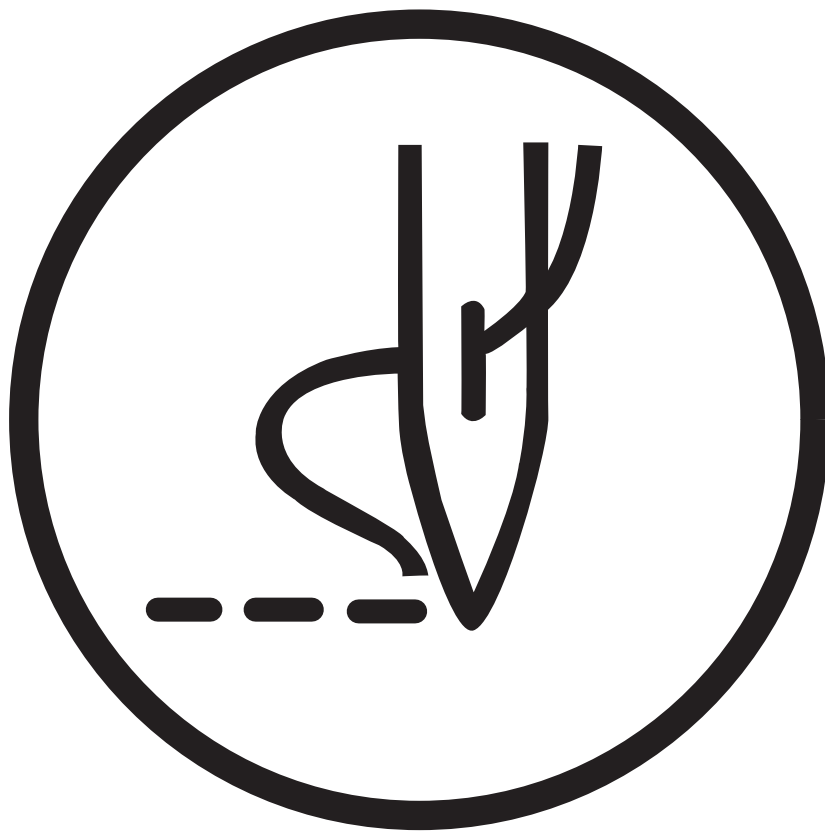


Instruction Manual & Parts Book

781-X



JAPSEW

Basic Pin Point Function



1. Choose Program 001



2. Press "SET"



3. Press "DOWN" to reduce pin point size



4. Press "UP" to increase pin point size



5. Press "RIGHT" to move the cursor for adjust gap size



6. Press "DOWN" to reduce gap size



7. Press “UP” to increase gap size



8. Press “ENTER” and result will come out

Programmable Stitch Pattern Function



1. Press "MODE"



2. Move cursor to the first column indicate "DISK"



3. Press "UP" to choose program number



4. Press "RIGHT" to move to next column setting number of stitch in the pattern cycle



5. Press "UP" to increase number of stitch in the pattern cycle



6. Press "ENTER" to confirm



7. Press “SET” to go to the next row



8. Press “LEFT” to move cursor to the left first column for stitch 01



9. Press “DOWN” to reduce size for the “First” stitch



10. Press “UP” increase size for the “First” stitch



11. Press “RIGHT” to move cursor to the right column for stitch 02



12. Press “DOWN” to reduce size for the “Second” stitch



13. Press “UP” to increase size for the “Second” stitch



14. Press “RIGHT” to move cursor to the right column for stitch 03



15. Press “DOWN” to reduce size for the “Third” stitch



16. Press “RIGHT” to move cursor to the right column for stitch 04,



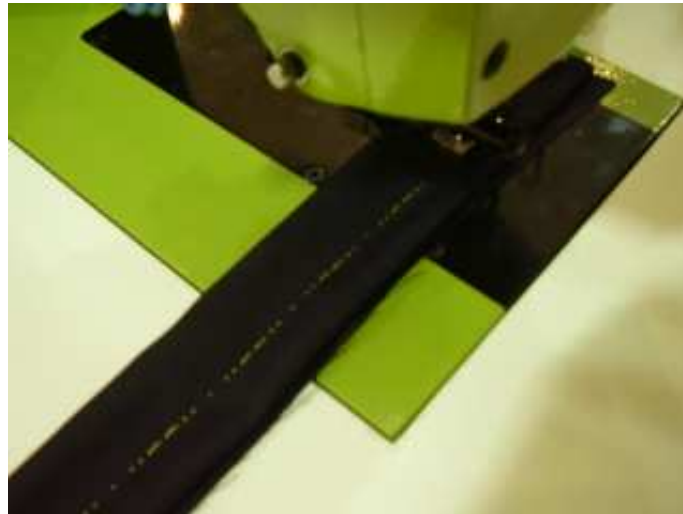
17. Press “DOWN” to reduce size for the “Fourth” stitch, ...



18. Press “UP” to increase size for the “Fourth” stitch,



19. Press “ENTER” to finish



20. New stitch pattern is being programmed

Auto Thread Trimmer Function



1. Press "MODE"



2. Press "RIGHT" to move cursor right



3. Press "RIGHT" again to move to the last column indicate "SICSSORS"



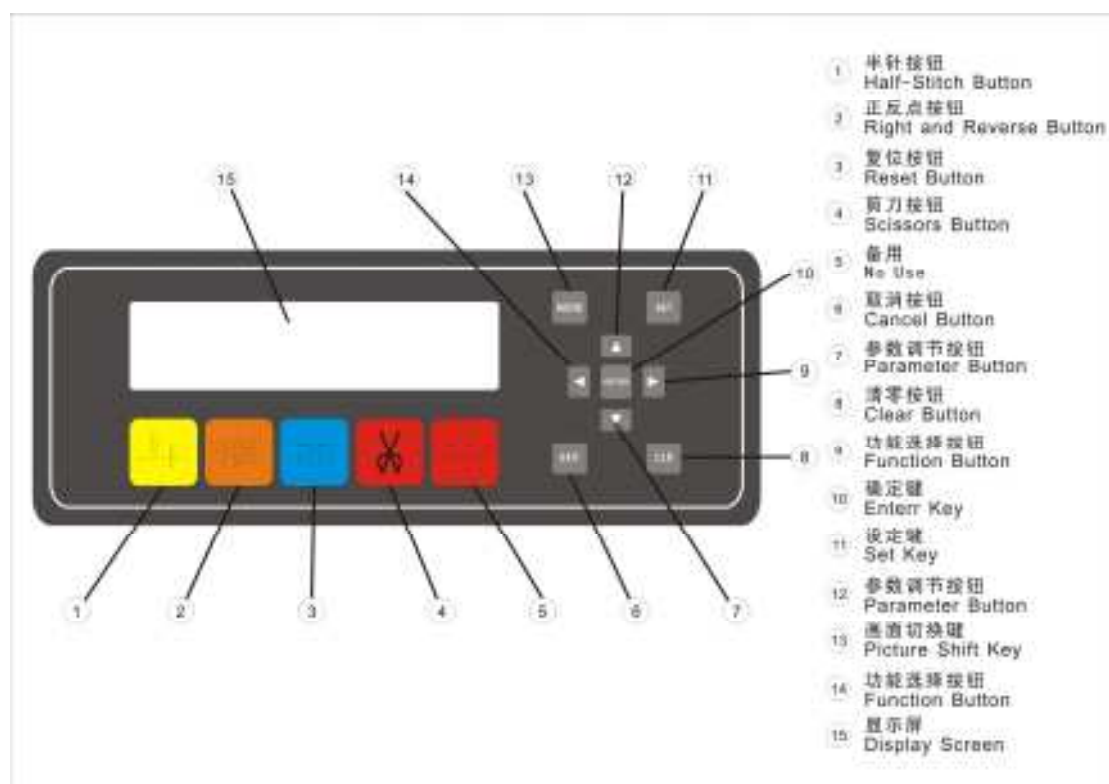
4. Press “DOWN” to decrease number of stitch before starting auto thread trimmer



5. Press “UP” to increase number of stitch before starting auto thread trimmer



6. Press “ENTER” to finish



781-X INSTRUCTION MANUAL

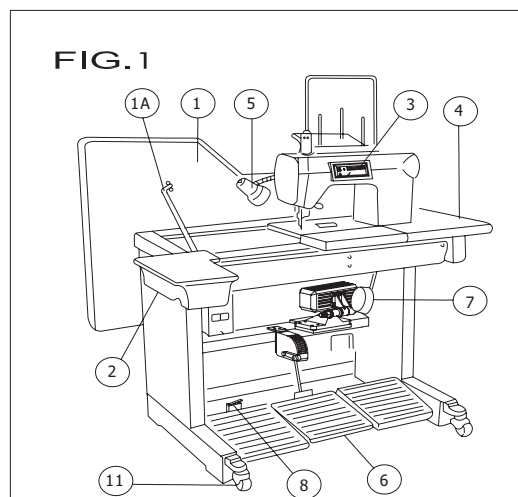
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I、 Main technical Specifications

Sewing Speed:	350~450 spm
Stitch Length:	0.1 mm – 6.5 mm.
Stitch Form:	Real Hand-Stitch
Thread Length:	120 cm
Needle Type:	780C
Needle Size:	14#, 16#, 18#, 20#, 23#.
Presser Foot Lift:	Knee or Pneumatic
Presser Foot Height:	8mm
Air Pressure:	6 psi
Lubrication:	Grease Lubrication
Dimensions:	128cm×96cm×86cm
Gross Weight:	270kg
Power Supply:	220v 1ph 50hz
Motor Power:	550 watt

II、 Installation of the machine

- 1、 Preparation Work:** After unpacked, assemble the accessories equipped in the machine such as roller caster wheels (4 PCS), thread stand, drawer and table. Regulate the 4 roller caster wheels to make the machine be level. (As shown in figure 1)

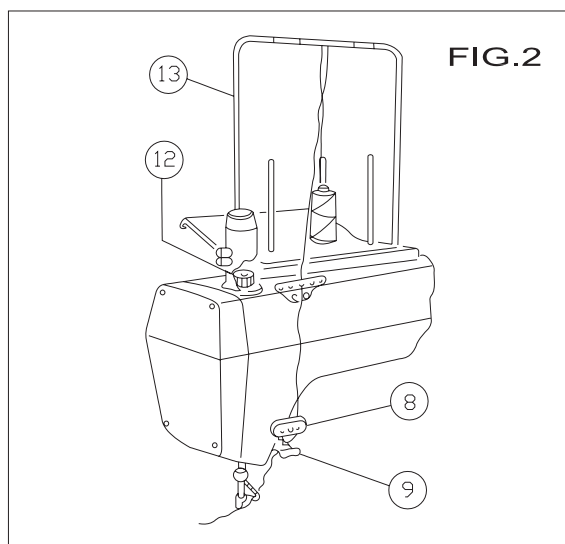


2、 Connect the air pump and power supply

Check the motor and make sure if the power supply is 380V or 220V. Select the power supply that is suitable for the machine. Get the machine powered, press the switch button and turn on work lamp. Connect the self-contained air pressure pipe to guarantee that the output air pressure of air compressor is 6psi.

3、Threading:

Put the tower thread onto the thread rack, and hold the thrum to thread it into the thread rack, thread-passing board, thread clamp, scissors, thread-passing hook, and pass it into the machine needle. The thread drawn out shouldn't exceed 120cm. (As shown in figure 2)



4、Trial operation:

Press the power switch, open the valve of air pipe, and check if the hand wheel rotates according to the direction indicated by the pointer, and check if the pressure is the standard value 4~6Pa. Use left hand to pull out the thread with not more than 120cm from the thread clamp, and use right hand to cover the thread at the end of thread clamp into the scissors and thread-passing hook. Reversely step on the pedal (6), pneumatically lift the needle-blocking seat (17) to make the looper show the hook mouth, and then cover the thread into the hook mouth, reset the pedal and close the needle-lifting cylinder. The blocking needle will reset to block the hook mouth and close the thread into the hook mouth of looper. Slightly step on the pedal forward, and the machine will run with low speed. With the increase of pressure on the pedal, the machine will work at the set maximum rotation speed. (As shown in figure 1)

Reset the pedal to the starting position and step on it reversely, under the effect of automatic needle-stopping motor, the machine will automatically stop the needle stem onto the highest position where the upper looper (46) lifts.

III、Operation of machine

1、Notes before the operation:

a. Check the needle type of machine, and select the matching thread. If it is necessary

to replace the needle, please select matching needle-blocking seat. (Refer to form A)
Form A

Needle Size	Needle Clamp	Maximum Thread Size
90#	1	80#
100#	2	60#
110#	3	40#
125#	4	20#
160#	5	15#



b. The thread length must be controlled with the range of 120cm.

c. If the thread quality is too bad, it may influence the sewing quality. It is suggested to adopt sewing thread with good quality from Germany, Japan. It's better to use polyester thread.

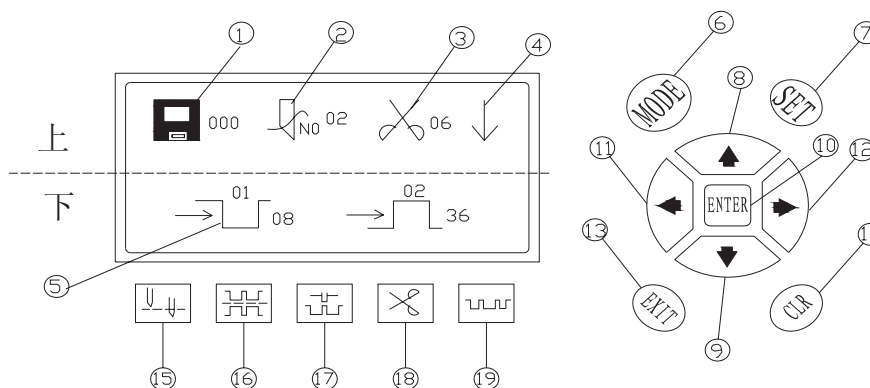
2、Operation steps and methods

Start the air pump and turn on the power supply. Put the right foot onto the pedal of machine. When the heel of the right foot steps on the pedal downwards, the blocking needle and presser will be lifted. At this time, put into clothes for sewing. Use left hand to pull out the thread not exceeding 120cm from the loosened thread clamp, and use right hand to cover the thread at the end of thread clamp into the scissors and thread-passing hook and hook mouth of needle in turn. Reset the pedal with the right foot and the blocking needle will reset to block the thread, and use left hand to throw away the thrum forward, and the right foot steps on the pedal forward, the machine will start its work.

When the clothes are sewn to the corner, reset the pedal. At this time, the needle will be in the sewing material. Observe the stitch, if the stitch is even, beautiful and appropriate, directly lift the presser to turn the corner. If the distance to the turning corner is only semi-stitch or the needle moves beyond the limit, inch the button on the displayer, the machine needle will stop at the highest position. Lift the presser to move the sewing material to your satisfactory position, prick the needle and turn the corner to sew.

When sewing the front fly of clothes, if it is required to change the stitch, inch the left switch (8) on the left pedal. (As shown in figure 1)

3、Operation instructions of display



1. Memory program number
2. Number of stitch pattern programmed for this memory
3. Number of stitch to initiate the automatic thread trimmer
4. First stitch up or down indicator
5. The length of this lower stitch
6. The length of this upper stitch
7. Set key
8. Parameter +
9. Parameter -
10. Enter key
11. Cursor move left key
12. Cursor move right key
13. Exit key
14. Clear key
15. Half stitch button (move needle up or down)
16. Inversion stitch button
17. Reverse knot button
18. Thread trimmer button
19. Pattern connect key

1. Memory program number shows the patterns that you set in before, when it is need, you just in put the pattern number and it will turn to the pattern you need. If you want to set a new pattern, please put in a new pattern number (the memory number is from 0 to 999)

Setting method: press upper setting button (6), the digits flash means it could be set. If it is not the right setting position, please press the select button(11) or (12) to the right position, then press parameter+(8) or parameter-(9), after you set the pattern number, please press the confirm button(9).

2. Number of stitch pattern programmed for this memory (2): it shows the needle

stitch number of the pattern you need, the setting number could be at (02-28), the setting method is the same as Pattern memory program.

3. Number of stitch to initiate the automatic thread trimmer: it means after several stitches the machine could be auto-cut, the number of stitches could be set at (0-10), the setting method is same as the method number 1.


Note: when using the function of automatic cut-trimmer, to make it take effect, the press foot should be firstly lifted.

4. First stitch up or down indicator (4): it shows the first stitch is on the up side, the key is on the up side, the first needle is on the down side, the key will be on the down side.

Note: it is regulated by the first stitch.

5. The length of this lower stitch

a)  It means the stitch pattern

b)  The digits upper of the pattern means the digits of the needle stitch, 01 means the first needle stitch.

c)  The digits beside the pattern 08 means the length of stitch, the digits is larger, the stitch is longer..

d) Setting method: press button (7), the flash digits of the stitch means the length of the stitch could be set. If you do not want the setting number, please select left select key (11) or right select button (12), then turn parameter+8 or parameter -9 to the right length you need, then press confirm key (10) for complete, the length could be set from 0 to 42.

e) If the number of pattern needle stitch is set more than 3 stitches, the back of the stitch pattern will show an "left arrow", it means the fourth stitch or more is not show, if you want to set the fourth stitch or more, please press right select key (12) for moving, then turn back to press left select key (11).

6. The length of this upper stitch (13): it means when you press the upper setting key or down setting key and do not want to set the parameter, press this key is ok.

7. Set key: If you want to set the digit to "0", please press top setting key or down setting key, press this key for resetting, then press confirm key (10) for conservation.

8. Parameter + (15): when the stitch turn to the corner, the needle is out of the fabric, please watch the stitch, if the stitch is perfect; please turn the foot-lifter directly. When it is left semi-stitch or advanced, please keep the needle at the top position, lift the foot-lifter to the right position, then sewing for several stitches, and then turn the corner for sewing.

9. Parameter - : when you need to change the stitch, please press this button or the button of left foot plate, then the stitch could be changed.

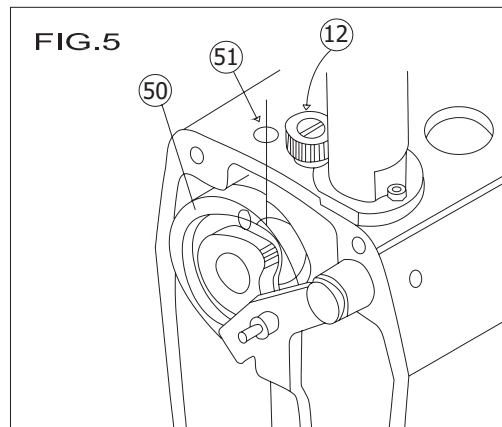
10. Enter key:

- a) First set up the foot-lifter, then press this button to operate the machine for knotting, the machine will not stopped automatically, it is suitable for knotting on the head of the thread.
- b) Press this button to set up the machine, after knotting, the machine could stop automatically, when it stop, if you still need to sew, please reset the motor foot plate till the machine can operate normally. If the sewing is finished, please tread the foot plate back, the fabric could be taken out, it is suitable for knotting on the back of the thread.
- c) Set the size of the knot, press this key for 4 seconds, the display screen will show the knotting pattern and number, press the upper setting key, then press parameter+ or parameter- to change the size, press confirm key for conservation, the size of the knot could be from 5 to 25.

