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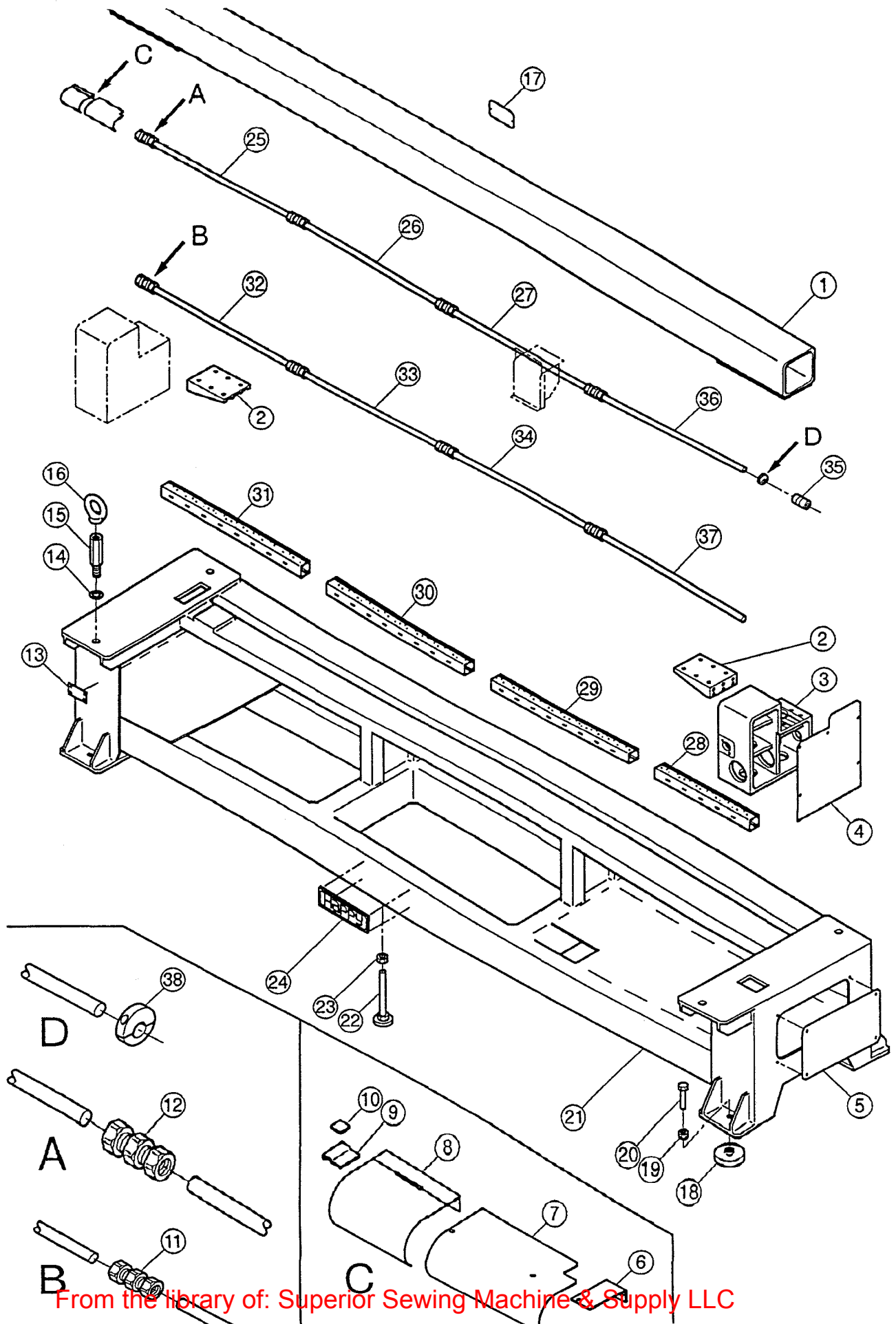
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Model

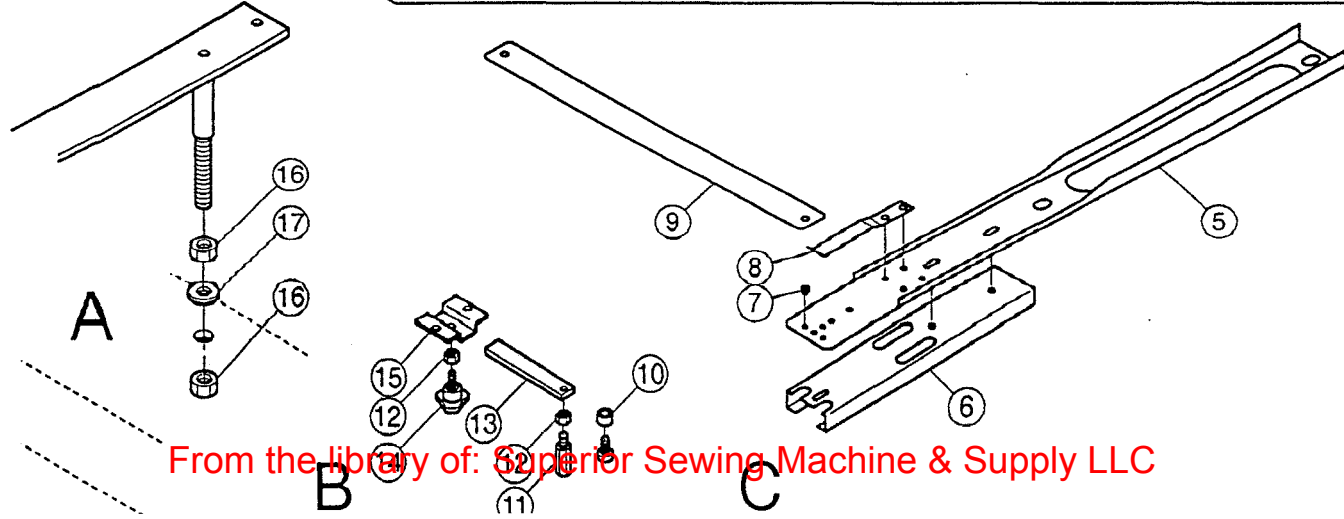
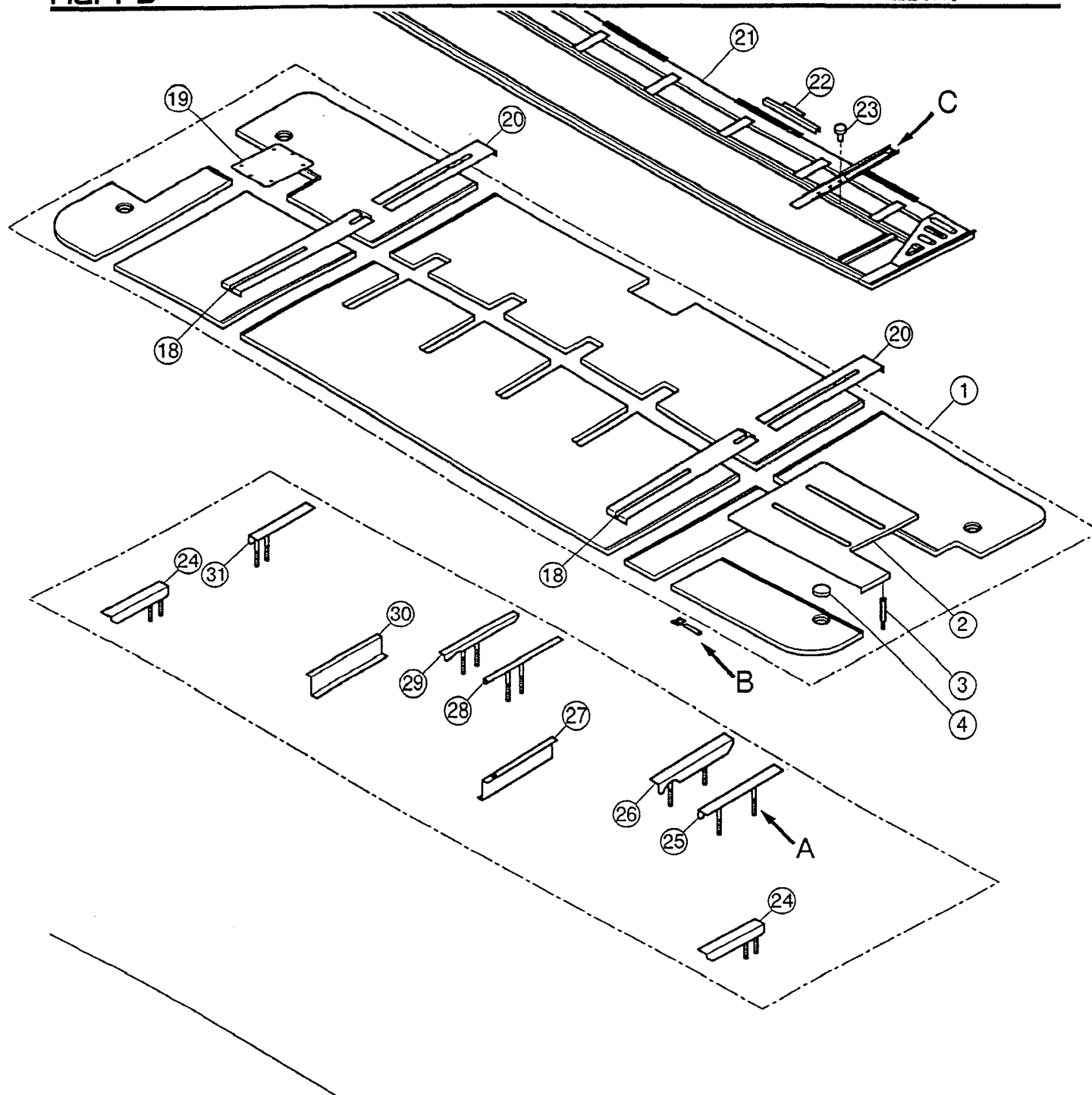
HCM-806-36T

Machine No.

1995.01.17

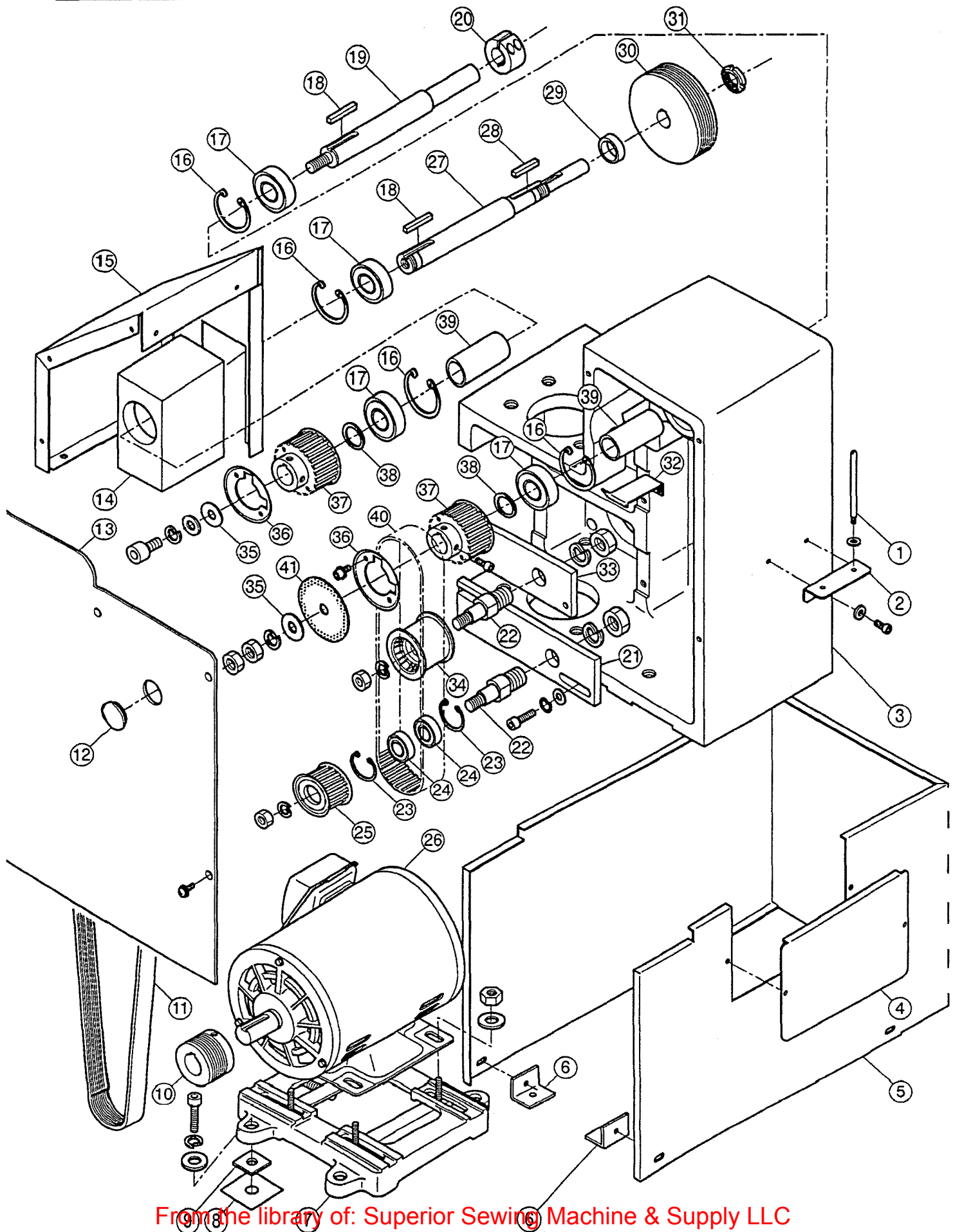


| 組     | 指図   | 部品番号      |                                                     | CM4C27    |
|-------|------|-----------|-----------------------------------------------------|-----------|
| Ass'y | El't | PARTS No. | PARTS NAMES                                         | NOTE / 備考 |
|       | 1    | -         | Beam (by model)                                     |           |
|       | 2    | HMF02070  | Arm                                                 |           |
|       | 3    | HMF02021  | Support box right                                   |           |
|       | 3    | HCM02220  | Support box right (for 806,804type)                 |           |
|       | 3    | HMF02041  | Support box right, for jumbo hook                   |           |
|       | 3    | HCM02200  | Support box right, for jumbo hook (for 806,804type) |           |
|       | 4    | HMF02061  | Cover right                                         |           |
|       | 4    | HMF02310  | Cover right (for 812-48)                            |           |
|       | 5    | M0400081  | Cover plate for frame                               |           |
|       | 6    | HMF13150  | Bracket for shaft cover                             |           |
|       | 7    | -         | Shaft cover left (by model)                         |           |
|       | 8    | HMF13161  | Shaft cover left (I) ass'y                          |           |
|       | 9    | HMF13271  | Shaft cover support                                 |           |
|       | 10   | SF530511  | Magnet (B) for cover bracket                        |           |
|       | 11   | MPC00010  | N-coupling (15-15)                                  |           |
|       | 12   | MPC00020  | N-coupling (20-20)                                  |           |
|       | 13   | M0400062  | Machine number plate                                |           |
|       | 14   | MPB00460  | Thrust washer                                       |           |
|       | 15   | M0400020  | Stud bolt                                           |           |
|       | 15   | HCM00351  | Hoisting bolt pillar (for 812-48)                   |           |
|       | 16   | M0400010  | Hoisting bolt                                       |           |
|       | 16   | MPZ01590  | Hoisting bolt (for 812-48)                          |           |
|       | 17   | HMF00180  | Cover                                               |           |
|       | 18   | M0400031  | Block base                                          |           |
|       | 19   | NA18000A  | Nut (M18)                                           |           |
|       | 20   | SV18050A  | Bolt (M18x50)                                       |           |
|       | 21   | -         | Frame (by model)                                    |           |
|       | 22   | MPZ01240  | Adjuster                                            |           |
|       | 23   | NA20000A  | Nut (M20)                                           |           |
|       | 24   | M0400071  | "HAPPY" brand plate                                 |           |
|       | 25   | -         | Upper shaft 1 (by model)                            |           |
|       | 26   | -         | Upper shaft 2 (by model)                            |           |
|       | 27   | -         | Upper shaft 3 (by model)                            |           |
|       | 28   | HMF00170  | Duct E (812-48)                                     |           |
|       | 28   | HMF00130  | Duct A (806-48)                                     |           |
|       | 28   | HMF00150  | Duct C (804-48)                                     |           |
|       | 29   | HCM00120  | Duct A (812-48,804-48)                              |           |
|       | 29   | HMF00150  | Duct C (806-48)                                     |           |
|       | 30   | HCM00120  | Duct A (812-48,806-48)                              |           |
|       | 31   | HCM00120  | Duct A (812-48)                                     |           |
|       | 32   | -         | Lower shaft 1 (by model)                            |           |
|       | 33   | -         | Lower shaft 2 (by model)                            |           |
|       | 34   | -         | Lower shaft 3 (by model)                            |           |
|       | 35   | M0402130  | Upper shaft grip                                    |           |
|       | 36   | M0408811  | Upper shaft 4 (812-48)                              |           |
|       | 37   | -         | Lower shaft 4 (by model)                            |           |
|       | 38   | HMF02341  | Balancer (for 812-48)                               |           |



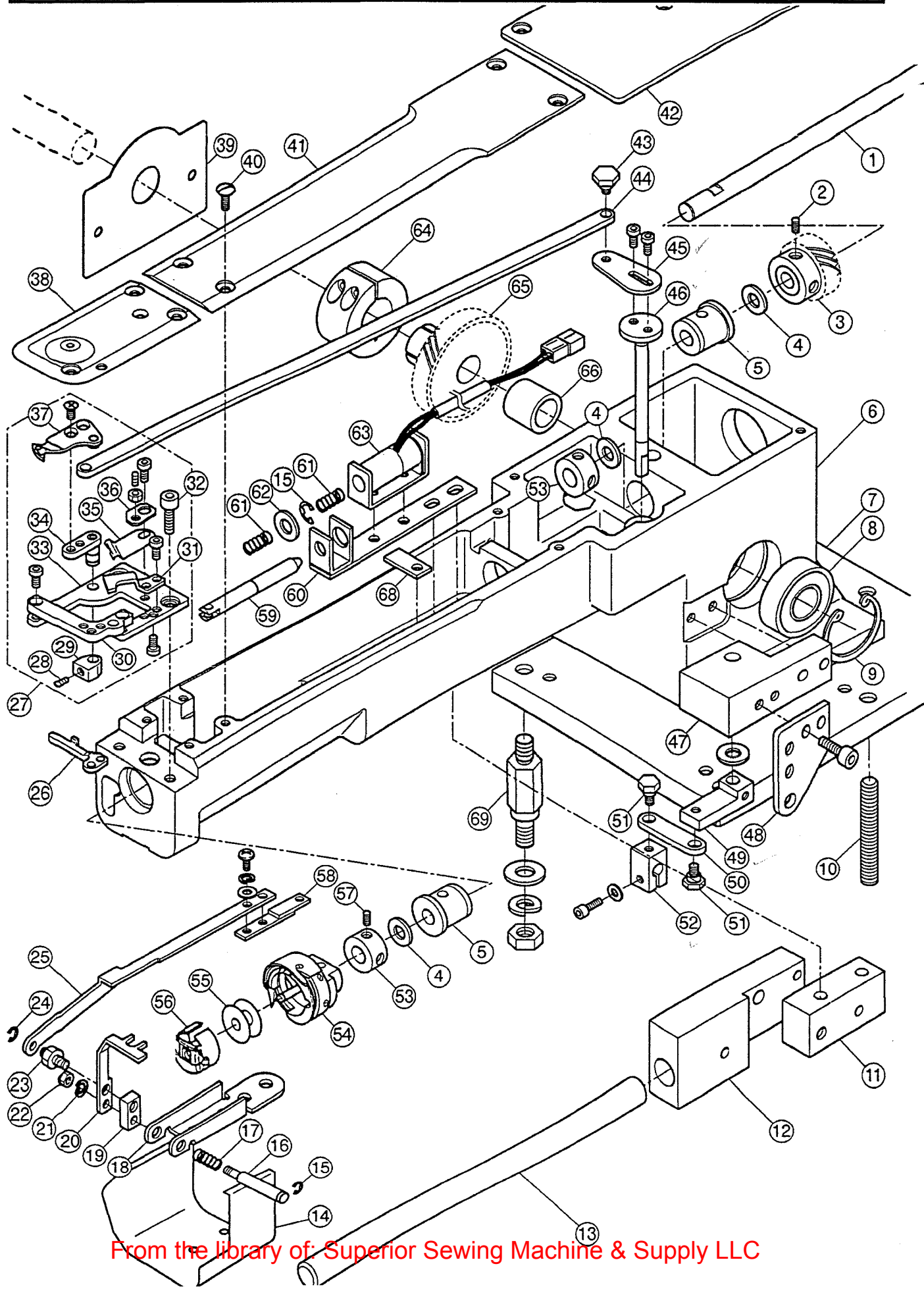
| 組<br>Ass'y | 指図<br>Elt | 部品番号<br>PARTS No. | PARTS NAMES                                  | CM5113<br>NOTE / 備考 |
|------------|-----------|-------------------|----------------------------------------------|---------------------|
|            | 1         | -                 | Table set (by model)                         |                     |
|            | 2         | -                 | X carriage cover (by model)                  |                     |
|            | 3         | M0430013          | Stud for cover                               |                     |
|            | 4         | M0430020          | Lid for table hole                           |                     |
|            | 4         | HCM30410          | Lid for table hole (for 812-48)              |                     |
|            | 5         | HCM40450          | Hold arm D for Tubular frame (Y480)          |                     |
|            | 5         | HCM40470          | Hold arm F for Tubular frame (Y300,Y360)     |                     |
|            | 5         | HCM40700          | Hold arm F for Tubular frame (for 720-30)    |                     |
|            | 6         | HCM40480          | Hold arm D reinforcement (Y480)              |                     |
|            | 6         | HCM40440          | Hold arm F reinforcement (Y300,Y360)         |                     |
|            | 7         | C0440561          | positioning pin                              |                     |
|            | 8         | HCM40491          | Hold spring                                  |                     |
|            | 9         | -                 | Jig for positioning tubular frame (by model) |                     |
|            | 10        | M0412241          | Plastic ring                                 |                     |
|            | 11        | M0410041          | Stud                                         |                     |
|            | 12        | NA05000B          | Nut (M5)                                     |                     |
|            | 13        | HCM34060          | Table prop B                                 |                     |
|            | 14        | MPZ01080          | Knob bolt (M6)                               |                     |
|            | 15        | HCM34050          | Table prop A                                 |                     |
|            | 16        | NA12000D          | Nut (M12)                                    |                     |
|            | 17        | WA12000D          | Plain washer (M12)                           |                     |
|            | 18        | HCM33021          | Y carriage cover, front (Y480)               |                     |
|            | 18        | HCM33060          | Y carriage cover, front (Y300)               |                     |
|            | 18        | HCM33110          | Y carriage cover, front (Y360)               |                     |
|            | 19        | HCM33041          | Thread cut cover (Y480)                      |                     |
|            | 19        | HCM33080          | Thread cut cover (Y300,Y360)                 |                     |
|            | 20        | HCM33031          | Y carriage cover, rear (Y480)                |                     |
|            | 20        | HCM33070          | Y carriage cover, rear (Y300)                |                     |
|            | 20        | HCM33120          | Y carriage cover, rear (Y360)                |                     |
|            | 21        | -                 | Frame ass'y (by model)                       |                     |
|            | 22        | M0437016          | Clip (300mm)                                 |                     |
|            | 22        | M0437036          | Clip (250mm)                                 |                     |
|            | 22        | M0437056          | Clip (190mm)                                 |                     |
|            | 22        | M0437836          | Clip (170mm)                                 |                     |
|            | 23        | M0437002          | Knob screw                                   |                     |
|            | 24        | HCM32030          | Table support C (Y480)                       |                     |
|            | 24        | HCM32060          | Table support F (Y300,Y360)                  |                     |
|            | 25        | HCM32010          | Table support A (Y480)                       |                     |
|            | 25        | HCM32050          | Table support E (Y300,Y360)                  |                     |
|            | 26        | HCM32020          | Table support B (Y480)                       |                     |
|            | 26        | HCM32040          | Table support D (Y300,Y360)                  |                     |
|            | 27        | HCM32090          | Table support I (for 720-30)                 |                     |
|            | 28        | HCM32071          | Table support G (for 720-30)                 |                     |
|            | 29        | HCM32081          | Table support H (for 720-30)                 |                     |
|            | 30        | HCM32101          | Table support J (for 720-30)                 |                     |
|            | 31        | HCM32030          | Table support C                              |                     |

| 組<br>Ass'y | 指図<br>Elt | 部品番号<br>PARTS No. | PARTS NAMES                           | CM5113<br>NOTE / 備考 |
|------------|-----------|-------------------|---------------------------------------|---------------------|
|            | 1         | SV05020A          | Hexagon head bolt (M5x20)             |                     |
|            | 3         | HCM34020          | Bracket for table reinforcement       |                     |
|            | 4         | NA05000A          | Nut (M5)                              |                     |
|            | 5         | -                 | Table reinforcement pipe 1 (by model) |                     |
|            | 6         | MPZ01490          | HD-pipe, 6m                           |                     |
|            | 6         | MPZ01500          | HD-pipe, 4m (for 804,806type)         |                     |
|            | 7         | MPZ01510          | Connecting screw                      |                     |
|            | 8         | MPZ01520          | Clamping ring                         |                     |
|            | 9         | MPZ01460          | Pump PB4625                           |                     |
|            | 9         | MPZ01450          | Pump PB2623 (for 804,806type)         |                     |
|            | 10        | MPZ01480          | Folding crank                         |                     |
|            | 11        | HCM34532          | Cylinder cover                        |                     |
|            | 12        | HCM34523          | Holder                                |                     |
|            | 13        | MPZ01470          | Cylinder                              |                     |
|            | 14        | SS04004A          | Set screw (M4x4)                      |                     |
|            | 15        | HCM34631          | Spacer B                              |                     |
|            | 15        | HCM34641          | Spacer (for 812-48)                   |                     |
|            | 16        | -                 | Table reinforcement 1 (by model)      |                     |
|            | 17        | SC05015A          | Cap screw (M5x15)                     |                     |
|            | 18        | WB05000A          | Spring washer (M5)                    |                     |
|            | 19        | WA05000A          | Plain washer (M5)                     |                     |
|            | 20        | HCM34141          | Connecting plate for reinforcement    |                     |
|            | 21        | -                 | Table reinforcement 2 (by model)      |                     |
|            | 22        | WA06000A          | Plain washer (M6)                     |                     |
|            | 23        | WB06000A          | Spring washer (M6)                    |                     |
|            | 24        | NA06000A          | Nut (M6)                              |                     |
|            | 25        | SS06035A          | Set screw (M6x35)                     |                     |
|            | 26        | HCM34041          | Support for table reinforcement       |                     |
|            | 27        | -                 | Table reinforcement pipe 2 (by model) |                     |
|            | 28        | HCM34621          | Table bracket B (for 812-48)          |                     |
|            | 28        | HCM34512          | Table bracket                         |                     |
|            | 29        | HCM34131          | Support B for table reinforcement     |                     |
|            | 30        | SC06035A          | Cap screw (M6x35)                     |                     |
|            | 31        | HCM34551          | Guide                                 |                     |
|            | 32        | MPB00630          | Bushing (80B2030)                     |                     |
|            | 33        | HCM34561          | Guide shaft                           |                     |
|            | 34        | HCM34570          | Guide reinforcement                   |                     |
|            | 35        | WA10000A          | Plain washer (M10)                    |                     |
|            | 36        | WB10000A          | Spring washer (M10)                   |                     |
|            | 37        | SC10020A          | Cap screw (M10x20)                    |                     |
|            | 38        | HCM34541          | Guide holder                          |                     |

