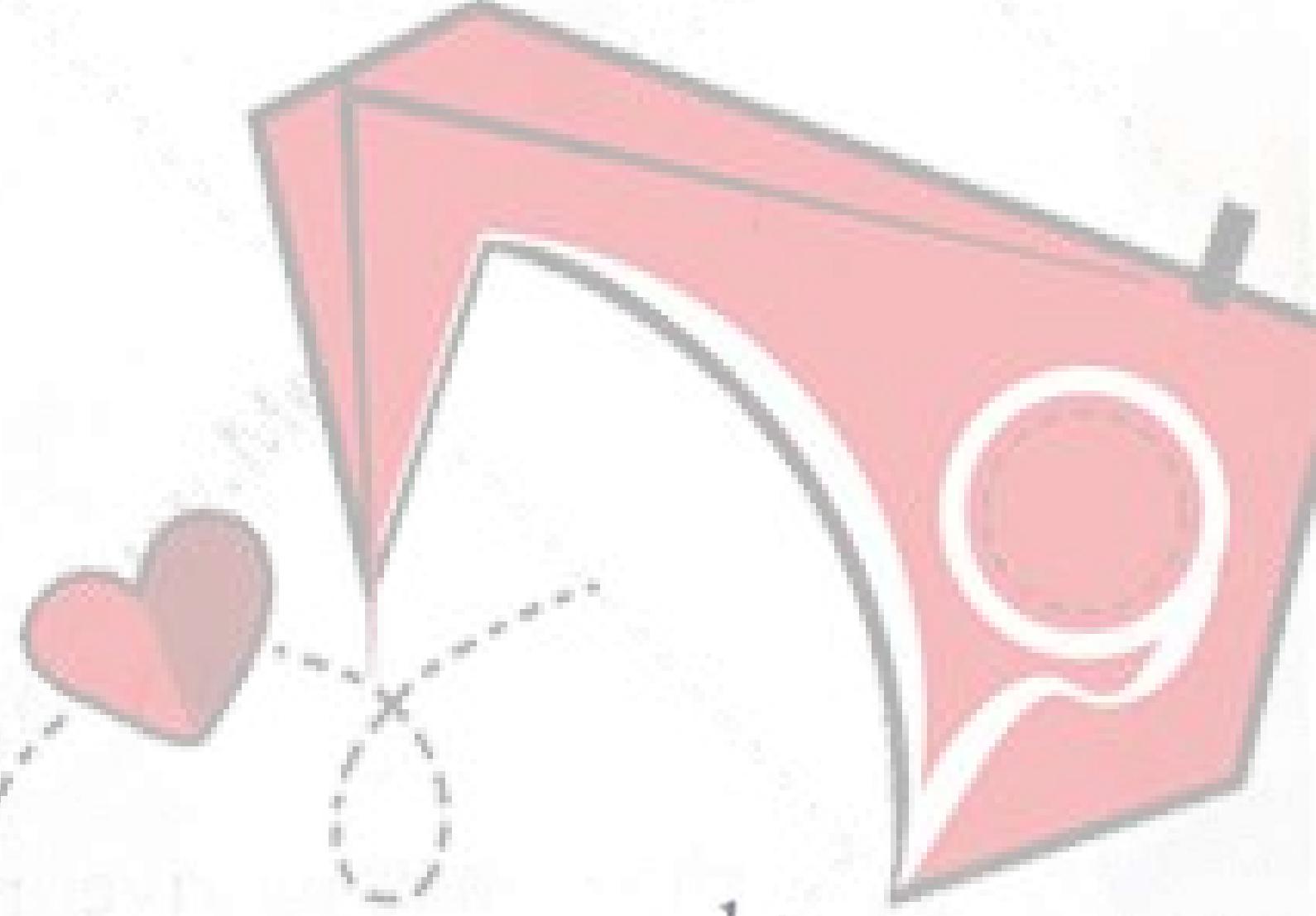


3A Type

Automatic Vapor eyelet Machine

## Specifications

# Catalogue



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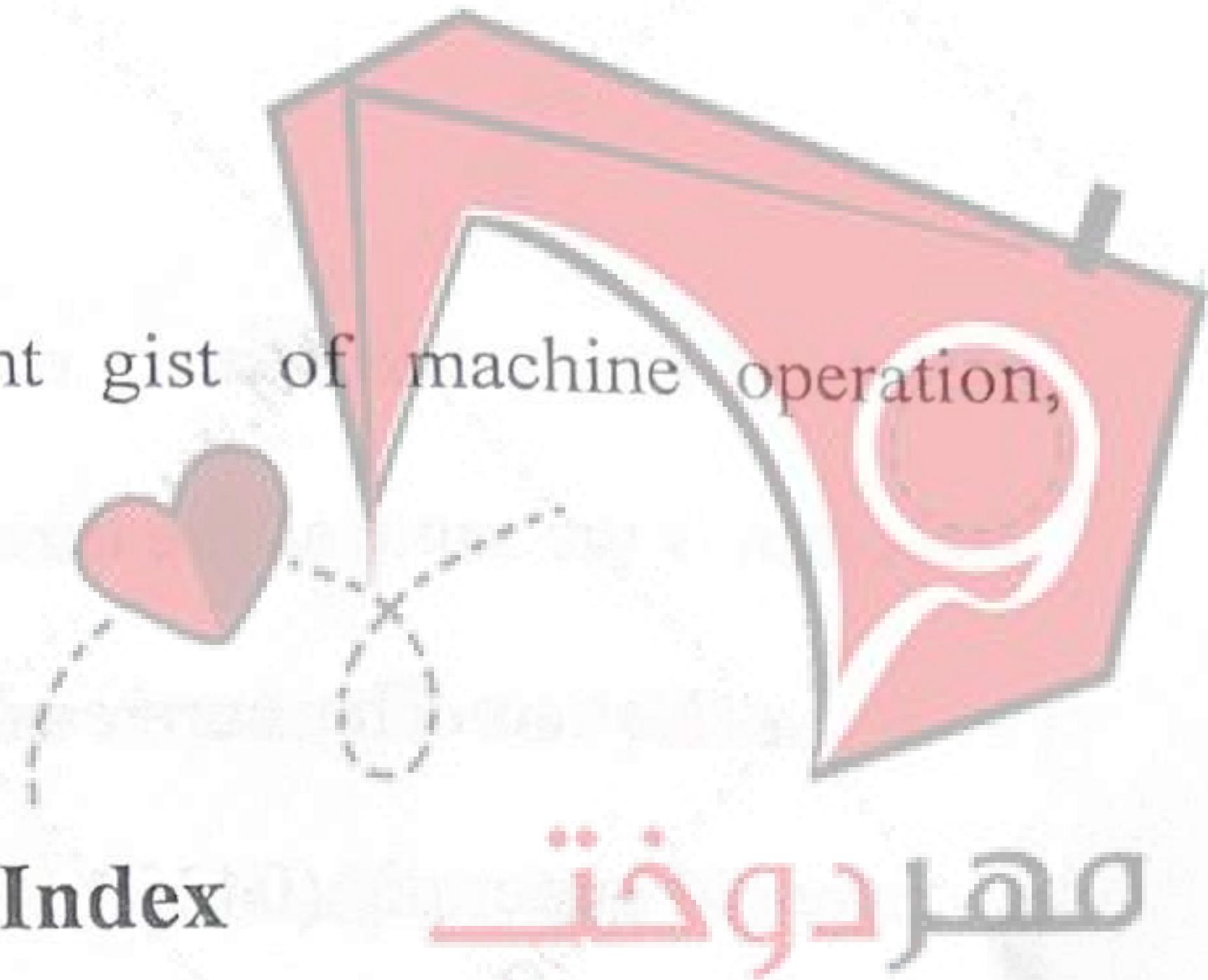
## 1. Introduction

3A Type automatic vapor eyelet machine is a kind of new shoes making riveting equipment which riveting single side shoe eyelet. It includes: shoe eyelet pitch adjustment device, punch device, feed device. It can automatically finish the working procedures like shoe eyelet transmission, upper punching, and riveting single side shoe eyelet which will achieve the easy stepless adjustment of shoe eyelet pitch. This machine has simple structure, good riveting quality, high produce efficiency and is easy to handle. It is a new type of shoes eyelet riveting equipment.

