

Yamato[®]

INSTRUCTIONS & PARTS LIST

for

VF2502, 2502P

High Speed 3 Needle Double Chainstitch Machine

This Instructions list the different items
from the instructions for VF2400 Class.

No. 1



YAMATO SEWING MACHINE MFG. CO., LTD.

CONTENTS

	Page
1. Specifications	1
2. Installation(Full-submerged type)	1
3. Drawing of Table Top Cut-out	2
4. Threading	4
5. Adjustment	5
5-1 Looper thread tension	5
5-2 Position of Looper Thread Take-up	5
5-3 Amount of Looper movement to the right	5
5-4 Height of Needle Bar	5
5-5 Front and rear position of Needle and Looper	6
5-6 Needle and Needle Guard	6
5-7 Adjustment of Upper Feed Roller(VF2502P)	6

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

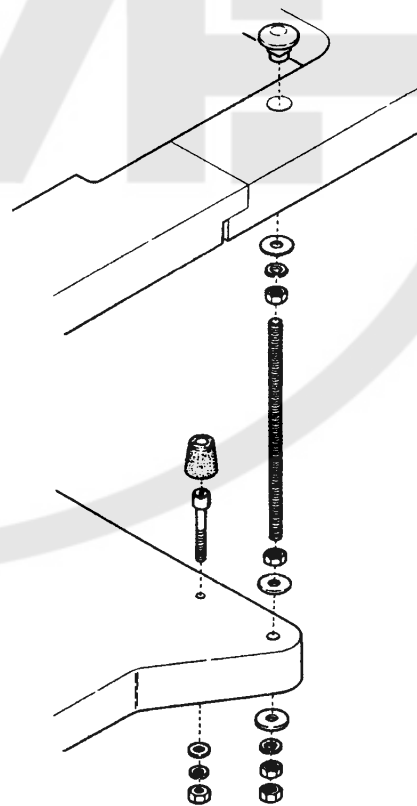
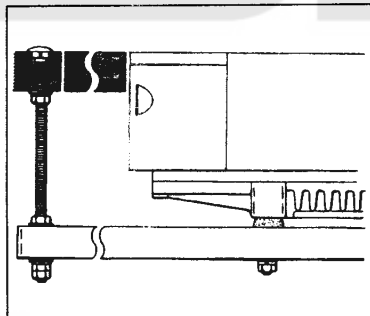
1. Specifications

Model	: VF2502-064, VF2502P-064
Description	: High Speed 3 Needle Double Chainstitch Machine (P : with Puller)
Dimensions	: 500(L) × 250(W) × 430(H)mm
Weight	: 41kg
Stitch type	: ISO(401·401·401)
Application	: lap seam for jeans and similar fabrics
Sewing speed	: Max. 5,000s.p.m.
Stitch length	: 1.4~3.6mm : stitch number 7~18 stitches/inch : 8~21 stitches/30mm
Needle to be used	: Schmetz or Organ UY128GAS
Needle distance	: 6.4mm(3.2, 3.2mm)
Needle stroke	: 31mm
Presser Foot lift	: 7.0mm
Feed regulation	: by Pushbutton
Differential ratio	: Max. normal differential 1:2 Max. reverse differential 1:0.7
Differential feed regulation	: Adjustable during operation by moving Lever up and down from outside
Lubrication	: Automatic lubrication by Oil Pump
Lubrication oil	: YAMATO SF OIL (Teresso 46 is also available.)
Capacity of oil reservoir	: 1,100cc
Installation	: Semi-submerged or full-submerged type

2. Installation(Full-submerged type)

☆ Installation of Supporting Board

Install Machine correctly as shown in the figure.
Set Screws to Supporting Board. Fix Supporting Board on Machine Table. Place Rubber Cushions on Screws and mount the Machine on them securely.



Technical drawing of a mechanical assembly, likely a hinge or bracket, showing dimensions and section views.

Dimensions:

- Overall width: 300
- Overall height: 625
- Top flange width: 80
- Top flange thickness: 40
- Top flange hole diameter: $\Phi 16$
- Top flange hole offset from center: 50
- Top flange hole offset from edge: 105
- Top flange hole offset from center: 305
- Top flange hole offset from edge: 60
- Top flange hole offset from center: 330
- Top flange hole offset from edge: 112
- Top flange hole offset from center: 20
- Top flange hole offset from edge: 85
- Top flange hole offset from center: 323
- Top flange hole offset from edge: 42.5
- Top flange hole offset from center: 20
- Top flange hole offset from edge: 20
- Top flange hole offset from center: 175
- Top flange hole offset from edge: 390
- Top flange hole offset from center: 55
- Top flange hole offset from edge: 60
- Top flange hole offset from center: 30
- Top flange hole offset from edge: 3
- Top flange hole offset from center: 3
- Top flange hole offset from edge: 12
- Top flange hole offset from center: 311
- Top flange hole offset from edge: 345
- Top flange hole offset from center: 190
- Top flange hole offset from edge: 40
- Top flange hole offset from center: 260
- Top flange hole offset from edge: 80
- Top flange hole offset from center: 602
- Top flange hole offset from edge: 625

Section Views:

- Section E-E:** Shows a cross-section of the top flange with a 30° angle and a 3- $\Phi 9.5$ hole pattern.
- Section F-F:** Shows a cross-section of the top flange with a 20x20 hole and a 6-R10 fillet.
- Section G-G:** Shows a cross-section of the top flange with a 20x40 hole and a 2-R65 fillet.
- Section H-H:** Shows a cross-section of the top flange with a 4- $\Phi 16$ hole pattern and a 4- $\Phi 9$ hole pattern.

