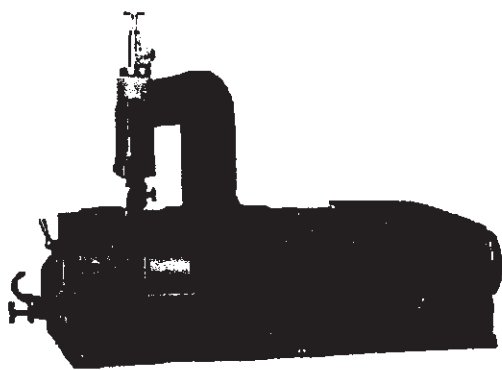


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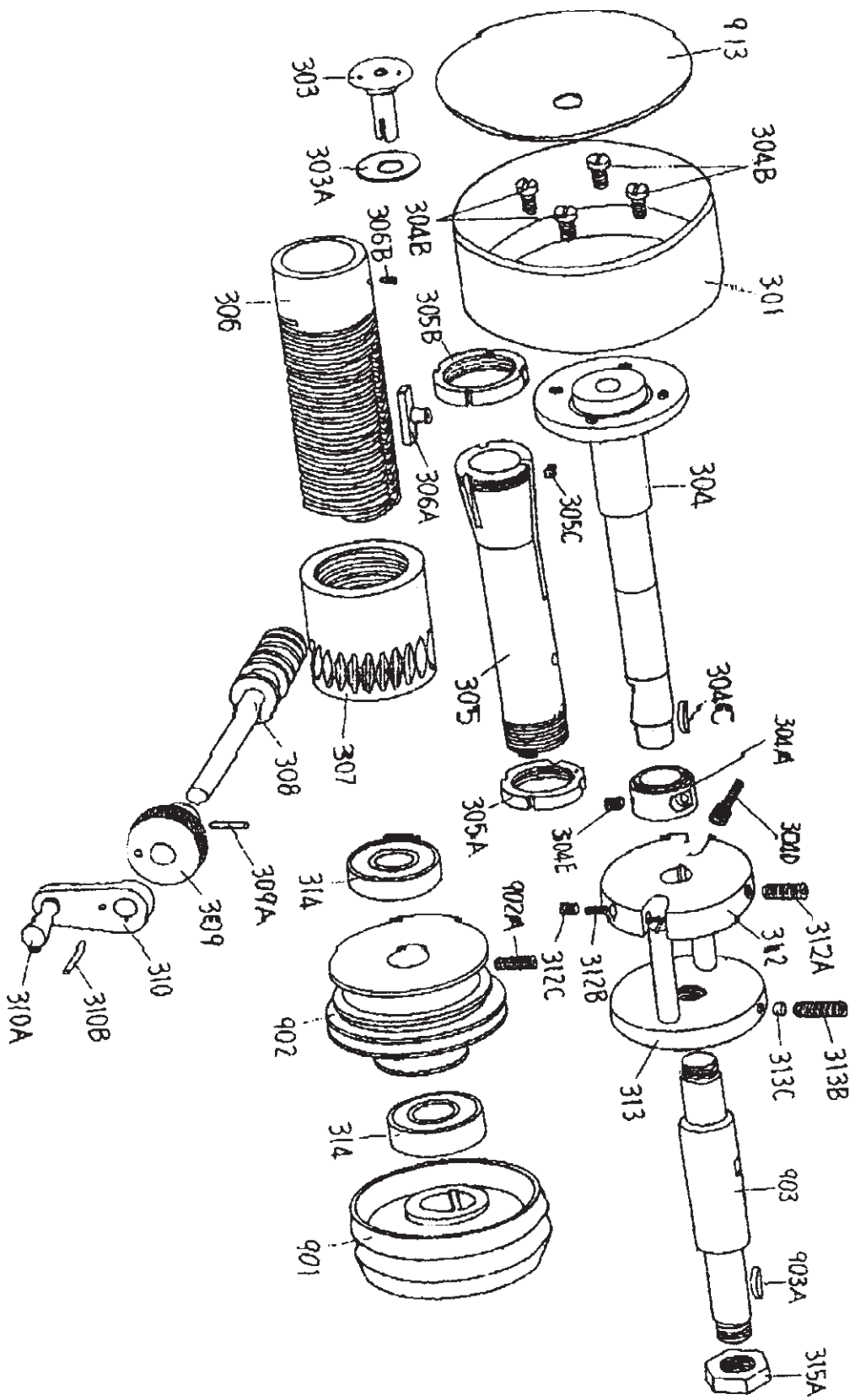


