



LPZ 9910 series

**Spare parts
& instruction manual**

With industrial sewing machines, it is normal to carry out work while positioned directly in front of moving parts such as the needle and thread take-up, and consequently there is always a danger of injury that can be caused by these parts. Follow the instructions from training personnel and instructors regarding safe and correct operation before operating the machine so that you will know how to use it correctly.

SAFETY INSTRUCTIONS

1. Safety indications and their meanings

This instruction manual and the indications and symbols that are used on the machine itself are provided in order to ensure safe operation of this machine and accidents and injury to yourself or other people.

Indications



This instructions which follow this term indicate situations where failure to follow the instructions could cause injury using the machine or physical damage to equipment and surroundings.

Symbols



• • •

This symbol (r) indicates something that you should be careful. The picture inside the triangle indicates the nature of the caution that must be taken. (For example, the symbol at left means "beware of injury".)



• • •

This symbol (X) indicates something that you must not do.



• • •

This symbol (") indicates something that you must do. The picture inside the circle indicates the nature of the thing that must be done. (For example, the symbol at left means "you must make the ground connection".)

2.Note on safety

CAUTION

Environmental requirements



Use the sewing machine in an area which is free from sources of strong electrical noise such as high-frequency welders. Sources of strong electrical noise may cause problems with correct operation.



Any fluctuations in the power supply voltage should be within $\pm 10\%$ of the rated voltage for the machine. Voltage fluctuations which are greater than this may cause problems with correct operation.



The power supply capacity should be greater than the requirements for the sewing machine's electrical consumption.



The ambient temperature should be within the range of 5°C - 35°C during use. Temperatures which are lower or higher than this may cause problems with correct operation.



The relative humidity should be within the range of 45%-85% during use, and no dew formation should occur in any devices. Excessively dry or humid environments and dew formation may cause problems with correct operation.



Avoid exposure to direct sunlight during use. Exposure to direct sunlight may cause problems with correct operation.



In the event of an electrical storm, turn off the power and disconnect the power cord from the wall outlet. Lightning may cause problems with correct operation.

Installation



Machine installation should only be carried out by a qualified technician.



Contact your JUMBAO dealer or a Qualified electrical work that may need to be done.



The sewing machine weighs approximately 36KG. The installation should be carried out by two or more people.



Be sure to connect the power cord until installation is complete. The machine may operate if the treadle is depressed by mistake, which could result in injury.



Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.



All cords should be secured at least 25mm away from any moving parts. Furthermore, do not excessively bend the cords or secure them too firmly with staples, otherwise there is the danger that fire or electric shocks could occur.



If using a work table which has casters, the casters should be secured in such a way so that they cannot move.



Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.



Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin. Otherwise inflammation can result. Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea. Keep the oil out of children.

▲ CAUTION

Sewing



This sewing machine should only be used by operators who have received the necessary training in safe use beforehand.



The sewing machine should not be used for any applications other than sewing.



Be sure to wear protective goggles when using the machine.

If goggles are not worn, there is the danger that if a needle breaks, parts of the broken needle may enter your eyes and injury may result.



Turn off the power switch at the following times. The motor will keep turning even after the power is switched off as a result of the motor's inertia wait until the motor stops fully before starting work. The machine may operate if the treadle is depressed by mistake, which could result in injury.

- When threading the needle
- When replacing the bobbin and needle
- When not using the machine and when leaving the machine unattended



If using a work table which has casters, the casters should be secured in such a way so that they cannot move.



Attach all safety devices before using the sewing machine.

If the machine is used without these devices attached, injury may result.



Do not touch any of the moving parts or press any objects against the machine while sewing. As this may result in personal injury or damage to the machine.



Use both hand to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.



If an error occurs in machine, or if abnormal noises or smells are noticed, immediately turn off the power switch. Then contact your nearest JUMBAO dealer or a qualified technician.



If the machine develops a problem, contact your nearest JUMBAO dealer or qualified technician.

Cleaning



Turn off the power switch before carrying out cleaning. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work. The machine may operate if the treadle is depressed by mistake, which could result in injury.



Use both hand to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.



Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin, otherwise inflammation can result. Furthermore, do not drink the oil or eat the grease vomiting and diarrhea.

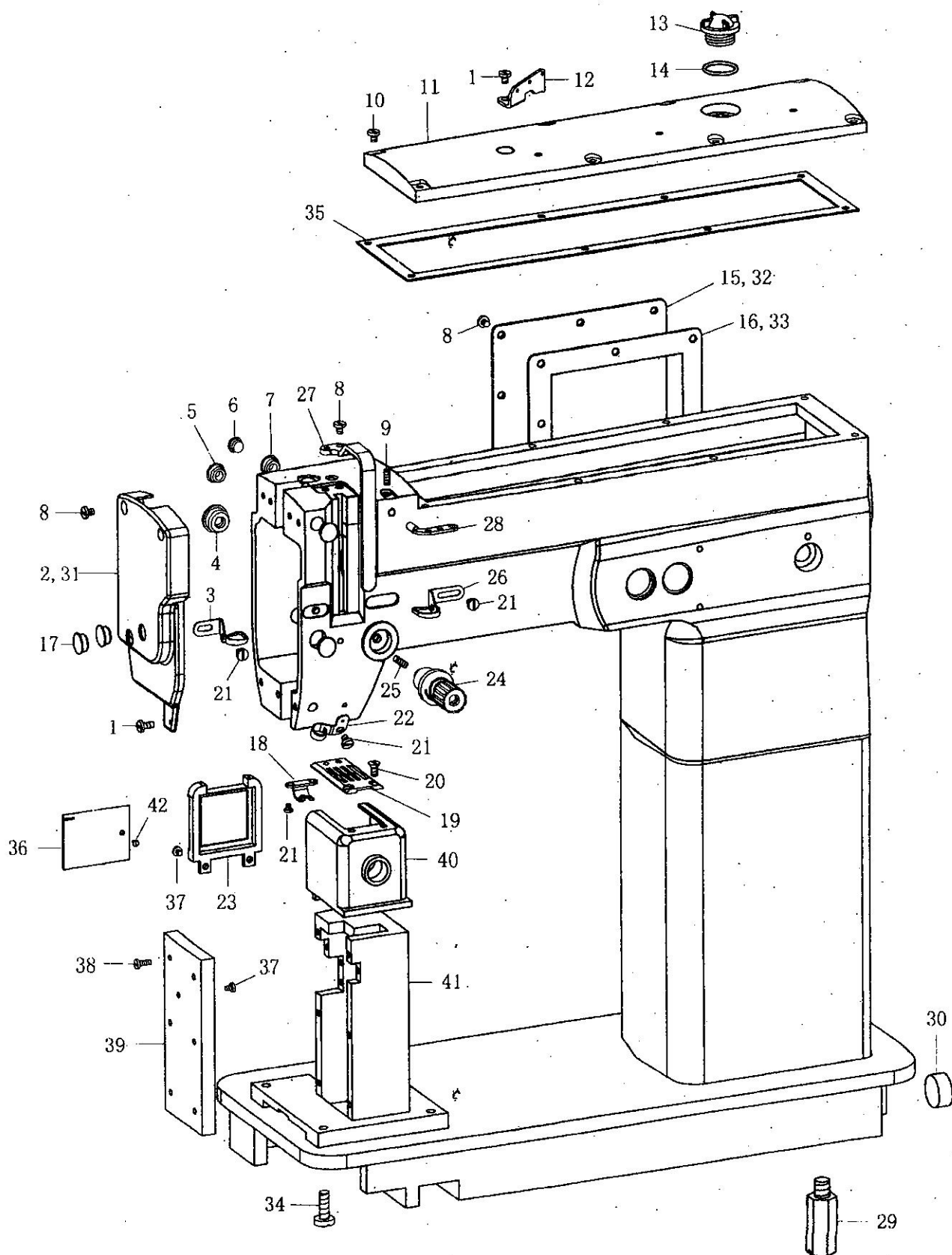


Use only the proper replacement parts as specified by JUMBAO.

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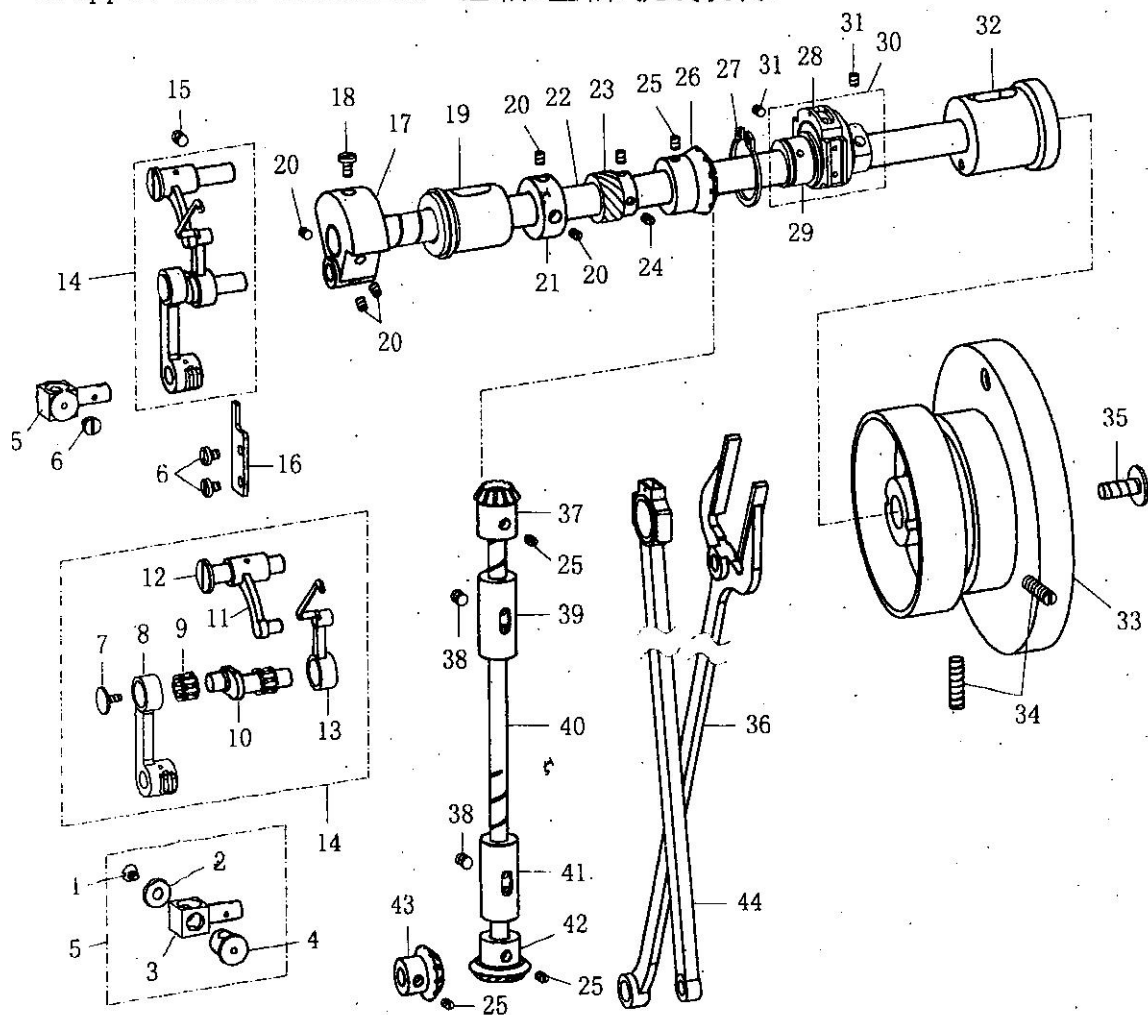
A. Machine body



