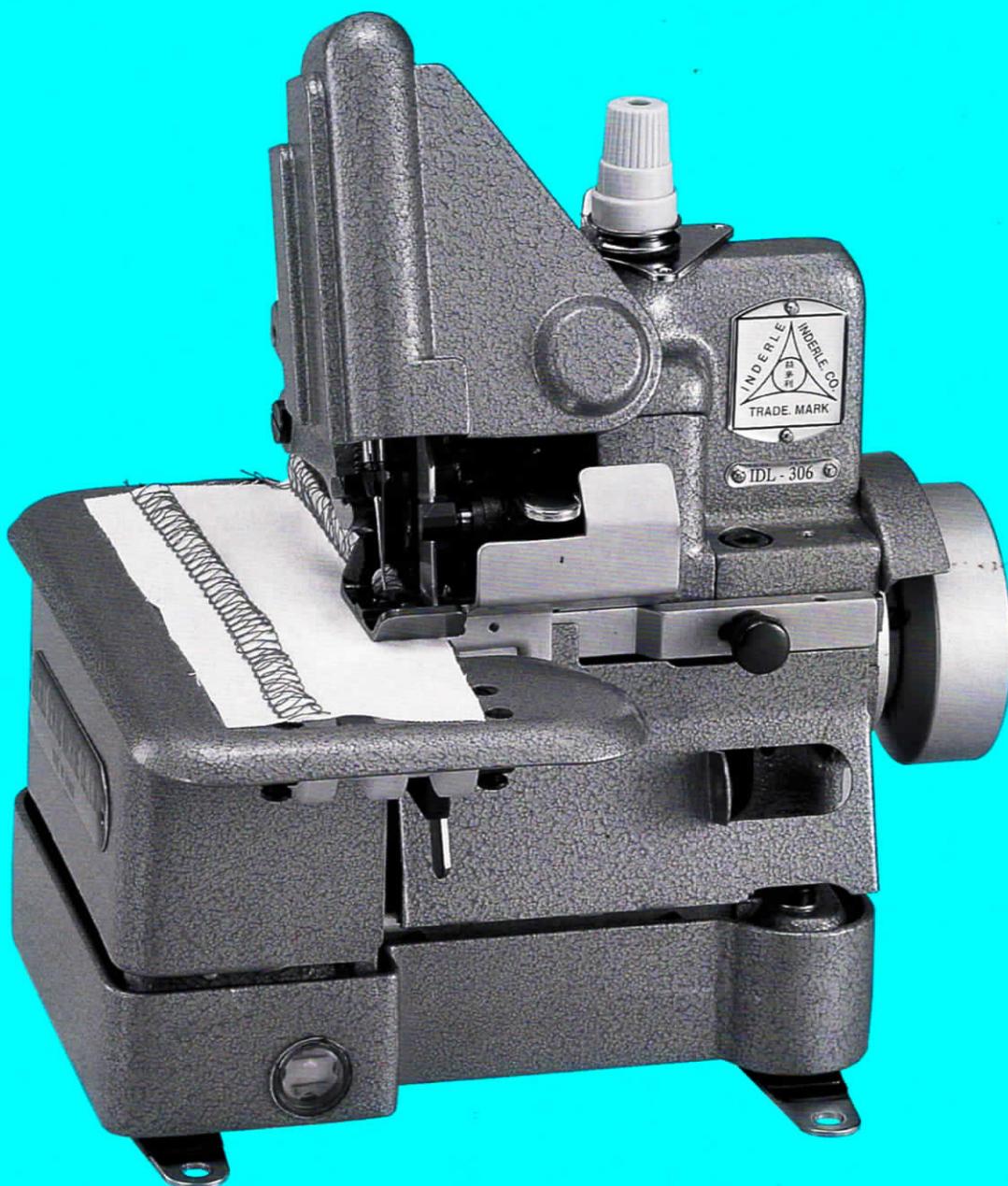


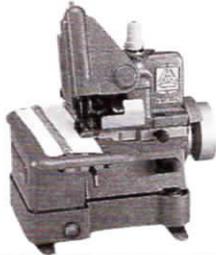
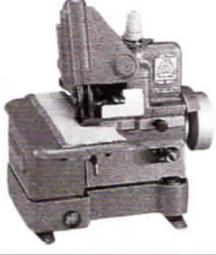
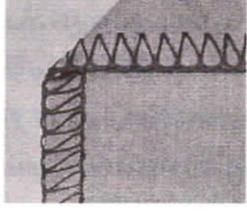
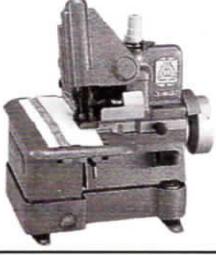
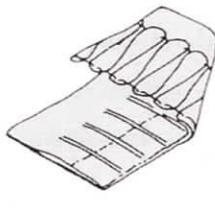
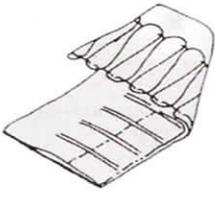
益多利縫機有限公司

INDERLE

INSTRUCTIONS FOR IDL-300 SERIES



*HIGH SPEED OVERLOCK
SEWING MACHINE*

| | | |
|---|---|---|
|  |  | MODEL-302 (1 THREAD) ABUTTED SEAM SEWING MACHINE 一般皮革、染整接布機專用 (1線) For joining temporarily the abutted edges of piece goods for processing in bleaching, dyeing and printing factories. |
|  |  | MODEL-303 (3 THREAD) OVERLOCK ABUTTED SEAM SEWING MACHINE 拷克車接布機專用 (3線) For joining temporarily the abutted edges of piece goods for processing in bleaching, dyeing and printing factories. |
|  |  | MODEL-306 (2 THREAD) ABUTTED SEAM SEWING MACHINE 一般染整接布機專用 (2線) For joining temporarily the abutted edges of piece goods for processing in bleaching, dyeing and printing factories. |
|  |  | MODEL-306A (2 THREAD) ABUTTED SEAM (MORE WIDTH) SEWING MACHINE 皮革、刷毛布厚類接布機專用 (特寬2線) For joining temporarily the abutted edges of piece goods for processing in bleaching, dyeing and printing factories. |
|  |   3 P 2 P | MODEL-308 (2 THREAD、3 THREAD) CARPET OVEREDGING、NO TRIMMER SEWING MACHINE 地毯包邊機(厚類)無附切刀 (2線、3線) For overedging on carpet and similar goods of heavy materials. |
|  |   3 P 2 P | MODEL-309 (2 THREAD、3 THREAD) CARPET OVEREDGING、WITH TRIMMER SEWING MACHINE 地毯包邊機(中厚類)附切刀 (2線、3線) For overedging on carpet and similar goods of heavy materials. |

SPECIFICATIONS

| MODEL | NEEDLE | THREAD | mm | ABUTTED WIDTH | mm | CUFT | G.W. | N.W. |
|------------|----------------------|--------|------|---------------|---------|----------|-------|-------|
| MODEL-302 | DCx27 #16 | 1 | ---- | 10-13 | 1.8-6 | 1.4 CUFT | 16 KG | 13 KG |
| MODEL-303 | DCx27 #16 | 3 | ---- | 8-10 | 1.8-6 | 1.4 CUFT | 16 KG | 13 KG |
| MODEL-306 | DCx27 #16 | 2 | ---- | 10-13 | 1.8-6 | 1.4 CUFT | 16 KG | 13 KG |
| MODEL-306A | DCx27 #16 | 2 | ---- | 12-14 | 1.8-6 | 1.4 CUFT | 16 KG | 13 KG |
| MODEL-308 | DMx5 #23 TTx81#23 | 3 | 10 | ---- | 1.8-4.5 | 1.4 CUFT | 16 KG | 13 KG |
| MODEL-309 | DMx5 #23 TTx81#23 | 3 | 10 | ---- | 1.8-4.5 | 1.4 CUFT | 16 KG | 13 KG |

CONTENTS

| Page | |
|------|---|
| 1 | 1、Classification of Machines 1 |
| 2 | 2、Specification 1 |
| 3 | 3、Installation 2 |
| 4 | 4、Sewing Speed and Rotation of Pulley 2 |
| 5 | 5、Setting of Motor and Belt 3 |
| 6 | 6、Lubricant 3 |
| 6-1 | 6-1、Lubrication Oil 3 |
| 6-2 | 6-2、Oil Feeding 3 |
| 6-3 | 6-3、Oil Exchange 4 |
| 7 | 7、Proper Operation 5 |
| 7-1 | 7-1、Needle to Be Used 5 |
| 7-2 | 7-2、Setting of Needle 5 |
| 7-3 | 7-3、Threading 6 |
| 7-4 | 7-4、Thread Tension 7 |
| 7-5 | 7-5、Pressure of Presser Foot 7 |
| 7-6 | 7-6、Adjustment of Width of Overedge Seam 8 |
| 7-7 | 7-7、Adjustment of Stitch Length 8 |
| 8 | 8、Proper Adjustment 9 |
| 8-1 | 8-1、Adjustment of Feeding Mechanism9 |
| 8-2 | 8-2、Adjustment of Presser Foot Mechanism 10 |
| 8-3 | 8-3、Adjustment of Needle Bar Stroke 12 |
| 8-4 | 8-4、Height of Needle Bar and Longitudinal Position of Lower Looper 12 |
| 8-5 | 8-5、Timing between Upper and Lower Loopers 13 |
| 8-6 | 8-6、Relation between Upper and Lower Loopers 13 |
| 8-7 | 8-7、Adjustment of Upper and Lower Knives 14 |
| 8-8 | 8-8、Adjustment of Auxiliary Stitch Tongue 16 |
| 8-9 | 8-9、Sharpening of Knives 16 |

1、 Classification of Machines / 機型

IDL-302 : For joining temporarily the abutted edges of piece goods for processing in bleadching, dyeing and printing factories. (1 Thread)

皮革及一般布料染整專用單線接布機

IDL-306 : For joining temporarily the abutted edges of piece goods for processing in bleadching, dyeing and printing factories. (2 Threads)

染整專用雙線接布機

IDL-306A : For joining temporarily the abutted edges of piece goods for processing in bleadching , dyeing and printing factories . (2 Threads & width seam)

皮革及一般布料專用雙線接布機

IDL-308 : For sewing Carpet and other materials of extra heavy duty, without knives for cutting fabric. (3 Threads)

無切刀 3 線地毯包邊機

IDL-309 : For sewing Carpet and other materials of extra heavy duty, with knives for cutting fabric. (3 Threads)

附切刀 3 線地毯包邊機

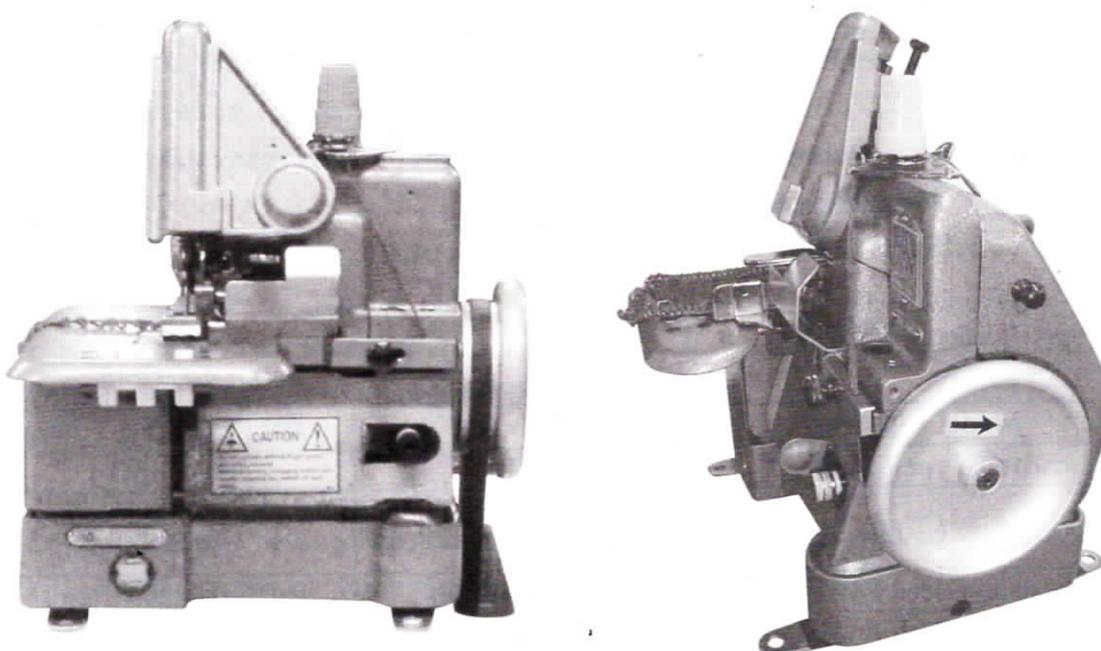
2、 Specification / 規格

| | | |
|--|---|---|
| Model / 型號 | IDL-308、309 | IDL-302、306、306A |
| Stitch Type / 線跡 | 504 (ISO) | 503 (ISO) |
| Use / 功能 | For carpet overedge 地毯包邊機 | For abutted seam. 染整接布機 |
| Sewing Speed / 轉速 | Up to 3,000 s.p.m. | Up to 4,200 s.p.m. |
| Stitch Length / 針距 | 1.6~4.2mm / 6~16 stitches per inch | |
| Width of Overedge Seam / 包邊寬度 | 9.0 mm (standard) | Seam width 7 mm Open width 14 mm |
| Needle Size / 針號 | DMX5 #22 #23 | DCX27 #16 |
| Needle Bar Stroke 針柱衝程 | 30 mm | |
| Presser Foot Lifting 押腳高度 | 4.3 mm | 2.5 mm |
| Lubrication Oil / 潤滑油 | “ SF OIL ” or “ TERESSO 46 ” | |

3、 Installation / 安裝

Standard Installation—the machine shall be installed on the top face of Table. Put the machine at the fixed place on the Table and tighten Screws. The machine is obtainable in a set with Table, if necessary, as we are ready to supply all parts concerned together with Table. Fit Velt Cover to Velt Cover Support as shown in the sketch.

機器必須安裝在桌板的頂面，將機頭放置於桌面固定的地方並用螺絲鎖緊，然後才能開始安裝其他桌上的零組件。機頭安裝如下列圖示：



4、 Sewing Speed and Rotation of Pulley / 浦力 Pulley 的旋轉方向與轉速

The highest sewing speed is 3,000 s. p. m. for IDL-308、IDL-309 and 4,200 s. p. m. for IDL-306. For the brand – new machines, it is recommended to rotate 15% ~ 20% under max. speed for the initial 200 hours (one month approximately). This manner will bring the good result to the durability of machines. Sa seen from the side of Pulley, the machine rotates to the right direction.

IDL-308 & IDL-309 最高縫速為 3,000 S.P.M.，IDL-302 & IDL-306 & IDL-306A 最高縫速為 4,200 S.P.M.。對於新機頭建議在最初的200小時內使用低於最高縫速15%~20%的縫紉速度使用，將會提高機頭的耐久性。朝浦力Pulley方向看去，浦力Pulley是向右方旋轉。

5、 Setting of Motor and Belt / 馬達及皮帶設定

Clutch Motor of 200 W (1/4 HP) shall be used and V-Belt of Type “M” also. To position the Motor, as the sketch shows, align both center lines of Motor Pulley and Machine Pulley exactly.

200W (1/4 HP) 離合器馬達 Clutch Motor 必須搭配 “M”-V 字型皮帶 Belt 使用，馬達的放置位置如下列圖示，機頭的浦力 Pulley 與馬達的浦力 Pulley 的相對位置須調整為一直線。

| External Diameter Of motor Pulley 馬達浦力的外部直徑 | Rotation of Machine / 機型 | | | |
|---|--------------------------|-------|-------------|-------|
| | IDL-302、306、306A | | IDL-308、309 | |
| | 50HZ | 60HZ | 50HZ | 60HZ |
| 50mm | -- | 3,200 | -- | 2,300 |
| 55mm | -- | 3,500 | -- | 2,600 |
| 60mm | 3,200 | 3,800 | 2,300 | 2,800 |
| 65mm | 3,500 | 4,200 | 2,600 | 3,000 |
| 70mm | 3,800 | -- | 2,800 | -- |
| 75mm | 4,000 | -- | 3,000 | -- |
| 80mm | 4,300 | -- | -- | -- |

External Diameter of Machine Pulley specified on the Table here above are those nearest to calculated values, because Pulleys are being sold at the step of 5mm in the market.

6、 Lubricant / 潤滑系統

6-1、 Lubrication Oil / 潤滑油

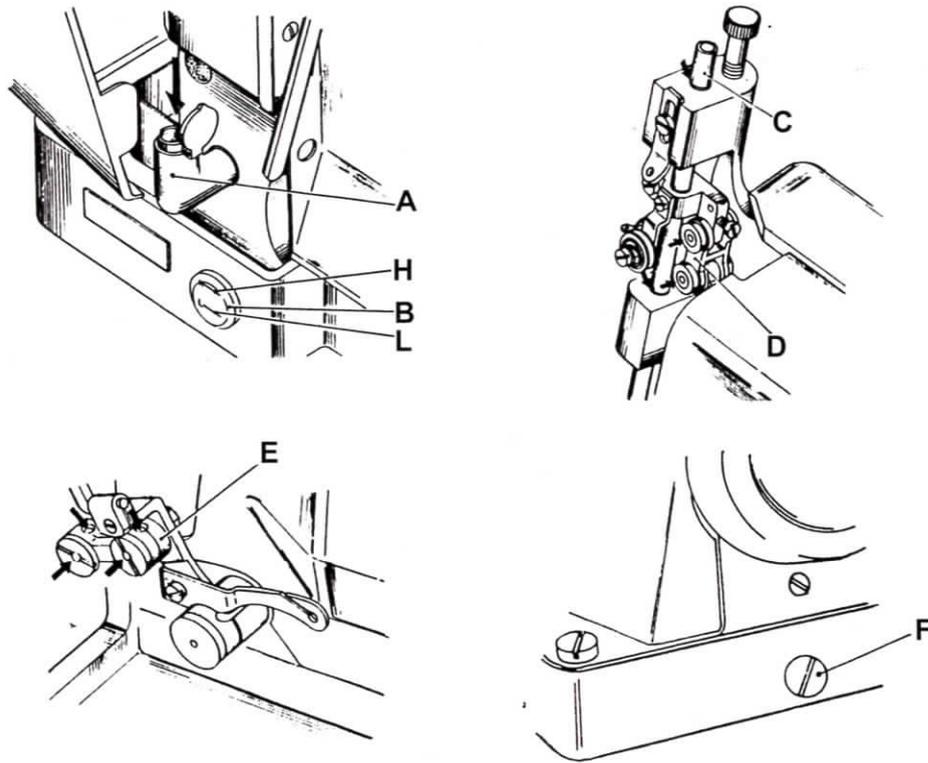
Use “SF OIL” or “TERESSO 46” as the lubricant for this machine.

潤滑系統使用 SF OIL 或 TERESSO 46 針車油。

6-2、 Oil Feeding / 油料供應

Oil in the machine will have been drained completely at the time of delivery, so it must be fed with new oil before operation. Feeding shall be made quietly to Oil Cap(A) and the oil surface must be kept between two Lines(H) , (L) on Oil Sight Gauge(B) . And, at least once each in the morning and afternoon, feed oil manually to Needle Bar(C) , Needle Bar Connecting Link(D) and Lower Looper Connecting Link(E) . However, fabrics may be soiled when feeding oil around Needle Bar too much. Take care , please .

