

# PARTS LIST & INSTRUCTION

# *DFB* SERIES

## Industrial Sewing Machines

*DFB1404P,PE,PMD*  
*DFB1404PSF,WB*  
*DFB1406P*  
*DFB1408P,PG*  
*DFB1409P*  
*DFB1412P,PL,PS,PQ,PET,ET-MD*  
*DFB1012P,PS,PSET*  
*DFB1402MR,1412MR*  
*DFB1412PTV*  
*DFB1406PTV-I*  
*DFB1412PTV-I*  
*DFB1012PSM*  
*DFB1412PS-SM,PS-SMET*  
*DFB1012PS-SM*  
*DFB1412PQ-SM*  
*DFB1403PSM-H*  
*DFB1418P*  
*DFB1421P*  
*DFB1411PSF*  
*DFB1411,1415SPF*

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No. 150202

**KANSAI**  
SPECIAL®

## パーツブック御利用に際して

- このパーツブックは、2016年1月製造中のDFB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 January 2016.
- 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.

## DFBシリーズ 表示方法

## DFB SERIES INFORMATION

- DFB1412は二重環縫いです。

DFB1412 is double chain stitch.

DFB1012は単環縫いです。

DFB1012 is single chain stitch.

- 針幅です。(インチ)

Needle width. (inch)

D F B 1 4 1 2 P - 1 / 4

- 12は12本針です。11は4本針です。

12 is 12 Needle machine. 11 is 4 Needle machine.

- Pは後プラー装置付です。

P is with rear puller.

PLはラインテープ付け用です。

PL for line attaching.

PMDは前プラー装置付です。

PMD is with front puller.

PSFは前立て用です。

PSF for shirt-fronting.

WBはジーンズの腰裏用です。

WB for waist banding. (for Jeans)

PSはシャーリング用です。

PS for shirring.

MRはヒダ取りミシンです。

MR for ruffler machine.

PQはゴム糸を入れたシャーリングです。

PQ for shirring with elastic threads into the stitching.

PTVはピンタック用です。

PTV for pintucking.

PTV-Iはインビジブルタック用です。

PTV-I for invisible tucking.

PSMはスモック飾り用です。

PSM for smocking attachment lays down decorative thread in an attractive pattern.

ETは下糸がゴム糸用です。

ET for elastic under thread.

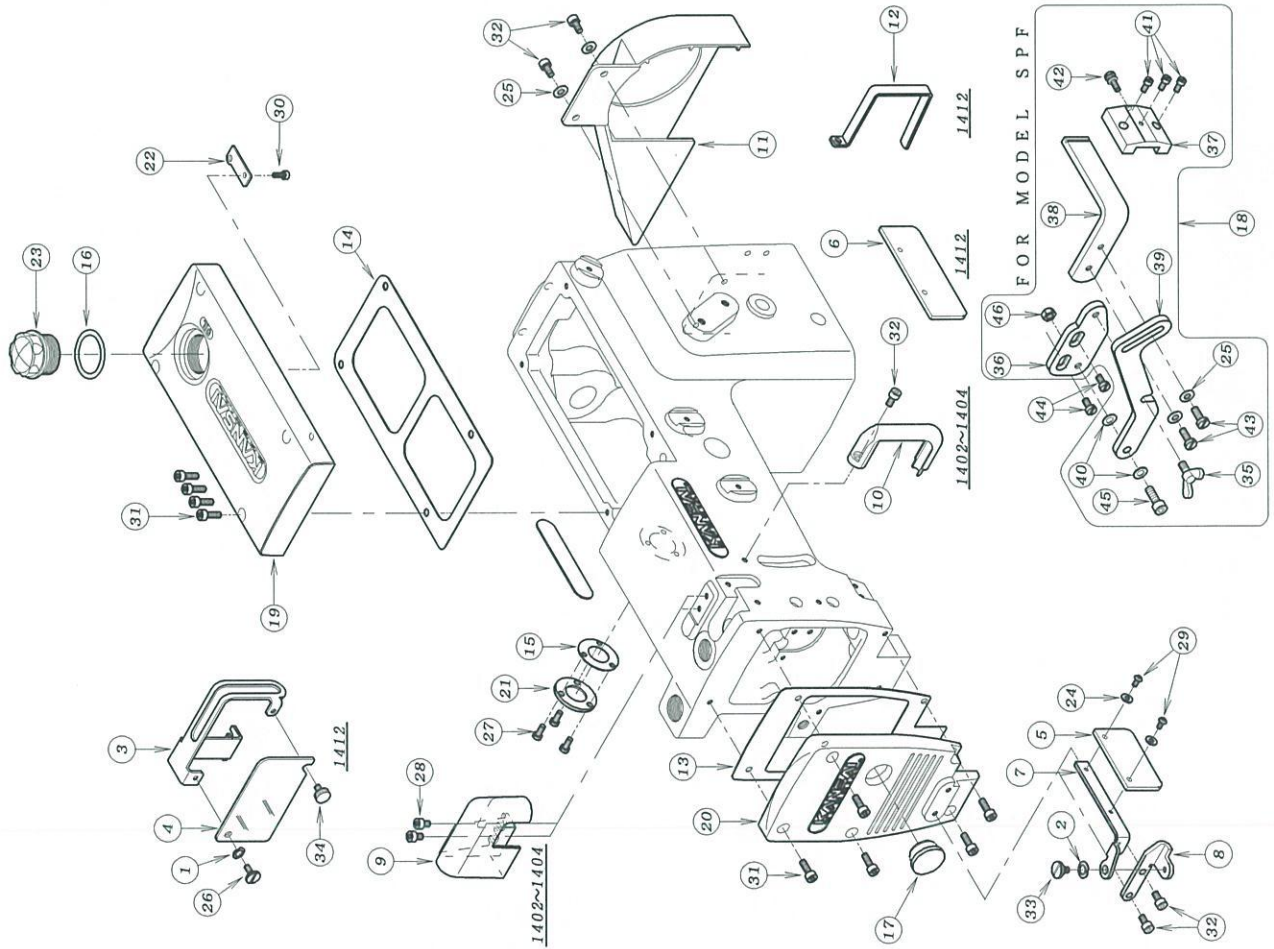
SPFはプラーシフト機構付のカーブ縫いです。

SPF for stitch curved waist bands.

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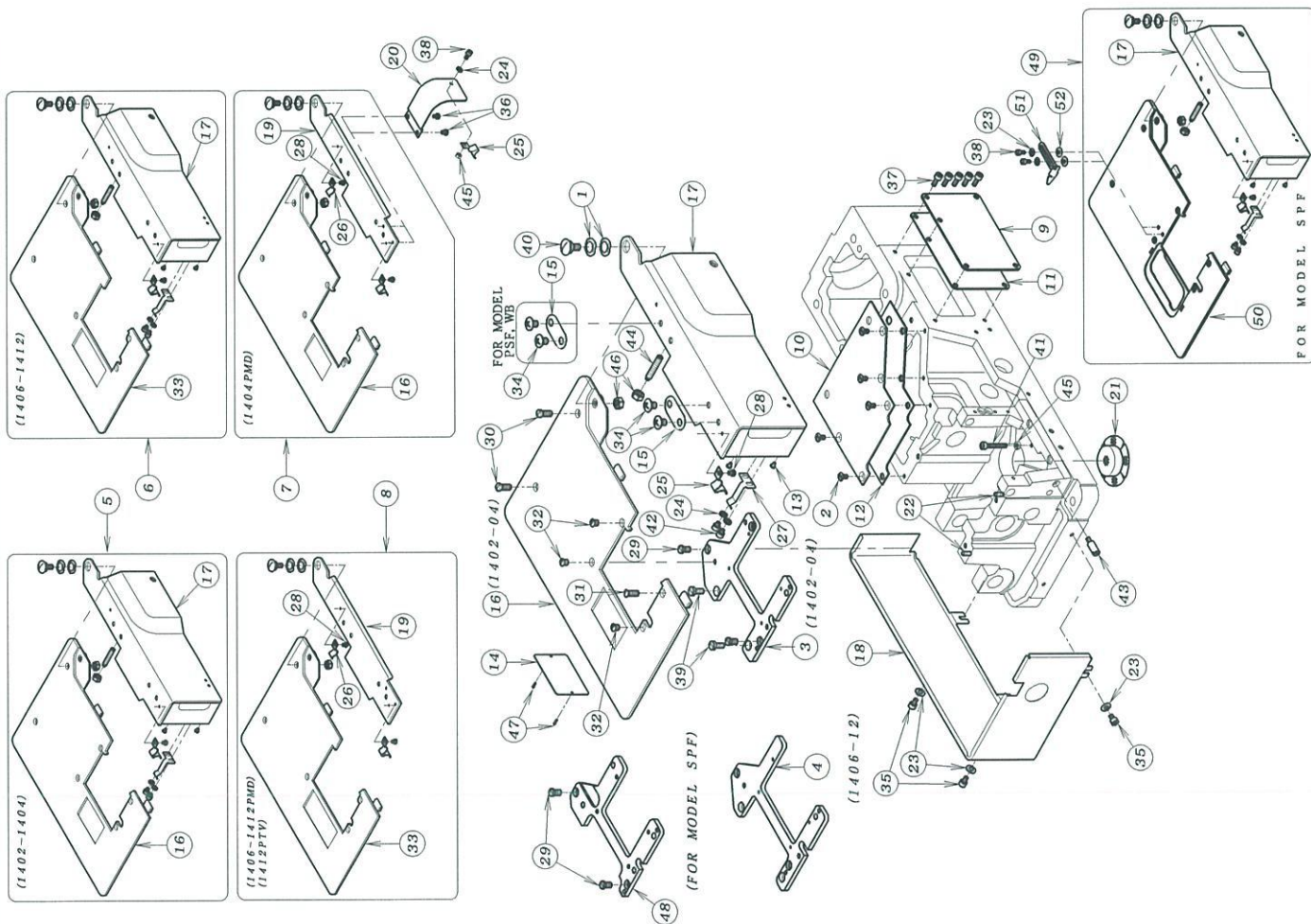
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# 1. フレーム関係 (1) FRAME ASSEMBLY (1)



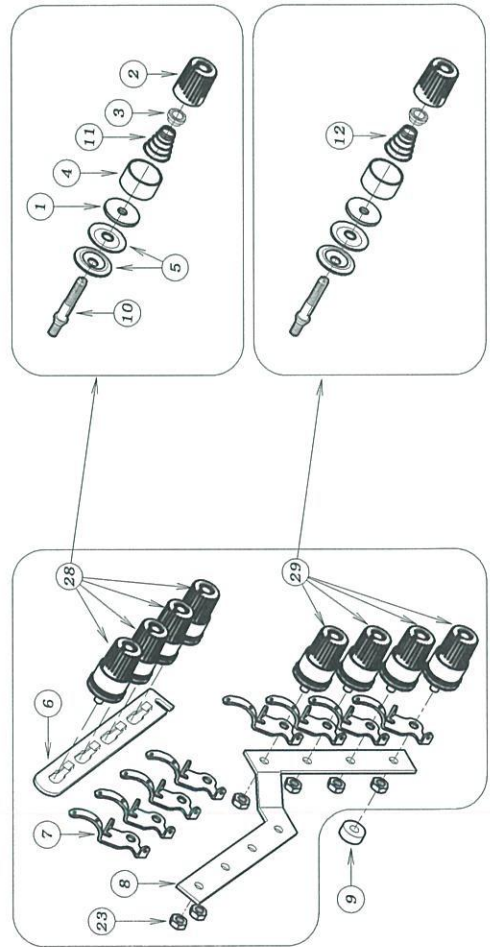
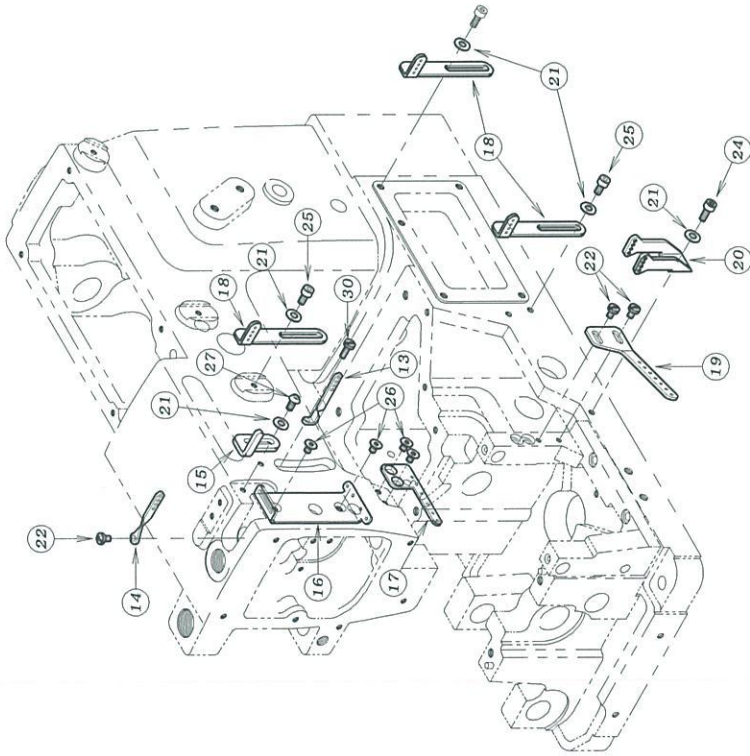
| REF. NO. | PART NO. | 品名       | DESCRIPTION                     | QTY |
|----------|----------|----------|---------------------------------|-----|
| 01-01    | 02-118   | 波シヤ      | WASHER                          | 1   |
| 01-02    | 02-119   | 波座金      | WASHER                          | 1   |
| 01-03    | 21-266   | 針棒カバー    | NEEDLE BAR COVER                | 1   |
| 01-04    | 21-267   | 保護カバー    | COVER                           | 1   |
| 01-05    | 21-273   | 保護カバー    | COVER                           | 1   |
| 01-06    | 21-274   | 保護カバー    | EYE GUARD                       | 1   |
| 01-07    | 21-275   | 保護カバー    | EYE GUARD                       | 1   |
| 01-08    | 21-276   | 保護カバー    | BRACKET                         | 1   |
| 01-09    | 21-934   | 針糸道カバー   | BRACKET                         | 1   |
| 01-10    | 21-935   | 弓糸道カバー   | COVER                           | 1   |
| 01-11    | 21-972   | フーリーカバー  | COVER                           | 1   |
| 01-12    | 21-975   | 弓糸道保護カバー | PULLEY COVER                    | 1   |
| 01-13    | 23-157   | パッキン     | COVER                           | 1   |
| 01-14    | 23-206   | パッキン F   | GASKET                          | 1   |
| 01-15    | 23-263   | パッキン C   | GASKET                          | 1   |
| 01-16    | 23-285   | Oリング     | GASKET C                        | 1   |
| 01-17    | 23-427   | コム栓      | O RING                          | 1   |
| 01-18    | 20-6400  | ラッパ      | PLUG                            | 1   |
| 01-19    | 27-017   | 立ロットカバー  | MOUNTING BASE FOR HOLDER ASS'Y  | 1   |
| 01-20    | 27-018   | 面版       | TOP COVER                       | 1   |
| 01-21    | 39-108   | 油止め板 B   | HEAD COVER                      | 1   |
| 01-22    | 39-137   | パイプサポ    | COVER                           | 1   |
| 01-23    | 39-234   | オイルポット   | PIPE SUPPORT                    | 1   |
| 01-24    | 75-224   | ワッシャ     | OIL POT                         | 2   |
| 01-25    | 75-455   | ワッシャ     | WASHER                          | 4   |
| 01-26    | 84-396   | 段ネジ      | WASHER                          | 1   |
| 01-27    | 87-010   | ネジ       | SCREW                           | 3   |
| 01-28    | 87-092   | 六角穴付きボルト | SCREW                           | 2   |
| 01-29    | 87-099   | ネジ       | BOLT                            | 2   |
| 01-30    | 87-124   | 六角穴付きボルト | SCREW                           | 2   |
| 01-31    | 87-129   | 六角穴付きボルト | BOLT                            | 1   |
| 01-32    | 87-177   | 六角穴付きボルト | BOLT                            | 9   |
| 01-33    | 87-264   | 段ネジ      | BOLT                            | 5   |
| 01-34    | 87-409   | ネジ       | SCREW                           | 1   |
| 01-35    | 26-736   | 蝶ボルト     | SCREW                           | 1   |
| 01-36    | 26-747   | ラッパ      | MOUNTING BASE FOR HOLDER WASHER | 1   |
| 01-37    | 26-748   | 取付クランプ   | FIXING CLAMP                    | 1   |
| 01-38    | 26-749   | ラッパ      | MOUNTING BASE FOR HOLDER        | 1   |
| 01-39    | 26-750   | ラッパ      | MOUNTING SIDE FOR HOLDER        | 1   |
| 01-40    | 79-922   | 皿バネ      | SPRING                          | 2   |
| 01-41    | 84-382   | ネジ       | SCREW                           | 3   |
| 01-42    | 84-387   | ネジ       | SCREW                           | 1   |
| 01-43    | 84-566   | ネジ       | SCREW                           | 2   |
| 01-44    | 87-096   | ネジ       | SCREW                           | 2   |
| 01-45    | 87-245   | 六角穴付きボルト | BOLT                            | 1   |
| 01-46    | 88-157   | ナット      | NUT                             | 1   |

## 2. フレーム関係 (2) FRAME ASSEMBLY (2)



| REF. NO. | PART NO. | 品名         | DESCRIPTION                  | Q'TY |
|----------|----------|------------|------------------------------|------|
| 02-01    | 02-112   | ワッシャー      | WASHER                       | 2    |
| 02-02    | 05-061   | ネジ         | SCREW                        | 5    |
| 02-03    | 14-157   | 針板土台       | NEEDLE PLATE SUPPORT BRACKET | 1    |
| 02-04    | 14-158   | 針板土台       | NEEDLE PLATE SUPPORT BRACKET | 1    |
| 02-05    | 20-0420  | 上ベアスカバーセット | UPPER COVER ASS'Y            | 1    |
| 02-06    | 20-0450  | 上ベアスカバーセット | UPPER COVER ASS'Y            | 1    |
| 02-07    | 20-0460  | 上ベアスカバーセット | UPPER COVER ASS'Y            | 1    |
| 02-08    | 20-0470  | 上ベアスカバーセット | UPPER COVER ASS'Y            | 1    |
| 02-09    | 21-137   | 前油カバー      | FRONT COVER                  | 1    |
| 02-10    | 21-897   | 上油カバー      | COVER                        | 1    |
| 02-11    | 23-137   | ハッキン       | GASKET                       | 1    |
| 02-12    | 23-229   | 上油カバーハッキン  | GASKET                       | 1    |
| 02-13    | 23-512   | クッションゴム    | CUSHION RUBBER               | 2    |
| 02-14    | 24-053   | モリスツツカ     | TYPE PLATE                   | 1    |
| 02-15    | 26-712   | 取付金具       | WASHER                       | 1~2  |
| 02-16    | 27-042   | 上ベアスカバー    | CLOTH PLATE                  | 1    |
| 02-17    | 27-043   | 前ベアスカバー    | FRONT PLATE                  | 1    |
| 02-18    | 27-044   | 横板カバー      | SIDE COVER                   | 1    |
| 02-19    | 27-046   | 前ベアスカバー    | FRONT COVER                  | 1    |
| 02-20    | 27-047   | 前アライメント    | COVER                        | 1    |
| 02-21    | 31-438   | ベッフィルター    | FILTER                       | 1    |
| 02-22    | 71-255   | ワッシャー      | PIN                          | 2    |
| 02-23    | 75-455   | ワッシャー      | WASHER                       | 5    |
| 02-24    | 75-468   | ワッシャー      | WASHER                       | 3    |
| 02-25    | 79-521   | 板ハネ(A)     | PLATE SPRING (A)             | 1    |
| 02-26    | 79-522   | 板ハネ        | SPRING                       | 1    |
| 02-27    | 79-552   | 前カバー止ハネ    | SPRING                       | 1    |
| 02-28    | 84-364   | ネジ         | SCREW                        | 2    |
| 02-29    | 84-761   | ネジ         | SCREW                        | 2    |
| 02-30    | 84-763   | ネジ         | SCREW                        | 2    |
| 02-31    | 84-861   | ネジ         | SCREW                        | 1    |
| 02-32    | 84-862   | ネジ         | SCREW                        | 2~3  |
| 02-33    | 27-045   | 上ベアスカバー    | CLOTH PLATE                  | 1    |
| 02-34    | 85-181   | ネジ         | SCREW                        | 2~4  |
| 02-35    | 87-092   | 六角穴付きボルト   | BOLT                         | 3    |
| 02-36    | 87-098   | ネジ         | SCREW                        | 2    |
| 02-37    | 87-113   | 六角穴付きボルト   | BOLT                         | 5    |
| 02-38    | 87-177   | 六角穴付きボルト   | BOLT                         | 3    |
| 02-39    | 87-278   | ネジ         | SCREW                        | 2    |
| 02-40    | 87-280   | ネジ         | SCREW                        | 1    |
| 02-41    | 87-285   | 六角穴付きボルト   | BOLT                         | 1    |
| 02-42    | 87-287   | 六角穴付きボルト   | BOLT                         | 2    |
| 02-43    | 87-310   | 六角穴付きボルト   | BOLT                         | 1    |
| 02-44    | 87-316   | ネジ         | SCREW                        | 1    |
| 02-45    | 88-146   | ナット        | NUT                          | 1~2  |
| 02-46    | 88-166   | ナット        | NUT                          | 2    |
| 02-47    | 93-701   | ピン         | PIN                          | 2    |
| 02-48    | 14-162   | 針板土台       | NEEDLE SUPPORT BRACKET       | 1    |
| 02-49    | 20-0410  | 上ベアスカバーセット | UPPER COVER ASS'Y            | 1    |
| 02-50    | 27-157   | 上ベアスカバー    | UPPER COVER                  | 1    |
| 02-51    | 26-527   | 生地カイト(右)   | GUIDE PLATE                  | 1    |
| 02-52    | 75-467   | ワッシャー      | WASHER                       | 2    |

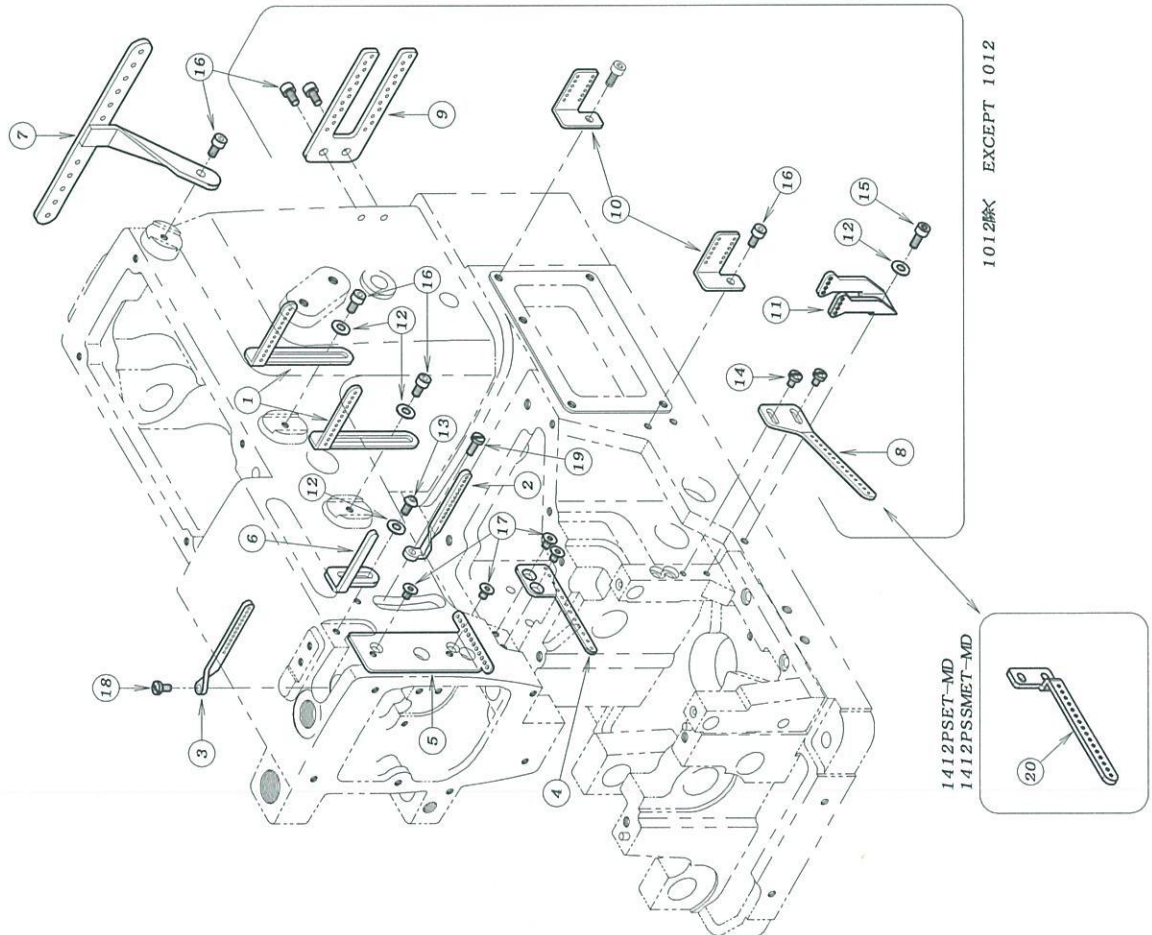
### 3. 糸調子機構 (1404) THREAD TENSION MECHANISM



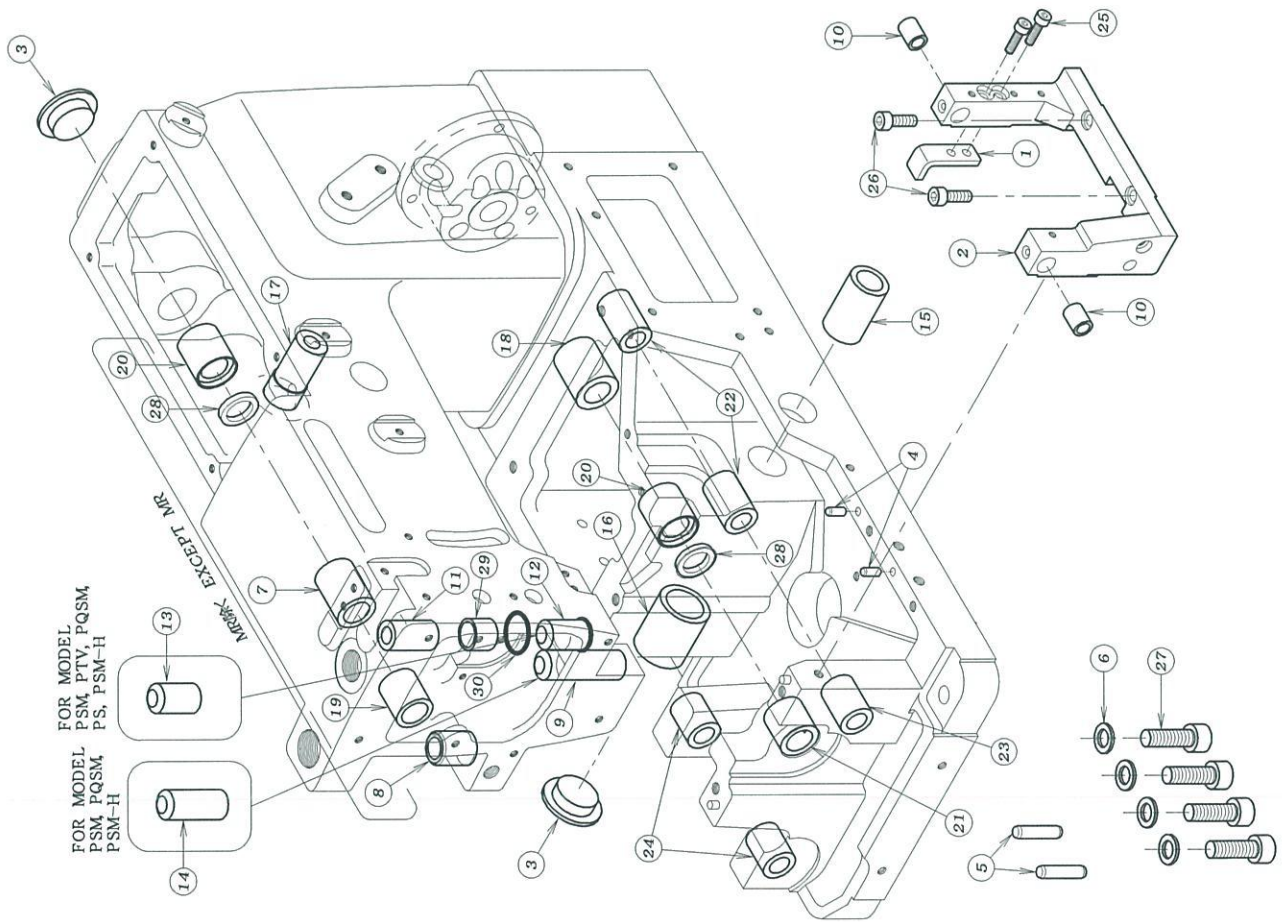
| REF. NO. | PART NO. | 品名             | DESCRIPTION           | Q'TY |
|----------|----------|----------------|-----------------------|------|
| 03-01    | 23-324   | フェルト           | FELT                  | 8    |
| 03-02    | 41-104   | チャンボ°ン皿小ケース    | THREAD TENSION NUT    | 8    |
| 03-03    | 41-105   | チャンボ°ン皿ワレット    | SPRING POST           | 8    |
| 03-04    | 41-106   | 大ケース           | SPRING CUP            | 8    |
| 03-05    | 41-509   | チャンボ°ン皿        | TENSION DISC          | 16   |
| 03-06    | 41-113   | チャンボ°ン皿調子板     | TENSION POST SUPPORT  | 1    |
| 03-07    | 41-120   | チャンボ°ン皿糸道      | THREAD EYELET         | 8    |
| 03-08    | 41-123   | チャンボ°ン元板       | TENSION POST HOLDER   | 1    |
| 03-09    | 41-136   | クッションコ° A      | RUBBER                | 1    |
| 03-10    | 41-510   | 調子棒            | SCREW STUD            | 8    |
| 03-11    | 41-701   | チャンボ°ン調子パネ (強) | SPRING (HEAVY)        | 4    |
| 03-12    | 41-702   | チャンボ°ン調子パネ (弱) | SPRING (LIGHT)        | 4    |
| 03-13    | 45-123   | 弓糸道            | THREAD EYELET         | 1    |
| 03-14    | 45-133   | 針棒糸道           | THREAD EYELET         | 1    |
| 03-15    | 45-429   | 上糸受け           | THREAD TAKE-UP PLATE  | 1    |
| 03-16    | 45-430   | 上糸ガイド          | THREAD EYELET         | 1    |
| 03-17    | 45-431   | 上糸糸道 (下)       | THREAD EYELET         | 1    |
| 03-18    | 45-438   | 上糸糸道           | THREAD EYELET         | 3    |
| 03-19    | 47-117   | 下糸調子案内糸道       | THREAD EYELET         | 1    |
| 03-20    | 47-413   | 下糸調子糸道         | THREAD EYELET         | 1    |
| 03-21    | 75-455   | ワッシャ           | WASHER                | 5    |
| 03-22    | 84-361   | ネジ             | SCREW                 | 3    |
| 03-23    | 86-411   | ナット            | NUT                   | 6    |
| 03-24    | 87-113   | 六角穴付きボルト       | BOLT                  | 1    |
| 03-25    | 87-177   | 六角穴付きボルト       | BOLT                  | 2    |
| 03-26    | 87-293   | ネジ             | SCREW                 | 4    |
| 03-27    | 87-272   | ネジ             | SCREW                 | 1    |
| 03-28    | 40-7370  | チャンボ°ン強セット     | TENSION ASS'Y (HEAVY) | 4    |
| 03-29    | 40-7380  | チャンボ°ン弱セット     | TENSION ASS'Y (LIGHT) | 4    |
| 03-30    | 84-363   | ネジ             | SCREW                 | 1    |

4. 糸調子機構 (1412) THREAD TENSION MECHANISM

| REF. NO. | PART NO. | 品名       | DESCRIPTION          | Q'TY |
|----------|----------|----------|----------------------|------|
| 04-01    | 45-107   | 糸道       | THREAD EYELET        | 2    |
| 04-02    | 45-127   | 糸道       | THREAD EYELET        | 1    |
| 04-03    | 45-432   | 針棒糸道     | THREAD EYELET        | 1    |
| 04-04    | 45-433   | 上糸道 (下)  | THREAD EYELET        | 1    |
| 04-05    | 45-434   | 上糸ガイド    | THREAD EYELET        | 1    |
| 04-06    | 45-435   | 上糸受け     | THREAD TAKE-UP PLATE | 1    |
| 04-07    | 45-437   | 上糸糸道     | THREAD EYELET        | 1    |
| 04-08    | 47-120   | 下糸調子案内糸道 | THREAD EYELET        | 1    |
| 04-09    | 47-408   | 糸道       | THREAD EYELET        | 1    |
| 04-10    | 47-409   | 糸道       | THREAD EYELET        | 2    |
| 04-11    | 47-413   | 下糸調子糸道   | THREAD EYELET        | 1    |
| 04-12    | 75-455   | ワッシャー    | WASHER               | 4    |
| 04-13    | 87-272   | ネジ       | SCREW                | 1    |
| 04-14    | 84-361   | ネジ       | SCREW                | 2    |
| 04-15    | 87-113   | 六角穴付きボルト | BOLT                 | 1    |
| 04-16    | 87-177   | 六角穴付きボルト | BOLT                 | 6    |
| 04-17    | 87-293   | ネジ       | SCREW                | 4    |
| 04-18    | 84-374   | ネジ       | SCREW                | 1    |
| 04-19    | 84-363   | ネジ       | SCREW                | 1    |
| 04-20    | 47-011   | 下糸案内糸道   | THREAD EYELET        | 1    |



# 5. ブッシュ機構 BUSHING

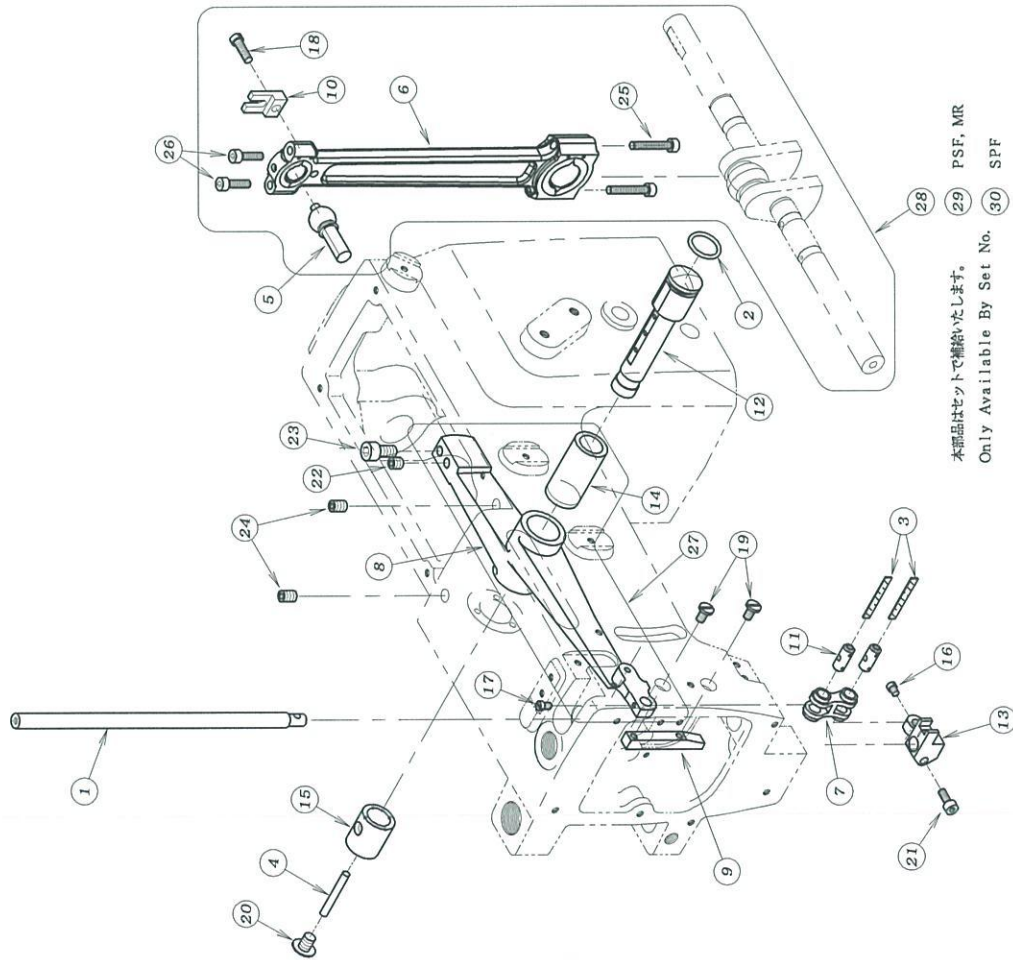


| REF. NO. | PART NO. | 品名             | DESCRIPTION             | QTY |
|----------|----------|----------------|-------------------------|-----|
| 05-01    | 04-109   | 針座土台受け器具       | SUPPORT BRACKET         | 1   |
| 05-02    | 04-110   | 糸巻せ土台          | RETAINER HOLDER BRACKET | 1   |
| 05-03    | 23-296   | コゝみ栓           | PLUG                    | 2   |
| 05-04    | 71-255   | ノックピン          | PIN                     | 2   |
| 05-05    | 71-256   | ノックピン          | PIN                     | 2   |
| 05-06    | 75-436   | ワッシャ           | WASHER                  | 4   |
| 05-07    | 81-109   | ブッシュ           | BUSHING                 | 1   |
| 05-08    | 81-133   | ブッシュ           | BUSHING                 | 1   |
| 05-09    | 81-153   | ブッシュ           | BUSHING                 | 1   |
| 05-10    | 81-180   | ブッシュ           | BUSHING                 | 2   |
| 05-11    | 81-181   | ブッシュ           | BUSHING                 | 1   |
| 05-12    | 81-182   | ブッシュ           | BUSHING                 | 1   |
| 05-13    | 81-190   | ブッシュ           | BUSHING                 | 1   |
| 05-14    | 81-224   | ブッシュ           | BUSHING                 | 1   |
| 05-15    | 81-236   | ブッシュ           | BUSHING                 | 1   |
| 05-16    | 81-237   | ブッシュ           | BUSHING                 | 1   |
| 05-17    | 81-256   | 押え掛け土台ワッシャ (後) | BUSHING                 | 1   |
| 05-18    | 81-717   | 上シャフトワッシャ      | BUSHING                 | 1   |
| 05-19    | 81-718   | 上シャフトワッシャ      | BUSHING                 | 1   |
| 05-20    | 81-720   | ブッシュ           | BUSHING                 | 1~2 |
| 05-21    | 81-723   | 下シャフトワッシャ (前)  | BUSHING                 | 1   |
| 05-22    | 81-735   | ブッシュ           | BUSHING                 | 2   |
| 05-23    | 81-739   | ワッシャ           | BUSHING                 | 1   |
| 05-24    | 81-753   | ブッシュ           | BUSHING                 | 2   |
| 05-25    | 87-214   | 六角穴付きボルト       | BOLT                    | 2   |
| 05-26    | 87-245   | 六角穴付きボルト       | BOLT                    | 2   |
| 05-27    | 87-661   | 六角穴付きボルト       | BOLT                    | 4   |
| 05-28    | 94-214   | オイルシール         | OIL SEAL                | 1~2 |
| 05-29    | 39-002   | オイルガード         | OIL GUARD               | 1   |
| 05-30    | 53-169   | 結束バンド          | BAND                    | 1   |



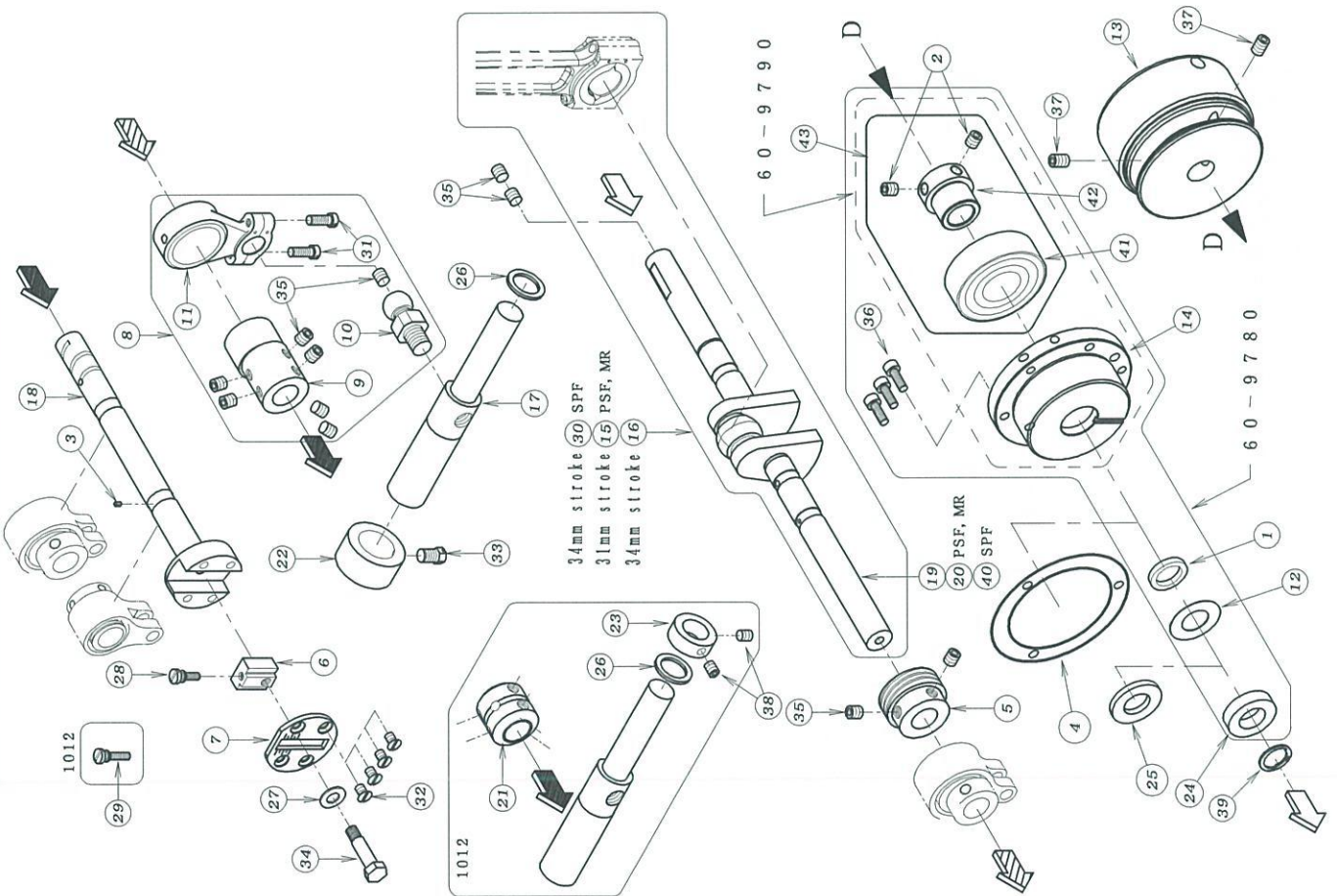
# 6. 針棒, 弓機構 NEEDLE BAR & LEVER MECHANISM

| REF. NO. | PART NO.  | 品名               | DESCRIPTION                 | QTY |
|----------|-----------|------------------|-----------------------------|-----|
| 06-01    | 11-400    | 針棒               | NEEDLE BAR                  | 1   |
| 06-02    | 23-195    | O-リング            | O-RING                      | 1   |
| 06-03    | 23-341    | フェルト             | FELT                        | 2   |
| 06-04    | 23-383    | フェルト             | FELT                        | 1   |
| 06-05    | 61-711    | 立ロケット玉           | CONNECTING ROD BALL         | 1   |
| 06-06    | 63-386    | 針棒クランクロケット       | CRANK ROD                   | 1   |
| 06-07    | 66-111    | 連結メカネ            | CONNECTING LINK             | 1   |
| 06-08    | 69-105    | 弓E               | NEEDLE LEVER E              | 1   |
| 06-09    | 69-117    | 針棒案内板            | NEEDLE BAR GUIDE            | 1   |
| 06-10    | 69-120    | ロケット 振れ止め        | GUIDE                       | 1   |
| 06-11    | 71-432    | メカネヒン            | FEED ROCKER LINK PIN        | 2   |
| 06-12    | 71-933    | 弓ピン C            | NEEDL LEVER STUD            | 1   |
| 06-13    | 73-121    | 針棒クランプ           | NEEDLE BAR CLAMP            | 1   |
| 06-14    | 81-113    | ブッシュ             | BUSHING                     | 1   |
| 06-15    | 81-412    | ブッシュ             | BUSHING                     | 1   |
| 06-16    | 84-365    | ネジ               | SCREW                       | 1   |
| 06-17    | 84-366    | ネジ               | SCREW                       | 1   |
| 06-18    | 84-567    | ネジ               | SCREW                       | 1   |
| 06-19    | 84-574    | ネジ               | SCREW                       | 2   |
| 06-20    | 85-181    | ネジ               | SCREW                       | 1   |
| 06-21    | 87-113    | 六角穴付きボルト         | BOLT                        | 1   |
| 06-22    | 87-172    | ネジ               | SCREW                       | 1   |
| 06-23    | 87-225    | 六角穴付きボルト         | BOLT                        | 1   |
| 06-24    | 87-242    | ネジ               | SCREW                       | 2   |
| 06-25    | 87-285    | 六角穴付きボルト         | BOLT                        | 2   |
| 06-26    | 87-299    | 六角穴付きボルト         | BOLT                        | 2   |
| 06-27    | 69-1050-2 | 弓 (ブッシュ付)        | NEEDLE LEVER (WITH BUSHING) | 1   |
| 06-28    | 70-0110   | クランクシャフトセット/34mm | CRANK SHAFT ASS'Y/34mm      | 1   |
| 06-29    | 70-0130   | クランクシャフトセット/31mm | CRANK SHAFT ASS'Y/31mm      | 1   |
| 06-30    | 70-0160   | クランクシャフトセット/34mm | CRANK SHAFT ASS'Y/34mm      | 1   |



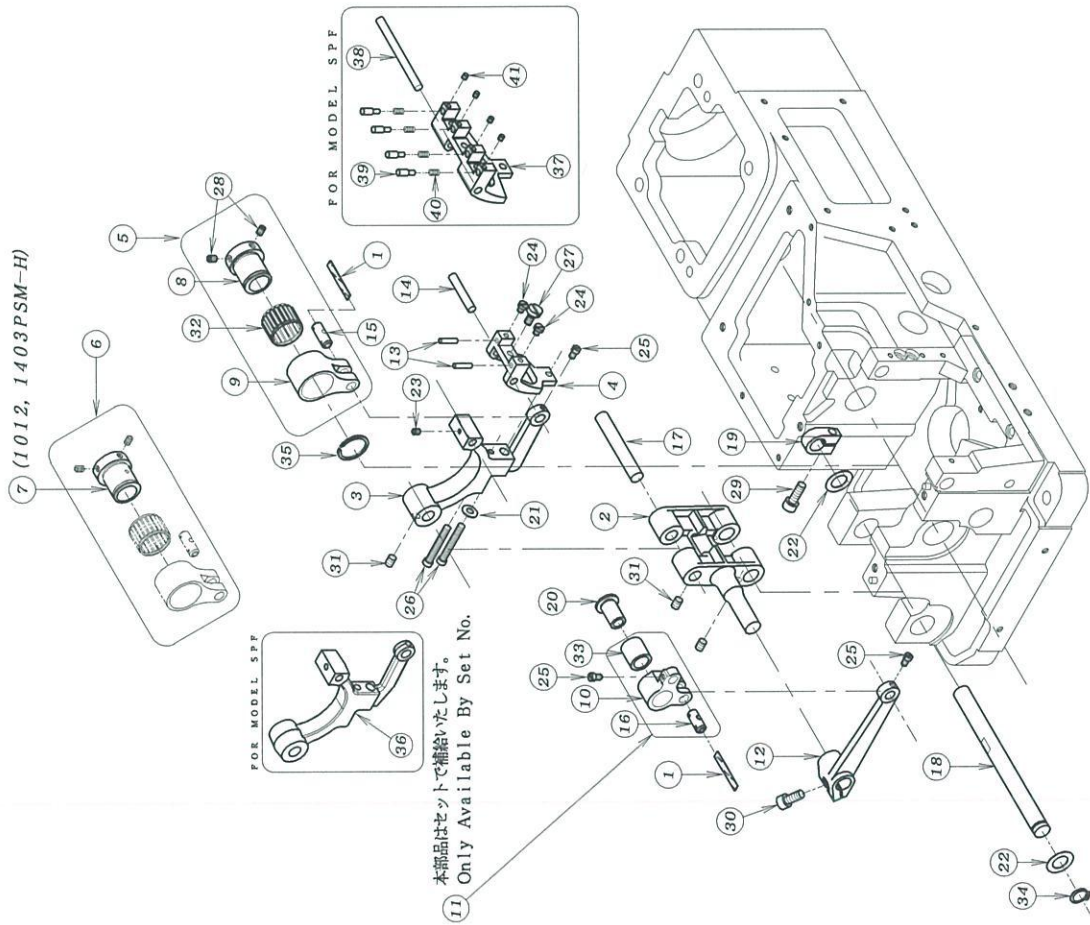
本部品はセットで輸送いたします。  
Only Available By Set No. 29 PSF, MR  
30 SPF

