

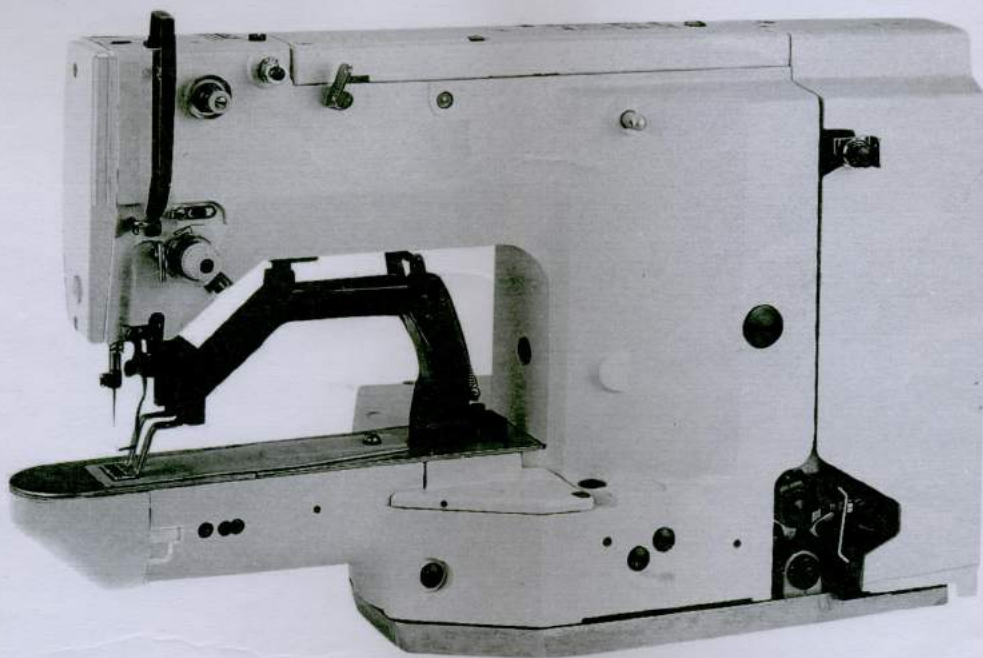
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# LOCKSTITCH BAR TACKING MACHINE

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## INSTRUCTION MANUAL & PART BOOK

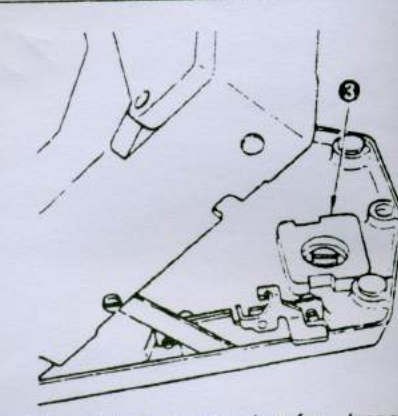
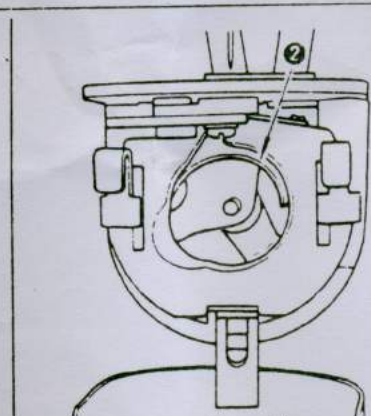
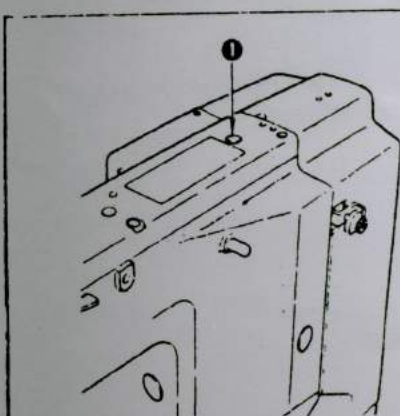
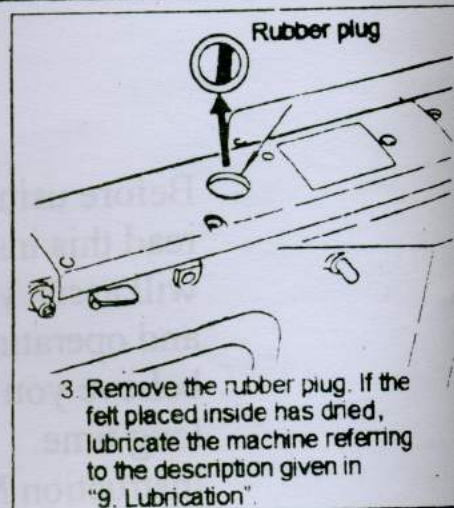
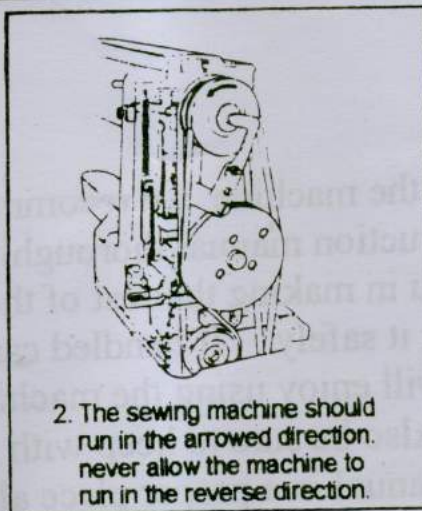
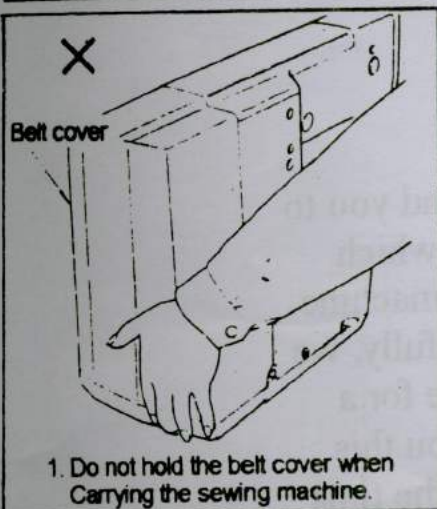
*Tanaka SSTC-2942H*



Before using the machine, we recommend you to read this instruction manual thoroughly which will assist you in making the rest of the machine and operating it safely. If handled carefully, we believe you will enjoy using the machine for a long time. Also be sure to keep with you this Instruction Manual in a proper place all the time In case for future use.

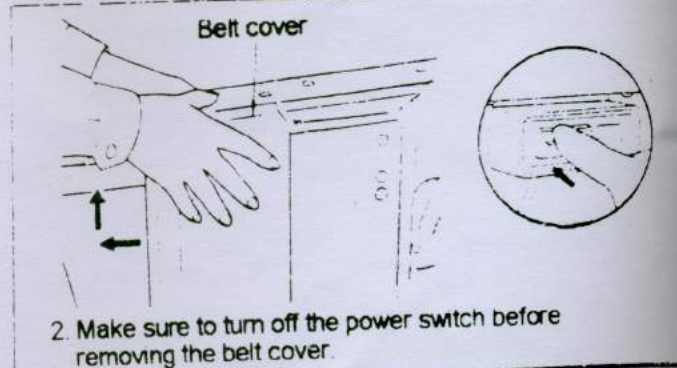
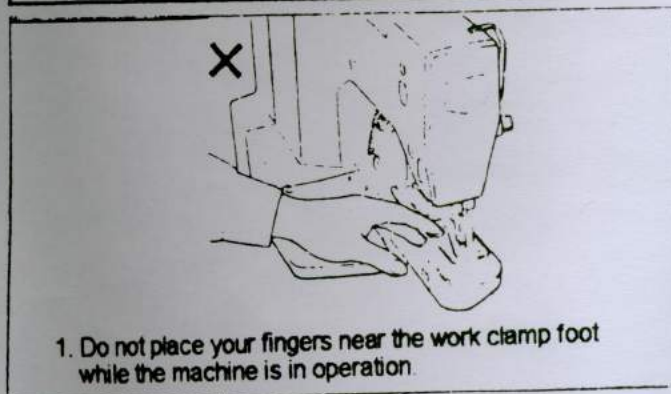


## CAUTIONS BEFORE OPERATION



4. Before starting a machine which has been newly set up or has not been used for a long period of time, apply a few drops of the lubricating oil to main shaft components through hole ①, one drop to the racing surface ② of the shuttle race, and infiltrate sufficient amount of the lubricating oil to the machine bed oil felt ③.

## CAUTIONS IN OPERATION

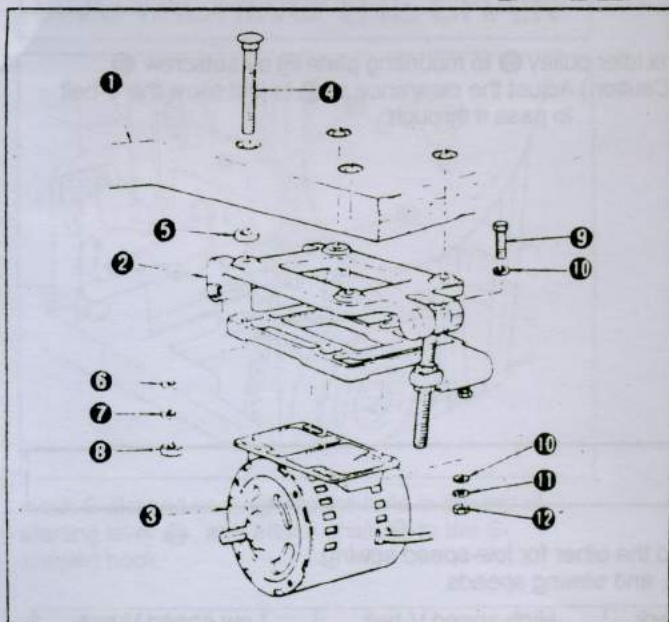


3. Never bring your fingers or hair close to, or place anything on the handwheel, V-belt, bobbin winder wheel.

4. If your machine is provided with a belt cover, finger guard and eye guard, never operate your machine without them.



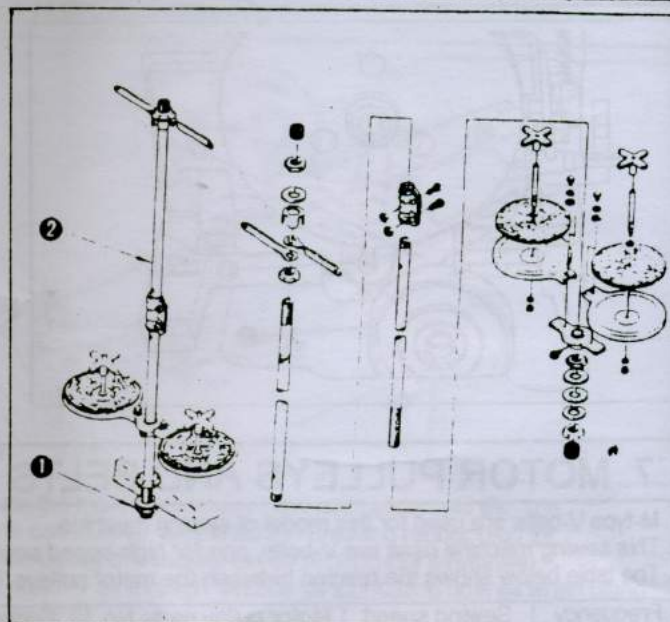
## 1. モーターの取り付け方



### 1. INSTALLING THE MOTOR

1. Attach motor base ② to table ① using bolt ④, vibration-proof rubber pad ⑤, washer ⑥, spring washer ⑦, and nut ⑧.
2. Using bolt ⑨, washer ⑩, spring washer ⑪, and nut ⑫, install motor ③ to motor base ②.

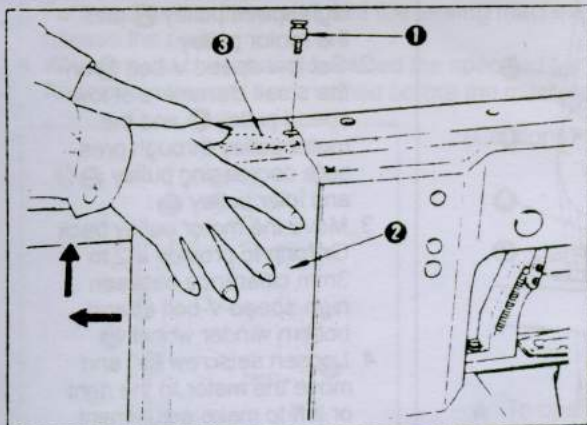
## 2. 糸立装置の取り付け



### 2. INSTALLING THE THREAD STAND

Assemble the thread stand, and set it in the hole in the table. Tighten nut ① to fix the thread stand. If ceiling wiring is made, pass the power cord through spool rest rod ②.

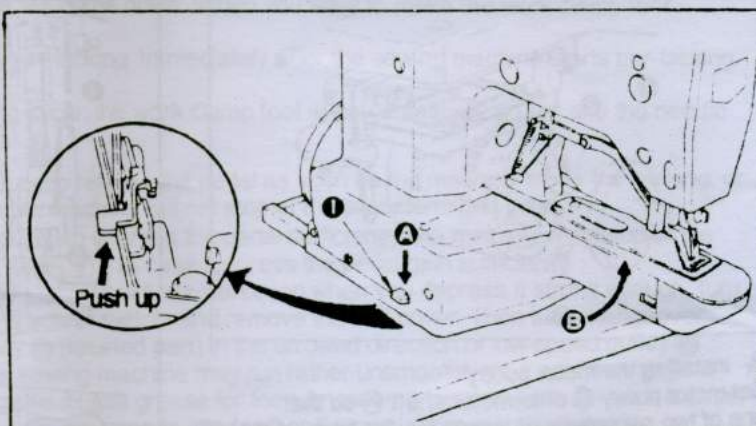
## 3. REMOVING THE BELT COVER



To remove the belt cover, loosen screw ① and tilt the belt cover away from you until it comes off then lift it.

★ Install the belt cover by reversing the above procedure.

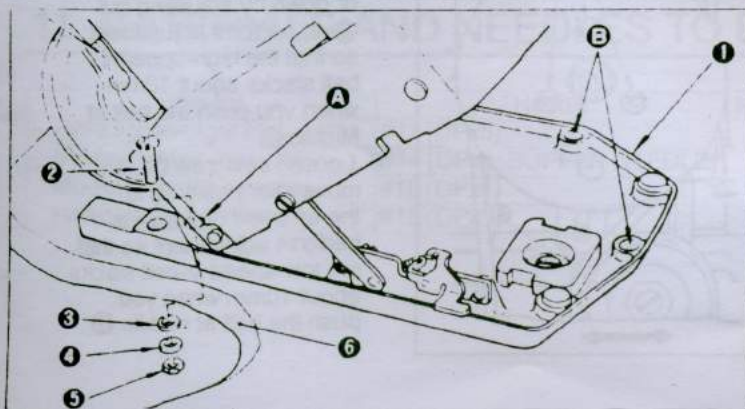
## 4. RAISING THE MACHINE HEAD



1. Remove the belt cover. With the machine head set in its installing position on the machine table, raise the machine head in direction B. While pushing down (in direction A) bed locker ①.
2. Releasing the bed locker, further raise the machine head in direction B until it locks.

★ To lower the machine head, push up the bed locker to release the Lock.

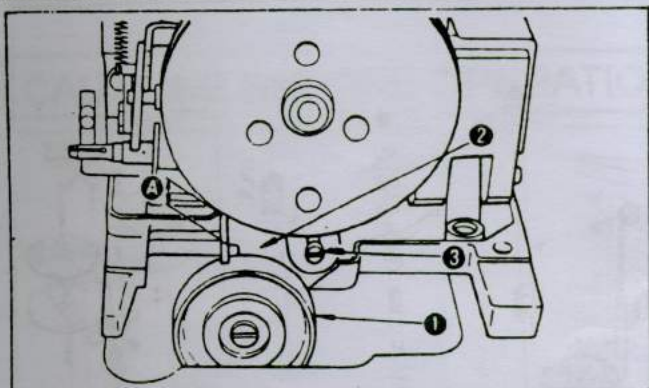
## 5. INSTALLING THE MACHINE HEAD



1. Install bed mounting base ① to machine table ⑥ using bolts ②, flat washers ③ and ④, and nuts ⑤ (each 3 pcs.).
2. Fix point A before raising the machine head. Then fix two points B.



## 6. ATTACHING THE IDLER PULLEY



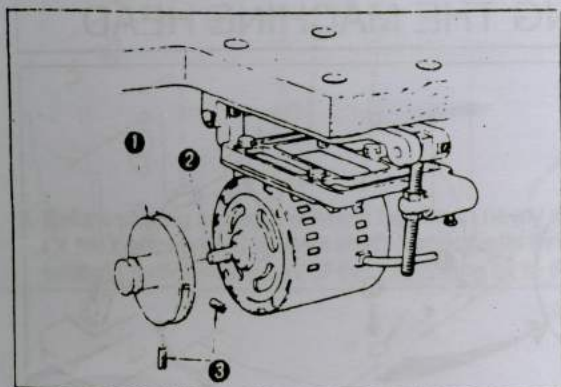
Fix idler pulley ① to mounting plate ② by setscrew ③.  
(Caution) Adjust the clearance at ④ to just allow the V-belt to pass it through.

## 7. MOTOR PULLEYS AND BELTS

1. M-type V-belts are used for this model of sewing machine.
2. This sewing machine uses two V-belts, one for high-speed sewing, and the other for low-speed sewing.
3. The table below shows the relation between the motor pulleys, V-belts, and sewing speeds.

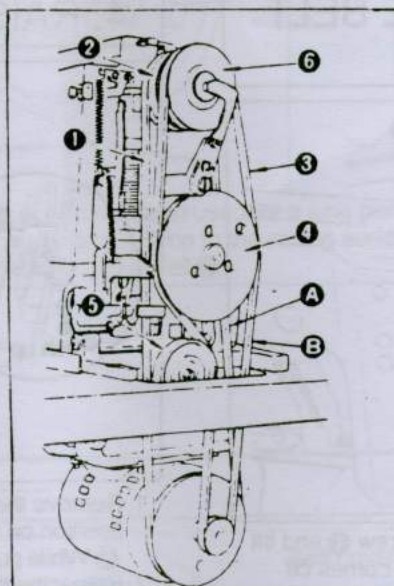
Frequency	Sewing speed	Motor pulley parts No.	Engraved mark	High-speed V-belt	Low-speed V-belt
50Hz.	2300s.p.m.	*13531108	50-2300	MTJVM005000 (50")	MTJVM004600 (46")
	2000	*13531207	50-2000	MTJVM004900 (49")	
	1800	13531306	50-1800	MTJVM004800 (48")	
60Hz.	2300	*13531405	60-2300	MTJVM004900 (49")	MTJVM004600 (46")
	2000	*13531504	60-2000	MTJVM004800 (48")	
	1800	13531603	60-1800	MTJVM004800 (48")	

Note: The motor pulleys marked \* are applicable only to cotton thread. Please order the motor pulleys for threads other than cotton thread.



