

# AZ6004G

高速度1本針2本糸縫用  
オーバロックミシン  
1 Needle Overlock Stitch Machine  
For Abutted Seam

AZ6000Gの取扱説明書と調整が異なる部分を記載しています。

AZ6000Gの取扱説明書とあわせてご使用下さい。

Adjustments different with AZ6000G are mentioned in this book.

Read this book in combination with INSTRUCTIONS of AZ6000G.

取扱説明書は全て保管しておいて下さい。

安全にお使い頂くため、

最後までよくお読みになってからご使用下さい。

SAVE ALL INSTRUCTION MANUALS.

READ and UNDERSTAND

THOROUGHLY to OPERATE for SAFE USE.



ヤマトミシン製造株式会社

YAMATO SEWING MACHINE MFG. CO., LTD.

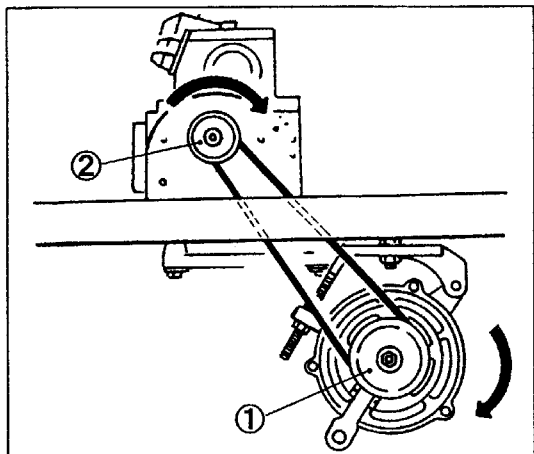
## 目次 / Contents

1. 縫い速度とプーリの回転方向 . . . . .	1
2. 正しい使い方 . . . . .	2
2-1 使用針 . . . . .	2
2-2 縁かがり縫いのルーパ糸調子 . . . . .	2
3. ミシンの調整 . . . . .	3
3-1 針の高さ . . . . .	3
3-2 下ルーパの引け量 . . . . .	3
3-3 上スプレッタの出量 . . . . .	4
3-4 下ルーパと上スプレッタのタイミング . . . . .	4
3-5 押エの上がり量の調節 . . . . .	5
4. 仕様 . . . . .	6

1. Sewing speed and rotating direction of pulley . . . . .	8
2. Proper operation . . . . .	9
2-1 Needle system . . . . .	9
2-2 Looper control for overedge stitch . . . . .	9
3. Adjustment of sewing machine . . . . .	10
3-1 Needle height . . . . .	10
3-2 Distance between needle and lower looper . . . . .	10
3-3 Timing between needle and upper spreader . . . . .	11
3-4 Timing between lower looper and upper spreader . . . . .	11
3-5 Adjustment of lifting amount of Presser foot . . . . .	12
4. Specifications . . . . .	13

\*\*\*\*\* ILLUSTRATED SPARE PARTS LIST \*\*\*\*\*

## 1. Sewing speed and rotating direction of pulley



The maximum sewing speed of this machine is shown at the table below.

To ensure long service life under good conditions, your new machine should be run lowered 15 - 20 % of the maximum sewing speed during the first 200 hours (approximately one month).

The rotating direction of the motor pulley① and the machine pulley② is clockwise as shown in the figure.

### ⚠ CAUTION

If machine rotate in reverse, oil could not circulate.

It may cause the machine trouble.

Maximum sewing speed(s.p.m.)

AZ6004G	5500
---------	------

outside diameter of motor pulley (mm)	sewing speed of machine for	
	50 Hz	60 Hz
70	/	4600
75	/	5300
80	4700	/
85	5300	/

For your reference, the chart shows the out side diameters of the motor pulley and s.p.m. of the machine when using the clutch motor of 3-shape, 2-pole, 400W(1/2 HP).

A commercial pulley is provided at intervals of 5 mm in diameter.

The diameters on the chart are the nearest size to the calculated value.

### ⚠ CAUTION

If a proper motor pulley is not used, machine sewing speed may exceed the maximum speed.

The machine may be troubled.

