4868101	压板组件 1310R	WORK CLAMP 311R ASSY	1	
38	41712048	SA4869101	压板组件 1310L	WORK CLAMP 311L ASSY	1	
39	417S30035	S55484002	螺栓 (带垫圈) M5×10	BOLT SOCKET(S/P WASHER) M5×10	4	
40	L01011	017501616	螺栓 M5×16	BOLT M5×16	4	
41	W01009	025050236	平垫圈 M5	WASHER PLAIN M5	4	
42	W02001	028050246	弹簧垫圈 2-5	WASHER SPRING 2-5	4	
43	41712049	SA4715001	送料板 1310	FEED PLATE 311G	1	
44	417S30035	S55484002	螺栓 (带垫圈) M5×10	BOLT SOCKET (S/P WASHER) M5×10	2	
			∠用于2210\	⟨For 2210⟩		
45	41712050	SA4870101	<用于2210> 压板组件 2210R	WORK CLAMP 2210R ASSY	1	
			压板组件 2210k		1	
46	41712051	SA4871101		WORK CLAMP 2210L ASSY		
39	417S30035	S55484002	螺栓 (带垫圈) M5×10	BOLT SOCKET (S/P WASHER) M5×10	4	
40	L02006	017501616	螺栓 M5×16	BOLT M5×16	4	
41	W01009	025050236	平垫圈 M5	WASHER PLAIN M5	4	
42	W02001	028050246	弹簧垫圈 2-5	WASHER SPRING 2-5	4	
44	417S30035	S55484002	螺栓(带垫圈)M5×10	BOLT SOCKET(S/P WASHER) M5×10	2	
47	41712052	SA4852001	送料板 2210	FEED PLATE 2210	1	

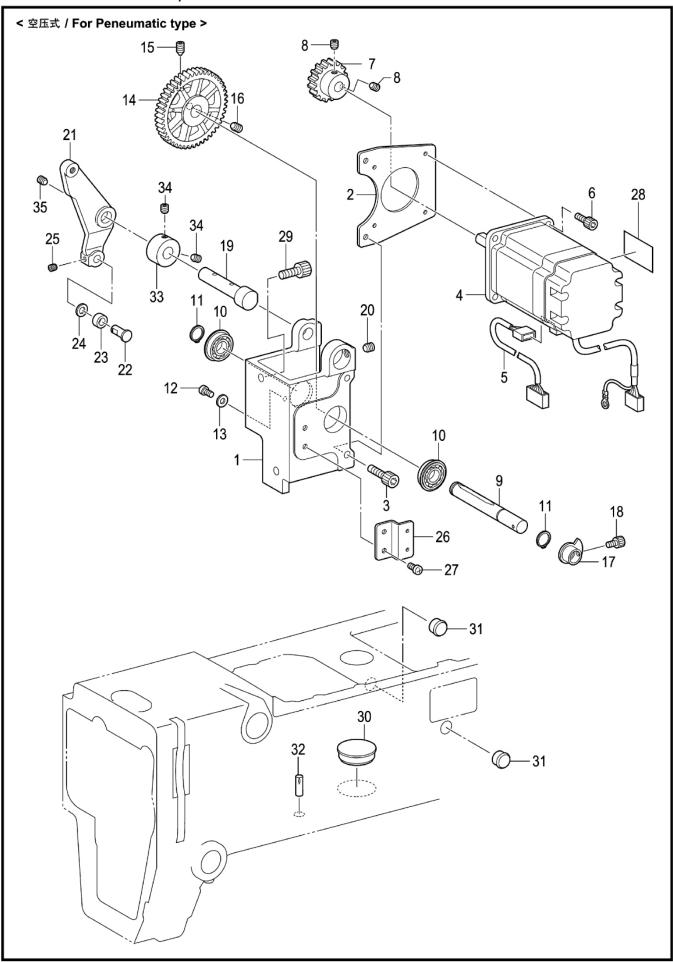


#### D1、抬压脚装置/Work clamp lifter mechanism

序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41710001	SA4759001	凸轮	STEPPING CLAMP CAM	1	
2	41705001	SA4760001	连杆	STEPPINGCLAMP CON. ROD	1	
3	41728003	SA4763001	垫圈	WASHER STEPPING CLAMP CAM	1	
4	B06008	623033000	轴承 6805VV	BALL BEARING 6805VV	1	
5	S10018	S23651001	固定螺钉 M6×0.75-6	SET SCREW SOCKET(FT)M6×6	2	
6	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	2	
7	41726003	SA4761001	滚轮轴	ROLLER SHAFT STEPPING CLAMP	1	
8	41703010	SA4762001	滚轮	ROLLER STEPPING CLAMP	1	
9	41728004	SA4302001	垫圈	WASHER	2	
10	N01021	021060106	螺母 M6	NUT 1 M6	1	
11	41709017	SA4764001	压臂 R	STEPPING CLAMP ARM R	1	
12	L02032	017061216	螺栓 M6×12	BOLT M6×12	1	
13	41702013	SA4765001	压臂 F	STEPPING CLAMP ARM F	1	
14	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6 × 6	1	
15	S10018	S23651001	固定螺钉 M6×0.75-6	SET SCREW SOCKET (FT) M6 × 6	1	
16	41703011	SA4766001	压臂轴套 F	BUSH STEPPING CLAMP F	1	
17 18	41703012 41712053	SA4767001	压臂轴套 R 间歇连杆 A	BUSH STEPPING CLAMP R	1	
18	41712053 417S30007	SA4768001 SA4769001	段螺钉 6	STEPPING CLAMP LINK A SHOULDER SCREW 6	4	
20	S04036	062300416	螺钉 M3×4	SCREW PAN M3×4	4	
21	41712054	SA4770001	间歇连杆 B	STEPPING CLAMP LINK B	1	
22	41712054	SA4770001 SA4772001	间歇联杆	STEPPING CLAMP LINK B	1	
23	41726004	SA4773001	联杆轴	SHAFT STEPPING CLAMP LINK	1	
24	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
25	S09006	012400436	螺钉 M4×4	SET SCREW SOCKET (FT) M4×4	1	
26	41709018	SA4777001	联接板	STEPPING CLAMP LIFTER LINK	1	
27	41702014	SA4771001	联接板轴	SHAFT STEPPING CLAMP LIFTER LINK	1	
28	41728031	SA2161001	<b>垫圈</b>	WASHER	1	
29	Н03006	048080142	轴用挡圈 C8	RETAINING RING EXTERNAL C8	1	
30	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
31	S09006	012400436	螺钉 M4×4	SET SCREW SOCKET (FT) M4×4	1	
32	41709019	SA4779001	间歇提升杆	STEPPING CLAMP LIFTER	1	
33	41703013	SA4781001	提升杆滑轮	ROLLER STEPPING CLAMP LIFTER	1	
34	41726005	141362001	滚轮轴	ROLLER	1	
35	41702015	SA4780001	提升杆轴	SHAFT STEPPING CLAMP LIFTER	1	
36	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET(FT)M6×6	1	
37	S02039	S25310101	螺钉 M4	SCREW FLAT M4	1	
38	41702016	SA4775001	提升连杆	STEPPING CLAMP LIFTER ROD	1	
39	417S12003	SA4853001	提升连杆接头	JOINT STEPPING CLAMP LIFTER	1	
40	4170500200	SA2663001	接头组件 R	BALL JOINT ASSY	2	
41	N01012	021060306	六角螺母 M6	NUT 3 M6	2	
42	417S16001	SA3227001	螺母 M6×0.75	NUT (FT) M6	1	
43	417S30008	SA4776001	段螺钉	SHOULDER SCREW	1	
44	417S12005	S32462001	段螺钉B M6	SHOULDER SCREW B M6	1	
45	L01007	017065002	螺栓 M6×50	BOLT M6×50	1	
46	N01021	021060106	螺母 M6 压紧杆接头	NUT 1 M6	1	
47 48	41709020	SA4778001	」 「 「 「 「 」 「 」 「 」 「 」 「 」 「 」 「 」 「 」 、 」 、 、 、 、 、 、 、 、 、 、 、 、 、	PRESSER BAR CLAMP	1	
	S05116	018400836 SA1174001		BOLT SOCKET M4×8	1	
49 50	129S30003 129S16001	SA1174001 SA1175001	调节螺栓 M14 调节螺母 M14	PESSER ADJUSTING SCREW M14 ADJUST SCREW NUT	1	
51	41727004	SA5300001	弹簧	PRESSER BAR SPRING	1	
52	41727004	S10112001	弹簧导向	PRESSER BAR SPRING GUIDE	1	
53	41703014	SA5301001	弹簧管套	COLLAR PRESSER BAR SPRING	1	
54	41703014	SA2195001	压紧杆轴套	PRESSER BAR BUSH	1	
55	S09041	012060536	螺钉 M6×5	SET SCREW SOCKET (FT) M6 × 5	1	
56	41702018	111466101	压紧杆	PRESSER BAR	1	
57	41716001	*P. 67	压脚	WORK CLAMP	1	
58	417S15011	S13399001	螺钉 SM3.57×12	SCREW SM3. 57×12	1	
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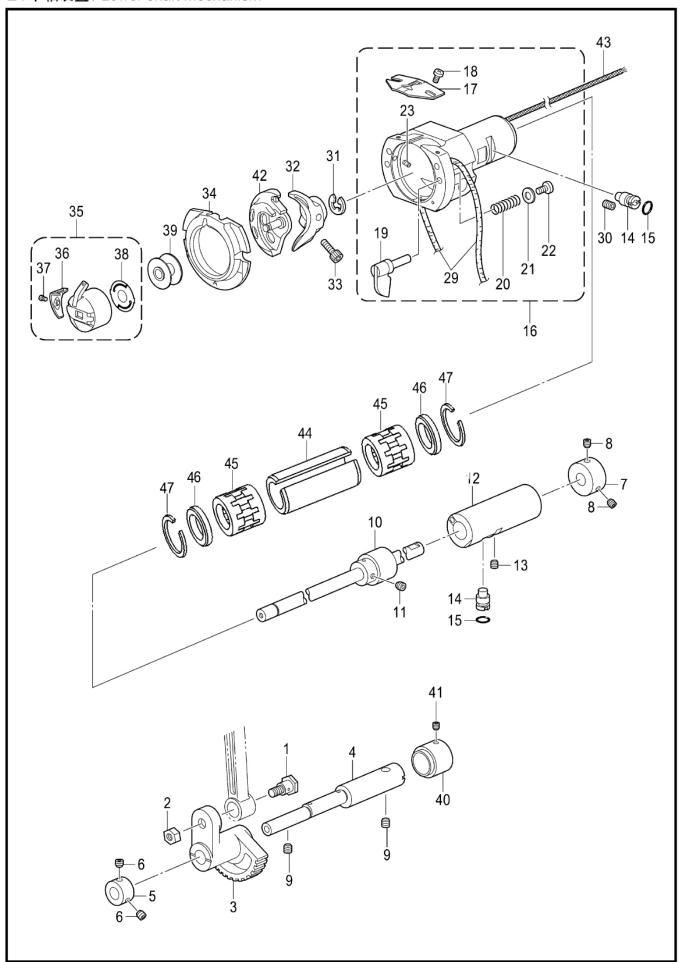
序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
			〈电磁式〉	⟨For Solenoid type⟩		
1	41724004	SA4729001	滑杆轴套	SLIDE BUSH	1	
2	S05048	018401036	螺钉 M4×10	BOLT SOCKET M4×10	4	
3	41712056	SA4731001	压脚提升板组件	WORK CLAMP LIFTER PATE ASSY	1	
4	41712057	SA4734001	底座板 E	SEAT E	1	
5	S04080	062400416	螺钉 M4×4	SCREW PAN M4×4	1	
6	41709021	SA4736001	压脚提升杆	WORK CLAMP LIFTER LEVER	1	
7	41726006	152744001	销	PIN	1	
8	41709022	102630001	压脚提升滑块	NEEDLE BAR GUIDE SLIDE BLOCK	1	
9	41702019	SA4737001	提升杆轴 B	WORK CLAMP LEVER SHAFT B	1	
10	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
11	41728001	S20356001	平垫圈 10	WASHER PLAIN 10	1	
12	Н05033	048080342	挡圈 E8	RETAINING RING E8	1	
13	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	2	
14	41729002	118208001	带槽销	DOWEL PIN	1	
15	41712058	SA4738001	压脚提升杆	WORK CLAMP LIFTER PATE ASSY	1	
16	417S20010	SA3438001	段螺钉	SHOULDER SCREW	2	
17	41727005	SA4739001	弹簧	PRESSER BAR SPRING	1	
18	41701008	SA4741101	马达座	MOTOR BRACKET	1	
19	41712063	SA4742001	压脚马达板	WORK CLAMP MOTOR PLATE	1	
20	S05121	018501036	螺栓 M5×10	BOLT SOCKET M5×10	2	
21	41730043	SA4826201	脉冲马达组件 P	PULSE MOTOR ASSY P	1	
22	41730044	SA4828001	马达端线 P	MOTOR HARNESS P	1	
23	S05048	018401036	螺钉 M4×10	BOLT SOCKET M4×10	4	
24	41725009	SA4743001	驱动齿轮	WORK CLAMP DRIVING GEAR	1	
25	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	2	
26	41702020	SA4744001	压脚支点轴	WORK CLAMP FULCRUM SHAFT	1	
27	B10015	SA4647001	球轴承 6900ZZNR	BALL BEARING 6900ZZNR	2	
28	Н03008	048100142	轴用挡圈 C10	RETAINING RING EXTERNAL C10	2	
29	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	1	
30	W01001	025040236	平垫圈 M4	WASHER PLAIN M4	1	
31	41725010	SA4745001	凸轮齿轮	WORK CLAMP CAM GEAR	1	
32	S10021	016061031	螺钉 M6×10	SET SCREW SOCKET (CN) M6×10	1	
33	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
34	41710002	SA4746001	压脚凸轮	WORK CLAMP CAM	1	
35	41724017	S35079000	滚针 3×11.8	NEEDLE ROLLER 3×11.8	1	
36	S10021	016061031	螺钉 M6×10	SET SCREW SOCKET (CN) M6×10	1	
37	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
38	4170301700	SA4747001	压脚原点挡块	WORK CLAMP H-POSITION DOG	1	
39	S05115	018400636	螺栓 M4×6	BOLT SOCKET M4×6	1	
40	41702025	SA4748001	压脚柄轴	WORK CLAMP LEVER SHAFT	1	
41	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
42	41709023	SA6210001	间歇驱动杆	STEPPING W-CLAMP DRIVING LEVER	1	
43	41702022	SA3441001	抬压滚轮轴	W-CLAMP LIFTER ROLLER SHAFT	1	
44	B04026	070696800	轴承 R-696ZZ	BALL BEARING RADIAL 696ZZ	1	
45	41728005	109763001	垫圈	WASHER	1	
46	S09019	012500536	螺钉 M5×5	SET SCREW SOCKET (FT) M5×5	1	
47	41709024	SA4750001	压脚驱动杆	WORK CLAMP DRIVING SHAFT	1	
48	41702022	SA3441001	抬压滚轮轴	W-CLAMP LIFTER ROLLER SHAFT	1	
49	B04026	070696800	轴承 R-696ZZ	BALL BEARING RADIAL 696ZZ	1	
50	41728005	109763001	垫圈	WASHER	1	
51	S09019	012500536	螺钉 M5×5	SET SCREW SOCKET (FT) M5×5	1	
52	41728001	S20356001	平垫圈 10	WASHER PLAIN 10	1	
53	41712061	SA4752001	凸轮定位	WORK CLAMP CAM STOPPER	1	
54	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	2	
55	41712062	SA4753001	压脚传感器板	WORK CLAMP SENSOR PLATE	1	
56	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	2	
57	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
58	41737005	SA4224001	注意符号 30×40	MARK ATTENTION 30×40	1	
59	S05110	018061236	螺栓 M6×12	BOLT SOCKET M6×12	2	