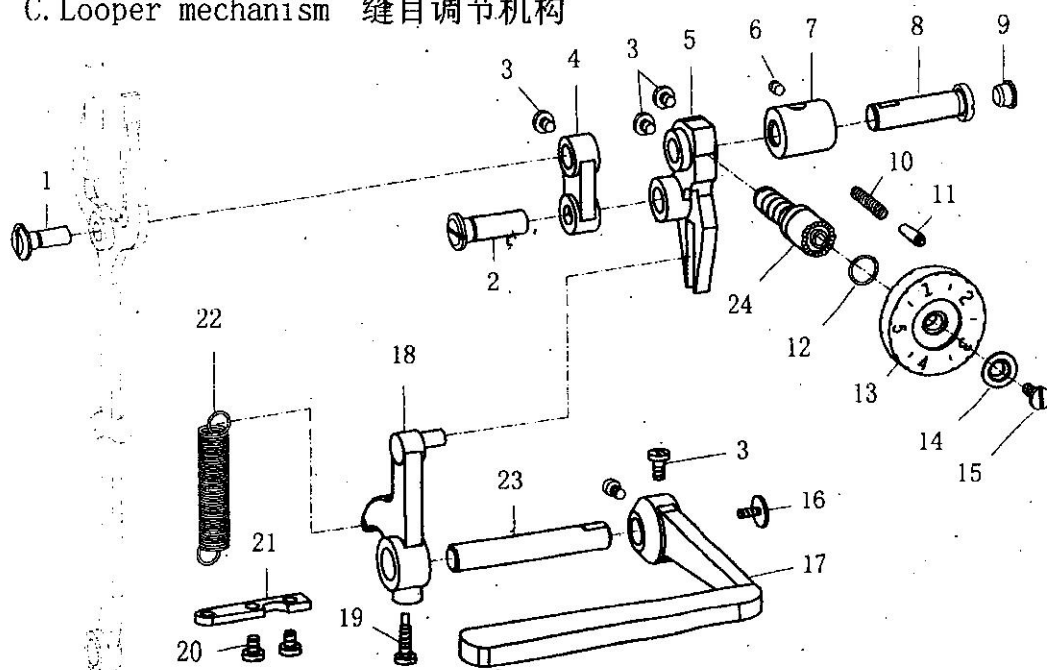
A. 本体外观/Machine body (注: 01用于1452 02用于2452)

| 注 | 序 | 仓储号 | 名称 | 件数 | 注 | 序 | 仓储号 | 名称 | 件数 |
|----|----|------------|--------------|----|----|----|------------|--------------|----|
| | 01 | PB810-006 | 螺丝11/64-40x5 | 3 | | 22 | PB810-028 | 上座下线勾 | 1 |
| 01 | 02 | 1530A-002 | 面板 | 1 | | 23 | 1452A-23 | 梭座盖 | 1 |
| | 03 | 3702-029 | 上座左线勾 | 1 | | 24 | 3702-901 | 夹线组 | 1 |
| | 04 | P11.8x5 | 悬吊轴橡皮塞 | 2 | | 25 | PB810-027 | 螺丝15/64-28x7 | 3 |
| | 05 | P10.8x4 | 橡皮塞 | 1 | | 26 | 3702-005 | 上座右线勾 | 1 |
| | 06 | P15.8x6 | 橡皮塞 | 2 | | 27 | 3700A-027 | 挑线杆防护罩 | 1 |
| | 07 | P8.8x5 | 橡皮塞 | 2 | | 28 | PB810-019 | 三眼线勾 | 1 |
| | 08 | PB810-109 | 螺丝11/64-40x7 | 8 | | 29 | 3700A-029 | 底板支撑杆 | 3 |
| | 09 | PB810-008 | 螺丝11/64-40x6 | 8 | | 30 | P20x7 | 橡皮塞 | 1 |
| | 10 | PB810-109L | 螺丝11/64-40x9 | 8 | 02 | 31 | 3700A-002 | DYZ面板 | 1 |
| | 11 | 1530A-011 | 顶盖 | 1 | 02 | 32 | 3700A-015 | DYZ后盖板 | 1 |
| | 12 | 3300A-035 | 顶盖线勾 | 1 | 02 | 33 | 3700A-016 | DYZ后盖板油垫 | 1 |
| | 13 | 1530A-013 | 油窗 | 1 | | 34 | PB810-261S | 内六角M6-1.0x20 | 4 |
| | 14 | ORIN-18 | 油窗O型圈 | 1 | | 35 | 1452A-35 | 顶盖垫片 | 1 |
| 01 | 15 | 1530A-015 | 后盖板 | 1 | | 36 | 1452A-36 | 梭座盖推板 | 1 |
| 01 | 16 | 1530A-016 | 后盖板油垫 | 1 | | 37 | PB810-21 | 螺丝9/64-40x6 | 3 |
| | 17 | P11x4 | 悬吊轴橡皮塞 | 2 | | 38 | PB810-21 | 螺丝9/64-40x7 | 6 |
| | 18 | 1452A-18 | 旋梭档 | 1 | | 39 | 1452A-39 | 立柱前盖 | 1 |
| | 19 | 1452A-19 | 针板 | 1 | | 40 | 1452A-40 | 梭座 | 1 |
| | 20 | PB810-263 | 螺丝11/64-40x7 | 2 | | 41 | 1452A-41 | 立柱 | 1 |
| | 21 | PB810-021 | 螺丝9/64-40x7 | 3 | | 42 | 45C-1-8-12 | 螺丝3/32-56x3 | 1 |

B. Upper shaft mechanism 上轴. 竖轴. 挑线机构.



C. Looper mechanism 缝目调节机构



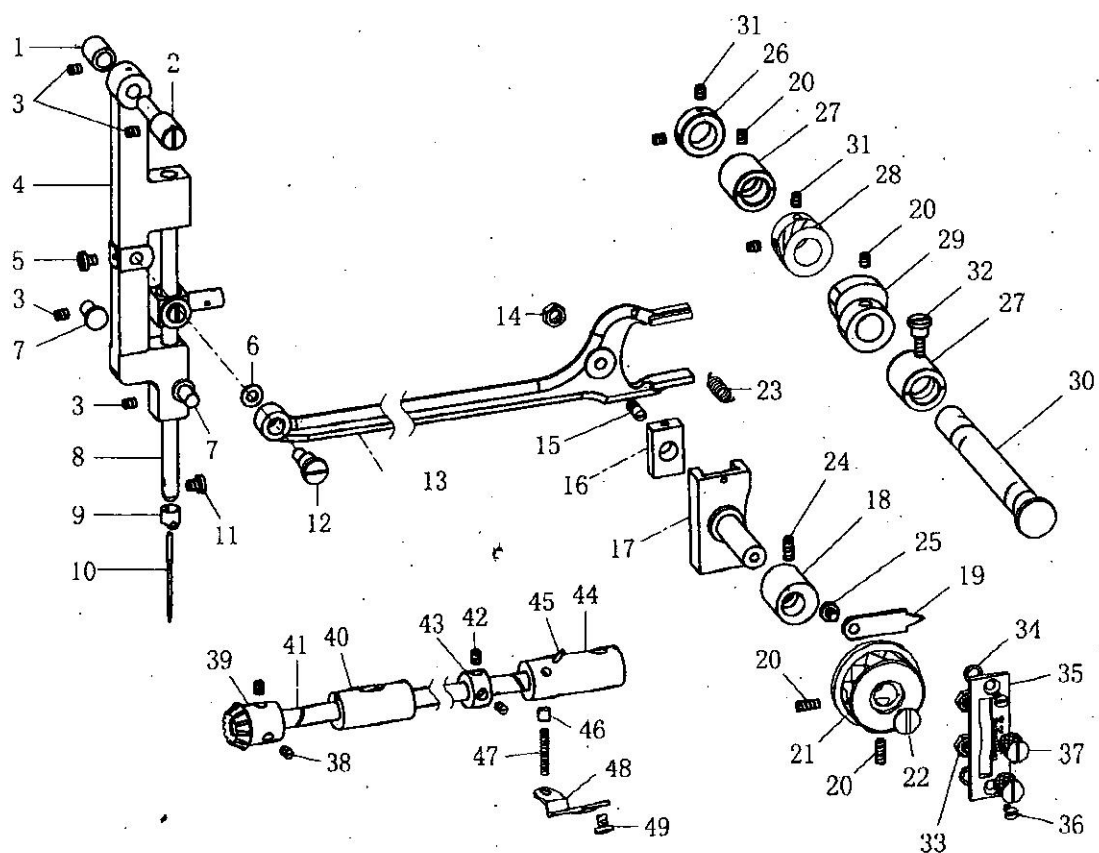
B. 上轴. 竖轴. 挑线/Upper shaft mecha (注:01用于1452 02用于2452)

