

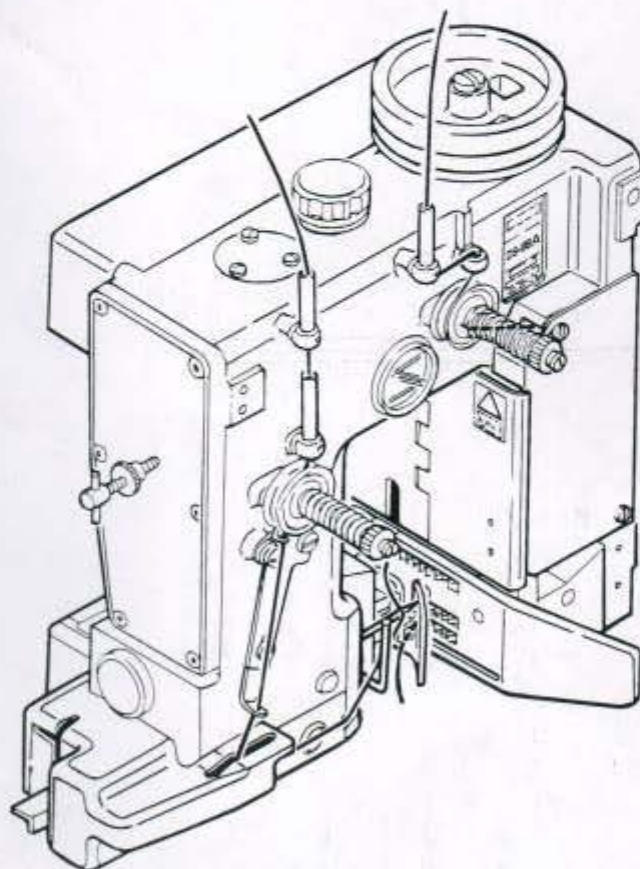


# DS-99

型号  
DS-99/A  
DS-99/C  
DS-99/P  
DS-99/AW  
DS-99/CW

## SEWING HEAD 封口袋缝纫机

INSTRUCTION MANUAL / PARTS LIST  
使用说明书 / 零部件清单



### 河北青工缝纫机有限公司

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## 1. Specification / 技术规格

Model	DS-99/A	DS-99/C	DS-99/P	DS-99/AW	DS-99/CW
Max. Speed 最高转动速度	2700 rpm			2500 rpm	
Ordinary Speed 常用转动速度	2500 rpm			2300 rpm	
Stitch Length 针距范围	7 - 11.5 mm	7 - 10.5 mm	7 - 11.5 mm	7 - 11.5 mm	7 - 10.5 mm
Stitch Type 缝合形式	Double thread chain stitch 双线链式缝合				
Needle Type and Size 缝针规格	DR-H30 #26		DRG-67 #27	DR-H30 #26	
Cutter 切刀形式	Thread Cutter 缝线切断	Crepe Tape Cutter 纸带切断	— 无切刀	Thread Cutter 缝线切断	Crepe Tape Cutter 纸带切断
Lubrication 给油方式	Totally enclosed oil bath 内置油槽润滑系统				

Model 机种名 Part 部品名	DS-99/A	DS-99/C	DS-99/P	DS-99/AW	DS-99/CW	Purpose 用途
Presser Foot, left 压脚(左)	062251A	102135A	302161A	062391A	102281A	Standard 标准
Presser Foot, right 压脚(右)	062261	102162	—	062381	102261	
Feed Dog, front 送料齿(前)	304211	304131	304221	304291	104231	
Feed Dog, rear 送料齿(后)	—	104072	—	—	104072	
Throat Plate 针板	304181	104123	304231	304281	104241	
Presser Foot, left 压脚(左)	—	102134A	—	062392A	102311A	Hand feed 人手给袋
	—	102136A	—	—	—	Sub-Tape 使用夹纸
	—	102321A	—	—	102331A	Bag Mouth Folder 袋口折边机
Presser Foot, right 压脚(右)	—	102161	—	—	—	Hand Feed and Jute Bag 人手给袋、麻袋
	—	104093	—	—	—	
Throat Plate 针板	—	104122	—	—	—	by lever start 开关拨杆方式
	—	304171	304241	—	—	Single Thread 单缝线缝合
	—	—	—	—	—	—

## 2. The Points Before Operation / 机器启动前的确认

- Oil the area through which thread passes, the tension disc, the thread guide, looper, etc.  
(Note: An anticorrosive agent is applied to the machines at the factory, in order to prevent rusting. It is necessary to use oil to remove this agent, or it may prevent the thread from passing smoothly.)
- Confirm that the machine has been threaded as per the instructions 3. in the manual.
- Confirm that the machine has been lubricated as per the instructions 4. in the manual.
- 打开捆包，初次启动缝纫机时，下列部件都需要注油，穿缝线路、线调节部、线导部、钩针等。从工场发货时，为了预防生锈，机器部都涂抹抗锈油。若不除掉抗锈油，否则缝线不会穿顺利。
- 启动机器前，必须查阅穿线图，应确认两条缝线都正确地穿引。(第3项目)
- 启动机器前，必须查阅润滑注油(第4项目)，应确认其注油程序依次顺利进行。

### 3. Threading / 穿引缝线

1. For DS-99/A, DS-99/C, DS-99/P <Fig. 1-A. a b>
  - a) Thread a on the left side of thread stand is Needle thread. Thread it points ① through ⑦ in order.
  - b) Thread b on the right hand side of thread stand is Looper thread. Thread it points ⑧ through ⑯ in order.
  - c) Both threads should extend from the last threading point by 15 to 20 cm.

**Caution:**

No stitching at all, or thread break or skipping stitches result if the machine is not properly threaded. Check the threading with <Fig. 1-A, B>, and be sure both Needle thread and Looper thread are correctly thread.

2. For DS-99/AW, DS-99/CW <Fig. 1-B. a a' b b'>
  - a) Needle Thread 1 a : Thread it points ① through ⑩ in order.
  - b) Needle Thread 2 a' : Thread it points ① through ⑩ in order.
  - c) Looper Thread 1 b : Thread it points ⑪ through ⑳ in order.
  - d) Looper Thread 2 b' : Thread it points ⑪ through ⑳ in order.

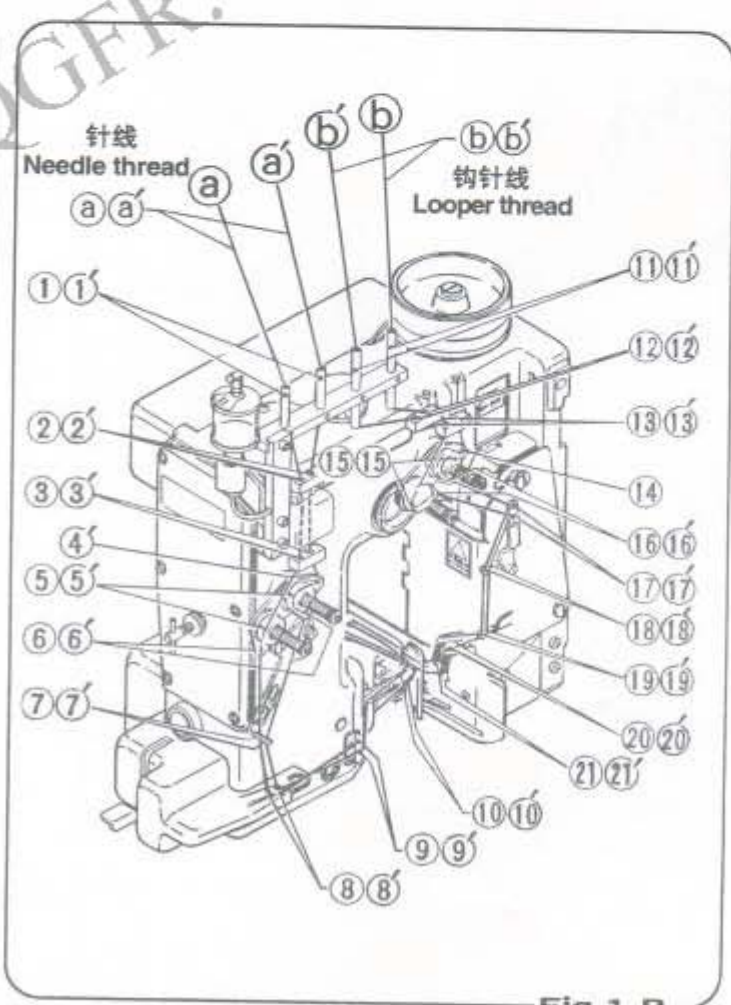
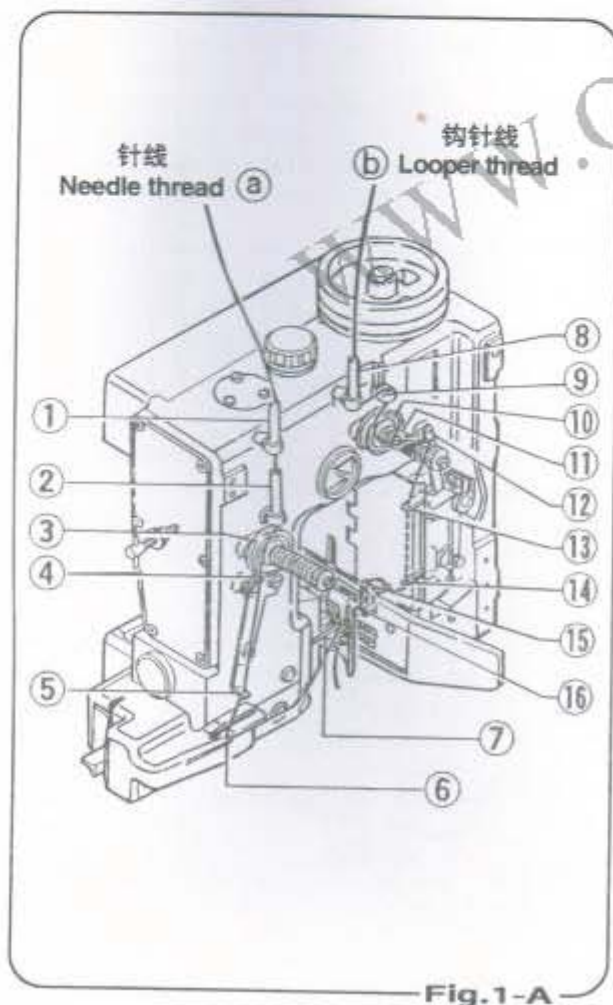
1. 型号 DS-99/A, DS-99/C, DS-99/P 穿线如<图1-A. a b>
  - a) 将线架左边的缝线a(针线), 按①-⑦号数穿线至针。
  - b) 将线架右边的缝线b(钩针线), 按⑧-⑯号数穿线至钩针。
  - c) 两缝线穿完后, 请把两条线拉出来, 分别从针尖儿和钩针应留出15~20cm长的缝线。

**[注意]**

缝线穿得不对, 可能成为完全不会缝合, 断线或跳针等故障的原因。

应遵照<图1-A, B>如图所示按号数穿线。

2. 型号 DS-99/AW, DS-99/CW 穿线如<图1-B. a a' b b'>
  - a) 针线 1 a 按 ①-⑩号数穿线。
  - b) 针线 2 a' 按 ①-⑩号数穿线。
  - c) 钩针线 1 b 按 ⑪-⑳号数穿线。
  - d) 钩针线 2 b' 按 ⑪-⑳号数穿线。



## 4. Oiling / 润滑注油

Oil is Completely drained from the machine before packing. Ensure the machine is filled to the correct levels as described below. Use mineral oil 22-32 cSt at 40°C. (Eg. Tellus oil #32.)

### 1. Oil Filling

- Unscrew breather cap a and fill with oil to between the maximum and minimum levels (A). Approximately 1,600cc should be used. (Fig.2)
- Remove cover (b) and fill with oil so that level reaches the 'red point' indicator (B). Approximately 140 cc should be used. (Fig.2)

### 2. Exchanging Oil

- Oil should be exchanged after the first 1,000 hours of operation then after every 2,000 hours.
- Oil Draining  
As indicated (Fig.2) oil is drained from the machine by rotating and un-plugging, (C, D).

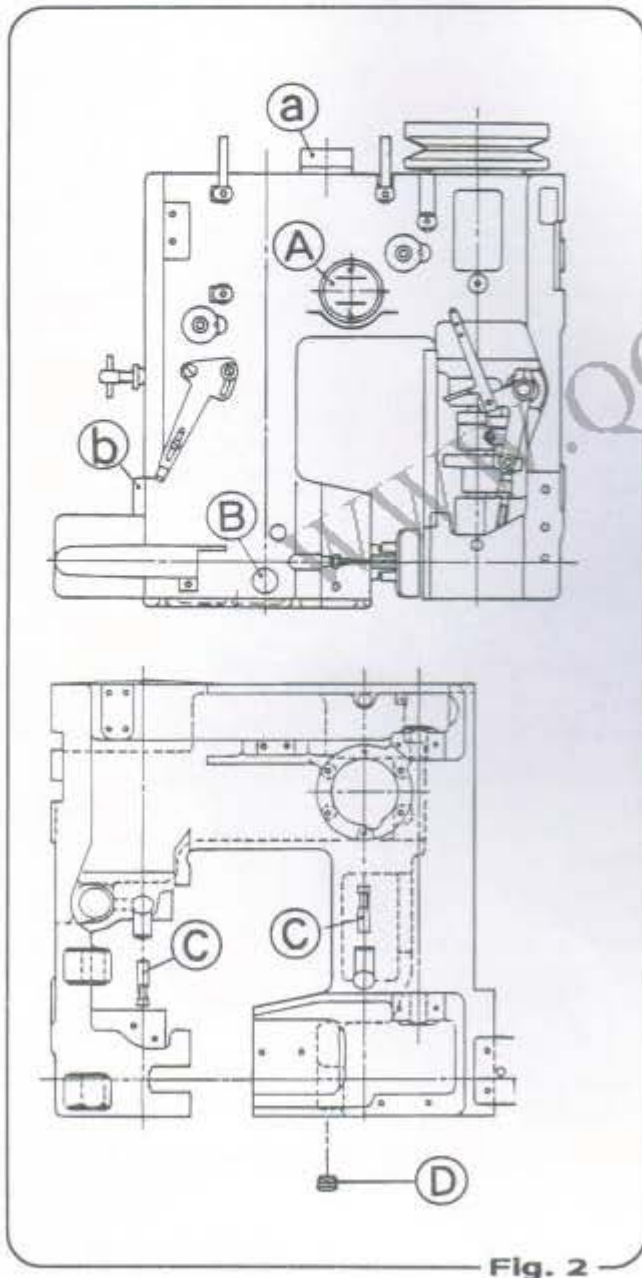


Fig. 2

型号DS-99缝纫机采用密封式的内置油槽润滑系统，但是从工场出货时，里面油都放掉。在启动机器之前，应加油所需要的润滑油而运动机器。

- \* 具有两个部分需要注油，请注意。
- \* 应使用在温度40C须有动粘度22-32cSt的矿物油。(例) Shell Tellus32号油
- \* 相当长期不使用的缝纫机，再次使用时，请跟我公司技术人员联系商量。

### 1. 注油

- 往(A)注油口儿加油，请拧开注油盖(a)后，加油直到油上面到“H”水准标记为止，注油量约1,600cc(图2)
- 往(B)注油口儿加油，请拧开注油盖(b)后，加油直到油上面到红色圈为止，注油量约140cc(图2)

### 2. 换油

- 初次换油，1000工作小时之后，请换油一次；第二次以后换油每2000工作小时需更换一次。
- 将要排油时，如图所示将塞子(C)和(D)取下，请涂掉余留油。

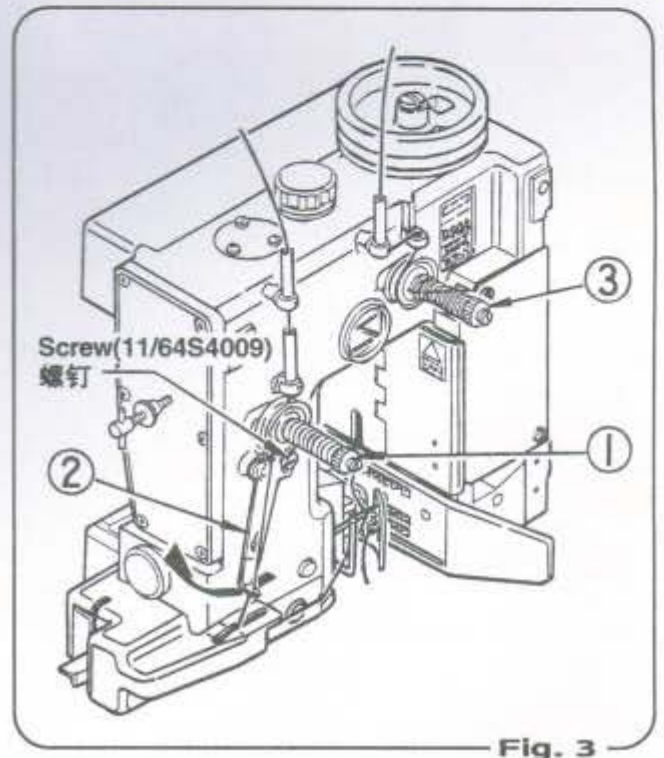


Fig. 3

## 5. Adjusting / 操作与调节

The looper movement of this machine has been properly adjusted before shipment from the factory, but if it needs re-adjustment when it is disassembled for repair or etc, proceed as follows.

### 1. Thread Tension (Figure 3)

Thread tension is most important for successful sewing. Maladjustment results in thread break, skipping stitches and break of bag.

Proper thread tension may slightly vary with the type of bag and thread. The norm is given below. Thread tension regulators are mounted so that the tension is uniform for stitch length. To adjust the tightness of seam, adjust ①, ③ in Figure 3.

#### 1) Heavy material (jute, etc.)

Thread tension regulators ① should be loosened slightly (turn the adjust nut counterclockwise). Needle thread controller ② after loosening set screw.

#### 2) Light material

Tighten thread tension regulators ① (turn the adjust nut clockwise).

#### 3) Needle thread

The feed rate of thread must be adjusted according to stitch length and thickness of bag. If thread tension regulator adjustment is not sufficient for obtaining the required thread tightness, use needle thread controller ② by moving it up or down as necessary, after loosening set screw. Thread is tighter by moving it up (in the direction of the arrow), and is looser by moving it down. Tighten the set screw after adjustment.

#### 4) Looper thread

Looper thread tension regulator ③ should be adjusted in accordance with adjustment of the needle thread tension regulator. Adjust it so that the looper thread will not sag. If looper thread tension is too much, the needle thread may break.

### 2. Presser Foot Pressure

Presser foot pressure must be adjusted according to the material of bag and thickness. Check the reverse side of seams. The pressure is too strong if seams show a sign of scratches by feed dog teeth, or the actual stitch length is shorter than the preset feed rate of feed dog teeth. In this case, unscrew plate spring adjust screw (102171), Figure 4, after loosening nut (5/16N24301). Be sure to tighten the nut after the adjustment. If the pressure is too weak, seams do not form a straight line, or the stitch length is irregular. In this case, increase the pressure by screwing the plate spring adjust screw. Decrease the pressure when closing jute and other heavy bag material, and increase it when closing PP woven cloth and other light bag material. Your machine is adjusted for 3-ply kraft paper bags at the factory.

