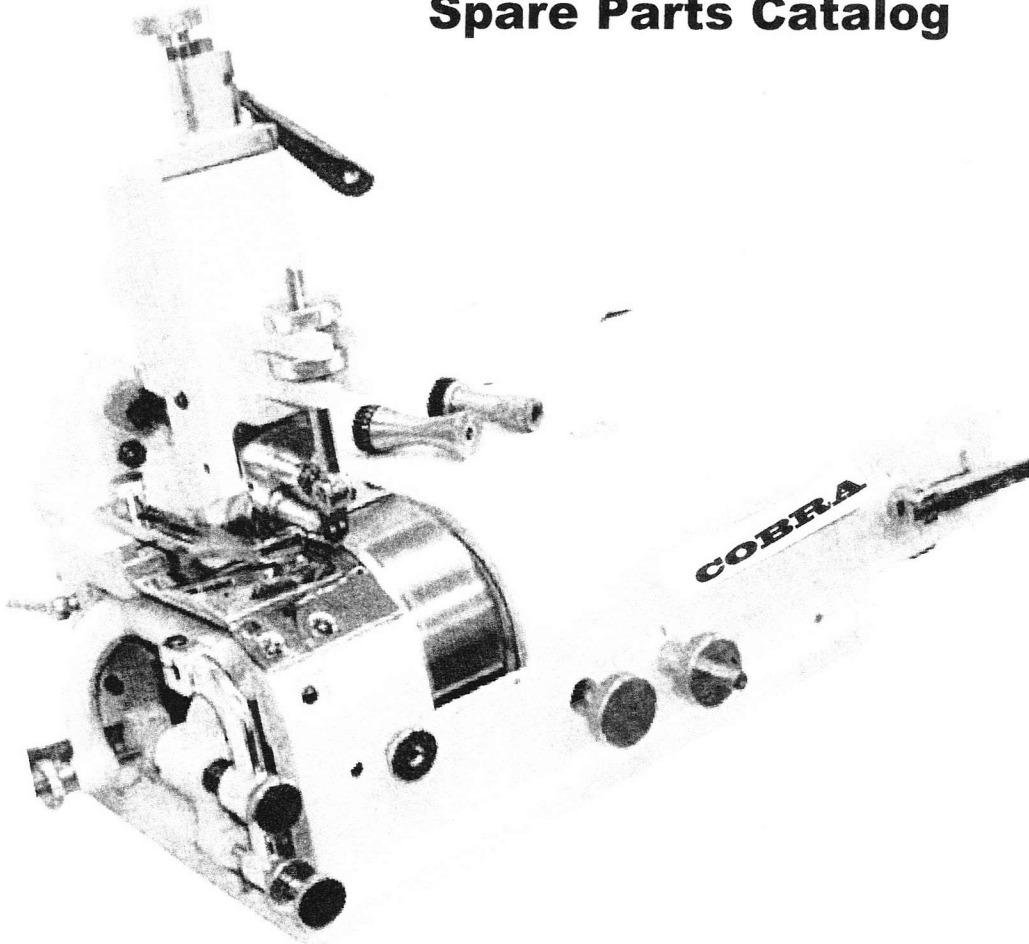# Instruction Book
## And
## Spare Parts Catalog



# COBRA

## NP 10
## Heavy Duty Top
## Puller & Roller Feed
## Skiving Machine

# 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 featuresof noiseeless stable performance, easy operation, high productivity and long life etc.

# Ⅱ. Main Technical Specifications.

| | |
|---|---|
| rotating speed of main shaft (circular kinfe) | 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 | $\varnothing 117 \times 54 \times \varnothing 112$ |

# 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. Thighten 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 wheather 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.
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

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.

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 regrund 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.

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 countrary 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 quali'y 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.

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 to do light leather skiving or big volume skiving, it is to decrease the height of the presser foot. The height of the presser foot is adjusted by means of adjusting the presser foot adjusting screw bar. Turn it clockwise to decrease the height, turn it counterclockwise to increase the height.

(b). To adjust the angle of the presser foot.

To do big width and small angle edge-skiving, the angle between the presser foot and the circular knife should be small. Under the countrary conditions, the angle should be big. The height of the angle is adjusted by means of loosening the angle adjusting nut of the presser foot and turning the angle adjusting, screw bar Turn it clockwise to increase the angle, and turn it counterclock wise to decrease the angle. After the required angle is adjusted, retighten the adjusting nut.