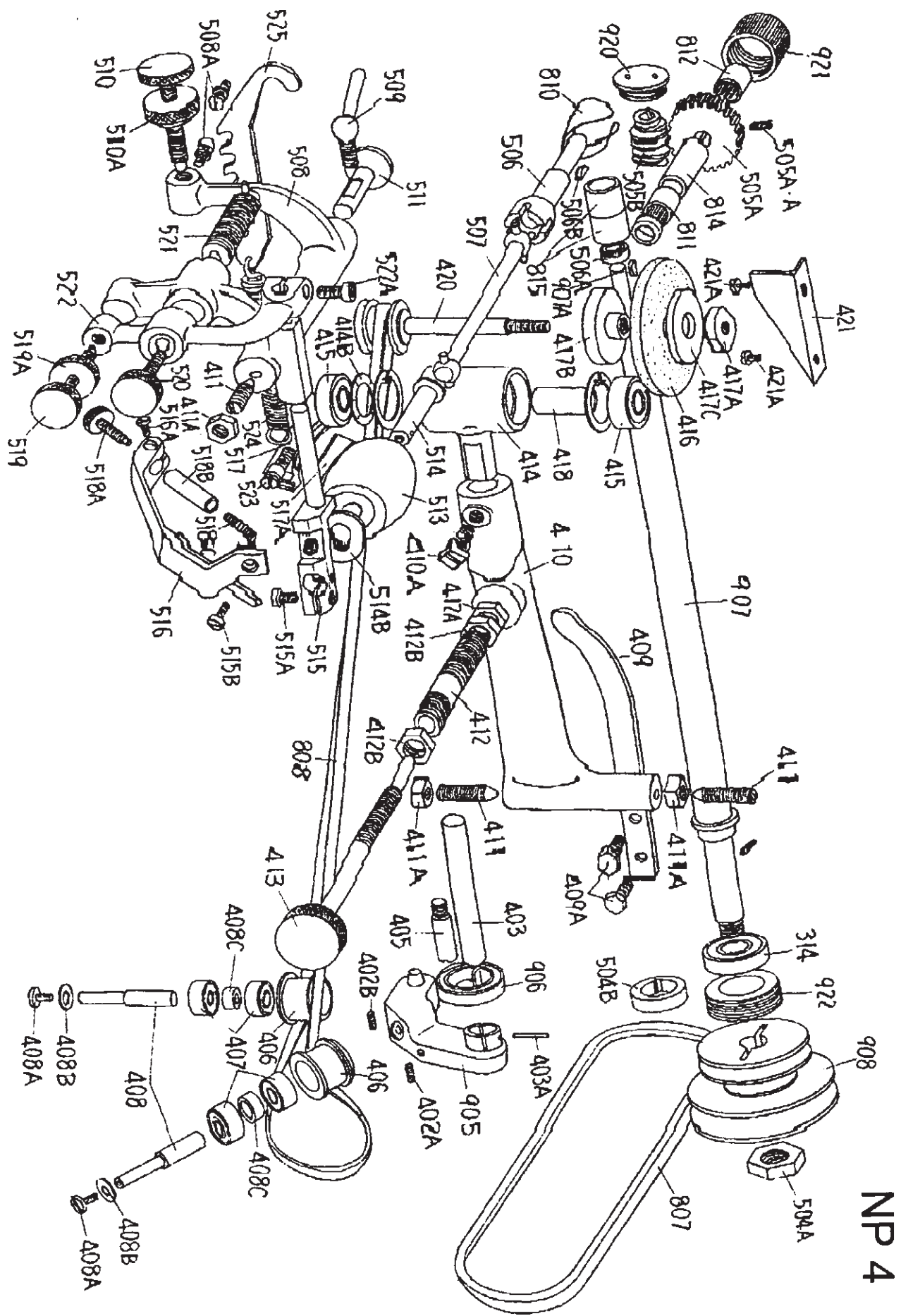
ARTISAN®

NP-4

**Operators Manual
and
Spare Parts Booklet**

ARTISAN® NP 4





NP 4

I . Features and uses of the machine.

Leather Skiving Machine with circular knife is suitable for edge-skiving and whole surface skiving of any kinds of leather as well as plastic cloth, synthetic leather, felted wool and rubber for shoes, caps, bags, garments, belts, gloves and sports goods etc. It is one of necessary equipments which make above goods.

The machine has features of noiseless stable performance, easy operation, high productivity and long life etc.

II . Main Technical Specifications.

rotating speed of main shaft (circular knife)	1100-1200rpm
skiving width	4-15mm
size of the machine head	550 × 370 × 400mm
net weight of the machine head	45kg
motor power	370w
size of circular knife	∅117 × 54 × ∅112

III . To prepare for using.

