

User's Manual  
and Spare Parts Book

GARUDAN®

**GF-138 Serie L100**

**GF-238 Serie L100**



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*Caution:*

*In case of sage the machine with HVP-70 motor,change the output JP3  
On motor's main board from 5V to 12V.*

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## PRECAUTIONS BEFORE STARTING OPERATION

### 1. Safety precautions

- 1) When turning the power on, keep your hands and fingers away from the area around/under the needle and the area around the pulley.
- 2) Power must be turned off when the machine is not used, or when the operator leaves his/her seat.
- 3) The power must be turned off before tilting the machine head, installing or removing the "V" belt, adjusting the machine, or when replacing.
- 4) Avoid placing fingers, hairs, bars etc. near the pulley, "V" belt, bobbin winder pulley, or motor when the machine is operation. Injury could result.
- 5) Do not insert fingers into the thread take-up cover, under/round the needle, or pulley when the machine is in operation.
- 6) If a belt cover, finger guard, and/or eye guard are installed, do not operate the machine without these safety devices.

### 2. Precaution before Starting Operation

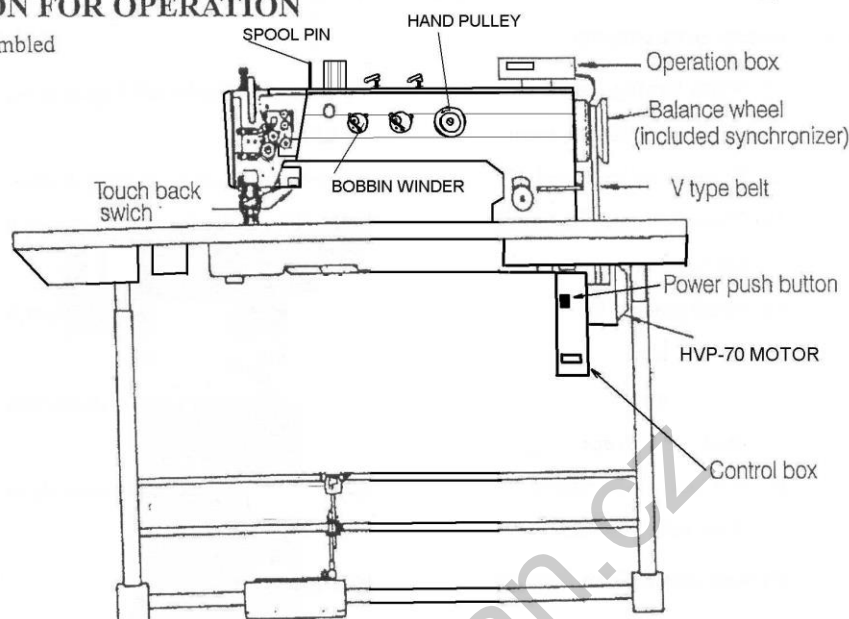
- 1) If the machine's oil pan has an oil sump, never operate the machine before filling it.
- 2) If the machine is lubricated by a drop oiler, never operate the machine before lubricating.
- 3) When a new sewing machine is first turned on, verify the rotational direction of the pulley with the power on. (the pulley should rotate counterclockwise when viewed from the pulley.)
- 4) Verify the voltage and (single or three) phase with those given on the motor nameplate.

### 3. Precaution for Operating Conditions

- 1) Avoid using the machine at abnormally high temperature (35°C or higher) or low temperature (5°C or lower). Otherwise, machine failure may result.
- 2) Avoid using the machine in dusty conditions.
- 3) Avoid using the machine in areas where too much electrical noise, resulted from the high-frequency welder and others, is generated.

## PREPARATION FOR OPERATION

Overall view of assembled sewing machine



### 1. Power cable connection

#### 1) Connection to Power Supply

When connecting the power supply connector to the control box, the connector should be completely plugged in the proper receptacle after confirming the connector type and matching direction.

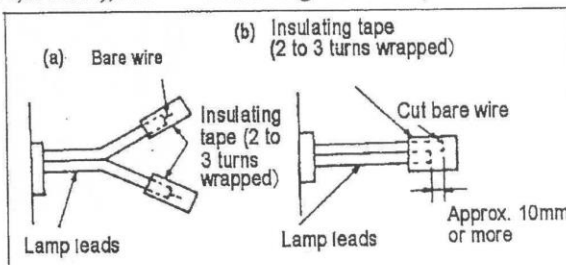
- A. In case of three-phase electrical power system, the "U" phase should be connected to the red lead, the "V" phase to the white lead, and the "W" phase to the black lead. The motor rotary direction depends, however, upon the setting of the internal switch in the control box as described in Paragraph 1-(3)

**CAUTION:** The green wire must be connected to the ground terminal in order to ground the motor properly.

- B. The appropriate power fuse capacity is as follows.
- |              |            |     |
|--------------|------------|-----|
| Power supply | 200V-240V: | 10A |
|              | 100V-120V: | 15A |

#### 2) Lamp Leads

- A. When installing the illuminating lamp(6V,15-20W),The connecting wire is attached on the back of the Control box. It should be removed and connected by removing the insulating tube from the wire and stripping properly. The wire connections should be, then, insulated by





wrapping insulating tape on the wires.

**CAUTION: The power switch must be Turned off before connecting the lamp.**

- B. When the illuminating lamp is not used, the end of the lamp leads must be insulated as (a) or (b) as shown in the figure on right side. If a short circuit occurs failing to insulate, the transformer in the control box will be possibly burned out.

**CAUTION: The illuminating lamp must not be connected with any heater, such as a foot warmer and others, in parallel. Otherwise, the load capacity will be exceeded.**

**It may cause transformer winding burned out.**

### 3) Rotary direction

It is possible to change the rotary direction of the motor by removing the rubber cap from the bottom left side of the front cover on the control box, and push the internal direction selector switch. The built-in lamp in the internal switch is off when the motor is rotating counterclockwise as facing to the motor pulley, and on when rotating clockwise. The rotary direction has been set to counterclockwise as facing to the motor pulley, matching with the machine prior to shipping

## 2. Connection of control box

The control box should be connected as shown to the right.

**Note: (1) Be sure to turn the power switch**

**off for safety before connecting or disconnecting the connectors.**

**(2) The combination of the machine heads with the motor control panels are specified below.**

**Use special care for the correct**

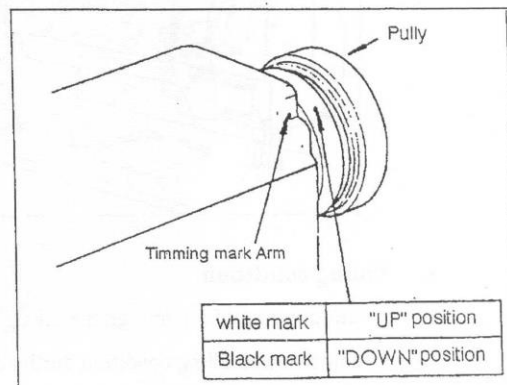
**combination when replacing the machine head or motor control panel.**

## 3. Adjustment of needle bar stop position

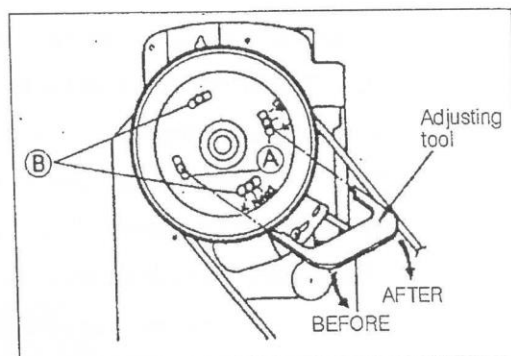
### 1) Adjust of "UP" position

When the pedal is kicked down by heel, the machine stops at "UP" position. If the marks deviate larger than 3 mm, adjust as follows.

- Disconnect the plug (12 pins) of cable from the machine head.
- Run the machine and stop at "UP" position.
- While holding the pulley, insert the "adjusting



- tool" in the hole" A", then remove the tool.
- 2) Adjust of "Down" position
- When the pedal is "Neutral" the machine stops at "Down" position. If the marks deviate large than 5 mm, adjust as follows.
- Disconnect the plug (12 pins) of cable from the machine head
  - Run the machine and stop at "Down" position.
  - While holding the pulley, insert the "adjusting tool" in the hole "B", then remove the tool.
- 3) Confirm the stop operation, then set the plug (12 pins) coming from the machine head into the receptacle.

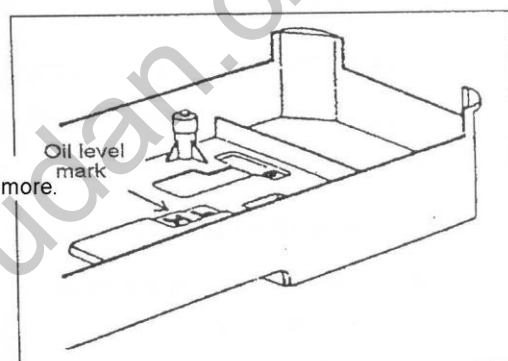


## CAUTIONS ON USE

### 1. Oiling (1)

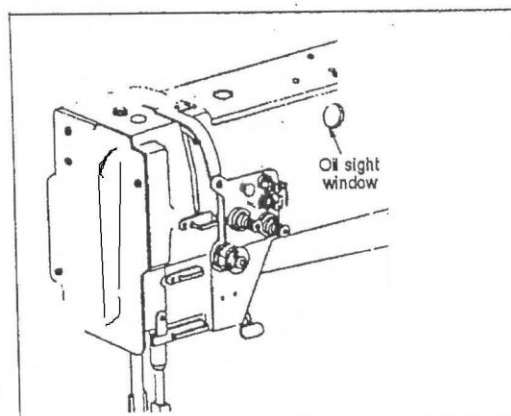
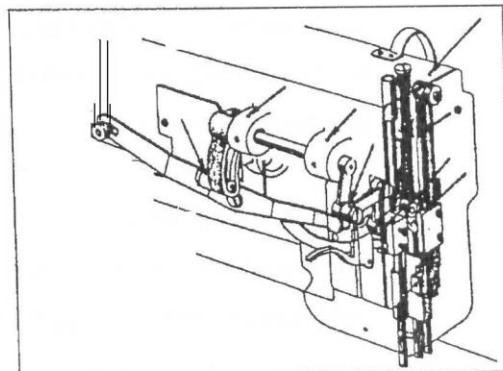
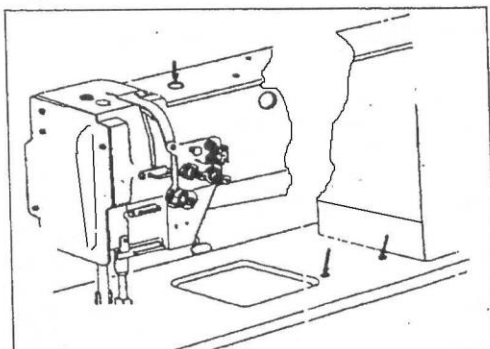
Fill the oil reservoir with oil up to "H" mark and more.

Oil level should be periodically checked. If oil level is found below "L" level replenish oil to "H" level. **For oil, Use white spindle oil.**



### 2. Oiling (2)

When a new sewing machine is used for the first time, or sewing machine left out of use for considerably long time is used again, replenish a suitable amount of oil to the portions indicated by arrow in the below figure



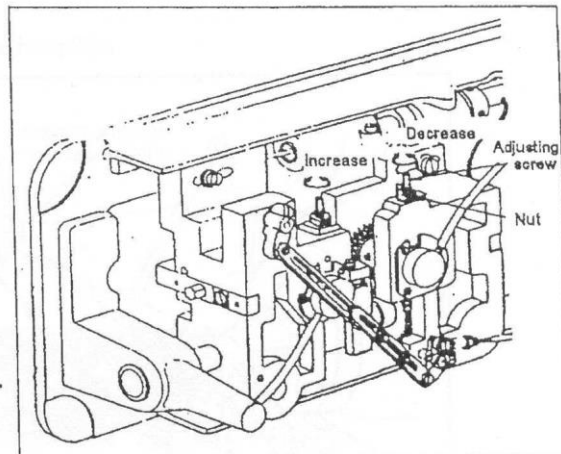
### 3. Oiling condition

See dripping of oil through the oil sight hole to check oiling condition during operation.

#### 4. Adjustment of oiling to rotating hook

#### 5. Cautions on operation

- a) When the power is turned on or off, keep foot away from the pedal.
- b) It should be noted that the brake may not work when the power is interrupted or power failure occurs during sewing machine operation.
- c) Since dust in the control box might cause malfunction or control troubles, be sure to keep the control box cover close during operation.
- d) Do not apply a multimeter to the control circuit for checking; otherwise voltage of multimeter might damage semiconductor components in the circuit.



## 6. Lubrication

On the machine are two main lubricant tank.

The first lubricant tank is under base plate of the machine. For accessing the lubricant tank is necessary to fold down the machine (fig. 1). In the upper portion of the casting (note.1.1). Through the tube put up to 3 cm of oil. During an 8 hour work shift, the oil in the tank refill once a week, preferably on Monday (because the machine is equipped with the wick lubrication and it is functional if the machine works or does not otherwise it could be a lot of oil in the machine).

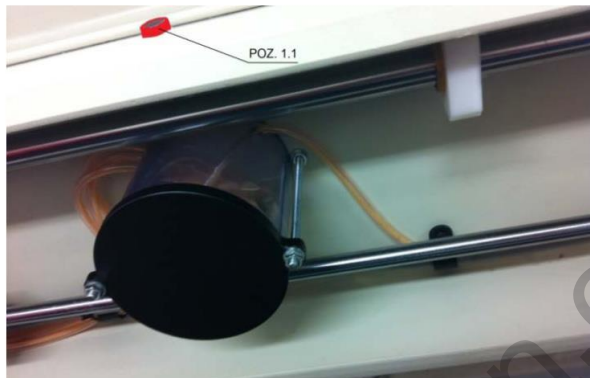


fig.1

The second lubricant tank is in the upper part of the machine. It is necessary to refill the oil up to 2 cm twice a month when it is 8 hours work shift. This lubricant place is connected with putting oil to needle bar. In the case that if there is an oil mark in the space of the needle it is necessary to put less oil to this tank or not to put any oil to this tank.



fig.2

Other lubricant places are marked with red colour and there is needed refill the oil (about 2 drops) once a week. The last lubricant places are shuttle hook. These places are not marked with red colour the places are marked with an arrow. It is necessary to put 2 drops of oil once a week.

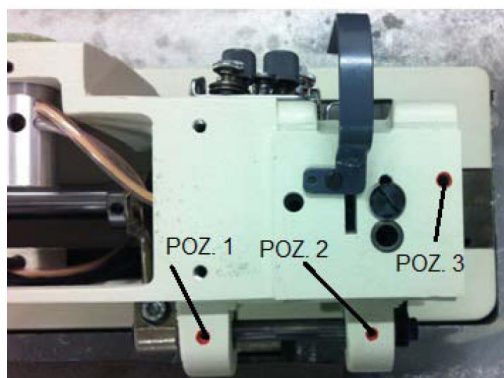
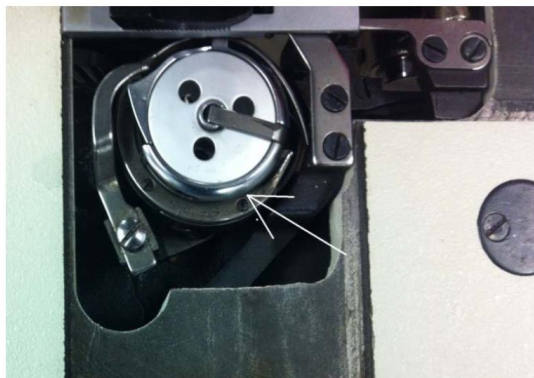


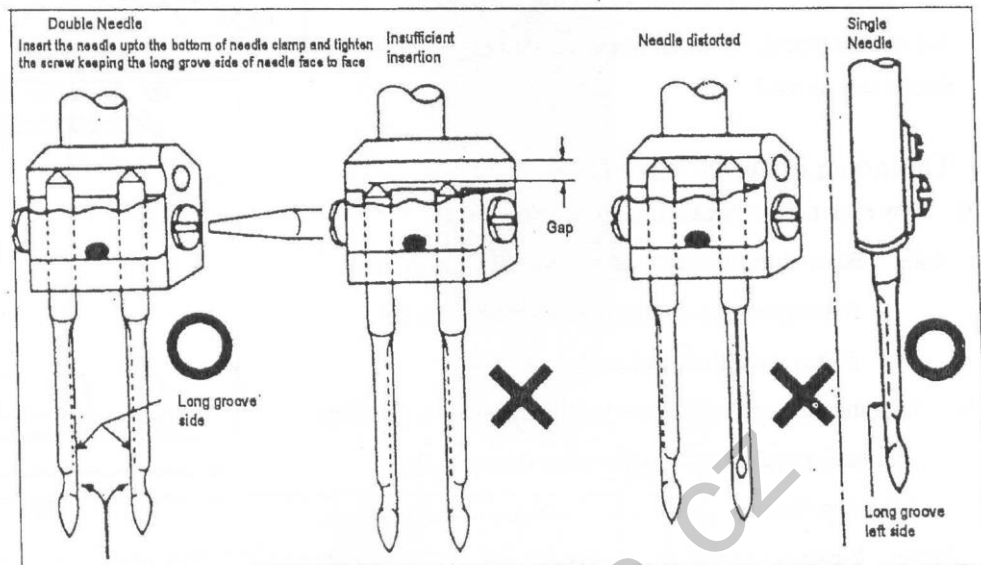
fig.3



## OPERATION

### 1. Installation of needles

Note: Before installing the needles, be sure to turn off the power.



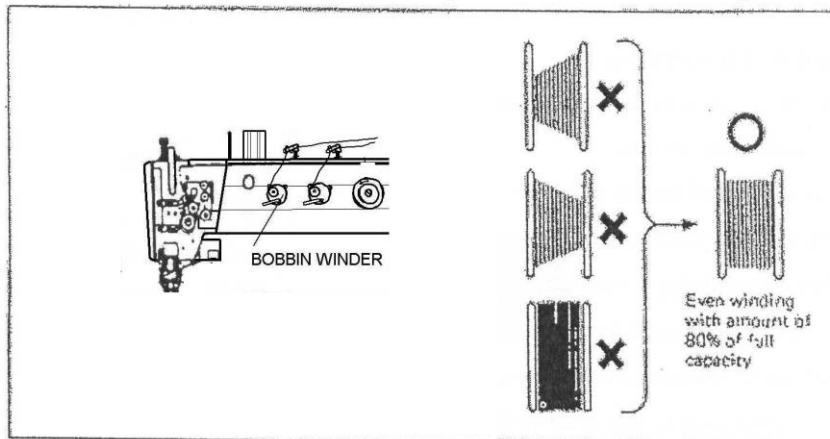
### 2. Winding of bobbin thread

Note: When bobbin thread is wound, keep the presser foot lifted.

#### Adjustment:

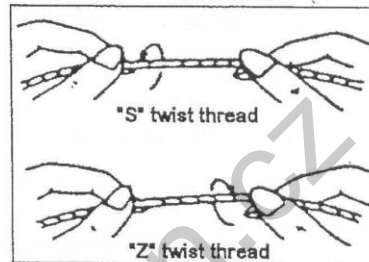
|                         |  |
|-------------------------|--|
| Tension of wound thread | Slack winding is recommended for polyester thread and nylon thread.  |
| Conically wound thread  | Move the thread guide toward smaller diameter of wound thread layer. |
| Length of wound thread  | Loosen the thread length adjusting screw to increase length          |

of thread and tighten the screw to decrease length of thread.



### 3. Selection of thread

It is recommended to use "S" twist thread in the left needle (viewed from front), and "Z" twist thread in the right needle. When discriminate use of needle threads is impossible, use "Z" twist thread in both the needles. For bobbin thread, "S" twist thread as well as "Z" twist thread can be used.

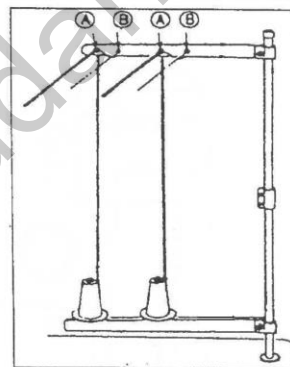


### 4. Threading of needle threads

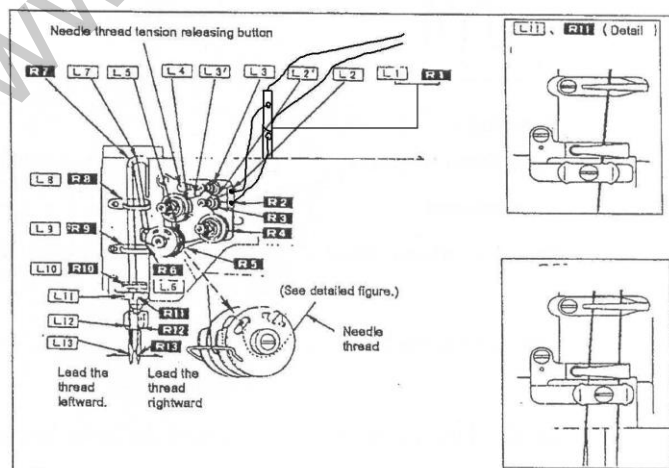
- a) Pass each needle thread through thread guide A

Note: When thin slippery thread (polyester Thread or filament thread, for example) is used pass the thread through thread guide B as well.

- b) With the take-up lever located at the upper most position, pass each needle thread in the order shown in the following figure.



Note: Pressing the upper thread loosening button shown in the figure below opens the saucer of the upper thread tension adjuster, and the upper thread can easily pulled out.



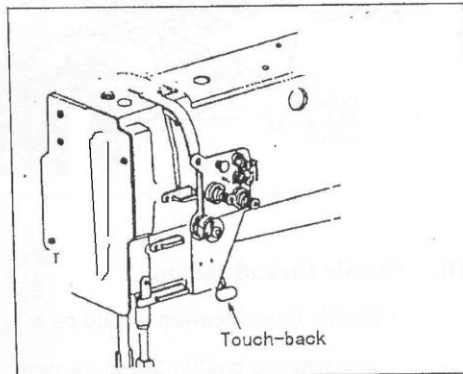
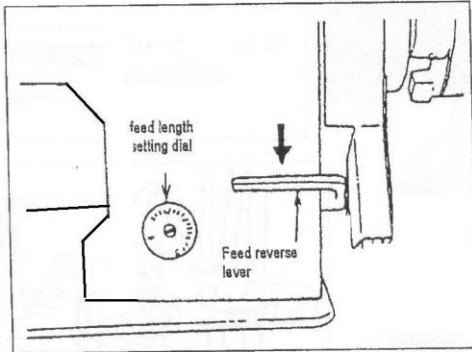


## 5. Adjustment of feed (stitch) length and stitch reversing (touch back)

**Note:** To make feed (stitch) length smaller, depress the feed reverse lever and set the feed length setting dial to a desired position

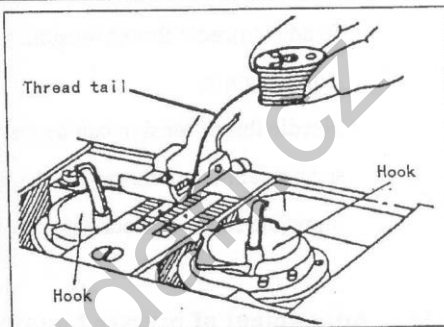
Touch-back button . . . Direction of stitching can be reversed by depressing this button.

Stitching goes on in reversed direction while the button is held down, and returns to forward direction when the button is released. .



## 6. Setting of bobbin

- Pulling out 5.cm thread tail from the bobbin.
- Hold the bobbin so that the bobbin thread is would in right direction and put it into the hook.



