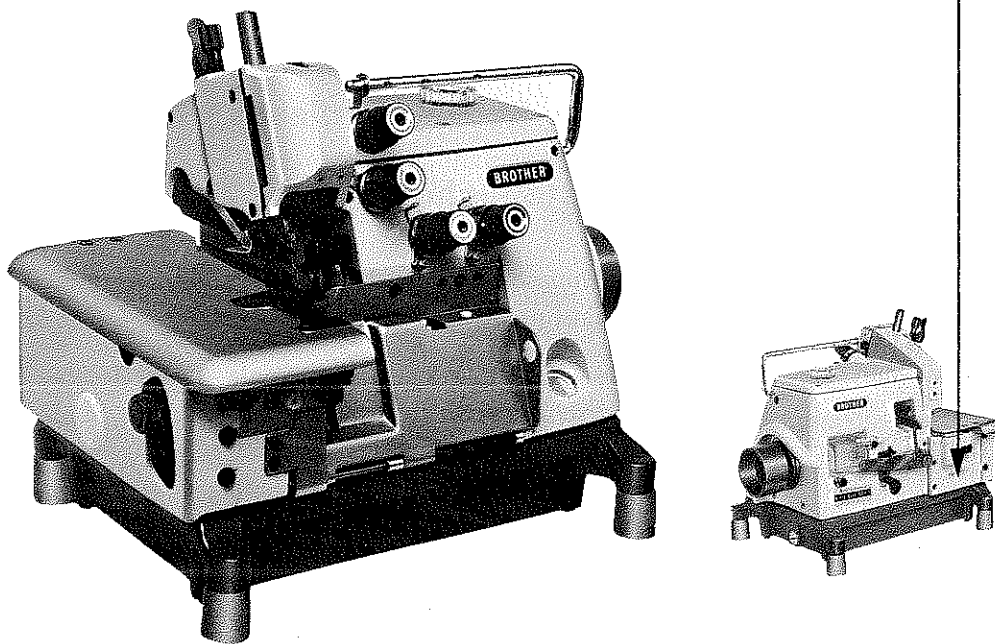


# PARTS BOOK

FOR

## BROTHER EF4-B531


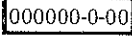
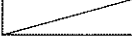
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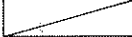
High Speed Twin Needle Overlock Sewing Machine

**BROTHER INDUSTRIES, LTD.**  
NAGOYA, JAPAN


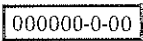
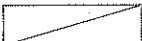
## Notes for using this parts book

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. If the symbol  or  is in the "Parts No." column or the "Assembly No." column, please refer to the separate parts list (page 21).
3. 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 No.
4. If the \* symbol is found before the Parts No., order this parts together with its paired parts.
5. This book was prepared based on information available in March, 1979.
6. Parts are subject to changes in design without prior notice.

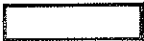

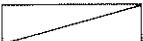
## Anmerkungen zum Gebrauch dieses Stücklistebuches

1. Dieses Buch bezieht sich auf die Nähmaschinen mit derselben Kennungsnummer wie auf diesem Buchumschlag (oder auf dem Korrekturblatt).
2. Wenn in der stücknummer oder Gerätesatznummer Spalte das Zeichen  oder  steht, schlagen Sie bitte bei der gesonderte Stückliste (Seite 21) nach.
3. Dieses Zeichen  in der Spalte "Teilnummer" bedeutet, daß dieser Teil nicht lieferbar ist. Wenn Jedoch in der Spalte "Gerätesatznummer" eine Nummer steht, kann disser Teil als ein Geräteteilsatz bestellt werden. Bestellen Sie daher bitte mit dieser Gerätesatznummer.
4. Bei diesem Zeichen \*vor der Teilnummer bestellen Sie bitte diesen Teil paarweise, zusammen mit seinem Gegenstück.
5. Dieses Boch basiert auf den Informationen vom März 1979.
6. Modelländerungen sidn 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. Si le symbole  ou  est présent dans la colonne "No. de pièce" ou dans la colonne "No. de ensemble", se référer à la liste de pièces annexe (page 21).
3. Le symbole  dans la colonne "N° de pièce" signifie que la pièce ne peut être fournie. Si, dans la colonne "N° jeu de pcs", 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° du jeu de pièces.
4. Si, devant le n° de pièce, il y a le symbole \*, veuillez commander cette pièce avec sa pièce appariée.
5. Ce manuel a été fait d'après les renseignements valables au mois de Mars 1979.
6. Les pièces peuvent être sujettes à des modifications sans préavis.

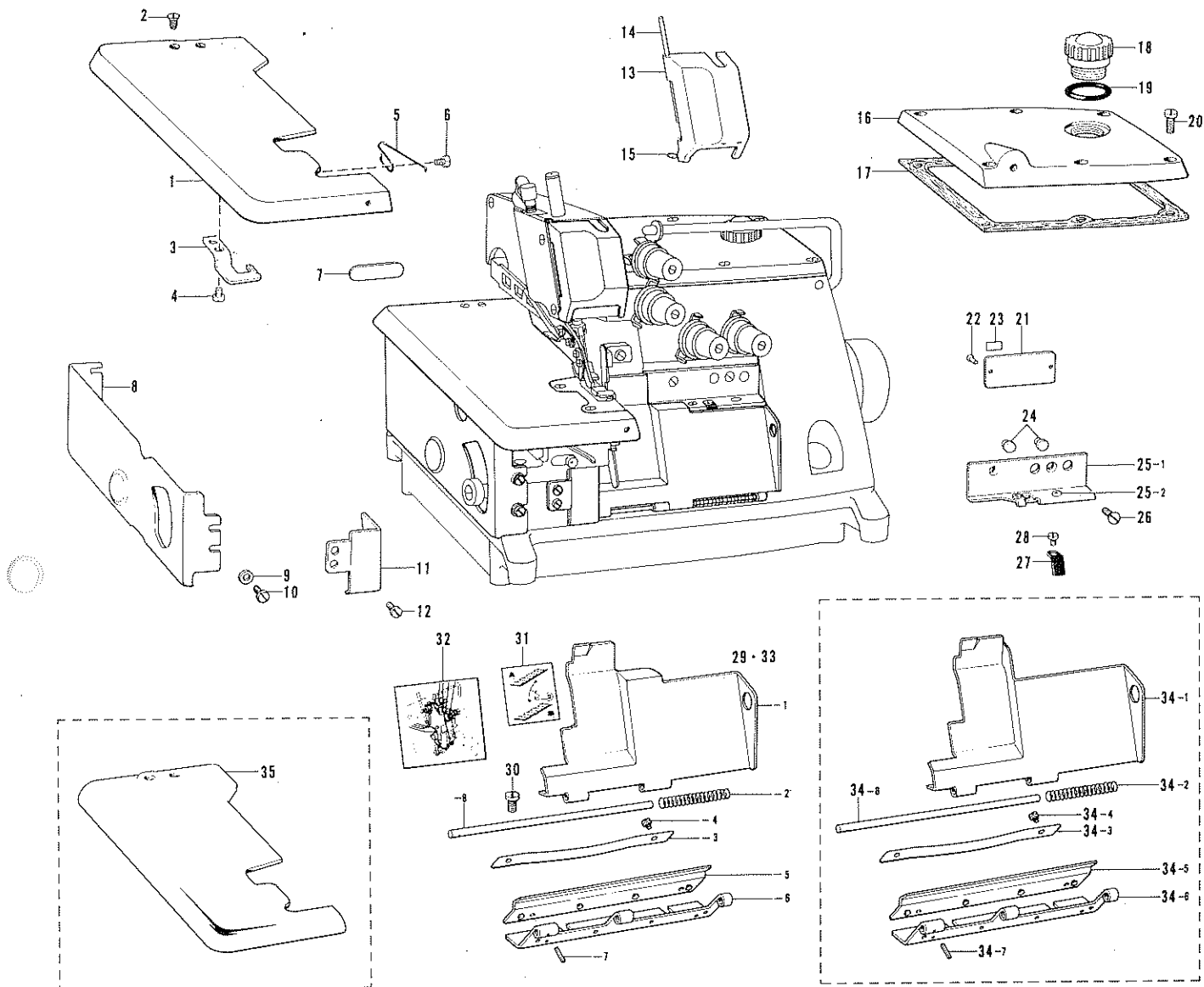
## Notas para usar este Libro de Piezas

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 arratas).
2. De haber el símbolo  o el  en la columna del "Número de Pieza" o en la del "Número de Juego", habrá que ver la lista de piezas separada (página 21).
3. 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 "Numero 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.
4. Si antes del número de una pieza, se encuentra el símbolo \*, habrá que ordenar dicha pieza junto con la otra con la que va la misma.
5. Este libro ha sido compilado basándose en los datos de que se disponía en Marzo de 1979.
6. Las piezas quedan sujetas a cambios de diseño sin aviso previo.

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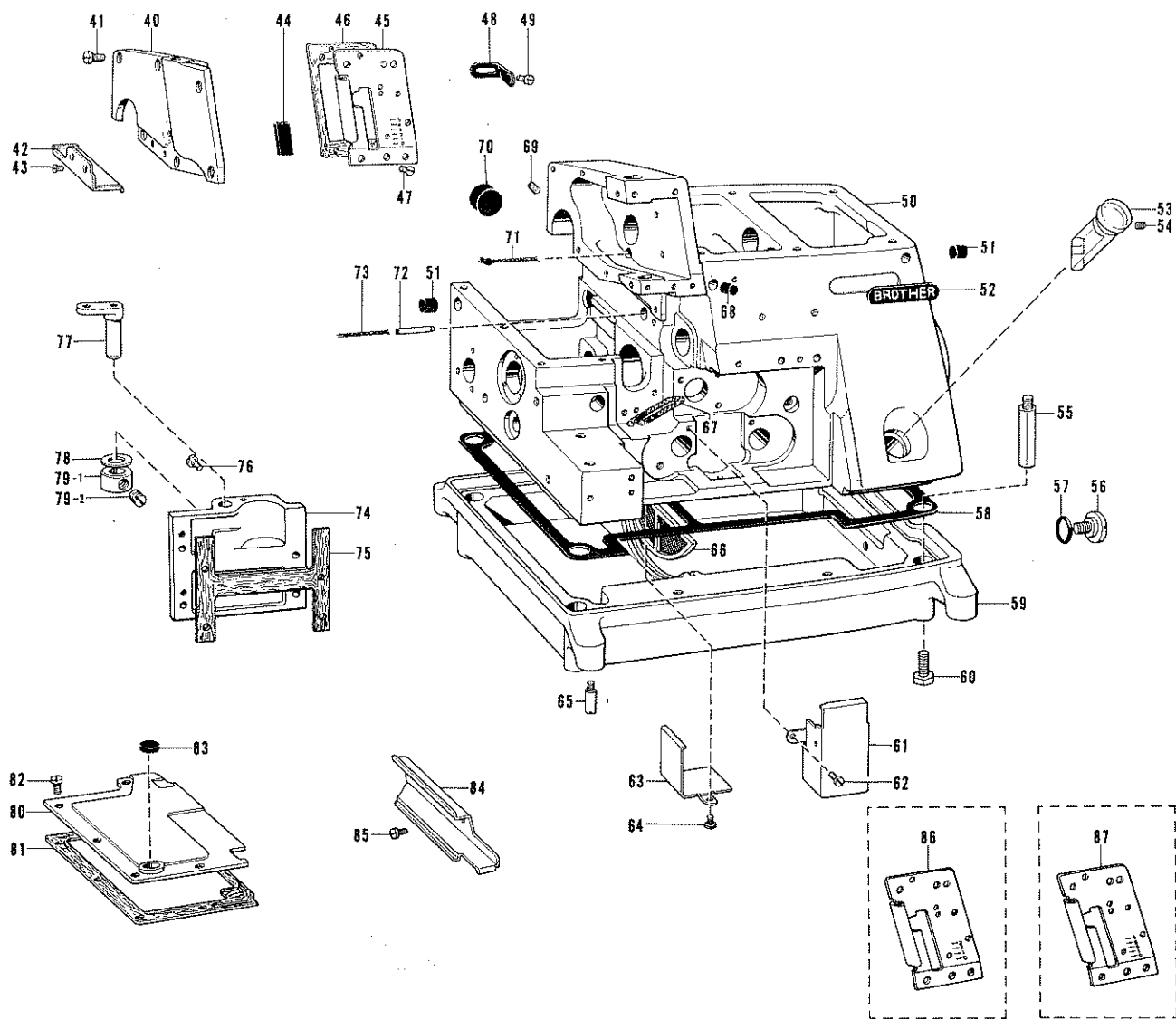
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# A. Machine Body (1)



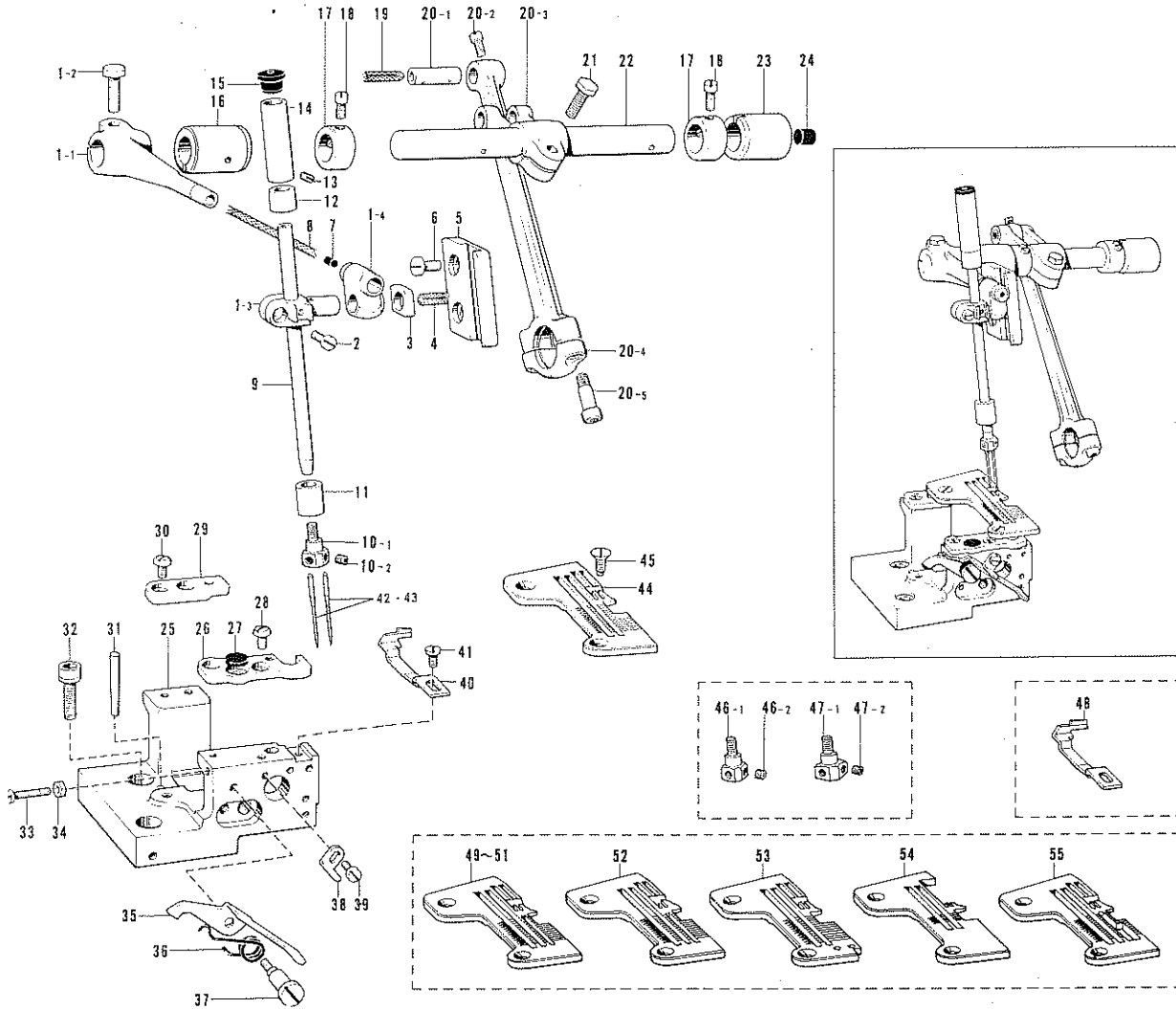
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
A-1	Cloth Plate	1	146448-0-01		A-29-1	Front Cover	1		A-29 Front Cover Assembly 148993-0-01
A-2	Screw	2	100032-0-03		A-29-2	Spring	1	146442-0-01	
A-3	Stopper for Cloth Plate	1	146449-0-01		A-29-3	Hinge Cover Presser Plate	1	152194-0-01	
A-4	Screw	2	001670-5-12		A-29-4	Screw	2	009670-4-12	
A-5	Spring	1	146450-0-01		A-29-5	Hinge Cover	1	148984-0-01	
A-6	Screw	1	001670-5-12		A-29-6	Front Cover Hinge	1	146440-0-01	
A-7	Parts Book Number Plate	1			A-29-7	Pin	1	047140-8-42	
A-8	Cloth Plate Lower	1	146717-1-01		A-29-8	Shaft for Front Cover	1	146441-0-00	
A-9	Washer	4	113431-0-02		A-30	Screw	2	107407-0-03	
A-10	Screw	4	009680-7-12		A-31	Label	1	147943-0-01	
A-11	Front Cover Guide	1	146712-0-01		A-32	Threading Diagram	1	146765-0-01	
A-12	Screw	2	009670-6-12		A-33-1	Front Cover	1		A-33 Front Cover Assembly 148995-0-01 (Denim)
A-13	Face Plate Cover	1	146425-0-01		A-33-2	Spring	1	146442-0-01	
A-14	Pin for Face Plate	1	146426-0-00		A-33-3	Hinge Cover Presser Plate	1	152194-0-01	
A-15	Screw	1	146427-0-01		A-33-4	Screw	2	009670-4-12	
A-16	Top Cover	1	146419-0-01		A-33-5	Hinge Cover	1	148984-0-01	
A-17	Packing	1	146420-0-00		A-33-6	Front Cover Hinge	1	146440-0-01	
A-18	Cap for Oil Feeding Hole	1	146421-0-00		A-33-7	Pin	1	047140-8-42	
A-19	Packing	1	113589-0-01		A-33-8	Shaft for Front Cover	1	146441-0-00	
A-20	Screw	6	009681-2-12		A-34-1	Front Cover	1		
A-21	Model Plate 531	1			A-34-2	Spring	1	146442-0-01	
A-22	Pin	2			A-34-3	Hinge Cover Presser Plate	1	152194-0-01	A-34 Front Cover Assembly 146763-0-01 (Ruffling, Ruffling W/Piping)
A-23	Label	1			A-34-4	Screw	2	009670-4-12	
A-24	Oil Cap	2	111865-0-01		A-34-5	Hinge Cover	1	148984-0-01	
A-25-1	Supporter for Front Cover	1		A-25 Supporter for Front Cover Assembly 146713-0-01	A-34-6	Front Cover Hinge	1	146440-0-01	
A-25-2	Thread Bushing	2	146924-0-00		A-34-7	Pin	1	047140-8-42	
A-26	Screw	2	117160-0-01		A-34-8	Shaft for Front Cover	1	146441-0-00	
A-27	Stopper Spring for Front Cover	1	146446-0-01		A-35	Cloth Plate	1	146716-0-01	
A-28	Screw	1	123185-0-01						

