

## For Operator Safety

Thank you for purchasing the YOUTIAN Model GN20 Bag Sewing Machine Head.

- This manual contains the instructions and precautions for using the Model GN20 Bag Sewing Machine Head. Be sure to read and understand this manual before use the machine correctly.
- Keep this manual near the sewing machine for easy reference. Be sure to attach this manual to the machine when lending or transferring it to another person or company.
- Please order this manual from the nearest YOUTIAN office if it is lost.
- The contents of this manual are subject to change without prior notice for improvement and safety purpose.

Instructions with this mark are especially important for operator safety. Be sure to observe these marked instructions.

### Hazard of Being Caught in the Machine

- Be careful, when you insert material to be closed into the sewing machine, your fingers may be caught in the machine between the presser foot and feed dog.
- A "Hazardous" mark is attached to the machine. When sewing, be sure not to touch on the machine.

### Hazard of Being Caught in the Machine

- A Needle Bar and Needle Thread Take-Up are moving at high speed. A "Hazardous" mark is attached to the machine. When the machine is in operation, keep fingers and yourself away from the Needle Bar and Needle Thread Take-Up.

## 安全操作

感謝您選擇友田牌 GN20 系列包邊縫紉機。

- 本使用說明書介紹 GN20 系列包縫機的使用方法及使用上的注意事項。在使用前請務必閱讀本使用說明書。請在充分理解內容的基礎上正確使用。
- 為便於使用,請任何時候都將本使用說明書保管在縫紉機旁邊。出租 GN20 系列包縫機或轉讓使用時,請隨機附帶本使用說明書。
- 遺失本使用說明書時,請與友田公司或經銷處聯系。
- 為提高功能及其安全起見,本使用說明書有時會在預先通知情況下作些改動。

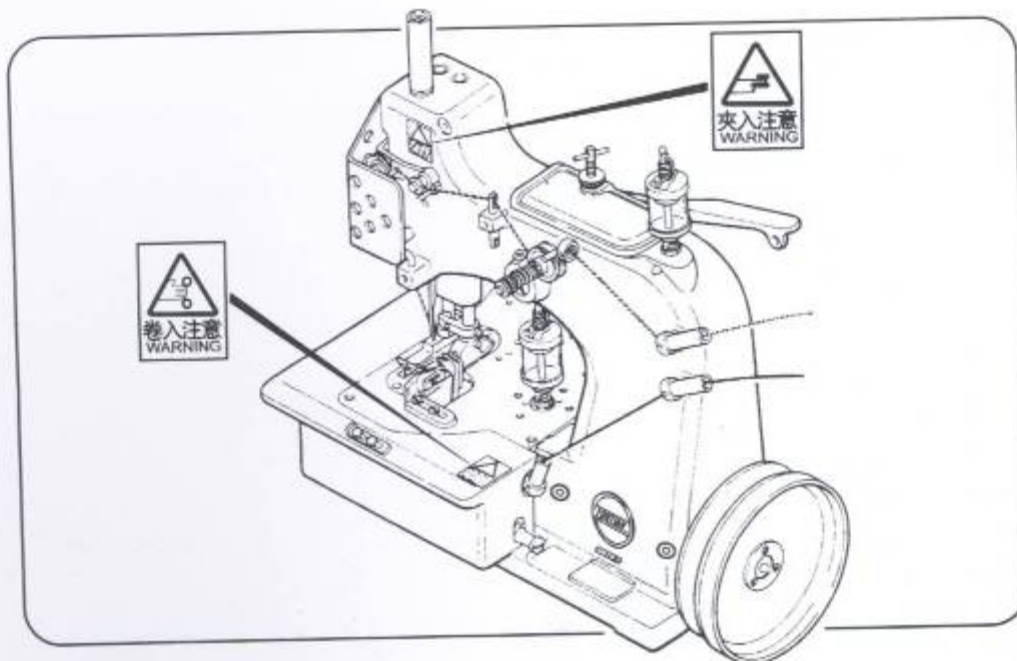
此危險標記,在安全操作上特別重要,請務必遵守。

### 卷入注意

- 當將縫料塞入機器縫紉時,要當心手指被送料牙和壓腳卷入。縫紉機上貼有卷入注意標記,縫紉時手應從縫紉機下側扶住縫料,不要接觸機器。

### 夾入注意

- 機器工作時,針杆與針杆連軸節組件處於高速運動狀態,在縫紉機上貼有夾入注意標記,縫紉時,手和身體不要與針杆和針杆連軸節組件接觸。



## Identifying and Ordering Parts

Where the construction permits, each part is stamped with its part number. On all orders, please include part number, part name and model name of machine.

### Safety Rules

To prevent personal injury:

- All power sources to the machine must be turned off before threading, oiling, adjusting or replacing parts.
- All covers and guards must be in position before operating machine.
- Do not tamper with safety cover, guards, etc., while machine is in operation.

## Cautions When Using the Machine

### Safety Precautions

- 1) Always turn power off before threading, oiling, and adjusting the machine or replacing parts.
- 2) Wear safety glasses.
- 3) Make sure, before starting the machine, that all covers and shields are in place and closed.
- 4) Do not touch on the machine when it is run.
- 5) Turn power off and make sure the needle does not operate before you put your fingers under the needles to adjust.
- 6) Do not touch one the machine when it is run.

## Maintenance

- Please keep in mind to handle the machine carefully and to maintain the machine in good condition.
- Thread fuzz or dust must be cleaned with air or brush on throat plate, in the groove of feed dog or around looper after the day's work.
- Wipe the area easy to rust with oil cloth.
- Check the machine for loose screws and tighten them, if any, once a month.
- Good maintenance will prolong the machine life.

## 售後服務

### 零部件調換和訂貨上的注意事項

- 本公司常年供應純正的 GN20 系列零部件。用戶若向非友田公司授權的經銷商購買時須謹防假冒。
- 訂貨時，請注明零件分解圖一覽表的零件號及名稱。
- 使用過程中，遇到不明處及故障、疑點、維護等問題，請與供應設備單位或本公司聯系。屆時，請寫明機器型號、縫紉機頭名稱及縫紉機編號。

## 使用時的注意事項

### 安全方面

- 1) 穿綫、給油、調試、零件調換以及保養檢修之前必須關閉電源。
- 2) 調試作業時，最好使用安全眼鏡。
- 3) 運轉前，必須將所有蓋板、罩殼堅固好。
- 4) 在確認蓋板等已關閉之后再啓動。
- 5) 將手伸入機針下面時，必須切斷電源。修理調試時，必須先關閉電源再進行作業。
- 6) 縫紉機運轉過程，不要觸摸機器運轉部位。

## 維護保養

- 縫紉機頭由精密的小零件構成，除了要當心使用之外，還要經常注意保養。
- 一天作業結束之後，應將針板上、壓腳槽內以及彎針周圍積存的塵埃等清除干淨。
- 容易生鏽的部位請用油布等擦淨。
- 每月一次，檢查螺絲是否鬆動。
- 維護保養的好壞關係到機器的壽命，應予以注意。

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# 1. Specifications/規格

	GN20-1	GN20-2	GN20-2A	GN20-3	GN20-3A
Stitch Type (針迹類型)	501	503	503	502	502
Stitch Range (針迹調整範圍)	7-16mm	7-16mm	2-4mm	7-16mm	2-4mm
Thread Type (縫綫類型)	Cotton 棉綫	Polypropylene/Ginlan 丙綫/晴綫	Pure Spinning/Polypropylene 純紡麻綫/丙綫	Polypropylene 丙綫	Pure Spinning/Polypropylene 純紡麻綫/丙綫
Needle (機針規格)	GN20-230/26#	GN20-400/33#	GN20-230/26#	GN20-230/26#	GN20-230/26#
Overedging Width (包邊寬度)	15mm (10mm available with special order) (特殊訂購 10mm)				
Thickness of Material (最大縫紉厚度)				14mm	
Max. Speed (最高縫紉速度)				1400rpm	
Motor Power (電機功率)				370W	

## General Description

**GN20-1:** It is suitable to the applications of piecing the cloth materials for carpet and other thick and/or broad-rimmed cloth materials.

**GN20-2:** It is suitable to sewing up different kind of woven bags such as gunny-bag and/or PP/PE bags.

**GN20-2A:** It is suitable to sewing up the decorating edge of carpets and foot-pads used for automobiles.

**GN20-3:** This type of sewing machine is a kind of heavy duty sewing machine for connecting ropes with sport net, fishnet, safety net and agri-net, featuring strong and nice-looking stitch and durable quality.

**GN20-3A:** It is suitable to sewing up different kind of decoration deges of carpet.

## 說明:

**GN20-1:** 適用於地毯和其它厚料、寬邊布料接布用途。

**GN20-2:** 單針雙綫集裝袋包邊機，適用於麻袋、PP/PE 編織袋等各種厚度袋子的包邊。

**GN20-2A:** 單針雙綫地毯包邊機，適用於地毯廠各種規格地毯包邊與服裝行業毛呢大衣裝飾包邊之用。

**GN20-3:** 單針三綫絲網、漁網包邊機，專門用於將繩索與體育用品網、漁網、安全網、農業網等網片連接在一起。

**GN20-3A:** 單針三綫地毯包邊機，適用於各種地毯的飾邊。

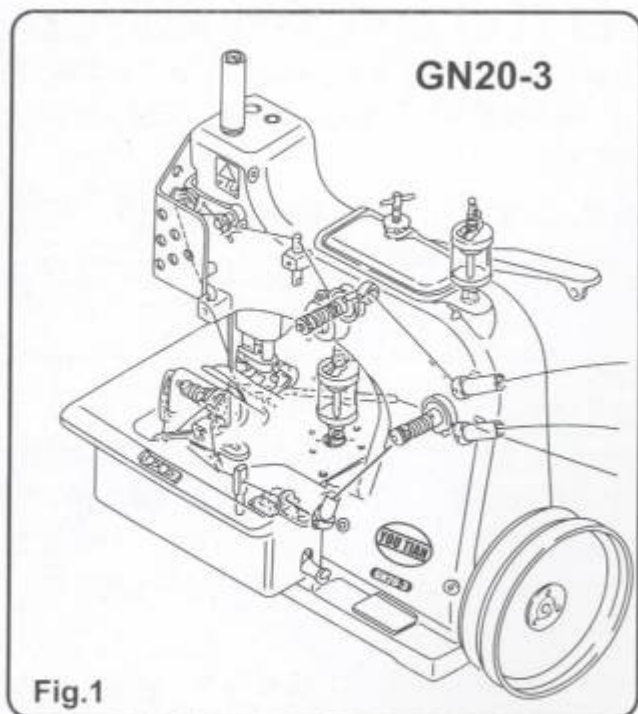


Fig.1

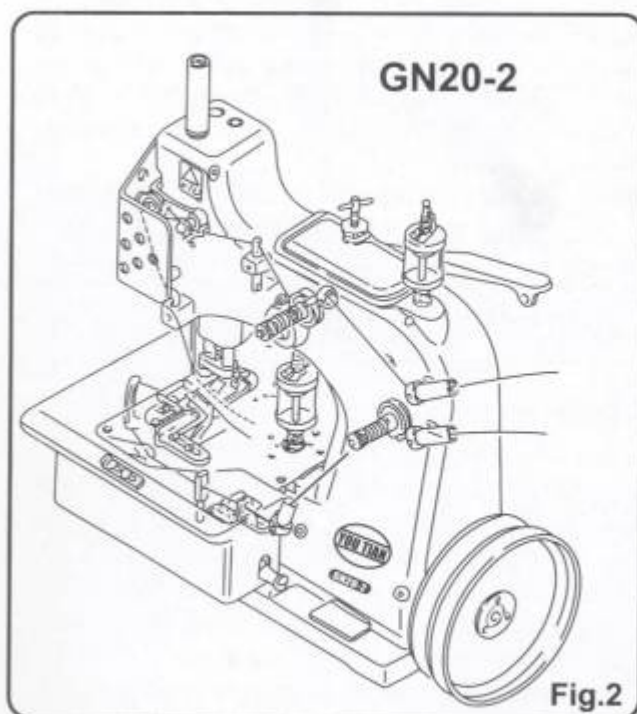


Fig.2

## 2. The Points Before Operation/使用前應注意事項

New machine or through long time storage machines must be checked before operation. Cleaning the anti-rust grease and dust on the surface of the machine, and filling sewing machine oil or white spindle oil 60# into oil cups and oil holes. Turning the pulley clockwise by hand. Check for free and cooperation. Check motor rotating direction for the same as that of the machine running. Then starting the machine for test sewing.

