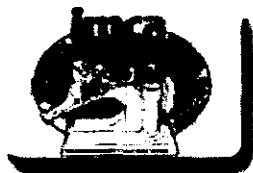


GLOBAL

SM 7747

Single needle lockstitch sewing machine
for moccasins

INSTRUCTION / OPERATING MANUAL
PARTS MANUAL



Used sewing machines
Gebrauchtmaschinen
Máquinas usadas
Machines occasion



New sewing machines
Neue Nähmaschinen
Máquinas nuevas
Machines nouveaux



Spare parts for Global machines

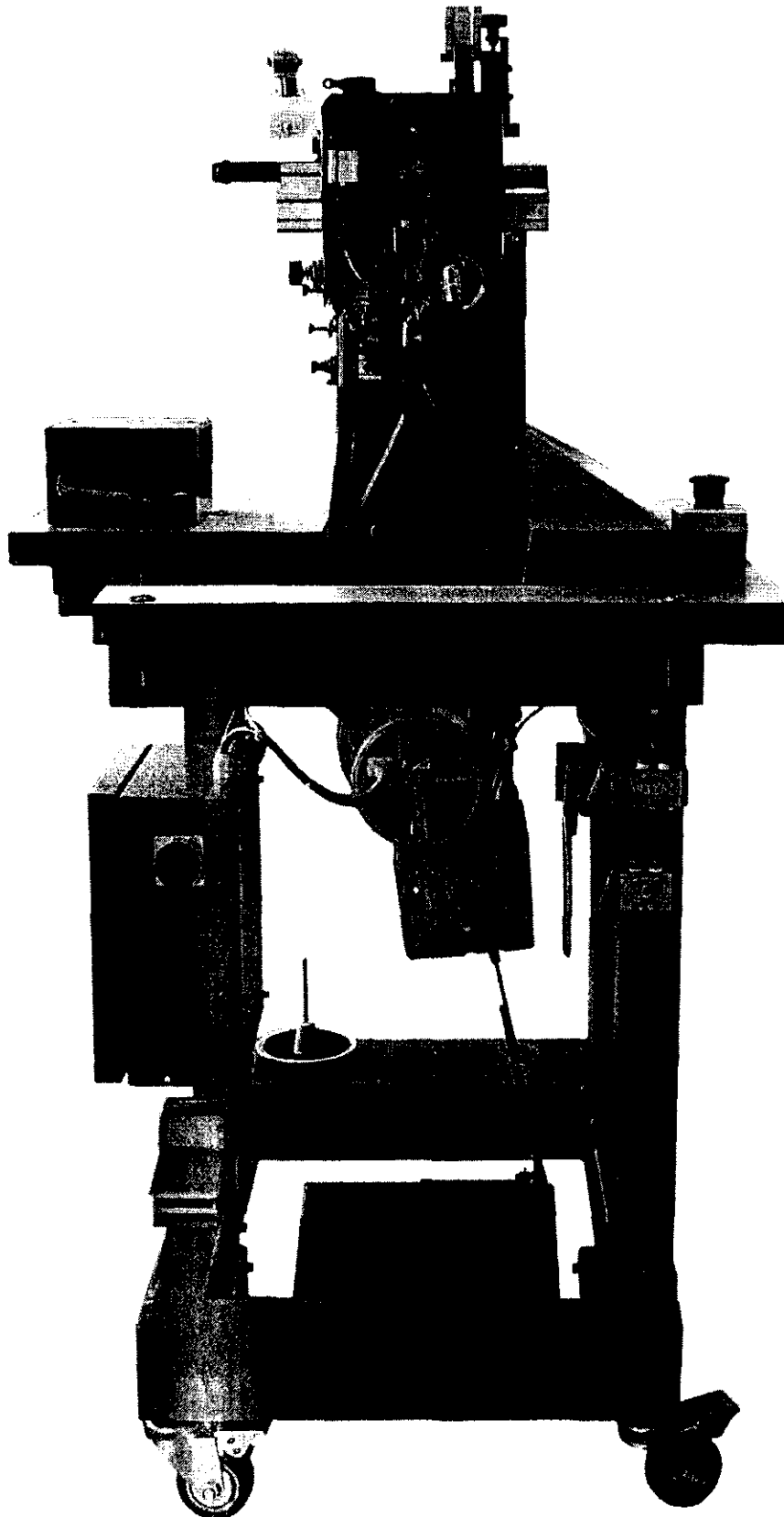


European distributor
of HO HSING
motors

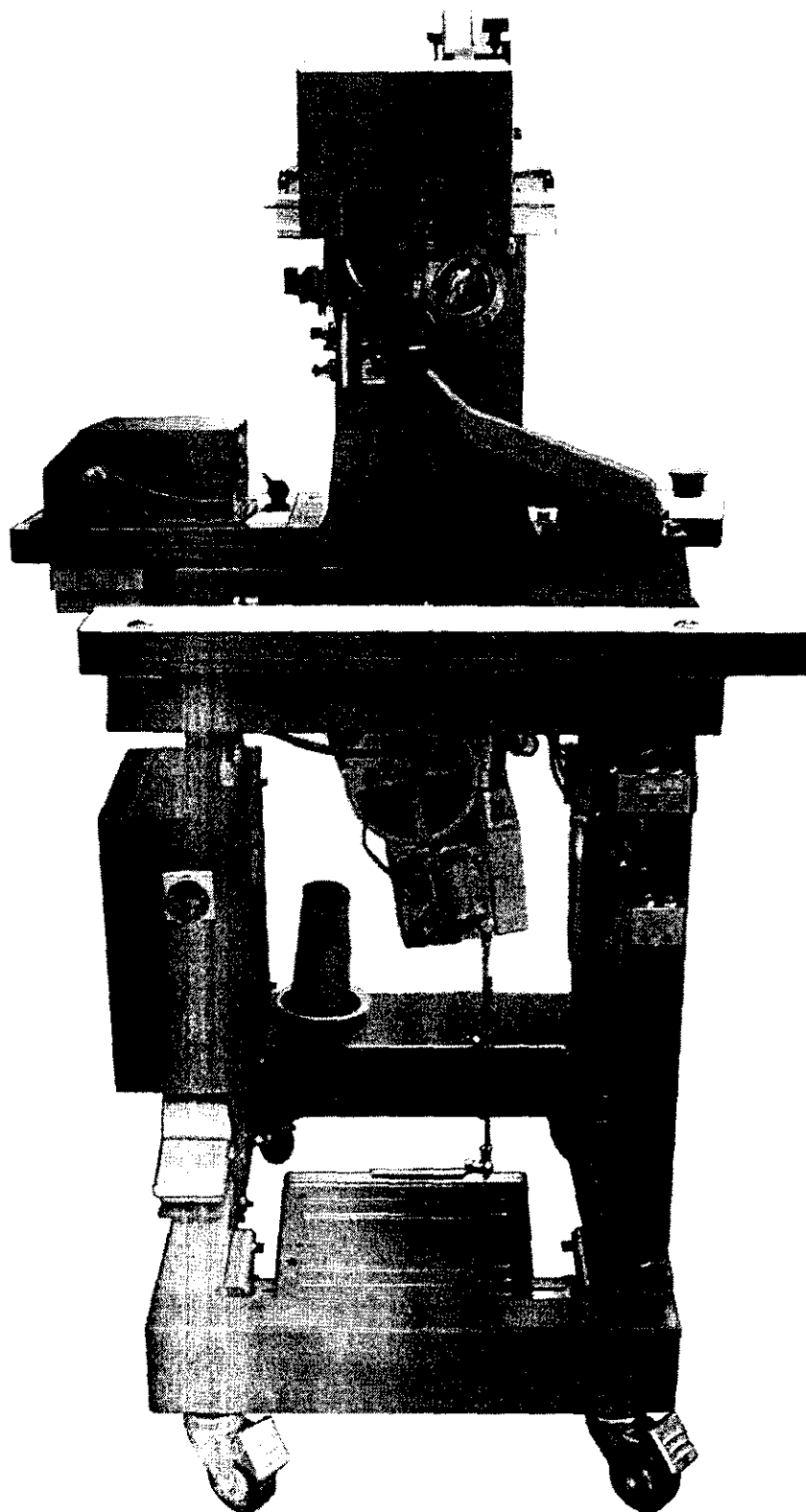
WWW.IMCA.NET

INFO@IMCA.NET

7747



7747-B



INDEX LIST

1. MACHINE DESCRIPTION	1
2. TECHNICAL FEATURES OF THE MACHINE	1
3. PREPARATION READY FOR USE	2
3.1 Compress air supply connection	2
3.2 The function of start pedal, kneel lever and foot valve	2
3.2.1 Start pedal	2
3.2.2 Knee lever	3
3.2.3 Foot valve	3
3.3 Needle thread preparation	3
3.4 Tension adjustment setting of the needle thread	3
3.5 Stitch length adjustment setting	4
3.6 Adjustment setting of gathering rate	4
3.6.1 Basic gathering rate setting	5
3.6.2 First increase gathering rate setting	5
3.6.3 Correction gathering rate setting	6
3.7 Sewing cycle description of Mod.' 7747	6
4. REPLACEMENT AND ADJUSTMENT OPERATION	7
4.1 Needle replacement	7
4.2 Setting the highest position of the needle	7
4.3 Setting the shuttle position	8
4.4 Adjustment of stopping position	8
5. CHANG STITCH SEAMS	8
6. MACHINE MAINTENANCE	9
6.1 Spare parts and tools supplied with the machine	9
7. COMPRESS AIR SYSTEM	10
PARTS DRAWING	12