DS-99缝包机在供货时已适当调整,但为了更换零部件需要调整,请参看下列调整方法进行正确地调整。

### 1. 穿线张紧度调整(图3参照)

线调节是在缝口袋时最重要的项目,请注意,线调节不对可能成为断线、跳针、破袋等的故障原因。由于袋料和缝线种类,线调节(图3-①、③)有些不一样,但原则上按下记指示进行调整。

#### 1) 厚袋(麻袋等)使用时的调整

请将线调节①按着针线比较松,线调节弹簧用指头从上面按住,送时针方向转动螺母,可使穿线放松。螺母转动到弹簧套入螺母背面沟转不动的地点,请确认。(线控制板②放松螺钉降下一点儿)

#### 2) 薄袋使用时的调整

请将线调节①按着针线紧一点儿,线调节螺母时针方向转动。(线控制板②放松螺钉抬高一点儿)

#### 3) 针线调节

因针距和袋厚度不一样而缝合结线不好时,请把线控制板②上下移动而调整,把线控制板往箭记号抬起,缝线紧起来,移动相反的方向,缝线松了,在适宜的地点,把线控制板用螺钉(11/64S40009)拧紧固定。

#### 4) 钩针线调节

钩针线调节③需要和针线调合调整,请把钩针线正确地调节而防备不会松。钩针调节按线太紧也会成为断线的原因,请注意。

### 2. 压脚调整

压脚的压力必须依被缝合袋料和其厚度适当调节,请查看缝袋的背面缝线。当压力太紧时袋料背面将被送料齿锐利的齿所损伤,针距比先定送料量更小的现象会发生。放松片簧调节螺钉(102171)而进行调整。然后再将螺母(5/16N24301)拧紧。压脚压力松弛时,缝口线可能不平直又针距不齐全,与上述调整相反请将调节螺钉拧紧。麻袋等厚袋要缝时,请调整压脚压力比较松。编织袋等薄袋要缝时,请调整比较紧。从工厂供货时,压脚压力用3层纸袋调整好。

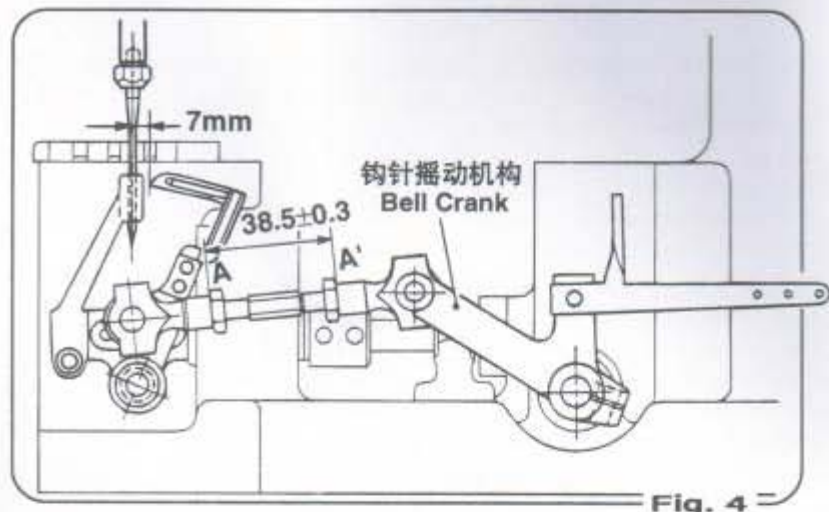


Fig. 4

## 3. Looper

- a) Turn the pulley in the forward direction and adjust the bell crank so that the end of the looper is 7mm away from the needle center when the needle is in the most retracted position, as shown in (Fig.4). The distance between the nut (outside) of Looper Connecting Rod must be  $38.5 \pm 0.3$ mm. (Fig.4)

Upon completion of the adjustment, tighten the screw of the bell crank.

## b) Check of Height of Needle

Needle 5 and looper 1 movements are correctly timed if distance (A and A' of Fig.4) between Looper point and Needle hole when Looper points gets in line with left-side edge of Needle 5 is the same as Looper 1 passes Needle in forward and backward movements.  $A=A' \pm 0.3$ mm is allowable. Adjust by lightly tapping the looper Drive Lever. Looper eyelet should overlap with lower part of oval hole of Needle, as shown in (Fig.5-c) as looper goes forward. Adjustment can also be done by loosening the set screw of the needle bar connecting stud and adjusting the height of the needle bar so that the end of the needle is 15.5mm from the upper surface of the throat plate as shown in (Fig.6).

## 3. 钩针调整

## a) 缝线和钩针距离

预先保持距离(A-A'), 相隔 $38.5\text{mm} \pm 0.3\text{mm}$ 以内, 而如图所示(图4)装球连杆(#063072AA), 钩针最后退时, 针中心离钩针距离应相隔7mm。调整钩针摇动机构后, 请无忘拧紧, 注意钩针摇动曲轴不要松动。

## b) 缝针高度

由于调整钩针尖头应准缝针孔中心线上, 请将钩针前进或后退而调整位置, 钩针和缝针交叉时候, 从钩针尖头到缝针穴的距离, 如图所示(图5-a/b), 须要确保一定的(A=A')尺寸, 尚有 $A=A' \pm 0.3\text{mm}$ 容许限度。

- 钩针尖头和缝针穴合不在一起, 请用塑料榔头从前面又后面轻轻打钩针摇动曲轴而调整位置。

- A=A' 尺寸确认后(图5-C), 为了钩针穴下面和针穴下面要合在一起, 请将针棒抱合(#032171)放松螺钉而调整针棒高度。

- 预先如图所示(图6), 针上升到最高位置时, 针至针板距是15.5mm, 将针棒高在那地点定下, 以后调整工作容易进行。

- 这项调整结束, 请将针棒抱合螺钉紧固。

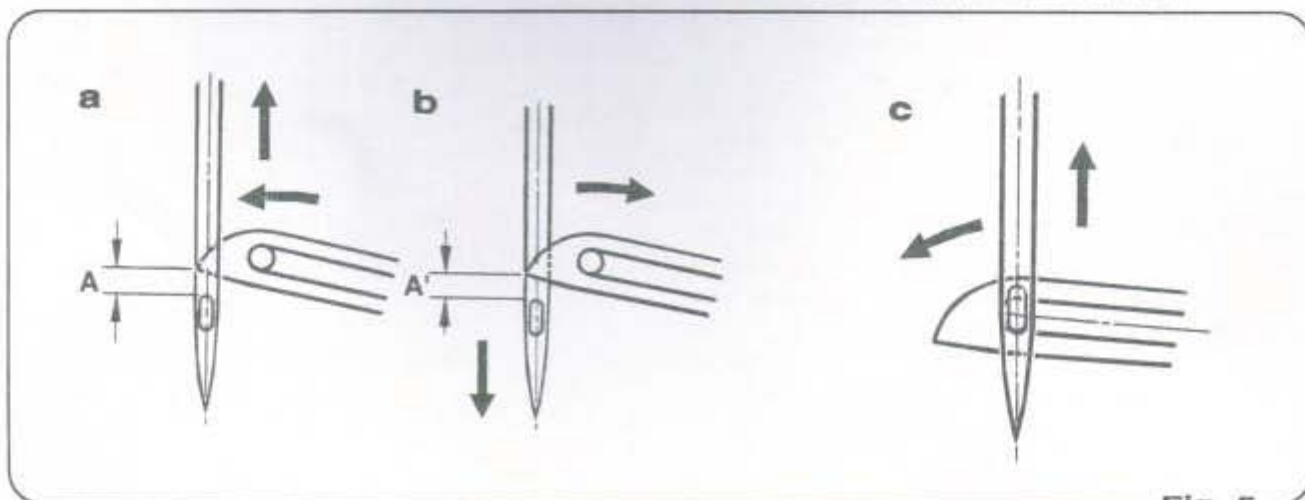


Fig. 5

## c) Clearance Between Loper and Needle

Adjust the clearance between the needle and the looper to between 0.05-0.1mm when the needle goes forward and passes the rear of the needle. To obtain the correct clearance, loosen the screw (b) of the looper rocker frame (a) and incline (c) the looper rocker. Adjust the clearance of the needle and looper to between 0.1-0.5mm when the looper moves forward to the right at the closest point to the needle. (Fig.7-a)

To facilitate the adjustment first adjust the looper avoid eccentric cam so that its screw is 45° to center of the main shaft. (Fig.7-b)

## d) Loper Retainer

Loosen set screw (d) and adjust the clearance of the needle and looper retainer to between 0.05-0.1mm as the needle goes up. (Fig.7-c)

## c) 缝线和钩针间隙

\* 针之凹弧处和钩针间隔需要调整, 钩针尖头在通过针后面时, 针凹弧处与钩针尖头相隔位置必须调整为0.05-0.1mm间隙,

\* 放松钩针摇臂(a)之螺钉(b)后, 放倒钩针台(c)后, 即使可调整。

\* 其次, 钩针从前进转向右边后退时, 钩针通过针之凹弧处, 这时两部件间隙必须接近于0.1-0.5mm如图示(图7-a)。

\* 钩针摇动(#303061)降下位置, 钩针倒偏心器(#303072)螺钉为了保持45角度, 暂系偏心器后进行细微调整(图7-b)。

## d) 缝针和钩针导部间隙

针和钩针导部间隙需要调整, 针从最低地点转上升时, 针和钩针导部相隔必须保持0.05-0.1mm调整这间隙(图7-c)。

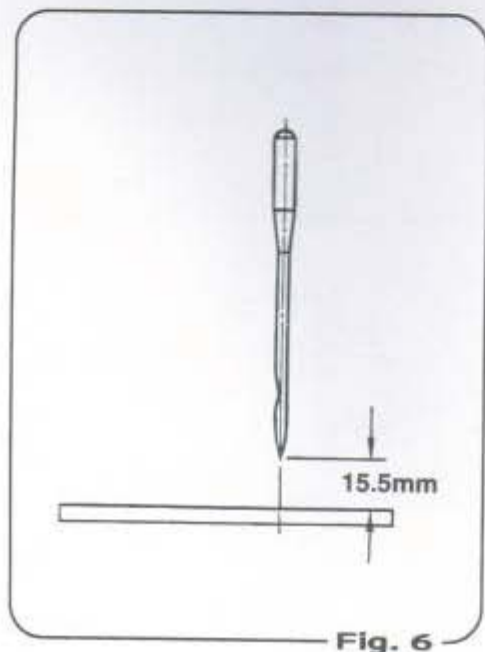


Fig. 6

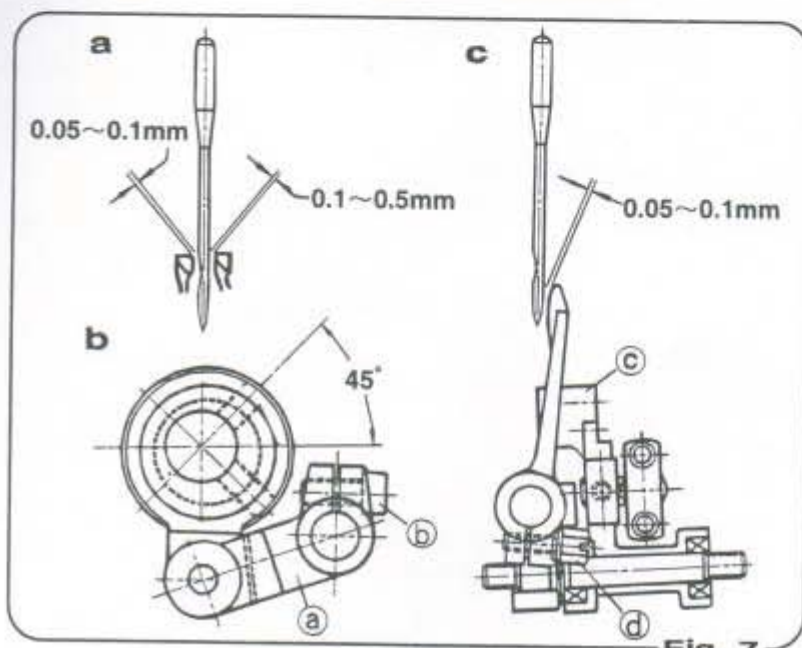


Fig. 7



4. Feed Mechanism

- a) Ensure that the feed dog does not touch the throat plate as it passes through. A clearance of 1.5mm should be seen between the middle teeth of the front feed dog and the throat plate as indicated (Fig.8).
- b) Height of the Feed Dog
- Adjust the height of the feed dog so that it protrudes 2.5mm from the upper surface of the throat plate when the feed dog has risen to the highest position, as shown in (Fig.9). If the feed dog is higher than this, stitch will not chain satisfactorily, and if it is lower than this, the stitch width will be too small. Slacken nut (b) with a box spanner to adjust the height of the Feed Dog. It is important to adjust the height with set screw (a) to ensure that the pressure from the Pressure Foot should not force it back down. Tighten nut (b) when the adjustment is correct.
  - The Rear Feed Dog should be set 0.1mm lower than the Front Feed Dog.

Caution:

Tentatively tighten the nut and make several stitches to be sure the required stitch length is obtained. After the confirmation, firmly tighten the nut with a spanner.

c) Stitch Spacing

The stitch width of this machine has been adjusted to 10mm before shipment from the factory. The stitch width is adjustable from 7 to 11.5mm.

(only DS-99C is adjustable from 7 to 10.5mm)

Loosen the nut (a) of the feed regulator and move the feed connecting rod (b) in the direction of S, as shown in (Fig.10), to decrease the stitch width, and move the rod in the direction of L to increase the width. When moving the feed connecting rod, do so after confirming that the feed connecting rod can move freely along the slot in the feed rocker (Rotate the pulley in the forward direction until the feed dog is in the forefront position).

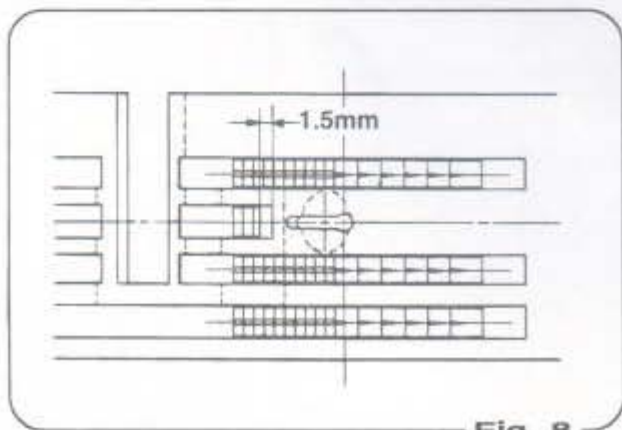


Fig. 8

4. 送料齿调整

- a) 针板和送料齿间隙  
送料齿最前进时，针板沟和送料齿间隙应有1.5mm(图8)，请放松送机构根基(#304201)螺钉，而调整其间隙。
- b) 送料齿高度
- 送料齿(前)到最高位时，测查送料齿在针板面上高度，必须2.5mm如(图9)所示。请将调节螺钉(a)拧左右而调为送料齿2.5mm高于针板上面。调整结束用筒板子拧紧螺母(b)固定送料齿。
  - 送料齿(后)对于送料齿(前)应调整高度一样或稍低0.1mm左右。

[注意]

调整工作时，暂拧螺母，调整结束再须拧紧螺母(b)。

c) 针距调节

针距可调节从一针距最小7mm调至最大11.5mm。从工场出货时，这针距调为10mm，针距调节要领，请参看(图10)

(但型号DS-99/C针距范围为7-10.5mm)

- \* 请将送料调节轴之螺母放松，手动调节杆(b)暂拧螺母。
- \* 移动螺栓向箭头指向(S方向)会达到较细的针距，反之移动向支点(L方向)会达到较粗的针距。
- \* 手动螺栓时，调节杆应顺着弓形物轻轻地会动作。
- \* 暂拧螺母，调节后要确实地紧固螺母(b)。

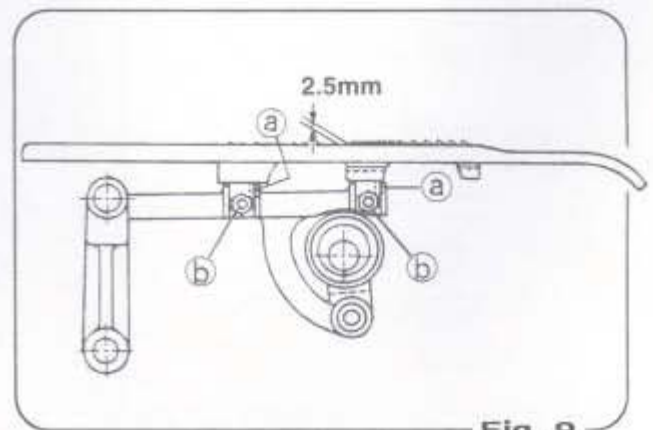


Fig. 9

## d) Needle Guide

When the stitch width is changed, the needle guide must be adjusted accordingly, as the clearance between the needle guide and the needle will change. Turn the pulley in the forward direction after loosening the screw (a) of Fig.11 and adjust the clearance between the needle and needle guide to zero when the end of the looper comes to the side of the needle, as shown in (Fig.11) and tighten the screw (a).

## d) 导针调整

- \* DS-缝纫机从工场出货时,如前述其针距已调节为10mm,与此同时,导针也调节为10mm.
- \* 导针在最前进时,如图11所示,导针对针的间隔必须终于0mm,放松螺钉而调整.
- \* DS-99缝纫机如果针距改变,导针不必再调节.为了慎重起见,请确认.

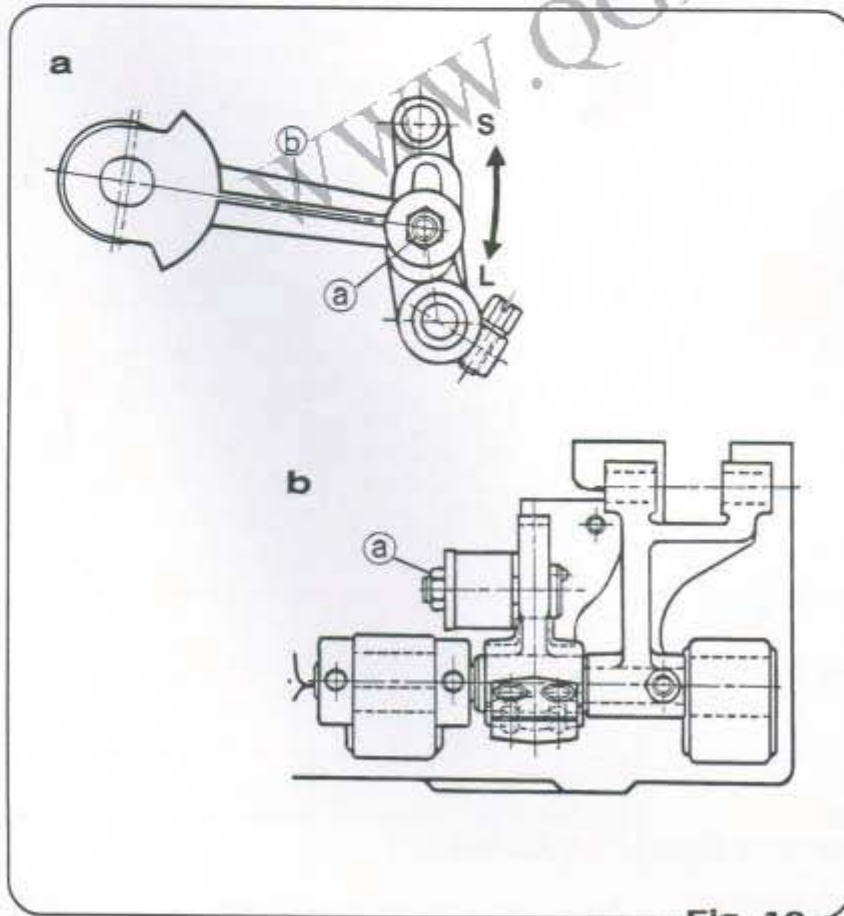


Fig. 10

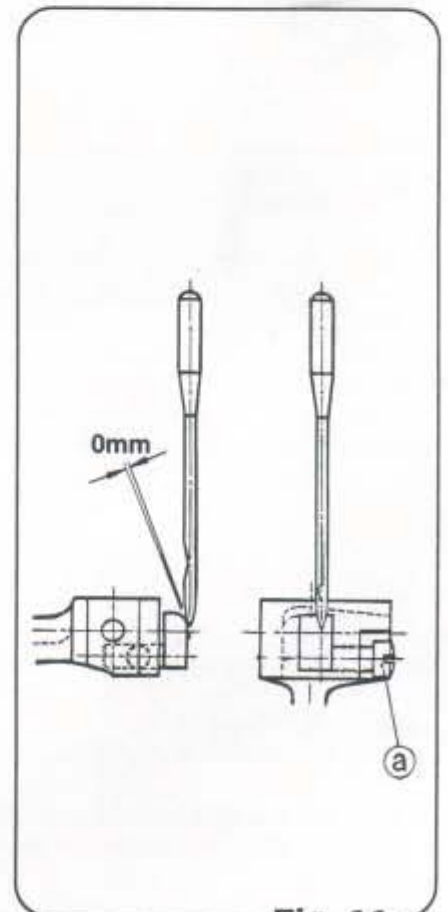


Fig. 11

5. Thread Cutter (DS-99/A)

The knives, (A) and (B) are to be adjusted as following steps.