Other Features:

- Hinge:** Indicated by a line pointing to the top flange.
- Magnet:** Indicated by a line pointing to the top flange.
- Operator:** Indicated by a line pointing to the top flange.

Note: A set with Openable Table.

Maker	A	B	C	D
Panasonic	57	159	66.5	33.25

Maker	A	B	C	D
Panasonic	57	159	66.5	33.25
Mitsubishi	60	150	65	32.5
Hitachi	54	159	66.5	33.25

A diagram of a composite figure. It consists of a shaded L-shaped region and an unshaded rectangular region. The shaded region has a horizontal base of 35 units and a vertical height of 20 units. The unshaded region is a rectangle that is 35 units wide and 20 units high, attached to the right side of the shaded region.

Technical drawing of a machine table set. The drawing shows a side view of the machine table with dimensions and callouts. The dimensions are as follows:

- Overall width: 510
- Overall height: 345
- Height of the main body: 311
- Width of the main body: 212
- Width of the base: 161
- Width of the base extension: 78
- Height of the base extension: 80
- Radius: 5-R10
- Callouts: J, J, K, K

Note: A set with Machine Table.

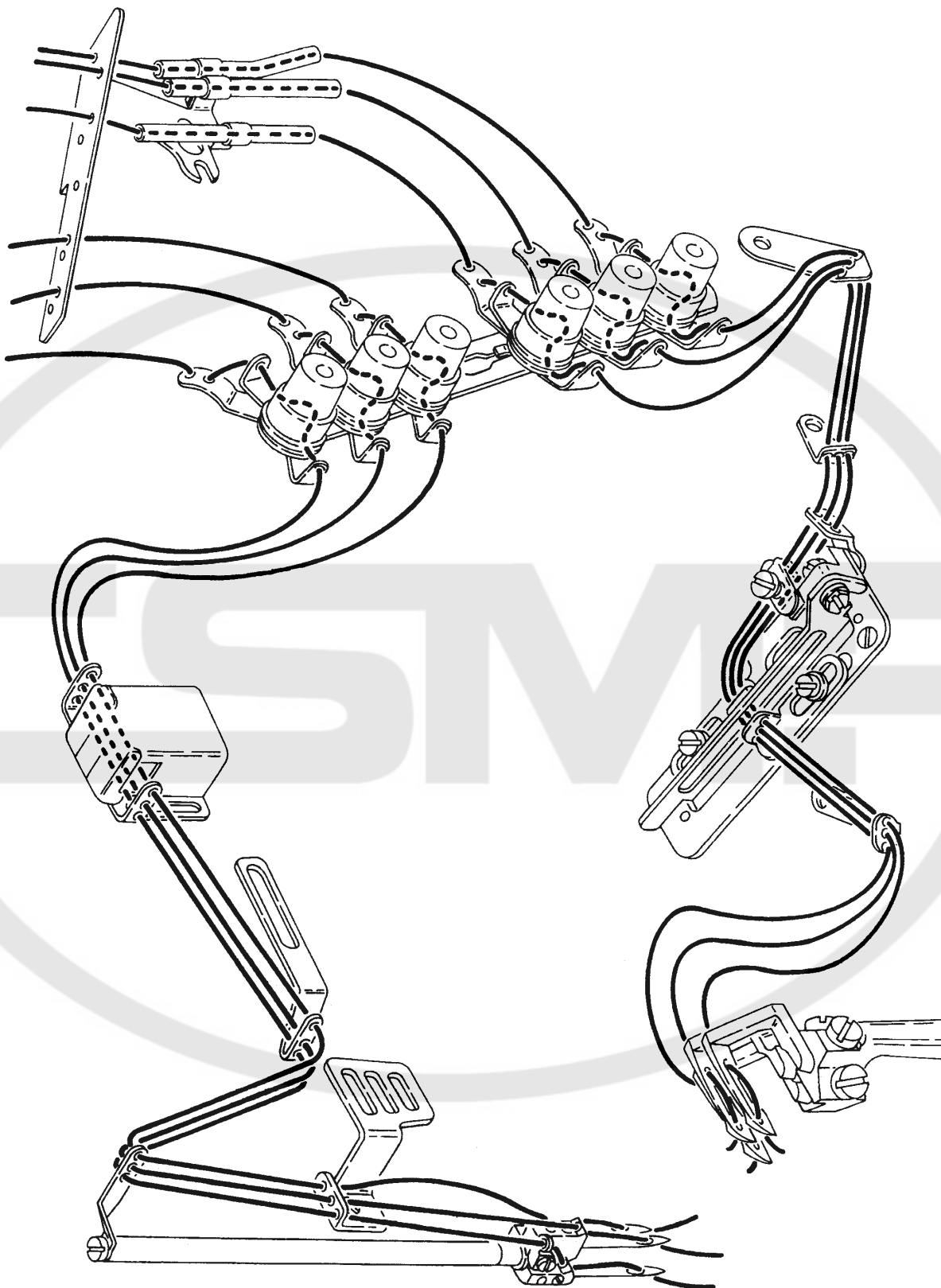
 Operator

Technical drawing of a rectangular box with dimensions and annotations. The drawing shows a perspective view of the box. Key dimensions and features include:

- Overall width: 685
- Overall height: 300
- Internal width: 625
- Internal height: 260
- Top edge features: 4- $\phi 6.5$ (4 holes of diameter 6.5), 4-R20 (4 rounded corners with radius 20), 4- $\phi 9$ (4 holes of diameter 9), and 4-R20 (4 rounded corners with radius 20).
- Bottom edge features: 4- $\phi 9$ (4 holes of diameter 9) and 4-R20 (4 rounded corners with radius 20).
- Internal dimensions: 155 (height of the upper section), 268 (width of the upper section), 425 (width of the lower section), 120 (width of the lower section), 73 (height of the lower section), 305 (height of the upper section), 220 (height of the lower section), 80 (height of the lower section), and 20 (height of the lower section).
- Operator: operator

– 3 –

4. Threading



5. Adjustment

5-1 Looper thread tension

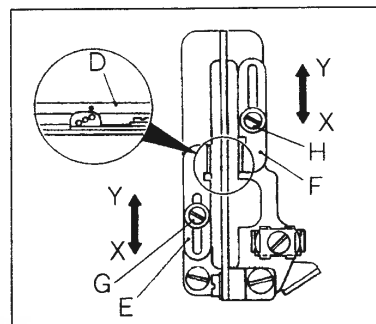
The figure shows Looper Thread Take-up.

Align the uppermost holes of Thread Take-up Eyelet (E) and (F) with the mark(·) of Cast-off Plate(D), which is standard.

To increase the feed amount of looper thread, loosen Screws(G) and (H) before sliding Eyelet(E) and (F) to (X)-direction.

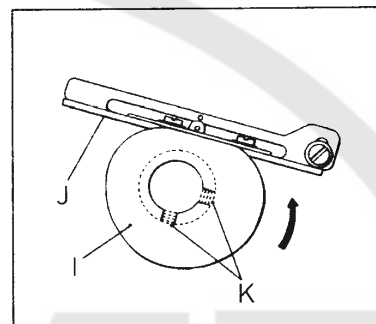
To decrease it, loosen the Screws before sliding the Eyelets to (Y)-direction.

Take care that too much feed amount of looper thread may cause skip stitch.



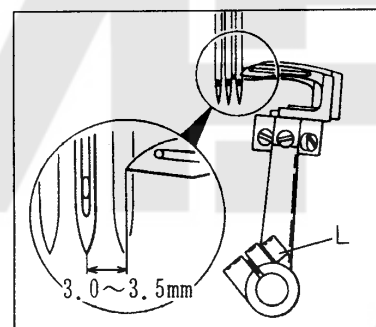
5-2 Position of Looper Thread Take-up

The figure shows Looper Thread Take-up seen from Needle Bar side. When Looper is at the leftmost position(the uppermost position of Needle Bar), loosen Screws(K) before making the flat face of Looper Thread Take-up(I) level with Supporting Plate (J).



5-3 Amount of Looper movement to the right

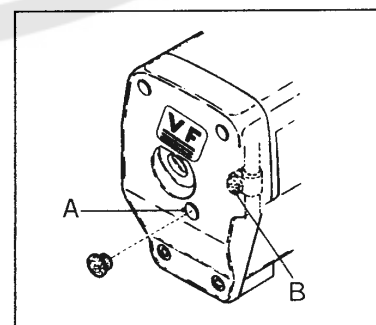
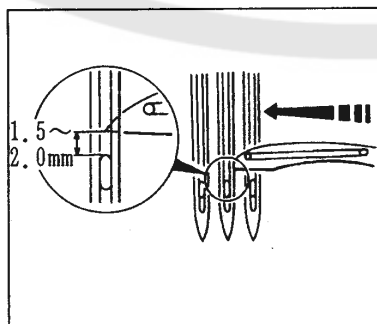
We recommend the central Needle for the adjustment. When Needle is at the lowest position of its travel and Looper reaches the rightmost position, the distance between the tip of Looper and the center of Needle is 3.0~3.5mm respectively. For its adjustment, loosen Screw(L) of Looper Holder.



5-4 Height of Needle Bar

We recommend the central Needle for the adjustment.

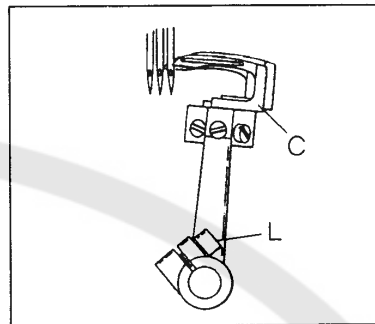
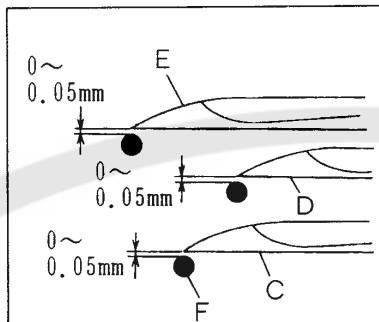
At both moving to the left and to the right of Looper, when the tip of Looper comes to the center of Needle, the tip must pass 1.5~2.0mm above the upper end of needle eye. For its adjustment, insert Screwdriver from the hole(A) of Head Cover. Loosen Screw(B) of Needle Bar Bracket before moving Needle Bar up and down.



5-5 Front and rear position of Needle and Looper

The standard clearance between the tip of Loopers and Needles is 0~0.05mm respectively.

We recommend the central Needle(F) and Looper(C) for the first adjustment. Insert Looper(C)(with a flat spot) to the bottom before tightening Screw of Looper. For its adjustment, loosen Screw(L) of Looper Holder before moving Looper Holder in front and in rear. Next, for making the clearance of 0~0.05mm, loosen Screws of Looper(D) and (E) before turning Looper.