3A Type automatic vapor eyelet machine is the newest type of machine in our company after we explored CYJ-3 Type automatic vapor eyelet machine, XC-95 Type automatic double side shoe eyelet riveting machine and NK-108 Type (Double sides) shoe eyelet bonding machine. 3A Type automatic vapor eyelet machine has awarded national patent. The products in our company have been strictly tested before launch, so we ensure that they have good quality and excellent working capability. The accessories of products have perfect interchangeability.

In order to give you more information about 3A Type automatic vapor eyelet machine and let you use it at your pleasure, please read this specification book in detail, and operate the machine after that.

This book will provide you the right gist of machine operation, maintenance and accessories selection.



## 2. Technical Index

1. Speed of Riveting Shoe Eyelet: 250/ mins
2. Suitable shoe eyelet types: 200#, 350#, 450#, 600#
3. Shoe eyelet pitch: 15~35mm
4. Electromotor power: 0.55 kw.
5. Net weight of machine: 210kg
6. Space usage of machine: length\*width\*height 70\*55\*150 cu.cm.

## 3. Operation Instruction

Before using new machine, should clean machine's surface and move off the oil in machine's surface. Before and after every day's operation, oil 20# machine oil to oil position, transmission accessories and other movable accessories which will ensure related accessories are fully lubricated in order to avoid excessive abrasion and occlusion and keep good working capability of machine, prolong the machine's service life.

### 1. Startup

Turn the belt pulley (0218) in the direction which showed in its shield, and let belt pulley disengages from main axis (0201A), switch on

electrical source and turn on electromotor, check if electromotor's turning direction is the same as the direction in shield sign.

Notice: The converse turning of the machine will lead to the damages of upper die (0435A) and pin.

## 2. Usage of footplate.

Left footplate: Step on left footplate, rise foot, send the upper, then release left footplate, foot will pin the upper.

Right footplate: Step on footplate and release it immediately, can riveting shoe eyelet one by one, if keep step on, machine will riveting shoe eyelet continuously.

## 3. Operation of riveting shoe eyelet

Step on left footplate, put the upper on the filler (0615A), cutting knife (0312) focus on punching hole, release left footplate, step on right footplate can continually punching and riveting shoe eyelet in upper, but should release right footplate in the last shoe eyelet.

If find some ill-quality shoe eyelets, can make cutting knife focus on this eyelet again, step on right footplate and can repair this eyelet by single.

## 4. Adjustment of shoe eyelet pitch:

Loosen nut (0326), turn screw (0329) and let slider bolt (0321) moves. Turn screw in clockwise direction can prolong the eyelet pitch, and turn screw in anticlockwise direction can shorten the eyelet pitch.

When adjust to the needed shoe eyelet pitch, screw down nut (0326).

### 5. Adjustment of the height of foot

If the height is not enough when riveting cotton-padded shoes uppers, loosen the setscrew in foot (0427A), and adjust foot to a suitable height, then screw down screw.



## 4. Accessories needed to replace and the adjustment of different types of shoe eyelets riveting

Riveting different types of shoe eyelets need replace the following accessories: cutting knife (0312), upper die (0435), pin (0434A), low die (0613A), interval channel (0412), height adjustment of shoe eyelet canister (0508).

1. Replacement of cutting knife. Turn cutting knife contradictorily by using handle, and then take out the cutting knife to replace.

2. Replacement of upper die and pin. Turn belt pulley by hand and let the upper die rise to the highest position, then loosen clamp screw and can take out upper-low die, pin and spring (0433) to replace.

3. Low die replacements. Remove upper die firstly, then loosen the setscrew behind crown pillar (0611A) of low die, and take out the low die.

4. Replacement and adjustment of interval channel. Loosen

extension spring nut (0438) and the screw in interval channel bolt (0519), draw out the bolt and the interval channel can be taken out and replaced.

Need adjust the comparatively position of interval channel and pin after replacement:

(1). Loosen the nut in eccentricity bolt (0410), turn eccentricity bolt which can adjust the position of interval channel.

(2). Loosen three setscrews behind floor (0510), can adjust the deviation position between internal channel's down port and pin

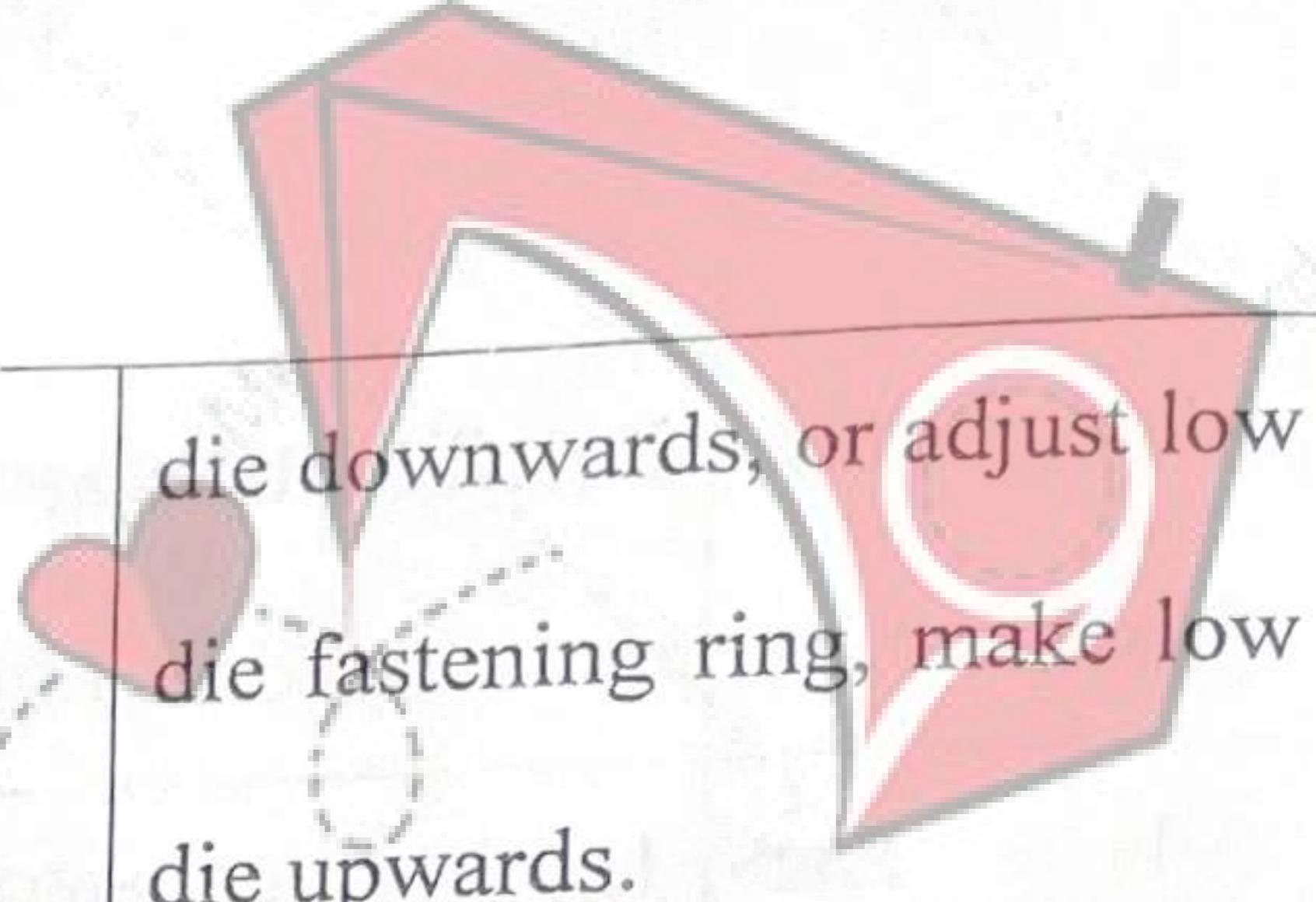
(3). Loosen the setscrew in bracket (0512), can adjust the high-low position of interval channel.