5. To adjust the blocking board.

The blocking board takes a role of limiting the width of skiving. Move it to the operator to decrease the width of skiving, under the countrary conditions, move it to another direction. The position of the blocking board is adjusted by the screw.

6. To adjust skiving speed.

The leather skiving machine with the circlur knife has two or three speeds to choose depending on operator skill and the skiving matetial. To adjust the speed, first open or take away belt cover, slide the belt into required skiving speed with screw driver, right side is low speed and left is high speed.

# 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.

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.

| | |
|---|---|
| Motor | 370-400W(2850) |
| Knife speed | 3500 |
| Feed wheel speed | 62,99,132(rpm) |
| Knife size | Φ118XΦ114X54(mm) |
| Knife axial displacement | 30(mm) |
| Skiving width | 10-50(mm) |
| NW / GW | 40 /45(kg) |
| Measurement | 630X480X415(mm) |

# 1. PRESSER FOOT AND OUTER ATTACHMENTS

# 1. PRESSER FOOT AND OUTER ATTACHMENTS
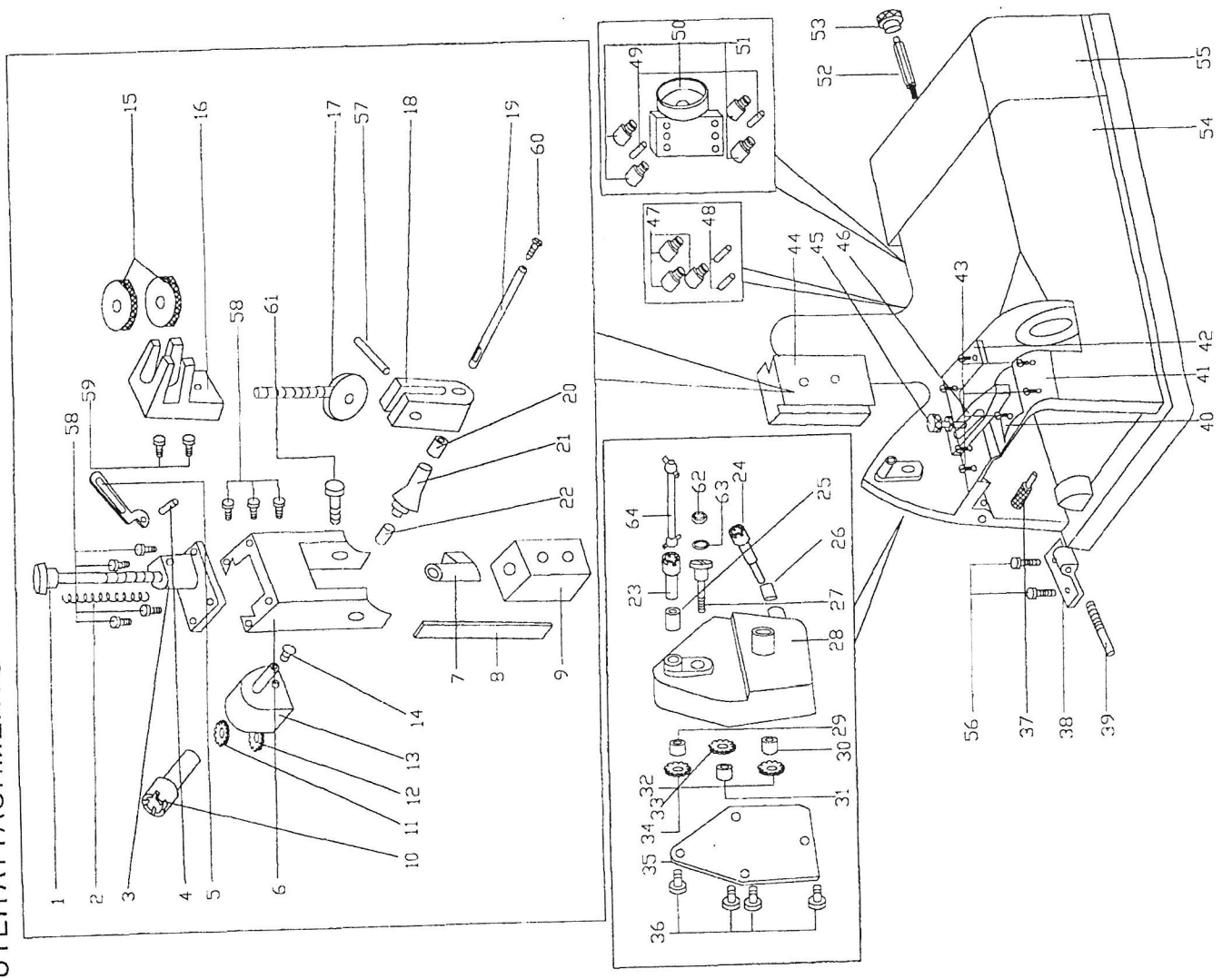
| No. | Part | Qty | | No. | Part | Qty |
|-----|------|-----|---|-----|------|-----|
| 1-1 | H8103 | 1 | | 1-36 | | 4 |
| 1-2 | H8106 | 1 | | 1-37 | H8401 | 1 |
| 1-3 | H8105 | 1 | | 1-38 | 10113 | 2 |