| 注 | 序 | 仓储号 | 名称 | 件数 | 注 | 序 | 仓储号 | 名称 | 件数 |
|---|----|-----------|----------------|-----|---|----|------------|---------------|-----|
| | 01 | 1530B-001 | 螺丝11/64-40x3.5 | 1 | | 23 | 1530B-023 | 摆针传动齿(上) | 1 |
| | 02 | 1530B-002 | 垫片 | 1 | | 24 | 0341C-060 | 螺丝11/64-40x4 | 2 |
| | 03 | 1530B-003 | 针杆接头组件 | 1 | | 25 | PB810-101S | 螺丝1/4-40x6 | 8 |
| | 04 | 1530B-004 | 针杆接头组件 | 1 | | 26 | PB810-116 | 上轴齿轮 | 1 |
| | 05 | 1530B-005 | 针杆接头组 | (1) | | 27 | PB810-S26 | C型挡环 | 1 |
| | 06 | PB810-006 | 螺丝11/64-40x6 | 3 | | 28 | PB810-129 | 牙叉滑块 | 1 |
| | 07 | 1530B-007 | 反牙螺丝 | 1 | | 29 | 3704-904B | 送布偏心轮 | 1 |
| | 08 | 1530B-008 | 针杆连杆 | 1 | | 30 | 3704-904 | 送布偏心轮组 | (1) |
| | 09 | 081208 | 滚针轴承 | 2 | | 31 | PB810-027 | 螺丝15/64-28x7 | 1 |
| | 10 | 1530B-010 | 挑线曲柄 | 1 | | 32 | PB810-133 | 上轴右套管 | 1 |
| | 11 | 1530B-011 | 挑线连杆 | 1 | | 33 | 3300B-069 | 手轮 | 1 |
| | 12 | 1530B-012 | 挑线曲柄悬吊轴 | 1 | | 34 | 842E-020 | 螺丝15/64-28x15 | 2 |
| | 13 | 1530B-013 | 挑线杆 | (1) | | 35 | PB810-136 | 螺丝11/32-28x13 | 1 |
| | 14 | 1530B-014 | 挑线杆组 | 1 | | 36 | 1452B-36 | 送布传动牙叉 | 1 |
| | 15 | PB810-091 | 螺丝15/64-28x15 | 1 | | 37 | PB810-117 | 竖轴上齿轮 | 1 |
| | 16 | 1530B-016 | 针杆连杆导位块 | 1 | | 38 | PB810-099 | 螺丝15/64-28x11 | 2 |
| | 17 | 1530B-017 | 针杆曲柄 | 1 | | 39 | PB810-119 | 竖轴上套管 | 1 |
| | 18 | PB810-105 | 螺丝9/32-28x10 | 1 | | 40 | 1452B-40 | 竖轴 | 1 |
| | 19 | PB810-103 | 上轴左套管 | 1 | | 41 | PB810-120A | 竖轴下套管 | 1 |
| | 20 | PB810-101 | 螺丝1/4-40x6 | 3 | | 42 | PB810-124 | 竖轴下齿轮 | 1 |
| | 21 | PB810-102 | 上轴挡圈 | 1 | | 43 | PB810-125 | 下轴右齿轮 | 1 |
| | 22 | 1530B-022 | 上轴 | 1 | | 44 | 1452B-44 | 抬牙连杆 | 1 |

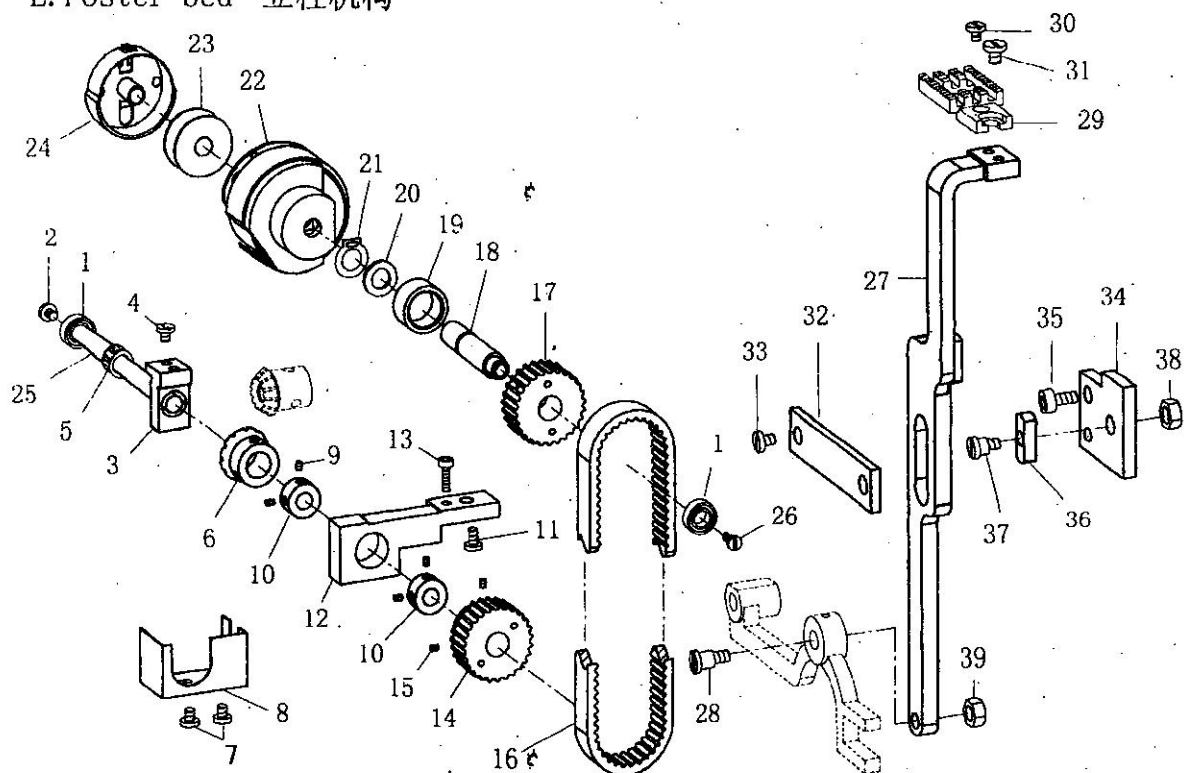
C. 缝目调节机构/Looper mechanism (注:01用于1452 02用于2452)

| 注 | 序 | 仓储号 | 名称 | 件数 | 注 | 序 | 仓储号 | 名称 | 件数 |
|---|----|-----------|---------------|-----|---|----|------------|---------------|-----|
| | 01 | 1530D-001 | 牙叉绞链轴 | 1 | | 13 | 842D-013 | 针距标盘 | 1 |
| | 02 | PB810-152 | 针距连杆绞链轴 | 1 | | 14 | 842D-013-4 | 针距标盘垫片 | 2 |
| | 03 | PB810-168 | 螺丝15/64-28x9 | 1 | | 15 | 842D-013-5 | 螺丝3/16-28x15 | 8 |
| | 04 | 1530D-004 | 针距连杆 | 1 | | 16 | PB810-165 | 螺丝3/16-28x7 | 1 |
| | 05 | 1530D-005 | 针距调节摆杆 | (1) | | 17 | PB810-167 | 倒缝操纵杆 | 1 |
| | 06 | PB810-099 | 螺丝15/64-28x11 | 3 | | 18 | PB810-906 | 倒缝操纵杆曲柄 | 1 |
| | 07 | 1452C-7 | 针距调节摆杆轴套 | 1 | | 19 | PB810-171 | 螺丝15/64-28x10 | 1 |
| | 08 | PB810-159 | 针距调节摆杆轴 | 1 | | 20 | PB810-109 | 螺丝11/64-40x7 | (1) |
| | 09 | P20x4 | 橡皮塞 | 2 | | 21 | PB810-174 | 复原簧支架 | 1 |
| | 10 | PB810-160 | 止动肖弹簧 | 1 | | 22 | PB810-172 | 复原簧 | 1 |
| | 11 | 3706-096 | 止动肖 | 1 | | 23 | PB810-169 | 倒缝操纵杆轴 | 1 |
| | 12 | ORIN-14 | O型圈 | 1 | | 24 | 1530D-001 | 针距调节螺杆 | 2 |