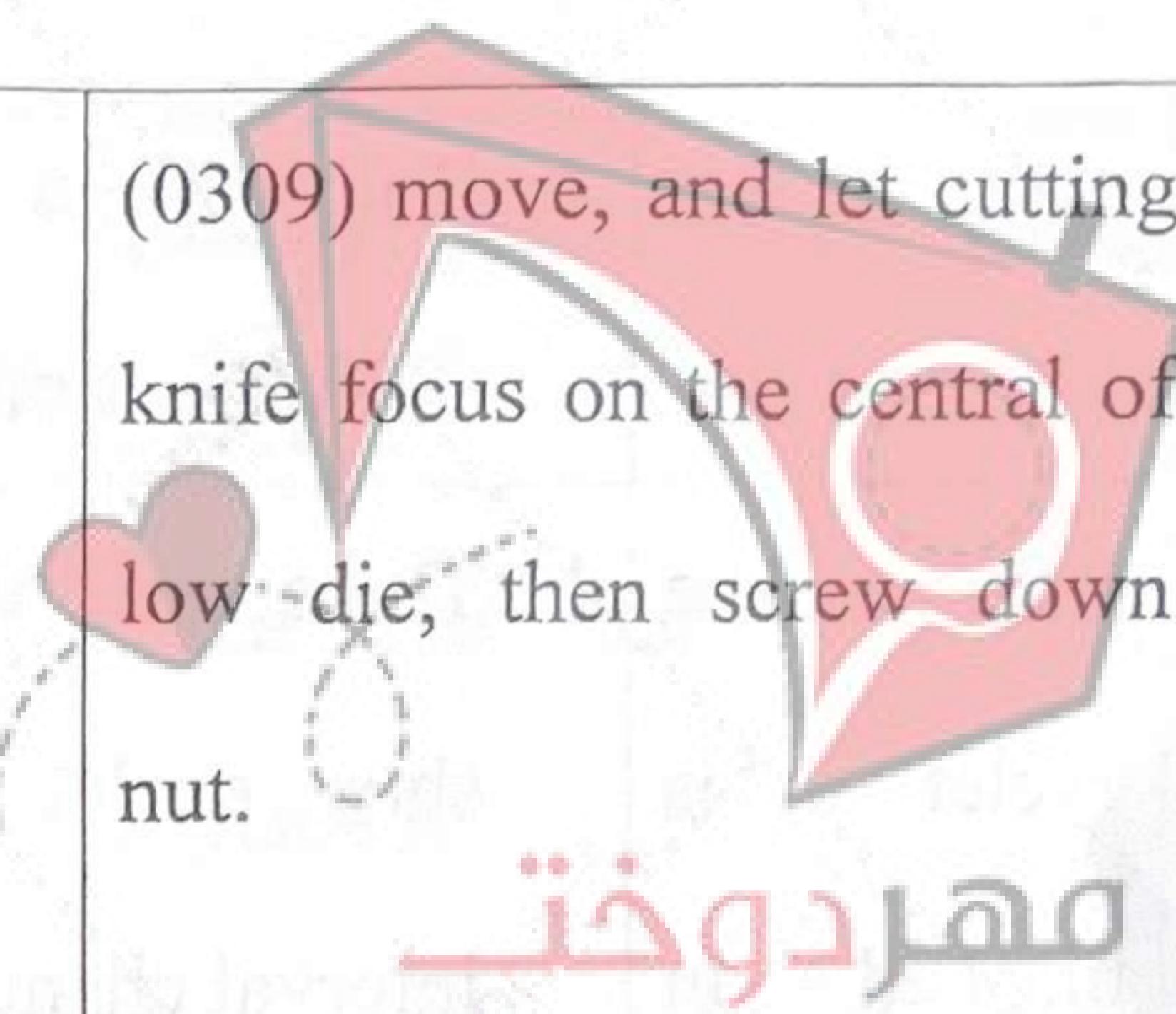
5. High-low adjustment of shoe eyelet canister:

Different shoe eyelet type needs different height, should adjust the gap between shoe eyelet canister (0508) and turnplate (0509), and turn screw in clockwise direction to let the gap between them becomes smaller. Turn screw in anticlockwise direction to let the gap between them becomes larger.

## 5.The reason and mend method of Main malfunction

Malfunction Condition	Possible Reason	Mend method
5-1 Can not punch through	<p>1. The cutting knife has gap or not sharp enough</p> <p>2. Cutting knife's lower punch power is not enough</p> <p>3. Abrasion of roller and roller bolt</p> <p>4. Abrasion of left 3-peach block (0209).</p> <p>5. Abrasion of filler (0615A)</p>	<p>Replace cutting knife. If cutting knife is not sharp, do not allow adjust cutting knife downwards and punching in force, which will cause machine parts damage.</p> <p>Adjust screw (0308) slightly, let cutting knife downwards.</p> <p>Remove rocker (0302A), and replace roller and roller bolt.</p> <p>Remove taper bolt (0211), take out main axis, replace left 3-peach block (0209), and rubdown or replace filler.</p>
5-2 Riveting shoe eyelet is	The gap between upper die and low die is too	Adjust spherical screw (0428) slightly, make upper

	too loose	large	 die downwards, or adjust low die fastening ring, make low die upwards.
5-3	Shoe eyelet and punch are not in the same position	<p>1. The workers hold upper too heavily</p> <p>2. The downwards distance of cutting knife is not enough, and when the cutting knife move, filler (0615A) gap is higher than upper's thickness</p> <p>3. After punching, eyelet position of cutting knife is not in the central of low die</p>	<p>Use a piece of cloth which has the same size of upper in advance, riveting in machine and check if shoe eyelet is accurate.</p> <p>Turn belt pulley by hands; check if the gap is too large between cutting knife and filler when moveable. If it is too high, should adjust screw (0308) slightly, and make cutting knife downwards, shorten the distance.</p> <p>Loosen spherical screw (0327), locknut and nut (0324), adjust spherical screw, make moving bracket</p>

		(0309) move, and let cutting knife focus on the central of low-die, then screw down nut.  دھن دھن خت
	4. When riveting cotton-padded shoes or thick upper, the rising height of foot (0427A) is not enough	Loosen setscrew in foot, and adjust the height of foot.
5-4 Shoe eyelet is distortion after riveting	<p>1. Shoe eyelet is riveted too tight.</p> <p>2. The central of upper die and low die is not the same</p> <p>3. Mold damages</p>	<p>Adjust spherical screw (0428), and adjust upper die distance upwards.</p> <p>Loosen four setscrews in low die bracket (0616A), move the low die and let it aim at the central of upper die.</p> <p>Replace mold.</p>