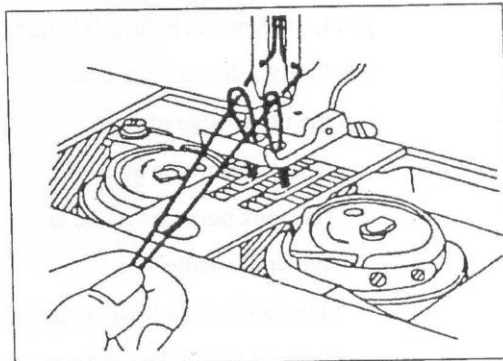
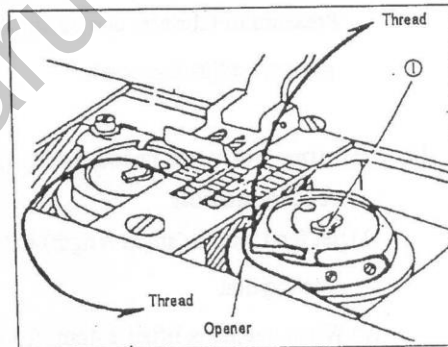
## 7. Threading of bobbin threads

- Put the hook into the bobbin case and press down the latch ①.

The thread end should be left on the bed .

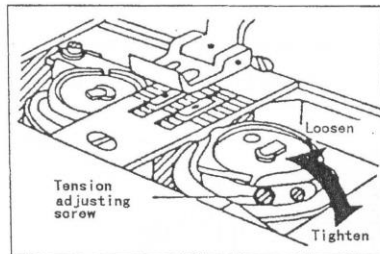
- While holding the two needle Threads by left hand, rotate the hand-wheel one turn by right hand.

By pulling up the needle threads, as shown in the figure, the bobbin threads will be lifted. Each combination of bobbin thread and needle thread should be aligned and led backward.

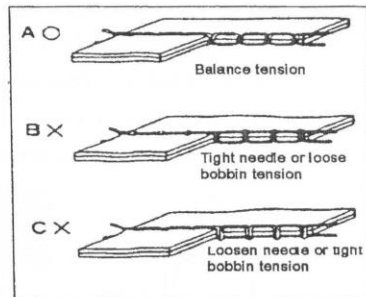




### 8. Tension adjustment of bobbin threads

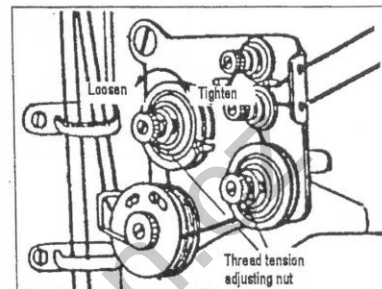


### 9. Balance of thread tension



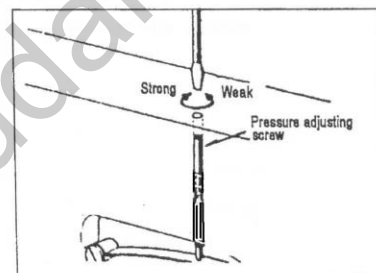
### 10. Needle thread tension

- Needle thread tension should be adjusted in reference to bobbin thread tension.
- To adjust needle thread tension, turn each tension adjusting nut.
- Needle thread tension can be also adjusted for special fabric and thread by changing intensity and movable range of slack thread adjusting spring.



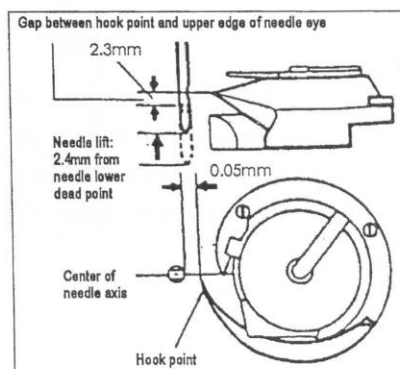
### 11. Adjustment of presser foot pressure

Pressure to fabric(s) can be adjusted by turning the pressure adjusting screw.



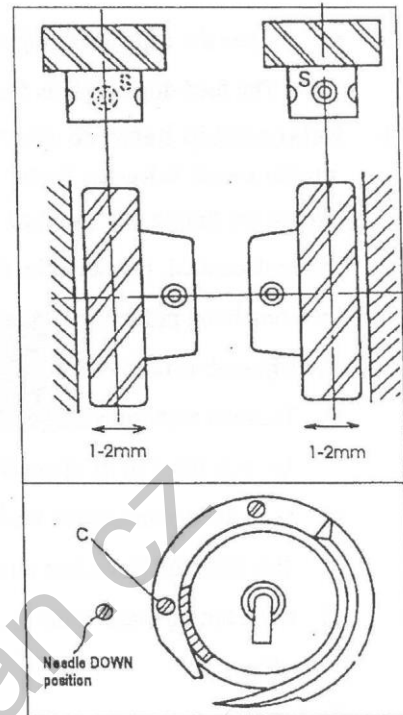
### 12. Timing between rotating hook motion and needle motion

- (1) Set feed length (stitch length) to "6" on the feed setting dial.
- (2) When needle is lifted 2.4mm from the lower dead point, as shown in Figure, the following positional relationship should be maintained.
  - The upper edge of needle eye should be 2.3mm below the hook point.
  - The hook point should be located at the center of needle axis.
  - Gap between the hook point and the side face of needle should be 0.05mm.



### ■ Positioning of hook point

- (1) When the needle is at DOWN position, the smaller Crossed helical gears on the right side and left side should be engaged with the large wheel so that the "S" screw of the former gear comes on the front side, and that of the latter gear on the reverse side.
  - (2) Tighten each "S" screw, where is punched for set screw, on the hook shaft.
  - (3) Approximate position of hook "C" screw of hook should be found close to the needle when the needle is at DOWN position.
- ♦ To finely adjust timing between the needle motion and hook motion, loosen the set screw of larger gear wheel and move the gear wheel in its axial direction within a range from 1mm to 2mm.



### 13. Adjustment of feed dog height

Height of feed dog and pressure of presser foot should be adjusted for individual fabric(s) with the following cautions:

- Fabric will be damaged if the feed dog extends too high, or pressure of presser foot is too large.
- Even stitch length cannot be assured if the feed dog is too low or pressure of presser foot is too small.
- Feed dog height should be measured at the point where the needle is at the top position.

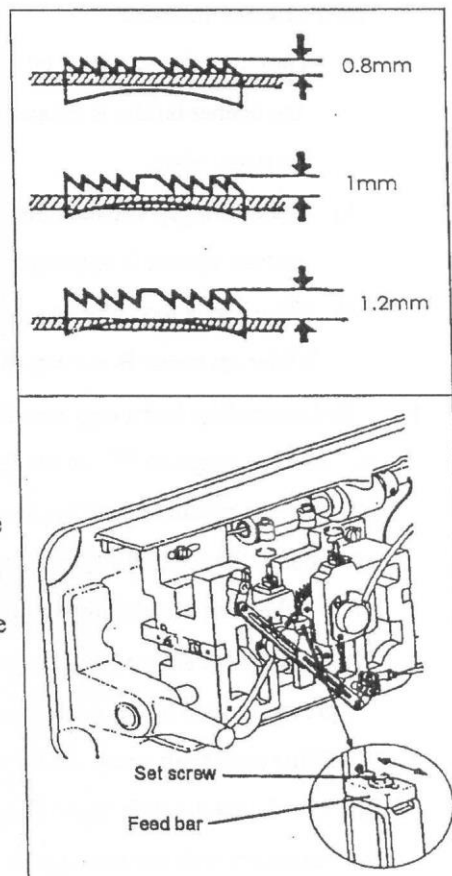
For light fabrics ..... Approx. 0.8mm from throat plate

For usual fabrics ..... Approx. 1.0mm from throat plate

For heavy fabrics ..... Approx. 1.2mm from throat plate

#### Adjustment procedure

- a) Lean the machine head backward.
- b) Turn the hand wheel by hand and stop when the feed dog rises to the maximum height.
- c) Loosen the feed bar set screw.
- d) Vertically move the feed bar (in the direction indicated by arrow in the figure) to adjust it to adequate height.

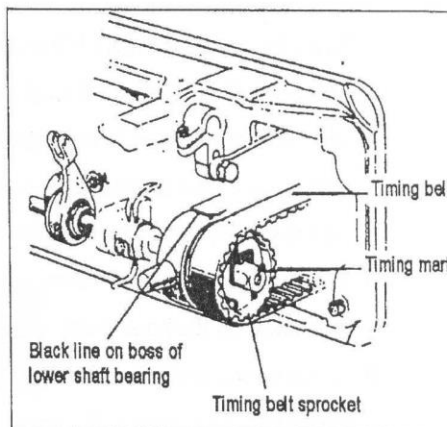


- e) After the adjustment, tighten the feed bar set screw.
  - ♦ The feed dog height is factory-adjusted to 1.2mm

#### 14. Relationship between rotating hook motion and take-up lever motion

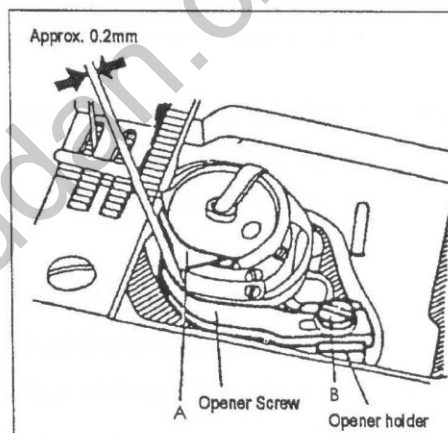
When the timing belt (toothed belt) was removed for its replacement, for example, the relationship between rotating hook motion and take-up lever motion should be adjusted as follows:

- a) Turn the balance wheel and stop when the take-up lever is lifted to its upper dead point.
- b) Lean the machine head backward and make sure the arrow (timing mark) put on the timing belt is in line with the black line on the boss of lower shaft bearing.
- c) If the timing mark is not in line with the black line, remove the timing belt and install it again to adjust.



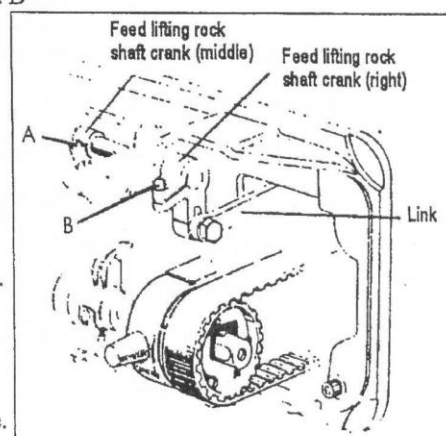
#### 15. Relationship between hook motion and opener motion

- a) Turn the balance wheel by hand and stop when the opener holder is located most remotely from the throat plate.
- b) Make sure gap between the bobbin case holder A and the opener is approximately 0.2mm.
- c) If the gap is too large or small, loosen the opener holder set screw B and adjust position of the opener.



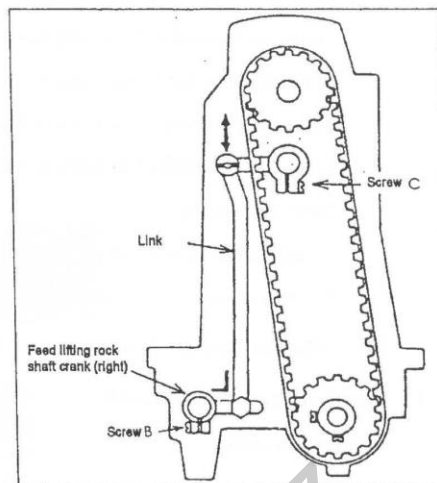
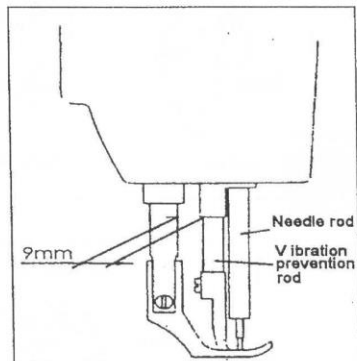
#### 16. Relationship between needle motion and feed dog motion

- a) Set feed length to "0" on the feed setting dial
- b) Lean the machine head backward.
- c) Loosen the feed lifting rock shaft crank set screws A and B
- d) Set the needle at the lowest position.
- e) Adjust the distance between presser rod and vibration prevention rod to 9mm and temporarily tighten the feed lifting rock shaft crank set screws A and B
- f) Check that the right feed lifting rock shaft crank is connected with the link at right angle, as shown in Figure.
- g) If the connection is not at right angle, remove the back cover, loosen screw C and move the right link to connect the right feed lifting rock shaft with the link at right angle.



h) After the completion of adjustment, fully tighten the screws A, B and C.

- ♦ At this time make certain that needle can enter the feed dog needle hole at the center of the hole.

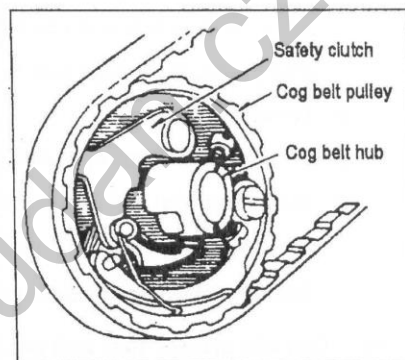


### 17. Safety clutch device:

Safety clutch device is installed to prevent the hook and cog belt from damage in case the thread is caught into the hook when the machine is loaded abnormally during operation.

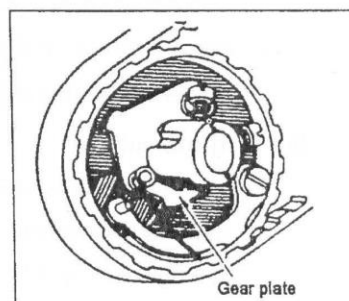
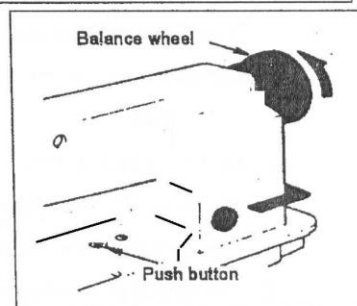
#### (1) Function of safety clutch.

- When the safety clutch acts, the cog belt pulley will be unloaded. then the rotation of hook shaft will stop. The arm shaft only will rotate. Stop the operation of machine.
- Clean the thread thoroughly which is caught into the hook.
- Turn the cog belt hub by hand, and check whether the hook Shaft rotates lightly and properly, place the clutch device as follows.



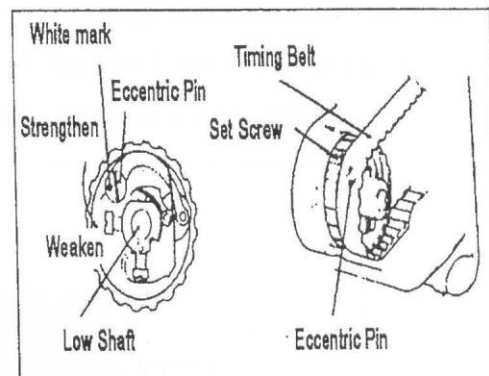
#### (2) How to set the safety clutch.

- While pressing down the push button on the opposite side of bed by left hand, turn the balance wheel slowly by right hand away from you as shown in the figure.
- The balance wheel will stop by the gear plate, but turn the balance wheel more firmly.
- Release the push button.
- As shown in the Figure, the safety clutch device is set.



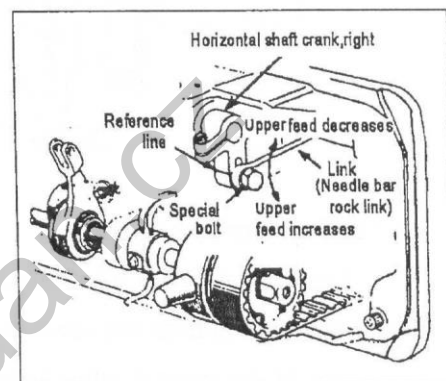
**(3) Force applied to the safety clutch.**

- The force applied to the safety clutch is the smallest when the white mark of the eccentric pin faces the center of the lower shaft. The force proportionally increases as the white mark faces the outside.
- To adjust the force slide the timing belt, loosen the set screw, and turn the eccentric pin.
- After the adjustment, make sure to fasten the set screw.

**18. Upper feed adjustment****(Needle side)**

If the uneven feeding occurs according to the fabric, Adjust the long hole of the horizontal feed shaft crank (right) to adjust the upper feed length. (How to adjust)

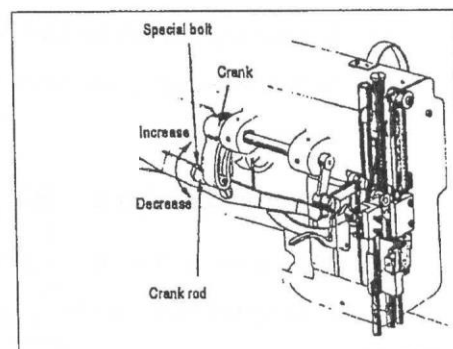
- Loosen the special bolt.
- Move the special bolt upward to decrease upper feed.
- Move the special bolt downward to increase the upper feed. The upper feed and the lower feed theoretically becomes equal at the reference line on the horizontal feed shaft crank.
- Securely tighten the special bolt after adjustment.

**19. Outside presser foot and inside presser vertical stroke adjustment**

When fabric with large elasticity is sewn, or when thickness of fabric changes, the vertical stroke (movable range) of the presser feet should be adjusted as follows:

**Adjustment**

- Loosen the special bolt.
- The vertical strokes of the presser feet become
- maximum when the crank rod is moved upward and set.
- The vertical strokes becomes minimum when the nut is moved downward and set.
- After the adjustment, fully tighten the special bolt.



- The vertical strokes of the presser feet can be adjusted within a range from 6mm to 2mm.

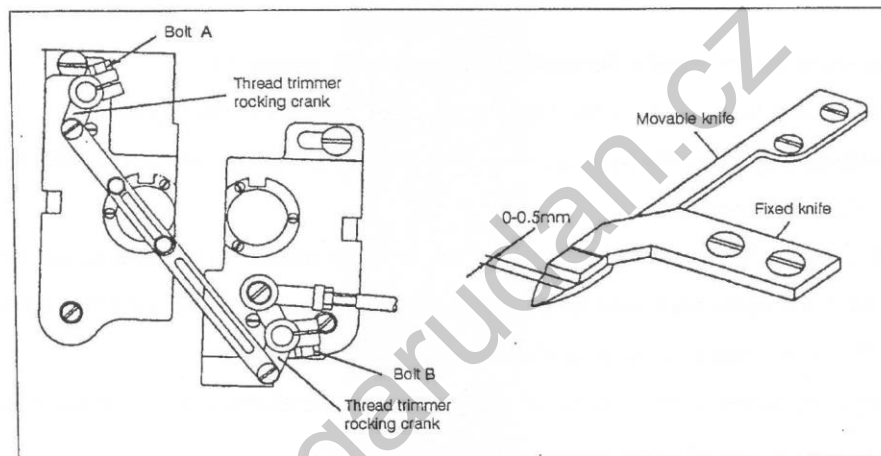
**20. Adjustment**

Screwing the pin that connects the link of back-sewing with the crank of back-sewing (down) can adjust the tolerance of between the stitches. Screwing the pin in clockwise can increase the stitch of forward sewing; otherwise, the stitch of back-sewing will be increased.

## 21. Installation of movable knife

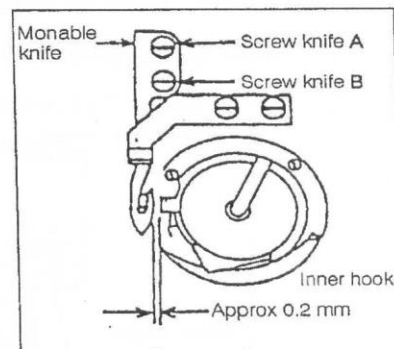
### (1) Installation of movable knife

- Turn the balance wheel and lower the needle bar to the lowest position.
- Push the cam follower crank so that the cam roller enters into the thread trimmer cam groove.
- Turn the balance wheel until the black mark point on the arm meets the white mark point on the balance wheel. Set the cam follower crank at this position with a screwdriver temporarily preventing the cam roller coming out from the cam groove.
- Loosen the thread trimmer rocking crank clamp bolts A and B.
- Adjust the movable knife so that the movable knife end slant portion protrudes 0-0.5 mm from the fixed knife, as shown in Figure and tighten the bolts A and B.



### (2) Gap between movable knife and bobbin case holder stopper

- Turn the balance wheel by hand until needle reaches the Lowest position.
- With the needle at the lowest position, depress cam follower crank, turn the balance wheel until the movable knife reaches the extremity of its stroke.
- Manually rotate the inner hook in the direction indicated by arrow in Figure and adjust gap between the movable knife and the inner hook stopper to about 0.5 mm (the screws A and B should be loosened for this adjustment).

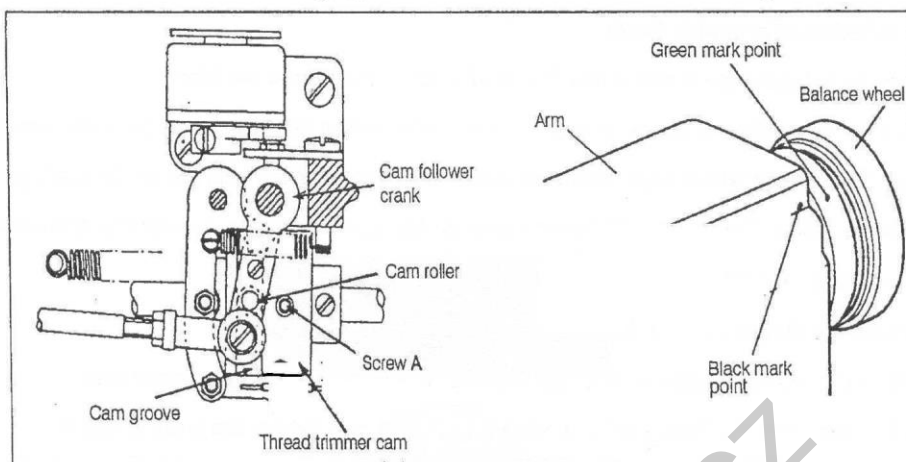


## 22. Adjustment of thread trimmer cam

- Turn the balance wheel by hand until the needles reach the lowest position.
- Maintaining the needle position, depress the cam follower crank and put the cam roller into the groove of thread trimmer cam.
- Turning the balance wheel by hand, adjust the thread trimmer cam so that the movable knife starts moving when the green mark point on the balance wheel comes in line with the black mark point on

the arm.

**Note:** To adjust, loosen two thread trimmer cam clamp screws A.



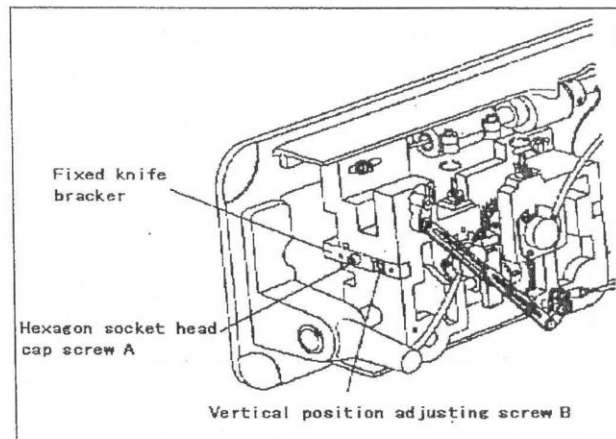
#### 24. Adjustment of scissoring pressure of movable knife and fixed knife

- a. Loosen the fixed knife bracket clamp bolt A.

- b. Turn the vertical position adjusting screw B to adjust meshing pressure and then tighten the hexagon socket head cap screw A.

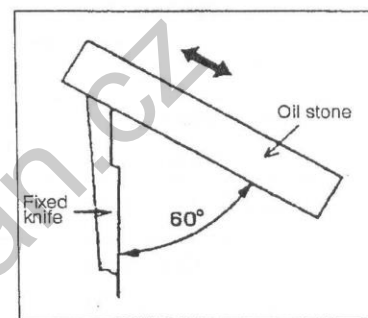
**Note:** Since excess pressure causes large torque to the thread trimming mechanism and trimming failure, adjust it so that thread can be trimmed with minimum pressure.

- c. Move the movable knife and check that the thread can be sharply trimmed.



