ARTISAN



611-30 LA BB

Sewing Machines

Operators Manual and Spare Parts List

— INDEX —

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SETTING UP THE MACHINE (Fig. 1)

Before setting up the machine on the table, attach the relative parts to the table.

- (1) Stand and treadle (2) Motor (3) Oil pan (4) Hinge
 - (6) Knee lifter
- (7) V belt

- (5) Machine head (8) Bobbin winder
- (9) Cotton stand
- (10) Prop

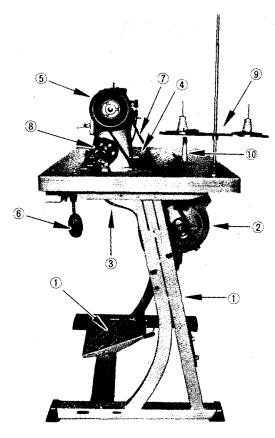


Fig. 1

BREAKING-IN & DIRECTION OF ROTATION

To assure durability and trouble-free operation, it is imperative that for the first several weeks of operation the maximum speed is held to no more than 2000 RPM in order to allow the parts to become properly broken in.

In operation the handwheel of the machine always turns toward the operator. To avoid tangled threads and jamming of the sewing hook, do not turn handwheel otherwise.

SPEED

Maximum operating speed after a break-in period is 2400 stitches per minute depending, of course, on the type of material being sewn, its thickness and that of the seams being crossed.

OILING

Do not operate the machine, even if only for testing, unless it has been properly oiled at every spot requiring lubrication.

The arrows on the following illustration indicate these spots.

(Fig. $2 \sim \text{Fig. } 6$)

NOTE: During the breaking-in period a new machine should be oiled more frequently.

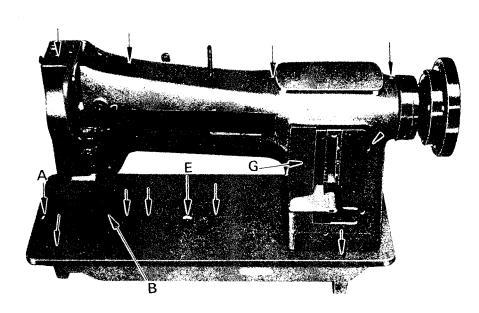


Fig. 2

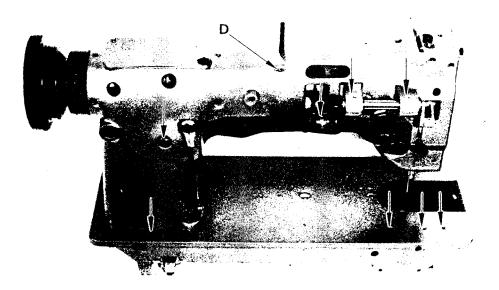


Fig. 3

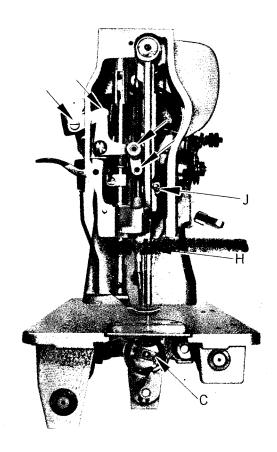


Fig. 4

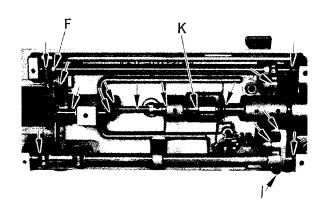


Fig. 5

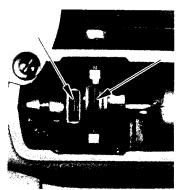


Fig. 6

NEEDLE (Fig. 7)

ARTISAN **611-25** is set up to use standard style DPx17. The size of the needle to be used should be determined by the size of the thread, which must pass freely through the eye of the needle.

HOW TO ATTACH THE NEEDLE

- 1. Turn the machine pulley over toward you until the needle bar 1) moves up to its highest point.
- 2. Loosen the needle set screw 2 and put the needle (3) up into the needle bar as deeply as it will go, with the long groove of the needle faces the left.
- 3. Tighten the needle set screw securely.

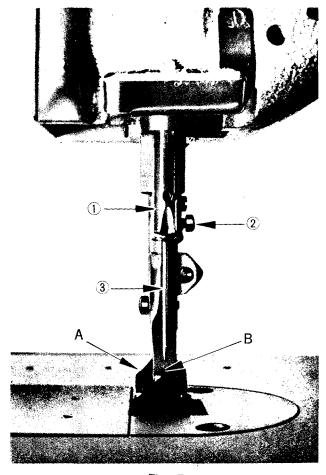


Fig. 7

TEREAD

Cotton, synthetic or silk thread can be used according to your purpose.

* Always use left twisted thread for upper (needle) thread, but you can use either right or left twisted thread for lower (bobbin) thread.

WINDING THE LOWER THREAD ON THE BOBBIN (Fig. 8)

- 1. Push a bobbin on the bobbin winder spindle 3 as far as it will go.
- 2. Pass the thread from the thread stand downward through the eye① in the tension bracket, then between and around the back of the tension disc②.
- 3. Bring the thread forward toward the bobbin and wind from below in clockwise direction several times around the bobbin.
- 4. Push the lever (4) toward the other side so that the pulley and V belt (7). Fig. 1) will engage and then start the machine.
- 5. The pulley will automatically be free from the belt and stopped after the bobbin is filled with thread.

THE ABOVE OPERATION CAN BE DONE WHILE SEWING.

ADJUSTMENT OF THE BOBBIN WINDER

1. IN CASE OF UNEVEN WINDING:

If the thread does not wind evenly on the bobbin, loosen the screw⁵ in the tension bracket and move the bracket to the right or to the left as may be required, then tighten the screw⁵.

2. WINDING AMOUNT OF THREAD:

Adjustment screw $\widehat{\mathbf{6}}$) can be turned in or out to increase or to decrease the amount of thread wound on the bobbin.

3. WINDING STRENGTH:

Strength of the winding can be adjusted with the nut?.

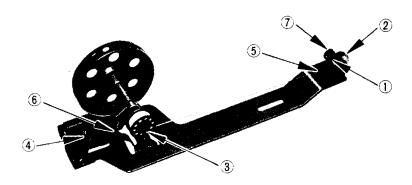


Fig. 8

REMOVING AND INSERTING THE BOBBIN

- 1. Lift the needle bar to its highest point, place the feed dog at this side in its travel turning the machine pulley, and open the slide plate (A, Fig. 2).
- 2. Pass left hand under table into opening on drip pan. With left thumb and index finger, open the hinged latch (C, Fig. 4). And pull bobbin case and bobbin from rotary hook. While the latch is held open, the bobbin will be retained in the bobbin case. Release of the latch and turning of the open side of the bobbin case downward will cause the bobbin to drop out.
- 3. Hold the bobbin between the thumb and the forefinger of your right hand and pull out a length of about 5cm of thread. Holding the bobbin case in your left hand turn the open side up and place the threaded bobbin into it. (Fig. 9)
- 4. With the right hand guide the thread into the slot in the edge of the bobbin case. Then pull the thread to the left, under the tension spring (①, Fig. 9) and into the delivery eye. In order to keep the bobbin from dropping out of the case when it is turned with the open side down, always keep the hinged latch (C, Fig. 4) at the front of the bobbin case open.
- 5. Take the threaded bobbin case by the latch (C, Fig. 4) and place it on the center stud of the bobbin case holder. Release latch and press bobbin case on to center stud until the latch catches the undercut thereon with a click that can be heard. Permit about 5cm of bobbin thread to hand down freely. Be sure to push the slide plate to the right before starting to sew.

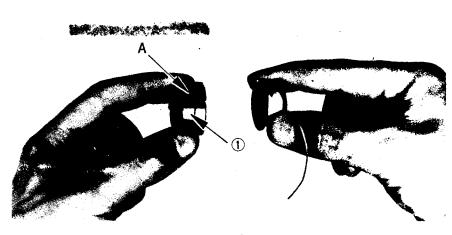


Fig. 9

THREADING THE MACHINE (Fig. 10)

- 1. Raise the needle bar to its highest point and lead the thread from the thread stand the following order:
 - From the thread stand lead the thread from back to front through the lower guide hole in pin 1 on top of the machine arm, then again from right to left through the upper guide hole in this pin. Pass thread in weaving fashion through the three holes in guide 2, and from right to left over and between the tension discs 3. Now pull thread downward and from right to left beneath and around thread controller 4, continue to pull thread upward against the pressure of the wire spring into the fork 5, in the thread controller. Guide upward through the point of controller discs 6, and thread guide 7, and from right to left through the eye in take-up lever 8, down through thread guide 7, again and then through 9, 10, 11, and from left to right through the eye of the needle 12.
- 2. After the above threading, hold the end of thread with your left hand, and turn the machine pulley with your right hand so that bobbin thread may be picked up by needle thread. And put their ends of thread back through under the presser foot for starting operation.

TO REMOVE THE WORK

Raise the needle bar to its highest point, lift the presser foot and draw the fabric back and to the left. Cut the ends of the threads a few centimeters.