D. Needle bar rocking & lower shaft mechan 摆针. 下轴机构



E. Poster bed 立柱机构



D. 摆针. 下轴/Needle bar rocking & low

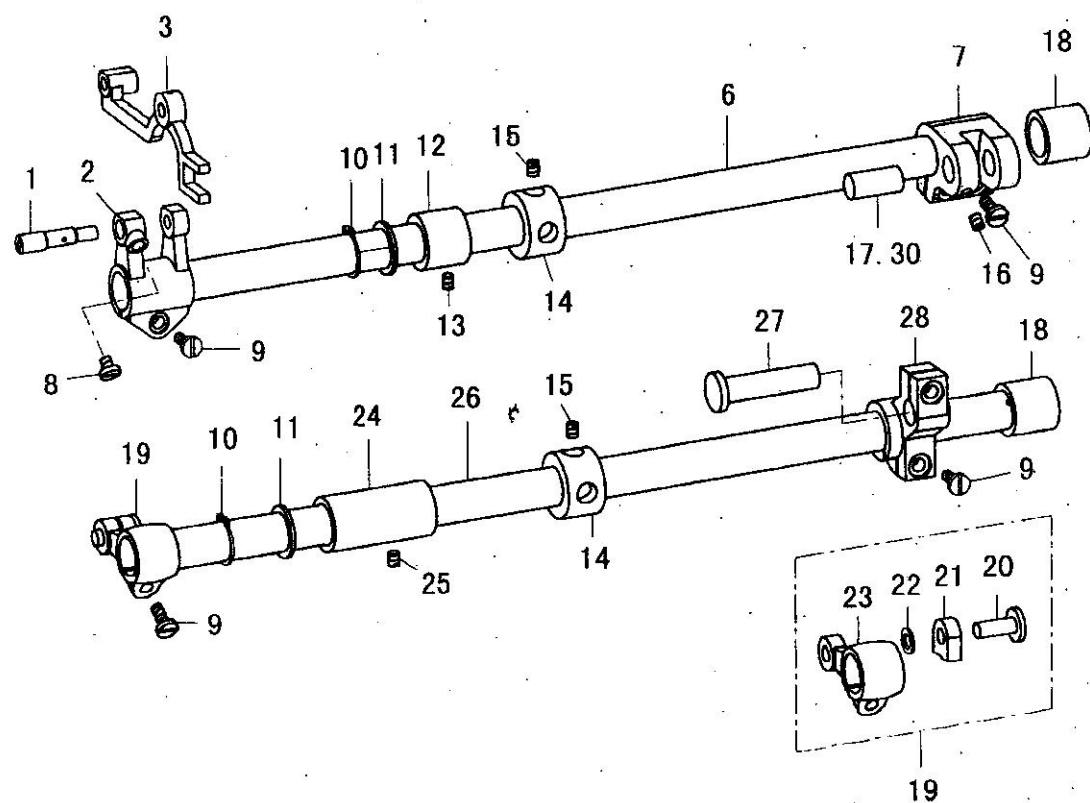
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|---|----|-----------|---------------|----|---|----|------------|----------------|----|
| | 01 | 1530C-001 | 摆针架悬吊轴套 | 1 | | 26 | 1530C-026 | 摆针传动轴挡圈 | 1 |
| | 02 | 1530C-002 | 摆针架悬吊轴 | 1 | | 27 | 1530C-027 | 摆针传动轴套 | 2 |
| | 03 | 9910J-002 | 螺丝M4-0.75x4 | 6 | | 28 | 1530C-028 | 摆针传动齿轮下 | 1 |
| | 04 | 1530C-004 | 摆针架 | 1 | | 29 | 1530C-029 | 摆针传动偏心轮 | 1 |
| | 05 | PB810-006 | 螺丝11/64-40x6 | 1 | | 30 | 1530C-030 | 摆针传动轴 | 1 |
| | 06 | W5x10x1 | 垫片W5x10x1 | 1 | | 31 | 341C-060 | 螺丝11/64-40x4 | 4 |
| | 07 | 1530C-007 | 摆针架下挡套 | 2 | | 32 | 1530C-032 | 螺丝15/64-28 | 4 |
| | 08 | 1530C-008 | 针杆 | 1 | | 33 | 1530C-033 | 螺丝11/64-40x3.5 | 2 |
| | 09 | 9910C-038 | 针杆过线环 | 1 | | 34 | 3708-201 | 垫片 | 2 |
| | 10 | DPX5 | 车针 | 1 | | 35 | 1530C-035 | 摆幅指示板 | 1 |
| | 11 | PB810-088 | 螺丝1/8-44x4.5 | 1 | | 36 | 1530C-036 | 螺丝11/64-40x10 | 2 |
| | 12 | 1530C-012 | 偏心肖 | 1 | | 37 | 1530C-037 | 押花螺丝11/64-40 | 2 |
| | 13 | 1530C-013 | 摆针传动二叉 | 1 | | 38 | PB810-101 | 下轴齿轮螺丝 | 2 |
| | 14 | PB810-142 | 螺母9/32-28x4 | 1 | | 39 | 1530C-047 | 下轴齿轮 | 1 |
| | 15 | 1530C-015 | 传动二叉滑块轴 | 1 | | 40 | PB810-119 | 下轴左套 | 1 |
| | 16 | 1530C-016 | 传动二叉滑块 | 1 | | 41 | 1530C-049 | 下轴 | 1 |
| | 17 | 1530C-017 | 传动二叉滑块座 | 1 | | 42 | PB810-221 | 螺丝15/64-28x5 | 2 |
| | 18 | 3708-155 | 传动二叉滑块座套 | 1 | | 43 | PB810-122 | 下轴挡圈 | 1 |
| | 19 | 1530C-019 | 摆幅指针 | 1 | | 44 | 1530B-052 | 下轴右套 | 1 |
| | 20 | PB810-027 | 螺丝15/64-28x7 | 4 | | 45 | 1530B-053 | 下轴右套油管 | 1 |
| | 21 | 1530C-021 | 摆幅手转轮 | 1 | | 46 | 1530B-054 | 柱塞 | 1 |
| | 22 | PB810-165 | 螺丝3/16-28x7 | 1 | | 47 | PB810-160 | 柱塞弹簧 | 1 |
| | 23 | 1530C-023 | 摆针传动二叉拉簧 | 1 | | 48 | 1530B-056 | 挡板 | 1 |
| | 24 | PB810-099 | 螺丝15/64-28x11 | 1 | | 49 | PB810-168L | 螺丝15/64-28x10 | 1 |
| | 25 | PB810-263 | 螺丝11/64-40x7 | 1 | | | | | |

E. 立柱机构/Poster bed mechanism

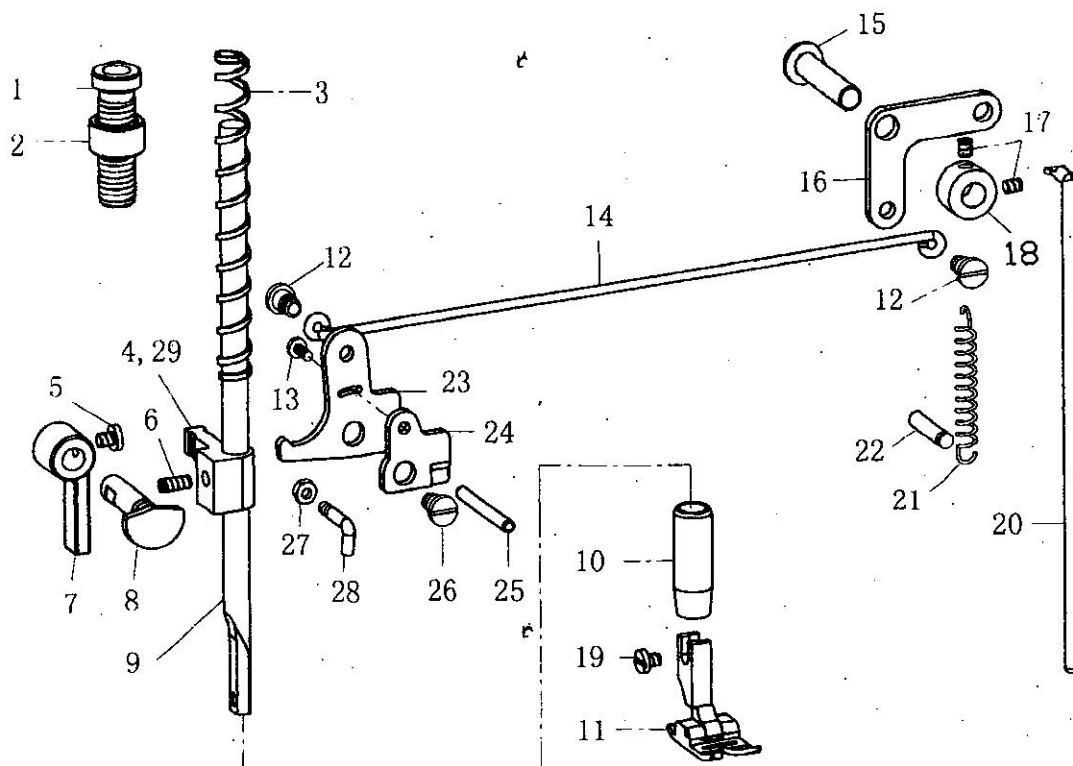
(注:01用于1452 02用于2452)

| 注 | 序 | 仓储号 | 名称 | 件数 | 注 | 序 | 仓储号 | 名称 | 件数 |
|---|----|-----------|---------------|----|---|----|------------|---------------|----|
| | 01 | 1530C-039 | 696轴承 | 2 | | 21 | S-8 | S8扣环 | 1 |
| | 02 | PB810-021 | 螺丝9/64-40x7 | 3 | | 22 | 1452E-22 | 旋梭 | 1 |
| | 03 | 1530C-042 | 梭轴座 | 1 | | 23 | 1452E-23 | 梭芯 | 1 |
| | 04 | 9910D-003 | 螺丝M4-0.7x10 | 2 | | 24 | 1452E-24 | 梭壳 | 1 |
| | 05 | 081208 | 滚针轴承 | 1 | | 25 | 1452E-25 | 下皮带轮定位轴 | 1 |
| | 06 | 1530C-063 | 齿轮 | 1 | | 26 | PB810-21 | 螺丝9/64-40x7 | 1 |
| | 07 | PB810-021 | 螺丝9/64-40x7 | 3 | | 27 | 1452E-27 | 送力台 | 1 |
| | 08 | 1530C-064 | 黄油盒 | 1 | | 28 | PB810-268 | 段螺丝11/64-40x7 | 1 |
| | 09 | 9910J-002 | 螺丝M4-0.75x4 | 4 | | 29 | 1452E-29 | 送布齿 | 1 |
| | 10 | 1530C-040 | 挡圈 | 2 | | 30 | DY6-217 | 螺丝1/8-40x6 | 1 |
| | 11 | PB810-68 | 螺丝11/64-40x12 | 2 | | 31 | PB810-21 | 螺丝9/64-40x6 | 1 |
| | 12 | 1452E-12 | 同步轮轴座 | 1 | | 32 | 1452E-32 | 外押板压板 | 1 |
| | 13 | 1452E-13 | 内六角M4-0.7x14 | 1 | | 33 | 42G-12 | 螺丝9/64-40x5 | 2 |
| | 14 | 1452E-14 | 下同步带轮 | 1 | | 34 | 1452E-34 | 滑块固定板 | 1 |
| | 15 | 341C-61 | 螺丝SM11/64X40 | 2 | | 35 | 91D-3 | 内六角M4-0.7x10 | 2 |
| | 16 | 1452E-16 | 同步带 | 1 | | 36 | 1452E-36 | 滑块珠 | 1 |
| | 17 | 1452E-17 | 上同步带轮 | 1 | | 37 | PB810-267 | 段螺丝3/16-32x9 | 1 |
| | 18 | 1452E-18 | 立柱梭轴 | 1 | | 38 | PB810-194 | 螺母3/16-32 | 1 |
| | 19 | 1452E-19 | 梭轴套 | 1 | | 39 | PB810-68-1 | 螺母11/64-40 | 1 |
| | 20 | W8x14 | 垫片W8x14x0.5 | 1 | | 40 | | | |

F. Feed mechanism 下送布机构



G. Presser foot mechanism 抬押机构



F. 下送布机构/Feed mechanism

(注:01用于1452 02用于2452)