## 25. Sharpening of fixed knife

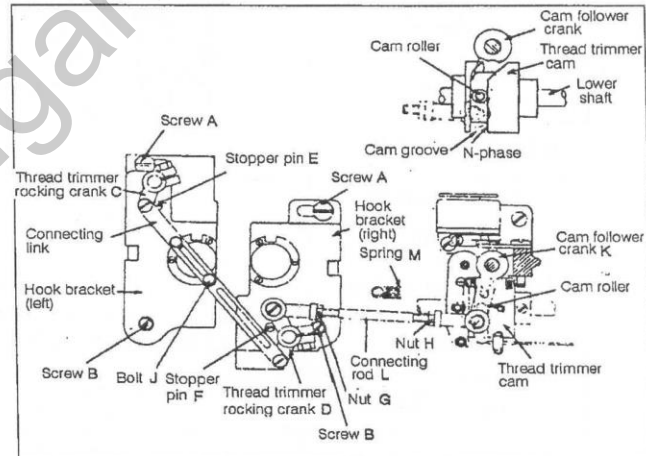
When the knives dull, the fixed should be sharpened as illustrated in Fig. Since it is very difficult to sharpen the movable knife, replace it with a new one when it dulls.



## 26. Adjustment for change of needle-to-needle distance

- (1) Replace the throat plate, feed dog and needle clamp.  
(Since the throat plate and feed dog are special parts designed for thread trimming machine, be sure to use those specified by us.)

- (2) Lean the machine head backward.  
(3) Loosen two connecting link clamp bolts J.  
(4) Remove the spring M.  
(5) Loosen the hook bracket clamp screws A and B and adjust gap between each needle and hook.  
(6) When the needles and hooks have been adjusted, install the spring M.



- (7) Contact the rocking cranks C and D to the stopper pins E and F and tighten the connecting link clamp bolt J.  
(8) Turn the balance wheel by hand until the needles reach the lowest position.  
(9) Loosen the nuts G and H.  
(10) Depress the cam follower crank K and adjust the connecting rod L so that the cam roller can smoothly enter the groove of thread trimmer cam.  
(11) Adjustment of the cam groove and the cam roller



- Push the cam follower crank K so that the cam roller enters into the cam groove.
- Turn the connecting rod L and adjust the clearance between the cam roller and the cam groove surface L as small as possible, and tighten the nuts G and H.
- Push the cam follower crank K again and check that the cam roller enters into the thread trimmer cam groove smoothly.

## SPECIFICATIONS

| Model                         | GF-138-443 H                     | GF-238-443 MH | GF-138-446 H  | GF-238-446 MH        |   |     |      |    |    |
|-------------------------------|----------------------------------|---------------|---------------|----------------------|---|-----|------|----|----|
| Number                        | Single-needle                    | Double-needle | Single-needle | Double-needle        |   |     |      |    |    |
| Application                   | Heavy material                   |               |               |                      |   |     |      |    |    |
| Max. sewing speed             | 2000(rpm)                        |               |               |                      |   |     |      |    |    |
| Stitch length                 | 0~9(mm)                          |               |               |                      |   |     |      |    |    |
| Thread take-up lever stroke   | 74.5(mm)                         |               |               |                      |   |     |      |    |    |
| Needle-bar stroke             | 36(mm)                           |               |               |                      |   |     |      |    |    |
| Presser-foot stroke           | 16(mm) Pneumatic Foot Lifter     |               | 8(mm) by hand |                      |   |     |      |    |    |
| Vertical stroke of upper feed | 2~6(mm)                          |               |               |                      |   |     |      |    |    |
| Needle No.                    | 135x17                           | DP×17         | #23           | Needle Size 90 - 160 |   |     |      |    |    |
| Hook                          | (Horizontal full-rotating) Large |               |               |                      |   |     |      |    |    |
| Thread take-up lever          | Slide lever                      |               |               |                      |   |     |      |    |    |
| Stitch adjusting system       | Dial                             |               |               |                      |   |     |      |    |    |
| Lubrication system            | Automatic lubrication            |               |               |                      |   |     |      |    |    |
| Motor                         | HVP-70 (750W)                    |               | HVP-70 (750W) |                      |   |     |      |    |    |
| Needle gauge                  | Standard                         | 6.4(mm)       |               |                      |   |     |      |    |    |
|                               | Special                          | 3.2           | 4             | 4.8                  | 8 | 9.5 | 12.7 | 16 | 19 |

- Note:** ♦ Some materials, gauge sizes, and/or sewing conditions may require specifications other than those listed above.
- ♦ Feed dog, throat plate, rotating hook, bobbin case and bobbin should be those designed for thread timer.
  - ♦ Bobbin should be of high quality free from deformation.
  - ♦ This specification is subject to change for machine improvement.

Spare Parts List  
Katalog náhradních dílů pro  
průmyslový šicí stroj

**GARUDAN**®

**GF-138 Serie L100**

**GF-238 Serie L100**



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Vlastnictví Anita B s r.o. a chráněno autorským právem. Použití tohoto obsahu bez písemného souhlasu Anita B s r.o. zakázáno.

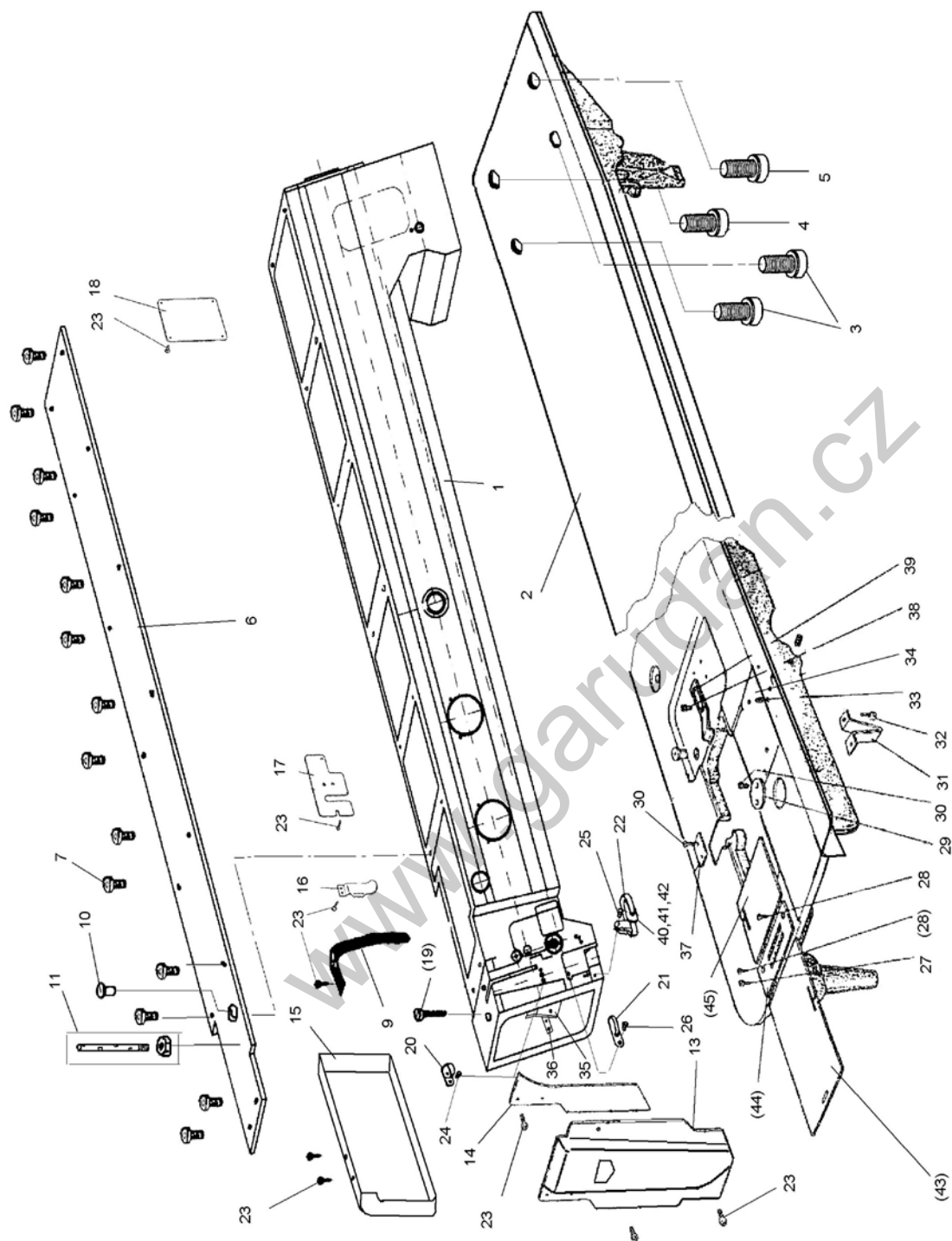
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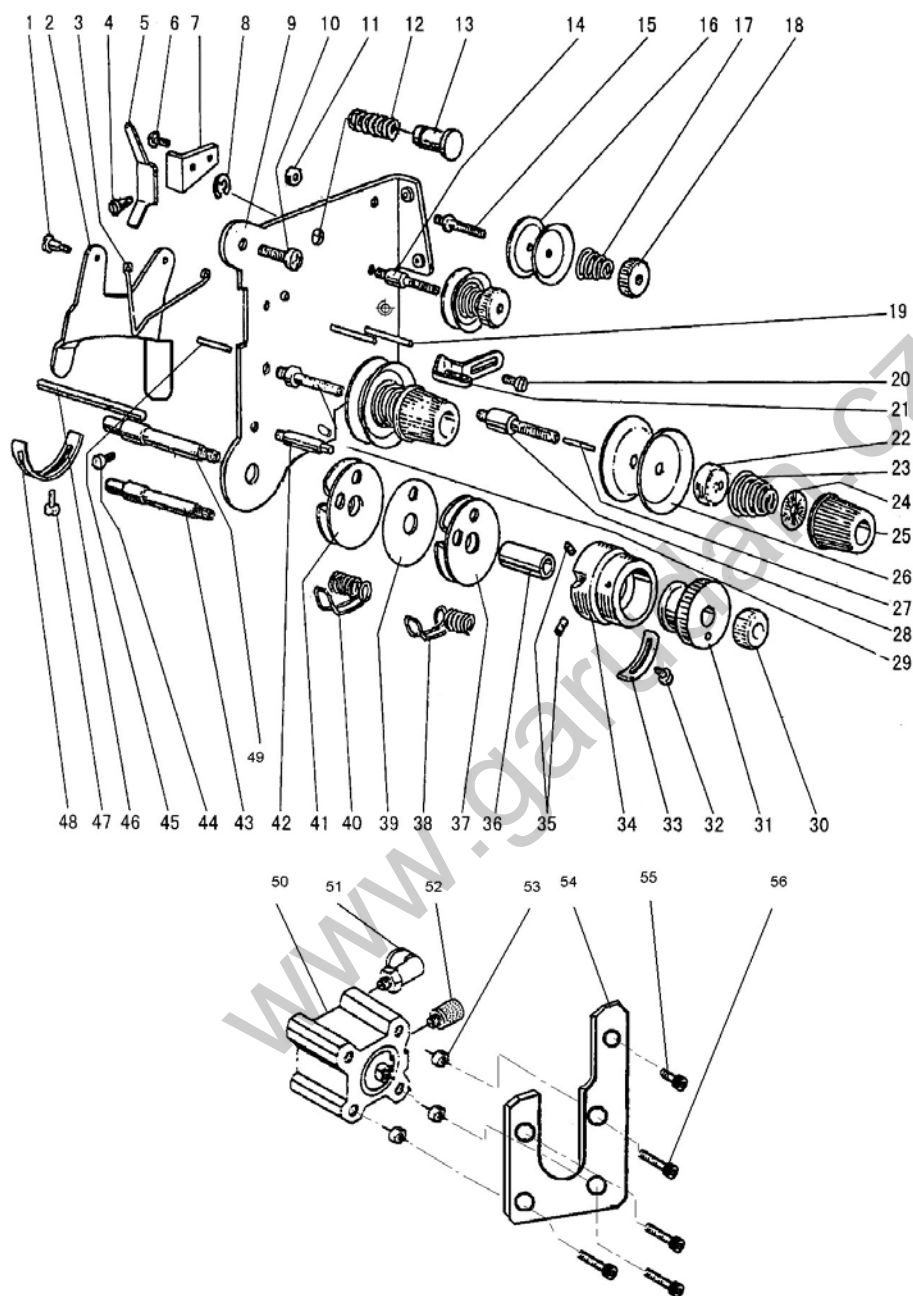
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## Spare Parts Lists

|          |   |       |
|----------|---|-------|
| <b>A</b> | Arm,Bed Plate and it's Accessories.....           | 4,5   |
| <b>B</b> | Thread Tension Mechanism.....                     | 6-9   |
| <b>C</b> | Arm Shaft Mechanism.....                          | 10,11 |
| <b>D</b> | Upper Shaft and Presser Foot Mechanism.....       | 12-15 |
| <b>E</b> | Needle Bar and Thread Take-up Mechanism.....      | 16-19 |
| <b>F</b> | Stitch Regulator Mechanism.....                   | 20,21 |
| <b>G</b> | Lower Shaft and Feed Rock Shaft Mechanism.....    | 22-25 |
| <b>H</b> | Hook Saddle Mechanism.....                        | 26,27 |
| <b>I</b> | Upper Feed Rock Shaft Mechanism.....              | 28-29 |
| <b>J</b> | Knife Mechanism.....                              | 30-33 |
| <b>K</b> | Backtacking Mechanism and Detector Mechanism..... | 34,35 |
| <b>L</b> | Oil Lubrication Mechanism.....                    | 36,37 |
| <b>M</b> | Accessories.....                                  | 38,39 |
| <b>N</b> | Bobbin Winder and Hand Pulley Parts.....          | 40,41 |
| <b>O</b> | Pneumatics.....                                   | 42,43 |
| <b>P</b> | Advanced Alternating Presser Foot Mechanism.....  | 44,45 |
| -        | Straightening Presser Foot.....                   | 46    |
| -        | Gauge Parts List.....                             | 47    |

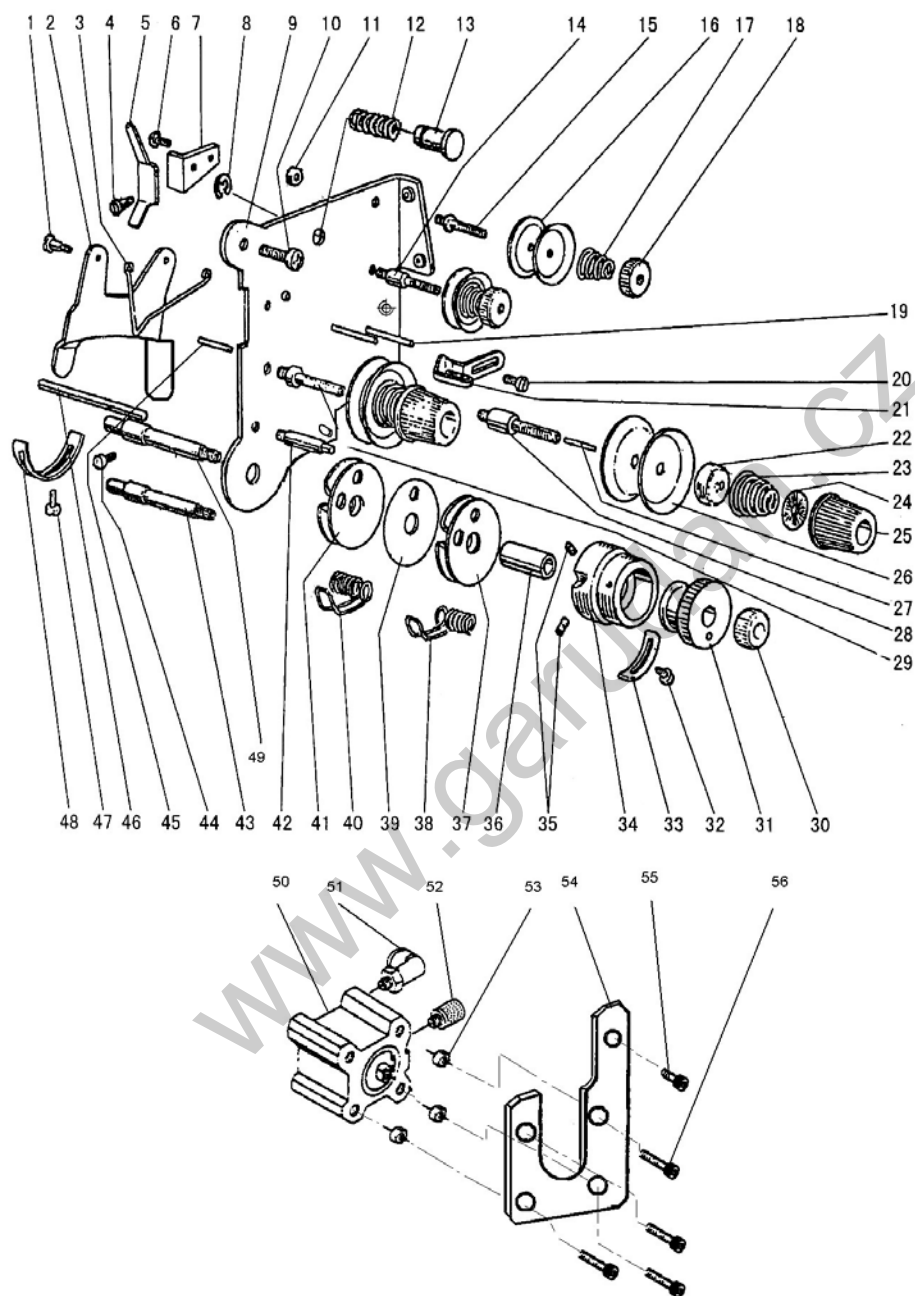


| Ref. No. | Part No.       | Name of Part                        | Q'ty   |        |
|----------|----------------|-------------------------------------|--------|--------|
|          |                |                                     | GF/138 | GF/238 |
| A 1      | GF/ L100- 01B  | Long Arm                            | 1      | 1      |
| A 2      | GF/ L100- 02A  | Long Bed Plate                      |        | 1      |
| A 2      | GF/ L100- 02B  | Long Bed Plate                      | 1      |        |
| A 3      | GF/ M12X30     | Screw (M12x40 DIN 912)              | 2      | 2      |
| A 4      | GF/ M12X50     | Screw(M12x50 DIN 912)               | 1      | 1      |
| A 5      | GF/ M12x80     | Screw (M12x80 DIN 912))             | 1      | 1      |
| A 6      | GF/ L100- 03   | Arm Cover                           | 1      | 1      |
| A 7      | GF/ M6x16      | Screw (M6x16 DIN 912)               | 14     | 14     |
| A 9      | GF/ H4717B8001 | Threrd Take-up Cover                | 1      | 1      |
| A 10     | GF/ H4715B8001 | Rubber Plug                         | 1      | 1      |
| A 11     | GP/ 119026     | Spool Pin                           | 1      | 1      |
| A 13     | GF/ 138        | Face Plate                          | 1      | 1      |
| A 14     | GF/ H4730B8001 | Guide Mounting Plate                | 1      | 1      |
| A 15     | GF/ L100- 40   | Cover of Alternating Feed           | 1      | 1      |
| A 16     | GF/ H4716B8001 | Oil Guide Plate                     | 1      | 1      |
| A 17     | GF/ H4718B8001 | Side Cover                          | 1      | 1      |
| A 18     | GF/ H4919B8001 | Side Cover right                    | 1      | 1      |
| A 19     | GF/ L100- 11   | Screw (see table E ig No.3)         | 1      | 1      |
| A 20     | GF/ H2400B2070 | Thread Guide [upper]                | 1      | 1      |
| A 21     | GF/ H4726B8001 | Thread Guide [middle]               | 1      | 1      |
| A 22     | GF/ H4725B8001 | Thred Guide                         | 1      | 1      |
| A 23     | GF/ M4x8       | Screw [DIN 85A, ISO 1362]           | 14     | 14     |
| A 24     | GF/ H2400B2080 | Screw                               | 2      | 2      |
| A 25     | GF/ H3200B2100 | Screw                               | 1      | 1      |
| A 26     | GF/ H3000D2160 | Screw                               | 1      | 1      |
| A 27     | GF/ H3200B2120 | Screw                               |        | 1      |
| A 28     | GF/ HA300B2190 | Screw                               | 2      |        |
| A 29     | GF/ H4915B8001 | Cover                               |        | 1      |
| A 30     | GF/ H4914B8001 | Screw                               | 2      | 4      |
| A 31     | GF/ H4913B8001 | Supporter                           | 1      | 1      |
| A 32     | GF/ H4912B8001 | Screw                               | 2      | 2      |
| A 33     | GF/ H3200B2170 | Screw                               |        | 1      |
| A 34     | GF/ H3219B0067 | Slide Plate Complete                |        | 1      |
| A 35     | GF/ H3200B2060 | Oill Guard                          | 1      | 1      |
| A 36     | GF/ H2400B2060 | Plate for Oil Guard                 | 1      | 1      |
| A 37     | GF/ H4911B8001 | Cover                               |        | 1      |
| A 38     | GF/ H4751B8001 | Tension Releasing Plate             | 1      |        |
| A 39     | GF/ H4742E8001 | Screw                               | 2      |        |
| A 40     | GF/ H4722B8001 | Screw                               | 1      | 1      |
| A 41     | GF/ H4723B8001 | Spring                              | 1      | 1      |
| A 42     | GF/ H4724B8001 | Plate                               | 1      | 1      |
| A 43     | GF/            | Slide Plate L(see Gauge Parts List) |        |        |
| A 44     | GF/            | Needle Plate(see Gauge Parts List)  |        |        |
| A 45     | GF/            | Slide Plate P(see Gauge Parts List) |        |        |

