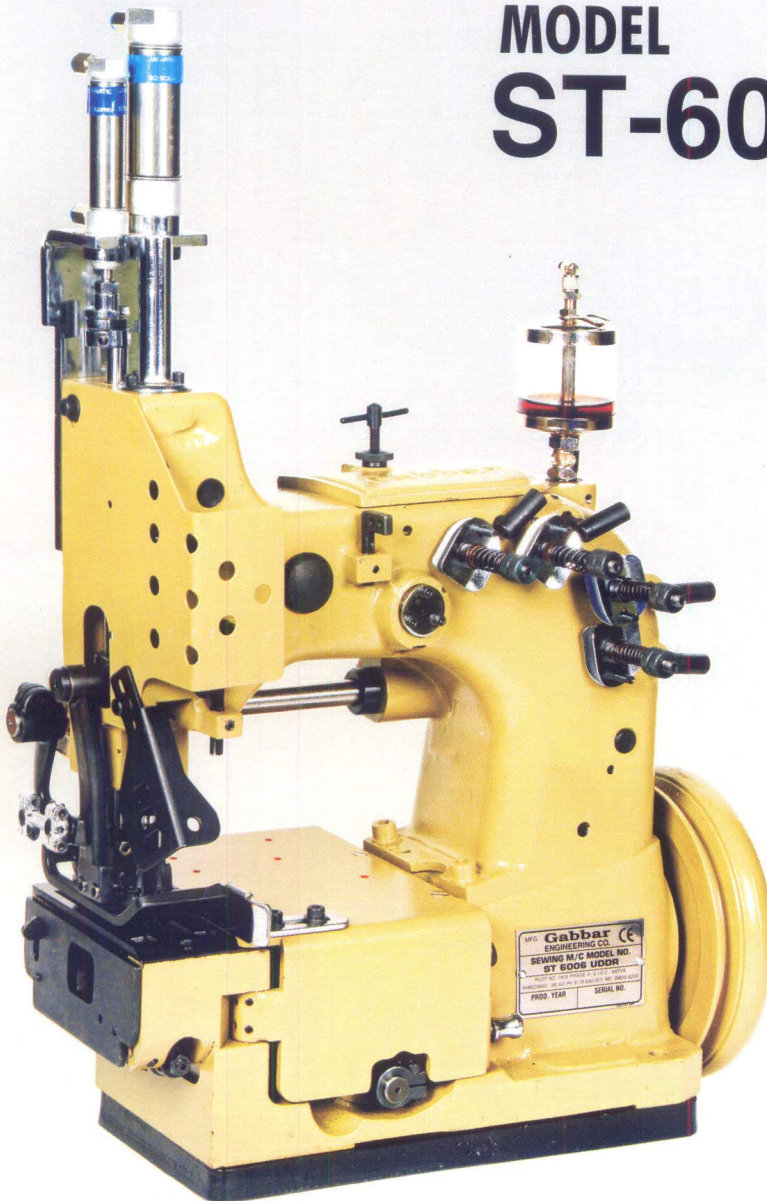


GabbarTM

BIG BAG SEWING MACHINE

INSTRUCTION MANUAL/PARTS LIST

MODEL ST-6006 UDDR



Decide with Confidence
SE 1B



QMS/0224/0313



CE

Manufactured By :

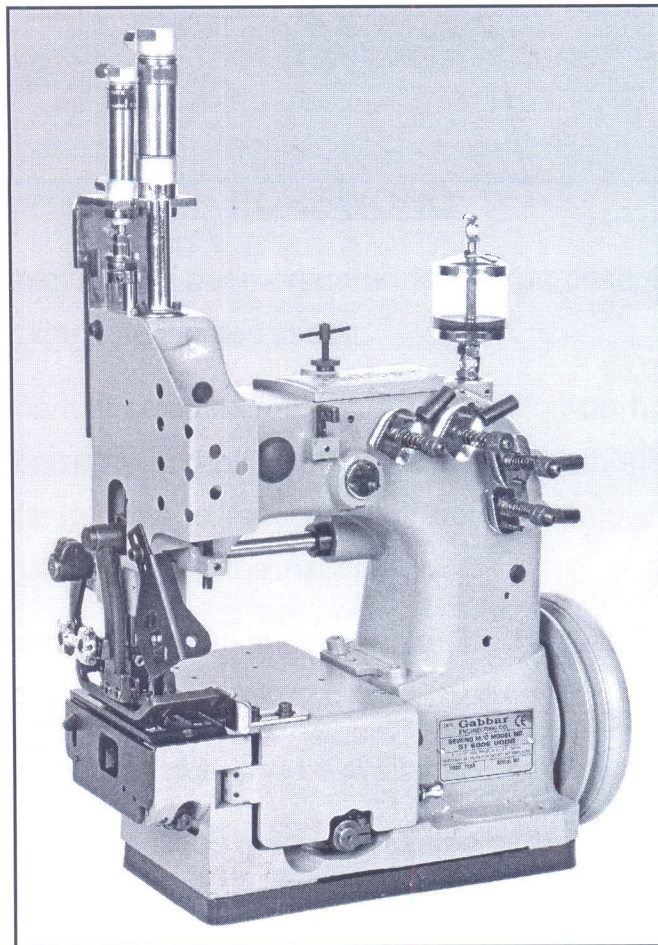
**Gabbar
Engineering Co.**

Gujarat, India.

GabbarTM

ILLUSTRATED PARTS LIST Model No: ST 6006 UDDR

CE



Double needle, double transport sewing machine with inline needles that create a special locking sewing system. It is specifically designed to be used for sewing heavy duty Big Bags enabling sift proof properties without using sift proof material such as filler cords and to sew fabrics of increased thicknesses such as the top and bottom covers to the body of the Big Bags with the addition of webbings.

GabbarTM

Instruction Manual and Parts List
Model No: ST 6006 UDDR



FOREWORD

This instruction manual has been prepared for the purpose of familiarizing the user with the machine's designated usage.

The instruction manual contains important information on how to operate the machine safely, correctly and efficiently. Observing these instructions helps to protect against danger and to reduce repair costs and downtimes. It will also increase the reliability and life of the machine.

The instructions manual is to be supplemented by the respective national rules and regulations to prevent accidents and protect the environment.

The instruction manual has to always be available wherever the machine is in use.

The instruction manual must be read and applied by any person with the duty of carrying out tasks with and on the machine , expressed below :

- **Operating** processes, including troubleshooting during operation, setting up, and maintenance.
- **Maintenance** processes (servicing, inspection, repair) and/or
- **Transport**

ST-6006 UDDR


Table of Contents

No.	Description	Page No.
1.	SAFETY RULES	1
2.	ORDERING REPAIR PARTS, STYLES OF MACHINES AND DESCRIPTIONS	2
3.	PUTTING INTO SERVICE OPERATION	3
4.	OILING DIAGRAM, LUBRICATION AND OPERATION MAINTENANCE AND NEEDLES	4-6
5.	THREADING DIAGRAMS	7
6.	OPERATING INSTRUCTIONS	8
7.	ENGINEER'S MANUAL	9-18
8.	ORDERING REPAIR PARTS	18
9.	CARRYING AND UNPACKING THE MACHINE	19
10.	BUSHING AND OILING PARTS	21
11.	CLOTH PLATES AND MISCELLANEOUS COVERS	23
12.	THREAD TENSION AND THREAD GUIDES	25
13.	NEEDLE LEVER CONNECTIONS	27
14.	NEEDLE CONNECTIONS	29
15.	CRANK SHAFT, PULLEY CONNECTIONS AND ECCENTRICS	31
16.	LOOPER, LOOPER LEVER, LOOPER ROCKER, LOOPER THREAD CAST-OFF	33
17.	LOWER FEED DRIVE MECHANISM	35
18.	UPPER FEED DRIVE MECHANISM	37
19.	PRESSER BAR, PRESSER BAR SPRINGS AND PRESSER FOOT LIFTER LEVER	39
20.	SEWING PARTS	41
21.	PARTS FOR PNEUMATIC PRESSER FOOT LIFTER	43
22.	PACKING LIST OF SEWING MACHINE ACCESSORIES	44

SAFETY RULES

- 1) Before putting the machine(s) described in this manual into service, carefully read all the instructions. The starting of each machine is only permissible after taking notice of all the instructions and when operated by qualified operators.

IMPORTANT! Before putting the machine into service, also read the safety rules and instructions from the motor supplier.

- 2) - Observe the national safety rules valid in your country.
- 3) The sewing machines described in this instruction manual are prohibited from being put into service until it has been ascertained that the sewing units which these sewing machines will be installed onto have conformed to the provisions of EC Machinery Directive 98/37/EC Annex II B.
Each machine is only allowed to be used as foreseen. The foreseen use of the particular machine is described in the paragraph **STYLES OF MACHINES** of this instruction manual. Any other use, going beyond the description, is not as foreseen.
- 4) All safety devices must be in position when the machine is ready for work or in operation. Operation of the machine without the appertaining safety devices is prohibited.
- 5) Wear safety glasses.
- 6) In case of machine conversions and changes all valid safety rules must be considered. Conversions and changes are made at your own risk. Gabbar does not assume responsibility if conversions are made.
- 7) The warning hints in the instructions are marked with one of these symbols. 
- 8) When doing the following, the machine has to be disconnected from the power supply by turning off the main switch or by pulling out the main plug:
 - 8.1- When threading needle(s), looper, spreader, etc.
 - 8.2- When replacing any part(s) such as needle, presser foot, throat plate, looper, spreader, feed dog, needle guard, folder, fabric guide, etc.
 - 8.3- When leaving the workplace and when the work place is unattended.
 - 8.4- When doing maintenance work.
 - 8.5- When using clutch motors with or without actuation lock. Make sure the motor is stopped completely

ORDERING REPAIR PARTS

To simplify ordering repair parts, various sections of the mechanism are shown with exploded views so that the parts may be seen in their actual positions in the machine. On the page opposite the illustration, a listing of the parts with their part numbers, descriptions and the number of pieces required in the particular view are shown.

Numbers in the first column are reference numbers only and merely show the position of that part in the illustration. Reference numbers should never be used for ordering parts. Always use the part number listed in the second column.

Component parts of sub-assemblies which can be supplied for repairs are indicated with a description by indentations under the description of the main sub-assembly.

At the back of the catalog a numerical index of all parts shown in this catalog can be found. This will facilitate locating the illustration and description when only the part number is known.

Important : On all orders, please include part number, part name, quantity required and style of machine for the part ordered.

STYLES OF MACHINE

ST 6006 UDDR : This machine is specifically designed for the polypropylene Big Bag (FIBC) industry. It is designed to reduce or eliminate the cost of filler cords and have the operator sew faster by not using any filler cord. This machine has a two needle inline sewing system. This system's specialty is that it weaves the thread during the sewing process. When the fabric is observed from below, a seam that resembles a woven filler cord is apparent. It is specifically designed to sew fabrics of increased thicknesses such as the top and bottom covers (panels) to the body of the Big Bags and the addition of webbings.

Seam Width : 25 mm

Sewing capacity : up to 16 mm

Standard Needle : UY 9848 G 300/120

Stitch Range : 7 - 9 mm

Standard Setting : 9 mm

Working Diameter of hand wheel pulley : 150 mm

Speed : Up to 1400 stitches per minute, depending on thread, fabric and sewing operation.

Equivalent continuous A-weighted sound pressure level at workstations at the operating speed of 1400 RPM is 75dB (A).

Noise measurement is according to DIN 45635-48/ISO 10821.

Net Weight : 34.50 kg.

Working pressure for pressure foot and upper feed dog lifter must be 6 - 6.5 bar for (ST 6006 UDDR).

Air usage : 20 Liters/minute.

Use **Gabbar** installations for the described sewing machines. **Gabbar** sewing tables and pedestals complete the particular sewing machine in a sewing unit and guarantee safe operation as well as produce the indicated data of the sound pressure level generated by the sewing unit.

PUTTING INTO SERVICE

Before using the machine, note the specified service voltage and number of cycles within the factory. The main voltage and the number of cycles of the machine must match the specified factory service voltage and the number of cycles.

Instructions starting direction or location, such as right, left, front or rear of machine, are given relative to operator's position at the machine unless otherwise noted. The pulley rotates clockwise in the operating direction when viewed from the right end of the machine.

⚠CAUTION : Before putting into service, check the direction of the rotation. Breakage may occur when the direction of the rotation is wrong.

OPERATION

Only qualified persons should be allowed to start and operate the machine.

Wear safety glasses.

The main switch has to be turned-off for the following :

- For threading the needle, looper, spreader, etc.
- For replacing sewing tools such as the needle, presser foot, throat plate, looper, spreader, feed dog, needle guard, folder, fabric guide, etc.
- When the work place is unattended and when leaving the work place.
- For maintenance work.

Do not touch moving machine parts while the main switch is turned on. This applies also to adjustments. Danger of injury!

All safety devices must be in position when the machine is ready for work or in operation.

The sewing unit should only be used for the intended purpose. In case of any conversions made to the machine, all applicable safeguarding provisions must be considered.