## 2. Proper operation

### 2-1 Needle system

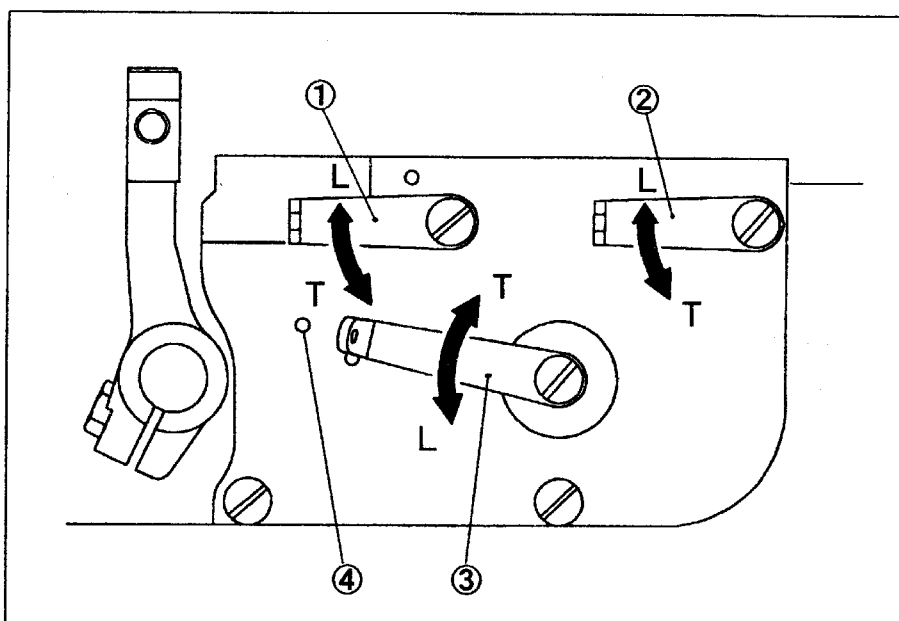
AZ6004G : DC×1(or 81×1)

Depend on the weight and type of material to be sewn, the proper needle and size should be selected.

■Needle size

Japanese standard	11	12	13	14
Metric standard	75	80	85	90

### 2-2 Looper thread control for overedge stitch



The standard setting of each looper thread eyelet is as follows ;

- 1) Make the lower looper eyelet ① and ② to be aligned.
- 2) Make the eye of lower looper thread pull-off ③ to line up to the notch mark ④ when the lower looper is at the rightmost of its stroke.

\* Moving each thread eyelet and the thread pull-off to the direction "T" tightens thread tension and moving them to the direction "L" loosens thread tension.

## 3. Adjustment of sewing machine

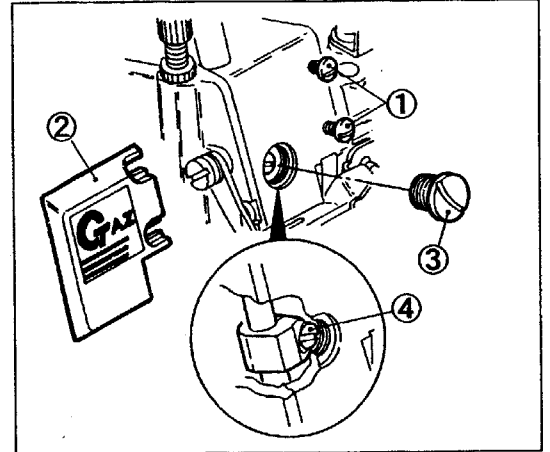


### WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

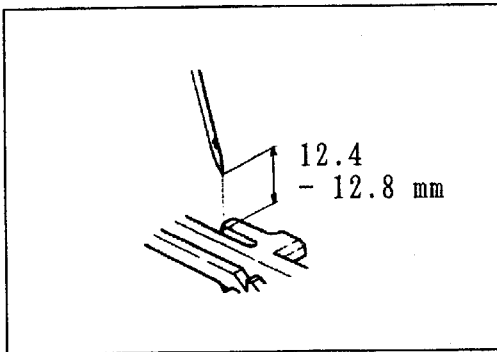
### 3-1 Needle height

1. Loosen the screws① and remove the logo plate②.
2. Remove the screw③.
3. Rotate the machine pulley and position the needle bar at the top dead point.
4. Loosen the screw④ on needle bar connecting bracket and adjust the position of needle bar by moving it up and down.



