

# PARTS LIST & INSTRUCTION

# *PX* *SERIES*

**Industrial Sewing Machines**

*PX302-4W*  
*PX302-5W*  
*PX301F-2S*

*PARTS LIST* 11th August 2015  
*INSTRUCTION* 6th August 2015

No. 150107

**KANSAI**  
SPECIAL®

## パーツブック御利用に際して

■このパーツブックは、2015年8月製造中のPXシリーズのデータに基づいて作成されたものです。

■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。

■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。

■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。

## INTRODUCTION

■This parts book is based on data current August 2015.

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

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

■Parts are subject to change without notice.

## PXシリーズ 表示方法

## PX SERIES INFORMATION

■PXは二重環縫いピコットマシンです。

PX is double chain stitch PICOT and FAGOTTING ZIG-ZAG machine.

P X 3 0 2 - 4 W

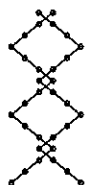
■302は2本針です。

302 is 2 Needle machine.

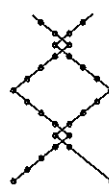
■301Fは1本針テープ 付け用です。

301F is 1 Needle, binding tape operation.

4W



5W



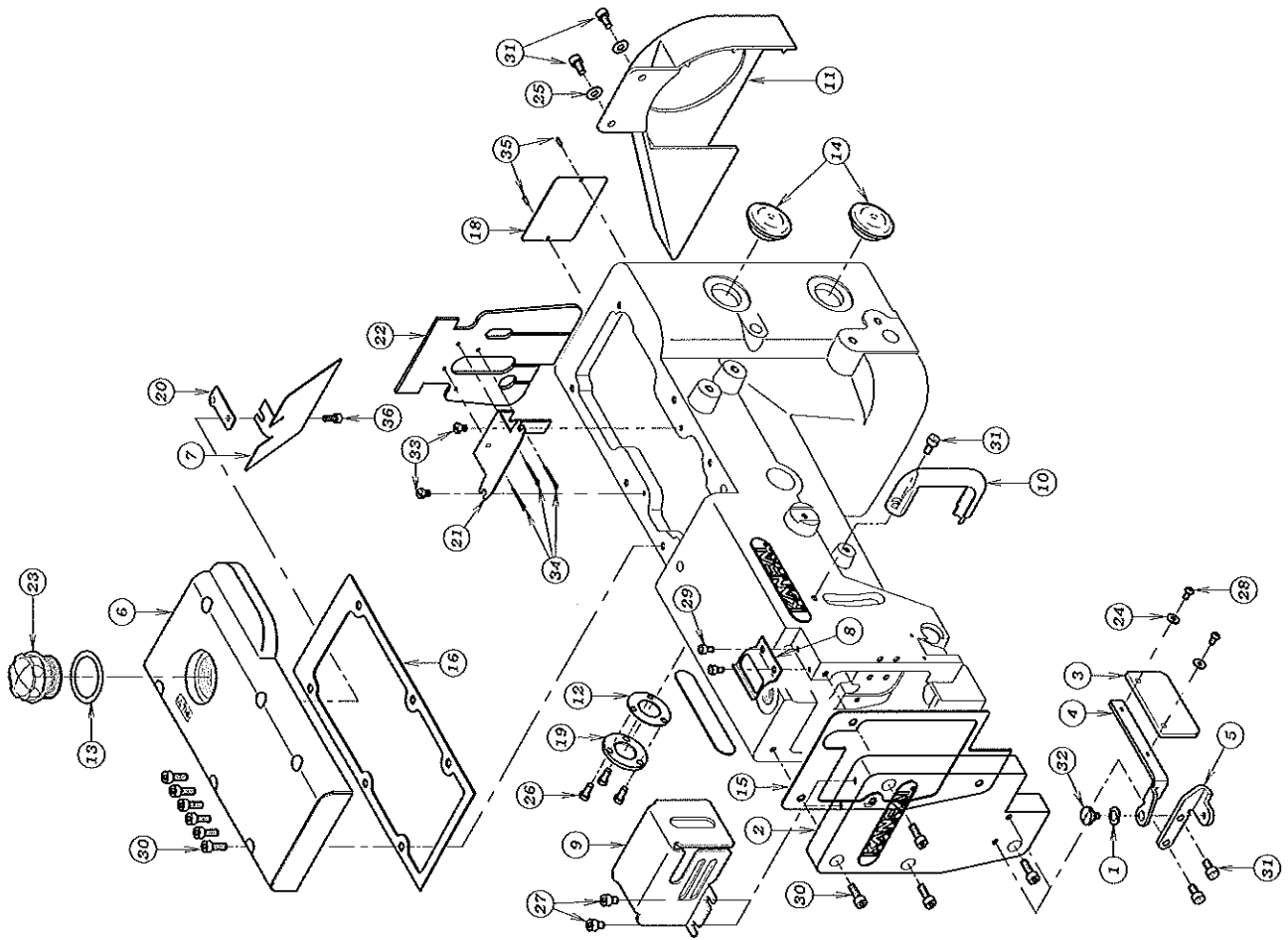
2 S



# 目次 CONTENTS

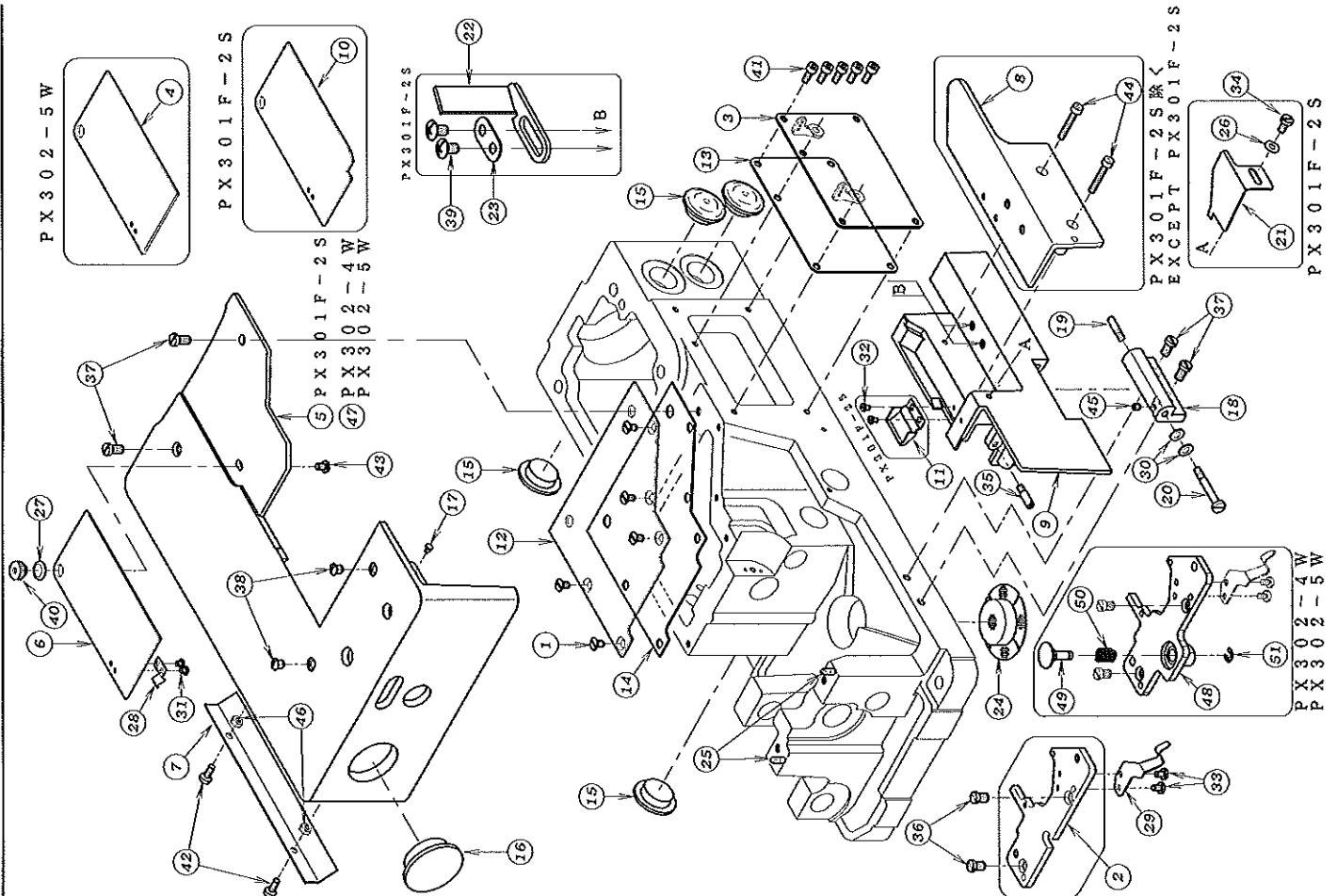
1. フレーム関係 (1)	FRAME ASSEMBLY (1)	1
2. フレーム関係 (2)	FRAME ASSEMBLY (2)	2
3. ブッシュ機構	BUSHING	3
4. 糸道機構	THREAD EYELET MECHANISM	4
5. 針棒, 弓機構	NEEDLE BAR&LEVER MECHANISM	5
6. 下軸機構	CRANKSHAFT MECHANISM	6
7. 差動送り機構	DIFFERENTIAL FEED MECHANISM	7-8
8. ルーパー機構	LOOPER MECHANISM	9
9. 針振り機構	NEEDLE RECIPROCATING MECHANISM	10
10. 押え揚げ機構	PRESSER FOOT MECHANISM	11
11. 給油機構	LUBRICATION MECHANISM	12
12. 糸立て及びテーブル	THREAD STAND AND TABLE	13
13. アクセサリー	ACCESSORIES	14
14. ゲージ関係	GAUGE PARTS (PX302-4W)	15
15. ゲージ関係	GAUGE PARTS (PX302-5W)	16
16. ゲージ関係	GAUGE PARTS (PX301F-2S)	17
17. ゲージ表	GAUGE PARTS TABLE	18

1. フレーム関係 (1) FRAME ASSEMBLY (1)



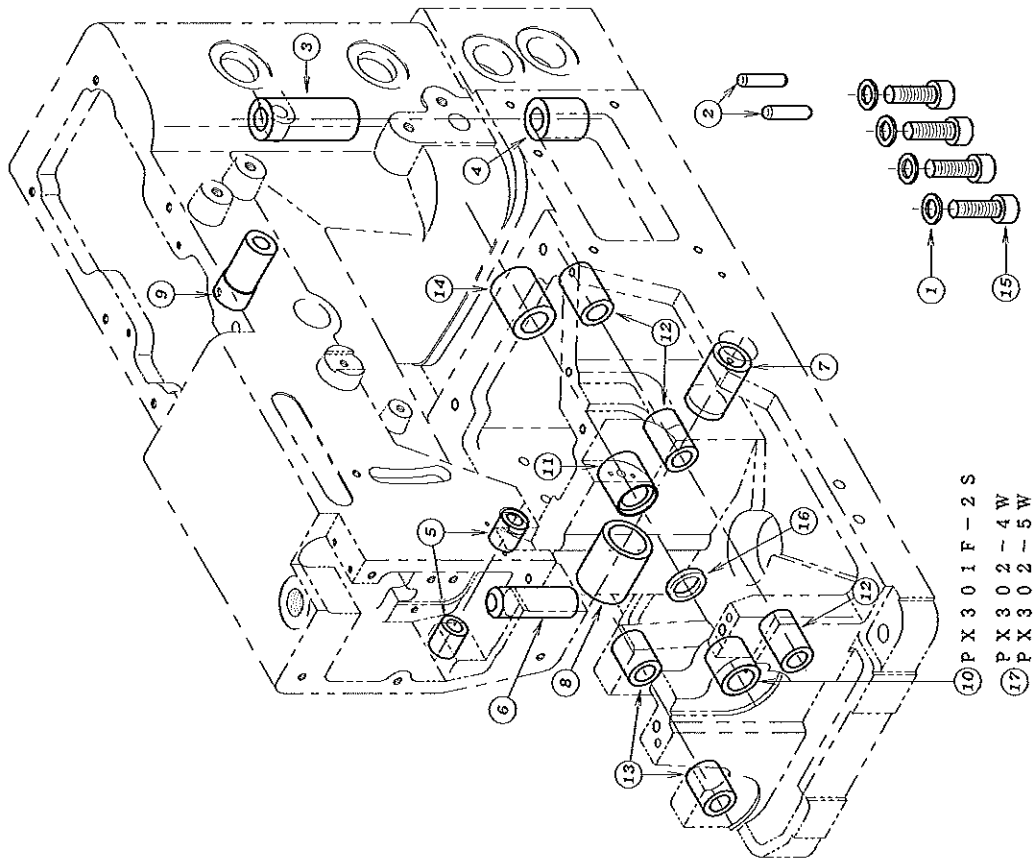
REF. NO.	PART NO.	品名	DESCRIPTION	QTY
01-01	02-119	波板	WASHER	1
01-02	21-245	面板	HEAD COVER	1
01-03	21-273	保護カバー	EYE GUARD	1
01-04	21-275	保護カバー - 取付板	BRACKET	1
01-05	21-276	保護カバー - プラケット	BRACKET	1
01-06	21-296	立ロケットカバー	TOP COVER	1
01-07	21-384	立ロケットオイルカバー	COVER	1
01-08	21-385	針様カバー	COVER	1
01-09	21-462	針米道カバー	COVER	1
01-10	21-935	円形道カバー	COVER	1
01-11	21-972	プーリーカバー	PULLEY COVER	1
01-12	23-263	パッキン C	GASKET C	1
01-13	23-285	O-リング	O RING	1
01-14	23-296	ゴム垫	PLUG	2
01-15	23-305	面板パッキン	GASKET	1
01-16	23-307	パッキン	GASKET	1
01-17				
01-18	24-053	モジュールスリッカー	TYPE PLATE	1
01-19	39-108	油止め板 B	COVER	1
01-20	39-137	パイプサポ-ト	PIPE SUPPORT	1
01-21	39-149	オイルフェンス取付板	OIL FENCE PLATE	1
01-22	39-150	オイルフェンス	OIL FENCE	1
01-23	39-234	オイルポット	OIL POT	1
01-24	75-224	ワッシャー	WASHER	2
01-25	75-455	ワッシャー	WASHER	2
01-26	87-010	ネジ	SCREW	3
01-27	87-092	六角穴付きボルト	BOLT	2
01-28	87-099	ネジ	SCREW	2
01-29	87-123	六角穴付きボルト	BOLT	2
01-30	87-129	六角穴付きボルト	BOLT	10
01-31	87-177	六角穴付きボルト	BOLT	5
01-32	87-264	段ネジ	SCREW	1
01-33	87-295	ネジ	SCREW	2
01-34	93-621	別りピン A	PIN	3
01-35	93-701	ピン	PIN	2
01-36	87-124	六角穴付きボルト	BOLT	1

