



**TYPICAL**

**GC24690/24690-1**

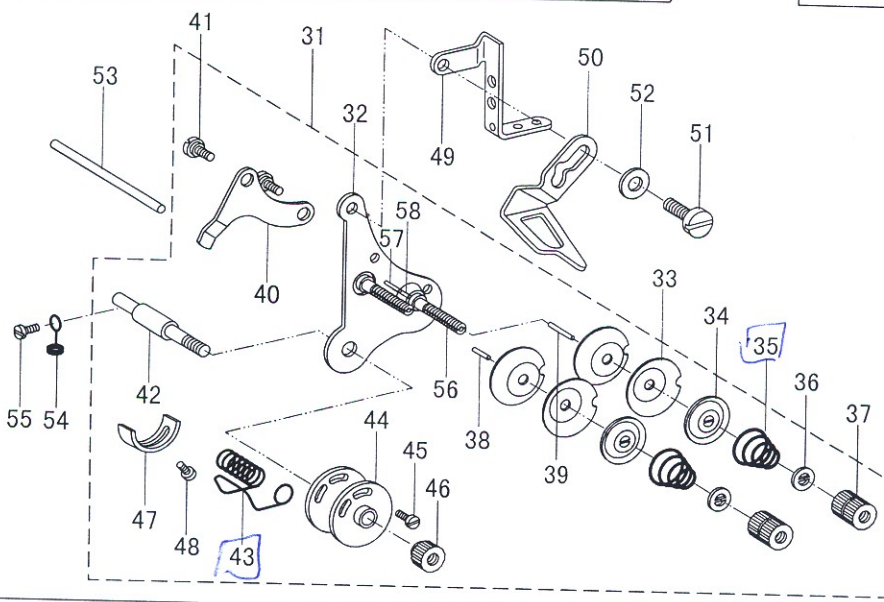
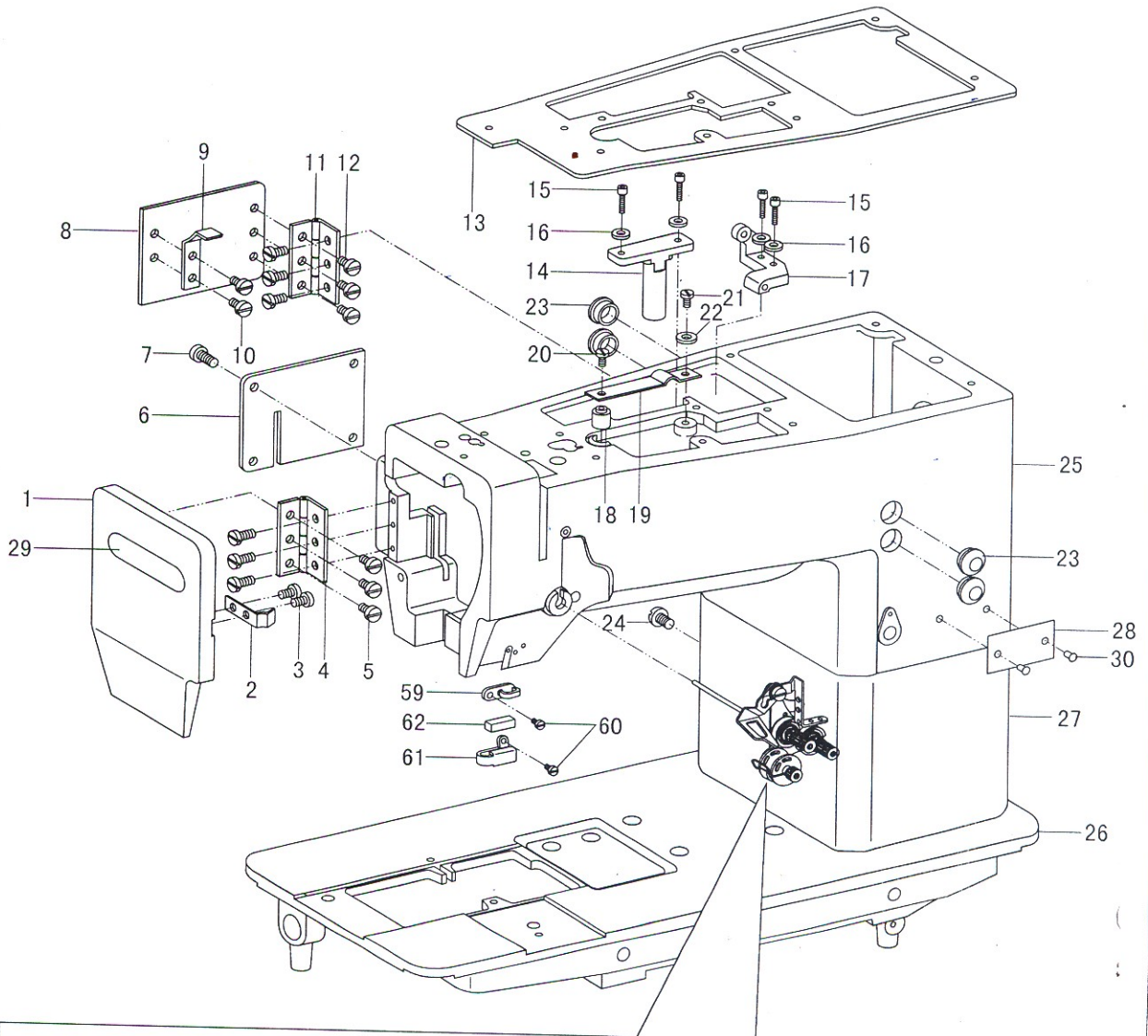
**Post Bed Double/Single Needle Large Hook  
Compound Feed Lockstitch Sewing Machine**