**Caution:** When the machines are sewing with no materials, lift the presser foot to avoid wearing feed dog and presser foot excessively. Do not lift presser foot too high to avoid impacting with upper looper.

新的或存放已久的機器，在使用前應作一次常規檢查，清除表面塵埃和防銹油脂，並在油杯和各油孔處注入縫紉機油或 60 號白色主軸油。用手順時針轉動皮帶輪，檢查運轉是否靈活協調，檢查電動機旋轉方向是否和機器運轉方向一致，然後再啓動機器進行試縫紉。

**注意：**機器在空車試運轉時，應將壓腳抬起，以避免送料牙與壓腳磨損，同時要注意壓腳不能抬得過高，以免與上彎針相碰。

## 3. Lubricating/潤滑

Oil machine at holes marked with "OIL" daily (Fig. 1). Before starting machine, make sure sight feed oiler are filled with oil. If machine is run dry, it will be bound or cause trouble. Use white spindle oil 60 or equivalent. Example: Shell Tellus Oil C10.

每天必須給機器各注油孔“OIL”標志處加油。開動機器前要確保滴注油杯已注滿油，否則機器在無油潤滑狀態下工作會引起燒軸等嚴重事故。潤滑時可使用 60 號白色主軸油或與之相當的，例如殼牌機油 C10。

## 4. Needle, Thread and Threading/機針、縫綫與穿綫

Selections of needle and thread depend on quality and technical demand of sewing material. Good combination of the needle and thread is one of the basic condition to get perfect sewing performance. The needle point must be sharp, and the thread must be strong enough. Threading as illustrated in Fig. 2, draw out needle and looper thread from needle eye and looper hole about 50mm. Feed materials smoothly by hand. Do not feed or catch materials forcibly.

**Caution:** Thread drawn out from thread bobbin should go out smoothly without any halt.

機針和縫綫的選擇應根據縫料的質量與技術要求而定。機針與縫綫相匹配是獲得正常縫紉性能的基本條件之一。機針應鋒利，縫綫應具有足夠的強度。按圖 1 圖 2 所示順序進行穿綫，分別將上綫和下綫拉出機針眼與彎針孔約 50mm 左右，即可送入縫料進行試縫。用手扶持導向，讓其自然進給，切忌強制喂入或拉住縫料。

**注意：**從綫圈引出的綫，縫紉時應順暢出綫，不得有阻滯、勾綫現象。

## 5. Adjusting/調整方法

### 5-1 Inserting Needle

Needle is a vulnerable part. When needle eye wears out obviously, needle point wears dull or bends, replace it. When replacing it, turn the pulley until the bar reaches its highest position. Loosen the needle bar nut, and insert a new needle with the shank as possible into the needle bar. The needle long groove must point to the moving direction of the sewing materials. Then retighten the needle set screw.

**Caution:** Improper needle inserting, crooked needle and worn out needle point and hole are possible causes of thread breaking and skipping.

### 5-1 機針安裝

機針是易損零件，當針眼明顯磨損、針尖磨鈍或彎曲時，應更換機針。換針時，旋轉皮帶輪使針杆上升到最高點，用板手擰松針杆螺母換上新針，針柄必須插入針杆孔到底，針眼凹形面必須朝縫料前進方向，再固緊螺母。

**注意：**機針安裝不正確、機針彎曲、針尖或針孔磨損，都有可能造成斷綫或跳針。

## 5-2 Adjusting Lower Loper

For convenient access, remove the Presser foot, throat plate and feed dog.

### a) The distance between needle center and lower looper.

Turn pulley clockwise, check the distance between needle center and lower looper point in the lowest position of needle bar just before moving upwards, the distance should be 9mm as shown in (Fig. 3). If it is larger or smaller than 9mm, carry out necessary adjustments after loosening nut (705) which holds looper lever (2005093D) and ball joint (200515) in position. Setting ball joints in the direction S will cause lower looper get nearer to needle (S'), while setting them in the direction L will make lower looper go away from needle (L'). Tighten nut (705) after the adjustment.

### b) The clearance between needle and lower looper

Turn pulley clockwise, and adjust looper lever (2005093D) so that the clearance between lower looper point and needle is 0.1mm (Fig. 4) when lower looper moves to the right and passes behind needle.

- For this adjustment, looper lever can be moved in the axial direction when screw (YT506) of looper lever is loosened.

**Caution:** If there is no clearance between needle and lower looper, with needle contacting lower looper, the former will be caused. Thread may skip if the clearance is too large.

## 5-2 下彎針調節

為了調整方便，應先卸下壓腳、針板和送料牙。

### a) 機針中心綫與下彎針間距調節

如圖 3 所示，順時針轉動皮帶輪，當針處於最低位置正要往上運動時，機針中心綫與下彎針針尖距離為 9mm。調整時，擰松下彎針連杆組件 (200515) 球頭螺母 (705)，將下彎針連杆組件往 S 方向移動，使下彎針針尖靠近機針 (S' 方向)；反之往 L 方向移動，使下彎針遠離機針 (L' 方向)。調整後，將螺母 (705) 固緊。

### b) 機針與下彎針間隙調節

如圖 4 所示，順時針方向轉動皮帶輪，使下彎針往右運動通過機針背面時，下彎針針尖與機針之間間隙為 0.1mm。

- 調整時，先擰松彎針架 (2005093D) 上的螺釘 (YT506)，然後將彎針架往軸向移動進行調節。

**注意：**如果機針與下彎針之間無間隙，會導致相互磨損；間隙太大，則容易跳針。

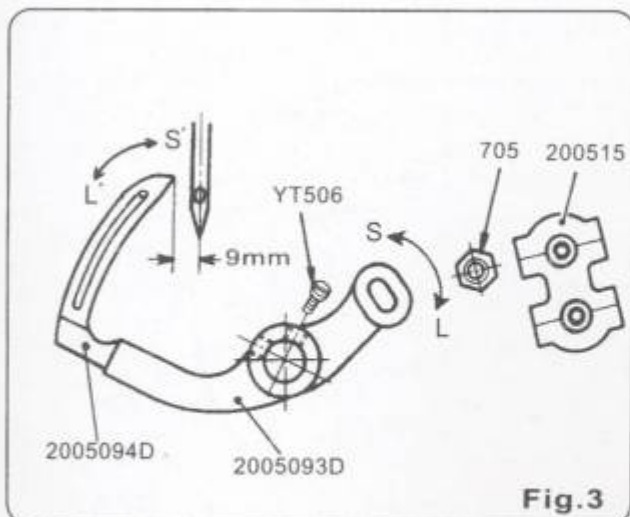


Fig. 3

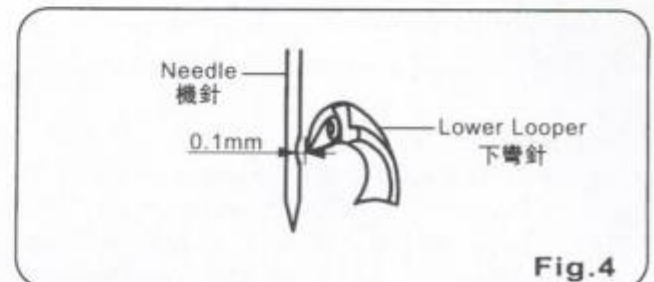


Fig. 4

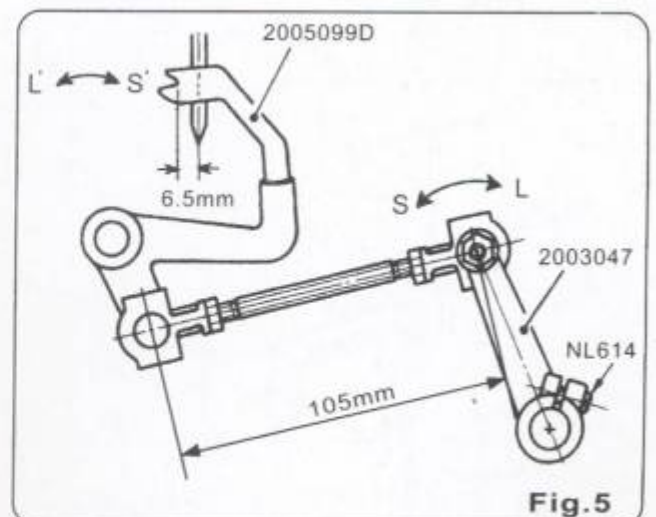


Fig. 5

### 5-3 Adjusting Upper Looper

- a) The distance between needle and upper looper.  
Turn pulley clockwise, and check the distance between needle center and the concave part of upper looper (2005099D) at the time when upper looper is at the farthest in the left. The distance must be 6.5mm as shown in (Fig. 5). If the distance is larger or smaller than 6.5mm, carry out necessary adjustments as follows; loosen screw (NL614) of drive lever for spreader (2003047), and turn the lever down (S) to move upper looper to the right (S'), or turn it up (L) to move upper looper to the left (L'). Never fail to tighten the screw (NL614) after the adjustment.
- b) The clearance between lower looper, needle and upper looper.  
Turn pulley clockwise further, and you will see lower looper moves to the right while upper looper goes to the left. In this case, note that upper looper point passes the concave part of lower looper (on the far side), as shown in (Fig. 6) Check the clearance between the concave part of lower looper and upper looper point. The clearance should be 0 to 0.1mm.
- If the clearance does not fall within the specified range, loosen screw (2001014) of looper shaft bearing (2001012), as shown in (Fig. 7), and move up looper shaft bearing (S) to make the clearance smaller or move it down (L) to make the clearance larger. Firmly tighten the screw of looper shaft bearing after the adjustment.
  - Confirm that the clearance between needle and upper looper is 0 to 0.5mm at the time when needle moves downwards and passes behind upper looper (2005099D), while turning pulley clockwise (Fig. 6)
- c) The center distance of ball joints.  
The center distance of ball joints connecting drive lever for spreader (2003047) and spreader lever (2005095) is fixed at 105mm. Keep this dimension, otherwise timing of lower looper and upper looper will get out of order (Fig. 5)

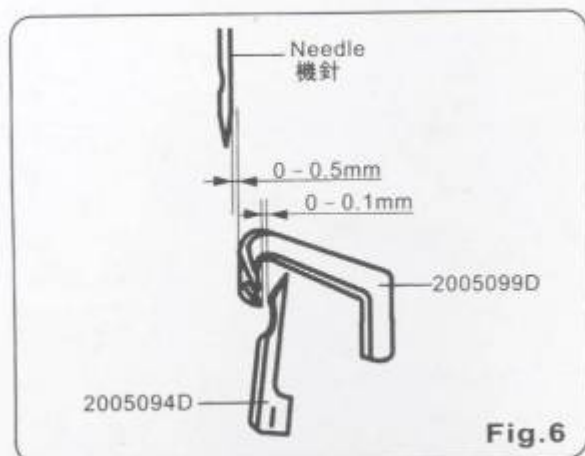


Fig.6

### 5-3 上彎針調節

- a) 機針與上彎針間距調節  
如圖 5 所示，順時針轉動皮帶輪，使上彎針處於最左端位置，檢查機針中心綫和上彎針凹端底部間的水平距離為 6.5mm。調整時，擰松外曲柄 (2003047) 上的螺釘 (NL614)，將外曲柄向 S 方向轉動，使上彎針向右 (S' 方向) 移動；反之將外曲柄向 L 方向轉動，使上彎針向左 (L' 方向) 移動。調整后，固緊螺釘 (NL614)。
- b) 下彎針、機針與上彎針間隙調節  
如圖 6 所示，順時針方向轉動皮帶輪，使下彎針向右運動而上彎針向左運動，當上彎針針尖通過下彎針凹形面時，檢查彎針凹形面與上彎針針尖之間間隙為 0-0.1mm。
- 如圖 7 所示，調整時，擰松彎針架座 (2001012) 螺釘 (2001014)，向上 (S 方向) 移動彎針架座，使間隙減小；向下 (L 方向) 移動，則間隙增大。調整后，擰緊彎針架座上的固緊螺釘。
  - 如圖 6 所示，順時針轉動皮帶輪，使機針下降至上彎針背面時，機針與上彎針的間隙為 0-0.5mm
- c) 球節中心距調節  
如圖 5 所示，外曲柄 (2003047) 與 (2005095) 上彎針架球節中心距為 105mm，否則下彎針和上彎針的運動會不協調。