## 2. フレーム関係 (2) FRAME ASSEMBLY (2)



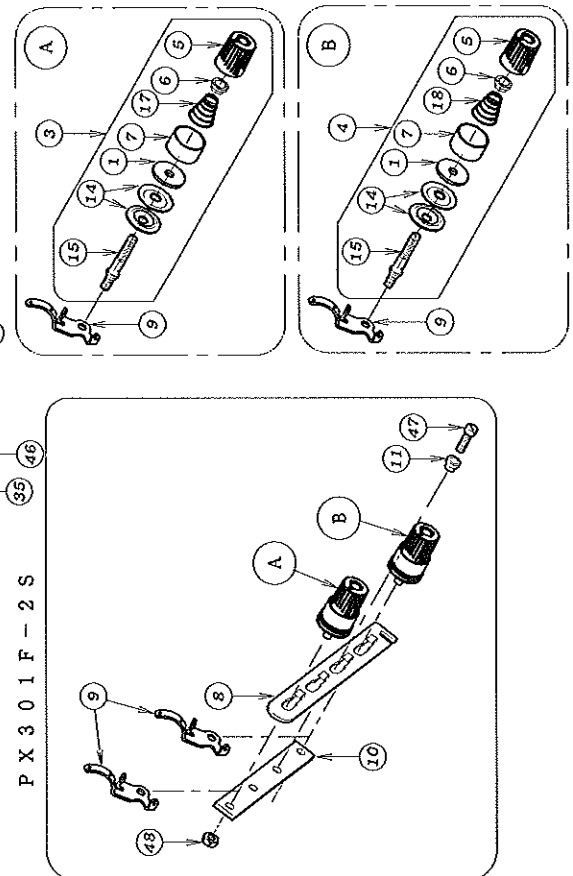
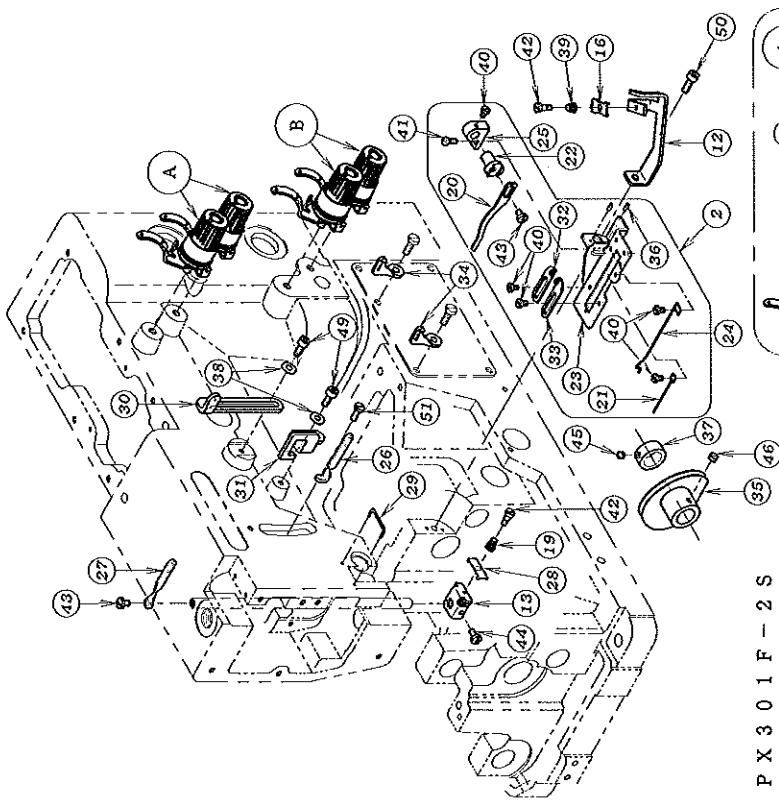
REF. NO.	PART NO.	品名	DESCRIPTION	QTY
02-01	05-061	ネジ	SCREW	5
02-02	14-030	針板土台	NEEDLE PLATE SUPPORT BRACKET	1
02-03	21-137	前油カハ	FRONT COVER	1
02-04	21-299	前ベ-スカハ	FRONT PLATE COVER	1
02-05	21-781	上ベ-スカハ	UPPER COVER	1
02-06	21-782	前ベ-スカハ	FRONT BASE COVER	1
02-07	21-783	上ベ-ス補助カハ	COVER	1
02-08	21-784	定規板	FRONT COVER PLATE	1
02-09	21-785	前カハ	FRONT COVER	1
02-10	21-786	前ベ-スカハ	FRONT BASE COVER	1
02-11	21-787	防護カハ	DUSTPROOF COVER	1
02-12	21-897	上油カハ	COVER	1
02-13	23-137	ハッセン	GASKET	1
02-14	23-229	上油カハ	GASKET	1
02-15	23-296	ゴ-ム栓	PLUG	4
02-16	23-504	ゴ-ム栓	PLUG	1
02-17	23-512	クッションゴ-ム	CUSHION RUBBER	1
02-18	25-226	前カハ	HINGE	1
02-19	25-503	カハ	SCREW	1
02-20	25-517	ピン	SCREW	1
02-21	26-781	F用前定規	GUIDE PLATE FOR F	1
02-22	26-821	F用ラック	FOLDER BASE	1
02-23	26-822	ラック	PLATE	1
02-24	31-438	ベ-ットフィルタ	FILTER	1
02-25	71-253	ノックピン	PIN	2
02-26	75-455	ワッシャ	WASHER	1
02-27	75-528	波座金	SPRING	1
02-28	79-801	バネ	SPRING	1
02-29	79-802	前カハ	SPRING	1
02-30	79-922	皿バネ	SPRING	2
02-31	84-117	ネジ	SCREW	2
02-32	84-167	ネジ	SCREW	2
02-33	84-361	ネジ	SCREW	2
02-34	84-571	ネジ	SCREW	1
02-35	84-706	段ネジ	SCREW	1
02-36	84-761	ネジ	SCREW	2
02-37	84-762	ネジ	SCREW	4
02-38	84-862	ネジ	SCREW	2
02-39	85-182	ネジ	SCREW	2
02-40	86-266	ナット	NUT	1
02-41	87-113	六角穴付きボルト	BOLT	5
02-42	87-209	ネジ	SCREW	2
02-43	87-266	ネジ	SCREW	2
02-44	87-285	六角穴付きボルト	BOLT	2
02-45	87-286	ネジ	SCREW	1
02-46	88-146	ナット	NUT	2
02-47	27-313	上ベ-スカハ	COVER	1
02-48	14-134	針板土台	NEEDLE PLATE SUPPORT BRACKET	1
02-49	69-517	プッシュボ-タン	PUSH BUTTON	1
02-50	79-528	バネ	SPRING	1
02-51	93-205	E-リング	E-RING	1

### 3. ブッシュ機構 BUSHING



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
03-01	75-436	ワッシャ	WASHER	4
03-02	71-256	ノックピン	PIN	2
03-03	81-121	立てシャフトブッシュ上	CONNECTING SHAFT BUSHING-UPPER	1
03-04	81-122	立てシャフトブッシュ下	CONNECTING SHAFT BUSHING-LOWER	1
03-05	81-151	斜盤土台シャフトブッシュ	BUSHING	2
03-06	81-153	ブッシュ	BUSHING	1
03-07	81-236	ブッシュ	BUSHING	1
03-08	81-237	ブッシュ	BUSHING	1
03-09	81-256	押え逃げ土台ブッシュ	BUSHING	1
03-10	81-723	ブッシュ	BUSHING	1
03-11	81-720	ブッシュ	BUSHING	1
03-12	81-735	ブッシュ	BUSHING	3
03-13	81-753	ブッシュ	BUSHING	2
03-14	81-717	ブッシュ	BUSHING	1
03-15	87-661	六角穴付きボルト	BOLT	1
03-16	94-214	オイルシール	OIL SEAL	4
03-17	81-716	下シャフトブッシュ (前)	BUSHING	1

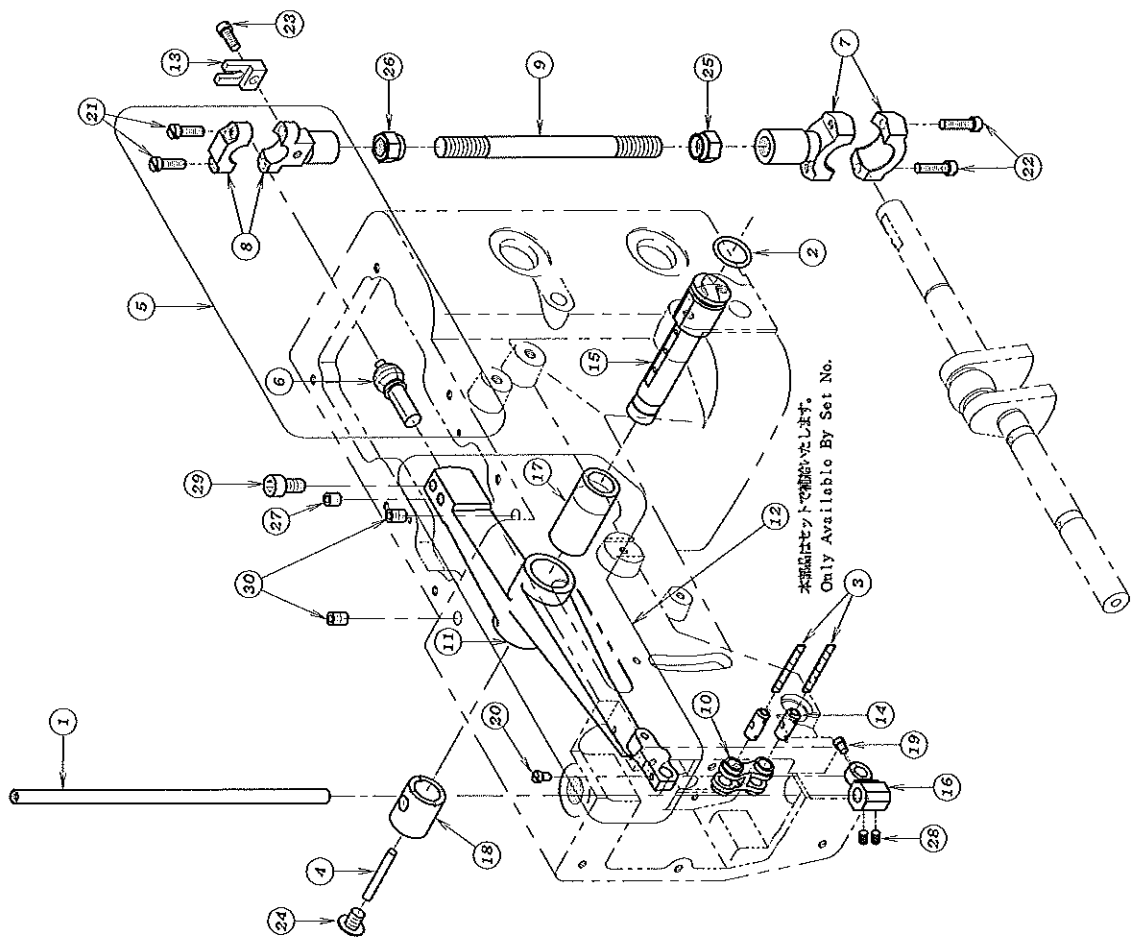
# 4. 糸道機構 THREAD EYELET MECHANISM



PX301F-2S

REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
04-01	23-324	フェルト	FELT	6
04-02	40-3320	下糸駒きセット	LOOPER THREAD EYELET ASS'Y	1
04-03	40-7370	チャンボ <sup>®</sup> ン強セット	TENSION ASS'Y (HEAVY)	3
04-04	40-7380	チャンボ <sup>®</sup> ン弱セット	TENSION ASS'Y (LIGHT)	3
04-05	41-101	チャンボ <sup>®</sup> ン血小カ <sup>®</sup> ス	THREAD TENSION NUT	6
04-06	41-105	チャンボ <sup>®</sup> ン血フチ <sup>®</sup> セット	SPRING POST	6
04-07	41-107	カ <sup>®</sup> ス	SPRING CUP	6
04-08	41-113	チャンボ <sup>®</sup> ン血調子板	TENSION POST SUPPORT	1
04-09	41-120	チャンボ <sup>®</sup> ン血糸道	THREAD EYELET	6
04-10	41-121	チャンボ <sup>®</sup> ン調節元板	TENSION POST HOLDER	1
04-11	41-132	カ <sup>®</sup> B	COLLAR	1
04-12	41-1310	小チャンボ <sup>®</sup> ン血取付台	BRACKET	1
04-13	41-312	針巻糸道台	BRACKET	1
04-14	41-509	チャンボ <sup>®</sup> ン皿	TENSION DISC	12
04-15	41-510	調子棒	SCREW STUD	6
04-16	41-601	針巻小調子皿	THREAD NIPPER	1
04-17	41-701	チャンボ <sup>®</sup> 調子ハネ (強)	SPRING (HEAVY)	3
04-18	41-702	チャンボ <sup>®</sup> 調子ハネ (弱)	SPRING (LIGHT)	3
04-19	41-721	ハ <sup>®</sup> ネ	SPRING	1
04-20	43-107	下糸駒き上	THREAD GUIDE	1
04-21	43-105	下糸駒きビ <sup>®</sup> ン	GUIDE WIRE	1
04-22	43-112	取付ビ <sup>®</sup> ン	PIN	1
04-23	43-331	下糸駒き板 C	SUPPORT PLATE	1
04-24	43-335	下糸駒き下ビ <sup>®</sup> ン	LOOPER THREAD RETAINER WIRE	1
04-25	43-339	下糸駒き上取付台	BRACKET	1
04-26	45-121	糸道	THREAD EYELET	1
04-27	45-131	糸道	THREAD EYELET	1
04-28	45-142	糸道	THREAD EYELET	1
04-29	45-246	上糸カ <sup>®</sup> イト <sup>®</sup> ハ <sup>®</sup> ン	GUIDE PIN	1
04-30	45-301	糸道	THREAD EYELET	1
04-31	45-302	上糸調子糸道A	THREAD EYELET	1
04-32	47-131	糸道 (左)	THREAD EYELET	1
04-33	47-132	糸道 (右)	THREAD EYELET	1
04-34	47-166	糸道	THREAD EYELET	2
04-35	49-131	ハヤク <sup>®</sup> J	LOOPER THREAD TAKE-UP	1
04-36	71-191	ビ <sup>®</sup> ン	PIN	2
04-37	75-114	カ <sup>®</sup> A	COLLAR	1
04-38	75-455	ワッシャ	WASHER	2
04-39	79-533	針巻糸道用ハ <sup>®</sup> ネ	SPRING	1
04-40	84-161	ネジ <sup>®</sup>	SCREW	5
04-41	84-164	ネジ <sup>®</sup>	SCREW	1
04-42	84-171	取付ネジ <sup>®</sup>	SCREW	2
04-43	84-361	ネジ <sup>®</sup>	SCREW	2
04-44	84-374	ネジ <sup>®</sup>	SCREW	1
04-45	84-511	ネジ <sup>®</sup>	SCREW	1
04-46	84-711	ネジ <sup>®</sup>	SCREW	1
04-47	84-764	ネジ <sup>®</sup>	SCREW	1
04-48	86-411	ナット	NUT	1
04-49	87-113	六角穴付きボルト	BOLT	2
04-50	87-129	六角穴付きボルト	BOLT	1
04-51	84-363	ネジ <sup>®</sup>	SCREW	1