11. Cursor move left key (19): it means the thread is used up when you are sewing, it needs to connect a new thread, please press this key, then find the original of the stitch for connection.

4. Regulation of presser foot

To stably carry out feeding at constant speed under different fabrics without damaging the fabric during the feeding, regulate the pressure of presser. Rotate pressure regulation bolt (12) clockwise, the pressure will increase, and conversely, the pressure will decrease. (As shown in figure 5)



IV. Regulation of machine

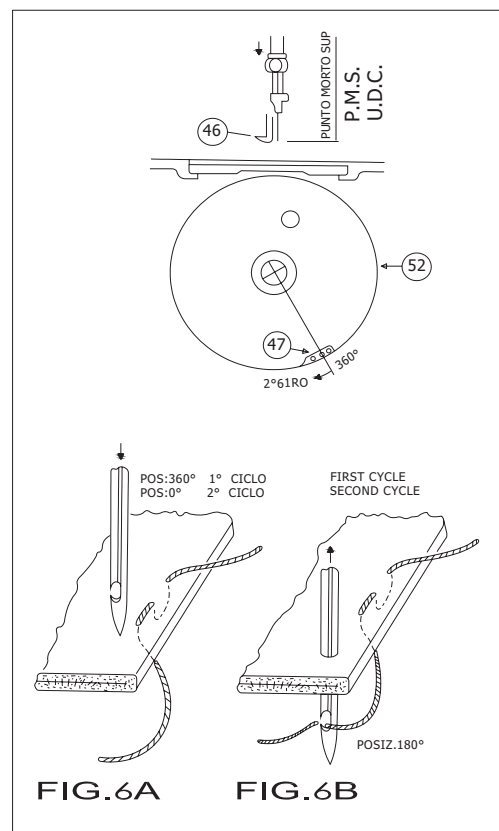
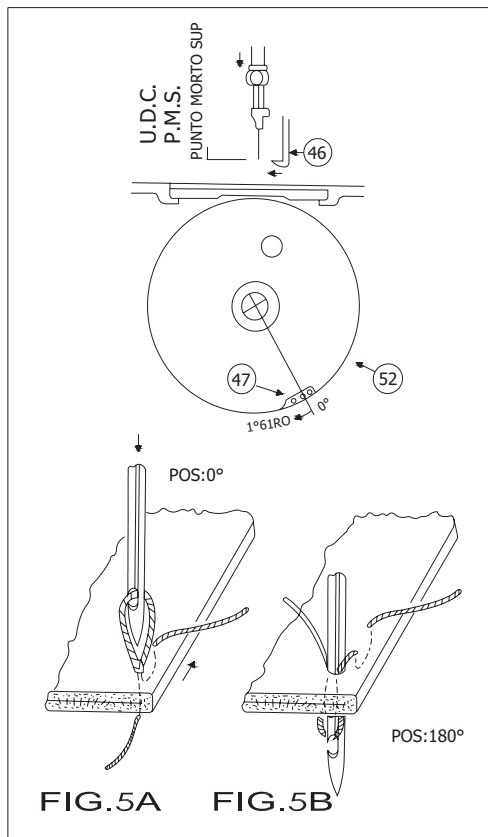
1. Work principle:

On the cloth, the machine will form a complete stitch, whose period consists of two work circulations:

The first work circulation is to complete the stitch at the top of the cloth. The second work circulation is to complete the stitch at the bottom of the cloth. The first work

circulation (As shown in figure 5A): We take the last process that the second work circulation turns to the first work circulation (The needle takes the thread to leave the fabric to lift to the highest position, and the cloth-feeding teeth start to feed the cloth) as the basic 0 degree, that is, the starting point of the first work circulation. The needle takes the thread to lift to the highest position and move downward from the highest position, the upper looper (46) will hook the thread at the top of the needle to lift forward, and the needle will take the thread to prick into the sewing material. At this time, the machine has run for 180 degree. (As shown in figure 5B) The needle takes the thread to descend to the lowest position and then ascends, and loop is formed on the needle. The loop is hooked by the rotary hook needle (47) and leaves the needle mouth. The needle leaves the fabric without taking the thread. At the same time, the upper looper (46) stops at the position behind the needle. At this time, the machine has run for 360 degree, that is, the first work circulation has finished. (As shown in figure 6A)

The second work circulation: The needle moves downward from the highest position without taking the thread, and the upper looper is still at the brake position behind the needle. When the needle ascend upward from the lowest position without taking the thread (As shown in figure 6B), the lower thread loader will feed the sewing thread into the hook mouth of needle. The needle will take the thread to ascend and leave the fabric. At this time, the machine has run for 720 degree. The second work circulation has finished.



After the two work circulations are finished, the operation process of needle stem, upper looper (46) and rotary hook needle is as follows:

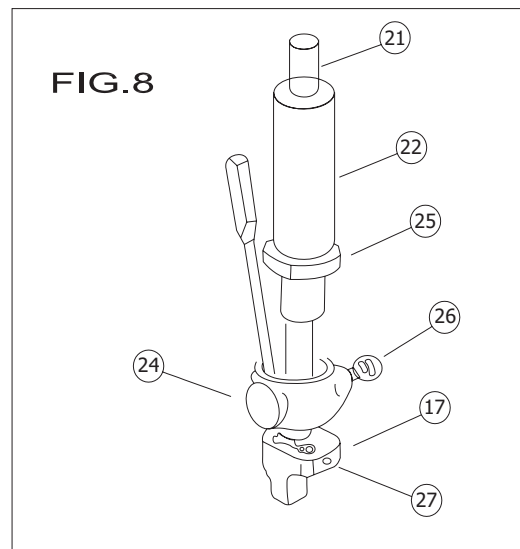
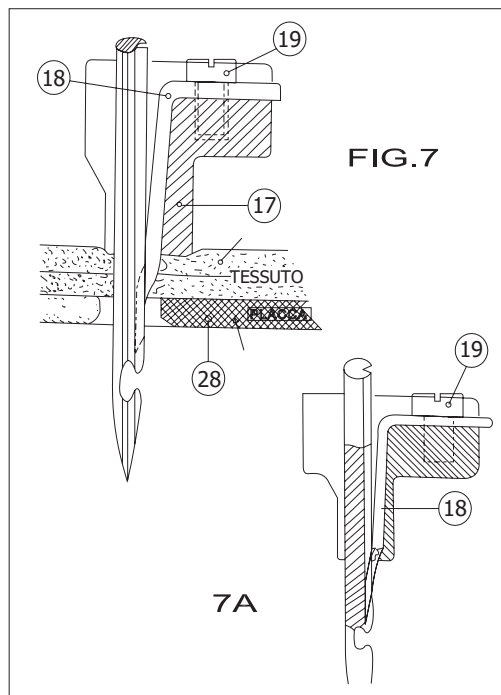
A. The blocking needle has made twice open and close actions.

B. The upper looper (46) has made once front-back hooking action.

C. The rotary hook needle (47) has rotated for 720 degree. (Two circles)

2. Installation and regulation of blocking needle

Dismantle the needle-blocking seat (17), and remove the needle. Select new blocking needle (18) to install it on the needle-blocking seat (17). Fix the matching Needle onto the needle stem (22) with needle-fixing cover (24). (As shown in figure 7 and figure 8) On the needle-blocking seat (17), use screw (19) to fasten the blocking needle (18) (As shown in figure 7A), install the needle-blocking seat (17) onto the small needle stem (21), and the sticking force of tip of blocking needle and machine needle shall be guaranteed to be as small as possible. Check if the fastening screw on the needle-blocking seat is locked, check if the movement of needle-blocking seat along the needle is flexible and stable, and check if it is straight-line movement.

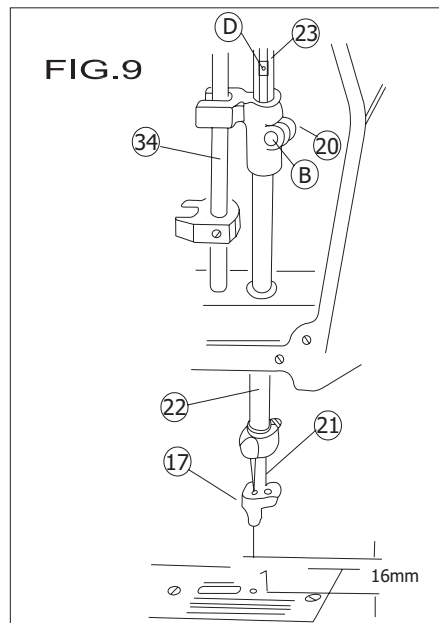


3. Installation of needle stem and regulation of height

Check the sliding status of the small needle stem (21) in the needle stem (22). Regulate the sliding block (23) to make the small needle stem (21) be under the flexible and best status at the sliding place of the needle stem (22).

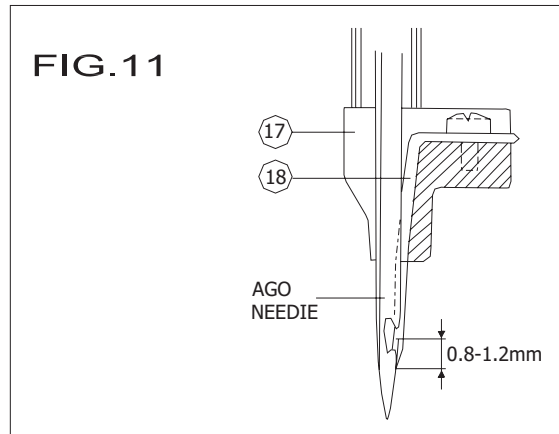
Install the machine needle and blocking needle on the needle stem in turn. Note that the top of the needle must contact the stopper (25). After fastening the machine needle by screwing down the screw (26), loosen the screw (B) at the transmission joint of needle stem, and rotate the needle stem to make the screw (26) point to the right side. And the hook mouth of the needle shall face the operator. The needle tip shall be aligned with the center of plate hole. Rotate the hand wheel to make the transmission joint (20) of the needle stem reach the highest position. Regulate the height of needle stem to make the distance between the needle tip and needle plate be 16mm. When locking the screw (B) at the transmission joint of needle stem, please be careful to avoid transforming the inside small needle stem. When the needle stem reaches the lowest position, rotate the basic hole (45) of large disc to make it be at the central line of the machine needle. (As shown in figure 9)

Check if the fastening screws (26), (27), (B) and (D) are firmly fastened. Check if the movement of needle stem has any obstacle, and check if the needle tip moves along straight line.

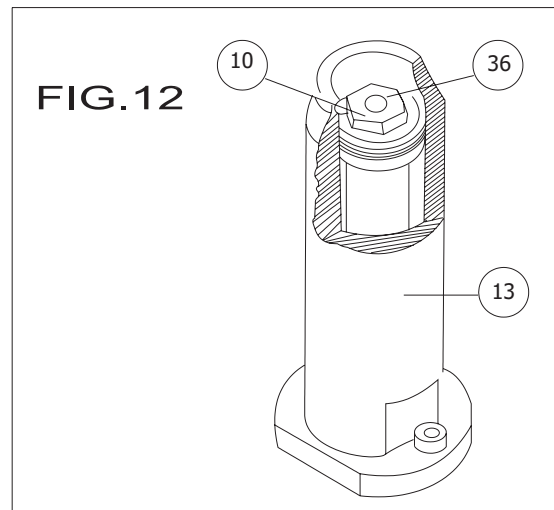


4. Regulation of height of blocking needle

The position of blocking needle is closely associated with the machine needle, and it depends on the position of needle. When the needle stem is at the highest position, the blocking needle shall block the hook mouth of machine needle, and shall exceed the hook mouth for 0.8~1.2mm. (As shown in figure 11)

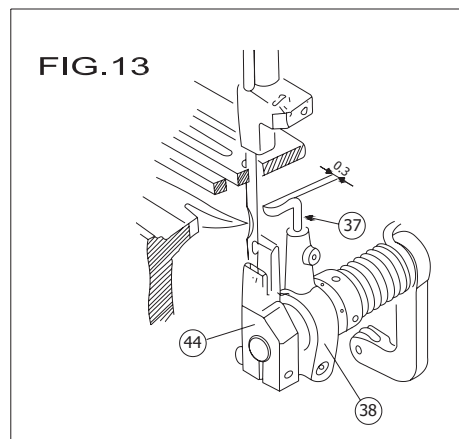


Rotate the screw cap (10) to regulate the height of blocking needle. Rotate clockwise, The blocking needle will ascend; rotate counterclockwise, the blocking needle will descend. After the regulation, fasten the screw (36). (As shown in figure 12)

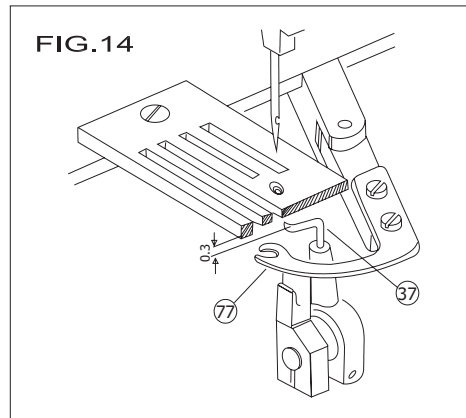


5. Regulation of lower feeding hook

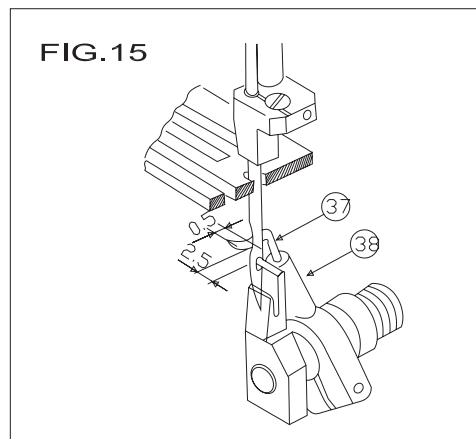
Install the lower feeding hook (37) to make its tip stretch out of its own shaft for about 0.3mm. (As shown in figure 13)



Rotate the hand wheel to make the highest position of lower feeding hook (37) be vertical to the bottom of needle plate. Regulate the distance between them to be 0.3mm. (As shown in figure 14)

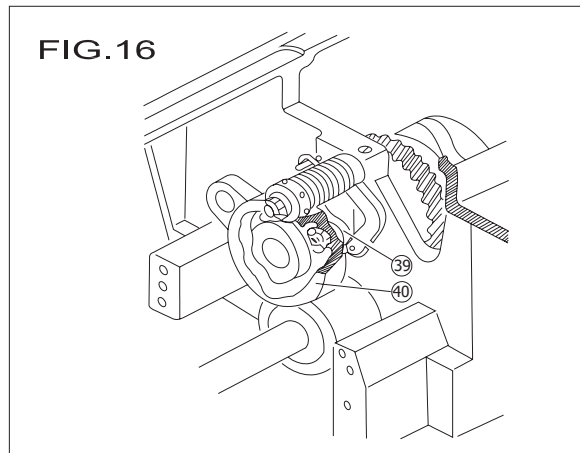


Rotate the hand wheel to make the lower feeding hook behind the needle reach the end of its stroke. Regulate the seat of lower feeding hook (38) to make the back end of lower feeding hook have a distance of 2.5mm with the machine needle, and the left outside part at its front end be out of 0.3mm to the left of machine needle. (As shown in figure 15)

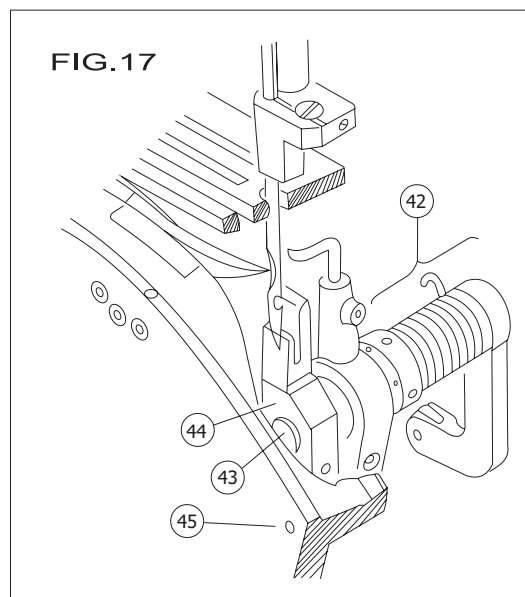


The matching movement of the lower feeding hook (37) and the needle stem is: The machine needle moves downward to the height of tip of lower feeding hook, and the lower feeding hook behind the needle reach the end of its stroke.

The cam (39) that controls the movement of lower feeding hook and the cam (40) that controls the thread clamp shall contact. (As shown in figure 16)

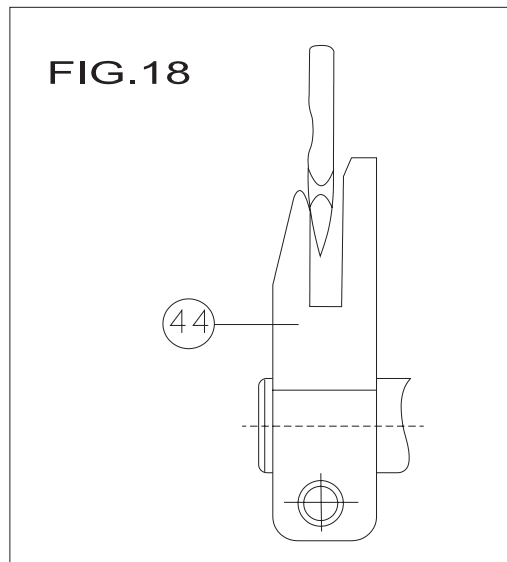


Check if the axial movement interval of the cam rocker of lower feeding hook (42) is large. If Push the axial bolt (43) to the direction of machine support, which can remove the interval. Pay attention to ensure the flexibility of rocker. (As shown in figure 17)



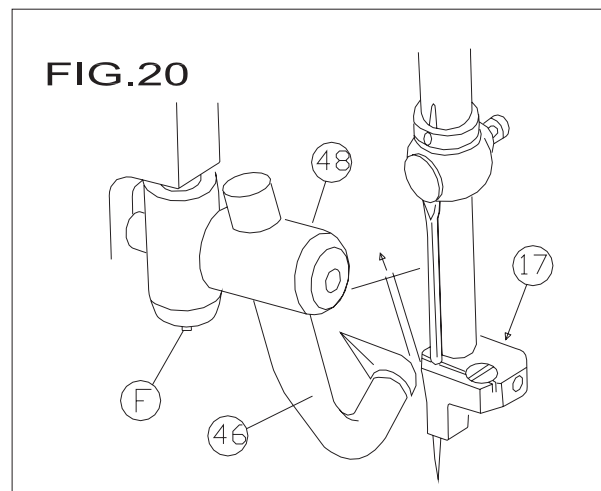
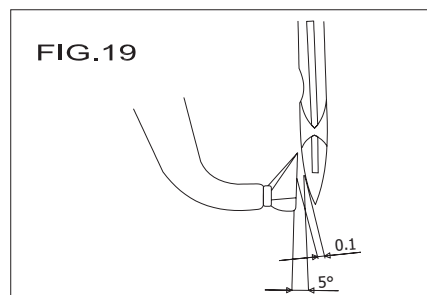
6. Regulation of needle protection head

The effect of needle protection head is to prevent bending the needle during sewing thick material (As shown in figure 18). The needle shall contact the internal side of short teeth of the needle protection head. When the machine needle ascends to 2mm from the lowest position, it still contacts the needle protection head. When the needle ascends to 3mm, it will leave the needle protection head. After the regulation, check if the fastening screws of needle protection head is fastened.