1.Assembling

The machine head, frame and motor etc. are packed separately. First assemble the frame, then set the motor at the long hole of the frame beam, and fix it with screw. Then place the table and machine head and align their positions. Tighten all screws and nuts.

2.Cleaning grease dirt.

The machine are coated with anti-rust grease to prevent it from rusting before packing. But it may be through long time storage and long way transport, the grease may become hardened or dust may accumulate on it. The grease on the surface of the machine must be cleaned with gasoline and clean soft cloth after unpacking.

3.Checking the machine.

The machine may get strong shaking in the transport leading to loosening or shifting of its parts. Check the machine completely after cleaning it. Turn the belt pulley of the main shaft with hand and observe whether the feeding wheel and the grinding wheel impact the edge of the circular knife or not. If there is any impact, adjust the machine according to the methods of this instruction book, make the feeding wheel and the grinding wheel keep a clearance with the edge of the knife.

4.Filling oil and testing.

Before starting the machine, fill oil at oil holes and moving parts. Let the machine run a few minutes for testing. The belt pulley of the main shaft should turn clockwise. (observe from the right of operator)

IV. How to use and adjust the machine.

1.To adjust the position of the circular knife.

The edge of the knife should keep a clearance about 0.4-0.8mm with the side of presser foot.(figure 1) This clearance is an important factor for assuring skiving quality. The edge of the knife will get dull through skiving, and need to regrind. After several times or long time regrinding the relative position of the edge of the knife to the feeding grinding wheel and the side of presser foot will change, and can be made up by means of adjusting the axial position of the knife

-3: The circular knife adjustment consists of precise worm and worm wheel which can make micro-adjusting by means of turning the adjusting handle of the knife. Turn it clockwise to increase the clearance and turn it counterclockwise to decrease the clearance. (see Figure 2)

2. To regrind the circular knife

The grinding wheel of the knife rotates when the machine works normally, so the edge of the knife can be regrind continually. Also can regrind it after the edge of the knife get dull. When turn the adjusting screw bar of the grinding wheel counter-clockwise, the grinding wheel closes to the dege of the knife and does grinding; turn the adjusting screw bar clockwise, the grinding wheel leaves the edge of the knife and stop grinding. (see Figure 3)

Caution: When grinding the edge of the knife, the grinding wheel should advance slowly to prevent the grinding wheel from impacting the edge of the knife, leading to destory the grinding wheel or the edge, even work accidents.

3. To adjust the height and centre of the feeding wheel arc.

The feeding wheel has two functions. The main one is feeding material, another is grinding burrs of the inner side of the knife. The R centre of the feeding wheel should be identical with the R centre of the knife.

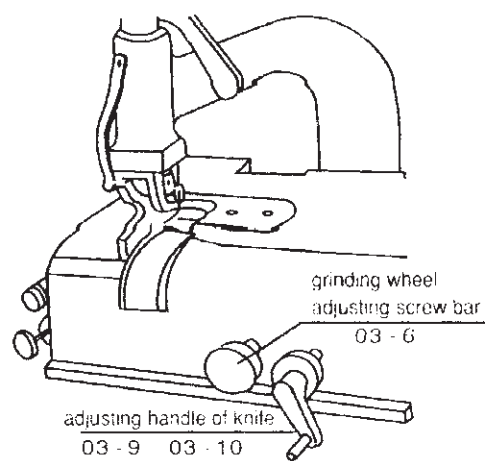
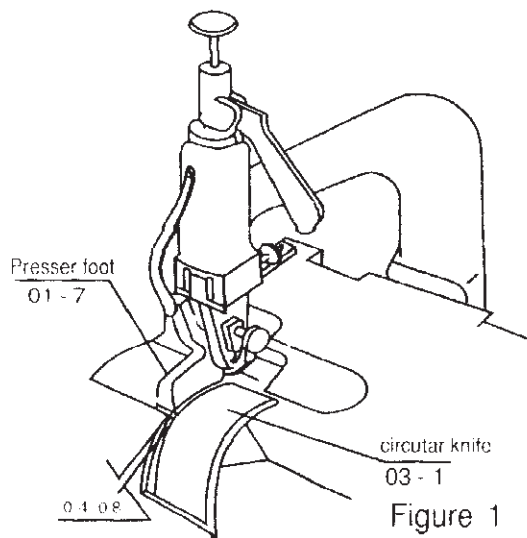
This will do great good to feeding the material and grinding the knife. The R centres should be adjusted if they are not on the same axis. The method is: loosen the R adjusting nut of feeding wheel, turn the R adjusting screw bar of feeding wheel when the clearance is big between the inner diameter of the knife and the right side of feeding wheel, turn the adjusting screw bar clockwise, on the contrary side, turn the adjusting screw bar counterclockwise until the clearance is consistent between the feeding wheel R and both sides of the inner diameter of the knife. Then retighten the adjusting nut R.

