

747 LOCKSTITCH SEWING MACHINE

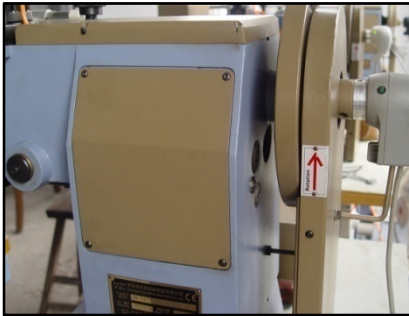
FOR MOCCASINS



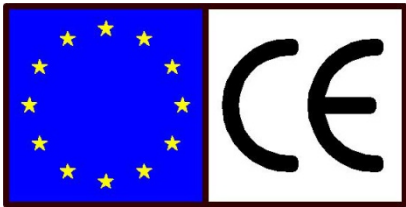
OPERATING INSTRUCTION MANUAL

Rev 201101

Thank you very much for your choice of this double thread side seam sewing machine. Please read the manual carefully before use!



Ensure that the rotation of the pulley conformable to the red allow on the belt cover !



The machine has passed CE !

Main Warnings:

- ♥It is extremely important that the electrical device must be soundly earthed!
- ♥It is absolutely forbidden to remove any protection system provided by manufacturer while machine is on!
- ♥All setting and replacement operation must be carried out only by the qualified expert personnel!
- ♥For repairs, all tools and replacement parts must be qualified by manufacturer!
- ♥Whenever, and whatever reason, the machine is to be demolished, certain basic rules must be observed to safeguard public health and the environment in which we live!

CONTENTS

1. MACHINE DESCRIPTION	1
2. TECHNICAL FEATURES OF THE MACHINE	3
3. PREPARATION READY FOR USE	3
3.1 Distances to be respected around the machine	3
3.2 Compress air supply connection	3
3.3 The function of start pedal, knee lever and foot valve	4
3.3.1 Start pedal	4
3.3.2 Knee lever	4
3.3.3 Foot valve	4
3.4 Needle thread preparation	5
3.5 Tension adjustment setting of the needle thread	5
3.6 Stitch length adjustment setting	5
3.7 Adjustment setting of gathering rate	6
3.7.1 Basic gathering rate setting	6
3.7.2 First increase gathering rate setting	7
3.7.3 Correction gathering rate setting	7
3.8 Sewing cycle description of Mod.747	8
4. REPLACEMENT AND ADJUSTMENT OPERATION	8
4.1 Needle replacement	8
4.2 Setting the highest position of the needle	9
4.3 Setting the shuttle position	9
4.4 Adjustment of stopping position	10
5. CHANGE STITCH SEAMS	10
6. MACHINE MAINTENANCE	10
6.1 Spare parts and tools supplied with the machine	11
7. COMPRESS AIR SYSTEM	11
8. MAIN WARNING	12
PARTS DRAWING	14

SETUP THE PARAMETER OF THE MOTOR

1. MACHINE DESCRIPTION

747 is a lockstitch sewing machine for stitching both lasted and tubular models with various types of stitching. **747 can be fitted with five different sewing guides (need to be bought additionally)**. The machine fitted with standard guide is called kit“S”, it can carry out the seam stitching “barca” or “classic”. The machine fitted with a “scalloping” system is called kit“C”, it can carry out the seam stitching “grain of rice”, which gives a more noticeable “hand-stitched” effect. The machine equipped with an edging device to instead of the guide is called kit“B”, it can carry out the special type of the edge stitching which is called “edge stitching” or “bordo”. Kit“D”, kit“E” and kit“F” are derived from kit“B”.

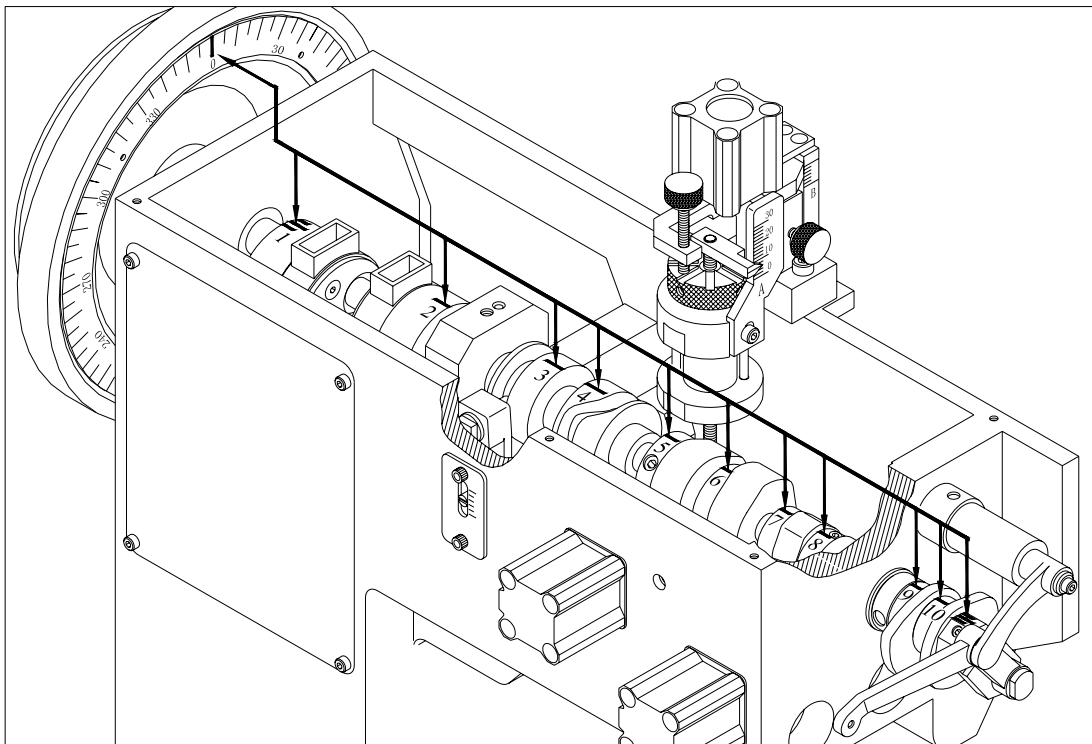
747C		
747S		
747B		
747D		
747E		
747F		

The stitching is carried out by a curved-needle and shuttle movement, mechanically controlled by a central shaft mounted with a series of cams for the various movements.

There are assemble marks and serial number(1#-11#) on the crank (747-222) and all cams. Three cams (9#-11#) will be assembled differently according to the different guide has be fitted on the machine. (Kit“c” is fitted with cam(9#) and cam(10#), kit“B”, kit“D”, kit“E” and kit“F” is fitted with cam(11#) only, but these cams(9#-11#) have no use for kit “S”).

The machine can be reset easily base on the dial of handwheel and assemble marks of cams. If adjusting them, please pay attention:

1. The assemble marks on the crank(747-222) and cams(1#-11#) must in alignment with scale ‘0’ on the dial of handwheel. (as shown in below drawing)



2. There are three marks on cam (1#) and crank (747-222), the cam (1#) and crank (747-222) can be adjusted between the three marks according to the sewing material and/or sewing thread.

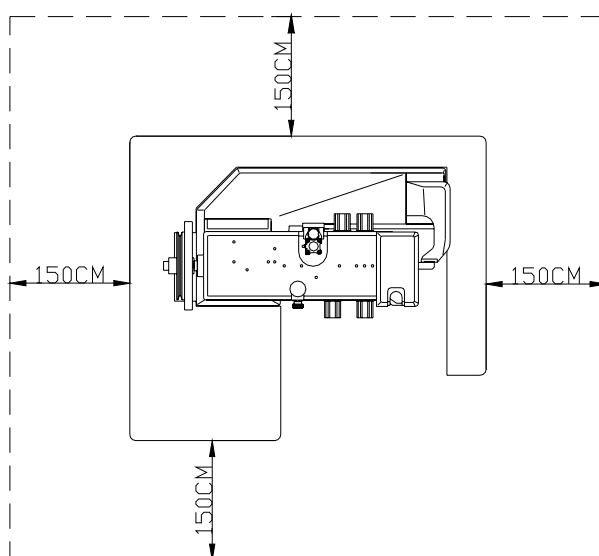
The machine is driven by an asynchronous electric motor. The sewing speed can be controlled stepless and the needle stopping position can be controlled by asynchronous motor. The rear presser feet , the counter presser foot and the gathering lever can opened by the movement of the various cylinders.

2. TECHNICAL FEATURES OF THE MACHINE

Sewing speed:	Stepless speed regulating
Stitch length:	6-10mm
Stitching thickness:	3mm (Max.)
Needle type:	DY-100(Special curved needle)
Needle size:	200-230
Thread diameter:	1-1.2mm
Sewing motor:	750W/220V single-phase
Lighting:	7W/220V
Net weight:	224 Kg
Machine dimensions:	90×77×145 cm(L×W×H)

3. PREPARATION READY FOR USE

3.1 Distances to be respected around the machine



3.2 Compressed air supply connection

The compressed air system of the 747 consists of a filter-reducer unit, ten cylinders, a solenoid valve, two mechanically valves and a foot valve. The filter-reducer unit on the machine must be connected to the compressed air supply by inserting the special flexible tubing into the appropriate rapid snap-on connection mounted on the FRL unit.

The value of the air pressure supply to the machine can be set by the knob on the pressure regulator located on the filter-reducer unit. The value of the set pressure is visible on the pressure gauge dial.

Warning: Pressure to be set for this machine – 4bar.

3.3 The function of start pedal, knee lever and foot valve

3.3.1 Start pedal (Fig.1)

First of all, switch on the main switch of the machine to check if the rotation of the motor conformable to the red allow on the belt cover. If the direction is opposite, switch in the other way round. Then operate the start pedal in three different movements. **(Fig.1)**

- Pressing forward (direction A) means advance. Pressing lightly is slow and pressing strongly is fast. Avoid pressing very strongly at the beginning.
- Stop in the neutral position.
- Pressing backward (direction B) means opening the rear presser feet and the counter presser foot.

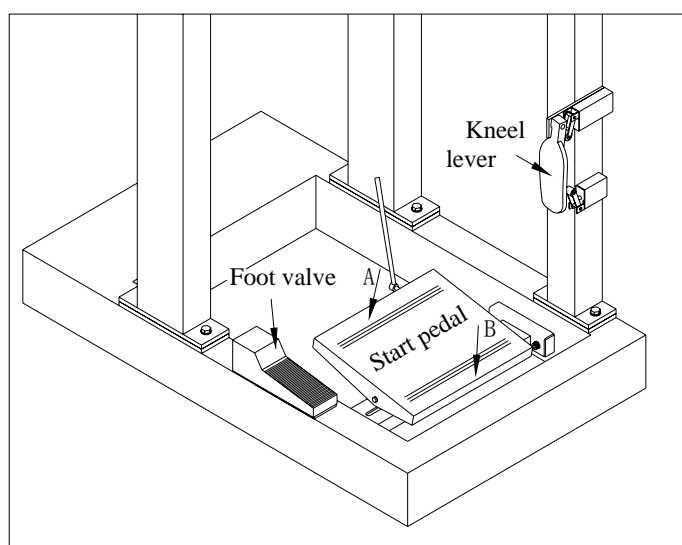


Fig.1

3.3.2 Knee lever

The knee lever is a dual position command lever. It can realize following functions:

- Pressing as far as the **first end of run**, the gathering rate will be increased. Which is called the **first gathering rate increase**.
- Pressing the knee lever **completely**; the gathering rate will be increased again. Which is called the **correction gathering rate**.

3.3.3 Foot valve

Pressing the foot valve, the gathering lever will be opened or the sewing unit will be down. **(If the arm 747B-101 is equipped.)**

3.4 Needle thread preparation

To prepare the needle thread, proceed as follows:

- Turn the pulley in the correct direction so that the needle comes to its highest position.
- Threading the needle thread by the path indicated in **Fig.2**
(1) Threading rod (2) Tightener 1 (3) Tightener 2 (4) Gathering tightener
(5) Tighten wheel (6) Take-up spring (7) Take-up lever (8) Clamp (9) Needle

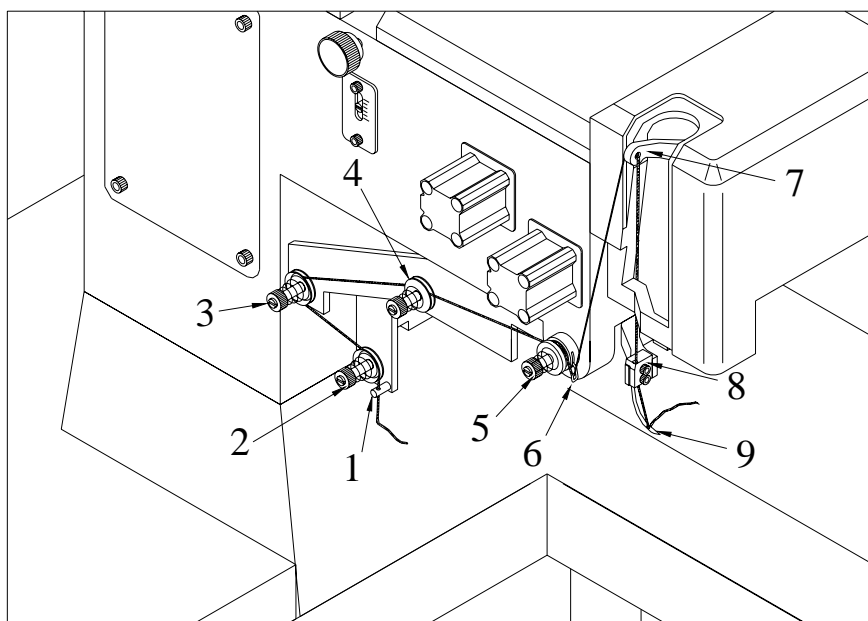


Fig.2

3.5 Tension adjustment setting of the needle thread

Stitching tension depends on the working tension of the needle thread and the working tension of the shuttle thread. The tension of each thread must be set correctly according to the tension of the other thread so that the loop of the stitch is made in the center between the upper and the apron being stitched.