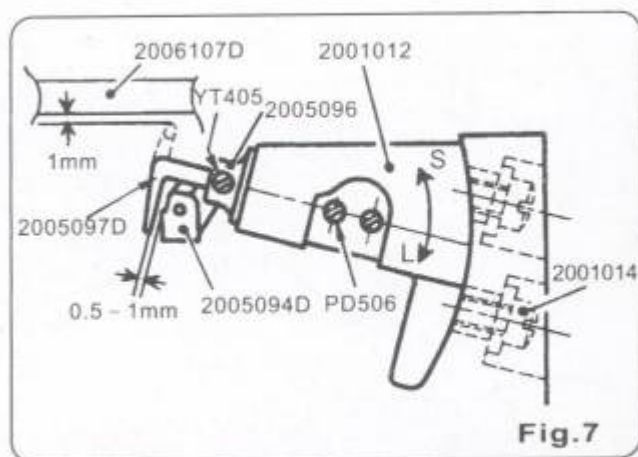


Fig.7

#### d) GN20-3 Adjusting upper looper

- (1) Turn pulley clockwise until upper looper (2005091) is in the most forward position. Adjust distance between needle center and upper looper point of 17mm (Fig. 8). Tighten screw (PD505) of spreader lever (2005088), Fig. 11 after adjusting.
- (2) Turn pulley clockwise to see upper looper point clears shaved part of lower looper. The clearance must be 0 to 0.1mm (Fig. 9). To obtain the distance, adjust upper looper, and tighten screw (PD506) of spreader lever shaft (2005090), Fig. 11.
- (3) Turn pulley clockwise to see jaw of upper looper just clears needle as it moves from its most forward position to the right. The clearance must be between 0 and 0.1mm as shown in Fig. 10. To adjust, loosen setscrew (2001014) in Fig. 11 and lift looper shaft bearing (2001012) in direction of S to decrease clearance, or lower it in direction of L to increase. Tighten setscrew after adjusting.

#### d) GN20-3 上彎針調節

- (1) 順時針轉動皮帶輪，使上彎針（2005091）向左運行到最前端，調整機針中心綫與彎針針尖之間的水平距離為17mm，如圖8所示，調整好后，按圖11擰緊彎針擺杆（2005088）上的螺釘（PD505）。
- (2) 順時針轉動皮帶輪，檢查上彎針針尖與下彎針凹槽處間隙是否為0-0.1mm，如圖9所示，調整時，擰松彎針小軸（2005090）螺釘（PD506），將上彎針作軸向調整至適合間隙后，再擰緊螺釘。
- (3) 順時針轉動皮帶后，如圖10，當上彎針從左端開始往右端運動時，檢查上彎針凸頭部與機針之間間隙是否為0-0.1mm。調整時擰松圓頭螺釘（2001014）如圖11所示，將彎針架座（2001012）往S方向移動減少間隙；向L方向移動則增加間隙，調整好后擰緊螺釘。

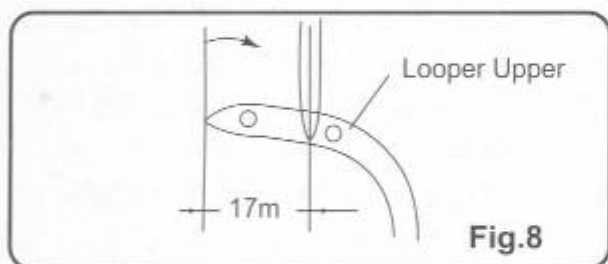


Fig.8

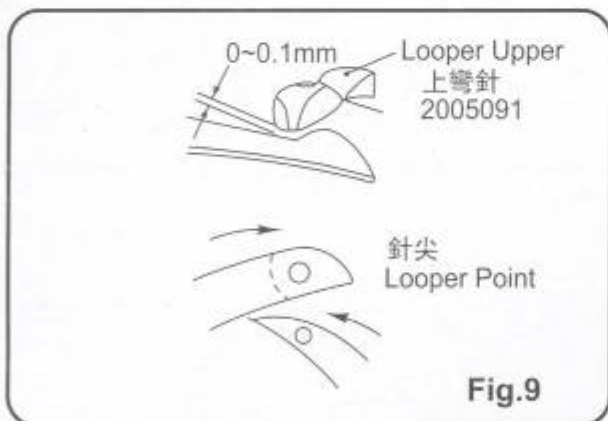


Fig.9

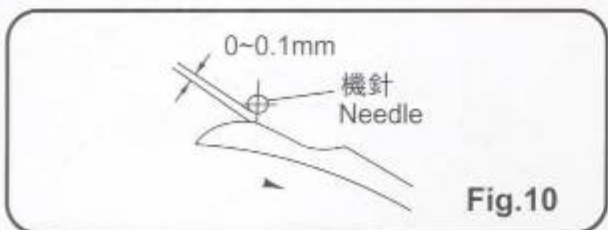


Fig.10

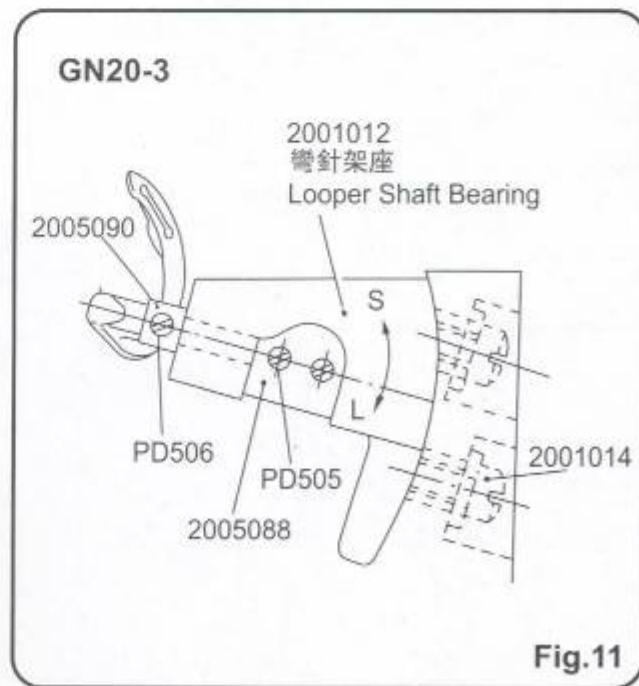


Fig.11



## 5-4 Adjusting the height of needle bar

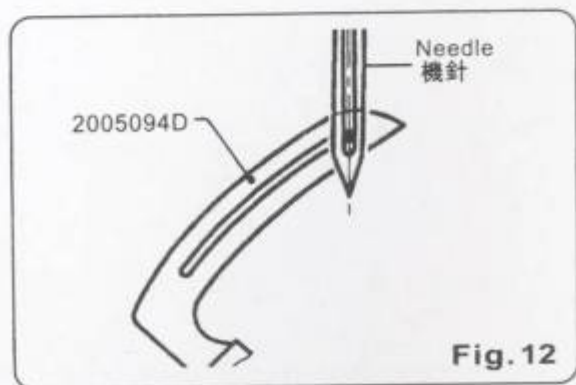
Adjust the height of needle bar (2003058) so that the upper part of needle hole coincides with lower looper hole, as shown in (Fig. 12), when lower looper goes to the right and lower looper hole aligns with needle center. For this adjustment, loosen screw (3510192) of needle bar vertically. After the adjustment, always tighten screw.

## 5-5 Adjusting Thread Retainer

Thread retainer (2005097D) has to catch the looper thread before lower looper (2005094D) enters the needle thread loop. It is to be adjusted so that the clearance between thread retainer and lower looper is 0.5 to 1mm when the retainer begins its upward movement and lower looper is at its farthest right position. For this adjustment, loosen screw (YT405) of the retainer and move the retainer as necessary (Fig. 7). Loosen screw (PD506) of spreader lever (2005095) and turn spreader lever shaft (2005096) as necessary, so that the clearance between the point of the retainer and throat plate (2006107D) is 1mm at the time when the retainer is facing upwards to its full extent.

## 5-6 Adjusting Feed Dog

The height of feed dog is correct when, at its highest point of travel, the rearmost teeth project above throat plate by 1mm as shown in (Fig. 13). This can be accomplished by removing feed dog (2006106), then adjusting screw (YT405) of feed bar (2006103) to obtain the required height. Fasten feed dog nut (709) after ensuring that feed dog is contacting screw (YT405). To adjust feed dog within throat plate (2006107D), ensuring uniform clearance between the rows of teeth and throat plate grooves, loosen screw (YT506) of feed rocker (2006102), and adjust feed rocker as necessary.



## 5-4 針杆高度調節

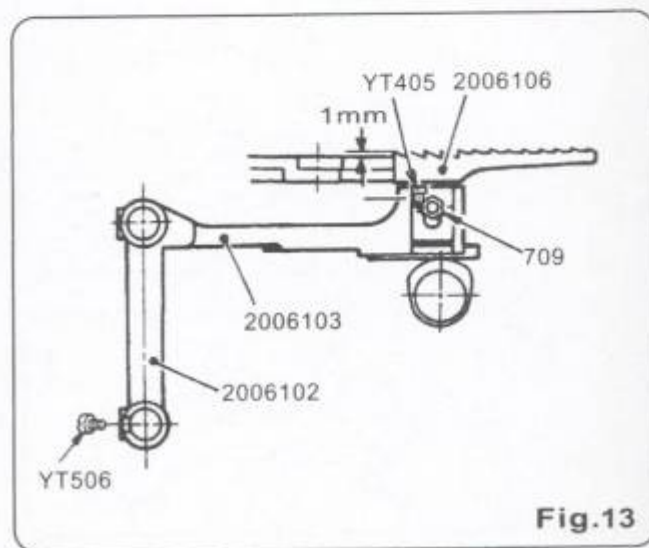
如圖 12 所示，繼續轉動皮帶輪，使下彎針向右運動至機針中心綫時，機針孔上邊緣與下彎針孔重疊。調整時，擰松針杆連軸節螺釘 (3510192) 使針杆上下移動。調整后，固緊螺釘。

## 5-5 壓綫針調節

如圖 7 所示，下彎針 (2005094D) 進入上綫綫環時，壓綫針必須勾住下綫。壓綫針開始向上運動而下彎針處於最右端位置，兩者間隙為 0.5 - 1mm。調整時，擰松壓綫針固緊螺釘 (YT405)，將壓綫針往其軸向適當移動；接着擰松上彎針架 (2005095) 上的螺釘 (PD506)，適當轉動壓綫針軸 (2005096)，使壓綫針處於最高位置時，壓綫針針尖與針板 (2006107D) 下平面距離為 1mm。

## 5-6 送料牙調節

如圖 13 所示，當送料牙位於最高位置時，送料牙的最后一排牙齒必須位於針板上平面 1mm 的位置。調整時，卸下送料牙 (2006106)，旋動牙架上起支撐送料牙高度作用的螺釘 (YT405) 至適當高度后，裝上送料牙擰緊螺母 (709)。送料牙安裝后其牙齒的兩側必須與針板 (2006107D) 槽對稱兩側有相同的間隙。若不對稱，可擰松螺釘 (YT506)，移動牙架座 (2006102) 至適當位置后再擰緊螺釘。



## 5-7 Adjusting Stitch Length

The stitch length adjustable in the range of 7 to 16mm. Your machine is set at the standard stitch length of 10mm in our plant before shipment. To adjust, loosen nut (706) of feed regulating stud (3506107) which connects feed rocker (2006102) and feed rod (2006100), and move feed regulating stud vertically, as shown in (Fig. 14). Bringing down the stud makes the stitch longer and moving it up shorter. After the adjustment, never forget to tighten the nut.