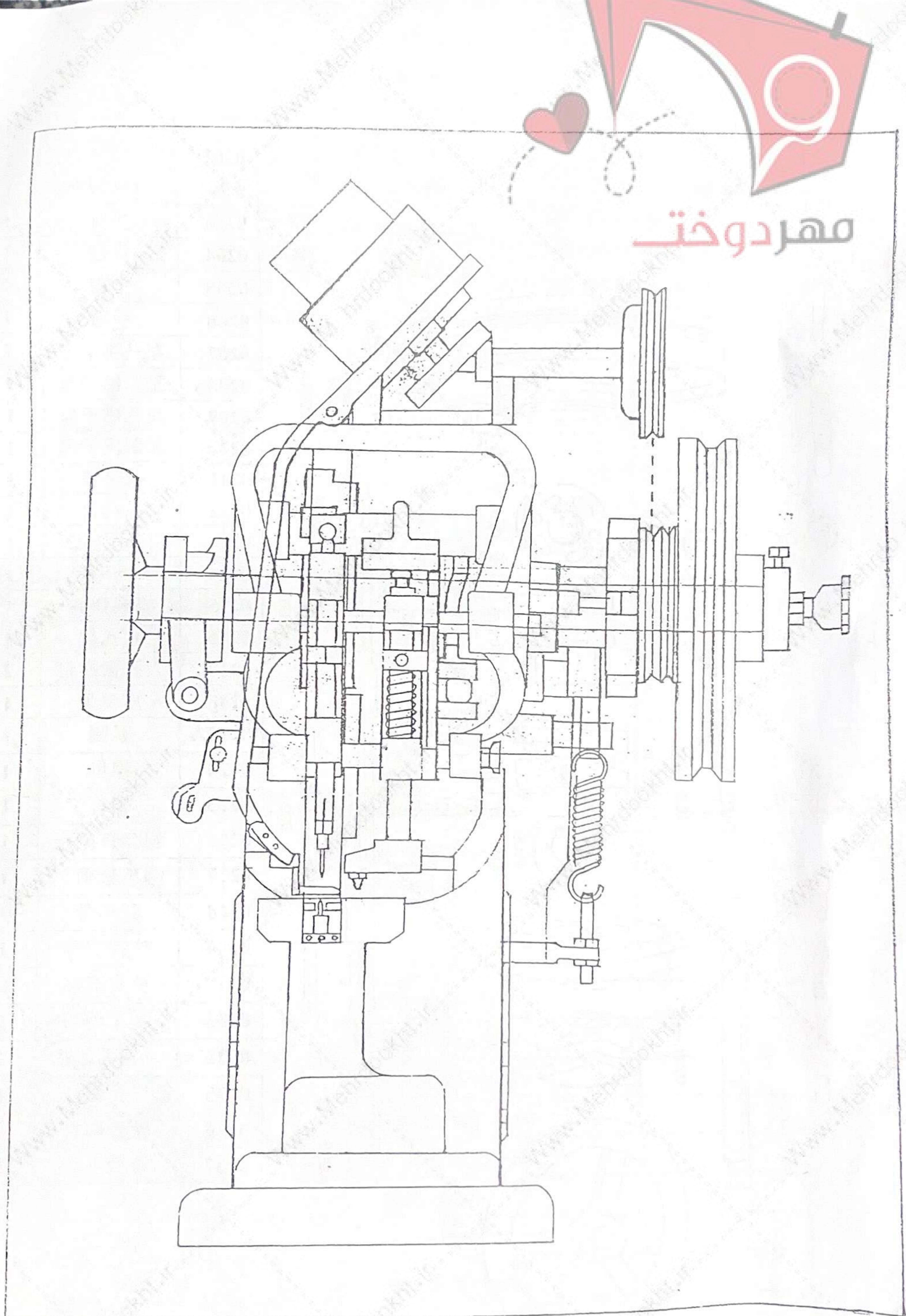
	4. Roller in rocker (0401A) damages	Take out rocker (0401A), replace roller.
5-5 shoe eyelet is blocked in interval channel or slot abrade and distort	<p>1. There is rubbish in shoe eyelet mode or interval channel</p> <p>2. The gap between shoe eyelet canister and turnplate is not suitable</p>	<p>Clean the shoe eyelet canister and interval channel by using hairbrush.</p> <p>Adjust the gap between shoe eyelet canister and interval channel, and make the gap 1.5mm larger than the height shoe eyelet.</p>
5-6 The position is not accurate when interval channel send eyelet	1. The spring in interval channel is too loosen	Adjust extension spring nut (0438), and add pull.
5-7 When step on footplate, belt pulley	<p>1. Spring (0215) damage</p> <p>2. bolt (0214) damage</p>	<p>Remove the baffle (0213) in bolt, take out spring and replace it.</p> <p>Remove number control plate</p>

and the main axis do not turn or has deviant sound.		<p>(0220) and belt pulley (0218), Take out bolt and then replace it.</p>
5-8 After finish one shoe eyelet riveting, pin nail rising distance is not enough	<ol style="list-style-type: none"> <li>1. The pressure in bow compression spring (0225) in brake is too big</li> <li>2. The pressure in compression is too small, has spring when stop</li> <li>3. Brake lining (0230) in brake bow damages</li> </ol>	<p>Adjust the screw of compression spring, and decrease the pressure of compression spring.</p> <p>Adjust the screw of compression spring, and increase the pressure.</p> <p>Remove brake bow, and replace brake lining.</p>

Notice: After any accessories in the machine has been adjusted or replaced, should turn belt pulley by hands, and inspect the operation of every part in detail. Inspect if these parts are flexible, and ensure has no danger before startup electromotor.

## 6. Accessories and tool table

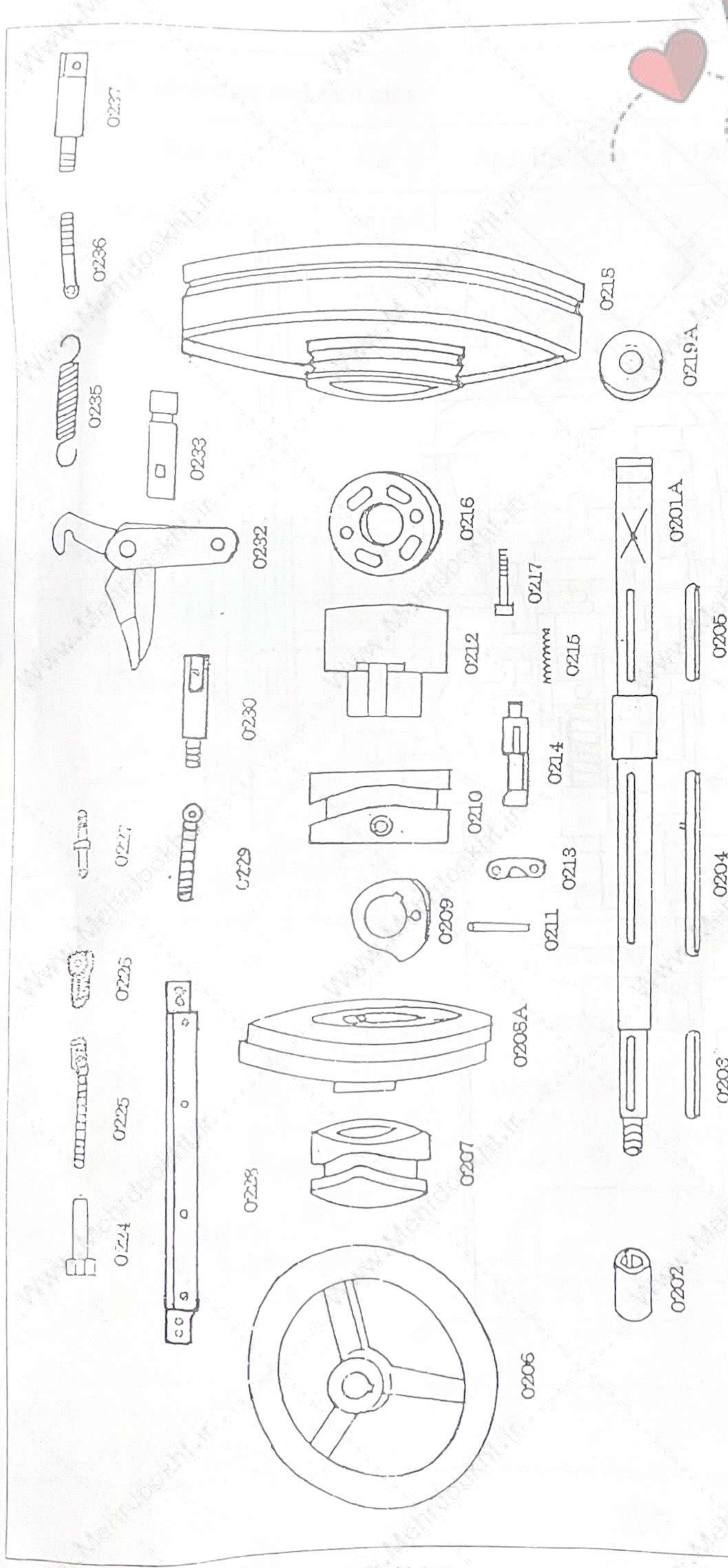
Name	No.	Specification	Quantity	Notes
Cutting knife	0312		4	
Upper die	0435		2	
Pin	0434		4	
Lower die	0613A		2	
Bolt	0214		1	
Pin spring	0433		8	
Bolt spring	0215		8	
Extension spring	0436		2	
Brake pad	0228		1	Oxhide
Oil gun		High pressure	1	
Screwdriver		Cross-head screwdriver, screwdriver	2	
Hexagonal socket head wrench		Φ6 Φ8 Φ10	3	
Open end wrench		8-10 12-14 14-17	3	
Steel draw point			1	
Specification			1	



