# 341/341N

## CYLINDER BED COMPOUND FEED LARGE ROTARY HOOK LARGE STITCH LENGTH SEWING MACHINE

OPERATION INSTRUCTION / PARTS MANUAL

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## Operation instruction



## Parts list

# OPERATION INSTRUCTION

## 1.Brief introduction

This cylinder bed sewing machine adopts single needle,slide type thread take-up lever,and vertical large hok.Upper and lower shafts are driven by synchronized toothed belt. Compound feed by feed dog,needle and walking foot;and high presser foot stroke and lifter assure its high sweing heavy ability and easy for sewing multi-layer leather and uneven materials.Safety clutch device also assures safe operation

Its widely used for sewing leather products,suitcases, shoes ad caps.Especially,its cylinder bed is suitable for sewing various arc and curved materials.

## 1.Main specification

| | TW3-341 | TW3-341N |
|---|---|---|
| Max.sewing speed | 2000s.p.m | |
| Max.stitch length | 6mm | 9mm |
| Needle bar stroke | 33.36mm | |
| Presserfoot lift | 6.5mm by hand | |
| height | 15mmby knee | |
| Thread take-up lever | Slide type | |
| Hook | Large hook | |
| Needle | Dp×17 14"~24"(standard23") | |
| Lubrication | Oiled by hand | |
| Motor Power | 400W(special for sewing machine 2P) | |
| Abblication | Medium,heavy,extra heavy weight materials | |

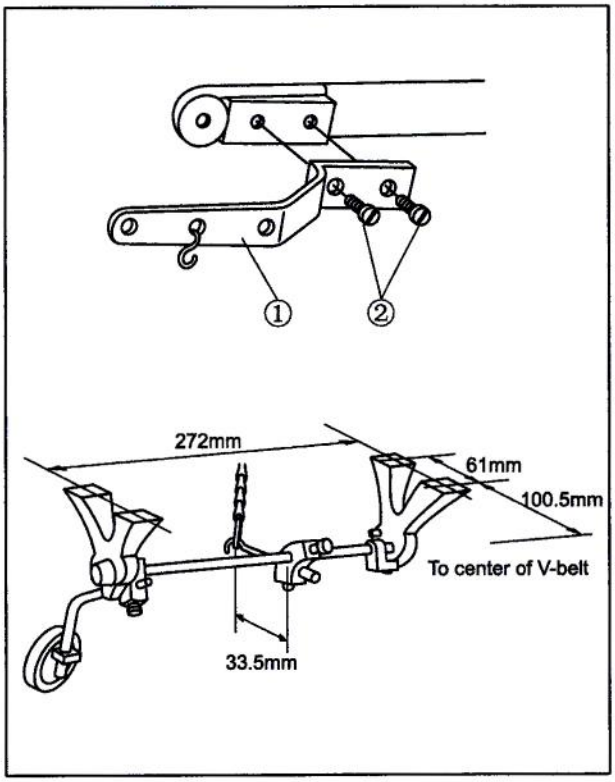
## 3.Operation preparation

- Befre first operate the machine,please clean the machine thoroughly in order to weed out the dust and frlly lubricate the machine.
- Please confirm if the power will be used is suitable for the designed voltage.
- The rotating direction of the machine is counter-clock wise when observed face to the hand wheel.
- Before turn over the machine head,please take down the knee lifter chain hook.
- Before trial running,please take down the bobbin and needle.
- Please control the sewing speed under 1800s.p.m within the first operation month.
- Only after the machine stops,then the hand wheel can be operated.

## 4.Installing the knee lifter mechanism(Fig.1)

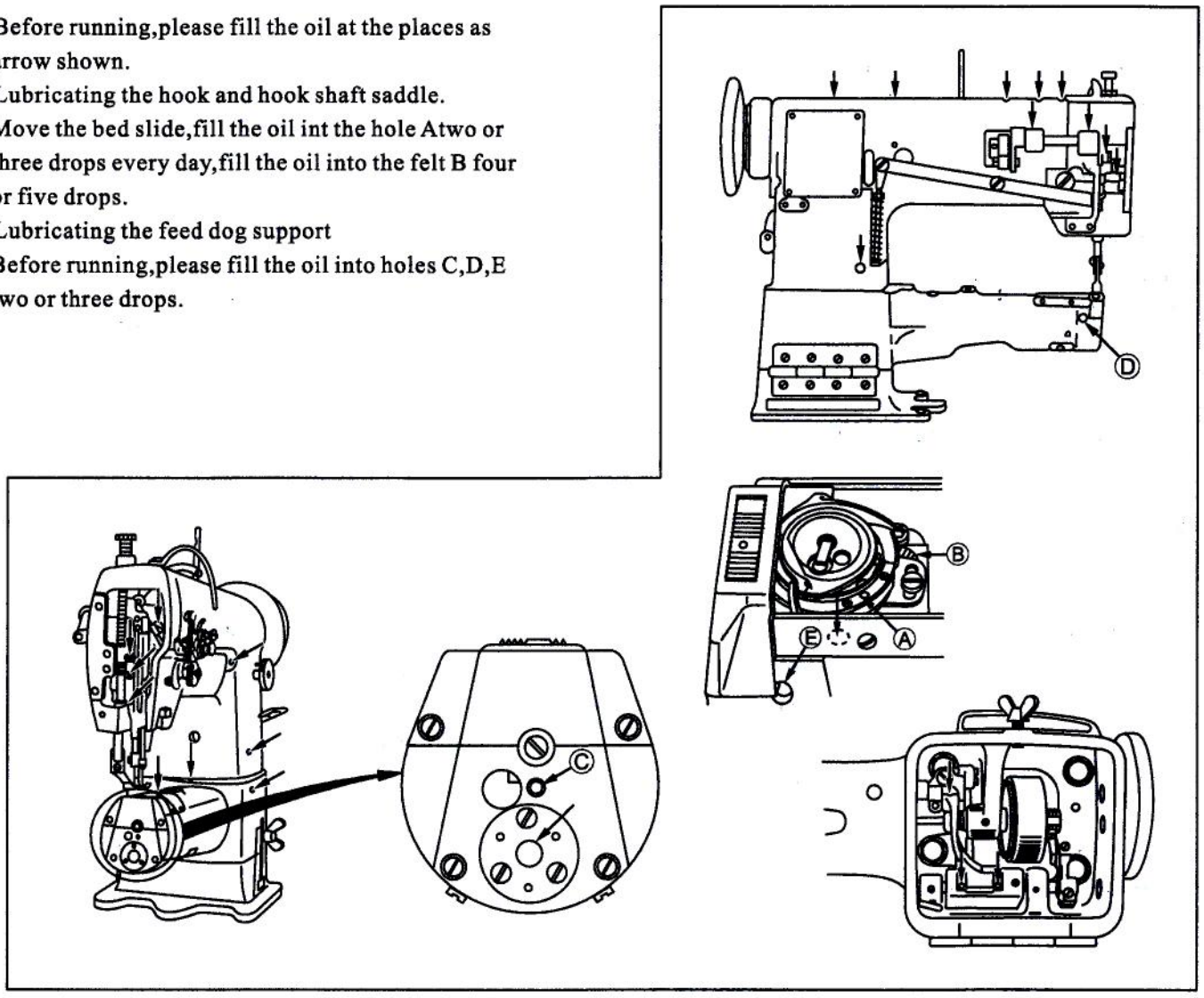
When use the knee lifter pedal,please use the screw② to fix the knee lifter lever①.

Knee lifter leaver① and screw② are packed in the accessory carton.



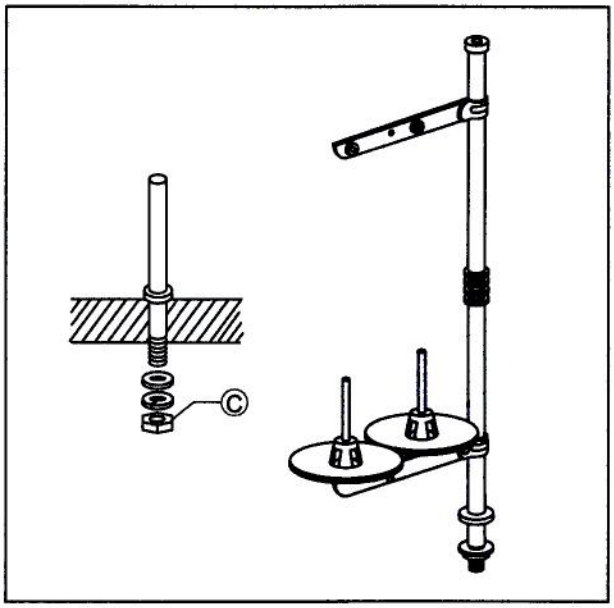
## 5.Lubrication(Fig.2)

1.Before running,please fill the oil at the places as arrow shown.
2.Lubricating the hook and hook shaft saddle.
Move the bed slide,fill the oil int the hole Atwo or three drops every day,fill the oil into the felt B four or five drops.
3.Lubricating the feed dog support
Before running,please fill the oil into holes C,D,E two or three drops.



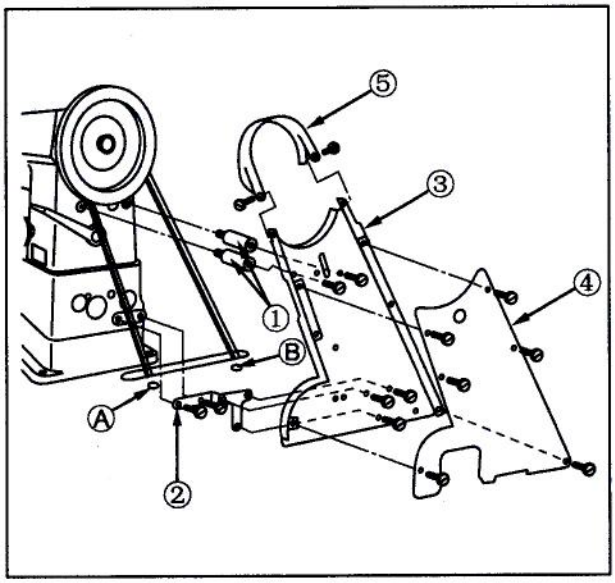

## 6.Installing the thread stand(Fig.3)

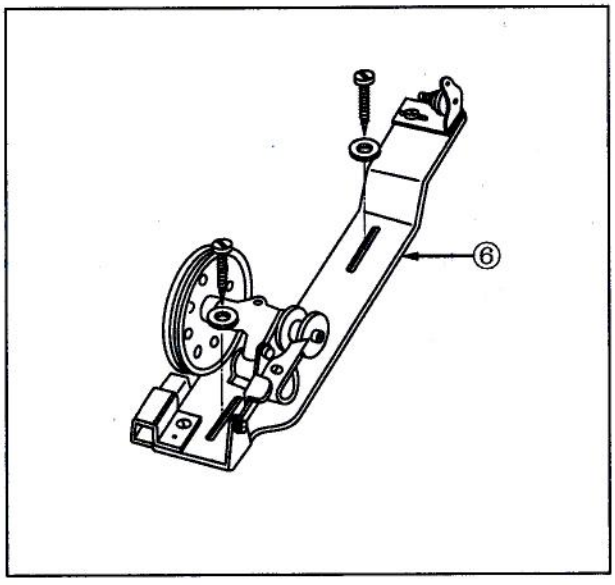
The thread stand should be located on the right backside of the table,then tighten the nut C.



## 7.Installing the belt cover and bobbin winder(fig.4、5)

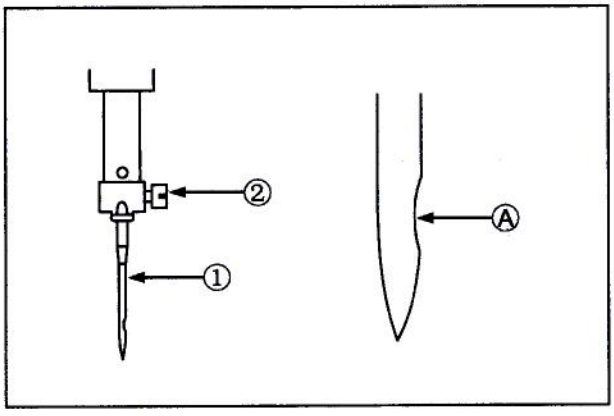
1.Install the belt cover support column① into the screw hole;
2.Install the belt cover support plate② on the machine casting;
3.Install the belt cover ③on the belt cover support column① and the belt cover support plate;
4.Install the bobbin winder ⑥into the cover ③and adjust it to the proper position;
5.Fix the bobbin winder ⑥on the table;
6.Install the V-belt on the hand wheel,then install the belt cover④ and belt cover⑤.



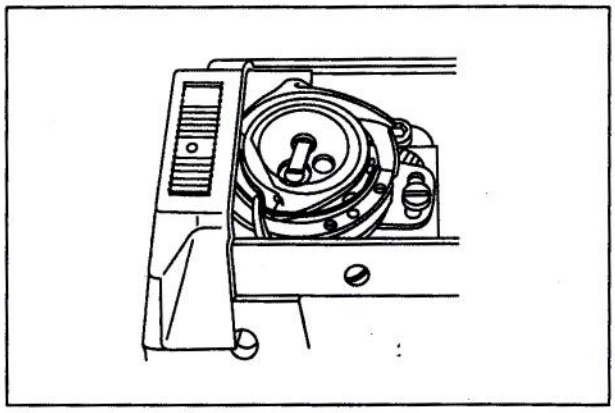

## 8.Installing the needle(fig .6)

1.Turn off the power;
2.Turn the hand wheel to lift the needle bar to its highest position;
3.loosen the needle set screw ②,and make the needle ①groove Ato the right side;
4.Insert the needle shank until to the bottom of the needle bar socket;
5.Tighten the screw②.



