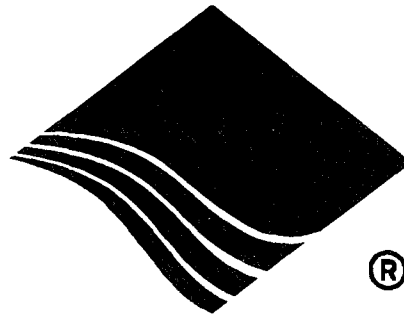


Purchasing Dept  
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**HIGHLEAD**

**GL13138-1**

**Industrial Blindstitch Machine**

**Instruction Manual**  
**Parts Catalog**

**SHANGHAI HUIGONG NO.3 SEWING MACHINE FACTORY**



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## 1. Part Name

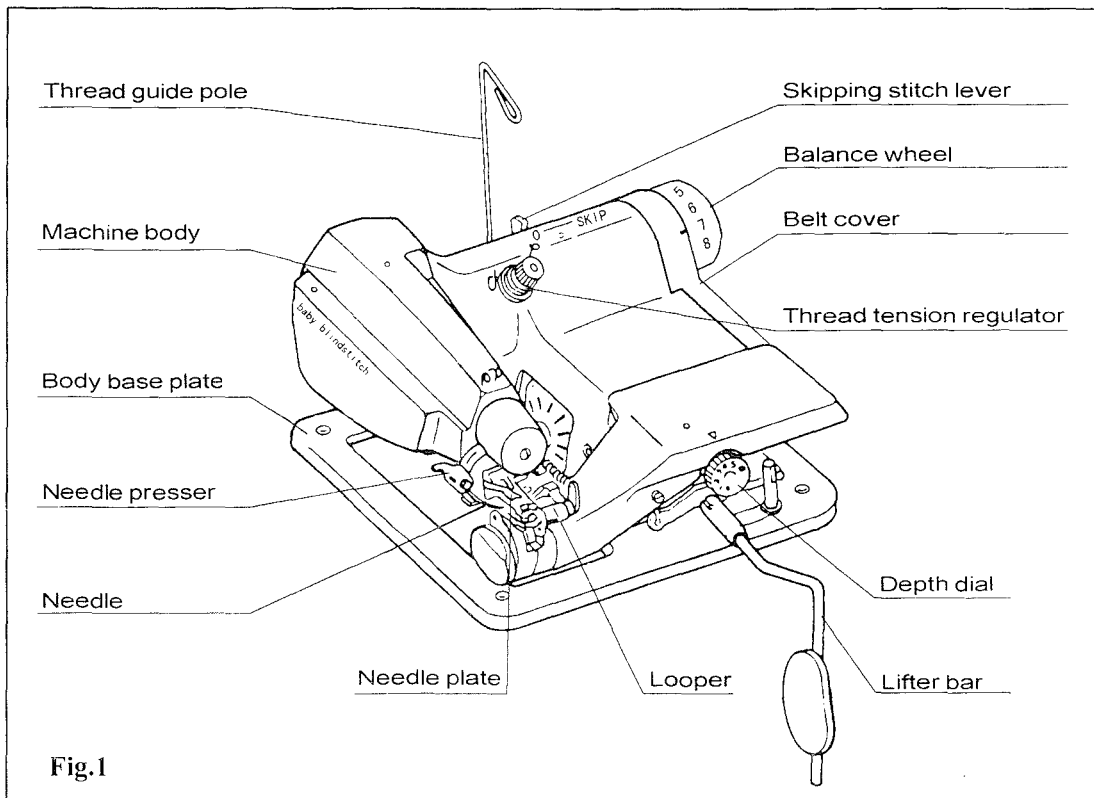


Fig.1

## 2. Safety Precautions

### 2.01 Precautions before starting operation

- 1) Verify the voltage and phase with those given on the machine nameplate.
- 2) Power must be turned off when the machine is not in use, or when the operator leaves the seat.

### 2.02 General Safety Tips

- 1) Don't put anything on the Motor and wire
- 2) Avoid using the machine at abnormally high temperatures (40°C or higher) or low temperatures (0°C or lower)
- 3) Terminal box and plunger is not allowed to touch water and tablet
- 4) When changing sewing tools (for example needle, knee lifter, auxiliary plate), when threading up, when leaving the work place as well as during maintenance work the machine should be unplugged or switched off at the mains
- 5) Avoid using the machine in dusty conditions
- 6) Avoid placing fingers, hairs, bars etc., near the balance wheel, needle and gears when the machine is in operation
- 7) Only the spare parts provided by us should be used during repairs. Don't use the damaged needle
- 8) Don't pull or press material excessive when sewing

### 3. Specification

Max. Speed	1200rpm
Stitch Length	3-8mm
Needle	LW×6T
Skip stitch	With skip (1:1,2:1)
Stitch spec.	Single thread. Blindstitch
Lubrication	Manual

### 4. Assembling

#### 4.01 Assembly of the Clamp Set, Lift bar, Motor (Fig.2)

##### 4.01.01 Assembly of the Clamp Set

Use the clamp set to fix the sewing machine to the table.