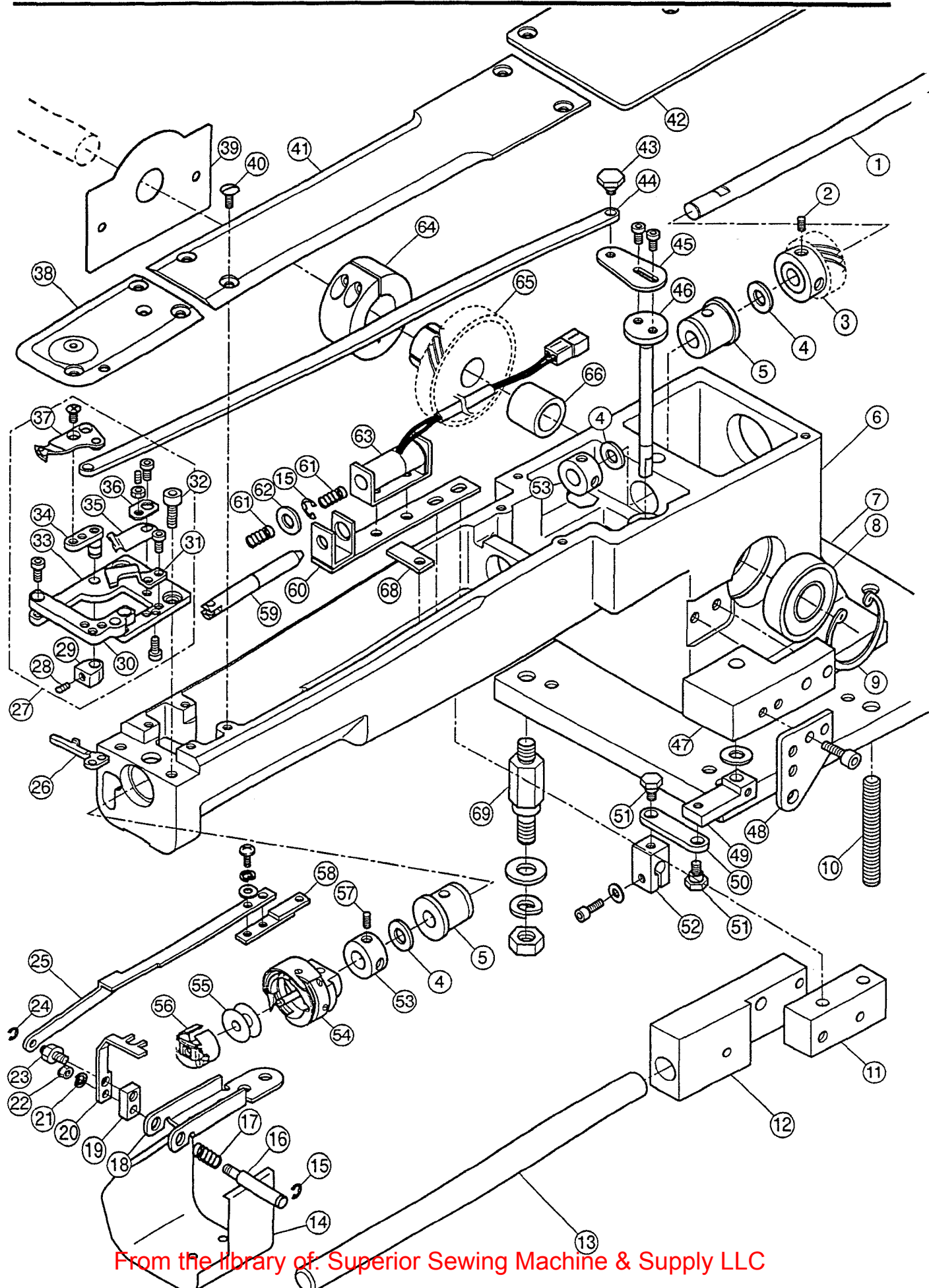


| 組<br>Ass'y | 指図<br>El't | 部品番号<br>PARTS No. | PARTS NAMES                                        | CM4C27<br>NOTE / 備考 |
|------------|------------|-------------------|----------------------------------------------------|---------------------|
|            | 1          | M0402052          | Spool pin                                          |                     |
|            | 2          | M0402371          | Spool support                                      |                     |
|            | 3          | HCM02132          | Support box left                                   |                     |
|            | 3          | HCM02211          | Support box left (for 806,804type)                 |                     |
|            | 3          | HCM02012          | Support box left, for jumbo hook                   |                     |
|            | 3          | HCM02191          | Support box left, for jumbo hook (for 806,804type) |                     |
|            | 4          | HMF00110          | Thread cut actuation unit cover                    |                     |
|            | 5          | HCM00060          | Motor cover (Y480)                                 |                     |
|            | 5          | HCM00181          | Motor cover (Y300,Y360)                            |                     |
|            | 6          | HMF00120          | Motor cover bracket                                |                     |
|            | 7          | MPZ00020          | Motor slide base                                   |                     |
|            | 7          | MPZ01530          | Motor slide base (for 804type)                     |                     |
|            | 8          | M0402220          | Rubber sheet for motor                             |                     |
|            | 9          | MPZ00010          | Square washer                                      |                     |
|            | 10         | HMF02110          | Motor pulley                                       |                     |
|            | 10         | HCM02050          | Motor pulley (for 804type)                         |                     |
|            | 11         | MPV00400          | Main drive belt                                    |                     |
|            | 12         | M0408150          | Rubber cap (small)                                 |                     |
|            | 13         | HCM02072          | Cover left (Y480)                                  |                     |
|            | 13         | HCM02121          | Cover left (812-48)                                |                     |
|            | 13         | HCM02163          | Cover left (Y300,Y360)                             |                     |
|            | 14         | HCM02230          | Drive shaft support                                |                     |
|            | 15         | HCM02241          | Drive shaft support cover A (Y480)                 |                     |
|            | 15         | HCM02251          | Drive shaft support cover B (Y300,Y360)            |                     |
|            | 16         | MPR00350          | JO-ring (JO-52)                                    |                     |
|            | 17         | MPB00530          | Bearing (6205LLU)                                  |                     |
|            | 18         | M0402141          | Key for upper shaft                                |                     |
|            | 19         | HMF02121          | Drive shaft upper                                  |                     |
|            | 20         | M0402150          | Clamp (upper)                                      |                     |
|            | 21         | HCM02041          | Tension bracket (Y480)                             |                     |
|            | 21         | HCM02151          | Tension bracket (Y300,Y360)                        |                     |
|            | 22         | MPV00020          | Idler pin                                          |                     |
|            | 23         | MPR00410          | JO-ring (JO-35)                                    |                     |
|            | 24         | MPB00150          | Bearing (6202LLU)                                  |                     |
|            | 25         | HCM02060          | Tension pulley                                     |                     |
|            | 26         | EPM00280          | Drive motor with brake 6P-0.75KW                   |                     |
|            | 26         | EPM00340          | Drive motor 6P-0.75KW (for 806type)                |                     |
|            | 26         | EPM00320          | Drive motor 6P-0.4KW (for 804type)                 |                     |
|            | 27         | M0402863          | Drive shaft lower                                  |                     |
|            | 28         | M0402181          | Allocation shaft key A                             |                     |
|            | 29         | M0402810          | Drive pulley spacer (D)                            |                     |
|            | 30         | HMF02100          | Drive pulley                                       |                     |
|            | 31         | MPB00590          | U-Nut                                              |                     |
|            | 32         | HMF02090          | Pointer                                            |                     |
|            | 33         | HCM02031          | Idler bracket                                      |                     |
|            | 34         | MPV00030          | Idler pulley                                       |                     |
|            | 35         | M0402840          | Washer for drive shaft                             |                     |
|            | 36         | M0402620          | Flange                                             |                     |
|            | 37         | M0402830          | Timing pulley (D)                                  |                     |
|            | 38         | M0402800          | Timing pulley spacer (D)                           |                     |
|            | 39         | M0402820          | Inner spacer (D)                                   |                     |
|            | 40         | MPV00310          | Timing belt (Y480)                                 |                     |
|            | 40         | MPV00280          | Timing belt (Y300,Y360)                            |                     |
|            | 41         | M0402295          | Adjusting disc                                     |                     |

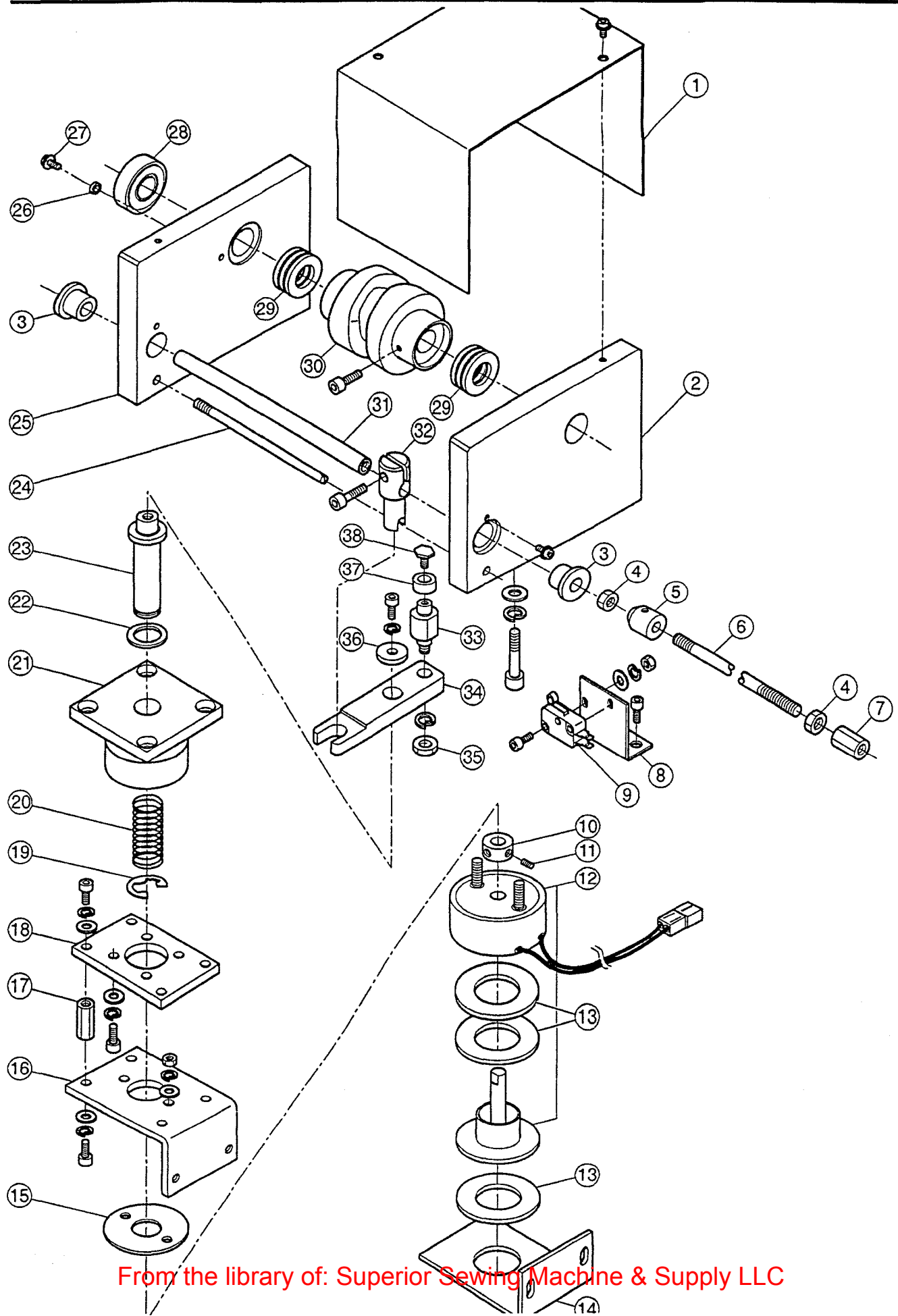




| 組<br>Ass'y | 指図<br>El't | 部品番号<br>PARTS No. | PARTS NAMES                        | CM5117<br>NOTE / 備考 |
|------------|------------|-------------------|------------------------------------|---------------------|
|            | 1          | HCM04030          | Rotary hook shaft (Y480)           |                     |
|            | 1          | HCM04370          | Rotary hook shaft (Y300,Y360)      |                     |
|            | 2          | SS05008A          | Set screw (M5x8)                   |                     |
|            | 3          | HMF04060          | Gear for rotary hook shaft         |                     |
|            | 4          | MPB00120          | Plastic thrust washer (TW0815)     |                     |
|            | 5          | CS404030          | Bushing for rotary hook shaft      |                     |
|            | 6          | HCM04012          | Rotary hook base (Y480)            |                     |
|            | 6          | HCM04364          | Rotary hook base (Y300,Y360)       |                     |
|            | 7          | HCM04020          | Bed plate (for Y480type)           |                     |
|            | 8          | MPB00150          | Bearing (6202LLU)                  |                     |
|            | 9          | MPR00410          | C-ring (C-35)                      |                     |
|            | 10         | HCM04340          | Bed stud B (Y480)                  |                     |
|            | 10         | HCM04430          | Bed stud C (Y300,Y360)             |                     |
|            | 11         | HCM04080          | Holder                             |                     |
|            | 12         | C0404420          | Fulcrum shaft holder               |                     |
|            | 13         | C0440431          | Fulcrum shaft for cap frame        |                     |
|            | 14         | HCM04422          | Keeper cover                       |                     |
|            | 14         | HCM04072          | Keeper cover (for jumbo hook)      |                     |
|            | 15         | MPR00420          | E-ring (E-4)                       |                     |
|            | 16         | HCM04160          | Keeper shaft                       |                     |
|            | 17         | HCM04150          | Spring A                           |                     |
|            | 18         | HCM04141          | Shaft holder                       |                     |
|            | 19         | HCM04131          | Fulcrum block                      |                     |
|            | 20         | HCM04411          | Keeper                             |                     |
|            | 20         | HCM04111          | Keeper (for jumbo hook)            |                     |
|            | 21         | WB03000D          | Spring washer (M3)                 |                     |
|            | 22         | NA03000D          | Nut (M3)                           |                     |
|            | 23         | HCM04121          | Fulcrum pin                        |                     |
|            | 24         | MPR00290          | E-ring (E-3)                       |                     |
|            | 25         | HCM04203          | Keeper actuating plate A           |                     |
|            | 26         | HCM04230          | Rotary hook retainer               |                     |
|            | 27         | HCM04264          | Thread cutting device ass'y        |                     |
| 27*        | 28         | SS04006A          | Set screw (M4x6)                   |                     |
| 27*        | 29         | C0404241          | Knife drive shaft retainer         |                     |
| 27*        | 30         | HCM04282          | Rotary hook retainer base          |                     |
| 27*        | 31         | HCM04321          | Fixed knife                        |                     |
|            | 32         | SC05010A          | Cap screw (M5x10)                  |                     |
| 27*        | 33         | HCM04271          | Thread cutting base                |                     |
| 27*        | 34         | HCM04301          | Knife drive shaft                  |                     |
| 27*        | 35         | HCM04330          | Bobbin thread holder               |                     |
| 27*        | 36         | HMF04140          | Holder retainer                    |                     |
| 27*        | 37         | HCM04291          | Knife                              |                     |
|            | 38         | HCM04061          | Needle plate                       |                     |
|            | 39         | C0404031          | Side cover for rotary hook base    |                     |
|            | 40         | MPZ00040          | Screw for needle plate             |                     |
|            | 41         | HCM04050          | Cover B (Y480)                     |                     |
|            | 41         | HCM04381          | Cover C (Y300,Y360)                |                     |
|            | 42         | HCM04041          | Cover A                            |                     |
|            | 43         | HCM04251          | Hinge screw for link               |                     |
|            | 44         | HCM04222          | Rod (Y480)                         |                     |
|            | 44         | HCM04391          | Rod (Y300,Y360)                    |                     |
|            | 45         | HCM04470          | Link B                             |                     |
|            | 46         | C0404301          | Drive shaft for link               |                     |
|            | 47         | HCM04090          | Link base                          |                     |
|            | 48         | HMF04050          | Support for thread cut shaft       |                     |
|            | 49         | M0404240          | Drive arm for knife                |                     |
|            | 50         | M0404250          | Link                               |                     |
|            | 51         | M0404262          | Hinge screw for link               |                     |
|            | 52         | C0404121          | Fulcrum block for thread cut shaft |                     |



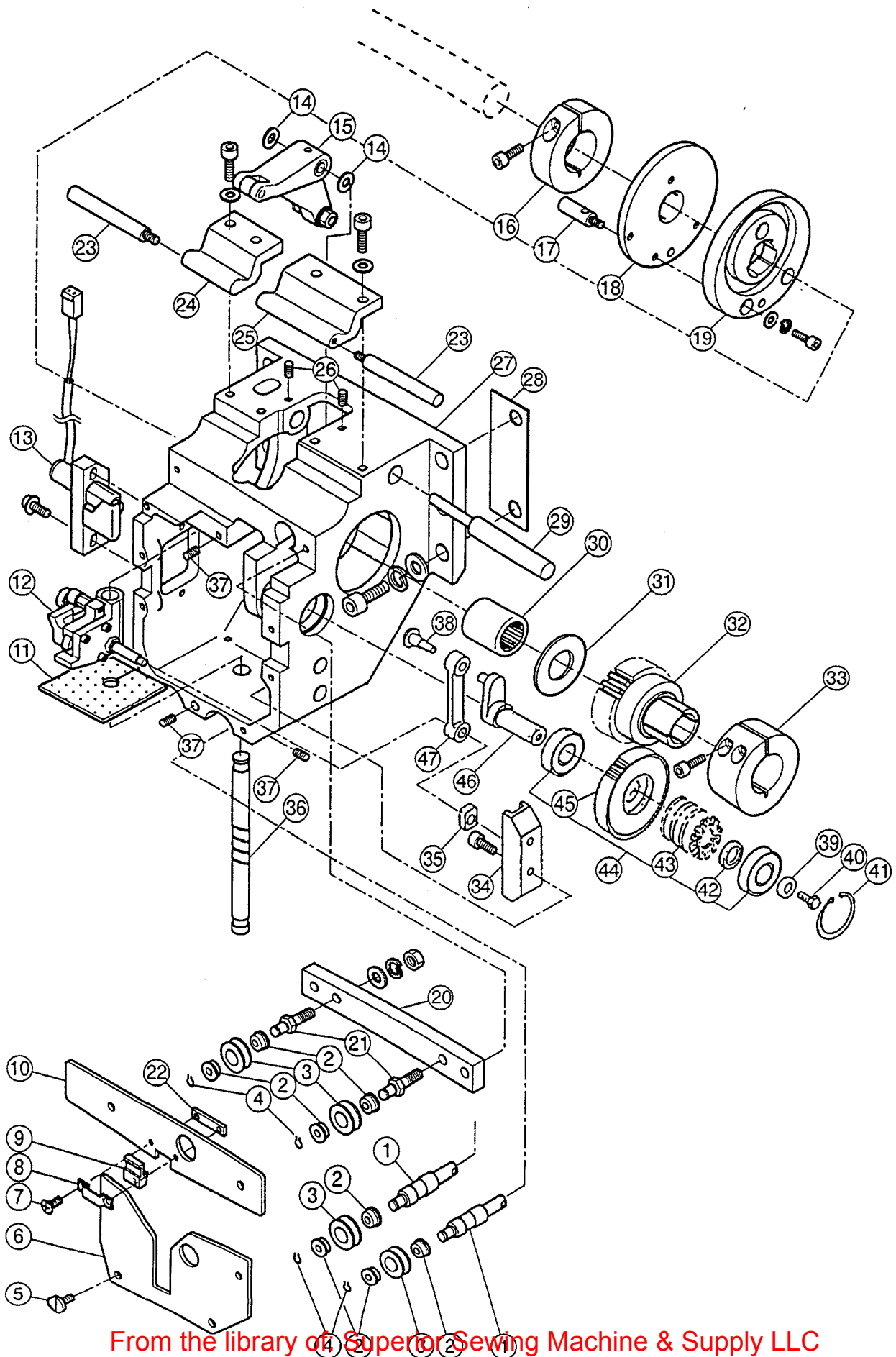
| 組     | 指図   | 部品番号      |                                          | CM4C27    |
|-------|------|-----------|------------------------------------------|-----------|
| Ass'y | El't | PARTS No. | PARTS NAMES                              | NOTE / 備考 |
|       |      | 53        | HMF04190 Stopping collar                 |           |
|       |      | 54        | MP201260 Rotary hook                     |           |
|       |      | 54        | MP201290 Rotary hook (for thick thread)  |           |
|       |      | 54        | MP201360 Jumbo hook                      |           |
|       |      | 55        | MP200550 Bobbin                          |           |
|       |      | 55        | MP201370 Bobbin (for jumbo hook)         |           |
|       |      | 56        | MP200080 Bobbin case                     |           |
|       |      | 56        | MP201380 Bobbin case (for jumbo hook)    |           |
|       |      | 57        | SS05006A Set screw (M5x6)                |           |
|       |      | 58        | HCM04211 Keeper actuating plate B        |           |
|       |      | 59        | HCM04191 Plunger                         |           |
|       |      | 60        | HCM04170 Solenoid base                   |           |
|       |      | 61        | HCM04180 Spring B                        |           |
|       |      | 62        | WA06000A Plain washer (M6)               |           |
|       |      | 63        | HGX78000 Keeper solenoid                 |           |
|       |      | 64        | M0404122 Fasten collar                   |           |
|       |      | 65        | SF404070 Drive spiral gear               |           |
|       |      | 66        | SF404030 Spiral collar                   |           |
|       |      | 68        | HCM04400 Rod support (for Y300,Y360type) |           |
|       |      | 69        | HCM04101 Bed stud A (Y480)               |           |
|       |      | 69        | HCM04442 Bed stud D (Y300,Y360)          |           |



# HAPPY THREAD CUT ACTUATION UNIT

5.1

| 組<br>Ass'y | 指図<br>E/t | 部品番号<br>PARTS No. | PARTS NAMES                    | CM4725<br>NOTE / 備考 |
|------------|-----------|-------------------|--------------------------------|---------------------|
|            | 1         | HMF06100          | Cover for thread cutting drive |                     |
|            | 2         | HMF06010          | Cam support right              |                     |
|            | 3         | MP200440          | Flange bushing                 |                     |
|            | 4         | M0404280          | Nut                            |                     |
|            | 5         | M0406101          | LS dog                         |                     |
|            | 6         | -                 | Moving shaft (by model)        |                     |
|            | 7         | M0404292          | Joint for moving shaft         |                     |
|            | 8         | HCM06030          | Micro switch base              |                     |
|            | 9         | EPS00010          | Micro switch                   |                     |
|            | 10        | HMF04190          | Collar                         |                     |
|            | 11        | SS04004A          | Set screw (M4x4)               |                     |
|            | 12        | HMX78020          | Thread cutting solenoid        |                     |
|            | 13        | M0406010          | Solenoid felt                  |                     |
|            | 14        | HMF06070          | Felt base                      |                     |
|            | 15        | HMF06080          | Solenoid spacer                |                     |
|            | 16        | HMF06060          | Fixing plate                   |                     |
|            | 17        | HMF06050          | Solenoid stud                  |                     |
|            | 18        | HMF06041          | Solenoid base                  |                     |
|            | 19        | -                 | E-ring (E-12)                  |                     |
|            | 20        | M0406050          | Lever spring                   |                     |
|            | 21        | HMF06030          | Lever shaft support            |                     |
|            | 22        | M0406260          | Urethane washer                |                     |
|            | 23        | M0406252          | Lever shaft                    |                     |
|            | 24        | M0406171          | Guide pin                      |                     |
|            | 25        | HMF06020          | Cam support left               |                     |
|            | 26        | M0406200          | Spacer                         |                     |
|            | 27        | SX04008D          | Cap screw with flange (M4x8)   |                     |
|            | 28        | MPB00150          | Bearing (6202LLU)              |                     |
|            | 29        | MPB00160          | Thrust bearing (51102)         |                     |
|            | 30        | HCM06011          | Drive cam for thread cutting   |                     |
|            | 31        | M0406161          | Slide shaft                    |                     |
|            | 32        | M0406142          | Lever drive pin                |                     |
|            | 33        | SF406050          | Roller shaft                   |                     |
|            | 34        | SF406040          | Cam lever                      |                     |
|            | 35        | NC06000A          | Nut (M6)                       |                     |
|            | 36        | M0406410          | Washer                         |                     |
|            | 37        | M0406220          | Thread cutting roller          |                     |
|            | 38        | M0406211          | Roller screw                   |                     |





# FIXED HEAD

0.1

CM5113

NOTE / 備考

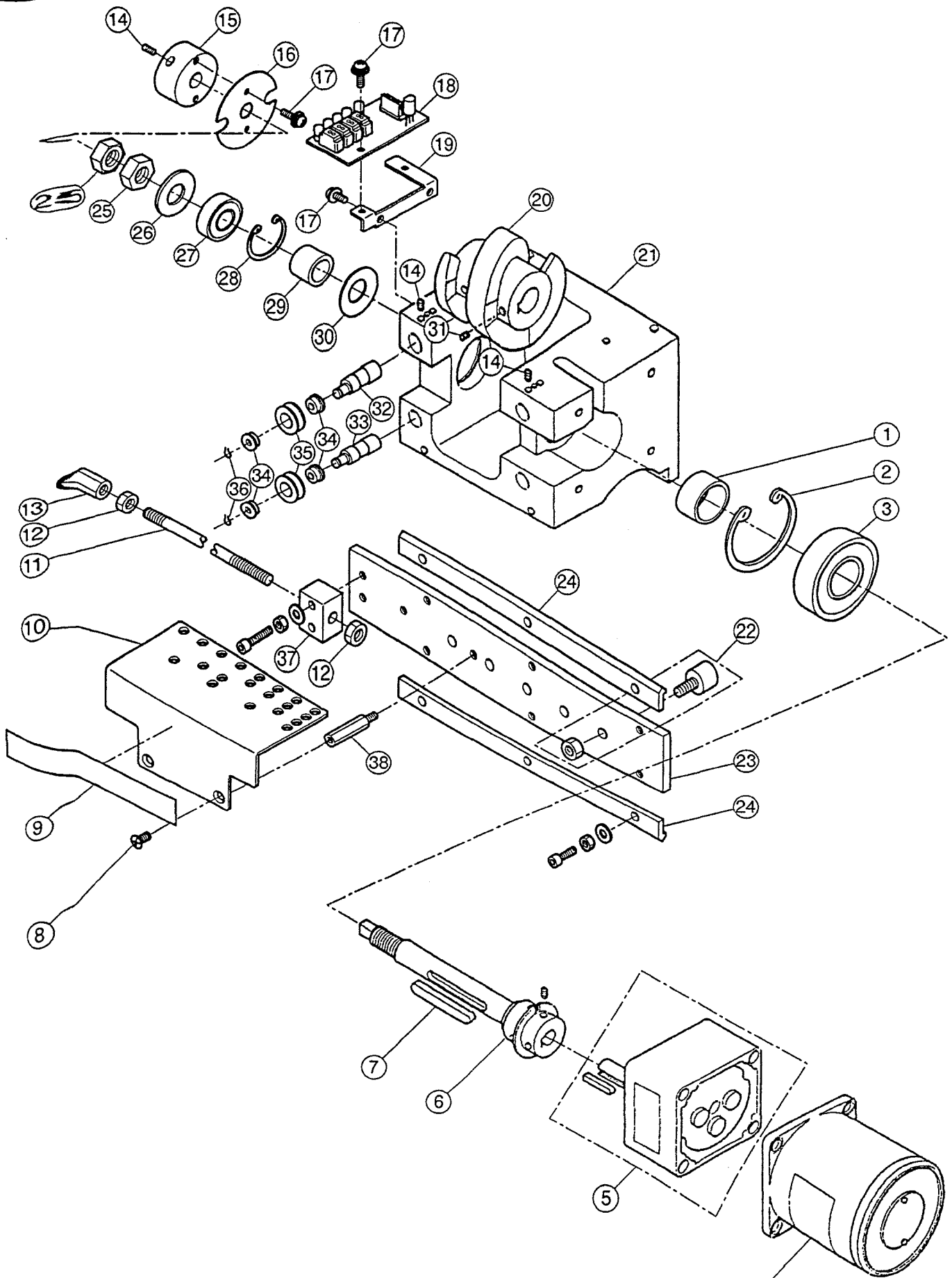
| 図  | 部品番号      |                                            |
|----|-----------|--------------------------------------------|
| It | PARTS No. | PARTS NAMES                                |
| 1  | HMF08170  | Roller pin (lower)                         |
| 2  | MPB00240  | Bearing (LF1060ZZ)                         |
| 3  | M0408483  | Bearing case                               |
| 4  | MPR00280  | DIN-ring (G-6)                             |
| 5  | SB04006A  | Screw for face plate                       |
| 6  | M0408403  | Lower face plate                           |
| 7  | -         | Flat head screw (M2.5x5)                   |
| 8  | M0408423  | Holding plate                              |
| 9  | M0408412  | Cushion                                    |
| 10 | HMF08050  | Upper face plate                           |
| 11 | M0408870  | Felt for fixed head                        |
| 12 | M0408276  | Jump structure unit                        |
| 13 | HMF08191  | Jump solenoid ass'y                        |
| 13 | HCM08020  | Jump solenoid ass'y (for 812-48type)       |
| 14 | MPB00080  | Plastic thrust washer (TW0613)             |
| 15 | C0408060  | Take-up lever catcher ass'y                |
| 16 | C0408040  | Fasten collar                              |
| 17 | C0408051  | Positioning pin                            |
| 18 | C0408030  | Fixing plate for cam                       |
| 19 | HMF08200  | Take-up lever cam                          |
| 19 | HMF08120  | Take-up lever cam (for jumbo hook)         |
| 20 | HMF08080  | Roller pin guide                           |
| 21 | HMF08061  | Roller pin (upper)                         |
| 22 | M0408430  | Plate nut                                  |
| 23 | HMF08140  | Guide bar for take-up lever (for 7 needle) |
| 23 | HMF08150  | Guide bar for take-up lever (for 8 needle) |
| 24 | HMF08090  | Guide base (left) for take-up lever        |
| 25 | HMF08100  | Guide base (right) for take-up lever       |
| 26 | SS04006A  | Set screw (M4x6)                           |
| 27 | HCM08012  | Fixed head                                 |
| 28 | HMF08070  | Head spacer                                |
| 29 | C0408100  | Take-up lever catcher shaft                |
| 30 | MPB00190  | Needle bearing (HK2020LL)                  |
| 31 | MPB00180  | Plastic thrust washer (TW2040)             |
| 32 | HMF08110  | Drive gear (1) for needle ber              |
| 33 | M0408003  | Fasten collar                              |
| 34 | M0408223  | Guide rail for slide block                 |
| 35 | M0408230  | Slide block                                |
| 36 | HMF08040  | Slide shaft                                |
| 37 | SS05008A  | Set screw (M5x8)                           |
| 38 | M0408210  | Screw for crank rod                        |
| 39 | M0408160  | Washer (B)                                 |
| 40 | SV06010E  | Bolt (M6x10)                               |
| 41 | MPR00050  | BO-ring (BO-28)                            |
| 42 | M0408170  | Washer (A)                                 |
| 43 | MPS00030  | Holder spring                              |
| 44 | MPB00210  | Bearing (6001ZZ)                           |
| 45 | M0408180  | Drive gear (2) for needle bar              |
| 46 | HMF08030  | Crank shaft                                |
| 47 | M0408203  | Crank rod                                  |