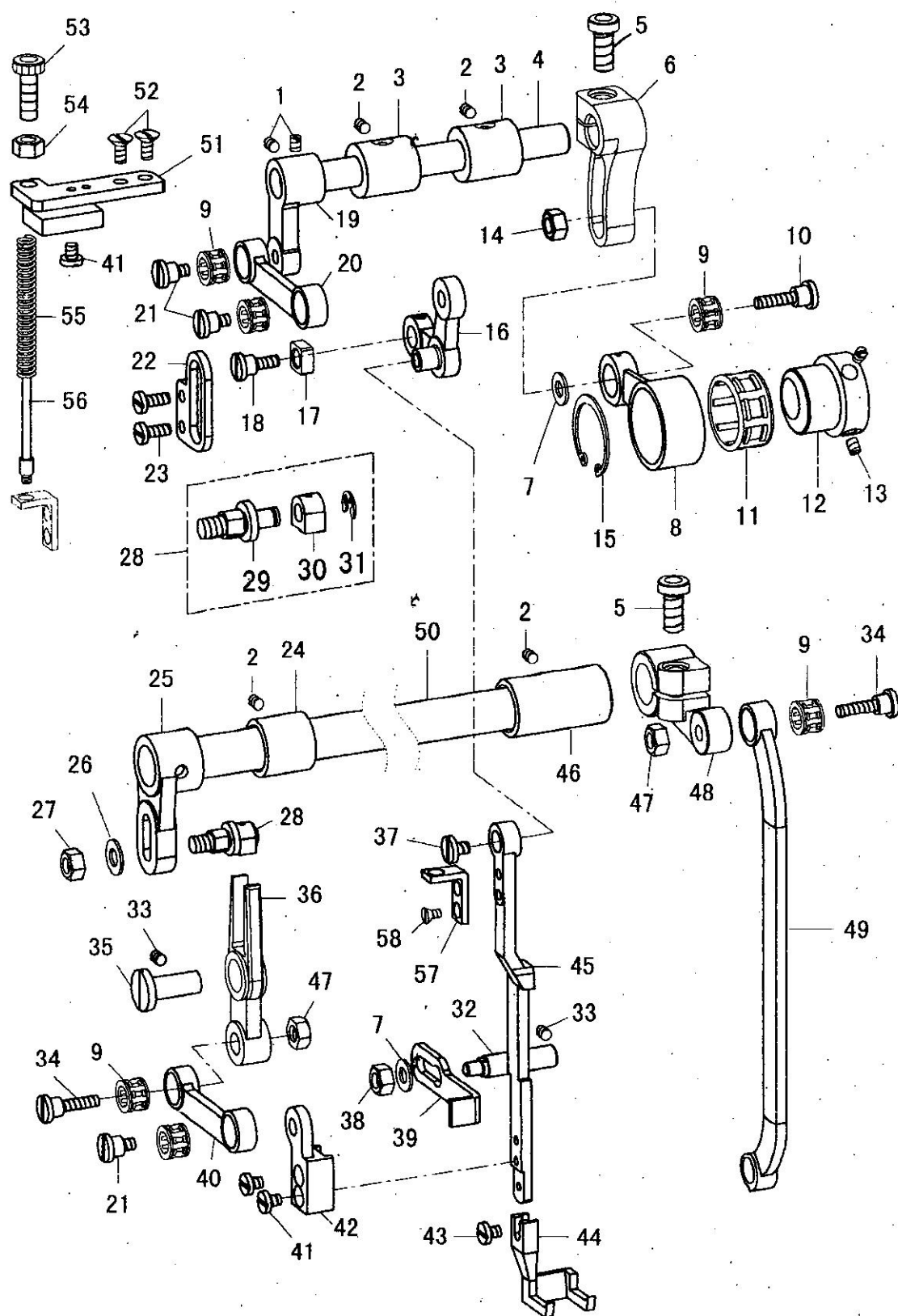
| 注 | 序 | 仓 储 号 | 名 称 | 件数 | 注 | 序 | 仓 储 号 | 名 称 | 件数 |
|---|----|-----------|---------------|----|----|----|------------|---------------|-----|
| | 01 | 1530E-001 | 牙架偏心轴 | 1 | 01 | 17 | PB810-226 | 送布轴曲柄绞链轴 | 1 |
| | 02 | 1530E-002 | 牙架曲柄 | 1 | | 18 | 1530E-018 | 送布轴右套 | 2 |
| | 03 | 1452F-3 | 牙架 | 1 | | 19 | 1530E-019 | 抬牙轴左曲柄组 | (1) |
| | 06 | 1530E-006 | 送布轴 | 1 | | 20 | 3300D-234B | 抬牙叉滑块轴 | 1 |
| | 07 | PB810-222 | 送布轴曲柄(右) | 1 | | 21 | 3300D-234C | 抬牙叉滑块轴 | 1 |
| | 08 | PB810-109 | 螺丝11/64-40x7 | 1 | | 22 | W6x10 | W6垫片 | 1 |
| | 09 | PB810-068 | 螺丝11/64-40x13 | 5 | | 23 | 3300D-234A | 抬牙轴左曲柄 | 1 |
| | 10 | S-15 | S扣环 | 2 | | 24 | 1530E-024 | 抬牙轴左套 | 1 |
| | 11 | W15x20 | W15垫片 | 2 | | 25 | PB810-099 | 螺丝15/64-28x11 | 1 |
| | 12 | 1530E-012 | 送布轴左套 | 1 | | 26 | 1530E-026 | 抬牙轴 | 1 |
| | 13 | PB810-027 | 螺丝15/64-28x7 | 1 | | 27 | 3706-224 | 抬牙轴曲柄绞链轴 | 1 |
| | 14 | PB810-211 | 送布轴挡圈 | 2 | | 28 | 3300C-241 | 抬牙轴右曲柄 | 1 |
| | 15 | PB810-221 | 螺丝15/64-28x5 | 4 | 02 | 30 | 2530E-030 | 送布轴曲柄绞链轴 | 1 |
| | 16 | PB810-008 | 螺丝11/64-40x7 | 1 | | | | | |

G. 抬押机构/Presser foot mechanism

(注:01用于1452 02用于2452)

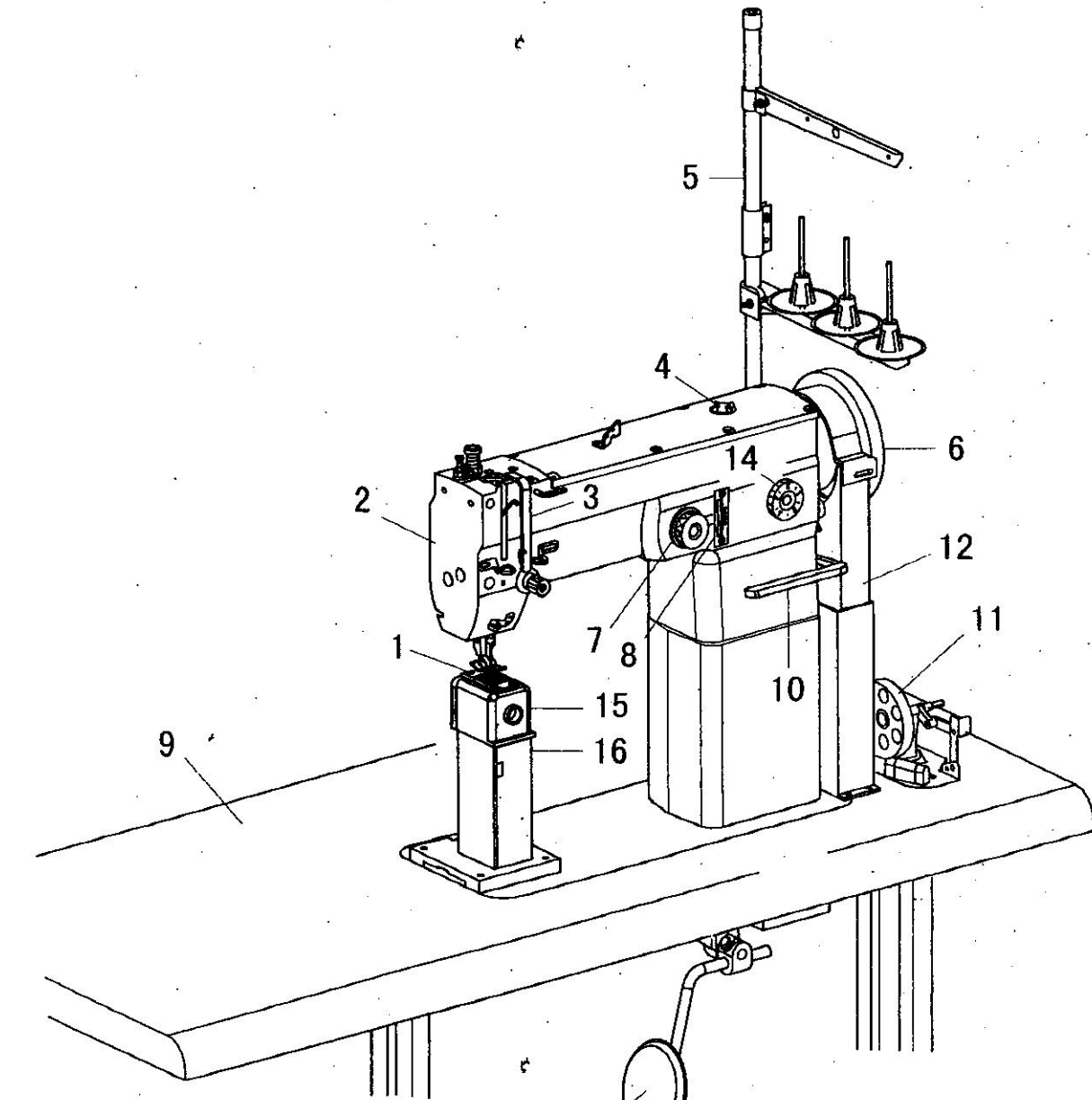
| 注 | 序 | 仓 储 号 | 名 称 | 件数 | 注 | 序 | 仓 储 号 | 名 称 | 件数 |
|----|----|-----------|----------------|----|----|----|-------------|--------------|----|
| | 01 | PB810-184 | 调压螺套 | 1 | | 16 | 1530F-016 | 膝控起押提升块右 | 1 |
| | 02 | 37010-143 | 调压螺套螺母 | 1 | | 17 | PB810-221 | 螺丝15/64-28x5 | 2 |
| | 03 | PB810-187 | 压簧 | 1 | | 18 | PB810-122 | 挡圈 | 1 |
| 01 | 04 | 1530F-004 | 押杆导位块 | 1 | | 19 | PB810-021 | 螺丝9/64-40x7 | 1 |
| | 05 | PB810-109 | 螺丝11/64-40x7 | 1 | | 20 | 1452G-20 | 膝控起押顶杆 | 1 |
| | 06 | PB810-027 | 螺丝15/64-28x7 | 5 | | 21 | 1530F-021 | 复原拉簧 | 1 |
| | 07 | 1530F-007 | 抬押扳手 | 1 | | 22 | 1530F-022 | 拉簧肖 | 1 |
| | 08 | 1530F-008 | 起押偏心器 | 1 | | 23 | 1530F-023 | 膝控起押提升块左 | 1 |
| | 09 | 37010-137 | 押杆 | 1 | | 24 | 1530F-024 | 夹线松线片 | 1 |
| | 10 | PB810-202 | 押杆下套 | 1 | | 25 | 37010-125 | 夹线松线杆 | 1 |
| | 11 | 1530F-011 | 押脚 | 1 | | 26 | 1530F-026 | 螺丝1/4-40x7.5 | 1 |
| | 12 | 341F-025 | 螺丝3/16-28x8.5 | 2 | | 27 | 9910P-12-10 | 螺丝19/64-40x3 | 1 |
| | 13 | PB810-292 | 螺丝11/64-40x6.5 | 1 | | 28 | 1530F-028 | 沙拉过线 | 1 |
| | 14 | 1530F-014 | 膝控起押引杆 | 1 | 02 | 29 | 2530F-029 | DYZ押杆导位块 | 1 |
| | 15 | 1530F-015 | 膝控起押提升块轴 | 1 | | | | | |

