

**HIGH SPEED BUTTONHOLE SEWING MACHINE  
KNOPFLOCH-SCHNELLNÄHMASCHINE  
MACHINE A COUDRE DE BOUTONNIERES A GRANDE VITESSE  
MAQUINA DE COSER OJALES DE ALTA VELOCIDAD**

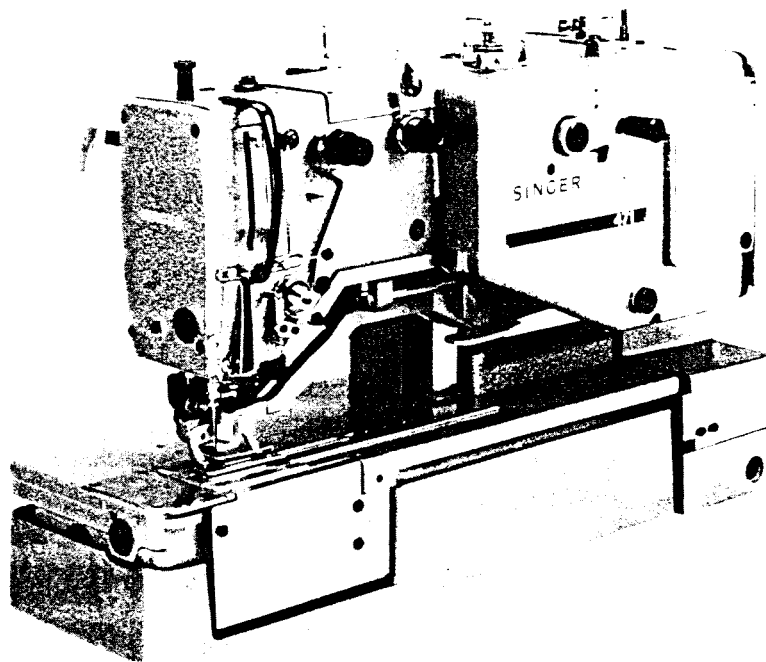
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**SINGER 471U**

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**PARTS BOOK  
TEILEKATALOG  
LIVRE DES PIECES  
LIBRO DE REFERENCIA DE PIEZAS**


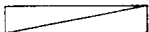
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**THE SINGER COMPANY**

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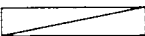
## Notes for using this parts book

1. This book is applicable to sewing machines which have the same plate number as shown on the cover of this book (or correction sheet).
2. Pages A~W and Z show all parts for model LH4-B810-21.
3. If the symbol  is found in the "Parts No." column or the "Assembly No." column, refer to the different parts list on page 24.
4. The symbol  in the "Parts No." column indicates that the parts is not available for supply. If, however, there is a number in the "Assembly No." column, the parts can be ordered as an assembly. Please, therefore, order by using the assembly number.
5. This book was prepared based on information available in August, 1983.
6. Parts are subject to changes in design without prior notice.


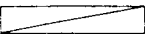
## Anmerkungen zum Gebrauch dieses Stücklistebuches

1. Dieses Buch bezieht sich auf die Nähmaschinen mit derselben Kennungsnummer wie auf diesem Buchumschlag (oder auf dem Korrekturblatt).
2. Auf den Seiten A~W und Z sind alle Teile des Modells LH4-B810-21 abgebildet.
3. Dieses Zeichen  in der Spalte "Parts No. (Teilnummer)" oder "Assembly No. (Gerätesatznummer)" verweist auf die Gesonderte Stückliste auf Seite 24.
4. Dieses Zeichen  in der Spalte "Teilnummer" bedeutet, daß dieser Teil nicht lieferbar ist. Wenn jedoch in der Spalte "Gerätesatznummer" eine Nummer steht, kann dieser Teil als ein Geräteteilsatz bestellt werden. Bestellen Sie daher bitte mit dieser Gerätesatznummer.
5. Dieses Buch basiert auf den Informationen vom August, 1983.
6. Modelländerungen sind vorbehalten.

## Notes sur l'utilisation de ce manuel de pièces détachées

1. Ce manuel est destiné aux machines à coudre ayant le même numéro de plaque montré sur la couverture de ce manuel (ou sur la feuille de corrections).
2. Les pages de A à W et les pages Z montrent toutes les pièces (vue éclatée) du modèle LH4-B810-21.
3. Si le symbole  se trouve dans la colonne "Parts No. (N° de pièce)" ou dans la colonne "Assembly No. (N° jeu de pces)", veuillez vous référer à la liste de pièces annexe page 24.
4. Le symbole  dans la colonne "N° de pièce" signifie que la pièce ne peut être fournie. Si, dans la colonne "N° jeu de pces", il y a un numéro de nomenclature, la pièce peut être commandée comme faisant partie d'un jeu de pièces. Donc, pour toute commande, veuillez spécifier le n° de jeu de pièces.
5. Ce manuel a été fait d'après les renseignements valables au mois de Août, 1983
6. Les pièces peuvent être sujettes à des modifications sans préavis.

## Notas para usar este Libro de Piezas

1. Este libro sirve para todas las máquinas de coser que llevan la misma placa de identificación que la que se puede ver en la tapa de este libro (o en la hoja de erratas).
2. Las páginas desde A a W y la Z muestran todas las piezas del modelo LH4-B810-21.
3. De haber un símbolo  junto al "Parts No. (Número de Pieza)" o en la columna del "Assembly No. (Número de Juego)", habrá que mirar la lista de piezas separada de la página 24.
4. El símbolo , que se encuentra en la columna del "Número de Pieza", quiere decir que no se dispone de dicha pieza sola. Cuando, empero, hay un número en la columna del "Número de Juego", se podrá ordenar la pieza con todo el juego. Por lo tanto, será mejor hacer el pedido recurriendo al número del juego respectivo.
5. Este libro ha sido compilado basándose en los datos de que se disponía en agosto de 1983.
6. Las piezas quedan sujetas a cambios de diseño sin aviso previo.

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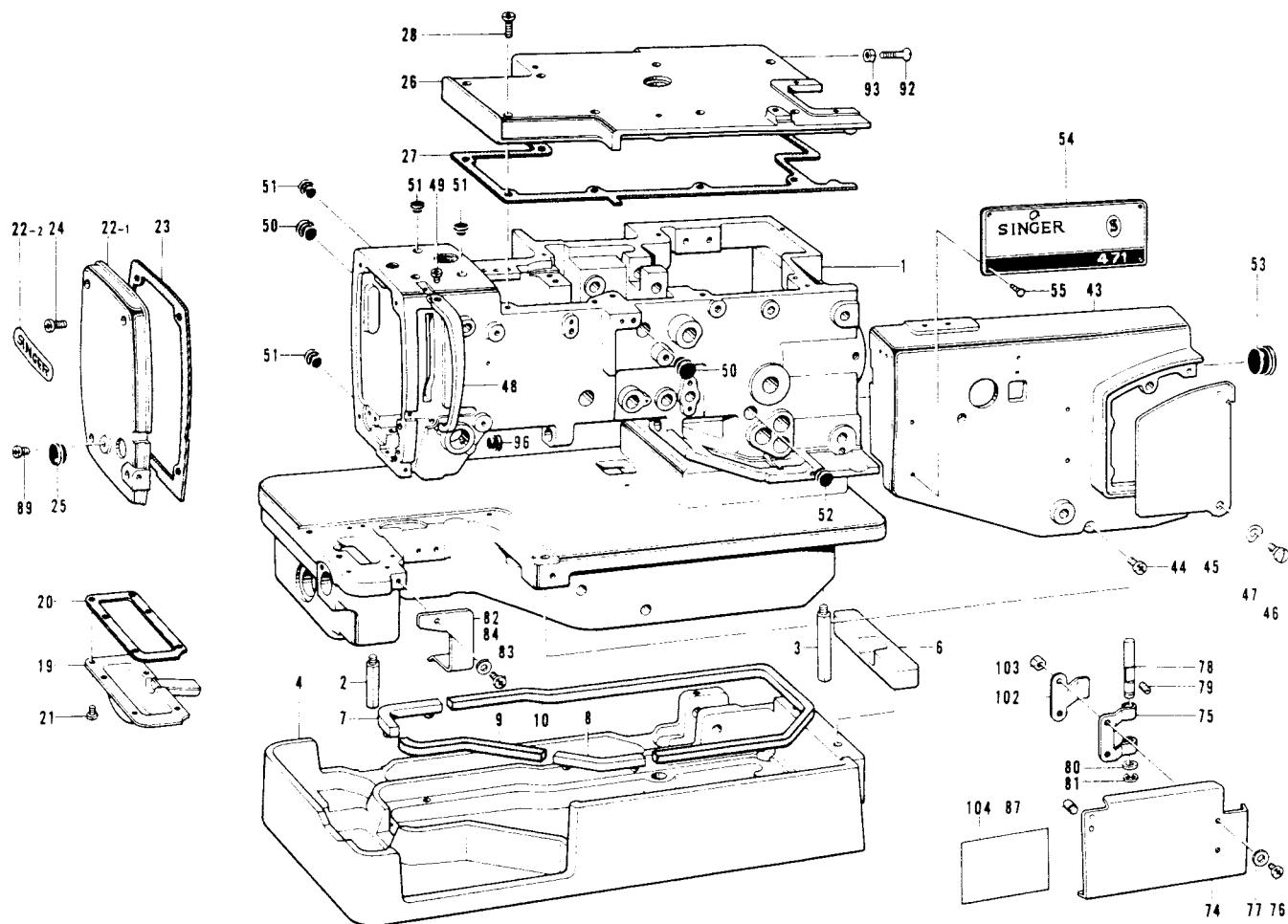
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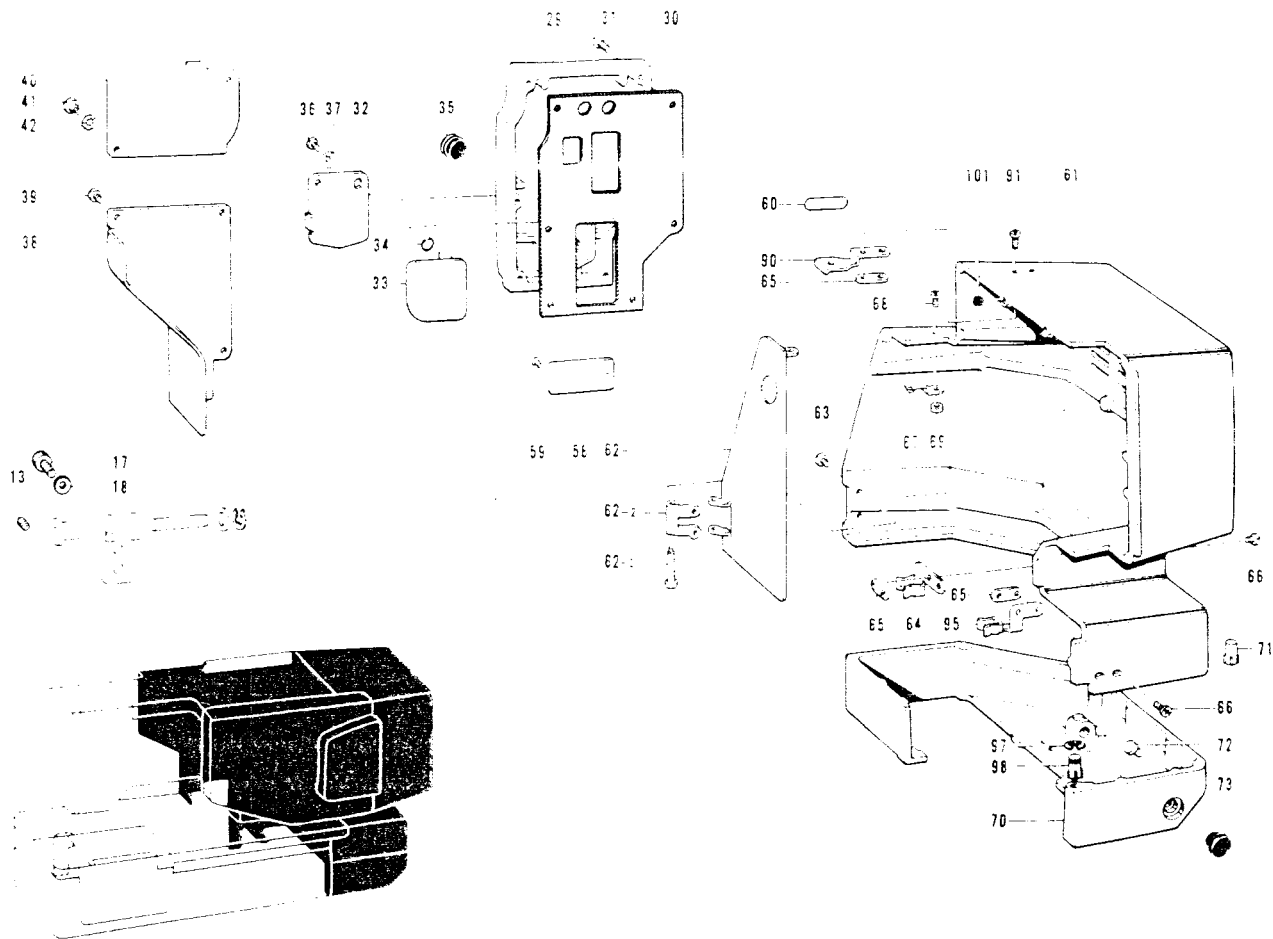
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A. Machine body (1) / Maschinengehäuse (1)  
 Corps de la machine (1) / Cuerpo de la máquina (1)



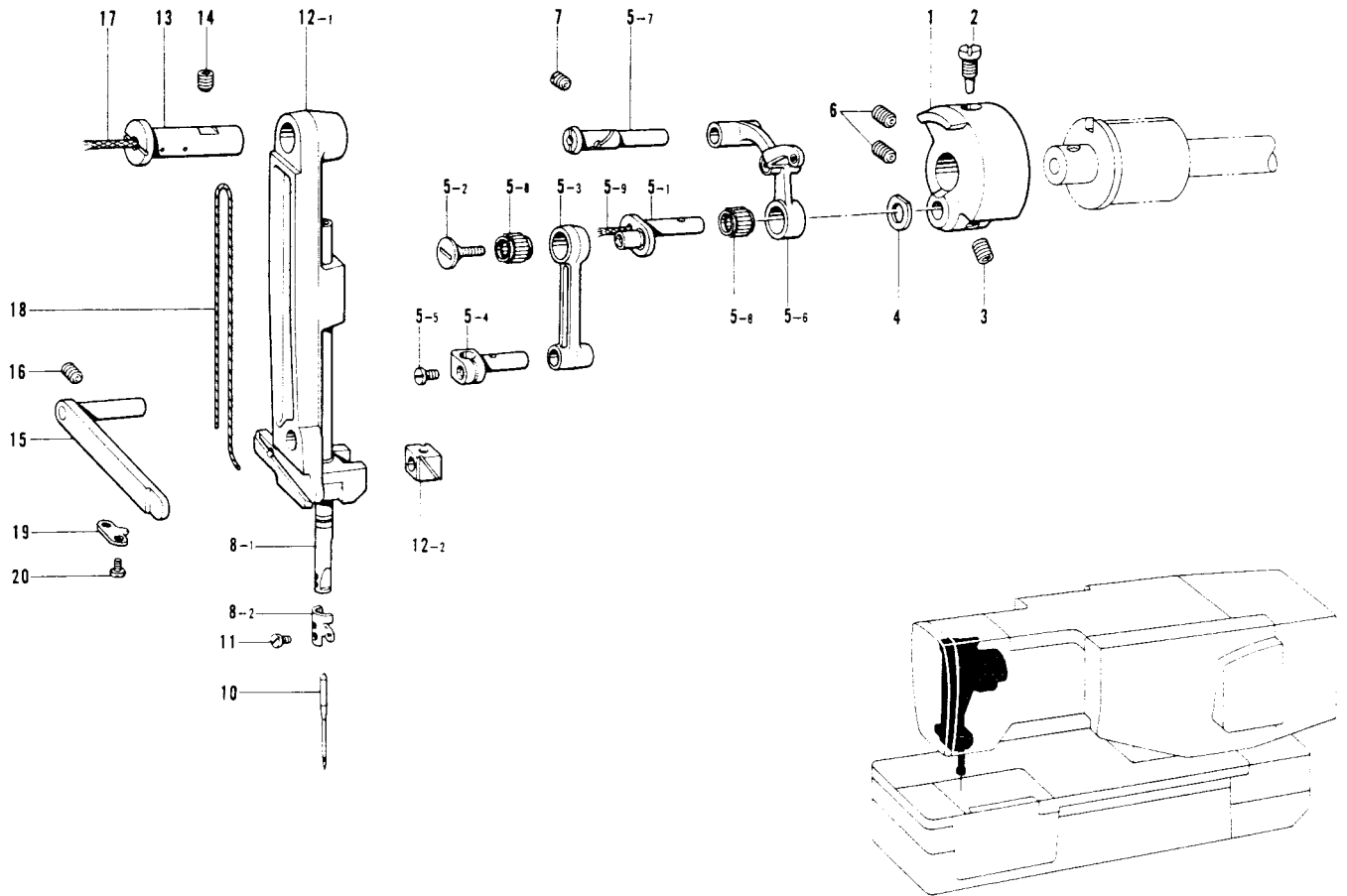
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
1	Arm-Bed	1			49	Screw 437 - 40 x 6	1	062680-612	
2	Machine Body Leg	1	151059-001		50	Oil Cap	2	104449-001	
3	Bed Leg, Long	3	113590-001		51	Oil Cap	4	104450-001	
4	Bed Base	1	158825-002		52	Oil Cap	1	117934-000	
6	Bed Cushion (R)	1	159455-000		53	Oil Cap	1	158882-000	
7	Bed Vessel Rubber (A)	1	159456-000		54	Name Plate 471	1		
8	Bed Vessel Rubber (B)	1	159457-000		55	Pin	4		
9	Bed Base Packing (A)	1	159459-000		74	Rotary Hook Cover	1	158876-001	
10	Bed Base Packing (B)	1	159460-000		75	Rotary Hook Cover Hinge	1	158877-001	
19	Gear Case Cover	1	158833-001		76	Screw 437 - 40 x 10	2	062681-012	
20	Gasket	1	158834-000		77	Washer 4.37	2	025680-232	
21	Screw 437 - 40 x 8	6	062680-812		78	Rotary Hook Cover Shaft	1	158879-001	
22-1	Face Plate	1	158836-002		79	Screw 5.95 x 6	1	014760-622	
22-2	Label	1		A-22 Face Plate Assembly S01401-601	80	Washer 6.35	1	025770-232	
23	Packing	1	158837-000		81	Stop Ring E6	1	048060-342	
24	Screw 476 - 32 x 14	4	062711-412		82	Inside Cover	1	159595-000	
25	Oil Cap	1	159150-000		83	Screw 437 - 40 x 6	1	062680-612	
26	Top Cover	1	158838-002		84	Washer 4.37	1	025680-132	
27	Gasket	1	158839-000		87	Rubber Cap	1	S00850-000	
28	Screw 476 - 32 x 14	8	062711-412		89	Screw 476 - 32 x 8	2	062710-812	
43	Cam Cover (A)	1	S01321-001		92	Belt Cover Stopper	1	141248-001	
44	Screw 476 - 32 x 14	3	062711-412		93	Nut 4.37	1	105234-003	
45	Feed Adjusting Cover	1	158851-001		96	Oil Cap	1	159928-000	
46	Screw 4.76	1	107321-003		102	Spring Plate	1	S00306-001	
47	Washer	1	107017-002		103	Nut 4.37	2	021680-202	
48	Thread Take-up Cover	1	158852-002		104	Threading Diagram	1	S01009-101	

