



**SINCE 1942**

## **R-19 HS**

**SINGLE NEEDLE, TWO THREAD HEAVY DUTY  
HEMMING & SEAMING SEWING MACHINES**

## **R-19 HW**

**SINGLE NEEDLE, SINGLE THREAD HEAVY DUTY  
CHAIN STITCH SEWING MACHINES**

## **R-19 HD**

**TWO NEEDLE, FOUR THREAD HEAVY DUTY  
HEMMING & SEAMING SEWING MACHINES**

# R-19 SERIES MACHINES

## R-19HS

### DESCRIPTION :

Single needle, two thread, double locked stitch sewing machine.

### APPLICATION :

For seaming & hemming of light weight to heavy weight fabric such as woven PP, jute or burlap.

### TECHNICAL TERMS :

Seam specification and stitch type	:	401
Stitch range	:	7-15 mm 9/32" -33/64"
Standard setting of range	:	10mm = 25/64"
Maximum thickness of material	:	12 mm 7/12
Feed	:	Plain feed
Needle type	:	DRx4 Size 32 for using Jute Thread (Organ Make) UY 1975 G 250/100 for using Cotton Thread (Groz Beekert)
Available sizes	:	080, 090, 100, 120, 140, 156, 172
Maximum speed	:	2100 Stitches / min.
Hand wheel diameter	:	152.4 mm = 6.00"
Pulley diameter	:	76.2 mm = 3.00"
With motor speed	:	2800 R.P.M.
Phase	:	Single - 2 pole
Sewing yarn	:	Jute twine or cotton
Needle thread	:	18/6
Looper thread	:	14/3
Standard installation	:	non-submerged

## R-19 HW

Same as R-19 HS, but single needle, single thread chain stitch sewing machine

Seam specification and stitch type : 101

# MACHINES CLASS R-19 SERIES

## R-19HD

### DESCRIPTION :

Two needle, two independent row, four thread, double locked stitch bag sewing machine.

### APPLICATION :

For seaming of heavy bags, exposed to constant and extreme pressure.

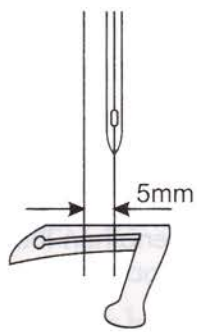
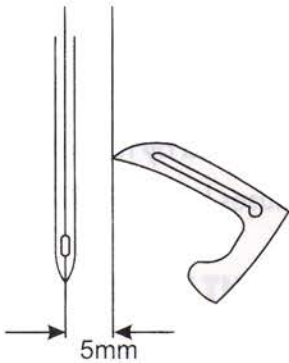
### TECHNICAL TERMS :

Seam specification and stitch type	:	401
Needle distance	:	7.2 mm = 9/32"
Stitch range	:	6-10 mm = 15/64" - 25/64"
Standard setting of range	:	8 mm = 5/16"
Feed	:	Plain feed
Teeth cut	:	5 mm = 13/64"
Needle type	:	DRx4 Size 32 for using Jute Thread (Organ Make) UY 1975 G 250/100 for using Cotton Thread (Groz Beekert)
Maximum speed	:	2100 Stitches / min.
Hand wheel diameter	:	152.4 mm = 6.00"
Pulley diameter	:	76.2 mm = 3.00"
Standard installation	:	non-submerged

# ADJUSTING INSTRUCTIONS

## SETTING THE NEEDLE

Before adjusting the machine, insert new needle into the needle bar as far as possible. The long groove of the needle must be directed to the operator. Tighten the needle clamp nut securely.

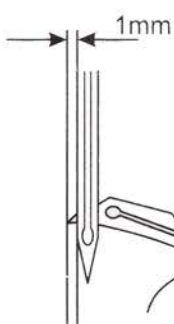


## ADJUSTING THE LOOPER

For convenient access remove the presser foot, throat plate and feed dog. Push the feed bar needle guard to the rear to avoid it contacting the needle. Insert the looper into the looper rocker. Set the looper so that the distance from the centre line of the needle to the point of the looper is 8 mm = 5/16" when the looper is at its farthest position to the right (looper gauge No. 21225-5/16). Therefore loosen the 2 nuts (269 and 18) on the looper connecting rod (80641) and turn the connecting rod forward or backward as required to obtain specified dimension, retighten nuts. When the looper is at its end position to the left, the distance from the centre line of the needle to the upper thread retaining must be 5 mm = 0.2". If it is not possible in the above mentioned way to realize the desired dimensions, then loosen the 2 clamping screws (22517) of the looper drive lever (80637), reposition as required and retighten them, assuring that all end play is taken out of the looper drive lever rocker shaft, but keep up some play in the 2 bearings (6039 K and 80657 A) at the end of the looper connecting rod.

## LOOPER AVOID MOTION

As the looper moves to the left, it should pass as close as possible to the back of the needle without contacting it. Adjustment can be made by loosening clamp screw (318) of the looper eccentric fork (80680) and turning the looper rocker shaft forward or backward as required retighten screw.



## SETTING THE NEEDLE BAR

Set the needle bar so that the top of the needle eye is even with the underside of the looper, when the looper point in its travel to the left projects 1 - 1,5 mm = 0.04 - 0.06" from the left side of the needle. If adjustment is necessary, loosen the clamping screw (BP 108) in the needle bar connection and move the needle bar up or down as required and retighten screw.

## **ADJUSTING THE FEED DOG**

The height of the feed dog is correct, when at its highest point of travel, the rear teeth project above the throat plate their full depth. This can be accomplished by removing the feed dog holding screw and feed dog, then adjusting the stop screw in feed bar as required to maintain the prescribed setting. To adjust the feed dog within the throat plate, loosen the 2 bottom screws (88) of the feed rocker and after adjusting as required retighten them.

## **LOOPER THREAD TAKE UP**

The cast off is correct adjusted when the free setting, means thread take up, happens at the moment as the needle descends into thread triangle, so that an early slip of the loop would be prevented. Too early or too late delivery of the looper thread causes skip stitches and thread breaking. This can be accomplished by higher or lower setting the thread take up in the long hole of the looper drive lever. Higher setting causes later and lower setting causes quick delivery of thread.

## **NEEDLE THREAD TAKE UP**

The setting of the needle thread take-up is correct when the needle thread is raised about 2-3 mm =  $5/64 - 1/8$ " while the needle is descending.

## **ADJUSTING THE STITCH LENGTH**

The length of the stitch can be adjusted by raising or lowering the stud 80696 in the segment slot of the feed rocker 80233. This can be accomplished by loosening nut HA 18 A, lowering stud 80696 will lengthen the stitch and raising the stud will shorten the stitch. When desired stitch length is obtained, retighten nut.

## **SETTING THE FEED BAR NEEDLE GUARD**

Set the feed bar needle guard so that it barely contacts the needle at its most forward point of travel, screw secures it in place.

## **NOTE :**

Any change in stitch length will necessitate a corresponding change in the feed bar needle guard setting.

## **SETTING HEIGHT OF PRESSER BAR AND PRESSER FOOT PRESSURE**

The presser bar unit move freely. After removing the front cover (80687 A), the pressure of the presser foot can be altered. This can be accomplished by shifting the collars (80666), where the in the front fork shaped laminated springs 80663 and 80664 are supported. Use the screw 64 Y at the top cover to obtain the precise adjustment, retighten the lock nut 35733 B.