# 5. 針棒、弓機構 NEEDLE BAR & LEVER MECHANISM

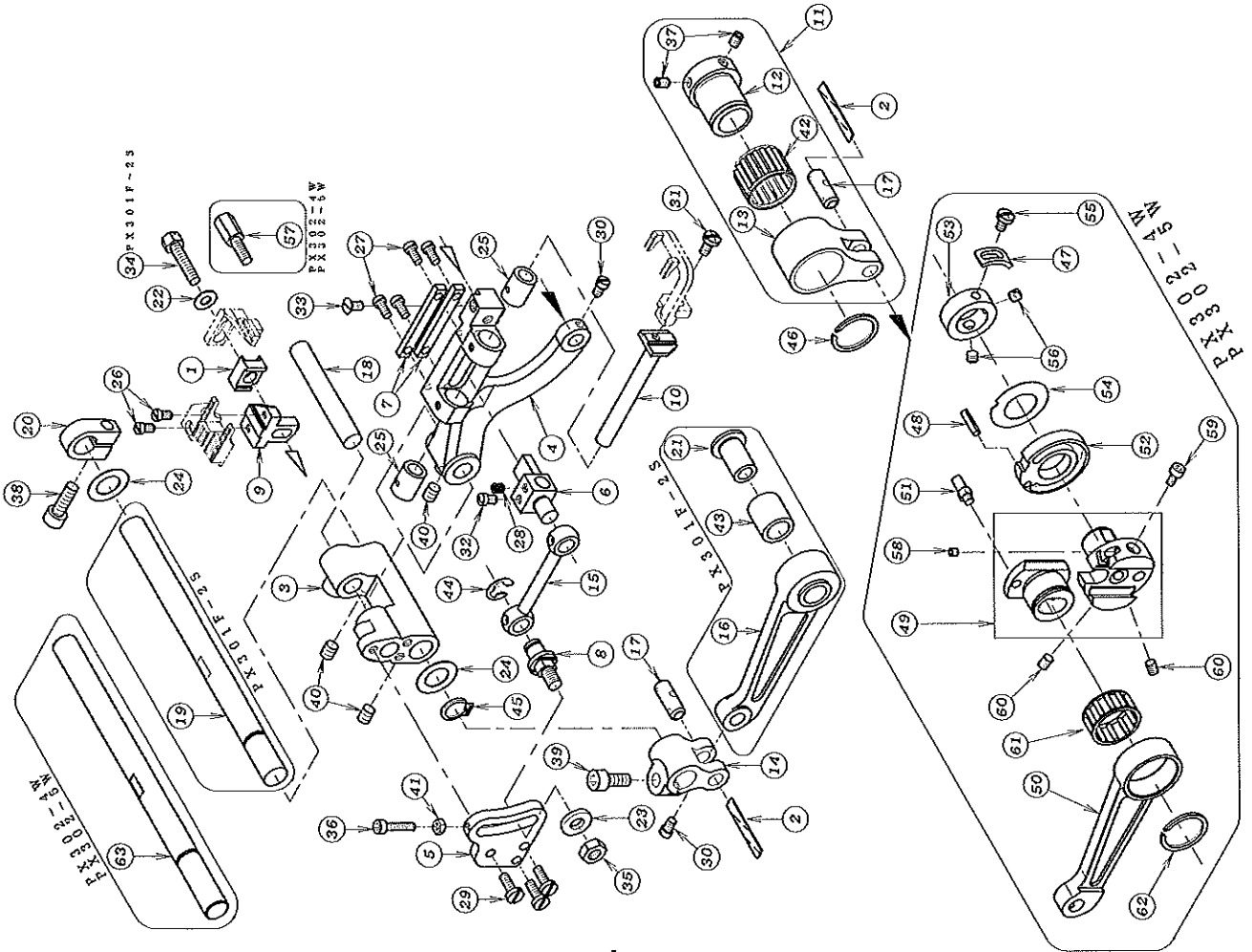


REF. NO.	PART NO.	品名	DESCRIPTION	QTY
05-01	11-704	針棒	NEEDLE BAR	1
05-02	23-195	O-リング	O-RING	1
05-03	23-341	フェルト	FELT	2
05-04	23-383	フェルト	FELT	1
05-05	60-3700	立ロッド(N)セット	CONNECTING ROD ASS'Y	1
05-06	61-711	立ロッド玉	CONNECTING ROD BALL	1
05-07	63-621	立ロッド(大)	BALL JOINT	1
05-08	63-713	立ロッド(小)	BALL JOINT	1
05-09	65-302	上シャフト連結棒	CONNECTING BER	1
05-10	66-111	連結マガネ	CONNECTING LINK	1
05-11	69-105	弓E	NEEDLE LEVER E	1
05-12	69-1050-2	弓E(ブッシュ付)	NEEDLE LEVER (WITH BUSHING)	1
05-13	69-121	ロッド 取付止め	GUIDE	1
05-14	71-432	マガネピン	FEED ROCKER LINK PIN	2
05-15	71-933	マガネピンC	NEEDLE LEVER STUD	1
05-16	73-111	針棒固定A	NEEDLE BAR HOLDER	1
05-17	81-113	ブッシュ	BUSHING	1
05-18	81-412	ブッシュ	BUSHING	1
05-19	84-365	ネジ	SCREW	1
05-20	84-366	ネジ	SCREW	1
05-21	84-567	ネジ	SCREW	2
05-22	84-568	ネジ	SCREW	2
05-23	84-572	ネジ	SCREW	2
05-24	85-181	ネジ	SCREW	1
05-25	86-741	ナット	NUT	1
05-26	86-742	ナット	NUT	1
05-27	87-172	ネジ	SCREW	1
05-28	87-181	ネジ	SCREW	2
05-29	87-225	六角穴付きボルト	BOLT	1
05-30	87-242	ネジ	SCREW	2





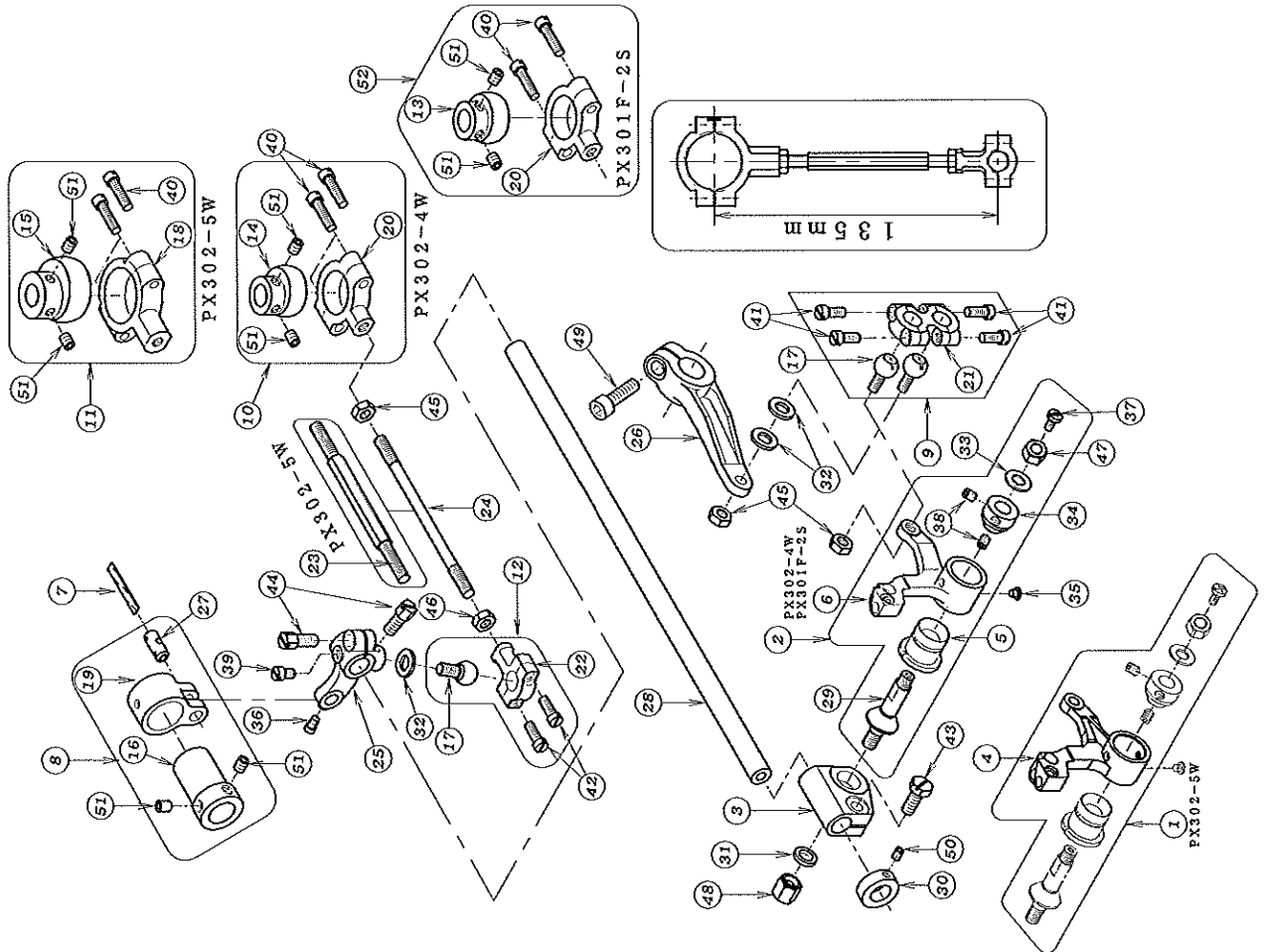
7. 差動送り機構 (7-1) DIFFERENTIAL FEED MECHANISM (7-1)



REF. NO.	PART NO.	品名	DESCRIPTION	QTY
07-01	18-708	針受け取付器具	BRACKET	1
07-02	23-341	フェルト	FELT	2
07-03	51-102	2枚送り元台	DIFFERENTIAL FEED ROCKER	1
07-04	51-103	2枚送り土台	MAIN DIFFERENTIAL FEED	1
07-05	51-105	2枚送り調整板	FEED ROCKER SEGMENT SHOT PLATE	1
07-06	51-109	針送り台組み	DIFFERENTIAL FEED BAR GUIDE	1
07-07	51-111	針送り台組みガイド	DIFFERENTIAL FEED BAR GUIDE	2
07-08	51-112	クランク取付ピン	CRANK SET PIN	1
07-09	51-117	後送り前取付台 (F)	FEED DOG HOLDER (F)	1
07-10	51-120	前送り前取付台	FRONT FEED DOG HOLDER BRACKET	1
07-11	60-0003	0.8 エキセンダ	ECCENTRIC LINK ASS'Y	1
07-12	61-029	針裏シエキセン玉	LOOPER AVOID ECCENTRIC	1
07-13	63-232	エキセンダ	ECCENTRIC LINK	1
07-14	63-357	送り台	FEED ROCKER LINK	1
07-15	66-506	送給クランク	FEED CRANK LINK	1
07-16	67-315	送り連動レバ	FEED ROCKER ARM	1
07-17	71-431	ピン	PIN	2
07-18	71-187	後送り前取付台シャフト	SHAFT	1
07-19	71-647	2枚送り元台シャフト	FEED ROCKER ARM SHAFT	1
07-20	75-139	カラー	COLLAR	1
07-21	75-235	送り台	ROLLER	1
07-22	75-455	ワッシャ	WASHER	1
07-23	75-458	ワッシャ	WASHER	1
07-24	75-675	ワッシャ	WASHER	2
07-25	81-141	ブッシュ	BUSHING	2
07-26	84-162	ネジ	SCREW	2
07-27	84-164	ネジ	SCREW	4
07-28	84-314	ネジ	SCREW	1
07-29	84-363	ネジ	SCREW	3
07-30	84-366	ネジ	SCREW	2
07-31	84-374	ネジ	SCREW	1
07-32	84-379	ネジ	SCREW	1
07-33	84-464	ネジ	SCREW	1
07-34	84-614	ネジ	SCREW	1
07-35	86-411	ナット	NUT	1
07-36	87-140	六角穴付きボルト	BOLT	1
07-37	87-181	ネジ	SCREW	2
07-38	87-245	六角穴付きボルト	BOLT	1
07-39	87-252	六角穴付きボルト	BOLT	1
07-40	87-254	ネジ	SCREW	3
07-41	88-136	ナット	NUT	1
07-42	91-005	ベアリング	BEARING	1
07-43	91-270	ニードルベアリング	BEARING	1
07-44	93-213	E環止砂輪	E-RING	1
07-45	93-261	Cリング	C-RING	1
07-46	93-406	ストップリンク	C-RING	1
07-47	51-848	ストップ	CONTROL LEVER STOPPER	1
07-48	52-308	スプリングピン	SPRING PIN	1
07-49	60-5060	送りエキセンセット	FEED ECCENTRIC ASS'Y	1
07-50	67-323	送り連動レバ	FEED ROCKER ARM	1
07-51	69-511	エキセンカム案内カム	PIN	1
07-52	69-543	送りエキセンカム	FEED ECCENTRIC CAM	1
07-53	75-547	エキセン止メカ	COLLER	1
07-54	79-525	皿バネ	SPRING	1
07-55	84-361	ネジ	SCREW	1
07-56	84-511	ネジ	SCREW	2