- Fix the knife (A) with tightening screw (A) at the proper position. Be sure that the knife edge does not protrude from thread gutter of throat plate.
- Fix the knife (B) in the gutter of knife lever, by tentatively tightening screw (B).
- Turn pulley clockwise direction. When the knife (B) moves farthest right position, fix the knife (B) moves so that it contact with the edge of knife (A) approx. 2mm.
- Slightly bend knife lever to obtain proper contact between knife (A) and (B).
- Try to cut several threads wound and then confirm if they are cut sharply and straightly.

5. 切刀调整(型号:DS-99/A)

切刀(A)和(B)啮合切断线情形,请调节如下要领。(如图12所示)

- 用螺钉, 请将切刀(A)紧紧地锁在固定基, 为缝线头不在沟里接触, 还其刀尖不须超出针板线沟, 请注意。
- 请将切刀(B)插入在刀片杆沟里, 用螺钉(B)暂拧紧。
- 用手转动皮带轮, 切刀(B)最前进时, 其切刀对切刀(A)尖头应保持2mm间隙, 那调整后拧紧螺钉(B)而固定。
- 切刀(A)和(B)发生弯曲时,(用板子等)弄直切刀杆而调整。
- 将5条线扎起来, 插入在切刀(A)和(B)之间用手转动皮带轮箭线时, 请确认切断面是否直角的, 又有无剪不断的部分, 还确认切刀切断效果。

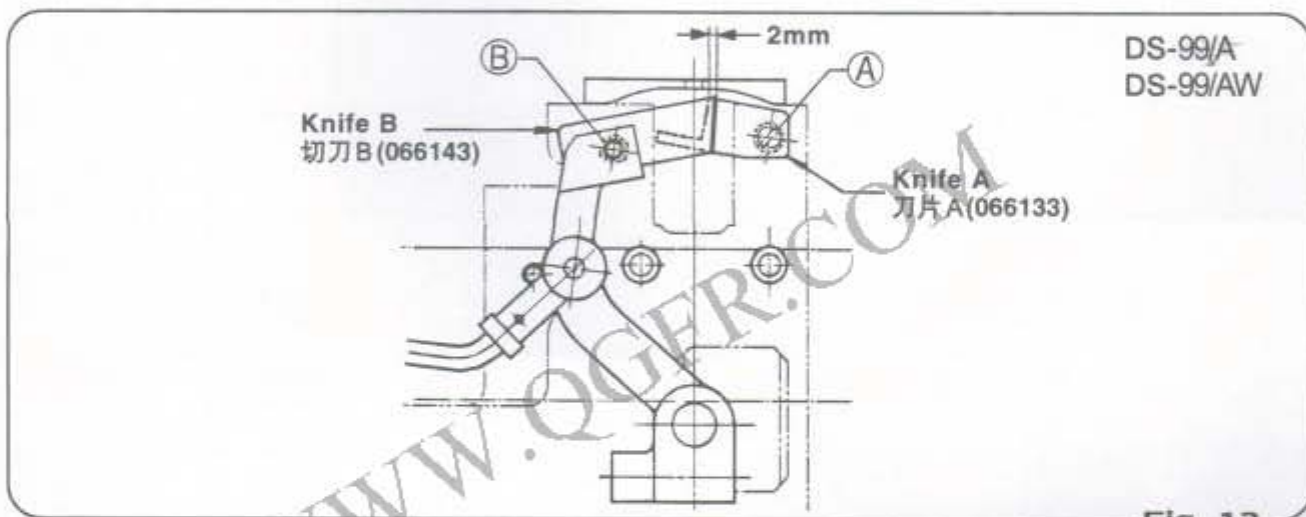


Fig. 12

6. Cutter (DS-99/C)

- To occlude the upper and lower blades, manually move the upper blade. To do so, put off air source. Here, prior to lowering the upper blade, loosen the screws (a), (b) and (f) and the nuts (c) and (d) shown in (Fig.13). When both blades are occluded, allow a gap of 0.1 to 0.2mm between the faces of the two blades on the rear side, and tighten the screw (a) and the nut (d).

6. 刀具调整(DS-99/C)

- 调整刀具时, 先要关上压缩空气源, 先确认空气系统停止后, 开始调整工作, 当装置新刀片(上或下刀片)时, 每次需要调节。
- 用手开动上刀片(#106053), 查看使它和下刀片啮合, 需要下降上刀片(如图13所示)时, 放松螺钉(a)、(b)和(f), 还要放松螺母(c)和(d)。
    - 上刀片和下刀片啮合调节, 如图(14)所示, 刀片后面仅有0.1-0.2mm隙间而用螺钉(b)调整, 这调整时, 上切片和下切片尖头经常应接触。

NOTE:

The gap adjustment can be easily made placing a sheet of kraft paper between the upper and lower blades, as shown in (Fig.14).

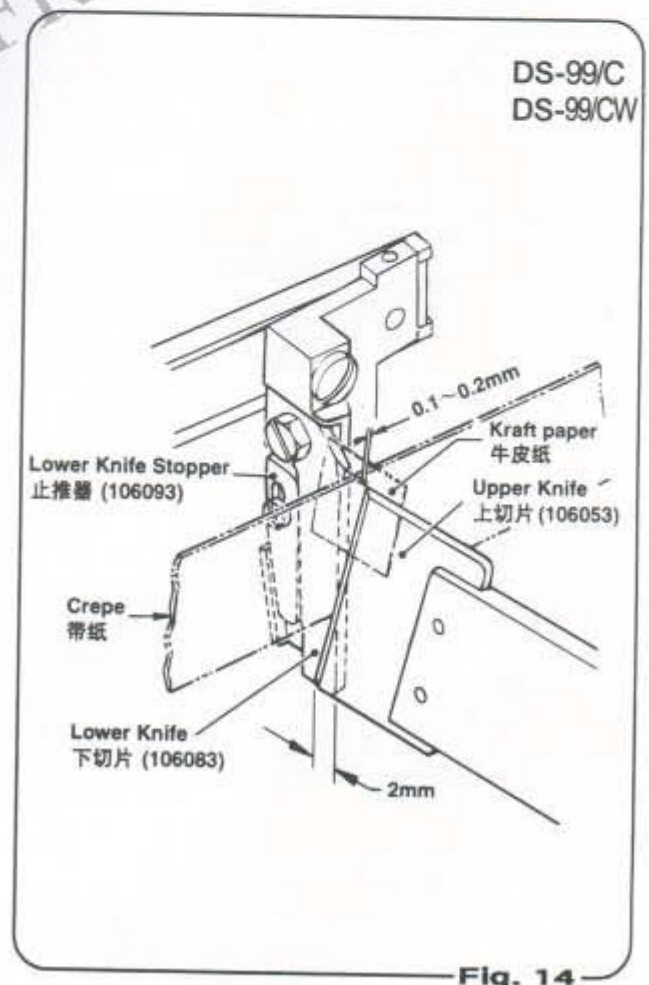
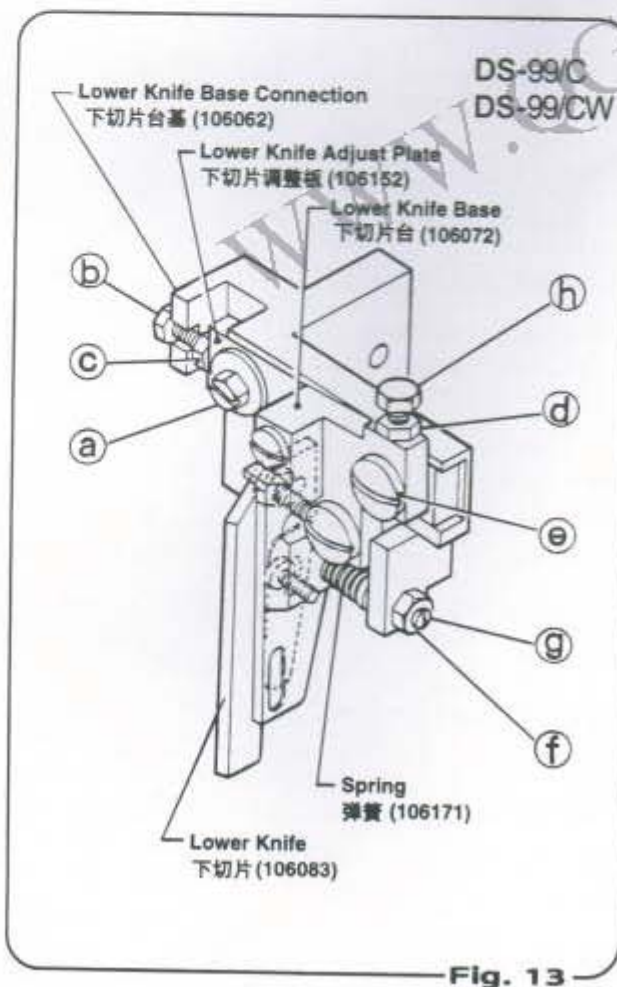
[注意]

如图14所示, 为了保持上述隙间, 请插入仅一张牛皮纸就会容易试验。

- After the setting described in (1) above, where the screw (f) is in light contact with the screw (e), tighten the nut (d).

- 这调整结束, 将螺钉(f)轻轻地拧进到螺钉(e), 然后拧紧螺母(d)。

- c) After the adjustment by steps ① and ②, cut a crepe tape or thread for test. If the front end of the cutter cuts but the rear end does not, there is a gap on the rear side. In this case, loosen the nut ③ and loosen the screw ④ by 1/8 turn, and cut the thread again for test. If it still does not cut, loosen the screw by another 1/8 turn and repeat this adjustment and test cut until the thread can be cut, and then retighten the nut ③. If the rear end of cutter cuts but the front end does not cut, the adjustment by step ① is insufficient. Then, make re-adjustment of the rear side so that the gap between both the blades becomes 0.1 to 0.2mm. Here, adjust the upper and lower blades so that they are in contact with each other on the front side. If the lower blade tends to turn away without cutting, loosen the nut ⑤ and increase the pressure of the spring by turning the screw ⑥ clockwise. (Fig.13)
- d) Adjust the overlapped depth of the upper and lower blades by changing the length of air cylinder rod end so that the distance between the upper face of the lower blade and the rear side of the upper blade becomes 2mm, as shown in (Fig.14).
- e) Do not operate without Air Speed Controller on the Solenoid Valve of the Stand. (See the Parts List A2/A6 (2L) page 12 Ref.No.49)
- f) Adjust air pressure to 0.4Mpa (4kg/cm<sup>2</sup>) not to exceed 0.5Mpa (5kg/cm<sup>2</sup>).
- c) 前述调整结束, 用手转动切刀, 查看切断纸带 (crepe tape) 或缝线。
- 刀片头侧能切得快但后侧不能切时, 那是由后面隙间太宽的原因。
  - 放松螺母③先将螺钉④转动1/8(22.5度)弯, 再试一次切断纸带或缝线, 还不能切时, 再转动螺钉④每一次1/8弯, 以达满意切断。确认切断好, 拧紧螺母③稳固地固定。
  - 相反, 后侧能切得快, 但头侧不能切时, ①部调整不完备, 再一次转动螺钉④调为上切片和下切片之间仅有0.1~0.2mm隙间。刀片切缝线时, 下切片错过缝线不确实切断线, 放松螺母⑤将螺钉顺时针方向转动而弹簧上加压力。(图13)
- d) 当两切片全部啮合时, 其深度应该2mm。请将气缸和气杆连接长度适当改变, 如图(14)所示为参考, 以便两切片深度调节为2mm。
- e) 在支柱侧的电磁阀上, 请务必安装空气速度控制器后启动机器。(请参看A2/A6(2L)零部件目录(12页49图号))
- f) 确实查看气压调为0.4Mpa(4kg/cm<sup>2</sup>), 不超过0.5Mpa(5kg/cm<sup>2</sup>)。

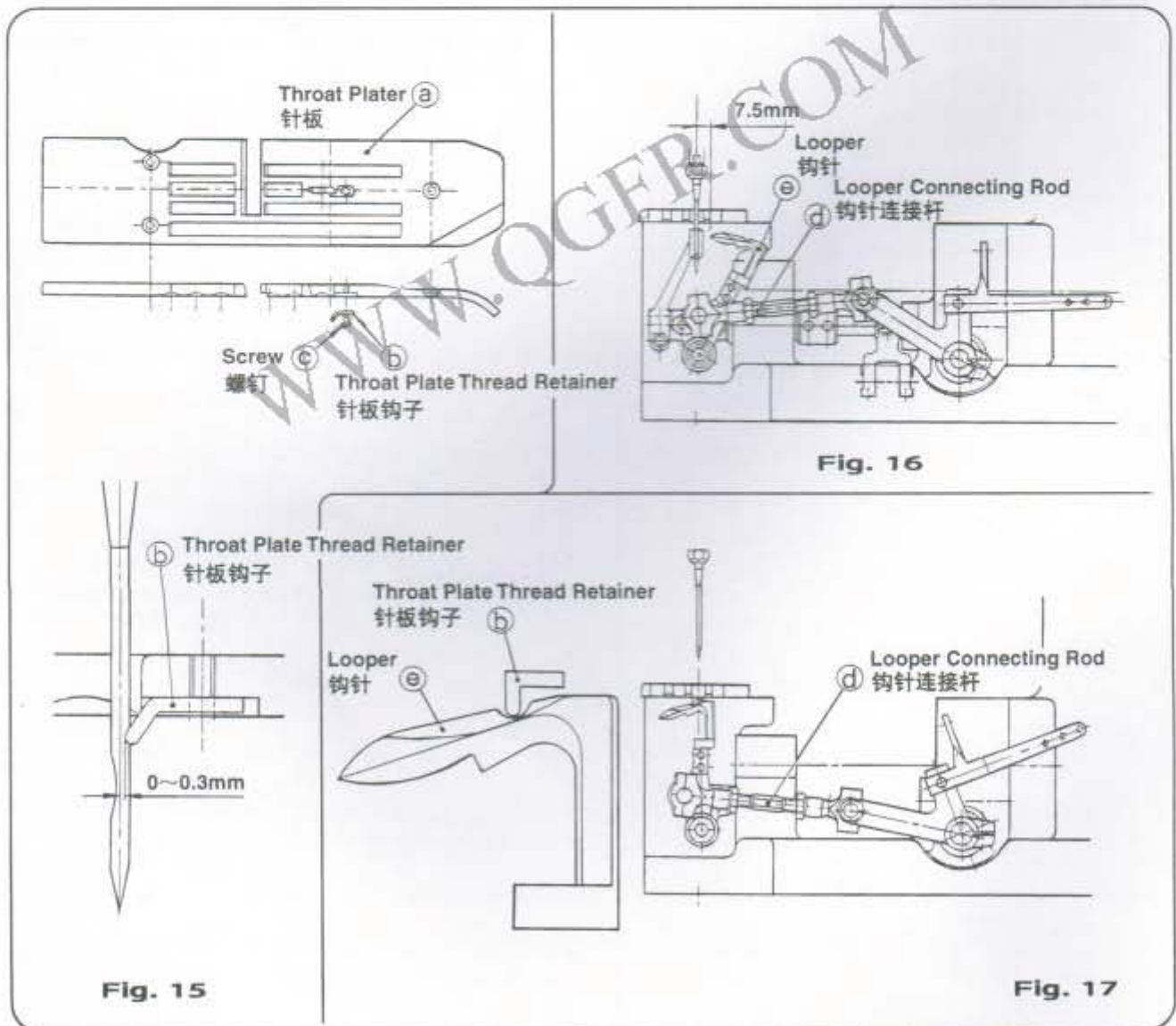


7. Adjustment for Single Thread Sewing

- a) Fixing Throat Plate Thread Retainer (Fig.15)  
Fix Throat Plate Thread Retainer (b) at Throat Plate (a) with Screw (c), keeping its point having 0 ~ 0.3 mm clearance from Needle center.
  - b) Clearance between Needle and Loper (Fig.16)  
Adjust Loper point with Loper Connecting Rod (d), keeping it having 7.5 mm clearance from Needle point when Needle is at the lowest position and Loper (e) is the most retracted position.
  - c) Adjustment between Loper and Throat Plate Thread Retainer (Fig.17)  
Adjust Throat Plate Thread Retainer with Loper Connecting Rod, keeping it not touching concave part of Loper when Loper pass through the nearest position A from Throat Plate.
- \* When the test to run, if the thread does not slip out smoothly from Throat Plate Thread Retainer, adjust keeping its point having 0 ~ 0.5 mm from Needle center.

7. 单线链式缝调整

- a) 装针板钩子(图15)  
用螺钉(c)将钩子(b)确实装上针板(a), 在安装钩子头离针中心必须保持0~0.3mm间隙。
  - b) 缝针和钩针关系(图16)  
图针降最下位, 同时钩针(e)最后退时, 调节钩针连接杆(d)必须保持针中心离钩针相隔7.5mm距离。
  - c) 钩针和针板钩调整(图17)  
钩针以A点为支点动作前后时, 为了预防针板钩碰上钩针沟面, 需要调整钩针连接杆。
- \* 在试缝袋时, 缝线挂在钩子较重时, 应将钩子离针中心缩回为0~0.5mm而调整。



## 6. Troubleshooting

Problem	Cause	Solution	Ref.
Needle (looper) thread breaks	1. Damaged looper	Replace	5-3
	2. Too much thread tension	Decrease	5-1
	3. Too little thread tension	Increase	5-1
	4. Thread snarled or hung up along path between thread stand and needle/looper	Correct	3
	5. Incorrect threading. Thread not between tension discs	Thread correctly	3
	6. incorrect needle setting	Set correctly	5-3-b
	7. Bent or damaged needle	Replace	5-3-b
	8. Double sewing	Move up thread controller	5-1
	9. Decreased stitch length because of worn feed dog teeth	Replace feed dog	5-4-b
No chain formed between bags	1. Incorrect threading	Thread correctly	3
	2. Too much looper thread tension	Decrease	5-1
	3. Too little needle thread tension	Increase	5-1
	4. Thread controller too low	Move it up	5-1
	5. Needle and looper not timed each other	Adjust timing	5-3-c
	6. Not enough presser foot pressure	Increase	5-2
	7. Thread is cut by feed dog teeth	File the row of feed dog teeth that comes in touch with thread	5-4
	8. Thread is feedback because feed dog is set too high	Adjust height of feed dog	5-4-b
Skipping stitches	1. Wrong setting of needle	Set correctly	5-3-b
	2. Bent or damaged needle	Replace	5-3-b
	3. Thread controller too low	Move it up	5-1
	4. Worn looper point	Replace looper	5-3-c
	5. Needle too high	Lower needle bar	5-3-b
	6. Thread sticking to needle due to heat	Dampen needle thread with oil	*
	7. Needle guard pushing needle	Adjust needle guard	5-4-d
	8. Looper thread too loose to form a good triangle (reverse skip)	Increase looper thread tension	5-1
	9. Needle and looper wide apart (scoop skip)	Adjust distance needle to looper	5-3-c
Needle or looper breaks	1. Bent needle	Replace	5-3-b
	2. Looper point hitting needle. Needle point hitting looper	Adjust timing of needle and looper	5-3-c
	3. Needle guard pushing needle or they are wide apart	Adjust needle guard	5-4-d
Stitch length not uniform, Curved seam	1. Not enough presser foot pressure	Increase	5-2
	2. Worn feed dog teeth	Replace feed dog	5-4-b
	3. Bent needle	Replace	5-3-b
Thread bites into crepe tape	1. Too much needle thread tension	Decrease	5-1
Crepe tape creases	1. Feed dog, rear, is higher than feed dog front a little	Adjust height	5-4-b

\* Plastic contents existent in bag material is melt by the heated needle and may stick to needle, etc., causing skipping stitches. When closing woven cloth bags, kraft paper bags inclusive of polyethylene coated layer, polyethylene and PVC bags, etc., dampen needle thread with oil to prevent sticking of plastic contents. Use silicone oil processed thread for packing rice and other food products.