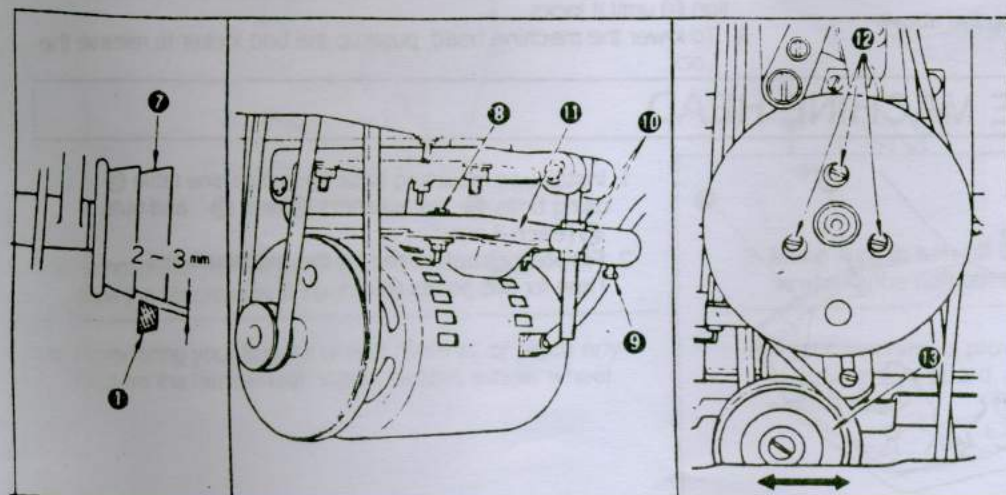
### ★ Installing the motor pulley

Set motor pulley ① onto motor shaft ② so that one of two set screws ③ meets the flat parts of the motor shaft. Then tight the screw ④.



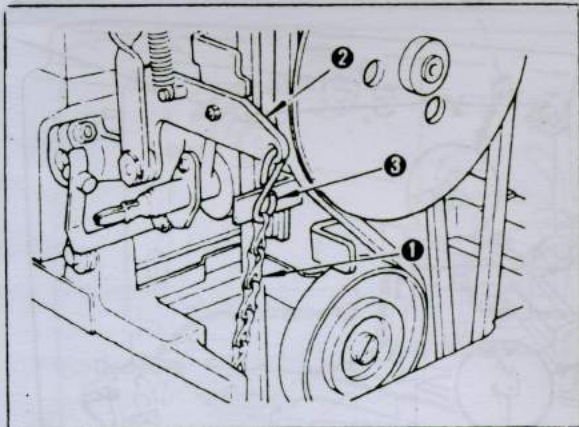
### ★ Attaching the belts

1. Set high-speed V-belts ① on the large diameters of high-speed pulley ② and the motor pulley.
2. Set low-speed V-belt ③ on the small diameters of low-speed pulley ⑥ and the motor pulley through pressure decreasing pulley ④ and idler pulley ⑤.
3. Move the motor pulley back Or forth to provide a 2 to 3mm clearance between high-speed V-belt ① and bobbin winder wheel ⑦.
4. Loosen setscrew ⑧, and move the motor to the right or left to make adjustment so that the high-speed V-belt comes evenly in contact with the bobbin winder wheel when the bobbin winder is used (refer to "15. Winding a bobbin").
5. Loosen setscrew ⑨, and move motor base ⑪ up or down by adjusting nut ⑩ to perform adjustment so that the high-speed V-belt slacks about 10mm when you push the belt at Middle ④.
6. Loosen setscrew ⑫, and move idler pulley ⑬ in the arrowed direction to perform adjustment so that the low-speed V-belt slacks about 10mm when you push the belt at middle ③.



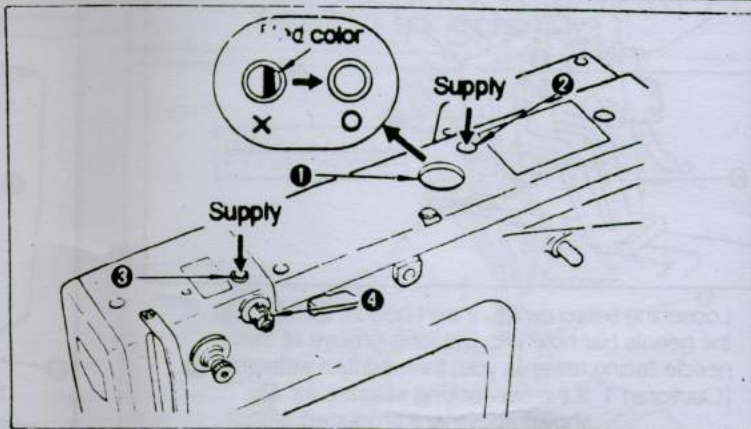


## 8. ATTACHING THE CHAIN



Hook S-shaped hook ③ into the hole in the trip of starting lever ②, and attach chain ① to the S-shaped hook.

## 9. LUBRICATION



Lubricate the machine per day from lubrication hole ②. The machine can also be lubricated by removing rubber plug ①.

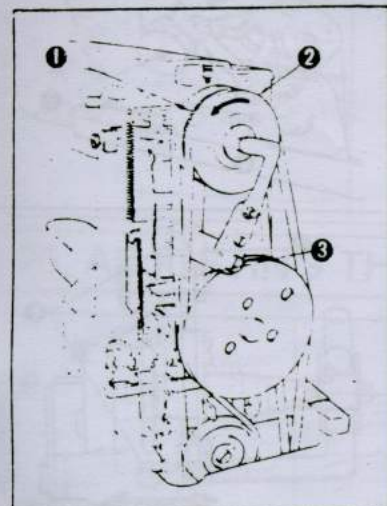
★ **When using the thread guide (optionally available)**  
Supply silicone oil through silicone oil lubricating hole ③ when using thread guide ④.

At this time, check that the thread which has passed through thread guide ④ has the silicone oil on it.

## 10. OPERATING THE SEWING MACHINE

Operate the sewing machine in the following procedure

- 1 Turn on the power switch.
- 2 Depress the starting pedal a little, and the work clamp foot will come down. When you want to make the work clamp foot go up, release the pedal.
- 3 Further depress the pedal, and the sewing machine starts bar-tacking. Immediately after the sewing machine starts bar-tacking, release the pedal.
- 4 When the machine has completed the specified bar-tacking cycle, the work clamp foot will automatically go up, and the needle And bobbin threads are trimmed before the machine stops.



(Cautions) 1. Be sure to release the pedal as soon as the machine starts bar-tacking, or else the machine will not stop at the predetermined point.

2. If you fail to depress the pedal sufficiently, the machine may stop at the first stitch. In this case, depress the pedal gain sufficiently.

3. If the machine will not start even when you depress it strong enough, turn of the power switch, and remove the belt cover. Then turn changeover pulley ① (knurled part) in the arrowed direction of low-speed pulley ②.

4. This sewing machine may run rather unsmoothly on a cold morning because it uses grease for the lubrication of several parts. In such a case, allow the machine to idle for 5 or 6 times before starting the work.

★ To operate the sewing machine manually:

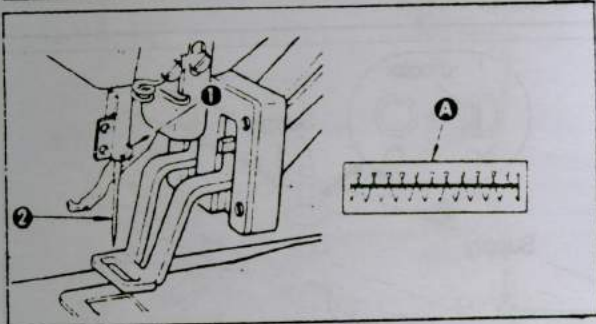
Turn off the power switch, remove the upper end of spring ③, give low-speed pulley ② two turns in the arrowed direction and the work clamp foot will come down. Then Depress the starting pedal, and the machine can be run manually.

## 11. MATERIALS AND NEEDLES TO BE USED

Material	Needle	Needle plate needle hole guide	Class or work
Extra light-weight material	#11 (DPx5)	D2426282C00	Knit goods, tricot wear
Synthetic fiber material	#14 (DPx5, SUPPER NEEDLE)	B2426280000 (standard)	Men's suits, Ladies' wear
Medium-weight material	#16 (DPx5)	B2426280000 (standard)	Men's suits, Ladies' wear
Heavy-weight material	#18 (DPx5)	B2426280000 (standard)	Working wear, overcoats



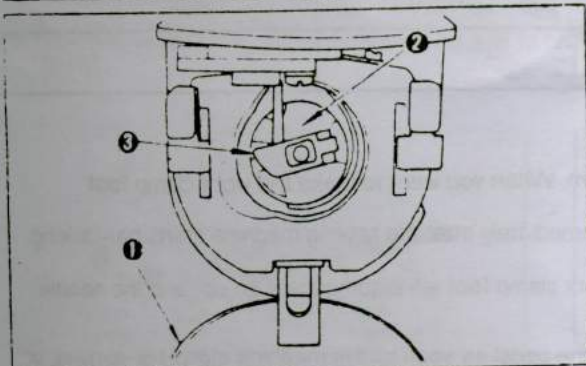
## 12. ATTACHING THE NEEDLE



Loosening setscrew ①, insert needle ② fully into the needle bar hole with the long groove of the needle facing towards you, then tighten setscrew ①.

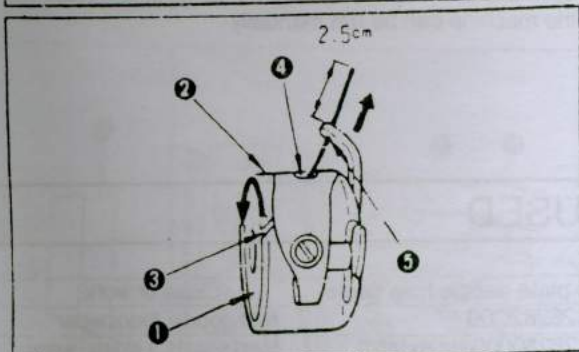
- (Cautions) 1 If the bar-tacking stitches as shown above are produced, install the needle so that it slightly faces to the left.  
2 Use a SUPPER needle for synthetic fiber when sewing with synthetic fiber thread or material.

## 14. REMOVING AND INSTALLING THE BOBBIN CASE



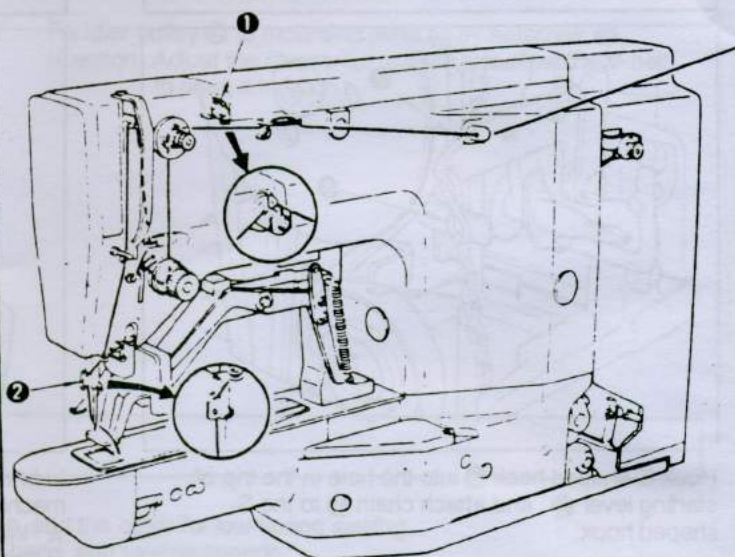
- 1 Open cylinder arm cap ①
- 2 Raise and hold the latch lever of bobbin case ② to take it out. The bobbin in the bobbin case does not fall as far as latch lever ③ is raised and held.
- 3 To load the bobbin case into the shuttle, fit it onto the shaft of the shuttle and snap in the latch lever of the bobbin case.

## 16. THREADING THE BOBBIN CASE



- 1 Hole bobbin ① in hand so that it spins counter-clockwise and set it in bobbin case ②.
- 2 Pass the thread through slot ③ in the bobbin case. Pull the thread to pass it under the tension spring out to thread exit ④. At this time, confirm that the bobbin spins in the arrowed direction when that thread is pulled.
- 3 pass the thread through hole ⑤, and allow the thread to run about 2.5cm from the hole.

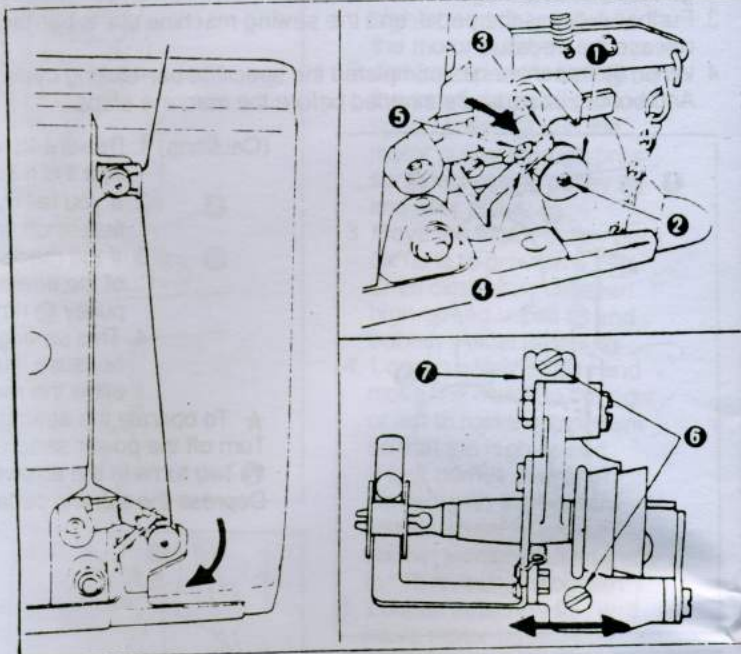
## 13. THREADING THE MACHINE



Thread the machine in the order as shown above. Leave thread of approx. 4cm on the needle.

- (Cautions) 1 If the machine is equipped with a silicon oil lubricating unit, pass the thread through thread guide ① of the silicon oil lubrication unit. (The silicon oil lubricating unit is optionally available.)  
2 For a thick thread, pass the thread through only one of the two holes in needle bar thread guide ②.

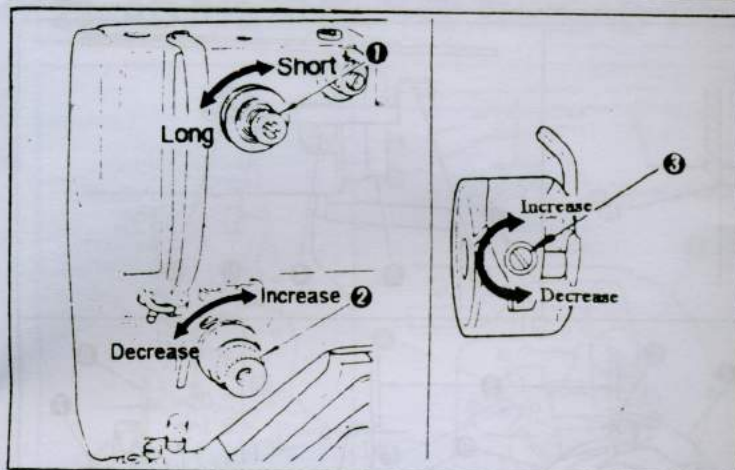
## 15. WINDING A BOBBIN



- 1 Attach bobbin ① to bobbin winder spindle ②
- 2 Thread the winder in the order as illustrated and wind the thread onto the bobbin four or five turns.
- 3 Push bobbin winder trip latch ④ towards the bobbin (in the arrowed direction), and the winder starts to wind the bobbin. The winder will automatically stop as soon as it has wound a predetermined amount (80% of the capacity of the bobbin) of thread round the bobbin.
- 4 To adjust the amount of thread wound round the bobbin, loosen nut ④ and screw in adjusting screw ⑤ to decrease the thread amount.
- 5 If the thread is not wound evenly round the bobbin, loosen screw ⑥ and move bobbin winder base ⑦ in the arrowed direction to make adjustment.



## 17. THREAD TENSION



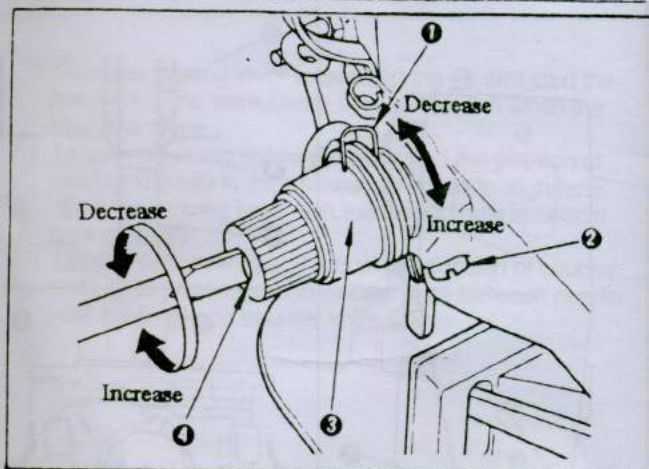
### ★ Adjusting the needle thread tension

As thread tension controller No 1 ① is turned clockwise, the length of the thread remaining on the needle after thread trimming will decrease, and vice versa. Minimize the length of the thread remaining on the needle as far as the thread does not slip off the needle. As thread tension controller No 2 ② is turned clockwise, the needle thread tension increases, and vice versa.

### ★ Adjusting the bobbin thread tension

Turning thread tension adjusting screw ③ clockwise will increase the bobbin thread tension, and vice versa.