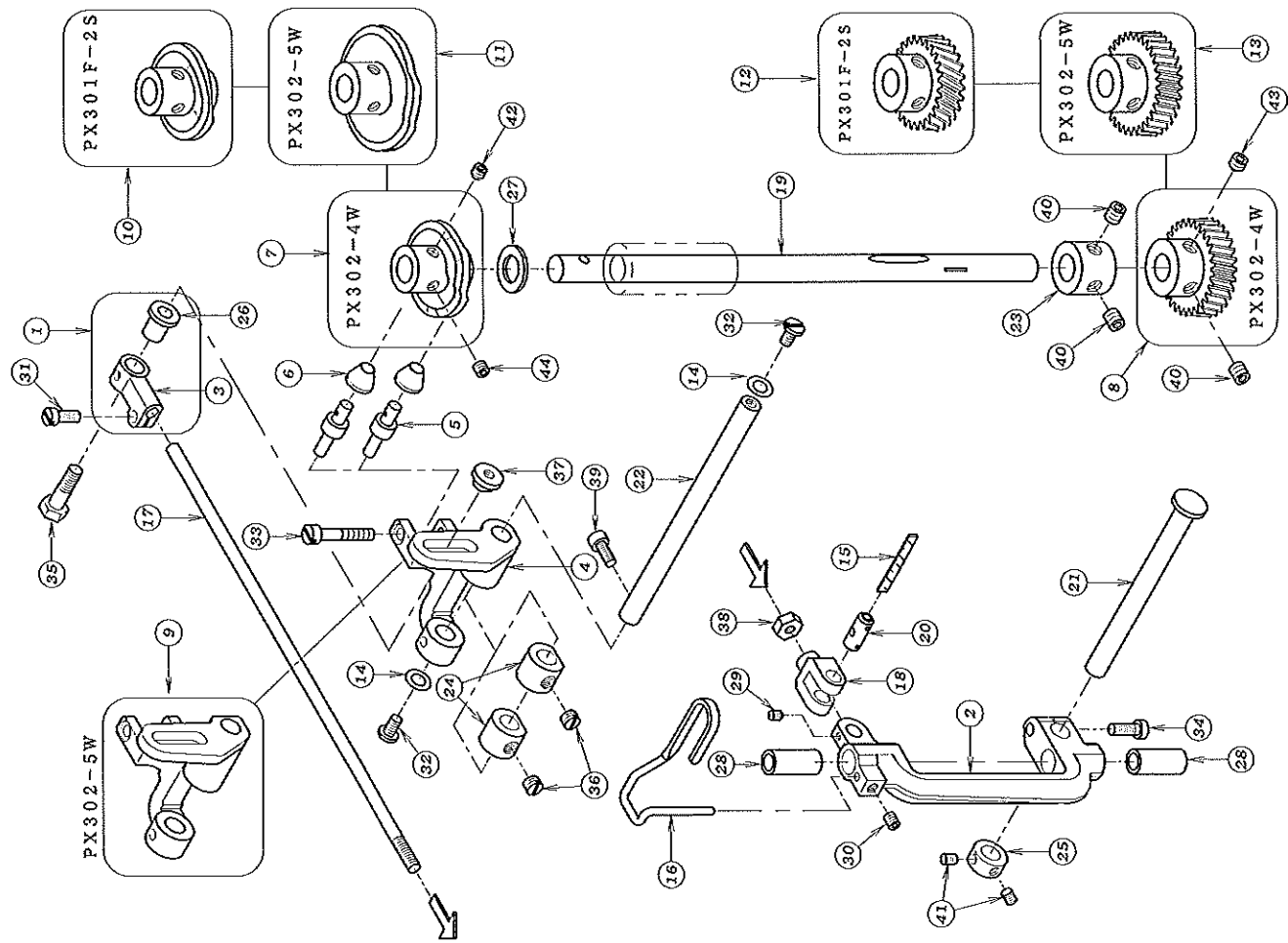


# 8. ルーパー機構 LOOPER MECHANISM



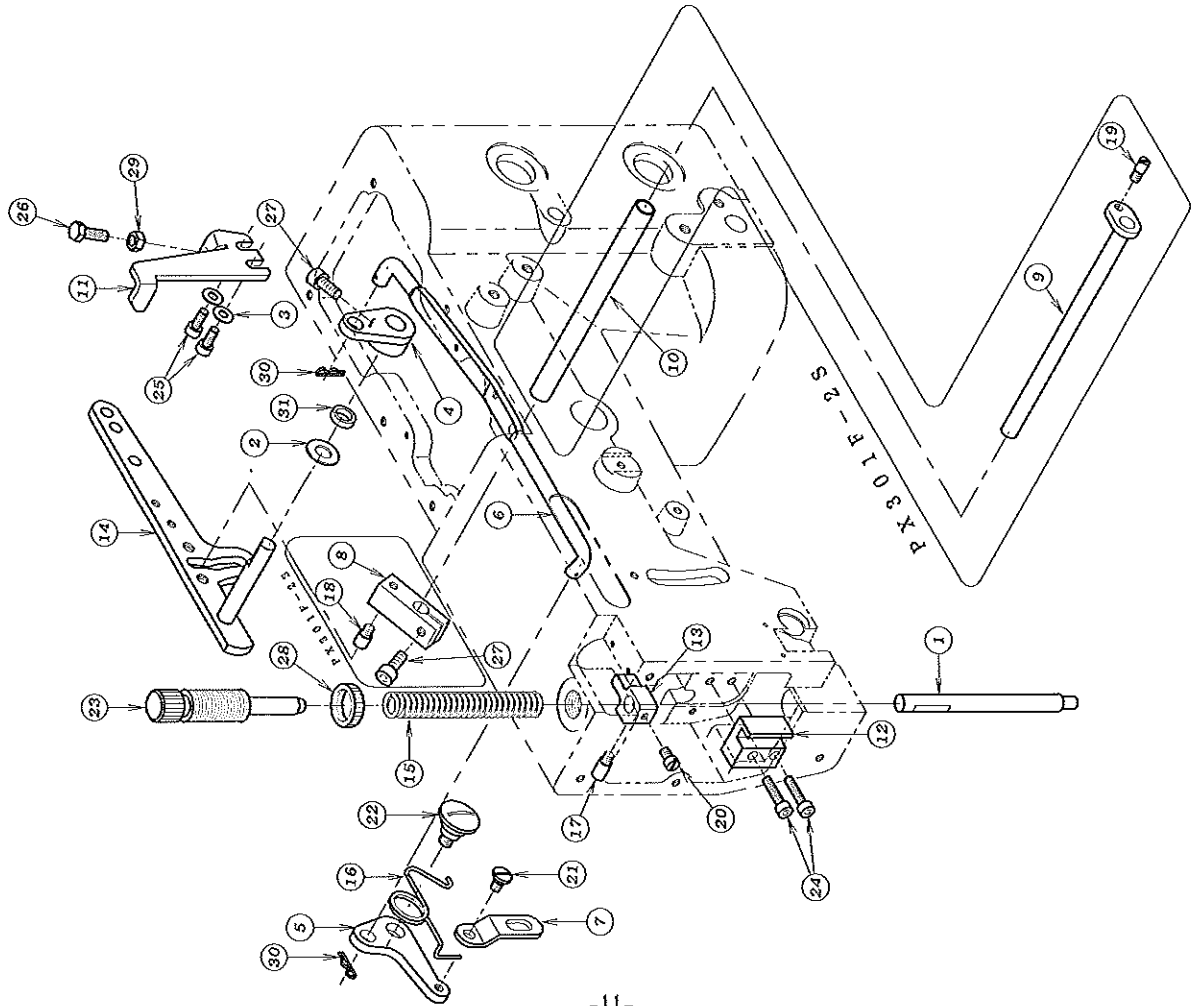
REF. NO.	PART NO.	品名	DESCRIPTION	QTY
08-01	10-9100	ルーパー台セット	LOOPER HOLDER ASS'Y	1
08-02	10-9110	PXルーパー台セット	LOOPER HOLDER ASS'Y	1
08-03	19-301	ルーパー元台	LOOPER ROCKER	1
08-04	19-386	ルーパー台	LOOPER HOLDER	1
08-05	19-587	ルーパー台ブッシュ	Looper holder bushing	1
08-06	19-590	ルーパー台	LOOPER HOLDER	1
08-07	23-341	フェルト	FELT	1
08-08	60-0750	針返しルーパーセット	LOOPER AVOID ECCENTRIC ASS'Y	1
08-09	60-3300	ルーパー連結ロッドセット	CONNECTING ROD ASS'Y	1
08-10	60-3340	ルーパー前後ロッドセット(4点)	CONNECTING ROD ASS'Y (4W)	1
08-11	60-3350	ルーパー前後ロッドセット(5点)	CONNECTING ROD ASS'Y (5W)	1
08-12	60-3720	ルーパー連結ロッドセット(左)	CONNECTING ROD ASS'Y (LEFT)	1
08-13	61-301	ルーパー左右エキセン(1.9)	LOOPER ECCENTRIC (1.9)	1
08-14	61-303	ルーパー左右エキセン(3)	LOOPER ECCENTRIC (3)	1
08-15	61-304	ルーパー左右エキセン(4)	LOOPER ECCENTRIC (4)	1
08-16	61-310	針返しエキセン玉	ECCENTRIC	1
08-17	61-823	ルーパー連結ロッド玉	CONNECTING BALL	3
08-18	63-301	ルーパー元駆動ロッド	LOOPER DRIVING ROD	1
08-19	63-311	針返しルーパー	ECCENTRIC LINK	1
08-20	63-611	ルーパー前後ロッド	LOOPER SIDE BALL JOINT	1
08-21	63-801	ルーパー連結ロッド	LOOPER CONNECTING BALL JOINT	1
08-22	63-812	連結ロッド左	BALL JOINT	1
08-23	65-320	ルーパー駆動連結棒	LOOPER CONNECTING BER	1
08-24	65-332	ルーパー前後ロッド連結棒	LOOPER SIDE STEP CONNECTION	1
08-25	67-131	針返しルーパー	LOOPER SIDE STEP ARM	1
08-26	67-231	ルーパー連結レバー	LOOPER DRIVING LEVER	1
08-27	71-432	マガネピン	FEED ROCKER LINK PIN	1
08-28	71-623	ルーパー台シャフト大	LOOPER ROCKER SHAFT	1
08-29	71-901	ルーパー台シャフト小	TAPERED PIN	1
08-30	75-133	カラー	COLLER	1
08-31	75-381	ワッシャー	WASHER	1
08-32	75-401	緩止めワッシャー	WASHER	3
08-33	75-452	ワッシャー	WASHER	1
08-34	81-401	ブッシュ	BUSHING	1
08-35	84-117	ネジ	SCREW	1
08-36	84-366	ネジ	SCREW	1
08-37	84-374	ネジ	SCREW	1
08-38	84-521	ネジ	SCREW	2
08-39	84-563	ネジ	SCREW	1
08-40	84-568	ネジ	SCREW	2
08-41	84-572	ネジ	SCREW	4
08-42	84-635	ネジ	SCREW	2
08-43	84-812	ネジ	SCREW	1
08-44	84-814	ネジ	SCREW	2
08-45	86-411	ナット	NUT	3
08-46	86-412	ナット	NUT	1
08-47	86-501	ナット	NUT	1
08-48	86-502	ナット	NUT	1
08-49	87-173	六角穴付きボルト	BOLT	1
08-50	87-181	ネジ	SCREW	1
08-51	87-254	ネジ	SCREW	4
08-52	160-3280	ルーパー前後ロッドセット	CONNECTING ROD ASS'Y	1

9. 針振り機構 NEEDLE RECIPROCATING MECHANISM



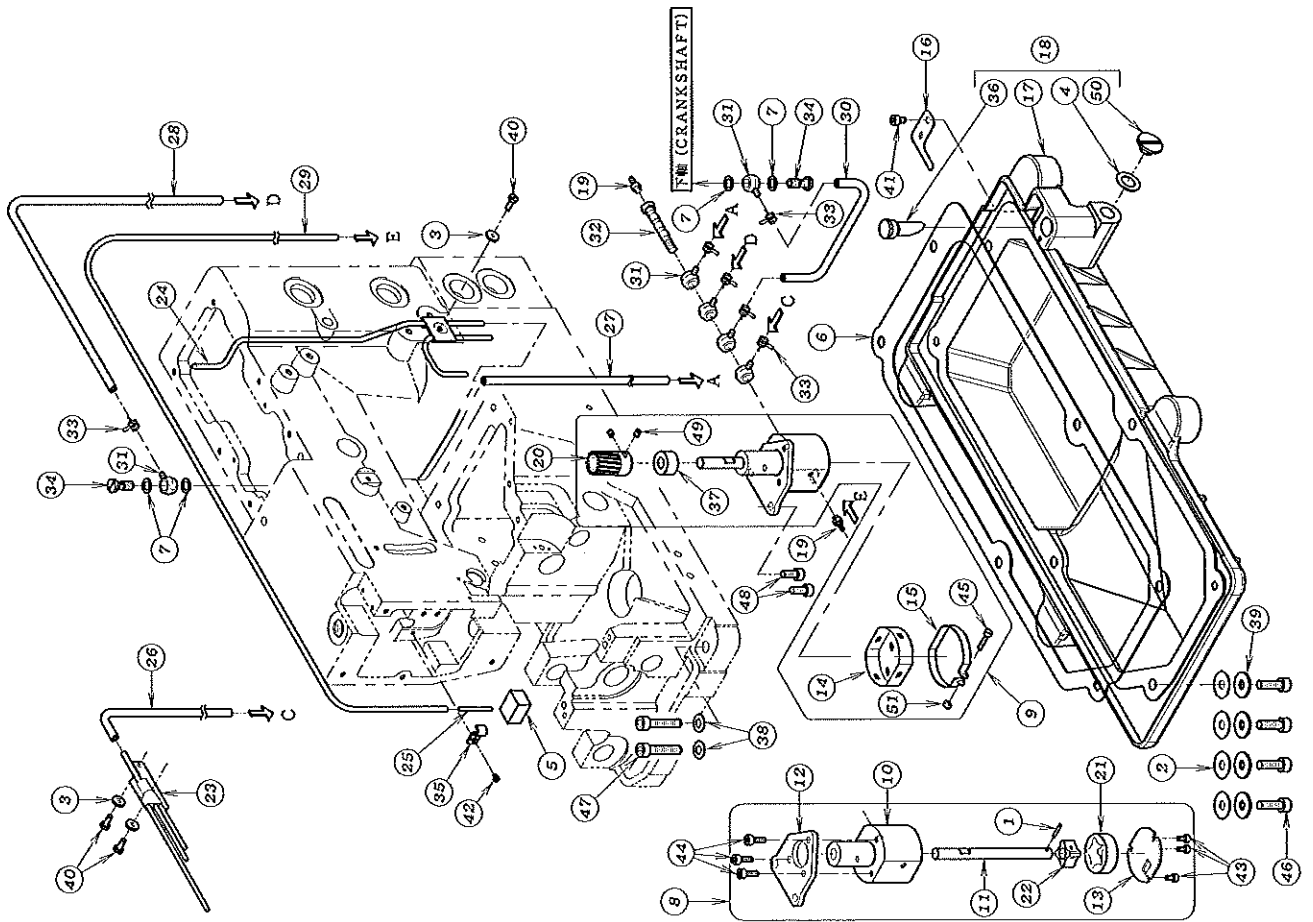
REF. NO.	PART NO.	品名	DESCRIPTION	QTY
09-01	00-3100	針振り連結カムセット	LINK ROLLER ASS'Y	1
09-02	03-101	針振り土台	NEEDLE BAR FRAME	1
09-03	03-103	針振り連結ダ、ルマ	NEEDLE BAR CONNECTING LINK	1
09-04	03-105	キヤム玉振り付台	CAM ROLLER ARM	1
09-05	03-107	キヤムローラー軸	ROLLER STUD	2
09-06	03-109	キヤムローラー	ROLLER	2
09-07	03-111	針振りカム (4点)	CAM (4P)	1
09-08	03-117	針振り歯車 (1:6)	WARM GEAR	1
09-09	03-316	キヤム玉振り付台 (5点)	CAM ROLLER ARM	1
09-10	03-317	針振りカム (2点)	CAM (2P)	1
09-11	03-320	針振りカム (5点)	CAM (5P)	1
09-12	03-322	針振り歯車 (1:2)	WARM GEAR	1
09-13	03-328	針振り歯車 (1:8)	WARM GEAR	1
09-14	23-183	O-リング	O-RING	2
09-15	23-341	フェルト	FELT	1
09-16	45-304	上巻受け	THREAD SUPPORT	1
09-17	65-331	針振り土台連結棒	NEEDLE BAR CONNECTING SHAFT	1
09-18	66-131	連結ダマ、ネ	CONNECTING LINK	1
09-19	71-319	立てシャフト	SHAFT	1
09-20	71-432	メカ、ネ、ピン	FEED ROCKER LINK PIN	1
09-21	71-511	針振り土台シャフト	SHAFT	1
09-22	71-522	土台シャフト	SHAFT	1
09-23	75-131	カラ	COLLAR	1
09-24	75-151	キヤム玉取付台カラ	COLLAR	2
09-25	75-152	カラ	COLLAR	1
09-26	75-251	針振り連結ダ、ルマローラー	LINK ROLLER	1
09-27	75-372	ワッシャー	WASHER	2
09-28	81-171	ブッシュ	BUSHING	2
09-29	84-310	ネジ	SCREW	1
09-30	84-521	ネジ	SCREW	1
09-31	84-572	ネジ	SCREW	1
09-32	84-574	ネジ	SCREW	2
09-33	84-589	ネジ	SCREW	1
09-34	84-591	六角穴付きボルト	BOLT	1
09-35	84-831	針振り連結ダ、ルマ止めネジ	SCREW	1
09-36	85-111	ネジ	SCREW	2
09-37	86-481	針振り連結ダ、ルマナット	NUT	1
09-38	86-701	ナット	NUT	1
09-39	87-113	六角穴付きボルト	BOLT	1
09-40	87-172	ネジ	SCREW	3
09-41	87-181	ネジ	SCREW	2
09-42	87-253	ネジ	SCREW	1
09-43	87-259	ネジ	SCREW	1
09-44	87-274	ネジ	SCREW	1