# A. Machine Body (2)



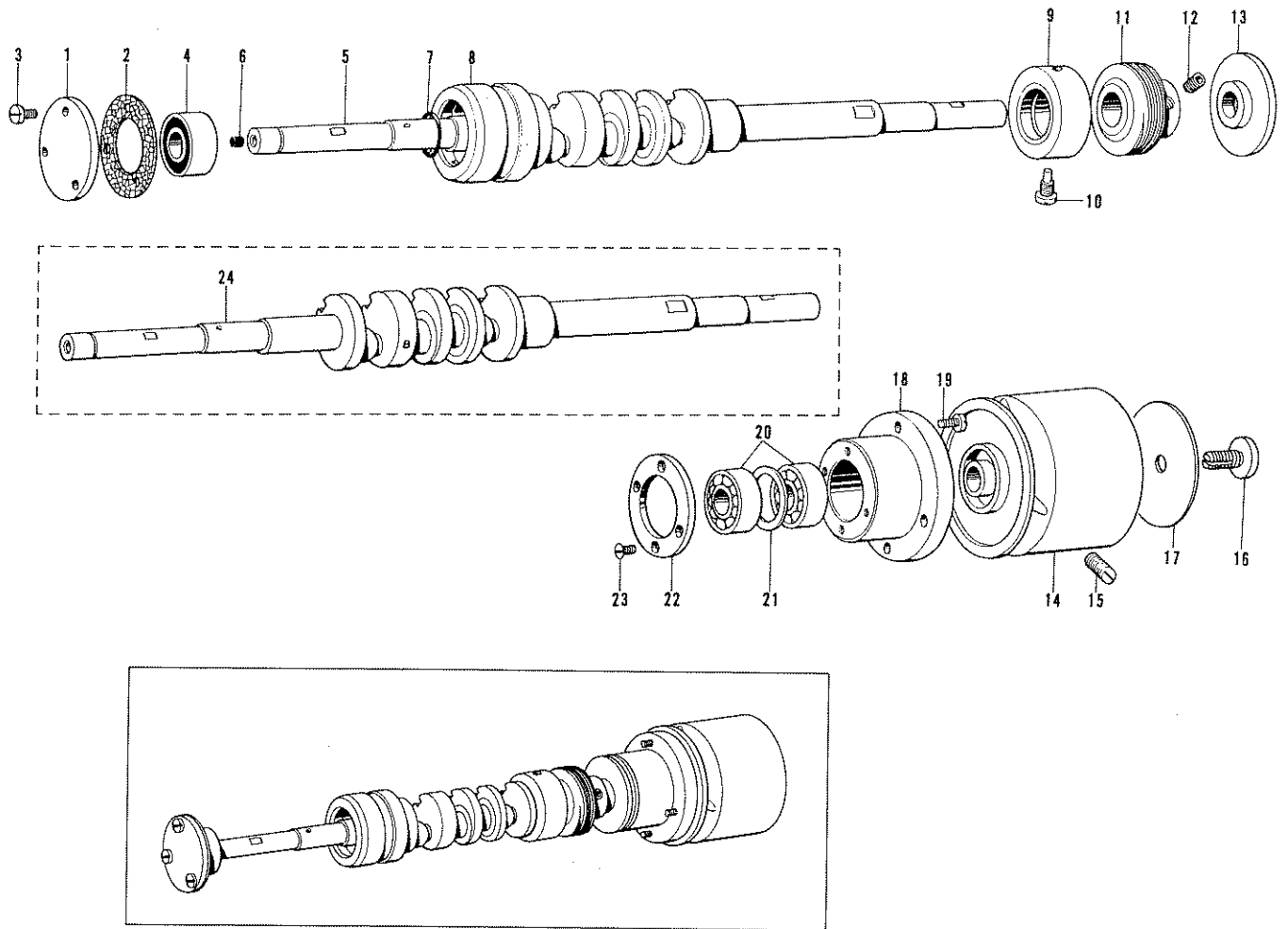
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
A-40	Cover for Needle Driving Mechanism	1	146422-0-01		A-65	Set Pin for Cushion	4	140077-0-01	
A-41	Screw	6	009680-7-12		A-66	Oil Filter	1	145664-0-00	
A-42	Cloth Guide (S)	1	146461-0-01		A-67	Wick	1	147361-0-00	
A-43	Screw	2	108960-0-02		A-68	Oil Cap	1	140421-0-01	
A-44	Rubber Cap	1	143992-0-01		A-69	Screw	2	013760-6-12	
A-45	Face Plate Assembly	1	146428-0-01		A-70	Oil Cap	1	140066-0-01	
A-46	Face Plate Packing	1	146433-0-00		A-71	Wick	1	150307-0-00	
A-47	Screw	3	102843-0-04		A-72	Oil Pipe	1	147217-0-00	
A-48	Stopper Spring	1	146432-0-01		A-73	Wick	1	112735-0-00	
A-49	Screw	2	009670-6-12		A-74	Cover for Feed Mechanism (B)	1	146704-0-01	
A-50	Machine Body	1			A-75	Packing	1	146705-0-00	
A-51	Oil Cap	2	146315-0-00		A-76	Screw	4	009681-0-12	
A-52	Name Plate	2			A-77	Cloth Plate Supporter	1	143374-0-01	
A-53	Oil Gauge	1	148084-0-01		A-78	Washer	1	141183-0-00	
A-54	Screw	1	014680-4-22		A-79-1	Set Collar	1		A-79 Collar 181969-0-03
A-55	Machine Body Leg	4	151059-0-01		A-79-2	Screw	2	101706-0-01	
A-56	Screw	1	110641-0-01		A-80	Cover for Feed Mechanism	1	146708-0-00	
A-57	Packing	1	109203-0-01		A-81	Packing	1	146709-0-00	
A-58	Packing	1	151060-0-00		A-82	Screw	5	009680-7-12	
A-59	Oil Reservoir	1	146458-0-01		A-83	Cloth Plate Cushion (B)	1	111486-0-01	
A-60	Bolt	4	017771-6-12		A-84	Cloth Guide (L)	1	146460-0-01	
A-61	Inside Cover	1	146436-0-01		A-85	Screw	2	009670-6-12	
A-62	Screw	2	009670-6-12		A-86	Face Plate Assembly (Bulky)	1	146706-0-01	
A-63	Oil Stopper Plate	1	146457-0-01		A-87	Face Plate Assembly (Ruffling · Ruffling W/Piping)	1	146430-0-01	
A-64	Screw	2	009670-6-12						

## B. Needle Bar Mechanism



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
B- 1-1	Needle Arm	1		B- 1	B-26	Needle Plate Supporter (F)	1	146494-0-01	
B- 1-2	Bolt	1	017771-6-12	Needle Bar Clamp Assembly 146480-0-01	B-27	Cloth Plate Cushion (B)	1	111486-0-01	
B- 1-3	Needle Bar Clamp	1	146482-0-01		B-28	Screw	2	001680-5-12	
B- 1-4	Needle Bar Connector	1	140096-0-01	B-29	Needle Plate Supporter (B)	1	146495-0-01		
B- 2	Screw	1	009670-8-12	B-30	Screw	2	001680-5-12		
B- 3	Needle Bar Guide Slide Block	1	105078-0-01	B-31	Pin	1	107351-0-01		
B- 4	Wick	2	140415-0-00	B-32	Bolt	2	018061-6-22		
B- 5	Needle Bar Guide	1	105079-0-01	B-33	Screw	1	009671-4-12		
B- 6	Screw	2	009680-7-12	B-34	Nut	1	021670-2-02		
B- 7	Oil Cap	1	140326-0-01	B-35	Cloth Plate Lever	1	146451-0-01		
B- 8	Wick	1	140418-0-00	B-36	Spring	1	146452-0-01		
B- 9	Needle Bar	1	146483-0-01	B-37	Stud Screw	1	146453-0-01		
B-10-1	Needle Clamp 1.8	1		B-10 Needle Clamp 1.8 Assembly 146771-0-01	B-38	Cloth Plate Lever Stopper	1	146454-0-01	
B-10-2	Screw	2	146427-0-01		B-39	Screw	1	009670-6-12	
B-11	Needle Bar Bushing (D)	1	146486-0-00	B-40	Needle Guide F	1	146777-0-01		
B-12	Needle Bar Bushing (U)	1	146485-0-00	B-41	Screw	1	009670-6-12		
B-13	Screw	1	013679-4-12	B-42	Needle DCx1	2			
B-14	Needle Bar Cap	1	146484-0-01	B-43	Needle DCx3	2			
B-15	Cap	1	114255-0-02	B-44	Needle Plate	1			
B-16	Needle Shaft Bushing (Left)	1	140093-0-00	B-45	Screw	2	100032-0-03		
B-17	Set Collar	2	140092-0-01	B-46-1	Needle Clamp 2.2	1		B-46 Needle Clamp 2.2 Assembly 146773-0-01	
B-18	Screw	4	100366-0-01	B-46-2	Screw	2	146427-0-01		
B-19	Wick	1	140320-0-00	B-47-1	Needle Clamp 3	1		B-47 Needle Clamp 3 Assembly 146775-0-01	
B-20-1	Pin	1	140088-0-01	B-47-2	Screw	2	146427-0-01		
B-20-2	Screw	1	100366-0-01	B-48	Needle Guard (F)	1	146778-0-01		
B-20-3	Needle Arm Driving Lever	1	146478-0-01	B-49	Needle Plate	1			
B-20-4	Needle Arm Driving Crank Rod	1		B-50	Needle Plate	1			
B-20-5	Screw	2	148425-0-01	B-51	Needle Plate (Ruffling - Ruffling W/Piping)	1			
B-21	Bolt	1	017771-6-12	B-52	Needle Plate (Denim)	1			
B-22	Needle Bar Crank Shaft	1	146479-0-01	B-53	Needle Plate (Backtacking)	1			
B-23	Needle Shaft Bushing (Right)	1	148120-0-00	B-54	Needle Plate (Piping)	1			
B-24	Oil Cap	1	140327-0-01	B-55	Needle Plate (Bulky)	1			
B-25	Needle Plate Support Bracket	1	146725-0-01						

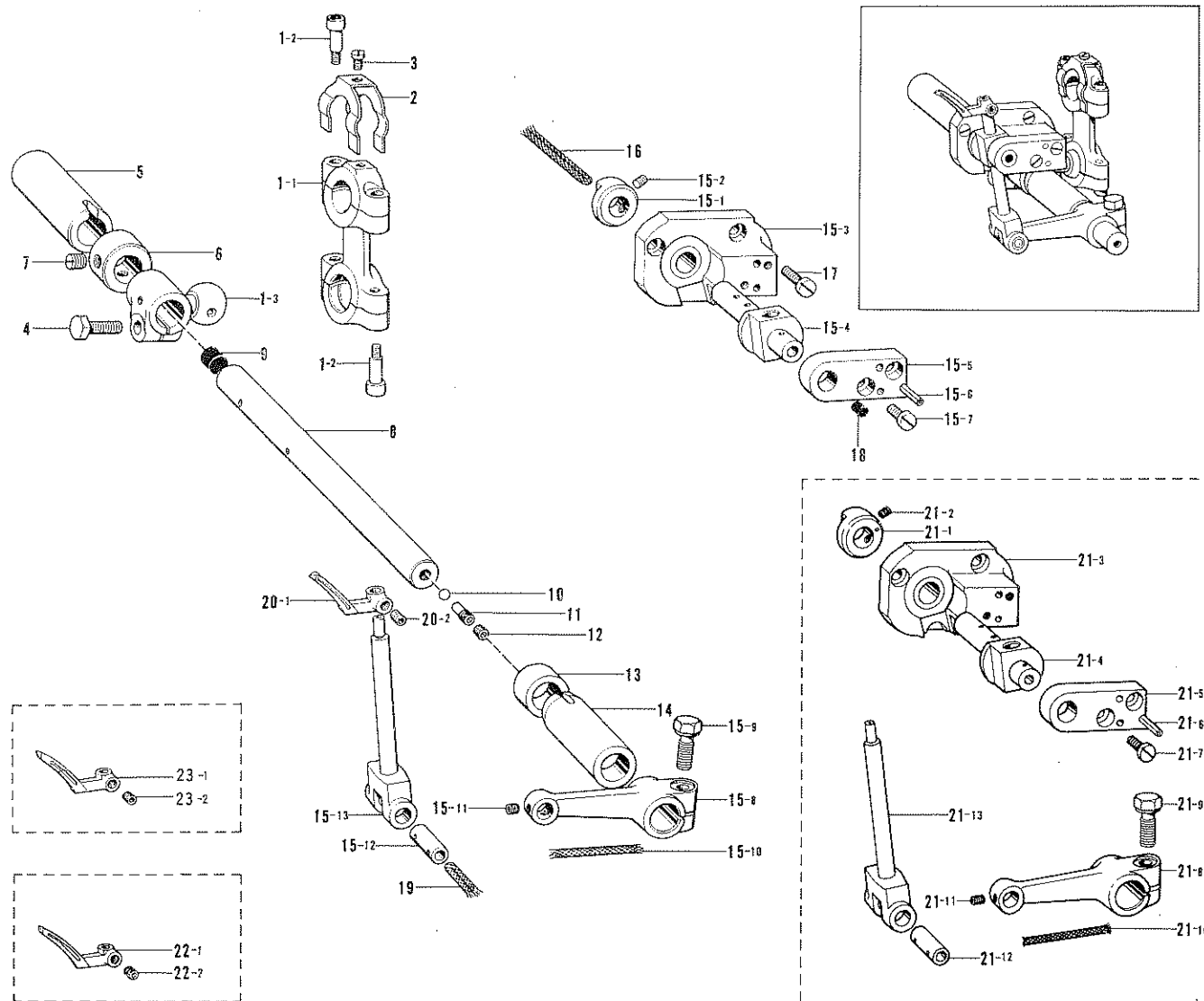
### C. Crank Shaft Mechanism



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
C- 1	Bearing Cap	1	143311-0-01		C-13	Oil Rejector	1	140084-0-00	
C- 2	Packing	1	143312-0-00		C-14	Pulley	1	147848-0-01	
C- 3	Screw	3	009670-8-12		C-15	Screw	2	013761-4-10	
C- 4	Bearing 6000	1	072600-0-00		C-16	Cap Screw	1	140180-0-01	
C- 5	Crank Shaft	1	*146724-0-01		C-17	Pulley Cover	1	147415-0-01	
C- 6	Oil Cap	1	142274-0-01		C-18	Bearing Case	1	110670-0-00	
C- 7	Packing	1	114294-0-01		C-19	Screw	4	009681-0-12	
C- 8	Crank Shaft Bushing (L) Assembly	1	146473-0-01		C-20	Bearing 6001	2	072600-1-00	
C- 9	Crank Shaft Bushing, Middle	1	143179-0-00		C-21	Thrust Washer	1	110672-0-00	
C-10	Screw	1	110668-0-01		C-22	Bearing Cover	1	110673-0-00	
C-11	Worm	1	146647-0-01		C-23	Screw	4	107244-0-01	
C-12	Screw	2	014770-6-22		C-24	Crank Shaft	1	*150866-0-01	



