

**PARTS LIST & INSTRUCTION**

***NR*SERIES**

**Industrial Sewing Machines**

*PARTS LIST 3<sup>rd</sup> edition June 2016*  
*INSTRUCTION 3<sup>rd</sup> edition June 2016*

No. 160066

**KANSAI**  
SPECIAL®

■このパーツブックは、2016年6月製造中のNRシリーズのデータに基づいて作成されたものです。

■This parts book is based on data current June 2016.

■各機構別に収録され、左側のページに分解イラスト図、右側のページに部品番号、名称、及び数量が記載されています。

■Each mechanism is arranged on facing pages. You will find listed for parts number, names, and quantities.

■この本の最後に部品番号インデックスを記載しています。部品番号からの図解、名称の検索に御利用下さい。

■A parts number index is attached to the back of this book for convenience.

■部品は、予告なく変更される場合がありますので、あらかじめ御了承下さい。

■Parts are subject to change without notice.

NRシリーズ 表示方法

NR SERIES INFORMATION

■NR9803Gは上飾り付です。

NR9803G is with top cover thread.

NR9701Gは上飾り無しです。

NR9701G is without top cover thread.

■針幅です。(インチ)

Needle width. (inch)



■3は3本針です。

3 is 3 Needle machine.

■UTAはエア一式糸切装置付ミシンです。(PNEUMATIC TYPE)

UTA is with thread trimmer unit.

UTEは電気式糸切装置付ミシンです。(ELECTRIC TYPE)

UTE is with thread trimmer unit.

UTABはUTAのエアブロー式糸切装置付ミシンです。

UTAB is UTA with air wiper

without top cover thread trimmer.

■CCは地縫い、裾引き、潰しカバーリング、片倒しカバーリング用です。

CC for plain seaming, heming, covering, fold-down covering operation.

Pは後ギアプラー装置付です。 P is with rear gear puller.

PEは後スムースプラー装置付です。 PE is with rear smooth puller.

ALKは左メス装置付裾引用です。 ALK for hemming with fabric trimmer.

PLKは左メス装置、ギアプラー付ゴム入れ用です。

PLK for hemming in inserting elastic tape with fabric trimmer and gear puller.

PEHKは右メス装置、スムースプラー付丸ゴム付用です。

PEHK for attaching flat elastic with fabric trimmer and smooth puller.

PGHKは右メス装置、ギアプラー付丸ゴム付用です。

PGHK for attaching flat elastic with fabric trimmer and gear puller.

Dは地縫用です。 D for plain seaming operation.

Jはジーンズ裾三巻用です。

J for hemming trouser bottoms and sleeves on jeans wear.

PMDは前プラー装置付です。 PMD is with front puller.

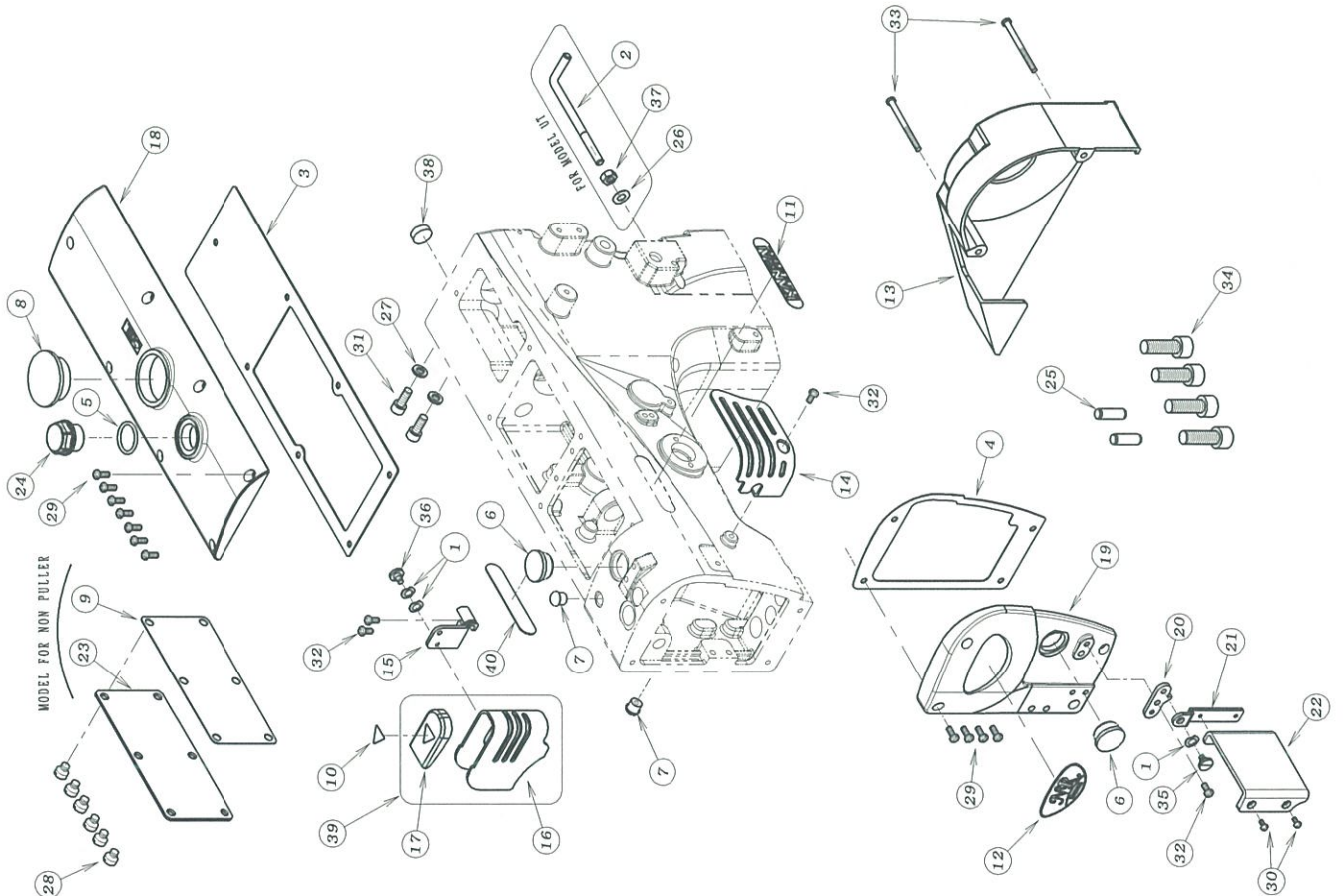
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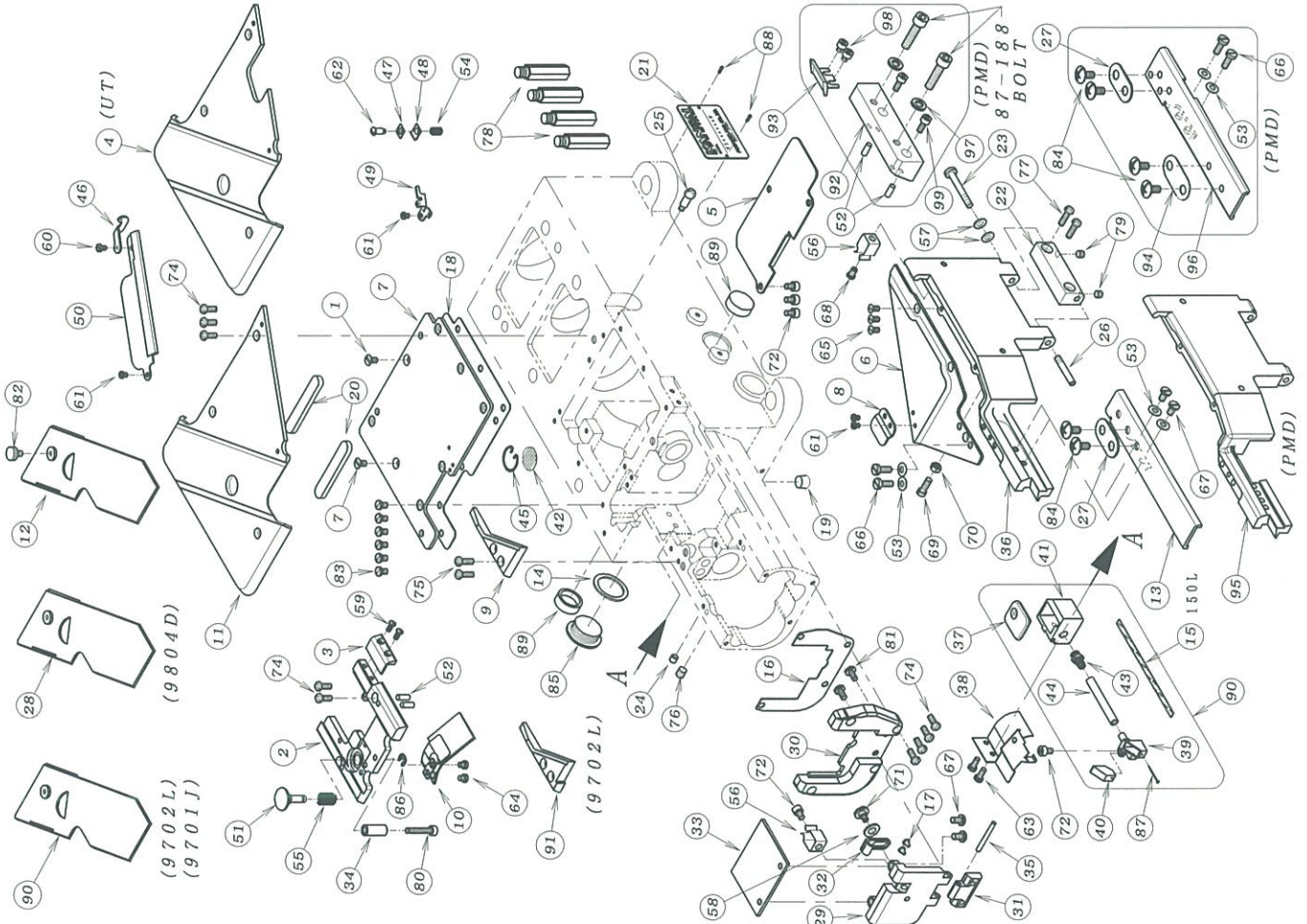
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# I. フレーム関係 (I) FRAME ASSEMBLY (I)

REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
01-0102-119	鍍金	WASHER		3
01-0205-292	ホシ'ジョナーハ'ー	BAR		1
01-0323-041	トップカバー'ハ'ッキン	GASKET		1
01-0423-045	面板'ハ'ッキン	GASKET		1
01-0523-287	O-リング	O RING		1
01-0623-427	コ'ム栓	PLUG		2
01-0723-501	コ'ム栓	PLUG		2
01-0823-504	コ'ム栓	PLUG		1
01-0923-538	ハ'ッキン	GASKET		1
01-1024-060	針棒カバー'シール	SEAL		1
01-1124-069	銘版	BRAND NAME PLATE		1
01-1224-062	機構プレート	MODEL PLATE		1
01-1327-136	プーリーカバー	PULLEY COVER		1
01-1427-231	天枠カバー'ー	COVER		1
01-1527-233	針棒カバー'ーフ'ラケット	BRACKET		1
01-1627-234	針棒カバー'ー	NEEDLE BAR COVER		1
01-1727-235	針棒カバー'ー'コ'ム	RUBBER		1
01-1827-237W	トップカバー'ー	TOP COVER		1
01-1927-238W	面版	HEAD COVER		1
01-2027-239	アイカ'ート'ヒンジ' (1)	HINGE		1
01-2127-240	アイカ'ート'ヒンジ' (2)	HINGE		1
01-2227-241	アイカ'ート'	EYE GUARD		1
01-2327-323W	後カバー'ー	REAR COVER		1
01-2439-235	オイルポット	OIL POT		1
01-2571-580	ノックピ'ン	PIN		2
01-2675-452	ワッシャ	WASHER		1
01-2775-552	ワッシャ	WASHER		2
01-2887-053	スリリ付小ネジM6x6L	SCREW M6x6L		6
01-2987-483	プライマイナベ'小ねじ	SCREW		11
01-3087-477	プライマイナベ'小ねじ	SCREW		2
01-3187-171	六角穴付きボルト	BOLT		2
01-3287-482	プライマイナベ'小ねじ	SCREW		4
01-3387-489	プライマイナベ'小ねじ	SCREW		2
01-3487-228	六角穴付きボルト	BOLT		4
01-3587-264	段ネジ'	SCREW		1
01-3687-437	段ネジ	SCREW		1
01-3788-166	ナット	NUT		1
01-3894-504	シールキャップ'	PLUG		1
01-3920-0008	針棒カバー'セット	NEEDLE BAR COVER ASS'Y		1
01-4024-052	銘版	BRAND NAME PLATE		1

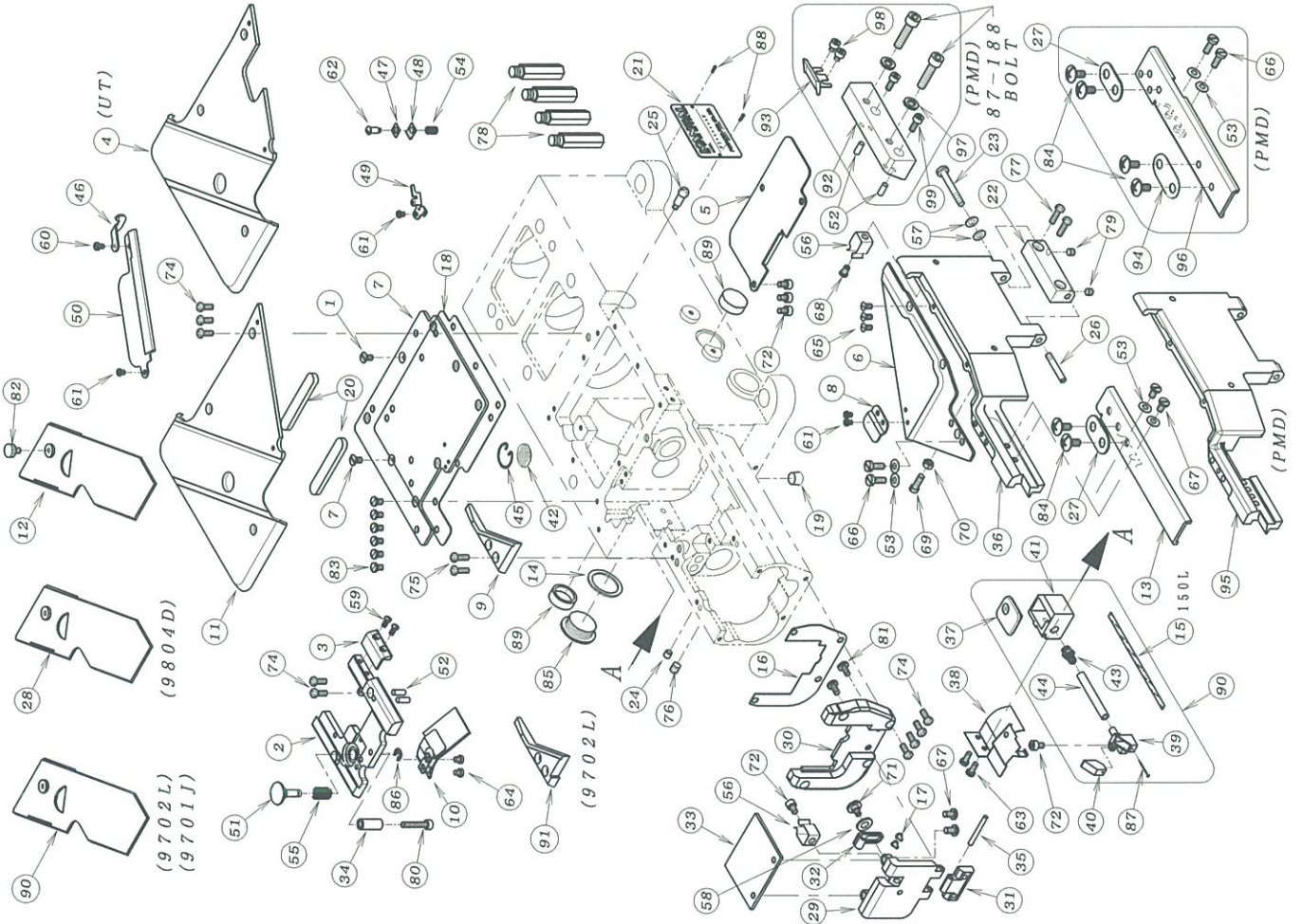


## 2. フレーム関係 (2-1) FRAME ASSEMBLY (2-1)



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
02-01	05-061	ネジ	SCREW	2
02-02	14-167	針板土台	NEEDLE PLATE SUPPORT BRACKET	1
02-03	14-168	針板補助プレート	BRACKET	1
02-04	21-610W	上ベースカバー	UPPER COVER	1
02-05	21-640	防塵プレート	PLATE	1
02-06	21-642W	定規板	FRONT COVER	1
02-07	21-643	上油カバー	CRANK CHAMBER COVER	1
02-08	21-644	調子皿保護カバー	COVER	1
02-09	21-646W	差板補助カバー	COVER	1
02-10	21-670	オイルカバー	OIL DIPENDER	1
02-11	21-678W	上ベースカバー	UPPER COVER	1
02-12	21-679	差板	SLIDE COVER	1
02-13	21-874	補助カバー	COVER	1
02-14	23-298	フタネジ用シール	SEAL	1
02-15	23-341	フェルト	FELT	1
02-16	23-510	パッキン	GASKET	1
02-17	23-512	クッションゴム	CUSHION RUBBER	2
02-18	23-513	パッキン	GASKET	1
02-19	23-528	プラグ	PLUG	1
02-20	23-570	防振マット	CUSHION	2
02-21	24-053	モテ、ルスタック	TYPE PLATE	1
02-22	25-516W	定規台ヒンジ	HINGE	1
02-23	25-517	ヒンジネジ	SCREW	1
02-24	25-521	プラグ	PLUG	1
02-25	25-522	カバー、ストッパ、ネジ	SCREW	1
02-26	25-527	カバー、ヒンジ、ネジ	SCREW	1
02-27	26-822	フック、取付金具	PLATE	2
02-28	27-114	差板	SLIDE COVER	1
02-29	27-212W	横カバー	SIDE COVER	1
02-30	27-213W	横カバーヒンジ土台	HINGE	1
02-31	27-214W	横カバーヒンジ	HINGE	1
02-32	27-215	レバー	LEVER	1
02-33	27-216	横カバー、プレート	SIDE COVER PLATE	1
02-34	27-217	カバー、ストッパ、カラー	COLLAR	1
02-35	27-218	ヒンジ、ヒン	PIN	1
02-36	27-223W	定規台	FRONT COVER	1
02-37	27-279	ニードルカバー、蓋	NEEDLE COOLER COVER	1
02-38	27-303	オイルメンテナンス (下輪)	OIL DIPENDER	1
02-39	27-522	ニードルカバー	NEEDLE COOLER	1
02-40	27-523	フェルト	FELT	1
02-41	27-524	ニードルカバー、タンク	NEEDLE COOLER TUNK	1
02-42	31-503	濾過網	OIL FILTER SCREEN	1
02-43	31-505	継手	JOINT	1
02-44	35-522	ヒ、ニールチューブ	TUBE	1
02-45	39-503	減速機押え	CLAMP	1
02-46	43-515	ルーバー、糸道	THREAD EYELET	1
02-47	43-516	調子皿 (上)	TENSION DISK	1
02-48	43-517	調子皿 (下)	TENSION DISK	1
02-49	43-527	調子皿カバー	TENSION DISK GUIDE	1
02-50	43-528	ルーバー、糸案内	LOOPER THREAD GUIDE	1
02-51	69-517	フック、ボルト	PUSH BUTTON	1
02-52	71-253	フック、ヒン	PIN	4
02-53	75-455	ワッシャー	WASHER	6
02-54	79-524	調子皿、ネ	TENSION SPRING	1
02-55	79-528	カバー、ネ	SPRING	1
02-56	79-912	カバー、ネ	SPRING	2

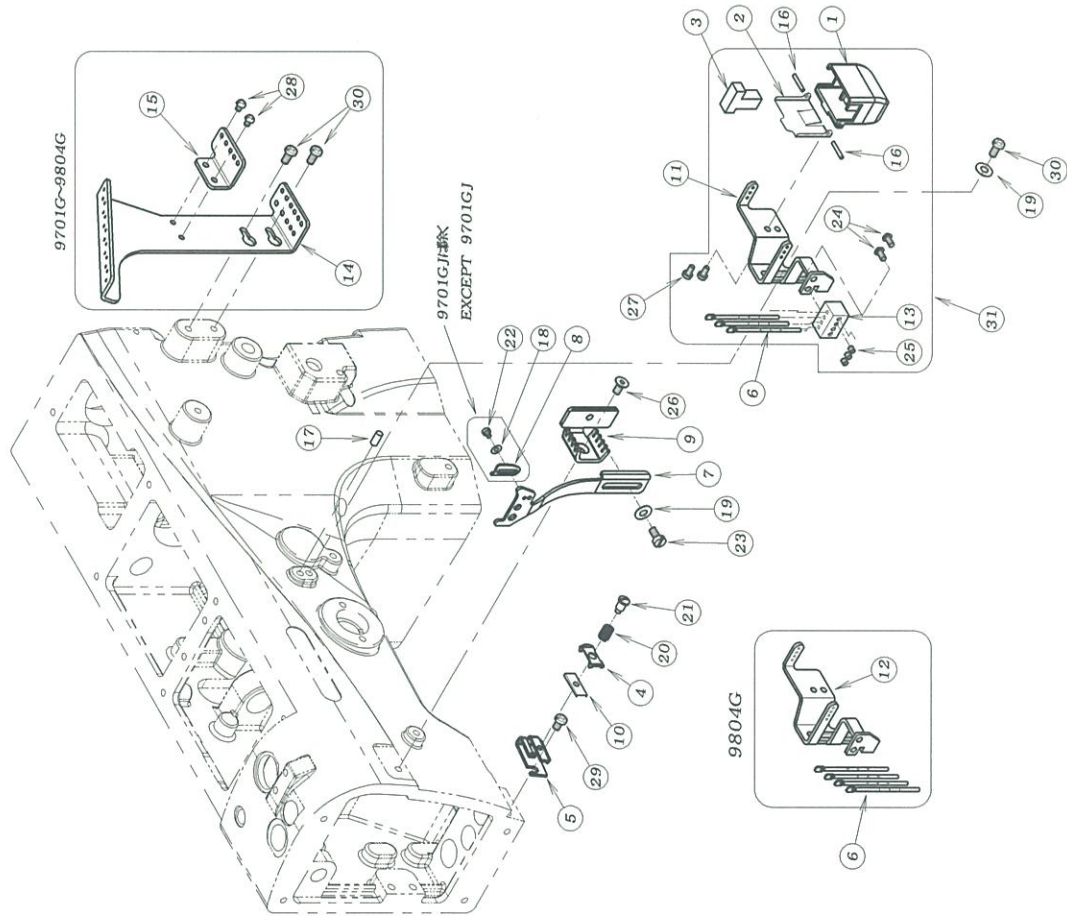
## 2. フレーム関係 (2-2) FRAME ASSEMBLY (2-2)



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
02-57	79-922	■ばね	SPRING	2
02-58	79-927	■ばね 6	SPRING	1
02-59	84-154	ネジ	SCREW	2
02-60	84-161	ネジ	SCREW	1
02-61	84-167	ネジ	SCREW	4
02-62	84-175	脂ネジ	SCREW	1
02-63	84-360	ネジ	SCREW	2
02-64	84-364	ネジ	SCREW	2
02-65	84-464	ネジ	SCREW	3
02-66	84-566	ネジ	SCREW	4
02-67	84-574	ネジ	SCREW	4
02-68	84-575	ネジ	SCREW	1
02-69	84-635	ネジ	SCREW	1
02-70	86-311	ナット	NUT	1
02-71	87-066	段ネジ	SCREW	1
02-72	87-092	六角穴付きボルト	BOLT	5
02-73	20-0003	ニードルカーゴセット	NEEDLE COOLER ASS'Y	1
02-74	87-483	プライマイナベ小ねじ	SCREW	9
02-75	87-484	プライマイナベ小ねじ	SCREW	2
02-76	87-172	ネジ	SCREW	1
02-77	87-485	プライマイナベ小ねじ	SCREW	2
02-78	87-258	スタント・ピン	PIN	4
02-79	87-274	ネジ	SCREW	2
02-80	87-283	六角穴付きボルト	BOLT	1
02-81	87-288	ネジ	SCREW	2
02-82	87-409	ネジ	SCREW	1
02-83	87-415	ネジ	SCREW	6
02-84	87-436	ネジ	SCREW	6
02-85	87-812	ネジ	SCREW	1
02-86	93-205	Eリング	E-RING	1
02-87	93-624	フェルトビーン	PIN	1
02-88	93-701	ビーン	PIN	2
02-89	94-506	オイルシール	OIL SEAL	2
02-90	21-798	差板	SLIDE COVER	1
02-91	21-799W	差板補助カバー	COVER	1
02-92	01-156	前ブレード取付台	BRACKET	1
02-93	01-157	油受け	PLATE	1
02-94	26-712	取付金具	WASHER	1
02-95	27-226	定規台 (PMD)	FRONT COVER	1
02-96	27-227	補助カバー	COVER	1
02-97	75-552	ワッシャー	WASHER	2
02-98	87-067	六角穴付きボルト	BOLT	2
02-99	87-113	ネジ	SCREW	2

### 3. 糸調子機構

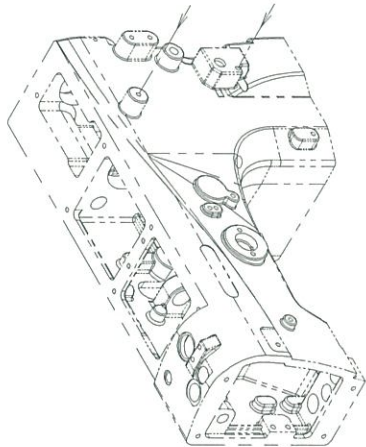
#### THREAD TENSION MECHANISM



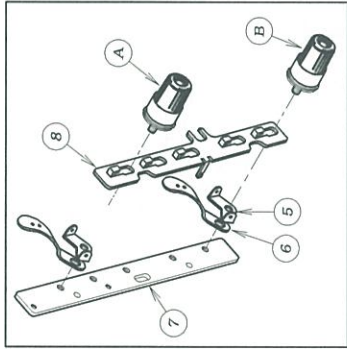
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
03-01	27-039	シリコタンク	SILICONE OIL RESERVOIR	1
03-02	27-533	シリコタンクフタ	COVER	1
03-03	27-534	フェルト	FELT	1
03-04	41-021	カム糸道	THREAD NIPPER	1
03-05	41-022	小調子台	THREAD GUIDE BRACKET	1
03-06	45-031	糸道	THREAD EYELET	7
03-07	45-033	上糸調子	THREAD GUIDE	1
03-08	45-034	補助上糸調子	THREAD GUIDE	1
03-09	45-038	上糸カイト	GUIDE	1
03-10	45-508	針挟小調子板	PLATE	1
03-11	45-541	シリコタンク糸道	THREAD EYELET	1
03-12	45-551	シリコタンク糸道	THREAD EYELET	1
03-13	45-553	ホルダ -	HOLDER	1
03-14	45-567	糸ガイド	THREAD GUIDE	1
03-15	45-568	糸ガイド糸道	THREAD EYELET	1
03-16	71-202	シリコタンク用ピン	SILICONE PIN	2
03-17	71-209	平行ピン	PIN	1
03-18	75-441	ワッシャー	WASHER	1
03-19	75-455	ワッシャー	WASHER	2
03-20	79-025	カム糸道ハネ	SPRING	1
03-21	84-021	ハネカイトネジ	SCREW	1
03-22	87-093	ネジ	SCREW	1
03-23	87-096	ネジ	SCREW	1
03-24	87-099	ネジ	SCREW	2
03-25	87-104	ネジ	SCREW	3
03-26	87-269	ネジ	SCREW	1
03-27	87-372	タッピングネジ	SCREW	2
03-28	87-476	ブラマイナベ小ねじ	SCREW	2
03-29	87-481	ブラマイナベ小ねじ	SCREW	2
03-30	87-482	ブラマイナベ小ねじ	SCREW	1
03-31	40-523W-3	シリコタンク糸道セット	THREAD EYELET ASS'Y	3
				1

# 4. 糸調子機構 (UT 除外)

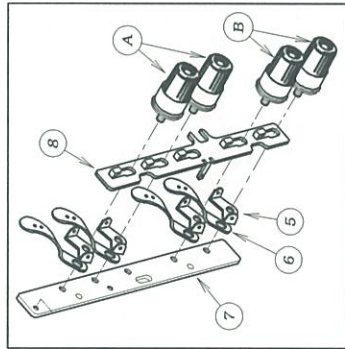
## THREAD TENSION MECHANISM (WITHOUT UT)



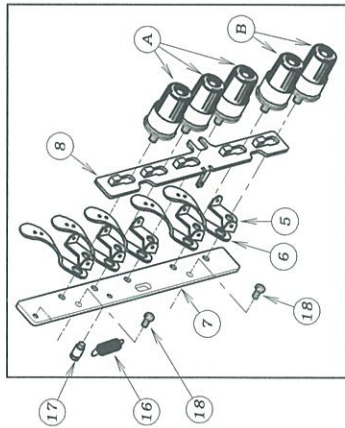
9701



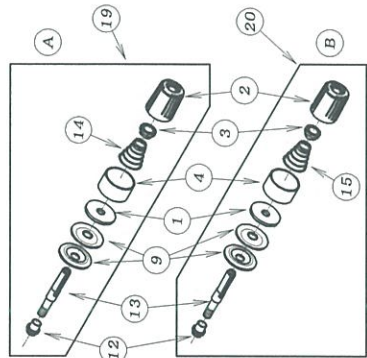
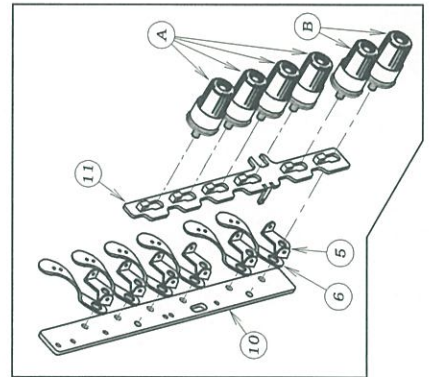
9702



9803



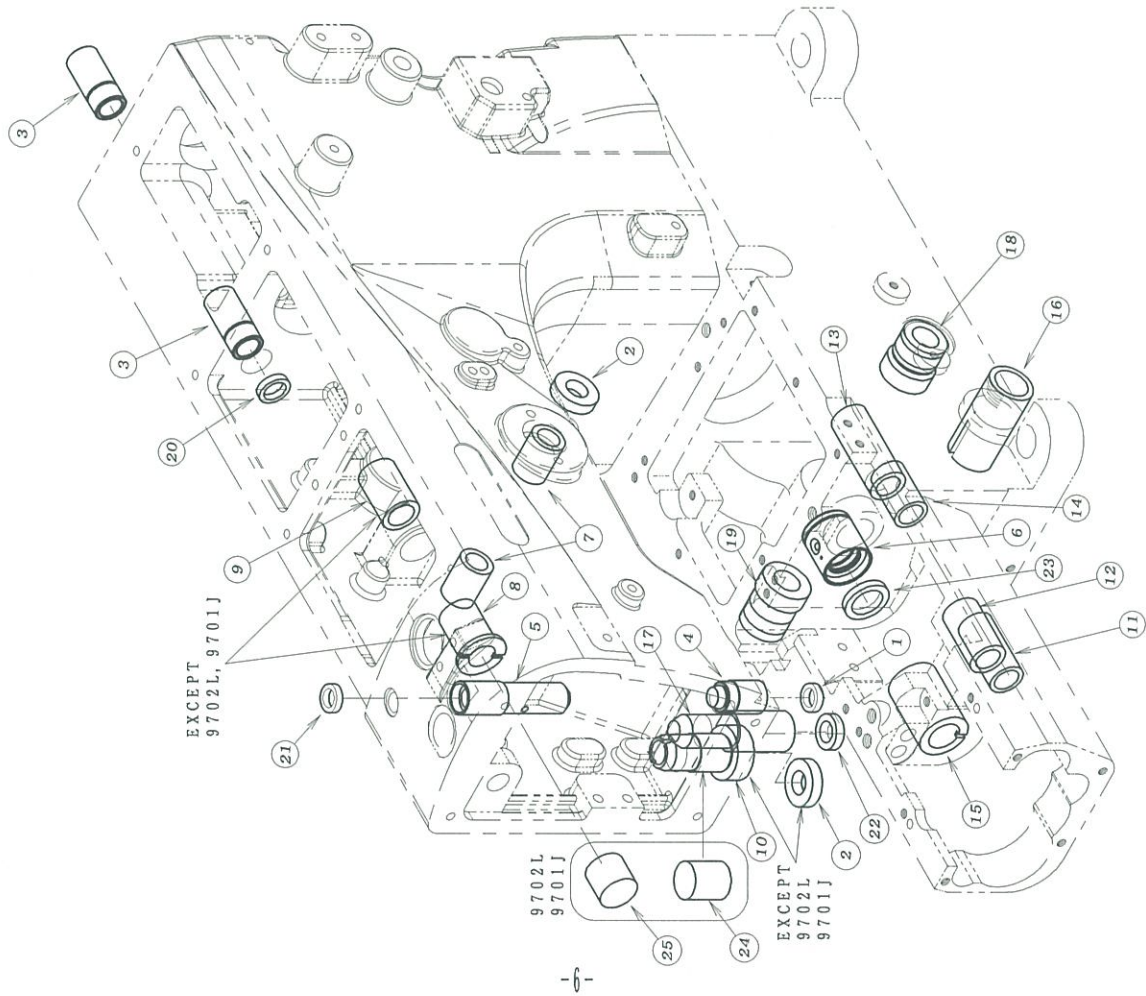
9804



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
04-0123-324	フェルト	FELT		*
04-0241-104	チャンボ°ン皿小ケース	THREAD TENSION NUT		*
04-0341-105	チャンボ°ン皿ラチェット	SPRING POST		*
04-0441-106	チャンボ°ン大ケース	SPRING CUP		*
04-0541-115	糸道 (上)	THREAD GUIDE		*
04-0641-117	糸道 (下)	THREAD GUIDE		*
04-0741-501	ブラケット	BRACKET		1
04-0841-502	糸繰めプレート	THREAD RELEASER		1
04-0941-509	チャンボ°ン皿	TENSION DISC		*
04-1041-518	フ°ラケット	BRACKET		1
04-1141-519	糸繰めフ°レート	THREAD RELEASER		1
04-1241-526	調子棒カチ	COLLAR		*
04-1341-527	調子棒	SCREW STUD		*
04-1441-701	チャンボ°ン調子ハネ (強)	SPRING (HEAVY)		*
04-1541-702	チャンボ°ン調子ハネ (弱)	SPRING (LIGHT)		*
04-1679-514	引張りハネ	SPRING		1
04-1784-501	ネジ	SCREW		1
04-1887-482	プ°ラマイナ°ベ小ねじ	SCREW		2
04-1940-7510	チャンボ°ンセット (強)	THREAD TENSION SET (HEAVE)		*
04-2040-7520	チャンボ°ンセット (弱)	THREAD TENSION SET (LIGHT)		*

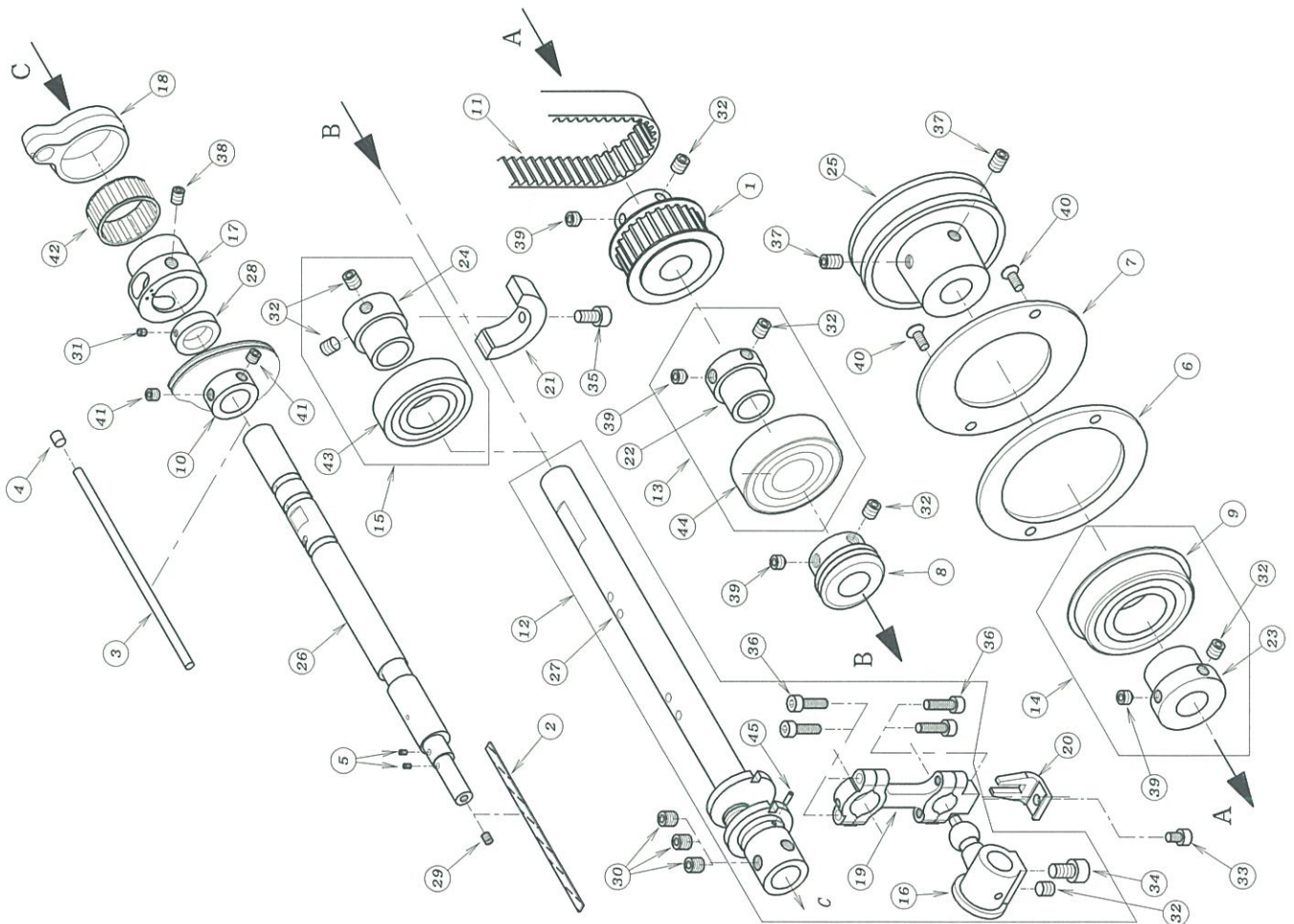


# 5. ブッシュ機構 BUSHING



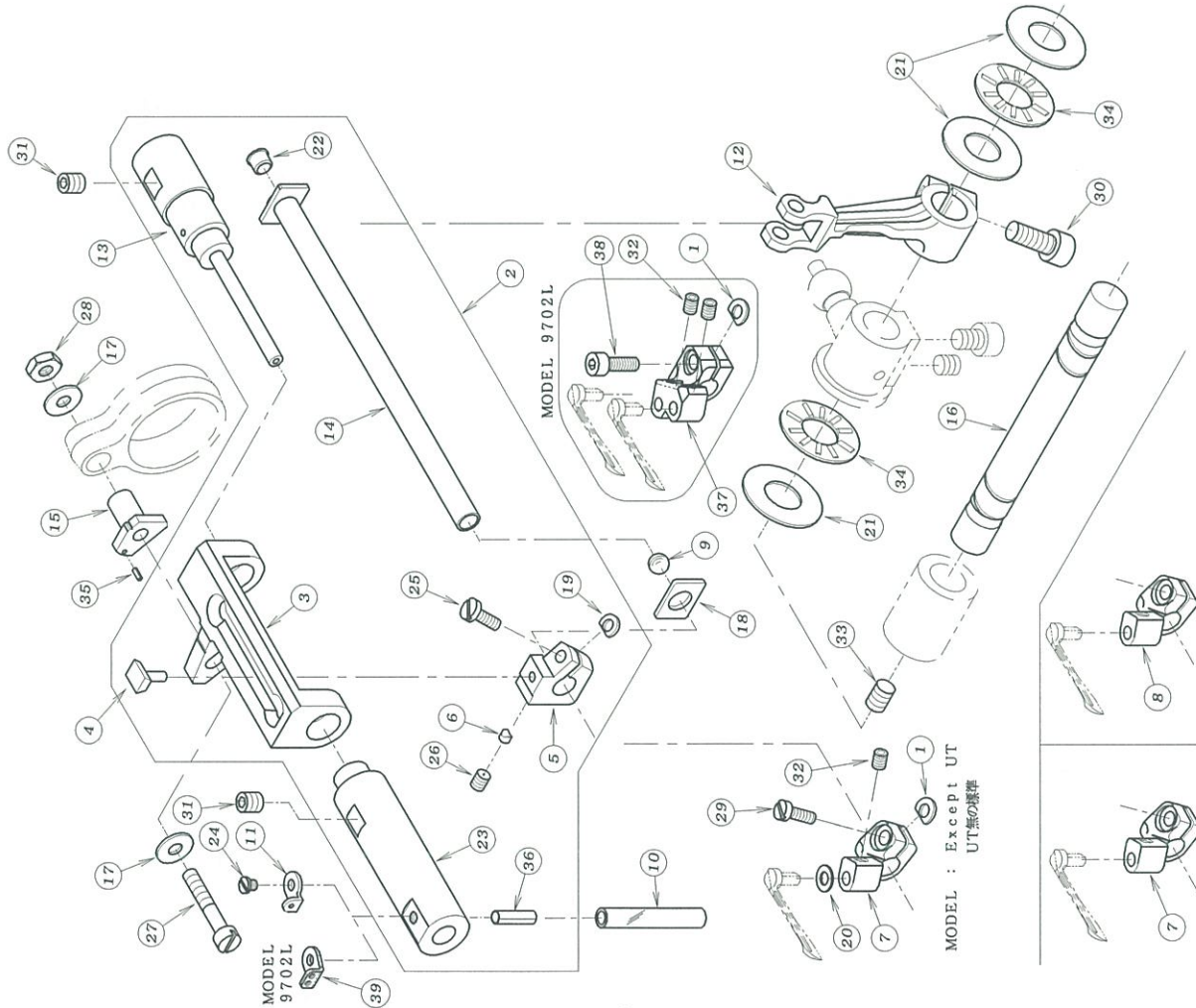
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
05-0194-511	05-0194-511	オイルシール	OIL SEAL	1
05-0294-804	05-0294-804	オイルシール	OIL SEAL	2
05-0381-023	05-0381-023	針工器付 運動シャフトブッシュ	BUSHING	2
05-0481-047	05-0481-047	針工器付 針工器付ブッシュ (下)	BUSHING	1
05-0581-048	05-0581-048	針工器付 針工器付ブッシュ (上)	BUSHING	1
05-0681-049	05-0681-049	針工器付 針工器付ブッシュ (後)	BUSHING (REAR)	1
05-0781-506	05-0781-506	ブッシュ	BUSHING	2
05-0881-507	05-0881-507	ブッシュ	BUSHING	1
05-0981-508	05-0981-508	ブッシュ	BUSHING	1
05-1081-587	05-1081-587	針工器付 針工器付ブッシュ	BUSHING	1
05-1181-511	05-1181-511	ブッシュ	BUSHING	1
05-1281-512	05-1281-512	ブッシュ	BUSHING	1
05-1381-513	05-1381-513	ブッシュ	BUSHING	1
05-1481-514	05-1481-514	ブッシュ	BUSHING	1
05-1581-515	05-1581-515	ブッシュ	BUSHING	1
05-1681-518	05-1681-518	ブッシュ	BUSHING	1
05-1781-546	05-1781-546	ブッシュ	BUSHING	1
05-1881-580	05-1881-580	ルーバ-振り元輪ブッシュ	BUSHING	1
05-1981-581	05-1981-581	ルーバ-振り元輪ブッシュ	BUSHING	1
05-2094-102	05-2094-102	オイルシール	OIL SEAL	1
05-2194-231	05-2194-231	オイルシール	OIL SEAL	1
05-2294-503	05-2294-503	オイルシール	OIL SEAL	1
05-2394-510	05-2394-510	オイルシール	OIL SEAL	1
05-2425-506	05-2425-506	詰栓	SEAL PLUG	1
05-2525-507	05-2525-507	詰栓	SEAL PLUG	1

6. 下軸機構 CRANKSHAFT MECHANISM



REF. NO.	PART NO.	品名	DESCRIPTION	QTY
06-01	06-239	タイミングロー(下)	TIMING PULLEY	1
06-02	23-341	フェルト	FELT	1
06-03	23-547	フェルト	FELT	1
06-04	23-548	フェルト	FELT	1
06-05	23-554	フェルト	FELT	2
06-06	25-519	ベアリング止め板 (A)	SET PLATE (A)	1
06-07	25-520	ベアリング止め板 (B)	SET PLATE (B)	1
06-08	31-540	ポンプ駆動ギア	PUMP DRIVING WARM	1
06-09	34-826	ホムルベアリング	BEARING	1
06-10	49-501	ハマグリ	LOOPER THREAD TAKE-UP	1
06-11	58-007	タイミングベルト	TIMING BELT	1
06-12	60-5020	ループクランクロッド*セット	LOOPER CRANK ROD ASS'Y	1
06-13	60-8510	ベアリングセット	BEARING ASS'Y	1
06-14	60-8540	ベアリングセット	BEARING ASS'Y	1
06-15	60-8550	ベアリングセット	BEARING ASS'Y	1
06-16	61-507	ループ*振玉	DRIVE BALL	1
06-17	61-522	針返エキセン	ECCENTRIC	1
06-18	63-504	針返連結ロッド	CONNECTING ROD	1
06-19	63-505	ループ*振りロッド	CONNECTING ROD	1
06-20	69-513	振れ止め	GUIDE	1
06-21	69-536	バランス	BALANCER	1
06-22	69-544	ベアリングスリーブ	BEARING SLEEVE	1
06-23	69-549	スリーブ	SLEEVE	1
06-24	69-550	スリーブ	SLEEVE	1
06-25	69-552	V-プーリー	V-PULLEY	1
06-26	71-540	下軸	LOWER SHAFT	1
06-27	71-587	下軸クランク	CRANK SHAFT	1
06-28	75-511	カラー	COLLAR	1
06-29	84-314	ネジ	SCREW	1
06-30	85-113	ネジ	SCREW	3
06-31	87-104	ネジ	SCREW	1
06-32	87-172	ネジ	SCREW	7
06-33	87-092	六角穴付きボルト	BOLT	1
06-34	87-203	六角穴付きボルト	BOLT	1
06-35	87-213	六角穴付きボルト	BOLT	1
06-36	87-214	六角穴付きボルト	BOLT	4
06-37	87-242	ネジ	SCREW	2
06-38	87-254	ネジ	SCREW	1
06-39	87-259	ネジ	SCREW	4
06-40	87-270	ネジ	SCREW	2
06-41	87-274	ネジ	SCREW	2
06-42	91-413	ニードルベアリング	NEEDLE BEARING	1
06-43	91-890	ベアリング	BEARING	1
06-44	91-994	ベアリング	BEARING	1
06-45	93-718	スプリングピン	SPRING PIN	1

# 7. ルーパ-機構 LOOPER MECHANISM



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
07-01	06-375	スベ-サー	WASHER	2
07-02	10-5010	ルーパ-駆動元台セット	LOOPER GUIDE ASS'Y	1
07-03	19-506	ルーパ-駆動元台	LOOPER SHAFT GUIDE	1
07-04	19-507	カムフロア	SLIDER	1
07-05	19-508	カムフロア-取付台	SLIDER HOLDER	1
07-06	19-509	カムフロア-押しピン	PIN	1
07-07	19-533	ルーパ-台	LOOPER HOLDER	2
07-08	*19-558	ルーパ-台	LOOPER HOLDER	1
07-09	23-515	プラグ	PLUG	1
07-10	35-526	ヒ-ニルチューブ	TUBE	1
07-11	47-801	ルーパ-案内糸道	THREAD EYELET	1
07-12	67-505	ルーパ-案内棒	LEVER	1
07-13	71-532	ルーパ-案内棒	LOOPER SHAFT GUIDE BAR	1
07-14	71-535	ルーパ-シャフト	LOOPER SHAFT	1
07-15	71-538	針送駆動ピン	PIN	1
07-16	71-539	駆動シャフト	SHAFT	1
07-17	75-467	ワッシャ	WASHER	2
07-18	75-513	スタッドワッシャ	WASHER	1
07-19	75-514	スベ-サー	WASHER	1
07-20	75-532	スベ-サー	SPACER	1
07-21	75-901	ワッシャ	WASHER	3
07-22	81-520	ワッシャ	BUSHING	1
07-23	81-573	ルーパ-案内ワッシャ	BUSHING	1
07-24	84-163	ネジ	SCREW	1
07-25	84-363	ネジ	SCREW	1
07-26	84-521	ネジ	SCREW	1
07-27	84-589	ネジ	SCREW	1
07-28	86-312	ナット	NUT	1
07-29	87-011	ネジ	SCREW	1
07-30	87-171	六角穴付きボルト	BOLT	1
07-31	87-172	ネジ	SCREW	2
07-32	87-181	ネジ	SCREW	3
07-33	87-242	ネジ	SCREW	1
07-34	92-233	スラストベ-アリンク	BEARING	2
07-35	93-717	スプリングピン	SPRING PIN	1
07-36	93-719	スプリングピン	SPRING PIN	1
07-37	19-769	ルーパ-台	LOOPER HOLDER	1
07-38	87-129	六角穴付きボルト	BOLT	1
07-39	43-571	ルーパ-案内糸道	THREAD EYELET	1

\* かまぼこ防止用針板の品番は、49ページのゲージパーツ表を参照して下さい。  
 \* Please refer to Page 49 GAUGE PARTS LIST for soft switch

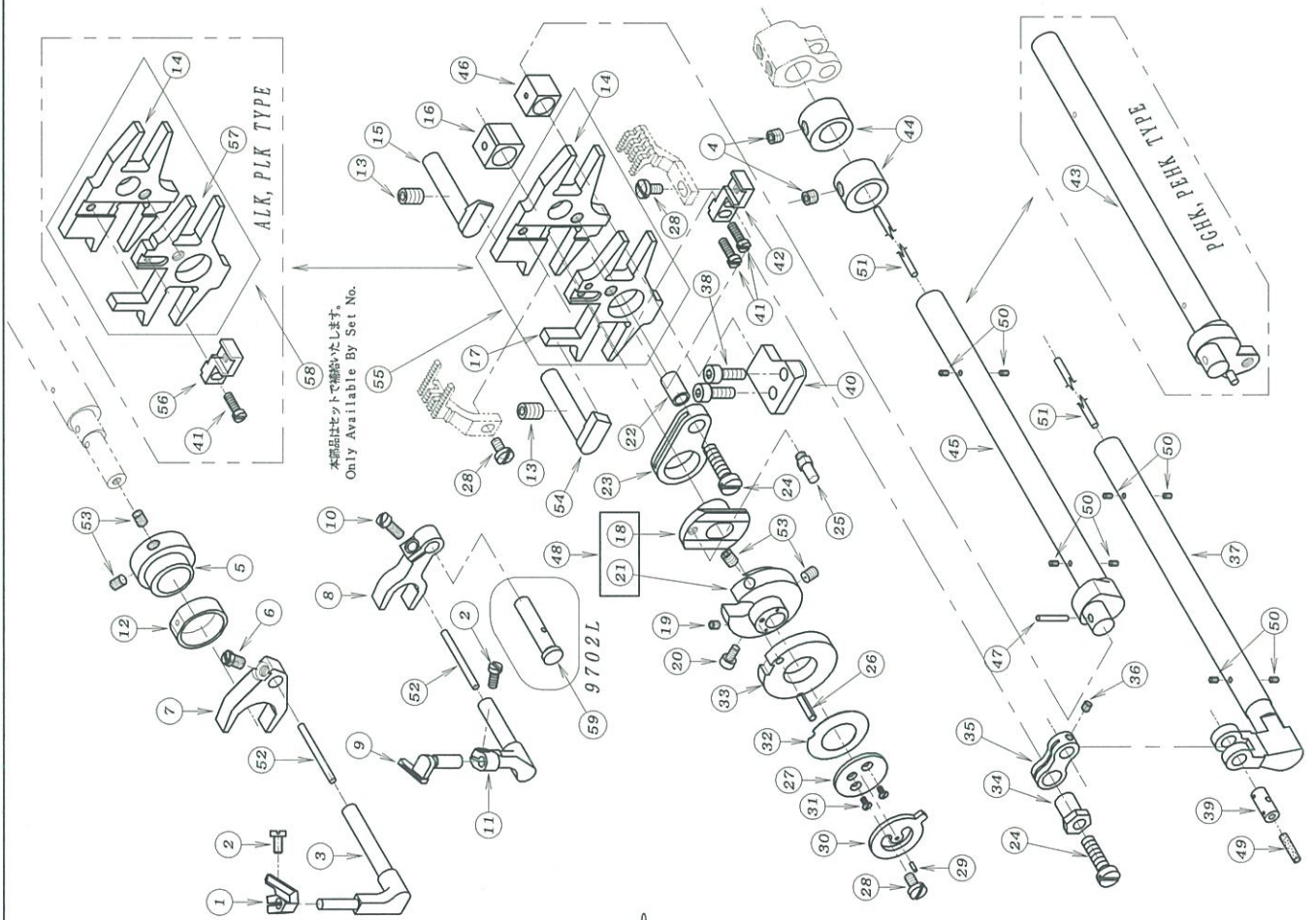
MODEL : With UT  
 UT付

MODEL : Except UT  
 UT無の標準

\* Model : With UT Use for needle plate of soft switch (K-TYPE)  
 かまぼこ防止用針板用でUT付 (Kタイプ)