Needle thread tension can be adjusted by turning (2) Tightener 1 (3) Tightener 2 and (5) Tighten wheel. (Fig.2)

3.6 Stitch length adjustment setting

The machine is designed to permit stitch lengths between a minimum of 6mm and a maximum of 10mm. To adjust the stitch length, proceed as follows: (Fig.3)

- Loosen the blocking knob 1.
- Turn the setting knob 2 in a clockwise direction to increase the stitch length, and in an anti-clockwise direction to reduce the stitch length. The set value can be seen on the graduated scale 4 shown by the slot on the pin 3.
- Tighten the blocking knob 1. after adjusting.

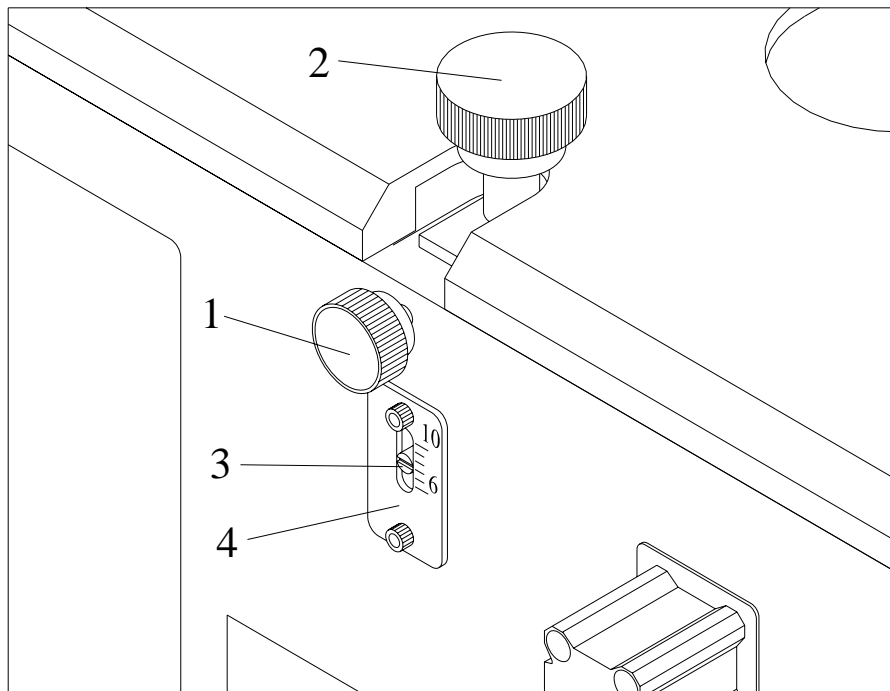


Fig.3

3.7 Adjustment setting of gathering rate

The upper to be sewn onto the apron is naturally much larger than the apron. The gathering device, composed of a lever and a barb which grips the work piece material, permits the operator to match the two pieces of leather to be stitched together. In order to be able to match the upper to the circumference of the apron, the upper must be gathered before it passes under the needle for stitching. The term “gathering” means compressing the circumference of the upper to reduce its length which is far longer than the circumference of the apron when laid flat.

There are three kinds of gathering rates can be programmed: “**basic gathering rate**” , “**first increase gathering rate**” and “**correction gathering rate**”.

Normally 2 or 3 stitching test runs are necessary in order to be able to establish the exact basic gathering rate, and subsequently, the increased rate.

3.7.1 Basic gathering rate setting (Fig.4)

To set the basic gathering rate, proceed as follows:

- Set the basic gathering rate by turning the adjustment setting nut 3. . Turn the setting nut 3. in a clockwise direction to increase the basic gathering rate, and in an anti-clockwise direction to reduce the basic gathering rate. The set value can be seen on the graduated scale 2. shown by the index arrow 1. which connected to the setting nut 3.(0% — no gathering straight stitching)

Warning: The basic gathering rate in expressed in percentage because the ratio between the same lengths measured on the developed upper and apron pattern multiplied by 100 provides the necessary gathering rate.

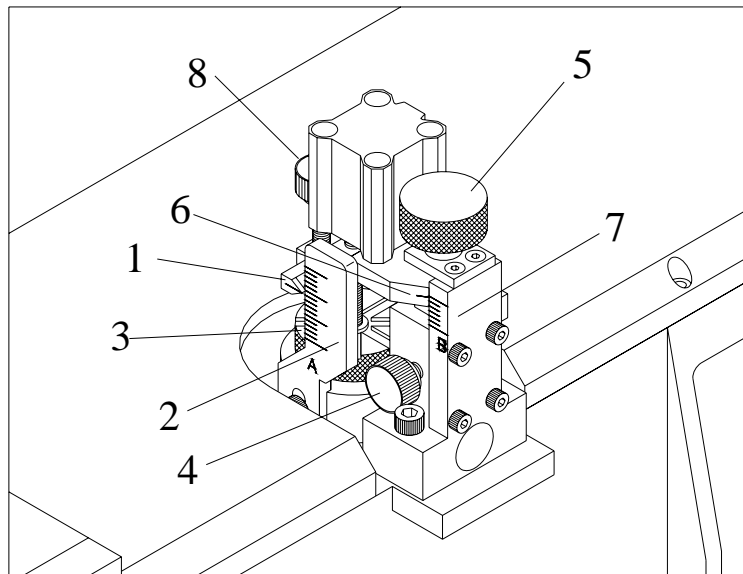


Fig.4

3.7.2 First increase gathering rate setting (Fig.4)

The first increase gathering rate is generally used around the toe of the upper. The gathering rate can be considered correct when the toe of the upper and the toe of the apron match exactly.

To set the first increase gathering rate, proceed as follows:

- Loosen the block knob 4. of the setting knob 5.
- Turn the setting knob 5. in a clockwise direction to increase or tighten the gathering rate and in an anti-clockwise to reduce the gathering rate.
- After setting, tighten the block knob 4.
- The set value can be seen on the scale B 7. shown by scale mark 6. indicates only the increase or reduction of the gathering rate from **basic gathering rate** to the **first increase gathering rate**. To give the exact quantity, press the knee lever as far as the first end of the run: The index arrow 1. will move from the **basic gathering rate** and will indicate the value of the **first increase gathering rate**.

3.7.3 Correction gathering rate setting (Fig.4)

Correction of the gathering rate can be adjusted even during the stitching operation. If the operator finds that the first increase rate is not sufficient, the operator can press the knee lever to its end of run, continuing the stitching with the **correction gathering rate**, in order to recover the deficient of increase which was programmed.

To set the correction gathering rate, proceed as follows:

- Loosen the blocking nut of the setting knob 8.
- Turn the setting knob 8. in a clockwise direction to increase the correction gathering rate, and vice versa, to reduce.
- Tighten the blocking nut after set.

Attention: If the operator found that the first increase gathering rate is too tight in the gathering around the toe, he can release the knee lever for a brief moment, continuing the stitching with the basic gathering rate, in order to recover the excess of the first increase gathering rate which was programmed.

3.8 Sewing cycle description of 747

The work function is as follows:

- Connect with the electricity supply and compress air supply, switch on the main switch of the machine and set the pressure of the compress air to 4 Bar.
- Open the presser feet by pressing the rear part of the start pedal with the heel.
- Open the gathering lever by pressing the foot valve.
- Place the upper on the left side of the leather guide unit, then release the foot valve letting the gathering lever return to its original position and block the upper.
- Place the apron on the right side of the leather guide unit and matching the upper, then release the start pedal letting the presser feet block the apron.
- Pull the needle thread and shuttle thread toward the machine holding the end of threads firmly with the left hand. This is necessary only for the first stitch.
- Hold the upper and apron together with right hand.
- Press fairly strongly forwards on the start pedal to carry out the first stitch slowly.
- Check that the shuttle has sent back the needle thread.
- Stitch the leather in your choice.
- After stitching, open the gathering lever and presser feet by pressing the rear part of the start pedal and the foot valve.
- Remove the apron and upper which now sewn together from the working area, then cut the two sewing threads.

4. REPLACEMENT AND ADJUSTMENT OPERATION

4.1 Needle replacement (Fig.5)

To replace the needle, proceed as follows:

- Turn the pulley in the correct direction, so that the needle bar 4. comes to its highest position.
- Unscrew the two fixing screws 2. from the needle clamp 3.
- Remove the needle 1. from the groove on the needle bar 4., and replace it with another. It is very important to ensure that the needle 1. is positioned correctly in the groove of the needle bar 4.
- Tighten the two fixing screws 2.

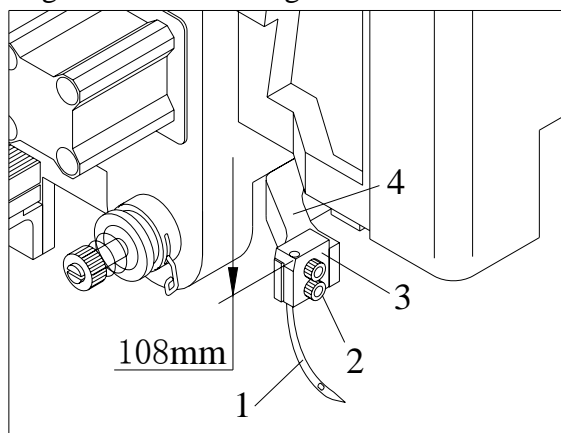


Fig.5

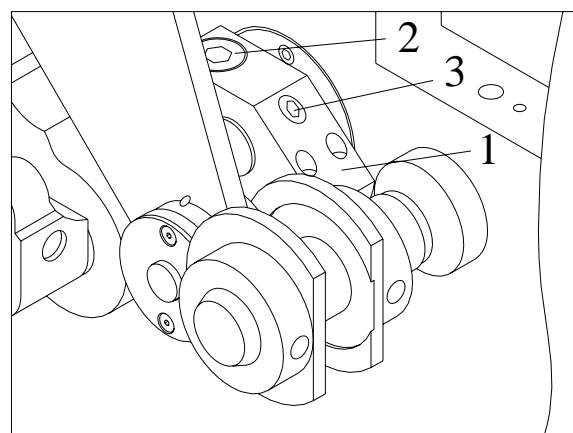


Fig.6

4.2 Set the highest position of the needle (Fig.5 ,Fig.6)

To ensure the highest position, remove the upper cover and the head cover, turn the pulley in the correct direction, letting the needle bar 4. comes to it's highest position, if the distance from the threading hole of the needle clamp 3. to the upper plate of the machine (upper cover is removed) is 108mm (as shown in Fig.5) then it's position is right else is wrong (Fig.5).

To adjust this position, proceed as follows: (Fig.6)

- Remove the upper cover, the side cover and the head cover.
- Turn the pulley in the correct direction, so that the needle comes to it's highest position.
- Unscrew the fixing screw 3. and the blocking screw 2. of the crank 1.
- Turn the needle bar 4. (Fig.5) to the correct position as described above.
- Tighten the fixing screw 3. and the blocking screw 2. after adjusting.

4.3 Set the shuttle position (Fig.7 ,Fig.8 , Fig.9 ,Fig.10)

The correct position of the shuttle is that the tip of the shuttle 3. near to the slot of the needle 1. about 0.1mm. (as shown in Fig.7)

To adjust it, proceed as follows: (Fig.8)

- Unscrew the two blocking screws 2. of the clamp 1.
- Move the shuttle seat 3. to its correct position as described above.
- Tighten the two blocking screws 2. of the clamp 1. after adjusting.