5-6 Needle and Needle Guard

We recommend the central Needle(F) and its Looper for the first adjustment.

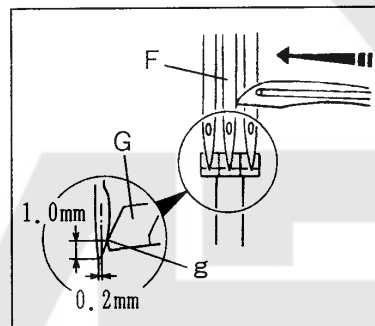
When the Looper comes to the right end of Needle(F), the height of (g) portion of Needle Guard(G) is about 1.0mm above the tip of the Needle.

Fix Needle Guard(G) to push Needle slightly.

The clearance between Needle and Needle Guard is 0mm or up to 0.2mm.

When Needle(F) is adjusted, the right and left Needles can be also adjusted.

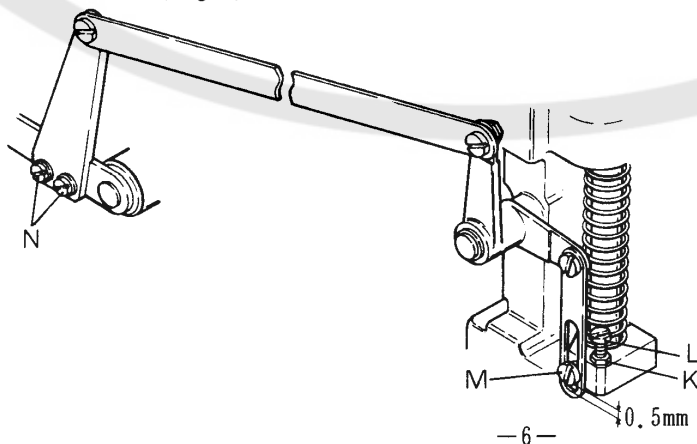
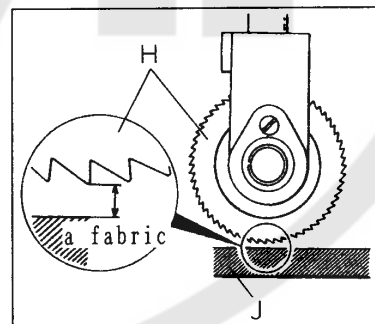
However, check their condition.



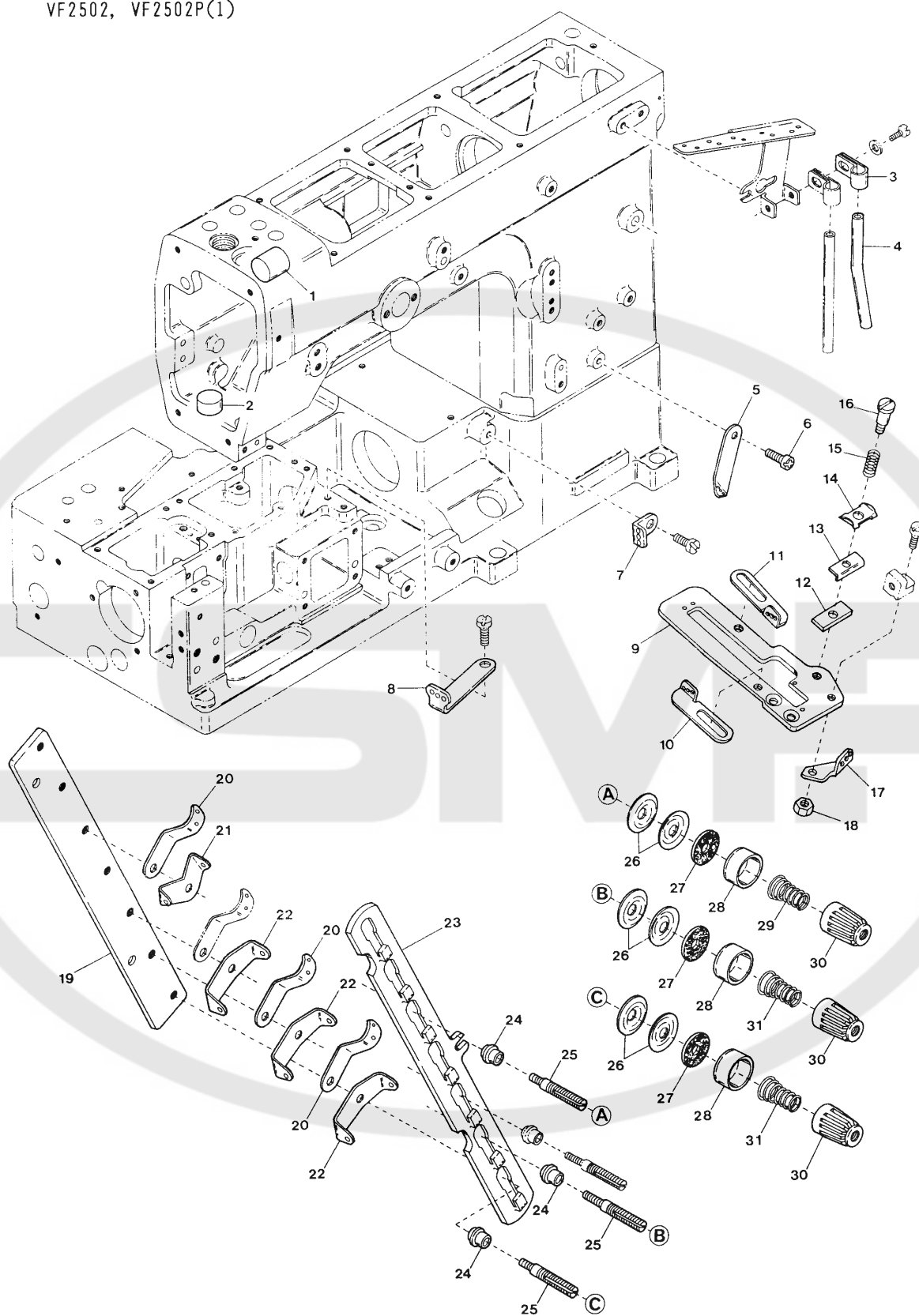
5-7 Adjustment of Upper Feed Roller(VF2502P)