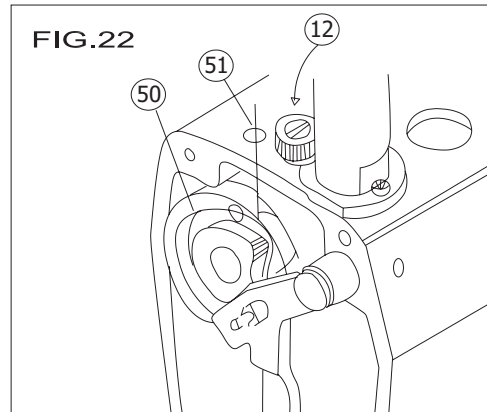
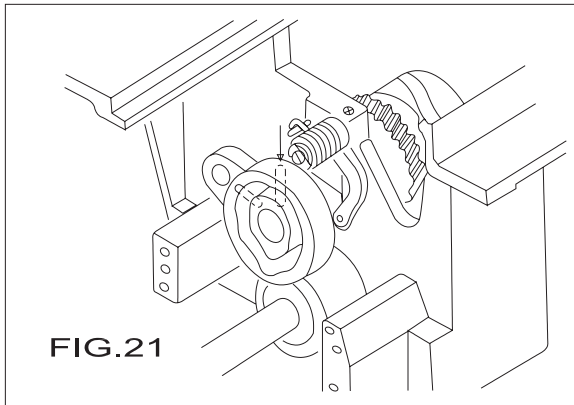
7. Regulation of upper looper

Install the upper looper (46) to make the hook tip keep a height of 16.3mm with the needle plate. To avoid the needle being broken and the screw (F) being loosened during the return stroke, rotate the seat of upper looper (48) to make 5 degree bevel between the looper and the machine needle. (As shown in figure 19 and figure 20)



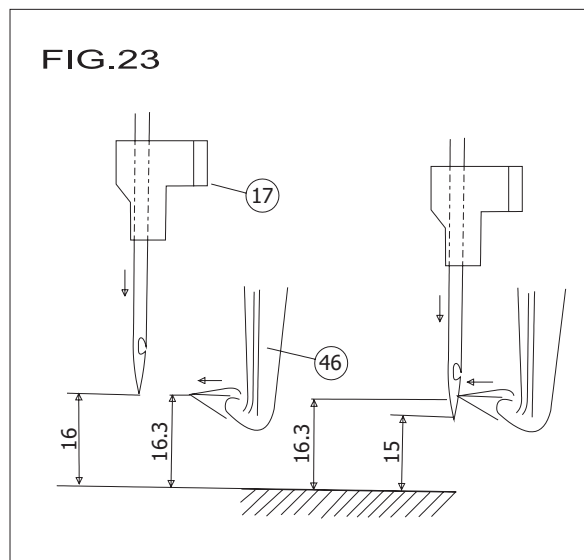
In figure 6A, when the needle stem is at the starting point of the second circulation (The needle leaves the fabric and moves upward without taking the thread), the second screw of the cam of thread clamp (40) (Judge the position of the second screw according to the rotation direction of the cam at 40 degree) is vertically upward, and the second screw of the cam of upper looper (50) is also upward, and is in line with the hole (51). Rotate the hand wheel, when the first screw of the cam of thread clamp (40) is vertically upward, the first screw of the cam of upper looper (50) is also upward, at this time, the position of needle stem is at the first circulation at 180 degree. That is, the needle takes the thread to prick into the cloth.

As shown in figure 21 and figure 22, at this position, first fasten the screws of cam (40) and cam (50), and make preparations for the synchronization regulation.



Rotate the hand wheel, put the needle stem at the first circulation position, and the needle stem will descend for 1mm from the highest position (As shown in figure 23). At this time, the upper looper will move forward and the tip of hook needle has reached the central line of the machine needle, and is 1mm higher than the tip of machine needle. If the position is not accurate, regulate the cam (50) until it is accurate.

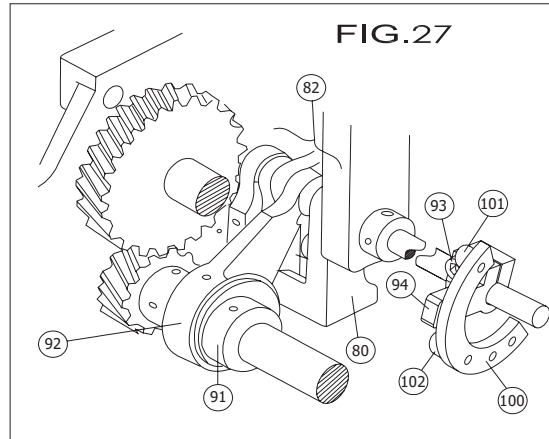
Check if the screws of the cam of upper looper (50) are fastened. Check if the front-back movement of upper looper is stable and flexible.



8. Regulation of lower cloth-feeding teeth transmission mechanism

A. As shown in figure 25, first ensure that the machine needle is vertical to the needle plate (28), and then align the needle hole on the needle plate with the machine needle. Put the lower cloth-feeding teeth onto the center of needle plate. Regulate the frame of lower cloth-feeding teeth (86) and eccentric wheel for lifting teeth frame (83), and guarantee that the movements trace of cloth-feeding teeth will not deviate from the center or collide with the needle plate.

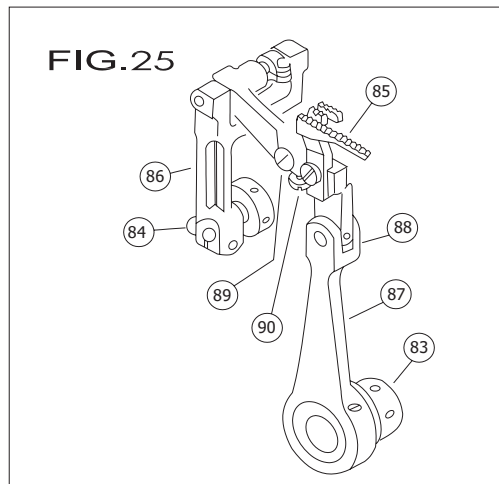
B. Wrench the roller frame (80) towards the side of gear and make the cloth-feeding teeth walk to the maximum without colliding with the needle plate. Then adjust the limit crank (94) to upper stop block (101) and fasten set screw (93). (As shown in figure 27)



C. Positioning of eccentric wheel for cloth-feeding (91), as shown in figure 27.

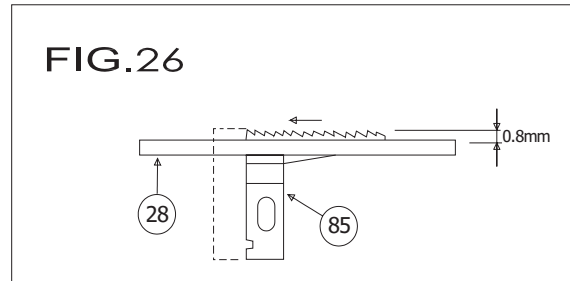
First regulate the eccentric wheel for lifting lower teeth frame (83) to make the lower cloth-feeding teeth be at the highest position on the needle plate (28). Rotate the hand wheel, when the needle stem is at the highest position, the lower cloth-feeding teeth (85) have moved half of the whole stroke. At this time, make marks on the needle plate (28) for the front position of the lower cloth-feeding teeth (85), continue to rotate the hand wheel. When the needle stem is at the lowest position, the lower cloth-feeding teeth have returned to the half position of the whole stroke from the terminal. At this time, the front position of lower cloth-feeding teeth (85) will coincide with the mark line on the needle plate (28). After regulation for several times, the above requirements are satisfied, fasten the screw of eccentric wheel for cloth-feeding (91).

D. Rotate the hand wheel to make the cloth-feeding teeth (85) be at the highest position on the needle plate. Regulate screws (88) and (89) to make the cloth-feeding teeth be parallel with the needle plate. (As shown in figure 25)



According to the following two conditions, check if the movement of cloth-feeding teeth is correct:

① When the needle stem is at the highest position, the height of the lower cloth-feeding teeth on the needle plate shall be 0.8mm. (As shown in figure 26).

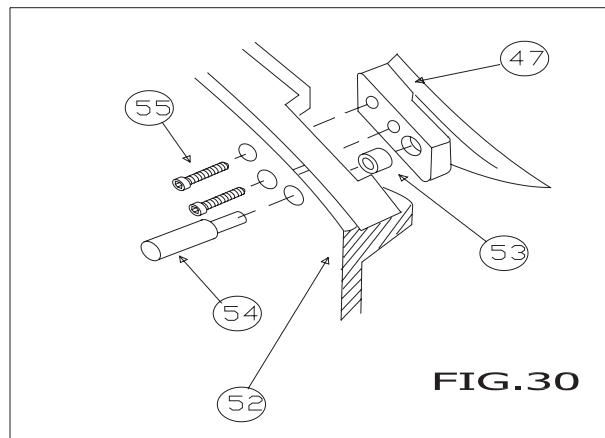


② When the lower cloth-feeding teeth start to ascend to be parallel with the needle plate or when the lower cloth-feeding teeth start to descend to be parallel with the needle plate, the height from the needle tip to the needle plate shall be the same.

If the movement of the cloth-feeding teeth can't meet the above requirements, through

9. Regulation of lower rotary hook needle

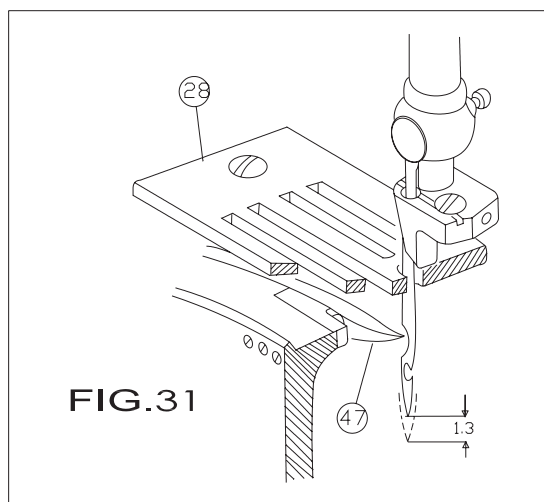
① Dismantle the thread disc (52) and fastening disc. Make sure that the spindle has no interval. Remove the rotary hook needle (47), remove the pin (54), clean the burr and scratch on the bearing (53) and hook needle (47), and polish the thread-passing surface of them. (As shown in figure 30) It is suggested to use 0# polishing sandpaper.



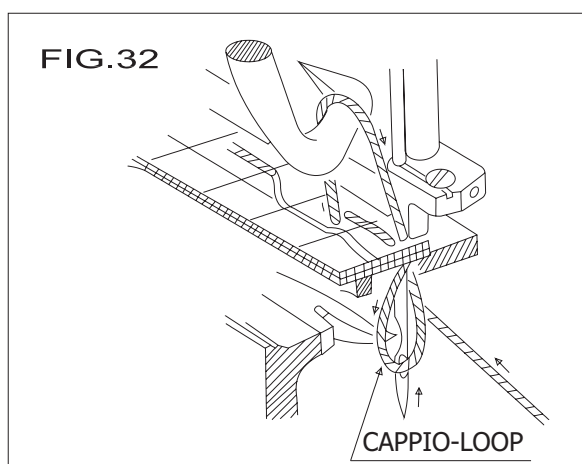
② Check if the rotation of the bearing (53) along the thread direction is flexible. Check if the thread-passing point of fastening disc is smooth. Clean the residuals inside the thread slot.

③ When the needle stem is fastened at the lowest position, move the thread disc (52) and make the basic hole (45) of thread disc (52) be aligned with the central line of the

corresponding machine needle. (Figure 17) Rotate the hand wheel along the working direction, when the needle stem ascend for 1.3mm, the rotary hook needle (47) will reach the central line of the machine needle at the same time. (Figure 31), and it is in the center of concave of the needle.

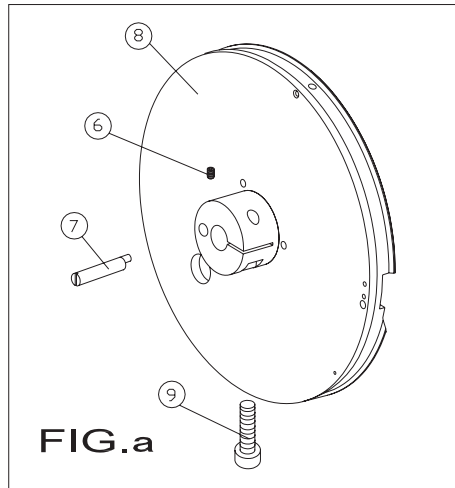


When the needle stem exceeds the position, the thread will form a loop and cause skipped stitch. (As shown in figure 32)



④ When the rotary hook needle (47) reaches the front of the center of machine needle, the needle protection block must protect the machine needle. The interval between the rotary hook needle and the machine needle shall be 0~0.05mm.

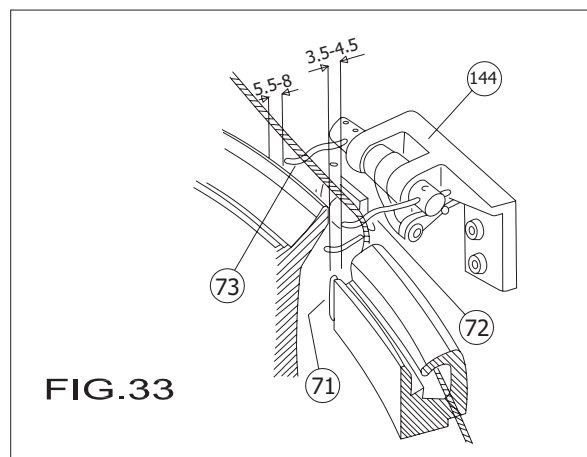
⑤ When sewing different materials, the machine may have broken thread or skipped stitch etc. Malfunctions. Just regulate the thread hooking time of the thread disc. (As shown in figure a) Loosen the hexagon screws (9) and (6), rotate the eccentric pin



(7) With slotted screwdriver, the thread disc will make front-back rotation along its circle and change the thread hooking time. For example, if want to delay the time, just regulate to that when the needle ascends for 1.5mm from the lowest position, the tip of rotary hook needle will reach the central line of the machine needle.

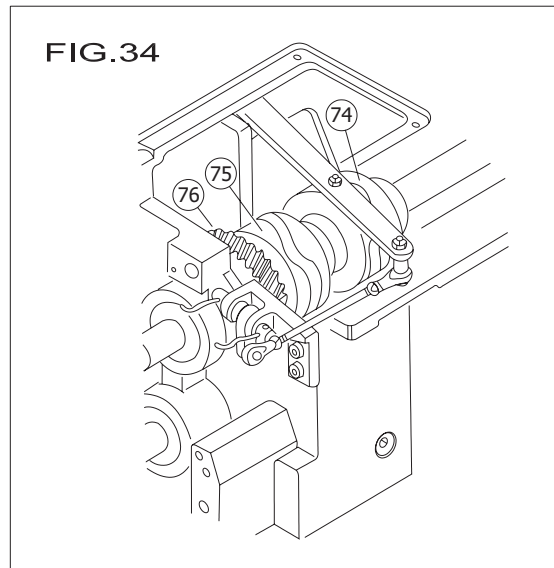
10. Regulation of lower thread lifter

To differentiate the two thread lifters, we call the one that is near to the operator as front thread lifter (72), and the other one that is near to the needle as back thread lifter (73). The distance between the front thread lifter and the side of the lower thread disc (52) is 3.5~4.5mm, and the distance between the back thread lifter and the side of the lower thread disc (52) is 5.5~8mm. The thread lifter support (144) shall be assembled so that the two thread lifters can reach the side of thread disc (52) simultaneously. (As shown in figure 33)



The coordination position of (72), (73) thread lifters and upper looper (46) is: At the first work circulation, when the two thread lifters (72), (73) are at the lowest position, the

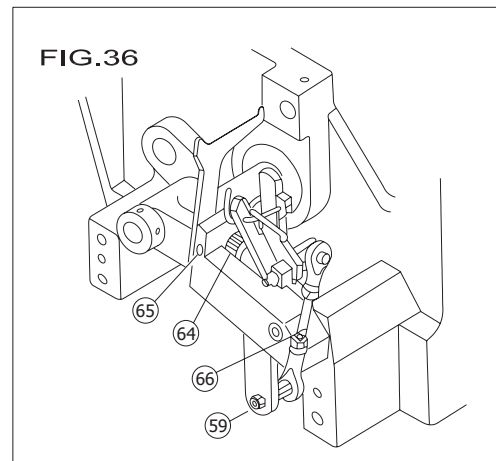
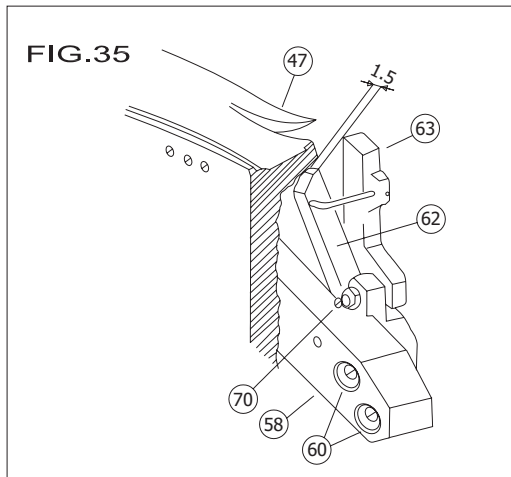
upper looper (46) just reaches the central line of machine needle. Regulate the cam (74) to meet the above requirements. (As shown in figure 34)



Move the shaft of thread lifter to make the distance between the front thread lifter and the small piece (71) be 3.5mm. (As shown in figure 33)

11. Regulation of lower thread clamp

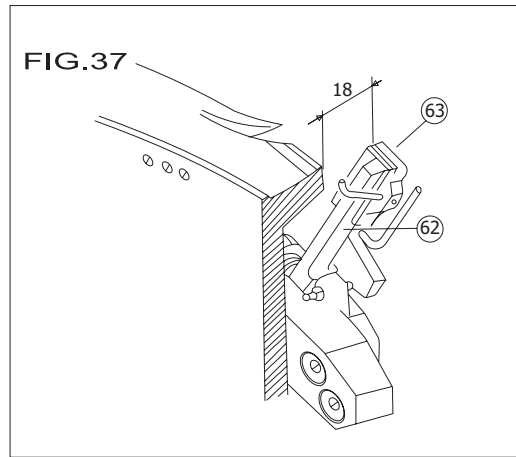
Remove the lower thread disc (52) (Figures 35 and 36), remove the screw cap (59) and screw (60), the clamp can be taken off.