**GC24690CX/24690-1CX**

**Post Bed Double/Single Needle Large Hook Compound  
Feed Lockstitch Sewing Machine With Thick Thread**

**OPERATION INSTRUCTION / PARTS MANUAL**

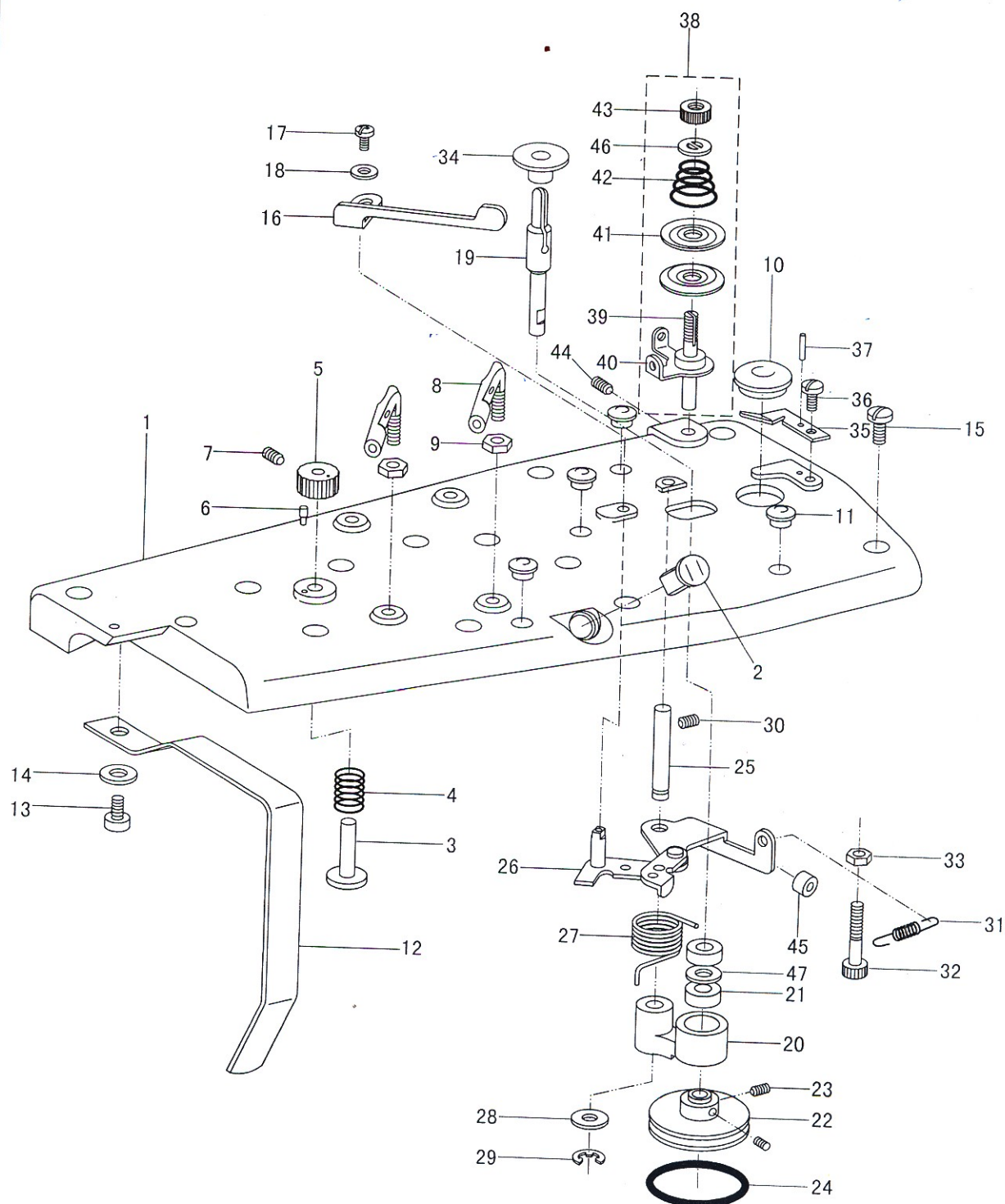
# 1. Machine casting components



1. Machine casting components

| No. | Parts No.    | Name of parts                        | Qty.    |    |    |      | Remarks        |
|-----|--------------|--------------------------------------|---------|----|----|------|----------------|
|     |              |                                      | GC24690 | CX | -1 | -1CX |                |
| 1   | 89WF2-003    | Face plate                           | 1       | 1  | 1  | 1    | GB93-87 5      |
| 2   | 89WF2-004    | Face plate spring                    | 1       | 1  | 1  | 1    |                |
| 3   | 89WF2-005    | Screw                                | 2       | 2  | 2  | 2    |                |
| 4   | 89WF2-006    | Hinge CPL.                           | 1       | 1  | 1  | 1    |                |
| 5   | 89WF2-005    | Screw                                | 6       | 6  | 6  | 6    |                |
| 6   | 89WF2-007    | Back cover (front)                   | 1       | 1  | 1  | 1    |                |
| 7   | 13WF2-008    | Screw                                | 4       | 4  | 4  | 4    |                |
| 8   | 89WF2-008    | Back cover (rear)                    | 1       | 1  | 1  | 1    |                |
| 9   | 89WF2-004    | Back cover (rear) spring             | 1       | 1  | 1  | 1    |                |
| 10  | 89WF2-005    | Screw                                | 2       | 2  | 2  | 2    |                |
| 11  | 89WF2-006    | Hinge CPL.                           | 1       | 1  | 1  | 1    |                |
| 12  | 89WF2-005    | Screw                                | 6       | 6  | 6  | 6    |                |
| 13  | 89WF2-013    | Seal gasket                          | 1       | 1  | 1  | 1    |                |
| 14  | 89WF2-009    | Bracket                              | 1       | 1  | 1  | 1    |                |
| 15  | 80WF6-029    | Screw                                | 4       | 4  | 4  | 4    |                |
| 16  |              | Washer                               | 4       | 4  | 4  | 4    | GB818-85-M4×6  |
| 17  | 89WF2-010    | Knee lifter connection lever bracket | 1       | 1  | 1  | 1    |                |
| 18  | 49WF2-016    | Oil regulator                        | 1       | 1  | 1  | 1    |                |
| 19  | 49WF2-015    | Oil control spring                   | 1       | 1  | 1  | 1    |                |
| 20  | 16WF3-014    | Screw                                | 1       | 1  | 1  | 1    |                |
| 21  | 13WF2-008    | Screw                                | 1       | 1  | 1  | 1    |                |
| 22  | 7KT2-020     | Washer                               | 1       | 1  | 1  | 1    |                |
| 23  | 89WF2-011    | Rubber plug                          | 4       | 4  | 4  | 4    |                |
| 24  |              | Earth wire screw                     | 1       | 1  | 1  | 1    |                |
| 25  | 88WF1-001    | Arm                                  | 1       | 1  | 1  | 1    |                |
| 26  | 89WF2-001    | Bed                                  | 1       | 1  | 1  | 1    |                |
| 27  | 89WF2-002    | Connectiong post                     | 1       | 1  | 1  | 1    |                |
| 28  | 89WF2-030    | Model label (CN)                     | 1       |    |    |      |                |
|     | 89WF2-031    | Model label (EN)                     | 1       |    |    |      |                |
|     | 121WF-001    | Model label (CN)                     |         | 1  |    |      |                |
|     | 121WF-001A   | Model label (EN)                     |         | 1  |    |      |                |
|     | 113WF2-008   | Model label (CN)                     |         |    | 1  |      |                |
|     | 113WF2-008A  | Model label (EN)                     |         |    | 1  |      |                |
|     | 120WF-001    | Model label (CN)                     |         |    |    | 1    |                |
|     | 120WF-001A   | Model label (EN)                     |         |    |    | 1    |                |
| 29  | 93WF1-052    | Face plate label                     | 1       | 1  | 1  | 1    | GB827-86 2.5×5 |
| 30  |              | Rivet                                | 2       | 2  | 2  | 2    |                |
| 31  | 89WF2-032    | Thread tension CPL.                  | 1       | 1  |    |      |                |
|     | 113WF2-009   | Thread tension CPL.                  |         |    | 1  | 1    |                |
| 32  | 25WF2-009A1  | Thread tension bracket               | 1       | 1  |    |      |                |
|     | 16WF2-046A1  | Thread tension bracket               |         |    | 1  | 1    |                |
| 33  | 16WF2-046A6  | Thread tension disc                  | 4       | 4  | 2  | 2    |                |
| 34  | 16WF2-046A5  | Tension releasing disc               | 2       | 2  | 1  | 1    |                |
| 35  | 037536       | Tension spring                       | 2       | 2  | 1  | 1    |                |
| 36  | 153209       | Washer                               | 2       | 2  | 1  | 1    |                |
| 37  | 16WF2-046A3  | Tension adjusting nut                | 2       | 2  | 1  | 1    |                |
| 38  | 19WF2-012    | Tension releasing pin (short)        | 1       | 1  |    |      |                |
|     | 16WF2-046A13 | Tension releasing pin                |         |    | 1  | 1    |                |
| 39  | 115955       | Tension releasing pin (long)         | 1       | 1  |    |      |                |
| 40  | 16WF2-046A14 | Tension releasing plate              | 1       | 1  | 1  | 1    |                |
| 41  | 16WF2-046A15 | Screw                                | 2       | 2  | 2  | 2    |                |
| 42  | 25WF2-009A2  | Thread controller stud               | 1       | 1  |    |      | GB848-85-5     |
|     | 16WF2-046A10 | Thread controller stud               |         |    | 1  | 1    |                |
| 43  | 19WF2-014    | Thread controller spring             | 1       | 1  |    |      |                |
|     | 16WF2-046A7  | Thread controller spring             |         |    | 1  | 1    |                |
| 44  | 16WF2-046A8  | Thread controller disc               | 2       | 2  | 1  | 1    |                |
| 45  | 1WF1-010R    | Screw                                | 1       | 1  |    |      |                |
|     | 16WF2-046A9  | Screw                                |         |    | 1  | 1    |                |
| 46  | 16WF2-046A11 | Nut                                  | 1       | 1  | 1  | 1    |                |
| 47  | 103693       | Thread controller spring stopper     | 1       | 1  | 1  | 1    |                |
| 48  | 16WF2-050    | Screw                                | 1       | 1  | 1  | 1    |                |
| 49  | 89WF2-017    | Thread retainer                      | 1       | 1  |    |      |                |
|     | 49WF2-022    | Thread retainer                      |         |    | 1  | 1    |                |
| 50  | 89WF2-018    | Thread guide                         | 1       | 1  | 1  | 1    |                |
| 51  | 13WF2-063    | Screw                                | 1       | 1  | 1  | 1    |                |
| 52  |              | Washer                               | 1       | 1  | 1  | 1    |                |
| 53  | 103723       | Tension releasing plate rod          | 1       | 1  | 1  | 1    |                |
| 54  | 72WF5-015    | Oil wick retainer                    | 1       | 1  | 1  | 1    |                |
| 55  | 52WF3-018    | Screw                                | 1       | 1  | 1  | 1    |                |
| 56  | 16WF2-046A2  | Screw                                | 2       | 2  | 2  | 2    |                |
| 57  | 16WF2-046A12 | Pin                                  | 1       | 1  | 1  | 1    |                |
| 58  | 19WF2-011    | Pin (long)                           | 1       | 1  |    |      |                |
| 59  | 16WF2-011    | Upper thread guide                   | 1       | 1  | 1  | 1    |                |
| 60  | 16WF2-015    | Screw                                | 2       | 2  | 2  | 2    |                |
| 61  | 16WF2-013    | Lower thread guide                   | 1       | 1  | 1  | 1    |                |
| 62  | 16WF2-014    | Oil felt                             | 1       | 1  | 1  | 1    |                |

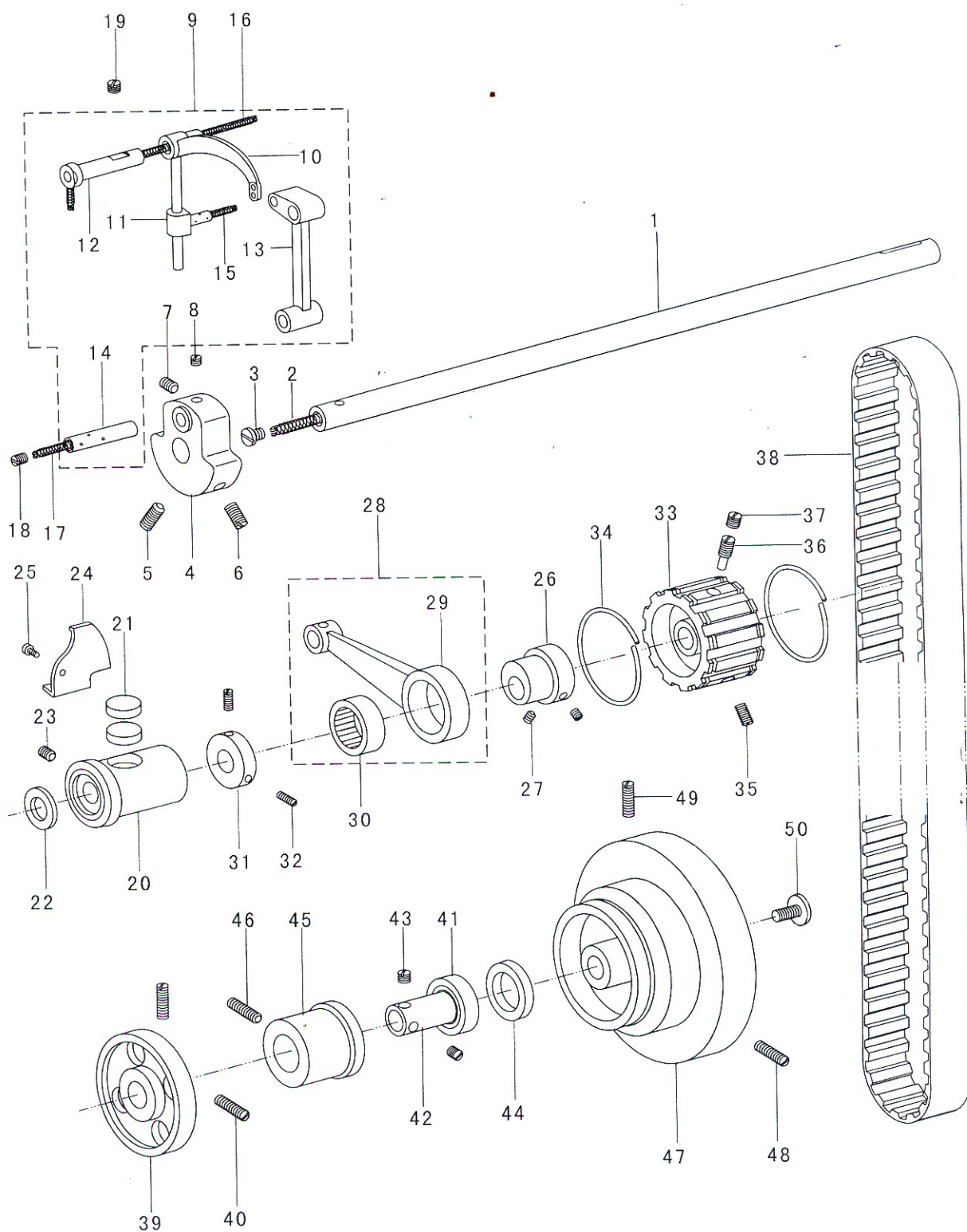
## 2. Upper cover and bobbin winder components



## 2. Upper cover and bobbin winder components

| No. | Parts No.  | Name of parts                | Qty.    |    |    |      | Remarks       |
|-----|------------|------------------------------|---------|----|----|------|---------------|
|     |            |                              | GC24690 | CX | -1 | -1CX |               |
| 1   | 89WF2-012  | Upper cover                  | 1       | 1  | 1  | 1    |               |
| 2   | 49WF2-014  | Oil window                   | 1       | 1  | 1  | 1    |               |
| 3   | 49WF2-017  | Oil regulating stud          | 1       | 1  | 1  | 1    |               |
| 4   | 49WF2-018  | Oil regulating spring        | 1       | 1  | 1  | 1    |               |
| 5   | 49WF2-019  | Oil regulating dial          | 1       | 1  | 1  | 1    |               |
| 6   | 49WF2-020  | Pin                          | 1       | 1  | 1  | 1    |               |
| 7   | 7KT3-032   | Screw                        | 1       | 1  | 1  | 1    |               |
| 8   | 13WF2-066  | Thread guide                 | 2       | 2  | 1  | 1    |               |
| 9   | 13WF2-067  | Nut                          | 2       | 2  | 1  | 1    |               |
| 10  | 89WF2-011  | Rubber plug                  | 1       | 1  | 1  | 1    | φ 20          |
| 11  | 89WF2-014  | Rubber plug                  | 4       | 4  | 4  | 4    | φ 9           |
| 12  | 89WF2-015  | Thread take-up lever cover   | 1       | 1  | 1  | 1    |               |
| 13  | 89WF2-016  | Screw                        | 1       | 1  | 1  | 1    |               |
| 14  |            | Washer                       | 1       | 1  | 1  | 1    | GB93-87 4     |
| 15  | 13WF3-069  | Screw                        | 11      | 11 | 11 | 11   |               |
| 16  | 89WF5-001  | Bobbin winder lever          | 1       | 1  | 1  | 1    |               |
| 17  |            | Screw                        | 1       | 1  | 1  | 1    | GB818-85-M4×8 |
| 18  |            | Washer                       | 1       | 1  | 1  | 1    | GB97.1-85-4   |
| 19  | 89WF5-002  | Bobbin winder shaft          | 1       | 1  | 1  | 1    |               |
| 20  | 89WF5-003  | Winder crank                 | 1       | 1  | 1  | 1    |               |
| 21  |            | Ball bearing                 | 2       | 2  | 2  | 2    | 5×16×5        |
| 22  | 89WF5-004  | Bobbin winder friction wheel | 1       | 1  | 1  | 1    |               |
| 23  | 89WF5-005  | Screw                        | 2       | 2  | 2  | 2    |               |
| 24  | 89WF5-006  | Ring                         | 1       | 1  | 1  | 1    |               |
| 25  | 89WF5-007  | Shaft                        | 1       | 1  | 1  | 1    |               |
| 26  | 89WF5-008  | Winder lever shaft CPL.      | 1       | 1  | 1  | 1    |               |
| 27  | 89WF5-009  | Spring                       | 1       | 1  | 1  | 1    |               |
| 28  | 89WF5-010  | Washer                       | 1       | 1  | 1  | 1    |               |
| 29  |            | Retaining ring               | 1       | 1  | 1  | 1    | GB896-86-6    |
| 30  | 57WF-009   | Screw                        | 1       | 1  | 1  | 1    |               |
| 31  | 89WF5-011  | Spring                       | 1       | 1  | 1  | 1    |               |
| 32  | 89WF5-012  | Screw                        | 1       | 1  | 1  | 1    |               |
| 33  | 72WF5-022  | Nut                          | 1       | 1  | 1  | 1    |               |
| 34  | 89WF5-013  | Bobbin winder dust guard     | 1       | 1  | 1  | 1    |               |
| 35  | 89WF5-014  | Knife                        | 1       | 1  | 1  | 1    |               |
| 36  | 1WF4-051   | Screw                        | 1       | 1  | 1  | 1    |               |
| 37  |            | Pin                          | 1       | 1  | 1  | 1    | GB879-86 2×8  |
| 38  | BS38736    | Bobbin winder CPL            | 1       | 1  | 1  | 1    |               |
| 39  | BS38738    | Bobbin winder tension stud   | 1       | 1  | 1  | 1    |               |
| 40  | BS38737    | Bobbin winder tension plate  | 1       | 1  | 1  | 1    |               |
| 41  | 22T1-012F5 | Bobbin winder tension disc   | 2       | 2  | 2  | 2    |               |
| 42  | 33T4-008C1 | Bobbin winder tension spring | 1       | 1  | 1  | 1    |               |
| 43  | B108265    | Nut                          | 1       | 1  | 1  | 1    |               |
| 44  | 13WF3-062  | Screw                        | 1       | 1  | 1  | 1    |               |
| 45  | 89WF5-015  | Rubber cover                 | 1       | 1  | 1  | 1    |               |
| 46  | 153209     | Washer                       | 1       | 1  | 1  | 1    |               |
| 47  | 89WF5-018  | Washer                       | 1       | 1  | 1  | 1    |               |