图一：自动汽眼机机头外形图

Diagram 1: Figuration drawing of the head of automatic vapor eyelet  
machine

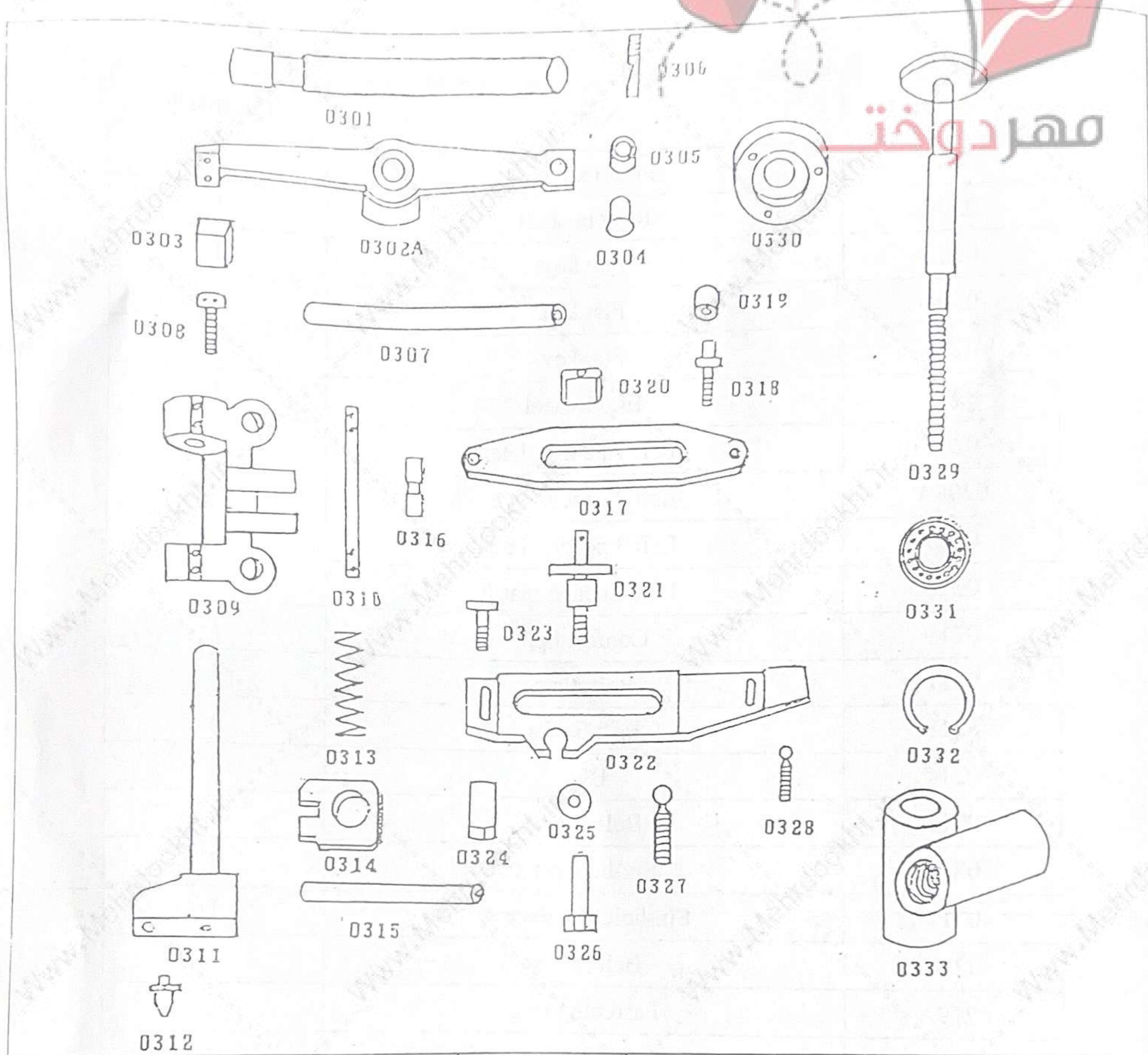
件号	名称	数量
0201A	主轴	1
0202	轴中川	1
0203	平键	1
0204	平键	1
0205	平键	1
0206	手轮	1
0207	左一桃子盘	1
0208A	左二桃子盘	1
0209	左三桃子盘	1
0210	左四桃子盘	1
0211	圆锥肖	1
0212	插销盘	1
0213	插销挡板	1
0214	插销	1
0215	插销弹簧	1
0216	六孔盘	1
0217	六孔盘螺钉	2
0218	皮带盘	1
0219A	紧圈	1
0224	螺母	1
0225	螺钉	1
0226	刹车带接头	1
0227	刹车带销子	1
0228	刹车带	1
0229	拉簧螺钉	1
0230	拉簧支柱	2
0232	刹车闸刀	1
0233	闸刀销	1
0235	拉簧	1
0236	拉簧螺钉	1
0237	拉簧支柱	1



图二: 02 主轴部分零配件图

Diagram 2: Accessory diagram of main axis parts

No.	Name	Quantity
0201A	Principal axis	1
0202	Ring in shaft	1
0203	Flat key	1
0204	Flat key	1
0205	Flat key	1
0206	Handwheel	1
0207	Left 1 peach plate	1
0208A	Left 2 peach plate	1
0209	Left 3 peach plate	1
0210	Left 4 peach plate	1
0211	Conical bolt	1
0212	Bolt plate	1
0213	Bolt baffle	1
0214	Bolt	1
0215	Bolt spring	1
0216	Six-hole plate	1
0217	Six-hole plate screw	2
0218	Belt pulley	1
0219A	Fastening ring	1
0224	Nut	1
0225	Screw	1
0226	Brake with joint	1
0227	Brake with bolt	1
0228	Brake lining in roll	1
0229	Extension spring screw	1
0230	Extension spring pillar	2
0232	Brake knife	1
0233	Knife bolt	1
0235	Extension spring	1
0236	Extension spring screw	1
0237	Extension spring pillar	1