When lowering Upper Feed Roller(H), the clearance between (H) and Roller Support(J) should be the same thickness as a fabric. To adjust it, loosen Nut(K) before turning Adjusting Screw(L).

When Presser Foot touches the surface of Stitch Plate, the clearance between the lower side of the slot of Lifter Connecting Plate and Screw(M) is 0.5mm. To adjust it, loosen Screw(N) of Upper Feed Roller Lifter(Right).



VF2502, VF2502P(1)

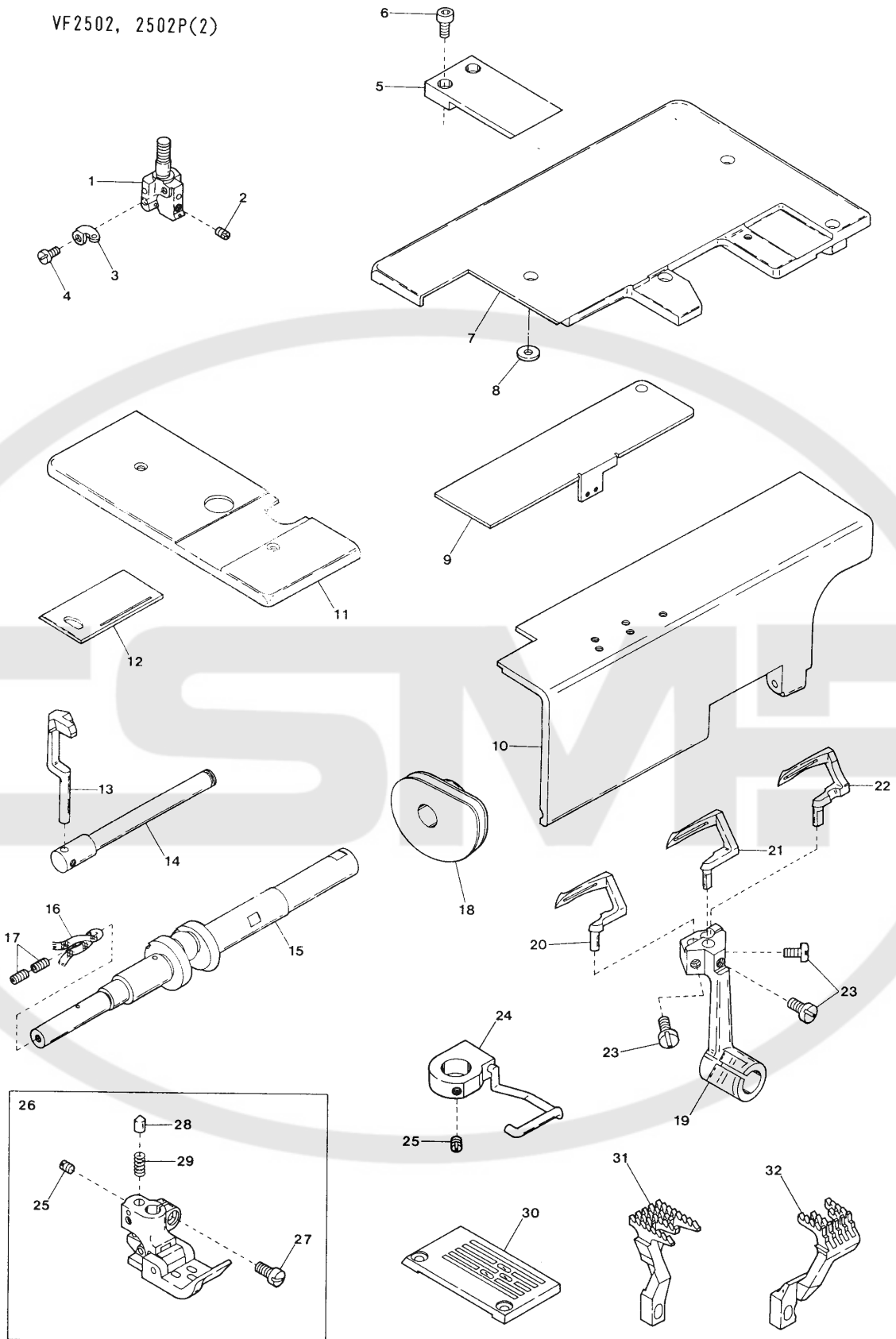


VF2502, 2502P EXCLUSIVE PARTS(1)

サブモデル専用部品(1)