Thank you very much for your choice of Mod.7747 lockstitch sewing machine . Please read the manual carefully before use!

1. MACHINE DESCRIPTION

The Mod.7747 is a lockstitch sewing machine for stitching both lasted and tubular models with various types of stitching. The machine fitted with standard guide is called "S" type , it can carry out the seam stitching "barca" or "classic". The machine equipped with a edging device to instead of the guide is called "B" type, it can carry out the special type of the edge stitching which is called "edge stitching" or "bordo". This type of edge stitching consists in sewing the apron on top of the upper to create a double thickness. The machine fitted with a "scalloping" system is called "C" type, it can carry out the seam stitching "grain of rice", which gives a more noticeable "hand-stitched" effect.

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.

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

2. TECHNICAL FEATURES OF THE MACHINE

Sewing speed:	Stepless speed regulating
Stitch length:	4-8mm
Stitching thickness:	3mm (Max.)
Needle type:	Special curved needle
Needle size:	200-230
Thread diameter:	1-1.2mm
Sewing motor:	550W/220V single-phase 550W/380V three-phase
Lighting:	7W/220V
Net weight:	224 Kg
Gross weight:	
Machine dimensions:	90 × 77 × 145 cm(L. × W. × H.)

3. PREPARATION READY FOR USE

3.1 Compressed air supply connection

The compressed air system of the Mod.7747 is consist of a filter-reducer unit, nine 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 locatted 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.

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

3.2.1 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.

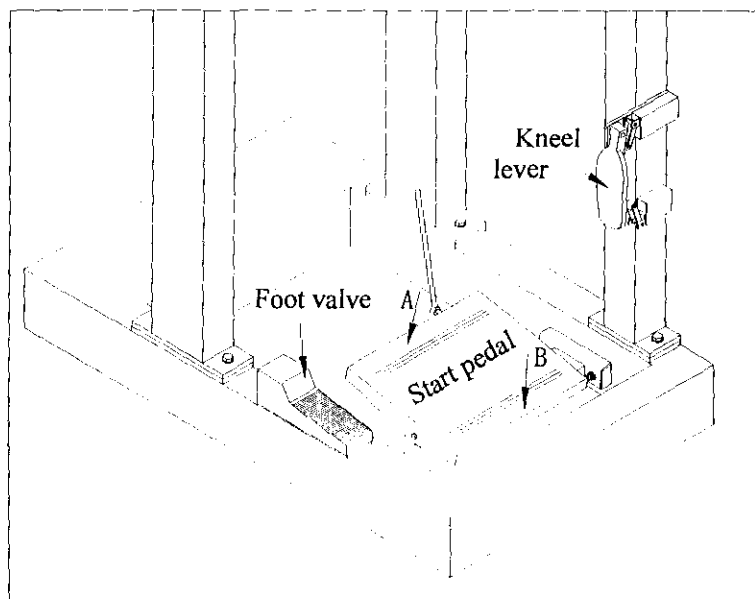


Fig.1

3.2.2 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**.

3.2.3 Foot valve

Pressing the foot valve, the gathering lever will be opened.

3.3 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

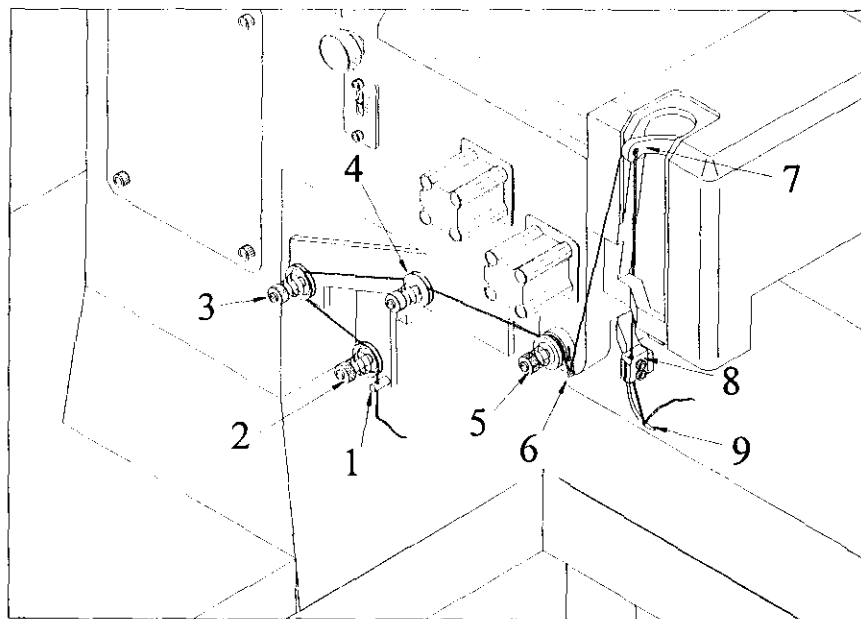


Fig.2

3.4 Tension adjustment setting of the needle thread

Needle thread tension can be adjusted by turning (2)Tightener 1 (3)Tightener2 and (5)Tighten wheel.(Fig.2)

3.5 Stitch length adjustment setting

The machine is designed to permit stitch lengths between a minimum of 4mm and a maximum of 8mm. 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.

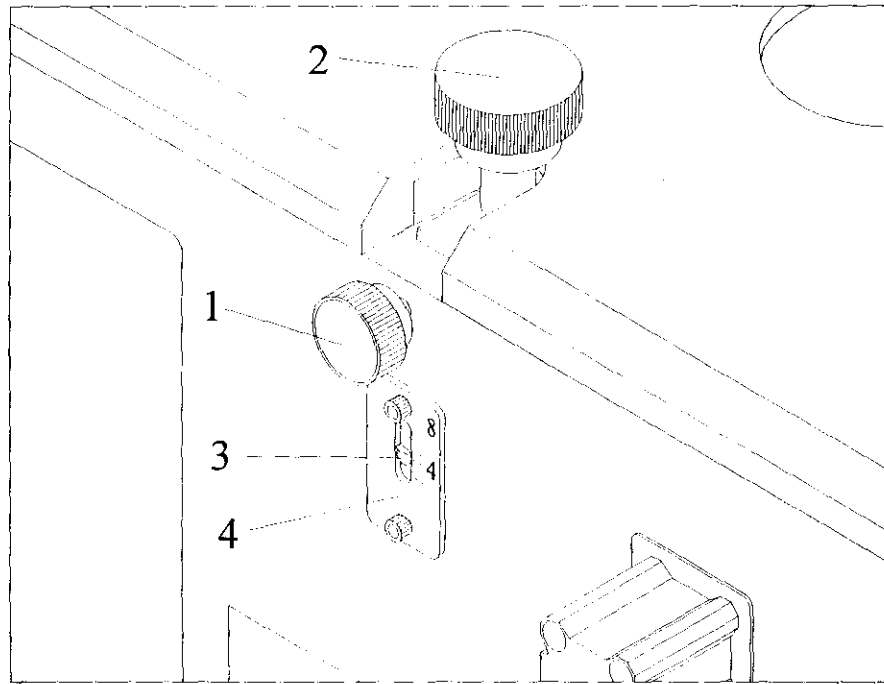


Fig.3

3.6 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.

3.6.1 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 is 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.