# HAPPY NEEDLE BAR SELECTION UNIT

HMF4120

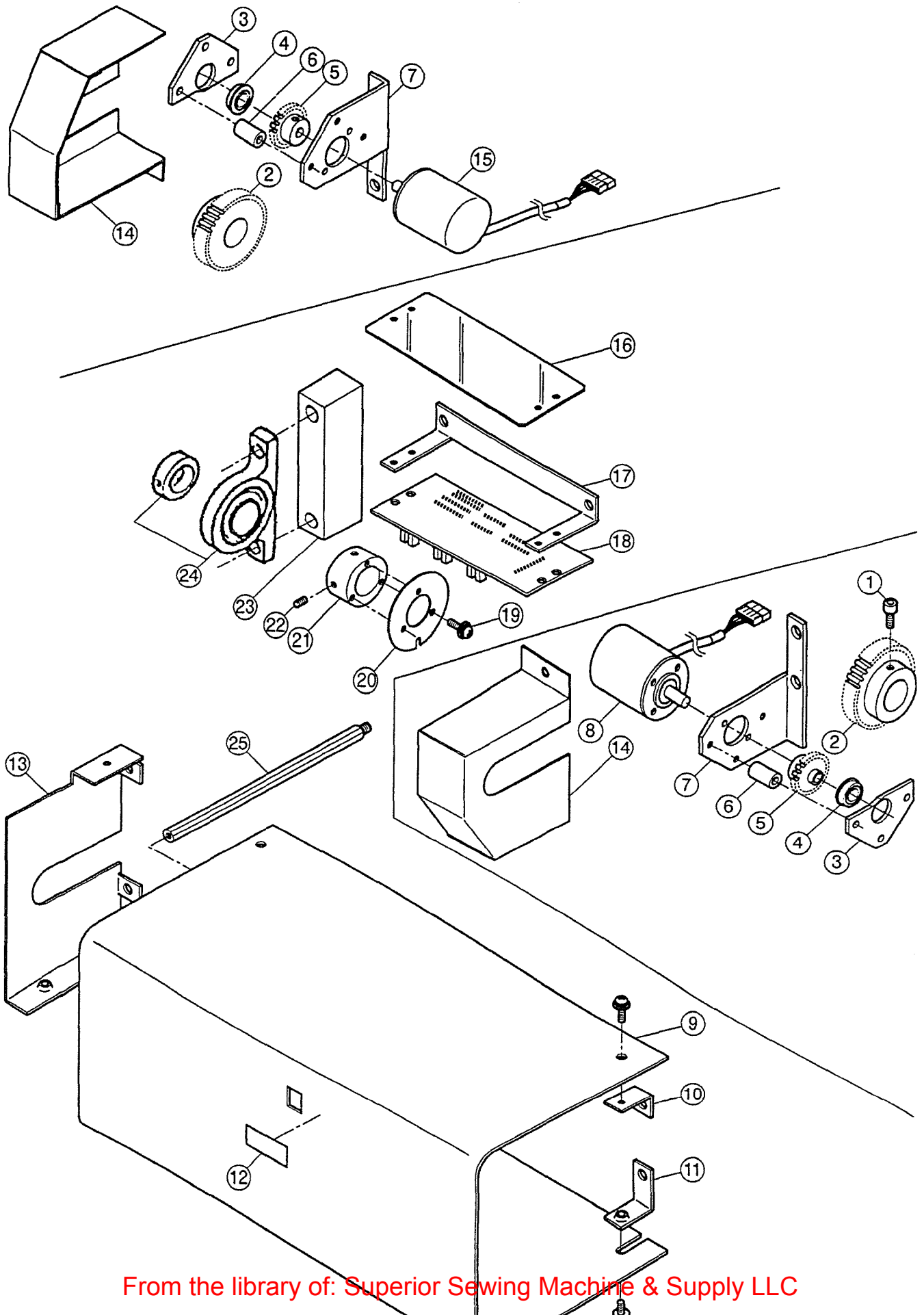
7.0



# HAPPY NEEDLE BAR SELECTION UNIT

7.1

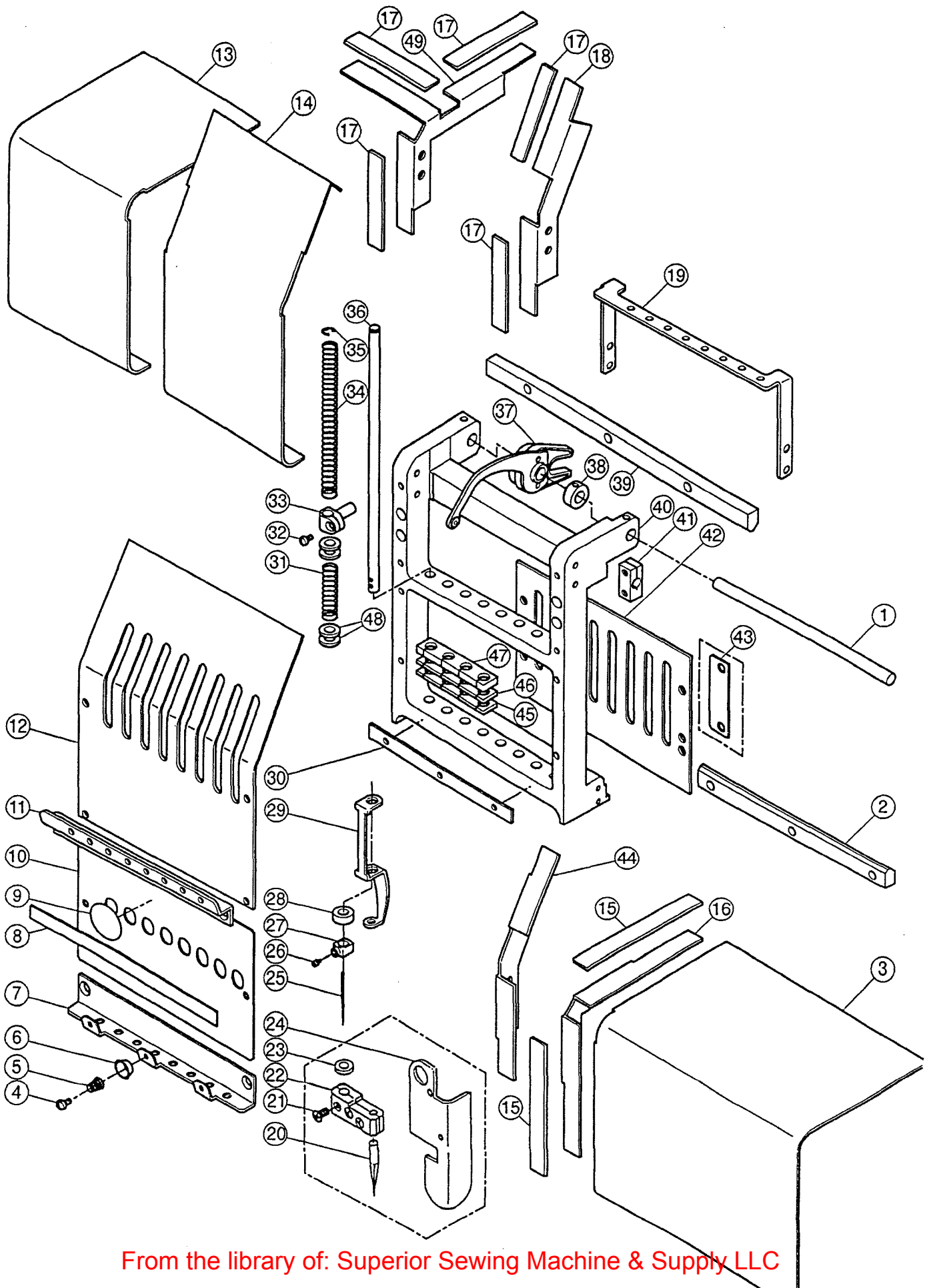
| 組<br>Ass'y | 指図<br>E't | 部品番号<br>PARTS No. | PARTS NAMES                                     | MF4725<br>NOTE / 備考 |
|------------|-----------|-------------------|-------------------------------------------------|---------------------|
|            | 1         | HMF10060          | Collar                                          |                     |
|            | 2         | -                 | JO-ring (JO-42)                                 |                     |
|            | 3         | MPB00610          | Bearing (6905ZZ)                                |                     |
|            | 4         | EPM00090          | Motor                                           |                     |
|            | 5         | EPM00020          | Gear head                                       |                     |
|            | 6         | HMF10020          | Drive shaft ass'y for needle bar selection unit |                     |
|            | 7         | MPK00010          | Key (both round 5x5x47)                         |                     |
|            | 8         | SP04008B          | Flat head screw (M4x8)                          |                     |
|            | 9         | M0451020          | Needle No. display sticker                      |                     |
|            | 10        | HMF10120          | Detecting plate for needle position             |                     |
|            | 11        | -                 | Moving shaft (by model)                         |                     |
|            | 12        | M0404280          | Nut                                             |                     |
|            | 13        | M0404292          | Joint                                           |                     |
|            | 14        | SS05008A          | Set screw (M5x8)                                |                     |
|            | 15        | HMF10080          | Slit disc boss                                  |                     |
|            | 16        | HMF10071          | Slit disc                                       |                     |
|            | 17        | SM03006D          | Screw (M3x6)                                    |                     |
|            | 18        | HMF83620          | Needle bar selection board ass'y                |                     |
|            | 19        | HMF10090          | Bracket for needle bar selection board          |                     |
|            | 20        | M0410070          | Rotating slotted cam                            |                     |
|            | 21        | HMF10010          | Base for needle bar selection unit              |                     |
|            | 22        | MPB00230          | Cam follower (with nut, KR16XLL)                |                     |
|            | 23        | HMF10100          | Slide bar                                       |                     |
|            | 24        | HMF10110          | Rail                                            |                     |
|            | 25        | NA12000B          | Nut (M12)                                       |                     |
|            | 26        | WA14000D          | Washer (M14)                                    |                     |
|            | 27        | MPB00220          | Bearing (6002ZZ)                                |                     |
|            | 28        | MPR00070          | C-ring (C-32)                                   |                     |
|            | 29        | M0410081          | Collar A                                        |                     |
|            | 30        | MPS00050          | Plate spring                                    |                     |
|            | 31        | SS04008A          | Set screw (M4x8)                                |                     |
|            | 32        | HMF10151          | Pin (upper)                                     |                     |
|            | 33        | HMF10171          | Pin (lower)                                     |                     |
|            | 34        | MPB00240          | Bearing (LF1060ZZ)                              |                     |
|            | 35        | M0408483          | Bearing case                                    |                     |
|            | 36        | MPR00280          | DIN-ring (G-6)                                  |                     |
|            | 37        | HMF10180          | Shaft holder                                    |                     |
|            | 38        | HMF10131          | Stud                                            |                     |



# HAPPY DETECTING UNIT

8.1

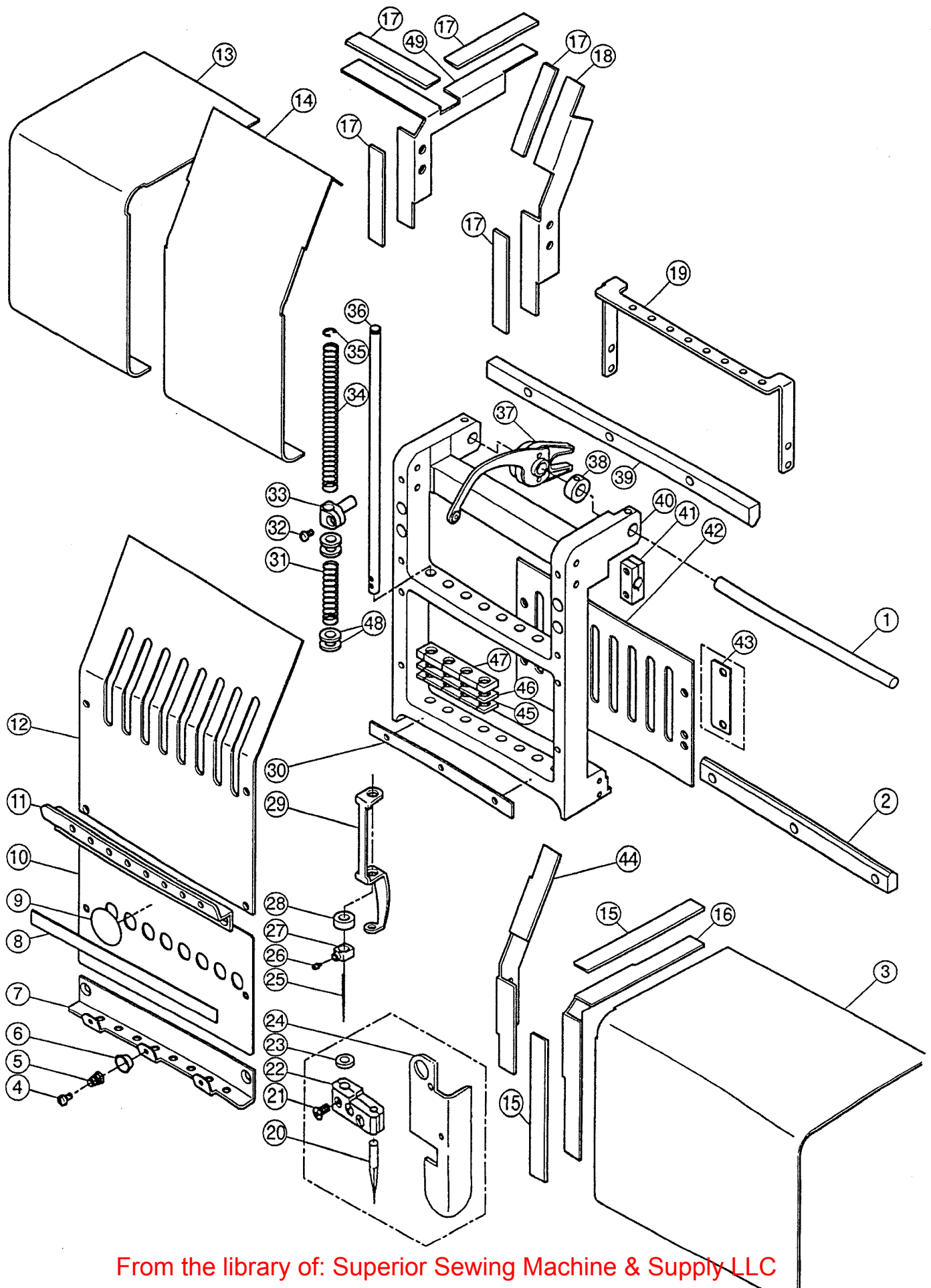
| 組<br>Assy | 指図<br>El't | 部品番号<br>PARTS No. | PARTS NAMES                    | MF4B14<br>NOTE / 備考 |
|-----------|------------|-------------------|--------------------------------|---------------------|
|           | 1          | SS04010A          | Cap screw (M4x10)              |                     |
|           | 2          | HMF10210          | Encoder drive gear A           |                     |
|           | 3          | HMF10203          | Encoder bracket B              |                     |
|           | 4          | MPB00620          | Bearing (LF1680ZZ)             |                     |
|           | 5          | HMF10220          | Encoder drive gear B           |                     |
|           | 6          | HMF10230          | Encoder collar                 |                     |
|           | 7          | HMF10193          | Encoder bracket A              |                     |
|           | 8          | M0402670          | Rotary encoder A               |                     |
|           | 9          | -                 | Cover (by model)               |                     |
|           | 10         | HMF10281          | Cover bracket B                |                     |
|           | 11         | HMF10270          | Cover bracket A                |                     |
|           | 12         | M0451060          | -                              |                     |
|           | 12         | M0451070          | Needle No. sticker             |                     |
|           | 13         | HMF10291          | Side cover                     |                     |
|           | 14         | HMF10241          | Encoder cover                  |                     |
|           | 15         | HMF84010          | Rotary encoder B               |                     |
|           | 16         | C0402070          | Board cover                    |                     |
|           | 17         | HMF10250          | Bracket for board              |                     |
|           | 18         | M0410103          | Timing detecting board ass'y   |                     |
|           | 19         | SM03008D          | Screw (M3x8)                   |                     |
|           | 20         | M0410123          | Detecting slit disc            |                     |
|           | 21         | C0402041          | Slit disc boss                 |                     |
|           | 22         | SS05008A          | Set screw (M5x8)               |                     |
|           | 23         | HMF10260          | Spacer                         |                     |
|           | 24         | MPB00050          | Bearing block                  |                     |
|           | 25         | HCM10020          | Stud (for HCM-Y480,806-36type) |                     |



| 組<br>Ass'y | 指図<br>E/t | 部品番号<br>PARTS No. | PARTS NAMES                                         | MF5113<br>NOTE / 備考 |
|------------|-----------|-------------------|-----------------------------------------------------|---------------------|
|            | 1         | M0412060          | Take-up lever shaft (for 7 needle)                  |                     |
|            | 1         | M0412070          | Take-up lever shaft (for 8 needle)                  |                     |
|            | 2         | M0412120          | Rail 2 (for 7 needle)                               |                     |
|            | 2         | M0412130          | Rail 2 (for 8 needle)                               |                     |
|            | 3         | -                 | Cover right (by model)                              |                     |
|            | 4         | M0412411          | Thread holding screw                                |                     |
|            | 5         | M0412400          | Spring                                              |                     |
|            | 6         | M0412390          | Thread holding disc                                 |                     |
|            | 7         | HMF12200          | Thread guide plate lower (for 7 needle)             |                     |
|            | 7         | HMF12210          | Thread guide plate lower (for 8 needle)             |                     |
|            | 8         | M0412382          | Thread holding rubber                               |                     |
|            | 9         | -                 | Number sticker                                      |                     |
|            | 10        | HMF12240          | Front panel lower (for 7 needle)                    |                     |
|            | 10        | HMF12250          | Front panel lower (for 8 needle)                    |                     |
|            | 11        | M0412334          | Thread guide plate B (for 7 needle)                 |                     |
|            | 11        | M0412342          | Thread guide plate B (for 8 needle)                 |                     |
|            | 12        | HMF12223          | Front panel upper (for 7 needle)                    |                     |
|            | 12        | HMF12233          | Front panel upper (for 8 needle)                    |                     |
|            | 13        | HMF13040          | Cover left                                          |                     |
|            | 14        | -                 | Cover center (by model)                             |                     |
|            | 15        | SF530502          | Magnet (A) for cover bracket                        |                     |
|            | 16        | HMF13012          | Cover bracket                                       |                     |
|            | 17        | HMF13302          | Magnet for cover bracket                            |                     |
|            | 18        | HMF13290          | Cover bracket (left)                                |                     |
|            | 19        | M0412005          | Thread guide plate C (for 7 needle)                 |                     |
|            | 19        | M0412012          | Thread guide plate C (for 8 needle)                 |                     |
|            | 20        | M0412280          | Borer blade                                         |                     |
|            | 21        | SP03006D          | Screw (M3x6)                                        |                     |
|            | 22        | M0412273          | Bracket A,B for borer                               |                     |
|            | 23        | M0413030          | Plastic ring (C)                                    |                     |
|            | 24        | SF512010          | Blade cover                                         |                     |
|            | 25        | MPZ00150          | Needle (#11)                                        |                     |
|            | 26        | MPZ00140          | Fixing screw                                        |                     |
|            | 27        | M0412250          | Needle holding block                                |                     |
|            | 28        | HMF12120          | Cushion                                             |                     |
|            | 29        | HMF12300          | Prsure foot ass'y                                   |                     |
|            | 30        | HMF12070          | Prsure foot sheet (for 7 needle)                    |                     |
|            | 30        | HMF12080          | Prsure foot sheet (for 8 needle)                    |                     |
|            | 31        | M0413060          | Needle bar spring (2)                               |                     |
|            | 32        | M0412200          | Screw for needle bar boss                           |                     |
|            | 33        | M0412801          | Needle bar boss                                     |                     |
|            | 34        | HMF12090          | Needle bar spring upper                             |                     |
|            | 35        | MPR00080          | E-ring (E-5)                                        |                     |
|            | 36        | M0412164          | Needle bar                                          |                     |
|            | 37        | HMF12271          | Take-up lever ass'y                                 |                     |
|            | 38        | HMF12150          | Collar                                              |                     |
|            | 39        | HMF12161          | Rail upper (for 7 needle)                           |                     |
|            | 39        | HMF12171          | Rail upper (for 8 needle)                           |                     |
|            | 40        | HMF12022          | Moving head main body (for 7 needle)                |                     |
|            | 40        | HMF12012          | Moving head main body for jumbo hook (for 7 needle) |                     |
|            | 40        | HMF12052          | Moving head main body (for 8 needle)                |                     |
|            | 40        | HMF12042          | Moving head main body for jumbo hook (for 8 needle) |                     |
|            | 41        | HMF12310          | Fasten block                                        |                     |
|            | 42        | HMF12180          | Needle bar boss lift cage (for 7 needle)            |                     |
|            | 42        | HMF12190          | Needle bar boss lift cage (for 8 needle)            |                     |

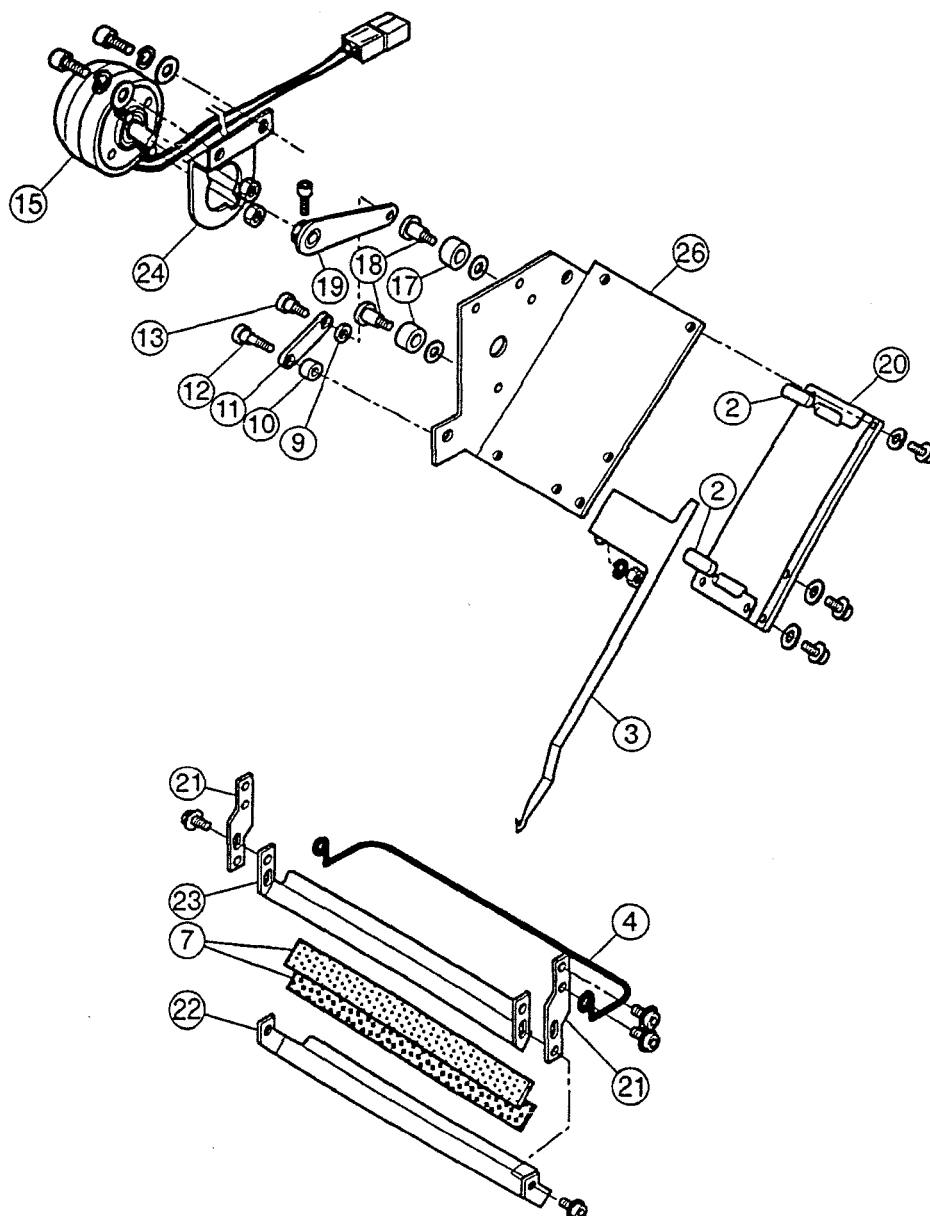
★  
TO STRAIGHTEN UP NEEDLE  
TO GO THROUGH CENTER  
OF NEEDLE PLATE.