LUBRICATING POINTS

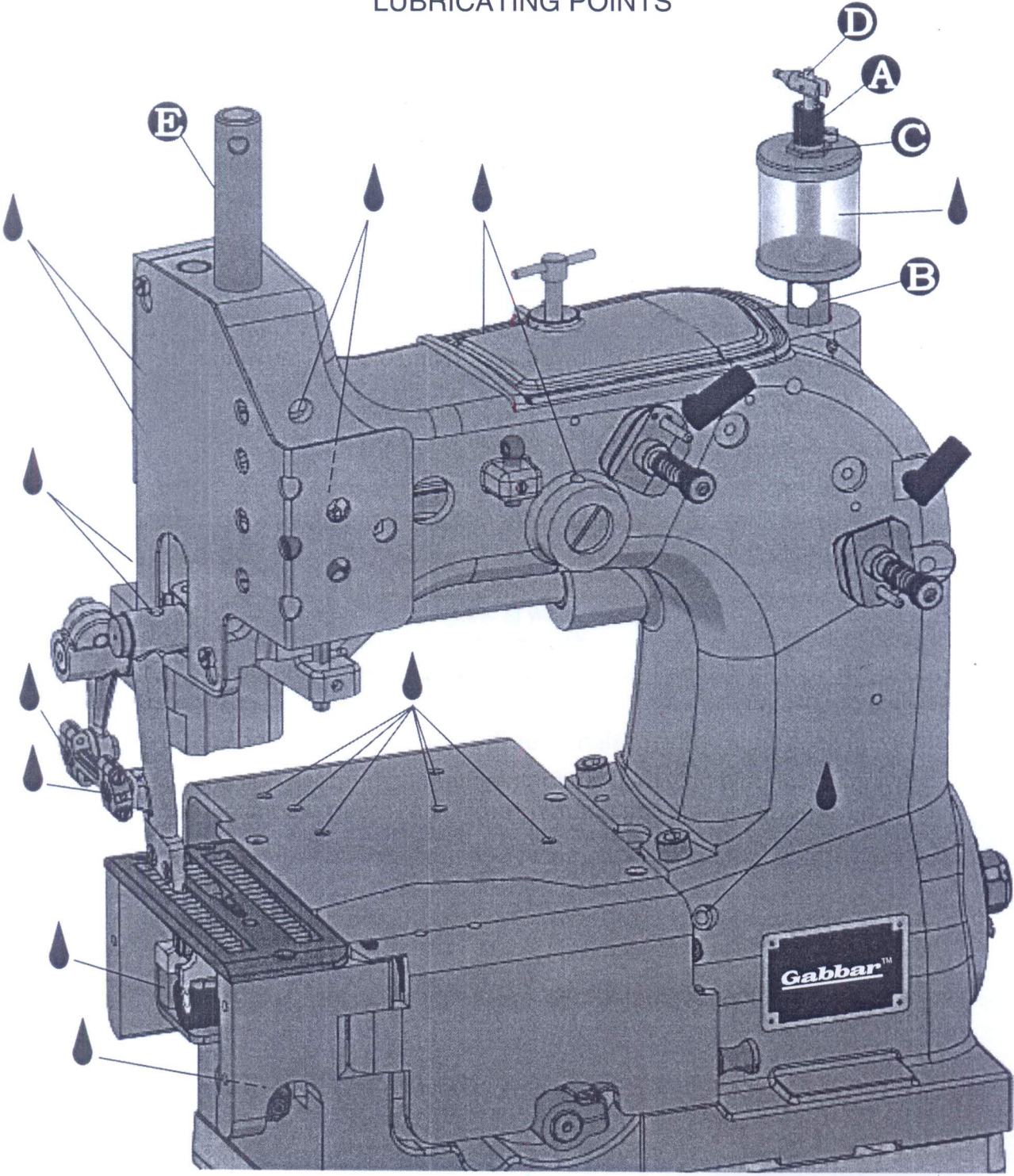


FIGURE 1

MAINTENANCE

Important:

Any work on the electrical equipment should be done by authorized persons only and with the main plug pulled out.

Apart from the permissible deviations according to DIN 57 105 or VDE 0105, work on live parts and equipment is not permitted.

For extensive maintenance work and for repairs, pull out the main plug.

Disconnect the sewing unit from the compressed air supply before doing maintenance work or repairs on pneumatic equipment.

Exceptions are allowed only if the adjustments and function tests are done by authorized persons.

Also observe all safety rules included in the operating and adjusting instructions.

LUBRICATION AND PREPARING FOR OPERATION

The machines of class ST 6006 UDDR have to be cleaned and lubricated twice a day on the lubricating points indicated on the oiling diagram (fig 1). This action should be done once in the morning and once in the afternoon before starting work. The sight feed oiler has to be kept full and should be adjusted so that it feeds two or three drops of oil per minute. The sight feed oiler has to be refilled so that it is never less than 1/3 full.

For lubrication we recommend "Mobil Oil DTE Medium."

Before operating a new machine for the first time, the needle bar guard(E, Fig.1) and the sight feed oiler, which come along with the accessories of the machine, have to be screwed in. The sight feed oiler has to be adjusted. All lubricating points, indicated on the oiling diagram (Fig.1), have to be oiled. For adjusting, fill the sight feed oiler half-way with oil and turn the metering pin (A, Fig.1) a short distance out. Then turn it in until it starts flowing at a rate of approximately two drops of oil per minute. This can be checked on the sight glass (B, Fig.1). Secure the setting of the metering pin with lock nut (C, Fig.1). Fill the oiler.



IMPORTANT! The oil flow has to be turned on again before operating the machine.

NEEDLES

Each needle has a number for both type and size. The type number denotes the kind of shank, point, length, groove, finish and other details. The size number is stamped on the needle shank.

The type and size number (metric/inch) represent the complete symbol, which is given on the label of all needles packaged and sold by GABBAR:

The standard needle for the Model No. ST 6006 UDDR is: UY 9848 GS 300/120

The desired, the needle size 250 can be used. To order this needle, the serial number is: UY 9848 G 250/100

Selection of proper needle size is determined by size of thread used. Thread should pass freely through the needle eye in order to produce good stitch formation.

To have needle orders promptly and accurately filled, an empty package, a sample needle, or type and size number should be forwarded. Use the description on the label. A complete order would read :

" UY 9848 G 300/120 - 100 Pieces. "

THREDDING DIAGRAM

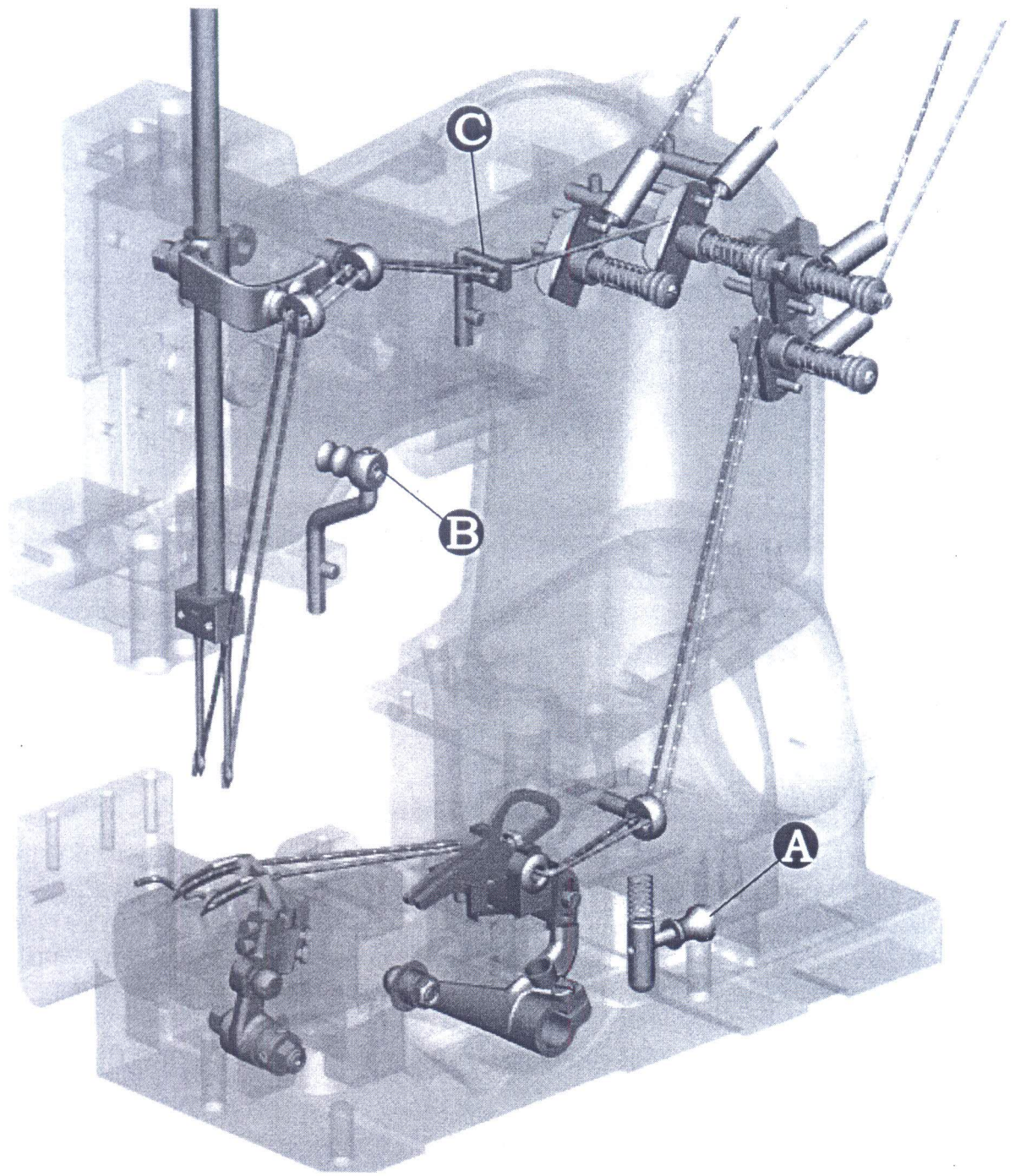


FIGURE 2

OPERATING INSTRUCTIONS

THREADING :

Caution: Switch off from the main switch before threading! When using clutch motors without actuation lock, wait until the motor has stopped completely!



ST 6006 UDDR is threading as show in Fig.2.

For threading the needle, turn hand wheel pulley in the operating direction until the needle is in the uppermost position. For looper threading, open the hinge plate by lifting locking bolt knob (A, Fig.2 and 2A). When threading, be sure the thread goes through the front eyelet, over the take-up and through the back eyelet before threading the looper (see also Fig.11). Close the hinge plate after threading.

OPERATING :

1. Switch on main power switch.
2. Without lifting the presser foot, place the fabric to be sewn as close as possible in front of the needle and to right on the edge guide.

Caution: Remove your foot from the motor treadle to avoid inadvertently starting the machine



in case it is necessary to lift the presser foot and upper feed dog for aligning the fabric to be sewn!

3. Depress the motor treadle. The machine sews guiding the fabric to be sewn.

Caution: Keep a security distance of approximately 10 cm. between hand and sewing needle



when guiding the fabric to be sewn!

4. Release the motor treadle. Wait until the machine stops. Cut the thread chain at the trailing edge of the fabric and remove the fabric from the machine.

CHANGING THE NEEDLE

Caution: Switch off from the main switch before changing the needle! When using clutch motors without actuation lock, wait until the motor has stopped completely!



Turn the hand wheel pulley in the operating direction until the needle is in its uppermost position. Unthread the eye of the needle to be changed. Loosen needle clamp nut and respective screws (Fig.2) for the needles and pull out the needles. Insert the shank of the new needle as far as it will go with the long groove of the needle facing to the front (toward the operator). Tighten the needle clamp nut and the respective screws securely. Thread the needle eye.

EDGE GUIDE

Caution: Switch off from the main switch before setting edge guide and changing the seam width! When using clutch motors without actuation lock, wait until the motor has stopped completely!



ENGINEER'S MANUAL

Caution: Observe the SAFETY RULES when making adjustments!



SETTING THE LOOPER(S)

Remove the presser foot, throat plate and feed dog, for convenient access to the machine. Loosen the screw (A, Fig.3) in the feed bar (B) and push the feed bar needle guard (C) to the rear to avoid its contacting the needle(s) (D). Set the looper connecting rod (E) so that the distance (X, Fig.4) between the centerlines of the two ball joints is 68.5 - 69 mm. For adjustment, loosen the two nuts (F, Fig.3) and turn connecting rod (E) forward or backward as required to obtain specified measurement. Retighten nuts (F).

Set the looper (G) so that the distance from the centerline of the needle (D) to the looper (G) is 6.5 mm when the looper is at its furthest position to the right. For adjustment, loosen screws (H) in the looper driver lever (J), reposition as required to obtain specified measurement and retighten screws (H) assuring that all end play is taken out of the looper drive lever rocker shaft.

Check to ensure a clearance of approximately 1 mm between the point of the looper and the bed end cover when the looper is at its extreme left position.

Rotate the machine pulley in the operating direction so that the looper moves from right to left. The looper point should pass as close as possible to the back of the needle without contacting it within the clearance of 0.08 to 0.13 mm. For adjustment, loosen screw (A, Fig.4) in the looper eccentric fork (B) and move the looper rocker shaft (C) forward or backward as required. Retighten screw (A).

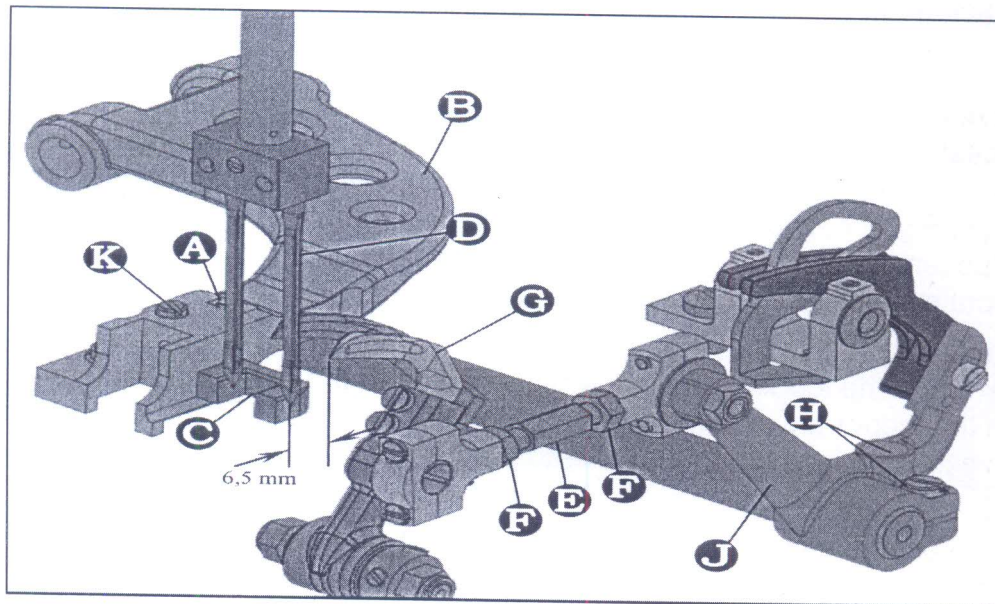


FIGURE 3

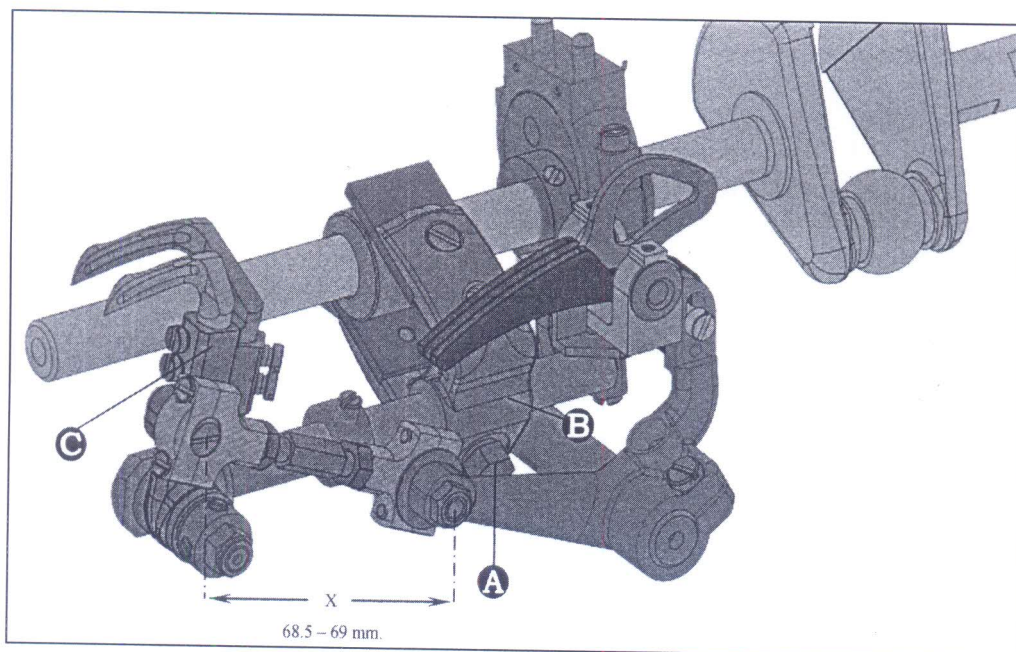


FIGURE 4

SETTING THE HEIGHT OF NEEDLE BAR

Remove the cloth plate with serial number 3701 CA. Rotate machine pulley in operating direction until the looper point projects 3 mm past the needle. The lower edge of the looper and the upper edge of the needle eye must be flush in this position. If adjustment is necessary, loosen clamp screw (A, Fig.6) in the needle bar connection and move the needle bar up or down, as required. Retighten screw (A) and remount face cover (81387).