## 18. ADJUSTING THE THREAD TAKE-UP SPRING



The normal stroke of thread take-up spring ① is 6 to 8mm and the tension at the starting point is 30 to 50g

### ★ Adjusting the needle thread tension

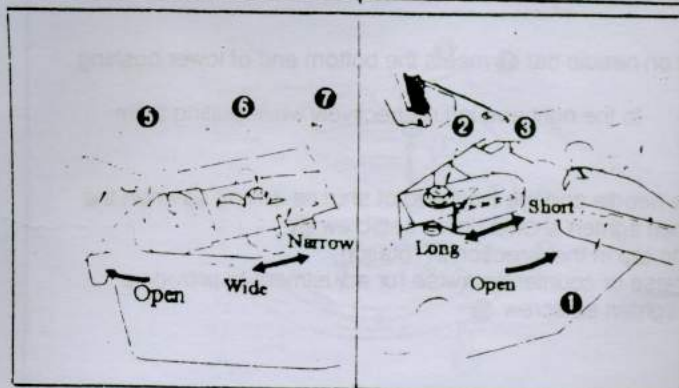
Loosen screw ②, and turn tension controller assembly ③ clockwise to increase the stroke or counterclockwise to decrease it

### ★ Adjusting the tension

Insert the blade of a flat-bit screwdriver into the groove in the tension post ④ and turn it clockwise to increase the tension or counterclockwise to decrease it

(Caution) Decrease the tension of the thread take-up spring for a synthetic fiber thread

## 19. ADJUSTING THE LENGTH AND WIDTH OF BAR-TACKING



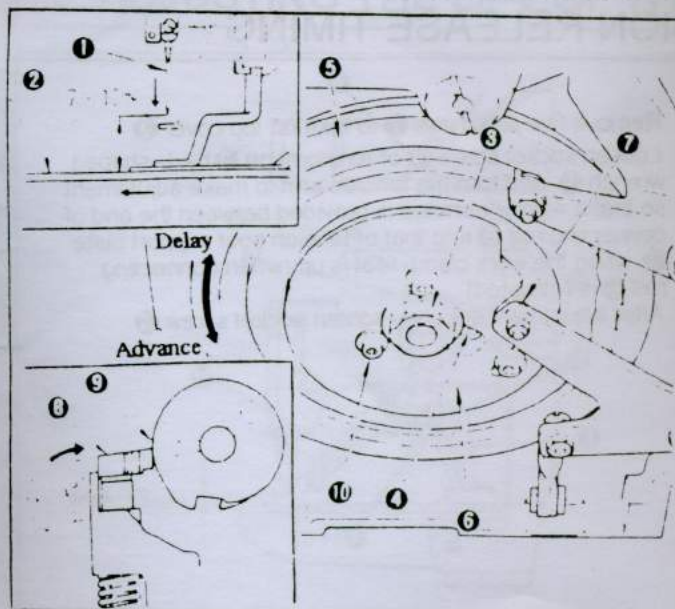
### ★ Adjusting the bartacking length

Push and open bed cover (A) ① in the arrowed direction, and loosen nut ②. Move feed across regulator ③ towards you to increase the bartacking length or away from you to decrease it. After adjustment, tighten nut ② and close bed cover (A) ①.

### ★ Adjusting the bartacking width

Push and open bed cover (B) ⑤ in the arrowed direction, and loosen nut ⑥. Move feed regulator ⑦ to the left to increase the bartacking width or to the right to decrease it. After adjustment, tighten nut ⑥ and close bed cover (B) ⑤.

## 20. ADJUSTING THE FEED TIMING



### 1. Raise the machine head (See "4. Raising the machine head")

2. Loosening hexagon nut ③ and socket screw ④, turn feed cam ⑤ to perform adjustment so that the material feed is completed at the moment the point of needle ① has lowered to a height of 7 to 10mm above the surface of throat plate ②. Turning the feed cam clockwise will delay the completion of the material feed and vice versa.

3. After adjustment, securely tighten socket screw ④ and hexagon nut ③.

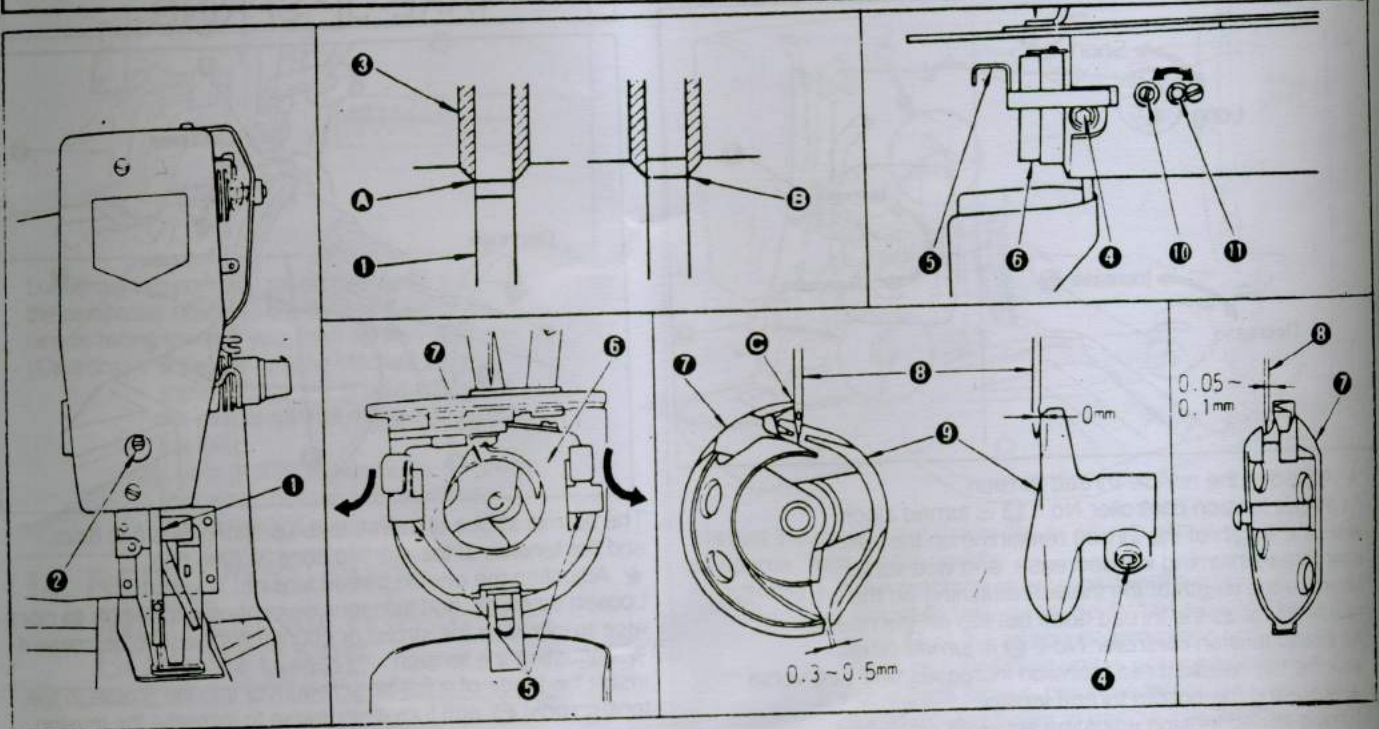
△ Better thread tension is obtained as the above mentioned Height is adjusted to about 7mm.

△ If slating stitches formed are loose when using a synthetic Fiber thread, adjust the above mentioned height to about 10mm in order to prevent such trouble.

4. Stop-motion regulating cam ⑤ is turned together with feed cam ⑥. Therefore, loosen setscrew ⑩ and turn the stop-motion regulating cam to make adjustment so that stop-motion regulating cam roller ⑦ enters stop motion from the low-speed revolution when stop-motion hook ③ falls onto stop-motion cam screw No. 1 ⑨ at the final stitch.



## 21. NEEDLE-TO-SHUTTLE RELATION



(Adjusting the height of the needle bar)

1. Turn the changeover pulley by hand to bring needle bar ① to the lowest position of its stroke (see "To operate the sewing machine manually")

2. Remove the rubber cap, and loosen setscrew ②

3. Turn the driving pulley by hand to make upper market line ④ engraved on the needle bar meet the bottom end of lower bushing ③ of the needle bar. Tighten setscrew ②

(Positioning the shuttle)

4. Further turn the driving pulley until lower market line ⑤ engraved on needle bar ① meets the bottom end of lower bushing ③ of the needle bar.

5. Loosen shuttle driver setscrew ④, and open shuttle race latches to the right and left, respectively while pulling them towards you to remove shuttle race ring ⑥

(Caution) At this time, be careful not to allow shuttle 7 to fall.

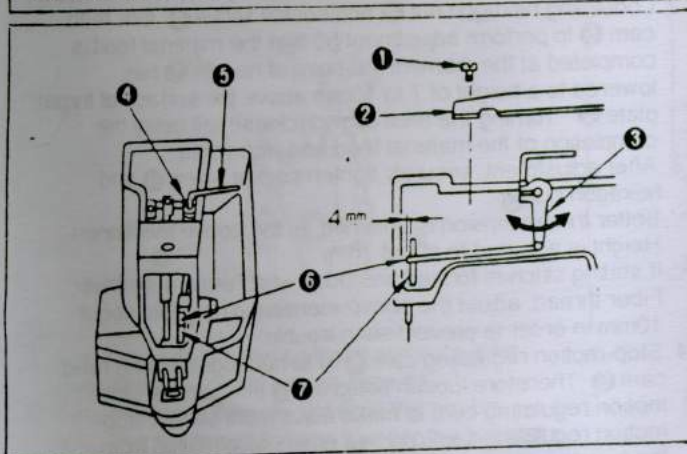
6. Perform adjustment so that no clearance is provided between the needle and the front end of shuttle driving ④ when the blade point of shuttle ⑦ is aligned with center ③ of needle ⑧. Then tighten shuttle driver setscrew ④

(Caution) At this time, be very careful not to cause the shuttle race to slip in the direction of rotation.

7. Loosening setscrew ⑩, turn shuttle race adjusting shaft ⑪ clockwise or counterclockwise for adjustment to provide a 0.05 to 0.1mm clearance between needle ⑧ and shuttle ⑦, then tighten setscrew ⑩

8. After adjustment, install shuttle race ring ⑥

## 22. ADJUSTING THE THREAD TENSION RELEASE TIMING



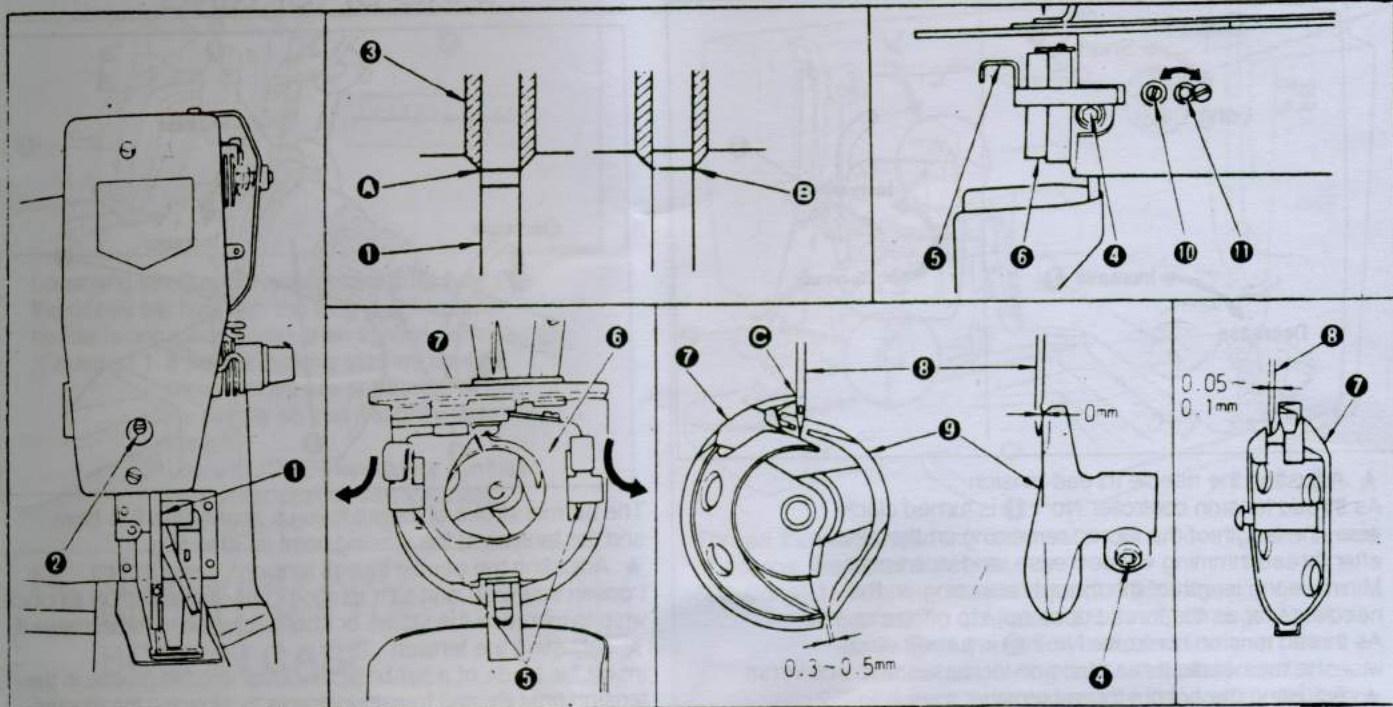
1. Remove five setscrews ① to take off top cover ②

2. Loosen socket screw ④ of tension arm ③ by L-shaped wrench ⑤, and turn the tension arm to make adjustment so that a 4mm clearance is provided between the end of connecting rod ⑥ and that of tension post support plate ⑦ when the work clamp foot is up (when connecting rod ⑥ is retreated)

3. After adjustment, securely tighten socket screw ④



## 21. NEEDLE-TO-SHUTTLE RELATION



(Adjusting the height of the needle bar)

1. Turn the changeover pulley by hand to bring needle bar ① to the lowest position of its stroke (see "To operate the sewing machine manually")

2. Remove the rubber cap, and loosen setscrew ②.

3. Turn the driving pulley by hand to make upper market line A engraved on the needle bar meet the bottom end of lower bushing ③ of the needle bar. Tighten setscrew ②.

(Positioning the shuttle)

4. Further turn the driving pulley until lower market line B engraved on needle bar ① meets the bottom end of lower bushing ③ of the needle bar.

5. Loosen shuttle driver setscrew ④, and open shuttle race latches to the right and left, respectively while pulling them towards you to remove shuttle race ring ⑥.

(Caution) At this time, be careful not to allow shuttle 7 to fall.

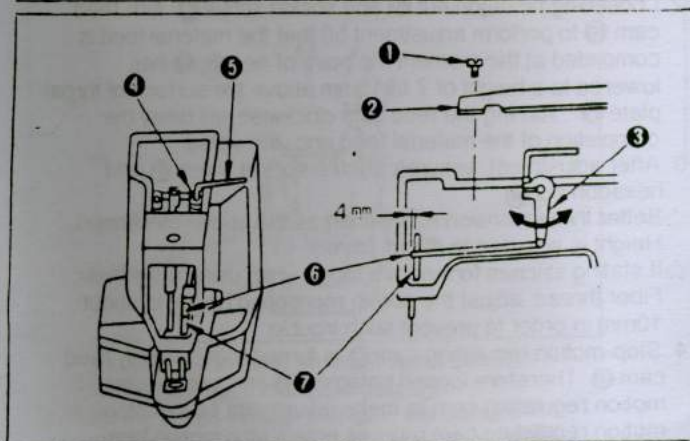
6. Perform adjustment so that no clearance is provided between the needle and the front end of shuttle driving ④ when the blade point of shuttle ⑦ is aligned with center C of needle ③. Then tighten shuttle driver setscrew ④.

(Caution) At this time, be very careful not to cause the shuttle race to slip in the direction of rotation.

7. Loosening setscrew ⑩, turn shuttle race adjusting shaft ⑪ clockwise or counterclockwise for adjustment to provide a 0.05 to 0.1mm clearance between needle ③ and shuttle ⑦, then tighten setscrew ⑩.

8. After adjustment, install shuttle race ring ⑥.

## 22. ADJUSTING THE THREAD TENSION RELEASE TIMING



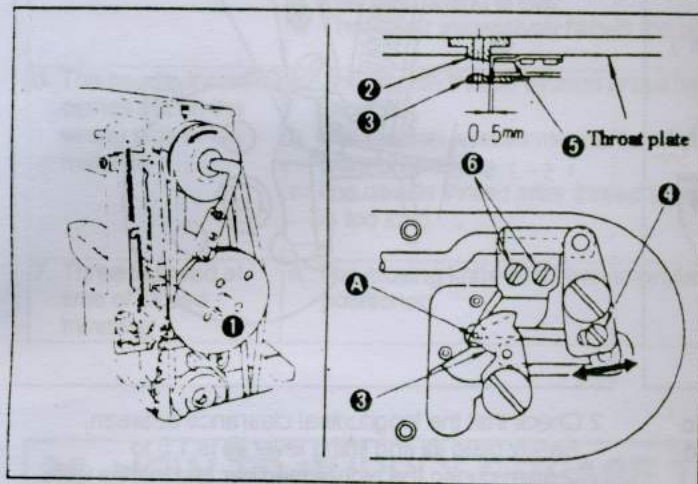
1. Remove five setscrews ① to take off top cover ②.

2. Loosen socket screw ④ of tension arm ③ by L-shaped wrench ⑤, and turn the tension arm to make adjustment so that a 4mm clearance is provided between the end of connecting rod ⑥ and that of tension post support plate ⑦ when the work clamp foot is up (when connecting rod ⑥ is retreated).

3. After adjustment, securely tighten socket screw ④.



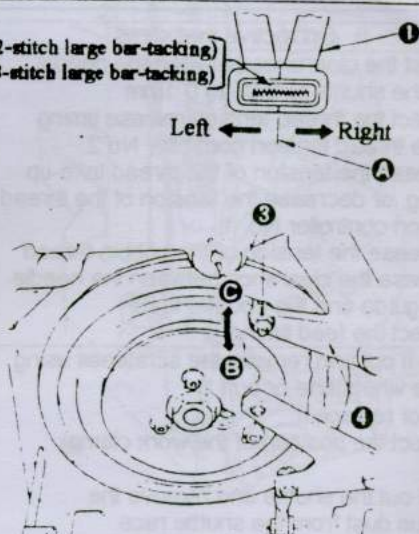
## 23. ADJUSTING THE THREAD TRIMMER



1. Remove starting lever tension spring ①, and start the machine. (The work clamp foot stays down when the machine stops.)
2. Loosen adjusting screw ④ and adjust the position of moving knife ③ in the arrowed direction to align hole ② of the moving knife with the needle hole in needle hole guide ②.
3. Loosen setscrew ⑥ and adjust the position of counter knife ⑤ to provide a 0.5mm clearance between needle hole guide ② and counter knife ⑤.