For the pressure regulation of the thread clamp boards (62), (63), loosen the screw (65) and rotate the knurled nut (64) to regulate the pressure of thread clamp boards. (As shown in figure 36)

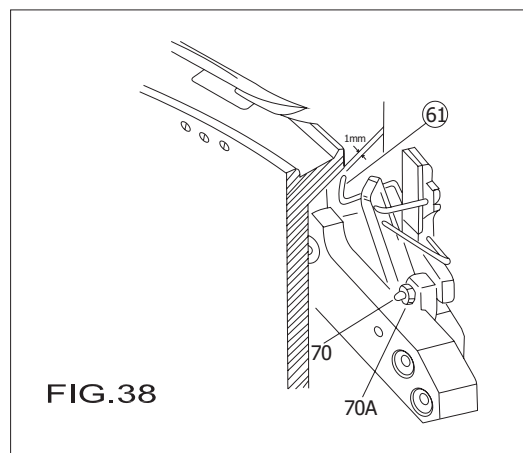
The pressure of thread clamps (62), (63) shall be higher than that of the steel-wire hook (61). To maintain the relation, check their reset status under the effect of torsion spring. Regulate to the required minimum pressure, with rapid and reliable reset pressure.

Rotate the machine by hand to make the closed thread clamp reach its horizontal terminal to the right. The distance between the right edge of lower thread disc (52) and the center of closed thread clamp shall be 18mm. Regulate the two ends of connection rod (66) to change the distance. (As shown in figures 36 and 37)



Regulate the steel-wire hook (61) to make the distance between its top and the internal wall of the thread disc be 1mm. (Figure 38) The coordination relation between the thread clamps (62), (63) and the upper looper (46) is:

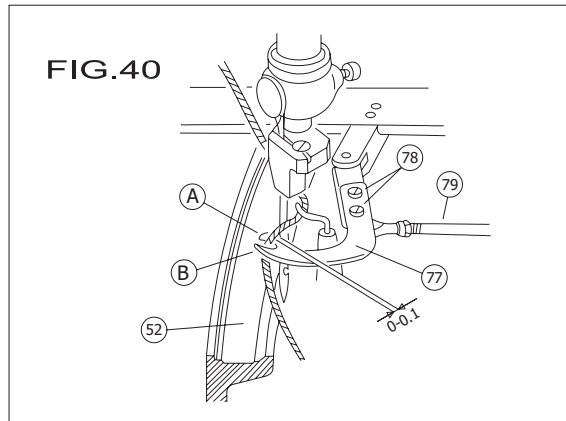
At the first work circulation, the end of the upper looper reaches the center of needle, and at the same time, the thread clamp is closed again, and then, it immediately opens. At this time, the position is the best, and the opening distance of the thread clamp is 1.5mm. Loosen the fastening screw (70A), and regulate the screw (70) to the satisfactory position. (As shown in figure 38)



12. Regulation of lower thread loader mechanism

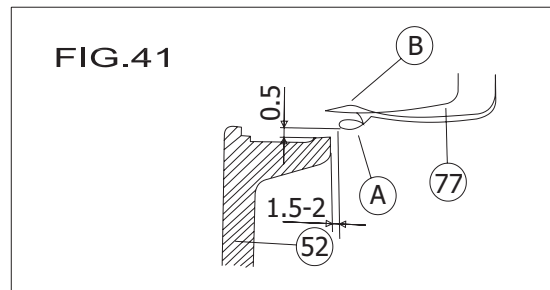
The main action of the lower thread loader (77) is to load thread for the machine needle. (As shown in figure 40) When its front right part A is close to the needle, it can contact the needle, but it is not permitted to collide with the needle.

Loosen the two screws (78), move the lower thread loader on the connection board of lower thread loader to regulate its position. (Figure 40)

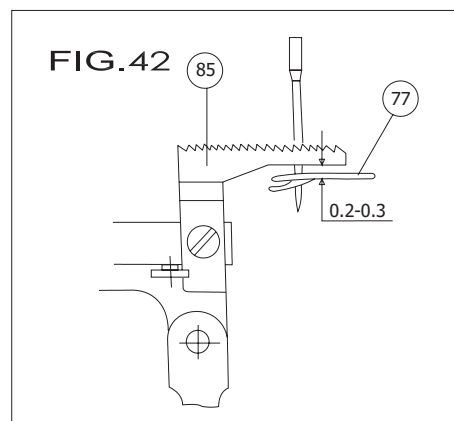


When the lower thread loader returns to the terminal at the right, the distance between the front right part A of the thread loader and the right edge of the thread disc (52) shall be 1.5mm~2mm. (As shown in figure 41) Regulate the connection rod (79) to reach the accurate distance.

The height between the lower thread loader and the lower thread disc shall be 0.5mm, which can be regulated through wrenching the lower thread loader. (As shown in figure 41)



The interval between the lower thread loader and the lower thread-feeding teeth is 0.2~0.3mm. (As shown in figure 42)



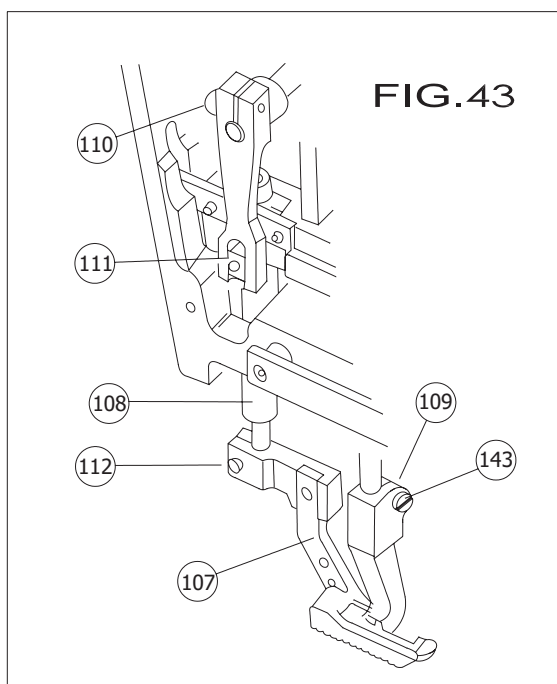
Rotate the hand wheel to make the machine needle reach the lowest point at the second circulation.

Rotate the cam (75). When the lower thread loader starts to load thread for the machine needle, slightly lock the cam (75). Rotate the hand wheel to make sure that the thread on the thread loader is about 3mm on the hook mouth of the machine needle. Then fasten the cam (75). (As shown in figure 34)

13. Regulation of upper cloth-feeding mechanism

At the first circulation of the machine, when the lower cloth-feeding teeth are lower than the needle plate, install the upper cloth-feeding teeth (107) and presser foot (109) (As shown in figure 43). Loosen the screw (112), regulate the upper cloth-feeding teeth to align them with the needle plate slot and make them be parallel with it.

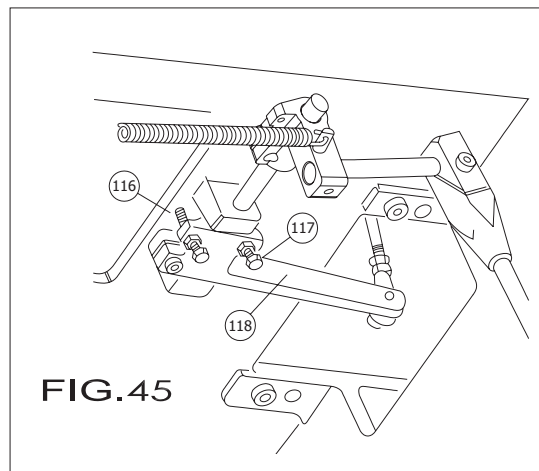
Rotate the hand wheel to make the lower cloth-feeding teeth be at the lowest position. Check if there is any interval on the combination surface of the presser foot (109) and needle plate. If there is, trim and seal them. Check if the distance between the upper cloth-feeding teeth and needle plate is same as that between the lower cloth-feeding teeth and needle plate. Loosen the screw (143) and move the presser foot up and down to regulate the distance. (As shown in figure43)



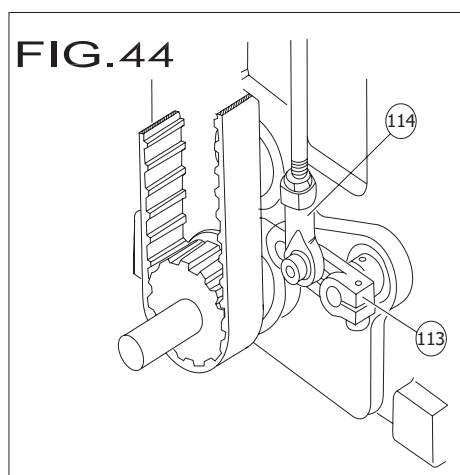
Rotate the hand wheel to check the engagement status of the upper cloth-feeding teeth and lower cloth-feeding teeth. Regulate the stitch to the longest and check if there is any collision of the upper cloth-feeding teeth. If there is, loosen the screw (110) to regulate the position of rocker and eliminate the collision. Note that the tip of upper cloth-feeding teeth shall be engaged in the root of the lower cloth-feeding teeth, and they shall be parallel.

Regulate the lifting eccentric wheel for upper cloth-feeding teeth to make the upper cloth-feeding teeth drop onto the lower cloth-feeding teeth when they protrude from the needle plate. At this time, fasten the screw of the lifting eccentric wheel for upper cloth-feeding teeth, and the eccentric wheel shall be in line with the connection rod.

Rotate the hand wheel, when the upper looper (46) reaches the vertical line of the presser foot at the first circulation; sway the right knee to lift the presser foot to the highest position. At this time, the upper looper contacts the presser foot (109), and under such position, please regulate the screws (116) and (117). (As shown in figure 45)



As shown in figure 44, move the round knurl (114) to regulate the movement of upper cloth-feeding teeth, and realize the synchronous movement of the upper and lower cloth-feeding teeth.

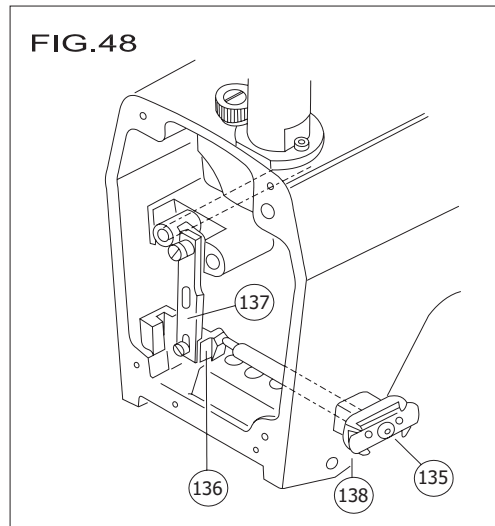


14. Regulation of upper thread clamp

The action of the upper thread clamp is to make the thread free from the influence of

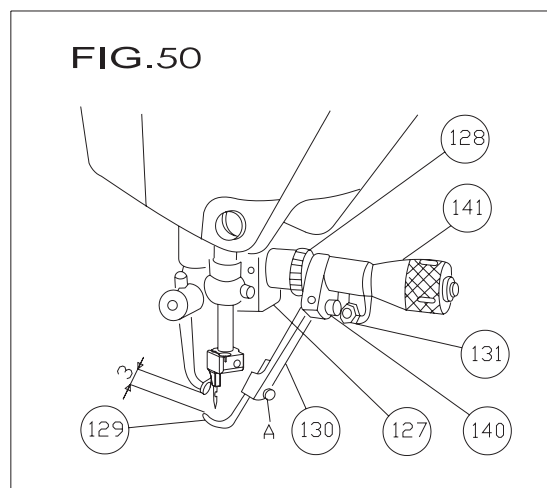
traction force caused during the looping, to guarantee the length pulling out to be constantly. Therefore, after pressing the sewing material, the thread clamp must clamp the thread. But when the presser foot is lifted to the highest position, the thread clamp must spread for convenience of pulling out the thread easily.

During the regulation, loosen the clamping screw (138), move the whole thread clamp along the axial direction or onto the lifting hook (137) under the presser foot, and move the eccentric part (136) up and down. (As shown in figure 48)



15. Regulation of thread loosening mechanism

Rotate the hand wheel to make the needle stem reach the highest position at the second circulation. After the upper looper (46) stops on the needle stem, remove the thread loosening hook (129), regulating button for loosening thread (141), thread loosening assembly (140), thread loosening rod (130) and cap of torsion spring (128). Check if the torsion spring is broken or the thread loosening hook is damaged. Replace the new torsion spring and polish the thread loosening hook, then assemble all the components in reverse turn. (As shown in figure 50)



During the installation of cap of torsion spring (128), note that the return force of the thread loosening rod (130) shall be regulated larger. Rotate the cap of torsion spring clockwise, the force will be larger, and contrarily, the force will be smaller. After the regulation, fasten the two screws on the cap of torsion spring.

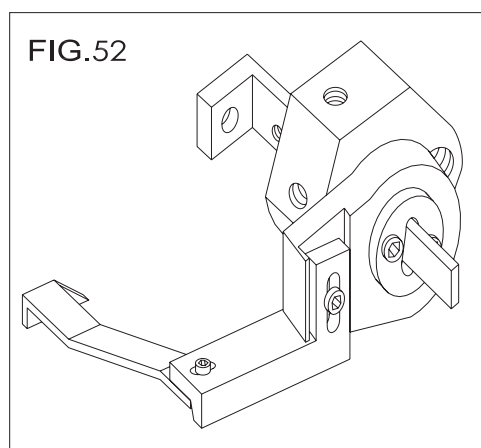
When the thread loosening hook (129) resets to the terminal position and is still, the distance between it and the needle plate shall be 1.5mm. Loosen the A screw on (130) to regulate the (129).

Rotate the hand wheel at the first circulation, when the upper looper (46) hooks the thread on the machine needle, the thread loosening hook (129) will contact the thread at the same time to form a hooking tendency. Loosen the screw (140) to regulate (130) to meet the above requirements.

Regulate the screw (131) to regulate the distance between the tip of thread loosening hook and presser foot to be 0.2mm. (Figure 50) The right side knob (141) is used to control the left and right movement of the thread loosening hook (129) to realize good thread loosening effect.

16. Upper positioning part

As shown in figure 52, the upper positioning part is: The main usage of the fence is for stitch positioning, which can make that the stopping end thread is along the edge of clothes with equal width and beautiful appearance. Installed on the presser foot (109), the fence can move up and down with the presser foot, and therefore, the fence makes it convenient to sew pocket thread and front fly.

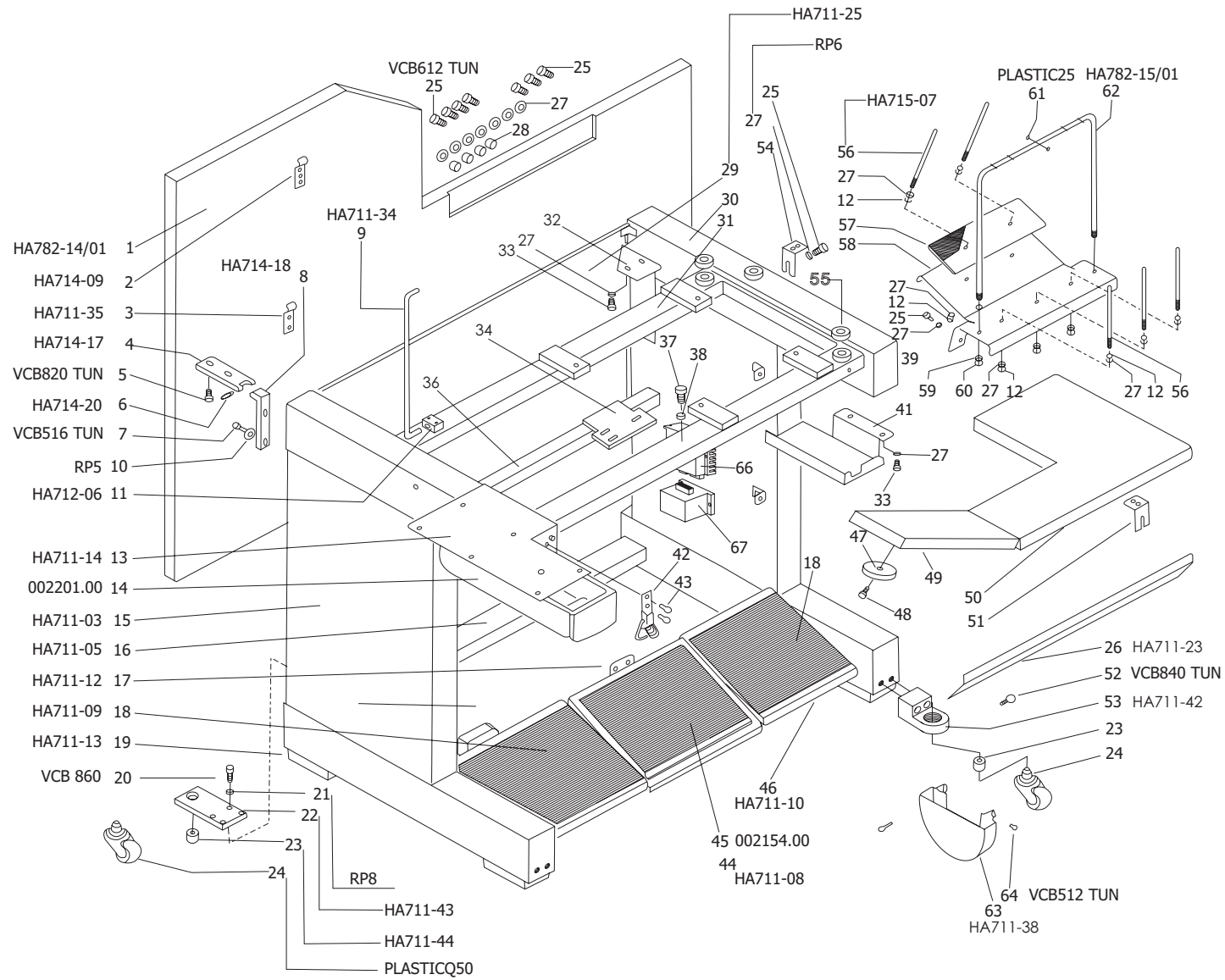


V. Error codes on screen display of 781-X

Screen display	Malfunction	Maintenance
Error code 1	Can't get communicated.	<ol style="list-style-type: none"> 1. Check if the communication plugs of the screen and circuit board are in the designated position. 2. Check if the communication wire of screen and circuit board is well connected.
Error code 2	The position of left positioner is not correct.	<ol style="list-style-type: none"> 1. Switch off power and restart it after 15 seconds 2. Adjust the position of left positioning plate. (The lamp of positioner is off) 3. Check if the position of positioner exceeds the fixing position.
Error code 3	The position of right positioner is not correct.	<ol style="list-style-type: none"> 1. Switch off power and restart it after 15 seconds. 2. Adjust the position of right positioning plate. (The lamp of positioner is off) 3. Check if the position of positioner exceeds the fixing position
Error code 4	The left positioner is out of work or can't find the position.	<ol style="list-style-type: none"> 1. Switch off power and restart it after 15 seconds. 2. Replace the positioner or regulate the positioning plate.
Error code 5	The right positioner is out of work or can't find the position.	<ol style="list-style-type: none"> 1. Switch off power and restart it after 15 seconds. 2. Replace the positioner or regulate the positioning plate.