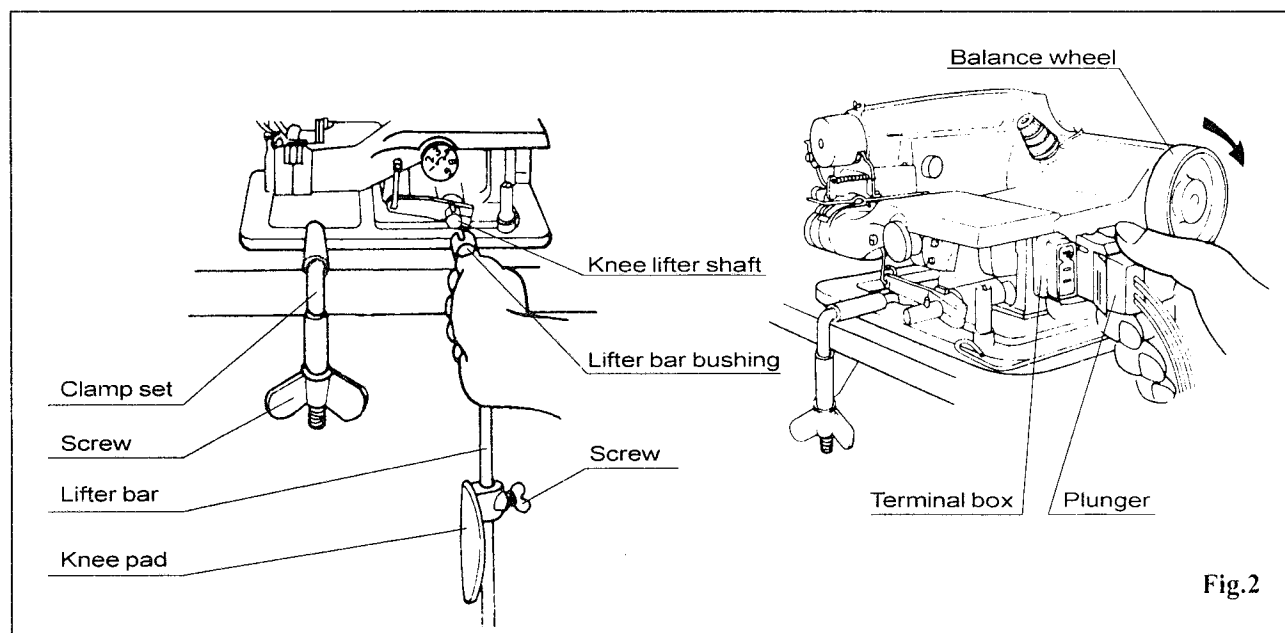
When lifter bar can operate easily, then tighten the screw.

##### 4.01.02 Assembly of the Lifter Bar

- 1) Set lifter bar bushing to knee lifter shaft
- 2) Move knee pad to suitable position, then tighten screw.

##### 4.01.03 Assembly of Motor

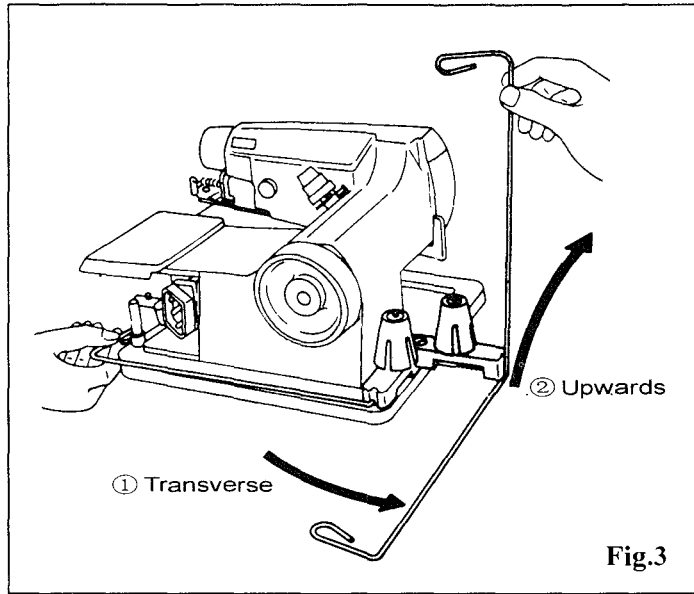
- 1) Insert plunger into terminal box
- 2) The balance wheel running counterclockwise when stepping on foot pedal.