## 6. 故障诊断和应付办法

故障内容	原因	故障排除	参看
针线, 钩针线断线	<ol style="list-style-type: none"> <li>1. 钩针受伤。</li> <li>2. 穿线(针线或钩针线)调节张力太紧。</li> <li>3. 穿线(针线或钩针线)调节张力太松。</li> <li>4. 两条线从线架分别穿引到缝针和钩针之间, 缠在一起或纠缠成一团。</li> <li>5. 穿线不对, 缝线不穿过张紧盘。</li> <li>6. 缝针装上不对。</li> <li>7. 缝针弯或受伤。</li> <li>8. 发生重复缝纫。</li> <li>9. 送料齿磨损, 针距比应有的较细短。</li> </ol>	<p>更换钩针 使线张力调松些 使线张力调紧些 注意勿让两线缠绕或纠缠</p> <p>正确地改正穿引缝线 正确地改正装缝针 更换缝针 将针线调节抬起 更换送料齿</p>	<p>5-3 5-1 5-1 3 3 5-3-b 5-3-b 5-1 5-4-b</p>
袋缝合后, 无法确实地形成结线	<ol style="list-style-type: none"> <li>1. 穿线不对。</li> <li>2. 钩针线调节张力太紧。</li> <li>3. 钩针线调节张力太松。</li> <li>4. 针线控制片位置低些。</li> <li>5. 缝针和钩针互相动作不合。</li> <li>6. 压脚压力不够。</li> <li>7. 由于送料齿的齿尖, 发生缝线切断。</li> <li>8. 因送料齿位置高, 使缝线往回送。</li> </ol>	<p>正确地改正穿引缝线 使钩针线张力调松 使钩针线张力调紧 将针线控制片抬高 按照这本书, 参看缝针和钩针调整项目进行调整。 用弹簧调节将压脚压力调紧些 送料齿压线尖部分用锉刀擦掉 调节送料齿高度</p>	<p>3 5-1 5-1 5-1 5-3-c 5-2 5-4 5-4-b</p>
跳针	<ol style="list-style-type: none"> <li>1. 缝针装上不对。</li> <li>2. 缝针弯或受伤。</li> <li>3. 针线控制片位置低些。</li> <li>4. 钩针尖头磨损。</li> <li>5. 缝针定位高些。</li> <li>6. 因发热, 缝线跟缝针紧贴在一起。</li> <li>7. 针导挤着缝针。</li> <li>8. 钩针线张力调整太松, 因此不会作好形状的三角形(重叠跳针)。</li> <li>9. 缝针离钩针间隔宽些(脱离跳针)。</li> </ol>	<p>正确地装上缝针 更换缝针 将针线控制片抬高 更换钩针 将针棒低下一些 缝线上加油 调整针导位置 使钩针线张力调紧些</p> <p>缝针离钩针的距离, 改正调整</p>	<p>5-3-b 5-3-b 5-1 5-3-c 5-3-b * 5-4-d 5-1 5-3-c</p>
缝针折了, 钩针折了。	<ol style="list-style-type: none"> <li>1. 缝针弯曲。</li> <li>2. 缝针和钩针头接触, 或者钩针和缝针顶端接触。</li> <li>3. 针导挤着缝针或者两零部件互隔缝隙。</li> </ol>	<p>更换缝针 缝针和钩针互相动作改正调整 正确地调整针导</p>	<p>5-3-b 5-3-c 5-4-d</p>
针目宽度不整齐针目弯曲	<ol style="list-style-type: none"> <li>1. 压脚压力不够</li> <li>2. 送料齿齿部磨损</li> <li>3. 缝针弯曲</li> </ol>	<p>压脚压力调紧些 更换送料齿 更换缝针</p>	<p>5-2 5-4-b 5-3-b</p>
传缝线深入封条纸内(带纸)	针线张力调整太紧	张力调整放松至适当紧度	5-1
封条纸(带纸)皱褶发生	送料齿后端高于前断送料齿	正确调整送料齿(后)高度	5-4-b

- \* 树脂材料编织袋, 牛皮纸袋中加聚乙烯膜袋子、聚乙烯袋、盐化乙烯树脂袋之缝合时, 因摩擦产生袋子溶化粘于针上, 或跳针等情况是容易发生的。此场合时, 在针线上加油润滑, 而包装米袋或食品相关袋子时, 请使用矿加工线材。

## ORDERING PARTS

1. Description of each part and its stamp number is described in this parts list. Screws and nuts for parts are shown adjacent to the relevant parts. When ordering parts, describe clearly stamp number with its name of part.
  2. The parts which have no Ref. Number can not be delivered independently; always order it as an assembly.
  3. A set of assembled parts is represented by the stamp number of its main parts.
  4. The last figure on the parts stamp number advances on each improvement of the parts.
  5. Parts No. described in [ ] of Remarks means old parts No.
- \* The parts list is subject to change without prior notice.

### 零部件订货时的注意项目

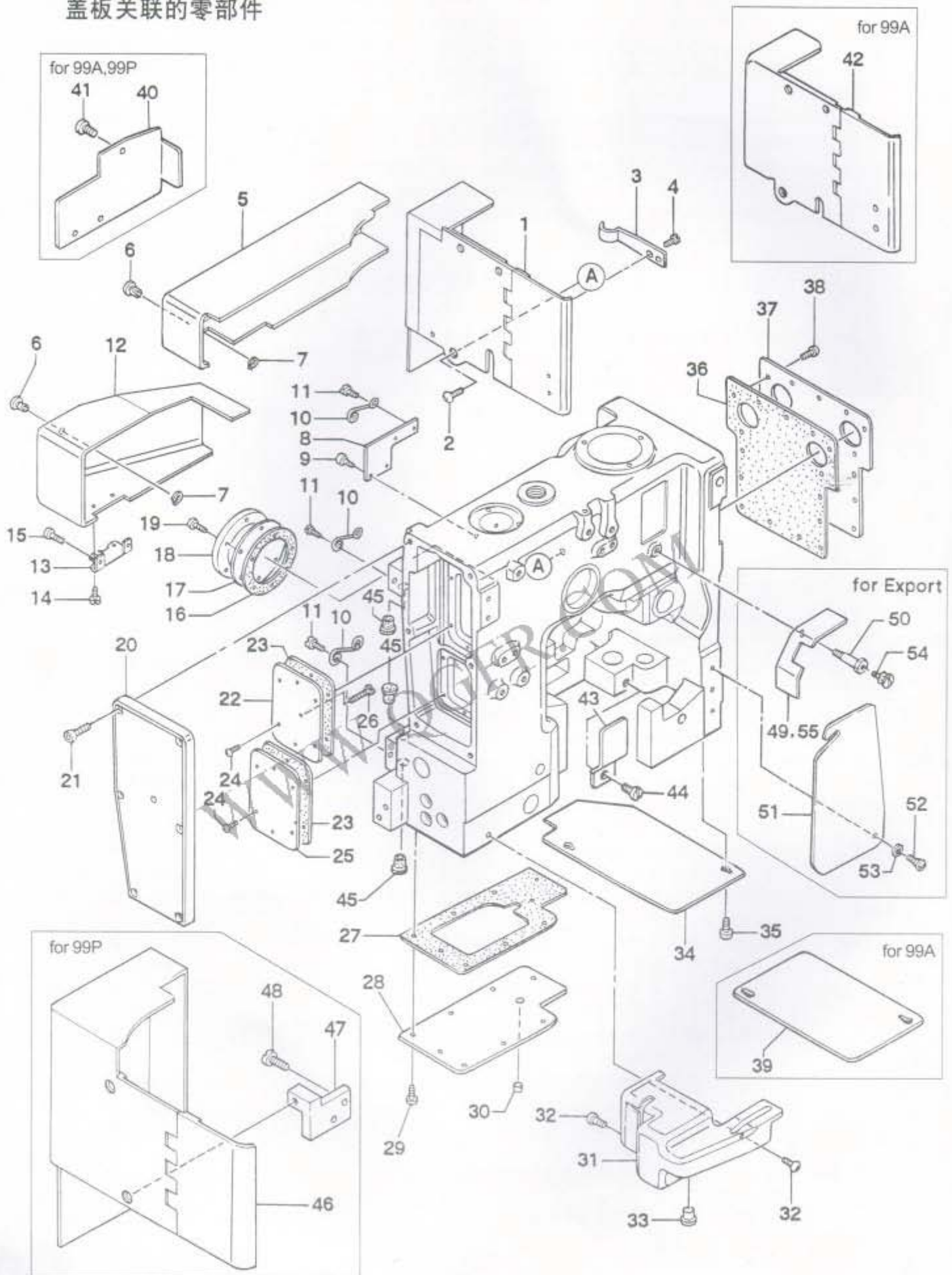
1. 当订购零部件时，应弄清零部件标记号，零部件名称及订购的数量。
  2. 无参考号码的零部件不能单独发货。这些零部件必须作为组装件一起订货。
  3. 一组装配好的零部件将按其主要零部件的标记号供货。
  4. 零部件标记的最后一位数按该零部件的改进次数依次递增。
  5. 备注内[ ]中的零部件号为旧零件编号。
- \* 零部件号更改后不另行通知

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# 01. MISCELLANEOUS COVERS PARTS 盖板关联的零部件

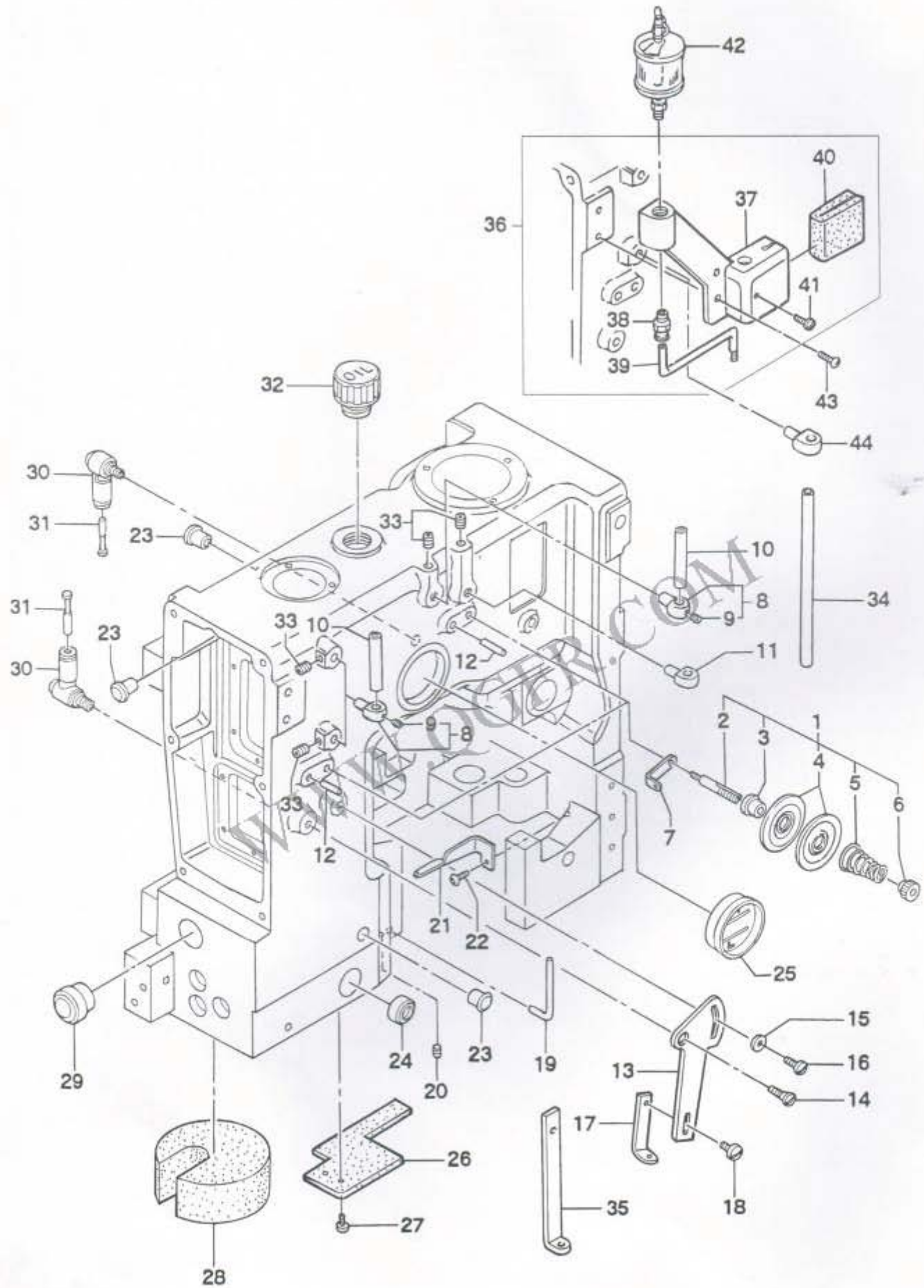


01. MISCELLANEOUS COVERS PARTS  
盖板关联的零部件

图号 Ref. No.	零部件号码 Part No.	零部件名称 Description	数量 Qty					备注 Remarks
			A	C	P	AW	CW	
1	105017B	Cloth Plate		1	-	-	1	
2	7/32S32007	Screw for 105017B		2	2	2	2	
3	065044	Cloth Plate Spring		1	1	1	1	
4	11/64S40005	Screw for 065044		2	2	2	2	
5	305031	Cylinder Cover		1	1	1	1	
6	E07002	Fastener Head(T8-149)		2	3	2	2	3
7	1RS-8	Stop Ring(S-8)		2	3	2	2	3
8	305122	Fastener Spring Base		1	1	1	1	1
9	4B5×10	Screw for 305122		2	2	2	2	2
10	E07003	Fastener Spring(ST8)		2	3	2	2	3
11	9/64S40004	Screw for E07003		4	6	4	4	6
12	305021	Cutter Cover		-	1	-	-	1
13	E07001	Hinge(2FZ-11)		-	1	-	-	1
14	9/64S40004	Screw for E07001		-	2	-	-	2
15	11/64S40005	Screw for E07001		-	2	-	-	2
16	305141	Gasket		1	1	1	1	1
17	035191	Side Cover		1	1	1	1	1
18	035201	Side Cover Retainer		1	1	1	1	1
19	10S4×12K	Screw for 035201,035191,305141		6	6	6	6	6
20	305012	Body Head Cover		1	1	1	1	1
21	4B5×20	Screw for 305012		6	6	6	6	6
22	305081	Top Cover A		1	1	1	1	1
23	305091	Gasket		2	2	2	2	2
24	10S4×12K	Screw for 305081,305082,305091		12	12	12	12	12
25	305082	Top Cover B		1	1	1	1	1
26	SC63278	Screw		1	1	1	1	1
27	305052	Gasket		1	1	1	1	1
28	305042	Face Plate, upper		1	1	1	1	1
29	3S5×12	Screw for 305042,304052		9	9	9	9	9
30	11G1/8NPT	Plug		1	1	1	1	1
31	305111	Needle Bar Cover		1	1	1	1	1
32	3S5×10	Screw for 305111		3	3	3	3	3
33	065401	Rubber Bushing		1	1	1	1	1
34	305151	Face Plate, lower		-	1	1	-	1
35	3S4×8	Screw for 305151		2	2	2	2	2
36	305072	Gasket		1	1	1	1	1
37	305062	Inside Cover		1	1	1	1	1
38	3S5×15	Screw for 305062,305072		15	15	15	15	15
39	305152	Face Plate, lower		1	-	-	1	-
40	305271	Side Cover		1	-	1	1	-
41	11/64S40005	Screw		3	-	3	3	-
42	305281	Cloth Plate		1	-	-	1	-
43	305261	Looper Thread Cover		1	1	1	1	1
44	11/64S40005	Screw for 305261		1	1	1	1	1
45	255351	Rubber Bushing		3	-	3	3	-
46	305211	Cloth Plate		-	-	1	-	-
47	305201	Cloth Plate Base		-	-	1	-	-
48	3/16S28018	Screw for 305201		-	-	2	-	-
49	305241	Looper Thread Take-Up Cover B		(1)	(1)	(1)	-	-
50	305171	Post		(1)	(1)	(1)	(1)	(1)
51	305162	Looper Thread Take-Up Cover A		(1)	(1)	(1)	(1)	(1)
52	15/64S28017	Screw for 305162		(1)	(1)	(1)	(1)	(1)
53	5/16W05201	Washer for 305162		(1)	(1)	(1)	(1)	(1)
54	3/16S32004	Screw for 305162		(1)	(1)	(1)	(1)	(1)
55	305242	Looper Thread Take-Up Cover B		-	-	-	(1)	(1)

For Export  
海外规格

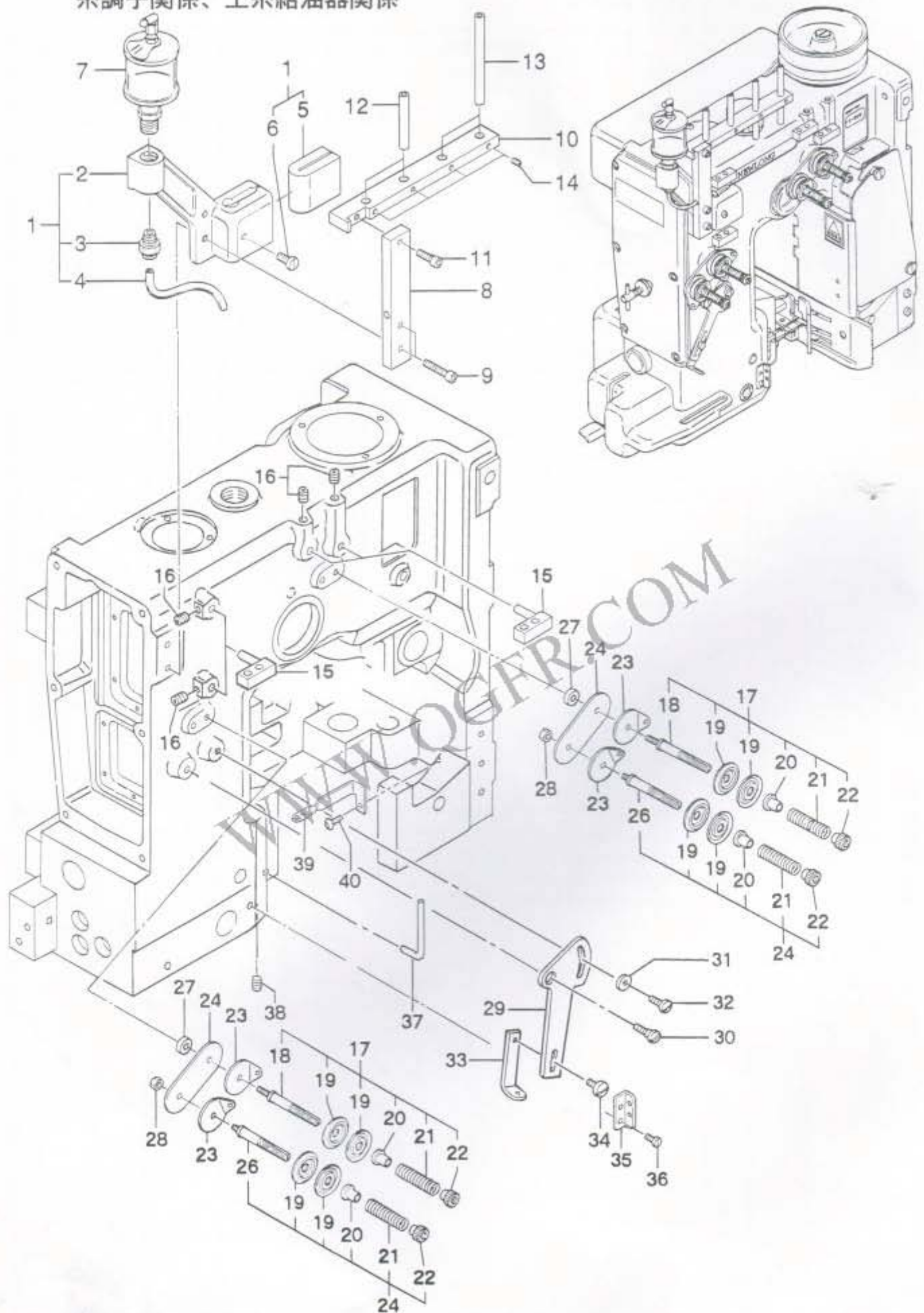
02-1. THREAD TENSION & OILING PARTS  
 缝线张紧和润滑装置零部件