# 7. 下軸機構 CRANKSHAFT MECHANISM



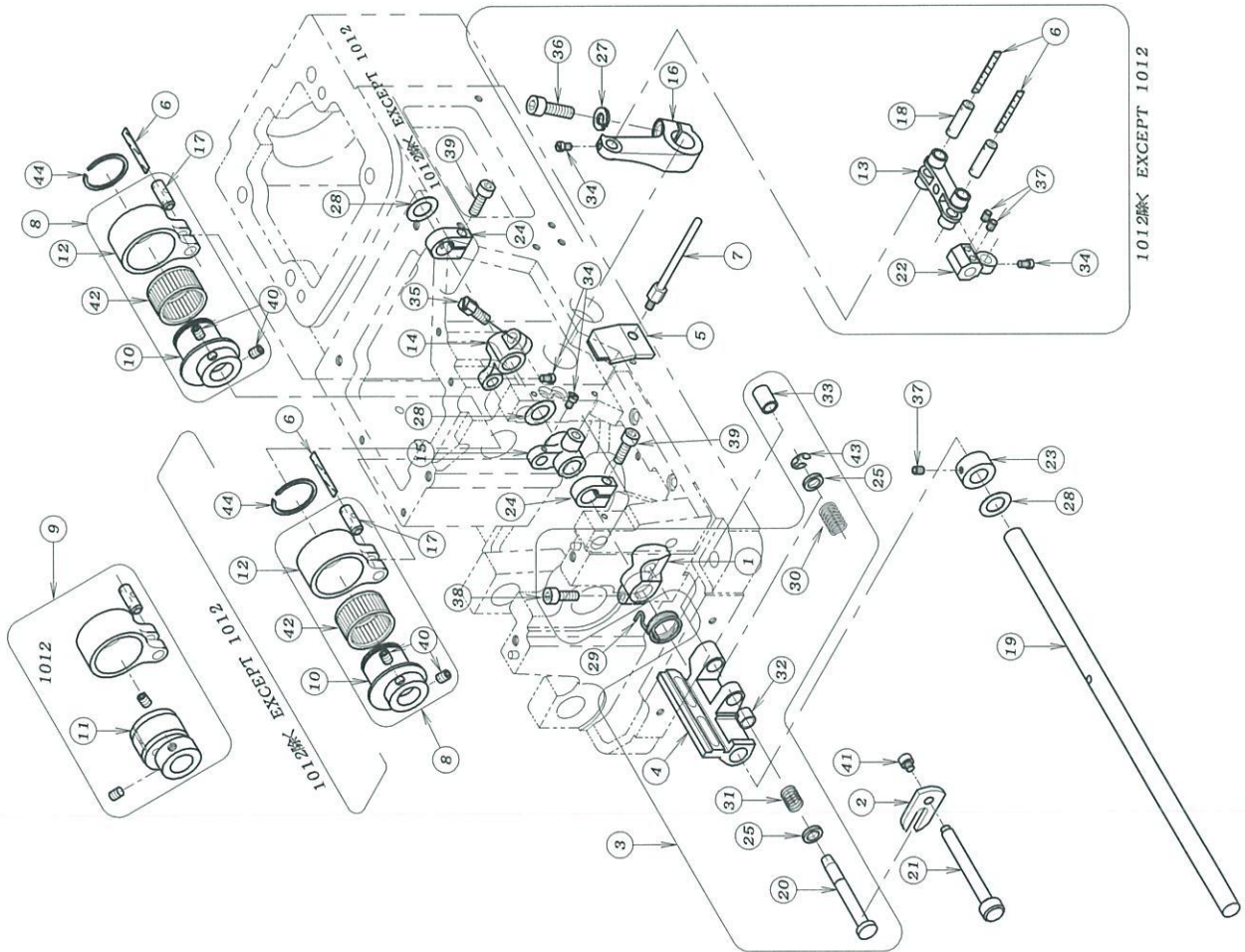
| REF. NO. | PART NO. | 品名               | DESCRIPTION                | QTY  |
|----------|----------|------------------|----------------------------|------|
| 07-01    | 94-214   | オイルシール           | OIL SEAL                   | 1    |
| 07-02    | 87-172   | ネジ               | SCREW                      | 2    |
| 07-03    | 23-554   | フェルト             | FELT                       | 1    |
| 07-04    | 23-663   | パッキン             | GASKET                     | 1    |
| 07-05    | 31-155   | ポンプ駆動ギア          | OIL PUMP DRIVING WARM      | 1    |
| 07-06    | 51-017   | 送り調節プレート         | ADJUSTING BLOCK            | 1    |
| 07-07    | 51-031   | メインシャフトハットプレート   | PLATE                      | 1    |
| 07-08    | 60-3460  | DFB糸巻エキセントロセット   | CONNECTING ROD ASS'Y       | 1    |
| 07-09    | 61-532   | 糸巻エキセントロ玉        | RETAINER DRIVING ECCENTRIC | 1    |
| 07-10    | 61-723   | ルーバース振元ロケット      | LOOPER DRIVING ECCENTRIC   | 1    |
| 07-11    | 63-517   | ルーバース振元ロケット      | CONNECTING ROD             | 1    |
| 07-12    | 75-351   | ワッシャ             | WASHER                     | 1    |
| 07-13    | 69-465   | プーリー             | PULLEY                     | 1    |
| 07-14    | 69-461   | ベアリングフレゾ         | FLANGE                     | 1    |
| 07-15    | 70-0130  | クランクシャフトセット(31)  | CRANK SHAFT ASS'Y (31)     | 1    |
| 07-16    | 70-0110  | クランクシャフトセット(34)  | CRANK SHAFT ASS'Y (34)     | 1    |
| 07-17    | 71-612   | ルーバース振元シャフト      | LOOPER DRIVING SHAFT       | 1    |
| 07-18    | 71-747   | 前下シャフト 4G        | MAIN SHAFT 4G              | 1    |
| 07-19    | 71-842   | クランクシャフト         | CRANK SHAFT                | 1    |
| 07-20    | 71-855   | クランクシャフト         | CRANK SHAFT                | 1    |
| 07-21    | 75-101   | シヨイントカラー         | JOINT COLLAR               | 1    |
| 07-22    | 75-107   | カラー              | COLLAR                     | 1    |
| 07-23    | 75-112   | カラー              | COLLAR                     | 1    |
| 07-24    | 75-352   | スペーサー            | WASHER                     | 1    |
| 07-25    | 75-329   | ワッシャ             | WASHER                     | 1    |
| 07-26    | 75-332   | ワッシャ             | WASHER                     | 1    |
| 07-27    | 75-452   | ワッシャ             | WASHER                     | 1    |
| 07-28    | 4-383    | 調節ネジ             | SCREW                      | 1    |
| 07-29    | 84-387   | 調節ネジ             | SCREW                      | 1    |
| 07-30    | 70-0160  | クランクシャフトセット(34)  | CRANK SHAFT ASS'Y (34)     | 1    |
| 07-31    | 84-635   | ネジ               | SCREW                      | 2    |
| 07-32    | 84-661   | ネジ               | SCREW                      | 4    |
| 07-33    | 85-212   | ボルト              | BOLT                       | 1    |
| 07-34    | 87-017   | 送り調節プレートロック止めボルト | BOLT                       | 1    |
| 07-35    | 87-172   | ネジ               | SCREW                      | 9~11 |
| 07-36    | 87-129   | 六角穴付きボルト         | BOLT                       | 3    |
| 07-37    | 87-242   | ネジ               | SCREW                      | 2    |
| 07-38    | 87-254   | ネジ               | SCREW                      | 2    |
| 07-39    | 93-264   | 止め輪              | RING                       | 1    |
| 07-40    | 71-160   | クランクシャフト         | CRANK SHAFT                | 1    |
| 07-41    | 91-995   | ベアリング            | BEARING                    | 1    |
| 07-42    | 69-462   | ベアリングスリーブ        | BEARING SLEEVE             | 1    |
| 07-43    | 60-9800  | ベアリングセット         | BEARING ASS'Y              | 1    |

# 8. 送り機構 FEED MECHANISM



| REF. NO. | PART NO.  | 品名             | DESCRIPTION            | Q'TY |
|----------|-----------|----------------|------------------------|------|
| 08-01    | 23-341    | フェルト           | FELT                   | 2    |
| 08-02    | 55-041    | 1枚送り元台         | SINGLE FEED ROCKER ARM | 1    |
| 08-03    | 55-141    | 送り土台           | FEED ROCKER            | 1    |
| 08-04    | 55-146    | 後送り歯取付台A       | FEED DOG HOLDER        | 1    |
| 08-05    | 60-0003   | 0.8エキセンガ、ルマセット | ECCENTRIC LINK ASS'Y   | 1    |
| 08-06    | 60-0004   | 0.9エキセンガ、ルマセット | ECCENTRIC LINK ASS'Y   | 1    |
| 08-07    | 61-028    | 針返しエキセン玉       | FEED ECCENTRIC         | 1    |
| 08-08    | 61-029    | 針返しエキセン玉       | LOOPER AVOID ECCENTRIC | 1    |
| 08-09    | 63-232    | エキセンガ、ルマ       | ECCENTRIC LINK         | 1    |
| 08-10    | 63-353    | 送りダ、ルマ         | FEED ROCKER LINK       | 1    |
| 08-11    | 63-3530-2 | 送りダルマセット       | FEED ROCKER ASS'Y      | 1    |
| 08-12    | 67-311    | 送り連結レバ、-A      | FEED ROCKER ARM        | 1    |
| 08-13    | 71-217    | 送り歯アジ、ヤストピン    | PIN                    | 2    |
| 08-14    | 71-351    | シャフト           | SHAFT                  | 1    |
| 08-15    | 71-431    | ピン             | PIN                    | 1    |
| 08-16    | 71-432    | メガ、ネジ、ソ        | FEED ROCKER LINK PIN   | 1    |
| 08-17    | 71-187    | 後送り歯取付台シャフト    | SHAFT                  | 1    |
| 08-18    | 71-642    | 送り元台シャフト       | FEED ROCKER ARM SHAFT  | 1    |
| 08-19    | 75-139    | カラー            | COLLAR                 | 1    |
| 08-20    | 75-235    | 送りダ、ルマローラー     | ROLLER                 | 1    |
| 08-21    | 75-455    | ワッシャ           | WASHER                 | 1    |
| 08-22    | 75-675    | ワッシャ           | WASHER                 | 2    |
| 08-23    | 84-314    | ネジ、ソ           | SCREW                  | 2    |
| 08-24    | 84-364    | ネジ、ソ           | SCREW                  | 2    |
| 08-25    | 84-366    | ネジ、ソ           | SCREW                  | 3    |
| 08-26    | 84-569    | ネジ、ソ           | SCREW                  | 2    |
| 08-27    | 84-588    | ネジ、ソ           | SCREW                  | 1    |
| 08-28    | 87-181    | ネジ、ソ           | SCREW                  | 2    |
| 08-29    | 87-245    | 六角穴付きボルト       | BOLT                   | 1    |
| 08-30    | 87-252    | 六角穴付きボルト       | BOLT                   | 1    |
| 08-31    | 87-254    | ネジ、ソ           | SCREW                  | 3    |
| 08-32    | 91-005    | ベ、アリンガ         | BEARING                | 1    |
| 08-33    | 91-270    | ニード、ルベ、アリガ     | BEARING                | 1    |
| 08-34    | 93-261    | クリンダ           | C-RING                 | 1    |
| 08-35    | 93-406    | ストップ、リング       | C-RING                 | 1    |
| 08-36    | 55-142    | 送り土台           | FEED ROCKET            | 1    |
| 08-37    | 55-143    | 送り歯取付台         | FEED DOG HOLDER        | 1    |
| 08-38    | 71-352    | 前送り歯取付台シャフト    | FEED DOG HOLDER SHAFT  | 1    |
| 08-39    | 71-487    | 送り歯上下ピン        | PIN                    | 4    |
| 08-40    | 79-420    | 送り上下ピンバネ       | SPRING                 | 4    |
| 08-41    | 87-104    | ネジ             | SCREW                  | 4    |

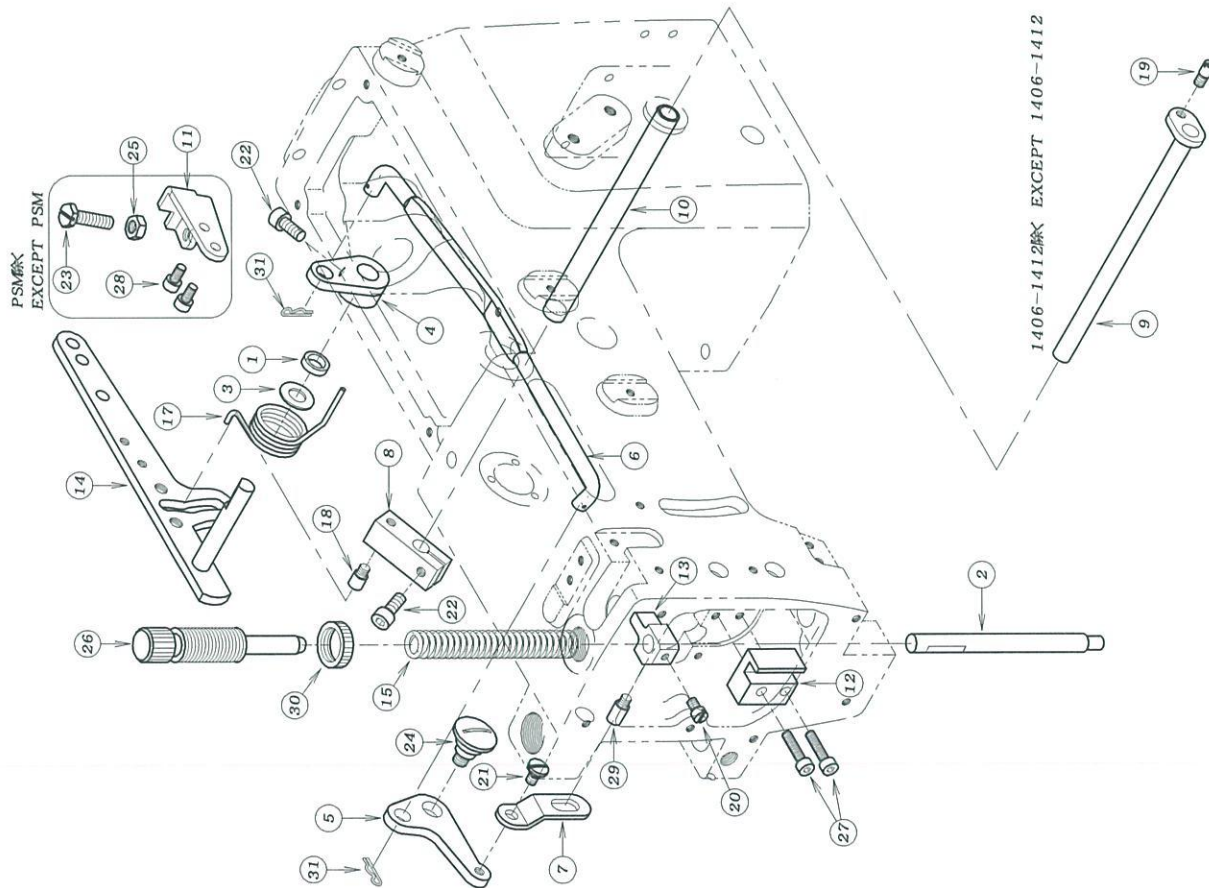
# 9. ルーパ° 一機構 LOOPER MECHANISM



1012除く EXCEPT 1012

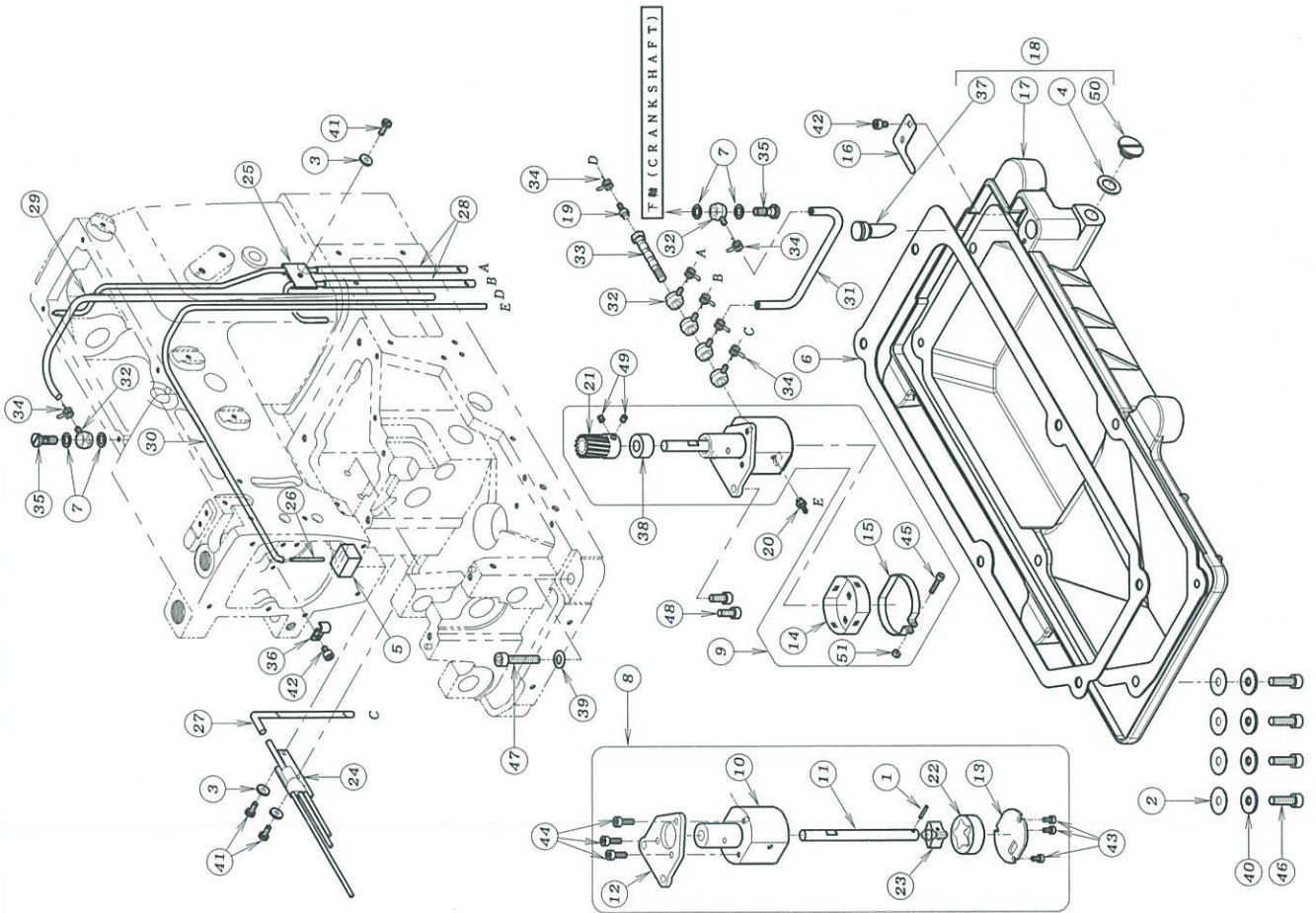
| REF. NO. | PART NO. | 品名                     | DESCRIPTION                      | Q'TY |
|----------|----------|------------------------|----------------------------------|------|
| 09-01    | 04-106   | ルーパ° 一台ストップ° 台         | LOOPER ROCKER                    | 1    |
| 09-02    | 04-111   | ルーパ° 一台引出し板            | PLATE                            | 1    |
| 09-03    | 10-9030  | DFBルーパ° 五台セット          | LOOPER ROCKER ASS'Y              | 1    |
| 09-04    | 19-408   | ルーパ° 元台                | LOOPER ROCKER                    | 1    |
| 09-05    | 21-126   | 糸綱さレハ° 油止めカハ°          | COVER                            | 1    |
| 09-06    | 23-341   | フェルト                   | FELT                             | 4    |
| 09-07    | 47-220   | 下糸綱さ棒                  | TAKE-UP ROD                      | 1    |
| 09-08    | 60-0008  | 下糸綱さエキセンタ° ルマセット       | ECCENTRIC LINK ASS'Y             | *    |
| 09-09    | 60-1410  | 下糸綱さエキセンタ° ルマセット       | ECCENTRIC LINK ASS'Y             | 1    |
| 09-10    | 61-037   | 下糸綱さエキセン玉              | LOOPER AVOID ECCENTRIC           | 2    |
| 09-11    | 61-244   | ルーパ° 前後エキセン玉           | LOOPER AVOID ECCENTRIC           | 1    |
| 09-12    | 63-241   | 下糸綱さ連結ダ° ルマ            | ECCENTRIC LINK                   | 2    |
| 09-13    | 66-116   | 糸綱さ連結メカ° 木             | RETAINER CONNECTING LINK         | 1    |
| 09-14    | 67-141   | ルーパ° 前後レハ°             | LOOPER ROCKER LEVER              | 1    |
| 09-15    | 67-147   | 下糸綱さ連結レハ° -B           | TAKE UP DRIVE LEVER B            | 1    |
| 09-16    | 67-235   | 糸綱さレハ° -B              | RETAINER LEVER B                 | 1    |
| 09-17    | 71-431   | ピン                     | PIN                              | 2    |
| 09-18    | 71-434   | シャフト                   | SHAFT                            | 2    |
| 09-19    | 71-626   | ルーパ° 一台シャフト            | LOOPER ROCKER SHAFT              | 1    |
| 09-20    | 71-911   | シャフト                   | SHAFT                            | 1    |
| 09-21    | 71-913   | ルーパ° 一台引出しシャフト         | LOOPER THROW-OUT ACTUATING SHAFT | 1    |
| 09-22    | 73-116   | 糸綱さ棒抱き                 | RETAINER BAR HOLDER              | 1    |
| 09-23    | 75-135   | カラー                    | COLLAR                           | 1    |
| 09-24    | 75-139   | カラー                    | COLLAR                           | 2    |
| 09-25    | 75-381   | ワッシャ                   | WASHER                           | 2    |
| 09-26    |          |                        |                                  |      |
| 09-27    | 75-527   | スプ° リンク° ワッシャ          | SPRING WASHER                    | 1    |
| 09-28    | 75-675   | ワッシャ                   | WASHER                           | 3    |
| 09-29    | 79-161   | ハ° 木                   | SPRING                           | 1    |
| 09-30    | 79-163   | ハ° 木                   | SPRING                           | 1    |
| 09-31    | 79-164   | ハ° 木                   | SPRING                           | 1    |
| 09-32    | 81-142   | ブッシュ                   | BUSHING                          | 1    |
| 09-33    | 81-143   | ブッシュ                   | BUSHING                          | 1    |
| 09-34    | 84-366   | ネジ°                    | SCREW                            | 4    |
| 09-35    | 84-814   | ネジ°                    | SCREW                            | 1    |
| 09-36    | 87-173   | 六角穴付きボルト               | BOLT                             | 1    |
| 09-37    | 87-181   | ネジ°                    | SCREW                            | 3    |
| 09-38    | 87-224   | 六角穴付きボルト               | BOLT                             | 1    |
| 09-39    | 87-245   | 六角穴付きボルト               | BOLT                             | 2    |
| 09-40    | 87-254   | ネジ°                    | SCREW                            | 4    |
| 09-41    | 87-287   | 六角穴付きボルト               | BOLT                             | 1    |
| 09-42    | 91-006   | 下糸綱さ用° アリソク°           | BEARING                          | 2    |
| 09-43    | 93-211   | E° リソク°                | E-RING                           | 1    |
| 09-44    | 93-401   | 下糸綱さ用° アリソク° 用サ° クリップ° | SNAP RING                        | 2    |

# 10. 押え上げ機構 PRESSER FOOT MECHANISM



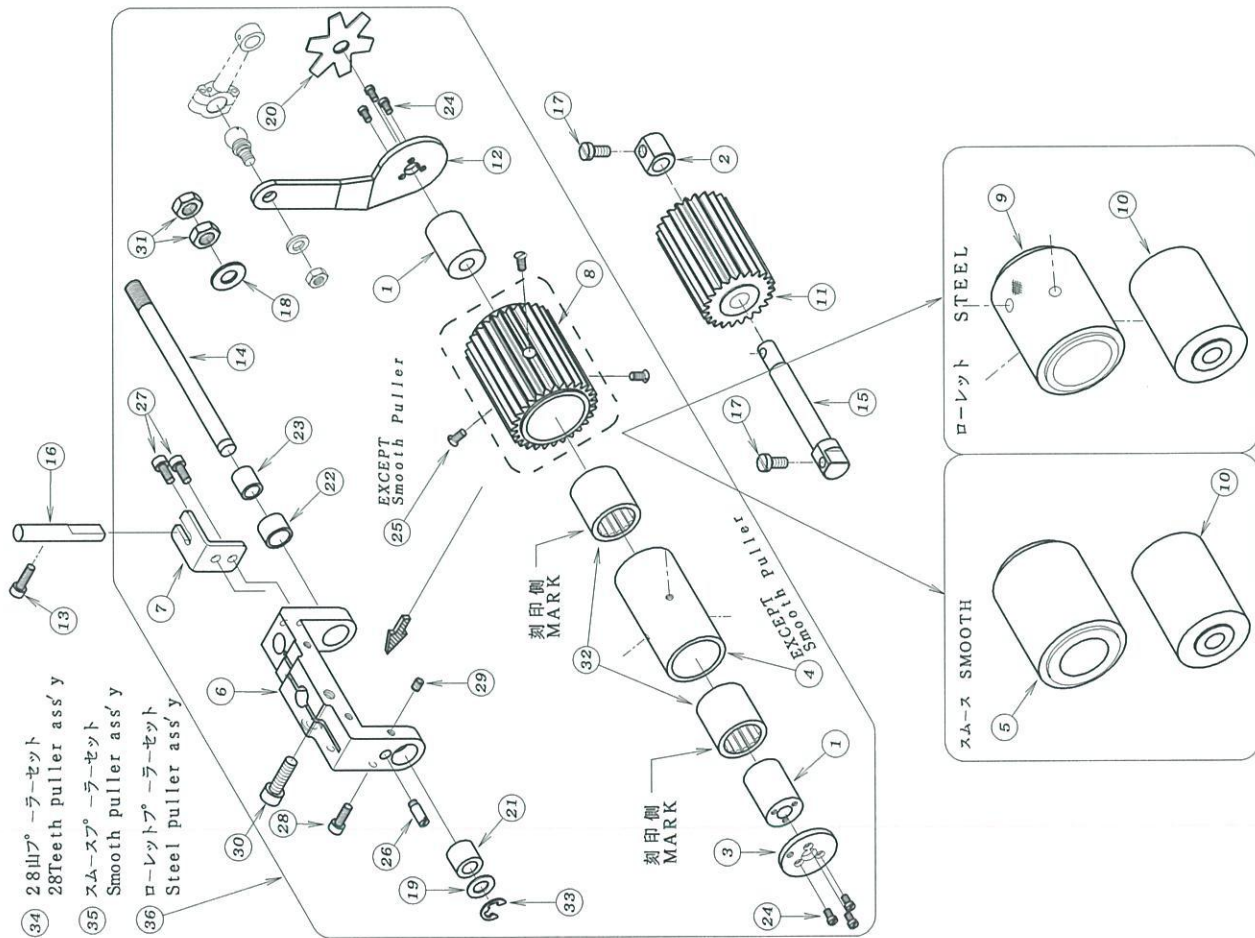
| REF. NO. | PART NO. | 品名              | DESCRIPTION                        | Q'TY |
|----------|----------|-----------------|------------------------------------|------|
| 10-01    | 94-231   | オイルシール          | OIL SEAL                           | 1    |
| 10-02    | 71-542   | 押え棒(小)          | PRESSER BAR (SMALL)                | 1    |
| 10-03    | 75-180   | ワッシャー           | WASHER                             | 1    |
| 10-04    | 77-107   | へ'アリング'用押え棒接続板A | CONNECTING PLATE                   | 1    |
| 10-05    | 77-109   | 巻ハ'ネ止め板         | LIFTER LEVER SPRING SUPPORTER      | 1    |
| 10-06    | 77-116   | 押え棒接続管          | LIFTER LEVER SPRING CONNECTING BAR | 1    |
| 10-07    | 77-131   | 押え棒巻き接続板        | PLATE                              | 1    |
| 10-08    | 77-163   | 調子心棒止め具         | BRACKET                            | 1    |
| 10-09    | 77-164   | 押え棒クワンシャフト      | SHAFT                              | 1    |
| 10-10    | 77-165   | ハ'イプ'           | PIPE                               | 1    |
| 10-11    | 77-509   | ブラケット           | BRACKET                            | 1    |
| 10-12    | 77-516   | 押え棒ガイド          | GUIDE                              | 1    |
| 10-13    | 77-517   | 押え棒巻き           | PRESSER BAR GUIDE                  | 1    |
| 10-14    | 77-818   | 押え棒コントロールハ'     | PRESSER FOOT LIFTER LEVER          | 1    |
| 10-15    | 79-121   | 押え棒巻ハ'ネ         | PRESSER BAR SPRING                 | 1    |
| 10-16    | 79-222   | 押え棒巻ハ'ネ         | LIFTER LEVER SPRING                | 1    |
| 10-17    | 79-550   | 巻ハ'ネ            | SPRING                             | 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    | 87-252   | 六角穴付きボルト        | BOLT                               | 2    |
| 10-23    | 84-813   | ネジ'             | SCREW                              | 1    |
| 10-24    | 85-201   | 段ネジ'            | SCREW                              | 1    |
| 10-25    | 86-411   | ナット             | NUT                                | 1    |
| 10-26    | 87-004   | 押え棒筒ネジ'         | SCREW                              | 1    |
| 10-27    | 87-112   | 六角穴付きボルト        | BOLT                               | 2    |
| 10-28    | 87-177   | 六角穴付きボルト        | BOLT                               | 2    |
| 10-29    | 84-551   | ネジ'             | SCREW                              | 1    |
| 10-30    | 88-003   | 筒ネジ' ナット        | NUT                                | 1    |
| 10-31    | 93-611   | スタンプ'ピン         | PIN                                | 2    |

# 11. 給油機構 LUBRICATION MECHANISM



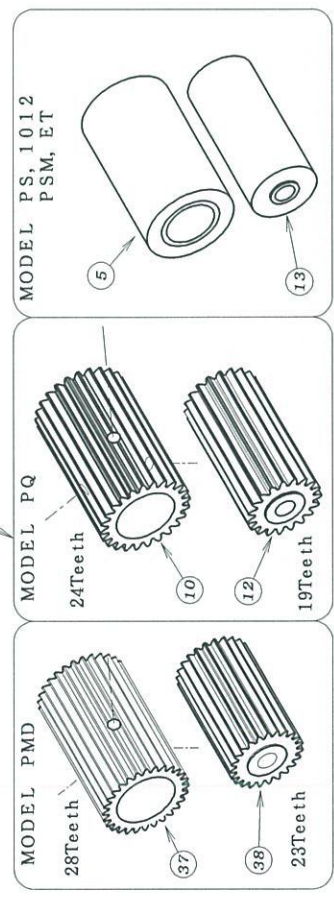
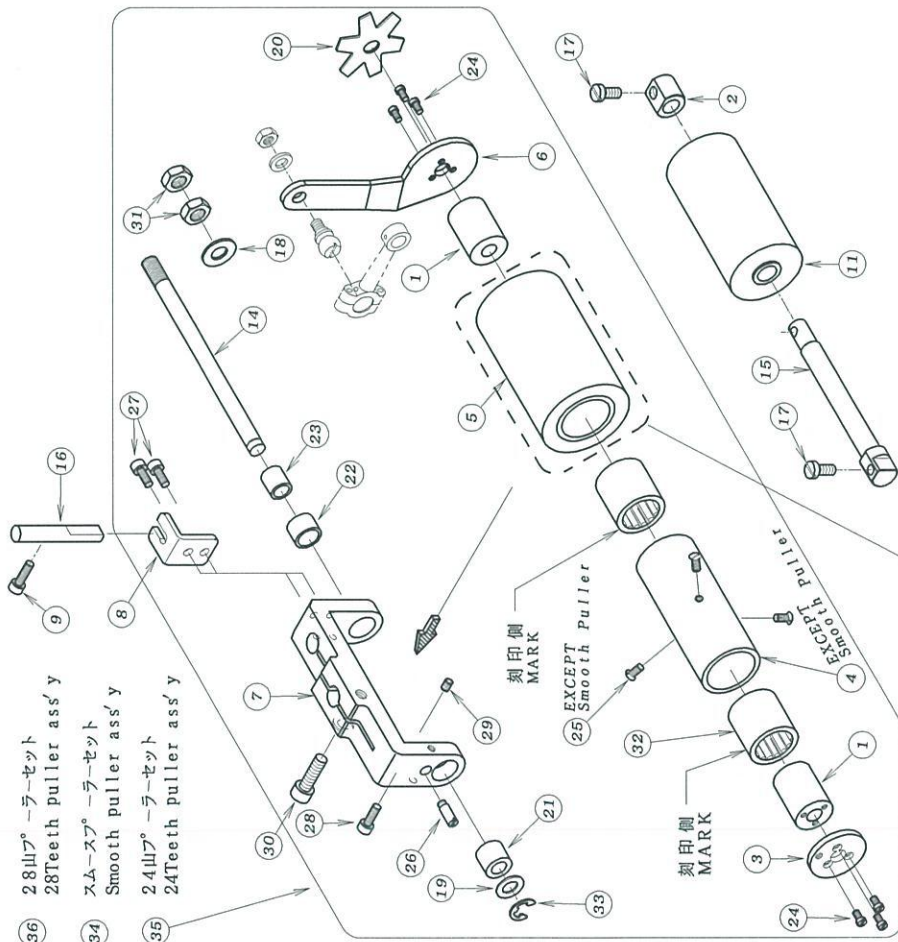
| REF. NO. | PART NO.  | 品名                     | DESCRIPTION        | Q'TY |
|----------|-----------|------------------------|--------------------|------|
| 11-01    | 17-8010-G | ピン                     | PIN                | 1    |
| 11-02    | 23-120    | オイルタンクパッキン             | GASKET             | 1    |
| 11-03    | 23-160    | 配管油止めシール               | SEAL WASHER        | 4    |
| 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   | ポンプセット                 | PUMP ASS'Y         | 1    |
| 11-09    | 30-0121   | ポンプセット                 | 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・メッシュ止め金具           | 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 | オイルタンクセット              | OIL TANK ASS'Y     | 1    |
| 11-19    | 31-314    | 継手                     | JOINT              | 1    |
| 11-20    | 31-364    | パイプ・継手                 | JOINT              | 1    |
| 11-21    | 31-702    | ポンプ・キープ                | PUMP GEAR          | 1    |
| 11-22    | 31-705    | アウトローター                | OUTER ROTER        | 1    |
| 11-23    | 31-707    | インナーローター               | INNER ROTER        | 1    |
| 11-24    | 35-122    | セパレート配管                | PIPE               | 1    |
| 11-25    | 35-246    | 立ロッド用配管                | PIPING             | 1    |
| 11-26    | 35-257    | パイプ・A                  | PIPE A             | 1    |
| 11-27    | 35-315    | ビニールチューブ               | TUBE (φ6×φ3, 190L) | 1    |
| 11-28    | 35-317    | ビニールチューブ               | TUBE               | 2    |
| 11-29    | 35-318    | ビニールチューブ*              | TUBE               | 1    |
| 11-30    | 35-322    | ビニールチューブ (φ4×φ2, 600L) | TUBE (φ4×φ2, 600L) | 1    |
| 11-31    | 35-343    | ビニールチューブ*              | TUBE (φ6×φ3, 80L)  | 1    |
| 11-32    | 35-361    | 片口管継手 (小)              | JOINT              | 6    |
| 11-33    | 35-362    | 管継手ホルト                 | JOINT SCREW        | 1    |
| 11-34    | 35-413    | 止め金具                   | CLAMP              | 7    |
| 11-35    | 35-528    | 管継手ホルト                 | JOINT SCREW        | 2    |
| 11-36    | 39-133    | パイプ・サポート C             | PIPE SUPPORT C     | 1    |
| 11-37    | 39-218    | オイルゲージ                 | OIL GAUGE          | 1    |
| 11-38    | 75-185    | ポンプ・スベール・スカラー          | COLLAR             | 1    |
| 11-39    | 75-452    | ワッシャ                   | WASHER             | 2    |
| 11-40    | 75-536    | ワッシャ                   | WASHER             | 4    |
| 11-41    | 84-363    | ネジ*                    | SCREW              | 3    |
| 11-42    | 87-092    | 六角穴付きボルト               | BOLT               | 2    |
| 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. 後プラー機構 REAR PULLER MECHANISM (1404)



| REF. NO. | PART NO. | 品名                  | DESCRIPTION                  | Q'TY |
|----------|----------|---------------------|------------------------------|------|
| 12-01    | 01-115   | スリーブ                | SLEEVE                       | 2    |
| 12-02    | 02-278   | カラ-B                | COLLAR                       | 1    |
| 12-03    | 02-117   | 後プラーハブイワフタ          | PLATE                        | 1    |
| 12-04    | 02-123   | ワンウェイクラッチ用ハウジング (中) | CLUTCH HOUSING               | 1    |
| 12-05    | 02-136   | スミス (中)             | REAR PULLER (SMOOTH)         | 1    |
| 12-06    | 02-158   | 後プラー台               | REAR PULLER HOLDER           | 1    |
| 12-07    | 02-166   | 回り止め                | GUIDE BRACKET                | 1    |
| 12-08    | 02-486   | 後プラー上ギヤ-28山         | UPPER REAR PULLER 28         | 1    |
| 12-09    | 02-184   | 後プラー上ローレット          | REAR PULLER (KNURLING)       | 1    |
| 12-10    | 02-197   | 後プラーフスミス            | LOWER REAR PULLER (SMOOTH)   | 1    |
| 12-11    | 02-487   | 後プラー下ギヤ-23山         | LOWER PULLER GEAR (23 TEETH) | 1    |
| 12-12    | 02-470   | 連結板                 | CONNECTING PLATE             | 1    |
| 12-13    | 87-214   | 六角穴付きボルト            | BOLT                         | 1    |
| 12-14    | 71-444   | 後プラー台シヤフト (中)       | SHAFT                        | 1    |
| 12-15    | 71-439   | 後プラー下シヤフト (短)       | REAR PULLER SHAFT (S)        | 1    |
| 12-16    | 71-921   | プラー回り止め棒            | PULLER GUIDE PIN             | 1    |
| 12-17    | 87-278   | ネジ                  | SCREW                        | 2    |
| 12-18    | 75-451   | ワッシャ                | WASHER                       | 1    |
| 12-19    | 75-519   | ワッシャ                | WASHER                       | 1    |
| 12-20    | 79-551   | プラー板ハネ              | PULLER PLATE SPRING          | 1    |
| 12-21    | 81-321   | ブッシュ                | BUSHING                      | 1    |
| 12-22    | 81-322   | ブッシュ                | BUSHING                      | 1    |
| 12-23    | 81-323   | ブッシュ                | BUSHING                      | 1    |
| 12-24    | 84-162   | ネジ                  | SCREW                        | 6    |
| 12-25    | 84-462   | ネジ                  | SCREW                        | 3    |
| 12-26    | 84-573   | 段ネジ                 | SCREW                        | 1    |
| 12-27    | 87-113   | 六角穴付きボルト            | BOLT                         | 2    |
| 12-28    | 87-129   | 六角穴付きボルト            | BOLT                         | 1    |
| 12-29    | 87-181   | ネジ                  | SCREW                        | 1    |
| 12-30    | 87-173   | 六角穴付きボルト            | BOLT                         | 1    |
| 12-31    | 88-179   | ナット                 | NUT                          | 2    |
| 12-32    | 91-407   | ワンウェイクラッチ           | BEARING                      | 2    |
| 12-33    | 93-221   | ストップリング             | E-RING                       | 1    |
| 12-34    | 00-2283  | 28山プラーセット           | 28 TEETH PULLER ASS'Y        | 1    |
| 12-35    | 00-2015  | スミスプラーセット           | SMOOTH PULLER ASS'Y          | 1    |
| 12-36    | 00-2016  | ローレットプラーセット         | STEEL PULLER ASS'Y           | 1    |

13. 後プーラー機構 REAR PULLER MECHANISM (1406~1412)

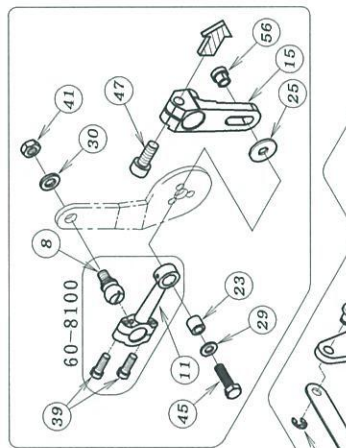


| REF. NO. | PART NO. | 品名            | DESCRIPTION                  | QTY |
|----------|----------|---------------|------------------------------|-----|
| 13-01    | 01-115   | スリーブ          | SLEEVE                       | 2   |
| 13-02    | 02-278   | カラ-B          | COLLAR                       | 1   |
| 13-03    | 02-117   | 後プーラー板ハネ      | PLATE                        | 1   |
| 13-04    | 02-124   | ハウジング         | HOUSING                      | 1   |
| 13-05    | 02-138   | 後プーラー(コ)      | REAR PULLER                  | 1   |
| 13-06    | 02-470   | 連結板           | CONNECTING PLATE             | 1   |
| 13-07    | 02-159   | 後プーラー台        | BRACKET                      | 1   |
| 13-08    | 02-459   | 回り止め          | GUIDE PLATE                  | 1   |
| 13-09    | 87-214   | 六角穴付きボルト      | BOLT                         | 1   |
| 13-10    | 02-492   | 後プーラー上ギヤ(24山) | REAR PULLER                  | 1   |
| 13-11    | 02-476   | 後プーラー(下)      | REAR PULLER                  | 1   |
| 13-12    | 02-493   | 後プーラー下ギヤ(19山) | REAR PULLER                  | 1   |
| 13-13    | 02-480   | 後プーラー(上)      | REAR PULLER                  | 1   |
| 13-14    | 71-445   | 後プーラー台シャフト(大) | SHAFT                        | 1   |
| 13-15    | 71-440   | 後プーラー下シャフト(長) | REAR PULLER SHAFT (L)        | 1   |
| 13-16    | 71-921   | プーラー回り止め棒     | PULLER GUIDE PIN             | 1   |
| 13-17    | 87-278   | ネジ            | SCREW                        | 2   |
| 13-18    | 75-451   | ワッシャー         | WASHER                       | 1   |
| 13-19    | 75-519   | ワッシャー         | WASHER                       | 1   |
| 13-20    | 79-551   | プーラー板ハネ       | PULLER PLATE SPRING          | 1   |
| 13-21    | 81-321   | ブッシュ          | BUSHING                      | 1   |
| 13-22    | 81-322   | ブッシュ          | BUSHING                      | 1   |
| 13-23    | 81-323   | ブッシュ          | BUSHING                      | 1   |
| 13-24    | 84-162   | ネジ            | SCREW                        | 6   |
| 13-25    | 84-462   | 段ネジ           | SCREW                        | 3   |
| 13-26    | 84-573   | 段ネジ           | SCREW                        | 1   |
| 13-27    | 87-113   | 六角穴付きボルト      | BOLT                         | 2   |
| 13-28    | 87-129   | 六角穴付きボルト      | BOLT                         | 1   |
| 13-29    | 87-181   | ネジ            | SCREW                        | 1   |
| 13-30    | 87-173   | 六角穴付きボルト      | BOLT                         | 1   |
| 13-31    | 88-179   | ナット           | NUT                          | 2   |
| 13-32    | 91-407   | ワンウェイクラッチ     | BEARING                      | 2   |
| 13-33    | 93-221   | ストッパリング       | E-RING                       | 1   |
| 13-34    | 00-2409  | スムースプーラーセット   | SMOOTH PULLER ASS'Y          | 1   |
| 13-35    | 00-2428  | 24山プーラーセット    | 24TEETH PULLER ASS'Y         | 1   |
| 13-36    | 00-2429  | 28山プーラーセット    | 28TEETH PULLER ASS'Y         | 1   |
| 13-37    | 02-494   | 後プーラー上ギヤ(28山) | REAR PULLER                  | 1   |
| 13-38    | 02-495   | 後プーラー下ギヤ(23山) | LOWER ROLLER GEAR (23 TEETH) | 1   |

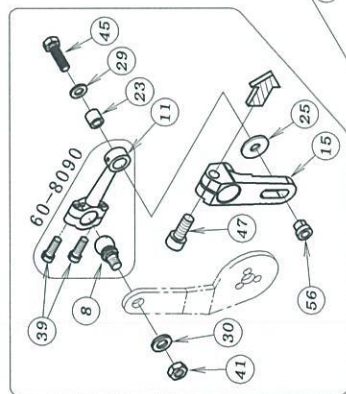


14-1-1. 後プーラー機構 REAR PULLER MECHANISM

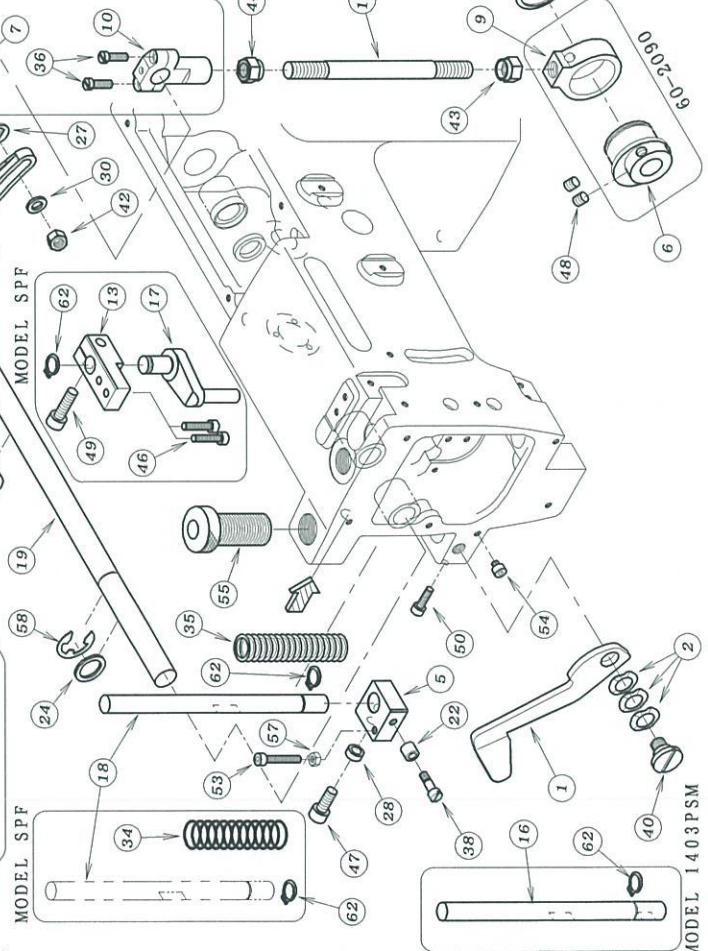
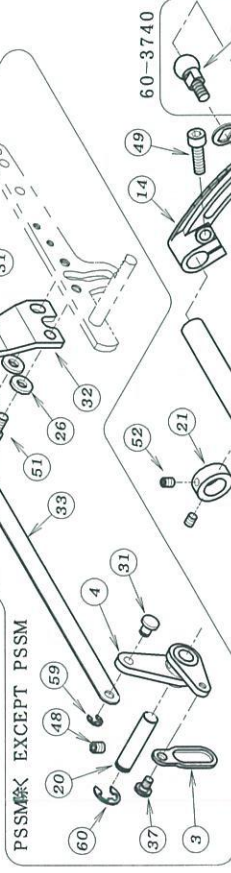
1406~1412TYPE