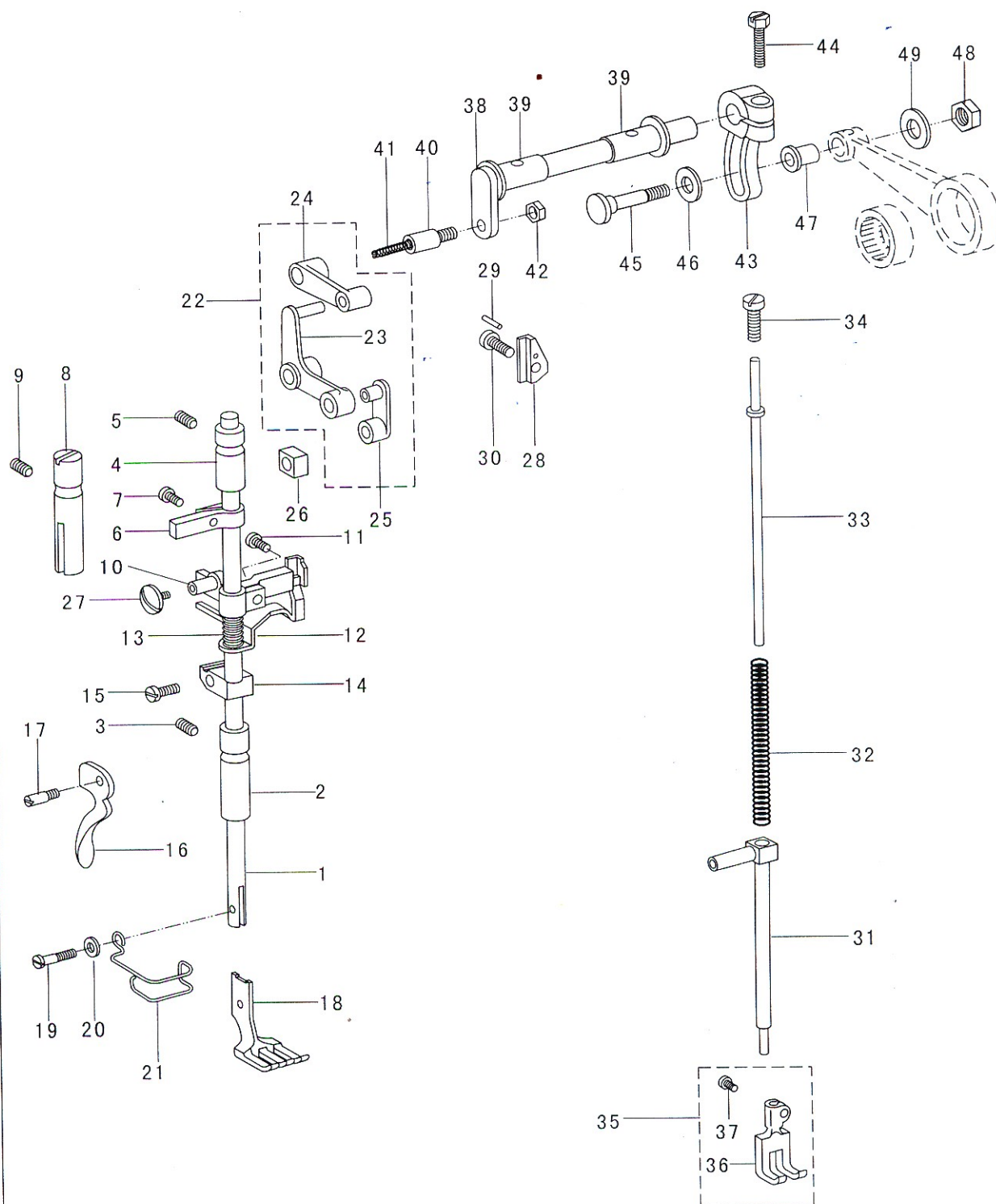
### 3. Upper shaft and thread take-up components



### 3. Upper shaft and thread take-up components

| No. | Parts No.  | Name of parts                     | Qty.    |    |    |      | Remarks                                                                             |
|-----|------------|-----------------------------------|---------|----|----|------|-------------------------------------------------------------------------------------|
|     |            |                                   | 6C24690 | CX | -1 | -1CX |                                                                                     |
| 1   | 88WF2-006  | Upper shaft                       | 1       | 1  | 1  | 1    | Φ5 L=110mm                                                                          |
| 2   |            | Oil wick                          | 1       | 1  | 1  | 1    |                                                                                     |
| 3   | 16WF1-022  | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |
| 4   | 16WF1-018  | Needle bar crank                  | 1       | 1  | 1  | 1    |                                                                                     |
| 5   | 16WF1-019  | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |
| 6   | 16WF1-020  | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |
| 7   | 16WF1-016  | Screw (long)                      | 1       | 1  | 1  | 1    |                                                                                     |
| 8   | 16WF1-017  | Screw (short)                     | 1       | 1  | 1  | 1    |                                                                                     |
| 9   |            | Thread take-up lever CPL          | 1       | 1  | 1  | 1    |                                                                                     |
| 10  | 88WF2-004  | Thread take-up lever              | 1       | 1  | 1  | 1    | Φ3 L=15mm<br>方3×7 L=150mm<br>Φ3 L=105mm<br><br>7940/00 25×32×13<br><br>202 15×35×11 |
| 11  | 215029     | Thread take-up lever driving stud | 1       | 1  | 1  | 1    |                                                                                     |
| 12  | 49WF1-003  | Thread take-up lever hinge stud   | 1       | 1  | 1  | 1    |                                                                                     |
| 13  | 16WF1-014  | Needle bar link                   | 1       | 1  | 1  | 1    |                                                                                     |
| 14  | 16WF1-015  | Needle bar crank pin              | 1       | 1  | 1  | 1    |                                                                                     |
| 15  |            | Oil wick                          | 1       | 1  | 1  | 1    |                                                                                     |
| 16  |            | Oil wick                          | 1       | 1  | 1  | 1    |                                                                                     |
| 17  |            | Oil wick                          | 1       | 1  | 1  | 1    |                                                                                     |
| 18  | 88WF2-003  | Rubber plug                       | 1       | 1  | 1  | 1    |                                                                                     |
| 19  | 49WF1-004  | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |
| 20  | 18006      | Bushing (front)                   | 1       | 1  | 1  | 1    |                                                                                     |
| 21  | 16WF1-025  | Oil felt                          | 2       | 2  | 2  | 2    |                                                                                     |
| 22  | 16WF1-021  | Washer                            | 1       | 1  | 1  | 1    |                                                                                     |
| 23  | 22WF1-045  | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |
| 24  | 16WF2-038  | Oil guard                         | 1       | 1  | 1  | 1    |                                                                                     |
| 25  | 22T1-003C6 | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |
| 26  | 22WF5-022  | Lifting eccentric wheel           | 1       | 1  | 1  | 1    |                                                                                     |
| 27  | 22WF4-002  | Screw                             | 2       | 2  | 2  | 2    |                                                                                     |
| 28  | 103775C    | Lifting eccentric link CPL        | 1       | 1  | 1  | 1    |                                                                                     |
| 29  | 22WF5-021  | Lifting eccentric link            | 1       | 1  | 1  | 1    |                                                                                     |
| 30  |            | Needle bearing                    | 1       | 1  | 1  | 1    |                                                                                     |
| 31  | 22WF5-024  | Collar                            | 1       | 1  | 1  | 1    |                                                                                     |
| 32  | 7KT5-016   | Screw                             | 2       | 2  | 2  | 2    |                                                                                     |
| 33  | 16WF1-030  | Belt pulley                       | 1       | 1  | 1  | 1    |                                                                                     |
| 34  | 16WF1-043  | Pulley spring ring                | 2       | 2  | 2  | 2    |                                                                                     |
| 35  | 16WF1-033  | Screw (long)                      | 1       | 1  | 1  | 1    |                                                                                     |
| 36  | 16WF1-031  | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |
| 37  | 16WF1-032  | Screw (short)                     | 1       | 1  | 1  | 1    |                                                                                     |
| 38  | 16WF1-034  | Timing belt                       | 1       | 1  | 1  | 1    |                                                                                     |
| 39  | 89WF5-016  | Bobbin winder driving wheel       | 1       | 1  | 1  | 1    |                                                                                     |
| 40  | 89WF5-017  | Screw                             | 2       | 2  | 2  | 2    |                                                                                     |
| 41  |            | Bearing                           | 1       | 1  | 1  | 1    |                                                                                     |
| 42  | 88WF2-008  | Bushing                           | 1       | 1  | 1  | 1    |                                                                                     |
| 43  | 22WF1-048  | Screw                             | 2       | 2  | 2  | 2    |                                                                                     |
| 44  | 16WF1-029  | Bearing retaining ring            | 1       | 1  | 1  | 1    |                                                                                     |
| 45  | 88WF2-007  | Upper shaft bushing (rear)        | 1       | 1  | 1  | 1    |                                                                                     |
| 46  | 16WF1-004  | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |
| 47  | 217165A    | Hand wheel                        | 1       | 1  | 1  | 1    |                                                                                     |
| 48  | 16WF1-036  | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |
| 49  | 16WF1-037  | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |
| 50  | 16WF1-040  | Screw                             | 1       | 1  | 1  | 1    |                                                                                     |