The outer diameter of the feeding wheel should connect the inner diameter of the knife. The big clearance between them will cause unsmooth feeding and poor quality skiving. The over interference will destroy the knife. The height of the feeding wheel is adjusted by means of loosening the adjusting nut, and turning the adjusting screw bar, turn clockwise to increase the height, turn counterclockwise to decrease the height, and tighten the height adjusting nut to adjust their connect. (Figure 3)

4. To adjust the height and angle of the presser foot.

(a). To adjust the height of the presser foot.

To do heavy leather skiving or small volume skiving, it is to increase the height of the presser foot. And



V. To dress the grinding wheel.

1. To dress the feeding grinding wheel.

After long time use, various kinds of skiving chips are stuck on the surface of the feeding wheel, weaken feeding friction force, lead to unsmooth feeding. To resume normal feeding, the surface of the feeding wheel must be dressed with grinding wheel dresser. First remove the feeding sliding plate to let the feeding wheel lie bare, switch on the machine, aim the dresser at the feeding wheel. The teeth of the dresser rotate with the feeding wheel and move left and right until the surface of the feeding wheel become sharp. (see Figure 7)

2. To dress the grinding wheel.

After regrinding the edge of the knife several times, grinding chips of metal and the grinding wheel are stuck on its surface, weaken grinding speed and quality. So its surface must be dressed with the grinding wheel dresser. (see Figure 8)

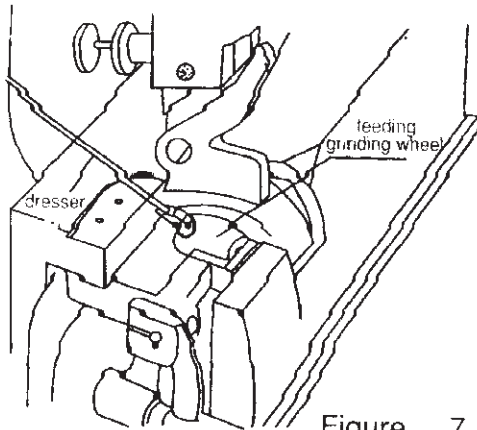


Figure 7

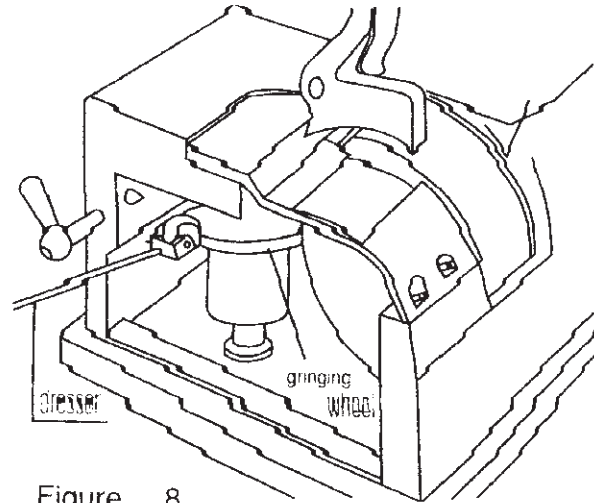
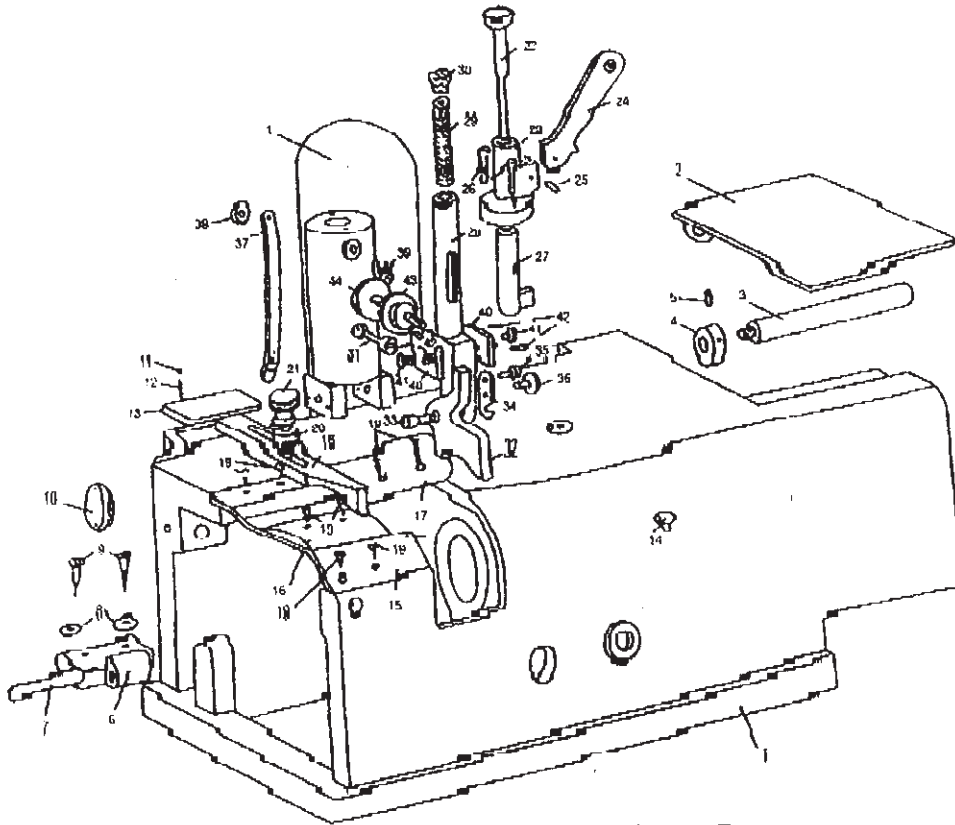