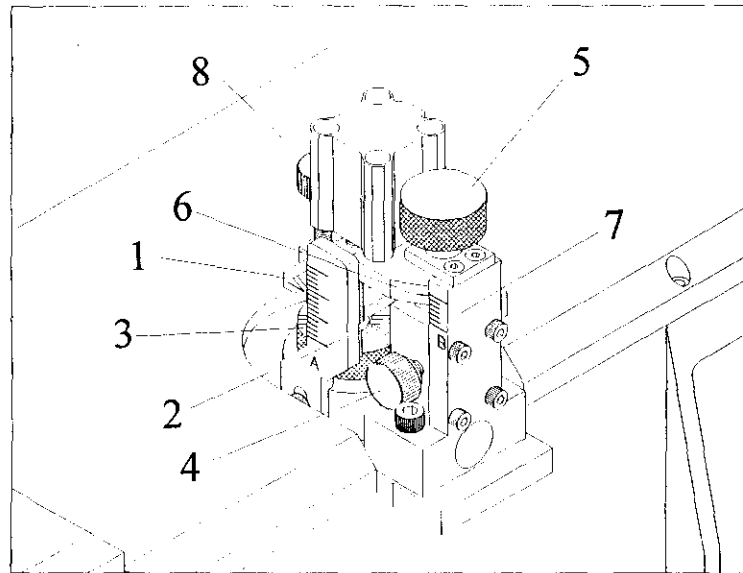


Fig.4

3.6.2 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 kneel lever as far as the fist 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**.

3.6.3 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 kneel 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 find that the first increase gathering rate is to tight in the gathering around the toe, he can release the kneel 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.

3.7 Sewing cycle description of Mod.7747

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

Warning: All replacement and adjustment described in this manual are to be carried out only after the machine has switched off.

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.

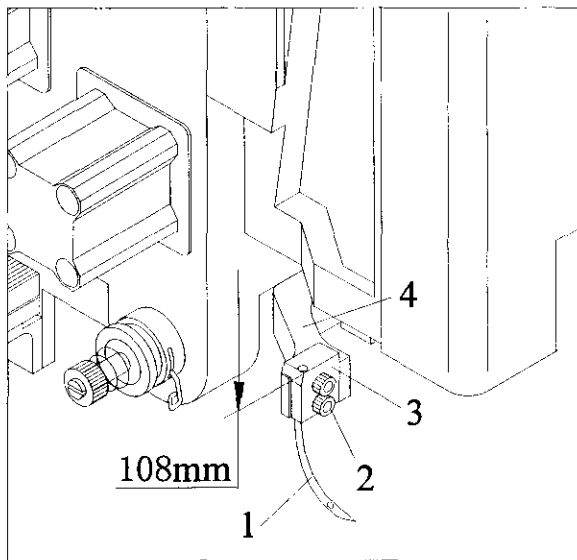


Fig.5

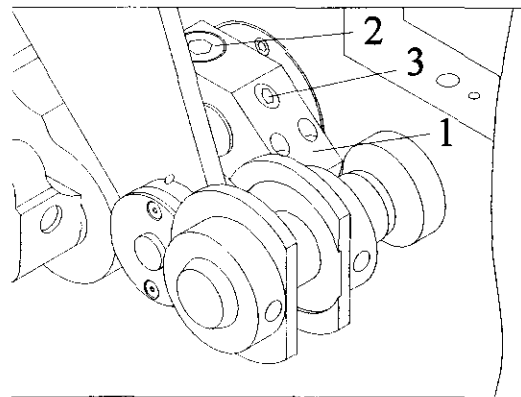


Fig.6

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 Setting the shuttle position (Fig.7 ,Fig.8)

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.

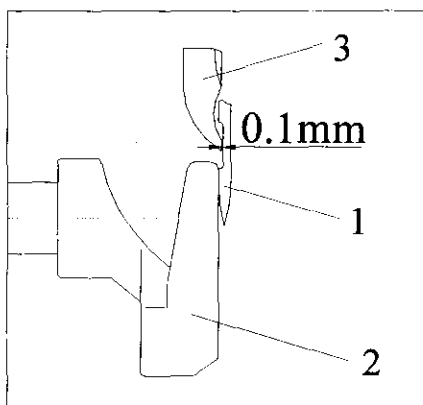


Fig.7

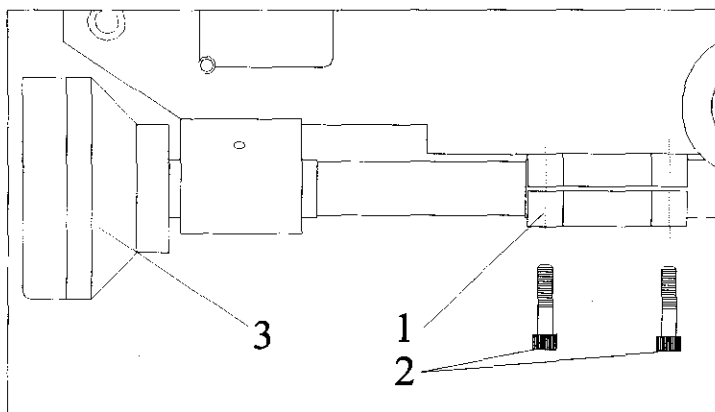


Fig.8

4.4 Adjustment of stopping position (Fig.9)

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.

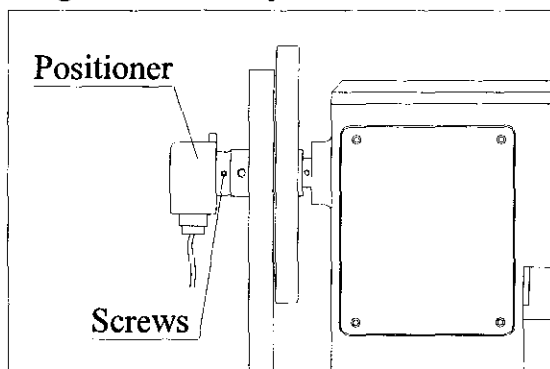


Fig.9

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

According to user’s need, the stitch seam that performed by the machine can be changed. The machine can be changed in “C” type, “S” type and “B” type 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.

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	1
747-404	Action block (short)	1
747-406	Thread loosen punch	1
747-407	Edge presser	1
747-415	Return spring	2
747-422	Left limiter of leather guide	1
747-423	Right limiter of leather guide	1
747-708	Shuttle	1
747-723	Screw	1
81-515	Bobbin	2
7747 "B" type	Whole set parts for 7747-B	1 set
	Fixing screw (3×3)	6
	Socket head screw (3×16)	6
	Screw (3×6)	6
	Needles (230/26#)	10

Below is the tool list

Name of the tool	Quantity
Screwdriver (5×200)	1
Crosswise screwdriver (5×200)	1
Complete set of Allen wrenches (1.5mm-10mm)	1 set
Open spanner (8-10)	1
Socket wrench (13-16)	1
T-Allen wrench (3mm/4mm/5mm)	1 each kind
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.10-Fig.12)