## 24. ADJUSTING THE LATERAL POSITION OF THE WORK CLAMP FOOT

26<sup>TH</sup> stitch (for 42-stitch large bar-tacking)  
18<sup>TH</sup> stitch (for 18-stitch large bar-tacking)

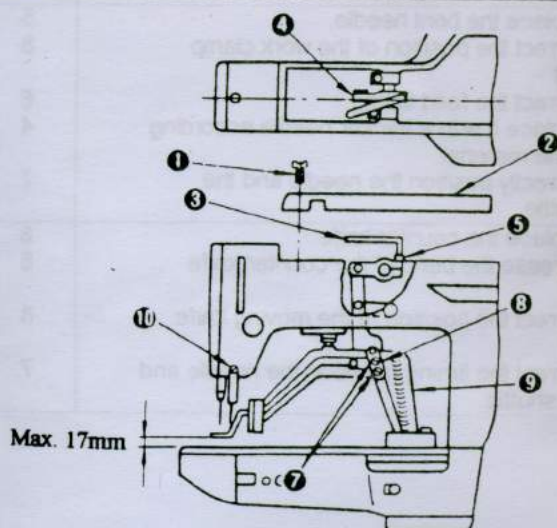


Loosen nut ③, and move feed across regulator in direction ② to shift lateral center ① of work clamp foot ① to the right or in direction ④ to shift it to the left.

- ★ For 42-stitch bar-tacking, adjust the lateral center at the 26<sup>th</sup> stitch.
- ★ For 18-stitch bar tacking, adjust the lateral center at the 18<sup>th</sup> stitch.

(Caution) To correct a slight deviation of the lateral feed center, loosen the nut described in "19. Adjusting the length and width of bar tacking", and push the work clamp foot to the right or left by hand to make adjustment.

## 25. ADJUSTING THE LIFT OF THE WORK CLAMP FOOT



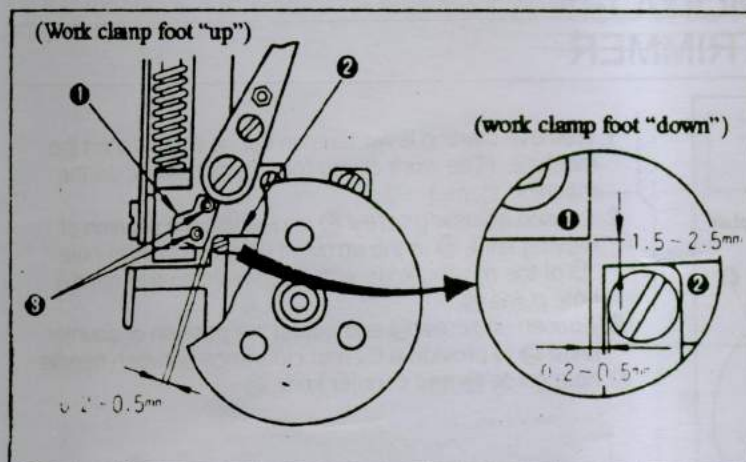
The lift of the work clamp foot can be adjusted up to 17mm.

1. With the machine in stop mode, remove five setscrew ① to take off top cover ②.
2. Apply L-shaped wrench ③ to socket screw ⑤ of clamp ④, and loosen socket screw.
3. Push down L-shaped wrench ③ to increase the lift of the work clamp foot, or pull it up to decrease the lift.
4. Securely tighten socket screw ⑤ after adjustment.
5. If the right and left work clamp feet are not levelled, loosen screw ⑦ and adjust the position of work clamp foot lever support plate ③ to level them.

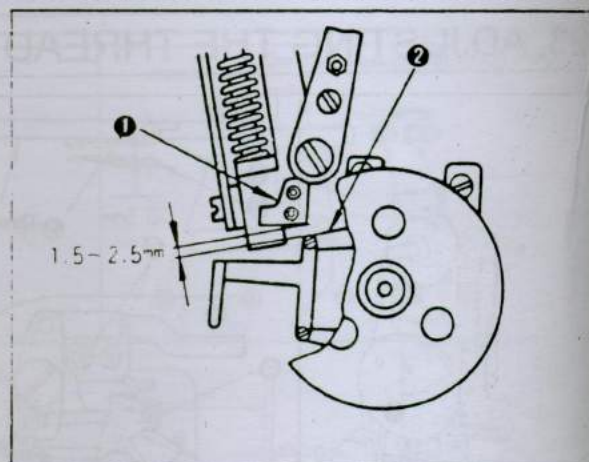
(Caution) Be careful not to cause work clamp foot lever support plate ③ to interfere with feed bracket ⑨. If the work clamp foot lever support plate interferes with the wiper, readjust the height of the wiper using setscrew ⑩.



## 26. ADJUSTING THE SAFETY PLATE



1 Loosening two setscrews ③, perform adjustment so that a 0.2 to 0.5mm lateral clearance is provided between safety plate ① and lifting lever ② when the work clamp foot is up at the time of stop motion, and a 1.5 to 2.5mm longitudinal clearance between them when the work clamp foot is down.



2 Check that the longitudinal clearance between Safety plate ① and lifting lever ② is 1.5 to 2.5mm during the high-speed bar tacking (the work clamp foot is down)

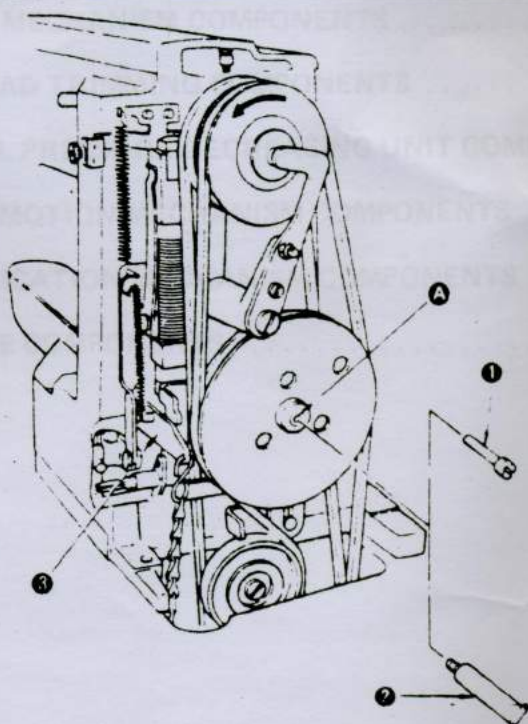
## 27. TROUBLES AND CORRECTIVE MEASURES

Trouble	Cause	Corrective measures	Page
1 The needle thread slips off the needle at the start of bar-tacking.	a. Stitches are skipped at the start	• Adjust the clearance between the needle and the shuttle to 0.05 to 0.1mm	7
	b. The needle thread remaining on the needle after thread trimming is too short.	• Correct the thread tension release timing of the thread tension controller No 2.	7
	c. The bobbin thread is too short.	• Increase the tension of the thread take-up spring, or decrease the tension of the thread tension controller No. 1.	6
	d. The feed timing is bad.	• Decrease the tension of the bobbin thread	6
2 Thread often breaks or synthetic fiber thread splits finely.	a. The shuttle or the driver has scratches.	• Increase the clearance between the needle hole guide and the counter knife.	8
	b. The needle hole guide has scratches.	• Correct the feed timing.	6
	c. The needle strikes the work clamp foot.	• Take it out and remove the scratches using a fine whetstone or buff.	8
	d. Fibrous dust is in the groove of the Shuttle race.	• Buff or replace it.	7
	e. The needle thread tension is too high.	• Correct the position of the work clamp foot	7
	f. The tension of the thread take-up spring is too high.	• Take out the shuttle and remove the fibrous dust from the shuttle race.	6
	g. The synthetic fiber thread melts due to heat generated on the needle.	• Reduce the needle thread tension.	6
3 The needle often breaks	a. The needle is bent.	• Reduce the tension.	4
	b. The needle hits the work clamp foot	• Use silicone oil.	4
	c. The feed timing is bad.	• Replace the bent needle.	5
	d. The needle is too thin for the material.	• Correct the position of the work clamp foot	8
	e. The driver excessively bends the needle.	• Correct the feed timing.	6
4 Threads are not trimmed.	a. The counter knife is dull.	• Replace it with a thicker needle according to the material	4
	b. The difference in level between the needle hole guide and the counter knife is not	• Correctly position the needle and the shuttle.	7
	c. The moving knife has been improperly positioned.	• Replace the counter knife.	8
	d. The last stitch is skipped.	• Increase the bend of the counter knife	8
		• Correct the position of the moving knife.	8
		• Correct the timing between the needle and the shuttle.	7



5. Stitch skipping often occurs	a. The motions of the needle and shuttle are not properly synchronized.	• Correct the positions of the needle and shuttle.	7
	b. The clearance between the needle and Shuttle is too large.	• Correct the positions of the needle and shuttle.	7
	c. The needle is bent.	• Replace the bent needle	.5
	d. The feed timing is bad	• Correct the feed timing	6
	e. The driver excessively bends the needle.	• Correctly position the driver.	7
6. The needle thread comes out on the wrong side of the material.	a. The needle thread tension is not high Enough.	• Increase the needle thread tension.	6
	b. The tension release mechanism fails to work properly.	• Check whether or not the tension disc-No.2 is released during bar-tacking.	7
	c. The needle thread after thread trimming is too long.	• Increase the tension of the thread tension controller No.1.	6
7. Threads bread at time of thread trimming	a. The moving knife has been improperly positioned.	• Correct the position of the moving knife.	8

## 28. HOW TO SUPPLY GREASE TO THE REDUCER



Supply grease to the reducer in accordance with the following procedure when the machine has been used for more than half year or if it chatters

1. Stop the machine and remove screw ①.
2. Uncap grease tube ② supplied with the machine, screw the tube into hole ④, and push
3. Removing grease tube ② from ④, push in the grease by screw ①.
4. Repeat the step of injecting the grease and pushing it in by the screw twice or so.
5. Tighten screw ①.

(Caution) If the grease will not get into the unit smoothly, screw in grease tube ②, turn on the motor switch, and move the presser foot up and down two or three times using lever ⑤. By doing this, you can make the grease get into the unit easily.

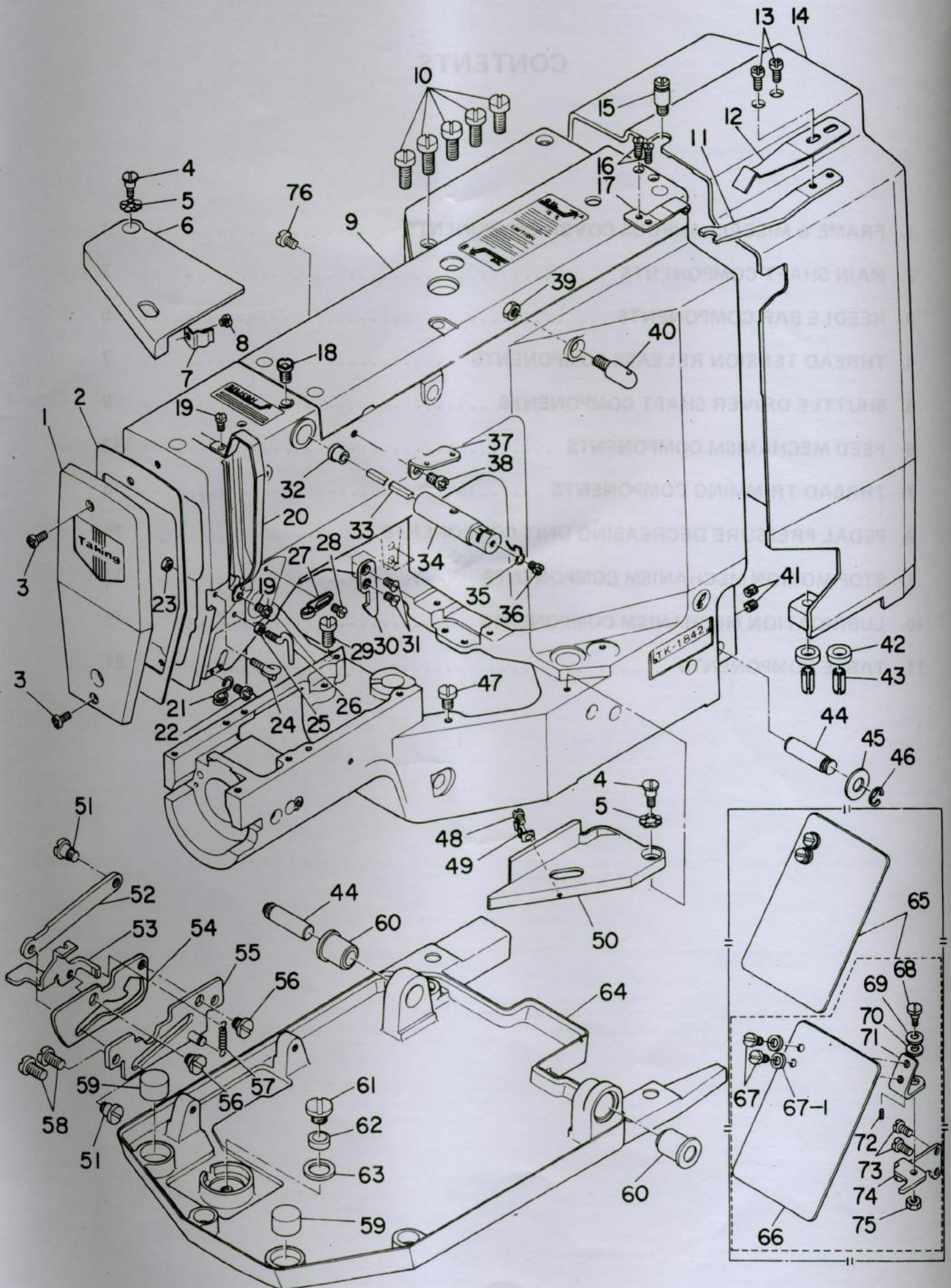


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# 1. FRAME & MISCELLANEOUS COVER COMPONENTS