Ref.	Parts			Amt.
No.	No.	Description	品 名	Req.
1	0094604	Seal Plug	詰栓	1
2	0063548	Seal Plug	詰栓	1
3	0093528	Thread Eyelet Pipe Stay	糸道パイプ支エ	1
4	0021735	Thread Eyelet Pipe(Long)	糸道パイプ(長)	1
5	0095916	Looper Thread Eyelet	ループ糸道	1
6	110013	Screw(M4-0.7×8)	止ネジ	1
7	3201156	Looper Thread Eyelet(Right)	ループ糸道(右)	1
8	3201157	Looper Thread Eyelet(Left)	ループ糸道(左)	1
9	3201152	Supporting Plate	カム糸道取付板	1
10	0095921	Thread Take-up Eyelet(Left)	調子カム糸道(左)	1
11	0095922	Thread Take-up Eyelet(Right)	調子カム糸道(右)	1
12	0095909	Supplementary Tension Holder	小調子台	1
13	0036175	Supplementary Tension Plate	小調子板	1
14	0032425	Supplementary Tension Disc	小調子皿	1
15	0090846	Looper Thread Retainer Spring	小調子バネ	1
16	270012	Screw(1/8-44×5)	止ネジ	1
17	3201153	Looper Thread Eyelet(Center)	ループ糸道(中)	1
18	000322	Nut	ナット	1
19	3201163	Tension Post Support	糸調子台	1
20	0090807	Thread Lead-in Guide	糸調子台糸道	3
21	0090856	Tension Disc Eyelet	糸調子皿糸道	1
22	0090857	Looper Thread Tension Disc Eyelet	下糸調子皿糸道	3
23	3201162	Tension Post Support	糸調子台	1
24	0090812	Tension Post Ferrule	糸調子棒糸摺レ	3
25	009835	Tension Post	糸調子棒	3
26	0031111	Tension Disc	糸調子皿	6
27	000177	Felt	フェルト	3
28	0090071	Thread Tension Spring Retainer	糸調子バネキャップ(下)	3
29	0090814	Needle Thread Tension Spring	針糸調子バネ	1
30	0093863	Thread Tension Spring Cap	糸調子バネキャップ(上)	3
31	0090847	Looper Thread Tension Spring	ループ糸調子バネ	2

VF2502, 2502P(2)

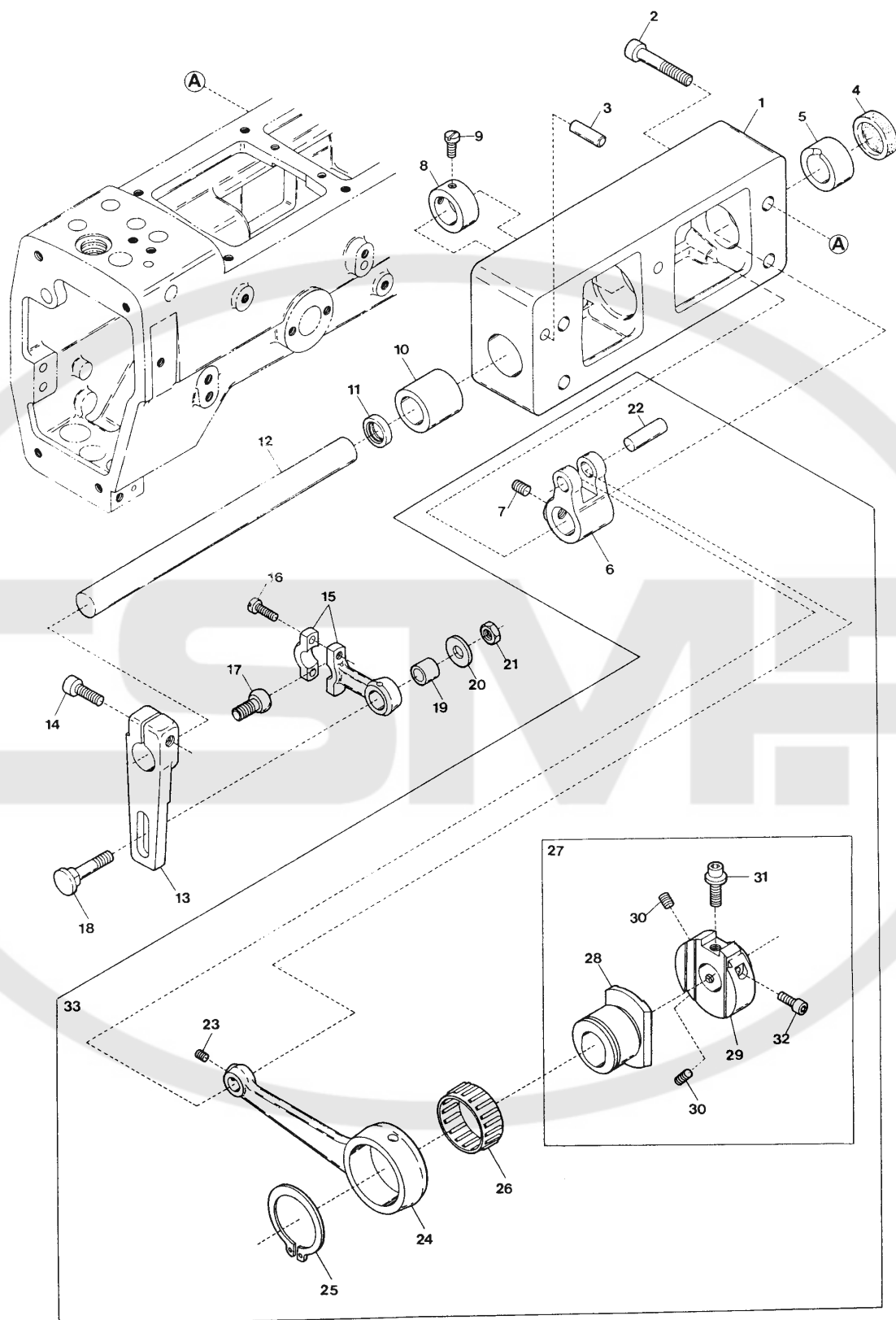


VF2502, 2502P EXCLUSIVE PARTS(2)