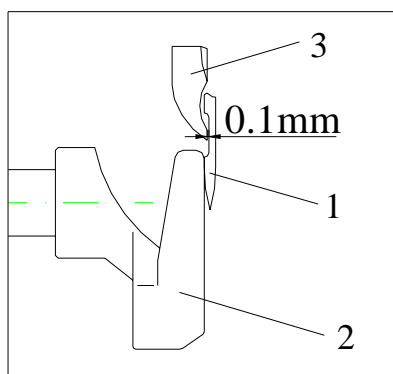


Fig.7

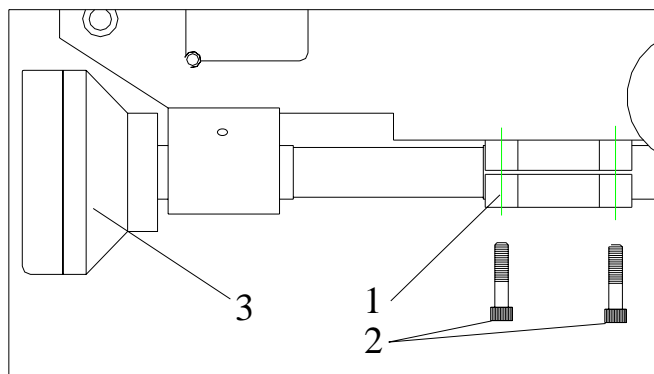


Fig.8

The correct time of the tip of shuttle hook the loop of needle : Turn the pulley in the correct direction, let the needle return about 5mm from its lowest position, at this time the position of shuttle is as shown in fig 9.

To adjust this position, proceed as follows:(fig10)

- Remove the side cover 747-108.
- loosen the screw 747-723.
- Turn the shuttle in a clockwise direction or in an anti-clockwise direction as your needs.
- Tighten the screw 747-723 after adjusting.

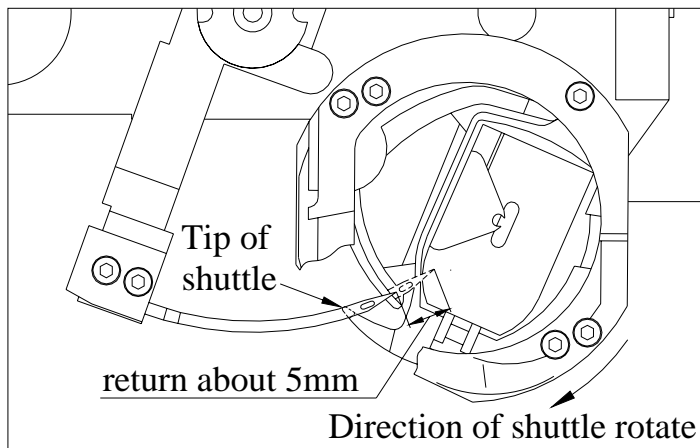


Fig.9

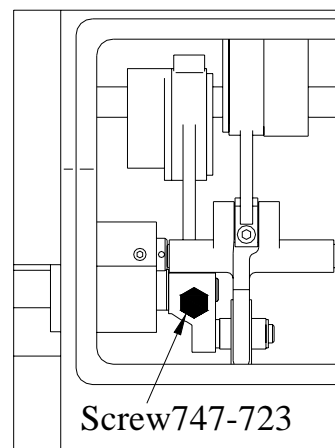


Fig.10

4.4 Adjustment of stopping position (Fig.11)

The positioner is used to control the stopping position of the machine. Normally, when the machine stop each time the take-up lever can stop nearby its highest position. To adjust the stopping position, proceed as follows:

- Unscrew the two fixing screws of the positioner.
- Adjust the relative position between the positioner and the main shaft.
- Tighten the two fixing screws after adjustment.

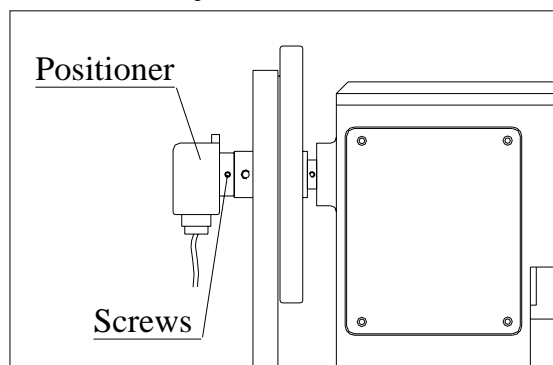


Fig.11

5. CHANGE STITCH SEAMS (KIT“C”, KIT“S” AND KIT“B”)

According to user’s need, the stitch seam that performed by the machine can be changed. The machine can be changed in kit “C”, kit “S” and kit “B” each other by replace or remove some parts.

Attention: This operation must be carried out only by the qualified personnel.

6. MACHINE MAINTENANCE

A careful maintenance represents an important factor for a longer life of the machine under the best functioning and performing conditions.

The machine must be lubricated at the end of each work shift. Special care and attention must be paid when lubricating all moving parts. Other machine parts must be lubricated each week.

The choice of oil is very important, since it must be neither too fluid nor too dense. Viscosity recommended: 209 cSt at 40° .

Always keep the machine clean and clean the important parts as leather guide unit, shuttle and shuttle seat etc. at the end of the each shift.

Check and oil the machine carefully is requested when it is reused after a long time. Test run with a low speed are requested too.

6.1 Spare parts and tools supplied with the machine

Below is the spare parts list

Fig. No.	Machine part	Quantity
747-119	Take-up spring	2
747-120	Spring	2
747-315	Roller(include HK1012)	2
747-522	Roller(include HK0808)	2
747-708	Shuttle	1
747-723	Screw	1
81-123	Cone spring	2 each spec.
81-515	Bobbin	2
	Needles (230/26#)	10

Below is the tool list

Name of the tool	Quantity
Screwdriver (5×200)	1
Complete set of Allen wrenches (1.5mm-10mm)	1 set
Fork wrench (8-10)	1
Socket wrench (13-16)	1
T-Allen wrench (3mm/4mm/5mm)	1 each spec.
Oiler	1
Instruction manual	1

7. COMPRESSED AIR SYSTEM

The location of the compress air components at the machine is indicated as below drawings. (Fig.12-Fig.14)

(1)Solenoid valve. (2)Upper mechanically valve. (3)Lower mechanically valve. (4)Foot valve. (5)Cylinder to open tightener 1. (6)Cylinder to open tightener 2. (7)Cylinder to open lift rear presser foot. (8)Cylinder to open counter presser foot. (9)Cylinder to open right rear presser foot. (10)Cylinder to open gathering lever. (11)Cylinder to increase gathering rate. (12)Cylinder for the correction gathering rate. (13)Cylinder to close gathering tightener. (14)Special purpose cylinder for 747-B.

The compress air layout of the machine is on **page.13**

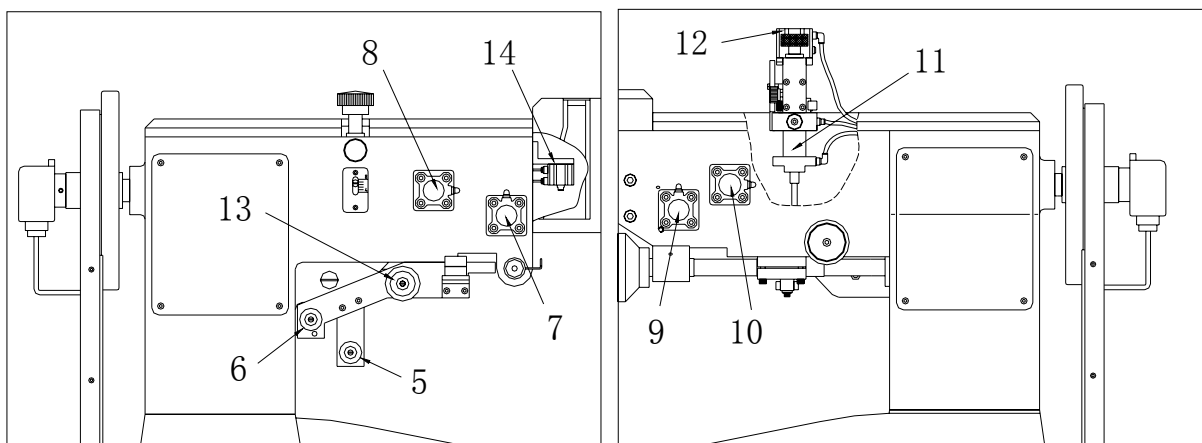


Fig.12

Fig.13

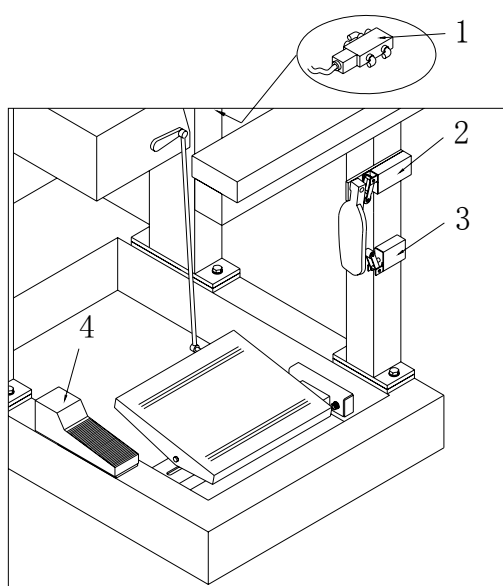


Fig.14

8. MAIN WARNING

8.1 All the operations described in this handbook must be carried out when the machine is under the following conditions:

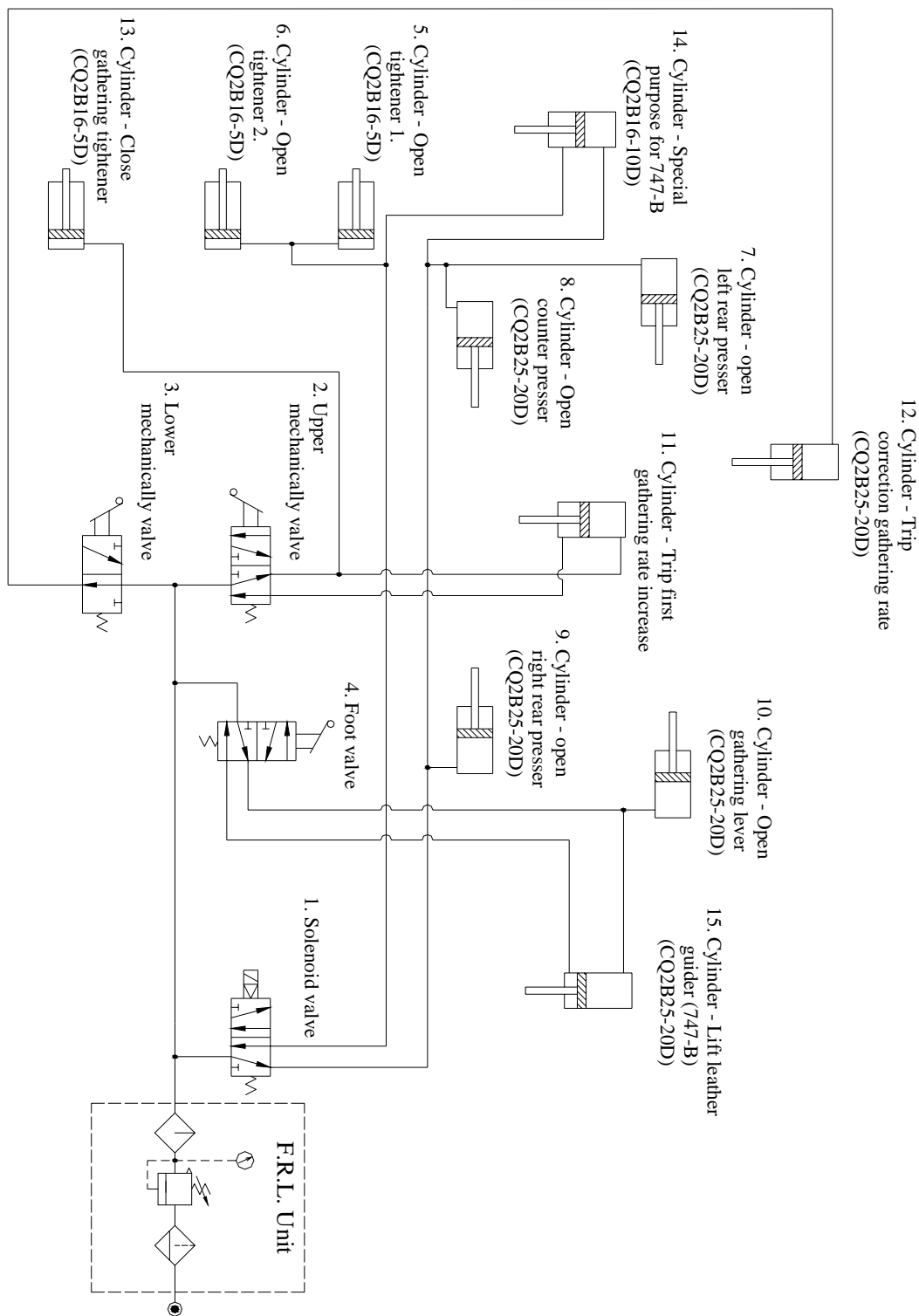
- Motor off
- Electric system off
- Air on/off valve on the FRL group closed

8.2 All the described adjusting and maintenance operations must be carried out by a skilled and qualified personnel in order to avoid any serious accident or damage to the machine.