1402~1404TYPE



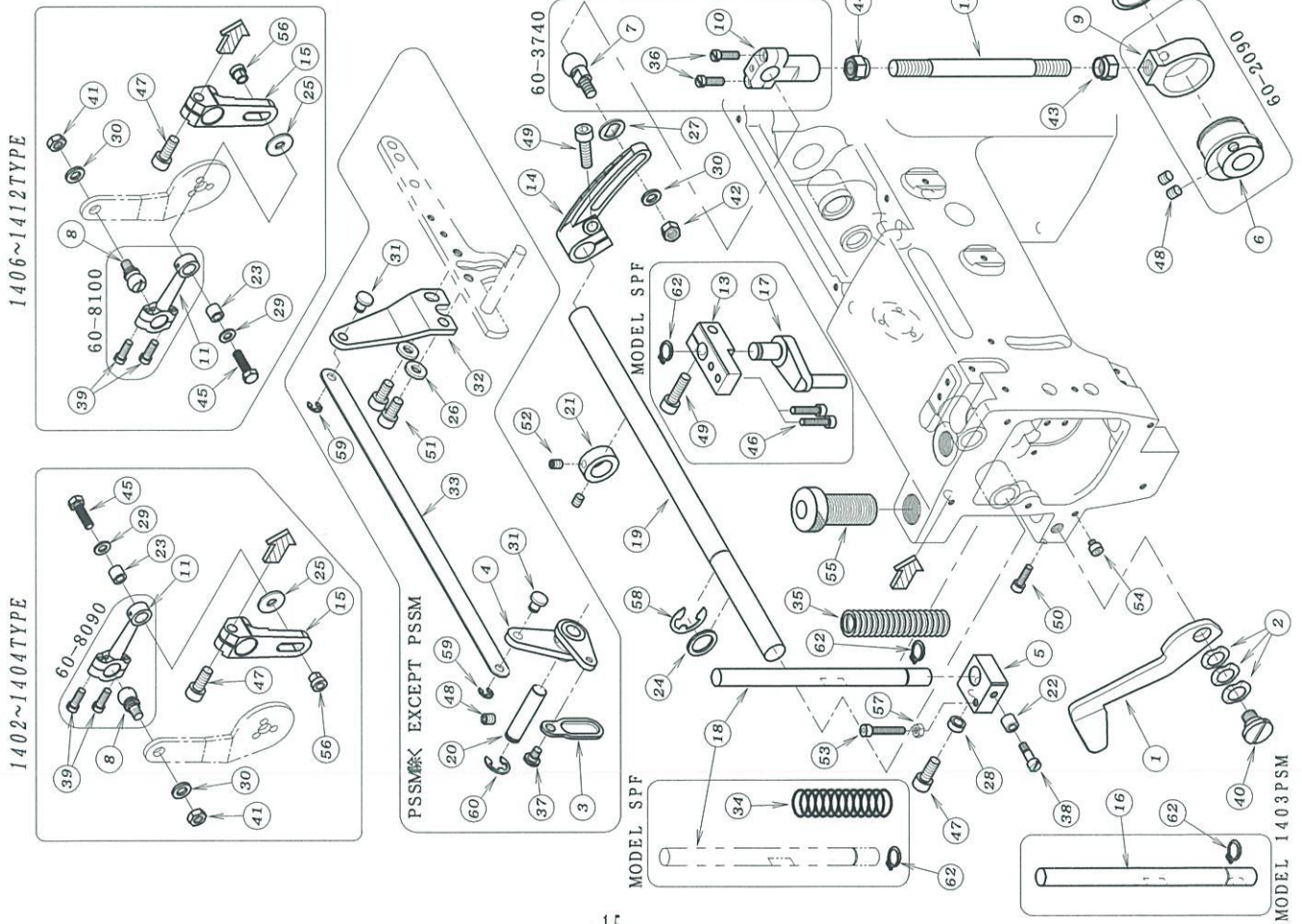
PSSM除く EXCEPT PSSM



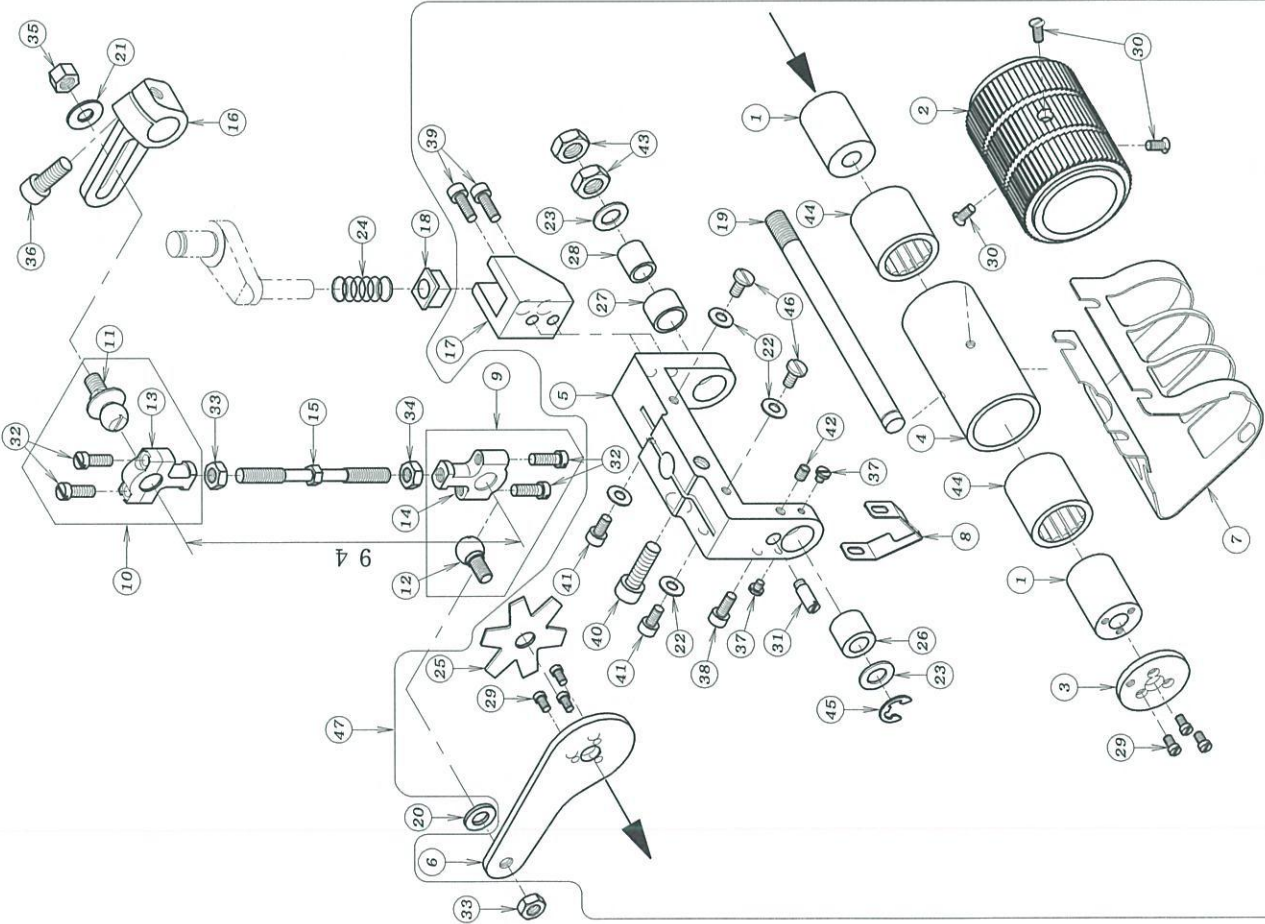
| REF. NO. | PART NO. | 品名           | DESCRIPTION                  | Q'TY |
|----------|----------|--------------|------------------------------|------|
| 14-01    | 102-029  | 手摺付用器具       | LEVER                        | 1    |
| 14-02    | 02-030   | 板ワッシャ        | WASHER                       | 3    |
| 14-03    | 02-205   | 連結プレート       | PLATE                        | 1    |
| 14-04    | 02-219   | 後プーラー揚げレバ    | LEVER                        | 1    |
| 14-05    | 02-224   | 後プーラー立シヤフト軸  | BRACKET                      | 1    |
| 14-06    | 61-209   | 上シヤフト連結エキセン玉 | PULLER DRIVING ECCENTRIC     | 1    |
| 14-07    | 61-714   | 上シヤフト連結ロッド玉  | CONNECTING ROD BALL          | 1    |
| 14-08    | 61-810   | プーラー連結ロッド玉   | CONNECTING ROD BALL          | 2    |
| 14-09    | 63-208   | 上シヤフト連結カ、ルマ  | CONNECTING LINK              | 1    |
| 14-10    | 63-711   | 立ロッド(小)      | BALL JOINT                   | 1    |
| 14-11    | 63-809   | プーラー連結ロッド    | BALL JOINT                   | 2    |
| 14-12    | 65-302   | 上シヤフト連結棒     | CONNECTING BAR               | 1    |
| 14-13    | 67-161   | ブラケット        | BRACKET                      | 1    |
| 14-14    | 67-172   | 上シヤフト連結レバ    | PULLER DRIVING LEVER (REAR)  | 1    |
| 14-15    | 67-173   | 上シヤフト連結レバ    | PULLER DRIVING LEVER (FRONT) | 2    |
| 14-16    | 71-450   | 後プーラー立シヤフト   | SHAFT                        | 1    |
| 14-17    | 71-169   | 傾斜用調節輪       | SHAFT                        | 1    |
| 14-18    | 71-462   | 後プーラー立シヤフト   | SHAFT                        | 1    |
| 14-19    | 71-691   | プーラー立シヤフト    | PULLER DRIVING SHAFT         | 1    |
| 14-20    | 71-726   | シヤフト         | SHAFT                        | 1    |
| 14-21    | 75-112   | カラ           | COLLAR                       | 1    |
| 14-22    | 75-211   | カラ           | COLLAR                       | 1    |
| 14-23    | 75-247   | 連結メカ、ネローラー   | COLLAR                       | 2    |
| 14-24    | 75-332   | ワッシャ         | WASHER                       | 1    |
| 14-25    | 75-407   | ワッシャ         | WASHER                       | 2    |
| 14-26    | 75-458   | ワッシャ         | WASHER                       | 2    |
| 14-27    | 75-491   | ワッシャ         | WASHER                       | 1    |
| 14-28    | 75-493   | カラ           | COLLAR                       | 1    |
| 14-29    | 75-520   | ワッシャ         | WASHER                       | 2    |
| 14-30    | 75-552   | ワッシャ         | WASHER                       | 2    |
| 14-31    | 77-419   | 押え揚げ連結ピン     | PIN                          | 3    |
| 14-32    | 77-420   | 押え揚げ連結板      | PLATE                        | 1    |
| 14-33    | 77-425   | 押え揚げ連結板      | PLATE                        | 1    |
| 14-34    | 79-126   | プーラー巻ハ、ネ     | PULLER SPRING                | 1    |
| 14-35    | 79-425   | プーラー圧縮バネ     | SPRING                       | 1    |
| 14-36    | 84-567   | ネジ           | SCREW                        | 2    |
| 14-37    | 84-581   | 段ネジ          | SCREW                        | 1    |
| 14-38    | 84-582   | 段ネジ          | SCREW                        | 1    |
| 14-39    | 84-635   | ネジ           | SCREW                        | 4    |
| 14-40    | 85-002   | 段ネジ          | SCREW                        | 1    |
| 14-41    | 86-411   | ナット          | NUT                          | 2    |
| 14-42    | 86-501   | ナット          | NUT                          | 1    |
| 14-43    | 86-741   | ナット          | NUT                          | 1    |
| 14-44    | 86-742   | ナット          | NUT                          | 1    |
| 14-45    | 87-015   | ネジ           | SCREW                        | 2    |
| 14-46    | 87-112   | 六角穴付きボルト     | BOLT                         | 2    |
| 14-47    | 87-171   | 六角穴付きボルト     | BOLT                         | 3    |
| 14-48    | 87-172   | ネジ           | SCREW                        | 3    |
| 14-49    | 87-173   | 六角穴付きボルト     | BOLT                         | 2    |
| 14-50    | 87-214   | 六角穴付きボルト     | BOLT                         | 1    |
| 14-51    | 87-225   | 六角穴付きボルト     | BOLT                         | 2    |
| 14-52    | 87-254   | ネジ           | SCREW                        | 2    |
| 14-53    | 87-285   | 六角穴付きボルト     | BOLT                         | 1    |
| 14-54    | 87-287   | 六角穴付きボルト     | BOLT                         | 1    |
| 14-55    | 87-754   | プーラー筒ネジ      | SCREW                        | 1    |
| 14-56    | 88-013   | 前プーラーナット     | NUT                          | 2    |

14-2. 後プーラー機構 REAR PULLER MECHANISM

| REF. NO. | PART NO. | 品名    | DESCRIPTION | QTY |
|----------|----------|-------|-------------|-----|
| 14-57    | 88-146   | ナット   | NUT         | 1   |
| 14-58    | 93-203   | E型止め輪 | E-RING      | 1   |
| 14-59    | 93-205   | E-リング | E-RING      | 2   |
| 14-60    | 93-222   | Eリング  | E-RING      | 1   |
| 14-61    | 93-258   | 軸用止め輪 | SNAP RING   | 1   |
| 14-62    | 93-261   | Cリング  | C-RING      | 2   |

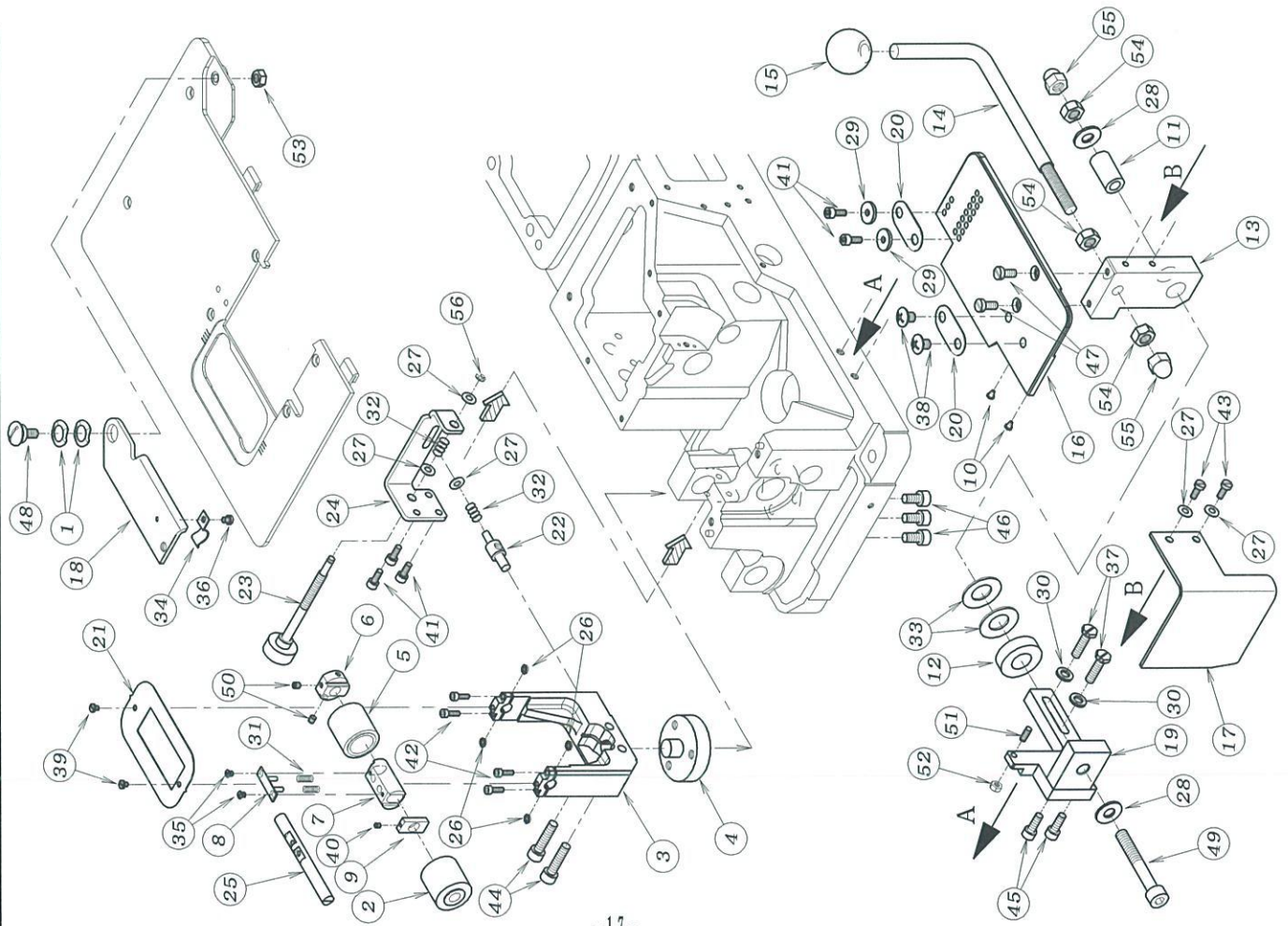


15. SPF専用部品 (1) MODEL SPF EXCLUSIVE PARTS (1)



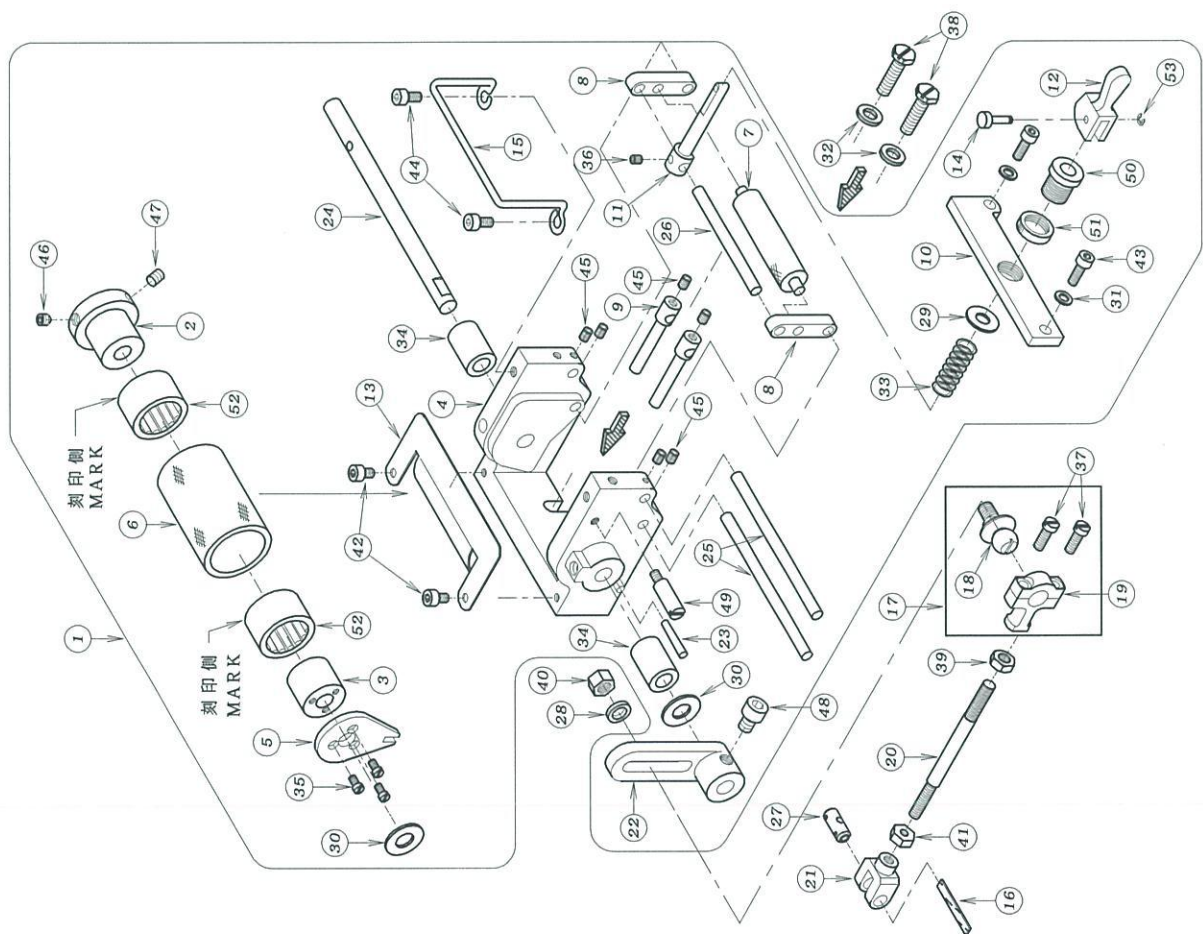
| REF. NO. | PART NO. | 品名                | DESCRIPTION                  | QTY |
|----------|----------|-------------------|------------------------------|-----|
| 15-01    | 01-115   | スリーブ              | SLEEVE                       | 2   |
| 15-02    | 02-009   | 後プーラー上ギア大 (59山)   | REAR PULLER GEAR             | 1   |
| 15-03    | 02-117   | 後プーラー板 アイソフラ      | PLATE                        | 1   |
| 15-04    | 02-123   | ワウエイクラッチ用ハブギア (中) | CLUTCH HOUSING               | 1   |
| 15-05    | 02-286   | 上プーラー上台           | REAR PULLER HOLDER           | 1   |
| 15-06    | 02-287   | 上プーラー連結板          | CONNECTING PLATE             | 1   |
| 15-07    | 02-288   | 巻き込み防止金具          | PULLER GUIDE PLATE           | 1   |
| 15-08    | 27-154   | 印板                | PLATE                        | 1   |
| 15-09    | 60-3720  | ルーバ-連結ロッド (左) セット | CONNECTING ROD ASS'Y (LEFT)  | 1   |
| 15-10    | 60-5007  | 連結ロッド (右) セット     | CONNECTING ROD ASS'Y (RIGHT) | 1   |
| 15-11    | 61-821   | ロッド玉              | CONNECTING ROD BALL          | 1   |
| 15-12    | 61-823   | ルーバ-連結ロッド玉        | CONNECTING BALL              | 1   |
| 15-13    | 63-811   | 連結ロッド右            | BALL JOINT                   | 1   |
| 15-14    | 63-812   | 連結ロッド左            | BALL JOINT                   | 1   |
| 15-15    | 65-435   | 連結棒               | CONNECTING BAR               | 1   |
| 15-16    | 67-162   | 上プーラー駆動連結レバー      | LEVER                        | 1   |
| 15-17    | 69-456   | 角駒ガイド             | GUIDE                        | 1   |
| 15-18    | 69-457   | 角ゴマ               | BLOCK                        | 1   |
| 15-19    | 71-444   | 後プーラー台シャフト (中)    | SHAFT                        | 1   |
| 15-20    | 75-401   | 振止めワッシャ           | WASHER                       | 1   |
| 15-21    | 75-446   | ワッシャ              | WASHER                       | 1   |
| 15-22    | 75-455   | ワッシャ              | WASHER                       | 4   |
| 15-23    | 75-519   | ワッシャ              | WASHER                       | 2   |
| 15-24    | 79-061   | 角駒用バネ             | SPRING                       | 1   |
| 15-25    | 79-551   | プーラー板ハネ           | PULLER PLATE SPRING          | 1   |
| 15-26    | 81-321   | ブッシュ              | BUSHING                      | 1   |
| 15-27    | 81-322   | ブッシュ              | BUSHING                      | 1   |
| 15-28    | 81-323   | ブッシュ              | BUSHING                      | 1   |
| 15-29    | 84-162   | ネジ                | SCREW                        | 6   |
| 15-30    | 84-462   | ネジ                | SCREW                        | 3   |
| 15-31    | 84-573   | 段ネジ               | SCREW                        | 1   |
| 15-32    | 84-635   | ネジ                | SCREW                        | 4   |
| 15-33    | 86-411   | ナット               | NUT                          | 1   |
| 15-34    | 86-412   | ナット               | NUT                          | 1   |
| 15-35    | 86-501   | ナット               | NUT                          | 1   |
| 15-36    | 87-039   | ネジ                | SCREW                        | 1   |
| 15-37    | 87-083   | ネジ                | SCREW                        | 2   |
| 15-38    | 87-113   | 六角穴付きボルト          | BOLT                         | 1   |
| 15-39    | 87-129   | 六角穴付きボルト          | BOLT                         | 2   |
| 15-40    | 87-173   | 六角穴付きボルト          | BOLT                         | 1   |
| 15-41    | 87-177   | 六角穴付きボルト          | BOLT                         | 2   |
| 15-42    | 87-181   | ネジ                | SCREW                        | 1   |
| 15-43    | 88-179   | ナット               | NUT                          | 2   |
| 15-44    | 91-407   | ワウエイクラッチ          | BEARING                      | 2   |
| 15-45    | 93-221   | ストッパリング           | E-RING                       | 1   |
| 15-46    | 87-288   | ネジ                | SCREW                        | 2   |
| 15-47    | 100-0004 | 59山プーラーセット        | 59TEETH REAR PULLER ASS'Y    | 1   |

16. SPF専用部品 (2) MODEL SPF EXCLUSIVE PARTS (2)



| REF. NO. | PART NO. | 品名               | DESCRIPTION             | QTY |
|----------|----------|------------------|-------------------------|-----|
| 16-01    | 02-112   | 波ワッシャー           | WASHER                  | 2   |
| 16-02    | 02-289   | 下ローラー-スム-ス小      | LOWER PULLER (SMOOTH)   | 1   |
| 16-03    | 02-297   | 下ローラー-土台         | LOWER PULLER BRACKET    | 1   |
| 16-04    | 02-298   | 下ローラー-土台支点台      | BRACKET                 | 1   |
| 16-05    | 02-566   | 下ローラー-コ-ム        | LOWER PULLER (SMOOTH)   | 1   |
| 16-06    | 02-568   | 下ローラー-回り止 (A)    | SLIDE HOLDER            | 1   |
| 16-07    | 02-571   | 下ローラー-スライド金具 (A) | SLIDER                  | 1   |
| 16-08    | 02-570   | パ-ネカ-イト          | SPRING GUIDE PLATE      | 1   |
| 16-09    | 02-571   | 下ローラー-回り止 (B)    | HOLDER                  | 1   |
| 16-10    | 23-512   | クッションコ-ム         | CUSHION RUBBER          | 2   |
| 16-11    | 26-461   | シャフト             | SHAFT                   | 1   |
| 16-12    | 26-462   | スペ-サ-            | SPACE BUSHING           | 1   |
| 16-13    | 26-487   | ホルダ-取付台          | BRACKET                 | 1   |
| 16-14    | 26-491   | 開閉レバ-            | LEVER                   | 1   |
| 16-15    | 26-492   | グリップ             | GRIP                    | 1   |
| 16-16    | 26-493   | ホルダ-取付ベース        | PLATE                   | 1   |
| 16-17    | 26-497   | 前ベースカバー (左)      | FRONT COVER             | 1   |
| 16-18    | 26-495   | 前ベースカバー (右)      | COVER                   | 1   |
| 16-19    | 26-496   | ホルダ-取付フ-ラケット分割型  | BRACKET                 | 1   |
| 16-20    | 26-712   | 取付金具             | WASHER                  | 2   |
| 16-21    | 27-152   | 下ローラー-ガイド板       | GUIDE PLATE             | 1   |
| 16-22    | 55-157   | スライドピン           | ADJUSTING PIN           | 1   |
| 16-23    | 55-158   | 下ローラー-土台調節ネジ     | ADJUSTING KNOB          | 1   |
| 16-24    | 55-159   | 調節ブラケット          | FEED GRADUATIONS        | 1   |
| 16-25    | 71-164   | 下ローラー-シャフト       | LOWER REAR PULLER SHAFT | 1   |
| 16-26    | 75-263   | ワッシャ             | WASHER                  | 4   |
| 16-27    | 75-455   | ワッシャ             | WASHER                  | 5   |
| 16-28    | 75-501   | ワッシャ             | WASHER                  | 2   |
| 16-29    | 75-508   | ワッシャ             | WASHER                  | 2   |
| 16-30    | 75-552   | ワッシャ             | WASHER                  | 2   |
| 16-31    | 79-062   | スプリング            | SPRING                  | 2   |
| 16-32    | 79-421   | フ-ッシホ-タンパ-ネ      | SPRING                  | 2   |
| 16-33    | 79-427   | 皿パ-ネ             | SPRING                  | 2   |
| 16-34    | 79-522   | 板パ-ネ             | SPRING                  | 1   |
| 16-35    | 84-193   | ネジ               | SCREW                   | 2   |
| 16-36    | 84-364   | ネジ               | SCREW                   | 1   |
| 16-37    | 84-813   | ネジ               | SCREW                   | 2   |
| 16-38    | 85-181   | ネジ               | SCREW                   | 2   |
| 16-39    | 87-083   | ネジ               | SCREW                   | 2   |
| 16-40    | 87-104   | ネジ               | SCREW                   | 1   |
| 16-41    | 87-113   | 六角穴付きボルト         | BOLT                    | 5   |
| 16-42    | 87-133   | 六角穴付きボルト         | BOLT                    | 4   |
| 16-43    | 87-145   | ネジ               | SCREW                   | 2   |
| 16-44    | 87-188   | 六角穴付きボルト         | BOLT                    | 2   |
| 16-45    | 87-224   | 六角穴付きボルト         | BOLT                    | 2   |
| 16-46    | 87-225   | 六角穴付きボルト         | BOLT                    | 3   |
| 16-47    | 87-278   | ネジ               | SCREW                   | 2   |
| 16-48    | 87-280   | ネジ               | SCREW                   | 1   |
| 16-49    | 87-281   | 六角穴付きボルト         | BOLT                    | 1   |
| 16-50    | 87-286   | ネジ               | SCREW                   | 2   |
| 16-51    | 87-401   | ネジ               | SCREW                   | 1   |
| 16-52    | 88-146   | ナット              | NUT                     | 1   |
| 16-53    | 88-166   | ナット              | NUT                     | 1   |
| 16-54    | 88-176   | ナット              | NUT                     | 3   |
| 16-55    | 88-183   | 袋ナット             | NUT                     | 2   |
| 16-56    | 93-201   | Eリング             | E-RING                  | 1   |

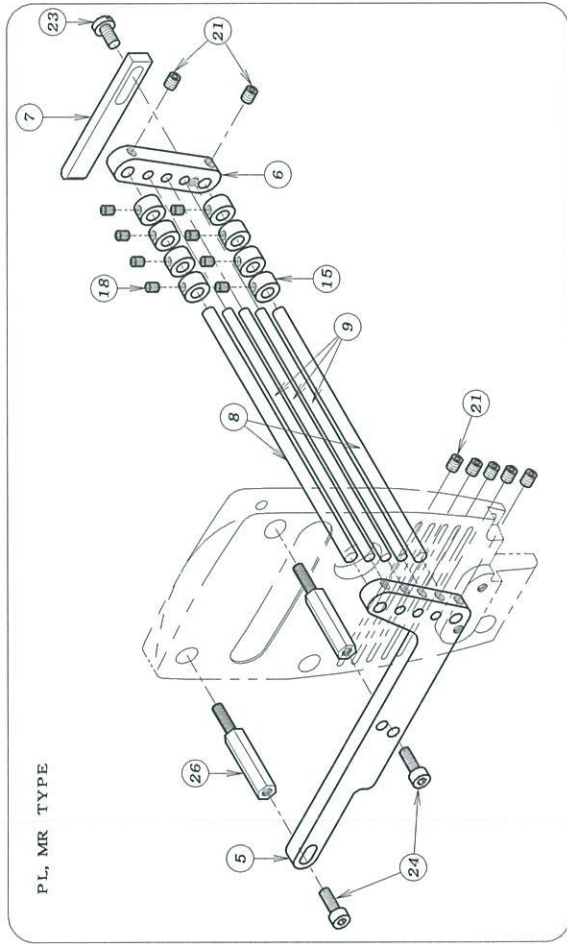
17. 前ブローラー機構 METERING DEVICE MECHANISM



| REF. NO. | PART NO. | 品名               | DESCRIPTION             | Q'TY |
|----------|----------|------------------|-------------------------|------|
| 17-01    | 00-1401  | PMD装置(組)         | METERING DEVICE ASS'Y   | 1    |
| 17-02    | 01-102   | フタ側スリーブ          | SLEEVE                  | 1    |
| 17-03    | 01-103   | 連結板側スリーブ         | SLEEVE                  | 1    |
| 17-04    | 01-111   | 前ブローラー土台         | BRACKET                 | 1    |
| 17-05    | 01-116   | 前ブローラー回り止め蓋      | PLATE                   | 1    |
| 17-06    | 01-132   | 前ブローラーローレット      | PULLER                  | 1    |
| 17-07    | 01-134   | 前ブローラー小ローラー      | LOWER ROLLER            | 1    |
| 17-08    | 01-136   | 前ブローラー小ローラー取り付金具 | ROLLER HOLDER           | 2    |
| 17-09    | 01-138   | 前ブローラーゴム案内金具     | PIVOT SHAFT HOLDER      | 2    |
| 17-10    | 01-141   | 前ブローラー締め金具       | RUBBER TIGHTENER        | 1    |
| 17-11    | 01-143   | 小ローラー締め金具        | ROLLER CONTROLLER       | 1    |
| 17-12    | 01-145   | ワッシャー レバ         | LEVER                   | 1    |
| 17-13    | 01-146   | 前ブローラーカバー        | COVER                   | 1    |
| 17-14    | 01-147   | レバ 連結ピン          | PIN                     | 1    |
| 17-15    | 01-152   | ガイド              | GUIDE                   | 1    |
| 17-16    | 23-341   | フェルト             | FELT                    | 1    |
| 17-17    | 60-8271  | 連結ロッドセット         | CONNECTING ROD ASS'Y    | 1    |
| 17-18    | 61-821   | ロッド 玉            | CONNECTING ROD BALL     | 1    |
| 17-19    | 63-812   | 連結ロッド左           | BALL JOINT              | 1    |
| 17-20    | 65-334   | 前ブローラー連結棒        | PULLER CONNECTING BAR   | 1    |
| 17-21    | 66-131   | 連結片メカネ           | CONNECTING LINK         | 1    |
| 17-22    | 67-180   | 前ブローラー連結レバ       | PULLER CONNECTING LEVER | 1    |
| 17-23    | 71-227   | シャフトピン           | PIN                     | 1    |
| 17-24    | 71-350   | 前ブローラー土台シャフト     | SHAFT                   | 1    |
| 17-25    | 71-361   | 案内棒大             | PIVOT SHAFT (LARGE)     | 2    |
| 17-26    | 71-362   | 案内棒小             | PIVOT SHAFT (SMALL)     | 1    |
| 17-27    | 71-432   | メカネピン            | FEED ROCKER LINK PIN    | 1    |
| 17-28    | 75-381   | ワッシャー            | WASHER                  | 1    |
| 17-29    | 75-446   | ワッシャー            | WASHER                  | 1    |
| 17-30    | 75-451   | ワッシャー            | WASHER                  | 2    |
| 17-31    | 75-468   | ワッシャー            | WASHER                  | 2    |
| 17-32    | 75-552   | ワッシャー            | WASHER                  | 2    |
| 17-33    | 79-171   | 圧縮バネ             | SPRING                  | 1    |
| 17-34    | 81-125   | ブッシュ             | BUSHING                 | 2    |
| 17-35    | 84-162   | ネジ               | SCREW                   | 3    |
| 17-36    | 84-314   | ネジ               | SCREW                   | 1    |
| 17-37    | 84-635   | ネジ               | SCREW                   | 2    |
| 17-38    | 84-813   | ネジ               | SCREW                   | 2    |
| 17-39    | 86-412   | ナット              | NUT                     | 1    |
| 17-40    | 86-501   | ナット              | NUT                     | 1    |
| 17-41    | 86-701   | ナット              | NUT                     | 1    |
| 17-42    | 87-092   | 六角穴付きボルト         | BOLT                    | 2    |
| 17-43    | 87-129   | 六角穴付きボルト         | BOLT                    | 2    |
| 17-44    | 87-177   | 六角穴付きボルト         | BOLT                    | 2    |
| 17-45    | 87-181   | ネジ               | SCREW                   | 6    |
| 17-46    | 87-253   | ネジ               | SCREW                   | 1    |
| 17-47    | 87-254   | ネジ               | SCREW                   | 1    |
| 17-48    | 87-255   | 六角穴付きボルト         | BOLT                    | 1    |
| 17-49    | 87-268   | カバーストップネジ        | SCREW                   | 1    |
| 17-50    | 87-456   | 調整ネジ             | SCREW                   | 1    |
| 17-51    | 88-456   | ナット              | NUT                     | 1    |
| 17-52    | 91-405   | ワッシャークラッチ        | BEARING                 | 2    |
| 17-53    | 93-200   | ストップリング          | E-RING                  | 1    |

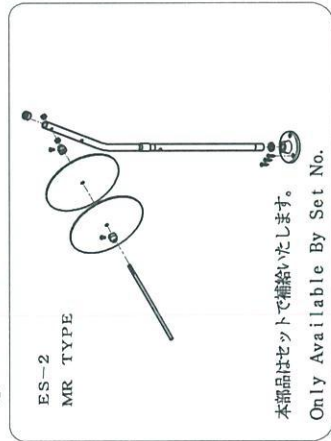
# 18. テープ° カイト° 関係 TAPE GUIDE ASSEMBLY

④ 20-6450



PL, MR TYPE

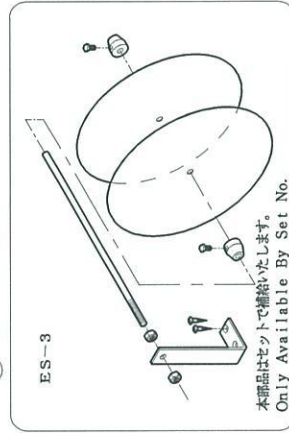
① 20-6020



ES-2  
MR TYPE

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Only Available By Set No.

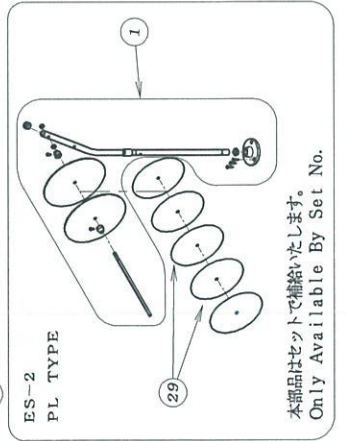
② 20-6030



ES-3

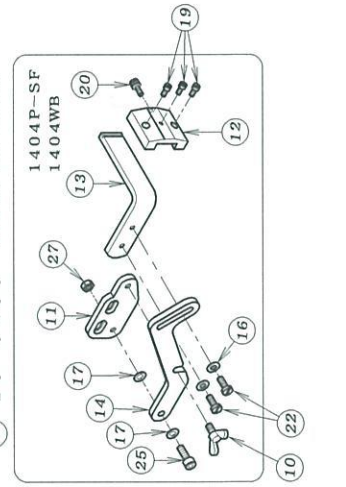
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Only Available By Set No.

③ 20-6400 オプション (OPTION)



ES-2  
PL TYPE

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Only Available By Set No.

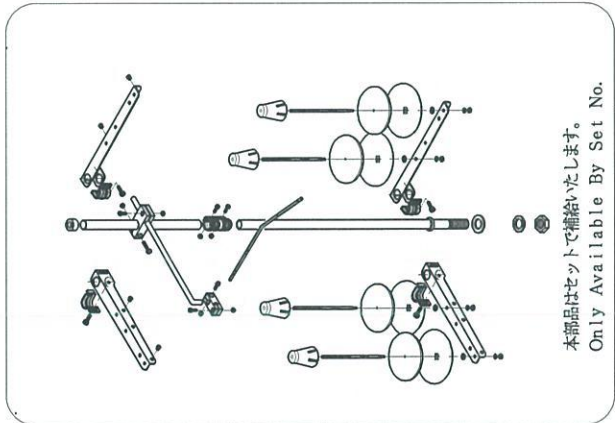


1404P-SF  
1404WB

| REF. NO. | PART NO. | 品名                | DESCRIPTION                    | QTY |
|----------|----------|-------------------|--------------------------------|-----|
| 18-01    | 20-6020  | テープ° 立てセット (ES-2) | TAPE STAND ASS'Y (ES-2)        | 1   |
| 18-02    | 20-6030  | テープ° 立てセット (ES-3) | TAPE STAND ASS'Y (ES-3)        | 1   |
| 18-03    | 20-6400  | ラック° 取付台セット       | MOUNTING BASE ASS'Y FOR HOLDER | 1   |
| 18-04    | 20-6450  | テープ° ガイドセット       | TAPE GUIDE ASS'Y               | 1   |
| 18-05    | 26-737   | カ° イト° プ° ラケット    | GUIDE BRACKET                  | 1   |
| 18-06    | 26-717   | カ° イト° 止め金具       | GUIDE FIXING BRACKET           | 1   |
| 18-07    | 26-738   | カ° イト° クランプ°      | GUIDE CLAMP                    | 1   |
| 18-08    | 26-719   | カ° イト° シヤフト大      | GUIDE SHAFT LARGE              | 2   |
| 18-09    | 26-720   | カ° イト° シヤフト小      | GUIDE SHAFT SMALL              | 3   |
| 18-10    | 26-736   | 蝶ボ° ルト            | BOLT                           | 1   |
| 18-11    | 26-747   | ラック° 取付基台         | MOUNTING BASE FOR HOLDER       | 1   |
| 18-12    | 26-748   | 取付クランプ° 金具        | FIXING CLAMP                   | 1   |
| 18-13    | 26-749   | ラック° 取付台          | MOUNTING BASE FOR HOLDER       | 1   |
| 18-14    | 26-750   | ラック° 取付スライド       | MOUNTING SIDE FOR HOLDER       | 1   |
| 18-15    | 75-097   | カラ°               | COLLAR                         | 8   |
| 18-16    | 75-455   | ワッシャ              | WASHER                         | 2   |
| 18-17    | 79-922   | 皿ハ° ネジ            | SPRING                         | 2   |
| 18-18    | 84-314   | ネジ°               | SCREW                          | 8   |
| 18-19    | 84-382   | ネジ°               | SCREW                          | 3   |
| 18-20    | 84-387   | ネジ°               | SCREW                          | 1   |
| 18-21    | 84-521   | ネジ°               | SCREW                          | 7   |
| 18-22    | 84-566   | ネジ°               | SCREW                          | 2   |
| 18-23    | 84-571   | ネジ°               | SCREW                          | 1   |
| 18-24    | 87-129   | 六角穴付きボルト          | BOLT                           | 2   |
| 18-25    | 87-245   | 六角穴付きボルト          | BOLT                           | 1   |
| 18-26    | 87-309   | 支柱ネジ°             | SCREW                          | 2   |
| 18-27    | 88-157   | ナット               | NUT                            | 1   |
| 18-28    | 20-6010  | テープ° 立て           | TAPE STAND ASS'Y               | 1   |
| 18-29    | 26-873   | 円板テープ° ガイド        | TAPE REEL DISC                 | 5   |

19. 糸立て及びテーブール (1404) THREAD STAND AND TABLE

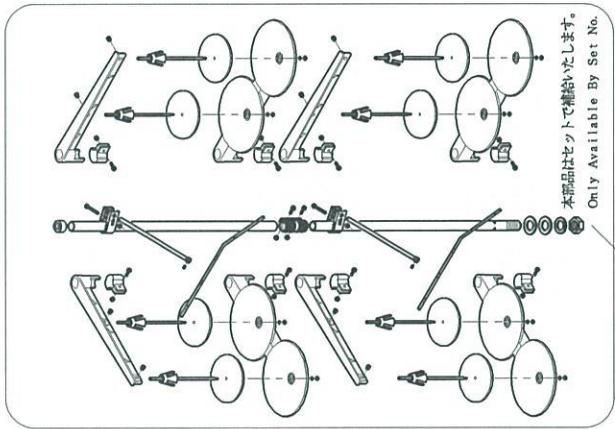
1402MR



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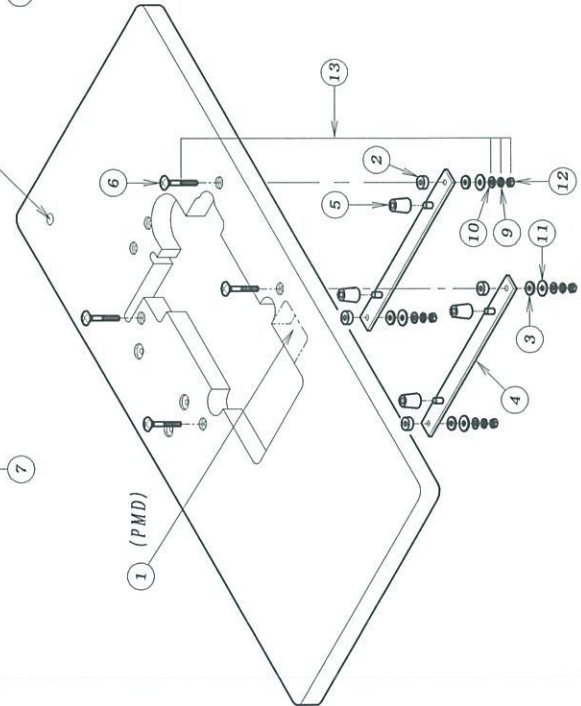
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1404P, 1411SPF



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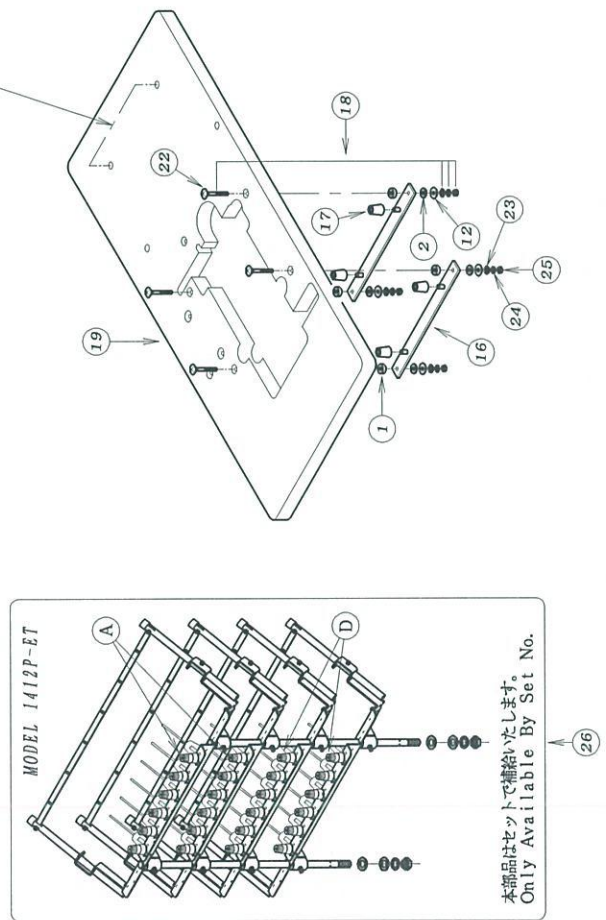
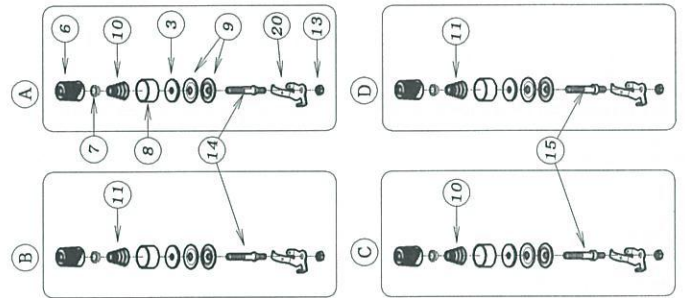
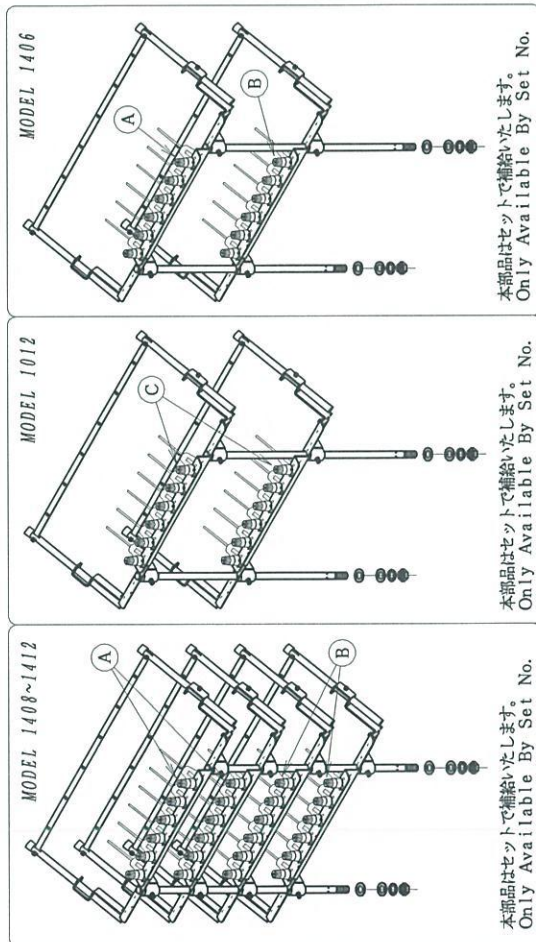
8



| REF. NO. | PART NO.  | 品名         | DESCRIPTION                 | QTY |
|----------|-----------|------------|-----------------------------|-----|
| 19-01    | 21-0450-1 | テーブール      | TABLE                       | 1   |
| 19-02    | 23-121    | テーブール取付コナA | CUSHION RUBBER              | 4   |
| 19-03    | 23-122    | テーブール取付コナB | CUSHION RUBBER              | 4   |
| 19-04    | 25-140    | タンク取付金具    | SUPPORTING BOARD            | 2   |
| 19-05    | 31-163    | クッションコナA   | CUSHION RUBBER              | 4   |
| 19-06    | 42-514    | 根角ボルトM8    | BOLT                        | 4   |
| 19-07    | 42-704    | 4本糸立て      | THREAD STAND ASSEMBLY FOR 4 | 1   |
| 19-08    | 42-718    | 8本糸立て      | THREAD STAND ASSEMBLY FOR 8 | 1   |
| 19-09    | 75-225    | スプリングワッシャー | SPRING WASHER               | 4   |
| 19-10    | 75-451    | ワッシャー      | WASHER                      | 4   |
| 19-11    | 75-535    | ワッシャー      | WASHER                      | 4   |
| 19-12    | 88-176    | ナット        | NUT                         | 4   |
| 19-13    | 80-7510   | 根角ボルト      | SCREW                       | 4   |

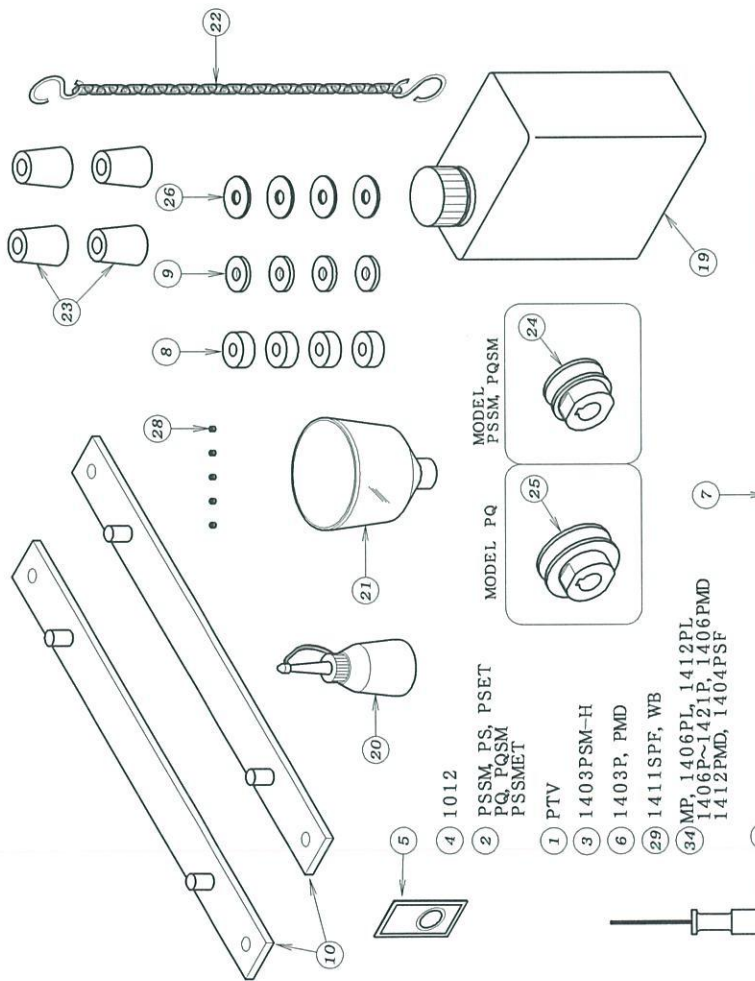
20. 糸立て及びテーブール (1012, 1406~1412) THREAD STAND AND TABLE

| REF. NO. | PART NO. | 品名             | DESCRIPTION                   | QTY |
|----------|----------|----------------|-------------------------------|-----|
| 20-01    | 23-121   | テーブール取付用 AA    | CUSHION RUBBER                | 4   |
| 20-02    | 23-122   | テーブール取付用 AB    | CUSHION RUBBER                | 4   |
| 20-03    | 23-324   | フェルト           | FELT                          | *   |
| 20-04    | 40-6502  | 12本糸立てセット      | THREAD STAND FOR MODEL 1406   | 1   |
| 20-05    | 40-6505  | 12本糸立てセット      | THREAD STAND FOR MODEL 1012   | 1   |
| 20-06    | 41-104   | チャンボン皿小ケース     | THREAD TENSION NUT            | *   |
| 20-07    | 41-105   | チャンボン皿ラチェット    | SPRING POST                   | *   |
| 20-08    | 41-106   | 大ケース           | SPRING CUP                    | *   |
| 20-09    | 41-509   | チャンボン皿         | TENSION DISC                  | *   |
| 20-10    | 41-701   | チャンボン調子バネ (強)  | SPRING (HEAVY)                | *   |
| 20-11    | 41-702   | チャンボン調子バネ (弱)  | SPRING (LIGHT)                | *   |
| 20-12    | 75-535   | ワッシャー          | WASHER                        | 4   |
| 20-13    | 88-157   | ナット            | NUT                           | *   |
| 20-14    | 41-522   | 調子棒中           | SCREW STUD                    | *   |
| 20-15    | 41-523   | ゴム糸田調子棒        | SCREW STUD FOR ELASTIC THREAD | 12  |
| 20-16    | 25-140   | タング取付金具        | MACHINE MOUNT BRACKET         | 2   |
| 20-17    | 31-163   | クッションゴム        | CUSHION RUBBER                | 4   |
| 20-18    | 80-7510  | 根角ボルト          | BOLT                          | 4   |
| 20-19    | 21-042   | テーブル           | TABLE                         | 1   |
| 20-20    | 41-524   | チャンボン皿糸道       | THREAD EYELET                 | *   |
| 20-21    | 40-6501  | 24本糸立てセット      | THREAD STAND FOR MODEL 1412   | 1   |
| 20-22    | 42-514   | 根角ボルト M8       | BOLT                          | 4   |
| 20-23    | 75-451   | ワッシャー          | WASHER                        | 4   |
| 20-24    | 75-225   | スプ. リング, ワッシャー | SPRING WASHER                 | 4   |
| 20-25    | 88-176   | ナット            | NUT                           | 4   |
| 20-26    | 40-6508  | 24本糸立てセット      | THREAD STAND FOR MODEL 1412   | 1   |