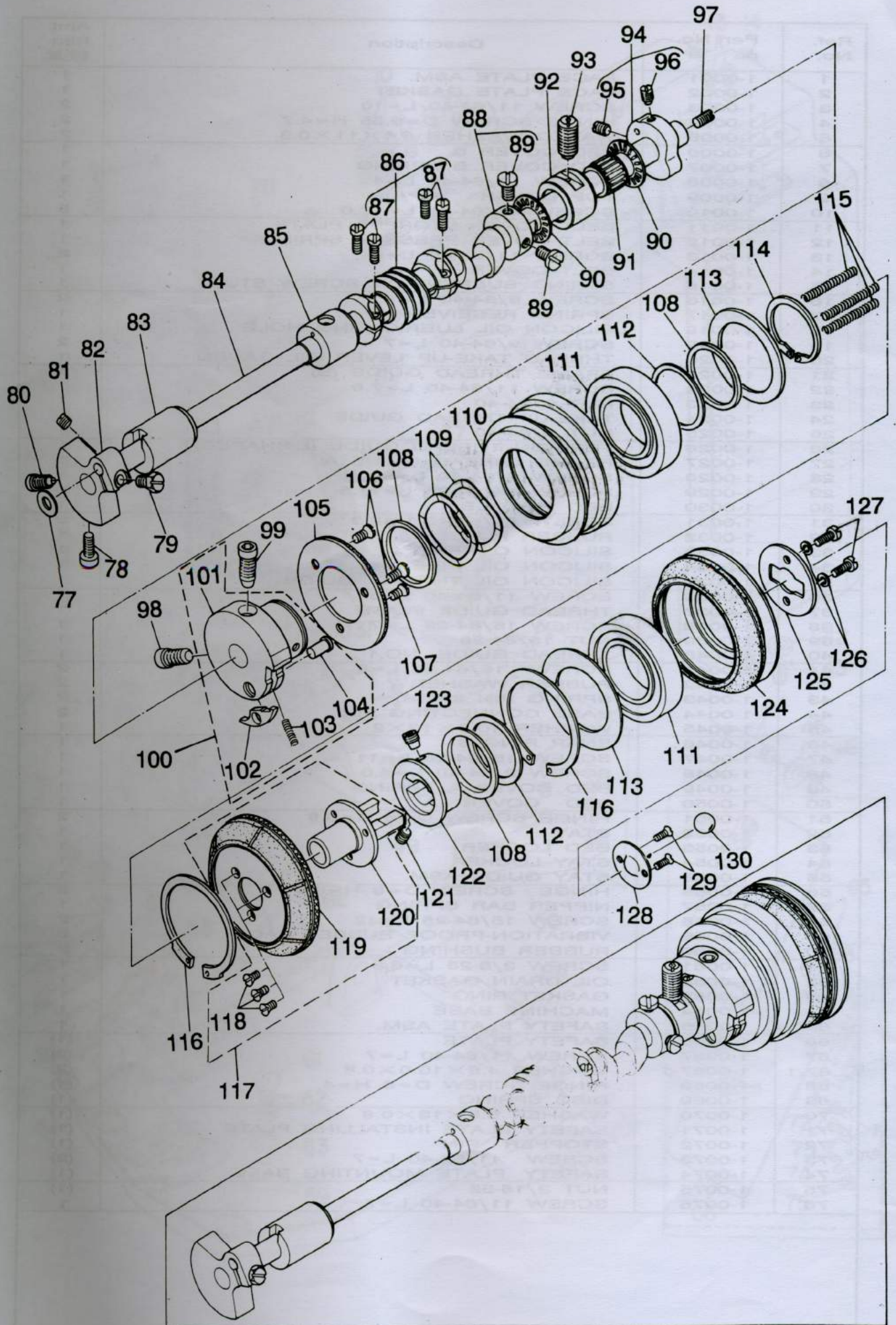




Ref. No.	Part No. 品 番	Description	Amt. Req. 數量
1	1-0001	FACE PLATE ASM.	1
2	1-0002	FACE PLATE GASKET	1
3	1-0003	SCREW 11/64-40 L=10	2
4	1-0004	HINGE SCREW D=6.35 H=4.7	2
5	1-0005	WAVED WASHER 6.4×11×0.3	2
6	1-0006	BED COVER B	1
7	1-0007	BED COVER B SPRING	1
8	1-0008	SCREW 11/64-40 L=4	1
9	1-0009	TOP COVER	1
10	1-0010	SCREW 15/64-28 L=17.0	5
11	1-0011	BELT COVER STOPPER PLATE	1
12	1-0012	BELT COVER PRESSER SPRING	1
13	1-0013	SCREW 11/64-40 L=8	2
14	1-0014	BELT COVER	1
15	1-0015	SPRING SUSPENSION SCREW STUD	1
16	1-0016	SCREW 9/64-40 L=8	2
17	1-0017	SPRING RECEIVER	1
18	1-0018	SILICON OIL LUBRICATING HOLE	1
19	1-0019	SCREW 9/64-40 L=7	2
20	1-0020	THREAD TAKE-UP LEVER OIL GAURD	1
21	1-0021	FRAME THREAD GUIDE (B)	1
22	1-0022	SCREW 11/64-40 L=7.8	1
23	1-0023	NUT 9/64-40	1
24	1-0024	TAKE-UP THREAD GUIDE	1
25	1-0025	NUT 9/64-40	1
26	1-0026	TENSION THREAD GUIDE (L-SHAPED)	1
27	1-0027	FRAME THREAD GUIDE A	1
28	1-0028	SCREW 9/64-40 L=6	1
29	1-0029	SCREW 15/64-28 L=11.5	1
30	1-0030	BED HOOK B	1
31	1-0031	SCREW 11/64-40 L=8.3	2
32	1-0032	RUBBER PLUG	1
33	1-0033	SILICON OIL FELT	1
34	1-0034	SILICON OIL PIPE	1
35	1-0035	SILICON OIL THREAD GUIDE	1
36	1-0036	SCREW 11/64-40 L=5	1
37	1-0037	THREAD GUIDE PLATE	1
38	1-0038	SCREW 15/64-28 L=7	1
39	1-0039	NUT 15/64-28	1
40	1-0040	THREAD GUIDE, NO.1	1
41	1-0041	SCREW 15/64-28 L=8	2
42	1-0042	RUBBER WASHER	2
43	1-0043	SPRING PIN 8×16	2
44	1-0044	BASE CONNECTING PIN	2
45	1-0045	WASHER 10.5×18×2	1
46	1-0046	SNAP RING 6	1
47	1-0047	SCREW 15/64-28 L=11	1
48	1-0048	SCREW 9/64-40 L=4.0	1
49	1-0049	BED COVER A SPRING	1
50	1-0050	BED COVER A	1
51	1-0051	HINGE SCREW D=8 H=6.8	2
52	1-0052	STAY	1
53	1-0053	BED LOCKER	1
54	1-0054	STAY LOCKER	1
55	1-0055	STAY GUIDE ASM.	1
56	1-0056	HINGE SCREW D=8 H=3.4	2
57	1-0057	NIPPER BAR SPRING	1
58	1-0058	SCREW 15/64-28 L=12	2
59	1-0059	VIBRATION-PROOF RUBBER PAD	2
60	1-0060	RUBBER BUSHING	2
61	1-0061	SCREW 3/8-28 L=6.5	1
62	1-0062	OIL DRAIN GASKET	1
63	1-0063	GASKET RING	1
64	1-0064	MACHINE BASE	1
65	1-0065	SAFETY PLATE ASM.	1
66	1-0066	SAFETY PLATE	(1)
67	1-0067	SCREW 11/64-40 L=7	(2)
67-1	1-0067-1	WASHER 4.5×10.0×0.8	(2)
68	1-0068	HINGE SCREW D=6 H=4	(1)
69	1-0069	DISC SPRING	(1)
70	1-0070	WASHER 6.5×13×0.8	(1)
71	1-0071	SAFETY PLATE INSTALLING PLATE	(1)
72	1-0072	STOPPER PIN	(1)
73	1-0073	SCREW 11/64-40 L=7	(2)
74	1-0074	SAFETY PLATE MOUNTING BASE	(1)
75	1-0075	NUT 3/16-32	(1)
76	1-0076	SCREW 11/64-40 L=7	1



## 2. MAIN SHAFT COMPONENTS

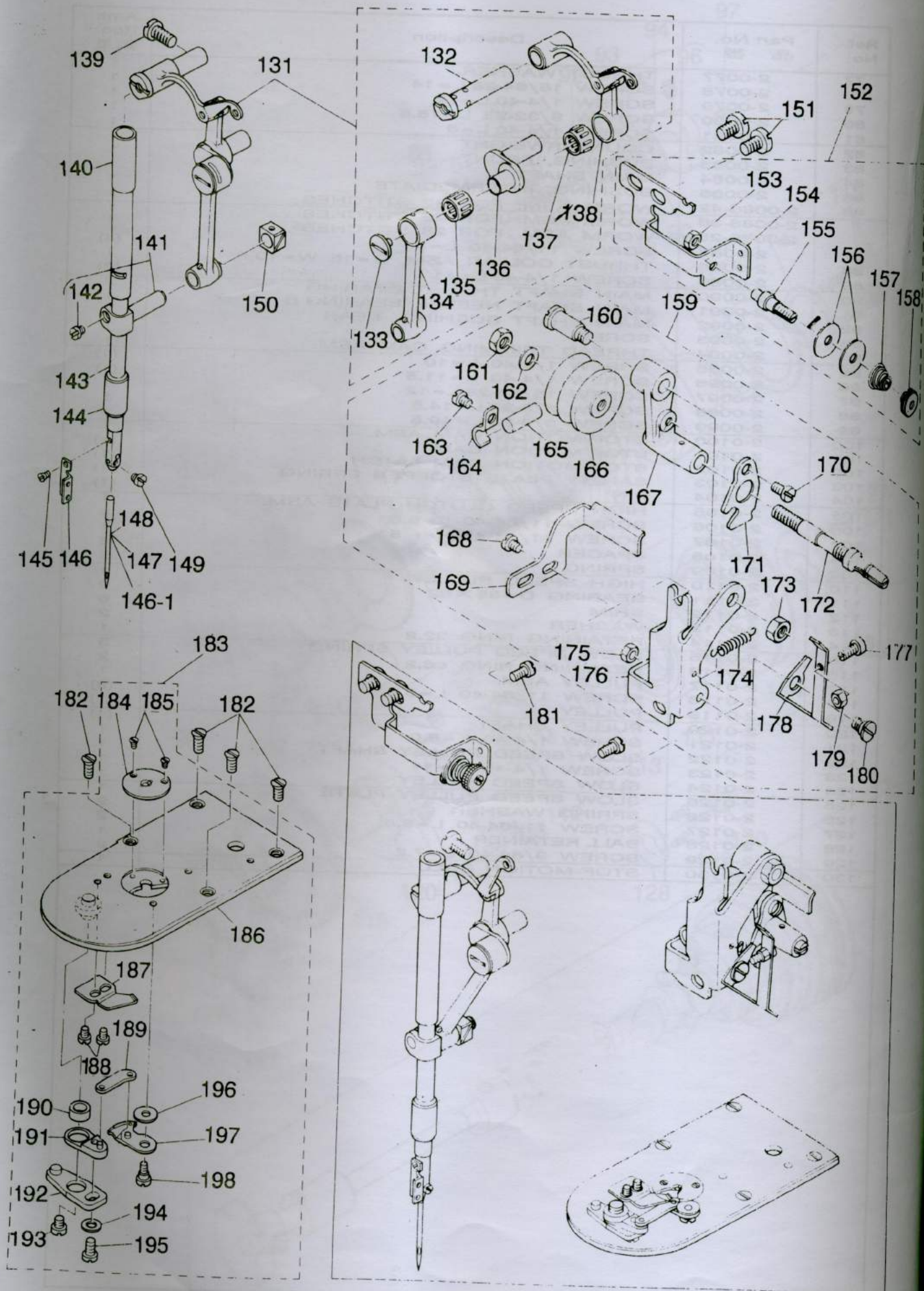




Ref. No.	Part No. 品番	Description	Amt. Req. 数量
77	2-0077	THRUST WASHER.	1
78	2-0078	SCREW 15/64-28 L=14	1
79	2-0079	SCREW 1/4-40 L=12	1
80	2-0080	SCREW 9/32-28 L=16.5	1
81	2-0081	SCREW 1/4-40 L=6	1
82	2-0082	COUNTERWEIGHT	1
83	2-0083	BUSHING, FRONT	1
84	2-0084	MAIN SHAFT	1
85	2-0085	BUSHING, INTERMEDIATE	1
86	2-0086-42	WORM ASM. FOR 42 STITCHES	1
	2-0086-36	WORM ASM. FOR 36 STITCHES	1
	2-0086-28	WORM ASM. FOR 28 STITCHES	1
87	2-0087	SCREW 11/64-40 L=14	(4)
88	2-0088	THRUST COLLAR ASM. D=15 W=10.8	1
89	2-0089	SCREW 1/4-40 L=11	(2)
90	2-0090	MAIN SHAFT THRUST BEARING	2
91	2-0091	MAIN SHAFT NEEDLE BEARING B	1
92	2-0092	MAIN SHAFT BUSHING, REAR	1
93	2-0093	SCREW	1
94	2-0094	THREAD TRIMMING CAM ASM.	1
95	2-0095	SCREW 1/4-40 L=10	(1)
96	2-0096	SCREW 1/4-40 L=11.5	(1)
97	2-0097	SCREW 15/64-28 L=12	1
98	2-0098	SCREW 3/8-28 L=14.5	1
99	2-0099	SCREW 3/8-28 L=19.5	1
100	2-0100	STOP-MOTION CAM ASM.	1
101	2-0101	STOP-MOTION CAM	(1)
102	2-0102	STOP-MOTION CAM LATCH	(1)
103	2-0103	SAFETY PLATE STOPPER SPRING	(1)
104	2-0104	PIN	(1)
105	2-0105	HIGH SPEED CLUTCH PLATE ASM.	1
106	2-0106	SCREW 11/64-40 L=8.5	2
107	2-0107	SCREW 11/64-40 L=5.5	1
108	2-0108	SPACER	3
109	2-0109	SPRING	2
110	2-0110	HIGH SPEED PULLEY	1
111	2-0111	BEARING D=35×62	2
112	2-0112	SHIM	6
113	2-0113	WASHER	2
114	2-0114	RETAINING RING 32.2	1
115	2-0115	SLOW SPEED PULLEY SPRING	3
116	2-0116	RETAINING RING 66.2	2
117	2-0117	PULLEY ASM.	1
118	2-0118	SCREW 11/64-40 L=5.5	(3)
119	2-0119	PULLEY	(1)
120	2-0120	PULLEY SHAFT	(1)
121	2-0121	SCREW 1/4-40 L=6.0	1
122	2-0122	SLOW SPEED PULLEY SHAFT	1
123	2-0123	SCREW 1/4-40 L=11	1
124	2-0124	SLOW SPEED PULLEY	1
125	2-0125	SLOW SPEED PULLEY PLATE	1
126	2-0126	SPRING WASHER	2
127	2-0127	SCREW 11/64-40 L=8.5	2
128	2-0128	BALL RETAINER	1
129	2-0129	SCREW 9/64-40 L=7.2	2
130	2-0130	STOP-MOTION BALL	1



### 3. NEEDLE BAR COMPONENTS

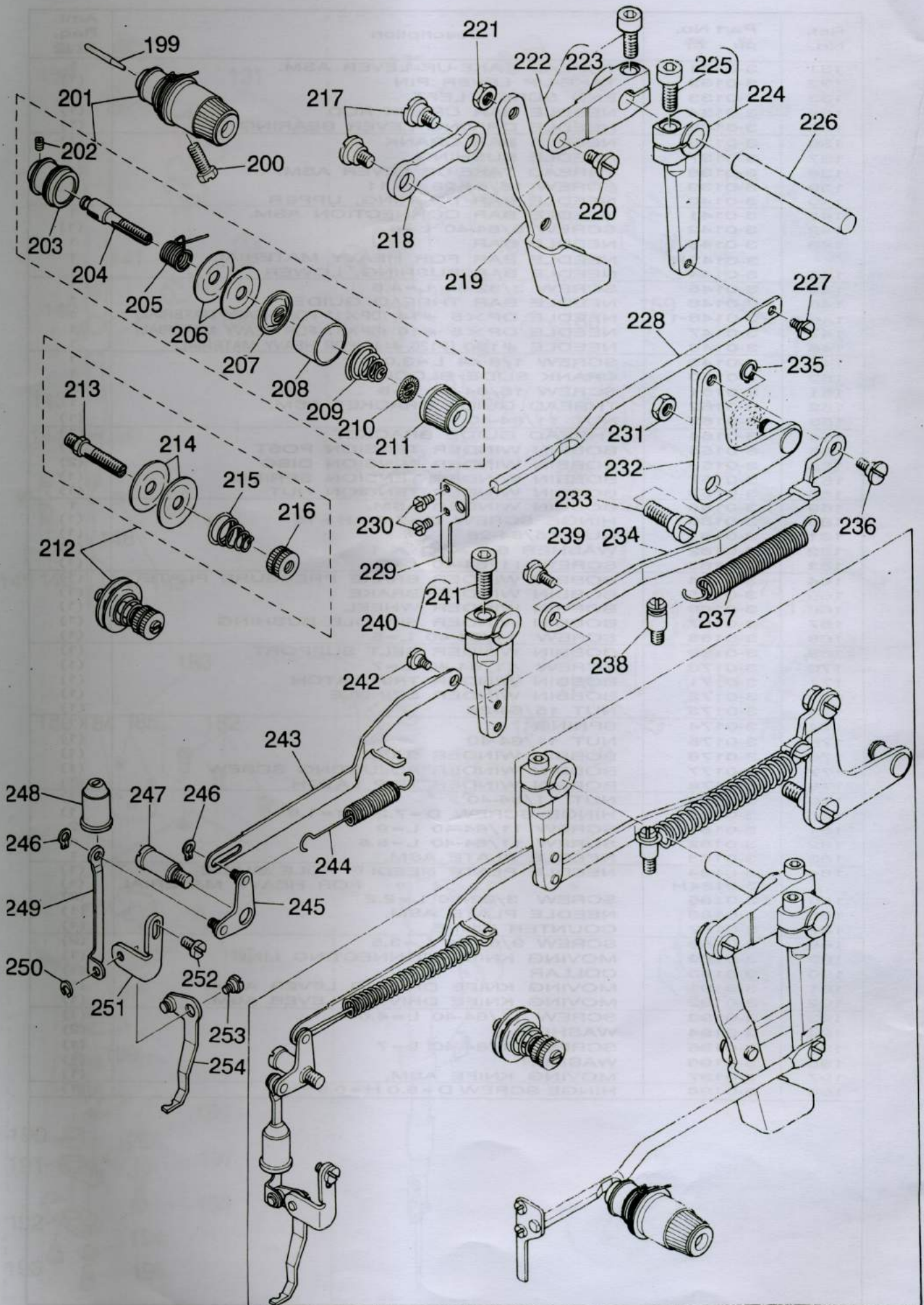




Ref. No.	Part No. 品 番	Description	Amt. Req. 數量
131	3-0131	THREAD TAKE-UP LEVER ASM.	1
132	3-0132	TAKE-UP LEVER PIN	(1)
133	3-0133	END SCREW LEFT	(1)
134	3-0134	NEEDLE BAR CRANK ROD	(1)
135	3-0135	NEEDLE DRIVING LEVER BEARING	(1)
136	3-0136	NEEDLE BAR CRANK	(1)
137	3-0137	NEEDLE BUSHING	(1)
138	3-0138	THREAD TAKE-UP LEVER ASM.	(1)
139	3-0139	SCREW 15/64-28 L=11	1
140	3-0140	NEEDLE BAR BUSHING, UPPER	1
141	3-0141	NEEDLE BAR CONNECTION ASM.	1
142	3-0142	SCREW 9/64-40 L=6	(1)
143	3-0143	NEEDLE BAR	1
	3-0143H	NEEDLE BAR FOR HEAVY MATERIAL	1
144	3-0144	NEEDLE BAR BUSHING, LOWER	1
145	3-0145	SCREW 3/32-56 L=4.5	1
146	3-0146	NEEDLE BAR THREAD GUIDE	1
146-1	3-0146-1	NEEDLE DP×5 #14 (DP×17 FOR HEAVY MATERIAL)	1
147	3-0147	NEEDLE DP×5 #16 (DP×17 FOR HEAVY MATERIAL)	1
148	3-0148	NEEDLE #100 (#120, #140 FOR HEAVY MATERIAL)	1
149	3-0149	SCREW 1/8-44 L=3.0	1
150	3-0150	CRANK SLIDE BLOCK	1
151	3-0151	SCREW 15/64-28 L=9	2
152	3-0152	THREAD GUIDE BRACKET ASM.	1
153	3-0153	NUT 11/64-40	(1)
154	3-0154	THREAD GUIDE BRACKET	(1)
155	3-0155	BOBBIN WINDER TENSION POST	(1)
156	3-0156	BOBBIN WINDER TENSION DISC	(2)
157	3-0157	BOBBIN WINDER TENSION SPRING	(1)
158	3-0158	BOBBIN WINDER TENSION NUT	(1)
159	3-0159	BOBBIN WINDER ASM.	1
160	3-0160	HINGE SCREW D=7.94 H=15	(1)
161	3-0161	NUT 15/64-28	(1)
162	3-0162	WASHER 6.5 × 11 × 1	(1)
163	3-0163	SCREW 11/64-40 L=5	(1)
164	3-0164	BOBBIN WINDER BRAKE PRESSURE PLATE	(1)
165	3-0165	BOBBIN WINDER BRAKE	(1)
166	3-0166	BOBBIN WINDER WHEEL	(1)
167	3-0167	BOBBIN WINDER SPINDLE BUSHING	(1)
168	3-0168	SCREW 11/64-40 L=5	(1)
169	3-0169	BOBBIN WINDER BELT SUPPORT	(1)
170	3-0170	SCREW 11/64-40 L=7	(1)
171	3-0171	BOBBIN WINDER TRIP LATCH	(1)
172	3-0172	BOBBIN WINDER SPINDLE	(1)
173	3-0173	NUT 15/64-28	(1)
174	3-0174	SPRING	(1)
175	3-0175	NUT 11/64-40	(1)
176	3-0176	BOBBIN WINDER BASE	(1)
177	3-0177	BOBBIN WINDER ADJUSTING SCREW	(1)
178	3-0178	BOBBIN WINDER TRIP LATCH	(1)
179	3-0179	NUT 11/64-40	(1)
180	3-0180	HINGE SCREW D=7.24 H=1.9	(1)
181	3-0181	SCREW 11/64-40 L=9	2
182	3-0182	SCREW 11/64-40 L=5.5	4
183	3-0183	NEEDLE PLATE ASM.	1
184	3-0184	NEEDLE PLATE NEEDLE HOLE GUIDE	(1)
	3-0184H	" " " FOR HEAVY MATERIAL	(1)
185	3-0185	SCREW 3/32-56 L=2.2	(2)
186	3-0186	NEEDLE PLATE ASM.	(1)
187	3-0187	COUNTER KNIFE	(1)
188	3-0188	SCREW 9/64-40 L=3.5	(2)
189	3-0189	MOVING KNIFE CONNECTING LINK	(1)
190	3-0190	COLLAR	(1)
191	3-0191	MOVING KNIFE DRIVING LEVER ASM.	(1)
192	3-0192	MOVING KNIFE DRIVING LEVER ASM.	(1)
193	3-0193	SCREW 11/64-40 L=4.0	(1)
194	3-0194	WASHER	(2)
195	3-0195	SCREW 11/64-40 L=7	(1)
196	3-0196	WASHER	(1)
197	3-0197	MOVING KNIFE ASM.	(1)
198	3-0198	HINGE SCREW D=5.0 H=0.9	(1)