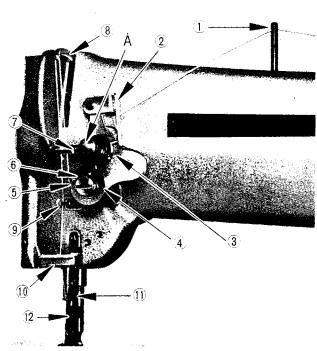


Fig. 10

REGULATING THE THREAD TENSIONS

For ordinary stitching, the tension of the upper and the lower threads should be equal so as to lock both threads in the center of the material.

If the tension on either thread is stronger than on the other, imperfect—stitching will be the result. If the tension on the upper thread is greater than that on the lower thread, it will lie straight along the upper surface of the material.

If the tension on the lower thread is greater than that on the upper thread, the lower thread will lie straight along the underside of the material.

1. Tension of the Upper (Needle) thread:

Before adjusting the tension of the upper (needle) thread, be certain that the presser foot is let down and not in lifted position.

To adjust tension, turn serrated nut (A. Fig. 10) on tension device to the right to increase tension and to the left if you desire to decrease it.

2. Tension of the Lower (Bobbin) thread: (Fig. 9)

The lower (bobbin) thread tension is controlled by the larger screw "A"(Fig. 9) near the end of the spring at the outside of the bobbin case.

Turning this screw to the right (clockwise) will increase the thread tension, while turning it to the left (counter-clockwise) will decrease it.

ADJUSTMENT OF THE PRESSURE ON THE MATERIAL (Fig. 3)

The pressure of the presser feet is adjusted by the screw (D, Fig. 3) with screw driver.

To increase the pressure, turn the screw to the right and to left if you desire to decrease it.

STITCH LENGTH ADJUSTMENT & REVERSING LEVER

The stitch length is changed by turning the serrated nut 1 so that the reference mark on the collar 3 comes in line with the desire number of stitch length on the plate 2.

- 1. If you desire to decrease the stitch length, turn the serrated nut to the right.
- To reverse sewing action, lift the lever past "O" toward marking "R" on the plate until stopped.

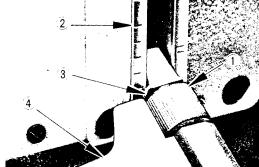


Fig. 12

ADJUSTING THE LIFT OF THE ALTERNATING PRESSER FEET

(Fig. 13)

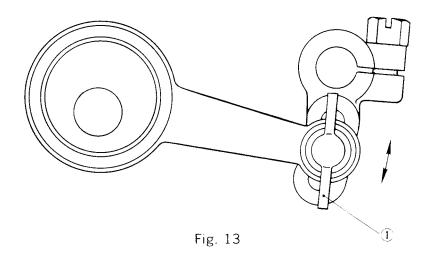
The thickness of the material sewn should control the height of the lift of the alternating presser feet. The lift should be just enough for clearance of the material.

1. With normal adjustment both feed lift to equal height:

To alter lift, loosen the wing nut① and move the link and stud assembly along the slot - move up to raise the feeding presser foot and push down to lower this foot. Tighten wing nut upon completion of adjustment.

However, some materials may require unequal height of lift.

2. When altering the lift of the lifting presser foot (A, Fig. 7) unequally against that of the vibrating presser foot (B, Fig. 7) or vice versa, see the instructions "ADJUSTING THE HEIGHT OF THE PRESSER FEET"



HOW TO RE-SET THE SAFETY CLUTCH MECHANISM

The sewing hook and its mechanism are protected by a safety clutch.

If it should become necessary to re-engage the safety clutch, depress button (E, Fig. 2) in the bed plate of the machine. At the same time, turn machine pulley until the locking mechanism re-engages the drive shaft beneath the bed of the machine. Open bed slide plate and rock the machine pulley back and forth to remove any foreign matter which may have lodged itself in the hook. Do not use any sharp-edged tools, etc., lest the hook be damaged.

EXTRA SLOTTED NEEDLE PLATE (You will find this in accessories box.)

If you put this extra slotted needle plate, you can use this machine without a feeder for sewing leather, vinyls, etc. without visible marks.

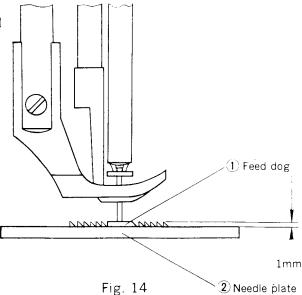
INFORMATION FOR ADJUSTMENT

ADJUSTING THE HEIGHT OF THE FEED DOG

The maximum height of the feed dog (①, Fig. 14) from the surface of the needle plate (②, Fig. 14) is normally 1mm.

To adjust this height:

- Lay down the machine head toward the other side, and turn the machine pulley so as to raise the feed dog to its highest point.
- 2. Loosen bell crank screw (F, Fig. 5) and adjust the height of the feeder by raising or lowering it.
- 3. Securely tighten the screw upon completion of adjustment.



RELATIVE POSITION OF THE FEEDER TO NEEDLE PLATE

- 1. Place the stitch length regulating lever (4), Fig. 12) on the "O" on the plate (2), Fig. 12)
- 2. Turn the machine pulley so as to raise the feed dog to its highest point.
- 3. Lay down the machine headtoward the other side, and loosen the screw (I, Fig. 5)
- 4. Adjust to be 32.1mm from the edge of the needle plate to the center of the needle hole on the feed dog (see Fig. 15)
- 5. Securely tighten the screw.

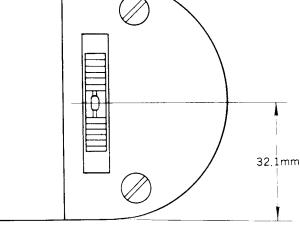


Fig. 15

THE POSITION OF THE NEEDLE AND THE NEEDLE HOLE OF THE FEEDER

Turning the machine pulley to lower slowly the needle bar, check whether the needle descends to the center of the needle hole of the feeder or not. (Please check again the needle is perfect one.)

If the needle does not enter into the center of the hole:

- 1. Remove the cover (G, Fig. 2) and loosen the screw (1, Fig. 16) slightly.
- 2. Holding the bottom of the needle bar rock frame (H. Fig. 4), move it as may be required to get the correct position to the feeder.
- 3. Tighten the screw and close the cover.

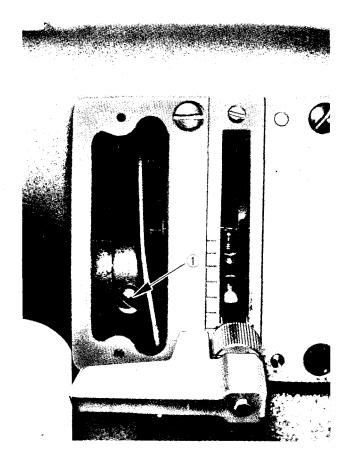


Fig. 16

TIMING THE NEEDLE WITH FEED DOG

It is important that the timing relationship between the needle on its downward stroke and the feed dog movement is maintained at all times. When the scarf of the needle on the downward stroke reaches the top surface of the feed dog, the feed dog movement must start.

When adjustment is required, use the following procedure to change the position of the cam (3), Fig. 17):

- 1. Open cover plate (1, Fig. 17) and loosen two screws (2, Fig. 17).
- 2. Normally put the arrow mark of the cam (3, Fig. 17) on the V ditch(9, Fig. 17) of arm shaft (8, Fig. 17).
- 3. As fine adjustment, turn the machine pulley to place the needle at 1mm up from its lowest point and pushing the stitch length regulating lever (4), Fig. 12) up and down, turn the cam (3), Fig. 17) and set this at the point both the needle and the feeder rest.

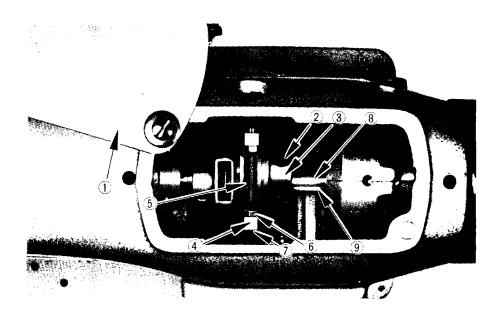
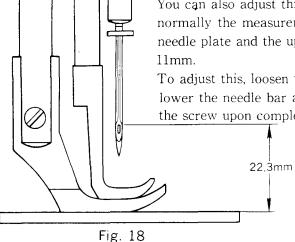


Fig. 17

ADJUSTING THE HEIGHT OF THE NEEDLE BAR (Fig. 18)

When the needle bar is at its highest point, normally the measurement between the surface of the needle plate and the upper end of the needle eye is 22.3mm. (Fig. 18)



You can also adjust this at its lowest point. In this case, normally the measurement between the surface of the needle plate and the upper end of the needle eye is

To adjust this, loosen the screw (J, Fig. 4) and raise or lower the needle bar as may be required. Then, tighten the screw upon completion of adjustment.

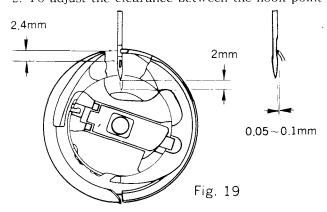
> NOTE: These measurements are approximate standard, accordingly, following final adjustments "TIMING BETWEEN THE HOOK AND THE NEEDLE" are recommended.

TIMING BETWEEN THE HOOK AND THE NEEDLE (Fig. 19)

After setting the needle bar height, set stitch length to minimum, turn the machine pulley toward you until the needle bar reaches its lowest point.