**02-1. THREAD TENSION & OILING PARTS**  
**缝线张紧和润滑装置零部件**

图号 Ref. No.	零部件号码 Part No.	零部件名称 Description		数量 Q'ty					备注 Remarks
				A	C	P	AW	CW	
1	065151E	Thread Tension Ass'y	穿线张紧装置	2	2	2	-	-	(2-6)
2	065151	Tension Post	张紧杆	2	2	2	-	-	
3	HA1348	Tension Post Ferrule	接头	2	2	2	-	-	
4	80676A	Tension Disc	张紧盘	4	4	4	-	-	
5	065181	Tension Spring	张紧弹簧	2	2	2	-	-	
6	065171	Tension Nut	张紧螺母	2	2	2	-	-	
7	245071	Thread Guide	穿线导杆	2	2	2	-	-	
8	075081	Frame Thread Eyelet Support	穿线眼圈	3	3	3	-	-	(9)
9	9/64S40501	Screw for 075091	螺钉, 用于 075091	3	3	3	-	-	
10	075091	Frame Thread Eyelet	线导管	3	3	1	-	-	
11	065211	Frame Thread Eyelet	线导	1	1	1	-	-	
12	80667	Tension Disc Stop Pin	支杆	2	2	2	-	-	
13	035031	Needle Thread Controller A	线控制板 A	1	1	1	-	-	
14	11/64S40014	Screw for 035031	螺钉, 用于 035031	1	1	1	-	-	
15	11/64W15103	Washer for 035031	垫片, 用于 035031	1	1	1	-	-	
16	11/64S40009	Screw for 035031	螺钉, 用于 035031	1	1	1	-	-	
17	035042	Needle Thread Controller B	线控制板 B	1	1	1	-	-	
18	9/64S40011	Screw for 035042	螺钉, 用于 035042	1	1	1	-	-	
19	305131	Needle Thread Guide	针线导	1	1	1	-	-	
20	1S5x5	Screw for 305131	螺钉, 用于 305131	1	1	1	-	-	
21	255262	Looper Thread Guide	钩针线导	1	1	1	-	-	
22	3S4x10	Screw for 255262	螺钉, 用于 255262	1	1	1	-	-	
23	065401	Rubber Bushing	油盖	3	3	3	3	3	
24	D05003	Oil Gauge (OLG 207R)	油量表(OLG 207R)	1	1	1	1	1	
25	D05007	Oil Gauge (KDM-40)	油量表(KDM-40)	1	1	1	1	1	
26	305231	Felt	油毛毡	1	1	1	1	1	
27	3S4x6	Screw for 305231	螺钉, 用于 305231	2	2	2	2	2	
28	035821	Fence	阻隔片	1	1	1	1	1	
29	D09002	Rubber Bushing (EZ3020AO)	供油盖(EZ3020AO)	1	1	1	1	1	
30	D07055	Tube Fitting,elbow (POL8-02)	管接头(POL8-02)	2	2	2	2	2	
31	D07056	Tube Fitting,plug (PP8)	塞子(PP8)	2	2	2	2	2	
32	D09005	Plug (BM-3/4)	供油盖(BM-3/4)	1	1	1	1	1	
33	1S5x5	Screw	螺钉	4	4	4	-	-	
34	305291	Frame Thread Eyelet	线导管	-	-	2	-	-	Single Thread (单线用)
35	305251	Needle Thread Controller	针线调节	-	(1)	(1)	-	-	(37-41)
36	255392A	Needle Thread Oiler Ass'y	针线注油器总成	(1)	(1)	(1)	-	-	
37	255392	Needle Thread Oiler Base	根基, 用于 255392A	(1)	(1)	(1)	-	-	
38	D07057	Tube Fitting,straight (PC4-01M)	简易接合(PC4-01M)	(1)	(1)	(1)	-	-	Special Order (特订)
39	8FU2-4x130	Oil Tube	注油管	(1)	(1)	(1)	-	-	
40	105521	Felt	油毛毡	(1)	(1)	(1)	-	-	
41	9/64S40005	Screw	螺钉	(1)	(1)	(1)	-	-	
42	D03002	Oiler (38-1/4PF)	注油器(38-1/4PF)	(1)	(1)	(1)	-	-	
43	3S5x15	Screw for 255392	螺钉, 用于 255392	(2)	(2)	(2)	-	-	
44	065211	Frame Thread Eyelet	穿线眼圈	(1)	(1)	(1)	-	-	

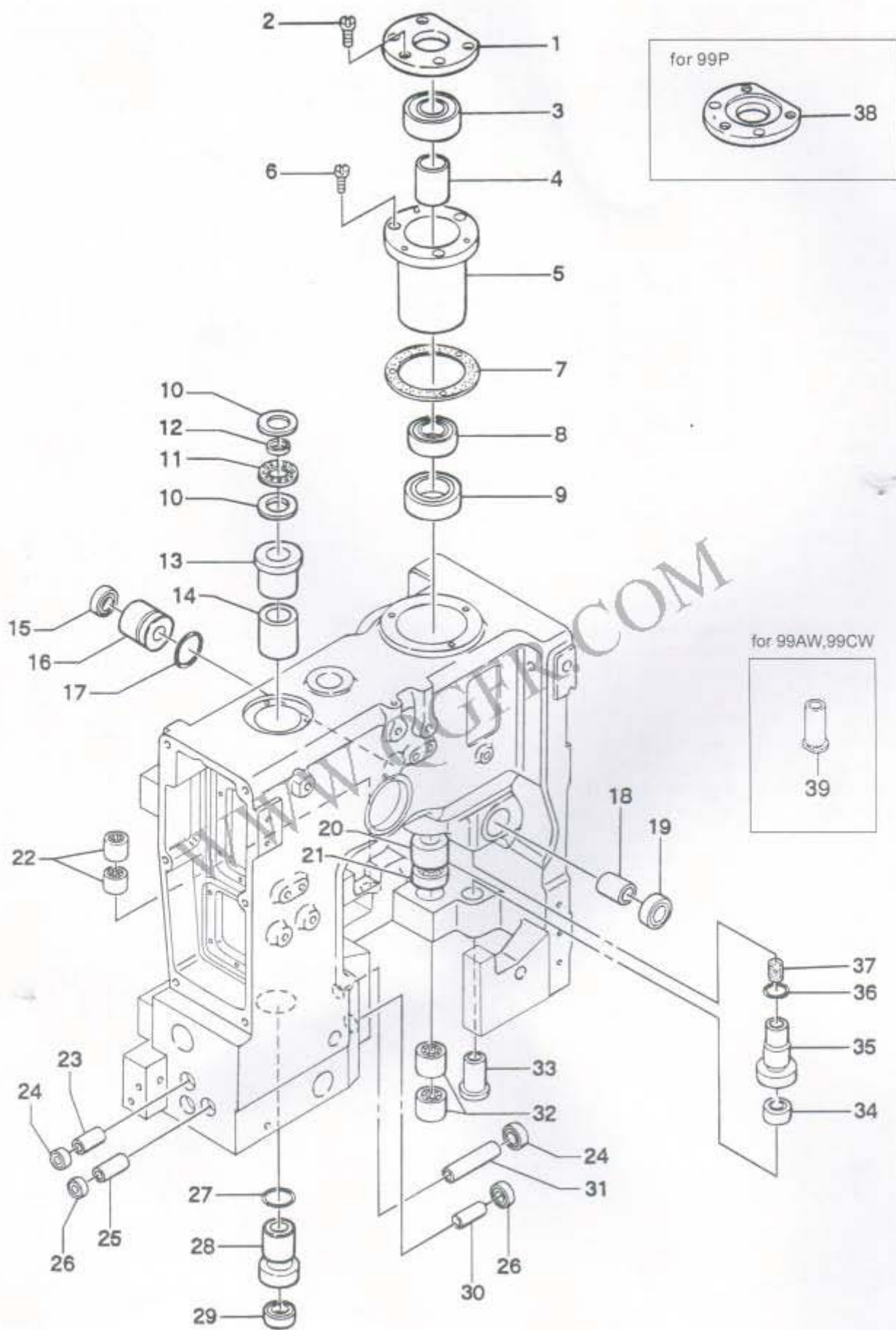
02-2. THREAD TENSION & NEEDLE THREAD OILER  
 糸調子関係、上糸給油器関係



**02-2. THREAD TENSION & NEEDLE THREAD OILER**  
**缝线张紧和针线给油关联的零部件**

图号 Ref.No.	零部件号码 Part No.	零部件名称 Description		数量 Q'ty		备注 Remarks
				99AW	99CW	
1	305401A	Needle Thread Oiler Ass'y	针线注油器组	1	1	(2-6)
2	305401	Needle Thread Oiler	针线注油器	1	1	
3	D07057	Tube Fitting, straight(PC4-01M)	简易接合(PC4-01M)	1	1	
4	8FU2-4x130	Oile Tube	注油管	1	1	
5	105521	Felt	油毛毡	1	1	
6	9/64S40005	Screw	螺钉	1	1	
7	D03002	Oile(38-1/4PF)	注油器(38-1/4PF)	1	1	
8	305371	Thread Guide Holder Base	线导管座保持片	1	1	
9	4B5x25	Screw	螺钉	2	2	
10	305361	Thread Guide Holder	线导管座	1	1	
11	4B5x15	Screw	螺钉	1	1	
12	075091	Frame Thread Eyelet	线导管	2	2	
13	305441	Frame Thread Eyelet	线导管	2	2	
14	1S5x5	Screw for 075091,305441	螺钉, 用于 075091、305441	4	4	
15	105561	Thread Eyelet	穿线导杆	4	4	
16	1S5x5	Screw for 105561	螺钉, 用于 105561	4	4	
17	035021A	Thread Tension Ass'y	穿线张紧装置	2	2	(18-22)
18	035021	Tension Post	张紧杆	2	2	
19	065261	Tension Disc	张紧盘	8	8	
20	035071	Tension Post Ferrule	接头	4	4	
21	035061	Tension Spring	张紧弹簧	4	4	
22	065171	Tension Nut	张紧螺母	4	4	
23	015011	Tension Thread Guide	垫片	4	4	
24	035011	Tension Thread Guide	垫片	2	2	
25	035022A	Thread Tension Ass'y	穿线张紧装置	2	2	(19-22,26)
26	035022	Tension Post	张紧杆	2	2	
27	305431	Collar	挡圈	1	1	
28	11/64N40104	Nut	螺母	2	2	
29	035031	Needle Thread Controller A	针线控制板 A	1	1	
30	11/64S40014	Screw for 035031	螺钉, 用于 035031	1	1	
31	11/64W15103	Washer for 035031	垫圈, 用于 035031	1	1	
32	11/64S40009	Screw for 035031	螺钉, 用于 035031	1	1	
33	035043	Needle Thread Controller B	针线控制板 B	1	1	
34	11/64S40011	Screw for 035043	螺钉, 用于 035043	1	1	
35	305381	Needle Thread Guide	针线导片	1	1	
36	11/64S40005	Screw for 305381	螺钉, 用于 305381	1	1	
37	305131	Needle Thread Guide	针线导杆	1	1	
38	1S5x5	Screw for 305131	螺钉, 用于 305131	1	1	
39	305391	Looper Thread Guide	钩针线导片	1	1	
40	3S4x10	Screw for 305391	螺钉, 用于 305391	1	1	

### 03. BUSHING PARTS 轴承关联的零部件



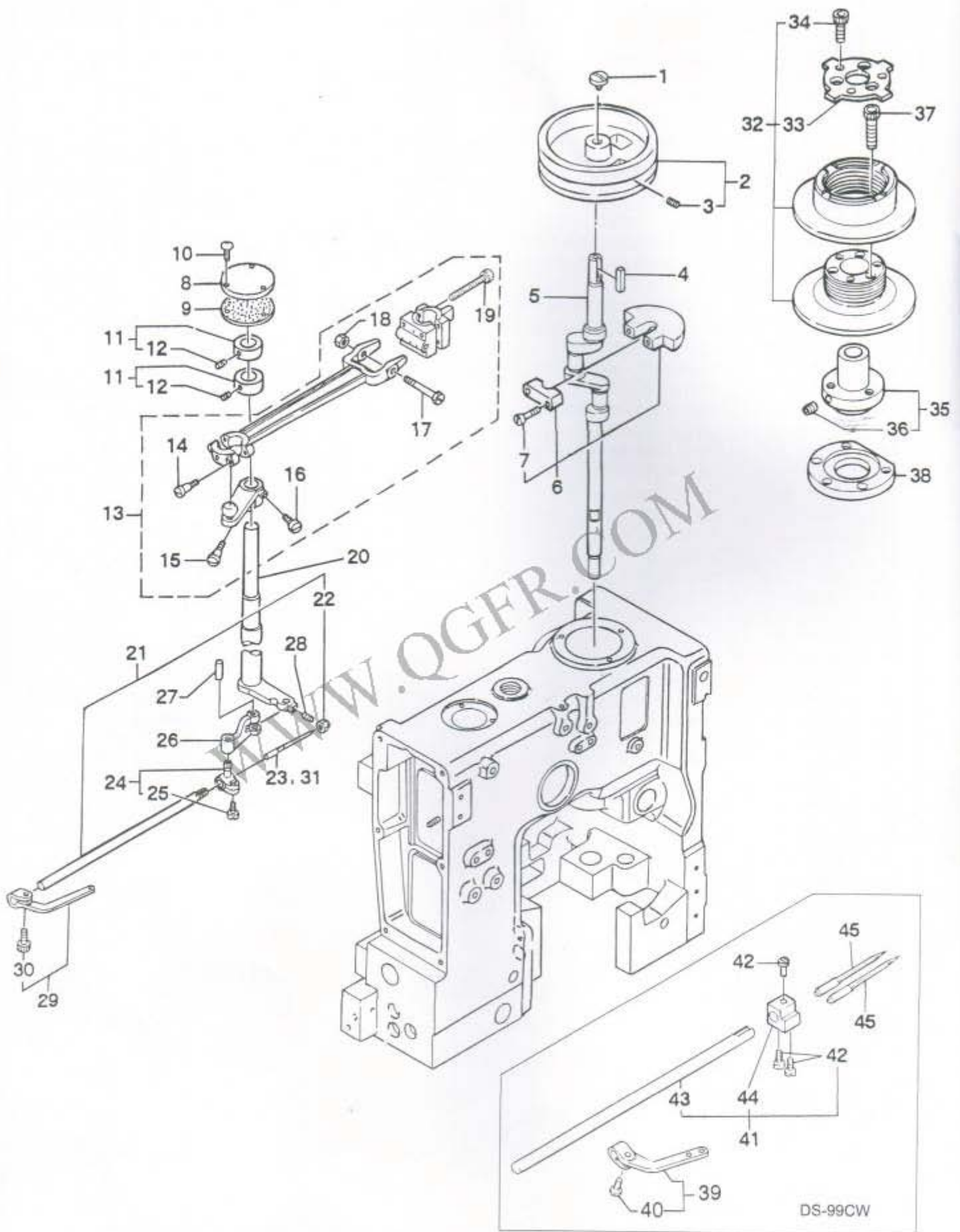
### 03. BUSHING PARTS 轴承关联的零部件

图号 Ref. No.	零部件号码 Part No.	零部件名称 Description		数量 Q'ty					备注 Remarks
				A	C	P	AW	CW	
1	031091	Bearing Holder	轴承座	1	1	-	-	-	
2	3/16S28014	Screw for 031091	螺钉, 用于 031091	3	3	3	3	3	
3	1A01002	Ball Bearing (6302ZZ)	滚珠轴承(6302ZZ)	1	1	1	1	1	
4	031111	Collar A	圆筒 A	1	1	1	1	1	
5	031082	Crank Shaft Bushing Housing	轴承外框子	1	1	1	1	1	
6	3/16S28017	Screw for 031082	螺钉, 用于 031082	3	3	3	3	3	
7	301041	Gasket	密封垫	1	1	1	1	1	
8	1A01004	Ball Bearing (6202ZZ)	滚珠轴承	1	1	1	1	1	
9	D04003	Oil Seal (SC224211)	油封(SC224211)	1	1	1	1	1	
10	4A01002	Thrust Washer (FTRA-1528)	侧压垫片(FTRA-1528)	2	2	2	2	2	
11	4A01001	Thrust Bearing (FTNA-1528)	侧压轴承(FTNA-1528)	1	1	1	1	1	
12	302061	Ring, pilot	环	1	1	1	1	1	
13	302052	Arm Rocker Shaft Bushing, rear	上轴轴套, 后部	1	1	1	1	1	
14	302041	Arm Rocker Shaft Bushing, middle	上轴轴套, 中间	1	1	1	1	1	
15	D04011	Oil Seal (TC10207)	油封(TC10207)	1	1	1	1	1	
16	303041	Looper Drive Lever Shaft Bushing, rear	钩针轴轴套, 后部	1	1	1	1	1	
17	31LP21	"O"Ring (P21)	O型圈(P21)	1	1	1	1	1	
18	303031	Looper Drive Lever Shaft Bushing, front	钩针轴轴套, 前部	1	1	1	1	1	
19	D04012	Oil Seal (TC12257)	油封(TC12257)	1	1	1	1	1	
20	301031	Crank Shaft Bushing, middle	主轴轴套, 中间	1	1	1	1	1	
21	D04013	Oil Seal (TC15307)	油封(TC15307)	1	1	1	1	1	
22	3A03016	Needle Bearing (HMK1012L)	针型轴承(HMK1012L)	4	4	4	4	4	
23	112061	Presser Bar Bushing, upper	压杆轴套, 上部	2	2	2	2	2	
24	D04016	Oil Seal (TC4 8.7 16.5 7)	油封(TC4 8.7 16.5 7)	4	4	4	4	4	
25	092052	Needle Bar Bushing, upper	针柄轴套, 上部	1	1	1	1	1	
26	D04015	Oil Seal (TC4 8 16.5 7)	油封(TC4 8 16.5 7)	2	2	2	2	2	
27	31LP21	"O"Ring (P21)	O型圈(P21)	1	1	1	1	1	
28	302032	Arm Rocker Shaft Bushing, front	上轴轴套, 前部	1	1	1	1	1	
29	D04014	Oil Seal (SC15257)	油封(SC15257)	1	1	1	1	1	
30	092062	Needle Bar Bushing, lower	针柄轴套, 下部	1	1	1	1	1	
31	062201	Presser Bar Bushing, lower	压杆轴套, 下部	2	2	2	2	2	
32	3A03014	Needle Bearing (HMK1516LL)	针型轴承(HMK1516LL)	1	1	1	1	1	
33	303111	Looper Rocker Shaft Bushing, front	钩针轴轴套, 前部	1	1	1	-	-	
34	D04011	Oil Seal (TC10207)	油封(TC10207)	1	1	1	1	1	
35	303121	Looper Rocker Shaft Bushing, rear	钩针轴轴套, 后部	1	1	1	1	1	
36	32LS14	"O"Ring (S14)	O型圈(S14)	1	1	1	1	1	
37	707181	Filter	滤器	1	1	1	1	1	
38	301091	Bearing Holder	轴承座	(1)	(1)	1	(1)	(1)	
39	303112	Looper Rocker Shaft Bushing, front	钩针轴轴套, 前部	-	-	-	1	1	