油料在機器運轉輸送中將會被消耗，所以機頭在運轉前必須添加新的針車油。油料由油蓋 Oil Cap(A)添加至油面到油表 Oil Sight Gauge(B)的 H 線及 L 線之間為止，並且在早上及下午最後一次使用後必須對針柱 Needle Bar(C)、針柱連結桿 Needle Bar Connecting Link(D)及下鉤針連結桿 Lower Looper Connecting Link(E)添加潤滑油，但是針柱 Needle Bar 若添加太多潤滑油時可能會污染到布料。



6-3、Oil Exchange / 潤滑油的替換

After the initial 200 hour's use of new machine, to keep it long life, remove Drain Screw (F) under the Pulley and drain used oil completely to change for new oil.

At this time remove Base from the machine and clean filter Screens and inside of the Base. The cleaning must be made 2 or 3 times regularly in a year.

新機頭在最初的200小時運轉後請替換新油料以增加機器壽命，請轉開在浦力 Pulley 下方的排油螺絲 Drain Screw(F)並更換新的油料。此時，並移開底座 Base 上的機頭，清洗過濾器 Filter Screens 及底盤，每年必須定期做 2~3 次的清洗。

7、 Proper Operation / 操作運轉

7-1、 Needle to Be Used- / 車針的使用、

For IDL-302、306、306A : DCX27 #16

For IDL-308、309 : DMX5 #22 #23

As the standard size, #22 or # 23 is used.

But, # 16 can be used by changing Stitch Plate and Needle Guard.

So, the needle of suitable size to the sewing condition must be selected.

IDL-302、306、306A使用 DCX27 #16 的車針。

IDL-308、309 使用 DMX5 #23 的車針。

7-2、 Setting of Needle / 車針的安裝

Needle must be set correctly facing its scarf towards the back side of machine as shown in the sketch.

The setting order is :

1 > Turn Pulley until Needle Bar(A) reaches its highest position.

2 > Loosen Nut(B) of Needle Clamp by Wrench Spanner and pull off the needle downwards.

3 > Insert new needle to Needle bar to the facing is obtained as mentioned above.

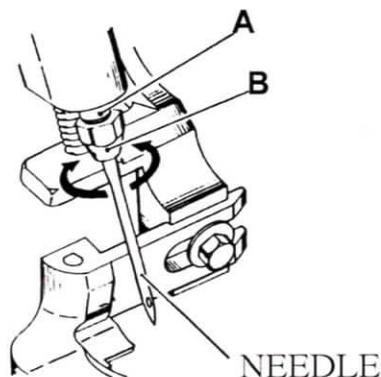
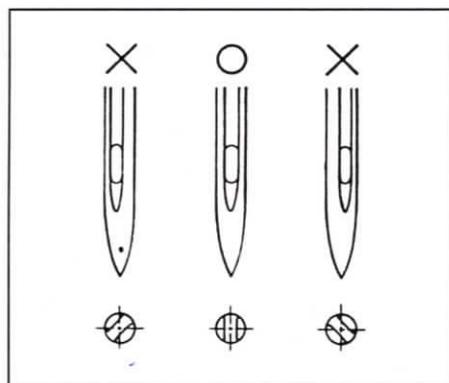
車針必須像下列圖示般安裝，針頭的斜面必須背向機器安裝。

安裝步驟：

(1)、轉動浦力 Pulley 直到針柱 Needle Bar(A)上移到最高位置。

(2)、將針留 Nut of Needle Clamp(B)鬆開並取下車針。

(3)、放入新的車針於針柱Needle bar(A)內並調整好位置後鎖緊針留 Nut(B)。



7-3、 Threading / 穿線

Threading must be made correctly according to the sketch .

A : Needle Thread B : Upper Looper Thread C : Lower Looper Thread

縫紉線必須像下列圖示般的正確安置。

A : 車針穿線法 Needle Thread 。

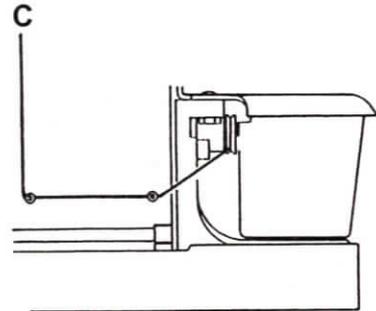
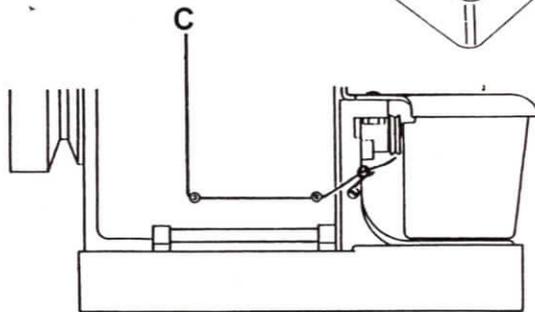
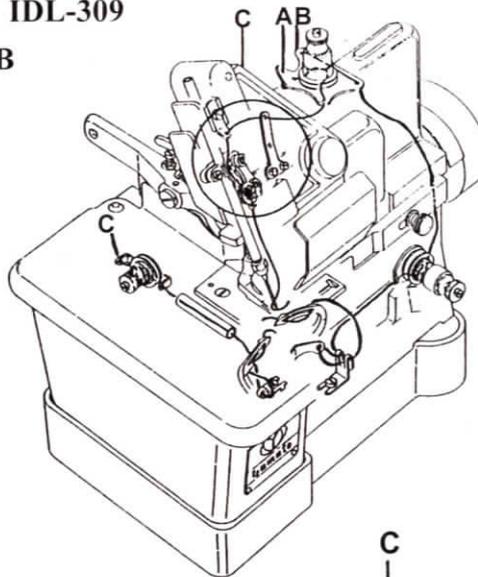
B : 上鉤針穿線法 Upper Looper Thread 。

C : 下鉤針穿線法 Lower Looper Thread 。

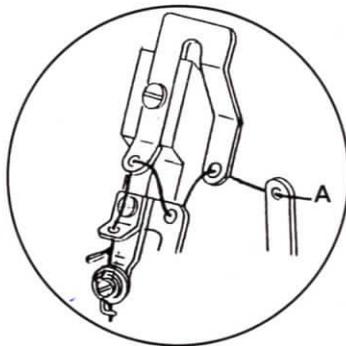
IDL-303 IDL-304

IDL-308 IDL-309

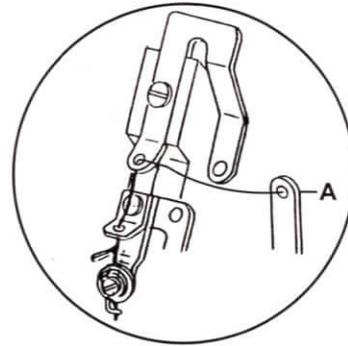
IDL-309B



IDL-302



IDL-306
IDL-306A



7-4、 Thread Tension / 線的鬆緊

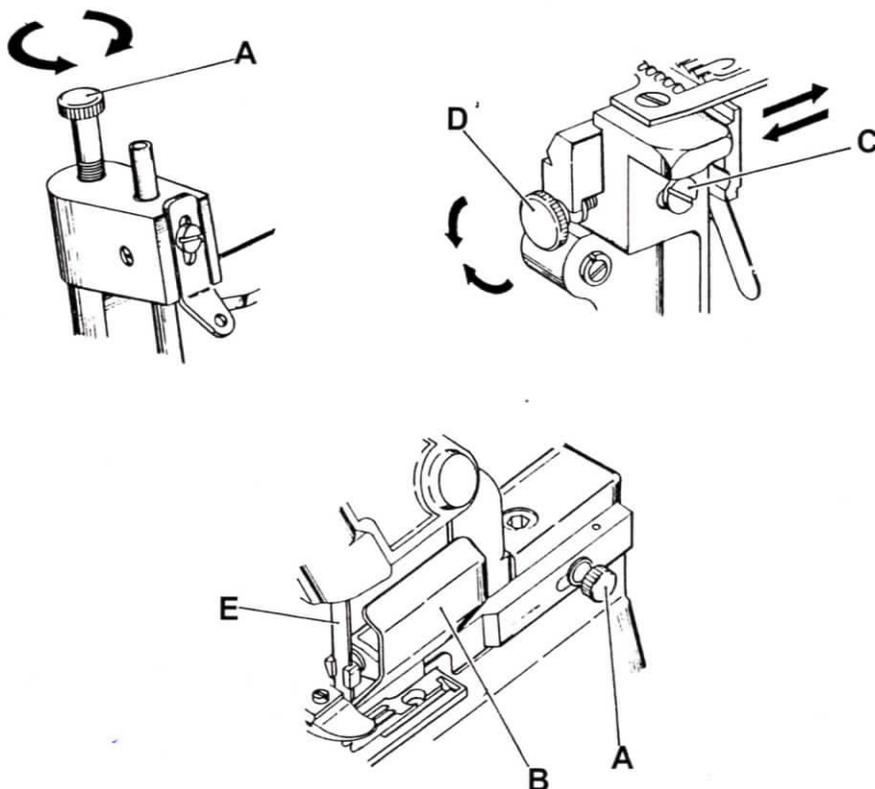
Thread tension shall be varied according to the kind of fabrics on threads, width of overedge seam, stitch length and other factors. So, adjust the thread tension mechanism for needle thread and upper, lower looper threads to obtain the suitable seam.

線的鬆緊會因線本身的材質、縫合的寬度 Width of Overedge Seam 及針距的長度 Stitch Length 和其他因素而多樣化，故可由調整車針 Needle 及上下鉤針的紗拉組彈簧來達到適當的縫合效果。

7-5、 Pressure of Presser Foot / 押腳的壓力

the pressure of Presser Foot must be adjusted as weakly as possible. If it is too weak, however, uniformity in the feeding and seaming may be lacked. The pressure shall be strengthened when Adjusting Screw(A) is turned to right and weakened by turning(A) to left.

押腳的壓力必須盡可能的調低，但如果調的太低則會影響車縫的針距與線跡的穩定度，押腳的壓力可由調整螺絲 Screw(A) 來改變，轉右邊則增加押腳壓力、轉左邊則會減少押腳壓力。



7-6、 Adjustment of width of Overedge Seam IDL-306、309

The width of Overedge Seam can be adjusted by cutting margin of material by knife.

縫接寬度 Width of Overedge Seam 的調整 (IDL-306、IDL-309)
依照布料被裁刀裁切的大小來調整邊緣縫接口的寬度。

The adjustment is made in the following order :

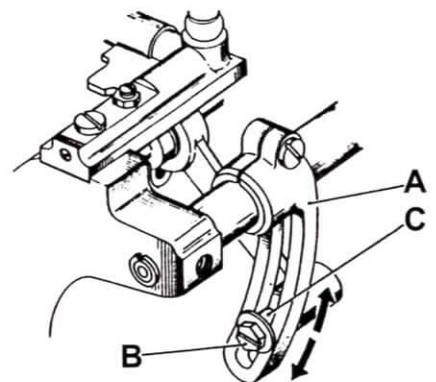
- 1 >、 Loosen Screw(A) of Chip Guard and move the Chip Guard(B) to the right.
- 2 >、 Loosen Screw(C) for Lower Knife Holder, and turn Screw(D) . Turning(D) to the right the width of Overedge Seam becomes wide and turning it to the left it becomes narrow.
- 3 >、 After adjustment, tighten Screw(C) .
- 4 >、 With Chip guard(B) contacting lightly to the Upper Knife(E) , tighten Screw(A) .

調整步驟:

- (1)、 鬆開螺絲Screw(A) 並把護刀蓋 Chip Guard(B) 向右推開。
- (2)、 轉開下刀座螺絲 Screw for Lower Knife Holder(C) 並調整螺絲 Screw(D) , 螺絲 Screw(D) 轉右邊會增加縫接的寬度, 轉左邊則會減少縫接的寬度。
- (3)、 調整完畢後, 鎖緊螺絲 Screw(C) 。
- (4)、 於護刀蓋 Chip Guard(B) 輕觸上切刀Upper Knife(E) 後, 鎖緊螺絲 Screw(A) 。

7-7、 Adjustment of Stitch Length / 針距長度 Stitch Length 的調整

Stitch length can be adjusted from 1.6 mm to 6 mm steplessly. To obtain the stitch length as you desire, loosen Adjusting Screw(B) of Feed Regulator(A) and move Feed Dog Driving Connecting Rod(C) up and down along the groove of the Regulator(A) . The stitch length becomes long when the Rod(C) is raised and short when the Rod(C) is lowered.



針距長度 **Stitch Length** 能調整到 1.6 mm~6 mm，可依需求調整針距長度。

調整步驟：

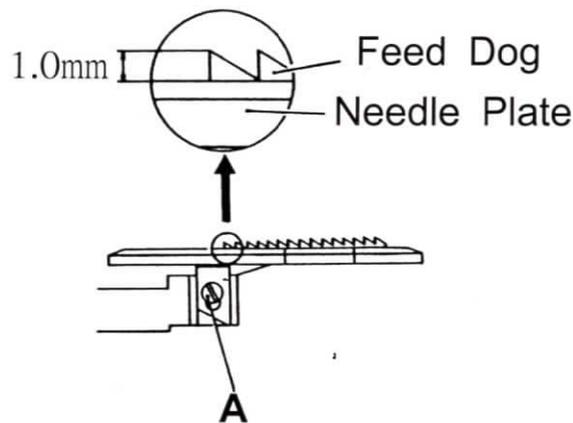
- (1)、鬆開狗齒調整器的調整螺絲 **Screw of Feed Regulator(B)**，並順著調整器的凹溝向上及向下移動狗齒連結桿 **Feed Dog Driving Connecting Rod(C)**。
- (2)、當連桿 **Rod(C)** 往上移動時針距長度便會變長，向下移動時針距長度便會減短。

8、Proper Adjustment / 一般調整

8-1、Adjustment of Feeding Mechanism / 狗齒機構的調整

1>、Height / 高度

When Feed Dog reaches the highest position, loosen Screw(A) and adjust the last teeth edge on the tail of Feed Dog to have 1.0 mm for the height from top of Stitch Plate.



當狗齒達到最高點時，鬆開螺絲 **Screw(A)** 並調整狗齒 **Feed Dog** 使其尾部的最後一齒離針板表面高度約 1.0 mm。

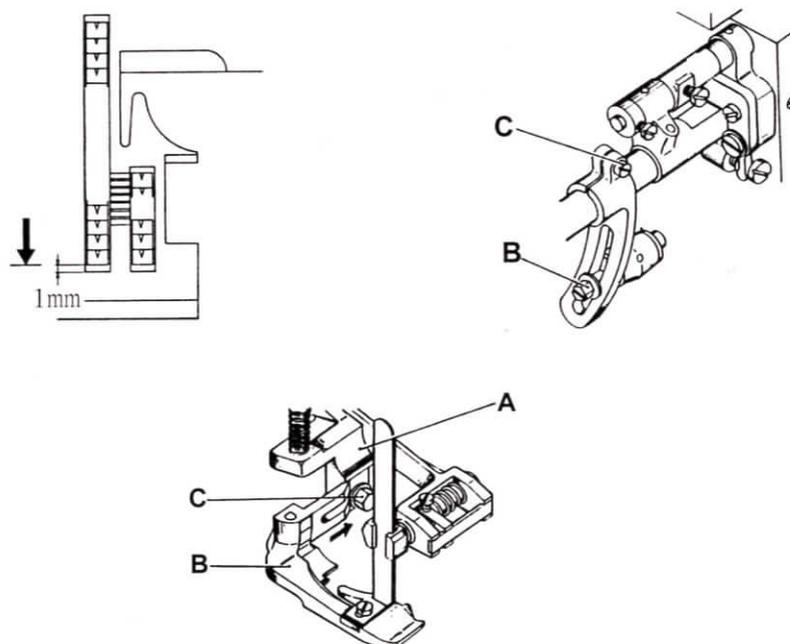
2>、Longitudinal Position / 擺動位置

Loosen Adjusting Screw(B) of Feed Regulator and tighten it at the highest position .

When Feed Dog comes to the foremost by turning Pulley , adjust the allowance between Front of groove in Stitch Plate and the point of Feed Dog to be 1mm. Then, tighten Screw(C) of Feed Regulator.

After the above adjustment , refer to 7-7 “Adjustment of Stitch Length” Screw of Feed Regulator(C) . adjust to obtain the suitable stitch length by loosening Adjusting Screw(B) .

鬆開狗齒調整器的調整螺絲 **Screw of Feed Regulator(B)**，並在最高點位置時鎖緊。轉動浦力 **Pulley** 讓狗齒 **Feed Dog** 移到最前面，調整狗齒讓針板的凹槽與狗齒最前點的間距約 **1mm** 時，鎖緊針距調整器的絲 **Screw of Feed Regulator(C)**。



8-2、Adjustment of Presser Foot Mechanism / 押腳機構調整

1 >、Fitting of Presser Foot / 安裝押腳

Turn Pulley until Needle Bar comes the highest position, then insert Presser Foot(B) to the groove of Presser Arm(A). And, turn Pulley again and adjust the needle to drop to the center of needle drop portion on Presser Foot. And tighten Screw(C).

轉動浦力 **Pulley** 直到針柱 **Needle Bar** 上移到最高位置，然後將押腳 **Presser Foot(B)** 插入押腳臂 **Presser Arm** 的凹槽(A)。其次轉動浦力並調整車針使其下降到押腳上的車針孔，然後鎖緊螺絲 **Screw(C)**。

2 >、Height of Presser Foot / 押腳的高度

Adjust the height according to the following order :

a >、Remove Foot lifter Lever(D) .

b >、Raise foot Lifter Hand lever(E) .

c >、Loosen Nut(F) and turn Screw(G) of Presser Arm Eccentric to obtain 4.3mm (2.5 mm for IDL-306) , the distance between the bottom of Foot and the top face of Stitch Plate. Re-tighten Nut(F) .

d > 、Fit foot Lifter Lever(D) .

e > 、Loosen Adjusting Screw(H) and push Foot Lifter Lever(D)

downwards by hand until Foot Lifter Hand Lever(E) falls to the arrow direction . Tighten Nut(I) .

f > 、When Presser Foot Lowers to the top face of stitch Plate, turn

Adjusting screw(K) and adjust the allowance between foot Lifter Lever(D) and the bottom of Presser Arm(J) to be 1.0 mm, then tighten Nut(L) .