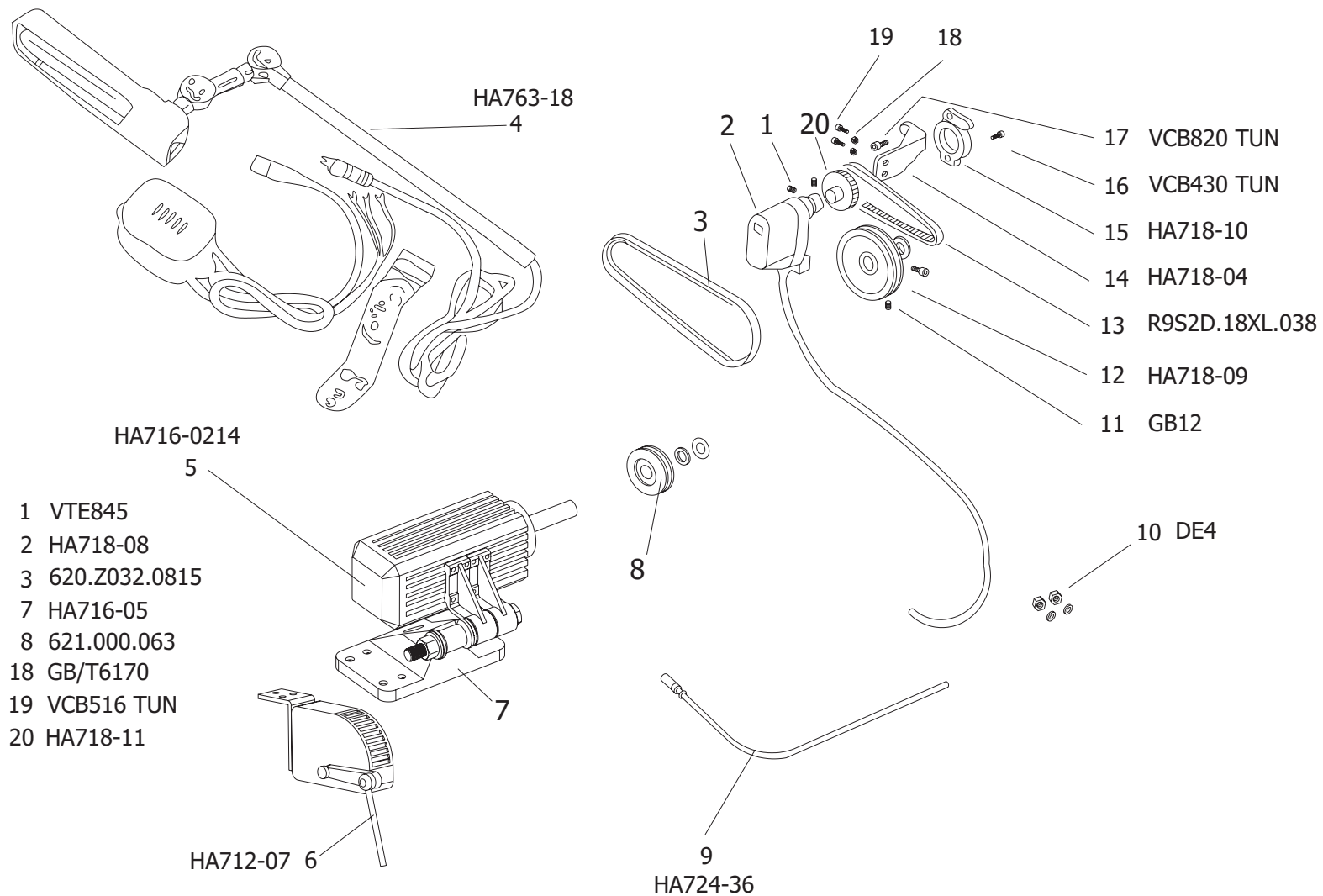
Ref.	Part No.	Qty	Description
1	HA782-14/01	1	Console table board
2	HA714-09	1	Fastener latch
3	HA711-35	1	Table tilt up hook
4	HA714-17	2	Upper hinge
5	VCB820 TUN	4	Hex. soc. hd. cap screw
6	HA14-20	2	Threaded pin
7	VCB516 TUN	4	Hex. soc. hd. cap screw
8	HA714-18	2	Lower hinge
9	HA711-34	1	Table board support rod
10	RP5	4	Flat washer
11	HA712-06	1	Knuckle connection
12	DE6	12	Hex nut
13	HA711-14	1	Drawer support plate
14	002201.00	1	Drawer
15	HA711-03	1	Left hand leg assy
16	HA711-05	1	Lower rear traverse
17	HA711-12	1	Foot treadle
18	HA711-09	2	Treadle rubber pad
19	HA711-13	4	Rubber pad
20	VCB860 TUN	8	Hex. Soc. hd cap screw
21	RP8	8	Flat washer
22	HA711-43	2	Rear wheels support plate
23	HA711-44	4	Sleeve
24	PLASTICQ50	4	Turning wheel
25	VCB612 TUN	10	Hex. Soc. hd cap screw
26	HA711-23	1	Front trimming
27	RP6	24	Flat washer
28	DE6	4	Hex nut
29	HA711-25	1	Back guard
30	HA711-02	1	Right hand leg assy
31	HA711-07	1	Machine support frame
32	HA711-41	1	Guard
33	VCB610 TUN	4	Hex. Soc. hd cap screw
34	HA716-04	1	Motor front support
35	HA716-05	1	Motor back support
36	HA711-06	1	Motor support tray

Ref.	Part No.	Qty	Description
37	HA714-23	1	Magenta
38	DE5	1	Hex nut
39	HA714-24	5	Spacer table
41	HA711-40	1	Belt guard
42	HA714-08	1	Locking handle
43	VCB410 TUN	2	Hex. soc. hd. cap screw
44	HA711-08	1	Side fixed pedal
45	002154.00	1	Table fixed pedal
46	HA711-10	1	Right fixed pedal
47	HA714-22	1	Magnet block
48	VCB625 TUN	2	Hex. Soc. hd cap screw
49	HA714-04	1	Hinged table board
50	HA714-03	1	Console table board
51	HA714-07	1	Support bracket
52	VCB840 TUN	4	Hex. soc. hd. cap screw
53	HA711-42	2	Front wheels support square
54	HA714-15	1	Support bracket
55	HA711-26	6	Table support
56	HA715-07	5	Stud
57	HA782-15/03	1	Protection mousse
58	HA782-15/02	1	Spool-holder plate
59	PR5	4	Washer
60	DE5	2	Hex nut
61	PLASTIC25	10	Tubular ring
62	782-15/01	1	Threading hook bar
63	711-38	1	Guard for wheel
64	VCB512 TUN	3	Hex. soc. hd. cap screw
65	AZ-7140, 781	1	Micros wit
66	798A-01-15	1	
67	798A-01-16	1	



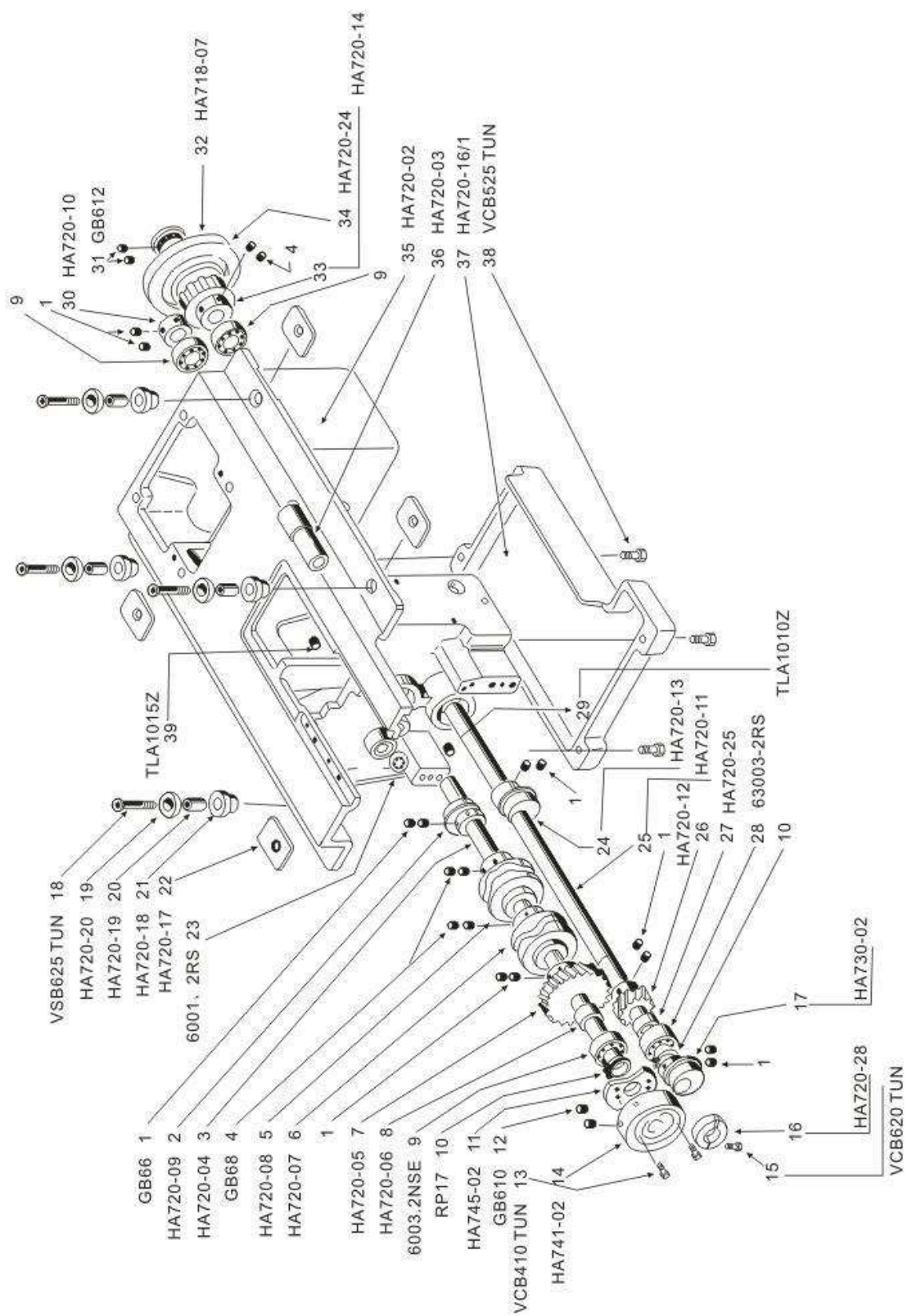
- 28 DE6
- 39 HA711-02
- 31 HA711-07
- 32 HA711-41
- 33 VCB610 TUN
- 34 HA716-04
- 35 HA716-05
- 36 HA716-06
- 37 HA714-23
- 38 DE5
- 39 HA714-24
- 41 HA711-40
- 42 HA711-08
- 43 VCB625 TUN
- 47 HA714-22
- 48 VCB625 TUN
- 49 HA714-04
- 50 HA714-03
- 51 HA714-07
- 54 HA714-15
- 55 HA711-26
- 57 HA782-05/03
- 58 HA782-15/02
- 59 RP5
- 60 DE5
- 65 AZ-7140、781
- 66 798A-01-15
- 67 798A-01-16

Ref.	Part No.	Qty	Description
1	VTE845	2	Hex. hd screw
2	HA718-08	1	Synchronizer
3	620.Z032.0815	1	"O" belt
4	HA763-18	1	Halogen lamp
5	HA716-02/40	1	Three-phase motor
6	HA712-07	1	Tie rod assy
7	HA716-05	1	Motor back support
8	621.000.063	1	60 cycle drive pulley
9	HA724-36	1	Cable with connector
10	DE4	2	Hex nut
11	GB12	2	Hex. Soc. set screw
12	AZ7310、781	1	Micro switch
13	R9S2D.180XL.038	1	Main pulley with timing belt pulley
14	HA718-10	1	Timing belt
15	HA718-12	1	Synchronizer holder clamp
16	VCB430 TUN	1	Hex. Soc. flat hd. cap screw
17	VCB820 TUN	1	Hex. Soc. flat hd. cap screw
18	GB/TT6170	2	Hex nut
19	VCB516 TUN	1	Hex. Soc. hd. cap screw
20	HA718-11	1	

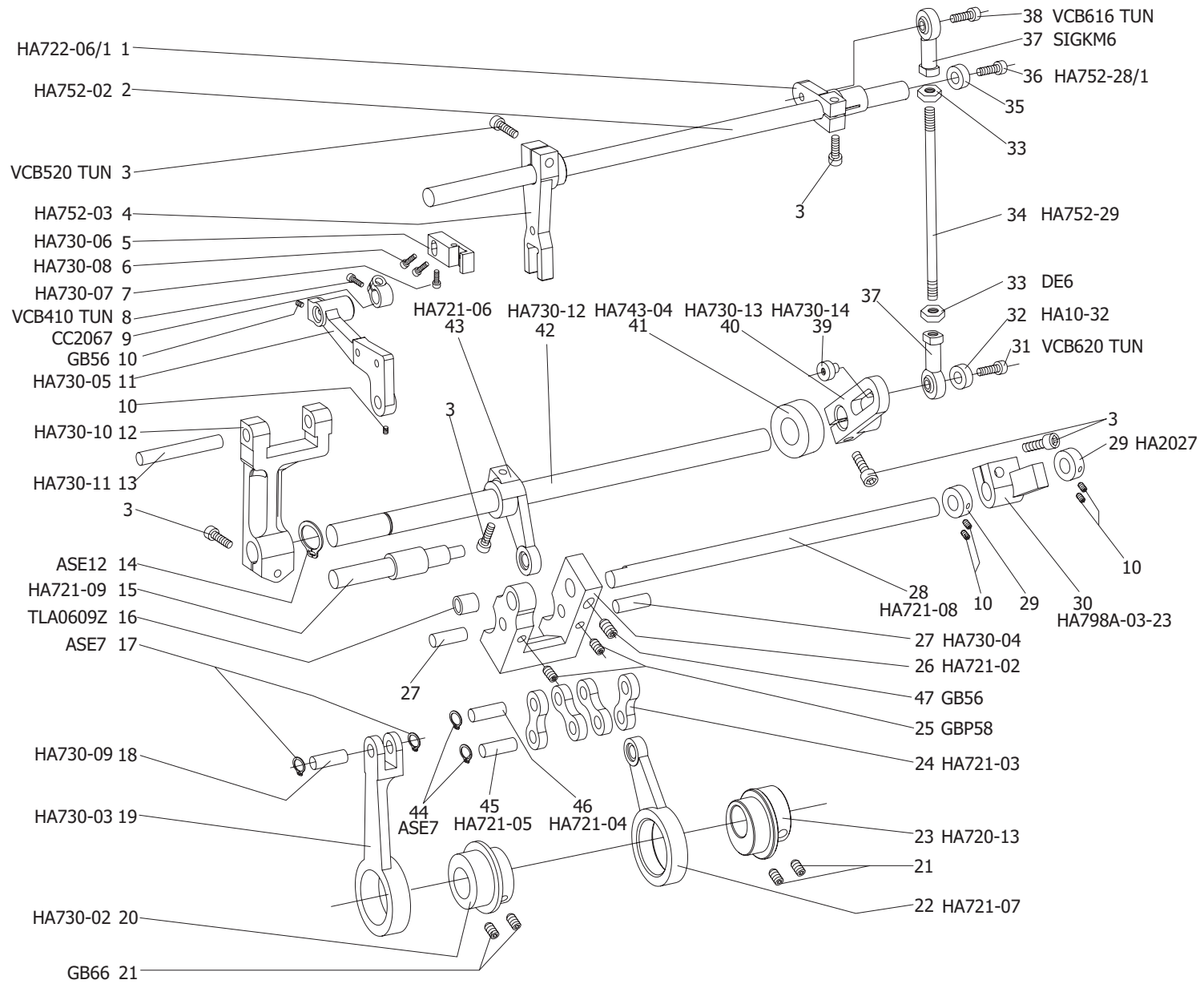


Ref.	Part No.	Qty	Description
1	GB66	12	Hex. Soc. set screw
2	HA720-09	1	Stitch shortening eccentric
3	HA720-04	1	Lower cam shaft
4	GB68	4	Hex. Soc. set screw
5	HA720-08	1	Thread lifting cam
6	HA720-07	1	Thread loader cam
7	HA720-05	1	Driver gear
8	HA720-06	1	Spacer
9	6003,2NSE	3	Ball bearing
10	RP17	2	Ring
11	HA745-02	1	Pull off ring cam
12	GB610	2	Hex. Soc. set screw
13	VCB410 TUN	2	Hex. soc. hd. cap screw
14	HA741-02	1	Tension drive cam
15	VCB620 TUN	1	Hex. soc. hd. cap screw
16	HA720-28	1	Looper wheel stop collar
17	HA730-02	1	Feed lift eccentric
18	VSB625 TUN	4	Hex. soc. flat hd. cap screw
19	HA720-13	4	Washer
20	HA720-19	4	Grommet spacer
21	HA720-18	4	Shock absorber grommet
22	HA720-17	4	Support pad
23	6001,2RS	2	Ball bearing
24	HA720-13	1	Main feed eccentric
25	HA720-11	1	Lower man shaft
26	HA720-12	1	Driving gear
27	HA720-25	1	Spacer
28	63003-2RS	1	Ball bearing
29	TLA1010Z	2	Roller-bearing sleeve
30	HA720-10	1	Ring
31	GB612	2	Hex. soc set screw