#### 《AZ6004G》

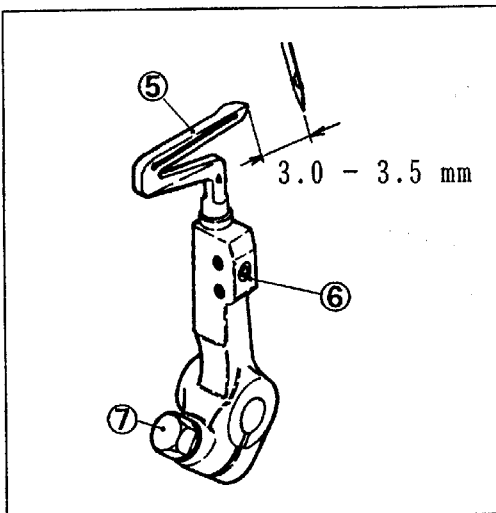
The needle height adjustment is made by locating the needle at the top of its stroke and setting the distance 12.4 - 12.8 mm from the tip of needle to the top of stitch plate.



### CAUTION

The tightening torque of screw on needle bar connecting bracket is 1.5N·m(15kgf·cm).

### 3-2 Distance between needle and lower looper



Loosen the screw⑦ on lower looper holder, rotate the machine pulley clockwise and adjust the lower looper⑤ to make the distance of 3.0 - 3.5 mm between the tip of lower looper and the center of needle when the lower looper is at the leftmost of its stroke.

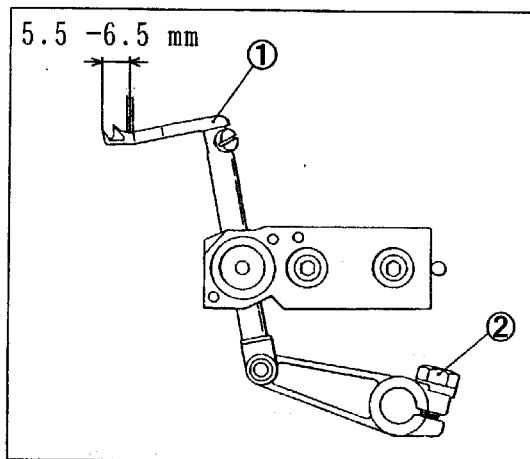
### 3. Adjustment of sewing machine



#### WARNING

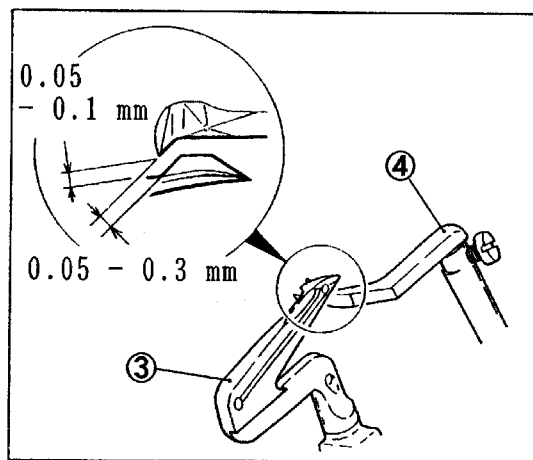
ALWAYS turn OFF the motor switch and check that the motor stops before the work.

#### 3-3 Timing between needle and upper spreader



Loosen the screw ② on upper looper crank. Rotate the machine pulley clockwise and adjust the upper spreader to make the distance of 5.5 - 6.5 mm between the tip of upper spreader and the center of needle when the upper spreader is at the leftmost of its stroke.

#### 3-4 Timing between lower looper and upper spreader



Rotate the machine pulley clockwise and make sure the clearance in front and back is 0.05 - 0.1 mm and also the clearance in left and right is 0.05 - 0.3 mm when the lower looper ③ meets with the upper spreader ④. With those clearances, the timing between the needle and the looper is correct.