# 10. 押え揚げ機構 PRESSER FOOT MECHANISM



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
10-01	71-542	押え棒(小)	PRESSER BAR (SMALL)	1
10-02	75-180	ワッシャー	WASHER	1
10-03	75-455	ワッシャー	WASHER	2
10-04	77-107	ハブリング・用押え揚げ連結板	CONNECTING PLATE	1
10-05	77-109	巻バネ止め板	LIFTER LEVER SPRING SUPPORTER	1
10-06	77-116	押え揚げ連結棒	LIFTER LEVER CONNECTING BAR	1
10-07	77-131	押え揚げ土台芯棒	LIFT LEVER LINK	1
10-08	77-163	調子心棒止め具	BRACKET	1
10-09	77-164	押え揚げクランクシャフト	SHAFT	1
10-10	77-165	パイプ	PIPE	1
10-11	77-301	ブラケット	BRACKET	1
10-12	77-516	押え棒ガイド	GUIDE	1
10-13	77-517	押え棒軸	PRESSER BAR GUIDE	1
10-14	77-818	押え揚げコントロールレバー	PRESSER FOOT LIFTER LEVER	1
10-15	79-121	押え棒軸ハネ	PRESSER BAR SPRING	1
10-16	79-222	押え揚げ巻バネ	LIFTER LEVER SPRING	1
10-17	84-551	ネジ	SCREW	1
10-18	84-561	ネジ	SCREW	1
10-19	84-562	段ネジ	SCREW	1
10-20	84-563	ネジ	SCREW	1
10-21	84-581	段ネジ	SCREW	1
10-22	85-201	段ネジ	SCREW	1
10-23	87-004	押え棒筒ネジ	SCREW	1
10-24	87-112	六角穴付きボルト	BOLT	2
10-25	87-113	六角穴付きボルト	BOLT	2
10-26	87-248	六角ボルト	BOLT	1
10-27	87-252	六角穴付きボルト	BOLT	2
10-28	88-003	類ネジナット	NUT	1
10-29	88-157	ナット	NUT	1
10-30	93-611	スタンプピン	PIN	1
10-31	94-231	オイルシール	OIL SEAL	2

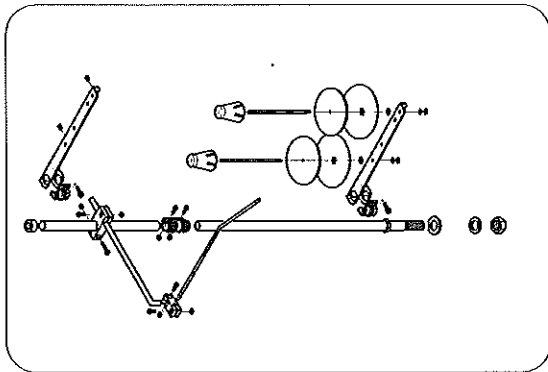
11. 給油機構 LUBRICATION MECHANISM



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
11-01	17-8010-G	ピン	PIN	1
11-02	23-120	オイルタンクパッキン	GASKET	4
11-03	23-160	配管油上メッセル	SEAL WASHER	3
11-04	23-304	シール	SEAL	1
11-05	23-363	フェルト	FELT	1
11-06	23-451	パッキン	GASKET	1
11-07	23-514	ジョイントシール	JOINT SEAL	4
11-08	30-0120	ポンプセツト	PUMP ASS'Y	1
11-09	30-0121	ポンプセツト	PUMP ASS'Y	1
11-10	31-151	トロロイトポンプハウジング	PUMP HOUSING	1
11-11	31-152	ポンプ軸	PUMP SHAFT	1
11-12	31-153	ポンプ取付板	PLATE	1
11-13	31-154	ポンプ裏板	PUMP REAR PLATE	1
11-14	31-156	ポンプメッシュ	PUMP MESH	1
11-15	31-157	ポンプメッシュ止メ具	CLAMP	1
11-16	31-271	濾過網	OIL FILTER SCREEN	1
11-17	31-272	オイルタンク	OIL TANK	1
11-18	31-2720-2	オイルタンクセツト	OIL TANK ASS'Y	1
11-19	31-364	パイプ継手	JOINT	2
11-20	31-702	ポンプキープ	PUMP GEAR	1
11-21	31-705	アウターローター	OUTER ROTER	1
11-22	31-707	インナーローター	INNER ROTER	1
11-23	35-122	セパレート配管	PIPE	1
11-24	35-246	立ロット用配管	PIPING	1
11-25	35-257	パイプA	PIPE A	1
11-26	35-315	ビニールチューブ	TUBE	1
11-27	35-317	ビニールチューブ	TUBE	1
11-28	35-318	ビニールチューブ	TUBE	1
11-29	35-322	ビニールチューブ	TUBE	1
11-30	35-343	ビニールチューブ	TUBE	1
11-31	35-361	片口管継手(小)	JOINT	6
11-32	35-362	管継手ホルト	JOINT SCREW	1
11-33	35-413	止め金具	CLAMP	6
11-34	35-528	管継手ホルト	JOINT SCREW	2
11-35	39-133	パイプサポ-トC	PIPE SUPPORT C	1
11-36	39-218	オイルゲージ	OIL GAUGE	1
11-37	75-185	ポンプスベ-スカラー	COLLAR	1
11-38	75-452	ワッシャ	WASHER	2
11-39	75-536	ワッシャ	WASHER	4
11-40	84-363	ネジ	SCREW	3
11-41	87-092	六角穴付きボルト	BOLT	1
11-42	87-093	ネジ	SCREW	1
11-43	87-123	六角穴付きボルト	BOLT	3
11-44	87-129	六角穴付きボルト	BOLT	3
11-45	87-140	六角穴付きボルト	BOLT	1
11-46	87-173	六角穴付きボルト	BOLT	4
11-47	87-183	六角穴付きボルト	BOLT	2
11-48	87-252	六角穴付きボルト	BOLT	2
11-49	87-286	ネジ	SCREW	2
11-50	87-311	ワタネジ	SCREW	1
11-51	88-137	ナット	NUT	1

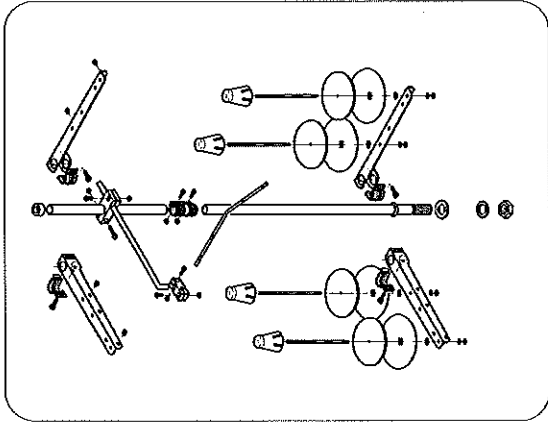
# 12. 糸立て及びテーブル THREAD STAND AND TABLE

PX301F-2S

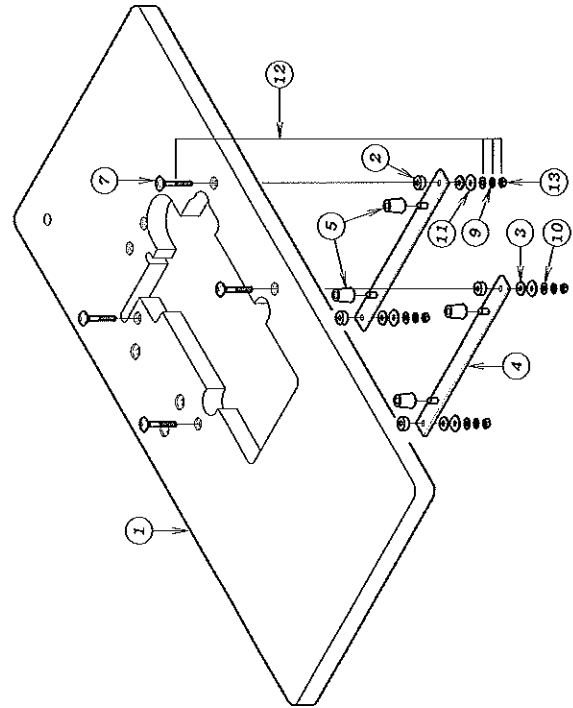


⑥

PX302-4W, PX302-5W



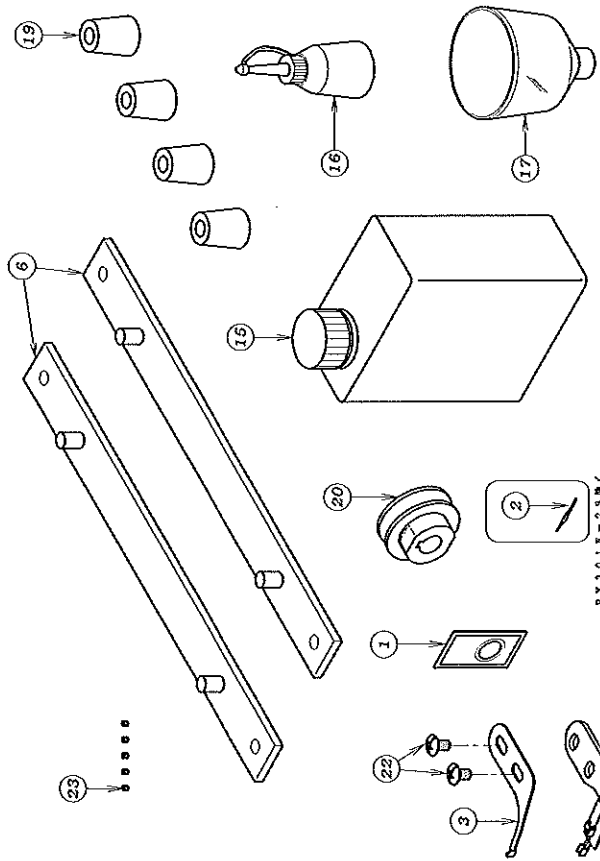
⑧



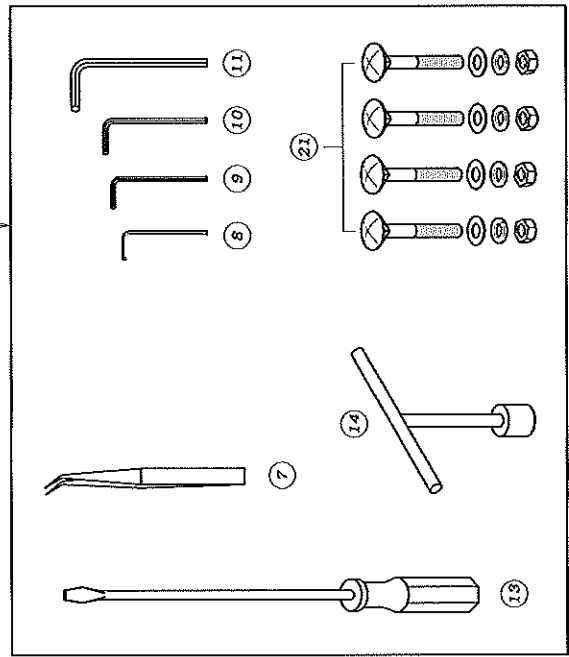
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
12-01	21-045	テーブル	TABLE	1
12-02	23-121	テーブル取付△A	CUSHION RUBBER	4
12-03	23-122	テーブル取付△B	CUSHION RUBBER	4
12-04	25-140	タンク取付金具	SUPPORTING BOARD	2
12-05	31-163	クッション△A	CUSHION RUBBER	4
12-06	42-002	2本糸立て	THREAD STAND ASSEMBLY	1
12-07	42-514	根角ボルトM8	BOLT	4
12-08	42-704	4本糸立て	THREAD STAND ASSEMBLY	1
12-09	75-225	スプリングワッシャー	SPRING WASHER	4
12-10	75-451	ワッシャー	WASHER	4
12-11	75-535	ワッシャー	WASHER	4
12-12	80-7510	根角ボルト	SCREW	4
12-13	88-176	ナット	NUT	4