サブモデル専用部品(2)

Ref.	Parts	Description	品 名	Amt.
No.	No.			Req.
1	3209113	Needle Clamp(88)	針止メ	1
2	001892	Screw(1/8-44×2.9)	止ネジ	3
3	3201493	Needle Clamp Eyelet	針止メ糸道	1
4	001230	Screw(3/32-56×3.8)	止ネジ	3
5	3201491	Puller Support	プラー受ケ	1
6	009747	Screw(M4-0.7×10)	止ネジ	2
7	3201492	Cloth Plate(Large)	大カバー	1
8	300006	Washer	ワッシャ	1
9	3200035	Looper Thread Take-up Cover	カムカバー	1
10	3200034	Front Cover	前開キカバー	1
11	3201160	Cloth Plate(Small)	小カバー	1
12	0095936	Slide Cover	小カバー滑り板	1
13	3209203	Needle Guard	針受ケ	1
14	3201155	Needle Guard Driving Shaft	針受ケ軸	1
15	3201166	Lower Crankshaft	下軸クランク	1
16	310055	Oil Wick	油芯	1
17	160007	Screw(M6-1×6)	止ネジ	2
18	0094512	Looper Thread Taku-up	下糸調子カム	1
19	3201490	Looper Holder	ルーパー台	1
20	3209314	Looper(Left)	ルーパー(左)	1
21	3209313	Looper(Medium)	ルーパー(中)	1
22	0095931	Looper(Right)	ルーパー(右)	1
23	110057	Screw(M4-0.7×7)	止ネジ	3
24	3200253	Finger Guard Unit	フィンガガード(組)	1
25	001459	Screw(9/64-40×3)	止ネジ	3
26	3207013	Presser Foot, Complete Set(64)	押エ(組)	1
27	001186	Screw(9/64-40×7.8)	止ネジ	1
28	0037166	Presser Foot Pin	押エピン	1
29	0037164	Presser Foot Spring	押エバネ	1
30	3208063	Stitch Plate(64M)	針板	1
31	3209038	Main Feed Dog	後送り	1
32	3209039	Differential Feed Dog	前送り	1

VF2502P(3)



VF2502P EXCLUSIVE PARTS(3)

サブモデル専用部品(3)

Ref.	Parts		Amt.
No.	No.	Description 品 名	Req.
1	3100625	Upper Feed Roller Shaft Bracket 上ローラ軸ブラケット	1
2	120019	Screw(M6-1×18) 止ネジ	4
3	000779	Knock Pin ノックピン	2
4	3100006	Seal Plug 詰栓	1
5	3100607	Roller Shaft Bushing(Right) 上ローラ軸ブッシュ(右)	1
6	3100604	Upper Feed Roller Shaft Lever 上ローラ軸腕	1
7	160007	Screw(M6-1×6) 止ネジ	2
8	0065398	Collar(14×22×10mm) カラー	1
9	009604	Screw(11/64-40×5.5) 止ネジ	2
10	3100626	Roller Shaft Bushing(Left) 上ローラ軸ブッシュ(左)	1
11	0065395	Oil Seal オイルシール	1
12	3100605	Upper Feed Roller Shaft 上ローラ軸	1
13	3100608	Upper Feed Roller Lever 上ローラレバー	1
14	120012	Screw(M6-1×20) 止ネジ	1
15	0065400	Upper Feed Roller Lever Rod 上ローラレバーロッド	1
16	001174	Screw(9/64-40×10.3) 止ネジ	2
17	0060109	Ball Stud 上ローラレバーロッド球	1
18	0065401	Upper Feed Roller Lever Pin 上ローラレバーピン	1
19	0065402	Upper Feed Roller Lever Rod Sleeve レバーロッドスリーブ	1
20	000613	Washer ワッシャ	1
21	000306	Nut ナット	1
22	0032921	Upper Feed Roller Driving Rod Pin 上ローラロッドピン	1
23	160001	Screw(M4-0.7×4) 止ネジ	1
24	3100602	Upper Feed Roller Driving Rod 上ローラロッド	1
25	3100192	Retaining Ring ストップリング	1
26	3100623	Roller Bearing ニードルベアリング	1
27	3100603	Upper Feed Roller Regulator, C. Set 上ローラ調節器(組)	1
28	3100601	Upper Feed Roller Eccentric 上ローラエキセン	1
29	3100600	Upper Feed Roller Regulator 上ローラ調節器	1
30	160003	Screw(M5-0.8×5) 止ネジ	2
31	190007	Adjusting Screw(M5-0.8×6) 調節ネジ	1
32	120008	Screw(M4-0.7×8) 止ネジ	1
33	3101212	Upper Feed Roller Driving Rod, C. Set(2) 上ローラロッド(組2)	1

This exploded view diagram illustrates the assembly of a mechanical component, likely a pump or actuator. The parts are numbered 1 through 30. The main body (1) is a central casting with a central bore. A long shaft (11) is inserted into this bore, with a pin (10) and a screw (30) at one end. A gear (29) is mounted on the other end of the shaft. A lever arm (17) is attached to the side of the main body, with a pin (18) and a screw (19) for adjustment. A gear (16) is mounted on the lever arm. A piston rod (24) is connected to the lever arm via a pin (20) and a screw (25). The piston rod is connected to a piston (27) inside a cylinder (26). A spring (22) is attached to the piston rod. A gear (23) is mounted on the end of the piston rod. A pin (21) and a screw (28) are also shown. The diagram includes a large 'S' watermark in the background.