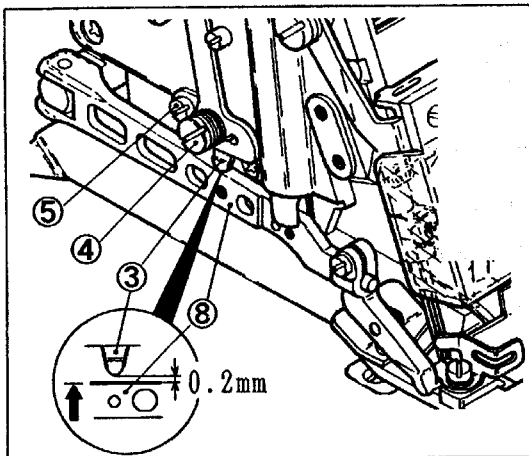
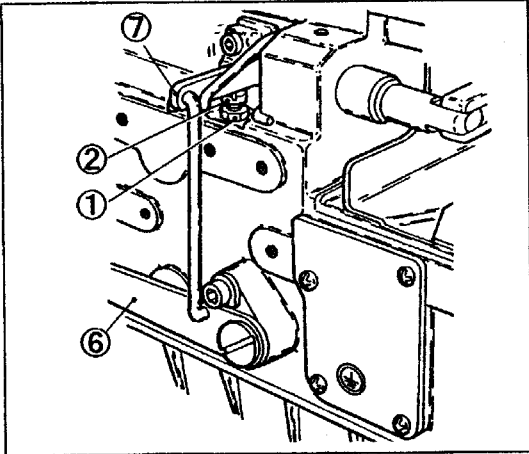
### 3. Adjustment of sewing machine



#### WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

#### 3-5 Adjustment of lifting amount of presser foot



Maximum lifting amount of presser foot is 3.5 mm.

1. Loosen the lock nut① and turn the screw② clockwise.
2. Loosen the screws④ and ⑤ on the stopper③ of presser foot.
3. Push down the presser foot lever⑥ and make its bottom surface to be in parallel with the stitch plate and place the presser foot 3.5 mm above the top surface of stitch plate.
4. With the presser foot is lifted up 3.5 mm, apply the screw② to the bottom surface of the lever⑦ of presser foot bar.
5. Tighten the lock nut①.
6. With the presser foot is lifted up 3.5 mm, make the clearance of 0.2 mm between the presser foot arm⑧ and the stopper③.
7. Tighten the screws④ and ⑤ for the stopper③.