LOOSEN 3mm (5/16") ALLEN SCREW  
ON FRONT OF HEAD - ADJUST  
ON 1/4" BAR - CENTER



| 組     | 指図   | 部品番号      |                          | MF5113    |
|-------|------|-----------|--------------------------|-----------|
| Ass'y | El't | PARTS No. | PARTS NAMES              | NOTE / 備考 |
|       | 43   | HMF12260  | Borer plate              |           |
|       | 44   | HMF13280  | Cover bracket (right)    |           |
|       | 45   | HMF12290  | Adjusting sheet (A)      |           |
|       | 46   | M0412490  | Prsure foot felt (0.5mm) |           |
|       | 46   | M0412500  | Prsure foot felt (1.0mm) |           |
|       | 46   | M0412510  | Prsure foot felt (1.5mm) |           |
|       | 46   | M0412610  | Prsure foot felt (2.0mm) |           |
|       | 47   | M0412223  | Prsure foot felt (5.0mm) |           |
|       | 48   | HMF12330  | Plastic washer           |           |
|       | 49   | HMF13350  | Cover bracket (left)     |           |



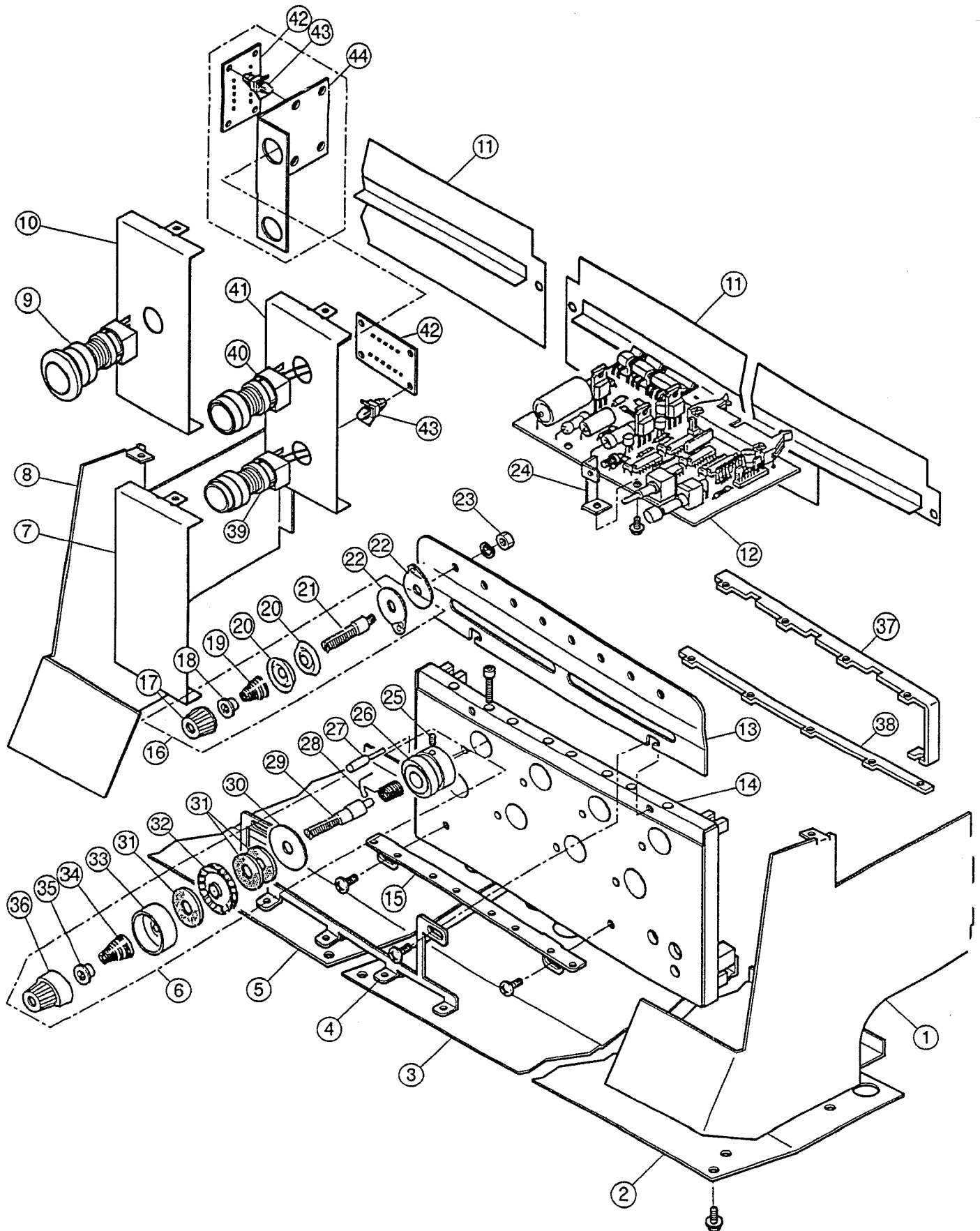


# HAPPY THREAD CATCHER

10.1

| 組<br>Ass'y | 指図<br>El't | 部品番号<br>PARTS No. | PARTS NAMES                 | CM4B22<br>NOTE / 備考 |
|------------|------------|-------------------|-----------------------------|---------------------|
|            | 2          | M0414180          | Cushion                     |                     |
|            | 3          | C0414055          | Hook                        |                     |
|            | 4          | HCM14100          | Hook guide for 7 needle     |                     |
|            | 4          | C0414121          | Hook guide for 8 needle     |                     |
|            | 7          | M0414040          | Magic tape for 7 needle     |                     |
|            | 7          | C0414111          | Magic tape for 8 needle     |                     |
|            | 9          | M0414150          | Washer for hinge screw      |                     |
|            | 10         | C0414080          | Spacer for hinge screw      |                     |
|            | 11         | M0414162          | Connecting plate            |                     |
|            | 12         | C0414070          | Hinge screw                 |                     |
|            | 13         | M0414142          | Hinge screw (A)             |                     |
|            | 15         | M0414120          | Solenoid                    |                     |
|            | 17         | M0412241          | Plastic ring                |                     |
|            | 18         | M0414080          | Hinge screw (B)             |                     |
|            | 19         | M0414100          | Actuating plate             |                     |
|            | 20         | HMF14081          | Guide plate                 |                     |
|            | 21         | HCM14030          | Holder guide                |                     |
|            | 22         | HCM14070          | Holder (Lower) for 7 needle |                     |
|            | 22         | HCM14060          | Holder (Lower) for 8 needle |                     |
|            | 23         | HCM14050          | Holder (Upper) for 7 needle |                     |
|            | 23         | HCM14040          | Holder (Upper) for 8 needle |                     |
|            | 24         | M0414111          | Solenoid fixing plate       |                     |
|            | 26         | HCM14012          | Bracket                     |                     |

*Need*  
*C0414070*  
*Hinge Screw*

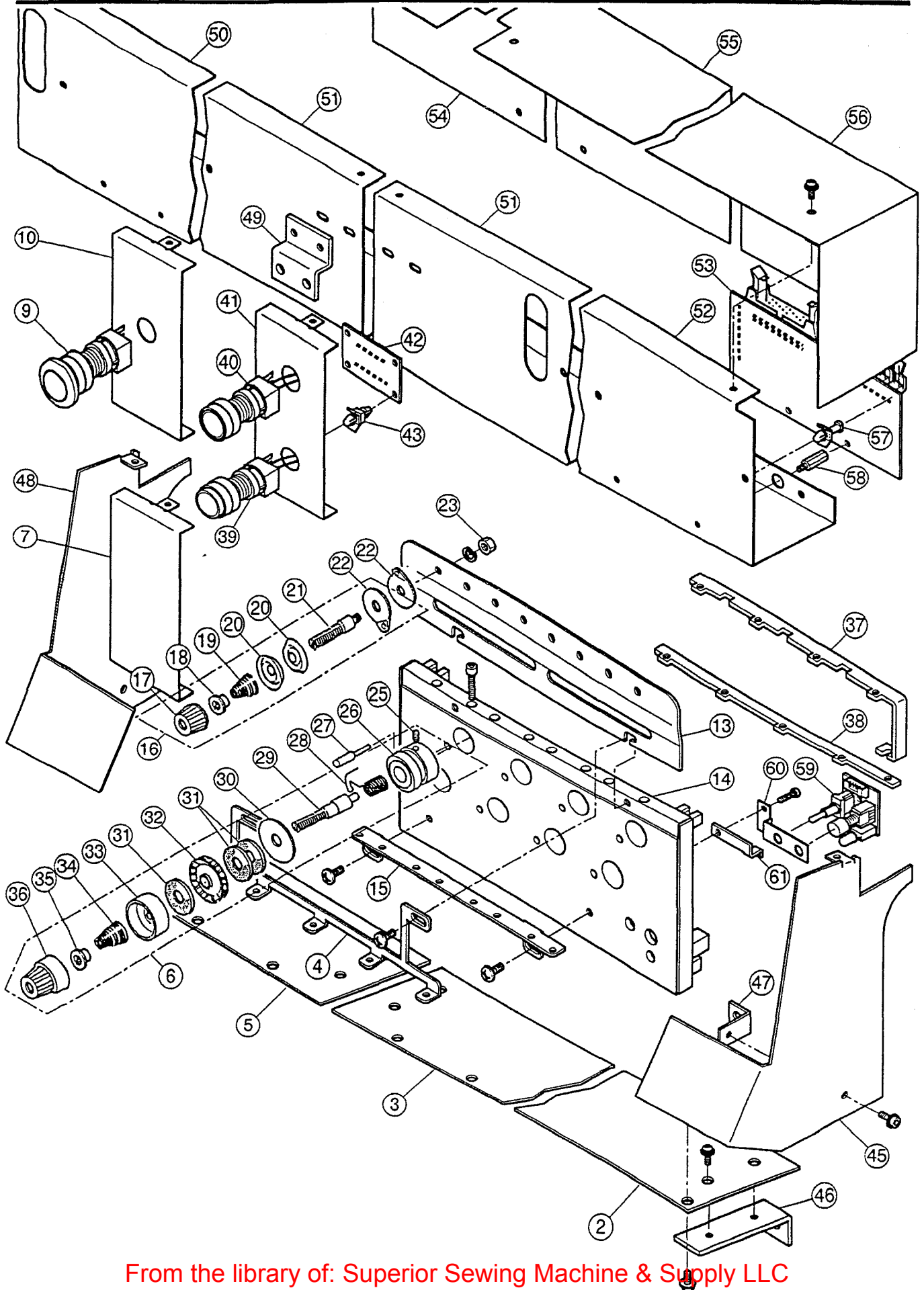


# HAPPY THREAD TENSION UNIT

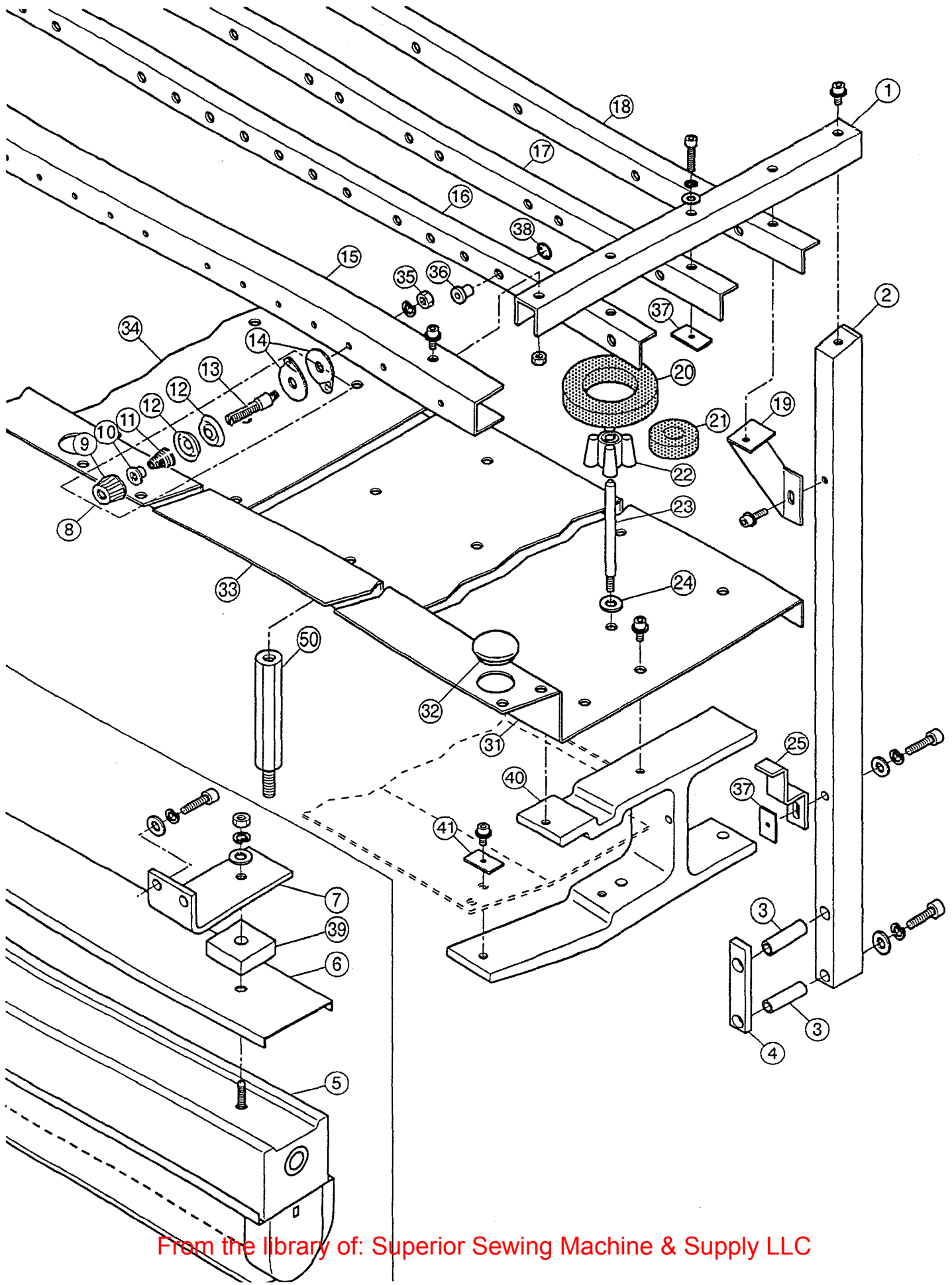
11.1

| 組     | 指図   | 部品番号      |                                       | CM4C27    |
|-------|------|-----------|---------------------------------------|-----------|
| Ass'y | El't | PARTS No. | PARTS NAMES                           | NOTE / 備考 |
|       | 1    | HMF20633  | Thread tension side cover (Right)     |           |
|       | 2    | -         | Fixing plate B right (by model)       |           |
|       | 3    | -         | Fixing plate B center (by model)      |           |
|       | 4    | M0416260  | Upper thread guide                    |           |
|       | 5    | -         | Fixing plate B left (by model)        |           |
|       | 6    | M0416214  | Thread tension ass'y                  |           |
|       | 7    | -         | Thread tension cover C (by model)     |           |
|       | 8    | HMF20643  | Thread tension side cover (Left)      |           |
|       | 9    | EPS00550  | Emergency stop switch                 |           |
|       | 10   | -         | Thread tension cover B (by model)     |           |
|       | 11   | -         | Rear cover (by model)                 |           |
|       | 12   | M0483222  | Thread detecting board ass'y          |           |
|       | 13   | M0416085  | Thread guide base (for 7 needle)      |           |
|       | 13   | M0416075  | Thread guide base (for 8 needle)      |           |
|       | 14   | M0416130  | Thread tension bracket (for 7 needle) |           |
|       | 14   | M0416140  | Thread tension bracket (for 8 needle) |           |
|       | 15   | M0416220  | Lower thread guide A (for 7 needle)   |           |
|       | 15   | M0416230  | Lower thread guide A (for 8 needle)   |           |
|       | 16   | M0416123  | Thread guide unit                     |           |
| 16*   | 17   | MPZ00960  | Tension nut                           |           |
| 16*   | 18   | MPZ00280  | Spring guide                          |           |
| 16*   | 19   | M0416111  | Spring                                |           |
| 16*   | 20   | MPZ00220  | Disc                                  |           |
| 16*   | 21   | M0418211  | Tension shaft                         |           |
| 16*   | 22   | MPZ00200  | Tension guide plate                   |           |
|       | 23   | NA04000A  | Nut (M4)                              |           |
|       | 24   | M0416031  | Bracket for thread detecting board    |           |
| 6*    | 25   | SS04005A  | Set screw (M4x5)                      |           |
| 6*    | 26   | M0416171  | Cylinder cover                        |           |
|       | 27   | M0416160  | Detecting pin                         |           |
| 6*    | 28   | M0416183  | Thread check spring                   |           |
| 6*    | 29   | MPZ00250  | Tension shaft                         |           |
| 6*    | 30   | M0416191  | Isolation disc (Gray)                 |           |
| 6*    | 31   | M0416201  | Felt (Gray)                           |           |
| 6*    | 32   | MPZ00260  | Rotary tension disc                   |           |
| 6*    | 33   | MPZ00270  | Holder (Black)                        |           |
| 6*    | 34   | M0416111  | Spring                                |           |
| 6*    | 35   | MPZ00280  | Spring guide                          |           |
| 6*    | 36   | MPZ00290  | Knob nut (Black)                      |           |
|       | 37   | M0417440  | Thread tension fixer A                |           |
|       | 38   | M0417450  | Thread tension fixer B (for 8 needle) |           |
|       | 38   | M0417460  | Thread tension fixer C (for 7 needle) |           |
|       | 39   | C0484020  | Stop switch ass'y                     |           |
|       | 40   | C0484010  | Start switch ass'y                    |           |
|       | 41   | -         | Thread tension cover A (by model)     |           |
|       | 42   | C0416120  | Start switch board ass'y              |           |
|       | 43   | EPN00290  | Locking card spacer                   |           |
|       | 44   | HCM18120  | Board bracket (for 720 type)          |           |

# HAPPY THREAD TENSION UNIT (812-48) CM4727 11.2

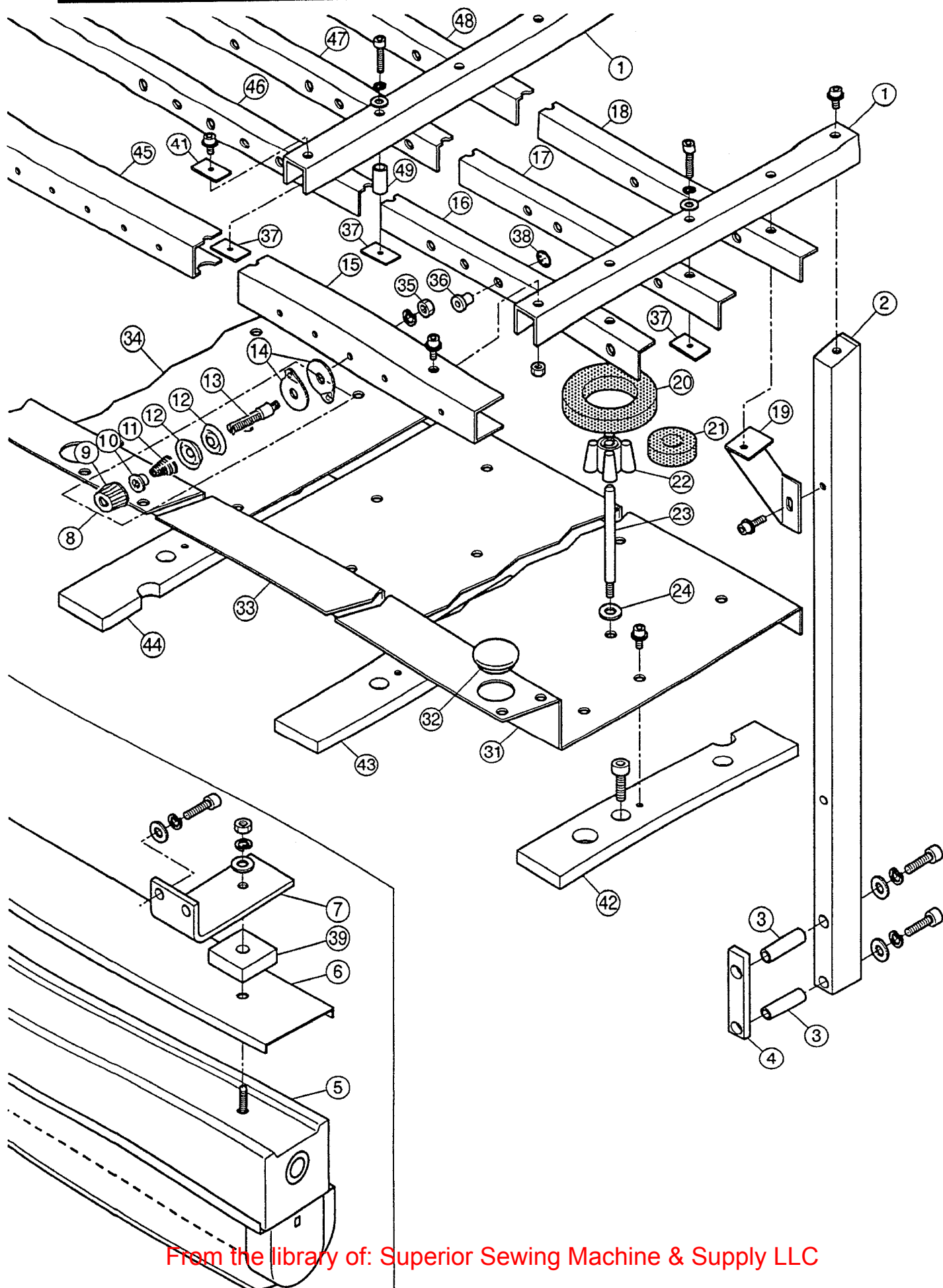


| 組<br>Ass'y | 指図<br>El't | 部品番号<br>PARTS No. | PARTS NAMES                           | CM4C27<br>NOTE / 備考 |
|------------|------------|-------------------|---------------------------------------|---------------------|
|            | 2          | HCM16191          | Fixing plate B right                  |                     |
|            | 3          | HCM16200          | Fixing plate B center                 |                     |
|            | 4          | M0416260          | Upper thread guide                    |                     |
|            | 5          | HCM16211          | Fixing plate B left                   |                     |
|            | 6          | M0416214          | Thread tension ass'y                  |                     |
|            | 7          | HCM18080          | Thread tension cover C                |                     |
|            | 9          | EPS00550          | Emergency stop switch                 |                     |
|            | 10         | HCM18070          | Thread tension cover B                |                     |
|            | 13         | M0416075          | Thread guide base (for 8 needle)      |                     |
|            | 14         | M0416140          | Thread tension bracket (for 8 needle) |                     |
|            | 15         | M0416230          | Lower thread guide A (for 8 needle)   |                     |
|            | 16         | M0416123          | Thread guide unit                     |                     |
| 16*        | 17         | MPZ00960          | Tension nut                           |                     |
| 16*        | 18         | MPZ00280          | Spring guide                          |                     |
| 16*        | 19         | M0416111          | Spring                                |                     |
| 16*        | 20         | MPZ00220          | Disc                                  |                     |
| 16*        | 21         | M0418211          | Tension shaft                         |                     |
| 16*        | 22         | MPZ00200          | Tension guide plate                   |                     |
|            | 23         | NA04000A          | Nut (M4)                              |                     |
| 6*         | 25         | SS04005A          | Set screw (M4x5)                      |                     |
| 6*         | 26         | M0416171          | Cylinder cover                        |                     |
|            | 27         | M0416160          | Detecting pin                         |                     |
| 6*         | 28         | M0416183          | Thread check spring                   |                     |
| 6*         | 29         | MPZ00250          | Tension shaft                         |                     |
| 6*         | 30         | M0416191          | Isolation disc (Gray)                 |                     |
| 6*         | 31         | M0416201          | Felt (Gray)                           |                     |
| 6*         | 32         | MPZ00260          | Rotary tension disc                   |                     |
| 6*         | 33         | MPZ00270          | Holder (Black)                        |                     |
| 6*         | 34         | M0416111          | Spring                                |                     |
| 6*         | 35         | MPZ00280          | Spring guide                          |                     |
| 6*         | 36         | MPZ00290          | Knob nut (Black)                      |                     |
|            | 37         | M0417440          | Thread tension fixer A                |                     |
|            | 38         | M0417450          | Thread tension fixer B (for 8 needle) |                     |
|            | 39         | C0484020          | Stop switch ass'y                     |                     |
|            | 40         | C0484010          | Start switch ass'y                    |                     |
|            | 41         | HCM18060          | Thread tension cover A                |                     |
|            | 42         | C0416120          | Start switch board ass'y              |                     |
|            | 43         | EPN00290          | Locking card spacer                   |                     |
|            | 45         | HCM16260          | Thread tension side cover (Right)     |                     |
|            | 46         | HCM16220          | Fixing plate bracket                  |                     |
|            | 47         | HMF10281          | Cover bracket B                       |                     |
|            | 48         | HCM16270          | Thread tension side cover (Left)      |                     |
|            | 49         | HCM16340          | Duct bracket                          |                     |
|            | 50         | HCM16300          | Duct (right)                          |                     |
|            | 51         | HCM16290          | Duct (center)                         |                     |
|            | 52         | HCM16280          | Duct (left)                           |                     |
|            | 53         | HMX83222          | Thread detecting board ass'y          |                     |
|            | 54         | HCM16330          | Duct cover (right)                    |                     |
|            | 55         | HCM16321          | Duct cover (center)                   |                     |
|            | 56         | HCM16310          | Duct cover (left)                     |                     |
|            | 57         | EPN00340          | Card spacer                           |                     |
|            | 58         | MPZ01430          | Stud (BSB315)                         |                     |
|            | 59         | HCM83001          | Jump switch board ass'y               |                     |
|            | 60         | HCM16600          | Switch fixing plate                   |                     |
|            | 61         | HCM16380          | Switch bracket                        |                     |

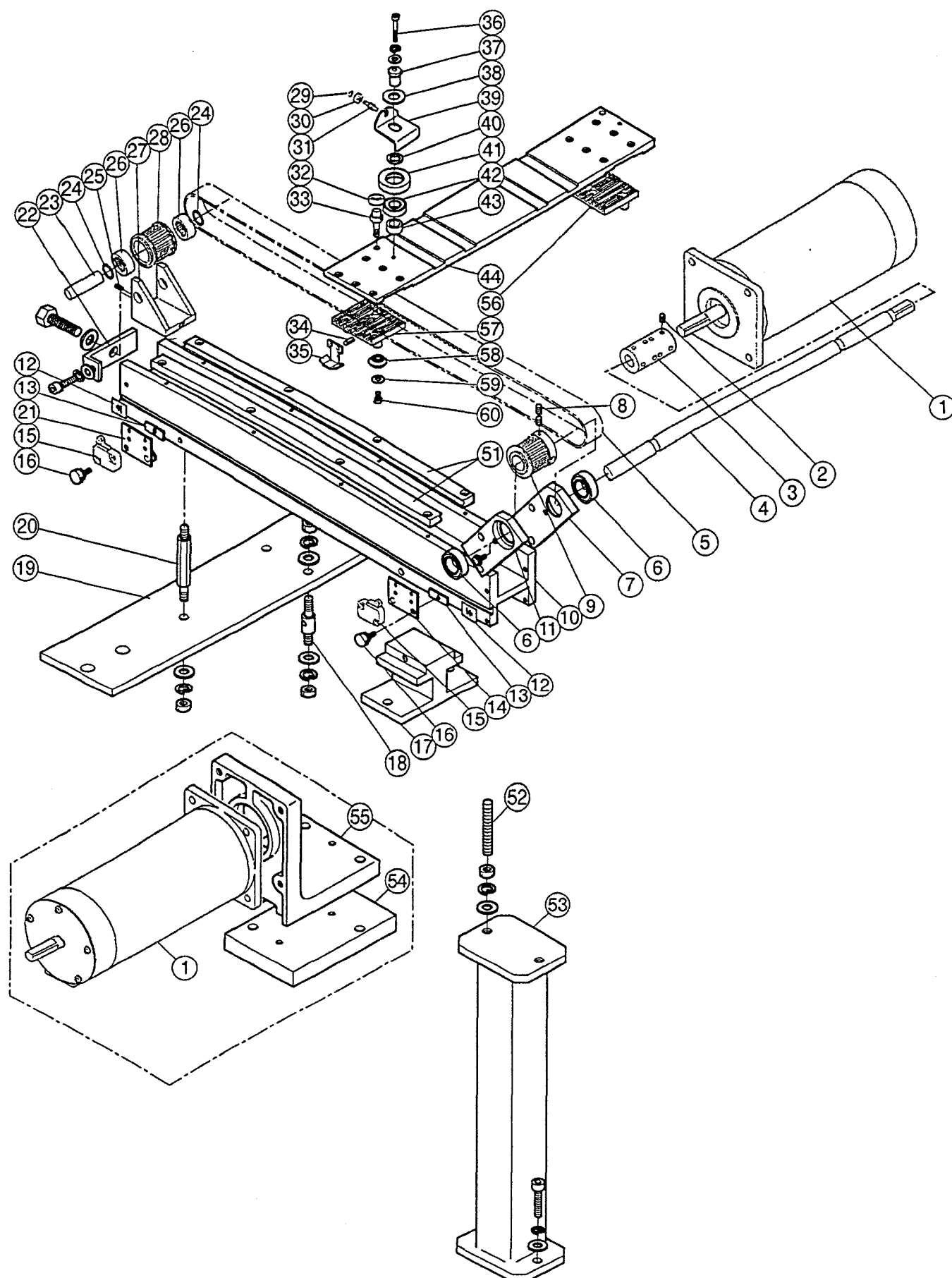


| 組<br>Ass'y | 指図<br>Elt | 部品番号<br>PARTS No. | PARTS NAMES                               | MF5113<br>NOTE / 備考 |
|------------|-----------|-------------------|-------------------------------------------|---------------------|
|            | 1         | HMF20053          | Thread guide connecting plate             |                     |
|            | 2         | HMF20063          | Thread guide support pillar               |                     |
|            | 3         | HMF20670          | Spacer                                    |                     |
|            | 4         | HMF20660          | Vibration insulator B                     |                     |
|            | 5         | EPP00360          | Illuminator                               |                     |
|            | 6         | HMF00200          | Illuminator cover                         |                     |
|            | 7         | HMF00190          | Illuminator bracket                       |                     |
|            | 8         | MO416123          | Thread guide unit                         |                     |
| 8*         | 9         | MPZ00960          | Tension nut                               |                     |
| 8*         | 10        | MPZ00280          | Spring guide                              |                     |
| 8*         | 11        | MO416111          | Spring                                    |                     |
| 8*         | 12        | MPZ00220          | Disc                                      |                     |
| 8*         | 13        | MO418211          | Tension shaft                             |                     |
| 8*         | 14        | MPZ00200          | Tension guide plate                       |                     |
|            | 15        | -                 | Thread guide unit fixing plate (by model) |                     |
|            | 16        | -                 | Thread guide A (by model)                 |                     |
|            | 17        | -                 | Thread guide B (by model)                 |                     |
|            | 18        | -                 | Thread guide C (by model)                 |                     |
|            | 19        | HMF20321          | Reinforcement plate                       |                     |
|            | 20        | HMF20570          | Felt ring (Large)                         |                     |
|            | 21        | MO420050          | Felt ring (Small)                         |                     |
|            | 22        | MPZ00340          | Plastic spring                            |                     |
|            | 23        | MO420032          | Spool pin                                 |                     |
|            | 24        | MO420890          | Washer                                    |                     |
|            | 25        | HMF20610          | Reinforcement plate B                     |                     |
|            | 31        | -                 | Fixing plate A right (by model)           |                     |
|            | 32        | MPZ00190          | Hole cover                                |                     |
|            | 33        | -                 | Fixing plate A center (by model)          |                     |
|            | 34        | -                 | Fixing plate A left (by model)            |                     |
|            | 35        | NA04000A          | Nut (M4)                                  |                     |
|            | 36        | MO445080          | Eyelet                                    |                     |
|            | 37        | MO420900          | Fixing nut                                |                     |
|            | 38        | MPR00110          | SE-ring (SE-7)                            |                     |
|            | 39        | HMF00320          | Vibration insulator                       |                     |
|            | 40        | HMF20590          | Base for thread stand                     |                     |
|            | 41        | HMF20650          | Washer                                    |                     |
|            | 50        | HCM20370          | Stud (for HCM-720-30)                     |                     |