8.3 Protections have been assembled by the builder in order to safeguard the operator's life while performing his tasks. During the machine functioning, protections must not be removed for any reason at all.

8.4 It is extremely important that the operator pays attention while using the machine during all the sewing phases. Since it is impossible to assemble a protection device in the sewing area, the operators authorized to use the machine are kindly requested to use it properly, thus avoiding any sort of inattention.

The layout of the compress air system



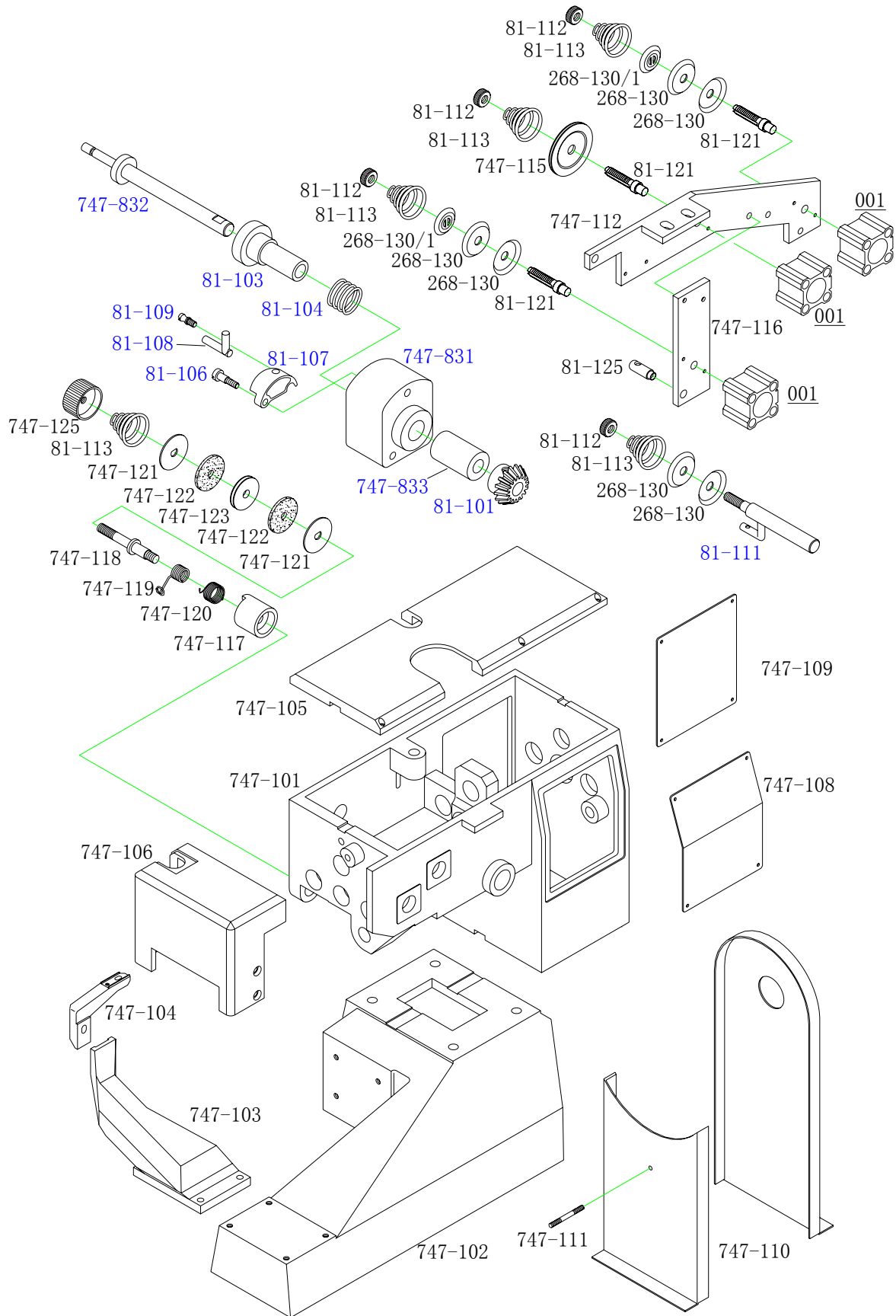


Fig. No.	Machine part	Quantity	Remarks
747-101	Frame	1	
747-102	Frame seat	1	
747-103	Horn	1	
747-104	Leather guide seat	1	
747-105	Upper cover	1	
747-106	Head cover	1	
747-108	Right side cover	1	
747-109	Left side cover	1	
747-110	Belt cover	1 set	
747-111	Screw rod	1	
747-112	Threading plate	1	
747-115	Threading wheel	1	
747-116	Little threading plate	1	
747-117	Housing	1	
747-118	Tightening rod	1	
747-119	Take-up spring	1	
747-120	Spring	1	
747-121	Tightening washer	2	
747-122	Felt washer	2	
747-123	Threading wheel	1	
747-125	Nut	1	
747-831	Winder stand	1	
747-832	Winding shaft	1	
747-833	Sleeve	1	
81-101	Bevel gear	1	
81-103	Sleeve of winding shaft	1	
81-104	Clamping spring	1	
81-106	Screwing pin	1	
81-107	Stopper	1	
81-108	Stopper lever	1	
81-109	Screw	1	
81-111	Winder threading rod	1	
81-112	Nut	4	
81-113	Cone spring	5	
81-121	Rod of thread tightener	3	
81-125	Threading rod	1	
268-130	Tightening disk	6	
268-130/1	Loosening disk	2	
001	Cylinder (CQ2B16-5D)	3	

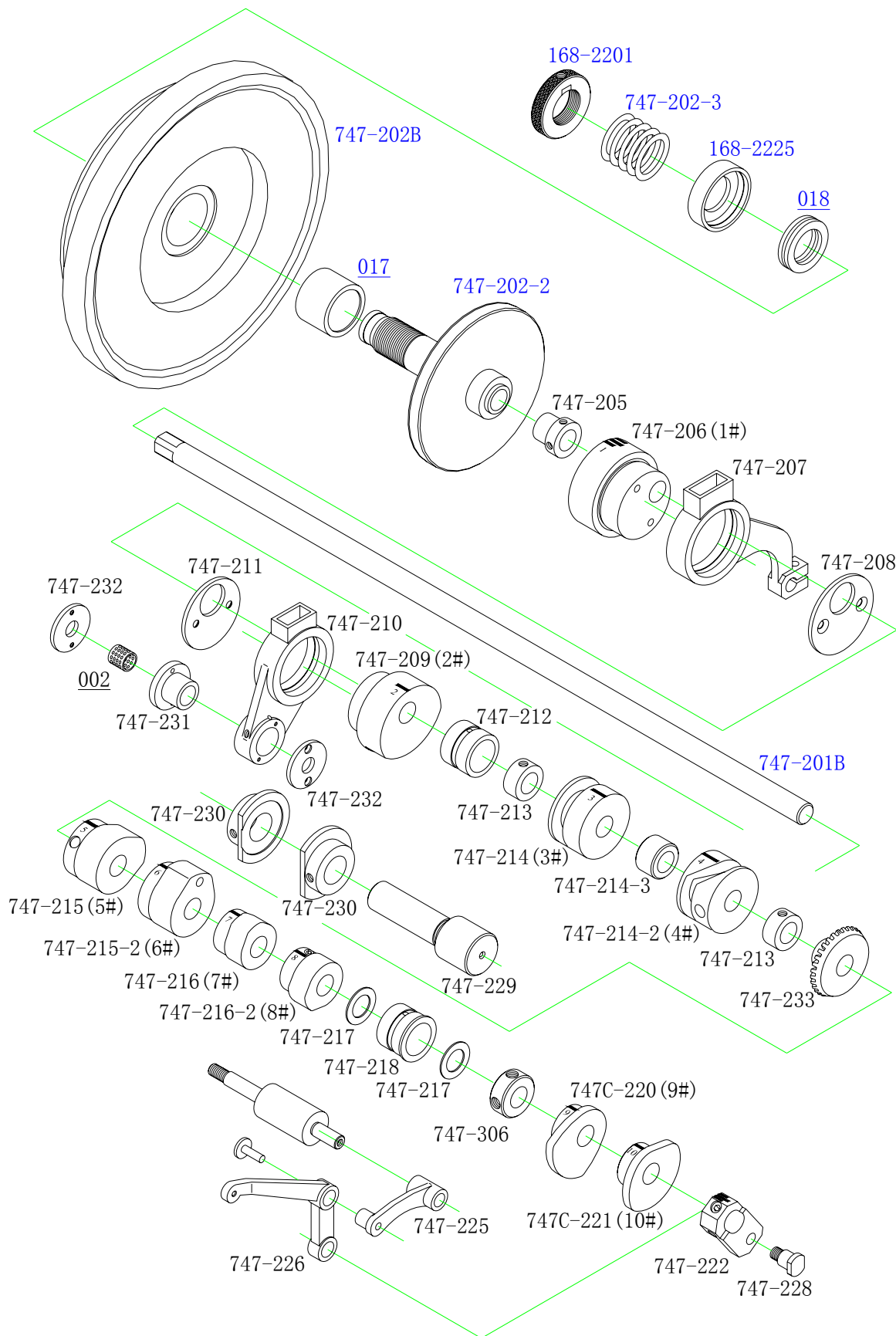


Fig. No.	Machine part	Quantity	Remarks
747-201B	Central shaft	1	
747-202B	Pulley	1	
747-202-2	Release collar	1	
747-202-3	Spring	1	
747-205	Thrust ring	1	
747-206	Shuttle driving cam (1#)	1	
747-207	Connecting lever	1	
747-208	Covering plate	1	
747-209	Needle driving cam (2#)	1	
747-210	Connecting lever	1	
747-211	Covering plate	1	
747-212	Mid bearing housing	1	
747-213	Thrust ring	2	
747-214	Needle transporting cam(3#)	1	
747-214-2	Gather transporting cam(4#)	1	
747-214-3	Close ring	1	
747-215	Driving cam(5#)	1	
747-215-2	Driving cam(6#)	1	
747-216	Driving cam(7#)	1	
747-216-2	Driving cam(8#)		
747-217	Washer	3	
747-218	Front bearing housing	1	
747-222	Thread taking-up crank	1	
747-223	Supporting shaft	1	
747-224	Washer	1	※
747-225	Connecting lever	1	
747-226	Thread take-up lever	1	
747-227	Connecting rod	1	
747-228	Screw	1	
747-229	Brief shaft	1	
747-230	Limiting ring	2	
747-231	Bearing housing	1	
747-232	Covering plate	2	
747-233	Winder driving gear	2	
747C-220	Edge presser driving cam(9#)	1	
747C-221	Thread loosing cam(10#)	1	
168-2201	Round nut	1	
168-2225	Bearing protect circle	1	
002	Linear bearing (141013)	1	
017	Roller bearing HK3026	1	
018	Trust bearing 51105	1	

Attention: The part marked ※ is exist or not according to the machine's good function when it is assembled in manufactory .