#### 4. THREAD TENSION RELEASE COMPONENTS

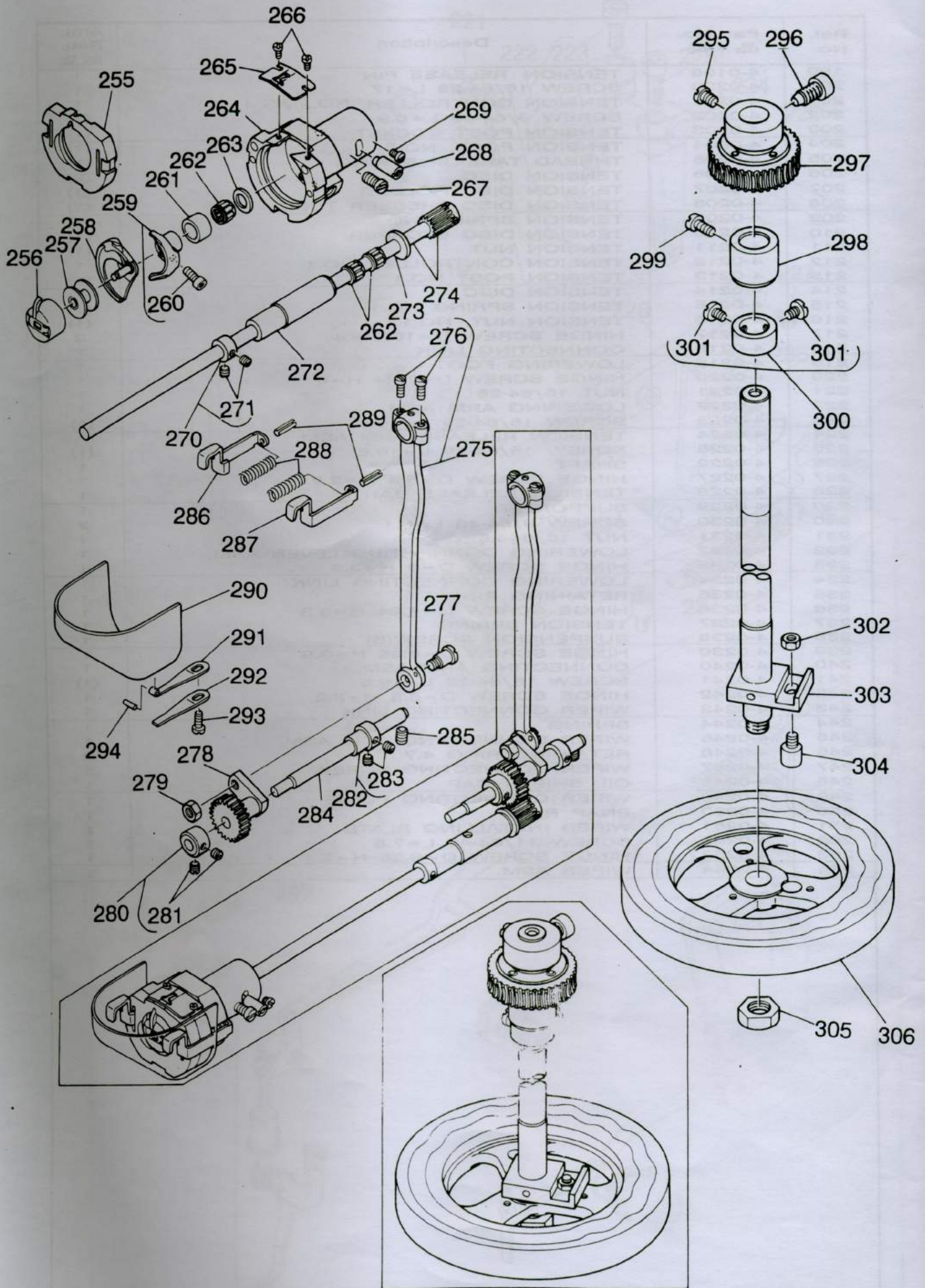




Ref. No.	Part No. 品 番	Description	Amt. Req. 數量
199	4-0199	TENSION RELEASE PIN	1
200	4-0200	SCREW 15/64-28 L=17	1
201	4-0201	TENSION CONTROLLER, NO.2 ASM.	1
202	4-0202	SCREW 9/64-40 L=5.9	(1)
203	4-0203	TENSION POST SOCKET	(1)
204	4-0204	TENSION POST, NO.2	(1)
205	4-0205	THREAD TAKE-UP SPRING	(1)
206	4-0206	TENSION DISC	(2)
207	4-0207	TENSION DISC HOLDER	(1)
208	4-0208	TENSION DISC PRESSER TUBE	(1)
209	4-0209	TENSION SPRING NO.2	(1)
210	4-0210	TENSION DISC STOPPER	(1)
211	4-0211	TENSION NUT	(1)
212	4-0212	TENSION CONTROLLER NO.1	1
213	4-0213	TENSION POST NO.1	(1)
214	4-0214	TENSION DISC	(2)
215	4-0215	TENSION SPRING NO.1	(1)
216	4-0216	TENSION NUT, NO.1	(1)
217	4-0217	HINGE SCREW D=10 H=4	2
218	4-0218	CONNECTING LINK	1
219	4-0219	LOWERING FOOT	1
220	4-0220	HINGE SCREW D=7.94 H=6	1
221	4-0221	NUT 15/64-28	1
222	4-0222	LOWERING ARM ASM.	1
223	4-0223	SCREW 15/64-28 L=16.5	(1)
224	4-0224	TENSION RELEASE ARM ASM.	1
225	4-0225	SCREW 15/64-28 L=16.5	(1)
226	4-0226	SHAFT	1
227	4-0227	HINGE SCREW D=5.3 H=2.2	1
228	4-0228	TENSION RELEASE BAR	1
229	4-0229	SUPPORTER	1
230	4-0230	SCREW 9/64-40 L=6.1	2
231	4-0231	NUT 15/64-28	1
232	4-0232	LOWERING CONNECTING LEVER ASM.	1
233	4-0233	HINGE SCREW D=9 H=3.2	1
234	4-0234	LOWERING CONNECTING LINK	1
235	4-0235	RETAINING RING	1
236	4-0236	HINGE SCREW D=7.24 H=3.3	1
237	4-0237	TENSION SPRING	1
238	4-0238	SUSPENSION SCREW(B)	1
239	4-0239	HINGE SCREW D=6.35 H=3.9	1
240	4-0240	CONNECTING ARM ASM.	1
241	4-0241	SCREW 15/64-28 L=16.5	(1)
242	4-0242	HINGE SCREW D=5.3 H=2.2	1
243	4-0243	WIPER CONNECTING LINK	1
244	4-0244	SPRING	1
245	4-0245	WIPER CONNECTING ARM ASM.	1
246	4-0246	RETAINING RING 4.7	2
247	4-0247	WIPER CONNECTING SCREW	1
248	4-0248	OIL SHIELD CAP	1
249	4-0249	WIPER CONNECTING PLATE	1
250	4-0250	SNAP RING	1
251	4-0251	WIPER INSTALLING PLATE	1
252	4-0252	SCREW 11/64-40 L=7.8	1
253	4-0253	HINGE SCREW D=6.35 H=2.1	1
254	4-0254	WIPER ASM.	1



## 5. SHUTTLE DRIVER SHAFT COMPONENTS

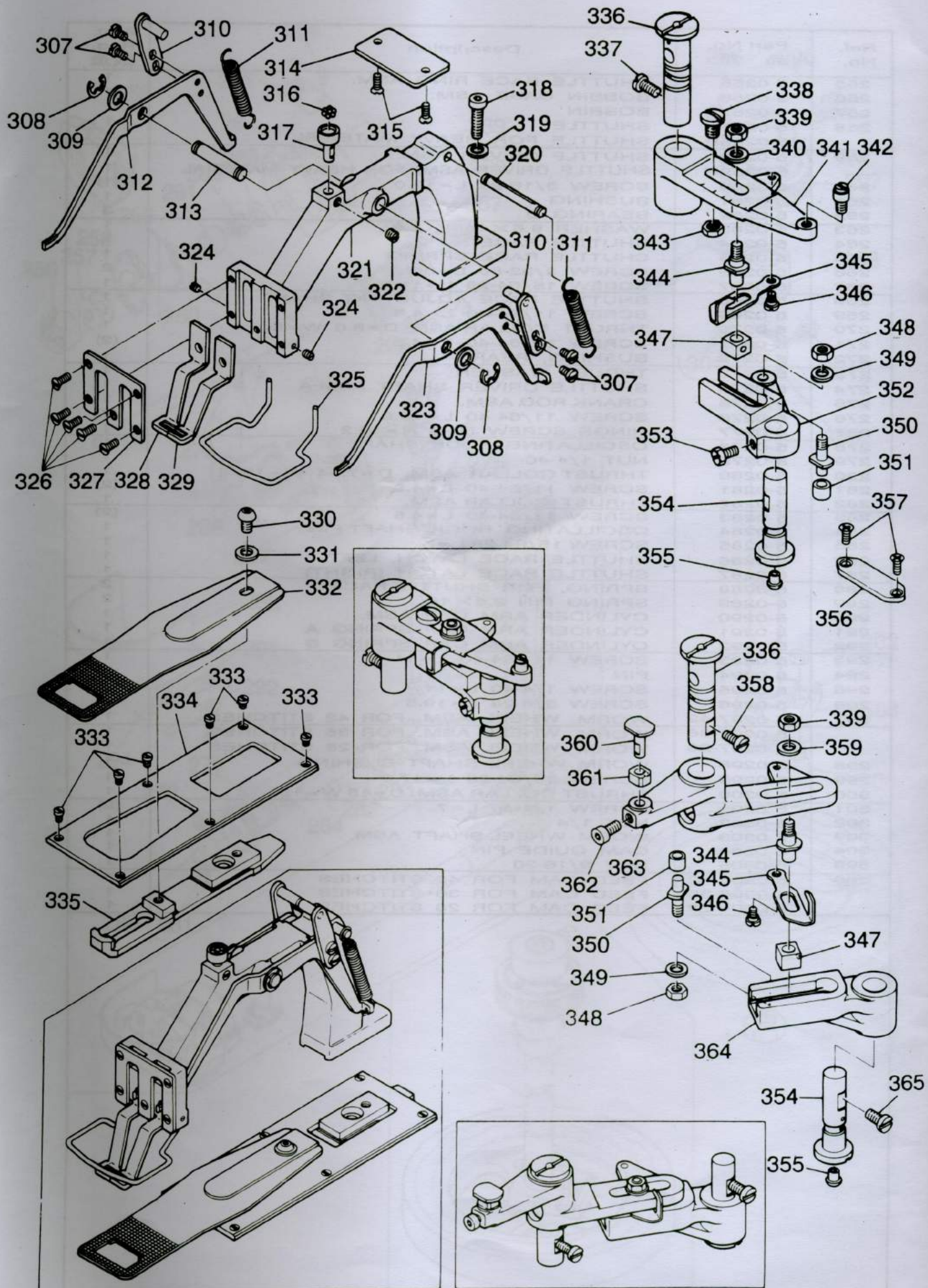




Ref. No.	Part No. 品番	Description	Amt. Req. 数量
255	5-0255	SHUTTLE RACE RING ASM.	1
256	5-0256	BOBBIN CASE ASM.	1
257	5-0257	BOBBIN	1
258	5-0258	SHUTTLE	1
	5-0258H	SHUTTLE FOR HEAVY MATERIAL	1
259	5-0259	SHUTTLE DRIVER ASM.	1
	5-0259H	SHUTTLE DRIVER ASM. FOR HEAVY MATERIAL	1
260	5-0260	SCREW 3/16-28 L=12.0	(1)
261	5-0261	BUSHING	1
262	5-0262	BEARING B	3
263	5-0263	WASHER 9.5×14.8×2.6	1
264	5-0264	SHUTTLE RACE	1
265	5-0265	SHUTTLE RACE SPRING	1
266	5-0266	SCREW 3/32-56 L=3.5	2
267	5-0267	SCREW 15/64-28 L=11.5	1
268	5-0268	SHUTTLE RACE ADJUSTING SHAFT	1
269	5-0269	SCREW 11/64-40 L=4.3	1
270	5-0270	THRUST COLLAR ASM. D=8.0 W=8	1
271	5-0271	SCREW 11/64-40 L=4.5	(2)
272	5-0272	BUSHING, REAR	1
273	5-0273	THRUST WASHER	1
274	5-0274	SHUTTLE DRIVER SHAFT ASM.A	1
275	5-0275	CRANK ROD ASM.	1
276	5-0276	SCREW 11/64-40 L=10.5	(2)
277	5-0277	HINGE SCREW D=8 H=10.2	1
278	5-0278	OSCILLATING ROCK SHAFT	1
279	5-0279	NUT 1/4-40	1
280	5-0280	THRUST COLLAR ASM. D=7.94 W=10	1
281	5-0281	SCREW 11/64-40 L=4.5	(2)
282	5-0282	THRUST COLLAR ASM.	1
283	5-0283	SCREW 11/64-40 L=4.5	(2)
284	5-0284	OSCILLATING ROCK SHAFT PIN	1
285	5-0285	SCREW 15/64-28 L=8	1
286	5-0286	SHUTTLE RACE LATCH, LEFT	1
287	5-0287	SHUTTLE RACE LATCH (RIGHT)	1
288	5-0288	SPRING, FOR SHUTTLE RACE	2
289	5-0289	SPRING PIN 2.5×16	2
290	5-0290	CYLINDER ARM CAP ASM.	1
291	5-0291	CYLINDER ARM CAP SPRING A	1
292	5-0292	CYLINDER ARM CAP SPRING B	1
293	5-0293	SCREW 11/64-40 L=11	1
294	5-0294	PIN	1
295	5-0295	SCREW 1/4-40 L=11	1
296	5-0296	SCREW 3/8-28 L=19.5	1
297	5-0297-42	WORM WHEEL ASM. FOR 42 STITCHES	1
	5-0297-36	WORM WHEEL ASM. FOR 36 STITCHES	1
	5-0297-28	WORM WHEEL ASM. FOR 28 STITCHES	1
298	5-0298	WORM WHEEL SHAFT BUSHING	1
299	5-0299	SCREW 15/64-28 L=17.0	1
300	5-0300	THRUST COLLAR ASM. D=18 W=12	1
301	5-0301	SCREW 1/4-40 L=7	(2)
302	5-0302	NUT 1/4	1
303	5-0303	WORM WHEEL SHAFT ASM.	1
304	5-0304	CAM GUIDE PIN	1
305	5-0305	NUT 9/16-20	1
306	5-0306-42	FEED CAM FOR 42 STITCHES	1
	5-0306-36	FEED CAM FOR 36 STITCHES	1
	5-0306-28	FEED CAM FOR 28 STITCHES	1