SETTING THE LOWER FEED DOG

At the lowest point of feed dog travel, the lower feed dog (C, Fig.6) should be set so that the full depth (X, Fig.6) of the rear teeth are 0.6 - 0.7 mm below the throat plate surface. For setting, remove the lower feed dog and adjust the supporting screw (K, Fig.3) above so that the lower feed dog reaches the necessary height. Remount the lower feed dog.

After loosening screws (A, Fig.7) rear in the feed rocker (B) the feed bar with feed dog can be moved laterally to center the feed dog in the throat plate slot, if required. Retighten screws (A).

Hint : Also refer to paragraph " SETTING THE UPPER FEED DOG ".

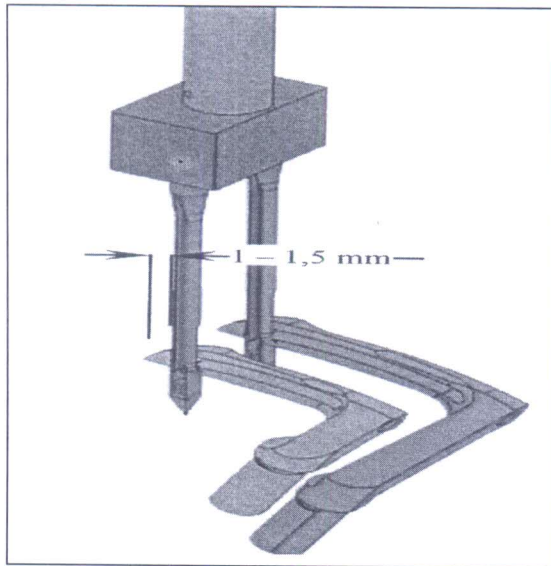


FIGURE 5

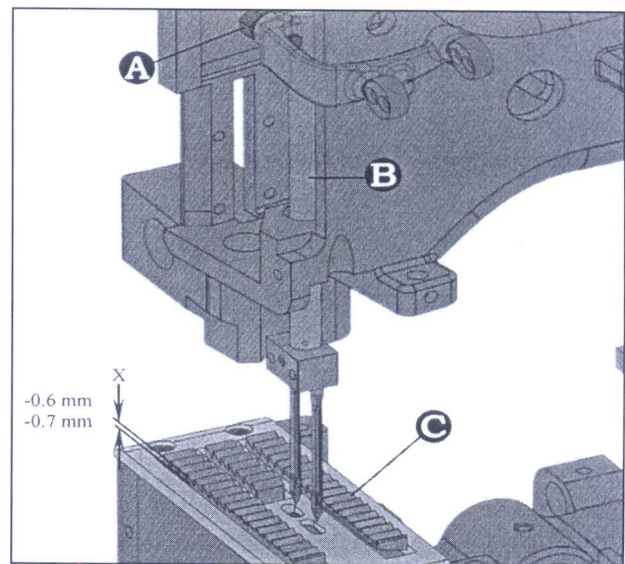


FIGURE 6

MOUNTING AND SETTING THE PRESSER FOOT

Remove the needle and rotate the pulley until the feed dog is below the throat plate. Depress the presser foot lifter lever (for ST 6006 UDDR) and insert the presser foot bars (L and R, Fig.8) into the presser foot shank between the two presser bars and the presser foot. The left presser bar (L) should move freely up and down along its axis within the presser foot shank.

SETTING THE STITCH LENGTH

On Model No.ST 6006 UDDR, the stud (C, Fig.7) for setting the stitch length is accessible from the outside. The length of the stitch can be adjusted by raising or lowering the stud (C, Fig.7) in the segment slot of the feed rocker (B). Lowering stud (C) will lengthen the stitch, raising the stud will shorten the stitch. After loosening nut (D), stud (C) can be moved accordingly. When the desired stitch length is obtained, retighten nut (D).

Note : Any change in stitch length will necessitate a corresponding change in the needle guard setting!

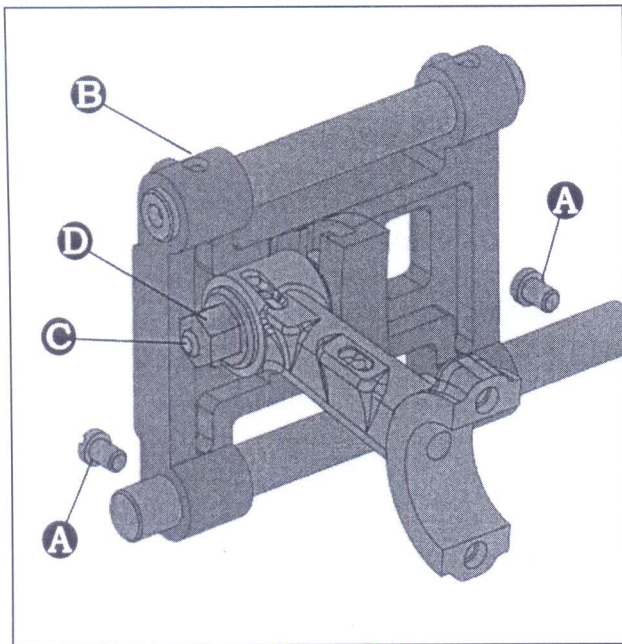


FIGURE 7

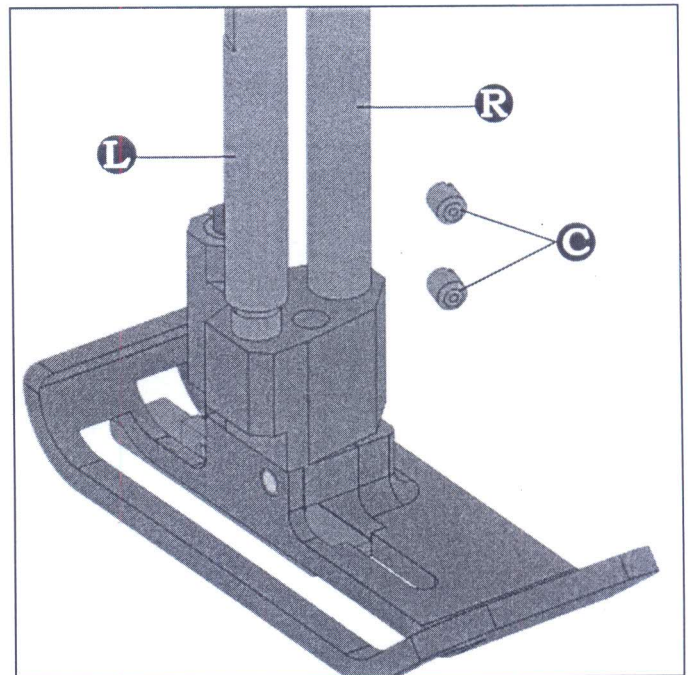


FIGURE 8

SETTING THE NEEDLE GUARD

The needle guard (C, Fig.3) has to be set so that it contacts just the needle at its most forward point of travel, without deflecting it. Loosen screw (A, Fig.3) in the feed bar (B) and adjust the needle guard (C) accordingly. Retighten screw (A).

SETTING THE UPPER FEED DOG

Assemble the upper feed dog (B, Fig.9). The upper feed dog should not push against the front or the rear end when moving within the slots of the presser foot (C). Simultaneously, the upper feed dog (B, Fig.10) should be positioned so that the tips of its teeth engage with the tooth spaces of the lower feed dog (A), without contacting it. The rear most tooth of the upper feed dog should enter the 4th space from the back of the lower feed dog without contacting it. When the lower feed dog (A) is in its highest and the upper feed dog (B) in its lowest point of travel, there must be a small gap between both feed dogs (0.2 - 0.3 mm). The feed travel of the upper and the lower feed dogs should be synchronous. If not, the fabric will become scraped.

For setting the upper feed dog with respect to slots in the presser foot and the tooth spaces of the lower feed dog, loosen screw (D, Fig.9) and turn drive lever (E) accordingly to the front and rear. Retighten screw.

Attention: The rear most tooth of the upper feed dog should enter the 4th space from the back of the lower feed dog without contacting it.

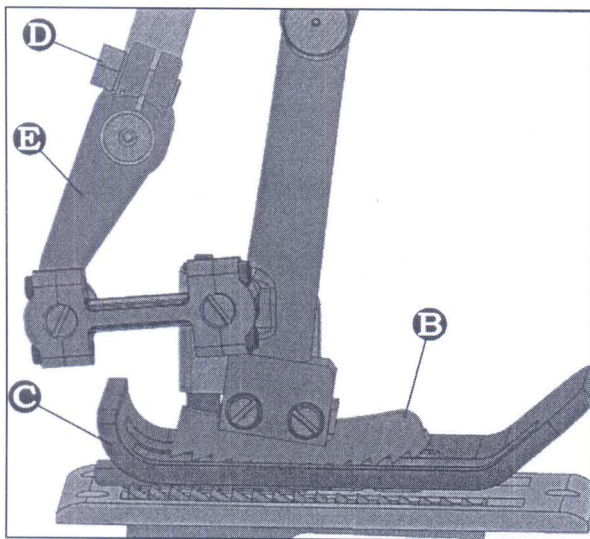


FIGURE 9

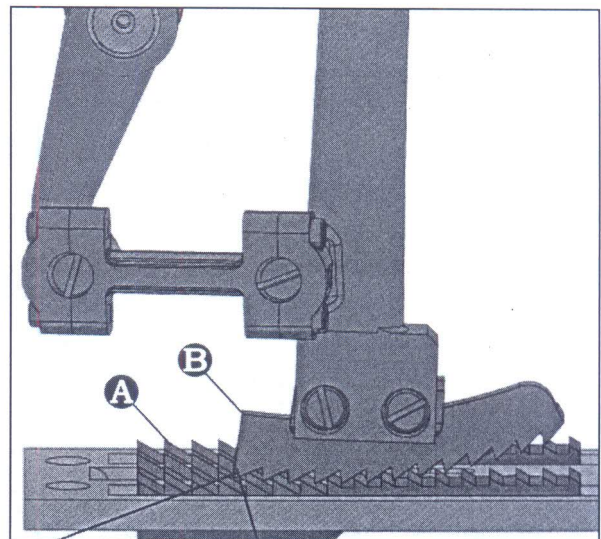


FIGURE 10

For setting the small gap between the feed dogs, loosen nut (F, Fig.11). Turning in the screw (G) increases the gap and turning it out decreases the gap, Retighten nut (F).

For matching the upper feed dog travel with the lower feed dog travel, loosen screw (A, Fig.12). Moving the ball link in the slot of rocker lever (B) to the front decreases the upper feed dog travel and moving it to the rear increases the travel. Retighten screw (A).

Hint : In general, the travel of the lower and the upper feed dog are set equally. Depending on the fabric to be sewn however, it may be necessary to set a slightly longer upper feed dog travel in order to get a proper end matching of the fabric plies. Also refer to the paragraph about " SETTING THE STITCH LENGTH "

ALTERNATING UPPER FEED DOG AND PRESSER FOOT

The upper feed dog pulls the fabric. The presser foot continuously exerts pressure on the fabric. However, the presser foot pressure is low when the upper feed dog is in the lower position and high when the feed dog is the higher position. Note : on its return travel, the upper feed dog lifts from the fabric to be sewn and the presser foot lowers on the fabric to hold it.

On the ST 6006 UDDR model, adjustment of the alternating lift motion of the upper feed dog and presser foot is done with the height level of the part with serial number 80768. Adjustment is done by loosening part 80768's screws, lifting it and retightening its screws while the needle bar is at its highest position.

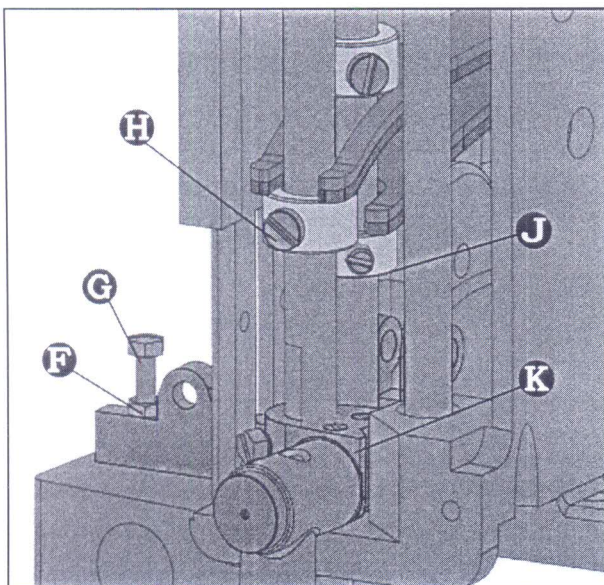


FIGURE 11

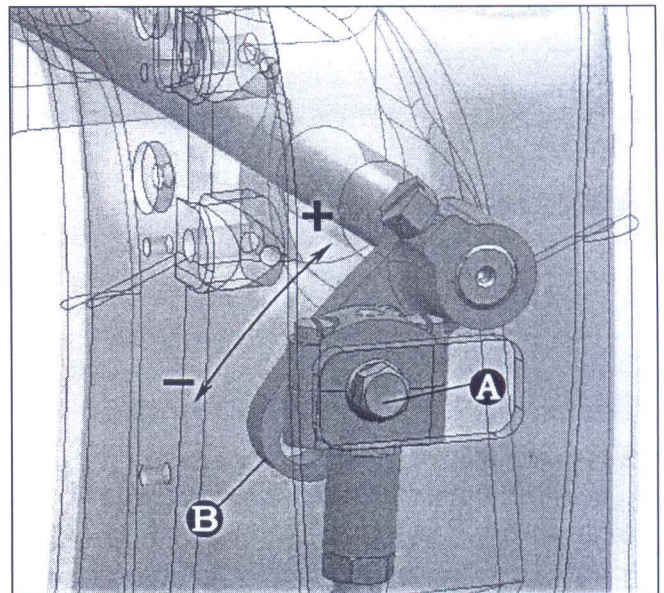


FIGURE 12

Next, loosen the two screws (H, Fig.11) and higher the supporting yoke (J) when the upper feed dog needs to lift more and the presser foot less, and lower it when the upper feed dog needs to lift less and the presser foot more. Retighten screws (H). Loosen nut (A, Fig.14) and tighten t-screw (B) until it exerts the wanted presser on the upper leaf springs. Then place the top cover in place and tighten while countering with the nut.