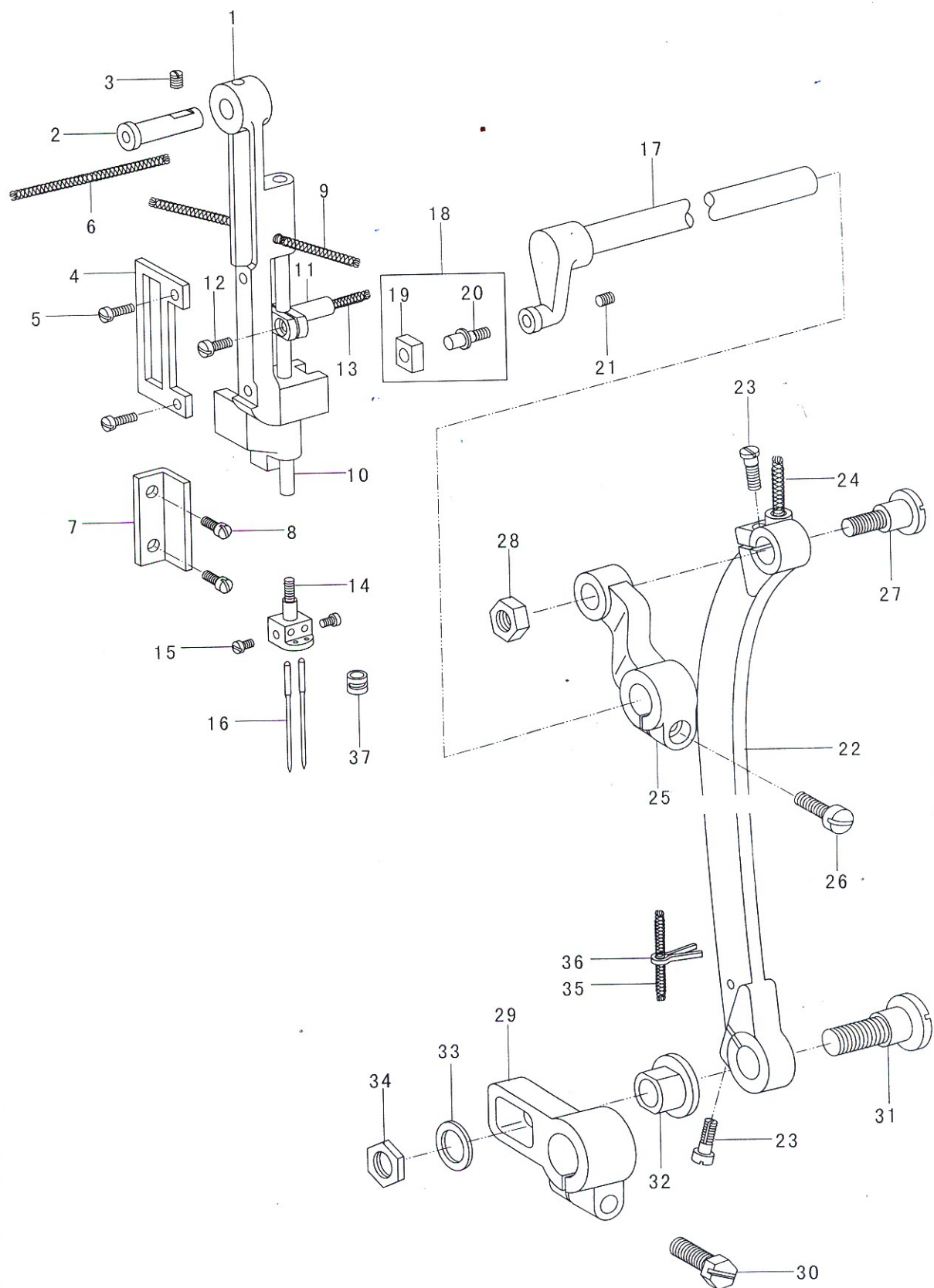
## 4. Walking foot components



#### 4. Walking foot components

| No. | Parts No.  | Name of parts               | Qty.    |    |    |      | Remarks    |
|-----|------------|-----------------------------|---------|----|----|------|------------|
|     |            |                             | GC24690 | CX | -1 | -1CX |            |
| 1   | 22WF3-005  | Presser bar                 | 1       | 1  | 1  | 1    | GB848-85-4 |
| 2   | 22WF3-006  | Presser bar bushing (lower) | 1       | 1  | 1  | 1    |            |
| 3   | 16WF3-025  | Screw                       | 1       | 1  | 1  | 1    |            |
| 4   | 16WF4-027  | Presser bar bushing(upper)  | 1       | 1  | 1  | 1    |            |
| 5   | 16WF3-025  | Screw                       | 1       | 1  | 1  | 1    |            |
| 6   | 16WF4-021  | Position guide bracket      | 1       | 1  | 1  | 1    |            |
| 7   | 16WF4-022  | Screw                       | 1       | 1  | 1  | 1    |            |
| 8   | 16WF4-020  | Position guide              | 1       | 1  | 1  | 1    |            |
| 9   | 16WF3-025  | Screw                       | 1       | 1  | 1  | 1    |            |
| 10  | 22WF3-007  | Lifting bracket             | 1       | 1  | 1  | 1    |            |
| 11  | 16WF2-033  | Screw                       | 1       | 1  | 1  | 1    |            |
| 12  | 22WF3-009  | Tension release slide       | 1       | 1  | 1  | 1    |            |
| 13  | 22WF3-008  | Slide spring                | 1       | 1  | 1  | 1    |            |
| 14  | 16WF4-023  | Presser bar spring bracket  | 1       | 1  | 1  | 1    |            |
| 15  | 16WF1-009  | Screw                       | 1       | 1  | 1  | 1    |            |
| 16  | 88WF3-001  | Presser foot lifting bar    | 1       | 1  | 1  | 1    |            |
| 17  | 16WF4-001  | Hinge screw                 | 1       | 1  | 1  | 1    |            |
| 18  | 88WF3-002  | Presser foot                | 1       |    |    |      |            |
|     | 121WF-004  | Presser foot                |         | 1  |    |      |            |
|     | 22WF3-013  | Presser foot                |         |    | 1  |      |            |
|     | 105WF3-001 | Presser foot                |         |    |    | 1    |            |
| 19  | 88WF3-003  | Screw                       | 1       | 1  | 1  | 1    |            |
| 20  |            | Washer                      | 1       | 1  | 1  | 1    |            |
| 21  | 88WF3-004  | Finger guard                | 1       | 1  |    |      |            |
|     | 104WF3-002 | Finger guard                |         |    | 1  | 1    |            |
| 22  |            | Lifting bell crank CPL      | 1       | 1  | 1  | 1    |            |
| 23  | 22WF5-026  | Lifting bell crank          | 1       | 1  | 1  | 1    |            |
| 24  | 22WF5-014  | Lifting bell crank link     | 1       | 1  | 1  | 1    |            |
| 25  | 22WF5-028  | Link                        | 1       | 1  | 1  | 1    |            |
| 26  | 215121     | Slide block                 | 1       | 1  | 1  | 1    |            |
| 27  | 22WF5-027  | Screw                       | 1       | 1  | 1  | 1    |            |
| 28  | 22WF3-010  | Lifting bracket guide block | 1       | 1  | 1  | 1    |            |
| 29  | 22WF3-012  | Pin                         | 1       | 1  | 1  | 1    |            |
| 30  | 22WF3-011  | Screw                       | 1       | 1  | 1  | 1    |            |
| 31  | 22WF5-029  | Walking foot bar            | 1       | 1  | 1  | 1    |            |
| 32  | 22WF5-030  | Spring                      | 1       | 1  | 1  | 1    |            |
| 33  | 22WF5-031  | Walking foot bar extension  | 1       | 1  | 1  | 1    |            |
| 34  | 49WF5-009  | Screw                       | 1       | 1  | 1  | 1    |            |
| 35  |            | Walking foot CPL            | 1       | 1  | 1  | 1    |            |
| 36  | 88WF4-001  | Walking foot                | 1       |    |    |      |            |
|     | 121WF-005  | Walking foot                |         | 1  |    |      |            |
|     | 120WF-004  | Walking foot                |         |    | 1  |      |            |
|     | 104WF4-001 | Walking foot                |         |    |    | 1    |            |
| 37  | 22WF5-033  | Screw                       | 1       | 1  | 1  | 1    |            |
| 38  | 22WF5-012  | Lifting rock shaft          | 1       | 1  | 1  | 1    |            |
| 39  | 22WF5-013  | Bushing                     | 2       | 2  | 2  | 2    |            |
| 40  | 88WF4-002  | Screw                       | 1       | 1  | 1  | 1    |            |
| 41  |            | Oil wick                    | 1       | 1  | 1  | 1    | Φ 5 L=14mm |
| 42  | 22WF5-016  | Nut                         | 1       | 1  | 1  | 1    |            |
| 43  | 88WF4-003  | Lifting eccentric crank     | 1       | 1  | 1  | 1    |            |
| 44  | 16WF3-040  | Screw                       | 1       | 1  | 1  | 1    |            |
| 45  | 22WF5-018  | Screw                       | 1       | 1  | 1  | 1    |            |
| 46  | 88WF4-004  | Washer                      | 1       | 1  | 1  | 1    |            |
| 47  | 22WF5-019  | Collar bushing              | 1       | 1  | 1  | 1    |            |
| 48  | 632117     | Nut                         | 1       | 1  | 1  | 1    |            |
| 49  | 491218     | Washer                      | 1       | 1  | 1  | 1    |            |

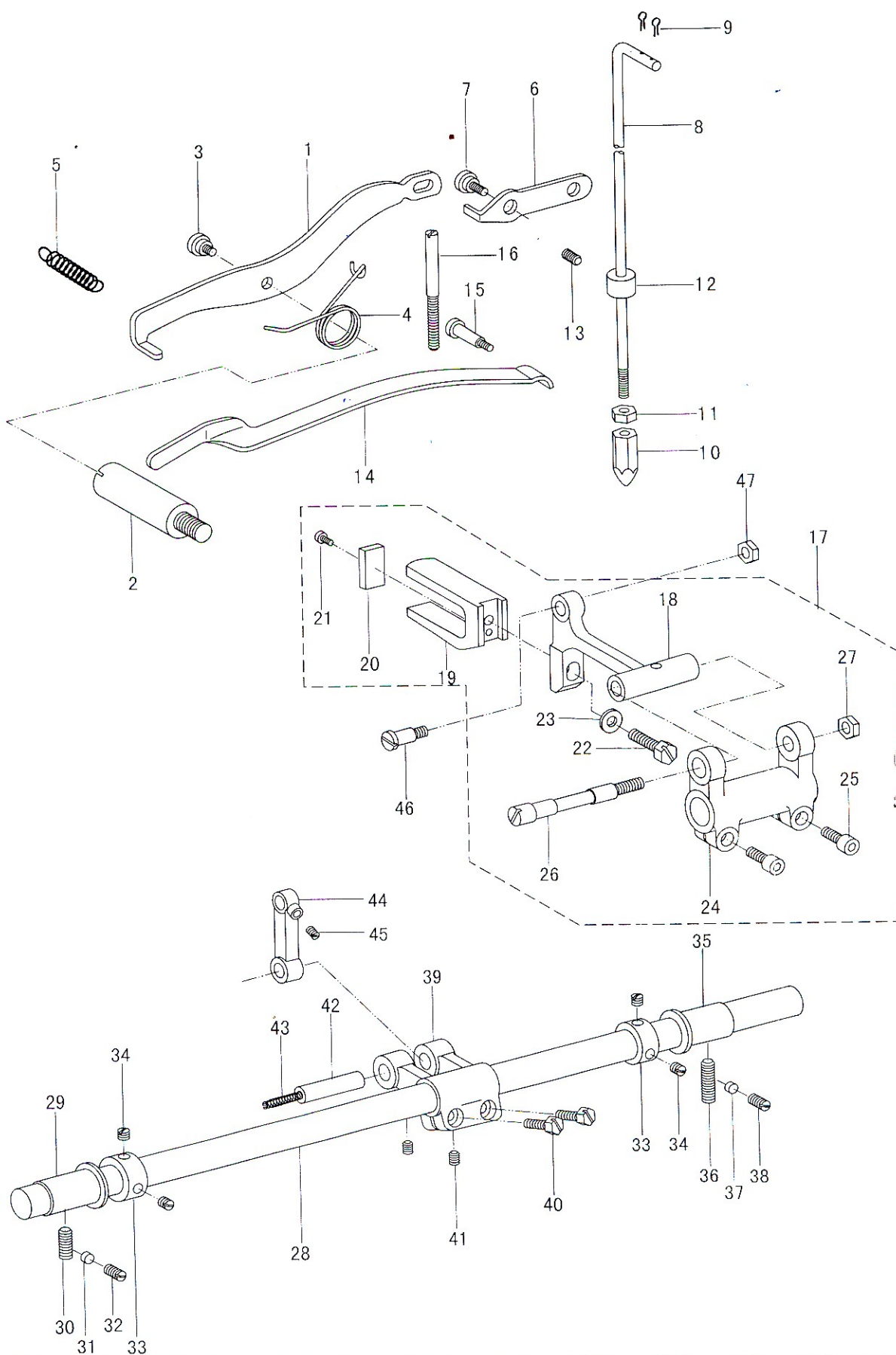
## 5. Needle bar rocking frame components



## 5. Needle bar rocking frame components

| No. | Parts No. | Name of parts                    | Qty.    |    |    |      | Remarks        |
|-----|-----------|----------------------------------|---------|----|----|------|----------------|
|     |           |                                  | GC24690 | CX | -1 | -1CX |                |
| 1   | 91WF5-001 | Needle bar rocking frame         | 1       | 1  | 1  | 1    |                |
| 2   | 22WF5-002 | Hinge stud                       | 1       | 1  | 1  | 1    |                |
| 3   | 7KT5-002  | Screw                            | 1       | 1  | 1  | 1    |                |
| 4   | 215120    | Slide block plate                | 1       | 1  | 1  | 1    |                |
| 5   | 6KT1-014  | Screw                            | 2       | 2  | 2  | 2    |                |
| 6   |           | Oil wick                         | 1       | 1  | 1  | 1    | φ5×15          |
| 7   | 88WF4-005 | Position bracket                 | 1       | 1  | 1  | 1    |                |
| 8   | 49WF2-012 | Screw                            | 2       | 2  | 2  | 2    |                |
| 9   |           | Oil wick                         | 1       | 1  | 1  | 1    | φ5 L=350mm     |
| 10  | 88WF2-002 | Needle bar                       | 1       | 1  |    |      |                |
|     | 49WF1-001 | Needle bar                       |         |    | 1  | 1    |                |
| 11  | 91WF1-001 | Needle bar connection stud       | 1       | 1  | 1  | 1    |                |
| 12  | 16WF1-009 | Screw                            | 1       | 1  | 1  | 1    |                |
| 13  |           | Oil wick                         | 1       | 1  | 1  | 1    | φ5 L=20mm      |
| 14  | 88WF2-001 | Needle clamp                     | 1       | 1  |    |      |                |
| 15  | 16WF1-007 | Screw                            | 2       | 2  |    |      |                |
|     | 22WF1-003 | Screw                            |         |    | 1  | 1    |                |
| 16  |           | Needle                           | 2       |    | 1  |      | DP×17 24#      |
|     |           | Needle                           |         | 2  |    | 1    | DP×17 25#      |
| 17  | 22WF5-004 | Rocking shaft                    | 1       | 1  | 1  | 1    |                |
| 18  |           | Slide block CPL                  | 1       | 1  | 1  | 1    |                |
| 19  | 22WF5-005 | Slide block                      | 1       | 1  | 1  | 1    |                |
| 20  | 22WF5-006 | Slide block stud                 | 1       | 1  | 1  | 1    |                |
| 21  | 22WF1-020 | Screw                            | 1       | 1  | 1  | 1    |                |
| 22  | 89WF3-004 | Rocking shaft crank link         | 1       | 1  | 1  | 1    |                |
| 23  | 88WF4-007 | Screw                            | 2       | 2  | 2  | 2    |                |
| 24  |           | Oil wick                         | 1       | 1  | 1  | 1    | φ5 L=8mm       |
| 25  | 89WF3-005 | Rocking shaft crank              | 1       | 1  | 1  | 1    |                |
| 26  | 7KT4-024  | Screw                            | 1       | 1  | 1  | 1    |                |
| 27  | 88WF4-009 | Screw                            | 1       | 1  | 1  | 1    |                |
| 28  | 661108    | Nut                              | 1       | 1  | 1  | 1    |                |
| 29  | 88WF4-010 | Rocking shaft crank (lower)      | 1       | 1  | 1  | 1    |                |
| 30  | 16WF3-030 | Screw                            | 1       | 1  | 1  | 1    |                |
| 31  | 88WF4-011 | Screw                            | 1       | 1  | 1  | 1    |                |
| 32  | 88WF4-013 | Rocking shaft crank (lower) pipe | 1       | 1  | 1  | 1    |                |
| 33  |           | Washer                           | 1       | 1  | 1  | 1    | GB848-85-8     |
| 34  | 88WF4-012 | Nut                              | 1       | 1  | 1  | 1    |                |
| 35  |           | Oil wick                         | 1       | 1  | 1  | 1    | φ5 L=40mm      |
| 36  |           | Clip                             | 1       | 1  | 1  | 1    | GB91-86 2.5×35 |
| 37  | 49WF1-002 | Needle bar thread guide          |         |    | 1  | 1    |                |