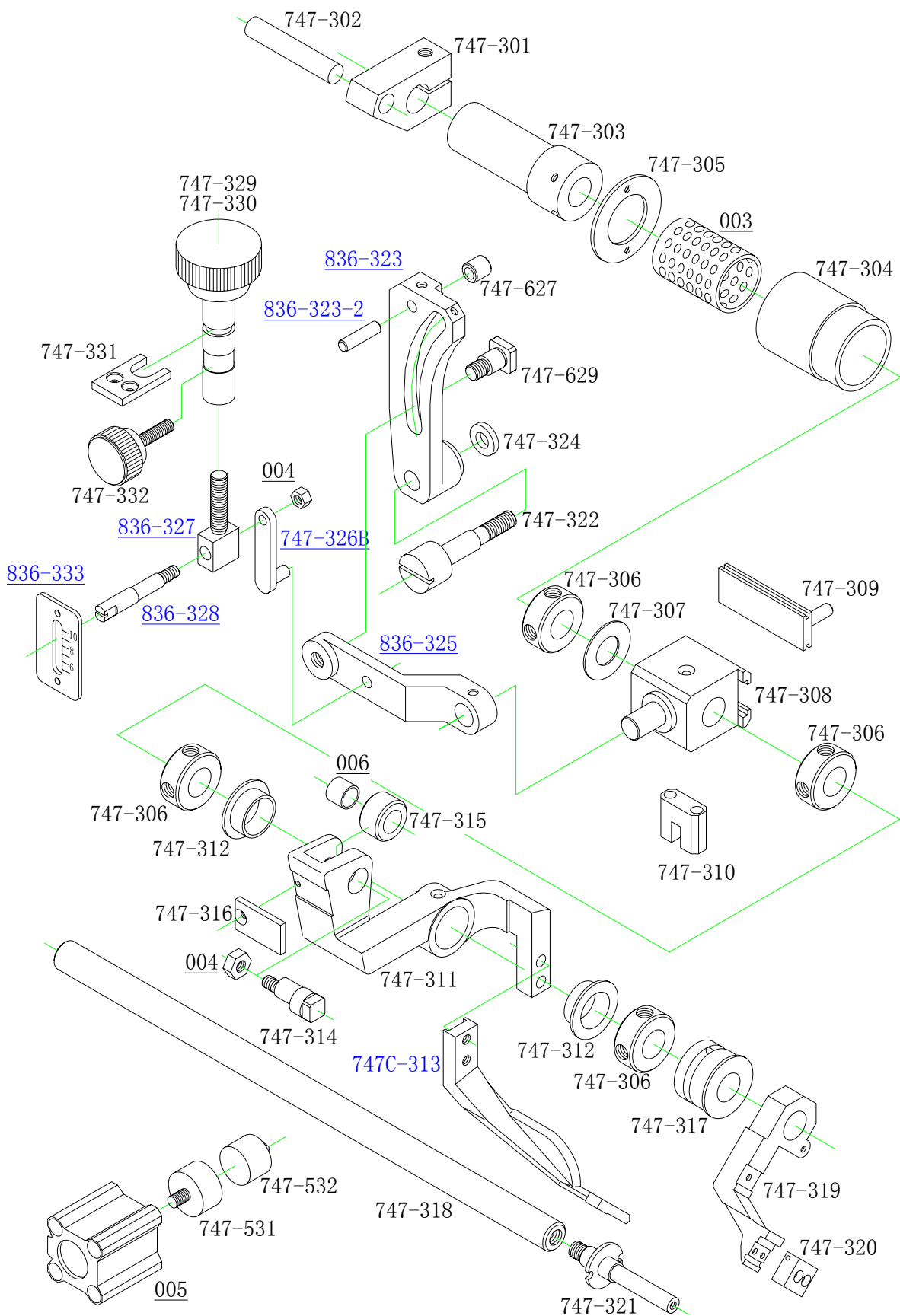


Fig. No.	Machine part	Quantity	Remarks
747-301	Needle driving crank	1	
747-302	Connecting shaft	1	
747-303	Thrust sleeve	1	
747-304	Bearing housing	1	
747-305	Covering plate	1	
747-306	Thrust ring	5	
747-307	Nylon washer	6	
747-308	Transport driving block	1	
747-309	Guide block	1	
747-310	Connecting block	1	
747-311	Counter presser action lever	1	
747-312	Sleeve	2	
747-314	Eccentric rod	2	
747-315	Roller	2	
747-316	Contact pad	2	
747-317	Front bushing	1	
747-318	Needle driving shaft	1	
747-319	Needle bar	1	
747-320	Needle clamp	1	
747-321	Fixing rod	1	
747-322	Supporting shaft	1	
747-324	Washer	1	
747-326B	Connecting lever	1	
747-329、330	Adjusting knob	1	
747-331	Fixing stirrup	1	
747-332	Blocking knob	1	
747C-313	Counter presser foot	1	
836-323	Transport driving lever	1	
836-323-2	Roller rod	1	
836-325	Connecting lever	1	
836-327	Adjusting action block	1	
836-328	Scale rod	1	
836-333	Graduated tile	1	
003	Linear bearing (312542)	1	
004	Jam nut (M6)	1	
005	Cylinder (CQ2B25-20D)	1	
006	Needle roller bearing (HK1012)	1	

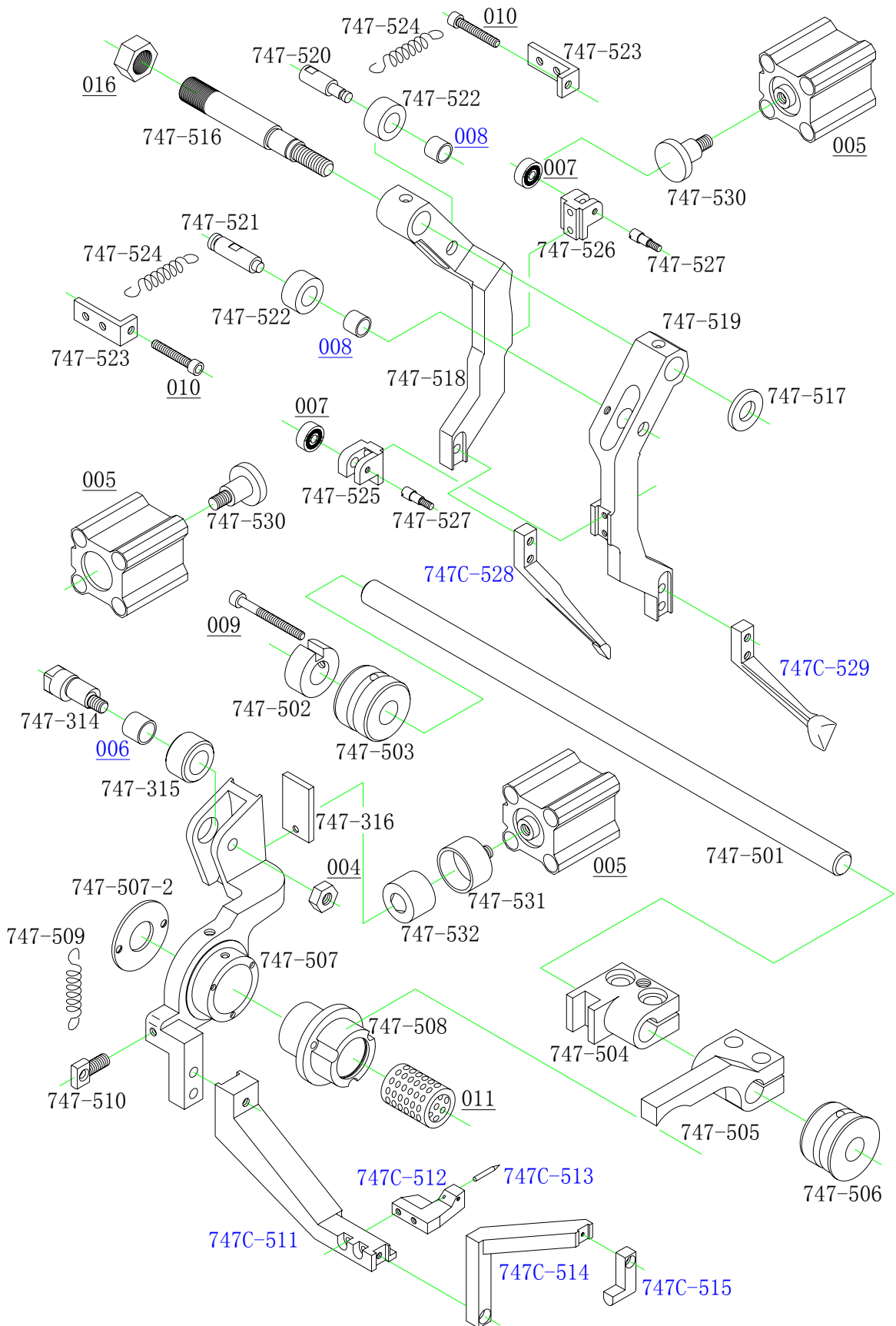


Fig. No.	Machine part	Quantity	Remarks
747-501	Gathering driving shaft	1	
747-502	Locating ring	1	
747-503	Back bushing	1	
747-504	Driving block	1	
747-505	Connecting lever	1	
747-506	Front bushing	1	
747-507	Gathering action lever	1	
747-507-2	Covering plate	1	
747-508	Bearing housing	1	
747-509	Return spring	1	
747-510	Spring hooking	1	
747-516	Support shaft	1	
747-517	Washer	1	
747-518	Right presser lever	1	
747-519	Left presser lever	1	
747-520	Roller rod (right)	1	
747-521	Roller rod (left)	1	
747-522	Roller	2	
747-523	Spring hooking	2	
747-524	Spring	2	
747-525	Roller seat (left)	1	
747-526	Roller seat (right)	1	
747-527	Roller rod	2	
747-530	Knock-out block	2	
747-531	Bearing housing	2	
747-532	Knock-out bearing	1	
747C-511	Gathering lever	1	
747C-512	Gathering barb seat	1	
747C-513	Gathering barb	1	
747C-514	Connecting lever	1	
747C-515	Little connecting lever	1	
747C-528	Right presser foot	1	
747C-529	Left presser foot	1	
004	Jam nut (M6)	1	
005	Cylinder (CQ2B25-20D)	3	
006	Needle roller bearing (HK1012)	1	
007	Bearing (624ZZ)	2	
008	Needle roller bearing (HK0808)	2	
009	Screw (M5×40)	1	
010	Screw (M4×25)	2	
011	Linear bearing (211528)	1	
016	Jam nut (M12)	1	

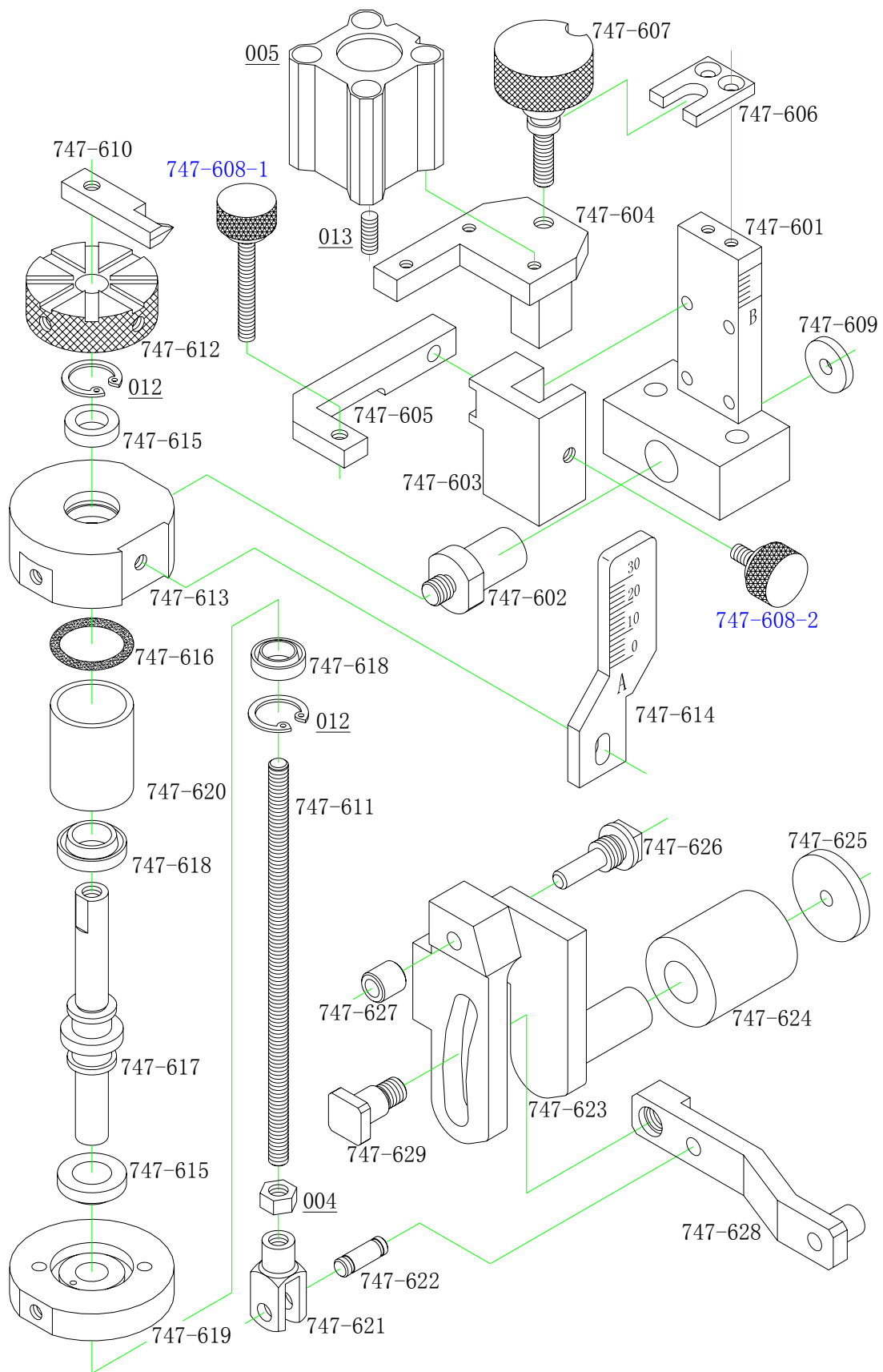


Fig. No.	Machine part	Quantity	Remarks
747-601	Adjusting device seat	1	
747-602	Connecting rod	1	
747-603	Stirrup	1	
747-604	Piston seat	1	
747-605	Fixing lever	1	
747-606	Fixing stirrup	1	
747-607	Adjusting knob	1	
747-608-1	Setting knob (long)	1	
747-608-2	Setting knob (short)	1	
747-609	Washer	1	
747-610	Index arrow	1	
747-611	Screw rod	1	
747-612	Setting nut	1	
747-613	Upper cylinder cover	1	
747-614	Graduated scale	1	
747-615	Y lock ring	1	
747-616	Lock ring	2	
747-617	Piston rod	1	
747-618	Y lock ring	1	
747-619	Lower cylinder cover	1	
747-620	Cylinder body	1	
747-621	Connecting stirrup	1	
747-622	Rod	1	
747-623	Gathering driving lever	1	
747-624	Copper busing	1	
747-625	Washer	1	
747-626	Roller rod	2	
747-627	Roller	2	
747-628	Connecting lever	1	
747-629	Rod	2	
004	Jam nut (M6)	1	
005	Cylinder (CQ2B25-20D)	1	
012	Snap ring (Ø17)	2	
013	Screw (M5)	1	