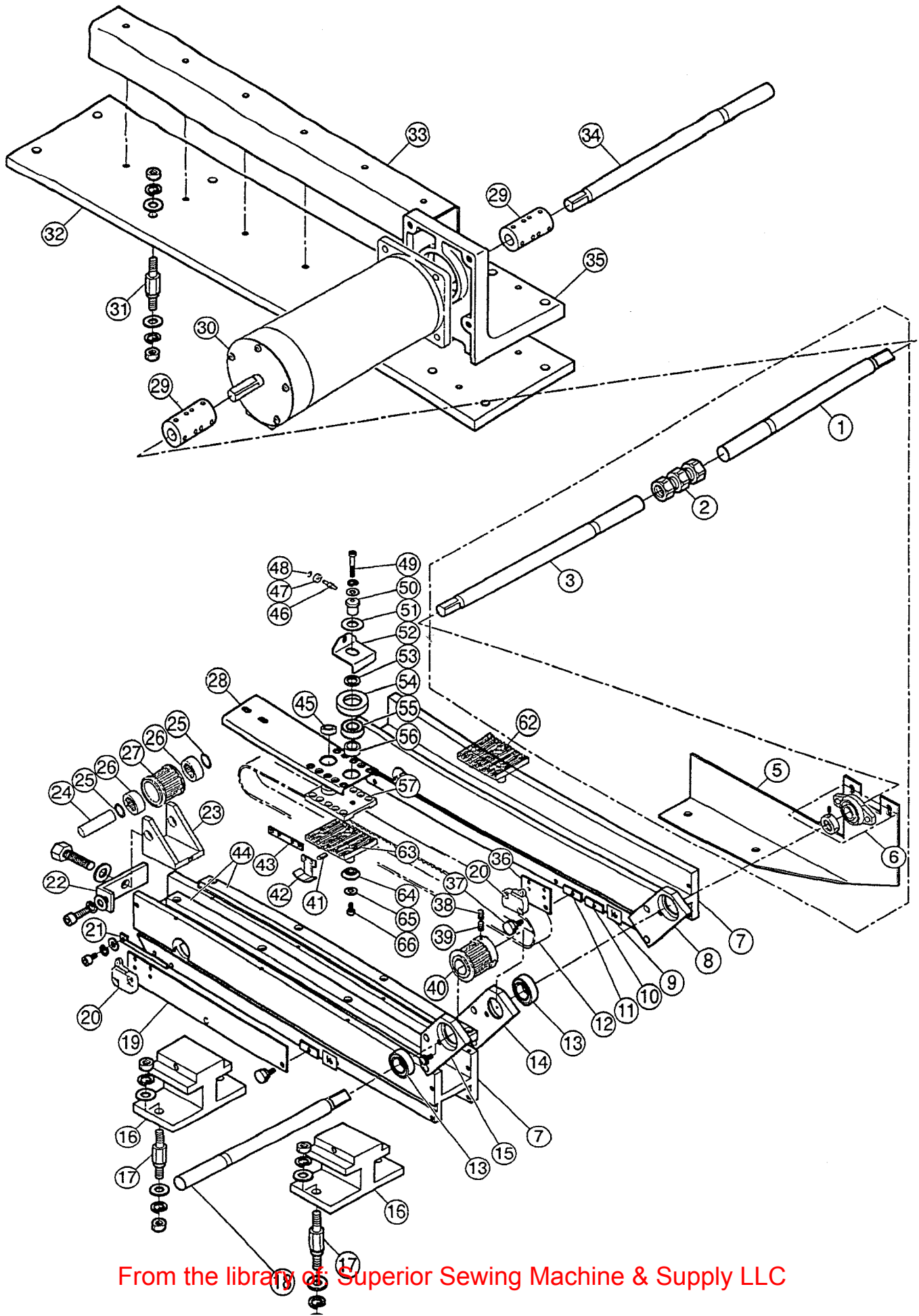




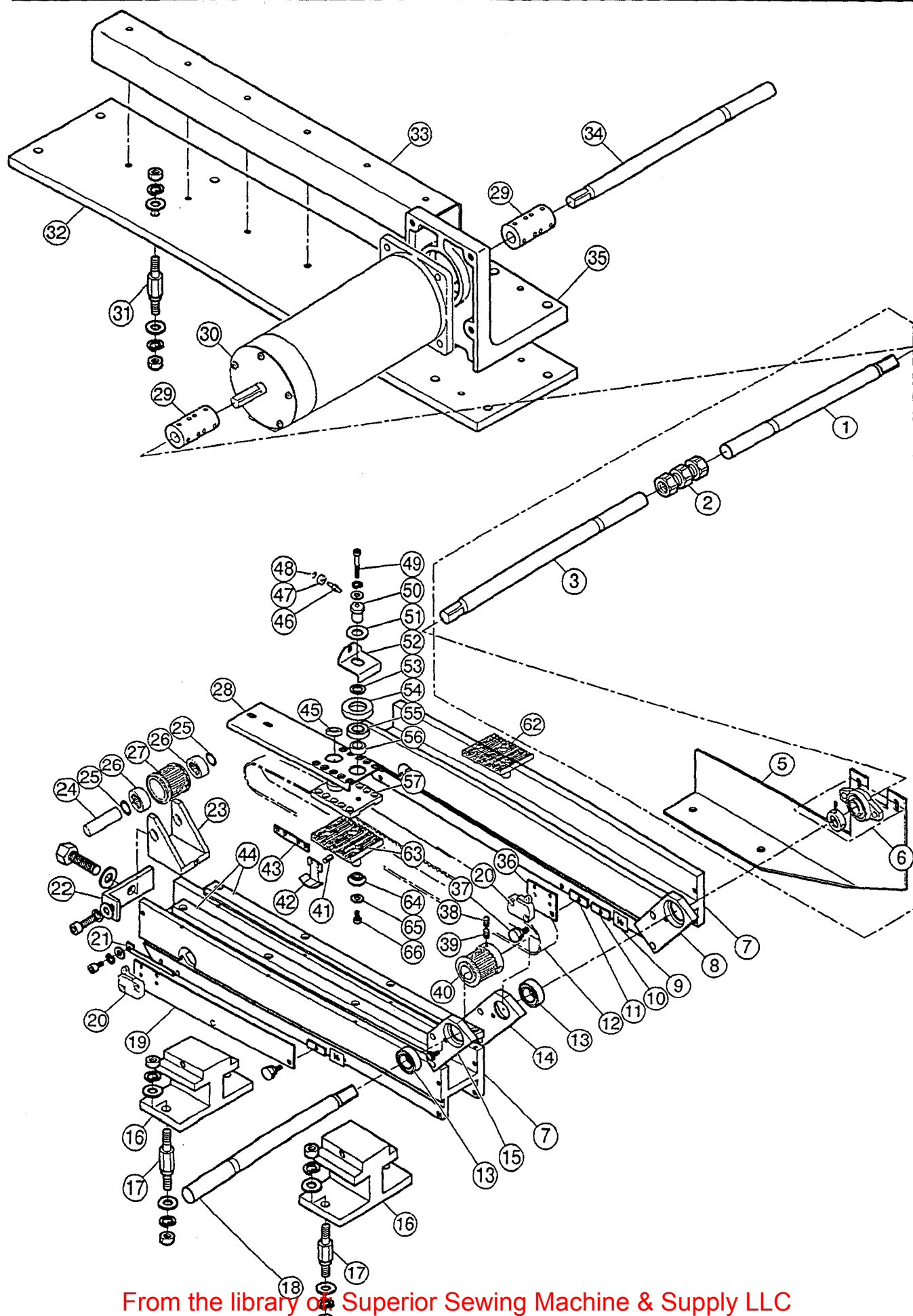
| 組<br>Ass'y | 指図<br>E't | 部品番号<br>PARTS No. | PARTS NAMES                            | CM4B14<br>NOTE / 備考 |
|------------|-----------|-------------------|----------------------------------------|---------------------|
|            | 1         | HMF20053          | Thread guide connecting plate          |                     |
|            | 2         | HMF20063          | Thread guide support pillar            |                     |
|            | 3         | HMF20670          | Spacer                                 |                     |
|            | 4         | HMF20660          | Vibration insulator B                  |                     |
|            | 5         | EPP00360          | Illuminator                            |                     |
|            | 6         | HMF00200          | Illuminator cover                      |                     |
|            | 7         | HMF00190          | Illuminator bracket                    |                     |
|            | 8         | M0416123          | Thread guide unit                      |                     |
| 8*         | 9         | MPZ00960          | Tension nut                            |                     |
| 8*         | 10        | MPZ00280          | Spring guide                           |                     |
| 8*         | 11        | M0416111          | Spring                                 |                     |
| 8*         | 12        | MPZ00220          | Disc                                   |                     |
| 8*         | 13        | M0418211          | Tension shaft                          |                     |
| 8*         | 14        | MPZ00200          | Tension guide plate                    |                     |
|            | 15        | HCM20191          | Thread guide unit fixing plate (right) |                     |
|            | 16        | HCM20131          | Thread guide A (right)                 |                     |
|            | 17        | HCM20151          | Thread guide B (right)                 |                     |
|            | 18        | HCM20171          | Thread guide C (right)                 |                     |
|            | 19        | HMF20321          | Reinforcement plate                    |                     |
|            | 20        | HMF20570          | Felt ring (Large)                      |                     |
|            | 21        | M0420050          | Felt ring (Small)                      |                     |
|            | 22        | MPZ00340          | Plastic spring                         |                     |
|            | 23        | M0420032          | Spool pin                              |                     |
|            | 24        | M0420890          | Washer                                 |                     |
|            | 31        | HCM16160          | Fixing plate A right                   |                     |
|            | 32        | MPZ00190          | Hole cover                             |                     |
|            | 33        | HCM16170          | Fixing plate A center                  |                     |
|            | 34        | HCM16180          | Fixing plate A left                    |                     |
|            | 35        | NA04000A          | Nut (M4)                               |                     |
|            | 36        | M0445080          | Eyelet                                 |                     |
|            | 37        | M0420900          | Fixing nut                             |                     |
|            | 38        | MPR00110          | SE-ring (SE-7)                         |                     |
|            | 39        | HMF00320          | Vibration insulator                    |                     |
|            | 41        | HMF20650          | Washer                                 |                     |
|            | 42        | HCM16230          | Base (right) for thread stand          |                     |
|            | 43        | HCM16240          | Base (center) for thread stand         |                     |
|            | 44        | HCM16250          | Base (left) for thread stand           |                     |
|            | 45        | HCM20201          | Thread guide unit fixing plate (left)  |                     |
|            | 46        | HCM20141          | Thread guide A (left)                  |                     |
|            | 47        | HCM20161          | Thread guide B (left)                  |                     |
|            | 48        | HCM20181          | Thread guide C (left)                  |                     |
|            | 49        | HMF20770          | Spacer                                 |                     |



| 組<br>Ass'y | 指図<br>E'l't | 部品番号<br>PARTS No. | PARTS NAMES                             | CM5110<br>NOTE / 備考 |
|------------|-------------|-------------------|-----------------------------------------|---------------------|
|            | 1           | EPM00080          | Pulse motor                             |                     |
|            | 1           | EPM00330          | Pulse motor (for 804type)               |                     |
|            | 2           | SS05008A          | Set screw (M5x8)                        |                     |
|            | 3           | M0424093          | Coupling A                              |                     |
|            | 4           | HMF24220          | X carriage drive shaft                  |                     |
|            | 4           | HCM24300          | X carriage drive shaft (for 812-48type) |                     |
|            | 5           | -                 | X timing belt (by model)                |                     |
|            | 6           | MPB00270          | Bearing (6903ZZ)                        |                     |
|            | 7           | HMF24050          | Drive shaft support A                   |                     |
|            | 8           | SS06006A          | Set screw (M6x6)                        |                     |
|            | 9           | M0424141          | Drive pulley                            |                     |
|            | 10          | -                 | X rail base (by model)                  |                     |
|            | 11          | HMF24060          | Drive shaft support B                   |                     |
|            | 12          | M0451080          | Embroidery range sticker for carriage   |                     |
|            | 13          | M0424210          | Fixing nut                              |                     |
|            | 14          | M0424221          | Limit switch plate                      |                     |
|            | 15          | EPS00010          | Micro switch                            |                     |
|            | 16          | MPZ00990          | Thumb knob                              |                     |
|            | 17          | HMF24020          | Supporting base B                       |                     |
|            | 18          | HCM24150          | X supporting base stud                  |                     |
|            | 19          | HCM24010          | X base plate                            |                     |
|            | 20          | HMF24080          | X carriage stud                         |                     |
|            | 21          | M0424231          | Limit switch plate 2                    |                     |
|            | 22          | M0424201          | Tension bracket                         |                     |
|            | 23          | M0424180          | Idler shaft                             |                     |
|            | 24          | M0424160          | Spacer                                  |                     |
|            | 25          | SS03006A          | Set screw (M3x6)                        |                     |
|            | 26          | MPB00280          | Needle bearing (HK1210)                 |                     |
|            | 27          | M0424190          | X idler pulley support                  |                     |
|            | 28          | M0424172          | Idler pulley                            |                     |
|            | 29          | MPR00230          | E-ring                                  |                     |
|            | 30          | M0425160          | Small roller                            |                     |
|            | 31          | M0425151          | Small roller shaft                      |                     |
|            | 32          | MPB00250          | Bearing (L-1680ZZ)                      |                     |
|            | 33          | M0424003          | X cam follower shaft                    |                     |
|            | 34          | MPZ01610          | Roll bushing spacer                     |                     |
|            | 35          | M0424050          | Limit switch dog                        |                     |
|            | 36          | SC04030D          | Cap screw (M4x30)                       |                     |
|            | 37          | M0426081          | Roller support B (eccentric)            |                     |
|            | 38          | WA10000D          | Plain washer (M10)                      |                     |
|            | 39          | HMF24181          | Roller support fixture                  |                     |
|            | 40          | HMF24200          | Spacer                                  |                     |
|            | 41          | HMF24210          | Bearing roller                          |                     |
|            | 42          | MPB00560          | Bearing (6900ZZ)                        |                     |
|            | 43          | HMF24190          | Collar                                  |                     |
|            | 44          | HCM24040          | Cam follower base (for Y480type)        |                     |
|            | 44          | HCM24221          | Cam follower base (for Y300,Y360type)   |                     |
|            | 51          | -                 | X rail with V groove (by model)         |                     |
|            | 52          | HCM04340          | Bed stud B                              |                     |
|            | 53          | HCM24020          | X base support                          |                     |
|            | 54          | HCM24320          | Rectifying plate (for 812-48type)       |                     |
|            | 55          | HCM24331          | Pulse motor bracket (for 812-48type)    |                     |
|            | 56          | HMF24610          | Holding plate D                         |                     |
|            | 57          | HMF24600          | Holding plate C                         |                     |
|            | 58          | HMF24570          | Roller bearing                          |                     |
|            | 59          | WA04000A          | Washer (M4)                             |                     |
|            | 60          | SC04006A          | Cap screw (M4x6)                        |                     |

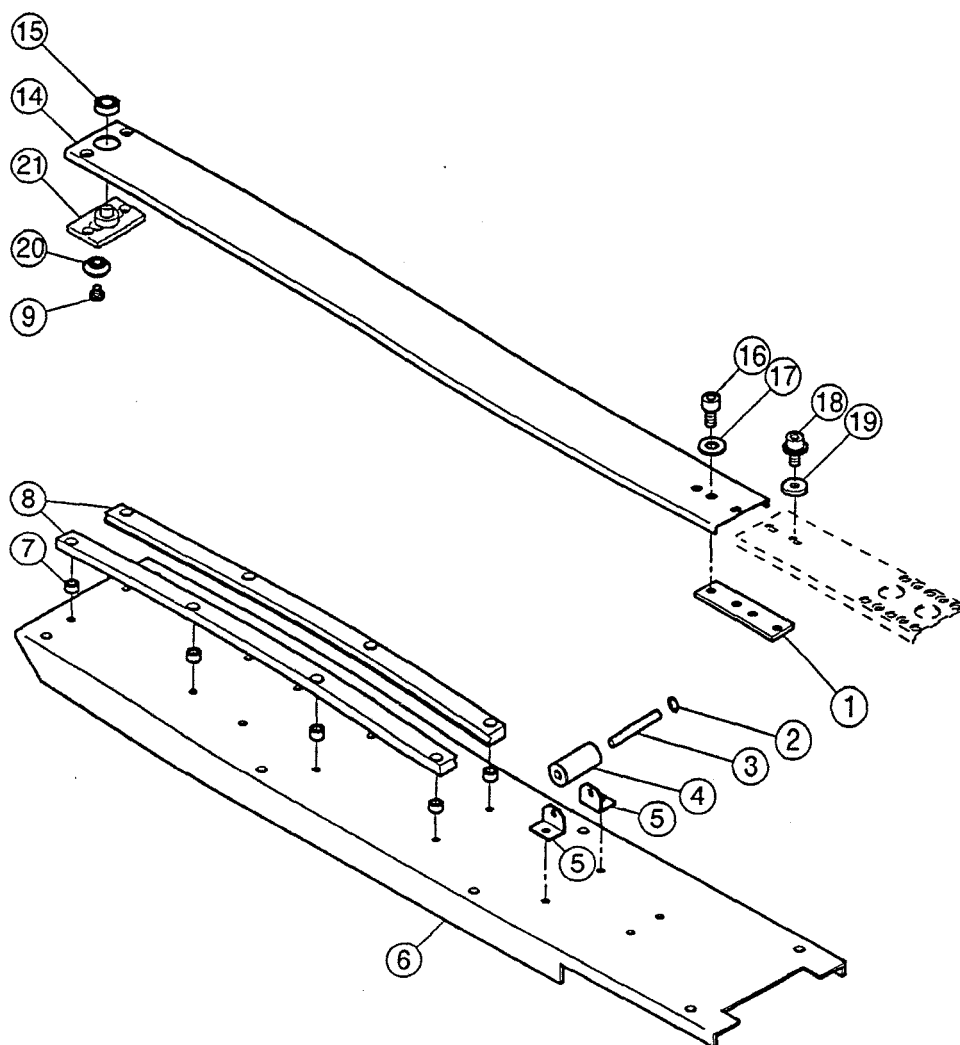


| 組     | 指図   | 部品番号      |                                              | CM5110    |
|-------|------|-----------|----------------------------------------------|-----------|
| Ass'y | El't | PARTS No. | PARTS NAMES                                  | NOTE / 備考 |
|       | 1    | HCM24350  | Y carriage drive shaft G (812-48)            |           |
|       | 2    | MPC00040  | N-coupling N17-17 (for 812-48type)           |           |
|       | 3    | HCM24361  | Y carriage drive shaft H (812-48)            |           |
|       | 5    | HCM24340  | Shaft intermediate support (812-48)          |           |
|       | 6    | MPB00290  | Flange type bearing unit (for 812-48type)    |           |
|       | 7    | HCM24050  | Rail base (Y480)                             |           |
|       | 7    | HCM24240  | Rail base (Y300)                             |           |
|       | 7    | HCM24390  | Rail base (Y360)                             |           |
|       | 8    | HMF24060  | Drive shaft support B                        |           |
|       | 9    | M0451080  | Embroidery range sticker for carriage        |           |
|       | 10   | M0424210  | Fixing nut (for Y480type)                    |           |
|       | 10   | C0424230  | Fixing nut (for Y300,Y360type)               |           |
|       | 11   | M0424210  | Fixing nut                                   |           |
|       | 12   | MPV00310  | Y timing belt (for Y480 type)                |           |
|       | 12   | MPV00380  | Y timing belt (for Y300 type)                |           |
|       | 12   | MPV00280  | Y timing belt (for Y360 type)                |           |
|       | 13   | MPB00270  | Bearing (6903ZZ)                             |           |
|       | 14   | HMF24050  | Drive shaft support A                        |           |
|       | 15   | HMF24070  | Drive shaft support C                        |           |
|       | 16   | HMF24010  | Supporting base A                            |           |
|       | 17   | HMF24450  | Y supporting base pillar                     |           |
|       | 18   | -         | Y carriage drive shaft 1 (by model)          |           |
|       | 19   | C0424070  | Limit switch plate (for Y480type)            |           |
|       | 19   | M0424231  | Limit switch plate 2 (for Y300,Y360type)     |           |
|       | 20   | EPS00010  | Micro switch                                 |           |
|       | 21   | C0424150  | Plate nut                                    |           |
|       | 22   | M0424201  | Tension bracket                              |           |
|       | 23   | C0424060  | Idler pulley support                         |           |
|       | 24   | M0424180  | Idler shaft                                  |           |
|       | 25   | M0424160  | Spacer                                       |           |
|       | 26   | MPB00280  | Needle bearing (HK1210)                      |           |
|       | 27   | M0424172  | Idler pulley                                 |           |
|       | 28   | HCM24080  | Slide base, rear                             |           |
|       | 29   | M0424093  | Coupling A                                   |           |
|       | 30   | EPM00080  | Pulse motor                                  |           |
|       | 30   | EPM00330  | Pulse motor (for 804type)                    |           |
|       | 31   | HMF24470  | Pulse motor base pillar                      |           |
|       | 32   | HCM24101  | bracket base (Y480)                          |           |
|       | 32   | HCM24270  | bracket base (Y300)                          |           |
|       | 32   | HCM24431  | bracket base (Y360)                          |           |
|       | 33   | HCM24110  | Reinforcement pipe (Y480)                    |           |
|       | 34   | -         | Y carriage drive shaft 2 (by model)          |           |
|       | 35   | M0424273  | Pulse motor bracket                          |           |
|       | 36   | M0424221  | Limit switch plate                           |           |
|       | 37   | MPZ00990  | Thumb knob                                   |           |
|       | 38   | SG06006A  | Set screw (flat tipped M6x6)                 |           |
|       | 39   | SS06006A  | Set screw (M6x6)                             |           |
|       | 40   | M0424141  | Drive pulley                                 |           |
|       | 41   | MPZ01610  | Roll bushing spacer                          |           |
|       | 42   | M0424050  | Limit switch dog                             |           |
|       | 43   | C0424080  | Limit switch dog bracket (for Y480 type)     |           |
|       | 43   | HCM24260  | Limit switch dog bracket (for Y300,Y360type) |           |
|       | 44   | M0425001  | Rail with V groove, rear (for Y480 type)     |           |
|       | 44   | M0424531  | Rail with V groove, rear (for Y300 type)     |           |
|       | 44   | M0424501  | Rail with V groove, rear (for Y360 type)     |           |

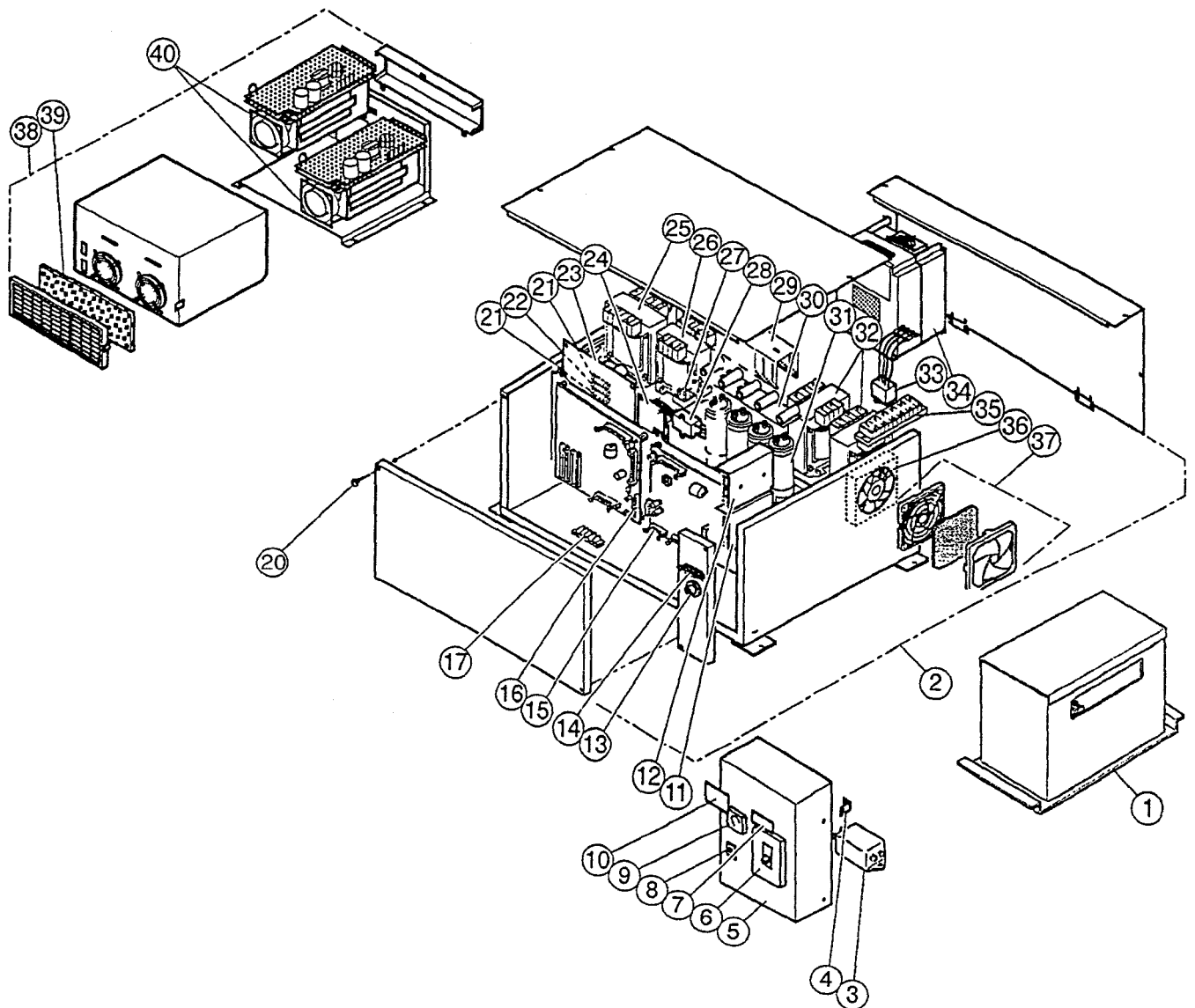


| 組     | 指図   | 部品番号      |                                              | CM5110    |
|-------|------|-----------|----------------------------------------------|-----------|
| Ass'y | El't | PARTS No. | PARTS NAMES                                  | NOTE / 備考 |
|       | 45   | MPB00250  | Bearing (L-1680ZZ)                           |           |
|       | 46   | M0425151  | Small roller shaft                           |           |
|       | 47   | M0425160  | Small roller                                 |           |
|       | 48   | MPR00230  | E-ring                                       |           |
|       | 49   | SC04030D  | Cap screw (M4x30)                            |           |
|       | 50   | M0426081  | Roller support B (eccentric)                 |           |
|       | 51   | WA10000D  | Washer (M10)                                 |           |
|       | 52   | HMF24181  | Roller support fixture                       |           |
|       | 53   | HMF24200  | Spacer                                       |           |
|       | 54   | HMF24210  | Bearing roller                               |           |
|       | 55   | MPB00560  | Bearing (6900ZZ)                             |           |
|       | 56   | HMF24190  | Collar                                       |           |
|       | 57   | HMF24131  | Fixing plate ass'y for belt                  |           |
|       | 57   | HMF24430  | Fixing plate ass'y for belt (for jumbo hook) |           |
|       | 62   | HMF24610  | Holding plate D                              |           |
|       | 63   | HMF24600  | Holding plate C                              |           |
|       | 64   | HMF24570  | Roller bearing                               |           |
|       | 65   | WA04000A  | Washer (M4)                                  |           |
|       | 66   | SC04006A  | Cap screw (M4x6)                             |           |