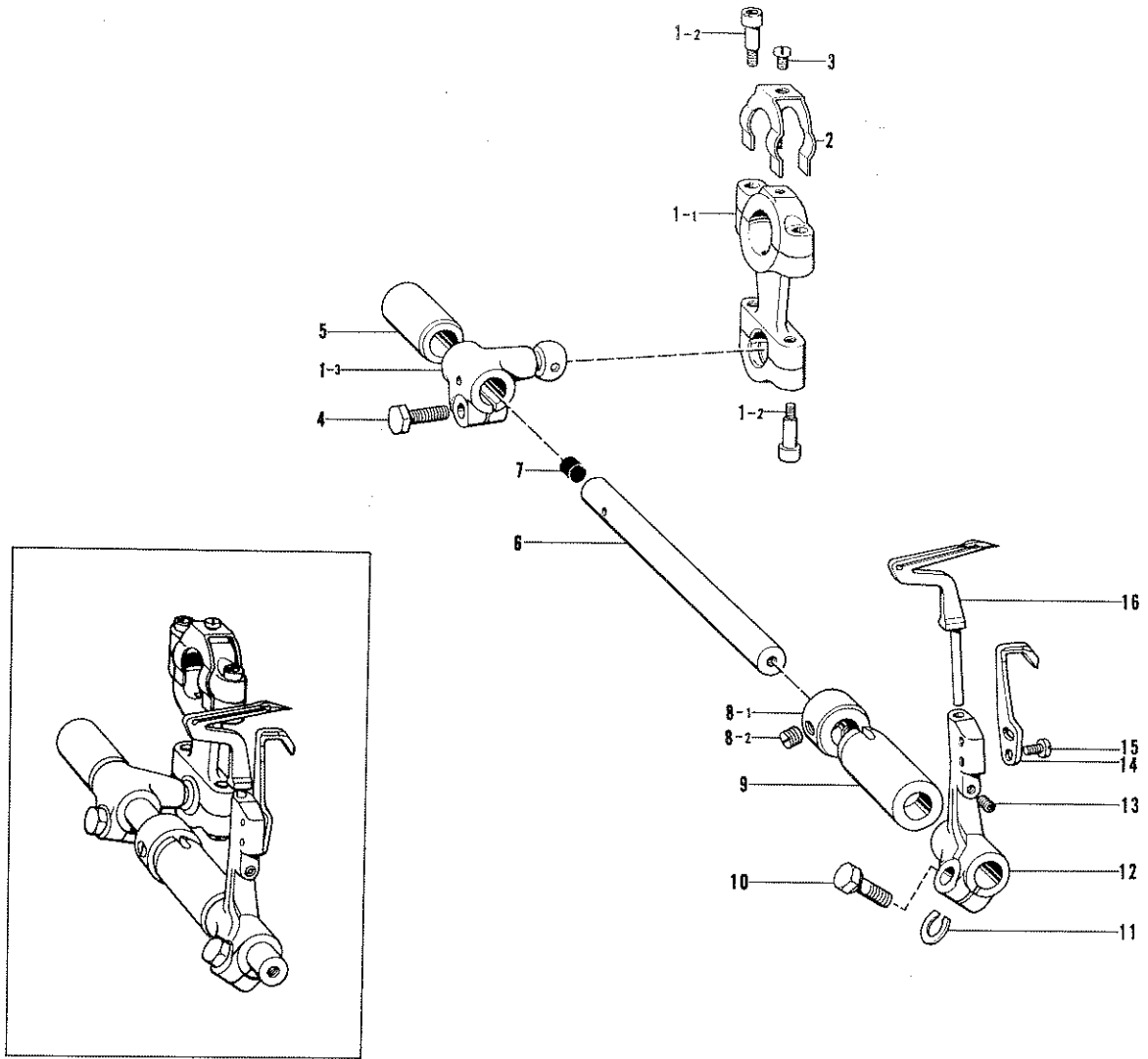
# D. Over Looper Mechanism



From the library of: Diamond Needle Corp

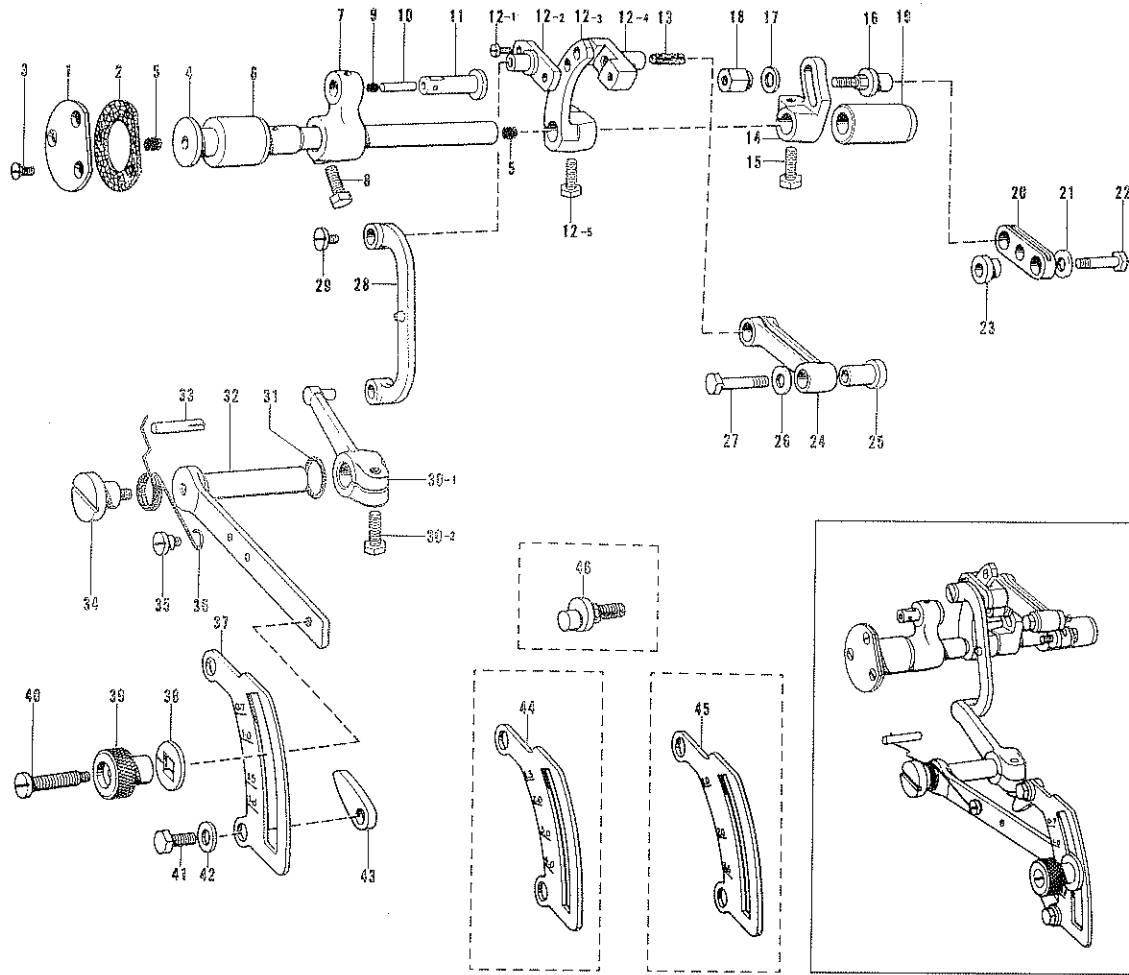
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
D- 1- 1	Over Looper Connecting Rod	1		*D-1 Over Looper Connecting Rod Assembly 144025-0-01	D-15-11	Screw	1	148294-0-01	D-15 Over Looper Assembly 146603-1-01 (Standard)
D- 1- 2	Screw	4	148425-0-01		D-15-12	Over Looper Holding Shaft	1	148379-0-01	
D- 1- 3	Over Looper Connecting Lever	1			D-15-13	Over Looper Holder	1	144036-0-01	
D- 2	Looper Connecting Rod Stopper	1	110704-0-01		D-16	Wick	1	140317-0-00	
D- 3	Screw	1	009660-4-12	D-17	Screw	3	009680-7-12		
D- 4	Bolt	1	017771-4-12	D-18	Oil Cap	1	140326-0-01		
D- 5	Bushing	1	144029-0-00	D-19	Wick	1	140417-0-00		
D- 6	Set Collar	1	146581-0-01	D-20- 1	Over Looper (Standard)	1		D-20 Over Looper 147934-0-01	
D- 7	Screw	2	100260-0-01	D-20- 2	Screw	1	014680-4-22		
D- 8	Over Looper Shaft	1	148033-0-01	D-21- 1	Set Collar	1		D-21 Over Looper Assembly 146611-1-01 (Hight-lift)	
D- 9	Oil Cap	1	140327-0-01	D-21- 2	Screw	2	014680-4-22		
D-10	Steel Ball	1	071023-8-50	D-21- 3	Over Looper Holder Guide Base	1			
D-11	Screw	1	148034-0-01	D-21- 4	Over Looper Holder Guide Block	1			
D-12	Screw	1	148294-0-01	D-21- 5	Over Looper Holder Supporting Plate	1			
D-13	Thrust Collar	1	146602-0-01	D-21- 6	Pin	2			
D-14	Bushing	1	144031-0-00	D-21- 7	Screw	2	009681-0-12		
D-15- 1	Set Collar	1		D-21- 8	Over Looper Driving Lever	1	148381-0-01		
D-15- 2	Screw	2	014680-4-22	D-21- 9	Bolt	1	149170-0-01		
D-15- 3	Over Looper Holder Guide Base	1		D-21-10	Wick	1	140416-0-00		
D-15- 4	Over Looper Holder Guide Block	1		D-21-11	Screw	1	148294-0-01		
D-15- 5	Over Looper Holder Supporting Plate	1		D-21-12	Over Looper Holding Shaft	1	148379-0-01		
D-15- 6	Pin	2		D-21-13	Over Looper Holder	1	144036-0-01		
D-15- 7	Screw	2	009681-0-12	D-22- 1	Over Looper (Hight-life)	1		D-22 Over Looper 147937-0-01	
D-15- 8	Over Looper Driving Lever	1	148378-0-01	D-22- 2	Screw	1	014680-4-22	D-23 Over Looper 147936-0-01	
D-15- 9	Bolt	1	149170-0-01	D-23- 1	Over Looper (Mock safety)	1			
D-15-10	Wick	1	140416-0-00	D-23- 2	Screw	1	014680-4-22		

# E. Under Looper Mechanism



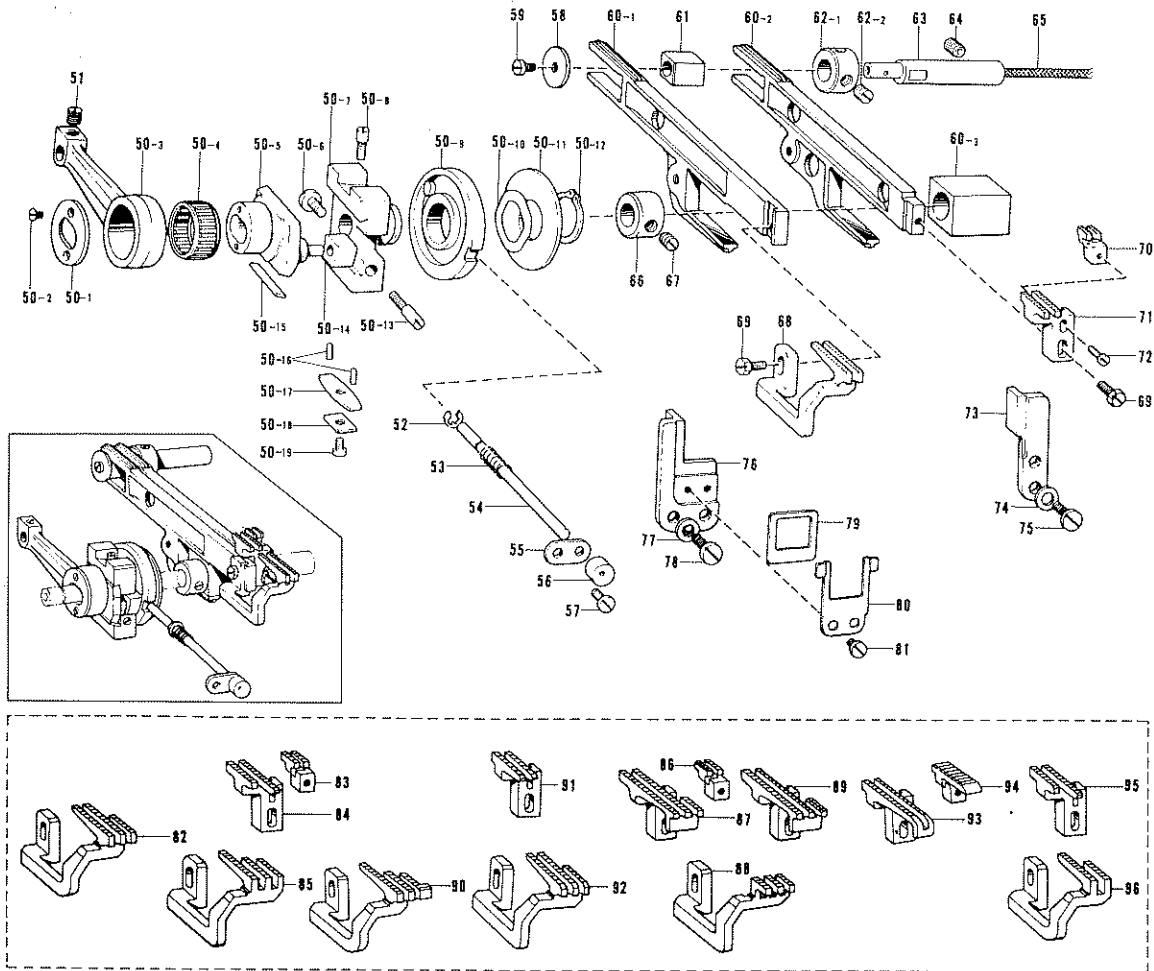
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
E- 1-1	Under Looper Connecting Rod	1		*E-1 Under Looper Connecting Rod Assembly 144044-0-01	E- 9	Under Looper Shaft Bushing (F)	1	146616-0-00	
E- 1-2	Screw	4	148425-0-01		E-10	Bolt	1	149171-0-01	
E- 1-3	Under Looper Connecting Lever	1			E-11	Spacer	1	148782-0-01	
E- 2	Looper Connecting Rod Stopper	1	110704-0-01		E-12	Under Looper Holder	1	146617-0-01	
E- 3	Screw	1	009660-4-12		E-13	Screw	1	014680-4-22	
E- 4	Bolt	1	017771-6-12		E-14	Movable Needle Guard	1	144127-0-01	
E- 5	Under Looper Shaft Bushing (B)	1	146615-0-00		E-15	Screw	2	009670-8-12	
E- 6	Under Looper Shaft	1	146614-0-01		E-16	Under Looper	1	144049-0-01	
E- 7	Oil Cap	1	140327-0-01						
E- 8-1	Collar	1		E- 8 Collar Assembly 180323-0-01					
E- 8-2	Screw	2	013760-6-12						

# F. Feed Mechanism (1)



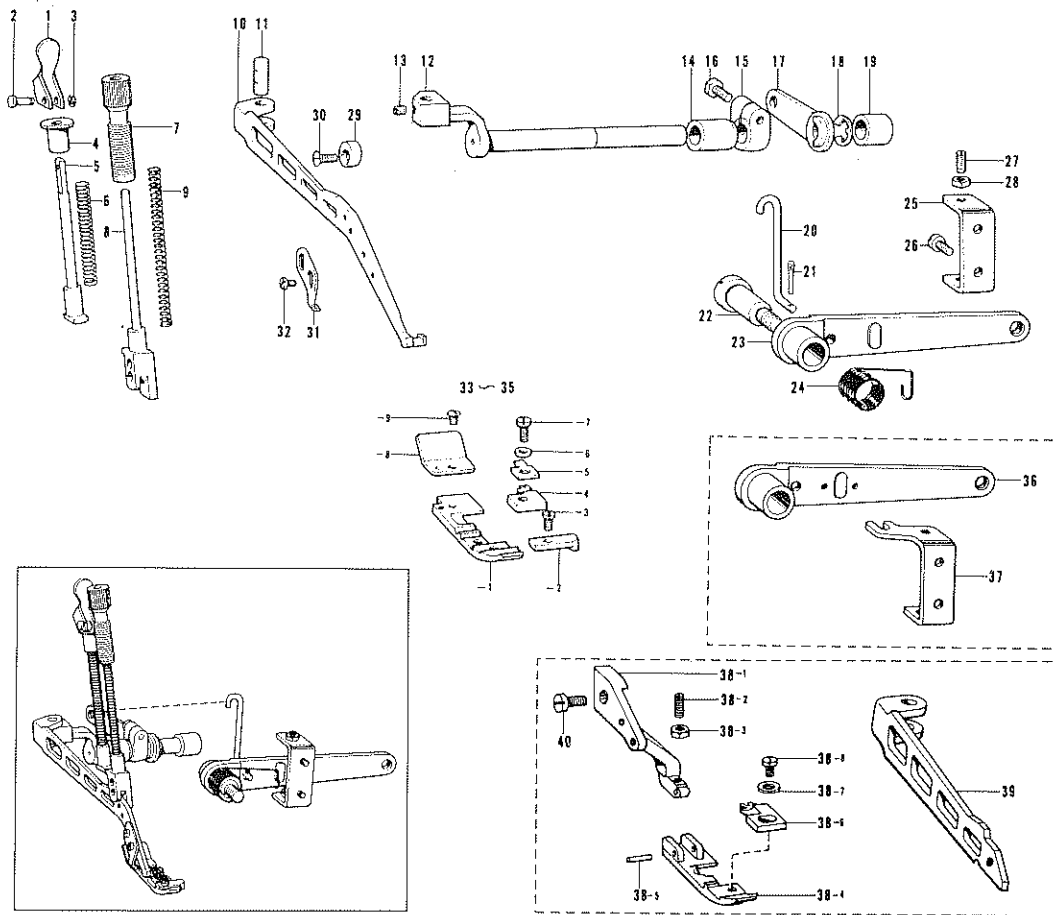
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
F- 1	Cover for Feed Shaft Bushing (L)	1	140188-0-04		F-23	Main Feed Link Bushing	1	140207-0-01	
F- 2	Packing	1	140187-0-00		F-24	Differential Feed Link	1	146554-0-01	
F- 3	Screw	3	102538-0-02		F-25	Differential Feed Link Bushing	1	146555-0-01	
F- 4	Feed Shaft	1	146538-0-01		F-26	Washer	1	140208-0-01	
F- 5	Oil Cap	2	140327-0-01		F-27	Feed Link Shaft (Large)	1	140217-0-01	
F- 6	Feed Shaft Bushing (L)	1	146539-0-00		F-28	Differential Feed Adjusting Link	1	146556-0-01	
F- 7	Feed Arm	1	146533-0-01		F-29	Screw	1	148834-0-01	
F- 8	Bolt	1	017771-6-12		F-30-1	Differential Feed Link Lever	1		F-30 Link Lever Assembly 146914-0-01
F- 9	Oil Cap	1	140326-0-01		F-30-2	Bolt	1	017771-4-12	
F-10	Pin	1	147318-0-00		F-31	Packing	1	109203-0-01	
F-11	Feed Arm Pin	1	146532-0-01		F-32	Differential Feed Adjusting Lever	1	146558-0-01	
F-12-1	Screw	2	009660-7-12	F-12 Differential Feed Arm Assembly 146550-0-01	F-33	Dowel Pin	1	140063-0-01	
F-12-2	Differential Feed Adjuster Cap	1			F-34	Stud Screw	1	146559-0-01	
F-12-3	Differential Feed Arm	1			F-35	Stud Screw	1	100294-0-02	
F-12-4	Differential Feed Adjuster	1			F-36	Spring	1	146560-0-01	
F-12-5	Bolt	1	017771-4-12		F-37	Differential Stitch Control	1	146561-0-01	
F-13	Felt	1	147363-0-00		F-38	Washer	1	146566-0-01	
F-14	Main Feed Arm	1	140205-0-01		F-39	Knob	1	146564-0-01	
F-15	Bolt	1	017771-4-12		F-40	Screw	1	146565-0-01	
F-16	Main Feed Shaft	1	143564-0-01		F-41	Bolt	2	017771-4-12	
F-17	Washer	1	113431-0-02		F-42	Washer	2	025770-2-32	
F-18	Nut	1	143565-0-01		F-43	Stopper	2	146563-0-01	
F-19	Feed Shaft Bushing (R)	1	146540-0-00		F-44	Differential Stitch Control (Bulky)	1	146742-0-01	
F-20	Main Feed Link	1	140209-0-01		F-45	Differential Stitch Control (Ruffling - Ruffling w/piping)	1	146562-0-01	
F-21	Washer	1	140208-0-01		F-46	Main Feed Shaft (Bulky)	1	144068-0-01	
F-22	Main Feed Link Shaft (Small)	1	140210-0-01						