# 04. NEEDLE BAR & CRANK SHAFT PARTS

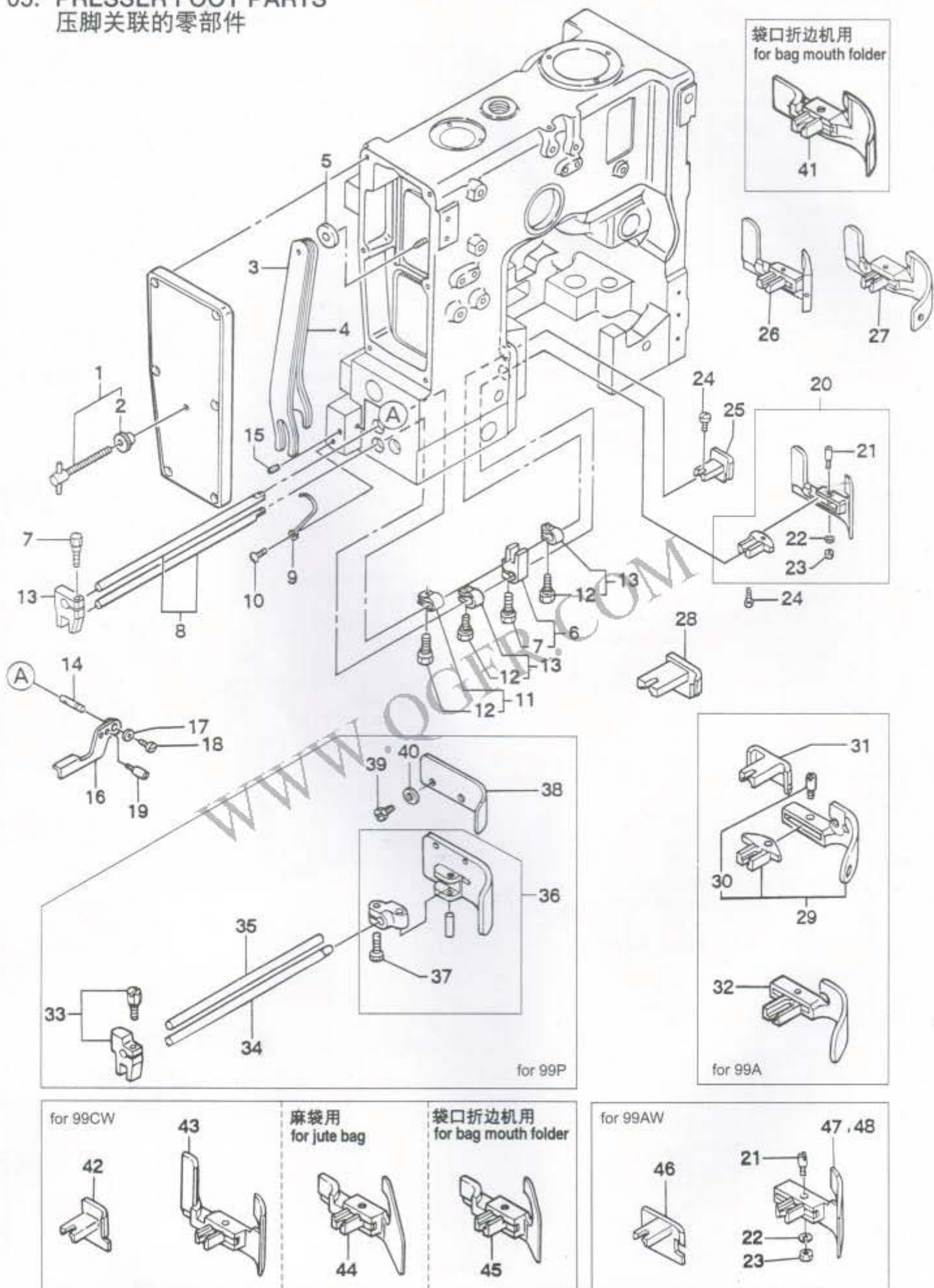
## 针棒、曲轴有关的零部件



**04. NEEDLE BAR & CRANK SHAFT PARTS**  
**针棒、曲轴有关的零部件**

图号 Ref. No.	零部件号码 Part No.	零部件名称 Description	数量 Q'ty					备注 Remarks	
			A	C	P	AW	CW		
1	15/64S28012	Screw for 101101	螺钉, 用于 101101	1	1	1	1	1	
2	301051	Pulley	皮带轮	1	1	-	1	1	(3)
3	1S6×10	Screw for 101101	螺钉, 用于 101101	2	2	-	2	2	
4	1K4×35S	Key (4×4×35)	插销 (4×4×35)	1	1	1	1	1	
5	301021	Crank Shaft	主动曲轴	1	1	1	1	1	
6	031131	Balance Weight	平衡重量	1	1	1	1	1	(7)
7	3/16S28018	Screw for 031131	螺钉, 用于 031131	2	2	2	2	2	
8	302072	Rear Cover	后面板	1	1	1	1	1	
9	302082	Gasket	垫片	1	1	1	1	1	
10	3S5×15	Screw for 302072,302082	螺钉, 用于 302072	3	3	3	3	3	
11	062052	Arm Rocker Shaft Collar	上轴圆筒	2	2	2	2	2	(12)
12	15/64S28512	Screw for 062052	螺钉, 用于 062052	4	4	4	4	4	
13	032012A	Crank Shaft Connecting Rod Ass'y	主动曲轴连接总成	1	1	1	1	1	(14-19)
14	11/64S40090	Screw	螺钉	2	2	2	2	2	
15	9/32S28015	Spot Screw for 032012A	螺钉, 用于 032012A	1	1	1	1	1	
16	9/32S28001	Screw for 032012A	螺钉, 用于 032012A	1	1	1	1	1	
17	1/4S40010	Screw	螺钉	1	1	1	1	1	
18	1/4N40207	Nut	螺母	1	1	1	1	1	
19	4B4×20	Screw	螺钉	4	4	4	4	4	
20	302011	Arm Rocker Shaft	上轴	1	1	1	1	1	
21	302091A	Needle Bar Ass'y	针棒组	1	1	1	-	-	(22)
22	062151	Needle Clamp Nut	缝线夹紧螺母	1	1	1	-	-	
23	B20000	Needle (DR-H30 #26)	缝针 (DR-H30 #26)	1	1	-	-	-	
24	032171	Needle Bar Connecting Stud	针棒抱合	1	1	1	1	1	(25)
25	11/64S40002	Screw for 032171	螺钉, 用于 032171	1	1	1	1	1	
26	302021	Needle Bar Connecting Link	针棒曲轴	1	1	1	1	1	
27	032141	Needle Bar Connecting Link Pin	针棒曲轴销	1	1	1	1	1	
28	1S5×6	Screw for 032141	螺钉, 用于 032141	1	1	1	1	1	
29	302101	Needle Thread Take-Up	缝针线平衡	1	1	1	-	-	(30)
30	4B5×10	Screw for 302101	螺钉, 用于 302101	1	1	1	-	-	
31	B05001	Needle (DR-G67 #27)	缝针 (DR-G67 #27)	-	-	1	-	-	
32	301061A	Variable Diameter Pulley Ass'y	可变直径皮带轮总成	(1)	(1)	1	(1)	(1)	(33,34)
33	301081	Presser Plate	押板	(1)	(1)	1	(1)	(1)	
34	4B5×20	Screw	螺钉	(3)	(3)	3	(3)	(3)	
35	281122	Pulley Hub	皮带轮转毂	(1)	(1)	1	(1)	(1)	(36)
36	SS142838	Screw	螺钉	(2)	(2)	2	(2)	(2)	
37	SC10321	Screw	螺钉	(3)	(3)	3	(3)	(3)	
38	301091	Bearing Holder	轴承支撑	(1)	(1)	1	(1)	(1)	
39	302271	Needle Thread Take-Up	缝针线平衡	-	-	-	1	1	(40)
40	4B5×10	Screw	螺钉	-	-	-	1	1	
41	302021	Needle Bar Ass'y	针棒组	-	-	-	1	1	(42-44)
42	11/64S40001	Screw	螺钉	-	-	-	3	3	
43	302251	Needle Bar	针棒	-	-	-	1	1	
44	302261	Needle Holder	针保持器	-	-	-	1	1	
45	B20001	Needle (DR-H30 #26)	缝针 (DR-H30 #26)	-	-	-	2	2	

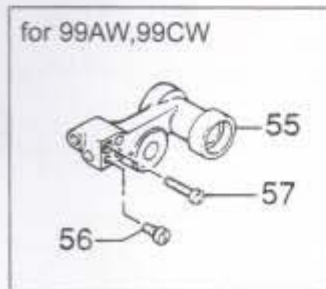
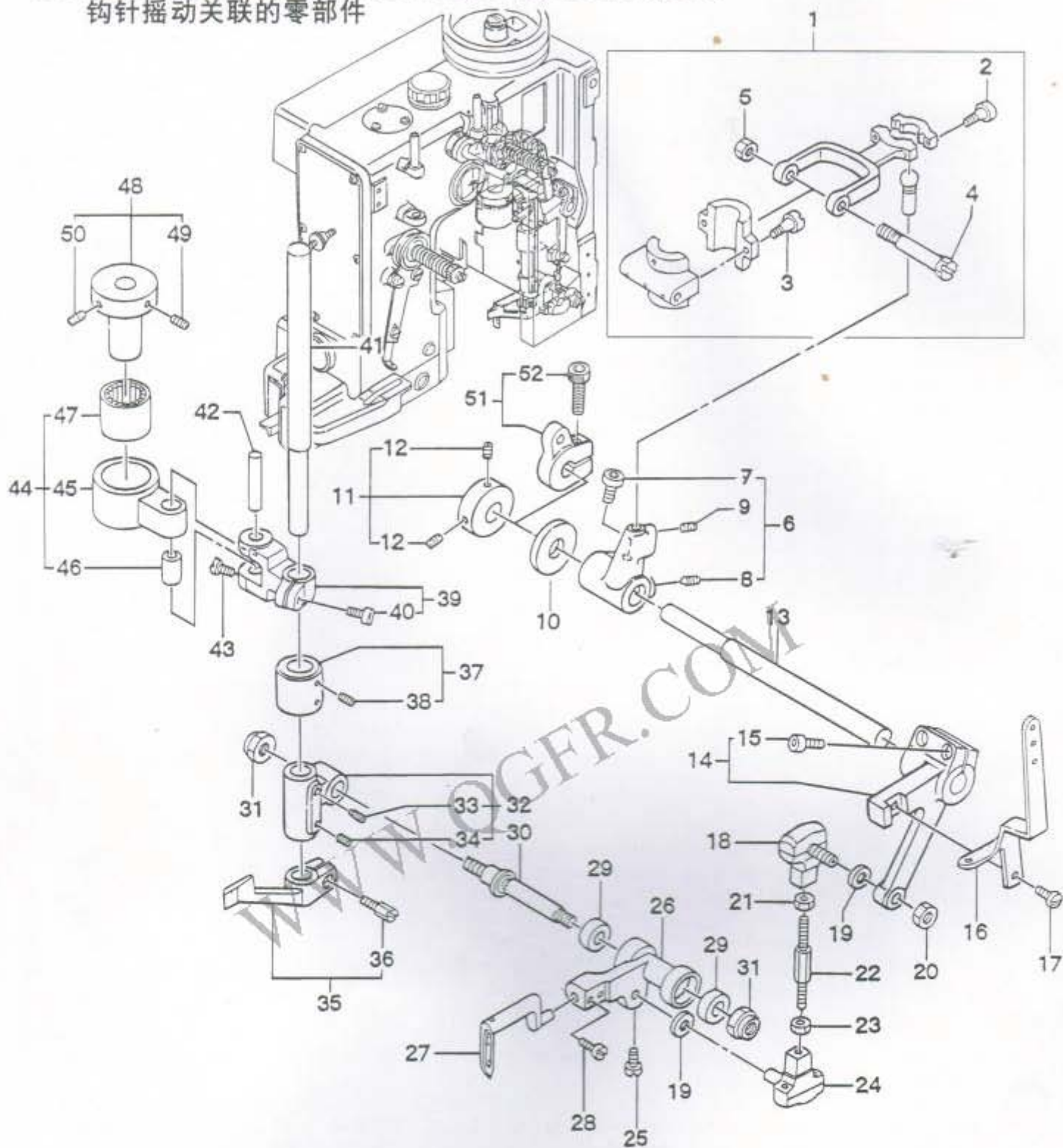
# 05. PRESSER FOOT PARTS 压脚关联的零部件



05. PRESSER FOOT PARTS  
压脚关联的零部件

图号 Ref. No.	零部件号码 Part No.	零部件名称 Description	数量 Qty					备注 Remarks	
			A	C	P	AW	CW		
1	102171	Presser Spring Regulator Screw	簧片调节螺钉	1	1	1	1	1	(2)
2	5/16N24301	Nut for 102171	螺母, 用于 102171	1	1	1	1	1	
3	102091	Presser Bar Spring, large	簧片(大)	2	2	3	2	2	
4	102101	Presser Bar Spring, small	簧片(小)	2	2	-	2	2	
5	302121	Collar	圆座	1	1	1	1	1	
6	102062	Presser Bar Lifting Bracket, left	压杆抱合(左边)	1	1	1	1	1	(7)
7	15/64S28019	Screw for 102062	螺钉, 用于 102062	2	2	2	2	2	
8	062181	Presser Bar	压杆	2	2	-	2	2	
9	305181	Spring	弹簧	1	1	1	1	1	
10	3S4×10	Screw for 305181	螺钉, 用于 305181	1	1	1	1	1	
11	072121	Presser Bar Spring Adjuster	压杆弹簧调节	3	3	3	3	3	(12)
12	15/64S28019	Screw for 072121	螺钉, 用于 072121	3	3	3	3	3	
13	302222	Presser Bar Lifting Bracket	压杆连接(上部)	1	1	-	1	1	(7)
14	282121	Presser Bar Lifter Hinge Stud	连接支杆	1	1	1	1	1	
15	1S5×10	Screw for 282121	螺钉, 用于 282121	1	1	1	1	1	
16	302231	Presser Bar Lifter	压脚提升机构	1	1	1	1	1	
17	7/32W05201	Washer for 282241	垫片, 用于 282241	1	1	1	1	1	
18	9/64S40011	Screw for 282241	螺钉, 用于 282241	1	1	1	1	1	
19	11/64S40099	Screw	螺钉	1	1	1	1	1	
20	102135A	Presser Foot Ass'y, left	压脚组(左边)	-	1	-	-	-	(21-23)
21	11/64S40073	Screw	螺钉	-	1	-	-	-	
22	3W5	Spring Washer	垫圈	1	1	-	-	-	
23	11/64N40102	Nut	螺母	1	1	-	-	-	
24	11/64S40084	Screw for 102135A, 102162	螺钉	2	2	-	-	-	
25	102162	Presser Foot, right	压脚(右边)	-	1	-	-	-	
26	102136A	Presser Foot Ass'y, left for sub-tape	压脚组(左边)纸带使用	-	(1)	-	-	-	(21-23)
27	102134A	Presser Foot Ass'y, left for hand feed	压脚组(左边)半自动给袋	-	(1)	-	-	-	(21-23)
28	102161	Presser Foot, right for hand feed	压脚组(右边)半自动给袋	-	(1)	-	-	-	
29	062251A	Presser Foot Ass'y, left	压脚组(左边)	1	-	-	-	-	(30)
30	11/64S40064	Screw	螺钉	1	-	-	-	-	
31	062261	Presser Foot, right	压脚(右边)	1	-	-	-	-	
32	062252A	Presser Foot Ass'y, left for jute bag	压脚组(左边)麻袋使用	(1)	-	-	-	-	(30)
33	302221	Presser Bar Right Lifting Bracket	压杆抱合(右边)	-	-	1	-	-	(7)
34	302201	Presser Bar Left	压杆(左边)	-	-	1	-	-	
35	302211	Presser Bar Right	压杆(右边)	-	-	1	-	-	
36	302161A	Presser Foot Ass'y	压脚组	-	-	1	-	-	(37)
37	11/64S40018	Screw for 302161A	螺钉, 用于 302161A	-	-	1	-	-	
38	302191	Presser Foot	压脚	-	-	1	-	-	
39	11/64S40045	Screw for 302181	螺钉, 用于 302181	-	-	2	-	-	
40	11/64W10101	Washer for 302181	垫圈, 用于 302181	-	-	2	-	-	
41	102321A	Presser Foot Ass'y, left for bag mouth folder	压脚组(螺钉)袋口折叠使用	-	(1)	-	-	-	(21-23)
42	102261	Presser Foot, right	压脚(右边)	-	-	-	-	1	
43	102281A	Presser Foot Ass'y, left	压脚组(左边)	-	-	-	-	1	(21-23)
44	102311A	Presser Foot Ass'y, left for jute bag	压脚组(左边)麻袋使用	-	-	-	-	(1)	(21-23)
45	102331A	Presser Foot Ass'y, left for mouth folder	压脚组(左边)袋口折叠使用	-	-	-	-	(1)	
46	062381	Presser Foot, right	压脚(右边)	-	-	-	1	-	
47	062391A	Presser Foot Ass'y, left	压脚组(左边)	-	-	-	1	-	(21-23)
48	062392A	Presser Foot Ass'y, left for jute bag	压脚组(左边)麻袋使用	-	-	-	(1)	-	(21-23)

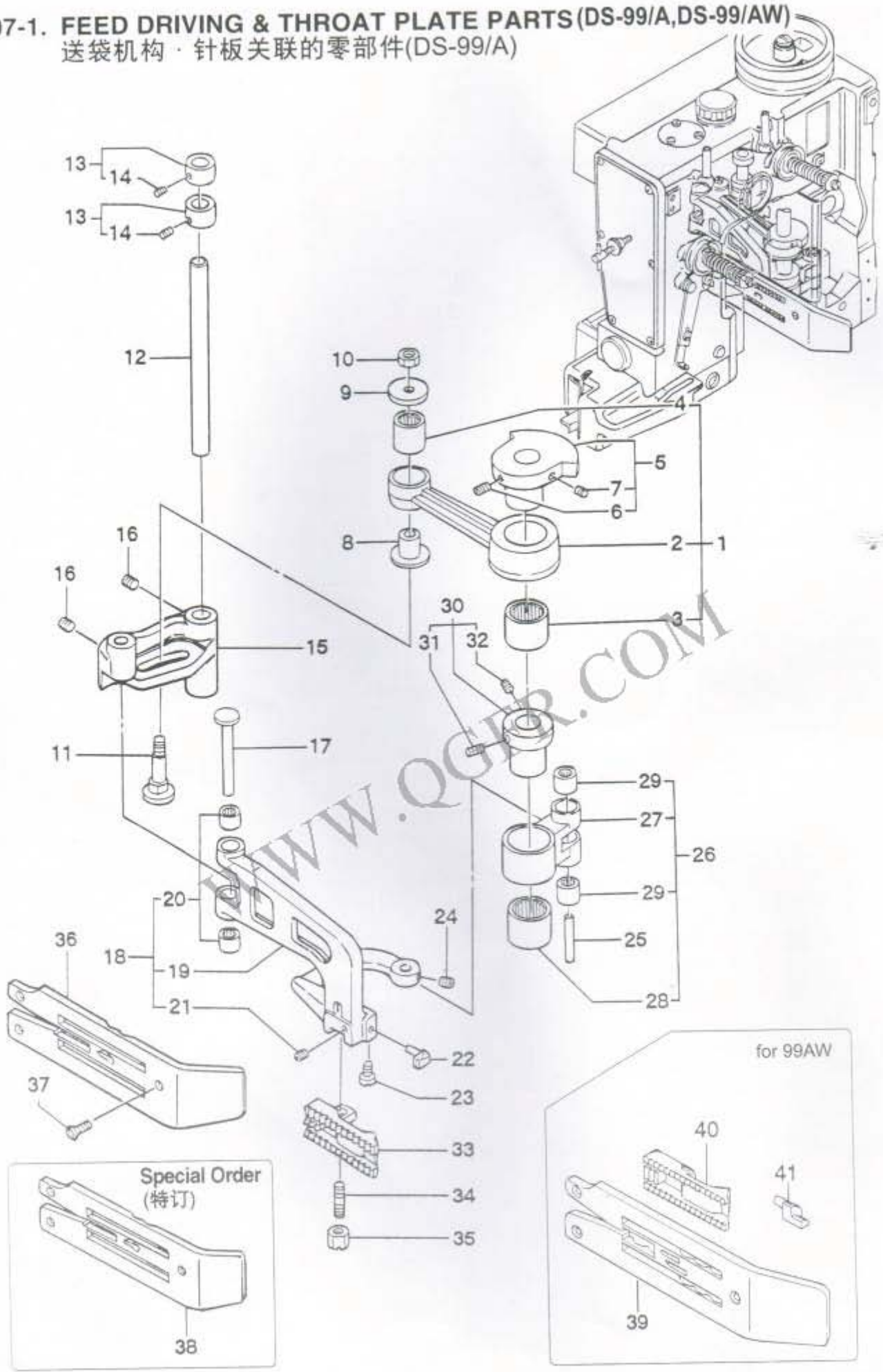
# 06. LOOPER ROCKER & CONNECTING ROD PARTS 钩针摇动关联的零部件