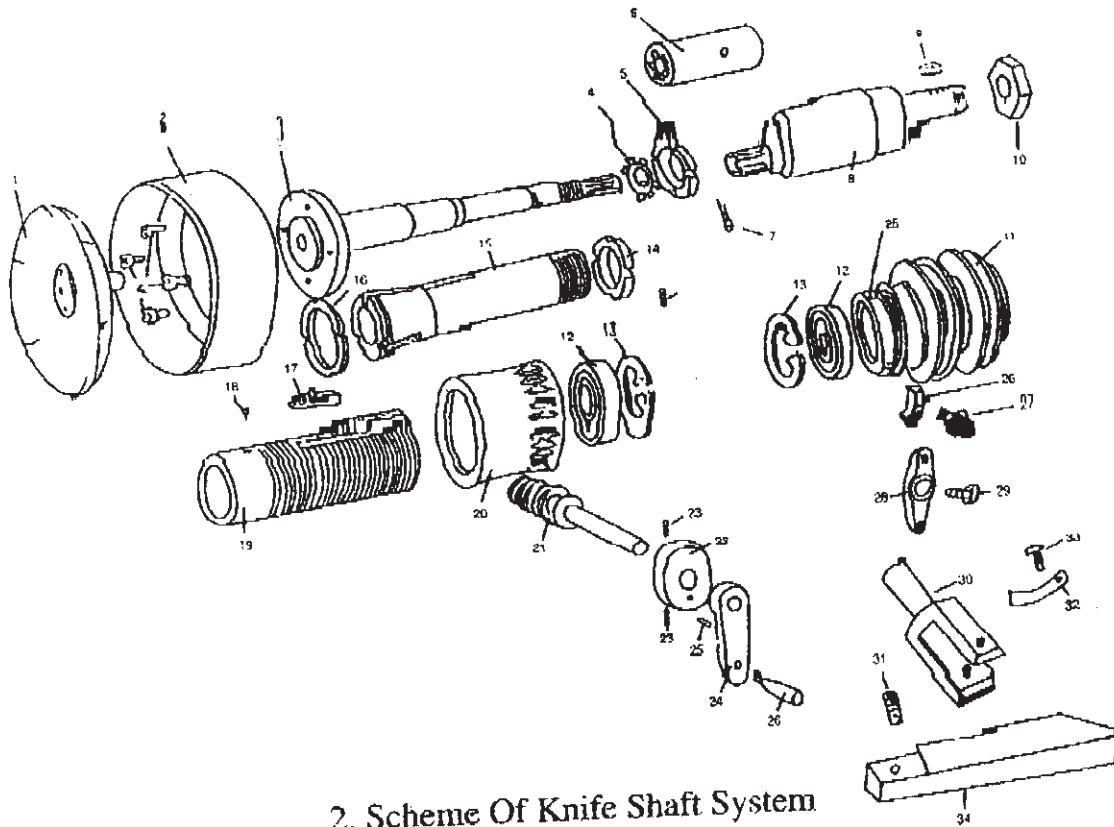
Figure 8



1. Scheme Of Presser Foot And Outer Parts

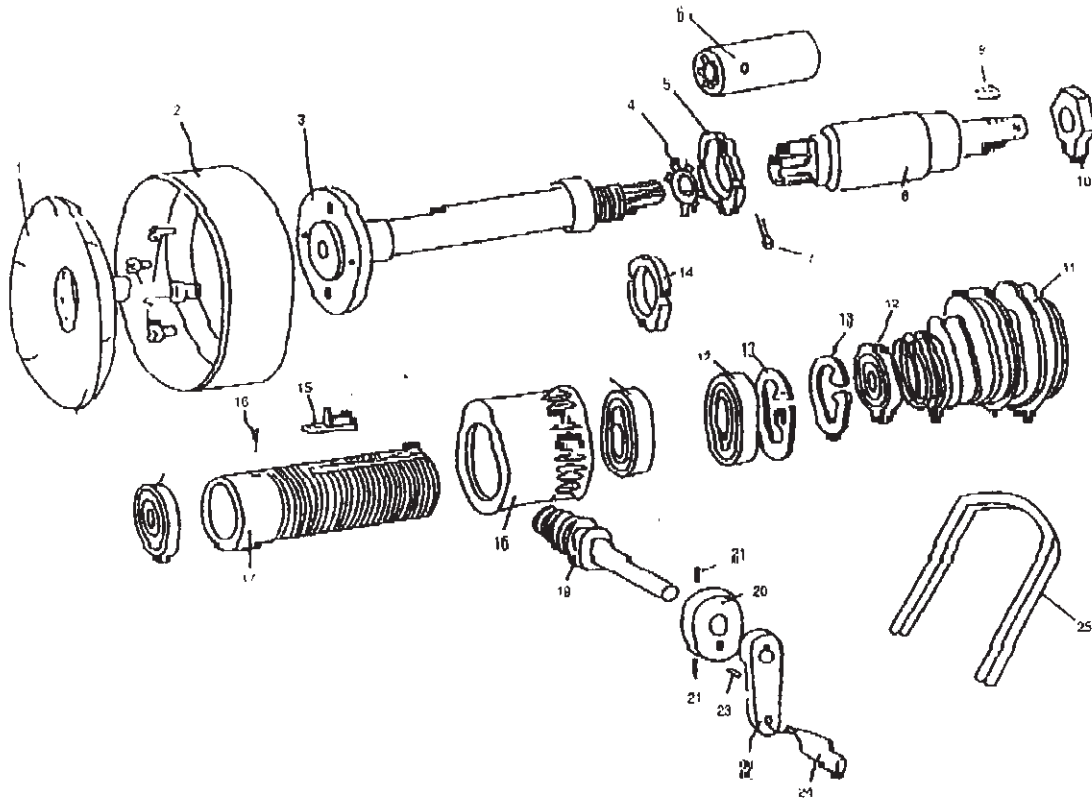
Parts List

No.	Drawing No.	Description	Quantity	Note	No.	Drawing No.	Description	Quantity	Note
1	06-1	Casing	1		24	01-5	Handle	1	
2	04-15	Cover	1		25	GB117-86	5 × 22 Pin	1	
3	06-13	Rod	1		26	GB65-85	Screw	2	
4	06-4	Hold Ring	1		27	01-2	Sleeve	1	
5	GB75-85	Pressing Screw	2		28	01-10	Sleeve	1	
6	06-11	Support	2		29		1.8 × 10 × 60 Spring	1	
7	06-12	Stud	4		30	01-6	Cap Bolt	1	
8	GB97.1-85	Washer	4		31	01-14	Screw	1	
9	GB845-85	ST8 × 20 Screw	1		32	01-7	Pressing Foot	1	
10	04-9	Cap Nut	1		33	01-9	Holding Pin	1	
11		φ5 Steel Ball	1		34	01-11	Pressing Plate	1	
12		0.5 × 4 × 20 Pressing Spring	1		35	GB818-85	M5 × 10 Screw	1	
13	04-11	Cover	1		36	01-12	Screw	1	
14	06-10	Cap	1		37	01-16	Elastic Plate	1	
15	06-3	Cover	1		38	GB95-85	Elastic Washer φ6	1	
16	06-2	Hold Plate	1		39	GB65-85	M6 × 10 Screw	1	
17	06-9	Cover For Circular Knife	1		40	01-8	Block	2	
18	06-4	Holding Plate	1		41	GB65-85	M5 × 10 Screw	2	
19	GS269	Screw	1		42	GB73-85	Holding Screw	4	
20	06-6	Washer	1		43	01-13	Adjusting Screw	1	
21	06-7	Screw	1		44	01-15	Adjusting Nut	1	
22	01-1	Screw	1		45				
23	01-3	Sleeve	1		46				