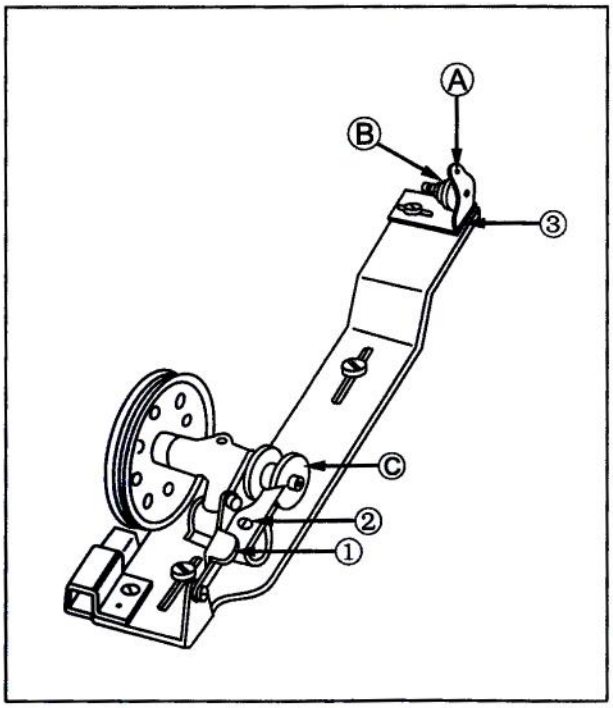
## 9.Installing the bobbin case(Fig.7)

1.Open the hook cover,put the bobbin and bobbin Case into the hook;
2.put the bobbin case on the hook driving shaft,then lay down the hook cover.



## 10.Winding the bobbin thread(Fig.8)

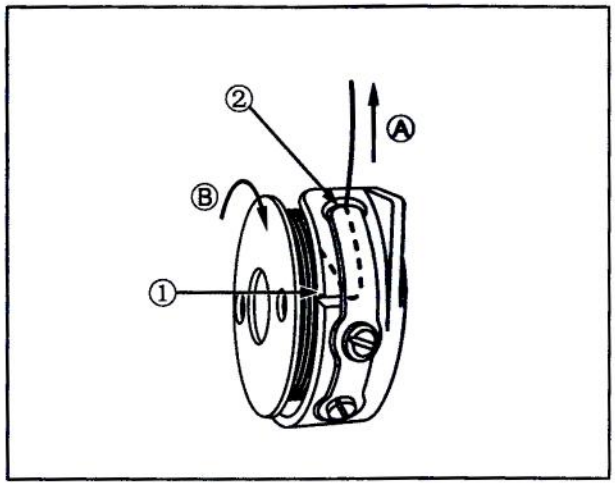
1.Thread as following order A,B,C,then wind the thread around bobbin several circles;
2.Press down the bobbin press plate①,the winding pulley will be touched with the V-belt;
3.windng amount can be adjusted by the screw②,the optimum capacity of bobbin thread is fill about 80% of bobbin outside diameter.Turn the screw clockwise to increase the winding amount,contrary,to decrease the amount;
4.If the thread is not neat,please move the bracket③ to adjust is;
5.When the winding is over, the bobbin press plate① will be loose and the bobbin winder will stop automatically.




## 11.Put the bobbin into bobbin case(fig.9)

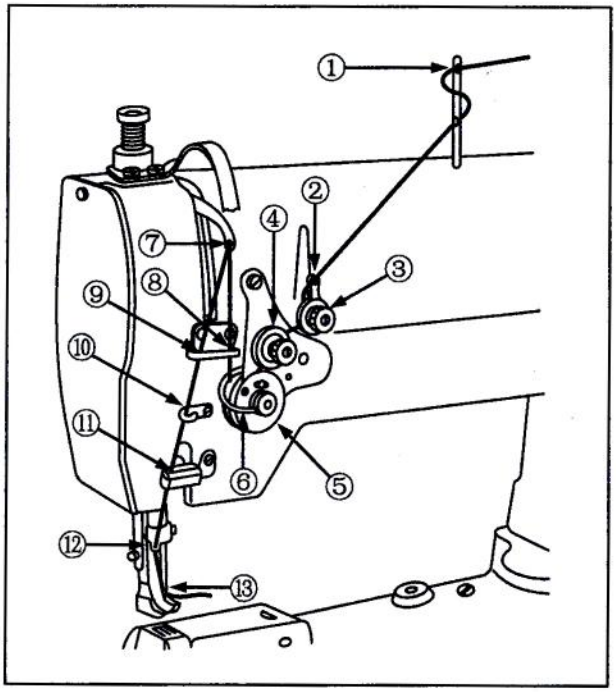
1.Draw the tip of bobbin thread to the right ,then put the bobbin into bobbin case;
2.Draw the bobbin thread through the slit① on the bobbin case,then pass through the thread tension spring,finally,draw the thread out of the slit②.

Reminder:if the bobbin is put correctly,then draw the bobbin thread as A,the bobbin will rotates as B.



## 12.Threading the needle thread(fig.10)

Position the needle bar on its highest,draw the thread from the thread stand and thread as shown order according to Fig.10.




## 13.Adjusting the stitch length(Fig.11)

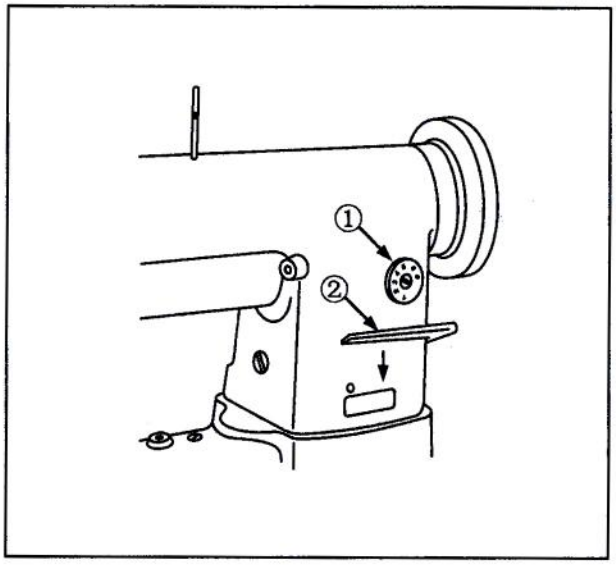
Turn the stitch dial counter-clockwise or clockwise to adjust the stitch length. The figure on the dial is the stitch length.(mm)

Reverse feed stitching

1.Press the feed leaverdownward;

2.When press the feed lever② downward, the feeding is reverse;

3.Release the feed lever, the machine recovers normal feeding again.



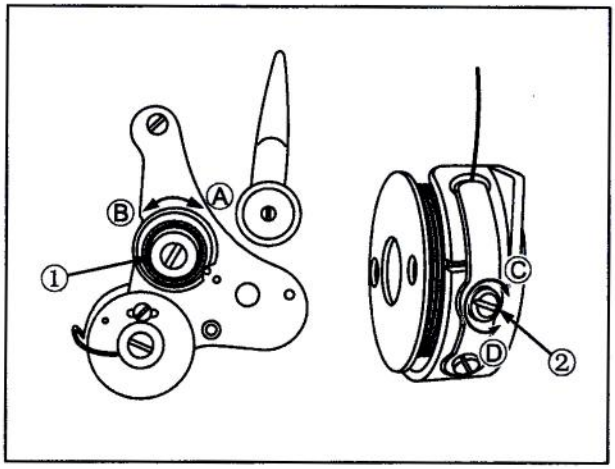

## 14. Thread tension(Fig. 12)

1.Adjusting the tension of needle thread

Turn the tension adjustment nut① clockwise(A direction) to increase the tension of needle thread;turn the nut counter-clockwise(B direction)to decrease the tension.

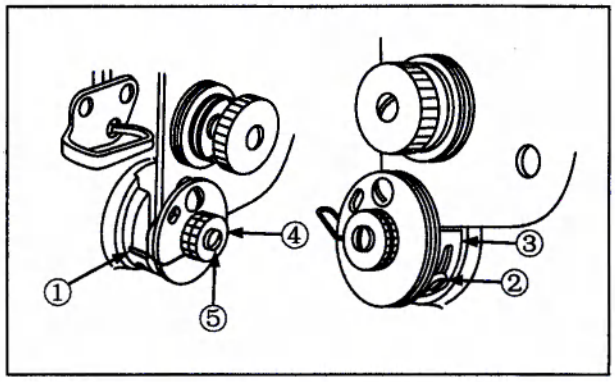
2.Adjusting the tension of bobbin thread

Turn the tension adjustment nut ②colckwise(C direction)to increase the tension of bobbin thread; turn the nut counter-clockwise(D direction) to decrease the tension.



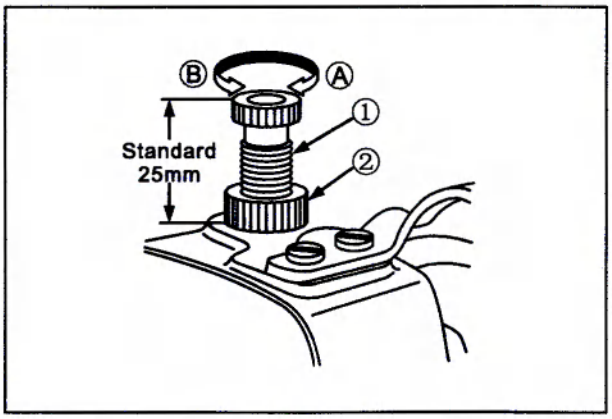
## 15.Thread take-up spring(fig.13)

1.Adjusting the thread take-up spring ①stroke
a.Loosen the screw②,and move the disc ③leftward or rightward;
b.Move the disc rightward to increase the spring stroke,contrary,to decrease the spring stroke.
2.Adjusting the tension of thread take-up spring
Tighten the nut ④,turn the spring shaft counter-colckwise to in crease the tension, cotrary,to decrease the tension.Please use a screwdriver to rotate the sprong shaft ⑤ to get the required tension.



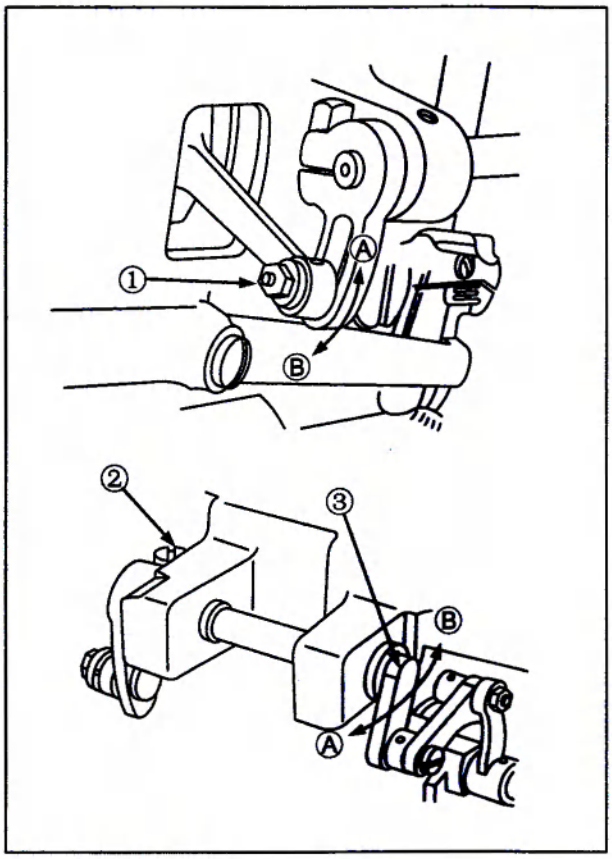

## 16.Adjusting the pressure of presser foot(Fig.14)

Adjust the presser foot pressure according to the materials.(the standard height of pressure adjustment screw ①is 25mm).
1.Turn the screw① clockwise(A direction)to increase the pressure, contrary, turn the screw① counter-clockwise(B direction)to decrease the pressure,
2.After the proper pressure is got,tighten the nut②.




## 17.Adjusting the height of presser foot(fig.15)

1.The optimum fixed position of presser foot is to adjust The presser foot to the "1/8" indication line on The feed crank.
Loosen the nut① and adjust the cam link assembling position.
a.At he highest position A, the max.Presser foot Vertical stroke is got;
b.At the lowest position B, the min. Presser foot vertical stroke is got.
2.Usually, the srtoke of outer presser foot is same as that of the inner presser foot.
A.Loosen the screw②;
b.When the thread take-up lever is at its highest position,lay down the presser bar lever;
c.Adjust the feed crank ③ to leftward(A directon) to increase the presser foot stroke.contrary,adjust the feed crank③ to rightward (b direction) to decrease the presser foot stroke.



## 18.Adjusting the height of feed dog(Fig.16)

The standard position of feed dog ① is 1mm higher than the surface of throat plate②.