## 6. FEED MECHANISM COMPONENTS

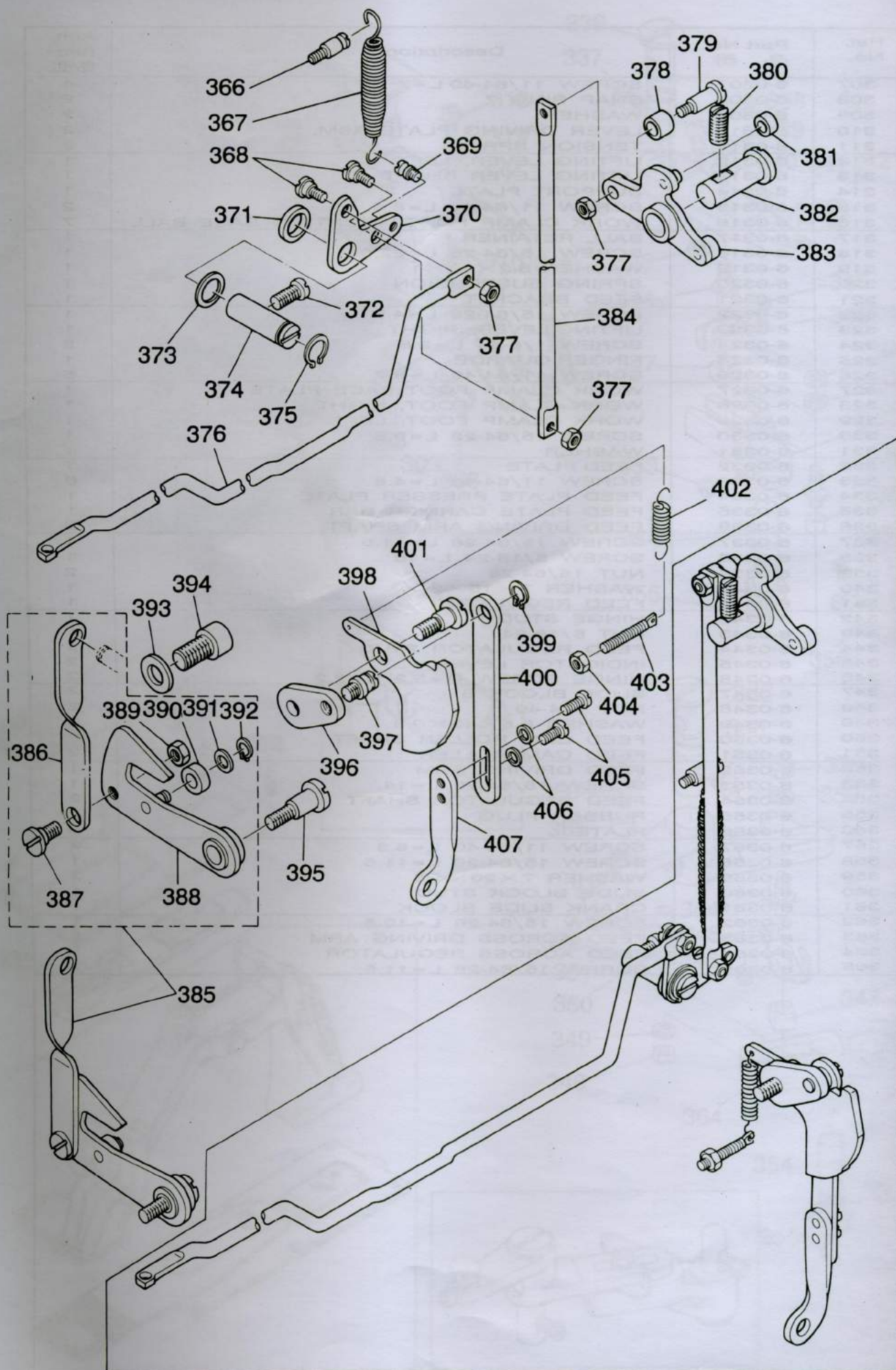




Ref. No.	Part No. 品 番	Description	Amt. Req. 数量
307	6-0307	SCREW 11/64-40 L=7	4
308	6-0308	SNAP RING 7	2
309	6-0309	WASHER	2
310	6-0310	LEVER DRIVING PLATE ASM.	2
311	6-0311	TENSION SPRING	2
312	6-0312	LIFTING LEVER, LEFT	1
313	6-0313	LIFTING LEVER SHAFT	1
314	6-0314	SUPPORT PLATE	1
315	6-0315	SCREW 11/64-40 L=8.5	2
316	6-0316	WORK CLAMP FOOT MOUNTING BASE BALL	7
317	6-0317	BALL RETAINER	1
318	6-0318	SCREW 15/64-28 L=22.0	1
319	6-0319	WASHER 6.2×13×1	1
320	6-0320	SPRING SUSPENSION	1
321	6-0321	FEED BRACKET	1
322	6-0322	SCREW 15/64-28 L=4.7	1
323	6-0323	LIFTING LEVER, RIGHT	1
324	6-0324	SCREW 1/8-44 L=2.8	2
325	6-0325	FINGER GUARDE	1
326	6-0326	SCREW 11/64-40 L=8.7	6
327	6-0327	WORK CLAMP FOOT FACE PLATE	1
328	6-0328	WORK CLAMP FOOT, RIGHT	1
329	6-0329	WORK CLAMP FOOT, LEFT	1
330	6-0330	SCREW 15/64-28 L=9.5	1
331	6-0331	WASHER	1
332	6-0332	FEED PLATE	1
333	6-0333	SCREW 11/64-40 L=4.8	6
334	6-0334	FEED PLATE PRESSER PLATE	1
335	6-0335	FEED PLATE CARRIER BAR	1
336	6-0336	FEED DRIVING ARM SHAFT	2
337	6-0337	SCREW 15/64-28 L=11.5	1
338	6-0338	SCREW 5/16-24 L=10	1
339	6-0339	NUT 15/64-28	2
340	6-0340	WASHER 7×15×2	1
341	6-0341	FEED REGULATOR	1
342	6-0342	HINGE STUD	1
343	6-0343	NUT 5/16-24	1
344	6-0344	FEED REGULATOR STUD	2
345	6-0345	INDICATOR LEVER	2
346	6-0346	HINGE SCREW D=5.3 H=2.2	2
347	6-0347	SLIDE BLOCK B	2
348	6-0348	NUT 1/4-40	2
349	6-0349	WASHER 6.5×13×0.8	2
350	6-0350	FEED CAM ROLLER SHAFT	2
351	6-0351	FEED CAM ROLLER	2
352	6-0352	FEED DRIVING ARM	1
353	6-0353	SCREW 15/64-28 L=14	1
354	6-0354	FEED REGULATOR SHAFT	2
355	6-0355	RUBBER PLUG	2
356	6-0356	PLATE	1
357	6-0357	SCREW 11/64-40 L=8.3	2
358	6-0358	SCREW 15/64-28 L=11.5	1
359	6-0359	WASHER 7×20×4.5	1
360	6-0360	SLIDE BLOCK STUD	1
361	6-0361	CRANK SLIDE BLOCK	1
362	6-0362	SCREW 15/64-28 L=10.5	1
363	6-0363	FEED ACROSS DRIVING ARM	1
364	6-0364	FEED ACROSS REGULATOR	1
365	6-0365	SCREW 15/64-28 L=11.5	1



## 7. THREAD TRIMMING COMPONENTS

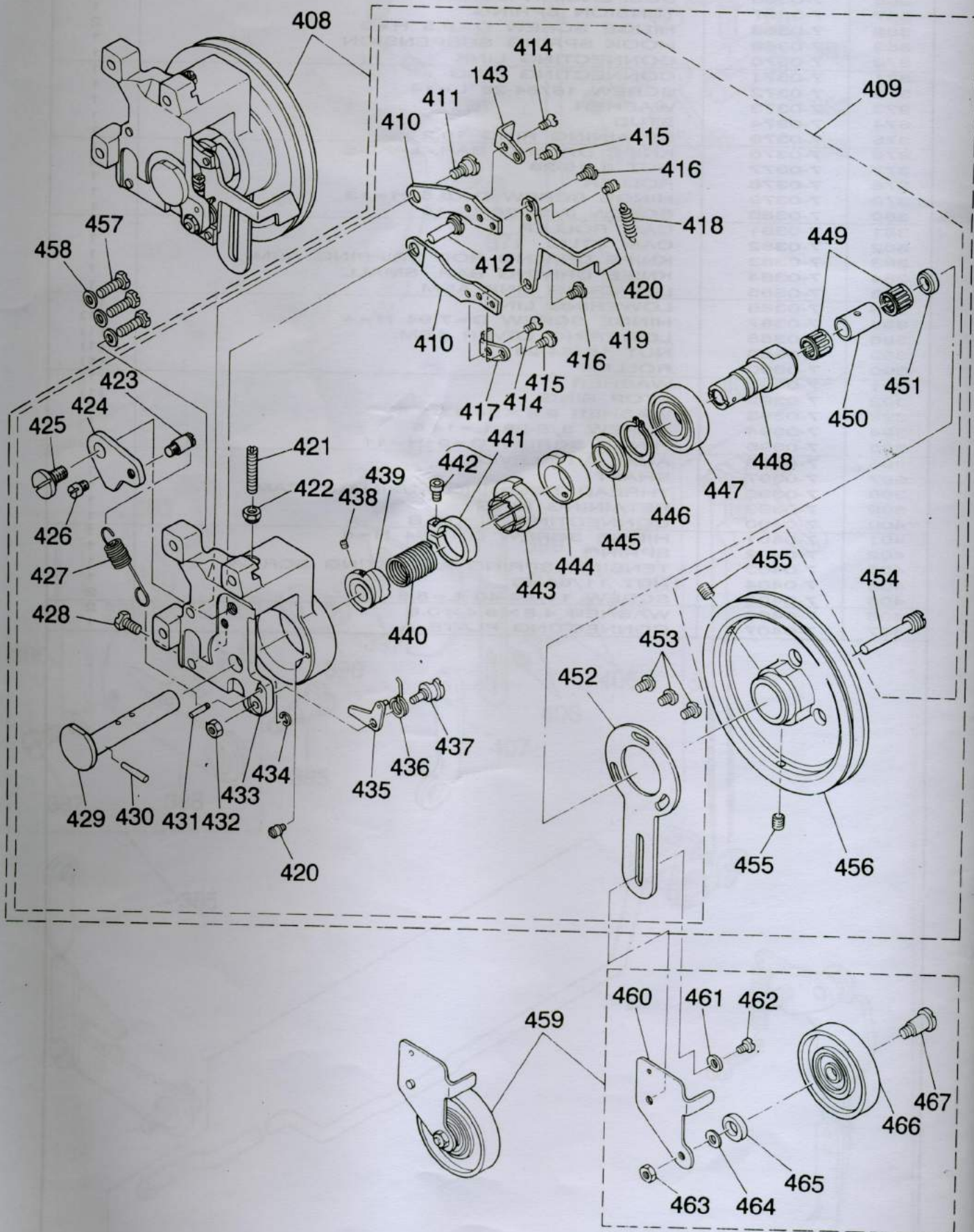




Ref. No.	Part No. 品 番	Description	Amt. Req. 数量
366	7-0366	SUSPENSION SCREW B	1
367	7-0367	TENSION SPRING	1
368	7-0368	HINGE SCREW D=6.5 H=3	2
369	7-0369	HOOK SPRING SUSPENSION	1
370	7-0370	CONNECTING LINK	1
371	7-0371	CONNECTING RING	1
372	7-0372	SCREW 15/64-28 L=14	1
373	7-0373	WASHER	1
374	7-0374	STUD	1
375	7-0375	RETAINING RING 10.2	1
376	7-0376	KNIFE DRIVING BAR, LARGE	1
377	7-0377	NUT 3/16-28	3
378	7-0378	ROLLER	1
379	7-0379	HINGE SCREW D=6.5 H=13	1
380	7-0380	SCREW 9/32-28 L=19	1
381	7-0381	CAM ROLLER	1
382	7-0382	CAM STUD	1
383	7-0383	KNIFE DRIVING ROD TRIPPING ASM.	1
384	7-0384	KNIFE DRIVING BAR, SMALL	1
385	7-0385	LOWERING LINK ASM.	1
386	7-0386	LOWERING LINK	(1)
387	7-0387	HINGE SCREW D=7.94 H=4	(1)
388	7-0388	LOWERING LEVER ASM.	(1)
389	7-0389	NUT 15/64-28	(1)
390	7-0390	ROLLER	(1)
391	7-0391	WASHER	(1)
392	7-0392	STOP RING	(1)
393	7-0393	WASHER 9.8×24.0×2.6	1
394	7-0394	SCREW 3/8-28 L=14.5	1
395	7-0395	HINGE SCREW D=9 H=11	1
396	7-0396	AUXILIARY LEVER	1
397	7-0397	SHAFT	1
398	7-0398	THREAD TRIMMING AUXILIARY CAM	1
399	7-0399	RETAINING RING	1
400	7-0400	CONNECTING PLATE B	1
401	7-0401	HINGE SCREW D=7.94 H=8	1
402	7-0402	SPRING	1
403	7-0403	TENSION SPRING ADJUSTING SCREW	1
404	7-0404	NUT 11/64-40	1
405	7-0405	SCREW 11/64-40 L=8.5	2
406	7-0406	WASHER 4.8×8.4×0.8	2
407	7-0407	CONNECTING PLATE A	1



## 8. PEDAL PRESSURE DECREASING UNIT COMPONENTS

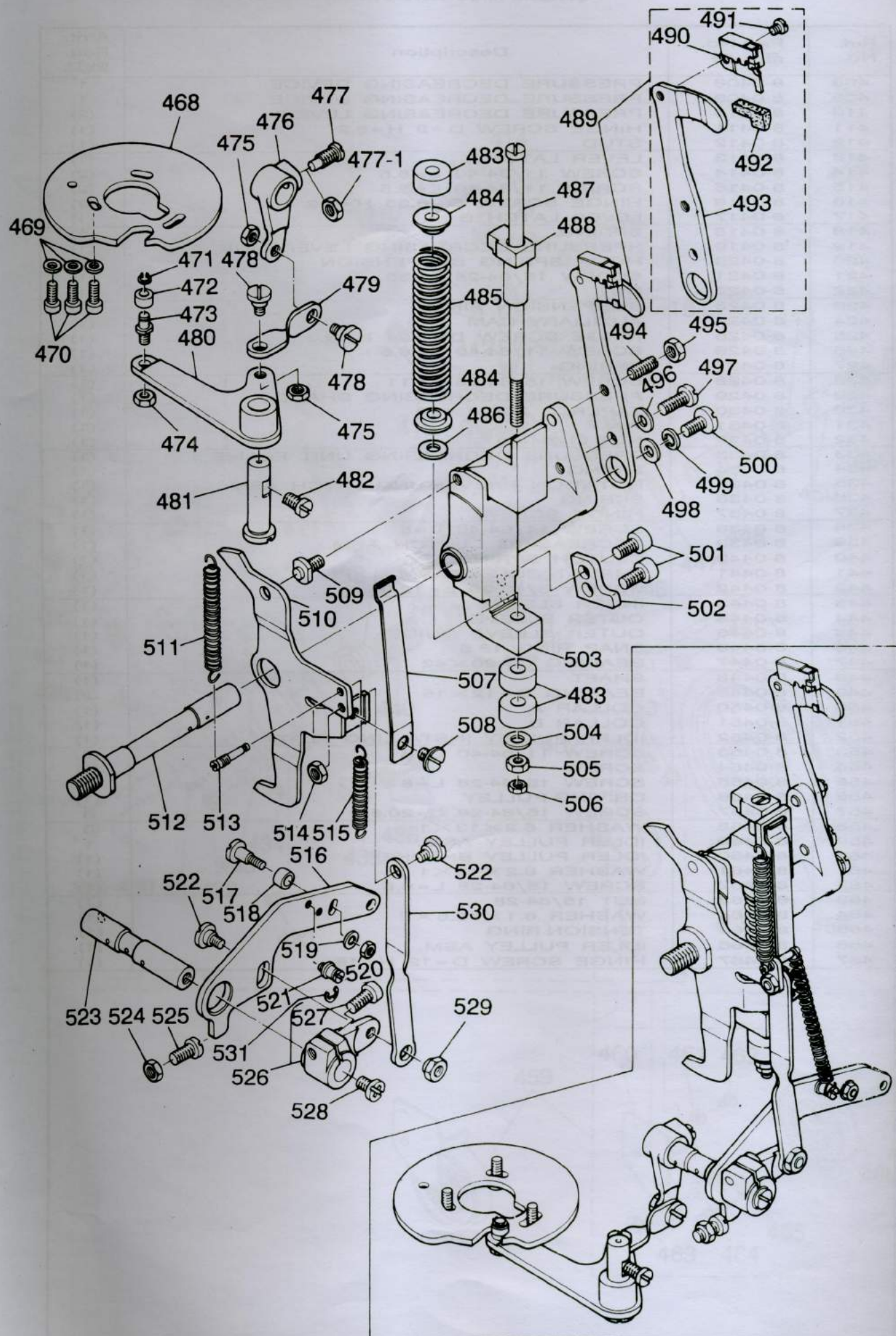




Ref. No.	Part No. 品番	Description	Amt. Req. 数量
408	8-0408	PRESSURE DECREASING DEVICE	1
409	8-0409	PRESSURE DECREASING DEVICE	1
410	8-0410	PRESSURE DECREASING LEVER	(2)
411	8-0411	HINGE SCREW D=9 H=3.2	(1)
412	8-0412	STUD	(1)
413	8-0413	LEVER LATCH A	(1)
414	8-0414	SCREW 11/64-40 L=8.5	(2)
415	8-0415	SCREW 11/64-40 L=8.5	(2)
416	8-0416	HINGE SCREW D=6.35 H=3.2	(2)
417	8-0417	LEVER LATCH B	(1)
418	8-0418	SPRING	(1)
419	8-0419	PRESSURE DECREASING LEVER LINK	(1)
420	8-0420	HOOK SPRING SUSPENSION	(2)
421	8-0421	SCREW 15/64-28 L=30	(1)
422	8-0422	NUT	(1)
423	8-0423	SUSPENSION PIN	(1)
424	8-0424	AUXILIARY CAM	(1)
425	8-0425	HINGE SCREW D=7.24 H=3.3	(1)
426	8-0426	SCREW 11/64-40 L=6.5	(1)
427	8-0427	SPRING	(1)
428	8-0428	SCREW 15/64-28 L=11	(1)
429	8-0429	PRESSURE DECREASING SHAFT	(1)
430	8-0430	TAPERED PIN 4×22	(1)
431	8-0431	PIN	(1)
432	8-0432	NUT 11/64-40	(1)
433	8-0433	PRESSURE DECREASING UNIT FRAME	(1)
434	8-0434	E-RING	(1)
435	8-0435	ROTATION PREVENTING LATCH ASM.	(1)
436	8-0436	SPRING	(1)
437	8-0437	HINGE SCREW	(1)
438	8-0438	SCREW 11/64-40 L=5	(1)
439	8-0439	DECREASING CLUTCH ASM.	(1)
440	8-0440	CLUTCH SPRING	(1)
441	8-0441	THRUST COLLAR ASM.	(1)
442	8-0442	SCREW 3/16-28 L=12.0	(1)
443	8-0443	INNER SLEEVE	(1)
444	8-0444	OUTER SLEEVE	(1)
445	8-0445	OUTER SLEEVE GUIDE	(1)
446	8-0446	SNAP RING 18.5	(1)
447	8-0447	BEARING D=20×42	(1)
448	8-0448	SHAFT	(1)
449	8-0449	BEARING D=12×15	(2)
450	8-0450	COLLAR A	(1)
451	8-0451	COLLAR B	(1)
452	8-0452	IDLER PULLEY INSTALLING PLATE	(1)
453	8-0453	SCREW 11/64-40 L=8	(3)
454	8-0454	SCREW	(1)
455	8-0455	SCREW 15/64-28 L=8	(2)
456	8-0456	DRIVING PULLEY	(1)
457	8-0457	SCREW 15/64-28 L=20.5	3
458	8-0458	WASHER 6.2×13×1	3
459	8-0459	IDLER PULLEY ASM.	1
460	8-0460	IDLER PULLEY BRACKET	(1)
461	8-0461	WASHER 6.2×13×1	(1)
462	8-0462	SCREW 15/64-28 L=6.5	(1)
463	8-0463	NUT 15/64-28	(1)
464	8-0464	WASHER 6.1×18.5×2	(1)
465	8-0465	TENSION RING	(1)
466	8-0466	IDLER PULLEY ASM.	(1)
467	8-0467	HINGE SCREW D=12 H=15	(1)