Continue turning and allow the needle bar to rise about 2mm while on its upward stroke. With needle bar in this position, the point of the sewing hook should be at the center of the needle, and normally, the measurement between the hook point and the upper end of the needle eye should be 2.4mm, further the clearance between the hook point and the needle hollow should be about 0.05 to 0.1mm.

- 1. If the sewing hook should not be timed correctly, loosen the three set screw (K, Fig. 5). Turn the hook shaft to align the hook point with the center of the needle. Re-tighten the three set screws and re-check the timing of the sewing hook.
- 2. To adjust the clearance between the hook point and the needle hollow, loos-



en the two screws (1), Fig. 20) and move the hook to the right or to the left as may require. Please note one of the two screws is placed on the V ditch of hook shaft. Therefore. keep the screw on V ditch during adjustment.

Re-tighten the screws.

ADJUSTMENT OF BOBBIN CASE OPENER

(THREAD RELEASE FINGER)

The bobbin case opener facilitates the passage of the needle thread loop by slightly nudging the bobbin case holder creating a slight rotating movement of same. This movement at that very instant opens a clearance gap between the notch on the bobbin case holder and the tab of the hook retainer permitting the needle thread loop to be drawn easily through the gap.

I) Clearance between the opener and projection of hook (Fig. 20 and 21):

- 1. Loosen the screw (2, Fig. 20)
- 2. Adjust the clearance between projection of hook (①, Fig. 21) and the opener (②, Fig. 21) by means of movement of thread releasing shaft bushing (③, Fig. 20) to the right or to the left as may be required. The standard clearance between the two parts is 0.8mm as shown Fig. 21.
- 3. Tighten the screw (2, Fig. 20) securely.

II) Position of the opener cam:

Place the one of screws (4), Fig. 20) which is indicated by "S" on V ditch of the hook shaft.

III) Adjustment of operation: (Fig. 20 and 22)

- 1. Turn the machine pulley until the opener (1), Fig. 22) presses the projection of hook (2), Fig. 22) extremely on its travel.
- 2. Press the opener to the projection of hook and make the right side clearance between the notch on the bobbin case holder and the tab of the hook retainer (③, Fig. 22) 0.2mm as shown Fig. 22.
- 3. This adjustment can be done by loosening the screw (5), Fig. 20).

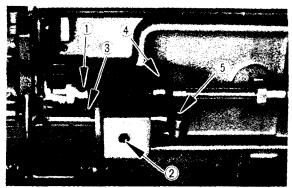


Fig. 20

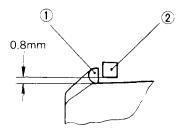


Fig. 21

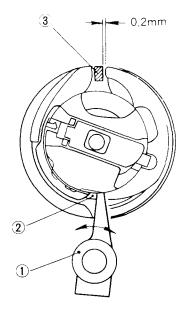


Fig. 22

ADJUSTING THE HEIGHT OF THE PRESSER FEET

1. Adjustment by the presser bar lifter:

Loosen the screw (1), Fig. 23) sufficiently, raise the presser bar lifter and loosen the set screw (2), Fig. 23). Move the lifting presser foot (A, Fig. 7) up or down as may be required so as to get the correct height and tighten the screws

2. Adjusting the lift of alternating presser feet:

If the height of the lifting presser foot changes, the momentums of the lifting and vibrating presser foot vary, thus the height of the vibrating presser foot must be adjusted.

To adjust this, lower the presser bar lifter, holding the vibrating presser foot(B, Fig. 7) and loosen the hexagon screw (3), Fig. 23) and move the presser foot up or down as may be required. After setting the position, tighten the screw.

TIMING OF THE VIBRATING PRESSER FOOT

This is the normal timing when turn the machine pulley toward you, after lowering the presser bar lifter, the vibrating presser foot should reach the feeder earlier than the needle eye comes to, and when the needle raises, the vibrating presser foot should leave the feeder after the needle eye has left the feeder. This is due to the reason that the vibrating presser foot must tightly hold the goods while the needle is passing the goods for avoiding irregular stitches. To adjust this, set the lift of the alternating presser feet to equal, loosen the two screws (4, Fig. 23) and adjust the rotating position of the cam (5). Fig. 23) faster or slower as may be desired, and tighten the screws.

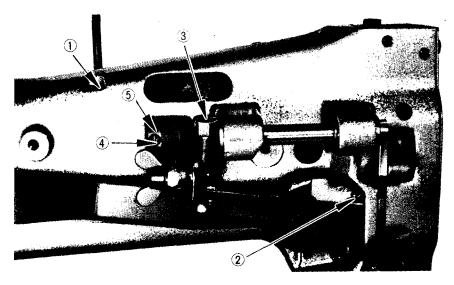


Fig. 23

ADJUSTMENT OF THE CLEARANCE BETWEEN FEED FORKED CONNECTION AND FEED FORK COLLAR

Incorrect clearance between the fork (4), Fig. 17) of feed forked connection and feed fork collar (5, Fig. 17) will bring irregular stitch length or overheating, etc. To ajust this, open the cover plate (1, Fig. 17).

- 1. To increase the clearance, loosen the screw (7.Fig. I7) and turn the screw (6, Fig. 17) to the left or counter-clockwise.
- 2. To decrease the clearance, loosen the screw (6, Fig. 17) and turn the screw (7, Fig. 17) to the right or clockwise.

This adjustment should be done with turning the machine pulley toward you to get correct clearance.

Upon completion of adjustment, tighten the screw which is loosened to touch the feed fork.

ADJUSTMENT OF SPRING TENSION OF SAFETY CLUTCH (Fig. 25)

The sewing hook and its mechanism are protected by a safety clutch. If it should become necessary to adjust the spring tension, use the following procedure:

- 1. Depress the button (E, Fig. 2) in the bed plate of the machine with your left hand. At the same time turn the machine pulley strongly so that the safety clutch disengages.
- 2. Lay down the machine head toward the other side. Hold the safety clutch (left) ① and turn the safety clutch (right) ② until you can see the screw ④ through the hole ③
- 3. To strengthen the tension of spring ⑤, turn the screw ④ to the right, while to lighten the tension, turn the screw to the left.
- 4. Upon completion of adjustment, depress the button (E, Fig. 2). At the same time turn the machine pulley until the safety clutch re-engages.

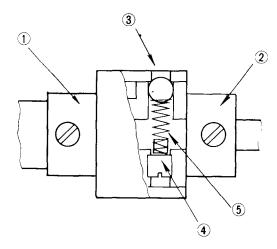


Fig. 25

ADJUSTING THE THREAD CONTROLLER SPRING

the screw and nut upon completion of adjustment.

Normally, the thread controller spring (①, Fig. 24) should hold slack of the upper thread until the needle reaches to the goods, and it should pause while raising of the needle and passing of the upper thread through the bobbin case.

I) For more controller action on the thread:

Loosen the stop screw (2), Fig. 24), move the stop (3), Fig. 24) to the right (For less action, move it to the left). Tighten the screw.

II) To adjust the tension of the spring:

Loosen the serrated nut (4), Fig. 24) and the screw (5), Fig. 24). Turn the tension stud (6), Fig. 24) slightly to the left to strengthen the tension (to lighten the tension, turn to the right) with a screw driver. Tighten

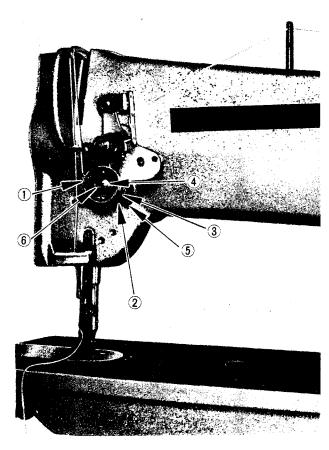
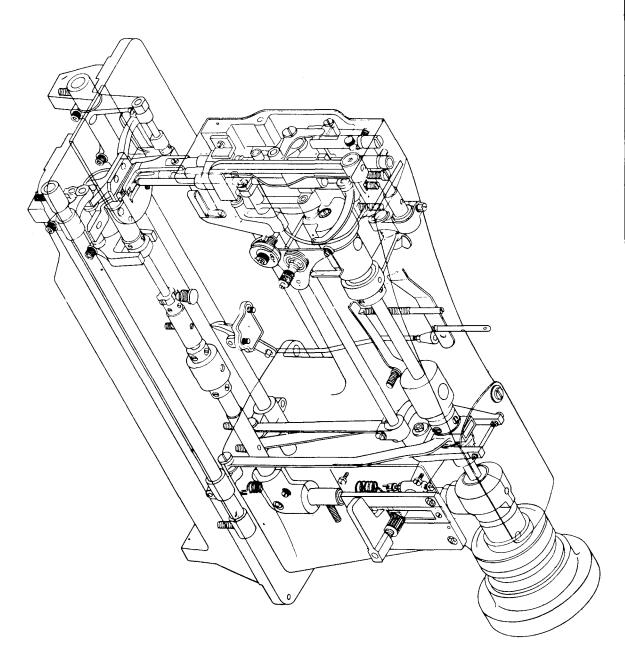
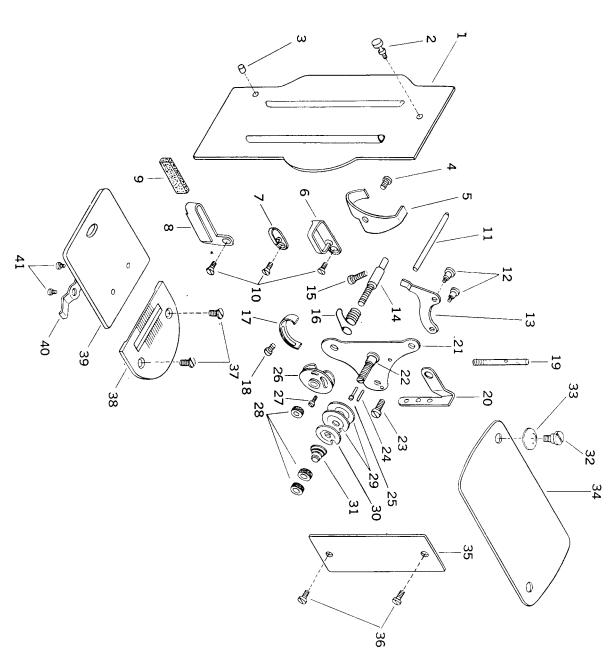