A. Machine body (2) - Maschinengehäuse (2)  
 Corps de la machine (2) - Cuerpo de la máquina (2)



Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.
17	Screw 5.95 x 6	2	014760-227		62-1	Belt Cover (S)	1	158866-002	A-62
17	Screw 6 x 16	4	018061-622		62-2	Hinge	1	158867-001	Belt Cover Assembly (S)
17	Washer 6	4	025060-252		62-3	Hinge Shaft	1	158868-001	159594-002
29	Side Cover (R)	1	S01322-001		63	Screw 437 - 40 x 8	2	062680-812	
32	Gasket	1	158841-000		64	Belt Cover Stopper (A)	1	158864-001	
31	Screw 476 - 32 x 14	6	062711-412		65	Stopper Washer	3	158865-001	
32	Adjusting Window Cover	1	158842-001		66	Screw 437 - 40 x 8	4	062680-812	
32	Adjusting Window Inside Cover	1	158843-001		67	Spring	1	158869-001	
34	"O" Ring PW3	1	081003-670		68	Screw 437 - 40 x 8	1	062680-812	
35	Oil Cap	1	150756-000		69	Nut 4.37	1	021680-202	
36	Screw 357 - 40 x 6	1	062670-612		70	Belt Cover Base	1	158870-002	
37	Washer	1	158844-001		71	Pin	1	143787-001	
38	Side Cover (F)	1	158845-002		72	Stopper	2	158875-001	
39	Screw 476 - 32 x 8	2	062710-812		73	Oil Cap	1	159928-000	
40	Gear Case Cover	1	158847-001		90	Spring Plate	1	158980-001	
41	Screw 4.76	1	107321-003		91	Screw 437 - 40 x 12	2	062681-212	
42	Washer	1	107017-002		95	Belt Cover Stopper (B)	1	158969-001	
51	Model Plate 4"11"	1			97	Stop Pin F0	1	043070-342	
50	Pin	2			98	Pin BR8 x 22	1	159989-001	
6	Parts Book Number Plate	1			101	Lever Stopper	1	154578-000	
51	Belt Cover (L)	1	158899-002						

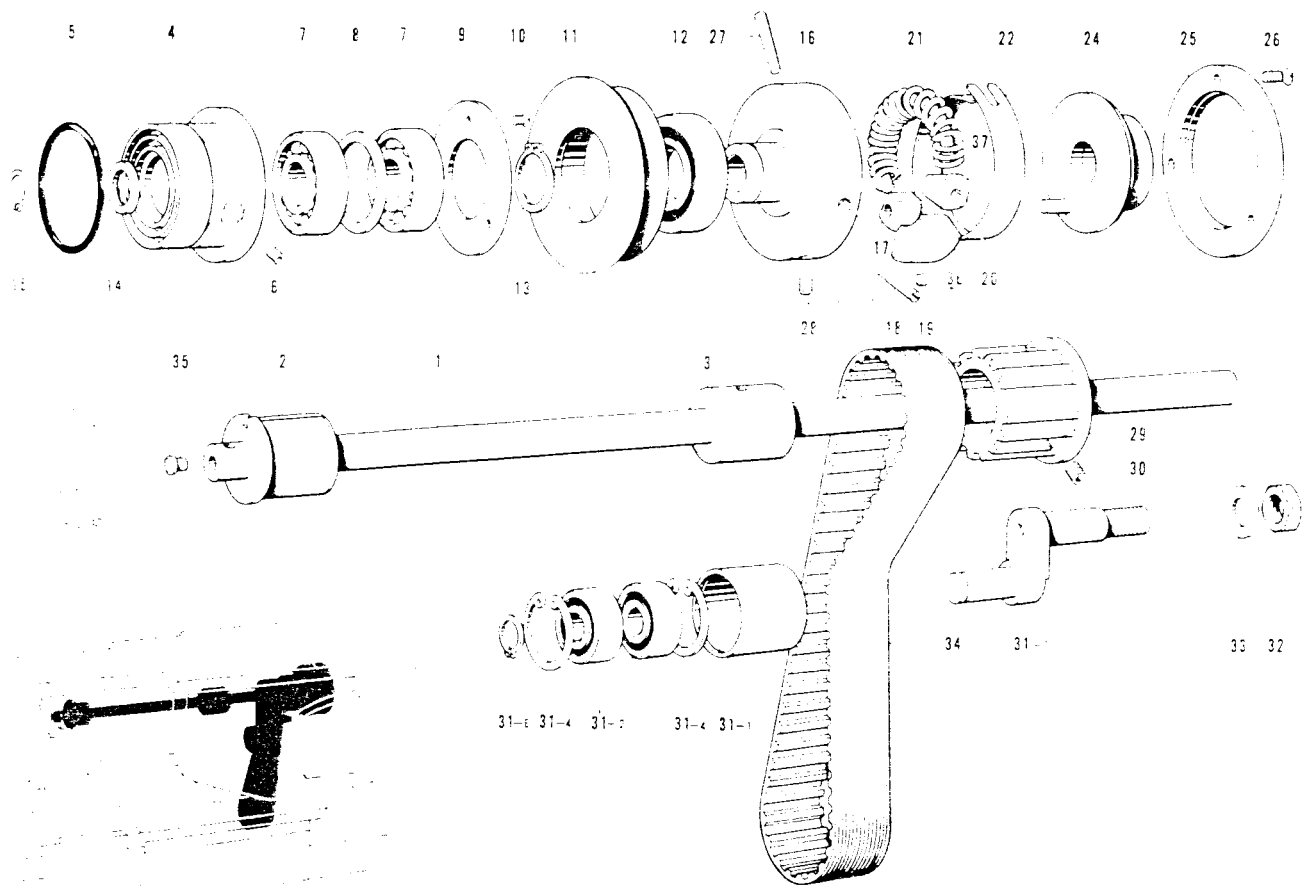
B. Needle bar and thread take-up mechanism / Nadelstangen- und Fadenabnahmevorrichtung  
 Mécanisme de la barre à aiguille et releveur de fil / Mecanismo de la barra de aguja y tirahilos



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
1	Counter Weight	1	158880-000		10	Needle Cat. No. 1955-0180-1	1	154483-012	
2	Screw 7.14	1	100250-001		11	Screw 3.18	1	140553-102	
3	Screw 6.35 x 6	1	014770-622		12-1	Needle Bar Support	1		B-12 Needle Bar Support Assembly 158886-001
4	Washer	1	110367-001		12-2	Slide Block	1	159624-001	
5-1	Needle Bar Crank	1		B-5 Thread Take-up Lever Assembly 159409-001	13	Stud	1	158888-001	
5-2	Screw 3.57L	1	145465-001		14	Screw 5.95 x 6	1	014760-622	
5-3	Needle Bar Crank Rod	1	118829-001		15	Needle Bar Supporter Guide	1	158889-001	
5-4	Needle Bar Clamp	1	111237-001		16	Screw 5.95 x 6	1	014760-622	
5-5	Screw 3.57	1	140004-001		17	Wick	1	159572-000	
5-6	Thread Take-up Lever	1	183216-001		18	Wick	1	159561-001	
5-7	Stud	1	111468-001		19	Needle Bar Indicator	1	158835-001	
5-8	Needle Roller Bearing	2			20	Screw 357 - 40 x 6	2	062670-612	
5-9	Wick	1	140430-001						
6	Screw 6.35 x 6	2	014770-622						
7	Screw 5.59 x 6	1	014760-622						
8-1	Needle Bar	1	158885-101	B-8 Needle Bar Assembly 158884-101					
8-2	Needle Bar Thread Guide	1	159916-001						

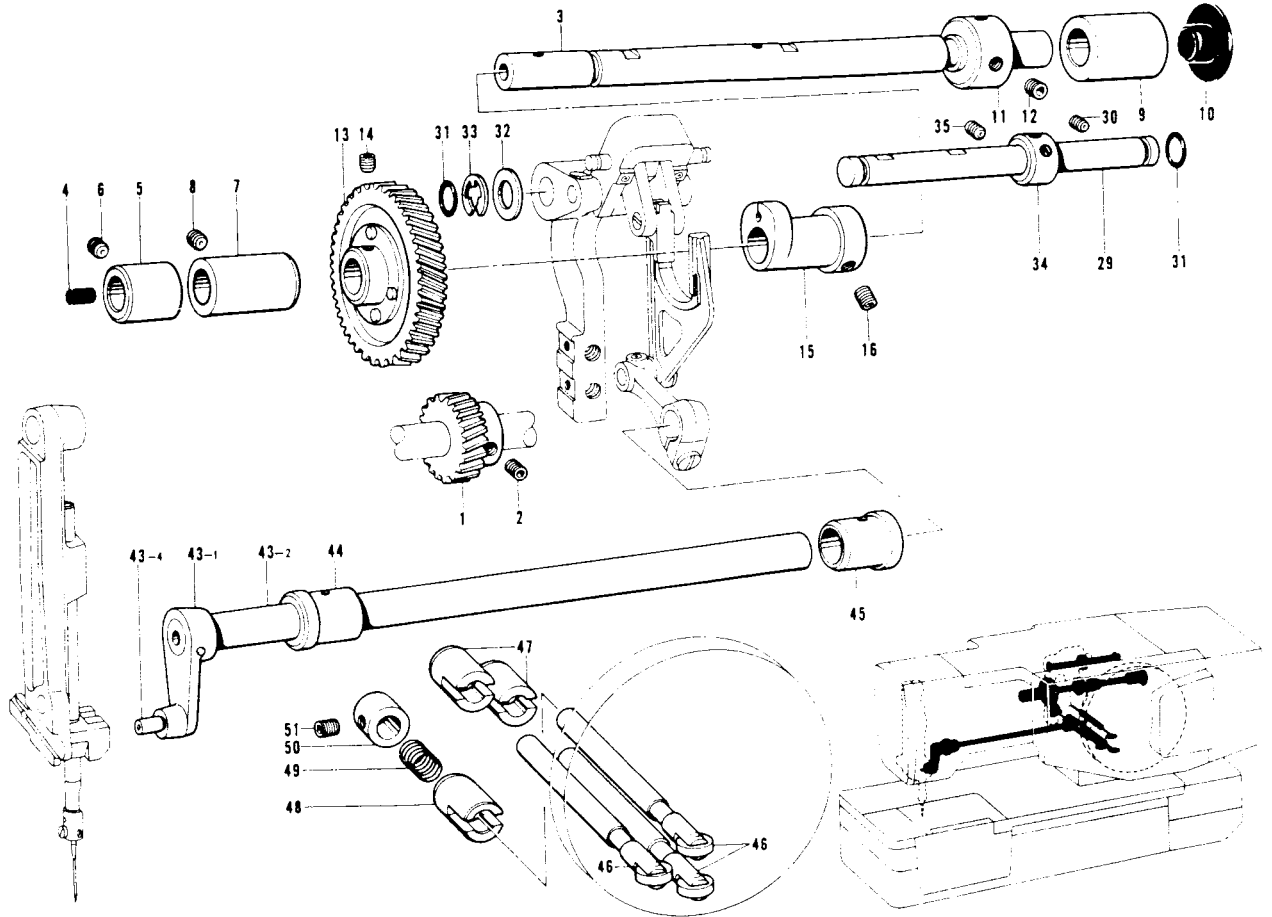


C. Upper shaft mechanism - Obere Welle  
 Mécanisme de l'arbre supérieur - Mecanismo de la eje superior



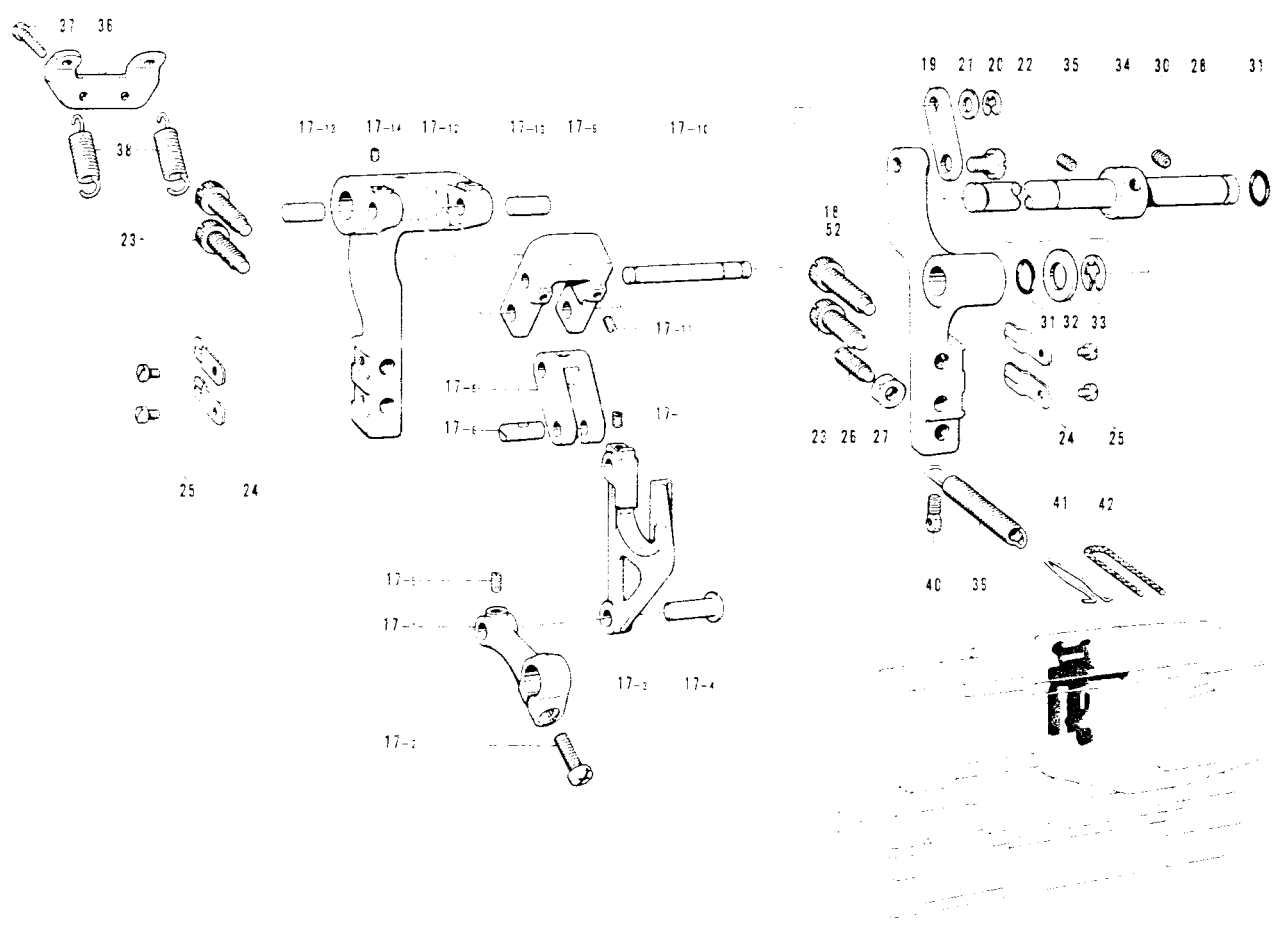
Ref. No.	Name of Part	Qty	Parts No.	Assembly No.	Ref. No.	Name of Part	Qty	Parts No.	Assembly No.
1	Upper Shaft	1	158891-001		21	Spring	1	159425-001	
2	Bushing (Front)	1	158892-001		22	Pulley Inside Cover	1	159420-001	
3	Bushing (Intermediate)	1	158893-000		24	Stop Cam Assembly	1	158901-001	
4	Bearing Case	1	158894-000		25	Cap for Stop Cam	1	158904-001	
5	"O" Ring P48	1	981048-070		26	Screw 3.57	2	117348-001	
6	Screw 5.95 x 6	1	014760-622		27	Taper Pin 4 x 28	1	S01319-001	
7	Ball Bearing 6302VV	2	722630-260		28	Screw 6.35 x 6	1	014770-622	
8	Washer	1	158895-001		29	Timing Belt Wheel Upper Assembly	1	159744-100	
9	Bearing Cap	1	158896-001		30	Screw 5.95 x 6	2	014760-622	
10	Screw 3.57	3	102843-004		31-1	Idle Pulley	1	158907-001	C-31 Idle Pulley Assembly 158906-001
11	Idle Pulley	1	158897-001		31-2	Bearing 6202VV	2	072620-260	
12	Bearing 6005VV	1	072600-560		31-4	Stop Ring C35	2	048350-242	
13	Stop Ring C25	1	048250-142		31-6	Stop Ring C15	1	048150-142	
14	Thrust Ring	1	116920-001		31-7	Idle Pulley Arm	1	158908-001	
15	Stop Ring C15	1	048150-142		32	Nut 12.7	1	158909-001	
16	Arm Shaft Pulley	1	158898-001		33	Washer 12.7	1	025900-232	
17	Block for Pulley	1	159427-001		34	Timing Belt	1	158910-001	
18	Screw	1	159424-001		35	Oil Cap	1	111865-001	
19	Screw 3.57	1	014679-320		36	Stop Cam Supporter	1	S00862-000	
20	Block for Pulley Stop Cam	1	158941-001		37	Spring Guide	1	S00928-001	