## D3、抬压脚装置/Work clamp lifter mechanism

序号 No.	公司件号 Part. No.	参考件号Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
			〈空压式〉	⟨For Penumatic type⟩		
1	41701008	SA4741101	马达座	MOTOR BRACKET	1	
2	41712063	SA4742001	压脚马达板	WORK CLAMP MOTOR PLATE	1	
3	S05121	018501036	螺栓 M5×10	BOLT SOCKET M5×10	2	
4	41730043	SA4826201	脉冲马达组件 P	PULSE MOTOR ASSY P	1	
5	41730044	SA4828001	马达端线 P	MOTOR HARNESS P	1	
6	S05048	018401036	螺栓 M4×10	BOLT SOCKET M4×10	4	
7	41725009	SA4743001	驱动齿轮	WORK CLAMP DRIVING GEAR	1	
8	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET(FT)M6×6	2	
9	41702020	SA4744001	压脚支点轴	WORK CLAMP FULCRUM SHAFT	1	
10	41724011	SA4647001	球轴承 6900ZZNR	BALL BEARING 6900ZZNR	2	
11	H03008	048100142	轴用挡圈 C10	RETAINING RING EXTERNAL C10	2	
12	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	1	
13	W01001	025040236	平垫圈 M4	WASHER PLAIN M4	1	
14	41725010	SA4745001	凸轮齿轮	WORK CLAMP CAM GEAR	1	
15	S10021	016061031	螺钉 M6×10	SET SCREW SOCKET(CN)M6×10	1	
16	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET(FT)M6×6	1	
17	4170301700	SA4747001	压脚原点挡块	WORK CLAMP H-POSITION DOG	1	
18	S05115	018400636	螺栓 M4×6	BOLT SOCKET M4×6	1	
19	41702025	SA4748001	压脚柄轴	WORK CLAMP LEVER SHAFT	1	
20	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
21	41709023	SA6210001	间歇驱动杆	STEPPING W-CLAMP DRIVING LEVER	1	
22	41702022	SA3441001	抬压滚轮轴	W-CLAMP LIFTER ROLLER SHAFT	1	
23	41724018	070696800	轴承 R-696ZZ	BALL BEARING RADIAL 696ZZ	1	
24	41728005	109763003	垫圈	WASHER	1	
25	S09019	012500536	螺钉 M5×5	SET SCREW SOCKET(FT)M5×5	1	
26	41712062	SA4753001	压脚传感器板	WORK CLAMP SENSOR PLATE	1	
27	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	2	
28	41737005	SA4224001	注意符号 30×40	MARK ATTENTION 30×40	1	
29	S05110	018061236	螺栓 M6×12	BOLT SOCKET M6×12	2	
30	41722012	159163000	橡皮塞 29	RUBBER CAP 29	1	
31	41722003	104821001	橡皮塞 10.5	RUBBER CAP 10.5	2	
32	P01011	118550001	带槽销	PIN DOWEL	1	
33	41708004	SA4757001	紧圈	SET SCREW COLLAR	1	
34	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET(FT)M6×6	2	
35	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	