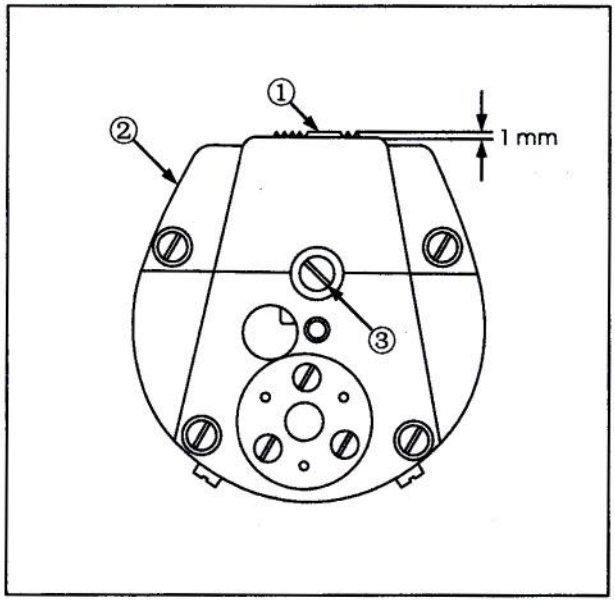
Please adjust it as folowing order according to sewing requirement or after change a new feed dog:

1.Please confirm the highest position of feed dog;

2.loosen the screw ③;

3.The height can be adjustd by turning eccentric pin(P22).

4.After the requred height is got, tighten the screw ③.




## 19.Adjusting the needle and hook(Fig.17)

1.Adjust the stitch dial to figure "3"

2.Turn the hand wheel to lower the needle bar to its lowest position, and loosen the scrwe①;

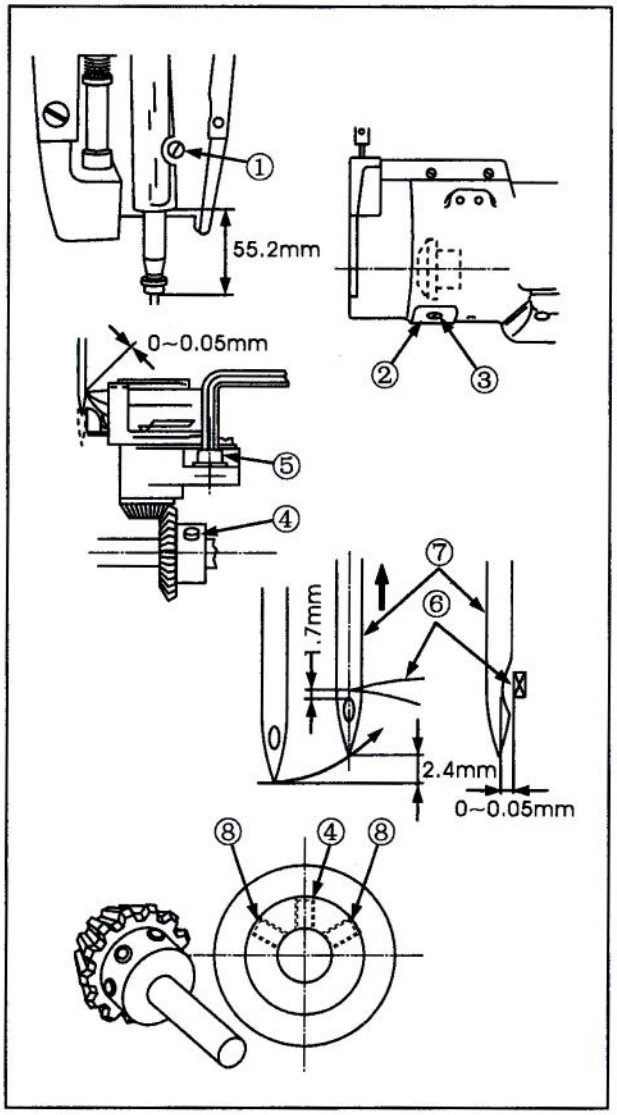
3.confirm the standard height of needle bar:Lift the needle bar up to 2.4mm from its lowest position, there should be1.7mm clearance hetween upside of needle hole and the tip of hook blade⑥ ;the lowest position of needle bar is that there is a clearance of 55.2mm from the bottom of needle bar rocking frame to the bottom of needle bar.

4.Loosen the screw ③ ,move the gear cover ② , and loosen the screw④ and screw⑧;

5.Loosen the screw ⑤,move the hook shaft saddle left-ward or rightward,assure the clearance between the tip of hook blade and needle ⑦ is 0~0.5mm, after finish, tighten the screw;

6.Make the tip of hook blade align with the center of needle bar,then tighten the screw ④;

7.Turn the hand wheel clockwise, tighten the screws⑧ alternately.

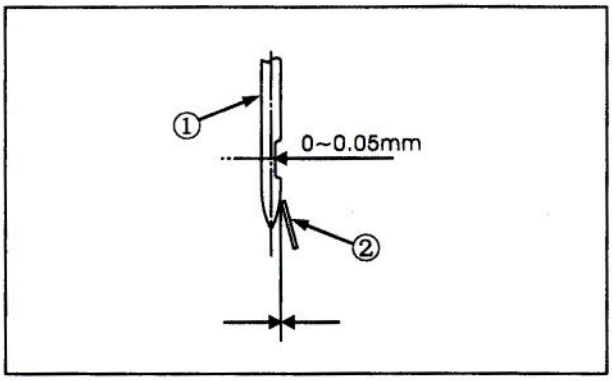


## 20.Adjusting the needle guard plate(Fig.18)

After changing hook , please confirm the position of needle guard plate. The standard position of needle guard plate is that needle guard plate ② is touched with the flank side of needle① slightly, if not,bend the plate and adjust the position:

1.If the needle guard plate bends inward, please a djust the plate outward with a screwdriver;

2.If the needle guard plate bends outward,please adjust the plate inward with a screwdriver;

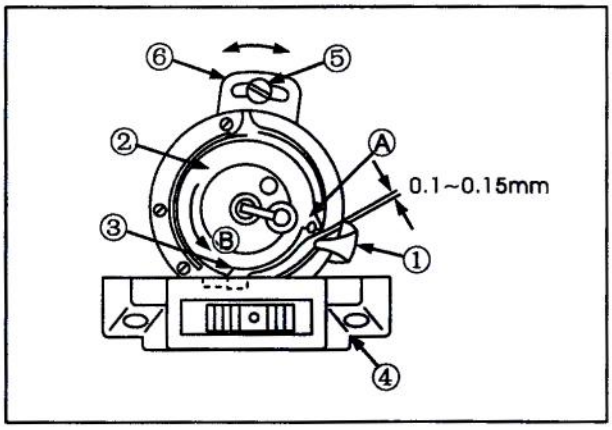



## 21.Adjusting the inner hook guide(Fig.19)

1.Turn the hand wheel to make the inner hook guide① reach its final position;

2.Turn the bobbin case as the direction shown by arrow Buntil to the slit of throat plate④;

3.Loosen the screw ⑤, the move the adjusting plate⑥ of inner hook guide as arrow shown direction,assure the clearance between the inner hook guide and the bobbin case flange is about 0.1~0.15mm.




## 22.Adjusting the lengthways position of needle bar frame(Fig.20)

1.Adjusting the relationship between the inner presser foot bar and pressing bar:

a.Adjust the stitch dial to min.figure;

b.Loosen the screw ①, adjust the distance between theinner presser foot bar and pressing bar to 7.5mm.

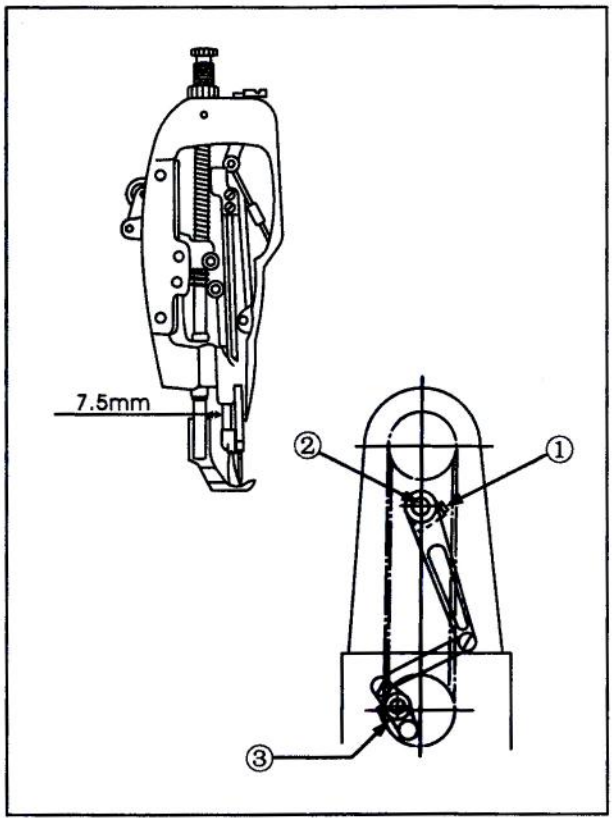
Note:Dont make any clearance at axis direction of needle bar frame.

2.Adjusting the relationship between the feed dog and needle bar:

a.Adjust the stitch dial to min.figure;

b.Loosen the screw③;

c.Adjust the position of feed dog to make the needle aling with the center of needle hole on the throat plate(towards to the operator slightly).



## 23.Safet clutch device(F.21)

If the hook blocks the thread when running ,the safety clutch device will work, which make the lower timing pulley rotate without load.

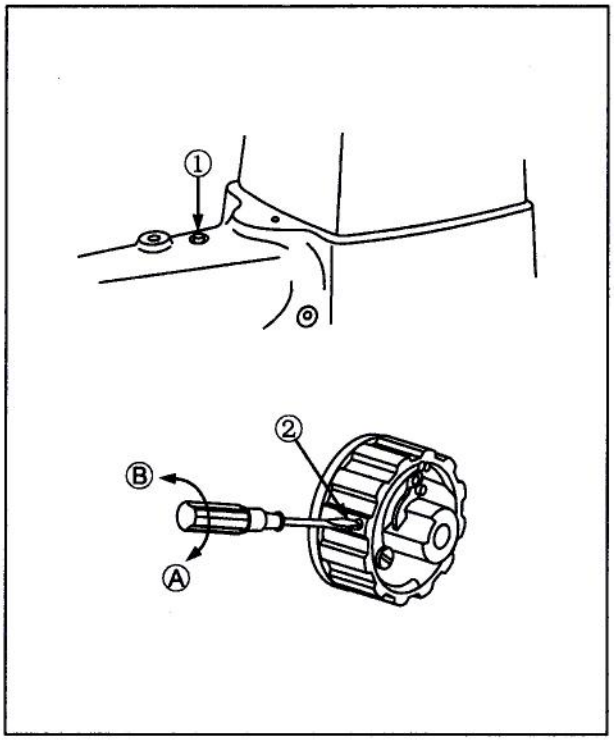
1.Restore as following order:

a.clean the thread blocked in the hook;

b.Press the button① and turn the hand wheel at reverse direction.

2.Adjusting the force of safety clutch:

Turn the screw② clockwise(A direction) to increase the force, contary, turn the screw counter-clockwise(B direction)to decrease the force.




## 24.Reloading the timing belt(Fig.22)

1.Unloading the timing belt:

a.Loosen the screw①,②,③,④,⑤;

b.Take the hand wheel ⑥ and bushing ⑦down;

c.Pull the feed lever ⑨, outward to make the timing belt ⑧have enough space to pass through;

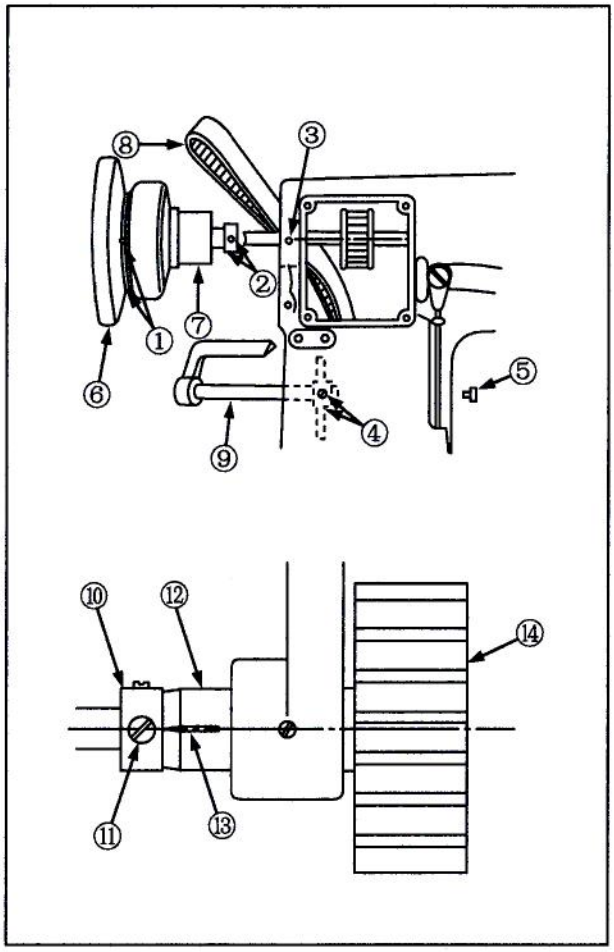
d.Take down the belt and take it out from the bush lole of upper shaft.