The pressure on either the right or left presser bar can be changed by changing the place of the collars (C, Fig.15), which work as upper leaf springs, Raising the collars increases pressure and lowering them, decreases pressure.

On the Model No.ST 6006 UDDR, adjustment of the varying lift movements of the upper feed dog and the presser foot is done by adjusting the height of the part with serial number 80768. Adjustment is done by loosening the screws (B, Fig.13) of part 80768 (A, Fig.13) when the needle bar is in its uppermost position, lifting part 80768 to the highest level, loweringing it 1 - 1.5 mm and tightening the screws.

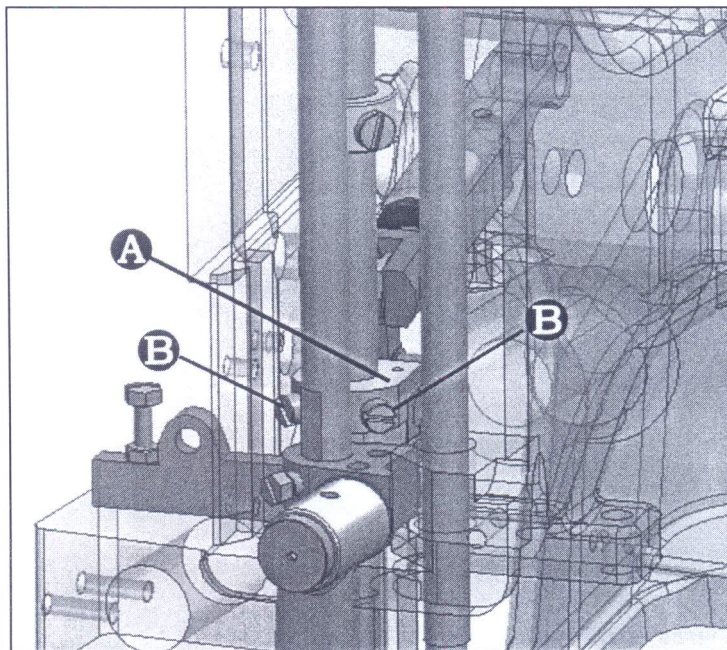


FIGURE 13

PRESSER FOOT PRESSURE

The presser foot lift is limited with the upper stop collar (D, Fig.15) on the right presser bar. When the needle is in its lowest position and the presser foot is lifted with the presser foot lifter lever, the needle holder should not contact the presser foot.

Make sure that both presser bars move up and down freely without binding.

Now tighten the T-screw (B, Fig.14) until the necessary presser foot pressure is exerted for proper feeding. (Determine by sewing tests.) Secure this setting with the knurled nut (A) which simultaneously fastens the upper arm cover. Remount the face cover and the finger guard.

NEEDLE THREAD TAKE-UP

Basically the needle thread take-up roller (B, Fig.2) is set in the middle of its shaft, located left on the upper bed casting under the face cover. In case more needle thread should be pulled off for a bigger needle thread loop (depending on thread and fabric), raise the needle thread take-up roller appropriately. Fasten needle thread guide (C Fig.2) located on the top of the upper bed casting, approximately so that it is placed in the middle of its shank.

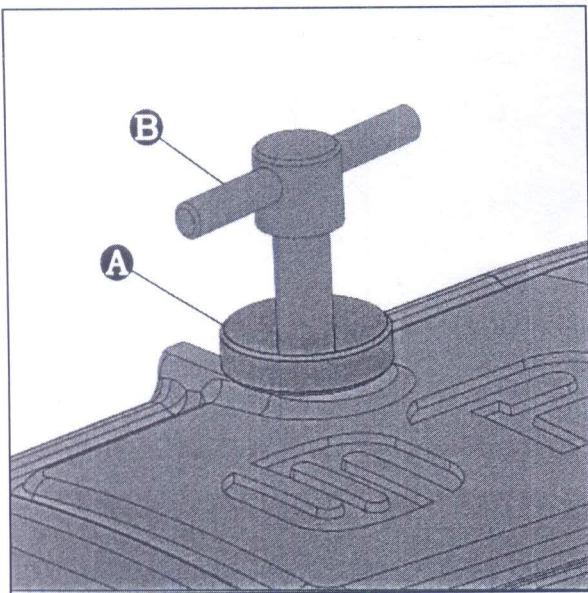


FIGURE 14

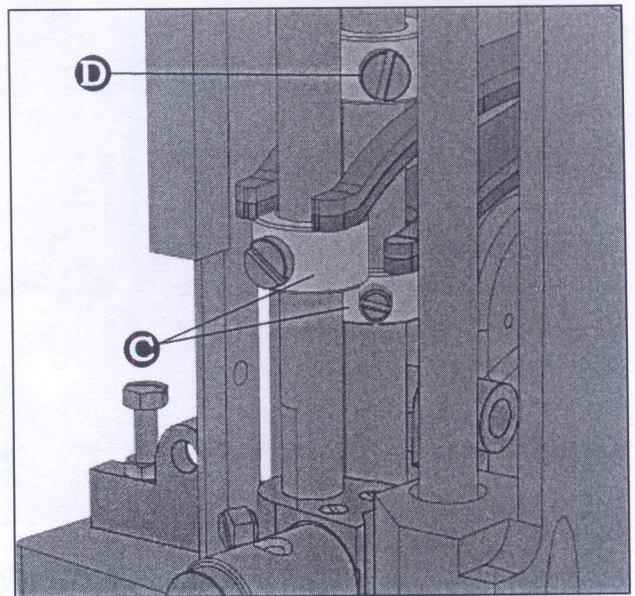


FIGURE 15

THREAD TENSION

Regulate the tension on the threads so that uniform stitches are produced. In general, the tension applied to the needle thread is slightly higher than the tension applied to the looper thread.

Turning the tension nuts clockwise increases the tension. Turning them counter clockwise decreases the tension.

LOOPER THREAD TAKE-UP

The height of the looper thread take-up (A, Fig.16) is adjusted in the following way. The looper thread take-up is adjusted when the height of the part shown in (A, Fig.16) is adjusted with the screw shown in (D, Fig.16), so that it does not touch the parts C and B, also shown in Fig.16.

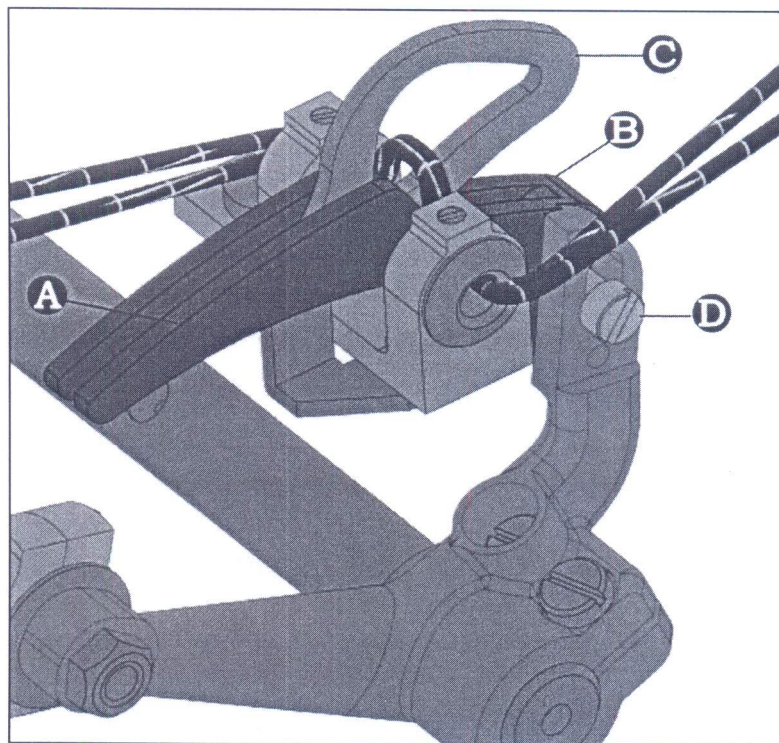


FIGURE 16

TORQUE REQUIREMENTS

Torque specifications given in this catalog are measured in Nm (newton meter). All straps and eccentrics must be tightened to 2.2 - 2.4 Nm, unless otherwise noted. All nuts, bolts, screws etc., without torque specifications, must be secured as tightly as possible, unless otherwise noted. Special torque specifications of connecting rods, links, screws etc., are shown on part illustrations.

ORDERING REPAIR PARTS

Illustrations

This catalog has been organized to simplify ordering repair parts. Various sections of the mechanism are shown with exploded views so that the parts may be seen in their actual positions in the machine. On the page opposite the illustration, a listing of the parts with their part numbers, descriptions and the number of pieces required in the particular view are shown.

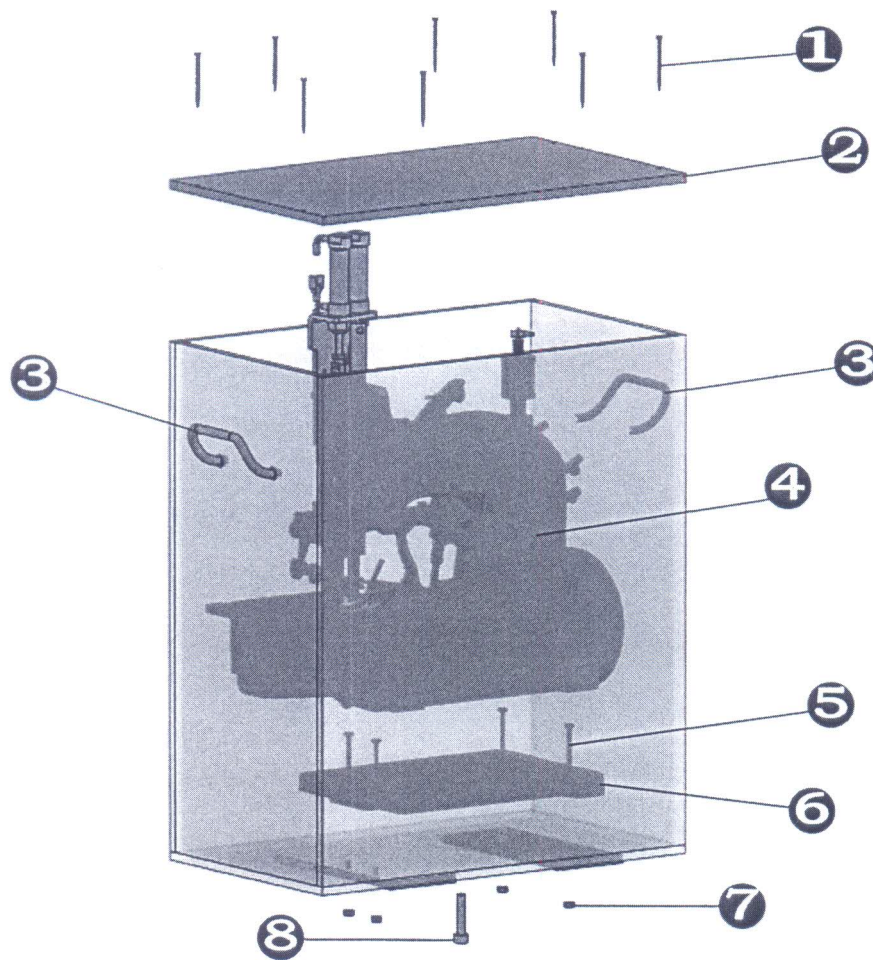
Numbers in the first column are reference numbers only and merely show the position of that part in the illustration. Reference numbers should never be used for ordering parts. Always use the part number listed in the second column.

As an example, refer to the following text:

15	30633	Feed Rocker
16	80696	Stitch Regulating Stud
17	80654	Flange Bushing
18	80695 A	Eccentric
19	22587	Screw
20	3651 A	Connection
21	39099 S	Feed Drive Eccentric Assy.

At the back of the catalog a numerical index of all parts shown in this catalog can be found. This will facilitate locating the illustration and description when only the part number is known.

Important: On all orders, please include part number, part name, quantity required and style of machine for the part ordered.