H. Upper feed mechanism 上送布机构



H. 2452上送布机构/Upper feed mec

| 注 | 序 | 仓 储 号 | 名 称 | 件数 | 注 | 序 | 仓 储 号 | 名 称 | 件数 |
|---|----|------------|--------------|-----|---|----|-----------|--------------|----|
| | 01 | 9910G-017 | 螺丝M5x6 | 2 | | 30 | 3708-194A | 调节器滑块 | 1 |
| | 02 | PB810-008 | 螺丝11/64-40x6 | 4 | | 31 | E-4 | E4扣环 | 1 |
| | 03 | 3708-155 | 押脚提升轴套 | 2 | | 32 | 3700E-032 | 外押脚板压板轴 | 1 |
| | 04 | 3700E-004 | 押脚提升轴 | 1 | | 33 | PB810-027 | 螺丝15/64-28x7 | 2 |
| | 05 | PB810-261S | 螺丝M6x20 | 2 | | 34 | 3700E-034 | 螺丝1/4-40x16 | 2 |
| | 06 | 3700E-006 | 押脚提升调节曲柄 | 1 | | 35 | 3708-208 | 送料变动曲柄导柱 | 1 |
| | 07 | W6x12 | W6垫片 | 2 | | 36 | 3700E-036 | 外押送料变动曲柄 | 1 |
| | 08 | 3700E-008 | 偏心轮连杆 | 1 | | 37 | PB810-164 | 3/16-28x7 | 1 |
| | 09 | 8x12x8 | 滚针轴承 | 6 | | 38 | 842C-015 | 螺母15/64-28x3 | 1 |
| | 10 | 3700E-010 | 螺丝M6 | 1 | | 39 | 2530G-039 | 外押脚板压板 | 1 |
| | 11 | 24x28x13 | 滚针轴承 | 1 | | 40 | 2530G-040 | 外押送料连杆 | 1 |
| | 12 | 3700E-012 | 提押偏心轮 | 1 | | 41 | PB810-21S | 螺丝9/64-40x6 | 2 |
| | 13 | PB810-101 | 螺丝1/4-40x6 | 2 | | 42 | 2530G-042 | 外押送料连杆座 | 1 |
| | 14 | 3708-167 | 螺母M6 | 1 | | 43 | PB810-21L | 螺丝9/64-40x8 | 1 |
| | 15 | R-24 | R24扣环 | 1 | | 44 | 2530G-044 | 外押脚 | 1 |
| | 16 | 3700E-016 | 外押板悬吊座 | 1 | | 45 | 2530G-045 | 外押脚板 | 1 |
| | 17 | 3700E-017 | 滑块 | 1 | | 46 | 3700E-046 | 外边轴右套 | 1 |
| | 18 | 3700E-018 | 螺丝3/16-28x7 | 1 | | 47 | 3708-207A | 螺母1/4-40x5 | 2 |
| | 19 | 3700E-019 | 外押提升曲柄 | 1 | | 48 | 3700E-048 | 外押摆动曲柄右 | 1 |
| | 20 | 3700E-020 | 外押提升连杆 | 1 | | 49 | 1452H-49 | 外押摆动曲柄连杆 | 1 |
| | 21 | 3700E-021 | 螺丝1/4-40x7 | 3 | | 50 | 3708-213 | 外边轴 | 1 |
| | 22 | 3700E-022 | 押杆提升导位板 | 1 | | 51 | 2530G-61 | 外押调节螺丝座 | 1 |
| | 23 | PB810-109 | 螺丝11/64-40x7 | 2 | | 52 | PB810-263 | 螺丝11/64-40x7 | 2 |
| | 24 | 3708-193 | 外边轴左套 | 1 | | 53 | DY8-151 | 外押调节螺丝 | 1 |
| | 25 | 3708-212 | 外押摆动曲柄左 | 1 | | 54 | PB810-142 | 螺母9/32-28 | 1 |
| | 26 | W6.5X13 | W6.5垫片 | 1 | | 55 | DY8-170 | 外押弹簧 | 1 |
| | 27 | 3708-210 | 螺母1/4-24x5 | 1 | | 56 | DY8-171 | 外押弹簧支轴 | 1 |
| | 28 | 3708-194 | 外押同步调节器 | (1) | | 57 | 2530G-62 | 外押簧座 | 1 |
| | 29 | 3708-194B | 调节器轴 | 1 | | 58 | PB810-255 | 螺丝9/64-40x7 | 2 |



- | | |
|----------------------------|-----------------------------------|
| 1. Need plate \针板 | 13 |
| 2. Face plate \面板 | |
| 3. Thred take-up \挑线杆防护罩 | 10. Reverse lever \抬押扳手 |
| 4. Oil window \油窗 | 11. Bobbin winder assy \绕线器 |
| 5. Cottonstand assy \线架 | 12. Belt coverassy \皮带罩 |
| 6. Pully \手轮 | 13. Cover .K-Lifter plate \膝控碰块 |
| 7. Hand trun wheel \摆幅手转轮 | 14. Stitch length dial assy \针距标盘 |
| 8. Indicating board \摆幅指示板 | 15. Rotary hook Base \梭座 |
| 9. Rubber hinge assy \台板 | 16. Ppster bend \立柱 |

J. Machine specifications\规格

| Item \ Model | TC-1452/TC-1453/TC-1454 | TC-2530/TC-2533/TC-2534 |
|--------------------------------|---|---|
| Speed 速度 | 1200spm | 1450spm |
| Zigzag width 摆幅 | 2points/3points/4points | 2points/3points/4points |
| Needle size 机针 | DPx5 | DPx5 |
| Thead take-up capacity 挑线杆活动量 | 73mm | 73mm |
| Needle bar capacity 针杆活动量 | 34mm | 34mm |
| Presser foot operating 压脚差动量 | | 3-7mm |
| Presser foot rising rate 压脚上升量 | 7mm | 7mm |
| Shuttle 旋梭 | Big shuttle 卧式大旋梭 | Big shuttle 卧式大旋梭 |
| Usage 用途 | Light-weight materials to medium-weight materials 薄料-中料 | Medium-weight materials to heavy-weight materials 中料-厚料 |

N. Installation\安装

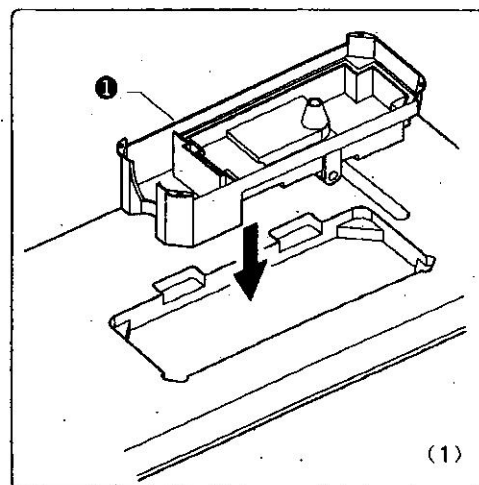
Oil Pan

As figure (1) shown:

Push ① in table.

油盘

如图(1)所示, 将油盘①放入台板。



As figure (2) shown:

Cover .K-Lifter plate

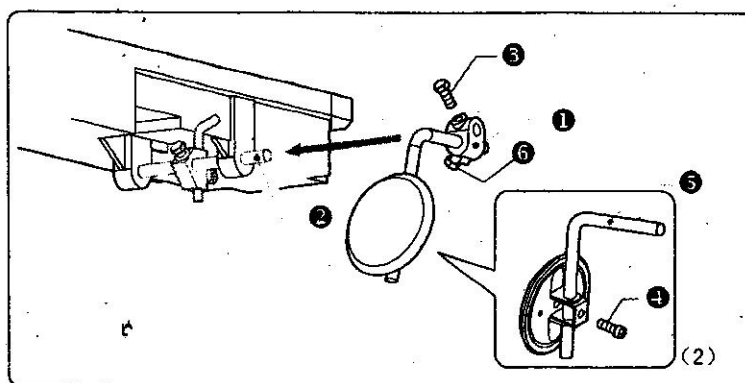
Adjust knee pan joint ②. kenn lifter vertical shaft installing am ①

and knee pad lever ⑤ to the direction of knee lifter lever shaft ② and assemble these components.

Adjust the direction of the pad with setscrews ③ ④ and ⑥.