## F. Feed Mechanism (2)



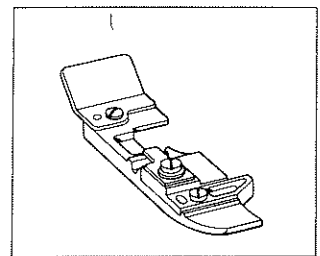
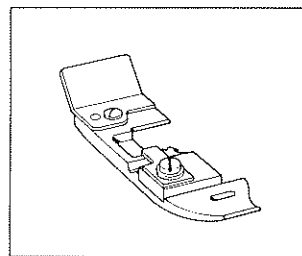
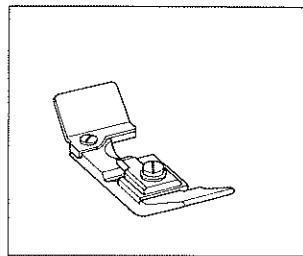
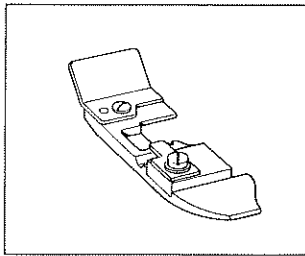
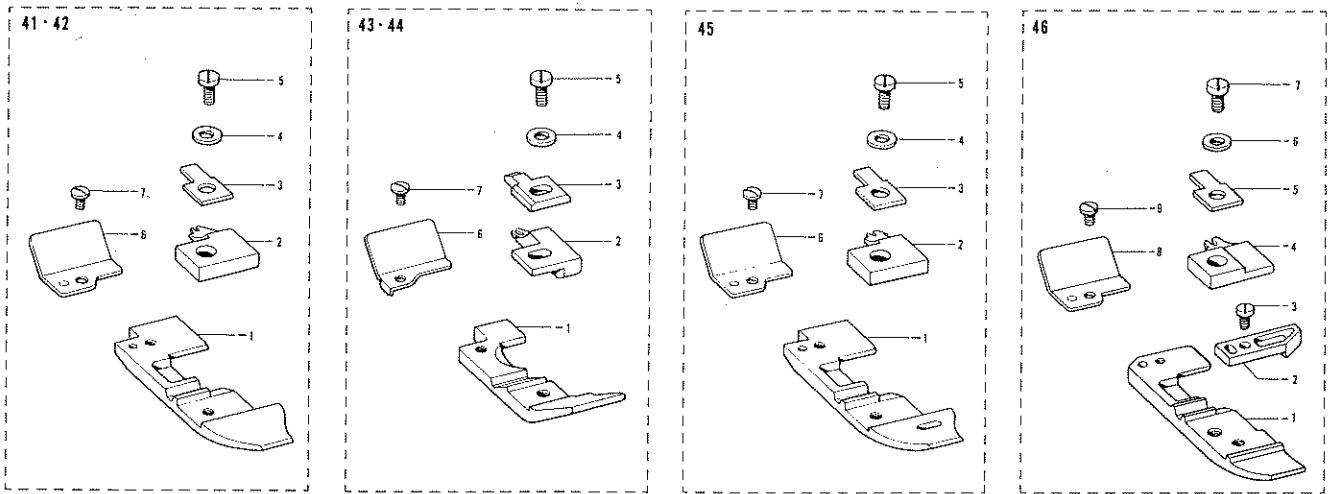
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
F-50- 1	Feed Rod Presser Plate	1	140176-0-01	F-50 Eccentric Wheel Assembly 146528-0-01	F-63	Feed Bar Guide Block Shaft	1	146548-0-01	
F-50- 2	Screw	2	117517-0-03		F-64	Screw	1	014770-6-22	
F-50- 3	Feed Rod	1	146530-0-01		F-65	Wick	1	147362-0-00	
F-50- 4	Needle Roller Bearing 20	1	146531-0-01		F-66	Set Collar	1	146741-0-00	
F-50- 5	Eccentric Wheel	1			F-67	Screw	1	101706-0-01	
F-50- 6	Screw	1	107093-0-02		F-68	Differential Feed Dog	1	146748-0-01	
F-50- 7	Eccentric Wheel Holder	1			F-69	Bolt	2	117516-0-01	
F-50- 8	Screw	2	100025-0-02		F-70	Chain Feed Dog	1	146577-0-01	
F-50- 9	Eccentric Wheel Adjusting Cam	1	144053-0-01		F-71	Main Feed Dog	1	146744-0-01	
F-50-10	Spring	1	144055-0-01		F-72	Screw	1	009630-8-12	
F-50-11	Washer	1	146529-0-01		F-73	Feed Bar Guide (R)	1	148174-0-00	
F-50-12	Stop Ring	1	048150-1-43		F-74	Washer	2	113431-0-02	
F-50-13	Screw	1	145663-0-01		F-75	Screw	2	107407-0-03	
F-50-14	Slide Block	1	140165-0-01		F-76	Feed Bar Guide (L)	1	149888-0-00	
F-50-15	Gib	1	146401-0-01		F-77	Washer	2	113431-0-02	
F-50-16	Gib Holder Pin	2	146402-0-01		F-78	Screw	2	107407-0-03	
F-50-17	Gib Holder Plate (L)	1	146404-0-01		F-79	Fragment Protector	1	149886-0-00	
F-50-18	Gib Holder Plate (S)	1	146403-0-01		F-80	Fragment Protector Plate	1	149887-0-01	
F-50-19	Screw	1	009660-5-02		F-81	Screw	2	106568-0-03	
F-51	Screw	1	100251-0-01	F-82	Differential Feed Dog	1	146749-0-01		
F-52	Stop Ring	1	048040-3-42	F-83	Chain Feed Dog (Bulky, Ruffling)	1	146578-0-01		
F-53	Spring	1	146535-0-01	F-84	Main Feed Dog (Bulky)	1	146745-0-01		
F-54	Feed Adjusting Shaft	1	146534-0-01	F-85	Differential Feed Dog (Bulky)	1	146750-0-01		
F-55	Supporter for Feed Adjusting Shaft	1	146536-0-01	F-86	Chain Feed Dog (Ruffling W/Piping)	1	147832-0-01		
F-56	Cap	1	146537-0-00	F-87	Main Feed Dog (Ruffling)	1	146746-0-01		
F-57	Screw	1	009670-6-12	F-88	Differential Feed Dog (Ruffling)	1	146751-0-01		
F-58	Slide Plate	1	146549-0-01	F-89	Main Feed Dog (Ruffling W/Piping)	1	147828-0-01		
F-59	Screw	1	009680-7-12	F-90	Differential Feed Dog (Bulky)	1	150873-0-01		
F-60- 1	Differential Feed Bar	1	146543-0-01	F-91	Main Feed Dog (Denim)	1	146790-0-01		
F-60- 2	Main Feed Bar	1	146542-0-01	F-92	Differential Feed Dog (Denim)	1	146791-0-01		
F-60- 3	Feed Lifting Slide Block	1	146544-0-00	F-93	Main Feed Dog (Piping)	1	149193-0-01		
F-61	Feed Bar Guide Block	1	146547-0-00	F-94	Chain Feed Dog (Piping)	1	149194-0-01		
F-62- 1	Collar	1		F-95	Main Feed Dog (Bulky)	1	148401-0-01		
F-62- 2	Screw	2	101706-0-01	F-96	Differential Feed Dog (Bulky)	1	148402-0-01		

# G. Presser Foot Mechanism (1)



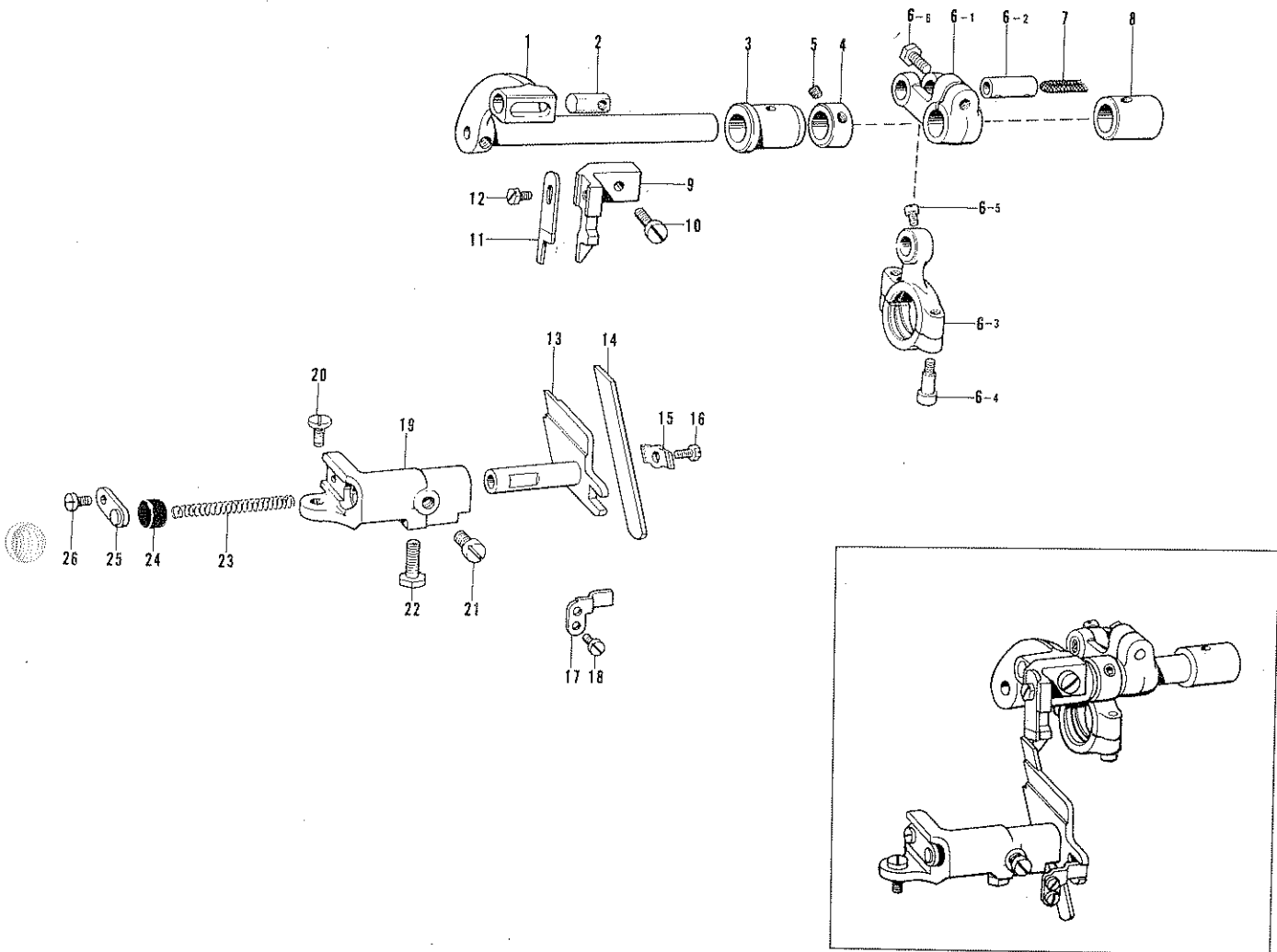
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
G- 1	Presser Bar Lifter	1	147759-0-01		G-33-5	Presser Foot Hinge Spring	1	146887-0-01	G-33 Presser Foot Assembly 146963-0-01
G- 2	Presser Bar Lifter Pin	1	144084-0-01		G-33-6	Washer	1	025030-1-32	
G- 3	Stop Ring	1	048020-3-42		G-33-7	Screw	1	100080-0-04	
G- 4	Washer	1	144083-0-01		G-33-8	Presser Foot (Rear)	1	146889-0-01	
G- 5	Presser Bar Lifter Shaft	1	144085-0-01		G-33-9	Screw	1	100105-0-05	
G- 6	Spring	1	144086-0-01		G-34-1	Presser Foot	1		G-34 Presser Foot Assembly 146902-0-01
G- 7	Screw	1	144079-0-01		G-34-2	Presser Foot (Front)	1	146888-0-01	
G- 8	presser Bar	1	146521-0-01		G-34-3	Screw	1	009639-3-12	
G- 9	Spring	1	144081-0-01		G-34-4	Presser Foot Stitch Tongue	1	146903-0-01	
G-10	Main Presser Arm	1	146789-0-01		G-34-5	Presser Foot Hinge Spring	1	146887-0-01	
G-11	Pin for Presser Arm Shaft	1	146527-0-01		G-34-6	Washer	1	025030-1-32	G-35 Presser Foot Assembly 146965-0-01
G-12	Presser Arm Shaft	1	146525-0-01		G-34-7	Screw	1	100080-0-04	
G-13	Screw	1	014680-4-22		G-34-8	Presser Foot (Rear)	1	146889-0-01	
G-14	Bushing (Left)	1	140263-0-00		G-34-9	Screw	1	100105-0-05	
G-15	Collar	1	140261-0-01		G-35-1	Presser Foot	1		
G-16	Bolt	1	017771-6-12		G-35-2	Presser Foot (Front)	1	146888-0-01	G-35 Presser Foot Assembly 146965-0-01
G-17	Presser Foot Lifter Inside Lever	1	146524-0-01		G-35-3	Screw	1	009639-3-12	
G-18	Stop Ring	1	048080-3-42		G-35-4	Presser Foot Stitch Tongue	1	146966-0-01	
G-19	Bushing (Right)	1	140262-0-00		G-35-5	Presser Foot Hinge Spring	1	146887-0-01	
G-20	Presser Foot Lifter Link	1	146523-0-01		G-35-6	Washer	1	025030-1-32	
G-21	Pin	1	110793-0-01		G-35-7	Screw	1	100080-0-04	G-38 Presser Foot Assembly 149195-1-01 (Piping)
G-22	Presser Foot Lifter Lever Stud Screw	1	148372-0-01		G-35-8	Presser Foot (Rear)	1	146889-0-01	
G-23	Presser Foot Lifter Lever	1	143323-1-03		G-35-9	Screw	1	100105-0-05	
G-24	Spring	1	143325-0-01		G-36	Presser Foot Lifter Lever	1	148369-1-01	
G-25	Lever Adjuster Plate	1	146522-0-01		G-37	Lever Adjuster Plate	1	147454-0-01	
G-26	Screw	2	009680-7-12		G-38-1	Sub Presser Arm	1		G-38 Presser Foot Assembly 149195-1-01 (Piping)
G-27	Screw	2	011711-4-12		G-38-2	Screw	1	103978-0-02	
G-28	Nut	2	110161-0-06		G-38-3	Nut	1	021660-1-02	
G-29	Presser Arm Stopper	1	144088-0-01		G-38-4	Presser Foot	1		
G-30	Screw	1	107231-0-02		G-38-5	Pin	1	149183-0-01	
G-31	Presser Foot Stopper	1	140504-0-01		G-38-6	Stitch Tongue	1	150739-0-01	
G-32	Screw	2	001660-5-12		G-38-7	Washer	1	025030-1-32	
G-33-1	Presser Foot	1		G-33 Presser Foot Assembly 146963-0-01	G-38-8	Screw	1	009660-4-12	
G-33-2	Presser Foot (Front)	1	146888-0-01		G-39	Main Presser Arm (Piping)	1	146526-0-01	
G-33-3	Screw	1	009639-3-12		G-40	Screw (Piping)	1	009680-7-12	
G-33-4	Presser Foot Stitch Tongue	1	146964-0-01						

## G. Presser Foot Mechanism (2)



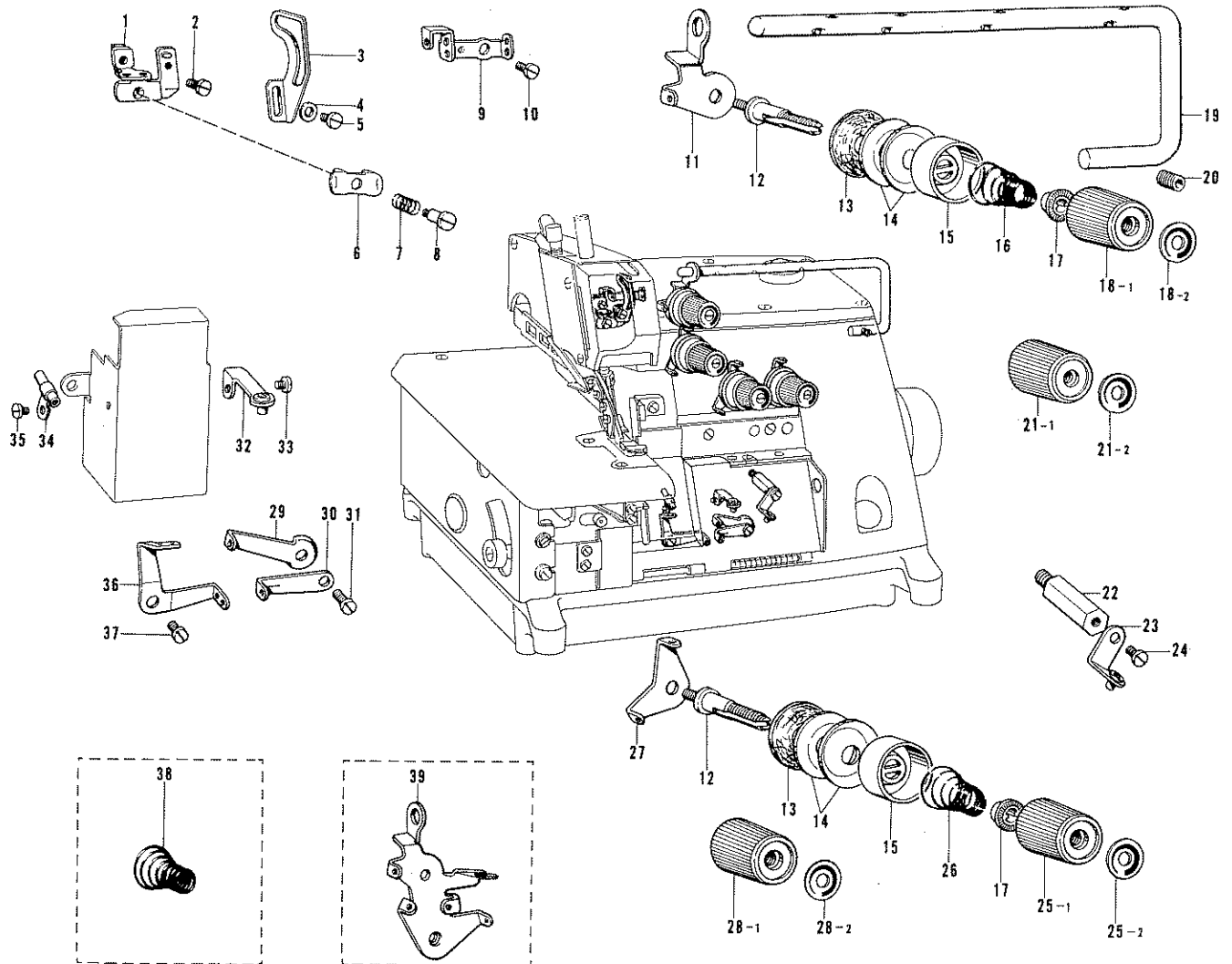
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
G-41-1	Presser Foot	1		G-41 Presser Foot Assembly 147952-0-01 (Bulky)	G-44-2	Presser Foot Stitch Tongue (V)	1	144816-0-01	G-44 Presser Foot Assembly 147439-0-01 (Ruffling W/Piping)
G-41-2	Presser Foot Stitch Tongue	1	146907-0-01		G-44-3	Presser Foot Plate	1	144091-0-01	
G-41-3	Presser Foot Hinge Spring	1	146887-0-01		G-44-4	Washer	1	025030-1-32	
G-41-4	Washer	1	025030-1-32		G-44-5	Screw	1	100080-0-04	
G-41-5	Screw	1	100080-0-04		G-44-6	Presser Foot (Rear)	1	144100-0-01	
G-41-6	Presser Foot (Rear)	1	145774-0-01		G-44-7	Screw	1	100105-0-05	
G-41-7	Screw	1	100105-0-05		G-45-1	Presser Foot	1		
G-42-1	Presser Foot	1		G-45-2	Presser Foot Stitch Tongue	1	146907-0-01		
G-42-2	Presser Foot Stitch Tongue	1	146905-0-01	G-45-3	Presser Foot Hinge Spring	1	146887-0-01		
G-42-3	Presser Foot Hinge Spring	1	146887-0-01	G-45-4	Washer	1	025030-1-32		
G-42-4	Washer	1	025030-1-32	G-45-5	Screw	1	100080-0-04		
G-42-5	Screw	1	100080-0-04	G-45-6	Presser Foot (Rear)	1	145774-0-01		
G-42-6	Presser Foot (Rear)	1	145774-0-01	G-45-7	Screw	1	100105-0-05		
G-42-7	Screw	1	100105-0-05	G-46-1	Presser Foot	1		G-46 Presser Foot Assembly 150869-0-01 (Bulky)	
G-43-1	Presser Foot (U)	1		G-46-2	Presser Foot (Front)	1	150872-0-01		
G-43-2	Presser Foot Stitch Tongue (V)	1	144816-0-01	G-46-3	Screw	1	009639-3-12		
G-43-3	Presser Foot Plate	1	144091-0-01	G-46-4	Presser Foot Stitch Tongue	1	150871-0-01		
G-43-4	Washer	1	025030-1-32	G-46-5	Presser Foot Hinge Spring	1	146887-0-01		
G-43-5	Screw	1	100080-0-04	G-46-6	Washer	1	025030-1-32		
G-43-6	Presser Foot (Rear)	1	144100-0-01	G-46-7	Screw	1	100080-0-04		
G-43-7	Screw	1	100105-0-05	G-46-8	Presser Foot (Rear)	1	145774-0-01		
G-44-1	Presser Foot	1		G-46-9	Screw	1	100105-0-05		