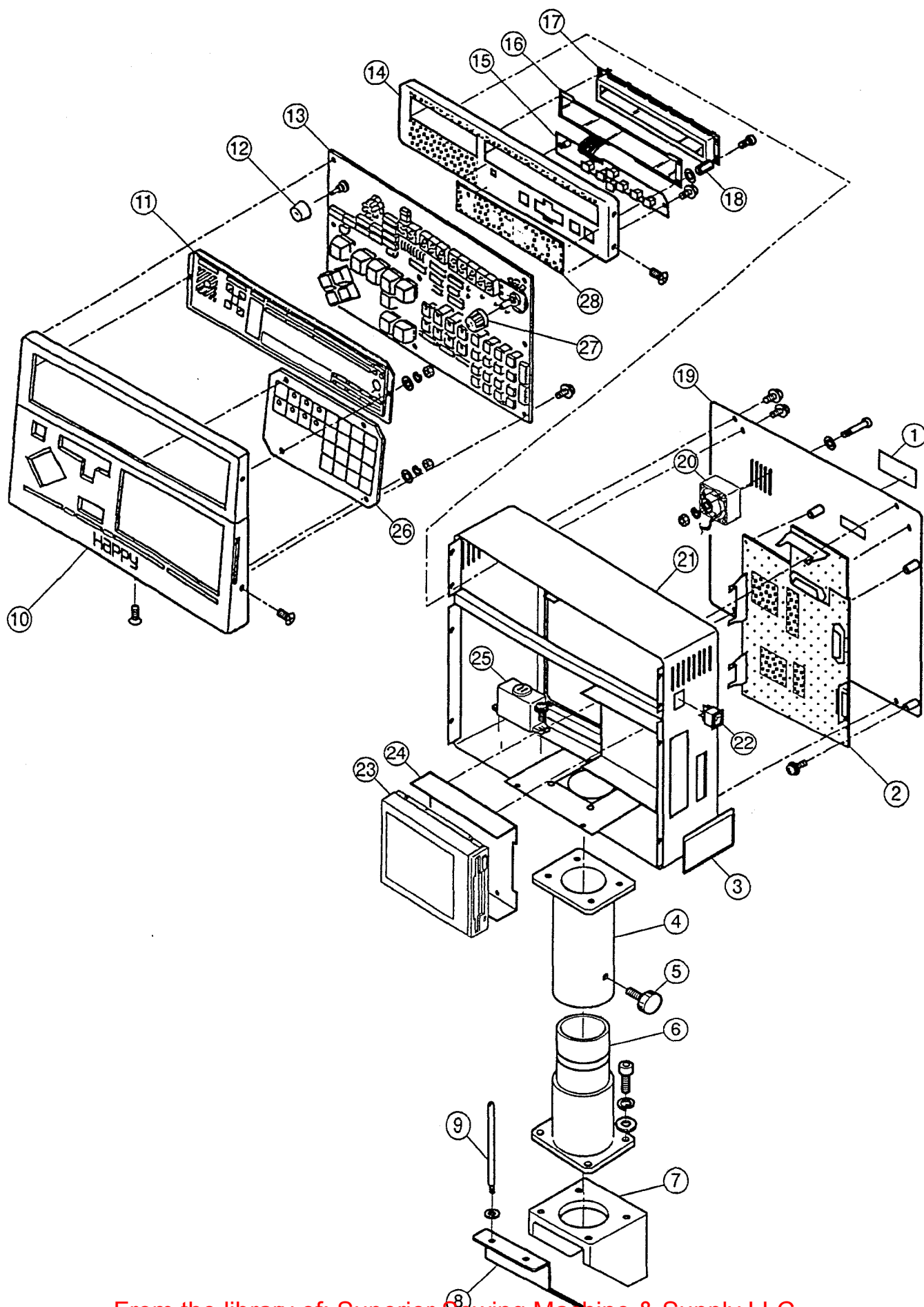




| 組     | 指図   | 部品番号      |                                                | CM5110    |
|-------|------|-----------|------------------------------------------------|-----------|
| Ass'y | El't | PARTS No. | PARTS NAMES                                    | NOTE / 備考 |
|       | 1    | C0424101  | Joint plate                                    |           |
|       | 2    | MPR00100  | SE-ring (SE-5)                                 |           |
|       | 3    | M0424382  | Center roller shaft                            |           |
|       | 4    | M0424390  | Center roller                                  |           |
|       | 5    | HCM24090  | Center roller support                          |           |
|       | 6    | HCM24060  | Rail bracket (Y480)                            |           |
|       | 6    | HCM24230  | Rail bracket (Y300)                            |           |
|       | 6    | HCM24400  | Rail bracket (Y360)                            |           |
|       | 7    | HCM24470  | Rail spacer                                    |           |
|       | 8    | HMF24230  | Rail with V groove, front (for Y480 type)      |           |
|       | 8    | M0424531  | Rail with V groove, front (for Y300,Y360 type) |           |
|       | 9    | SF524160  | Idler screw                                    |           |
|       | 14   | HCM24071  | Slide base, front (Y480)                       |           |
|       | 14   | HCM24251  | Slide base, front (Y300)                       |           |
|       | 14   | HCM24411  | Slide base, front (Y360)                       |           |
|       | 15   | MPB00250  | Bearing (L-1680ZZ)                             |           |
|       | 16   | SC05008D  | Cap screw (M5x8)                               |           |
|       | 17   | NA05000D  | Plain washer (M5)                              |           |
|       | 18   | SX05010D  | Cap screw with flange (M5x10)                  |           |
|       | 19   | C0424190  | Plastic washer                                 |           |
|       | 20   | HMF24570  | Roller bearing                                 |           |
|       | 21   | HMF24580  | Roller supporting idler ass'y                  |           |



| 組<br>Assy | 指図<br>E/t | 部品番号<br>PARTS No. | PARTS NAMES                       | MF5117<br>NOTE / 備考 |
|-----------|-----------|-------------------|-----------------------------------|---------------------|
|           | 1         | M0427360          | Transformer ass'y                 |                     |
|           | 2         | HMF27014          | Main unit box ass'y               |                     |
|           | 3         | EPK00070          | Noise filter                      |                     |
|           | 4         | HMF10281          | Cover bracket B                   |                     |
|           | 5         | HMF27100          | Breaker bracket                   |                     |
|           | 6         | M0475171          | Automatic breaker (3 phase)       |                     |
|           | 6         | M0475181          | Automatic breaker (1 phase)       |                     |
|           | 7         | -                 | Power supply sticker              |                     |
|           | 8         | SF427120          | Outlet (with fram)                |                     |
|           | 9         | EPK00080          | Voltmeter                         |                     |
|           | 10        | -                 | Voltmeter sticker                 |                     |
|           | 11        | EPK00580          | Switching power supply (24V)      |                     |
|           | 12        | EPK00590          | Switching power supply (5V)       |                     |
|           | 13        | EPJ00580          | Power supply terminal for reader  |                     |
|           | 14        | EPJ00540          | Communication terminal for reader |                     |
|           | 15        | HMF83611          | Slave circuit board ass'y         |                     |
|           | 16        | M0483017          | Master circuit board ass'y        |                     |
|           | 17        | EPF00080          | Terminal base                     |                     |
|           | 20        | MPZ00990          | Thumb knob                        |                     |
|           | 21        | EPF00160          | Fuse (5A)                         |                     |
|           | 22        | EPF00170          | Fuse (10A)                        |                     |
|           | 23        | HMF83631          | Power supply board ass'y          |                     |
|           | 24        | HMF83641          | Thread catch circuit board ass'y  |                     |
|           | 25        | EPK00550          | Transformer                       |                     |
|           | 26        | EPK00560          | Transformer                       |                     |
|           | 27        | EPD00010          | Diode stack                       |                     |
|           | 28        | EPK00600          | Noise filter                      |                     |
|           | 29        | -                 | Duct                              |                     |
|           | 30        | M0483230          | Condenser connecting board ass'y  |                     |
|           | 31        | EPC00640          | Electrolytic condenser            |                     |
|           | 32        | EPK00570          | Transformer                       |                     |
|           | 33        | EPC00600          | Surge protector                   |                     |
|           | 34        | EPM00260          | Inverter                          |                     |
|           | 35        | EPF00060          | Terminal base                     |                     |
|           | 36        | EPK00290          | Fan                               |                     |
|           | 37        | EPK00300          | Filter for fan                    |                     |
|           | 38        | EPM00150          | Pulse motor driver ass'y          |                     |
|           | 39        | -                 | Air filter                        |                     |
|           | 40        | EPM00200          | Pulse motor driver                |                     |



# HAPPY CONTROL BOX

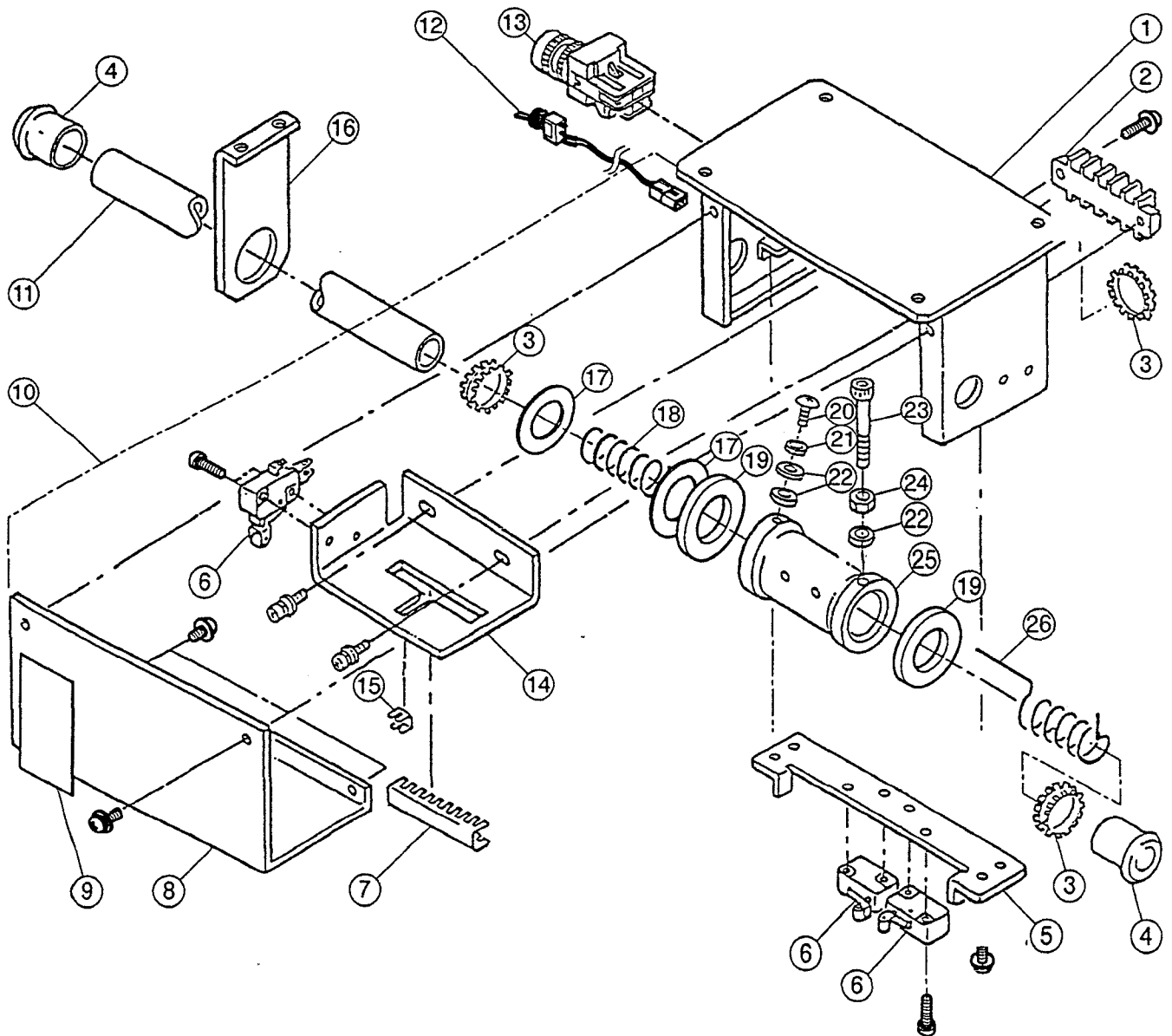
16.1

| 組<br>Ass'y | 指図<br>El't           | 部品番号<br>PARTS No. | PARTS NAMES                            | MF4C27<br>NOTE / 備考 |
|------------|----------------------|-------------------|----------------------------------------|---------------------|
| 1          | -                    | -                 | DIP switch setting list for disk drive |                     |
| 2          | M042933 <sup>2</sup> | <del>+</del>      | FDC circuit board ass'y                | 1                   |
| 3          | HMF51050             |                   | Sticker                                |                     |
| 3          | HMF51040             |                   | -                                      |                     |
| 4          | HMF29100             |                   | Pillar (A)                             |                     |
| 5          | -                    |                   | Thumb screw                            |                     |
| 6          | SF529100             |                   | Pillar (B)                             |                     |
| 7          | HMF29010             |                   | Pole support                           |                     |
| 8          | SF529120             |                   | Pole support cover                     |                     |
| 9          | M0402051             |                   | Spool pin                              |                     |
| 10         | M0429142             |                   | Front panel                            |                     |
| 10         | M0429152             |                   | -                                      |                     |
| 11         | M0429100             |                   | Acrylic panel                          |                     |
| 11         | M0429110             |                   | -                                      |                     |
| 12         | -                    |                   | Switch top                             |                     |
| 13         | M0429093             |                   | Display circuit board ass'y            |                     |
| 14         | HMF29071             |                   | Front panel for disk drive             |                     |
| 15         | M0429350             |                   | Switch board ass'y for disk drive      |                     |
| 16         | M0429300             |                   | Acrylic panel for disk drive           |                     |
| 17         | SF429090             |                   | Liquid crystal display                 |                     |
| 18         | -                    |                   | Stud (M3x10)                           |                     |
| 19         | M0429271             |                   | Rear panel                             |                     |
| 20         | EPK00380             |                   | DC fan unit                            |                     |
| 21         | HMF29052             |                   | Main body                              |                     |
| 22         | EPS00480             |                   | Switch                                 |                     |
| 23         | EPZ00280             |                   | Disk drive unit                        | 3                   |
| 24         | HMF29120             |                   | Insulation plate                       |                     |
| 25         | M0429031             |                   | Buzzer                                 |                     |
| 26         | M0429120             |                   | Switch sheet (with sub panel)          |                     |
| 26         | M0429130             |                   | -                                      |                     |
| 27         | -                    |                   | Knob                                   |                     |
| 28         | M0429310             |                   | Switch sheet for disk drive            |                     |

5

4 rollers for malco cap drivers  
JENC OK 157

004229-01 Roller clip

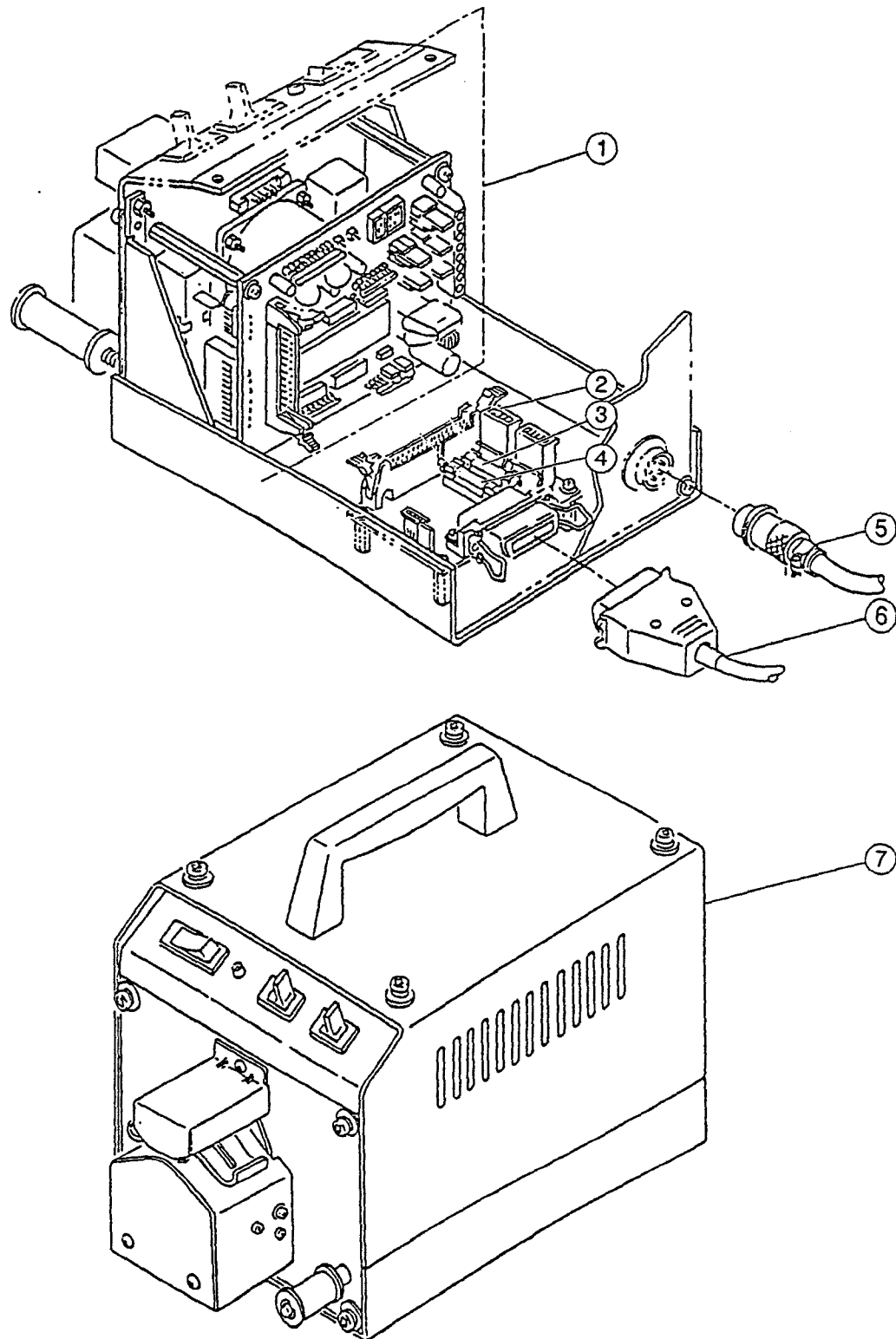


# HAPPY BAR SWITCH

17.1

| 組     | 指図   | 部品番号      |                                   | MF4802    |
|-------|------|-----------|-----------------------------------|-----------|
| Ass'y | El't | PARTS No. | PARTS NAMES                       | NOTE / 備考 |
|       | 1    | M0435063  | Bar switch box                    |           |
|       | 2    | EPF00030  | Terminal base                     |           |
|       | 3    | EPN00010  | Flexible bush                     |           |
|       | 4    | -         | Bar switch cap                    |           |
|       | 5    | M0435082  | Micro switch brakel               |           |
|       | 6    | EPS00010  | Micro switch                      |           |
|       | 7    | EPN00010  | Flexible bush                     |           |
|       | 8    | M0435072  | Bar switch box cover              |           |
|       | 9    | M0451010  | Bar switch sticker                |           |
|       | 10   | M0435050  | Bar switch box ass'y              |           |
|       | 11   | -         | Switch bar (by model)             |           |
|       | 12   | M0435150  | Brake on/off switch               |           |
|       | 13   | EPS00030  | Switch                            |           |
|       | 14   | M0435092  | Mode changing switch base         |           |
|       | 15   | EPN00010  | Flexible bush                     |           |
|       | 16   | M0435041  | Bar switch bracket (for HM4Btype) |           |
|       | 17   | M0435160  | Sheet                             |           |
|       | 18   | M0435030  | Spring (A)                        |           |
|       | 19   | M0435011  | Rubber spacer                     |           |
|       | 20   | ST04006B  | Screw (M4x6)                      |           |
|       | 21   | WB04000B  | Spring washer (M4)                |           |
|       | 22   | NA04000B  | Washer (M4)                       |           |
|       | 23   | SC04030B  | Cap screw (M4x30)                 |           |
|       | 24   | NA04000B  | Nut (M4)                          |           |
|       | 25   | M0435020  | Switch dock                       |           |
|       | 26   | M0435002  | Spring (B)                        |           |

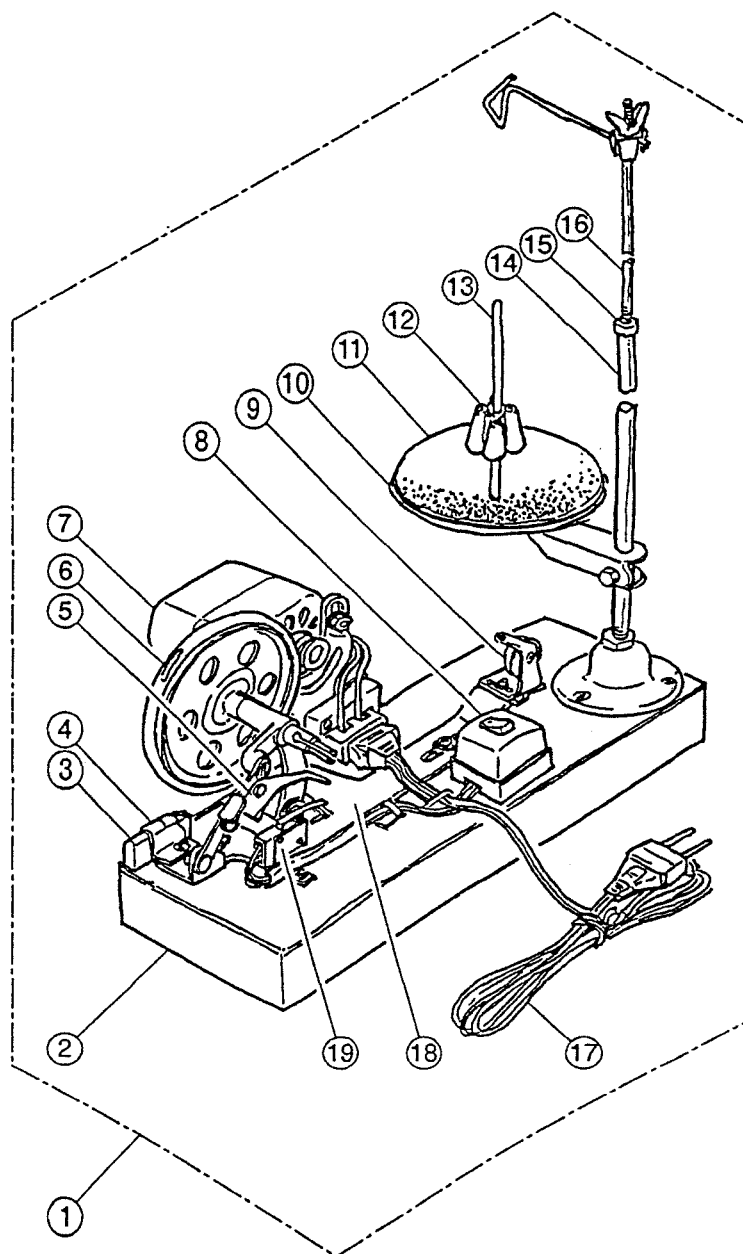




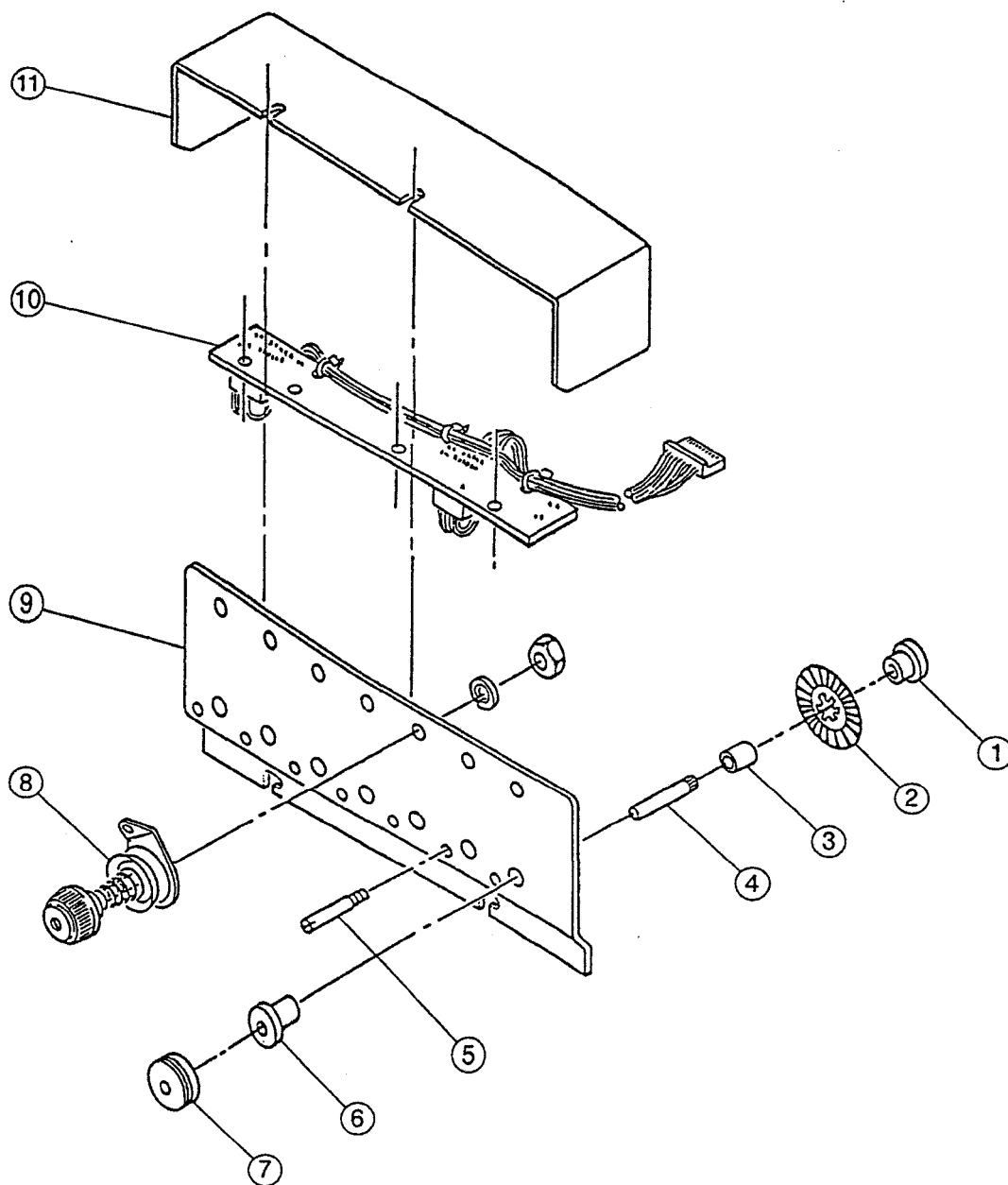
# Happy TAPE READER

18.1

| 組<br>Ass'y | 指図<br>Elt | 部品番号<br>PARTS No. | PARTS NAMES                   | S844B02<br>NOTE / 備考 |
|------------|-----------|-------------------|-------------------------------|----------------------|
|            | 1         | EPK00120          | Read unit                     |                      |
|            | 2         | M0436022          | Leader connector board ass'y  |                      |
|            | 3         | EPF00140          | Fuse (1A)                     |                      |
|            | 4         | EPF00150          | Fuse (2A)                     |                      |
|            | 5         | M0470891          | Power supply cord for reader  |                      |
|            | 6         | M0470900          | Communication cord for reader |                      |
|            | 7         | M0436010          | Tape reader ass'y             |                      |



| 組<br>Ass'y | 指図<br>Elt | 部品番号<br>PARTS No. | PARTS NAMES          | MF4C20<br>NOTE / 備考 |
|------------|-----------|-------------------|----------------------|---------------------|
|            | 1         | EPK00390          | Bobbin winder (100V) |                     |
|            | 1         | EPK00400          | Bobbin winder (220V) |                     |
|            | 2         | MPZ01630          | Table                |                     |
|            | 3         | MPZ01740          | Brake rubber         |                     |
|            | 4         | MPZ01750          | Brake rubber fixer   |                     |
|            | 5         | MPZ01730          | Hold spring          |                     |
|            | 6         | MPV00490          | Belt (6mm)           |                     |
|            | 7         | EPM00360          | Motor (100V)         |                     |
|            | 7         | EPM00370          | Motor (220V)         |                     |
|            | 8         | EPS00630          | Power switch         |                     |
|            | 9         | MPZ01770          | Thread tension unit  |                     |
|            | 10        | MPZ01710          | Spool disc           |                     |
|            | 11        | MPZ01700          | Spool mat            |                     |
|            | 12        | MPZ01690          | Spool spring         |                     |
|            | 13        | MPZ01680          | Spool pin            |                     |
|            | 14        | MPZ01650          | Main pillar          |                     |
|            | 15        | MPZ01670          | Nut                  |                     |
|            | 16        | MPZ01660          | Assist pillar        |                     |
|            | 17        | EPE00040          | Motor cable          |                     |
|            | 18        | MPZ01760          | Base                 |                     |
|            | 19        | EPS00620          | Stop switch          |                     |



| 組     | 指図   | 部品番号      |                                       | HMF4130   |
|-------|------|-----------|---------------------------------------|-----------|
| Ass'y | El't | PARTS No. | PARTS NAMES                           | NOTE / 備考 |
|       | 1    | MPZ00350  | Eyelet                                |           |
|       | 2    | M0445060  | Slit disc                             |           |
|       | 3    | MPZ00360  | Spacer                                |           |
|       | 4    | M0445070  | Detecting roller shaft                |           |
|       | 5    | M0445102  | Detecting roller to bring up thread   |           |
|       | 6    | M0445080  | Support for detecting roller shaft    |           |
|       | 7    | M0445092  | Detecting roller                      |           |
|       | 8    | M0416123  | Thread guide unit                     |           |
|       | 9    | M0445053  | Fixing plate (for 7 needle)           |           |
|       | 9    | M0445043  | Fixing plate (for 8 needle)           |           |
|       | 10   | M0445020  | Detecting board ass'y (for 7 needle)  |           |
|       | 10   | M0445030  | Detecting board ass'y (for 8 needle)  |           |
|       | 11   | M0445013  | Cover for fixing plate (for 7 needle) |           |
|       | 11   | M0445003  | Cover for fixing plate (for 8 needle) |           |