- | | |
|----------------------|-------------------------|
| 1 - Nails | 2 - Upper lid |
| 3 - Carrying handles | 4 - Machine |
| 5 - Screws | 6 - Lower tray |
| 7 - Nuts | 8 - M10 connecting bolt |

Carrying and unpacking the machine

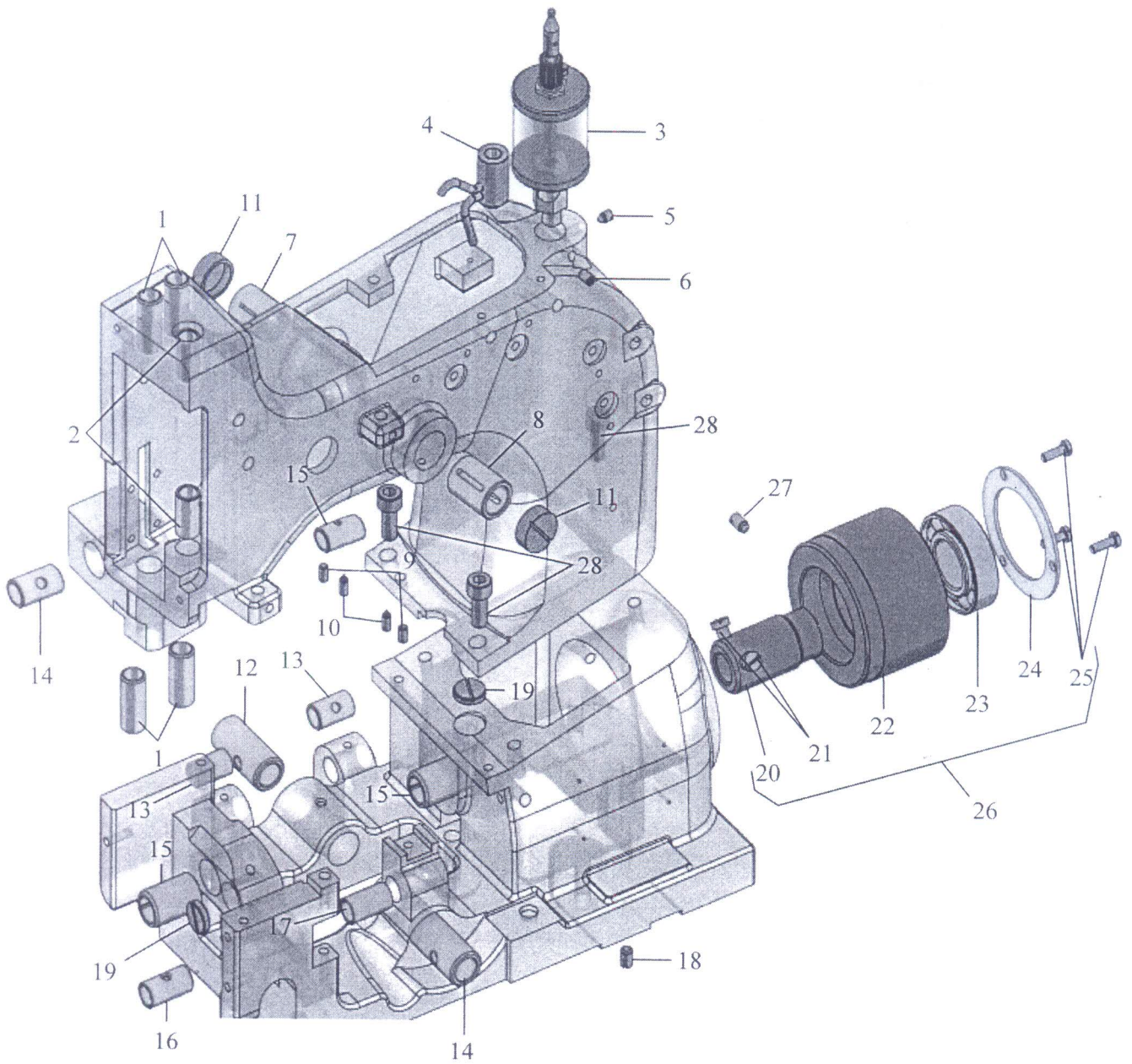
Carrying the machine :

The machine must be carried by using the carrying handles (3).

Unpacking the machine :

- a) Open the lid (2) by taking out the nails (1).
- b) Unbolt the M10 connecting bolt (8) and take the machine out of the case.
- c) Unscrew the 4 nuts (7).
- d) Take the 4 screws (5) out of the case.
- e) Take the lower tray (6) out of the case.

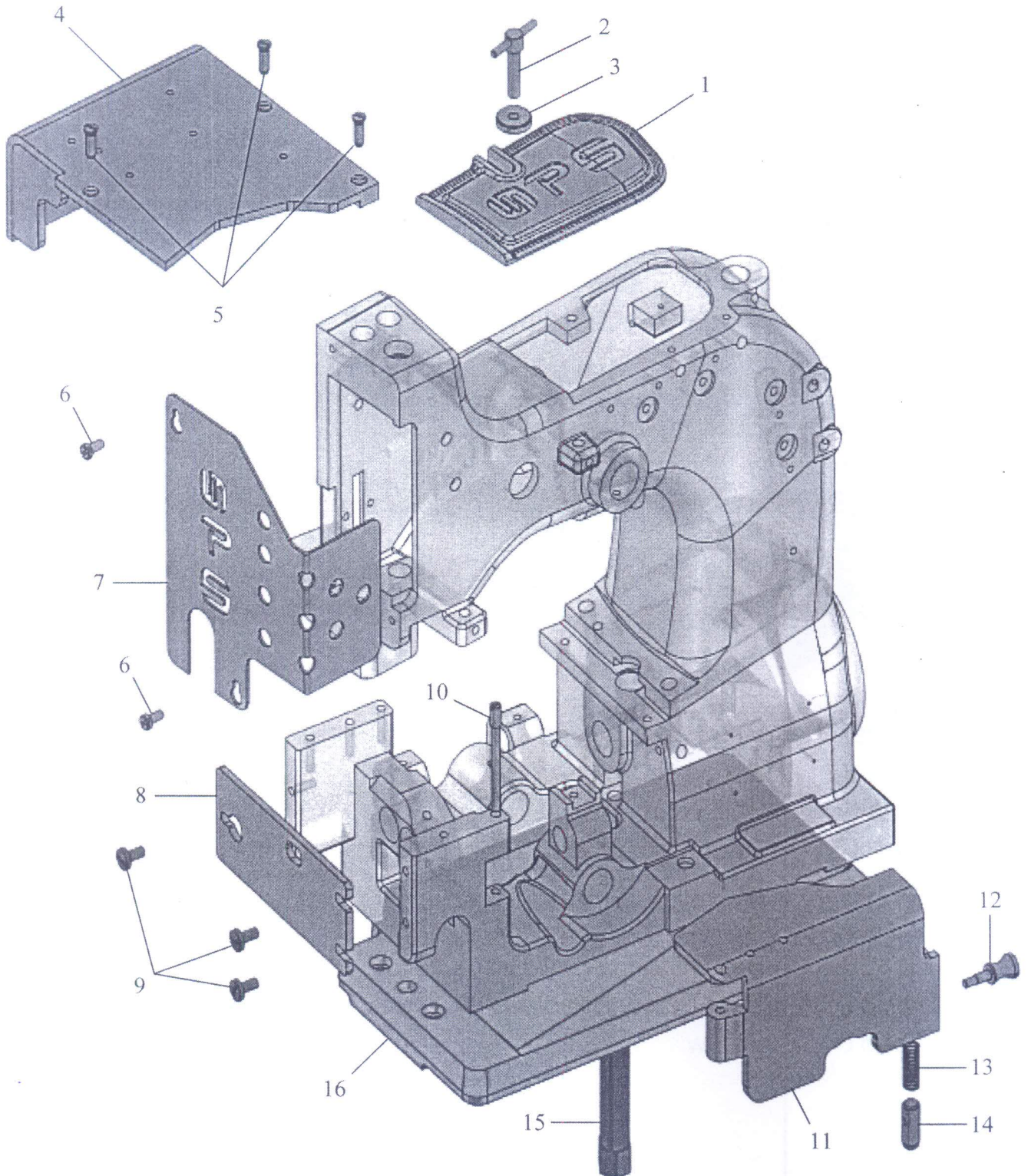
(1) BUSHINGS & OILING PARTS



(1) BUSHINGS & OILING PARTS

SR. No.	PART No.	DESCRIPTION	QTY.
1	80862	Pressure Bar Bushing	4
2	81373 A	Needle Bar Bushing	2
3	666-79	Sight Feed Oiler	1
4	80293 A	Oil Distributor	1
5	22894 L	Spot Screw, Headless	1
6	22894 J	Set Screw	1
7	80846	Bushing For Needle Lever Shaft	1
8	40846	Bushing For Needle Lever Shaft	1
9	22560 A	Screw	2
10	22560 S	Screw	2
11	80644	Plug Screw	2
12	80640 EA	Bushing Left For Upper Feed Drive Shaft	1
13	80692 EA	Bushing For Feed Rocker Shaft	2
14	3640 SA	Bushing For Looper Drive Locker	2
15	80694 DC	Bushing For Crank Shaft	3
16	80639 FA	Bushing Left For Looper Shaft	1
17	80639 EA	Bushing Right For Looper Shaft	1
18	HA 95	Set Screw	1
19	22539	Plug Screw	2
20	30885 B	Hub	1
21	HA 95	Screw	2
22	30885	Ball Bearing	1
23	999-106 D	Deep Groove Ball Bearing	1
24	80885 C	Retaining Ring	1
25	22528	Screw	3
26	30885 S	Ball Bearing Assy. Crank Shaft	1
27	HA 81	Spot Screw Headless	1
28	95861	Screw	3

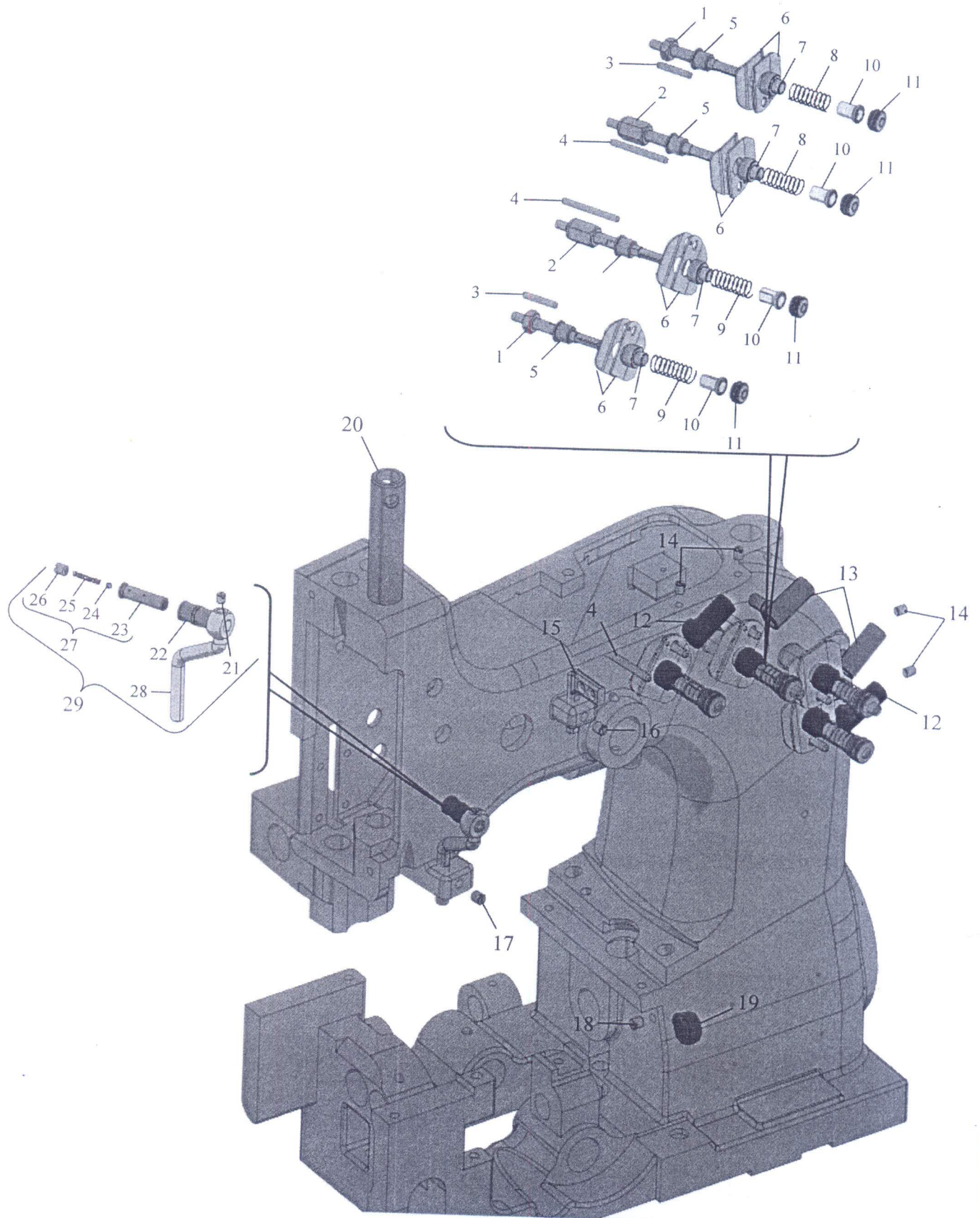
(2) CLOTH PLATES AND MISCELLANEOUS COVERS



(2) CLOTH PLATES AND MISCELLANEOUS COVERS

SR. No.	PART No.	DESCRIPTION	QTY.
1	40888	Arm Cover	1
2	64 Y	T-Screw	1
3	3573	Knurled Nut	1
4	3701 CA	Cloth Plate	1
5	22574	Screw	3
6	22528	Screw	2
7	81387	Face Cover	1
8	3411 B	End Cover	1
9	22548	Screw	3
10	3564	Hinge Pin	1
11	A 3409 D	Hinge Cover	1
12	80440	Locking Bolt Knop	1
13	80438	Spring	1
14	81239	Locking Bolt	1
15	33681	T-Screw	1
16	33280	Base Plate	1