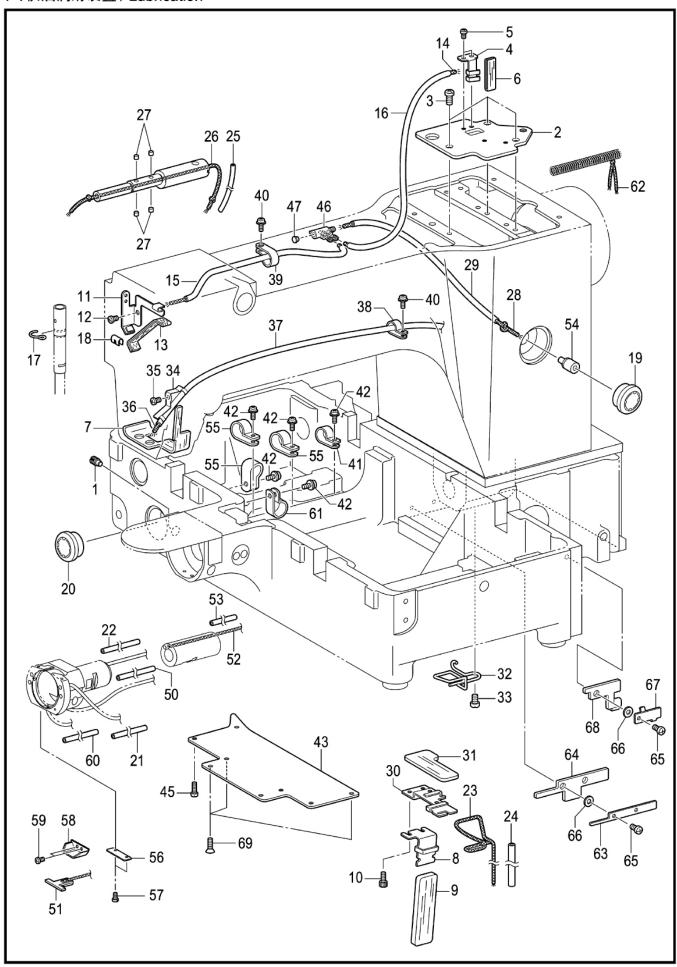
# E. 下轴装置 / Lower shaft mechanism



## E、下轴装置/Lower shaft mechanism

序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	417S30011	SA3226001	段螺钉	SHOULDER SCREW	1	
2	417S16001	SA3227001	螺母 M6×0.75	NUT (FT) M6	1	
3	41725011	SA3228101	摆动齿轮	ROCK GEAR	1	
4	41702027	SA4782001	摆动齿轮轴	ROCK GEAR SHAFT	1	
5	41708002	SA3231001	紧圈 B	SET SCREW COLLAR B	1	
6	S09041	012060536	螺钉 M6×5	SET SCREW SOCKET(FT)M6×5	2	
7	41708006	SA3233001	紧圈	SET SCREW COLLAR	1	
8	S10018	S23651001	固定螺钉 M6×0.75-6	SET SCREW SOCKET(FT)M6×6	2	
9	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET(FT)M6×6	2	
10	4170202800	SA4783001	下轴组件	LOWER SHAFT ASSY	1	
11	S09019	012500536	螺钉 M5×5	SET SCREW SOCKET(FT)M5×5	1	
12	41703019	SA6216001	下轴轴套	LOWER SHAFT BUSH	1	
13	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
14	41702029	SA3238101	旋梭调节轴	ADJUSTING STUD	2	
15	41722015	081003670	0形圈 PW3	O RING PW3	2	
16	41701009	SA6220001	大旋梭基座组件 G	SHUTTLE RACE BASE ASSY G	1	
17	41712190	S02429201	旋梭线导向	SHUTTLE RACE THREAD GUIDE	1	
18	417S15007	SA4199001	螺钉 M3×4	SCREW M3×4	2	
19	4172601500	SA3241001	大旋梭固定柄	S-RACE BASE SETTING CLAW	2	
20	41727006	152684101	弹簧	COMPRESSION SPRING	2	
21	W01002	026030236	垫圈 M3	WASHER PLAIN M3	2	
22	S04082	062300616	螺钉 M3×6	SCREW PAN M3×6	2	
23	41723013	153050000	油毡	S-RACE BASE FELT	2	
29	41723012	S59886001	油毡 L=360	FELT L=360	2	
30	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
31	H05032	048070342	挡圈 E7	RETAINING RING E7	1	
32	41718001	SA3284101	梭托 D	DRIVER D	1	
33	S05122	018501232	螺栓 M5×12	BOLT SOCKET M5×12	1	
34	41718002	*P. 66	外旋梭	SHUTTLE RACE BASE	1	
35	4171800300	*P. 66	梭芯套组件	BOBBIN CASE ASSY	1	
36	41727015	*P. 66	调节弹簧	TENSION SPRING	1	
37	417S30005	*P. 66	螺钉	SCREW	1	
38	41727016	*P. 66	防空转弹簧	ANTI-SPIN SPRING	1	
39	41718004	*P. 66	梭芯	BOBBIN	1	
40	41703020	SA3283101	紧圈 R	SET SCREW COLLAR R	1	
41	S09019	012500536	螺钉 M5×5	SET SCREW SOCKET (FT) M5×5	1	
42	41718005	*P. 66	中旋梭	SHUTTLE HOOK	1	
43	12923018	S32557001	油线 4×4 L=400	WICK 4×4 L=400	1	
44	41711027	SA3278001	轴圈	BUSH	1	
45	41711028	SA3276001	垫片	SPACER COLLER	2	
46	41724008		滚针轴承 K8×12×11	NEEDLE BEARING	2	
47	41729005		切口卡簧	RETAINING RING	2	

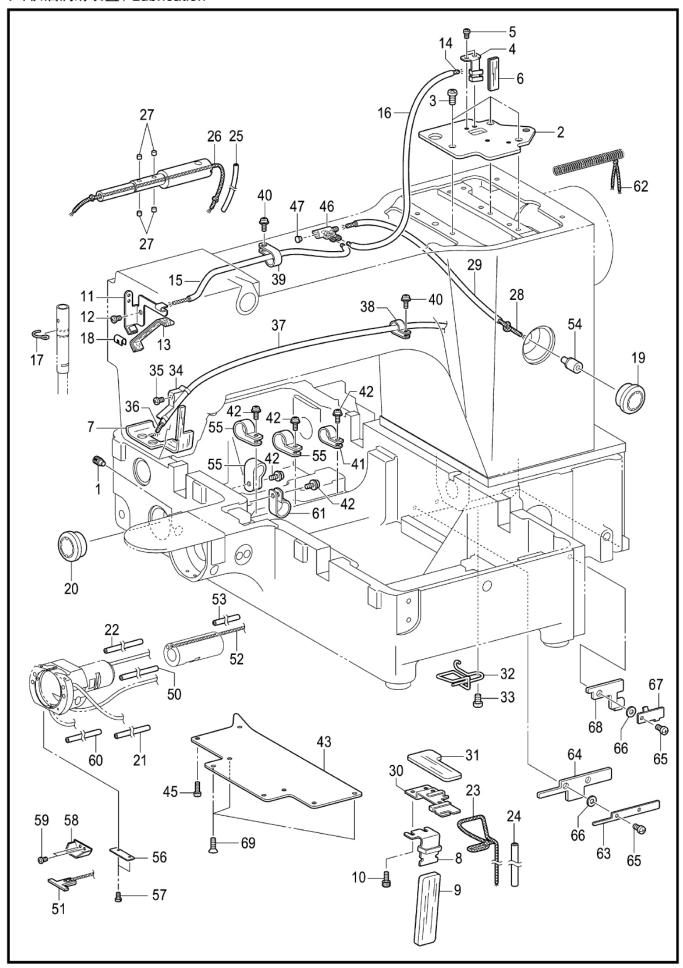
## F.供油润滑装置/Lubrication



## F、供油润滑装置/Lubrication

序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	417S30022	SA3244001	螺钉	SET SCREW	1	
2	41712065	SA4785001	曲柄盖	CRANK COVER	1	
3	S04038	062061016	螺钉 M6×10	SCREW PAN M6×10	3	
4	41712066	SA4787001	曲柄供油板	CRANK WICK PLATE	1	
5	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	2	
6	41723008	SA5294001	毡油线 L=90	FLAT WICK L=90	1	
7	41723005	SA4786101	油毡	FELT	1	
8	41712067	SA3503201	下轴给油支架	LOWER SHAFT WICK SUPPORT	1	
9	41723006	SA3504201	下轴齿轮油毡	LOWER SHAFT GEAR FELT	1	
10	S05115	018400636	螺栓 M4×6	BOLT SOCKET M4×6	2	
11	41712068	SA4788001	供油支架	WICK SUPPORT	1	
12	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	1	
13	41723008	SA6593001	毡油线 L=180	FLAT WICK L=180	1	
14	41723009	SA5292001	油线 Φ2.5 L=780	WICK L=780	1	
15	12921002	S07459100	油管 Φ3×Φ5 L=240	OIL TUBE L=240	1	
16	12921002	SA6576001	油管 Φ3×Φ5 L=210	OIL TUBE L=210	1	
17	41712069	SA6087001	油线挂钩	WICK SUPPORT	1	
18	41712070	104567101	油线支架	WICK SUPPORT	1	
19	4171100300	S49992000	油视窗	OIL GAUGE WINDOW	1	
20	4171100400	152948001	油视窗	OIL GAUGE WINDOW	1	
21	12921002	S50529000	油管 Φ3×Φ5 L=330	OIL TUBE L=320	1	
22	12921002	S07459100	油管 Φ3×Φ5 L=240	OIL TUBE L=240	1	
23	12923018	SA5292101	油线 4×4 L=680	WICK L=680	1	
24	12921002	S53175000	油管 Φ3×Φ5 L=450	OIL TUBE L=450	1	
25	12921002	SA5072001	油管 Φ3×Φ5 L=120	OIL TUBE L=120	1	
26	12923019	S45849000	油线 6×6 L=300	WICK 6×6 L=300	1	
27	41723011	S09043000	油毡	FELT	4	
28	12923018	S49982000	油线 4×4 L=400	WICK 4×4 L=400	1	
29	12921002	S48189000	油管 Φ3×Φ5 L=280	OIL TUBE L=280	1	
30	41712071	SA3246001	齿轮供油支架	GEAR WICK SUPPORT	1	
31	41723031	SA3280001	油毡	GEAR FELT	1	
32	41712072	SA4789101	油线夹 B	LOWER SHAFT WICK SUPPORT B	1	
33	S04033	062060816	螺钉 M6×8	SCREW PAN M6×8	1	
34	41712073	145547001	回油管管托	TUBE HOLDER	1	
35	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	1	
36	12923018	S49957000		WICK 4×4 L=1370	1	
37	12921005	SA4791101	油管 Φ4×Φ6 L=620	OIL TUBE L=620	1	
39	41711014	149547000	压线板	CORD HOLDER 4N	1	
39	41711015	525567000	电线夹 #8	CORD HOLDER #8  SCREW PAN(S/P WASHER) M4×10	1	
40	417S30025 41711016	0A5401006		CORD HOLDER #6	2	
41		525664000	电线夹 #6			
42 43	417S30025 41712074	0A5401006 SA5259001		SCREW PAN(S/P WASHER) M4×10 OIL COVER	5 1	
45	41712074 417S30021	062401016		SCREW PAN M4×10	5	
46	417330021	S38265000	等接头 L	TERMINAL L	1	
47	41722016	142274101	橡皮塞 4.2	RUBBER CAP 4.2	1	
50	12921003	SA6263001		OIL TUBE L=320	1	
51	4172302100	SA6260001	油毡组件	FELT ASSY	1	
52	4172302100	S00400000	油线 Φ2.5 L=200	WICK 2.5×200	1	
53	12921002	SA6579001	油线 Φ2.5 L-200 油管 Φ3×Φ5 L=110	OIL TUBE L=110	1	
54	41736002	SA5339101	油嘴管	OIL FEEDING PIPE	1	
55	41711015	525567000	电线夹 #8	CORD HOLDER #8	3	
56	41711015	SA3242001	油毡支架	FELT HOLDER	1	
57	417S15009	S44924001	固定螺钉 M3×5.5	SCREW M3×5.5	2	
58	417313003	SA3274101	油毡支架	FELT HOLDER	1	
59	417S15010	S47307001	螺钉 M3×4	SCREW M3×4	2	
60	12921002	SA6577001	源行 M3ハ4 油管 Φ3×Φ5 L=300	OIL TUBE L=300	1	
61	41711017	552907000	电线夹 #10	CORD HOLDER #10	1	
62	41723014	SA6572001	油线 L=140	WICK L=140	1	
63	41712110	SA6581001	油毡压板 L	WICK E-140 WICK SUPPORT L	1	
64	41723024	SA6583001	底板油毡 L	FELT BEDL	1	
0.1	11.20021	0110000001	INN NATH ED E	. 55. 0000		