Fig. 24

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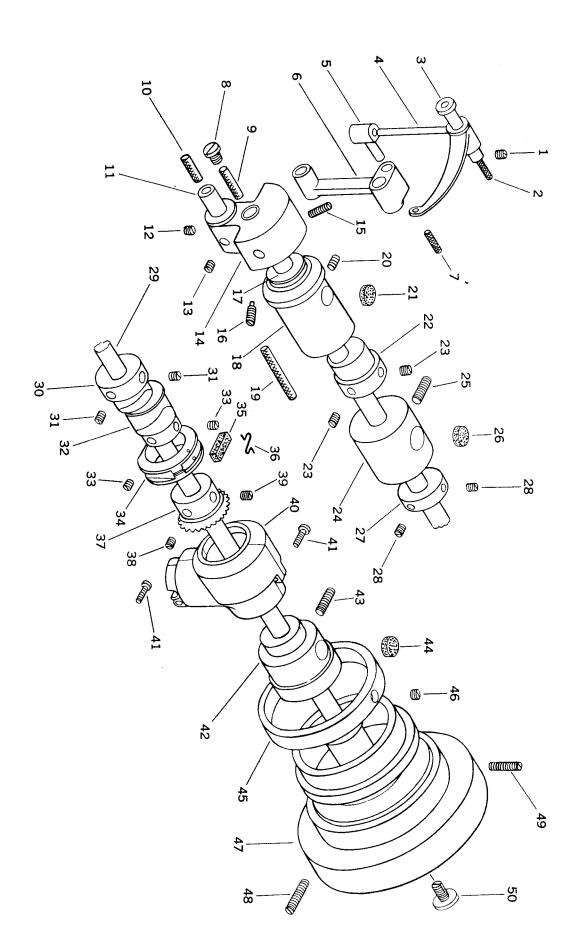
BELT GUARD	HOOK	ACCESSORIES	ARM SHAFT (UPRIGHT), LOWER SHAFT	FEED REGULATOR	LOWER FEEDING MECHANISM	PRESSER BAR	NEEDLE BAR, FEEDING MECHANISM	ARM SHAFT, TAKE UP LEVER	THREAD TENSION, GUIDE, NEEDLE PLATE	PERSPECTIVE
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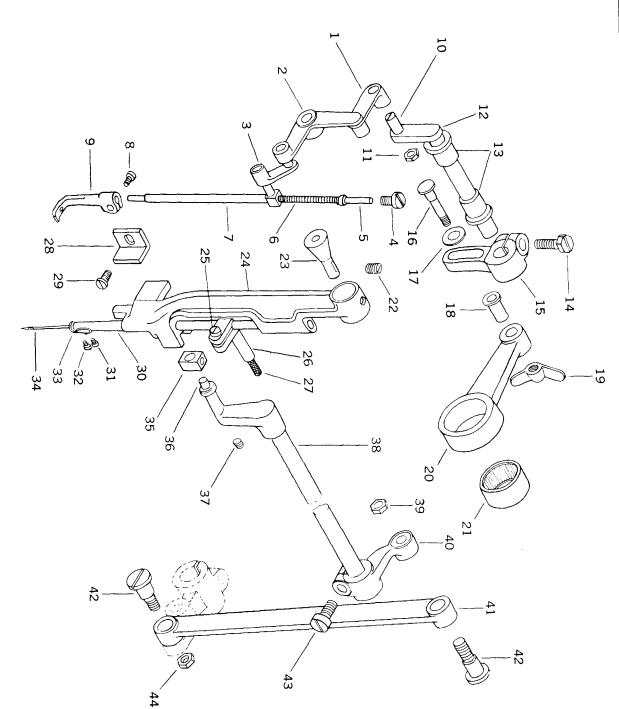
I THREAD TENSION, GUIDE, NEEDLE PLATEI

1 10698 1 Face plate 22 10789 1 Tension stud	<u></u>	Fig. No.	Parts: Ner Quantity	Quantity	Name of Parts	— TI	Fig. No.	Parts No. Qu	Quantity	Name of Parts
10699 1 Face plate set screw 23 15055 1 10700 1 Face plate stopper pin 24 10791 1 10650 1 Screw for #10551 25 10793 1 10551 1 Needle bar connecting link oil guard 26 10694 1 10682 1 Thread guide (upper) 27 10695 1 10683 1 Thread guide (middle) 27 10695 1 10759 1 Thread guide screw 28 10697 3 10760 1 Felt for thread guide screw 30 10692 1 10770 1 Tension release lever rod 32 10704 1 10679 2 Tension release lever screw 33 10703 1 10679 1 Tension release lever screw 34 18004 1 10679 2 Tension stud set screw 35 18005 1 10689 1 Thread controller spring 36 8100 2 10690 1 Thread controller spring 38 18030 1 10690 1 Set screw for #10690 38 18030 1		-	10698	,		\neg	22	10789	1	Tension stud
10700 1 Face plate stopper pin 24 10791 1 10650 1 Screw for #10551 25 10793 1 10551 1 Needle bar connecting link oil guard 26 10694 1 10682 1 Thread guide (middle) 27 10695 1 10759 1 Thread guide (middle) 28 10697 3 10760 1 Felt for thread guide 29 10691 2 10770 1 Thread guide screw 30 10692 1 10770 1 Tension release lever rod 32 10704 1 10679 2 Tension release lever screw 33 10703 1 10792 1 Thread controller stud 34 18004 1 10689 1 Thread controller spring 35 18005 1 10690 1 Thread controller spring stop 38 18030 1 10690 1 Thread controller spring stop 38 18030 1 10650 1 Set screw for #10690 39 18032 1 10675 1 Thread retainer 41 6035 2 <t< td=""><td></td><td>2</td><td>10699</td><td>1</td><td>Face plate set screw</td><td></td><td>23</td><td>15055</td><td></td><td>Set screw for #10675</td></t<>		2	10699	1	Face plate set screw		23	15055		Set screw for #10675
10650 1 Screw for #10551 25 10793 1 10551 1 Needle bar connecting link oil guard 26 10694 1 10551 1 Needle bar connecting link oil guard 26 10694 1 10682 1 Thread guide (middle) 27 10695 1 10759 1 Thread guide (lower) 28 10697 3 10760 1 Felt for thread guide screw 30 10692 1 10760 1 Felt for thread guide screw 30 10692 1 10770 1 Tension release lever rod 32 10704 1 10679 2 Tension release lever screw 33 10703 1 10792 1 Thread controller stud 35 18005 1 10689 1 Thread controller spring 36 8100 2 10690 1 Thread controller spring 38 18030 1 10695 1 <td></td> <td>ယ</td> <td>10700</td> <td>1</td> <td>Face plate stopper pin</td> <td></td> <td>24</td> <td>10791</td> <td>1</td> <td>Tension bracket pin</td>		ယ	10700	1	Face plate stopper pin		24	10791	1	Tension bracket pin
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10682 1 Thread guide (upper) 27 10695 1 10683 1 Thread guide (middle) 28 10697 3 10759 1 Thread guide (lower) 29 10691 2 10760 1 Felt for thread guide 30 10692 1 10675 3 Thread guide screw 31 10693 1 10770 1 Tension release lever rod 32 10704 1 10678 3 Thread controller stud 33 10703 1 10792 1 Thread controller stud 34 18004 1 10645 1 Thread controller stud 35 18005 1 10650 1 Thread controller spring 36 8100 2 10650 1 Thread controller spring stop 38 18030 1 10650 1 Set screw for #10690 39 18032 1 10679 1 Thread controller spring stop 38 18030 1 10650 1 Set screw for #10690 39 18032 1 10679 1 Thread controller spring 39 18032 1 <t< td=""><td></td><td>51</td><td>10551</td><td></td><td>Needle bar connecting link oil guard</td><td></td><td>26</td><td>10694</td><td></td><td>Thread controller disc</td></t<>		51	10551		Needle bar connecting link oil guard		26	10694		Thread controller disc
10683 1 Thread guide (middle) 28 10697 3 10759 1 Thread guige (lower) 29 10691 2 10759 1 Felt for thread guide 30 10692 1 10685 3 Thread guide screw 31 10693 1 10679 2 Tension release lever rod 32 10704 1 10679 2 Tension release lever screw 33 10703 1 10792 1 Thread controller stud 34 18004 1 10792 1 Thread controller spring 36 8100 2 10689 1 Thread controller spring stop 37 6031 2 10650 1 Set screw for #10690 38 18030 1 10709 1 Spool pin 39 18032 1 10675 1 Thread retainer 41 6035 2 10675 1 Tension bracket 41 6035 2		6	10682	1	Thread guide (upper)		27	10695	,	Thread controller disc screw
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10679 2 Tension release lever screw 33 10703 1 10678 1 Tension release lever 34 18004 1 10792 1 Thread controller stud 35 18005 1 10545 1 Tension stud set screw 36 8100 2 10689 1 Thread controller spring 37 6031 2 10690 1 Thread controller spring stop 38 18030 1 10650 1 Set screw for #10690 39 18032 1 10709 1 Spool pin 40 6034 1 10675 1 Thread retainer 41 6035 2 10675 1 Tension bracket 41 6035 2		Ξ	10720	1	Tension release lever rod		32	10704	1	Arm cap screw
10678 1 Tension release lever 34 18004 1 10792 1 Thread controller stud 35 18005 1 10545 1 Tension stud set screw 36 8100 2 10689 1 Thread controller spring 37 6031 2 10690 1 Thread controller spring stop 38 18030 1 10650 1 Set screw for #10690 39 18032 1 10709 1 Spool pin 40 6034 1 15062 1 Thread retainer 41 6035 2 10675 1 Tension bracket 41 6035 2		12	10679	2	Tension release lever screw		33	10703	1	Arm cap screw washer
10792 1 Thread controller stud 35 18005 1 10545 1 Tension stud set screw 36 8100 2 10689 1 Thread controller spring 37 6031 2 10690 1 Thread controller spring stop 38 18030 1 10650 1 Set screw for #10690 39 18032 1 10709 1 Spool pin 40 6034 1 15062 1 Thread retainer 41 6035 2 10675 1 Tension bracket 41 6035 2		13	10678	-	Tension release lever		34	18004	1	Arm cap
10545 1 Tension stud set screw 36 8100 2 10689 1 Thread controller spring 37 6031 2 10690 1 Thread controller spring stop 38 18030 1 10650 1 Set screw for #10690 39 18032 1 10709 1 Spool pin 40 6034 1 15062 1 Thread retainer 41 6035 2 10675 1 Tension bracket 41 6035 2		14	10792	<u>,</u>	Thread controller stud		35	18005	1	Arm side cover
10689 1 Thread controller spring 37 6031 2 10690 1 Thread controller spring stop 38 18030 1 10650 1 Set screw for #10690 39 18032 1 10709 1 Spool pin 40 6034 1 15062 1 Thread retainer 41 6035 2 10675 1 Tension bracket 41 6035 2		15	10545	_	Tension stud set screw		36	8100	2	Set screw for #18005
10690 1 Thread controller spring stop 38 18030 1 10650 1 Set screw for #10690 39 18032 1 10709 1 Spool pin 40 6034 1 15062 1 Thread retainer 41 6035 2 10675 1 Tension bracket 41 6035 2		16	10689	Ь	Thread controller spring		37	6031	2	Needle plate set screw
10650 1 Set screw for #10690 39 18032 1 10709 1 Spool pin 40 6034 1 15062 1 Thread retainer 41 6035 2 10675 1 Tension bracket 41 6035 2		17	10690		Thread controller spring stop		38	18030	1	Needle plate
10709 1 Spool pin 40 6034 1 15062 1 Thread retainer 41 6035 2 10675 1 Tension bracket 41 6035 2		18	10650	_	Set screw for #10690	-	39	18032	1	Bed slide
15062 1 Thread retainer 41 6035 2 10675 1 Tension bracket 41 6035 2		19	10709	_	Spool pin		40	6034	1	Bed slide spring
10675		20	15062	1	Thread retainer	_	41	6035	2	Set screw for #6034.
		21	10675	H	Tension bracket	Г				