**Caution:** Any change in the stitch length will necessitate a corresponding change in the setting of needle guard (2006104).

## 5-8 Adjusting Needle Guard

Mount needle guard (2006108) in the groove in throat plate (2006107D), as shown in (Fig. 15), and adjust its position so that the clearance between needle and the guard is 1mm. Hold the guard in position by means of screw (YT408).

Mount another needle guard (2006104) on feed bar (2006103), as shown in (Fig. 16), and adjust its position in the groove of feed bar, so that it will just contact needle as needle goes up. Hold the guard in position securely by tightening screw (YT410). To confirm the proper adjustment, turn pulley counter-clockwise to check if needle clicks on the guard. If it does, the guard is pushing needle and readjustment is necessary.

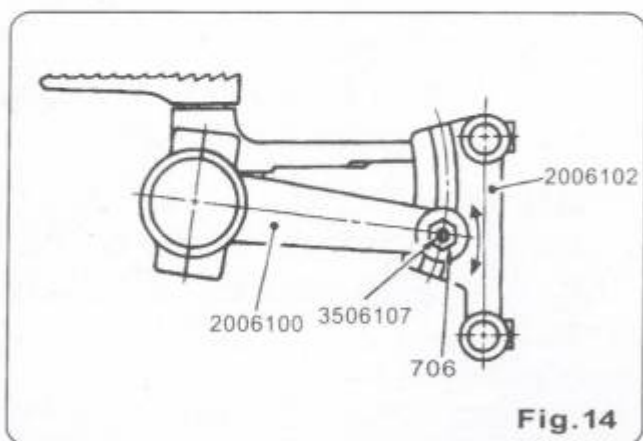


Fig. 14

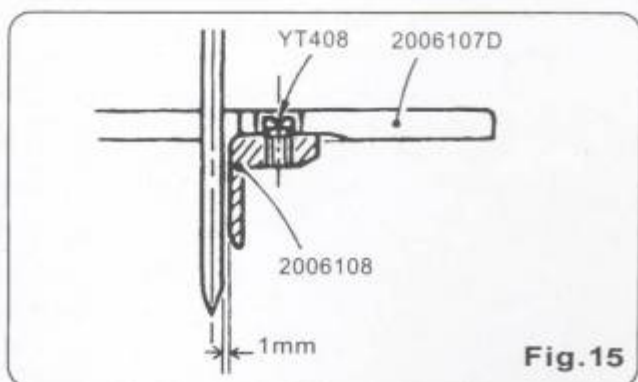


Fig. 15

## 5-7 針迹長度調節

針迹可調範圍為 7 ~ 16mm，機器出廠時標準設備為 10mm。如圖 14 所示，擰松連接牙架座 (2006102) 與送料連杆 (2006100) 的針迹調整螺栓 (3506107) 的螺母 (706)，然後往上移動針迹調整螺栓減小針迹長度，往下移動則增加針迹長度。

**注意：**針迹長度改變後，必須調整機針擋塊 (2006104) 與機針的間隙。

## 5-8 機針擋塊調節

如圖 15 所示，將機針擋塊 (2006108) 安裝在針板 (2006107D) 槽中，調整擋塊與機針的間隙為 1mm，然後用螺釘 (YT408) 將擋塊固定。

如圖 16 所示，將另一個機針擋塊 (2006104) 裝在 (2006103) 牙架槽中，順時針轉動皮帶輪，使機針上升，而機針擋塊向機針靠近，其間隙為 0 ~ 0.05，擰緊螺釘 (YT410) 將擋塊定位。為確保調整正確，可逆時針轉動皮帶輪，檢查機針有否撞擊擋塊，若有，則必須重新調整。

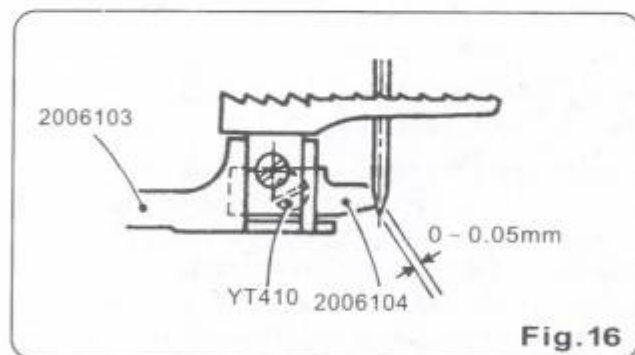


Fig. 16

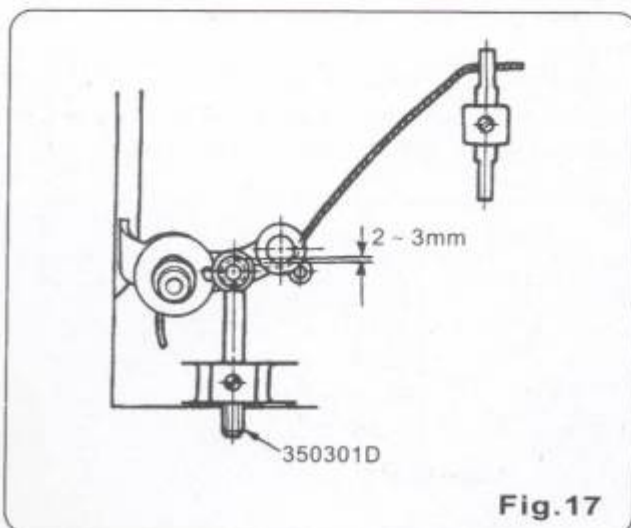


Fig. 17

## 5-9 Mounting Presser Bar and Adjusting Pressure of Presser Foot

The presser bars must move freely.

- a) Remove face cover (3502021) and determine the position of set collar (3505079), as follows:
  1. Adjust and set presser bar holder (3507126) so that the clearance between presser lifter lever (3507133) and presser lifter pin (3507128) is 1mm, as shown in (Fig. 18)
  2. Make the clearance between presser bar holder and set collar "A" 1.5mm.
  3. Make the clearance between set collar "A" and "B" 7mm.
  4. Place the set collar "C" in the middle of the presser bar, upper, the presser bar holder.
  5. There must be a sufficient clearance between presser foot (in the highest position) and needle bar nut (in the lowest position). A sufficient clearance is also required between upper looper in the upward movement and presser foot finger in the lifted position. Adjust set collar "D" so that upper looper in its upward movement will not hit presser foot finger at the time when presser foot is lifted by lifter lever (3507133).
- b) Now that the position of set collar "A" to "D" has been determined, and they are properly set, adjust the spring pressure properly by means of presser foot plate spring adjusting screw (2004063) located on top cover (3502018). After the adjustment, firmly lock the adjusting screw using the lock nut (2004064), to prevent its loosening.

## 5-10 Thread Tension

Thread Tension and Needle Thread Roller Support Ass'y are the main parts for successful sewing. Adjust thread tension according to the different stitch.

- a) **Adjusting Thread Tension Assembly.**  
Adjust Needle Thread Tension Ass'y to obtain the straight stitch; Adjust Looper Thread Tension Ass'y to obtain the stronger overedging stitch.
- b) **Adjusting Needle Thread Roller Support Assembly**  
Adjust Needle Thread Roller Support Ass'y (350301D) so that the needle thread is raised by 2 to 3mm, as shown in (Fig. 17), when needle is low.

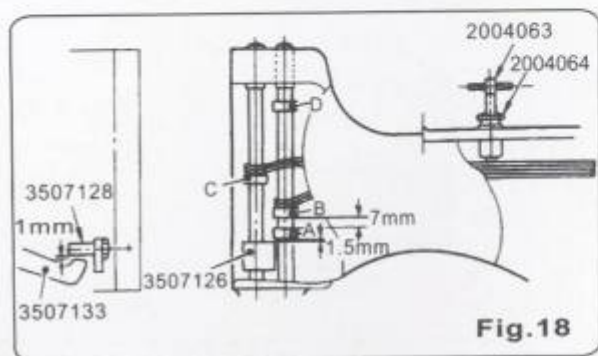


Fig.18

## 5-9 壓杆安裝與壓腳壓力調節

壓杆安裝好后必須能夠自動滑動。

- a) 卸下面板 (3502021)，然後按如下步驟進行調整，確定擋圈 (3505079) A、B、C、D 的位置：
  1. 如圖 18 所示，調整壓杆導架 (3507126)，使抬壓腳扳手 (3507133) 與壓腳提升螺釘 (3507128) 之間的間隙為 1mm。
  2. 使壓杆導架與擋圈 "A" 之間間隙為 1.5mm。
  3. 使擋圈 "A" 與擋圈 "B" 之間間隙為 7mm。
  4. 將擋圈 "C" 安裝在壓杆中部位於壓杆導架上端位置。
  5. 當腳踏板抬壓腳扳手 (3507133) 將壓腳抬升到最高位置而針杆下行到最低位置時，注意針杆螺母不能與壓腳相碰；裝在壓腳上的擋錢器 (2004074) 與向上運行的上彎針不能相碰。通過調整擋圈 "D" 的上下位置使兩者保持適當的間隙。
- b) 擋圈 "A、B、C、D" 的位置各自正確固定后，壓簧壓力大小通過壓腳板簧調節螺釘 (2004063) 進行，旋進螺釘加大壓力；旋出螺釘則減少壓力。將壓簧板調節至適當壓力后，用螺母 (2004064) 將調節螺釘鎖緊，防止鬆動。

## 5-10 縫綫張力調節

夾綫器、上綫調節杆組件是產生漂亮針腳的主要零件。請根據針腳綫迹差異調節縫綫張力。

- a) **夾綫器調節**  
調節牙綫夾綫器的縫綫張力，使縫料平縫針腳平直；調節下綫夾綫器的縫綫張力，使包縫針腳結實。
- b) **上綫調節杆組件調節**  
如 (圖 17)，當機針位於最低點時，調節上綫調節杆組件 (350301D) 使上綫升高 2 ~ 3mm。

## 6. Trouble Shooting

When trouble occurs while operating the machine, refer to the following table for selecting suitable measures:

Trouble	Cause	Cure	Ref.
Needle thread break	<ol style="list-style-type: none"> <li>1. Damaged looper</li> <li>2. Needle thread too tight</li> <li>3. Worn out feed dog causing fine stitches</li> <li>4. Thread twisting or entangling between thread stand and needle</li> <li>5. Improper needle setting Bent or damaged needle</li> <li>6. Needle thread too loose</li> </ol>	Replace looper Reduce tension Replace feed dog, wear teeth dull Secure correct threading  Set needle properly Replace needle Increase tension	5-2 5-10 5-6 4  5-1 5-1 5-10
Looper thread break	<ol style="list-style-type: none"> <li>1. Looper thread too tight or too loose</li> <li>2. Damaged looper</li> <li>3. Thread twisting or entangling between thread stand and looper</li> </ol>	Adjust tension  Replace looper Check for correct threading	5-10  5-2 4
No chaining on work edges	<ol style="list-style-type: none"> <li>1. Incorrect threading</li> <li>2. Looper thread too tight</li> <li>3. Improper timing of needle and looper</li> <li>4. Presser foot screw loosened</li> </ol>	Thread machine Reduce tension Adjust timing of needle and looper Tighten the screw	4 5-10 5-2
Thread skips	<ol style="list-style-type: none"> <li>1. Needle setting not correct Bent or damaged needle</li> <li>2. Needle thread regulator set too low</li> <li>3. Needle thread sticking on needle due to heat</li> <li>4. Needle bar set too high</li> <li>5. Needle thread pinched by needle guard, collapsing loop</li> <li>6. Looper thread too loose, not making a good triangle</li> </ol>	Set needle correctly Replace needle Raise regulator  Use lubricant on thread  Lower needle bar Adjust needle guard slightly  Increase looper thread tension	5-1 5-1 5-10   5-4 5-8 5-10
Needle or looper breaks	<ol style="list-style-type: none"> <li>1. Needle hits looper</li> <li>2. Bent needle</li> </ol>	Adjust the clearance between needle and looper Replace needle	5-2 5-1
Nonuniform stitch length Scam not straight	<ol style="list-style-type: none"> <li>1. Weak pressure of presser foot</li> <li>2. Bent needle</li> <li>3. Worn out feed dog</li> </ol>	Increase pressure Replace needle Replace feed dog	5-9 5-1 5-6

## 6. 故障原因與解決方法

在操作機器過程中，若發生故障，請參考如下表格中相應項目進行解決：

故障內容	原因	解決方法	參照
上綫斷綫	<ol style="list-style-type: none"> <li>1. 彎針損壞</li> <li>2. 上綫太緊</li> <li>3. 送料牙磨損，齒尖鋒利</li> <li>4. 綫扭結或纏繞在綫架與機針間</li> <li>5. 機針安裝不正確 機針彎曲或損壞</li> <li>6. 上綫太松</li> </ol>	換彎針 減小綫張力 換送料牙，磨鈍中齒尖 檢查穿綫正確與否 正確安裝機針 換機針 增加上綫張力	5-2 5-10 5-6 4 5-1 5-1 5-10
下綫斷綫	<ol style="list-style-type: none"> <li>1. 下綫太緊或太松</li> <li>2. 彎針損壞</li> <li>3. 綫扭結或纏繞在綫架與彎針間</li> </ol>	調節下綫張力 換彎針 檢查穿綫正確與否	5-10 5-2 4
無法形成鏈式綫迹	<ol style="list-style-type: none"> <li>1. 穿綫不正確</li> <li>2. 下綫太緊</li> <li>3. 機針與彎針運動不協調</li> <li>4. 壓腳固緊螺釘松動</li> </ol>	正確穿綫 減小下綫張力 調節機針與彎針運動協調 固緊螺釘	4 5-10 5-2
跳綫	<ol style="list-style-type: none"> <li>1. 機針安裝不正確</li> <li>2. 機針彎曲或損壞</li> <li>3. 上綫調節器設置太低</li> <li>4. 機針發熱沾結機針綫</li> <li>5. 針杆安裝太高</li> <li>6. 上綫被機針擋塊阻礙，無法形成綫環</li> <li>7. 下綫太松，形成三角綫環不佳</li> </ol>	正確安裝機針 更換機針 升高調節器 將綫涂上潤滑劑 降低針杆位置 適當調整機針擋塊 增加下綫張力	5-1 5-1 5-10  5-4 5-8 5-10
斷機針 斷彎針	<ol style="list-style-type: none"> <li>1. 機針與彎針碰</li> <li>2. 機針彎曲</li> </ol>	調節機針與彎針配合間隙 更換機針	5-2 5-1
綫迹長度不一致 張縫不直	<ol style="list-style-type: none"> <li>1. 壓腳壓力不足</li> <li>2. 機針彎曲</li> <li>3. 送料牙磨損</li> </ol>	增加壓腳壓力 更換機針 更換送料牙	5-9 5-1 5-6

## 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 indelyntly; Always order it as an assembly.
  3. A set of assembled parts is represented by the stamp number of its main parts.
- \* The parts list is subject to change without prior notice.

### 訂購零部件時的注意事項

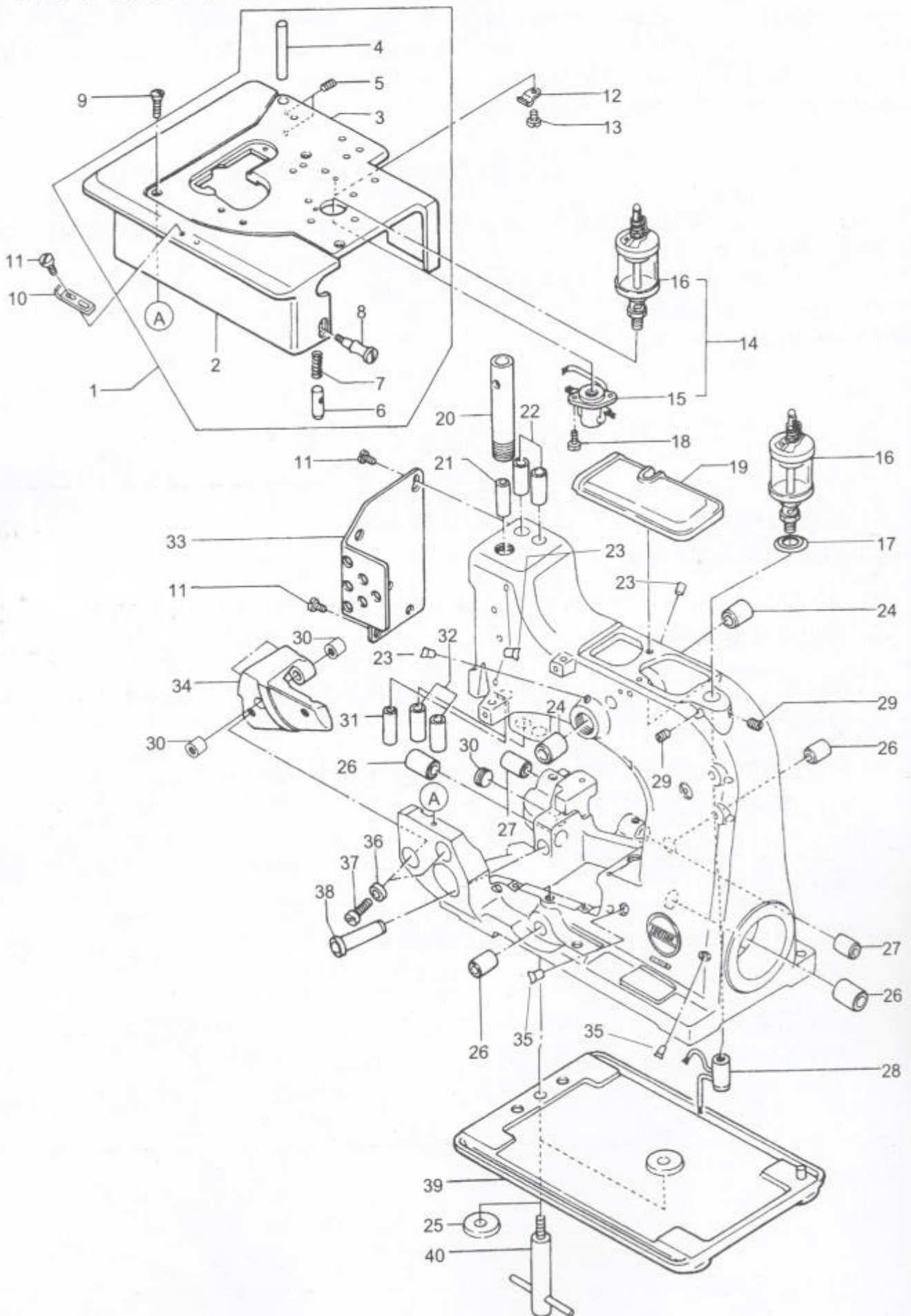
1. 零件列表中列出了每一個零件的名稱與零件號。裝配部件的螺釘和螺母都與其所連接的相應零部件一起表示，訂購時請寫清楚零件號與零件名稱。
  2. 沒有相應序號的零件不能單獨購買，必須訂購整個部件。
  3. 裝配好的部件用其主要部件表示。
- \* 該零件列表若有改動恕不通知。

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# 01. BUSHING, OILER AND COVER PARTS