依照下列步驟調整押腳高度：

(a) 、移動押腳拉桿 Foot Lifter Lever(D) 。

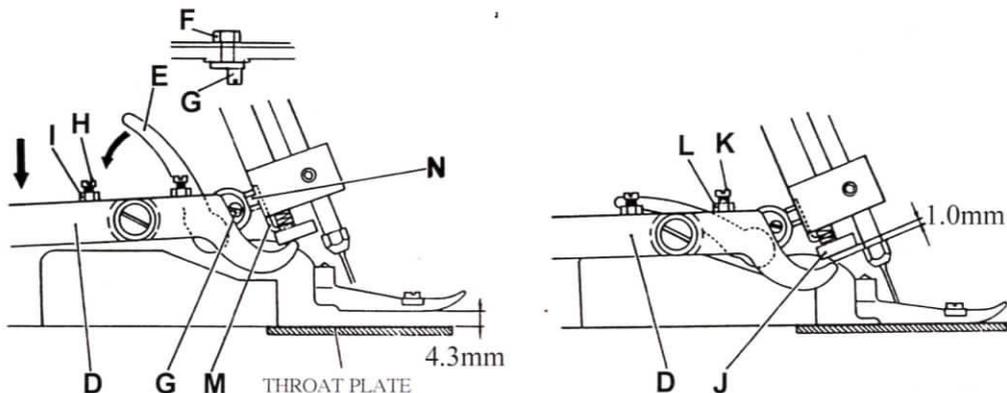
(b) 、抬起押腳手拉桿 Foot Lifter Hand Lever(E) 。

(c) 、鬆開螺絲帽 Nut(F) 並轉動押腳偏心螺絲 Screw of Presser Arm Eccentric(G) 使押腳底部與針板 Stitch Plate 的表面間距 機型：309 為 4.3 mm / 機型：306 為 2.5mm，然後鎖緊螺絲帽 Nut(F) 。

(d) 、調整押腳拉桿 Foot Lifter Lever(D) 。

(e) 、鎖緊調整螺絲 Screw(H)，並且用手把押腳拉桿 Foot Lifter Lever(D) 向下押直到押腳手拉桿 Foot Lifter Hand Lever(E) 下降到箭頭的方向為止，然後鎖緊螺絲帽 Nut(F) 。

(f) 、當押腳下降到針板的表面時，轉動調整螺絲 Screw(K) 使押腳拉桿 Foot Lifter Lever(D) 和押臂 Presser Arm 底部(J) 的間距為 1.0mm，然後鎖緊螺絲帽 Nut(L) 。



During operation , when Presser Foot agrounds on the very thick part of fabric and lifts beyond 4.3 mm , Loper may contact the Foot . As the result , Loper and other parts may be dam aged . For those obstruction as mentioned above , keeping the Foot lifted in 4.3 mm , apply Presser Arm Stopper(M) to Presser Arm(J) and tighten Screw(N) .

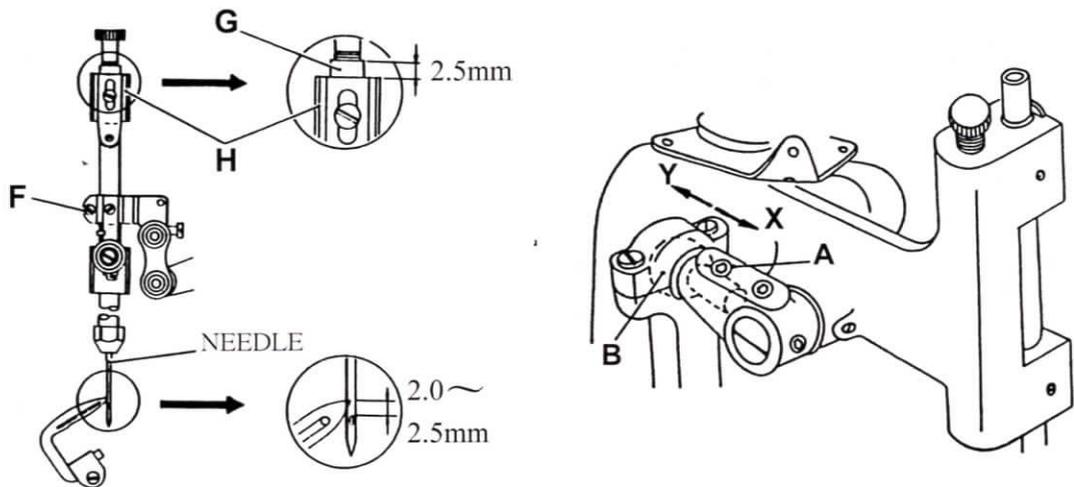
若在運轉當中押腳因厚重布料且會被向上頂超過 4.3mm 時，鉤針 Looper 可能會觸碰到押腳 Foot 造成鉤針和其他零件的損害。對於上述情況可使押腳抬起 4.3 mm 並讓押臂制止器 Presser Arm Stopper(M) 頂住押臂 Presser Arm(J) 然後鎖緊螺絲 Screw(N)。

8-3、Adjustment of Needle Bar Stroke / 針柱上下擺動幅度Stroke的調整

The standard stroke of Needle Bar is 30 mm.

After loosening Screw(A), when Needle Bar Driving Crank Ball Stud(B) is put inside to the arrow direction(X) the stroke becomes big, and outside to the direction(Y) the stroke becomes small. Tighten Screw(A) after adjustment. When Ball stud is put inside to the direction(X), be carefully that rod does not contact with crankshaft.

針柱上下擺動的標準幅度為 30mm，鬆開螺絲 Screw(A) 並且當連結球栓 Needle Bar Driving Crank Ball Stud(B) 向內(X) 方向移動時，則擺動幅度會變大(針柱拉高)，向外(Y) 方向移動時則針柱上下擺幅會變小，等調整到適當位置後鎖緊螺絲 (A)。當連結球栓Ball被放往(X) 方向時請注意不要碰觸到軸面。



8-4、Height of Needle Bar and Longitudinal Position of Lower Looper / 針柱的最高位置與下鉤針的擺動位置

When Lower Looper(E) moves to right from left end and its point reaches the center of Needle, adjust the distance between the looper point and the upper edge of needle eye to be 2.0~2.5 mm.

This adjustment is made by loosening Screw(F) of Needle Bar Connecting Bracket.

When Needle Bar lowers to its bottom, the distance between both upper edges of Needle Bar(G) and Arm(H) shall be 2.5mm. which is considered as the standard distance generally.

The point of Lower Loper passes behind Needle and they must be closed as near as possible but without touch. This adjustment is made by loosening Screw(I) .

當下鉤針 Lower Loper(E) 由右方移動到車針左方終端時，下鉤針的針尖要接觸到縫針的中心點位置，並調整鉤針的針尖與縫針針孔的上邊緣的間距為2.0~2.5 mm，此處由針柱托架螺絲 Screw of Needle Bar Connecting Bracket(F) 來調整。當針柱降至它的底部時，針柱 Needle Bar(G) 頂端與針臂 Needle Arm(H) 頂端的間距應該為2.5mm，這是一般標準的間距。下鉤針的針尖通過車針的背後時必須盡可能的靠近但不能相互碰觸，避免零件損壞。

8-5、Timing between Needle and Lower Loper / 車針與下鉤針的定位

When Lower Loper swings to left end, the distance between its point and the center of Needle shall be 3.0 mm. This adjustment is made by loosening Screw(J) and putting the Ball Stud(K) inside or outside. By putting the Ball Stud(K) inside to the direction(X) , the moving amount of the looper mechanism becomes big, and outside to the direction(Y) the amount becomes small. Owing to the abovementioned, the position of Lower Loper at its left end is changed inevitably. Furthermore, the portion(L) of Lower looper must always stick to Lower Loper Holder Arm.

當下鉤針向左移到終端時，針尖與車針中心點的間距應為 3.0mm，此可由螺絲Screw(J)與球栓 Ball Stud(K) 的內外移動來調整。把球栓 Ball Stud(K)往(X)方向內移則下鉤針的擺動速度將會變快，反之往(Y)方向外移則會變慢。歸於上述，下鉤針左移的最終位置的改變是不可避免的，且下鉤針的(L) 部份必須插牢於下鉤針臂 Lower Loper Holder Arm。

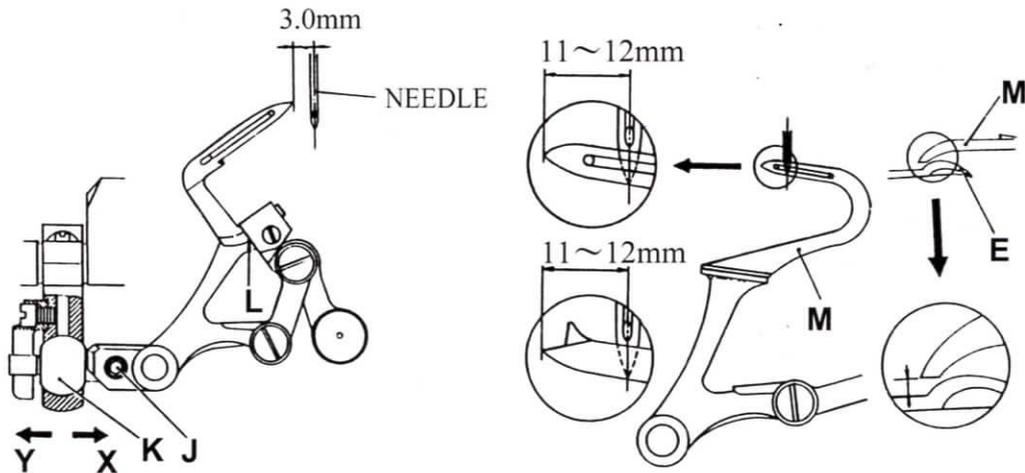
8-6、Relation between Upper and Lower Loopers / 上下鉤針的定位

When Upper Loper(M) and Lower Loper(E) meet together, the point of Upper Loper passes the depression just under the swelling on the back of the point of Lower Loper. at this moment, both Loopers must be closed as nearly as possible but without touch.

When Upper looper passes the front side of Needle and reaches the left end of its movement, the distance between the point of Upper Loper and the center of Needle shall be 11~12 mm approximately .

(In case of IDL-306 the distance the point of Spreader and the center of Needle should also be 11~12 mm.)

當上鉤針 Upper Looper(M)與下鉤針 Lower Looper(E)相會時，而上鉤針的針尖通過下鉤針的凹槽時，上下鉤針應盡可能的接近但不能相碰觸。當上鉤針通過車針的前端並且左移到終端時，上鉤針的針尖與車針的中心點間距必須為 11~12 mm。

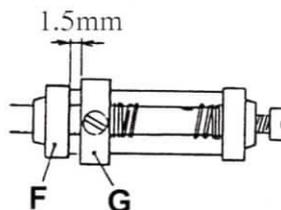
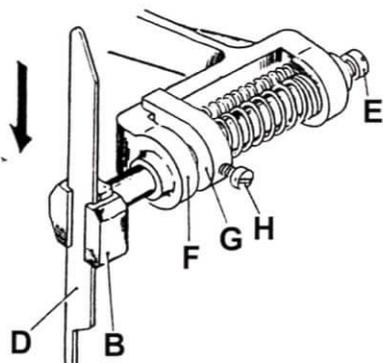
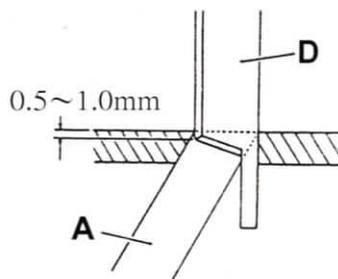
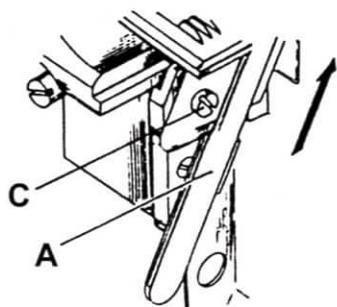


8-7、Adjustment of Upper and Lower Knives / 上下切刀的調整

To fit Lower Knife(A) , push Upper Knife Holder(B) to right and insert the Lower Knife upwards along the groove on Lower Knife Holder. In the above fitting, make the Blade of Lower Knife even with the top face of Stitch Plate or a little lower (0~0.3 mm) . This Adjustment is made by loosening Screw(C) . When Upper Knife(D) lowers to the bottom , adjust the engagement with Lower Knife(A) to be 0.5~1.0 mm. This adjustment is made by loosening Screw(E) of Upper Knife Clamp. The pressure of engagement of both Knives shall be adjusted by loosening Screw(H) .

When Upper Knife Holder Guide(G) is moved to right the pressure becomes strong and to left the pressure becomes weak. Under the standard condition of pressure, the allowance between Upper Knife Driving Arm Stud(F) and Holder Guide(G) shall be 1.5mm.

下切刀Lower Knife(A) 適當的調整，將上刀座 Upper Knife Holder(B) 向右推並延著下刀座的凹槽向上插入下刀片，使下刀片對齊針板的上表面或低於 0~0.3 mm，此處調整可由螺絲 Screw(C) 來達成。當上刀片 Upper Knife(D) 降至底部時，調整上刀座底部與下切刀Lower Knife(A) 的間距約 0.5~1.0mm，此處可由上刀鉗螺絲Screw of Upper Knife Clamp(E) 來調整。上下切刀的壓力可由螺絲 Screw(H) 來調整，當上刀座導引塊Upper Knife Holder Guide(G) 向右移動時壓力就會增加，反之向左移動時就變弱。在標準的壓力條件下，上刀傳動臂 Upper Knife Driving Arm Stud(F) 與導引塊Holder Guide(G) 的間距為1.5 mm。

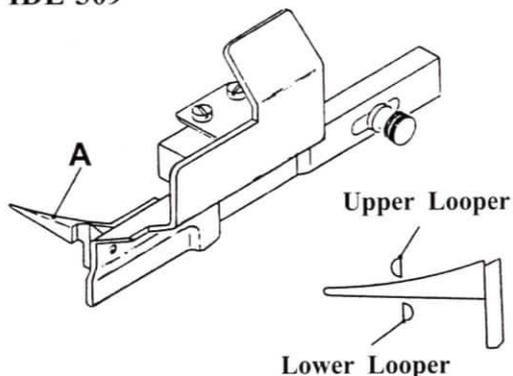


8-8、Adjustment of Auxiliary Stitch Tongue / 輔助舌 Auxiliary Stitch Tongue 的調整

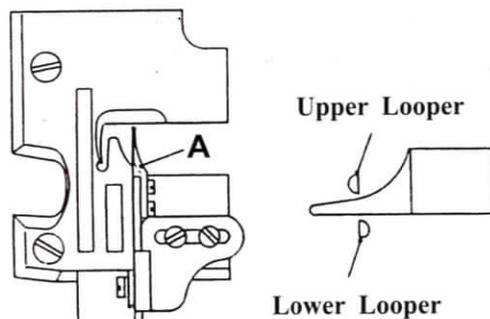
When fixing Auxiliary Stitch Tongue, take care that it does not touch Upper and Lower Loper.

當固定輔助舌 Auxiliary Stitch Tongue 時，必須注意輔助舌不能碰觸到上下鉤針。

IDL-306
IDL-309



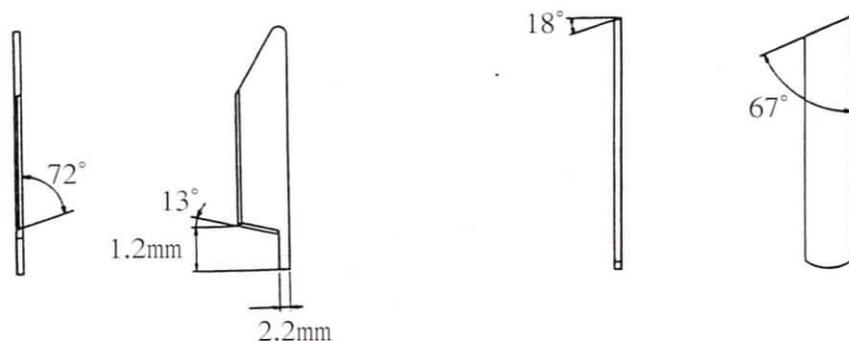
IDL-308



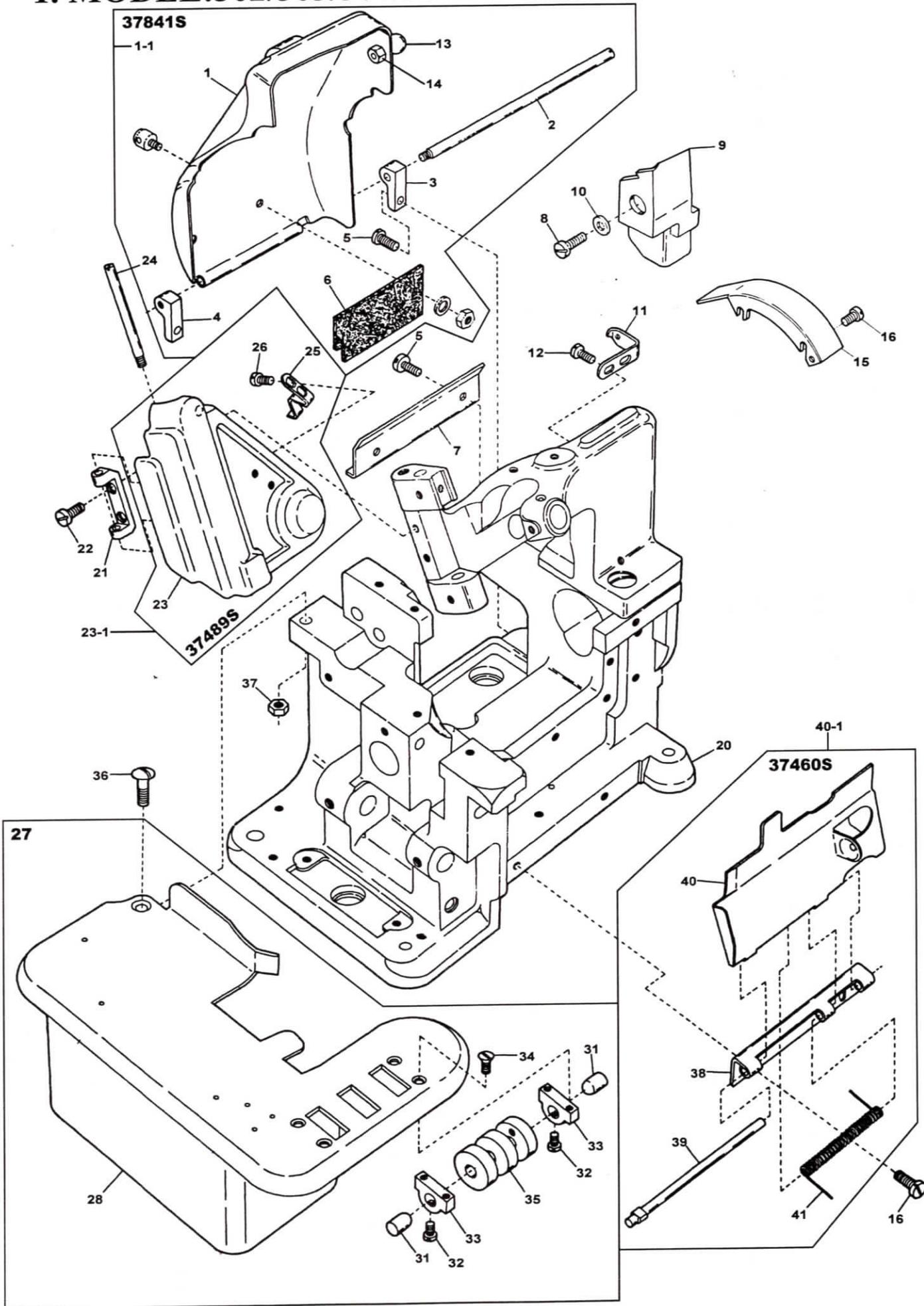
8-9、Sharpening of Knives / 切刀的研磨

Knives must be re-sharpened when the sharpness become blunt. The sketches show angles of Blade on both knives. When Sharpening Upper Knife, the part(H) must be 12 mm as the dimension indicated.