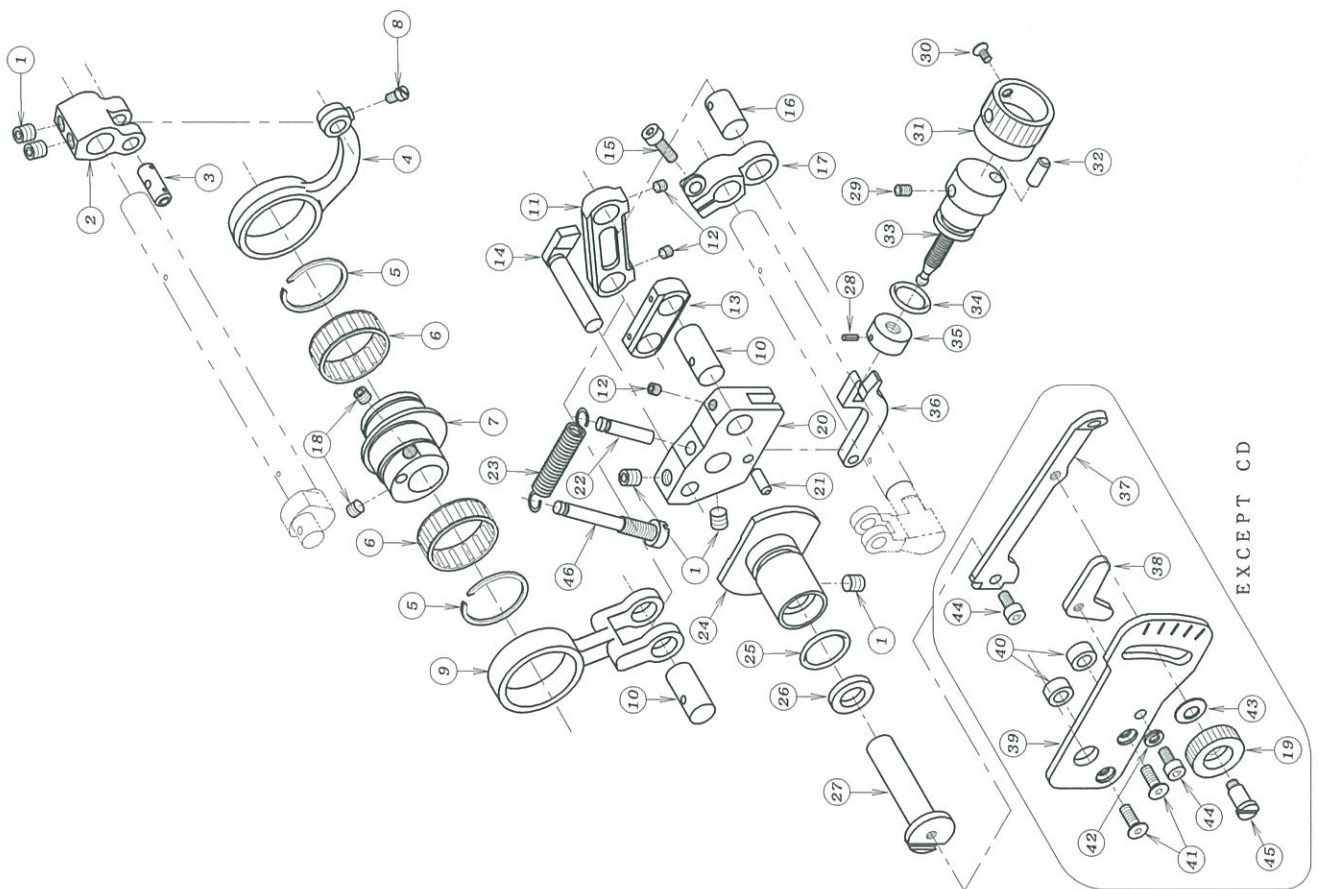
\* Except UT & Use for needle plate of soft switch  
 \* UT無でかまぼこ防止用針板使用

# 8. 送り機構 (1) FEED MECHANISM (1)



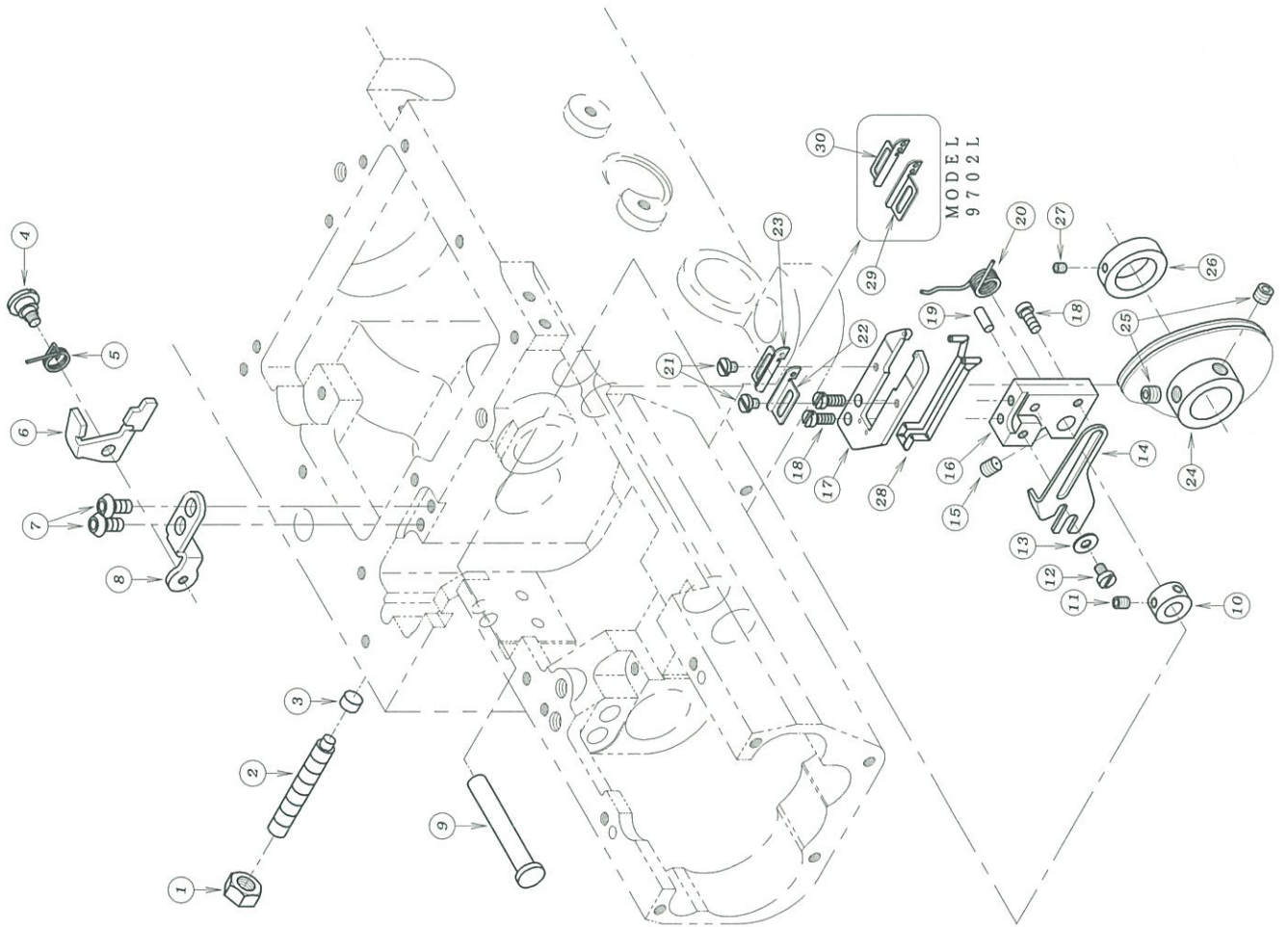
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
08-01	18-805	針受	NEEDLE GUARD	1
08-02	84-155	ネジ	SCREW	2
08-03	18-804	針受ブラケット	BRACKET	1
08-04	87-274	ネジ	SCREW	2
08-05	61-530	針受エキセン	ECCENTRIC	1
08-06	84-616	ネジ	SCREW	1
08-07	18-800	針受レバ	NEEDLE GUARD LEVER	1
08-08	18-801	針ガイトレバ	NEEDLE GUARD LEVER	1
08-09	18-806	針ガイト	NEEDLE GUARD	1
08-10	84-376	ネジ	SCREW	1
08-11	18-803	針ガイトブラケット	BRACKET	1
08-12	18-799	針受エキセン角ゴマ	BLOCK	1
08-13	87-242	ネジ	SCREW	2
08-14	51-827	主送り台	MAIN FEED BAR	1
08-15	69-514	送り台ガイト	FEED ROCKER GUIDE	1
08-16	51-822	角ゴマ(後)	FEED LIFT BLOCK (REAR)	1
08-17	51-826	差動送り台	DIFFERENTIAL FEED BAR	1
08-18	61-504	スライドエキセン	ECCENTRIC	1
08-19	87-104	ネジ	SCREW	1
08-20	87-123	ネジ	SCREW	1
08-21	61-503	送りエキセン	FEED ECCENTRIC	1
08-22	71-530	主送り連結リンクピン	PIN	1
08-23	51-823	主送り連結リンク	CONNECTING LINK	1
08-24	87-235	ネジ	SCREW	2
08-25	69-511	エキセンカム案内ピン	PIN	1
08-26	52-308	スプリングピン	SPRING PIN	1
08-27	69-509	押板	PLATE	1
08-28	84-374	ネジ	SCREW	3
08-29	93-716	スプリングピン	SPRING PIN	1
08-30	69-510	送り調節ストップ	FEED REGULATING STOP	1
08-31	87-107	ネジ	SCREW	2
08-32	79-525	皿バネ	SPRING	1
08-33	69-512	送りエキセンカム	CAM	1
08-34	51-819	案内エキセン	ECCENTRIC	1
08-35	51-820	連結リンク	CONNECTING LINK	1
08-36	87-234	ネジ	SCREW	1
08-37	71-558	差動送り軸	FEED SHAFT	1
08-38	87-129	ネジ	SCREW	2
08-39	71-528	リンクピン	PIN	1
08-40	51-824	送り台ガイトプレート	FEED BAR GUIDE PLATE	1
08-41	84-158	ネジ	SCREW	3
08-42	51-825	差動送り歯付台	DIFFERENTIAL FEED DOG BASE	1
08-43	71-634	送り上下軸	FEED LIFT SHAFT	1
08-44	75-512	カバー	COLLER	2
08-45	71-566	送り上下軸	FEED LIFT SHAFT	1
08-46	51-821	角ゴマ(前)	FEED LIFT BROCK (FRONT)	1
08-47	23-531	フェルト	FELT	1
08-48	60-5070	送りエキセンセット	FEED ECCENTRIC ASS'Y	1
08-49	23-341	フェルト	FELT	1
08-50	23-554	フェルト	FELT	8
08-51	23-535	フェルト	FELT	2
08-52	23-552	フェルト	FELT	2
08-53	87-181	ネジ	SCREW	4
08-54	69-531	送り台ガイト	FEED ROCKER GUIDE	1
08-55	50-8260	送り台セット	FEED BRACKET SET	1
08-56	51-849	取付付ブラケット	BRACKET	1
08-57	51-850	差動送り台	DIFFERENTIAL FEED BAR	1
08-58	50-8270	送り台セット	FEED BRACKET SET	1
08-59	71-766	ピン	PIN	1

9. 送り機構 (2) FEED MECHANISM (2)



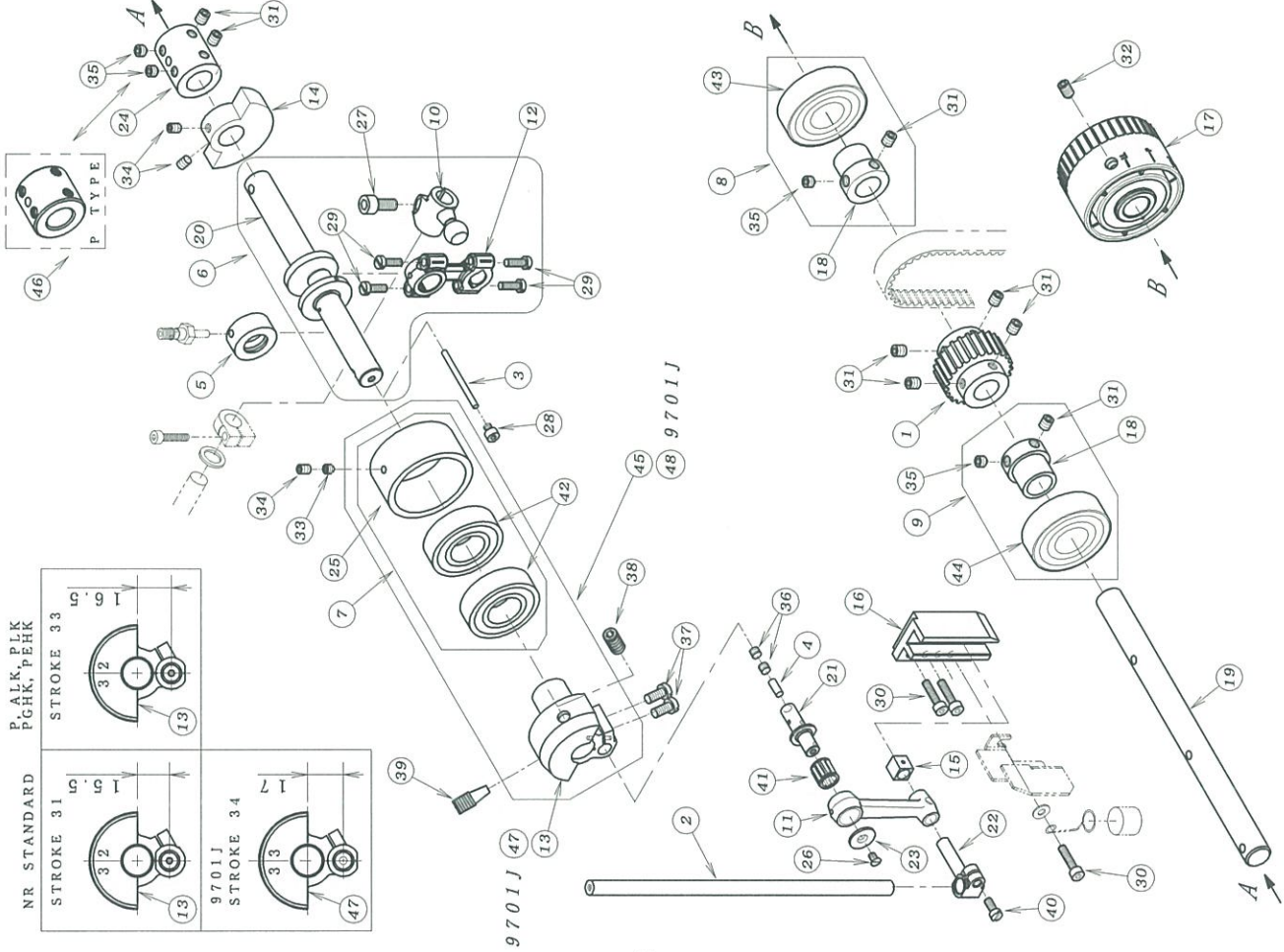
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
09-01	87-172	ネジ	SCREW	5
09-02	67-504	送り上下レバ -	FEED LEVER	1
09-03	71-431	ダ ルマピン	PIN	1
09-04	63-502	送り上下連結ロッド*	CONNECTING ROD	1
09-05	93-402	サークリップ	SNAP RING	2
09-06	91-412	ニードル	NEEDLE BEARING	2
09-07	61-505	送りダ ルマエキセン	FEED ECCENTRIC	1
09-08	84-366	ネジ	SCREW	1
09-09	63-503	連結ロッド*	CONNECTING ROD	1
09-10	71-518	リンクピン	PIN	2
09-11	51-817	リンク	LINK	1
09-12	87-233	ネジ	SCREW	3
09-13	51-816	リンク	LINK	1
09-14	69-515	ロッド ガイド	CONNECTING ROD GUIDE	1
09-15	87-129	ネジ	SCREW	1
09-16	71-525	リンクピン	PIN	1
09-17	67-509	送りレバ -	FEED LEVER	1
09-18	87-274	ネジ	SCREW	2
09-19	51-808	ナット	NUT	1
09-20	51-811	調整台	BRACKET	1
09-21	71-520	ピン	PIN	1
09-22	51-812	引張りバ ネ取付ピン	PIN	1
09-23	79-527	引張りバ ネ	SPRING	1
09-24	51-809	ブ ヅユ	BUSHING	1
09-25	23-283	O-リング	O-RING	1
09-26	94-222	オイルシール	OIL SEAL	1
09-27	51-866	調整レバ - 軸	CONTROL LEVER SHAFT	1
09-28	32-281	スプ リング ピン	SPRING PIN	1
09-29	87-181	ネジ	SCREW	1
09-30	87-212	調整ノブ	ADJUSTING KNOB	1
09-31	51-815	ストップ ピン	PIN	1
09-32	71-208	調整ネジ	SCREW	1
09-33	51-814	O-リング	O-RING	1
09-34	23-192	ナット	NUT	1
09-35	51-813	リンク	CONTROL LINK	1
09-36	51-810	調整レバ -	DIFFERENTIAL FEED CONTROL LEVER	1
09-37	51-865	ストップバ -	STOPPER	1
09-38	51-804	目盛板	FEED GRADUATIONS	1
09-39	51-801	ネジ	SCREW	2
09-40	51-805	スペ - スカラー	COLLAR	2
09-41	87-265	ネジ	SCREW	2
09-42	75-410	ワッシャ	WASHER	1
09-43	51-806	皿バ ネ	SPRING	1
09-44	87-177	ネジ	BOLT	2
09-45	51-807	調整ネジ	SCREW	1
09-46	51-818	引張りバ ネ取付ネジ*	STUD BOLT	1

10. 下糸捌き機構 LOOPER THREAD MECHANISM



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
10-01	88-166	ナット	NUT	1
10-02	87-239	ネジ	SCREW	1
10-03	23-511	キャップ	CAP	1
10-04	84-174	ネジ	SCREW	1
10-05	79-523	バネ	SPRING	1
10-06	43-513	レバ	LEVER	1
10-07	87-272	ネジ	SCREW	2
10-08	43-506	ストップ台	STOP BRACKET	1
10-09	43-507	取付台軸	SHAFT	1
10-10	75-105	カラー	COLLAR	1
10-11	84-314	ネジ	SCREW	1
10-12	84-161	ネジ	SCREW	1
10-13	75-224	ワッシャー	WASHER	1
10-14	43-538	糸案内	CAST-OFF PLATE	1
10-15	84-521	ネジ	SCREW	1
10-16	43-536	ブラケット	BRACKET	1
10-17	43-537	プレート	PLATE	1
10-18	84-155	ネジ	SCREW	3
10-19	71-207	ピン	PIN	1
10-20	79-520	スプリング	SPRING	1
10-21	87-083	ネジ	SCREW	2
10-22	43-512	糸遣(右)	THREAD EYELET (RIGHT)	1
10-23	43-510	糸遣(左)	THREAD EYELET (LEFT)	1
10-24	49-501	ハマグリ	LOOPER THREAD TAKEUP CAM	1
10-25	87-274	ネジ	SCREW	2
10-26	75-511	カラー	COLLAR	1
10-27	87-104	ネジ	SCREW	1
10-28	23-319	巻き止めモジュール	LACED WIRE	1
10-29	43-572	ハマグリ糸遣左	THREAD EYELET (LEFT)	1
10-30	43-573	ハマグリ糸遣右	THREAD EYELET (RIGHT)	1

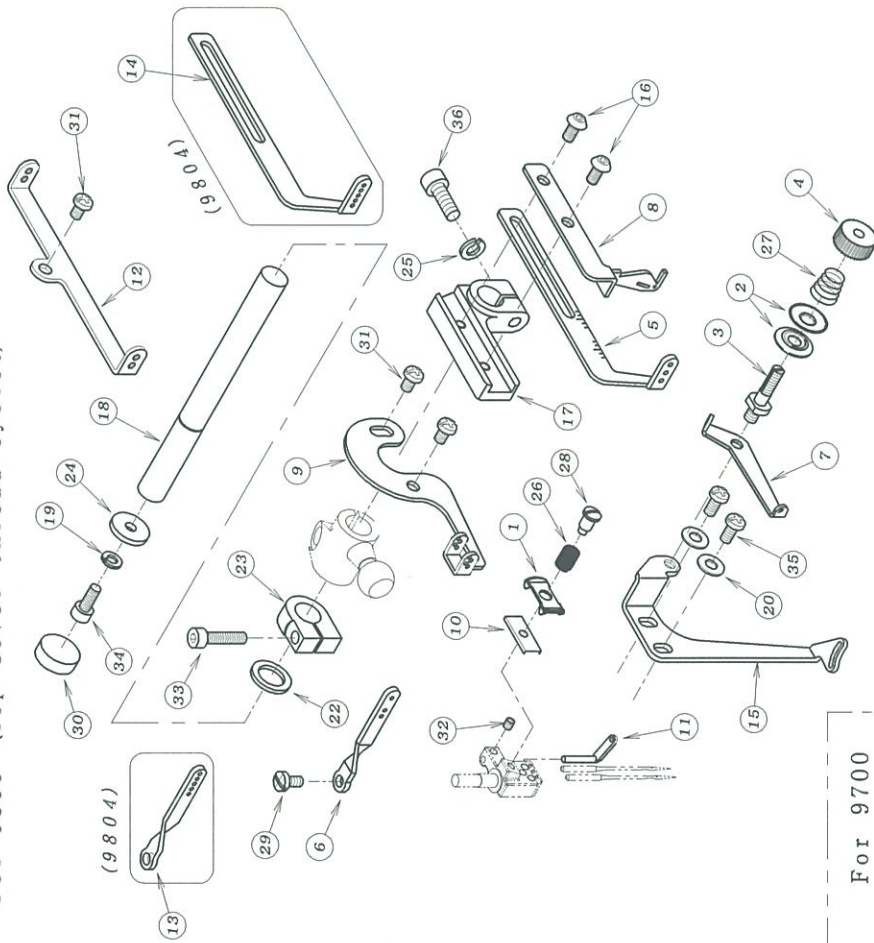
# 11. 針棒上軸機構 NEEDLE BAR MECHANISM



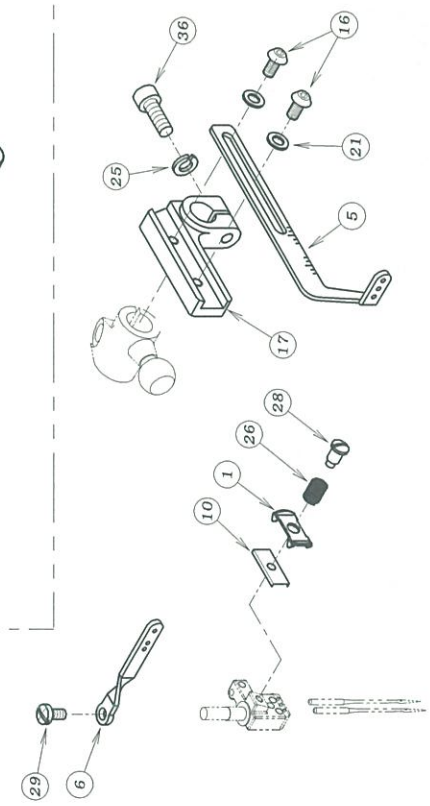
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
11-01	06-238	タイミンギア-リー (L)	TIMING PULLEY	1
11-02	11-409	針棒	NEEDLE BAR	1
11-03	23-063	フェルト	FELT	1
11-04	23-567	フェルト	FELT	1
11-05	35-559	オイルスリーブ	OIL SLEEVE	1
11-06	60-5160	上軸糸捌きロッド・セット	CONNECTING ROD ASS'Y	1
11-07	60-8490	ベアリングセット	BEARING ASS'Y	1
11-08	60-8500	ベアリングセット	BEARING ASS'Y	1
11-09	60-8510	ベアリングセット	BEARING ASS'Y	1
11-10	61-745	針糸捌きロッド玉	ECCENTRIC LINK	1
11-11	63-427	針棒リンク	LINK	1
11-12	63-518	針糸捌きロッド	CONNECTING ROD	1
11-13	66-523	針棒リンク (32)	NEEDLE CRANK ASS'Y	1
11-14	69-142	クランクモーション	BALANCE WEIGHT	1
11-15	69-532	角コマ	BLOCK	1
11-16	69-533	針棒ガイド	GUIDE	1
11-17	69-540	ハンド・プ-リー	HAND WHEEL	1
11-18	69-544	ベアリングスリーブ	BEARING SLEEVE	2
11-19	71-830	上軸 (右)	UPPER SHAFT (RIGHT)	1
11-20	71-836	上軸 (左)	UPPER SHAFT (LEFT)	1
11-21	71-837	針棒リンク (0.5)	LINK PIN	1
11-22	73-504	針棒抱き	NEEDLE BAR BRACKET	1
11-23	75-004	針棒リンクエンド・7° レ-ト	WASHER	1
11-24	75-271	下軸・ヨイント	JOINT COLLAR	1
11-25	81-585	ベアリングハウジング	BEARING HOUSING	1
11-26	84-463	ネジ	SCREW M6 x 14 L	1
11-27	87-057	六角穴付きボルト M6 x 14 L	SCREW M6 x 14 L	1
11-28	87-067	六角穴付きボルト	BOLT	1
11-29	87-097	ネジ	SCREW	4
11-30	87-112	六角穴付きボルト	BOLT	3
11-31	87-172	ネジ	SCREW	8
11-32	87-241	ネジ	SCREW	1
11-33	87-253	ネジ	SCREW	1
11-34	87-254	ネジ	SCREW	3
11-35	87-259	ネジ	SCREW	4
11-36	87-274	ネジ	SCREW	2
11-37	87-278	ネジ	SCREW	2
11-38	87-368	ネジ	SCREW	1
11-39	87-369	ネジ	SCREW	1
11-40	87-520	ネジ	SCREW	1
11-41	91-264	ニ-トル・ベ-アリング	BEARING	1
11-42	91-888	ベ-アリング	BEARING	2
11-43	91-894	ベ-アリング	BEARING	1
11-44	91-994	ベ-アリング	BEARING	1
11-45	60-8492	ベ-アリング・セット	BEARING ASS'Y	1
11-46	75-273	上軸ヨイント (P 用)	JOINT COLLAR (for P model)	1
11-47	66-525	針棒リンク (33)	NEEDLE CRANK ASS'Y	1
11-48	60-8493	ベ-アリング・セット	BEARING ASS'Y	1

# 12. 上糸捌き機構 NEEDLE THREAD MECHANISM

For 9800 (Top Cover thread eyelet)



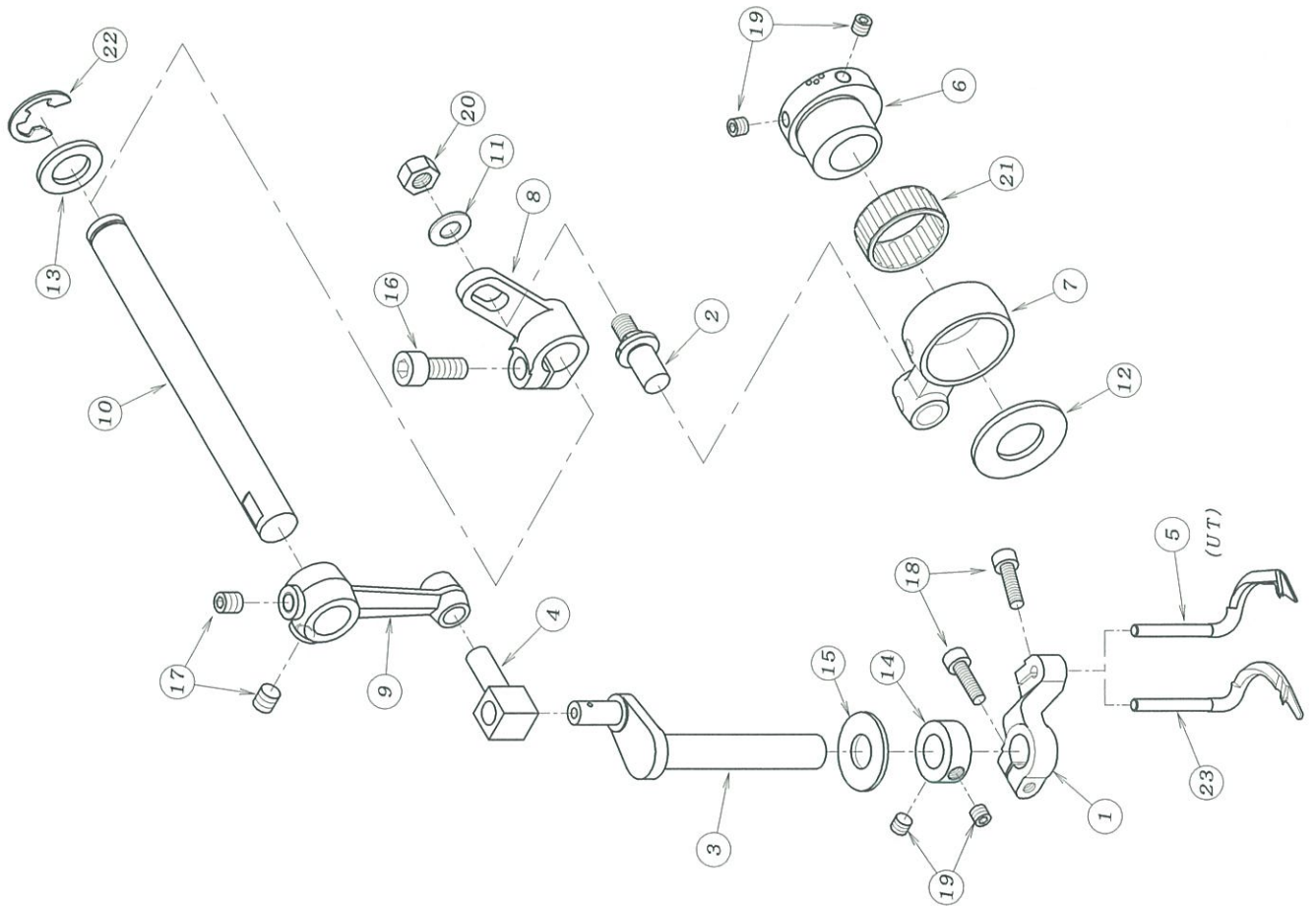
For 9700



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
12-01	41-021	カメ糸道	THREAD NIPPER	1
12-02	41-155	チェンボソ皿	DISC	2
12-03	41-504	調子棒	TENSION POST	1
12-04	43-568	小チェンボソナット	NUT	1
12-05	45-032	針糸サバキ	NEEDLE THREAD TAKE-UP	1
12-06	45-035	針糸糸道	THREAD EYELET	1
12-07	45-036	針糸糸道	THREAD EYELET	1
12-08	45-502	飾り糸道	THREAD TAKE-UP	1
12-09	45-507	飾り糸道	THREAD EYELET	1
12-10	45-508	針糸小調子板	PLATE	1
12-11	45-514	飾り糸道	THREAD EYELET	1
12-12	45-515	飾り糸道	THREAD EYELET	1
12-13	45-535	針糸糸道	THREAD EYELET	1
12-14	45-536	針糸糸道	NEEDLE THREAD TAKE-UP	1
12-15	45-540	飾り糸案内	BRACKET	1
12-16	87-272	ネジ	SCREW	2
12-17	67-502	針糸器を取付台	LEVER	1
12-18	71-514	針糸器	SHAFT	1
12-19	75-410	スプリング	SPRING WASHER	1
12-20	75-455	ワッシャー	WASHER	2
12-21	75-468	ワッシャー	WASHER	2
12-22	75-504	ワッシャー	WASHER	1
12-23	75-505	カラー	COLLAR	1
12-24	75-508	ワッシャー	WASHER	1
12-25	75-526	スプリング	SPRING WASHER	1
12-26	79-025	カメ糸道ハネ	SPRING	1
12-27	79-534	ハネ	SPRING	1
12-28	84-021	ハネ	SCREW	1
12-29	84-374	ネジ	SCREW	1
12-30	94-504	シールキヤップ	PLUG	1
12-31	87-481	フレーム	SCREW	3
12-32	87-104	ネジ	SCREW	1
12-33	87-112	六角穴付きボルト	BOLT	1
12-34	87-113	六角穴付きボルト	BOLT	1
12-35	87-482	フレーム	SCREW	2
12-36	87-224	六角穴付きボルト	BOLT	1

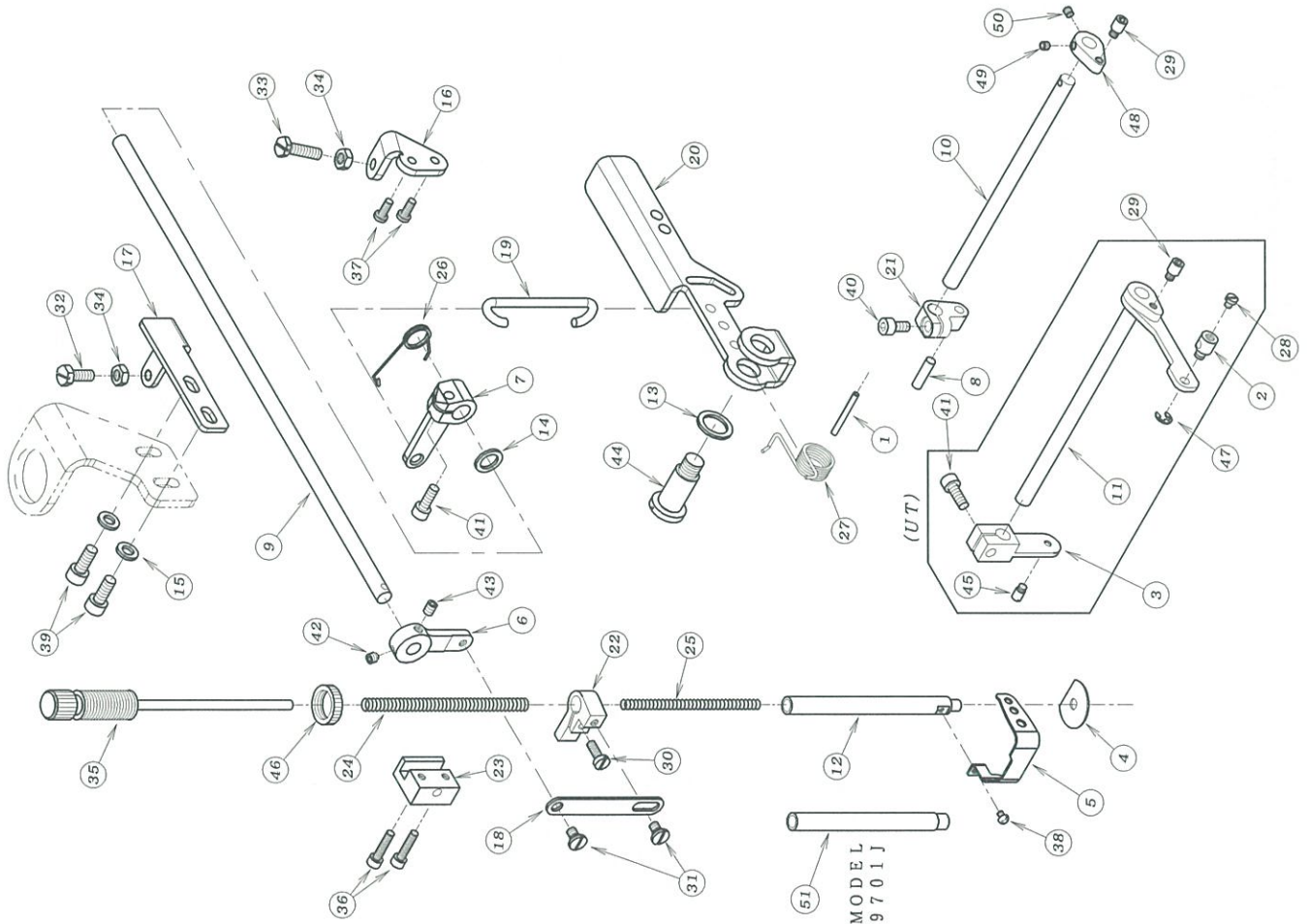


# 13. 上飾り機構 SPREADER DRIVE MECHANISM



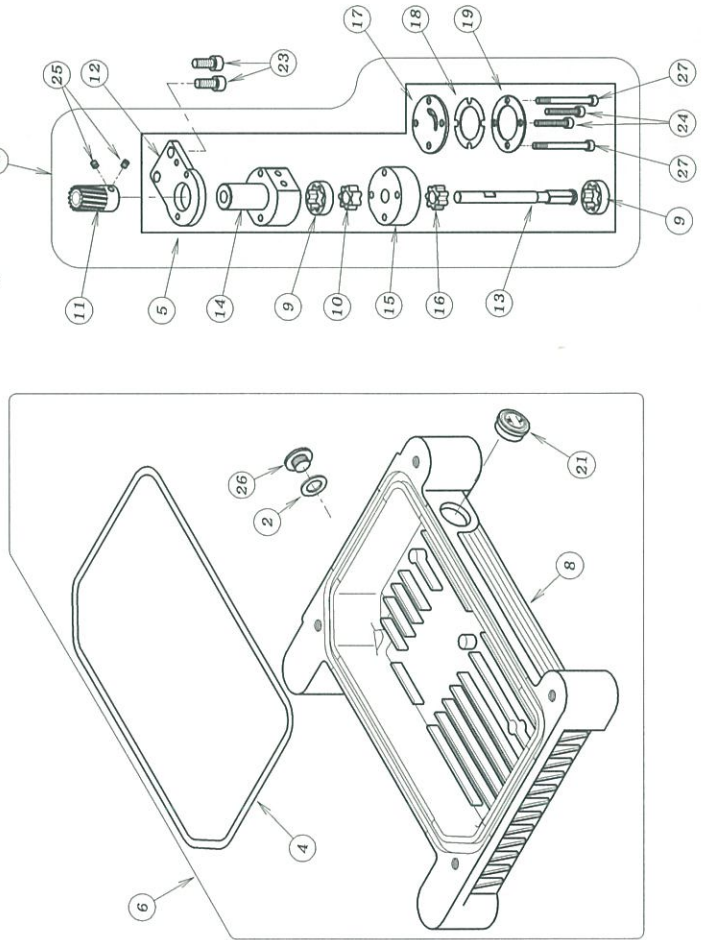
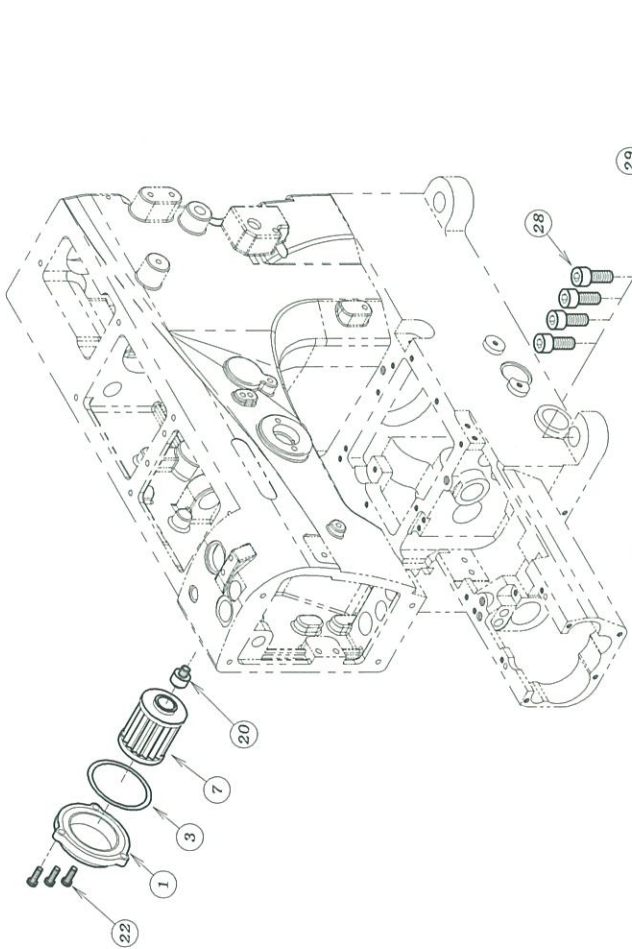
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
13-01	04-501	スプロケット -ホルダ-	HOLDER	1
13-02	04-502	覆筋レバ -ピン	PIN	1
13-03	04-507	歯リル -バ-	CRANK	1
13-04	04-508	運結 -シ-	CONNECTING HOLDER	1
13-05	19-505	上飾リル -バ-	SPREADER	1
13-06	61-527	上飾リエキセン玉	ECCENTRIC	1
13-07	63-500	飾リ振りロツト	CONNECTING ROD	1
13-08	67-510	飾リ振りレバ -	LEVER	1
13-09	67-511	ル -バ - 飾リレバ -	LEVER	1
13-10	71-513	飾リ駆動軸	SHAFT	1
13-11	75-452	ワッシヤ	WASHER	1
13-12	75-502	ワッシヤ	WASHER	1
13-13	75-509	ワッシヤ	WASHER	1
13-14	75-537	カラ-	COLLAR	1
13-15	75-549	ワッシヤ	WASHER	1
13-16	87-171	六角穴付きボルト	BOLT	1
13-17	87-172	ネジ	SCREW	2
13-18	87-214	六角穴付きボルト	BOLT	2
13-19	87-274	ネジ	SCREW	4
13-20	88-166	ナツト	NUT	1
13-21	91-416	ニ - ト - ルカ - シ	NEEDLE BEARING	1
13-22	93-202	E - リンク	E-RING	1
13-23	19-751	上飾リル -バ-	SPREADER	1

# 14. 押え揚げ機構 PRESSER FOOT MECHANISM



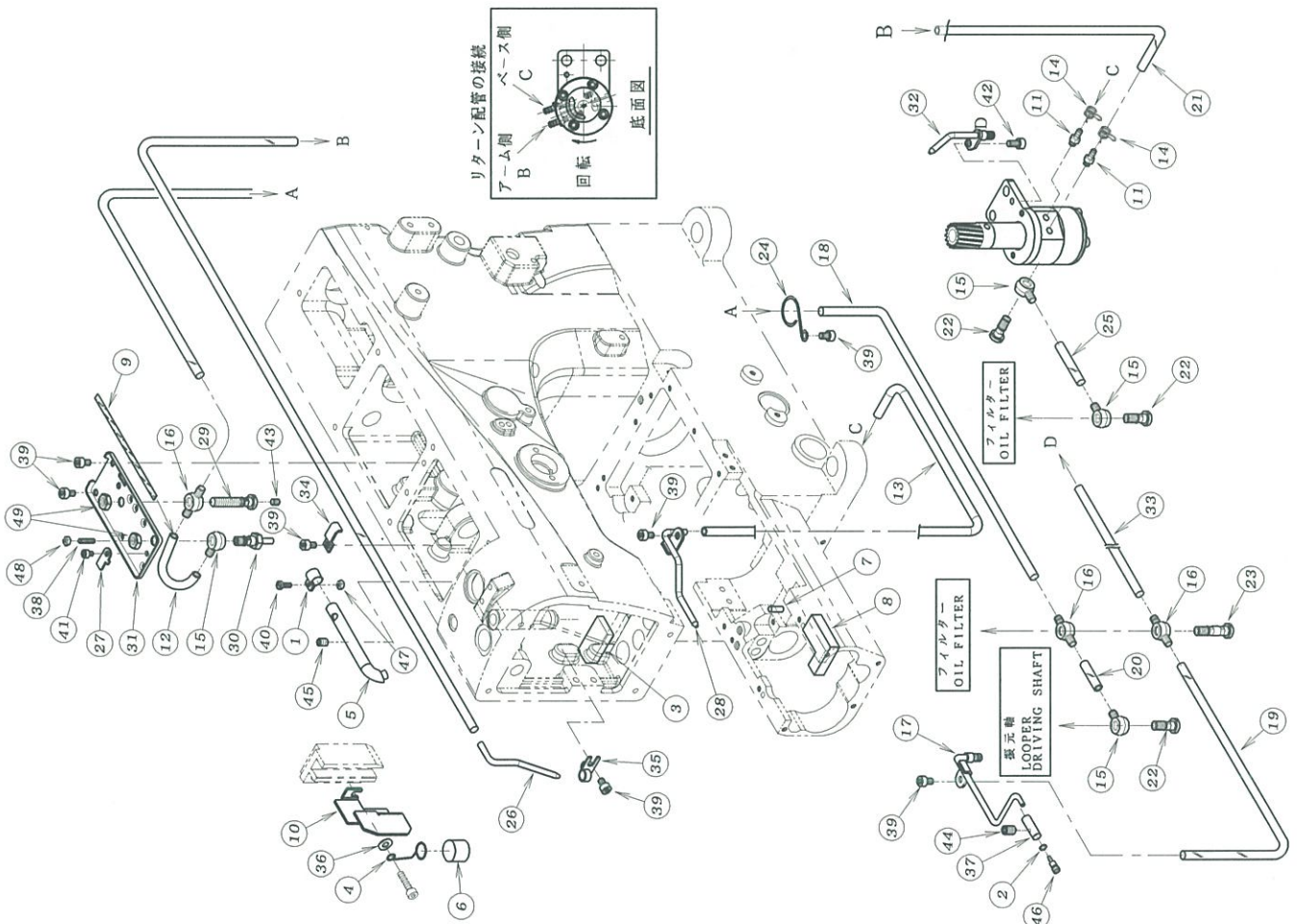
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
14-01105-404	スプリングピン	SPRING PIN	1	
14-02105-853	糸締め連結片	HOLDER	1	
14-03105-958	クランクレバ-	LEVER	1	
14-04123-018	押え棒油止シール	SEAL	1	
14-05127-232	フィンガ'-ガード	FINGER GUARD	1	
14-06167-036	レバ'-	LEVER	1	
14-07167-037	レバ'-	LEVER	1	
14-08171-203	平行ピン	PIN	1	
14-09171-278	連動シャフト	SHAFT	1	
14-10171-270	糸締め軸	SHAFT	1	
14-11171-280	レバ'-シャフト (UT)	SHAFT	1	
14-12171-515	押え棒	PRESSER FOOT BAR	1	
14-13175-332	ワッシャ	WASHER	1	
14-14175-504	ワッシャ	WASHER	2	
14-15175-552	ワッシャ	WASHER	2	
14-16177-030	ブラケット	BRACKET	1	
14-17177-033	押え棒止ストッパー	STOPPER	1	
14-18177-051	連結ア'-プレート	PLATE	1	
14-19177-052	リンク	LINK	1	
14-20177-053	押え棒レバ'-	LEVER	1	
14-21177-504	押え棒クランク	CRANK	1	
14-22177-510	押え棒軸	CLAMP	1	
14-23177-511	押え棒ガイド	GUIDE	1	
14-24179-022	押え棒ハ'-ネ (上)	SPRING	1	
14-25179-023	押え棒ハ'-ネ (下)	SPRING	1	
14-26179-024	巻きハ'-ネ	SPRING	1	
14-27179-423	巻きハ'-ネ	SPRING	1	
14-28184-364	ネジ	SCREW	1	
14-29184-561	ネジ	SCREW	2	
14-30184-566	ネジ	SCREW	2	
14-31184-581	段ネジ	SCREW	2	
14-32184-818	六角ボルト	BOLT	1	
14-33184-813	ネジ	SCREW	1	
14-34186-411	ナット	NUT	2	
14-35187-001	押え棒段ネジ	SCREW	1	
14-36187-112	六角穴付きボルト	BOLT	2	
14-37187-483	ブライナベ小ねじ	SCREW	2	
14-38187-476	ブライナベ小ねじ	SCREW	2	
14-39187-171	六角穴付きボルト	BOLT	2	
14-40187-213	六角穴付きボルト	BOLT	1	
14-41187-224	六角穴付きボルト	BOLT	2	
14-42187-253	ネジ	SCREW	1	
14-43187-254	ネジ	SCREW	1	
14-44187-404	段付ネジ	SCREW	1	
14-45187-423	段ネジ	SCREW	1	
14-46188-003	筒ネジ' ナット	NUT	1	
14-47193-205	エリク'	E-RING	1	
14-48177-270	糸締めプレート	PLATE	1	
14-49187-233	ネジ	SCREW	1	
14-50187-286	ネジ	SCREW	1	
14-51171-038	押え棒	PRESSER FOOT BAR	1	

# 15 給油機構 (1) LUBRICATION MECHANISM (1)



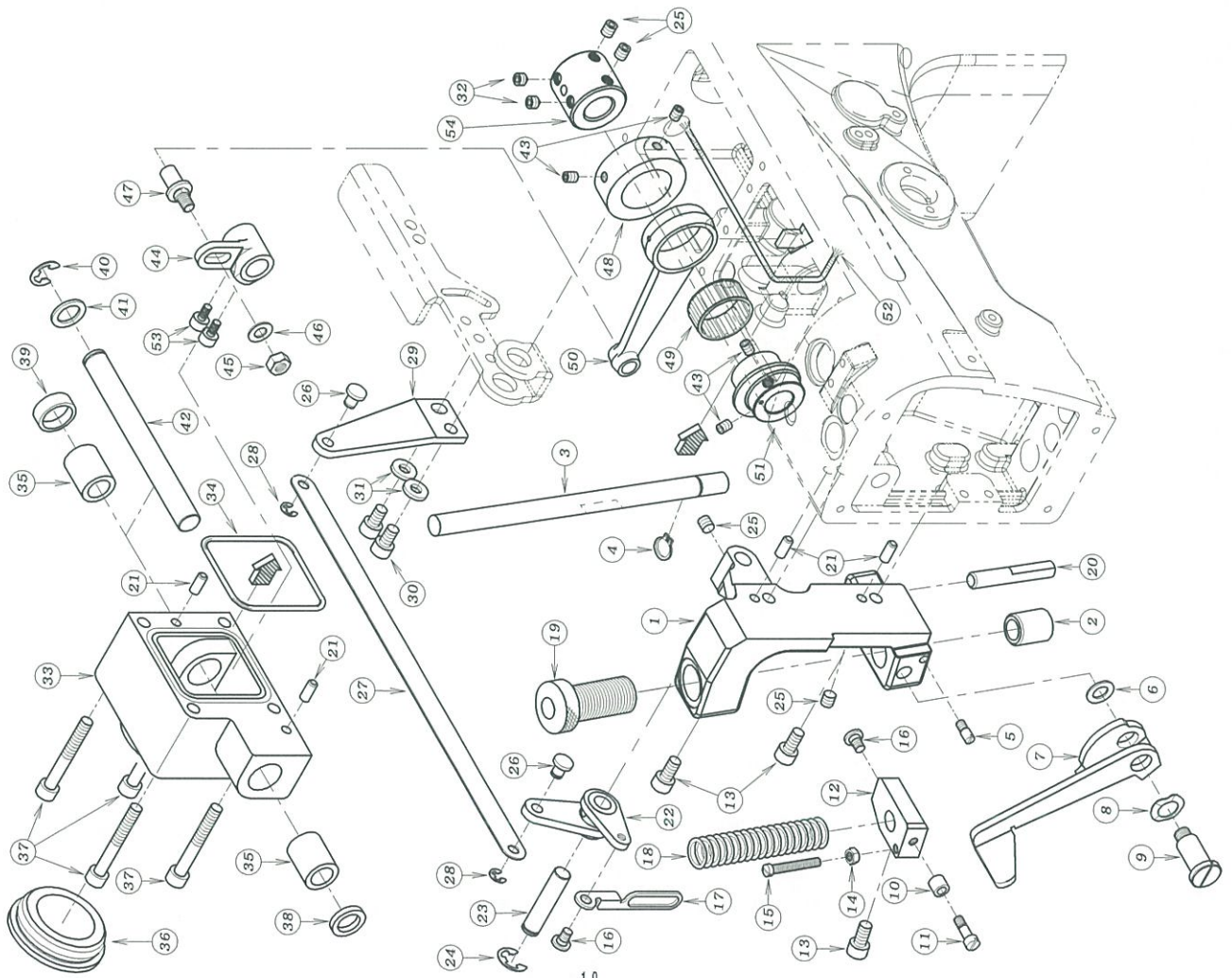
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
15-01	21-632W	オイルフィルターキャップ	OIL FILTER CAP	1
15-02	23-304	シール	SEAL	1
15-03	23-506	O-リング	O-RING	1
15-04	23-508	O-リング	O-RING	1
15-05	30-0019	ポンプセット	PUMP ASS'Y	1
15-06	30-5070	オイルタンクセット	OIL TANK ASS'Y	1
15-07	31-222	フィルター	OIL FILTER	1
15-08	31-507	オイルタンク	OIL RESERVOIR	1
15-09	31-530	アウトローター	OUTER ROTOR	2
15-10	31-531	インローター	INNER ROTOR	1
15-11	31-539	ポンプギア	PUMP GEAR	1
15-12	31-549	ポンプ取付板	PLATE	1
15-13	31-542	ポンプ軸	PUMP SHAFT	1
15-14	31-543	ポンプハウジング(上)	PUMP HOUSING	1
15-15	31-544	ポンプハウジング(下)	PUMP HOUSING	1
15-16	31-545	インローター	INNER ROTOR	1
15-17	31-546	ポンプ裏板	PLATE	1
15-18	31-547	ポンプメッシュ	PUMP MESH	1
15-19	31-548	ポンプメッシュ止め板	PLATE	1
15-20	35-509	継手	JOINT	1
15-21	39-504	オイルシグ	OIL SIGHT GAUGE	1
15-22	87-484	フランナナ小ねじ	SCREW	3
15-23	87-171	六角穴付きボルト	BOLT	2
15-24	87-285	六角穴付きボルト	BOLT	2
15-25	87-286	ネジ	SCREW	2
15-26	87-311	ワタネジ	SCREW	1
15-27	87-391	六角穴付きボルト	BOLT	2
15-28	87-663	六角穴付きボルト	BOLT	4
15-29	30-0020	ポンプセット	PUMP ASS'Y	1