2. Scheme Of Knife Shaft System
Parts List

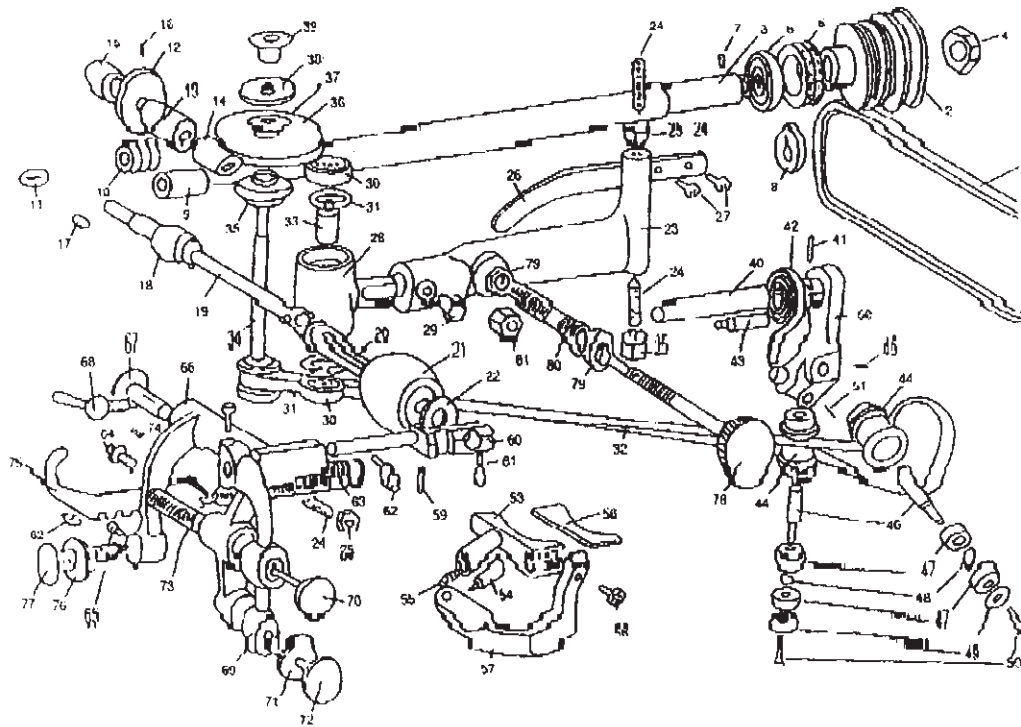
No.	Drawing No.	Description	Quantity	Note	No.	Drawing No.	Description	Quantity	Note
1	03-2	Knife Underlay	1		16	03-31	Nut	1	
2	03-1	Circular Knife	1		17	03-30	Positioning Key	1	
3	03-3	Knife Shaft	1		18	GB75-85	M4 × 6 Holding Screw	1	
4	GB858-88	Holding Washer	1		19	03-13	Stud	1	
5	03-14	Holding Nut	1		20	03-7	Worm Wheel	1	
6	03-15	Sleeve	1		21	03-8	Worm	1	
7	GB91-86	3 × 40 Pin	1		22	03-11	Holding Ring	1	
8	03-21	Driving Shaft	1		23	GB73-85	M5 × 6 Holding Screw	2	
9	GB1096-79	5 × 16 Key	1		24	03-9	Connecting Plate	1	
10	GB6172-86	M16 Nut	1		25	GB119-86	3 × 12 Pin	1	
11	03-19	Belt Wheel	1		26	03-10	Handle	1	
12	GB276-82	203 Bearing	2						
13	GB893.1-86	Elastic Holding Ring 40A	2						
14	03-14	Nut	1						
15	03-12	Sleeve	1						



2. Scheme Of Knife Shaft System

Parts List

No.	Drawing No.	Description	Quantity	Note	No.	Drawing No.	Description	Quantity	Note
1	03-2	Knife Undertay	1		16	GB75-85	M4 × 6 Holding Screw	1	
2	03-1	Circular Knife	1		17	03-13	Stud	1	
3	03-3	Knife Shaft	1		18	03-7	Worm Wheel	1	
4	GB858-88	Holding Washer	1		19	03-8	Worm	1	
5	03-14	Holding Nut	1		20	03-11	Holding Ring	1	
6	03-15	Sleeve	1		21	GB73-85	M5 × 6 Holding Screw	2	
7	GB91-86	3 × 40 Pin	1		22	03-9	Connecting Plate	1	
8	03-21	Driving Shaft	1		23	GB119-86	3 × 12 Pin	1	
9	GB1096-79	5 × 16 Key	1		24	03-10	Handle	1	
10	GB6172-86	M16 Nut	1						
11	03-19	Belt Wheel	1						
12	GB276-82	203 Bearing	2						
13	GB893.1-86	Elastic Holding Ring 40A	2						
14	03-14	Nut	1						
15	03-30	Positioning Key	1						