切刀變鈍時須研磨使其變銳利，下圖顯示刀身銳角的角度。



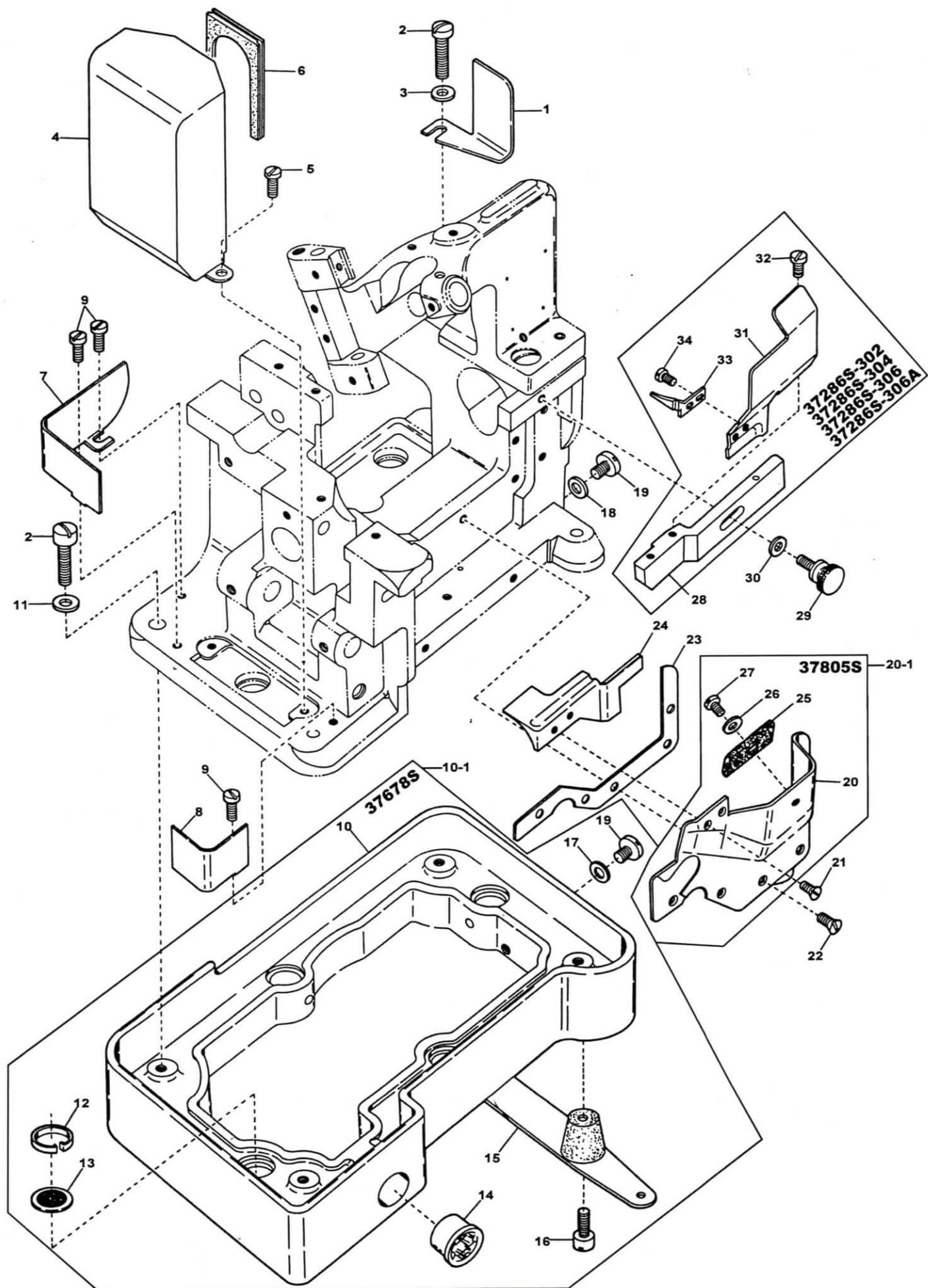
1. MODEL:302/303/304/306/306A/306S



1 . MISCELLANEOUS COVERS (1)

| REF NO. | PARTS NO. | DESCRIPTION | |
|---------|-----------|-------------------------------|--------------------------|
| 1 | 37841 | Rear Cover Unit | |
| 1-1 | 37841S | Complete Set | |
| 2 | 37612 | Rear Cover Hinge Pin | |
| 3 | 37609 | Rear Cover Hinge (Right) | |
| 4 | 37610 | Rear Cover Hinge (Left) | |
| 5 | 7609 | Screw | |
| 6 | 37569 | Rear Cover Felt | |
| 7 | 38229 | Plate | |
| 8 | 1175 | Screw | |
| 9 | 37622 | Front Cover (Fixed) | |
| 10 | 541 | Washer | |
| 11 | 37613 | Rear Cover Spring | |
| 12 | 1196 | Screw | |
| 13 | 37841SC | Ball Screw | |
| 14 | 37841N | Nut | |
| 15 | 37544 | Belt Cover | |
| 16 | 1208 | Screw | |
| 17 | ----- | ----- | |
| 18 | ----- | ----- | |
| 19 | ----- | ----- | |
| 20 | ----- | Machine Frame Unit | |
| 21 | 37616 | Needle Bar Cover Bracket | |
| 22 | 7616 | Screw | |
| 23 | 37489 | Needle Bar Cover | |
| 23-1 | 37489S | Complete Set | |
| 24 | 37617 | Needle Bar Cover Pin | |
| 25 | 37618 | Needle Bar Cover Latch Spring | |
| 26 | 1227 | Screw | |
| 27 | ----- | Cloth Plate Complete Set | |
| 28 | 37495 | Cloth Plate | |
| 29 | ----- | ----- | |
| 30 | ----- | ----- | |
| 31 | 37453 | Roller Holder | |
| 32 | 3433 | Screw | |
| 33 | 37809 | Roller Holder Bracket | |
| 34 | 5345 | Screw | |
| 35 | 37452 | Roller | |
| 36 | 2419 | Screw | |
| 37 | 144 | Nut | |
| 38 | 37605 | Front Cover Hinge | |
| 39 | 37606 | Front Cover Hinge Pin | |
| 40 | 37460 | Front Cover | |
| 40-1 | 37460S | Complete Set | |
| 41 | 37607 | Front Cover Restoring Spring | |
| REF NO. | MODEL | PARTS NO. | DESCRIPTION |
| 20 | IDL-302 | 37482 | Machine Frame Unit |
| | IDL-303 | 37801 | Machine Frame Unit |
| | IDL-304 | 37801 | Machine Frame Unit |
| | IDL-306 | 37482 | Machine Frame Unit |
| | IDL-306A | 37801 | Machine Frame Unit |
| 27 | IDL-302 | 37495S | Cloth Plate Complete Set |
| | IDL-303 | 37834S | Cloth Plate Complete Set |
| | IDL-304 | 37834S | Cloth Plate Complete Set |
| | IDL-306 | 37495S | Cloth Plate Complete Set |
| | IDL-306A | 37834S | Cloth Plate Complete Set |

2. MODEL:302/303/304/306/306A/306S

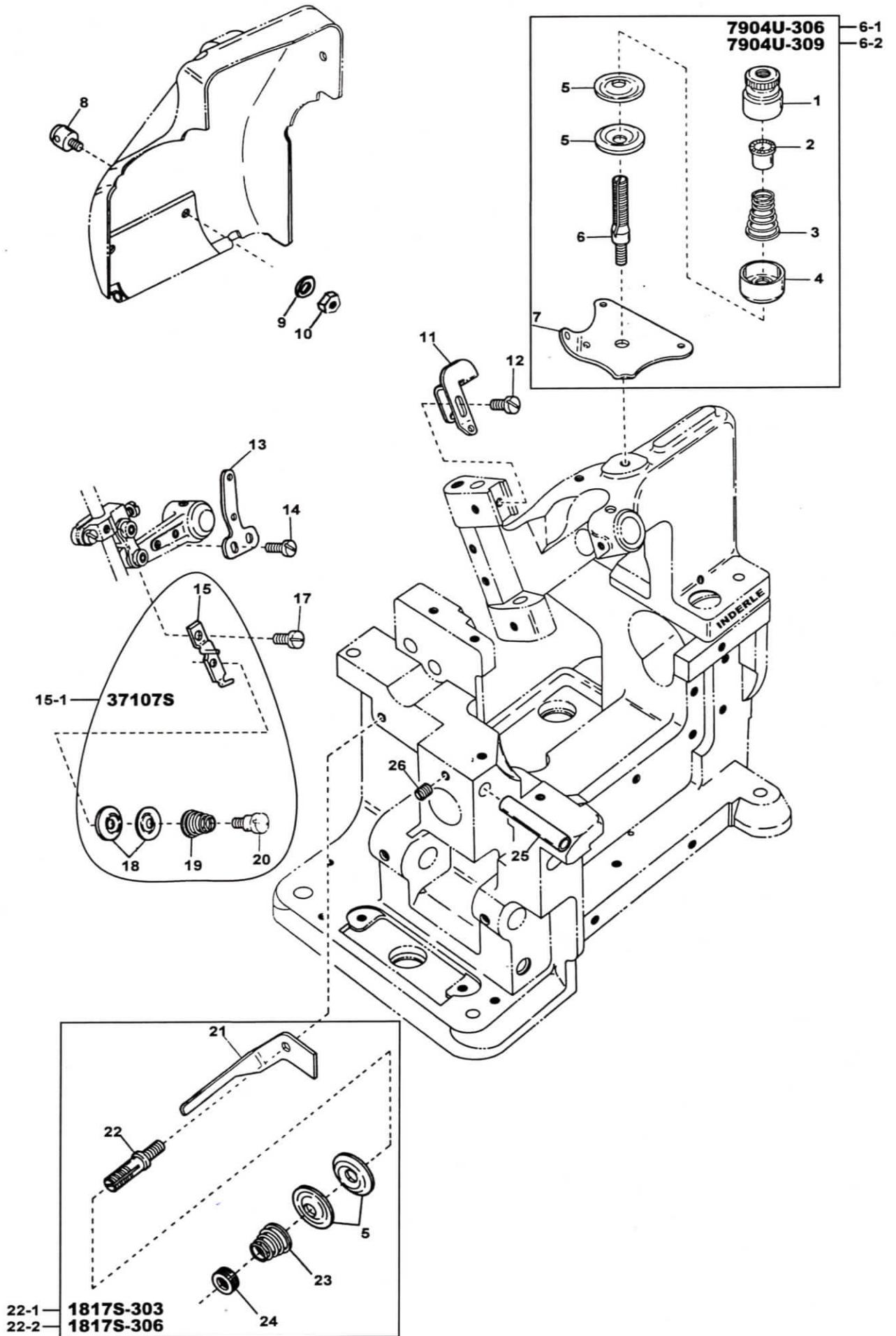


2. MISCELLANEOUS COVERS (2)

| REF NO. | PARTS NO. | DESCRIPTION |
|---------|-----------|------------------------------------|
| 1 | 37709 | Dust Plate |
| 2 | 7763 | Screw |
| 3 | 562 | Washer |
| 4 | 37624 | Looper Connecting Rod Cover |
| 5 | 9604 | Screw |
| 6 | 37699 | Looper Connecting Rod Cover Gasket |
| 7 | 37626 | Angled Cover (Large) |
| 8 | 37627 | Angled Cover (Small) |
| 9 | 1208 | Screw |
| 10 | 37678 | Base |
| 10-1 | 37678S | Complete Set |
| 11 | 500 | Washer |
| 12 | 37681 | Oil Filter Screen Camp |
| 13 | 37680 | Oil Filter Screen |
| 14 | 37679 | Oil Sight Gauge |
| 15 | 37540 | Base Rubber Cushion Unit |
| 16 | 5083 | Screw |
| 17 | 567 | Gasket |
| 18 | 567 | Gasket |
| 19 | 5062 | Screw |
| 20 | 37805 | Front Oil Shield |
| 20-1 | 37805S | Complete Set |
| 21 | 1613 | Screw |
| 22 | 7619 | Screw |
| 23 | 37620 | Front Oil Shield Gasket |
| 24 | 37842 | Front Oil Shield (Upper) |
| 25 | 37692 | Felt |
| 26 | 531 | Washer |
| 27 | 7616 | Screw |
| 28 | 37466 | Chip guard Holder |
| 29 | 1218 | Screw |
| 30 | 554 | Washer |
| 31 | ---- | Chip Guard (Upper) |
| 32 | 7609 | Screw |
| 33 | ---- | Auxiliary Stitch Tongue |
| 34 | 4237 | Screw |

| REF NO. | MODEL | PARTS NO. | DESCRIPTION |
|---------|----------|------------|-------------------------|
| 31 | IDL-302 | 37461 | Chip Guard |
| | IDL-303 | 37461 | Chip Guard |
| | IDL-304 | 37461 | Chip Guard |
| | IDL-306 | 37487 | Chip Guard |
| | IDL-306A | 37461 | Chip Guard |
| 33 | IDL-302 | 37286-306A | Auxiliary Stitch Tongue |
| | IDL-304 | 37286-304 | Auxiliary Stitch Tongue |
| | IDL-306 | 37286 | Auxiliary Stitch Tongue |
| | IDL-306A | 37286-306A | Auxiliary Stitch Tongue |
| | IDL-306S | 37286-306A | Auxiliary Stitch Tongue |

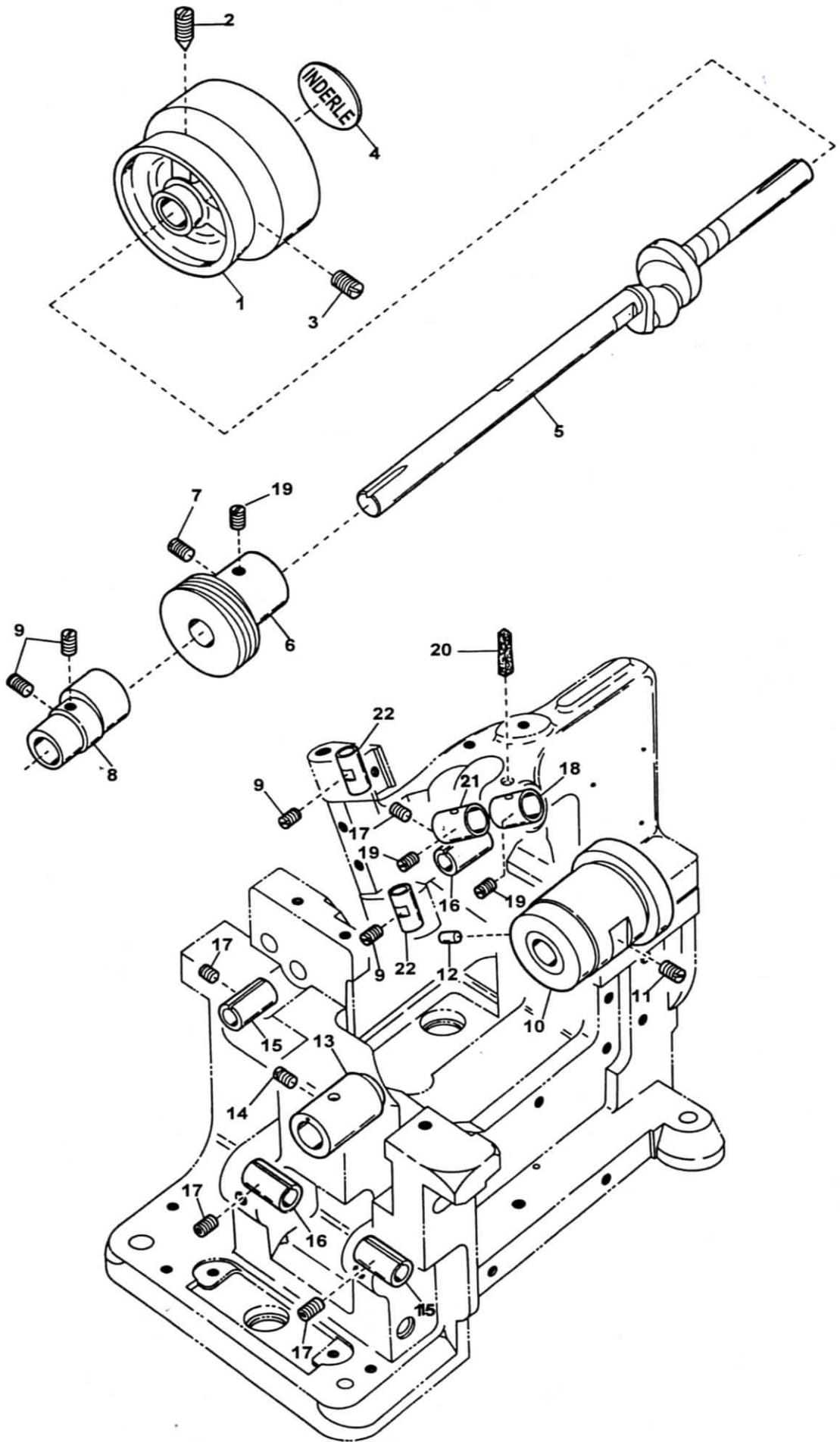
3. MODEL:302/303/304/306/306A/306S



3. MISCELLANEOUS THREAD EYELETS

| REF NO. | PARTS NO. | DESCRIPTION | |
|---------|-----------|------------------------------------|------------------------------|
| 1 | 37634 | Thread Tension Spring Cap | |
| 2 | 37170 | Tension Spring Bushing | |
| 3 | ----- | Needle Thread Tension Spring | |
| 4 | 37635 | Thread Tension Spring Retainer | |
| 5 | 31111 | Tension Disc | |
| 6 | 7904 | Tension Post | |
| 6-1 | 7904U-306 | Complete Set | |
| 6-2 | 7904U-309 | Complete Set | |
| 7 | 37812 | Tension Disc Eyelet | |
| 8 | 38364 | Rear Cover Thread Eyelet | |
| 9 | 531 | Washer | |
| 10 | 12 | Nut | |
| 11 | 37262 | Needle Thread Eyelet | |
| 12 | 4358 | Screw | |
| 13 | 37060 | Needle Thread Sewing Eyelet | |
| 14 | 1196 | Screw | |
| 15 | 37107 | Needle bar Thread Retainer Bracket | |
| 15-1 | 37107S | Complete set | |
| 16 | ----- | ----- | |
| 17 | 1222 | Screw | |
| 18 | 37108 | Thread Retainer Disc | |
| 19 | 37109 | Thread Retainer Spring | |
| 20 | 1093 | Screw | |
| 21 | 37016 | Side Thread Latch | |
| 22 | 1817 | Tension Post | |
| 22-1 | 1817S-303 | Complete set | |
| 22-2 | 1817S-306 | Complete set | |
| 23 | ----- | Looper Thread Tension Spring | |
| 24 | 56 | Adjusting Nut | |
| 25 | 37112 | Lower Looper Thread Pipe | |
| 26 | 1457-3 | Screw | |
| REF NO. | MODEL | PARTS NO. | DESCRIPTION |
| 3 | IDL-302 | 37115 | Needle Thread Tension Spring |
| | IDL-303 | 37113 | Needle Thread Tension Spring |
| | IDL-304 | 37115 | Needle Thread Tension Spring |
| | IDL-306 | 37115 | Needle Thread Tension Spring |
| | IDL-306A | 37115 | Needle Thread Tension Spring |
| | IDL-306S | 37115 | Needle Thread Tension Spring |
| | IDL-308 | 37632 | Needle Thread Tension Spring |
| | IDL-309 | 37632 | Needle Thread Tension Spring |
| 21 | IDL-303 | 37016 | Side Thread Latch |
| | IDL-304 | 38074 | Side Thread Latch |
| | IDL-306 | 37016 | Side Thread Latch |
| | IDL-306A | 37016 | Side Thread Latch |
| | IDL-306S | 37016 | Side Thread Latch |
| 23 | IDL-303 | 37632 | Looper Thread Tension Spring |
| | IDL-304 | 37115 | Looper Thread Tension Spring |
| | IDL-306 | 37115 | Looper Thread Tension Spring |
| | IDL-306A | 37115 | Looper Thread Tension Spring |
| | IDL-306S | 37115 | Looper Thread Tension Spring |