16 給油機構 (2) LUBRICATION MECHANISM (2)



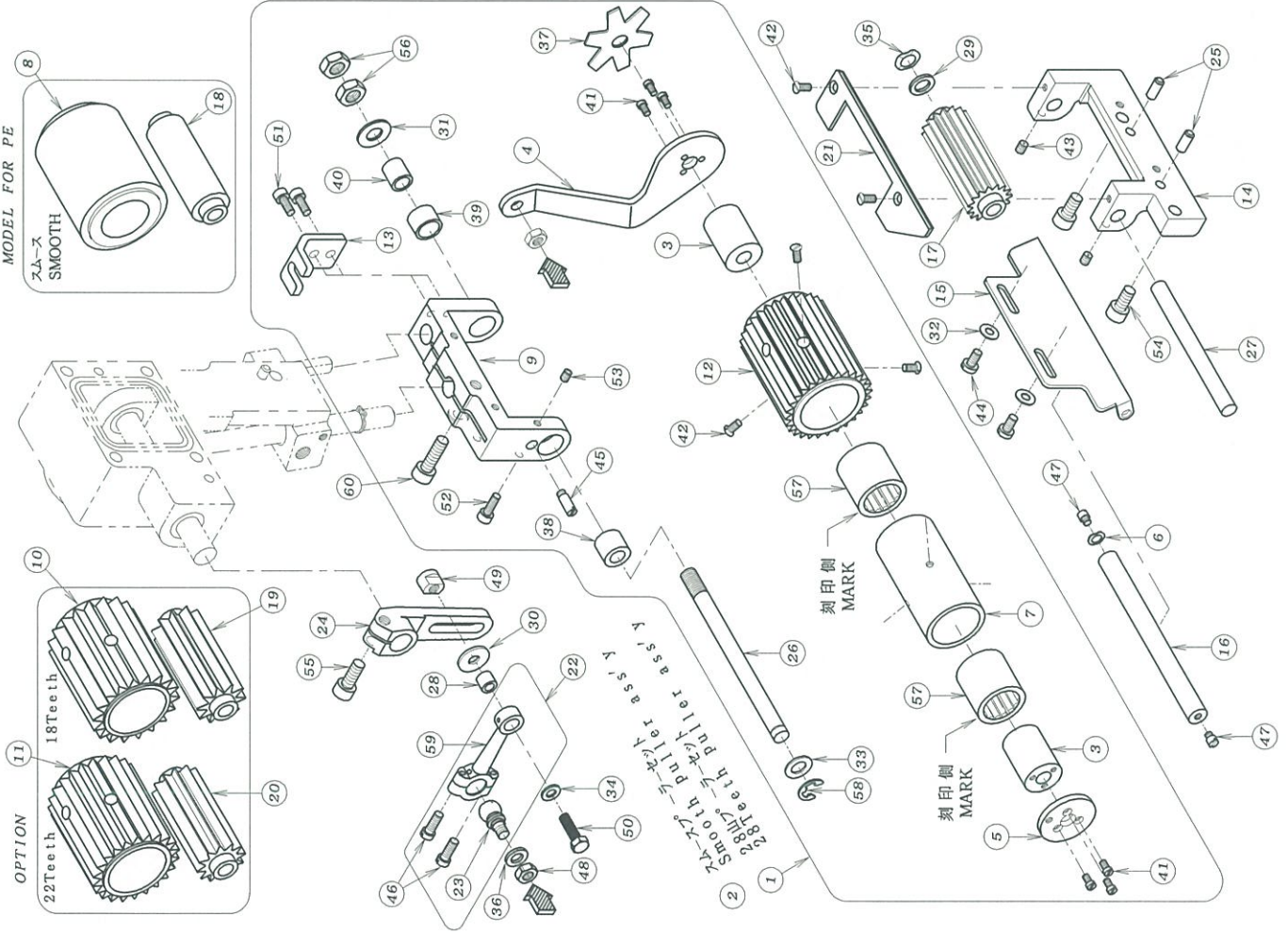
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
16-01	07-008	調節バンド	BAND	1
16-02	23-373	O-リング	O-RING	1
16-03	23-386	フェルト	FELT	1
16-04	23-558	給油サポ-ト	SUPPORT	1
16-05	23-560	給油ハ-イプ	PIPE	1
16-06	23-562	スポンジ	SPONGE	1
16-07	23-567	フェルト	FELT	1
16-08	23-571	フェルト	FELT	1
16-09	23-574	フェルト	FELT	1
16-10	27-301	オイルア-エ-ンス	OIL COVER	1
16-11	31-314	継手	JOINT	2
16-12	35-005	ヒ-ニ-ルチューブ 80L	TUBE	1
16-13	35-318	ヒ-ニ-ルチューブ	TUBE	1
16-14	35-413	止め金具	CLAMP	2
16-15	35-505	片口継手	JOINT	4
16-16	35-506	両口管継手	JOINT	3
16-17	35-512	給油配管	OIL DISTRIBUTOR	1
16-18	35-517	ヒ-ニ-ルチューブ 540L	TUBE	1
16-19	35-519	ヒ-ニ-ルチューブ	TUBE	1
16-20	35-520	ヒ-ニ-ルチューブ	TUBE	1
16-21	35-521	ヒ-ニ-ルチューブ	TUBE	1
16-22	35-528	管継手ボ-ルト	JOINT SCREW	3
16-23	35-529	管継手ボ-ルト	JOINT SCREW	1
16-24	35-530	チューブハ-ント	CLAMP	1
16-25	35-537	ヒ-ニ-ルチューブ	TUBE	1
16-26	35-540	リターン用ハ-イプ	PIPE	1
16-27	35-551	油調節ワ-レット	PLATE	1
16-28	35-553	リターン用ハ-イプ	PIPE	1
16-29	35-556	オイル噴出し継手	JOINT SCREW	1
16-30	35-557	ノズル	OIL SIGHT TOP NOZZLE	1
16-31	35-558	油受け	OIL RELEASER	1
16-32	35-560	ホ-ンプキ-キ給油配管	PIPE	1
16-33	35-562	ヒ-ニ-ルチューブ	TUBE (φ6×φ4, 300L)	1
16-34	39-139	ハ-イプサポ-ト	PIPE SUPPORT	1
16-35	39-501	配管止め	CLAMP	1
16-36	75-455	ワッシャ	WASHER	1
16-37	81-371	油調節ブッシュ	ADJUSTING BUSHING	1
16-38	87-072	六角穴止めねじ	SCREW	1
16-39	87-092	六角穴付きボルト	BOLT	7
16-40	87-128	ネジ	SCREW	1
16-41	87-142	ネジ	SCREW	1
16-42	87-177	六角穴付きボルト	BOLT	1
16-43	87-181	ネジ	SCREW	1
16-44	87-241	ネジ	SCREW	1
16-45	87-254	ネジ	SCREW	1
16-46	87-371	油量調節ネジ	ADJUSTING SCREW	1
16-47	88-136	ナット	NUT	1
16-48	88-137	ナット	NUT	1
16-49	88-165	六角ナット	NUT	2

17. 後プーラー機構 (1) REAR PULLER MECHANISM (1)



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
17-01	02-225W	後プーラーラケット	REAR PULLER BRACKET	1
17-02	81-133	ブッシュ	BUSHING	1
17-03	71-464	後プーラーシャフト	SHAFT	1
17-04	93-261	リング	E-RING	1
17-05	84-562	段ネジ	SCREW	1
17-06	75-519	ワッシャ	WASHER	1
17-07	02-216	手摺用金具	PULLER LIFTING LEVER	1
17-08	02-112	板ワッシャ	CORRUGATED WASHER	1
17-09	85-671	ネジ	SCREW	1
17-10	75-211	カラー	COLLAR	1
17-11	84-582	ネジ	SCREW	1
17-12	02-217	後プーラーシャフト抱き	BRACKET	1
17-13	87-225	ネジ	SCREW	3
17-14	86-311	ナット	NUT	1
17-15	84-569	ネジ	SCREW	1
17-16	84-581	ネジ	SCREW	2
17-17	02-218	後プーラー抱き連結プレート	CONNECTING PLATE	1
17-18	79-640	バネ	SPRING	1
17-19	87-754	筒ネジ	SCREW	1
17-20	71-729	プーラー回り止メッキ	GUIDE PIN	1
17-21	71-208	ロックピン	PIN	4
17-22	02-219	後プーラー振レバ	LEVER	1
17-23	71-726	シャフト	SHAFT	1
17-24	93-222	リング	E-RING	1
17-25	87-172	ネジ	SCREW	4
17-26	77-419	押換連結ピン	PIN	2
17-27	77-037	押換連結板	PLATE	1
17-28	93-205	リング	E-RING	2
17-29	77-421	押換レバ	LEVER	1
17-30	87-203	ネジ	SCREW	2
17-31	75-458	ワッシャ	WASHER	2
17-32	87-259	ネジ	SCREW	2
17-33	02-220W	上プーラー軸ケース	BRACKET	1
17-34	23-542	リング	O-RING	1
17-35	81-559	上プーラー軸ブッシュ	BUSHING	2
17-36	23-541	コム栓	PLUG	1
17-37	87-186	ネジ	SCREW	4
17-38	94-502	オイルソール	OIL SEAL	1
17-39	94-506	シールキャップ	PLUG	1
17-40	93-223	リング	E-RING	1
17-41	75-187	ワッシャ	WASHER	1
17-42	71-727	上プーラー駆動軸	SHAFT	1
17-43	87-254	ネジ	SCREW	4
17-44	67-528	上プーラー振レバ	LEVER	1
17-45	88-166	ナット	NUT	1
17-46	75-452	ワッシャ	WASHER	1
17-47	04-502	調整レバピン	PIN	1
17-48	75-272	スラストカバー	COLLAR	1
17-49	91-413	ニードルベアリング	NEEDLE BEARING	1
17-50	63-535	プーラークランクロッド	CRANK ROD	1
17-51	61-551	プーラーエキセン	ECCENTRIC	1
17-52	23-556	フェルト	FELT	1
17-53	87-024	六角穴付ナット	BOLT	2
17-54	75-273	上軸ジョイント (P用)	JOINT COLLAR (for P model)	1

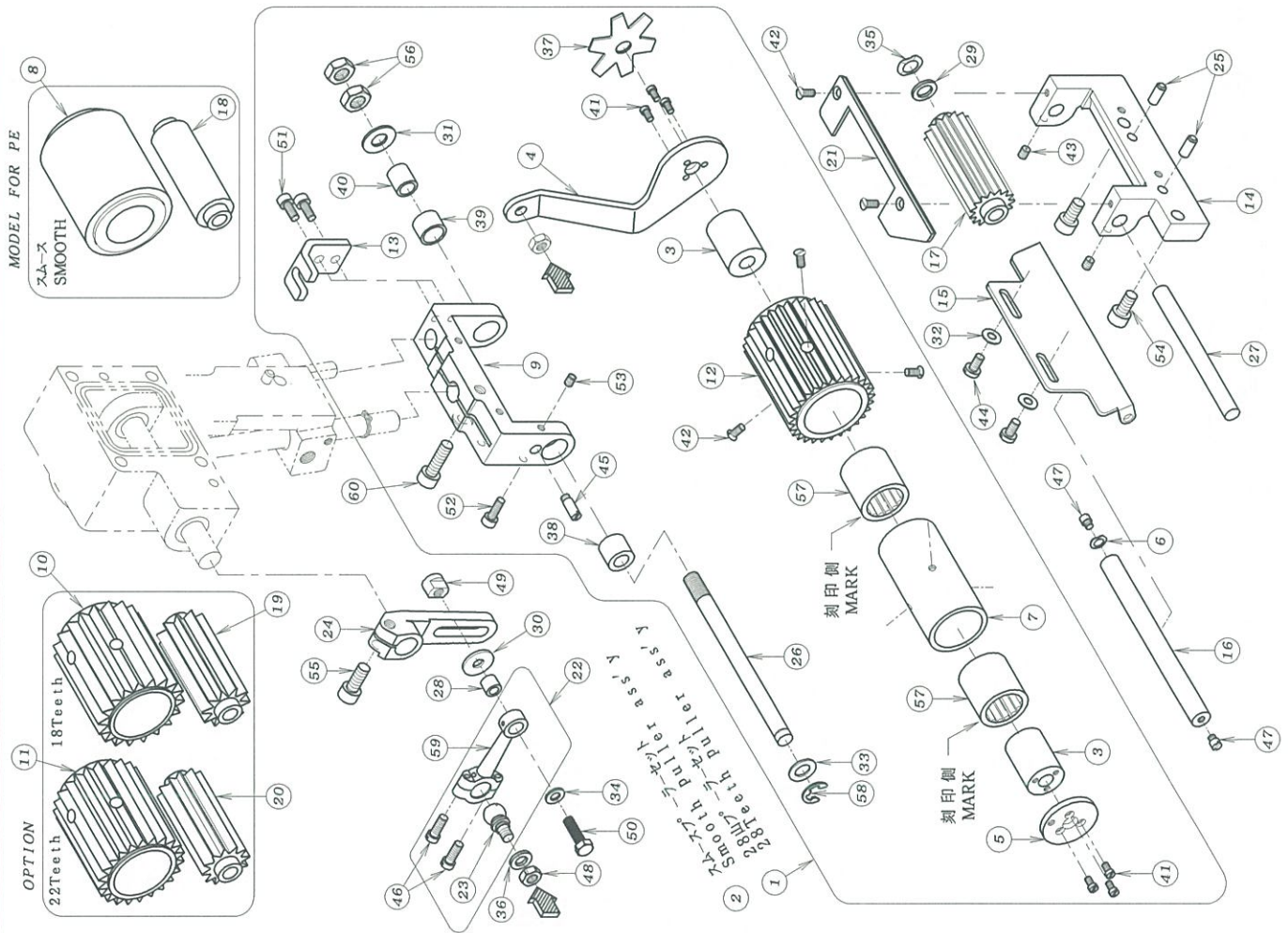
18. 後プーラー機構 (2-1) REAR PULLER MECHANISM (2-1)



REF. NO.	PART. NO.	品名	DESCRIPTION	Q'TY
18-0100	3282	28山プーラーセット	28TEETH REAR PULLER ASS'Y	1
18-0200	2008	スムースプーラーセット	SMOOTH PULLER ASS'Y	1
18-0301	1115	スリーブ	SLEEVE	2
18-0402	017	後プーラー連結板	CONNECTING PLATE	1
18-0502	117	後プーラーハブ	PLATE	1
18-0602	118	被ワッシャ	WASHER	1
18-0702	123	リウキエイトラッチ用ハブシフト (中)	CLUTCH HOUSING	1
18-0802	136	スムース (中)	REAR PULLER (SMOOTH)	1
18-0902	158	後プーラー台	REAR PULLER HOLDER	1
18-1002	176	後プーラー上ギヤ-18山	UPPER REAR PULLER18	1
18-1102	177	後プーラー上ギヤ-22山	UPPER REAR PULLER22	1
18-1202	178	後プーラー上ギヤ-28山	UPPER REAR PULLER28	1
18-1302	250	回り止ワッシャ	BRACKET	1
18-1402	252W	下プーラー上台	BRACKET	1
18-1502	253	補助ローラー取付板	PLATE	1
18-1602	254	補助ローラー	ROLLER	1
18-1702	255	後プーラー下 (11.5山)	LOWER REAR PULLER GEAR (15 TEETH)	1
18-1802	451	下ローラースムース	REAR PULLER (SMOOTH)	1
18-1902	452	下ローラー (10山)	REAR PULLER GEAR (10TEETH)	1
18-2002	453	下ローラー (12山)	REAR PULLER GEAR (12TEETH)	1
18-2121	715	下プーラーガイド	PULLER GUIDE	1
18-2260	8090	プーラー連結ロットセット	CONNECTING ROD ASS'Y	1
18-2361	810	プーラー連結ロット玉	CONNECTING ROD BALL	1
18-2467	529	上プーラー駆動レバー	LEVER	1
18-2571	208	ノックピン	PIN	2
18-2671	444	後プーラー台シフト (中)	SHAFT	1
18-2771	728	後プーラー下シフト	LOWER REAR PULLER SHAFT	1
18-2875	247	連結メカノローラー	ROLLER	1
18-2975	356	ワッシャ	WASHER	1
18-3075	407	ワッシャ	WASHER	1
18-3175	451	ワッシャ	WASHER	1
18-3275	455	ワッシャ	WASHER	2
18-3375	519	ワッシャ	WASHER	1
18-3475	520	ワッシャ	WASHER	1
18-3575	528	銅鍍金	WASHER	1
18-3675	552	ワッシャ	WASHER	1
18-3779	551	プーラー板ハブ	PULLER PLATE SPRING	1
18-3881	321	ブッシュ	BUSHING	1
18-3981	322	ブッシュ	BUSHING	1
18-4081	323	ブッシュ	BUSHING	1
18-4184	162	ネジ	SCREW	6
18-4284	462	ネジ	SCREW	5
18-4384	521	ネジ	SCREW	2
18-4484	571	ネジ	SCREW	2
18-4584	573	鉄ネジ	SCREW	1
18-4684	635	ネジ	SCREW	2
18-4785	607	鉄ネジ	SCREW	2
18-4886	411	ナット	NUT	1
18-4988	005	ナット	NUT	1
18-5087	015	ネジ	SCREW	1
18-5187	113	六角穴付きボルト	BOLT	2
18-5287	129	六角穴付きボルト	BOLT	1
18-5387	181	ネジ	SCREW	1
18-5487	225	六角穴付きボルト	BOLT	2
18-5587	171	六角穴付きボルト	BOLT	1
18-5688	179	ナット	NUT	2

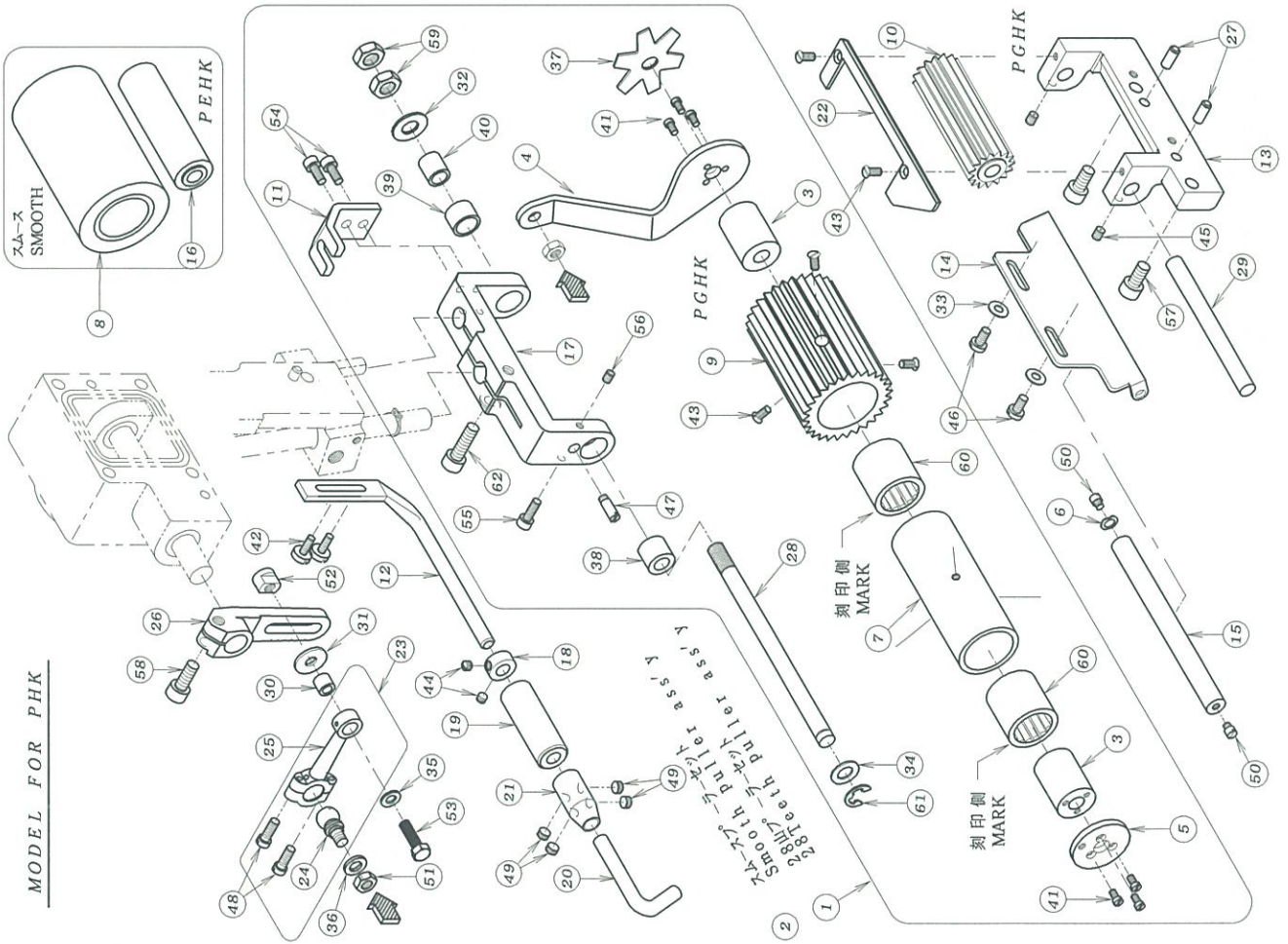
18. 後プーラー機構 (2-2) REAR PULLER MECHANISM (2-2)

REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
18-57	91-407	ワンウェイクラッチ	BEARING	2
18-58	93-221	ストップリンク	E-RING	1
18-59	63-809	連結メガネ	BALL JOINT	1
18-60	87-173	六角穴付きボルト	BOLT	1



19. 後プーラー機構 (3-1) REAR PULLER MECHANISM (3-1)

MODEL FOR PHK

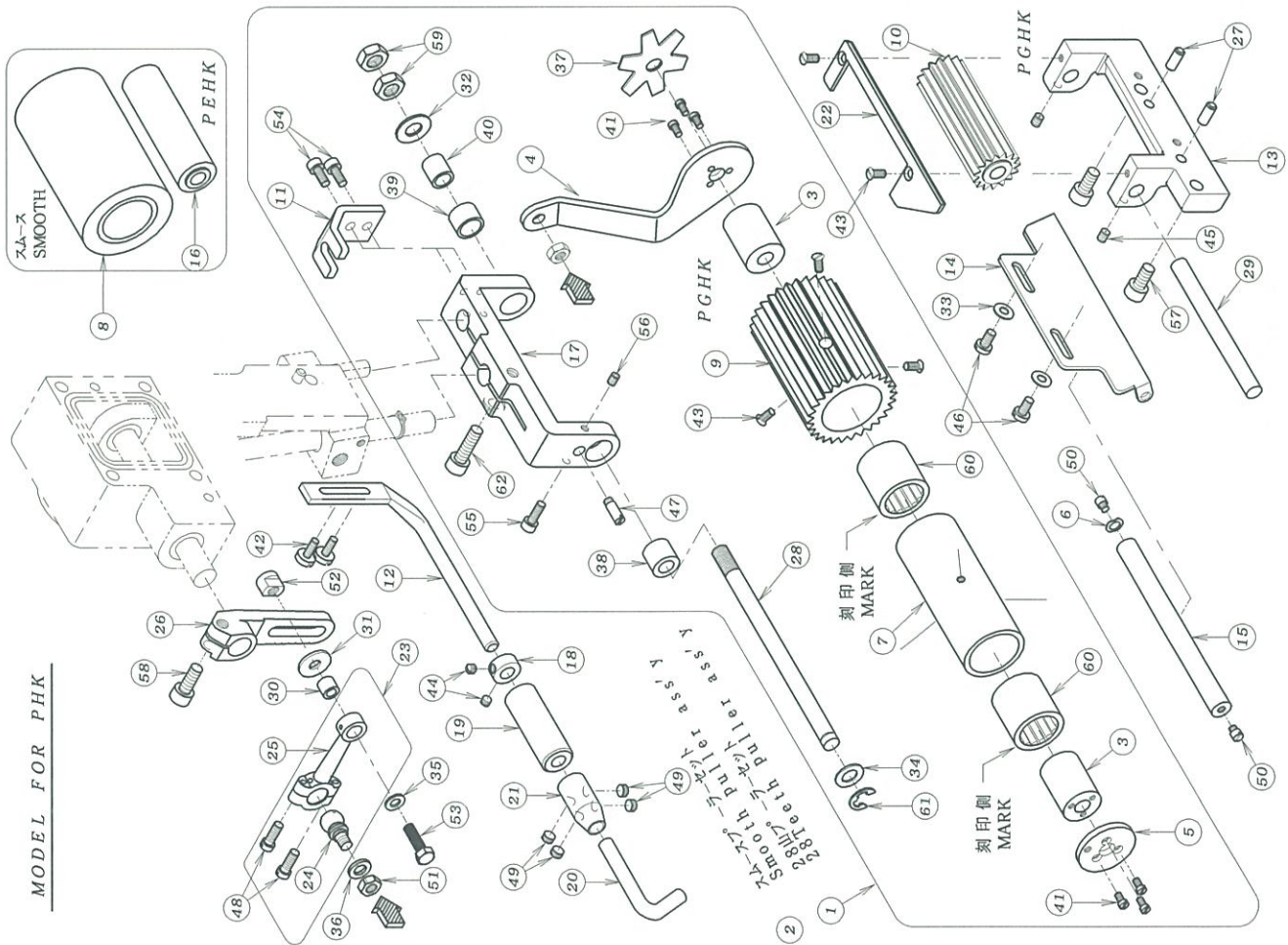


REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
19-0100-4280	28山プーラーセット		28 TOOTH REAR PULLER ASS'Y	1
19-0200-4283	スムーズプーラーセット		SMOOTH PULLER ASS'Y	1
19-0301-115	スリーブ		SLEEVE	2
19-0402-018	後プーラー連結板		CONNECTING PLATE	1
19-0502-117	後プーラーハブ		PLATE	1
19-0602-118	減ワッシャ		WASHER	1
19-0702-124	ワッシャ付子用ハブシヤク (大)		HOUSING	1
19-0802-138	後プーラー (コ・ム)		REAR PULLER	1
19-0902-228	後プーラー上28山		REAR PULLER GEAR (28 TEETH)	1
19-1002-245	後プーラー下15山		LOWER REAR PULLER GEAR (15 TEETH)	1
19-1102-246	回り止フ・ラケット		BRACKET	1
19-1202-247	コ・ムカ・イト・軸		ELASTIC TAPE GUIDE SHAFT	1
19-1302-252W	下フ・ラー上台		BRACKET	1
19-1402-253	補助ローラー取付板		PLATE	1
19-1502-254	補助ローラー		ROLLER	1
19-1602-455	下ローラー・スムーズ		REAR PULLER (SMOOTH)	1
19-1702-159	後プーラー台		BRACKET	1
19-1809-917	カマ		COLLAR	1
19-1909-919	コ・ムカ・イト・ローラー		TAPE GUIDE	1
19-2009-923	フ・ラー・コ・ムカ・イト		ELASTIC GUIDE	1
19-2109-984	コ・ムカ・イト・止めカマ		END COLLAR	1
19-2227-038	下フ・ラー・カ・イト		PULLER GUIDE	1
19-2360-8090	フ・ラー・連結ロッド・セット		CONNECTING ROD ASS'Y	1
19-2461-810	フ・ラー・連結ロッド・玉		CONNECTING ROD BALL	1
19-2563-809	フ・ラー・連結ロッド		BALL JOINT	1
19-2667-529	上プーラー駆動レバ		LEVER	1
19-2717-208	ノックピン		PIN	2
19-2871-445	後プーラー台シヤフト (大)		SHAFT	1
19-2971-728	後プーラー下シヤフト		LOWER REAR PULLER SHAFT	1
19-3075-247	連結カマ・ネローラー		ROLLER	1
19-3175-407	ワッシャ		WASHER	1
19-3275-451	ワッシャ		WASHER	1
19-3375-455	ワッシャ		WASHER	2
19-3475-519	ワッシャ		WASHER	1
19-3575-520	ワッシャ		WASHER	1
19-3675-552	ワッシャ		WASHER	1
19-3779-551	フ・ラー・板ハ・ネ		PULLER PLATE SPRING	1
19-3881-321	ブッシュ		BUSHING	1
19-3981-322	ブッシュ		BUSHING	1
19-4081-323	ブッシュ		BUSHING	1
19-4184-162	ネジ		SCREW	6
19-4284-368	ネジ		SCREW	2
19-4384-462	ネジ		SCREW	2
19-4484-511	ネジ		SCREW	2
19-4584-521	ネジ		SCREW	5
19-4684-571	ネジ		SCREW	2
19-4784-573	取ネジ		SCREW	2
19-4884-635	ネジ		SCREW	2
19-4984-711	ネジ		SCREW	4
19-5085-607	取ネジ		SCREW	2
19-5186-411	ナット		NUT	1
19-5288-005	ナット		NUT	1
19-5387-015	ネジ		SCREW	1
19-5487-113	六角穴付きボルト		BOLT	2
19-5587-129	六角穴付きボルト		BOLT	1
19-5687-181	ネジ		SCREW	1



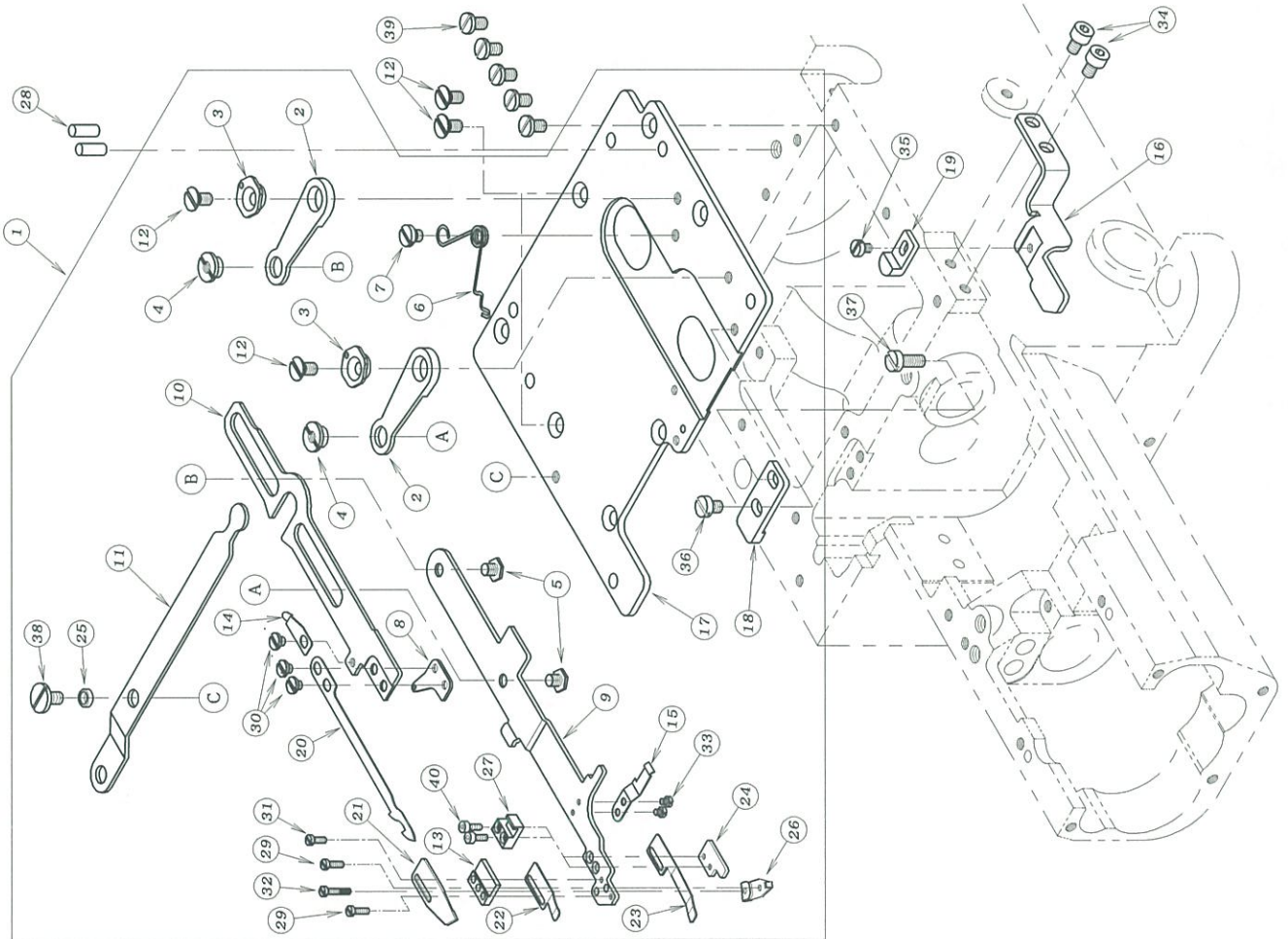
19. 後プーラー機構 (3-2) REAR PULLER MECHANISM (3-2)

MODEL FOR PHK



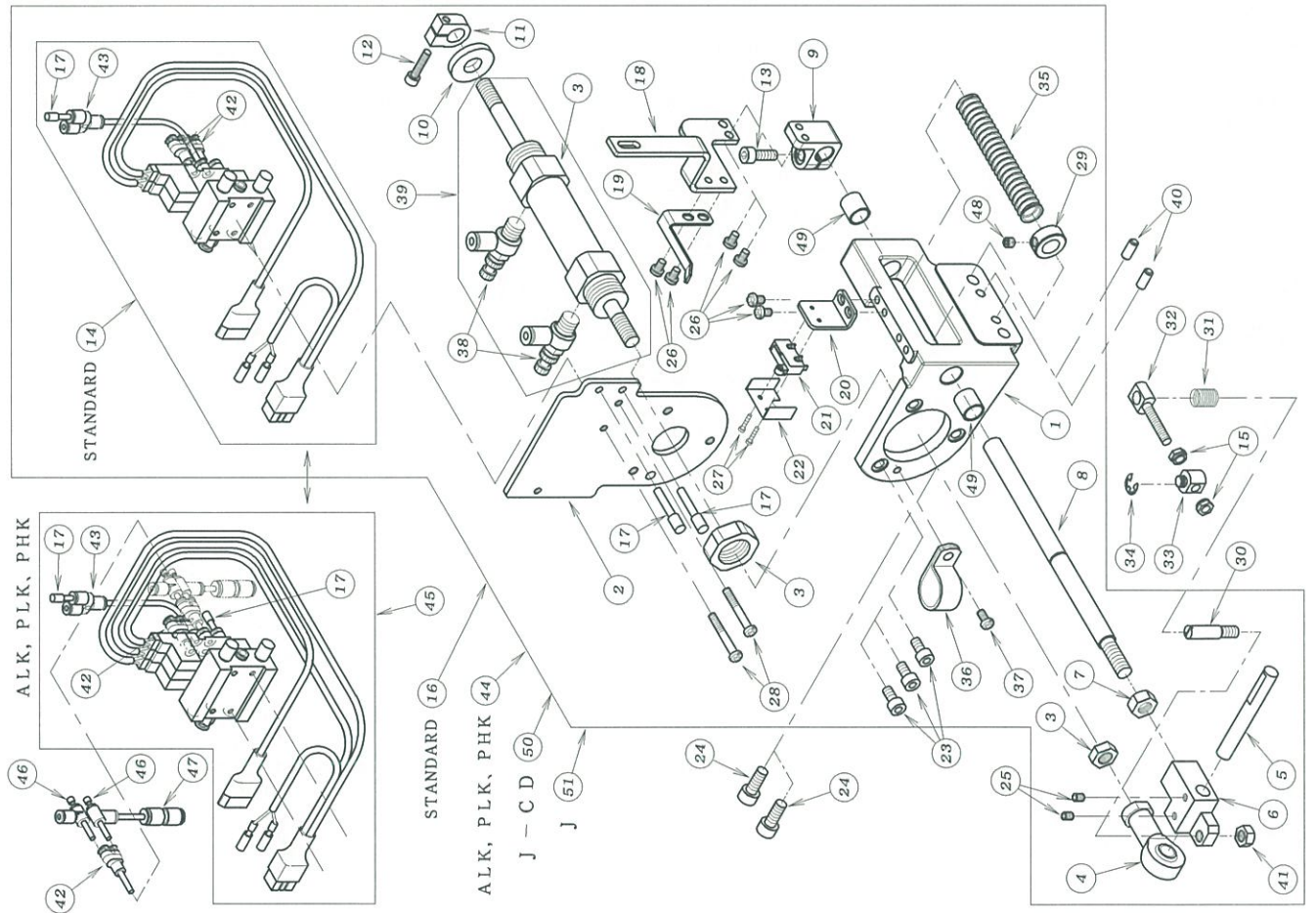
REF. NO.	PART. NO.	品名	DESCRIPTION	Q'TY
19-57	187-225	六角穴付きボルト	BOLT	2
19-58	187-171	六角穴付きボルト	BOLT	1
19-59	188-179	ナット	NUT	2
19-60	191-407	ワウエイクラッチ	BEARING	2
19-61	193-221	ストップリンク	E-RING	1
19-62	187-173	六角穴付きボルト	BOLT	1

20. 下糸切り装置 (UT) KNIFE MECHANISM (UT)



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
20-01	100-8031	マセット	THREAD TRIM ASSEMBLY	1
20-02	05-051	マスカ'イト'レハ' -	LEVER	2
20-03	05-052	マスカ'イト'レハ' - 調節リング'	RING	2
20-04	05-053	リング' ナット	NUT	2
20-05	05-054	ネジ'	SCREW	2
20-06	05-055	固定マス台ハ'ネ	SPRING	1
07-07	105-056	平頭付段ネジ'	SCREW	1
20-08	05-057	ルーハ' - 糸締め糸道	THREAD EYELET	1
20-09	05-058	固定マス土台	UPPER KNIFE HOLDER	1
20-10	05-059	可動マス土台	LOWER KNIFE HOLDER	1
20-11	105-060	駆動レハ' -	LEVER	1
20-12	05-061	ネジ'	SCREW	4
20-13	05-062	可動マスカ'イト'	GUIDE	1
20-14	05-063	固定マス台補助ハ'ネ	SPRING	1
20-15	05-064	固定マス台支エハ'ネ	SPRING	1
20-16	05-065	カ'イト'フ'ラケット	GUIDE BRACKET	1
20-17	05-066	マス土台フ'レート	BASE PLATE	1
20-18	05-067	固定マス台ストツハ' -	STOPPER	1
20-19	05-068	可動マス台カ'イト'	GUIDE	1
20-20	05-658	可動マス	LOWER KNIFE	1
20-21	05-812	固定マス	UPPER KNIFE	1
20-22	05-794	裏ハ'ネ (上)	LEAF SPRING (UPPER)	1
20-23	05-799	裏ハ'ネ (下)	LEAF SPRING (LOWER)	1
20-24	05-822	フ'ラケット	BRACKET	1
20-25	05-882	カ'イト'ローラ' (小)	GUIDE ROLLER	1
20-26	05-894	裏ハ'ネ調節板	PLATE	1
20-27	05-898	可動マスカ'イト'	GUIDE	1
20-28	71-253	ノックピ'ン	PIN	2
20-29	87-075	ネジ'	SCREW	2
20-30	87-077	ネジ'	SCREW	3
20-31	87-078	ネジ'	SCREW	1
20-32	87-079	ネジ'	SCREW	1
20-33	87-091	ネジ'	SCREW	2
20-34	87-092	六角穴付きボルト	BOLT	2
20-35	87-095	ネジ'	SCREW	1
20-36	87-098	ネジ'	SCREW	1
20-37	87-145	ネジ'	SCREW	1
20-38	87-414	ネジ'	SCREW	1
20-39	87-415	ネジ'	SCREW	5
20-40	87-398	六角穴付きボ'ルト	BOLT	2

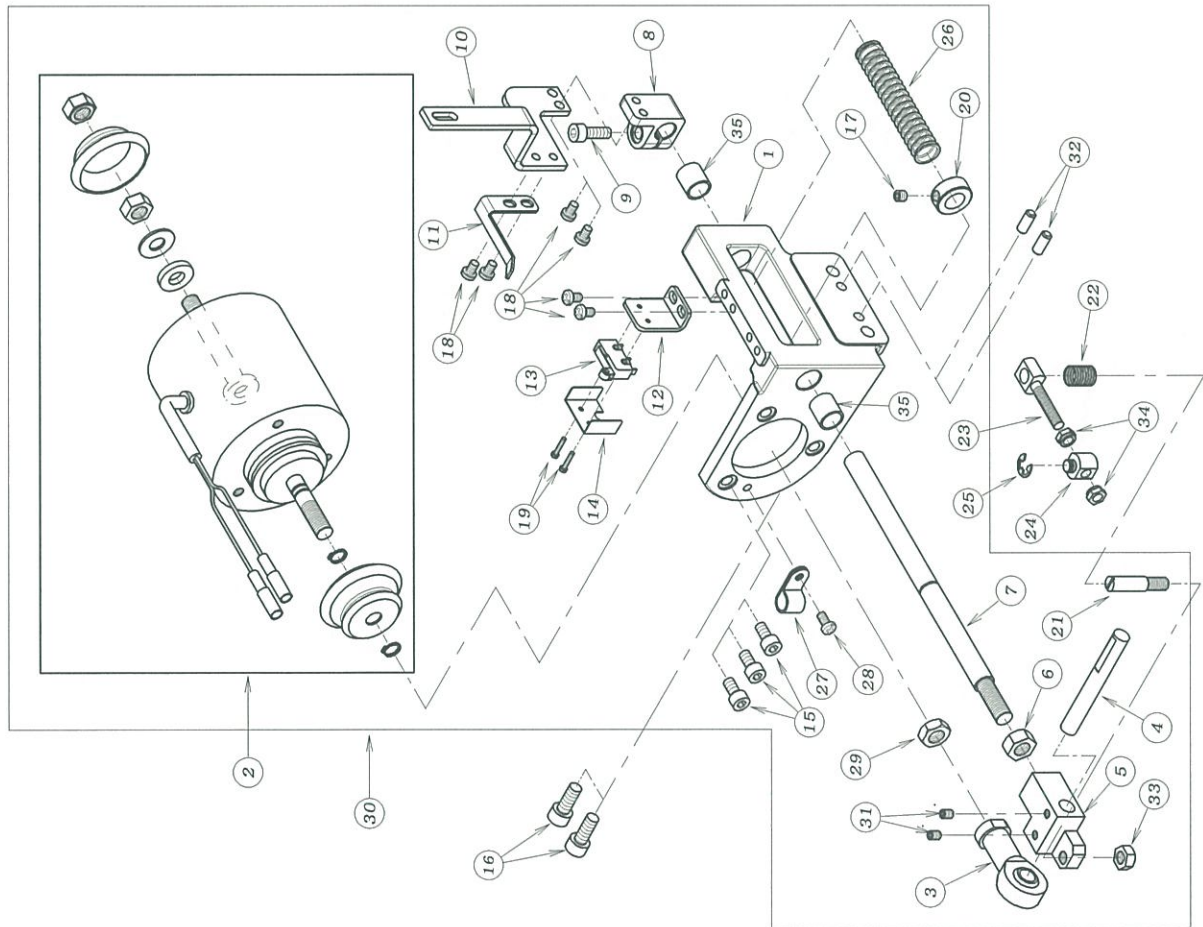
21. UT調整装置(エア式) THREAD TRIMMING MECHANISM (PNEUMATIC TYPE)



REF. NO.	PART NO.	品名	DESCRIPTION	Qty
21-01	05-901	シリンダ - 取付プレート	BRACKET	1
21-02	05-646	シリンダ - 取付プレート	PLATE	1
21-03	05-205	メス調整シリンダ -	CYLINDER	1
21-04	05-842	ロッドエンド	ROD	1
21-05	05-904	調整シヤフト	SHAFT	1
21-06	05-828	調整プレート	BRACKET	1
21-07	88-176	ナット	NUT	1
21-08	05-905	戻しシヤフト	SHAFT	1
21-09	05-927	プレート - 取付台	BRACKET	1
21-10	05-907	クッションゴム	SHOCK RUBBER	1
21-11	05-220	クッションストッパー	COLLAR	1
21-12	87-245	ネジ	SCREW	1
21-13	87-245	六角穴付きボルト	BOLT	1
21-14	05-647	調整ピン2連セット	SOLENOID VALVE ASSEMBLY	1
21-15	88-004	調整ピン1連	NUT	2
21-16	00-6114	UT調整装置	AIR CYLINDER ASSEMBLY	1
21-17	06-597	プラグ	PLUG	3
21-18	05-226	絶縁調整プレート	PLATE	1
21-19	05-294	絶縁調整プレート	SWITCH PLATE	1
21-20	05-910	スイッチ取付板	PLATE	1
21-21	05-911	スイッチ	SWITCH	1
21-22	05-912	スイッチカバー	COVER	1
21-23	87-213	ネジ	SCREW	3
21-24	87-171	ネジ	SCREW	2
21-25	87-181	ネジ	SCREW	2
21-26	87-481	ブライヤベシ	SCREW	6
21-27	87-282	十字穴付バネ小ネジ	SCREW	2
21-28	87-488	ブライヤベシ	SCREW	2
21-29	75-537	カラー	COLLAR	1
21-30	05-829	連結ピン(2)	PIN	1
21-31	79-540	連結ピン用スプリング	SPRING	1
21-32	05-913	連結ネジ	SCREW	1
21-33	05-045	連結ピン	PIN	1
21-34	93-211	Eリング	E RING	1
21-35	79-644	戻しバネ	SPRING	1
21-36	06-927	ナイロンクリップ	CORD CLAMP	1
21-37	87-482	ブライヤベシ	SCREW	1
21-38	06-580	スピードコントローラ	SPEED CONTROLLER	1
21-39	00-6083	メス調整シリンダ - セット	CYLINDER ASS'Y	2
21-40	71-208	ロックピン	PIN	2
21-41	88-166	ナット	NUT	1
21-42	05-484	フランジユニオンワイ	JOINT	2~3
21-43	05-482	ユニオンワイ	JOINT	1
21-44	00-6121	UT調整装置	AIR CYLINDER ASSEMBLY	1
21-45	05-648	調整ピン3連セット	SOLENOID VALVE ASSEMBLY	1
21-46	05-224	スピードコントローラ	SPEED CONTROLLER	2
21-47	05-224	異径ストローク	JOINT	1
21-48	87-274	ネジ	SCREW	1
21-49	81-588	ブッシュ	BUSHING	2
21-50	00-6140	UT調整装置	AIR CYLINDER ASSEMBLY	1
21-51	00-6123	UT調整装置	AIR CYLINDER ASSEMBLY	1

## 2.2. UT駆動装置 (電気式)

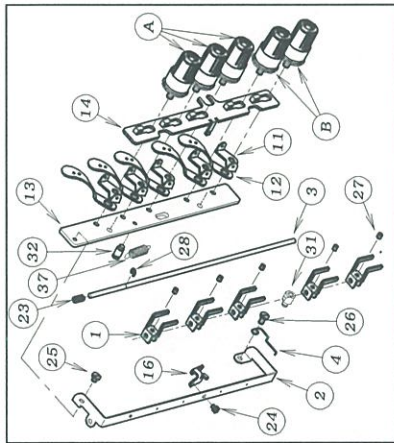
### THREAD TRIMMING MECHANISM (ELECTRIC TYPE)



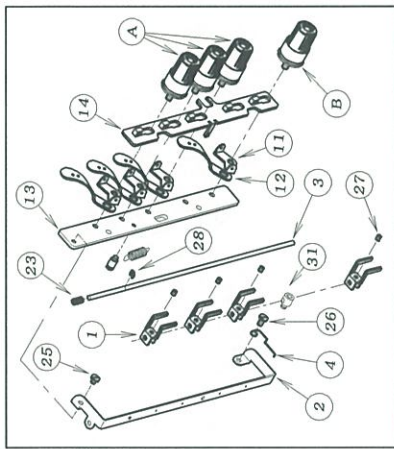
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
22-01	05-901	シリンダ-取付ラケット	BRACKET	1
22-02	06-336	メス用ソレノイド*	SOLENOID	1
22-03	05-842	ロッドエンド*	ROD	1
22-04	05-904	連結シャフト	SHAFT	1
22-05	05-828	連結ラケット	BRACKET	1
22-06	88-176	ナット	NUT	1
22-07	05-905	戻しシャフト	SHAFT	1
22-08	05-927	レバ-取付台	BRACKET	1
22-09	87-245	六角付きボルト	BOLT	1
22-10	05-226	糸巻用連結プレート	PLATE	1
22-11	05-294	スイッチガード*	SWITCH PLATE	1
22-12	05-910	スイッチ取付板	PLATE	1
22-13	05-911	スイッチ	SWITCH	1
22-14	05-912	スイッチカバー*	COVER	1
22-15	87-213	ネジ	SCREW	3
22-16	87-171	ネジ	SCREW	2
22-17	87-274	ネジ	SCREW	1
22-18	87-481	プラマイナボリねじ	SCREW	1
22-19	87-282	十字取付ネジ 小ネジ	SCREW	2
22-20	75-537	カラー	COLLAR	1
22-21	05-829	連結ピン (2)	PIN	1
22-22	79-540	連結ピン用スプリング*	SPRING	1
22-23	05-913	連結ネジ	SCREW	1
22-24	05-045	連結ピン (1)	PIN	1
22-25	93-211	Eリング*	E RING	1
22-26	79-642	戻しバネ	SPRING	1
22-27	06-928	ナイロンクリップ 7N	CODE CLAMP	1
22-28	87-482	プラマイナボリねじ	SCREW	1
22-29	88-179	ナット	NUT	1
22-30	00-6115	UT電機式下糸巻装置	SOLENOID ASSEMBLY	1
22-31	87-181	ネジ	SCREW	2
22-32	71-208	ノックピン	PIN	2
22-33	88-166	ナット	NUT	1
22-34	88-004	調節ナット	NUT	2
22-35	81-588	ブッシュ	BUSHING	2

23. 糸調子機構 (UT) THREAD TENSION MECHANISM (UT)