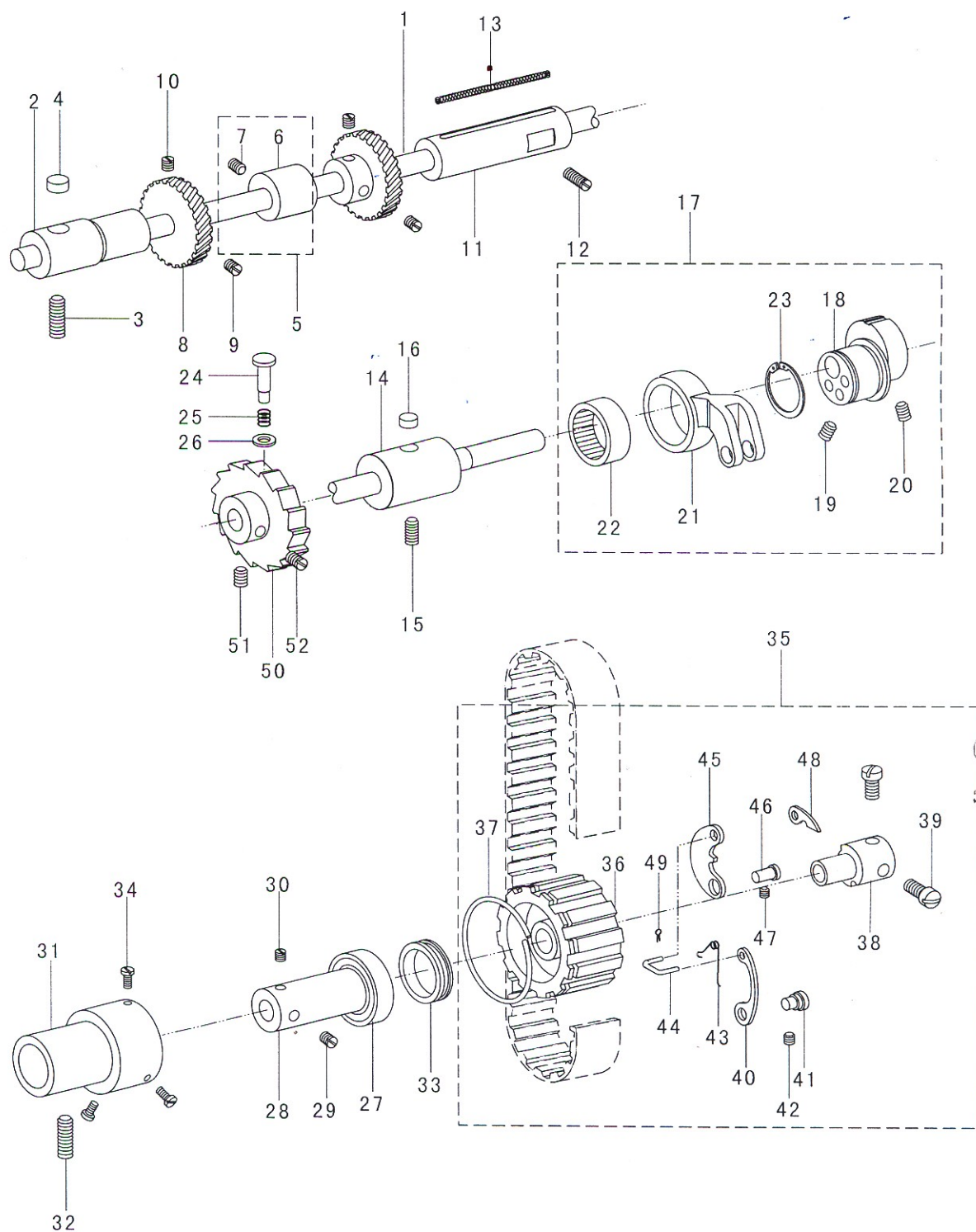
## 6. Knee lifting and feed shaft components



# 6. Knee lifting and feed shaft components

| No. | Parts No. | Name of parts               | Qty.    |    |    |      | Remarks        |
|-----|-----------|-----------------------------|---------|----|----|------|----------------|
|     |           |                             | GC24690 | CX | -1 | -1CX |                |
| 1   | 16WF4-006 | Knee lifter lifting lever   | 1       | 1  | 1  | 1    | GB91-86 1.6×10 |
| 2   | 88WF3-005 | Lifting lever bracket       | 1       | 1  | 1  | 1    |                |
| 3   | 88WF3-006 | Hinge screw                 | 1       | 1  | 1  | 1    |                |
| 4   | 16WF4-004 | Spring                      | 1       | 1  | 1  | 1    |                |
| 5   | 16WF4-003 | Screw                       | 1       | 1  | 1  | 1    |                |
| 6   | 88WF3-007 | Connecting lever            | 1       | 1  | 1  | 1    |                |
| 7   | 16WF3-059 | Hinge screw                 | 1       | 1  | 1  | 1    |                |
| 8   | 89WF4-001 | Knee lifter lifting rod     | 1       | 1  | 1  | 1    |                |
| 9   |           | Clip                        | 2       | 2  | 2  | 2    |                |
| 10  | 88WF3-009 | Lifting rod extension rod   | 1       | 1  | 1  | 1    |                |
| 11  | 7KT4-021  | Nut                         | 1       | 1  | 1  | 1    |                |
| 12  | 16WF4-011 | Lifting rod collar          | 1       | 1  | 1  | 1    |                |
| 13  | 49WF4-029 | Screw                       | 1       | 1  | 1  | 1    |                |
| 14  | 88WF3-010 | Presser bar spring          | 1       | 1  | 1  | 1    |                |
| 15  | 16WF4-008 | Screw                       | 1       | 1  | 1  | 1    |                |
| 16  | 88WF3-011 | Adjusting screw             | 1       | 1  | 1  | 1    |                |
| 17  |           | Feed base CPL               | 1       | 1  | 1  | 1    |                |
| 18  | 89WF3-002 | Feed base                   | 1       | 1  | 1  | 1    | GB97.1-85-6    |
| 19  | 16WF3-012 | Feed lifting eccentric fork | 1       | 1  | 1  | 1    |                |
| 20  | 16WF3-013 | Oil felt                    | 1       | 1  | 1  | 1    |                |
| 21  | 16WF3-014 | Screw                       | 1       | 1  | 1  | 1    |                |
| 22  | 16WF3-015 | Screw                       | 1       | 1  | 1  | 1    |                |
| 23  |           | Washer                      | 1       | 1  | 1  | 1    |                |
| 24  | 88WF5-004 | Feed base crank             | 1       | 1  | 1  | 1    |                |
| 25  | 80WF6-029 | Screw                       | 2       | 2  | 2  | 2    |                |
| 26  | 89WF3-003 | Feed base hinge screw       | 1       | 1  | 1  | 1    |                |
| 27  | 16WF3-017 | Nut                         | 1       | 1  | 1  | 1    |                |
| 28  | 88WF5-008 | Feed shaft                  | 1       | 1  | 1  | 1    |                |
| 29  | 16WF3-023 | Feed shaft bushing (front)  | 1       | 1  | 1  | 1    |                |
| 30  | 7KT5-002  | Screw                       | 1       | 1  | 1  | 1    |                |
| 31  | 16WF3-026 | Liner                       | 1       | 1  | 1  | 1    |                |
| 32  | 16WF3-025 | Screw                       | 1       | 1  | 1  | 1    |                |
| 33  | 16WF3-027 | Collar                      | 2       | 2  | 2  | 2    | φ3 L=28mm      |
| 34  | 89WF3-007 | Screw                       | 4       | 4  | 4  | 4    |                |
| 35  | 16WF3-066 | Feed shaft bushing (rear)   | 1       | 1  | 1  | 1    |                |
| 36  | 16WF1-004 | Screw                       | 1       | 1  | 1  | 1    |                |
| 37  | 16WF3-026 | Liner                       | 1       | 1  | 1  | 1    |                |
| 38  | 16WF3-025 | Screw                       | 1       | 1  | 1  | 1    |                |
| 39  | 16WF3-029 | Feed crank (rear)           | 1       | 1  | 1  | 1    |                |
| 40  | 16WF3-030 | Screw                       | 2       | 2  | 2  | 2    |                |
| 41  | 16WF3-032 | Screw                       | 2       | 2  | 2  | 2    |                |
| 42  | 16WF3-031 | Pin                         | 1       | 1  | 1  | 1    |                |
| 43  |           | Oil wick                    | 1       | 1  | 1  | 1    |                |
| 44  | 88WF5-011 | Feed link                   | 1       | 1  | 1  | 1    |                |
| 45  | 16WF3-032 | Screw                       | 1       | 1  | 1  | 1    |                |
| 46  | 16WF3-007 | Screw                       | 1       | 1  | 1  | 1    |                |
| 47  | 16WF3-008 | Nut                         | 1       | 1  | 1  | 1    |                |