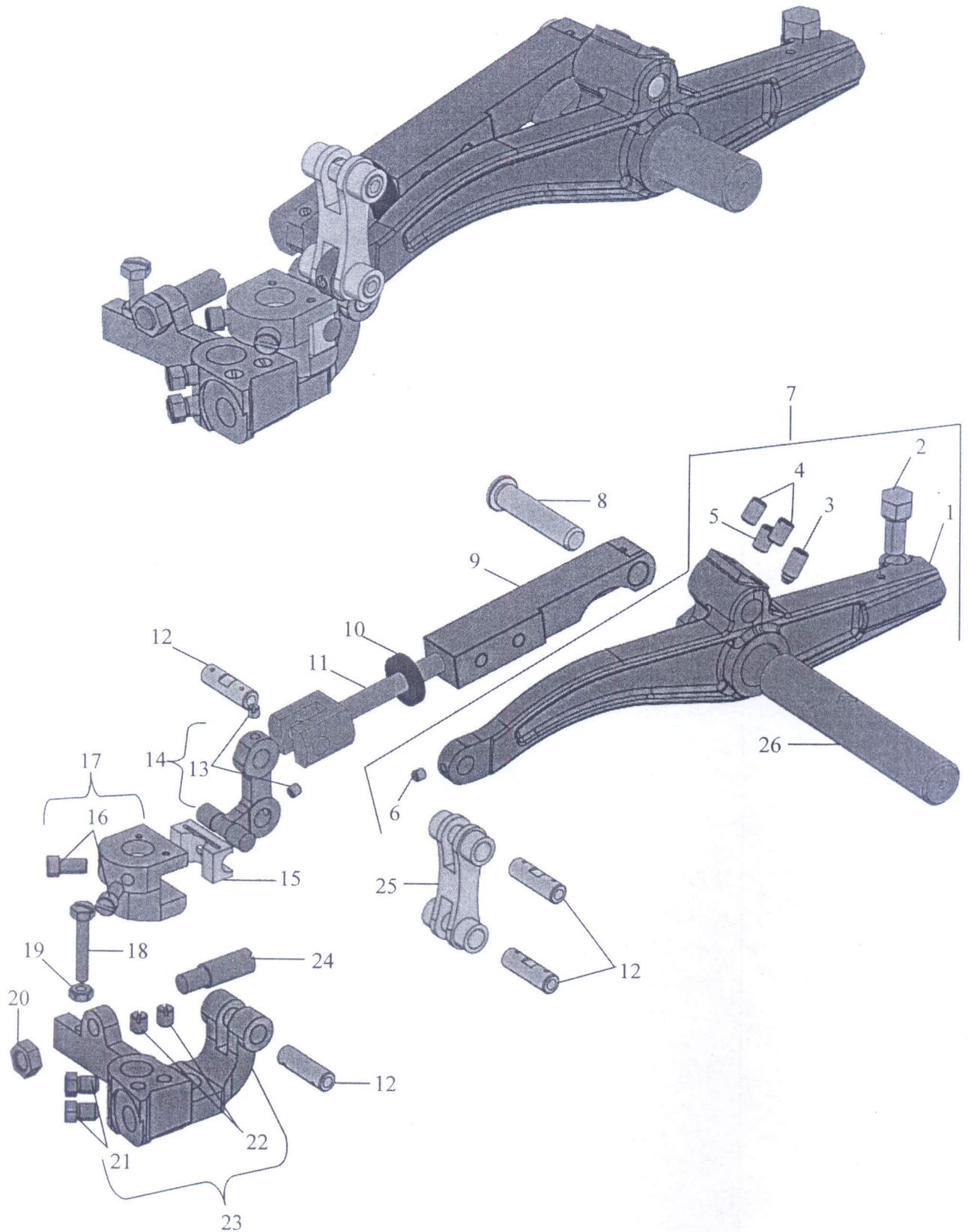
(3) THREAD TENSION AND THREAD GUIDES



(3) THREAD TENSION AND THREAD GUIDES

SR. No.	PART No.	DESCRIPTION	QTY.
1	HS 106	Tension Post	2
2	81292 A	Tension Post	2
3	80667	Pin For Tension Discs	2
4	80655 A	Pin	3
5	80669 B	Tension Post Ferrule	4
6	80676 B	Tension Disc	8
7	HA 1349	Tension Sleeve	4
8	110-2	Spring For Looper Thread Tension	2
9	HS 110 A	Spring For Looper Thread Tension	2
10	107	Tension Spring Ferrule	4
11	108	Tension Nut	4
12	81256 A	Thread Sleeve	2
13	AS 3256	Thread Sleeve	2
14	22560 B	Screw	4
15	80250 G	Thread Sleeve	1
16	22894 AD	Screw	1
17	95	Screw	1
18	22894 AD	Screw	1
19	81254 A	Thread Sleeve	1
20	80673 C	Needle Bar Guide	1
21	88	Screw	1
22	80668 A	Thread Guide Roller	1
23	81386 A	Roller Stud	1
24	12964 C	Spring Ball	1
25	HA 1286 B	Spring	1
26	G 89	Screw	1
27	81386	Needle Thread Take-Up Roller	1
28	81365	Roller Support	1
29	81365 A	Thread Take-Up Roller Guide Assy.	1

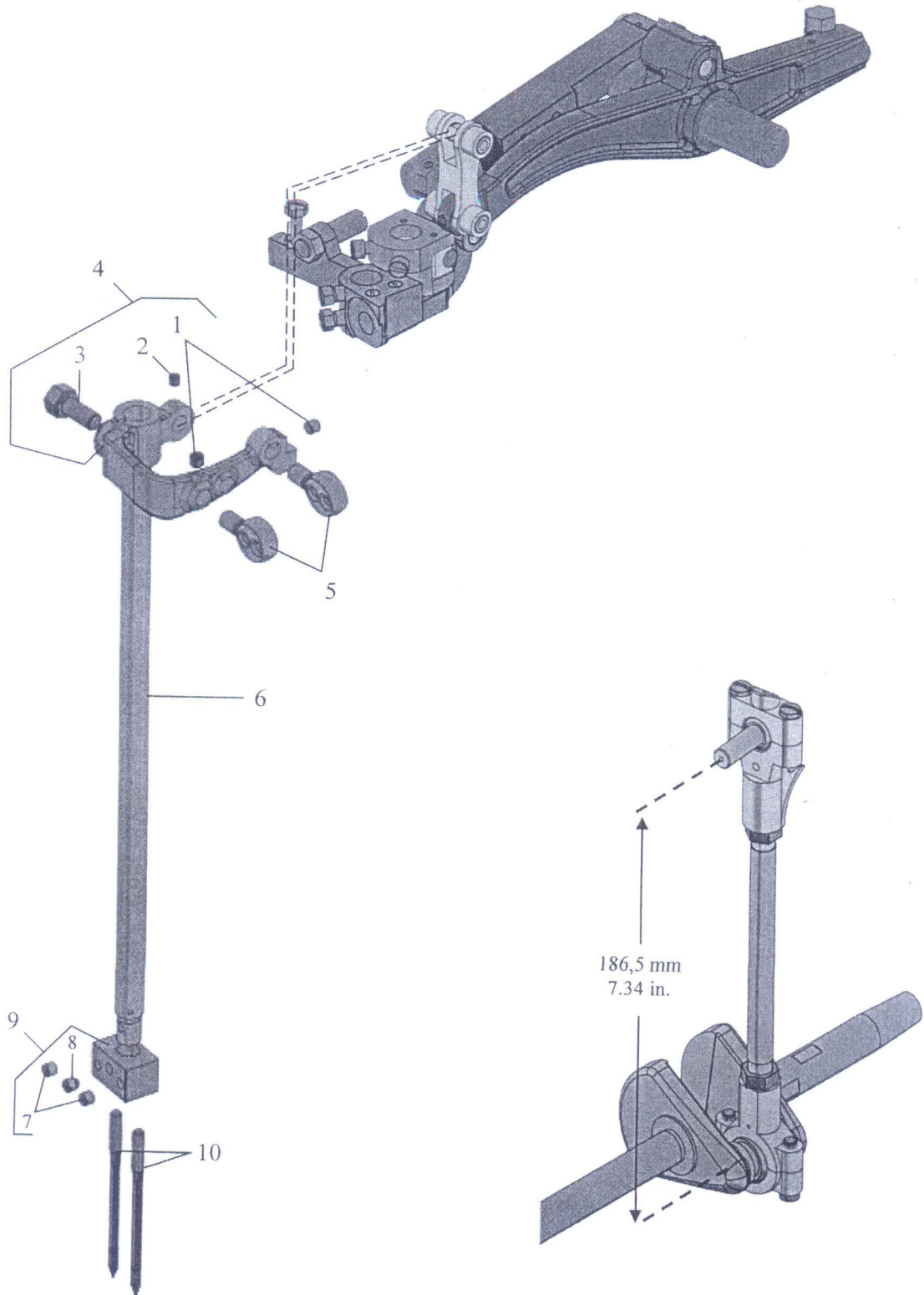
(4) NEEDLE LEVER CONNECTIONS



(4) NEEDLE LEVER CONNECTIONS

SR. No.	PART No.	DESCRIPTION	QTY.
1	96653	Roll Pin	1
2	BP 108	Hex. Head Cap Screw	1
3	22894 H	Set Screw	1
4	95	Set Screw	2
5	22894 J	Set Screw	1
6	22894 Y	Set Screw	1
7	80715	Needle Lever	1
8	80776	Stud	1
9	80774	Guide	1
10	80772	Washer, Leather	1
11	80771	Link	1
12	34334 V	Link Pin	4
13	22894 Y	Screw	2
14	80770	Lift Lever	1
15	80769	Sliding Block	1
16	79	Screw	1
17	80768	Supporting Yoke	1
18	22707	Screw	1
19	907	Nut	1
20	258	Nut	1
21	92127	Screw	2
22	22894 AD	Screw	2
23	80732	Guide Link	1
24	22870	Shank Screw	1
25	HA 54 A	Connecting Link	1
26	33643	Needle Lever Shaft	1

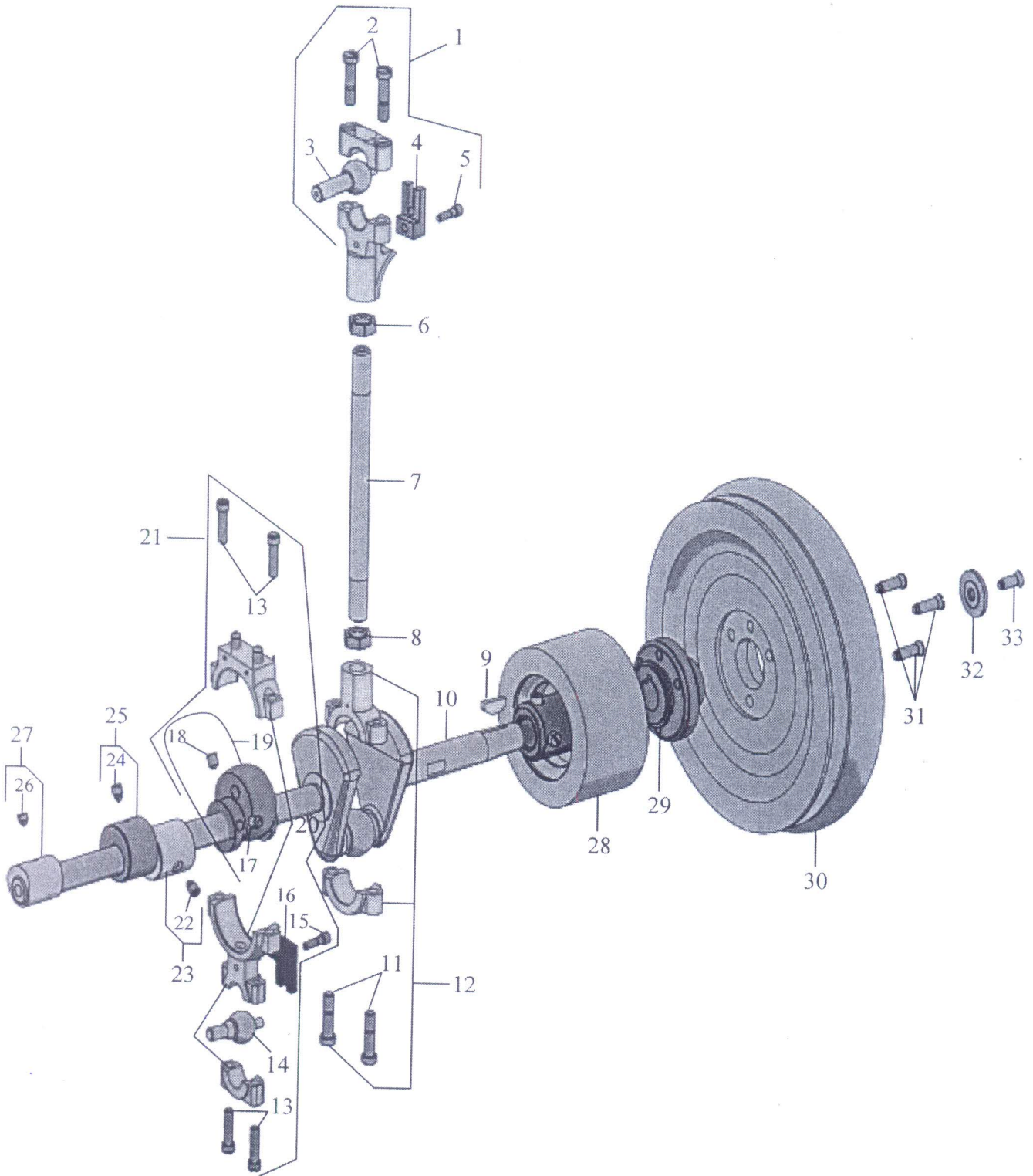
(5) NEEDLE CONNECTIONS



(5) NEEDLE CONNECTIONS

SR. No.	PART No.	DESCRIPTION	QTY.
1	22894 W	Set Screw	2
2	22894 Y	Set Screw	1
3	BP 108	Hex Head Cap Screw	1
4	81559 A	Needle Bar Connection	1
5	3254 A	Eyelet	2
6	60317	Needle Bar	1
7	531	Set Screw	2
8	G 89	Set Screw	1
9	6073	Needle Holder	1
10	UY9848 300/120	Needle	2