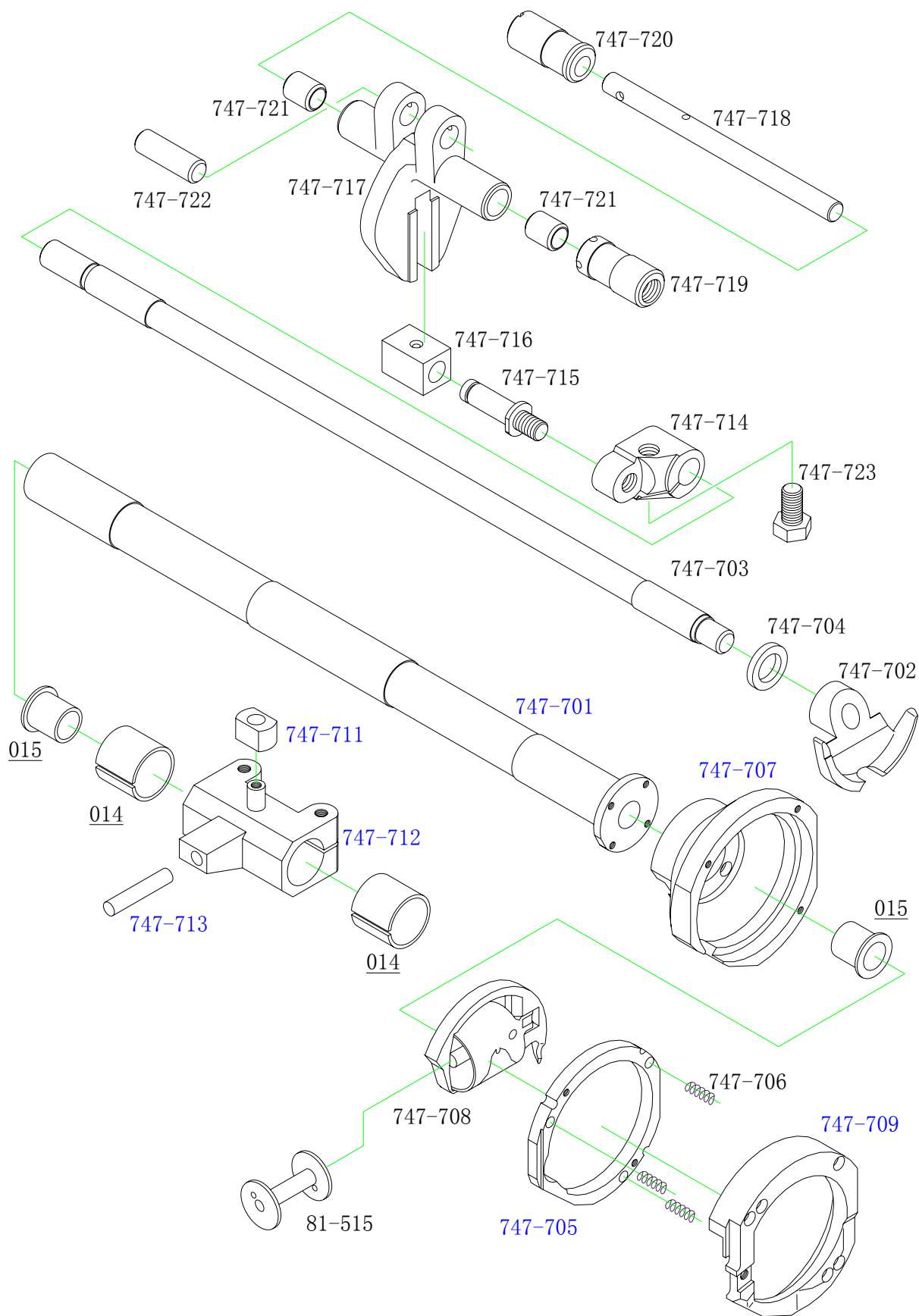
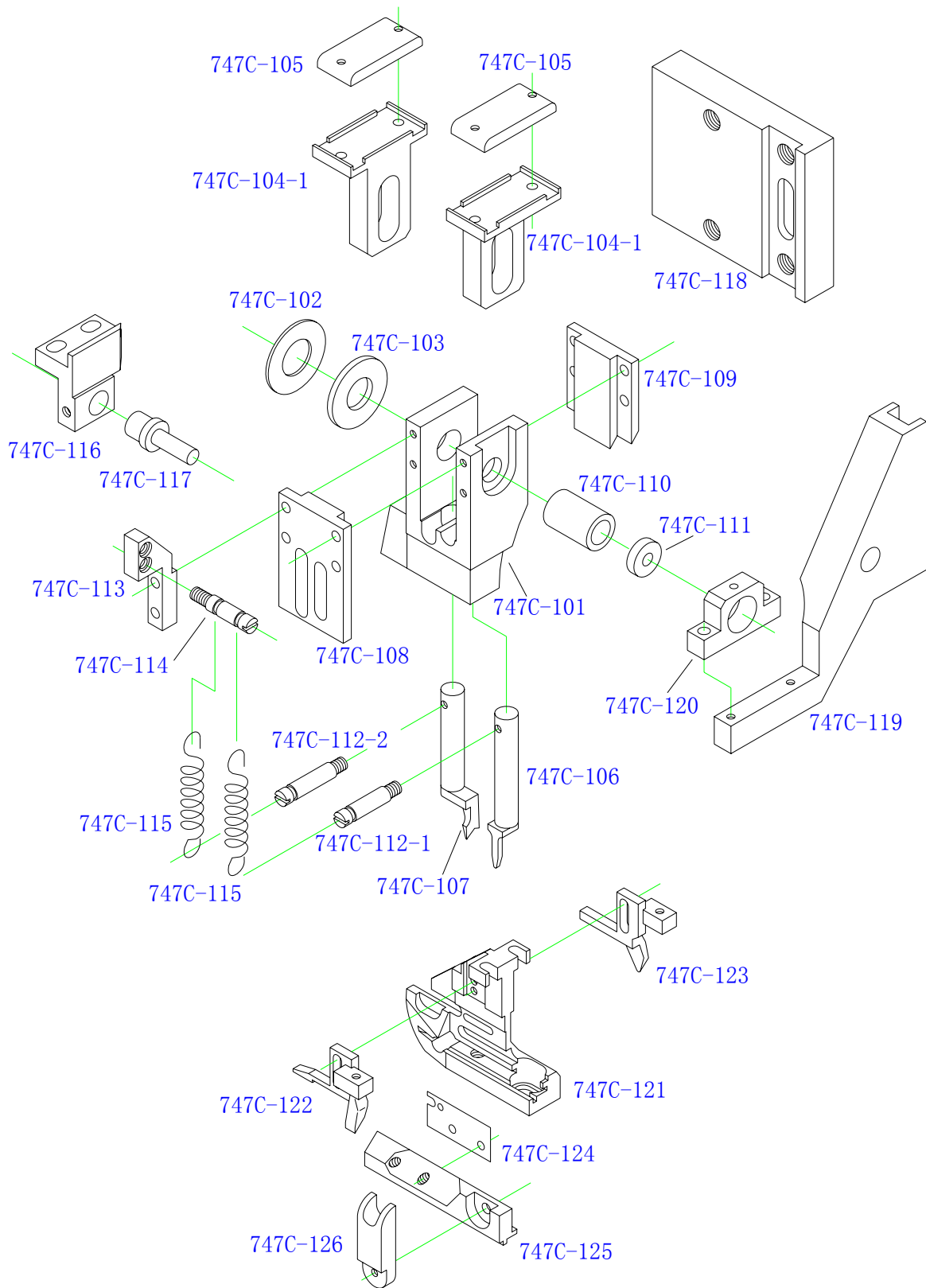


Fig. No.	Machine part	Quantity	Remarks
747-701	Shuttle seat shaft	1	
747-702	Shuttle driver	1	
747-703	Shuttle driving shaft	1	
747-704	Washer	1	
747-705	Fixing ring	1	
747-706	Spring	3	
747-707	Shuttle seat	1	
747-708	Shuttle	1	
747-709	Cover	1	
747-711	Block	1	
747-712	Clamp	1	
747-713	Connecting rod	1	
747-714	Shuttle driving crank	1	
747-715	Connecting rod	1	
747-716	Block	1	
747-717	Shuttle driving fork	1	
747-718	Support shaft	1	
747-719	Eccentric bushing	1	
747-720	Eccentric bushing	1	
747-721	Bushing	2	
747-722	Rod	1	
747-723	Screw	1	
81-515	Bobbin	1	
014	Linear bearing (SF2020)	2	
015	Linear bearing (SF1F12120)	2	

747C

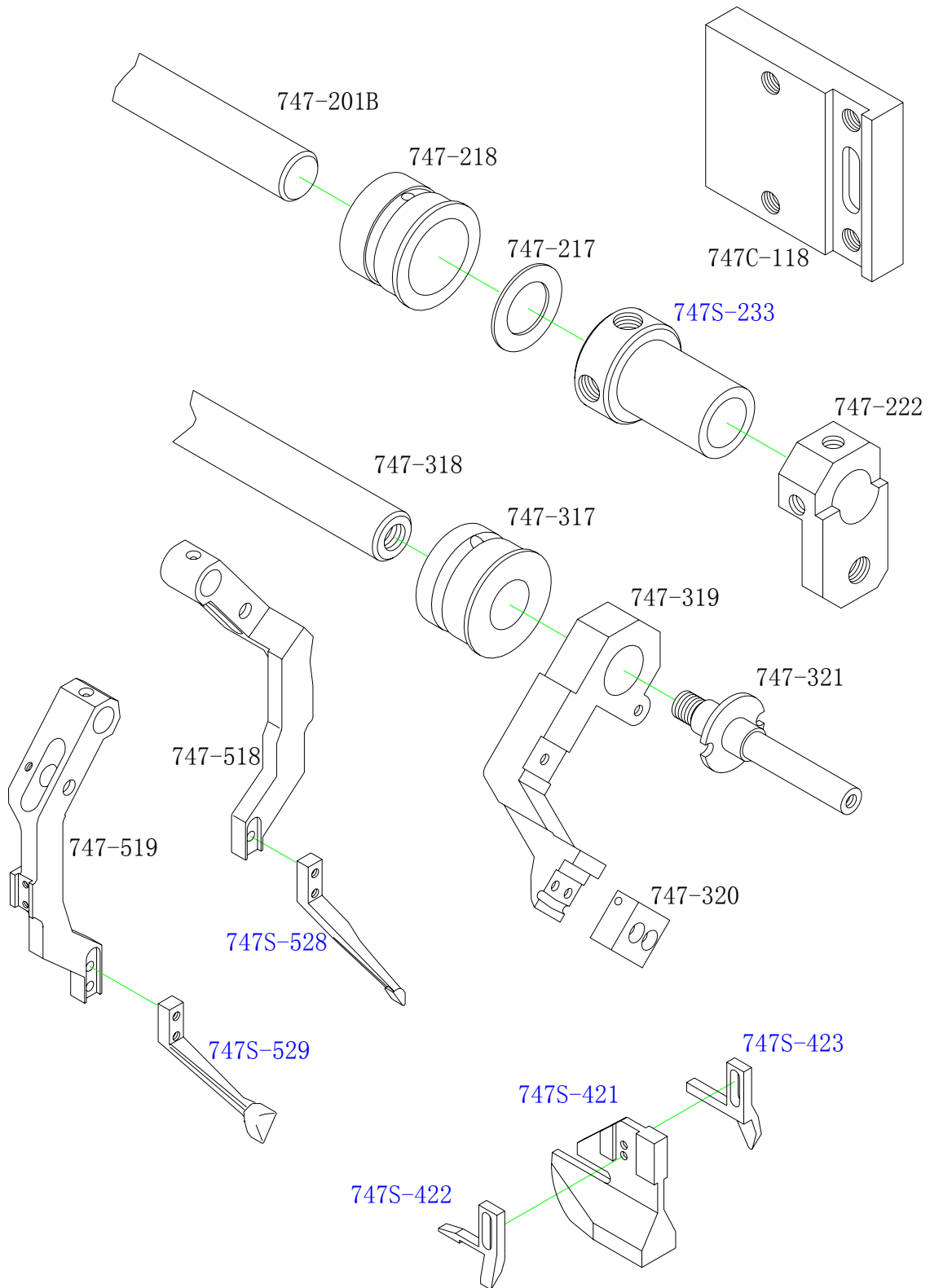


747C Parts list

Fig. No.	Machine part	Quantity	Remarks
747C-101	Support	1	
747C-102	Washer	1	※
747C-103	Washer	1	
747C-104-1	Action block (short)	2	
747C-105	Pad	2	
747C-106	Thread loosen punch	1	
747C-107	Edge presser	1	
747C-108	Left side covering plate	1	
747C-109	Right side covering plate	1	
747C-110	Bushing	1	
747C-111	Washer	2	
747C-112-1	Spring hook-up rod (short)	1	
747C-112-2	Spring hook-up rod (long)	1	
747C-113	Spring support	1	
747C-114	Upper spring hook-up rod	1	
747C-115	Return spring	2	
747C-116	Guiding rod seat	1	
747C-117	Guiding rod	1	
747C-118	Fixing plate	1	
747C-119	Support arm	1	
747C-120	Bushing support	1	
747C-121	Leather guide	1	
747C-122	Left limiter	1	
747C-123	Right limiter	1	
747C-124	Shim	1	
747C-125	Block	1	
747C-126	Connecting lever	1	

Attention: The part marked ※ is exist or not according to the machine's good function when it is assembled in manufactory.