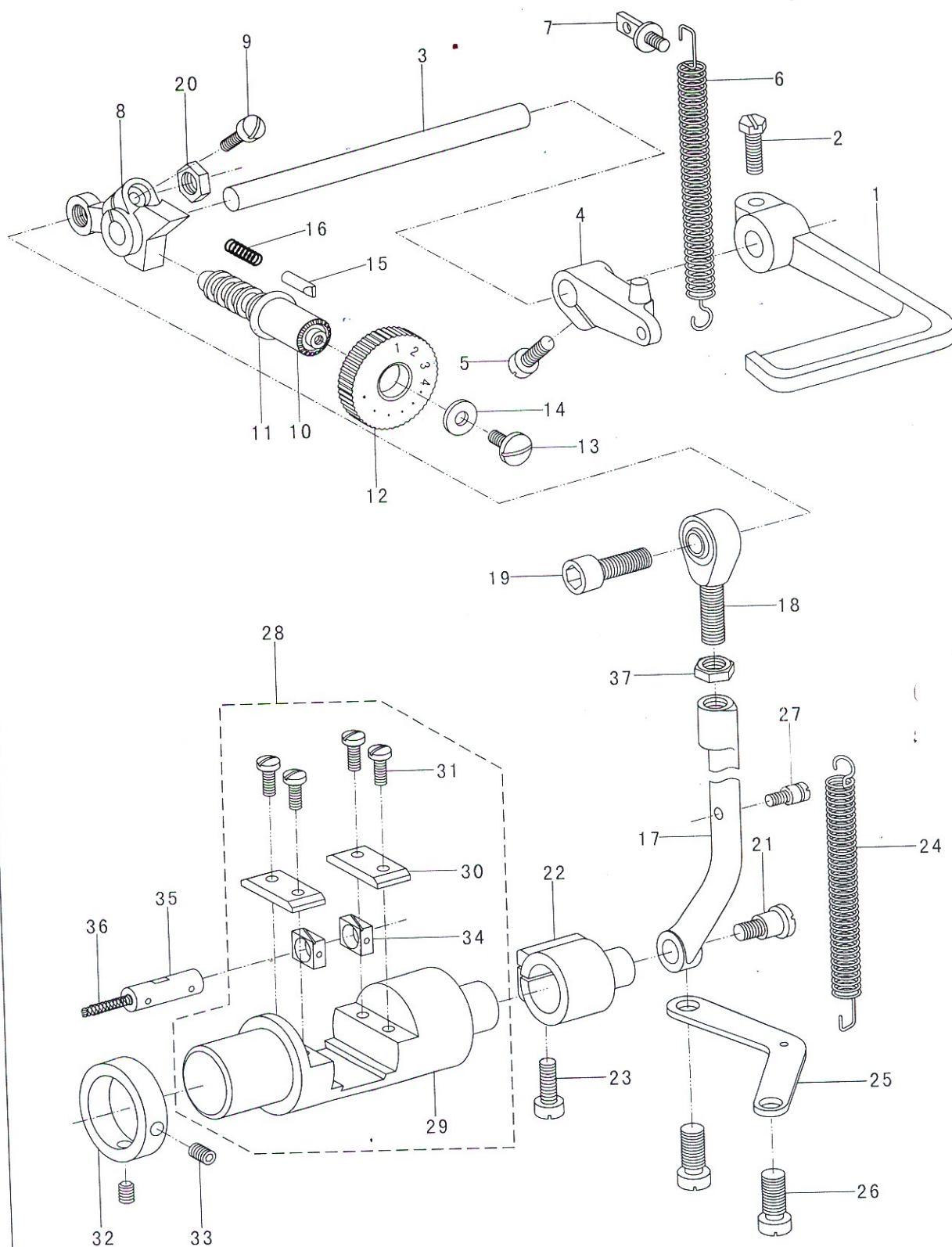
## 7. Lower shaft components



## 7. Lower shaft components

| No. | Parts No. | Name of parts               | Qty.    |    |    |      | Remarks                             |
|-----|-----------|-----------------------------|---------|----|----|------|-------------------------------------|
|     |           |                             | GC24690 | CX | -1 | -1CX |                                     |
| 1   | 89WF1-001 | Lower shaft                 | 1       | 1  | 1  | 1    | Φ9.5×5                              |
| 2   | 88WF2-010 | Lower shaft bushing(front)  | 1       | 1  |    |      |                                     |
|     | 16WF1-039 | Lower shaft bushing(front)  |         |    | 1  | 1    |                                     |
| 3   | 16WF1-004 | Screw                       | 1       | 1  | 1  | 1    |                                     |
| 4   |           | Oil felt                    | 1       | 1  | 1  | 1    |                                     |
| 5   |           | Feed lifting cam CPL        | 1       | 1  | 1  | 1    |                                     |
| 6   | 88WF5-003 | Feed lifting cam            | 1       | 1  | 1  | 1    |                                     |
| 7   | 16WF1-047 | Screw                       | 1       | 1  | 1  | 1    |                                     |
| 8   | 16WF1-052 | Hook driving gear           | 2       | 2  | 1  | 1    |                                     |
| 9   | 21WF1-033 | Screw                       | 2       | 2  | 1  | 1    |                                     |
| 10  | 16WF1-053 | Screw                       | 2       | 2  | 1  | 1    | Φ5×35                               |
| 11  | 89WF1-002 | Lower shaft bushing(middle) | 1       | 1  | 1  | 1    |                                     |
| 12  | 16WF1-051 | Screw                       | 1       | 1  | 1  | 1    |                                     |
| 13  |           | Oil wick                    | 1       | 1  | 1  | 1    |                                     |
| 14  | 88WF2-012 | Lower shaft bushing(rear)   | 1       | 1  | 1  | 1    |                                     |
| 15  | 7KT1-019  | Screw                       | 1       | 1  | 1  | 1    |                                     |
| 16  |           | Oil felt                    | 1       | 1  | 1  | 1    |                                     |
| 17  |           | Feed driving eccentric CPL  | 1       | 1  | 1  | 1    |                                     |
| 18  | 88WF5-006 | Feed driving eccentric      | 1       | 1  | 1  | 1    |                                     |
| 19  | 21WF1-020 | Screw                       | 1       | 1  | 1  | 1    | Φ10.5×5                             |
| 20  | 21WF1-005 | Screw                       | 1       | 1  | 1  | 1    |                                     |
| 21  | 88WF5-007 | Feed driving eccentric link | 1       | 1  | 1  | 1    |                                     |
| 22  |           | Needle bearing              | 1       | 1  | 1  | 1    |                                     |
| 23  |           | Retaining ring              | 1       | 1  | 1  | 1    |                                     |
| 24  | 88WF1-008 | Push button                 | 1       | 1  | 1  | 1    |                                     |
| 25  | 16WF3-046 | Spring                      | 1       | 1  | 1  | 1    |                                     |
| 26  | 16WF3-047 | Retaining ring              | 1       | 1  | 1  | 1    |                                     |
| 27  |           | Ball bearing                | 1       | 1  | 1  | 1    |                                     |
| 28  | 88WF2-013 | Ball bearing collar         | 1       | 1  | 1  | 1    | 27941/30K 30×37×12<br>GB894.1-86-30 |
| 29  | 16WF1-047 | Screw                       | 1       | 1  | 1  | 1    |                                     |
| 30  | 16WF1-028 | Screw                       | 1       | 1  | 1  | 1    |                                     |
| 31  | 16WF1-045 | Lower shaft bushing (rear)  | 1       | 1  | 1  | 1    |                                     |
| 32  | 16WF1-051 | Screw                       | 1       | 1  | 1  | 1    |                                     |
| 33  | 16WF1-048 | Retaining washer            | 1       | 1  | 1  | 1    |                                     |
| 34  | 16WF1-049 | Screw                       | 3       | 3  | 3  | 3    |                                     |
| 35  |           | Safety clutch pulley CPL    | 1       | 1  | 1  | 1    |                                     |
| 36  | 22WF1-010 | Pulley                      | 1       | 1  | 1  | 1    |                                     |
| 37  | 16WF1-043 | Spring flange               | 1       | 1  | 1  | 1    | 202 15×35×11                        |
| 38  | 22WF1-011 | Safety clutch collar        | 1       | 1  | 1  | 1    |                                     |
| 39  | 22WF1-012 | Screw                       | 2       | 2  | 2  | 2    |                                     |
| 40  | 22WF1-013 | Spring lever                | 1       | 1  | 1  | 1    |                                     |
| 41  | 22WF1-015 | Hinge pin                   | 1       | 1  | 1  | 1    |                                     |
| 42  | 22WF1-020 | Screw                       | 1       | 1  | 1  | 1    |                                     |
| 43  | 22WF1-014 | Spring                      | 1       | 1  | 1  | 1    |                                     |
| 44  | 22WF1-017 | Link                        | 1       | 1  | 1  | 1    |                                     |
| 45  | 22WF1-018 | Safety clutch locking lever | 1       | 1  | 1  | 1    |                                     |
| 46  | 22WF1-019 | Hinge stud                  | 1       | 1  | 1  | 1    |                                     |
| 47  | 22WF1-020 | Screw                       | 1       | 1  | 1  | 1    | GB91-86 1.6×10                      |
| 48  | 22WF1-016 | Safety clutch ratchet       | 1       | 1  | 1  | 1    |                                     |
| 49  |           | Latch pin                   | 1       | 1  | 1  | 1    |                                     |
| 50  | 88WF2-014 | Ratchet wheel               | 1       | 1  | 1  | 1    |                                     |
| 51  | 16WF1-053 | Screw                       | 1       | 1  | 1  | 1    |                                     |
| 52  | 16WF1-054 | Screw                       | 1       | 1  | 1  | 1    |                                     |

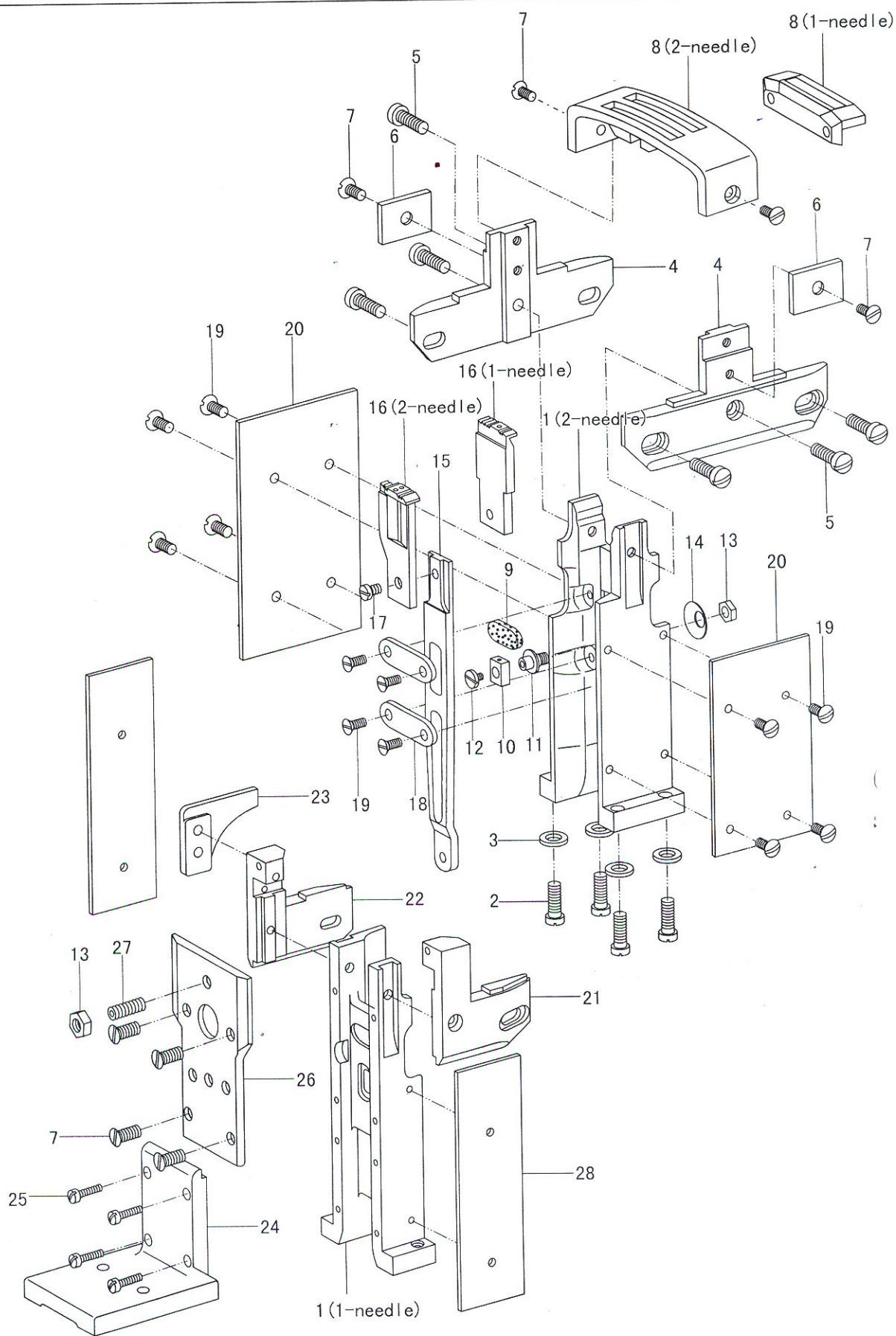
## 8. Stitch length adjustment components



## 8. Stitch length adjustment components

| No. | Parts No.  | Name of parts                 | Qty.    |    |    |      | Remarks              |
|-----|------------|-------------------------------|---------|----|----|------|----------------------|
|     |            |                               | 6024690 | CX | -1 | -1CX |                      |
| 1   | 88WF5-012  | Feed reverse lever            | 1       | 1  | 1  | 1    | 10. 6×2. 65 GB3452-1 |
| 2   | 104848     | Screw                         | 1       | 1  | 1  | 1    |                      |
| 3   | 88WF5-013  | Feed reverse shaft            | 1       | 1  | 1  | 1    |                      |
| 4   | 88WF5-014  | Feed reverse lever stopper    | 1       | 1  | 1  | 1    |                      |
| 5   | 16WF3-061  | Screw                         | 1       | 1  | 1  | 1    |                      |
| 6   | 88WF5-015  | Spring                        | 1       | 1  | 1  | 1    |                      |
| 7   | 88WF5-016  | Spring hook                   | 1       | 1  | 1  | 1    |                      |
| 8   | 88WF5-017  | Feed regulator                | 1       | 1  | 1  | 1    |                      |
| 9   | 1WF4-018   | Screw                         | 1       | 1  | 1  | 1    |                      |
| 10  | 88WF5-018  | Feed regulating stud          | 1       | 1  | 1  | 1    |                      |
| 11  |            | O-ring                        | 1       | 1  | 1  | 1    |                      |
| 12  | 037499     | Stitch dial                   | 1       | 1  | 1  | 1    |                      |
| 13  | 88WF5-019  | Screw                         | 1       | 1  | 1  | 1    |                      |
| 14  | 36T5-007D4 | Washer                        | 1       | 1  | 1  | 1    |                      |
| 15  | 88WF5-020  | Lock pin                      | 1       | 1  | 1  | 1    |                      |
| 16  | 21WF3-046  | Spring                        | 1       | 1  | 1  | 1    |                      |
| 17  | 89WF3-006  | Feed regulating rod           | 1       | 1  | 1  | 1    | SABJK6S              |
| 18  |            | Ball joint                    | 1       | 1  | 1  | 1    |                      |
| 19  | 7KT3-005   | Screw                         | 1       | 1  | 1  | 1    |                      |
| 20  | 72WF2-018  | Nut                           | 1       | 1  | 1  | 1    |                      |
| 21  | 88WF5-022  | Screw                         | 1       | 1  | 1  | 1    |                      |
| 22  | 88WF5-023  | Feed rock shaft driving crank | 1       | 1  | 1  | 1    |                      |
| 23  | 16WF3-061  | Screw                         | 1       | 1  | 1  | 1    |                      |
| 24  | 88WF5-024  | Spring                        | 1       | 1  | 1  | 1    |                      |
| 25  | 88WF5-025  | Spring bracket                | 1       | 1  | 1  | 1    |                      |
| 26  | 7KT2-010   | Screw                         | 2       | 2  | 2  | 2    |                      |
| 27  | 88WF5-026  | Spring hook                   | 1       | 1  | 1  | 1    | φ 3×26               |
| 28  |            | Stitch regulating crank CPL   | 1       | 1  | 1  | 1    |                      |
| 29  | 88WF5-027  | Stitch regulating crank       | 1       | 1  | 1  | 1    |                      |
| 30  | 88WF5-028  | Slide block guide             | 2       | 2  | 2  | 2    |                      |
| 31  | 13WF2-047  | Screw                         | 4       | 4  | 4  | 4    |                      |
| 32  | 88WF5-029  | Collar                        | 1       | 1  | 1  | 1    |                      |
| 33  | 80WF6-011  | Screw                         | 2       | 2  | 2  | 2    |                      |
| 34  | 88WF5-030  | Slide block                   | 2       | 2  | 2  | 2    |                      |
| 35  | 88WF5-031  | Slide block stud              | 1       | 1  | 1  | 1    |                      |
| 36  |            | Oil wick                      | 1       | 1  | 1  | 1    |                      |
| 37  | 72WF2-018  | Nut                           | 1       | 1  | 1  | 1    |                      |