## INDEX

|                           |     |     |
|---------------------------|-----|-----|
| FRAME -----               | b-0 | b-1 |
| TABLE-----                | c-0 | c-1 |
| MOVING SHAFT-----         | d-0 | d-1 |
| DETECTING UNIT /          |     |     |
| MOVING HEAD -----         | e-0 | e-1 |
| THREAD TENSION UNIT ----- | f-0 | f-1 |
| REAR COVER -----          | g-0 | g-1 |
| THREAD STAND -----        | h-0 | h-1 |
| CARRIAGE -----            | i-0 | i-1 |

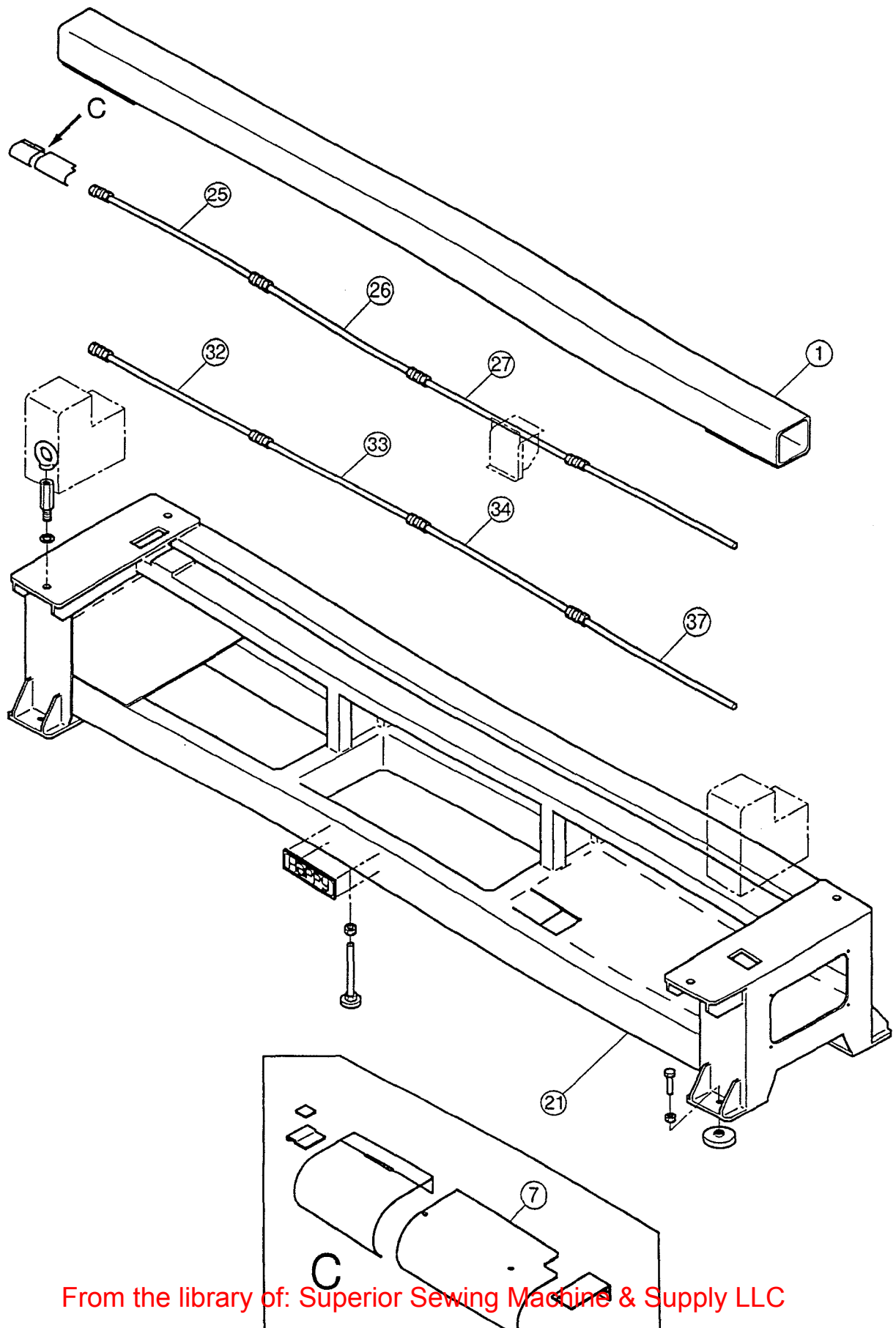
## HOW TO USE THIS LIST

| MODEL | PARTS NAMES | 1-25<br>Upper shaft (left) |  |
|-------|-------------|----------------------------|--|
|       |             |                            |  |
|       | L 7 2 0 A   | HMF02140                   |  |
|       | L 8 1 8     | M0408791                   |  |
|       | L 8 1 6     | HMF02140                   |  |
|       | L 8 1 4     | HMF02150                   |  |
|       | L 8 1 2     | HMF02130                   |  |
|       | L 8 1 0     | M0408821                   |  |
|       | K 7 1 8 A   | HMF02140                   |  |
|       | K 8 1 5     | M0408781                   |  |
|       | S 7 1 5     | M0408791                   |  |
|       | S 8 1 2     | M0408801                   |  |
|       | S 8 1 0     | M0408811                   |  |
|       | S 8 0 8     | M0408801                   |  |

- ① This number shows where the part is mentioned in the parts list.  
(Ex. 1-25 means this part is mentioned in the page 1, El't No.25 in the parts list)
- ② This column shows model number.
- ③ This column shows each parts number of the part which differs depend on the model.  
(Ex. Parts number of "Upper shaft (left)" for L720A is HMF02140)

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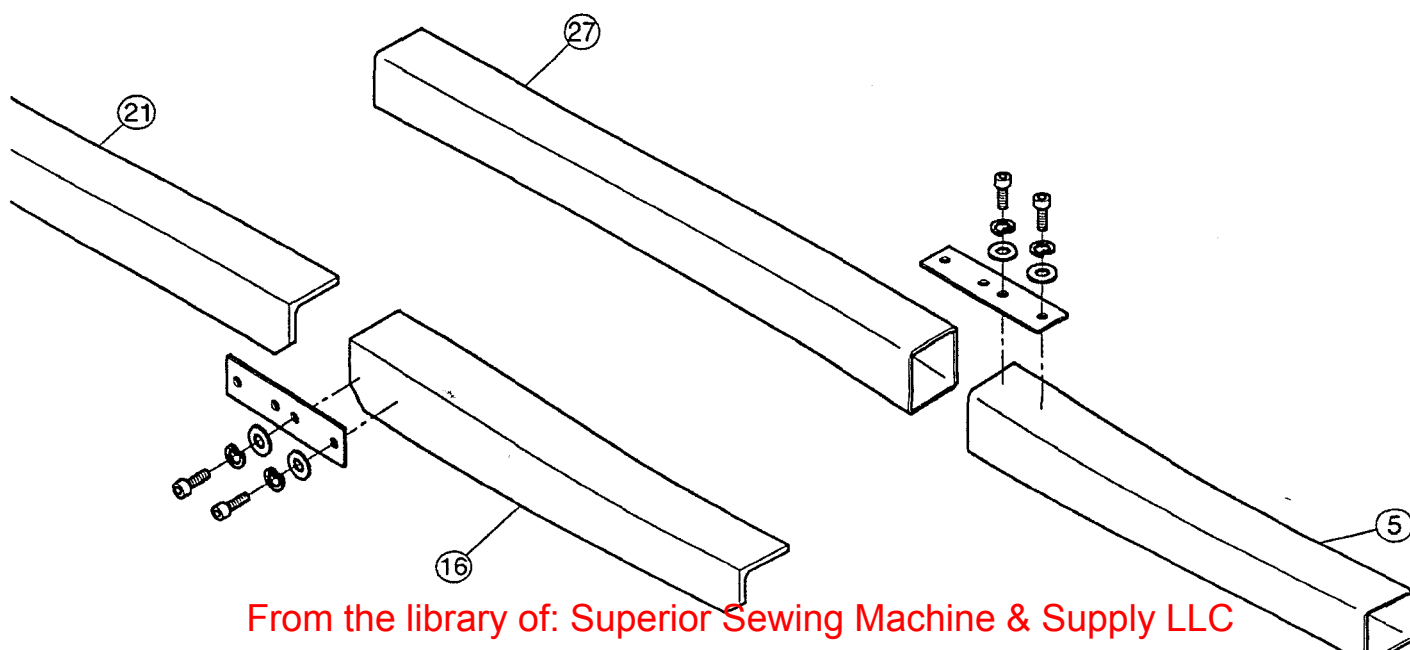
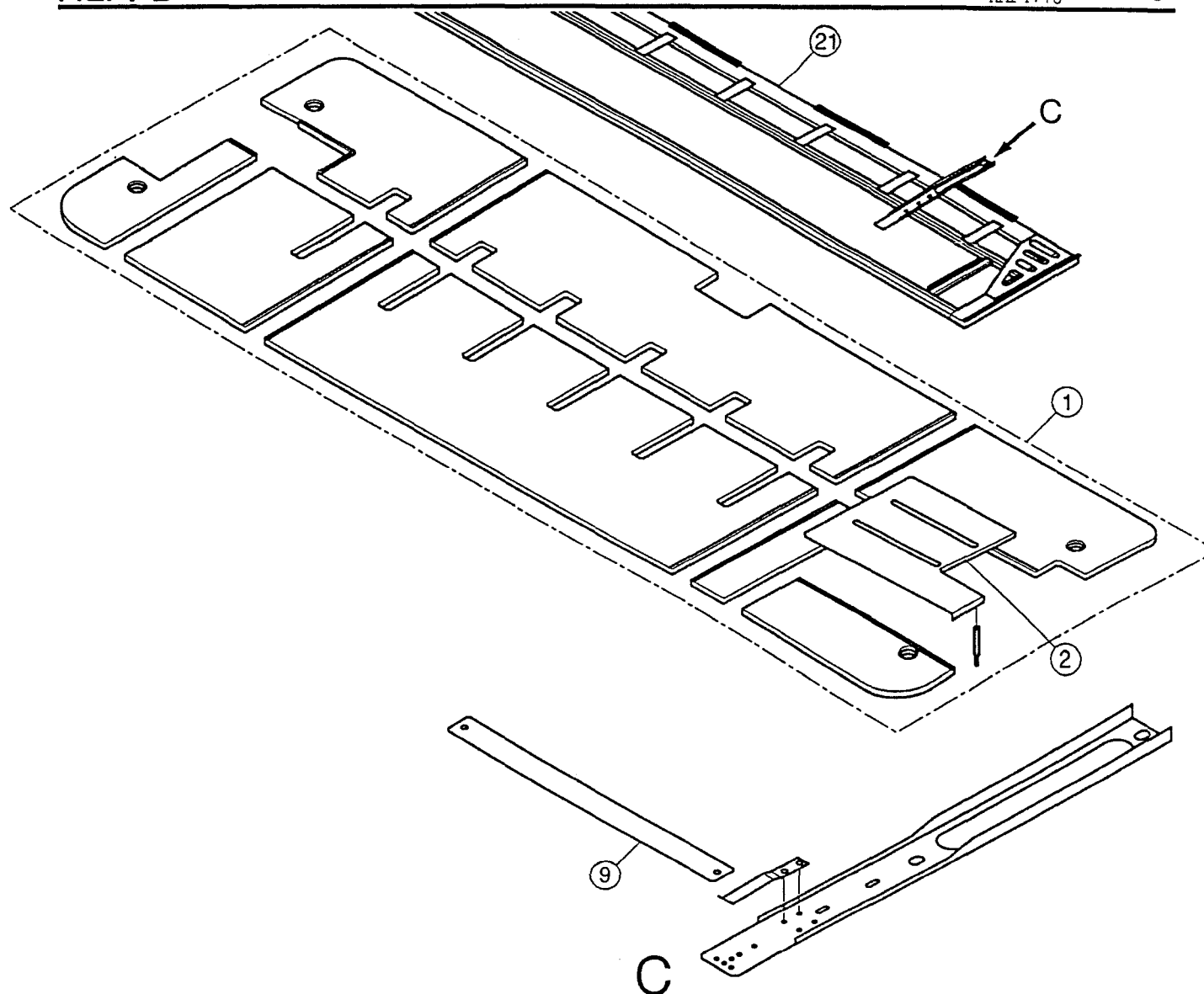
| Elt<br>PARTS NAMES |           | 1-1<br>Beam | 1-7<br>Shaft cover (left) | 1-21<br>Frame |
|--------------------|-----------|-------------|---------------------------|---------------|
| MODEL              | 8 1 2-4 8 | HCM00143    | HCM13080                  | HCM00134      |
|                    | 8 0 6-4 8 | HCM00082    | HCM13010                  | HCM00071      |
|                    | 8 0 4-4 8 | HCM00041    | HCM13010                  | HCM00021      |
|                    | 7 2 0-3 0 | HCM00252    | HMF13180                  | HCM00284      |
|                    | 8 1 2-3 0 | HCM00202    | HCM13030                  | HCM00193      |
|                    | 8 1 2-3 6 | HCM00202    | HCM13030                  | HCM00193      |
|                    | 8 0 6-3 6 | HCM00313    | HCM13050                  | HCM00342      |

| Elt<br>PARTS NAMES |           | 1-25<br>Upper shaft 1 | 1-26<br>Upper shaft 2 | 1-27<br>Upper shaft 3 |
|--------------------|-----------|-----------------------|-----------------------|-----------------------|
| MODEL              | 8 1 2-4 8 | M0408781              | M0408811              | M0408781              |
|                    | 8 0 6-4 8 | M0408811              | SF508000              | M0408791              |
|                    | 8 0 4-4 8 | M0408811              | M0408791              | -                     |
|                    | 7 2 0-3 0 | HMF02180              | HCM02180              | HMF02140              |
|                    | 8 1 2-3 0 | M0408801              | M0408821              | M0408811              |
|                    | 8 1 2-3 6 | M0408801              | M0408821              | M0408811              |
|                    | 8 0 6-3 6 | M0408801              | M0408801              | SF508000              |

| Elt<br>PARTS NAMES |           | 1-32<br>Lower shaft 1 | 1-33<br>Lower shaft 2 | 1-34<br>Lower shaft 3 |
|--------------------|-----------|-----------------------|-----------------------|-----------------------|
| MODEL              | 8 1 2-4 8 | M0404492              | M0404482              | M0404462              |
|                    | 8 0 6-4 8 | M0404452              | M0404482              | -                     |
|                    | 8 0 4-4 8 | M0404472              | HCM02080              | -                     |
|                    | 7 2 0-3 0 | M0404482              | HCM02080              | M0404492              |
|                    | 8 1 2-3 0 | M0404442              | M0404452              | -                     |
|                    | 8 1 2-3 6 | M0404442              | M0404452              | -                     |
|                    | 8 0 6-3 6 | M0404462              | M0404472              | -                     |

| Elt<br>PARTS NAMES |           | 1-37<br>Lower shaft 4 |  |  |
|--------------------|-----------|-----------------------|--|--|
| MODEL              | 8 1 2-4 8 | HCM02080              |  |  |
|                    | 8 0 6-4 8 | -                     |  |  |
|                    | 8 0 4-4 8 | -                     |  |  |
|                    | 7 2 0-3 0 | M0404472              |  |  |
|                    | 8 1 2-3 0 | -                     |  |  |
|                    | 8 1 2-3 6 | -                     |  |  |
|                    | 8 0 6-3 6 | -                     |  |  |

CM5113



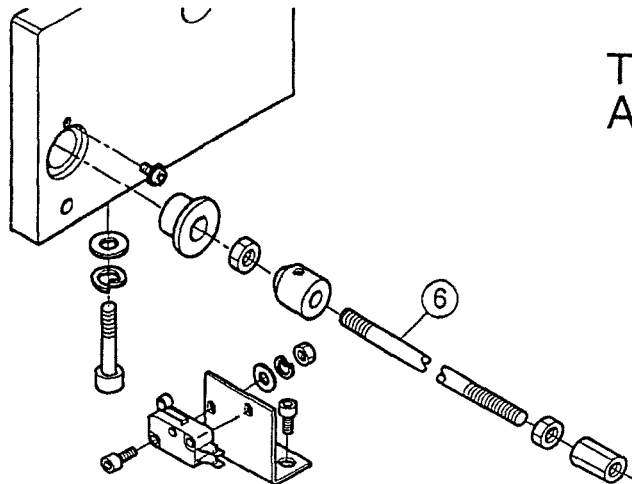
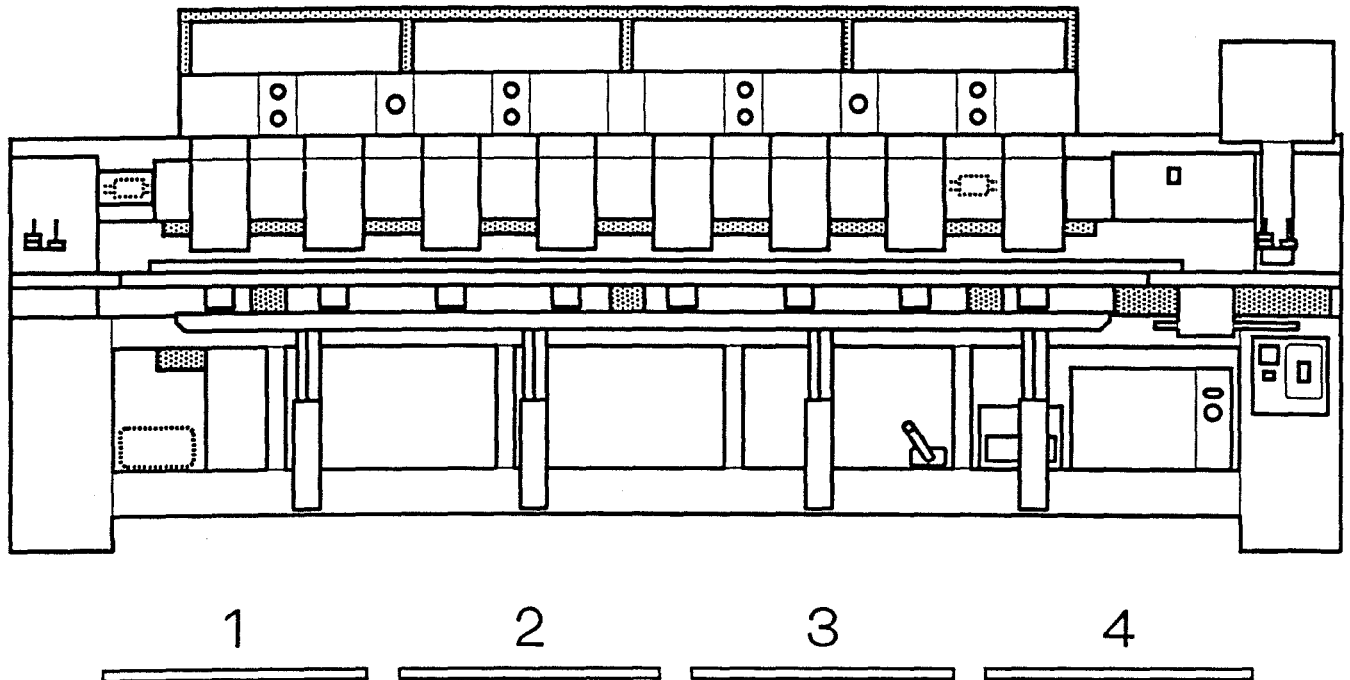
| Elt<br>PARTS NAMES |           | 2.0-1<br>Table set | 2.0-2<br>X carriage cover | 2.0-9<br>Jig |
|--------------------|-----------|--------------------|---------------------------|--------------|
| MODEL              | 8 1 2-4 8 | HCM30294           | HCM33090                  | HCM53021     |
|                    | 8 0 6-4 8 | HCM30103           | HCM33011                  | HCM53011     |
|                    | 8 0 4-4 8 | HCM30012           | HCM33011                  | HCM53011     |
|                    | 7 2 0-3 0 | HCM30422           | HCM33130                  | HCM53040     |
|                    | 8 1 2-3 0 | HCM30166           | HCM33051                  | HCM53030     |
|                    | 8 1 2-3 6 | HCM30614           | HCM33051                  | HCM53030     |
|                    | 8 0 6-3 6 | HCM30525           | HCM33100                  | HCM53021     |

| Elt<br>PARTS NAMES |           | 2.0-21<br>Frame ass'y |  |  |
|--------------------|-----------|-----------------------|--|--|
| MODEL              | 8 1 2-4 8 | HCM937060             |  |  |
|                    | 8 0 6-4 8 | HCM937040             |  |  |
|                    | 8 0 4-4 8 | HCM937020             |  |  |
|                    | 7 2 0-3 0 | HCM937100             |  |  |
|                    | 8 1 2-3 0 | HCM937080             |  |  |
|                    | 8 1 2-3 6 | HCM937170             |  |  |
|                    | 8 0 6-3 6 | HCM937120             |  |  |

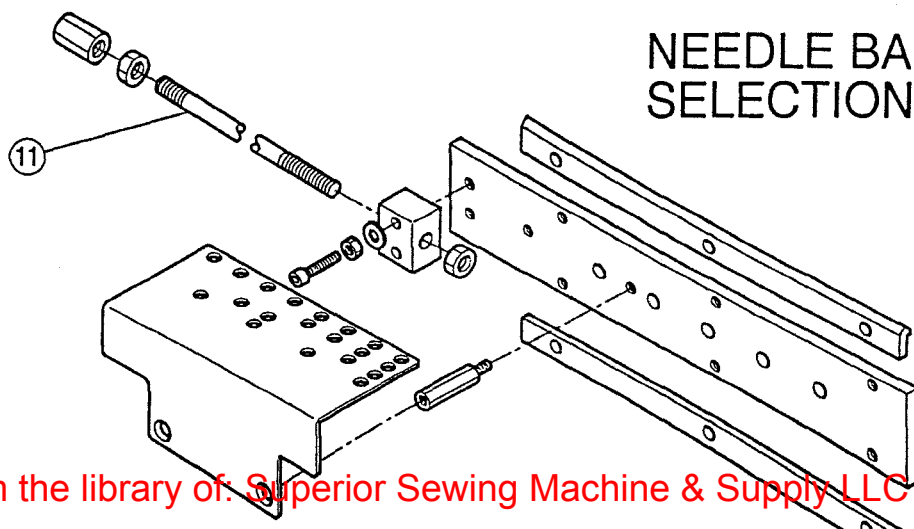
| Elt<br>PARTS NAMES |           | 2.2-5<br>Reinforcement pipe 1 | 2.2-27<br>Reinforcement pipe 2 |  |
|--------------------|-----------|-------------------------------|--------------------------------|--|
| MODEL              | 8 1 2-4 8 | HCM34150                      | HCM34160                       |  |
|                    | 8 0 6-4 8 | HCM34070                      | -                              |  |
|                    | 8 0 4-4 8 | HCM34010                      | -                              |  |
|                    | 7 2 0-3 0 | -                             | -                              |  |
|                    | 8 1 2-3 0 | HCM34090                      | HCM34100                       |  |
|                    | 8 1 2-3 6 | HCM34090                      | HCM34100                       |  |
|                    | 8 0 6-3 6 | HCM34190                      | -                              |  |

| Elt<br>PARTS NAMES |           | 2.2-16<br>Table reinforcement 1 | 2.2-21<br>Table reinforcement 2 |  |
|--------------------|-----------|---------------------------------|---------------------------------|--|
| MODEL              | 8 1 2-4 8 | HCM34171                        | HCM34181                        |  |
|                    | 8 0 6-4 8 | HCM34080                        | -                               |  |
|                    | 8 0 4-4 8 | HCM34030                        | -                               |  |
|                    | 7 2 0-3 0 | -                               | -                               |  |
|                    | 8 1 2-3 0 | HCM34110                        | HCM34120                        |  |
|                    | 8 1 2-3 6 | HCM34110                        | HCM34120                        |  |
|                    | 8 0 6-3 6 | HCM34200                        | -                               |  |

CM5113



THREAD CUT  
ACTUATION UNIT



NEEDLE BAR  
SELECTION UNIT

| Elt<br>PARTS NAMES |        | 5-6<br>Moving shaft 1 | 5-6<br>Moving shaft 2 | 5-6<br>Moving shaft 3 |
|--------------------|--------|-----------------------|-----------------------|-----------------------|
| MODEL              | 812-48 | HMF06121              | HMF06111              | HMF06121              |
|                    | 806-48 | HMF06151              | HMF06121              | -                     |
|                    | 804-48 | HMF06111              | HMF06170              | -                     |
|                    | 720-30 | HMF06161              | HMF06131              | HMF06131              |
|                    | 812-30 | HMF06121              | HMF06121              | HMF06121              |
|                    | 812-36 | HMF06121              | HMF06121              | HMF06121              |
|                    | 806-36 | HMF06121              | HMF06111              | -                     |