## 06. LOOPER ROCKER & CONNECTING ROD PARTS 钩针摇动关联的零部件

图号 Ref. No.	零部件号码 Part No.	零部件名称 Description	数量 Qty					备注 Remarks	
			A	C	P	AW	CW		
1	033022A	Looper Bell Crank Connection Rod Ass'y	钩针摇动连接总成	1	1	1	1	1	(2-5)
2	9/64S40061	Screw	螺钉	2	2	2	2	2	
3	11/64S40090	Screw	螺钉	2	2	2	2	2	
4	1/4S40010	Screw	螺钉	1	1	1	1	1	
5	1/4N40207	Nut	螺母	1	1	1	1	1	
6	303011	Looper Drive Lever Rocker	钩针摇动根基	1	1	1	1	1	(7,8)
7	4B6×12	Screw for 303011	螺钉, 用于 303011	1	1	1	1	1	
8	1S6×8T	Screw for 303011	螺钉, 用于 303011	1	1	1	1	1	
9	1S5×6	Screw for 033022A	螺钉, 用于 033022A	2	2	2	2	2	
10	303051	Thrust Collar	侧压圆筒	1	1	1	1	1	
11	304061	Set Collar	圆筒固定	-	1	1	-	1	(12)
12	1S6×8	Screw for 304061	螺钉, 用于 304061	-	2	2	-	2	
13	303021	Looper Drive Lever Shaft	钩针摇动轴	1	1	1	1	1	
14	303061	Looper Drive Lever	钩针摇动机构	1	1	1	1	1	(15)
15	4B6×15	Screw for 303061	螺钉, 用于 303061	2	2	2	2	2	
16	033072	Looper Thread Take-Up	钩针张紧	1	1	1	-	-	
17	11/64S40009	Screw for 033072	螺钉, 用于 033072	1	1	1	1	1	
18	063072AA	Looper Connecting Rod Ball Joint, right	球连杆组(右边)	1	1	1	1	1	
19	9/32W10106	Washer	垫圈	2	2	2	2	2	
20	9/32N28210	Nut	螺母	1	1	1	1	1	
21	1/4N32201L	Nut	螺母	1	1	1	1	1	
22	303181	Looper Connecting Rod	联合杆	1	1	1	1	1	
23	1/4N32201	Nut	螺母	1	1	1	1	1	
24	063092AA	Looper Connecting Rod Ball Joint, left	球连杆组(左边)	1	1	1	1	1	
25	11/64S40005	Screw for 063092AA	螺母, 用于 063092AA	1	1	1	1	1	
26	303171	Looper Rocker	钩针摇动台	1	1	1	-	-	
27	033121	Looper	钩针	1	1	1	2	2	
28	11/64S40003	Screw for 033121	螺钉, 用于 033121	2	2	2	-	-	
29	1A01020	Ball Bearing (W687.ZZA)	滚珠轴承	2	2	2	2	2	
30	303161	Looper Rocker Cone Stud	钩针摇动根轴	1	1	1	1	1	
31	6N1/4	Nut	螺母	2	2	2	2	2	
32	303151	Looper Rocker Frame	钩针摇动根基	1	1	1	1	1	
33	1S5×8T	Screw for 303151	螺钉, 用于 303151	1	1	1	1	1	
34	1S5×6	Screw for 303151	螺钉, 用于 303151	1	1	1	1	1	
35	103021	Looper Retainer	钩针导杆	1	1	1	-	-	(36)
36	11/64S40018	Screw for 103021	螺钉, 用于 103021	1	1	1	-	-	
37	303141	Set Collar	圆筒	1	1	1	1	1	(38)
38	1S6×6	Screw for 303141	螺钉, 用于 303141	2	2	2	2	2	
39	303091	Looper Rocker Shaft Arm	钩针摇臂	1	1	1	1	1	
40	4B5×12	Screw for 303091	螺钉, 用于 303091	1	1	1	1	1	
41	303131	Looper Rocker Shaft	钩针摇动轴	1	1	1	1	1	
42	303101	Link Pin	支杆	1	1	1	1	1	
43	11/64S40005	Screw for 303101	螺钉, 用于 303101	2	2	2	2	2	
44	303082A	Bearing Case Ass'y	轴承固定组	1	1	1	1	1	(45-47)
45	303082	Bearing Case	轴承圆筒	1	1	1	1	1	
46	3A03020	Bearing (SCE48P)	针轴承(SCE48P)	1	1	1	1	1	
47	3A03013	Bearing (HK2220LL)	针轴承(MK2220LL)	1	1	1	1	1	
48	303072	Looper Avoid Eccentric	钩针倒偏心器	1	1	1	1	1	(49, 50)
49	1S6×10	Screw for 303072	螺钉, 用于 303072	1	1	1	1	1	
50	1S6×12	Screw for 303072	螺钉, 用于 303072	1	1	1	1	1	
51	306072	Knife Lever A	刀具杆	1	-	-	1	-	(52)
52	4B6×20	Screw for 306071	螺钉, 用于 306071	1	-	-	1	-	
53	303191	Looper for Single Thread	钩针(单线)	-	(1)	(1)	-	-	
54	033301	Looper Thread Take-Up	钩针张紧	-	-	-	1	1	
55	303211	Looper Rocker	钩针摇动台	-	-	-	1	1	
56	9/64S40066	Screw	螺钉	-	-	-	3	3	
57	9/64S40003	Screw	螺钉	-	-	-	1	1	

07-1. FEED DRIVING & THROAT PLATE PARTS (DS-99/A, DS-99/AW)  
 送袋机构·针板关联的零部件(DS-99/A)

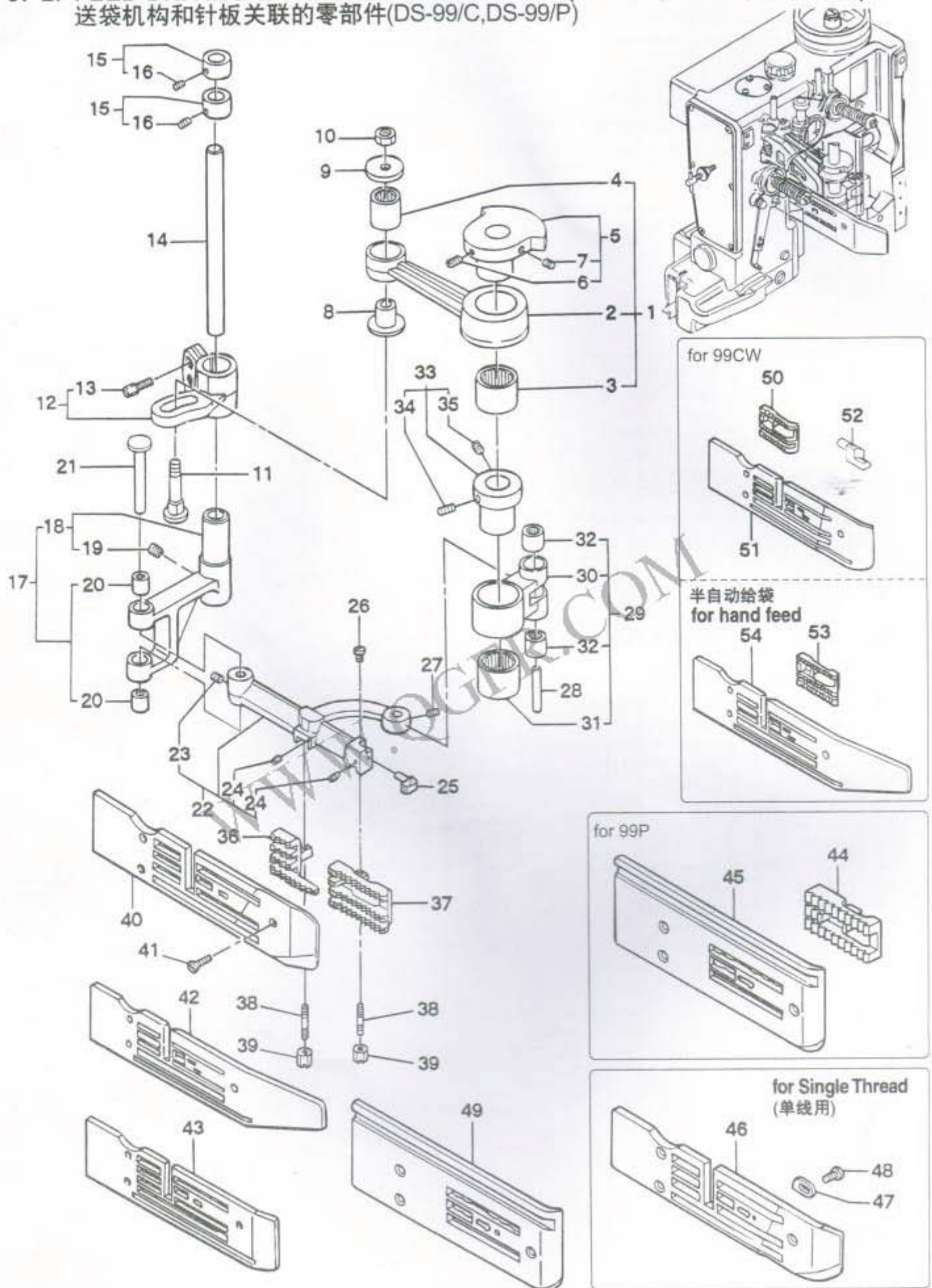


**07-1. FEED DRIVING & THROAT PLATE PARTS (DS-99/A,DS-99/AW)**  
**送袋机构·针板关联的零部件(DS-99/A)**

图号 Ref. No.	零部件号码 Part No.	零部件名称 Description		数量 Q'ty		备注 Remarks
				99AW	99CW	
1	304021A	Feed Drive Eccentric Ass'y	送齿驱动杆组	1	1	(2-4)
2	304021	Feed Rocker Eccentric Connection	送齿驱动杆	1	1	
3	3A03013	Needle Bearing (HK2220LL)	针轴承(HK2220LL)	1	1	
4	3A03018	Needle Bearing (HK1216LL)	针轴承(HK1216LL)	1	1	
5	304011	Feed Rocker Eccentric	偏心凸轮	1	1	(6,7)
6	1S6x12	Screw for 304011	螺钉, 用于 304011	1	1	
7	1S6x10	Screw for 304011	螺钉, 用于 304011	1	1	
8	304041	Bushing	接头套筒	1	1	
9	304271	Washer	垫圈	1	1	
10	9/32N28211	Nut	螺母	1	1	
11	304031	Feed Regulating Stud	送调节轴座	1	1	
12	304051	Feed Rocker Shaft	送调节轴	1	1	
13	304061	Set Collar	固定圆筒	2	2	(14)
14	1S6x8	Screw for 304061	螺钉, 用于 304061	4	4	
15	304201	Feed Rocker	送机构根基	1	1	(16)
16	1S6x6	Screw for 304201	螺钉, 用于 304201	3	3	
17	304261	Feed Bar Shaft	支杆, 用于 304191A	1	1	
18	304191A	Feed Bar Ass'y	送料齿根基总成	1	1	(19-21)
19	304191	Feed Bar	送料齿根基	1	1	
20	3A03020	Needle Bearing (SCE48P)	针轴承(SCE48P)	2	2	
21	9/64S40502	Screw	螺钉	1	1	
22	104033	Needle Guide	针导	1	-	
23	11/64S40002	Screw for 104033	螺钉, 用于 104033	1	1	
24	1S5x5	Screw for 304091	螺钉, 用于 304091	1	1	
25	304091	Feed Crank Link Pin	插销	1	1	
26	304082A	Feed Crank Link Ass'y	轴承圆筒总成	1	1	(27-29)
27	304082	Feed Crank Link	轴承圆筒	1	1	
28	3A03019	Needle Bearing (HK2020LL)	针轴承(HK2020LL)	1	1	
29	3A03020	Needle Bearing (SCE48P)	针轴承(SCE48P)	2	2	
30	304101	Feed Lift Eccentric	上下移动凸轮	1	1	(31,32)
31	1S6x10	Screw for 304101	螺钉, 用于 304101	1	1	
32	1S6x6	Screw for 304101	螺钉, 用于 304101	1	1	
33	304211	Feed Dog	送料齿	1	-	
34	11/64S40505	Screw for 304211	螺钉, 用于 304211	1	1	
35	11/64N40204	Nut for 304211	螺母, 用于 304211	1	1	
36	304181	Throat Plate	针板	1	-	
37	11/64S40074	Screw for 304181	螺钉, 用于 304181	3	3	
38	304182	Throat Plate	针板	(1)	-	Special Order
39	304281	Throat Plate	针板 (DS-99/AW)	-	1	(特订)
40	304291	Feed Dog	送料齿 (DS-99/AW)	-	1	
41	304301	Needle Guide	针导 (DS-99/AW)	-	1	



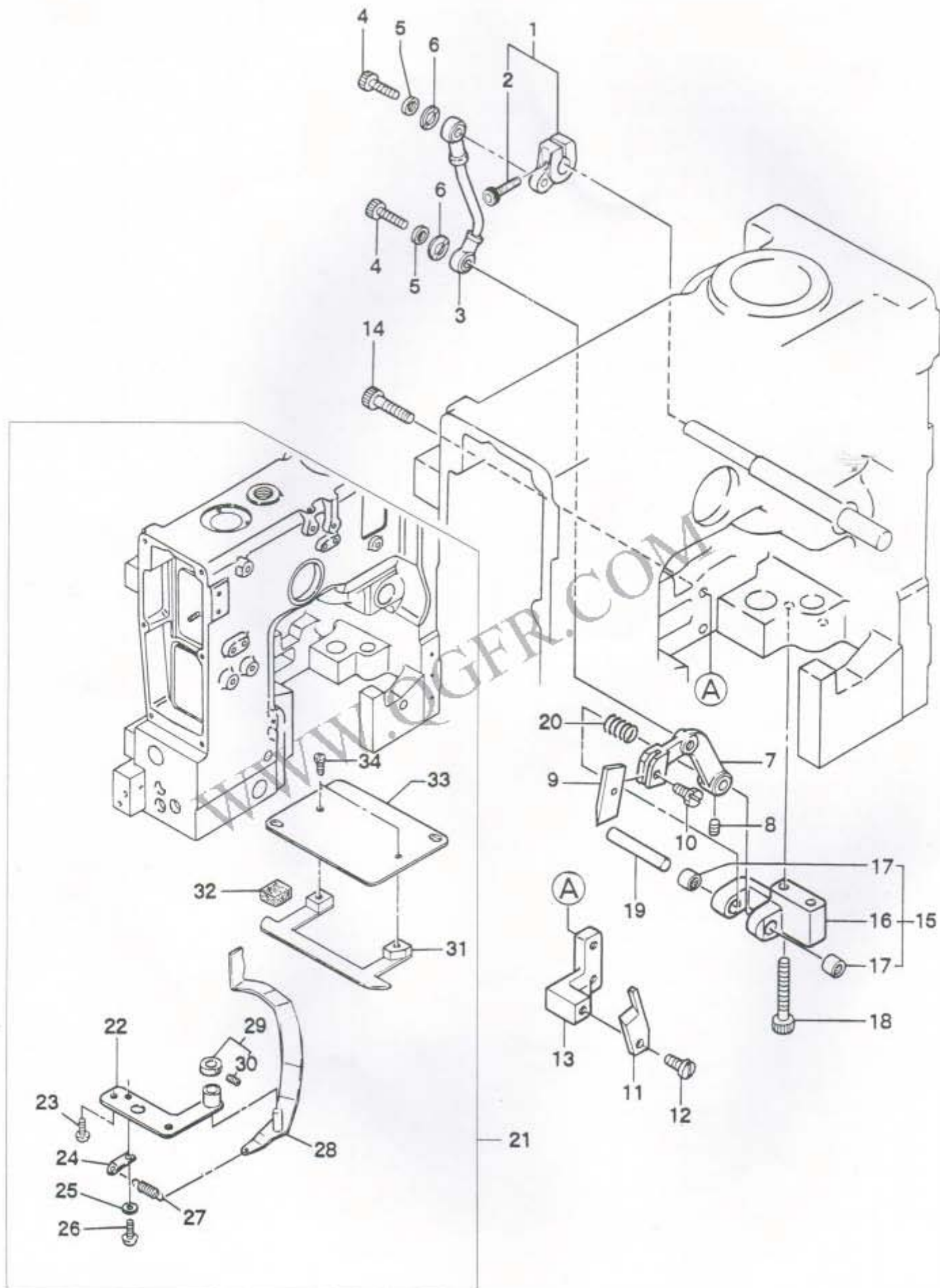
07-2. FEED DRIVING & THROAT PLATE PARTS (DS-99/C,DS-99/P,DS-99/CW)  
送袋机构和针板关联的零部件(DS-99/C,DS-99/P)