# H. Knives Mechanism



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
H- 1	Upper Knife Driving Arm	1	146580-0-01		H-12	Bolt	1	144075-0-01	
H- 2	Nut	1	148281-0-01		H-13	Lower Knife Holder	1	146754-0-01	
H- 3	Bushing (Left)	1	140235-0-00		H-14	Lower Knife	1	112436-0-01	
H- 4	Set Collar	1	146581-0-01		H-15	Lower Knife Presser Plate	1	117515-0-01	
H- 5	Screw	2	100260-0-01		H-16	Bolt	1	117516-0-01	
H- 6-1	Upper Knife Driving Lever	1	140233-0-01	H- 6 Upper Knife Driving Rod Assembly 148427-0-01	H-17	Lower Knife Holder Guide	1	146585-0-01	
H- 6-2	Pin	1	140232-0-01		H-18	Screw	2	009670-6-12	
H- 6-3	Upper Knife Driving Rod	1	148428-0-00		H-19	Lower Knife Holder Supporter	1	146582-0-01	
H- 6-4	Screw	2	148425-0-01		H-20	Screw	1	107407-0-03	
H- 6-5	Screw	1	100366-0-01		H-21	Screw	1	102627-0-01	
H- 6-6	Bolt	1	017771-6-12		H-22	Bolt	1	017771-4-12	
H- 7	Wick	1	140317-0-00		H-23	Spring	1	146584-0-01	
H- 8	Bushing (Right)	1	144117-0-00		H-24	Cap	1	146586-0-00	
H- 9	Upper Knife Holder	1	144073-0-01		H-25	Lower Knife Holder Spring Stopper	1	140248-0-01	
H-10	Screw	1	107407-0-03		H-26	Screw	1	009680-7-12	
H-11	Upper Knife	1	144074-0-00						

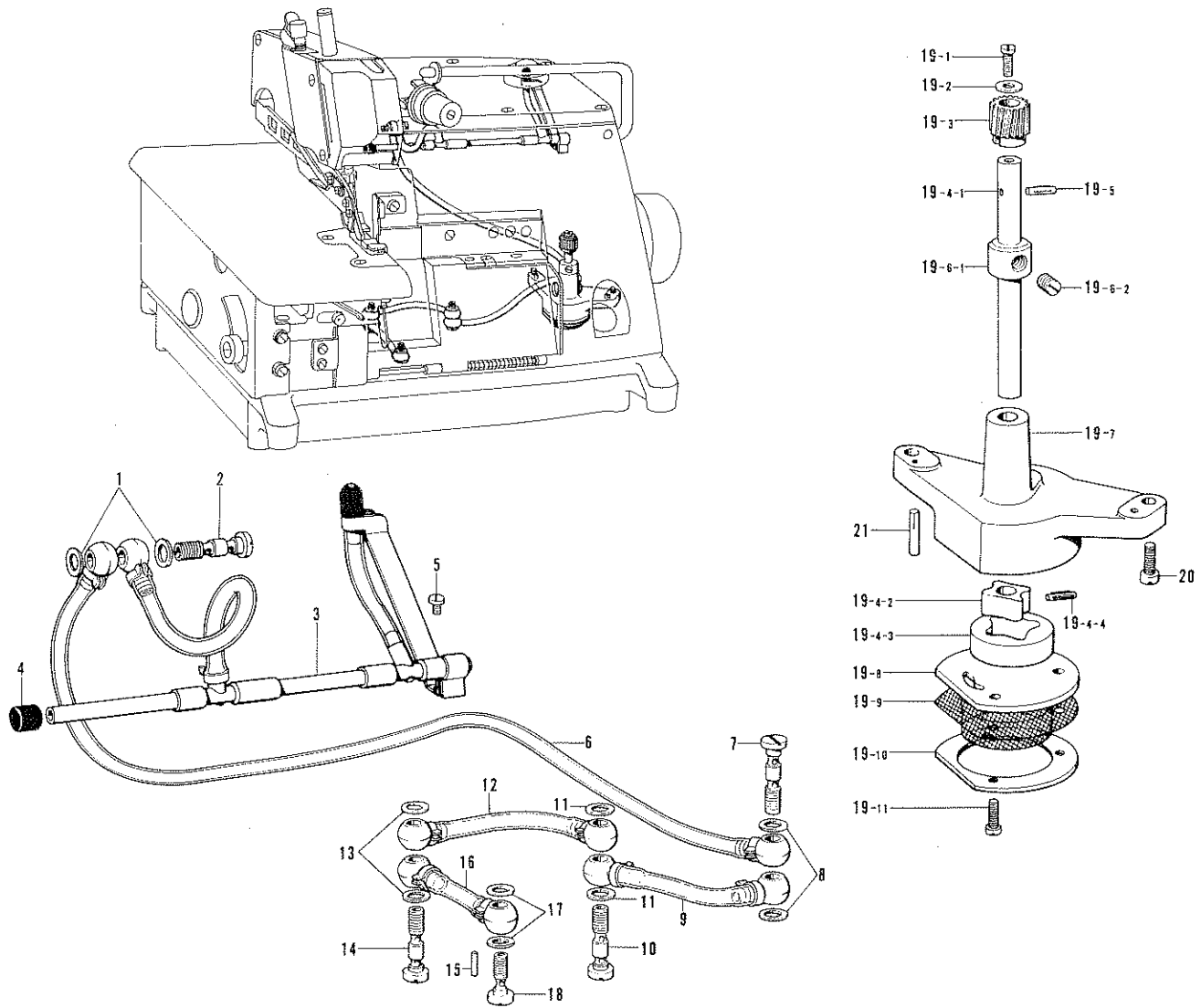
# J. Threading



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
J- 1	Needle Thread Take-up Supporter	1	147344-0-01		J-22	Thread Guide Holder	1	144111-0-01	
J- 2	Screw	1	009670-6-12		J-23	Under Looper Thread Guide	1	146926-0-02	
J- 3	Needle Thread Take-up	1	144108-0-01		J-24	Screw	1	009670-6-12	
J- 4	Washer	1	105248-0-03		J-25-1	Thread Tension Control Nut	1	149566-0-01	J-25 Thread Tension Control Nut Assembly 149568-0-02
J- 5	Screw	1	009660-4-12		J-25-2	Tension Indicating Plate	1	147049-0-02	
J- 6	Needle Thread Guard	1	112300-0-01		J-26	Spring	2	144110-0-01	
J- 7	Needle Thread Guard Spring	1	112299-0-01		J-27	Needle Thread Guide Plate	3	110813-0-01	
J- 8	Screw	1	112301-0-01		J-28-1	Thread Tension Control Nut	1	149566-0-01	J-28 Thread Tension Control Nut Assembly 149568-0-04
J- 9	Needle Thread Guide	1	146793-0-01		J-28-2	Tension Indicating Plate	1	147049-0-04	
J-10	Screw	1	009660-4-12		J-29	Over Looper Thread Take-up (R)	1	146652-0-01	
J-11	Thread Guide Supporter	1	146649-0-01		J-30	Under Looper Thread Take-up (R)	1	146653-0-01	
J-12	Looper Thread Tension Control Stud	4	110820-0-01		J-31	Screw	1	009670-8-12	
J-13	Felt	4	110832-0-01		J-32	Over Looper Thread Guide	1	146929-0-01	
J-14	Tension Disc	8	145446-0-01		J-33	Screw	1	009670-6-12	
J-15	Presser for Tension Disc	4	144103-0-02		J-34	Over Looper Thread Guide	1	142669-0-02	
J-16	Spring	2	144104-0-01		J-35	Screw	1	122771-0-02	
J-17	Tension Spring Washer	4	144105-0-00		J-36	Looper Thread Take-up (L)	1	146654-0-01	
J-18-1	Thread Tension Control Nut	1	149566-0-01	J-18 Thread Tension Control Nut Assembly 149568-0-03	J-37	Screw	1	009670-6-12	
J-18-2	Tension Indicating Plate	1	147049-0-03		J-38	Spring	2	148851-0-01	
J-19	Main Thread Guide	1	146648-0-01		J-39	Thread Guide Supporter	1	148370-0-01	
J-20	Screw	1	014770-6-22						
J-21-1	Thread Tension Control Nut	1	149566-0-01	J-21 Thread Tension Control Nut Assembly 149568-0-01					
J-21-2	Tension Indicating Plate	1	147049-0-01						

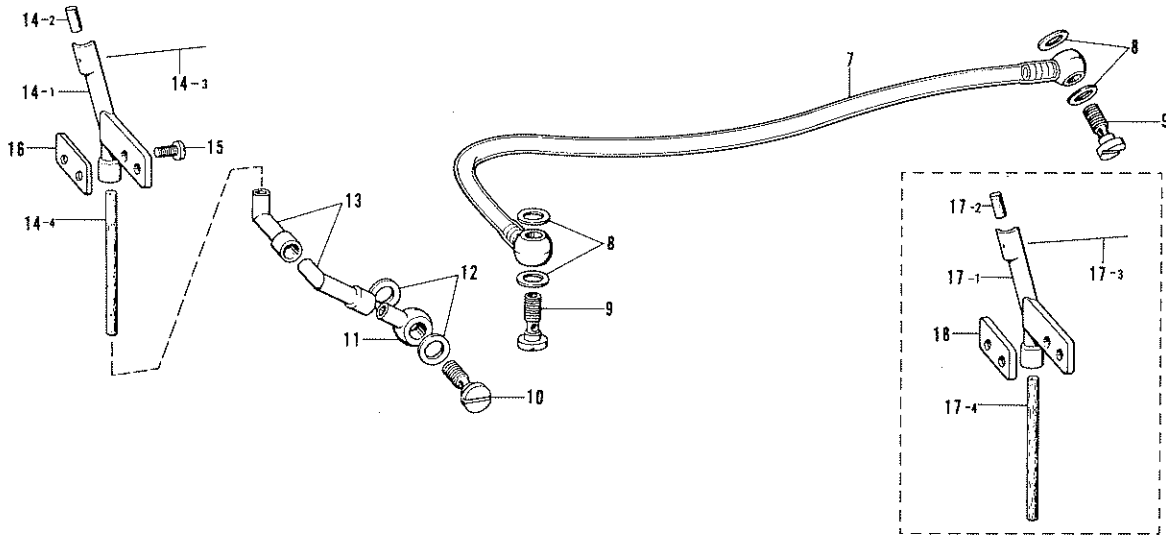
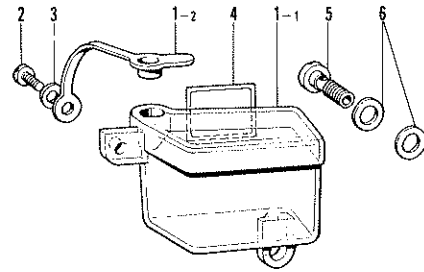
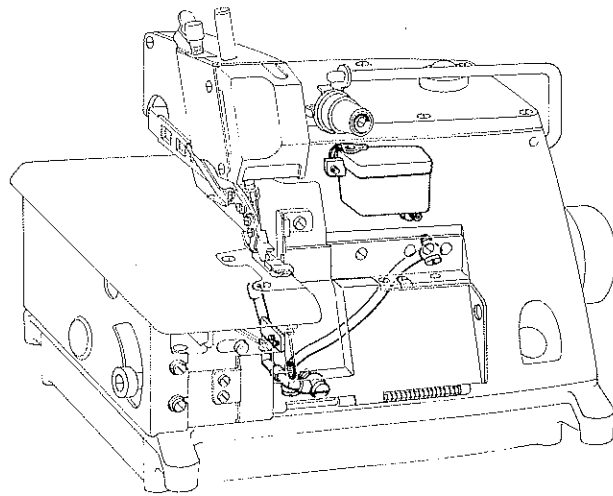


# K. Lubrication



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
K- 1	Packing	2	112348-0-01		K-19-1	Screw	1	009670-8-12	K-19 Pump Assembly 147521-0-01
K- 2	Oil Feeding Pipe (B)	1	112364-0-01		K-19-2	Washer	1	025350-3-32	
K- 3	Main Oil Pipe	1	146636-0-01		K-19-3	Worm Wheel	1	144619-0-00	
K- 4	Oil Cap	1	140325-0-01		K-19-4-1	Pump Inner Roter Shaft	1		K-19-4 Pump Inner Roter Assembly 147523-0-01
K- 5	Screw	1	009670-6-12		K-19-4-2	Pump Inner Roter	1		
K- 6	Vinyl Tube	1	140780-0-01		K-19-4-3	Pump Outer Roter	1		
K- 7	Oil Feeding Pipe (B)	1	112364-0-01		K-19-4-4	Pin	1		
K- 8	Packing	2	112348-0-01		K-19-5	Pin	1	144622-0-01	
K- 9	Vinyl Tube	1	140779-0-01		K-19-6-1	Collar	1		K-19-6. Collar Assembly 181995-0-01
K-10	Oil Feeding Pipe (B)	1	112364-0-01		K-19-6-2	Screw	2	101706-0-01	
K-11	Packing	2	112348-0-01		K-19-7	Pump Case	1		
K-12	Vinyl Tube	1	140778-0-01		K-19-8	Pump Cover	1	147527-0-01	K-19 Pump Assembly 147521-0-01
K-13	Packing	2	112348-0-01		K-19-9	Oil Filter Gauze	1	147528-0-00	
K-14	Oil Feeding Pipe (B)	1	112364-0-01		K-19-10	Oil Filter Flange	1	147529-0-01	
K-15	Pin	1	147318-0-00		K-19-11	Screw	3	009671-0-12	
K-16	Vinyl Tube	1	147211-0-01		K-20	Screw	2	009711-2-12	
K-17	Packing	2	112348-0-01		K-21	Pin	2	508693-0-01	
K-18	Screw	1	112359-0-01						

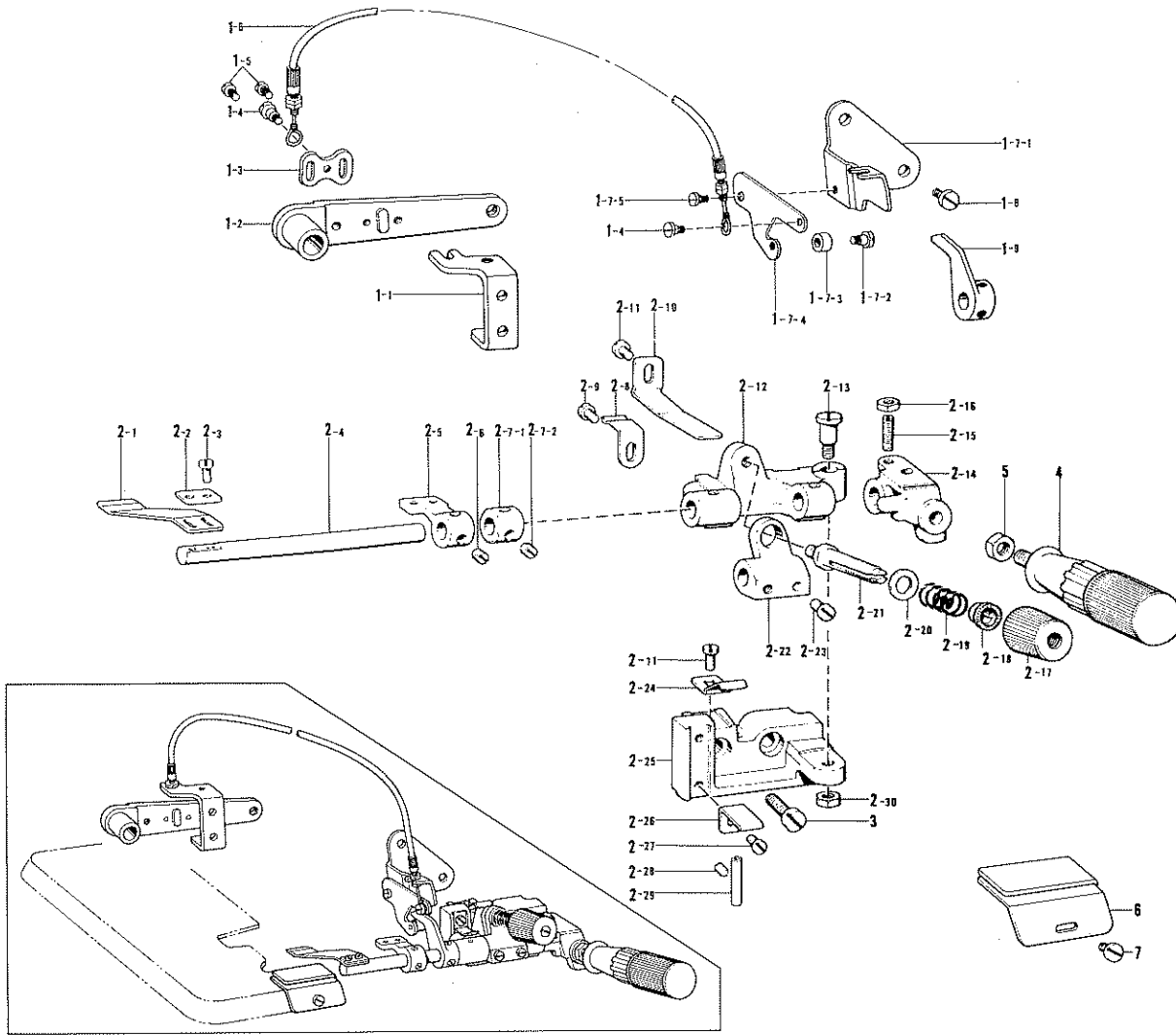
# L. Needle Cooler



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
L- 1-1	Oil Tank	1		L-1 Oil Tank Assembly 146511-0-00	L-13	Pipe Joint	2	146516-0-00	
L- 1-2	Cap	1	146993-0-00		L-14-1	Felt Holder	1	148009-0-00	L-14
L- 2	Screw	1	009681-0-12		L-14-2	Felt (S)	1	146740-0-00	Felt Holder
L- 3	Washer	1	113431-0-02		L-14-3	Steel Wire	1	147738-0-00	Assembly
L- 4	Label	1	147716-0-01		L-14-4	Felt	1	144116-0-00	148008-0-00
L- 5	Screw	1	112359-0-01		L-15	Screw	2	105216-0-01	
L- 6	Packing	2	112348-0-01		L-16	Spacer	1	146787-0-01	
L- 7	Vinyl Tube	1	146512-0-00		L-17-1	Felt Holder	1	146739-0-00	L-17
L- 8	Packing	4	112348-0-01		L-17-2	Felt (S)	1	146740-0-00	Felt Holder
L- 9	Screw	2	112359-0-01		L-17-3	Steel Wire	1	147738-0-00	Assembly
L-10	Screw	1	112359-0-01		L-17-4	Felt	1	144116-0-00	146738-0-00
L-11	Oil Feeding Connector	1	146515-0-00		L-18	Spacer	1	146788-0-01	
L-12	Packing	2	112348-0-01						