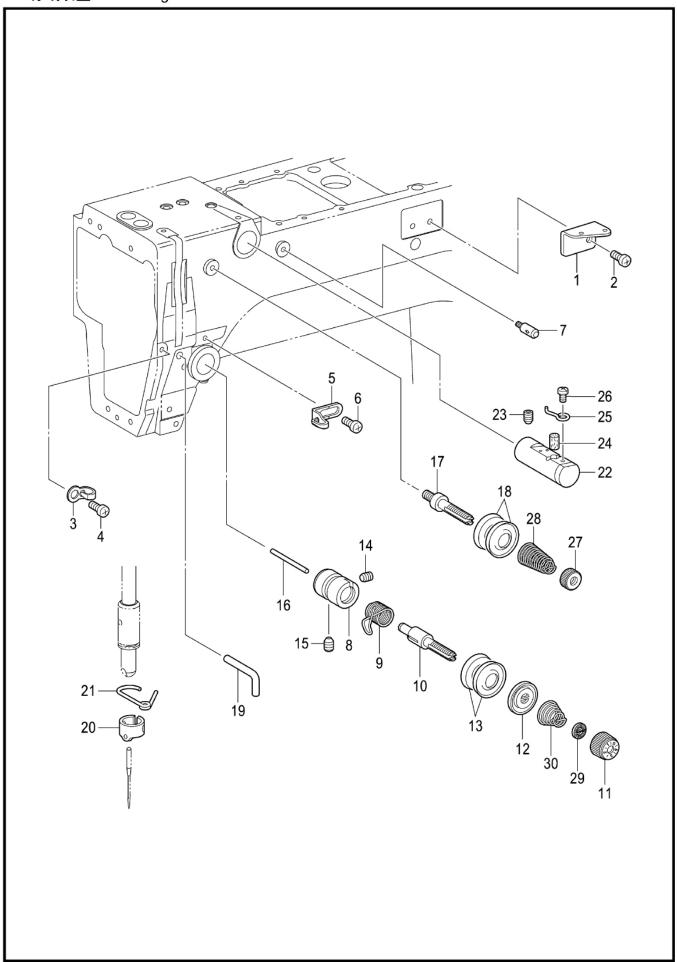
## F.供油润滑装置 / Lubrication



### F、供油润滑装置/Lubrication

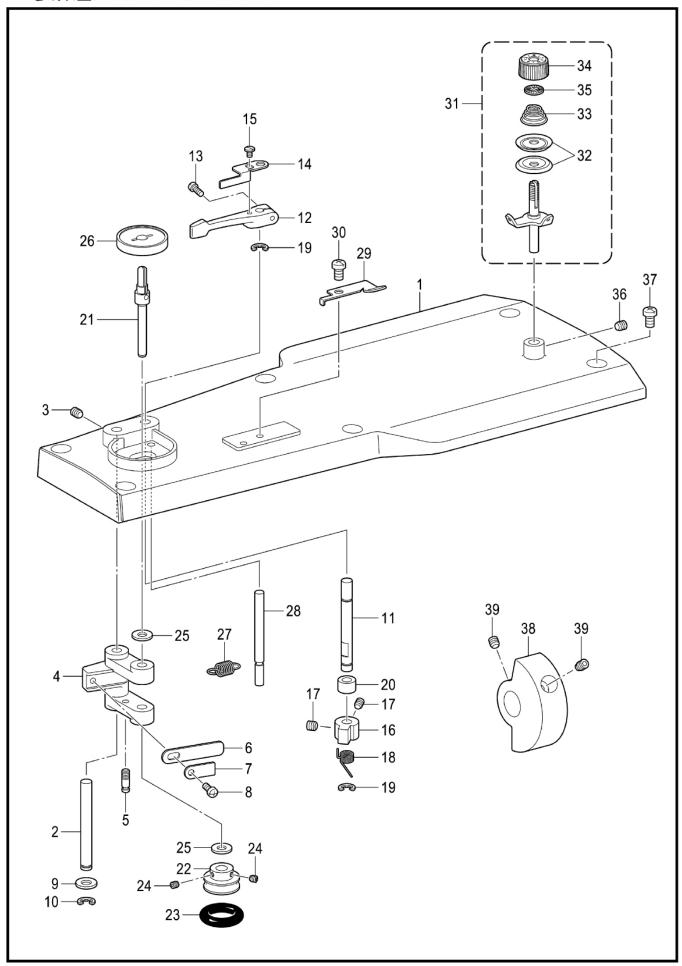
序号 No.	公司件号 Part. No.	参考件号 Ref.No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
65	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	3	
66	W02008	028040246	弹簧垫圈 2-4	WASHER SPRING 2-4	3	
67	41712130	SA6582001	油毡压板 R	WICK SUPPORT R	1	
68	41723018	SA6584001	底板油毡 R	FELT BED R	1	
69	S02039	S25310101	螺钉 M4	SCREW FLAT M4	3	

# G . 穿线装置/ Threading mechanism



### G、穿线装置/Threading mechanism

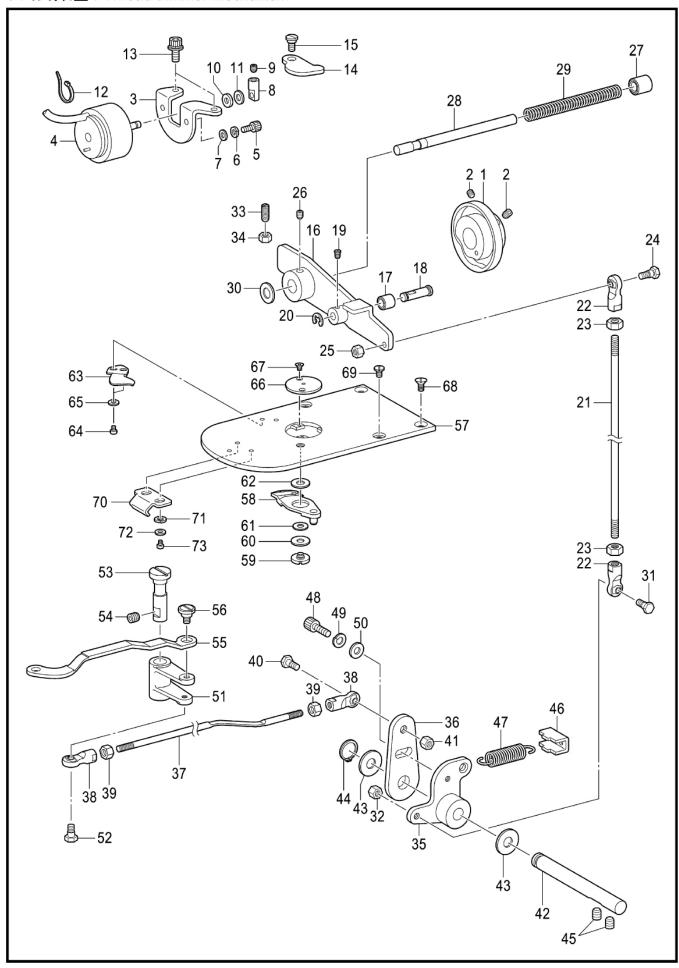
序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41712077	SA3250001	过线导向 A	ARM THREAD GUIDE A	1	
2	S04030	062500616	螺钉 M5×6	SCREW PAN M5×6	1	
3	41712078	SA4333001	过线导向 B	ARM THREAD GUIDE B	1	
4	S04030	062500616	螺钉 M5×6	SCREW PAN M5×6	1	
5	41712079	SA6391001	过线器 C	ARM THREAD GUIDE C	1	
6	S04030	062500616	螺钉 M5×6	SCREW PAN M5×6	1	
7	41702030	153049001	面线导向杆	UPPER THREAD GUIDE STUD	1	
8	41713001	SA3254001	夹线座	TENSION BRACKET	1	
9	41713002	*P. 66	调节弹簧	THREAD TAKE-UP SPRING	1	
10	41713003	SA3255001	夹线杆轴	TENSION STUP	1	
11	129S30013	S31032001	压线螺母	TENSION NUT	1	
12	41713005	159805001	夹线压盘	TENSION DISC PRESSER	1	
13	41713006	145446001	夹线盘	DISC TENSION	1	
14	417S15012	100402004	固定螺钉 SM3.57	SET SCREW SM3.75	1	
15	417S10004	SA4143001	螺钉 M6×6	SET SCREW (FT) M6×6	1	
16	41702031	S12699000	松线销	TENSION RELEASE PIN	1	
17	41713007	SA3256001	夹线杆轴 A	TENSION STUD A	1	
18	41713006	145446001	夹线盘	DISC TENSION	2	
19	41712080	159224001	线钩	THREAD GUIDE ARM	1	
20	41726014	*P. 67	针杆线导向	NEEDLE BAR THREAD GUIDE	1	
21	41712082	SA3258001	针杆轴套线导向 D	N-BAR BUSH THREAD GUIDE D	1	
22	41203018	152881001	线冷却器组件	NEEDLE COOLER ASSY	1	
23	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
24	41223043	152883000	油毡 8×15.5	FELT 8×15.5	1	
25	41213008	152884001	过线钩	NEEDLE COOLER THREAD GUIDE	1	
26	409S11017	062670412	螺钉 SM3.57-40×4	SCREW PAN SM3.57-40×4	1	
27	41713009	100136001	夹线螺母	TENSION NUT	1	
28	41713010	SA4146001	弹簧	SUB TENSION SPRING	1	
29	41713011	S12441001	止动垫圈	WASHER	1	
30	41713012	*P. 66	夹线簧	TENSION SPRING	1	



### H、卷线装置/Bobbin winder mechanism

序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41701010	SA4795001	顶盖	TOP COVER	1	
2	41702033	SA3290001	卷线手柄轴	SHAFT BW-LEVER	1	
3	S09019	012500536	螺钉 M5×5	SET SCREW SOCKET (FT) M5×5	1	
4	41709026	SA3291001	卷线手柄	BOBBIN WINDER LEVER	1	
5	41702034	SA4171001	弹簧挂钩	SPRING HOOK	1	
6	41712084	152936001	板弹簧	PLATE SPRING	1	
7	41712085	152937001	垫圈	WASHER	1	
8	S04077	062350616	螺钉 M3.5×6	SCREW PAN M3.5×6	1	
9	W01015	159486001	垫圈	WASHER	1	
10	H05006	048050342	挡圈 E5	RETAINING RING E5	1	
11	41702035	SA3293001	卷线卡爪轴	STUD B-WINDER	1	
12	41709027	SA1984001	梭芯压臂柄	BOBBINPRESSER ARM	1	
13	S04081	062401216	螺钉 M4×12	SCREW PAN 4×12	1	
14	41712086	SA3294001	梭芯压杆	BOBBIN PRESSER	1	
15	417S15006	S23418002	螺钉 M4×5	SCREW M4×5	1	
16	41709028	SA3295001	卷线卡爪	CLAW B-WINDER	1	
17	S09006	012400436	螺钉 M4×4	SET SCREW SOCKET (FT) M4×4	2	
18	41727007	S10438001	弹簧	SPRING TWIST	1	
19	Н05006	048050342	挡圈 E5	RETAINING RING E5	2	
20	41708025	SA4796001	垫片	SPACER COLLER	1	
21	41702036	SA3296001	卷线轴	BOBBIN WINDER SHAFT	1	
22	41703021	SA3297001	卷线器	WHEEL B-WINDER	1	
23	41722017	120448001	橡皮圈	BOBBIN WINDER RUBBER BAND	1	
24	S09006	012400436	螺钉 M4×4	SET SCREW SOCKET (FT) M4 × 4	2	
25	W01015	159486001	垫圈	WASHER	2	
26	41711063	SA1988001	梭芯座	BOBBIN SUPPORT	1	
27	41727008	S10268001	拉簧	SPRING	1	
28	41702037	SA3298001	止动轴	STPPER SHAFT B-WINDER	1	
29	41719001	SA3299001	切刀	KNIFT	1	
30	S04030	062500616	螺钉 M5×6	SCREW PAN M5×6	1	
31	1291301100	SA1994101	卷线器夹线组件	BOBBIN WINDER TENSION ASSY	1	
32	12913007	145446002	夹线盘	DISC TENSION	2	
33	12927016	100401022	夹线弹簧	TENSION SPRING	1	
34	129S30013	S31032001	压线螺母	TENSION NUT	1	
35	12928014	S12441001	止动垫圈	WASHER	1	
36	S09019	012500536	螺钉 M5×5	SET SCREW SOCKET (FT) M5×5	1	
37	S04038	062061016	螺钉 M6×10	SCREW PAN M6×10	6	
38	41704002	SA4797101	卷线驱动轮	DRIVING WHEEL B-WINDER	1	
39	S10018	S23651001	固定螺钉 M6×0.75-6	SET SCREW SOCKET (FT) M6×6	2	