VF2502P EXCLUSIVE PARTS(4)

サブモデル専用部品(4)

Ref.	Parts		Amt.
No.	No.	Description	Req.
1	3300070	Upper Feed Roller Yoke 上ローラヨーク	1
2	120012	Screw(M6-1×20) 止ネジ	1
3	3300071	Upper Feed Roller Yoke Guide . . . 上ローラヨークガイド . . .	1
4	110009	Screw(M4-0.7×8) 止ネジ	2
5	3100613	Upper Feed Roller Yoke Pin . . . 上ローラヨークピン . . .	1
6	003662	Screw(M6-1×6) 止ネジ	1
7	0090620	Cotter Pin 割リピン	1
8	006270	Screw(9/64-40×0.5) 止ネジ	1
9	160001	Screw(M4-0.7×4) 止ネジ	2
10	0060056	Retaining Ring ストップリング	1
11	3300072	Clutch Driving Shaft クラッチ軸	1
12	3100616	Clutch Driving Shaft Bushing(Left) クラッチ軸ブッシュ(左) . .	1
13	0065414	Clutch Driving Shaft Bushing(Right) クラッチ軸ブッシュ(右) . .	1
14	0065421	Clutch Tension Sleeve クラッチテンションスリーブ .	1
15	000145	Adjusting Nut 調節ナット	2
16	0065420	Clutch Tension Spring クラッチテンションバネ . .	1
17	3300074	Clutch Driving Lever クラッチ板(右)	1
18	000306	Nut ナット	1
19	007621	Screw(9/64-40×8.5) 止ネジ	12
20	0095061	Clutch クラッチ	2
21	3010022	Clutch Spring(Thick) クラッチバネ(太)	6
22	0095066	Clutch Spring Seat クラッチバネ座	6
23	0065417	Clutch Roller クラッチローラ	6
24	3300073	Clutch Spacer クラッチスペーサ	1
25	160005	Screw(M6-1×8) 止ネジ	1
26	0095065	Clutch Spring(Thin) クラッチバネ(細)	6
27	3300075	Clutch Sleeve クラッチスリーブ	1
28	0065418	Clutch Check Plate クラッチ板(左)	1
29	3201494	Upper Feed Roller(60 teeth) . . . 上ローラ(60山)	1
30	110011	Screw(M5-0.8×10) 止ネジ	1

VF2502P EXCLUSIVE PARTS(5)

サブモデル専用部品(5)

Ref.	Parts			Amt.
No.	No.	Description	品 名	Req.
1	0065381	Upper Feed Roller Lifter(Right)	上ローラ揚ゲ(右)	1
2	004440	Screw(11/64-40×8.3)	止ネジ	2
3	000538	Washer	ワッシャ	3
4	000334	Nut	ナット	2
5	0034979	Flexible Wire Clamp Bushing	ワイヤ止メブッシュ	2
6	006075	Screw(11/64-40×6)	止ネジ	2
7	0067126	Lifter Connecting Plate	上ローラ揚ゲ連結板	1
8	0065374	Upper Feed Roller Lifter(Left)	上ローラ揚ゲ(左)	1
9	0065375	Upper Feed Roller Lifter Pin	上ローラ揚ゲピン	1
10	0095027	Retaining Ring	ストップリング	2
11	0065376	Lifter Connecting Plate	上ローラ吊リ	1
12	006038	Screw(3/16-32×2.2)	止ネジ	2
13	0065407	Roller Press Bar Bracket	上ローラ押エ棒抱キ	1
14	005650	Screw(M5-0.8×14)	止ネジ	1
15	0065402	Lifting Lever Sleeve	上ローラレバースリーブ	1
16	006411	Screw(11/64-40×5.5)	止ネジ	1
17	000340	Lock Nut	ロックナット	1
18	009931	Stop Screw(11/64-40×26)	ストップネジ	1
19	3100614	Roller Press Spring	上ローラ押エバネ	1
20	3100610	Upper Feed Roller Bracket	上ローラブラケット	1
21	009753	Screw(M6-1×35)	止ネジ	2
22	000779	Knock Pin	ノックピン	2
23	0065405	Roller Press Bar Bushing(Upper)	上ローラ押エ棒ブッシュ(上)	1
24	160007	Screw(M6-1×6)	止ネジ	1
25	3100609	Roller Press Bar Bushing(Lower)	上ローラ押エ棒ブッシュ(下)	1
26	0065404	Upper Feed Roller Press Bar	上ローラ押エ棒	1
27	0034117	Retaining Ring	ストップリング	1
28	000690	Stop Pin	ストップピン	1
29	000613	Washer	ワッシャ	1
30	0067111	Upper Feed Roller Lifting Lever	手揚ゲ	1
31	000487	Corrugated Washer	波形ワッシャ	1
32	170008	Screw(M6-1×9)	止ネジ	1
33	3201495	Lifter Lever	押エ揚ゲレバー	1