**07-2. FEED DRIVING & THROAT PLATE PARTS (DS-99/C,DS-99/P,DS-99/CW)**  
**送袋机构和针板关联的零部件(DS-99/C,DS-99/P)**

图号 Ref. No.	零部件号码 Part No.	零部件名称 Description		数量 Qty			备注 Remarks
				99C	99P	99CW	
1	304021A	Feed Drive Eccentric Ass'y	送齿驱动杆组	1	1	1	(2-4)
2	304021	Feed Rocker Eccentric Connection	送齿驱动杆	1	1	1	
3	3A03013	Needle Bearing (HK2220LL)	针轴承(MK2220LL)	1	1	1	
4	3A03018	Needle Bearing (HK1216LL)	针轴承(MK1216LL)	1	1	1	
5	304011	Feed Rocker Eccentric	偏心凸轮	1	1	1	(6,7)
6	1S6×12	Screw for 304011	螺钉, 用于 304011	1	1	1	
7	1S6×10	Screw for 304011	螺钉, 用于 304011	1	1	1	
8	304041	Bushing	接头套筒	1	1	1	
9	304271	Washer	垫圈	1	1	1	
10	9/32N28211	Nut	螺母	1	1	1	
11	304031	Feed Regulating Stud	送调节轴座	1	1	1	
12	064051	Feed Rocker Crank	送元弓形	1	1	1	(13)
13	15/64S28019	Screw for 064051	螺钉, 用于 064051	2	2	1	
14	304051	Feed Rocker Shaft	送调节轴	1	1	1	
15	304061	Set Collar	固定圆筒	2	2	2	(16)
16	1S6×8	Screw for 304061	螺钉, 用于 304061	4	4	4	
17	304112A	Feed Rocker Ass'y	送机构根基总成	1	1	1	(18-20)
18	304112	Feed Rocker	送机构根基	1	1	1	(19)
19	1S6×6	Screw for 304112	螺钉, 用于 304112	1	1	1	
20	3A03020	Needle Bearing (SCE48P)	针轴承(SCE48P)	2	2	2	
21	304251	Feed Bar Shaft	支杆, 用于 304112A	1	1	1	
22	304071	Feed Bar	送料齿根基	1	1	1	(23,24)
23	1S6×6	Screw for 304071	螺钉, 用于 304071	1	1	1	
24	9/64S40502	Screw	螺钉, 用于 304071	2	2	2	
25	304121	Needle Guide	针导	1	1	-	
26	11/64S40005	Screw for 304121	螺钉, 用于 304121	1	1	1	
27	1S5×5	Screw for 304091	螺钉, 用于 304091	1	1	1	
28	304091	Feed Crank Link Pin	插销	1	1	1	
29	304082A	Feed Crank Link Ass'y	轴承圆筒总成	1	1	1	(30-32)
30	304082	Feed Crank Link	轴承圆筒	1	1	1	
31	3A03019	Needle Bearing (HK2020LL)	针轴承(HK2020LL)	1	1	1	
32	3A03020	Needle Bearing (SCE48P)	针轴承(SCE48P)	2	2	2	
33	304101	Feed Lift Eccentric	上下移动凸轮	1	-	1	(34,35)
34	1S6×10	Screw for 304101	螺钉, 用于 304101	1	1	1	
35	1S6×6	Screw for 304101	螺钉, 用于 304101	1	1	1	
36	104072	Feed Dog, rear	送料齿(后边)	1	-	1	
37	304131	Feed Dog, front	送料齿(前边)	1	-	-	
38	11/64S40505	Screw for 104072, 304131	螺钉, 用于 104072	2	2	2	
39	11/64N40204	Nut for 104072, 304131	螺母, 用于 104072	2	2	2	
40	104123	Throat Plate for automatic feed	针板(用于 CM)	1	-	-	
41	11/64S40074	Screw for 104123, 104093, 1040122	螺钉	3	3	3	
42	104093	Throat Plate for Hand Feed	针板(半自动给袋)	(1)	-	-	
43	104122	Throat Plate for automatic feed by lever start	针板(起动控制杆方式)	(1)	-	-	
44	304221	Feed Dog	送料齿	-	1	-	
45	304231	Throat Plate	针板	-	1	-	
46	304171	Throat Plate for Single Thread	针板(单线用)	(1)	-	-	
47	114131	Throat Plate Thread Retainer	针板钩子	(1)	(1)	-	Special Order (特订)
48	3/32S56004	Screw for 114131	螺钉, 用于 114131	(1)	(1)	-	
49	304241	Throat Plate for Single Thread	针板(单线用)	-	(1)	-	
50	104231	Feed Dog, front	送料齿(前边)	-	-	1	
51	104241	Throat Plate	针板	-	-	1	
52	304301	Needle Guide	针导	-	-	1	
53	104232	Feed Dog, front for Hand Feed	送料齿(前边)(半自动给袋)	-	-	(1)	Special Order (特订)
54	104242	Throat Plate for Hand Feed	针板(半自动给袋)	-	-	(1)	

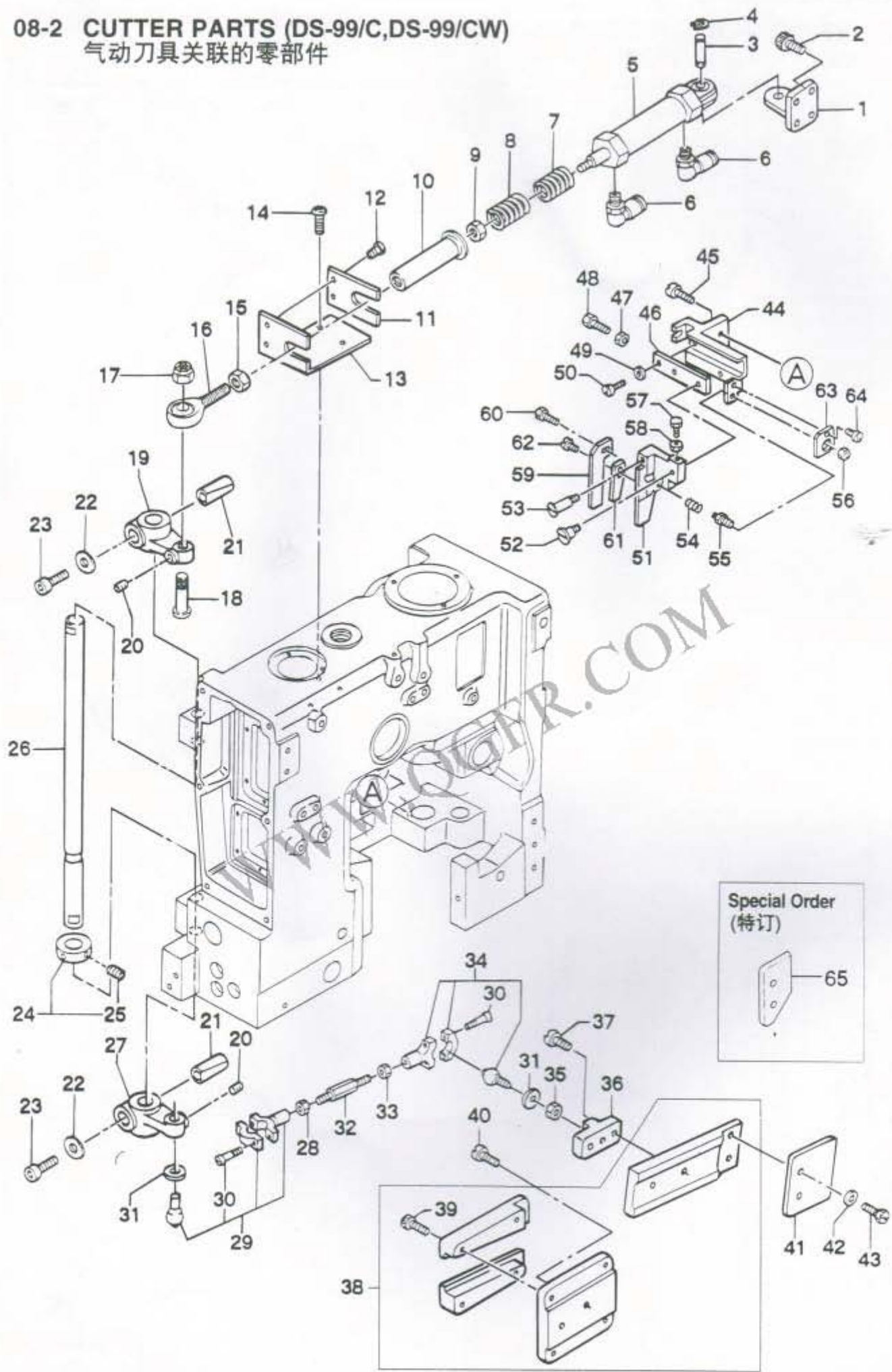
08-1. CUTTER PARTS (DS-99/A,DS-99/AW)  
 机动切刀关联的零部件(DS-99/A)



**08-1. CUTTER PARTS (DS-99/A,DS-99/AW)**  
**机动切刀关联的零部件(DS-99/A)**

图号 Ref.No.	零部件号码 Part No.	零部件名称 Description		数量 Q'ty		备注 Remarks
				99A	99AW	
1	306072	Knife Lever A	切刀杆 A	1	1	(2)
2	4B6×20	Screw for 306072	螺钉, 用于 306072	1	1	
3	306081	Ball Joint Rod	球联合	1	1	
4	4B5×20	Screw for 306081	螺钉, 用于 306081	2	2	
5	P4031	Washer	垫圈	2	2	
6	5/16W05201	Spring Washer	弹簧垫圈	2	2	
7	306091	Knife Lever B	切刀杆 B	1	1	(8)
8	15/64S28525	Screw	螺钉	1	1	
9	066143	Knife B	切刀片 B(活动件)	1	1	
10	11/64S40084	Screw for 066143	螺钉, 用于 066143	1	1	
11	066133	Knife A	切刀片 A (固定件)	1	1	
12	3/16S28002	Screw for 066133	螺钉, 用于 066133	1	1	
13	306131	Knife Base	切刀片固定基	1	1	
14	4B5×25	Screw for 306131	螺钉, 用于 306131	2	2	
15	306111A	Knife Lever Base Ass'y	切刀杆基总成	1	1	(16,17)
16	306111	Knife Lever Base	剪刀杆基	1	1	
17	3A03020	Needle Bearing (SCE48P)	针轴承(SCE48P)	2	2	
18	4B5×35	Screw for 306111	螺钉, 用于 306111	2	2	
19	306101	Knife Lever Pin	支杆, 用于 306111A	1	1	
20	306121	Knife Lever Spring	弹簧	1	1	
21	305301A	Thread Pusher Set	缝线插入结构	(1)	(1)	(22-34)
22	305301	Lever Base	袋压上杆根基	(1)	(1)	
23	3S5×15	Screw for 305301	螺钉, 用于 305301	(2)	(2)	
24	285501	Spring Hook	弹簧钩	(1)	(1)	Special Order
25	2W5	Washer	垫圈	(1)	(1)	(特订)
26	4S5×5	Screw	螺钉	(1)	(1)	
27	285491	Spring	弹簧	(1)	(1)	
28	285461	Lever	袋压上杆	(1)	(1)	
29	285471	Set Collar	固定圆筒	(1)	(1)	(30)
30	SS1032316	Screw	螺钉	(1)	(1)	
31	305311	Guide	袋导片	(1)	(1)	
32	305331	Rubber	缓冲物	(1)	(1)	
33	305321	Face Plate, lower	下面板	(1)	(1)	
34	11/64S40005	Screw	螺钉	(2)	(2)	

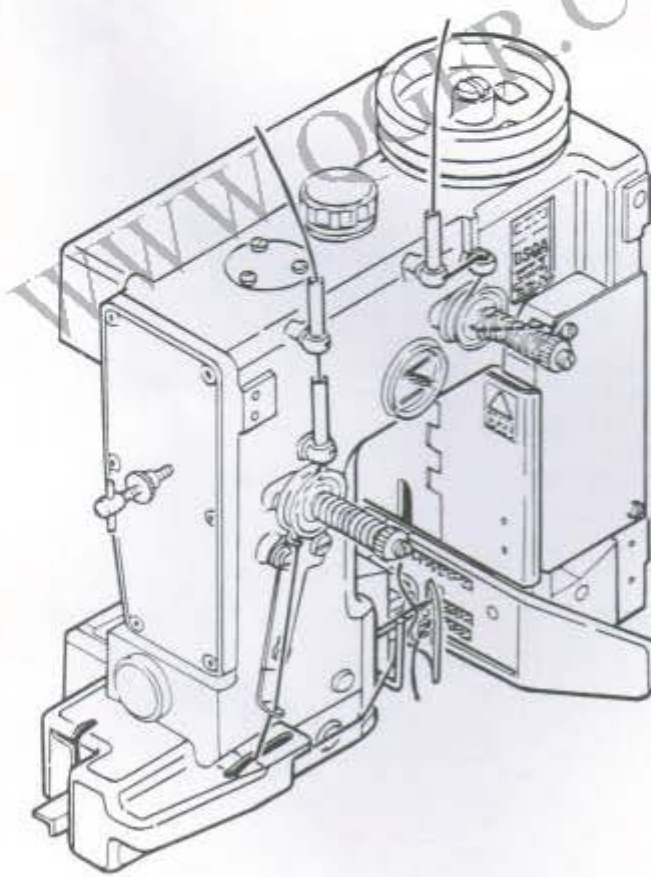
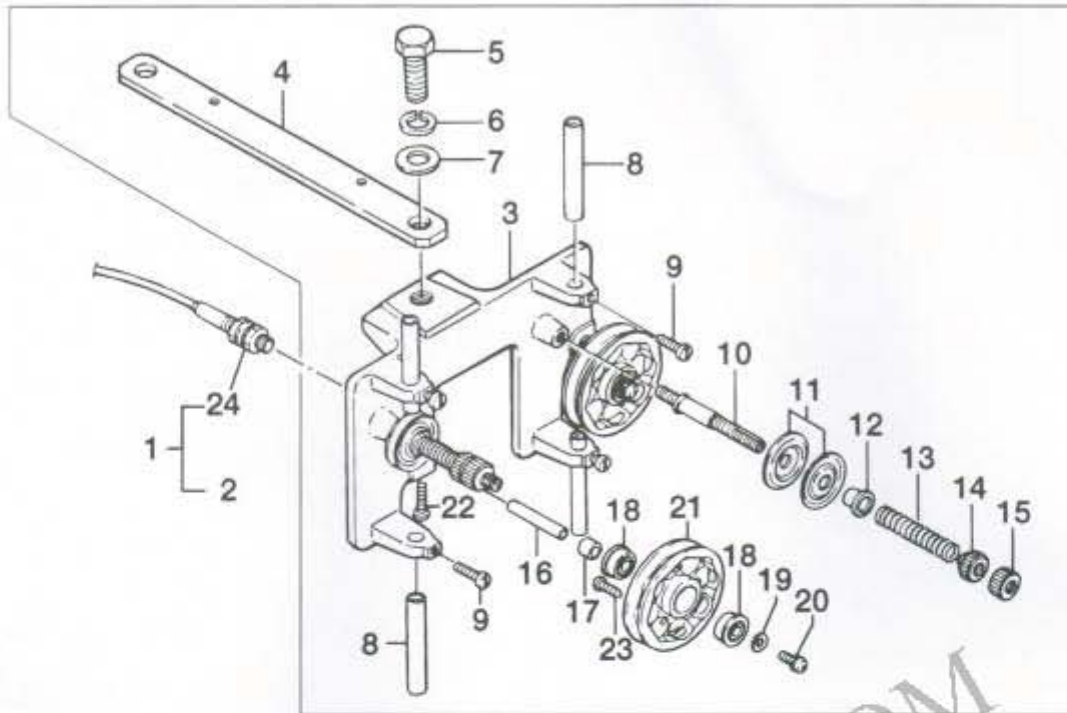
08-2 CUTTER PARTS (DS-99/C,DS-99/CW)  
 气动刀具关联的零部件



**08-2. CUTTER PARTS (DS-99/C,DS-99/CW)**  
**气动刀具关联的零部件**

图号 Ref. No.	零部件号码 Part No.	零部件名称 Description	数量 Q'ty		备注 Remarks
			99C	99CW	
1	306011	Air Cylinder Base	1	1	
2	4B5×15	Screw for 306011	4	4	
3	106201	Pin	1	1	
4	1RS-8	Stop Ring (S-8)	2	2	
5	J01002	Air Cylinder	1	1	
6	D07034	Tube Fitting,elbow (PL6-01M)	2	2	
7	305221	Spring	1	1	
8	286161	Spring	1	1	
9	1N8C	Nut	1	1	
10	306151	Joint Rod	1	1	
11	306061	Spacer	1	1	
12	11/64S40005	Screw for 306061	2	2	
13	306032	Joint Rod Guide	1	1	
14	3S5×10	Screw For 306032	2	2	
15	1N8	Nut (M8)	1	1	
16	6A04007	Rod End (POS-8)	1	1	
17	6N5/16	Nut	1	1	
18	306162	Cutter Connecting Lever Pin	1	1	
19	306182	Cutter Connecting Lever	1	1	
20	1S5×6	Screw	2	2	
21	306191	Cotter Pin	2	2	
22	15/64W20101	Washer	2	2	
23	4B6×15	Screw	2	2	
24	062052	Set Collar	1	1	(25)
25	15/64S28512	Screw	2	2	
26	306171	Cutter Rocker Shaft	1	1	
27	306181	Cutter Connecting Lever	1	1	
28	1/4N32201	Nut	1	1	
29	063092A	Ball Joint Ass'y, left	1	1	(30)
30	9/64S40061	Screw for 063092A,063072A	3	3	
31	9/32W10106	Washer	2	2	
32	106141	Cutter Connecting Rod	1	1	
33	1/4N32201L	Nut	1	1	
34	063072A	Ball Joint Ass'y, right	1	1	(30)
35	9/32N28210	Nut	1	1	
36	306041	Ball Holder	1	1	
37	15/64S28004	Screw for 306041	2	2	
38	106032C	Oscillating Plate Ass'y	1	1	(39)
39	11/64S40061	Screw	4	4	
40	11/64S40006	Screw for 106032C	2	2	
41	106053	Upper Knife	1	1	
42	11/64W15103	Washer for 106053	2	2	
43	11/64S40049	Screw for 106053	2	2	
44	106062	Lower Knife Base Connection	1	1	
45	3/16S28018	Screw for 106062	2	2	
46	106152	Lower Knife Adjust Plate	1	1	
47	9/64N40101	Nut	1	1	
48	9/64S40067	Screw	1	1	
49	11/64W15103	Washer	1	1	
50	11/64S40075	Screw	1	1	
51	106072	Lower Knife Base	1	1	
52	11/64S40060	Screw	1	1	
53	11/64S40059	Screw	1	1	
54	106171	Spring	1	1	
55	106161	Spring Adjust	1	1	
56	11/64N40201	Nut for 106161	1	1	
57	9/64S40039	Screw	1	1	
58	9/64N40101	Nut	1	1	
59	106083	Lower Knife	1	1	
60	11/64S40093	Screw for 106083	1	1	
61	106093	Lower Knife Stopper	1	1	
62	9/64S40005	Screw for 106093	1	1	
63	306141	Plate	1	1	
64	11/64S40005	Screw	1	1	Special Order (特订)
65	306201	Upper Knife (Thread Cutter Only)	1	-	

# 09. THREAD BREAK DETECTOR PARTS 断线检知关联的零部件



09. THREAD BREAK DETECTOR PARTS  
断线检知关联的零部件

图号 Ref. No.	零部件号码 Part No.	零部件名称 Description		数量 Q'ty		备注 Remarks
				99A	99C	
1	255531BS	Thread Break Detector Ass'y	断线检知装置	1	1	(2, 24)
2	255531B	Thread Break Detector Ass'y	断线检知总成	1	1	(3-23)
3	255531	Thread Break Detector Base	断线检知台	1	1	
4	255571	Stey	支撑	1	1	
5	1B10×15	Bolt	六角螺栓	1	1	
6	3W10	Spring Washer	弹簧垫圈	1	1	
7	2W10	Washer	垫圈	1	1	
8	075091	Frame Thread Eyelet	线导管	4	4	
9	11/64S40003	Screw for 075091	螺钉, 用于 075091	4	4	
10	035021	Tension Post	线张紧杆	2	2	
11	065261	Tension Disc	线张紧盘	4	4	
12	035071	Tension Post Ferrule	接头片	2	2	
13	51292F-2	Tension Spring	线张紧弹簧	2	2	
14	065171	Tension Nut	线张紧螺母	2	2	
15	245091	Tension Nut	线张紧螺母	2	2	
16	255551	Shaft	轴	2	2	
17	255561	Collar	圆筒	2	2	
18	1A01015	Bearing	轴承	4	4	
19	2W3	Washer	平垫圈	2	2	
20	4S3×8	Screw	螺钉	2	2	
21	255541	Thread Break Detector Roller	断线检知	2	2	
22	4S4×10	Screw	螺钉	2	2	
23	9S2.6×8	Screw	螺钉	12	12	
24	C02010	Switch (FL7M-P8A6)	靠近开关(FL7M-P8A6)	2	2	

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NUT & WASHER (螺母、垫圈) FULL SIZE (原来的尺寸图)



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