(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.10**

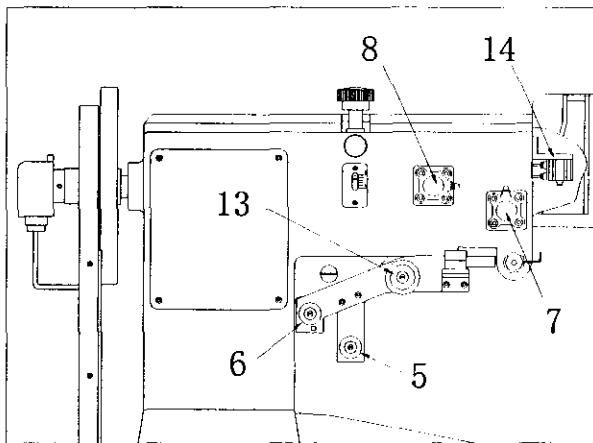


Fig.10

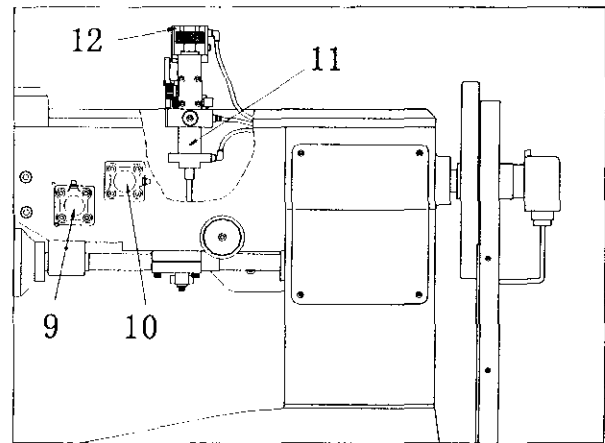


Fig.11

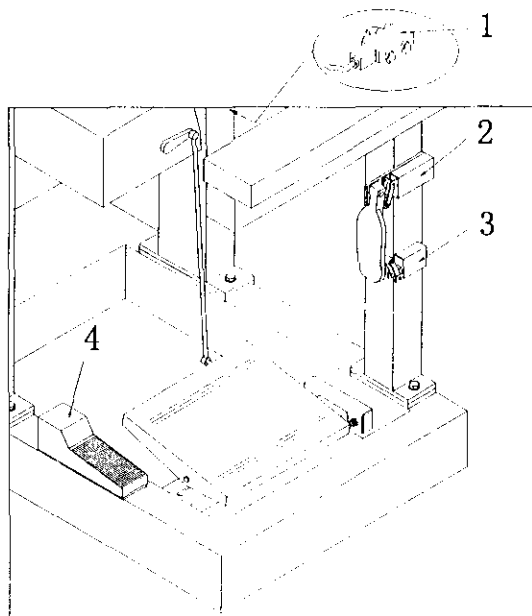
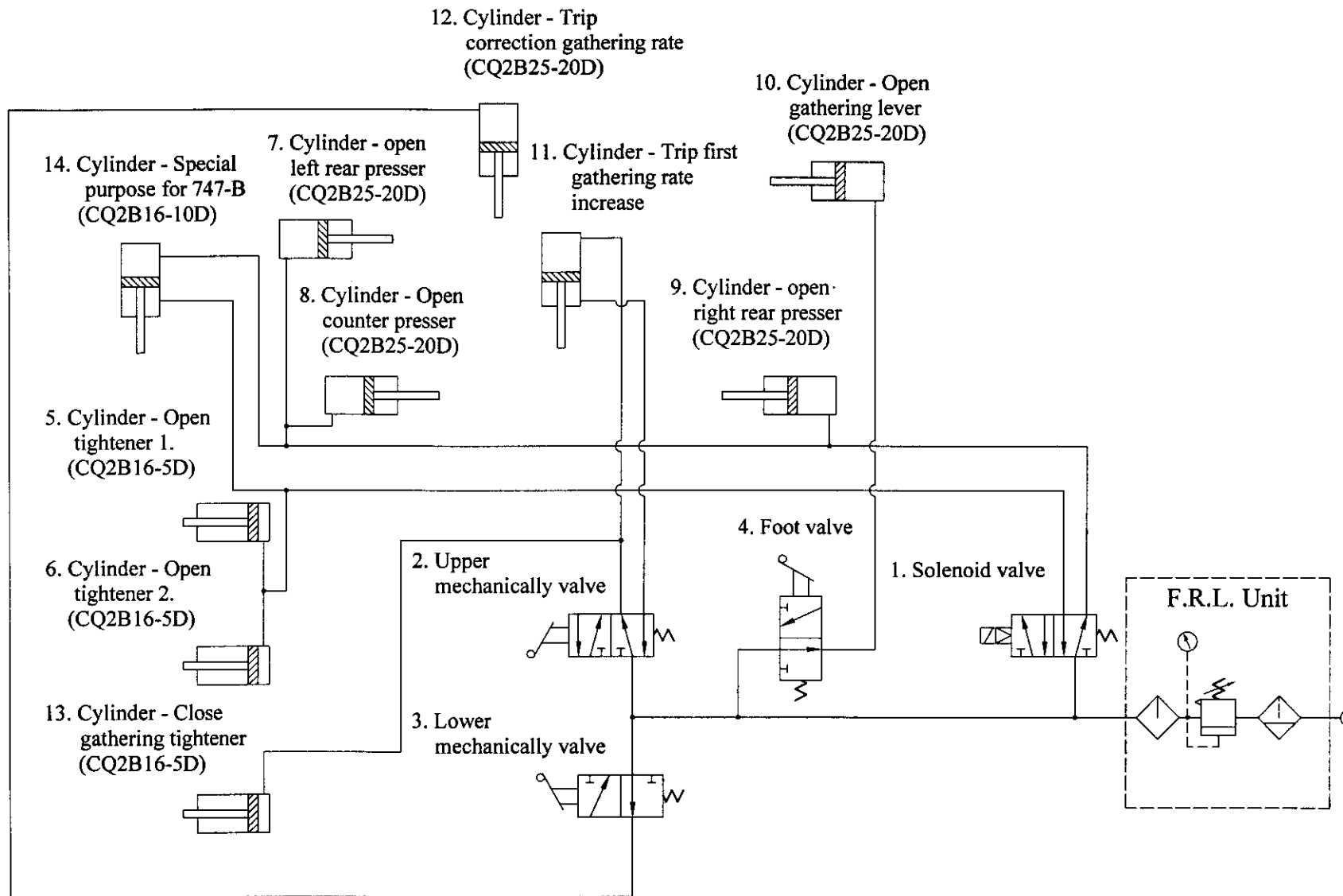