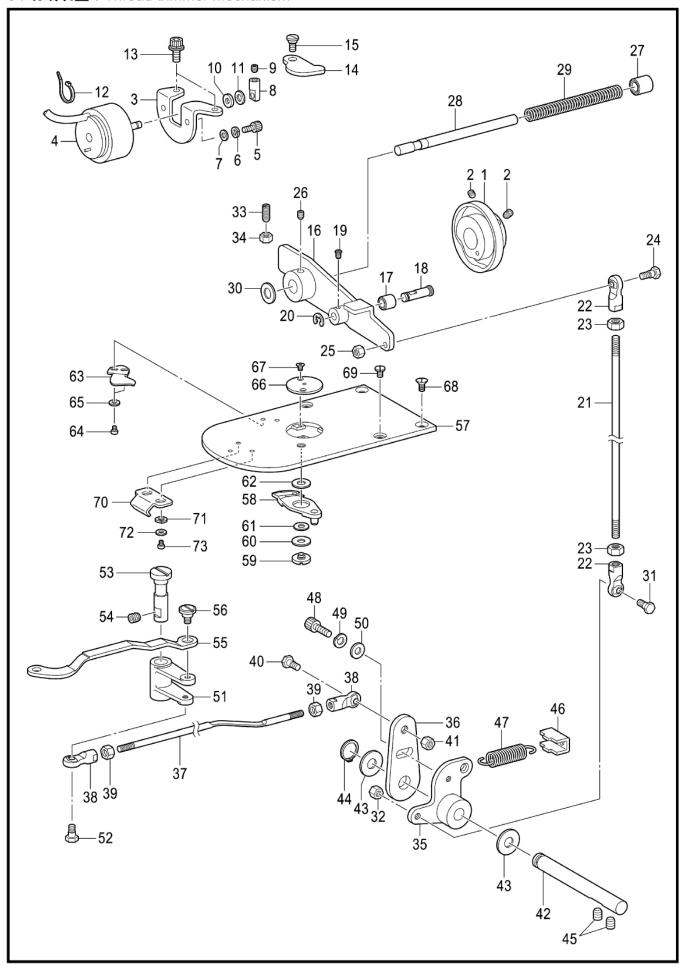
## J. 切线装置 / Thread trimmer mechanism



### J、切线装置/Thread trimmer mechanism

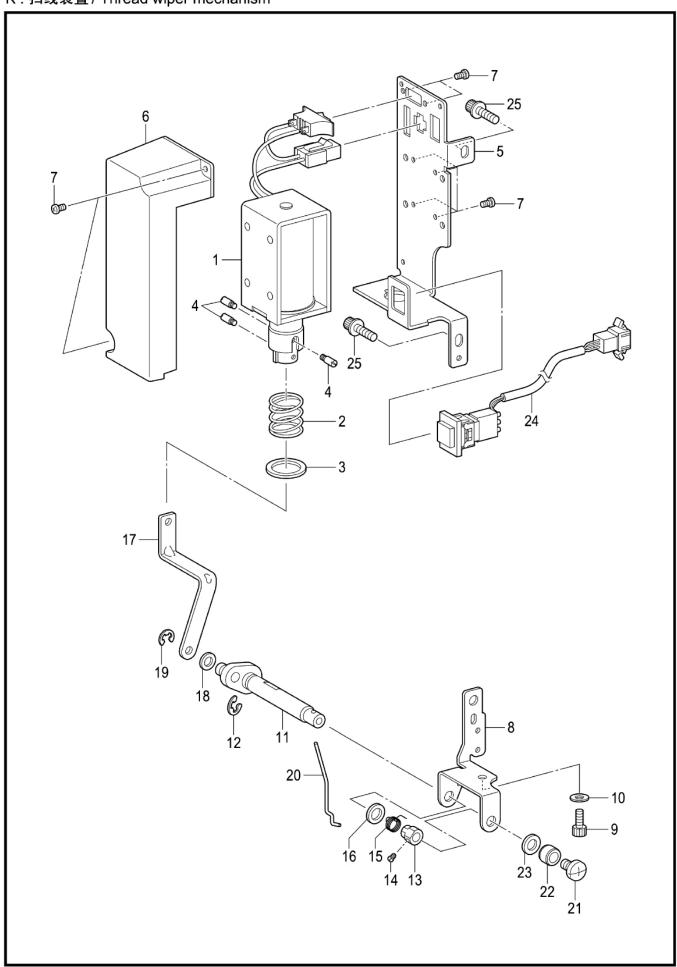
序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41710003	SA3301101	切线凸轮	THREAD TRIMMER CAM	1	
2	S10018	S23651001	固定螺钉 M6×0.75-6	SET SCREW SOCKET (FT) M6×6	2	
3	41712087	SA4798001	电磁铁安装板	SETTING PLATE SOLENOID	1	
4	41730001	SA5135001	切线电磁铁	THREAD TRIMMER SOLENOID	1	
5	L02031	017400802	螺栓 M4×8	BOLT M4×8	2	
6	W02008	028040246	弹簧垫圈 2-4	WASHER SPRING 2-4	2	
7	W01001	025040236	平垫圈 M4	WASHER PLAIN M4	2	
8	41702038	SA3307001	电磁铁杆	SOLENOID LEVER	1	
9	S09006	012400436	螺钉 M4×4	SET SCREW SOCKET (FT) M4×4	1	
10	41722020	154599000	电磁铁缓冲垫圈	SOLENOID CUSHION	1	
11	41728033	S02445001	垫圈	WASHEWR	1	
12	11211005	S04159000	线夹 1M	BAND 1M	1	
13	417S30035	S55484002	螺栓 (带垫圈) M5×10	BOLT SCREW SOCKET(S/P WASHER)M5×10	2	
14	41712088	SA4799001	驱动压杆	PUSHING LEVER D-LEVER	1	
15	417S30012	SA3306001	段螺钉 7-3	SHOULDER SCREW 7-3	1	
16	4171211100	SA3309101	切线驱动杆组件	TR-DRIVING LEVER	1	
17	4171211100	SA3310001	切线滚轮	COLLAR TR-TRIMMER	1	
18	41702039	SA3311001	切线滚轮轴	COLLAR SHAFT	1	
19	41702039 417S12009	S46903001	螺钉 M4×5	SET SCREW M4×5	1	
20	H05029	048040342	 	RETAINING RING E4	1	
21	41702040	SA3315001	切线杆 V	THREAD TRIMMER RODV	1	
22	4170500300	S32465001	接头组件	BALL JOINT ASSY	2	
23	N01021	021060106	螺母 M6	NUT 1 M6	2	
24	417S12005	S32462001	段螺钉B M6	SHOULDER SCREW B M6	1	
25		021060306	六角螺母 M6	NUT 3 M6	1	
26	N01012 S10018	S23651001	万用螺母 M6 × 0.75−6	SET SCREW SOCKET (FT) M6×6	1	
27			轴套 8×15	BUSH 8×15	1	
	41703023	231071001		GUIDE SHAFT	1	
28	41702041	SA3312001	驱动杆导向轴	-		
29	41727009	SA3313101	弹簧 减震垫圈	SPRING COMPRESSION	1	
30	41722018	154596000	段螺钉B M6	CUSHION	1	
31 32	417S12005	S32462001	六角螺母 M6	SHOULDER SCREW B M6		
-	N01012	021060306		NUT 3 M6	1	
33	417S10003	S25475101	螺钉 M6×19	SET SCREW M6×19	1	
34	N01021	021060106	螺母 M6	NUT 1 M6	1	
35	41712089	SA4546001	切线杠杆 V	THREAD TRIMMER LEVER V	1	
36	41712090		切线杠杆 H	THREAD TRIMMER LEVER H	1	
37	41712091	SA4801001	切线杆 H	THREAD TRIMMER ROD H		
38	4170500300	S32465001	接头组件	BALL JOINT ASSY	2	
39	N01021	021060106	螺母 M6	NUT 1 M6	2	
40	417S12005	S32462001	段螺钉B M6	SHOULDER SCREW B M6	1	
41	N01012	021060306	六角螺母 M6	NUT 3 M6	1	
42	41702042	SA3319101	切线杠杆轴	SHAFT TR-TRIMMER LEVER	1	
43	41728023	SA4545001	垫片 独田採園 CO	SPACER  DETAINING DING EVIEDNAL CO	2	
44	H03006	048080142	轴用挡圈 C8	RETAINING RING EXTERNAL C8	1	
45	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	2	
46	41712092	SA3320101	弹簧挂钩 	SPRING HOOK	1	
47	41727010	SA3321001	切线复位弹簧	SPRING EXTENSION	1	
48	S05123	018501236	螺栓 M5×12	BOLT SOCKET M5×12	1	
49	W02001	028050246	弹簧垫圈 2-5	WASHER SPRING 2-5	1	
50	41728028	146354002	<u> </u>	WASHER PLAIN 5	1	
51	41709029	SA3324001	动刀曲柄	MOVING KNIFE LEVER	1	
52	417S12007	SA3325001	段螺钉 6.35-6	SHOULDER SCREW 6. 35-6	1	
53	41702043	SA4802001	动刀杆轴	SHAFT MOVABLE KNIFE LEVER	1	
54	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (FT) M6×6	1	
55	41712093	SA3327101	动刀连杆	M-KNIFE CONNECTING PLATE	1	
56	417S30013	SA4354001	段螺钉 6-1.8	SHOULDER SCREW 6-1.8	1	
57	41715001	SA5157001	针板A	NEEDLE PLATE A	1	
58	4170903000	SA3330001	动刀组件 F	MOVABLE KNIFE ASSY F	1	
59	417S30014	SA4518001	段螺钉	MOVABLE KNIFE SHOULDER SCREW	1	
60	41728007	SA4519001	动刀圈套	THRUST WASHER	1	
61	41728008	S00705001	动刀圈套	MOVABLE KNIFE COLLAR	1	

## J. 切线装置 / Thread trimmer mechanism



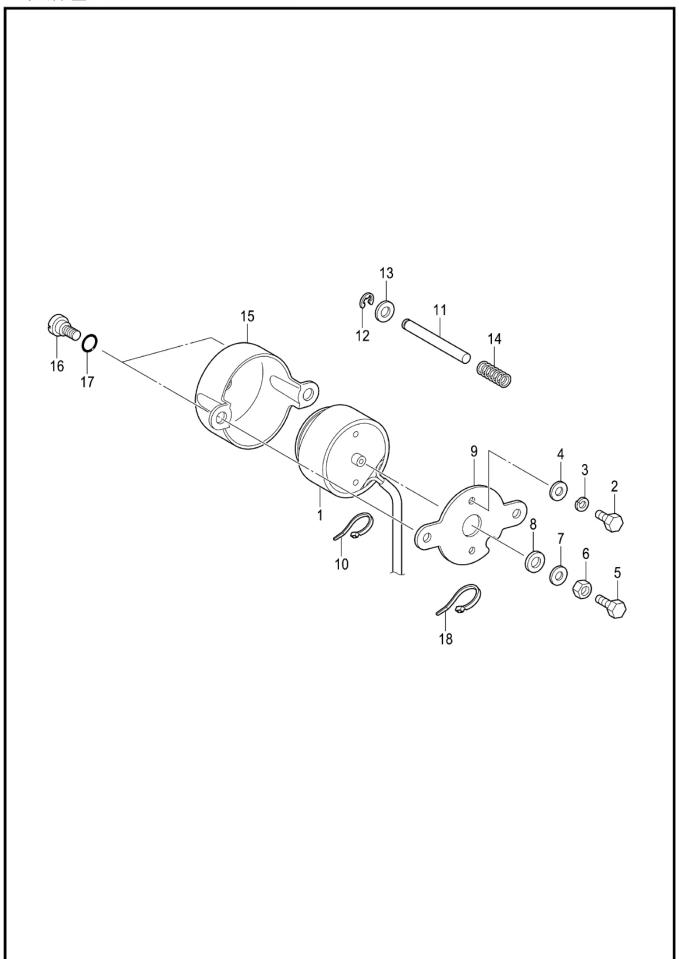
### J、切线装置/Thread trimmer mechanism

序号 No.	公司件号 Part. No.	参考件号 Ref.No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
62	41728009	SA6297001	垫片 0.2	M-KNIFE SPACER TO. 2	1	
62	41728009	SA3334001	垫片 0.3	M-KNIFE SPACER TO. 3	1	
62	41728009	SA6398001	垫片 0.4	M-KNIFE SPACER TO. 4	1	
63	41719002	SA3335001	定刀 F	FIXED KNIFE F	1	
64	S04036	062300416	螺钉 M3×4	SCREW PAN M3×4	2	
65	W01002	026030236	垫圈 M3	WASHER PLAIN M3	2	
66	41712094	*P. 66	针孔板	NEEDLE HOLE PLATE	1	
67	417S17001	100360003	螺钉 SM2.38	SCREW	2	
68	S02039	S25310101	螺钉 M4	SCREW FLAT M4	2	
69	417S15008	SA3538001	螺钉 M4×8	SCEW M4×8	2	
70	41712095	SA6273001	大旋梭盖挂钩 U	SHUTTLE BASE COVER HOOK U	1	
71	W02007	028030246	弹簧垫圈 2-3	WASHER SPRING 2-3	2	
72	W01002	026030236	垫圈 M3	WASHER PLAIN M3	2	
73	S04036	062300416	螺钉 M3×4	SCREW PAN M3×4	2	