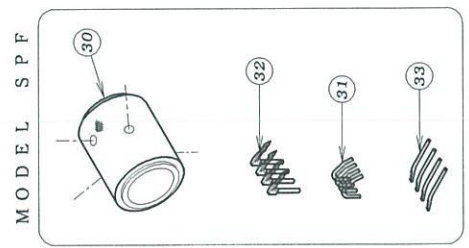
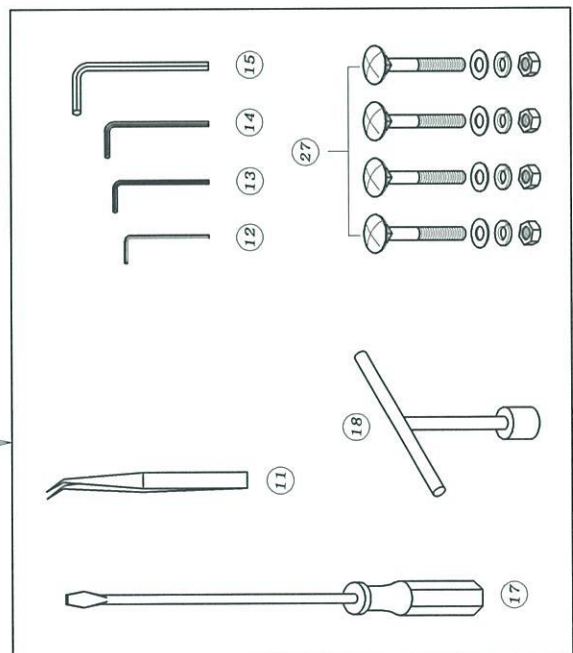




# 21. アクセサリー - ACCESSORIES

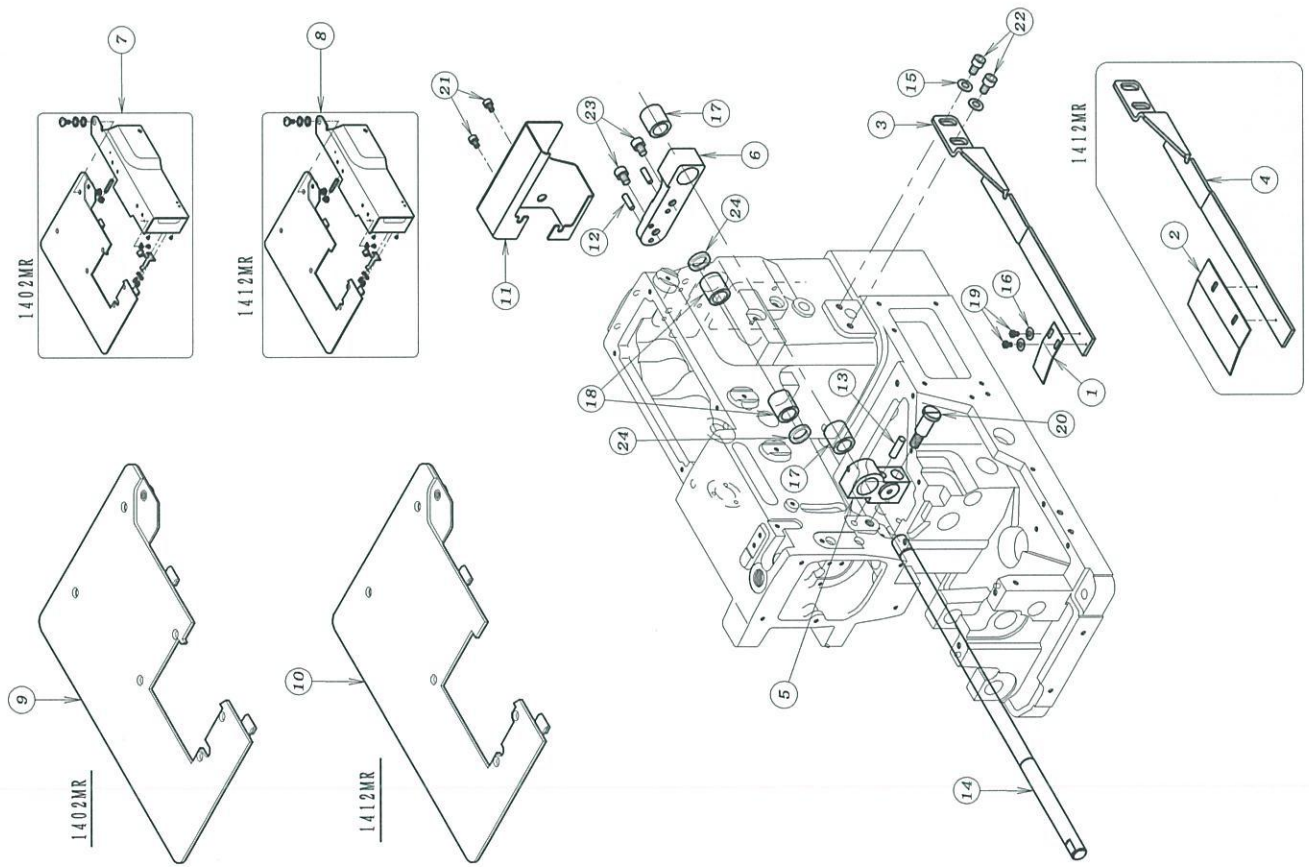


- ① PTV
- ② PSSM, PS, PSET  
PQ, PQSM  
PSSMET
- ③ 1403PSM-H
- ④ 1012
- ⑤
- ⑥ 1403P, PMD
- ⑦
- ⑧
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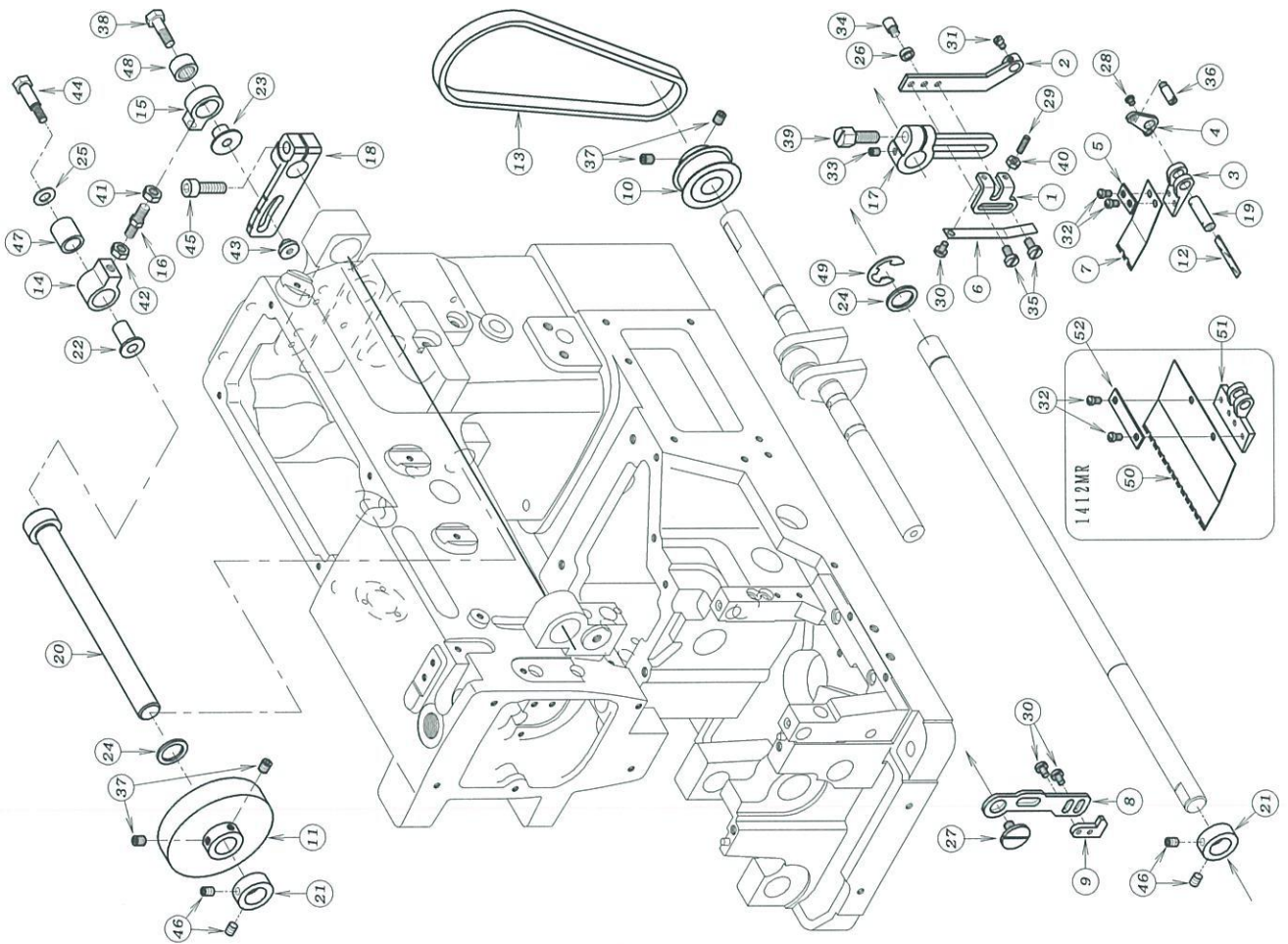
| REF. NO. | PART NO.   | 品名                   | DESCRIPTION           | QTY |
|----------|------------|----------------------|-----------------------|-----|
| 21-01    | 13-0520-5  | 針 (DVX57 #12)        | NEEDLE                | 1   |
| 21-02    | 13-0540-5  | 針 (DVX57 #14)        | NEEDLE                | 1   |
| 21-03    | 13-0580-5  | 針 (DVX57 #18)        | NEEDLE                | 1   |
| 21-04    | 13-0810-5  | 針 (DV-K25 #21)       | NEEDLE                | 1   |
| 21-05    | 13-1140-6  | 針 (UOX113 #14)       | NEEDLE                | 1   |
| 21-06    | 13-1140-7  | 針 (UYX113GS Nm90/14) | NEEDLE                | 1   |
| 21-07    | 20-0020    | 付属部品ケース              | ACCESSORIES           | 1   |
| 21-08    | 23-121     | テーパー取付コ' ΔA          | CUSHION RUBBER        | 4   |
| 21-09    | 23-122     | テーパー取付コ' ΔB          | CUSHION RUBBER        | 4   |
| 21-10    | 25-140     | タンク取付金具              | SUPPORTING BOARD      | 2   |
| 21-11    | 28-011     | ピンセット                | TWEZERS               | 1   |
| 21-12    | 28-311     | 六角レンチ 2mm            | ALLEN KEY (2mm)       | 1   |
| 21-13    | 28-312     | 六角レンチ 2.5mm          | ALLEN KEY (2.5mm)     | 1   |
| 21-14    | 28-313     | 六角レンチ 3mm            | ALLEN KEY (3mm)       | 1   |
| 21-15    | 28-314     | 六角レンチ 5mm            | ALLEN KEY (5mm)       | 1   |
| 21-16    | 28-317     | 柄付き六角レンチ 1.5mm       | ALLEN KEY (1.5mm)     | 1   |
| 21-17    | 28-452     | ドライバ (大)             | DRIVER (L)            | 1   |
| 21-18    | 28-464     | T型レンチ 10mm           | T-WRENCH              | 1   |
| 21-19    | 28-611     | オイル                  | OIL                   | 1   |
| 21-20    | 28-614     | 油差し                  | OILER                 | 1   |
| 21-21    | 28-615     | シ'ョウゴ'               | OIL FUNNEL            | 1   |
| 21-22    | 28-920     | チェーン                 | CHAIN                 | 1   |
| 21-23    | 31-163     | クッションコ' Δ            | CUSHION RUBBER        | 4   |
| 21-24    | 69-849     | φ40モーター-リ-           | φ40MOTOR PULLEY       | 1   |
| 21-25    | 69-851     | φ50モーター-リ-           | φ50MOTOR PULLEY       | 1   |
| 21-26    | 75-535     | ワッシャー                | WASHER                | 4   |
| 21-27    | 80-751     | 振角ボ'ルト               | BOLT                  | 4   |
| 21-28    | 87-104     | ネジ                   | SCREW                 | 5   |
| 21-29    | 113-1180-5 | 針 (UOX113 #18)       | NEEDLE UOX113#18      | 1   |
| 21-30    | 02-184     | 後プ-ラー上ローレット          | REAR PULLER (KNURING) | 1   |
| 21-31    | 19-405     | 針受け                  | NEEDLE GUARD          | 4   |
| 21-32    | 19-433     | ルーバ-                 | LOOPER                | 4   |
| 21-33    | 19-437     | 糸巻セルバ-               | RETAINER LOOPER       | 4   |
| 21-34    | 13-1140-0  | 針 (UY113GS Nm90)     | NEEDLE                | 1   |

22. MR専用部品 (1) MODEL MR EXCLUSIVE PARTS (1)



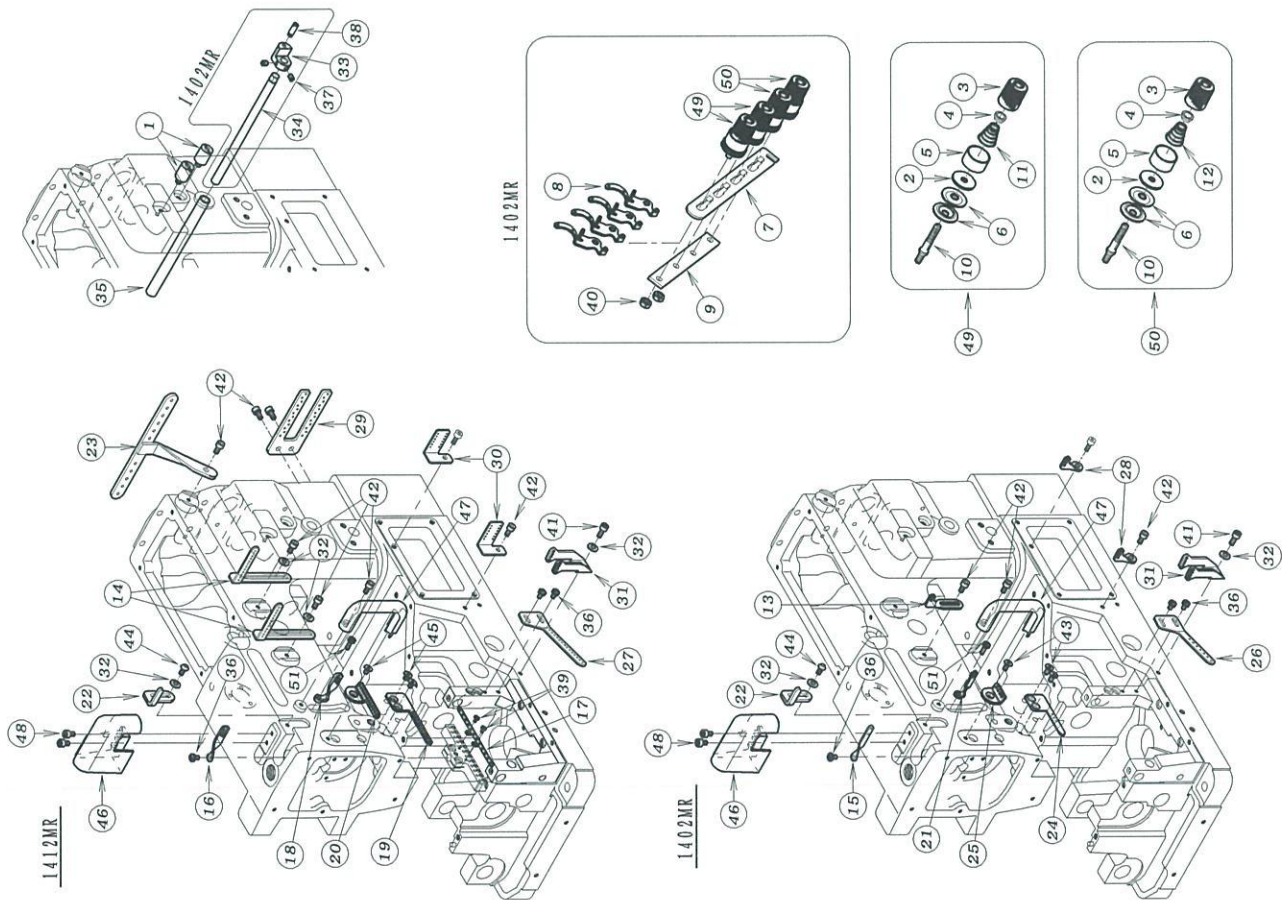
| REF. NO. | PART NO. | 品名             | DESCRIPTION       | Q'TY |
|----------|----------|----------------|-------------------|------|
| 22-01    | 06-432   | 下ハネ            | STRIPPER BLADE    | 1    |
| 22-02    | 06-433   | 下ハネ            | STRIPPER BLADE    | 1    |
| 22-03    | 06-434   | 下ハネ取付ブラケット     | BRACKET           | 1    |
| 22-04    | 06-435   | 下ハネ取付ブラケット     | BRACKET           | 1    |
| 22-05    | 06-437   | 上輪ブラケット        | BRACKET           | 1    |
| 22-06    | 06-470   | 上輪ブラケット        | BRACKET           | 1    |
| 22-07    | 20-0430  | 上ベアリングセット      | UPPER COVER ASS'Y |      |
| 22-08    | 20-0440  | 上ベアリングセット      | UPPER COVER ASS'Y |      |
| 22-09    | 27-123   | 上ベアリング (2本針用)  | CLOTH COVER       | 1    |
| 22-10    | 27-124   | 上ベアリング (12本針用) | CLOTH COVER       | 1    |
| 22-11    | 27-125   | 後カバ            | COVER             | 1    |
| 22-12    | 71-241   | テーパーピン         | TAPER PIN         | 2    |
| 22-13    | 71-263   | ピン             | PIN               | 1    |
| 22-14    | 71-761   | 主軸 (上)         | SHAFT             | 1    |
| 22-15    | 75-452   | ワッシャー          | WASHER            | 2    |
| 22-16    | 75-455   | ワッシャー          | WASHER            | 2    |
| 22-17    | 81-108   | ブッシュ           | BUSHING           | 2    |
| 22-18    | 81-431   | ブッシュ           | BUSHING           | 2    |
| 22-19    | 84-161   | ネジ             | SCREW             | 2    |
| 22-20    | 85-674   | 段ネジ            | SCREW             | 1    |
| 22-21    | 87-092   | 六角穴付きボルト       | BOLT              | 2    |
| 22-22    | 87-203   | 六角穴付きボルト       | BOLT              | 2    |
| 22-23    | 87-255   | 六角穴付きボルト       | BOLT              | 2    |
| 22-24    | 94-214   | オイルシール         | OIL SEAL          | 2    |

23. MR 専用部品 (2) MODEL MR EXCLUSIVE PARTS (2)



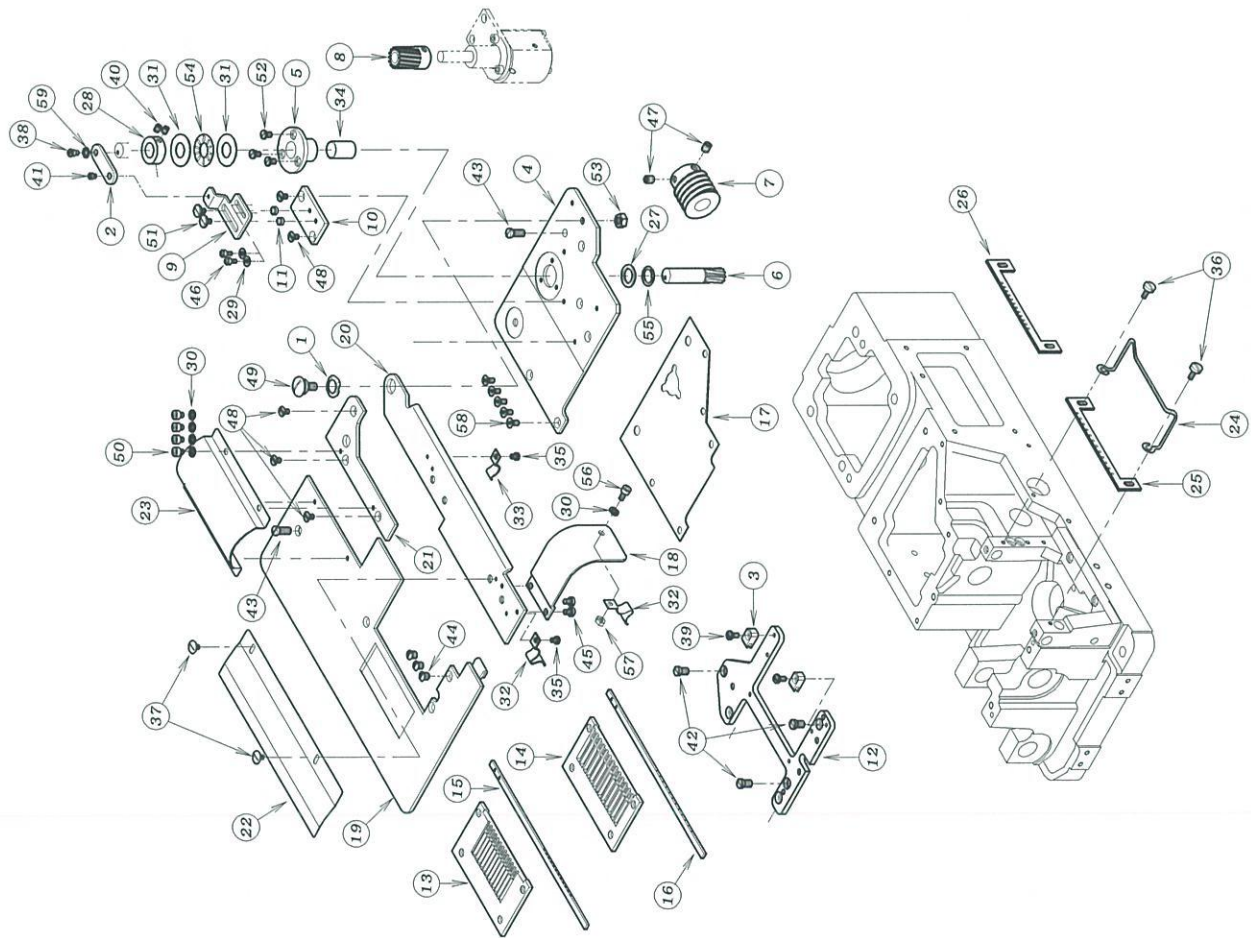
| REF. NO. | PART NO. | 品名            | DESCRIPTION    | Q'TY |
|----------|----------|---------------|----------------|------|
| 23-01    | 06-406   | 板ハ、ネ調整レート     | PLATE          | 1    |
| 23-02    | 06-408   | ヒダ、取リレハ、-     | LEVER          | 1    |
| 23-03    | 06-409   | 突板取付フ、ロック     | BRACKET        | 1    |
| 23-04    | 06-410   | フ、ツシユレハ、-     | PLATE          | 1    |
| 23-05    | 06-411   | 板ハ、ネ押え板       | PLATE          | 1    |
| 23-06    | 06-412   | 板ハ、ネ          | FLAT SPRING    | 1    |
| 23-07    | 06-431   | 突板            | RUFFLER BLADE  | 1    |
| 23-08    | 06-438   | 突板調整レハ、-      | PLATE          | 1    |
| 23-09    | 06-439   | 押出フ、レート       | PLATE          | 1    |
| 23-10    | 06-471   | タイミンクプ、リー     | TIMING PULLEY  | 1    |
| 23-11    | 06-472   | タイミンクプ、リー     | TIMING PULLEY  | 1    |
| 23-12    | 23-341   | フェルト          | FELT           | 1    |
| 23-13    | 58-410   | タイミンクベルト      | TIMING BELT    | 1    |
| 23-14    | 63-409   | 送りダ、ルマ        | BRACKET        | 1    |
| 23-15    | 63-410   | 送りダ、ルマ        | BRACKET        | 1    |
| 23-16    | 65-402   | 連結棒           | CONNECTING BAR | 1    |
| 23-17    | 67-410   | ヒダ、取リ-A       | LEVER          | 1    |
| 23-18    | 67-427   | 主軸調整レハ、-      | LEVER          | 1    |
| 23-19    | 71-434   | シャフト          | SHAFT          | 1    |
| 23-20    | 71-762   | ヒダ取リドライブ軸 (3) | SHAFT          | 2    |
| 23-21    | 75-112   | カラ            | COLLAR         | 1    |
| 23-22    | 75-235   | 送りダ、ルマローラ     | ROLLER         | 1    |
| 23-23    | 75-244   | リンクローラ        | LINK ROLLER    | 1    |
| 23-24    | 75-332   | ワッシャ          | WASHER         | 2    |
| 23-25    | 75-452   | ワッシャ          | WASHER         | 1    |
| 23-26    | 75-942   | ワッシャ          | WASHER         | 1    |
| 23-27    | 84-103   | 段ネジ           | SCREW          | 1    |
| 23-28    | 84-163   | ネジ            | SCREW          | 1    |
| 23-29    | 84-313   | ネジ            | SCREW          | 1    |
| 23-30    | 84-361   | ネジ            | SCREW          | 3    |
| 23-31    | 84-365   | ネジ            | SCREW          | 1    |
| 23-32    | 84-379   | ネジ            | SCREW          | 2    |
| 23-33    | 84-521   | ネジ            | SCREW          | 1    |
| 23-34    | 84-561   | ネジ            | SCREW          | 1    |
| 23-35    | 84-571   | ネジ            | SCREW          | 2    |
| 23-36    | 84-573   | 段ネジ           | SCREW          | 1    |
| 23-37    | 84-718   | ネジ            | SCREW          | 4    |
| 23-38    | 84-831   | 針振り連結ダ、ルマ止めネジ | SCREW          | 1    |
| 23-39    | 85-210   | ボ、ルト          | BOLT           | 1    |
| 23-40    | 86-211   | ナット           | NUT            | 1    |
| 23-41    | 86-411   | ナット           | NUT            | 1    |
| 23-42    | 86-412   | ナット           | NUT            | 1    |
| 23-43    | 86-481   | 針振り連結ダ、ルマナット  | NUT            | 1    |
| 23-44    | 87-019   | 六角頭付段ネジ       | SCREW          | 1    |
| 23-45    | 87-173   | 六角穴付きボルト      | BOLT           | 1    |
| 23-46    | 87-254   | ネジ            | SCREW          | 4    |
| 23-47    | 91-270   | ニート、ルハ、アリク    | BEARING        | 1    |
| 23-48    | 91-409   | ニート、ルハ、アリク    | BEARING        | 1    |
| 23-49    | 93-203   | E 型止め輪        | E-RING         | 1    |
| 23-50    | 06-415   | 突板            | RUFFLER BLADE  | 1    |
| 23-51    | 06-416   | 突板取付フ、ロック     | BRACKET        | 1    |
| 23-52    | 06-418   | 板ハ、ネ押え板       | PLATE          | 1    |

24. MR専用部品 (3) MODEL MR EXCLUSIVE PARTS (3)



| REF. NO. | PART NO. | 品名                             | DESCRIPTION           | QTY |
|----------|----------|--------------------------------|-----------------------|-----|
| 24-01    | 01-816   | 支柱ネジ                           | SCREW                 | 2   |
| 24-02    | 23-324   | フェルト                           | FELT                  | 4   |
| 24-03    | 41-104   | チャンボン皿小ケース                     | THREAD TENSION NUT    | 4   |
| 24-04    | 41-105   | チャンボン皿ワレット                     | SPRING POST           | 4   |
| 24-05    | 41-106   | 大ケース                           | SPRING CUP            | 4   |
| 24-06    | 41-509   | チャンボ <sup>®</sup> シ皿           | TENSION DISC          | 8   |
| 24-07    | 41-113   | チャンボ <sup>®</sup> シ皿調子板        | TENSION POST SUPPORT  | 1   |
| 24-08    | 41-120   | チャンボ <sup>®</sup> シ皿糸道         | THREAD EYELET         | 4   |
| 24-09    | 41-121   | チャンボ <sup>®</sup> シ皿筋元板        | TENSION POST HOLDER   | 1   |
| 24-10    | 41-510   | 調子棒                            | SCREW STUD            | 4   |
| 24-11    | 41-701   | チャンボン調子パネ (強)                  | SPRING (HEAVY)        | 2   |
| 24-12    | 41-702   | チャンボン調子パネ (弱)                  | SPRING (LIGHT)        | 2   |
| 24-13    | 45-101   | 糸道                             | THREAD EYELET         | 1   |
| 24-14    | 45-107   | 糸道                             | THREAD EYELET         | 2   |
| 24-15    | 45-131   | 糸道                             | THREAD EYELET         | 1   |
| 24-16    | 45-237   | 糸道                             | THREAD EYELET         | 1   |
| 24-17    | 45-238   | 針株糸道                           | NEEDLE THREAD         | 1   |
| 24-18    | 45-261   | 12本弓糸道                         | THREAD EYELET         | 1   |
| 24-19    | 45-262   | 12本針糸道 (F)                     | THREAD EYELET         | 1   |
| 24-20    | 45-263   | 12本針糸道                         | THREAD EYELET         | 1   |
| 24-21    | 45-264   | 2本弓糸道                          | THREAD EYELET         | 1   |
| 24-22    | 45-429   | 上糸受け                           | THREAD TAKE-UP PLATE  | 1   |
| 24-23    | 45-437   | 上糸糸道                           | THREAD EYELET         | 1   |
| 24-24    | 45-442   | 上糸糸道 (F)                       | THREAD EYELET         | 1   |
| 24-25    | 45-550   | 針糸道                            | THREAD EYELET         | 1   |
| 24-26    | 47-117   | 下糸棚き案内糸道                       | THREAD EYELET         | 1   |
| 24-27    | 47-120   | 下糸棚き案内糸道                       | THREAD EYELET         | 1   |
| 24-28    | 47-166   | 糸道                             | THREAD EYELET         | 2   |
| 24-29    | 47-408   | 糸道                             | THREAD EYELET         | 1   |
| 24-30    | 47-409   | 糸道                             | THREAD EYELET         | 2   |
| 24-31    | 47-413   | 下糸棚き糸道                         | THREAD EYELET         | 1   |
| 24-32    | 75-455   | ワッシャー                          | WASHER                | 2~4 |
| 24-33    | 77-102   | 丸駒                             | BRACKET               | 1   |
| 24-34    | 77-111   | 押え揚げ軸                          | SHAFT                 | 1   |
| 24-35    | 77-165   | ハ <sup>®</sup> イプ <sup>®</sup> | PIPE                  | 1   |
| 24-36    | 84-361   | ネジ                             | SCREW                 | 3   |
| 24-37    | 84-521   | ネジ                             | SCREW                 | 2   |
| 24-38    | 84-573   | 段ネジ                            | SCREW                 | 1   |
| 24-39    | 85-613   | ネジ                             | SCREW                 | 2   |
| 24-40    | 86-411   | ナット                            | NUT                   | 2   |
| 24-41    | 87-113   | 六角穴付きボルト                       | BOLT                  | 1   |
| 24-42    | 87-177   | 六角穴付きボルト                       | BOLT                  | 3~7 |
| 24-43    | 87-269   | ネジ                             | SCREW                 | 3   |
| 24-44    | 87-272   | ネジ                             | SCREW                 | 1   |
| 24-45    | 87-293   | ネジ                             | SCREW                 | 3   |
| 24-46    | 21-934   | 針糸道カハ <sup>®</sup> -           | COVER                 | 1   |
| 24-47    | 21-935   | 弓糸道カハ <sup>®</sup> -           | COVER                 | 1   |
| 24-48    | 87-092   | 六角穴付きボルト                       | BOLT                  | 2   |
| 24-49    | 40-7370  | チャンボ <sup>®</sup> シ皿強セット       | TENSION ASS'Y (HEAVY) | 2   |
| 24-50    | 40-7380  | チャンボ <sup>®</sup> シ皿弱セット       | TENSION ASS'Y (LIGHT) | 2   |
| 24-51    | 184-363  | 平小ねじ 平先                        | SCREW                 | 1   |

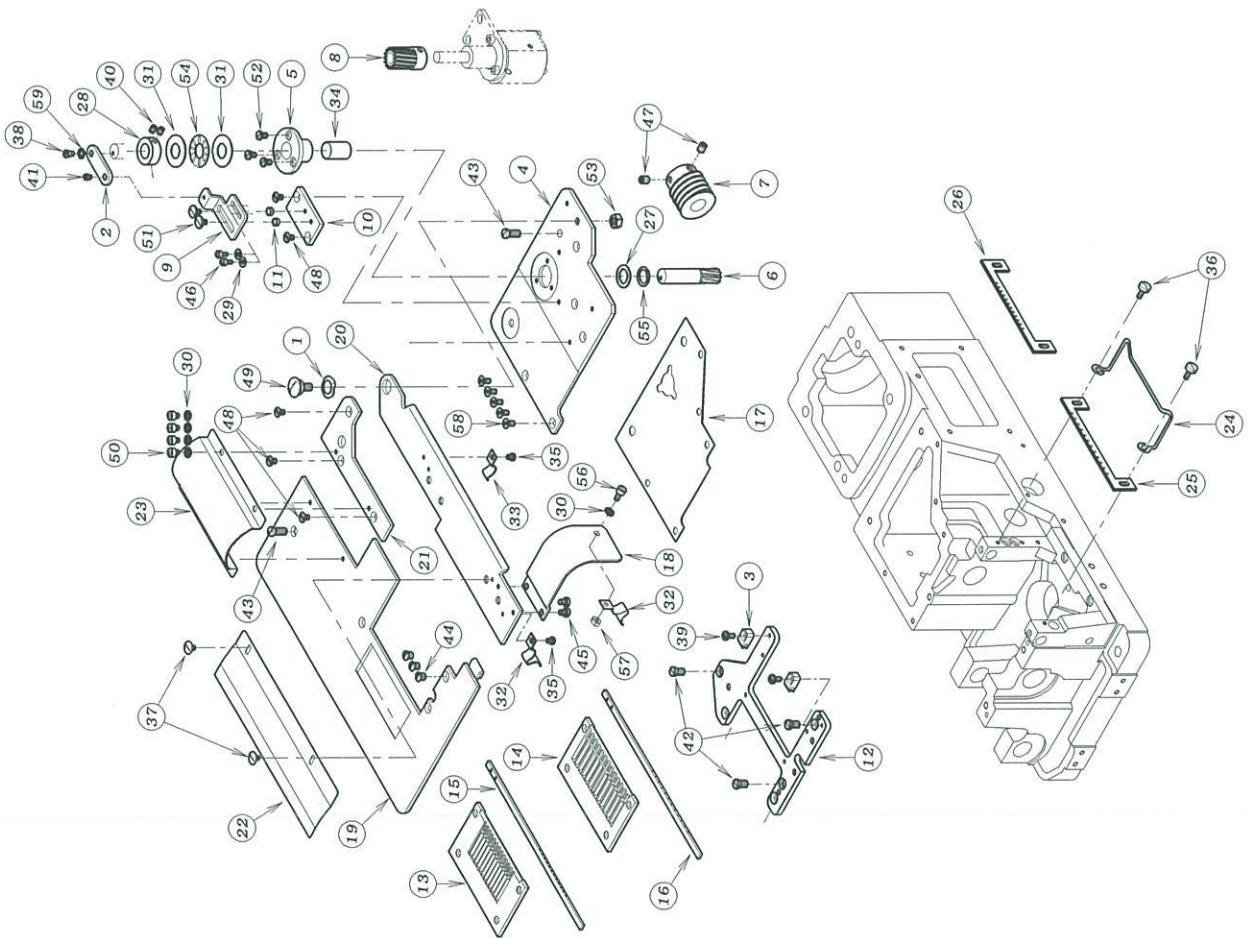
25-1. PQ専用部品 MODEL PQ EXCLUSIVE PARTS



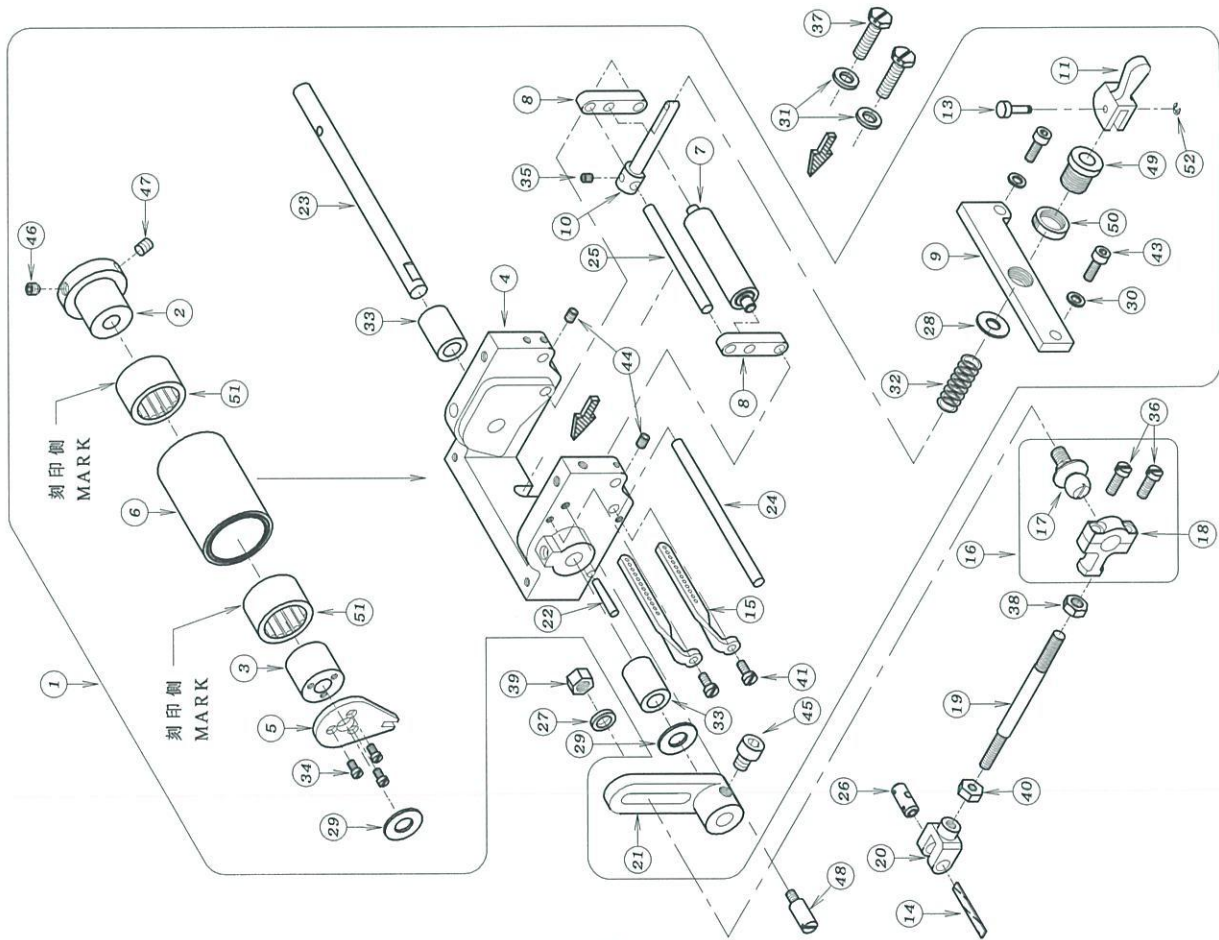
| REF. NO. | PART NO. | 品名            | DESCRIPTION            | QTY |
|----------|----------|---------------|------------------------|-----|
| 25-01    | 02-112   | 波ワッシャー        | WASHER                 | 1   |
| 25-02    | 04-405   | 片メカネ          | LINK                   | 1   |
| 25-03    | 04-460   | ルーハカイト        | GUIDE                  | 2   |
| 25-04    | 04-461   | 上油カハ          | COVER                  | 1   |
| 25-05    | 04-462   | 軸受け           | HOUSING                | 1   |
| 25-06    | 04-463   | PQギヤ          | GEAR                   | 1   |
| 25-07    | 04-464   | ホソ7°駆動ギヤ      | GEAR                   | 1   |
| 25-08    | 04-465   | ホソ7°ギヤ        | GEAR                   | 1   |
| 25-09    | 04-466   | ルーハ取付台        | BRACKET                | 1   |
| 25-10    | 04-467   | スライダカイト       | GUIDE PLATE            | 1   |
| 25-11    | 05-430   | カイトローラ(小)     | GUIDE ROLLER(S)        | 2   |
| 25-12    | 14-161   | 針板土台          | NEEDLE SUPPORT BRACKET | 1   |
| 25-13    | 14-468   | 針板(3/16)      | NEEDLE PLATE           | 1   |
| 25-14    | 14-469   | 針板(1/4)       | NEEDLE PLATE           | 1   |
| 25-15    | 19-476   | コメ糸用ルーハ(3/16) | RETAINER               | 1   |
| 25-16    | 19-477   | コメ糸用ルーハ(1/4)  | RETAINER               | 1   |
| 25-17    | 23-240   | 上油ハッセン        | GASKET                 | 1   |
| 25-18    | 27-047   | 前プラーカハ        | COVER                  | 1   |
| 25-19    | 27-057   | 上ヘスカハ         | UPPER COVER            | 1   |
| 25-20    | 27-058   | 前ヘスカハ         | FRONT COVER            | 1   |
| 25-21    | 27-059   | 上ヘス補助カハ       | PLATE                  | 1   |
| 25-22    | 27-060   | 前ヘスカハ、プレート    | COVER                  | 1   |
| 25-23    | 27-061   | エキセンカハ        | COVER                  | 1   |
| 25-24    | 45-242   | コメ糸カイト        | THREAD GUIDE           | 1   |
| 25-25    | 45-401   | コメ糸案内糸道(1/4)  | THREAD EYELET          | 1   |
| 25-26    | 45-402   | コメ糸案内糸道(3/16) | THREAD EYELET          | 1   |
| 25-27    | 75-187   | ワッシャ          | WASHER                 | 1   |
| 25-28    | 75-189   | カラー           | COLLAR                 | 1   |
| 25-29    | 75-224   | ワッシャ          | WASHER                 | 2   |
| 25-30    | 75-468   | ワッシャ          | WASHER                 | 5   |
| 25-31    | 75-901   | ワッシャ          | WASHER                 | 2   |
| 25-32    | 79-521   | 板ハネ(A)        | PLATE SPRING (A)       | 2   |
| 25-33    | 79-522   | 板ハネ           | SPRING                 | 1   |
| 25-34    | 81-436   | ブッシュ          | BUSHING                | 1   |
| 25-35    | 84-364   | ネジ            | SCREW                  | 2   |
| 25-36    | 84-368   | ネジ            | SCREW                  | 2   |
| 25-37    | 84-370   | ネジ            | SCREW                  | 2   |
| 25-38    | 84-372   | 段ネジ           | SCREW                  | 1   |
| 25-39    | 84-374   | ネジ            | SCREW                  | 2   |
| 25-40    | 84-521   | ネジ            | SCREW                  | 2   |
| 25-41    | 84-398   | 段ネジ           | SCREW                  | 1   |
| 25-42    | 84-761   | ネジ            | SCREW                  | 3   |
| 25-43    | 84-763   | ネジ            | SCREW                  | 2   |
| 25-44    | 84-862   | ネジ            | SCREW                  | 3   |
| 25-45    | 87-098   | ネジ            | SCREW                  | 2   |
| 25-46    | 87-123   | 六角穴付きボルト      | BOLT                   | 2   |
| 25-47    | 87-172   | ネジ            | SCREW                  | 2   |
| 25-48    | 87-261   | ネジ            | SCREW                  | 5   |
| 25-49    | 87-280   | ネジ            | SCREW                  | 1   |
| 25-50    | 87-287   | 六角穴付きボルト      | BOLT                   | 4   |
| 25-51    | 87-412   | ネジ            | SCREW                  | 2   |
| 25-52    | 87-415   | ネジ            | SCREW                  | 3   |
| 25-53    | 88-166   | ナット           | NUT                    | 1   |
| 25-54    | 92-233   | スタストベアリング     | BEARING                | 1   |
| 25-55    | 93-266   | 軸用C形止め輪       | C-RING                 | 1   |
| 25-56    | 87-177   | 六角穴付きボルト      | BOLT                   | 1   |

25-2. PQ専用部品 MODEL PQ EXCLUSIVE PARTS

| REF. NO. | PART NO. | 品名    | DESCRIPTION | QTY |
|----------|----------|-------|-------------|-----|
| 25-57    | 88-146   | ナット   | NUT         | 1   |
| 25-58    | 87-269   | ネジ    | SCREW       | 5   |
| 25-59    | 75-457   | ワッシャー | WASHER      | 1   |



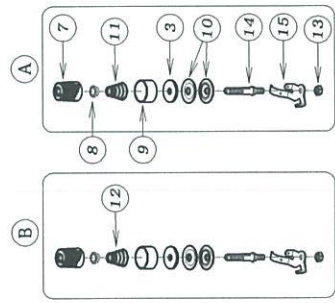
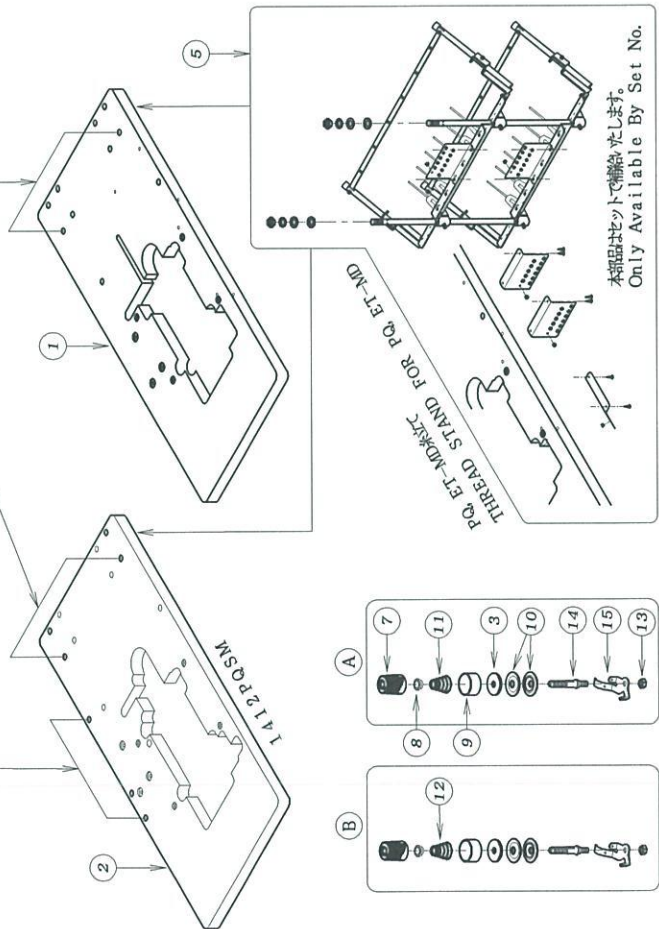
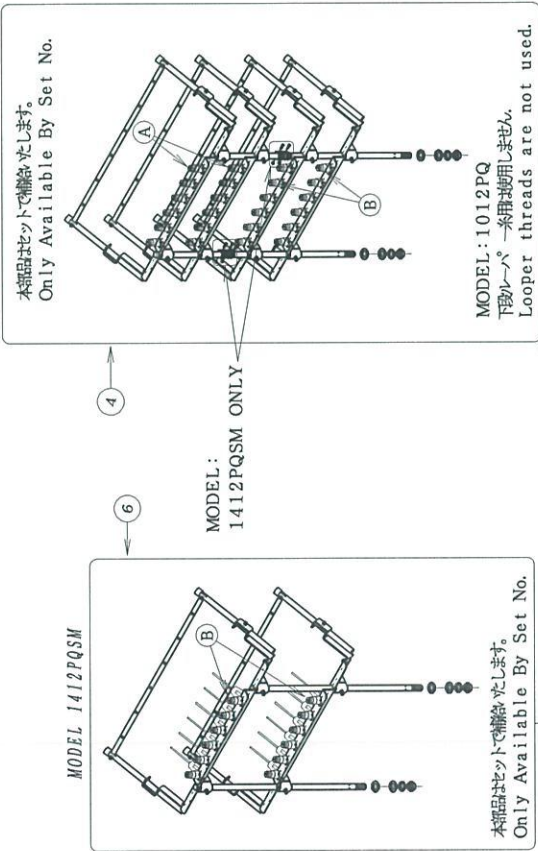
26. PQ, ET-MD専用部品 (2) MODEL PQ, ET-MD EXCLUSIVE PARTS (2)



| REF. NO. | PART NO. | 品名              | DESCRIPTION             | QTY |
|----------|----------|-----------------|-------------------------|-----|
| 26-01    | 00-1407  | PMD装置(組)        | METERING DEVICE ASS'Y   | 1   |
| 26-02    | 01-102   | フタ側スリーブ         | SLEEVE                  | 1   |
| 26-03    | 01-103   | 連結板側スリーブ        | SLEEVE                  | 1   |
| 26-04    | 01-111   | 前フーラー土台         | BRACKET                 | 1   |
| 26-05    | 01-116   | 前フーラー回り止め蓋      | PLATE                   | 1   |
| 26-06    | 01-165   | スムーズ(大)         | SMOOTH PULLER (LARGE)   | 1   |
| 26-07    | 01-167   | 前フーラー小ローラー      | FEED ROLLER (SMOOTH)    | 1   |
| 26-08    | 01-136   | 前フーラー小ローラー取付け金具 | ROLLER HOLDER           | 2   |
| 26-09    | 01-141   | 前フーラー締め金具       | RUBBER TIGHTENER        | 1   |
| 26-10    | 01-143   | 小ローラー締め金具       | ROLLER CONTROLLER       | 1   |
| 26-11    | 01-145   | ワシワシ レハ         | LEVER                   | 1   |
| 26-12    |          |                 |                         |     |
| 26-13    | 01-147   | レハ-連結ピン         | PIN                     | 1   |
| 26-14    | 23-341   | フェルト            | FELT                    | 1   |
| 26-15    | 45-127   | 糸道              | THREAD EYELET           | 2   |
| 26-16    | 60-8271  | 連結ロッドセット        | CONNECTING ROD ASS'Y    | 1   |
| 26-17    | 61-821   | ロッド玉            | CONNECTING ROD BALL     | 1   |
| 26-18    | 63-812   | 連結ロッド左          | BALL JOINT              | 1   |
| 26-19    | 65-334   | 前フーラー-連結棒       | PULLER CONNECTING BAR   | 1   |
| 26-20    | 66-131   | 連結片メカネ          | CONNECTING LINK         | 1   |
| 26-21    | 67-180   | 前フーラー-連結レハ      | PULLER CONNECTING LEVER | 1   |
| 26-22    | 71-227   | テハ-ピン           | PIN                     | 1   |
| 26-23    | 71-350   | 前フーラー土台シャフト     | SHAFT                   | 1   |
| 26-24    | 71-361   | 案内棒大            | PIVOT SHAFT (LARGE)     | 1   |
| 26-25    | 71-362   | 案内棒小            | PIVOT SHAFT (SMALL)     | 1   |
| 26-26    | 71-432   | メカネピン           | FEED ROCKER LINK PIN    | 1   |
| 26-27    | 75-381   | ワシワシ            | WASHER                  | 1   |
| 26-28    | 75-446   | ワシワシ            | WASHER                  | 1   |
| 26-29    | 75-451   | ワシワシ            | WASHER                  | 2   |
| 26-30    | 75-468   | ワシワシ            | WASHER                  | 2   |
| 26-31    | 75-552   | ワシワシ            | WASHER                  | 2   |
| 26-32    | 79-171   | 圧縮バネ            | SPRING                  | 1   |
| 26-33    | 81-125   | ブッシュ            | BUSHING                 | 2   |
| 26-34    | 84-162   | ネジ              | SCREW                   | 3   |
| 26-35    | 84-314   | ネジ              | SCREW                   | 1   |
| 26-36    | 84-635   | ネジ              | SCREW                   | 2   |
| 26-37    | 84-813   | ネジ              | SCREW                   | 2   |
| 26-38    | 86-412   | ナット             | NUT                     | 1   |
| 26-39    | 86-501   | ナット             | NUT                     | 1   |
| 26-40    | 86-701   | ナット             | NUT                     | 1   |
| 26-41    | 87-010   | ネジ              | SCREW                   | 2   |
| 26-42    |          |                 |                         |     |
| 26-43    | 87-129   | 六角穴付きボルト        | BOLT                    | 2   |
| 26-44    | 87-181   | ネジ              | SCREW                   | 2   |
| 26-45    | 87-255   | 六角穴付きボルト        | BOLT                    | 1   |
| 26-46    | 87-253   | ネジ              | SCREW                   | 1   |
| 26-47    | 87-254   | ネジ              | SCREW                   | 1   |
| 26-48    | 87-310   | カハ-ストップネジ       | SCREW                   | 1   |
| 26-49    | 87-456   | 調節ネジ            | SCREW                   | 1   |
| 26-50    | 88-456   | ナット             | NUT                     | 1   |
| 26-51    | 91-405   | ワシワシ            | BEARING                 | 2   |
| 26-52    | 93-200   | ストップリング         | E-RING                  | 1   |

27. PQ, ET-MD専用部品 (3) MODEL PQ, ET-MD EXCLUSIVE PARTS (3)

MODEL 1412PQ, 1412PQSM, 1012PQ



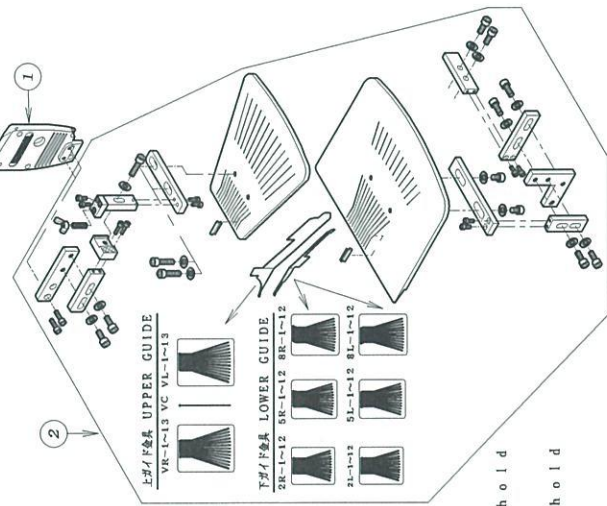
| REF. NO. | PART NO. | 品名            | DESCRIPTION                 | QTY |
|----------|----------|---------------|-----------------------------|-----|
| 27-01    | 21-040   | テーブル          | TABLE                       | 1   |
| 27-02    | 21-054   | テーブル          | TABLE                       | 1   |
| 27-03    | 23-324   | フェルト          | FELT                        | *   |
| 27-04    | 40-6501  | 24本立てセット      | THREAD STAND FOR MODEL 1412 | 1   |
| 27-05    | 40-6503  | 12本立てセット (PQ) | THREAD STAND FOR MODEL PQ   | 1   |
| 27-06    | 40-6504  | 12本立て (PSM)   | THREAD STAND FOR MODEL PSM  | 1   |
| 27-07    | 41-104   | チャンポン皿カバー     | THREAD TENSION NUT          | *   |
| 27-08    | 41-105   | チャンポン皿ラチェット   | SPRING POST                 | *   |
| 27-09    | 41-106   | カバー           | SPRING CUP                  | *   |
| 27-10    | 41-509   | チャンポン皿        | TENSION DISC                | *   |
| 27-11    | 41-701   | チャンポン調子バネ (強) | SPRING (HEAVY)              | 12  |
| 27-12    | 41-702   | チャンポン調子バネ (弱) | SPRING (LIGHT)              | *   |
| 27-13    | 88-157   | ナット           | NUT                         | *   |
| 27-14    | 41-522   | 調子棒中          | SCREW STUD                  | *   |
| 27-15    | 41-524   | チャンポン皿糸道      | THREAD EYELET               | *   |



28. PTV専用部品 MODEL PTV EXCLUSIVE PARTS

| REF. NO. | PART NO.  | 品名                   | DESCRIPTION                     | QTY |
|----------|-----------|----------------------|---------------------------------|-----|
| 28-01    | 27-020    | 面版                   | HEAD COVER                      | 1   |
| 28-02    | 97-4150-0 | ホルダー-セット             | HOLDER ASS'Y                    | 1   |
| 28-03    | 97-4140-0 | 1412PTV-I-3/16-6ホルダー | HOLDER ASS'Y (1412PTV-I-3/16-6) | 1   |
| 28-04    | 97-4141-0 | 1406PTV-I-3/8-11ホルダー | HOLDER ASS'Y (1406PTV-I-3/8-11) | 1   |
| 28-05    | 97-4142-0 | 1412PTV-I-1/4-8ホルダー  | HOLDER ASS'Y (1412PTV-I-1/4-8)  | 1   |
| 28-06    | 97-4143-0 | 1406PTV-I-1/2-14ホルダー | HOLDER ASS'Y (1406PTV-I-1/2-14) | 1   |

\* PTV-Iのホルダー-セットには、押エも同梱されています。  
 \* It is included special presser foot for PTV-I in PTV-I folder set.