2.Reloading the timing belt;

a.The loading order of timing belt is the reverse order of unloading;

b.Adjusting the timing relationship between upper shaft and lower shaft;

Turn the hand wheel to lift the thread take-up lever to its highest position, turn the lower shaft to make the first screw on the collar ⑩align with the mark on the rear bushing of lower shaft,under this condition, install the belt on the lower timing pulley

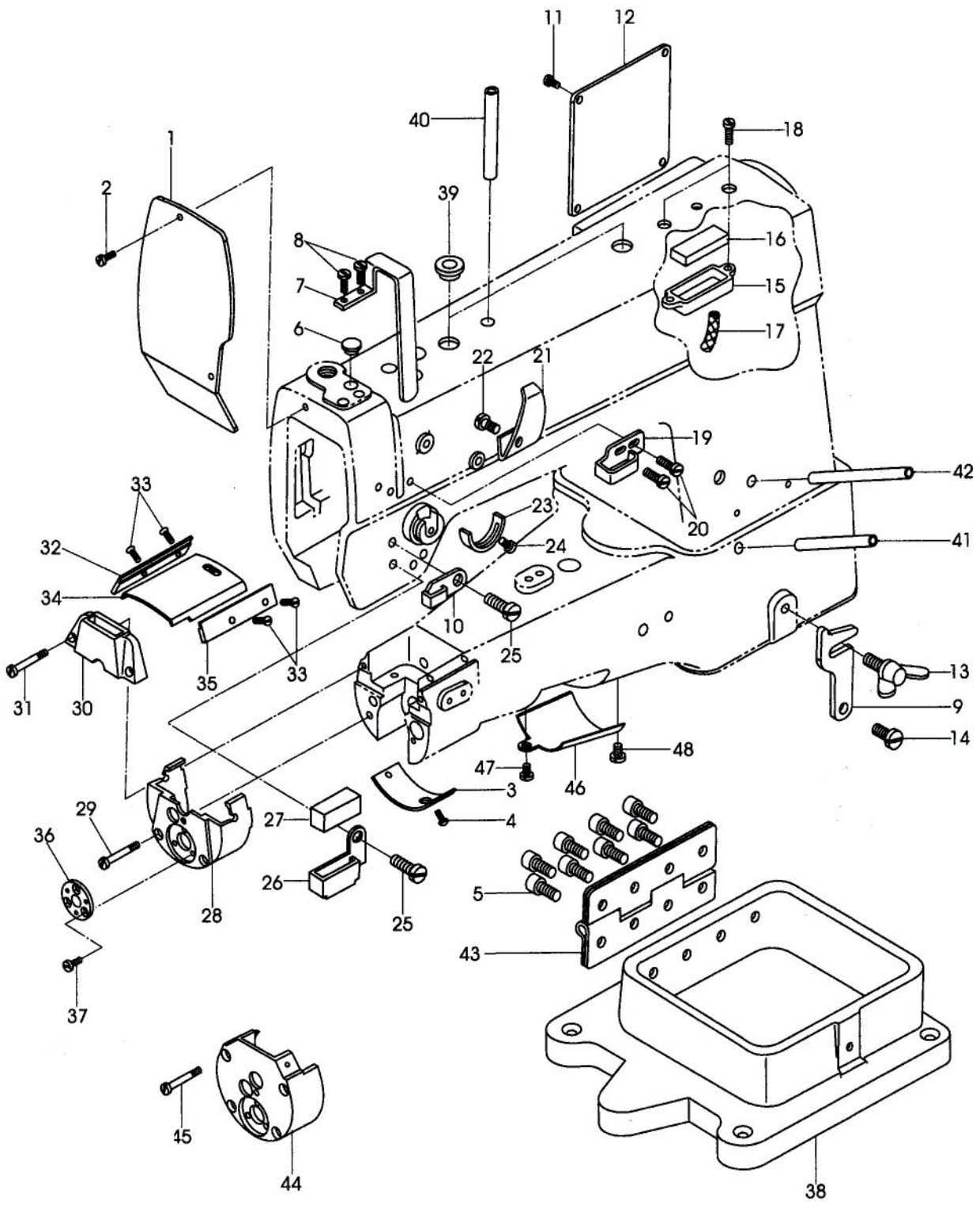


## 25.Trouble shooting

| Trouble | Causes | Solution |
|---|---|---|
| 1.Thread breakage (thread wear and tear) | ① Threading course,needle tip, hook blade tip or thread passing groove on the throat plate is rough.<br>② Too large needle thread tension.<br>③ Too big clearance of inner hook guide.<br>④ collision between needle and hook guide tip.<br>⑤ Too small needle thread tension.<br>⑥ TOOlarge or too small stroke thread take -up spring tension<br>⑦ Not timing between needle and hook. | ● Get rid of the burr on the hook blade tip and polish the thread passing groove on the throat plate with fine emery cloth.<br>● Adjust the needle thread to proper tension.<br>● Decrease the clearance,refer to21.<br>● Adjusting the inner hook guide.<br>● Rdfer to 19. Adjusting the needle and hook.<br>● Adjust the needle thread to proper tension.<br>● Decrease the tension of thread take-up Spring and increase the spring stroke.<br>● Refer to 19. Adjusting the needle and hool. |
| 2.Skip stitch | ① Too big clearance between needle and the tip of inner hook blade.<br>② Not timing between needle and hook.<br>③ Too small pressure on the outer presser foot.<br>④ the height of needle bar is not enough.<br>⑤ No effect of needle guard plate.<br>⑥ Wrong needle size.<br>⑦ Wrong needle threading.<br>⑧ Rotary hook is scraped. | ● Refer to 19.Adjusting the needle and hook.<br>● Refer to 19.Adjusting the needle and hook.<br>● Tighten the pressure screw.<br>● Refer to 19.Adjusting the needle and hook.<br>● Refer to 20.Adjusting the needle guard plate.<br>● Change a proper needle.<br>● Refer to 12.Threading the needle thread.<br>● Get rid of the burr on the hook guide tip with fine emery cloth. |
| 3.Loose stitch | ① The thread passing parts are not smooth.<br>② the bobbin cannot rotate smoothly.<br>③ Too big clearance of inner hook guide.<br>④ Too weak tension of bobbin thread.<br>⑤ too tighten when winding bobbin thread.<br>⑥ bobbing thread doesn't pass the thread tension spring on the bobbin case | ● Polish them with fine emery cloth.<br>● Reset the bobbin and rotary hook.<br>● Refer to 21. Adjusting the inner hook guide.<br>● Adjust the bobbin thread tension properly.<br>● Decrease the tension when winding.<br>● Threading the bobbin thread correctly. |

# PARTS CHART

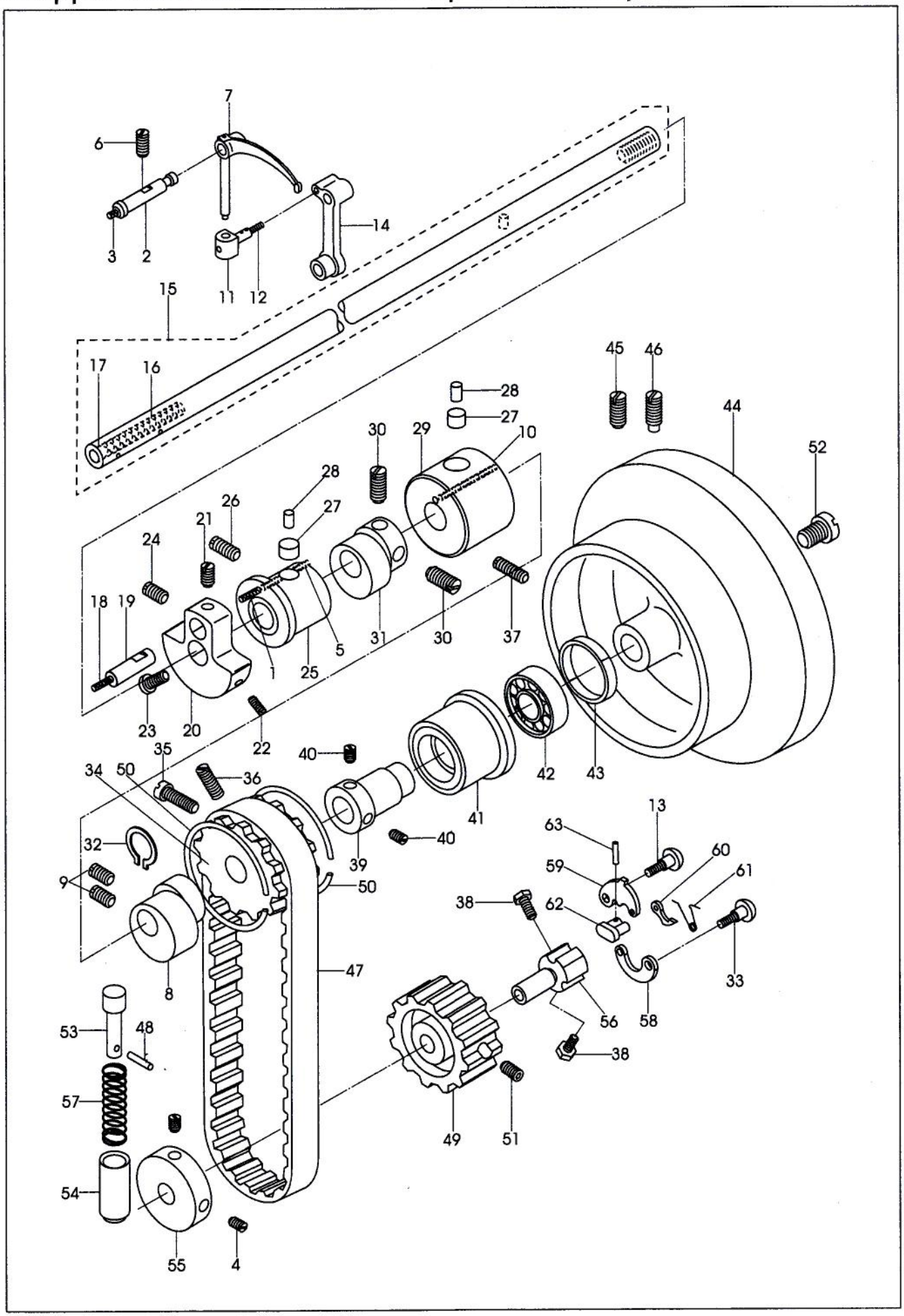
# 1.Casting components



# 1.Casting components

| Ref.NO. | Parts No. | Name of parts | Qty. | Remarks |
|---|---|---|---|---|
| 1 | 50WF2-004 | Face plate | 1 | |
| 2 | 16WF1-059 | Screw | 2 | SM9/64" ×40 |
| 3 | 50WF2-005 | Gear cover | 1 | |
| 4 | 13WF2-008 | Screw | 2 | SM9/64" ×40 |
| 5 | | Screw | 8 | GB70-85 M8 ×20 |
| 6 | 50WF2-008 | Rubber plug | 1 | |
| 7 | 50WF2-009 | Thread take-up lever cover | 1 | |
| 8 | 1WF-038 | Screw | 2 | SM15/64" ×28 |
| 9 | 50WF2-010 | Connecting hook | 1 | |
| 10 | 16WF2-012 | Thread guide(middle) | 1 | |
| 11 | 7WF5-017 | Screw | 4 | SM11/64" ×40 |
| 12 | 50WF2-013 | Side plate | 1 | |
| 13 | 50WF2-012 | Wing bolt | 1 | |
| 14 | 50WF2-011 | Screw | 1 | |
| 15 | 50WF2-019 | Oil pan | 1 | |
| 16 | 50WF2-020 | Felt | 1 | |
| 17 | | Oil aick | 1 | |
| 18 | 7WF4-004 | Screw | 2 | SM11/64" ×40 |
| 19 | 50WF2-014 | Thread guide(upper) | 1 | |
| 20 | 16WF2-015 | Screw | 2 | SM9/64" ×40 |
| 21 | 50WF2-021 | Take-up oil splasher | 1 | |
| 22 | 19WF4-002 | Screw | 1 | SM9/64" ×40 |
| 23 | 50WF2-022 | Take-up spring adjusting plate | 1 | |
| 24 | 1WF1-026 | Screw | 1 | SM9/64" ×40 |
| 25 | 16WF2-015 | Screw | 2 | SM9/64" ×40 |
| 26 | 50WF2-015 | Throat guide(lower) | 1 | |
| 27 | 50WF2-016 | Felt | 1 | |
| 28 | 50WF2-023 | Throat pate base | 1 | For341 |
| | 106WF2-001 | Throat plate base | 1 | For341N |
| 29 | 50WF2-024 | Screw | 2 | SM11/64" ×40 |
| 30 | 50WF2-027 | Throat plate | 1 | |
| | 106WF2-002 | Screw | 1 | |
| 31 | 50WF2-028 | Left side plate | 2 | SM11/64" ×40 |
| 32 | 50WF2-029 | Screw | 1 | |
| 33 | 50WF2-031 | Bed slide | 4 | SM9/64" ×40 |
| 34 | 50WF2-032 | Right side plate | 1 | |
| 35 | 50WF2-030 | Lower shaft front cover | 1 | |
| 36 | 50WF2-025 | Screw | 1 | |
| 37 | 50WF2-026 | Machine base | 3 | SM11/64" ×40 |
| 38 | 50WF2-003 | Rubber plug | 1 | |
| 39 | | Oil tube | 2 | |
| 40 | 50WF3-090 | Oil tube | 1 | |
| 41 | 50WF3-091 | Oil tube | 1 | |
| 42 | 50WF1-055 | hinge | 1 | |
| 43 | 50WF2-006 | Throat plate base | 1 | |
| 44 | | Screw | 4 | #1 |
| 45 | | Cylinder bed cover(lower) | 1 | #1SM11/64" ×40 |
| 46 | 50WF2-007 | Left screw | 1 | SM9/64" ×40 |
| 47 | 1WF1-016 | Right screw | 1 | SM9/64" ×40 |
| 48 | 22WF5-027 | | | |