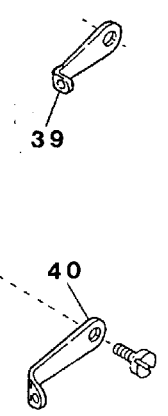
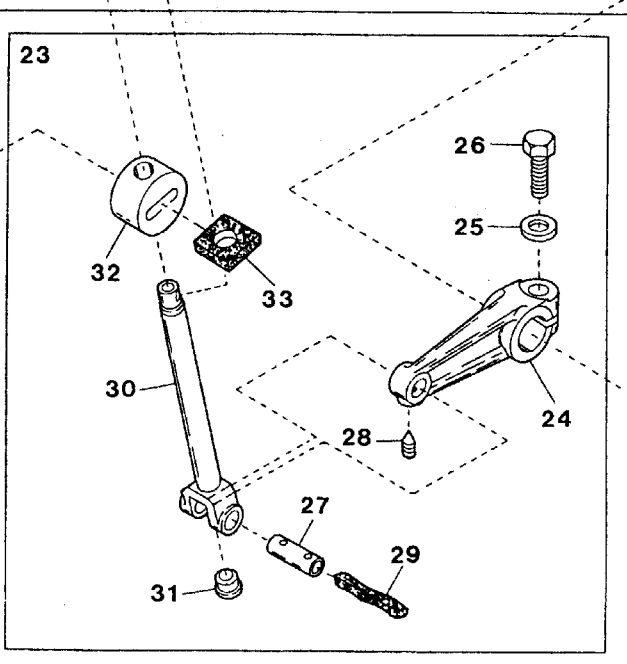
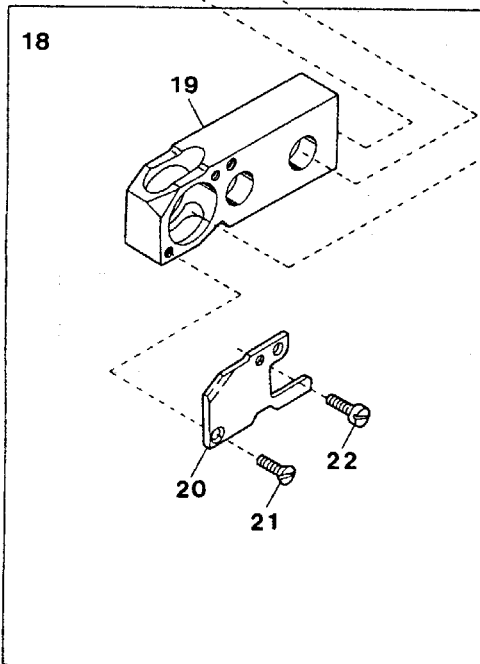
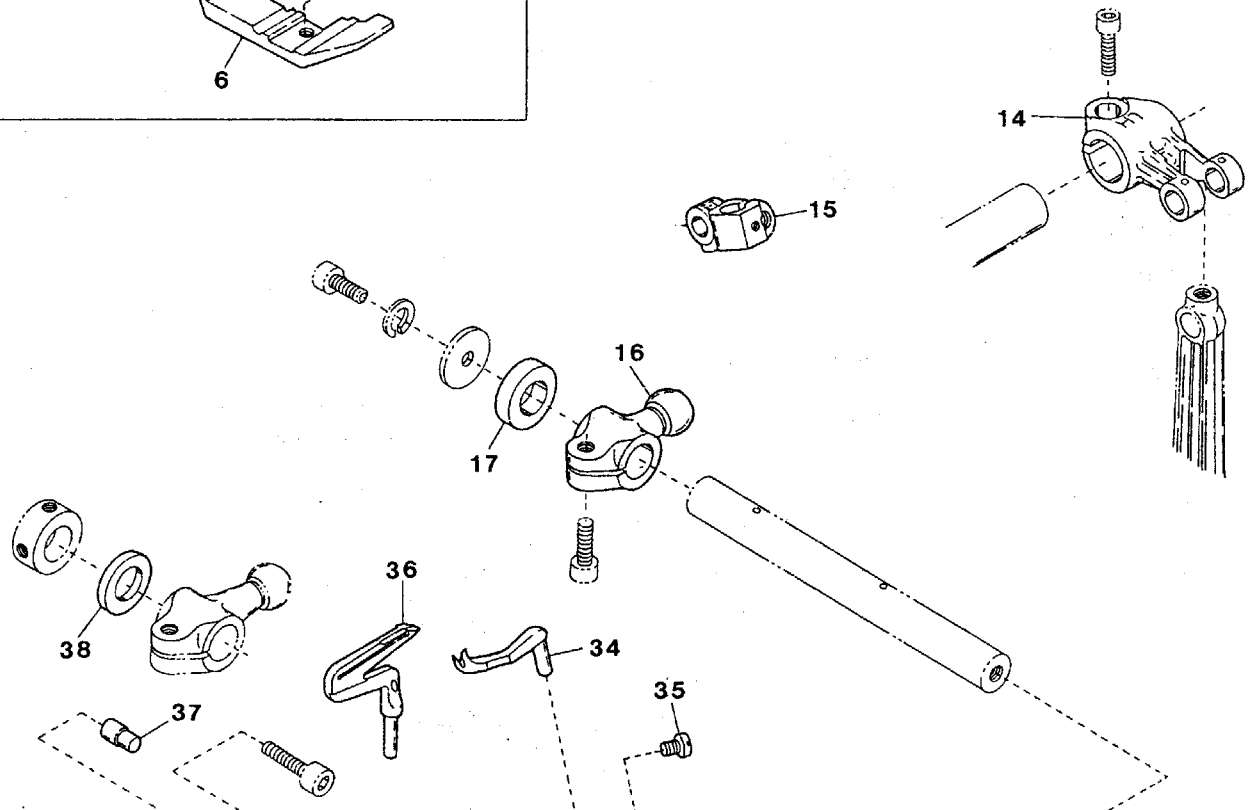
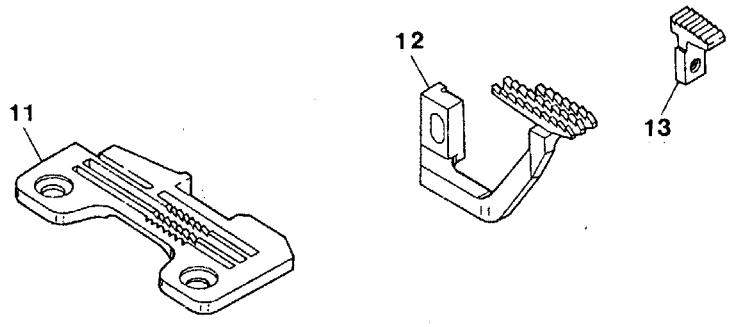
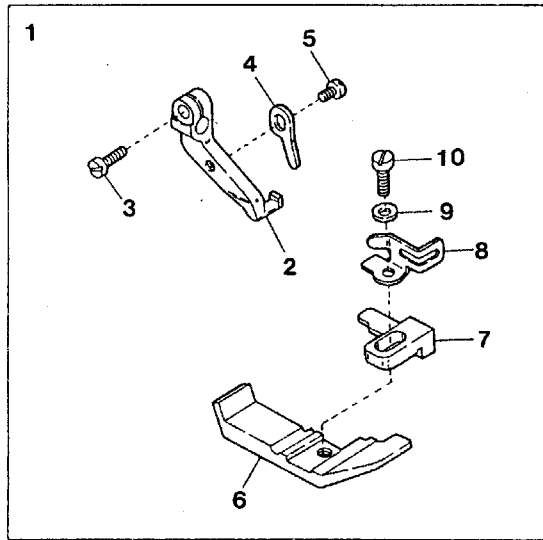
## 4. Specifications