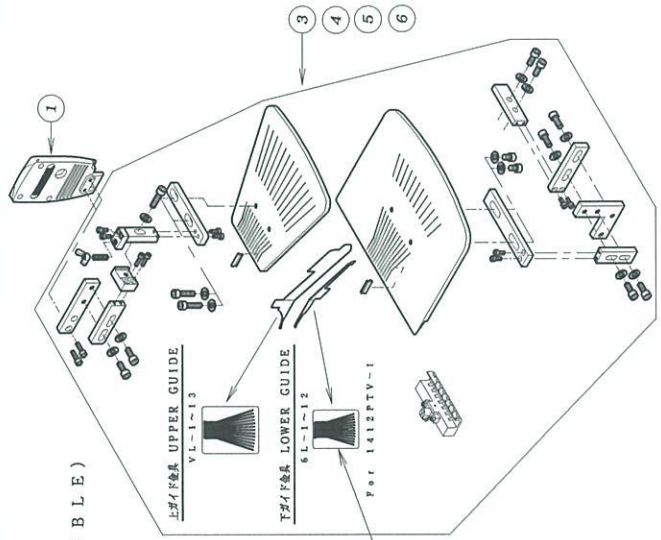
PTV

R=Right side hold

(右側)

L=Left side hold

(左側)

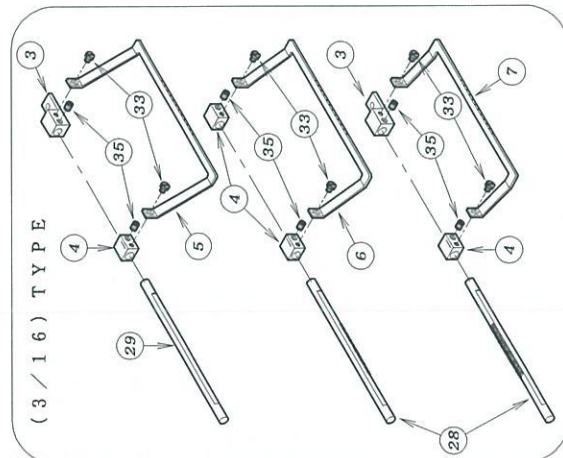
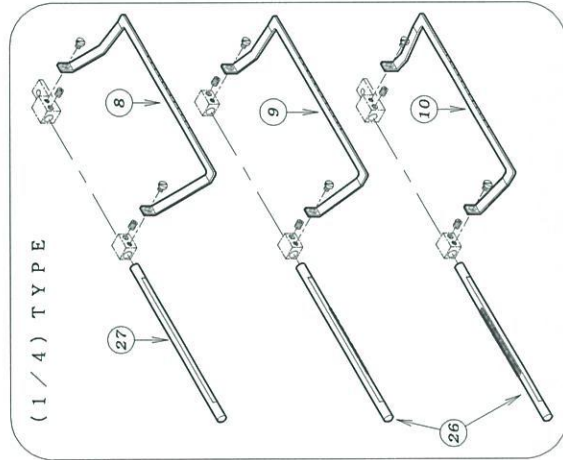
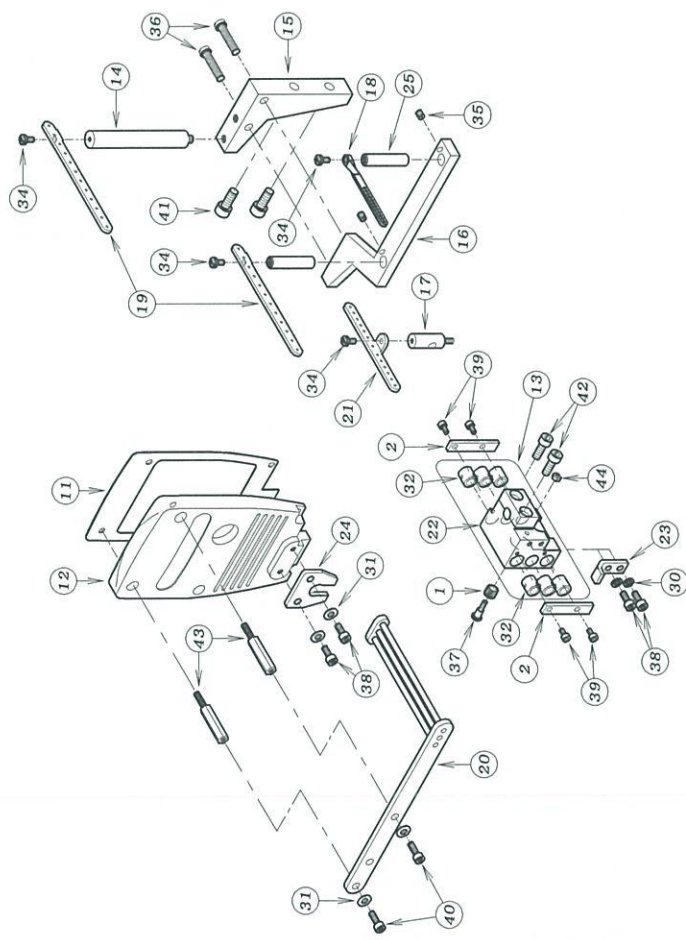


PTV-I

(FOR INVISIBLE)

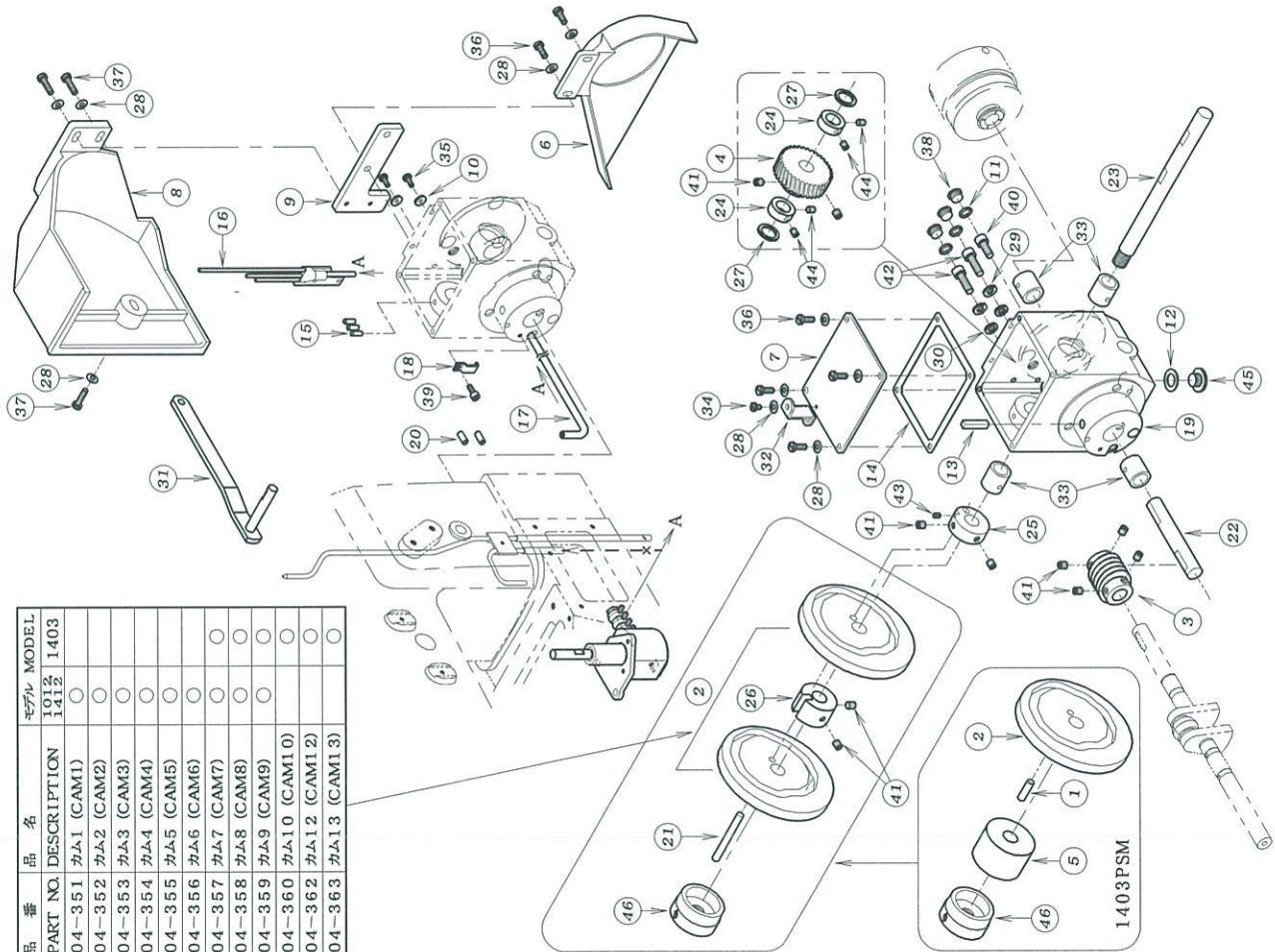
29. PSM専用部品 (1) MODEL PSM EXCLUSIVE PARTS (1)

| REF. NO. | PART NO.  | 品名              | DESCRIPTION        | QTY |
|----------|-----------|-----------------|--------------------|-----|
| 29-01    | 04-328    | ヒ・ニオン           | PINION             | 1   |
| 29-02    | 04-414    | ストップ            | STOPPER            | 2   |
| 29-03    | 04-416    | フック付ラケット        | BRACKET            | 2   |
| 29-04    | 04-417    | ルーパ-フ・ラケット      | BRACKET            | 4   |
| 29-05    | 04-418    | 飾り糸ルーパ-C (3/16) | SPREADER C (3/16)  | 1   |
| 29-06    | 04-419    | 飾り糸ルーパ-B (3/16) | SPREADER B (3/16)  | 1   |
| 29-07    | 04-420    | 飾り糸ルーパ-A (3/16) | SPREADER A (3/16)  | 1   |
| 29-08    | 04-421    | 飾り糸ルーパ-C (1/4)  | SPREADER C (1/4)   | 1   |
| 29-09    | 04-422    | 飾り糸ルーパ-B (1/4)  | SPREADER B (1/4)   | 1   |
| 29-10    | 04-423    | 飾り糸ルーパ-A (1/4)  | SPREADER A (1/4)   | 1   |
| 29-11    | 23-158    | ハネッセン           | GASKET             | 1   |
| 29-12    | 27-019    | 面版              | HEAD COVER         | 1   |
| 29-13    | 69-3240-2 | フックハウジングセット     | RACK HOUSING ASS'Y | 1   |
| 29-14    | 41-341    | 糸道取付棒           | BAR                | 1   |
| 29-15    | 41-439    | フ・ラケット          | BRACKET            | 1   |
| 29-16    | 41-461    | フ・ラケット          | BRACKET            | 1   |
| 29-17    | 41-462    | 糸道取付棒           | BAR                | 1   |
| 29-18    | 45-432    | 糸道              | THREAD EYELET      | 1   |
| 29-19    | 45-342    | 糸道              | THREAD EYELET      | 2   |
| 29-20    | 45-343    | 飾り糸カイト          | THREAD GUIDE       | 1   |
| 29-21    | 45-344    | 糸道              | THREAD EYELET      | 1   |
| 29-22    | 69-324    | フックハウジ'ソク'      | RACK HOUSING       | 1   |
| 29-23    | 69-325    | 回り止めフ・レ-ト       | PLATE              | 1   |
| 29-24    | 69-326    | フックハウジ'ソク' 回り止め | GUIDE PLATE        | 1   |
| 29-25    | 71-370    | 糸道取付棒           | PIN                | 2   |
| 29-26    | 71-457    | フック             | RACK SHAFT         | 2   |
| 29-27    | 71-458    | ルーパ-シャフト        | LOOPER SHAFT       | 1   |
| 29-28    | 71-459    | フック             | RACK SHAFT         | 2   |
| 29-29    | 71-460    | ルーパ-シャフト        | LOOPER SHAFT       | 1   |
| 29-30    | 75-410    | スプ・リンク'ワッシャ     | SPRING WASHER      | 2   |
| 29-31    | 75-455    | ワッシャ            | WASHER             | 4   |
| 29-32    | 81-435    | フ・ッシュ           | BUSHING            | 6   |
| 29-33    | 84-364    | ネジ              | SCREW              | 6   |
| 29-34    | 84-374    | ネジ              | SCREW              | 4   |
| 29-35    | 84-521    | ネジ              | SCREW              | 8   |
| 29-36    | 84-765    | ネジ              | SCREW              | 2   |
| 29-37    | 87-068    | 段ネジ             | SCREW              | 1   |
| 29-38    | 87-113    | 六角穴付きボルト        | BOLT               | 4   |
| 29-39    | 87-123    | 六角穴付きボルト        | BOLT               | 4   |
| 29-40    | 87-129    | 六角穴付きボルト        | BOLT               | 2   |
| 29-41    | 87-171    | 六角穴付きボルト        | BOLT               | 2   |
| 29-42    | 87-224    | 六角穴付きボルト        | BOLT               | 2   |
| 29-43    | 87-309    | 支柱ネジ            | SCREW              | 2   |
| 29-44    | 88-137    | ナット             | NUT                | 1   |



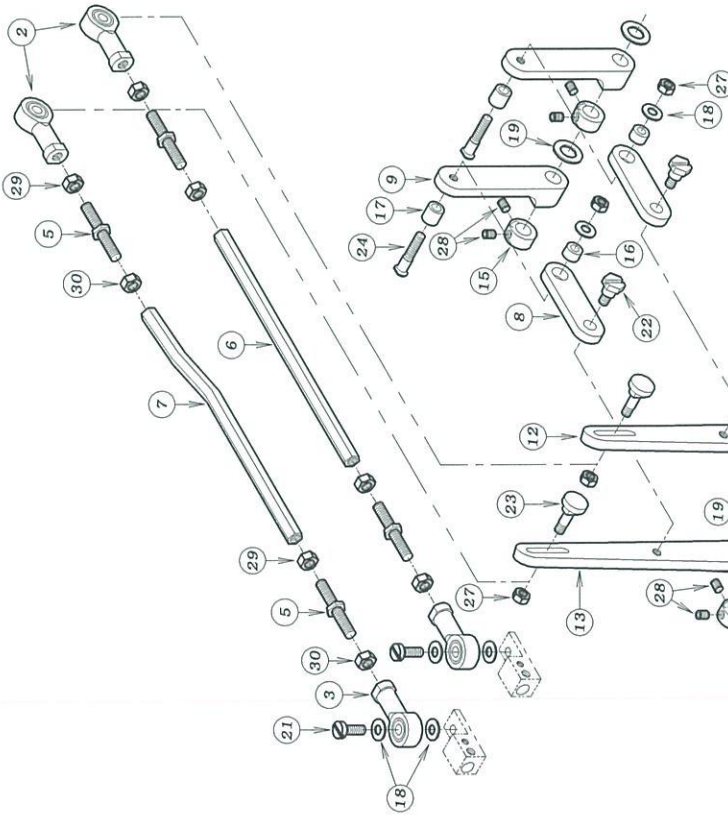
30. PSM専用部品 (2) MODEL PSM EXCLUSIVE PARTS (2)

| 品番       | 品名           | モデル  | MODEL |
|----------|--------------|------|-------|
| PART NO. | DESCRIPTION  | 1012 | 1403  |
| 04-351   | カA1 (CAM1)   | ○    |       |
| 04-352   | カA2 (CAM2)   | ○    |       |
| 04-353   | カA3 (CAM3)   | ○    |       |
| 04-354   | カA4 (CAM4)   | ○    |       |
| 04-355   | カA5 (CAM5)   | ○    |       |
| 04-356   | カA6 (CAM6)   | ○    |       |
| 04-357   | カA7 (CAM7)   | ○    |       |
| 04-358   | カA8 (CAM8)   | ○    |       |
| 04-359   | カA9 (CAM9)   | ○    |       |
| 04-360   | カA10 (CAM10) | ○    |       |
| 04-362   | カA12 (CAM12) | ○    |       |
| 04-363   | カA13 (CAM13) | ○    |       |



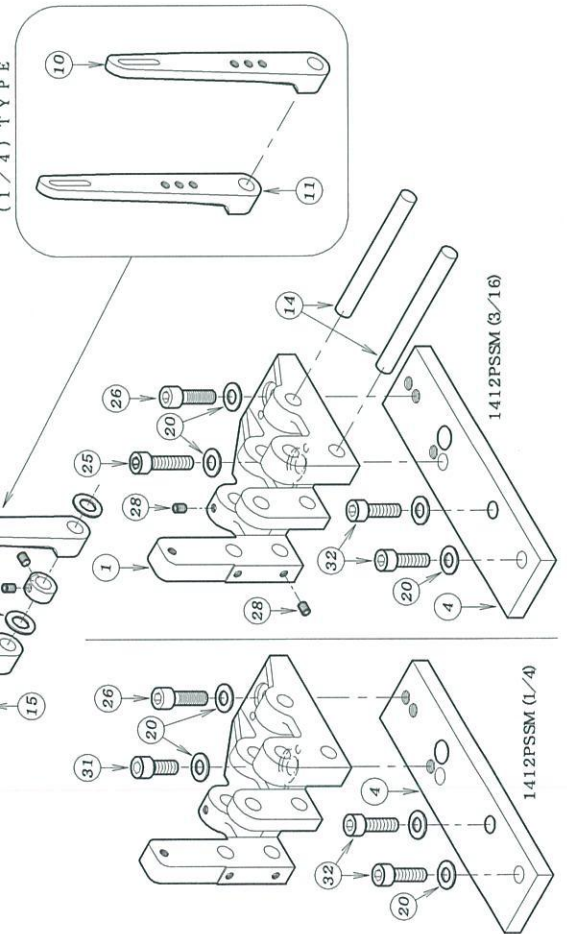
| REF. NO. | PART NO. | 品名           | DESCRIPTION    | Q'TY |
|----------|----------|--------------|----------------|------|
| 30-01    | 104-008  | キヤムカマールピン    | PIN            | 1    |
| 30-02    | *        | カA1~13       | CAM1~13        | 1    |
| 30-03    | 04-408   | ワームギヤ        | WORM GEAR      | 1    |
| 30-04    | 04-409   | ワームホイール      | WORM WHEEL     | 1    |
| 30-05    | 04-468   | スペース         | SPACE COLLAR   | 1    |
| 30-06    | 21-402   | プーリ          | PULLEY COVER   | 1    |
| 30-07    | 21-412   | ギヤハウジングカハ    | HOUSING COVER  | 1    |
| 30-08    | 21-488   | キヤムカハ        | CAM COVER      | 1    |
| 30-09    | 21-489   | カムカハ取付金具     | PLATE          | 1    |
| 30-10    | 23-160   | 配管油止シール      | SEAL WASHER    | 2    |
| 30-11    | 23-189   | Oリング         | O-RING         | 3    |
| 30-12    | 23-304   | シール          | SEAL           | 1    |
| 30-13    | 23-384   | フェルト         | FELT           | 1    |
| 30-14    | 23-412   | パッキン         | GASKET         | 1    |
| 30-15    | 23-567   | フェルト         | FELT           | 3    |
| 30-16    | 35-122   | セパレート配管      | PIPE           | 1    |
| 30-17    | 35-315   | ヒールチューブ      | TUBE           | 1    |
| 30-18    | 39-139   | パイプサポート      | PIPE SUPPORT   | 1    |
| 30-19    | 69-320   | ギヤハウジングカハ    | GEAR HOUSING   | 1    |
| 30-20    | 71-208   | ノックピン        | PIN            | 2    |
| 30-21    | 71-266   | ピン           | PIN            | 1    |
| 30-22    | 71-706   | シャフト         | SHAFT          | 1    |
| 30-23    | 71-942   | カムシャフト       | SHAFT          | 1    |
| 30-24    | 75-112   | カラー          | COLLAR         | 2    |
| 30-25    | 75-181   | カムカラ-A       | CAM COLLAR (A) | 1    |
| 30-26    | 75-184   | カムスペース       | SPACE COLLAR   | 1    |
| 30-27    | 75-332   | ワッシャ         | WASHER         | 2    |
| 30-28    | 75-455   | ワッシャ         | WASHER         | 10   |
| 30-29    | 75-527   | スプリングワッシャ    | SPRING WASHER  | 2    |
| 30-30    | 75-552   | ワッシャ         | WASHER         | 2    |
| 30-31    | 77-160   | 押し操作コントロールレバ | LEVER          | 1    |
| 30-32    | 77-412   | チェーンガイド      | CHAIN GUIDE    | 1    |
| 30-33    | 81-690   | ブッシュ         | BUSHING        | 4    |
| 30-34    | 84-361   | ネジ           | SCREW          | 1    |
| 30-35    | 84-363   | ネジ           | SCREW          | 2    |
| 30-36    | 84-566   | ネジ           | SCREW          | 6    |
| 30-37    | 84-579   | ネジ           | SCREW          | 3    |
| 30-38    | 85-522   | ネジ           | SCREW          | 3    |
| 30-39    | 87-113   | 六角穴付きボルト     | BOLT           | 1    |
| 30-40    | 87-171   | 六角穴付きボルト     | BOLT           | 1    |
| 30-41    | 87-172   | ネジ           | SCREW          | 8~10 |
| 30-42    | 87-173   | 六角穴付きボルト     | BOLT           | 2    |
| 30-43    | 87-181   | ネジ           | SCREW          | 1    |
| 30-44    | 87-254   | ネジ           | SCREW          | 4    |
| 30-45    | 87-311   | フタネジ         | SCREW          | 1    |
| 30-46    | 88-462   | カム固定ナット      | NUT            | 1    |

31. PSM専用部品 (3) MODEL PSM EXCLUSIVE PARTS (3)



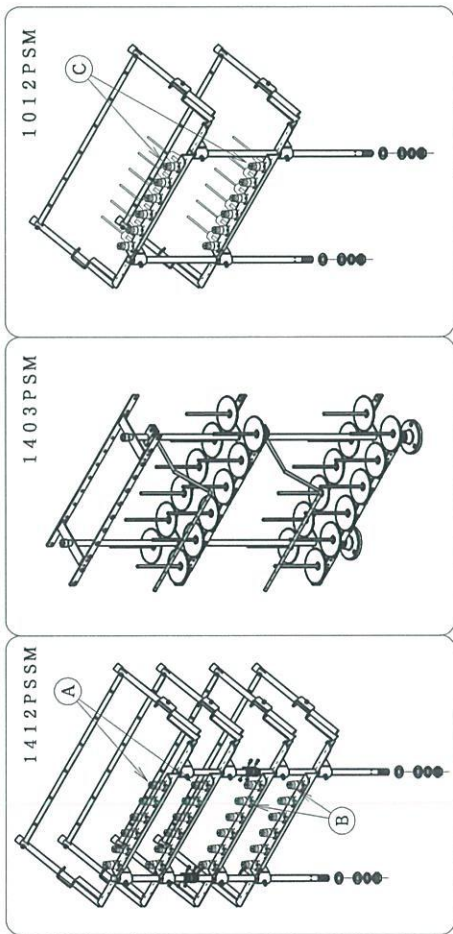
| REF. NO. | PART NO. | 品名           | DESCRIPTION    | QTY |
|----------|----------|--------------|----------------|-----|
| 31-01    | 04-342   | 糸振りペース       | FLAME          | 1   |
| 31-02    | 04-348   | ロッドエンド*      | ROD            | 2   |
| 31-03    | 04-349   | ロッドエンド*      | ROD            | 2   |
| 31-04    | 04-411   | ペース取付プレート    | PLATE          | 1   |
| 31-05    | 65-341   | 連結棒          | CONNECTING BAR | 4   |
| 31-06    | 65-347   | 飾り連結棒        | CONNECTING BAR | 1   |
| 31-07    | 65-348   | 飾り連結棒        | CONNECTING BAR | 1   |
| 31-08    | 66-433   | カム連結リンク      | LINK           | 2   |
| 31-09    | 67-431   | カムリンクレバ*     | LEVER          | 2   |
| 31-10    | 67-434   | 飾り糸振りレバ*     | LEVER          | 1   |
| 31-11    | 67-435   | 飾り糸振りレバ*     | LEVER          | 1   |
| 31-12    | 67-436   | 飾り糸振りレバ*     | LEVER          | 1   |
| 31-13    | 67-437   | 飾り糸振りレバ*     | LEVER          | 1   |
| 31-14    | 71-529   | カムレバ* - シャフト | SHAFT          | 2   |
| 31-15    | 75-152   | カラ*          | COLLAR         | 4   |
| 31-16    | 75-257   | カム連結ローラー     | LINK ROLLER    | 2   |
| 31-17    | 75-260   | ローラー         | ROLLER         | 2   |
| 31-18    | 75-455   | ワッシャ         | WASHER         | 6   |
| 31-19    | 75-519   | ワッシャ         | WASHER         | 4   |
| 31-20    | 75-452   | ワッシャ         | WASHER         | 4   |
| 31-21    | 84-566   | ネジ*          | SCREW          | 2   |
| 31-22    | 84-605   | ネジ*          | SCREW          | 2   |
| 31-23    | 84-606   | ネジ*          | SCREW          | 2   |
| 31-24    | 84-607   | ネジ*          | SCREW          | 2   |
| 31-25    | 87-188   | 六角穴付きボルト     | BOLT           | 1   |
| 31-26    | 85-627   | ネジ*          | SCREW          | 1   |
| 31-27    | 86-311   | ナット          | NUT            | 4   |
| 31-28    | 87-181   | ネジ*          | SCREW          | 10  |
| 31-29    | 88-157   | ナット          | NUT            | 4   |
| 31-30    | 88-158   | ナット          | NUT            | 4   |
| 31-31    | 85-629   | ネジ*          | SCREW          | 1   |
| 31-32    | 87-173   | 六角穴付きボルト     | BOLT           | 2   |

(1/4) TYPE

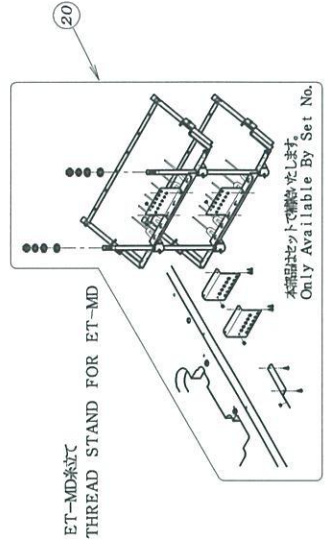
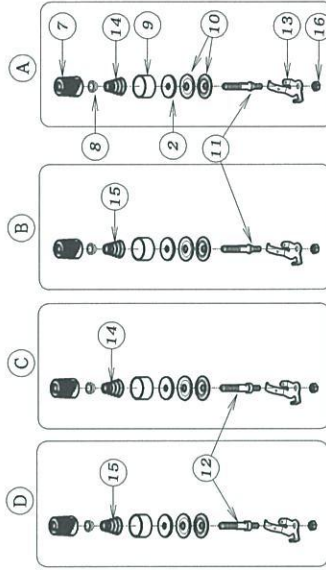
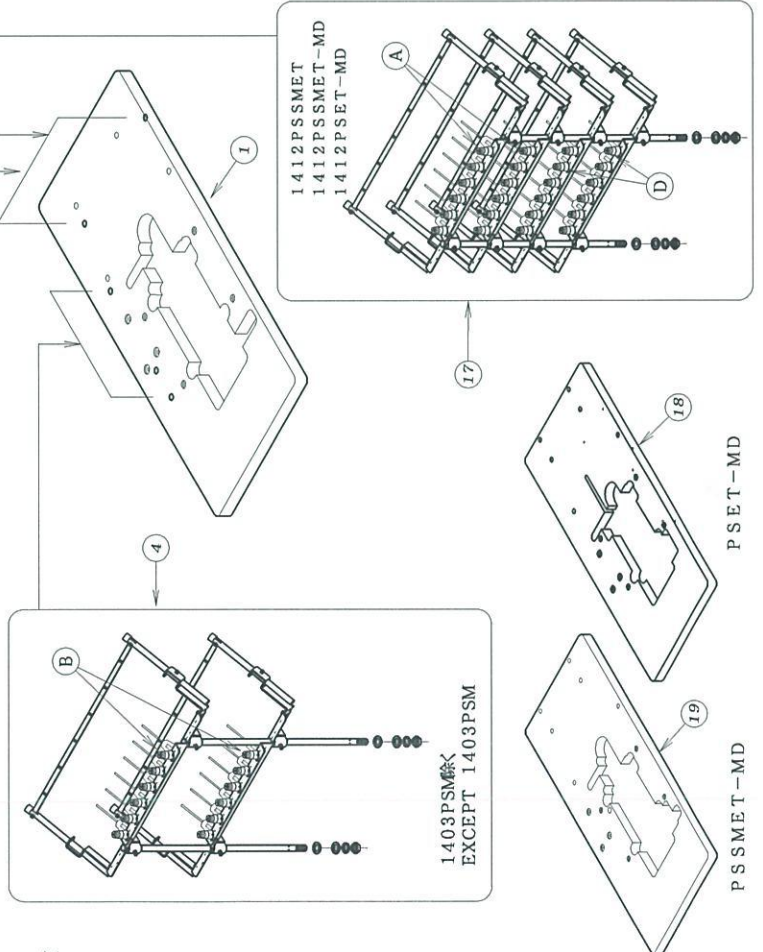


32. PSM専用部品 (4) MODEL PSM EXCLUSIVE PARTS (4)

| REF. NO. | PART NO. | 品名             | DESCRIPTION                   | QTY |
|----------|----------|----------------|-------------------------------|-----|
| 32-01    | 21-048   | テーブル           | TABLE                         | 1   |
| 32-02    | 23-324   | フェルト           | FELT                          | *   |
| 32-03    | 40-6501  | 24本糸立てセット      | THREAD STAND FOR MODEL I412   | 1   |
| 32-04    | 40-6504  | 12本糸立て (PSM)   | THREAD STAND FOR MODEL PSM    | 1   |
| 32-05    | 40-6505  | 12本糸立てセット      | THREAD STAND FOR MODEL I012   | 1   |
| 32-06    | 42-024   | 24本糸立て (垂直タイプ) | THREAD STAND                  | 1   |
| 32-07    | 41-104   | チャンボン皿小ケース     | THREAD TENSION NUT            | *   |
| 32-08    | 41-105   | チャンボン皿ラチェット    | SPRING POST                   | *   |
| 32-09    | 41-106   | 大ケース           | SPRING CUP                    | *   |
| 32-10    | 41-509   | チャンボン皿         | TENSION DISC                  | *   |
| 32-11    | 41-522   | 調子棒中           | SCREW STUD                    | *   |
| 32-12    | 41-523   | ゴム糸用調子棒        | SCREW STUD FOR ELASTIC THREAD | 12  |
| 32-13    | 41-524   | チャンボン皿糸道       | THREAD EYELET                 | *   |
| 32-14    | 41-701   | チャンボン調子パネ (強)  | SPRING (HEAVY)                | 12  |
| 32-15    | 41-702   | チャンボン調子パネ (弱)  | SPRING (LIGHT)                | *   |
| 32-16    | 88-157   | ナット            | NUT                           | *   |
| 32-17    | 40-6508  | 24本糸立てセット      | THREAD STAND FOR MODEL I412   | 1   |
| 32-18    | 21-040   | テーブル           | TABLE                         | 1   |
| 32-19    | 21-054   | テーブル           | TABLE                         | 1   |
| 32-20    | 40-6503  | 12本糸立てセット (PQ) | THREAD STAND FOR MODEL PQ     | 1   |

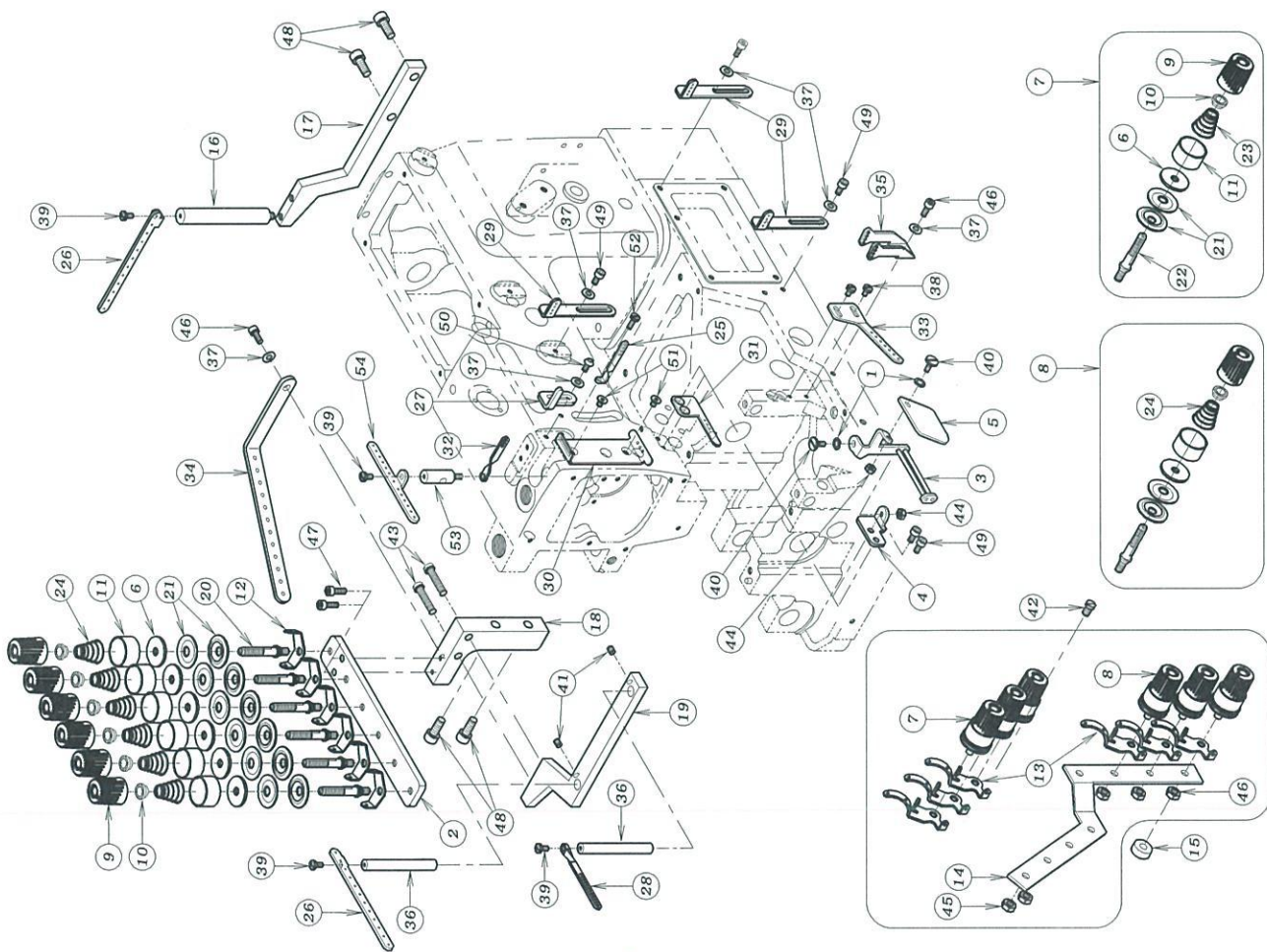


本商品はセットで補給いたします。 Only Available By Set No.



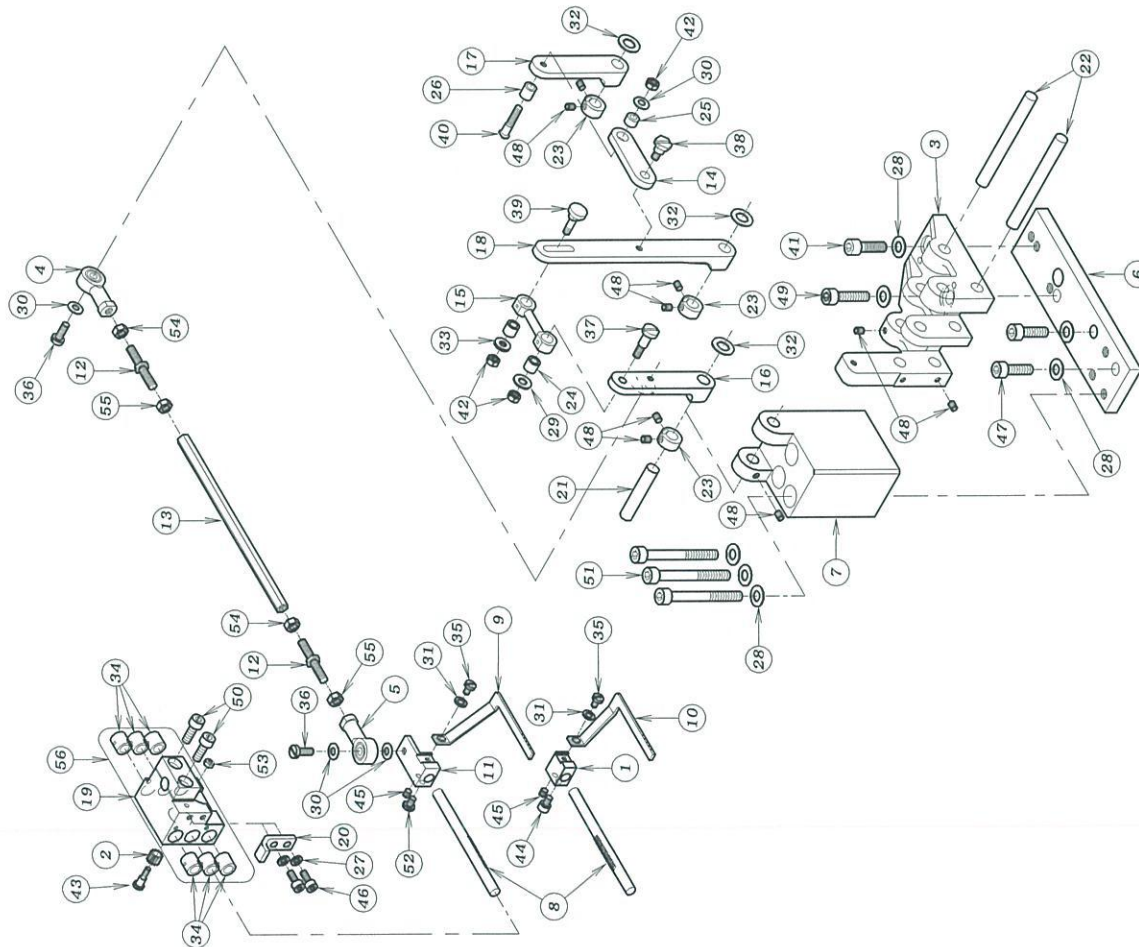
本商品はセットで補給いたします。 Only Available By Set No.