D. Zigzag mechanism (I) / Zickzackvorrichtung (I)  
 Mécanisme du zigzag (I) / Mecanismo del zigzag (I)



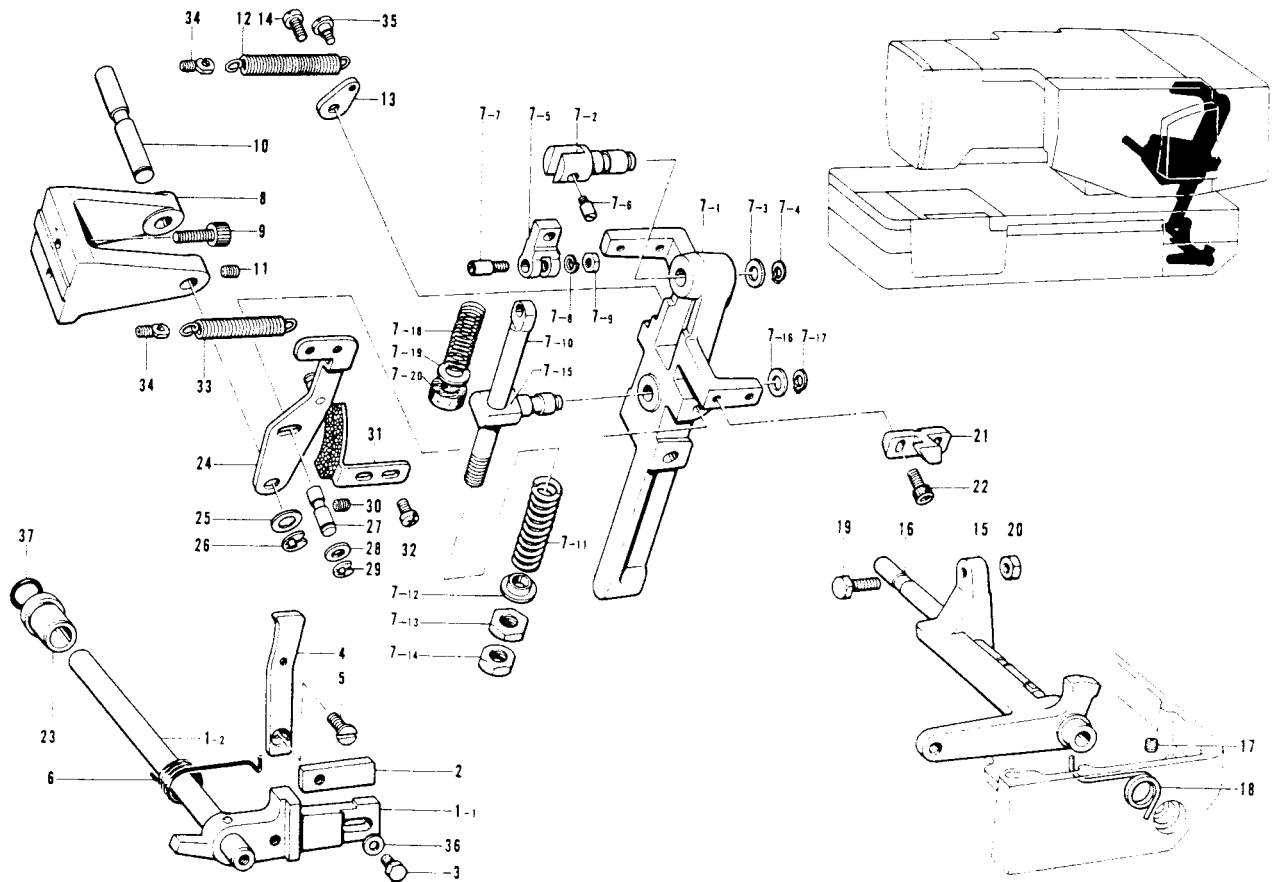
Ret. No.	Name of Parts	Qty	Parts No.	Assembly No.	Ret. No.	Name of Parts	Qty	Parts No.	Assembly No.
1	Speed Reduction Gear	1	141309-001		30	Screw 5.95 x 6	2	014760-622	
2	Screw 6.35 x 6	2	014770-622		31	"O" Ring	4	110558-001	
3	Sub Shaft	1	158911-001		32	Washer	2	115007-001	
4	Oil Cap	2	156641-001		33	Stop Ring E10	2	146293-001	
5	Bushing (Front)	1	158913-001		34	Collar	2	117671-002	
6	Screw 5.95 x 6	1	014760-622		35	Screw 6.35 x 6	4	014770-622	
7	Bushing (Intermediate)	1	158914-001		43-1	Zigzag Lever (Front)	1	D-43 Zigzag Lever Front Assembly 158942-001	
8	Screw 5.95 x 6	1	014760-622		43-2	Zigzag Lever Shaft	1		
9	Bushing (Right)	1	158915-001		43-4	Shaft	1		159625-001
10	Oil Cap	1	158916-000		44	Bushing (Front)	1	158945-001	
11	Collar	1	101486-001		45	Bushing (Right)	1	158946-001	
12	Screw 5.95 x 6	2	014760-622		46	Zigzag Connecting Shaft Assembly	3	158948-001	
13	Sub Shaft Gear	1	158917-001		47	Bushing	2	158950-000	
14	Screw 6.35 x 6	2	014770-622		48	Bushing	1	158951-000	
15	Zigzag Cam	1	158919-001		49	Spring	1	158952-001	
16	Screw 6.35 x 6	2	014770-622		50	Collar	1	141351-001	
29	Adjusting Arm Shaft (B)	1	158933-001		51	Screw 6.35 x 6	1	014770-622	

D. Zigzag mechanism (2) Zickzackvorrichtung (2)  
 Mecanisme du zigzag (2) Mecanismo del zigzag (2)



Qty	Part No.	Name of Parts	Qty	Part No.	Assembly No.	Qty	Part No.	Name of Parts	Qty	Part No.	Assembly No.
1	158947-001	Zigzag Adjusting Lever (R)	1	158947-001		1	153138-001	Washer	1	153138-001	
1	158948-001	Screw 0.35 x 18	1	158948-001		1	145480-001	Screw 0.35	1	145480-001	
1	158924-001	Zigzag Adjusting Link	1	158924-001		3	158930-001	Screw	3	158930-001	
1	158921-001	Stud	1	158921-001		4	158931-001	Zigzag Adjusting Screw Presser	4	158931-001	
1	014770-622	Screw 6.35 x 6	1	014770-622		4	062680-512	Screw 437 - 40 x 5	4	062680-512	
1	158922-001	Pin	1	158922-001	D-17	1	159905-001	Screw	1	159905-001	
1	014680-622	Screw 4.37 x 6	1	014680-622	Zigzag Adjusting Cam Assembly 159547-001	1	105812-003	Nut 7.94	1	105812-003	
1	158923-001	Zigzag Adjusting Link	1	158923-001		1	158929-001	Adjusting Arm Shaft (A)	1	158929-001	
1	158924-001	Link	1	158924-001		1	159426-001	Spring Hook	1	159426-001	
1	158928-001	Zigzag Adjusting Shaft	1	158928-001		2	062681-612	Screw 437 - 40 x 16	2	062681-612	
2	014680-622	Screw 4.37 x 6	2	014680-622		2	158935-001	Spring (A)	2	158935-001	
1	158928-000	Adjusting Arm	1	158928-000		1	158939-001	Spring (B)	1	158939-001	
2	158927-001	Stud	2	158927-001		1	141334-001	Spring Hook	1	141334-001	
2	014680-622	Screw 4.37 x 6	2	014680-622		1	158940-001	Spring Hook	1	158940-001	
1	158932-000	Zigzag Adjusting Arm	1	158932-000		1	159562-000	Wick	1	159562-000	
1	158926-001	Zigzag Adjusting Link	1	158926-001		1	159906-001	Screw	1	159906-001	
1	048050-342	Stop Ring E5	1	048050-342							

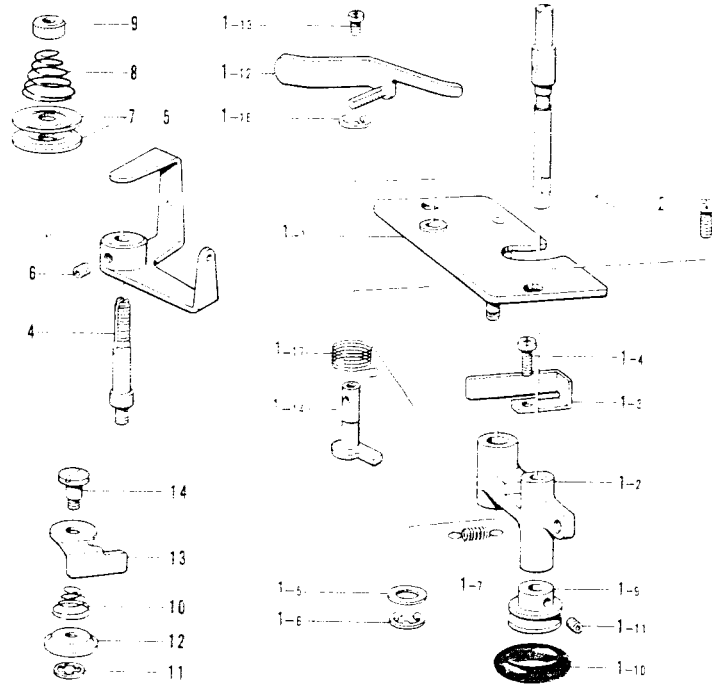
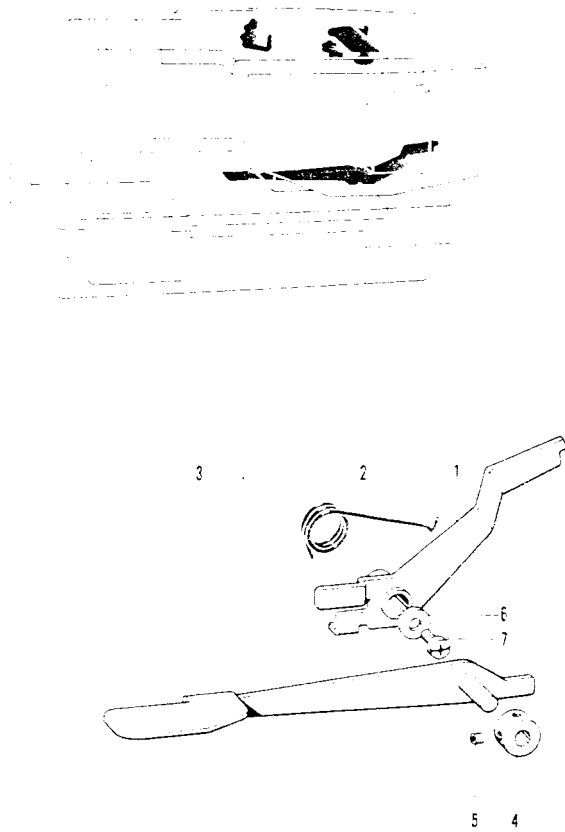
E. Clutch mechanism / Kupplungsvorrichtung  
 Mécanisme de l'embrayage / Mecanismo de embrague



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
1-1	Stop Lever	1		E-1 Stop Lever Assembly 158955-001	9	Screw 8 x 20	2	018082-022	
1-2	Shaft	1	158955-001		10	Clutch Lever Shaft	1	158961-001	
2	Stop Lever Claw	1	158956-001		11	Screw 5.95 x 6	2	014760-622	
3	Screw 6.35 x 14	1	017771-412		12	Spring	1	158979-001	
4	Plate	1	158957-001		13	Adjusting Plate	1	115558-002	
5	Screw 5.95 x 12	1	003761-212		14	Screw 5.95 - 28 x 12	1	062761-212	
6	Spring	1	158958-001		15	Starting Lever	1	158968-001	
7-1	Clutch Lever	1	158960-001		16	Starting Lever Shaft	1	158970-001	
7-2	Clutch Stopper Supporter	1	142667-001	17	Screw 5.95 x 6	1	014760-622		
7-3	Washer 10	1	025100-132	18	Spring	1	158971-001		
7-4	Stop Ring C10	1	048100-142	19	Screw 7.94	1	115585-001		
7-5	Clutch Stopper	1	115545-001	20	Nut 7.94	1	152997-001		
7-6	Screw	1	115544-001	21	Clutch Claw	1	158972-001		
7-7	Screw	1	115546-001	22	Screw 6 x 14	2	018061-422		
7-8	Spring Washer 2-5	1	028050-240	23	Bushing	1	158973-001		
7-9	Nut 4.76	1	021710-202	24	Brake Lever	1	158974-001		
7-10	Shaft	1	158962-001	25	Washer 10	1	025100-132		
7-11	Spring	1	158963-001	26	Stop Ring E8	1	048080-342		
7-12	Coller	1	158964-001	27	Pin	1	158975-001		
7-13	Nut 9.52	1	021860-312	28	Washer 8	1	025080-132		
7-14	Nut 9.52	1	100075-004	29	Stop Ring E6	1	048060-342		
7-15	Adjusting Bar Clamp	1	158965-001	30	Screw 5.95 x 6	1	014760-622		
7-16	Washer 10	1	025100-132	31	Brake Assembly	1	158976-001		
7-17	Stop Ring C10	1	048100-142	32	Screw 5.95 - 28 x 8	2	062760-812		
7-18	Spring	1	115551-001	33	Spring	1	141517-001		
7-19	Washer 10	1	025100-132	34	Spring Hook	2	141534-001		
7-20	Spring Felt	1	115550-001	35	Screw 4.76	1	115559-002		
8	Clutch Lever Bracket	1	158959-001	36	Washer 6.35	1	025770-232		
				37	"O" Ring PW10	1	081010-670		

F. Emergency stop mechanism  
 Abschaltvorrichtung  
 Mécanisme de l'arrêt de secours  
 Mecanismo de parada de emergencia

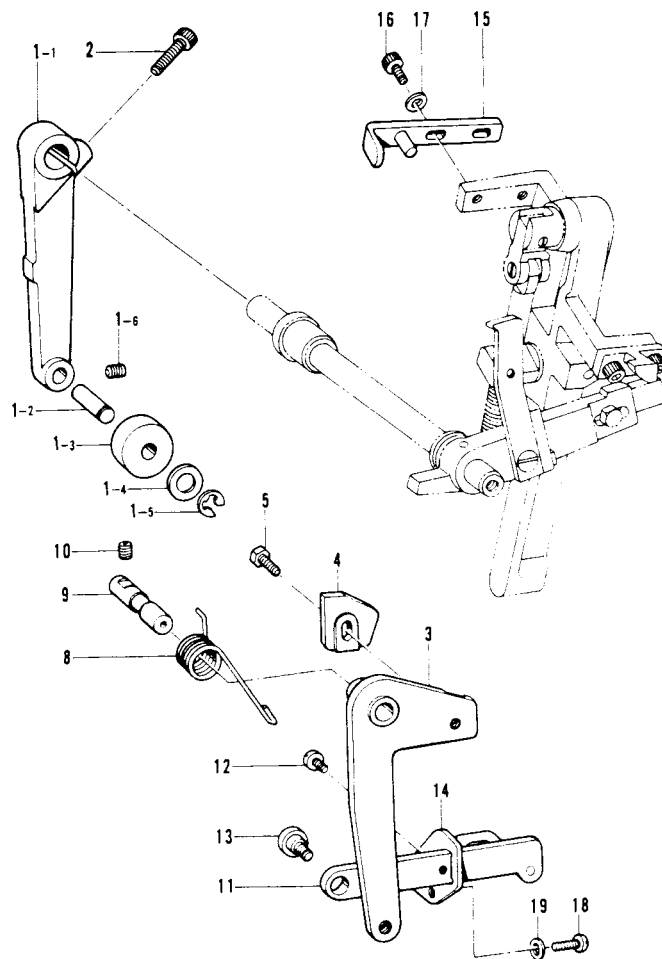
G. Bobbin winder  
 Spulor  
 Mécanisme du bobineur  
 Mecanismo del devanador de la canilla



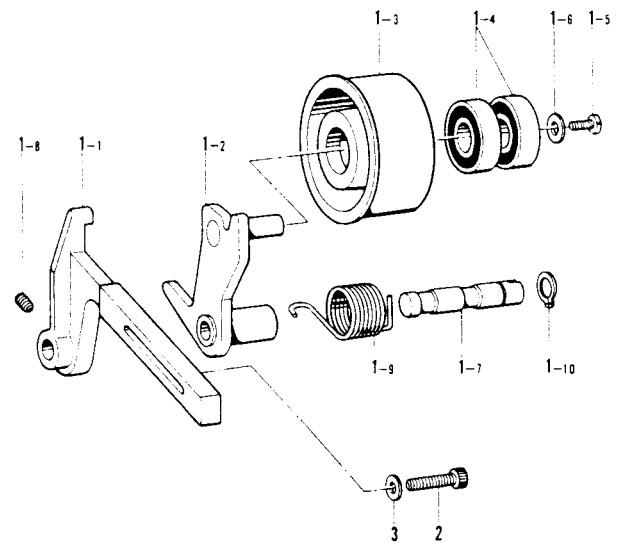
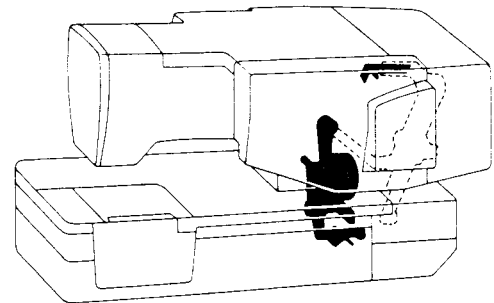
Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.
1	Emergency Stop Lever	1	159001-001	
2	Spring	1	159002-001	
3	Emergency Stop Arm Assembly	1	159005-001	
4	Collar	1	159006-001	
5	Screw 4.37 x 6	2	014680-622	
6	Washer E	1	025060-332	
7	Screw 6.35 - 40 x 10	1	062771-012	

Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.
1-1	Bobbin Bracket Assembly	1	S01288-002	
1-2	Bobbin Arm	1	S01290-001	
1-3	Spring	1	S01292-001	
1-4	Screw 4.37 - 40 x 8	1	062680-812	
1-5	Washer E	1	025080-132	
1-6	Stop Ring E6	1	048060-342	
1-7	Spring	1	S01294-001	
1-8	Shaft	1	159252-001	
1-9	Bobbin Winder Wheel	1	154528-001	G-1
1-10	Rubber Ring	1	120448-001	Bobbin
1-11	Screw 4.37 x 6	2	014680-622	Assembly
1-12	Bobbin Presser	1	159253-001	S01287-002
1-13	Screw 3.57 - 40 x 6	1	062670-612	
1-14	Shaft	1	S01291-001	
1-16	Stop Ring E5	1	048050-342	
1-17	Spring	1	S01293-001	
2	Screw 4.76 - 32 x 8	2	062710-812	
4	Bobbin Thread Bar	1	159256-001	
5	Bobbin Thread Guide	1	159257-001	
6	Screw 4.37 x 6	2	014680-622	
7	Tension Disc	2	145446-001	
8	Tension Spring	1	115188-001	
9	Tension Control Nut	1	100136-001	
10	Spring	1	144505-000	
11	Stop Ring CS4	1	146200-001	
12	Disc	1	146199-001	
13	Knife	1	146198-001	
14	Screw 4.37	1	118764-002	

**H. Belt shift mechanism**  
 Riemenstellvorrichtung  
 Mécanisme du changement de courroie  
 Mecanismo del cambia correas