## 軸套、油杯與罩殼部件



# 01. BUSHING, OILER AND COVER PARTS

## 軸套、油杯與罩殼部件

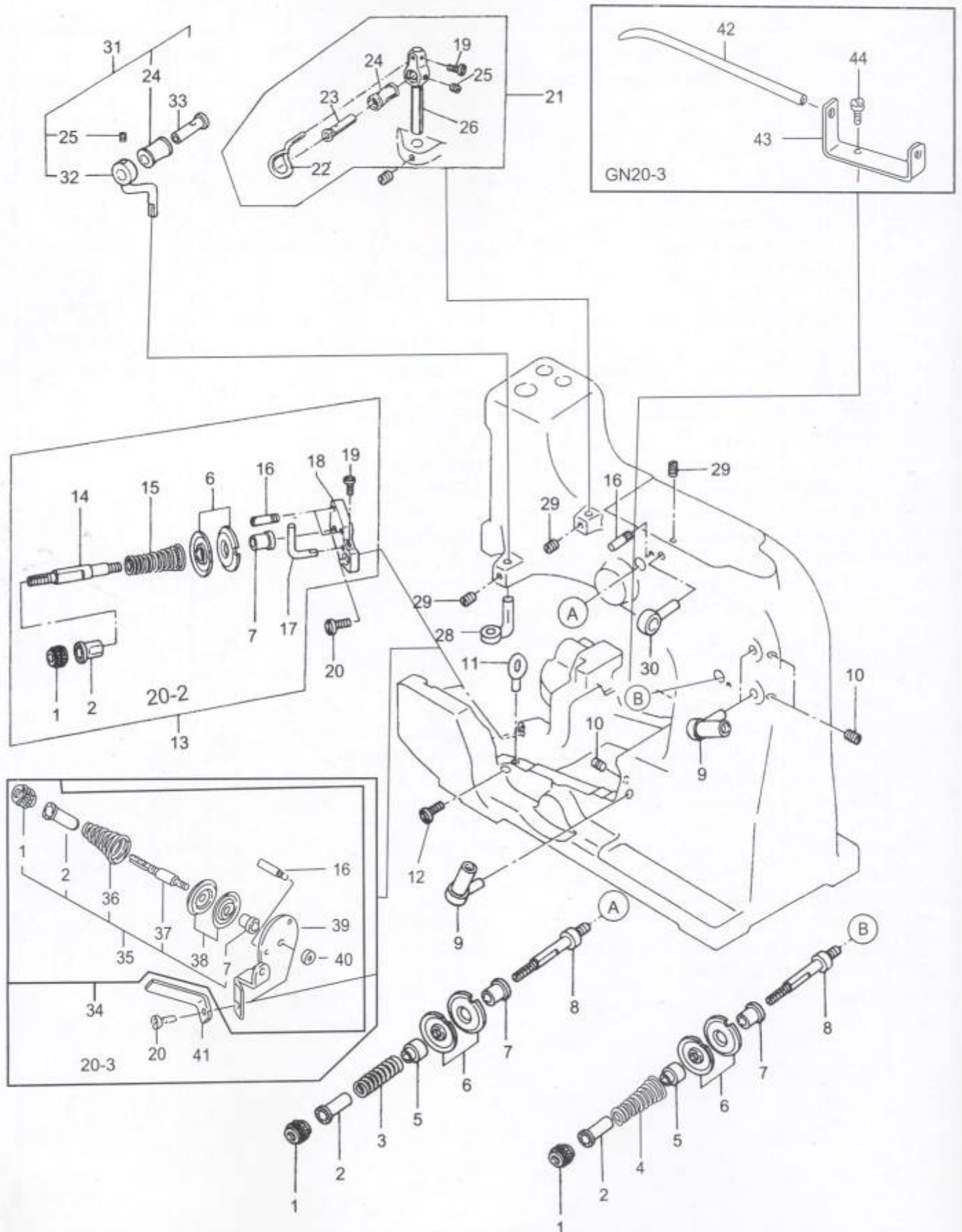
序 號 Ref. No.	零 部 件 號 Part No.	零 部 件 名 稱 Description	數 量 Q'ty			備 注 Remarks		
			-1	-2	-3			
1	200101	Cloth Plate Ass'y	罩殼組件	1	1	1	(2-8)	
2	2001001	Cloth Plate Swinging Extension	搖門	1	1	1		
3	2001002	Cloth Plate	罩殼	1	1	1		
4	3502024	Axle	鉸鏈銷	1	1	1		
5	PD504	Screw	平端螺釘 M5 × 4	2	2	2		
6	2001003	Guide	定位銷	1	1	1		
7	2001004	Spring	彈簧	1	1	1		
8	2001005	Screw	捏手	1	1	1		
9	CT615	Screw	沉頭螺釘 M6 × 15	3	3	3		
10	2001006	Fabric Guide	料邊導向塊	(1)	(1)	(1)		
11	YT508	Screw	圓柱頭螺釘 M5 × 8	2	2	2		
12	2001007	Oil Tube Clamp	油管夾	1	1	1		
13	YT405	Screw	圓柱頭螺釘 M4 × 5	1	1	1		
14	200102	Cloth Plate, Oil Reservoir Ass'y	罩殼油杯組件	1	1	1		(15, 16)
15	2001008	Oil Cup Base	油杯座	1	1	1		
16	1001	Sight Feed Oiler	○ 滴注式油杯 M10 × 1	2	2	2		
17	2008118	Washer	油杯墊圈	1	1	1		
18	YT406	Screw	圓柱頭螺釘 M4 × 6	2	2	2		
19	3502018	Top Cover	上蓋板	1	1	1		
20	3503044	Guand for Needle Bar	針杆護套	1	1	1		
21	3501004	Bushing for Needle Bar, upper	針杆上軸套	1	1	1		
22	3501016	Bushing for Presser Bar, upper	壓杆上軸套	2	2	2		
23	1001-3	Ball Valve Oiler	彈子油杯 φ6	4	4	4		
24	3501002	Bushing for Needle Lever Shaft	針杆杠杆軸軸套	2	2	2		
25	2001019	Waher	特制墊圈 φ10	2	2	2		
26	2001009	Bushing for Transverse/Main Shaft	彎針軸/主軸軸套	4	4	4		
27	3501014	Bushing for Feed Rocker Shaft	軸套	2	2	2		
28	2001011	Oil Cup Base	油杯座	1	1	1		
29	PD508	Screw	平端螺釘 M5 × 8	2	2	2		
30	3A03021	Needle Bearing (HK1012)	滾針軸承 (HK1012)	2	2	2		
31	3501005	Bushing for Needle Bar, lower	針杆下軸套	1	1	1		
32	3501006	Bushing for Presser Bar, lower	壓杆下軸套	2	2	2		
33	3502021	Face Cover	面板	1	1	1		
34	2001012	Looper Shaft Bearing	叉口彎針架座	1	1	1		
35	1001-1	Ball Valve Oiler	彈子油杯 φ8	2	2	2		
36	2001013	Washer	墊圈 φ6	2	2	2		
37	2001014	Screw	特制圓柱頭螺釘 M6 × 20	2	2	2		
38	2001015	Bushing for Cone Shaft	錐軸軸套	1	1	1		
39	2001017	Base Plate	機頭底板	1	1	1		
40	2001018	" T" Screw	機頭固緊螺栓	2	2	2		

Special Order  
特殊訂購  
for Overseam  
Width 10mm  
包縫 10mm 用



## 02. MISCELLANEOUS THREAD GUIDE AND THREAD TENSION PARTS

### 過綫及綫調整部件



## 02. MISCELLANEOUS THREAD GUIDE AND THREAD TENSION PARTS

## 過綫及綫調整部件

序 號 Ref. No.	零 部 件 號 Part No.	零 部 件 名 稱 Description		數 量 Q'ty			備 注 Remarks
				-1	-2	-3	
1	3503040	Tension Regulating Nut	調節螺母	1	2	2	
2	3503039	Tension Spring Ferrule	壓簧壓套	1	2	2	
3	3503038D	Tension Spring	壓簧 φ1.5	-	-	1	
4	3503038	Tension Spring	錐形壓簧 φ1.2	1	1	-	
5	3503042	Tension Sleeve	壓簧套	-	-	1	
6	3503037	Tension Disc	夾綫板	2	4	4	
7	3503036	Tension post Ferrule	夾綫板滾柱	1	2	2	
8	3503035	Tension Post	夾綫板螺柱	1	1	1	
9	350303A	Thread Sleeve Ass'y	導綫柱組件	1	3	3	
10	PD508	Screw	平端螺釘 M5 × 8	1	3	3	
11	2002023	Thread Eyelet	導綫圈	-	1	1	
12	YT408	Screw	圓柱頭螺釘 M4 × 8	-	1	1	
13	200205D	Looper Thread Tension Ass'y	下夾綫器組件	-	1	-	(1,2,6,7,14-19)
14	2002028	Tension Post	下夾綫板螺柱	-	1	1	
15	3503041	Tension Spring	錐形壓簧 φ1	-	1	1	
16	3503034	Pin Screw	螺釘銷	1	2	2	
17	2002024	Thread Hook	隔綫柱	-	1	1	
18	2002029D	Bracket	夾綫器組件座	-	1	1	
19	YT306	Screw	圓柱頭螺釘 M3 × 6	-	2	2	
20	YT512	Screw	圓柱頭螺釘 M5 × 12	-	1	1	
21	350301	Rolling Thread Guide Ass'y	綫量調節杆組件	-	(1)	(1)	(19,22-26) OLD PARTS 舊型
22	3503033	Rolling Thread Guide Wire	攔綫架	-	(1)	(1)	
23	3503032	Oil Cup	壓注油杯	-	(1)	(1)	
24	3503031	Thread Guide Roller	過綫滾輪	-	(1)	(2)	
25	PD404	Screw	平端螺釘 M4 × 4	-	(1)	(2)	
26	3503030	Holder	綫量調節杆	-	(1)	(1)	
27	2002036	Thread Guide	導綫柱	1	1	1	
28	2002035E	Thread Guide Post	導綫柱	1	-	-	
29	PD506	Screw	平端螺釘 M5 × 6	3	2	3	
30	3503043	Support	過綫柱	1	1	1	
31	350301D	Needle Thread Roller Support Ass'y	上綫調節杆組件	-	-	1	(24,25,32,33)
32	2002030	Needle Thread Roller Support	上綫調節杆	-	-	1	
33	3503032D	Oil Cup	壓注油杯	-	-	1	
34	200205	Looper Thread Tension Ass'y	下夾綫器組件	-	-	1	
35	200208B	Thread Tension Ass'y	下夾綫板組件	-	-	1	
36	2002027	Tension Spring	錐形壓簧	-	-	1	
37	2002028	Tension Post	下夾綫板螺柱	-	-	1	
38	2002026	Tension Disc	夾綫板	-	-	1	
39	2002029	Bracket	夾綫器組件座	-	-	1	
40	2002031	Nut	螺母 M5	-	-	1	
41	2002032	Tension Guide	綫調整導塊	-	-	1	
42	2002033	Thread Guide Pipe	導綫管	-	-	1	
43	2002034	Holder	導綫管座	-	-	1	
44	YT408	Screw	圓柱頭螺釘 M4 × 8	-	-	1	

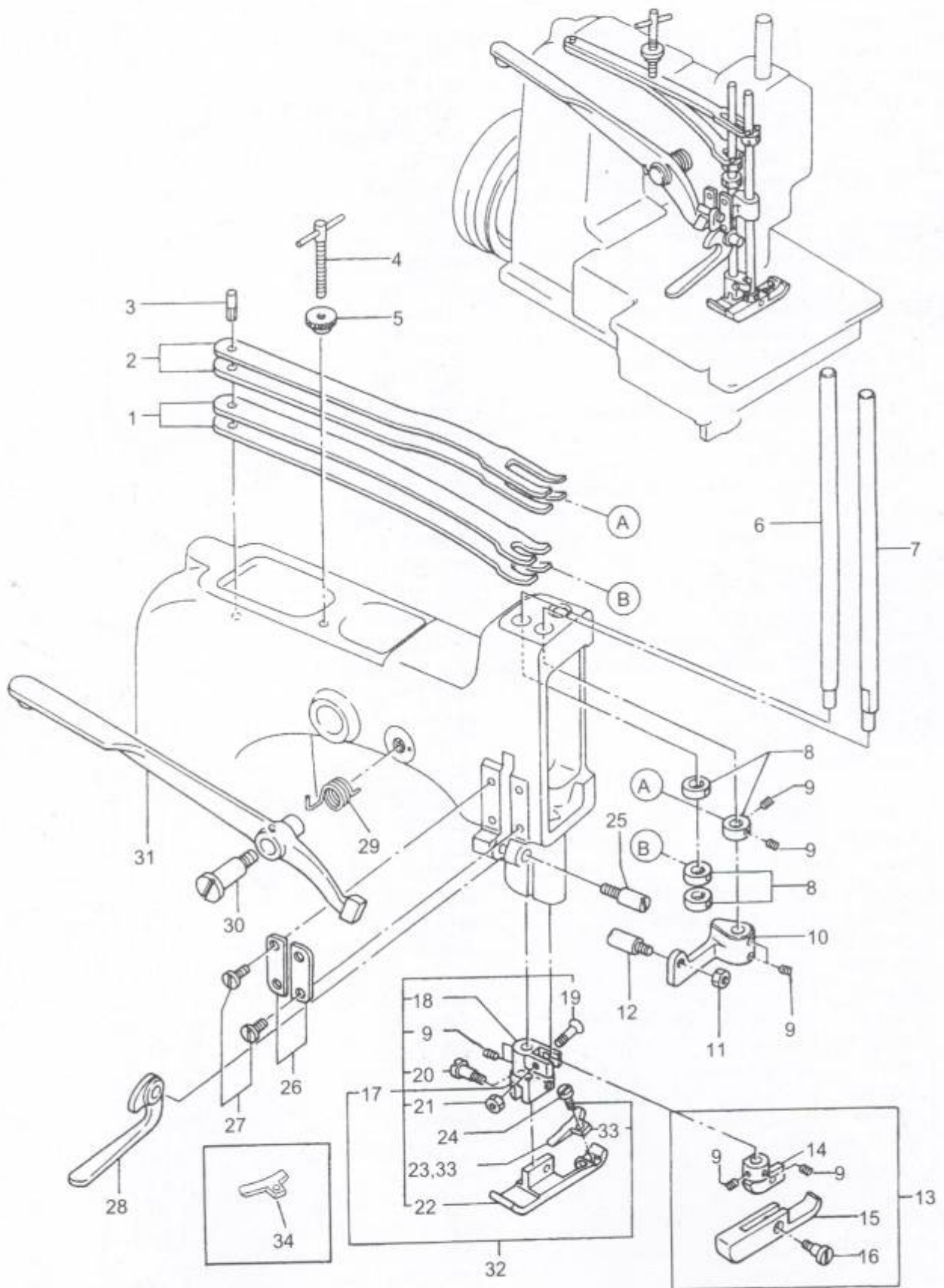
### 03. NEEDLE LEVER, PULLEY AND CRANK SHAFT PARTS