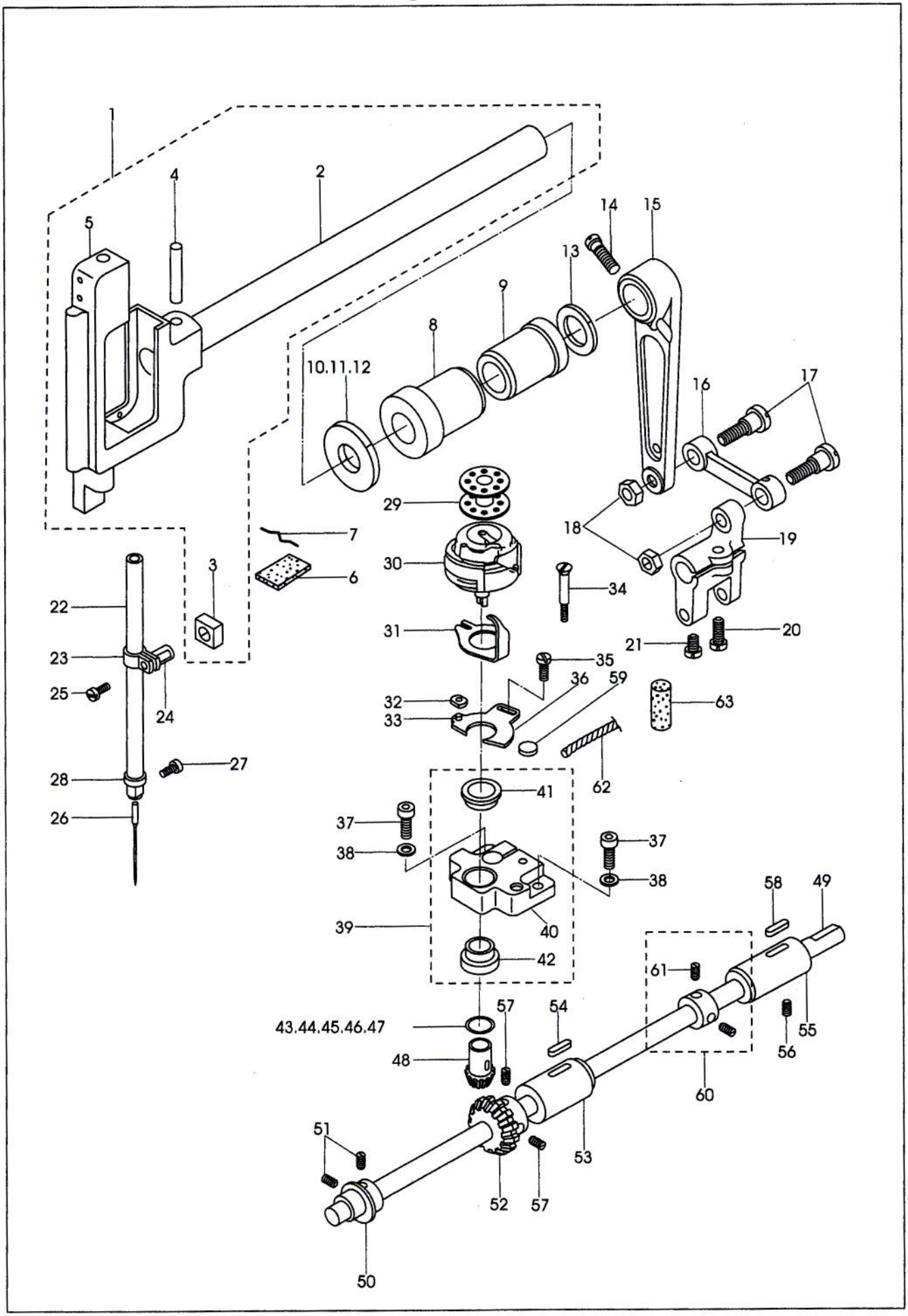
# 2.Upper shaft and thread take-up leaver components



# 2.Upper shaft and thread take-up lever components

| Ref.NO. | Parts No. | Name of parts | Qty. | Remarks |
|---|---|---|---|---|
| 1 | 16WF-010 | Plug | 2 | |
| 2 | | take-up lever pin | 1 | |
| 3 | | Oil wick | 1 | |
| 4 | 50WF1-022 | Screw | 2 | SM15/64" ×28 |
| 5 | | Oil wick | 1 | |
| 6 | 50WF1-004 | Screw | 1 | SM15/64" ×28 |
| 7 | 50WF1-005 | Thread take-up leaver | 1 | |
| 8 | 50WF3-043 | Feed cam | 1 | |
| 9 | 18227 | Screw | 2 | SM1/4" ×40 |
| 10 | | Oil wick | 1 | |
| 11 | 50WF1-006 | Take-up lever sliding block | 1 | |
| 12 | | Oil wick | 1 | |
| 13 | 50WF1-062 | Hinge screw | 1 | |
| 14 | 50WF1-057 | Needle bar crank rod | 1 | |
| 15 | 50WF1-015 | Upper shaft | 1 | |
| 16 | | Oil wick | 1 | |
| 17 | 50WF1-014 | Plug | 1 | |
| 18 | | Oil wick | 1 | |
| 19 | 50WF1-008 | Crank pin | 1 | |
| 20 | 50WF1-011 | Needle bar crank | 1 | SM9/32" ×28 |
| 21 | 50WF1-009 | Screw | 1 | SM9/32" ×28 |
| 22 | 50WF1-013 | Screw | 1 | SM9/32" ×28 |
| 23 | 50WF1-012 | Screw | 1 | SM9/32" ×28 |
| 24 | 50WF1-010 | Screw | 1 | |
| 25 | 50WF1-016 | Upper shaft bush(front) | 1 | SM15/64" ×28 |
| 26 | 50WF1-019 | Screw | 2 | |
| 27 | 50WF1-017 | Oil felt | 2 | |
| 28 | | Oil felt | 1 | |
| 29 | 50WF1-018 | Upper shaft bush(middle) | 2 | SM1/4" ×40 |
| 30 | 18227 | Screw | 1 | |
| 31 | 50WF3-034 | Oil felt | 1 | GB894.2-86 26 |
| 32 | | Upper shaft bush(upper) | 1 | |
| 33 | 50WF1-062 | Set screw | 1 | |
| 34 | 50WF1-024 | Screw | 1 | |
| 35 | 50WF1-025 | Screw | 1 | |
| 36 | 50WF1-013 | Screw | 1 | |
| 37 | 50WF1-019 | Upper shaft bearing bush | 2 | |
| 38 | 50WF1-035 | Screw | 1 | |
| 39 | 50WF1-021 | Upper shaft bush(rear) | 2 | |
| 40 | 50WF1-022 | Bearing | 1 | |
| 41 | 50WF1-020 | Reataining collar | 1 | 15×35×11(202型) |
| 42 | | Hand wheel | 1 | |
| 43 | 50WF1-023 | Screw | 1 | |
| 44 | 50WF1-028 | Screw | 1 | SM15/64" ×28 |
| 45 | 50WF1-019 | Timing belt | 1 | SM15/64" ×28 |
| 46 | 50WF1-029 | Spring pin | 1 | |
| 47 | 50WF1-027 | Timing pulley(lower) | 1 | GB879-86 2×10 |
| 48 | | Spring ring | 2 | |
| 49 | 50WF1-032 | Screw | 2 | SM9/64" ×40 |
| 50 | 16WF1-043 | Screw | 1 | SM5/16" ×24 |
| 51 | 21WF6-007 | Safety clutch push button | 1 | |
| 52 | 50WF1-030 | Push button cylinder | 1 | |
| 53 | 50WF1-051 | Safety clutch disc | 1 | |
| 54 | 50WF1-053 | Safety base | 1 | |
| 55 | 50WF1-052 | Spring | 1 | |
| 56 | 50WF1-034 | Safety clutch spring | 1 | |
| 57 | 16WF3-046 | Safety clutch hook | 1 | |
| 58 | 22WF1-013 | Safety clutch counter-hook | 1 | |
| 59 | 22WF1-018 | Counter-hook spring | 1 | |
| 60 | 22WF1-016 | Safety clutch link | 1 | |
| 61 | 22WF1-014 | Safety clutch link pin | 1 | |
| 62 | 22WF1-017 | | | |
| 63 | | | | |

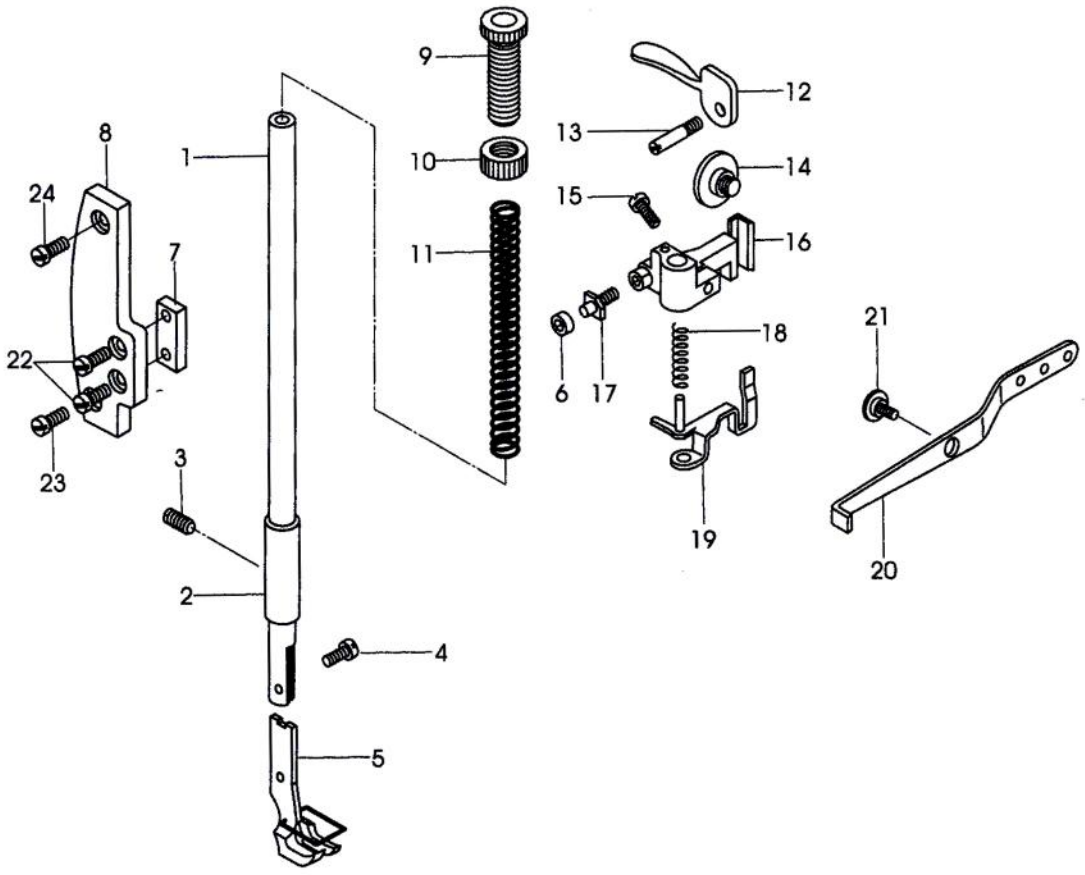
# 3.Needle bar and hook driving shaft components