| 1-4 | M5×16 | 1 | | 1-39 | 10343 | 2 |
| 1-5 | H8101 | 1 | | 1-40 | 10326 | 1 |
| 1-6 | H8109 | 1 | | 1-41 | 10327 | 1 |
| 1-7 | H8102 | 1 | | 1-42 | 10328 | 1 |
| 1-8 | H8104 | 1 | | 1-43 | 11/64×40 | 8 |
| 1-9 | H8108 | 1 | | 1-44 | H8107 | 1 |
| 1-10 | H8112 | 1 | | 1-45 | 10338 | 1 |
| 1-11 | H8113 | 1 | | 1-46 | 10112 | 1 |
| 1-12 | H8117 | 1 | | 1-47 | M10×20 | 3 |
| 1-13 | H8111 | 1 | | 1-48 | M5×20 | 2 |
| 1-14 | H8114 | 1 | | 1-49 | M5×20 | 2 |
| 1-15 | H8123 | 2 | | 1-50 | 10107 | 1 |
| 1-16 | H8110 | 1 | | 1-51 | M8×12 | 4 |
| 1-17 | H8121 | 1 | | 1-52 | 10329 | 1 |
| 1-18 | H8120 | 1 | | 1-53 | 10330 | 1 |
| 1-19 | H8115 | 1 | | 1-54 | 10101 | 1 |
| 1-20 | H8118 | 1 | | 1-55 | 10311 | 1 |
| 1-21 | H8116 | 1 | | 1-56 | M8×65 | 2 |
| 1-22 | H8119 | 1 | | 1-57 | φ6×15 | 1 |
| 1-23 | H8306 | 1 | | 1-58 | M4×16 | 7 |
| 1-24 | H8310 | 1 | | 1-59 | M6×18 | 2 |
| 1-25 | H8312 | 1 | | 1-60 | M5×12 | 1 |
| 1-26 | H8303 | 1 | | 1-61 | M8×60 | 1 |
| 1-27 | H8309 | 1 | | 1-62 | M8 | 1 |
| 1-28 | H8301 | 1 | | 1-63 | φ10 | 1 |
| 1-29 | H8302 | 1 | | 1-64 | | |
| 1-30 | H8304 | 1 | | | | |
| 1-31 | H8308 | 1 | | | | |
| 1-32 | H8305 | 1 | | | | |
| 1-33 | H8307 | 1 | | | | |
| 1-34 | H8311 | 1 | | | | |
| 1-35 | H8313 | 1 | | | | |

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## 2.KINFE AND RELATED PARTS