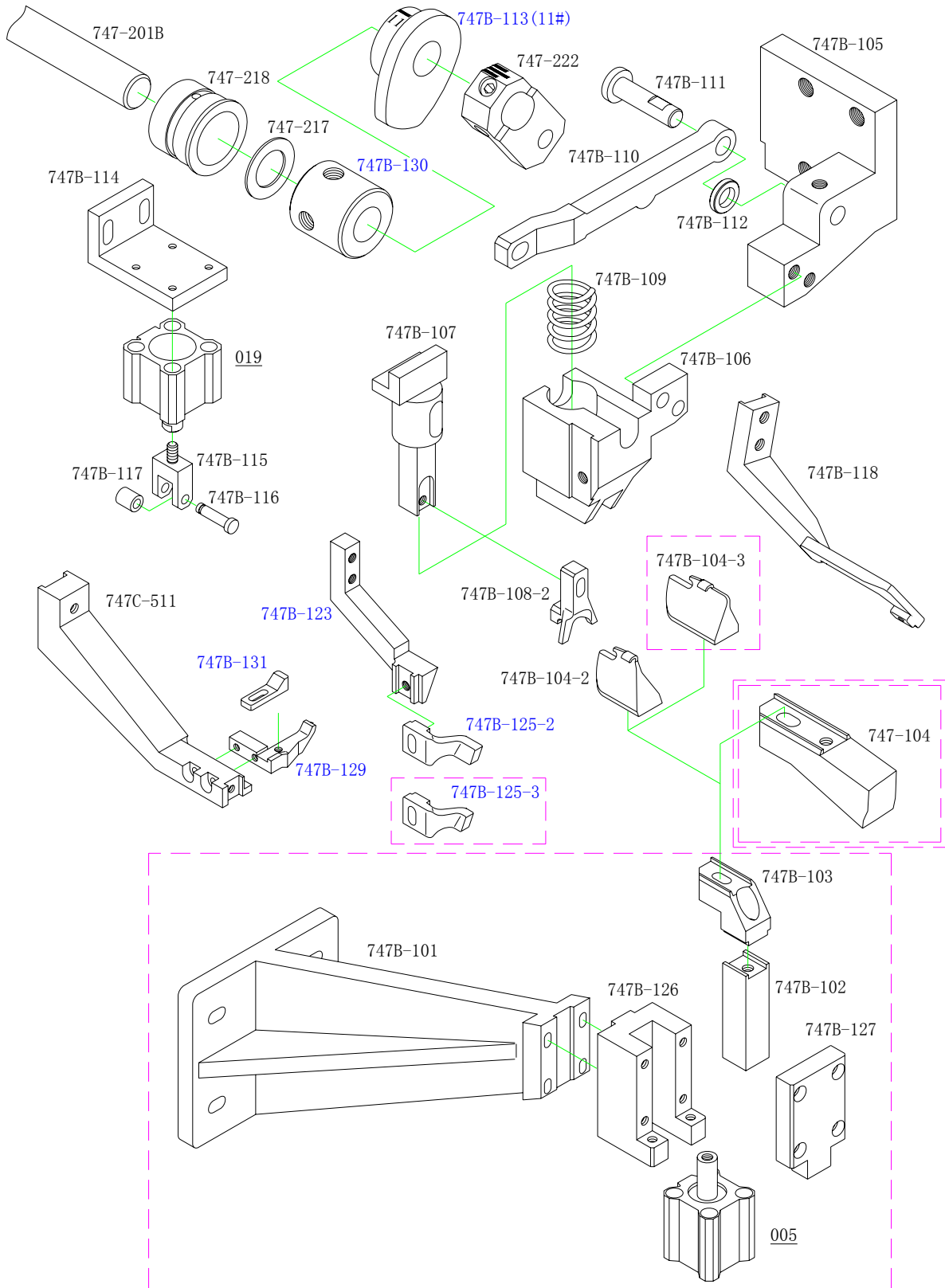
747S



747S Parts list

Fig. No.	Machine part	Quantity	Remarks
747S-233	Close ring	1	
747S-421	Leather guide	1	
747S-422	Left limiter	1	
747S-423	Right limiter	1	
747S-528	Right presser foot	1	
747S-529	Left presser foot	1	

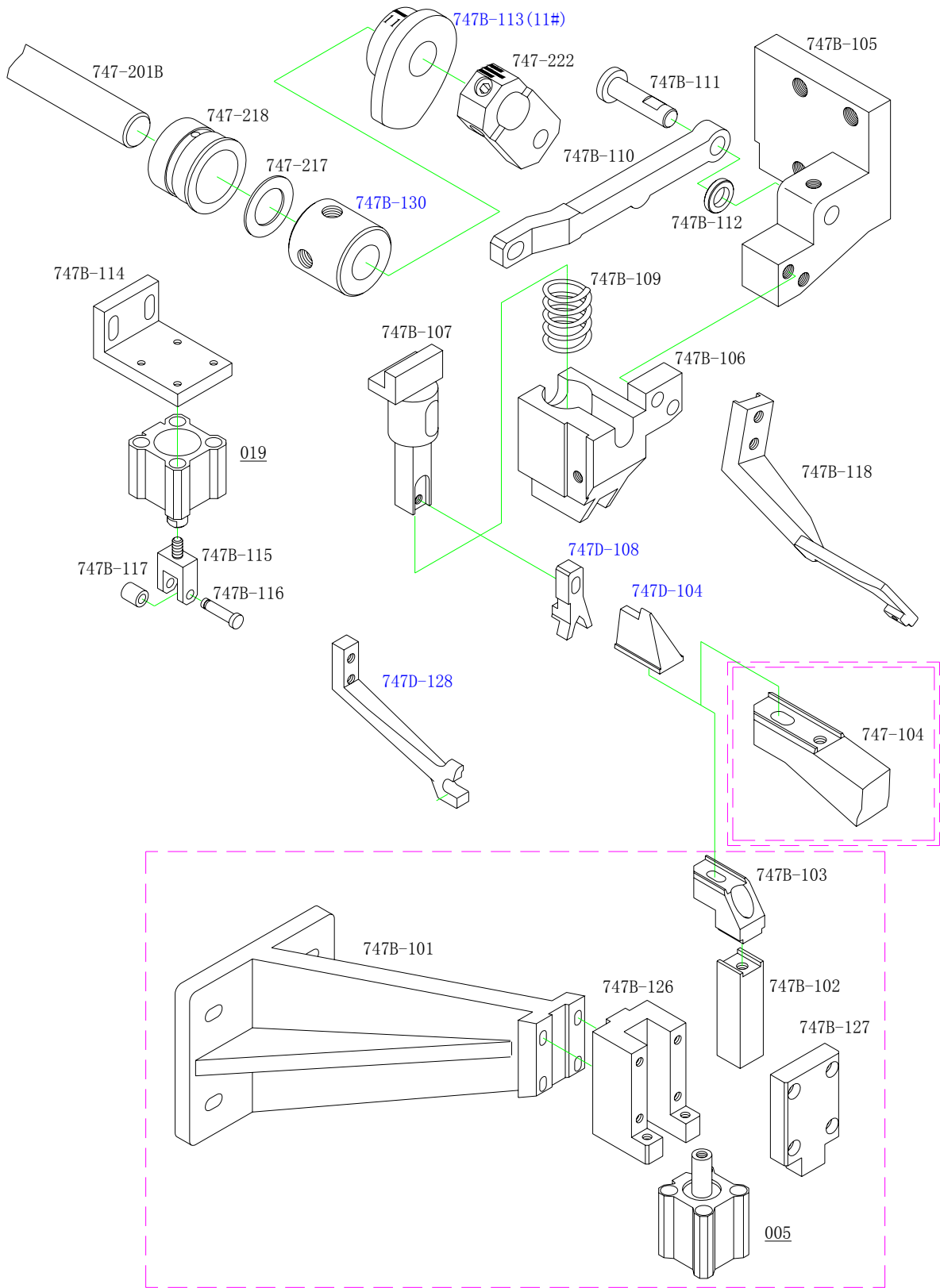
747B



747B Parts list

Fig. No.	Machine part	Quantity	Remarks
747B-101	Support arm	1	
747B-102	Supporter	1	
747B-103	Guide seat	1	
747B-104-2	Sewing guide	1	
747B-104-3	Sewing guide	1	
747B-105	Supporter	1	
747B-106	Supporter	1	
747B-107	Action lever	1	
747B-108-2	Pressing block	1	
747B-109	Spring	1	
747B-110	Lever	1	
747B-111	Support pin	1	
747B-112	Washer	1	
747B-113	Cam (11#)	1	
747B-114	Cylinder supporter	1	
747B-115	Roller supporter	1	
747B-116	Roller pin	1	
747B-117	Roller	1	
747B-118	Counter presser foot	1	
747B-123	Presser foot seat	1	
747B-125-2	Presser foot	1	
747B-125-3	Presser foot	1	
747B-126	Clevis	1	
747B-127	Cover plate	1	
747B-129	Gathering claw	1	
747B-130	Close ring	1	
747B-131	Limiting block	1	
747C-511	Gathering lever	1	
<u>005</u>	Cylinder (CQ2B25-20D)	1	
<u>019</u>	Cylinder (CQ2B16-10D)	1	