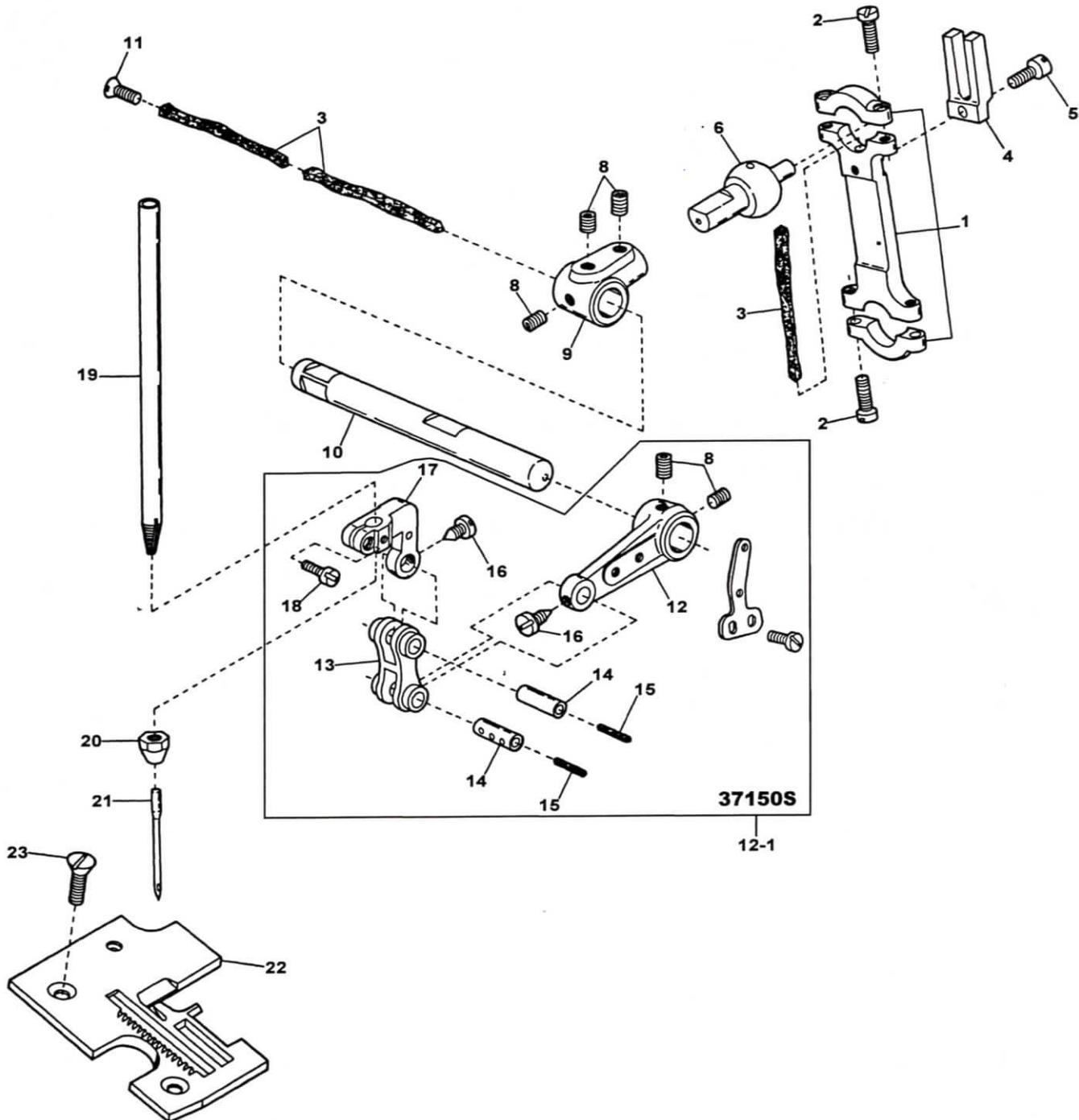
4. MODEL:302/303/304/306/306A/306S



4. MISCELLANEOUS CRANKSHAFT & BUSHINGS

| REF NO. | PARTS NO. | DESCRIPTION | |
|----------|-----------|--|-------------|
| 1 | ----- | Pulley | |
| 2 | 3591 | Screw | |
| 3 | 3593 | Screw | |
| 4 | 989 | Hand wheel Mark | |
| 5 | 37799 | Main Crankshaft | |
| 6 | 37650 | Feed Driving Eccentric | |
| 7 | 7650 | Screw | |
| 8 | 37462 | Feed and Upper Knife Eccentric | |
| 9 | 1457 | Screw | |
| 10 | 37547 | Crankshaft Bushing (Right) | |
| 11 | 3639 | Screw | |
| 12 | 294 | Oil Wick | |
| 13 | 37645 | Crankshaft Bushing (Middle) | |
| 14 | 2022 | Screw | |
| 15 | 37409 | Feed Bar and Upper Looper Bushing | |
| 16 | 37654 | Feed Bar and Upper Looper Bushing | |
| 17 | 3635 | Screw | |
| 18 | 37133 | Needle Bar Driving Crank Bushing (Front) | |
| 19 | 3434 | Screw | |
| 20 | 290 | Oil Wick | |
| 21 | 37134 | Needle Bar Driving Crank Bushing (Rear) | |
| 22 | 37049 | Needle Bar Bushing | |
| PREF NO. | MODEL | PARTS NO. | DESCRIPTION |
| 1 | IDL-302 | 37703 | Pulley |
| | IDL-303 | 37703 | Pulley |
| | IDL-304 | 37816 | Pulley |
| | IDL-306 | 37703 | Pulley |
| | IDL-306A | 37703 | Pulley |

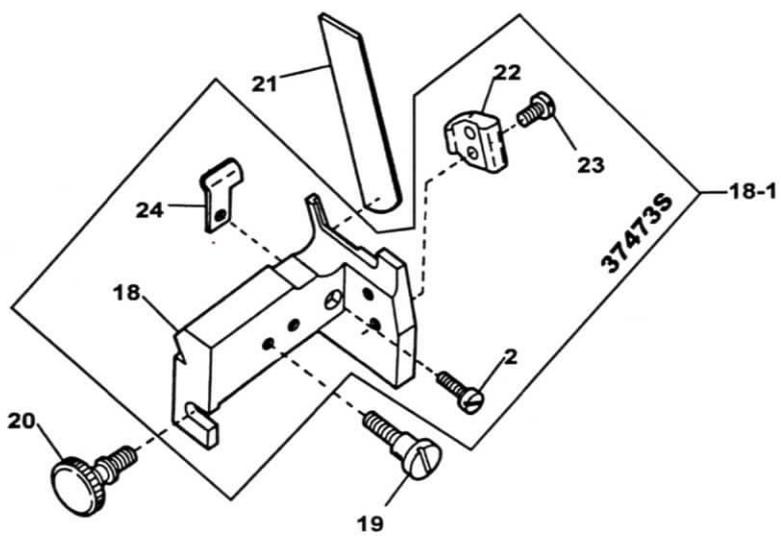
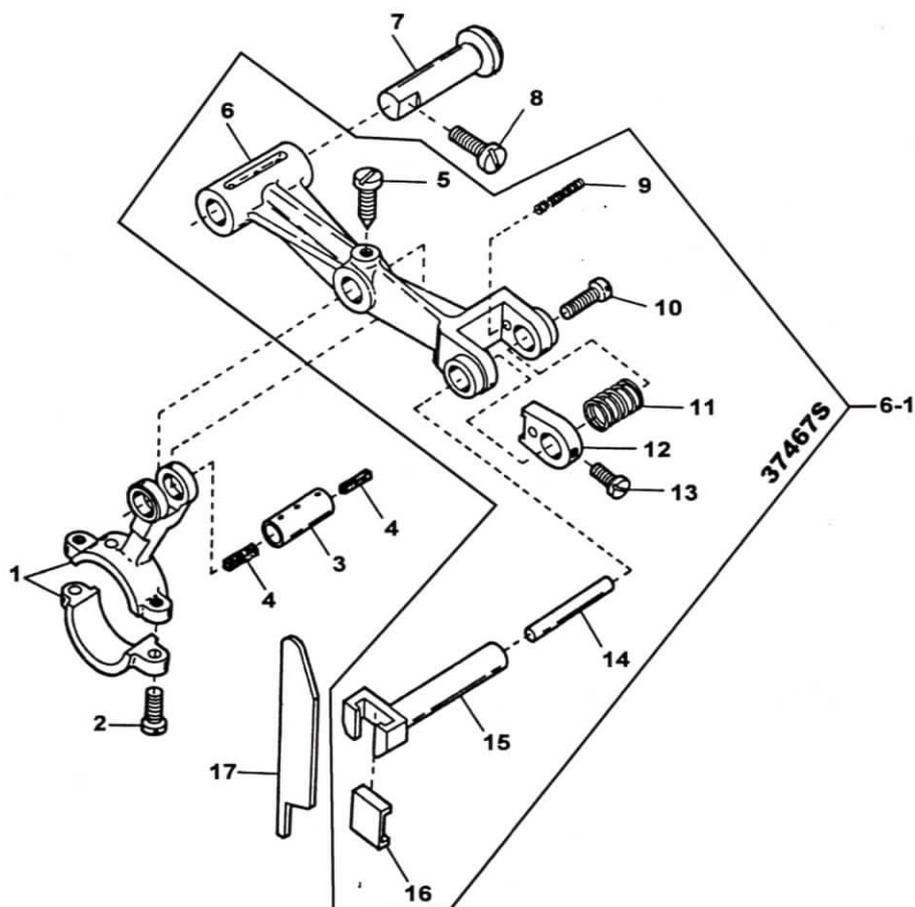
5. MODEL:302/303/304/306/306A/306S



5. NEEDLE BAR DRIVING MECHANISM

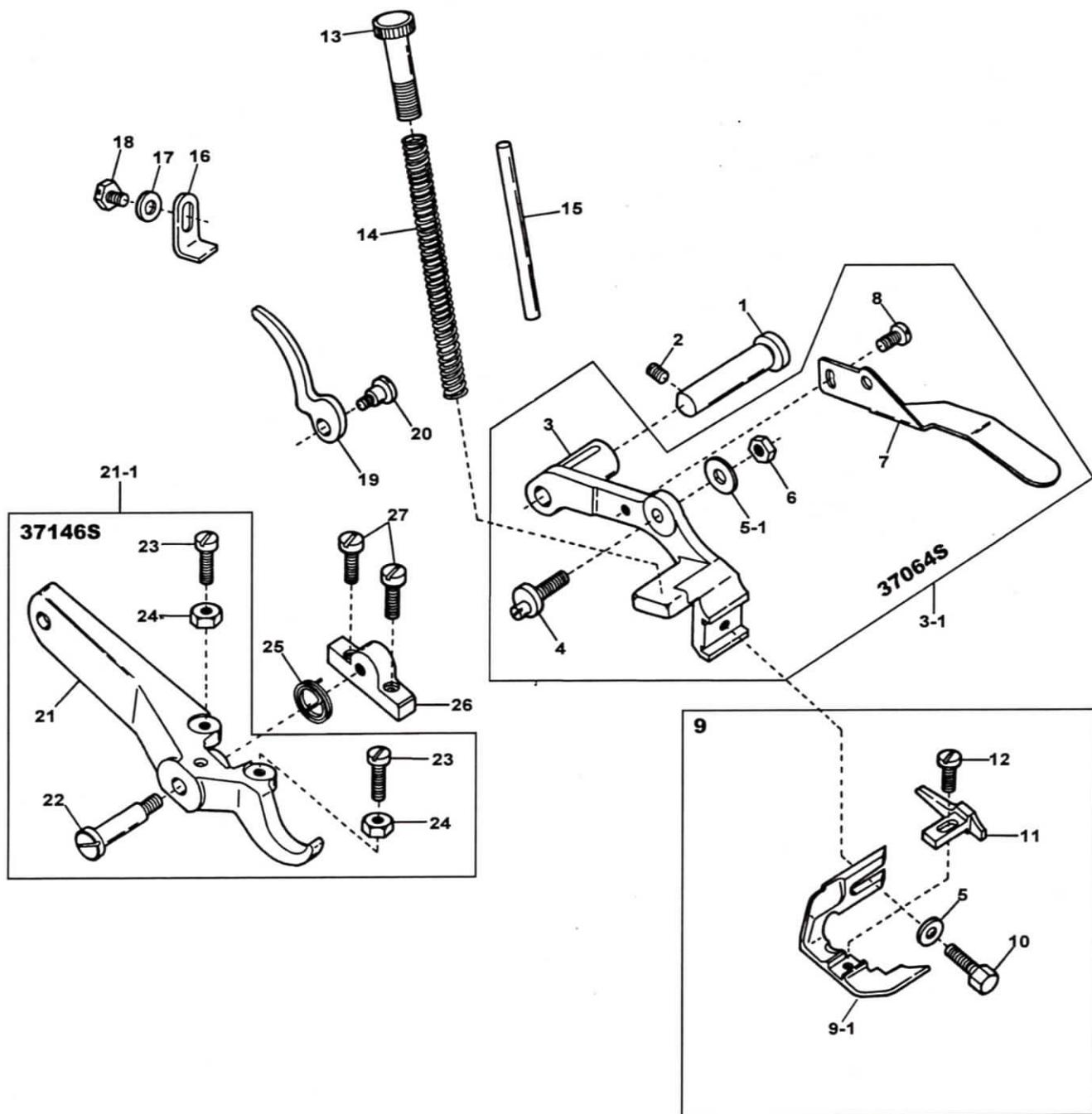
| REF NO. | PARTS NO. | DESCRIPTION | |
|---------|-----------|-------------------------------|--------------|
| 1 | 37057 | Needle Bar Connecting Rod | |
| 2 | 7311-1 | Screw | |
| 3 | 304 | Oil Wick | |
| 4 | 37130 | Connecting Rod Guide Fork | |
| 5 | 1175 | Screw | |
| 6 | 37132 | Driving Crank Ball Stud | |
| 7 | ---- | ---- | |
| 8 | 3635 | Screw | |
| 9 | 37127 | Driving Crank (Rear) | |
| 10 | 37059 | Driving Crankshaft | |
| 11 | 3433 | Screw | |
| 12 | 37150 | Driving Crank (Front) | |
| 12-1 | 37150S | Complete Set | |
| 13 | 90321 | Connecting Link | |
| 14 | 90320 | Connecting Link Pin | |
| 15 | 278 | Oil Wick | |
| 16 | 4313 | Screw | |
| 17 | 37818 | Needle Bar Connecting Bracket | |
| 18 | 4435 | Screw | |
| 19 | 37062 | Needle Bar | |
| 20 | 62 | Nut | |
| 21 | ---- | Needle | |
| 22 | ---- | Stitch Plate | |
| 23 | 1732 | Screw | |
| REF NO. | MODEL | PARTS NO. | DESCRIPTION |
| 21 | IDL-302 | DCx27#16 | Needle |
| | IDL-303 | DCx27#16 | Needle |
| | IDL-304 | DMx5#23 | Needle |
| | IDL-306 | DCx27#16 | Needle |
| | IDL-306A | DCx27#16 | Needle |
| | IDL-306S | DCx27#16 | Needle |
| 22 | IDL-302 | 37483-302 | Stitch Plate |
| | IDL-303 | 37483-303 | Stitch Plate |
| | IDL-304 | 37459B | Stitch Plate |
| | IDL-306 | 37483 | Stitch Plate |
| | IDL-306A | 37483-306A | Stitch Plate |
| | IDL-306S | 37483-306S | Stitch Plate |

6. MODEL:302/303/304/306/306A/306S



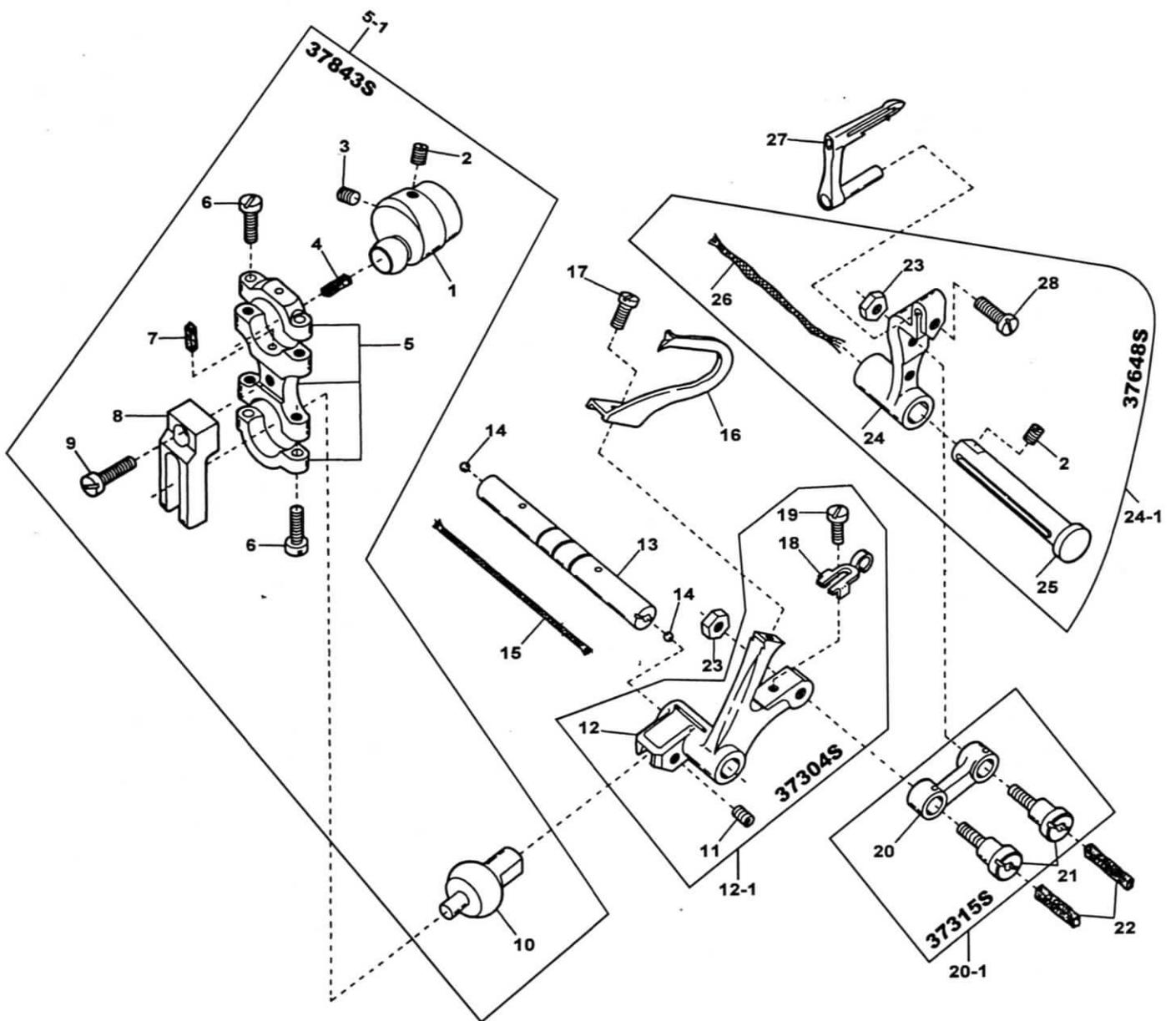
| 6. KNIFE DRIVING MECHANISM | | |
|-----------------------------------|------------------|-----------------------------------|
| REF NO. | PARTS NO. | DESCRIPTION |
| 1 | 37883 | Upper Knife Connecting Rod |
| 2 | 1174 | Screw |
| 3 | 37876 | Connecting Rod Pin |
| 4 | 290 | Oil Wick |
| 5 | 1176 | Screw |
| 6 | 37467 | Upper Knife Driving Arm Stud |
| 6-1 | 37467S | Complete Set |
| 7 | 37552 | Driving Arm Stud Pin |
| 8 | 1156 | Screw |
| 9 | 30414 | Upper Knife Holder Spring (Small) |
| 10 | 1132 | Screw |
| 11 | 30413 | Upper Knife Holder Spring |
| 12 | 37478 | Upper Knife Holder Guide |
| 13 | 1222 | Screw |
| 14 | 37475 | Upper Knife Clamp Pin |
| 15 | 37470 | Upper Knife Holder |
| 16 | 37471 | Upper Knife Clamp |
| 17 | 37469 | Upper Knife |
| | 37469T | Upper Knife Tungsten |
| 18 | 37473 | Lower Knife Holder |
| 18-1 | 37473S | Complete Set |
| 19 | 2086 | Screw |
| 20 | 2369 | Adjusting Screw |
| 21 | 37472 | Lower Knife |
| 22 | 37474 | Lower Knife Clamp |
| 23 | 7405 | Screw |
| 24 | 37458 | Needle Guard |