## 4.02 Threading

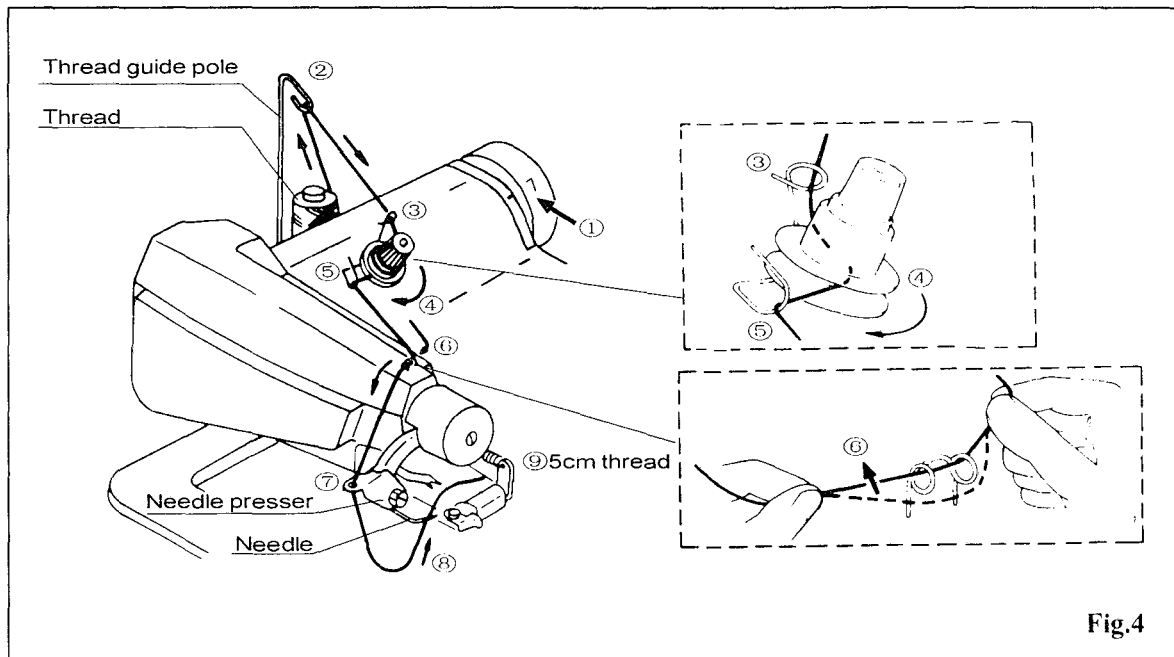
### 4.02.01 Thread Guide Pole (Fig.3)

Holding the thread guide pole, withdraw it transverse as fig.3 show, then upwards it



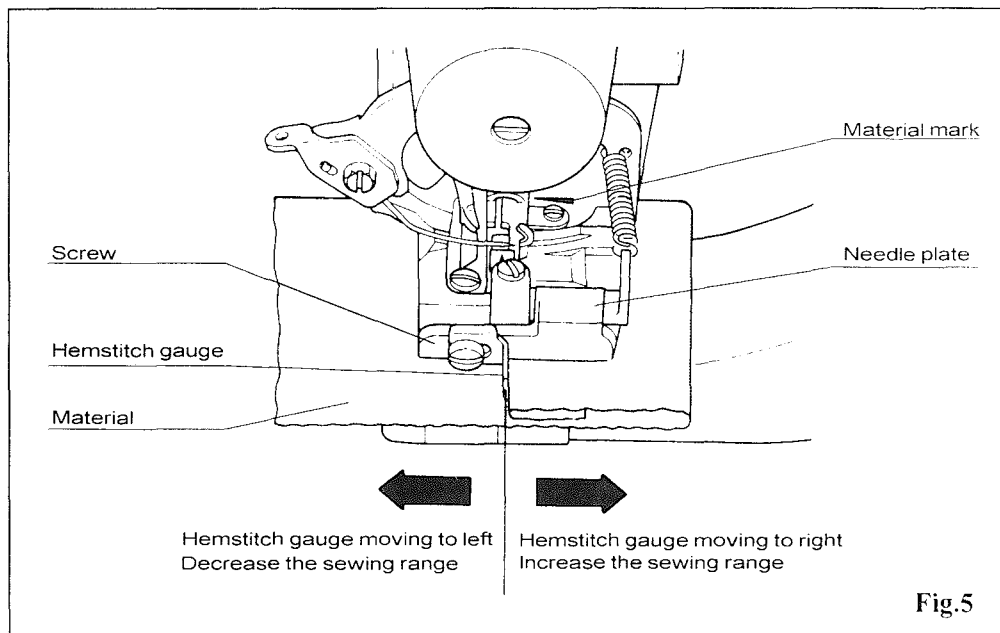
### 4.02.02 Threading (Fig.4)

- 1) Turn balance wheel and make "7" on balance wheel to be level with mark on belt cover.
- 2) Threading as shown in Fig. 4
- 3) Pull out thread about 5cm away from needle.