Model	AZ6004G
Dimensions	380(L) × 245(W) × 310(H) mm
Weight	26.5kg
Construction	Dust-proof, Oil-tight and Completely Sealed
Stitch Type	503
Application	Overlock stitch sewing with abutted seam
Sewing Speed	Up to 5,500 s.p.m.
Stitch Length	1.0 - 4.0 mm
	6.5 - 25 stitches per inch
	7.5 - 30 stitches per 30 mm
Needle System	DC×1, Size 75 - 90 (#11 - 14)
Needle Stroke	25.7 mm
Presser Foot Lift	3.5 mm (max.)
Adjustment of Feeding Mode	Push Button System
Differential Ratio	Normal Differential (Gathering) 1 : 2.3 (max.)
	Reverse Differential (Stretching) 1 : 0.7 (max.) ( 1 : 0.6 is available by adjusting the position of lever pin on main feed dog)
Adjustment of Differential Feeding	Adjustment during the rotation is also available by lifting and lowering the lever.
Knives for Cutting Fabric	Lower Knife : Flat Type, made of Special Steel
	Upper Knife : Flat or Angled Type, made of Super Hard Alloy
Lubrication	Automatic Lubrication System (Forced fed by Trochoide-shaped Pump)
Lubrication Oil	YAMATO SF OIL No.28
Capacity of Oil Reservoir	900cc
Installation	Table top type
	Fully-submerged type / Semi-submerged type