7. MODEL:302/303/304/306/306A/306S

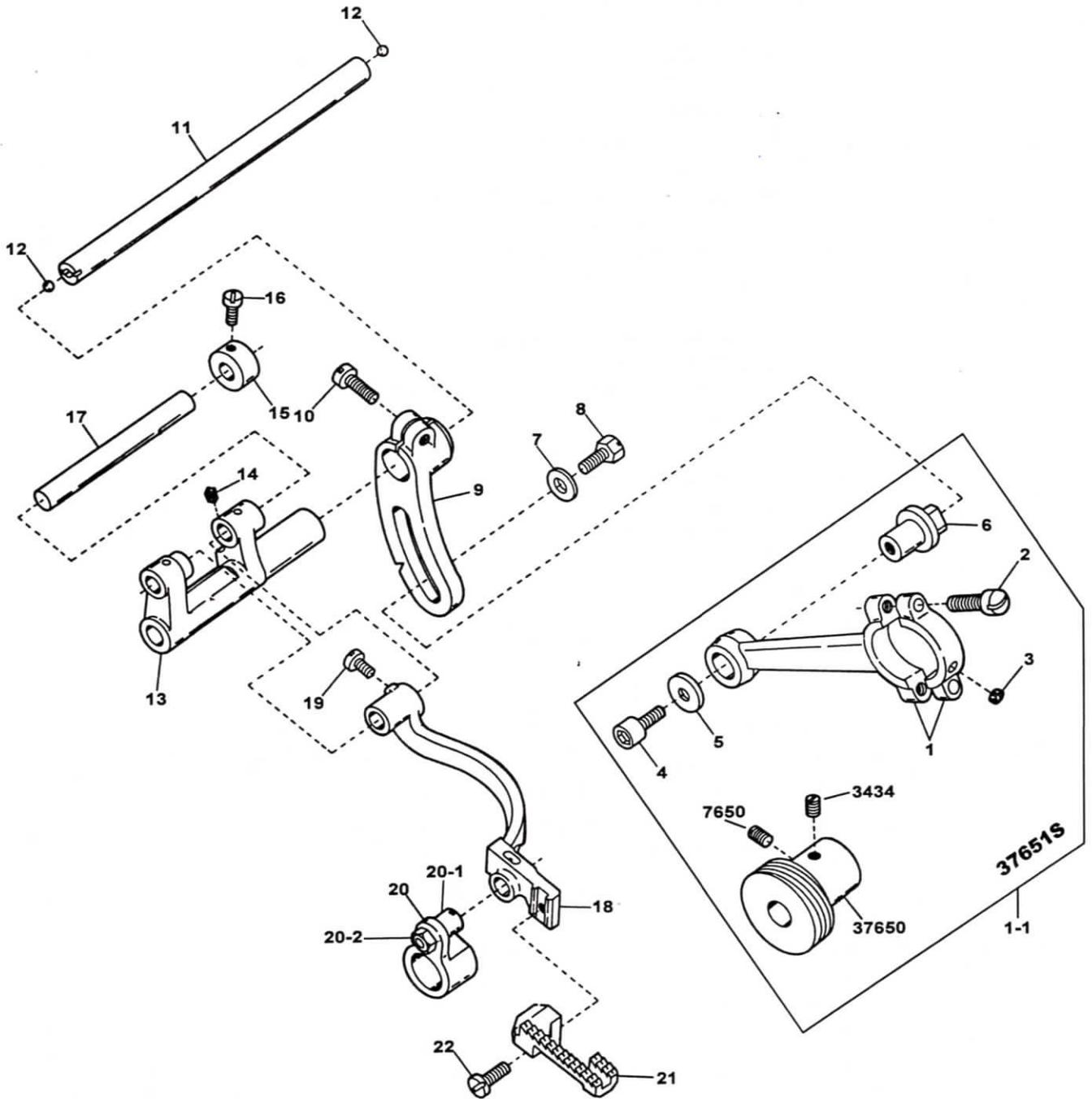


| 7. PRESSER FOOT MECHANISM | | | |
|---------------------------|-----------|----------------------------------|------------------------------------|
| REF NO. | PARTS NO. | DESCRIPTION | |
| 1 | 37552 | Presser Arm Hinge Stud | |
| 2 | 3434 | Screw | |
| 3 | 37064 | Presser Arm | |
| 3-1 | 37064S | Complete Set | |
| 4 | 7143 | Eccentric Screw | |
| 5 | 554 | Washer | |
| 5-1 | 541 | Washer | |
| 6 | 334 | Nut | |
| 7 | 37886 | Auxiliary Foot Lifter Hand Lever | |
| 8 | 1208 | Screw | |
| 9 | ---- | Presser Foot, Complete Set | |
| 9-1 | ---- | Presser Foot Base | |
| 10 | 2308 | Screw | |
| 11 | ---- | Presser Foot Stitch Tongue | |
| 12 | 4236 | Screw | |
| 13 | 2371 | Adjusting Screw | |
| 14 | 37065 | Presser Spring | |
| 15 | 37048 | Presser Foot Positioning Pin | |
| 16 | 37148 | Presser Arm Stop | |
| 17 | 531 | Washer | |
| 18 | 5541 | Screw | |
| 19 | 37144 | Foot Lifter Hand Lever | |
| 20 | 2214 | Screw | |
| 21 | 37146 | Foot Lift Lever | |
| 21-1 | 37146S | Complete Set | |
| 22 | 2285 | Screw | |
| 23 | 2133 | Screw | |
| 24 | 334 | Nut | |
| 25 | 37147 | Foot Lifter Lever Spring | |
| 26 | 37145 | Foot Lifter Lever Bracket | |
| 27 | 7311 | Screw | |
| REF NO. | MODEL | PARTS NO. | DESCRIPTION |
| 9 | IDL-302 | 37496-306A | Presser Foot Complete Set |
| | IDL-303 | 37496-303 | Presser Foot Complete Set |
| | IDL-304 | 37848 | Presser Foot Complete Set |
| | IDL-306 | 37496 | Presser Foot Complete Set |
| | IDL-306A | 37496-306A | Presser Foot Complete Set |
| | IDL-306S | 37496-306S | Presser Foot Complete Set |
| 9-1 | IDL-303 | 37496B | Presser Foot Base |
| | IDL-304 | 37848B | Presser Foot Base |
| | IDL-306 | 37496B | Presser Foot Base |
| 11 | IDL-303 | 37268-303 | Presser Foot Stitch Tongue |
| | | 37268-303W | Presser Foot Stitch Tongue (Width) |
| | IDL-304 | 37850 | Presser Foot Stitch Tongue |
| | IDL-306 | 37268 | Presser Foot Stitch Tongue |

8. MODEL:302/303/304/306/306A

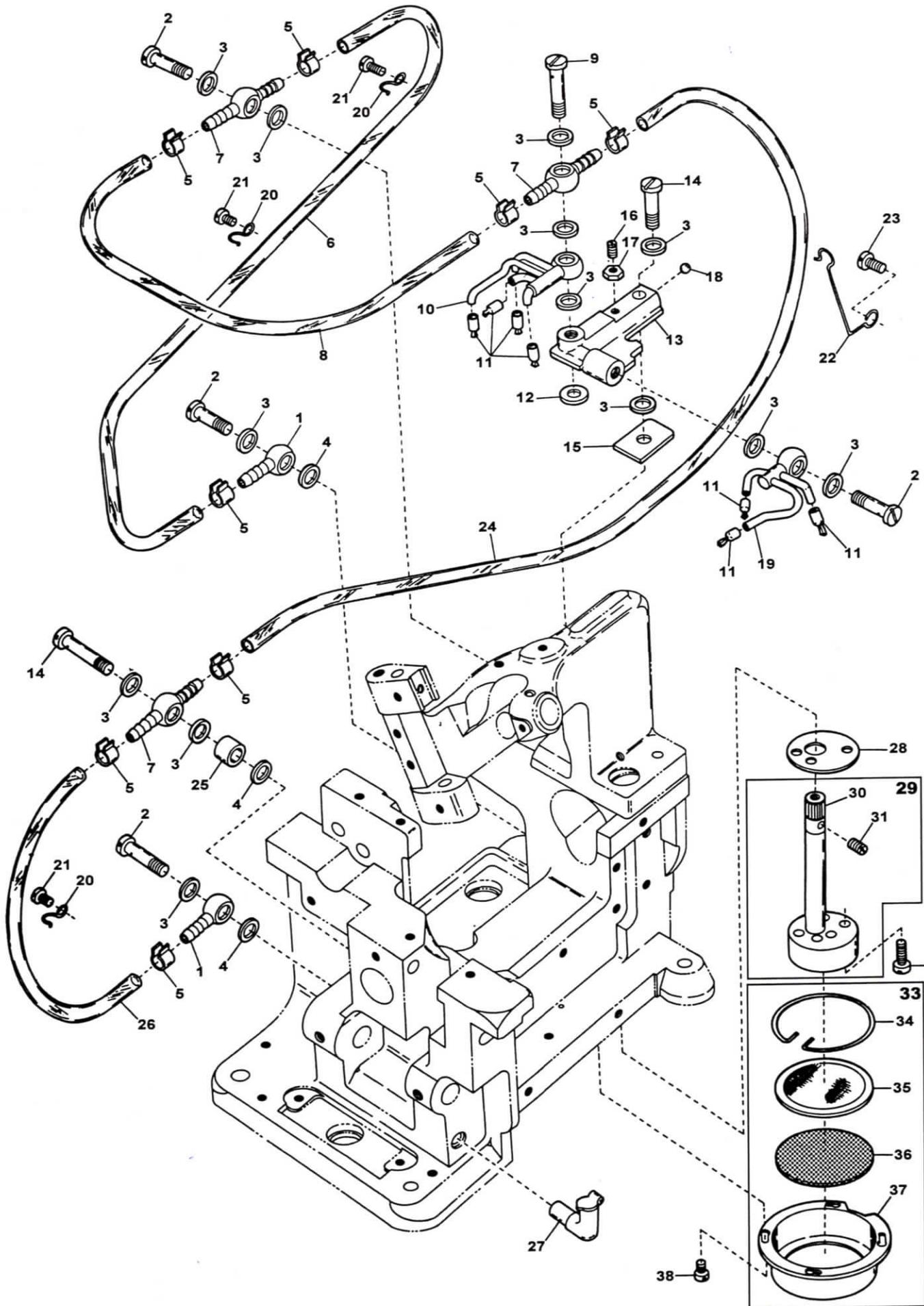


9. MODEL:302/303/304/306/306A



| 9. FEED DRIVING MECHANISM | | | |
|---------------------------|-----------|---------------------------------|----------------|
| REF NO. | PARTS NO. | DESCRIPTION | |
| 1 | 37651 | Feed Dog Driving Connecting Rod | |
| 1-1 | 37651S | Complete set | |
| | 7650 | Screw | |
| | 3434 | Screw | |
| | 37650 | Feed Driving Eccentric | |
| 2 | 2043 | Screw | |
| 3 | 281 | Oil Wick | |
| 4 | 5028 | Screw | |
| 5 | 555 | Washer | |
| 6 | 38064 | Connecting Rod Pin | |
| 7 | 551 | Washer | |
| 8 | 5540 | Screw | |
| 9 | 37652 | Feed Regulator | |
| 10 | 1156-1 | Screw | |
| 11 | 37653 | Feed Bar Shaft | |
| 12 | 9604 | Screw | |
| 13 | 37256 | Differential Feed Rocker | |
| 14 | 287 | Oil Wick | |
| 15 | 37443 | Collar | |
| 16 | 1222 | Screw | |
| 17 | 37442 | Feed Holder Pin | |
| 18 | 37279 | Feed Dog Holder | |
| 19 | 9604 | Screw | |
| 20 | 37410 | Feed Dog Driving Lever | |
| 20-1 | 37410S | PIN SCREW | |
| 20-2 | 37410N | NUT | |
| 21 | ---- | Plain Feed Dog | |
| 22 | 1208 | Screw | |
| REF NO. | MODEL | PARTS NO. | DESCRIPTION |
| 21 | IDL-302 | 37273-302 | Plain Feed Dog |
| | IDL-303 | 37273-303 | Plain Feed Dog |
| | IDL-304 | 37439 | Plain Feed Dog |
| | IDL-306 | 37273 | Plain Feed Dog |
| | IDL-306A | 37273-306A | Plain Feed Dog |
| | IDL-306S | 37273-306S | Plain Feed Dog |

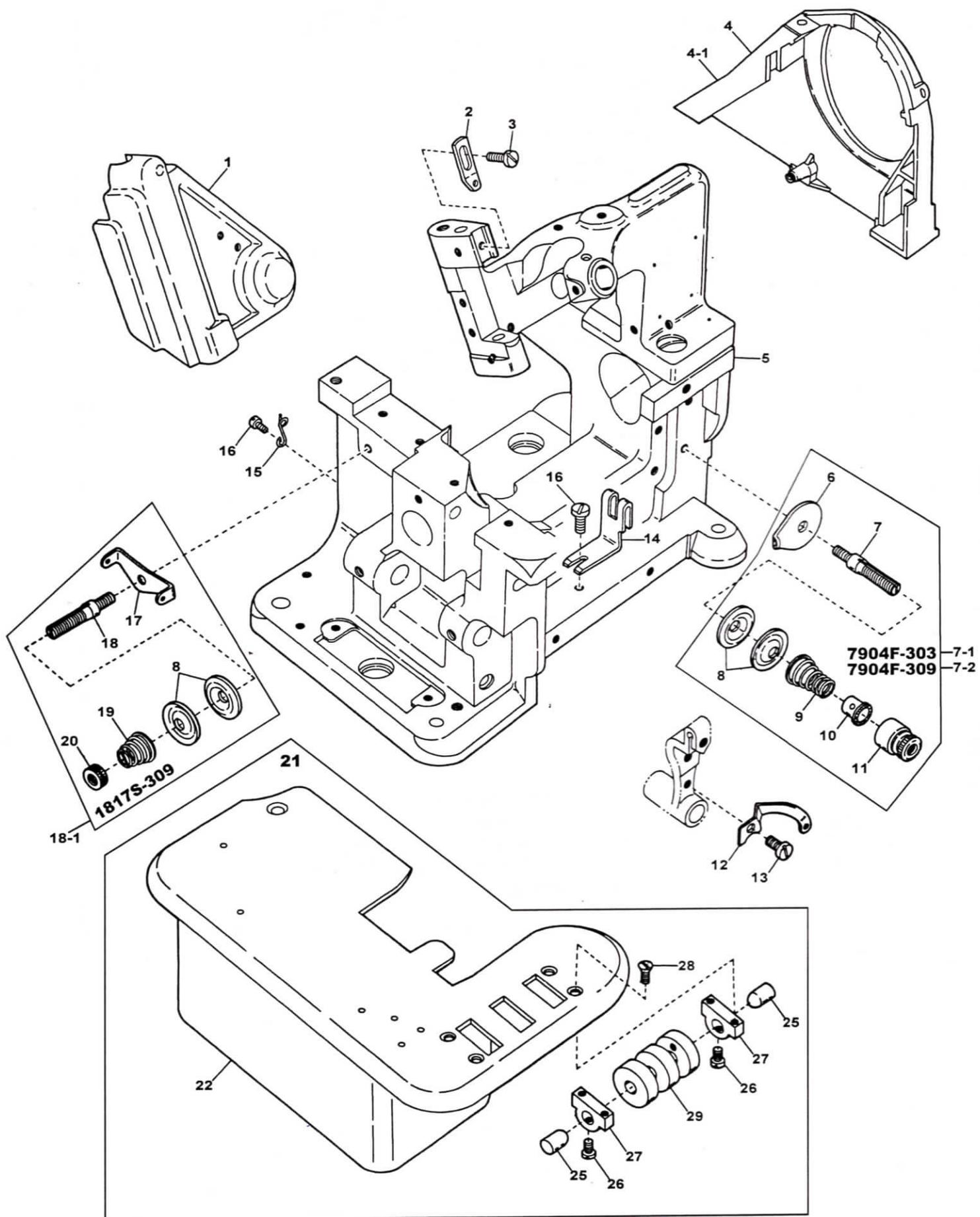
10. MODEL:302/303/304/306/306A



10. LUBRICATING MECHANISM

| REF NO. | PARTS NO. | DESCRIPTION |
|---------|-----------|----------------------------------|
| 1 | 37669 | Oil Tube Fitting One Way End |
| 2 | 7668 | Oil Tube Fitting Stud |
| 3 | 567 | Seal |
| 4 | 566 | Seal |
| 5 | 37675 | Oil Tube Clamp |
| 6 | 37433 | Oil Tube |
| 7 | 37668 | Oil Tube Fitting Two Way |
| 8 | 93619 | Oil Tube |
| 9 | 7667 | Oil Tube Fitting Stud |
| 10 | 37670 | Oil Focal Point |
| 11 | 37697 | Oil Cap |
| 12 | 569 | Seal |
| 13 | 37666 | Oil Tube Joint Holder |
| 14 | 7666 | Oil Tube Fitting Stud |
| 15 | 37667 | Oil Tube Joint Holder Gasket |
| 16 | 9209 | Screw |
| 17 | 340 | Nut |
| 18 | 637 | Seal Plug |
| 19 | 37479 | Oil Focal Point |
| 20 | 37677 | Oil Tube Holder (Small) |
| 21 | 1196 | Screw |
| 22 | 37676 | Oil Tube Holder (Large) |
| 23 | 1208 | Screw |
| 24 | 37432 | Oil Tube |
| | 37432S | Oil Tube Complete Set |
| 25 | 37691 | Oil Tube Joint Ring |
| 26 | 37431 | Oil Tube |
| 27 | 37685 | Oil Cup |
| 28 | 37659 | Oil Pump Gasket |
| 29 | 37684 | Oil Pump, Complete Set |
| 30 | 37660 | Worm Gear |
| 31 | 3410 | Screw |
| 32 | 7658 | Screw |
| 33 | 38172 | Pump Filter Screen, C. Set |
| 34 | 38176 | Pump Filter Screen Clamp |
| 35 | 38175 | Pump Filter Screen (Fine Mesh) |
| 36 | 38174 | Pump Filter Screen (Coarse Mesh) |
| 37 | 38173 | Pump Filter Case |
| 38 | 7302 | Screw |