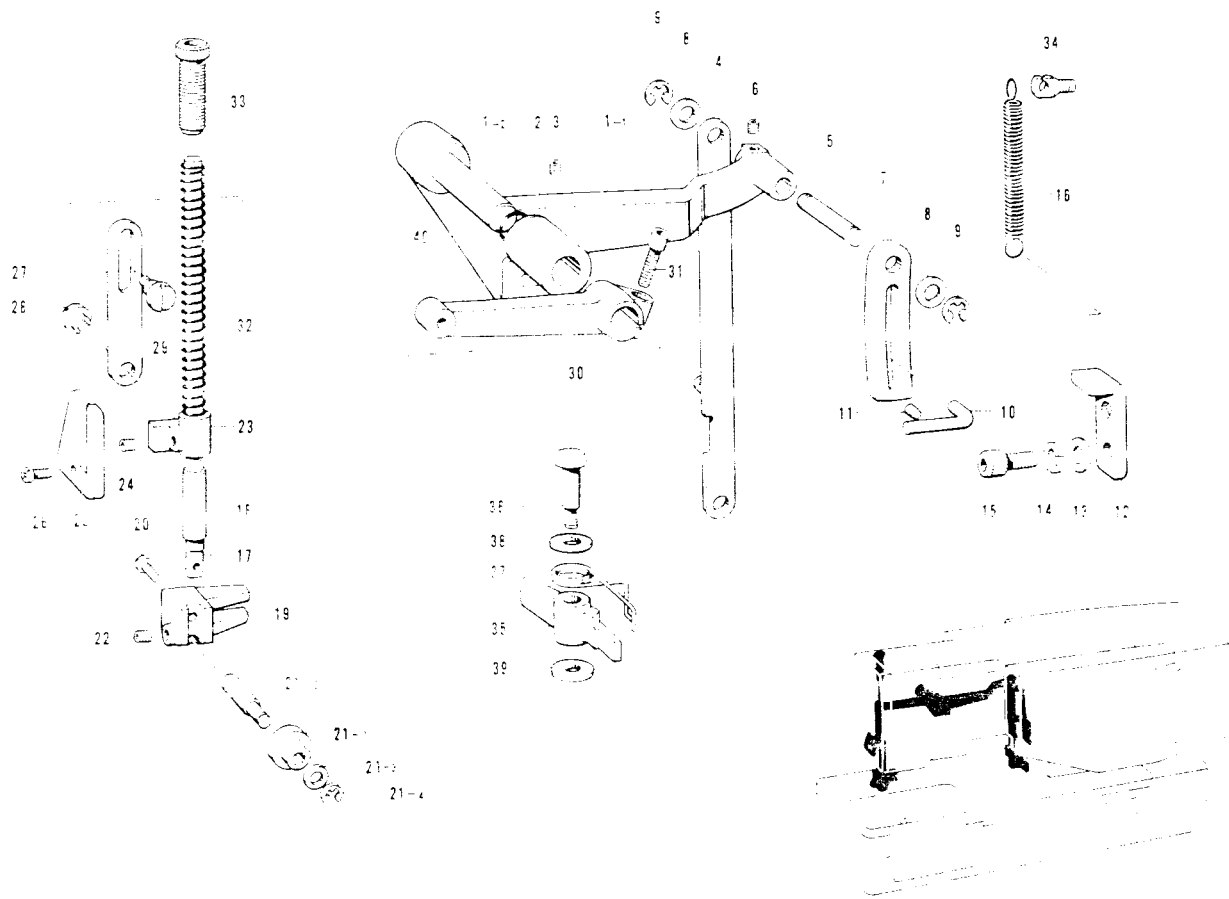
**J. Tension pulley mechanism**  
 Spannrolle  
 Mécanisme de la poulie de tension  
 Mecanismo de la polea de tensión



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
1-1	Belt Shift Lever	1	158990-001	H-1 Belt Shift Lever Assembly 159553-001
1-2	Roller Stud	1	158991-001	
1-3	Belt Shift Roller	1	158992-001	
1-4	Washer	1	107153-002	
1-5	Stop Ring E6	1	048060-342	
1-6	Screw 5.95 x 6	1	014760-622	
2	Screw 6 x 22	1	018062-222	
3	Belt Shifter Lever	1	158993-001	
4	Belt Shifter Cam	1	158994-001	
5	Screw 6.35 x 8	1	017770-802	
8	Spring	1	158995-001	
9	Stud	1	158996-001	
10	Screw 5.95 x 6	1	014760-622	
11	Belt Shift Lower	1	158997-001	
12	Screw 476 - 32 x 6	1	062710-612	
13	Screw 6.35	1	158998-001	
14	Belt Shifter Lower Guide	1	158999-100	
15	Belt Shifter Upper	1	159000-001	
16	Screw 6 x 12	2	018061-222	
17	Washer 6	2	025060-232	
18	Screw 437	2	107407-003	
19	Washer 4.37	2	025680-132	

Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
1-1	Tension Pulley Bracket	1	159007-001	J-1 Tension Pulley Assembly 159551-001
1-2	Tension Pulley Arm Assembly	1	159008-001	
1-3	Tension Pulley	1	159011-000	
1-4	Bearing 6201VV	2	072620-160	
1-5	Screw 595 - 28 x 12	1	062761-212	
1-6	Washer 6	1	025060-332	
1-7	Shaft	1	159012-001	
1-8	Screw 5.95 x 6	1	014760-622	
1-9	Spring	1	159013-001	
1-10	Stop Ring C10	1	048100-142	
2	Screw 8 x 20	1	018082-022	
3	Washer 8	1	025080-232	

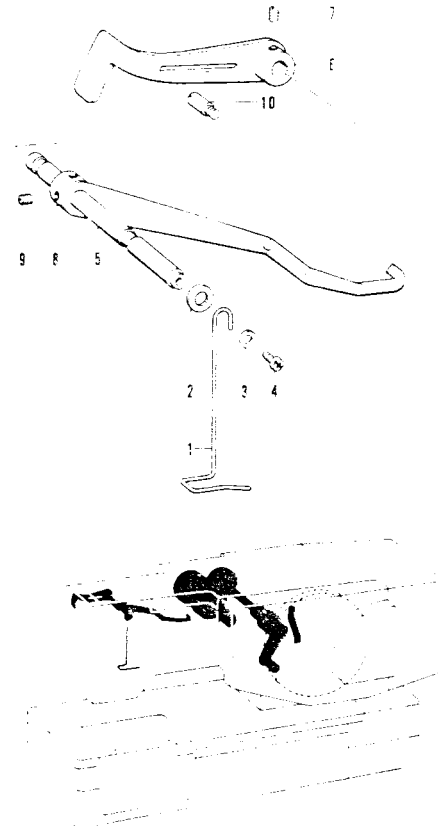
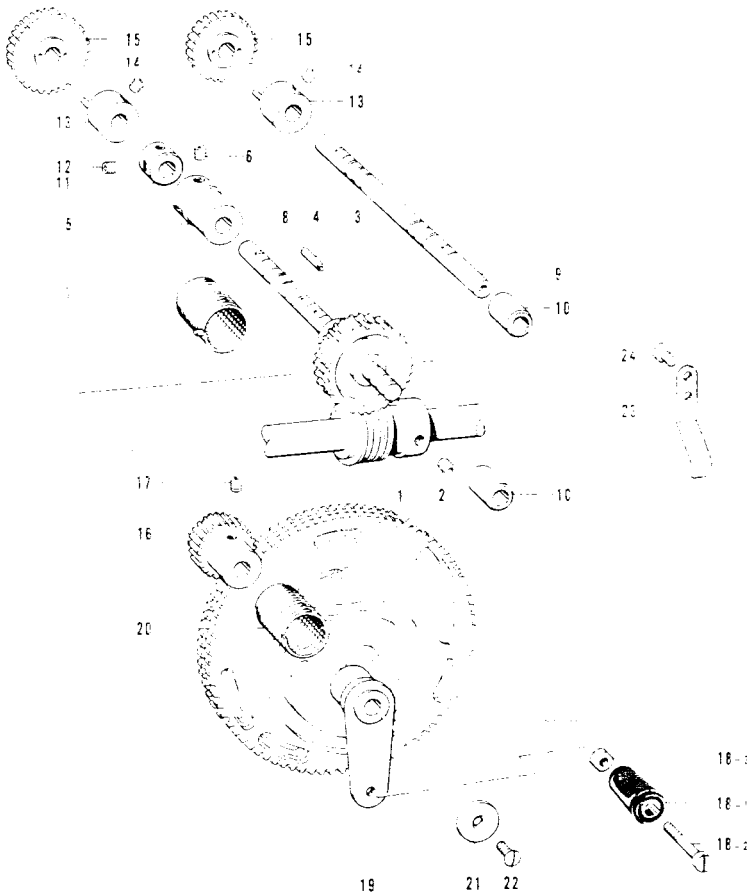
K. Presser foot mechanism: Stoffdruckerruß  
 Mécanisme du pied presseur: Mecanismo de prensa telas



Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.
1	Presser Lifter	1	159015-001	K-1 Presser Lift Assembly 159014-001	21-1	Presser Roller	1	159027-001	K-21 Presser Bar Roller Bracket Assembly 159052-001
2	Presser Lifter Lever Shaft	1	159016-001		21-2	Roller Stud	1	159028-001	
3	Bushing	1	159032-000	21-3	Washer 6	1	025060-132	048040-342	
4	Screw 5.95 x 6	1	014760-622	21-4	Stop Ring E6	1	048040-342		
5	Presser Lifter Driving Connector	1	159018-001	22	Screw 6.35 x 6	1	014770-622	159030-000	
6	Stud	1	159020-001	23	Presser Bar Clamp	1	159030-000		
7	Screw 5.95 x 6	1	014760-622	24	Screw 5.95 x 6	1	014760-622	159031-001	
8	Safety Stopper	1	159021-001	25	Guide Plate	1	159031-001		
9	Washer 8	2	025080-232	26	Screw 437 - 40 x 8	2	062680-812	159033-001	
10	Stop Ring E6	2	048060-342	27	Presser Lift Link	1	159033-001		
11	Safety Stopper Shaft	1	159022-001	28	Screw 5.95	1	159394-001	145480-001	
12	Screw 5.95 x 6	1	014760-622	29	Screw 6.35	1	145480-001		
13	Stopper	1	159023-001	30	Presser Bar Lifter	1	159034-000	018062-022	
14	Washer 8	2	025080-232	31	Screw 6 x 20	1	018062-022		
15	Spring Washer 2--8	2	028080-242	32	Spring	1	159035-001	100279-101	
16	Screw 8 x 16	2	018081-622	33	Presser Adjusting Screw	1	100279-101		
17	Spring	1	159024-001	34	Spring Hook	1	141334-001	159923-001	
18	Presser Bar	1	159025-001	35	Presser Stop Lever	1	159923-001		
19	Bushing	1	159818-001	36	Screw	1	159924-001	159925-001	
20	Presser Bar Roller Bracket	1	159026-001	37	Spring	1	159925-001		
	Screw 437 - 40 x 12	1	062681-212	38	Washer	1	159947-001	149095-001	
				39	Washer	1	149095-001		
				40	"O" Ring PW11	1	081011-670		

M. Feed cam mechanism  
 Transporteurkurve  
 Mécanisme de la came d'entraînement  
 Mecanismo de la leva de alimentación

N. Thread breakage detector  
 Fadenbrüchmähler  
 Mécanisme du détecteur de cassure du fil  
 Mecanismo del sensor de cortes en el hilo

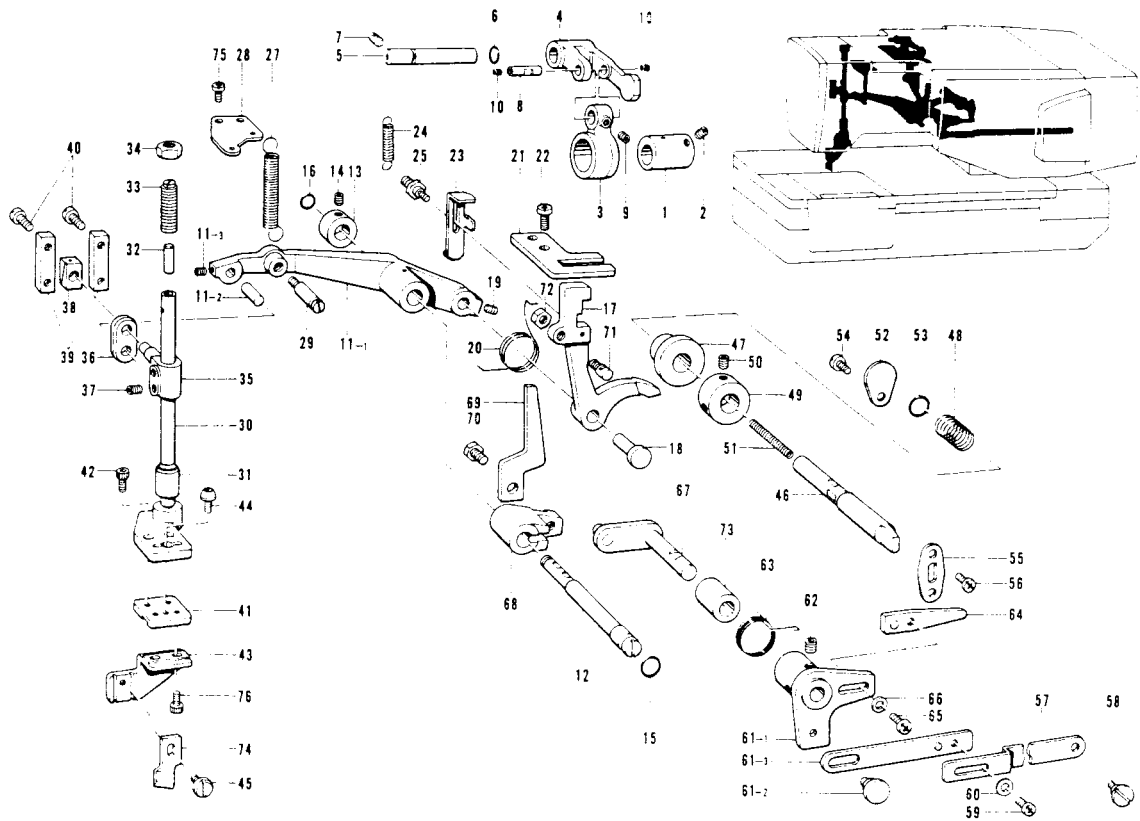


Ref. N°	Name of Parts	Qty	Parts No.	Assembly No.
1	Worm	1	141367-000	
2	Screw 6.35 x 6	2	014770-622	
3	Worm Wheel	1	159082-000	
4	Spring Pin AW3	1	047301-842	
5	Collar	1	159083-001	
6	Screw 6.35 x 6	2	014770-622	
7	Spring	1	159084-001	
8	Worm Wheel Shaft	1	159085-000	
9	Gear Shaft	1	159086-001	
10	Bushing	2	159087-000	
11	Ser Collar	1	110495-003	
12	Screw 6.35 x 6	2	014770-622	
13	Gear Shaft Collar Assembly	2	159088-001	
14	Screw 6.35 x 6	4	014770-622	
15	Gear 34	1	141378-000	
15	Gear 42	1	141382-000	
16	Free Wheel Gear	1	159090-001	
17	Screw 6.35 x 6	2	014770-622	
18-1	Handle	1	159093-000	M-18
18-2	Screw 5.95	1	112700-001	Handle Assembly
18-3	Nut 5.95	1	106588-003	159091-001
19	Handle Lever	1	159092-001	
20	Spring	1	159094-001	
21	Bearing Cover	1	151932-001	
22	Screw 4.76	1	107231-002	
23	Stopper	1	159095-000	
24	Screw 4.37 - 40 x 6	1	062680-612	

Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.
1	Thread Breakage Perceiving Wire	1	159144-001	
2	Washer 6	1	025060-232	
3	Washer 3.5	1	025350-332	
4	Screw 25.7 - 40 x 6	1	062670-612	
5	Shaft	1	159145-001	
6	Thread Breakage Perceiving Lever	1	159146-001	
7	Screw 4.37 x 6	2	014680-622	
8	Stopper	1	159147-001	
9	Screw 4.37 x 6	2	014680-622	
10	Stopper	1	159148-001	



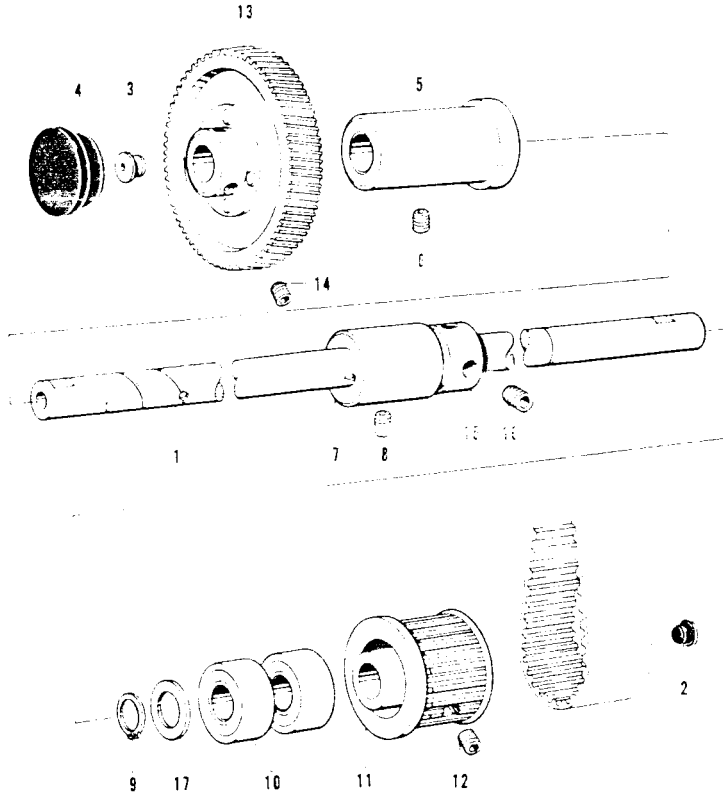
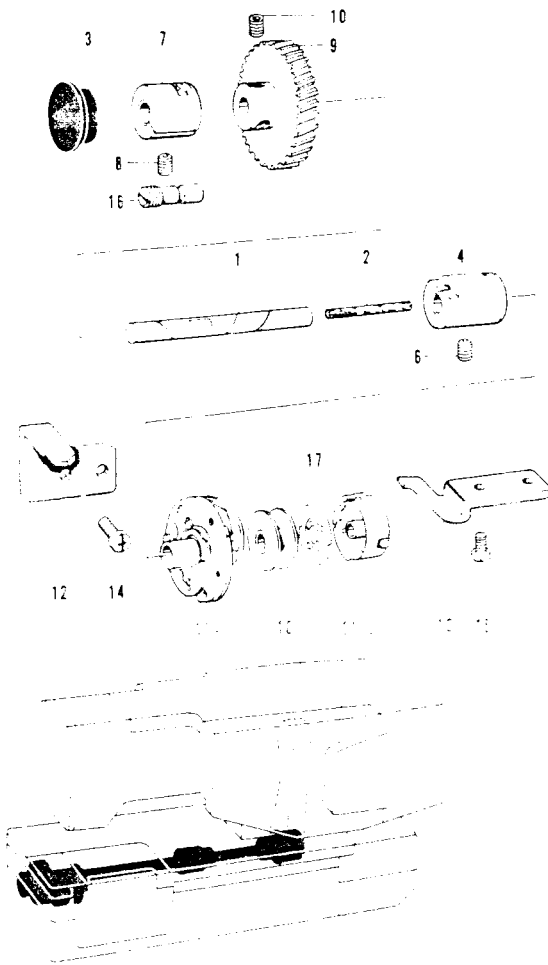
P. Cutter mechanism Abschneidevorrichtung  
 Mécanisme de la coupe Mecanismo de la corta