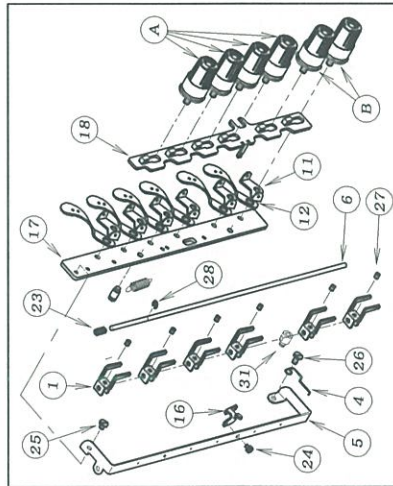
9803



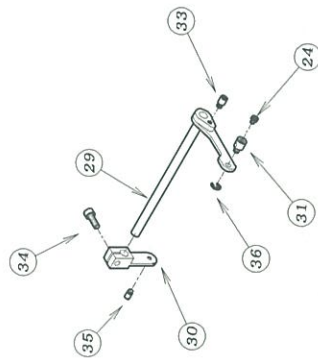
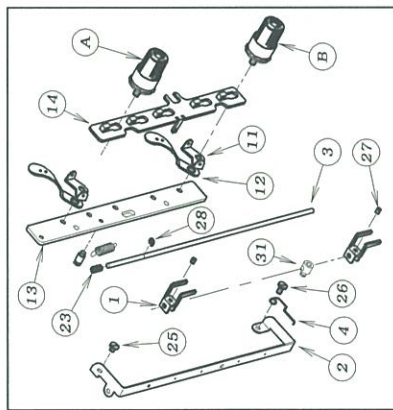
9703



9804



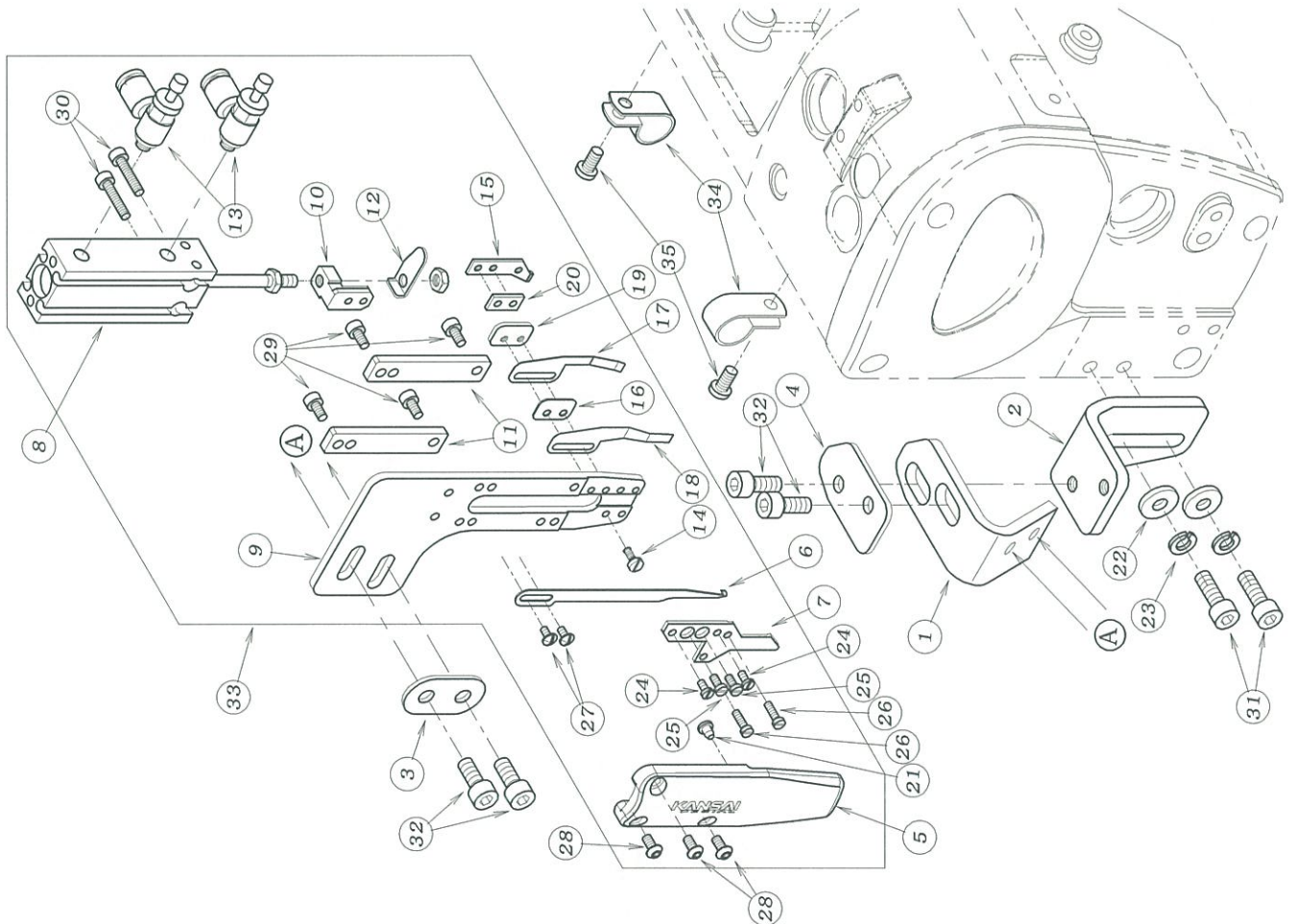
9701



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
23-01	105-850	糸繰めプロック (大)	HOLDER	*
23-02	05-956	糸繰め糸道	THREAD EYELET	1
23-03	105-957	糸繰め棒	SHAFT	1
23-04	05-961	糸繰め防振パネ	SPRING	1
23-05	105-962	糸繰め糸道	THREAD EYELET	1
23-06	05-963	糸繰め棒	SHAFT	1
23-07	123-324	フェルト	FELT	*
23-08	41-104	チャンポン皿小ケース	THREAD TENSION NUT	*
23-09	41-105	チャンポン皿ラチェット	SPRING POST	*
23-10	41-106	チャンポン皿大ケース	SPRING CUP	*
23-11	41-115	糸道 (上)	THREAD GUIDE	*
23-12	41-117	糸道 (下)	THREAD GUIDE	*
23-13	41-501	ブラケット	BRACKET	1
23-14	41-502	糸繰めプレート	THREAD RELEASER	1
23-15	41-509	チャンポン皿	TENSION DISC	*
23-16	41-514	ルーバ-糸道 (A)	THREAD EYELET	1
23-17	41-518	フ-ラケット	BRACKET	1
23-18	41-519	糸繰めプレート	THREAD RELEASER	1
23-19	41-526	調子棒カチ	COLLAR	*
23-20	41-527	調子棒	SCREW STUD	*
23-21	41-701	チャンポン調子パネ (強)	SPRING (HEAVY)	1
23-22	41-702	チャンポン調子パネ (弱)	SPRING (LIGHT)	1
23-23	79-542	糸繰め棒防振パネ	SPRING	1
23-24	84-364	ネジ	SCREW	2
23-25	84-553	ネジ	SCREW	1
23-26	84-574	ネジ	SCREW	1
23-27	87-286	ネジ	SCREW	1
23-28	93-201	エレング	E-RING	1
23-29	71-280	レバ-シャフト (UT)	SHAFT	1
23-30	05-958	クランクレバ-	LEVER	1
23-31	105-853	糸繰め連結片	HOLDER	1
23-32	84-501	ネジ	SCREW	1
23-33	84-561	ネジ	SCREW	1
23-34	87-224	六角穴付きボルト	BOLT	1
23-35	87-423	段ネジ	SCREW	1
23-36	93-205	エレング	E-RING	1
23-37	79-514	引張りパネ	SPRING	1
23-38	40-7510	チャンポンセット (強)	THREAD TENSION SET (HEAVE)	*
23-39	40-7520	チャンポンセット (弱)	THREAD TENSION SET (LIGHT)	*

24. 上飾り糸切装置 (エア一式)

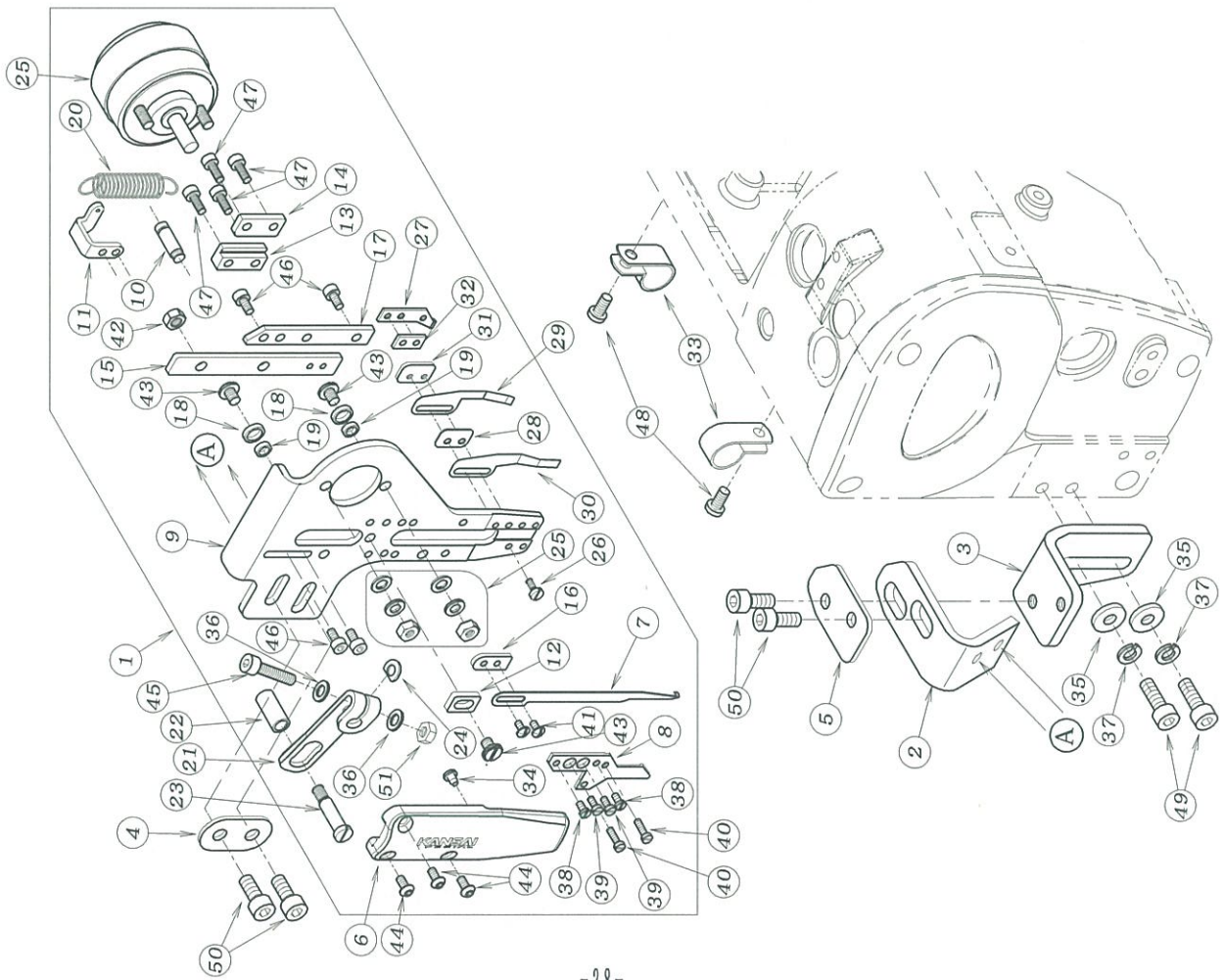
SPREADER THREAD TRIMMING MECHANISM (PNEUMATIC TYPE)



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
24-01	05-271	調節金具	BRACKET	1
24-02	05-272	取付ブラケット	BRACKET	1
24-03	05-273	取付金具 (1)	BRACKET	1
24-04	05-274	取付金具 (2)	BRACKET	1
24-05	05-275	カバー	COVER	1
24-06	05-276	可動メス	TRIMMING KNIFE	1
24-07	05-277	固定メス	FIXED KNIFE	1
24-08	05-278	エアシリンダー	AIR CYLINDER	1
24-09	05-279	取付ベースプレート	BASE PLATE	1
24-10	05-280	シリンダーブロック	CYLINDER BLOCK	1
24-11	05-281	ガイド	GUIDE	2
24-12	05-282	調節レバー	LEVER	1
24-13	05-481	スピードコントローラ	SPEED CONTROLLER	2
24-14	06-601	ネジ	SCREW	1
24-15	06-602	ハネ調節ライナー	LINER	1
24-16	06-603	メス裏ハネライナー	LINER	1
24-17	06-604	メス裏ハネ (溝)	LEAF SPRING	1
24-18	06-605	メス裏ハネ (朝)	LEAF SPRING	1
24-19	06-608	裏ハネ止板	PLATE	1
24-20	06-630	ハネ調節ベース板	PLATE	1
24-21	23-512	クッションゴム	CUSHION RUBBER	1
24-22	75-456	ワッシャー	WASHER	2
24-23	75-526	スプリング ワッシャー	SPRING WASHER	2
24-24	85-102	ネジ	SCREW	2
24-25	85-105	ネジ	SCREW	2
24-26	85-106	ネジ	SCREW	2
24-27	85-613	ネジ	SCREW	2
24-28	87-099	ネジ	SCREW	3
24-29	87-123	六角穴付きボルト	BOLT	4
24-30	87-140	六角穴付きボルト	BOLT	2
24-31	87-245	六角穴付きボルト	BOLT	2
24-32	87-252	六角穴付きボルト	BOLT	4
24-33	00-8096	上飾り糸切セット (エア)	THREAD TRIM ASS'Y (AIR)	1
24-34	06-928	ナイロンクリップ	CLAMP	2
24-35	87-482	プラマイナベ小ねじ	SCREW	2

# 25. 上飾り糸切装置 (電気式)

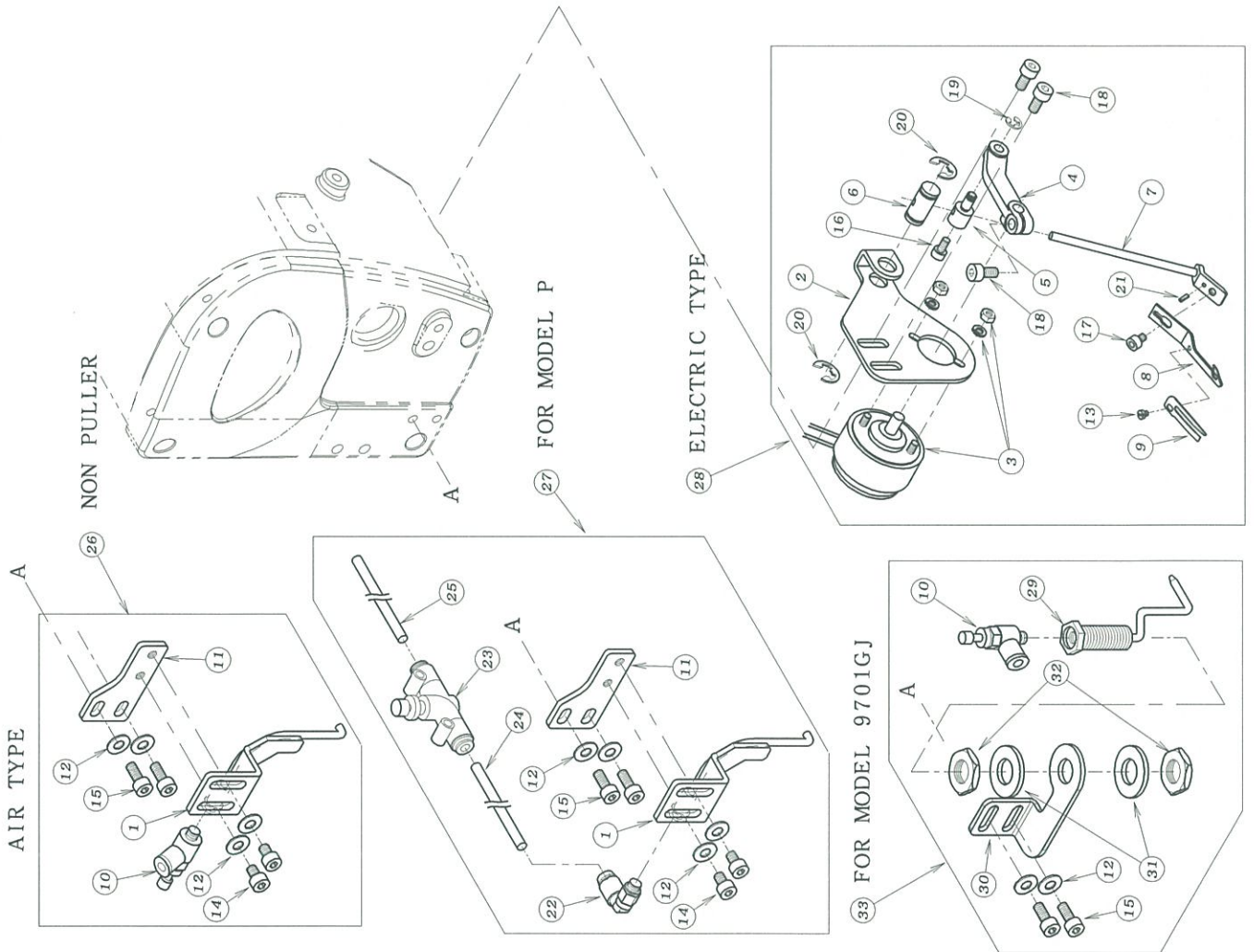
## SPREADER THREAD TRIMMING MECHANISM (ELECTRIC TYPE)



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
25-01	00-8097	上飾り糸切セット (電気式)	THREAD TRIM ASS'Y	1
25-02	05-271	調節金具	BRACKET	1
25-03	05-272	取付ブラケット	BRACKET	1
25-04	05-273	取付金具 (1)	BRACKET	1
25-05	05-274	取付金具 (2)	BRACKET	1
25-06	05-275	カバー	COVER	1
25-07	05-276	可動メス	TRIMMING KNIFE	1
25-08	05-277	固定メス	FIXED KNIFE	1
25-09	05-283	取付ベースプレート	BASE PLATE	1
25-10	05-284	ピン	PIN	1
25-11	05-285	フック	HANGER	1
25-12	05-286	ストップバー	STOP PLATE	1
25-13	05-287	メス押えカバー (A)	COVER	1
25-14	05-288	メス押えカバー (B)	COVER	1
25-15	05-289	可動メスベース	BRACKET	1
25-16	05-290	スペーサー	PLATE	1
25-17	05-291	ガイド	GUIDE	1
25-18	05-881	カイトローラー	GUIDE ROLLER	1
25-19	05-882	カイトローラー (小)	GUIDE ROLLER	2
25-20	06-367	引張コイルハネ	SPRING	1
25-21	06-371	ソレノイド 回転レバー	LEVER	1
25-22	06-372	カイトローラー	GUIDE ROLLER	1
25-23	06-374	カイトローラー	GUIDE SCREW	1
25-24	06-375	スペーサー	WASHER	1
25-25	06-376	ロータリーソレノイド	SOLENOID	1
25-26	06-601	ネジ	SCREW	1
25-27	06-602	ハネ調節ライナー	LINER	1
25-28	06-603	メス裏ハネライナー	LINER	1
25-29	06-604	メス裏ハネ (溝)	LEAF SPRING	1
25-30	06-605	メス裏ハネ (卵)	LEAF SPRING	1
25-31	06-608	裏ハネ止板	PLATE	1
25-32	06-630	ハネ調節スペーサー板	PLATE	1
25-33	06-928	ナイロンクリップ	CLAMP	2
25-34	23-512	クッションゴム	CUSHION RUBBER	1
25-35	75-456	ワッシャ	WASHER	2
25-36	75-468	ワッシャ	WASHER	2
25-37	75-526	スプリング ワッシャ	SPRING WASHER	2
25-38	85-102	ネジ	SCREW	2
25-39	85-105	ネジ	SCREW	2
25-40	85-106	ネジ	SCREW	2
25-41	85-613	ネジ	SCREW	2
25-42	86-311	ナット	NUT	1
25-43	87-080	ネジ	SCREW	3
25-44	87-099	ネジ	SCREW	3
25-45	87-112	六角穴付きボルト	BOLT	1
25-46	87-123	六角穴付きボルト	BOLT	4
25-47	87-124	ネジ	SCREW	4
25-48	87-482	プラマイナベ小ねじ	SCREW	2
25-49	87-245	六角穴付きボルト	BOLT	2
25-50	87-252	六角穴付きボルト	BOLT	4
25-51	88-146	ナット	NUT	1

# 26. 上糸払い装置 THREAD WIPER MECHANISM

REF. NO.	PART NO.	品名	DESCRIPTION	QTY
26-01	06-283	エアノズル	AIR NOZZLE	1
26-02	06-491	ソレノイド 取付台	BRACKET	1
26-03	06-492	ソレノイド	SOLENOID	1
26-04	06-493	ソレノイドレバ	LEVER	1
26-05	06-494	取付ピン	PIN	1
26-06	06-495	案内ピン	GUIDE PIN	1
26-07	06-496	ソレノイド取付台	BRACKET	1
26-08	06-497	ワイパー	WIPER	1
26-09	06-498	糸抜きハネ	SPRING	1
26-10	06-559	スピードコントローラ	SPEED CONTROLLER	1
26-11	27-236	エアノズル取付プレート	BRACKET	1
26-12	75-455	ワッシャ	WASHER	4
26-13	87-091	ネジ	SCREW	1
26-14	87-092	六角穴付きボルト	BOLT	2
26-15	87-113	六角穴付きボルト	BOLT	2
26-16	87-123	六角穴付きボルト	BOLT	1
26-17	87-142	ネジ	SCREW	1
26-18	87-177	六角穴付きボルト	BOLT	3
26-19	93-201	Eリング	E-RING	1
26-20	93-213	E環止め輪	E-RING	2
26-21	93-717	スプリングピン	SPRING PIN	1
26-22	05-202	エルボユニオン	JOINT	1
26-23	05-640	スピードコントローラ	SPEED CONTROLLER	1
26-24	05-495	エアチューブ φ4x260mm	AIR TUBE φ4x260mm	1
26-25	05-493	エアチューブ φ4x400mm	AIR TUBE φ4x400mm	1
26-26	00-8036	糸払い装置 (エア)	WIPER MECHANISM ASS'Y (AIR)	1
26-27	00-8037	糸払い装置 (エア)	WIPER MECHANISM ASS'Y (AIR)	1
26-28	00-8045	糸払い装置 (電気)	WIPER MECHANISM ASS'Y (ELECTRIC)	1
26-29	06-282	エアノズル	AIR NOZZLE	1
26-30	27-369	エアノズル取付プレート	BRACKET	1
26-31	75-538	ワッシャ	WASHER	2
26-32	86-801	ナット	NUT	2
26-33	00-8038	糸払い装置 (エア)	WIPER MECHANISM ASS'Y (AIR)	2

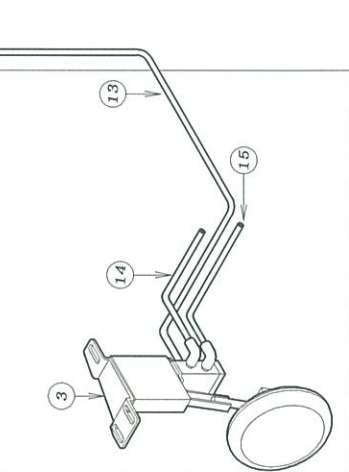
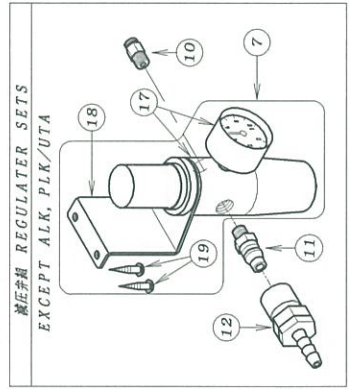
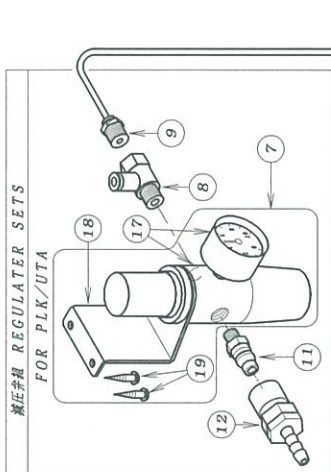
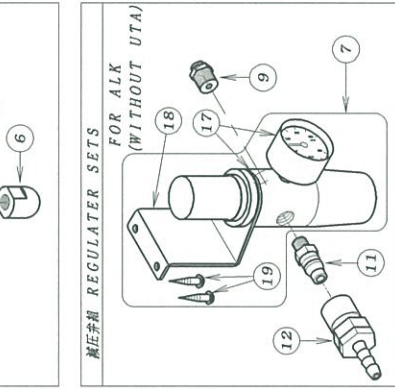
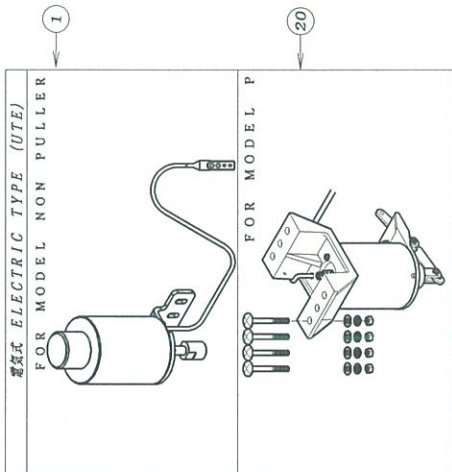
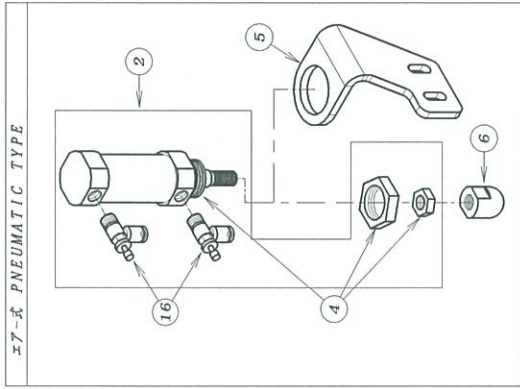




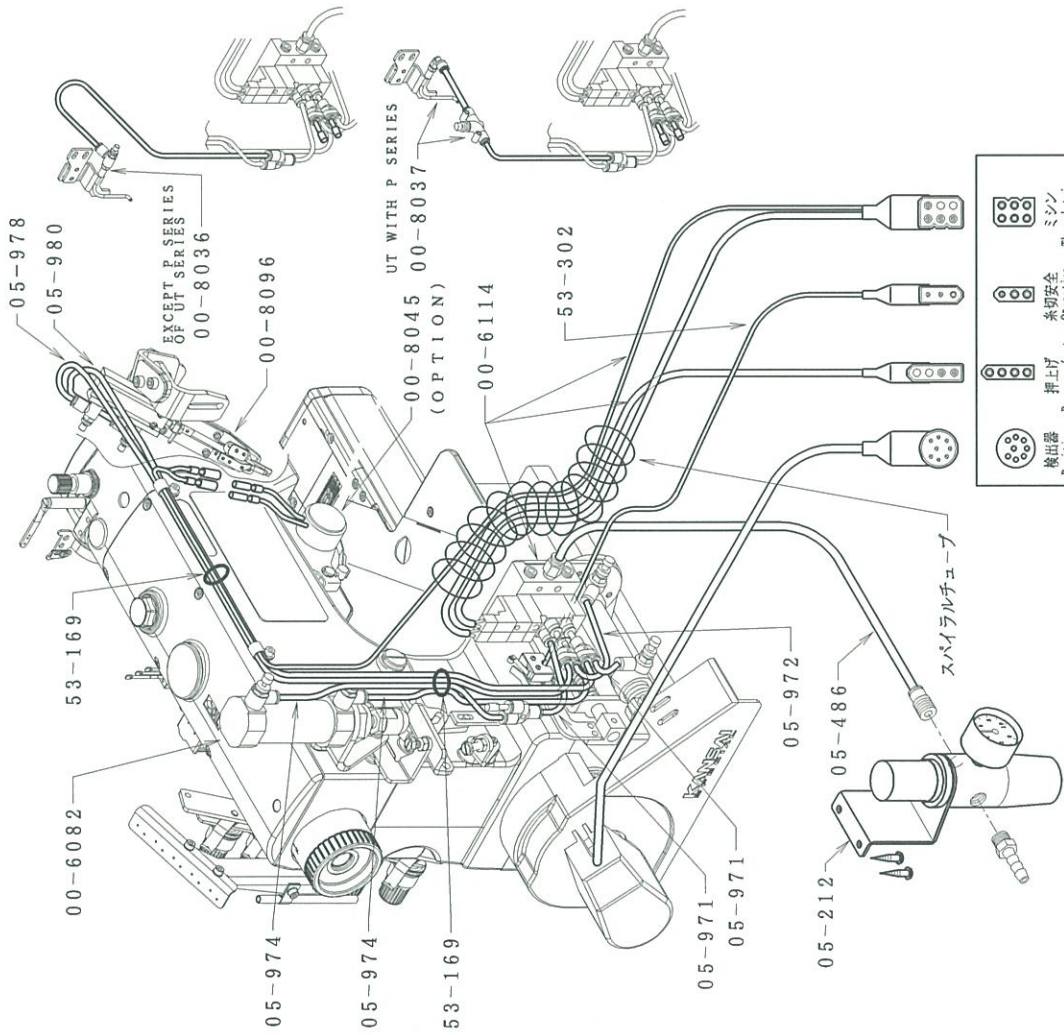
## 27. 押え揚げ装置, レギュレーターセット, 膝スイッチ機構

### FOOT LIFTER MECHANISM, REGULATOR SETS, KNEE SWITCH MECHANISM

REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
27-01	100-8099	電気式押え揚装置	FOOT LIFTER SOLENOID ASS'Y	1
27-02	100-6082	押え揚ボリダゲセット	AIR CYLINDER ASS'Y	1
27-03	100-6118	膝スイッチセット	KNEE SWITCH ASS'Y	1
27-04	105-207	押え揚ボリダゲ	AIR CYLINDER	1
27-05	177-032	シリンダゲブブラケット	BRACKET	1
27-06	105-897	作動金具	BRACKET	1
27-07	105-212	フィルタレキ・ユレータ	REGULATOR	1
27-08	105-214	ユニハ・サルメスエルボ	JOINT	1
27-09	105-217	ハブユニオン	JOINT	1
27-10	105-218	レキ・ユレータ用継手	JOINT	1
27-11	106-516	カブ・ラマス	CONNECTOR	1
27-12	106-517	カブ・ラマス	CONNECTOR	1
27-13	105-932	エアチューブ φ4x1500mm	AIR TUBE φ4x1500mm	1
27-14	105-938	エアチューブ φ4x450mm	AIR TUBE φ4x450mm	1
27-15	105-939	エアチューブ φ4x500mm	AIR TUBE φ4x500mm	1
27-16	106-580	スピードコントローラ	SPEED CONTROLLER	2
27-17	105-2120-A	フィルタ・レキ・ユレータ	REGULATOR	1
27-18	105-2120-B	取付けブラケット	BRACKET	1
27-19	187-905	木ネジ	SCREW	2
27-20	100-8028	UT電気式押え揚げ装置	FOOT LIFTER SOLENOID ASS'Y	1

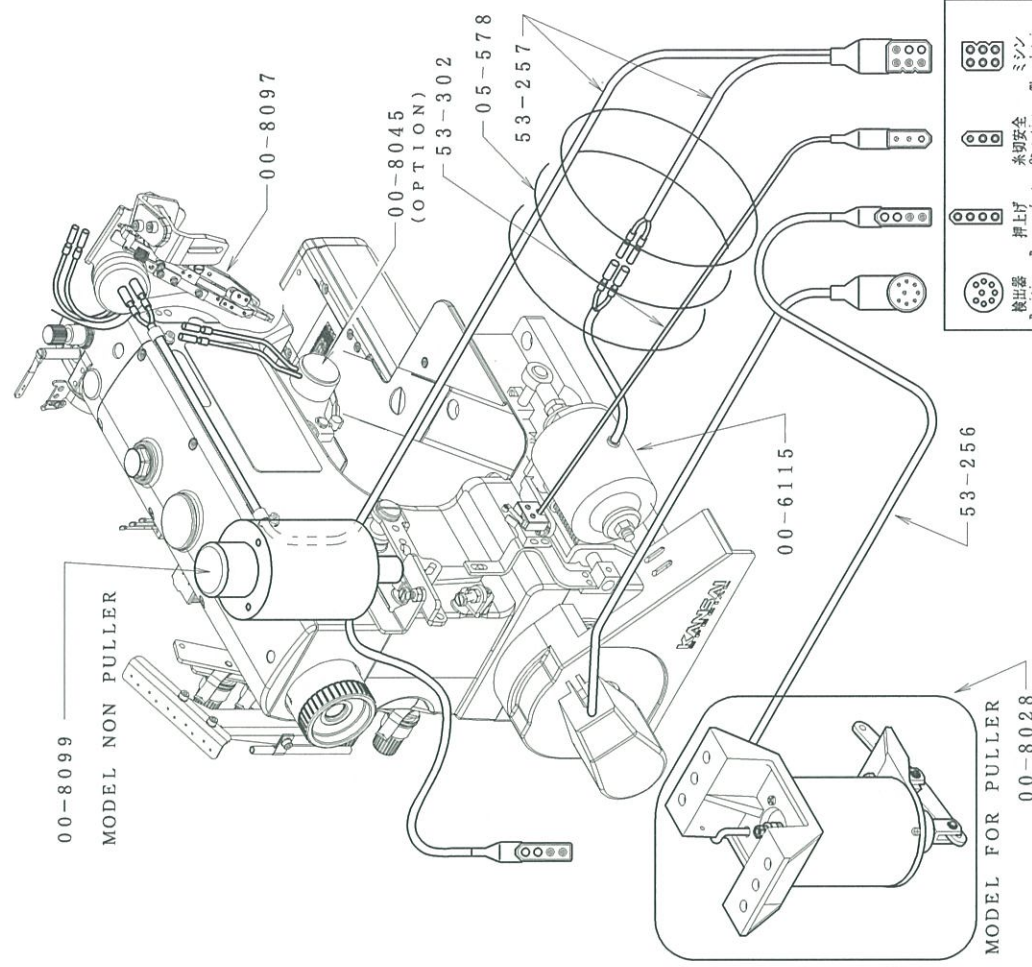


28-1. 配管, 配線図 (エア-式) WIRING AND PIPING (PNEUMATIC TYPE)



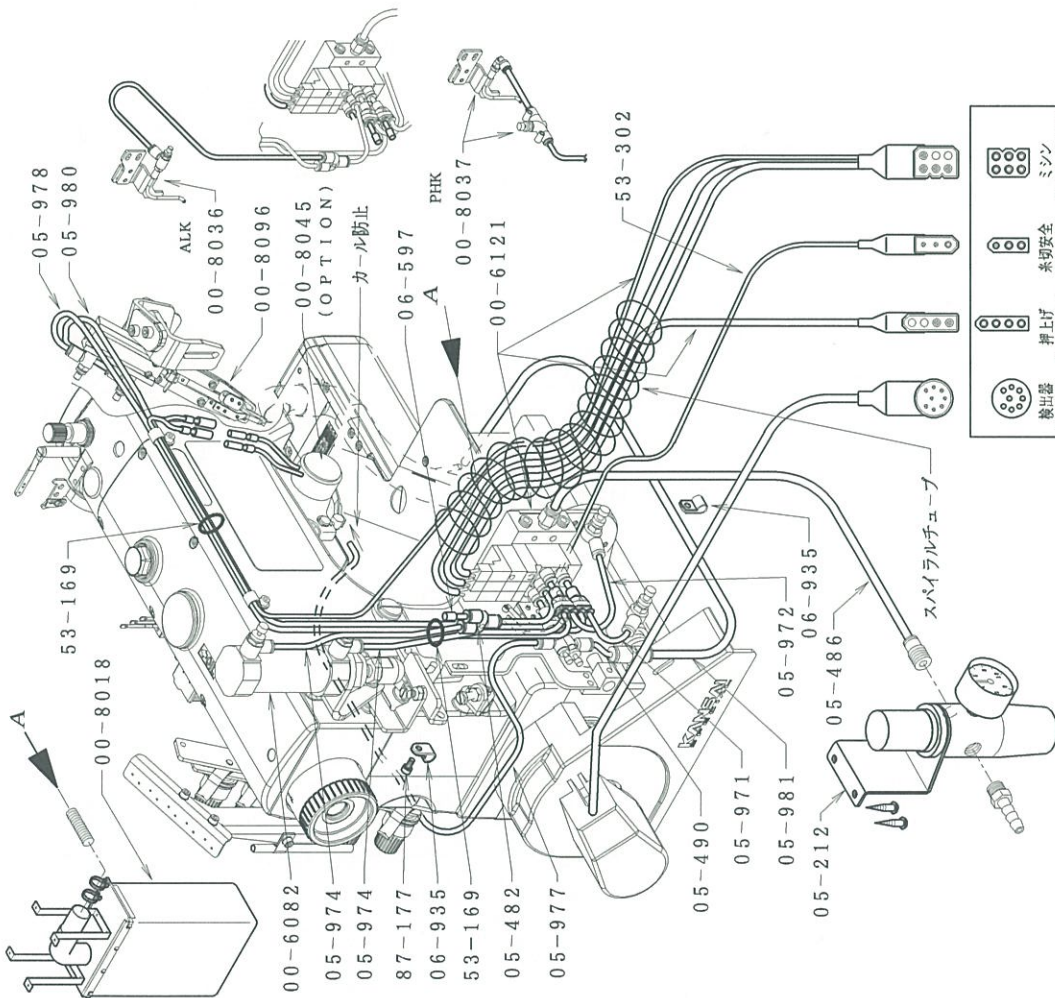
PART NO.	品名	description
00-8096	上糸糸切装置 (エア-式)	spreader thread trimming mechanism (AIR TYPE)
00-8036	上糸払い装置 (エア-式)	thread wiper mechanism ass'y (air)
00-8037	上糸払い装置 (エア-式)	thread wiper mechanism ass'y (air)
00-6082	押脚シリンダ-セット	presser foot lifter cylinder ass'y
00-6114	UT空圧装置	air cylinder assembly (UTA)
05-212	レギュレータ	regulator
00-8045	上糸払い装置 (電気)	thread wiper mechanism ass'y (electric)

28-2. 配線図 (電気式) CORD CONNECTION (ELECTRIC TYPE)



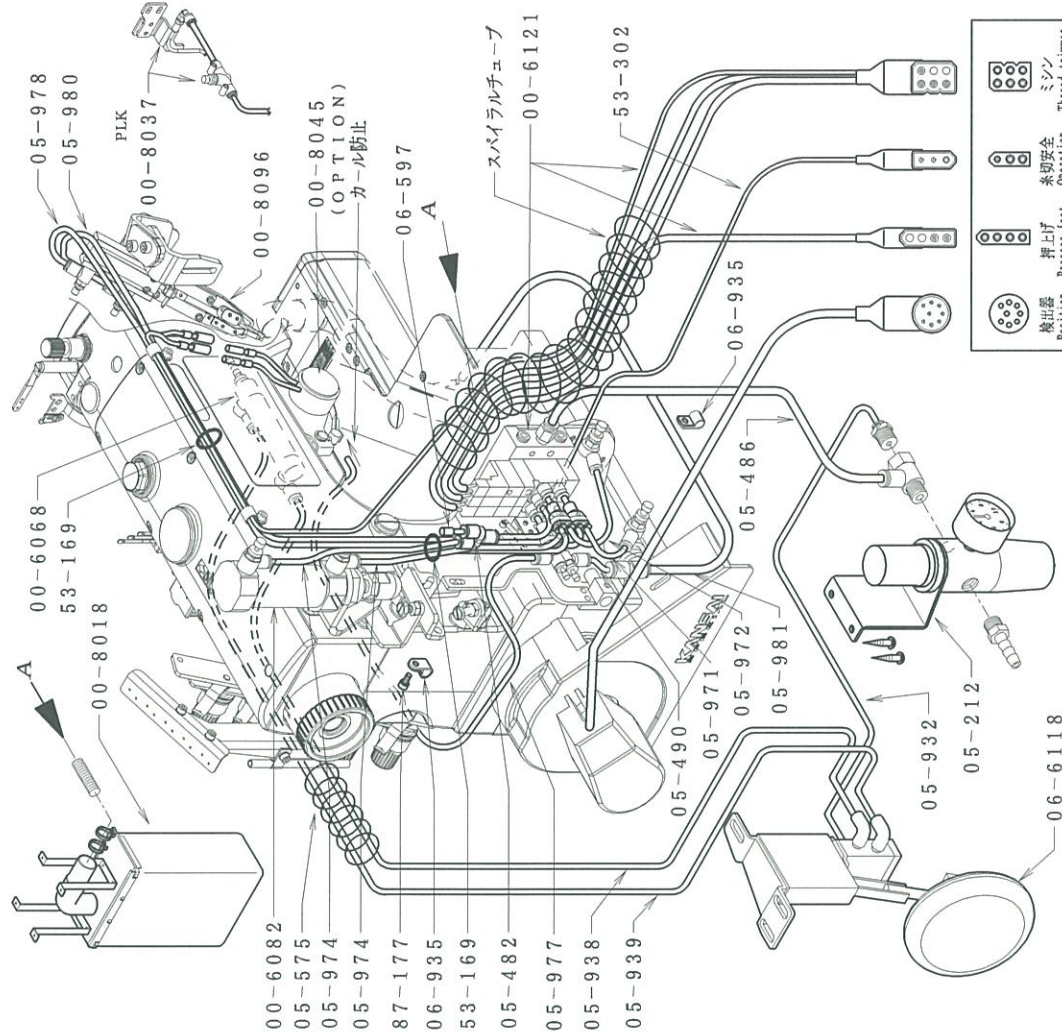
PART NO.	品名	description
00-8097	上糸糸切装置	spreader thread trimming mechanism
00-8099	UT電気式押脚升装置	presser foot lifter solenoid ass'y (FOR NON PULLER)
00-8028	UT電気式押脚升装置	presser foot lifter solenoid ass'y (FOR PULLER)
00-6115	UT電気式下糸切装置	solenoid assembly (UTE)
00-8045	上糸払い装置	thread wiper mechanism ass'y (electric)
53-257	中継コード	relay cord

28-3. 配管, 配線図 (ALK, PHK エア-式) WIRING AND PIPING (PNEUMATIC TYPE)



PART NO.	品名	description
00-8096	上飾糸切装置 (エア-式)	spreader thread trimming mechanism (AIR TYPE)
00-8036	上糸払い装置 (エア-式)	thread wiper mechanism ass'y (air)
00-8037	上糸払い装置 (エア-式)	thread wiper mechanism ass'y (air)
00-6082	押巻シリンダ-セット	presser foot lifter cylinder ass'y
00-6121	UT空圧装置	air cylinder assembly (UTA)
05-212	レギュレータ	regulator
00-8018	集塵袋セット	dust bag assembly
00-8045	上糸払い装置 (電気)	thread wiper mechanism ass'y (electric)

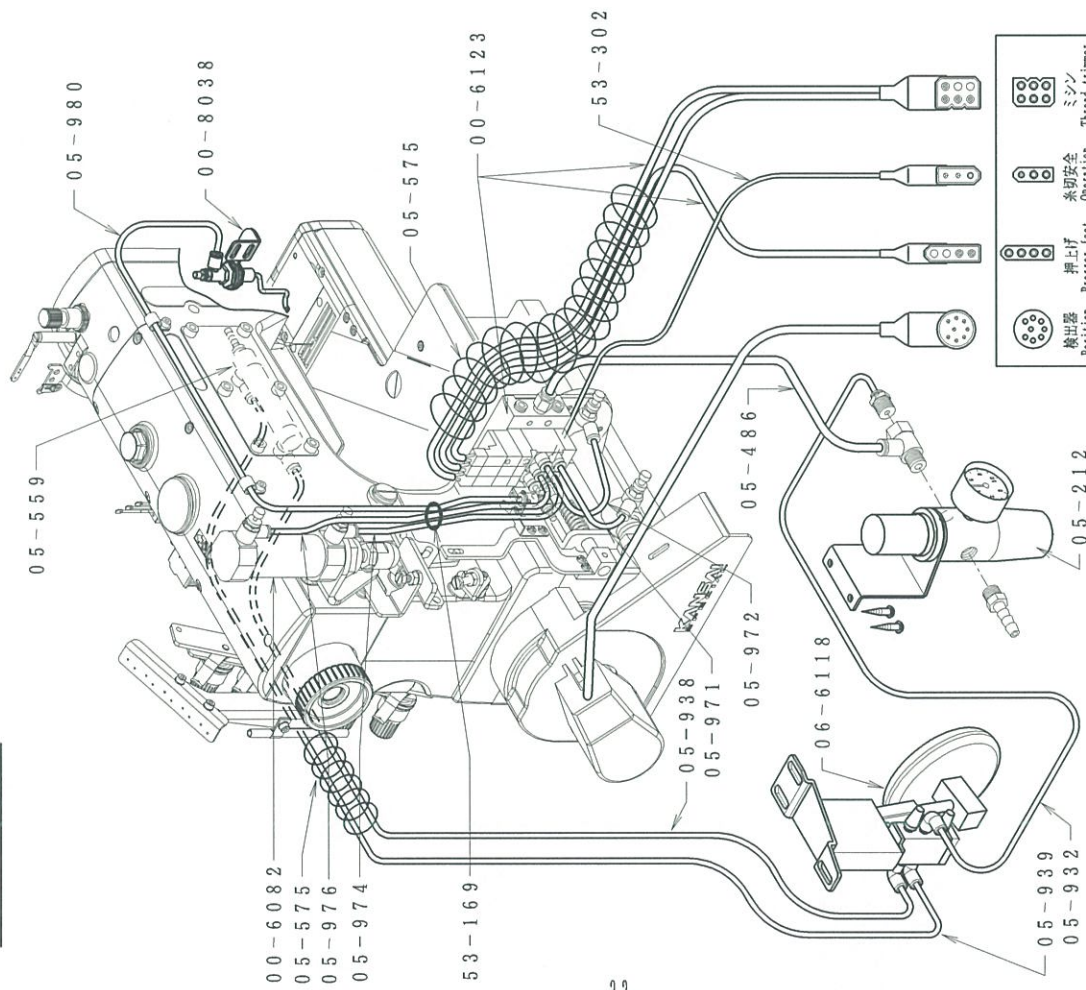
28-4. 配管, 配線図 (PLK エア-式) WIRING AND PIPING (PNEUMATIC TYPE)



PART NO.	品名	description
00-8096	上飾糸切装置 (エア-式)	spreader thread trimming mechanism (AIR TYPE)
00-8037	上糸払い装置 (エア-式)	thread wiper mechanism ass'y (air)
00-6082	押巻シリンダ-セット	presser foot lifter cylinder ass'y
00-6121	UT空圧装置	air cylinder assembly (UTA)
05-212	レギュレータ	regulator
00-8018	集塵袋セット	dust bag assembly
00-8045	上糸払い装置 (電気)	thread wiper mechanism ass'y (electric)

28-5. 配管, 配線図 (J エア-式) WIRING AND PIPING (PNEUMATIC TYPE)

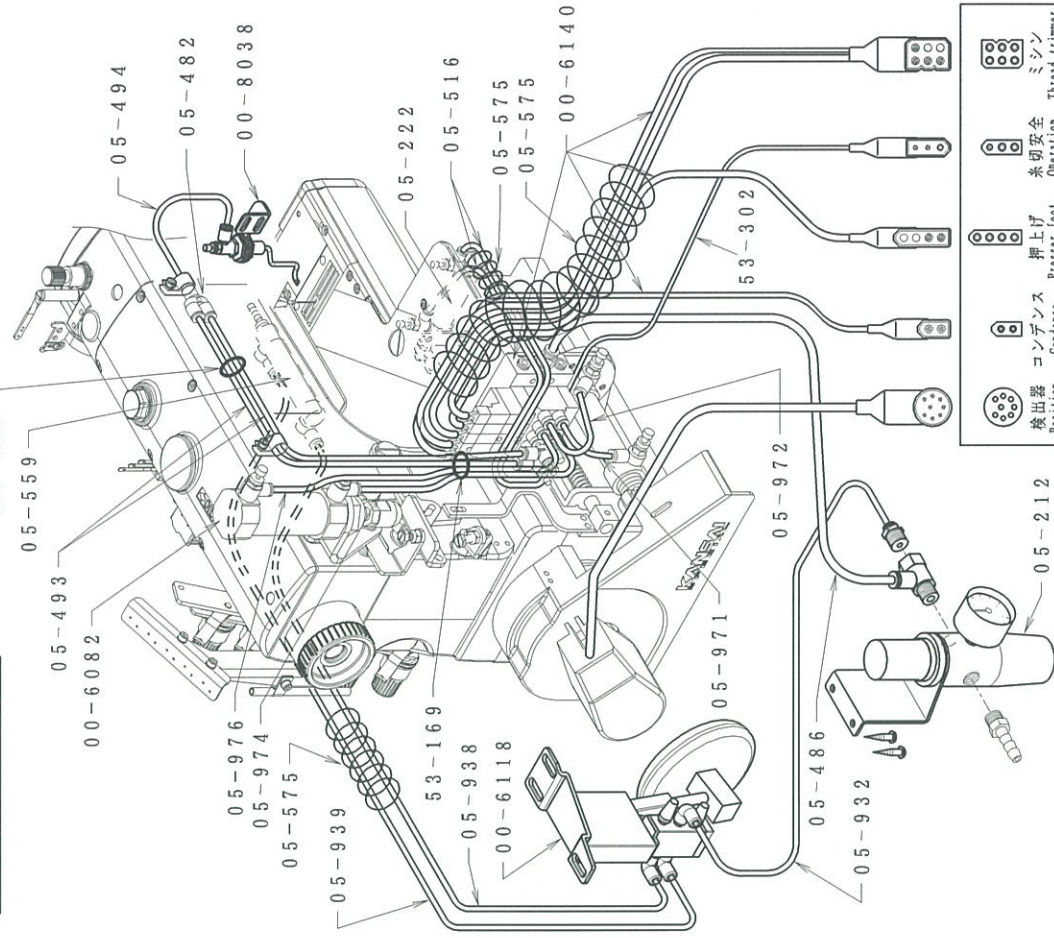
9701J-UTAB



PART NO.	品名	description
00-8038	上糸払い装置 (エア-式)	thread wiper mechanism ass'y (air)
00-6082	押揚シリンダ-セット	presser foot lifter cylinder ass'y
00-6123	UT空圧装置	air cylinder assembly (UTA)
05-212	レギュレータ	regulator
00-6118	膝スイッチセット	knee switch ass'y

28-6. 配管, 配線図 (J-CD エア-式) WIRING AND PIPING (PNEUMATIC TYPE)

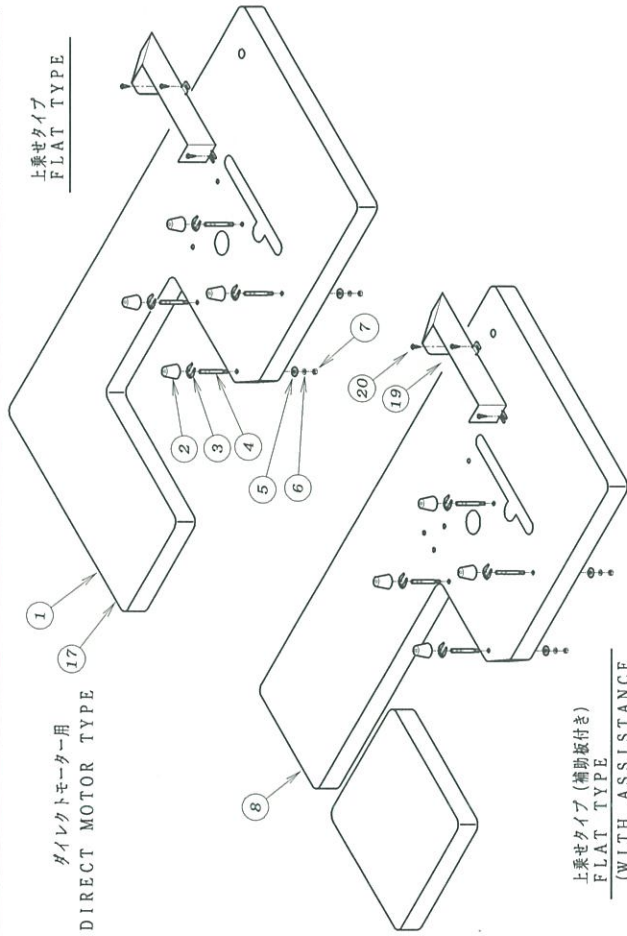
9701J-CD-UTAB



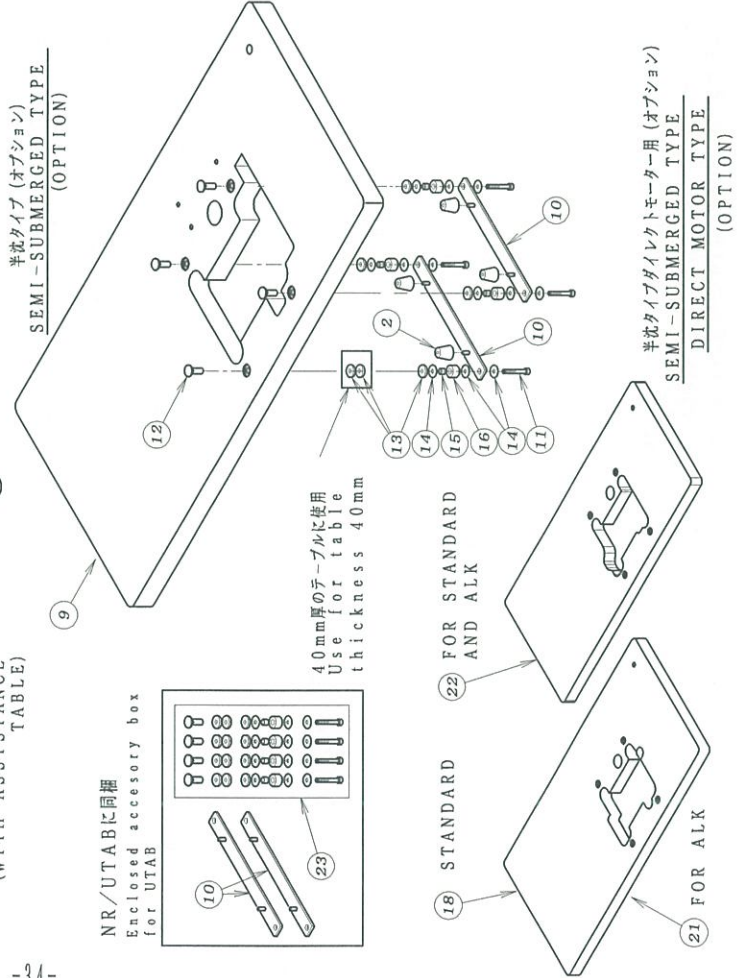
PART NO.	品名	description
00-8038	上糸払い装置 (エア-式)	thread wiper mechanism ass'y (air)
00-6082	押揚シリンダ-セット	presser foot lifter cylinder ass'y
00-6140	UT空圧装置	air cylinder assembly (UTA)
05-212	レギュレータ	regulator
00-6118	膝スイッチセット	knee switch ass'y