#### 針杆杠杆、皮帶輪與曲軸部件

序 號 Ref. No.	零 部 件 號 Part No.	零 部 件 名 稱 Description		數 量 Q'ty			備 注 Remarks
				-1	-2	-3	
1	200309	Needle Bar Connection Ass'y	針杆連軸節組件	-	-	1	(2-6, 10-18)
2	2003038	Needle Bar Connection	針杆連軸節	-	-	1	
3	3510192	Screw	連軸節螺栓	1	1	1	
4	YT406	Screw	內六角平端緊固螺釘 M4 × 6	2	2	2	
5	YT405	Screw	圓柱頭螺釘 M4 × 5	-	-	2	
6	3503034	Pin Screw	螺釘銷	-	-	2	
7	3504050	Needle Bar Connection	針杆連軸節	1	1	-	
8	701	Nut	螺母 M5	1	1	-	
9	3504049	Thread Guide	過綫柱	1	1	-	
10	3503032	Oil Cup	壓注油杯	-	-	1	
11	2003042	Thread Guide Roller	過綫滑輪	-	-	1	
12	2003044	Tension Post Ferrule	小夾綫板滾柱	-	-	1	
13	2003045	Tension Disc	小夾綫板	-	-	2	
14	2003046	Thread Tension Ferrule	壓簧座	-	-	1	
15	2003048	Tension Spring	壓簧	-	-	1	
16	2003049	Thread Tension Ferrule	壓簧壓套	-	-	1	
17	2003050	Tension Post	小夾綫板軸	-	-	1	
18	2003051	Collar	擋圈	-	-	1	
19	3504052	Needle Bare Connection Link	針杆小連杆	1	1	1	(21)
20	3504051	Pin Ass'y	針杆小連杆銷	2	2	2	
21	1004	Oil Wick	油繩 φ1.5	2	2	2	
22	3504048	Needle Lever	針杆杠杆	1	1	1	
23	YT512	Screw	圓柱頭螺釘 M5 × 12	2	2	2	
24	3501003	Plug Screw	杠杆軸悶頭	2	2	2	
25	3504053	Needle Lever Shaft	針杆杠杆軸	1	1	1	
26	350406	Needle Lever Bearing Ass'y	連杆上接頭組件	1	1	1	(27,29-31)
27	3504054	Bearing	連杆上接頭	1	1	1	(28)
28	3504055	Screw	軸位螺釘	4	4	4	
29	3504056	Ball Stud	上接頭球頭銷	1	1	1	
30	3504057	Guide Fork	導向板	1	1	1	
31	YT412	Screw	圓柱頭螺釘 M4 × 12	1	1	1	
32	708	Nut	螺母 M10 × 1	2	2	2	
33	3504058	Needle Lever Connection Rod	連杆接杆	1	1	1	
34	1004-1	Felt	油繩 φ5	1	1	1	
35	2003052	Main Shaft	主軸	1	1	1	
36	3504059	Bearing for Crank Shaft	連杆下接頭	1	1	1	(28)
37	3504061	Wooddruff Key	半圓鍵	1	1	1	
38	2003053	Collar	擋圈	1	1	1	
39	NL516	Screw	內六角螺釘 M5 × 16	1	1	1	
40	2003054	Crank Shaft Bearing Housing	曲軸悶頭	1	1	1	
41	2003055	Bearing	曲軸后軸套	1	1	1	
42	3501010	Plug Screw	螺塞	1	1	1	
43	2003056	Pulley	帶輪	1	1	1	
44	3504065	Lock Washer	墊圈	1	1	1	
45	NL614	Screw	內六角螺釘 M6 × 14	1	1	1	
46	2003058	Needle Bar	針杆	1	1	1	
47	3504046	Clamp Nut	針杆螺母	1	1	1	
48	2003059	Needle (GN20-230/26#)	✓機針 (GN20-230/26#)	1	1	-	
49	2003059D	Needle (GN20-400/33#)	✓機針 (GN20-400/33#)	-	-	1	
50	NL514	Screw	內六角螺釘 M5 × 14	1	1	1	

# 04. PRESSER FOOT LIFTER AND PRESSER FOOT PARTS

## 壓腳提升與壓腳部件



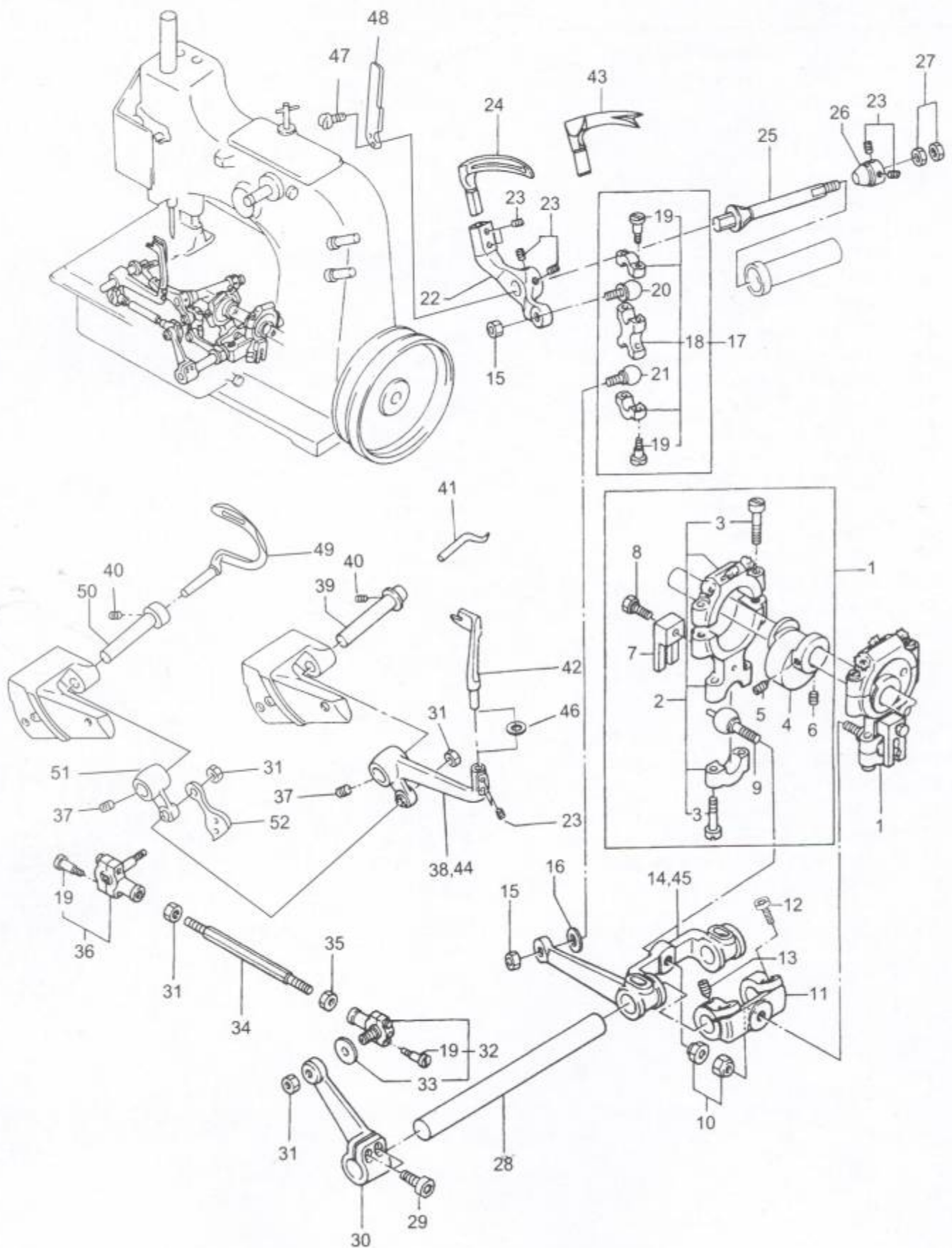
# 04. PRESSER FOOT LIFTER AND PRESSER FOOT PARTS

## 壓腳提升與壓腳部件

序 號 Ref. No.	零 部 件 號 Part No.	零 部 件 名 稱 Description		數 量 Q'ty			備 注 Remarks
				-1	-2	-3	
1	2004061	Presser Foot Spring, lower	壓脚下壓簧板	2	2	2	
2	2004060	Presser Foot Spring, upper	壓脚上壓簧板	2	2	2	
3	2004062	Pin	壓黃板定位銷	1	1	1	
4	2004063	Screw	壓黃板調節螺釘	1	1	1	
5	2004064	Lock Nut	上蓋板鎖緊螺母	1	1	1	
6	3507125	Presser Bar, right	右壓脚杆	1	1	1	
7	2004066	Presser Bar, left	左壓脚杆	1	1	1	
8	3505079	Collar	擋圈	4	4	4	
9	YT506	Screw	內六角平端緊固螺釘 M5 × 6	14	14	14	
10	3507126	Guide for Presser Bar	壓杆導架	1	1	1	
11	702	Nut	螺母 M6	1	1	1	
12	3507128	Screw	提升螺釘	1	1	1	
13	200413	Presser Foot Ass'y, left	左壓脚組件	1	1	1	(9,14-16)
14	2004067	Presser Foot Shank	左壓脚柄	1	1	1	
15	2004068	Presser Foot Bottom, left	左壓脚	1	1	1	
16	2004069	Screw	左壓脚柄螺釘	1	1	1	
17	200414	Presser Foot Ass'y, right	右壓脚組件	1	1	1	
18	2004070	Presser Foot Shank	壓脚支架	1	1	1	(9,19-22)
19	2004071	Screw	半沉頭螺釘 M4 × 19	1	1	1	
20	2004072	Screw	壓脚支銷	1	1	1	
21	710	Nut	螺母 M4	1	1	1	
22	2004073	Presser Foot Bottom, right	右壓脚	1	1	1	
23	2004074D	Presser Foot Tongue	擋綫器	1	1	1	
24	YT405	Screw	圓柱頭螺釘 M4 × 5	1	1	1	
25	2004075	Screw	壓脚板手銷	1	1	1	
26	3507129	Guide Plate	導板	2	2	2	
27	YT508D	Screw	圓柱頭螺釘 M5 × 8	4	4	4	
28	2004076	Presser Foot Lifter Hand Lever	手抬壓脚板手	1	1	1	
29	3507134	Spring	扭簧	1	1	1	
30	3507132	Screw	抬壓脚螺釘	1	1	1	
31	3507133	Presser Foot Lifter Lever	脚踏抬壓脚板手	1	1	1	
32	200414D	Presser Foot Ass'y, right	右壓脚組件	-	-	(1)	(17,23,24)
33	2004074H	Presser Foot Tongue	擋綫器	-	-	(1)	Special Order 特殊訂購 for Overseam Width 10mm
34	2004074G	Presser Foot Tongue	擋綫器	-	-	(1)	包縫 10mm 用  Special Order 特殊訂購 for Overseam Width 19mm 包縫 19mm 用