# 13. アクセサリー - ACCESSORIES

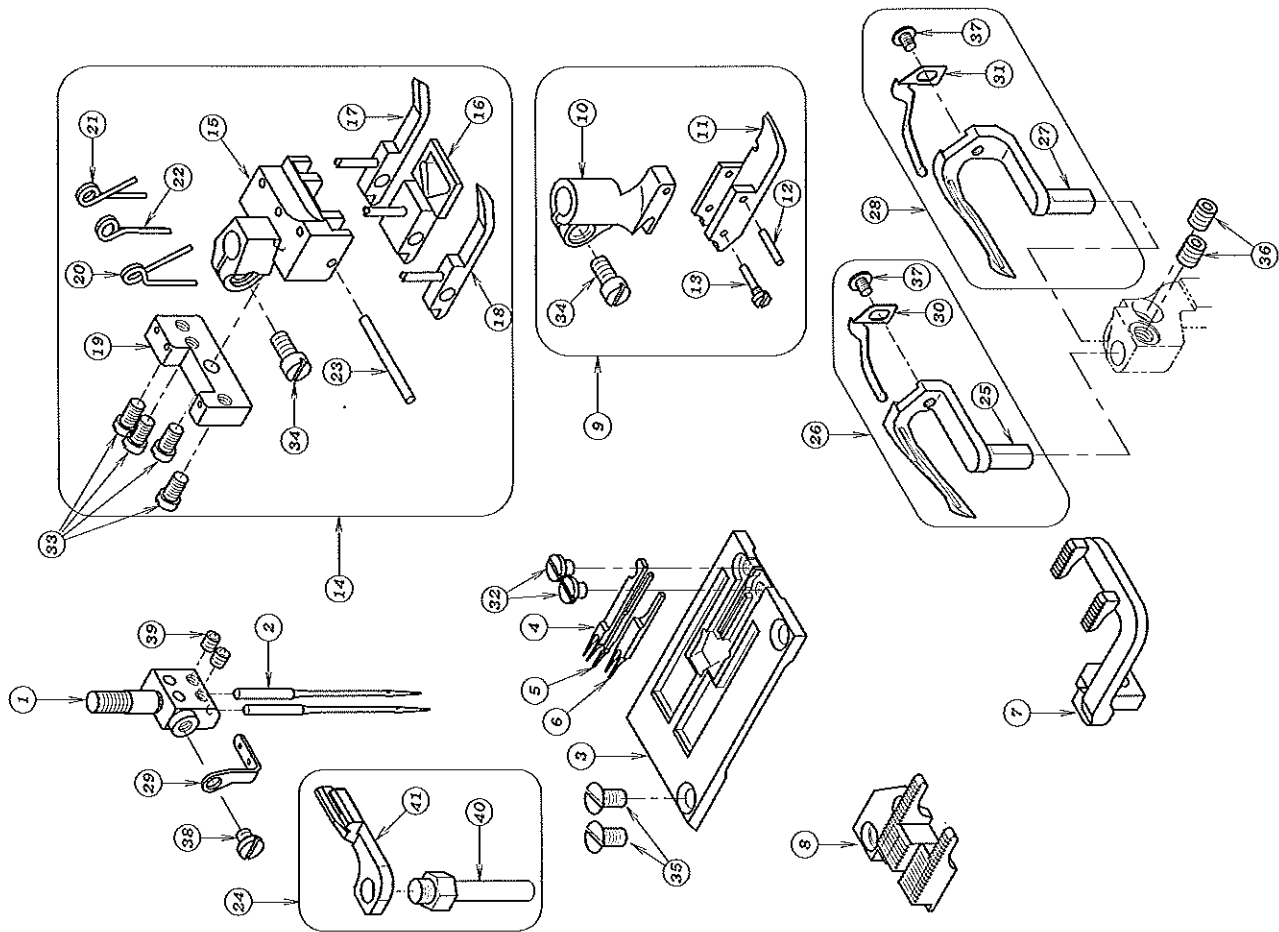


EXCERPT - 2222 < P-23361P-232K >



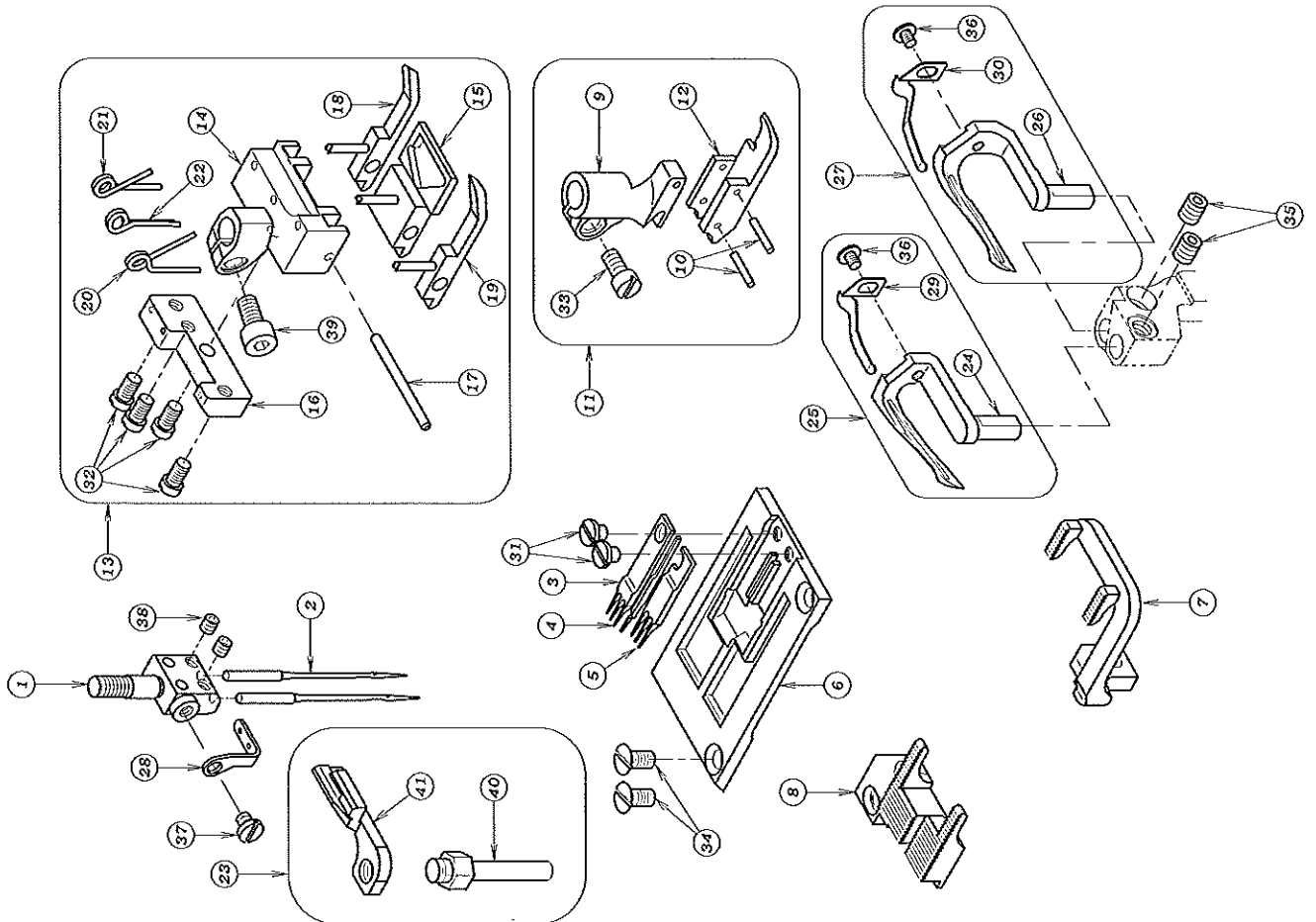
REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
13-01	13-2510-5	針 (UOX163 #11)	NEEDLE	1
13-02	14-337	シヤクル用爪	CENTER NAIL	1
13-03	18-301	片押ニ定規	GUIDE	1
13-04	18-362	両押ニ定規	GUIDE	1
13-05	20-0020	附属部品ケース	ACCESSORIES	1
13-06	25-140	タンク取付金具	SUPPORTING BOARD	2
13-07	28-011	ピンセット	TWEZERS	1
13-08	28-311	六角レンチ 2mm	ALLEN KEY (2mm)	1
13-09	28-312	六角レンチ 2.5mm	ALLEN KEY (2.5mm)	1
13-10	28-313	六角レンチ 3mm	ALLEN KEY (3mm)	1
13-11	28-314	六角レンチ 5mm	ALLEN KEY (5mm)	1
13-12	28-317	横付き六角レンチ 1.5mm	ALLEN KEY (1.5mm)	1
13-13	28-452	ドライバ (大)	DRIVER (L)	1
13-14	28-464	T型レンチ 10mm	T-WRENCH	1
13-15	28-611	オイル	OIL	1
13-16	28-614	油差シ	OILER	1
13-17	28-615	シヤクル	OIL FUNNEL	1
13-18	28-920	チェーン	CHAIN	1
13-19	31-163	クッションゴム	CUSHION RUBBER	4
13-20	69-851	φ50モーター用	Ø50MOTOR PULLEY	1
13-21	80-7510	螺絲ボルト	BOLT	4
13-22	85-182	ネジ	SCREW	2
13-23	87-104	ネジ	SCREW	5

14. ゲージ関係 (PX302-4W) GAUGE PARTS



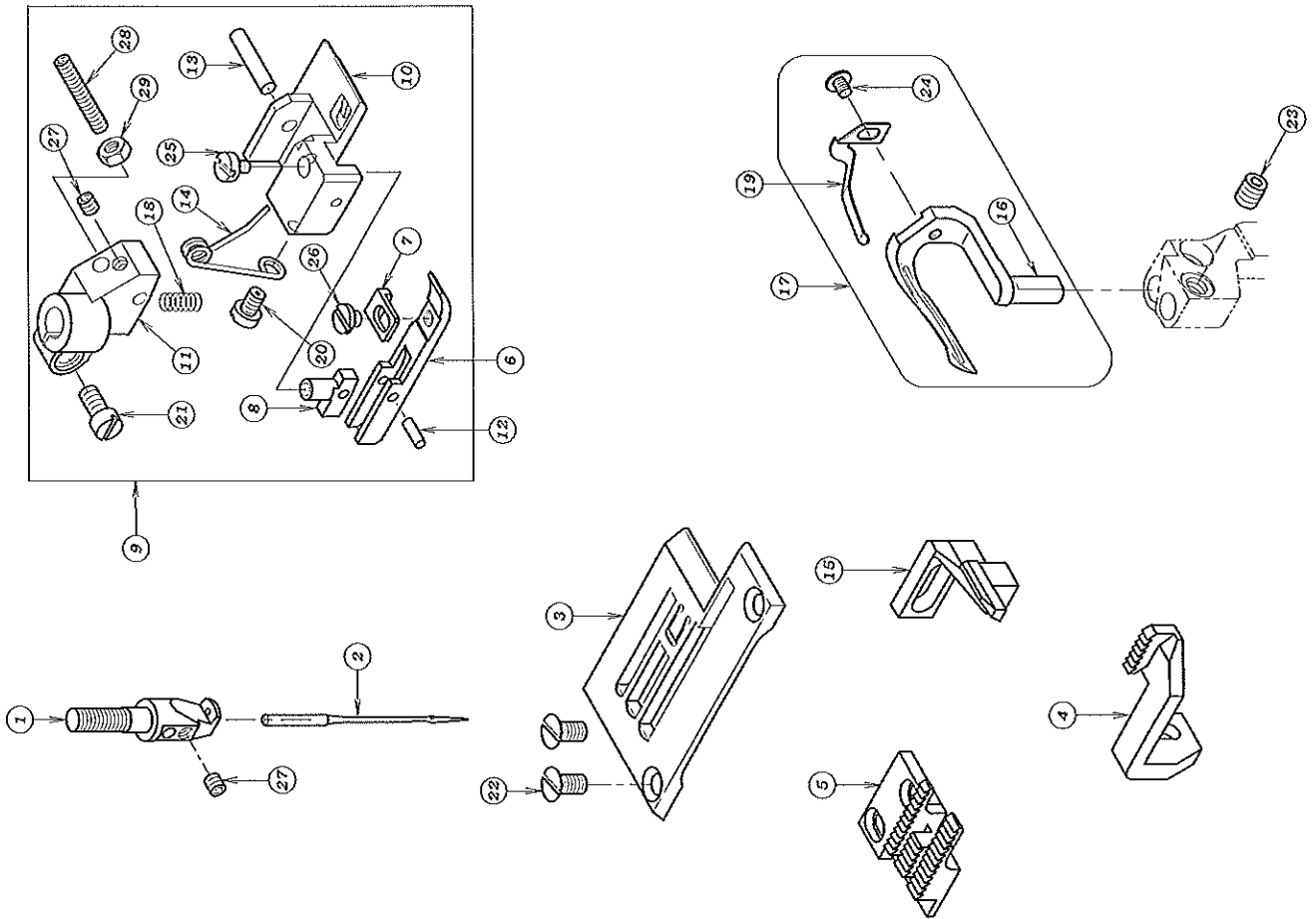
REF. NO.	PART NO.	品名	DESCRIPTION	QTY
14-01	*	針板	NEEDLE HOLDER	1
14-02	13-2510-5	針(UOx163 #11)	NEEDLE	2
14-03	*	針板	NEEDLE PLATE	1
14-04	14-331	右爪	RIGHT NAIL	1
14-05	14-332	中爪	CENTER NAIL	1
14-06	14-333	左爪	LEFT NAIL	1
14-07	*	前送り歯	FRONT FEED DOG	1
14-08	*	後送り歯	REAR FEED DOG	1
14-09	*	押エゼット	PRESSER FOOT ASS'Y	1
14-10	17-3010-A	片押エボ'ス	SHANK	1
14-11	17-3010-B	片押エ足	BOTTOM	1
14-12	17-3010-C	取付ピン	PIN	1
14-13	17-3010-D	ピン付ネジ	SCREW	1
14-14	*	押エゼット	PRESSER FOOT ASS'Y	1
14-15	17-3610-A	押エボ'ス	SHANK	1
14-16	17-3610-B	押エ足	BOTTOM	1
14-17	17-3610-C	押エガイド'足'右	BOTTOM GUIDE (R)	1
14-18	17-3610-D	押エガイド'足'左	BOTTOM GUIDE (L)	1
14-19	17-3610-E	ハネ取付金具	BRACKET	1
14-20	17-3610-F	押エボ'ス'左	SPRING (L)	1
14-21	17-3610-G	押エボ'ス'右	SPRING (R)	1
14-22	17-3610-H	押エボ'ス'中	SPRING	1
14-23	17-3610-I	ガイド'足'取付ピン	PIN	1
14-24	10-7171	針受けゼット	NEEDLE GUARD ASS'Y	1
14-25	*	前ルーパー	FRONT LOOPER	1
14-26	19-3620-2	前ルーパー'ゼット	FRONT LOOPER ASS'Y	1
14-27	*	後ルーパー	REAR LOOPER	1
14-28	19-3630-2	後ルーパー'ゼット	REAR LOOPER ASS'Y	1
14-29	45-316	針板ネジ	THREAD EYELET	1
14-30	79-578	前ルーパー'ネジ'ネ小	SPRING FOR FRONT LOOPER	1
14-31	79-579	後ルーパー'ネジ'ネ大	SPRING FOR REAR LOOPER	1
14-32	84-117	ネジ	SCREW	2
14-33	84-162	ネジ	SCREW	4
14-34	84-382	ネジ	SCREW	2
14-35	84-464	ネジ	SCREW	2
14-36	84-521	ネジ	SCREW	2
14-37	85-611	ネジ	SCREW	2
14-38	87-083	ネジ	SCREW	1
14-39	87-104	ネジ	SCREW	2
14-40	18-826	針受け軸	NEEDLE GUARD SHAFT	1
14-41	18-827	針受け	NEEDLE GUARD	1

15. ゲージ関係 (PX302-5W) GAUGE PARTS



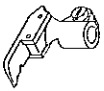
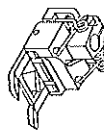



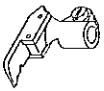
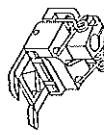


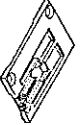



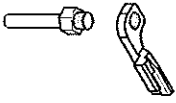
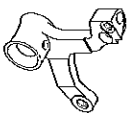

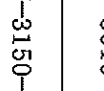
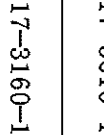

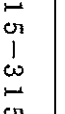
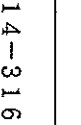
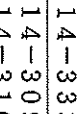

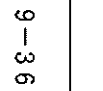
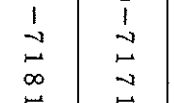
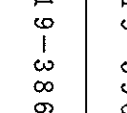

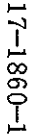

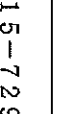
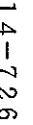
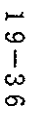
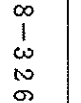
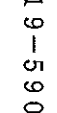
REF. NO.	PART NO.	品名	DESCRIPTION	QTY
15-01	12-316	針鉄	NEEDLE HOLDER	1
15-02	13-2510-5針 (UOX163 #11)		NEEDLE	2
15-03	14-309	右爪	RIGHT NAIL	1
15-04	14-310	中爪	CENTER NAIL	1
15-05	14-311	左爪	LEFT NAIL	1
15-06	14-316	針板	NEEDLE PLATE	1
15-07	15-315	前送り歯	FRONT FEED DOG	1
15-08	15-316	後送り歯	REAR FEED DOG	1
15-09	17-3010-A	片押エボ'ス	SHANK	1
15-10	17-3010-C	取付ピン	PIN	2
15-11	17-3150-1	片押エセット	PRESSER FOOT ASS'Y	1
15-12	17-3150-B	片押エ足	BOTTOM	1
15-13	17-3160-1	押エボ'ス	PRESSER FOOT ASS'Y	1
15-14	17-3160-A	押エボ'ス	SHANK	1
15-15	17-3160-B	押エ足	BOTTOM	1
15-16	17-3160-E	ボ'ネ取付金具	BRACKET	1
15-17	17-3160-1	ガイド足取付ピン	PIN	1
15-18	17-3610-C	押エガイド'足 右	BOTTOM GUIDE (R)	1
15-19	17-3610-D	押エガイド'足 左	BOTTOM GUIDE (L)	1
15-20	17-3610-F	押エボ'ネ 左	SPRING (L)	1
15-21	17-3610-G	押エボ'ネ 右	SPRING (R)	1
15-22	17-3610-H	押エボ'ネ 中	SPRING	1
15-23	10-7181	針受けセット	NEEDLE GUARD ASS'Y	1
15-24	19-362	前ル'ボ'ネ	FRONT LOOPER	1
15-25	19-3620-2	前ル'ボ'ネ-セット	FRONT LOOPER ASS'Y	1
15-26	19-363	後ル'ボ'ネ	REAR LOOPER	1
15-27	19-3630-2	後ル'ボ'ネ-セット	REAR LOOPER ASS'Y	1
15-28	45-316	針鉄赤道	THREAD EYELET	1
15-29	79-578	前ル'ボ'ネ-取付ボ'ネ小	SPRING FOR FRONT LOOPER	1
15-30	79-579	後ル'ボ'ネ-取付ボ'ネ大	SPRING FOR REAR LOOPER	1
15-31	84-117	ネジ	SCREW	2
15-32	84-162	ネジ	SCREW	4
15-33	84-382	ネジ	SCREW	1
15-34	84-464	ネジ	SCREW	2
15-35	84-521	ネジ	SCREW	2
15-36	85-611	ネジ	SCREW	2
15-37	87-083	ネジ	SCREW	1
15-38	87-104	ネジ	SCREW	2
15-39	87-177	六角穴付きボルト	BOLT	1
15-40	18-826	針受け軸	NEEDLE GUARD SHAFT	1
15-41	18-828	針受け後	NEEDLE GUARD	1