# 29. テーブル関係 TABLE

REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
29-01	21-027	シリンダー-フラットテーブル	FLAT TABLE	1
29-02	23-509	クッションゴム	CUSHION RUBBER	4
29-03	93-501	U型止め輪	U-RING	4
29-04	42-501	クッションゴム取付ネジ	SCREW	4
29-05	75-536	平ワッシャー	WASHER	4
29-06	75-527	M6用平ワッシャー	WASHER	4
29-07	88-166	固定ナット	NUT	4
29-08	21-025	補助取付テーブル	WITH ASSISTANCE TABLE	1
29-09	21-026	シリンダー-半沈没テーブル	SEMI SUBMERGED TABLE	1
29-10	25-524	タンク取付金具(D)	SUPPORTING BOARD	2
29-11	87-281	六角穴付ボルト	BOLT	4
29-12	42-503	本体取付ナット	NUT	4
29-13	42-507	スペーサー	SPACER	4
29-14	75-535	ワッシャー	WASHER	12
29-15	42-509	防振ゴムカラー	SWING PROOF RUBBER COLLAR	4
29-16	42-508	防振ゴム	SWING PROOF RUBBER	4
29-17	27-312	上乗せテーブルダイレクトモーター用	FLAT TABLE DIRECT MOTOR	1
29-18	27-311	半沈没テーブルダイレクトモーター用	SEMI SUBMERGED TABLE DIRECT MOTOR	1
29-19	21-629W	補助カバー	COVER	1
29-20	87-901	ネジ	SCREW	3
29-21	27-354	半沈没テーブルダイレクトモーター用	SEMI SUBMERGED TABLE DIRECT MOTOR	1
29-22	NR-789	半沈没テーブルダイレクトモーター用	SEMI SUBMERGED TABLE DIRECT MOTOR	1
29-23	20-0040	ミシン取付部品セット	ACCESSORIES	1



上乗せタイプ (補助板付き)  
FLAT TYPE  
(WITH ASSISTANCE TABLE)



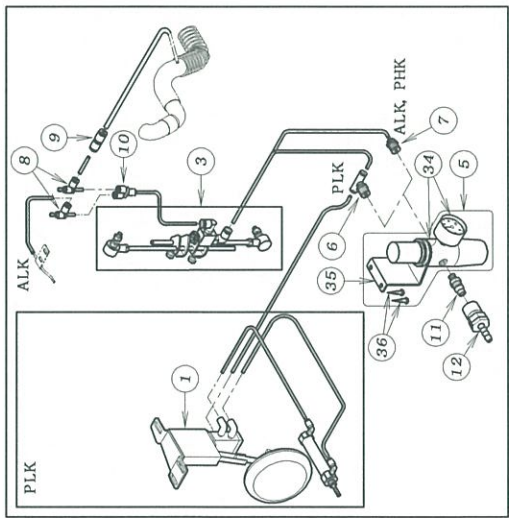
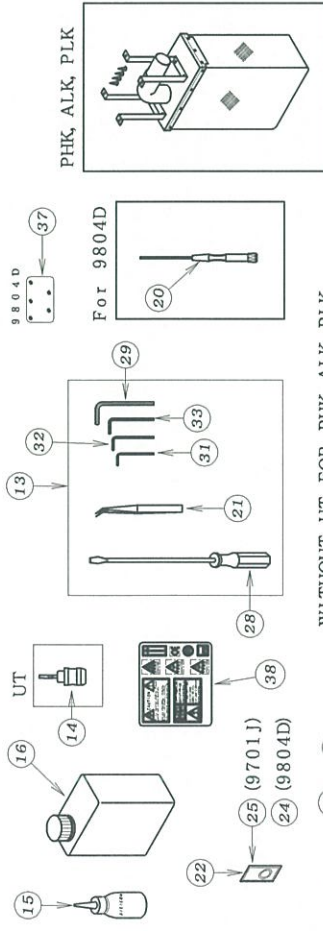
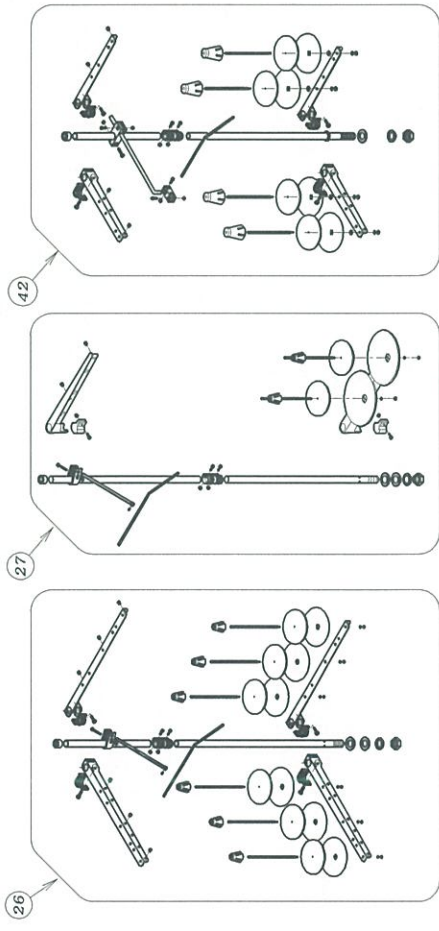
NR/UTABに同梱  
Enclosed accessory box  
for UTAB

40mm厚のテーブルに使用  
Use for table  
thickness 40mm

FOR STANDARD  
AND ALK

FOR ALK

# 30. 糸立て及びアクセサリ-関係 THREAD STAND AND ACCESSORIES



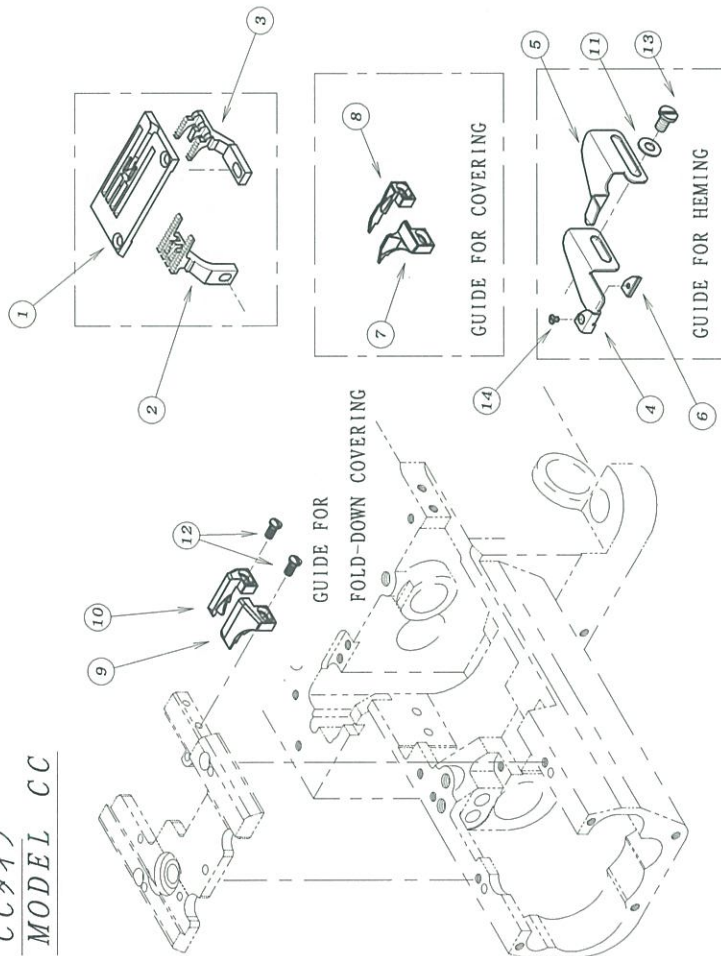
エアー式 UT は除く  
EXCEPT UT (PNEUMATIC TYPE)

REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
30-01	100-6118	膝スイッチセット	KNEE SWITCH ASS'Y	1
30-02	87-104	ネジ	SCREW	5
30-03	100-8014	吸込み用パルプセット	TREADLE AIR SWITCH ASSEMBLY	1
30-04	100-8018	集塵袋セット	FABRIC BAG ASSEMBLY	1
30-05	105-212	フィルタレキユレータ	REGULATOR	1
30-06	105-215	両口チークスユニオン	JOINT	1
30-07	105-217	ハーフユニオン	JOINT	1
30-08	105-221	スピードコントローラ	SPEED CONTROLLER	2
30-09	105-224	異径ストレート	JOINT	1
30-10	105-482	ユニオンワイ	CONNECTOR	1
30-11	106-516	カプラメス	CONNECTOR	1
30-12	106-517	カプラメス	CONNECTOR	1
30-13	20-0010	付属部品ケース	ACCESSORIES	1
30-14	28-454	トライハブ(小)	DRIVER (SMALL)	1
30-15	28-612	シリコンオイル	SILICON OIL	1
30-16	28-618	オイル	OIL	1
30-17	28-614	油差し	OILER	1
30-18	28-615	シヨウコ	OIL FUNNEL	1
30-19	28-920	チェーン	CHAIN	1
30-20	28-318	精密メイトドライブ-2.5mm	SCREWDRIVER	1
30-21	28-011	ピンセット	TWEZERS	1
30-22	13-0110-6	針 UYX128GAS #11	NEEDLE UYX128GAS #11	1
30-23	28-557	シンカパー	COVER	1
30-24	13-3020-5	針 SM1014H #10S	NEEDLE (9804D-6.4mm) #10S	1
30-25	13-1510-5	針 TVX5 #21	NEEDLE TVX5 #21 (RX9701J)	1
30-26	42-706	6本糸立	THREAD STAND ASSEMBLY	1
30-27	42-002	2本糸立	THREAD STAND ASSEMBLY	1
30-28	28-452	ドライブ(大)	DRIVER (LARGE)	1
30-29	28-314	六角レンチ 5mm	ALLEN KEY (5mm)	1
30-30	28-317	グリッパ付六角レンチ 1.5mm	ALLEN KEY (1.5mm)	1
30-31	28-311	六角レンチ 2mm	ALLEN KEY (2mm)	1
30-32	28-312	六角レンチ 2.5mm	ALLEN KEY (2.5mm)	1
30-33	28-313	六角レンチ 3mm	ALLEN KEY (3mm)	1
30-34	105-2120-A	フィルタレキユレータ	REGULATOR	1
30-35	105-2120-B	取付けブラケット	BRACKET	1
30-36	87-905	木ネジ	SCREW	2
30-37	85-603	ネジ	SCREW	5
30-38	20-6200	警告ラベルシール	INFORMATION SEAL	1
30-39	100-8036	糸払い装置(エア)	WIPER MECHANISM ASS'Y (AIR)	1
30-40	100-8037	糸払い装置(エア)	WIPER MECHANISM ASS'Y (AIR)	1
30-41	28-610	酸化防止剤	CORROSION INHIBITOR	1
30-42	42-704	4本糸立て	THREAD STAND ASSEMBLY	1

31. CCタイプ, Pタイプ 生地ガイド関係

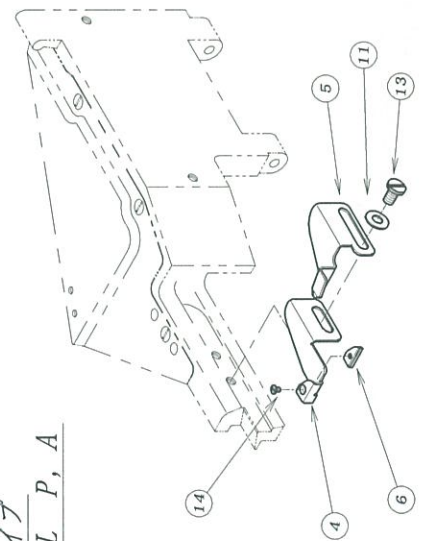
FABRIC GUIDE FOR MODEL CC, P, A

CCタイプ  
MODEL CC



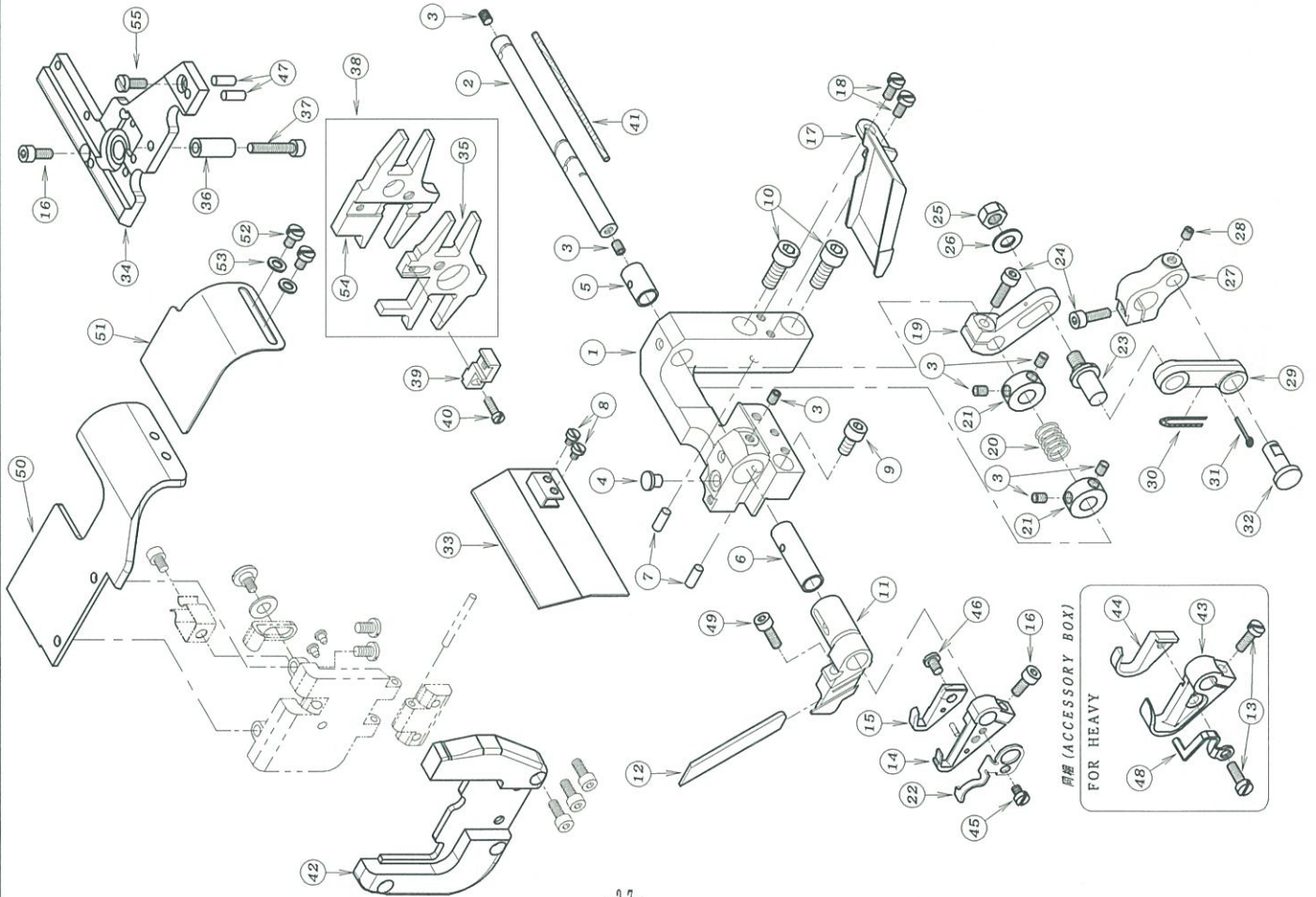
\*Enclosing accessory box

P, Aタイプ  
MODEL P, A



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
31-01*		針板	NEEDLE PLATE	1
31-02*		後送歯	REAR FEED DOG	1
31-03*		前送歯	FRONT FEED DOG	1
31-04	26-556	裾引定規(左)	HEMMING GUIDE (LEFT)	2
31-05	26-557	裾引定規(右)	HEMMING GUIDE (RIGHT)	2
31-06	26-558	定規チップ	FOLDER CHIP	2
31-07	26-831	C用ガイド左	EDGE GUIDE (LEFT)	1
31-08	26-832	C用ガイド右	EDGE GUIDE (RIGHT)	1
31-09	26-833	CL用ガイド左	EDGE GUIDE (LEFT)	1
31-10	26-834	CL用ガイド右	EDGE GUIDE (RIGHT)	1
31-11	175-455	ワッシャー	WASHER	2
31-12	84-154	ネジ	SCREW	2
31-13	84-574	ネジ	SCREW	2
31-14	87-105	ネジ	SCREW	2

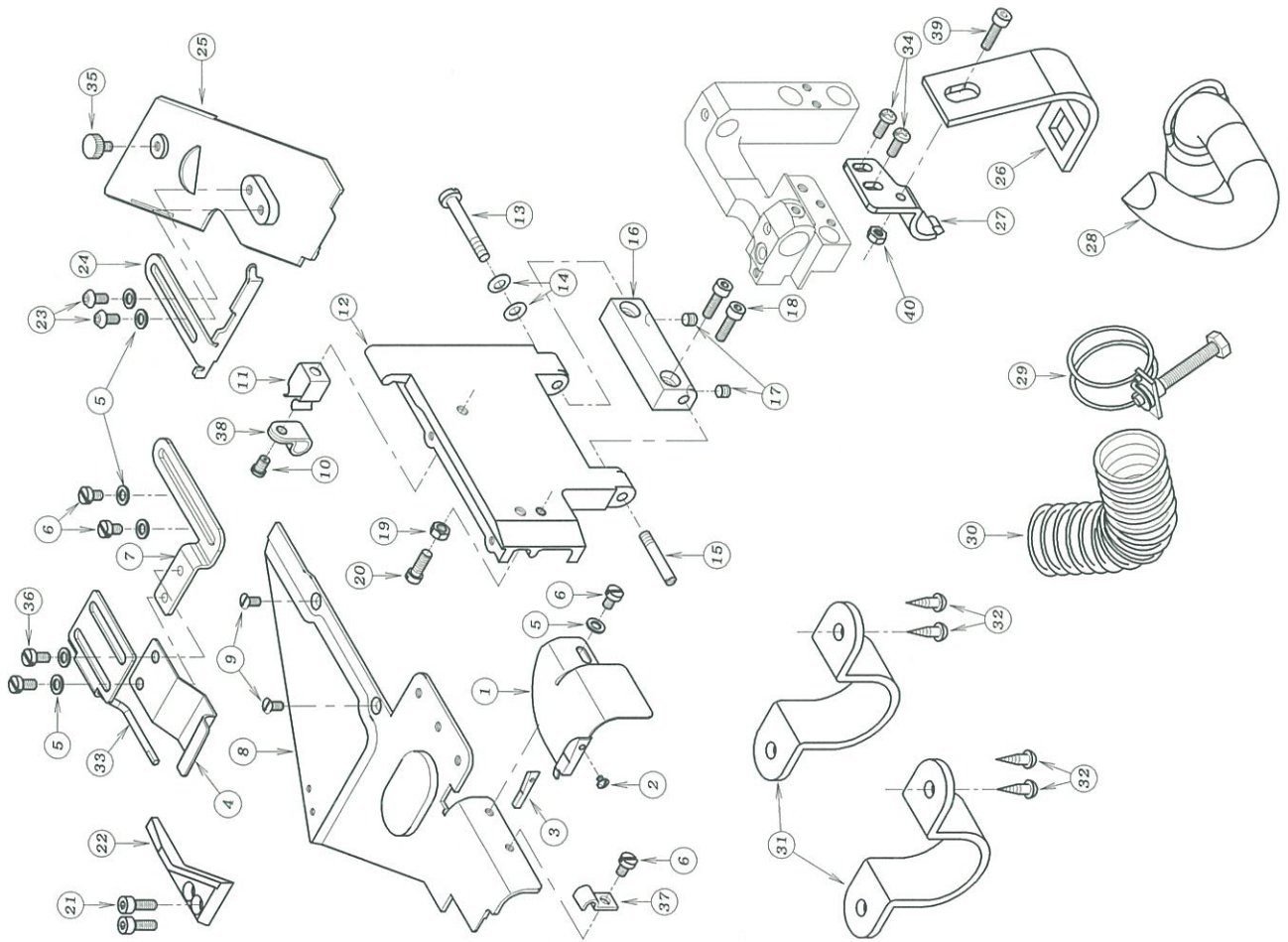
32. 左メス機構 LEFT KNIFE FABRIC TRIMMER (MODEL \*LK)



REF. NO.	PART NO.	品名	DESCRIPTION	QTY
32-01	07-562W	メス上台	BRACKET	1
32-02	71-755	メスシャフト	SHAFT	1
32-03	87-181	ネジ	SCREW	7
32-04	23-425	クッションゴム	RUBBER	1
32-05	81-558	ブッシュ	BUSHING	1
32-06	81-537	ブッシュ	BUSHING	1
32-07	71-253	ロックピン	PIN	2
32-08	87-095	ネジ	SCREW	2
32-09	87-213	ネジ	SCREW	1
32-10	87-171	ネジ	SCREW	1
32-11	07-557	下メスブラケット	BRACKET	1
32-12	07-558	下メス	KNIFE	1
32-13	87-097	ネジ	SCREW	2
32-14	07-545	上メス上台	BRACKET	1
32-15	07-544	上メス	KNIFE	1
32-16	87-113	六角穴付きボルト	BOLT	2
31-17	07-563	油渡皿	PLATE	1
32-18	87-096	ネジ	SCREW	4
32-19	67-531	メス調節レバー	LEVER	1
32-20	79-568	バネ	SPRING	1
32-21	75-561	カラー	COLLAR	2
32-22	07-543	可動メスガイド	COVER	1
32-23	04-502	ピン	PIN	1
32-24	87-214	ネジ	SCREW	2
32-25	88-166	ナット	NUT	1
32-26	75-452	ワッシャー	WASHER	1
32-27	67-527	メス調節レバー	LEVER	1
32-28	87-286	ネジ	SCREW	1
32-29	07-561	リンク	LINK	1
32-30	23-540	フェルト	FELT	1
32-31	93-620	ピン	PIN	1
32-32	71-724	ピン	PIN	1
32-33	07-564	油カバー	COVER	1
32-34	14-171	針板上台	NEEDLE PLATE SUPPORT BRACKET	1
32-35	51-850	差込送り台	DIFFERENTIAL FEED BAR	1
32-36	27-217	カバーストップカラー	COLLAR	1
32-37	87-283	六角穴付きボルト	BOLT	1
32-38	50-8270	送り台セット	FEED BAR ASS'Y	1
32-39	51-849	取付ブラケット	BRACKET	1
32-40	84-158	ネジ	SCREW	1
32-41	23-124	フェルト	FELT	1
32-42	27-253W	横カバーヒンジ上台	HINGE	1
32-43	07-569	上メスブラケット	BRACKET	1
32-44	07-570	上メス	UPPER KNIFE	1
32-45	87-295	ネジ	SCREW	1
32-46	87-415	ネジ	SCREW	1
32-47	71-253	ロックピン	PIN	2
32-48	07-523	可動メスガイド	COVER	1
32-49	87-129	六角穴付きボルト	BOLT	1
32-50	27-254	クロスプレート	COVER	1
32-51	26-564	補助カバー	COVER	1
32-52	87-284	ネジ	SCREW	2
32-53	75-468	ワッシャー	WASHER	2
32-54	51-827	主送り台	MAIN FEED BAR	1
32-55	87-145	ネジ	SCREW	1

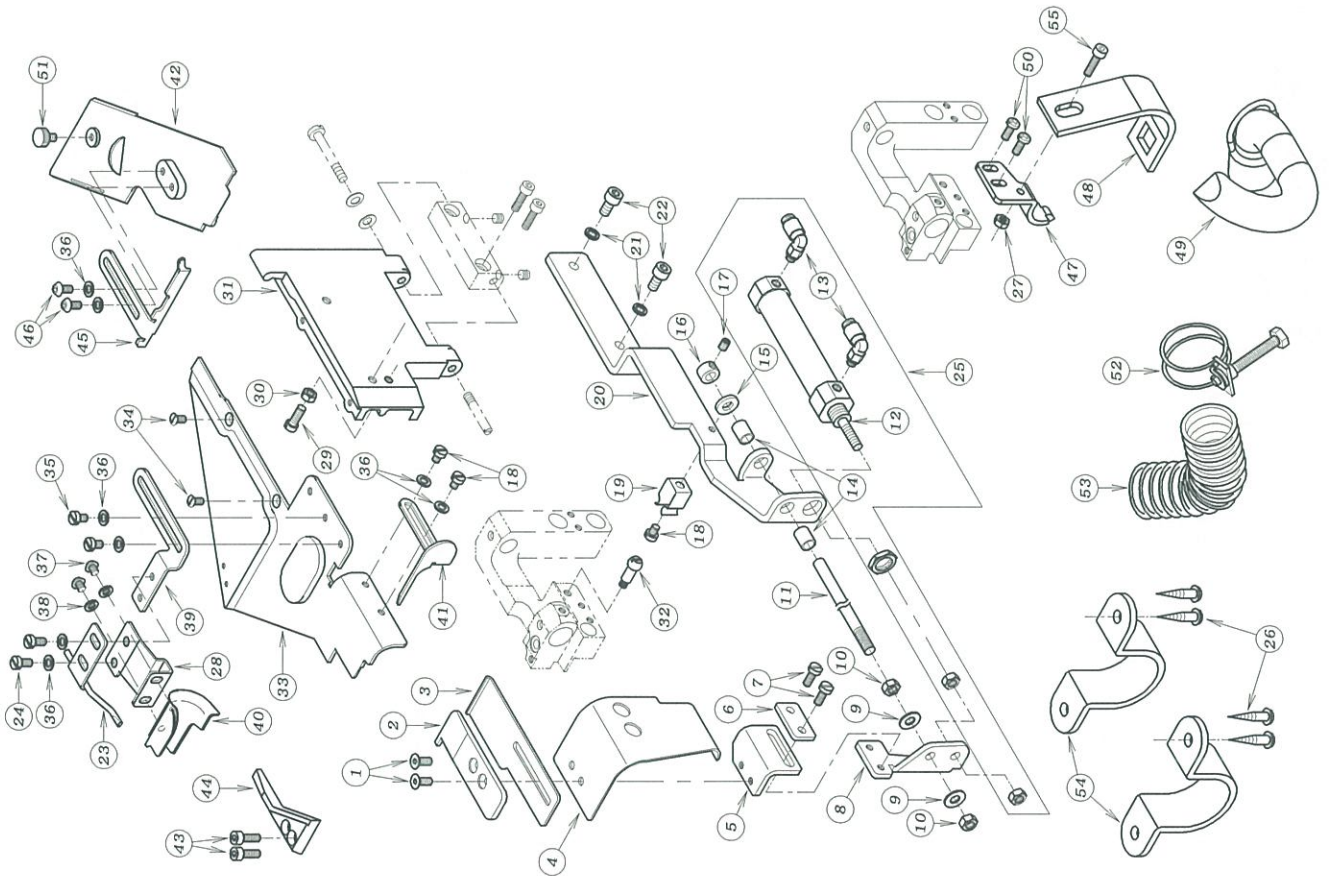


33. ALK専用部品 MODEL ALK EXCLUSIVE PARTS



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
33-01	26-567	布ガイド (右)	GUIDE (LEFT)	1
33-02	85-611	ネジ	SCREW	1
33-03	85-611	ネジ	SCREW	1
33-03	26-568	定規チップ	BLOCK	1
33-04	26-565	棚底規 (右)	GUIDE (RIGHT)	1
33-05	75-468	ワッシャー	WASHER	7
33-06	87-284	ネジ	SCREW	4
33-07	26-572	棚底規 (右) 取付台	BRACKET (RIGHT)	1
33-08	21-752W	両板	FRONT PLATE	1
33-09	84-464	ネジ	SCREW	2
33-10	84-575	ネジ	SCREW	1
33-11	79-912	定規台板バネ	SPRING	1
33-12	21-743W	定規台	FRONT COVER	1
33-13	25-517	ピンジネジ	SCREW	1
33-14	79-922	皿バネ	FLAT SPRING	2
33-15	25-527	ピンジネジ	SCREW	1
33-16	25-516W	ピンジ	HINGE	1
33-17	87-274	ネジ	SCREW	2
33-18	87-214	ネジ	SCREW	2
33-19	86-311	ナット	NUT	1
33-20	84-635	ネジ	SCREW	1
33-21	87-129	ネジ	SCREW	2
33-22	21-737W	差込棚かバネ	COVER	1
33-23	87-272	ネジ	SCREW	2
33-24	26-570	布ガイド (右)	FABRIC GUIDE (RIGHT)	1
33-25	21-767	両板	SLIDE COVER	1
33-26	07-010	横込ハーフ 止め金具	PIPE BAND	1
33-27	07-009	横込ハーフ フラケット	BRACKET	1
33-28	07-011	横込ハーフ	PIPE	1
33-29	07-573	ホスバンド	BELT	1
33-30	07-572	ホス	HOSE	1
33-31	07-542	ホスクラップ	CLAMP	2
33-32	87-902	ネジ	SCREW	4
33-33	26-573	カーン防ヒヤブ	PIPE	1
33-34	87-483	フレームバネ	SCREW	2
33-35	87-409	ネジ	SCREW	1
33-36	87-096	ネジ	SCREW	2
33-37	39-131	パイプサポート	CLAMP	1
33-38	06-935	パイロンクリップ	CLAMP	1
33-39	87-299	六角穴付きボルト	BOLT	1
33-40	88-146	ナット	NUT	1

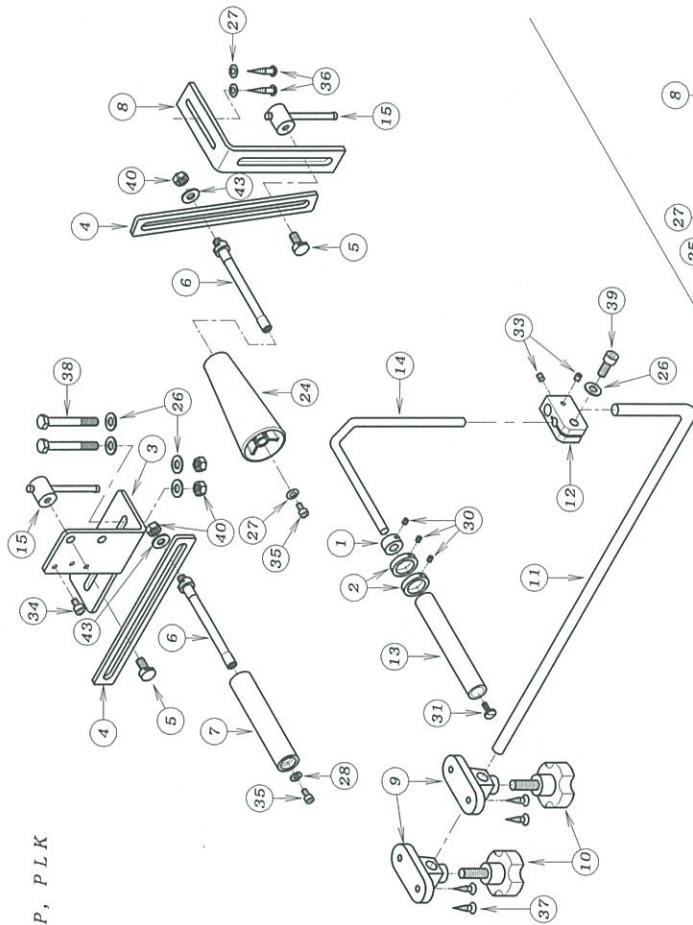
34. PLK専用部品 MODEL PLK EXCLUSIVE PARTS



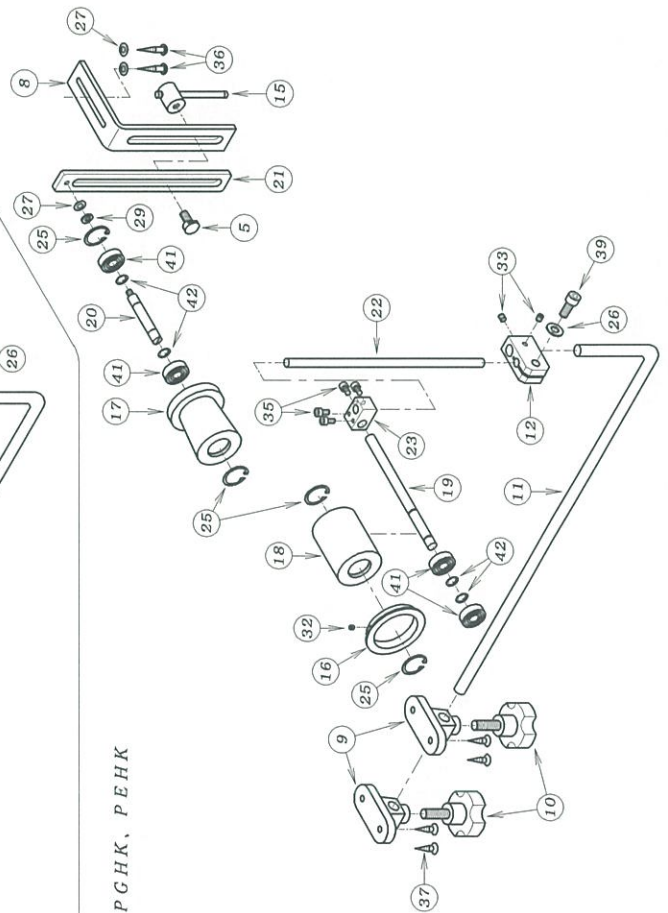
REF. NO.	PART NO.	品名	DESCRIPTION	QTY
34-01	87-270	皿ネジ	SCREW	2
34-02	09-533	ゴムガイド (H)	GUIDE (UPPER)	1
34-03	09-534	ゴムガイド (F)	GUIDE (LOWER)	1
34-04	09-537	カバー	COVER	1
34-05	09-538	スライドブACKET	BRACKET	1
34-06	09-539	止め金具	PLATE	1
34-07	87-145	ネジ	SCREW	2
34-08	09-541	スライドブACKET	BRACKET	1
34-09	75-453	ワッシャ	WASHER	2
34-10	88-157	ナット	NUT	2
34-11	09-540	ガイド棒	SHAFT	1
34-12	06-556	ゴムガイドシリンダ	AIR CYLINDER	1
34-13	05-202	ホルボユニオン	JOINT	2
34-14	09-504	ブッシュ	BUSHING	2
34-15	09-506	クッションゴムA	RUBBER	1
34-16	75-108	カラー	COLLAR	1
34-17	84-521	ネジ	SCREW	1
34-18	87-098	ネジ	SCREW	3
34-19	79-912	板バネ	SPRING	1
34-20	09-536	シリンダブACKET	BRACKET	1
34-21	75-457	ワッシャ	WASHER	2
34-22	87-213	ネジ	SCREW	2
34-23	26-571	カル防止パイプ	PIPE	1
34-24	87-096	ネジ	SCREW	2
34-25	00-6068	ゴム製用シリンダセット	SYLINDER ASS'Y	1
34-26	87-905	ネジ	SCREW	4
34-27	88-146	ナット	NUT	1
34-28	26-569	布ガイド (右) 取付台	BRACKET (RIGHT)	1
34-29	84-635	ネジ	SCREW	1
34-30	86-311	ナット	NUT	1
34-31	21-743W	取付台	FRONT COVER	1
34-32	25-522	カバーストップネジ	STOP PIN	1
34-33	21-752W	取付板	FRONT PLATE	1
34-34	84-464	ネジ	SCREW	2
34-35	87-284	ネジ	SCREW	2
34-36	75-468	ワッシャ	WASHER	8
34-37	87-267	ネジ	SCREW	2
34-38	75-410	バネ板	SPRING WASHER	2
34-39	26-566	網取付 (右) 取付台	BRACKET (RIGHT)	1
34-40	09-543	右身取付台	FABRIC GUIDE	1
34-41	09-544	布ガイド (右)	GUIDE (LEFT)	1
34-42	21-767	取付板	SLIDE COVER	1
34-43	87-129	ネジ	SCREW	2
34-44	21-737W	取付補助カバー	COVER	1
34-45	26-570	布ガイド (右)	FABRIC GUIDE (RIGHT)	1
34-46	87-272	ネジ	SCREW	2
34-47	07-009	取付台	BRACKET	1
34-48	07-010	取付台	BELT	1
34-49	07-011	取付台	JOINT	1
34-50	87-483	取付台	SCREW	2
34-51	87-409	ネジ	SCREW	1
34-52	07-573	ホースバンド	BELT	1
34-53	07-572	ホース	HOSE	1
34-54	07-542	ホースクランプ	CLAMP	2
34-55	87-299	六角穴付きボルト	BOLT	1

### 35. ゴム張り機構, GUIDE ROLLER MECHANISM

P, PLK

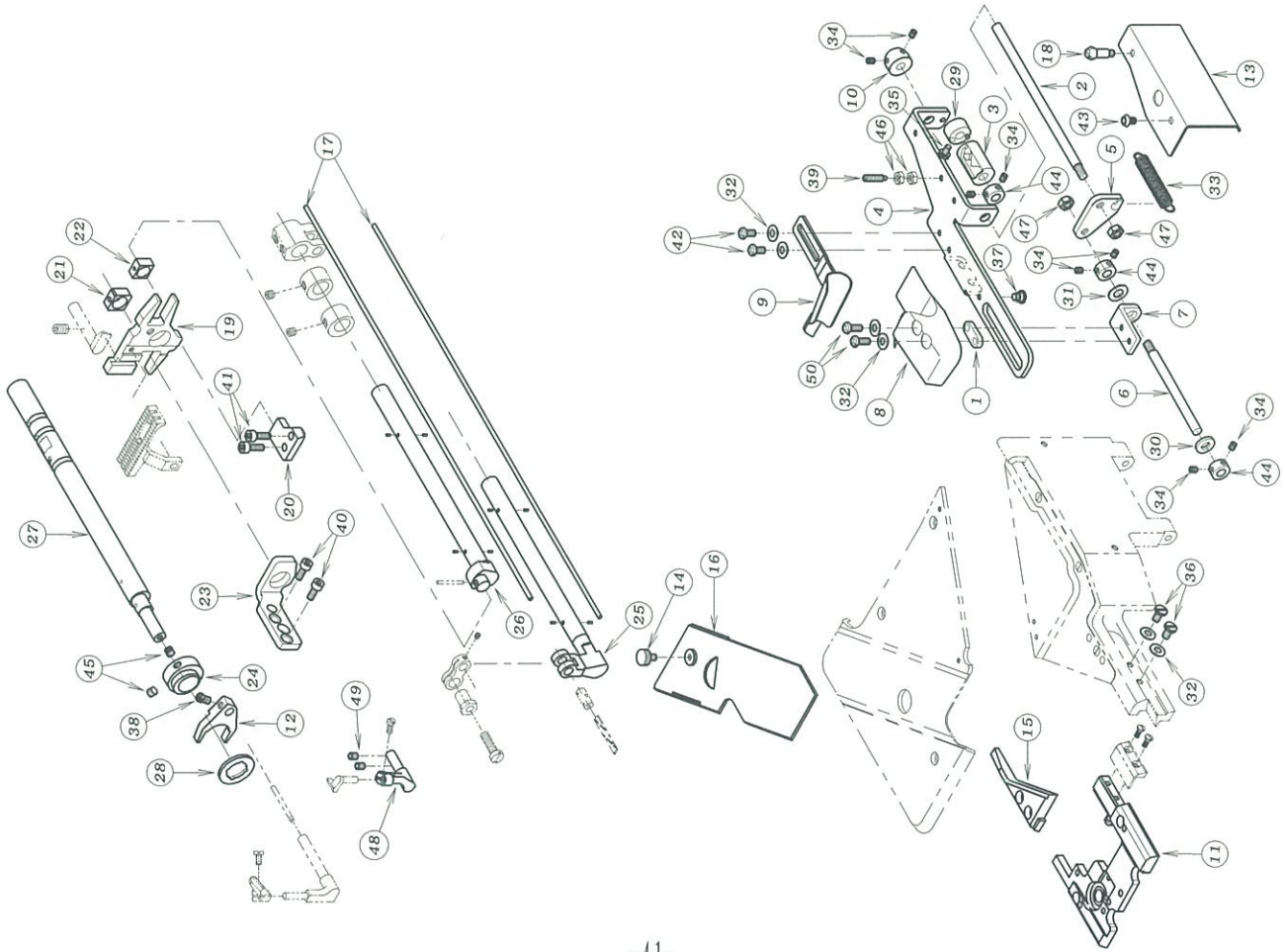


PGHK, PEHK



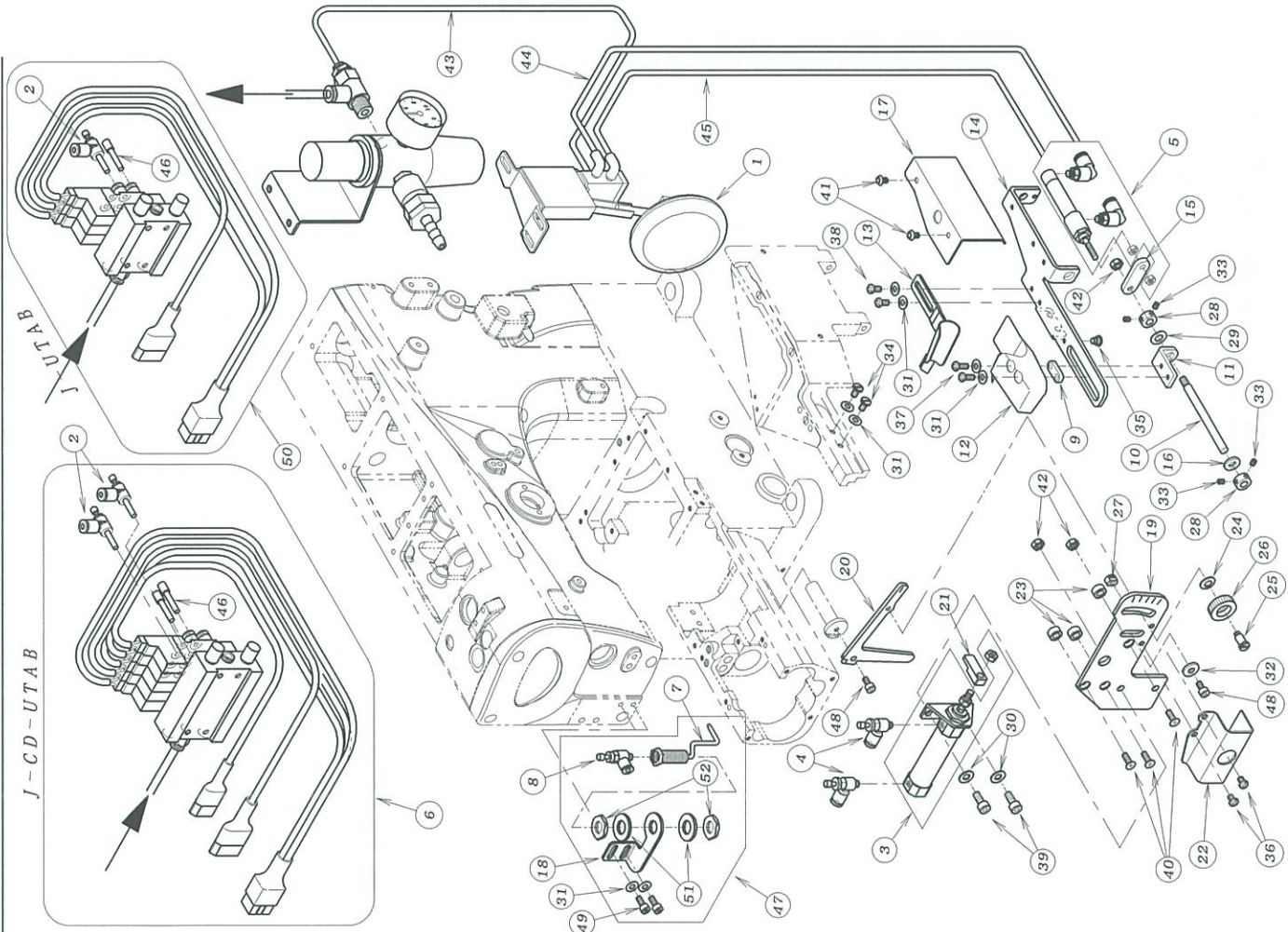
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
35-01	109-145	カラー	COLLAR	1
35-02	109-147	カラー	COLLAR	2
35-03	109-519	リアローラーラケット	REAR ROLLER BRACKET	1
35-04	109-521	リアローラースライド*	SLIDE PLATE	1
35-05	109-522	リアローラー止めネジ*	SCREW	1~2
35-06	109-523	リアローラー調整軸	SHAFT	2
35-07	109-524	リアローラー	REAR ROLLER	1
35-08	109-525	フロントローラーラケット	BRACKET	1
35-09	109-526	フロントローラーラケット	BRACKET	2
35-10	109-527	ノブ	KNOB	2
35-11	109-528	フロントローラーラケットハブ	BAR	1
35-12	109-529	フロントローラー調整手	JOINT BLOCK	1
35-13	109-530	フロントローラー	ROLLER	1
35-14	109-531	フロントローラーラケットハブ	BAR	1
35-15	109-553	ハンドル	HANDLE	1~2
35-16	109-603	フロントローラーガイド	FRONT ROLLER GUIDE	1
35-17	109-614	フロントローラー	TAPER ROLLER	1
35-18	109-615	フロントローラー	FRONT ROLLER	1
35-19	109-616	フロントローラーシャフト	FRONT ROLLER SHAFT	1
35-20	109-617	フロントローラー	ROLLER SHAFT	1
35-21	109-618	フロントローラー	SLIDE PLATE	1
35-22	109-619	フロントローラーシャフト	SHAFT	1
35-23	109-620	フロントローラー調整手	JOINT BRACKET	1
35-24	109-727	フロントローラー	TAPER ROLLER	1
35-25	193-238	フロントローラー	C-RING 26	4
35-26	175-451	ワッシャー	WASHER	1~5
35-27	175-452	ワッシャー	WASHER	2~3
35-28	175-453	ワッシャー	WASHER	1
35-29	175-527	スプリングリング	SPRING WASHER	1
35-30	184-521	ネジ	SCREW	3
35-31	184-570	ネジ	SCREW	1
35-32	187-106	ネジ	SCREW	1
35-33	187-172	ネジ	SCREW	2
35-34	187-203	六角穴付きボルト	BOLT	1
35-35	187-213	六角穴付きボルト	BOLT	2~4
35-36	187-501	丸木ネジ*	SCREW	2
35-37	187-502	丸木ネジ*	SCREW	4
35-38	187-503	六角ボルト	BOLT	2
35-39	187-663	六角穴付きボルト	BOLT	2
35-40	188-176	ナット	NUT	1
35-41	191-110	ボールハブアリング*	BALL BEARING	4
35-42	193-228	軸用丸S形止め輪	SNAP RING	4
35-43	175-501	ワッシャー	WASHER	2

36. 9701J 専用部品 MODEL 9701J EXCLUSIVE PARTS



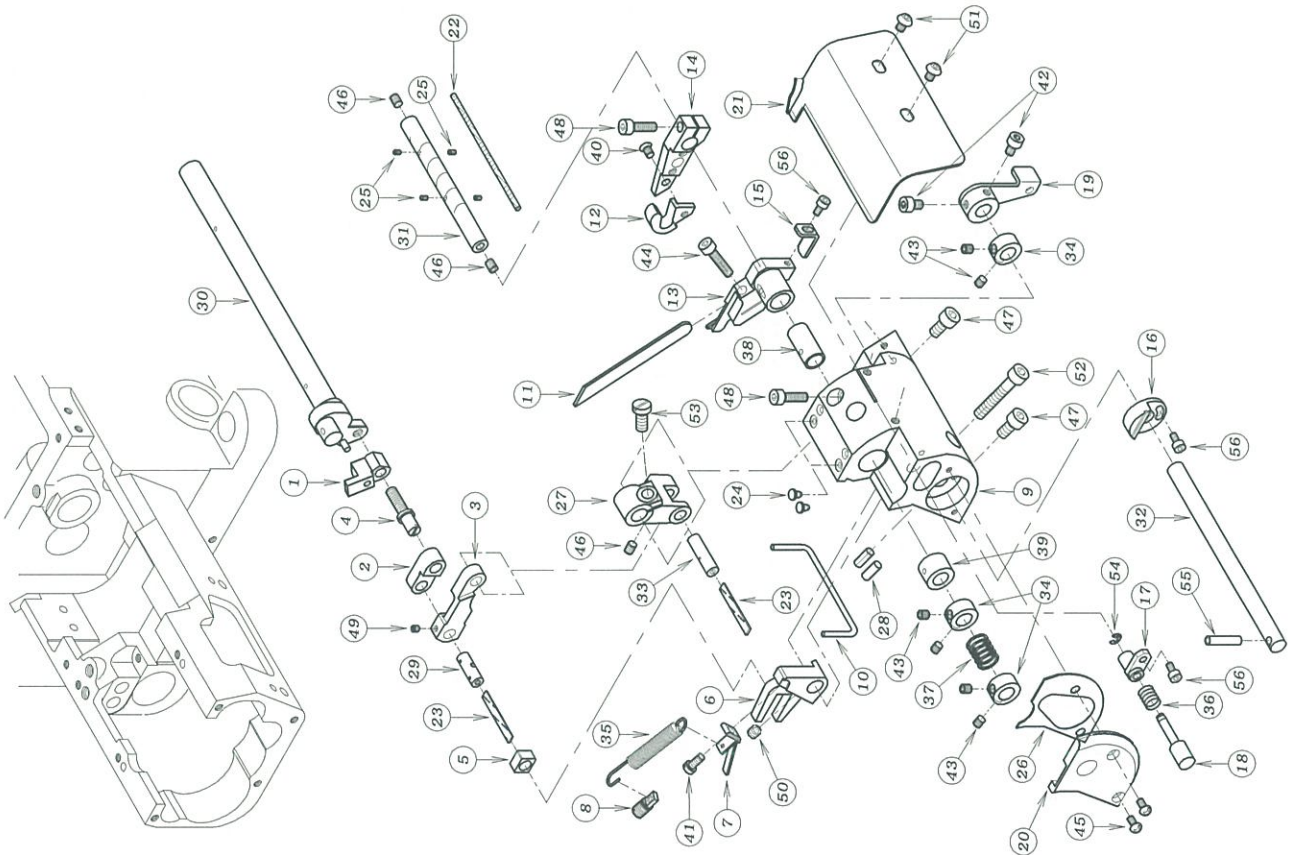
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
36-01	09-015	スライト <sup>*</sup> 金具	BRACKET	1
36-02	09-016	ホルダ <sup>*</sup> -案内構 (B)	GUIDE BAR (B)	1
36-03	09-017	ホルダ <sup>*</sup> -案内金具	CAM	1
36-04	09-018	ホルダ <sup>*</sup> -取付台	BRACKET	1
36-05	09-019	ホルダ <sup>*</sup> -連結プ <sup>*</sup> レート	PLATE	1
36-06	09-020	ホルダ <sup>*</sup> -案内構 (A)	GUIDE BAR (A)	1
36-07	09-021	ホルダ <sup>*</sup> -取付ブ <sup>*</sup> ラケット	BRACKET	1
36-08	09-022	ホルダ <sup>*</sup> - (左)	GUIDE (LEFT)	1
36-09	09-023	ホルダ <sup>*</sup> - (右)	GUIDE (RIGHT)	1
36-10	09-159	フ <sup>*</sup> ヅシユ金具	BRACKET	1
36-11	114-169	針板土台	NEEDLE SUPPORT BRACKET	1
36-12	18-010	針受レハ <sup>*</sup> -	LEVER	1
36-13	21-232	カハ <sup>*</sup> -	COVER	1
36-14	87-409	ネジ	SCREW	1
36-15	21-244	差板補助カハ <sup>*</sup> -	COVER	1
36-16	21-798	差板	SLIDE COVER	1
36-17	23-535	フェルト	FELT	2
36-18	25-522	カハ <sup>*</sup> -ストップ <sup>*</sup> ネジ <sup>*</sup>	SCREW	1
36-19	151-001	送り台	FEED BAR	1
36-20	51-824	送り土台カ <sup>*</sup> イト <sup>*</sup> フ <sup>*</sup> レート	FEED BAR GUIDE PLATE	1
36-21	151-872	角コ <sup>*</sup> マ (後)	FEED LIFT BLOCK (REAR)	1
36-22	51-875	角コ <sup>*</sup> マ (前)	FEED LIFT BLOCK (FRONT)	1
36-23	51-876	送り土台カ <sup>*</sup> イト <sup>*</sup> (左)	GUIDE (LEFT)	1
36-24	61-016	針受エキセン	ECCENTRIC	1
36-25	71-024	差動送り輪	FEED SHAFT	1
36-26	71-025	送り上下輪	FEED LIFT SHAFT	1
36-27	71-039	下輪	LOWER SHAFT	1
36-28	75-013	平座金	WASHER	1
36-29	75-090	ストップ <sup>*</sup> カラー	COLLAR	1
36-30	09-506	ワッシヤ	WASHER	1
36-31	75-452	ワッシヤ	WASHER	1
36-32	75-455	ワッシヤ	WASHER	6
36-33	79-021	引離ハ <sup>*</sup> ネ	SPRING	1
36-34	84-314	ネジ <sup>*</sup>	SCREW	8
36-35	84-361	ネジ <sup>*</sup>	SCREW	1
36-36	84-574	ネジ <sup>*</sup>	SCREW	2
36-37	84-585	段ネジ <sup>*</sup>	SCREW	1
36-38	84-616	ネジ <sup>*</sup>	SCREW	1
36-39	87-016	六角穴付き止めねじ	SCREW	1
36-40	87-113	六角穴付きボルト	BOLT	2
36-41	87-129	六角穴付きボルト	BOLT	2
36-42	87-177	六角穴付きボルト	BOLT	2
36-43	87-267	ネジ <sup>*</sup>	SCREW	1
36-44	75-105	カラー	COLLAR	3
36-45	87-274	ネジ <sup>*</sup>	SCREW	2
36-46	88-146	ナット	NUT	2
36-47	88-157	ナット	NUT	2
36-48	18-813	針ガイドブラケット	BRACKET	1
36-49	87-181	ネジ	SCREW	2
36-50	87-483	プラマイナベ小ねじ	SCREW	2