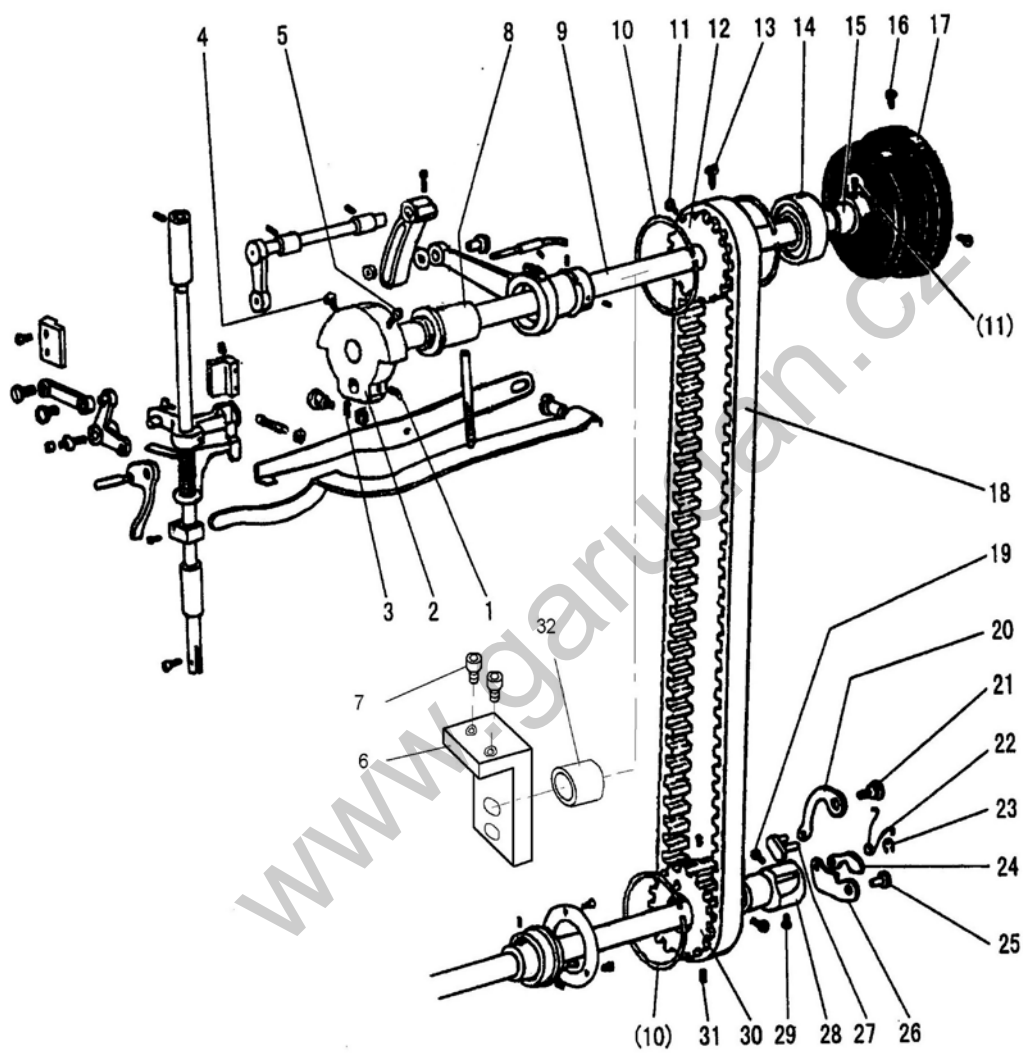


| Ref. No. | Part No.       | Name of Part                             | Q'ty   |        |
|----------|----------------|--|--------|--------|
|          |                |  | GF/138 | GF/238 |
| B 1      | GF/ H3221B6811 | Screw                                    | 2      | 2      |
| B 2      | GF/ L100- 16P  | Tension Releasing Plate                  | 1      | 1      |
| B 3      | GF/ H3221B6812 | Tension Releasing Spring                 | 1      | 1      |
| B 4      | GF/ H4705C8001 | Screw                                    | 1      | 1      |
| B 5      | GF/ H4706C8001 | Lever                                    | 1      | 1      |
| B 6      | GF/ HA7311C306 | Screw                                    | 1      | 1      |
| B 7      | GF/ H4707C8001 | Mounting Plate                           | 1      | 1      |
| B 8      | GF/ H007013050 | Stop Ring                                | 1      | 1      |
| B 9      | GF/ L100- 16   | Mounting Plate (modification H3221B6820) | 1      | 1      |
| B 10     | GF/ M4x15      | Screw (M4x15 DIN 85A)                    | 1      | 1      |
| B 11     | GF/ H3221B6810 | Nut                                      | 1      | 1      |
| B 12     | GF/ H4708C8001 | Spring                                   | 1      | 1      |
| B 13     | GF/ H4709C8001 | Push Button                              | 1      | 1      |
| B 14     | GF/ H3221B0685 | Thread Tension Stud                      | 1      | 1      |
| B 15     | GF/ H3221B0683 | Thread Tension Stud                      | 1      | 1      |
| B 16     | GF/ HA112B0693 | Thread tension Disk                      | 2      | 4      |
| B 17     | GF/ H3221B0384 | Thread Tension Spring                    | 1      | 2      |
| B 18     | GF/ HA710B0671 | Thumb Nut                                | 1      | 2      |
| B 19     | GF/ H3221B0682 | Pin                                      | 2      | 3      |
| B 20     | GF/ HA106B0676 | Screw                                    | 1      | 1      |
| B 21     | GF/ H3306B0661 | Thread Guide                             | 1      | 1      |
| B 22     | GF/ HA310B0702 | Thred Tension Releasing Plate            | 1      | 2      |
| B 23     | GF/ H4710C8001 | Thread Tension Spring                    | 1      | 2      |
| B 24     | GF/ HA115B7010 | Thumb Nut Revolution Stopper             | 1      | 2      |
| B 25     | GF/ HA310B0701 | Thumb Nut Compete                        | 1      | 2      |
| B 26     | GF/ HA310B0705 | Thread Tension Disk                      | 2      | 4      |
| B 27     | GF/ H3221B6816 | Pin                                      |        | 1      |
| B 28     | GF/ H3221B0689 | Thread Tension Stud                      |        | 1      |
| B 29     | GF/ H3221B0686 | Thread Tension Stud                      | 1      | 1      |
| B 30     | GF/ H32481B721 | Thumb Nut                                | 1      | 1      |
| B 31     | GF/ H32481B621 | Také-up Spring Guide                     |        | 1      |
| B 32     | GF/ H32481BC21 | Screw (to 6/2014)                        |        | 1      |
| B 32     | GF/ M4x10      | Screw (from 6/2014)                      |        | 1      |
| B 33     | GF/ H32481BB21 | Stopper                                  |        | 1      |
| B 34     | GF/ H32481B921 | Thread Tension Post                      |        | 1      |
| B 35     | GF/ H32481B521 | Screw                                    |        | 2      |
| B 36     | GF/ H32481B821 | Bushing                                  |        | 1      |
| B 37     | GF/ H32481BF21 | Plate Complete                           |        | 1      |
| B 38     | GF/ H4712C8001 | Thred Také-up Spring                     |        | 1      |
| B 39     | GF/ H32481BE21 | Plate                                    |        | 1      |
| B 40     | GF/ H4713C8001 | Thread Také-up Spring                    | 1      | 1      |
| B 41     | GF/ H32481BD21 | Plate Complete                           | 1      | 1      |
| B 42     | GF/ H4804C8001 | Screw                                    | 1      |        |
| B 42     | GF/ H32481B421 | Thread Tension Stud                      |        | 1      |
| B 43     | GF/ H4805C8001 | Thread Tension Stud                      | 1      |        |

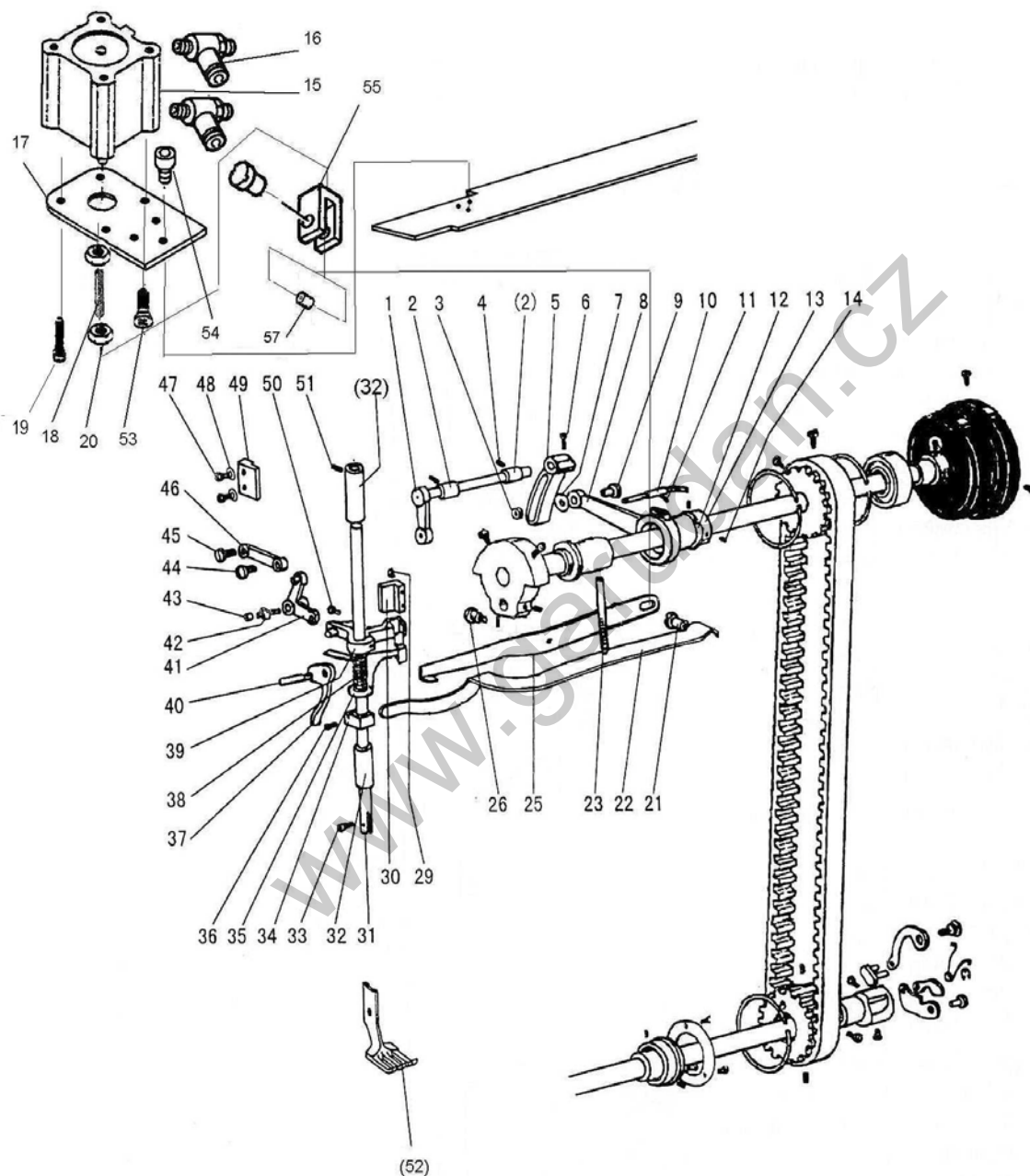




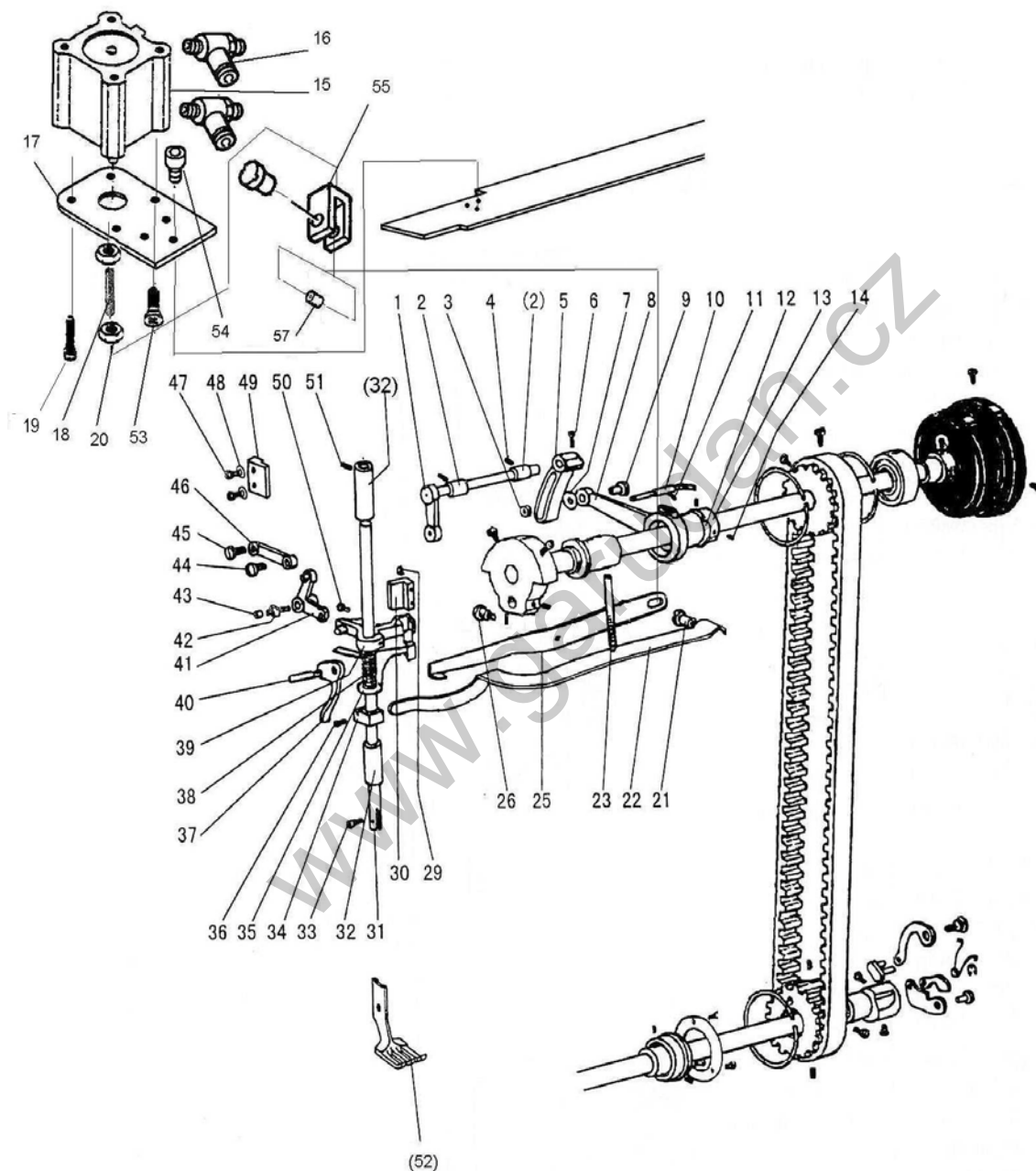
| Ref. No. | Part No.      |            | Name of Part                 | Q'ty   |        |
|----------|---------------|------------|------------------------------|--------|--------|
|          |               |            |                              | GF/138 | GF/238 |
| B 44     | GF/           | H3230K0751 | Screw                        | 1      | 1      |
| B 45     | GF/           | H3221B6817 | Pin                          | 1      | 1      |
| B 46     | GF/           | H3221B6818 | Tension Releasing Pin        | 1      |        |
| B 46     | GF/           | H4916B8001 | Tension Releasing Pin        |        | 1      |
| B 47     | GF/           | H3200B2100 | Screw                        | 1      | 1      |
| B 48     | GF/           | H3221B6819 | Stopper                      | 1      | 1      |
| B 49     | GF/           | H32481B121 | Thread Tension Stud          |        | 1      |
| B 50     | GF/           | CQ2B12-5D  | Air Cylinder SMC             | 1      | 1      |
| B 51     | GF/           | KQ2L04-M5  | Fitting SMC                  | 1      | 1      |
| B 52     | GF/           | AN120-M5   | Silencer SMC                 | 1      | 1      |
| B 53     | GF/ L100- 16K |            | Distance Bushing             | 3      | 3      |
| B 54     | GF/ L100- 16D |            | Bracket                      | 1      | 1      |
| B 55     | GF/           | M4x5       | Screw (M4x5 DIN 912,BN 272)  | 1      | 1      |
| B 56     | GF/           | M4x20      | Screw (M4x20 DIN 912,BN 272) | 4      | 4      |



| Ref. No. | Part No. |            | Name of Part                           | Q'ty   |        |
|----------|----------|------------|--|--------|--------|
|          |          |            |  | GF/138 | GF/238 |
| C 1      | GF/      | HA307C0662 | Set Screw                              | 1      | 1      |
| C 2      | GF/      | H4706D8001 | Crank                                  | 1      | 1      |
| C 3      | GF/      | HA105D0662 | Long Bed Plate                         | 1      | 1      |
| C 4      | GF/      | HA100C2060 | Set Screw                              | 1      | 1      |
| C 5      | GF/      | HA100C2070 | Screw                                  | 1      | 1      |
| C 6      | GF/      | L100- 24   | Bracket                                | 2      | 2      |
| C 7      | GF/      | M5x12      | Screw (M5x12 DIN 84A)                  | 4      | 4      |
| C 8      | GF/      | NAX 1532Z  | Needle Bearing (NAX 1532Z IKO)         | 1      | 1      |
| C 9      | GF/      | L100- 05   | Arm Shaft                              | 1      | 1      |
| C 10     | GF/      | H3205C0661 | Spring flange                          | 3      | 3      |
| C 11     | GP/      | HA113F0684 | Screw                                  | 1(2)   | 1(2)   |
| C 12     | GF/      | L100- 57   | Belt pulley (modification H3205C1021 ) | 1      | 1      |
| C 13     | GF/      | HA100F2130 | Screw                                  | 1      | 1      |
| C 14     | GF/      | H3205J0662 | Bearing                                | 1      | 1      |
| C 15     | GF/      | L100- 58   | Collar (modification H3205J0661)       | 1      | 1      |
| C 16     | GF/      | HA110D0672 | Screw                                  | 2      | 2      |
| C 17     | GF/      | L100- 59   | Pulley (modification H4711D8001)       | 1      | 1      |
| C 18     | GF/      | H3200C2030 | Cog belt                               | 1      | 1      |
| C 19     | GF/      | HA104F0654 | Screw                                  | 1      | 1      |
| C 20     | GF/      | H4713D8001 | Spring Plate                           | 1      | 1      |
| C 21     | GF/      | H4714D8001 | Pin                                    | 1      | 1      |
| C 22     | GF/      | H4716D8001 | Twist Spring                           | 1      | 1      |
| C 23     | GF/      | H007013025 | top Ringh                              | 1      | 1      |
| C 24     | GF/      | H4717D8001 | Plate                                  | 1      | 1      |
| C 25     | GF/      | H4718D8001 | Pin                                    | 1      | 1      |
| C 26     | GF/      | H4719D8001 | Plate                                  | 1      | 1      |
| C 27     | GF/      | H4715D8001 | Link                                   | 1      | 1      |
| C 28     | GF/      | H4720D8001 | Bushing                                | 1      | 1      |
| C 29     | GF/      | H4721D8001 | Screw                                  | 1      | 1      |
| C 30     | GF/      | H4722D8001 | Belt Pulley (lower)                    | 1      | 1      |
| C 31     | GF/      | H4723D8001 | Screw                                  | 2      | 2      |
| C 32     | GF/      | HK 1512    | Needle Bearing (HK 1512) SKF           | 2      | 2      |

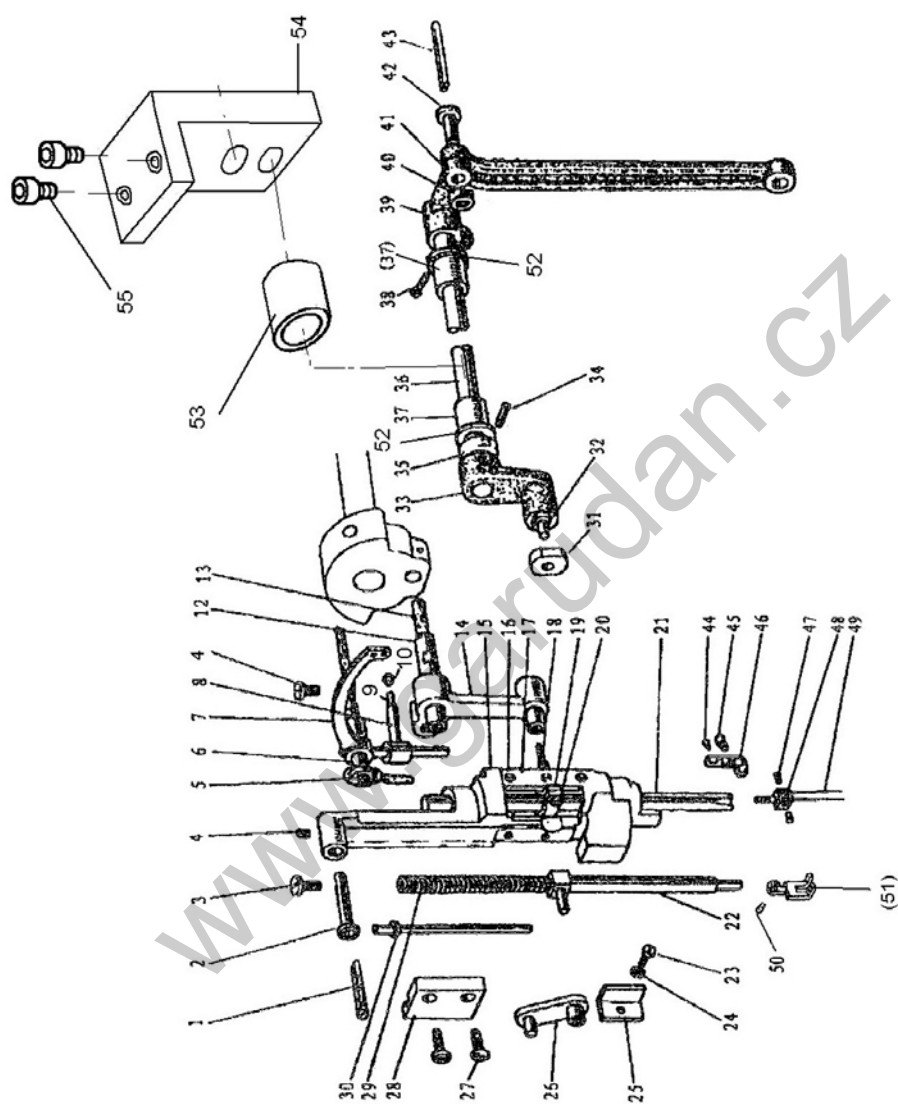


| Ref. No. | Part No.  |                | Name of Part              | Q'ty   |        |
|----------|-----------|----------------|---------------------------|--------|--------|
|          |           |                |                           | GF/138 | GF/238 |
| D 1      | GF/       | H4705E8001     | Feed Lifting Rock Shaft   | 1      | 1      |
| D 2      | GF/       | H4707E8001     | Bushing                   | 2      | 2      |
| D 3      | GF/       | HS91165206     | Nut                       | 1      | 1      |
| D 4      | GF/       | H4706E8001     | Screw                     | 2      | 2      |
| D 5      | GF/       | H4709E8001     | Lever                     | 1      | 1      |
| D 6      | GF/       | H3115F0671     | Screw                     | 1      | 1      |
| D 7      | GF/       | H2013J0065     | Washer                    | 1      | 1      |
| D 8      | GF/       | H2014J0066     | Connectung Rod            | 1      | 1      |
| D 9      | GF/       | H2000J2100     | Bolt                      | 1      | 1      |
| D 10     | GF/       | H4713E8001     | Oil Pipe, Wick complete   | 1      | 1      |
| D 11     | GF/       | H20111C106     | Spring                    | 1      | 1      |
| D 12     | GF/       | H007009250     | C-type Stop Ring          | 1      | 1      |
| D 13     | GF/       | H4714E8001     | Eccentric (modification)  | 1      | 1      |
| D 14     | GF/       | HA307C0662     | Screw                     | 2      | 2      |
| D 15     | GF/       | ECQ2B40-20D    | Air Cylinder              | 1      | 1      |
| D 16     | GF/       | AS2201F-01-04S | Meter out Speed Controler | 2      | 2      |
| D 17     | GF/ L100- | 21D            | Bracket                   | 1      | 1      |
| D 18     | GF/       | M8x70          | Rod with Thread (M8x70)   | 1      | 1      |
| D 19     | GF/       | M6x20          | Screw (M6x20 DIN 912)     | 2      | 2      |
| D 20     | GF/       | M8x70          | Nut (M8 DIN 934)          | 2      | 2      |
| D 21     | GF/ L100- | 14             | Pin                       | 1      | 1      |
| D 22     | GF/       | H4730E8001     | Lever Spring              | 1      | 1      |
| D 23     | GF/ L100- | 12             | Screw (M8x0,75)           | 1      | 1      |
| D 25     | GF/       | H472E8001      | Knee lifting Lever        | 1      | 1      |
| D 26     | GF/ L100- | 15             | Screw                     | 1      | 1      |
| D 29     | GF/       | HA111G0683     | Screw                     | 2      | 2      |
| D 30     | GF/       | H4723E8001     | Guide                     | 1      | 1      |
| D 31     | GF/       | H4744E8001     | Bushing                   | 2      | 2      |
| D 32     | GF/       | H4754E8001     | Presser Bar               | 1      | 1      |
| D 33     | GF/       | H3200E2020     | Screw                     | 1      | 1      |
| D 34     | GF/       | H4746E8001     | Spring Bracket            | 1      | 1      |
| D 35     | GF/       | H4768E8001     | Thread Releasing Plate    | 1      | 1      |
| D 36     | GF/       | H2404I0034     | Screw                     | 1      | 1      |
| D 37     | GF/       | H4748E8001     | Lifter Lever              | 1      | 1      |
| D 38     | GF/       | H4767E8001     | Spring                    | 1      | 1      |
| D 39     | GF/       | H4752E8001     | Bracket                   | 1      | 1      |
| D 40     | GF/ L100- | 13             | screw                     | 1      | 1      |
| D 41     | GF/       | H4715E8001     | Bell Crank                | 1      | 1      |
| D 42     | GF/       | H2004J0655     | Support Shaft             | 1      | 1      |
| D 43     | GF/       | H4717E8001     | Roller                    | 1      | 1      |