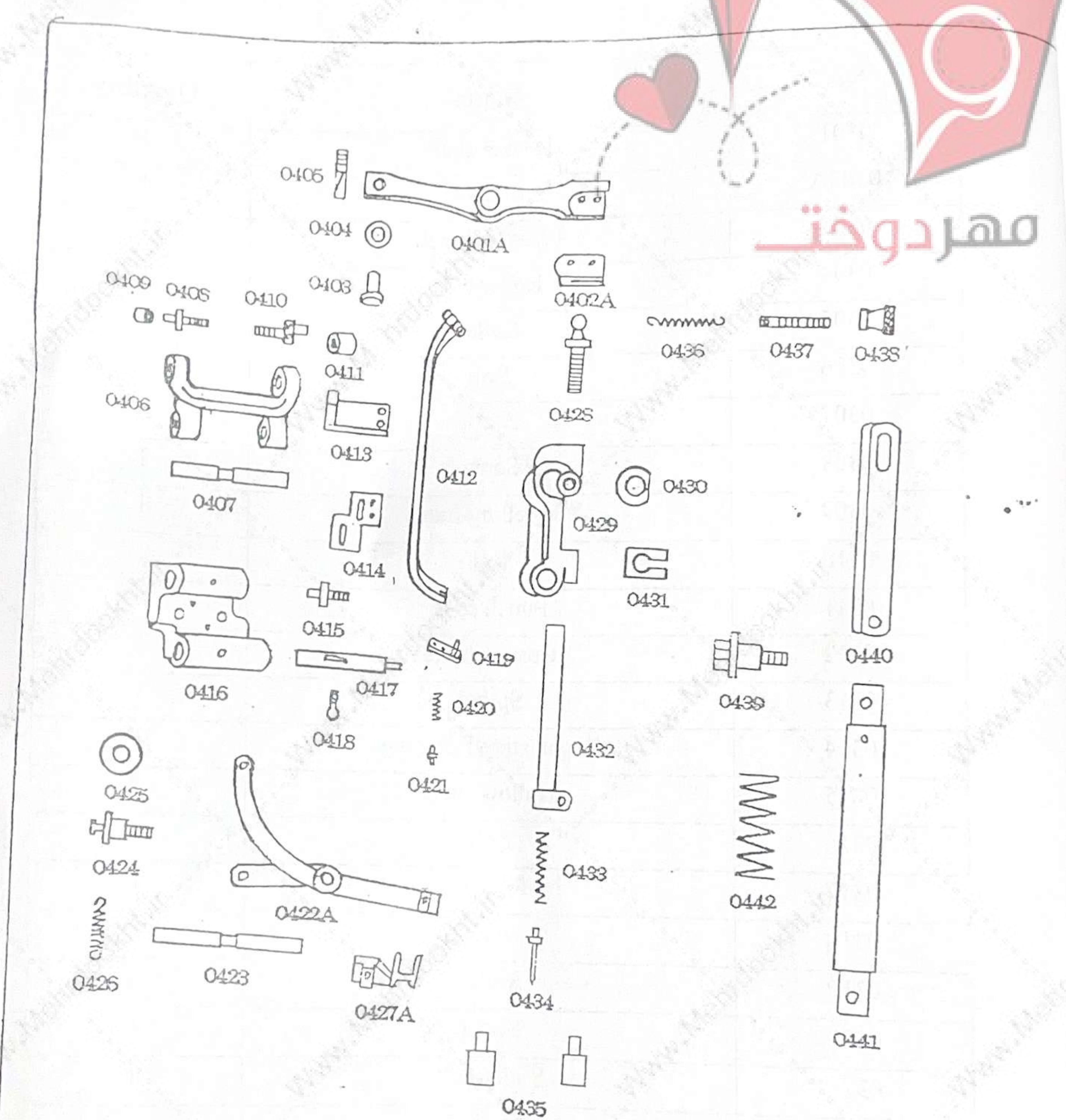


件号	名称	数量	件号	名称	数量	件号	名称	数量
0301	摇臂轴	1	0312	冲刀	1	0323	螺钉	1
0302A	摇臂	1	0313	弹簧	1	0324	螺母	1
0303	压块	1	0314	冲眼棒轧头	1	0325	压板	1
0304	滚子肖	1	0315	空心轴	1	0326	螺母	1
0305	滚子	1	0316	肖	1	0327	球形螺钉	1
0306	肖	1	0317	摇臂	1	0328	球形螺钉	1
0307	轴	1	0318	滚子肖	1	0329	螺杆	1
0308	螺钉	1	0319	滚子	1	0330	轴承座	1
0309	移动架	1	0320	滑块	1	0331	轴承	1
0310	键	1	0321	滑块销	1	0332	挡川	1
0311	冲眼棒	1	0322	支架	1	0333	调节螺母	1

图三: 03 冲孔与孔距调节部分零配件图

Diagram 3: Accessory diagram of punch and pitch adjustment parts

No.	Name	Quantity
0301	Rocker shaft	1
0302A	Rocker	1
0303	Pressing block	1
0304	Roller bolt	1
0305	Roller	1
0306	Bolt	1
0307	Shaft	1
0308	Screw	1
0309	Travelling frame	1
0310	Key	1
0311	Punch stick	
0312	Cutting knife	1
0313	Spring	1
0314	Punch stick fastening	1
0315	Hollow shaft	1
0316	Bolt	1
0317	Rocker	1
0318	Roller bolt	1
0319	Roller	1
0320	Slider	1
0321	Slider bolt	1
0322	Bracket	
0323	Screw	1
0324	Nut	1
0325	Punch pad	1
0326	Nut	1
0327	Spherical screw	1
0328	Spherical screw	1
0329	Screw	1
0330	Bearing pedestal	1
0331	Bearing	1
0332	Closing ring	1
0333	Adjusting nut	1

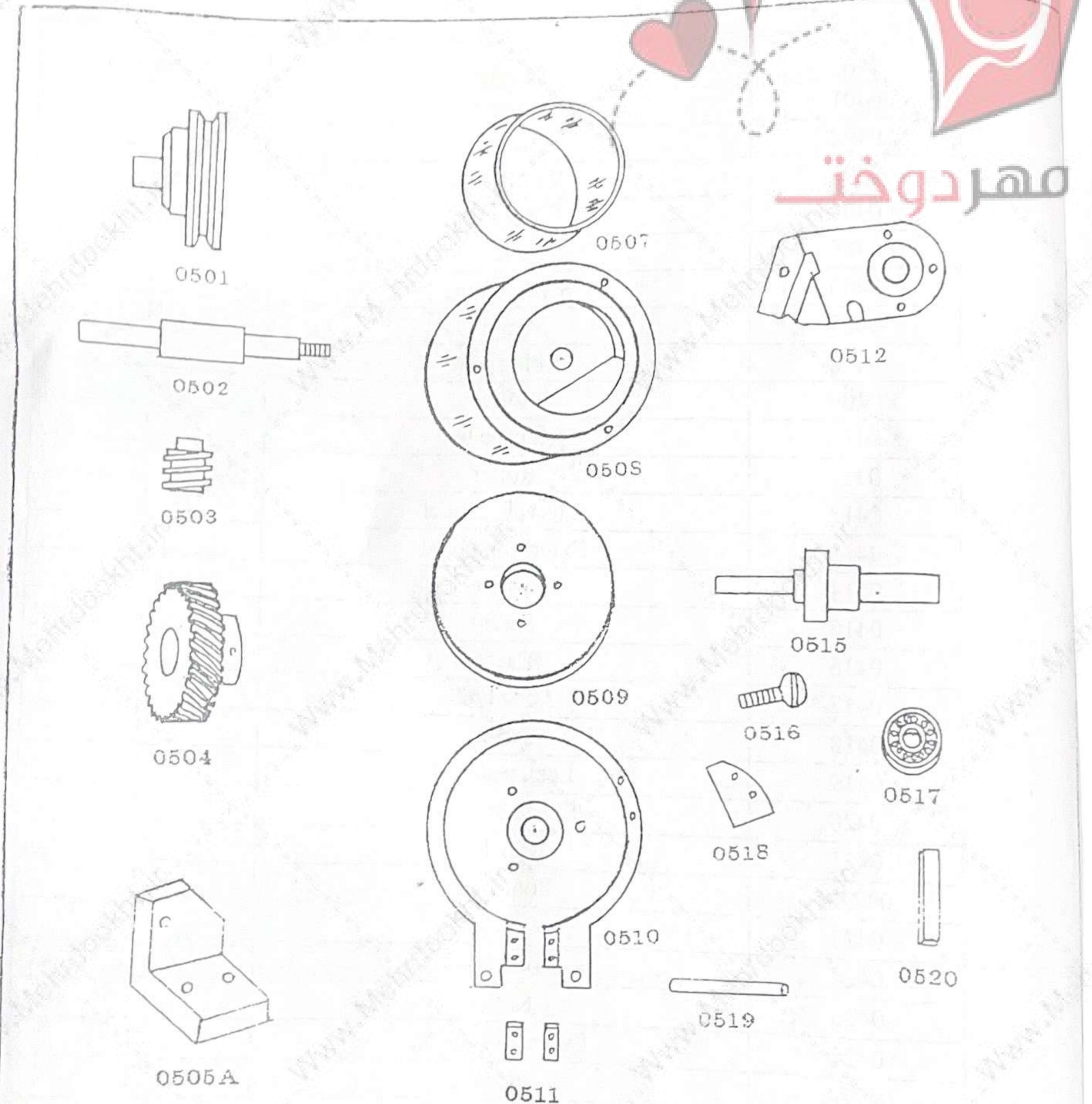


件号	名称	数量	件号	名称	数量	件号	名称	数量	件号	名称	数量
0401A	摇臂	1	0411	滚子	1	0422A	压脚杆	1	0433	扦钩弹簀	1
0402A	揻块	1	0412	流道	1	0423	轴	1	0434	扦针	1
0403	滚子肖	1	0413	拉板	1	0424	滚子肖	1	0435	上模	1
0404	滚子	1	0414	卡板	1	0425	滚子	1	0436	拉簧	1
0405	销	1	0415	螺钉	1	0426	拉簧	1	0437	螺丝	1
0406	摆动架	1	0416	支架	1	0427A	压脚	1	0438	螺母	1
0407	轴	1	0417	锁肖	1	0428	球形螺钉	1	0439	螺钉	2
0408	滚子肖	1	0418	螺钉	1	0429	支架	1	0440	连杆	1
0409	滚子	1	0419	锁座	1	0430	紧卷	1	0441	连杆	1
0410	偏心肖	1	0420	锁筒	1	0431	紧卷	1	0442	弹簀	1
			0421	锁子	1	0432	汽眼杆	1			