37. 9701JCD/UTA専用部品 MODEL 9701JCD/UTA EXCLUSIVE PARTS



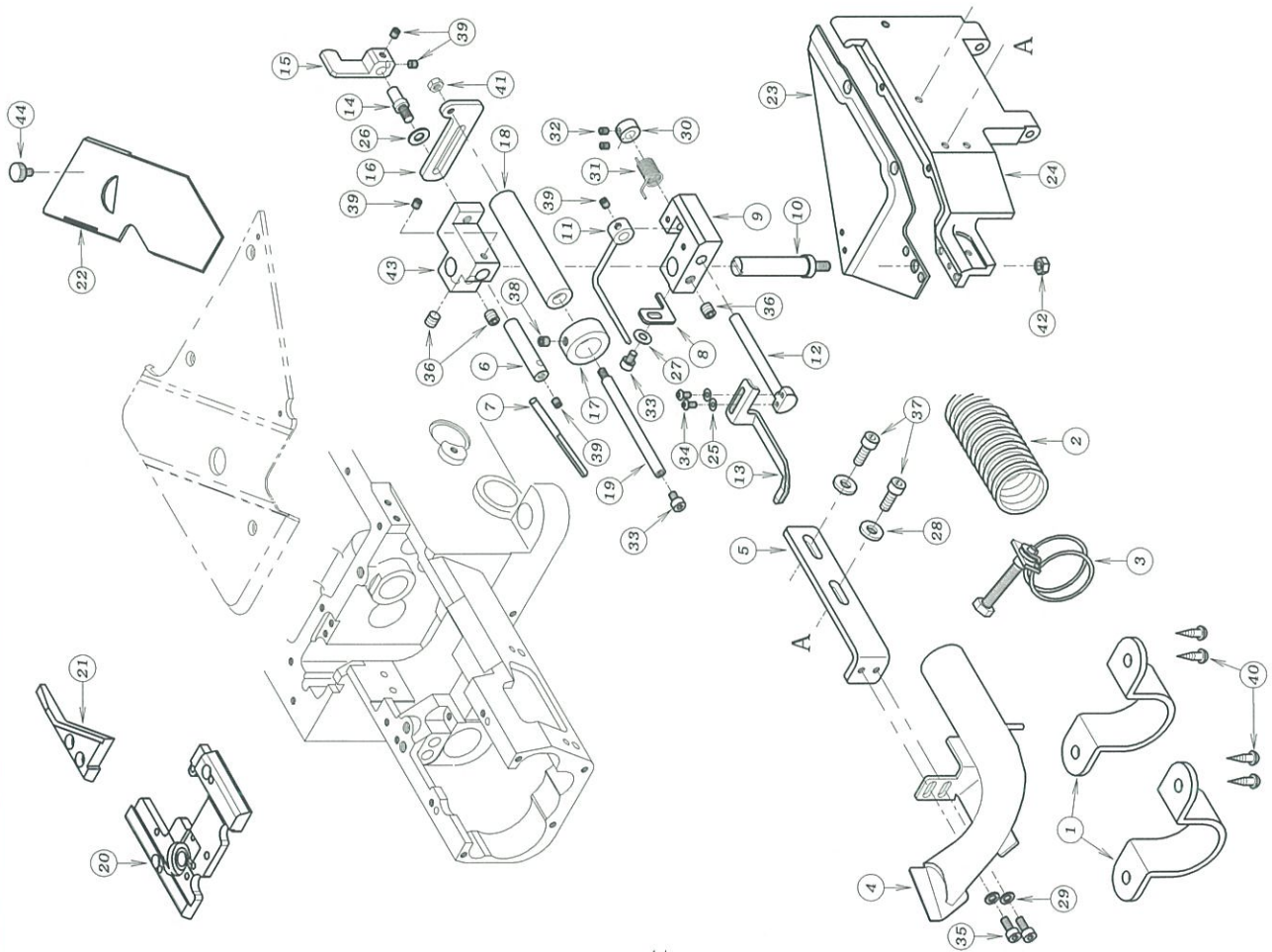
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
37-01	100-6118	膝スイッチセット	KNEE SWITCH ASS'Y	1
37-02	105-221	スピードコントロール	SPEED CONTROLLER	2
37-03	105-222	エアシリンダ	CYLINDER	1
37-04	105-481	スピードコントロール	SPEED CONTROLLER	2
37-05	105-559	エアシリンダ	AIR CYLINDER	1
37-06	105-969	電磁弁5連セット	SOLENOID VALVE ASSEMBLY	1
37-07	106-282	エアノズル	AIR NOZZLE	1
37-08	106-559	スピードコントロール	SPEED CONTROLLER	1
37-09	109-015	スライダ' 金具	BRACKET	1
37-10	109-020	ホルダ' 案内棒 (A)	GUIDE BAR	1
37-11	109-021	ホルダ' 取付フ' ラケット	BRACKET	1
37-12	109-022	ホルダ' (左)	GUIDE (LEFT)	1
37-13	109-023	ホルダ' (右)	GUIDE (RIGHT)	1
37-14	109-024	ホルダ' 取付台	BRACKET	1
37-15	109-025	ホルダ' 運送フ' レート	PLATE	1
37-16	109-506	ワッシヤ	WASHER	1
37-17	121-232	カバー	COVER	1
37-18	27-369	エアプロブ' ラケット	BRACKET	1
37-19	151-141	目盛板	FEED GRADUATIONS	1
37-20	151-142	コンデ' ンスレハ' --	CONDENSE LEVER	1
37-21	151-143	シリンダ' 先端金具	BLOCK	1
37-22	151-144	安全カバー	COVER	1
37-23	151-805	スヘ' スカラー	COLLAR	3
37-24	151-806	皿ハ' ネ	SPRING	1
37-25	151-807	段ネジ	SCREW	1
37-26	151-808	ナット	NUT	1
37-27	151-846	ストップ	STOPPER	1
37-28	75-105	カラー	COLLAR	2
37-29	75-452	ワッシヤ	WASHER	1
37-30	75-453	ワッシヤ	WASHER	2
37-31	75-455	ワッシヤ	WASHER	8
37-32	75-456	ワッシヤ	WASHER	1
37-33	84-314	ネジ	SCREW	4
37-34	84-574	ネジ	SCREW	2
37-35	84-585	段ネジ	SCREW	1
37-36	87-481	プラマイナ' ベ小ねじ	SCREW	2
37-37	87-483	プラマイナ' ベ小ねじ	SCREW	2
37-38	87-482	プラマイナ' ベ小ねじ	SCREW	2
37-39	87-252	六角穴付きボルト	BOLT	2
37-40	87-265	六角穴付き皿ボ' ルト	SCREW	3
37-41	87-267	ネジ	SCREW	2
37-42	88-157	ナット	NUT	2
37-43	105-932	エアチューブ' $\phi 4 \times 1500\text{mm}$	AIR TUBE $\phi 4 \times 1500\text{mm}$	3
37-44	105-938	エアチューブ' $\phi 4 \times 450\text{mm}$	AIR TUBE $\phi 4 \times 450\text{mm}$	1
37-45	105-939	エアチューブ' $\phi 4 \times 500\text{mm}$	AIR TUBE $\phi 4 \times 500\text{mm}$	1
37-46	106-597	プラグ	PLUG	1
37-47	100-8038	糸引き装置 (エア)	WIPER MECHANISM ASS'Y (AIR)	2
37-48	87-177	六角穴付きボルト	BOLT	2
37-49	87-113	六角穴付きボルト	BOLT	2
37-50	105-966	電磁弁3連セット	SOLENOID VALVE ASSEMBLY	1
37-51	175-538	ワッシヤ	WASHER	2
37-52	186-801	ナット	NUT	2

38. PHK 専用部品 (1) MODEL PHK EXCLUSIVE PARTS (1)



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
38-01	07-586	ブロック	BLOCK	1
38-02	07-587	連結リンク	LINK	1
38-03	07-588	連結リンク	LINK	1
38-04	07-589	駆動ピン	PIN	1
38-05	07-590	角コマ	BLOCK	1
38-06	07-591	上メス調整レハ	LEVER	1
38-07	07-592	スプリンクホルダ	SPRING HOLDER	1
38-08	07-593	スプリンク止めネジ	LOCK SCREW	1
38-09	07-594W	右メス土台	BRACKET	1
38-10	07-595	オリング	O RING	1
38-11	07-596	下メス (厚み 1.5mm)	LOWER KNIFE (THICK 1.5mm)	1
38-12	07-597	上メス	UPPER KNIFE	1
38-13	07-599	下メス土台	BRACKET	1
38-14	07-610	下メス土台	BRACKET	1
38-15	07-611	下メス台ガイト	GUIDE PLATE	1
38-16	07-612	調節レハ	STOPPER	1
38-17	07-613	フッシュボタン用ホルダ	HOLDER	1
38-18	07-614	フッシュボタン	PUSH BOTTON	1
38-19	07-615	トロッポレハ	LEVER	1
38-20	07-616W	横カハ	COVER	1
38-21	07-617	布ガイト	CLOTH GUIDE	1
38-22	23-124	フェルト	FELT	1
38-23	23-341	フェルト	FELT	2
38-24	23-512	クッションゴム	CUSHION RUBBER	2
38-25	23-554	フェルト	FELT	4
38-26	23-566	横カハ	GASKET	1
38-27	67-536	メス駆動レハ	LEVER	1
38-28	71-253	ノックピン	PIN	2
38-29	71-596	メスロッド	CONNECTING ROD PIN	1
38-30	71-634	送り上下軸	FEED LIFT SHAFT	1
38-31	71-648	上メスシャフト	SHAFT	1
38-32	71-650	トロッポレハ	SHAFT	1
38-33	71-660	上メスリンクピン	LINK PIN	1
38-34	75-561	カラー	COLLAR	3
38-35	79-558	スプリンク	SPRING	1
38-36	79-559	フッシュボタン用レハ	SPRING	1
38-37	79-568	上メスレハ	SPRING	1
38-38	81-576	下メス台	BUSHING	1
38-39	81-577	メス軸	BUSHING	1
38-40	84-463	ネジ	SCREW	1
38-41	87-010	六角穴付きボルト	SCREW	1
38-42	87-092	六角穴付きボルト	BOLT	2
38-43	87-106	ネジ	SCREW	6
38-44	87-112	六角穴付きボルト	BOLT	1
38-45	87-477	プラマイナベ小ねじ	SCREW	2
38-46	87-181	ネジ	SCREW	3
38-47	87-213	六角穴付きボルト	BOLT	2
38-48	87-214	六角穴付きボルト	BOLT	2
38-49	87-234	ネジ	SCREW	1
38-50	87-253	ネジ	SCREW	1
38-51	87-271	六角穴付きボルト	BOLT	2
38-52	87-276	六角穴付きボルト	BOLT	1
38-53	87-278	ネジ	SCREW	1
38-54	93-195	E形止め輪	E-RING	1
38-55	93-506	スプリンク	SPRING PIN	1
38-56	87-123	六角穴付きボルト	BOLT	3

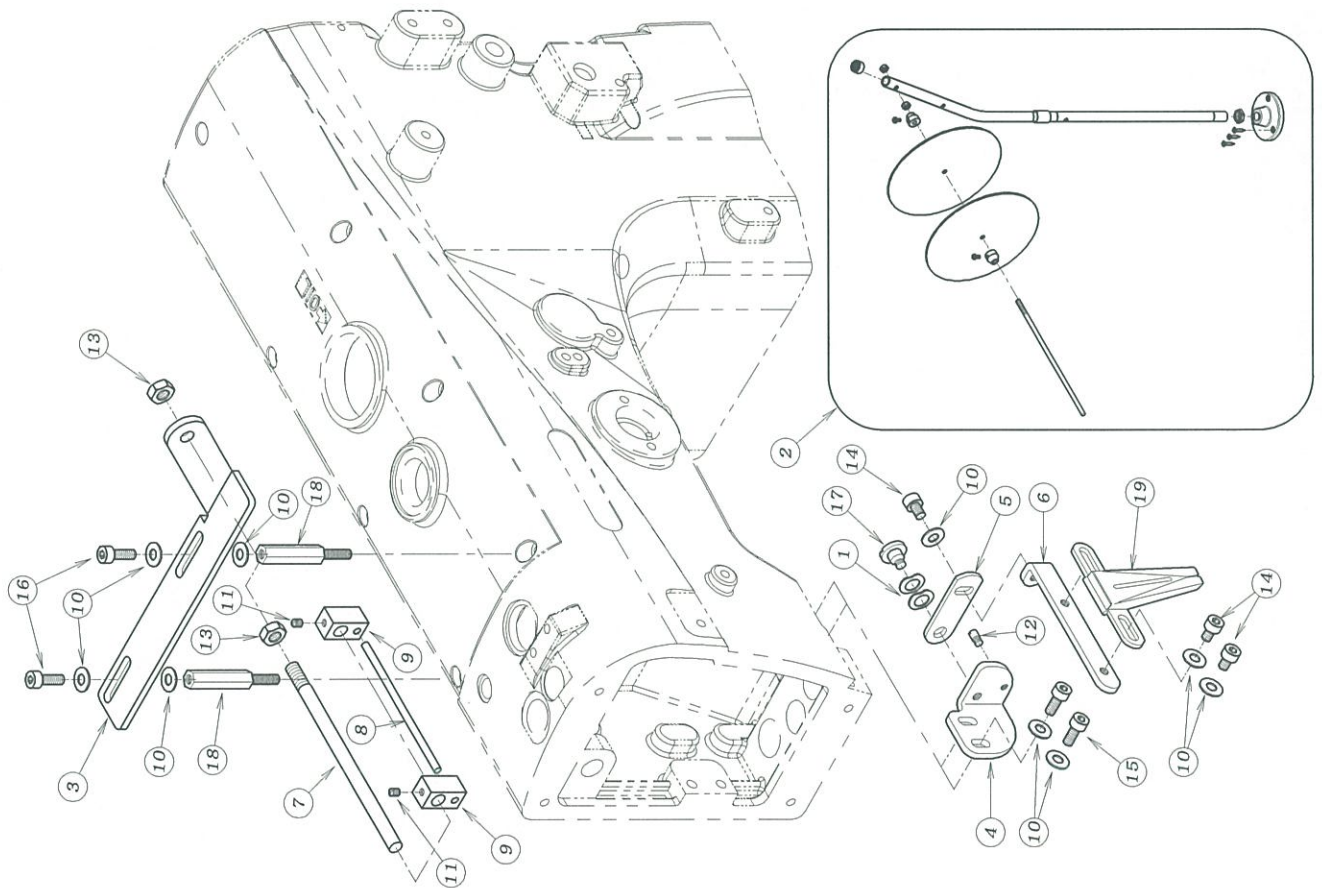
39. PHK専用部品 (2) MODEL PHK EXCLUSIVE PARTS (2)



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
39-01	07-542	ホースクランプ	CLAMP	2
39-02	07-572	ホース	HOSE	1
39-03	07-573	ホースバンド	BAND	1
39-04	07-574	吸込パイプ	PIPE	1
39-05	07-575	吸込パイプ取付プレート	PLATE	1
39-06	07-577	ゴムガイド取付棒	ELASTIC TAPE GUIDE BAR	1
39-07	07-578	ゴムガイド	ELASTIC TAPE GUIDE	1
39-08	07-579	ガイド棒用ストッパー	STOPPER	1
39-09	07-580	ガイド棒取付台	BRACKET	1
39-10	07-581	支柱ネジ	SCREW	1
39-11	07-582	ガイド棒	GUIDE BAR	1
39-12	07-619	布押え取付棒	SHAFT	1
39-13	07-620	布押え	FABRIC GUIDE	1
39-14	09-607	レバ取付ピン	PIN	1
39-15	09-608	クランプレバ	CLAMP LEVER	1
39-16	09-610	上ローラー Bracket	BRACKET	1
39-17	09-611	ガイドカラー	COLLAR	1
39-18	09-612	前ローラー	FRONT ROLLER	1
39-19	09-613	上ローラー軸	UPPER ROLLER SHAFT	1
39-20	14-170	針板土台	NEEDLE SUPPORT BRACKET	1
39-21	21-799W	差板補助カバー	COVER	1
39-22	27-026	差板	SLIDE COVER	1
39-23	27-027W	定規板	FRONT COVER	1
39-24	27-028W	定規台	FRONT COVER	1
39-25	75-441	ワッシャー	WASHER	2
39-26	75-453	ワッシャー	WASHER	1
39-27	75-455	ワッシャー	WASHER	1
39-28	75-458	ワッシャー	WASHER	2
39-29	75-468	ワッシャー	WASHER	2
39-30	75-556	カラー	COLLAR	1
39-31	79-071	巻ハネ	SPRING	1
39-32	84-314	ネジ	SCREW	2
39-33	87-092	六角穴付きボルト	BOLT	2
39-34	87-099	ネジ	SCREW	2
39-35	87-113	六角穴付きボルト	BOLT	2
39-36	87-172	ネジ	SCREW	3
39-37	87-224	六角穴付きボルト	BOLT	2
39-38	87-274	ネジ	SCREW	1
39-39	87-286	ネジ	SCREW	5
39-40	87-902	木ネジ	SCREW	4
39-41	88-146	ナット	NUT	1
39-42	88-157	ナット	NUT	1
39-43	07-576	ゴムガイド取付台	BRACKET	1
39-44	187-409	ネジ	SCREW	1

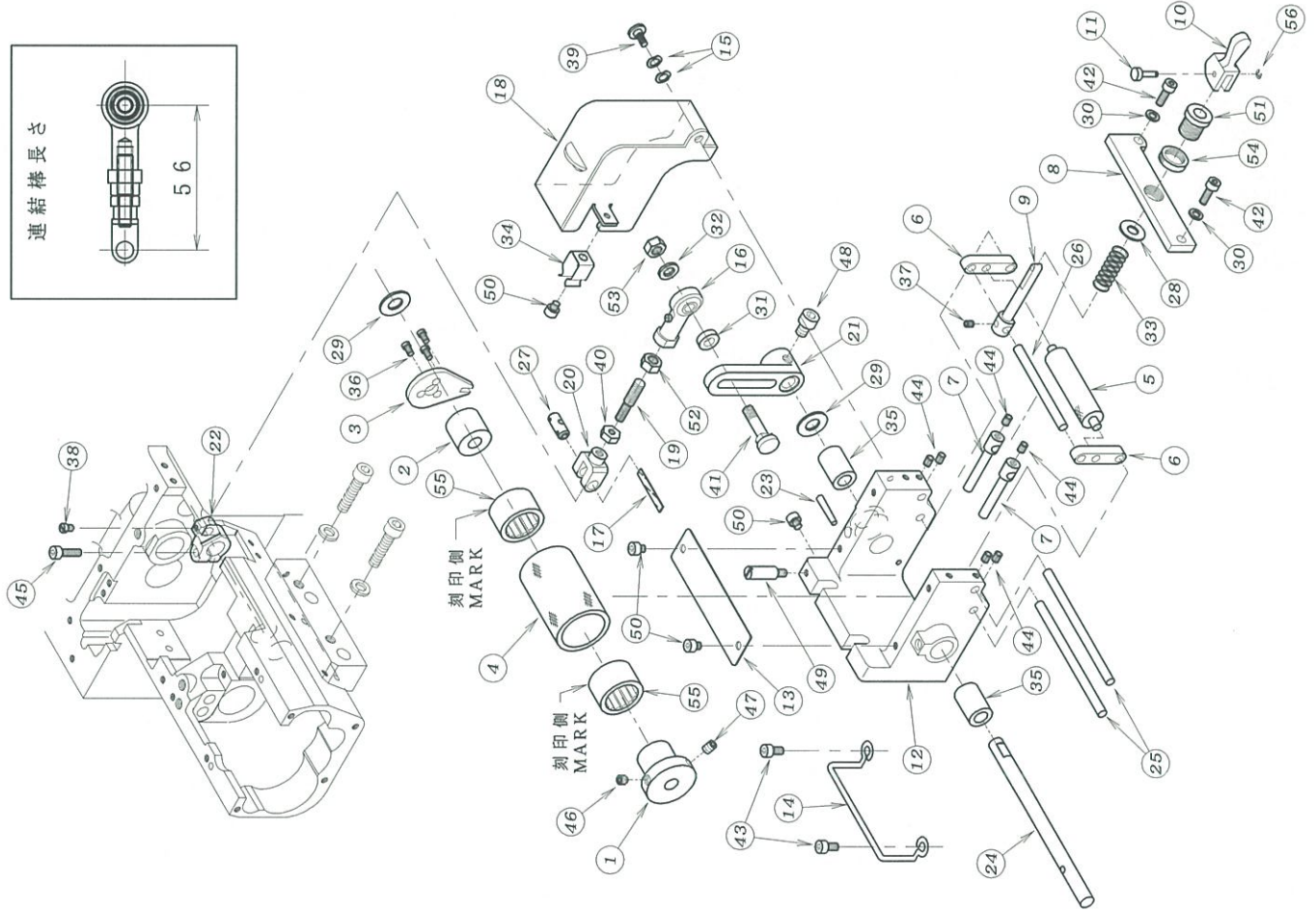
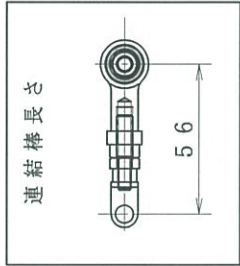
40. 9702L専用部品 MODEL 9702L EXCLUSIVE PARTS

REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
40-01	02-119	波座金	WASHER	2
40-02	20-6020	テープ立て	TAPE STAND	1
40-03	26-606	コ・ムア° - ラー案内板	BRACKET	1
40-04	26-608	ブラケットA	BRACKET A	1
40-05	26-609	ブラケットB	BRACKET B	1
40-06	26-610	ブラケットC	BRACKET C	1
40-07	26-751	コ・ムア° - ラー取付棒	BAR	1
40-08	26-752	コ・ムア° - ラー案内棒	BAR	1
40-09	26-753	コ・ムア° - ラー取付金具	BRACKET	2
40-10	75-455	ワッシャ	WASHER	9
40-11	84-112	ネジ	SCREW	2
40-12	84-114	ネジ	SCREW	1
40-13	86-411	ナット	NUT	2
40-14	87-092	六角穴付きボルト	BOLT	3
40-15	87-113	六角穴付きボルト	BOLT	2
40-16	87-129	六角穴付きボルト	BOLT	2
40-17	87-264	板ネジ	SCREW	1
40-18	87-309	支柱ネジ	SCREW	2
40-19	97-5010-1	ハ・インダ° - セット (9mm)	FOLDER ASS'Y	1





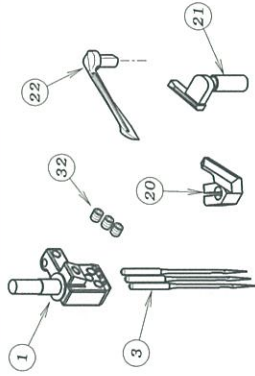
# 41. MD機構 METERING DEVICE MECHANISM



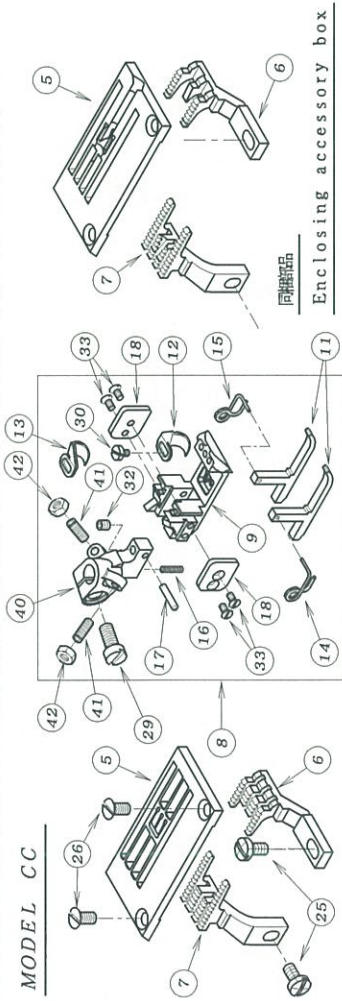
REF. NO.	PART NO.	品名	DESCRIPTION	QTY
41-01101-102	フタ側スリーブ	フタ側スリーブ	SLEEVE	1
41-02101-103	連結板側スリーブ	連結板側スリーブ	SLEEVE	1
41-03101-116	前フーラー回り止め蓋	前フーラー回り止め蓋	PLATE	1
41-04101-132	前フーラーローレット	前フーラーローレット	PULLER	1
41-05101-134	前フーラー小ローラー	前フーラー小ローラー	LOWER ROLLER	1
41-06101-136	前フーラーローラー取り付金具	前フーラーローラー取り付金具	ROLLER HOLDER	2
41-07101-138	前フーラーコ・A案内金具	前フーラーコ・A案内金具	PIVOT SHAFT HOLDER	2
41-08101-141	前フーラー締め金具	前フーラー締め金具	RUBBER TIGHTENER	1
41-09101-143	小ローラー締め金具	小ローラー締め金具	ROLLER CONTROLLER	1
41-10101-145	ワンタッチレバ	ワンタッチレバ	LEVER	1
41-11101-147	レバ・連結ピン	レバ・連結ピン	PIN	1
41-12101-153	前フーラー土台	前フーラー土台	BRACKET	1
41-13101-154	前フーラーカバー	前フーラーカバー	COVER	1
41-14101-155	前フーラー台取付ガイド	前フーラー台取付ガイド	GUIDE	1
41-15102-118	滾ワッシャ	滾ワッシャ	WASHER	2
41-16105-954	ロッド・エント	ロッド・エント	ROD	1
41-17123-341	フェルト	フェルト	FELT	1
41-1827-168	前フーラー連結レバカバー	前フーラー連結レバカバー	COVER	1
41-19165-337	前フーラー連結棒	前フーラー連結棒	CONNECTING BAR	1
41-20166-131	連結片メカネ	連結片メカネ	CONNECTING LINK	1
41-21167-419	前フーラー連結レバ	前フーラー連結レバ	LEVER	1
41-22167-533	連結レバ	連結レバ	LEVER	1
41-23171-227	ブローピン	ブローピン	PIN	1
41-24171-350	前フーラー土台シャフト	前フーラー土台シャフト	SHAFT	1
41-25171-361	案内棒大	案内棒大	PIVOT SHAFT (LARGE)	2
41-26171-362	案内棒小	案内棒小	PIVOT SHAFT (SMALL)	1
41-27171-432	メカネピン	メカネピン	FEED ROCKER LINK PIN	1
41-28175-446	ワッシャ	ワッシャ	WASHER	1
41-29175-451	ワッシャ	ワッシャ	WASHER	2
41-30175-468	ワッシャ	ワッシャ	WASHER	2
41-31175-480	ワッシャ	ワッシャ	WASHER	1
41-32175-552	ワッシャ	ワッシャ	WASHER	1
41-33179-171	圧縮バネ	圧縮バネ	SPRING	1
41-34179-912	バネ	バネ	SPRING	1
41-35181-125	ブッシュ	ブッシュ	BUSHING	2
41-36184-162	ネジ	ネジ	SCREW	3
41-37184-314	ネジ	ネジ	SCREW	1
41-38184-365	ネジ	ネジ	SCREW	1
41-39184-396	歯ネジ	歯ネジ	SCREW	1
41-40186-701	ナット	ナット	NUT	1
41-41187-006	ロッドエント・止ネジ	ロッドエント・止ネジ	SCREW	1
41-42187-129	六角穴付きボルト	六角穴付きボルト	BOLT	2
41-43187-177	六角穴付きボルト	六角穴付きボルト	BOLT	2
41-44187-181	ネジ	ネジ	SCREW	6
41-45187-214	六角穴付きボルト	六角穴付きボルト	BOLT	1
41-46187-253	ネジ	ネジ	SCREW	1
41-47187-254	ネジ	ネジ	SCREW	1
41-48187-255	六角穴付きボルト	六角穴付きボルト	BOLT	1
41-49187-268	カム・ストップネジ	カム・ストップネジ	SCREW	1
41-50187-287	六角穴付きボルト	六角穴付きボルト	BOLT	4
41-51187-456	調節ネジ	調節ネジ	SCREW	1
41-52188-161	ナット	ナット	NUT	1
41-53188-166	ナット	ナット	NUT	1
41-54188-456	ナット	ナット	NUT	1
41-55191-405	ワンウェイクラッチ	ワンウェイクラッチ	BEARING	2
41-56193-200	ストップリンク	ストップリンク	E-RING	1

# 42. ゲージ関係 (1) GAUGE PARTS (1)

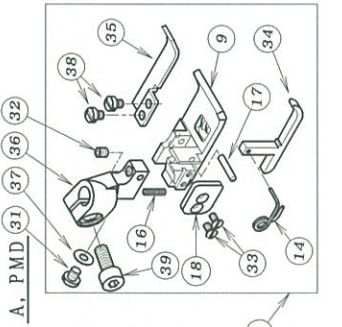
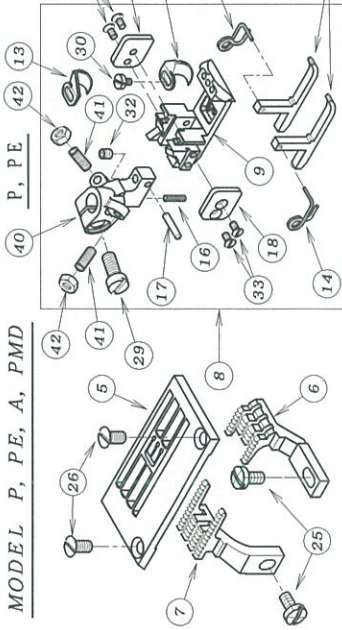
## STANDARD



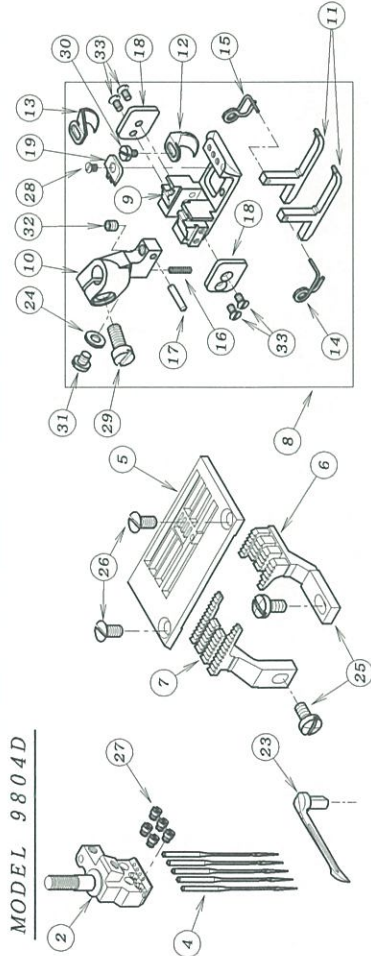
## MODEL CC



## MODEL P, PE, A, PMD



## MODEL 9804D

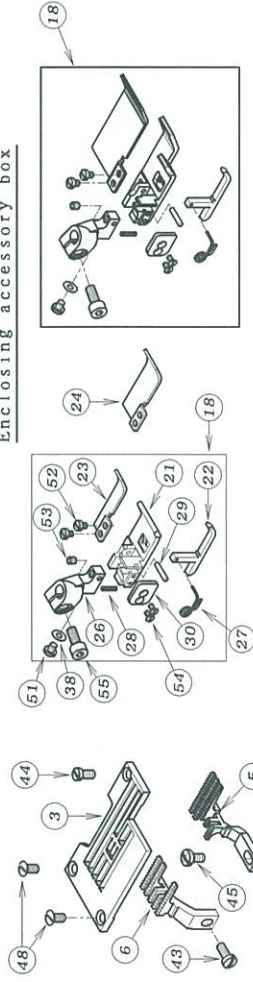


REF. NO.	PART NO.	品名	DESCRIPTION	QTY
42-01	*	針株	NEEDLE HOLDER	1
42-02	*	針株	NEEDLE HOLDER	1
42-03	13-0110-6	針(UYX128GAS #11)	NEEDLE	3
42-04	13-3020-5	針(SM1014H #10S)	NEEDLE	5
42-05	*	針版	NEEDLE PLATE	1
42-06	*	前送歯	FRONT FEED DOG	1
42-07	*	後送歯	REAR FEED DOG	1
42-08	*	押えゼット	PRESSER FOOT ASS'Y	1
42-09	*	押え足	BOTTOM	1
42-10	17-7680-A	押え足ボス	SHANK	1
42-11	17-7680-B	補助押え足	GUIDE	2
42-12	17-7680-K	生地カイト	GUIDE	1
42-13	17-7680-L	生地カイト	GUIDE	1
42-14	17-8190-D	補助押え足ハネ(左)	SPRING (LEFT)	1
42-15	17-8190-E	補助押え足ハネ(右)	SPRING (RIGHT)	1
42-16	17-8190-F	ハネ	SPRING	1
42-17	17-8190-G	ピン	PIN	1
42-18	17-8190-J	カイトプレート	GUIDE PLATE	2
42-19	17-8430-B	押え爪	STITCH TONGUE	1
42-20	18-805	針受	NEEDLE GUARD	1
42-21	18-806	針カイト	NEEDLE GUIDE	1
42-22	19-525	ルーパー	LOOPER	1
42-23	19-534	ルーパー	LOOPER	1
42-24	175-228	ワッシャ	WASHER	1
42-25	184-374	ネジ	SCREW	2
42-26	184-464	ネジ	SCREW	2
42-27	185-603	ネジ	SCREW	5
42-28	185-616	ネジ	SCREW	1
42-29	187-034	ネジ	SCREW	1
42-30	187-035	ネジ	SCREW	1
42-31	187-083	ネジ	SCREW	1
42-32	187-104	ネジ	SCREW	*
42-33	187-107	ネジ	SCREW	4
42-34	17-8120-E	補助押え足	GUIDE	1
42-35	17-8120-F	板押え(備装)	GUIDE PLATE (S)	1
42-36	17-8190-A	押え足ボス	SHANK	1
42-37	175-441	ワッシャ	WASHER	1
42-38	187-093	ネジ	SCREW	2
42-39	187-113	六角穴付きボルト	BOLT	1
42-40	17-9380-A	押え足ボス	SHANK	1
42-41	187-071	ネジ	SCREW	2
42-42	188-136	ナット	NUT	2

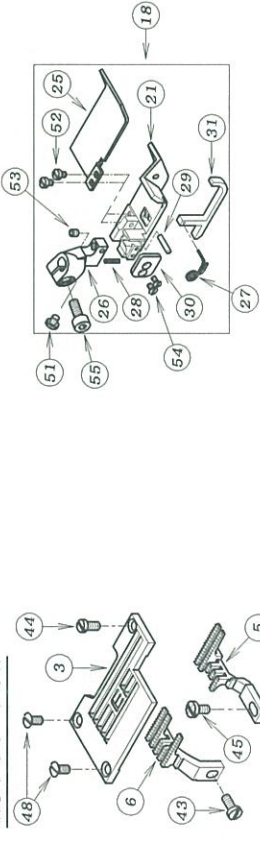
\* 各ゲージ部品の品番は、52ページのゲージハーツ表を参照して下さい。  
\* Please refer to Page 52 GAUGE PARTS LIST

# 43. ゲージ関係 (2) GAUGE PARTS (2)

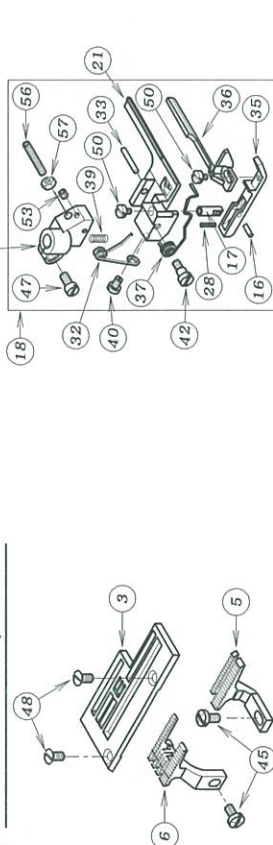
MODEL ALK



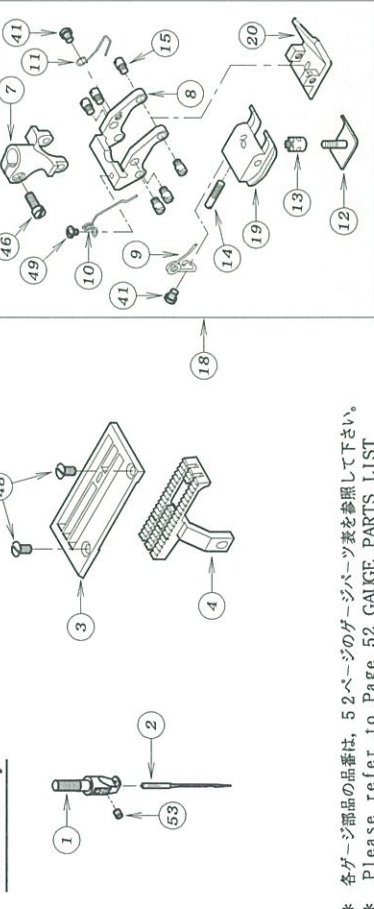
MODEL PLK



MODEL PEHK, PGHK



MODEL J

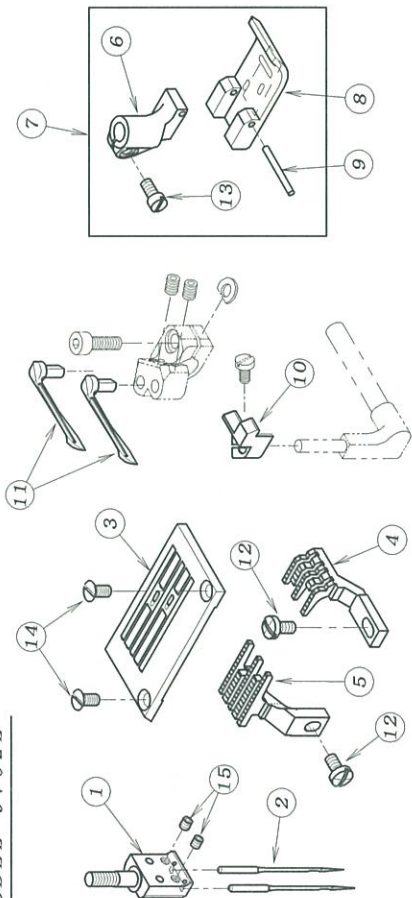


REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
43-01	*	針株	NEEDLE HOLDER	1
43-02	13-1510-5	針 T VX5 #21	NEEDLE	1
43-03	*	針板	NEEDLE PLATE	1
43-04	15-800	送備	FEED DOG	1
43-05	*	前送備	FRONT FEED DOG	1
43-06	*	後送備	REAR FEED DOG	1
43-07	17-5530-A	押えホース	SHANK	1
43-08	17-5530-C	押え足ホルダ	BOTTOM HOLDER	1
43-09	17-5530-D	押えカイト足ハネ	SPRING	1
43-10	17-5530-F	押え足後ハネ	SPRING	1
43-11	17-5530-G	押え足ハネ	SPRING	1
43-12	17-5530-H	押えカイト足	GUIDE	1
43-13	17-5530-I	押えカイト足調節ナット	NUT	1
43-14	17-5530-J	押え足固定ネジ	SCREW	1
43-15	17-5530-K	ネジ	SCREW	6
43-16	17-7760-D	ピン	PIN	1
43-17	17-7760-F	カイト足金具	GUIDE PIN	1
43-18	*	押えセット	PRESSER FOOT ASSEMBLY	1
43-19	17-8000-A	押え足 (後)	BOTTOM (REAR)	1
43-20	17-8000-B	押え足 (前)	BOTTOM (FRONT)	1
43-21	*	押え足	BOTTOM	1
43-22	17-8120-E	補助押え足	GUIDE	1
43-23	17-8120-F	布押え (幅狭)	GUIDE PLATE (S)	1
43-24	17-8120-G	布押え (幅広)	GUIDE PLATE (L)	1
43-25	17-8140-D	布押え (コム入れ用)	GUIDE PLATE	1
43-26	17-8190-A	押え足ホース	SHANK	1
43-27	17-8190-D	補助押え足ハネ (左)	SPRING (LEFT)	1
43-28	17-8190-F	ハネ	SPRING	1
43-29	17-8190-G	ピン	PIN	1
43-30	17-8190-J	カイトプレート	GUIDE PLATE	1
43-31	17-8220-B	補助押え足	GUIDE	1
43-32	17-8260-F	押え足金具ハネ	SPRING	1
43-33	17-8260-G	ピン	PIN	1
43-34	17-8290-D	押えホース	SHANK	1
43-35	17-9290-B	押えカイト足	GUIDE	1
43-36	17-9290-C	コム当て定規	ELASTIC TAPE GUIDE	1
43-37	17-9290-D	カイト足ハネ	SPRING	1
43-38	175-441	ワッシャー	WASHER	1
43-39	179-191	ハネ	SPRING	1
43-40	184-161	ネジ	SCREW	1
43-41	184-167	ネジ	SCREW	2
43-42	184-171	散ネジ	SCREW	1
43-43	184-360	ネジ	SCREW	1
43-44	184-362	ネジ	SCREW	1
43-45	184-374	ネジ	SCREW	1
43-46	184-376	ネジ	SCREW	1
43-47	184-382	ネジ	SCREW	1
43-48	184-464	ネジ	SCREW	2
43-49	185-611	ネジ	SCREW	1
43-50	185-621	ネジ	SCREW	2
43-51	187-083	ネジ	SCREW	1
43-52	187-093	ネジ	SCREW	2
43-53	187-104	ネジ	SCREW	2
43-54	187-107	ネジ	SCREW	2
43-55	187-113	六角穴付きボルト	BOLT	1
43-56	187-130	ネジ	SCREW	1
43-57	188-136	ナット	NUT	1

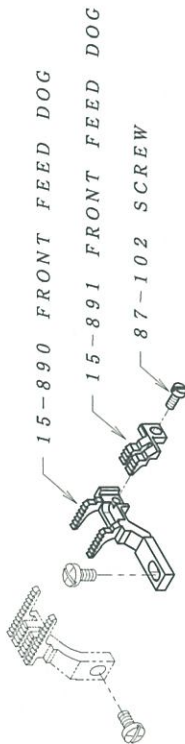
\* 各ゲージ部品の品番は、52ページのゲージパーツ表を参照して下さい。  
\* Please refer to Page 52 GAUGE PARTS LIST

# 44. ゲージ関係 (3) GAUGE PARTS (3)

MODEL 9702L



OPTION PARTS FOR CC



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
44-01	12-563	針株 (1/4)	NEEDLE HOLDER	1
44-02	13-0110-6	針 (UYX128GAS #11)	NEEDLE	2
44-03	14-563	針板 (1/4)	NEEDLE HOLDER	1
44-04	15-769	前送歯	FEED DOG FRONT	1
44-05	15-770	後送歯	FEED DOG REAR	1
44-06	17-4430-A	押えホース	SHANK	1
44-07	17-5480-B	押え足チープ 付用 (1/4)	PRESSER FOOT ASSEMBLY	1
44-08	17-5480-B	押え足チープ	BOTTOM	1
44-09	17-5480-G	平行ピン	PIN	1
44-10	18-769	針受後	NEEDLE GUARD REAR	1
44-11	19-525	ルーパー	LOOPER	2
44-12	184-374	ネジ*	SCREW	2
44-13	184-382	ネジ*	SCREW	1
44-14	184-464	ネジ*	SCREW	2
44-15	187-104	ネジ*	SCREW	2

\* 各ゲージ部品の品番は、52ページのゲージパーツ表を参照して下さい。  
 \* Please refer to Page 52 GAUGE PARTS LIST

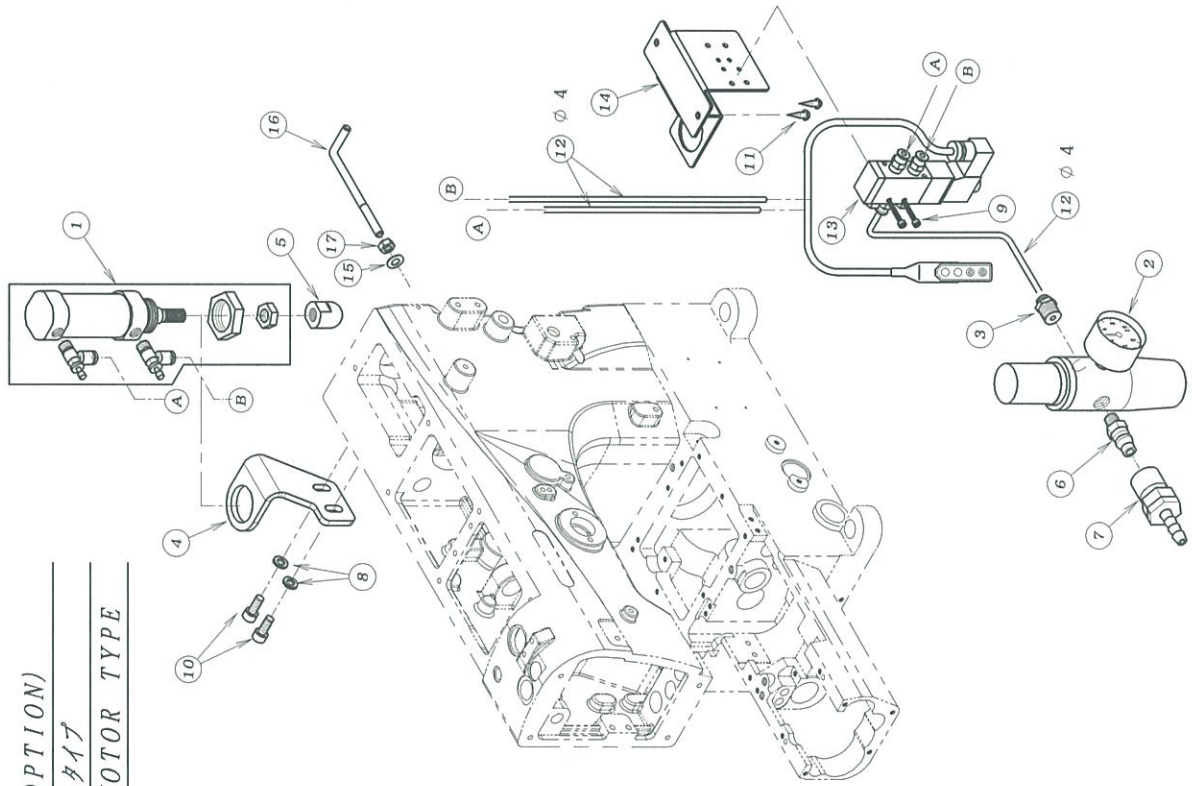
# 45. 押え揚げ装置 (エア-式) FL-8

## FOOT LIFTER MECHANISM (PNEUMATIC TYPE) FL-8

オプション (OPTION)

サーボモータータイプ

SERVO MOTOR TYPE



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
45-01	00-6082	押え揚げシリンダーセット	AIR CYLINDER ASS'Y	1
45-02	05-2120-A	フィルタレギュレータ	REGULATOR	1
45-03	05-217	レギュレーター用継手	JOINT	1
45-04	77-032	押え揚げシリンダーブラケット	BRACKET	1
45-05	05-897	シリンダー作動チップ	CHIP	1
45-06	06-516	カプラメス	CONNECTOR	1
45-07	06-517	カプラオス	CONNECTOR	1
45-08	75-552	ワッシャー	WASHER	2
45-09	87-438	六角穴付ボルト	SCREW	2
45-10	87-171	六角穴付ボルト	SCREW	2
45-11	87-902	木ネジ	SCREW	2
45-12	05-979	チューブφ4x700mm	TUBE (φ4x700L)	3
45-13	05-982	電磁弁セット	SOLENOID VALVE ASS'Y	1
45-14	05-644	電磁弁取付板	BRACKET	1
45-15	75-452	ワッシャー	WASHER	1
45-16	05-292	ボジションバー	BAR	1
45-17	88-166	ナット	NUT	1

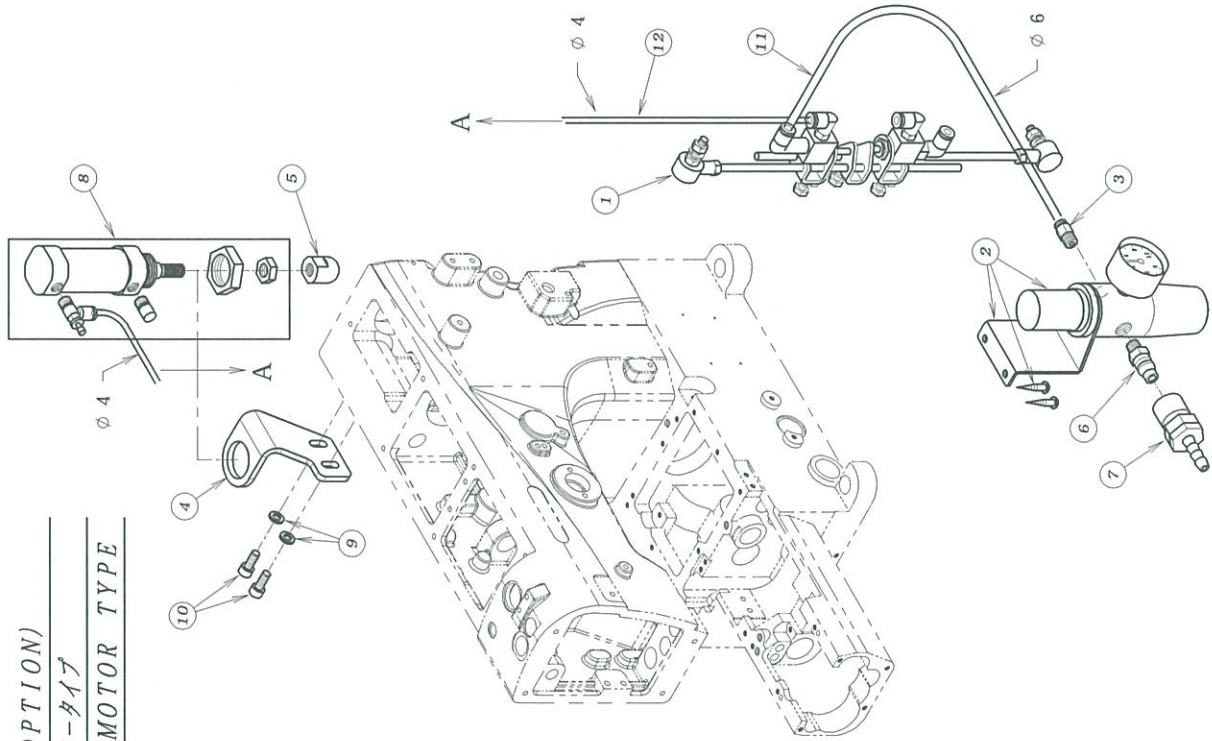
46. 押え揚げ装置 (エア-式) FL-9

FOOT LIFTER MECHANISM (PNEUMATIC TYPE) FL-9

オプション (OPTION)

クラッチモータータイプ

CLUTCH MOTOR TYPE



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
46-01	00-8040	吸込み押え揚げ用バルブセット	TREADLE AIR SWITCH ASS'Y	1
46-02	05-212	フィルダレギュレータ	REGULATOR	1
46-03	05-218	レギュレータ-用継手	JOINT	1
46-04	77-032	押え揚げシリンダー-ブラケット	BRACKET	1
46-05	05-897	シリンダー-作動チップ	CHIP	1
46-06	06-516	カプラメス	CONNECTOR	1
46-07	06-517	カプラオス	CONNECTOR	1
46-08	00-6130	押え揚げシリンダー-セット	AIR CYLINDER ASS'Y	1
46-09	75-552	ワッシャ	WASHER	2
46-10	87-171	六角穴付ボルト	SCREW	2
46-11	05-486	チューブφ6x1000mm	TUBE (φ6x1000mm)	1
46-12	05-932	チューブφ4x1500mm	TUBE (φ4x1500mm)	1

# 47. ゲージパーツ表 GAUGE PARTS LIST

機種 MODEL	タイプ TYPE	針数 NEEDLE	ゲージ GAUGE	針株 NEEDLE HOLDER	押え組 PRESSER FOOT ASS'Y	後送り歯 FEED DOG (REAR)	前送り歯 FEED DOG (FRONT)	針板 NEEDLE PLATE Standard	ルーパー LOOPER	上飾り ルーパー SPREADER	針受 (後) NEEDLE GUARD (REAR)	針ガイド (前) NEEDLE GUARD (FRONT)
NR	CC		7/32	12-0260-1	17-9380-1	15-881	15-880	14-871	19-525	19-751 (None UT)	18-805	18-806
				12-0270-1	17-9390-1	★15-861	★15-862	★14-846				
	A		7/32	12-0260-1	17-8120-1	15-881	15-880	14-871				
				12-0270-1	17-8130-1	15-881	15-880	14-880				
	P		7/32	12-0260-1	17-9380-1	15-881	15-880	14-871				
				12-0270-1	17-9390-1	15-881	15-880	14-880				
	PE		1/4	12-0260-1	17-8120-1	15-854	15-784	14-781				
				12-0270-1	★17-9360-1			14-782				
				12-0270-1	17-8130-1			14-812				
				12-0270-1	★17-9370-1			14-813				
	PLK		7/32	12-0260-1	17-8150-1	15-869	15-868	14-929				
				12-0270-1	17-8160-1	14-930						
	PEHK PGHK		7/32	12-0260-1	17-9290-1	15-883	15-882	14-712				
				12-0270-1	17-9300-1			14-849				
	D		6mm	12-8480-1	17-7120-1	15-800	15-800	14-800				
				12-8490-1	17-8430-1			14-800				
	J		1/4	12-8770-1	17-8000-1	15-856	15-855	14-890				
				12-0260-1	17-8120-1	15-858	15-857	14-891				
	PMD		7/32	12-0260-1	17-8130-1	19-534	19-580	19-525				
				12-0270-1	17-8130-1	19-534	19-580	19-751				

★同梱部品です。★ Enclosing accessory box

\* その他、特殊ステッチ対応針板品番は、53ページのゲージパーツ表を参照して下さい。

\* Please refer to Page 53 GAUGE PARTS LIST for special needle plate.