膝控碰块

如图(2)所示, 将膝控碰块①插入油盘上的膝控提升连杆②。松开螺钉③和螺钉④, 将膝控碰块①移至易于使用的位置。



As figure (3) shown:

Fix the hinge seats ① and the support rubbers ③ ⑤ suplien whit the machine on table using nails ②
Then push ⑦ in the oil pan

如图 (3) 所示:

机壳铰链套

将两个个机壳铰链套 ① 嵌入台板的止动销, 并用两个铁钉 ② 将其固定。

三角型防震垫块

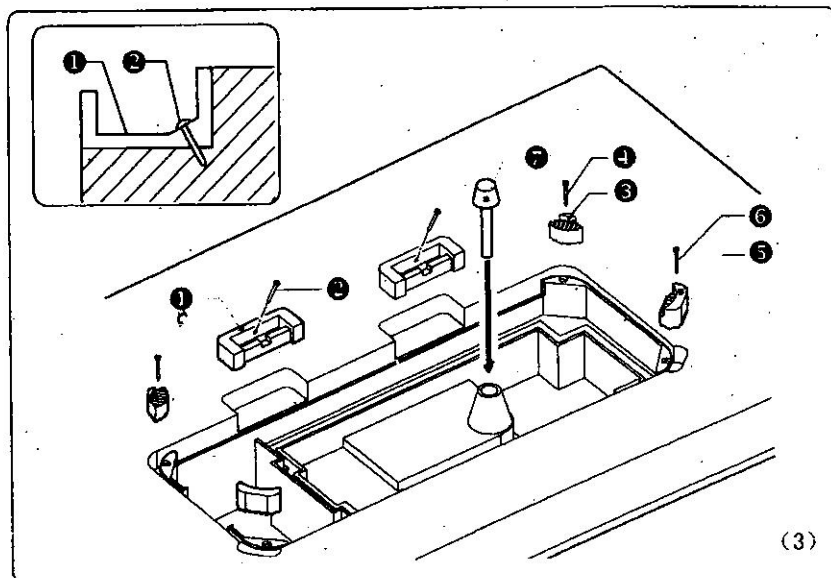
将两个三角型防震垫块 ③ 放入油盘的两角, 然后用两个铁钉 ④ 将其固定。

耳型防震垫块

两个耳型防震垫块 ⑤ 放入油盘的另外两角, 并用两个铁钉 ⑥ 将其固定。

膝控提升顶杆

膝控提升顶杆 ⑦ 插入油盘。



As figure (4) shown:

Head hinge ① push in the machine.

Tap the head rest ③ securely into the table hole.

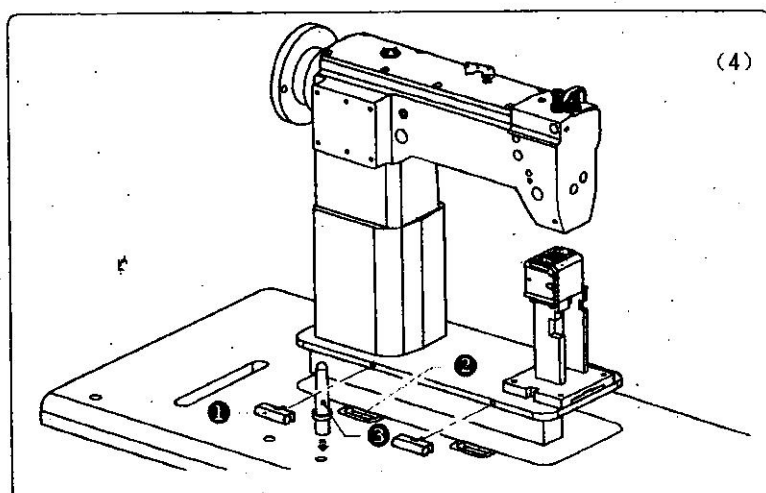
如图 (4) 所示:

缝纫机头部

将铰链 ① 插入机壳, 然后放入机壳铰链套 ②。

机头撑杆

将机头撑杆 ③ 敲入台板中。



As figure (5) shown:

Apply screw ② to tighten belt cover U ① to machine cover.

Apply screw ④ to tighten belt cover C ③ and cover U ①.

Apply screw ⑥ to tighten belt cover D ⑤ on the table.

如图 (5) 所示:

U型皮带罩

用螺钉 ② 将U型皮带罩 ① 锁入机壳。

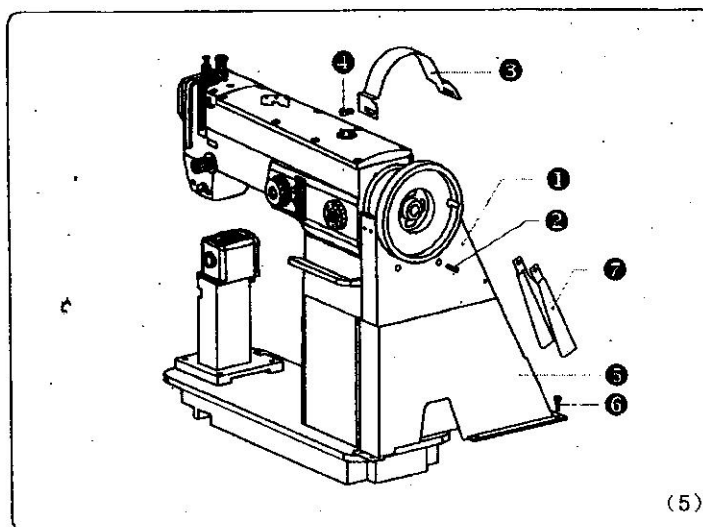
C型皮带罩

用螺钉 ④ 将C型皮带罩 ③ 与U型皮带罩 ① 锁紧。

D型皮带罩

用螺钉 ⑥ 将D型皮带罩 ⑤ 锁紧。

将D型皮带罩盖 ⑦ 扣入U型皮带罩 ①。

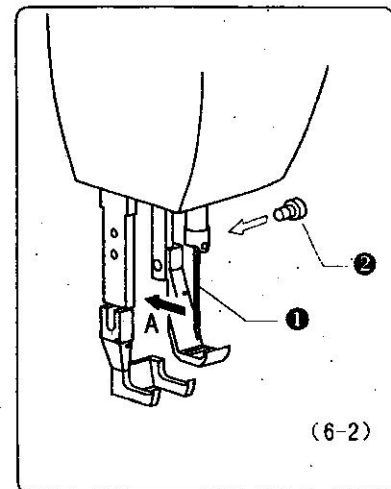
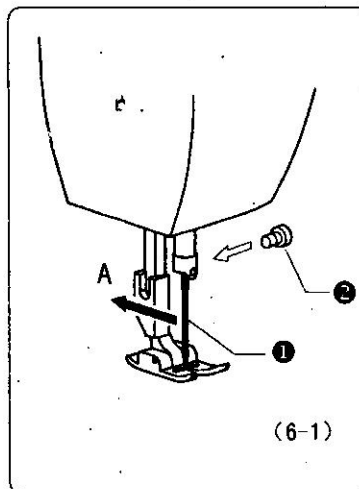


K. Adjustment / 缝纫机的调整

Installing the needle

As figure (6-1) (6-2) shown:
Rotate handwheel to make needle bar rise to the maximum high, loosen tighten screw ②, plug needle ① to the top needle's groove side face to A then fasten screw ②.

如图(6-1) (6-2) 所示, 转动手轮使针杆上升到最高位置, 松开机针紧固螺钉 ②, 将机针 ① 插到顶, 长槽面向A方向, 然后拧紧螺钉 ②。

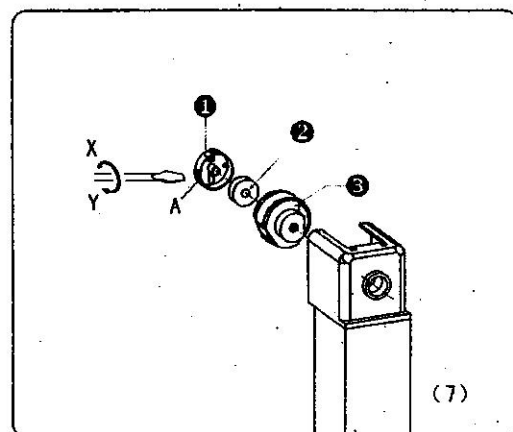


As figure (7) shown:

- <1> Open the case cover, then take out the bobbin case ①. Install bobbin ② into bobbin case ①, open the case cover, snap bobbin case ① into shuttle ③ then assemble together.
- <2> Turn tension adjustment screw (A) clockwise Y to increase the bobbin thread tension, or counterclockwise X to decrease it.

梭壳拆装及张力调整

- <1> 梭壳的拆装 掰开梭壳盖A, 即可取出梭壳 ①。将梭芯 ② 装入梭壳 ① 后, 掰开梭壳盖A, 将梭壳扣入旋梭 ③, 并与之结合即可。
- <2> 张力的调节 如图, 用螺丝刀转动螺钉A, X方向底线张力变小, Y方向张力变大。

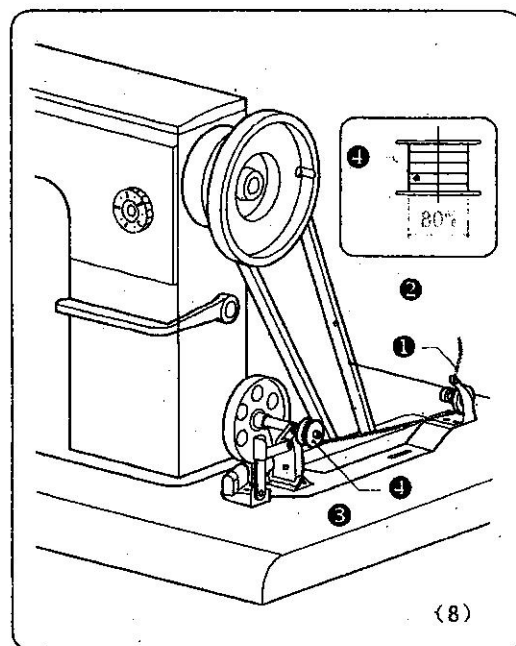


As figure (8) show: connect lower thread ①, move handle of the winding shaft ③ to snap the wheel to belt ②, rotate it 80% of the winding amount in bobbin ④ will be best.