# 3.Needle bar and hook driving shaft components

| Ref.NO. | Parts No. | Name of parts | Qty. | Remarks |
|---|---|---|---|---|
| 1 | 50WF3-001 | Needle bar rocking frame assembly | 1 | |
| 2 | 50WF3-002 | Needle bar rocking frame shaft | 1 | |
| 3 | | Needle bar slide blockPin | 1 | |
| 4 | 50WF3-003 | Needle bar rocking frame | 1 | GB117-86 A5×28 |
| 5 | 50WF3-004 | Felt | 1 | |
| 6 | 50WF3-005 | Retainer | 1 | |
| 7 | 50WF3-006 | Rocking shaft bush(front) | 1 | |
| 8 | 50WF3-007 | Rocking shaft bush(rear) | 1 | |
| 9 | 50WF3-008 | Washer | 1 | |
| 10 | | Washer | 1 | T=1.5 |
| 11 | | Washer | 1 | T=1.35 #1 |
| 12 | | Washer | 1 | T=1.65 #1 |
| 13 | 50WF3-010 | Screw | 1 | T=1.65 |
| 14 | 50WF3-009 | Rocking shaft crank | 1 | |
| 15 | 50WF3-011 | connecting rod | 1 | |
| 16 | 50WF3-012 | Hinger screw | 1 | |
| 17 | 50WF3-013 | Nut | 2 | |
| 18 | 50WF3-014 | Feed shaft crank | 2 | SM15/64" ×28 |
| 19 | 34T5-540 | Screw | 1 | |
| 20 | 36T5-008E5 | Screw | 1 | SM15/64" ×28 |
| 21 | 50WF1-001 | Needle bar | 1 | SM11/64" ×40 |
| 22 | 50WF1-003 | Needle bar connection | 1 | |
| 23 | | Felt | 1 | |
| 24 | 22-WF3-014 | Screw | 1 | |
| 25 | | Needle | 1 | SM9/64" ×40 |
| 26 | 22T2-017 | Screw | 1 | DP×17 |
| 27 | 50WF1-002 | Needle bar thread guide | 1 | SM1/8" ×40 |
| 28 | 33T1-027 | Bobbin | 1 | |
| 29 | | Rotary hook | 1 | |
| 30 | 50WF1-047 | Inner hook guide | 1 | SKRT341-NR |
| 31 | 50WF1-048 | Slide block | 1 | |
| 32 | | Slide block pin | 1 | |
| 33 | 50WF1-046 | ]Screw | 1 | |
| 34 | 16WF2-017 | Screw | 1 | |
| 35 | 50WF1-049 | Adjusting plate | 1 | SM9/64" ×40 |
| 36 | | Screw | 2 | GB70-85 M5×12 |
| 37 | | Washer | 2 | GB95-85 5 |
| 38 | | Hook shaft saddle assembly | 1 | |
| 39 | 50WF1-050 | Hook shaft saddle | 1 | For341 |
| 40 | 106WF1-001 | Hook shaft saddle | 1 | For341N |
| 41 | | Hook shaft bush(upper) | 1 | |
| 42 | 50WF5-045 | Hook shaft bush(lower) | 1 | T=1.88 #1 |
| 43 | | Washer | 1 | T=1.92 #1 |
| 44 | | Washer | 1 | T=1.96 #1 |
| 45 | 50WF1-044 | Washer | 1 | T=2.00 #1 |
| 46 | | Washer | 1 | T=2.04 #1 |
| 47 | | Washer | 1 | |
| 48 | 50WF1-043 | Hook shaft gear | 1 | |
| 49 | 50WF1-031 | Lower shaft | 1 | |
| 50 | 50WF3-016 | Feed cam | 1 | SM15/64" ×28 |
| 51 | 50WF3-017 | Screw | 2 | |
| 52 | 50WF1-040 | Lower shaft bevel gear | 1 | |
| 53 | 50WF1-036 | Lower shaft bush(front) | 1 | |
| 54 | 50WF1-037 | Oil felt | 1 | |
| 55 | 50WF1-038 | Lower shaft bush(rear) | 1 | SM15/64" ×28 |
| 56 | 50WF1-022 | Screw | 1 | SM1/4" ×40 |
| 57 | 50WF1-041 | Screw | 3 | |
| 58 | 50WF1-039 | Felt | 1 | |
| 59 | | Felt | 1 | |
| 60 | 50WF1-042 | Lower shaft collar | 1 | SM11/64" ×40 |
| 61 | 17027 | Screw | 2 | |
| 62 | | Oil wick | 1 | |
| 63 | | Felt | 1 | |

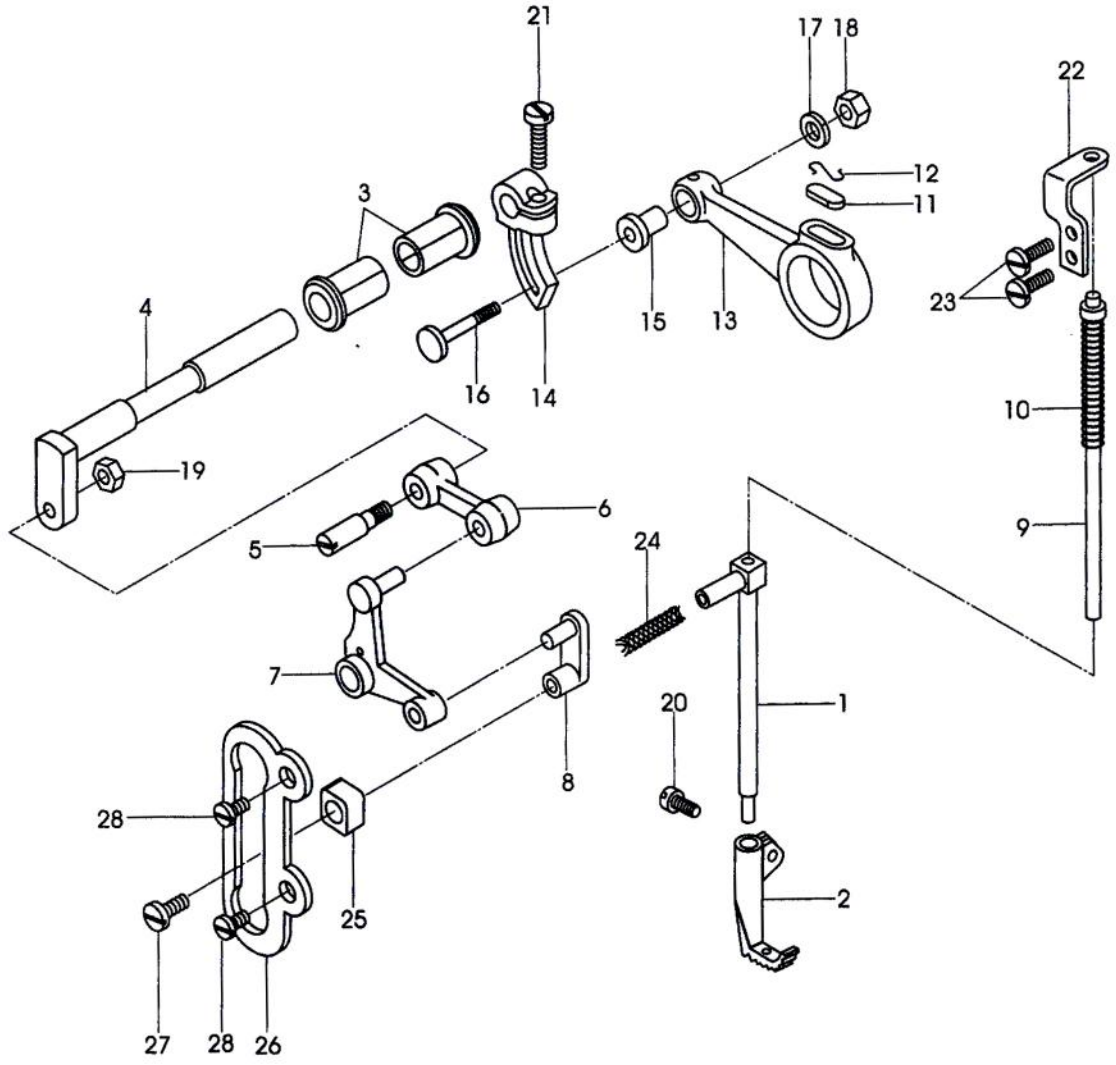
# 4.Presser foot components



# 4.Presser foot components

| Ref.NO. | Parts No. | Name of parts | Qty. | Remarks |
|---|---|---|---|---|
| 1 | 22WF3-005 | Presser bar | 1 | |
| 2 | 50WF4-001 | Presser bar lower bush | 1 | |
| 3 | 50WF1-022 | Screw | 1 | SM15/64" ×28 |
| 4 | 22WF3-014 | Screw | 1 | SM9/64" ×28 |
| 5 | 50WF4-002 | Outer presser foot assembly | 1 | |
| 6 | 50WF4-011 | connecting pin roller | 1 | |
| 7 | 50WF4-017 | Presser bar bracket guide | 1 | |
| 8 | 50WF4-015 | Guide plate base | 1 | |
| 9 | 1KT4-001 | Pressure adjustment screw | 1 | |
| 10 | 1KT4-002 | Nut | 1 | |
| 11 | 50WF4-006 | Presser spring | 1 | |
| 12 | 50WF4-007 | Hand lifter | 1 | |
| 13 | 50WF4-008 | Hand lifter pin | 1 | |
| 14 | 50WF4-014 | Hinge screw | 1 | |
| 15 | 16034 | Screw | 1 | SM11/64" ×40 |
| 16 | 50WF4-009 | Presser lifting lever base | 1 | |
| 17 | 50WF4-010 | Screw | 1 | |
| 18 | 50WF4-013 | Spring | 1 | |
| 19 | 50WF4-012 | Thread release guide assembly | 1 | |
| 20 | 50WF4-018 | Presser bar lifting lever | 1 | |
| 21 | 50WF4-019 | Hinge screw | 1 | |
| 22 | 22WF2-017 | Screw | 3 | SM3/16" ×32 |
| 23 | 50WF4-016 | Screw | 1 | SM15/64" ×28 |

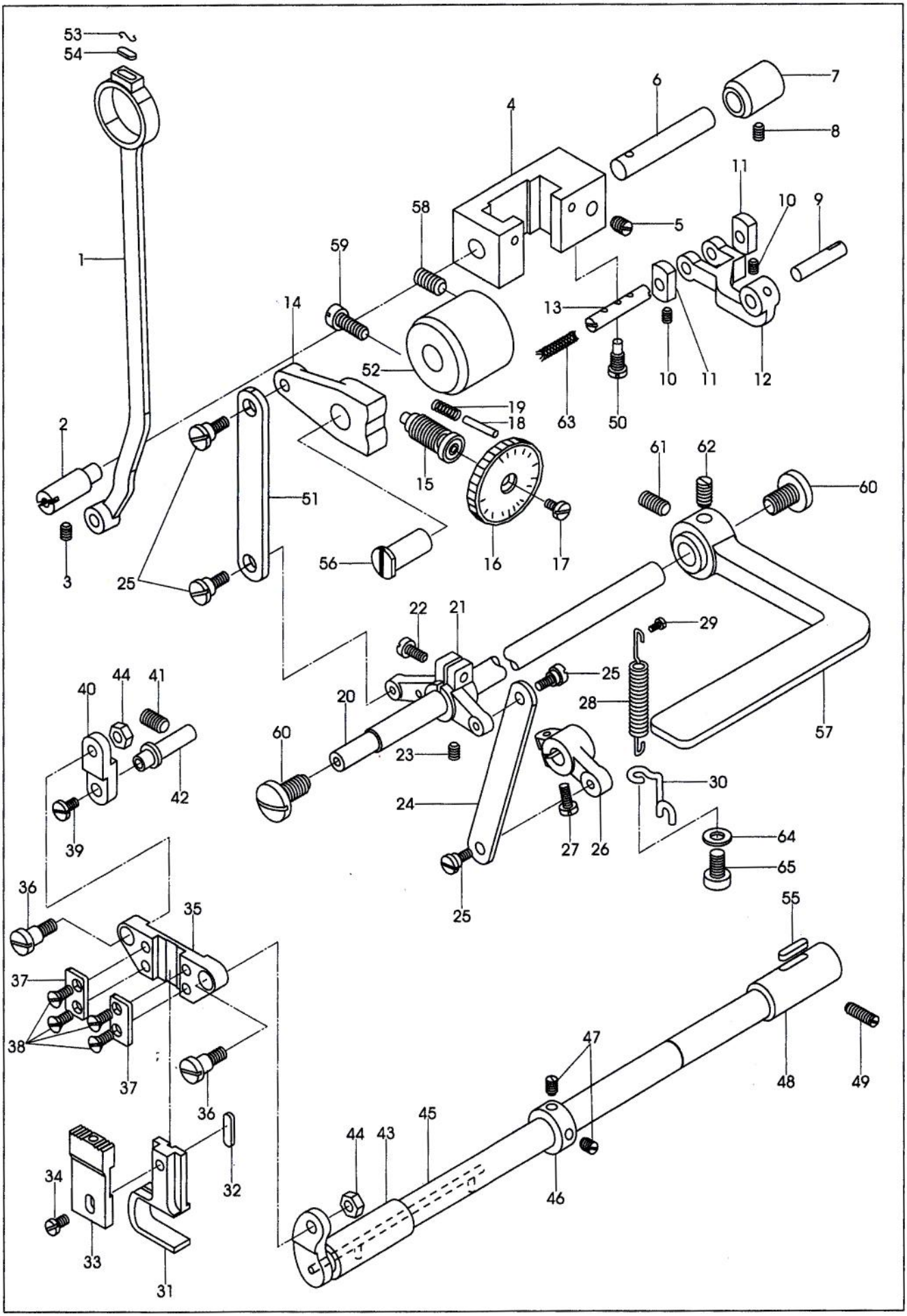
# 5.Upper feed mechanism components



# 5.Upper feed mechanism components

| Ref.NO. | Parts No. | Name of parts | Qty. | Remarks |
|---|---|---|---|---|
| 1 | 55WF3-018 | Inner presser foot bar | 1 | |
| 2 | 50WF3-019 | Inner presser foot | 1 | |
| 3 | 50WF3-021 | Bushing | 2 | |
| 4 | 50WF3-022 | Upper feed shaft | 1 | |
| 5 | 50WF3-023 | Screw stud | 1 | |
| 6 | 50WF3-025 | Upper feed connecting link | 1 | |
| 7 | 50WF3-026 | Upper feed sewing plate | 1 | |
| 8 | 50WF3-027 | Inner presser foot driving link | 1 | |
| 9 | 50WF3-031 | Inner presser foot rod | 1 | |
| 10 | 50WF3-032 | Inner presser foot spring | 1 | |
| 11 | 50WF3-036 | Felt | 1 | |
| 12 | 22WF4-040 | Felt retainer | 1 | |
| 13 | 50WF3-035 | Upper feed driving rod | 1 | |
| 14 | 50WF3-038 | Upper feed crank | 1 | |
| 15 | 50WF3-037 | connecting stud | 1 | |
| 16 | 50WF3-040 | Hing screw | 1 | |
| 17 | 50WF3-041 | Washer | 1 | |
| 18 | 50WF3-042 | Nut | 1 | SM11/64" ×40 |
| 19 | 50WF3-024 | Nut | 1 | SM1/4" ×40 |
| 20 | 50WF3-020 | Screw | 1 | SM11/64" ×40 |
| 21 | 50WF3-039 | Screw | 1 | SM1/4" ×24 |
| 22 | 50WF3-033 | Inner presser foot reataining plate | 1 | |
| 23 | 16WF1-059 | Screw | 2 | SM9/64" ×40 |
| 24 | | Oil wick | 2 | |
| 25 | 50WF3-029 | Slide block | 1 | |
| 26 | 50WF3-030 | Slider block holder | 1 | |
| 27 | 17078 | Screw | 1 | SM11/64" ×40 |
| 28 | 1WF1-011 | Screw | 2 | SM11/64" ×40 |