### K、扫线装置/Thread wiper mechanism

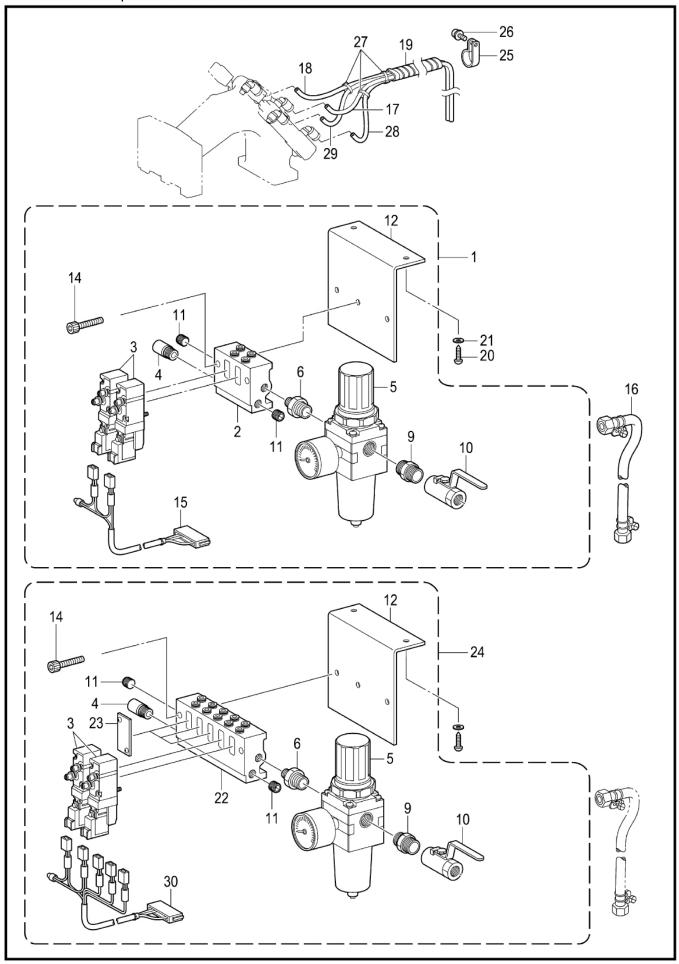
序号 No.	公司件号 Part. No.	参考件号 Ref.No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41730002	SA5208001	扫线电磁铁组件	THREAD WIPER SOLENOID ASSY	1	
2	41727011	S41206001	挡线弹簧	THREAD WIPER SPRING	1	
3	41728011	S41205001	平垫圈	WASHER PLAIN	1	
4	41726007	S25456001	柱塞销	PLUNGER PIN	3	
5	41712210	SA5217001	扫线电磁铁安装板	T-WIPER SOLENOID SETTING PLATE	1	
6	41711011	SA4806001	电磁铁盖	SOLENOID COVER	1	
7	S04082	062300616	螺钉 M3×6	SCREW PAN M3×4	8	
8	41712096	SA5218001	扫线轴托架	THREAD WIPER SHAFT BRACKET	1	
9	S05116	018400836	螺栓 M4×8	BOLT SOCKET M4×8	1	
10	W01001	025040236	平垫圏 M4	WASHER PLAN M4	1	
11	4170204400	SA1967001	扫线曲柄组件	THREAD WIPER CRANK ASSY	1	
12	Н05029	048040342	挡圈 E4	RETAINING RING E4	1	
13	41708007	S25454001	螺纹紧圈	SET SCREW COLLAR	1	
14	417S15005	S25279001	螺钉 M3.5-5	SET SCREW (CP)M3.5-5	1	
15	41727012	SA2287001	扭簧	SPRING	1	
16	41722019	149097000	消音垫	SILENT SHEET	1	
17	41712097	SA5219001	扫线杆	THREAD WIPER ROD	1	
18	W01024	110735001	垫圈	WASHER	1	
19	H05002	048030342	挡圈 E3	RETAINING RING E3	1	
20	41712098	S10470101	扫线钢丝	WIPER	1	
21	417S15013	060400516	螺钉 M4×5	SCREW BIND M4×5	1	
22	41708008	146288001	挡线轴挡圈	THREAD WIPER STUD COLLAR	1	
23	41728034	S03677001	垫圈	WASHER	1	
24	41730003	SA5213001	停止开关组件	STOP SWITCH ASSY	1	
25	417S30036	S55485001	螺栓 (帯垫圏) M5×12	BOLT SOCKET (S/P WASHER)M5×12	2	



### L、松线装置/Tension release mechanism

序号 No.	公司件号 Part. No.	参考件号 Ref.No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41730004	SA4855001	松线电磁铁HV	TENSION RELEASE SOLENOID HV	1	
2	L02031	017400802	螺栓 M4×8	BOLT M4×8	2	
3	W02008	028040246	弾簧垫圏 2-4	WASHER SPRING 2-4	2	
4	W01001	025040236	平垫圈 M4	WASHER PLAIN M4	2	
5	L02036	017401415	螺栓 M4×14	BOLT M4×14	1	
6	N01024	021400306	六角螺母 M4	NUT 3 M4	1	
7	W01001	025040236	平垫圈 M4	WASHER PLANT M4	1	
8	41722020	154599000	电磁铁缓冲垫圈	SOLENOID CUSHION	1	
9	41712099	SA6389001	电磁铁安装板	SETTING PLATE SOLENOID	1	
10	11211005	S04159000	线夹 1M	BAND 1M	1	
11	41702045	SA3347001	松线杆	TENSION RELEASE BAR	1	
12	H05029	048040342	挡圈 E4	RETAINING RING E4	1	
13	W01009	025050236	平垫圈 M5	WASHER PLAIN M5	1	
14	41727013	SA3348001	弹簧	SPRING COMPRESSION	1	
15	41711013	SA3349001	电磁铁盖	SOLENOID COVER	1	
16	417S30012	SA3306001	段螺钉 7-3	SHOULDE SCREW 7-3	2	
17	41722021	081007070	0形圈 P7	O RING P7	2	
18	11211005	218859001	电线夹 M150	BINDER M150	1	