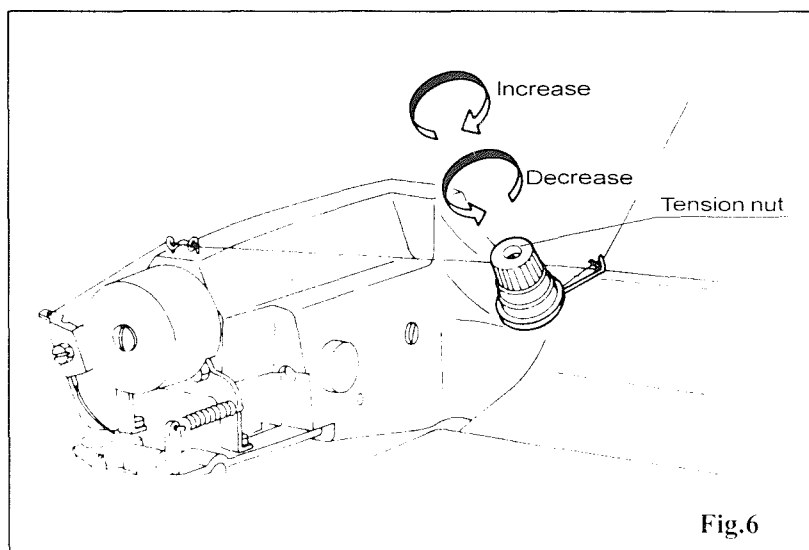
### 4.03 Regulating the Sewing Range (Fig.5)

- 1) Insert the material to right of the hemstitch gauge according to the material mark on the needle plate, start to sew.
- 2) Regulate the position of the Hemstitch gauge to regulate the sewing range.



### 4.04 Adjustment of Thread Tension (Fig.6)

Different kinds and weights of material and the various sizes of thread require respective thread tension. Turning the tension nut can regulate thread tension. Turn it right to increase the tension and turn it left to decrease the tension.

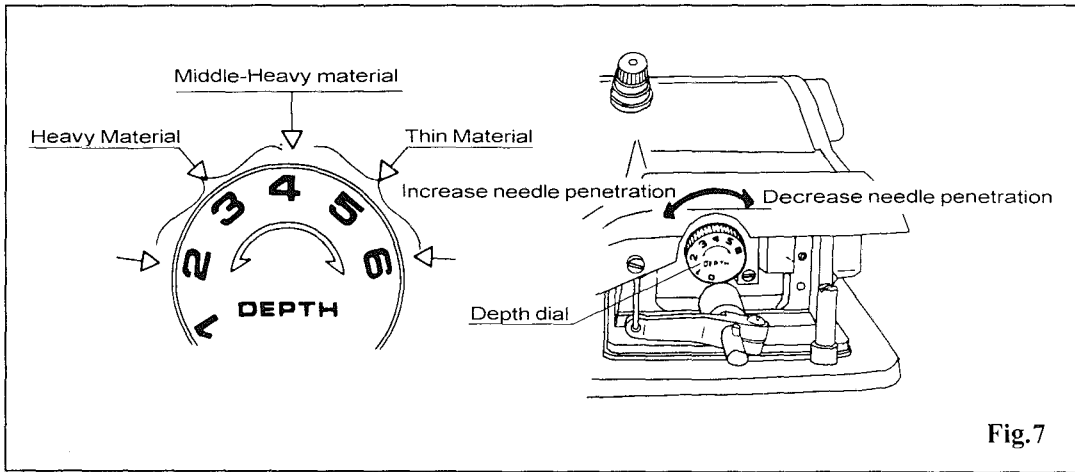




#### 4.05 Adjustment of Needle Penetration (Fig.7)

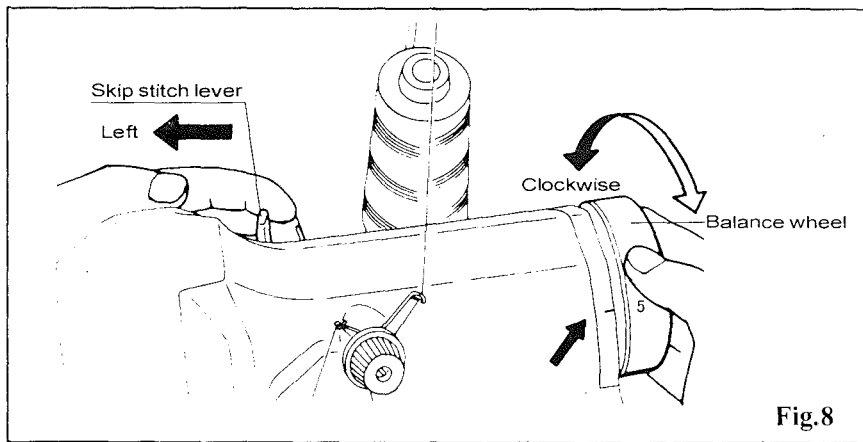
The depth of needle penetration into the cloth can be adjusted by turning the depth dial.

Turn the depth dial counterclockwise to increase needle penetration (for thin material). Turn depth dial clockwise to lessen the penetration (for heavy material). The greater the number directly in front on the depth dial, the deeper the penetration of the needle.