From the library of: Diamond Needle Corp

# M. Ruffler Interlocking Parts Assembly and Ruffling Attachment Assembly (1)

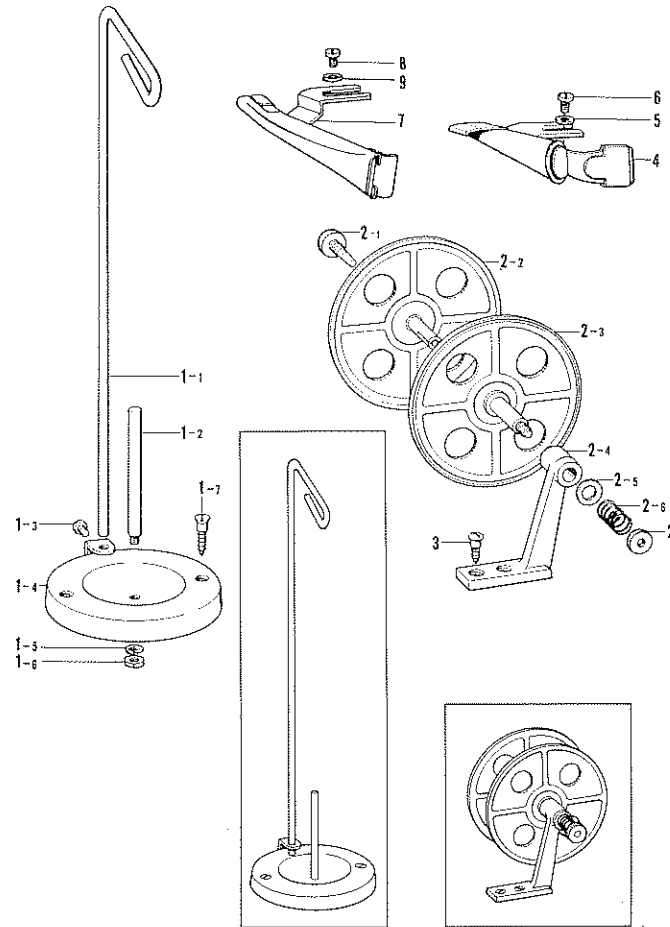
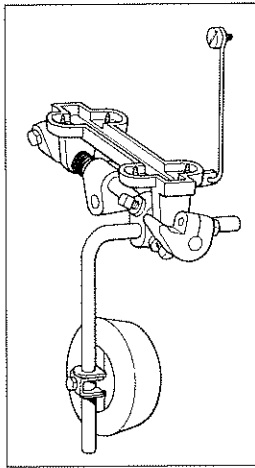
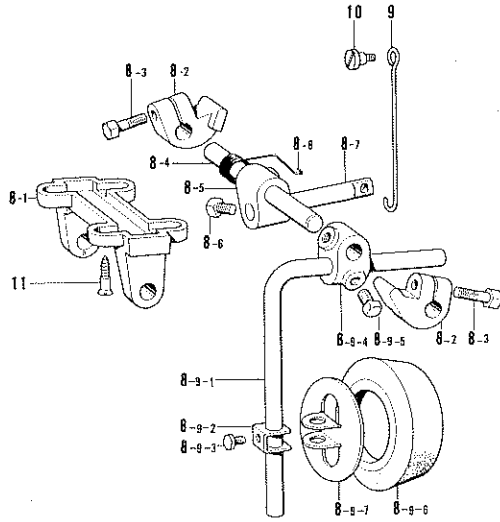


From the library of: Diamond Needle Corp

Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
M-1- 1	Lever Adjuster Plate	1	147454-0-01	M-1 Ruffler Interlocking Parts Assembly 148396-0-02	M-2-12	Bracket for Ruffling Blade	1	146588-0-01	M-2 Ruffling Attachment Assembly 146587-0-01
M-1- 2	Presser Foot Lifter Lever	1	148369-1-01		M-2-13	Screw	1	147933-0-01	
M-1- 3	Wire Plate	1	147672-0-01		M-2-14	Handle Fixing Plate	1	145810-0-01	
M-1- 4	Screw	2	141514-0-01		M-2-15	Screw	1	110230-0-01	
M-1- 5	Screw	2	009670-6-12		M-2-16	Nut	1	105234-0-03	
M-1- 6	Flexible Wire Assembly	1	148391-0-01		M-2-17	Tension Nut	1	144106-0-02	
M-1- 7-1	Presser Foot Lifter Lever Support	1	148389-0-01		M-2-18	Tension Spring Washer	1	144105-0-00	
M-1- 7-2	Screw	1	112301-0-01		M-2-19	Spring	1	144788-0-01	
M-1- 7-3	Roller	1	148390-0-01		M-2-20	Washer	1	025770-2-32	
M-1- 7-4	Ruffling Plate Lifter Lever	1	148388-0-01		M-2-21	Looper Thread Tension Control Stud	1	110820-0-01	
M-1- 7-5	Screw	1	141514-0-01		M-2-22	Spring Base	1	146590-0-01	
M-1- 8	Screw	1	009680-8-12	M-2-23	Screw	2	105163-0-01		
M-1- 9	Ruffling Plate Lifter	1	148387-0-01	M-2-24	Spring Plate	1	145808-0-01		
M-2- 1	Ruffling Blade	1	144783-0-01	M-2-25	Ruffler Base	1			
M-2- 2	Washer	1	144784-0-01	M-2-26	Ruffling Blade Guide	2	145807-0-01		
M-2- 3	Screw	2	009660-7-12	M-2-27	Screw	2	009680-8-12		
M-2- 4	Ruffling Blade Base Shaft	1	145803-0-01	M-2-28	Screw	1	013679-4-12		
M-2- 5	Wrapper Base	1	146589-0-01	M-2-29	Thread Guide Pipe	1	146529-0-01		
M-2- 6	Screw	2	101706-0-01	M-2-30	Nut	1	150553-0-02		
M-2- 7-1	Collar	1		M-3	Screw	2	009781-8-12		
M-2- 7-2	Screw	2	101706-0-01	M-4	Handle	1	145809-0-01		
M-2- 8	Spring	1	144764-0-01	M-5	Nut	1	150556-0-02		
M-2- 9	Screw	1	001670-5-12	M-6	Ruffler Guide	1	144793-0-00		
M-2-10	Spring Plate	1	145811-0-01	M-7	Screw	1	112751-0-02		
M-2-11	Screw	2	009680-6-12						

M. Differential Adjuster Assembly (2)

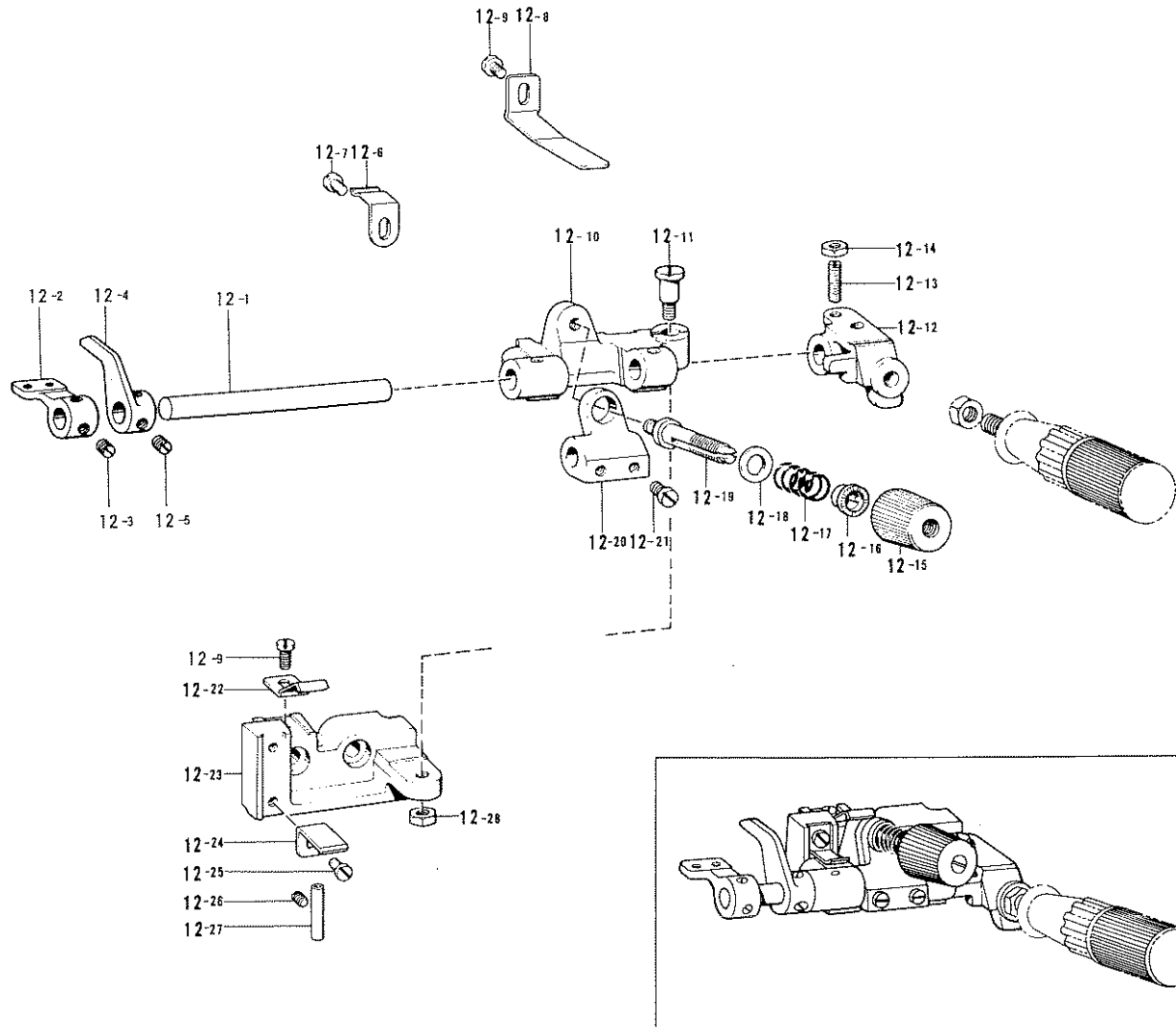
N. Wrapper and Piping parts



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	
M- 8-1	Knee Lifter Shaft Bracket	1	144803-0-01	M- 8 Knee Lifter Shaft Bracket Assembly 144822-0-01	
M- 8-2	Collar	2	104890-0-02		
M- 8-3	Bolt	2	017762-2-03		
M- 8-4	Knee Lifter Shaft	1	144804-0-01		
M- 8-5	Knee Lifter Bracket	1	143989-0-01		
M- 8-6	Bolt	2	100463-0-01		
M- 8-7	Knee Lifter Lever	1	144805-0-01		
M- 8-8	Spring	1	144806-0-01		
M- 8-9-1	Knee Lifter Bar	1	104619-0-02		M- 8-9 Knee Lifter Assembly 180814-0-01
M- 8-9-2	Knee Lifter Plate Stopper	1	114967-0-01		
M- 8-9-3	Bolt	1	110087-0-01		
M- 8-9-4	Knee Lifter Bracket	1	143989-0-01		
M- 8-9-5	Bolt	2	100463-0-01		
M- 8-9-6	Knee Lifter Cover	1	140503-0-01		
M- 8-9-7	Knee Lifter Plate	1	114966-0-01		
M- 9	Connecting Bar	1	146593-0-01		
M-10	Stud Screw	1	146594-0-01		
M-11	Screw	4	033452-5-02		

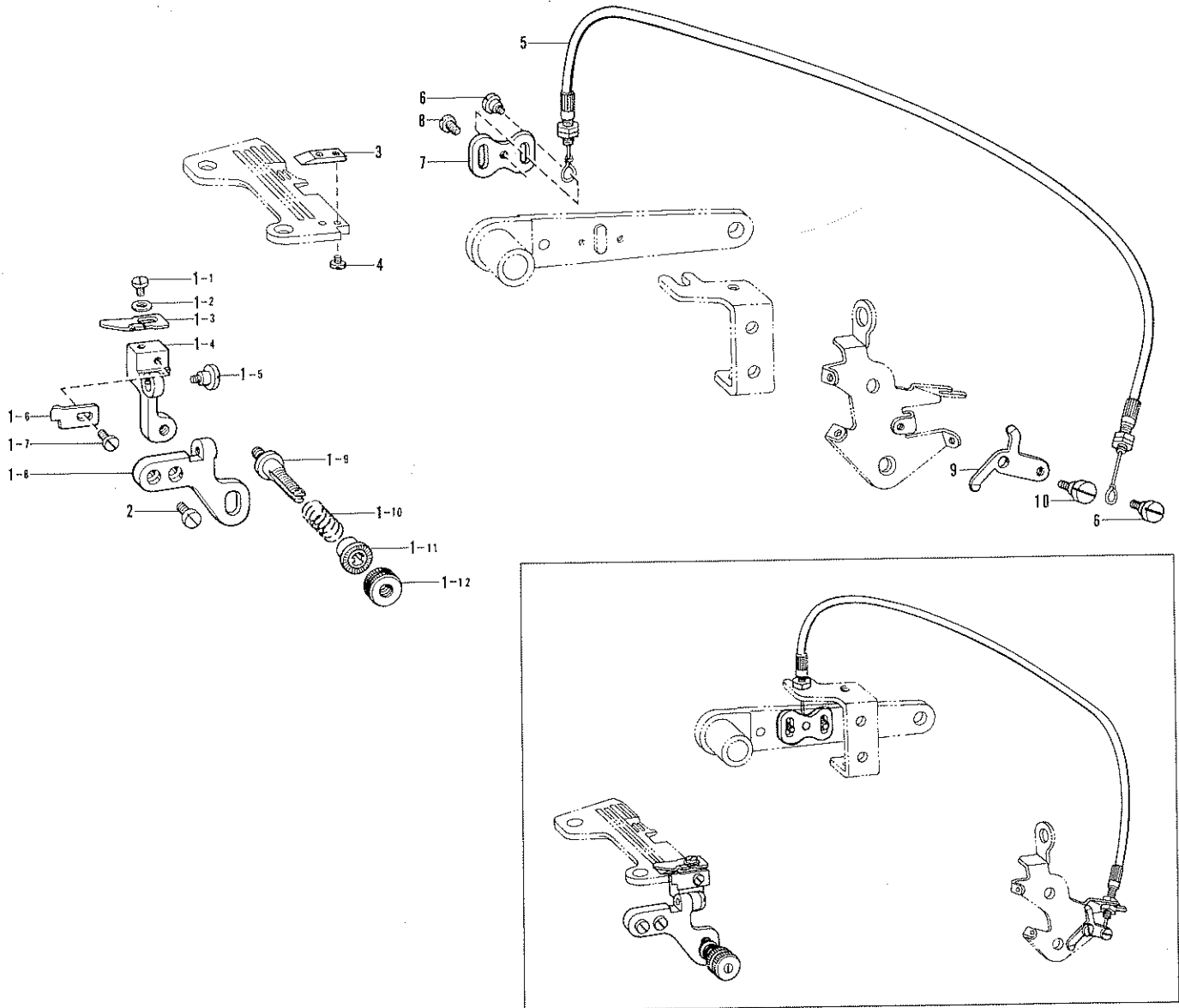
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
N- 1-1	Thread Guide Stud	1		N- 1 Cotton Stand 181031-0-01
N- 1-2	Spool Stud	1	100444-0-02	
N- 1-3	Screw	1	100080-0-02	
N- 1-4	Spool Disc	1		
N- 1-5	Spring Washer	1	028050-2-42	
N- 1-6	Nut	1	110161-0-03	
N- 1-7	Screw	2	100447-0-01	
N- 2-1	Screw	1	143980-0-01	N- 2 Tape Winder Assembly 143767-0-02
N- 2-2	Tape Winder Wheel (L)	1		
N- 2-3	Tape Winder Wheel (R)	1		
N- 2-4	Tape Winder Bracket	1		
N- 2-5	Washer	1	108494-0-01	
N- 2-6	Spring	1	108495-0-01	
N- 2-7	Tension Control Nut	1	100136-0-01	
N- 3	Screw	2	101118-0-01	
N- 4	Wrapper Assembly	1	147440-0-00	
N- 5	Washer	2	110735-0-02	
N- 6	Screw	2	009680-6-12	
N- 7	Wrapper Assembly	1	149197-0-00	
N- 8	Screw	2	009680-6-12	
N- 9	Washer	2	110735-0-02	

# M' Piping Wrapper Base Assembly



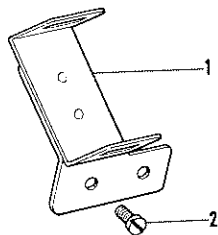
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
M'-12- 1	Ruffling Blade Base Shaft	1	149203-0-01	M'-12 Piping Wrapper Base Assembly 149202-0-01	M'-12-15	Tension Nut	1	144106-0-02	M'-12 Piping Wrapper Base Assembly 149202-0-01
M'-12- 2	Wrapper Base	1	146589-0-01		M'-12-16	Tension Spring Washer	1	144105-0-00	
M'-12- 3	Screw	2	101706-0-01		M'-12-17	Spring	1	144788-0-01	
M'-12- 4	Ruffling Plate Lifter	1	148387-0-01		M'-12-18	Washer	1	025770-2-32	
M'-12- 5	Screw	2	101706-0-01		M'-12-19	Looper Thread Tension Control Stud	1	110820-0-01	
M'-12- 6	Spring	1	144764-0-01		M'-12-20	Spring Base	1	146590-0-01	
M'-12- 7	Screw	1	001670-5-12		M'-12-21	Screw	2	105163-0-01	
M'-12- 8	Spring Plate	1	145811-0-01		M'-12-22	Spring Plate	1	145808-0-01	
M'-12- 9	Screw	2	009680-6-12		M'-12-23	Ruffler Base	1		
M'-12-10	Bracket for Ruffling Blade	1	146588-0-01		M'-12-24	Ruffling Blade Guide	2	145807-0-01	
M'-12-11	Screw	1	147933-0-01		M'-12-25	Screw	2	009680-8-12	
M'-12-12	Handle Fixing Plate	1	145810-0-01		M'-12-26	Screw	1	013679-4-12	
M'-12-13	Screw	1	110230-0-01		M'-12-27	Thread Guide Pipe	1	146592-0-01	
M'-12-14	Nut	1	105234-0-03		M'-12-28	Nut	1	150553-0-02	

## P. Backtacking



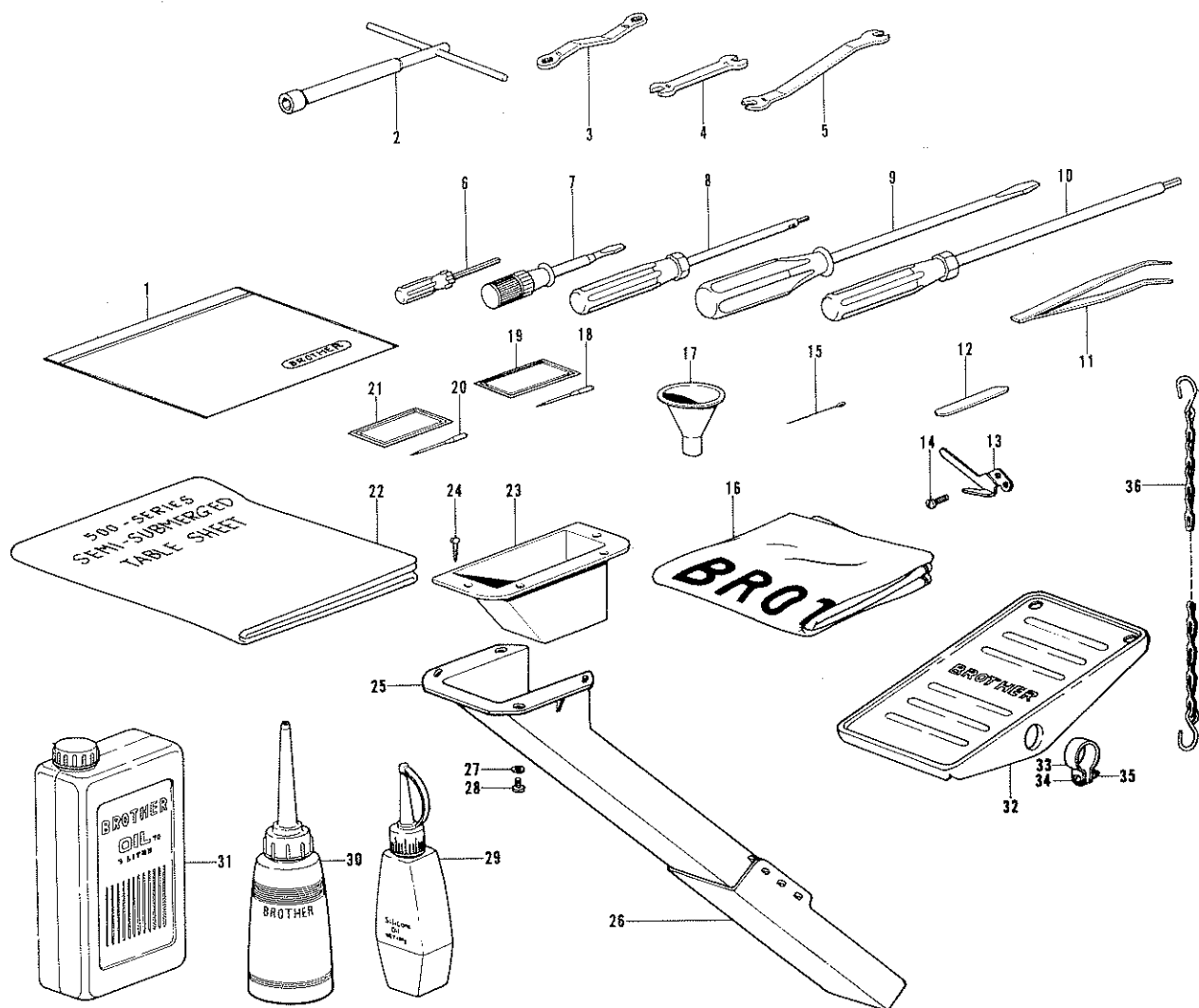
Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
P- 1- 1	Screw	1	009660-4-12	P-1 Back-tack Presser Assembly 147473-0-01	P- 1-12	Upper Thread Tension Adjusting Nut	1	151012-0-01	
P- 1- 2	Washer	1	025030-1-32		P- 2	Screw	2	009670-6-12	
P- 1- 3	Back-tack Blade Presser Plate	1	147477-0-01		P- 3	Back-tack Guide	1	147484-0-01	
P- 1- 4	Back-tack Blade Holder	1			P- 4	Screw	2	141544-0-01	
P- 1- 5	Screw	1	147476-0-01		P- 5	Flexible Wire Assembly	1	147480-0-01	
P- 1- 6	Back-tack Knife	1	147478-0-01		P- 6	Screw	2	141514-0-01	
P- 1- 7	Screw	1	009660-4-12		P- 7	Wire Plate	1	147672-0-01	
P- 1- 8	Back-tack Blade Holder Supporter	1			P- 8	Screw	2	009670-6-12	
P- 1- 9	Thread Tension Control Stud	1	147148-0-01		P- 9	Thread Release Lever	1	148371-0-01	
P- 1-10	Spring	1	147479-0-01		P-10	Screw	1	141514-0-01	
P- 1-11	Tension Spring Washer	1	144105-0-00						