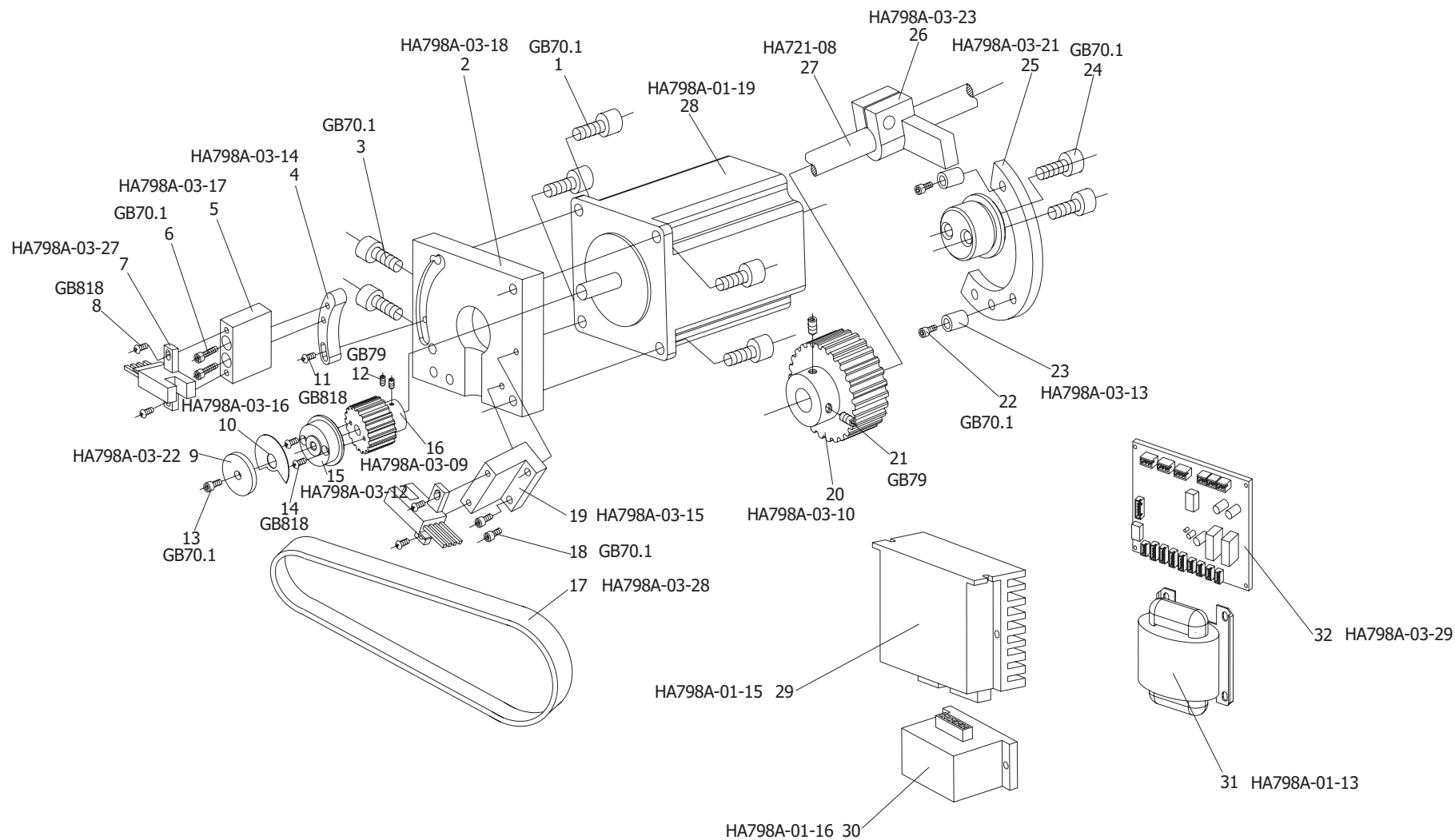
Ref.	Part No.	Qty	Description
32	HA718-07	1	Man pulley with timing belt pulley
33	HA720-14	1	Lower timing belt pulley
34	HA720-24	1	Pulley flange
35	HA720-02	1	Bed
36	HA720-03	1	bushing
37	HA720-16/1	1	Bottom cover
38	VCB525 TUN	3	Hex. Soc hd. cap screw
39	TLA1015Z	1	Roller-bearing sleeve



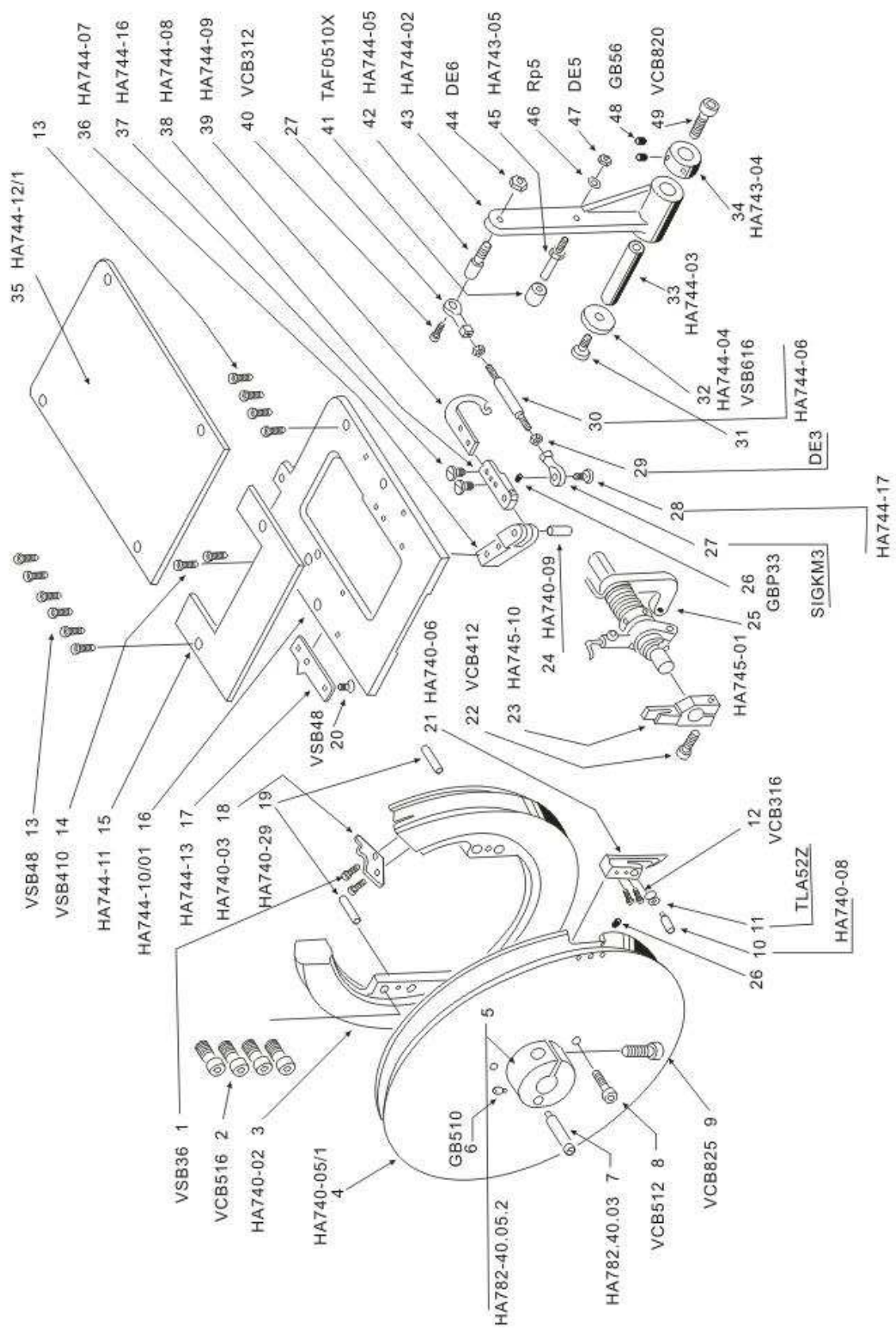
Ref.	Part No.	Qty	Description	Ref.	Part No.	Qty	Description
1	HA722-06/1	1	Control lever	32	HA10-32	1	Spacer ring
3	VCB520 TUN	6	Hex. soc. hd. cap screw	33	DE6	2	Hex nut
4	HA752-03	1	Fork lever	34	HA752-28/1	1	Washer
5	HA730-06	1	Feed dog holder	35	HA752-29	1	Connecting rod
6	HA730-08	2	Feed dog screw	36	VCB521 TUN	1	Hex. soc. hd. cap screw
7	HA730-07	1	Feed dog height adjustment screw	37	SIGKM6	2	Articulated (end piece)
8	VCB410 TUN	1	Hex. soc. hd. cap screw	38	VCB616 TUN	1	hex. soc. hd. cap screw
9	CC2067	1	Clamp	39	HA730-14	1	Ring nut
10	GB56	8	Hex. Soc. set screw	40	HA730-13	1	Foot control lever
11	HA730-05	1	Feed dog carrier bar	41	HA743-04	1	Ring
12	HA730-10	1	Feed dog fork	42	HA730-12	1	Feed drive rock shaft
13	HA730-11	1	Hinge stud	43	HA721-06	1	Stitch-Length control lever
14	ASE7	2	Ring	44	ASE7	2	Retaining ring
15	HA721-09	1	Hinge stud	45	HA721-05	1	Stud
16	TLA0609Z	1	Roller-bearing sleeve	46	HA721-04	1	Stud
17	ASE7	2	Ring	47	GB56	1	Hex. Soc. set screw
18	HA730-09	1	Stud				
19	HA730-03	1	Feed lift connecting rod				
20	HA730-02	1	Feed lift eccentric				
21	GB66	4	Hex. Soc. set screw				
22	HA721-07	1	Stitch-Length connecting rod				
23	HA720-13	1	Main feed eccentric				
24	HA721-03	4	Link				
25	GBP58	2	Hex. Soc. set screw				
26	HA721-02	1	Stitch-Length support				
27	HA730-04	2	Roller				
28	HA721-08	1	Stitch-Length pivot shaft				
29	HA2027	2	Ring				
30	HA798A-03-23	1	Limit crank				
31	VCB620 TUN	1	Hex. soc. hd. cap screw				



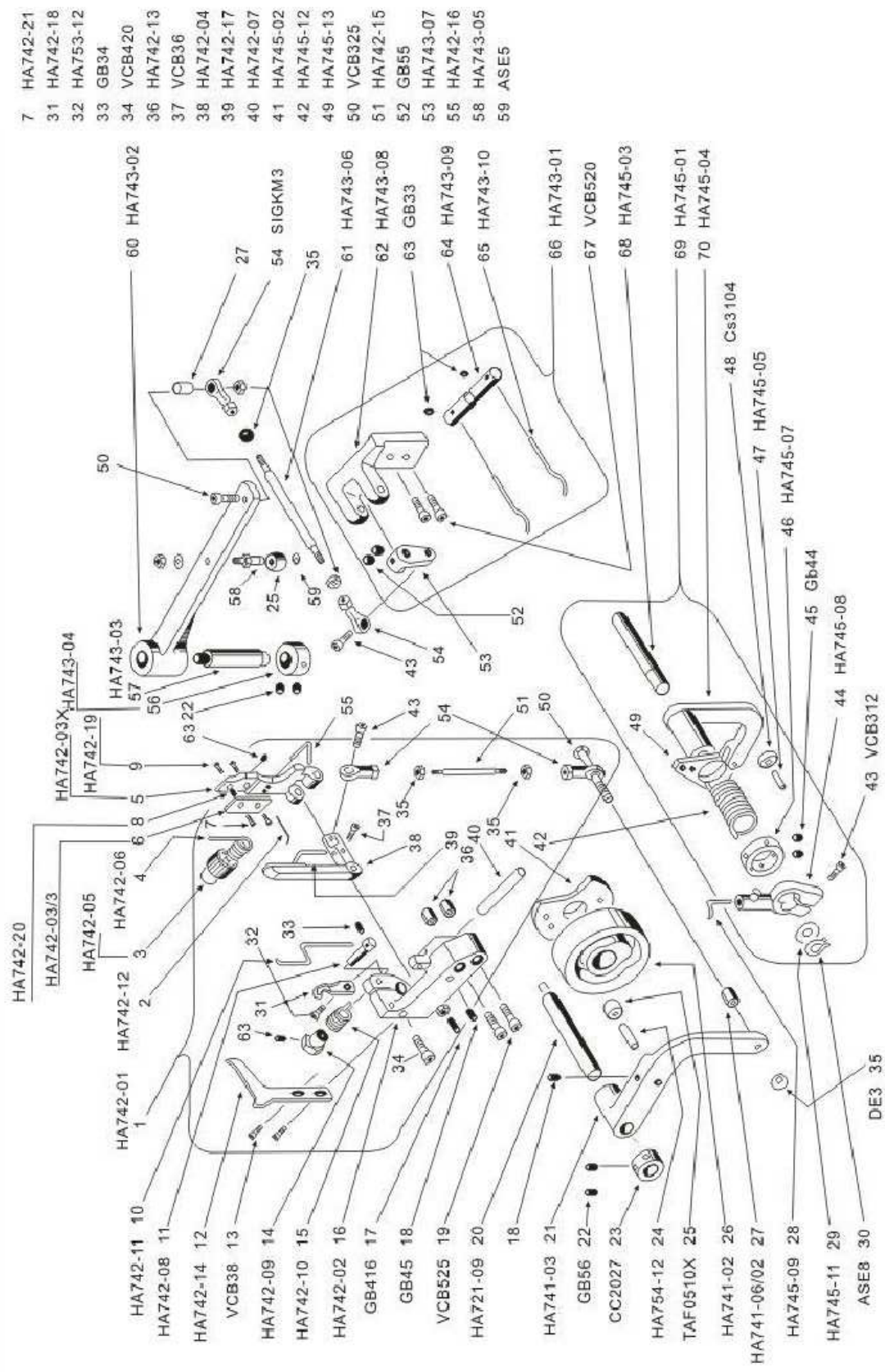
Ref.	Part No.	Qty	Description	Ref.	Part No.	Qty
1	GB70.1	4	Screw of fixed board of motor	29	HA798A-01-15	1
2	HA798A-03-18	1	Fixed board of motor	30	HA798A-01-16	1
3	GB70.1	2	Screw of fixed motor board	31	HA798A-01-13	1
4	HA798A-03-14	1	Proximity switch seat	32	HA798A-03-29	1
5	HA798A-03-17	1	Adjusting screw of sensing switch			
6	GB818	2	Screw			
7	HA798A-03-27	2	Proximity switch			
8	GB818	4	Screw			
9	HA798A-03-22	1	Press plate of sensing piece			
10	HA798A-03-16	1	Sensing piece			
11	GB818	1	Screw			
12	GB79	2	Set screw			
13	GB70.1	1	Screw			
14	GB818	2	Screw			
15	HA798A-03-12	1	Sensing piece seat			
16	HA798A03-09	1	Synchronous wheel of motor			
17	HA798A-03-28	1	Synchronous belt			
18	GB70.1	2	Screw			
19	HA798A-03-15	1	Proximity switch seat			
20	HA798A-03-10	1	Large synchronous wheel			
21	GB79	2	Set screw			
22	GB70.1	2	Screw			
23	HA798A-03-13	2	Stopper			
24	GB70.1	2	Screw			
25	HA798A-03-21	1	Positioning plate			
26	HA798A-03-23	1	Limit crank			
27	HA721-08	1	Shaft			
28	HA798A-01-19	1	Motor			



Ref.	Part No.	Qty	Description	Ref.	Part No.	Qty	Description
1	VSΒ36	2	Hex. Soc. flat hd. cap screw	33	HA744-03	1	Hinge stud
2	VCΒ516	4	Hex. soc. hd. cap screw	34	HA743-04	1	Ring
3	HA740-02	1	Stationary wheel	35	HA744-12/1	1	Right and cover plate
4	HA740-05/1	1	Wheel	36	HA744-07	1	Hinge fork
5	HA782-40.05.2	1	Hub	37	HA744-16	2	Screw
6	GB510	1	Hex. Soc. set screw	38	HA744-08	1	Holder
7	HA782.40.03	1	Cam for (freeloader)wheel	39	HA744-09	1	Thread loader
8	VCΒ512	3	Hex. soc. hd. cap screw	40	VCΒ312	1	Hex. soc. hd. cap screw
9	VCΒ825	1	Hex. soc. hd. cap screw	41	TAF0510X	1	Rollers bearing
10	HA740-08	1	Sheave shaft	42	HA744-05	1	Screw stud
11	TLA52Z	1	Bearing	43	HA744-02	1	Roller stud
12	VCΒ316	2	Hex. soc. hd. cap screw	44	DE6	1	Flat washer
13	VSΒ48	10	Hex. soc. hd. cap screw	45	HA743-05	1	Hex nut
14	VSΒ410	2	Hex. soc. hd. cap screw	46	RP5	1	Hex. soc. set screw
15	HA744-11	1	Left and cover plate	47	DE5	1	Hex. soc. hd. cap screw
16	HA744-10/01	1	Throat plate support frame	48	GB56	2	
17	HA744-13	1	Thread separator	49	VCΒ820	1	
18	HA740-03	1	Thread guide plate				
19	HA740-29	2	Dowel pin				
20	VSΒ48	2	Hex. Soc. flat hd. cap screw				
21	HA740-06	1	Rotary hook				
22	VCΒ412	1	Hex. soc. hd. cap screw				
23	HA745-10	1	Needle guide				
24	HA740-09	1	Dowel pin				
25	HA745-01	1	Thread shifter assembly				
26	GBP33	2	Hex. Soc. set screw				
27	SIGKM3	2	Articulated (end piece)				
28	HA744-17	1	Screw				
29	DE3	2	Hex nut				
30	HA744-06	1	Connecting rod				
31	VSΒ616	1	Hex. Soc. flat hd. cap screw				
32	HA744-04	1	washer				