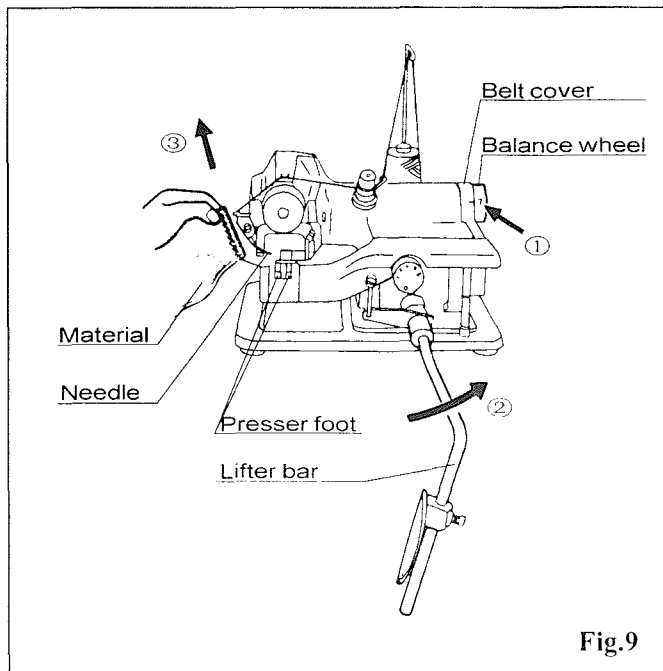
#### 4.06 Regulating Stitch Length (Fig.8)

- 1) Press the skip stitch lever
- 2) Turn balance wheel clockwise until to its dead point
- 3) Turn balance wheel counterclockwise to get need stitch length
- 4) Set the skip stitch lever free.



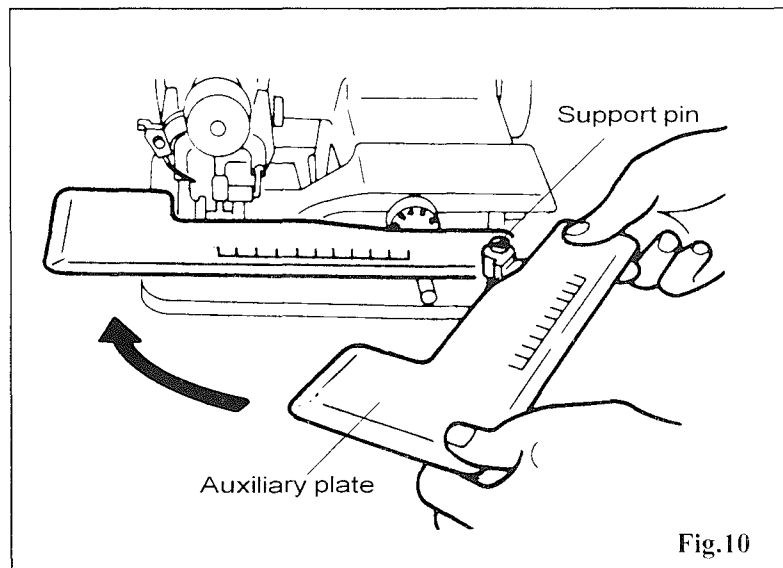
#### 4.07 Removal of the Material From the Machine and Break the Thread (Fig.9)

- 1) Turn balance wheel and make “7” on balance wheel to be level with mark on belt cover
- 2) Press the lift bar to right to put down the presser foot
- 3) Pull the material rearward out of the machine with a quick stroke. This will lock the last stitch and break the thread.



#### 4.08 Assembly of Auxiliary Plate (Fig.10)

- 1) Setting Auxiliary plate to support pin, rotate auxiliary plate as fig.10 show
- 2) Tighten screw.