1

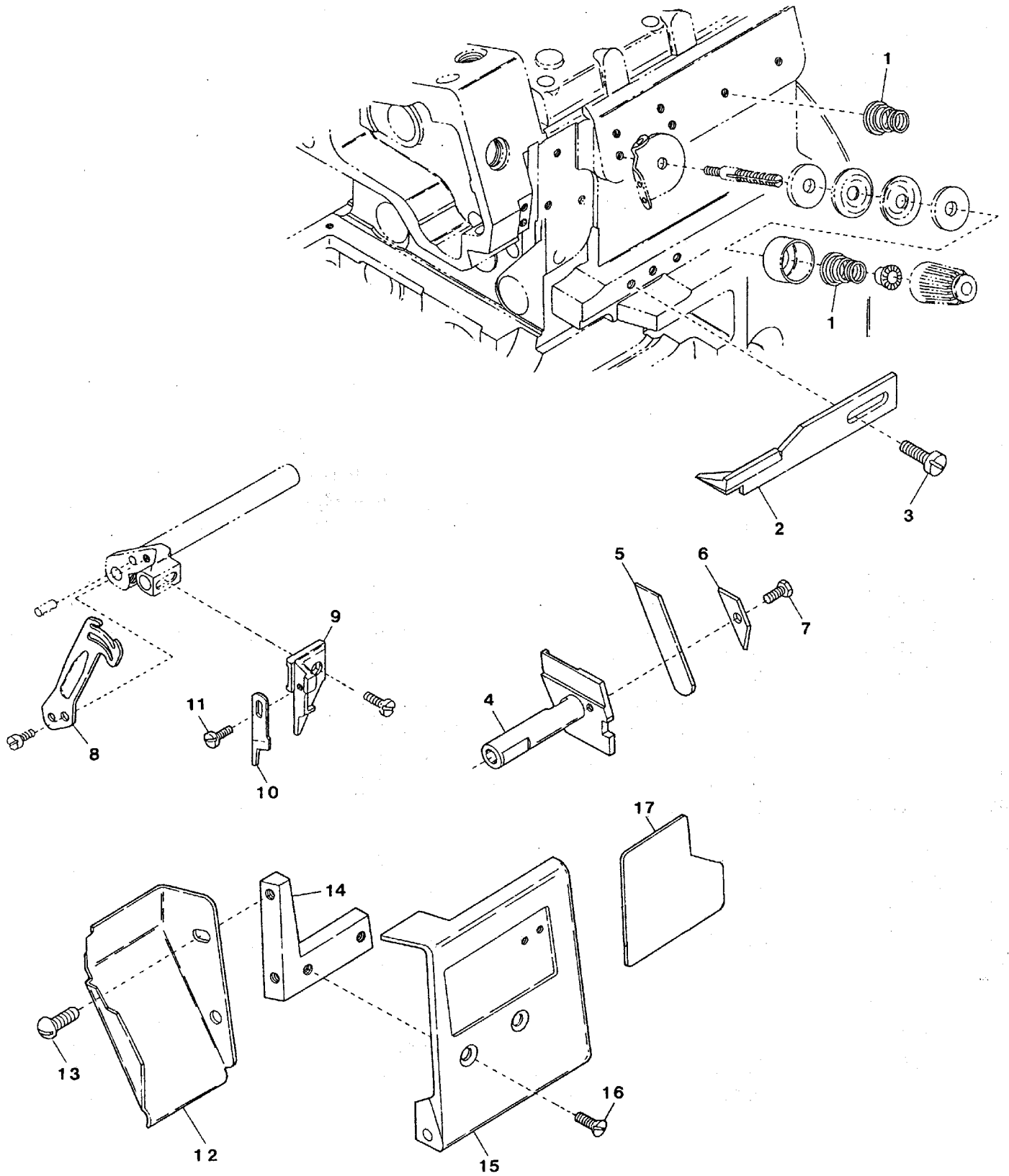
AZ6004G EXCLUSIVE PARTS(1)