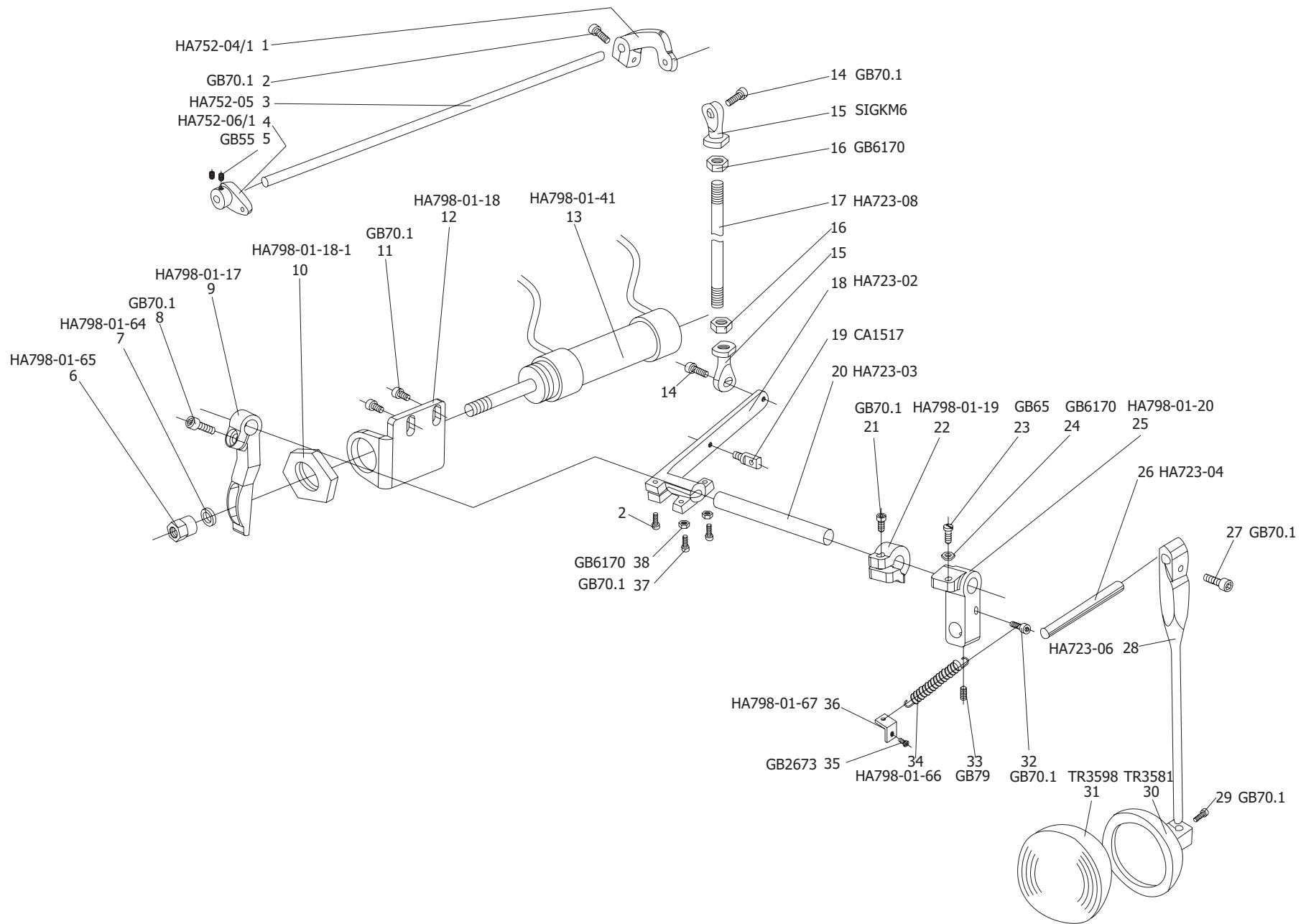


Ref.	Part No.	Qty	Description	Ref.	Part No.	Qty	Description
1	HA742-01	1	Tension assembly	37	VCB36	1	Hex. soc. hd. cap screw
2	HA742-12	1	Thread holder hook	38	HA742-04	1	Left hand tension prong
3	HA742-05	1	Spring tensioning drum	39	HA742-17	1	Stop lever
4	HA742-06	2	Torsion spring	40	HA742-07	1	Hinge shaft
5	HA742-03X	1	Ring hand tension prong	41	HA745-02	1	Pull off finger cam
6	HA742-03/3	1	Plate	42	HA745-12	1	Torsion spring
7	HA742-21	2	Hex. Soc. flat hd. cap screw	43	VCB312	3	Hex. soc. hd. cap screw
8	HA742-20	1	Stop screw spring	44	HA745-08	1	Thee ad shifter lever
9	HA742-19	2	Stop screw	45	GB44	2	Hex. soc. hd. cap screw
10	HA742-11	1	Thread pusher hook	46	HA745-07	1	Adjusting collar
11	HA742-08	1	Thread pusher stud	47	HA745-05	1	Roller
12	HA742-14	1	Thread support plate	48	CS3104	1	Ball bearing
13	VCB38	2	Hex. soc. hd. cap screw	49	HA745-13	1	Paw1
14	HA742-09	1	Spring tensioning drum	50	VCB325	2	Hex. soc. hd. cap screw
15	HA742-10	2	Torsion spring	51	HA742-15	1	Connecting rod
16	HA742-02	1	(pre-tensioning)support	52	GB55	2	Hex. Soc. set screw
17	GB416	1	Hex. Soc. set screw	53	HA743-07	1	Thread lifter connecting rod
18	GB45	2	Hex. Soc. set screw	54	SIGKM3	4	Articulated end piece
19	VCB525	2	Hex. soc. hd. cap screw	55	HA742-16	1	Thread wiping finger
20	HA721-09	1	Hinge stud	56	HA743-04	1	Ring
21	HA741-03	1	Tension driver lever	57	HA743-03	1	Pin for lever
22	GB56	4	Hex. Soc. set screw	58	HA743-05	1	Roller stud
23	CC2027	1	Ring	59	ASE5	1	Ring
24	HA754-12	1	Stud	60	HA743-02	1	Thread lifting lever
25	TAF0510X	2	Rollers bearing	61	HA743-06	1	Tie-rod
26	HA741-02	1	Tension drive cam	62	HA743-08	1	Thread lifter support
27	HA741-06/2	2	Screw stud	63	GB33	4	Hex. Soc. set screw
28	HA745-09	1	Hook	64	HA743-09	1	Thread lifting finger shaft
29	HA745-11	1	Washer	65	HA743-10	2	Thread lifter
30	ASE8	1	Ring	66	HA743-01	1	Thread lifting finger assembly
31	HA742-18	1	Stop lever	67	VCB520	2	Hex. soc. hd. cap screw
32	HA753-12	1	Throat plate screw	68	HA745-03	1	Needle guard carrier shaft
33	GB34	1	Hex. Soc. set screw	69	HA745-01	1	Thread shifter assembly
34	VCB420	1	Hex. soc. hd. cap screw	70	HA745-04	1	Thread shifter control lever
35	DE3	6	Hex nut				
36	HA742-13	2	Bushing dowel				



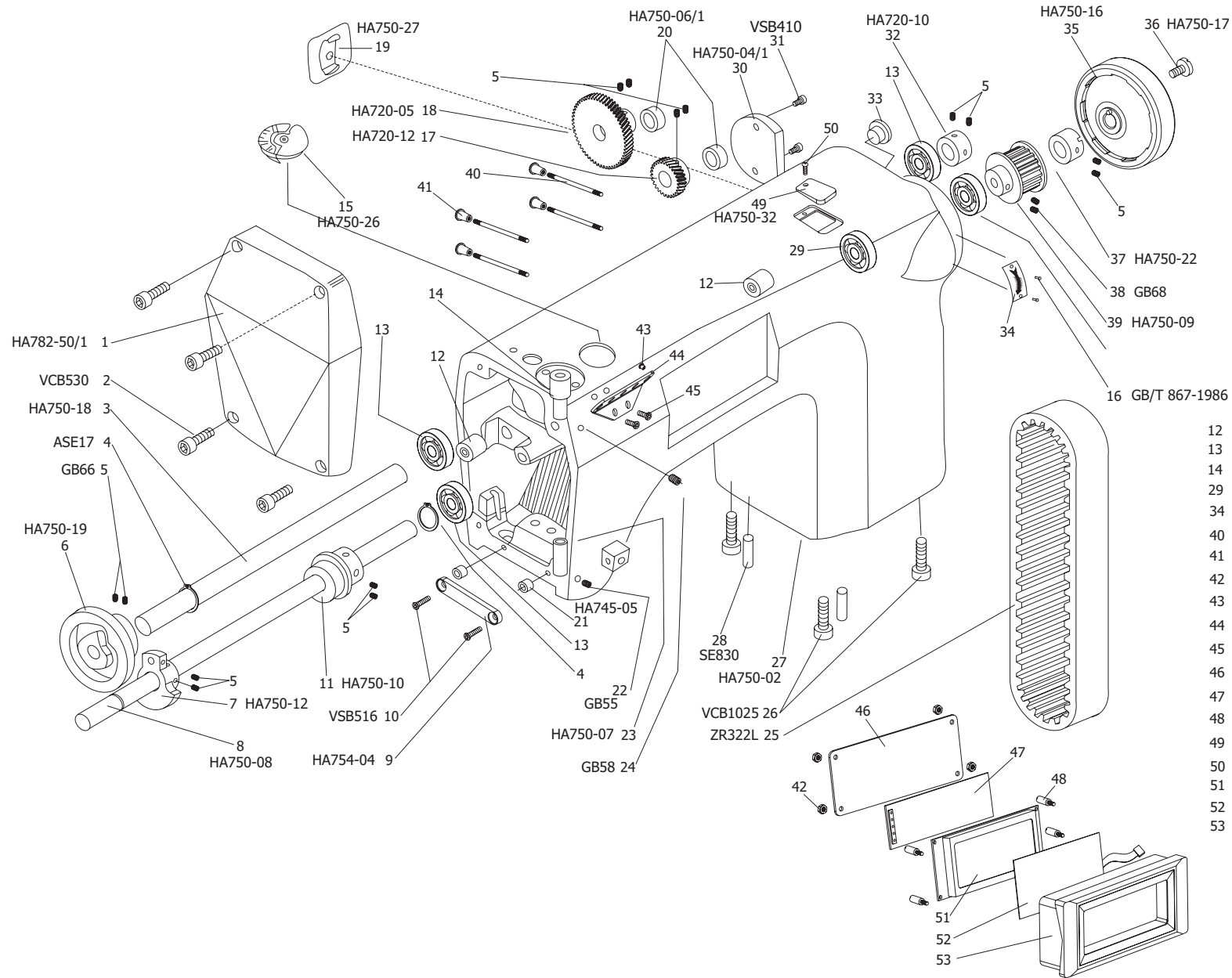
Ref.	Part No.	Qty	Description
1	HA752-04/1	1	Foot lifter lever
2	VCB520	2	Hex. soc. hd. cap screw
3	HA752-05	1	Foot lifter shaft
4	HA752-06/1	1	Lifting crank
5	GB5	2	Hex. Soc. set screw
6	HA798-01-65	1	Nut
7	HA798-01-64	1	Rubber cushion
8	GB70.1	1	Screw
9	HA798-01-17	1	Rocker
10	HA798-01-18-1	1	Nut
11	GB70.1	2	Screw
12	HA798-01-18	1	Cylinder supporter
13	HA798-01-18	1	Cylinder
14	GB70.1	2	Screw
15	SIGKM6	2	Articulated (end piece)
16	GB6170	2	Nut
17	HA723-08	1	Connecting rod
18	HA723-02	1	Knee lifter connection lever
19	CA1517	1	Thread guide
20	HA723-03	1	Knee lever pivot shaft
21	GB70.1	1	Screw
22	HA798-01-19	1	Separator
23	GB65	1	Screw
24	GB6170	1	Nut
25	HA798-01-20	1	Separator
26	HA723-04	1	Lever stud
27	GB70.1	1	Screw
28	HA723-06	1	Knee rod lever
29	GB70.1	1	Screw
30	TR3581	1	Knee device

Ref.	Part No.	Qty	Description
31	TR3598	1	Knee lever pad
32	GB70.1	1	Screw
33	GB79	1	Set screw
34	HA798-01-66	1	Tension spring
35	GB2673	1	Screw
36	HA798-01-67	1	Tension spring seat
37	GB70.1	2	Screw
38	GB6170	2	Nut



Ref.	Part No.	Qty	Description
1	HA782-50/1	1	Nose section
2	VCB530	4	Hex. soc. hd. cap screw
3	HA750-18	1	Lower cam shaft
4	ASE17	2	Ring
5	GB66	14	Hex. Soc. set screw
6	HA750-19	1	Upper looper driver cam
7	HA750-12	1	Needle bar crank
8	HA750-08	1	Upper main shaft
9	HA754-04	1	Lever guide
10	VSB516	2	Hex. Soc. flat hd. cap screw
11	HA750-10	1	Walking presser lifting eccentric
12	TLA0810Z	2	Roller bearing sleeve
13	6003-2NSE	4	Ball bearing
14	HA750-06	1	Upper needle bar bushing
15	HA750-26	1	Access covers
16	GB/T 867-1986	2	Rivet
17	HA720-12	1	Driving gear
18	HA720-05	1	Driver gear
19	HA750-27	1	Access covers
20	HA720-06/1	2	Spacer
21	HA754-05	2	Spacer
22	GB55	1	Hex. Soc. set screw
23	HA750-07	1	Lower needle bar bushing
24	GB58	1	Hex. Soc. set screw
25	ZR322L	2	Cogged belt
26	VCB1025	4	Hex. soc. hd. cap screw
27	HA750-02	1	Arm
28	SE830	2	Spring pin
29	6000LLB/2A01	1	Ball bearing
32	HA720-10	1	Ring
33	HA750-20	1	Plug

Ref.	Part No.	Qty	Description
34	SA007.34	1	Tag with arrow
35	HA750-16	1	Hand wheel
36	HA750-17	1	Hand wheel screw
37	HA750-22	1	Timing collar
38	GB68	2	Hex. Soc. set screw
39	HA750-09	1	Upper trimming belt pulley
40	HA798A-03-08	4	Screw rod
41	HA798A-03-07	4	Locking nut
42	GB/T 6171	4	Nut
43	PLASTIC25	5	Flanged tube
44	HA760-06	1	Thread guide
45	VCB48	2	Hex. soc. hd. cap. screw
46	HA798A-03-03	1	Back cover plate of display screen
47	HA798A-03-32	1	Circuit board of display screen
48	HA798A-03-05	4	Outside cover bolt of display screen
49	HA750-32	1	Top Cover
50	VCB48	1	Hex. soc. hd. cap screw
51	HA798A-03-30	1	Display screen
52	HA798A-03-31	1	Touch screen
53	HA798A-03-01	1	Outside cover of display screen



- 12 TLA0810Z
- 13 6003-2NSE
- 14 HA750-06
- 29 6000LLB/2A01
- 34 SA007.34
- 40 HA798A-03-08
- 41 HA798A-03-07
- 42 GB6171
- 43 PLASTIC25
- 44 HA760-06
- 45 VCB48
- 46 HA798A-03-03
- 47 HA798A-03-32
- 48 HA798A-03-05
- 49 HA750-32
- 50 VCB48
- 51 HA798A-03-30
- 52 HA798A-03-31
- 53 HA798A-03-01

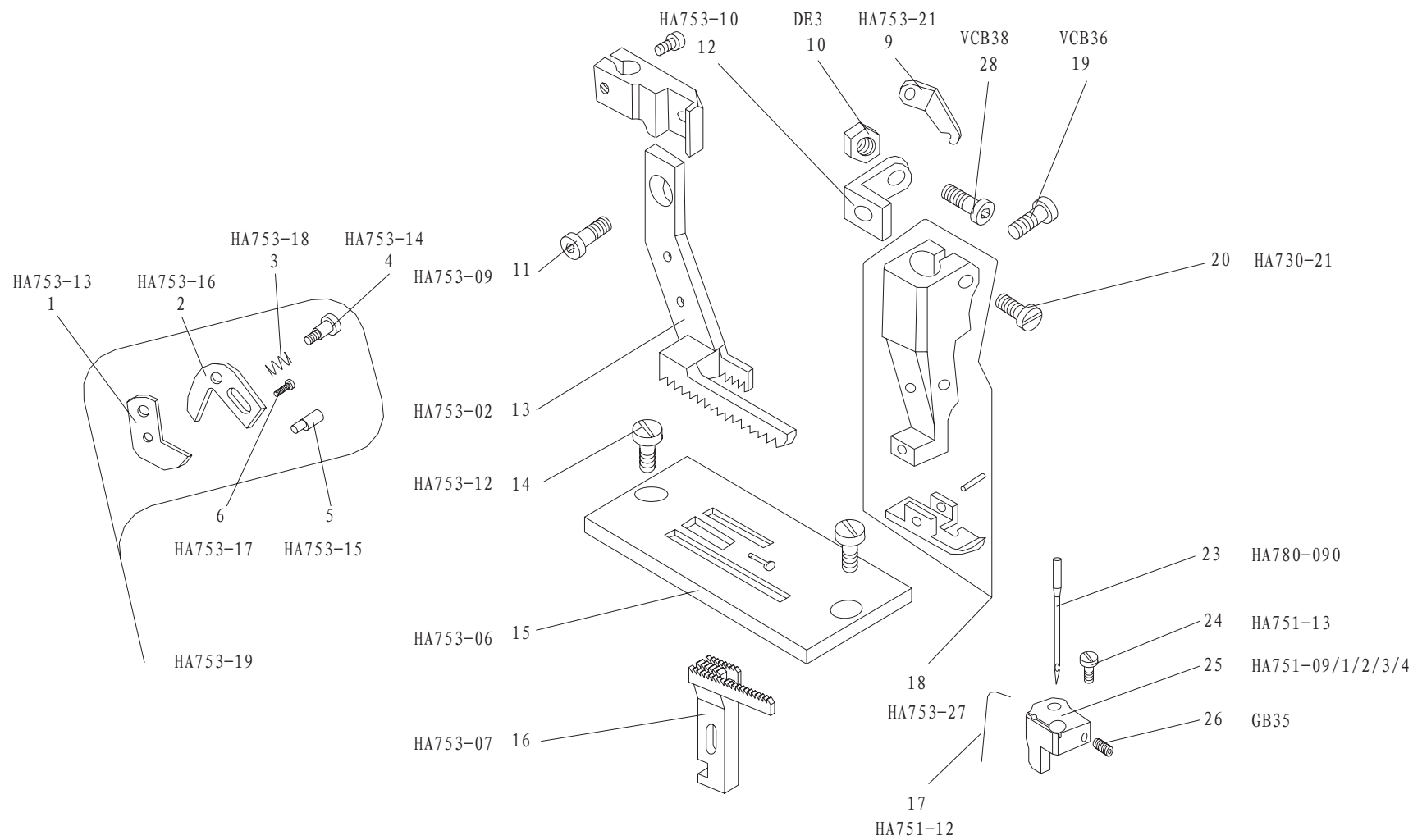
Ref.	Part No.	Qty	Description	Ref.	Part No.	Qty	Description
1	HA752-25	1	Plug screw	34	Ha751-05	1	Needle bar spring
2	HA752-24	1	Pressure regulator screw	35	CT340	1	Clamp
3	ASE15	1	Ring	36	VCB412	1	Hex. soc. hd. cap screw
4	HA752-23	1	Pressure regulator nut	37	HA752-19	1	Link
5	HA752-22	1	Spring	38	HA752-20/1	2	Collar
6	HA752-06/1	1	Lifting crank	39	HA752-27	1	Foot-lifter
7	HA752-07/1	1	Presser feet lifting link	40	HA752-21	1	Drawbore
8	HA752-33	1	Spring	41	GB44	2	Presser bar
9	HA752-08/1	1	Shoulder screw	42	HA752-30	1	Small block
10	HA752-34	1	Cam block	43	VCB520	1	Hex. soc. hd. cap screw
11	HA752-35	1	Clamp collar	44	HA752-03	1	Fork lever
12	HA752-09	1	Foot-lifter bracket	45	ASE5	1	Ring
13	VCB410	2	Hex. soc. hd. cap screw	46	HA752-14	1	Stud
14	HA752-10	1	Guide	47	HA757-06	1	Adjust table cap
15	HA752-36	2	Shoulder screw	48	HA751-14	1	Cushion ring
16	VCB416	2	Hex. soc. hd. cap screw	49	HA750-11	1	Connecting link
17	HA752-12	1	Guide fork	50	HA750-10	1	Walking presser lifting eccentric
18	HA752-11	2	Slider bar	51	GB66	4	Hex. Soc. set screw
19	HA752-13	1	Presser foot drive bushing	52	HA750-12	1	Needle bar crank
20	GB45	3	Hex. Soc. set screw	53	HA750-13	1	Connection link with bearing
21	VCB512	1	Hex. soc. hd. cap screw	54	HA750-25	1	Hinge pin
22	HA752-15	1	Walking presser holder	55	HA750-14	1	Pin for con-rod
23	GB55	1	Hex. soc. hd. cap screw	56	HA751-01/1	1	Needle bar assembly
24	HA752-16	1	Belt crank	57	HA751-03	1	Fabric-holder rod
25	HA752-18	1	Hinge pin	58	VCB38	1	Hex. soc. hd. cap screw
26	HA752-17	1	Pivot shaft	59	HA751-04	1	Side block
27	VCB310	1	Hex. soc. hd. cap screw	60	HA751-02	1	Needle bar rod
28	HA750-15/1	1	clamp	61	GB33	1	Hex. Soc. set screw
29	GBP58	2	Hex. Soc. set screw	62	HA751-15	1	Needle stop collar
30	AR04010	2	Spring	63	VCB35	1	Hex. soc. hd. cap screw
31	HA752-26	1	Guide bar	64	HA751-08	1	Needle camp
32	HA751-16	1	Cushion ring	65	GB66	4	Hex. Soc. set screw
33	HA751-06	1	Needle bar clamp	66	HA752-20	2	Hex. soc. hd. cap screw