ARM SHAFT, TAKE UP LEVER

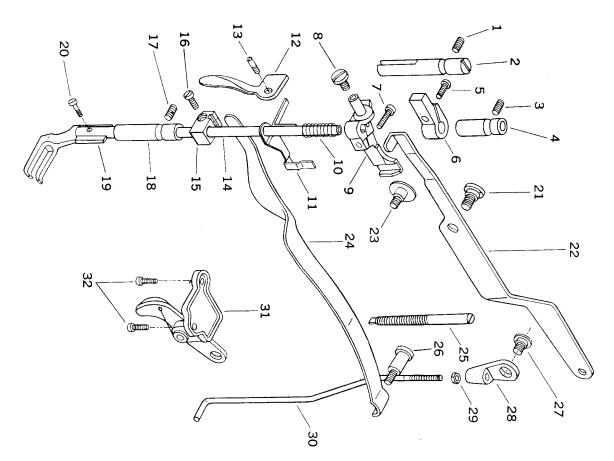
Fig. No.	Parts No.	Quantity	Name of Parts	Fig. No.	Parts No.	Quantity	Name of Parts
-	10571	1	Set screw for #10527	26	10725	1-	Oiling felt for #18008
2	10726	1	Oil wick for #10527	27	17014	_	Arm shaft bushing collar
3	10527	,	Take up lever hinged stud	28	10766	2	Set screw for #17014
4	18003	}4	Thread take up lever	29	17011	1	Arm shaft
5	15026	1	Take up lever driving stud	30	18020	_	Feed lifting cam
6	10528	1	Needle bar connecting link	31	10766	2	Set screw for #18020
7	10728	1	Oil wick for #15026	32	18009	_	Feed driving eccentric
8	10506	1	Arm shaft oil packing stop screw	33	10766	2	Set screw for #18009
9	10724	1	Oiling wick for arm shaft	34	17040	1	Feed fork collar
10	10726	1	Oiling wick for #10523	35	17041	1	Oiling felt for #17040
11	10523	1	Needle bar connecting link stud	36	10723	1	Oiling felt presser pin
12	10764		Set screw (B) for #10523	37	17017		Arm shaft gear (spiral)
13	10524	1	Set screw (A) for #10523	38	17018		Set screw (A) for #17017
14	10520	1	Needle bar crank	39	17019	_	Set screw (B) for #17017
15	10522	1	Screw (B) for #10520	40	17015	1	Gear cover (upper)
16	10521	1	Screw (A) for #10520	41	17016	2	Set screw for #17015
17	10563	1	Arm shaft bushing (front) washer	42	17013	1	Arm shaft bushing (rear)
18	18006	1	Arm shaft bushing (front)	43	10571		Set screw for #17013
19	10729	pt	Oil wick for #18006	44	13081	1	Oiling felt for #17013
20	10522	1	Set screw for #18006	45	13423-B	1	Stitch length indicator
21	10725	2	Oiling felt for #18006	46	10566	1	Set screw for #13423-B
22	10771	1	Lifting eccentric	47	10504	1	Balance wheel
23	10566	2	Screw for #10771	48	10576	1	Set screw (A) for #10504
24	18008	1	Arm shaft bushing (middle)	49	. 10579	1-1	Set screw (B) for #10504
25	10571	_	Set screw for #18008	50	10577	-	Balance wheel adjusting screw