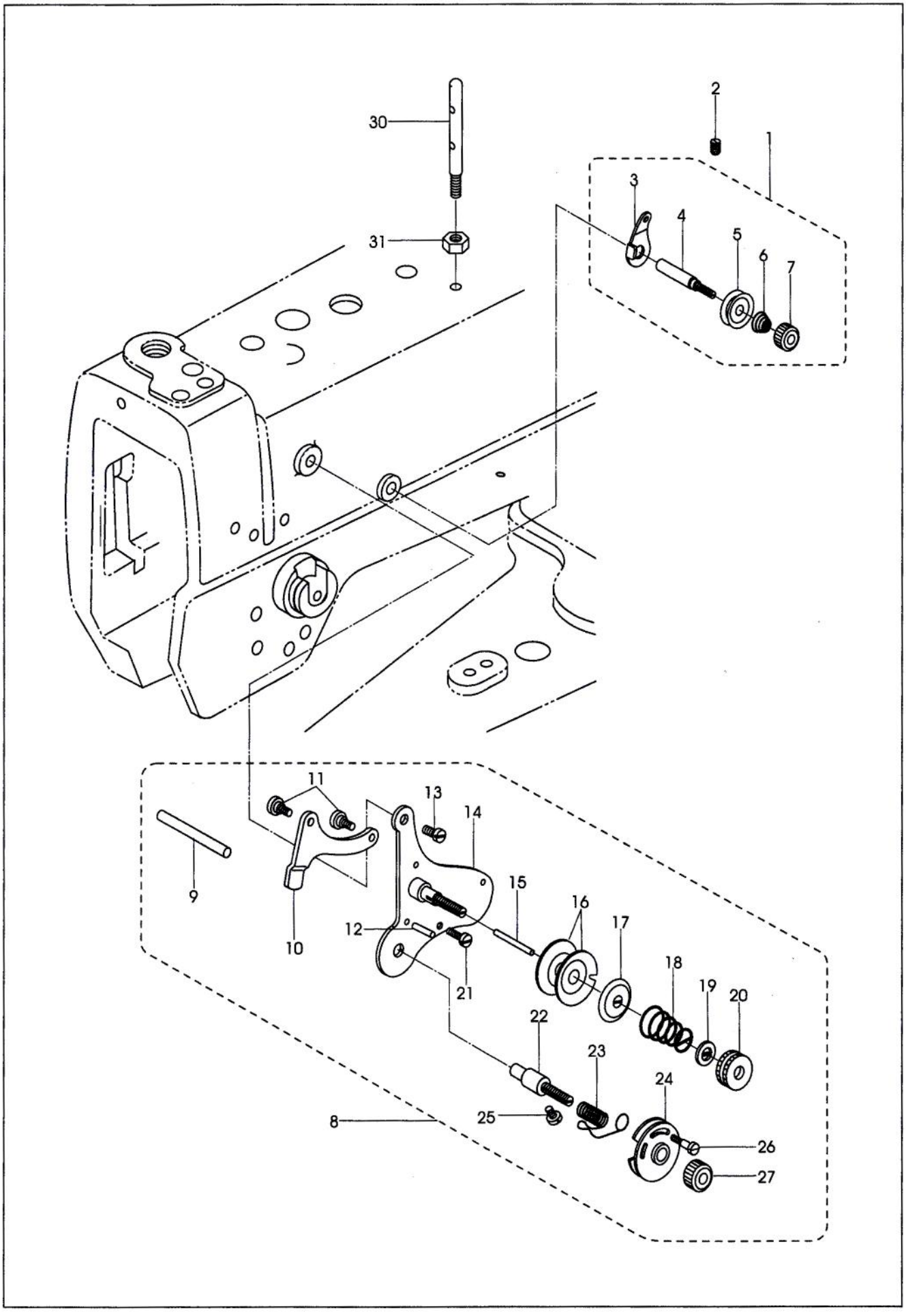
# 6.Lower feed mechanism omponents



# 6.Lower feed mechanism components

| Ref.NO. | Parts No. | Name of parts | Qty. | Remarks |
|---|---|---|---|---|
| 1 | 55WF3-044 | Feed connection rod | 1 | |
| 2 | 55WF3-045 | Hinge pin | 1 | |
| 3 | 50WF3-017 | Screw | 1 | SM11/64" ×28 |
| 4 | 50WF3-046 | Reverse feed driving rocker | 1 | |
| 5 | J0.0.40 | Screw | 1 | |
| 6 | 50WF3-047 | Reverse feed driving rocker shaft | 1 | |
| 7 | 50WF3-049 | Bushing | 1 | SM15/64" ×28 |
| 8 | 50WF3-017 | Screw | 1 | |
| 9 | 50WF3-015 | Pin | 1 | |
| 10 | 50WF3-051 | Screw | 2 | SM9/64" ×40 |
| 11 | 50WF3-050 | Slide block | 2 | |
| 12 | 50WF3-053 | Link | 1 | |
| 13 | 50WF3-052 | Slide block shaft | 1 | |
| 14 | 50WF3-059 | Feed regulator base | 1 | |
| 15 | 50WF3-056 | Screw | 1 | |
| 16 | 50WF3-055 | Stitch dial | 1 | |
| 17 | 50WF3-057 | Screw | 1 | |
| 18 | 17WF4-035 | Pin | 1 | SM3/16" ×28 |
| 19 | 50WF3-058 | Spring | 1 | |
| 20 | 50WF3-062 | Reverse feed lever shaft | 1 | |
| 21 | 50WF3-066 | Reverse feed lever shaft crank | 1 | |
| 22 | 16056 | Screw | 2 | SM3/64" ×28 |
| 23 | 50WF3-017 | Screw | 1 | SM15/64" ×28 |
| 24 | 50WF3-068 | Reverse feed crank link | 1 | |
| 25 | 50WF3-069 | Hinge screw | 4 | |
| 26 | 50WF3-074 | Crank | 1 | For341 |
| | 106WF3-001 | Crank | 1 | For341N |
| 27 | 50WF3-092 | Eccentric pin | 1 | |
| 28 | 50WF3-070 | Tension spring | 1 | |
| 29 | 50WF3-071 | Screw | 1 | |
| 30 | 50WF3-072 | Suspension hook | 1 | |
| 31 | 50WF3-084 | Feed bar crank | 1 | For341 |
| | 106WF3-003 | Feed bar crank | 1 | For341N |
| 32 | 50WF3-085 | Oil felt | 1 | |
| 33 | 50WF3-086 | Feed dog | 1 | For341 |
| | 106WF3-002 | Feed dog | 1 | For341N |
| 34 | 22WF4-014 | Screw | 1 | |
| 35 | 50WF3-080 | Feed dog support | 1 | |
| 36 | 50WF3-083 | Screw | 2 | |
| 37 | 50WF3-081 | Fence | 1 | |
| 38 | 50WF3-082 | Screw | 4 | SM1/8" ×44 |
| 39 | 50WF3-089 | Screw | 1 | SM11/64" ×40 |
| 40 | 50WF3-087 | Feed dog support crank | 1 | |
| 41 | 50WF1-022 | Screw | 1 | SM15/64" ×28 |
| 42 | 50WF3-088 | Pin | 1 | |
| 43 | 50WF3-075 | Feed shaft bushing(front) | 1 | |
| 44 | 50WF3-024 | Nut | 2 | SM1/4" ×40 |
| 45 | 50WF3-078 | Feedshaft | 1 | |
| 46 | 50WF3-079 | Feed shaft collar | 1 | |
| 47 | 18227 | Screw | 2 | SM1/4" ×40 |
| 48 | 50WF3-076 | Feed shaft bushing(rear) | 1 | |
| 49 | 50WF1-019 | Screw | 1 | SM15/64" ×28 |
| 50 | 50WF3-048 | Screw | 1 | SM15/64" ×28 |
| 51 | 50WF3-067 | Connection rod | 1 | |
| 52 | 50WF3-060 | Feed regulator bushing | 1 | |
| 53 | 50WF4-040 | Felt retainer | 1 | |
| 54 | 50WF3-036 | Oil felt | 1 | |
| 55 | 50WF3-077 | Oil felt | 1 | |
| 56 | 50WF3-061 | Hinge pin | 1 | |
| 57 | 50WF3-064 | Reverse feed lever | 1 | |
| 58 | 50WF1-022 | Screw | 1 | SM15/64" ×28 |
| 59 | 1WF2-029 | Screw | 1 | SM15/64" ×28 |
| 60 | 50WF3-063 | Screw | 2 | SM3/16" ×32 |
| 61 | 1WF2-010 | Screw | 1 | SM1/4" ×40 |
| 62 | 50WF3-065 | Screw | 1 | SM1/4" ×40 |
| 63 | | Oil wick | 1 | |
| 64 | 50WF3-073 | Washer | 1 | |
| 65 | 22WF3-014 | Screw | 1 | SM9/64" ×40 |

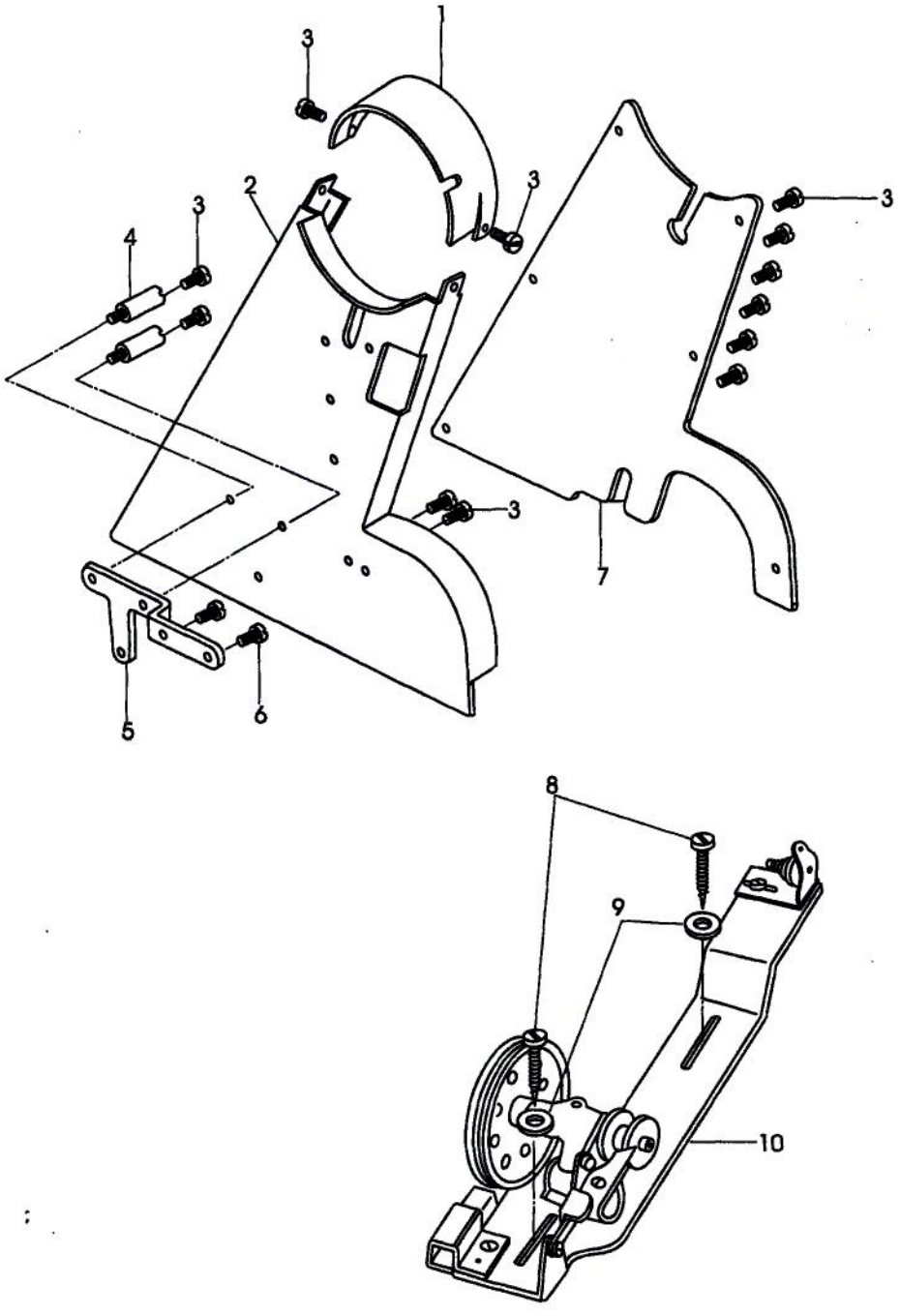
# 7.Thread thnsion components



# 7.Thread thnsion components

| Ref.NO. | Parts No. | Name of parts | Qty. | Remarks |
|---|---|---|---|---|
| 1 | 55WF2-035 | Thread tension controller assembly | 1 | |
| 2 | 1WF5-022 | Screw | 1 | SM11/64" ×40 |
| 3 | 50WF2-035A2 | Thread guide | 1 | |
| 4 | 50WF2-035A1 | First tension post | 1 | |
| 5 | 50WF2-035A4 | thread tension disc | 2 | |
| 6 | 50WF2-035A3 | Spring | 1 | |
| 7 | 50WF2-035A5 | Thread tension nut | 1 | |
| 8 | | Thread tension controller assembly | 1 | |
| 9 | 16WF2-047 | Thread tension release bar | 1 | |
| 10 | 16WF2-046A14 | Thread tension release lever | 1 | |
| 11 | 16WF2-046A15 | Hinge screw | 2 | |
| 12 | 16WF2-046A12 | Thread tension stud | 1 | |
| 13 | 16WF2-020 | Screw | 1 | SM11/64" ×32 |
| 14 | 50WF2-033 | Thread tension controller base | 1 | |
| 15 | 16WF2-046A13 | Thread release pin | 1 | |
| 16 | 16WF2-046A6 | Thrad tension cisc | 2 | |
| 17 | 16WF2-046A5 | Thread tension cisc | 1 | |
| 18 | 16WF2-046A4 | Tension spring | 1 | |
| 19 | 153029 | Stopper | 1 | |
| 20 | 16WF2-046A3 | Thread tension stud nut | 1 | SM11/64" ×32 |
| 21 | 16WF2-015 | Screw | 1 | |
| 22 | 16WF2-046A10 | Thread takee-up spring shaft | 1 | |
| 23 | 16WF2-046A7 | Thread take-up spring | 1 | |
| 24 | 16WF2-046A8 | Thread tension guide disc | 1 | |
| 25 | 16WF2-033 | Screw | 1 | SM11/64" ×32 |
| 26 | 16WF2-046A9 | Screw | 1 | SM1/8" ×44 |
| 27 | 16WF2-046A11 | Nut | 1 | |
| 28 | 16WF2-049 | Thread take-up spring fence | 1 | |
| 29 | 16WF2-050 | Fence setscrew | 1 | SM9/64" ×40 |