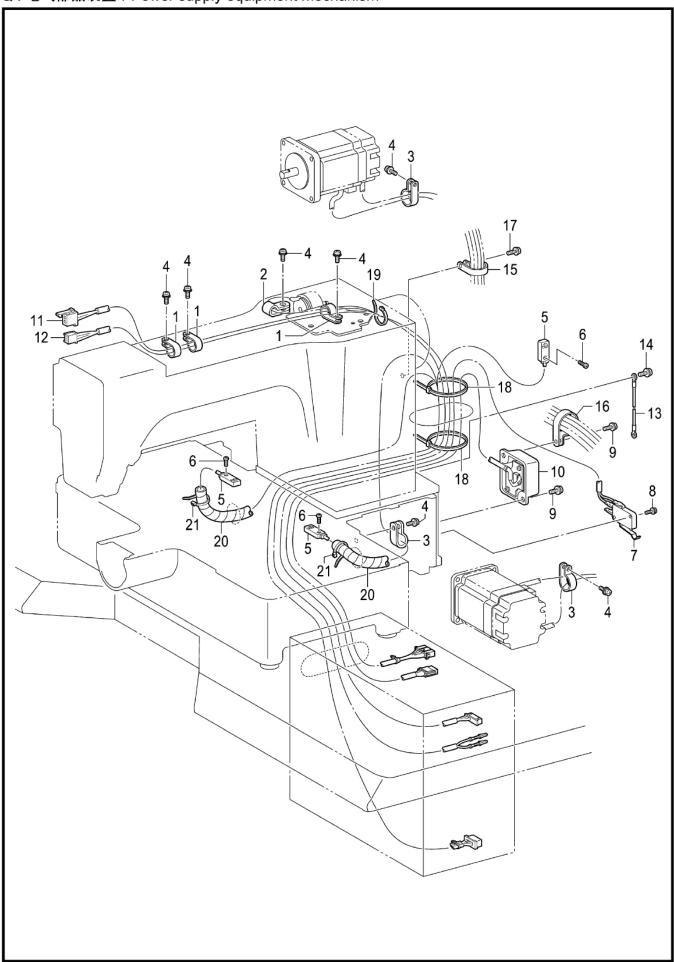
# P . 空压装置 / Air pressure mechanism



### P、空压装置/Air pressure mechanism

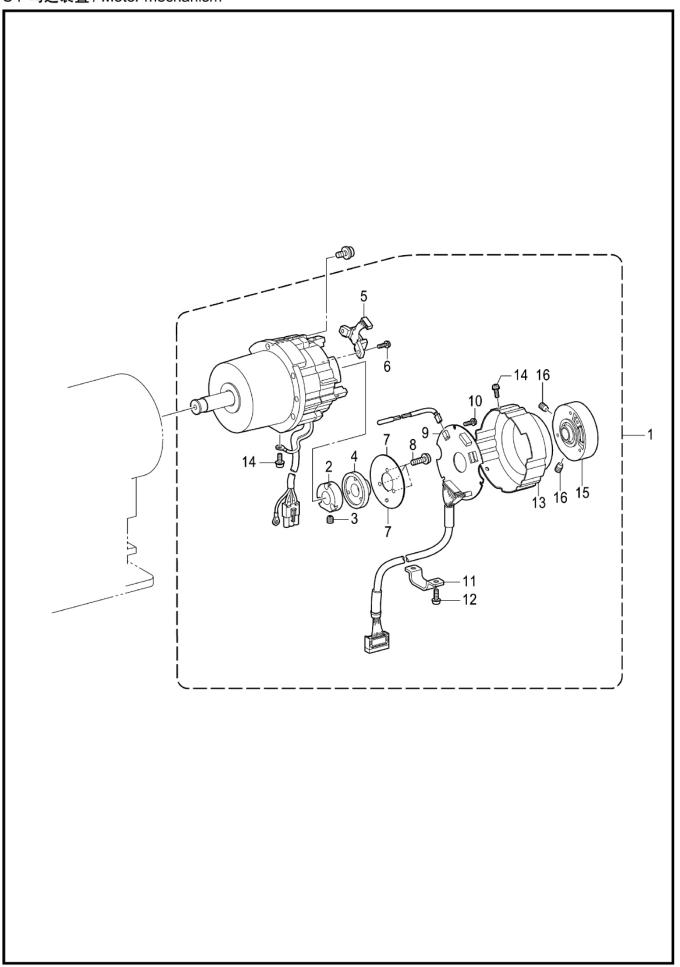
序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
			〈空压式〉	⟨For Peneumatic type⟩		
1	4173001100	SA5281001	电磁阀组件 2A	SOLENOID VALVE ASSY 2A	1	
2	40730066	SA5289001	双通汇流板	MANIFOLD2	1	
3	40730082	S39116100	电磁阀 SY3120-5L0ZD-C4	VALVE SY3120-5L0ZD-C4	2	
4	40728003	SA5283001	消声器	SILENCER	1	
5	40730045	SA5282001	气压阀	AIR VALVE	1	
6	417S30026	S09228000	管接头	JOINT	1	
10	40730046	SA6573001	手动阀	VALVE	1	
11	407S12002	153274001	汇流板密封螺钉	SCREW	2	
12	41712106	SA5286001	阀安装板	SETTING PLATE VALVE	1	
14	417S30024	018503036	螺栓 M5×30	BOLT SOCKET M5×30	2	
15	41730022	SA5191001	阀门接线2连组件	VALVE HARNESS X2 ASSY	2	
16	4073001000	149796001	橡皮管带接头	AIR HOSE, W/CONNECTOR	1	
17	61911006	SA6405001	空气管 R	AIR TUBE R	1	
18	61911006	SA6406001	空气管 L	AIR TUBE L	1	
28	61911006	SA6405002	空气管 R	AIR TUBE R	1	
29	61911006	SA6406002	空气管 L	AIR TUBE L	1	
19	41711008	SA6407001	保护用弹性管 470S (Φ12	SPIRAL 470S	1	
20	417S30015	032422003	木螺钉 M4.1×20	WOOD SCREW, ROUND 2 M4.1×20	2	
21	W01001	025040236	平垫圈 M4	WASHER PLAIN M4	2	
25	41711016	525664000	电线夹 #6	CORD HOLDER, #6	1	
26	417S30025	0A5401006	螺栓(带垫圈) M4×10DB	SCREW PAN (S/P WASHER) M4×10	1	
27	11211005	228475000	电线夹 1.9×80	FASTENING BAND, 1.9×80	3	
				·		
24	4173003100	SA5288001	电磁阀组件 5A	SOLENOID VALVE ASSY 5A	1	
22	41730032	SA5290001	集合管 5	CORD HOLDER #5	1	
23	41730033	S53982000	隔板	BLANKING PLATE ASSY	3	
3	40730082	S39116100	电磁阀 SY3120-5L0ZD-C4	VALVE SY3120-5L0ZD-C4	2	
4	40728003	SA5283001	消声器	SILENCER	1	
5	40730045	SA5282001	气压阀	AIR VALVE	1	
6	417S30026	S09228000	管接头	JOINT	1	
10	40730046	SA6573001	手动阀	VALVE	2	
11	407S12002	153274001	汇流板密封螺钉	SCREW	1	
12	41712106	SA5286001	阀安装板	SETTING PLATE VALVE	2	
14	417S30024	018503036	螺栓 M5×30	BOLT SOCKET M5×30	2	
30	41730031	SA5192001	阀门接线5连组件	VALVE HARNESS X5 ASSY	1	

# Q . 电气部品装置 / Power supply equipment mechanism



### Q、电气部品装置/Power supply equipment mechanism

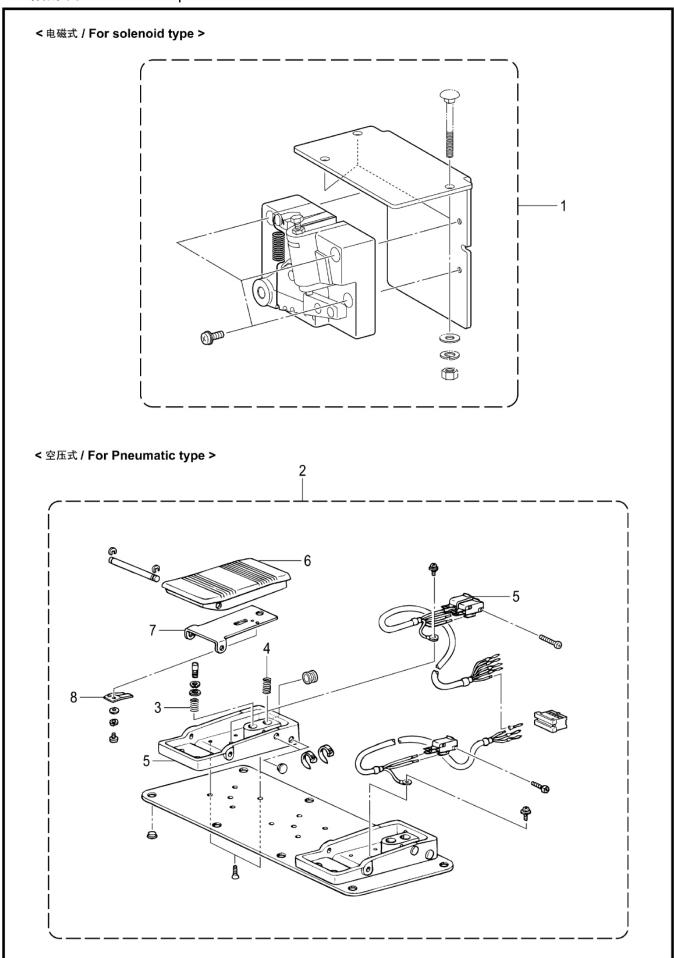
序号 No.	公司件号 Part. No.	参考件号 Ref.No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41711015	525567000	电线夹 #8	CORD HOLDER #8	3	5.F
2	41711014	149547000	压线板	CORD HOLDER 4N	1	
3	41711015	525567000	电线夹 #8	CORD HOLDER #8	3	
4	417S30025	0A5401006	螺栓 (帯垫圏) M4×10DB	SCREW PAN(S/P WASHER)M4×10DB	7	
5	4173000500	SA4830001	传感器组件	H-POSITION SENSOR ASSY	1	
6	S04076	062300816	螺钉 M3×8	SCREW PAN M3×8	3	
7	41730006	SA3481001	机头开关组件	SWITCH ASSY MACHINE HEAD	1	A
8	417S30023	0A5301605	螺栓(带垫圈)M3×16DB	SCREW PAN(S/PWASHER)M4×16DB	2	
9	417S30025	0A5401006	螺栓(带垫圈)M4×10DB	SCREW PAN(S/PWASHER)M4×10DB	2	
10	41730030	SA4824001	头部检出复合件	HEAD DETECTOR UNIT ASSY	1	
11	41730007	SA5210001	电磁铁接线	THREAD WIPER SOLENOID HARNESS	1	
12	41730008	SA5214001	开关接线	STOP SWITCH HARNESS	1	
13	41730009	SA5261001	接底线 450	GROUND WIRE 450	1	
14	417S30025	0A5401006	螺栓(带垫圏)M4×10DB	SCREW PAN(S/P WASHER)M4×10DB	1	
15	41711025	554482000	电线夹 #12	CORD HOLDER #12	1	
16	41711025	554482000	电线夹 #12	CORD HOLDER #12	1	
17	417S30025	0A5401006	螺栓(带垫圈)M4×10DB	SCREW PAN(S/P WASHER)M4×10	2	
18	41711019	218859001	电线夹 M150	BINDER M150	2	
19	11211005	S04159000	线夹 1M	BAND 1M	1	
20	41711009	SA6560101	保护用螺线管 140SS (Φ	SPIRAL 140SS	2	
21	11211005	S04159000	线夹 1M	BAND 1M	2	



### S、马达装置/Motor mechanism

序号 No.	公司件号 Part. No.	参考件号 Ref.No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	4173004700	J80991001	马达组件 CDD-430D	MOTOR ASSY CDD-430D	1	
2	41730048	J03955001	磁鼓 CDD	DRUM CDD	1	
3	S09044	014400632	螺钉 M4×6	SET SCREW SOCKET (CP)M4×6	1	
4	41730049	J03956001	磁铁 180P36	MAGNET 180P36	1	
5	41730050	J03957001	MR感应器组件 180P	MR SENSOR ASSY 180P	1	
6	S13003	0A4300805	螺栓(带垫圈)M3×8DA	SCREW PAN(S/P WASHER)M3×8	1	
7	41730051	J03958001	屏蔽板CDD	SHIELD PLATE CDD	1	
8	417S30017	0A4261005	螺栓(带垫圏)M2.6×10	SCREW PAN(S/P WASHER)M2.6×10	3	
9	41730052	J04488001	ENC 基板组件 430#2	NEC PCB ASSY 430D#2	1	
10	417S30018	0A5300606	螺栓(带垫圏)M3×6DB	SCREW PAN(S/P WASHER)M3×6	3	
11	41712118	J04230001	电线固定夹CDD-HT	CORD HOLDER CDD-HT	1	
12	417S30019	0A4401005	螺栓 (帯垫圏) M4×10DA	SCREW PAN(S/P WASHER)M4×10	3	
13	41730053	J04388001	编码器盖 430D	ENCODER COVER 430D	1	
14	S13003	0A4300805	螺栓(带垫圈)M3×8DA	SCREW PAN(S/P WASHER)M3×8	3	
15	41709003	J04303001	同步轮组件 430D	PULLEY HOLDER ASSY 430D	1	
16	S09045	014500632	螺钉 M5×6	SET SCREW SOCKET (CP)M5×6	2	

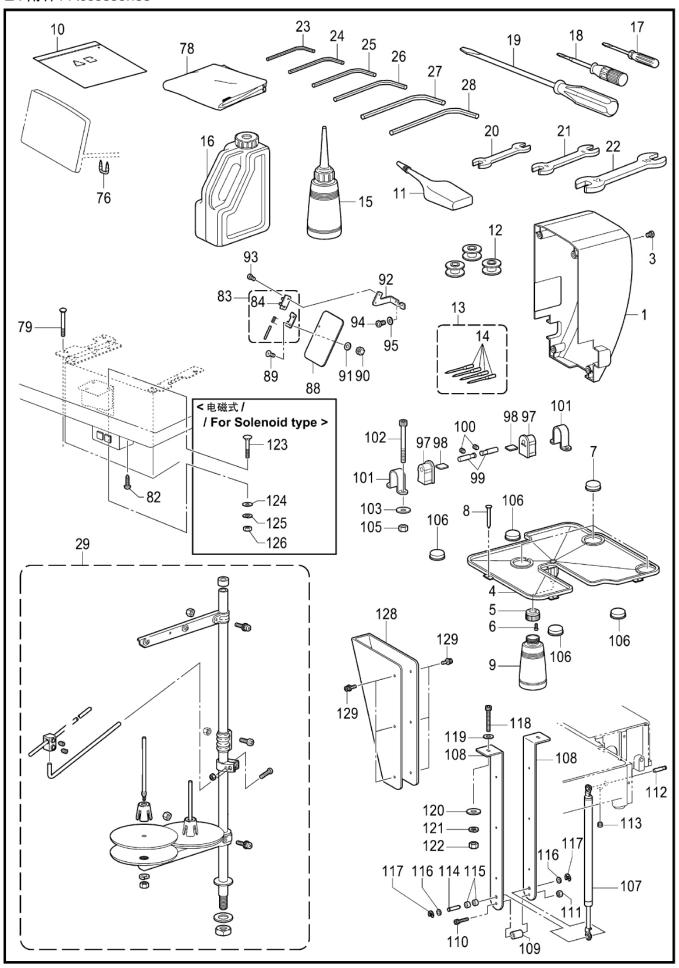
# T . 踏板关系 / Foot switch pedal mechanism