### **IMPORTANT :**

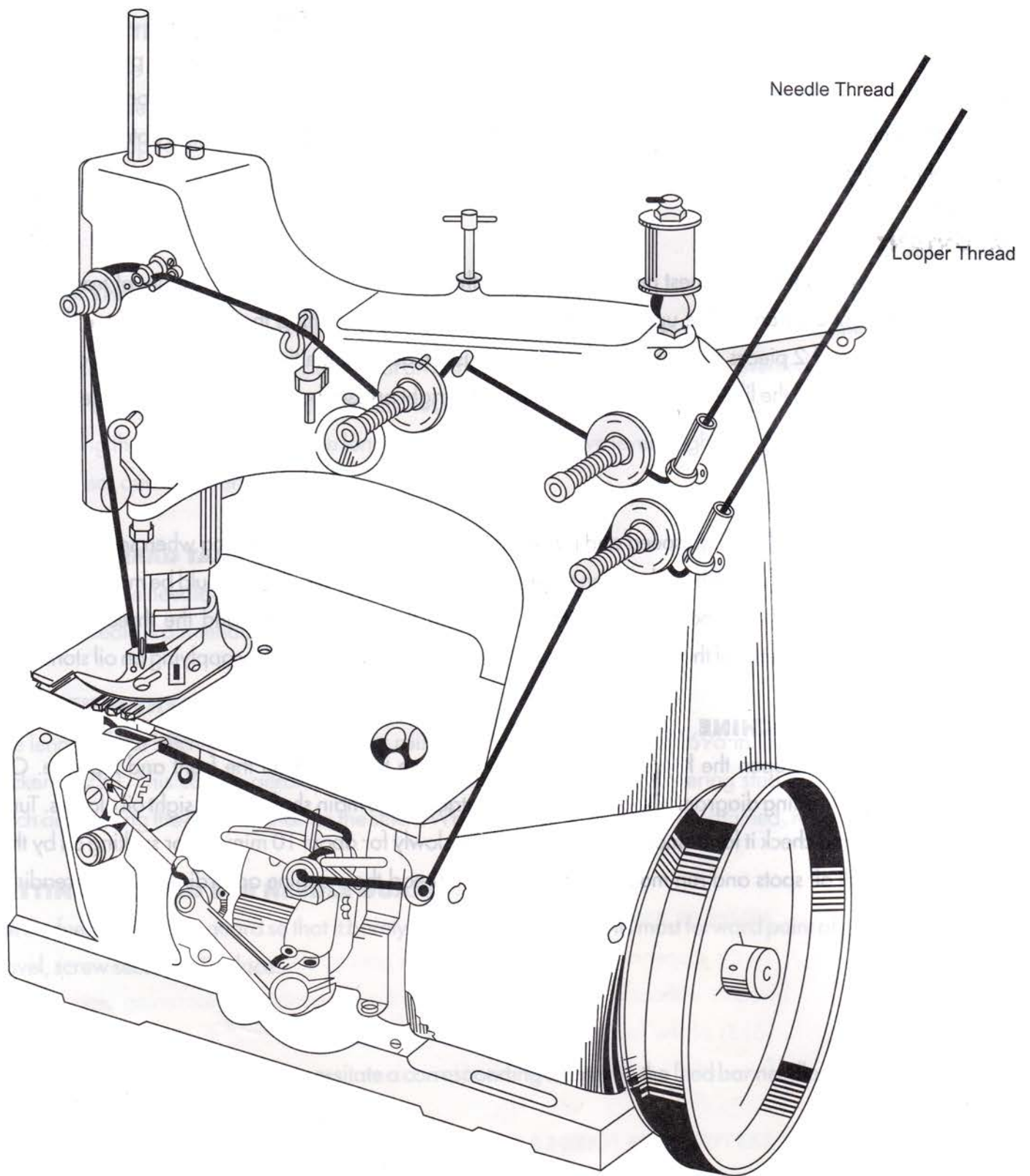
Between the presser foot at its highest point of travel and the needle clamp nut its lower point of travel, there must be a sufficient clearance. The upper travel limit is adjustable by shifting the upper collar on the right presser bar. In case of 2 pieces presser foot, the 2 parts must be at the same time actuated, raising as well as descending by means of the lifter lever. The lower collar of the right presser bar must support on the left presser bar guide.

## **SEWING OF THE MACHINE**

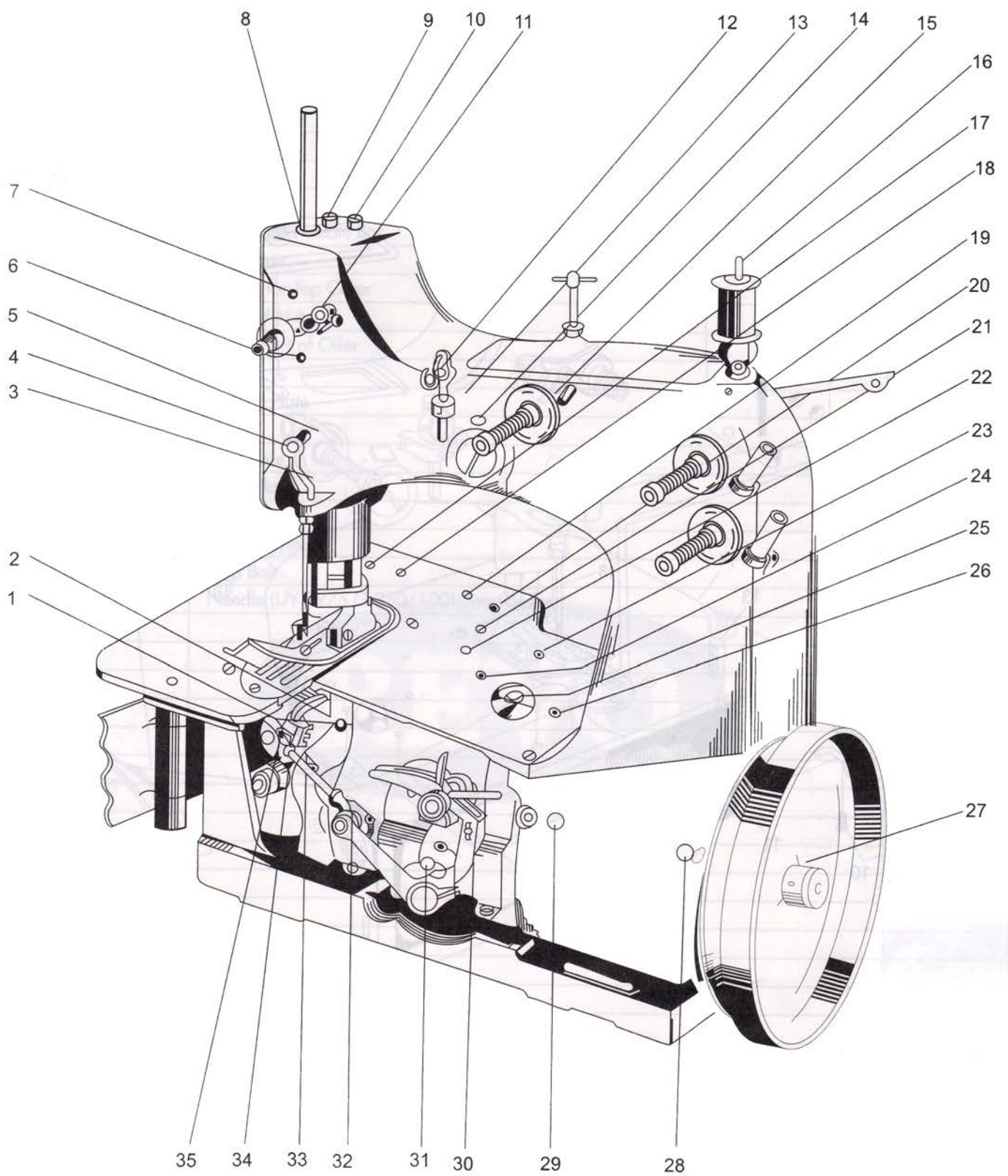
Start operating the machine at high speed and pay attention to an immaculate chaining when sewing on with fabric or without fabric. Regulate thread tension to get proper seams. As a rule, there should be more tension on the needle thread than on the looper thread tension. Should the sewing fabric and the thread chain be damaged (injured) by the teeth of the feed dog, then the teeth can be slightly dulled by applying an oil stone.

## **STARTING OF THE MACHINE**

Before starting machine open the hinged front plate and remove the covers on the front and top side. Oil machine according to oiling diagram. Oil carefully all eccentrics on the main shaft. Fill the sight oil glasses. Turn machine by hand and check it for a smooth run. Run machine slowly for about 10 minutes for sucking oil by the wicks. Oil again all oil spots and run machine at full speed. Thread the machine according to the threading diagram.