Ref.	Part No.	Qty	Description	Ref.	Part No.	Qty	Description
1	HA781-09	2	Edge guide support bracket	32	VCB258	2	Hex. soc. hd. cap screw
2	VCB36	1	Hex. soc. hd. cap screw	33	HA766-09	1	Spring for pawl
3	HA765-02	2	Sliding support for retractable edge guide	34	HA766-14	1	Ball pawl
4	GB33	1	Hex. Soc. set screw	35	HA751-13	3	Latch wire fastening screw
5	615.GN.615	1	Ball presser	36	HA766-15	1	Washer
6	HA765-04	1	Rotating lever for retractable edge guide	37	HA766-10	1	Impressed disc
7	HA765-05	1	Washer for retractable edge guide	38	HA766-08	1	Adjustment knob
8	VCB2-256	4	Hex. soc. hd. cap screw	39	VCB310	1	Hex. soc. hd. cap screw
9	DE6	2	Flat washer	41	RP3	1	Washer
10	VCB312	1	Hex. soc. hd. cap screw	42	HA766-06	1	Stitch slackening lever
11	HA765-06	1	Support for retractable edge guide	43	HA756-11	1	Fastening screw cap
12	HA765-07	1	Snap retractable edge guide	44	HA756-07	1	Stitch slackening finger
13	HA765-03	1	Lock plate for snap retractable edge guide	45	VCB412	1	Hex. Soc. hd cap screw
14	HA765-01	1	Snap retractable edge guide assembly	46	HA756-02	1	Shaft bushing
15	HA782-50	1	Eyes guard return spring				
16	HA782-50/3	1	Eyes guard return spring				
17	HA782-50/2	1	Threaded washer				
18	HA782-50/1	1	Eyes guard protection				
19	VTE5	1	Needle protection pin				
20	HA766-01	1	Stitch slackening assembly with clamp				
21	HA766-16	1	Ringer guard				
22	HA766-04	1	Stitch slackening lever				
23	DE3	1	Hex nut				
24	SE38	1	Parallel pin				
25	VTE48	1	Convex-headed screw				
26	HA766-11	1	Lever lock				
27	HA753-20	1	Stop screw				
28	HA7556-05	1	Torsion spring				
29	HA756-04	1	Spring housing cap				
30	GB34	1	Hex. Soc. set screw				
31	HA766-20	1	Threaded sleeve				



Ref.	Part No.	Qty	Description
1	HA753-13	1	Thread cutter guide
2	HA753-16	1	Thread cutter
3	HA753-18	1	Spring
4	HA753-14	1	Thread cutter screw
5	HA753-15	1	Eccentric stud
6	HA753-17	1	Screw
7	HA753-19	1	Thread cutter assembly" N. P"
8	HA753-33	1	Sewing unit "M.P"
9	HA753-21	1	Thread guide
10	HADE3	1	Hex nut
11	HA753-09	1	Screw
12	HA753-10	1	Strip lever
13	HA753-02	1	Walking presser
14	HA753-12	2	Throat plate screw
15	HA753-06	1	Plate
16	HA753-07	1	Drop feed dog
17	HA753-12	1	Latch wire
18	HA753-27	1	Presser feet "M.P"
19	VCB36	1	Hex. soc. hd. cap screw
20	HA730-07	1	Feed dog height adjustment screw
23	HA780-090	1	Needle gauge 90 system 780C
23	HA780-100	1	Needle gauge 100 system 780C
23	HA780-110	1	Needle gauge 110 system 780C
23	HA780-125	1	Needle gauge 125 system 780C
24	Ha751-13	1	Latch wire fastening screw
25	HA751-09/1	1	Fabric holder for needle size 90
25	HA751-09/2	1	Fabric holder for needle size 100
25	HA751-09/3	1	Fabric holder for needle size 110
25	HA751-09/4	1	Fabric holder for needle size 125
26	Gb35	1	Hex. Soc. set screw

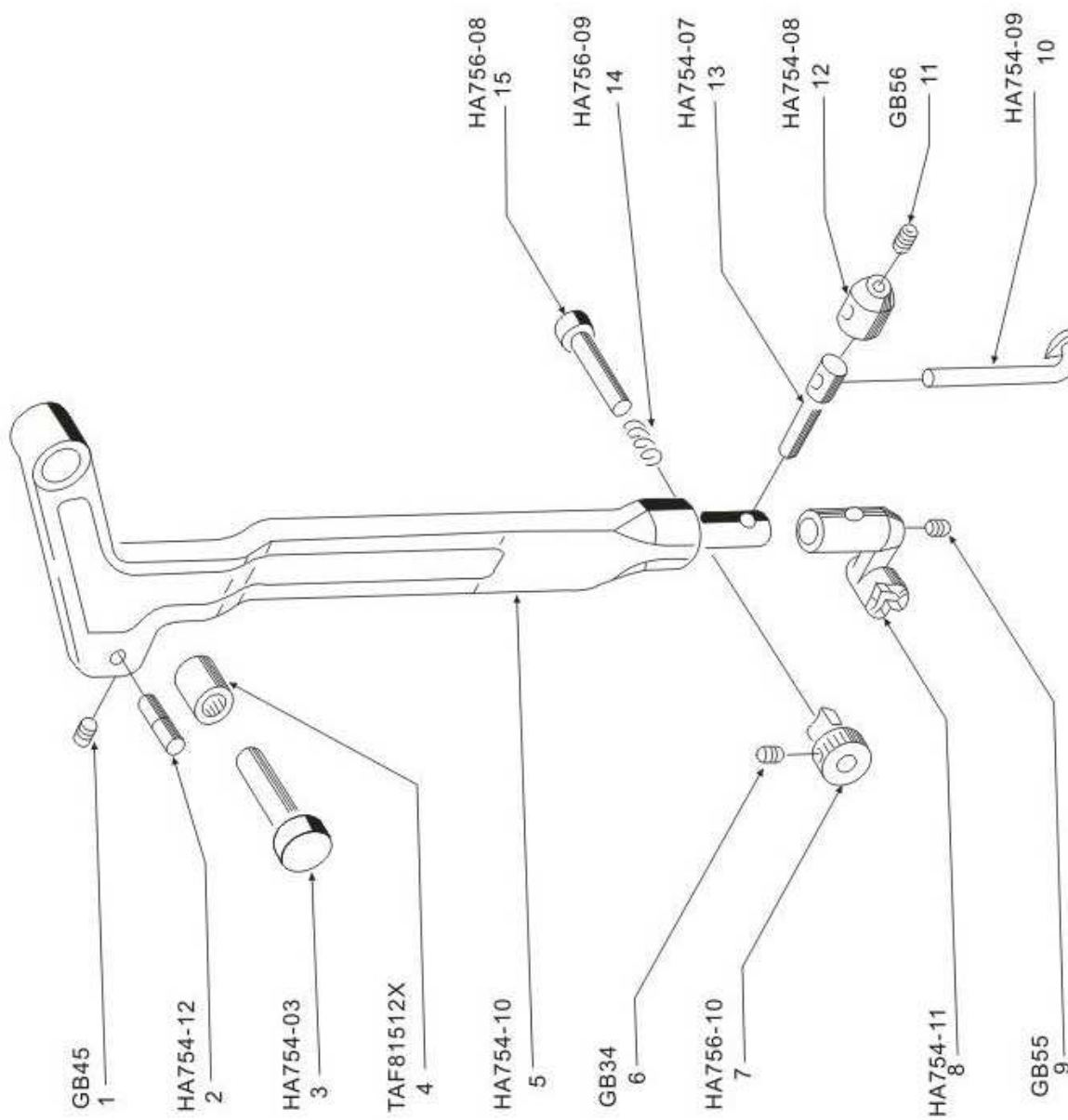
Ref.	Part No.	Qty	Description
27	HA753-11	1	Presser feet assembly"M.P"
28	VCB38	1	Hex. soc. hd. cap screw

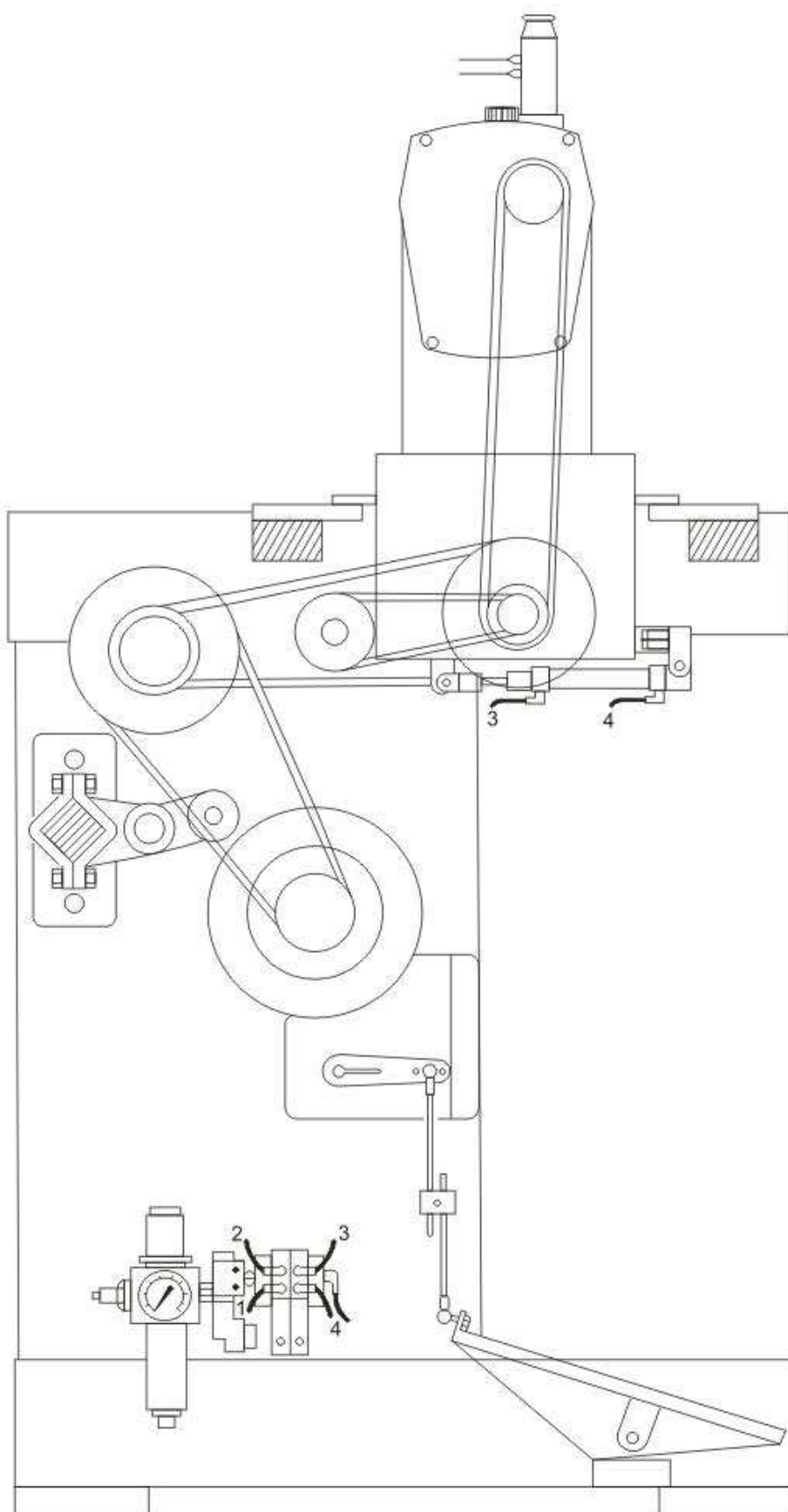


Ref.	Part No.	Qty	Description	Ref.	Part No.	Qty	Description
1	HA757-05	1	Cylinder cap	33	644.235.0001	1	Connector
2	HA757-09	1	02081 washer	34	616.11.000.01	1	Screw plug
3	HA757-08	2	Washer	35	HA781-08	2	Muffler
4	HA757-04	1	Threaded guide	36	HA781-09	1	Extension
5	SPC04M5	2	Elbow pneumatic coupler	37	HA781-06	2	Nipple
6	VCB410	2	Hex. soc. hd. cap screw	38	HA781-01	3	Electro valve
7	HA757-02	1	Tang-lifter cylinder	39	616.11.000.02	2	Screw plug
8	HA757-07	1	Washer	40	HA781-02	1	Sub-base
9	HA757-03	1	Seal piston	41	HA781-03	2	Muffler
10	SIGKM6	2	Articulated end piece	42	PLL04-M5	1	Elbow pneumatic coupler
11	HA752-29	1	Connecting rod	43	PLL04-M5	4	Elbow pneumatic coupler
12	VCB6016	1	Hex. soc. hd. cap screw	44	644.781.0002	2	Connector
13	HA724-05	1	Stitch inversion control lever	45	HA724-29 hose	1	Clamp 4
14	HA724-11/1	1	Fork	46	HA724-30	1	pipe
15	HA724-09	1	Cylinder body				
16	HA724-06	1	Cylinder mounts				
17	VCB850	1	Hex. soc. hd. cap screw				
18	HA724-11/2	1	Lock clips				
19	NSE04-M5	2	Regulator				
20	HA724-07	1	Hinge pin				
21	ASE6	2	Ring				
22	616.11.235.06	1	Fixing square				
23	VCB512	2	Hex. soc. hd. cap screw				
24	HA724-31	1	Spring tube				
25	HA724-41	1	Air gun				
26	HA724-50	1	Straight pneumatic coupler				
27	HA724-15/2	1	Straight pneumatic coupler				
28	HA724-15/1	1	Faucet				
29	HA724-44	1	Quick coupling				
30	HA724-13	1	Filter				
31	HA724-14	1	Gauge				
32	HA781-05	1	Pneumatic coupler				

Ref.	Part No.	Qty	Description	Ref.	Part No.	Qty	Description
1	HA762-01	1	Cutters assembly	33	S0212	1	Spring pin
2	HA762-05	1	Blade screw	34	HA761-15	1	Adjustable sliding bar
3	VCB38	1	Hex. soc. hd. cap screw	35	HA761-13	1	Adjustable guide supporting
4	HA762-09	1	cylinder	36	HA761-12	1	Index
5	HA762-08	1	Movable blade	37	HA761-11	1	Ball grip for adjustable guide
6	HA762-02	1	Stationary blade				
7	HA762-06	1	Spring				
8	HA762-04	1	Spring blade				
9	HA762-03	1	Moving blade				
10	VCB416	4	Hex. soc. hd. cap screw				
11	HA760-17	1	Thread-brake tension group				
12	HA760-14	1	Tension cap				
13	HA760-13	1	Spring				
14	HA760-08	1	Guide sleeve				
15	HA760-12	1	Nipper release rod				
16	HA760-09	1	Rear pressure plate				
17	GBP34	2	Hex. Soc. set screw				
18	GBP35	1	Hex. Soc. set screw				
19	HA760-11	1	Nut				
20	HA760-10	1	Front pressure plate				
21	R2510	2	Roller				
22	HA761-20	1	Snap retractable edge guide assembly				
23	RP4	2	Flat washer				
24	VCB36	2	Hex. soc. hd. cap screw				
25	HA761-08/1	1	Reinforcement for spring				
26	HA761-08	1	Release spring for guide				
27	HA761-10	1	Threaded block				
28	HA761-03	1	Bottom for guide with lock				
29	VSB36	2	Hex. soc. flat had cap screw				
30	HA761-06	1	Spring for cloth-guide				
31	HA761-07	1	Push button for guide				
32	HA761-05	1	Spring guide point				

Ref.	Part No.	Qty	Description
1	GB	1	ex. soc. set screw
2	HA754-12	1	Stud
3	HA754-03	1	Hinge stud
4	TAF81512X	1	Rollers bearing
5	HA754-10	1	Upper looper lever
6	GB34	1	Hex. soc. set screw
7	HA756-10	1	Control knob
8	HA754-11	1	Upper looper support
9	GB55	1	Hex. soc. set screw
10	HA754-09	1	Upper looper
11	GB56	1	Hex. soc. set screw
12	HA754-08	1	Upper looper holder cap
13	HA754-07	1	Cap for hook
14	HA756-09	1	Spring
15	HA756-08	1	Roller stud





Ref	Description
1	Oil bottle
2	Pincers
3	Angular screw driver
4	Head screw driver mm.7
5	Open and wrench mm.5,5.7
6	Hexagonal key mm.1.5
7	Hexagonal key mm.2
8	Hexagonal key mm.2.5
9	Hexagonal key mm.3
10	Hexagonal key mm.4
11	Hexagonal key mm.5
12	Hexagonal key mm.6
13	Sample throat plate type "M.P.-M.L." (Optional Parts)
14	Sample throat plate type "L"
15	Sample gauge for lower bad center (Optional Parts)
16	Template for height of drop feed dog and needle (Optional Parts)