| Part NO. | | | Name of Part | Quan |
|---|---|---|---|---|
| 8010201 | P2-1 | 2Y-21 / 2Y-21-2 | 1021 | 1 |
| 8010202 | P2-2 | 2Y-24 | M6P1.0X10 | 4 |
| 8010203 | P2-3 | 2Y-10 | 1010 | 1 |
| 8010204 | P2-4 | 2Y-11 | 1011 | 1 |
| 8010205 | P2-5 | 2Y-127 | 3X13 | 1 |
| 8010206 | P2-6 | 2Y-26A | 28X18X7X1.5 | 1 |
| 8010207 | P2-7 | 2Y-26-1 | | |
| 8010208 | P2-8 | 2Y-23 | 1023 | 2 |
| 8010209 | P2-9 | 2Y-15 | 1015 | 1 |
| 8010210 | P2-10 | 2Y-33 | 1033 | 1 |
| 8010211 | P2-11 | 2Y-34 | 1034 | 2 |
| 8010212 | P2-12 | 2Y-26B | 28X16X7X1.5 | 1 |
| 8010213 | P2-13 | 2S-140 | 9/32X28X4.5 | 2 |
| 8010214 | P2-14 | 2S-092 | 9/32X28X18 | 2 |
| 8010215 | P2-15 | 2Y-47B | 3X10 | 1 |
| 8010216 | P2-16 | 2Y-31 | 1031 | 1 |
| 8010217 | P2-17 | 2Y-47A | 3X16 | 1 |
| 8010218 | P2-18 | 2Y-44A | M16XP1.5 | 1 |
| 8010219 | P2-19 | 2Y-28 | 39X34X3XP1.0 | 1 |
| | P2-20 | | 2005 | 1 |
| 8010221 | P2-21 | 2Y-12 | 1012 | 1 |
| 8010222 | P2-22 | 2Y-27 | 36X27X7XP1.5 | 1 |
| 8010223 | P2-23 | 2Y-20 | 1020 | 1 |
| 8010224 | P2-24 | 2Y-13 | 1013 | 1 |
| 8010225 | P2-25 | 2Y-14 | 1014 | 1 |
| 8010226 | P2-26 | 2Y-16 | 1016 | 1 |
| 8010227 | P2-27 | 2P-019 | 3X18 | 1 |
| 8010228 | P2-28 | 2*Y-17 | 1017 | 1 |
| 8010229 | P2-29 | 2*Y-18 | 1018 | 1 |
| 8010230 | P2-30 | 2Y-19 | 1019 | 1 |
| 8010231 | P2-31 | 2Y-48 | 6203ZZ | 2 |
| 8010232 | P2-32 | 2Y-32 | 1032 | 1 |

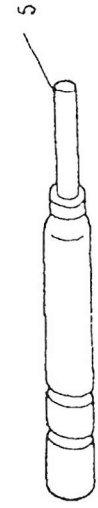| Part NO. | | | Name of Part | Quan |
|---|---|---|---|---|
| 8010233 | P2-33 / P2-34 | 2S-141 | 5/16"X24X21 | 3 |
| 8010235 | P2-35 | 2Y-35 | 1035 | 1 |
| 8010236 | P2-36 | 2Y-30 | 1030 | 1 |
| 8010237 | P2-37 | 2Y-49 | 1049 | 1 |
| 8010238 | P2-38 | 2Y-40 | 1040 | 1 |
| 8010239 | P2-39 | 2Y-43 | 1043 | 1 |
| 8010240 | P2-40 | BW-024 | 1024 | 1 |
| 8010241 | P2-41 | 2Y-46 | 1046 | 1 |
| 8010242 | P2-42 | 2N-006 | 1/4"X40 | 1 |
| 8010243 | P2-43 | 2S-142 | 15/64"28X8 | 1 |
| 8010244 | P2-44 | 2Y-41 | 1041 | 1 |
| 8010245 | P2-45 | 2S-143A | 1160 | 1 |
| 8010246 | P2-46 | 2Y-42 | 1042 | 1 |
| 8010247 | P2-47 | 2W-010 | | 1 |
| 8010248 | P2-48 | 2S-144 | 9/64"X40X6 | 1 |
| 8010249 | P2-49 | 2S-007 | 9/64"X40X6 | 1 |
| 8010250 | P2-50 | 2Y-39 | 1039 | 1 |
| 8010251 | P2-51 | | NTB2035 | 2 |
| 8010252 | P2-52 | | 20X35X1 | 2 |
| 8010253 | P2-53 | | 6004ZZ | |
| 8010254 | P2-54 | | 6203ZZ | |