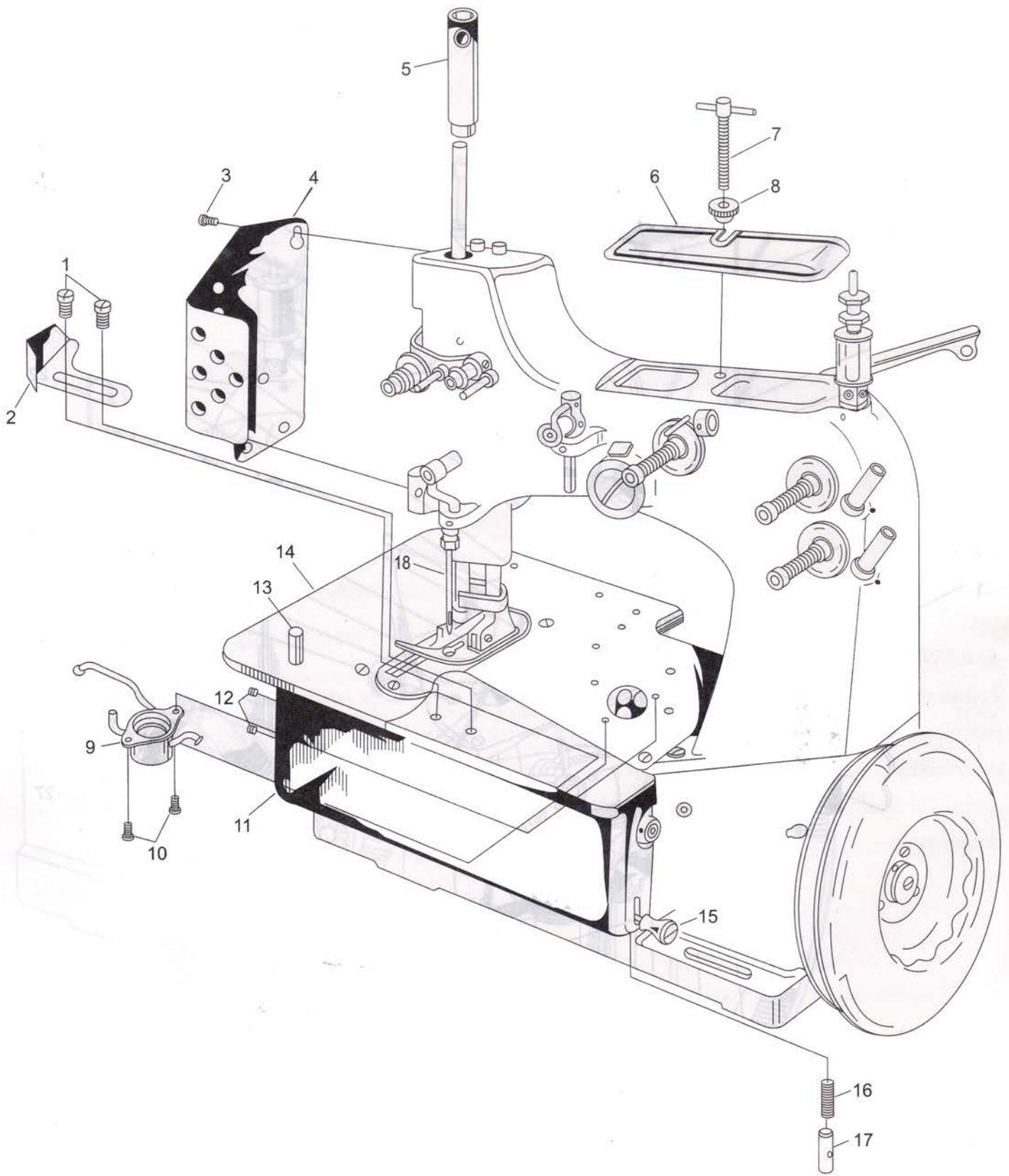


THREADING DIAGRAM FOR MACHINE R-19HS

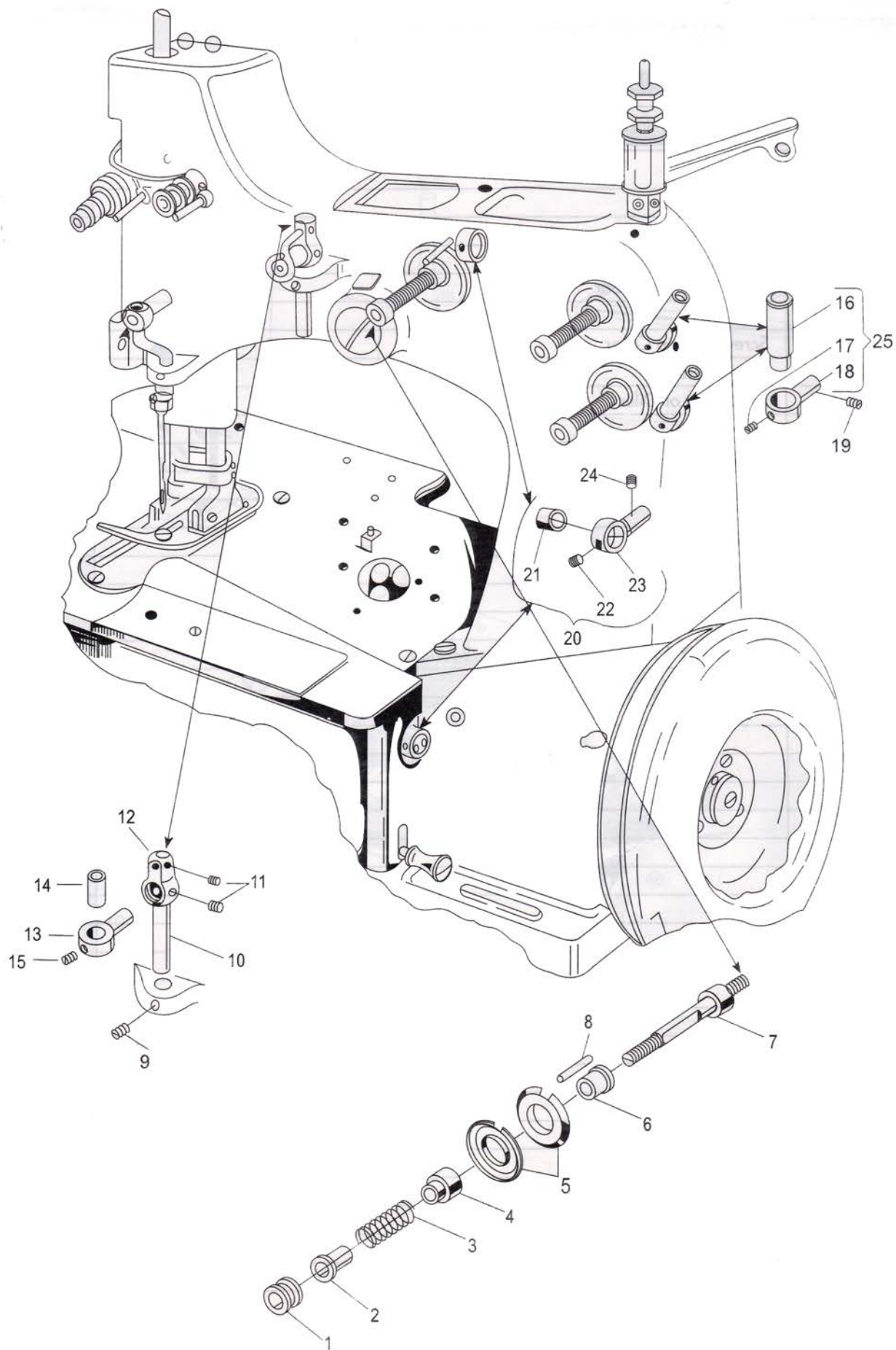


OILING DIAGRAM FOR MACHINE R-19HS

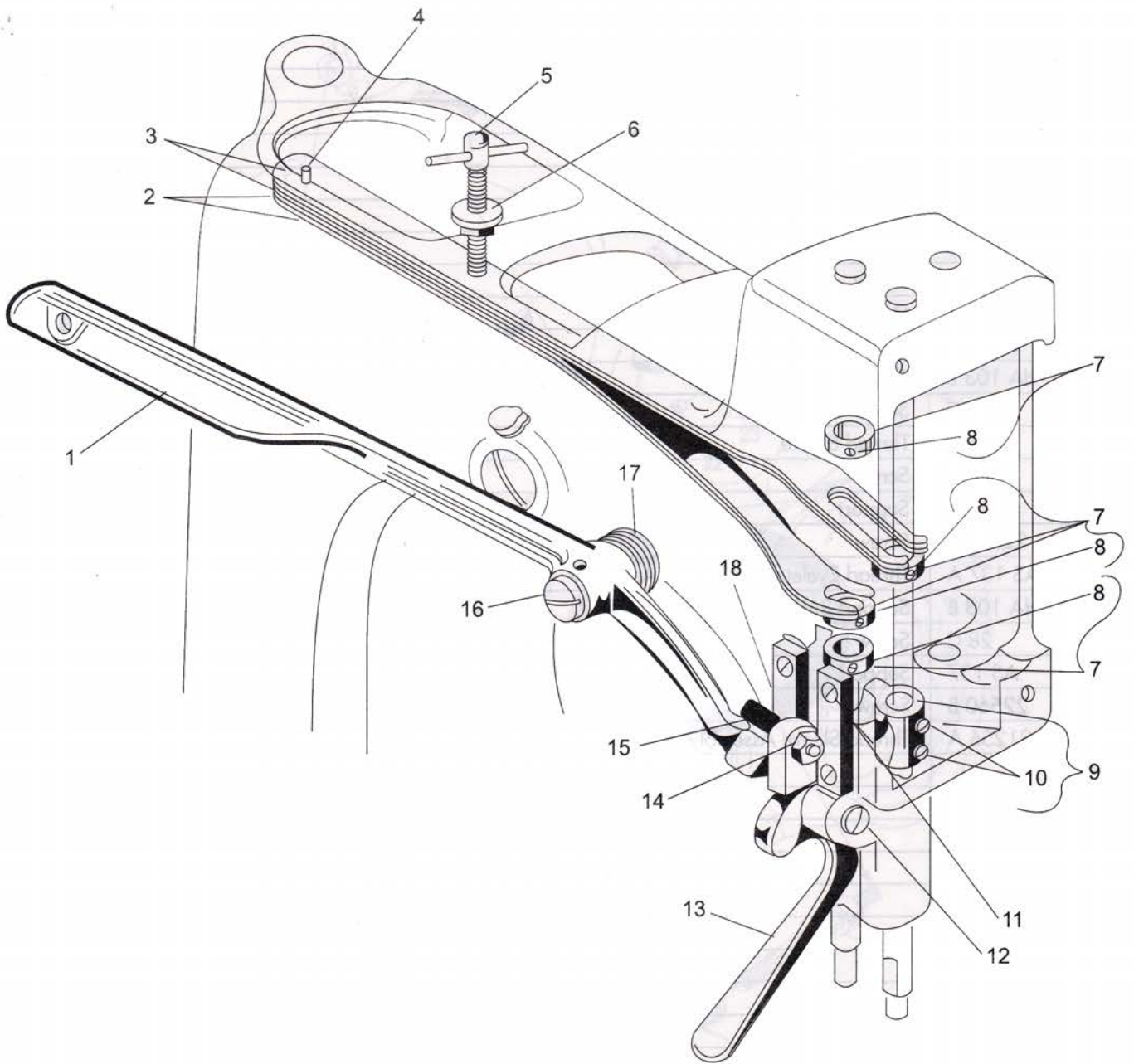




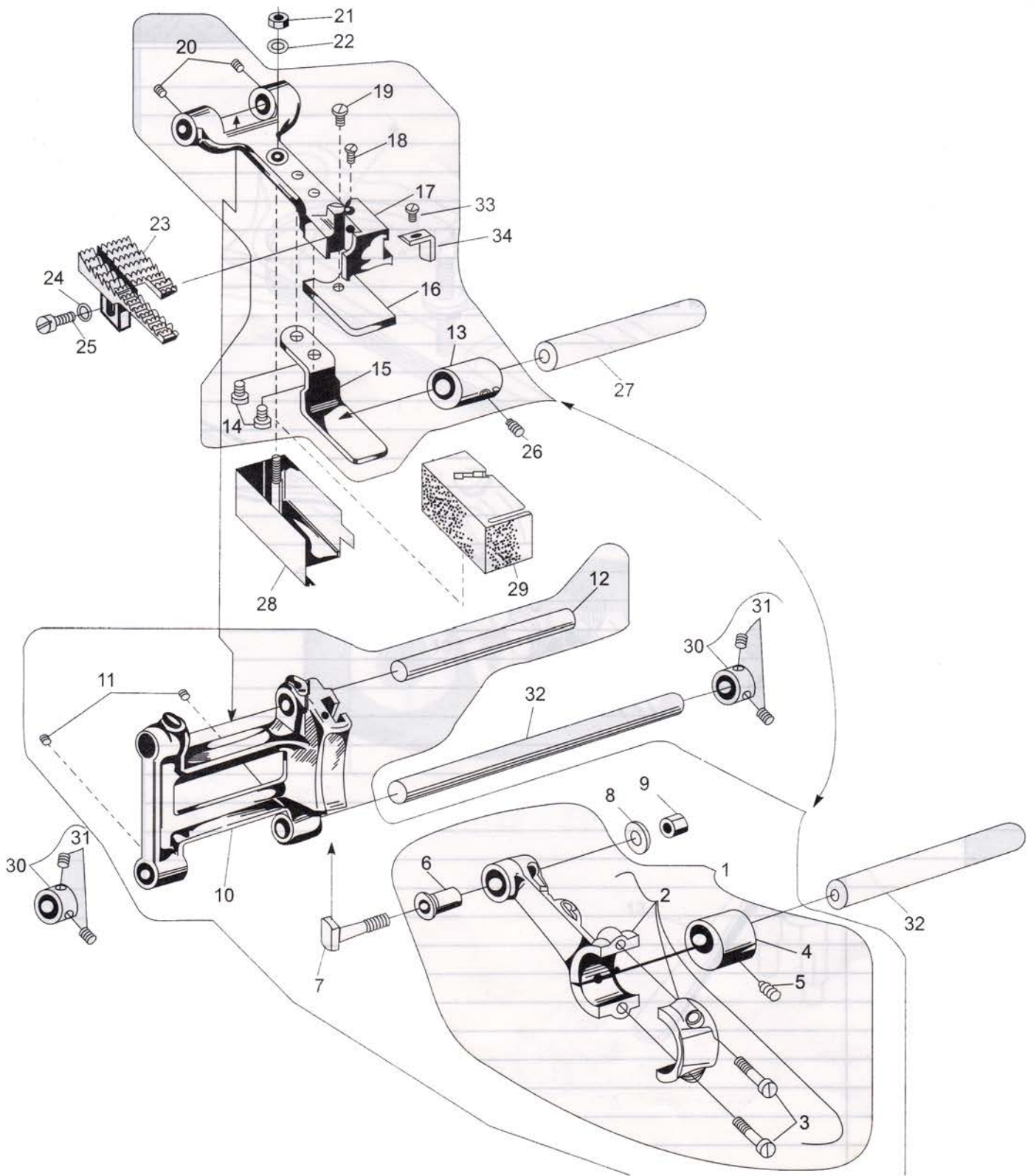






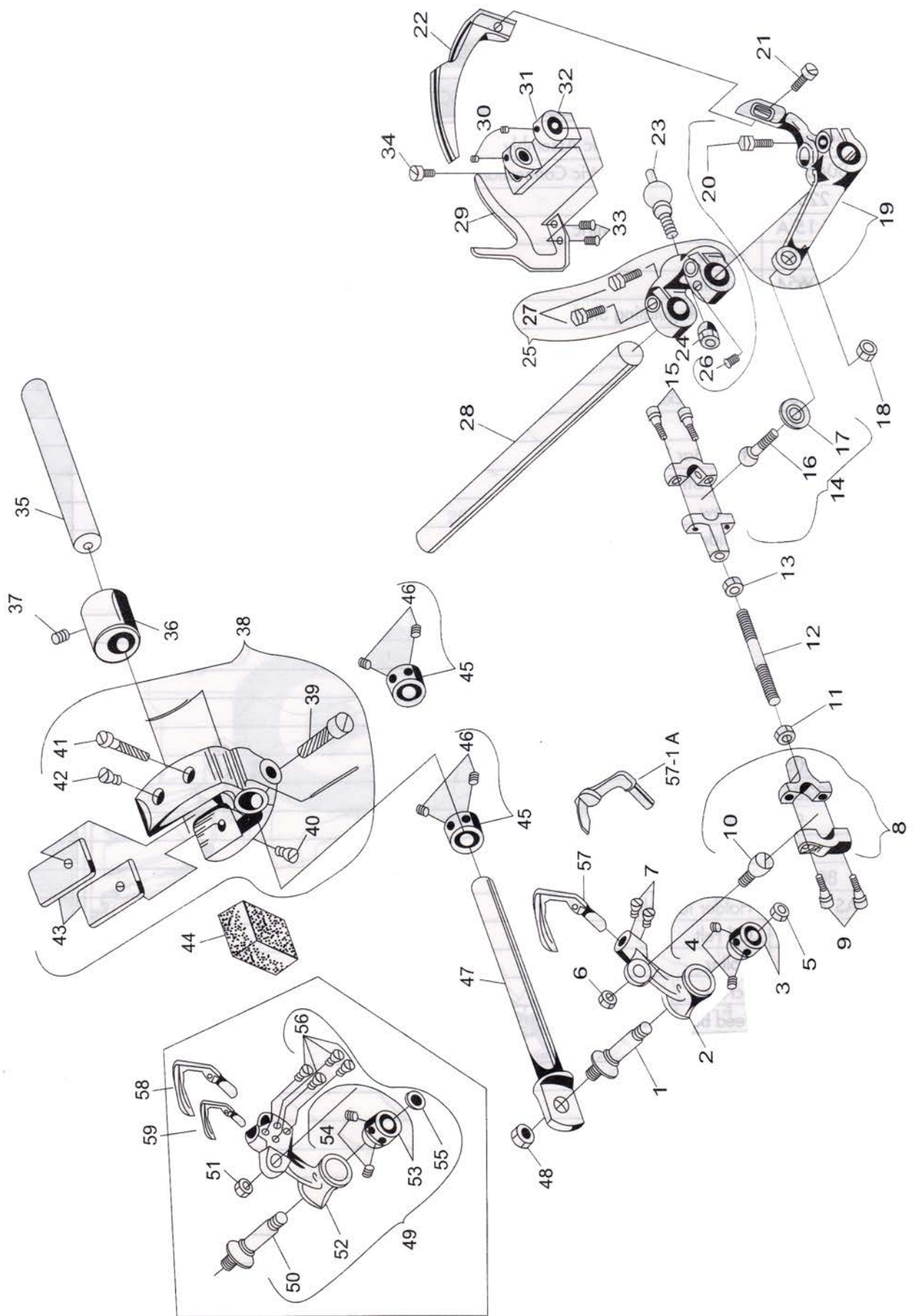




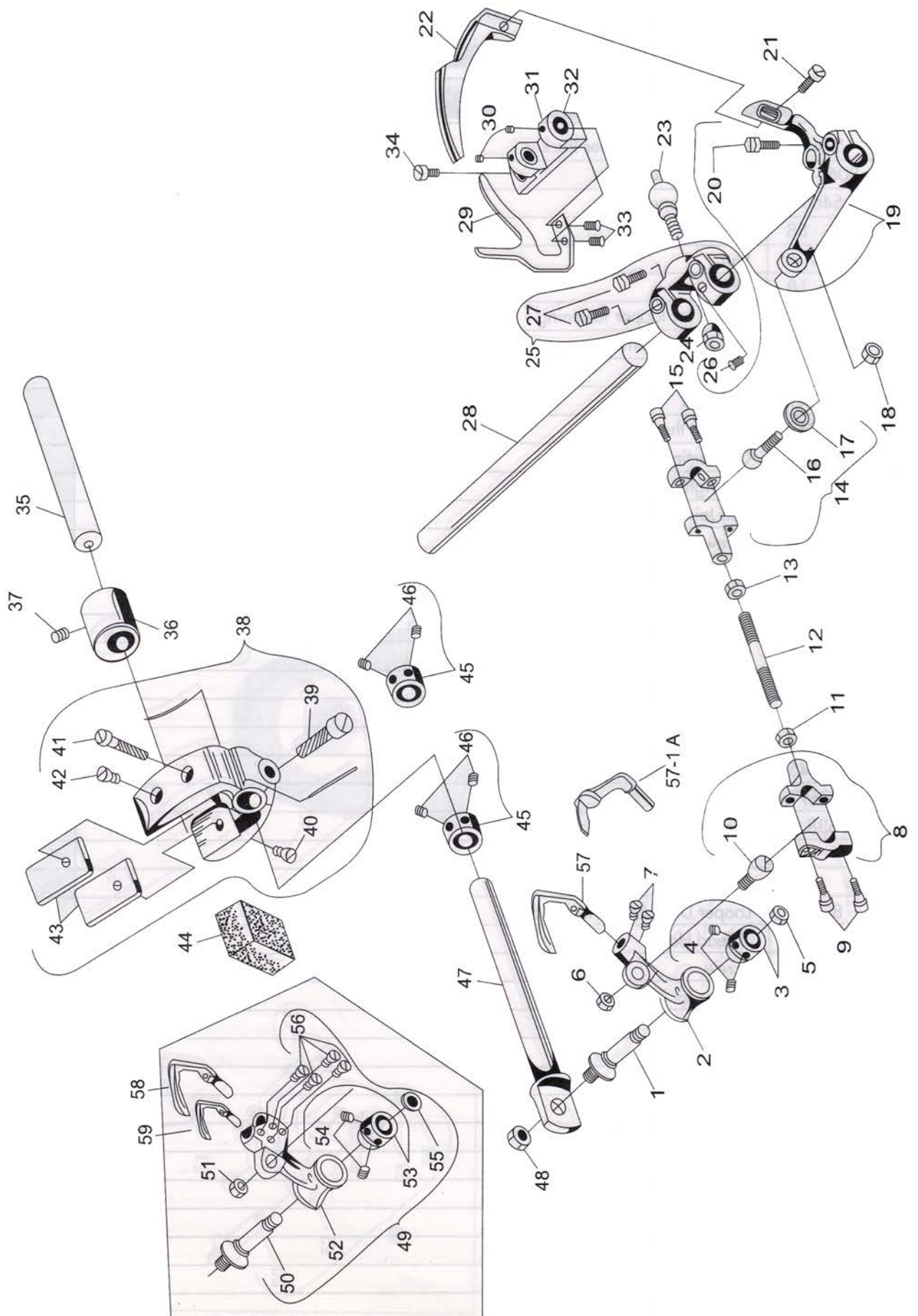




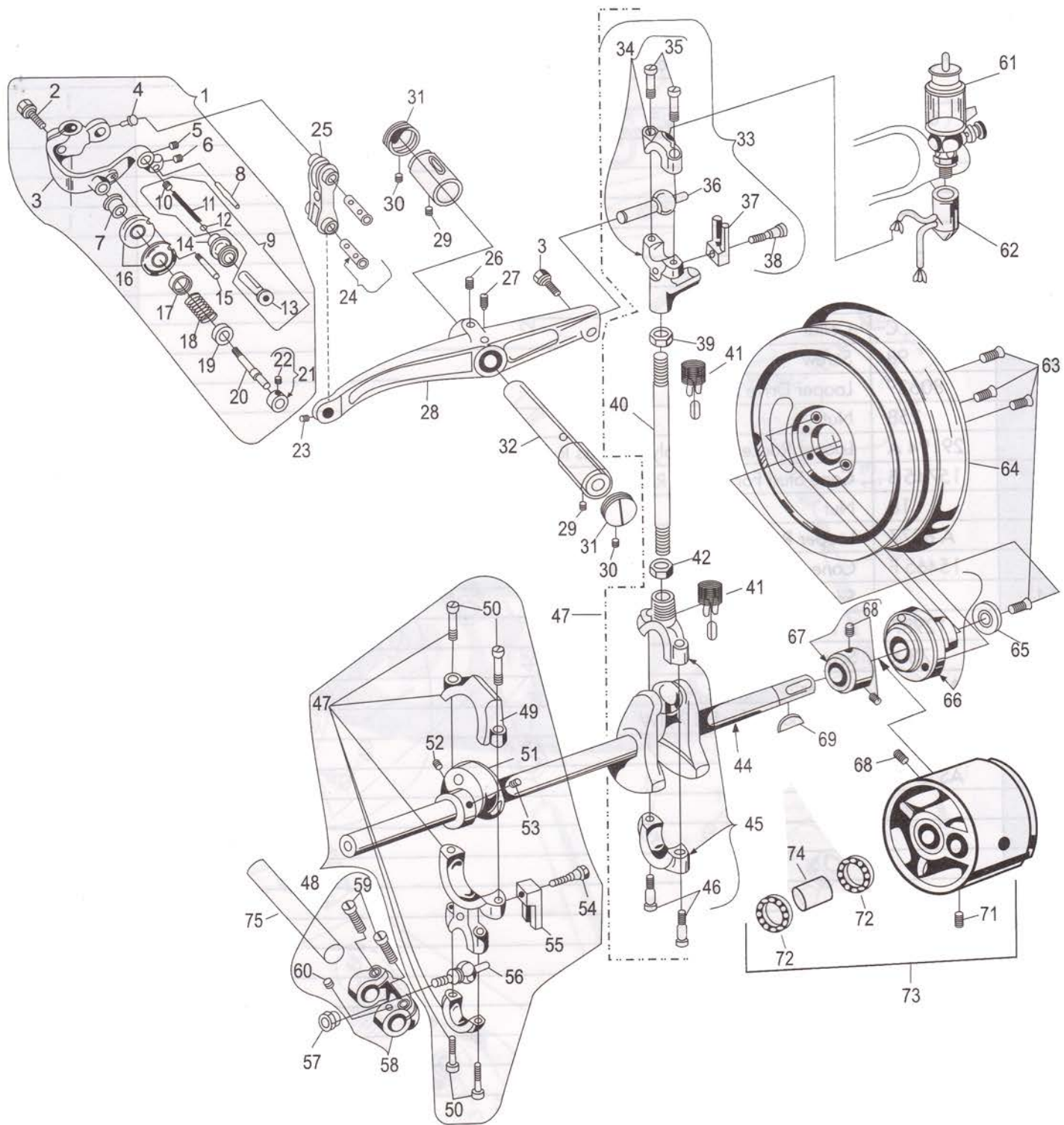