I NEEDLE BAR, FEEDING MECHANISM

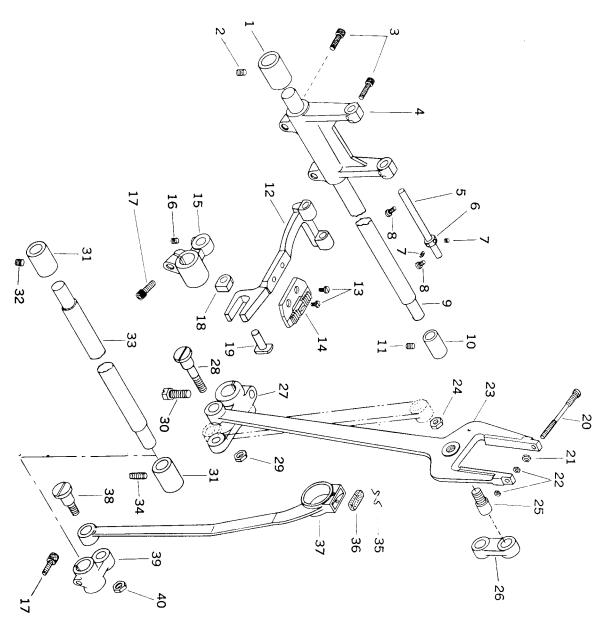
10557 1 Lifting bell crank link 23 20103 1 10558 1 Lifting bell crank 24 10536 1 10556 1 Vibrating presser bar conecting link 25 10536 1 15060 1 Screw for #10555 26 10531 1 10553 1 Vibrating presser bar extension spring 27 10726 1 10554 1 Vibrating presser bar extension spring 28 10560 1 10555 1 Vibrating presser foot pinch screw 29 10561 1 10795 1 Vibrating presser foot pinch screw 30 10530 1 10519 1 Screw for #10515 30 10534 1 10517 1 Nut for #10519 31 10534 1 10518 2 Lifting rock shaft 33 10533 1 10524 2 Lifting rock shaft bushing 34 6332 1 10751 1 Lifting eccentric connecting crank 37 10581 1 10774 1 Lifting eccentric connecting crank 39 6026 1 10775 1 Wing nut for #10772	Fig. No.	Parts No.	Quantity	Name of Parts	T 1	Fig. No.	Parts No.	Quantity	Name of Parts
10558 1 Lifting bell crank 24 10536 1 10536 1 10536 1 10536 1 25 10532 1 10536 1 25 10532 1 10533 1 25 10533 1 25 10533 1 25 10533 1 25 10533 1 25 10533 1 25 10533 1 25 10553 1 25 10555 1 25 10555 1 25 10555 1 25 10560 1 25 10560 1 25 10566 1 25 10566 1 25 10566 1 25 10566 1 25 10566 1 25 10566 1 25 10566 1 25 10566 1 25 10566 1 25 10566 1 25 10566 1 25 10566 1 25 10566 1 25 25 25 25 25 25 25	1-1	10557	1	Lifting bell crank link	1	23	20103	1	Needle bar rock frame hinged stud
10556 1 Vibrating presser bar com.ecting link 25 10532 1 15060 1 Screw for #10555 26 10531 1 10553 1 Vibrating presser bar extension spring 28 10560 1 10554 1 Vibrating presser bar extension spring 28 10560 1 10555 1 Vibrating presser bar 29 10561 1 10662 1 Vibrating presser foot pinch screw 30 10530 1 10795 1 Vibrating presser foot pinch screw 31 10534 1 10517 1 Nut for #10515 32 10535 1 10518 1 Lifting rock shaft 33 10533 1 10754 2 Lifting rock shaft bushing 33 10582 1 10775 1 Lifting eccentric connecting crank 37 10580 1 10773 1 Lifting eccentric connecting crank 38 17048 1 10774 1 Lifting eccentric connecting collar 40 18016 1 10775 1 Washer for #10772 39 6026 1 10776 1 Lifting eccentric	2	10558	-	Lifting bell crank		24	10536	,_	Needle bar rock frame
15060 1 Screw for #10555 26 10531 1 10553 1 Vibrating presser bar extension 27 10726 1 10554 1 Vibrating presser bar extension spring 28 10560 1 10555 1 Vibrating presser foot pinch screw 30 10561 1 10662 1 Vibrating presser foot pinch screw 30 10530 1 10795 1 Vibrating presser foot pinch screw 30 10530 1 10519 1 Screw for #10515 32 10535 1 10517 1 Nut for #10519 33 10533 1 10518 1 Lifting rock shaft 33 10532 1 10514 2 Lifting rock shaft bushing 35 10582 1 10754 1 Clamp screw for #10751 36 10580 1 10773 1 Lifting eccentric connecting crank 37 10581 1 10774 1 Lifting eccentric connecting collar 40 18016 1 10775	ω	10556	ы	Vibrating presser bar connecting link		25	10532	1	Set screw for #10531
10553 1 Vibrating presser bar extension 27 10726 1 10554 1 Vibrating presser bar 28 10560 1 10555 1 Vibrating presser bar 29 10561 1 10662 1 Vibrating presser foot pinch screw 30 10530 1 10795 1 Vibrating presser foot 31 10534 1 10519 1 Screw for #10515 32 10535 1 10517 1 Nut for #10519 32 10535 1 10514 2 Lifting rock shaft bushing 33 10533 1 10754 1 Clamp screw for #10751 36 10580 1 10775 1 Lifting eccentric connecting crank 37 10581 1 10774 1 Vibrating presser foot 37 10581 1 10772 1 Lifting ccentric connecting collar 38 17048 1 10773 1	4	15060	1	Screw for #10555		26	10531	,_,	Needle bar connecting stud
10554 1 Vibrating presser bar extension spring 28 10560 1 10555 1 Vibrating presser bar 29 10561 1 10662 1 Vibrating presser foot pinch screw 30 10530 1 10795 1 Vibrating presser foot pinch screw 31 10530 1 10517 1 Nut for #10515 32 10535 1 10517 1 Nut for #10519 32 10535 1 10518 1 Lifting rock shaft 33 10533 1 10754 2 Lifting rock shaft bushing 35 10582 1 10754 1 Clamp screw for #10751 36 10580 1 10775 1 Lifting eccentric connecting crank 37 10581 1 10774 1 Lifting eccentric connecting crank 38 17048 1 10772 1 Wing nut for #10772 40 18016 1 10773	5	10553		Vibrating presser bar extension	·	27	10726	1-	Oil wick for #10531
10555 1 Vibrating presser bar 29 10561 1 10662 1 Vibrating presser foot pinch screw 30 10530 1 10795 1 Vibrating presser foot pinch screw 31 10530 1 10519 1 Screw for #10515 32 10534 1 10517 1 Nut for #10519 32 10535 1 10517 1 Lifting rock shaft 33 10533 1 10514 2 Lifting rock shaft bushing 34 6332 1 10754 1 Clamp screw for #10751 36 10580 1 10775 1 Lifting eccentric connecting crank 37 10581 1 10774 1 Lifting eccentric connecting collar 39 6026 1 10772 1 Wing nut for #10772 40 18016 1 10773 1 Needle bearing for #10772 42 18018 2 10755 1 Screw for #10536 44 8105 1	6	10554	1	Vibrating presser bar extension spring		28	10560		Needle bar rock frame position bracket
10662 1 Vibrating presser foot pinch screw 30 10530 1 10795 1 Vibrating presser foot 31 10530 1 10795 1 Vibrating presser foot 31 10530 1 10795 1 Vibrating presser foot 31 10530 1 10519 1 Screw for #10519 32 10535 1 10515 1 Lifting rock shaft 33 10533 1 10514 2 Lifting rock shaft bushing 34 6332 1 10754 1 Clamp screw for #10751 35 10582 1 10775 1 Lifting eccentric connecting crank 37 10581 1 10774 1 Lifting eccentric connecting collar 39 6026 1 10775 1 Wing nut for #10772 39 6026 1 10772 1 Lifting eccentric connecting collar 41 18017 1 10773 1 Needle bearing for #10772 42 18018 2 10775 1 Screw for #10536 44 8105 1	7	10555	г	Vibrating presser bar		29	10561	₩.	Set screw for #10560
10795 1 Vibrating presser foot 31 1054 1 10519 1 Screw for #10515 32 10535 1 10517 1 Nut for #10519 33 10535 1 10515 1 Lifting rock shaft 34 6332 1 10514 2 Lifting rock shaft bushing 35 10582 1 10754 1 Clamp screw for #10751 36 10580 1 10751 1 Lifting eccentric connecting crank 37 10581 1 10703 1 Screw for #10774 38 17048 1 10774 1 Lifting eccentric connecting collar 40 18016 1 10772 1 Wing nut for #10772 41 18017 1 10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	∞	10662	1	Vibrating presser foot pinch screw		30	10530	1	∦eedle bar
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10517 1 Nut for #10519 33 10533 1 10515 1 Lifting rock shaft bushing 34 6332 1 10514 2 Lifting rock shaft bushing 35 10582 1 10754 1 Clamp screw for #10751 36 10580 1 10775 1 Lifting eccentric connecting crank 37 10581 1 10703 1 Washer for #10774 38 17048 1 10774 1 Lifting eccentric connecting collar 40 18016 1 10772 1 Wing nut for #10772 41 18017 1 10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	10	10519	 1	Screw for #10515	- 1	32	10535	-	Needle set screw
10515 1 Lifting rock shaft 34 6332 1 10514 2 Lifting rock shaft bushing 35 10582 1 10754 1 Clamp screw for #10751 36 10580 1 10751 1 Lifting eccentric connecting crank 37 10581 1 10775 1 Screw for #10774 38 17048 1 10773 1 Washer for #10772 39 6026 1 10776 1 Wing nut for #10772 40 18016 1 10773 1 Needle bearing for #10772 42 18018 2 10525 1 Screw for #10536 44 8105 1	11	10517	1	Nut for #10519		33	10533	1	Needle bar thread guide
10514 2 Lifting rock shaft bushing 35 10582 1 10754 1 Clamp screw for #10751 36 10580 1 10751 1 Lifting eccentric connecting crank 37 10581 1 10775 1 Screw for #10774 38 17048 1 10774 1 Lifting eccentric connecting collar 40 18016 1 10776 1 Wing nut for #10772 41 18017 1 10773 1 Lifting eccentric connection 42 18018 2 10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	12	10515	1	Lifting rock shaft		34	6332	₽	Needle DPx17 #22
10754 1 Clamp screw for #10751 36 10580 1 10751 1 Lifting eccentric connecting crank 37 10581 1 10775 1 Screw for #10774 38 17048 1 10703 1 Washer for #10774 39 6026 1 10774 1 Lifting eccentric connecting collar 40 18016 1 10776 1 Wing nut for #10772 41 18017 1 10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	13	10514	2	Lifting rock shaft bushing		35	10582	1	Needle bar rock frame slide block
10751 1 Lifting eccentric connecting crank 37 10581 1 10775 1 Screw for #10774 38 17048 1 10773 1 Washer for #10774 39 6026 1 10774 1 Lifting eccentric connecting collar 40 18016 1 10776 1 Wing nut for #10772 41 18017 1 10773 1 Lifting eccentric connection 42 18018 2 10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	14	10754	1	Clamp screw for #10751		36	10580	1	Needle bar rock frame slide block stud
10775 1 Screw for #10774 38 17048 1 10703 1 Washer for #10774 39 6026 1 10774 1 Lifting eccentric connecting collar 40 18016 1 10776 1 Wing nut for #10772 41 18017 1 10773 1 Lifting eccentric connection 42 18018 2 10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	15	10751	1	Lifting eccentric connecting crank		37	10581		Screw for #17048
10703 1 Washer for #10774 39 6026 1 10774 1 Lifting eccentric connecting collar 40 18016 1 10776 1 Wing nut for #10772 41 18017 1 10772 1 Lifting eccentric connection 42 18018 2 10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	16	10775	1	Screw for #10774		38	17048	н	Needle bar rock frame rock shaft
10774 1 Lifting eccentric connecting collar 40 18016 1 10776 1 Wing nut for #10772 41 18017 1 10772 1 Lifting eccentric connection 42 18018 2 10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	17	10703	1	Washer for #10774		39	6026	-	Nut (upper) for #18017
10776 1 Wing nut for #10772 41 18017 1 19772 1 Lifting eccentric connection 42 18018 2 10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	18	10774	_	Lifting eccentric connecting collar		40	18016	1	Needle bar rock frame rock shaft crank
19772 1 Lifting eccentric connection 42 18018 2 10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	19	10776	1	Wing nut for #10772		41	18017	1	Needle bar rock frame rock shaft crank connection
10773 1 Needle bearing for #10772 43 10519 1 10525 1 Screw for #10536 44 8105 1	20	10772	1	Lifting eccentric connection		42	18018	2	Hinge screw for #18017
10525 1 Screw for #10536 44 8105 1	21	10773	1	Needle bearing for #10772		43	10519	1	Set screw for #18016
	22	10525	_	Screw for #10536		44	8105	1	Nut for #18018