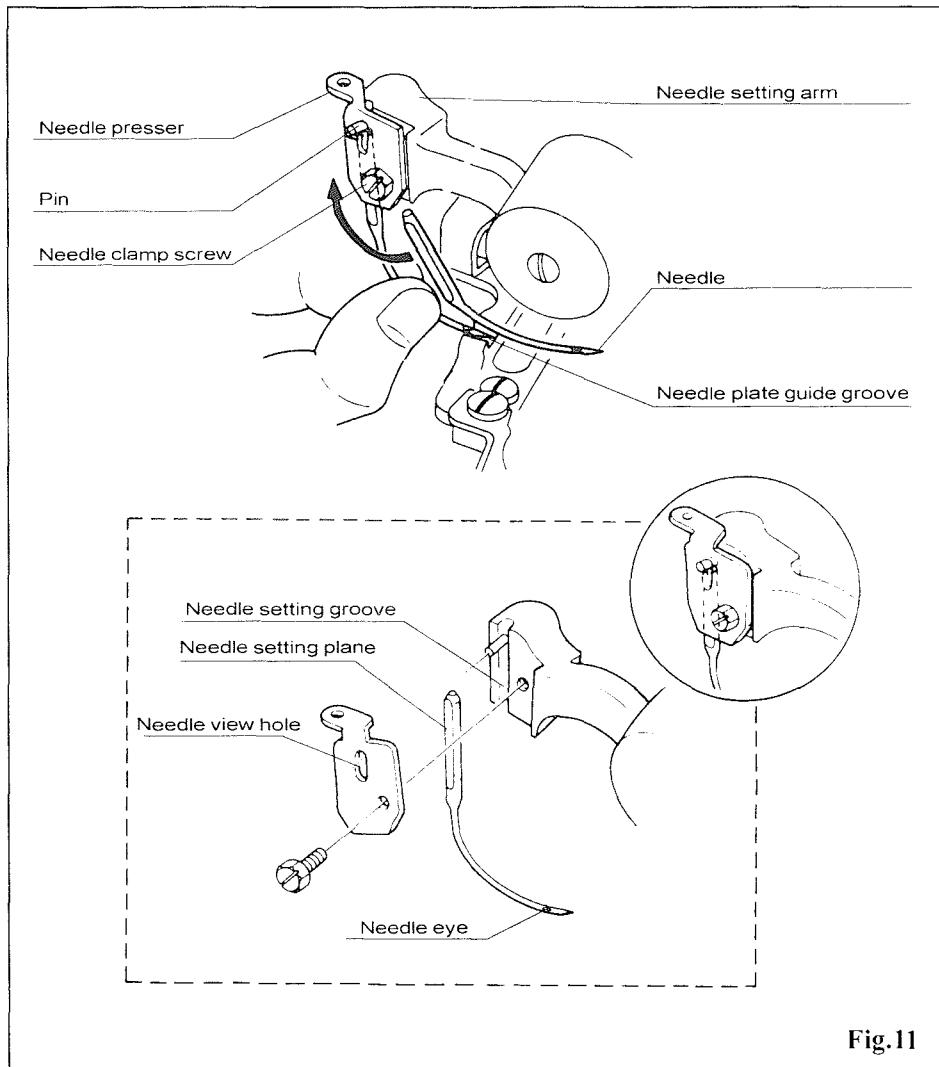


#### 4.09 Replacing the Needle (Fig.11)

Turn balance wheel (clockwise) until needle reaches to the end of its return stroke. Remove needle to be replaced by loosening needle clamp screw.

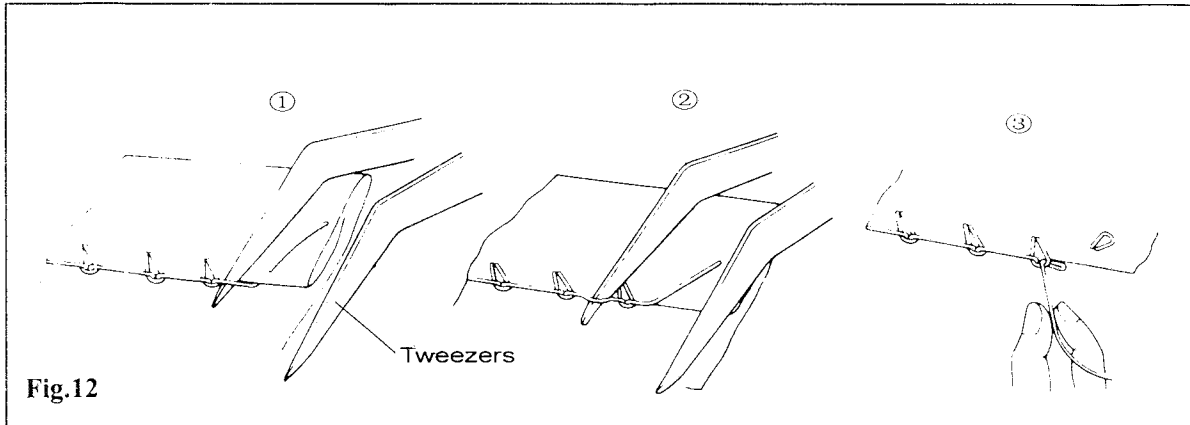
Insert new needle into its seat on needle setting arm pushing it as far to the left as it will go. Then tighten needle clamp screw.

Use needle LW×6T



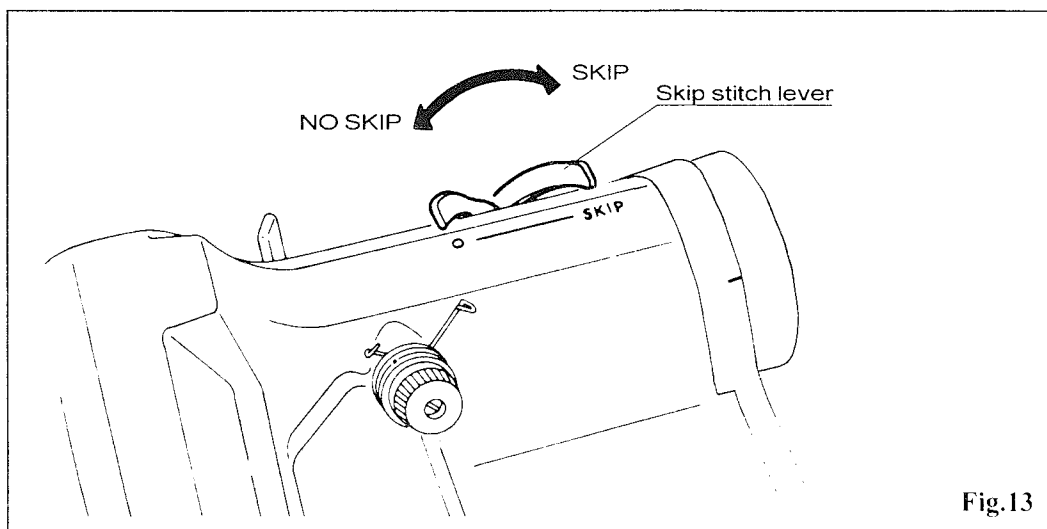
#### 4.10 Take Out Stitch (Fig.12)

- 1) Draw thrum from the end of sewing use tweezers
- 2) Pull out one thread ring
- 3) Take out stitch.