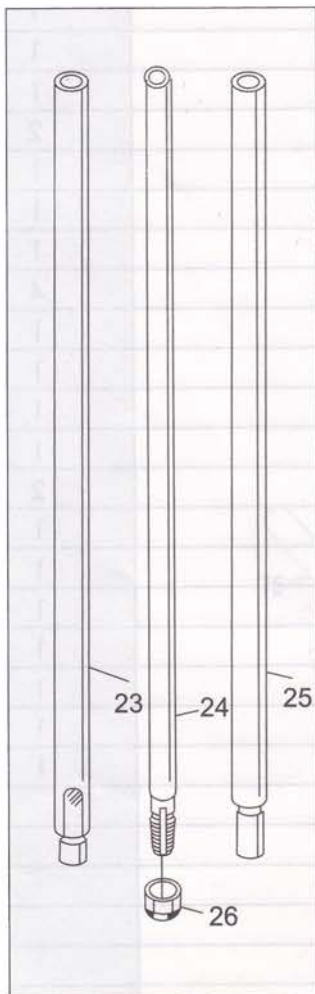
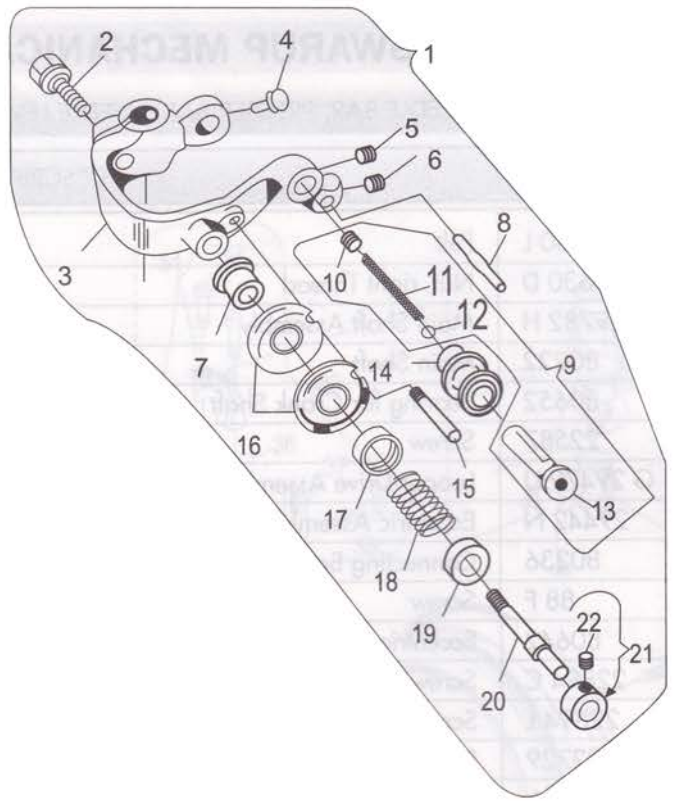




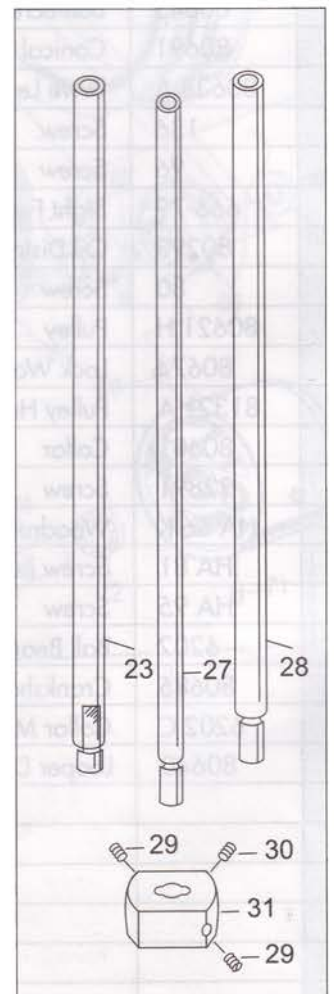
**NEEDLE BAR, PRESSER BAR, NEEDLE LEVER, PULLEY AND CRANKSHAFT**

REF. No.	PART No.	DESCRIPTION	AMT. REQ.
1	29774 D	Needle Bar Connection Assembly	1
2	BP 108	Screw	2
3	80659	Needle Bar Connection	1
4	91	Screw	1
5	88	Screw	1
6	22743	Screw	1
7	80669	Tension Post Ferrule	1
8	80655	Thread Guide Pin	1
9	HS 52 B	Rolling Thread Guide Axle Assembly	1
10	22560	Screw	1
11	HA 1286 B	Spring	1
12	12964 C	Ball	1
13	81086 C	Rolling Thread Guide Axle	1
14	81093	Guide Roller	1
15	HS 100 D	Pin Screw	1
16	80676	Tension Disc	2
17	HA 58 C	Thread Tension Ferrule	1
18	HA 58 F	Spring	1
19	HA 58 D	Thread Tension Ferrule	1
20	80046	Tension Post	1
21	21111	Collar	1
22	88	Screw	1
23	22565 C	Screw	1
24	51134 V	Pin Assembly	2
25	HA 54 A	Needle Bar Connecting Link	1
26	95	Screw	1
27	81	Screw	1
28	80615	Needle Lever	1
29	89	Screw	2
30	89	Screw	2
31	80644	Plug Screw	2
32	80643	Needle Lever Shaft	1
33	29066 L	Needle Lever Bearing Assembly	1
34	80650	Bearing	1
35	22587	Screw	2
36	80656	Ball Stud	1
37	80636 A	Guide fork	1
38	22729	Screw	1
39	80630 C	Nut, Left Thread	1
40	80630	Needle Lever Connecting Rod	1