Fig.12

The layout of the compress air system



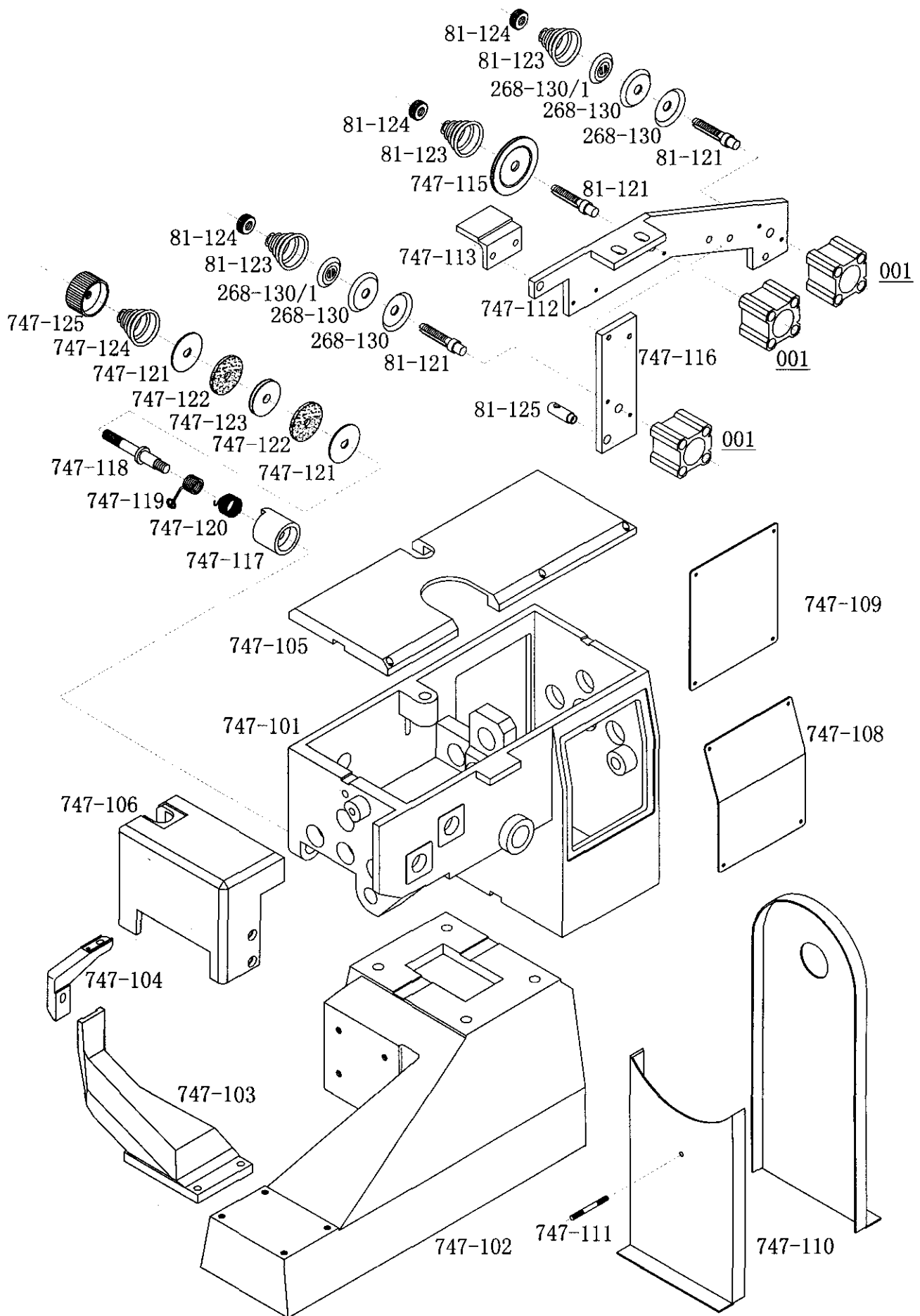


Fig. No.	Machine part	Quantity	Remarks
747-101	Frame	1	
747-102	Frame seat	1	
747-103	Horn	1	
747-104	Leather guide seat	1	
747-105	Upper cover	1	
747-106	Head cover	1	
747-108	Right side cover	1	
747-109	Left side cover	1	
747-110	Belt cover	1 set	
747-111	Screw rod	1	
747-112	Threading plate	1	
747-113	Lubricating support	1	
747-115	Threading wheel	1	
747-116	Little threading plate	1	
747-117	Housing	1	
747-118	Tightener 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	
747-124	Cone spring	1	
747-125	Nut	1	
81-121	Rod of thread tighener	3	
81-123	Cone spring	3	
81-124	Nut	3	
81-125	Threading rod	1	
268-130	Tightening disk	4	
268-130/1	Loosening disk	2	
001	Cylinder (CQ2B16-5D)	3	

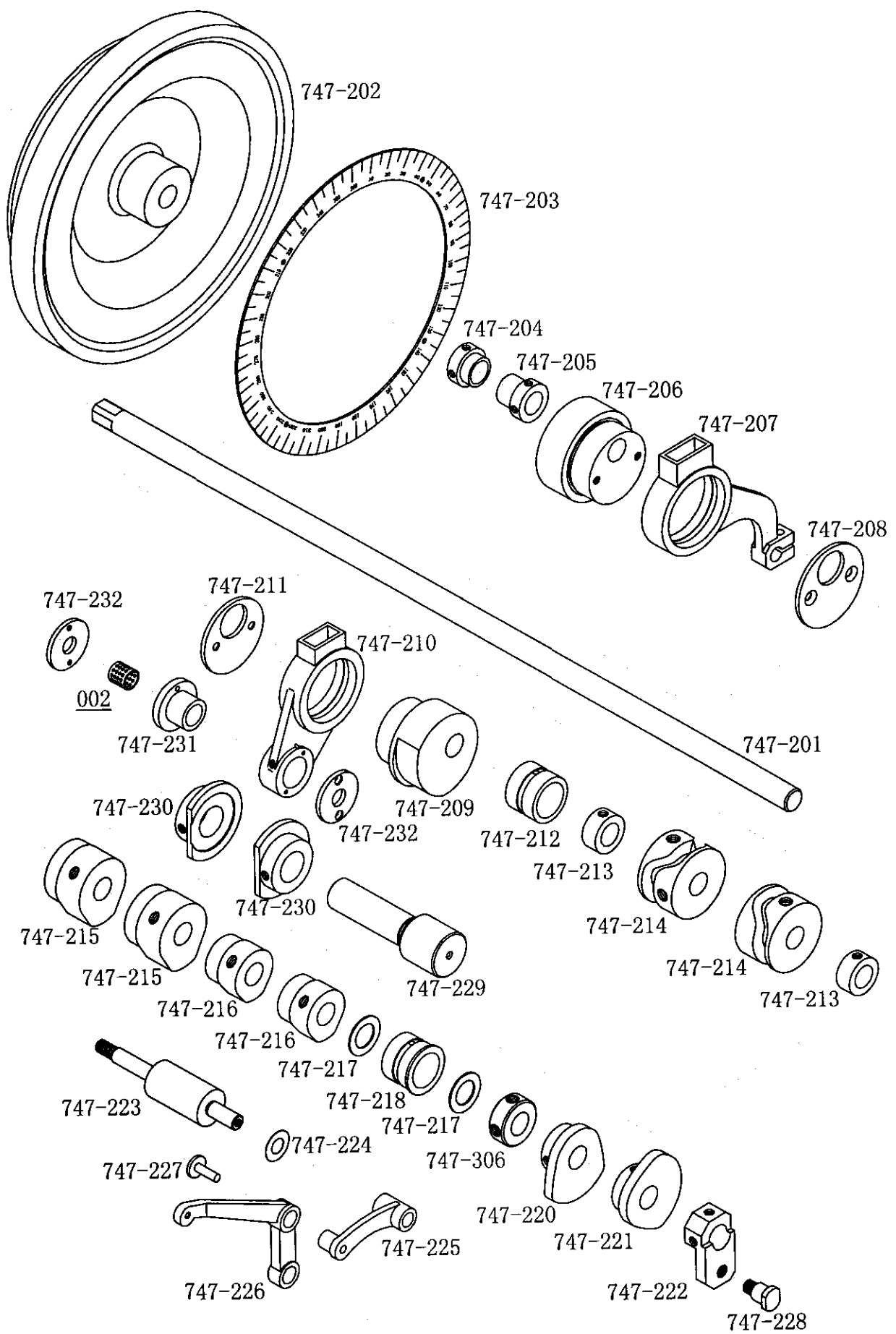


Fig. No.	Machine part	Quantity	Remarks
747-201	Central shaft	1	
747-202	Pulley	1	
747-203	Scale disk	1	
747-204	Thrust ring	1	
747-205	Thrust ring	1	
747-206	Shuttle driving cam	1	
747-207	Connecting lever	1	
747-208	Covering plate	1	
747-209	Needle driving cam	1	
747-210	Connecting lever	1	
747-211	Covering plate	1	
747-212	Mid bearing housing	1	
747-213	Thrust ring	2	
747-214	Transporting cam	2	
747-215	Gathering lever driving cam	2	
747-216	Rear feet driving cam	2	
747-217	Washer	3	
747-218	Front bearing housing	1	
747-220	Edge presser driving cam	1	
747-221	Thread loosing cam	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	
002	Linear bearing (141013)	1	