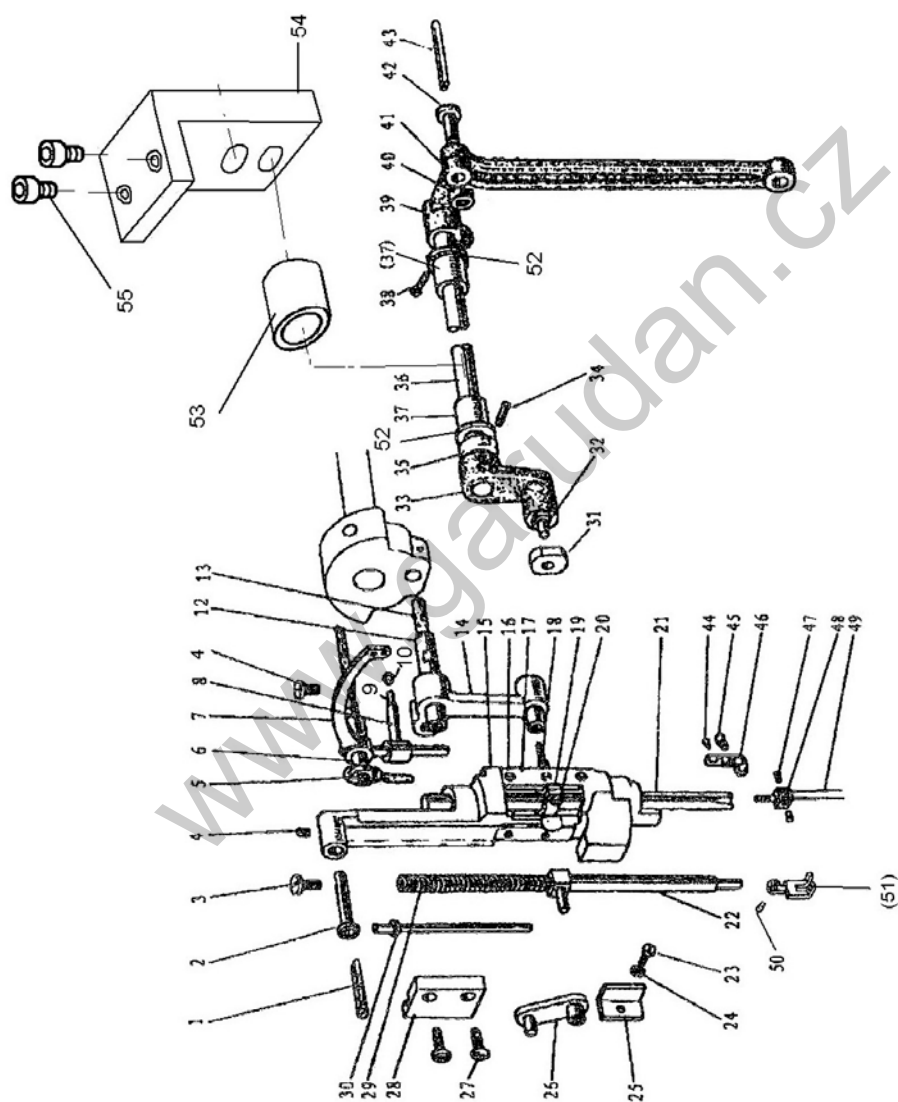


| Ref. No. | Part No. |            | Name of Part                               | Q'ty   |        |
|----------|----------|------------|--|--------|--------|
|          |          |            |  | GF/138 | GF/238 |
| D44      | GF/      | H4718E8001 | Screw                                      | 1      | 1      |
| D45      | GF/      | H2004J0662 | Screw                                      | 1      | 1      |
| D46      | GF/      | H4719E8001 | Link                                       | 1      | 1      |
| D47      | GF/      | HA100E2150 | Screw                                      | 2      | 2      |
| D48      | GF/      | H4722E8001 | Washer                                     | 2      | 2      |
| D49      | GF/      | H4721E8001 | Bell Crank Guide                           | 1      | 1      |
| D50      | GF/      | H4753E8001 | Screw                                      | 1      | 1      |
| D51      | GF/      | M6x16      | Screw (M6x16 DIN 551)                      | 2      | 2      |
| D52      | GF/      | H4757E8001 | Lifting Presser Foot(see table page no.47) |        | 1      |
| D52      | GF/      | H3100G2110 | Lifting Presser Foot(see table page no.47) | 1      |        |
| D53      | GF/      | M6x16      | Screw (M6x16 DIN 963A)                     | 2      | 2      |
| D54      | GF/      | M5x12      | Screw (M5x12 DIN 912)                      | 3      | 3      |
| D55      | GF/      | GKM8-16    | Connecting Rod SMC                         | 1      | 1      |
| D        | GF/      |            |  |        |        |
| D57      | GF/      | L100-21L   | Roller                                     | 1      | 1      |

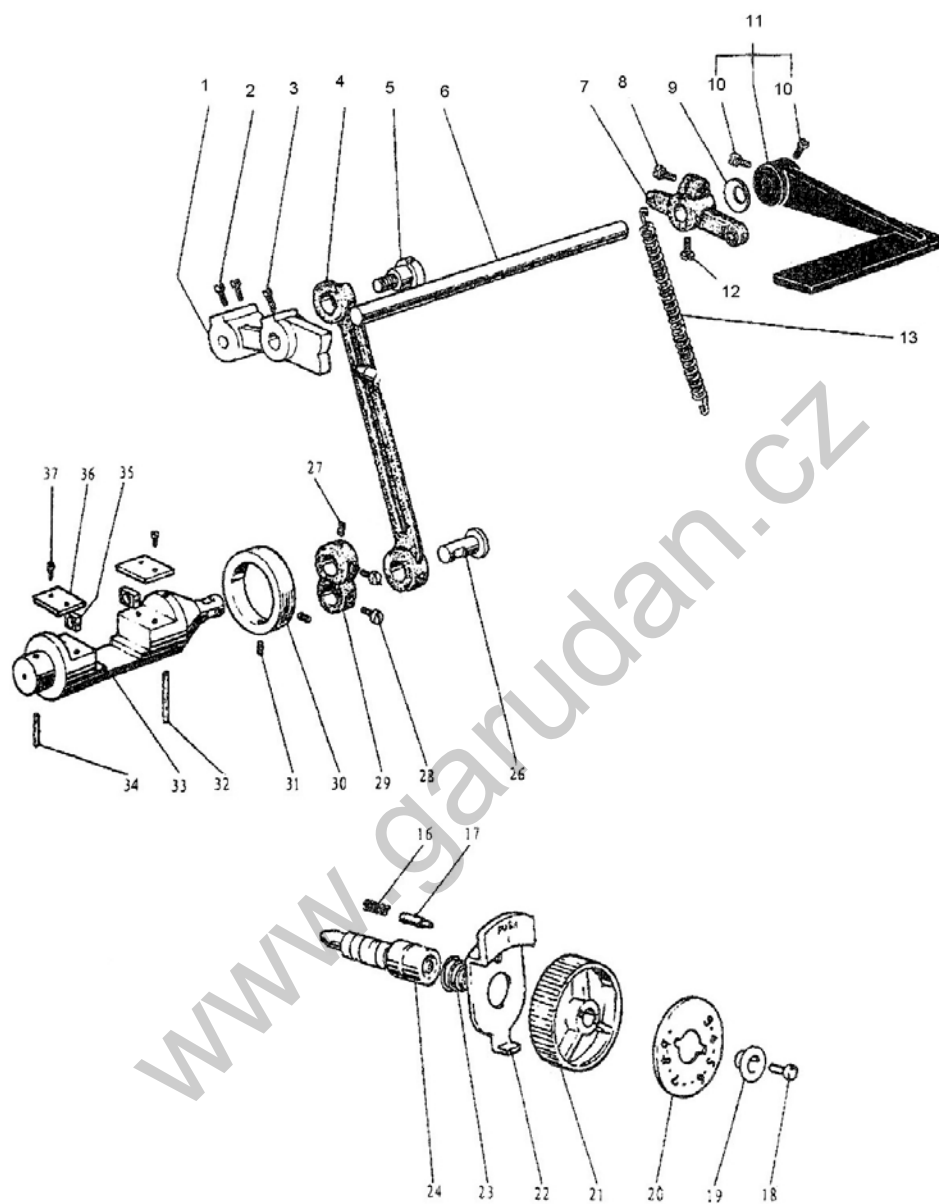




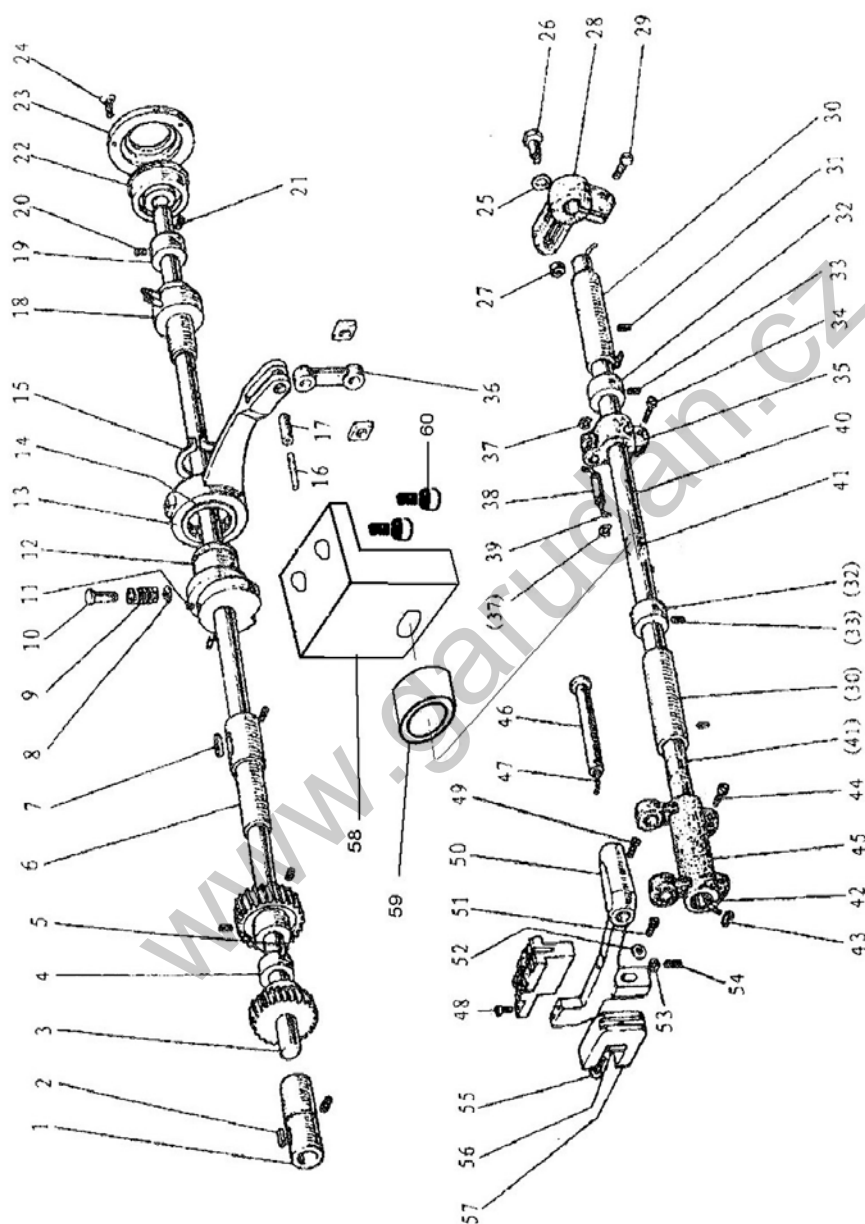
| Ref. No. | Part No. |            | Name of Part                               | Q'ty   |        |
|----------|----------|------------|--|--------|--------|
|          |          |            |  | GF/138 | GF/238 |
| E 1      | GF/      | H24211DN05 | Oil Wick                                   | 1      | 1      |
| E 2      | GF/      | H4706F8001 | Needle Bar Guide Bracket Stud              | 1      | 1      |
| E 3      | GF/      | L100- 11   | Screw                                      | 1      | 1      |
| E 4      | GP/      | 700510     | Screw (M6x0.75x8 ) (to 6/2014)             | 2      | 2      |
| E 4      | GP/      | M6x8       | Screw (from 6/2014)                        | 2      | 2      |
| E 5      | GF/      | H24211DN05 | Oil Wick                                   | 1      | 1      |
| E 6      | GF/      | H24211DM05 | Thread Take -up Lever support Stud         | 1      | 1      |
| E 7      | GF/      | H4712F8001 | Thread Take -up Lever                      | 1      | 1      |
| E 8      | GF/      | H2405D1112 | Thread Take-up Lever Slide Block           | 1      | 1      |
| E 9      | GF/      | H24211D405 | Oil Wick                                   | 1      | 1      |
| E 10     | GF/      | H24211D305 | Plug                                       | 1      | 1      |
| E 12     | GF/      | H2405D0662 | Needle Bar Crank Pin                       | 1      | 1      |
| E 13     | GF/      | H4716F8001 | Oil Wick                                   | 1      | 1      |
| E 14     | GF/      | H4717F8001 | Connecting Link                            | 2      | 2      |
| E 15     | GF/      | H4719F8001 | Needle Bar Guide Bracket                   | 1      | 1      |
| E 16     | GF/      | H32111D304 | Screw                                      | 6      | 6      |
| E 17     | GF/      | H4721F8001 | Spacer                                     | 2      | 2      |
| E 18     | GF/      | H3204D6513 | Felt                                       | 1      | 1      |
| E 19     | GF/      | H4722F8001 | Needle Bar Holder                          | 1      | 1      |
| E 20     | GF/      | H32111D604 | Screw                                      | 1      | 1      |
| E 21     | GF/      | H4724F8001 | Needle Bar                                 |        | 1      |
| E 21     | GF/      | H4806F8001 | Nedle Bar                                  | 1      |        |
| E 22     | GF/      | H4725F8001 | Vibrating Presser Bar                      | 1      | 1      |
| E 23     | GF/      | H3400C2020 | Screw                                      | 1      | 1      |
| E 24     | GF/      | H3200I2030 | Washer                                     | 1      | 1      |
| E 25     | GF/      | H3400C2010 | Needle Bar Guide                           | 1      | 1      |
| E 26     | GF/      | H4726F8001 | Vibrating Presser Bar Link                 | 1      | 1      |
| E 27     | GF/      | H4753E8001 | Screw                                      | 2      | 2      |
| E 28     | GF/      | H4728F8001 | Vibrating Prasser Bar Guide                | 1      | 1      |
| E 29     | GF/      | H4729F8001 | Spring Bracket                             | 1      | 1      |
| E 30     | GF/      | H4730F8001 | Vibrating Presser Spring Guide             | 1      | 1      |
| E 31     | GF/      | H3410C301P | Squre Block                                | 1      | 1      |
| E 32     | GF/      | H3406C0671 | Crank Pin                                  | 1      | 1      |
| E 33     | GF/      | H3406C0672 | Needle Bar Vibrating Crank (left)          | 1      | 1      |
| E 34     | GF/      | 4x24h6     | Pin (4x24h6 DIN 6325, BN 858)              | 1      | 1      |
| E 35     | GF/      | H4734F8001 | Collar (modification)                      | 1      | 1      |
| E 36     | GF/      | L100- 06   | Nedle Bar Vibrating Shaft                  | 1      | 1      |
| E 37     | GF/      | NK 15/20   | Beedle Bearing IKO                         | 2      | 2      |
| E 38     | GF/      | H2012N0652 | Screw                                      | 1      | 1      |
| E 39     | GF/      | L100- 62   | N. BarVibr.Crank (modification H3407C0661) | 1      | 1      |
| E 40     | GF/      | H32311D506 | Nut  | 1      | 1      |
| E 41     | GF/      | H3407C0662 | Connecting Link                            | 1      | 1      |
| E 42     | GF/      | H32311D306 | Screw                                      | 1      | 1      |



| Ref. No. | Part No.  |               | Name of Part                            | Q'ty   |        |
|----------|-----------|---------------|---|--------|--------|
|          |           |               |   | GF/138 | GF/238 |
| E 43     | GF/       | H32311D406    | Oil Wick                                | 1      | 1      |
| E 44     | GF/       | H3129F0691    | Screw                                   | 1      |        |
| E 45     | GF/       | HA100C2170    | Screw                                   | 1      |        |
| E 46     | GF/       | H3129F0693    | Thread Guide                            | 1      |        |
| E 47     | GF/       | H32132D104    | Screw                                   |        | 2      |
| E 48     | GF/       | H4739F8001    | Needle Clamp(1/4)(see table page no.45) |        | 1      |
| E 49     | GF/       | H4740F8001    | Needle                                  | 1      | 2      |
| E 50     | GF/       | HA700F2100    | Screw                                   | 1      | 1      |
| E 51     | GF/       | H4807F8001    | Presser Foot (see table page no.45)     | 1      |        |
| E 51     | GF/       | H4737F8001    | Presser Foot (see table page no.45)     |        | 1      |
| E 52     | GF/       | 16x28/0.5,0.2 | Distance Washer                         | x      | x      |
| E 53     | GF/       | HK 1512       | Needle Bearing HK 1512 IKO              | 2      | 2      |
| E 54     | GF/ L100- | 24            | (see table C)                           |        |        |
| E 55     | GF/       | M4x20         | (see table C)                           |        |        |

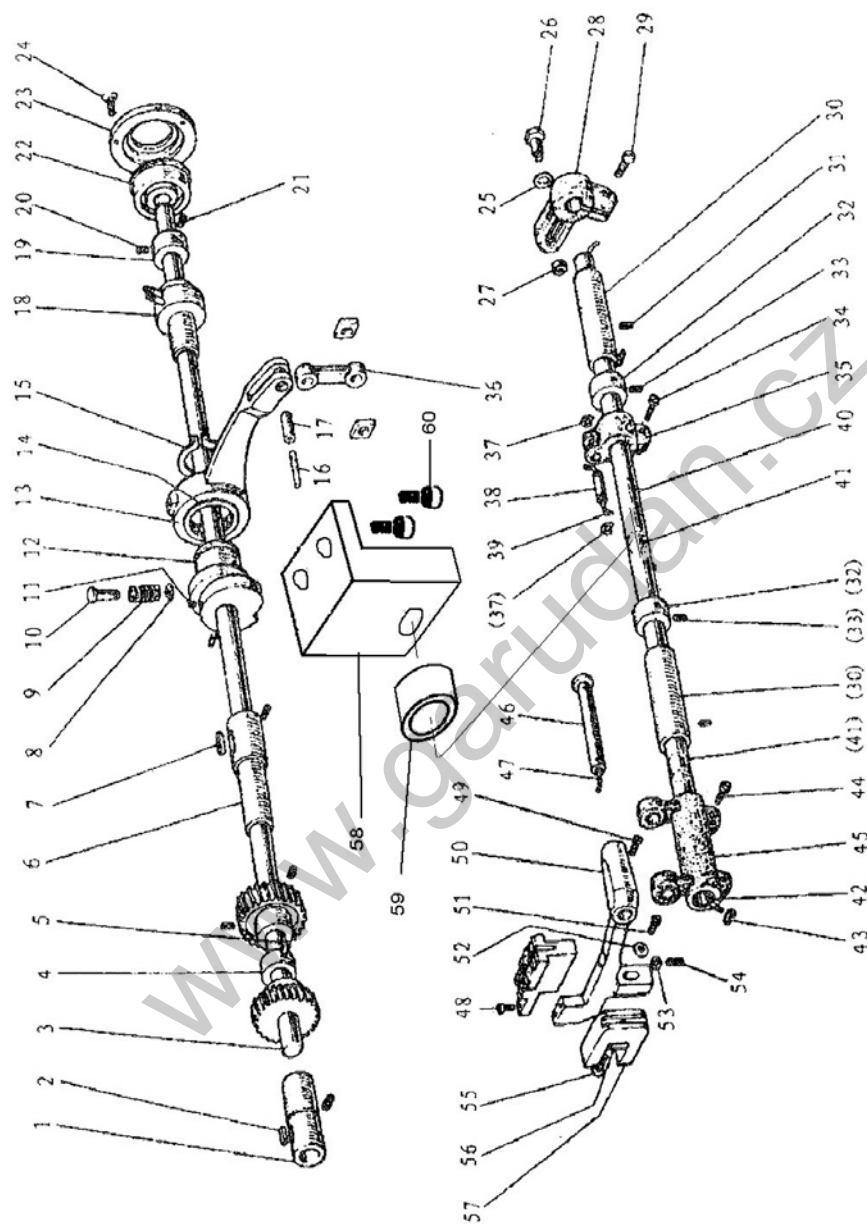


| Ref. No. | Part No. |            | Name of Part                   | Q'ty   |        |
|----------|----------|------------|--------------------------------|--------|--------|
|          |          |            |                                | GF/138 | GF/238 |
| F 1      | GF/      | H4706G8001 | Feed Regulator Cam             | 1      | 1      |
| F 2      | GF/      | HA113F0684 | Screw                          | 2      | 2      |
| F 3      | GF/      | H3200F2020 | Screw                          | 1      | 1      |
| F 4      | GP/      | H4707G8001 | Link                           | 1      | 1      |
| F 5      | GF/      | HA100G2070 | Eccentric Shaft                | 1      | 1      |
| F 6      | GF/      | H4909G8001 | Reverse Stitch Shaft upper)    | 1      | 1      |
| F 7      | GF/      | H4905G8001 | Arm                            | 1      | 1      |
| F 8      | GF/      | HA800F2020 | Screw                          | 1      | 1      |
| F 9      | GF/      | HA100F2110 | Spring Washer                  | 1      | 1      |
| F 10     | GF/      | HA113F0684 | Screw                          | 2      | 2      |
| F 11     | GF/      | H4906G8001 | Reverse Sewing Lever           | 1      | 1      |
| F 12     | GF/      | H3207F0672 | Screw                          | 1      | 1      |
| F 13     | GF/      | H4710G8001 | Spring                         | 1      | 1      |
| F 16     | GF/      | H3200F2120 | Spring                         | 1      | 1      |
| F 17     | GF/      | HA700F2030 | Pin                            | 1      | 1      |
| F 18     | GF/      | HA720F0608 | Screw                          | 1      | 1      |
| F 19     | GF/      | HA720F0685 | Bushing                        | 1      | 1      |
| F 20     | GF/      | H4910G8001 | Stitch Length Indicating Plate | 1      | 1      |
| F 21     | GF/      | HA7421F120 | Dial                           | 1      | 1      |
| F 22     | GF/      | HA720F0683 | Vibrating Presser Bar          | 1      | 1      |
| F 23     | GF/      | HA720F0687 | Coil Spring                    | 1      | 1      |
| F 24     | GF/      | HA109F0671 | Screw Bar                      | 1      | 1      |
| F 26     | GF/      | H3206F0662 | Pin                            | 1      | 1      |
| F 27     | GF/      | H415050200 | Screw                          | 1      | 1      |
| F 28     | GF/      | H428050060 | Screw                          | 2      | 2      |
| F 29     | GF/      | H4714G8001 | Reverse Sewing Crank           | 1      | 1      |
| F 30     | GF/      | H4715G7101 | Collar                         | 1      | 1      |
| F 31     | GF/      | HA3411D308 | Screw                          | 2      | 2      |
| F 32     | GF/      | H4719G8001 | Felt                           | 1      | 1      |
| F 33     | GF/      | H4720G8001 | Reverse Block                  | 1      | 1      |
| F 34     | GF/      | H4721G8001 | Felt                           | 1      | 1      |
| F 35     | GF/      | H4722G8001 | Square block                   | 1      | 1      |
| F 36     | GF/      | H4723G8001 | Guide Plate                    | 2      | 2      |
| F 37     | GF/      | HA300C2030 | Screw                          | 4      | 4      |