33. 1403PSM専用部品 (1) MODEL 1403PSM EXCLUSIVE PARTS (1)



| REF. NO. | PART NO. | 品名            | DESCRIPTION           | QTY |
|----------|----------|---------------|-----------------------|-----|
| 33-01    | 02-118   | ワッシャ          | WASHER                | 2   |
| 33-02    | 04-015   | 飾り用チャンポン台     | PLATE                 | 1   |
| 33-03    | 04-018   | 飾り案内糸道        | THREAD GUIDE          | 1   |
| 33-04    | 04-476   | 飾り案内糸道取付台     | BRACKET               | 1   |
| 33-05    | 21-626   | 保護カバー         | COVER                 | 1   |
| 33-06    | 23-324   | フェルト          | FELT                  | *   |
| 33-07    | 40-7370  | チャンポン強セット     | TENSION ASS'Y (HEAVY) | 3   |
| 33-08    | 40-7380  | チャンポン弱セット     | TENSION ASS'Y (LIGHT) | 3   |
| 33-09    | 41-104   | チャンポン皿小ケース    | THREAD TENSION NUT    | *   |
| 33-10    | 41-105   | チャンポン皿ラチェット   | SPRING POST           | *   |
| 33-11    | 41-106   | 大ケース          | SPRING CUP            | *   |
| 33-12    | 41-115   | 糸道 (上)        | THREAD GUIDE          | 6   |
| 33-13    | 41-120   | チャンポン皿糸道      | THREAD EYELET         | 6   |
| 33-14    | 41-123   | チャンポン皿元板      | TENSION POST HOLDER   | 1   |
| 33-15    | 41-136   | クッションゴム       | RUBBER                | 1   |
| 33-16    | 41-341   | 糸道取付棒         | BAR                   | 1   |
| 33-17    | 41-429   | ブラケット         | BRACKET               | 1   |
| 33-18    | 41-430   | ブラケット         | BRACKET               | 1   |
| 33-19    | 41-461   | ブラケット         | BRACKET               | 1   |
| 33-20    | 41-508   | 調子棒 (中)       | SCREW STUD            | 6   |
| 33-21    | 41-509   | チャンポン皿        | TENSION DISC          | 24  |
| 33-22    | 41-510   | 調子棒           | SCREW STUD            | 6   |
| 33-23    | 41-701   | チャンポン調子パネ (強) | SPRING (HEAVY)        | 3   |
| 33-24    | 41-702   | チャンポン調子パネ (弱) | SPRING (LIGHT)        | 9   |
| 33-25    | 45-123   | 弓糸道           | THREAD EYELET         | 1   |
| 33-26    | 45-342   | 糸道            | THREAD EYELET         | 2   |
| 33-27    | 45-429   | 上糸受け          | THREAD TAKE-UP PLATE  | 1   |
| 33-28    | 45-432   | 針棒糸道          | THREAD EYELET         | 1   |
| 33-29    | 45-438   | 上糸糸道          | THREAD EYELET         | 3   |
| 33-30    | 45-441   | 上糸ガイド         | THREAD EYELET         | 1   |
| 33-31    | 45-442   | 上糸糸道 (下)      | THREAD EYELET         | 1   |
| 33-32    | 45-523   | 針棒糸道          | THREAD EYELET         | 1   |
| 33-33    | 47-117   | 下糸綱き案内糸道      | THREAD EYELET         | 1   |
| 33-34    | 47-176   | 糸道下           | THREAD EYELET         | 1   |
| 33-35    | 47-413   | 下糸綱き糸道        | SHAFT                 | 1   |
| 33-36    | 71-426   | 糸道取付棒         | WASHER                | 2   |
| 33-37    | 75-455   | ワッシャ          | SCREW                 | 6   |
| 33-38    | 84-361   | ネジ            | SCREW                 | 2   |
| 33-39    | 84-374   | ネジ            | SCREW                 | 4   |
| 33-40    | 84-396   | 段ネジ           | SCREW                 | 2   |
| 33-41    | 84-521   | ネジ            | SCREW                 | 2   |
| 33-42    | 84-761   | ネジ            | SCREW                 | 1   |
| 33-43    | 84-765   | ネジ            | SCREW                 | 2   |
| 33-44    | 86-211   | ナット           | NUT                   | 2   |
| 33-45    | 86-411   | ナット           | NUT                   | 5   |
| 33-46    | 87-113   | 六角穴付きボルト      | BOLT                  | 2   |
| 33-47    | 87-129   | 六角穴付きボルト      | BOLT                  | 2   |
| 33-48    | 87-171   | 六角穴付きボルト      | BOLT                  | 4   |
| 33-49    | 87-177   | 六角穴付きボルト      | BOLT                  | 4   |
| 33-50    | 87-272   | ネジ            | SCREW                 | 1   |
| 33-51    | 87-293   | ネジ            | SCREW                 | 2   |
| 33-52    | 84-363   | 平小ねじ 平先       | SCREW                 | 2   |
| 33-53    | 41-462   | 糸道取付棒         | BAR                   | 1   |
| 33-54    | 45-344   | 糸道            | THREAD EYELET         | 1   |

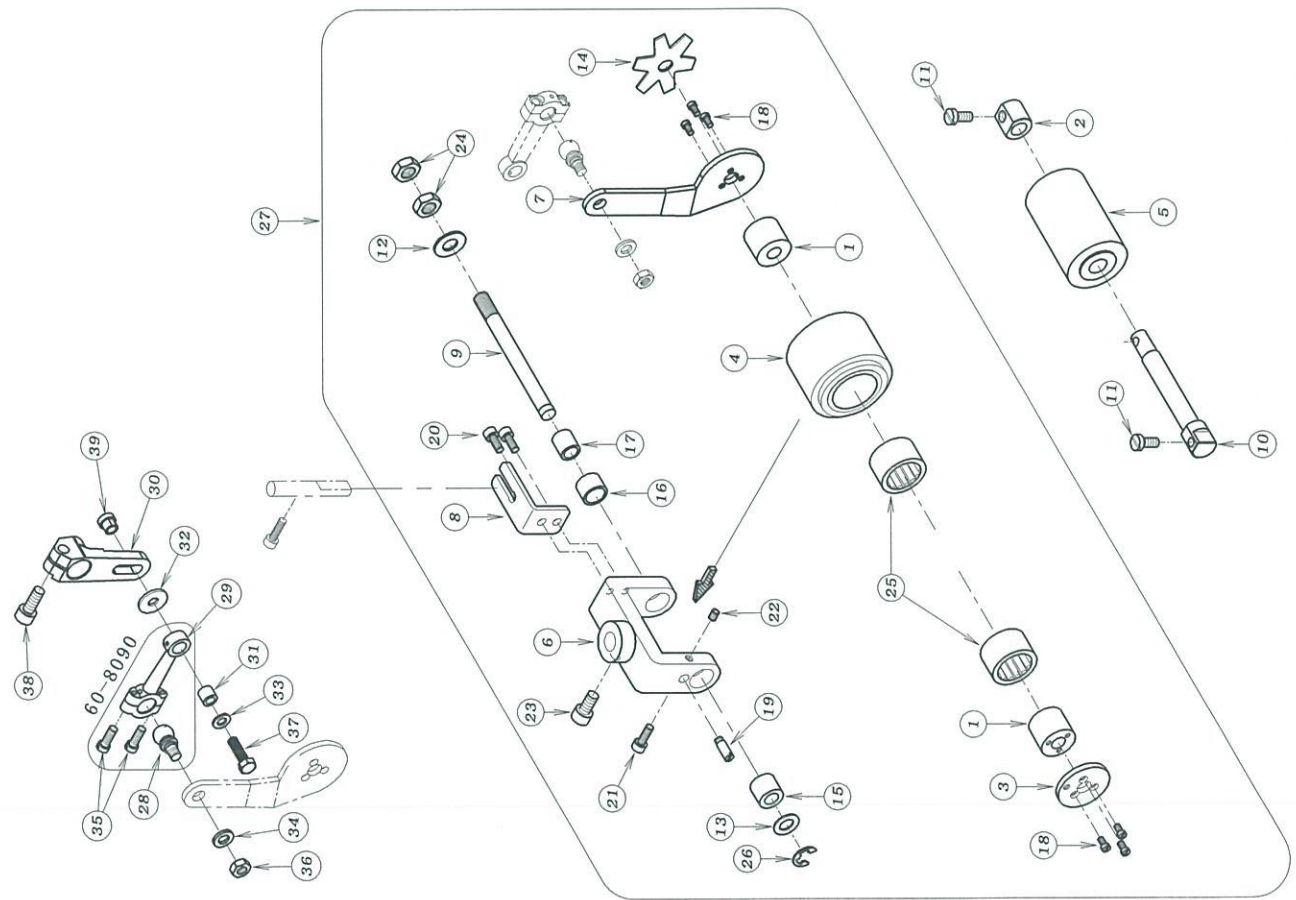
34. 1403PSM専用部品 (2) MODEL 1403PSM EXCLUSIVE PARTS (2)



1412PSSM (3/16) の位置

| REF. NO. | PART NO.  | 品名                                      | DESCRIPTION        | QTY |
|----------|-----------|---|--------------------|-----|
| 34-01    | 04-043    | 飾り糸ルーパ <sup>®</sup> -取付台                | SPREADER HOLDER    | 1   |
| 34-02    | 04-328    | ヒ <sup>®</sup> -ニオン                     | PINION             | 1   |
| 34-03    | 04-342    | 糸振りベ <sup>®</sup> -ース                   | FLAME              | 1   |
| 34-04    | 04-348    | ロッドエンド*                                 | ROD                | 1   |
| 34-05    | 04-349    | ロッドエンド*                                 | ROD                | 1   |
| 34-06    | 04-469    | スモック飾りルーパ <sup>®</sup> -ース取付金具          | PLATE              | 1   |
| 34-07    | 04-470    | 減速ルーパ <sup>®</sup> -フ <sup>®</sup> ラケット | BRACKET            | 1   |
| 34-08    | 04-471    | フック                                     | RACK SHAFT         | 2   |
| 34-09    | 04-473    | 飾り糸ルーパ <sup>®</sup> -上 (1/4)            | SPREADER           | 1   |
| 34-10    | 04-474    | 飾り糸ルーパ <sup>®</sup> -下 (1/4)            | SPREADER           | 1   |
| 34-11    | 04-475    | フックフ <sup>®</sup> ラケット                  | BRACKET            | 1   |
| 34-12    | 65-341    | 連結棒                                     | CONNECTING BAR     | 2   |
| 34-13    | 65-347    | 飾り連結棒                                   | CONNECTING BAR     | 1   |
| 34-14    | 66-433    | カム連結リンク                                 | LINK               | 1   |
| 34-15    | 66-519    | ルーパ <sup>®</sup> -連結メガネ                 | LINK               | 1   |
| 34-16    | 67-430    | 減速ルーパ <sup>®</sup>                      | LEVER              | 1   |
| 34-17    | 67-431    | カムリンクルーパ <sup>®</sup> -                 | LEVER              | 1   |
| 34-18    | 67-432    | 飾り糸振りルーパ <sup>®</sup> -                 | LEVER              | 1   |
| 34-19    | 69-324    | フックハウジング*                               | RACK HOUSING       | 1   |
| 34-20    | 69-325    | 回り止めア <sup>®</sup> レート                  | PLATE              | 1   |
| 34-21    | 71-423    | シャフト                                    | SHAFT              | 1   |
| 34-22    | 71-529    | カムルーパ <sup>®</sup> -シャフト                | SHAFT              | 2   |
| 34-23    | 75-152    | カラー                                     | COLLAR             | 3   |
| 34-24    | 75-247    | 連結メガ <sup>®</sup> ネローラー                 | ROLLER             | 2   |
| 34-25    | 75-257    | カム連結ローラー                                | LINK ROLLER        | 1   |
| 34-26    | 75-260    | ローラー                                    | ROLLER             | 1   |
| 34-27    | 75-410    | スフ <sup>®</sup> リング* フック                | SPRING WASHER      | 2   |
| 34-28    | 75-452    | ワッシャ                                    | WASHER             | 7   |
| 34-29    | 75-453    | ワッシャ                                    | WASHER             | 1   |
| 34-30    | 75-455    | ワッシャ                                    | WASHER             | 4   |
| 34-31    | 75-468    | ワッシャ                                    | WASHER             | 2   |
| 34-32    | 75-519    | ワッシャ                                    | WASHER             | 3   |
| 34-33    | 75-522    | ワッシャ                                    | WASHER             | 1   |
| 34-34    | 81-435    | フ <sup>®</sup> ッシユ                      | BUSHING            | 6   |
| 34-35    | 84-361    | ネジ <sup>®</sup>                         | SCREW              | 2   |
| 34-36    | 84-566    | ネジ <sup>®</sup>                         | SCREW              | 2   |
| 34-37    | 84-583    | ネジ <sup>®</sup>                         | SCREW              | 1   |
| 34-38    | 84-605    | ネジ <sup>®</sup>                         | SCREW              | 1   |
| 34-39    | 84-606    | ネジ <sup>®</sup>                         | SCREW              | 1   |
| 34-40    | 84-607    | ネジ <sup>®</sup>                         | SCREW              | 1   |
| 34-41    | 85-627    | ネジ <sup>®</sup>                         | SCREW              | 1   |
| 34-42    | 86-311    | ナット                                     | NUT                | 3   |
| 34-43    | 87-068    | 段ネジ <sup>®</sup>                        | SCREW              | 1   |
| 34-44    | 87-092    | 六角穴付きボルト                                | BOLT               | 1   |
| 34-45    | 87-106    | ネジ <sup>®</sup>                         | SCREW              | 2   |
| 34-46    | 87-113    | 六角穴付きボルト                                | BOLT               | 2   |
| 34-47    | 87-173    | 六角穴付きボルト                                | BOLT               | 2   |
| 34-48    | 87-181    | ネジ <sup>®</sup>                         | SCREW              | 9   |
| 34-49    | 87-188    | 六角穴付きボルト                                | BOLT               | 1   |
| 34-50    | 87-224    | 六角穴付きボルト                                | BOLT               | 2   |
| 34-51    | 87-243    | 六角穴付きボルト                                | BOLT               | 3   |
| 34-52    | 87-266    | ネジ <sup>®</sup>                         | SCREW              | 1   |
| 34-53    | 88-137    | ナット                                     | NUT                | 1   |
| 34-54    | 88-157    | ナット                                     | NUT                | 2   |
| 34-55    | 88-158    | ナット                                     | NUT                | 2   |
| 34-56    | 69-3240-2 | フックハウジング* セット                           | RACK HOUSING ASS'Y | 1   |

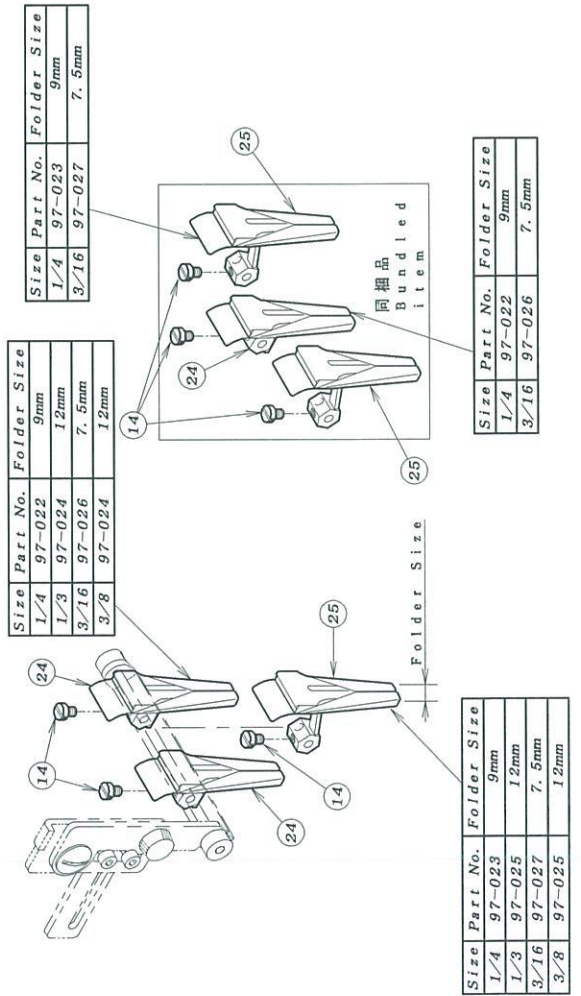
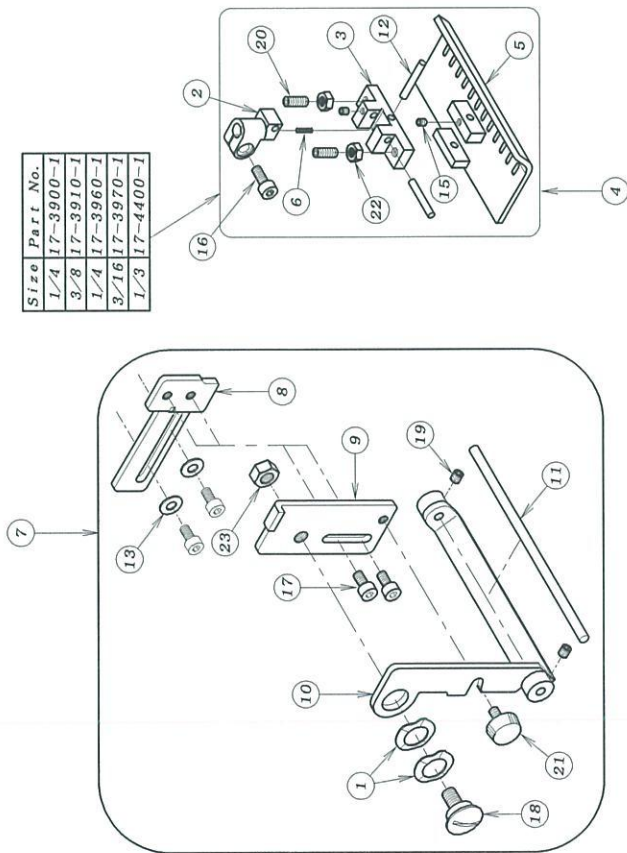
35. 1403PSM専用部品 (3) MODEL 1403PSM EXCLUSIVE PARTS (3)



| REF. NO. | PART NO. | 品名            | DESCRIPTION                  | Q'TY |
|----------|----------|---------------|------------------------------|------|
| 35-01    | 01-103   | 連結板側スリーブ      | SLEEVE                       | 2    |
| 35-02    | 02-278   | カラーB          | COLLAR                       | 1    |
| 35-03    | 02-117   | 後プーラーハブイーフタ   | PLATE                        | 1    |
| 35-04    | 02-189   | 後プーラー上(ゴム)    | REAR PULLER (SMOOTH)         | 1    |
| 35-05    | 02-199   | 後プーラー下(ゴム)    | LOWER REAR PULLER (SMOOTH)   | 1    |
| 35-06    | 02-251   | 後プーラー台小       | REAR PULLER BRACKET          | 1    |
| 35-07    | 02-470   | 連結板           | CONNECTING PLATE             | 1    |
| 35-08    | 02-266   | 後プーラー台回り止め    | PLATE                        | 1    |
| 35-09    | 71-443   | 後プーラー台シャフト(小) | SHAFT                        | 1    |
| 35-10    | 71-439   | 後プーラー下シャフト(短) | REAR PULLER SHAFT (LOWER)    | 1    |
| 35-11    | 87-278   | ネジ            | SCREW                        | 2    |
| 35-12    | 75-451   | ワッシャ          | WASHER                       | 1    |
| 35-13    | 75-519   | ワッシャ          | WASHER                       | 1    |
| 35-14    | 79-551   | プーラー板ハネ       | PULLER PLATE SPRING          | 1    |
| 35-15    | 81-321   | ブッシュ          | BUSHING                      | 1    |
| 35-16    | 81-322   | ブッシュ          | BUSHING                      | 1    |
| 35-17    | 81-323   | ブッシュ          | BUSHING                      | 1    |
| 35-18    | 84-162   | ネジ            | SCREW                        | 6    |
| 35-19    | 84-573   | 段ネジ           | SCREW                        | 1    |
| 35-20    | 87-113   | 六角穴付きボルト      | BOLT                         | 2    |
| 35-21    | 87-129   | 六角穴付きボルト      | BOLT                         | 1    |
| 35-22    | 87-181   | ネジ            | SCREW                        | 1    |
| 35-23    | 87-225   | 六角穴付きボルト      | BOLT                         | 1    |
| 35-24    | 88-179   | ナット           | NUT                          | 2    |
| 35-25    | 91-405   | ワッシャイクラッチ     | BEARING                      | 2    |
| 35-26    | 93-221   | ストップリング       | E-RING                       | 1    |
| 35-27    | 00-2006  | スムースプーラーセット   | SMOOTH PULLER ASS'Y          | 1    |
| 35-28    | 61-810   | プーラー連結ロッド 玉   | CONNECTING ROD BALL          | 1    |
| 35-29    | 63-809   | プーラー連結ロッド     | BALL JOINT                   | 1    |
| 35-30    | 67-173   | 上シャフト連結レバ前    | PULLER DRIVING LEVER (FRONT) | 1    |
| 35-31    | 75-247   | 連結メカネローラー     | ROLLER                       | 1    |
| 35-32    | 75-407   | ワッシャ          | WASHER                       | 1    |
| 35-33    | 75-520   | ワッシャ          | WASHER                       | 1    |
| 35-34    | 75-552   | ワッシャ          | WASHER                       | 1    |
| 35-35    | 84-635   | ネジ            | SCREW                        | 2    |
| 35-36    | 86-411   | ナット           | NUT                          | 1    |
| 35-37    | 87-015   | ネジ            | SCREW                        | 1    |
| 35-38    | 87-171   | 六角穴付きボルト      | BOLT                         | 1    |
| 35-39    | 88-013   | 前プーラーナット      | NUT                          | 1    |



# 36. PL 専用部品 MODEL PL EXCLUSIVE PARTS

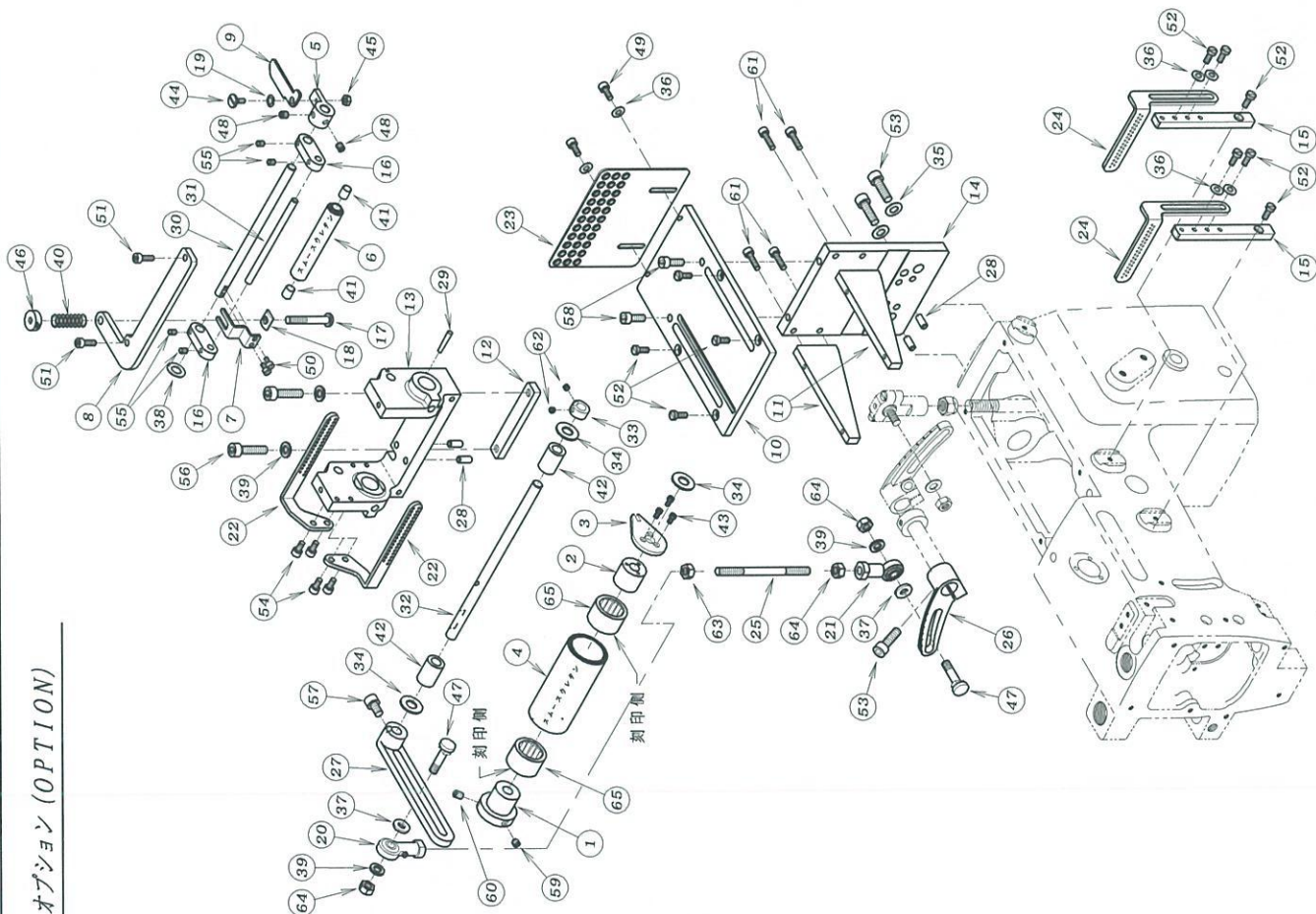


| REF. NO. | PART NO.  | 品名           | DESCRIPTION                    | QTY |
|----------|-----------|--------------|--------------------------------|-----|
| 36-01    | 02-112    | ワッシャー        | WASHER                         | 2   |
| 36-02    | *         | 押エボス         | SHANK                          | 1   |
| 36-03    | 17-3710-C | 押エボス取り付台     | BRACKET                        | 1   |
| 36-04    | *         | 押えセット        | PRESSER FOOT ASS'Y             | 1   |
| 36-05    | *         | 押エ足          | BOTTOM                         | 1   |
| 36-06    | 17-8190-F | パネ           | SPRING                         | 1   |
| 36-07    | 20-6510   | ホルダー調節ガイドセット | MOUNTING BASE ASS'Y FOR HOLDER | 1   |
| 36-08    | 26-754    | ブラケットA       | BRACKET                        | 1   |
| 36-09    | 26-755    | ブラケットB       | BRACKET                        | 1   |
| 36-10    | 26-756    | ホルダー取付ブラケット  | MOUNTING BASE FOR HOLDER       | 1   |
| 36-11    | 26-757    | ホルダー取付軸      | HOLDER SHAFT                   | 1   |
| 36-12    | 71-215    | ピン           | PIN                            | 2   |
| 36-13    | 75-455    | ワッシャー        | WASHER                         | 2   |
| 36-14    | 87-098    | ネジ           | SCREW                          | 6   |
| 36-15    | 87-104    | ネジ           | SCREW                          | 2   |
| 36-16    | 87-113    | 六角穴付きボルト     | BOLT                           | 1   |
| 36-17    | 87-177    | 六角穴付きボルト     | BOLT                           | 2   |
| 36-18    | 87-280    | ネジ           | SCREW                          | 2   |
| 36-19    | 87-286    | ネジ           | SCREW                          | 2   |
| 36-20    | 87-289    | ネジ           | SCREW                          | 2   |
| 36-21    | 87-292    | 調節ネジ         | SCREW                          | 1   |
| 36-22    | 88-146    | ナット          | NUT                            | 2   |
| 36-23    | 88-166    | ナット          | NUT                            | 1   |
| 36-24    | *         | ホルダーA        | HOLDER                         | 3   |
| 36-25    | *         | ホルダーB        | HOLDER                         | 3   |

\* 各ゲージ部品の品番は、46, 47ページのゲージパーツ表を参照して下さい。  
 \* Please refer to Page 46, 47 GAUGE PARTS LIST

37-1. MD3 専用部品 (DFB1012) MODEL MD3 EXCLUSIVE PARTS

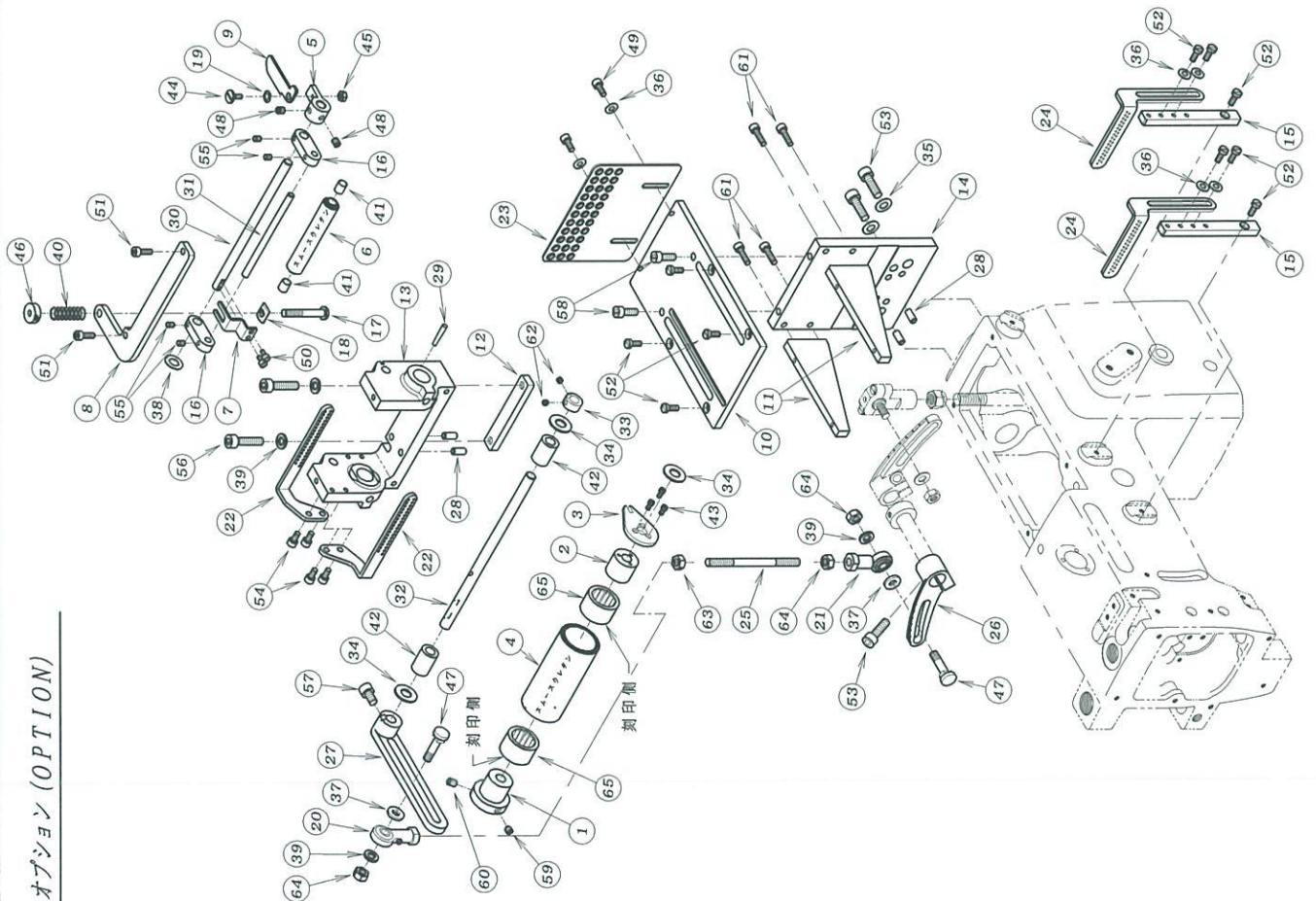
オプション (OPTION)



| REF. NO. | PART NO. | 品名                | DESCRIPTION                 | Q'TY |
|----------|----------|-------------------|-----------------------------|------|
| 37-01    | 01-102   | フタ副スリーブ           | SLEEVE                      | 1    |
| 37-02    | 01-103   | 連結板副スリーブ          | SLEEVE                      | 1    |
| 37-03    | 01-116   | 前フーラー回り止め蓋        | PLATE                       | 1    |
| 37-04    | 01-162   | スムースプラー (大)       | SMOOTH PULLER (LARGE)       | 1    |
| 37-05    | 01-178   | 開閉レバー             | LEVER                       | 1    |
| 37-06    | 01-179   | スムース (小)          | SMOOTH PULLER (SMALL)       | 1    |
| 37-07    | 01-180   | 調節レバー             | ADJUSTING LEVER             | 1    |
| 37-08    | 01-181   | ピンフック             | PIN BRACKET                 | 1    |
| 37-09    | 01-182   | ストップレバー           | LEVER                       | 1    |
| 37-10    | 01-183   | プラー土台取付プレート       | BRACKET PLATE               | 1    |
| 37-11    | 01-184   | プレート用リブ           | BRACKET PLATE               | 2    |
| 37-12    | 01-185   | 回り止めナット           | NUT                         | 1    |
| 37-13    | 01-186   | プラー土台             | PULLER ROCKER               | 1    |
| 37-14    | 01-187   | フック               | BRACKET                     | 1    |
| 37-15    | 01-188   | 新糸道取付フック          | PLATE                       | 2    |
| 37-16    | 01-753   | ゴム調節ローラーアーム       | BRACKET                     | 2    |
| 37-17    | 01-763   | ローラー圧調節芯棒         | SCREW                       | 1    |
| 37-18    | 01-764   | レバー調節金具           | LEVER ADJUSTING BLOCK       | 1    |
| 37-19    | 02-118   | 波ワッシャー            | WASHER                      | 1    |
| 37-20    | 05-954   | ロッド               | ROD                         | 1    |
| 37-21    | 05-998   | ロッド               | ROD                         | 1    |
| 37-22    | 45-041   | 糸道                | THREAD EYELET               | 2    |
| 37-23    | 45-042   | パルティング糸道          | THREAD EYELET               | 1    |
| 37-24    | 45-112   | 上糸道               | THREAD EYELET               | 2    |
| 37-25    | 65-335   | 前フーラー連結棒          | CONNECTING BAR              | 1    |
| 37-26    | 67-172   | 上シャフト連結レバー        | PULLER DRIVING LEVER (REAR) | 1    |
| 37-27    | 67-185   | レバー               | LEVER                       | 1    |
| 37-28    | 71-208   | ワッシャー             | PIN                         | 4    |
| 37-29    | 71-227   | ピン                | PIN                         | 1    |
| 37-30    | 71-285   | ローラーシャフト          | ROLLER SHAFT                | 1    |
| 37-31    | 71-286   | ローラーシャフト          | ROLLER SHAFT                | 1    |
| 37-32    | 71-287   | プラー土台シャフト         | SHAFT                       | 1    |
| 37-33    | 75-152   | カラー               | COLLAR                      | 1    |
| 37-34    | 75-451   | ワッシャー             | WASHER                      | 3    |
| 37-35    | 75-452   | ワッシャー             | WASHER                      | 2    |
| 37-36    | 75-455   | ワッシャー             | WASHER                      | 6    |
| 37-37    | 75-458   | ワッシャー             | WASHER                      | 2    |
| 37-38    | 75-519   | ワッシャー             | WASHER                      | 1    |
| 37-39    | 75-552   | ワッシャー             | WASHER                      | 4    |
| 37-40    | 79-035   | 圧縮バネ              | SPRING                      | 1    |
| 37-41    | 81-016   | 軸受                | BUSHING                     | 2    |
| 37-42    | 81-125   | ブッシュ              | BUSHING                     | 2    |
| 37-43    | 84-162   | ネジ                | SCREW                       | 3    |
| 37-44    | 84-396   | 段ネジ               | SCREW                       | 1    |
| 37-45    | 86-211   | ナット               | NUT                         | 1    |
| 37-46    | 86-484   | 調節ナット             | NUT                         | 1    |
| 37-47    | 87-006   | ロッド               | SCREW                       | 2    |
| 37-48    | 87-058   | 六角穴付き止めネジ M5 x 5L | SCREW M5 x 5L               | 2    |
| 37-49    | 87-113   | 六角穴付きボルト          | BOLT                        | 2    |
| 37-50    | 87-123   | 六角穴付きボルト          | BOLT                        | 2    |
| 37-51    | 87-129   | 六角穴付きボルト          | BOLT                        | 2    |
| 37-52    | 87-145   | ネジ                | SCREW                       | 10   |
| 37-53    | 87-173   | 六角穴付きボルト          | BOLT                        | 3    |
| 37-54    | 87-177   | 六角穴付きボルト          | BOLT                        | 4    |
| 37-55    | 87-181   | ネジ                | SCREW                       | 4    |
| 37-56    | 87-188   | 六角穴付きボルト          | BOLT                        | 2    |

37-2. MD3専用部品 (DFB1012) MODEL MD3 EXCLUSIVE PARTS

オプション (OPTION)



| REF. NO. | PART NO. | 品名       | DESCRIPTION | Q'TY |
|----------|----------|----------|-------------|------|
| 37-57    | 87-203   | 六角穴付きボルト | BOLT        | 1    |
| 37-58    | 87-224   | 六角穴付きボルト | BOLT        | 2    |
| 37-59    | 87-253   | ネジ       | SCREW       | 1    |
| 37-60    | 87-254   | ネジ       | SCREW       | 1    |
| 37-61    | 87-299   | 六角穴付きボルト | BOLT        | 4    |
| 37-62    | 87-322   | ネジ       | SCREW       | 2    |
| 37-63    | 88-161   | ナット      | NUT         | 1    |
| 37-64    | 88-166   | ナット      | NUT         | 3    |
| 37-65    | 91-405   | ワンウェイラッチ | BEARING     | 2    |

### 38. 押え揚げ装置 (エア-式) FL-3

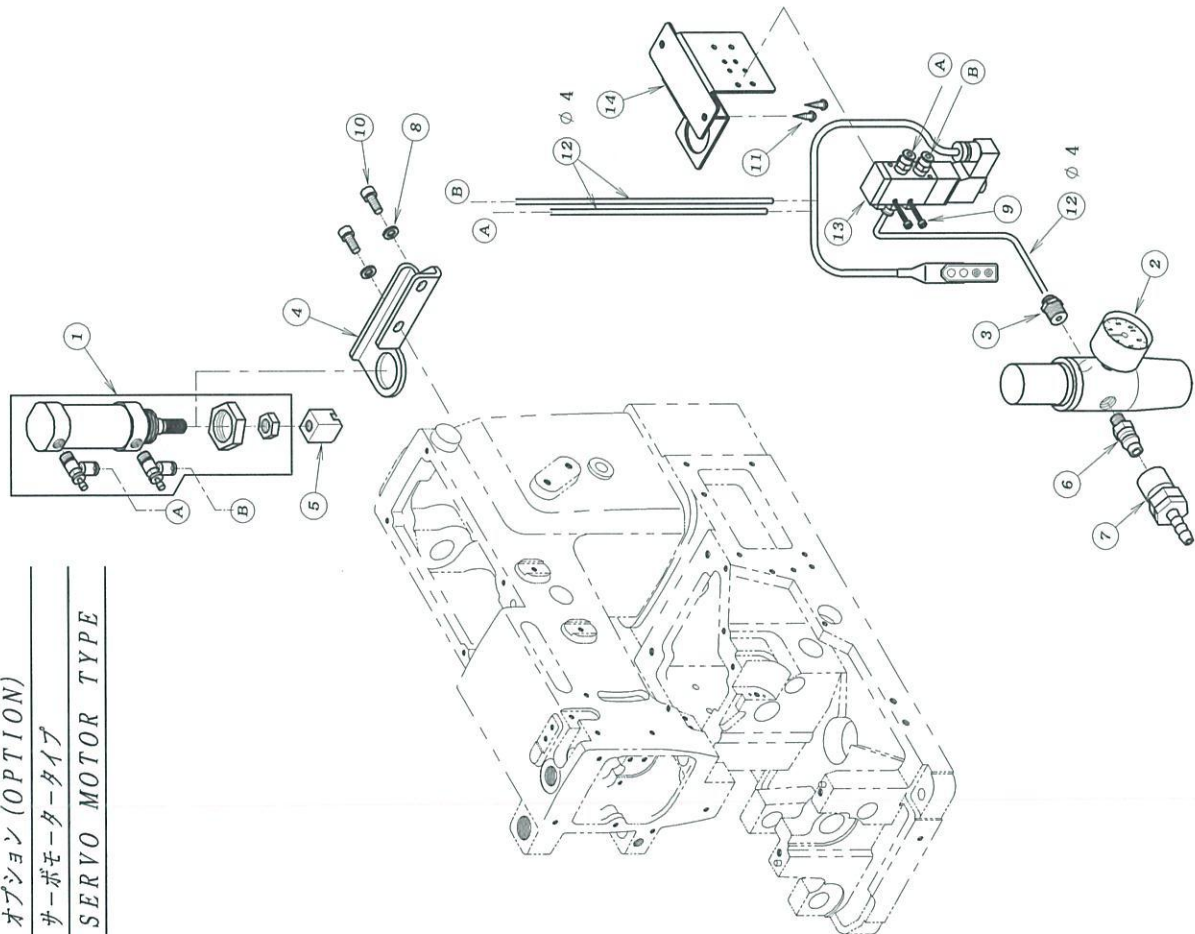
#### FOOT LIFTER MECHANISM (PNEUMATIC TYPE) FL-3

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          | QTY |
|----------|-----------|-----------------|----------------------|-----|
| 38-01    | 00-6082   | 押え揚げシリンダーセット    | AIR CYLINDER ASS'Y   | 1   |
| 38-02    | 05-2120-A | フィルタレギュレータ      | REGULATOR            | 1   |
| 38-03    | 05-217    | レギュレータ-用継手      | JOINT                | 1   |
| 38-04    | 05-596    | 押え揚げシリンダー-ブラケット | BRACKET              | 1   |
| 38-05    | 05-891    | 押え揚げレバ-作動金具     | CHIP                 | 1   |
| 38-06    | 06-516    | カプラマス           | CONNECTOR            | 1   |
| 38-07    | 06-517    | カプラオス           | CONNECTOR            | 1   |
| 38-08    | 75-552    | ワッシャ            | WASHER               | 2   |
| 38-09    | 87-438    | 六角穴付ボルト         | SCREW                | 2   |
| 38-10    | 87-171    | 六角穴付ボルト         | SCREW                | 2   |
| 38-11    | 87-902    | 木ネジ             | SCREW                | 2   |
| 38-12    | 05-979    | チューブφ4x700mm    | TUBE (φ4x700L)       | 3   |
| 38-13    | 05-982    | 電磁弁セット          | SOLENOID VALVE ASS'Y | 1   |
| 38-14    | 05-644    | 電磁弁取付板          | BRACKET              | 1   |



### 39. 押え揚げ装置 (エア-式) FL-6

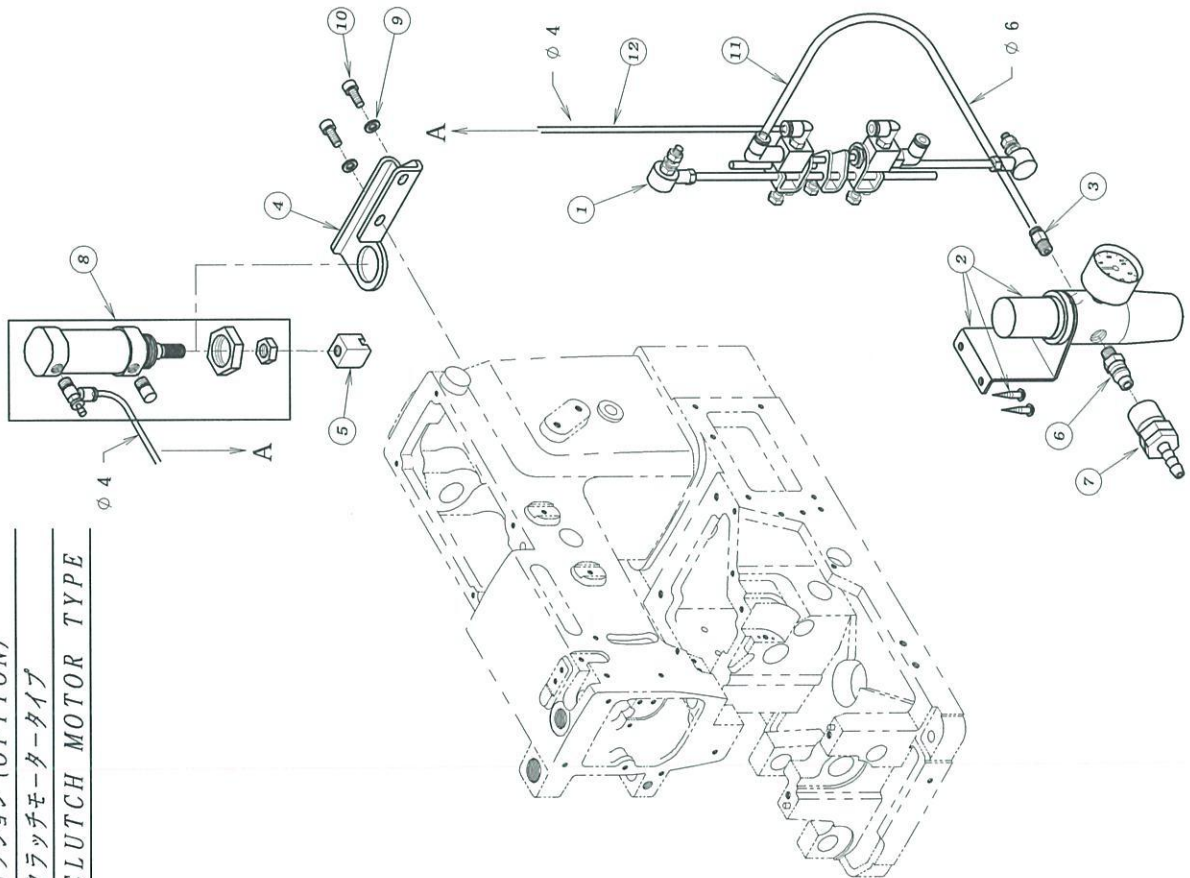
#### FOOT LIFTER MECHANISM (PNEUMATIC TYPE) FL-6

オプション (OPTION)

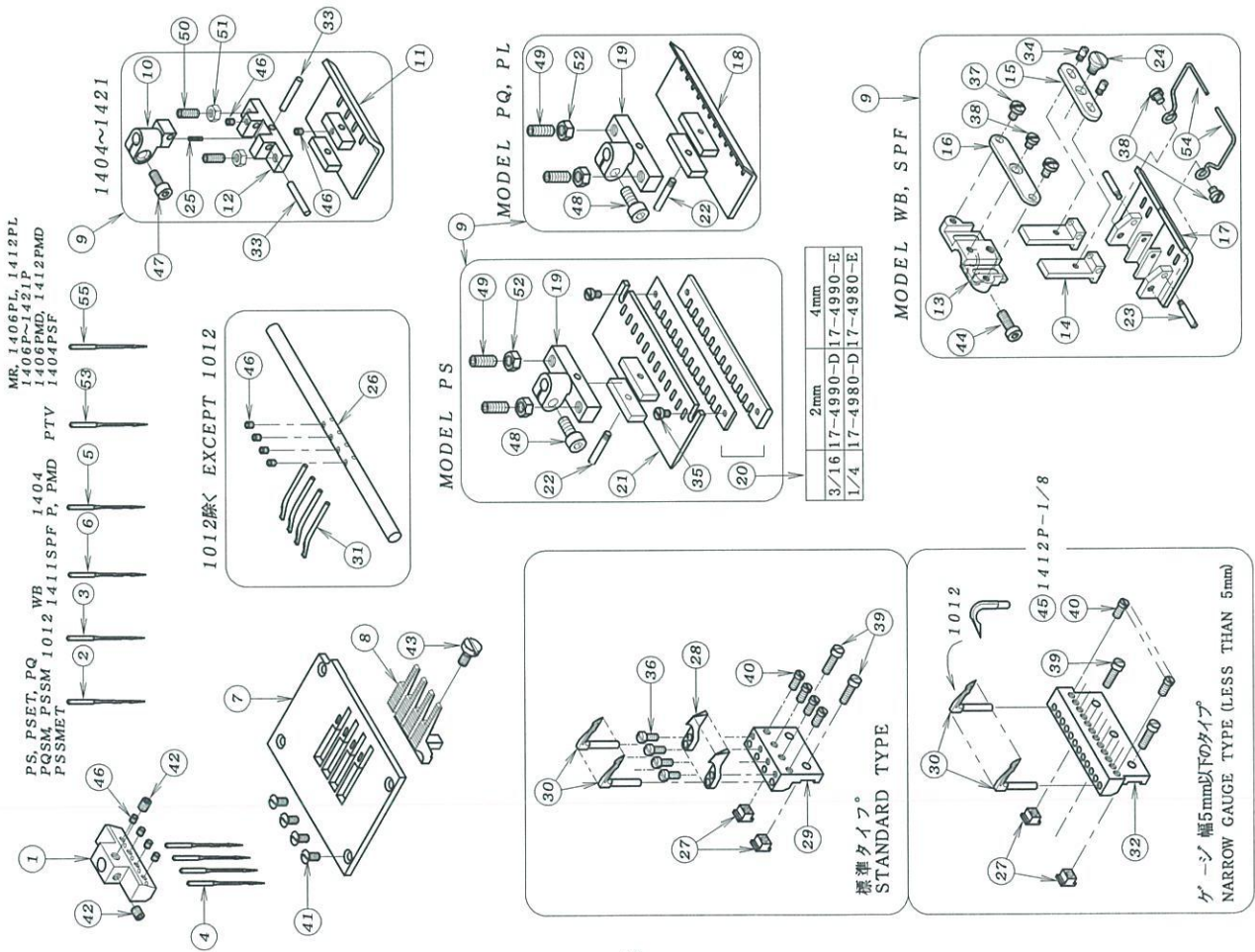
クラッチモータータイプ

CLUTCH MOTOR TYPE

| REF. NO. | PART NO. | 品名             | DESCRIPTION              | Q'TY |
|----------|----------|----------------|--------------------------|------|
| 39-01    | 00-8040  | 吸込み押え揚げ用バルブセット | TREADLE AIR SWITCH ASS'Y | 1    |
| 39-02    | 05-212   | マイルタレギュレータ     | REGULATOR                | 1    |
| 39-03    | 05-218   | レギュレータ-用継手     | JOINT                    | 1    |
| 39-04    | 05-596   | 押え揚げシリンダ-ブラケット | BRACKET                  | 1    |
| 39-05    | 05-891   | 押え揚げレバ-作動金具    | CHIP                     | 1    |
| 39-06    | 06-516   | カプラメス          | CONNECTOR                | 1    |
| 39-07    | 06-517   | カプラオス          | CONNECTOR                | 1    |
| 39-08    | 00-6130  | 押え揚げシリンダ-セット   | AIR CYLINDER ASS'Y       | 1    |
| 39-09    | 75-552   | ワッシャ           | WASHER                   | 2    |
| 39-10    | 87-171   | 六角穴付ボルト        | SCREW                    | 2    |
| 39-11    | 05-486   | チューブφ6x1000mm  | TUBE (φ6x1000L)          | 1    |
| 39-12    | 05-979   | チューブφ4x700mm   | TUBE (φ4x700L)           | 1    |



# 40. ゲージハーツ (1) GAUGE PARTS (1)



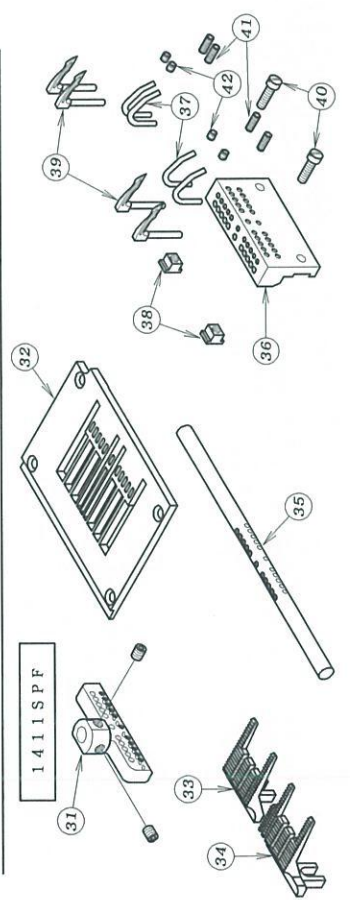
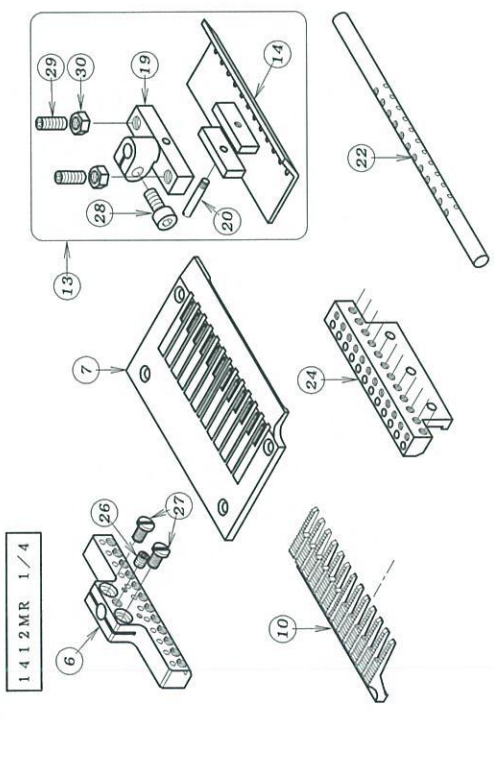
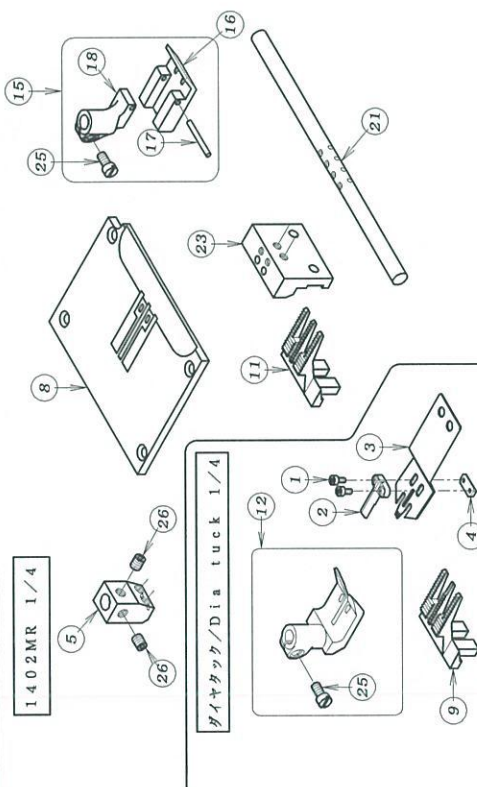
| REF. NO. | PART NO.  | 品名                   | DESCRIPTION        | Q'TY |
|----------|-----------|----------------------|--------------------|------|
| 40-01    | *         | 針 (1'均等)             | NEEDLE HOLDER      | 1    |
| 40-02    | 13-0540-5 | 針 (DVX57 #14)        | NEEDLE             | *    |
| 40-03    | 13-0810-5 | 針 (DV-K25 #21)       | NEEDLE             | *    |
| 40-04    | 13-1140-6 | 針 (UOX113 #14)       | NEEDLE             | *    |
| 40-05    | 13-1140-7 | 針 (UYX113GS Nm90/14) | NEEDLE             | *    |
| 40-06    | 13-1180-5 | 針 (UOX113 #18)       | NEEDLE             | *    |
| 40-07    | *         | 針板 (1')              | NEEDLE PLATE       | 1    |
| 40-08    | *         | 送前                   | FEED DOG           | 1    |
| 40-09    | *         | 押エセット                | PRESSER FOOT ASS'Y | 1    |
| 40-10    | 17-3710-A | 押エボス                 | SHANK              | 1    |
| 40-11    | *         | 押エ足 (1'均等)           | BOTTOM             | 1    |
| 40-12    | 17-3710-C | 押エボス取り付け台            | BRACKET            | 1    |
| 40-13    | 17-4210-A | 押エボス                 | BRACKET            | 1    |
| 40-14    | 17-4210-C | 取付金具                 | BRACKET            | 2    |
| 40-15    | 17-4210-E | 取付エリコンプレート           | LINK PLATE         | 1    |
| 40-16    | 17-4210-G | スライド押エプレート           | SLIDE PLATE        | 1    |
| 40-17    | *         | 押エ足                  | BOTTOM             | 1    |
| 40-18    | *         | 押エ足                  | BOTTOM             | 1    |
| 40-19    | 17-4960-A | 押エボス                 | BRACKET            | 1    |
| 40-20    | *         | 押エ取り付けライナー           | FRONT GUIDE        | 1    |
| 40-21    | *         | 押エ足                  | BOTTOM             | 1    |
| 40-22    | 17-5700-C | 押エ足取付けネジ             | SCREW              | 1    |
| 40-23    | 17-5810-D | 押エ足取付けピン             | PIN                | 2    |
| 40-24    | 17-5810-F | リンクネジ                | SCREW              | 1    |
| 40-25    | 17-8190-F | ハネ                   | SPRING             | 1    |
| 40-26    | *         | 糸巻せ棒                 | RETAINER HOLDER    | 1    |
| 40-27    | 19-406    | ルーバ-台止め金具            | BRACKET            | *    |
| 40-28    | 19-416    | 針受                   | NEEDLE GUARD       | *    |
| 40-29    | *         | ルーバ-台                | LOOPER HOLDER      | 1    |
| 40-30    | *         | ルーバ-台                | LOOPER             | *    |
| 40-31    | *         | 糸巻せルーバ-              | RETAINER LOOPER    | *    |
| 40-32    | *         | ルーバ-台                | LOOPER HOLDER      | 1    |
| 40-33    | 71-215    | ピン                   | PIN                | 2    |
| 40-34    | 84-114    | ネジ                   | SCREW              | 2    |
| 40-35    | 84-161    | ネジ                   | SCREW              | 2    |
| 40-36    | 84-164    | ネジ                   | SCREW              | *    |
| 40-37    | 84-361    | ネジ                   | SCREW              | 2    |
| 40-38    | 84-364    | ネジ                   | SCREW              | 3    |
| 40-39    | 84-367    | ネジ                   | SCREW              | *    |
| 40-40    | 84-380    | ネジ                   | SCREW              | *    |
| 40-41    | 84-464    | ネジ                   | SCREW              | 4    |
| 40-42    | 84-521    | ネジ                   | SCREW              | 2    |
| 40-43    | 84-588    | ネジ                   | SCREW              | 1    |
| 40-44    | 84-591    | 六角穴付きボルト             | BOLT               | 1    |
| 40-45    | 87-071    | ネジ                   | SCREW              | 12   |
| 40-46    | 87-104    | ネジ                   | SCREW              | *    |
| 40-47    | 87-113    | 六角穴付きボルト             | BOLT               | 1    |
| 40-48    | 87-252    | 六角穴付きボルト             | BOLT               | 1    |
| 40-49    | 87-279    | 六角穴付き止ネジ             | SCREW              | 2    |
| 40-50    | 87-289    | ネジ                   | SCREW              | 2    |
| 40-51    | 88-146    | ナット                  | NUT                | 2    |
| 40-52    | 88-160    | ナット                  | NUT                | 2    |
| 40-53    | 13-0520-5 | 針 (DVX57 #12)        | NEEDLE             | *    |
| 40-54    | 79-296    | フィンガーガード             | FINGER GUARD       | 2    |
| 40-55    | 13-1140-0 | 針 (UY113GS Nm90)     | NEEDLE             | *    |