# 05. LOOPER DRIVE PARTS

## 彎針驅動部件



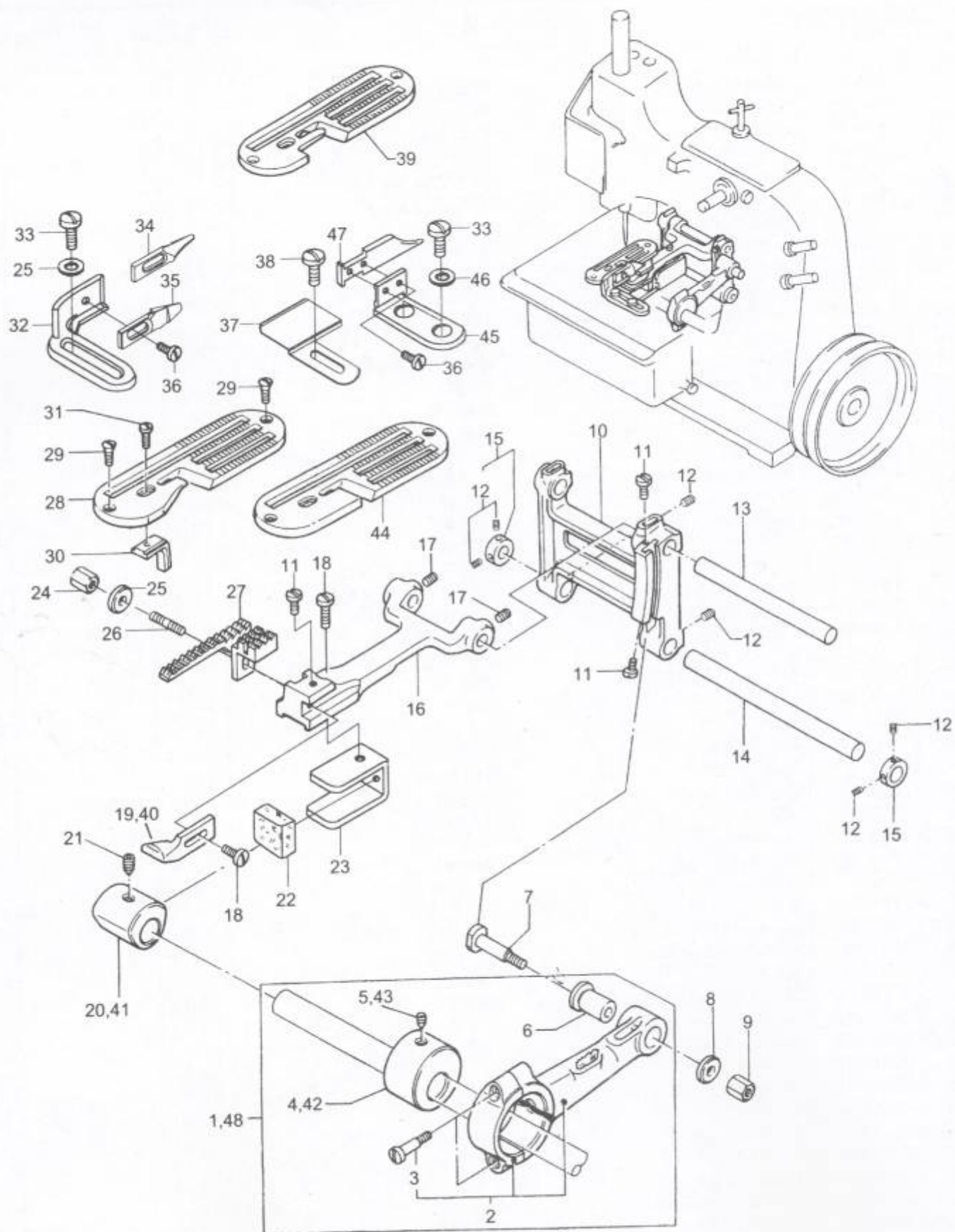
# 05. LOOPER DRIVE PARTS

## 彎針驅動部件

序 號 Ref. No.	零 部 件 號 Part No.	零 部 件 名 稱 Description	數 量 Q'ty			備 注 Remarks	
			-1	-2	-3		
1	350407	Eccentric Ass'y	彎針大連杆組件	2	2	2	(2,4,7-9)
2	3504066	Connecting Bearing	彎針大連杆	2	2	2	(3)
3	3504067	Screw	軸位螺釘	8	8	8	
4	3504068	Eccentric	彎針大偏心	2	2	2	
5	ZD610	Screw	錐端螺釘 M6 × 10	2	2	2	
6	PD608	Screw	平端螺釘 M6 × 8	2	2	2	
7	3504057	Guide Fork	導向板	2	2	2	
8	3510193	Screw	導向板螺栓	2	2	2	
9	3504070	Ball Screw	大連杆球軸承	2	2	2	
10	3505073	Conical Nut	錐形螺母	2	2	2	
11	3505072	Drive Lever	內搖杆	1	1	1	
12	NL514	Screw	內六角螺釘 M5 × 14	2	2	2	
13	ZD506	Screw	錐端螺釘 M5 × 6	1	1	1	
14	2005077	Drive Lever for Looper	外搖杆	1	1	1	
15	705	Nut	螺母 M5	2	2	2	
16	802	Washer	墊圈 φ5	1	1	1	
17	200515	Ball Joint Ass'y	0 下(底綫)彎針連杆組件	1	1	1	(18-21)
18	2005078	Shell Ass'y	下(底綫)彎針連杆	1	1	1	(19)
19	3505085	Screw	軸位螺釘	8	8	8	
20	2005079	Ball Stud	球軸承	1	1	1	
21	2005080	Ball Stud	球軸承	1	1	1	
22	2005093D	Looper Lever	下(底綫)彎針架	1	1	1	
23	YT506	Screw	內六角平端緊固螺釘 M5 × 6	8	8	8	
24	2005094D	Looper, lower	0 下(底綫)彎針	-	1	1	
25	2005083	Cone Stud	彎針架錐軸	1	1	1	
26	3505084	Cone	錐形支承體	1	1	1	
27	704	Nut	螺母 M6 × 0.75 × 3	2	2	2	
28	2005085	Looper Drive Lever Rocker Shaft	彎針軸	1	1	1	
29	NL614	Screw	內六角螺釘 M6 × 14	2	2	2	
30	2003047	Drive Lever for Spreader	外曲柄	1	1	1	
31	702	Nut	螺母 M6	3	3	3	
32	350511	Ball Joint Ass'y, right	右小連杆組件	1	1	1	(19,33)
33	2005086	Washer	球面墊圈	1	1	1	
34	2005087	Connecting Rod	小連杆接杆	1	1	1	
35	703	Nut, left thread	螺母 M6 (左)	1	1	1	
36	350510	Ball Joint Ass'y, left	左小連杆組件	1	1	1	(19)
37	PD506	Screw	平端螺釘 M5 × 6	2	2	2	
38	2005095	Spreader Lever	上(叉口)彎針架	-	-	1	
39	2005096	Spreader Lever Shaft	壓綫針軸	1	1	1	
40	YT405	Screw	內六角平端緊固螺釘 M4 × 5	1	1	1	
41	2005097D	Thread Engaging Member	壓綫針	-	-	1	
42	2005099D	Looper, upper	0 上(叉口)彎針	1	1	1	
43	2005094E	Looper, lower	0 下(底綫)彎針	1	-	-	
44	2005095E	Spreader Lever	上(叉口)彎針架	1	1	-	
45	2005077G	Drive Lever for Looper	外搖杆	-	-	(1)	Special Order 特殊訂購 for Overseam Width 19mm 包縫 19mm 用
46	2008119	Washer	墊圈	-	-	(1)	
47	NL513	Screw	內六角螺釘 M4 × 10	-	-	1	
48	2005092	Needle Guide	機針擋塊	-	-	1	
49	2005091	Looper Upper	0 上彎針	-	-	1	
50	2005090	Spreader Lever Shaft	彎針小軸	-	-	1	
51	2005088	Spreader Lever	彎針擺杆	-	-	1	
52	2005089	Looper The read Take-up	挑綫動片	-	-	1	

# 06. FEED LIFT AND FEED DRIVING PARTS

## 送料抬升與送料驅動部件





## 06. FEED LIFT AND FEED DRIVING PARTS

### 送料抬升與送料驅動部件

序 號 Ref. No.	零 部 件 號 Part No.	零 部 件 名 稱 Description	數 量 Q'ty			備 注 Remarks	
			-1	-2	-3		
1	200616	Feed Drive Eccentric Ass'y	送料連杆組件	1	1	1	(2,4-6)
2	2006100	Feed Rocker Eccentric Connection	送料連杆	1	1	1	(3)
3	3504055	Screw	軸位螺釘	2	2	2	
4	2006101D	Feed Rocker Eccentric	送料偏心	1	-	1	
5	ZD610X	Screw	錐端螺釘 M6 × 0.75 × 10	1	-	1	
6	3506111	Bushing	連杆調節軸套	1	1	1	
7	3506107	Stitch Regulating Stud	針距調節螺栓	1	1	1	
8	3506112	Washer	墊圈	1	1	1	
9	706	Nut	厚螺母 M6 × 8	1	1	1	
10	2006102	Feed Rocker	牙架座	1	1	1	
11	YT405	Screw	圓柱頭螺釘 M4 × 5	3	3	3	
12	YT506	Screw	內六角平端緊固螺釘 M5 × 6	6	6	6	
13	3506103	Feed Bar Shaft	牙架軸	1	1	1	
14	3506105	Feed Rocker Shaft	送料軸	1	1	1	
15	3505079	Collar	擋圈	2	2	2	
16	2006103	Feed Bar	牙架	1	1	1	
17	PD506	Screw	平端螺釘 M5 × 6	2	2	2	
18	YT410	Screw	圓柱頭螺釘 M4 × 10	2	2	2	
19	2006104D	Needle Guard	機針擋塊	-	-	1	
20	2006105D	Feed Lift Eccentric	抬牙凸輪	1	-	1	
21	ZD607X	Screw	錐端螺釘 M6 × 0.75 × 10	1	1	1	
22	3506100	Oil Felt	毛氈	1	1	1	
23	3506099	Feed Lift Fork	抬牙叉	1	1	1	
24	709	Nut	厚螺母 M5 × 10	1	1	1	
25	802	Washer	墊圈 φ5	3	3	3	
26	3506101	Stud	螺栓 M5	1	1	1	
27	2006106	Feed Dog	送料牙	1	1	1	
28	2006107D	Needle Plate	針板	1	1	1	
29	CT508	Screw	沉頭螺釘 M5 × 8	2	2	2	
30	2006108	Needle Guard	機針護針塊	1	1	1	
31	YT408	Screw	圓柱頭螺釘 M4 × 8	1	1	1	
32	2006111D	Edge Guide	擋料板	1	1	1	
33	YT515	Screw	圓柱頭螺釘 M5 × 15	2	2	2	
34	2006112D	Tongue	分綫器	-	1	1	
35	2006112E	Tongue	分綫器	1	-	-	
36	YT406	Screw	圓柱頭螺釘 M4 × 6	1	1	1	(2) GN20-3 for Overseam Width 19mm 包縫 19mm 用
37	2008120	Material Pressing Plate	壓料板	1	-	-	
38	YT508	Screw	圓柱頭螺釘 M5 × 8	2	-	-	
39	2006107H	Needle Plate	針板	-	-	(1)	Special Order 特殊訂購 for Overseam Width 10mm 包縫 10mm 用
40	2006104	Needle Guard	機針擋塊	-	1	-	
41	2006105	Feed Lift Eccentric	抬牙凸輪	-	1	-	
42	2006101	Feed Rocker Eccentric	送料偏心	-	1	-	
43	ZD608X	Screw	錐端螺釘 M6 × 0.75 × 7.5	-	1	-	
44	2006107G	Needle Plate	針板	-	-	(1)	Special Order 特殊訂購 for Overseam Width 19mm 包縫 19mm 用
45	2006111G	Edge Guide	擋料板	-	-	(1)	
46	2001013	Washer	墊圈 φ6	-	-	(1)	
47	2006112G	Tongue	分綫器	-	-	(1)	
48	200616F	Feed Drive Eccentric Ass'y	送料連杆組件	-	1	-	(2,6,42,43)

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## The Accessories of the Sewing Machine 隨機附件

序 號 Ref. No.	名 稱	Description	規 格 Specifications	數量 Q'ty
1	鑷子	Tweezers		1
2	雙頭扳手	Double jawed wrench	8 × 10	1
3	內六角扳手	Hexagon socket head wrench	4mm	1
4	內六角扳手	Hexagon socket head wrench	5mm	1
5	內六角扳手	Hexagon socket head wrench	2mm	1
6	內六角扳手	Hexagon socket head wrench	2.5mm	1
7	內六角扳手	Hexagon socket head wrench	3mm	1
8	油槍	Oil gun		1
9	螺釘旋具	Screwdriver	75mm	1
10	螺釘旋具	Screwdriver	200mm	1