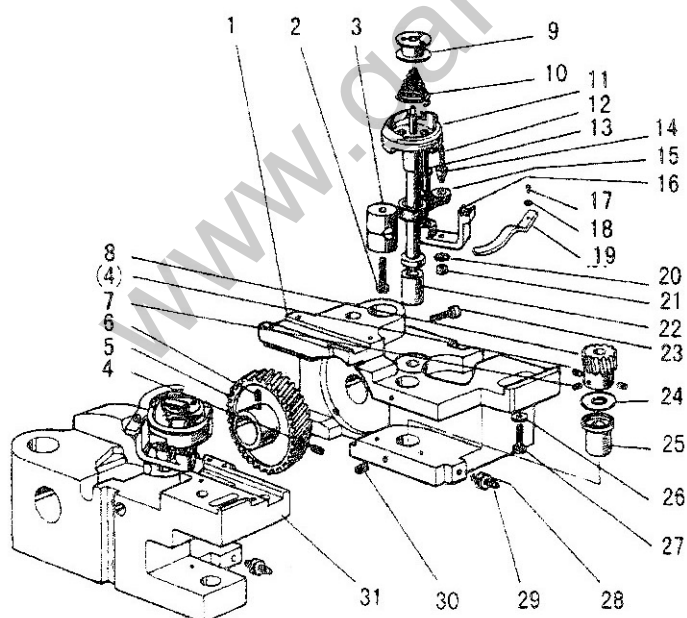
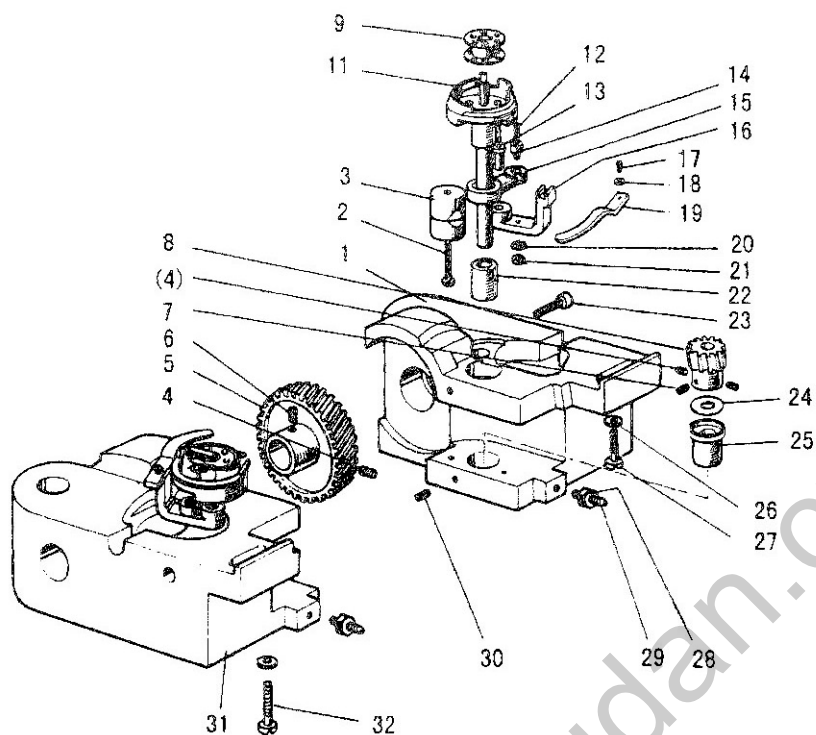


| Ref. No. | Part No.        | Name of Part                              | Q'ty   |        |
|----------|-----------------|---|--------|--------|
|          |                 |   | GF/138 | GF/238 |
| G 1      | GF/ H4706H8001  | Lower Shaft Bushing (left)                | 1      | 1      |
| G 2      | GF/ H4707H8001  | Oil Wick                                  | 1      | 1      |
| G 3      | GF/ L100- 08    | Lower Shaft                               | 1      | 1      |
| G 4      | GF/ H4710H8001  | Feed Eccentric Cam                        | 1      | 1      |
| G 5      | GF/ H3205H0654  | Screw                                     | 1      | 1      |
| G 6      | GF/ H4712H8001  | Lower Shaft Bushing (right)               | 1      | 1      |
| G 7      | GF/ H4713H8001  | Oil Wick                                  | 1      | 1      |
| G 8      | GF/ H007013050  | Stop Ring                                 | 2      | 2      |
| G 9      | GF/ H4714H8001  | Spring                                    | 1      | 1      |
| G 10     | GF/ H4715H8001  | Push Button                               | 1      | 1      |
| G 11     | GF/ H2405D0664  | Screw                                     | 2      | 2      |
| G 12     | GF/ H4717H8001  | Feed Eccentric                            | 1      | 1      |
| G 13     | GF/ H4718H8001  | Feed Connecting Rod                       | 1      | 1      |
| G 14     | GF/ H4719H8001  | Needle Bearing                            | 1      | 1      |
| G 15     | GF/ H007009260  | C-type Stop Ring                          | 1      | 1      |
| G 16     | GF/ H4720H8001  | Oil Wick                                  | 1      | 1      |
| G 17     | GF/ H4721H8001  | Shaft                                     | 1      | 1      |
| G 18     | GF/ H4722H7101  | Lower Shaft Bushig Complete (miiddle)     | 1      | 1      |
| G 19     | GF/ H4725H8001  | Bushig                                    | 1      | 1      |
| G 20     | GF/ HA105D0662  | Screw                                     | 1      | 1      |
| G 21     | GF/ H3205H0654  | Screw                                     | 1      | 1      |
| G 22     | GF/ H4723H8001  | Ball Bearing                              | 1      | 1      |
| G 23     | GF/ H4727H8001  | Bearing Holder                            | 1      | 1      |
| G 24     | GF/ HA7300C306  | Screw                                     | 3      | 3      |
| G 25     | GF/ H4728H8001  | Washer                                    | 1      | 1      |
| G 26     | GF/ H4729H8001  | Screw                                     | 1      | 1      |
| G 27     | GF/ H003055060  | Nut                                       | 1      | 1      |
| G 28     | GF/ L100- 63    | Feed Noc. Crank(modification H4731H8001)  | 1      | 1      |
| G 29     | GF/ H2012N0652  | Screw                                     | 1      | 1      |
| G 30     | GF/ HK 1522     | Needle Bearing HK 1522 IKO                | 2      | 2      |
| G 31     | GF/ HA4708D8001 | Screw                                     | 2      | 2      |
| G 32     | GF/ L100- 66    | Collar (modification HA108G0661)          | 2      | 2      |
| G 33     | GF/ HA105D0662  | Screw                                     | 4      | 4      |
| G 34     | GF/ H2012N0652  | Screw                                     | 1      | 1      |
| G 35     | GF/ L100- 64    | Feed Noc. Crank (modification H4736H8001) | 1      | 1      |
| G 36     | GF/ H4737H8001  | Link                                      | 1      | 1      |
| G 37     | GF/ H007013050  | E-type Stop Ring                          | 2      | 2      |
| G 38     | GF/ H4738H8001  | Pin                                       | 1      | 1      |
| G 39     | GF/ H4739H8001  | Oil Wick                                  | 1      | 1      |
| G 40     | GF/ L100- 07    | Feed Rock Shaft                           | 1      | 1      |
| G 41     | GF/ H4740H8001  | Felt                                      | 2      | 2      |
| G 42     | GF/ H3204G0031  | Oil Wick                                  | 1      | 1      |
| G 43     | GF/ H3200G2030  | Clip                                      | 1      | 1      |

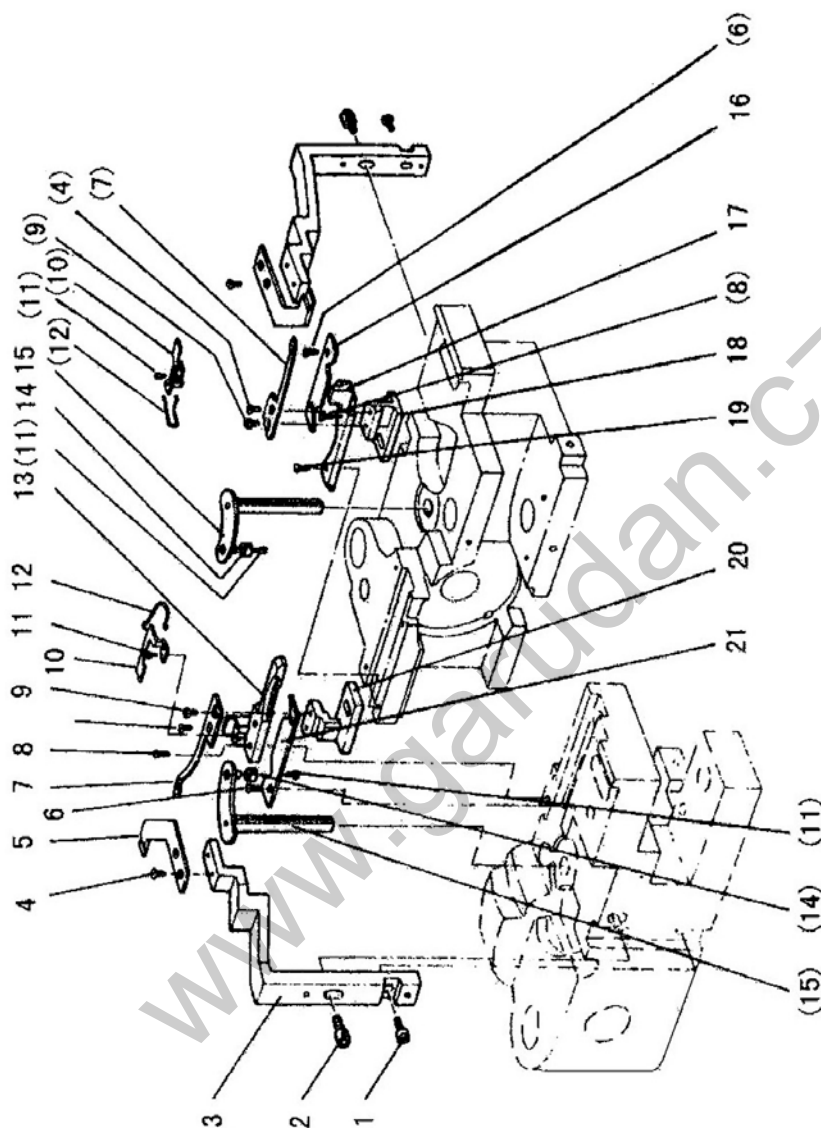




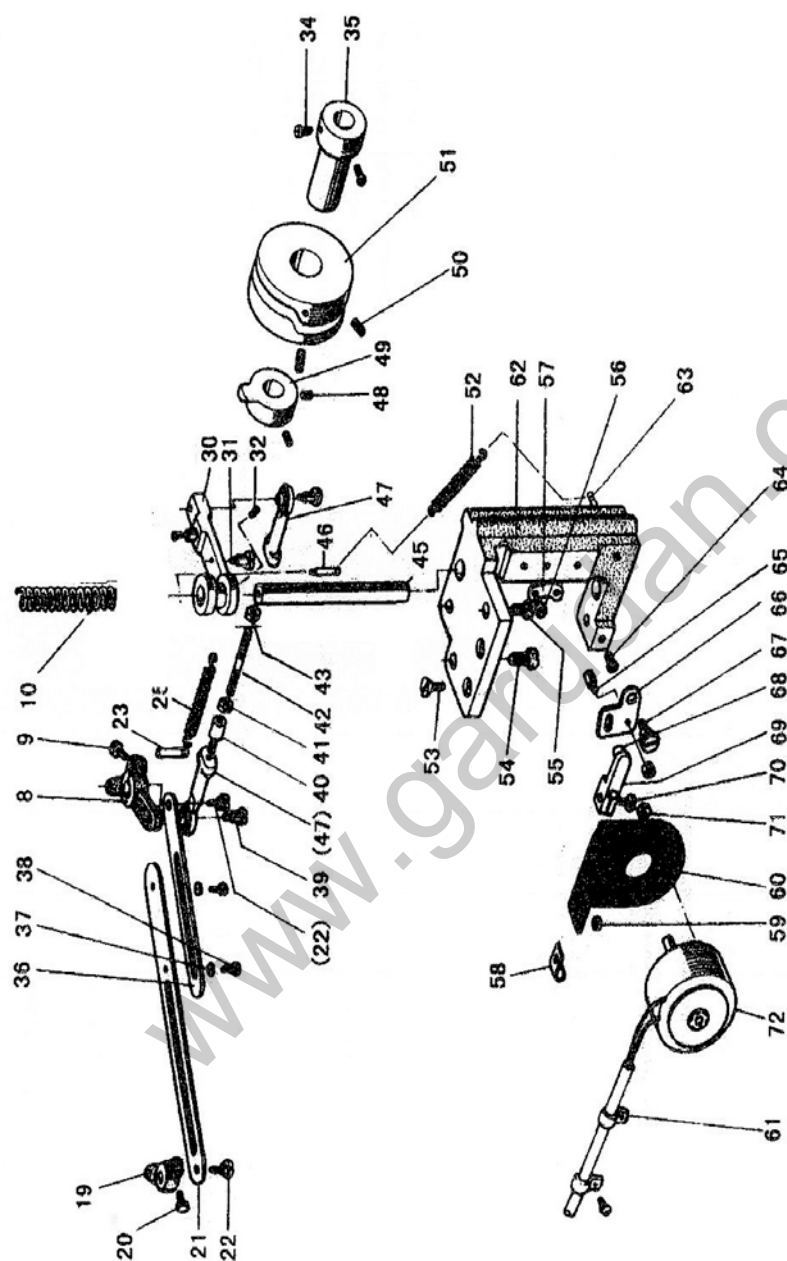
| Ref. No. | Part No.       | Name of Part                              | Q'ty   |        |
|----------|----------------|---|--------|--------|
|          |                |   | GF/138 | GF/238 |
| G 44     | GF/ HA104G0012 | Screw                                     | 2      | 2      |
| G 45     | GF/ L100- 65   | Feed C.Crank (modification H4905H8001)    |        | 1      |
| G 45     | GF/ H3205G1032 | Feed Connection Crank (left,modification) | 1      |        |
| G 46     | GF/ H32243G205 | Feed Bar Shaft                            | 1      | 1      |
| G 47     | GF/ H320G0662  | Oil Wick                                  | 1      | 1      |
| G 48     | GF/ H32211G205 | Bolt                                      | 2      | 2      |
| G 49     | GF/ H429050050 | Bolt                                      | 1      | 1      |
| G 50     | GF/ H4805H8001 | Feed Bar                                  | 1      |        |
| G 50     | GF/ H4942H8001 | Feed Bar                                  |        | 1      |
| G 51     | GF/ H3200H2040 | Screw                                     | 1      | 1      |
| G 52     | GF/ H2013J0065 | Washer                                    | 1      | 1      |
| G 53     | GF/ H003002030 | Nut                                       |        | 1      |
| G 54     | GF/ H429030140 | Screw                                     |        | 1      |
| G 55     | GF/ H320H0653  | Screw                                     | 1      | 1      |
| G 56     | GF/ H3205H0652 | Felt                                      | 1      | 1      |
| G 57     | GF/ H4743H8001 | Feed Bar Forked Connection                | 1      | 1      |
| G 58     | GF/ L100- 23   | Bracket                                   | 1      | 1      |
| G 59     | GF/ HK 1512    | Needle Bearing HK 1512 IKO                | 1      | 1      |
| G 60     | GF/ M4x20      | Screw (M4x20 DIN 912)                     | 2      | 2      |



| Ref. No. | Part No.      | Name of Part               | Q'ty   |        |        |        |
|----------|---------------|----------------------------|--------|--------|--------|--------|
|          |               |                            | 138/-3 | 238/-3 | 138/-6 | 238/-6 |
| H1       | GF/H3304I0651 | Hook Saddle (right)        | 1      | 1      |        |        |
| H1       | GF/H4906I8001 | Hook Saddle (right)        |        |        | 1      | 1      |
| H2       | GF/H3207I0661 | screw                      | 1      | 2      | 1      | 1      |
| H3       | GF/H3207I0662 | Bushing                    | 1      | 2      | 1      | 2      |
| H4       | GF/H4707I8001 | Screw                      | 3      | 6      | 3      | 6      |
| H5       | GF/H4706I8001 | Hook Driving Gear (large)  | 1      | 2      | 1      | 2      |
| H6       | GF/H4708I8001 | Screw                      | 1      | 2      | 1      | 2      |
| H7       | GF/H4709I8001 | Screw                      | 1      | 2      | 1      | 2      |
| H8       | GF/H4705I8001 | Hook Driving Gear (small)  | 1      | 2      | 1      | 2      |
| H9       | GF/H3306I0067 | Bobbin                     | 1      | 2      |        |        |
| H9       | GF/H481I8001  | Bobbin                     |        |        | 1      | 2      |
| H10      | GF/H4922I8001 | Spring                     |        |        | 1      | 2      |
| H11      | GF/h4908i7101 | Hook Complete              |        |        | 1      | 2      |
| H11      | GF/H4708I7101 | Hook Complete              | 1      | 2      |        |        |
| H12      | GF/H3204I0656 | Oil Wick                   | 2      | 4      | 2      | 4      |
| H13      | GF/K321531504 | Opener Bracket Shaft       | 1      | 2      | 1      | 2      |
| H14      | GF/H321531204 | Screw                      | 1      | 2      | 1      | 2      |
| H15      | GF/H33131I204 | Link                       | 1      | 2      | 1      | 2      |
| H16      | GF/H33131I104 | Opener Bracket             | 1      | 2      | 1      | 2      |
| H17      | GF/H2004J0067 | Screw                      | 1      | 2      | 1      | 2      |
| H18      | GF/H3200I2030 | Washer                     | 1      | 2      | 1      | 2      |
| H19      | GF/H3305I0066 | Opener                     | 1      | 2      | 1      | 2      |
| H20      | GF/H005008050 | Spring Washer              | 1      | 2      | 1      | 2      |
| H21      | GF/HA104G0658 | Nut                        | 1      | 2      | 1      | 2      |
| H22      | GF/H33121I104 | Hook Shaft Bushing (upper) | 1      | 2      |        |        |
| H22      | GF/H4909I8001 | Hook Shaft Bushing (upper) |        |        | 1      | 2      |
| H23      | GF/H3204I0657 | screw                      | 1      | 2      | 1      | 2      |
| H24      | GF/H3312I204  | Washer                     | 1      | 2      |        |        |
| H24      | GF/H4910I8001 | Washer                     |        |        | 1      | 2      |
| H25      | GF/H3204I0653 | Hook Shaft Bushing (lower) | 1      | 2      |        |        |
| H25      | GF/H1911I8001 | Hook Shaft Bushing (lower) |        |        | 1      | 2      |
| H26      | GF/H2013J0065 | Washer                     | 1      | 2      | 1      | 2      |
| H27      | GF/H3200I2050 | Screw                      | 1      | 1      | 1      | 1      |
| H28      | GF/H3204I0659 | Nut                        | 1      | 2      |        |        |
| H28      | GF/H4914I8001 | Nut                        |        |        | 1      | 2      |
| H29      | GF/H3204I0658 | Screw                      | 1      | 2      |        |        |
| H29      | GF/H4915I8001 | Screw                      |        |        | 1      | 2      |
| H30      | GF/HA305E0662 | Screw                      |        |        | 2      | 4      |
| H31      | GF/H4917I8001 | Hook Saddle (left)         |        |        |        | 1      |
| H31      | GF/H3307I0681 | Hook Saddle (left)         |        | 1      |        |        |
| H32      | GF/H3200I2050 | Screw                      | 1      | 2      |        |        |
| H32      | GF/H4913I8001 | Screw                      |        |        | 1      | 2      |

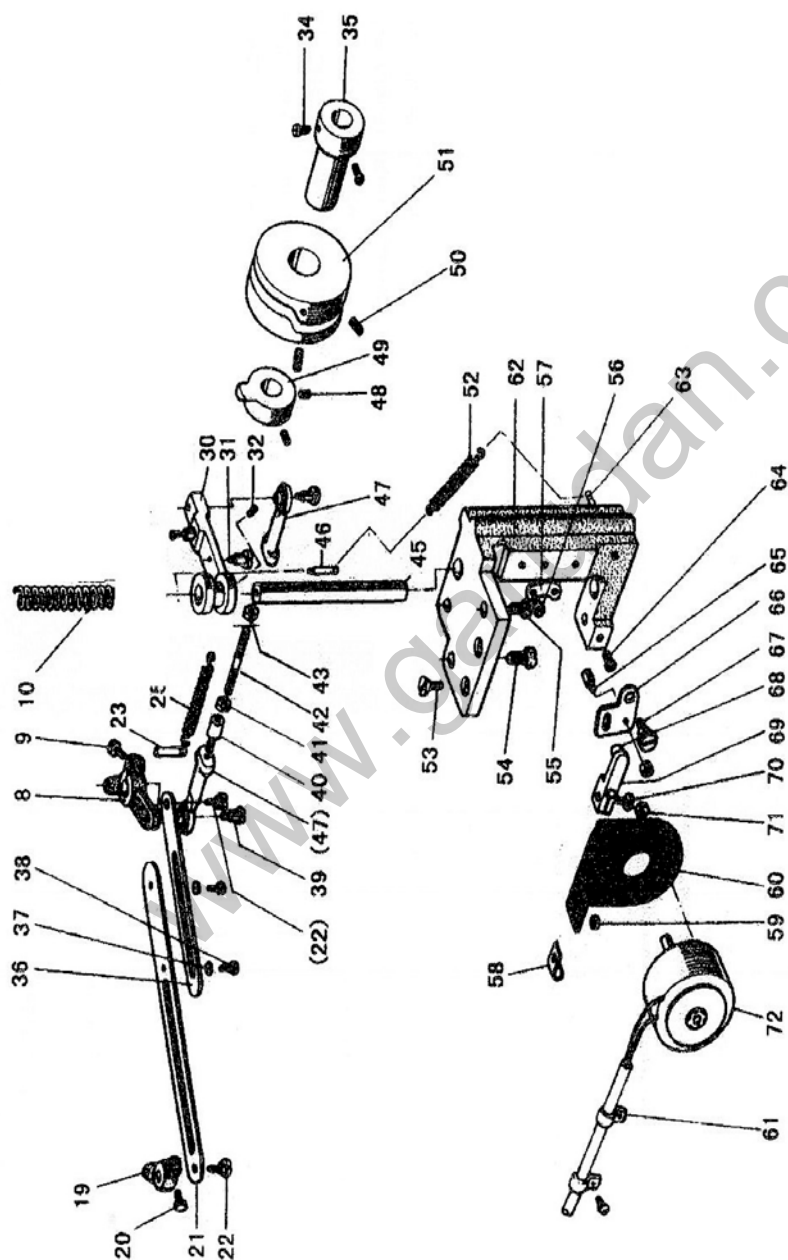


| Ref. No. | Part No. |             | Name of Part          | Q'ty   |        |
|----------|----------|-------------|-----------------------|--------|--------|
|          |          |             |                       | GF/138 | GF/238 |
| I1       | GF/      | H4905J8001  | Screw                 | 1      | 2      |
| I2       | GF/      | H4906J8001  | Bolt                  | 1      | 2      |
| I3       | GF/      | H4907J8001  | Trimming Knife Holder | 1      | 2      |
| I4       | GF/      | H4908J8001  | Screw                 | 1      | 2      |
| I5       | GF/      | H4909J8001  | Fixed Blade           | 1      | 2      |
| I6       | GF/      | H4914B8001  | Screw                 | 2      | 4      |
| I7       | GF/      | H4911J8001  | Moved Knife           | 1      | 2      |
| I8       | GF/      | H4912J8001  | Screw                 | 1      | 2      |
| I9       | GF/      | H4913J8001  | Screw                 | 1      | 2      |
| I10      | GF/      | H4914J8001  | Spring Plate          | 1      | 2      |
| I11      | GF/      | H4915J8001  | Screw                 | 3      | 6      |
| I12      | GF/      | H4916J80001 | Reversing Spring      | 1      | 2      |
| I13      | GF/      | H4917J8001  | Guide                 | 1      | 1      |
| I14      | GF/      | H4920J8001  | Roller                | 1      | 2      |
| I15      | GF/      | H4921J8001  | Lever                 | 1      | 2      |
| I16      | GF/      | H4922J8001  | Cover                 | 1      | 1      |
| I17      | GF/      | H4923J8001  | Guide (right)         | 1      | 1      |
| I18      | GF/      | H4924J8001  | Knife Pad (right)     | 1      | 1      |
| I19      | GF/      | H4925J8001  | Screw                 | 1      | 1      |
| I20      | GF/      | H4926J8001  | Knife Pad (left)      | 1      | 1      |
| I21      | GF/      | H4927J8001  | Cover                 | 1      | 1      |