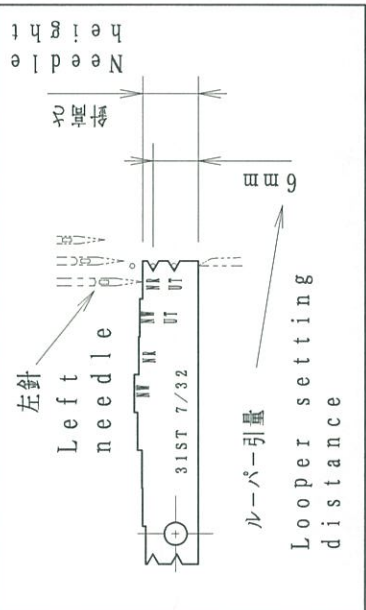
48. 特注針板パーツ表 EXTRA NEEDLE PLATE PARTS LIST

機種 MODEL	タイプ TYPE	針数 NEEDLE	ゲージ GAUGE	標準 Standard 針板 NEEDLE PLATE	ロングステッチ For long stitch	ショートステッチ For short stitch	かまぼこ防止用Uタイプ For soft stitch formation	かまぼこ防止用Kタイプ For soft stitch formation	
					針板 NEEDLE PLATE	針板 NEEDLE PLATE	針板 NEEDLE PLATE	針板 NEEDLE PLATE	ルーパー台 LOOPER HOLDER
NR	CC		7/32	14-871	14-871L	14-871S	14-871U	14-871K	
	P	3							
	PE		1/4	14-880	14-880L	14-880S	14-880U	14-880K	
	PLK			7/32	14-812	14-812L	14-812S		14-812K
			3						
				1/4	14-813	14-813L	14-813S		14-813K
							19-533 19-558 (None UT)		

\* ルーパー台の組み合わせは、8ページを参照して下さい。  
\* Please refer to Page 8 for Looper holder assembly.

特注パーツ EXTRA PARTS

針棒ストローク STROKE	ゲージ GAUGE	針高さ、ルーパーゲージ NEEDLE & LOOPER SETTING GAUGE
31mm	7/32	16-8221
	1/4	
33mm	7/32	16-8222
	1/4	











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# ***NR** Series Instruction Manual*

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## INTRODUCTION

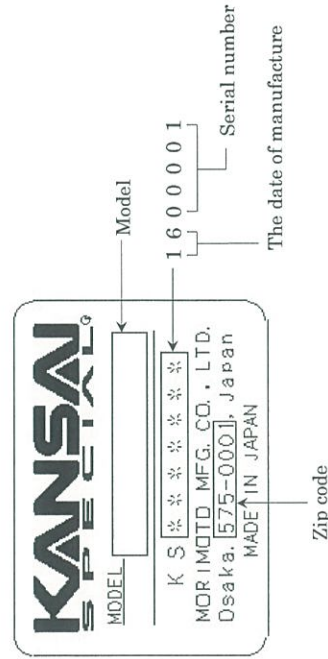
Thank you for your purchasing Kansai Special's NR Series.  
Read and study this instruction manual carefully before beginning any of the procedures and save it for later use.

1. This instruction manual describes adjustments and maintenance procedures on this machine.
2. Before starting the machine, check to make sure the pulley cover, safety cover, etc. are secured.
3. Before adjusting, cleaning, threading the machine or replacing the needle, be sure to turn off the power.
4. Never start the machine with no oil in the reservoir.
5. Refer to the parts list as well as this instruction manual before maintenance.

If the machine includes a thread trimmer, read and study the instruction manual for the thread trimmer carefully.

6. The contents described in this instruction manual are subject to change without notice.

### Indication of serial number



## CONTENTS

1. NEEDLES & THREADING	10. STITCH FORMATION
1-1 Needles	10-1 Position of the needle thread guides
1-2 Replacing the needles	10-2 Position of the thread guide on the needle thread take-up
1-3 Threading to the looper thread support plate	10-3 Timing of the needle thread take-up
1-4 Threading	10-4 Position of the needle thread guard
2. MACHINE SPEED	10-5 Position of the thread guide of the spreader thread take-up
2-1 Machine speed & operating direction	10-6 Position of the thread guide of the looper thread take-up
2-2 Motor & belt	10-7 Position of the looper thread take-up
3. LUBRICATION	11. ADJUSTING THE ALK AND PLK
3-1 Oil	11-1 Specifications of the ALK and PLK
3-2 Oiling	11-2 Adjusting the PLK for inserting elastic into waists of tubular goods
3-3 Replacing the oil and the oil element	11-3 Adjusting each holder
4. SEWING MACHINE INSTALLATION	11-4 Adjusting the hem guide (ALK)
4-1 Cutting the machine table	11-5 Adjusting the fabric trimmer positioned to the left of the needle
4-2 Installing the machine	12. ADJUSTING THE REAR PULLER
5. TIMING OF THE LOOPER TO THE NEEDLES	12-1 Position of the hand lever and the stopper
5-1 Changing the needle bar stroke	12-2 To adjust the puller pressure
5-2 Adjusting the needle height	12-3 To adjust the feeding amount of the rear puller
5-3 Angle and height for installing the looper	13. ADJUSTING THE PHK
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5-5 Needle/looper front-to-back relationship	13-2 Adjusting the cloth presser
5-6 Adjusting the needle/looper setting distance	13-3 Adjusting the knife apparatus
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8-1 Feed dog height & tilt	
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8-4 Differential feed	
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9-1 Presser foot pressure	
9-2 Position of the presser foot & foot lift	
9-3 Adjusting the float foot	

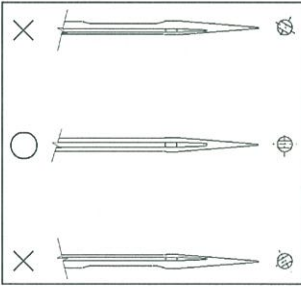
**[1] NEEDLES & THREADING**

**1-1 Needles**

UY128GAS of Schmetz , Organ or Groz-Beckert.  
Select the proper needle for the fabric and thread.

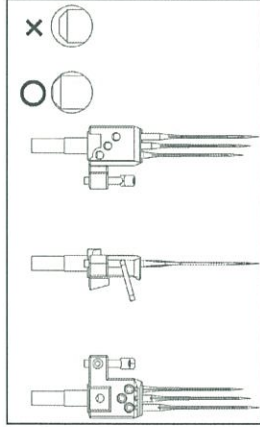
< Needles and needle size >

Organ UY128GAS	# 09	# 10	# 11	# 12	# 14
Schmetz UY128GAS	Nm65	Nm70	Nm75	Nm80	Nm90
Groz UY128GAS	Nm65	Nm70	Nm75	Nm80	Nm90



**1-2 Replacing the needle**

To replace the needle, check the needle carefully to see that the scarf is turned to the rear of the machine (see the illustration).  
Then install the needle correctly.

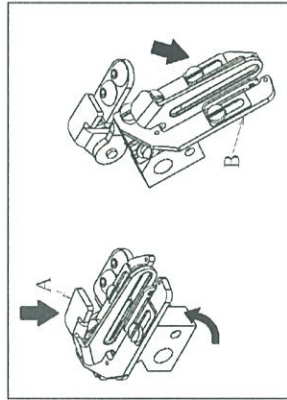


< Note >

Before replacing the needle, be sure to turn off the machine. A clutch motor continues running for a while after the machine is turned off. Therefore keep on pressing the pedal until the machine stops.

**1-3 Threading to the looper thread support plate**

Press lever A and support plate B will spring up. After threading, return it to the original position by pressing B.

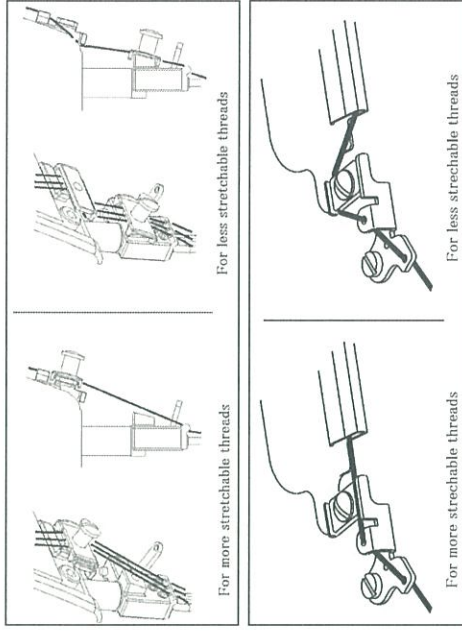
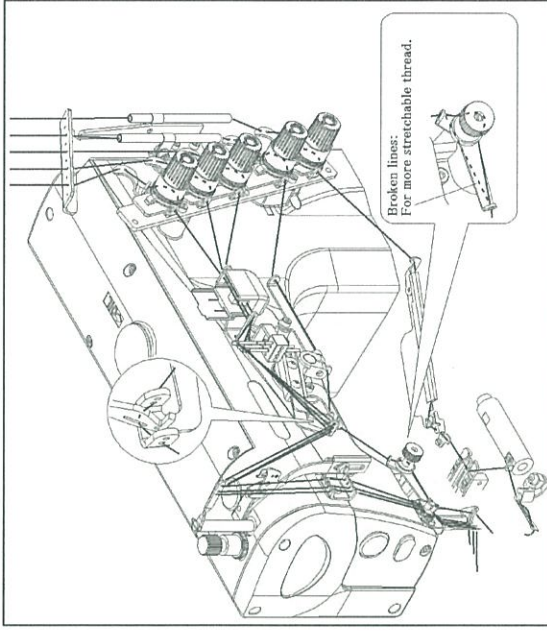


< Note >

Be sure to return the support plate B correctly when the machine is starting.

**1-4 Threading**

Thread the machine correctly by referring to the illustration below.  
Threading the machine incorrectly may cause skip stitching, thread breakage and/or uneven stitch formation. Thread tension should be changed according to various kinds of conditions such as the thread to be used and/or the feeding amount (see Chapter 10 for "Stitch formation").



**[2] MACHINE SPEED**

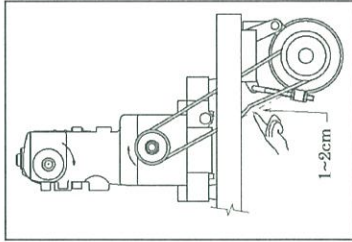
**2-1 Machine speed & operating direction**

Refer to the table below for maximum and standard speeds of the Series. To extend machine life, run the machine approximately 15~20% below the maximum speed for the first 200 hours of operation (approx. 1 month). Then run the machine at the standard speed.  
The machine pulley turns clockwise as the handwheel does as seen from the machine pulley

**2-2 Motor & belt**

Motor : 3-phase, 2-pole, 400W clutch motor  
Belt : M type V belt

Select the proper motor pulley according to the machine speed (refer to the motor pulley outer diameter on the table below). Adjust where to position the motor by pressing the finger onto the middle of the belt so that 1~2cm deflection can be achieved (see the illustration on the right)



NR25

< Machine speed >

TYPE	MAXIMUM SPEED	STANDARD SPEED
NR9803	6,000rpm	5,500rpm
NR9803ALK	5,500rpm	5,000rpm
NR9803PLK	4,800rpm	4,300rpm
NR9803PHK	4,800rpm	4,300rpm

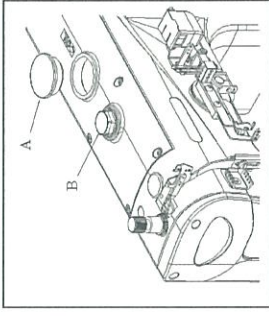
< Motor pulley selection table >

Motor pulley outer diameter (mm)	Machine speed (rpm)	
	50Hz	60Hz
80	3,500	4,200
90	4,000	4,800
100	4,400	5,300
110	4,900	5,800
120	5,300	6,300
130	5,700	
140	6,200	

**[3] LUBRICATION**

**3-1 Oil**

Use Kansai Special's genuine oil.  
(Part No. 28-618 :700cc)



**3-2 Oiling**

■ To fill the machine with oil  
Remove rubber plug A from the oil hole.  
Fill the machine with oil until the oil level is at the top line (see H in the illustration) on oil gauge C.  
After the first lubrication, add oil so that the oil level will be between H and L.

■ To check for proper oil flow

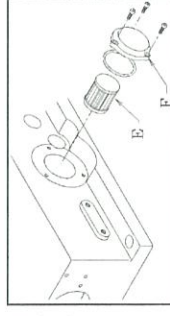
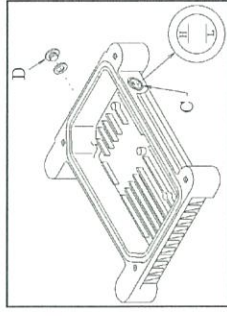
After filling the machine with oil, run the machine to check the oil is splashing to oil flow sight window B.

**3-3 Replacing the oil and the oil element**

To extend machine life, be sure to replace the oil after the first 250 hours of operation.

To replace the oil, follow the procedures below.

1. Remove the V belt from the motor pulley and then remove the machine from the table.
2. Remove screw D and then drain the oil. Be careful not to stain V belt with the oil.
3. After draining the oil, be sure to tighten screw D.
4. Fill the machine with oil by referring to 3-2 shown above.



If element E is contaminated, proper oiling may not be performed. Clean the filter element every six months. If just a little or no oil flows out from the nozzle with the proper amount of oil in the machine, check the element. To do so, remove oil filter cap F.

Replace the element if necessary.

< Note >

When the oil filter cap is removed, the oil collected on the element drips. Be careful.



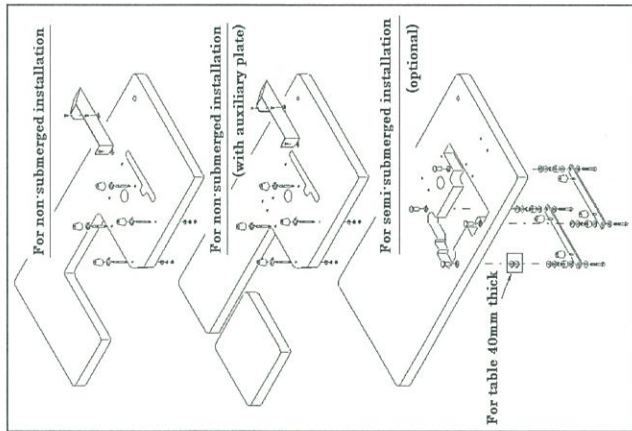


#### 4-2 Installing the machine

The NR Series is available in two kinds of installations, non-submerged and semi-submerged.

##### ■ Non-submerged installation

Install the machine correctly by referring to the illustration. Install the bolts and nuts to the machine table. Fit the rubber cushions onto the bolts. Then mount the machine properly onto the rubber cushions.



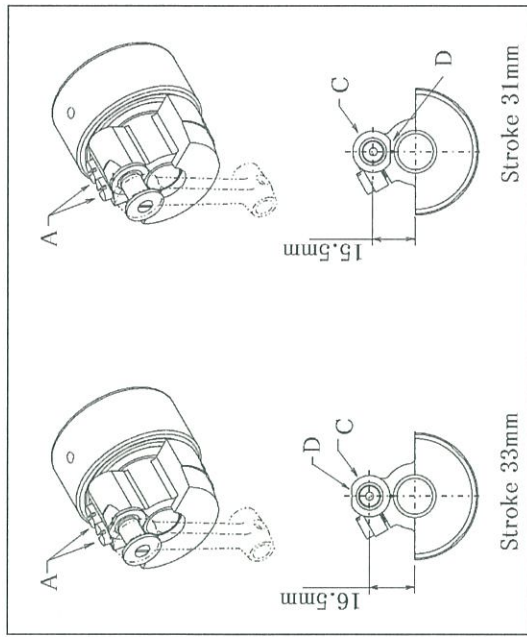
##### ■ Semi-submerged installation

Install the machine correctly by referring to the illustration. Secure the oil reservoir installation brackets to the machine table with screws. Fit the rubber cushions onto the screws. Then mount the machine properly onto the rubber cushions.

#### [ 5 ] TIMING OF THE LOOPER TO THE NEEDLES

##### 5-1 Changing the needle bar stroke

Loosen screws A and turn needle bar link C. To change the needle bar stroke, bring flat surface D to the top or bottom. When the needle bar and flat surface D come to the highest position, the stroke of needle bar stroke is set to 33mm. At the time of shipment of the machine, needle bar stroke is 31mm.



##### < Note >

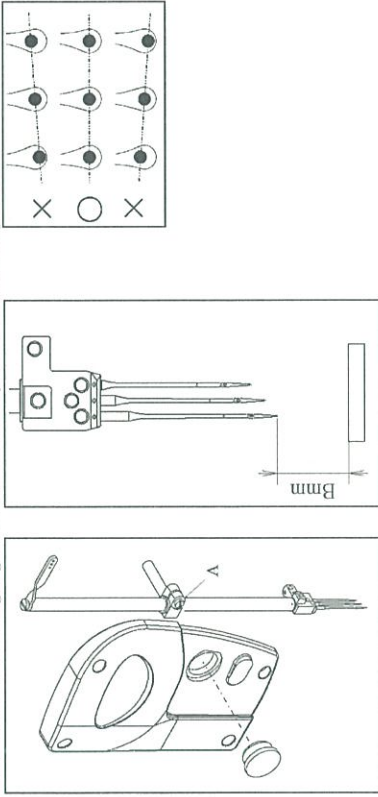
Before changing the needle bar stroke, be sure to turn off the power.

After the needle bar stroke adjustment, make sure that retighten the two screws A securely.

When the needle bar stroke changing, check to make sure the timing of the needle and looper. (See chapter 5)

### 5-2 Adjusting the needle height

When the needle bar is at the bottom of its stroke, remove the plug on the head cover, loosen screw A, and move the needle bar up or down. Setting distance B varies according to the needle stroke or gauge size for further adjustment. (See chapter 5-4)

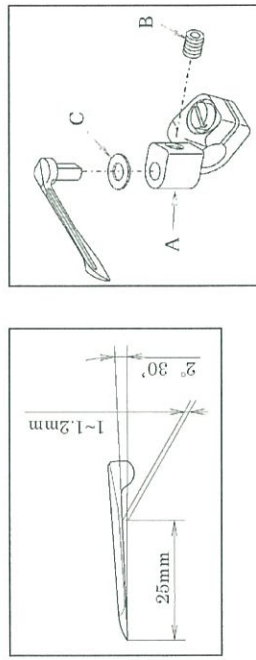


< Note >

After the above adjustment, check to make sure each needle drops into the center of each needle hole.

### 5-3 Angle and height for installing the looper

To obtain the proper angle and height, insert the looper fully into looper holder A and then tighten screw B. The proper angle for the looper is 2° 30'. Distance at 25mm from the point of the looper between the bottom of the looper blade and the extension line from the point of the looper : Approximately 1.1mm.

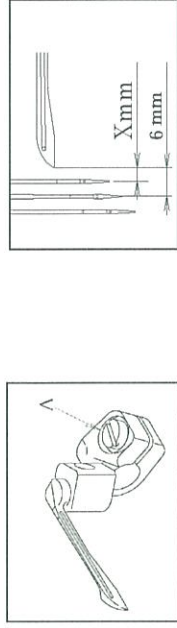


< Note >

There is no need for washer C with UT series.

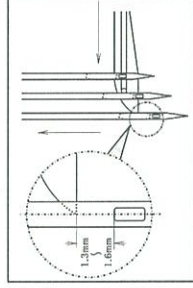
### 5-4 Looper setting distance

When the looper is at its farthest position to the right, looper setting distance is the fundamental distance from the point of the looper to the center of the needle should be 6mm. Also, setting distance X varies according to the needle stroke or gauge size for further adjustment. (See the table below)



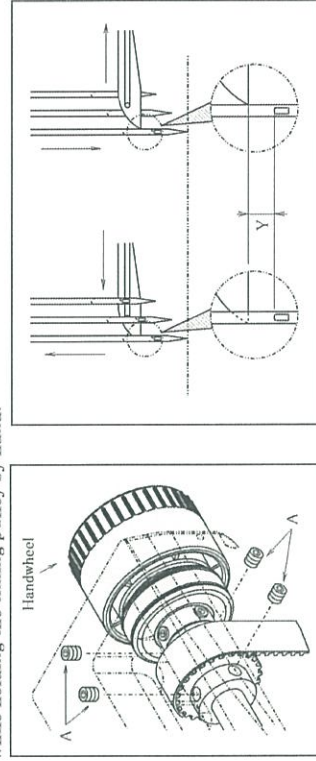
Needle stroke gauge (mm) (inch)	Needle height (Bmm)			Looper setting distance (Xmm)
	None UT	UT	None UT	
3.2 (1/8)	31 (STANDARD)	33	33	31/33
4.0 (5/32)	9.1 ± 0.2	8.6 ± 0.2	10.2 ± 0.2	9.7 ± 0.2
4.8 (3/16)	8.7 ± 0.2	8.2 ± 0.2	9.8 ± 0.2	9.3 ± 0.2
5.6 (7/32)	8.3 ± 0.2	7.8 ± 0.2	9.4 ± 0.2	8.9 ± 0.2
6.4 (1/4)	7.9 ± 0.2	7.4 ± 0.2	9.0 ± 0.2	8.5 ± 0.2
	7.5 ± 0.2	7.0 ± 0.2	8.6 ± 0.2	8.1 ± 0.2

The point of the looper should pass the center of the left needle and 1.3~1.6mm above the top of its needle's eye when the looper moves to left on the back side of the left needle .



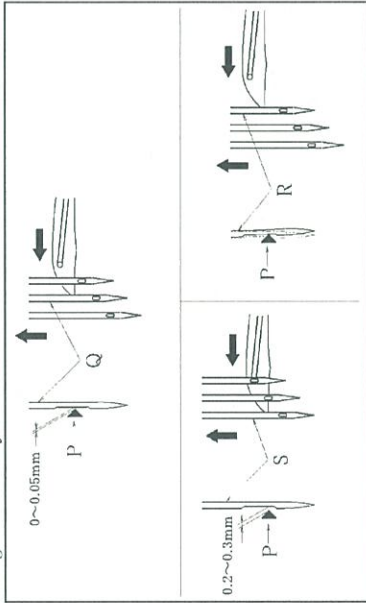
### 5-5 Needle/looper front-to-back relationship

When the point of the looper moves to the left needle should be same distance Y from the top of its needle's eye to the point of the looper by referring to the illustration below. To adjust the timing of the looper to the needles, remove the machine cover, loosen screws A on the timing pulley (upper), and shift the timing pulley (upper) by turning the handwheel while holding the timing pulley by hand.



### 5-6 Adjusting the needle/looper setting distance

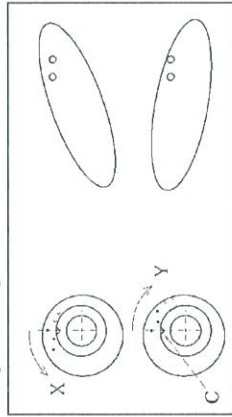
The looper set the clearance between back side of the center needle Q and the point of the looper at 0~0.05mm. To make this adjustment, loosen screw B on the looper holder first. At this time the looper should barely touch the right needle R. And the point of the looper at this position, set the clearance between the left needle S at approximately 0.2~0.3mm. If you can not make this adjustment, please change the looper's orbit. (See below chapter) Then see chapter 6-1 for right needle adjustment.



< Note >

When adjusting the looper holder front or back, be careful not to change the looper setting distance and don't touch the needle guard (rear) and needle.

To change the looper's orbit, loosen screw B on eccentric A and shift the timing mark C by moving eccentric A front or back by referring to the illustration below.



< Note >

When the timing mark moves to the direction of X unnecessary, the clearance between the point of the looper and the left needle when the looper moves to the left decreases. Cause of occur triangle skip stitch, and improper chaining off. When the timing mark moves to the direction of Y unnecessary, the clearance between the point of the looper and the left needle when the looper moves to the left increases. Cause of occur needle loop skip stitch, and easy to break the tip of the needle.

### 5-7 Changing the amount of the looper front-to-back movement

The clearance between the point of the left needle and the back side of the looper when the looper moves to the right from the extreme left end of its travel should be 0.3~0.6mm (The needle is pressed to the back). The distance between the point of the left needle and the center of the looper's eye on the back side of the looper should be 3~3.5mm.

The amount of the looper front-to-back movement is factory-set properly for needle count #11 (Nm75). If you use needle counts Nm80~90, adjust the amount as required.

Remove the inside cover. Loosen nut B while holding screw A for the looper front-to-back adjusting pin with a screwdriver.

Then move the front-to-back rod front or back.

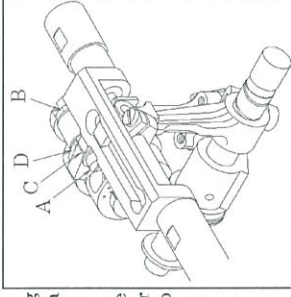
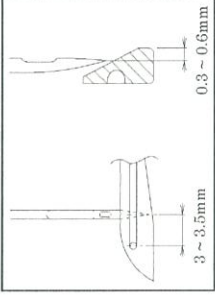
To increase the amount, move alignment mark D on the front-to-back rod to the front from mark C on the looper bar guide. To decrease the amount, move mark D to the back. Adjust according to the needle count.

< Note >

After the above adjustment, check to make sure the chapter 5-6.

< Note >

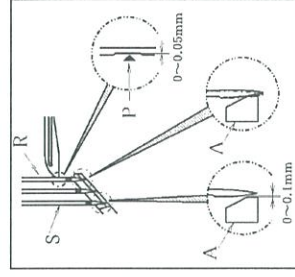
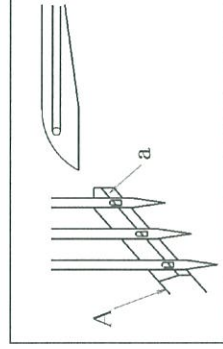
When the amount of the looper adjusting decrease more than necessary, easy to break the tip of the needle. When the amount of the looper adjusting increase more than necessary, cause of occur triangle skip stitch.



## [ 6 ] FRONT AND REAR NEEDLE GUARDS

### 6-1 Position of the needle guard (rear)

- Align line a with the center of needle's hole when the needle is at the bottom of the stroke.
- Following the 5-6 section, when the point of the looper has reached the center of the right needle (R), the clearance between the needle and the looper should be 0~0.05mm. Loosen screw B and move the needle guard (A) slightly to the front. Then the clearance between the left needle (S) and the needle guard (A) should be 0~0.1mm.

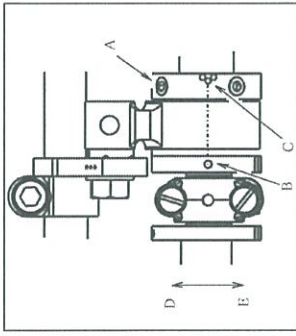


## [ 7 ] SPREADER

### 7-1 Timing of the spreader

Adjust according to the thread to be used or other conditions. To make this adjustment, remove the top arm cover and loosen two screws for looper eccentric A on the upper shaft. Then shift alignment mark C front or back while referring to alignment mark B.

To advance the timing of the spreader to the needle, shift mark C in the direction of D.  
To delay the timing of the spreader to the needle, shift mark C in the direction of E.



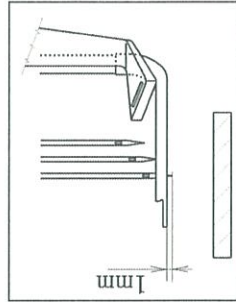
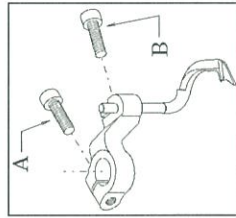
### 7-2 Position of the spreader

#### ■ Height

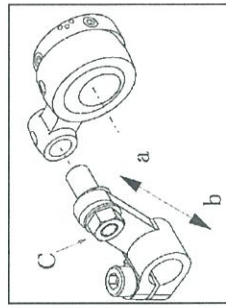
The distance from the point of the left needle to the bottom surface of the spreader should be 1mm.

#### ■ Left-to-right position

When the spreader is at the extreme left end of its travel, the distance from the center of the left needle to the point of the thread carrying notch should be 4.5~5.5mm. When the spreader passes the left needle, the clearance between the point of the thread carrying notch and the left needle should be 0.5~0.8mm. To make the above adjustment, loosen screws A and B.



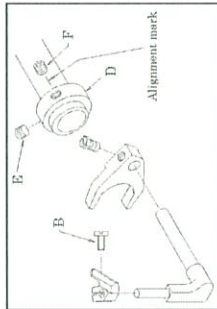
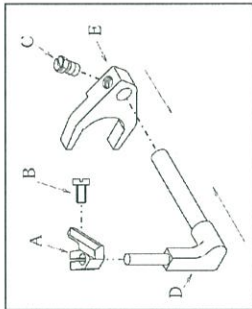
Adjust the number of spreader threads and/or the fabric weight. To make this adjustment, remove the arm top cover, loosen nut C and then move the adjusting lever pin in direction (a) or (b). To decrease the amount, move the pin in the direction of (a). To increase the amount, move the pin in the direction of (b).



■ To adjust the needle guard (A) front to back, loosen screws C. The vertical adjustment, and angle adjustment by loosen screw B correctly.

■ To readjust the timing of the needle guard (rear) movement, loosen screws E and F and move eccentric D. Align the alignment mark on the shaft with the center of screw F which turns afterward in the operating direction.

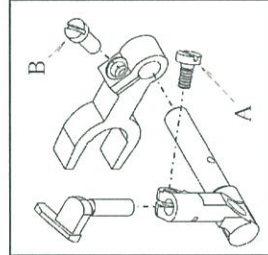
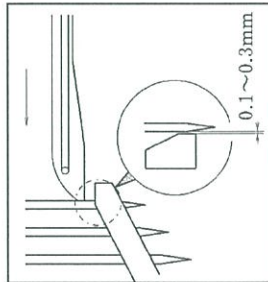
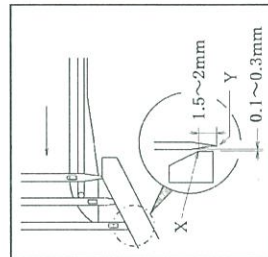
< Note >  
Retighten the screws while checking there is no left-to-right shake on the needle guard (A).



### 6-2 Position of the needle guard (front)

■ When looper has reached at the center of left needle. The position of needle guard (front)'s height should be 1.5~2mm from the tip of left needle Y to the line of needle guard X.

■ When looper has reached at the center of the right needle. The clearance between the needle guard and needles should be 0.1~0.3mm. Also, when looper has reached at the center of the left needle. The clearance between the needle guard and needles should be 0.1~0.3mm.

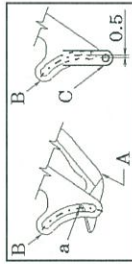
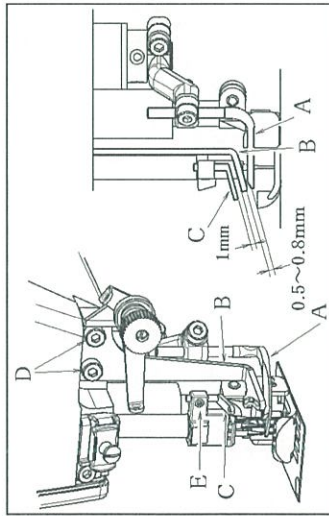


■ To adjust the needle guard front to back, loosen screws B. The vertical adjustment, and angle adjustment, by loosen screw A correctly.

< Note >  
Retighten the screws while checking there is no left-to-right shake on the needle guard (front).

### 7-3 Position of the spreader thread guide

The clearance between spreader thread guide B and spreader A should be 0.5~0.8mm. When the spreader is at the extreme right end of its travel, point (a) of the spreader thread carrying notch should be aligned with the centerline of the slot of spreader thread guide B. When the needle bar is at the bottom of its stroke, the clearance between the spreader thread guide and spreader thread guide C should be 1mm and the eyelet of spreader thread guide C should be approximately 0.5mm left to the center line of the slot of spreader thread guide B. To make this adjustment, loosen two screws D and screw E and move each thread guide up or down, left or right, or front or back as required.



## [ 8 ] FEED DOGS & STITCH LENGTH

### 8-1 Feed dog height & tilt

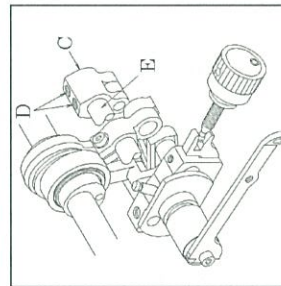
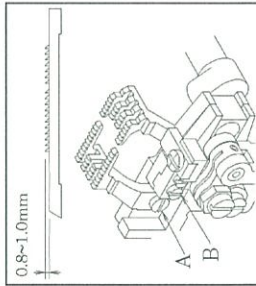
#### ■ Height

When the feed dogs are at the top of their stroke, the feed dog teeth should be parallel with and 0.8~1.0mm above the top surface of the needle plate. To make this adjustment, loosen screws A and B and move the main (back) and differential (front) feed dogs up or down.

#### ■ Tilt

When the feed dogs are at their top of their stroke, the feed dogs should be parallel with the top surface of the needle plate. To make this adjustment, loosen screws D and move shaft E.

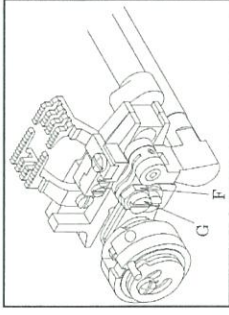
When using thick materials or stretchable materials, the front of the feed dog teeth tilt slightly become up. When using thick materials or stretchable materials, the front of the feed dog teeth tilt upward slightly. The top of the feed dog teeth should be parallel with above the top surface of the needle plate.



### 8-2 Front-to-back position of the feed dogs

#### ■ Maximum feed dog movement

< Amount of the front feed: 4.0mm >  
< Amount of the back feed: 3.6mm >  
Center the feed dogs in the needle plate so that they do not touch the needle plate.  
To make a fine front-to-back adjustment on the differential (front) feed dog, tighten screw G on front-to-back adjusting eccentric F and turn the eccentric.



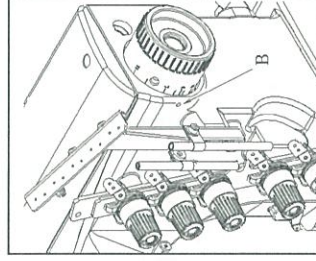
### 8-3 Adjusting stitch length

The stitch length is adjustable from 1.4~3.6mm. The following table shows the number of stitches within 1 inch (25.4mm) or 30mm according to the stitch length.

Stitch length (mm)	No. of stitches (within 1 inch)	No. of stitches (within 30mm)
3.6	7.0	8.0
2.4	10.5	12.5
1.4	18.0	21.0

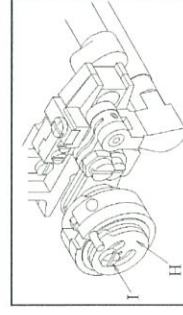
#### ■ To adjust the stitch length

1. Press push button A lightly until its end touches the inside part and clicks.
2. Turn handwheel by hand while pressing the push button lightly until the push button goes further into the depth.
3. Then press down the push button strongly again while turning handwheel as required.
4. Align the desired stitch length with alignment mark B and release the push button.



#### ■ Max. feeding amount for the NR Series: 4.5mm

To obtain a max. feeding amount of 4.5mm, loosen screw I on stopper H to release stopper H. Adjust while check to make sure the feed dogs do not touch the needle plate.

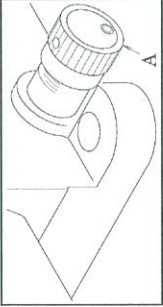


< Note >  
Before adjusting the stitch length, be sure to turn off the power.

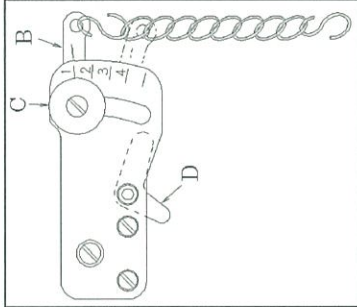
### 8-4 Differential feed

The NR Series is equipped with independently driven main (back) and differential (front) feed dogs.

Adjust the feeding amount of the differential (front) feed dog by positioning differential feed adjusting lever B or turning adjusting knob A. The normal and reverse differential feeds can be obtained as required.



- Feeding amount of the differential (front) feed dog  
The readings indicate the feeding amount of the differential (front) feed dog. Loosen nut C. Set differential (front) feed adjusting lever B as required at 1.0~4.0mm or adjust by turning adjusting knob A.
- If you use differential feed lever, secure lever B as required with nut C within the range from the reading which differential feed lever B read when knob A is turned to stopper D.
- If you change the feeding amount of the differential feed dog during sewing, connect a chain to differential feed lever B.



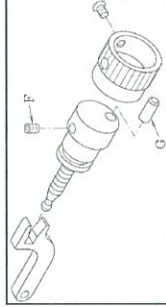
Each of the front (differential) and back (main) feed dog drives independently.

Therefore if you change the feeding amount of the back (main) feed dog (stitch length), the differential feed ratio will be changed. Readjust the differential feed ratio.

< Differential feed ratio >

Stitch length (mm)	Max. normal diff. Feed	Max. reverse diff. Feed
3.6	1:1.1	1:0.3
2.5	1:1.6	1:0.4
2.0	1:2	1:0.5
1.4	1:2.9	1:0.7

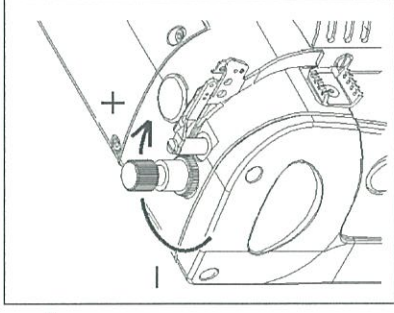
- On the NR Series the feeding amount can be changed mechanically up to 4.5mm. To obtain 4.5mm, loosen screw F and move stop pin G to release the stopping position. If you change to the maximum feeding amount, adjust the feed dogs front to back while checking to make sure the feed dogs do not touch the needle plate.



## [ 9 ] PRESSER FOOT

### 9-1 Adjusting presser foot pressure

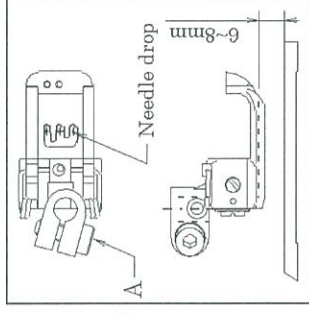
The presser foot pressure should be as light as possible, yet be sufficient to feed the fabric and produce uniform stitches. To increase the presser foot pressure, turn the adjusting knob clockwise.



### 9-2 Position of the presser foot & foot lift

Fit the presser foot onto the presser bar so that the needle can drop correctly to the center of the presser foot needle drop hole.

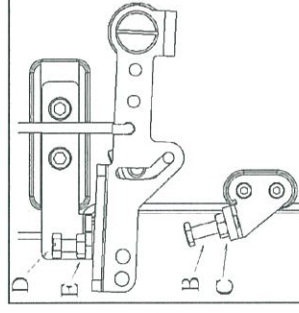
- Position of the presser foot  
Loosen screw A. Adjust by moving the presser foot left or right while checking to make sure the needle drops correctly to the center of the presser foot needle drop hole.



### ■ Foot lift

For machines with the spreader, the presser foot should be 6mm above the top surface of the needle plate. Check to make sure presser foot does not touch the spreader with the presser foot in the above position. For machines without the spreader, the presser foot should be 8mm above the top surface of the needle plate.

Set stopper B at the required position. Fasten the presser foot lift lever with nut C so that the lever cannot be lowered.



### 9-3 Adjusting the float-foot

When the adjusting screw D is turned clockwise or counterclockwise, the presser bar lifting lever is pressed down to lift the presser foot.

Adjusting the height of the float-foot according to the sewing condition.

< Note >

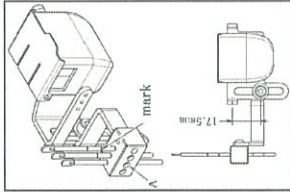
In case of the float-foot is not used, use the sewing machine with the screw E moves to top.

## [ 10 ] STITCH FORMATION

### 10-1 Position of the needle thread guides

The distance from the center of the eyelet of the needle thread guide to that of the set screw should be approximately 17.5mm (see the illustration). Adjust the height of the thread guides by loosening screws A and moving each thread guide up or down (refer to the mark shown in the illustration).

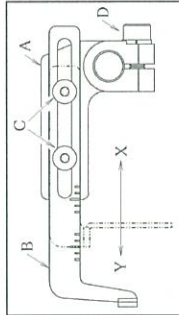
If the stitch formation cannot be changed extremely by adjusting the height of the thread guides because of the thread to be used, unravel the thread after test sewing and adjust the height of the thread guides while checking the tension of the needle thread.



### 10-2 Position of the thread guide on the needle thread take-up

When the needle bar is at the bottom of its stroke, needle thread take-up bracket A should be level and refer to the mark shown in the right figure the position of the thread guide of needle thread take-up B. To make this adjustment, loosen screws C and D.

To tighten the needle thread, move needle thread take-up to Y. To loosen the needle thread, move needle thread take-up to X.

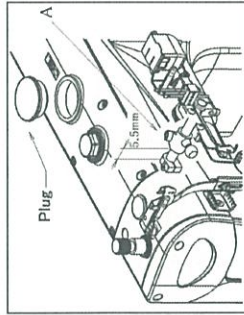


### 10-3 Timing of the needle thread take-up

The timing of the needle thread take-up in relation to the up-and-down movement of the needles can be adjusted. This timing is factory-set to synchronize with the up-and-down movement of the needle bar.

< Note >

*The rod ball is factory-set at 5.5mm from the rear end of the shaft. To make the needle thread loop small, move the rod ball to the front. To make the needle thread loop large, move the rod ball to the back. Remove the rubber top plug. Loosen the screw of (A) with a 5mm wrench. Then move the rod ball to the front or back.*

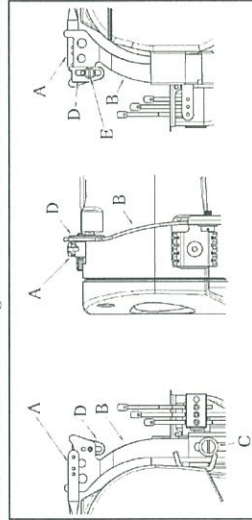


### 10-4 Position of the needle thread guide

When the needle bar is at the bottom of its stroke, the center of the needle bar eyelet A should be level with the top surface of needle thread guide B. To make the needle thread

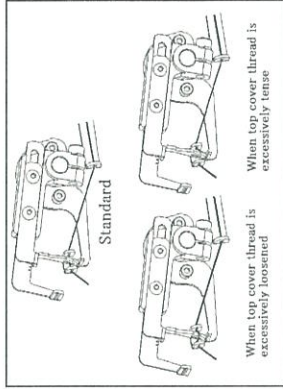
loop large, move up the thread guide B, for more stretchable threads. To make the needle thread loop small, move down the thread guide B, loosen screw C and move guide B up or down.

Also, loosen screw E and move up or down thread guide D as required.



### 10-5 Position of the thread guide of the spreader thread take-up

When the needle bar is at the top of its stroke, thread any one of parts on the spreader thread take-up with spreader thread. (see the illustration)



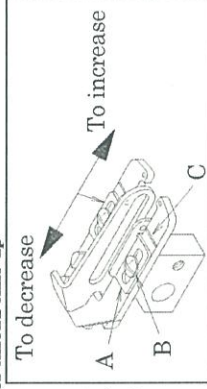
### 10-6 Position of the thread guide of the looper thread take-up

Position thread guide A according to the amount of looper thread supplied by the looper thread take-up.

To do so, loosen screw B and move the eyelet of thread guide A to the front or back while referring to alignment mark C on the bracket.

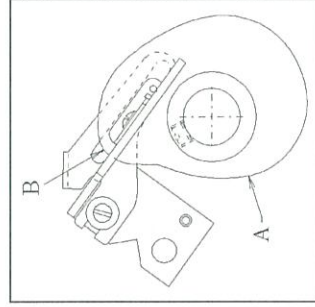
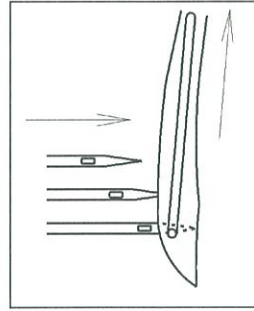
■ To increase the amount of looper thread Move the eyelet of A to the front.

■ To decrease the amount of looper thread Move the eyelet of A to the back.



### 10-7 Position of the looper thread take-up

When the point of the left needle descending to the back side of the looper has reached the bottom surface of the looper blade while the looper is moving to the right from the extreme left end of its travel, the looper thread should be removed properly from position B on the looper thread take-up.



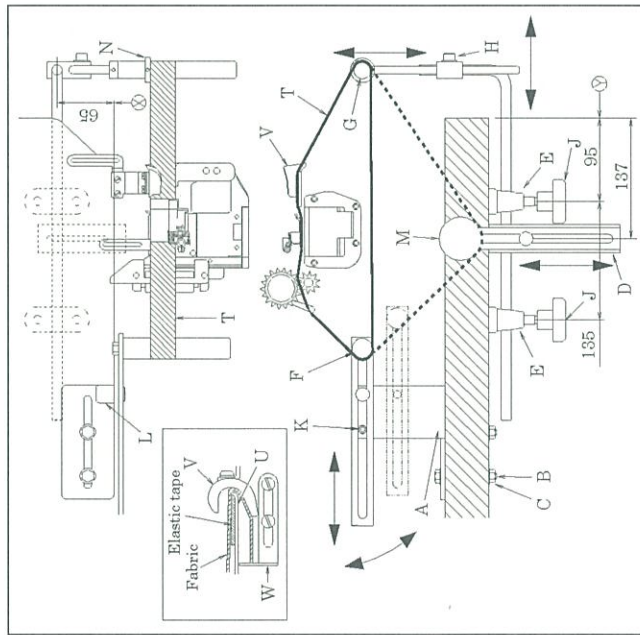
## [ 11 ] ADJUSTING THE ALK AND PLK

### 11-1 Specifications of the ALK and PLK

- |                       |  |
|-----------------------|--|
| 1. Needle bar stroke  | ..... 33mm   |
| 2. Upper knife stroke | ..... 4.5mm  |
| 3. Hem width          | ..... 12.7~25.4mm ALK (with an auxiliary presser foot) |
| 4. Elastic width      | ..... 10~30mm PLK (with an auxiliary presser foot)     |
| 5. With rear puller   | .....No. of threads on the upper puller : 28 (PLK)     |

### 11-2 Adjusting the PLK for inserting elastic into waists of tubular goods

- To install each elastic tension roller
  - Secure rear roller bracket A with bolt B and nut C onto the top surface of the machine table.
  - Install front roller installation bracket E on the underside of the machine table (refer to the distances from table ends X and Y shown below).
  - Install lower taper roller bracket D on the underside of the machine table (refer to the distance from table end Y shown below).
- To sew the fabric
  - Raise the presser foot and position elastic tape T as shown below.
  - Cover elastic tape T with the fabric positioned along lower elastic guide (U). Rotate the fabric in the operating direction.  
The fabric is folded along lower elastic guide (U) and right fabric guide (V). Go on until the fabric edge reaches left fabric guide (W).  
Then lower the presser foot.



- Place the fabric on rear roller F and protrude the fabric edge sufficiently to the right to form a hem. Hold the fabric lightly by hand so that the fabric will not move to the left or right. Do not form a hem forcibly during sewing.  
It may cause trouble due to the change of tension on the fabric.  
When the start of sewing comes close to lower elastic guide (U) and right fabric guide (V), stop sewing and then press the knee switch under the machine table.  
The whole elastic guide moves to the left.  
Remove the fabric from lower elastic guide (U) and right fabric guide (V).  
Sew the fabric while checking to see if the fabric edge is uniform and/or seams at the start of sewing match those at the end of sewing.