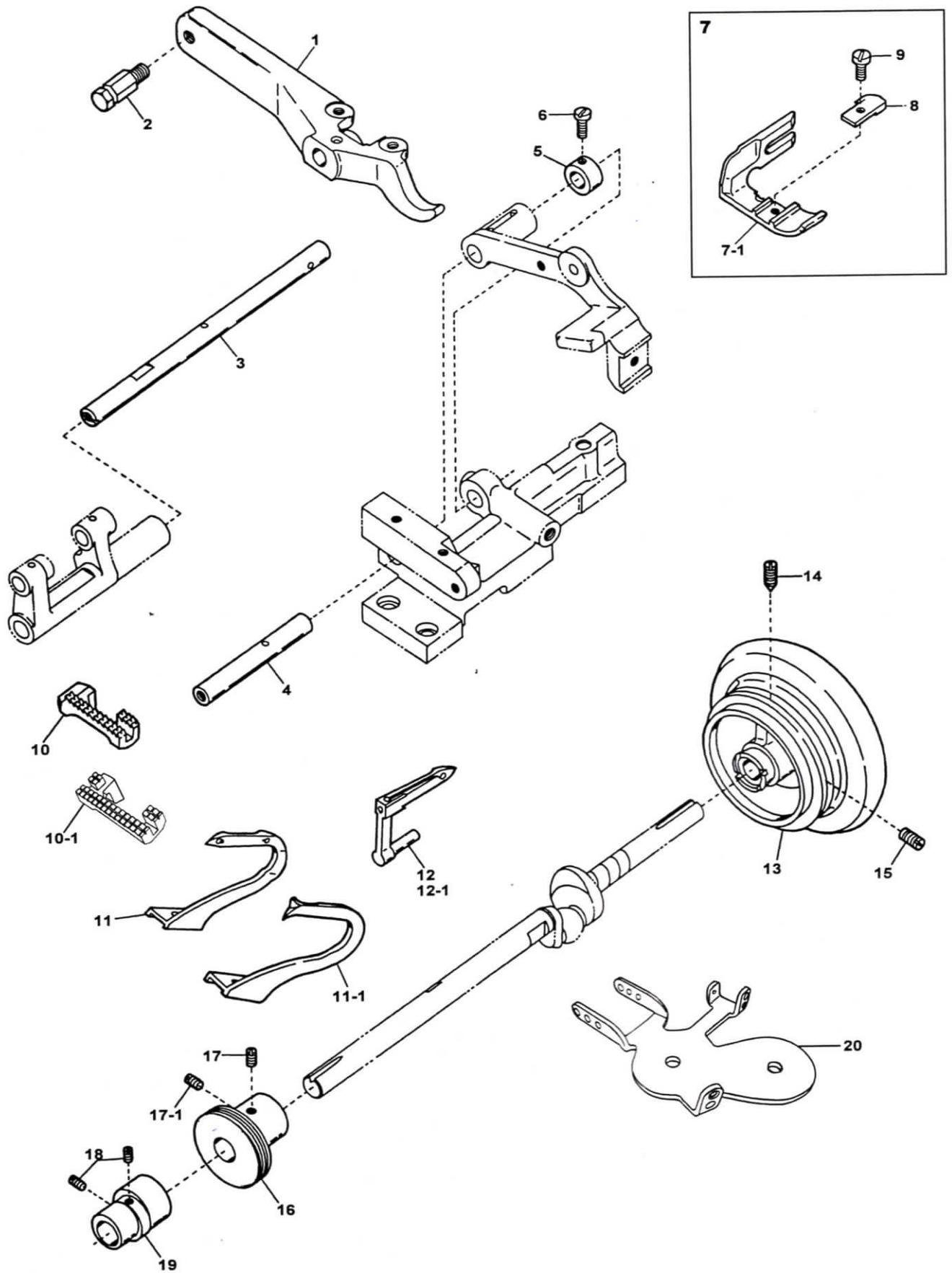
11. MODEL:308/309/309B



11. EXCLUSIVE PARTS (1)

| REF NO. | PARTS NO. | DESCRIPTION | |
|---------|-------------|------------------------------------|------------------------------------|
| 1 | 37804 | Needle Bar Cover | |
| 2 | 37101 | Needle Thread Eyelet | |
| 3 | 4358 | Screw | |
| 4 | 2000002-306 | Belt Cover | |
| 4-1 | 2000002-309 | Belt Cover | |
| 5 | 37801 | Machine Frame Unit | |
| 6 | 37813 | Tension Disc Eyelet | |
| 7 | 7904 | Tension Post | |
| 7-1 | 7904F-303 | Complete set | |
| 7-2 | 7904F-309 | Complete set | |
| 8 | 31111 | Tension Disc | |
| 9 | ---- | Upper Looper Thread Tension Spring | |
| 10 | 37170 | Tension Spring Bushing | |
| 11 | 56 | Adjusting Nut | |
| 12 | 37833 | Upper Looper Thread Pull-Off | |
| 13 | 1222 | Screw | |
| 14 | 37814 | Thread Take-Up Eyelet | |
| 15 | 90185 | Thread Eyelet | |
| 16 | 1208 | Screw | |
| 17 | 38074 | Tension Disc Eyelet | |
| 18 | 1817 | Tension Post | |
| 18-1 | 1817S-309 | Complete set | |
| 19 | 37113 | Lower Looper Thread Tension Spring | |
| 20 | 56 | Adjusting Nut | |
| 21 | 37834S | Cloth Plate, Complete Set | |
| 22 | 37834 | Cloth Plate | |
| 23 | ---- | ----- | |
| 24 | ---- | ----- | |
| 25 | 37453 | Roller Holder | |
| 26 | 3433 | Screw | |
| 27 | 37809 | Roller Holder Bracket | |
| 28 | 5345 | Screw | |
| 29 | 37452 | Roller | |
| REF NO. | MODEL | PARTS NO. | DESCRIPTION |
| 9 | IDL-303 | 37632 | Upper Looper Thread Tension Spring |
| | IDL-308 | 37113 | Upper Looper Thread Tension Spring |
| | IDL-309 | 37115 | Upper Looper Thread Tension Spring |

12.MODEL:308/309/309B

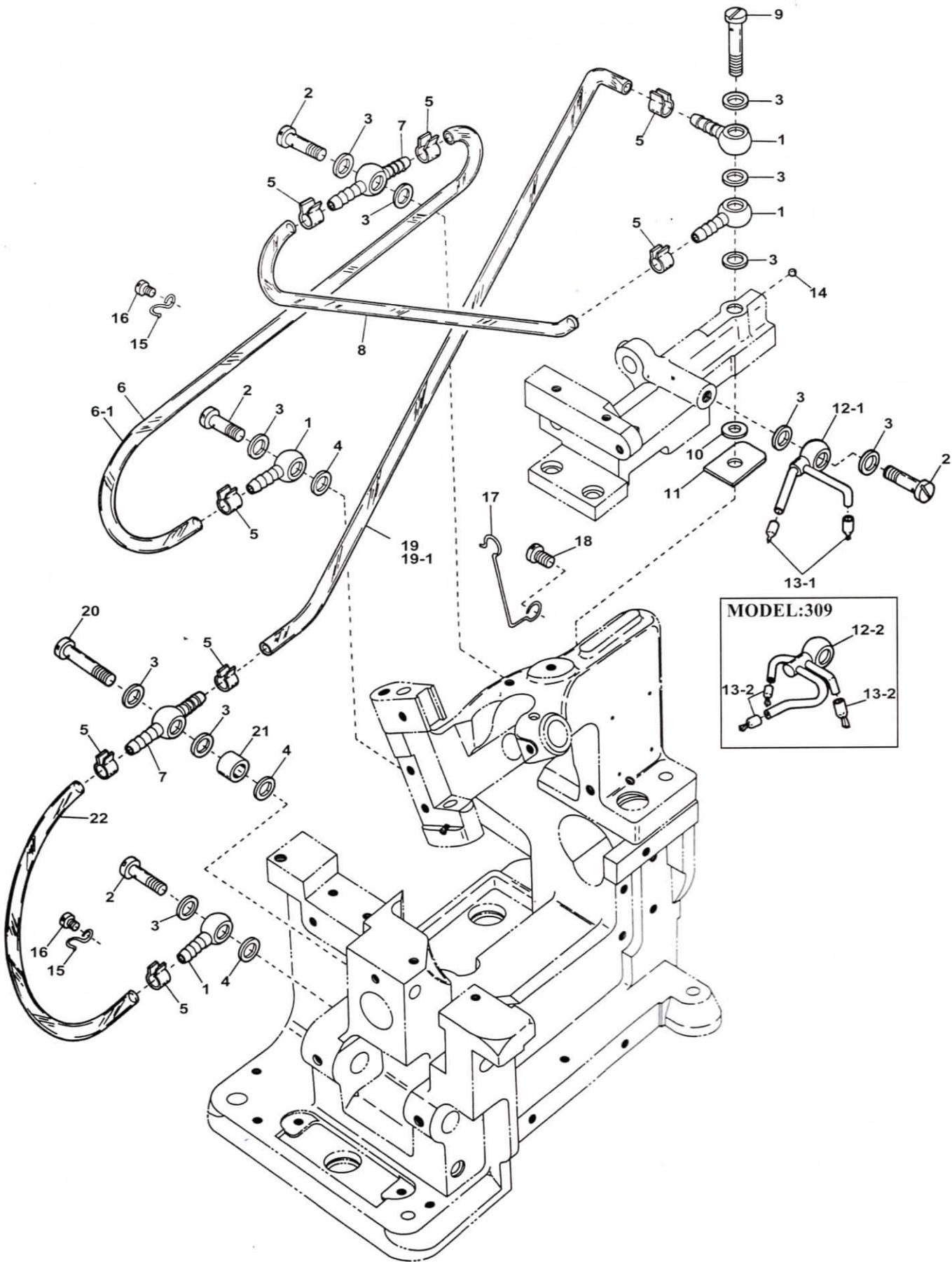


12. EXCLUSIVE PARTS (2)

| REF NO. | PARTS NO. | DESCRIPTION |
|----------------|------------------|-----------------------------------|
| 1 | 37755 | Foot Lifter Lever |
| 2 | 37757 | Chain Latch Bolt |
| 3 | 37835 | Feed Bar Shaft |
| 4 | 37826 | Presser Arm Hinge Pin |
| 5 | 37827 | Collar |
| 6 | 7302 | Screw |
| 7 | 37848 | Presser Foot, Complete Set |
| 7-1 | 37848B | Presser Foot Base |
| 8 | 37850 | Presser Foot Stitch Tongue |
| 9 | 1228 | Screw |
| 10 | 37439 | Plain Feed Dog |
| 10-1 | 37439-309B | Plain Feed Dog |
| 11 | 37832 | Upper Looper |
| 11-1 | 37271-309B | Upper Looper |
| 12 | 37076 | Lower Looper |
| 12-1 | 37076-309B | Lower Looper |
| 13 | 37816 | Pulley |
| 14 | 2347 | Screw |
| 15 | 1419 | Screw |
| 16 | 37438 | Feed Driving Eccentric |
| 17 | 3434 | Screw |
| 17-1 | 7650 | Screw |
| 18 | 1457 | Screw |
| 19 | 37437 | Feed Lift & Upper Knife Eccentric |
| 20 | 37812-L309B | Tension Disc Eyelet |

*11. 37832B Upper Looper (Strong Base)

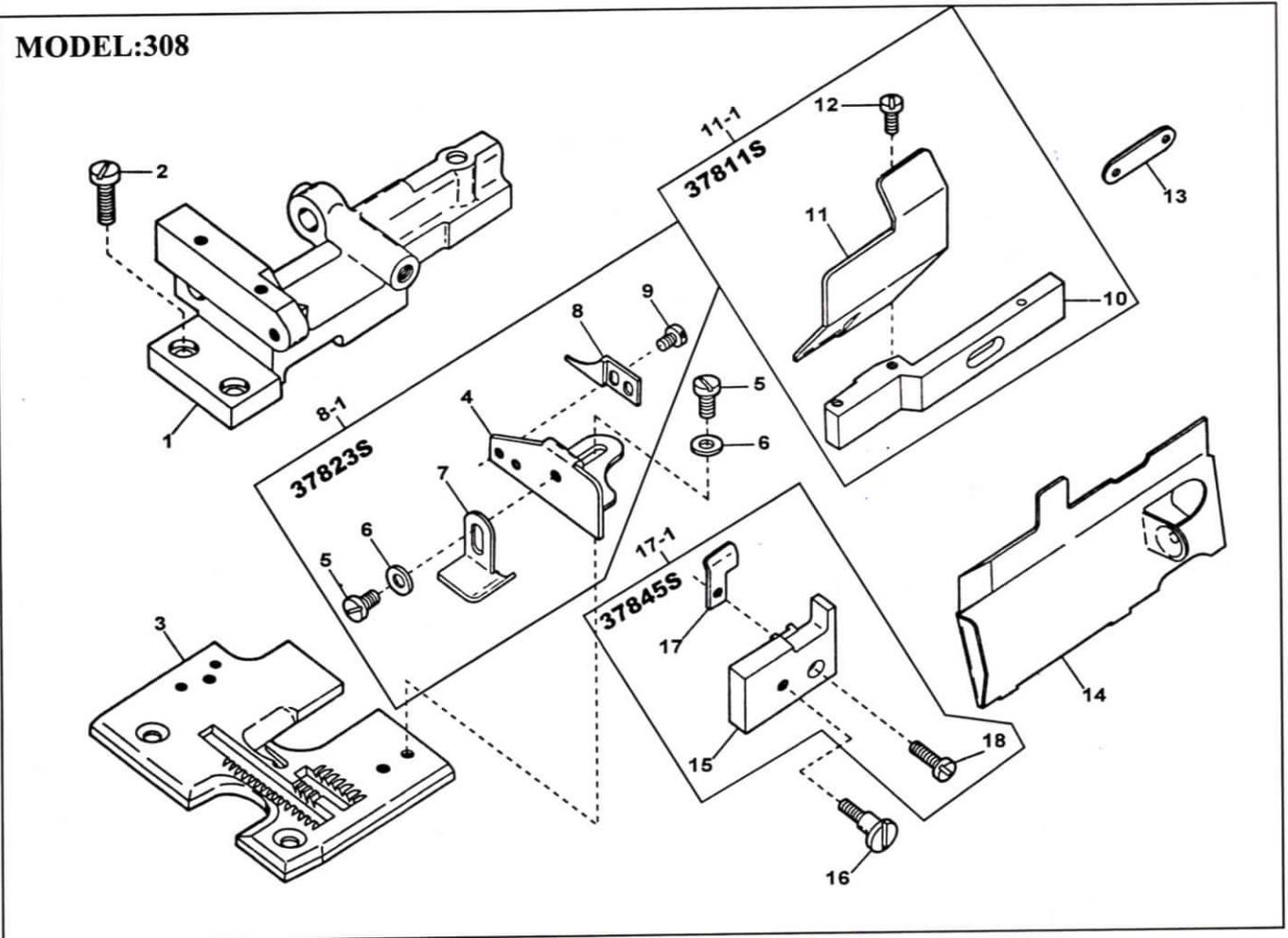
13.MODEL:308/309/309B



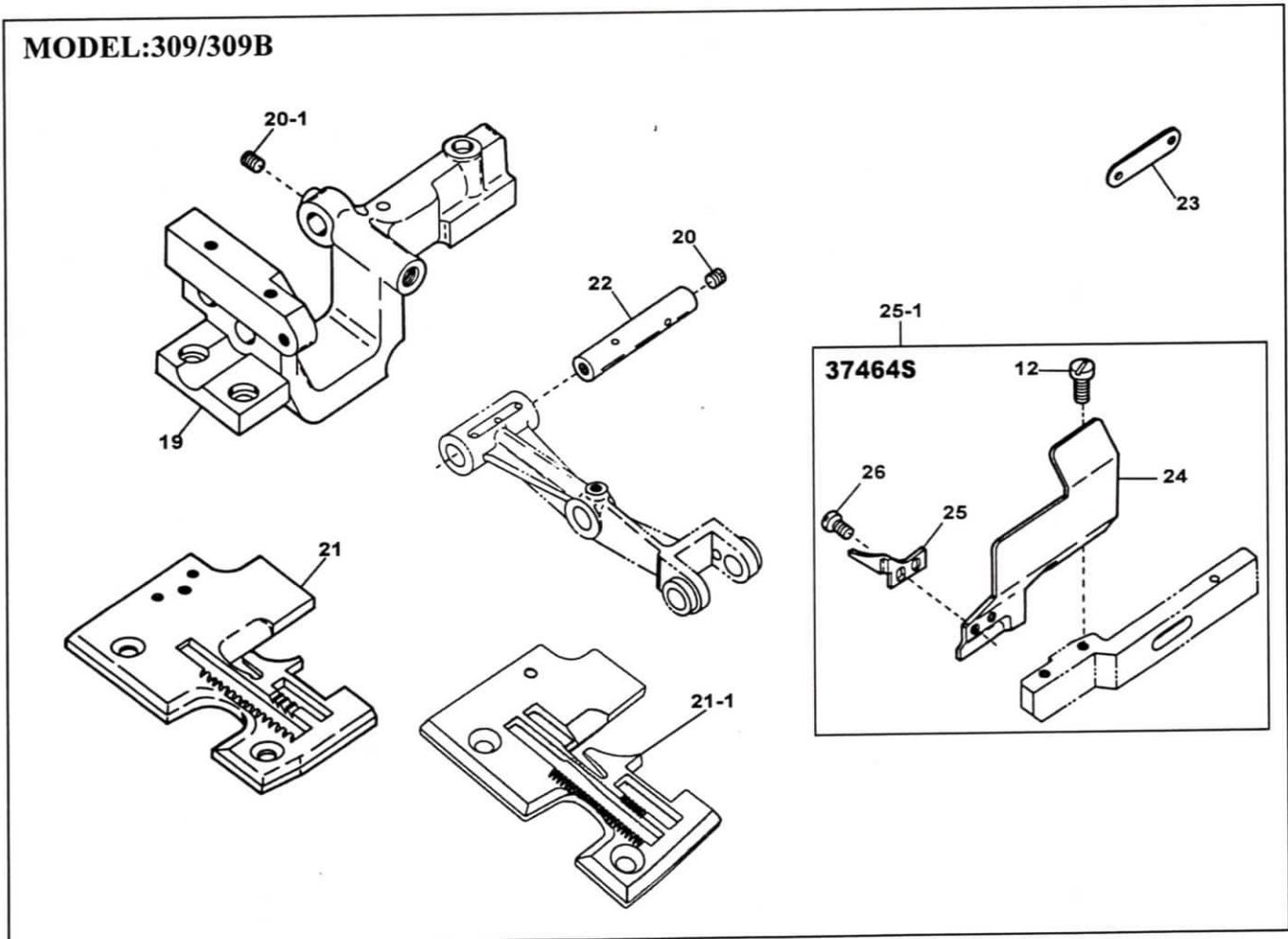
13. EXCLUSIVE PARTS (3)

| REF NO. | PARTS NO. | DESCRIPTION |
|----------------|------------------|------------------------------|
| 1 | 37669 | Oil Tube Fitting One Way End |
| 2 | 7668 | Oil Tube Fitting Stud |
| 3 | 567 | Seal |
| 4 | 566 | Seal |
| 5 | 37675 | Oil Tube Clamp |
| 6 | 37433 | Oil Tube |
| 6-1 | 37433S | Oil Tube Complete Set |
| 7 | 37668 | Oil Tube Fitting Two Way |
| 8 | 37435 | Oil Tube |
| 9 | 6762 | Oil Tube Fitting Stud |
| 10 | 569 | Seal |
| 11 | 37667 | Oil Tube Joint Holder Gasket |
| 12-1 | 37715 | Oil Focal Foimt Model : 308 |
| 12-2 | 37479 | Oil Focal Foimt Model : 309 |
| 13-1 | 37697 | Oil Cap Model : 308 |
| 13-2 | 37697 | Oil Cap Model : 309 |
| 14 | 3433 | Screw |
| 15 | 37677 | Oil Tube Holder (Small) |
| 16 | 1196 | Screw |
| 17 | 37880 | Oil Tube Holder (Large) |
| 18 | 1208 | Screw |
| 19 | 37481 | Oil Tube |
| 19-1 | 37481S | Oil Tube Complete Set |
| 20 | 7666 | Oil Tube Fitting Stud |
| 21 | 37691 | Oil Tube Joint Ring |
| 22 | 37431 | Oil Tube |