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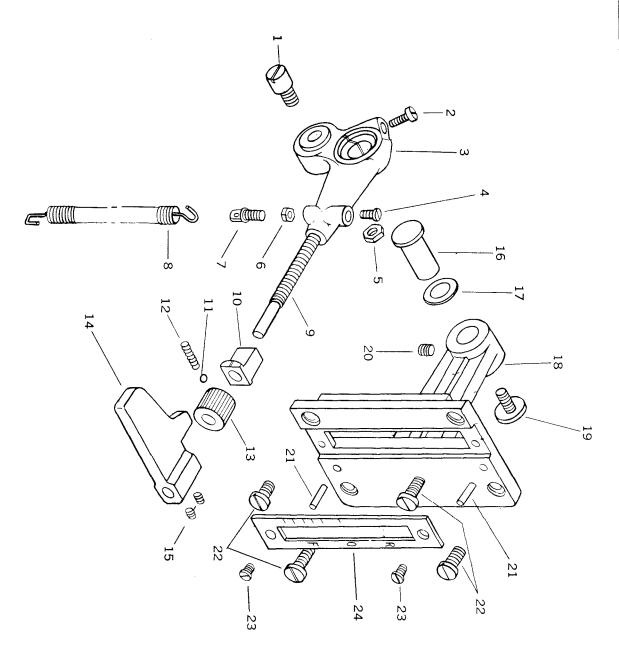
PRESSER BAR

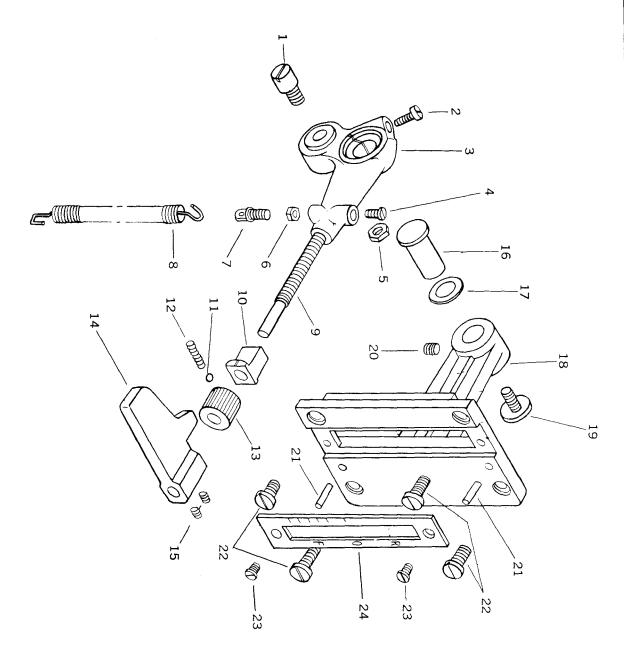
Fig. No.	Fig. No. Parts No. Quantity	Quantity	Name of Parts	Fig. No.	Parts. No. Quantity	Quantity	Name of Parts
-	10761	_	Set screw for #10543	17	10761	1	Set screw for #10531
2	10543	1	Presser bar position guide	18	10531	Н	Presser bar bushing (lower)
ယ	10761	1	Set screw for #10538	19	10796		Lifting presser foot
4	10538	ш	Presser bar bushing (upper)	20	10664	1	Pinch screw for #10796
5	10662	1	Pinch screw for #10543	21	10712	l	Set screw for #18080
6	10541	1	Presser bar position guide bracket	22	18080	1	Knee lifter lifting lever
7	10545	-	Screw for #10544	23	10548	1	Presser bar lifting bracket guide screw
8	10559	1	Set screw for #10558	24	10705	1	Presser bar spring (flat)
9	10544	1	Presser bar lifting bracket	25	11156	1	Presser bar spring (flat) regulating screw
10	10547		Tension release spring	26	10706	1	Presser bar spring (flat) supporting screw
11	10546	1	Tension release slide	27	6384	1	Hinge screw for #6359
12	10659	→	Presser bar lifter	28	6359	1	Knee lifter lifting lever connecting rod joint
13	10660	1	Hinge screw for #10659	29	6360	1	Knee lifter lifting lever connecting rod screw
14	10540	1	Presser bar	30	18081	1	Knee lifter lifting lever connecting rod
.15	10549	1	Presser bar spring bracket	31	18082	1	Knee lifter bell crank complete
16	10532	1	Pinch screw for #10549	32	18085	2	Set screw for Knee lifter bell crank complete



LOWER FEEDING MECHANISM

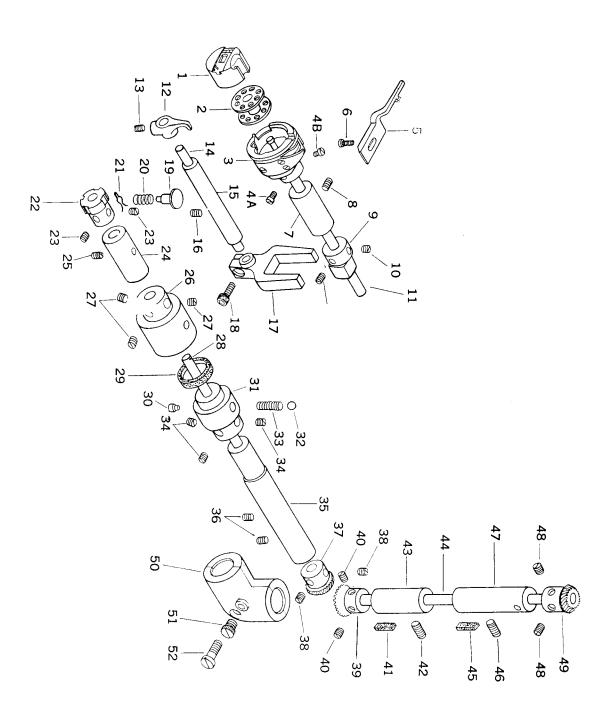
Fig. No.	Parts No.	Quantity	Name of Parts	Fig. No.	Parts No.	Quantity	Name of Parts
	18062	1	Feed rock shaft bushing (front)	21	4137	1	Nut (big) for #18010
2	8009		Set screw for #18062	22	4211	2	Nut (small) for #18010
ယ	18065	2	Set screw for #18065	23	18010		Feed forked connection
4	18064	1	Feed rock shaft base	24	8105	1	Nut for #18010
5	18067		Feed base supporting pin	25	18014	-	Hinge screw for #18010
6	18068		Feed base supporting pin collar	26	17207	-	Feed connecting link
7	8103	2	Set screw for #18068	27	18070	1	Feed rock shaft bell crank (Back)
∞	21104	2	Set screw for #18067	28	18015	_	Hinge screw for #18010
9	18061		Feed rock shaft	29	8105		Nut for #18010
10	18063		Feed rock shaft bushing (rear)	30	10754	-	Pinch screw for #18070
=	21124		Set screw for #18063	31	18073	2	Feed lifting rock shaft bushing
12	18066	,	Feed base	32	8009	_	Set screw (front) for #18073
13	8044	2	Feed dog screw	33	18072	1	Feed lifting rock shaft
14	18031	_	Feed dog (Standard type)	34	10579	_	Set screw (rear) for #18073
15	18074	1	Feed lifting rock shaft front bell crank	35	10723	1	Oiling felt presser pin
16	2067	1	Set screw for #18075	36	17041	1	Oiling felt for #18021
17	18065	2	Set screw for feed lifting rock shaft bell crank	37	18021	1	Crank connecting rod
18	18075	-	Feed lifting rock shaft slide block	38	18018	-	Hinge screw for #18021
19	18076	1	Pin for #18075	39	18077	1	Feed lifting rock shaft bell crank (back)
20	18011		Set screw for #18010	40	8105	_	Nut for #18018