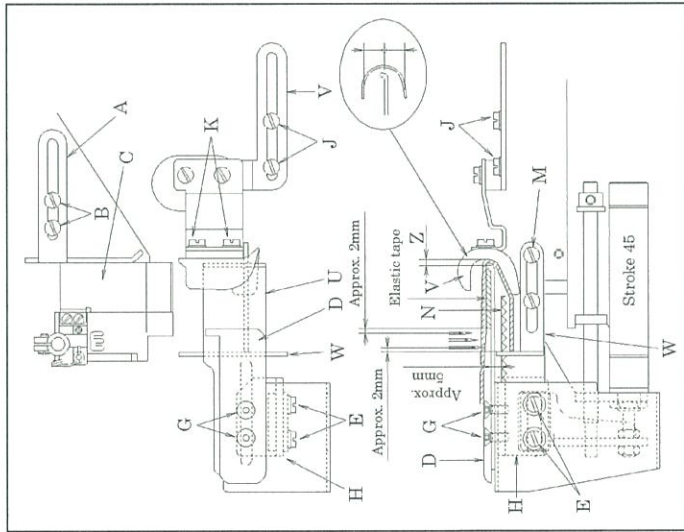
- To adjust each elastic tension roller
  - Position rear roller F and front roller G according to the size of the fabric which is spread properly. Loosen lever L and adjust rear roller F front to back. The rear roller can be lowered on bracket A by changing the position of screw K. In addition, the rear roller can be adjusted front to back and tilted forward or backward with lever L (see below). If the fabric is large, adjust by moving up or down lower taper roller M. Lower taper roller M can be adjusted up and down easily by loosening the lever.
  - Adjust elastic guide N for front roller G left to right by positioning elastic guide N correctly along to the right side of the elastic tape. Loosen screw H and adjust the height and direction of the front roller.  
Loosen knob J and adjust the front roller front to back.

### 11-3 Adjusting each holder

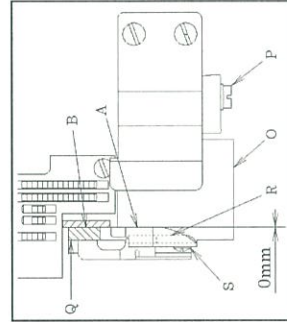
- To adjust the height of the lower elastic guide  
The clearance between lower elastic guide U and top surface N of the needle plate is factory-set at approximately 5mm. Adjust this clearance according to the fabric to be used. Loosen screw E and move elastic guide bracket H up or down as required.
- To adjust elastic tape left to right  
Loosen screws E. Adjust upper elastic guide D left to right so that the clearance between the left edge of elastic tape and the right needle is approximately 2mm.
- To adjust the elastic width  
Loosen screws G and adjust lower elastic guide U left to right according to the elastic width.
- To adjust the hem width  
Adjust fabric guide (right) V and rear fabric guide (right) A.  
Loosen screws J and B. Adjust V and A left to right according to the hem width.  
To adjust fabric guide (right) V up and down, loosen screws K and position lower elastic guide U so that it is approximately centered in the fabric guide (right).  
Adjust clearance Z between fabric guide (right) V and lower elastic guide U according to the fabric. Loosen screws J and adjust fabric guide (right) V left to right.  
If the hem width is smaller than the width of fabric pressing plate C, file or grind the right edge of C.



5. To adjust the width of the fabric edge to be cut  
Loosen screws M. Adjust fabric guide (left) W left to right so that the clearance between the raw edge of the fabric and the left needle is approximately 2mm.



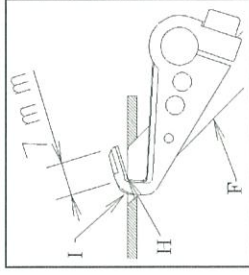
**11-4 Adjusting the hem guide (ALK)**  
Between A line and B line of the side of upper knife should be same line. To adjustment of hem guide, loosen screw P on the guide O.



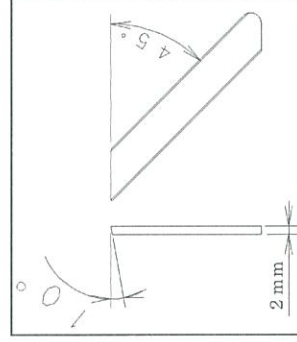
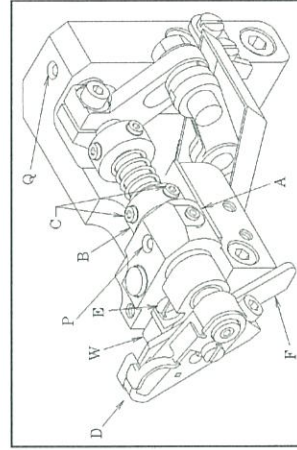
**11-5 Adjusting the fabric trimmer positioned to the left of the needle**

1. To adjust the width of the fabric edge to be cut  
Loosen screw A and adjust by moving upper knife holder D and lower knife holder W simultaneously left to right as required. Then tighten screw A.

<Note >  
Add a small amount of oil from oil holes P and Q periodically.



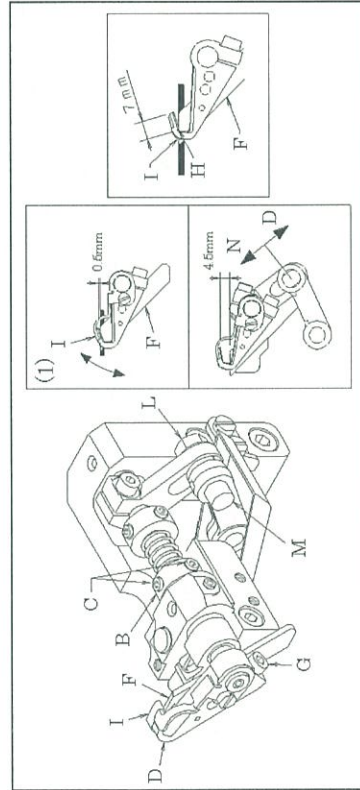
2. To remove/install the lower knife  
<To remove the lower knife >  
a. Open the front and side covers.  
b. Loosen screw C on collar (left) B.  
c. Press upper knife holder D to the left to create the clearance between the upper and lower knives.  
d. Tighten screws C on collar (left) B temporarily.  
e. Loosen screw E on lower knife holder W and remove the lower knife.  
<To install the lower knife >  
a. Align the cutting edge of lower knife F with the top surface of the needle plate. Then tighten screw E.  
b. Loosen screw C on collar (left) B temporarily.  
c. The upper knife turns to the right with spring pressure to mate with the lower knife.  
d. Place a thread between the upper and lower knives and check for the proper cutting action by turning the machine pulley by hand.  
e. The distance between the point of upper knife and the point H of the cutting edge of lower knife F should be 7mm and tighten screw C on the collar B.  
f. Recheck for the proper cutting action of the upper and lower knives.  
3. To sharpen the lower knife  
When the upper and lower knives become dull, resharpen the lower knife.  
Reserve new upper and lower knives for replacement.



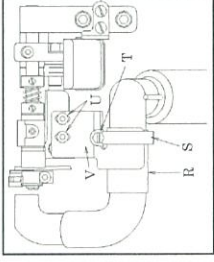
4. To remove/install the upper knife  
<To remove the upper knife >  
 b. Loosen screw G and remove the upper knife bracket D.  
 c. Loosen screw H and remove the upper knife I.  
 <To install the upper knife >  
 a. Install the upper knife I and tighten screw H.  
 b. Install the upper knife bracket D and tighten screw G temporarily.  
 c. When the upper knife I is at the bottom of its stroke, adjust the overlap of upper knife I and lower knife F by referring to the illustration on the below (1).  
 And tighten screw G  
 d. To increase overlap, loosen screw C on collar B the overlap are pressure by the spring.  
 e. Place a thread between the upper and lower knives and check for the proper cutting action by turning the machine pulley by hand.  
 f. The distance between the point of upper knife and the point H of the cutting edge of lower knife F should be 7mm and tighten screw C on the collar B.  
 g. Place a thread between the upper and lower knives and check for proper cutting action by turning the machine pulley by hand again.  
 5. To adjust the stroke of the upper knife  
 To decrease of upper knife's stroke. Loosen nut L, and the upper knife lever pin M should be move to downward. And tighten nut L.  
 To increase of upper knife's stroke. Loosen nut L, and the upper knife lever pin M should be move to upward. And tighten nut L.

<Note >

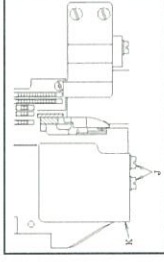
When the stroke was changed, the overlap 0.5mm between upper and lower knives needs to re-adjust at the above mention of c to g. Factory adjustment.  
 The stroke of upper knife is adjusted by 4.5mm, which is minimum of it (The upper knife lever pin M is the point of bottom). For gaud of upper and lower knives, the distance between the point of upper knife I and the point H of the cutting edge of lower knife F should be 7mm then tighten screw C on the collar B.



6. To adjust the sucking pipe  
 Loosen screws U on bracket V and adjust sucking pipe R up and down.  
 Loosen screw T on band S and adjust sucking pipe R front to back and left to right. Install sucking pipe R properly.



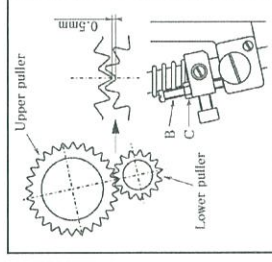
7. To adjust the support cover  
 When the position of vacuum pipe was changed, also, the position of support cover K should be change by loosen screw J.



## 【12】 ADJUSTING THE REAR PULLER

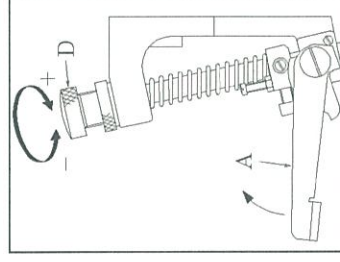
### 12-1 Position of the hand lever and the stopper

To position or remove the fabric, raise hand lever A.  
 With the hand lever lowered, adjust stopper B so that the clearance between the upper and lower pullers is 0.5mm.  
 Then tighten nut C.



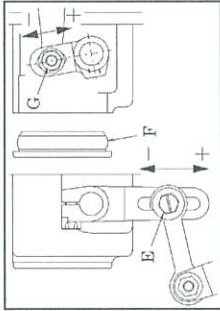
### 12-2 To adjust the puller pressure

The puller pressure should be as light as possible, yet be sufficient to feed the fabric smoothly.  
 To increase the pressure, turn adjusting knob D clockwise.  
 To decrease the pressure, turn adjusting knob D counterclockwise.



**12-3 To adjust the feeding amount of the rear puller**  
The feeding amount of the rear puller should be the same as that of the feed dog. Loosen nut E.

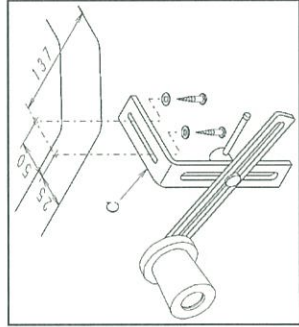
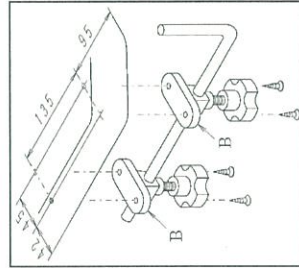
- To decrease the amount, move upward.
- To increase the amount, move downward.
- If the proper feeding amount is still not obtained after the above adjustment, remove rubber plug F and loosen screw G with a hex wrench.
- To decrease the amount, move upward.
- To increase the amount, move downward.



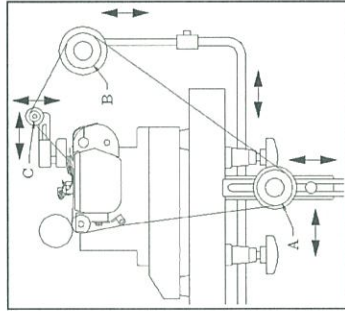
**[ 13 ] ADJUSTING THE PHK**

**13-1 Adjusting the roller**

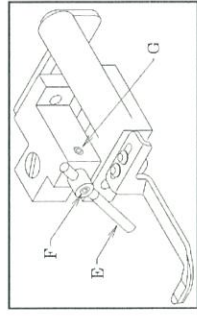
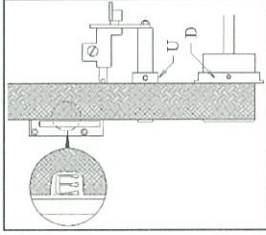
- Adjustment for elastic band's tension the parts B and C should be fit with the bottom surface of table correctly with referring to dimensions. (see the illustration)



- Rollers A, B, C are adjustable with finished waist size so that rollers adjust the proper position for elastic band's size.

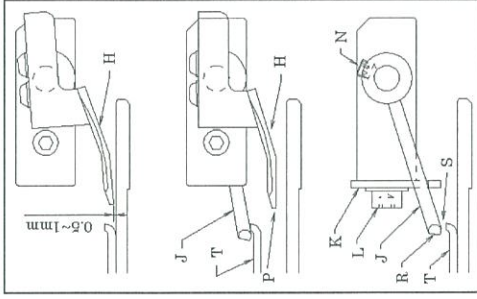


- In order to locate the elastic band by moving properly (L-R direction). Adjust by the elastic slast collar D on the front roller B, the elastic guide collar U on the front roller C, and the elastic guide pole E on the upper side of the ruler plate. 25~45cm widths of the elastic band can be used.



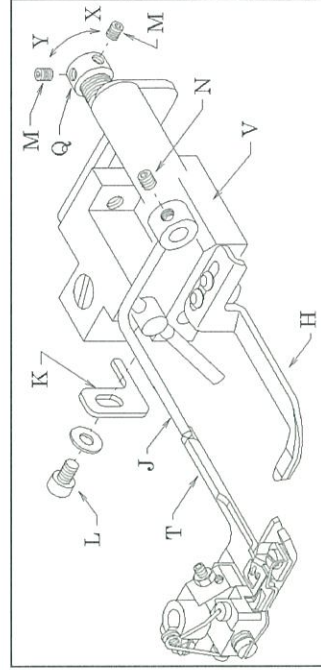
**13-2 Adjusting the cloth presser**

- Spring pressure of the cloth presser can be adjusted by loosening screw M on the collar Q. Turning the collar to the direction of arrow X can strengthen spring presser, and turning the collar to the direction of arrow Y can weaken it. Make the distance of 0.5~1.0mm between the edge P of the cloth presser H and needle plate when presser foot descends as shown in the figure. Locate the edge P of the cloth presser H at the middle point between needle plate and presser foot. Make the gap S between the presser foot T and the edge R of the guide bar J by loosening screw N on the guide bar J and screw L on the stopper K. Tighten the screw N and L after this adjustment.
- 



< Note >

Guide bar Attachment table V has a hole to fill oil.  
Insert some oil from it periodically.



### 13-3 Adjusting the knife apparatus

- Adjusting the width of knife (Adjusting the cutting point of cloth)
  - Detach cloth guide.
  - Locate lower knife table S properly by loosening screw A on the lower knife table S and screw B on the upper knife drive lever.
  - Tighten screw A on the lower knife table and screw B on the upper knife drive lever.

<Note >  
Do not tighten the screw A on the lower knife too much.

- Make sure whether you can move the upper knife table C to the right against spring pressure. If you cannot move it, loosen the screw B on the upper knife drive lever and move the upper knife table C to the right.
- Increase spring pressure properly by loosening screw D on collar ((left)).

<Note >  
Insert some oil from a hole E periodically.

- How to detach/attach the lower knife

<Detaching the lower knife>

- Detach the cloth guide.
- Loosen screw F on the lower knife table S.
- Remove lower knife G downward by making a gap between the upper knife K and the lower knife G, while pulling the upper knife table C to the right.

<Attaching the lower knife>

- Tighten screw F while locating the edge of the lower knife G on the surface of the needle plate.
- Make sure the sharpness of the upper and lower knives by putting a thread between them and rotating a pulley manually.

- How to detach/attach the upper knife.

<Detaching the upper knife>

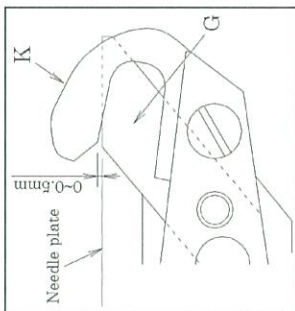
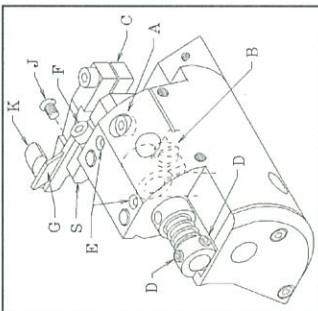
- Temporarily tighten screw B at which you can see the screw J on the upper knife, while loosening.
- Detach the upper knife by loosening screw J on the upper knife K.

<Attaching the upper knife>

- Tighten screw J while attaching the upper knife K to the upper knife table C.
- Make sure the sharpness of the upper and lower knives by putting a thread between them and rotating a pulley manually.

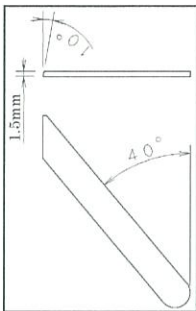
- Adjusting the contact of the upper and the lower knives.

Adjust the contact of the upper knife K and the lower knife G by loosening the screw B on the upper knife drive lever as shown on the figure when the upper knife K descends to its lowest point. Tighten the screw B after this adjustment.



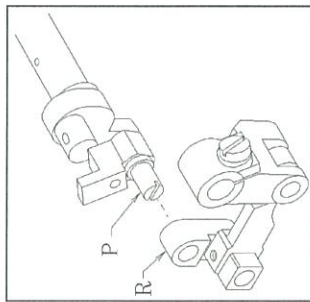
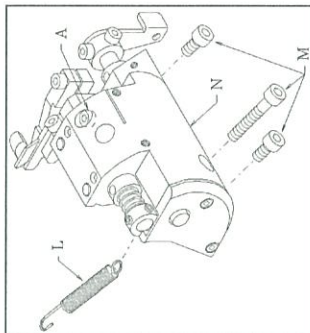
- How to grind knives.

Not necessary to grind the upper knife for about a year due to cemented carbide. Grind the lower knife if you find blunt for the period.



- How to detach the right knife table.

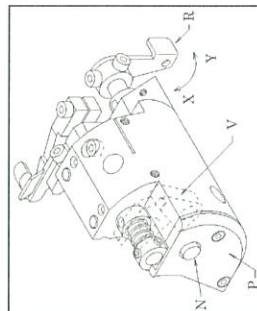
- Open the side cover and detach upper knife adjust spring L.
- Remove 3 screws M on the right knife table N.
- Move the needle bar to the upper death point by rotating puller manually.
- Detach the right knife table from its bed. You can loosen screw A on the lower knife table if you cannot do so.
- Detach the link R from drive pin P attaching the edge of the up-down feeding axis.



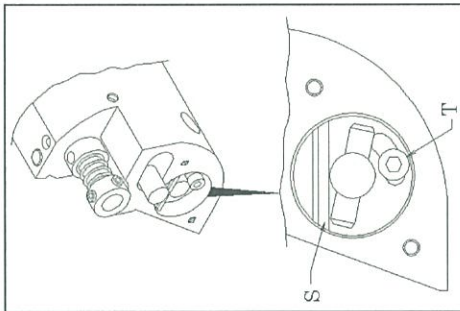
### 13-4 Adjusting the mechanism of knife drops

- In case you function the mechanism of knife drops.

- Descend the upper knife and stop its movement by rotating the drop lever R to the direction of arrow X.
- You can lock the movement of the upper knife by pressing the drop lever R to the last and pressing the push bottom N to the point at which the bottom reaches the upper knife adjust lever V.



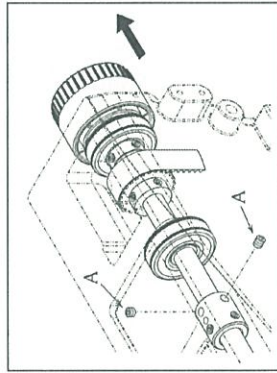
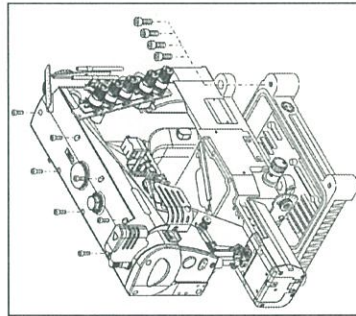
- c. Pull the drop lever R to the direction Y slightly until the edge of the push bottom N touches the upper knife adjust lever V. You can lock the movement of the upper knife after this.
  - d. In order to unlock it, push the drop lever R to the direction of Y. Push bottom N will be away from the upper knife adjust lever V. At this stage, you can unlock the drop of the upper knife by pulling the drop lever R to the direction of Y.
2. Adjusting the mechanism of knife drops.
    - a. Detach the side cover P.
    - b. Adjust by above mentioned guidance (13.4:1-a, b) by loosening screw T on the adjust lever stopper S. Be careful not to change the contact of the knives this procedure.
    - c. Tighten the screw T after this adjustment.



#### 【 14】 REPLACING THE TIMING BELT

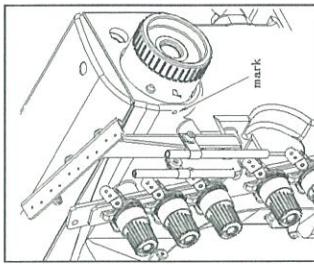
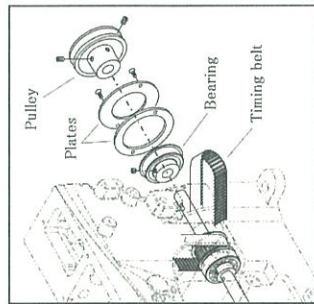
##### 14-1 To remove the timing belt

1. Loosen the seven arm cover set screws and the four oil reservoir set screws (see the illustration). Remove each part.
2. Loosen two screws A. Remove the handwheel to the right while turning it slowly (see the illustration).
3. Remove the pulley, plates and bearing in sequence by referring to the illustration. Then remove the timing belt from the hole for the bearing.



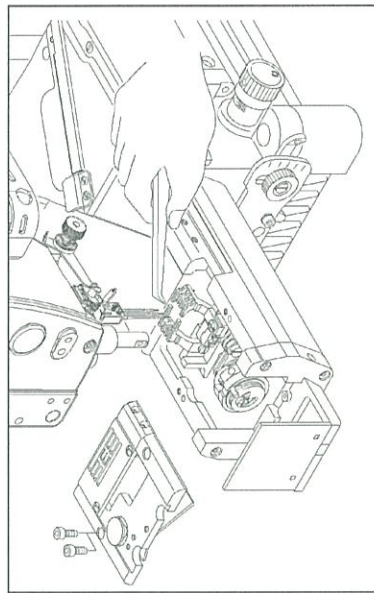
##### 14-2 To place the timing belt

1. Install the timing belt, bearing, plates, pulley and cover by performing the reverse procedure of 14-1.
2. Position the bearing so that the point of the screw is fitted correctly into the positioning hole on the lower shaft. Then tighten the screw to secure the bearing.
3. Move the looper to the extreme right end of its travel by turning the machine pulley. Bring the looper down to the bottom of its stroke by hand.
4. Then place the belt onto the timing pulley on the upper shaft. Tighten two screws A.
5. Bring the needle bar up to the top of its stroke by turning the machine pulley. Check to make sure mark "P" on the handwheel is aligned with alignment mark "O" on the bed.
6. To make a fine adjustment for the timing of the needle and looper, refer to 5-5.



#### 【 15】 CLEANING THE MACHINE

At the end of each day, remove the needle plate and clean the slots of the needle plate and the area around the feed dogs.



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# ***NR-UT*** *Series Instruction Manual*

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## INTRODUCTION

*Thank you for your purchasing Kansai Special's NR/UT Series.*

*Read and study this instruction manual carefully before beginning any of the procedures and save it for later use.*

*This instruction manual describes adjustments and maintenance procedures for the thread trimmer.*

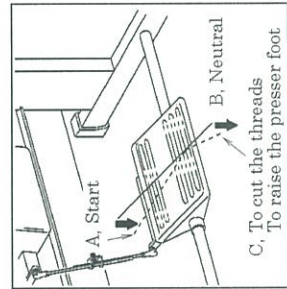
*Refer to the NR Series instruction manual for other information.*

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### [1] HOW TO USE THE THREAD TRIMMER

< Note >  
Do not use this thread trimmer with no fabric under the presser foot.

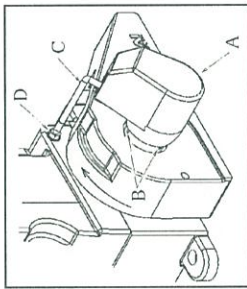


- Pressing the pedal with toe (position A) starts the machine. Releasing the pedal (position B) stops the needle at the top/bottom of its stroke (adjustable with the motor).
- If the needle stops at the bottom of its stroke as adjusted, pressing the pedal with heel (position C) raises the needle. As soon as the needle stops at the top of its stroke by pressing the pedal with heel, the thread trimmer gets actuated (if the needle stops at the top of its stroke as adjusted, the thread trimmer gets actuated by pressing the pedal with heel).
- Returning the pedal to position B lowers the presser foot.
- The presser foot can be raised or lowered freely by releasing the pedal (position B) or pressing the pedal with heel (position C) until the pedal is placed at position A for the next sewing operation after the threads are cut.

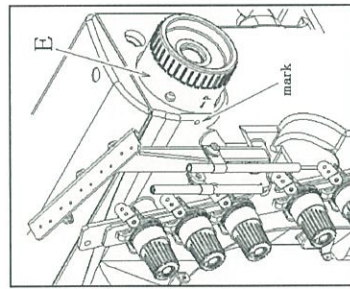
### [2] INSTALLING THE POSITION DETECTOR

- Install position detector A and tighten screw B temporarily.
- Fit positioner bar C onto the guide groove of the position detector. Then tighten screw D.
- Turn on the motor.

< Note >  
Remove the connector for the thread trimmer cylinder.  
Make sure the knife is retracted all the way.



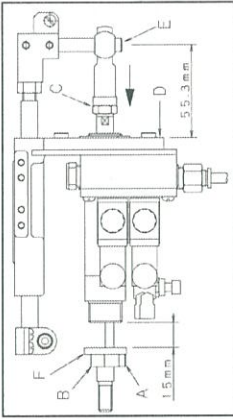
- Press the pedal with heel after two to three stitches are formed by pressing the pedal with toe.
- Then the needle stops.
- Loosen screws B for the position detector.
- Turn the machine pulley while checking that the position of screws B is not shifted. Align mark P on handwheel E with the alignment mark on the arm.
- Then the needle bar is at the top of its stroke.
- Tighten screws B to secure the position detector.
- Check to see if the needle bar stops at the top of its stroke by pressing and then releasing the pedal.



### [3] ADJUSTING THE THREAD TRIMMER AIR CYLINDER (UTA)

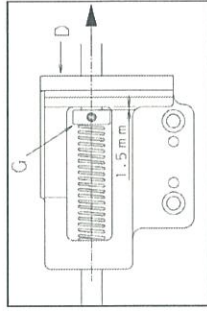
#### 3-1 Air cylinder stroke

The stroke of the air cylinder should be approximately 15mm.  
To adjust this stroke, loosen collar B and screw A. Set the clearance between rubber cushion F and the rear end of the cylinder at 15mm.  
To position shaft E, loosen nut C.  
With the cylinder retracted, set the distance from the left end of cylinder installation bracket D and the center of shaft E at approximately 55.3mm.



#### 3-2 Air cylinder return spring

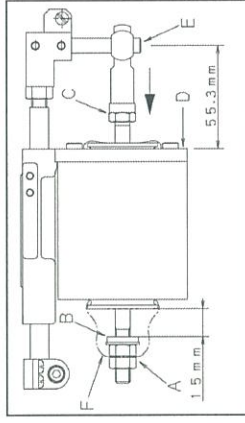
With the cylinder plunger protruded, there should be clearance slightly between collar G and bracket D.



### [4] ADJUSTING THE THREAD TRIMMER SOLENOID (UTE)

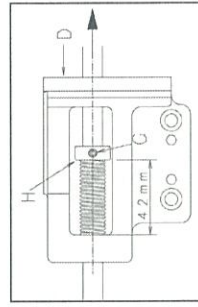
#### 4-1 Solenoid stroke

The stroke of the solenoid should be approximately 15mm.  
To adjust this stroke, remove rubber cover F and loosen nut A.  
Set the clearance between rubber cushion B and the rear end of the solenoid at 15mm. To position shaft E, loosen nut C.  
With the solenoid retracted, set the distance from the left end of bracket D and the center of shaft E at approximately 55.3mm.



#### 4-2 Adjusting the solenoid return spring

With the solenoid plunger protruded, there should be approximately 42mm clearance between collar H and bracket D. To make this adjustment, loosen screw G of solenoid return spring collar H.

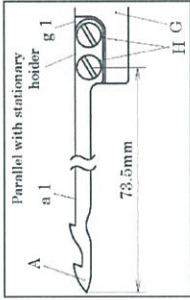




**[ 5 ] ADJUSTING THE THREAD TRIMMER**

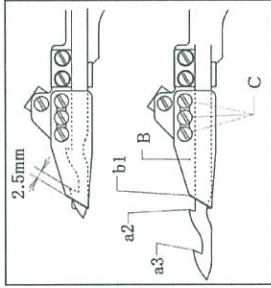
**5-1 Position of the movable knife and the stationary knife**

■ Position of the movable knife  
Set the (a 1) part of the movable knife A parallel to the (g 1) part of the stationary holder G.  
Set the distance from point of movable knife A and the center of left screw H at approximately 73.5mm.



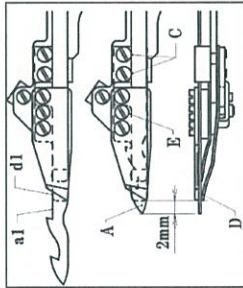
■ Relation between the stationary knife and the movable knife.

Adjust the engagement between blade (a 3) for trimming loop thread and stationary knife to be 2.5mm when movable knife is at the extreme right.  
So that the point of blade (a 2) for cutting needle thread pass the corner (b 1) of stationary knife B.  
The adjustment is made by loosening screw C.



**5-2 Adjusting the looper thread clamp spring**

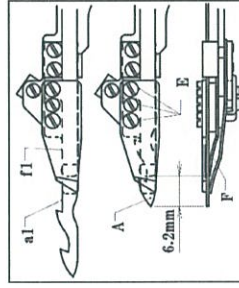
Position of looper thread clamp spring D so that the part (a 1) of movable knife and the part (d 1) of looper thread clamp spring are on the same plane.  
And adjust it will protrude approximately 2mm from the point of movable knife A when movable knife is at the extreme right. Adjustment is made by loosening screw C.



To adjust the pressure of thread clamp spring D, turn adjusting screw E. To increase the pressure, turn it clockwise. To decrease the pressure, turn it counterclockwise.

**5-3 Adjusting the movable knife pressure spring**

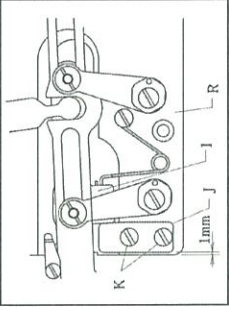
Position of movable knife pressure spring F so that the part (a 1) of movable knife and the part (f 1) of movable knife pressure spring are on the same plane. And adjust it will protrude approximately 5.2mm from the point of movable knife A when movable knife is at the extreme right.  
Adjustment is made by loosening screw E.



Adjustment is made by loosening screw E.

**5-4 Adjusting the stationary knife holder stopper**

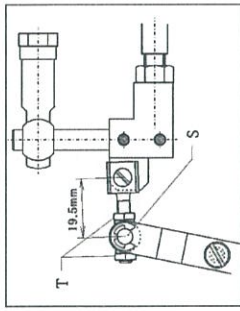
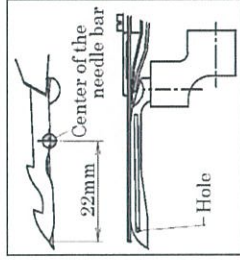
The stationary knife holder I slides to the left and stops by stationary knife holder stopper J.  
Never slide the stationary knife holder I to the left too much because the looper thread clamp spring touches the looper. The adjustment is made by loosening screw K and moving stationary knife stopper left and right. The standard position, the left end of stationary knife holder stopper is 1mm right from the left end of base plate R.



**5-5 Adjusting the movable knife holder left and right**

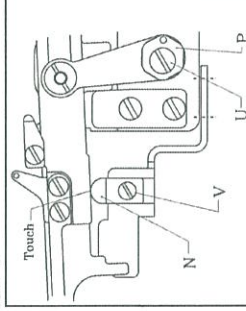
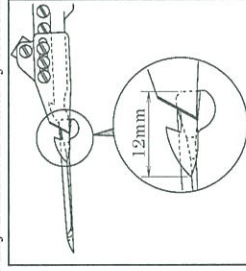
With movable knife A at the extreme left end of its travel, there should be a distance of 19.5mm from the center of the needle bar to the point of movable knife A.

To make the above adjustments, loosen nut T and move the pin S make a fine left-to-right adjustment by turning nut T. The point of the movable knife is center between the point of the looper and the eye's of the looper when move extremely left position of the knife.



**5-6 Adjusting the movable knife front to back**

To adjust the movable knife front to back, center the point of movable knife over the looper with the point of movable knife 12mm moved to the left from the right end of looper. To adjust, when loosening screw U and turning guide lever P clockwise, the movable knife point moves forward and turning it counterclockwise, the point moves backward.  
At the same time, movable knife holder guide N should slightly touch the end of movable knife holder. The adjustment is made by loosening screw V.

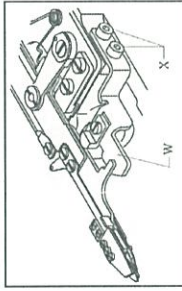
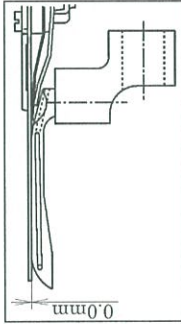


< Note >

In case of the extremely large or small feed amount, necessary fine adjustment of the movable knife position. (See chapter 5 - 8)

### 5-7 Adjusting the movable knife up and down

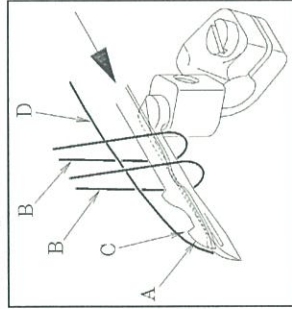
There should be a clearance of 0mm between movable knife and the top surface of looper. The adjustment is made by loosening screw X and moving stationary knife holder guide. After the above adjustment, make sure the movable and stationary knife holders move smoothly.



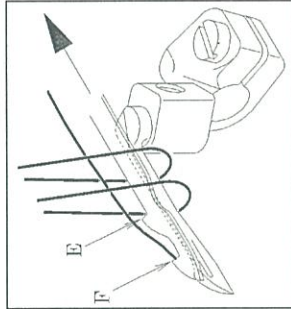
### 5-8 Relationship between the movable knife, needle thread and looper thread

After all the adjustments are made, check the following before threading to start the machine.

- Movable knife A should enter needle thread loops B. Cutting edge C for the looper thread should pass looper thread D.

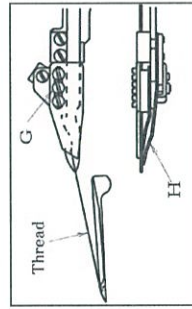


- When the movable knife is returning home, the needle threads and looper thread are pulled to the right by cutting edges E and F and cut by the stationary knife.



### 5-9 Looper thread clamp spring pressure

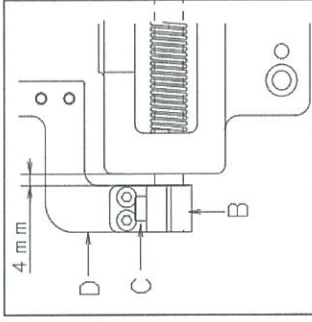
The looper thread clamp spring holds the looper thread after it is cut. To adjust the pressure of thread clamp spring H, turn adjusting screw G. To increase the pressure, turn it clockwise. To decrease the pressure, turn it counterclockwise. The machine is supplied with a spun thread (#60). The pressure of the thread clamp spring is factory set at approximately 90g. Adjust the pressure for other threads.



### [ 6 ] ADJUSTING THE THREAD RELEASER

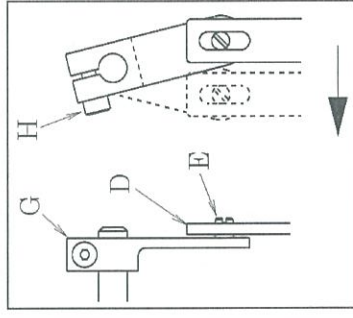
#### 6-1 Thread releaser block

With the thread trimmer air cylinder rod at the left end (the air cylinder is not operating), set the clearance between thread trimmer air cylinder bracket A and thread releaser block B at 4mm. Then tighten screw C.



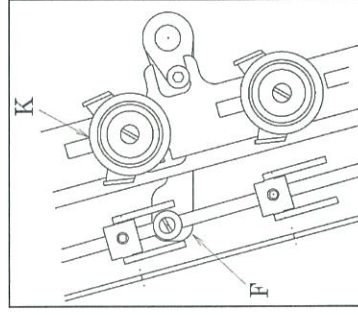
#### 6-2 Thread releaser connection plate

Fit thread releaser connection plate D to guide screw E. Create a clearance between plate D and thread releaser connection lever G. Adjustment is made by loosening screw H.



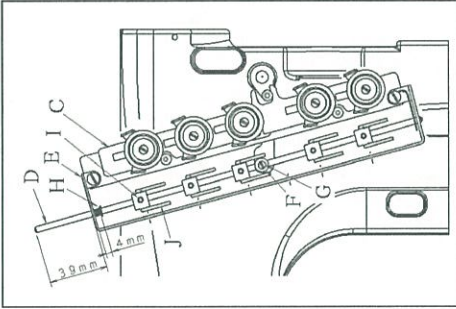
#### 6-3 Thread releaser lever

Position thread releaser lever F so that the thread tension disk can open as fast as possible. Then tighten screw H for thread releaser connection lever G at the rear of the arm.



#### 6-4 Thread releaser plate

Install thread releaser bar D to thread releaser bar connection plate F with screw G.  
The top end of thread releaser bar D should protrude 39mm from the top surface of thread releaser bar guide E. There should be a clearance of 4mm between washer H and thread releaser bar guide E.

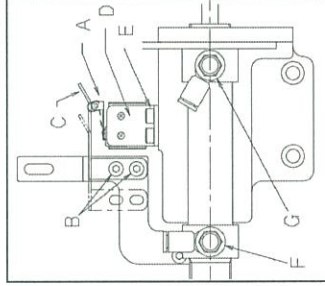


#### 6-5 Thread releaser hook

The needle thread should not protrude long from the underside of the fabric at the start of sewing.  
Loosen screw I and adjust thread releaser hook J.  
To decrease the amount of the thread supplied by the thread take-up, raise the thread releaser hook.  
To increase the amount, lower the thread releaser hook. If the amount is too little, the stitches cannot be formed at the start of sewing.

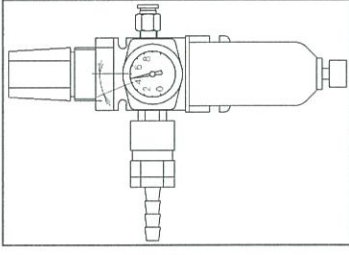
#### [7] SAFETY DETECTOR

■ The safety detector is included so that the machine will not start until the thread trimmer cuts the threads and returns home safely.  
Switch A of the detector must be pressed (ON) during sewing (with the thread trimmer completely returned home). Adjust by loosening screws B and E and moving brackets C and D.



#### [8] ADJUSTING THE SPEED CONTROLLER AND AIR PRESSURE (UTA)

■ Speed controller F controls the speed when the thread trimmer knife holder protrudes. Speed controller G controls the speed when the thread trimmer knife holder retracts. If screw F is too loosened, the holder will protrude too fast and then the position of the movable knife will be unstable, causing cutting error.  
If screw G is too loosened, the holder will retract too fast and then the looper thread may not be held properly (the speed controllers are factory-set).

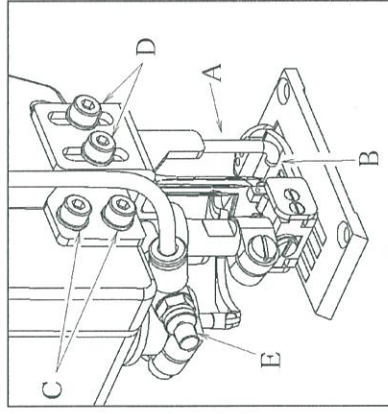
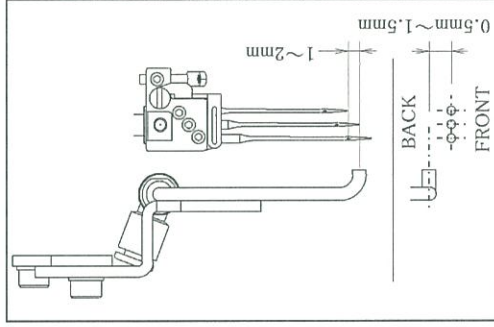


<Note >

Set the regulator at 4~5kg/cm<sup>2</sup>. To increase the pressure, turn the adjusting knob clockwise. Too fast speed will give a shock to the knife holder. Then the threads will be cut before they are caught by the knife or the threads will not be held properly. It may cause trouble.

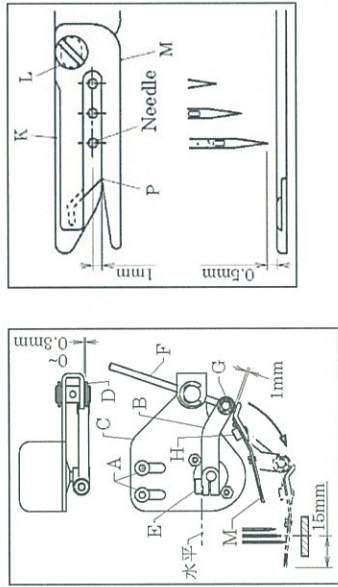
#### [9] AIR WIPER ADJUSTMENT (UTA, UTAB)

- When the needle bar is at the top of its stroke, position air blowing outlet B 1~2mm below the left needle's eye. Loosen screw D and air wiper up or down required.
- The position of air blowing outlet B should be 0.5~1.5mm from backside of the needles. Loosen screw C and air wiper front or back required.
- Adjusting amount of blowing air by adjust screw E.



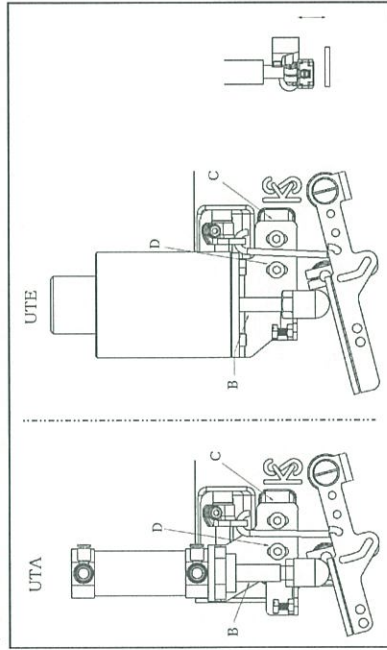
**【 10】 THREAD WIPER ADJUSTMENT (UTE)**

- Tighten screw E to position lever B horizontally. There should be a 0 to 0.3mm clearance between bracket C and stopper ring D.
- Position thread wiper K with screw H. The distance between the left end of the thread wiper and the center of the needle bar should be approximately 1.5mm when the thread wiper is all the way to the left and clearance between the needle center and point P of the thread wiper should be approximately 1mm.
- The distance between the left needle and thread wiper K should approximately 0.5mm with screw A.
- Position of thread wiper K is parallel with flat spring M with screw L.



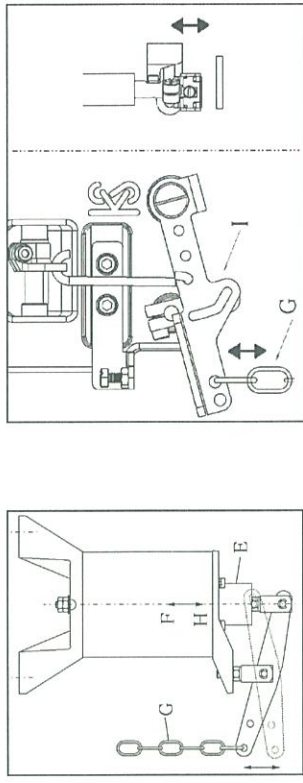
**【 11】 ADJUSTING THE PRESSER FOOT LIFT**

- Foot lift on the machine with spreader 6mm above the top surface of the needle plate
- Foot lift on the machine without spreader 8mm above the top surface of the needle plate
- To make these adjustment, loosen screw D. Move bracket C up or down.



**■ Electric presser foot lifter for P-UTE**

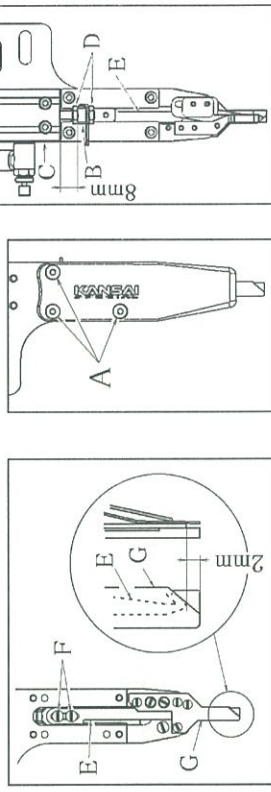
When plunger E moves in direction of F, the presser foot should be 6mm or 8mm above the top surface of the needle plate. Adjust by using chain G. Note that there is a little slack on chain I when plunger E moves in the direction of H. Then make sure the presser foot whether or not the floating when the machine running.



**【 12】 ADJUSTING THE TOP COVER THREAD TRIMMER**

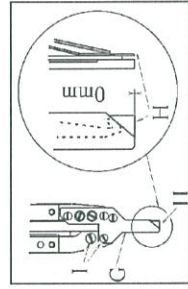
**12-1 Relationship between the position of the movable knife and the stationary knife**

When the movable knife E retracts all the way, Set the clearance between mount bracket B and the end of the air-cylinder C at 8mm. Tighten nut D.(Model for UTA)  
 When the movable knife E retracts all the way, Set the clearance between the end of fixed knife G and the top of the movable knife E at 2mm. Loosen screw A to open the cover, then loosen screw F and adjust knife position.



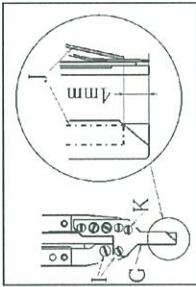
**12-2 Adjusting the top cover thread clamp spring**

Top cover thread clamp spring H should parallel and same line with end of the stationary knife G. Loosen screws I and adjust spring H



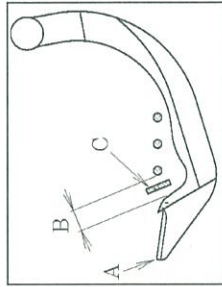
### 12-3 Adjusting the top cover thread rear spring

Top cover thread rear spring J should parallel and set to approximately 4mm from end G of the stationary knife. Loosen screws I and adjust spring J



### 12-4 Adjusting the thread clamp pressure

The spring H holds the top cover thread after it is cut. To adjust the pressure of the spring, turn adjusting screw K. To increase the pressure, turn it clockwise. To decrease the pressure, turn it counterclockwise.

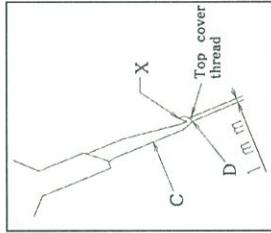


### 12-5 Adjusting the movable knife left to right

Movable knife C should pass clearance B between spreader A and the left needle. Loosen screw H for bracket G. Adjust movable knife C while checking it does not touch spreader A or the left needle.

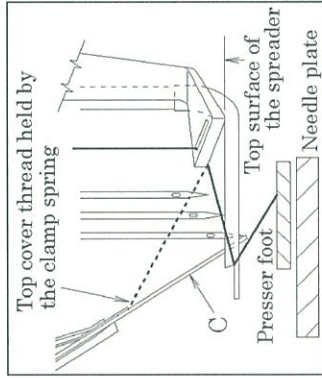
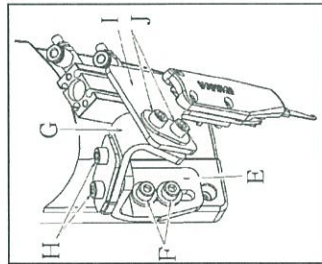
### 12-6 Adjusting the movable knife front to back

The movable knife should hook the top cover thread when the movable knife returns home. Loosen screws J on movable knife installation base I. Set the clearance between hook end D of movable knife C and the top cover thread at approximately 1mm.



### 12-7 Adjusting the height of the movable knife

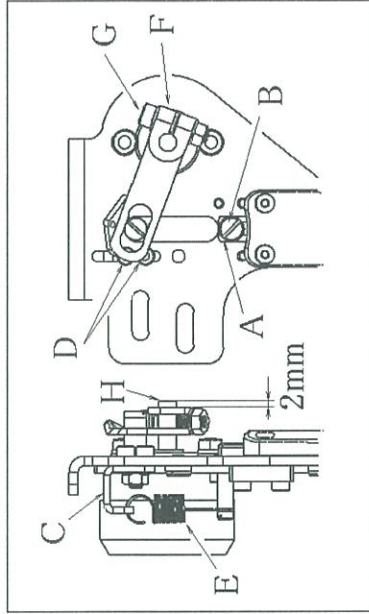
When the movable knife is at the bottom of its travel, hook point X of the movable knife should be aligned with the top surface of the spreader. Then tighten screws F when bracket E is in the lowest position. In case of the UTE series, adjustment is made by moving stoppers A. Loosen screw B for stopper. (See the illustration on the next page)



< Note >  
Turn off the motor, position the fabric under the presser foot and then adjust by hand.

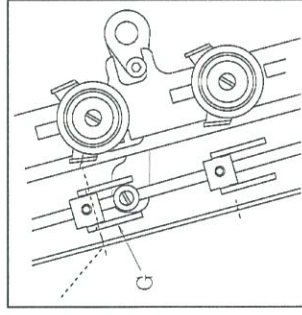
### 12-8 Adjusting the solenoid return spring (UTE)

To adjust the returning pressure of the movable knife, loosen screw D for spring hook C and move spring hook C up or down. To increase the pressure, move up hook C. To decrease the pressure, move down hook C. The pressure of spring E should be as light as possible, yet be sufficient to return the movable knife home correctly when the solenoid gets actuated. Set the clearance between drive lever F and solenoid shaft H at approximately 2mm. Then tighten screw F for drive lever B.



### 12-9 Adjusting the top cover thread releaser hook

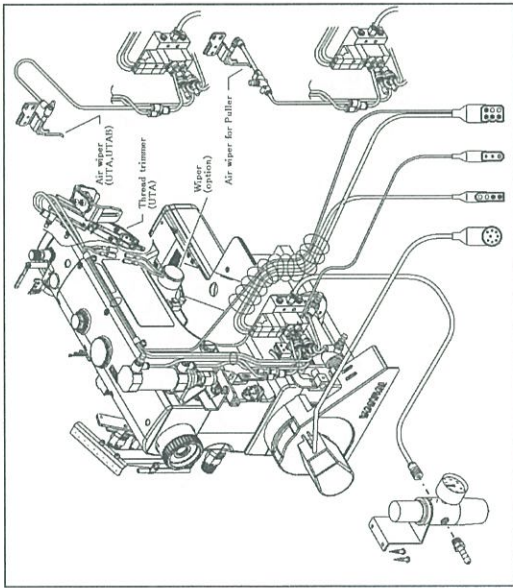
To decrease the amount of the thread supplied by the thread take-up, move up thread releaser hook G. To increase the amount of the thread supplied by the thread take-up, move down thread releaser hook G. If the amount is too small, the top cover thread cannot be held after it is cut.



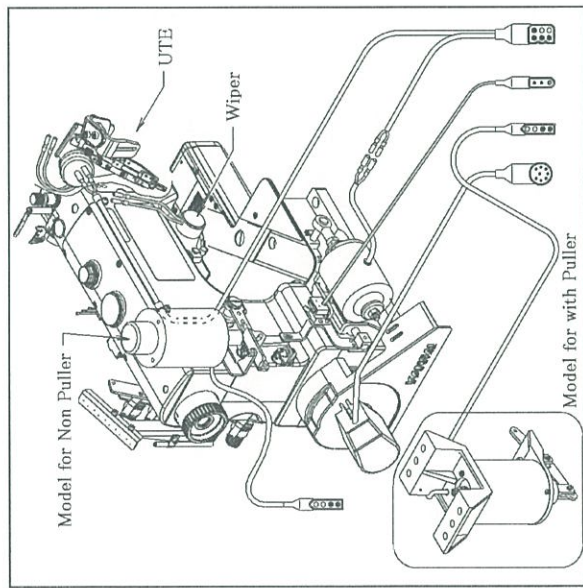
**[ 13 ] WIRING AND PIPING FOR PNEUMATIC DEVICES**

■ **Model for UTA, UTAB**

Connect air lines and cords by referring to the illustration below and the parts list.



■ **Model for UTE**



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