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
1	Cutter Eccentric Wheel	1	159096-001		40	Screw 595 - 28 x 12	4	062761-212	
2	Screw 6.35 x 6	2	014770-622		41	Holder (Upper)	1	159122-001	
3	Cutter Eccentric Rod	1	159097-001		42	Screw 4.37 x 8	2	018680-822	
4	Cutter Driving Lever	1	159098-001		43	Holder (Lower)	1	159123-001	
5	Cutter Driving Lever Shaft	1	159099-001		44	Screw	2	153057-002	
6	"O" Ring P7	1	081007-070		45	Screw 4.37	1	115503-001	
7	Screw 5.95 x 6	1	014760-622		46	Cutter Connecting Shaft	1	159124-001	
8	Pin	1	159100-001		47	Collar	1	159126-001	
9	Screw 4.37 x 6	1	014680-622		48	Spring	1	159127-001	
10	Oil Cap	2	159101-000		49	Set Collar	1	159128-001	
11-1	Cutter Connecting Lever	1		P-11 Cutter Connecting Lever Assembly 159102-001	50	Screw 6.35 x 6	2	014770-622	
11-2	Pin	1	159104-001		51	Spring	1	159129-001	
11-3	Screw 4.37 x 6	1	014680-622		52	Spring Guide Supporter	1	159130-001	
12	Cutter Connecting Lever Shaft	1	159105-001		53	"O" Ring P11	1	081011-070	
13	Collar	1	159491-001		54	Screw 476 - 32 x 8	1	062710-812	
14	Screw 5.95 x 6	2	014760-622		55	Clutch Shaft Guide Plate	1	159131-001	
15	"O" Ring P11	1	081011-070		56	Screw 437 - 40 x 6	2	062680-612	
16	"O" Ring PW6	1	081006-670		57	Connecting Plate	1	159132-001	
17	Clutch	1	159106-001		58	Screw 4.37	1	159908-001	
18	Pin	1	159107-001		59	Screw 437 - 40 x 6	2	062680-612	
19	Screw 5.95 x 6	1	014760-622		60	Washer 4.37	2	025680-132	
20	Spring	1	159108-001		61-1	Cutter Stop Lever	1		P-61 Cutter Stop Lever Assembly 158824-001
21	Cutter Clutch Guide	1	159109-001		61-2	Pin	1	159133-001	
22	Screw 595 - 28 x 12	2	062761-212		61-3	Cutter Stop Connecting Rod	1	158823-001	
23	Cutter Clutch Guide Plate	1	159110-001		62	Screw 6.35 x 6	2	014770-622	
24	Spring	1	159111-001		63	Spring	1	159135-001	
25	Spring Hook	1	159112-001		64	Lever	1	159136-001	
27	Spring	1	159114-001		65	Screw 437 - 40 x 6	2	062680-612	
28	Spring Plate	1	159115-001		66	Washer 4.37	2	025680-132	
29	Pin	1	159395-001		67	Stop Lever Shaft	1	159137-001	
30	Shaft	1	159116-001		68	Stop Lever Bracket	1	159140-001	
31	Bushing	1	159117-001		69	Stop Lever Plate	1	159141-001	
32	Cushion	1	159118-000		70	Screw 6.35 x 14	1	017771-412	
33	Screw	1	159119-001		71	Pin	1	159142-001	
34	Nut 12.70	1	021910-302		72	Nut 6.35	1	150554-002	
35	Holder	1	159120-001		73	Bushing	1	159143-000	
36	Link	1	159329-001		74	Cutter 1/2"	1	107200-001	
37	Screw 6.35 x 6	2	014770-622		75	Screw 437 - 40 x 8	2	062680-812	
38	Cutter Guide Block	1	159570-001		76	Screw 4.37 x 5	2	018680-522	
39	Cutter Bar Guide	2	159121-001						

Q. Rotary hook mechanism  
Greifervorrichtung  
Mecanisme du crochet rotatif  
Mecanismo del cangrejo

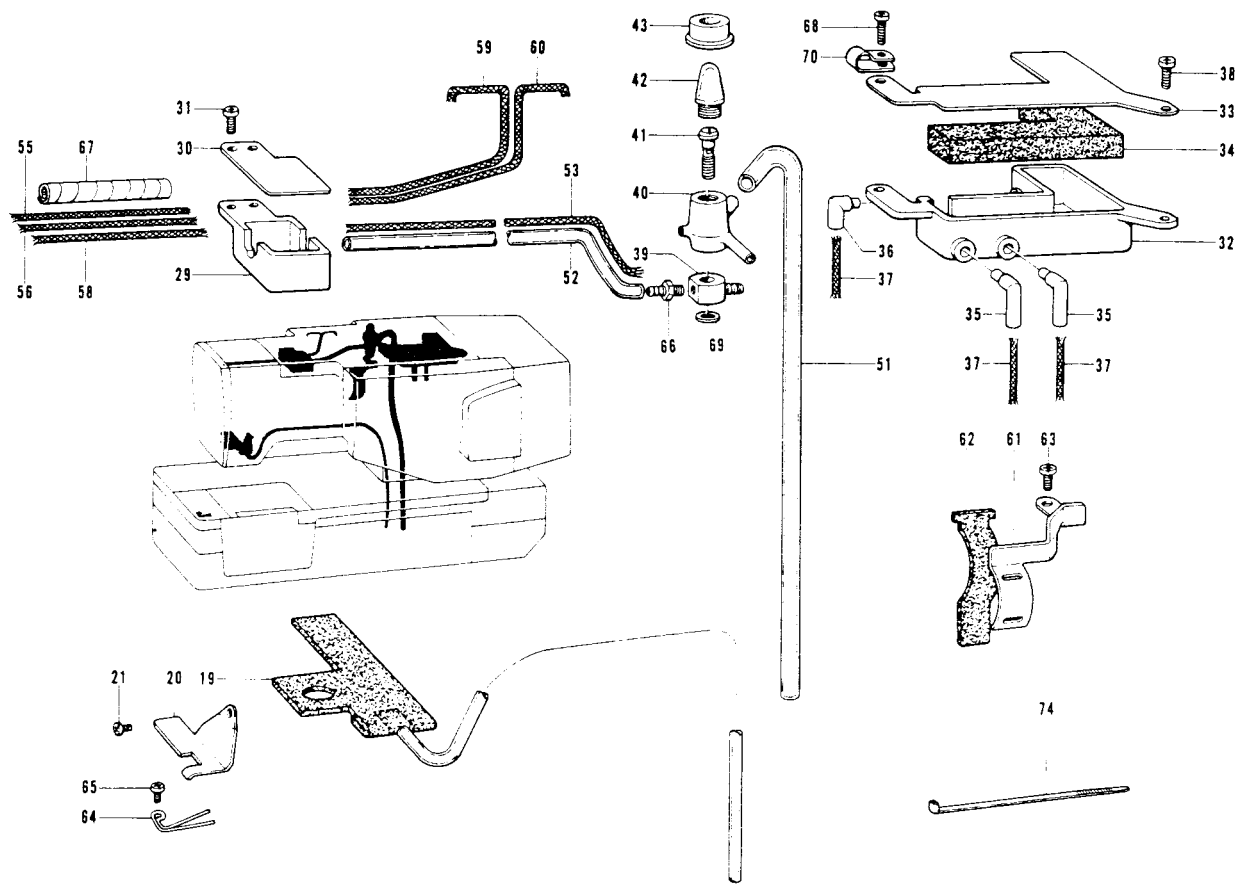
R. Lower shaft mechanism  
Untere Welle  
Mecanisme de l'arbre inferieur  
Mecanismo de la eje inferior



Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.
1	Rotary Hook Shaft	1	159149-001	
2	Felt	1	106436-001	
3	Oil Cap	1	159150-000	
4	Bushing (Right)	1	159151-001	
5	Screw 5.95 x 6	1	014760-622	
6	Bushing (Front)	1	159153-001	
7	Screw 5.95 x 6	1	014760-622	
8	Screw 5.95 x 6	1	159154-001	
9	Gear	2	014770-622	
10	Screw 6.35 x 6	2	014770-622	
11-1	Rotary Hook	1		Q-11 Rotary Hook Assembly 159155-001
11-2	Bobbin Case Assembly	1	159157-001	
12	Rotary Hook Stop (A)	1	159159-001	
13	Rotary Hook Stop (B)	1	159160-001	
14	Screw 476 - 32 x 10	2	062711-612	
15	Screw 437 - 40 x 6	2	062680-612	
16	Screw	2	159161-001	
17	Spring	1	S01109-001	
18	Bobbin	1	159158-001	

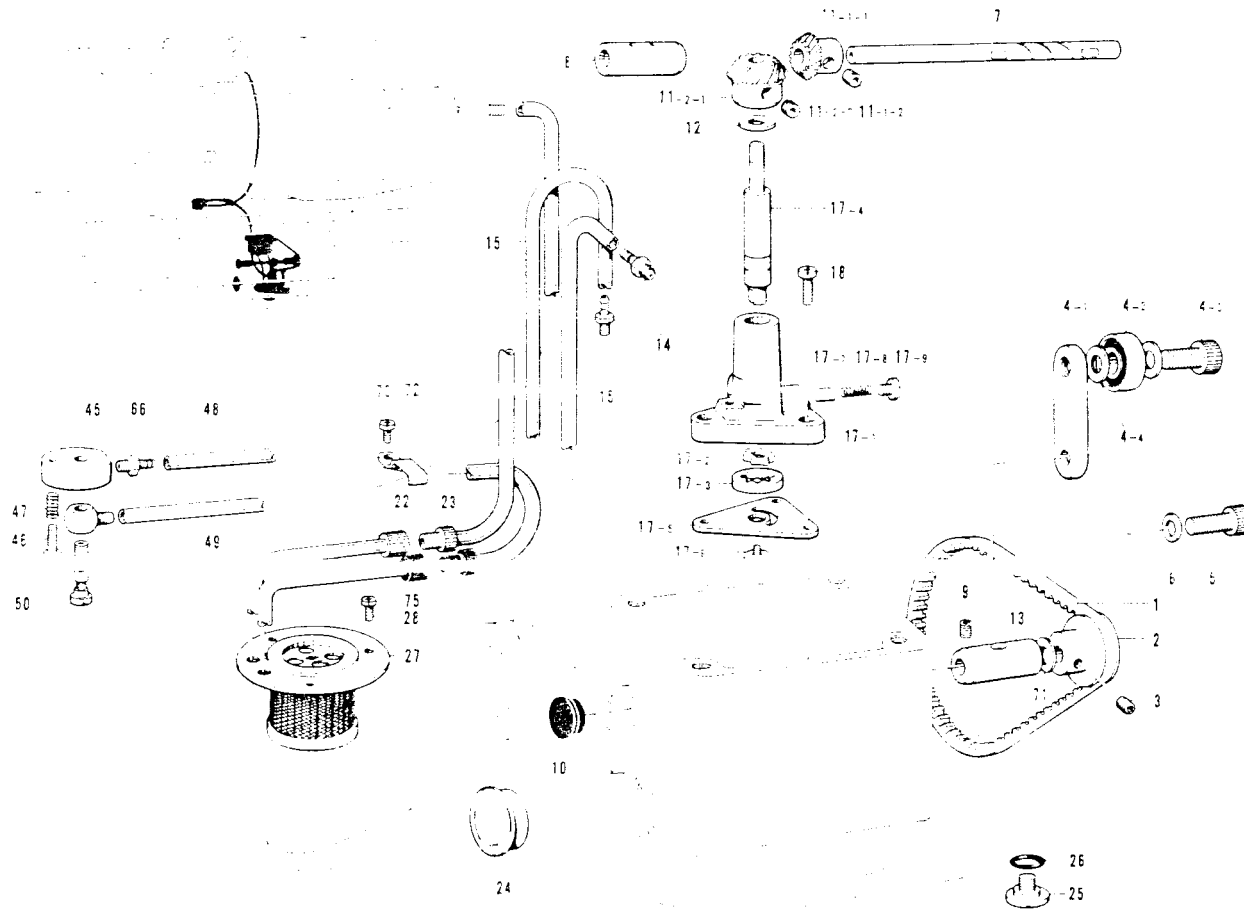
Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.
1	Lower Shaft	1	159162-001	
2	Vinyl Cap	1	104450-001	
3	Cap	1	114255-002	
4	Oil Cap	1	159163-000	
5	Bushing (Front)	1	159164-001	
6	Screw 5.95 x 6	1	014760-622	
7	Bushing (Intermediate)	1	158893-000	
8	Screw 5.95 x 6	1	014760-622	
9	Stop Ring C15	1	048150-142	
10	Bearing 6202	2	072620-200	
11	Lower Pulley Assembly	1	159745-100	
12	Screw 5.95 x 6	2	014760-622	
13	Lower Shaft Gear Assembly	1	159166-001	
14	Screw 6.35 x 6	2	014770-622	
15	Set Collar	1	159169-001	
16	Screw 6.35 x 6	2	014770-622	
17	Washer	1	116920-001	

S. Lubrication (I) Schmierung (I)  
 Lubrification (I) Lubricación (I)



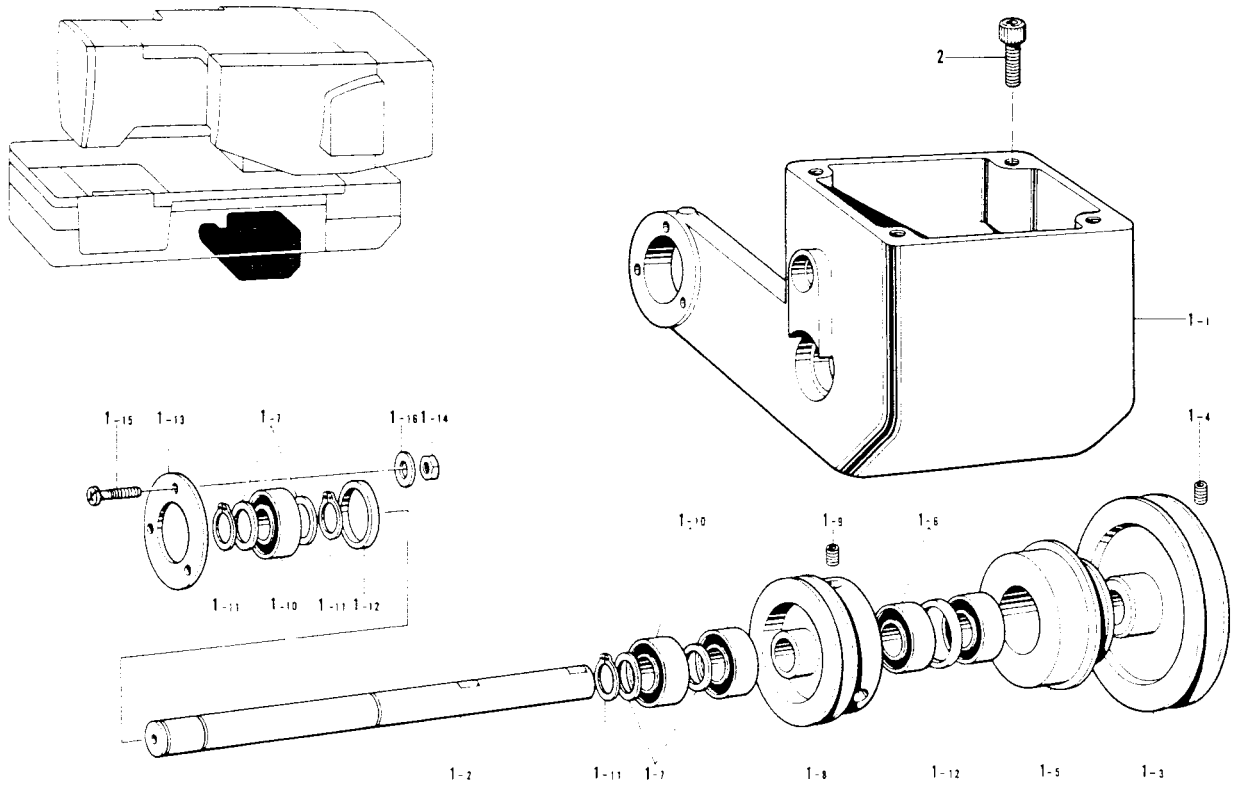
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
19	Pump Tube Assembly	1	159178-001		51	Vinyl Tube	1	159209-000	
20	Felt Holder	1	159181-001		52	Vinyl Tube	1	141650-000	
21	Screw 357 - 40 x 6	1	062670-612		53	Wick 2.5 x 500	1	159564-000	
29	Felt Base (A)	1	159187-000		55	Wick 2.5 x 150	1	159565-000	
30	Felt Base Cap	1	159188-001		56	Wick 3 x 450	1	159566-000	
31	Screw 437 - 40 x 8	2	062680-812		58	Wick 3 x 180	1	159567-000	
32	Felt Base (B)	1	159189-000		59	Wick 2.5 x 100	1	159568-000	
33	Felt Base Cap	1	159190-001		60	Wick 2.5 x 150	1	159569-000	
34	Felt	1	159191-000		61	Felt Holder	1	159213-001	
35	Oil Pipe (A)	2	159192-000		62	Felt	1	159214-000	
36	Oil Pipe (B)	1	159193-000		63	Screw 437 - 40 x 6	2	062680-612	
37	Wick 4 x 4	3	159601-000		64	Guide	1	159215-001	
38	Screw 437 - 40 x 8	1	062680-812		65	Screw 357 - 40 x 5	1	062670-512	
39	Vinyl Tube Joint	1	159194-000		67	Spiral Tube	1	159909-000	
40	Oil Terminal	1	159195-000		68	Screw 437 - 40 x 10	1	062681-012	
41	Screw	1	159199-001		69	Gasket	1	112348-001	
42	Oil Gauge Window	1	143713-001		70	Cord Holder	1	149547-000	
43	Oil Window Holder	1	159201-000		74	Bead Bard	2	149799-000	