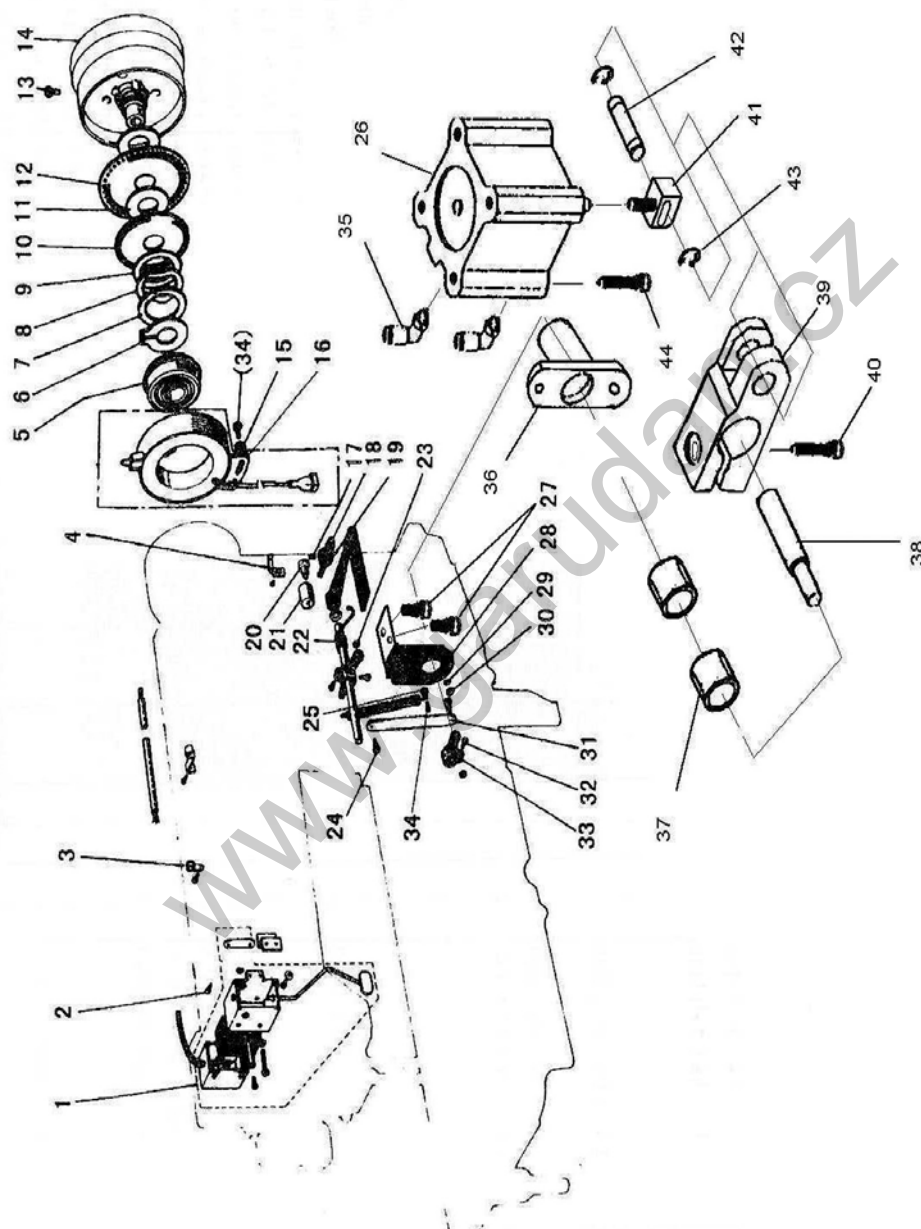


| Ref. No. | Part No. |            | Name of Part           | Q'ty   |        |
|----------|----------|------------|------------------------|--------|--------|
|          |          |            |                        | GF/138 | GF/238 |
| J8       | GF/      | H4912K8001 | Arm                    | 1      | 1      |
| J9       | GF/      | H4913K8001 | Bolt                   | 1      | 1      |
| J10      | GF/      | H4945K8001 | Spring                 | 1      | 1      |
| J11      | GF/      | H4950K8001 | Screw                  | 1      | 1      |
| J12      | GF/      | H494K8001  | Roller                 | 1      | 1      |
| J19      | GF/      | H4908K8001 | Arm                    |        | 1      |
| J20      | GF/      | H4907K8001 | Bolt                   |        | 1      |
| J21      | GF/      | H4906K8001 | Link                   |        | 1      |
| J22      | GF/      | H4905K8001 | Screw                  | 2      | 2      |
| J23      | GF/      | HA100H2080 | Pin Type               | 1      | 1      |
| J24      | GF/      | H4946K7101 | Thread Releasing Lever | 1      | 1      |
| J25      | GF/      | H4943K8001 | Spring                 | 1      | 1      |
| J26      | GF/      | H4951K8001 | Nut                    | 1      | 1      |
| J30      | GF/      | H4957K7101 | Vibrating Crank        | 1      | 1      |
| J31      | GF/      | H4944K8001 | Screw                  | 1      | 1      |
| J32      | GF/      | H3205G1114 | Screw                  | 2      | 2      |
| J34      | GF/      | HA113F0684 | Screw                  | 2      | 2      |
| J35      | GF/      | H4931K8001 | Bushing                | 1      | 1      |
| J36      | GF/      | H4909K8001 | Link                   |        | 1      |
| J37      | GF/      | H005001050 | Washer                 |        | 1      |
| J38      | GF/      | H4911K8001 | Bolt                   |        | 2      |
| J39      | GF/      | H4936K8001 | Screw                  | 2      | 2      |
| J40      | GF/      | H4987K8001 | Bolt                   | 1      | 1      |
| J41      | GF/      | H4940K8001 | Nut (left)             | 1      | 1      |
| J42      | GF/      | H4939K8001 | Bolt                   | 1      | 1      |
| J43      | GF/      | H003002050 | Nut (right)            | 1      | 1      |
| J44      | GF/      | H4964K8001 | Shaft                  | 1      | 1      |
| J45      | GF/      | H4963K8001 | Shaft                  | 1      | 1      |
| J46      | GF/      | H4985K8001 | Screw                  | 1      | 1      |
| J47      | GF/      | H3405D0663 | Ball Joint (right)     | 2      | 2      |
| J48      | GF/      | H320G1114  | Screw                  | 4      | 4      |
| J49      | GF/      | H4934K8001 | Cam                    | 1      | 1      |
| J50      | GF/      | HA710E0692 | Screw                  | 2      | 2      |
| J51      | GF/      | H4932K8001 | Cam                    | 1      | 1      |
| J52      | GF/      | H4986K8001 | Spring                 | 1      | 1      |
| J53      | GF/      | H411050160 | Scrwr                  | 2      | 2      |
| J54      | GF/      | H2012N0652 | Screw                  | 1      | 1      |
| J55      | GF/      | H4983K8001 | Screw                  | 1      | 1      |
| J56      | GF/      | H4967K8001 | Screw                  | 3      | 3      |
| J57      | GF/      | H4966K8001 | Stopper                | 1      | 1      |
| J58      | GF/      | H4981K8001 | Holder                 | 1      | 1      |
| J59      | GF/      | H003008050 | Nut                    | 2      | 2      |
| J60      | GF/      | H4977K8001 | Mounting Plate         | 1      | 1      |

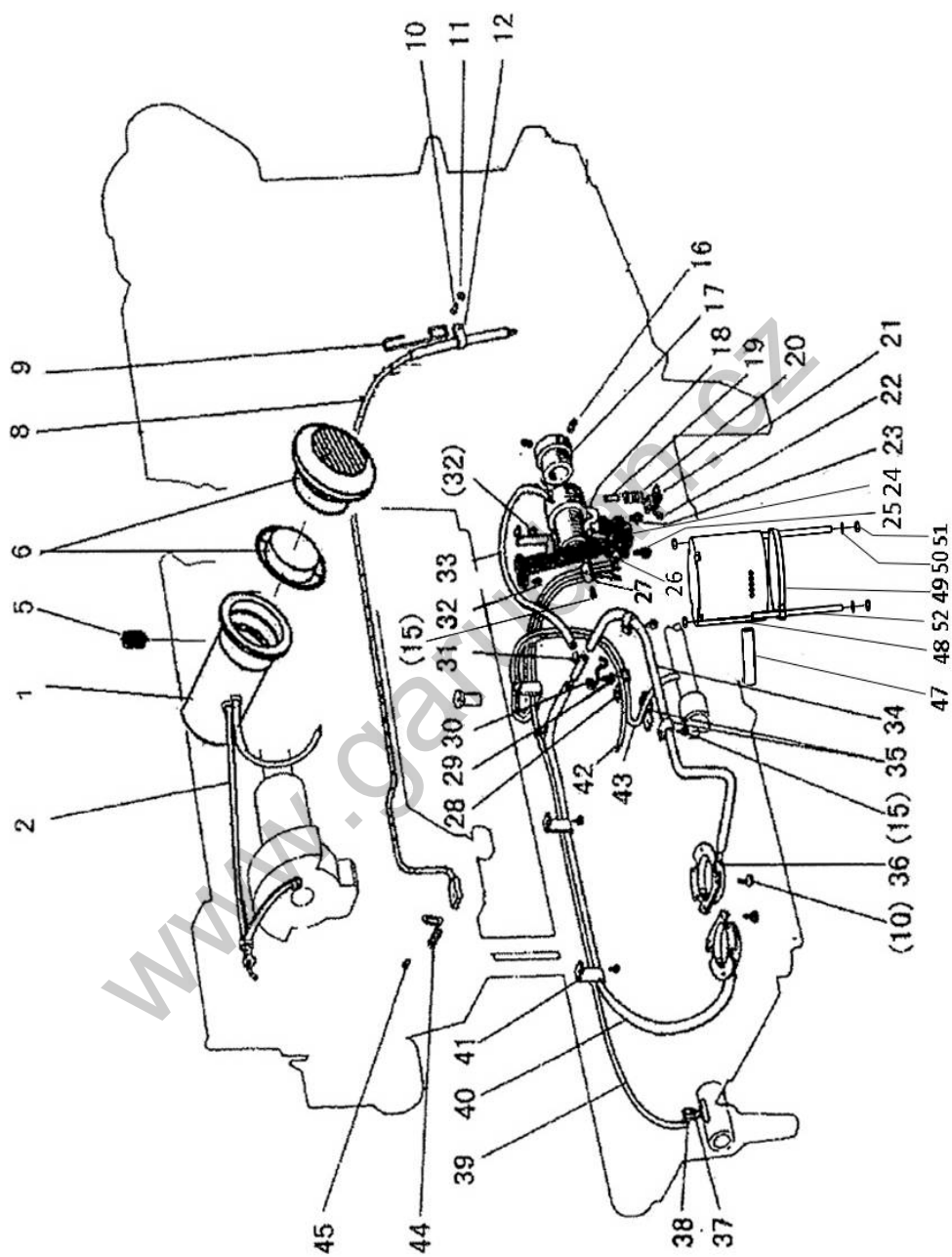




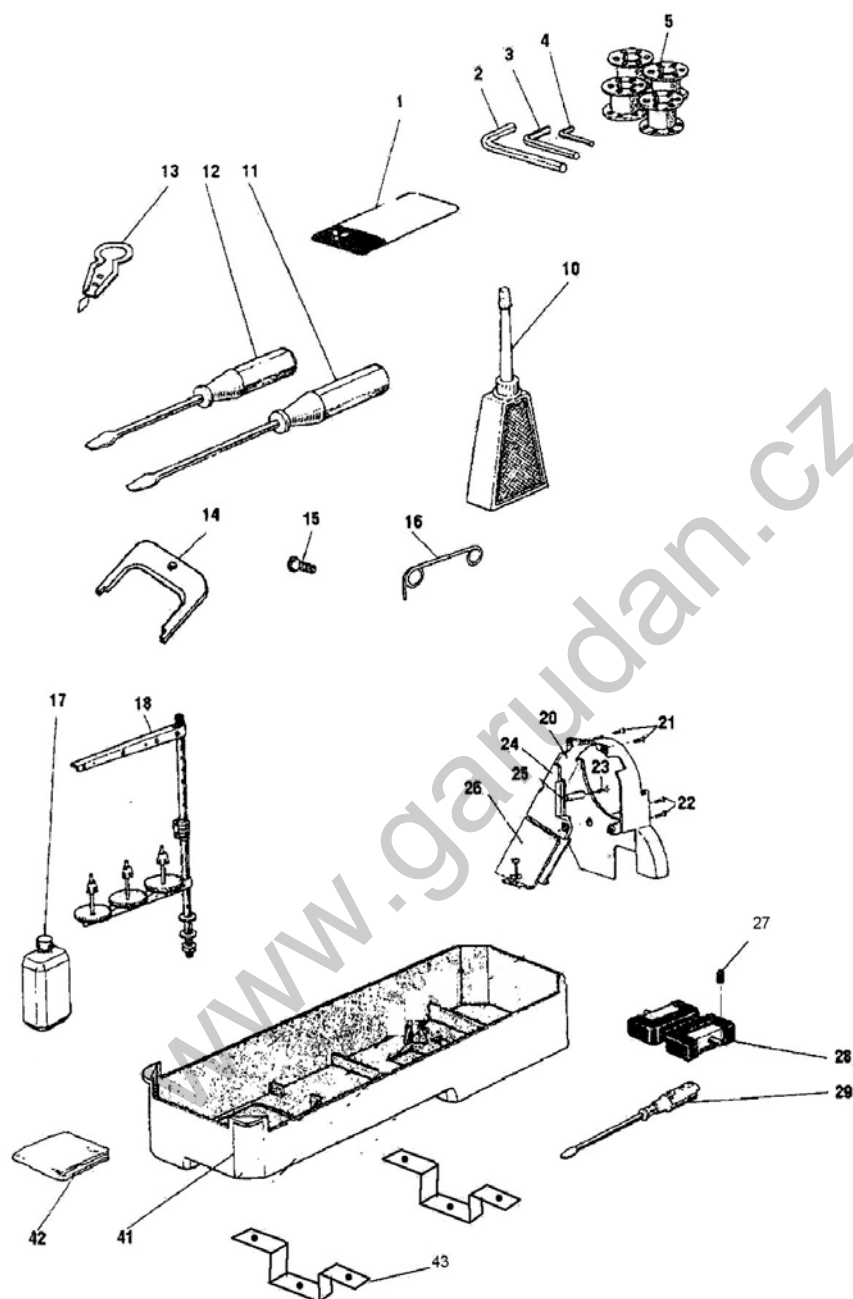
| Ref. No. | Part No. |            | Name of Part      | Q'ty   |        |
|----------|----------|------------|-------------------|--------|--------|
|          |          |            |                   | GF/138 | GF/238 |
| J61      | GF/      | H4980K8001 | Holder            | 2      | 2      |
| J62      | GF/      | H4965K8001 | Set Plate         | 1      | 1      |
| J63      | GF/      | H3700E2080 | Pin Type          | 1      | 1      |
| J64      | GF/      | H4969K8001 | Screw             | 1      | 1      |
| J65      | GF/      | H4970K8001 | Screw             | 1      | 1      |
| J66      | GF/      | H4971K8001 | Lever             | 1      | 1      |
| J67      | GF/      | H4972K8001 | Screw             | 1      | 1      |
| J68      | GF/      | H4973K8001 | Pin               | 1      | 1      |
| J69      | GF/      | H4974K8001 | Arm               | 1      | 1      |
| J70      | GF/      | HA111G0683 | Screw             | 1      | 1      |
| J71      | GF/      | HA7111N304 | Nut               | 1      | 1      |
| J72      | GF/      | H4979K8001 | Solenoid Complete | 1      | 1      |



| Ref. No. | Part No.     |             | Name of Part                  | Q'ty   |        |
|----------|--------------|-------------|-------------------------------|--------|--------|
|          |              |             |                               | GF/138 | GF/238 |
| K 1      | GF/          | H4905L7101  | Touth Switch Complete         | 1      | 1      |
| K 2      | GF/          | H4918L8001  | Screw                         | 4      | 4      |
| K 3      | GF/          | HA700Q0030  | Holder                        | 2      | 2      |
| K 4      | GF/          | H49922L8001 | Holder                        | 1      | 1      |
| K 5      | GF/          | H3205J0662  | Ball Bearing                  | 1      | 1      |
| K 6      | GF/          | H007009300  | Retaining Ring C-type         | 1      | 1      |
| K 7      | GF/          | HA700R0060  | Washer                        | 1      | 1      |
| K 8      | GF/          | HA700R0050  | Support Spring                | 1      | 1      |
| K 9      | GF/          | HA700R0040  | Spacer                        | 1      | 1      |
| K 10     | GF/          | H4928L8001  | Speed Command Disk F20 (up)   | 1      | 1      |
| K 11     | GF/          | HA700R0030  | Spacer A                      | 2      | 2      |
| K 12     | GF/          | H4930L8001  | Speed Command Disk F11 (down) | 1      | 1      |
| K 13     | GF/          | HA110D0672  | Screw                         | 2      | 2      |
| K 14     | GF/          | H4931L8001  | Pulley (complete)             | 1      | 1      |
| K 15     | GF/          | HA703R0067  | Washer                        | 1      | 1      |
| K 16     | GF/          | HA703R0065  | Detector Bracket (complete)   | 1      | 1      |
| K 17     | GF/          | HA3411D308  | Screw                         | 1      | 1      |
| K 18     | GF/          | H4936L8001  | Lever                         | 1      | 1      |
| K 19     | GF/          | HA113F0684  | Screw                         | 1      | 1      |
| K 20     | GF/          | H4937L8001  | Screw                         | 1      | 1      |
| K 21     | GF/          | H4938L8001  | Rubber Ring                   | 1      | 1      |
| K 22     | GF/          | H4939L8001  | Spring                        | 1      | 1      |
| K 23     | GF/          | H4940L8001  | Nut                           | 2      | 2      |
| K 24     | GF/          | H4941L8001  | Screw                         | 2      | 2      |
| K 25     | GF/          | M4          | Nut M4                        | 1      | 1      |
| K 26     | GF/          | CQ2B25-15D  | Air Cylinder CQ2B25-15D SMC   | 1      | 1      |
| K 27     | GF/          | M6x10       | Screw M6x10 DIN 912           | 2      | 2      |
| K 28     | GF/ L100- 55 |             | Bracket                       | 1      | 1      |
| K 29     | GF/          |             | Spring Washer                 | 2      | 2      |
| K 30     | GF/          | M4          | Nut M4                        | 2      | 2      |
| K 31     | GF/          | H4948L8001  | Link                          | 1      | 1      |
| K 32     | GF/          | H4949L8001  | Blot                          | 1      | 1      |
| K 33     | GF/          | H4950L8001  | Arm                           | 1      | 1      |
| K 34     | GF/          | M4x10       | Screw M4x10 DIN84A            | 2      | 2      |
| K 35     | GF/          | KQ2L04-M5   | Fitting SMC                   | 2      | 2      |
| K 36     | GF/ L100- 51 |             | Bushing                       | 1      | 1      |
| K 37     | GF/          | HK 1010     | Needle Bearing HK 1010 SKF    | 2      | 2      |
| K 38     | GF/ L100- 54 |             | Shaft                         | 1      | 1      |
| K 39     | GF/ L100- 50 |             | Crank                         | 1      | 1      |
| K 40     | GF/          | M6x16       | Screw (M6x16 DIN 912)         | 1      | 1      |
| K 41     | GF/ L100- 53 |             | Remove Lever                  | 1      | 1      |
| K 42     | GF/ L100- 52 |             | Pin                           | 1      | 1      |
| K 43     | GF/          | 4           | E-ring 4 DIN 6799             | 2      | 2      |
| K 44     | GF/          | M4x40       | Screw M4x40 DIN 912           | 3      | 3      |

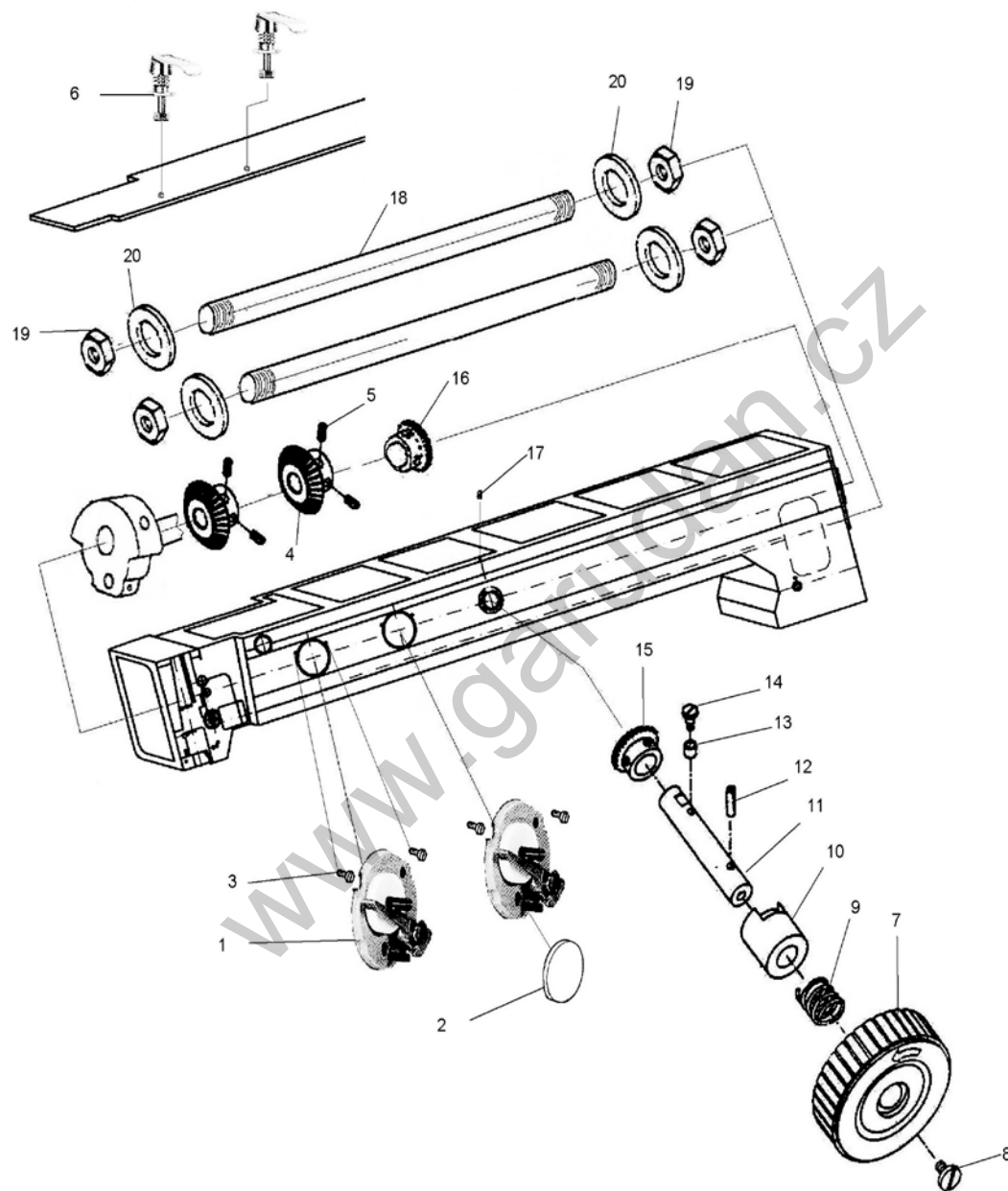


| Ref. No. | Part No.         | Name of Part                              | Q'ty   |        |
|----------|------------------|---|--------|--------|
|          |                  |   | GF/138 | GF/238 |
| L 1      | GF/ L100- 20     | Oil Reservoar                             | 1      | 1      |
| L 2      | GF/ H4705J7101   | Oil Pipe comlete                          | 1      | 1      |
| L 5      | GF/ M5x5         | Screw M5x5 DIN 551                        | 1      | 1      |
| L 6      | GF/ K56042282015 | Oil Control Peephole cat.No.28004-2282015 | 1      | 1      |
| L 8      | GF/ H4711J7101   | Oil Reservoir Complete                    | 1      | 1      |
| L 9      | GF/ H4713J8001   | Holder                                    | 1      | 1      |
| L 10     | GF/ HA7311CC06   | Screw                                     | 7      | 7      |
| L 11     | GF/ HA100I2050   | Spring Washer                             | 1      | 1      |
| L 12     | GF/ H2000M0110   | Holder                                    | 1      | 1      |
| L 16     | GF/ H3230K0751   | Screw                                     | 2      | 2      |
| L 17     | GF/ H4716K8001   | Bushing                                   | 1      | 1      |
| L 18     | GF/ H3215K0696   | Oil Pipe                                  | 1      | 1      |
| L 19     | GF/ H1100I2070   | Pin                                       | 1      | 1      |
| L 20     | GF/ H1100I2090   | Spring                                    | 1      | 1      |
| L 21     | GF/ H1100I2120   | Spring Holder                             | 1      | 1      |
| L 22     | GF/ H3204D6510   | Screw                                     | 1      | 1      |
| L 23     | GF/ H3215K0693   | Screw                                     | 1      | 1      |
| L 24     | GF/ H3215K0692   | Filter                                    | 1      | 1      |
| L 25     | GF/ H3215K0694   | Screw                                     | 1      | 1      |
| L 26     | GF/ H4718J7101   | Mounting Plate Complete                   | 1      | 1      |
| L 27     | GF/ H3215K0695   | Holder                                    | 1      | 1      |
| L 28     | GF/ H3200K0170   | Holder                                    | 1      | 1      |
| L 29     | GF/ HA7311CC06   | Pin                                       |        | 1      |
| L 30     | GF/ H3210K0674   | Holder                                    |        | 1      |
| L 31     | GF/ H3210K0671   | Oil Pipe Joint                            |        | 1      |
| L 32     | GF/ HA100E2150   | Screw                                     | 4      | 4      |
| L 33     | GF/ H4721J8001   | Oil Pipe diam.3x1x90                      |        | 1      |
| L 34     | GF/ H4805J8001   | Oil Pipe diam.3x1x370                     | 1      |        |
| L 35     | GF/ H4723J8001   | Oil Pipe diam.3x1x300                     |        | 1      |
| L 36     | GF/ H2000M0110   | Holder                                    | 3      | 3      |
| L 37     | GF/ H3211K0068   | Oil Reservoir Complete                    | 2      | 2      |
| L 38     | GF/ H3200K0180   | Oil Wick diam.2.5x35                      | 3      | 3      |
| L 39     | GF/ H4735J8001   | Oil Pipe                                  | 1      | 1      |
| L 40     | GF/ H4724J8001   | Oil Pipe diam.3x1x445                     | 1      | 1      |
| L 41     | GF/ H3200K0160   | Holder                                    | 3      | 3      |
| L 42     | GF/ H4725J7101   | Oil Wick                                  | 1      | 1      |
| L 43     | GF/ H4728J7101   | Oil Wick                                  | 1      | 1      |
| L 44     | GF/ H4731J8001   | Holder                                    | 1      | 1      |
| L 45     | GF/ HA300C2030   | Screw                                     | 1      | 1      |
| L 46     | GF/              |   |        |        |
| L 47     | GF/ L100-G3      | Oil Tube                                  | 1      | 1      |
| L 48     | GF/ L100-G2      | Oil Box                                   | 1      | 1      |
| L 49     | GF/ L100-G1      | Oil Cover                                 | 1      | 1      |
| L 50     | GF/ A5           | Washer                                    | 2      | 2      |
| L 51     | GF/ M5           | Nut                                       | 4      | 4      |
| L 52     | GF/ L100-G5      | Thread Shaft                              | 2      | 2      |