# 3. GRINDSTONE AND ROLLER RELATED PARTS
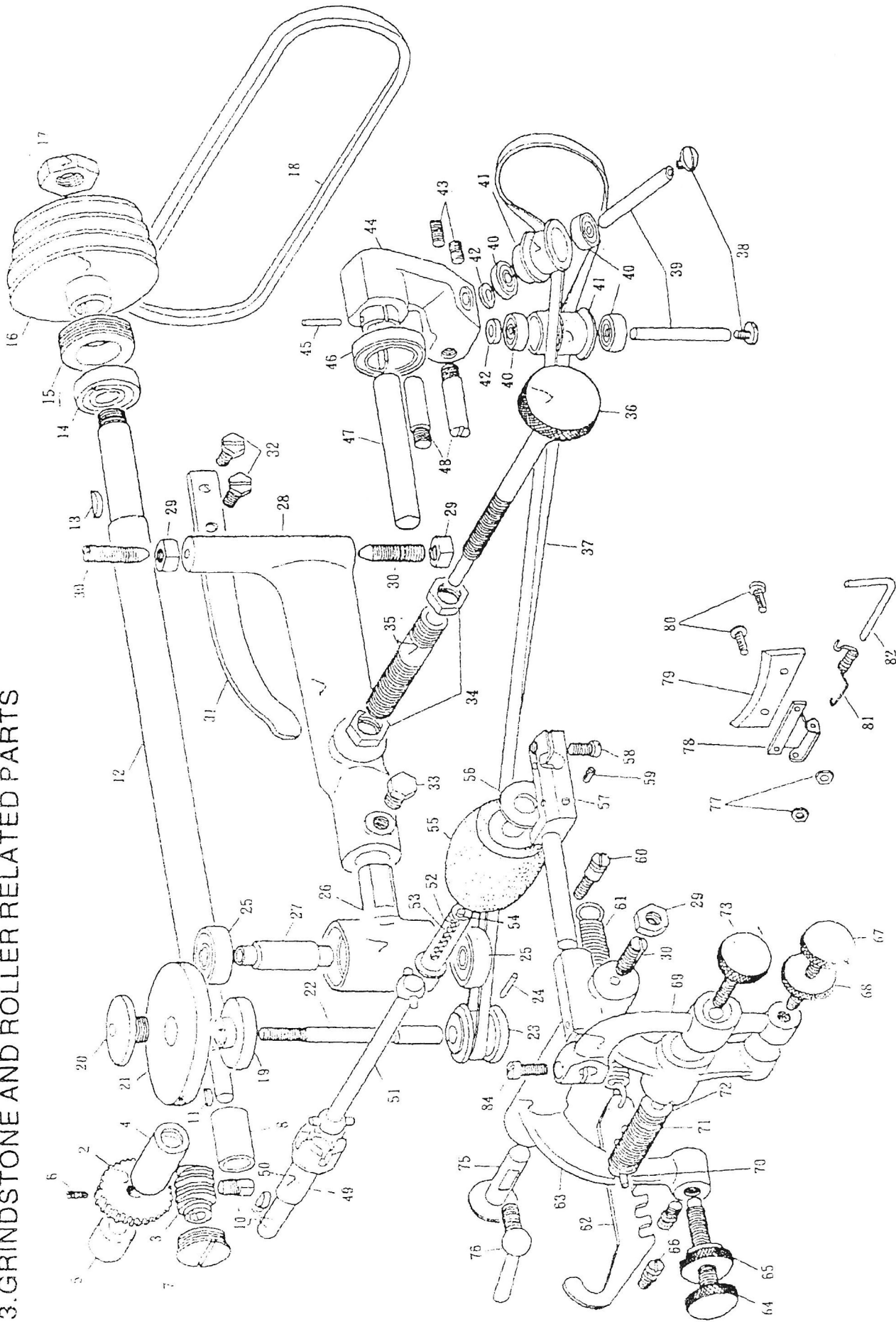
# 3.GRINDSTONE AND ROLLER RELATED PARTS