#### 4.11 Skip Stitch (Fig.13)

Push skip stitch lever to “SKIP” can obtain double needle penetration.

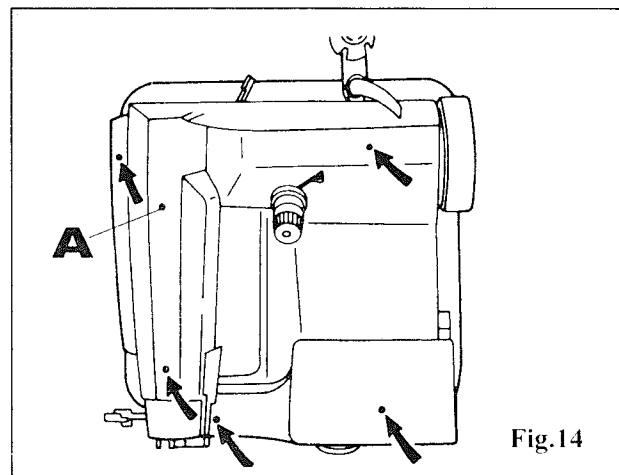


#### 4.12 Lubrication (Fig.14)

General oiling: Twice monthly

Arrow mark: 1-2 drops

Mark A: 5 drops



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## 5. Eventual Trouble Shooting

### 5.01 Sewing Machine doesn't work

- 1) Terminal box and plunger are not connect. (According to 4.01)
- 2) Too loose belt
- 3) Sewing machine does not lubrication. (According to 4.12)

### 5.02 No sewing

- 1) Incorrect threading. (According to 4.02)
- 2) Needle incorrectly inserted or damaged. (According to 4.09)

### 5.03 No break the thread

- 1) Incorrect threading. (According to 4.02)
- 2) Excessive thread tension. (According to 4.04)
- 3) Needle incorrectly inserted or damaged. (According to 4.09)
- 4) Incorrect thread size.

### 5.04 Stitch skipping

- 1) Needle incorrectly inserted or damaged. (According to 4.09)
- 2) Unsited needle penetration and material. (According to 4.05)
- 3) Incorrect threading. (According to 4.02)
- 4) Excessively elastic material or excessively elastic thread. (According to 4.01)