16. ケーシ関係 (PX301F-2S) GAUGE PARTS



REF. NO.	PART NO.	品名	DESCRIPTION	Q'TY
16-01 *		針座	NEEDLE HOLDER	1
16-02	13-2510-5	針 (UOx163 #11)	NEEDLE	1
16-03 *		針板	NEEDLE PLATE	1
16-04 *		前送歯	FEED DOG	1
16-05 *		後送歯	FEED DOG	1
16-06	17-1760-C	押えガイド・足	GUIDE BRACKET	1
16-07	17-1760-K	テープガイド	TAPE GUIDE	1
16-08	17-1760-L	ガイド・足金具	GUIDE PIN	1
16-09 *		押えゼット (1/8)	PRESSER FOOT A' SSY	1
16-10	17-1860-B	押え足 (1/8)	BOTTOM	1
16-11	17-7760-A	押えボ・ス	SHANK	1
16-12	17-7760-D	ピン	PIN	1
16-13	17-7760-E	ピン	PIN	1
16-14	17-8260-F	押え足金具・ネ	SPRING	1
16-15 *		針受け	NEEDLE GUARD	1
16-16	19-363	後ループ	REAR LOOP	1
16-17	19-3630-2	後ループ・ゼット	REAR LOOP ASS'Y	1
16-18	79-191	ハ・ネ	SPRING	1
16-19	79-579	後ループ・裏ハ・ネ大	SPRING FOR REAR LOOP	1
16-20	84-161	ネジ	SCREW	1
16-21	84-382	ネジ	SCREW	1
16-22	84-464	ネジ	SCREW	2
16-23	84-521	ネジ	SCREW	1
16-24	85-611	ネジ	SCREW	1
16-25	85-621	ネジ	SCREW	1
16-26	87-077	ネジ	SCREW	1
16-27	87-104	ネジ	SCREW	2
16-28	87-130	ネジ	SCREW	1
16-29	88-136	ナット	NUT	1

# 17. ケージ表 GAUGE PARTS TABLE

機種 MODEL	針数 NEEDLE	針株 NEEDLE HOLDER	PRESSER FOOT ASS'Y 押え組		後送り歯 FEED DOG (REAR)	前送り歯 FEED DOG (FRONT)	針板 NEEDLE PLATE	針板爪 NEEDLE NAIL	ルーパー LOOPER		針受 NEEDLE GUARD	ルーパー台 LOOPER HOLDER
												
PX302-4W	2											
PX302-5W	2											
PX301F-2S	1											



---

# *PX Series Instruction Manual*

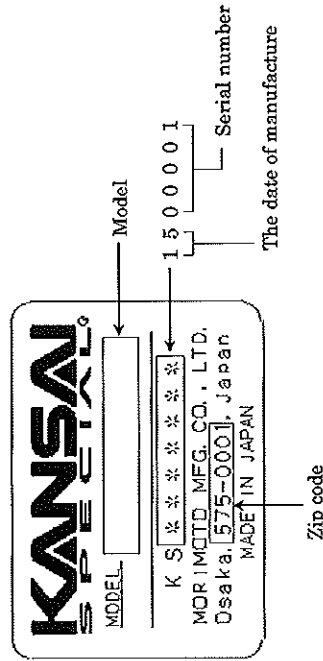
---

## INTRODUCTION

Thank you for your purchasing Kansai Special's PX 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 performing preventive maintenance.
6. The contents described in this instruction manual are subject to change without notice.

### Indication of serial number



PX series

## CONTENTS

<b>1. NEEDLES &amp; THREADING THE MACHINE</b>	
1-1 Needles	1
1-2 Replacing the needle	1
1-3 To thread the machine	1
<b>2. MACHINE SPEED</b>	
2-1 Machine speed & direction in which the machine pulley runs	2
2-2 Motor & belt	2
<b>3. LUBRICATION</b>	
3-1 Oil	3
3-2 To fill the machine with oil	3
3-3 Replacing the oil and the filter element	3
<b>4. SEWING MACHINE INSTALLATION</b>	
4-1 Cutting the machine table	4
4-2 To install the machine	5
<b>5. TIMING OF THE LOOPER TO THE NEEDLE</b>	
5-1 Needle height	5
5-2 Needle drop and needle side stroke	6
5-3 To install the looper	7
5-4 Eccentric for adjusting the looper left to right	7
5-5 Position of the looper rocker	8
5-6 Looper left-to-right movement	9
5-7 Looper/needle front-to-back relationship	9
5-8 Looper setting distance	9
5-9 Adjusting the looper back spring	10
<b>6. ADJUSTING THE NEEDLE GUARD</b>	
6-1 Model 301F-2S	10
6-2 Model 302-4W, 302-5W	10
<b>7. ADJUSTING THE FEED DOG &amp; STITCH LENGTH</b>	
7-1 Feed dog height	11
7-2 Stitch length	11
7-3 Differential feed ratio	12
<b>8. ADJUSTING THE PRESSER FOOT</b>	
8-1 Presser foot pressure	12
8-2 Position of the presser foot and foot lift	12
<b>9. ADJUSTING THE STITCH FORMATION</b>	
9-1 Adjusting the looper thread eyelets	13
9-2 Position of the looper thread take-up	13
9-3 Adjusting the needle thread guard	13
<b>10. CLEANING THE MACHINE</b>	14

PX series



## [1] NEEDLES & THREADING THE MACHINE

### 1-1 Needles

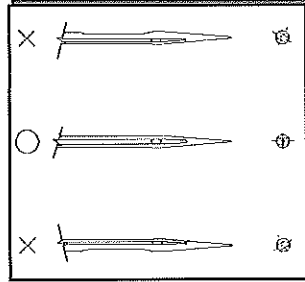
UO163 of Schmetz or Organ  
Select the proper needle for the fabric and thread.

< Comparison table of needle sizes >

Schmetz	UY163GAS	Nm65	Nm70	Nm75	Nm80	Nm90
Organ	UO163	#9	#10	#11	#12	#14

### 1-2 Replacing the needle

When replacing the needle, check the needle carefully to see that the scarf is turned to the rear of the machine (see the illustration).

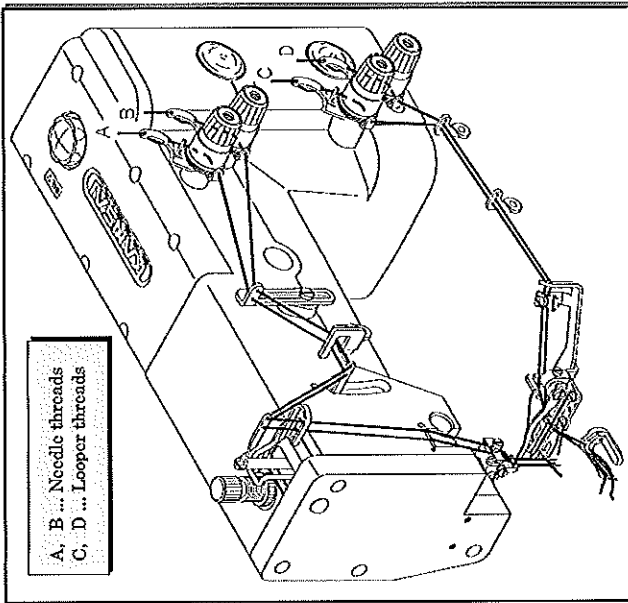


< Note >

*When 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 To thread the machine

Thread the machine correctly by referring to the illustration below. Incorrect threading may cause skip stitching, thread breakage and/or uneven stitch formation.



## [2] MACHINE SPEED

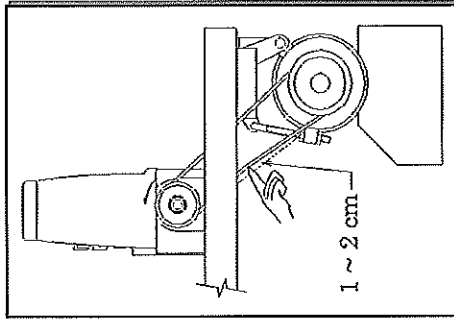
### 2-1 Machine speed & direction in which the machine pulley runs

Maximum speed : 3,500 rpm

Standard speed : 3,000 rpm

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 counterclockwise as seen from the end of the machine pulley (see the illustration).



### 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 the position of the motor by pressing the finger onto the middle of the belt so that 1~2cm deflection can be achieved (see the illustration).

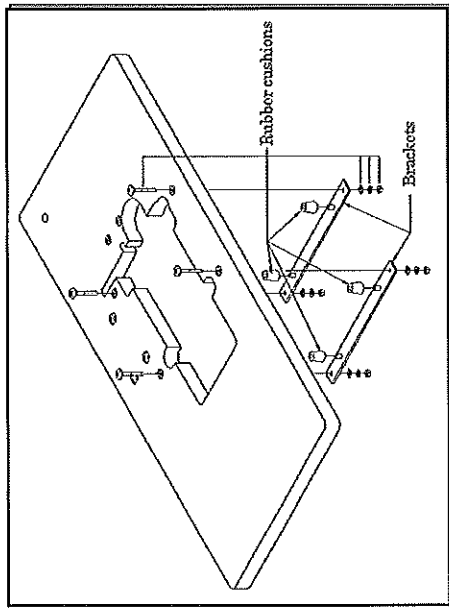
< Motor pulley selection table >

Motor pulley outer diameter (mm)	Machine speed (SPM)	
	50Hz	60Hz
60	2500	2950
70	2900	3450
80	3300	(3900)
90	(3700)	(4400)



#### 4-2 To install the machine

Install the brackets on the underside of the table board (see the illustration below).  
Fit the rubber cushions onto the brackets.  
Mount the machine head on the rubber cushions correctly.



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

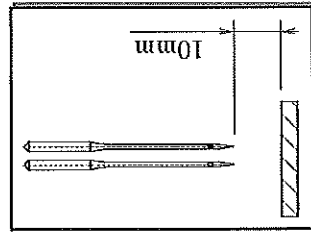
#### 5-1 Needle height

When the needle bar is at the top of its stroke, there should be a distance of approximately 10mm (2S : 11~11.3mm) from the top surface of the needle plate to the point of the needle. Adjustment is made by loosening screws A.

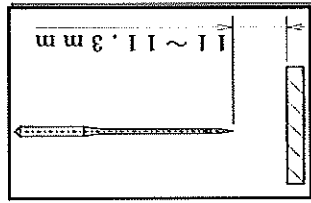
< Note >

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

< Model : 302-4W, 302-5W >



< Model : 301F-2S >



#### 5-2 Needle drop and needle side stroke

The needle side stroke on this machine is 5.55mm (302-4W) and 7.4mm (302-5W) and 3.2mm (301F-2S).

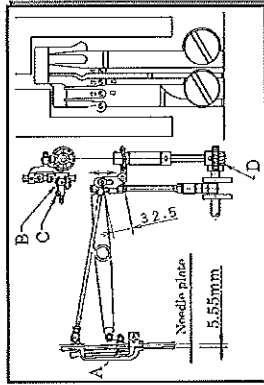
To increase the stroke, loosen screw B and move it up in the slot. To decrease the stroke, loosen screw B and move it down in the slot. The point of the needle should be centered left to right between fingers of the needle plate when the needle drops to the needle plate. Adjustment is made by loosening screw C. The needle side stroke movement should start when the point of the needle moves up from the top surface of the needle plate.

The needle side stroke movement should stop when the point of the needle reaches the top surface of the needle plate. This timing adjustment is made by worm gear D. To adjust the position of the needle drop, loosen screws A and turn the needle bar as required.

< Model : 302-4W >

< Note >

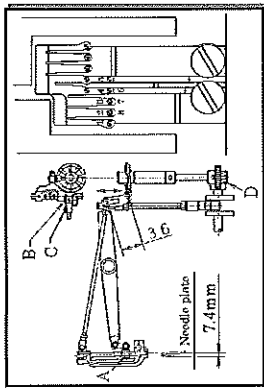
Position of the needle drop 1, 2, 3, 4 from the left side, 4 is the extreme right end. 4, 5, 6, 1 from the right side



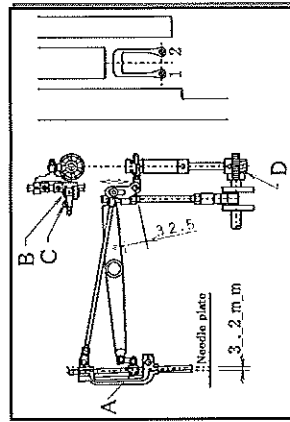
< Model : 302-5W >

< Note >

Position of the needle drop 1, 2, 3, 4, 5 from the left side, 5 is the extreme right end. 5, 6, 7, 8, 1 from the right side



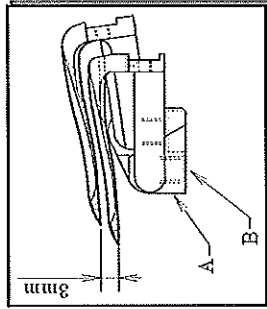
< Model : 301F-2S >



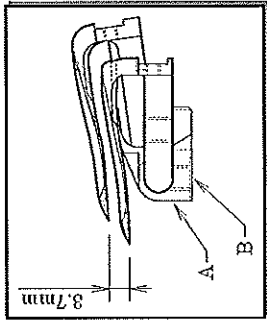
### 5-3 To install the looper

To set the angle and height of the looper, insert the looper fully into looper holder A and tighten screw B.

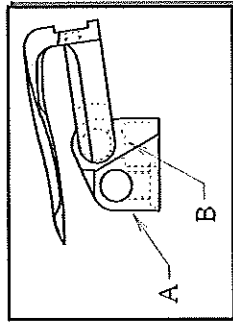
< Model : 302-4W >



< Model : 302-5W >

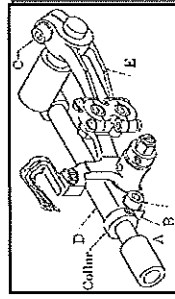
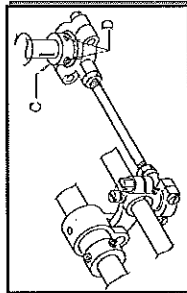


< Model : 301F-2S >



### 5-4 Eccentric for adjusting the looper left to right

To adjust the position of the eccentric, loosen screws D. Align the screw which comes second in the turning direction of the eccentric with the mark on the shaft. Then tighten screws D temporarily. Then make a fine adjustment so that the looper shaft can reach the extreme right end of its travel while the needle is at the bottom of its stroke with position 4. After this adjustment, tighten the screws securely. For PX302-5W, adjust each looper shaft to come the same position while the needle is at the bottom of its stroke with position 3 and position 7.