## Q. Taping



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
Q- 1	Tape Guide	1	146883-0-01	
Q- 2	Screw	2	009669-4-12	

## Z. Accessoires (1)



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.
Z- 1	Vinly Bag		122991-0-01		Z-19	Needle Bag			
Z- 2	Wrench		140342-0-01		Z-20	Needle DCx3			
Z- 3	Wrench		105343-0-01		Z-21	Needle Bag			
Z- 4	Spanner 6x7		107779-0-01		Z-22	Table Sheet		147698-0-01	
Z- 5	Spanner 8		143566-0-01		Z-23	Duster Drop		148430-0-01	
Z- 6	Screw Driver		144124-0-01		Z-24	Screw		031311-3-02	
Z- 7	Screw Driver		118837-0-01		Z-25	Duster Shoot L		148431-0-01	
Z- 8	Driver Wrench		146700-0-01		Z-26	Duster Shoot S		148432-0-01	
Z- 9	Screw Driver		101572-1-01		Z-27	Washer		025680-2-32	
Z-10	Screw Driver		149173-0-01		Z-28	Screw		009681-0-12	
Z-11	Tweezers		117466-0-00		Z-29	Silicone Oil		142343-0-01	
Z-12	Lower Knife		112436-0-01		Z-30	Oiler		114483-0-01	
Z-13	Trimming Knife		140888-0-01		Z-31	Oil Tank		145277-1-03	
Z-14	Screw		009669-4-12		Z-32	Treadle Pedal		147893-0-01	
Z-15	Threader		142125-0-00		Z-33	Pedal Stopper		116016-0-01	
Z-16	Head Cover		144225-0-01		Z-34	Screw		001401-4-06	
Z-17	Funnel		140759-0-00		Z-35	Nut		021400-1-06	
Z-18	Needle DCx1				Z-36	Chain Assembly		142262-0-01	

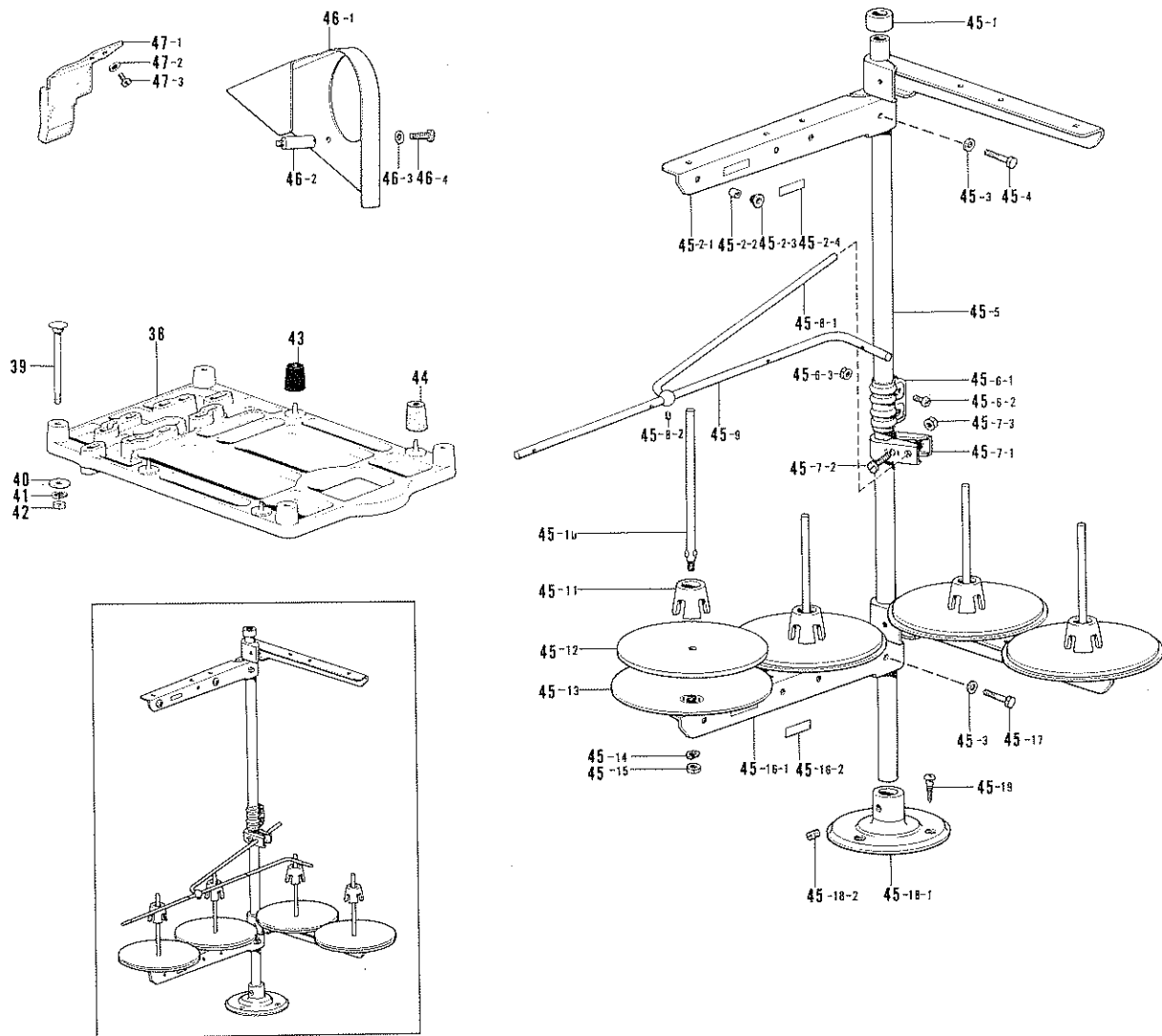
\*The details of included accessories are subject to change.

\*Les détails des accessoires inclus sont sujets à des changements.

\*Änderungen in der Aufstellung der mitgelieferten Zubehöre sind vorbehalten.

\*Los detalles de los accesorios incluidos pueden variar.

## Z. Machine Head Plate and Cotton Stand Assembly (2)



Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	Ref. No.	Name of Parts	Q'ty	Parts No.	Assembly No.	
Z-38	Machine Head Plate		148447-0-00		Z-45- 9	Thread Guide 4		142998-0-01	Z-45 Cotton Stand Assembly 150161-0-01	
Z-39	Bolt		210973-0-01		Z-45-10	Spool Shaft (B)		150179-0-01		
Z-40	Washer		025080-2-36		Z-45-11	Spool Cushion		147060-0-01		
Z-41	Washer		028080-2-42		Z-45-12	Spool Mat		150182-0-00		
Z-42	Nut		021080-1-06		Z-45-13	Spool Stand Base		150180-0-00		
Z-43	Cushion		147919-0-01		Z-45-14	Washer		028050-2-43		
Z-44	Cushion		147919-0-02		Z-45-15	Nut		021500-1-03		
Z-45- 1	Cap		150174-0-00		Z-45-16-1	Spool Holder 2				Z-45-16 Spool Holder Assembly 150177-0-01
Z-45- 2-1	Spool Holder 2			Z-45- 2	Z-45-16-2	Name Plate				
Z-45- 2-2	Thread Bushing			Thread Hanger Assembly 147055-0-01	Z-45-17	Screw		017502-8-03		
Z-45- 2-3	Thread Hanger				Z-45-18-1	Cotton Stand Base		150189-0-01	Z-45-18 Cotton Stand Base Assembly 150139-0-01	
Z-45- 2-4	Name Plate				Z-45-18-2	Screw		150181-0-01		
Z-45- 3	Washer		025050-2-33	Z-45 Cotton Stand Assembly 150161-0-01	Z-45-19	Screw		031452-2-03		
Z-45- 4	Screw		017502-8-03		Z-46- 1	Belt Cover			Z-46 Belt Cover Assembly 148348-0-01	
Z-45- 5	Pipe		150172-0-01		Z-46- 2	Belt Cover Stud		148042-0-01		
Z-45- 6-1	Joint			Z-45- 6 Joint for Cotton Stand 150106-0-01	Z-46- 3	Washer		113431-0-02		
Z-45- 6-2	Screw		150202-0-01		Z-46- 4	Screw		009681-0-12		
Z-45- 6-3	Nut		021500-1-03		Z-47- 1	Eye Guard for Overlock		150550-0-00	Z-47 Eye Guard Assembly 151017-0-01	
Z-45- 7-1	Thread Guide Holder		150185-0-01	Z-45- 7 Thread Guide Holder Assembly 150145-0-01	Z-47- 2	Washer		025030-2-32		
Z-45- 7-2	Screw		007502-8-03		Z-47- 3	Screw		009660-5-12		
Z-45- 7-3	Nut		021500-1-03							
Z-45- 8-1	Thread Guide Stopper Bar		142996-0-01	Z-45- 8 Thread Guide Stopper Bar 142971-0-01						
Z-45- 8-2	Screw		013719-4-12							

\*The details of included accessories are subject to change.

\*Änderungen in der Aufstellung der mitgelieferten Zubehöre sind vorbehalten.





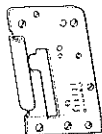
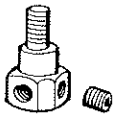
\*The Belt Cover Assembly (Z-46) is special order parts.

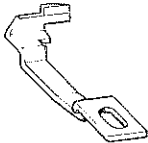

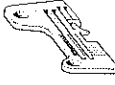

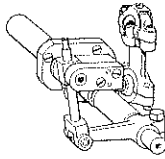
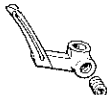
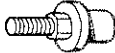
\*Les détails des accessoires inclus sont sujets à des changements.

\*Los detalles de los accesorios incluidos pueden variar.



# DIFFERENT PARTS LIST

Sub Class	Specifications	Cloth Plate		Label		Oil Cap		Front Cover Assembly		Face Plate Assembly		Needle Clamp Assembly	
													
021-4	Thin	A-1	146448-0-01	A-23	146975-0-39	A-24	111865-0-01	A-29	148993-0-01	A-45	146428-0-01	B-10	146771-0-01
022-5 -6	Thin, medium			A-23	146975-0-04 146975-0-05							B-46	146773-0-01
023-5 -6	Thin, medium (Mock safety)			A-23	146975-0-65 146975-0-40							B-47	146775-0-01
024-5	Thin, medium			A-23	146975-0-64							B-10	146771-0-01
025-6	Thin, medium (Mock safety)			A-23	146975-0-10							B-46	146773-0-01
026-4 -5 -6	Bulky Knit			A-23	146974-0-68 146975-0-12 146975-0-13							B-10	146771-0-01
027-5 -6 -7	Bulky Knit			A-23	146975-0-62 146975-0-41 146975-0-15							B-46	146773-0-01
028-5 -6 -7	Bulky Knit (Mock safety)			A-23	146975-0-63 146975-0-69 146975-0-16								
031-7	Denim			A-23	146975-0-17								
032-7	Denim (Mock safety)			A-23	146975-0-18								
033-5	Ruffling			A-23	146975-0-19								
034-5	Ruffling (Mock safety)			A-23	146975-0-20								
037-5	Ruffling (w/piping)			A-23	146995-0-21								
041-5	Taping			A-23	146975-0-23								
045-5 -6 -7	Bulky Knit taping			A-23	146975-0-31 146975-0-32 146975-0-33							A-24	111865-0-01
049-5 -6	Backtacking	A-23	146975-0-66 146975-0-67					A-45	146428-0-01				
050-5	Piping	A-35	146716-0-01	A-23	146975-0-72			A-34	146763-0-01				
051-6 -7	Bulky Knit	A-1	146448-0-01	A-23	146975-0-81 146975-0-82	A-24	111865-0-01	A-29	148993-0-01	A-86	146706-0-01		

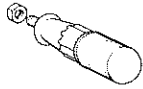



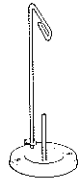

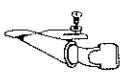
Sub Class	Needle Guide F 	Needle DCx1 Needle DCx3 	Needle Plate 	Crank Shaft 	Over Looper Assembly 	Over Looper 	Main Feed Shaft 			
021-4	B-40 146777-0-01	B-43 147838-0-11	B-44 146779-0-01	C- 5 146724-0-01	D-15 146603-1-01	D-20 147934-0-01	F-16 143564-0-01			
022-5 -6		B-42 112297-0-11	B-49 146781-0-01 146782-0-01					D-23 147936-0-01		
023-5 -6			B-50 148030-0-01						D-20 147934-0-01	
024-5	B-48 146778-0-01	B-42 112297-0-11	B-50 148031-0-01			D-23 147936-0-01				
025-6			B-43 147838-0-11					B-44 146779-0-01 146780-0-01 148832-0-01	D-21 146611-1-01	D-22 147937-0-01
026-4 -5 -6	B-40 146777-0-01	B-42 112297-0-14	B-49 146781-0-01 146782-0-01 146783-0-01			D-23 147936-0-01				
027-5 -6 -7			B-42 112297-0-21					B-52 146785-0-01		
028-5 -6 -7	B-48 146778-0-01	B-42 112297-0-21	B-52 146785-0-01			D-22 147937-0-01		D-23 147936-0-01		
031-7			B-42 112297-0-11						B-51 146786-0-01	D-20 147934-0-01
032-7	B-49 146781-0-01	D-23 147936-0-01								
033-5			B-40 146777-0-01	B-42 112297-0-14	B-49 146781-0-01	D-22 147937-0-01	F-46 144068-0-01			
034-5	B-42 112297-0-11	B-49 146781-0-01 146782-0-01 146783-0-01			D-21 146611-1-01			D-22 147937-0-01		
037-5			B-42 112297-0-11	B-53 148366-0-01 148367-0-01		D-23 147936-0-01				
041-5	B-42 112297-0-11	B-54 149192-0-01			D-20 147934-0-01					
045-5 -6 -7			B-42 112297-0-11	B-55 150867-0-01 150868-0-01		D-20 147934-0-01	F-16 143564-0-01			
049-5 -6	B-42 112297-0-14	B-55 150867-0-01 150868-0-01			D-21 146611-1-01			D-22 147937-0-01	F-46 144068-0-01	
050-5			B-42 112297-0-14	B-55 150867-0-01 150868-0-01		D-15 146603-1-01	D-20 147934-0-01			F-16 143564-0-01
051-6 -7	B-42 112297-0-14	B-55 150867-0-01 150868-0-01			C-24 150866-0-01			D-21 146611-1-01	D-22 147937-0-01	

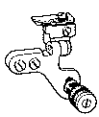

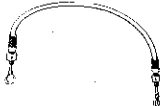


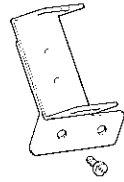

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Sub Class	Differential Stitch Control	Differential Feed Dog	Chain Feed Dog	Main Feed Dog	Main Presser Arm	Presser Foot Lifter Lever	Lever Adjuster Plate
021-4		F-68 146748-0-01					
022-5 -6							
023-5 -6	F-37 146561-0-01	F-82 146749-0-01	F-70 146577-0-01	F-71 146744-0-01			
024-5							
025-6							
026-4 -5 -6		F-96 148402-0-01					
027-5 -6 -7	F-44 146742-0-01		F-83 146578-0-01				
028-5 -6 -7		F-85 146750-0-01					
031-7	F-37 146561-0-01	F-92 146791-0-01	F-70 146577-0-01	F-91 146790-0-01			
032-7							
033-5			F-83 146578-0-01	F-87 146746-0-01			
034-5	F-45 146562-0-01	F-88 146751-0-01					
037-5			F-86 147832-0-01	F-89 147828-0-01			
041-5	F-37 146561-0-01	F-82 146749-0-01	F-70 146577-0-01	F-71 146744-0-01			
045-5 -6 -7	F-44 146742-0-01	F-85 146750-0-01	F-83 146578-0-01	F-84 146745-0-01			
049-5 -6		F-68 146748-0-01	F-70 146577-0-01	F-71 146744-0-01			
050-5	F-37 146561-0-01		F-94 149194-0-01	F-93 149193-0-01	G-39 146526-0-01 G-40 009680-7-12	G-36 148369-1-01	G-37 147454-0-01
051-6 -7	F-44 146742-0-01	F-90 150873-0-01	F-83 146578-0-01	F-84 146745-0-01	G-10 146789-0-01	G-23 143323-1-03	G-25 146522-0-01

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Sub Class	Handle - Nut 	Ruffler Guide 	Knee Lifter Shaft Bracket Assembly 	Connecting Bar Stud Screw 	Cotton Stand 	Tape Winder Assembly 	Wrapper Assembly 
021-4							
022-5 -6							
023-5 -6							
024-5							
025-6							
026-4 -5 -6							
027-5 -6 -7							
028-5 -6 -7							
031-7							
032-7							
033-5							
034-5	M- 4 145809-0-01 M- 5 150556-0-02	M- 6 144793-0-00 M- 7 112751-0-02	M- 8 144822-0-01 M-11 033452-5-02	M- 9 146593-0-01 M-10 146594-0-01			
037-5					N- 1 181031-0-01	N- 2 143767-0-02 N- 3 101118-0-01	N- 4 147440-0-00 N- 5 110735-0-02 N- 6 009680-6-12
041-5							
045-5 -6 -7							
049-5 -6							
050-5	M- 4 145809-0-01 M- 5 150556-0-02						N- 7 149197-0-00 N- 8 009680-6-12 N- 9 110735-0-02
051-6 -7							