\* 各ゲージ部品の品番は、46, 47ページのゲージパーツ表を参照して下さい。  
\* Please refer to Page 46, 47 GAUGE PARTS LIST

# 41. ゲージハーツ(2) GAUGE PARTS (2)

| REF. NO. | PART NO.  | 品名         | DESCRIPTION        | Q'TY |
|----------|-----------|------------|--------------------|------|
| 41-01    | 06-003    | 六角穴付きボルト   | BOLT               | 2    |
| 41-02    | 06-186    | 突き板爪       | RUFFLER BLOCK      | 1    |
| 41-03    | 06-187    | 突き板        | RUFFLER BLADE      | 1    |
| 41-04    | 06-188    | 突き板爪止めナット  | NUT                | 1    |
| 41-05    | 12-409    | 針株         | NEEDLE CLAMP       | 1    |
| 41-06    | 12-479    | 針株         | NEEDLE CLAMP       | 1    |
| 41-07    | 14-411    | 針板         | NEEDLE PLATE       | 1    |
| 41-08    | 14-415    | 針板         | NEEDLE PLATE       | 1    |
| 41-09    | 15-051    | ダイヤタック送り歯  | FEED DOG           | 1    |
| 41-10    | 15-411    | 送歯         | FEED DOG           | 1    |
| 41-11    | 15-415    | 送歯         | FEED DOG           | 1    |
| 41-12    | 17-0510-1 | 押え(ダイヤタック) | PRESSER FOOT       | 1    |
| 41-13    | 17-4110-1 | 押え組        | PRESSER FOOT ASS'Y | 1    |
| 41-14    | 17-4110-B | 押え足        | BOTTOM             | 1    |
| 41-15    | 17-4150-1 | 押え組        | PRESSER FOOT ASS'Y | 1    |
| 41-16    | 17-4150-B | 押え足        | BOTTOM             | 1    |
| 41-17    | 17-4150-C | ピン         | PIN                | 1    |
| 41-18    | 17-4430-A | 押えホース      | SHANK              | 1    |
| 41-19    | 17-4960-A | 押えホース      | BRACKET            | 1    |
| 41-20    | 17-5700-C | 押え足取付けネジ   | SCREW              | 1    |
| 41-21    | 18-418    | 糸寄せ棒       | RETAINER HOLDER    | 1    |
| 41-22    | 18-496    | 糸寄せ棒       | RETAINER HOLDER    | 1    |
| 41-23    | 19-413    | ルーバー台      | LOOPER HOLDER      | 1    |
| 41-24    | 19-496    | ルーバー台      | LOOPER HOLDER      | 1    |
| 41-25    | 84-382    | ネジ         | SCREW              | 1    |
| 41-26    | 84-521    | ネジ         | SCREW              | 1~2  |
| 41-27    | 84-564    | ネジ         | SCREW              | 2    |
| 41-28    | 87-252    | 六角穴付きボルト   | BOLT               | 1    |
| 41-29    | 87-279    | 六角穴付き止ネジ   | SCREW              | 2    |
| 41-30    | 88-160    | ナット        | NUT                | 2    |
| 41-31    | 12-392    | 針株         | NEEDLE HOLDER      | 1    |
| 41-32    | 14-393    | 針板         | NEEDLE PLATE       | 1    |
| 41-33    | 15-393    | 送り歯(右)     | FEED DOG           | 1    |
| 41-34    | 15-394    | 送り歯(左)     | FEED DOG           | 1    |
| 41-35    | 18-392    | 糸寄せ棒       | RETAINERHOLDER     | 1    |
| 41-36    | 19-392    | ルーバー台      | LOOPER HOLDER      | 1    |
| 41-37    | 19-405    | 針受け        | NEEDLE GUIDE       | 4    |
| 41-38    | 19-406    | ルーバー台止め金具  | BRACKET            | 2    |
| 41-39    | 19-433    | ルーバー       | LOOPER             | 4    |
| 41-40    | 84-367    | ネジ         | SCREW              | 2    |
| 41-41    | 87-071    | 六角穴付き止めねじ  | SCREW              | 4    |
| 41-42    | 87-104    | ネジ         | SCREW              | 12   |

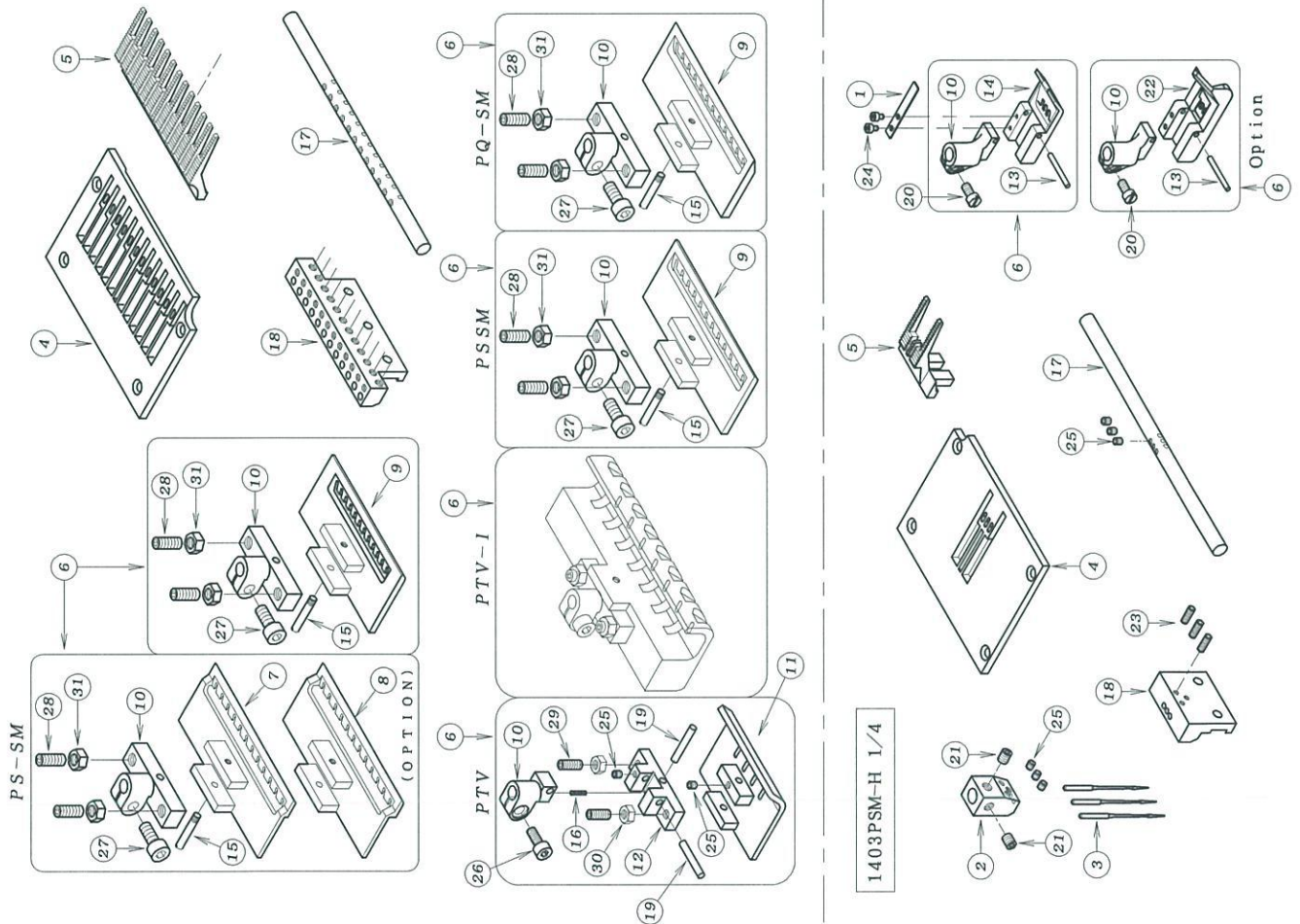
\* 各ゲージ部品の品番は、46, 47ページのゲージパーツ表を参照して下さい。  
 \* Please refer to Page 46, 47 GAUGE PARTS LIST



# 42. ケーシハーツ (3) GAUGE PARTS (3)

| REF. NO. | PART NO.  | 品名            | DESCRIPTION        | QTY |
|----------|-----------|---------------|--------------------|-----|
| 42-01    | 04-477    | カイトハネ         | SPRING             | 1   |
| 42-02    | 12-435    | 針株            | NEEDLE CLAMP       | 1   |
| 42-03    | 13-0580-5 | 針 (DVX57 #18) | NEEDLE             | 3   |
| 42-04    | *         | 針板            | NEEDLE PLATE       | 1   |
| 42-05    | *         | 送歯            | FEED DOG           | 1   |
| 42-06    | *         | 押え組           | PRESSER FOOT ASS'Y | 1   |
| 42-07    | *         | 押え足 (2mm)     | BOTTOM             | 1   |
| 42-08    | *         | 押え足 (3.5mm)   | BOTTOM             | 1   |
| 42-09    | *         | 押え足           | BOTTOM             | 1   |
| 42-10    | *         | 押えボス          | SHANK              | 1   |
| 42-11    | 17-3710-B | 押え足 (1' 均等)   | BOTTOM             | 1   |
| 42-12    | 17-3710-C | 押えボス取り付台      | BRACKET            | 1   |
| 42-13    | 17-4150-C | ピン            | PIN                | 1   |
| 42-14    | 17-4350-A | 押え足           | BOTTOM             | 1   |
| 42-15    | 17-5700-C | 押え足取付ネジ       | SCREW              | 1   |
| 42-16    | 17-8190-F | ハネ            | SPRING             | 1   |
| 42-17    | *         | 糸巻せ棒          | RETAINER HOLDER    | 1   |
| 42-18    | *         | ルーパ一台         | LOOPER HOLDER      | 1   |
| 42-19    | 71-215    | ピン            | PIN                | 2   |
| 42-20    | 84-382    | ネジ            | SCREW              | 1   |
| 42-21    | 84-521    | ネジ            | SCREW              | 2   |
| 42-22    | 17-4330-A | 押え足           | BOTTOM             | 1   |
| 42-23    | 87-071    | ネジ            | SCREW              | 3   |
| 42-24    | 87-100    | 六角穴付きボルト      | BOLT               | 2   |
| 42-25    | 87-104    | ネジ            | SCREW              | 8   |
| 42-26    | 87-113    | 六角穴付きボルト      | BOLT               | 1   |
| 42-27    | 87-252    | 六角穴付きボルト      | BOLT               | 1   |
| 42-28    | 87-279    | 六角穴付き止ネジ      | SCREW              | 2   |
| 42-29    | 87-289    | ネジ            | SCREW              | 2   |
| 42-30    | 88-146    | ナット           | NUT                | 2   |
| 42-31    | 88-160    | ナット           | NUT                | 2   |

\* 各ゲージ部品の品番は、46, 47ページのゲージパーツ表を参照して下さい。  
\* Please refer to Page 46, 47 GAUGE PARTS LIST





# 43. ゲージ部品一覽表 (1) GAUGE PARTS TABLE (1)

| 機種<br>MODEL | タイプ<br>TYPE | ゲージ<br>GAUGE      | 針株<br>NEEDLE<br>HOLDER | 押え組<br>PRESSER<br>FOOT ASS'Y | 送り歯<br>FEED<br>DOG | 針板<br>NEEDLE<br>PLATE | 糸寄せ棒<br>RETAINER<br>HOLDER | 糸寄せルーパー<br>RETAINER<br>LOOPER | ルーパー<br>LOOPER | ルーパー台<br>LOOPER<br>HOLDER | 針受け<br>NEEDLE<br>GUARD |
|-------------|-------------|-------------------|------------------------|------------------------------|--------------------|-----------------------|----------------------------|-------------------------------|----------------|---------------------------|------------------------|
| 1402        | MR          | 1/4               | 12-4090-1              | 17-4150-1                    | 15-415             | 14-415                | 18-418                     |                               |                | 19-413                    |                        |
|             | Dia tuck    | 1/4               | 12-4090-1              | 17-0510-1                    | 15-051             | 14-415                | 18-418                     |                               |                | 19-413                    |                        |
| 1404        | P           | 3/4               | 12-4180-1              | 17-3750-1                    | 15-418             | 14-418                | 18-418                     |                               |                | 19-418                    |                        |
|             |             | 1                 | 12-4210-1              | 17-3710-1                    | 15-421             | 14-421                | 18-421                     |                               |                | 19-421                    | 19-416                 |
|             | PMD         | 1-1/8             | 12-4220-1              | 17-3720-1                    | 15-422             | 14-422                | 18-422                     |                               |                | 19-422                    |                        |
|             |             | 1-1/4             | 12-4230-1              | 17-3730-1                    | 15-423             | 14-423                | 18-423                     |                               |                | 19-423                    |                        |
|             |             | 1-1/2             | 12-4240-1              | 17-3740-1                    | 15-424             | 14-424                | 18-424                     |                               |                | 19-424                    |                        |
| 1404        | PMD         | 1/4-1/2-1/4       | 12-4280-1              | 17-4280-1                    | 15-428             | 14-428                | 18-428                     |                               |                | 19-428                    |                        |
|             |             | 1/4-3/4-1/4       | 12-4270-1              | 17-3770-1                    | 15-427             | 14-427                | 18-427                     |                               |                | 19-427                    |                        |
|             | PE          | 3/4               | 12-4180-1              | 17-3750-1                    | 15-418             | 14-418                | 18-418                     |                               |                | 19-418                    |                        |
|             |             | 1-1/4             | 12-4230-1              | 17-3730-1                    | 15-423             | 14-423                | 18-423                     |                               |                | 19-423                    |                        |
| 1406        | P           | 3/16              | 12-4420-1              | 17-3890-1                    | 15-442             | 14-442                | 18-442                     | 19-437                        | 19-431         | 19-442                    |                        |
|             |             | 1/4               | 12-4430-1              | 17-3900-1                    | 15-443             | 14-443                | 18-443                     |                               |                | 19-443                    |                        |
|             |             | 1/3               | 12-4400-1              | 17-4400-1                    | 15-440             | 14-440                | 18-440                     |                               |                | 19-440                    |                        |
| 1408        | P PG        | 3/8               | 12-4540-1              | 17-3910-1                    | 15-454             | 14-454                | 18-454                     |                               |                | 19-454                    | 19-416                 |
|             |             | 1/4               | 12-4650-1              | 17-3930-1                    | 15-465             | 14-465                | 18-465                     |                               |                | 19-465                    |                        |
| 1409        | P           | 1/4               | 12-4700-1              | 17-3940-1                    | 15-470             | 14-470                | 18-470                     |                               |                | 19-470                    |                        |
|             |             | 3/16              | 12-4990-1              | 17-3970-1                    | 15-497             | 14-497                | 18-497                     |                               |                | 19-497                    |                        |
| 1412        | P           | 1/4               | 12-4980-1              | 17-3960-1                    | 15-496             | 14-496                | 18-496                     |                               |                | 19-496                    | 19-416                 |
|             |             | 5mm               | 12-0450-1              | 17-3980-1                    | 15-045             | 14-045                | 18-045                     |                               |                | 19-045                    |                        |
| 1406        | PL          | 1/8               | 12-4780-1              | 17-4780-1                    | 15-480             | 14-480                | 18-480                     |                               |                | 19-480                    |                        |
|             |             | 1/4               | 12-4430-1              | 17-3900-1                    | 15-443             | 14-443                | 18-443                     |                               |                | 19-443                    |                        |
|             |             | 1/3               | 12-4400-1              | 17-4400-1                    | 15-440             | 14-440                | 18-440                     |                               |                | 19-440                    | 19-416                 |
| 1412        | P           | 3/8               | 12-4540-1              | 17-3910-1                    | 15-454             | 14-454                | 18-454                     |                               |                | 19-454                    |                        |
|             |             | 1/4               | 12-4980-1              | 17-3960-1                    | 15-496             | 14-496                | 18-496                     |                               |                | 19-496                    |                        |
| 1412        | PMD         | 3/16              | 12-4990-1              | 17-3970-1                    | 15-497             | 14-497                | 18-497                     |                               |                | 19-497                    |                        |
|             |             | 1/8               | 12-4780-1              | 17-4780-1                    | 15-480             | 14-480                | 18-480                     |                               |                | 19-480                    |                        |
| 1012        | P           | 3/16              | 12-4990-1              | 17-3970-1                    | 15-046             | 14-046                |                            |                               |                | 19-497                    |                        |
|             |             | 1/4               | 12-4980-1              | 17-3960-1                    | 15-047             | 14-047                |                            |                               |                | 19-496                    | 19-416                 |
| 1404        | PSF         | 3/16-3/4-3/16     | 12-4260-1              | 17-3760-1                    | 15-426             | 14-426                | 18-426                     |                               |                | 19-426                    |                        |
|             |             | 1/4-3/4-1/4       | 12-4270-1              | 17-3770-1                    | 15-427             | 14-427                | 18-427                     |                               |                | 19-427                    | 19-416                 |
|             |             | 3/16-1-3/16       | 12-4300-1              | 17-3820-1                    | 15-432             | 14-432                | 18-432                     |                               |                | 19-430                    |                        |
| 1411        | P           | 1/4-1-1/4         | 12-4290-1              | 17-3810-1                    | 15-431             | 14-431                | 18-431                     |                               |                | 19-429                    | 19-416                 |
|             |             | 1/8X4-1/4X2-1/8X4 | 12-3920-1              | 17-3920-1                    | 15-392             | 14-392                | 18-392                     | 19-437                        | 19-433         | 19-392                    | 19-405                 |
| 1404        | WB          | 3/16-3/4-3/16     | 12-4260-1              | 17-4260-1                    | 15-426             | 14-426                | 18-426                     |                               |                | 19-426                    |                        |
|             |             | 1/4-3/4-1/4       | 12-4270-1              | 17-4270-1                    | 15-427             | 14-427                | 18-427                     |                               |                | 19-427                    | 19-416                 |
|             |             | 3/16-1-3/16       | 12-4300-1              | 17-4320-1                    | 15-432             | 14-432                | 18-432                     |                               |                | 19-430                    |                        |
| 1403        | PSM-H       | 1/4-1-1/4         | 12-4290-1              | 17-4310-1                    | 15-431             | 14-431                | 18-431                     |                               |                | 19-429                    | 19-416                 |
|             |             | 1/4               | 12-4350-1              | 17-4350-1                    | 15-435             | 14-435                | 18-435                     |                               |                | 19-433                    |                        |

\*はオプションです。 \* i s o p t i o n .

44. ゲージ部品一覽表 (2) GAUGE PARTS TABLE (2)

| 機種<br>MODEL | タイプ<br>TYPE | ゲージ<br>GAUGE  | 針株<br>NEEDLE<br>HOLDER | 押え組<br>PRESSER<br>FOOT ASS' Y | 送り歯<br>FEED<br>DOG | 針板<br>NEEDLE<br>PLATE | 糸寄せ棒<br>RETAINER<br>HOLDER | 糸寄せルーパー<br>RETAINER<br>LOOPER | ルーパー<br>LOOPER | ルーパー台<br>LOOPER<br>HOLDER | 針受け<br>NEEDLE<br>GUARD |
|-------------|-------------|---------------|------------------------|-------------------------------|--------------------|-----------------------|----------------------------|-------------------------------|----------------|---------------------------|------------------------|
| 1412        | PS          | 3/16          | 12-4990-1              | 17-4990-1                     | 15-046             | 14-028                | 18-497                     | 19-439                        | 19-431         | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-4980-1                     | 15-047             | 14-029                | 18-496                     |                               |                | 19-496                    | 19-416                 |
| 1012        | PQ          | 3/16          | 12-4990-1              | 17-4990-1                     | 15-046             | 14-046                |                            |                               | 19-112         | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-4980-1                     | 15-047             | 14-047                |                            |                               |                | 19-496                    | 19-416                 |
| 1412        | PQ          | 3/16          | 12-4990-1              | 17-4920-1                     | 15-500             | 14-468                | 18-497                     | 19-439                        | 19-431         | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-4910-1                     | 15-499             | 14-469                | 18-496                     |                               |                | 19-496                    | 19-416                 |
| 1412        | MR          | 3/16          | 12-4990-1              | 17-4920-1                     | 15-500             | 14-468                |                            |                               | 19-112         | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-4910-1                     | 15-499             | 14-469                |                            |                               |                | 19-496                    | 19-416                 |
| 1412        | PTV         | 3/16          | 12-4990-1              | 17-3970-1                     | 15-497             | 14-497                | 18-497                     | 19-437                        |                | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-3960-1                     | 15-496             | 14-496                | 18-496                     | 19-439                        | 19-431         | 19-496                    | 19-416                 |
| 1406        | PTV-1       | 3/8-11        | 12-4990-1              | 17-4510-1                     | 15-497             | 14-497                | 18-497                     |                               |                | 19-497                    |                        |
|             |             | 1/2-14        | 12-4980-1              | 17-4530-1                     | 15-496             | 14-496                | 18-496                     | 19-437                        |                | 19-496                    | 19-416                 |
| 1412        | PSM         | 3/16-6        | 12-4990-1              | 17-4500-1                     | 15-497             | 14-497                | 18-497                     |                               |                | 19-497                    |                        |
|             |             | 1/4-8         | 12-4980-1              | 17-4520-1                     | 15-496             | 14-496                | 18-496                     |                               |                | 19-496                    | 19-416                 |
| 1012        | PSSM        | 3/16          | 12-4990-1              | 17-0480-1                     | 15-046             | 14-046                |                            |                               | 19-112         | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-0500-1                     | 15-047             | 14-047                |                            |                               |                | 19-496                    | 19-416                 |
| 1412        | PSSM        | 3/16          | 12-4990-1              | 17-0460-1                     | 15-046             | 14-028                | 18-497                     |                               |                | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-0480-1                     | 15-047             | 14-029                | 18-496                     | 19-439                        | 19-431         | 19-496                    | 19-416                 |
| 1012        | PSSM        | 3/16          | 12-4990-1              | 17-0460-1                     | 15-046             | 14-046                |                            |                               |                | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-0470-1                     | 15-047             | 14-047                |                            |                               | 19-112         | 19-496                    | 19-416                 |
| 1412        | PQSM        | 3/16          | 12-4990-1              | 17-4720-1                     | 15-500             | 14-468                | 18-497                     | 19-439                        | 19-431         | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-4710-1                     | 15-499             | 14-469                | 18-496                     |                               |                | 19-496                    | 19-416                 |
| 1412        | P-ET        | 3/16          | 12-4990-1              | 17-3970-1                     | 15-046             | 14-028                | 18-497                     |                               |                | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-3960-1                     | 15-047             | 14-029                | 18-496                     | 19-439                        | 19-432         | 19-496                    | 19-416                 |
| 1412        | PS-ET       | 3/16          | 12-4990-1              | 17-4990-1                     | 15-046             | 14-028                | 18-497                     |                               |                | 19-497                    |                        |
|             |             | 1/4           | 12-4980-1              | 17-4980-1                     | 15-047             | 14-029                | 18-496                     |                               |                | 19-496                    | 19-416                 |
| 1421        | P           | 1/8           | 12-4110-1              | 17-3680-1                     | 15-368             | 14-368                | 18-403                     | 19-437                        | 19-433         | 19-391                    |                        |
|             |             | 3/16          | 12-4990-1              | 17-0460-1                     | 15-046             | 14-028                | 18-497                     |                               |                | 19-497                    |                        |
| 1412        | PSSM-ET     | 1/4           | 12-4980-1              | 17-0470-1                     | 15-047             | 14-029                | 18-496                     | 19-439                        | 19-432         | 19-496                    | 19-416                 |
|             |             | 1/8..1/4..1/8 | 12-3920-1              | 17-3950-1                     | 15-394<br>15-393   | 14-393                | 18-392                     |                               |                | 19-392                    | 19-433                 |
| 1418        | P           | 1/8..1/4      | 12-4110-1              | 17-3680-1                     | 15-395             | 14-395                | 18-403                     | 19-437                        | 19-433         | 19-368                    | 19-405                 |
|             |             |               |                        |                               |                    |                       |                            |                               |                |                           |                        |







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# ***DFB** Series Instruction Manual*

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*10th edition : : Jan 2016*

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**KANSAI**  
SPECIAL®

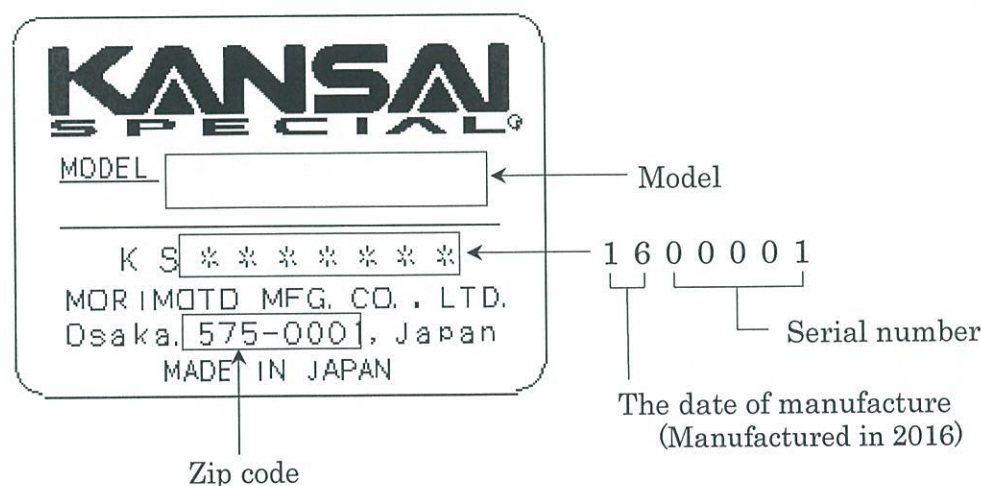
## INTRODUCTION

*Thank you for your purchasing Kansai Special's DFB 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.

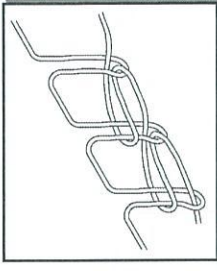
### Indication of serial number



|   |  |    |
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| 10-2 Position of the presser foot   |  |    |
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| 11-1 Manual lever   |  |    |
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**[1] SPECIFICATIONS**

**1-1 Stitch type**  
JIS401 double chain stitch machines



**1-2 Model**

|                     |                     |                   |                   |
|---------------------|---------------------|-------------------|-------------------|
| Model               | DFB1404P            | DFB1406P          | DFB1412P          |
| No. of needles      | 2~4                 | 5~6               | 7~12              |
| No. of threads      | 4 needle threads    | 6 needle threads  | 12 needle threads |
| Type of tension set | 4 looper threads    | 6 looper threads  | 12 looper threads |
| Puller width        | Mounted type        | Separate type     | Separate type     |
| Minimum gauge width | 55mm                | 79mm              | 79mm              |
| Maximum gauge width | 38.1mm (1-1/2 inch) | 3.18mm (1/8 inch) | 70mm              |

**[2] NEEDLES & THREADING THE MACHINE**

**2-1 Needles**

UO113GS of Schmetz or Organ  
Select the proper needle for the fabric and thread.

< Needles and needle size >

|         |      |      |      |       |       |
|---------|------|------|------|-------|-------|
| Schmetz | Nm75 | Nm80 | Nm90 | Nm100 | Nm130 |
| Organ   | #11  | #12  | #14  | #16   | #21   |

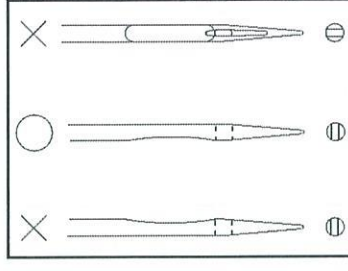
|            |         |         |
|------------|---------|---------|
|            | Organ   | Schmetz |
| 14??P,SPF  | UO×113  | UY×113  |
| 10??P      | DV×57LE |         |
| PS,PQ,PSSM | DV×57   | DV×57   |
| PTV        | DV×57   | DV×57   |

**2-2 Replacing the needle**

When replacing the needle, check the needle carefully to see that the scarf is turned to the left 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.





### 2-3 To thread the machine

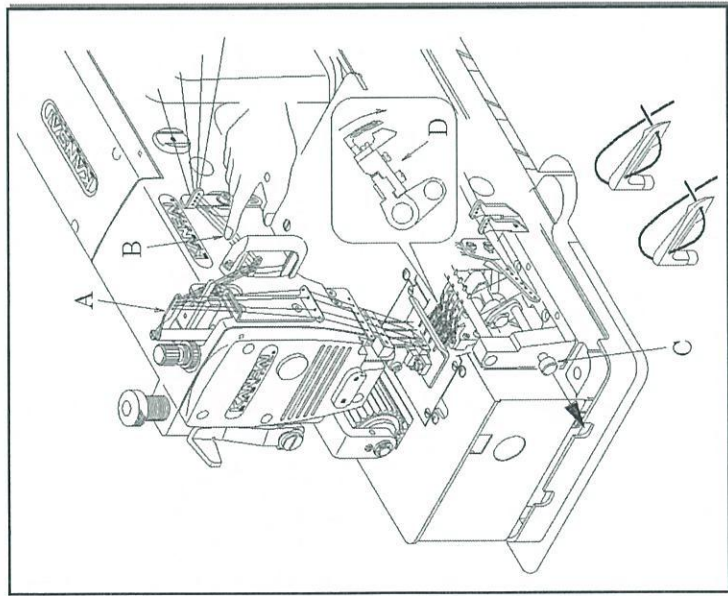
Thread the machine correctly by referring to pages 3 to 11. Incorrect threading may cause skip stitching, thread breakage and/or uneven stitch formation. When threading the looper, tilt the looper holder toward the front of the machine using the looper drawing bar.

■ To tilt the looper toward the front

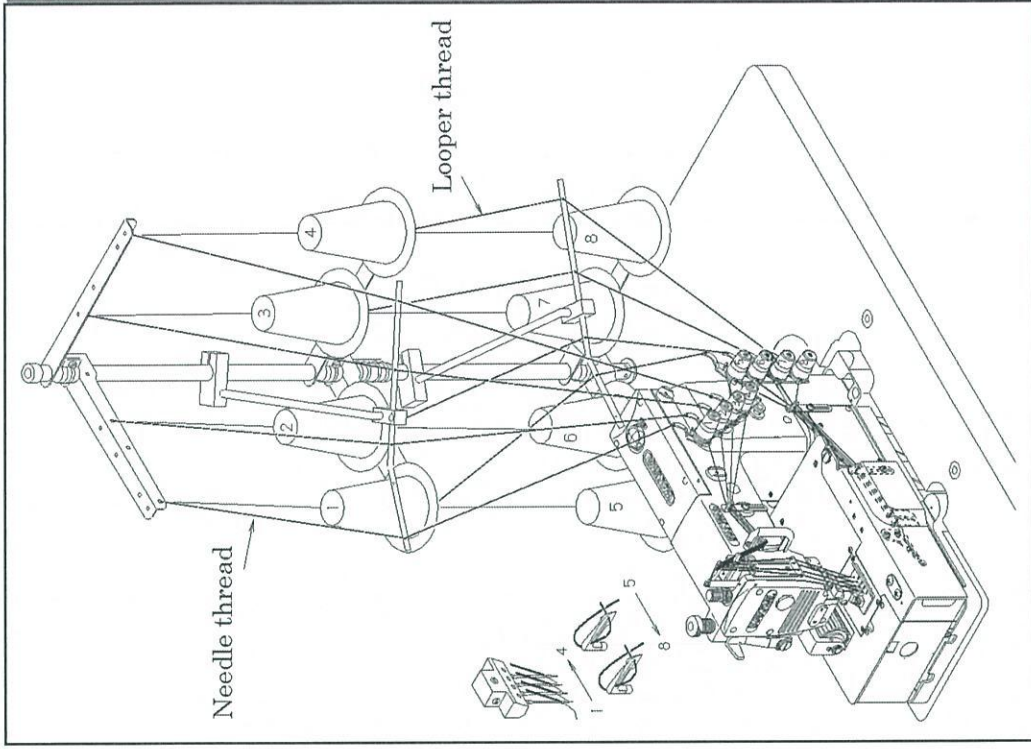
1. Bring needle bar A to the top of its stroke.
2. Pay out the needle thread from the spool by pressing a finger down on needle threads B.
3. Pull looper drawing bar knob C out to the left so that the looper holder is tilted toward the front of the machine.
4. After the machine is threaded, replace the looper by pressing looper holder D into the machine until it clicks.

< Note >

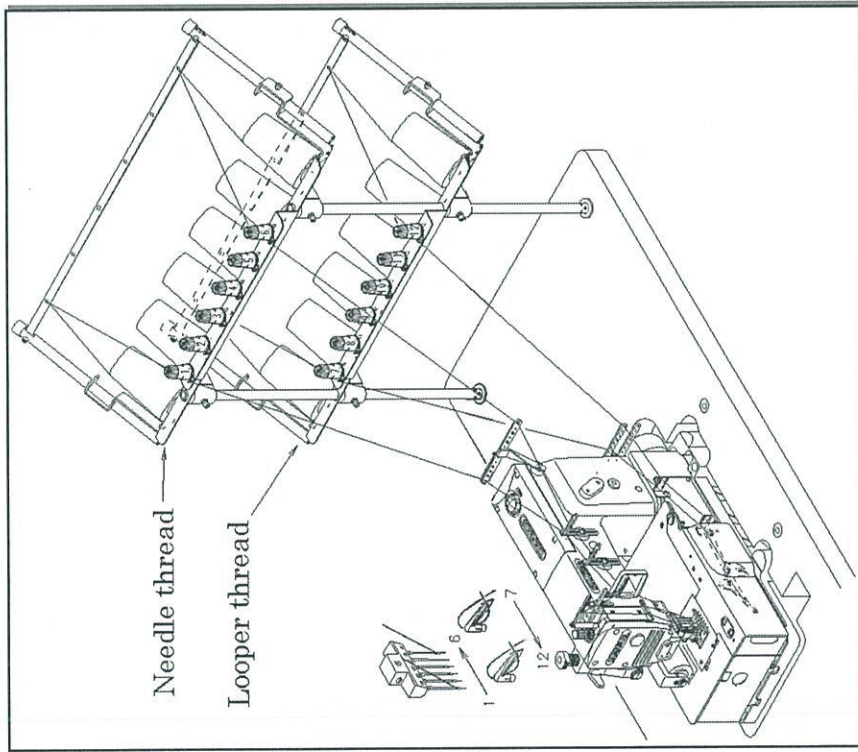
The looper pops out of the machine as soon as knob C is pulled, so do not bring your fingers close to the looper.



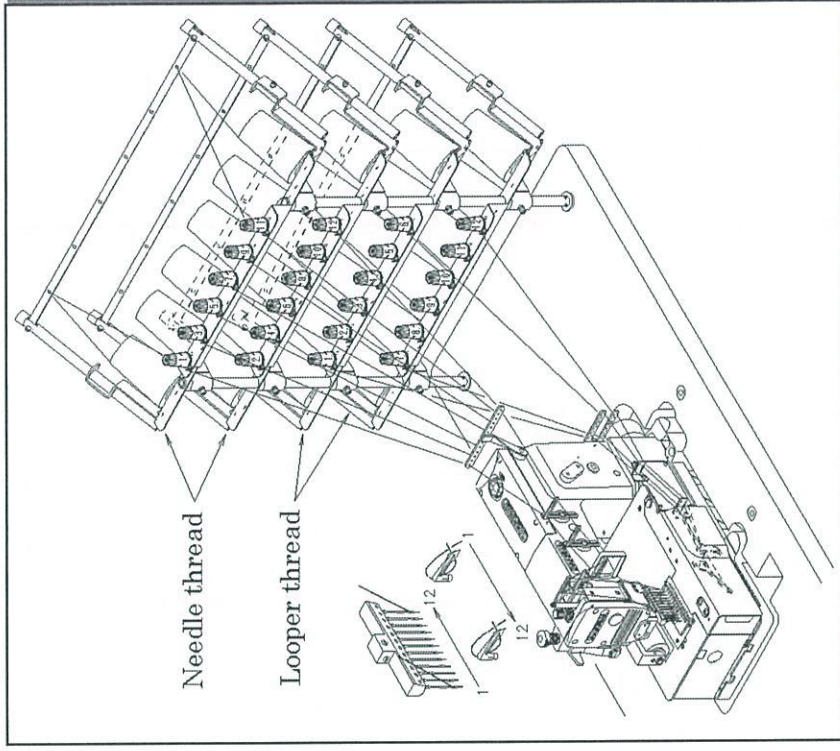
### ■ Threading diagram for DFB1404, 1411SPF



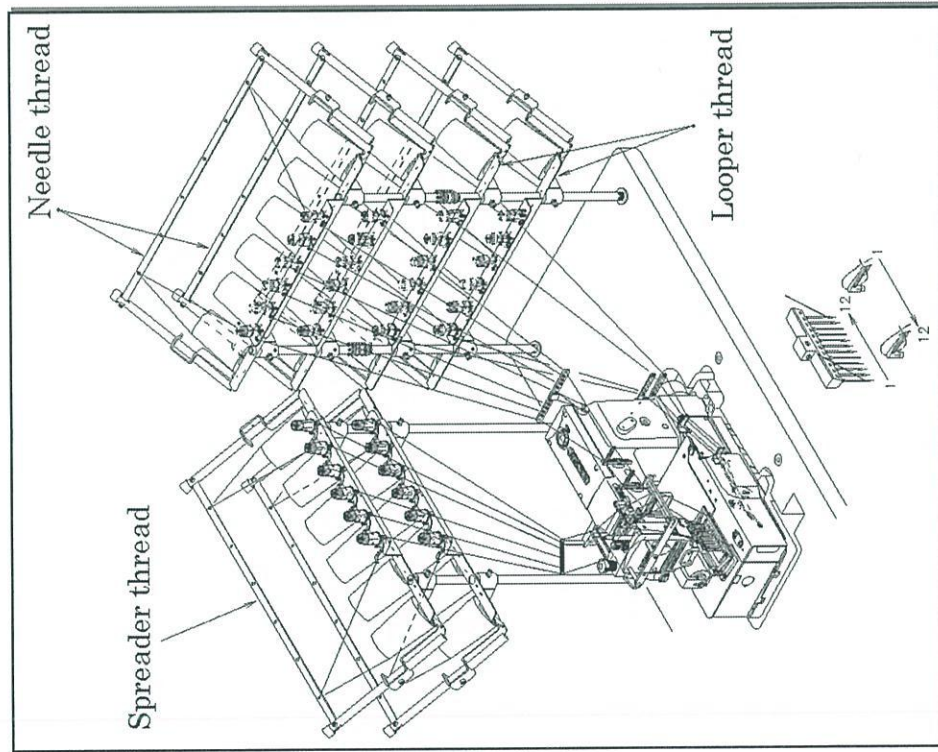
■ Threading diagram for DFB1406



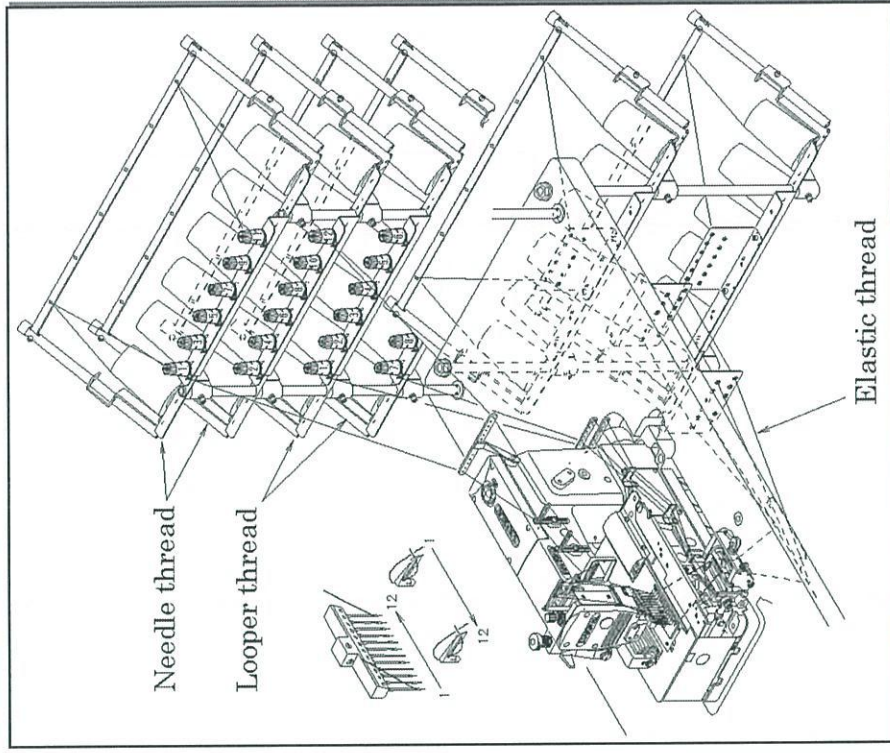
■ Threading diagram for DFB1412



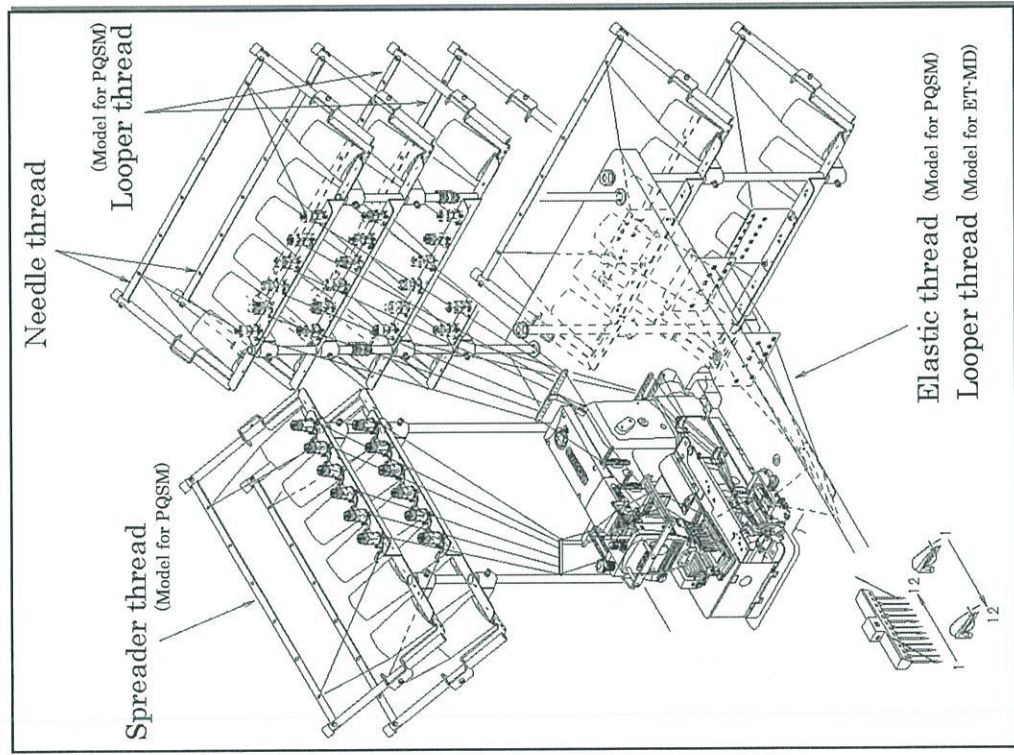
■ Threading diagram for DFB1412PSM



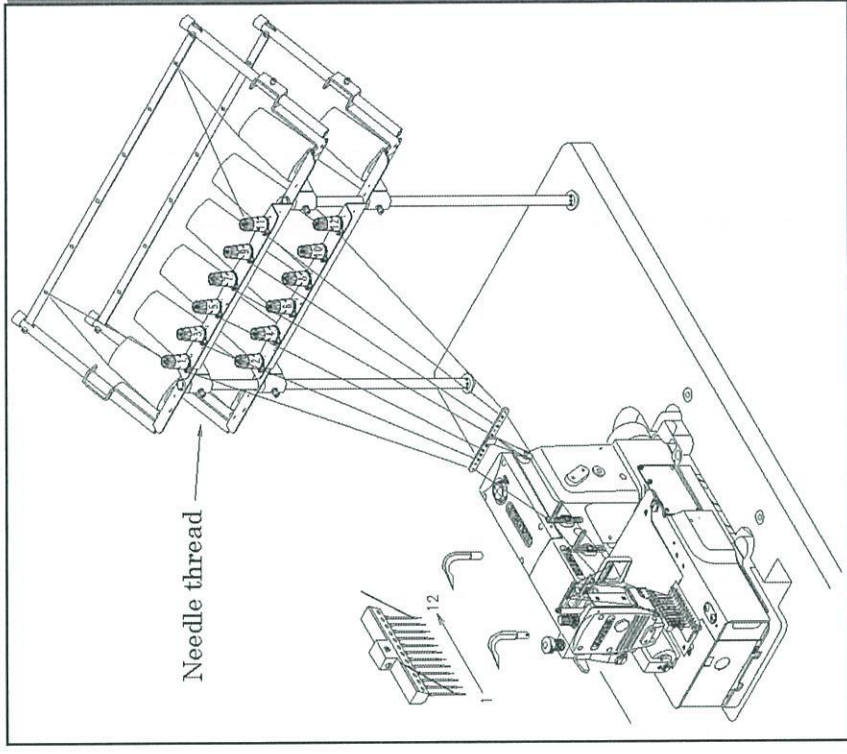
■ Threading diagram for DFB1412PQ



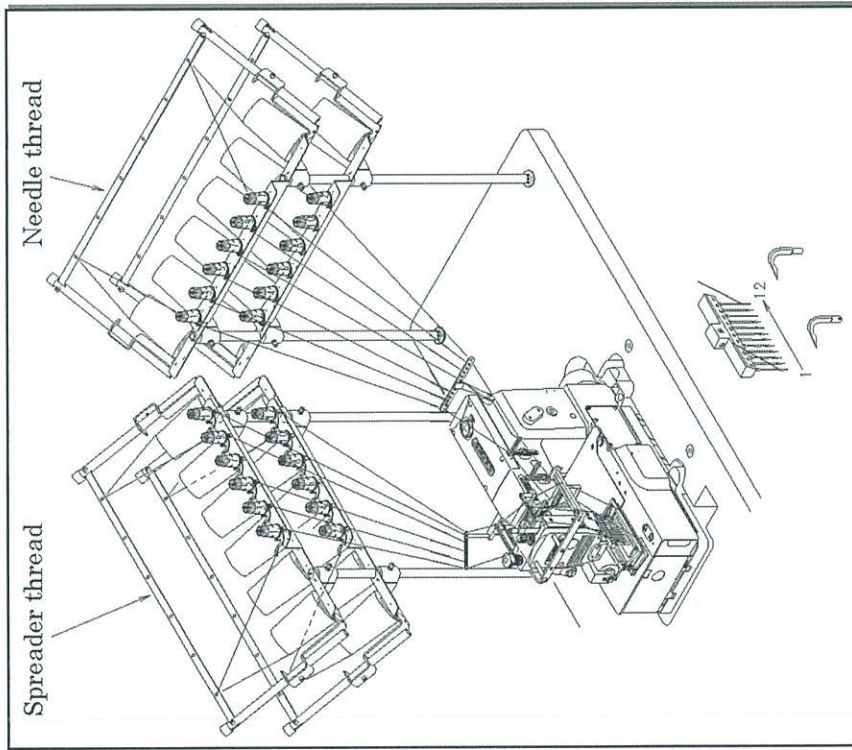
■ Threading diagram for DFB1412PQSM, DFB1412ET-MD



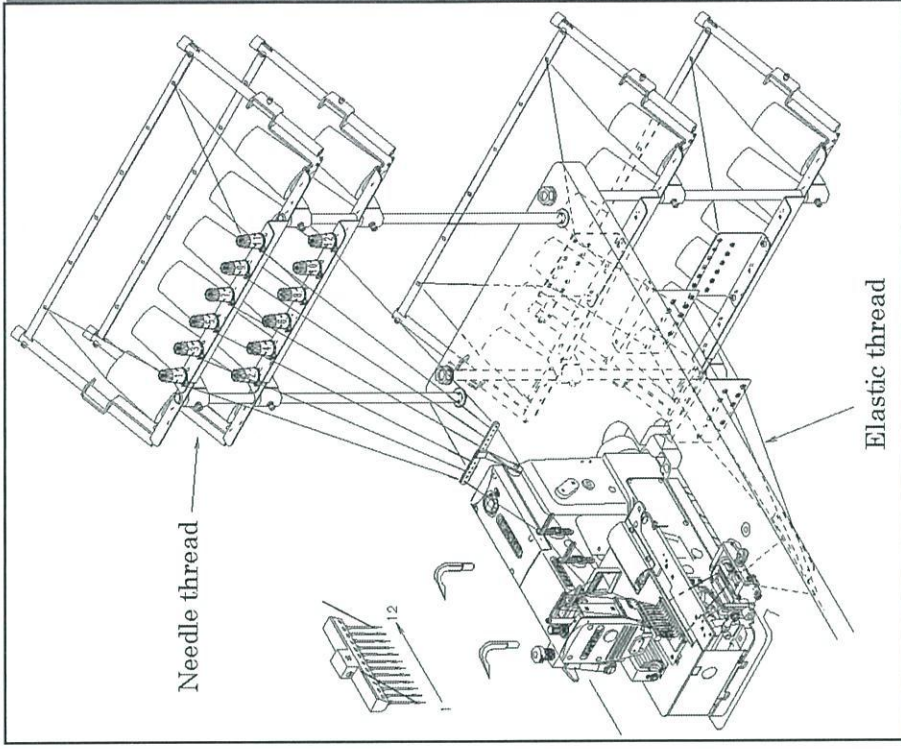
■ Threading diagram for DFB1012



■ Threading diagram for DFB1012PSM



■ Threading diagram for DFB1012PQ

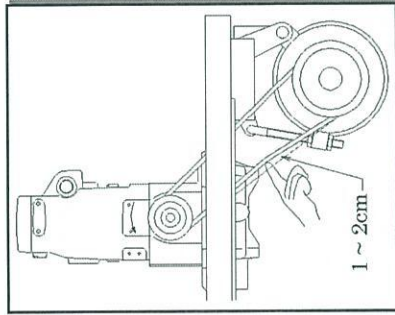


### [3] MACHINE SPEED

#### 3-1 Machine speed & direction in which the machine pulley runs

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 counterclockwise as seen from the end of the machine pulley.