### T、踏板关系/Foot switch pedal mechanism

序号 No.	公司件号 Part. No.	参考件号 Ref.No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
			〈电磁式〉	<pre><for solenold="" type=""></for></pre>		
1	4173001200	SA3519101	脚踏复合件 A	TREADLE UINT. A ASSY	1	
			〈空压式〉	⟨For Peneumatic type⟩		
2	4173004500	SA6038001	2连脚踏开关组件	2-PEDAL FOOT SWITCH SW ASSY	1	
3	41727018	S38168001	弹簧	SPRING COMPRESSION 10×30	1	
4	41727018	S38170001	弾簧	FOOT PEDAL SPRING	2	
5	41730046	S36260000	开关 VX	PIN BUTTON MICRO SWITCH VX	3	
6	41712115	S38174000	脚踏板	FOOT PEDAL	2	
7	41712116	S38175001	脚踏护板	PROTECTION PLATE PEDAL	2	
8	41712117	S38176101	弹簧板	SPRING PLATE	2	

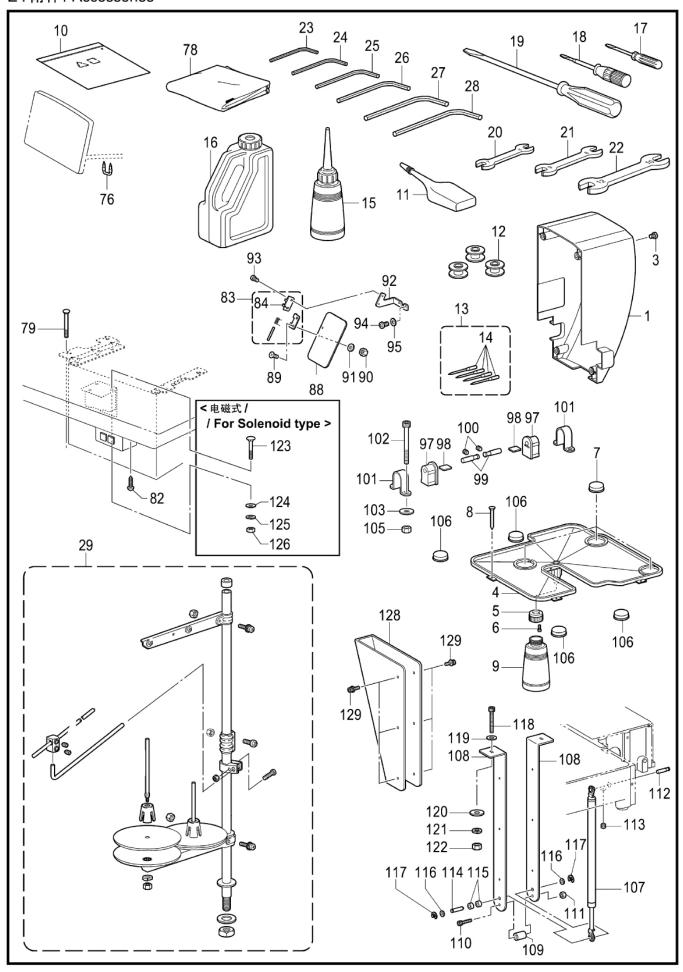
### Z. 附件 / Accessories



#### Z、附件/Accessories

序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
1	41711060	SA4842001	马达盖	MOTOR COVER	1	
3	S04038	062061016	螺钉 M6×10	SCREW PAN M6×10	4	
4	41711031	SA4844001	油盘	OIL PAN	1	
5	41711006	154467001	废油回收壶盖	DUST OILER	1	
6	417S30010	037301215	螺销 M3×12	TAPPING SCREW PAN V M3×12	2	
7	41722005	SA3540001	缓冲橡皮垫	RUBBER CUSHION	3	
8	101S30010	109714000	打	NAIL	7	
9	11631008	114486002	油壶	OILER	1	
10	20131076	122991001	附属品塑料袋	ACCESSORY BAG	1	
11	41231018	S06706001	硅油 粉井 I AN	SILICONE OIL	1	
12	41718004	S44633001	梭芯 LAN	BOBBIN LAN	3	
1.0	41017000	+D 67	+n #1. #1 #4 / 4 ++ * * * * * * * * * * * * * * * * *	NEEDLE ADIECE ACCV	1	
13	41217002	*P. 67	机针组件(4支装)	NEEDLE 4PIECE ASSY	1	
14	41217002	*P. 67	机针	NEEDLE	4	
15	41231016	114483002	油壶组件	OILER ASSY	1	
16	41231017	S55663001	油罐组件	OIL TANK ASSY	1	
17	10131004	142443001	小起子 1.9×52	SCREW-DRIVER 1.9×52	1	
18	10131003	118837001	起子 3.4×70	SCREW-DRIVER 3.4×70	1	
19	10131002	101572102	起子 5.5×190	SCREW-DRIVER 5.5×190	1	
20	30131005	107779001	扳手 6×7	WRENCH 6×7	1	
21	41731011	100887001	双头扳手 8×9	WRENCH 8×9	1	
22	11631003	107780001	扳手 10×12	WRENCH 10×12	1	
23	30131007	S07783001	内六角扳手 1.5	HEXAGONAL WRENCH 1.5	1	
24	20131046	142002001	内六角扳手 2	HEXAGONAL WRENCH 2	1	
25	30331010	154125001	内六角扳手 2.5	HEXAGONAL WRENCH 2.5	1	
26	30131010	142721001	内六角扳手 3	HEXAGONAL WRENCH 3	1	
27	30131012	118064001	内六角扳手 4	HEXAGONAL WRENCH 4	1	
28	20131047	150335001	内六角扳手 5	HEXAGONAL WRENCH 5	1	
29	1013100700	S40574209	线架组件 2DTHF	COTTON STAND ASSY 2DTHF	1	
76	30112024	200190001	U形卡钉	STAPLE 10×20	7	
78	40131017	144226001	机头罩	HEAD COVER	1	
79	S05088	032461606	螺栓 M6×45	BOLT SOCKET M6×45	4	
82	417S30016	032461606	木螺钉 M4.5×16	WOOD SCREW ROUND 2 M4.5×16	2	
83	4121208100		<b>铰链组件</b>	HINGE ASSY	1	
84	41212082	S44484001	护眼板铰链	EYE GUARD HINGE	1	
88	41211005	S44485001	护眼板	EYE GUARD	1	
89	412S17004	061660806	螺钉 SM3.18-40×8	SCREW FLAT SM3. 18-40×8	2	
90	412S16012	021660102	螺母 M3.18	NUT M3. 18	2	
91	41228047	026030232	平垫圈 M3	WASHER PLAIN M3	2	
92	41211005	S44486101	护眼板架 A	EYE GUARD HOLDER A	2	
93	401S11022	062670512	螺钉 SM3.57-40×5	SCREW PAN SM3. 57-40×5	2	
94	S04035	062400616	螺钉 M4×6	SCREW PAN M4×6	2	
95	W01024	110735001	垫圈 梯 皮 絞 絞	WASHER	2 2	
97 98	41722033	SA3395001	橡皮铰链 垫片	RUBBER CUSHION SPACER	2	
98	41712131 41726019	SA3392001 SA3384001	机头支承销	PIN	2	
100	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (CP)M6×6	2	
100	41712132	SA3385001	头部铰链座	HINGE HOLDER	2	
101	S05112	018066036	紫栓 M6×60	BOLT SOCKET M6×50	4	
103	41728030	213650001	<u> </u>	WASHER 2.3×8.5×38	4	
105	N01021	021060106	螺母 M6	NUT 1 M6	4	
106	41722005	SA3540001	缓冲橡皮垫	RUBBER CUSHION	4	
107	41730010	SA4845001	缓冲器	SHOCK ABSORBER GAS	1	
108	41712113	SA4846001	缓冲器支架	HOLDER ABSORBER	2	
109	41703027	SA5251001	<b>垫圈</b>	SPACER	1	
110	S05117	018064031	螺栓 M6×40	BOLT SOCKET M6×40	1	
111	N01021	021060106	螺母 M6	NUT 1 M6	1	
112	41702023	SA4847001	轴 U	SHAFT U	1	
113	S10019	012060636	螺钉 M6×6	SET SCREW SOCKET (CP) M6×6	1	

### Z. 附件 / Accessories



### Z、附件/Accessories

序号 No.	公司件号 Part. No.	参考件号 Ref. No.	零部件名称	NAME OF PARTS	数量 Amt.	备注
114	41702024	S17974001	轴 D	SHAFT D	1	
115	41703028	S17975100	轴套 GS	SHAFT COLLAR GAS	2	
116	41728018	025080132	垫圈 S8	WASHER PLAIN S8	2	
117	H05031	048060342	挡圈 E6	RETAINING RING E6	2	
118	S05112	SA3387001	螺栓 M6×60	BOLT SOCKET M6×60	2	
119	W01003	025060236	平垫圈 M6	WASHER PLAIN M6	2	
120	41728030	213650001	垫圈 2.3×8.5×38	WASHER 2.3×8.5×38	2	
121	W02009	028060246	弹簧垫圈 2-6	WASHER SPRING 2-6	2	
122	N01021	021060106	螺母 M6	NUT 1 M6	2	
			〈电磁式〉	<for solenold="" type=""></for>		
123	S05112	119755001	螺栓 M6×60	BOLT M6×60	2	
124	W01003	025060236	平垫圈 M6	WASHER PLAIN M6	2	
125	W02009	028060246	弹簧垫圈 2-6	WASHER SPRING 2-6	2	
126	N01021	021060106	螺母 M6	NUT 1 M6	2	
128	41712114	SA6261001	支架盖	HOLDER ABSORBER COVER	1	
129	417S30033	S55479001	螺栓(带垫圈)M4×8	BOLT SOCKET (S/P WASHER) M5×32	6	

# Ga . 工模具一览表 / Gauge parts list

Od . 工快来							
	压脚 / Pre	sser foot					
A / S42843-001 *	B / S42844-001	C / S42845-001	D / S42846-001				
5 04	φ5.5	5 φ3	φ10 φ6				
φ2.5	Φ4	<b>⊅</b> ¢2	Ø \$43				
E / S42847-001	F / 157237-001	G / 158592-001	J / S42848-001				
φ2.5	Ø \$\phi_2	2.5 \$\phi_3\$	10 φ4 Ø φ2.5				
<del></del>	/	Ø \$2	7				
A-CUT / S40214-001	B-L / S49448-001	XA / S42849-101	H / SA4811-001 *				
5 04	7 \$\displays{\phi 5.5}\$	5	φ5.5				
φ2.5	₩ ¢4	φ2.5	φ3				

针孔板 / Needle hole plate									
2.4 C0.4 / SA3336-001 *	2.2 / SA5221-001 *	3.0 C1.5 / SA5222-001 *							
φ4 φ2.4 2.9	ф2.2 ———————————————————————————————————	φ6 3 2.9							

### 印有\*记号的为标准零部件

The  $\ast$  symbol is for Standard parts.