Sub Class	Back-tack Presser Assembly		Back-tack Guide		Flexible Wire Assembly		Wire Plate		Thread Release Lever		Tape Guide		Needle DCx1 Needle DCx3	
														
021-4													Z-20	147838-0-11
022-5 -6														
023-5 -6													Z-18	112297-0-11
024-5														
025-6														
026-4 -5 -6													Z-20	147838-0-11
027-5 -6 -7													Z-18	112297-0-14
028-5 -6 -7														
031-7													Z-18	112297-0-21
032-7														
033-5														
034-5													Z-18	112297-0-11
037-5														
041-5														
045-5 -6 -7											Q- 1 146883-0-01 Q- 2 009669-4-12		Z-18	112297-0-14
049-5 -6	P- 1 147473-0-01 P- 2 009670-6-12	P- 3 147484-0-01 P- 4 141544-0-01	P- 5 147480-0-01 P- 6 141514-0-01	P- 7 147672-0-01 P- 8 009670-6-12	P- 9 148371-0-01 P-10 141514-0-01								Z-18	112297-0-11
050-5														
051-6 -7													Z-18	112297-0-14

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# I N D E X

Parts No.	Ref. No.	Remark	Parts No.	Ref. No.	Remark	Parts No.	Ref. No.	Remark	Parts No.	Ref. No.	Remark
001401-4-06	Z - 34		009681-0-12	C - 19		025770-2-32	M' - 12-18		105163-0-01	M' - 12-21	
001660-5-12	G - 32			D - 15- 7		028050-2-42	N - 1- 5		105216-0-01	L - 15	
001670-5-12	A - 4			D - 21- 7		028050-2-43	Z - 45-14		105234-0-03	M - 2-16	
	A - 6			L - 2		028080-2-42	Z - 41			M' - 12 - 14	
	M - 2- 9			Z - 28		031311-3-02	Z - 24		105248-0-03	J - 4	
	M' - 12- 7			Z - 46- 4		031452-2-03	Z - 45-19		105343-0-01	Z - 3	
001680-5-12	B - 28		009681-2-12	A - 20		033452-5-02	M - 11		106568-0-03	F - 81	
	B - 30		009711-2-12	K - 20		047140-8-42	A - 29- 7		107093-0-02	F - 50- 6	
007502-8-03	Z - 45- 7-2		009781-8-12	M - 3			A - 33- 7		107231-0-02	G - 30	
009630-8-12	F - 72		011711-4-12	G - 27			A - 34- 7		107244-0-01	C - 23	
009639-3-12	G - 33- 3		013679-4-12	B - 13		048020-3-42	G - 3		107351-0-01	B - 31	
	G - 34- 3			M - 2-28		048040-3-42	F - 52		107407-0-03	A - 30	
	G - 35- 3			M' - 12-26		048080-3-42	G - 18			F - 75	
	G - 46- 3		013719-4-12	Z - 45- 8-2		048150-1-43	F - 50-12			F - 78	
009660-4-12	D - 3		013760-6-12	A - 69		071023-8-50	D - 10			H - 10	
	E - 3			E - 8- 2		072600-0-00	C - 4			H - 20	
	G - 38- 8		013761-4-10	C - 15		072600-1-00	C - 20		107779-0-01	Z - 4	
	J - 5		014680-4-22	A - 54		100025-0-02	F - 50- 8		108494-0-01	N - 2- 5	
	J - 10			D - 15- 2		100032-0-03	A - 2		108495-0-01	N - 2- 6	
	P - 1- 1			D - 20- 2			B - 43		108960-0-02	A - 43	
	P - 1- 7			D - 21- 2		100080-0-02	N - 1- 3		109203-0-01	A - 57	
009660-5-02	F - 50-19			D - 22- 2		100080-0-04	G - 33- 7			F - 31	
009660-5-12	Z - 47- 3			D - 23- 2			G - 34- 7		110087-0-01	M - 8- 9-3	
009660-7-12	F - 12- 1			E - 13			G - 35- 7		110161-0-03	N - 1- 6	
	M - 2- 3			G - 13			G - 41- 5		110161-0-06	G - 28	
009669-4-12	Q - 2		014770-6-22	C - 12			G - 42- 5		110230-0-01	M - 2-15	
	Z - 14			F - 64			G - 43- 5			M' - 12-13	
009670-4-12	A - 29- 4			J - 20			G - 44- 5		110436-0-01	Z - 1	
	A - 33- 4		017502-8-03	Z - 45- 4			G - 45- 5		110641-0-01	A - 56	
	A - 34- 4			Z - 45-17			G - 46- 7		110668-0-01	C - 10	
009670-6-12	A - 12		017762-2-03	M - 8- 3		100105-0-05	G - 33- 9		110670-0-00	C - 18	
	A - 49		017771-4-12	D - 4			G - 34- 9		110672-0-00	C - 21	
	A - 62			F - 12- 5			G - 35- 9		110673-0-00	C - 22	
	A - 64			F - 15			G - 41- 7		110704-0-01	D - 2	
	A - 85			F - 30- 2			G - 42- 7			E - 2	
	B - 39			F - 41			G - 43- 7		110735-0-02	N - 5-N- 9	
	B - 41			H - 22			G - 44- 7		110793-0-01	G - 21	
	F - 57		017771-6-12	A - 60			G - 46- 9		110813-0-01	J - 27	
	H - 18			B - 1- 2			G - 45- 7		110820-0-01	J - 12	
	J - 2			B - 21		100136-0-01	N - 2- 7			M - 2-21	
	J - 24			F - 4		100251-0-01	F - 51			M' - 12-19	
	J - 33			F - 8		100260-0-01	D - 7		110832-0-01	J - 13	
	J - 37			G - 16			H - 5		111486-0-01	A - 83	
	K - 5			H - 6- 6		100294-0-02	F - 35			B - 27	
	M - 1- 5		018061-6-22	B - 32		100366-0-01	B - 18		111865-0-01	A - 24	
	P - 2		021080-1-06	Z - 42			B - 20- 2		112297-0-11	B - 42	
	P - 8		021400-1-06	Z - 35			H - 6- 5			Z - 18	
009670-8-12	B - 2		021500-1-03	Z - 45- 6-3		100444-0-02	N - 1- 2		112297-0-14	B - 42	
	C - 3			Z - 45- 7-3		100447-0-01	N - 1- 7			Z - 18	
	E - 15			Z - 45-15		100463-0-01	M - 8- 6		112297-0-21	Z - 18-B-42	
	J - 31		021660-1-02	G - 38- 3			M - 8- 9-5		112299-0-01	J - 7	
	K - 19- 1		021670-2-02	B - 34		101118-0-01	N - 3		112300-0-01	J - 6	
009671-0-12	K - 19-11		025030-1-32	G - 33- 6		101572-1-01	Z - 9		112301-0-01	J - 8	
009671-4-12	B - 33			G - 34- 6		101706-0-01	A - 79- 2			M - 1- 7-2	
009680-6-12	M - 2-11			G - 35- 6		101706-0-01	F - 62- 2		112348-0-01	K - 1	
	M' - 12- 9			G - 38- 7			F - 67			K - 8	
	N - 6-N- 8			G - 41- 4			K - 19- 6-2			K - 11	
009680-7-12	A - 10			G - 42- 4			M - 2- 6			K - 13	
	A - 41			G - 43- 4			M - 2- 7-2			K - 17	
	A - 82			G - 44- 4			M' - 12- 3			L - 6	
	B - 6			G - 45- 4			M' - 12- 5			L - 8	
	D - 17			G - 46- 6		102538-0-02	F - 3			L - 12	
	F - 59			P - 1- 2		102627-0-01	H - 21		112359-0-01	K - 18	
	G - 26		025030-2-32	Z - 47- 2		102843-0-04	A - 47			L - 5	
	G - 40		025050-2-33	Z - 45- 3		103978-0-02	G - 38- 2			L - 9	
	H - 26		025080-2-36	Z - 40		104619-0-02	M - 8- 9-1			L - 10	
009680-8-12	M - 1- 8		025350-3-32	K - 19- 2		104890-0-02	M - 8- 2		112354-0-01	K - 2	
	M - 2-27		025680-2-32	Z - 27		105078-0-01	B - 3			K - 7	
	M' - 12-25		025770-2-32	F - 42		105079-0-01	B - 5			K - 10	
009681-0-12	A - 76			M - 2-20		105163-0-01	M - 2-23			K - 14	

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Parts No.	Ref. No.	Remark	Parts No.	Ref. No.	Remark	Parts No.	Ref. No.	Remark	Parts No.	Ref. No.	Remark
112436-0-01	H - 14		140417-0-00	D - 19		144106-0-02	M - 2-17		146441-0-00	A - 33- 8	
	Z - 12		140418-0-00	B - 8			M' - 12-15			A - 34- 8	
112735-0-00	A - 73		140421-0-01	A - 68		144108-0-01	J - 3		146442-0-01	A - 29- 2	
112751-0-02	M - 7		140503-0-01	M - 8- 9-6		144110-0-01	J - 26			A - 33- 2	
113431-0-02	A - 9		140504-0-01	G - 31		144111-0-01	J - 22			A - 34- 2	
	F - 17		140759-0-00	Z - 17		144116-0-00	L - 14- 4		146446-0-01	A - 27	
	F - 74		140778-0-01	K - 12			L - 17- 4		146448-0-01	A - 1	
	F - 77		140779-0-01	K - 9		144117-0-00	H - 8		146449-0-01	A - 3	
	L - 3		140780-0-01	K - 6		144124-0-01	Z - 6		146450-0-01	A - 5	
	Z - 46- 3		140888-0-01	Z - 13		144127-0-01	E - 14		146451-0-01	B - 35	
113589-0-01	A - 19		141183-0-00	A - 78		144225-0-01	Z - 16		146452-0-01	B - 36	
114255-0-02	B - 15		141514-0-01	M - 1- 4		144619-0-00	K - 19- 3		146453-0-01	B - 37	
114294-0-01	C - 7			M - 1- 7-5		144622-0-01	K - 19- 5		146454-0-01	B - 38	
114483-0-01	Z - 30			P - 6		144764-0-01	M - 2- 8		146457-0-01	A - 63	
114966-0-01	M - 8- 9-7			P - 10			M' - 12- 6		146458-0-01	A - 59	
114967-0-01	M - 8- 9-2		141544-0-01	P - 4		144783-0-01	M - 2- 1		146460-0-01	A - 84	
116016-0-01	Z - 33		142125-0-00	Z - 15		144784-0-01	M - 2- 2		146461-0-01	A - 42	
117160-0-01	A - 26		142262-0-01	Z - 36		144788-0-01	M - 2-19		146473-0-01	C - 8	
117466-0-00	Z - 11		142274-0-01	C - 6			M' - 12-17		146476-1-01	B - 20	
117515-0-01	H - 15		142343-0-01	Z - 29		144793-0-00	M - 6		146478-0-01	B - 20- 3	
117516-0-01	F - 69		142669-0-02	J - 34		144803-0-01	M - 8- 1		146479-0-01	B - 22	
	H - 16		142971-0-01	Z - 45- 8		144804-0-01	M - 8- 4		146480-0-01	B - 1	
117517-0-03	F - 50- 2		142996-0-01	Z - 45- 8-1		144805-0-01	M - 8- 7		146482-0-01	B - 1- 3	
118837-0-01	Z - 7		142998-0-01	Z - 45- 9		144806-0-01	M - 8- 8		146483-0-01	B - 9	
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140077-0-01	A - 65		143374-0-01	A - 77		145446-0-01	J - 14		146511-0-00	L - 1	
140084-0-00	C - 13		143564-0-01	F - 16		145663-0-01	F - 50-13		146512-0-00	L - 7	
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140088-0-01	B - 20- 1		143566-0-01	Z - 5		145774-0-01	G - 41- 6		146516-0-00	L - 13	
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140093-0-00	B - 16		143980-0-01	N - 2- 1			G - 46- 8		146522-0-01	G - 25	
140096-0-01	B - 1- 4		143989-0-01	M - 8- 5			G - 45- 6		146523-0-01	G - 20	
140165-0-01	F - 50-14		143989-0-01	M - 8- 9-4		145803-0-01	M - 2- 4		146524-0-01	G - 17	
140176-0-01	F - 50- 1		143992-0-01	A - 44		145807-0-01	M - 2-26		146525-0-01	G - 12	
140180-0-01	C - 16		144025-0-01	D - 1		145807-0-01	M' - 12-24		146526-0-01	G - 39	
140187-0-00	F - 2		144026-0-00	D - 1- 1		145808-0-01	M - 2-24		146527-0-01	G - 11	
140188-0-04	F - 1		144027-0-01	D - 1- 3			M' - 12-22		146528-0-01	F - 50	
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140208-0-01	F - 21		144036-0-01	D - 15-13			M' - 12-12		146531-0-01	F - 50- 4	
	F - 26			D - 21-13		145811-0-01	M - 2-10		146532-0-01	F - 11	
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140217-0-01	F - 27		144053-0-01	F - 50- 9		146401-0-01	F - 50-15		146535-0-01	F - 53	
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140233-0-01	H - 6- 1		144068-0-01	F - 46		146403-0-01	F - 50-18		146537-0-00	F - 56	
140235-0-00	H - 3		144073-0-01	H - 9		146404-0-01	F - 50-17		146538-0-01	F - 4	
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140262-0-00	G - 19		144079-0-01	G - 7		146421-0-00	A - 18		146541-0-01	F - 60	
140263-0-00	G - 14		144081-0-01	G - 9		146422-0-01	A - 40		146542-0-01	F - 60- 2	
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	H - 7		144084-0-01	G - 2		146426-0-00	A - 14		146544-0-00	F - 60- 3	
140320-0-00	B - 19		144085-0-01	G - 5		146427-0-01	A - 15		146547-0-00	F - 61	
140325-0-01	K - 4		144086-0-01	G - 6			B - 10- 2		146548-0-01	F - 63	
140326-0-01	B - 7		144088-0-01	G - 29			B - 46- 2		146549-0-01	F - 58	
	D - 18		144091-0-01	G - 43- 3			B - 47- 2		146550-0-01	F - 12	
	F - 9			G - 44- 3		146428-0-01	A - 45		146554-0-01	F - 24	
140327-0-01	B - 24		144100-0-01	G - 43- 6		146430-0-01	A - 87		146555-0-01	F - 25	
	D - 9			G - 44- 6		146432-0-01	A - 48		146556-0-01	F - 28	
	E - 7		144103-0-02	J - 15		146433-0-01	A - 46		146558-0-01	F - 32	
	F - 5		144104-0-01	J - 16		146436-0-01	A - 61		146559-0-01	F - 34	
140342-0-01	Z - 2		144105-0-00	J - 17		146440-0-01	A - 29- 6		146560-0-01	F - 36	
140415-0-00	B - 4			M - 2-18			A - 33- 6		146561-0-01	F - 37	
140416-0-00	D - 15-10			M' - 12-16			A - 34- 6		146562-0-01	F - 45	
	D - 21-10			P - 1-11		146441-0-00	A - 29- 8		146563-0-01	F - 43	

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146564-0-01	F - 39		146779-0-01	B - 44		146975-0-68	A - 23		148120-0-00	B - 23	
146565-0-01	F - 40		146780-0-01	B - 44		146975-0-69	A - 23		148174-0-00	F - 73	
146566-0-01	F - 38		146781-0-01	B - 49		146975-0-72	A - 23		148281-0-01	H - 2	
146577-0-01	F - 70		146782-0-01	B - 49		146975-0-81	A - 23		148294-0-01	D - 12	
146578-0-01	F - 83		146783-0-01	B - 49		146975-0-82	A - 23			D - 15-11	
146580-0-01	H - 1		146784-0-01	B - 49		146993-0-00	L - 1- 2			D - 21-11	
146581-0-01	D - 6		146785-0-01	B - 52		147049-0-01	J - 21- 2		148348-0-01	Z - 46	
	H - 4		146786-0-01	B - 51		147049-0-02	J - 25- 2		148366-0-01	B - 53	
146582-0-01	H - 19		146787-0-01	L - 16		147049-0-03	J - 18- 2		148367-0-01	B - 53	
146584-0-01	H - 23		146788-0-01	L - 18		147049-0-04	J - 28- 2		148369-1-01	G - 36	
146585-0-01	H - 17		146789-0-01	G - 10		147055-0-01	Z - 45- 2			M - 1- 2	
146586-0-01	H - 24		146790-0-01	F - 91		147060-0-01	Z - 45-11		148370-0-01	J - 39	
146587-0-01	M - 2		146791-0-01	F - 92		147148-0-01	P - 1- 9		148371-0-01	P - 9	
146588-0-01	M - 2-12		146793-0-01	J - 9		147211-0-01	K - 16		148372-0-01	G - 22	
	M' - 12-10		146883-0-01	Q - 1		147217-0-01	A - 72		148378-0-01	D - 15- 8	
146589-0-01	M - 2- 5		146887-0-01	G - 33- 5		147318-0-00	F - 10		148379-0-01	D - 15-12	
	M' - 12- 2			G - 34- 5			K - 15			D - 21-21	
146590-0-01	M - 2-22			G - 35- 5		147344-0-01	J - 1		148381-0-01	D - 21- 8	
	M' - 12-20			G - 41- 3		147361-0-00	A - 67		148387-0-01	M - 1- 9	
146592-0-01	M - 2-29			G - 42- 3		147362-0-00	F - 65			M' - 12- 4	
	M' - 12-27			G - 45- 3		147363-0-00	F - 13		148388-0-01	M - 1- 7-4	
146593-0-01	M - 9			G - 46- 5		147415-0-01	C - 17		148389-0-01	M - 1- 7-1	
146594-0-01	M - 10		146888-0-01	G - 33- 2		147439-0-01	G - 44		148390-0-01	M - 1- 7-3	
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146617-0-01	E - 12		146903-0-01	G - 34- 4		147478-0-01	P - 1- 6		148425-0-01	B - 20- 5	
146636-0-01	K - 3		146904-0-01	G - 42		147479-0-01	P - 1-10			D - 1- 2	
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146654-0-01	J - 36		146924-0-00	A - 25- 2		147528-0-00	K - 19- 9		148431-0-01	Z - 25	
146700-0-01	Z - 8		146926-0-02	J - 23		147529-0-01	K - 19-10		148432-0-01	Z - 26	
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146705-0-00	A - 75		146963-0-01	G - 33			P - 7		148782-0-01	E - 11	
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146709-0-00	A - 81		146966-0-01	G - 35- 4		147738-0-00	L - 14- 3		148851-0-01	J - 38	
146712-0-01	A - 11		146975-0-04	A - 23			L - 17- 3		148984-0-01	A - 29- 5	
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146742-0-01	F - 44		146975-0-21	A - 23		147919-0-02	Z - 44		149193-0-01	F - 93	
146744-0-01	F - 71		146975-0-22	A - 23		147933-0-01	M - 2-13		149194-0-01	F - 94	
146745-0-01	F - 84		146975-0-23	A - 23			M', 12-11		149195-1-01	G - 38	
146746-0-01	F - 87		146975-0-27	A - 23		147934-0-01	D - 20		149197-0-00	N - 7	
146748-0-01	F - 68		146975-0-31	A - 23		147936-0-01	D - 23		149202-0-01	M' - 12	
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146763-0-01	A - 34		146975-0-41	A - 23		148009-0-00	L - 14- 1			J - 28- 1	
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146778-0-01	B - 48		146975-0-67	A - 23		148084-0-01	A - 53		149887-0-01	F - 80	

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