### 5-5 Position of the looper rocker

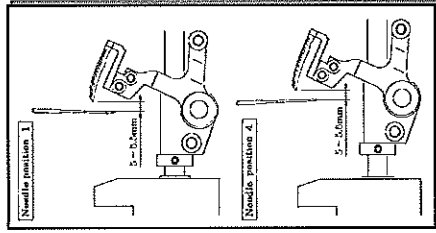
The setting distances of the looper with the needle at position 4 and position 1 should be equal (302-4W, -5W : 5~5.5mm 301F-2S : 4.8mm) (For PX302-5W, the needle at position 1 and position 5) (For PX301F-2S the needle at position 1 and position 2) (see 5-2).

To achieve this adjustment, loosen screw A to loosen the collar. Loosen screws B and C. Then adjust looper rocker D and lever E.

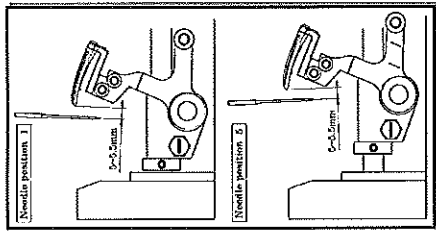
#### Example

If the setting distance with the needle at position 1 is 5mm and the setting distance with the needle at position 4 is 6mm, move looper rocker D approximately 1mm to right. After the adjustment is made, tighten screws B and C securely. Then tighten screw A with the collar fitted onto looper rocker D.

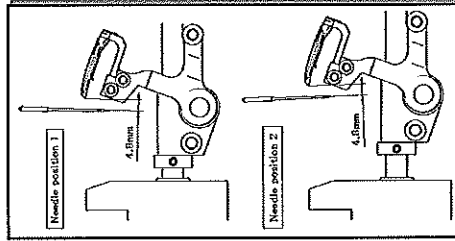
< Model : 302-4W >



< Model : 302-5W >

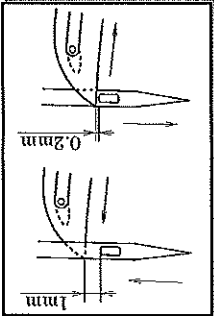


< Model : 301F-2S >



### 5-6 Looper left-to-right movement

This adjustment should be made when the needle is at position 1 (see 5-2). When the point of the looper, moving to the left, has reached the left side of the needle, it should be 1mm above the top of the needle's eye. When the point of the looper, moving to the right, has reached the left side of the needle, it should be 0.2mm above the top of the needle's eye. The looper moves 0.8mm faster than the needle (see the illustration on the right).



For PX302-5W when the needle is at position 2.

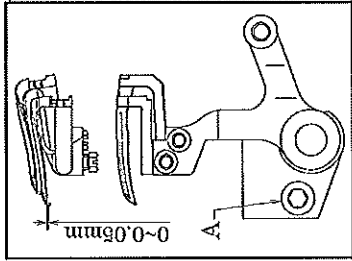
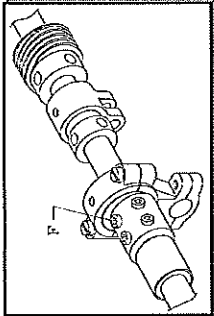
### 5-7 Looper/needle front-to-back relationship

Adjust when the needle is at position 3 or 5 (see 5-2). When the point of the looper is at the center of the needle, there should be a clearance of 0mm between the needle and the looper.

### 5-8 Looper setting distance

Adjustment is made by loosening screw A.

If the looper setting distance is not correct, perform 5-4, 5-5 procedure again.



### 5-9 Adjusting the looper back spring

It is the best that the surface of the spring touches the looper closely within the range of B.

Check to see if the surface of the spring touches the looper closely at least on points C within the range of B. Spun thread #60 should be removed from the spring at approximately 80-100g of tension.

### < Model : 302-4W >

Needle position	Setting distance (mm)
1, 4	5.5
2, 6	4.7
3, 5	5.8

### < Model : 302-5W >

Needle position	Setting distance (mm)
1, 5	5.5
2, 8	4.2
3, 7	4.8
4, 6	6

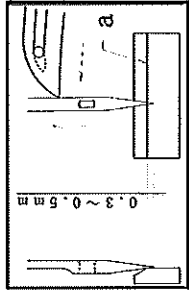
### < Model : 301F-2S >

Needle position	Setting distance (mm)
1, 2	4.8

## [6] ADJUSTING THE NEEDLE GUARD

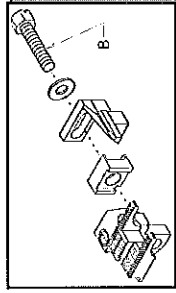
### 6-1 Model 301F-2S

This adjustment should be made when the needle is at position 2 (see 5-2). When the point of the looper, moving to the left, has reached the right side of the needle, line A on the needle guard should be 0.3-0.5mm above the point of the needle (see the illustration on the right). Then the needle must slightly touch the needle guard. Adjustment is made by loosening screw B.



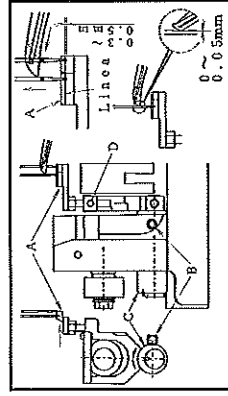
### 6-2 Model 302-4W, 302-5W

This adjustment should be made when the needle is at position 4 (302-5W : position 5, see 5-2). When the point of the looper, moving to the left, has reached the right side of the needle, line A on the needle guard should be 0.3-0.5mm above the point of the needle (see the illustration on the right). Adjustment is made by loosening screw D, raise or lower the guard as needed then tighten D.



### ■ Clearance adjustment

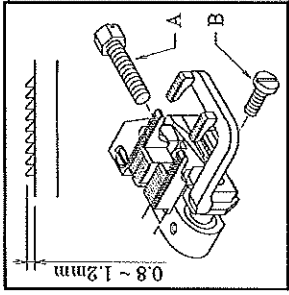
Clearance between the needles and rear needle guard should be 0.0mm to 0.05mm. Adjust by loosening screw B and turning bushing C. Turn C clockwise to move the guard forward or counterclockwise to move the guard rearward. At this time tighten screw B slightly.



**[7] ADJUSTING THE FEED DOG & STITCH LENGTH**

**7-1 Feed dog height**

When the feed dog is at the top of its stroke, the feed dog teeth should be 0.8~1.2mm above the top surface of the needle plate. Adjustment is made by loosening screws A and B.



**7-2 Stitch length**

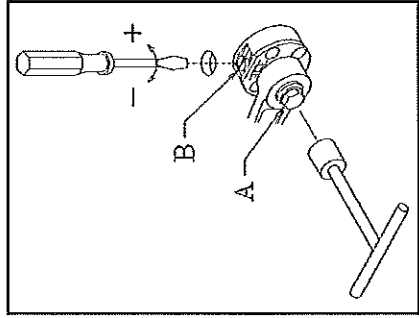
< Model : 301F-2S >

Loosen bolt A with a 9.5mm T-wrench.

Then turn screw B as required.

To decrease the stitch length, turn it clockwise.

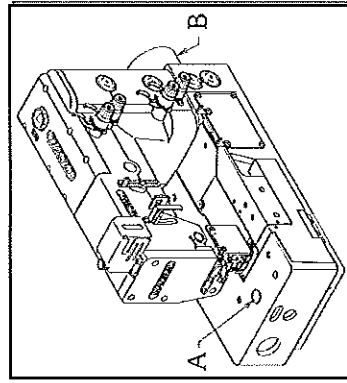
To increase the stitch length, turn it counterclockwise (see the illustration on the right).



< Model : 302-4W, 302-5W >

To adjust the stitch length

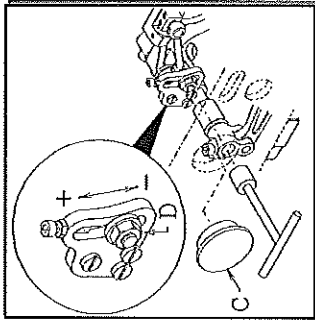
1. Press push button A lightly until its end touches the inside part and clicks.
2. Turn the pulley B by hand while pressing the push button lightly until the push button goes further into the depth.
3. Then press down the push button strongly again. Adjust the stitch length as required by turning the pulley B.



**7-3 Differential feed ratio**

Remove rubber plug C. Loosen nut D.

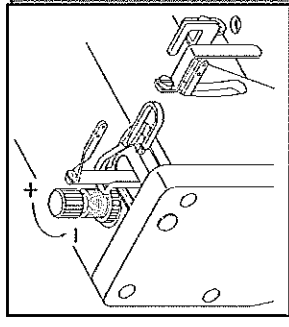
To increase the differential feed ratio, move up the nut. To decrease the differential feed ratio, move down the nut.



**[8] ADJUSTING THE PRESSER FOOT**

**8-1 Presser foot pressure**

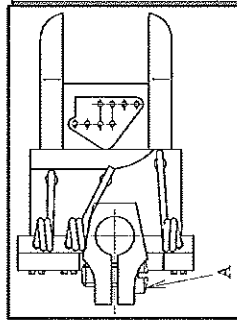
The presser foot pressure should be as light as possible, yet be sufficient to feed the fabric and produce uniform stitches. To increase the presser foot pressure, turn the adjusting knob clockwise (see the illustration on the right).



**8-2 Position of the presser foot and foot lift**

The presser foot should not touch the needle.

Adjustment is made by loosening screw A and then moving the presser foot to the right or left.



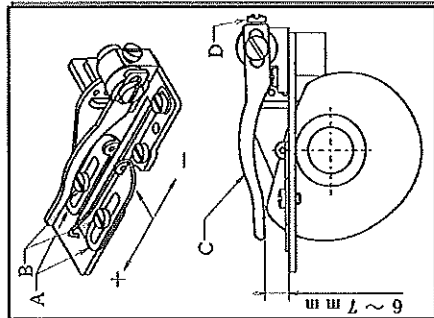
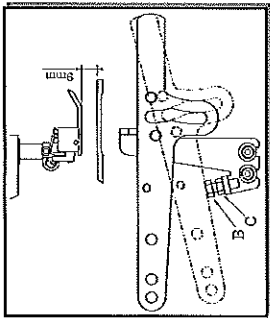
Position stopper B with the presser foot approximately 9mm above the top surface of the needle plate and then tighten nut C.

*< Note >  
Before adjusting machine, be sure to turn off the motor.*

**[9] ADJUSTING THE STITCH FORMATION**

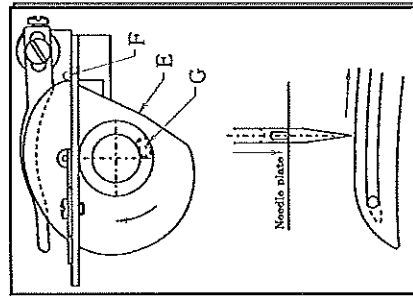
**9-1 Adjusting the looper thread eyelets**

Align the eyes on the looper thread eyelets A with the center line of the shaft. Adjust looper thread eyelets A according to sewing conditions such as the fabric or thread to be used by loosening screws B. To increase the amount of the thread to be supplied, move the eyelets backward. To decrease the amount of the thread to be supplied, move the eyelets forward. Thread guide C should be 6-7mm above the guide plate. Adjustment is made by loosening screw D.



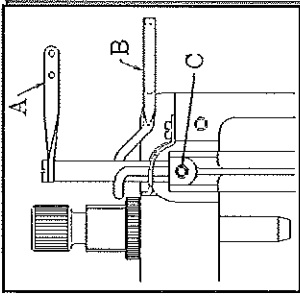
**9-2 Position of the looper thread take-up**

When the bottom of the needle's eye has reached the top surface of the needle plate while the needle is descending, the looper thread taken up by looper thread take-up E should be removed from the looper thread take-up at point F. Adjustment is made by screw G.



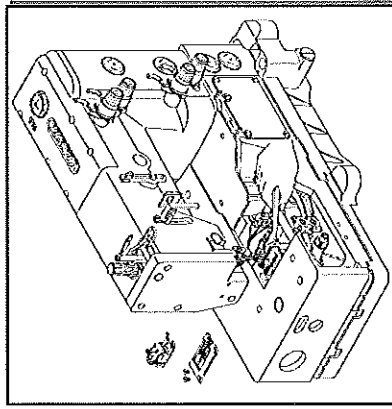
**9-3 Adjusting the needle thread guard**

With the needle bar at the bottom of its stroke, the centers of eyes on needle bar thread eyelet A should be level with the top surface of needle thread guard E. Adjustment is made by screw C. To tighten the needle thread, move up needle bar thread eyelet A. To loosen the needle thread, move down needle bar thread eyelet A.



**[10] CLEANING THE MACHINE**

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



**株式会社 森本製作所**

本社 〒575-0001 大阪府四条畷市砂 一丁目 4 番 17 号 TEL: 072-877-1221 FAX: 072-878-9649

**MORIMOTO MFG. CO., LTD.**

1-4-17, SUNA, SHIJONAWATE-CITY, OSAKA 575-0001, JAPAN

TEL: +81-72-877-1221 FAX: +81-72-878-9649 E-MAIL: hqeigyo@kansai-special.com URL: www.kansai-special.com

**FOREIGN AFFILIATED COMPANIES**

**KANSAI SPECIAL AMERICAN MACHINE CORP.**

1 MADISON ST. BLDG. F, EAST RUTHERFORD, N.J. 07073 U.S.A.

TEL: +1-973-470-8321 FAX: +1-973-470-8497

**KANSAI SPECIAL EUROPE GMBH**

QUIRINSTR. 19, 40545 DUSSELDORF, GERMANY

TEL: +49-211-577-9090 FAX: +49-211-558-1477 E-MAIL: contact@kansai-special.de

**MORIMOTO SINGAPORE PTE LTD.**

NO.51 PENJURU ROAD #02-02 SINGAPORE 609143

TEL: +65-6334-1305 FAX: +65-6334-1365 E-MAIL: info@kansaispecial.com.sg

**MORIMOTO INDIA LIAISON OFFICE**

NO.11 SENTHILL NAGAR, PERRIYAR COLONY, AVINASHI ROAD, TIRUPUR, INDIA 641601

TEL: +91-421-4248229 FAX: +91-421-4286600 Tech Support TEL: +91-770-8300100

E-MAIL: india@kansaispecial.com.sg

**MORIMOTO BANGLADESH LIAISON OFFICE**

FLAT #2/B. HOUSE #16, ROAD #13, SECTOR #04 UTTARA, DHAKA-1230 BANGLADESH

TEL: +88-02-8931702 FAX: +88-02-8931704 E-MAIL: bangladesh@kansaispecial.com.sg

**KANSAI (SHANG HAI) INDUSTRIAL SEWING MACHINE CO., LTD**

NO.55 LANE 835, JIAXIN ROAD, MALU TOWN, JIADING DISTRICT, SHANGHAI 201818, CHINA

TEL: +86-21-5990-1798 FAX: +86-21-5990-1538 E-MAIL: kansaish@spe.sina.net