# 9. STOP-MOTION MECHANISM COMPONENTS

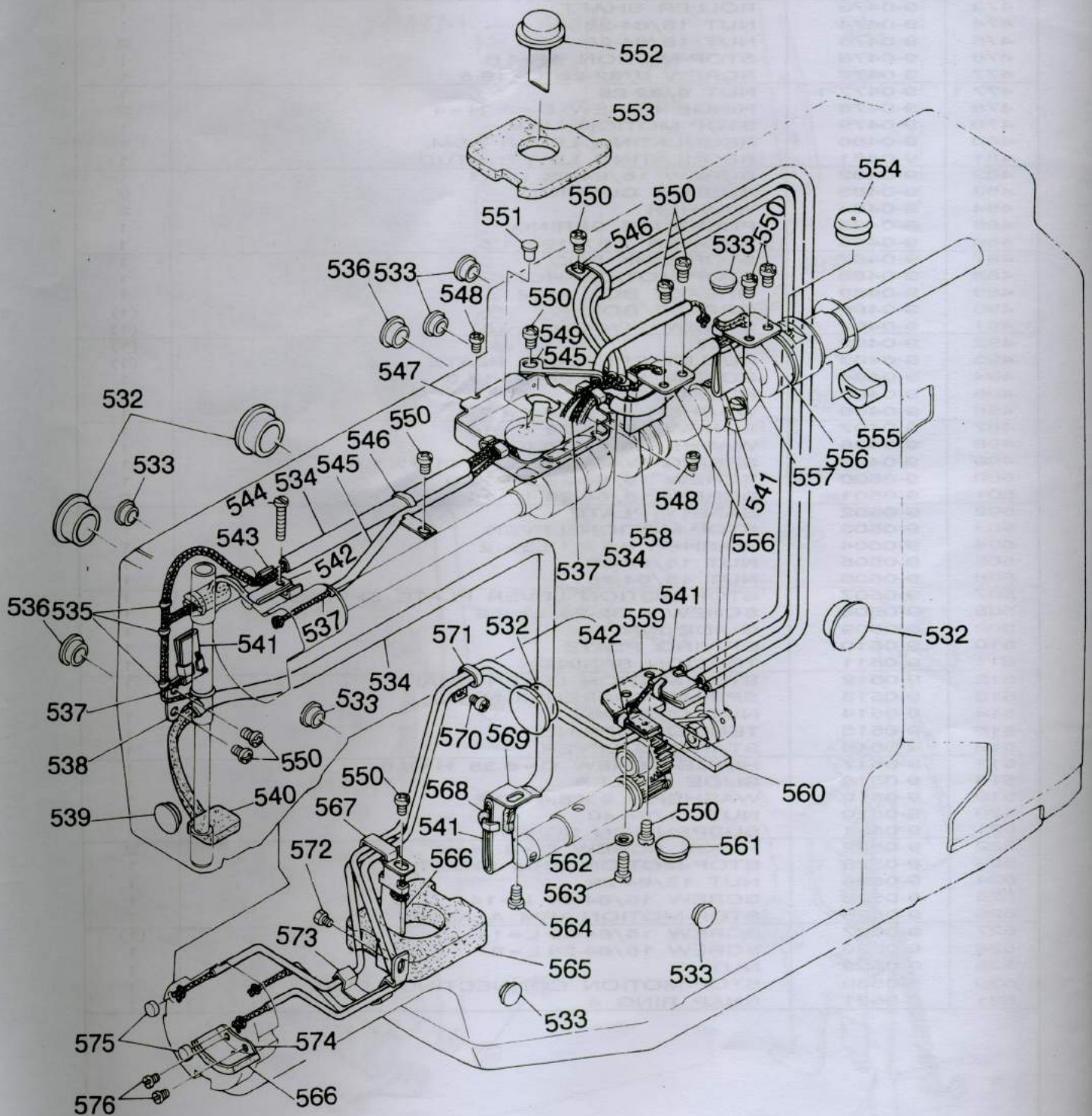




Ref. No.	Part No. 品 番	Description	Amt. Req. 数量
468	9-0468	STOP-MOTION REGULATING CAM	1
469	9-0469	WASHER 4.8×8.4×0.8	3
470	9-0470	SCREW 3/16-28 L=12.0	3
471	9-0471	RETAINING RING 4.7	1
472	9-0472	ROLLER	1
473	9-0473	ROLLER SHAFT	1
474	9-0474	NUT 15/64-28	1
475	9-0475	NUT 15/64-28	2
476	9-0476	STOP-MOTION ARM B	1
477	9-0477	SCREW 9/32-28 L=16.5	1
477-1	9-0477-1	NUT 9/32-28	1
478	9-0478	HINGE SCREW D=8 H=4	2
479	9-0479	STOP-MOTION LINK	1
480	9-0480	REGULATING LEVER ASM.	1
481	9-0481	REGULATING LEVER STUD	1
482	9-0482	SCREW 15/64-28 L=11	1
483	9-0483	RUBBER CUSHION	3
484	9-0484	WASHER	2
485	9-0485	PRESSURE SPRING	1
486	9-0486	WASHER 7.5×19×1.5	1
487	9-0487	STOP LINK ROD	1
488	9-0488	STOP-MOTION HOOK	1
489	9-0489	GREASE BOX ASM.	1
490	9-0490	GREASE BOX	(1)
491	9-0491	SCREW 11/64-40 L=5	(1)
492	9-0492	FELT	(1)
493	9-0493	PULLEY PRESSING PLATE	(1)
494	9-0494	SCREW 15/64-28 L=17.0	1
495	9-0495	NUT 15/64-28	1
496	9-0496	WASHER 6.1×15.2×2.5	1
497	9-0497	SCREW 15/64-28 L=14	1
498	9-0498	WASHER 6.1×18.5×2	1
499	9-0499	SPRING WASHER 6.4×11.9×1.5	1
500	9-0500	SCREW 15/64-28 L=13.0	1
501	9-0501	SCREW 15/64-28 L=14	2
502	9-0502	SAFETY PLATE	1
503	9-0503	STOP-MOTION LEVER	1
504	9-0504	WASHER 6.1×18.5×2	1
505	9-0505	NUT 15/64-28	1
506	9-0506	NUT 15/64-28	1
507	9-0507	STOP-MOTION LEVER PLATE SPRING	1
508	9-0508	SCREW 9/32-28 L=6.8	1
509	9-0509	GUIDE PIN	1
510	9-0510	DRIVING PLATE	1
511	9-0511	TENSION SPRING	1
512	9-0512	STOP-MOTION LEVER SHAFT	1
513	9-0513	SPRING SUSPENSION	1
514	9-0514	NUT 15/64-28	1
515	9-0515	TENSION SPRING	1
516	9-0516	STARTING LEVER	1
517	9-0517	HINGE SCREW D=6.35 H=8.0	1
518	9-0518	SLIDE ROLLER	1
519	9-0519	WASHER 4.8×8.4×0.8	1
520	9-0520	NUT 11/64-40	1
521	9-0521	SUSPENSION SCREW	1
522	9-0522	HINGE SCREW D=8 H=4	2
523	9-0523	STOP-MOTION ARM SHAFT	1
524	9-0524	NUT 15/64-28	1
525	9-0525	SCREW 15/64-28 L=14	1
526	9-0526	STOP-MOTION ARM A ASM.	1
527	9-0527	SCREW 15/64-28 L=14	(1)
528	9-0528	SCREW 15/64-28 L=9	1
529	9-0529	NUT	1
530	9-0530	STOP-MOTION CONNECTING LEVER	1
531	9-0531	SNAP RING 4	1



# 10. LUBRICATION MECHANISM COMPONENTS

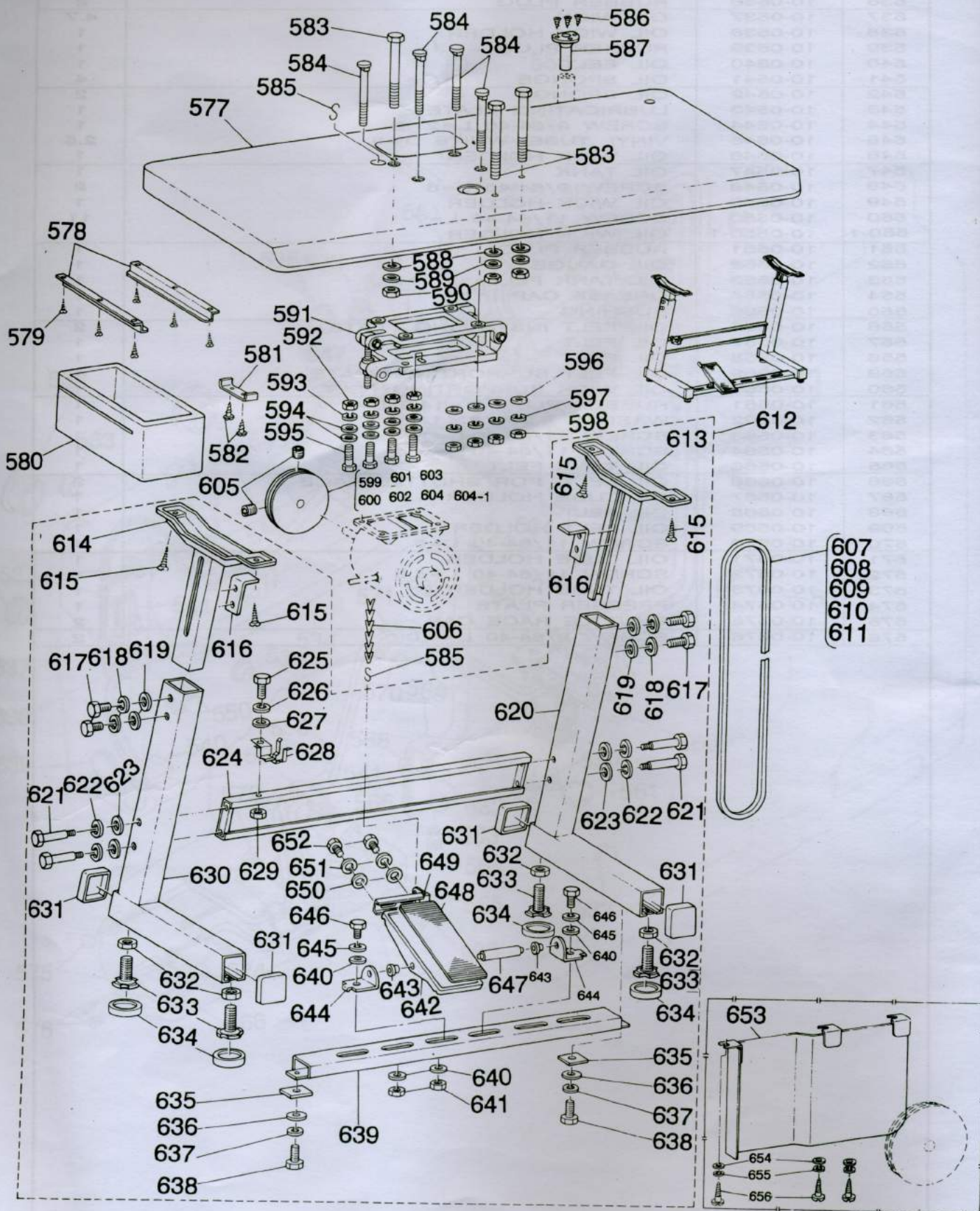




Ref. No.	Part No. 品番	Description	Amt. Req. 数量
532	10-0532	RUBBER PLUG	4
533	10-0533	RUBBER PLUG	7
534	10-0534	VINYL TUBE, WHITE D=6	0.7
535	10-0535	OIL WICK HOLDER	3
536	10-0536	RUBBER PLUG	2
537	10-0537	OIL WICK	4.7
538	10-0538	OIL WICK HOLDER	1
539	10-0539	RUBBER PLUG	1
540	10-0540	OIL FELT	1
541	10-0541	OIL SPONGE	4
542	10-0542	OIL SPONGE	2
543	10-0543	LUBRICATING PLATE	1
544	10-0544	SCREW 9/64-40 L=21.2	1
545	10-0545	VINYL TUBE, WHITE D=3	2.5
546	10-0546	OIL WICK HOLDER	1
547	10-0547	OIL TANK	1
548	10-0548	SCREW 9/64-40 L=5	2
549	10-0549	OIL WICK HOLDER	1
550	10-0550	SCREW 11/64-40 L=7	11
550-1	10-0550-1	OIL WICK HOLDER	1
551	10-0551	RUBBER PLUG	1
552	10-0552	OIL GAUGE	1
553	10-0553	OIL TANK FELT	1
554	10-0554	GREASE CAP	1
555	10-0555	BUSHING	1
556	10-0556	OIL FELT INSTALLING PLATE	2
557	10-0557	OIL FELT	1
558	10-0558	OIL FELT	1
559	10-0559	OIL FELT SUPPORTING PLATE	1
560	10-0560	OIL WICK SUPPORTING FELT	1
561	10-0561	RUBBER PLUG D=14.5 L=4	1
562	10-0562	WASHER 6.2×13×1	1
563	10-0563	SCREW 11/64-40 L=11	1
564	10-0564	SCREW 11/64-40 L=5	1
565	10-0565	OIL TANK FELT	1
566	10-0566	OIL FELT, FOR SHUTTLE RACE	2
567	10-0567	OIL TUBE HOLDER A	1
568	10-0568	OIL FELT	1
569	10-0569	OIL FELT HOLDER	1
570	10-0570	SCREW 11/64-40 L=5	1
571	10-0571	OIL TUBE HOLDER	1
572	10-0572	SCREW 11/64-40 L=5.3	1
573	10-0573	OIL TUBE HOLDER B	1
574	10-0574	PRESSER PLATE	1
575	10-0575	SHUTTLE RACE CAP	2
576	10-0576	SCREW 9/64-40 L=4.0	2



# 11. TABLE COMPONENTS





Ref. No.	Part No. 品番	Description	Amt. Req. 数量
577	11-0577	TABLE	1
578	11-0578	DRAWER SUPPORT	2
579	11-0579	WOOD SCREW D=2.1 L=10	6
580	11-0580	DRAWER	1
581	11-0581	DRAWER STOPPER	1
582	11-0582	WOOD SCREW D=4.8 L=25	2
583	11-0583	SCREW 15/64-28 L=68	3
584	11-0584	MOUNTING BOLT	4
585	11-0585	S SHAPED HOOK	2
586	11-0586	WOOD SCREW D=2.1 L=10	3
587	11-0587	OIL DRAIN	1
588	11-0588	WASHER 6.1×18.5×2	3
589	11-0589	WASHER 6.2×13×1	3
590	11-0590	NUT 15/64-28	3
591	11-0591	MOTOR BASE ASM.	1
592	11-0592	NUT M6	4
593	11-0593	SPRING WASHER 6.2×11.4×1.2	4
594	11-0594	WASHER 6.1×18.5×2	8
595	11-0595	SCREW M6 L=32	4
596	11-0596	WASHER 8.5×18×1.6	4
597	11-0597	SPRING WASHER 9.0×15.0×2.0	4
598	11-0598	NUT 5/16-18	4
599	11-0599	MOTOR PULLEY 50HZ 2300 SPM	1
600	11-0600	MOTOR PULLEY 50HZ 2000 SPM	1
601	11-0601	MOTOR PULLEY 50HZ 1800 SPM	1
602	11-0602	MOTOR PULLEY 60HZ 2300 SPM	1
603	11-0603	MOTOR PULLEY 60HZ 2000 SPM	1
604	11-0604	MOTOR PULLEY 60HZ 1800 SPM	1
604-1	11-0604-1	MOTOR PULLEY 60HZ 1500 SPM	1
605	11-0605	SCREW 15/64-28 L=8	2
606	11-0606	CHAIN	1
607	11-0607	V-BELT, 50 INCH	1
608	11-0608	V-BELT, 49 INCH	1
609	11-0609	V-BELT, 48 INCH	1
610	11-0610	V-BELT, 47 INCH	1
611	11-0611	V-BELT, 46 INCH	1
612	11-0612	TABLE STAND ASM.	1
613	11-0613	HEIGHT ADJUSTING STAND ASM., R.	(1)
614	11-0614	HEIGHT ADJUSTING STAND ASM., L.	(1)
615	11-0615	WOOD SCREW D=5.1 L=40	(4)
616	11-0616	TABLE SUPPORT	(2)
617	11-0617	SCREW M8 L=20	(4)
618	11-0618	SPRING WASHER 8.6×15×1.4	(4)
619	11-0619	WASHER 8.7×18×1.6	(4)
620	11-0620	STAND (RIGHT) ASM.	(1)
621	11-0621	HINGE SCREW D=12 H=43.1	(4)
622	11-0622	SPRING WASHER 12.5×21.5×3	(4)
623	11-0623	WASHER 12.5×25.6×2.2	(4)
624	11-0624	STAND SIDE SUPPORT ASM.	(1)
625	11-0625	SCREW M8 L=20	(1)
626	11-0626	SPRING WASHER 8.6×15×1.4	(1)
627	11-0627	WASHER 8.7×18×1.6	(1)
628	11-0628	OIL HOLDER ASM.	(1)
629	11-0629	NUT M8	(1)
630	11-0630	STAND ASM.	(1)
631	11-0631	RUBBER CAP	(4)
632	11-0632	NUT M12	(4)
633	11-0633	ADJUSTING SCREW ASM.	(4)
634	11-0634	LEG SUPPORT CAP	(4)
635	11-0635	LEG BOTTOM SUPPORT BRACKET	(2)
636	11-0636	WASHER 8.7×18×1.6	(2)
637	11-0637	SPRING WASHER 8.6×15×1.4	(2)
638	11-0638	SCREW M8 L=20	(2)
639	11-0639	LEG BOTTOM SUPPORT	(1)
640	11-0640	WASHER 8.7×18×1.6	(4)
641	11-0641	NUT M8	(2)
642	11-0642	PEDAL	(1)
643	11-0643	PEDAL BUSHING	(2)
644	11-0644	PEDAL SHAFT BRACKET	(2)
645	11-0645	SPRING WASHER 8.6×15×1.4	(2)
646	11-0646	SCREW M8 L=20	(2)
647	11-0647	PEDAL CONNECTING ROD	(1)
648	11-0648	PEDAL MAT	(1)
649	11-0649	PEDAL ADJUSTING PLATE	(1)
650	11-0650	WASHER 6.7×13×1	(2)
651	11-0651	SPRING WASHER 6.2×11.4×1.2	(2)
652	11-0652	SCREW M6 L=12	(2)
653	11-0653	GUARD PLATE	1
654	11-0654	WASHER 6.2×13×1	3
655	11-0655	SPRING WASHER 5.2×8.2×1	3
656	11-0656	WOOD SCREW D=4.8 L=25	3