## AZ6004G EXCLUSIVE PARTS(1)

## サブモデル専用部品(1)

Ref. No.	Parts No.	Description	品名	Amt. Req.
1	2157238	Presser Foot, Complete Set . . . . .	押エ(組) . . . . .	1
2	2157000	Presser Foot Hinge . . . . .	押エヒンジ . . . . .	1
3	110004	Screw(9/64-40×7) . . . . .	止ネジ . . . . .	1
4	2157041	Presser Foot Half-stay . . . . .	半固定片 . . . . .	1
5	110001	Screw(M4-0.7×5.4) . . . . .	止ネジ . . . . .	1
6	2107263	Presser Foot(Lower) . . . . .	押エ(下) . . . . .	1
7	2107264	Presser Foot Stitch Tongue . . . . .	爪 . . . . .	1
8	2107643	Finger Guard . . . . .	フィンガガード . . . . .	1
9	000444	Washer . . . . .	ワッシャ . . . . .	1
10	005036	Screw(1/8-44×5.6) . . . . .	止ネジ . . . . .	1
11	2108096	Stitch Plate . . . . .	針板 . . . . .	1
12	2109009	Differential Feed Dog . . . . .	前送り . . . . .	1
13	2106011	Auxiliary Feed Dog . . . . .	小送り . . . . .	1
14	2100946	Needle Bar Driving Lever . . . . .	針棒クランク軸腕 . . . . .	1
15	2150059	Needle Bar Connecting Bracket . . . . .	針棒抱キ . . . . .	1
16	2101141	Upper Loper Driving Lever . . . . .	上ルーパ軸腕 . . . . .	1
17	2100945	Driving Shaft Thrust Ring . . . . .	上ルーパスラストリング . . . . .	1
18	2150516	Upper Loper Bar Crank Arm, C. Set . . . . .	上ルーパクランク(組) . . . . .	1
19	2150084	Upper Loper Bar Guide Bushing . . . . .	ルーパ案内メタル . . . . .	1
20	2100227	Upper Loper Bar Guide Cover . . . . .	ルーパ案内蓋 . . . . .	1
21	130001	Screw(M2.5-0.45×6) . . . . .	止ネジ . . . . .	1
22	110071	Screw(M2.5-0.45×6) . . . . .	止ネジ . . . . .	1
23	2100885	Upper Loper Bar Guide, C. Set . . . . .	ルーパ案内(組) . . . . .	1
24	2101089	Upper Loper Bar Crank Arm . . . . .	上ルーパクランク . . . . .	1
25	300008	Washer . . . . .	ワッシャ . . . . .	1
26	140004	Screw(M6-1×16) . . . . .	止ネジ . . . . .	1
27	2100903	Upper Loper Bar Crank Arm Pin . . . . .	上ルーパクランクピン . . . . .	1
28	160002	Screw(M4-0.7×5) . . . . .	止ネジ . . . . .	1
29	310089	Oil Wick . . . . .	油芯 . . . . .	1
30	2100667	Upper Loper Bar . . . . .	ルーパ棒 . . . . .	1
31	000629	Seal Plug . . . . .	詰栓 . . . . .	1
32	2100892	Upper Loper Bar Guide . . . . .	ルーパ案内 . . . . .	1
33	310065	Oiling Felt . . . . .	フェルト . . . . .	2
34	2129311	Upper Spreader(for Needle Size #11~14) . . . . .	上スプレダ(針番#11~14用) . . . . .	1
35	210009	Screw(1/8-44×3.2) . . . . .	止ネジ . . . . .	1
36	2109346	Lower Loper . . . . .	下ルーパ . . . . .	1
37	2100947	Standard Pin . . . . .	基準ピン . . . . .	1
38	2100905	Lower Loper Driving Shaft Thrust Ring . . . . .	下ルーパスラストリング . . . . .	1
39	2120535	Lower Loper Thread Eyelet . . . . .	下ルーパ糸道 . . . . .	2
40	2101282	Upper Loper Thread Pull-off . . . . .	上ルーパ糸繰り . . . . .	1



## AZ6004G EXCLUSIVE PARTS (2)

## サブモデル専用部品 (2)

2

Ref. Na	Parts Na	Description	品名	Amt. Req.
1	0032952	Needle & Lower Looper Thread Tension Spring	針糸・下ルーパ線子バネ	2
2	2101280	Supplementary Stitch Tongue	補助爪	1
3	110047	Screw (M4-0.7×10)	止ネジ	2
4	2121236	Lower Knife Holder	下メス台	1
5	2121111	Lower Knife	下メス	1
6	2121237	Lower Knife Clamp	下メス押エ	1
7	140010	Screw (M4-0.7×6)	止ネジ	1
8	2150521	Needle Thread Pull-off	針糸繰り	1
9	2121234	Upper Knife Holder (Flat Type)	上メスホルダ (平)	1
10	2121235	Upper Knife	上メス	1
11	110004	Screw (M3.5-0.6×8)	止ネジ	1
12	2101277	Chip Guard (Openable)	切屑落シ板	1
13	110106	Screw (M4-0.7×8)	止ネジ	4
14	2101278	Chip Guard (Openable) Support	切屑落シ板取付台	1
15	2150501	Front Cover (Right)	前開キカバー	1
16	130006	Screw (M4-0.7×10)	ネジ	2
17	390680	Threading Chart	糸通シ図	1