3. Scheme Of Feeding Driving System
Part List 1.

No.	Drawing No.	Description	Quantity	Note	No.	Drawing No.	Description	Quantity	Note
1		500Ruber Belt	1		24	02-22	M8 × 32 Holding Screw	2	
2	04-1	Belt Wheel	1		25	GB6172-86	M8 Nut	2	
3	04-5	Driving Shaft	1		26	05-1	Elastic Plate	1	
4	GB6172-86	M12 × 1.25 Nut	1		27	GB5781-86	M6 × 12 Screw	2	
5	04-3	Nut	1		28	05-5	Grinding Wheel Seal	1	
6	GB276-64	202 Bearing	1		29	GB5781-86	M8 × 16 Screw	1	
7	GB879-86	4 × 8 Elastic Pin	1		30	GB276-82	1800101 Bearing	2	
8	04-2	Ring	1		31	GB893.2-86	B28 Stop Ring	2	
9	04-6	Sleeve	1		32		Plate Belt	1	
10	04-7	Worm	1		33	05-4	Ring	1	
11	GB1098-79	3 × 16 Key	1		34	05-2	Belt Wheel Axis	1	
12	04-13	Worm Wheel	1		35	05-6	Grinding Wheel Sleeve	1	
13	04-15	Sleeve	1		36	GB2489-84	φ70 × 8 × φ16 Plate Grinding Wheel	1	
14	04-15	Guide Sleeve	1		37	05-7	Grinding Wheel Slid	2	
15	04-12	Sleeve	1		38	05-8	Grinding Wheel Washer	1	
16	GB73-85	M4 × 8 Screw	1		39	05-9	(M8-Left) Nut	1	
17	GB1096-79	3 × 12 Key	1		40	GB119-86	12 × 75 Pin	1	
18	04-14	Worm Wheel Axis	1		41	GB879-86	3 × 16 Elastic Pin	1	
19	04-16	Universal Driving Shaft	1		42	03-25	Worm Spring	1	
20	02-2	Grinding Wheel Axis	1		43	GB878-86	8 × 20 Screw Pin	1	
21	02-23	Drum Grinding Wheel	1		44	03-27	Rotting Wheel	2	
22	02-1	Grinding Wheel Sleeve	1		45	GB73-85	M5 × 6 Holding Screw	1	
23	05-10	Support	1		46	03-84	Rotting Wheel Axis	2	

3. Scheme Of Feeding Driving System

Part List 1.

No.	Drawing No.	Description	Quantity	Note	No.	Drawing No.	Description	Quantity	Note
47		80026 Micro Bearing	4		65	02-9	Spring Hook Nail	1	
48	03-22	Sleeve	2		66	02-5	Support	1	
49	03-26	Washer	2		67	02-6	Grinding Support Point	1	
50	GS269	Screw	2		68	02-7, 8	Holdng Handle Screw	1	
51	GB73-85	M5 x 6 Holding Screw	1		69	02-16	Feeding Support	1	
52	02-23	Driving Rod	1		70	02-19	Tension Adjusting Screw	1	
53	02-3	Scraper Seat	1		71	02-18	M6 Adjusting Nut	1	
54	02-4	Scraper Seat Axis	1		72	02-20	Feed Wheel Adjusting Screw M6 x 65	1	
55	GB1239-76	0.5 x 9 x 10 Spring	1		73	02-21	2 x 12 x 49 Tension Spring	1	
56	GB65-85	M5 x 10 Screw	1		74	02-9	Spring Hook Nail	1	
57	02-14	Scraper Support	1		75	02-10	Hook	1	
58	02-13	Scraper	1		76	02-11	M8 Nut	1	
59	GB879-86	3 x 14 Elastic Pin	1		77	02-12	M8 x 60 Height Adjusting Screw	1	
60	02-17	Support	1		78	03-5 03-6	Grinding Wheel Adjusting Screw Handle	1	
61	GB65-85	M5 x 10 Screw	1		79	GB6172-86	M8 Nut	2	
62	GB878-86	8 x 20 Pin	1		80	03-4	Stud	1	
63	02-24	1.2 x 10 x 90 Tension Spring	1		81	03-50	Stud Holding Nut	1	
64	02-15	Spring Joint A,B	1		82				