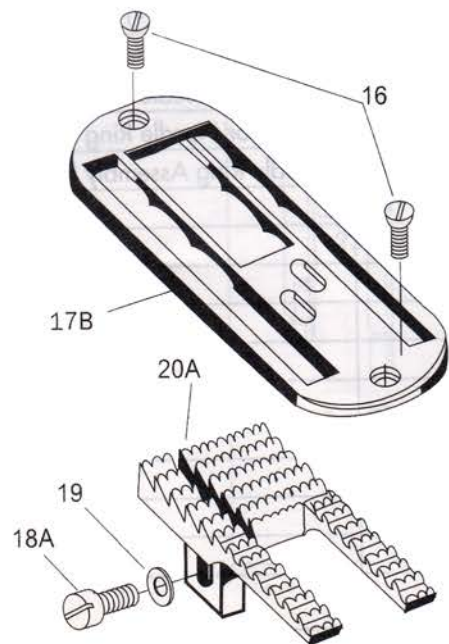
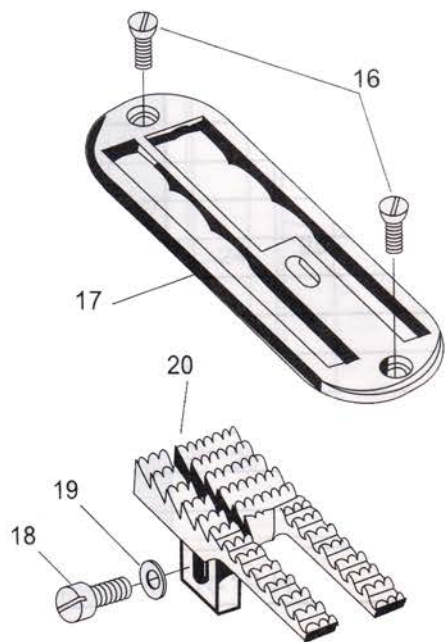
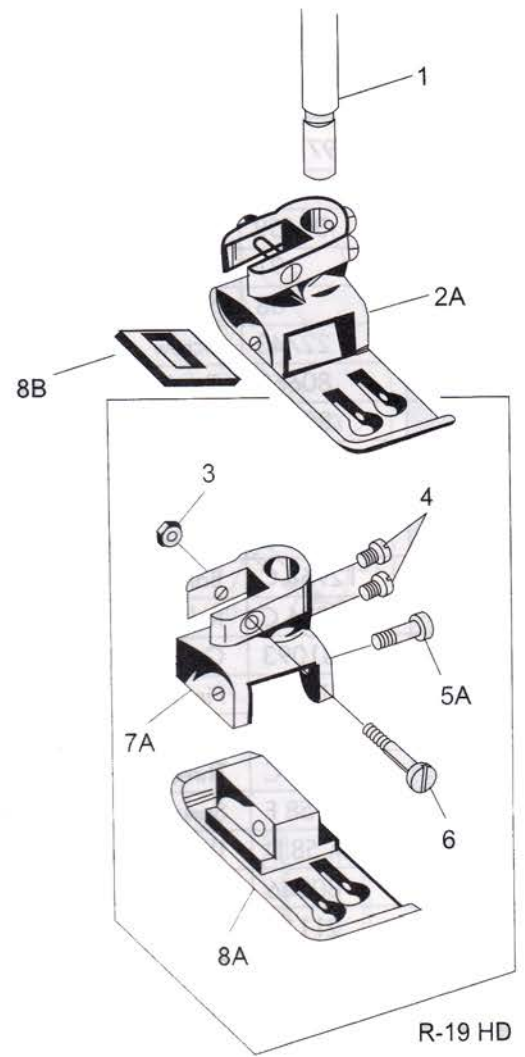
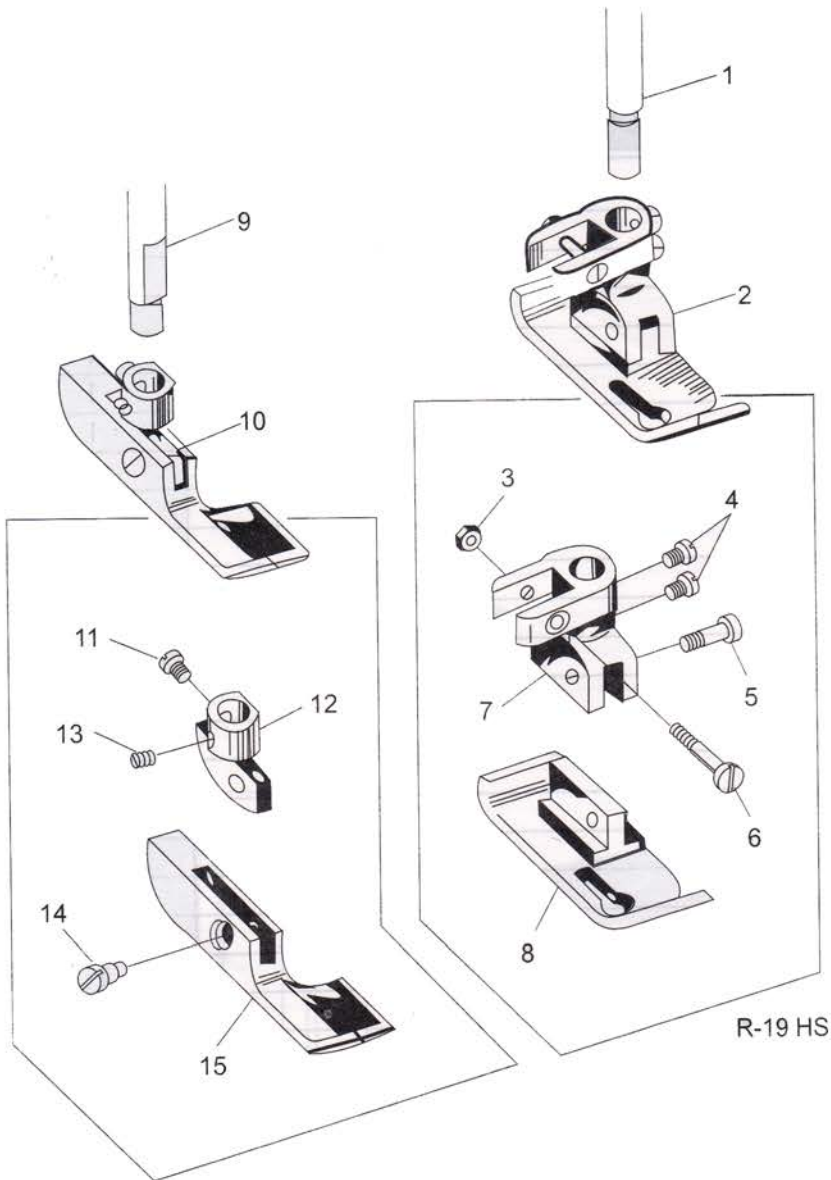
R-19 HS, R-19 HW