#### 3-2 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 on the right).

< Machine speed >

| Model    | Maximum speed | Standard speed |
|----------|---------------|----------------|
| DFB1404P | 4500          | 4000           |
| DFB1412P | 4000          | 3500           |

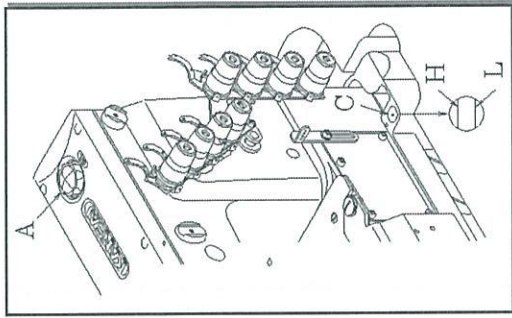
< Motor pulley selection table >

| Motor pulley outer diameter (mm) | Machine speed (SPM) |        |
|----------------------------------|---------------------|--------|
|                                  | 50Hz                | 60Hz   |
| 60                               | 2500                | 2950   |
| 70                               | 2900                | 3450   |
| 80                               | 3300                | 3900   |
| 90                               | 3700                | 4400   |
| 100                              | 4100                | (4900) |
| 110                              | 4500                | (5400) |

### [4] LUBRICATION

#### 4-1 Oil

Use Kansai Special's genuine oil.  
(Part No. 28-611)



#### 4-2 To fill the machine with oil

Remove oil pot A.

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.

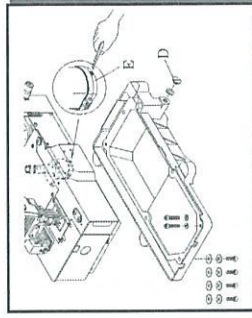
After filling the machine with oil, run the machine to check the oil is splashing onto oil pot A.

#### 4-3 Replacing the oil and the filter 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.
3. 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 4-2 shown above.



If filter element E is contaminated, proper oiling may not be performed.

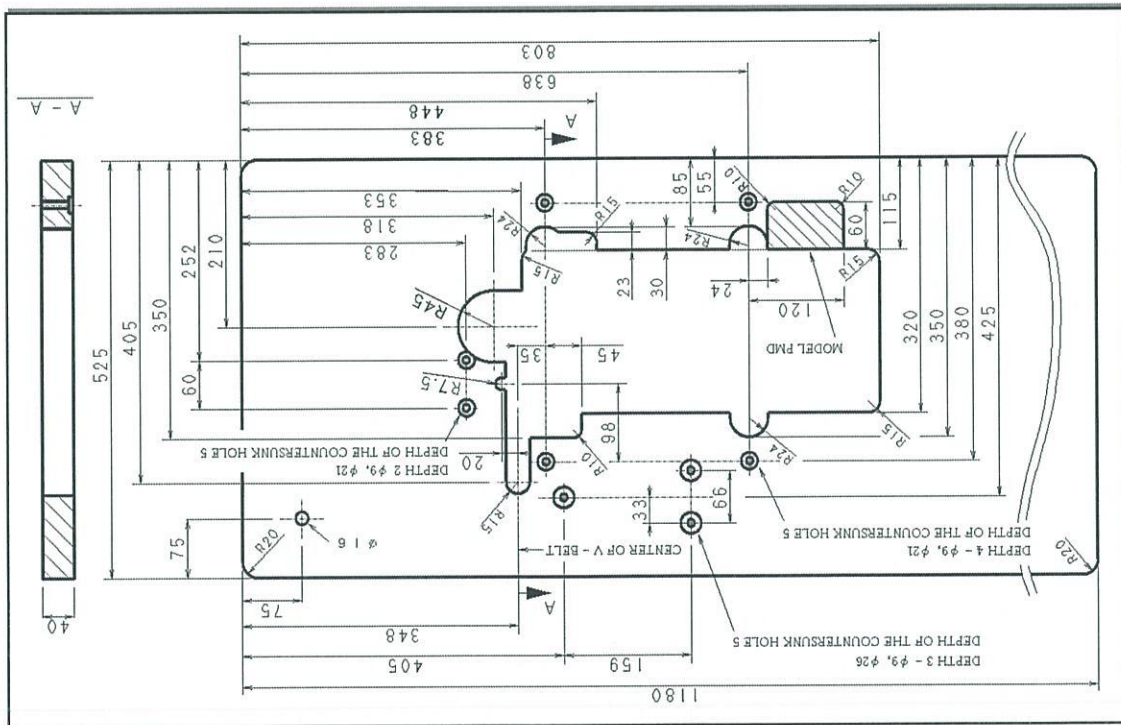
Clean the filter element every six months. If just a little or no oil flows out from the nozzle with the proper amount of oil in the machine, check the filter element.

To clean the filter element, remove oil reservoir.

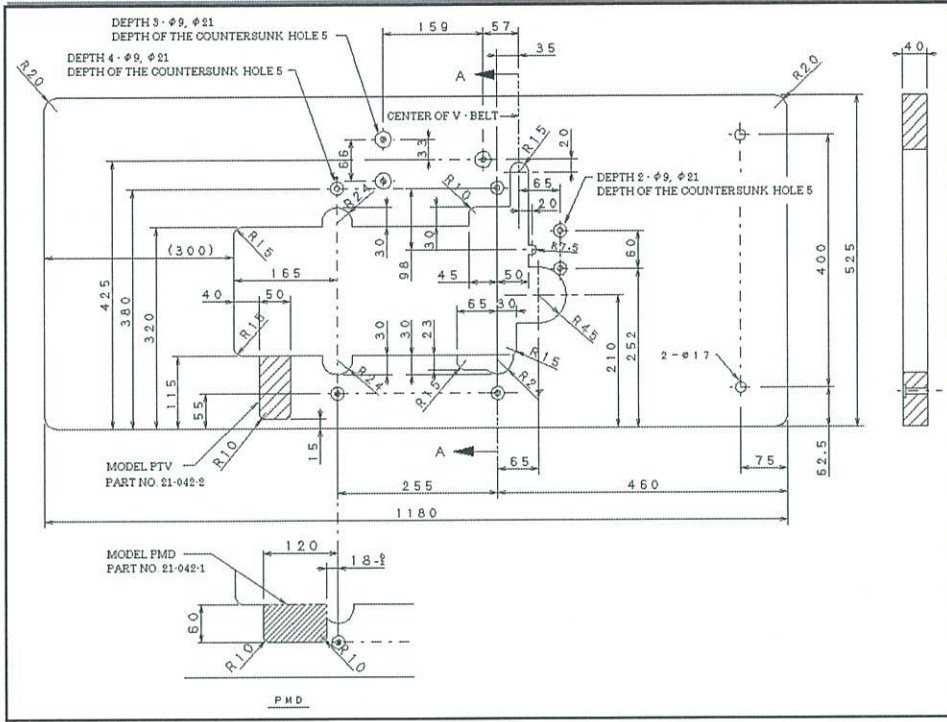
[5] SEWING MACHINE INSTALLATION

5-1 Cutting the machine table

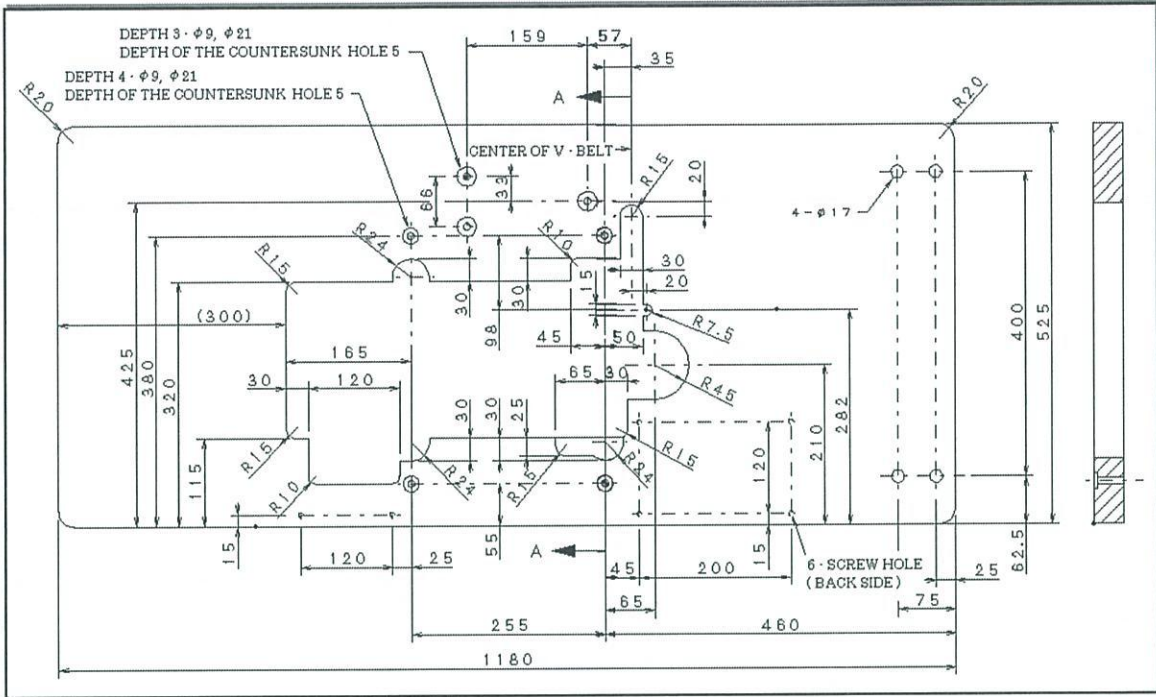
■ 1402-1404, 1411SPF



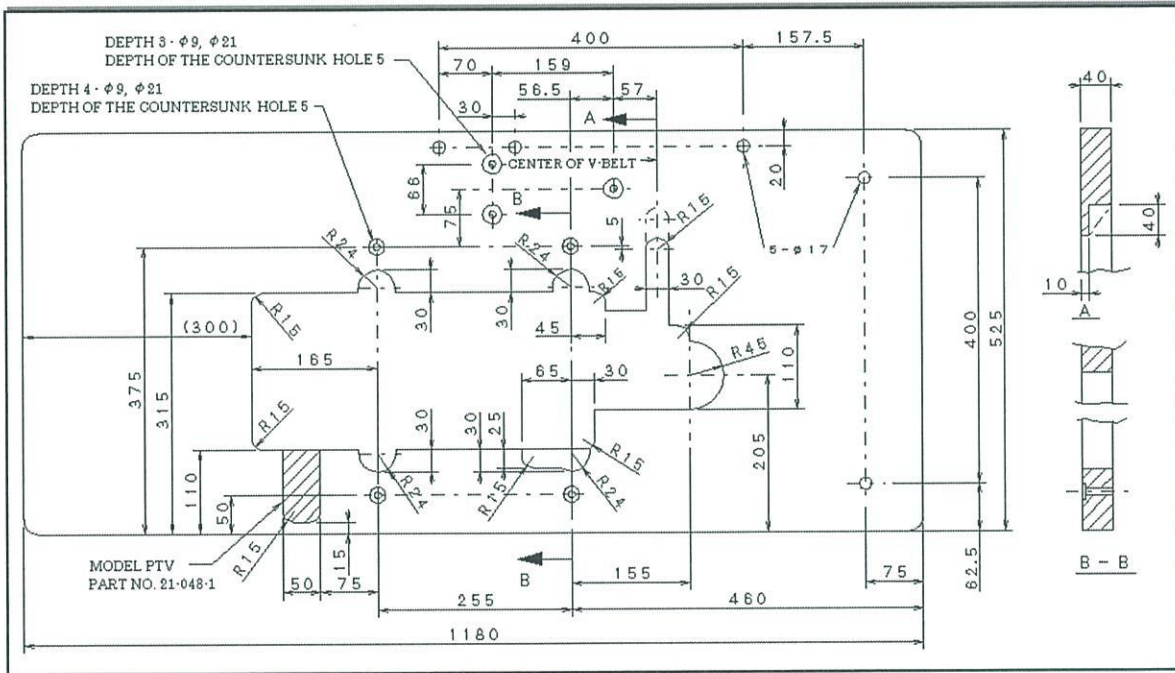
■ 1406-1412, 1012



■ 1412, 1012PQ



■ 1412, 1012PSM





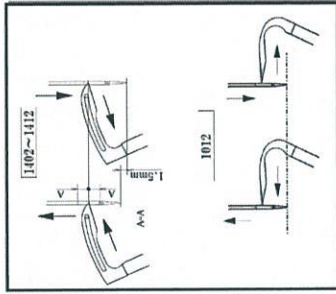


### 6-2 Loooper left-to-right movement

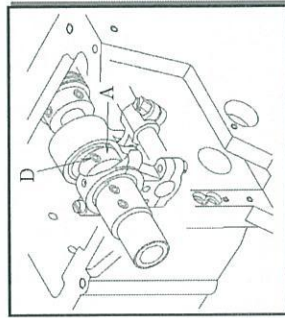
The timing must be decided the difference of its height, when the pulley is moved regular turning and reverse turning as shown figure.

Needle position should be 1.5mm lower when the looper returns by the center of the needle than when it goes by the right.

When the looper passes the needle, it points at the middle of concave (scarf) of the needle like the drawing below.

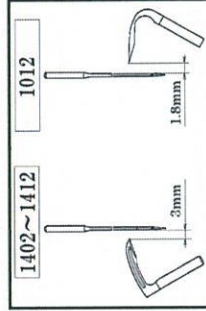


■ To make this adjustment, remove the cover first, loosen eccentric set screw D and then move eccentric ball A.

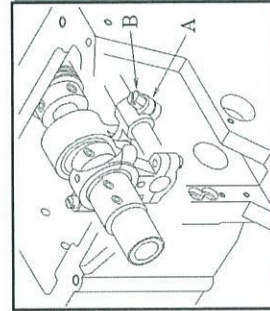


### 6-3 Loooper setting distance

When the needle bar is at the bottom of its stroke, set the distance from the point of the looper to the left side of the needle should be 3mm.



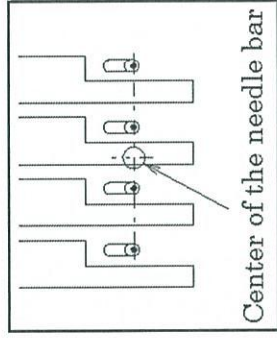
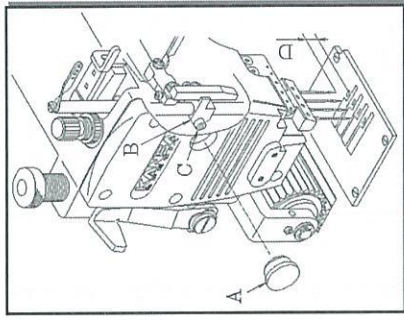
■ Adjustment is made by removing the cover and loosening screw B on looper front-to-back lever A.



### 6-4 Needle height

When the needle bar is at the top of its stroke, remove plug A on the side cover plate, loosen screw C on needle bar clamp B with a hexagonal wrench and then move the needle bar up or down as required.

| Stroke      | needle bar height D |
|-------------|---------------------|
| 34mm        | 13.5mm              |
| 31mm PSF/MR | 10.4mm              |



Center of the needle bar

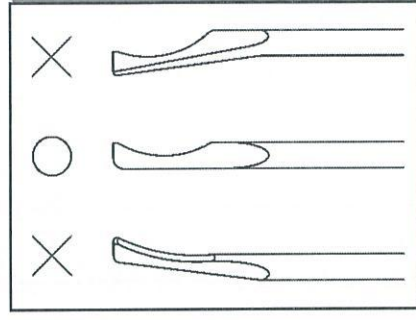
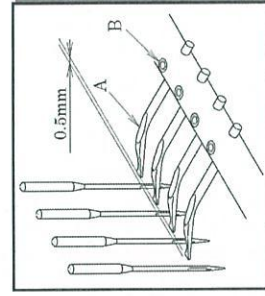
< Note >

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

### [7] ADJUSTING THE TIMING OF THE RETAINER LOOPER

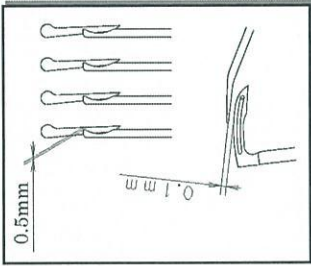
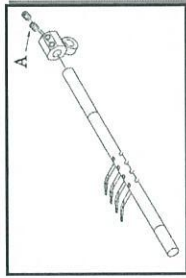
#### 7-1 Position of the retainer looper

Install retainer looper A so that its flat surface is turned upward. At this time, there should be a clearance of 0.5mm between the needle and the point of the retainer looper. Adjustment is made by loosening B.



### 7-2 Timing of the retainer loop to the needle

When the needle, moving from the top to bottom of its stroke, enters the triangle of the loop thread, the retainer loop should be at the extreme right end of its travel. To adjust the retainer loop left to right, loosen screws A first. With the retainer loop at the extreme left end of its travel, set the clearance between the retainer loop and the right side of the loop at approximately 0.5mm. Then set the clearance between the retainer loop and the top surface of the loop blade at 0.1mm. After this adjustment is made, tighten screws A.



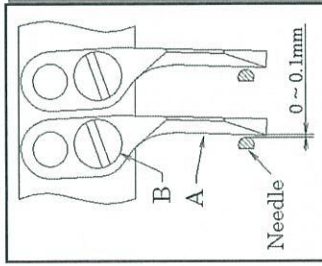
### [8] ADJUSTING THE NEEDLE GUARD

#### 8-1 Position of the needle guard

When the needle is closest to the needle guard, there should be a clearance 0~0.1mm between the right side of the needle and needle guard A. Adjustment is made by loosening screw B.

< Note >

To adjust the standard type of needle guard, after positioning the loop holder bracket (see 6-1) adjust the loop by loosening the loop set screw. Then tighten screw B.



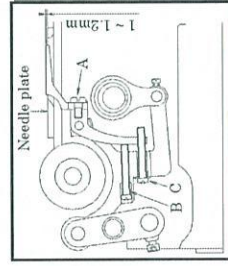
### [19] ADJUSTING THE FEED DOG & STITCH LENGTH

#### 9-1 Feed dog height & tilt

When the needle bar is at the top of its stroke, the feed dog teeth should be 1~1.2mm above the top surface of the needle plate. Adjustment is made by loosening screw A. Then check to see if the feed dog teeth is parallel with the top surface of the needle plate. Adjustment is made with screws B and C.

< Note >

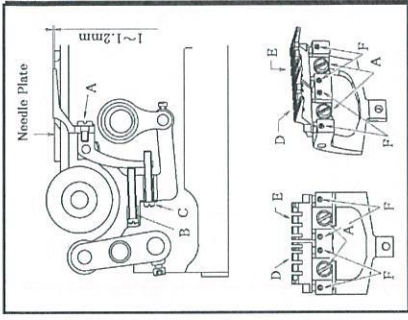
When adjusting the height of the feed dog, tilt the loop holder toward the front of the machine.



### 9-2 Left and right feed dog height (Model SPF)

Feed dog divides between left and right side. ( See the illustration ), left side feed dog D and right side feed dog E can be adjusted independently.

When the bottom of left feed dog D bring down to the pin F, both left and right feed dog height would be same. In case of the adjustment, loosen screw A and make the left feed dog higher than the right side how much the angle of the curved waist band is. Original both feed dog position at the beginning are set to the same height.



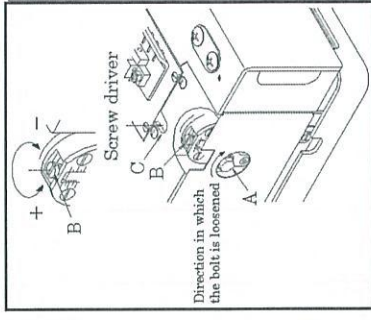
### 9-3 Stitch length

The stitch length can be adjusted from 2 to 5mm with no step. The following table shows the stitch length with the number of stitches within 1 inch (25.4mm) and 30mm.

| Stitch length (mm) | No. of stitches |             |
|--------------------|-----------------|-------------|
|                    | within 1"       | within 30mm |
| 2                  | 13              | 15          |
| 3                  | 8.5             | 10          |
| 5                  | 5               | 6           |

■ To change the stitch length

- Loosen bolt A while checking the direction in which the bolt is loosened.
- Insert a screwdriver from hole C. To decrease the stitch length, turn screw B clockwise. To increase the stitch length, turn screw B counterclockwise.
- After this adjustment is made by turning screw B, be sure to tighten screw A.



< Note >

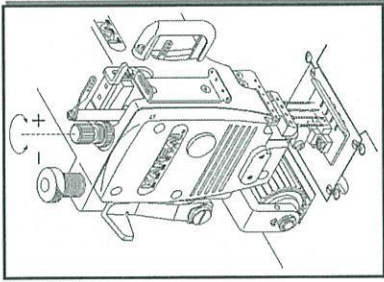
Be sure turn off the motor when changing the stitch length.

## [10] ADJUSTING THE PRESSER FOOT

### 10-1 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.

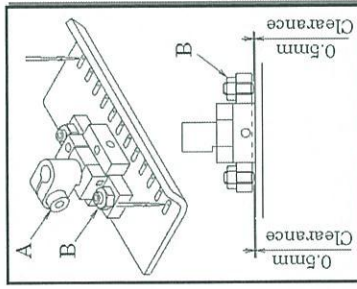


### 10-2 Position of the presser foot

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

Adjustment is made by loosening screw A. The left-to-right play adjustment on the presser foot is made by loosening nuts B.

Create a clearance of 0.5mm as shown in the illustration on the right.



## [11] ADJUSTING THE REAR PULLER DEVICE

### 11-1 Manual lever

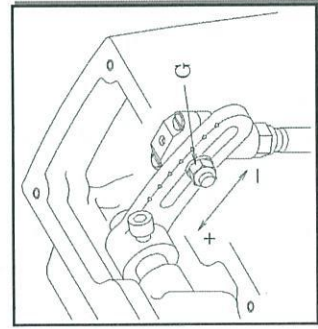
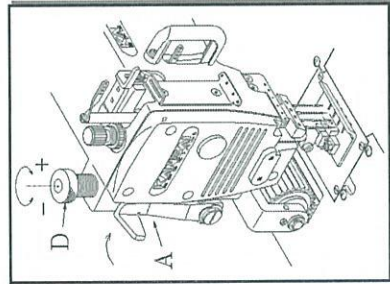
To position or remove the fabric, raise manual lever A.

### 11-2 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.

### 11-3 Adjusting the feeding amount of the rear puller

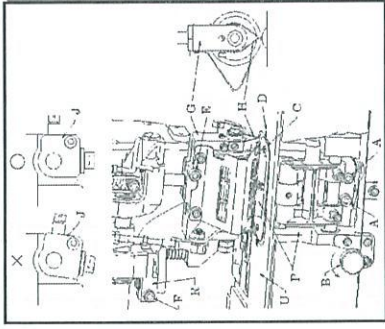
Adjust the feeding amount of the rear puller according to that of the feed dog. To increase the amount, loosen nut G and move it to the left. To decrease the amount, move it to the right.



### 11-4 Upper puller angle adjustment (Model SPF)

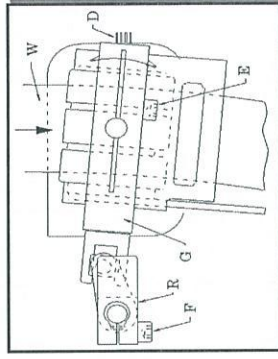
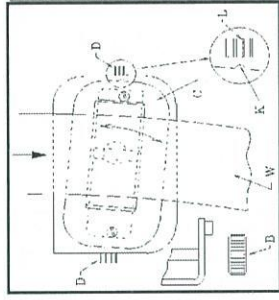
Loosen both screw E of the upper puller bracket G and screw F of the bracket R, and change the angle of the upper puller bracket.

And adjust scale plate H to scale mark D on the cloth cover how much the angle of the curved waist band is. After the angle adjustment, tighten screw E & F. At this moment, check the bracket J (See the illustration above), is located to straight position and tighten screw E & F.



### 11-5 Lower puller angle adjustment (Model SPF)

Loosen two screws A of the lower puller bracket P, and turn adjusting screw B counterclockwise as the drawing shows. Therefore, the angle of the lower puller bracket can be adjusted horizontally. And, match the scale plate H of the puller bracket on the point K of the lower puller guide plate. Then, the both angle of the upper and lower puller would be same.

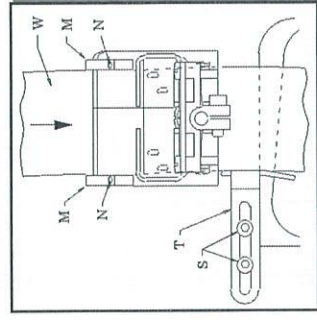


< Note >

The point K of the lower puller guide plate is matched with the third mark L of the cloth plate on the factory adjustment. This adjustment is set for the curved waistband radius of approximately 600 to 700mm.

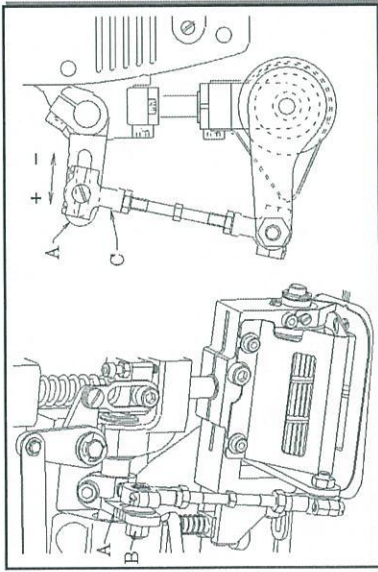
### 11-6 Guide plate adjustment (Model SPF)

Adjust guide plate M & T according to the width of waist band. Loosen screw N & S for the adjustment.



### 11-7 The minor adjustment of the rear puller feeding amount (Model SPF)

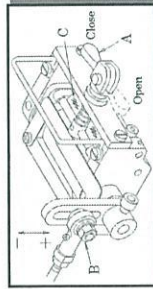
The feeding amount will be bigger by loosening nut B of lever A, and moving the connecting rod C to the left. And the feeding amount will be smaller by loosening nut B of lever A, and moving the connecting rod C to the right.



### [12] ADJUSTING THE FRONT PULLER DEVICE

#### 12-1 To insert elastic and adjust the feeding amount of the front puller

Insert elastic by opening/closing small roller C with lever A (see the illustration).  
Adjust the feeding amount of the front puller according to that of the feed dog.  
To decrease the amount, loosen screw B and move it up.  
To increase the move it down.

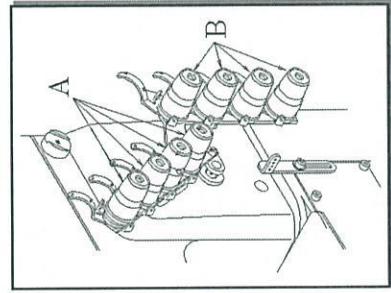


### [13] ADJUSTING THE STITCH FORMATION

#### 13-1 Thread tension adjustment

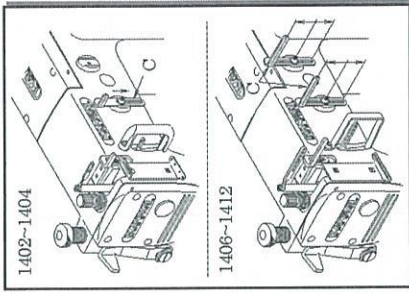
Thread tension varies according to sewing conditions such as the fabric, thread and stitch length to be used.  
Tension on the needle thread can be adjusted with nuts A. Tension on the looper thread can be adjusted with nuts B. To increase the tension, turn the nuts clockwise.

<Note >  
*The tension should be as light as possible, yet be sufficient to produce uniform stitches.*



### 13-2 Position of the needle thread eyelets

■ On 1402~1404, secure needle thread eyelet C at the top end of the slot.

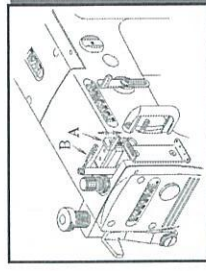


■ On 1406~1412, secure needle thread eyelet C at the center of the slot.

< Note >  
*Adjust the needle thread eyelets according to the thread to be used. To tighten the needle thread, raise the needle thread eyelets.*

### 13-3 Adjusting the needle thread guard

With the needle bar at the bottom of its stroke, the top surface of needle thread guard A should be level and parallel with the centers of the eyes on needle bar eyelet B.



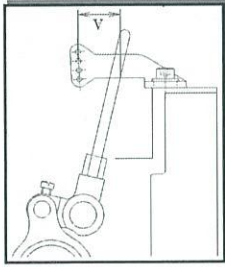
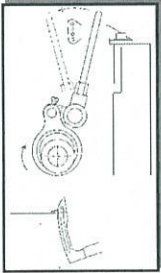
< Note >  
*Raising needle thread guard A increases the size of the needle thread loop. Lowering needle thread guard A decreases the size of the needle thread loop.*

### 13-4 Position and timing of the looper thread eyelet

When the point of the needle has reached the underside of the looper blade while the needle bar is descending, the looper thread eyelet bar should ascend.

With the looper thread eyelet bar at the bottom of its stroke, adjust distance A between the eye on the looper thread eyelet and the looper thread eyelet bar by referring to the table below.

| Thread type         | Distance A |
|---------------------|------------|
| Polyester (Tetoron) | 8mm        |
| Spun                | 10mm       |
| Wooly               | 15mm       |



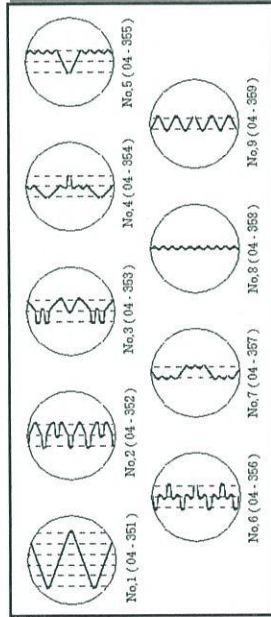
## [14] PSM MECHANISM

### 14-1 Types of cams (DFB1012PSM, 1412PSM)

There are 9 types of cams from No.1 to No.9 (9 types of standard patterns).

Various kinds of decorative stitches can be produced by a combination of 2 cams.

The inside cam moves the upper spreader. The outside cam moves the lower two spreaders and crosses spreader threads.



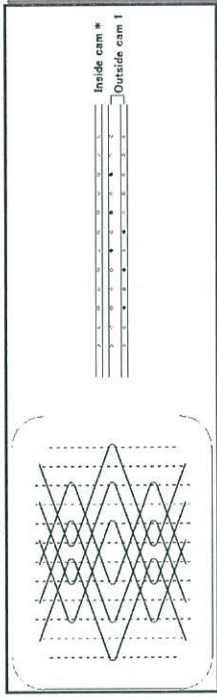
### 14-2 Producing decorative stitches

Install cam 1 on the outside to use the lower two spreaders.

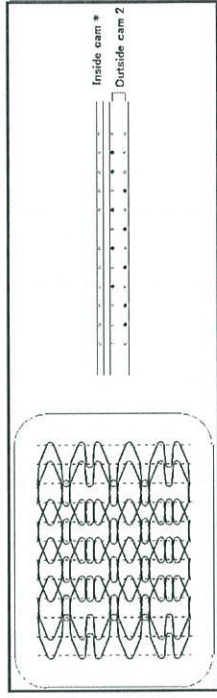
Install any one of cams No.2 to No.9 on the inside to use the upper spreader.

Thread spreaders' eyes marked ●. Following the above procedures automatically produces the decorative stitches below (refer to decorative stitches No.2 to No.9).

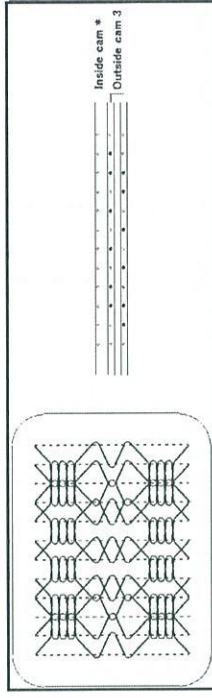
No.1



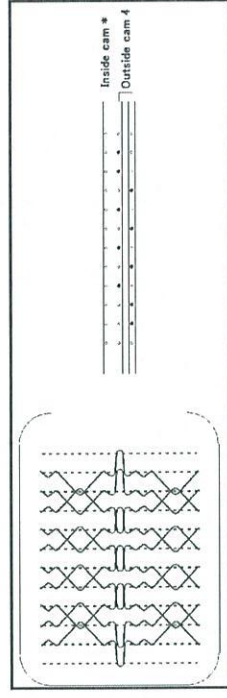
No.2



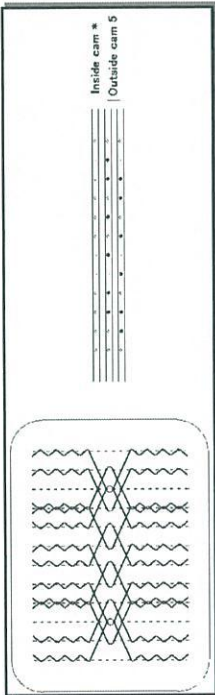
No.3



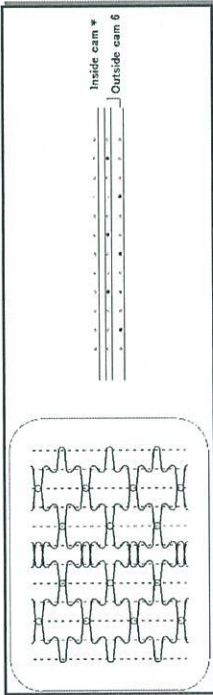
No.4



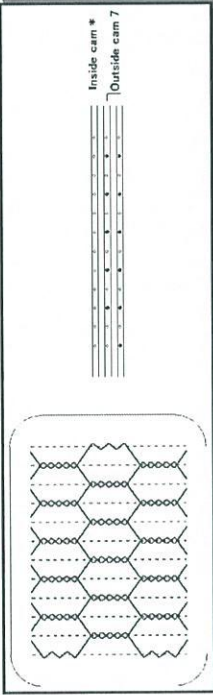
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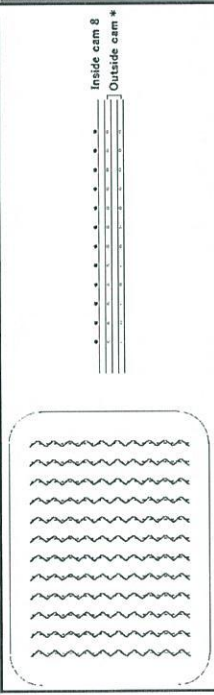
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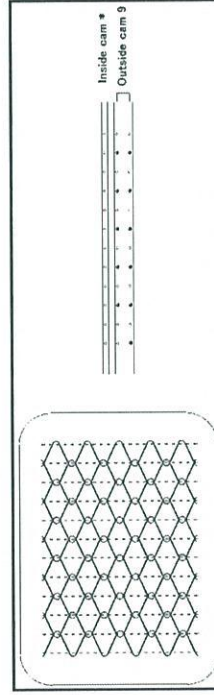
No.7



No.8



No.9



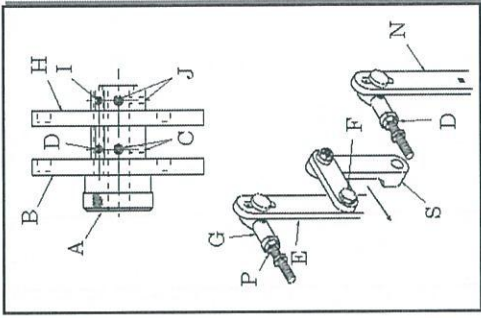
### 14-3 Replacing the cams

To replace outside cam B, remove nut A (note that this nut has a left-hand thread).

To replace inside cam H, loosen screws C and D, and remove the collar. Remove screw F from lever S. Then move lever S down in the direction of the arrow.

< Note >

Before installing new cams, be sure to grease the cam grooves. Never loosen screws I and J. Otherwise the timing of spreaders is changed.



### 14-4 Timing of spreaders

To adjust this timing, set cam No.8 on the inside and No.1 on the outside. Then follow the procedures below. Spreader K moves left to right with the inside cam. Each of spreaders L and M moves in the opposite direction with the outside cam.

1. When the needle starts to move from the top to the bottom of its stroke, adjust the cams so that spreaders K, L and M stop moving.

Adjustment is made by loosening screws C and J (see "Replacing the cams").

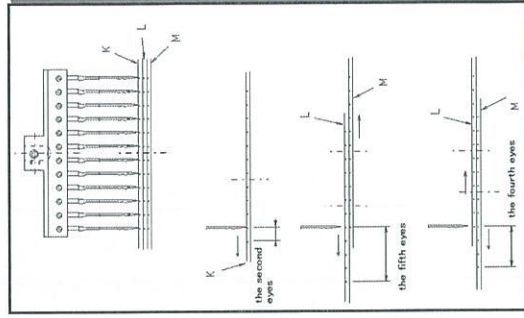
2. Position of spreader K

With spreader K at the extreme left end of its travel, the second spreader's eye on spreader K should be aligned with the center of the left end needle. Adjustment is made by loosening nut D for lever N (see "Replacing the cams").

3. Position of spreaders L and M

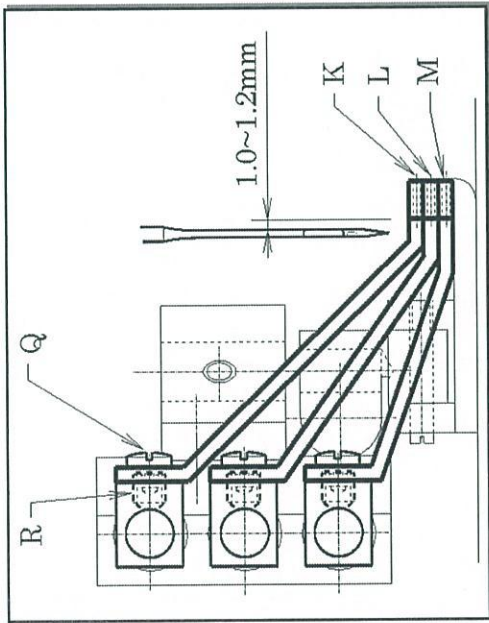
With spreader L at the extreme left end of its travel, the fifth spreader's eye on spreader L should be aligned with the center of the left end needle. Adjustment is made by loosening nut P for lever E (see "Changing the cams").

With spreader L at the extreme right end of its travel, make sure the fourth spreader's eye on spreader M is aligned with the center of the left end needle.



**14-5 Adjusting the spreaders**

The clearance between spreader K, L and M and needles should be 1~1.2mm.  
 Spreader up and down adjustment is made with screws Q.  
 Spreader tilt adjustment is made with screws R.  
 Confirm K, L, and M move right and left and smoothly.



**14-6 Types of cams (DFB1403PSM)**

6 types of cams such as No.7, 8, 9, 10, 12, 13 are available.  
 Upper and Lower spreader has each 3 holes of threading.  
 Inserting decorative thread into the following ● mark makes decorative stitches automatically. Refer to the following picture and next page.

|                   |                          | 飾り糸ホルダー (上) / Upper spreader |         | 飾り糸ホルダー (下) / Lower spreader |         |         |         |         |         |
|-------------------|--------------------------|------------------------------|---------|------------------------------|---------|---------|---------|---------|---------|
| カム No.<br>CAM No. | 品番<br>PART No.           | ○ ○ ○ ○                      | ○ ● ○ ○ | ○ ○ ○ ○                      | ○ ● ○ ○ | ○ ○ ○ ○ | ○ ● ○ ○ | ○ ○ ○ ○ | ○ ● ○ ○ |
| No. 7             | 品番<br>PART No.<br>04-357 | ○ ○ ○ ○                      | ○ ● ○ ○ | ○ ○ ○ ○                      | ○ ● ○ ○ | ○ ○ ○ ○ | ○ ● ○ ○ | ○ ○ ○ ○ | ○ ● ○ ○ |
| No. 8             | 品番<br>PART No.<br>04-358 | ○ ○ ○ ○                      | ○ ● ○ ○ | ○ ○ ○ ○                      | ○ ● ○ ○ | ○ ○ ○ ○ | ○ ● ○ ○ | ○ ○ ○ ○ | ○ ● ○ ○ |
| No. 9             | 品番<br>PART No.<br>04-359 | ○ ○ ○ ○                      | ○ ● ○ ○ | ○ ○ ○ ○                      | ○ ● ○ ○ | ○ ○ ○ ○ | ○ ● ○ ○ | ○ ○ ○ ○ | ○ ● ○ ○ |



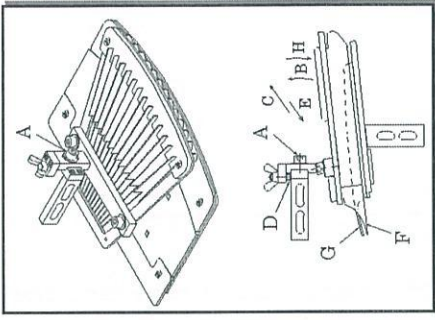
**[15] PTV MECHANISM**

**15-1 Disassembling and reassembling the binder**

■ To disassemble the binder  
Remove screw A. Remove the binder by pulling it toward you while referring to arrows B and C.

< Note >  
When removing the binder, be careful not to damage the ends of the fabric guides.

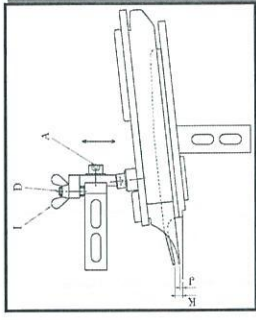
■ To reassemble the binder  
Fit the ends of upper fabric guides (F) onto lower fabric guides (G). Move the binder down in the direction of arrow H. Check that end D of the screw touches the bracket. Then tighten screw A.



**15-2 Adjusting the binder up and down**

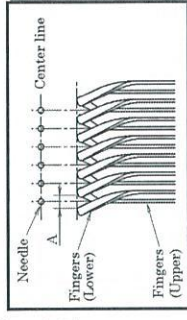
Adjust the binder up and down according to the fabric to be used. Adjustment is made by loosening screw A and wing screw I and turning screw D as required. After this adjustment is made, tighten screw A and wing screw I.

< Note >  
Adjust the position of J and K according to the finished pin tuck.



**15-3 Position of the upper and lower fingers of the binder**

Position upper and lower fingers so that distance A is halved by each vertical centerline of the needles. The line formed by the points of the upper and lower fingers should be parallel with each horizontal centerline of the needles.

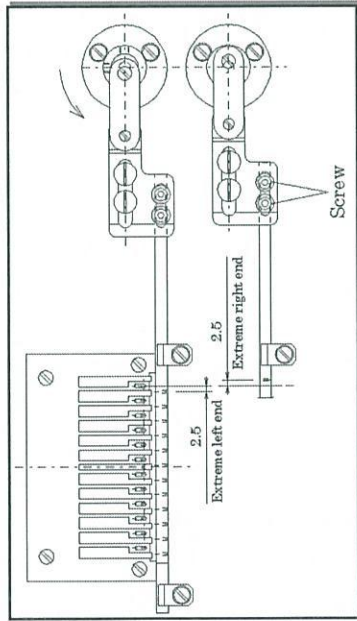


脚の糸ルーパー (上) / Upper spreader  
脚の糸ルーパー (下) / Lower spreader

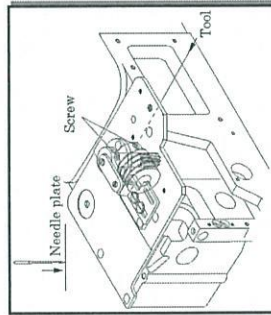
| カム No.<br>CAM No.                  | 脚の糸ルーパー (上) / Upper spreader | 脚の糸ルーパー (下) / Lower spreader |
|------------------------------------|------------------------------|------------------------------|
| No. 10<br>品番<br>PART No.<br>04-360 |                              |                              |
| No. 12<br>品番<br>PART No.<br>04-362 |                              |                              |
| No. 13<br>品番<br>PART No.<br>04-363 |                              |                              |

**[16] PQ ADJUSTMENT**

- A. Adjustment of right & left movement of retainer for elastic thread  
 The right-left movement of retainer move even of its travel for each needles.  
 < Adjustment >  
 Loosen 2 screws on the retainer holder and the retainer eye should keep equal distance of right-left movement from the center of each needles.

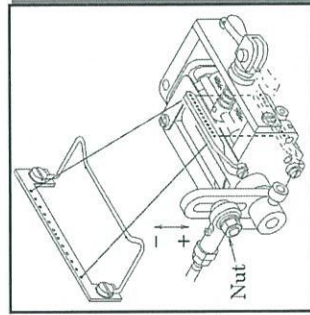


- B. Relation with needle bar stroke  
 When the tip of needle reaches at the top surface of needle plate, the retainer should be the position of extreme right end or left end of its stroke.



- < Adjustment >  
 Set up the tip of needle is located the top surface of needle plate and holding the position, then tighten the screw on the oil pump driving worm gear, when the retainer is located the extreme right end or left end.

- C. Adjustment of elastic thread tension  
 Elastic thread tension is adjusted by connecting bar in MD-1 device for PQ.

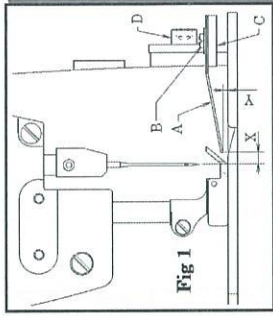


- < Adjustment >  
 Loosen a nut on rod, it is possible to adjust the elastic thread tension by the nut move to up or down. To increase, the nut moves to down. To decrease, the nut moves to up.

**[17] MR ADJUSTMENT**

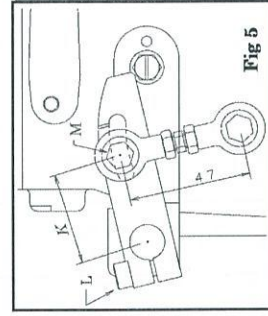
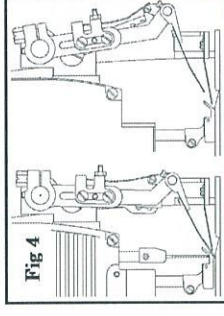
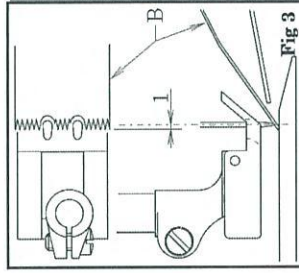
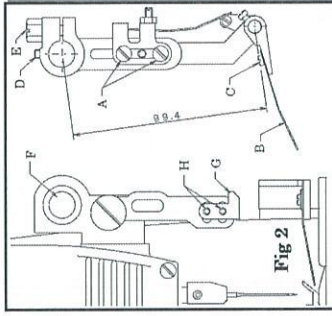
**17-1 Adjusting low stripper blade**

The height (Y) of low stripper blade A should be about 1~3mm from the surface of needle plate and then the fabric can be through the clearance (X) by loosening screw D and move the bracket C to up or down. See the Fig 1. The clearance (X) between the needle and the tip of low stripper blade A should be about 4~5mm by loosening screw B and move A to front or back. See Fig 1.



**17-2 Adjusting the ruffling arm sets**

The length of the ruffling arm should be about 99.4mm by loosening screw A tighten screw A after that adjustment. See Fig 2.  
 The ruffler blade B should be parallel with the needles and the needle plate at same time and then tighten C screw carefully.  
 The ruffling arm should be attached the driving shaft F and tighten screw D and then tighten screw E. When the ruffler blade B get the nearest to the needle, the tip of the ruffler blade be 1mm left-side from the center of needle by loosening nut L. See Fig 3, 5.



The ruffler blade B and the low stripper blade should be the clearance I by loosening screw H and move the stopper plate G to left or right.  
 When the stopper plate G is right, the clearance become wide. On the other hand, when the stopper plate G is left, the clearance become narrow.  
 The adjustment for the movement of the ruffling arm should be made by loosening screw M.  
 When the distance K is narrow, the movement become big. On the hand, when the distance K is wide, the movement become small. See Fig 5.  
 For example, the distance of movement position is 35mm. See Fig 4.

### 17-3 Adjusting the timing of ruffling arm

When the ruffling blade gets the nearest to needle, the needle be touched the fabric.  
The adjustment should be made by opening top cover and adjust the timing pulley position after loosening screw (A). See Fig 6.

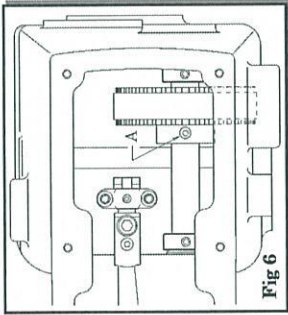
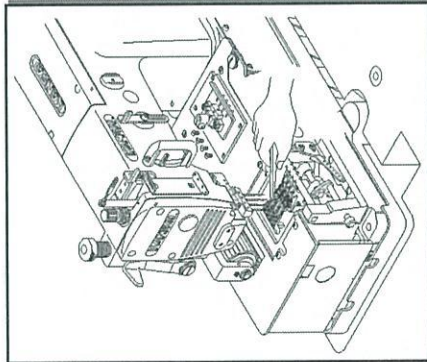


Fig 6

## [18] 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.



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