| Part NO. | | | Name of Part | Quan |
|---|---|---|---|---|
| 8010301 | P3-1 | 3Y-2A | 1116 | 1 |
| 8010302 | P3-2 | 3Y-116 | 1115 | 1 |
| 8010303 | P3-3 | 3Y-115 | 1119 | 1 |
| 8010304 | P3-4 | 3Y-119 | 1120 | 1 |
| 8010305 | P3-5 | 3Y-120 | 9/64"x40x9 | 1 |
| 8010306 | P3-6 | 3S-005 | 1123 | 1 |
| 8010307 | P3-7 | 3Y-123 | 1117 | 1 |
| 8010308 | P3-8 | 3Y-117 | 121803 | 1 |
| 8010309 | P3-9 | 3Y-133 | 1124 | 1 |
| 8010310 | P3-10 | 3Y-124 | 2.5x10 | 1 |
| 8010311 | P3-11 | 3Y-47A | 1110 | 1 |
| 8010312 | P3-12 | 3Y-110 | 3x16 | 1 |
| 8010313 | P3-13 | 3Y-126 | 6002ZZ | 1 |
| 8010314 | P3-14 | 3Y-130 | M63x10xP1.5 | 1 |
| 8010315 | P3-15 | 3Y-113 | 1111 | 1 |
| 8010316 | P3-16 | 3Y-111 | M14xP1.5 | 1 |
| 8010317 | P3-17 | 3Y-44B | 3 STAR K20 | 1 |
| 8010318 | P3-18 | 3Y-128 | 1051 | 1 |
| 8010319 | P3-19 | 3Y-51 | 1052 | 1 |
| 8010320 | P3-20 | 3Y-52 | 1050 | 1 |
| 8010321 | P3-21 | 3Y-50 | 1053 | 1 |
| 8010322 | P3-22 | 3Y-53 | 1054 | 1 |
| 8010323 | P3-23 | 3Y-54 | 2.5x20 | 2 |
| 8010324 | P3-24 | 3P-020 | 6200ZZ | 1 |
| 8010325 | P3-25 | 3Y-71 | 1056 | 1 |
| 8010326 | P3-26 | 3Y-56 | 1055 | 1 |
| 8010327 | P3-27 | 3Y-55 | 1057 | 3 |
| 8010328 | P3-28 | 3Y-57 | 5/16"x24 | 3 |
| 8010329 | P3-29 | 3N-030 | 1731 | 1 |
| 8010330 | P3-30 | 3Y-73A | 1069 | 2 |
| 8010331 | P3-31 | 3Y-69 | 15/64"x24x14 | 1 |
| 8010332 | P3-32 | 3S-145 | 15/64"x24x14 | 2 |
| 8010333 | P3-33 | 3S-068 | 1/2"x28 | 1 |
| 8010334 | P3-34 | 3Y-74 | 1066 | 1 |
| 8010335 | P3-35 | 3Y-66 | 1058 | 1 |
| 8010336 | P3-36 | 3Y-58 | 1059 | 2 |
| 8010337 | P3-37 | 3Y-59 | | 2 |
| 8010338 | P3-38 | 3S-146 | 1063 | 4 |
| 8010339 | P3-39 | 3Y-63 | 626ZZ | 2 |
| 8010340 | P3-40 | 3Y-72 | 1062 | 2 |
| 8010341 | P3-41 | 3Y-62 | 1064 | 2 |
| 8010342 | P3-42 | 3Y-64 | | |
| 8010343 | P3-43 | 3S-090 | 15/64"x28x8 | 1 |
| 8010344 | P3-44 | 3Y-60 | 1060 | 1 |
| 8010345 | P3-45 | 3P-019 | 3x18 | 1 |
| 8010346 | P3-46 | 3Y-67 | 1067 | 1 |
| 8010347 | P3-47 | 3Y-61 | 1061 | 2 |
| 8010348 | P3-48 | 3Y-65 | 1065 | 1 |
| 8010349 | P3-49 | 3Y-118 | 1118 | 1 |
| 8010350 | P3-50 | 3Y-127 | 3x13 | 1 |
| 8010351 | P3-51 | 3Y-121 | 1121 | 1 |