图四：04 上模与流道传动部分零配件图

Diagram 4: Accessory diagram of upper die and interval channel transmission parts

No.	Name	Quantity
0401	Rocker	1
0402	Mass	1
0403	Roller bolt	1
0404	Roller	1
0405	Pin	1
0406	Swing frame	1
0407	Shaft	1
0408	Roller bolt	1
0409	Roller	1
0410	Eccentric bolt	1
0411	Roller	1
0412	Interval channel	1
0413	Extension board	1
0414	Pallet	1
0415	Screw	1
0416	Bracket	1
0417	Lock bolt	1
0418	Screw	1
0419	Lock pedestal	1
0420	Lock spring	1
0421	Lock	1
0422A	Foot pole	1
0423	Shaft	1
0424	Roller bolt	1
0425	Roller	1
0426	Extension spring	1
0427A	Foot	1
0428	Spherical screw	1
0429	Bracket	1
0430	Fastening ring	1
0431	Fastening ring	1
0432	Vapor eyelet jumper bar	1
0433	Pin spring	1
0434	Pin	1
0435	Upper die	1
0436	Extension spring	1
0437	Screw	1
0438	Nut	2
0439	Screw	1
0440	Connection rod	1
0441	Connection rod	1
0442	Spring	

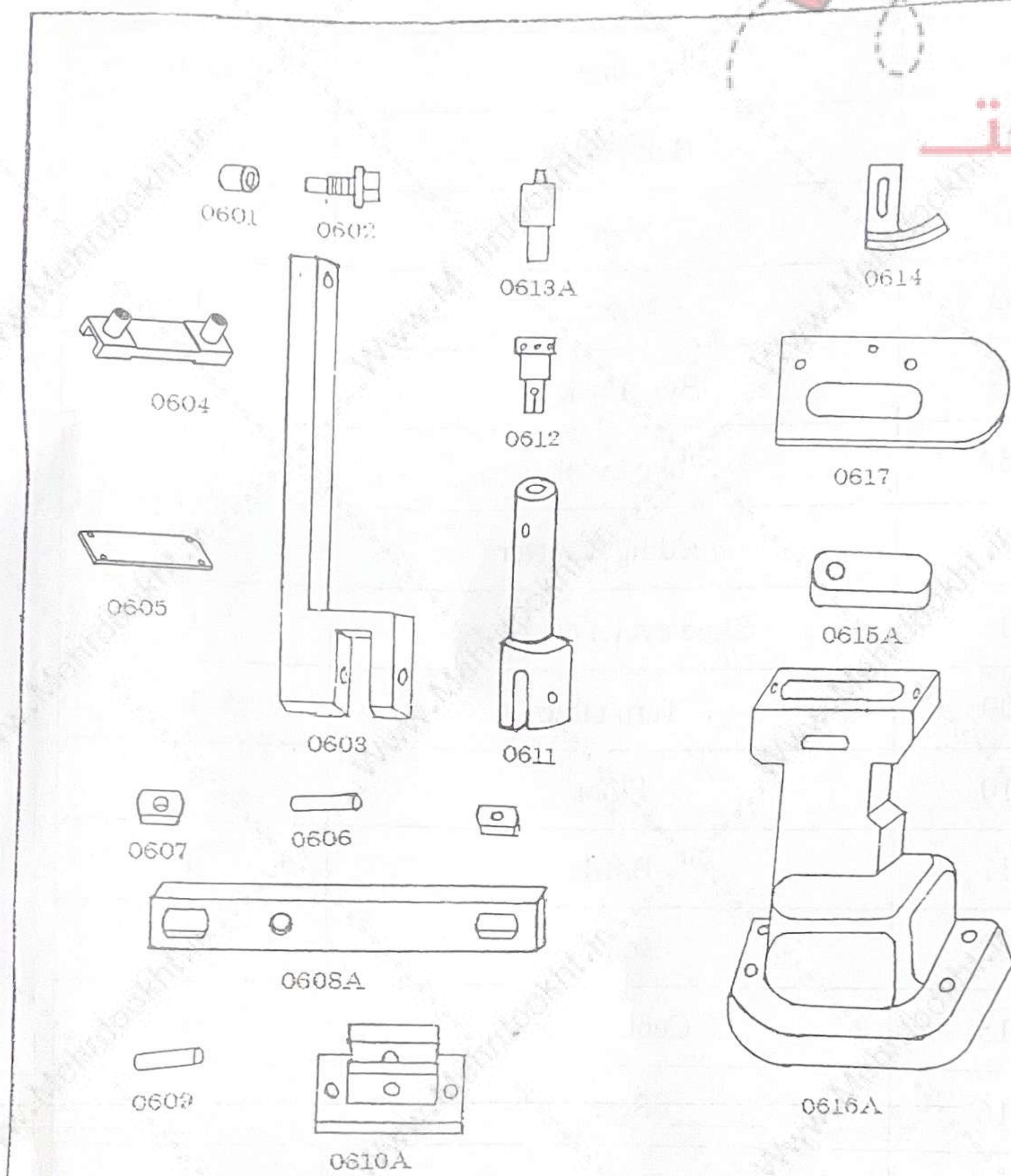


件号	名称	数量	件号	名称	数量	件号	名称	数量
0501	皮带轮	1	0508	鞋眼筒	1	0516	螺钉	1
0502	轴	1	0509	转 盘	1	0517	轴 承	2
0503	蜗 杆	1	0510	底 盘	1	0518	挡 板	1
0504	斜 齿 轮	1	0511	挡 板	1	0519	肖	1
0505A	架 座	1	0512	支 架	1	0520	平 键	1
0507	加 料 筒	1	0515	中心轴	1			

图五：05 鞋眼筒部分零配件图

Diagram 5: Accessory diagram of shoe eyelet canister

No.	Name	Quantity
0501	Belt pulley	1
0502	Shaft	1
0503	Worm	1
0504	Bevel wheel	1
0505A	Pedestal	1
0507	Feeding canister	1
0508	Shoe eyelet canister	1
0509	Turn table	1
0510	Floor	1
0511	Baffle	1
0512	Bracket	1
0515	Central axis	1
0516	Screw	1
0517	Bearing	2
0518	Baffle	1
0519	Bolt	1
0520	Flat key	1