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

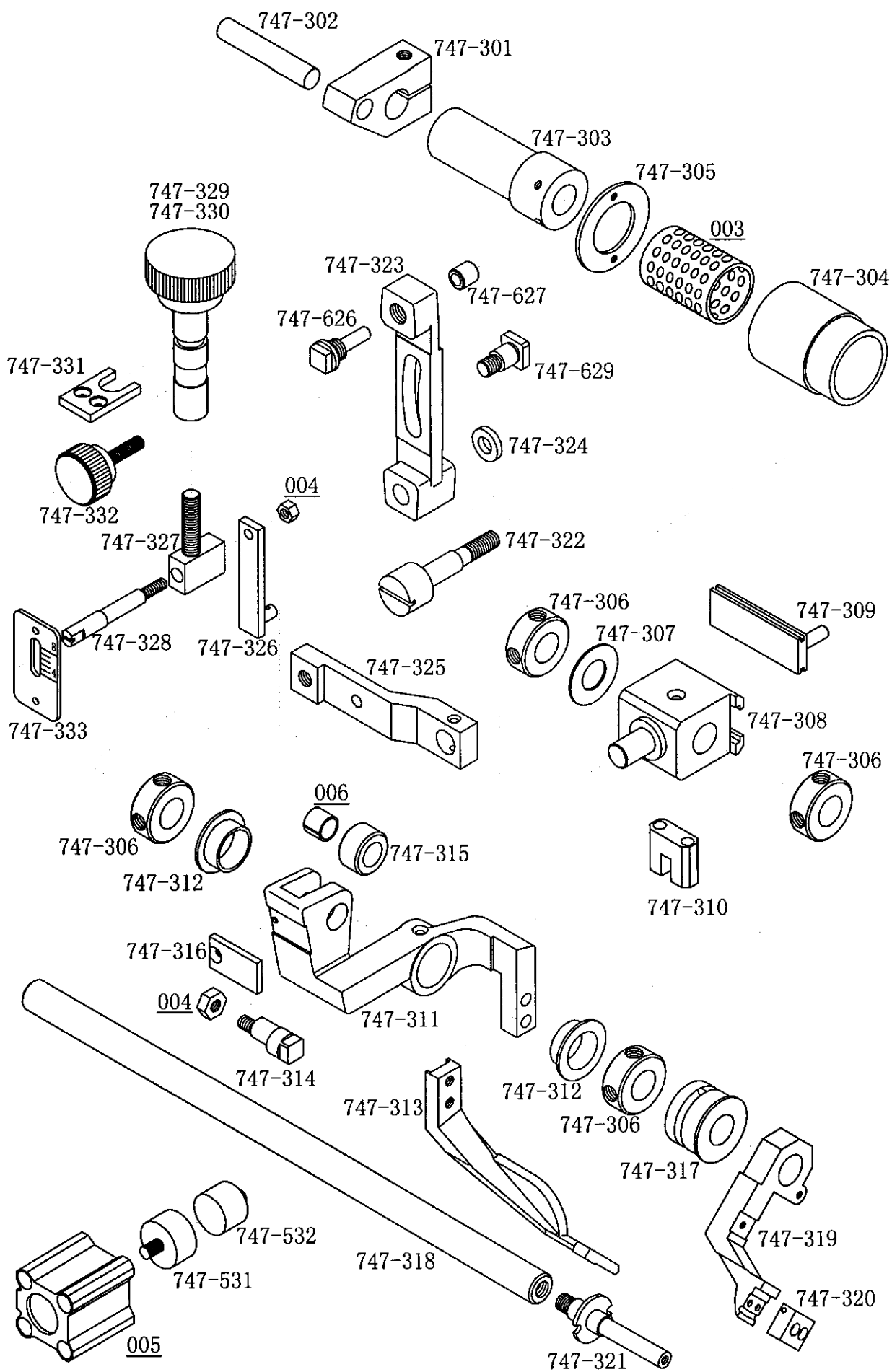


Fig. No.	Machine part	Quantity	Remarks
747-301	Needle driving crank	1	
747-302	Connecting shaft	1	
747-303	Thrust sleeve	1	
747-304	Bearing housing	1	
747-305	Covering plate	1	
747-306	Thrust ring	5	
747-307	Nylon washer	6	
747-308	Transport driving block	1	
747-309	Guide block	1	
747-310	Connecting block	1	
747-311	Counter presser action lever	1	
747-312	Sleeve	2	
747-313	Counter presser foot	1	
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	
747-323	Transport driving lever	1	
747-324	Washer	1	
747-325	Connecting lever	1	
747-326	Connecting lever	1	
747-327	Adjust action block	1	
747-328	Scale rod	1	
747-329、330	Adjusting knob	1	
747-331	Fixing stirrup	1	
747-332	Blocking knob	1	
747-333	Graduated tile (stitch length)	1	
003	Linear bearing (312542)	1	
004	Jam nut (M6)	1	
005	Cylinder (CQ2B25-20D)	1	
006	Side bushing (SF1010)	1	

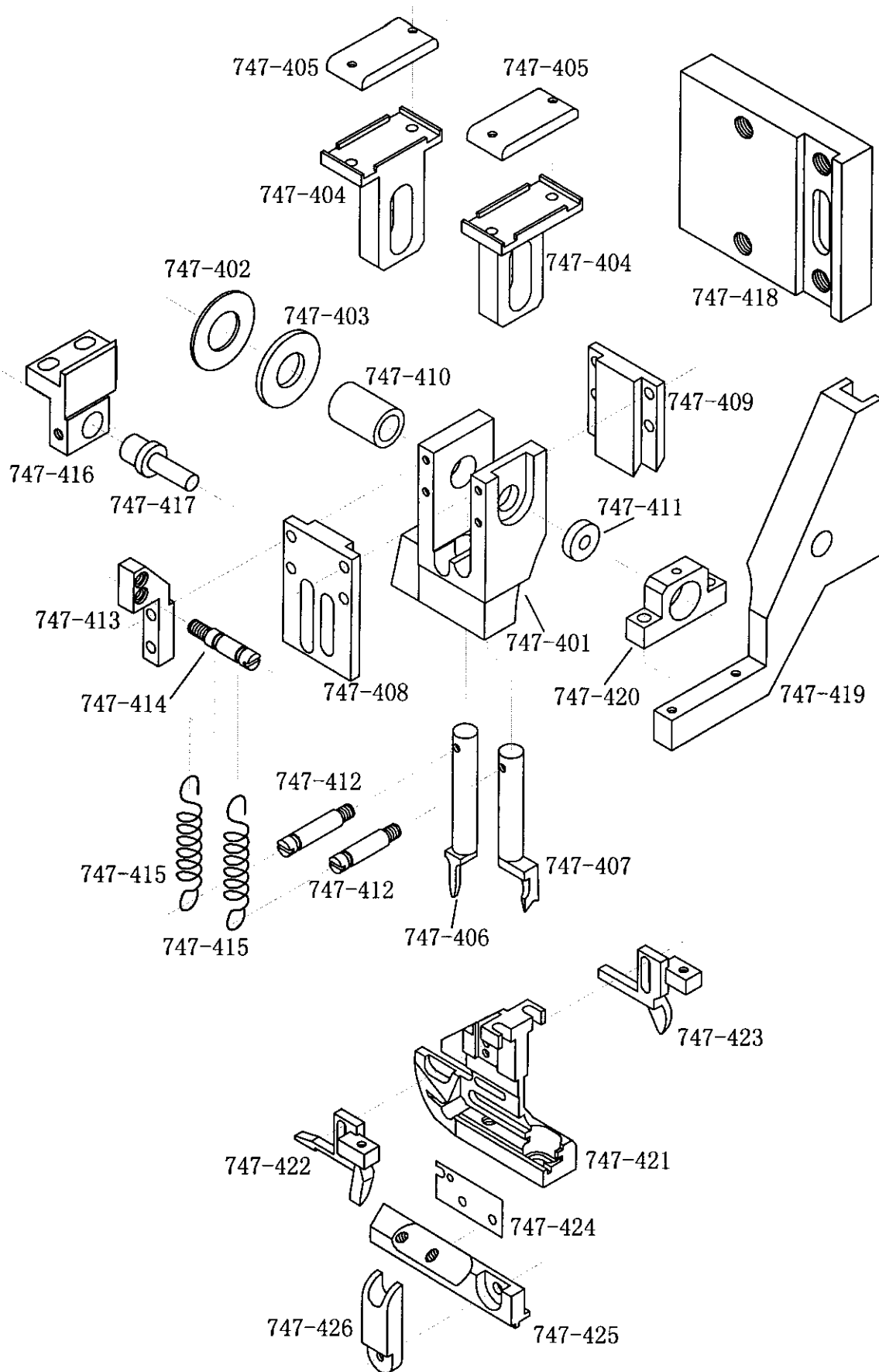


Fig. No.	Machine part	Quantity	Remarks
747-401	Support	1	
747-402	Washer	1	※
747-403	Washer	1	
747-404	Action block	2	long&short
747-405	Pad	2	
747-406	Thread loosen punch	1	
747-407	Edge presser	1	
747-408	Left side covering plate	1	
747-409	Right side covering plate	1	
747-410	Bushing	1	
747-411	Washer	3	
747-412	Spring hook-up rod	2	long&short
747-413	Spring support	1	
747-414	Upper spring hook-up rod	1	
747-415	Return spring	2	
747-416	Guiding rod seat	1	
747-417	Guiding rod	1	
747-418	Fixing plate	1	
747-419	Support arm	1	
747-420	Bushing support	1	
747-421	Leather guide	1	
747-422	Left limiter	1	
747-423	Right limiter	1	
747-424	Shim	1	
747-425	Block	1	
747-426	Connecting lever	1	