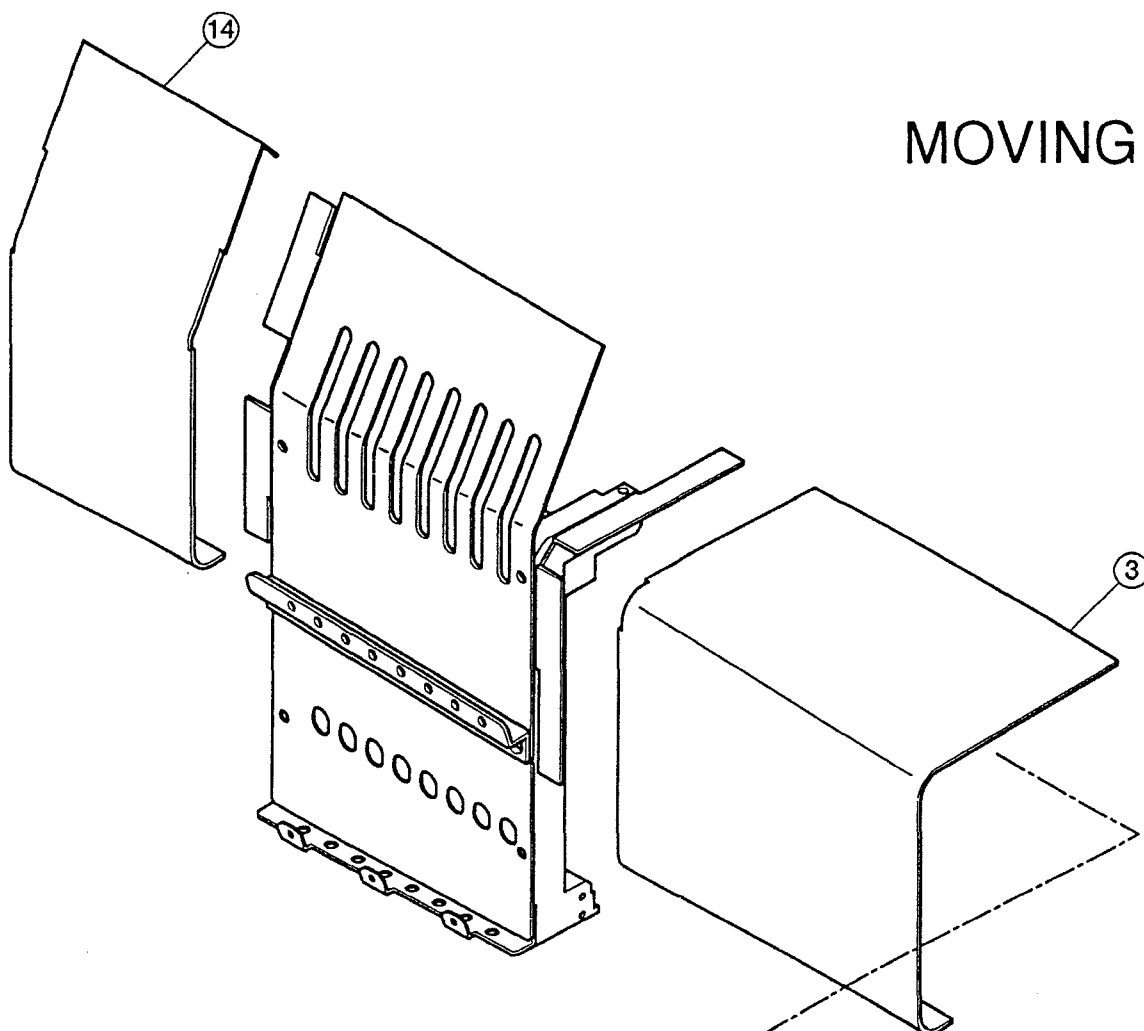
| Elt<br>PARTS NAMES |        | 5-6<br>Moving shaft 4 |  |  |
|--------------------|--------|-----------------------|--|--|
| MODEL              | 812-48 | HMF06111              |  |  |
|                    | 806-48 | -                     |  |  |
|                    | 804-48 | -                     |  |  |
|                    | 720-30 | -                     |  |  |
|                    | 812-30 | -                     |  |  |
|                    | 812-36 | -                     |  |  |
|                    | 806-36 | -                     |  |  |

| Elt<br>PARTS NAMES |        | 7-11<br>Moving shaft 1 | 7-11<br>Moving shaft 2 | 7-11<br>Moving shaft 3 |
|--------------------|--------|------------------------|------------------------|------------------------|
| MODEL              | 812-48 | HMF06170               | HMF06121               | HMF06151               |
|                    | 806-48 | HMF06161               | HMF06151               | -                      |
|                    | 804-48 | HMF06180               | HMF06111               | -                      |
|                    | 720-30 | HCM06020               | HCM06020               | HMF06111               |
|                    | 812-30 | HMF06151               | HMF06131               | HMF06131               |
|                    | 812-36 | HMF06151               | HMF06131               | HMF06131               |
|                    | 806-36 | HMF06201               | HMF06121               | -                      |

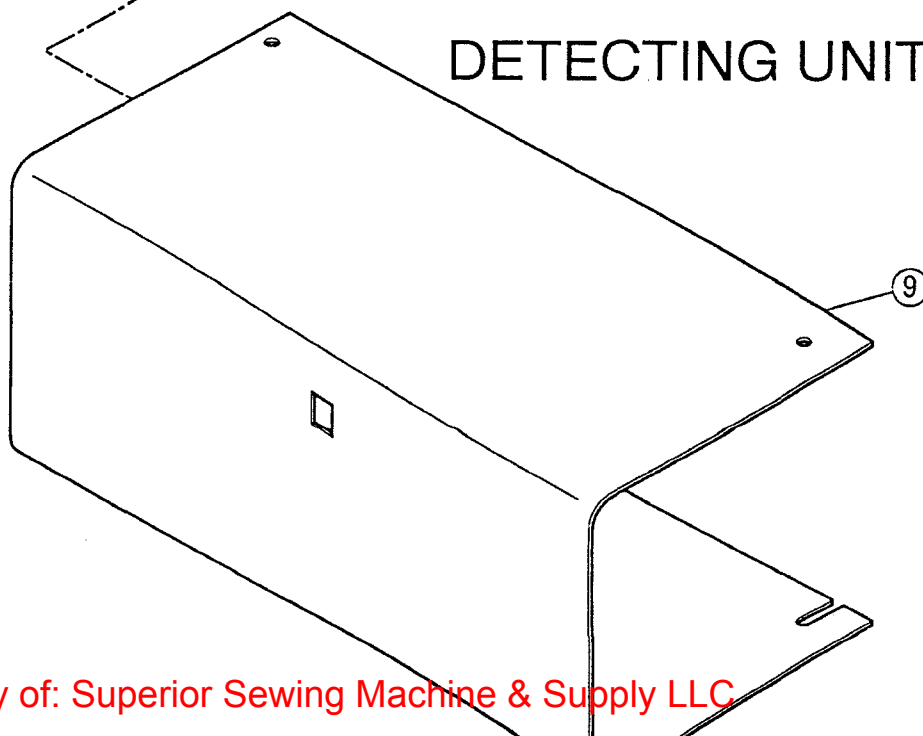
| Elt<br>PARTS NAMES |        | 7-11<br>Moving shaft 4 |  |  |
|--------------------|--------|------------------------|--|--|
| MODEL              | 812-48 | HMF06161               |  |  |
|                    | 806-48 | -                      |  |  |
|                    | 804-48 | -                      |  |  |
|                    | 720-30 | -                      |  |  |
|                    | 812-30 | -                      |  |  |
|                    | 812-36 | -                      |  |  |
|                    | 806-36 | -                      |  |  |

CM4802

## MOVING HEAD



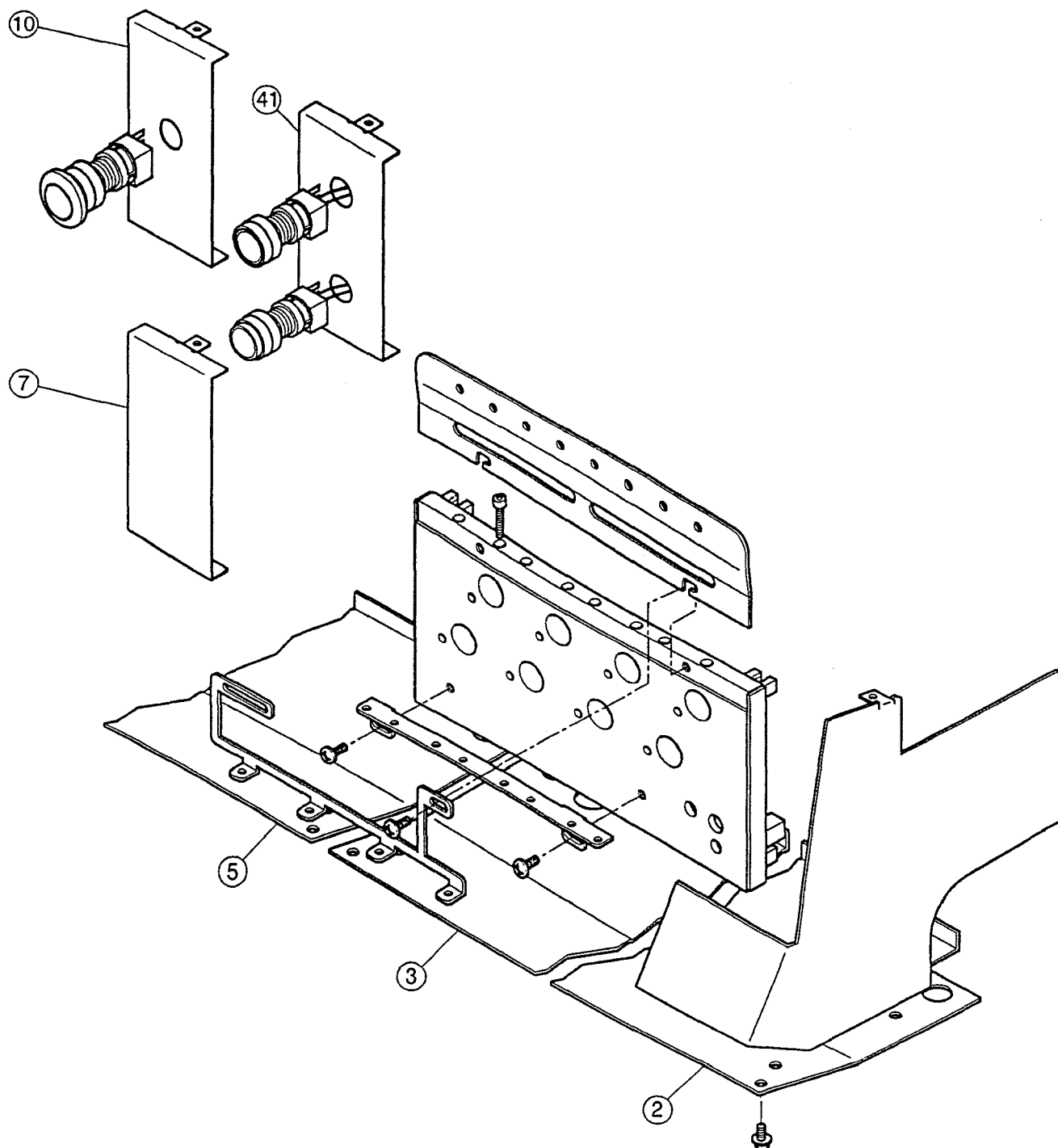
## DETECTING UNIT



| E/t<br>PARTS NAMES |             | 8-9<br>Cover | 9-3<br>Cover (right) | 9-14<br>Cover (center) |
|--------------------|-------------|--------------|----------------------|------------------------|
| MODEL              | 8 1 2 - 4 8 | HCM10080     | HMF13030             | HCM13061               |
|                    | 8 0 6 - 4 8 | HCM10060     | HMF13030             | HCM13020               |
|                    | 8 0 4 - 4 8 | HCM10060     | HMF13030             | HCM13020               |
|                    | 7 2 0 - 3 0 | HMF10370     | HMF13020             | HCM13071               |
|                    | 8 1 2 - 3 0 | HCM10070     | HMF13030             | HCM13041               |
|                    | 8 1 2 - 3 6 | HCM10070     | HMF13030             | HCM13041               |
|                    | 8 0 6 - 3 6 | HCM10090     | HMF13030             | HCM13060               |

CM5113



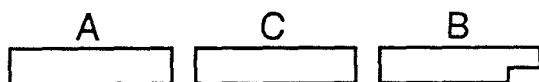


| Elt<br>PARTS NAMES |        | 11-2<br>Fixing plate B right | 11-3<br>Fixing plate B center | 11-5<br>Fixing plate B left |
|--------------------|--------|------------------------------|-------------------------------|-----------------------------|
| MODEL              | 806-48 | HCM16050                     | -                             | HCM16060                    |
|                    | 804-48 | HCM16020                     | -                             | -                           |
|                    | 720-30 | HCM16420                     | HCM16430                      | HCM16440                    |
|                    | 812-30 | HCM16130                     | HCM16140                      | HCM16150                    |
|                    | 812-36 | HCM16130                     | HCM16140                      | HCM16150                    |
|                    | 806-36 | HCM16500                     | -                             | HCM16510                    |

| Elt<br>PARTS NAMES |        | 11-7<br>Cover C | 11-10<br>Cover B | 11-41<br>Cover A |
|--------------------|--------|-----------------|------------------|------------------|
| MODEL              | 806-48 | -               | HCM18022         | HCM18011         |
|                    | 804-48 | -               | HCM18022         | HCM18011         |
|                    | 720-30 | HCM18110        | HCM18100         | HCM18090         |
|                    | 812-30 | HCM18050        | HCM18040         | HCM18030         |
|                    | 812-36 | HCM18050        | HCM18040         | HCM18030         |
|                    | 806-36 | -               | HCM18070         | HCM18060         |

CM4802

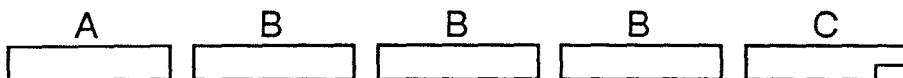
806-48



804-48



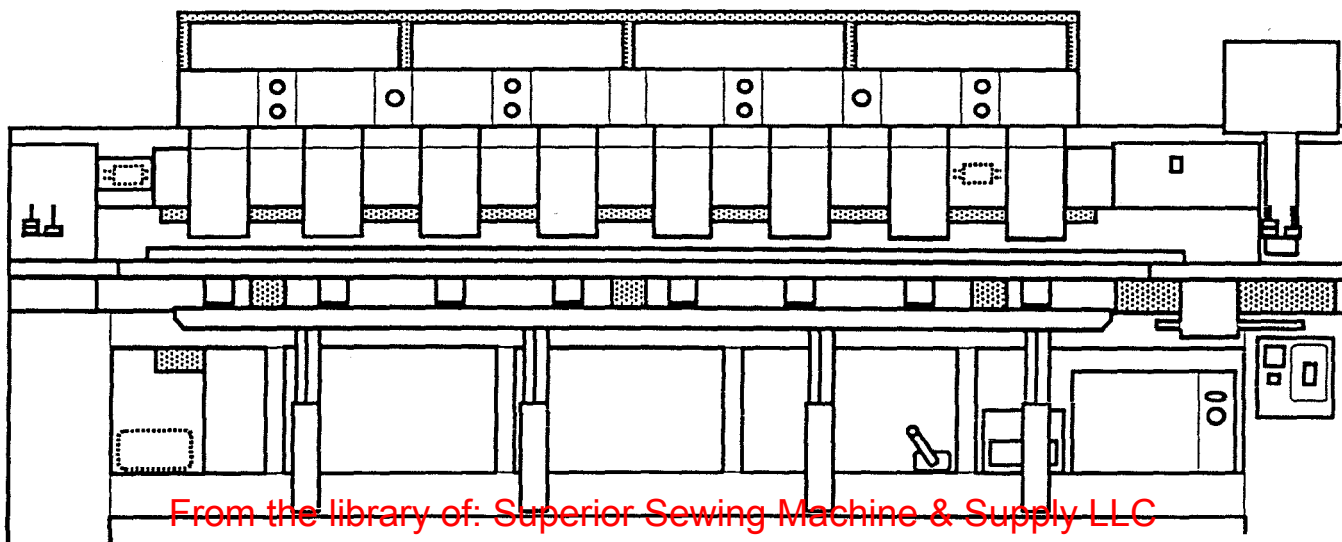
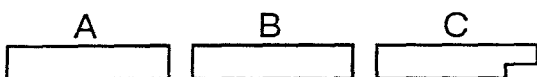
720-30



812-30, 812-36



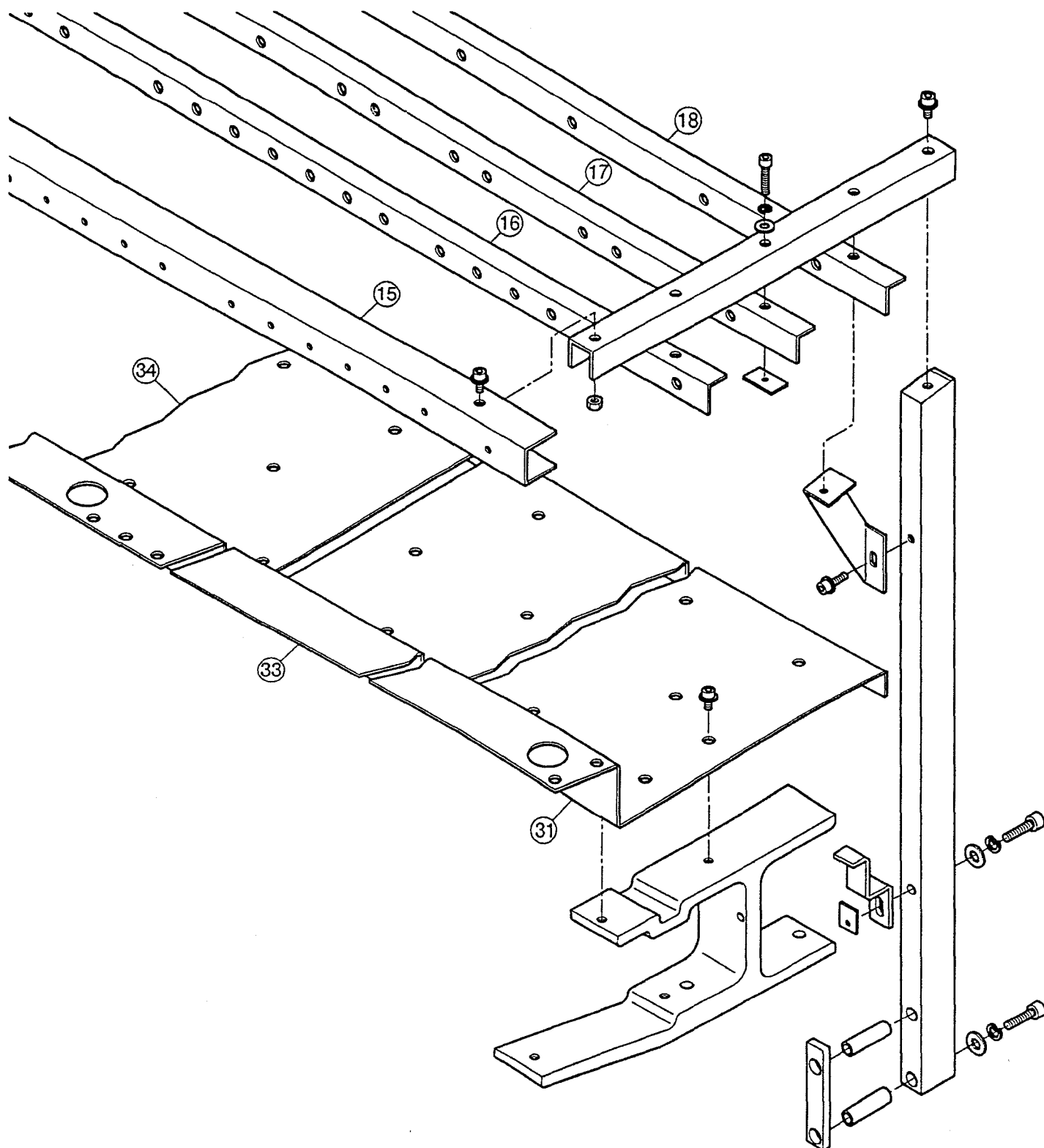
806-36



| E/t<br>PARTS NAMES |        | 11-11<br>Rear cover A | 11-11<br>Rear cover B | 11-11<br>Rear cover C |
|--------------------|--------|-----------------------|-----------------------|-----------------------|
| MODEL              | 806-48 | HCM16071              | HCM16081              | HCM16091              |
|                    | 804-48 | HCM16071              | HCM16081              | -                     |
|                    | 720-30 | HCM16451              | HCM16461              | HCM16471              |
|                    | 812-30 | HCM16561              | HCM16571              | HCM16581              |
|                    | 812-36 | HCM16561              | HCM16571              | HCM16581              |
|                    | 806-36 | HCM16351              | HCM16361              | HCM16371              |

| E/t<br>PARTS NAMES |        | 11-11<br>Rear cover D |  |  |
|--------------------|--------|-----------------------|--|--|
| MODEL              | 806-48 | -                     |  |  |
|                    | 804-48 | -                     |  |  |
|                    | 720-30 | -                     |  |  |
|                    | 812-30 | HCM16591              |  |  |
|                    | 812-36 | HCM16591              |  |  |
|                    | 806-36 | -                     |  |  |

CM4804



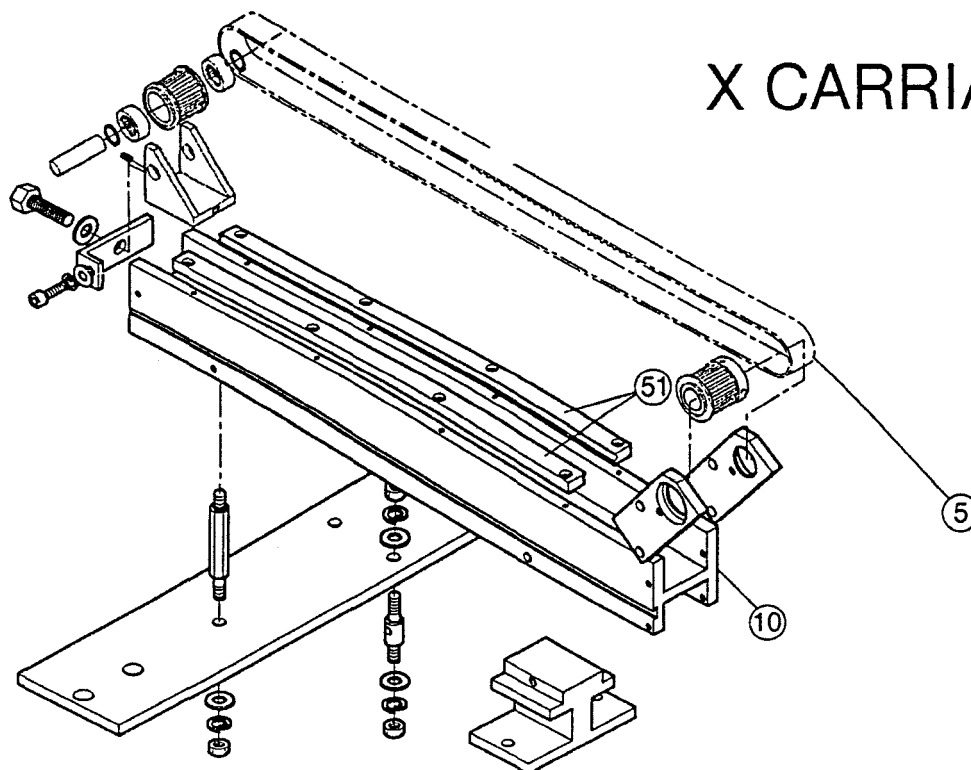
| Elt         |        | 12-15                          |  |  |
|-------------|--------|--------------------------------|--|--|
| PARTS NAMES |        | Thread guide unit fixing plate |  |  |
| MODEL       | 806-48 | HCM20081                       |  |  |
|             | 804-48 | HCM20041                       |  |  |
|             | 720-30 | HCM20241                       |  |  |
|             | 812-30 | HCM20121                       |  |  |
|             | 812-36 | HCM20121                       |  |  |
|             | 806-36 | HCM20281                       |  |  |

| Elt         |        | 12-16          | 12-17          | 12-18          |
|-------------|--------|----------------|----------------|----------------|
| PARTS NAMES |        | Thread guide A | Thread guide B | Thread guide C |
| MODEL       | 806-48 | HCM20051       | HCM20061       | HCM20071       |
|             | 804-48 | HCM20011       | HCM20021       | HCM20031       |
|             | 720-30 | HCM20211       | HCM20221       | HCM20231       |
|             | 812-30 | HCM20091       | HCM20101       | HCM20111       |
|             | 812-36 | HCM20091       | HCM20101       | HCM20111       |
|             | 806-36 | HCM20251       | HCM20261       | HCM20271       |

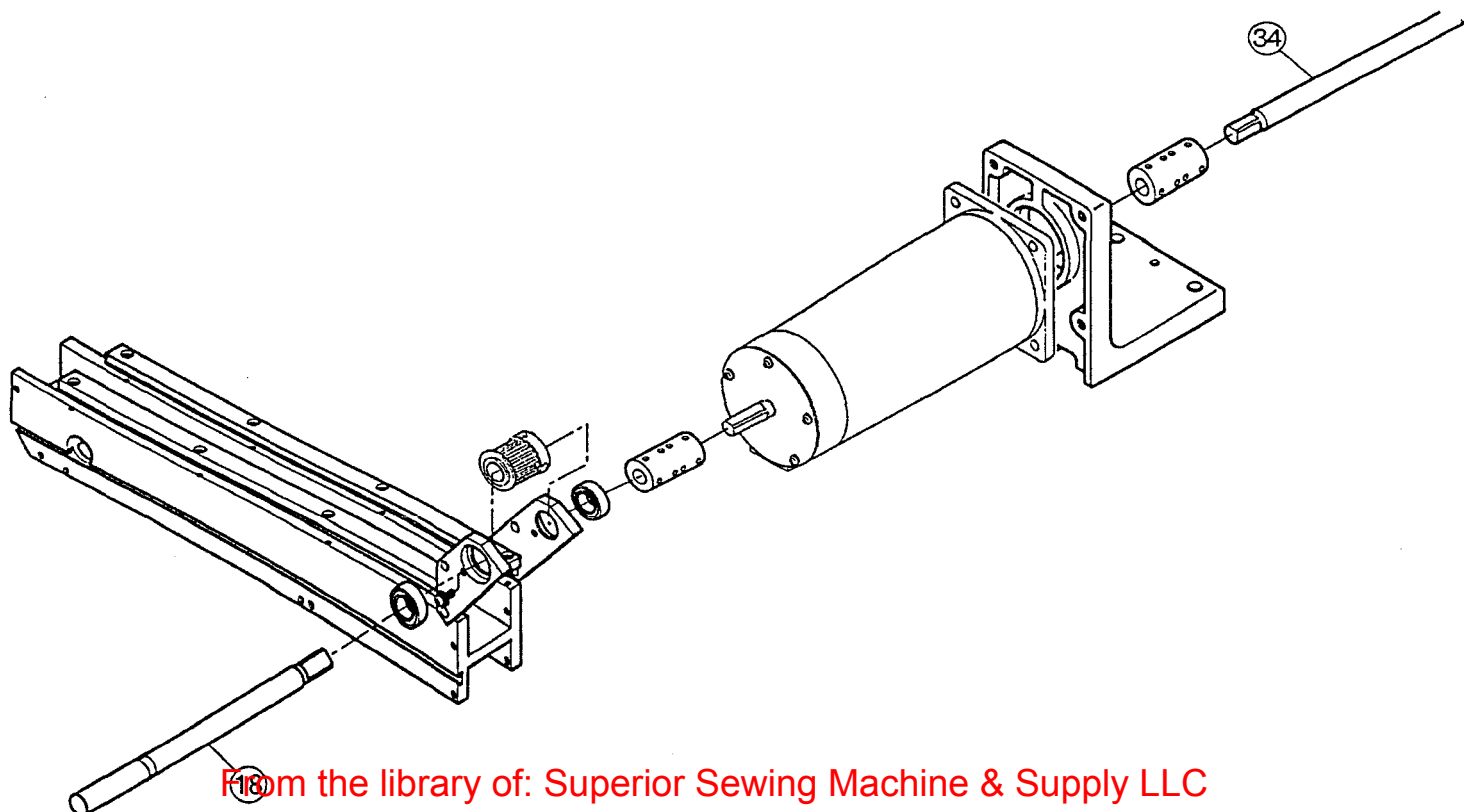
| Elt         |        | 12-31                | 12-33                 | 12-34               |
|-------------|--------|----------------------|-----------------------|---------------------|
| PARTS NAMES |        | Fixing plate A right | Fixing plate A center | Fixing plate A left |
| MODEL       | 806-48 | HCM16031             | -                     | HCM16041            |
|             | 804-48 | HCM16011             | -                     | -                   |
|             | 720-30 | HCM16391             | HCM16402              | HCM16411            |
|             | 812-30 | HCM16101             | HCM16111              | HCM16121            |
|             | 812-36 | HCM16101             | HCM16111              | HCM16121            |
|             | 806-36 | HCM16481             | -                     | HCM16492            |

CM4A11

## X CARRIAGE



## Y CARRIAGE 1



| Elt<br>PARTS NAMES |             | 13-5<br>X timing belt | 13-10<br>X rail base | 13-51<br>X rail with V groove |
|--------------------|-------------|-----------------------|----------------------|-------------------------------|
| MODEL              | 8 1 2 - 4 8 | MPV00050              | HCM24310             | M0425001                      |
|                    | 8 0 6 - 4 8 | MPV00050              | HCM24030             | HMF24380                      |
|                    | 8 0 4 - 4 8 | MPV00050              | HCM24030             | HMF24380                      |
|                    | 7 2 0 - 3 0 | MPV00270              | HMF24290             | M0424561                      |
|                    | 8 1 2 - 3 0 | MPV00390              | HCM24200             | HCM24210                      |
|                    | 8 1 2 - 3 6 | MPV00390              | HCM24200             | HCM24210                      |
|                    | 8 0 6 - 3 6 | MPV00310              | HCM24380             | M0425001                      |

| Elt<br>PARTS NAMES |             | 14.0-18<br>Y carriage shaft 1 | 14.0-34<br>Y carriage shaft 2 |  |
|--------------------|-------------|-------------------------------|-------------------------------|--|
| MODEL              | 8 1 2 - 4 8 | HCM24350                      | HCM24370                      |  |
|                    | 8 0 6 - 4 8 | HCM24171                      | HCM24180                      |  |
|                    | 8 0 4 - 4 8 | HCM24130                      | HCM24140                      |  |
|                    | 7 2 0 - 3 0 | HCM24450                      | HCM24460                      |  |
|                    | 8 1 2 - 3 0 | HCM24280                      | HCM24290                      |  |
|                    | 8 1 2 - 3 6 | HCM24280                      | HCM24290                      |  |
|                    | 8 0 6 - 3 6 | HCM24420                      | HCM24420                      |  |

CM4B02