S. Lubrication (2) Schmierung (2)  
 Lubrification (2) Lubricación (2)



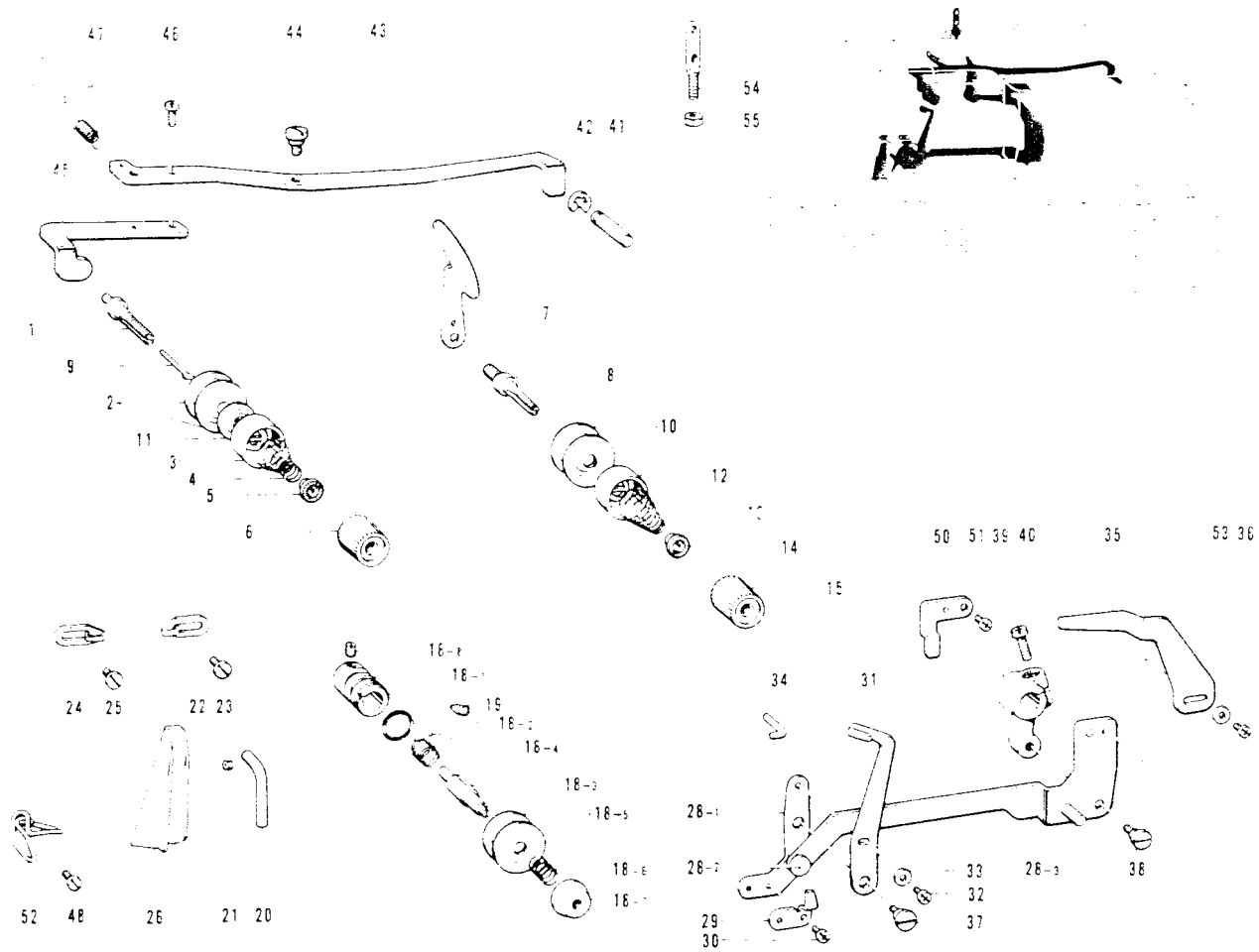
Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.
1	Pump belt	1	159170-000		17-4	Pump Shaft	1	148469-001	
2	Pump Pulley	1	159171-000		17-5	Pump Cap Plate	1	159177-001	S-17
3	Screw 5.95 x 6	2	014760-622		17-6	Screw 3.57 x 1	1	145465-001	Pump
4-1	Pump Pulley Base	1	159173-001	S-4	17-7	Plunger	1	148471-001	Assembly
4-2	Bearing 6000DD	1	072600-040	Pump Pulley	17-8	Spring	1	144876-001	159176-001
4-3	Screw 10 x 16	1	018101-622	Assembly	17-9	Screw 6.35	1	112467-002	
4-4	Washer 10	1	025100-132	159172-001	18	Screw 476 - 22 x 14	3	062711-412	
5	Screw 8 x 14	1	018081-422		22	Nut	1	142750-002	
6	Washer 8	1	025080-232		23	Oil Feeding Pipe	1	142748-002	
7	Pump Pulley Shaft	1	159174-001		24	Oil Gauge Window	1	152948-001	
8	Bushing	1	142766-001		25	Screw 9.52	1	110641-002	
9	Screw 5.95 x 6	1	014760-622		26	"O" Ring	1	109203-001	
10	Oil Cap	1	150756-000		27	Oil Filter Assembly	1	159182-001	
11-1-1	Pump Shaft Gear	1		S-11-1	28	Screw 437 - 40 x 8	3	062680-812	
11-1-2	Screw 6.35 x 6	2	014770-622	Pump Shaft Gear Assembly 143916-001	45	Oil Adjusting Base	1	159203-000	
11-2-1	Lower Shaft Gear	1		S-11-2	46	Screw 437 - 40 x 14	1	062681-412	
11-2-2	Screw 6.35 x 6	2	014770-622	Lower Shaft Gear Assembly 180515-001	47	Spring	1	159204-001	
12	Washer	1	S01040-001		48	Vinyl Tube Assembly (A)	1	159205-001	
13	Bushing (Front)	1	S01047-001		49	Vinyl Tube Assembly (B)	1	159207-001	
14	Oil Feeding Pipe	2	142359-001		50	Oil Feeding Pipe (B)	1	112364-001	
15	Vinyl Tube	2	159175-000		66	Oil Feeding Pipe	2	142359-001	
17-1	Pump Body	1		S-17	71	Washer	1	110367-001	
17-2	Oil Pump Inner Rotor	1	141643-000	Pump Assembly 159176-001	72	Tube Holder	1	142268-001	
17-3	Oil Pump Outer Rotor	1	141642-000		73	Screw 357 - 40 x 6	1	062670-612	
					75	Nut	1	142750-001	

T. Power transmitter mechanism - Kraftübertragungsvorrichtung  
 Mécanisme du transmetteur - Mecanismo del transmisor de potencia



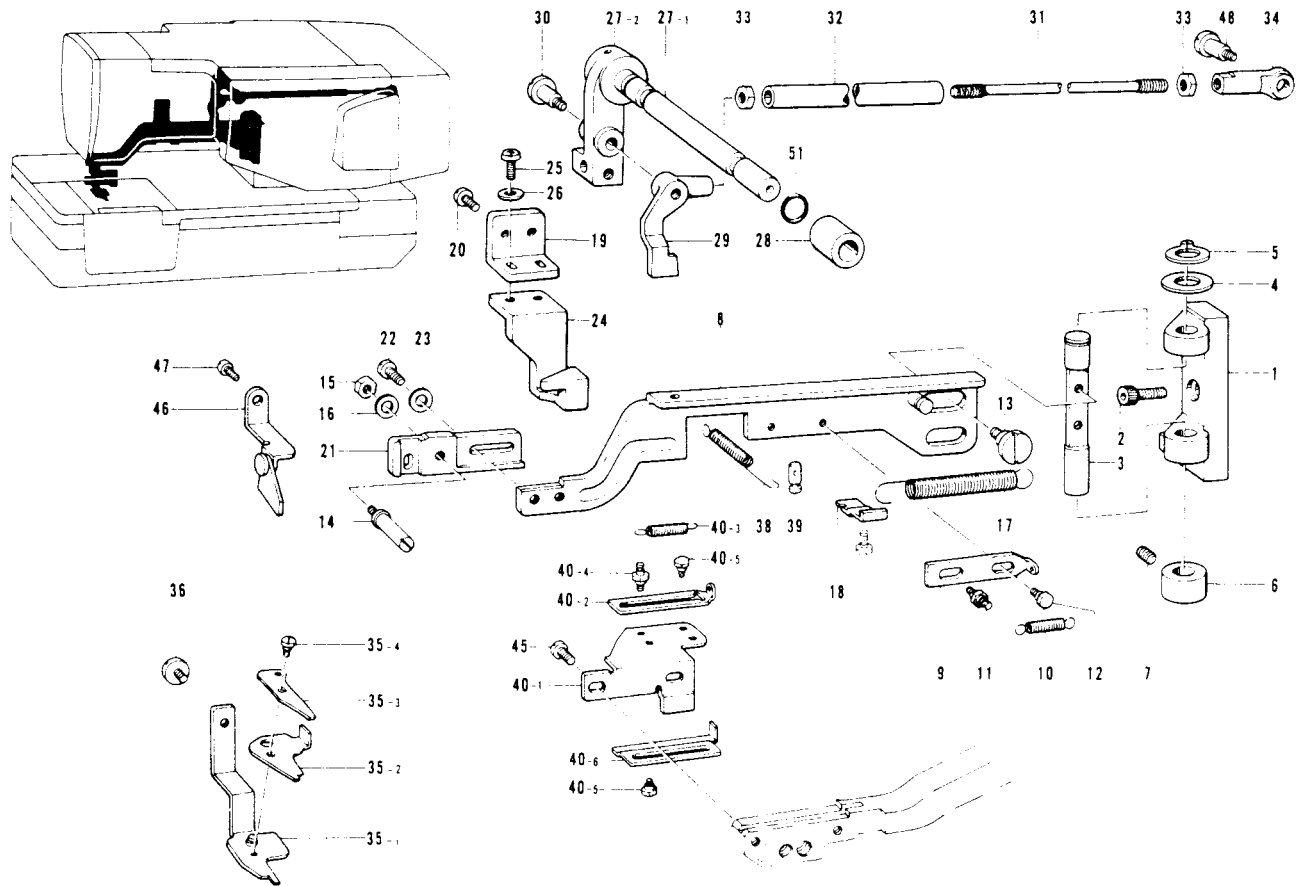
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
1- 1	Transmitter Base	1	158989-001	T-1 Transmitter Assembly 159550-001	1-10	Bearing 6003VV	3	072600-360	T-1 Transmitter Assembly 159550-001
1- 2	Shaft	1	158983-001		1-11	Stop Ring C17	3	048170-142	
1- 3	Slow Speed Pulley	1	158984-001		1-12	Bearing Collar	2	158981-001	
1- 4	Screw 5.95 x 6	2	014760-622		1-13	Bearing Cap	1	158988-001	
1- 5	Pulley	1	158985-001		1-14	Nut 4.37	3	021680-212	
1- 6	Bearing 6003VV	2	072600-360		1-15	Screw 4.37 40 x 20	3	062682-012	
1- 7	Washer	4	158986-001		1-16	Washer	3	154898-001	
1- 8	Slow Speed Pulley	1	158987-001		2	Screw 8 x 20	4	018082-022	
1- 9	Screw 5.95 x 6	2	014760-622						

U. Inthreading mechanism Fadentührungsmechanismus  
 Mecanismo de Penfilage Mecanismo de la Penfilado



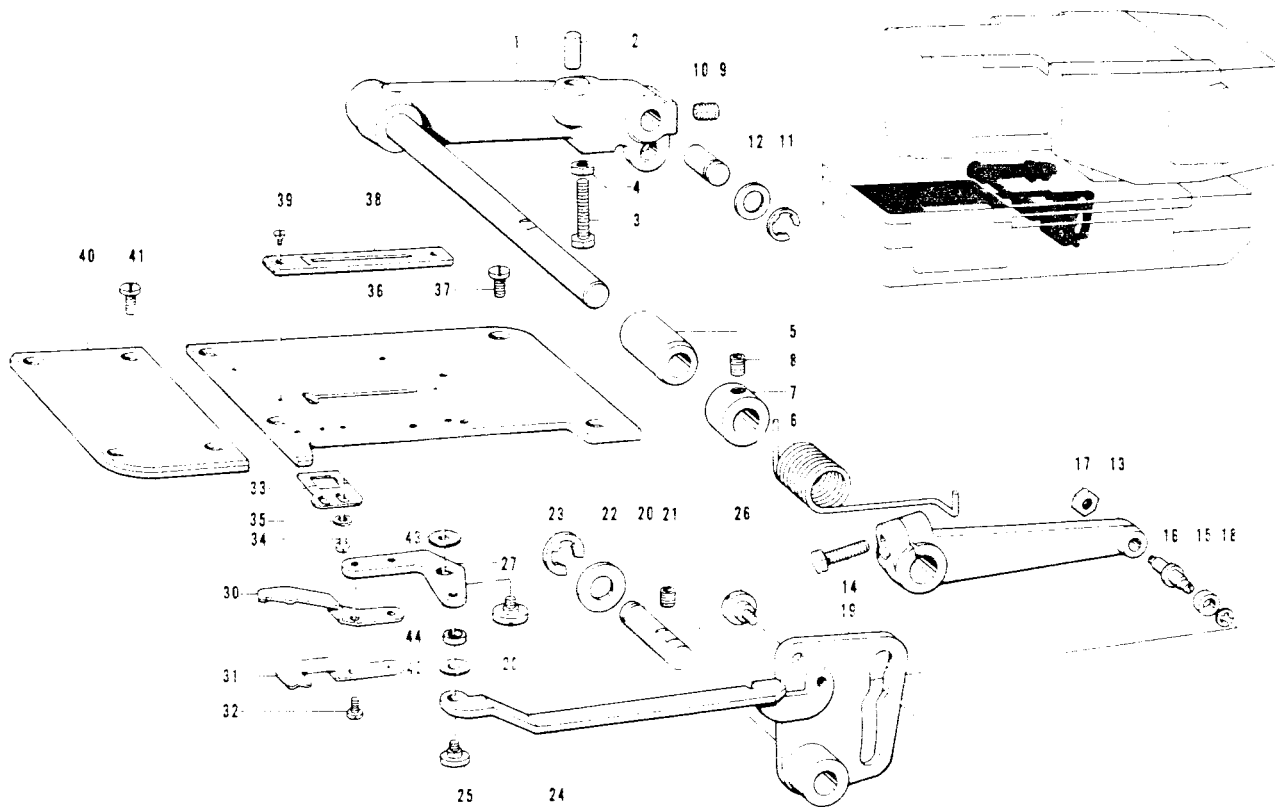
Item No.	Name of Part	Qty	Part No.	Assembly No.	Ref. No.	Name of Part	Qty	Part No.	Assembly No.
1	Looper Thread Tension Control Stud	1	110820-101		26	Thread Guide	1	159846-101	
2	Tension Disc	1	148446-001		28-1	Thread Take-up Lever	1	159226-001	3-28
3	Presser for Tension Disc	1	144103-003		28-2	Stud	1		Thread Take-up Lever Assembly 159226-001
4	Spring	1	144104-001		28-3	Thread Take-up Link Assembly	1		
5	Tension Spring Washer	1	144105-000		29	Claw	1	159234-001	
6	Thread Tension Adjusting Nut	1	149566-002		30	Screw 35° - 40 x 8	2	062670-512	
7	Thread Retainer	1	158218-001		31	Thread Release Lever	1	159235-001	
8	Sub Tension Stud	1	159219-104		32	Screw 43° - 40 x 8	1	062680-512	
9	Pin	1	159220-101		33	Washer 4.37	1	025680-132	
10	Tension Disc	2	148446-001		34	Pin	1	159236-001	
11	Presser for Tension Disc	1	159805-001		35	Tension Release Plate	1	159237-001	
12	Presser for Tension Disc	1	144103-003		36	Screw 43° - 40 x 6	1	062680-612	
13	Spring	1	159221-001		37	Screw 4.37	1	159238-001	
14	Tension Spring Washer	1	144105-000		38	Screw 4.37	1	159908-001	
15	Thread Tension Adjusting Nut	1	149566-002		39	Thread Take-up Lever Arm	1	159239-001	
18-1	Tension Regulator Bracket	1	144741-001		40	Screw 595 - 28 x 16	1	062761-612	
18-2	"O" Ring	1	114294-001		41	Pin	1	159240-001	
18-3	Tension Stud	1	159222-001		42	STOP Ring F4	1	048040-342	
18-4	Thread Take-up Spring	1	148519-001		43	Tension Release Lever	1	159241-001	
18-5	Tension Disc	2	148446-001		44	Screw 4.37	1	144526-001	
18-6	Spring	1	159223-001		45	Tension Release Lever S	1	159242-001	
18-7	Nut	1	159331-001		46	Screw 43° - 40 x 8	2	062680-812	
18-8	Screw 3.57	1	100402-004		47	Spring	1	159243-001	
19	Screw 5.95	1	103950-002		48	Screw 3.57	1	112751-002	
20	Arm Thread Guide	1	159224-001		50	Tension Release Guide	1	159226-001	
21	Screw 4.37 x 6	1	014680-622		51	Screw 43° - 40 x 6	1	062680-612	
22	Arm Thread Guide	1	113316-001		52	Arm Guide Lower	1	159917-001	
23	Screw 3.57	1	112751-002		53	Washer 4.37	1	025680-132	
24	Arm Thread Guide	1	113316-001		54	Thread Retainer (upper)	1	141590-001	
25	Screw 3.57	1	112751-002		55	Nut 5.95	1	150553-003	

V. Upper thread trimmer mechanism Oberer Fadenabschneider  
 Mécanisme de la coupe-fil supérieur Mecanismo de la recortadora de orillos superior



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
1	Bracket	1	159335-001		28	Bushing	1	159262-000	
2	Screw 6 x 16	2	018061-622		29	Connecting Supporter	1	159354-001	
3	Shaft	1	159336-001		30	Screw 5.95	1	112404-001	
4	Washer	1	115007-001		31	Connecting Bar	1	159355-001	
5	Stop Ring C12	1	048120-142		32	Connecting Pipe	1	159356-001	
6	Collar	1	117671-002		33	Nut 5.95	2	106588-003	
7	Screw 6.35 x 6	2	014770-622		34	Joint	1	141492-001	
8	Upper Thread Trimming Lever	1	159337-001		35-1	Upper Thread Lower Blade	1	159370-001	V-35 Upper Thread Trimming Assembly 159357-001
9	Upper Thread Trimming Clutch Plate	1	159341-001		35-2	Upper Thread Middle Blade	1	159373-001	
10	Spring	1	159111-001		35-3	Upper Thread Upper Blade	1	159374-001	
11	Spring Hook	1	159948-001		35-4	Screw	1	141514-001	
12	Screw 3.18	1	159113-001		36	Screw 4.37	1	115503-001	
13	Screw 5.95	2	159342-001		38	Spring	1	159378-001	
14	Upper Thread Support Stud	1	159343-001		39	Pin B x 6 x 18	1	159379-001	
15	Nut 4.37	1	021680-202		40-1	Upper Thread Trimming Guide	1	159380-001	V-40 Upper Thread Trimming Guide Assembly S01018-001
16	Washer 4.37	1	025680-132		40-2	Upper Thread Trimming Safety Plate	1	159381-001	
17	Spring	1	159344-001		40-3	Spring	1	159111-001	
18	Spring Hook	1	159345-001		40-4	Spring Hook	1	159948-001	
19	Upper Thread Trimming Clutch Guide	1	159346-101		40-5	Screw 3.18	3	159113-001	
20	Screw 437 - 40 x 12	2	062681-212		40-6	Upper Thread Trimming Safety Plate D	1	159946-001	
21	Upper Thread Trimming Lever (B)	1	159017-001		45	Screw 437 - 40 x 10	2	062681-012	
22	Screw 437 - 40 x 6	2	062680-612		46	Thread Scissor Guard Supporter	1	159554-001	
23	Washer 4.37	2	025680-232		47	Screw 595 - 28 x 8	1	062760-812	
24	Clutch Cam	1	159348-101		48	Screw	1	141494-001	
25	Screw	2	153057-002		51	"O" Ring PW6	1	081006-670	
26	Washer 4.37	2	025680-232						
27-1	Lever	1		V-27 Lever Assembly 159349-001					
27-2	Lever Shaft	1							