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

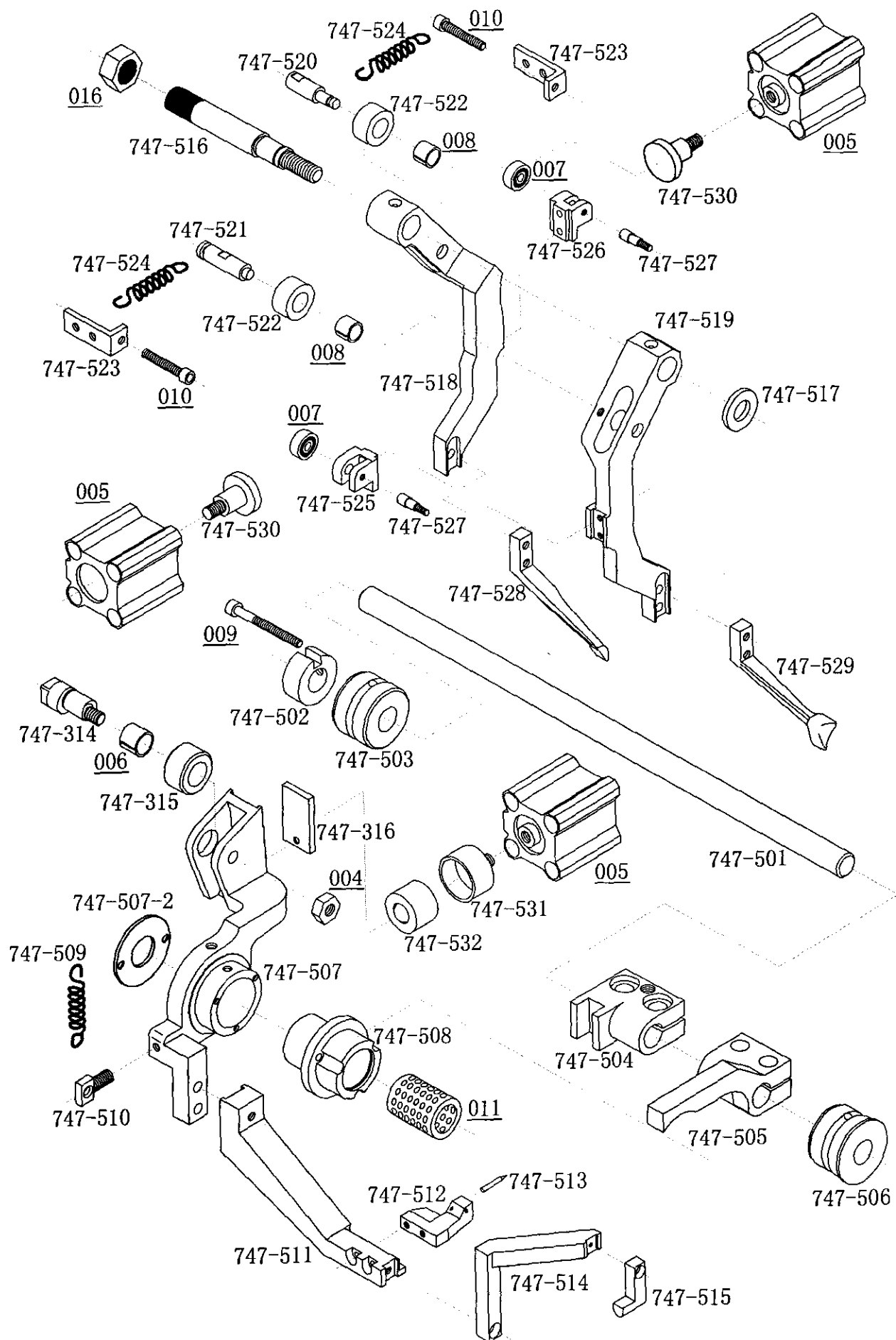


Fig. No.	Machine part	Quantity	Remarks
747-501	Gathering driving shaft	1	
747-502	Locating ring	1	
747-503	Back bushing	1	
747-504	Driving block	1	
747-505	Connecting lever	1	
747-506	Front bushing	1	
747-507	Gathering action lever	1	
747-507-2	Covering plate	1	
747-508	Bearing housing	1	
747-509	Return spring	1	
747-510	Spring hooking	1	
747-511	Gathering lever	1	
747-512	Gathering barb seat	1	
747-513	Gathering barb	1	
747-514	Connecting lever	1	
747-515	Little connecting lever	1	
747-516	Support shaft	1	
747-517	Washer	2	
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	
747-528	Right presser foot	1	
747-529	Left presser foot	1	
747-530	Knock-out block	2	
747-531	Bearing housing	2	
747-532	Knock-out bearing	1	
004	Jam nut (M6)	1	
005	Cylinder (CQ2B25-20D)	3	
006	Side bearing (SF1010)	1	
007	Bearing (624ZZ)	2	
008	Side bearing (SF0808)	2	
009	Screw (M5×40)	1	
010	Screw (M4×25)	2	
011	Linear bearing (211528)	1	
016	Jam nut (M12)	1	

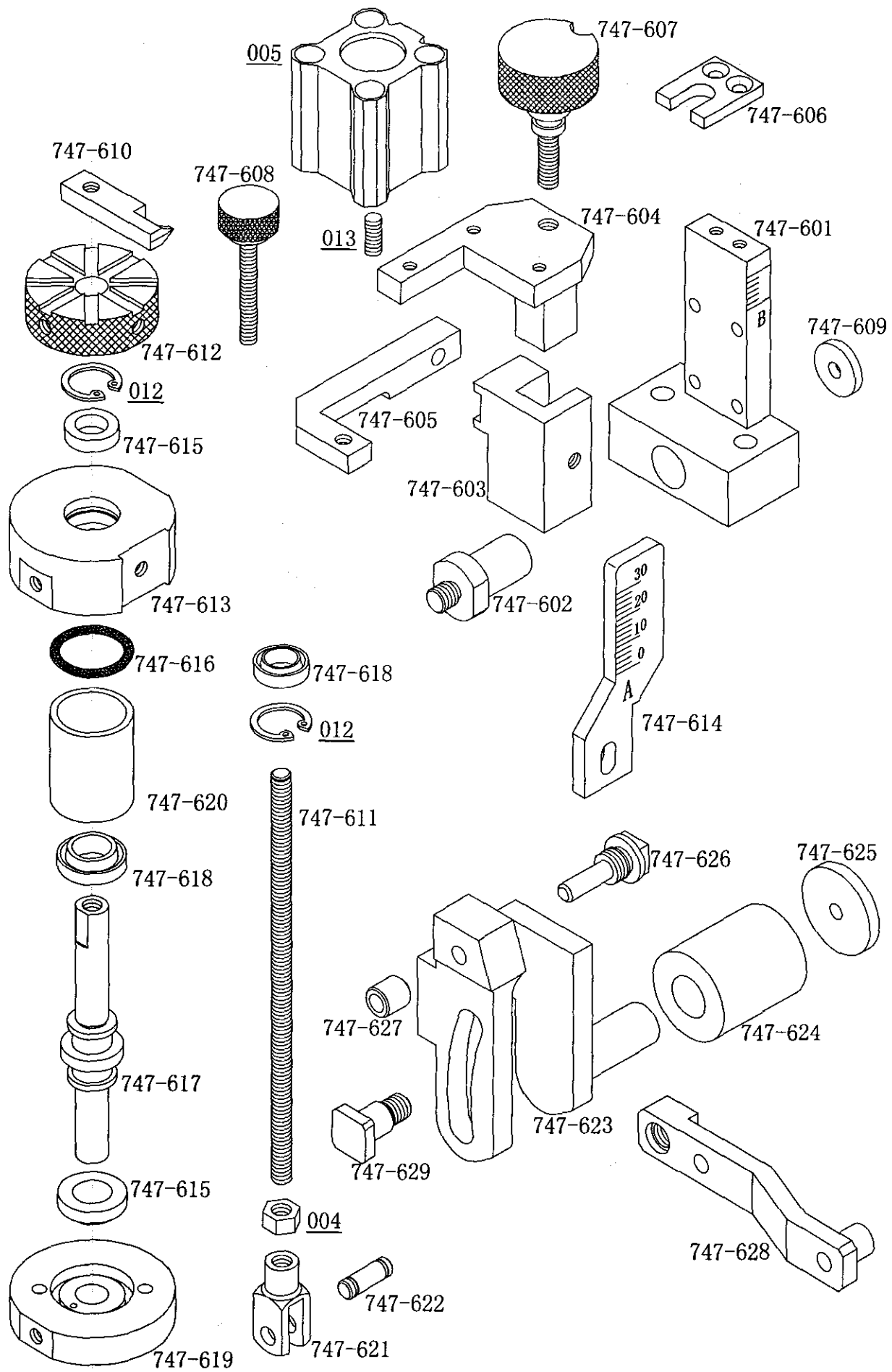
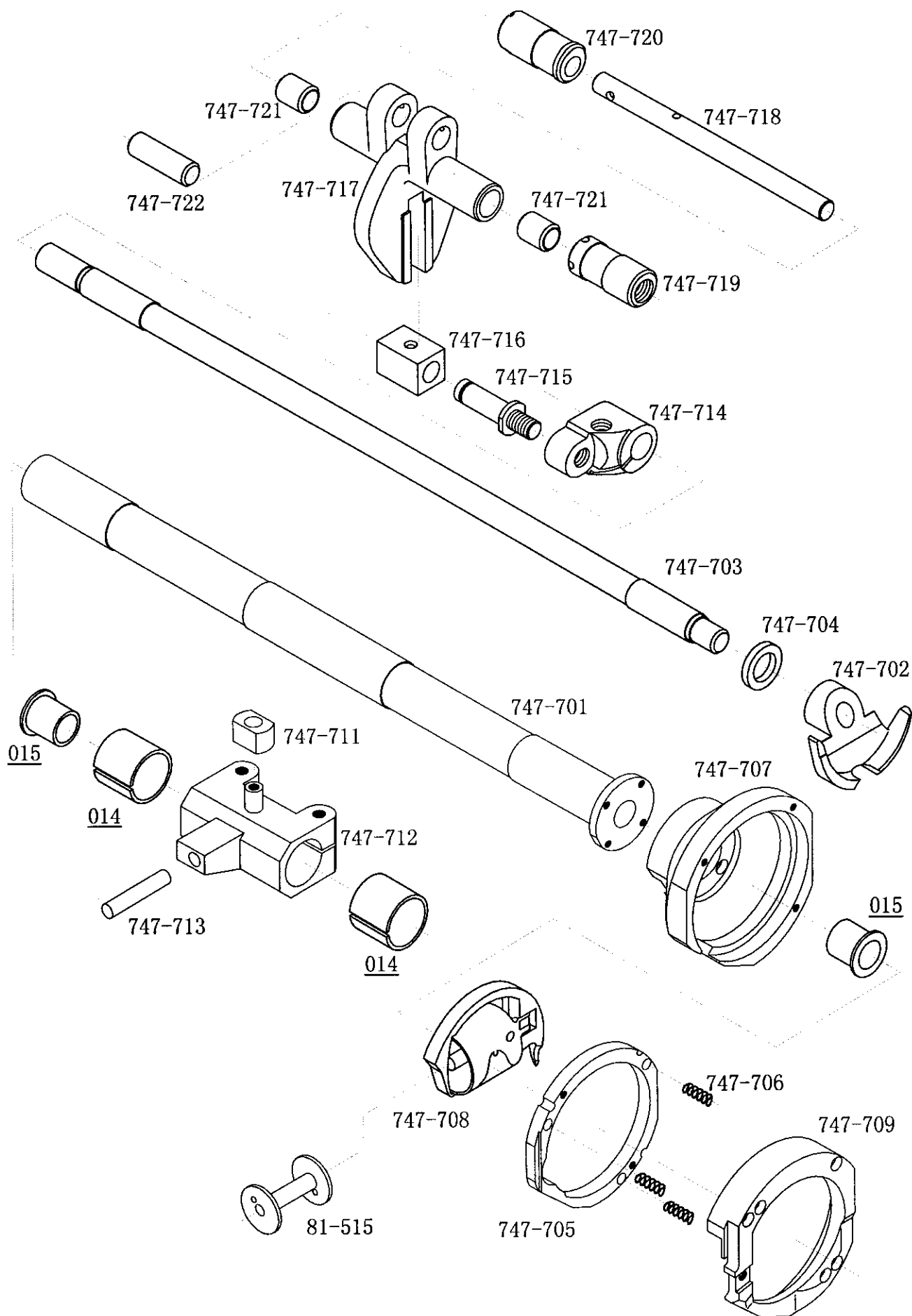