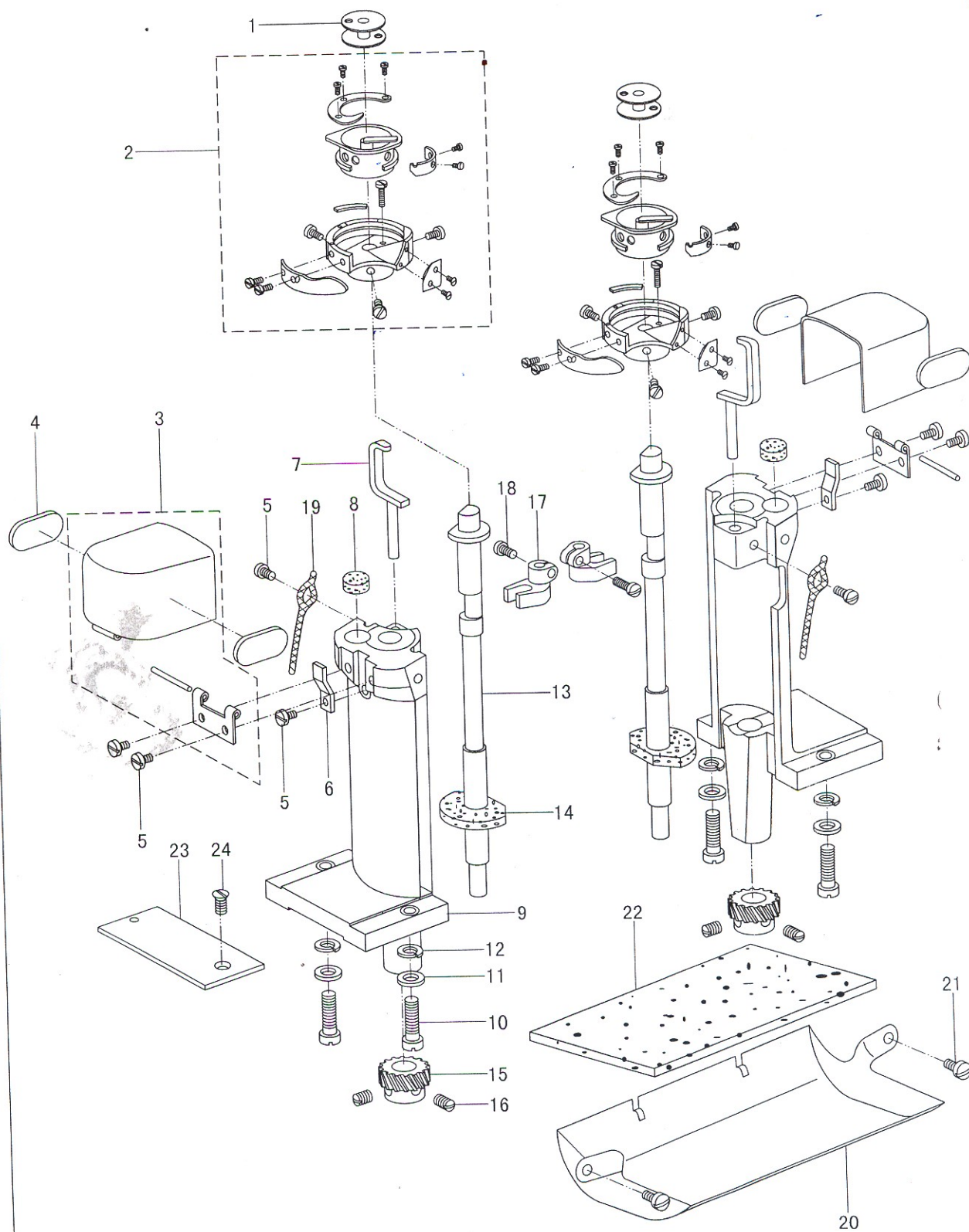
## 9. Hook and post bed components I



## 9. Hook and post bed components I

| No. | Parts No.  | Name of parts               | Qty.    |    |    |      | Remarks |
|-----|------------|-----------------------------|---------|----|----|------|---------|
|     |            |                             | GC24690 | CX | -1 | -1CX |         |
| 1   | 89WF2-019  | Post bed                    | 1       | 1  |    |      |         |
|     | 113WF2-001 | Post bed                    |         |    | 1  | 1    |         |
| 2   | 16WF2-041  | Screw                       | 4       | 4  | 2  | 2    |         |
| 3   | 16WF2-032  | Washer                      | 4       | 4  | 2  | 2    |         |
| 4   | 89WF2-024  | Needle plate support        | 2       | 2  |    |      |         |
| 5   | 21WF1-062  | Screw                       | 6       | 6  |    |      |         |
| 6   | 89WF2-023  | Needle plate sub-cover      | 2       | 2  |    |      |         |
| 7   | 13WF2-010  | Screw                       | 4       | 4  |    |      |         |
| 8   | 89WF2-022  | Needle plate                | 1       |    |    |      |         |
|     | 121WF-002  | Needle plate                |         | 1  |    |      |         |
|     | 113WF2-005 | Needle plate                |         |    | 1  |      |         |
|     | 120WF-002  | Needle plate                |         |    |    | 1    |         |
| 9   | 89WF2-020  | Oil felt                    | 2       | 2  | 1  | 1    |         |
| 10  | 16WF3-003  | Slide block                 | 1       | 1  | 1  | 1    |         |
| 11  | 16WF3-004  | Stud                        | 1       | 1  | 1  | 1    |         |
| 12  | 16WF3-005  | Screw                       | 1       | 1  | 1  | 1    |         |
| 13  | 16WF3-006  | Nut                         | 1       | 1  | 2  | 2    |         |
| 14  | 16WF2-023  | Washer                      | 1       | 1  | 1  | 1    |         |
| 15  | 16WF3-002  | Feed plate                  | 1       | 1  | 1  | 1    |         |
| 16  | 89WF3-001  | Feed dog                    | 1       |    |    |      |         |
|     | 121WF-003  | Feed dog                    |         | 1  |    |      |         |
|     | 113WF3-001 | Feed dog                    |         |    | 1  |      |         |
|     | 120WF-003  | Feed dog                    |         |    |    | 1    |         |
| 17  | 16WF2-020  | Screw                       | 1       | 1  | 1  | 1    |         |
| 18  | 89WF2-021  | Feed plate support          | 2       | 2  |    |      |         |
| 19  | 13WF2-010  | Screw                       | 12      | 12 | 8  | 8    |         |
| 20  | 89WF2-028  | Post bed cover              | 2       | 2  |    |      |         |
| 21  | 113WF2-002 | Needle plate support(front) |         |    | 1  | 1    |         |
| 22  | 113WF2-003 | Needle plate support(rear)  |         |    | 1  | 1    |         |
| 23  | 113WF2-004 | Hook cover support          |         |    | 1  | 1    |         |
| 24  | 16WF2-029  | Post bed support            |         |    | 1  | 1    |         |
| 25  | 16WF2-033  | Screw                       |         |    | 4  | 4    |         |
| 26  | 113WF2-007 | Post bed cover (L)          |         |    | 1  | 1    |         |
| 27  | 22WF1-020  | Screw                       |         |    | 1  | 1    |         |
| 28  | 113WF2-006 | Post bed cover (fornt/rear) |         |    | 2  | 2    |         |

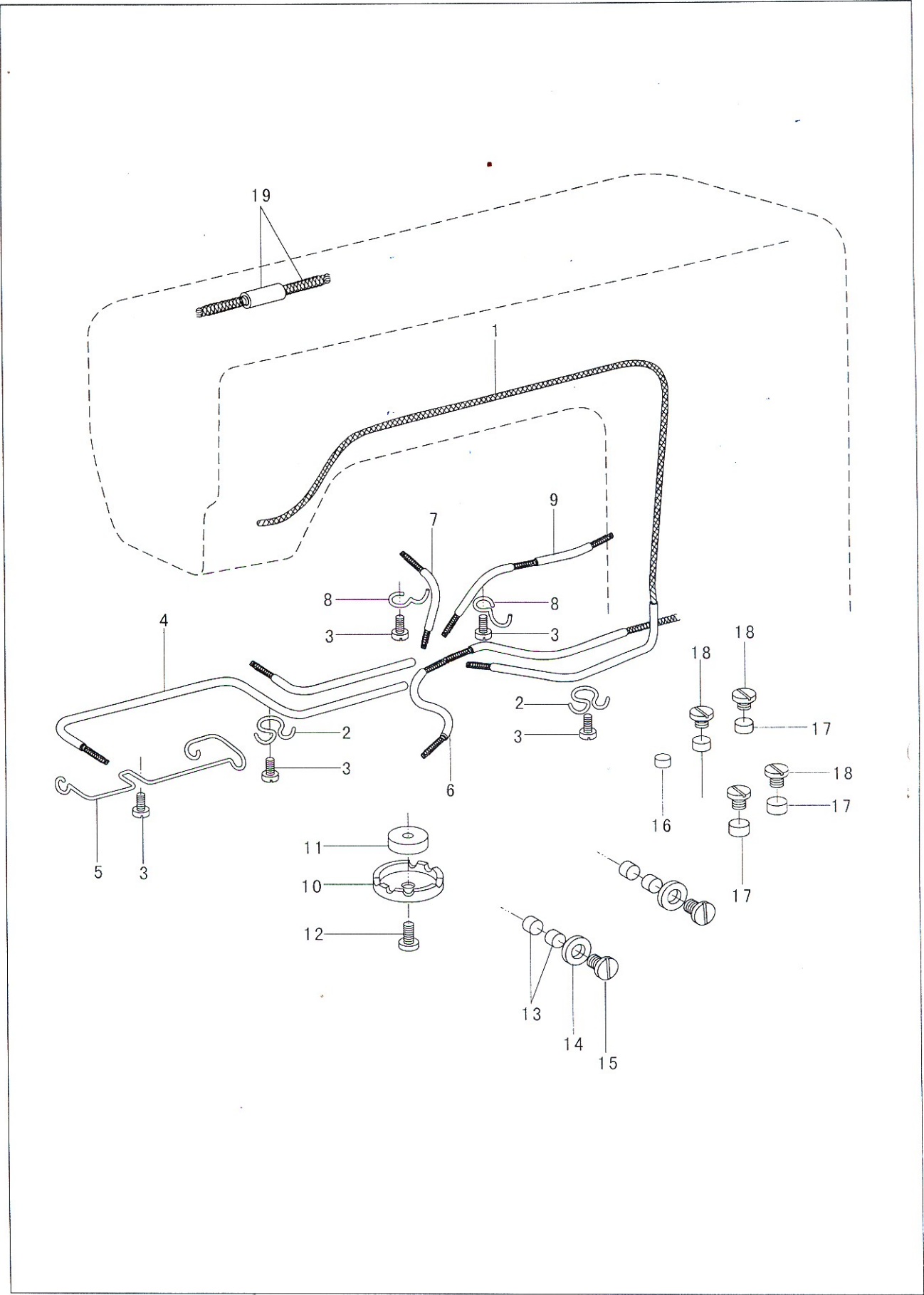
## 10. Hook and post bed components II



## 10. Hook and post bed components II

| No. | Parts No. | Name of parts | Qty.    |    |    |      | Remarks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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|     |           |               | 6C24690 | CX | -1 | -1CX |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| 1   | 215044    | Bobbin        | 2       | 2  | 1  | 1    | Φ 12×9<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br>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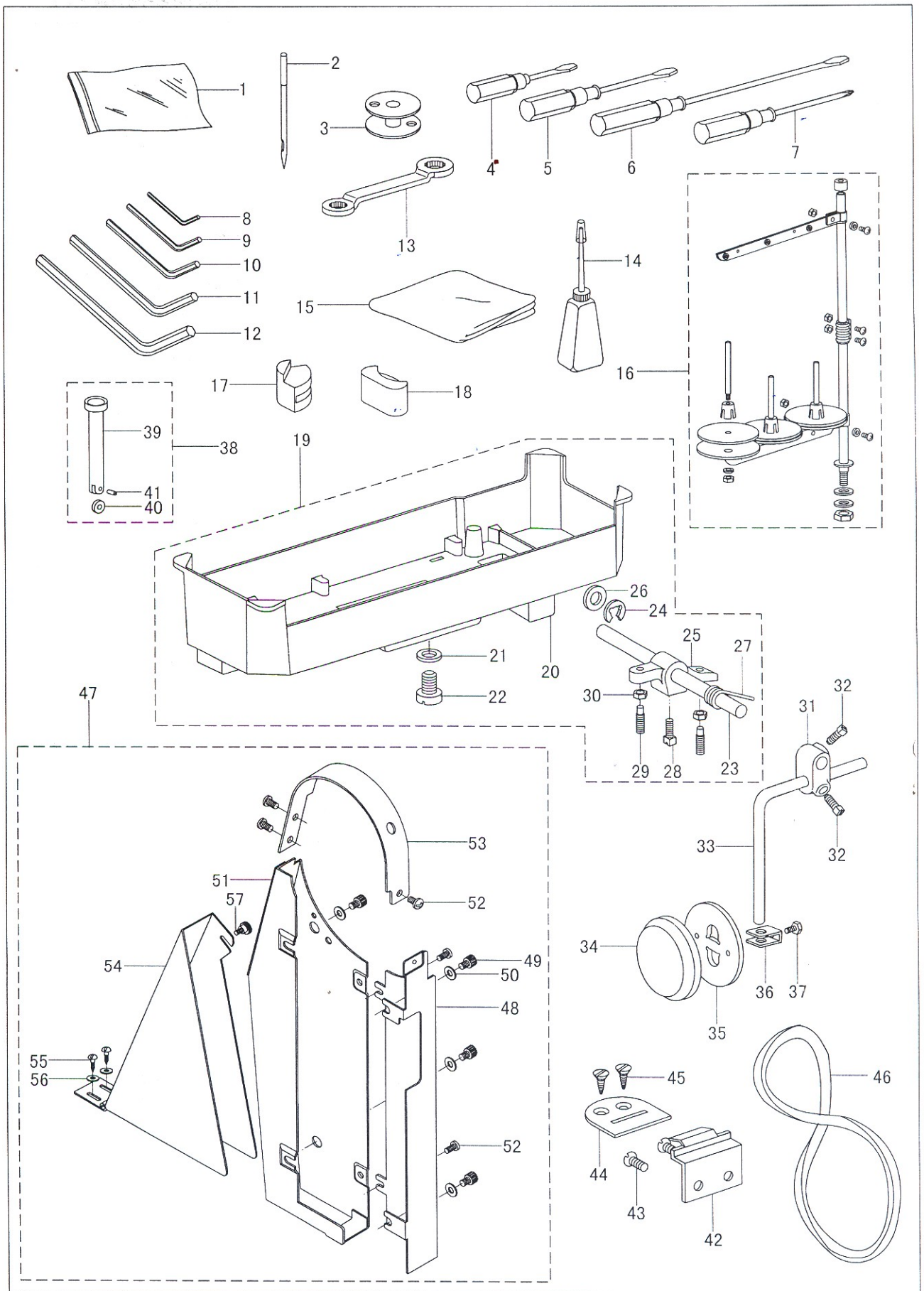
11. Lubrication components