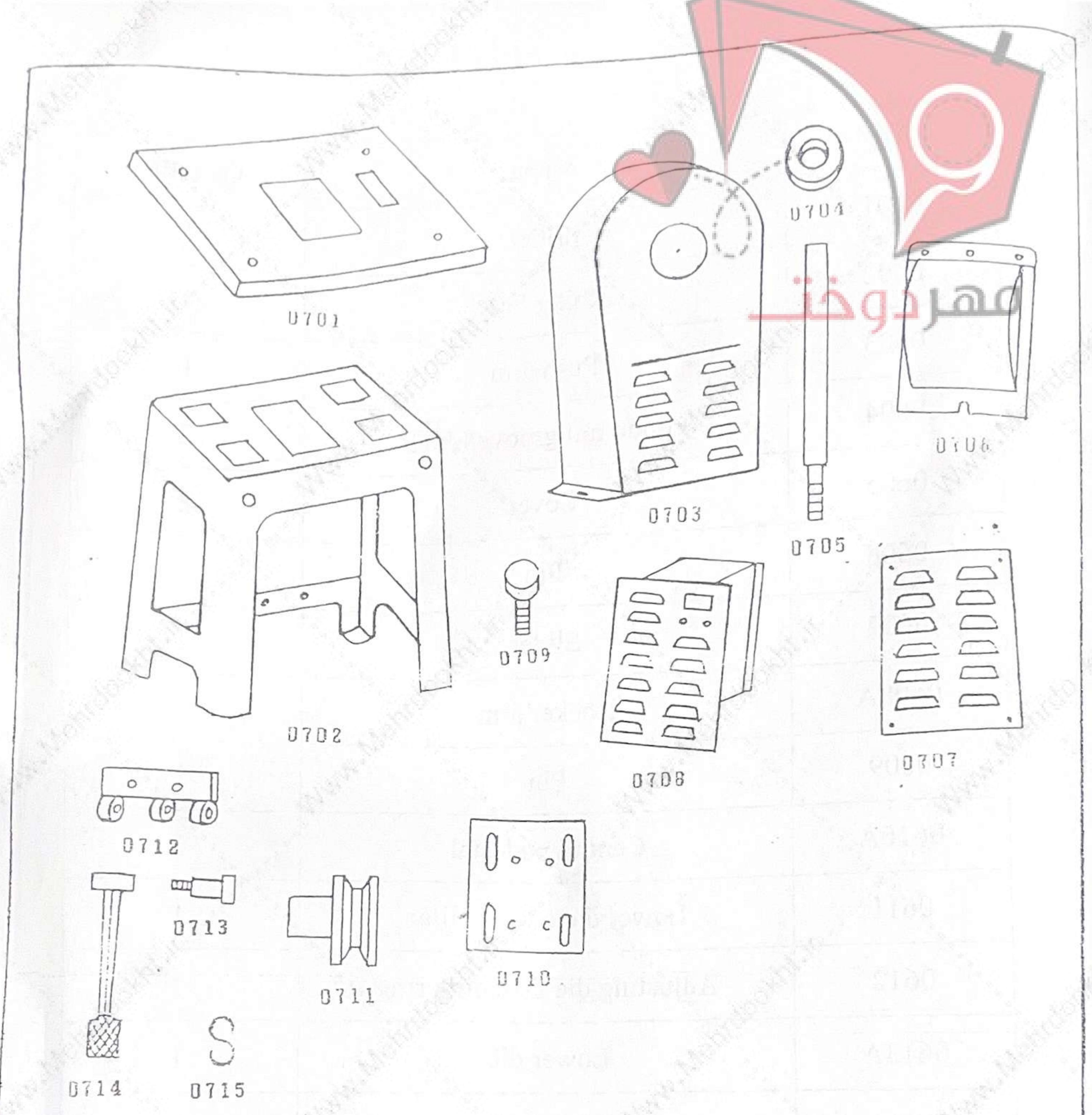


件号	名称	数量	件号	名称	数量	件号	名称	数量
0601	滚子	1	0608A	摆杆臂	1	0615A	填块	1
0602	滚子肖	1	0609	销	1	0616A	下模座架	1
0603	推臂	1	0610A	中心座	1	0617	面板	
0604	导槽轨块	2	0611	下模顶柱	1			
0605	盖	2	0612	调模紧固	1			
0606	销	2	0613A	下模	1			
0607	滑块	2	0614	靠板	1			

图六：06 下模传动部分零配件图

Diagram 6: Accessory diagram of lower die transmission parts

No.	Name	Quantity
0601	Roller	1
0602	Roller bolt	1
0603	Push arm	1
0604	Guide rail groove block	2
0605	Cover	2
0606	Pin	2
0607	Slider	2
0608A	Rocker arm	1
0609	Pin	1
0610A	Central pedestal	1
0611	Lower die crown pillar	1
0612	Adjusting die fastening ring	1
0613A	Lower die	1
0614	Backboard	1
0615A	Filler	1
0616A	Lower die pedestal	1
0617	Face plate	1



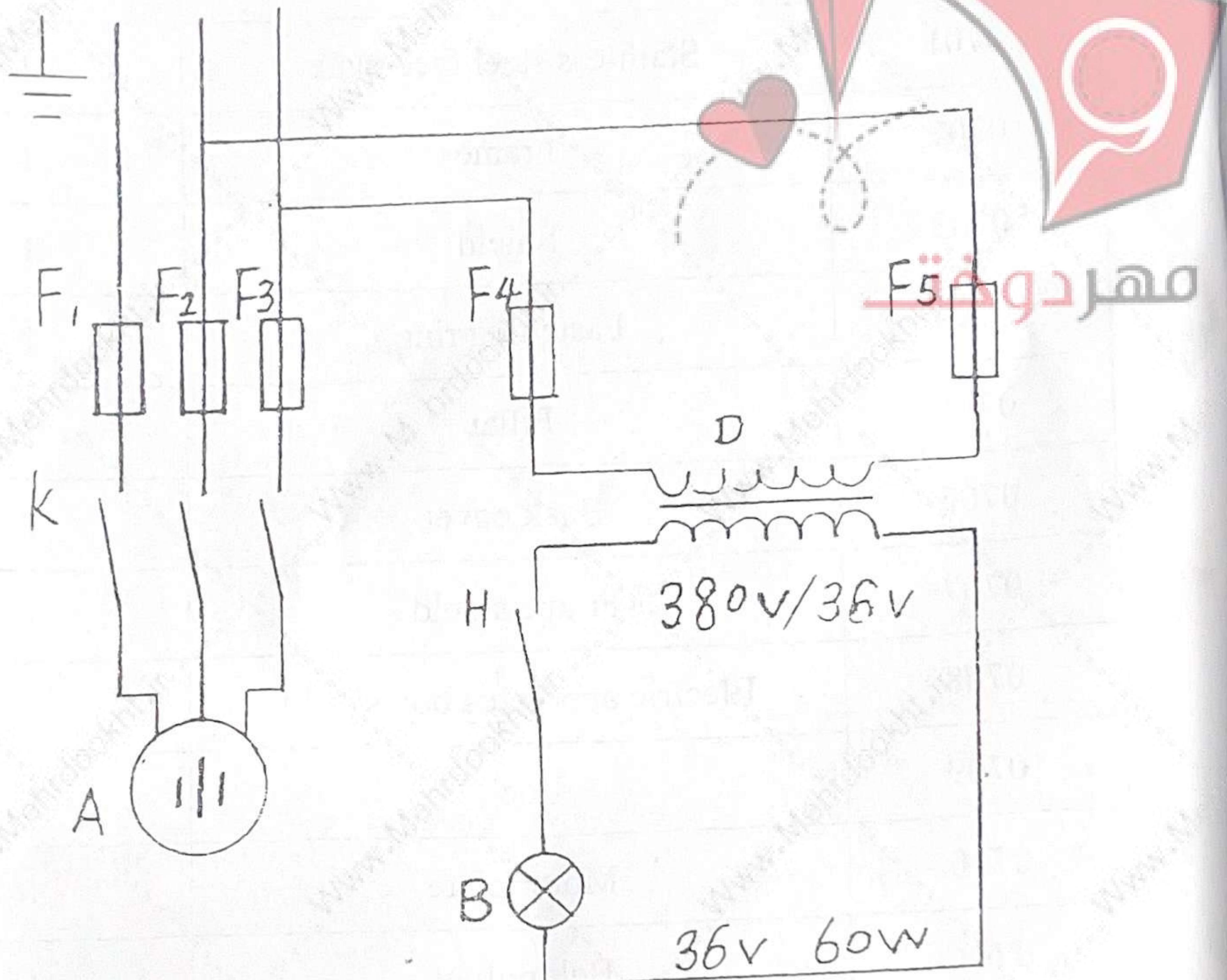
件号	名 称	数 量	件号	名 称	数 量
0701	不锈钢面板	1	0709	锁	1
0702	机 架	1	0710	马达板	1
0703	护 罩	1	0711	皮带轮	1
0704	紧 圈	1	0712	踏板架	1
0705	柱 杆	1	0713	螺 钉	2
0706	后 罩	1	0714	踏 板	2
0707	架 罩	1	0715	S 构	4
0708	电器箱罩	1			

图七：07 机架部分零配件图

Diagram 7: Accessory diagram of frame parts

No.	Name	Quantity
0701	Stainless steel face plate	1
0702	Frame	1
0703	Shield	1
0704	Fastening ring	1
0705	Pillar	1
0706	Back cover	1
0707	Frame shield	1
0708	Electric apparatus box shield	1
0709	Lock	1
0710	Motor plate	1
0711	Belt pulley	1
0712	Step tread frame	1
0713	Screw	2
0714	Step tread	2
0715	S form	4

N L<sub>1</sub> L<sub>2</sub> L<sub>3</sub>



Code	Name	Quantity
L	Wire	
N	Ground wire	
F	Fuse	
K	Switch	
A	Motor	
D	Transformer	
H	Push button switch	
B	Working light	

代号	名称
L	电源线
N	地 线
F	熔断器
K	开 关
A	电动机
D	变压器
H	按钮开关
B	工作灯

图八：电气原理图

Diagram 8: Electric schematic diagram--- Enclosed diagram