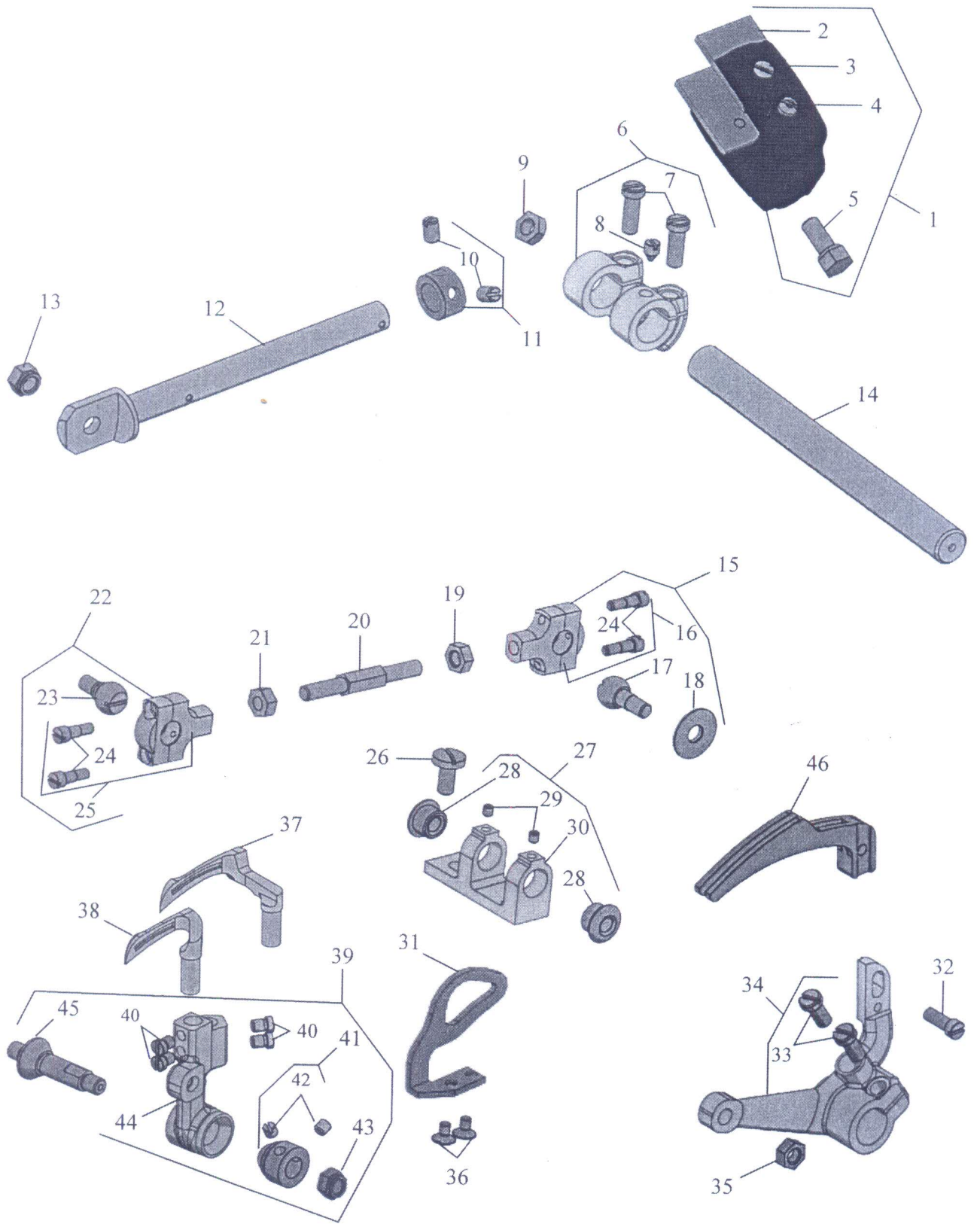
(6) CRANK SHAFT, PULLEY CONNECTIONS AND ECCENTRICS



(6) CRANK SHAFT, PULLEY CONNECTIONS AND ECCENTRICS

SR. No.	PART No.	DESCRIPTION	QTY.
1	29066 LA	Needle Lever Ball Lnik	1
2	22587	Screw	2
3	80656	Ball Stud	1
4	80636 A	Guide Fork	1
5	97 S	Screw	1
6	80630 C	Nut, Left Thread	1
7	80630	Needle Lever Connection Rod	1
8	80630 D	Nut, Right Thread	1
9	HA 66 K	Wood Ruff Key	1
10	30322	Crank Shaft	1
11	22587	Screw	2
12	80652	Shell	1
13	88 F	Screw	4
14	80645	Ball Screw	1
15	97 S	Screw	1
16	80636 A	Guide Fork	1
17	98	Screw	1
18	22894 L	Screw	1
19	80642	Eccentric	1
20	30236	Shell	1
21	29442 N	Looper Drive Eccentric Assy.	1
22	22894 L	Screw	1
23	30380	Eccentric	1
24	22894 L	Scree	1
25	80695 A	Eccentric	1
26	96	Screw	1
27	80206	Eccentric	1
28	30885 S	Ball Bearing Assy. For Crank Shaft	1
29	80621 A	Hub For Hand Wheel Pulley	1
30	81321 B	Hand Wheel Pulley	1
31	22574	Screw	3
32	80674	Lock Washer For Hub	1
33	80	Screw	1

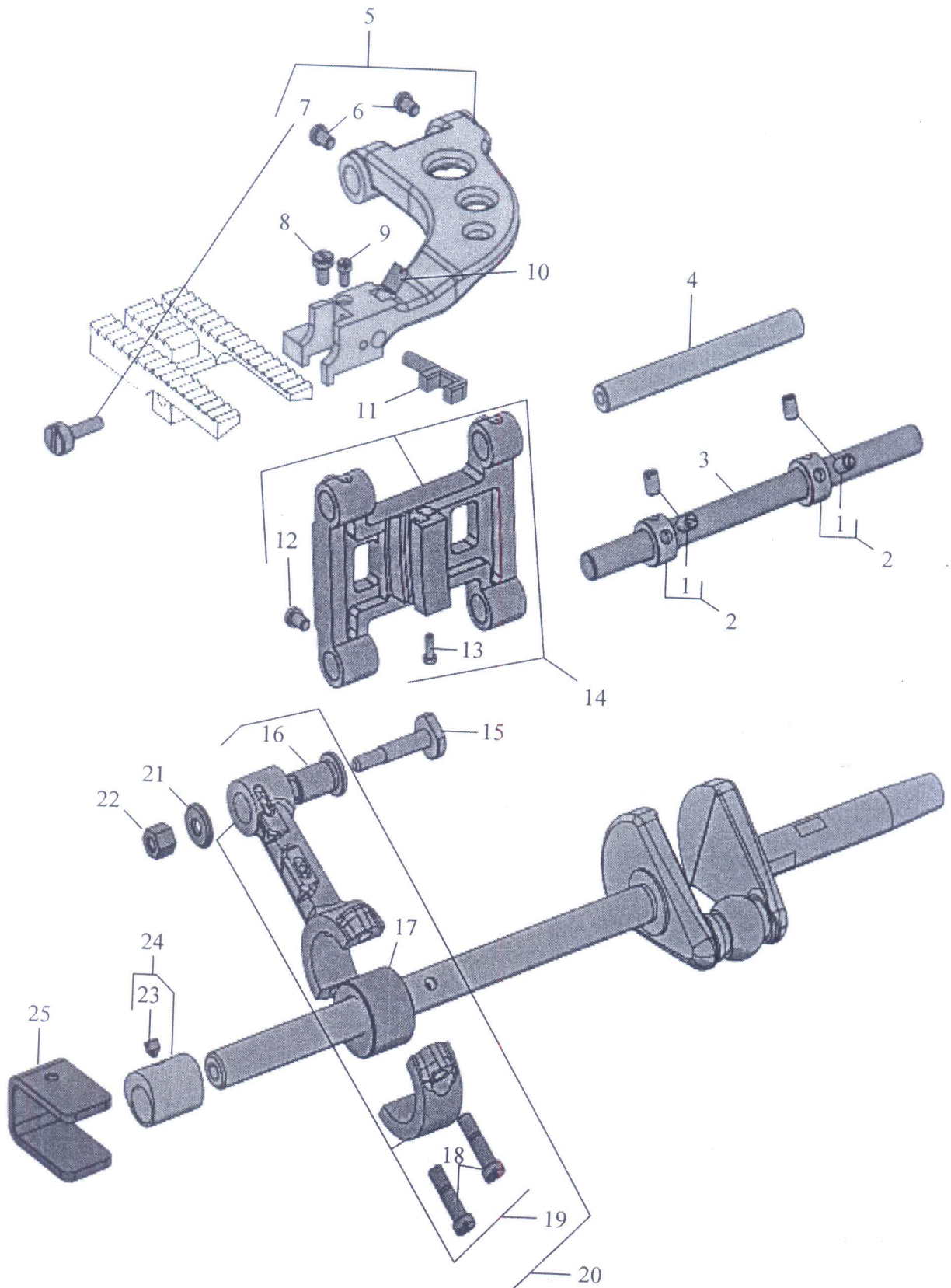
(7) LOOPERS, LOOPER LEVER AND ROCKER, LOOPER THREAD CAST-OFF



(7) LOOPERS, LOOPER LEVER AND ROCKER, LOOPER THREAD CAST-OFF

SR. No.	PART No.	DESCRIPTION	QTY.
1	80680	Looper Avoid Eccentric Fork Assy.	1
2	80680 B	Guide Plate	2
3	94	Screw	2
4	85	Screw	1
5	74 A	Screw	1
6	80638 A	Rocker For Looper Drive Lever Shaft	1
7	136	Screw	2
8	96	Screw	1
9	80691	Nut	1
10	96 B	Screw	2
11	482 C	Stelling	1
12	80639	Looper Shaft	1
13	1280	Nut	1
14	80640	Looper Drive Lever Rocker Shaft	1
15	80658 A	Ball Joint Assy.	1
16	271 E	Shell Assy.	1
17	36 A	Ball Joint	1
18	HS 36 K	Washer	1
19	18	Nut, Right Hand Thread	1
20	80641	Connecting Rod	1
21	269	Nut, Left Hand Thread	1
22	80657 A	Ball Joint Assy.	1
23	237 A	Ball Joint	1
24	97 A	Screw	4
25	6040 A	Shell Assy.	1
26	22548	Screw	1
27	80653 BB	Bracket With Bushing	1
28	HA 102 A	Thread Eyelet	2
29	22743	Set Screw	2
30	80653 B	Bracket	1
31	3804 RD	Cast-Off Hook	1
32	22569	Screw	1
33	22517	Screw	2
34	80637 X	Looper Drive Lever	1
35	12538	Nut	1
36	222 D	Counter Sunk Screw	2
37	6003	Looper	1
38	6002	Looper	1
39	A 3377 A	Looper Rocker Assy.	1
40	73	Screw For Looper	4
41	15465 F	Cone	1
42	88	Set Screw	2
43	1280	Nut	1
44	A 3377	Looper Rocker	1
45	15745 B	Cone Stud	1
46	80623	Looper Thread Take-Up	1

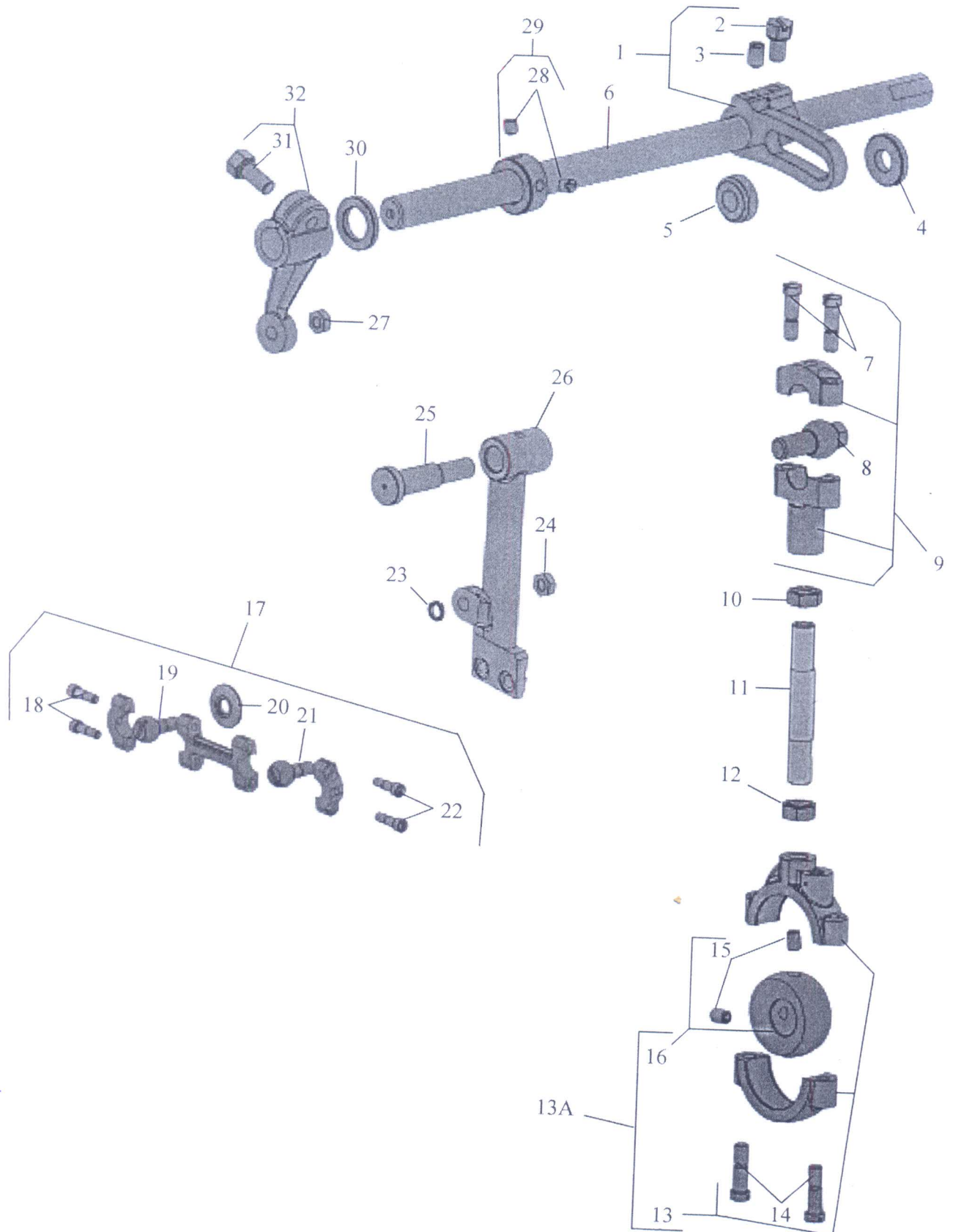
(8) LOWER FEED DRIVE MECHANISM



(8) LOWER FEED DRIVE MECHANISM

SR. No.	PART No.	DESCRIPTION	QTY.
1	96 B	Set Screw	4
2	482 C	Collar	2
3	3 A	Feed Rocker Shaft	1
4	11	Feed Bar Shaft	1
5	60234 R	Feed Bar	1
6	22596 B	Screw	2
7	3686 C	Stud Bolt	1
8	93 A	Screw	1
9	97 X	Screw For Feed Dog Height Adjustment	1
10	HA 95	Screw For Needle Guard	1
11	6025	Needle Guard	1
12	22596 B	Screw	2
13	90	Screw	1
14	30633	Feed Rocker	1
15	80696	Stitch Regulating Stud	1
16	80654	Flange Bushing	1
17	80695 A	Eccentric	1
18	22587	Screw	2
19	3651 A	Connection	1
20	39099 S	Feed Drive Eccentric Assy.	1
21	HA 20 A	Washer	1
22	HA 18 A	Nut	1
23	96	Spot Screw, Headless	1
24	80206	Eccentric	1
25	80634 E	Feed Lift Eccentric Fork	1