# 11. Lubrication components

| No. | Parts No. | Name of parts         | Qty.   |    |    |      | Remarks                                                     |
|-----|-----------|-----------------------|--------|----|----|------|-------------------------------------------------------------|
|     |           |                       | GC2490 | CX | -1 | -1CX |                                                             |
| 1   | 88WF6-001 | Oil wick& oil pipe    | 1      | 1  | 1  | 1    | Wick $\phi 3 \times 800$ mm pipe $\phi 5 \times 490$ mm     |
| 2   |           | Clamp                 | 2      | 2  | 2  | 2    |                                                             |
| 3   |           | Screw                 | 5      | 5  | 5  | 5    |                                                             |
| 4   | 89WF6-001 | Oil wick& oil pipe    | 1      | 1  | 1  | 1    | Wick $\phi 3 \times 550$ mm pipe $\phi 5 \times 100/330$ mm |
| 5   |           | Clamp                 | 1      | 1  | 1  | 1    |                                                             |
| 6   |           | Oil wick& oil pipe    | 1      | 1  | 1  | 1    | Wick $\phi 3 \times 300$ mm pipe $\phi 5 \times 60/150$ mm  |
| 7   | 88WF6-003 | Oil wick& oil pipe    | 1      | 1  | 1  | 1    | Wick $\phi 3 \times 150$ mm pipe $\phi 5 \times 100$ mm     |
| 8   |           | Clamp                 | 2      | 2  | 2  | 2    |                                                             |
| 9   |           | Oil wick& oil pipe    | 1      | 1  | 1  | 1    | Wick $\phi 3 \times 180$ mm pipe $\phi 5 \times 50/60$ mm   |
| 10  | 88WF6-004 | Oil tube              | 1      | 1  | 1  | 1    |                                                             |
| 11  |           | Oil felt              | 1      | 1  | 1  | 1    | $\phi 6.5 \times \phi 36$ mm H=5mm                          |
| 12  |           | Screw                 | 1      | 1  | 1  | 1    |                                                             |
| 13  | 88WF6-006 | Oil felt              | 4      | 4  | 4  | 4    | $\phi 10 \times 5$ mm                                       |
| 14  |           | Seal                  | 2      | 2  | 2  | 2    |                                                             |
| 15  |           | Screw                 | 2      | 2  | 2  | 2    |                                                             |
| 16  | 88WF6-008 | Oil felt              | 1      | 1  | 1  | 1    | $\phi 9 \times 5$ mm                                        |
| 17  |           | Oil felt              | 4      | 4  | 4  | 4    | $\phi 10 \times 5$ mm                                       |
| 18  |           | Screw                 | 4      | 4  | 4  | 4    |                                                             |
| 19  | 88WF6-009 | Oil wick and oil pipe | 1      | 1  | 1  | 1    | Pipe $\phi 5 \times 60/150$ mm                              |

## 12. Accessories



## 12. Accessories

| No. | Parts No.   | Name of parts               | Qty.    |    |    |      | Remarks         |
|-----|-------------|-----------------------------|---------|----|----|------|-----------------|
|     |             |                             | 0024690 | CX | -1 | -1CX |                 |
| 1   | 33TF-010    | Accessories pack            | 1       | 1  | 1  | 1    |                 |
| 2   |             | Needle                      | 6       |    | 3  |      | DP×17 24#       |
|     |             | Needle                      |         | 6  |    | 3    | DP×17 25#       |
| 3   | 215044      | Bobbin                      | 6       | 6  | 3  | 3    |                 |
| 4   | 33TF-014    | Screwdriver (small)         | 1       | 1  | 1  | 1    |                 |
| 5   | 33TF-013    | Screwdriver (middle)        | 1       | 1  | 1  | 1    |                 |
| 6   | 33TF-012    | Screwdriver (big)           | 1       | 1  | 1  | 1    |                 |
| 7   |             | Screwdriver                 | 1       | 1  | 1  | 1    |                 |
| 8   |             | Wrench                      | 1       | 1  | 1  | 1    | 1.6mm           |
| 9   | 1F-010      | Wrench                      | 1       | 1  | 1  | 1    | 2.5mm           |
| 10  | 1F-011      | Wrench                      | 1       | 1  | 1  | 1    | 3mm             |
| 11  | 13F-010     | Wrench                      | 1       | 1  | 1  | 1    | 4mm             |
| 12  | 13F-011     | Wrench                      | 1       | 1  | 1  | 1    | 5mm             |
| 13  | 16WF5-004   | Double head wrench          | 1       | 1  | 1  | 1    |                 |
| 14  | 33TF-011    | Oil pot                     | 1       | 1  | 1  | 1    |                 |
| 15  | 42F-001     | Machine head cover          | 1       | 1  | 1  | 1    |                 |
| 16  | 89F-001     | Thread stand                | 1       | 1  |    |      |                 |
|     | 53F-001     | Thread stand                |         |    | 1  | 1    |                 |
| 17  | 89WF7-002   | Rubber cushion (small)      | 2       | 2  | 2  | 2    |                 |
| 18  | 89WF7-003   | Rubber cushion (big)        | 2       | 2  | 2  | 2    |                 |
| 19  |             | Oil pan CPL                 | 1       | 1  | 1  | 1    |                 |
| 20  | 89WF7-004   | Oil pan                     | 1       | 1  | 1  | 1    |                 |
| 21  | 89WF7-005   | O-ring                      | 1       | 1  | 1  | 1    |                 |
| 22  | 22T9-001A2  | Drain screw                 | 1       | 1  | 1  | 1    |                 |
| 23  | 89WF7-006   | Knee lifter rock shaft      | 1       | 1  | 1  | 1    |                 |
| 24  |             | Retaining ring              | 1       | 1  | 1  | 1    | GB896-86-9      |
| 25  | 89WF7-007   | Knee lifter lifting crank   | 1       | 1  | 1  | 1    |                 |
| 26  | 89WF7-008   | Washer                      | 1       | 1  | 1  | 1    |                 |
| 27  | 89WF7-009   | Spring                      | 1       | 1  | 1  | 1    |                 |
| 28  | 89WF7-010   | Screw                       | 1       | 1  | 1  | 1    |                 |
| 29  | 22WF3-003   | Screw                       | 2       | 2  | 2  | 2    |                 |
| 30  | 22T9-001A10 | Nut                         | 2       | 2  | 2  | 2    |                 |
| 31  | 22T9-003B3  | Knee lifter rock shaft hub  | 1       | 1  | 1  | 1    |                 |
| 32  | 22T9-003B4  | Screw                       | 2       | 2  | 2  | 2    |                 |
| 33  | 22T9-003B2  | Knee lifter rock lever      | 1       | 1  | 1  | 1    |                 |
| 34  | 22T9-003B8  | Knee lifter rocking pad     | 1       | 1  | 1  | 1    |                 |
| 35  | 22T9-003B5  | Knee lifter rocking plate   | 1       | 1  | 1  | 1    |                 |
| 36  | 22T9-003B6  | Joint                       | 1       | 1  | 1  | 1    |                 |
| 37  | 22T9-003B7  | Screw                       | 1       | 1  | 1  | 1    |                 |
| 38  | 89WF7-011   | Knee lifter lifting rod CPL | 1       | 1  | 1  | 1    |                 |
| 39  | 89WF7-011A  | Knee lifter lifting rod     | 1       | 1  | 1  | 1    |                 |
| 40  | 89WF7-011B  | Roller                      | 1       | 1  | 1  | 1    |                 |
| 41  | 80WF7-011C  | Screw stud                  | 1       | 1  | 1  | 1    |                 |
| 42  | 3KT2-006    | Machine hinge (2)           | 2       | 2  | 2  | 2    |                 |
| 43  | 3KT2-002    | Screw                       | 4       | 4  | 4  | 4    |                 |
| 44  | 3KT2-005    | Machine hinge (1)           | 2       | 2  | 2  | 2    |                 |
| 45  | 16F-002     | Nail                        | 4       | 4  | 4  | 4    |                 |
| 46  |             | V-belt                      | 1       | 1  | 1  | 1    | M55             |
| 47  | 89WF7-001   | Belt guard CPL              | 1       | 1  | 1  | 1    |                 |
| 48  | 89WF7-001A  | Belt guard (small)          | 1       | 1  | 1  | 1    |                 |
| 49  | 89WF7-001B  | Screw                       | 4       | 4  | 4  | 4    |                 |
| 50  |             | Washer                      | 4       | 4  | 4  | 4    | GB97.1-85-6     |
| 51  | 89WF7-001C  | Belt guard (big)            | 1       | 1  | 1  | 1    |                 |
| 52  |             | Screw                       | 5       | 5  | 5  | 5    | GB818-85-4×5    |
| 53  | 89WF7-001D  | Upper cover                 | 1       | 1  | 1  | 1    |                 |
| 54  | 89WF7-001E  | Back belt guard             | 1       | 1  | 1  | 1    |                 |
| 55  |             | Screw                       | 2       | 2  | 2  | 2    | GB950-86-3.5×16 |
| 56  |             | Washer                      | 2       | 2  | 2  | 2    | GB848-85-4      |
| 57  | 89WF7-001F  | Screw                       | 1       | 1  | 1  | 1    |                 |

# Table of gauge sets for GC24690/24690CX

| Gauge Size | Needle clamp | Walking foot |            | Presser foot |            | Needle plate |             | Feed dog    |             | Needle plate Support (Fronte & Rear) | Needle plate Sub-cover (Fronte & Rear) | Postbed cover (Front & Rear) | Bed Slide  |
|------------|--------------|--------------|------------|--------------|------------|--------------|-------------|-------------|-------------|--------------------------------------|----------------------------------------|------------------------------|------------|
|            |              | GC24690/     | GC24690CX  | GC24690      | GC24690CX  | GC24690      | GC24690CX   | GC24690     | GC24690CX   |                                      |                                        |                              |            |
| Inch       | mm           |              |            |              |            |              |             |             |             |                                      |                                        |                              |            |
| 1 / 8"     | 3.2          | 88WF4-001A   | 88WF2-001a | 88WF3-002A   | 88WF3-002A | 88WF2-022A1  | 88WF2-022A1 | 88WF3-001A1 | 88WF3-001A1 | 89WF2-024A                           | 89WF2-023A1                            | 89WF2-028A                   | 89WF2-029A |
| 5 / 32"    | 4            | 88WF4-002    | 88WF1-005  | 88WF4-003    | 88WF4-003  | 88WF2-022A2  | 88WF2-022A2 | 88WF3-001A2 | 88WF3-001A2 | 89WF2-024                            | 89WF2-023A2                            | 89WF2-028A                   | 89WF2-029A |
| 3 / 16"    | 4.8          | 88WF4-001B   | 88WF2-001B | 88WF3-002B   | 88WF3-002B | 88WF2-022A3  | 88WF2-022A3 | 88WF3-001A3 | 88WF3-001A3 | 89WF2-024                            | 89WF2-023A3                            | 89WF2-028B                   | 89WF2-029A |
| 7 / 32"    | 5.6          | 88WF4-001C   | 88WF2-001C | 88WF3-002C   | 88WF3-002C | 88WF2-022A4  | 88WF2-022A4 | 88WF3-001A4 | 88WF3-001A4 | 89WF2-024                            | 89WF2-023A4                            | 89WF2-028B                   | 89WF2-029A |
| 1 / 4"     | 6.4          | 88WF4-001    | 88WF2-001  | 88WF3-002    | 88WF3-002  | 88WF2-022B1  | 88WF2-022B1 | 88WF3-001B1 | 88WF3-001B1 | 89WF2-024                            | 89WF2-023A5                            | 89WF2-028B                   | 89WF2-029B |
| 5 / 16"    | 7.9          | 88WF4-001D   | 88WF2-001D | 88WF3-002D   | 88WF3-002D | 88WF2-022B2  | 88WF2-022B2 | 88WF3-001B2 | 88WF3-001B2 | 89WF2-024                            | 89WF2-023A6                            | 89WF2-028B                   | 89WF2-029B |
| 3 / 8"     | 9.5          | 88WF4-001E   | 88WF2-001E | 88WF3-002E   | 88WF3-002E | 88WF2-022    | 88WF2-022   | 88WF3-001   | 88WF3-001   | 89WF2-024                            | 89WF2-023                              | 89WF2-028                    | 89WF2-029B |
| 1 / 2"     | 12.7         | 88WF4-001G   | 88WF2-001G | 88WF3-002G   | 88WF3-002G | 88WF2-022C1  | 88WF2-022C1 | 88WF3-001C1 | 88WF3-001C1 | 89WF2-024B                           | 89WF2-023B1                            | 89WF2-028                    | 89WF2-029C |
| 5 / 8"     | 15.9         | 88WF4-001H   | 88WF2-001H | 88WF3-002H   | 88WF3-002H | 88WF2-022C2  | 88WF2-022C2 | 88WF3-001C2 | 88WF3-001C2 | 89WF2-024B                           | 89WF2-023B2                            | 89WF2-028C                   | 89WF2-029C |
| 3 / 4"     | 19           | 88WF4-001J   | 88WF2-001J | 88WF3-002J   | 88WF3-002J | 88WF2-022C3  | 88WF2-022C3 | 88WF3-001C3 | 88WF3-001C3 | 89WF2-024B                           | 89WF2-023B3                            | 89WF2-028C                   | 89WF2-029C |