FEED REGULATOR

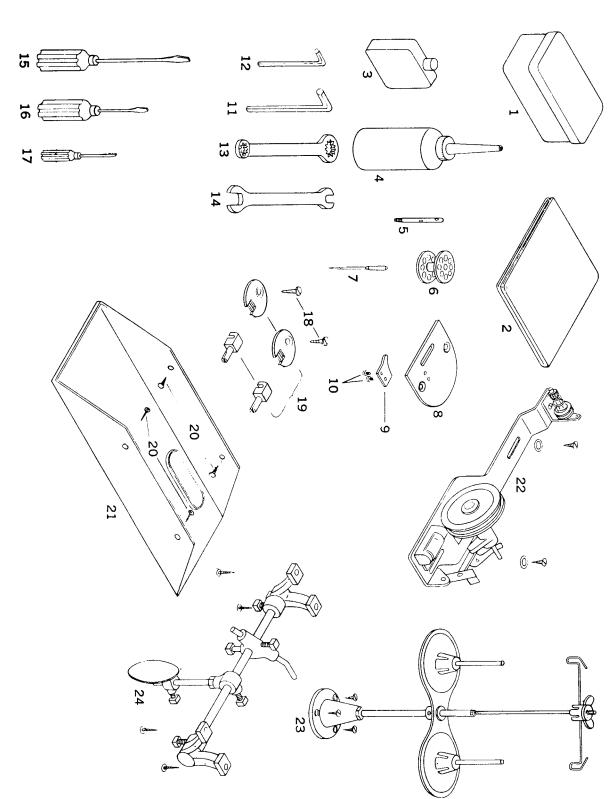
24 18	23 17	22 12	21 50	20 17	19 1	18 18	17 17	16 17	15 18	14 18	13 13	12 8	11 8	10 13	9 18	8 18	7 17	6 4	5 8	4 4	3 18	2 17	1 17	Fig. No. Part
18024	17093 2	12361 4	50174 2	17056 1	1368	18023	17057 1	17055	18028 2	18027	13416	8157 1	8158	13417	18025	18026	17059	4135	8105	4019 1	18022	17053	17209	Parts No. Quantity
Stitch length indicating plate	Set screw for #18024	Screw for #18023	Pin for #18023	Screw for #18023	Supporting stud pushing screw	Feed regulating base	Washer for #17055	Feed regulating support stud	Screw (small) for #18027	Reverse stitch lever	Feed adjusting knurling tool	Spring for #8158	Bearing ball 1/8"	Feed adjusting pipe	Feed regulating lever	Feed regulating lever spring	Screw for #18026	Nut for #18026	Nut for #18025	Set screw for #18025	Feed regulator	Set screw for #18022	Feed regulating screw	Name of Parts



ARM SHAFT (UPRIGHT), LOWER SHAFT

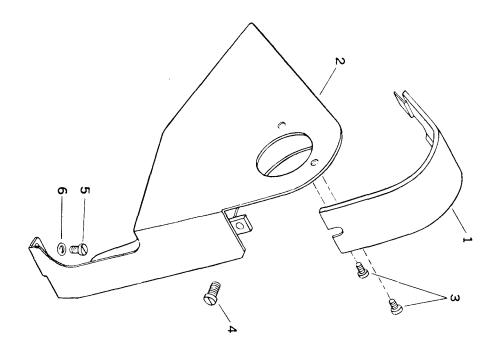
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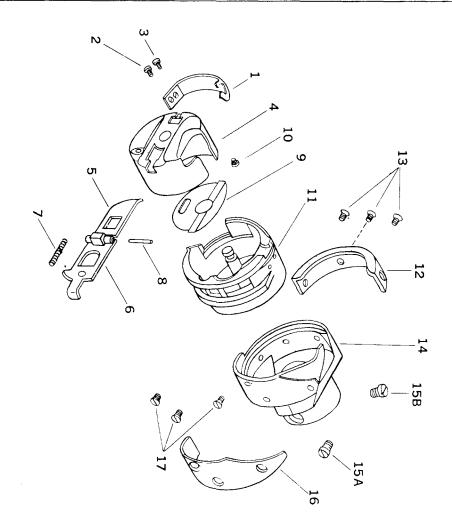
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26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	œ	7	6	5	4A 4B	ပၗ	2	1	Fig. No.
18047	8009	18038	17022	18052	10674	18054	18053	30066	18043	21124	18042	18041	18040	18039	18036	50304	18044	8009	18037	6025	18035	18033-7 18033-8	18033	18034	18045	Parts No.
<u>.</u>	1	-	2	-	1	↦	ы	_	1	1	1			1	1	2	_	1	1	1	1		1	1	_	Quantity
Safety clutch (left)	Set screw for #18038	Hook shaft bushing (rear)	Set screw for #18052	Hook shaft lock ratchet	Clip for #18033	Push button spring	Push button	Pinch screw for #18043	Thread releasing shaft fork	Set screw for #18042	Thread releasing shaft bushing	Thread releasing shaft	Set screw for #18039	Thread release finger	Hook driving shaft	Set screw for #18044	Hook shaft collar	Set screw for #18037	Hook shaft bushing (front)	Set screw for #18035	Hook supporting plate	Hook set screw (A) Hook set screw (B)	Rotating hook complete	Bobbin	Bobbin case completc	Name of Parts
52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	Fig. No.
18059	18060	18058	17021	17022	17024	10571	17026	17020	17025	10571	17026	17022	17023	17022	17028	8009	18057	17019	18050	18049	18041	18051	18046	18056	17019	Parts No.
_	1		_	. 2	1	-	1	1	1	1	1	2	1	2	1	2	1	3	1	_	1	1	1	1	ω	Quantity
Pinch screw for #18058	Gear cover (lower) sealing screw	Gear cover complete (lower)	Arm shaft (upright) gear (spiral)	Set screw for #17021	Arm shaft (upright) bushing (upper)	Set screw for #17026	Oiling felt for #17024	Arm shaft (upright)	Arm shaft (upright) bushing (lower)	Set screw for #17026	Oiling felt for #17025	Set screw for #17023	Arm shaft (upright) gear (lower)	Set screw for #17027	Lower shaft gear (spiral)	Set screw for #18057	Lower shaft bushing	Set screw for #18041	Spring for #18041	Steel ball	Safety clutch (right)	Set screw for #18050	Oil wick for #18047	Lower shaft	Set screw for #18047	Name of Parts



ACCESSORIES

18028	10780	10734	6054	20 6055	19 6051	18 6052	17 8121	16 8120															
7	1		1	4	2	2	1	1		1				1 1 1	1 1 1 1 1 1 1	1 1 1 2 1 1	1 1 1 1 1 1	6 3 1 1 1 1	1 1 1 2 2 1 1 3 6 6 1	1 6 6 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Know lifter complete	Thread·stand	Bobbin winder complete	Oil pan	Nail for #6054	Bed hinge connection	Screw for #6051	Screw driver (small)	Screw driver (middle)	Screw driver (large)	Spanner 6×7mm Screw driver (large)	Double head wrench Spanner 6×7mm Screw driver (large)	Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Set screw for #2056 Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Needle plate spring Set screw for #2056 Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Needle plate (for without lower feed) Needle plate spring Set screw for #2056 Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Needle DPx17 #22 Needle plate (for without lower feed) Needle plate spring Set screw for #2056 Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Bobbin Needle DPx17 #22 Needle plate (for without lower feed) Needle plate spring Set screw for #2056 Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Spool pin Bobbin Needle DPx17 #22 Needle plate (for without lower feed) Needle plate spring Set screw for #2056 Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Spool pin Bobbin Needle DPx17 #22 Needle plate (for without lower feed) Needle plate spring Set screw for #2056 Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Oiler Spool pin Bobbin Needle DPx17 #22 Needle plate (for without lower feed) Needle plate spring Set screw for #2056 Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Oiler Oiler Spool pin Bobbin Needle DPx17 #22 Needle plate (for without lower feed) Needle plate spring Set screw for #2056 Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)	Accessories box Vinyl cover Oil Oiler Spool pin Bobbin Needle DPx17 #22 Needle plate (for without lower feed) Needle plate spring Set screw for #2056 Wrench 4.0mm Wrench 4.0mm Wrench 2.5mm Double head wrench Spanner 6×7mm Screw driver (large)





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Fig. No.	Fig. No. Parts No. Quantity	Quantity	Name of Parts
1	15099	1	Belt guard upper cover
2	15098	-	Belt guard
ω.	10650	2	Set screw for #15098 (upper)
4	12481		Set screw for #15099
5	10650	1	Set screw for #15098 (lower)
6	11142	-	Washer for #10650

Fig. No.	Parts No.	Quantity	Name of Parts
1	18045- 2	1	Thread tension spring
2	18045- 4	-	Set screw for #18045-2
3	18045- 3	1	Thread tension spring regulating screw
4	í8045- 1	1	Bobbin case
5	18045- 5	1	Bobbin case pulling plate
6	18045- 6	1	Bobbin set plate
7	18045-8	1	Bobbin set plate spring
8	18045- 7	1	Pin for #18045-6
9	18045-10	1	Thread releasing protecting spring
10	18045- 9	1	Set screw for #18045-5
11	18033- 4	1	Bobbin case base
12	18033- 5	1	Hook gib
13	18033- 6	3	Set screw for #18033-5
14	18033- 1	1	Rotating hook only
15A 15B	18033- 7 18033- 8	111	Hook set screw (A) Hook set screw (B)
16	18033- 2	_	Thread guide
17	18033- 3	ယ	Set screw for #18033-2