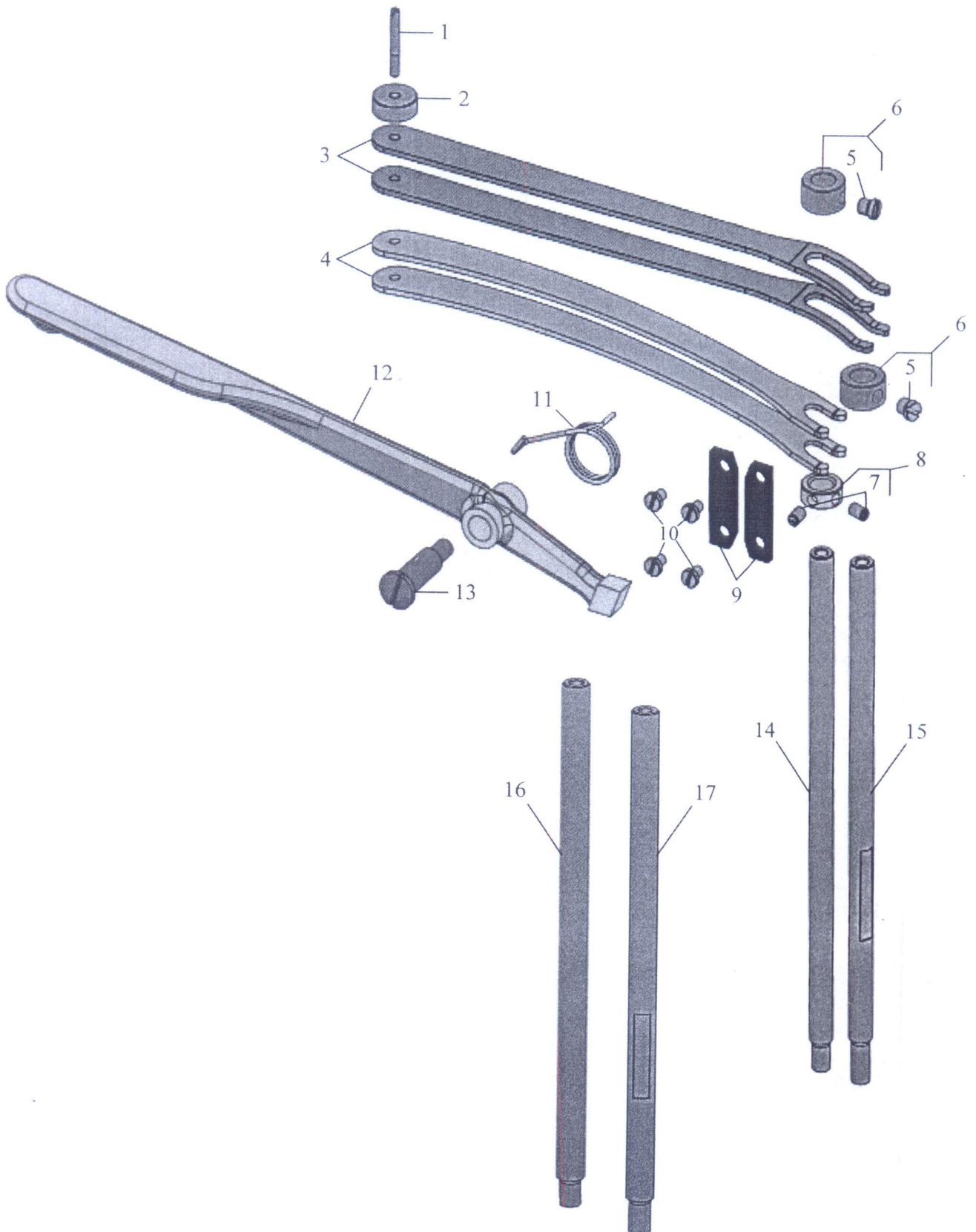
(9) UPPER FEED DRIVE MECHANISM



(9) UPPER FEED DRIVE MECHANISM

SR. No.	PART No.	DESCRIPTION	QTY.
1	40790	Rock Lever	1
2	BP 108	Hex Head Cap Screw	1
3	HA 95	Screw	1
4	21712	Washer	1
5	21711	Nut	1
6	40740	Drive Shaft	1
7	22587	Screw	2
8	21710	Ball Stud	1
9	G 29139	Ball Joint Assy.	1
10	80630 C	Nut, Left Hand Thread	1
11	40730	Connecting Rod	1
12	80630 D	Nut, Right Hand Thread	1
13	35430 M	Shell	1
13A	G 49099 Q	Drive Eccentric Assy.	1
14	22587	Screw	2
15	22894 C	Screw	2
16	41306	Eccentric	1
17	80755	Connecting Link Assy.	1
18	97 A	Screw	2
19	36 E	Ball Stud	1
20	HS 36 K	Washer	1
21	36 E	Ball Stud	1
22	97 A	Screw	2
23	21212	Ring	1
24	18	Nut	1
25	81235	Stud	1
26	31234 A	Feed Lever	1
27	18	Nut	1
28	98	Screw	2
29	57847	Collar	1
30	52951 C	Washer	1
31	BP 108	Hex Head Cap Screw	1
32	80791	Drive Lever	1

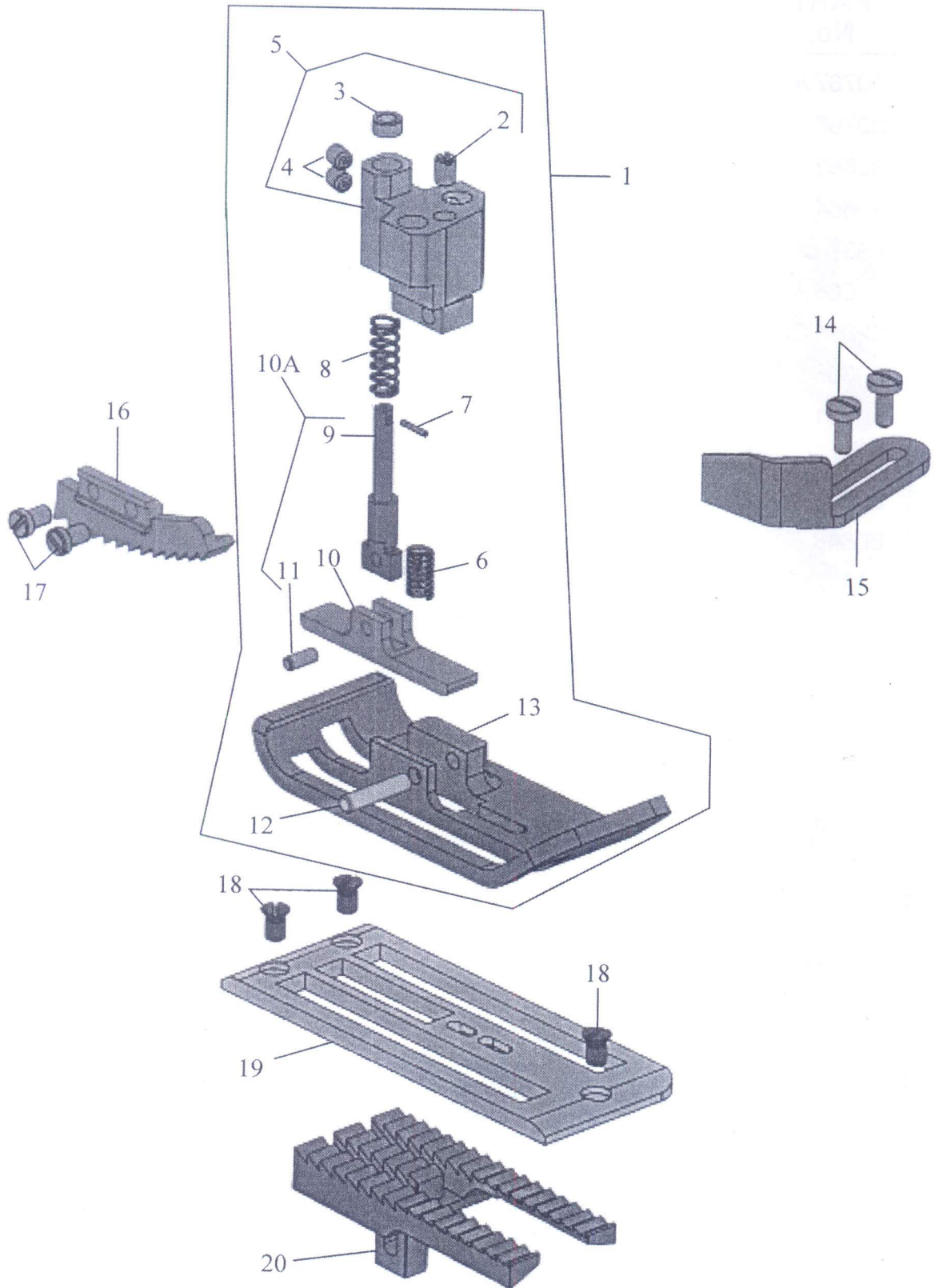
(10) PRESSER BAR, PRESSER BAR SPRINGS AND PRESSER FOOT LIFTER LEVER



(10) PRESSER BAR, PRESSER BAR SPRINGS AND PRESSER FOOT LIFTER LEVER

SR. No.	PART No.	DESCRIPTION	QTY.
1	80767 A	Shank Screw	1
2	80766	Spring Rest	1
3	80663	Leaf Spring Upper	2
4	80664	Leaf Spring Lower	2
5	99376 A	Screw	2
6	81566 A	Collar	2
7	22894 C	Screw	2
8	80666 D	Collar	1
9	80631	Guide Plate	2
10	94	Screw	4
11	80649	Spring	1
12	80648	Lifter Lever	1
13	420	Shoulder Screw For Lifter Lever	1
14	33661	Presser Bar Right	1
15	33661 B	Presser Bar Left	1
16	33661 H	Presser Bar Right (Pneumatic System)	1
17	33661 BH	Presser Bar Left (Pneumatic System)	1

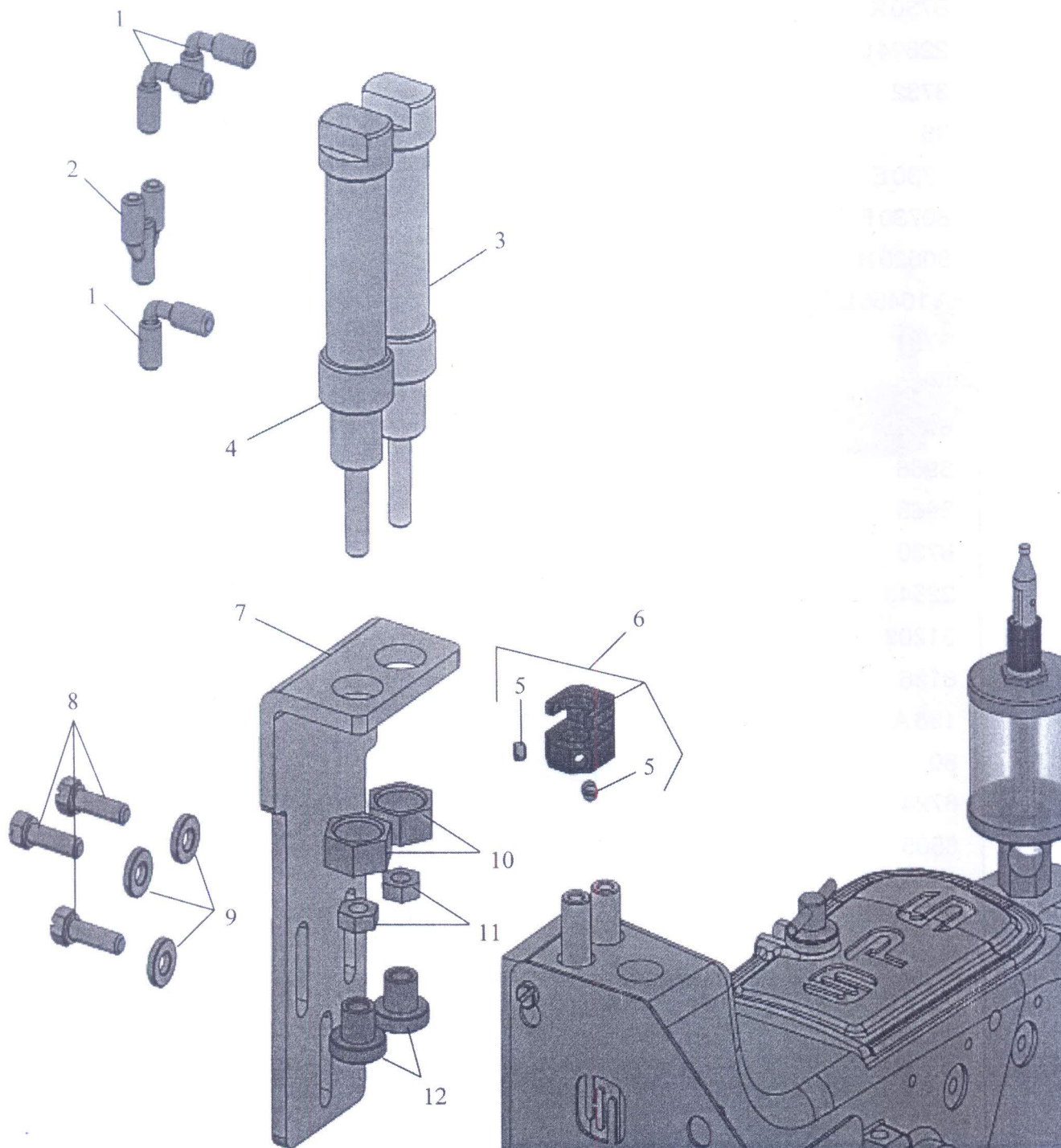
(11) SEWING PARTS



(11) SEWING PARTS

SR. No.	PART No.	DESCRIPTION	QTY.
1	6730 K	Presser Foot	1
2	22894 C	Screw	1
3	3732	Washer	1
4	98	Screw	2
5	3730 E	Presser Foot Shank	1
6	80730 F	Presser Foot Spring	1
7	80620 H	Parallel Pin	1
8	A 10456 D	Spring	1
9	3731	Presser Foot Yielding Section	1
10	6030	Presser Foot Tongue	1
10A	6054	Presser Foot Tongue Complete	1
11	3966	Parallel Pin	1
12	3965	Parallel Pin	1
13	6730	Presser Foot Bottom	1
14	22548	Screw	2
15	31203	Edge Guide	1
16	3126	Upper Feed Dog	1
17	136 A	Screw	2
18	80	Counter Sunk Screw	3
19	6724	Throat Plate	1
20	6505	Lower Feed Dog	1

(12) PARTS FOR PNEUMATIC PRESSER FOOT LIFTER



(12) PARTS FOR PNEUMATIC PRESSER FOOT LIFTER

SR. No.	PART No.	DESCRIPTION	QTY.
1	03020	Coupling	3
2	0302166	Coupling	1
3	30181	Air Cylinder	1
4	30182	Air Cylinder	1
5	98	Screw	2
6	A 34455 B	Connection	1
7	A 34455 A	Bracket	1
8	74 A	Screw	3
9	81257	Washer	3
10	349-1949	Nut	2
11	45291	Nut	2
12	A 34455 D	Cylinder Rod End	2

PACKING LIST OF **"GABBAR"** MACHINE ACCESSORIES

1.	MACHINE BASE PLATE	1
2.	THREAD STAND COMPLETE SET	1
3.	MACHINE PULLEY	1
4.	'V' BELT	1
5.	SIGHT FEED OILER	1
6.	ALLEN KEY WRENCH 'T' TYPE	5
7.	ALLEN KEY WRENCH 'L' TYPE	5
8.	FIX SPANNER (8X10)	1
9.	SCISSOR	1
10.	OIL CAN	1
11.	PLUCKER	1
12.	SCREW DRIVER	1
13.	BRUSH	1
14.	INSTRUCTION MANNUAL & PARTS LIST BOOKLET	1