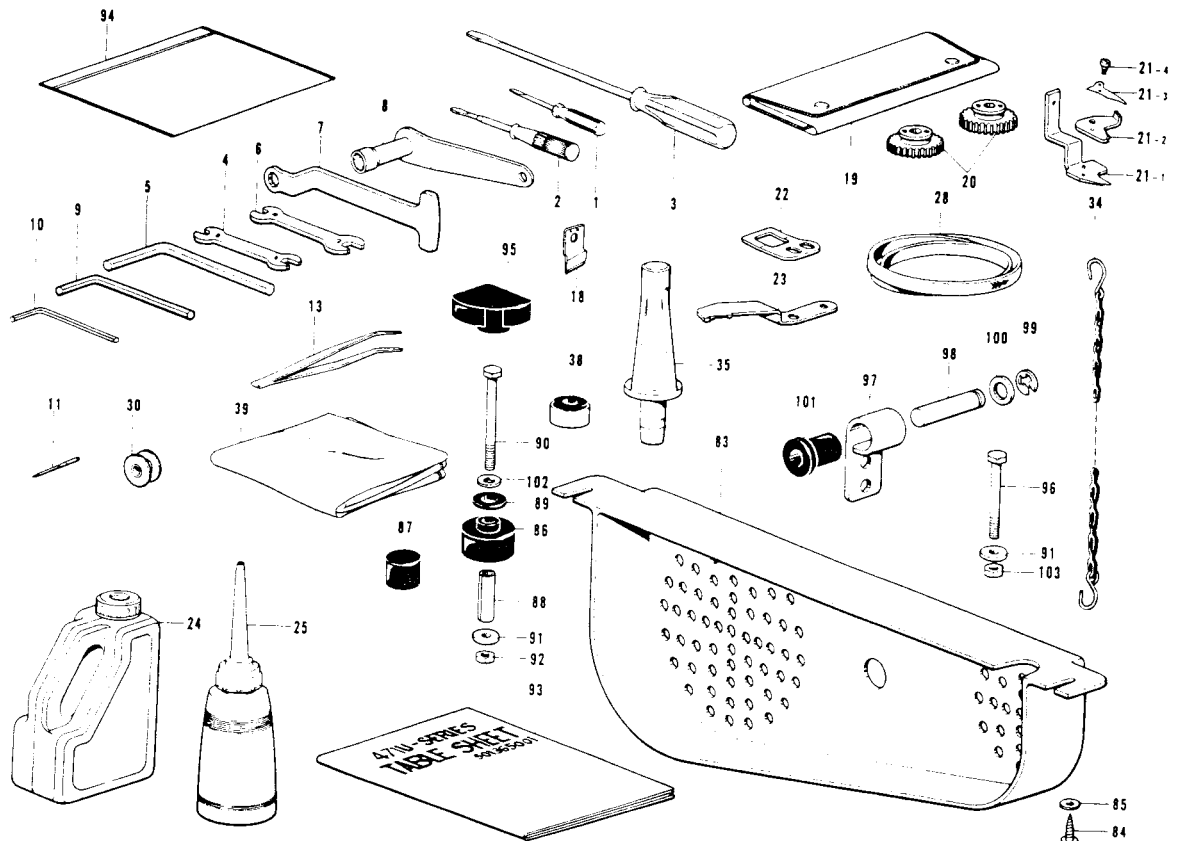
W. Lower thread trimmer mechanism    Unterer Fadenabschneider  
 Mécanisme de la coupe-fil inférieur    Mecanismo de la recortadora de hilos inferior



Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Qty	Parts No.	Assembly No.
1	Lower Thread Cutter Lever Assembly	1	159259-101		23	Stop Ring E8	1	048080-342	
2	Cushion	1	159118-000		24	Link	1	159268-001	
3	Screw 5.95 x 22	1	017762-203		25	Screw	1	159269-001	
4	Nut 5.95	1	106588-003		26	Screw	1	159270-001	
5	Pushing	1	159768-000		27	Driving Lever	1	159271-001	
6	Spring	1	159265-001		28	Screw	1	159272-001	
7	Collar	1	141351-001		30	Movable Knife	1	159274-001	
8	Screw 6.35 x 6	1	014770-622		31	Lower Thread Retainer	1	159275-001	
9	Pin	1	159264-001		32	Screw 3.57 - 4.6 x 5	2	062670-512	
10	Screw 5.95 x 6	1	014760-622		33	Fixed Knife	1	159276-101	
11	Stop Ring E6	1	048060-342		34	Screw 3.57	2	110215-002	
12	Washer 8	1	025080-232		35	Washer 3.5	2	025350-132	
13	Cam Lever	1	159265-001		36	Base Plate	1	159277-001	
14	Screw 5.95 x 20	1	017762-012		37	Screw 4.37	4	145318-001	
15	Roller	1	107744-001		38	Throat Plate	1		
16	Roller Stud	1	141519-001		39	Screw 2.38	2	145247-001	
17	Nut 4.76	1	110161-004		40	Cloth Plate	1	159281-001	
18	Stop Ring E3	1	048030-342		41	Screw 4.37	4	145318-001	
19	Lower Thread Cam	1	159266-001		42	Washer (U)	1	S00901-001	
20	Shaft	1	159267-001		43	Washer (D)	1	S00902-001	
21	Screw 5.95 x 6	1	014760-622		44	Collar	1	S00903-001	
22	Washer	1	110494-001						



Z. Accessories (1) Zubehör (1)  
 Accessoires (1) Accesorios (1)

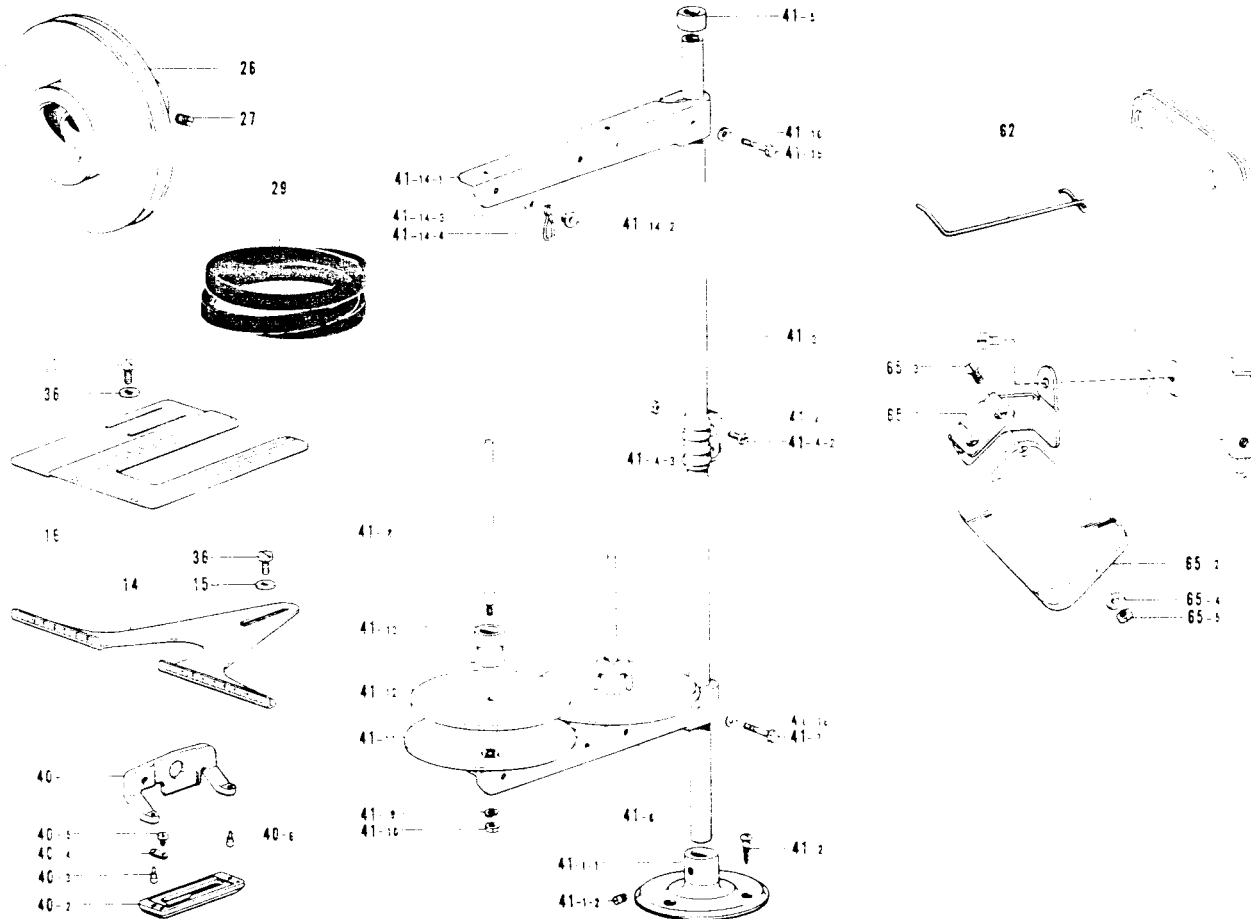


Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
1	Screw Driver 1.9 x 52	1	142443-001		34	Chain	2	149247-001	
2	Screw Driver 3.4 x 70	1	118837-001		35	Head Rest	1	159384-001	
3	Screw Driver 5.5 x 190	1	101572-101		38	Collar	4	146254-001	
4	Spanner 8 x 9	1	100887-001		39	Head Cover	1	144226-001	
5	Allen Wrench 6	1	115157-001		83	V-Belt Cover	1	159332-000	
6	Spanner 10 x 12	1	107780-001		84	Screw 4.1 x 20	2	032422-003	
7	Wrench 10	1	152765-001		85	Washer	2	116662-002	
8	Box Spanner 12	1	143949-001		86	Bet Base Cushion (A)	4	158827-000	
9	Spanner 5	1	150335-001		87	Bet Base Cushion (B)	1	158828-000	
10	Spanner 3	1	142721-001		88	Spcaer 6 x 25	4	159715-001	
11	Needle Cat. No. 1955-0180-1	5	154483-012		89	Rubber Sheet	4	159458-000	
13	Tweezers	1	117466-000		90	Screw 6 x 75	4	159910-001	
18	Cutter	1			91	Washer	6	115947-001	
19	Change Gear Box	1	142745-002		92	Nut 6	4	021060-102	
20	Gear	1			93	Table Sheet 471U	1	501365-001	
21-1	Upper Thread Lower Blade	1	159370-001	Z-21	94	Vinyl Bag	1	122991-001	
21-2	Upper Thread Middle Blade	1	159373-001	Upper Thread	95	Bet Cushion (F)	1	159454-000	
21-3	Upper Thread Upper Blade	1	159374-001	Trimming	96	Screw 6 x 60	2	017066-002	
21-4	Screw	1	141514-001	Assembly	97	Hingg	2	158830-001	
22	Fixed Knife	1	159276-101	159357-001	98	Pin	2	158831-001	
23	Movable Knife	1	159274-001		99	Stop Ring E8	2	048080-342	
24	Oil Tank	1	154702-001		100	Washer 10	2	025100-132	
25	Oiler	1	114483-002		101	Rubber	2	158832-000	
28	Belt	1	141711-000		102	Washer 6	4	025060-332	
30	Bobbin	3	159158-001		103	Nut 6	2	021060-102	

\* The details of included accessories are subject to change.  
 \* Änderungen in der Aufstellung der mitgelieferten Zubehöre sind vorbehalten.

\* Les détails des accessoires inclus sont sujets à des changements.  
 \* Los detalles de los accesorios incluidos pueden variar.

Z. Accessories (2) Zuzehör (2)  
 Accessoires (2) Accesorios (2)

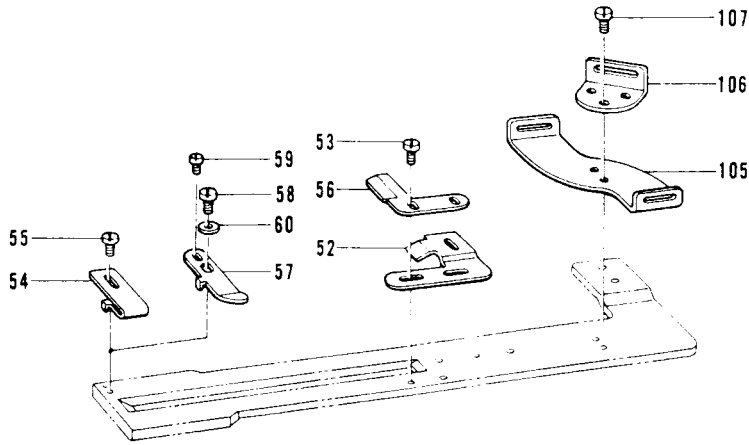
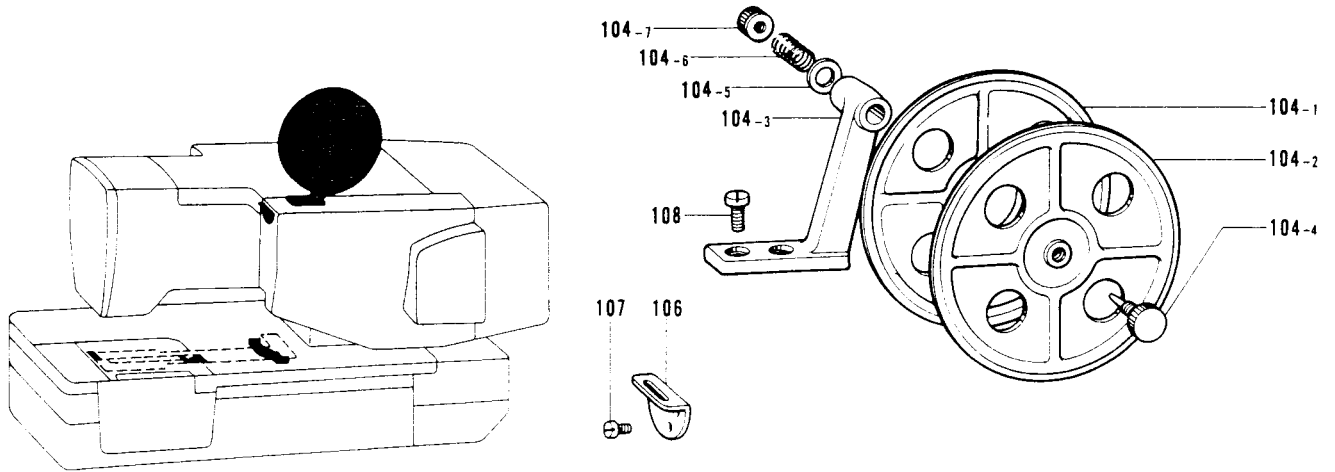


Qty.	No.	Name of Part	Qty.	Part No.	Assembly No.	Qty.	No.	Name of Part	Qty.	Part No.	Assembly No.
1	14	Flange	1	890857-001		1	41-1-5	Cap	1		
2	15	Screw 4.37 x 5	2	017680-514		1	41-1-6	Spool Holder 2	1	150178-001	
1	16	Flange	1	890856-001		1	41-1-7	Screw 5 x 28	1	017502-805	Z-41
2	17	Screw 4.37 x 5	2	017680-514		2	41-1-8	Spool Strap (b)	2	150179-001	Thread
1	24	Flange	1			2	41-1-9	Spring Washer	2	028056-243	Unwinder
1	27	Screw 3.95	1	151605-002		2	41-1-10	Nut 5	2	021500-103	Assembly 2
1	29	V-Belt				2	41-1-11	Spool Stand Base	2	150180-000	150156-003
2	36	Washer	2	116662-002		2	41-1-12	Spool Mat	2	150182-000	
1	40-1	Upper Clamping Foot Supporter	1			2	41-1-13	Spool Cushion	2	126863-000	
1	40-2	Upper Clamping Foot Rubber	1			1	41-14-1	Spool Holder 2	1	150178-001	Z-41-14
1	40-3	Pin	1	159927-001	Z-41-1	1	41-14-2	Thread Hanger	1		Thread Hanger
2	40-4	Spring	2	107401-001	Upper Clamping Foot Assembly	2	41-14-3	Thread Bushing	2	142994-001	Assembly
2	40-5	Screw 1.98	2	107404-001		2	41-14-4	Thread Guide Spring	2	150184-001	150192-003
1	40-6	Pin	1	159927-001		1	41-15	Screw 5 x 28	1	017502-803	
1	41-1-1	Thread Unwinder	1	150189-001	Z-41-1 Cotton Stand Base Assembly	2	41-16	Washer 5	2	025050-233	
2	41-1-2	Screw 6 x 7	2	150181-101	150139-001	1	62	Finger Guard	1		
3	41-1-3	Screw 4.5 x 22	3	031452-203		1	65-1	Eye Guard Hinge Assembly	1		Z-65
1	41-1-4	Joint	1	150172-001	Z-41-4	1	65-2	Eye Guard	1		Plastic Eye
2	41-1-5	Screw 5 x 14	2	150202-001	Joint for Cotton Stand	2	65-3	Screw 3.18 x 7	2	005660-713	Guard Assembly
2	41-1-6	Nut 5	2	021500-103	150106-001	2	65-4	Washer 3	2	025030-232	143971-001
						2	65-5	Nut 3.18	2	021660-102	

\* The details of included accessories are subject to change.  
 \* Änderungen in der Aufstellung der mitgelieferten Zubehöre sind vorbehalten.

\* Les détails des accessoires inclus sont sujets à des changements.  
 \* Los detalles de los accesorios incluidos pueden variar.