MODEL:308



MODEL:309/309B



14. EXCLUSIVE PARTS (4)

| REF NO. | PARTS NO. | DESCRIPTION |
|----------------|------------------|----------------------------------|
| 1 | 37825 | Foot Lifter Device Bracket |
| 2 | 1156 | Screw |
| 3 | 37800 | Stitch Plate |
| 4 | 37821 | Edge Guide |
| 5 | 4358 | Screw |
| 6 | 532 | Washer |
| 7 | 37822 | Fabric Guide |
| 8 | 37823 | Auxiliary Stitch Tongue |
| 8-1 | 37823S | Complete Set |
| 9 | 1228 | Screw |
| 10 | 37466 | Chip Guard Holder |
| 11 | 37811 | Chip Guard |
| 11-1 | 37811S | Complete set |
| 12 | 7609 | Screw |
| 13 | 37839 | Model Plate |
| 14 | 37604 | Front Cover |
| 15 | 37824 | Needle Guard Bracket |
| 16 | 2086 | Screw |
| 17 | 37845 | Needle Guard |
| 17-1 | 37845S | Complete set |
| 18 | 1174 | Screw |
| 19 | 37465 | Foot Lifter Device Bracket |
| 20 | 9604 | Screw |
| 20-1 | 1457-2 | Screw |
| 21 | 37459 | Stitch Plate |
| 21-1 | 37459-309B | Stitch Plate |
| 22 | 37468 | Upper Knife Driving Arm Stud Pin |
| 23 | 37480 | Model Plate |
| 24 | 37461 | Chip Guard |
| 25 | 37464 | Auxiliary Stitch Tongue |
| 25-1 | 37464S | Complete set |
| 26 | 4237 | Screw |

| PARTS NO | PAGE NO | REF NO | PARTS NO | PAGE NO | REF NO | PARTS NO | PAGE NO | REF NO | PARTS NO | PAGE NO | REF NO | PARTS NO | PAGE NO | REF NO | PARTS NO | PAGE NO | REF NO |
|----------|---------|--------|----------|---------|--------|----------|---------|--------|----------|---------|--------|----------|---------|--------|----------|---------|--------|
| 12 | 3 | 10 | 1175 | 8 | 9 | 3434 | 9 | 1-1 | 7904 | 3 | 6 | 37268 | 7 | 11 | 37481 | 13 | 19 |
| 18 | 8 | 23 | 1176 | 6 | 5 | 3434 | 12 | 17 | 7904 | 11 | 7 | 37271 | 8 | 16 | 37482 | 1 | 20 |
| 56 | 3 | 24 | 1196 | 1 | 12 | 3591 | 4 | 2 | 9209 | 10 | 16 | 37272 | 8 | 27 | 37482 | 1 | 20 |
| 56 | 11 | 11 | 1196 | 3 | 14 | 3593 | 4 | 3 | 9604 | 2 | 5 | 37273 | 9 | 21 | 37483 | 5 | 22 |
| 56 | 11 | 20 | 1196 | 8 | 17 | 3635 | 4 | 17 | 9604 | 8 | 14 | 37279 | 9 | 18 | 37487 | 2 | 31 |
| 62 | 5 | 20 | 1196 | 10 | 21 | 3635 | 5 | 8 | 9604 | 9 | 12 | 37286 | 2 | 33 | 37489 | 1 | 23 |
| 144 | 1 | 37 | 1196 | 13 | 16 | 3635 | 8 | 3 | 9604 | 9 | 19 | 37288 | 8 | 27 | 37495 | 1 | 28 |
| 278 | 5 | 15 | 1208 | 1 | 16 | 3635 | 8 | 11 | 9604 | 14 | 20 | 37304 | 8 | 12 | 37496 | 7 | 9 |
| 281 | 9 | 3 | 1208 | 2 | 9 | 3639 | 4 | 11 | 30413 | 6 | 11 | 37307 | 8 | 18 | 37540 | 2 | 15 |
| 287 | 9 | 14 | 1208 | 7 | 8 | 3709 | 4 | 15 | 30414 | 6 | 9 | 37315 | 8 | 20 | 37544 | 1 | 15 |
| 290 | 4 | 20 | 1208 | 9 | 22 | 3710 | 3 | 2 | 31111 | 3 | 5 | 37410 | 9 | 20 | 37547 | 4 | 10 |
| 290 | 6 | 4 | 1208 | 10 | 23 | 4236 | 7 | 12 | 31111 | 11 | 8 | 37431 | 10 | 26 | 37552 | 6 | 7 |
| 290 | 8 | 22 | 1208 | 11 | 16 | 4236 | 8 | 19 | 37016 | 3 | 21 | 37431 | 13 | 22 | 37552 | 7 | 1 |
| 292 | 8 | 4 | 1208 | 13 | 18 | 4237 | 2 | 34 | 37016 | 3 | 21 | 37432 | 10 | 24 | 37569 | 1 | 6 |
| 294 | 4 | 12 | 1218 | 2 | 29 | 4237 | 14 | 26 | 37048 | 7 | 15 | 37433 | 10 | 6 | 37604 | 14 | 14 |
| 294 | 8 | 7 | 1222 | 3 | 17 | 4313 | 5 | 16 | 37049 | 4 | 22 | 37433 | 13 | 6 | 37605 | 1 | 38 |
| 304 | 5 | 3 | 1222 | 6 | 13 | 4358 | 3 | 12 | 37057 | 5 | 1 | 37435 | 13 | 8 | 37606 | 1 | 39 |
| 334 | 7 | 6 | 1222 | 9 | 16 | 4358 | 11 | 3 | 37058 | 8 | 10 | 37437 | 12 | 19 | 37607 | 1 | 41 |
| 334 | 7 | 24 | 1222 | 11 | 13 | 4358 | 14 | 5 | 37059 | 5 | 10 | 37438 | 12 | 16 | 37609 | 1 | 3 |
| 340 | 10 | 17 | 1227 | 1 | 26 | 4435 | 5 | 18 | 37060 | 3 | 13 | 37439 | 9 | 21 | 37610 | 1 | 4 |
| 500 | 2 | 11 | 1228 | 12 | 9 | 5028 | 9 | 4 | 37062 | 5 | 19 | 37439 | 12 | 10 | 37612 | 1 | 2 |
| 531 | 2 | 26 | 1228 | 14 | 9 | 5062 | 2 | 19 | 37064 | 7 | 3 | 37442 | 9 | 17 | 37613 | 1 | 11 |
| 531 | 3 | 9 | 1335 | 8 | 21 | 5083 | 2 | 16 | 37065 | 7 | 14 | 37443 | 9 | 15 | 37616 | 1 | 21 |
| 531 | 7 | 17 | 1419 | 12 | 15 | 5345 | 1 | 34 | 37074 | 11 | 17 | 37452 | 1 | 35 | 37617 | 1 | 24 |
| 532 | 14 | 6 | 1457 | 4 | 9 | 5345 | 11 | 28 | 37076 | 12 | 12 | 37452 | 11 | 29 | 37618 | 1 | 25 |
| 541 | 1 | 10 | 1457 | 12 | 18 | 5540 | 9 | 8 | 37101 | 11 | 2 | 37453 | 1 | 31 | 37620 | 2 | 23 |
| 541 | | 5-1 | 1613 | 2 | 21 | 5541 | 7 | 18 | 37107 | 3 | 15 | 37453 | 11 | 25 | 37622 | 1 | 9 |
| 551 | 9 | 7 | 1732 | 5 | 23 | 6762 | 13 | 9 | 37108 | 3 | 18 | 37458 | 6 | 24 | 37624 | 2 | 4 |
| 554 | 2 | 30 | 1817 | 3 | 22 | 7143 | 7 | 4 | 37109 | 3 | 19 | 37459 | 14 | 21 | 37626 | 2 | 7 |
| 554 | 7 | 5 | 1817 | 11 | 18 | 7302 | 8 | 28 | 37112 | 3 | 25 | 37460 | 1 | 40 | 37627 | 2 | 8 |
| 555 | 9 | 5 | 2022 | 4 | 14 | 7302 | 10 | 38 | 37113 | 11 | 19 | 37461 | 2 | 31 | 37632 | 3 | 3 |
| 562 | 2 | 3 | 2022 | 8 | 2 | 7302 | 12 | 6 | 37113 | 11 | 9 | 37461 | 14 | 24 | 37632 | 3 | 23 |
| 566 | 10 | 4 | 2043 | 9 | 2 | 7311 | 7 | 27 | 37115 | 3 | 3 | 37462 | 4 | 8 | 37632 | 11 | 9 |
| 566 | 13 | 4 | 2086 | 6 | 19 | 7405 | 6 | 23 | 37115 | 3 | 23 | 37464 | 14 | 25 | 37634 | 3 | 1 |
| 567 | 2 | 17 | 2086 | 14 | 16 | 7609 | 1 | 5 | 37115 | 11 | 9 | 37465 | 14 | 19 | 37635 | 3 | 4 |
| 567 | 2 | 18 | 2133 | 7 | 23 | 7609 | 2 | 32 | 37127 | 5 | 9 | 37466 | 2 | 28 | 37645 | 4 | 13 |
| 567 | 10 | 3 | 2214 | 7 | 20 | 7609 | 14 | 12 | 37130 | 5 | 4 | 37466 | 14 | 10 | 37647 | 8 | 13 |
| 567 | 13 | 3 | 2285 | 7 | 22 | 7616 | 1 | 22 | 37130 | 8 | 8 | 37467 | 6 | 6 | 37648 | 8 | 24 |
| 569 | 10 | 12 | 2308 | 7 | 10 | 7616 | 2 | 27 | 37132 | 5 | 6 | 37468 | 14 | 22 | 37649 | 8 | 25 |
| 569 | 13 | 10 | 2347 | 12 | 14 | 7619 | 2 | 22 | 37133 | 4 | 18 | 37469 | 6 | 17 | 37650 | 4 | 6 |
| 637 | 10 | 18 | 2369 | 6 | 20 | 7650 | 4 | 7 | 37134 | 4 | 21 | 37470 | 6 | 15 | 37650 | 9 | 1-1 |
| 989 | 4 | 4 | 2371 | 7 | 13 | 7650 | 9 | 1-1 | 37144 | 7 | 19 | 37471 | 6 | 16 | 37651 | 9 | 1 |
| 1093 | 3 | 20 | 2419 | 1 | 36 | 7650 | 12 | 17-1 | 37145 | 7 | 26 | 37472 | 6 | 21 | 37652 | 9 | 9 |
| 1132 | 6 | 10 | 3410 | 10 | 31 | 7658 | 10 | 32 | 37146 | 7 | 21 | 37473 | 6 | 18 | 37653 | 9 | 11 |
| 1156 | 6 | 8 | 3433 | 1 | 32 | 7666 | 10 | 14 | 37147 | 7 | 25 | 37474 | 6 | 22 | 37654 | 4 | 16 |
| 1156 | 14 | 2 | 3433 | 5 | 11 | 7666 | 13 | 20 | 37148 | 7 | 16 | 37475 | 6 | 14 | 37659 | 10 | 28 |
| 1174 | 6 | 2 | 3433 | 11 | 26 | 7667 | 10 | 9 | 37150 | 5 | 12 | 37478 | 6 | 12 | 37660 | 10 | 30 |
| 1174 | 14 | 18 | 3433 | 13 | 14 | 7668 | 10 | 2 | 37170 | 11 | 10 | 37479 | 10 | 19 | 37666 | 10 | 13 |
| 1175 | 1 | 8 | 3434 | 4 | 19 | 7668 | 13 | 2 | 37256 | 9 | 13 | 37479 | 13 | 12-2 | 37667 | 10 | 15 |
| 1175 | 5 | 5 | 3434 | 7 | 2 | 7763 | 2 | 2 | 37262 | 3 | 11 | 37480 | 14 | 23 | 37667 | 13 | 11 |

| PARTS NO | PAGE NO | REF NO | PARTS NO | PAGE NO | REF NO | PARTS NO | PAGE NO | REF NO | PARTS NO | PAGE NO | REF NO |
|----------|---------|--------|-------------|---------|--------|-------------|---------|--------|-----------|---------|--------|
| 37668 | 10 | 7 | 37826 | 12 | 4 | 37268-303W | 7 | 11 | 37843S | 8 | 5-1 |
| 37668 | 13 | 7 | 37827 | 12 | 5 | 37271-304 | 8 | 16 | 37845S | 14 | 17-1 |
| 37669 | 10 | 1 | 37831 | 8 | 1 | 37271-309B | 12 | 11-1 | 37848B | 7 | 9-1 |
| 37669 | 13 | 1 | 37832 | 12 | 11 | 37271B | 8 | 16 | 37848B | 12 | 7-1 |
| 37670 | 10 | 10 | 37833 | 11 | 12 | 37272-303 | 8 | 27 | 7904F-303 | 11 | 7-1 |
| 37675 | 10 | 5 | 37834 | 11 | 22 | 37273-302 | 9 | 21 | 7904F-309 | 11 | 7-2 |
| 37675 | 13 | 5 | 37835 | 12 | 3 | 37273-303 | 9 | 21 | 7904U-306 | 3 | 6-1 |
| 37676 | 10 | 22 | 37839 | 14 | 13 | 37273-306A | 9 | 21 | 7904U-309 | 3 | 6-2 |
| 37677 | 10 | 20 | 37841 | 1 | 1 | 37273-306S | 9 | 21 | | | |
| 37677 | 13 | 15 | 37842 | 2 | 24 | 37286-304 | 2 | 33 | | | |
| 37678 | 2 | 10 | 37843 | 8 | 5 | 37286-306A | 2 | 33 | | | |
| 37679 | 2 | 14 | 37845 | 14 | 17 | 37304S | 8 | 12-1 | | | |
| 37680 | 2 | 13 | 37848 | 7 | 9 | 37315S | 8 | 20-1 | | | |
| 37681 | 2 | 12 | 37848 | 12 | 7 | 37410N | 9 | 20-2 | | | |
| 37684 | 10 | 29 | 37850 | 7 | 11 | 37410S | 9 | 20-1 | | | |
| 37685 | 10 | 27 | 37850 | 12 | 8 | 37432S | 10 | 24 | | | |
| 37691 | 10 | 25 | 37876 | 6 | 3 | 37433S | 13 | 6-1 | | | |
| 37691 | 13 | 21 | 37880 | 13 | 17 | 37439-309B | 12 | 10-1 | | | |
| 37692 | 2 | 25 | 37883 | 6 | 1 | 37459-309B | 14 | 21-1 | | | |
| 37697 | 10 | 11 | 37886 | 7 | 7 | 37459B | 5 | 22 | | | |
| 37697 | 13 | 13-1 | 38064 | 9 | 6 | 37460S | 1 | 40-1 | | | |
| 37697 | 13 | 13-2 | 38074 | 3 | 21 | 37464S | 14 | 25-1 | | | |
| 37699 | 2 | 6 | 38172 | 10 | 33 | 37467S | 6 | 6-1 | | | |
| 37703 | 4 | 1 | 38173 | 10 | 37 | 37469T | 6 | 17 | | | |
| 37709 | 2 | 1 | 38174 | 10 | 36 | 37473S | 6 | 18-1 | | | |
| 37715 | 13 | 12-1 | 38175 | 10 | 35 | 37481S | 13 | 19-1 | | | |
| 37755 | 12 | 1 | 38176 | 10 | 34 | 37483-302 | 5 | 22 | | | |
| 37757 | 12 | 2 | 38229 | 1 | 7 | 37483-303 | 5 | 22 | | | |
| 37799 | 4 | 5 | 38364 | 3 | 8 | 37483-306A | 5 | 22 | | | |
| 37800 | 14 | 3 | 90185 | 11 | 15 | 37483-306S | 5 | 22 | | | |
| 37801 | 1 | 20 | 90320 | 5 | 14 | 37489S | 1 | 23-1 | | | |
| 37801 | 1 | 20 | 90321 | 5 | 13 | 37495S | 1 | 27 | | | |
| 37801 | 1 | 20 | 93619 | 10 | 8 | 37496-303 | 7 | 9 | | | |
| 37801 | 11 | 5 | 7311-1 | 5 | 2 | 37496-306A | 7 | 9 | | | |
| 37804 | 11 | 1 | 7311-1 | 8 | 6 | 37496-306S | 7 | 9 | | | |
| 37805 | 2 | 20 | 1156-1 | 9 | 10 | 37496B | 7 | 9-1 | | | |
| 37809 | 1 | 33 | 1457-2 | 14 | 20-1 | 37648S | 8 | 24-1 | | | |
| 37809 | 11 | 27 | 1457-3 | 3 | 26 | 37651S | 9 | 1-1 | | | |
| 37811 | 14 | 11 | 1817S-303 | 3 | 22-1 | 37678S | 2 | 10-1 | | | |
| 37812 | 3 | 7 | 1817S-306 | 3 | 22-2 | 37805S | 2 | 20-1 | | | |
| 37813 | 11 | 6 | 1817S-309 | 11 | 18-1 | 37811S | 14 | 11-1 | | | |
| 37814 | 11 | 14 | 2000002-306 | 11 | 4 | 37812-L309B | 12 | 20 | | | |
| 37816 | 4 | 1 | 2000002-309 | 11 | 4-1 | 37823S | 14 | 8-1 | | | |
| 37816 | 12 | 13 | 37064S | 7 | 3-1 | 37832-303 | 8 | 16 | | | |
| 37818 | 5 | 17 | 37076-304 | 8 | 27 | 37832B | 12 | 11 | | | |
| 37821 | 14 | 4 | 37076-309B | 12 | 12-1 | 37834S | 1 | 27 | | | |
| 37822 | 14 | 7 | 37107S | 3 | 15-1 | 37834S | 11 | 21 | | | |
| 37823 | 14 | 8 | 37146S | 7 | 21-1 | 37841N | 1 | 14 | | | |
| 37824 | 14 | 15 | 37150S | 5 | 12-1 | 37841S | 1 | 1-1 | | | |
| 37825 | 14 | 1 | 37268-303 | 7 | 11 | 37841SC | 1 | 13 | | | |