绕底线

底线 ① 按图(8)所示连接好之后, 推动绕线器 ③ 的扳手使转轮贴到皮带轮 ② 上, 并随之转动。

梭芯 ④ 上的绕线量约80%时为最好。



As figure (9) shown:

<1> Threading the upper thread

Insert the upper thread ① as figure shown.

<2> Face line tension adjustment

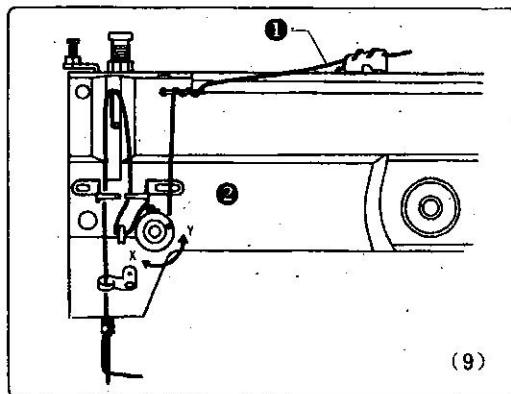
Rotate clipper ②, the upperline tension in direction X increase and Y direction decrease.

穿面线及调整

如图(9)所示

<1> 穿面线, 面线①按图依次穿过。

<2> 面线的调整, 转动夹线器②, X方向面线张力变大, Y方向张力变小。



Presser foot pressure adjustment

As figure (10) shown:

Rotate screw ①, the outer pressure in A direction increase B direction decrease adjustment fix the nut ②.

Rotate screw ③, the inner pressure in C direction increase D direction decrease after adjustment fix the nut ④.

压脚压力调整

如图(10)所示

外压脚压力调整

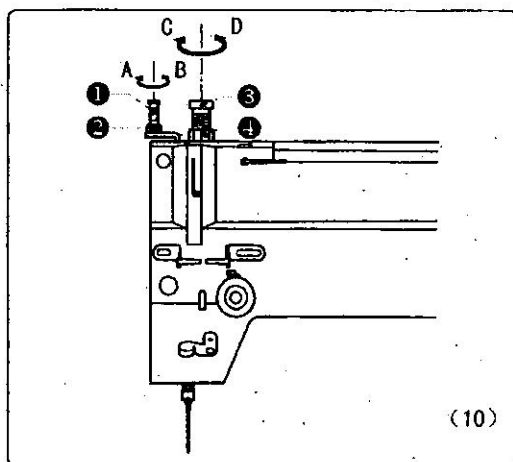
旋转螺丝①, A方向外压脚压力变大,

B方向压力变小。调整后必须固好螺母②。

内压脚压力调整

旋转螺丝③, C方向内压脚压力变大,

D方向压力变小。调整后必须固好螺母④。

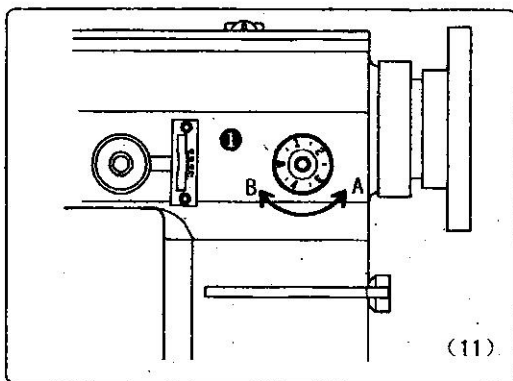


As figure (11) shown:

Rotate the stitch length dial assy ① to adjust the swing span in A direction decrease and B direction increase.

针距调整

如图(11)所示, 针距调节盘①上表示的是针距mm的数值, 左右转动调整到自己需要的数值上。



Span adjustment

As figure (13) shown:

Macro adjustment

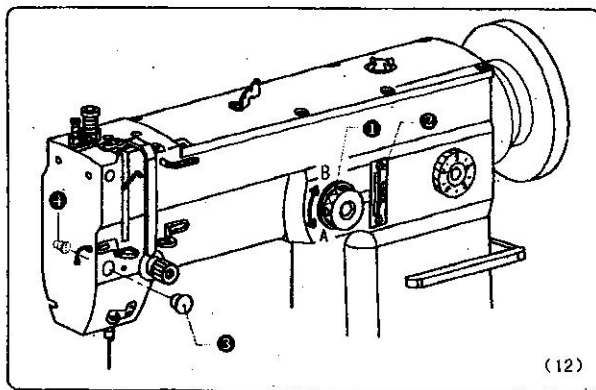
The swing indicator ② indicate the span number in mm rotate the swing handwheel ①, to adjust the swing span in A direction decrease and B direction increase.

Micro adjustment

Open the rubber cork ③ apply screwdriver to rotate eccentric bar ④ to adjust the swing span.

摆幅调整

如图(13)所示, 摆幅指示板②上表示的是摆幅mm的数值, 转动摆幅手转轮①, A方向摆幅减小, B方向摆幅增大。



P. TROUBLESHOOT

| NO | Trouble | What to do when | Trouble parse | Corrective measures |
|----|-------------------|--|---|---|
| 1 | Breaking needle | Direction and height of needle | Wrong direction of upper needle | Correct direction from high to maximum high |
| | | needle | Bend needle | Change needle |
| | | Feed dog travel | Mismatch of needle bar movement feed dog travel | Adjust travel of needle and shuttle |
| | | Needle bar rising | Wrong travel of needle and shuttle | Adjust travel of needle and shuttle |
| | | Needle bar height | Wrong travel of needle and shuttle | Adjust travel of needle and shuttle |
| | | Main distance between needle and shuttle | Wrong traveled needle and shuttle | Correct threading |
| 2 | Breaking thread | Ways of threading | Improper threading | Correct threading |
| | | needle | Bent needle or broken needle tip | Change needle |
| | | Direction and height of needle | Upper needle problem | Correct upper needle |
| | | Upper thread tension | Upper thread tension too strong | Adjust upper thread tension |
| | | Lower thread tension | Lower thread tension too strong | Adjust lower thread tension |
| | | Thread take-up spring rate | Rate too big | Adjust spring rate |
| | | Thread take-up spring tension | Thread take-up spring tension too weak | Adjust thread take-up spring tension |
| 3 | Wire problem | Thread tension | Shuttle upper thread tension problem | Adjust shuttle and upper thread tension |
| | | Thread take up spring tension | Thread take-up spring tension problem | Adjust thread take-up spring tension |
| | | Presser foot | Presser foot too high | Adjust presser foot height |
| | | Presser foot pressure | Presser foot pressor too small | Adjust presser foot pressure |
| 4 | Wrinkly of fabric | Feed dog height | Feed dog height too low | Adjust feed dog height |
| | | Presser foot pressure | Presser foot pressure too small | Adjust presser foot pressure |
| | | bobbin | Scratch bobbin | Polish or change |
| | | V belt tension | Belt tension too small | Adjust belt tension |
| 5 | Tangled thread | Upper thread tension | Upper thread tension too strong | Adjust upper thread tension |
| | | Lower upper thread tension | Lower thread tension too strong | Adjust lower and upper thread tension |
| | | Thread take-up spring tension | Thread take-up spring tension too problem | Adjust thread take-up spring tension |
| | | Thread take-up spring rate | Rate too big | Adjust thread take-up spring rate |
| | | Presser foot pressure | Presser foot pressure too small | Adjust presser foot pressure |
| 6 | Tangled thread | bobbin | When pulling lower thread bobbin reverse | Reverse bobbin |
| | | bobbin | Bobbin does not rotate smoothly | Change bobbin |
| | | Bobbin winding amount | Too much winding amount | Winding amount should not be more than 80% |

五、故障原因及对策

| NO | 故障状态 | 查看事项 | 故障原因 | 处理方法 |
|----|------|---------|-------------|-----------|
| 1 | 断针 | 针的方向、高度 | 上针方向不对 | 正确方向上到最上 |
| | | 针 | 弯针 | 换针 |
| | | 送布牙行程 | 针杆运行与送布行程不对 | 调整送布牙行程 |
| | | 针杆上升量 | 针和旋梭的行程不良 | 调整针和旋梭的行程 |
| | | 针杆高度 | 针和旋梭的行程不良 | 调整针和旋梭的行程 |
| | | 针和旋梭主距离 | 针和旋梭的行程不良 | 调整针和旋梭的行程 |
| 2 | 断线 | 穿线方法 | 穿线出错 | 正确方法穿线 |
| | | 缝纫针 | 针已弯或针尖已坏 | 换针 |
| | | 针的方向、高度 | 上针位置不良 | 正确方向上针 |
| | | 面线张力 | 面线张力太强 | 调整面线张力 |
| | | 底线张力 | 底线张力太强 | 调整底线张力 |
| | | 挑线弹簧运动量 | 运动量太大 | 调整弹簧的运动量 |
| | | 挑线弹簧张力 | 挑线弹簧张力太弱 | 调整挑线弹簧张力 |
| 3 | 线路不良 | 线张力 | 底、面线张力不良 | 调整底、面线张力 |
| | | 挑线弹簧张力 | 挑线弹簧张力不良 | 调整挑线弹簧张力 |
| | | 压脚 | 压脚太高 | 调整压脚高度 |
| | | 压脚压力 | 压脚压力太小 | 调整压脚压力 |
| 4 | 线缝零乱 | 送布牙高度 | 送布牙高度太低 | 调整送布牙高度 |
| | | 压脚压力 | 压脚压力太小 | 调整压脚压力 |
| | | 梭芯 | 梭芯有划痕 | 打磨光滑或更换 |
| | | V型皮带张力 | 皮带张力太小 | 调整皮带张力 |
| 5 | 缝料皱褶 | 面线张力 | 面线张力太强 | 调整面线张力 |
| | | 底线张力 | 底线张力太强 | 调整底线张力 |
| | | 挑线弹簧张力 | 挑线弹簧张力不良 | 调整挑线弹簧张力 |
| | | 挑线弹簧运动量 | 运动量太大 | 调整弹簧的运动量 |
| | | 压脚压力 | 压脚压力太小 | 调整压脚压力 |
| 6 | 底线纠结 | 梭芯 | 拉出底线时, 梭芯反转 | 反向安装梭芯 |
| | | 梭芯 | 梭芯转动不流畅 | 更换梭芯 |
| | | 梭芯绕线量 | 绕线量过多 | 绕线量不超过80% |