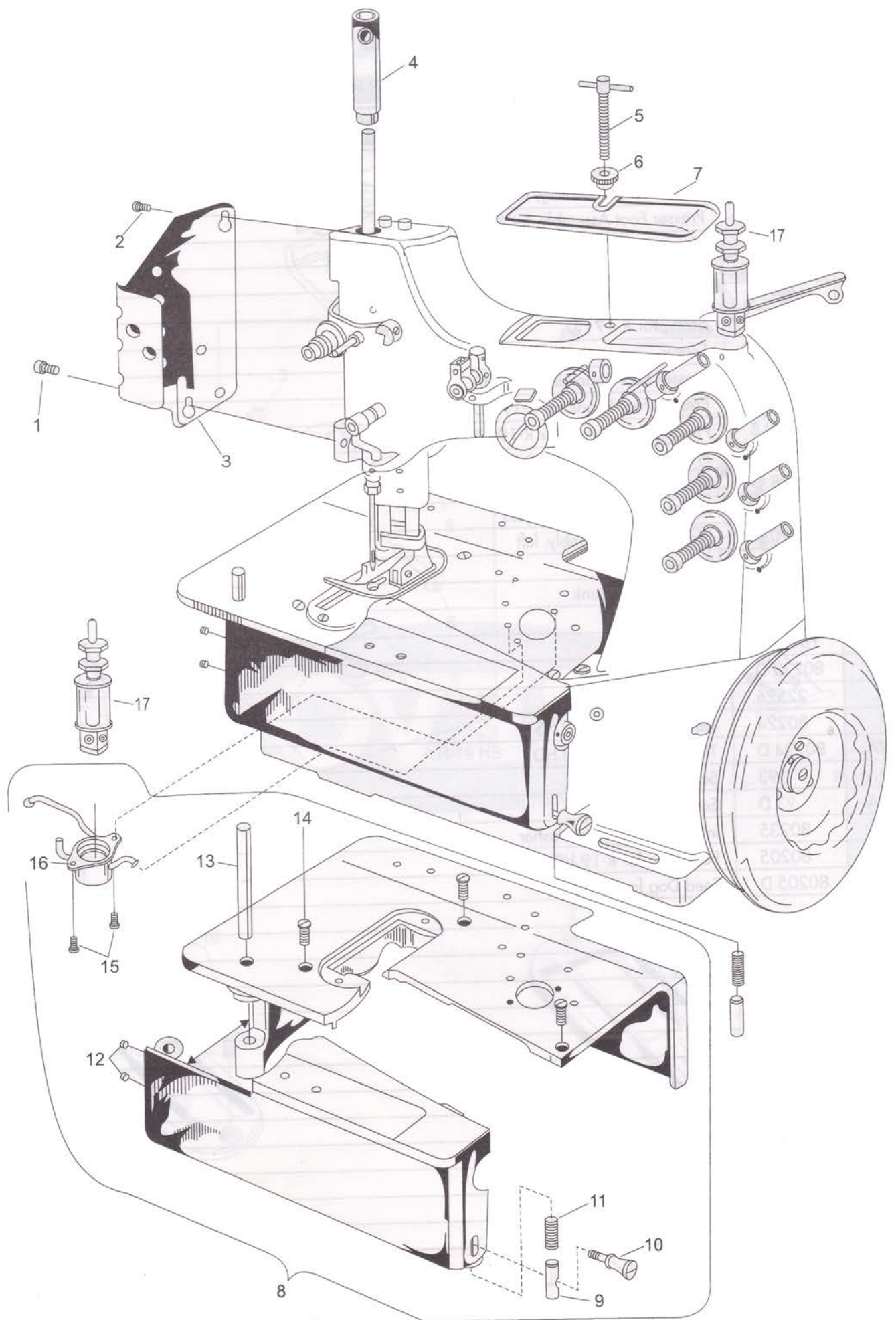
R-19 HD



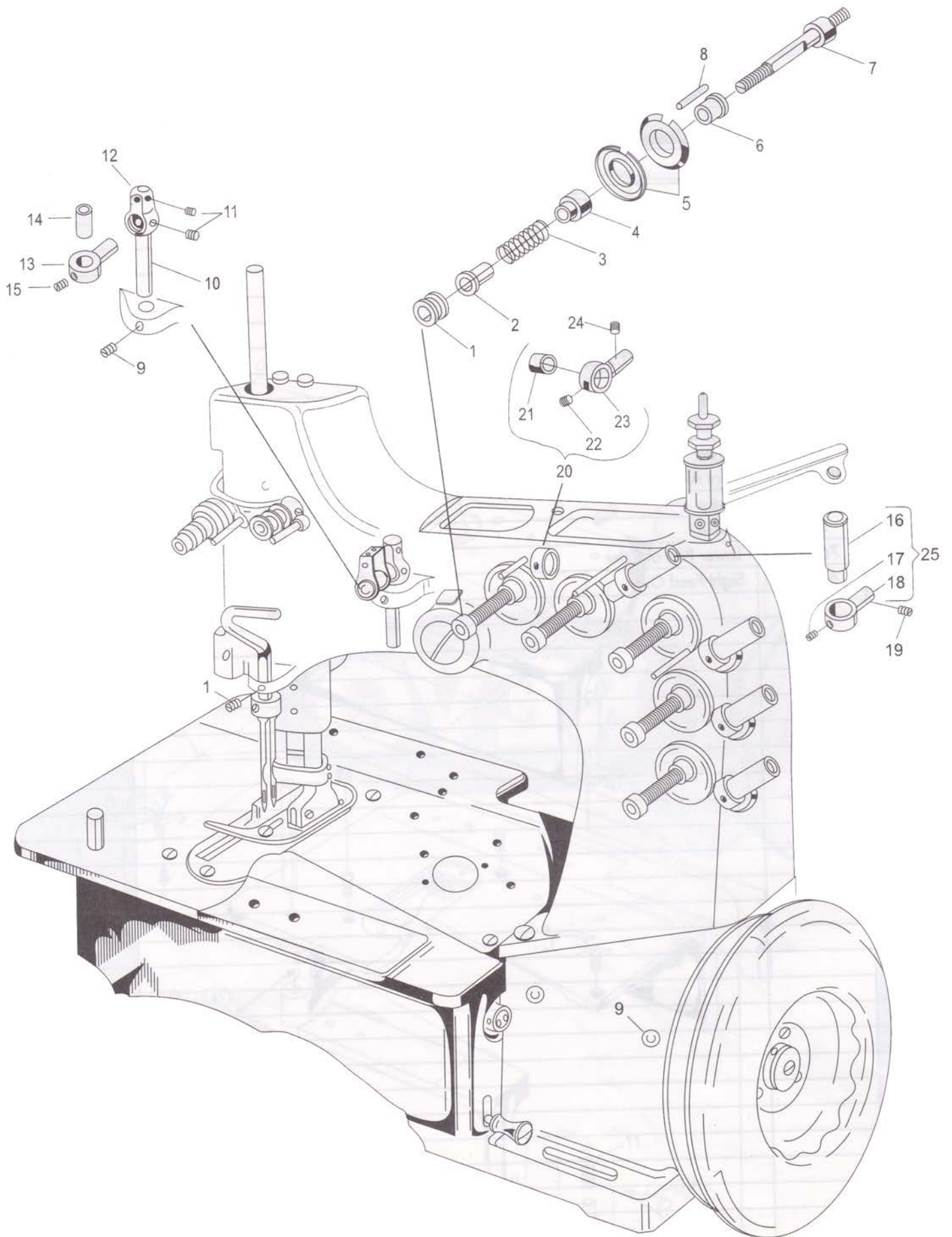














Manufacturers

## **SWARUP MECHANICAL WORKS**

OFF. & FAC. UNIT-I :OVERLOCK BUILDING, OVERLOCK ROAD, LUDHIANA-141 003. (INDIA)  
TELEPHONE : 91-161-2530774, 2546030, 31. FAX : 91-161-2533751. GRAMS : OVERLOCK  
FACTORY - UNIT II : B-XXX-69, KAILASH NAGAR, SHERPUR BYE-PASS, LUDHIANA-141 003. (INDIA)  
INTERNET : [www.revoindia.com](http://www.revoindia.com) [www.sewingnet.com](http://www.sewingnet.com) E-MAIL : [sales@revoindia.com](mailto:sales@revoindia.com)