# OPTION PARTS / SONDERZUBEHÖR PIECES EN OPTION / PIEZAS OPCION



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
52	Tape Guide (Rear)	1	144998-001		104-4	Screw	1	143980-001	Z-104 Tape Window Assembly 143767-004
53	Screw 2.38	2	105288-002		104-5	Washer	1	108494-001	
54	Tape Guide Front (A)	1	144997-001		104-6	Spring	1	108495-001	
55	Screw 2.38	2	122771-002		104-7	Tension Control Nut	1	100136-001	
56	Tape Guide (Front)	1	144999-001		105	Tape Guide (Lower)	1	143749-001	
57	Tape Guide Front (F)	1	144628-001		106	Tape Guide (Upper)	2	143748-001	
58	Screw 2.38	1	122771-002		107	Screw 318 - 40 x 4	4	062660-416	
59	Screw 2.38	1	105970-001		108	Screw 4.37	2	107407-003	
60	Washer	1	110067-001						
104-1	Tape Window Wheel (R)	1		Z-104					
104-2	Tape Window Wheel (L)	1		Tape Window					
104-3	Tape Window Bracket	1		Assembly 143767-004					

DIFFERENT PARTS LIST ZUBEHÖRLISTE  
 LISTE DES PIÈCES ACCESSOIRES LISTA DE PIEZAS ACCESORIAS

Ref. No.	Name of Parts	Sub-Class	21	- 31
W - 38 - 4	Needle Plate 1.2 S			159758-001
W - 38 - 5	Needle Plate 1.4 S		159759-001	
Z - 18	Cutter 5/8			107205-001
Z - 18	Cutter 3/8			109837-001
Z - 18	Cutter 3/4			107207-001
Z - 18	Cutter 1			107210-001
Z - 20	Change Gear 30			141376-000
Z - 20	Change Gear 36			141379-000
Z - 20	Change Gear 38			141380-000
Z - 20	Change Gear 40			141381-000
Z - 20	Change Gear 46			141384-000
Z - 26	Pulley 3600 50 Hz			159633-001
Z - 26	Pulley 3600 60 Hz			159387-001
Z - 29	V Belt M27			082102-790
Z - 29	V Belt M28		$\frac{0.1}{1 \quad 2}$	082102-890
Z - 29	V Belt M30			082103-090
Z - 40	Upper Clamping Foot 16 RS			159764-001
Z - 40	Upper Clamping Foot 25 RS			159765-001
Z - 40 - 2	Upper Clamping Foot Rubber (16 mm)			159761-001
Z - 40 - 2	Upper Clamping Foot Rubber (25 mm)			159762-001
Z - 62	Finger Guard (S)			159079-000
Z - 62	Finger Guard (M)		159080-000	

GAUGE PARTS LIST / LEHRENLISTE  
LISTE DES PIÈCES D'ECARTEMENT / LISTA DE PIEZAS CALIBRADORAS

Upper Clamping Foot

Sub-class	Name of Parts	Parts No.	
		Upper Clamping Foot Assembly	Clamping Foot
	Upper Clamping Foot (for 16 mm)	159072-001	147113-001
	Upper Clamping Foot (for 16 mm) rubber	158982-001	159581-001
	Upper Clamping Foot (for 25 mm)	159074-001	159579-001
	Upper Clamping Foot (for 25 mm) rubber	159217-001	159582-001
	Upper Clamping Foot (for 32 mm)	159076-001	159580-001
	Upper Clamping Foot (for 16 mm) rubber S	159764-001	159761-001
	Upper Clamping Foot (for 25 mm) rubber S	159765-001	159762-001
	Upper Clamping Foot (for 32 mm) rubber S	159766-001	159763-001

Needle Plate

Name of Parts	Parts No.	Name of Parts	Parts No.
Needle Plate 1.2	159278-001	Needle Plate 1.4 S	159759-001
Needle Plate 1.4	159279-001	Needle Plate 1.6 S	159760-001
Needle Plate 1.6	159280-001	Needle Plate 1.2 S (Flat)	S01269-001
Needle Plate 1.2 S	159758-001		

Cutter

Name of Parts	Parts No.	Name of Parts	Parts No.
Cutter 7/16 (11 mm)	107204-001	Cutter 32 (32 mm)	143780-001
Cutter 1/2 (13 mm)	107200-001	Cutter 48	147941-001
Cutter 5/8 (16 mm)	107205-001	Flat Cutter 3/8	S01271-001
Cutter 3/8 (10 mm)	109837-001	Flat Cutter 7/16	S01273-001
Cutter 3/4 (19 mm)	107207-001	Flat Cutter 5/8	S01274-001
Cutter 7/8 (22 mm)	109838-001	Flat Cutter 3/4	S01275-001
Cutter 1 (25 mm)	107210-001	Flat Cutter 7/8	S01276-001

GAUGE PARTS LIST - LEHRENLISTE  
 LISTE DES PIÈCES D'ECARTEMENT - LISTA DE PIEZAS CALIBRADORAS

Change Gear

Number of Stitches	Change Gear L	Change Gear R	Number of Stitches	Change Gear L	Change Gear R
347	(54) 141388-000	(22) 141372-001	127	(36) 141379-000	(40) 141381-000
306	(52) 141387-000	(24) 141373-001	114	(34) 141378-000	(42) 141382-000
271	(50) 141386-000	(26) 141374-000	103	(32) 141377-000	(44) 141383-000
242	(48) 141385-000	(28) 141375-000	92	(30) 141376-000	(46) 141384-000
216	(46) 141384-000	(30) 141376-000	82	(28) 141375-000	(48) 141385-000
194	(44) 141383-000	(32) 141377-000	73	(26) 141374-000	(50) 141386-000
174	(42) 141382-000	(34) 141378-001	65	(24) 141373-001	(52) 141387-000
157	(40) 141381-000	(36) 141379-000	58	(22) 141372-001	(54) 141388-000
141	(38) 141380-000	(38) 141380-000			

MOTOR PULLEY AND V-BELT SELECTION  
 AUSWAHL DER RIEMENSCHLEIBEN UND ANTRIEBSRIEMEN  
 CHOIX DE LA POULIE DE MOTEUR ET DES COURROIES TRAPEZOIDALES  
 ELECCIÓN DE POLEA DE MOTOR Y CORREA TRAPEZOIDAL

Machine Speed	Frequency	Motor Pulley	High Speed V-belt	Low Speed V-belt
4000	50	159632-001	082103-190 (M31)	082102-890 (M28)
	60	159635-001	082102-990 (M29)	082102-790 (M27)
3600	50	159633-001	082103-090 (M30)	082102-890 (M28)
	60	159387-001	082102-890 (M28)	082102-790 (M27)
3200	50	159634-001	082102-990 (M29)	082102-890 (M28)
	60	159386-001	082102-790 (M27)	082102-790 (M27)

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Parts No.	Ref. No.	Remark	Parts No.	Ref. No.	Remark	Parts No.	Ref. No.	Remark	Parts No.	Ref. No.	Remark	
S00306-001	A-102		014760-622	K-24		018680-522	P-42		048060-342	H- 1- 5		
S00806-001	Z-16			L-15		021060-102	Z-92			K- 9		
S00807-001	Z-14			L-26			Z-103			W-11		
				L-51		021500-103	Z-41- 4- 3		048070-342	A-97		
				L-52			Z-41-10		048080-342	E-26		
S00850-000	A-87			P- 7		021660-102	Z-65- 5			L-35		
S00862-000	C-36			P-14		021680-202	A-69			W-23		
S00901-001	W-42			P-19			A-103			Z-99		
S00902-001	W-43			Q- 6			V-15		048100-142	E- 7- 4		
S00903-001	W-44			Q- 8		021680-212	T- 1-14			E- 7-17		
S00928-001	C-37			R- 6		021710-202	E- 7- 9			J- 1-10		
S01009-101	A-104			R- 8		021860-312	E- 7-13		048110-142	L-17		
S01018-001	V-40			R-12		021910-302	L- 4		048120-142	V- 5		
S01040-001	S-12			S- 3			P-34		048150-142	C-31- 6		
S01047-001	S-13			S- 9		025030-232	Z-65- 4			C-15		
S01109-001	Q-17			T- 1- 4		025050-233	Z-41-16			R- 9		
S01236-001	L-23			T- 1- 9		025060-132	K-21- 3		048170-142	T- 1-11		
S01237-002	L-24			W-10		025060-232	A-18		048250-142	C-13		
S01237-002	L-24			W-21			H-17		048350-242	C-31- 4		
S01287-002	G- 1			014770-622	B- 3			N- 2		062670-512	S-65	
S01288-002	G- 1- 1				B- 6		025060-332	F- 6			U-30	
S01290-001	G- 1- 2				C-28			J- 1- 6			W-32	
S01291-001	G- 1-14				D- 2			Z-102		062670-612	A-36	
S01292-001	G- 1- 3				D-14		025080-132	E-28			B-20	
S01293-001	G- 1-17				D-16			G- 1- 5			G- 1-13	
S01294-001	G- 1- 7		D-17- 5			025080-232	J- 3			N- 4		
S01304-001	D-17- 2		D-35				K- 8			S-21		
S01319-001	C-27		D-51				K-13			S-73		
S01321-001	A-43		K-22				S- 6		062680-512	D-25		
S01322-001	A-29		L-37				W-12			U-32		
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			M- 6				E- 7-16			A-83		
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	Z-11		M-14				E-25			P-56		
S01365-000	Z-93		M-17				L-34			P-59		
S01401-001	A-22		P- 2				S- 4- 4			P-65		
003761-212	E- 5		P-37				Z-100			Q-15		
005660-713	Z-65- 3		P-50			025350-132	W-35			S-63		
014679-320	C-19		P-62			025350-332	N- 3			U-36		
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C-30		P-70		028050-240	E- 7- 8			L- 5-12				
D- 6		H-16		028050-243	Z-41- 9			S-68				
D- 8		E-22		028080-242	K-14			V-45				
D-12		A-17		031452-203	Z-41- 2		062681-212	A-91				
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062710-812	G- 2		107401-001	Z-40- 4		122991-001	Z-94		144999-001	Z-56	
	P-54		107404-001	L-48- 5		126863-000	Z-41-13		145247-001	W-39	
062711-012	L-40			Z-40- 5		140064-001	B- 5- 5		145318-001	W-37	
	Q-14		107407-003	H-18		140430-001	B- 5- 9			W-41	
062711-412	A-24			Z-108		140553-102	B-11		145446-001	G- 7	
	A-28		107550-002	L-13		141248-001	A-92			U- 2	
	A-31		107744-001	W-15		141309-001	D- 1			U-10	
	A-44		107780-001	Z- 6		141334-001	D-40			U-18- 5	
	S-18		108494-001	Z-104- 5			E-34			145465-001	B- 5- 2
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062761-212	F-14		109203-001	S-26		141351-001	D-50		145480-001	D-22	
	J- 1- 5		109837-001	Z-18			W- 7			K-29	
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072620-160	J- 1- 4		110558-001	D-31		141406-001	L- 6		149247-001	Z-34	
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	Z-104- 7		114294-001	U-18- 2		142443-001	Z- 1		150202-001	Z-41- 4- 2	
100250-001	B- 2		114483-002	Z-25		142628-001	U-16		150335-001	Z- 9	
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105812-003	D-27		115559-002	E-35		143787-001	A-71			P-44	
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106436-001	Q- 2		115947-001	Z-91		143949-001	Z- 8		153138-001	D-21	
106568-003	L-46		116662-002	Z-85		143971-001	Z-65		154528-001	G- 1- 9	
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	V-33		116920-001	C-14		144103-003	U- 3		154898-001	T- 1-16	
	W- 4		116920-001	R-17			U-12		156641-001	D- 4	
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107153-002	H- 1- 4		117671-002	D-34			U-14		158825-002	A- 4	
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107231-002	M-22		118837-001	Z- 2		144741-001	U-18- 1		158832-000	Z-101	
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158838-002	A-26		158939-001	D-39		159023-001	K-12		159111-001	P-24	
158839-000	A-27		158940-001	D-41		159024-001	K-16			V-10	
			158941-001	C-20		159025-001	K-17			V-40- 3	
158841-000	A-30		158942-001	D-43		159026-001	K-19		159112-001	P-25	
158842-001	A-32		158945-001	D-44		159027-001	K-21- 1		159113-001	V-12	
158843-001	A-33		158946-001	D-45		159028-001	K-21- 2			V-40- 5	
158844-001	A-37		158947-001	D-17- 1		159030-000	K-23				
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158847-001	A-40		158950-000	D-47		159032-000	K- 2		159115-001	P-28	
			158951-000	D-48		159033-000	K-27		159116-001	P-30	
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158865-001	A-65		158956-001	E- 2		159037-101	L- 5		159119-001	P-33	
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158875-001	A-72		158962-001	E- 7-10		159044-001	L- 5-11		159126-001	P-47	
158876-001	A-74		158963-001	E- 7-11		159045-001	L- 5-13		159127-001	P-48	
158877-001	A-75		158964-001	E- 7-12		159046-001	L- 5-15		159128-001	P-49	
158879-001	A-78		158965-001	E- 7-15		159047-001	L- 8		159129-001	P-51	
158880-000	B- 1		158968-001	E-15		159048-001	L- 9		159130-001	P-52	
158882-000	A-53		158969-001	A-95		159049-001	L-10		159131-001	P-55	
158884-101	B- 8		158970-001	E-16		159050-001	L-11		159132-001	P-57	
158885-101	B- 8- 1		158971-001	E-18		159051-101	L-12		159133-001	P-61- 2	
158886-001	B-12		158972-001	E-21		159054-001	L-14		159135-001	P-63	
158888-001	B-13		158973-001	E-23		159055-001	L-18		159136-001	P-64	
158889-001	B-15		158974-001	E-24		159056-001	L-19		159137-001	P-67	
158891-001	C- 1		158975-001	E-27		159057-001	L-20		159140-001	P-68	
158892-001	C- 2		158976-001	E-31		159058-101	L-21		159141-001	P-69	
158893-000	C- 3		158979-001	E-12		159062-001	L-25		159142-001	P-71	
	R- 7		158980-001	A-90		159063-001	L-27		159143-000	P-73	
158894-000	C- 4		158981-001	T- 1-12		159064-001	L-30		159144-001	N- 1	
158895-001	C- 8		158983-001	T- 1- 2		159065-002	L-32		159145-001	N- 5	
158896-001	C- 9		158984-001	T- 1- 3		159066-001	L-33		159146-001	N- 6	
158897-001	C-11		158985-001	T- 1- 5		159067-001	L-38		159147-001	N- 8	
158898-001	C-16		158986-001	T- 1- 7		159068-001	L-39		159148-001	N-10	
158899-002	A-61		158987-001	T- 1- 8		159069-001	L-42		159149-001	Q- 1	
			158988-001	T- 1-13		159071-001	L-45		159150-000	A-25	
158901-001	C-24		158989-001	T- 1- 1		159078-001	L-50			Q- 3	
158904-001	C-25		158990-001	H- 1- 1		159080-000	L-49	Z-62	159151-001	Q- 4	
158906-001	C-31		158991-001	H- 1- 2		159082-000	M- 3		159153-001	Q- 7	
158907-001	C-31- 1		158992-001	H- 1- 3		159083-001	M- 5		159154-001	Q- 9	
158908-001	C-31- 7		158993-001	H- 3		159084-001	M- 7		159155-001	Q-11	
158909-001	C-32		158994-001	H- 4		159085-001	M- 8		159157-001	Q-11- 2	
158910-001	C-34		158995-001	H- 8		159086-001	M- 9		159158-001	Q-18	Z-30
158911-001	D- 3		158996-001	H- 9		159087-000	M-10		159159-001	Q-12	
158913-001	D- 5		158997-001	H-11		159088-001	M-13		159160-001	Q-13	
158914-001	D- 7		158998-001	H-13		159090-001	M-16		159161-001	Q-16	
158915-001	D- 9		158999-100	H-14		159091-001	M-18		159162-001	R- 1	
158916-000	D-10		159000-001	H-15		159092-001	M-19		159163-000	R- 4	
158917-001	D-13		159001-001	F- 1		159093-000	M-18- 1		159164-001	R- 5	
158919-001	D-15		159002-001	F- 2		159094-001	M-20		159166-001	R-13	
158920-001	D-17- 3		159003-001	F- 3		159095-001	M-23		159169-001	R-15	
158921-001	D-17- 4		159006-001	F- 4		159096-001	P- 1		159170-000	S- 1	
158922-001	D-17- 6		159007-001	J- 1- 1		159097-001	P- 3		159171-000	S- 2	
158923-001	D-17- 8		159008-001	J- 1- 2		159098-001	P- 4		159172-001	S- 4	
158924-001	D-17- 9		159011-000	J- 1- 3		159099-001	P- 5		159173-001	S- 4- 1	
158925-001	D-17-10		159012-001	J- 1- 7		159100-001	P- 8		159174-001	S- 7	
158926-001	D-19		159013-001	J- 1- 9		159101-000	P-10		159175-000	S-15	
158927-001	D-17-13		159014-001	K- 1		159102-001	P-11		159176-001	S-17	
158928-000	D-17-12		159015-001	K- 1- 1		159104-001	P-11- 2		159177-001	S-17- 5	
158929-001	D-28		159016-001	K- 1- 2		159105-001	P-12		159178-001	S-19	
158930-001	D-23		159017-001	V-21		159106-001	P-17		159181-001	S-20	
158931-001	D-24		159018-001	K- 4		159107-001	P-18		159182-001	S-27	
158932-000	D-18		159020-001	K- 5		159108-001	P-20		159187-000	S-29	

Part N	Ref. N	Remark	Part N	Ref. N	Remark	Part N	Ref. N	Remark	Part N	Ref. N	Remark
159188-001	S-30		159343-001	V-14		159764-001	Z-40				
159189-000	S-32		159344-001	V-17		159768-000	W-5				
159190-001	S-33		159345-000	V-18		159805-001	C-71				
159191-000	S-34		159346-101	V-19		159818-001	K-18				
159192-000	S-35		159348-101	V-24		159905-001	D-26				
159193-000	S-36		159349-001	V-27		159906-001	D-52				
159194-000	S-37		159350-001	V-28		159907-001	D-52				
159195-000	S-40		159355-001	V-31			U-38				
159199-001	S-41		159356-001	V-32		159909-000	S-67				
159201-000	S-43		159357-001	V-35		159910-001	Z-90				
159203-000	S-45			Z-21		159916-001	B-8- 2				
159204-001	S-47		159370-001	V-35- 1	Z-21	159917-001	U-52				
159205-001	S-48		159373-001	V-35- 2		159925-001	K-35				
159207-001	S-49			Z-21- 2		159924-001	K-36				
159209-001	S-51		159374-001	V-35- 3		159927-003	L-77				
159213-001	S-61			Z-21- 3		159926-001	L-48- 3				
159214-000	S-62		159378-001	V-38			Z-40- 3				
159215-001	S-64		159379-001	V-39		159927-001	L-48- 6				
159218-001	U- 7		159380-001	V-40- 1			Z-40- 6				
159219-101	U- 8		159381-001	V-40- 2		159928-000	A-73				
159220-101	U- 9		159384-001	Z-35			A-96				
159221-001	U-13		159387-001	Z-26		159946-001	V-40- 6				
159222-001	U-18- 3		159394-001	K-28		159947-001	K-38				
159223-001	U-18- 6		159395-001	B-29		159948-001	V-11				
159224-001	U-20		159409-001	B- 5			V-40- 4				
159226-001	U-50		159420-001	C-22		159989-001	A-98				
159228-001	U-28		159424-001	C-18		180515-001	S-11- 2				
159229-001	U-28- 1		159425-001	C-21		183216-001	B- 5- 6				
159234-001	U-29		159426-001	D-36							
159235-001	U-31		159427-001	C-17		092681-612	D-37				
159236-001	U-34		159454-000	Z-95		149095-001	K-39				
159237-001	U-35		159455-000	A- 6		150173-001	Z-41- 4-1				
159238-001	U-37		159456-000	A- 7		154578-000	A-101				
159239-001	U-39		159457-000	A- 8		159079-000	Z-62				
159240-001	U-41		159458-000	Z-89		159759-001	W-38				
159241-001	U-43		159459-000	A- 9		159765-001	L-48				
159242-001	U-45		159460-000	A-10			Z-40				
159243-001	U-47		159491-001	P-13		154483-012	B-10				
159252-001	G- 1- 8		159546-101	U-26			Z-13				
159253-001	G- 1-12		159547-001	D-17							
159256-001	G- 4		159548-001	E- 7							
159257-001	G- 5		159550-001	T- 1							
159259-101	W- 1		159551-001	J- 1							
159262-000	V-28		159552-001	K-21							
159263-001	W- 6		159553-001	H- 1							
159264-001	W- 9		159554-001	V-46							
159265-001	W-13		159561-001	B-18							
159266-001	W-19		159562-000	D-42							
159267-001	W-20		159563-000	I- 2							
159268-001	W-24		159564-000	S-53							
159269-001	W-25		159565-000	S-55							
159270-001	W-26		159566-000	S-56							
159271-001	W-27		159567-000	S-58							
159272-001	W-28		159568-000	S-59							
159274-001	W-30		159569-000	S-60							
	Z-23		159570-001	P-38							
159275-001	W-31		159572-000	B-17							
159276-101	W-33		159594-002	A-62							
	Z-22		159595-000	A-82							
159277-001	W-36		159601-000	S-37							
159279-001	W-38		159623-001	U-18							
159281-001	W-40		159624-001	B-12- 2							
159329-001	P-36		159625-001	D-43- 4							
159331-001	U-18- 7		159633-001	Z-26							
159332-000	Z-83		159715-001	Z-88							
159335-001	V- 1		159744-100	C-29							
159336-001	V- 3		159745-000	R-11							
159337-001	V- 8		159758-001	W-38							
159341-001	V- 9		159761-001	Z-40- 2							
159342-001	V-13		159762-001	L-48- 2	Z-40- 2						

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