| 8010352 | P3-52 | 3Y-94 | 1094 | 1 |
| 8010353 | P3-53 | 3Y-81 | 1081 | 1 |
| 8010354 | P3-54 | 3P-008 | | 1 |
| 8010355 | P3-55 | 3Y-80 | 1080 | 1 |
| 8010356 | P3-56 | 3Y-82 | 1082 | 1 |
| 8010357 | P3-57 | 3Y-83 | 1083 | 1 |
| 8010358 | P3-58 | 3S-147 | 15/64"x28x10 | 1 |
| 8010359 | P3-59 | 3S-114 | 11/64"40x3.5 | 1 |
| 8010360 | P3-60 | 3Y-98 | 1098 | 1 |
| 8010361 | P3-61 | 3Y-95 | 1095 | 1 |
| 8010362 | P3-62 | 3Y-96 | 1096 | 1 |
| 8010363 | P3-63 | 3Y-91 | 1091 | 1 |
| 8010364 | P3-64 | 3Y-92 | 1092 | 1 |
| 8010365 | P3-65 | 3Y-93 | 1093 | 2 |
| 8010366 | P3-66 | 3Y-97 | 1097 | 1 |
| 8010367 | P3-67 | 3Y-85 | 1085 | 1 |
| 8010368 | P3-68 | 3Y-86 | 1086 | 1 |
| 8010369 | P3-69 | 3Y-84 | 1084 | 1 |
| 8010370 | P3-70 | 3Y-88 | 1088 | 1 |
| 8010371 | P3-71 | 3Y-87 | 1087 | 1 |
| 8010372 | P3-72 | 3Y-90 | 1090 | 3 |
| 8010373 | P3-73 | 3Y-89 | 1089 | 3 |
| 8010375 | P3-74 | 3Y-99 | 1/4"x20x20 | 1 |
| 8010376 | P3-75 | 3Y-100 | 1099 | 1 |
| 8010377 | P3-76 | 3N-013 | 1100 | 2 |
| 8010378 | P3-77 | 3Y-101 | 9/64"x10 | 1 |
| 8010379 | P3-78 | 3Y-104 | 1101 | 2 |
| 8010380 | P3-79 | 3S-148 | 1104 | 2 |
| 8010381 | P3-80 | 3Y-103 | 9/64"x40 | 1 |
| 8010382 | P3-81 | 3Y-102 | 1103 | 1 |
| | P3-82 | | 1102 | |
| 8010384 | P3-83 | 3S-066 | 4x22 | 1 |
| | P3-84 | | | |
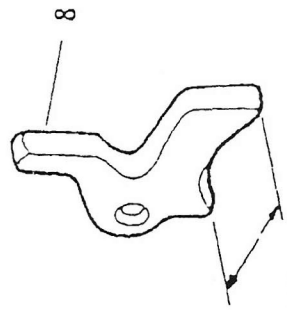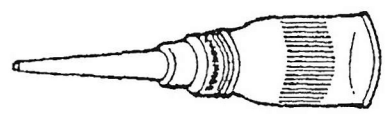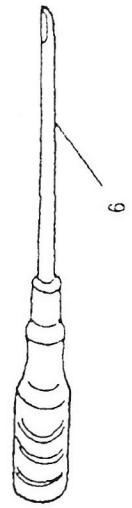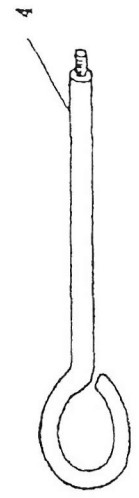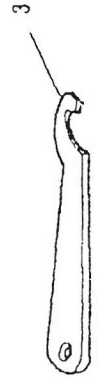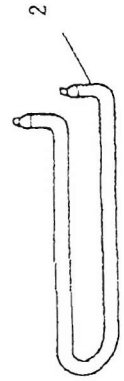
# 4.ACCESSORIES





## 4.ACCESSORIES

| Part NO. | | | Name of Part | Quan |
|---|---|---|---|---|
| 8010401 | P4-1 | 4A-3Y | 3001 | 1 |
| 8010402 | P4-2 | 4A-4Y | 3002 | 1 |
| 8010403 | P4-3 | 4A-5Y | 3004 | 1 |
| 8010404 | P4-4 | 4A-6Y | 3005 | 1 |
| 8010405 | P4-5 | 4A-7Y | 3006 | 1 |
| 8010406 | P4-6 | 4A-6B | 3007 | 1 |
| 8010407 | P4-7 | 4A-4B | 3008 | 1 |
| P4-16A | | | 1140A | 1 |
| P4-16B | | | 1140B | 1 |
| P4-16C | | | 1140C | 1 |
| P4-47 | | | 2002 | 2 |
| P4-46 | | | 2001 | 2 |
| P4-48 | | | 18x6.3x1.6 | 2 |
| P4-49 | | | 6x30 | 4 |
| P4-29 | | | 1018 | 1 |
| P4-30 | | | 1019 | 1 |
| P4-5 | | | 3006 | 1 |

SIZE