Fig. No.	Machine part	Quantity	Remarks
747-601	Adjusting device seat	1	
747-602	Connecting rod	1	
747-603	Stirrup	1	
747-604	Piston seat	1	
747-605	Fixing lever	1	
747-606	Fixing stirrup	1	
747-607	Adjusting knob	1	
747-608	Setting knob	2	
747-609	Washer	1	
747-610	Index arrow	1	
747-611	Screw rod	1	
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	



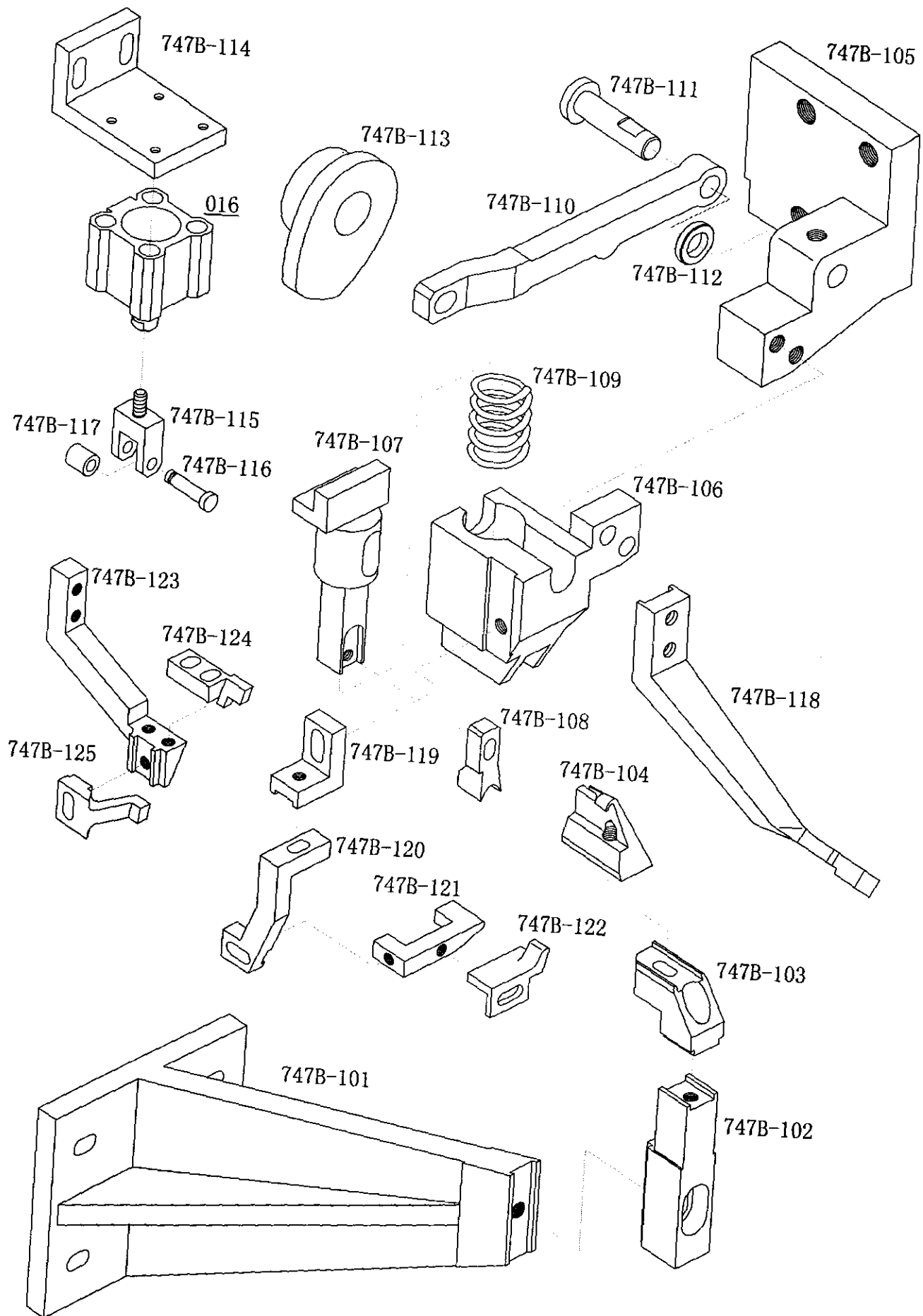


Fig. No.	Machine part	Quantity	Remarks
747B-101	Support arm	1	
747B-102	Supporter	1	
747B-103	Guide seat	1	
747B-104	Sewing guide	1	
747B-105	Supporter	1	
747B-106	Supporter	1	
747B-107	Action lever	1	
747B-108	Pressing block	1	
747B-109	Spring	1	
747B-110	Lever	1	
747B-111	Support pin	1	
747B-112	Washer	1	
747B-113	Cam	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-119	Side seat	1	
747B-120	Connecting lever	1	
747B-121	Adjusting block	1	
747B-122	Location device	1	
747B-123	Presser seat	1	
747B-124	Upper presser foot	1	
747B-125	Lower presser foot	1	
016	Cylinder (CQ2B16-10D)	1	