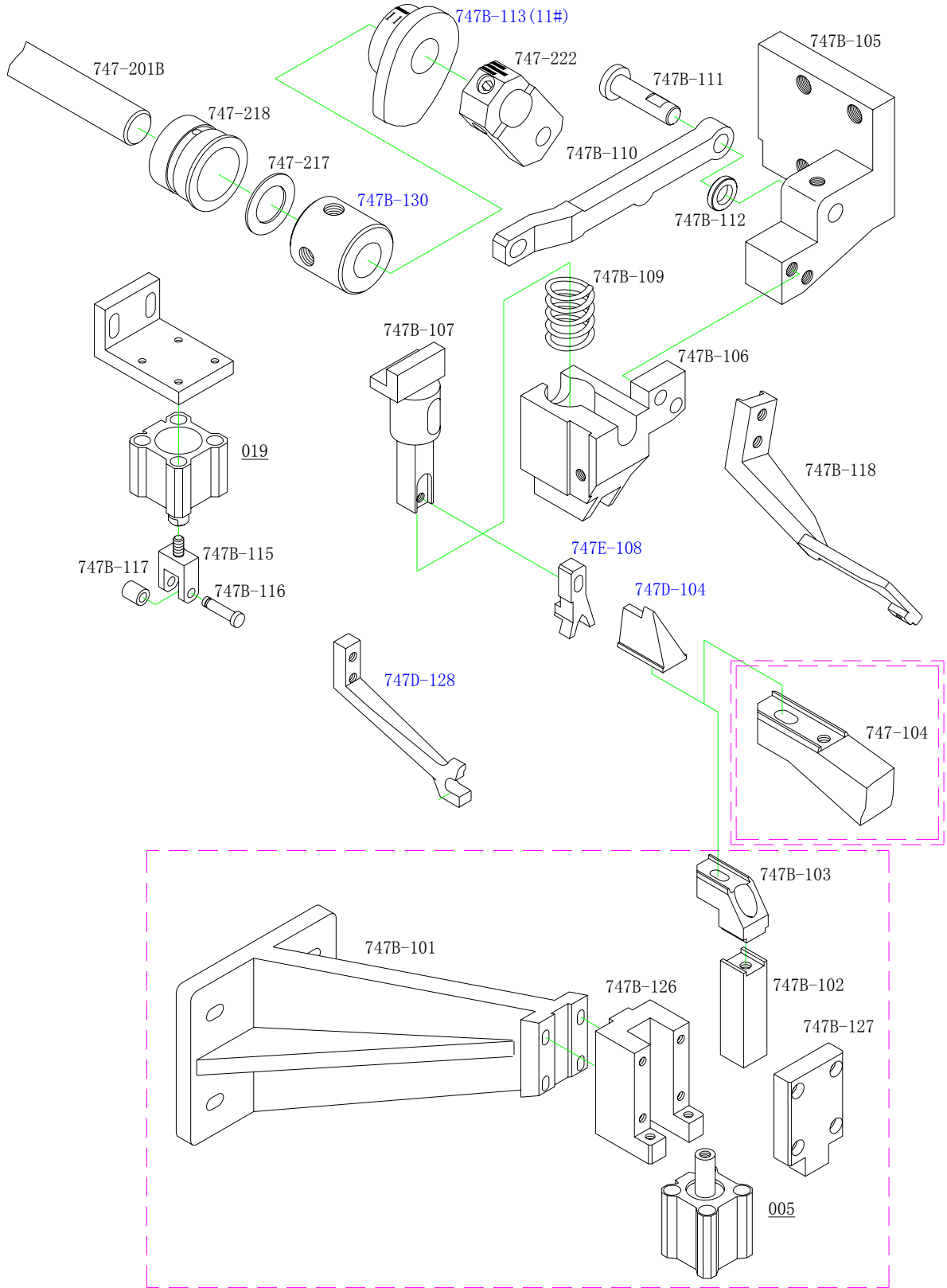
747D



747D Parts list

Fig. No.	Machine part	Quantity	Remarks
747B-101	Support arm	1	
747B-102	Supporter	1	
747B-103	Guide seat	1	
747B-105	Supporter	1	
747B-106	Supporter	1	
747B-107	Action lever	1	
747B-109	Spring	1	
747B-110	Lever	1	
747B-111	Support pin	1	
747B-112	Washer	1	
747B-113	Cam(11#)	1	
747B-114	Cylinder supporter	1	
747B-115	Roller supporter	1	
747B-116	Roller pin	1	
747B-117	Roller	1	
747B-118	Counter presser foot	1	
747B-126	Clevis	1	
747B-127	Cover plate	1	
747B-130	Close ring	1	
747D-104	Sewing guide	1	
747D-108	Pressing block	1	
747D-128	Left presser foot	1	
<u>005</u>	Cylinder (CQ2B25-20D)	1	
<u>019</u>	Cylinder (CQ2B16-10D)	1	

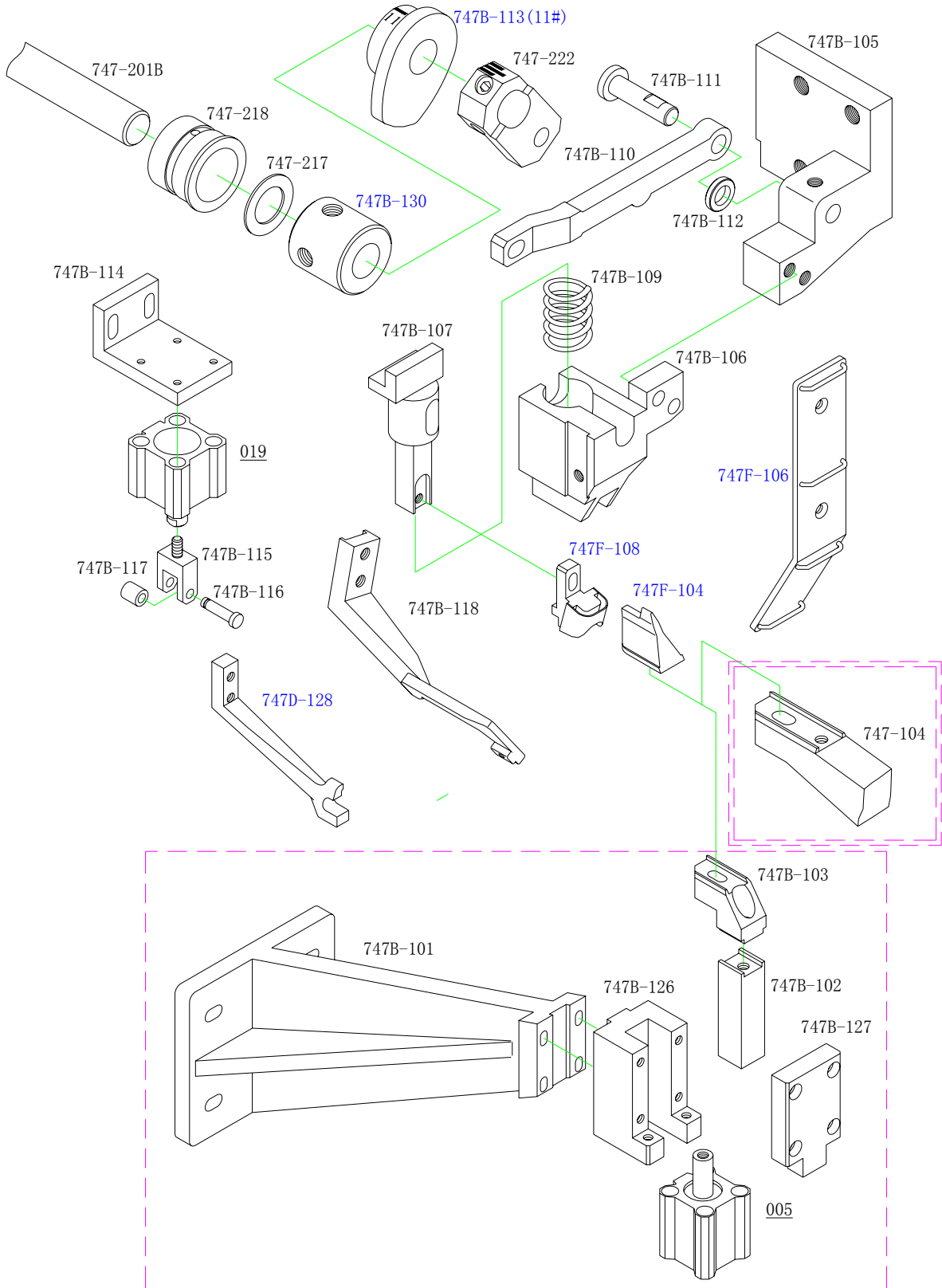
747E



747E Parts list

Fig. No.	Machine part	Quantity	Remarks
747B-101	Support arm	1	
747B-102	Supporter	1	
747B-103	Guide seat	1	
747B-105	Supporter	1	
747B-106	Supporter	1	
747B-107	Action lever	1	
747B-109	Spring	1	
747B-110	Lever	1	
747B-111	Support pin	1	
747B-112	Washer	1	
747B-113	Cam(11#)	1	
747B-114	Cylinder supporter	1	
747B-115	Roller supporter	1	
747B-116	Roller pin	1	
747B-117	Roller	1	
747B-118	Counter presser foot	1	
747B-126	Clevis	1	
747B-127	Cover plate	1	
747B-130	Close ring	1	
747D-104	Sewing guide	1	
747D-128	Left presser foot	1	
747E-108	Pressing block	1	
<u>005</u>	Cylinder (CQ2B25-20D)	1	
<u>019</u>	Cylinder (CQ2B16-10D)	1	

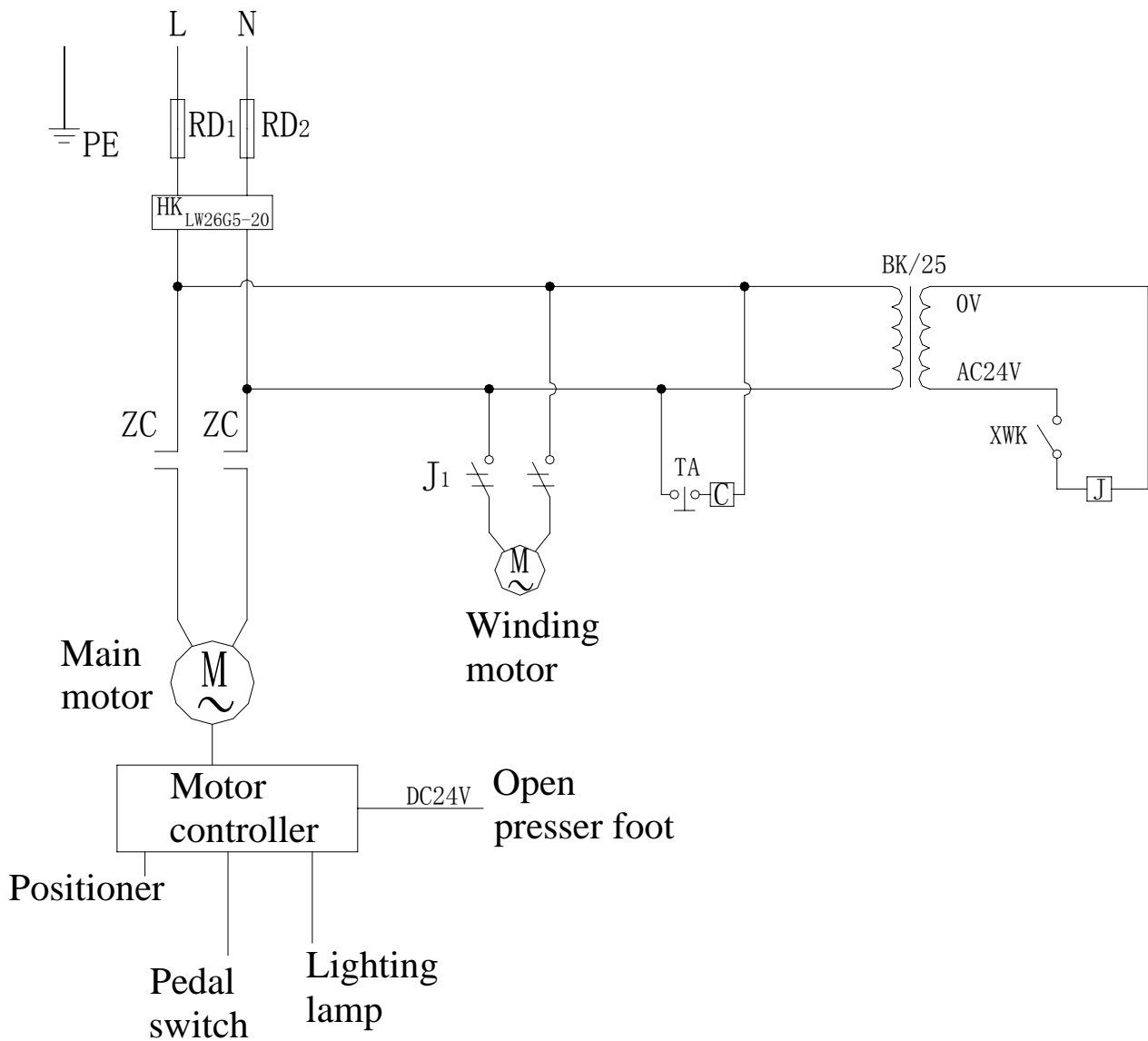
747F



747F Parts list

Fig. No.	Machine part	Quantity	Remarks
747B-101	Support arm	1	
747B-102	Supporter	1	
747B-103	Guide seat	1	
747B-105	Supporter	1	
747B-106	Supporter	1	
747B-107	Action lever	1	
747B-109	Spring	1	
747B-110	Lever	1	
747B-111	Support pin	1	
747B-112	Washer	1	
747B-113	Cam(11#)	1	
747B-114	Cylinder supporter	1	
747B-115	Roller supporter	1	
747B-116	Roller pin	1	
747B-117	Roller	1	
747B-118	Counter presser foot	1	
747B-126	Clevis	1	
747B-127	Cover plate	1	
747B-130	Close ring	1	
747D-128	Left presser foot	1	
747F-104	Sewing guide	1	
747F-106	Welt groove	1	
747F-108	Welt spout	1	
<u>005</u>	Cylinder (CQ2B25-20D)	1	
<u>019</u>	Cylinder (CQ2B16-10D)	1	

747 Electrical Block Diagram



Parameter Setting of the Motor (HVP-90 for 747)

Parameter Mode A: Press 'P' key to enter Parameter Mode A

PARAMETER CODE	DEFAULT	DESCRIPTION
001	500	Maximum sewing speed, Recommended speed less than 700RPM.
007	400	Soft start speed adjustment, don't adjust is recommended.
046	CW	Direction of motor rotation.

Parameter Mode B: Turn off the motor, press and hold the 'P' key, then turn on the power to enter Parameter Mode B.

PARAMETER CODE	DEFAULT	DESCRIPTION
049	156	Setting machine pulley dimension, don't adjust is recommended.
050	85	Setting machine pulley dimension, don't adjust is recommended.
060	150	Setting acceleration curve, recommended value less than 200.
065	55	For solenoid's switching power adjustment, recommended value less than 300. Wrongly adjustment will cause the solenoid unable to lift or over-heating!
067	OFF	Keep lifting when presser foot active is stop.
069	0	Time setting between sewing stop active to presser foot active.
072	ON	

Parameter Mode C: Turn off the motor, press and hold the 'S' key, then turn on the power to enter Parameter Mode C.

PARAMETER CODE	DEFAULT	DESCRIPTION
168	20	Setting needle stop torsion, recommended value less than 30.
246	OFF	Keep lifting when presser foot active is stop.