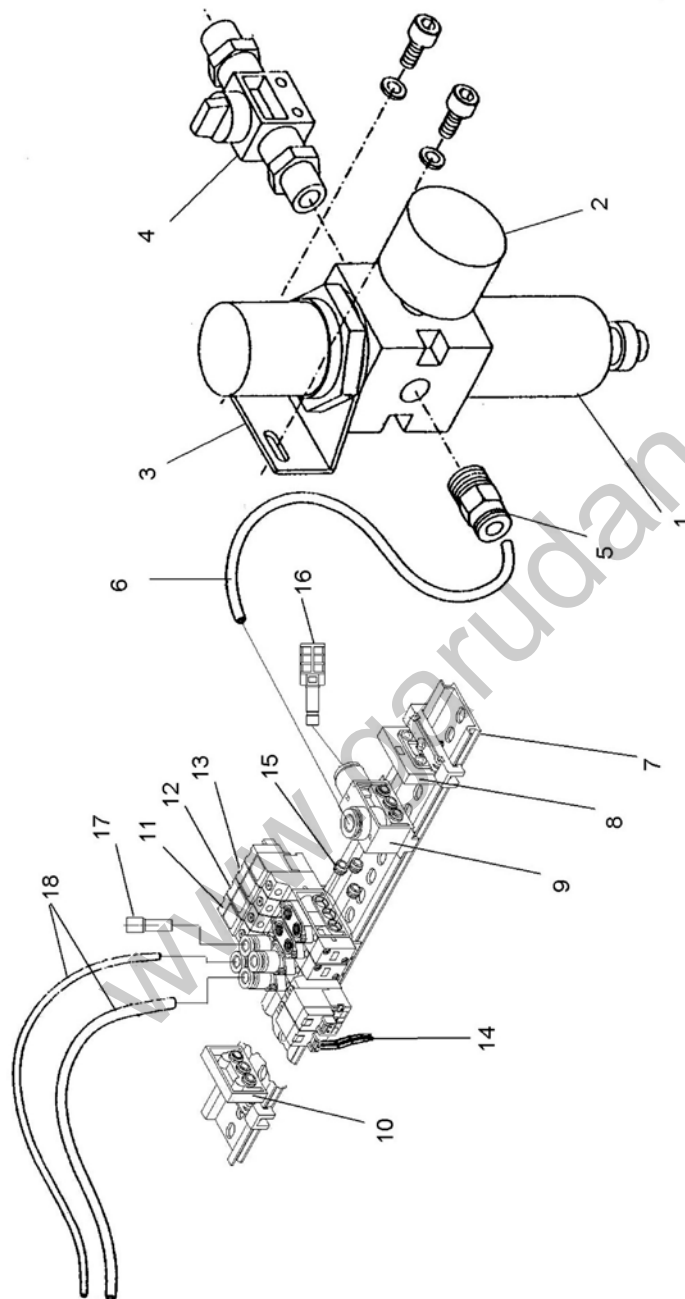


| Ref. No. | Part No.       | Name of Part                           | Q'ty   |        |        |        |
|----------|----------------|--|--------|--------|--------|--------|
|          |                |  | 138/-3 | 238/-3 | 138/-6 | 238/-6 |
| M 1      | GF/H4740F8001  | Needle DPx17-23                        | 3      | 6      | 3      | 6      |
| M 2      | GF/H3209L8001  | Socet Wrench                           |        |        | 1      | 1      |
| M 3      | GF/H3208L8001  | Socet Wrench                           | 1      | 1      | 1      | 1      |
| M 4      | GF/H4905N8001  | Socet Wrench                           |        |        | 1      | 1      |
| M 5      | GF/H3306I0067  | Bobbin                                 | 2      | 4      |        |        |
| M 5      | GF/H49121I8001 | Washer                                 |        |        | 2      | 4      |
| M 10     | GF/HA100J2110  | Oiler                                  | 1      | 1      | 1      | 1      |
| M 11     | GF/HA100J2140  | Screw Driver (middle)                  | 1      | 1      | 1      | 1      |
| M 12     | GF/HA100J2150  | Screw Driver (small)                   | 1      | 1      | 1      | 1      |
| M 13     | GF/H3207L0065  | Thread a Needle Kit                    | 1      | 1      | 1      | 1      |
| M 14     | GF/HA704S0654  | Adjusting Plate for Speed Command Disk |        |        | 1      | 1      |
| M 15     | GF/H409030060  | Screw                                  |        |        | 1      | 1      |
| M 16     | GF/H4907N8001  | Thread Guide                           |        |        | 1      | 1      |
| M 17     | GF/H3200L0130  | Oil Can                                | 1      | 1      | 1      | 1      |
| M 18     | GF/H3200L0120  | Cotton Stand                           | 1      |        | 1      |        |
| M 18     | YH/FPL-4       | Cotton Stand                           |        | 1      |        | 1      |
| M 20     | GF/H2008O0068  | Belt Cover                             |        |        | 1      | 1      |
| M 21     | GF/HA300C2170  | Screw                                  |        |        | 2      | 2      |
| M 22     | GF/HA300J2280  | Screw                                  | 2      | 2      | 2      | 2      |
| M 23     | GF/HA300J2250  | Screw                                  |        |        | 1      | 1      |
| M 24     | GF/H2405B6601  | Belt Cover Complete                    | 1      | 1      |        |        |
| M 24     | GF/H4953N7101  | Belt Cover Complete                    |        |        | 1      | 1      |
| M 25     | GF/H003008040  | Nut                                    |        |        | 1      | 1      |
| M 26     | GF/HA305J0665  | Belt Cover                             | 1      | 1      | 1      | 1      |
| M 27     | GF/M6x15       | Screw M6x15 DIN 551                    | 2      | 2      | 2      | 2      |
| M 28     | GF/HA307J0067  | Hinge Complete                         | 2      | 2      | 2      | 2      |
| M 29     | GF/HA300J2070  | Screw Driver (large)                   | 1      | 1      | 1      | 1      |
| M 41     | GF/L100-18     | Oil Pan                                | 1      | 1      | 1      | 1      |
| M 42     | GF/HA100J2180  | Vinyl Cover                            | 1      | 1      | 1      | 1      |
| M 43     | GF/L100-19     | Oil Pan Holder                         | 2      | 2      | 2      | 2      |

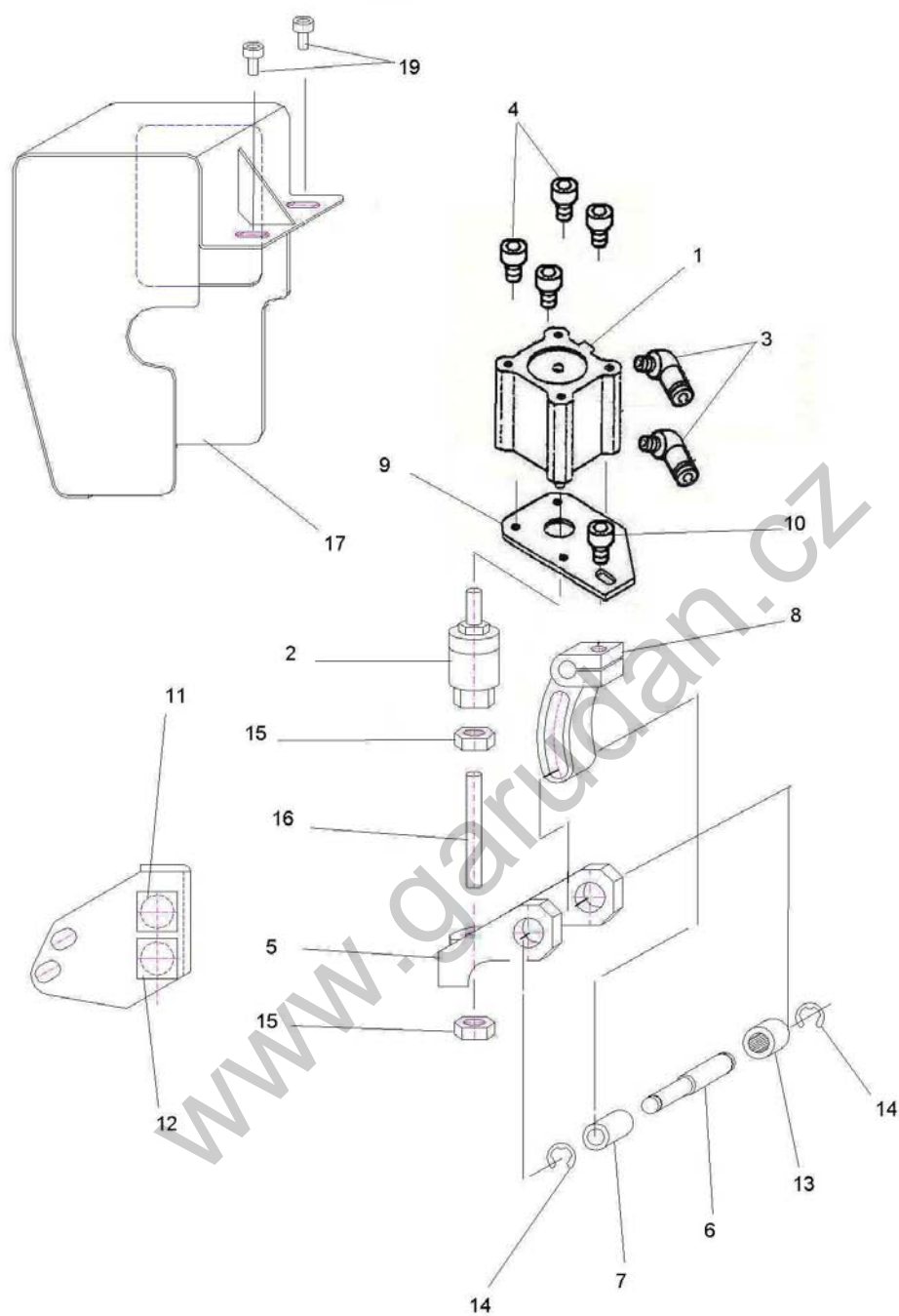




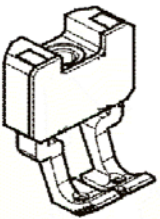
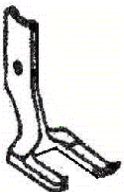
| Ref. No. | Part No.        | Name of Part                              | Q'ty   |        |
|----------|-----------------|---|--------|--------|
|          |                 |   | GF/138 | GF/238 |
| N 1      | GF/ H98A030     | Bobbin Winder                             | 1      | 2      |
| N 2      | GF/ L100-27     | Plug                                      | 1      |        |
| N 3      | GP/ 700336      | Screw                                     | 4      | 4      |
| N 4      | GF/ L100-09     | Bevel Gear                                | 1      | 2      |
| N 5      | GP/ 341901      | Screw M6x0.75x6                           | 2      | 4      |
| N 6      | P/ P98002524800 | Thread Retainer                           | 1      | 2      |
| N 7      | S/ 25S004S-306H | Hand Pulley                               | 1      | 1      |
| N 8      | S/ 25S012S-306H | Screw                                     | 1      | 1      |
| N 9      | S/ 25S011S-306H | Hand Pulley Spring                        | 1      | 1      |
| N 10     | S/ 25S009S-306H | Bushing                                   | 1      | 1      |
| N 11     | S/ 25S005S-306H | Shaft                                     | 1      | 1      |
| N 12     | S/ 25S008S-306H | Spring Pin                                | 1      | 1      |
| N 13     | S/ 25S007S-306H | Hand Pulley Roller                        | 1      | 1      |
| N 14     | S/ 25S006S-306H | Hand Pulley Roller Hinge Screw            | 1      | 1      |
| N 15     | S/ 25S001S-306H | Hand Pulley Gear B                        | 1      | 1      |
| N 16     | GF/ L100-56     | Hand P. Gear B(Modification 25S001S-306H) | 1      | 1      |
| N 17     | GF/ M5x8        | Screw M5x8 DIN 551                        | 1      | 1      |
| N 18     | GF/ L100-04     | Strain Shaft                              | 2      | 2      |
| N 19     | GF/ M12         | Nut M12 DIN 934 ISO 4032 BN 116 Kl.8      | 4      | 4      |
| N 20     | GF/ 12          | Washer 12x24x0.5 DIN 988 BN 748           | 4      | 4      |










| Ref. No.   | Part No. |                  | Name of Part                            | Q'ty   |        |
|--|----------|------------------|---|--------|--------|
|  |          |                  |   | GF/138 | GF/238 |
| O 1  | GF/      | AW20-F02H        | Filter Regulator AW20-F02H SMC          | 1      | 1      |
| O 2  | GF/      | G36-10-01        | Manometr G36-10-01                      | 1      | 1      |
| O 3  | GF/      | ARP20P-270AS     | Holder SRP20P-270AS                     | 1      | 1      |
| O 4  | GF/      | VHK3-08F-02S     | Finger Valve VHK3-08F-02S               | 1      | 1      |
| O 5  | GF/      | KQ2H08-02S       | Tube Connector KQ2H08-02S               | 1      | 1      |
| O 6  | GF/      | TU0805BU-20      | Air Tube TU0805BU-20 (20m)              | 30cm   | 30cm   |
| O 7  | GF/      | VZ1000-11-3-1000 | Bracket Ledge VZ1000-11-3-1000          | 1      | 1      |
| O 8  | GF/      | SY3000-56-1A-Q   | Terminal panel SY3000-56-1A-Q           | 1      | 1      |
| O 9  | GF/      | SY3000-55-1A-Q   | Input Block SY3000-55-1A-Q              | 1      | 1      |
| O 10   | GF/      | SY3000-56-1B-Q   | Terminal panel SY3000-56-1B-Q           | 1      | 1      |
| O 11   | GF/      | SY3160-5LOU      | Solenoid Valve SY3160-5LOU-C4-Q Table D | 1      | 1      |
| O 12   | GF/      | SY3160-5LOU      | Solenoid Valve SY3160-5LOU-C4-Q Table B | 1      | 1      |
| O 13   | GF/      | SY3160-5LOU      | Solenoid Valve SY3160-5LOU-C4-Q Table K | 1      | 1      |
| O 14   | GF/      | SY100-30-4A-20   | Solenoid Connector SY100-30-4A-20       | 3      | 3      |
| O 15   | GF/      | SY3000-52-5A     | Connecting Ring SY3000-52-5A            | 3      | 3      |
| O 16   | GF/      | AN203-KM8        | Silencer AN203-KM8 (for sol.No.12)      | 1      | 1      |
| O 17   | GF/      | KQ2P-04          | Plug KQ2P-04                            | 1      | 1      |
| O 18   | GF/      | TU0425BU-20      | Air Tube TU0425BU-20 (20m)              | 8m     | 8m     |
| O 21(11)   | GF/      | SY3160-5LOU      | Solenoid Valve SY3160-5LOU-C4-Q Table P | 1      | 1      |
| O 22(14)   | GF/      | SY100-30-4A-20   | Solenoid Connector SY100-30-4A-20       | 1      | 1      |
| O 23(18)   | GF/      | TU0425BU-20      | Air Tube TU0425BU-20 (20m)              | 4m     | 4m     |
| *Ref.No.21,22,23-for the Acvanced Alternating<br>Presser Foot Mechanism-table P<br>-určeno pro předzdvih krácející patky-<br>- viz. tab. P |          |                  |   |        |        |



| Ref.No. | Part No.      | Name of Part                       | Q'ty   |        |
|---------|---------------|------------------------------------|--------|--------|
|         |               |                                    | GF/138 | GF/238 |
| P1      | GF/CQ2B20-30D | Air Cylinder CQ2B20-30D SMC        | 1      | 1      |
| P2      | GF/JA15-5-080 | Kompenzační hlavice SMC            | 1      | 1      |
| P3      | GF/KQ2L04-M5  | Fitting SMC                        | 2      | 2      |
| P4      | GF/M5x50      | Screw M5x50 DIN 912                | 4      | 4      |
| P5      | GF/41         | Bracket                            | 1      | 1      |
| P6      | GF/42         | Pin                                | 1      | 1      |
| P7      | GF/44         | Roller                             | 1      | 1      |
| P8      | GF/45         | Lever (modification H4709E8001)    | 1      | 1      |
| P9      | GF/46         | Holder                             | 1      | 1      |
| P10     | GF/47         | Screw (modification M8x25 DIN 912) | 1      | 1      |
| P11     | GF/AL1Q-M11-A | Push Button AL1Q-M11-A (orange)    | 1      | 1      |
| P12     | GF/AB1Q-M1-S  | Push Button AB1Q-M1-S (blue)       | 1      | 1      |
| P13     | GF/HK0709     | Needle Bearing HK0709 SKF          | 1      | 1      |
| P14     | GF/4          | E-Ring 4 DIN 6799                  | 2      | 2      |
| P15     | GF/M5         | Nut M5 DIN 934                     | 2      | 2      |
| P16     | GF/M5x30      | Screw M5x30 DIN915 (DIN551)        | 1      | 1      |
| P17     | GF/48         | Cover                              | 1      | 1      |
| P18     |               |                                    |        |        |
| P19     | GF/M5x15      | Screw M5x15 DIN 912                | 2      | 2      |

|               |   |   |                    |
|---------------|---|---|--------------------|
|               |  |  |                    |
|               | Straightening Presser<br>Foot<br>Kompenzační patka                                | Presser Foot<br>Zadní patka   | Notice<br>Poznámka |
| 5/16" (8mm)   | SM21-1S   | SM21-2  |                    |
| 3/8" (9.5mm)  | SM20-1S   | SM20-2  |                    |
| 1/2" (12.7mm) | SM19-1S   | SM19-2  |                    |

## Gauge Parts List

|                      |  |  |  |  |  |  |  |
|----------------------|---|---|---|---|---|--|---|
| Gauge Size           | Needle Plate  | Presser Foot (Inside)   | Presser Foot  | Needle Clamp  | Feed Dog  | Slide Plate(L)   | Slide Plate(R)  |
| <b>GF-230-443 MH</b> |   |   |   |   |   |  |   |
| 1/8 (3.2mm)          | H4737B8001  | H4741F8001  | H4758E8001  | H4750F8001  | H4745H8001  | H4732B8001   | H4733B8001  |
| 5/32 (4mm)           | H4738B8001  | H4742F8001  | H4759E8001  | H4751F8001  | H4746H8001  | H4732B8001   | H4733B8001  |
| 3/16 (4.8mm)         | H4739B8001  | H4743F8001  | H4760E8001  | H4752F8001  | H4747H8001  | H4732B8001   | H4733B8001  |
| 1/4 (6.4mm)          | H4734B8001  | H4737F8001  | H4757E8001  | H4739F8001  | H4744H8001  | H4732B8001   | H4733B8001  |
| 5/16 (8mm)           | H4740B8001  | H4744F8001  | H4761E8001  | H4753F8001  | H4748H8001  | H4746B8001   | H4733B8001  |
| 3/8 (9.5mm)          | H4741B8001  | H4745F8001  | H4762E8001  | H4754F8001  | H4749H8001  | H4746B8001   | H4733B8001  |
| 1/2 (12.7mm)         | H4742B8001  | H4746F8001  | H4763E8001  | H4755F8001  | H4750H8001  | H4747B8001   | H4750B8001  |
| 5/8 (16mm)           | H4743B8001  | H4747F8001  | H4764E8001  | H4756F8001  | H4751H8001  | H4747B8001   | H4750B8001  |
| 3/4 (19mm)           | H4744B8001  | H4748F8001  | H4765E8001  | H4757F8001  | H4752H8001  | H4748B8001   | H4750B8001  |
| 1 (25.4mm)           | H4745B8001  | H4749F8001  | H4766E8001  | H4758F8001  | H4753H8001  | H4749B8001   | H4750B8001  |
| <b>GF-230-446 MH</b> |   |   |   |   |   |  |   |
| 1/8 (3.2mm)          | H4937B8001  | H4741F8001  | H4758E8001  | H4750F8001  | H4945H8001  | H4732B8001   | H4733B8001  |
| 5/32 (4mm)           | H4938B8001  | H4742F8001  | H4759E8001  | H4751F8001  | H4946H8001  | H4732B8001   | H4733B8001  |
| 3/16 (4.8mm)         | H4939B8001  | H4743F8001  | H4760E8001  | H4752F8001  | H4947H8001  | H4732B8001   | H4733B8001  |
| 1/4 (6.4mm)          | H4917B8001  | H4737F8001  | H4757E8001  | H4739F8001  | H4944H8001  | H4732B8001   | H4733B8001  |
| 5/16 (8mm)           | H4940B8001  | H4744F8001  | H4761E8001  | H4753F8001  | H4948H8001  | H4746B8001   | H4733B8001  |
| 3/8 (9.5mm)          | H4941B8001  | H4745F8001  | H4762E8001  | H4754F8001  | H4949H8001  | H4746B8001   | H4733B8001  |
| 1/2 (12.7mm)         | H4942B8001  | H4746F8001  | H4763E8001  | H4755F8001  | H4950H8001  | H4747B8001   | H4733B8001  |
| 5/8 (16mm)           | H4943B8001  | H4747F8001  | H4764E8001  | H4756F8001  | H4951H8001  | H4747B8001   | H4733B8001  |
| 3/4 (19mm)           | H4944B8001  | H4748F8001  | H4765E8001  | H4757F8001  | H4952H8001  | H4748B8001   | H4750B8001  |
| 1 (25.4mm)           | H4945B8001  | H4749F8001  | H4766E8001  | H4758F8001  | H4953H8001  | H4749B8001   | H4750B8001  |
| <b>GF-130-443 H</b>  |   |   |   |   |   |  |   |
|                      | H4814B8001  | H4807F8001  | H3100G2110  |   | H4807H8001  | H4812B8001   | H4813B8001  |
| <b>GF-130-446 H</b>  |   |   |   |   |   |  |   |
|                      | H5014B8001  | H4807F8001  | H3100G2110  |   | H5004H8001  | H4812B8001   | H4813B8001  |



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