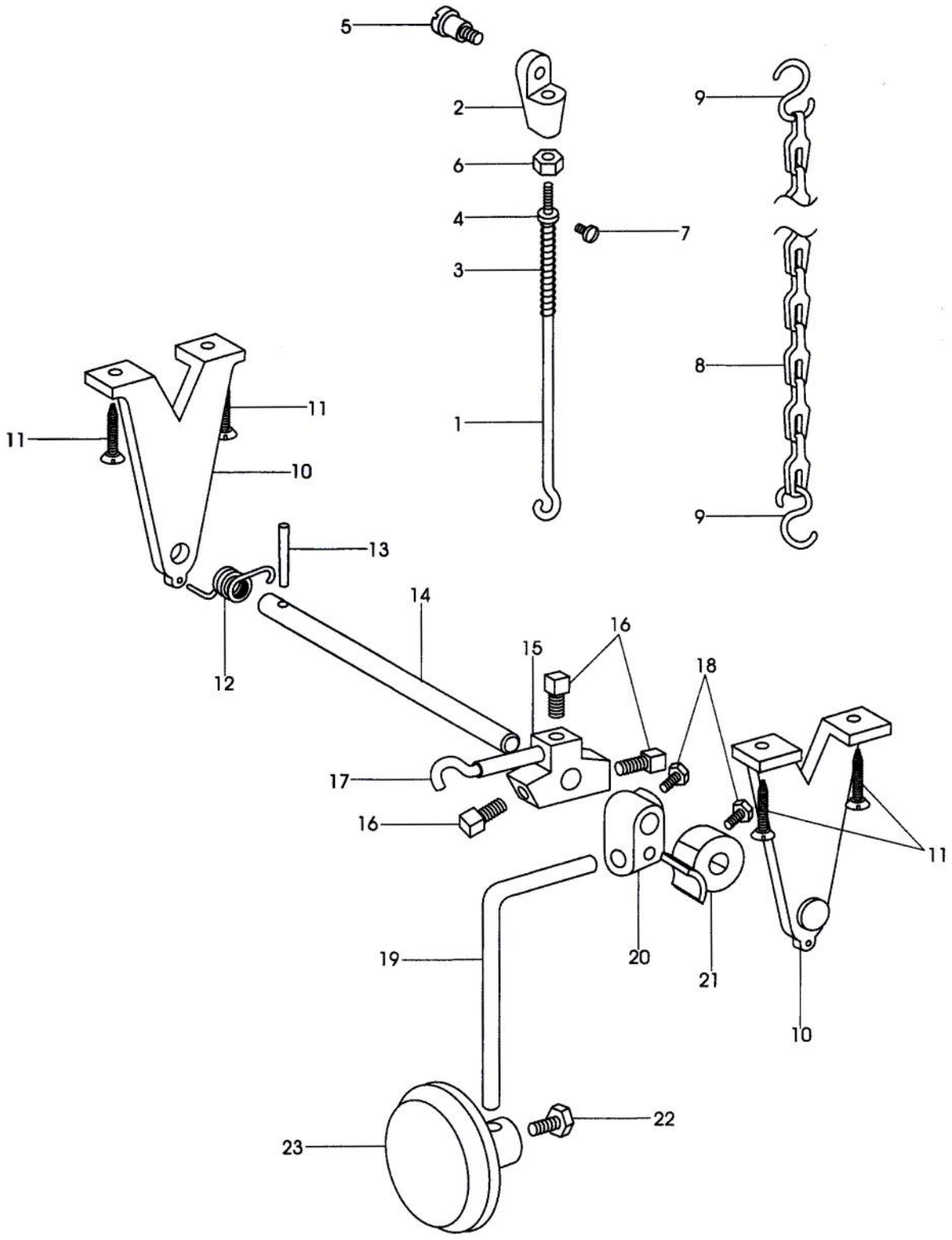
# 8.Belt cover and bobbin sinder components



# 8.Belt cover and bobbin winder components

| Ref.NO. | Parts No. | Name of parts | Qty. | Remarks |
|---|---|---|---|---|
| 1 | 50WF5-007 | Belt cover(3) | 1 | |
| 2 | 50WF5-005 | Belt cover(1) | 1 | |
| 3 | 40T2-202 | Screw | 12 | SM11/64" ×40 |
| 4 | 50WF5-009 | Support screw | 2 | |
| 5 | 50WF5-008 | Belt cover support plate | 1 | |
| 6 | 22T4-015 | Screw | 2 | SM11/64" ×40 |
| 7 | 50WF5-006 | Belt cover(2) | 1 | |
| 8 | 33TF-017 | Wooden screw | 2 | |
| 9 | 33TF-011 | Washer | 2 | |
| 10 | S14420020 | Bobbin winder assembly | 1 | |

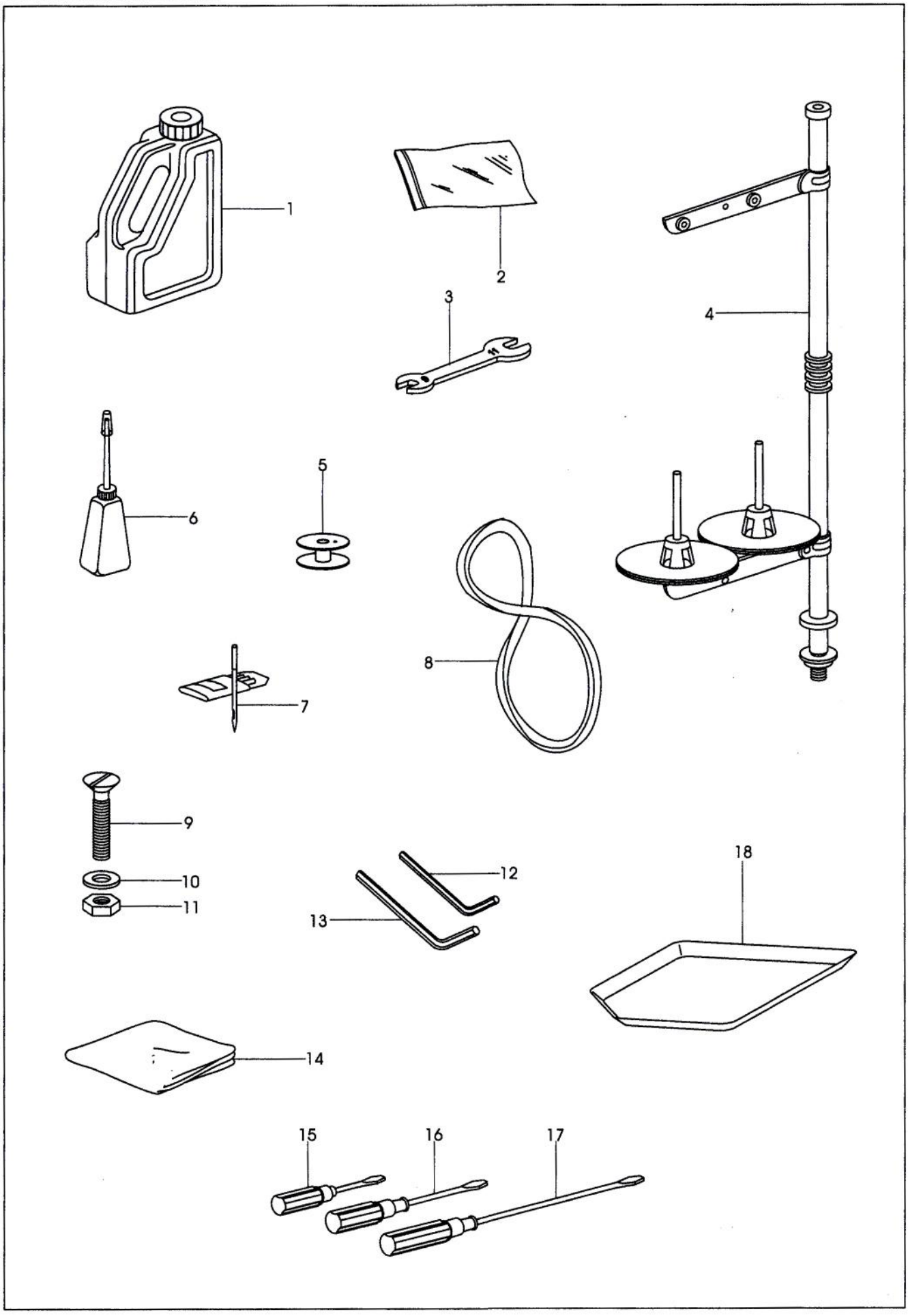
# 9.Knee lifter components



# 9.Knee lifter components

| Ref.NO. | Parts No. | Name of parts | Qty. | Remarks |
|---|---|---|---|---|
| 1 | 50WF4-020 | Hanging rod | 1 | |
| 2 | 50WF4-023 | Bar connection | 1 | |
| 3 | 50WF4-021 | Spring | 1 | |
| 4 | 50WF4-022 | Spring holdr | 1 | |
| 5 | 50WF4-024 | Hinge screw | 1 | |
| 6 | 50WF4-018 | Nut | 1 | |
| 7 | 36T5-008E5 | Screw | 1 | |
| 8 | 606082 | Chain | 1 | Length1000cm |
| 9 | | "S" shaped hook | 2 | |
| 10 | 33T5-005 | Knee lifter base | 2 | GB99-86 |
| 11 | | Wooden screw | 4 | GB9 ST5 × 8 |
| 12 | 33T5-006 | Spring | 1 | GB119-86 |
| 13 | | Pin | 1 | GB119 ϕ2 × 31 |
| 14 | 33T5-007B1 | Knee lifter shaft | 1 | |
| 15 | 50WF6-001 | Knee lifter crank | 1 | GB821-88 |
| 16 | | Set screw | 3 | GB821 M8 × 11 |
| 17 | 50WF6-002 | Knee lifter crank hook | 1 | GB821-88 |
| 18 | | Screw | 2 | GB821 M8 × 11 |
| 19 | 33T5-009 | Knee lifter plate rod | 1 | |
| 20 | 33T5-008 | Bracket | 1 | |
| 21 | 33T5-011E | Knee lifter adjustment bracket | 1 | GB5781-86- M6 × 10 |
| 22 | | Hexagonal screw | 1 | GB21 M6 × 10 |
| 23 | 33T5-010F | knee lifter press assembly | 1 | |

# 10.Accessories



# 10.Accessories

| Ref.NO. | Parts No. | Name of parts | Qty. | Remarks |
|---|---|---|---|---|
| 1 | 1F-009 | Oil box | 11 | |
| 2 | 33TF-010 | Parts bag | 1 | |
| 3 | | Wrench | 1 | |
| 4 | 4F-007 | Thread stand assembly | 6 | |
| 5 | 33T1-027 | Bobbin | 1 | |
| 6 | 33TF-011 | Oil pot | 5 | DP × 17 |
| 7 | | Needle | 1 | |
| 8 | | V-belt | 4 | M6 × 70 |
| 9 | 50WF5-010 | Screw | 4 | GB5287-856 |
| 10 | | Washer | 4 | GB41-85 M6 |
| 11 | | Nut | 1 | S=3 |
| 12 | | Hexagonal wrench 3 | 1 | S=4 |
| 13 | | Hexagonal wrench 4 | 1 | |
| 14 | 1F-013 | Machine cover | 1 | |
| 15 | 33TF-014 | Screw driver(small) | 1 | |
| 16 | 33TF-013 | Screw driver(milddle) | 1 | |
| 17 | 33TF-012 | Screw driver(big) | 1 | |
| 18 | 50WF5-011 | Oil pan | 1 | |
| 19 | 50WF2-017 | Thread guide pin | 1 | |
| 20 | 50WF2-018 | Locknut | 1 | SM3/16" × 32 |

□除调整线迹外，机器的调试及维修非专业人员请勿擅自操作。

□个别零件进行更改设计时，恕不另行通知。