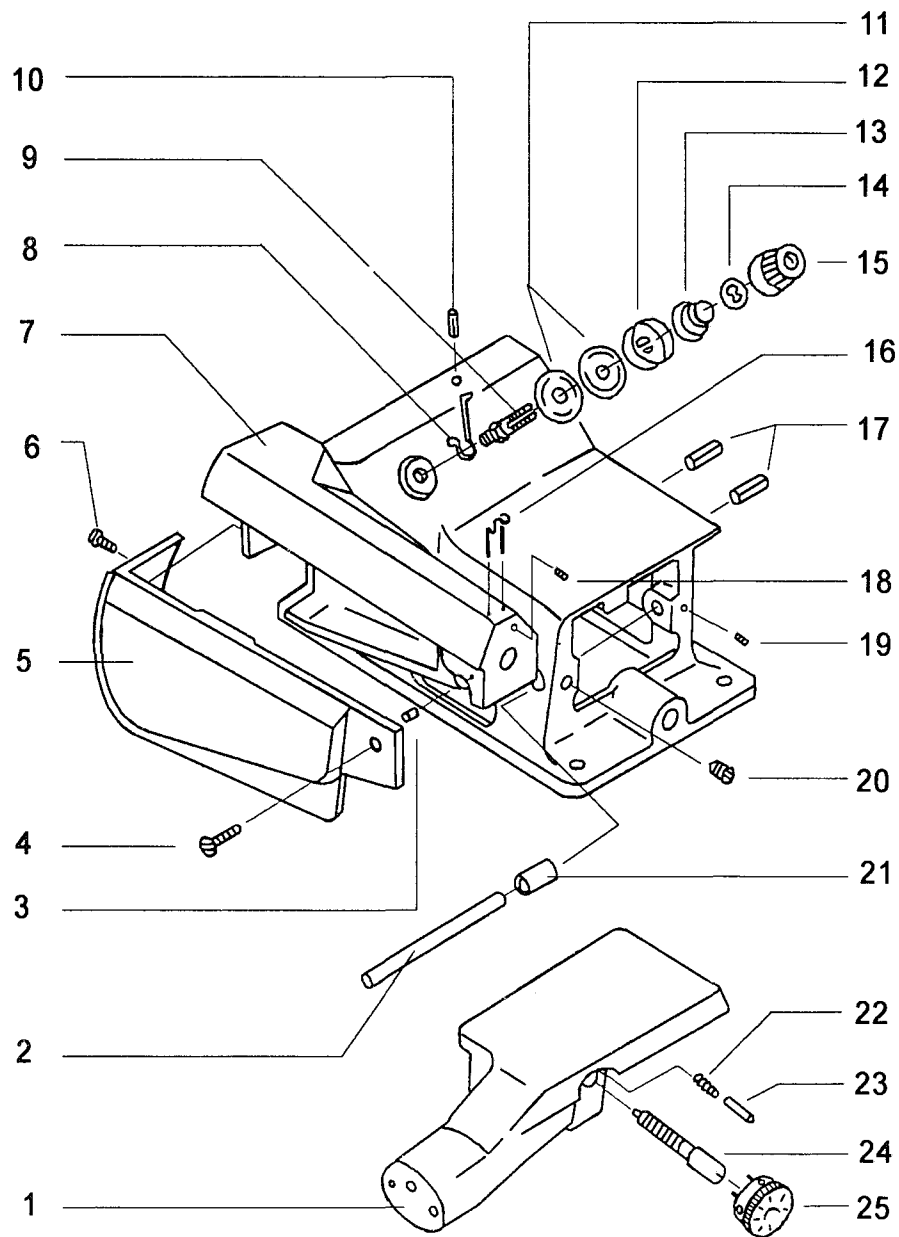
### 5.05 Uneven stitch

- 1) Ensure thread and tension. (According to 4.04)
- 2) Unsited stitch length and thread tension. (According to 4.04)
- 3) Incorrect threading. (According to 4.02)

### 5.06 Unstable needle penetration

- 1) Unsited needle penetration and material. (According to 4.05)
- 2) Incorrect position of material. (According to 4.03)
- 3) Uneven position of material and hemstitch gauge. (According to 4.03)
- 4) Needle incorrectly inserted or damaged. (According to 4.09)

# A. ARM BED AND ITS ACCESSORIES



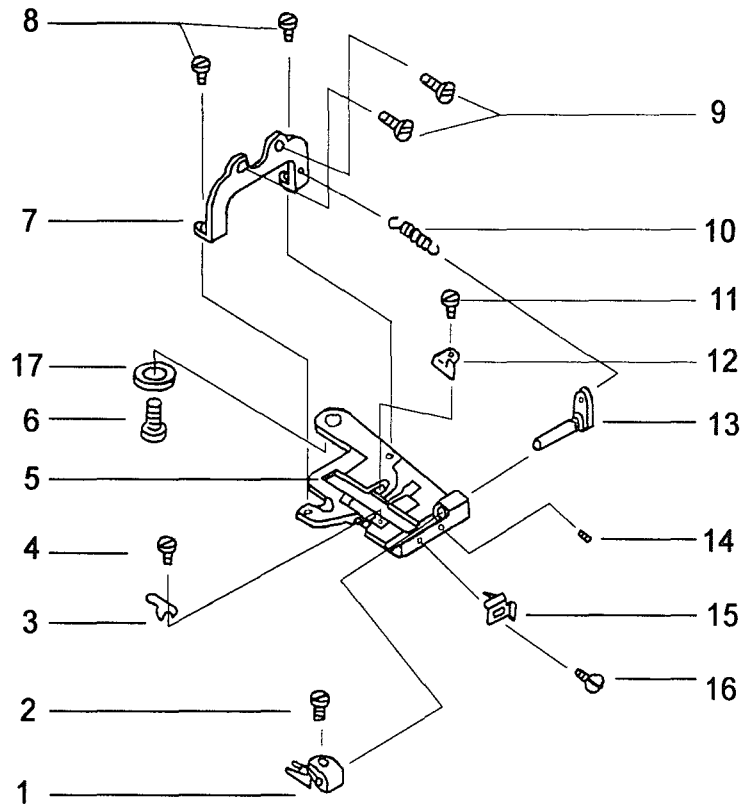
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## A.ARM BED AND ITS ACCESSORIES

Fig. No.	Part No.	Description	Pcs.	Remarks
A01	HD721B8001	Cylinder	1	
A03	HD712B8001	Washer	1	
A04	H401040100	Screw	1	M4×10
A05	HD707B7101	Arm cover	1	
A06	H401040060	Screw	1	M4×6
A07	HD706B8001	Machine body	1	
A08	HD729B8001	Thread guide	1	
A09	HD727B8001	Thread tension stud	1	SM1/4(40)×16
A10	H609040060	Spring pin	1	
A11	HA310B0705	Thread tension disc	2	
A12	HD726B8001	Thread tension regulator	1	
A13	HD725B8001	Thread tension spring	1	
A14	HA115B7010	Thumb nut revolution stopper	1	
A15	HD728B8001	Pre-tension adjusting nut	1	SM1/4(40)
A16	HD713B8001	Thread guide	1	
A17	H609060150	Spring pin	2	
A18	H431040040	Set screw	1	
A19	H431040040	Set screw	1	
A20	H431060060	Set screw	1	
A21	HD723B8001	Cylinder shaft bushing	1	
A22	HD720B8001	Spring for stopper pin	1	
A23	HD719B8001	Stopper pin	1	
A24	HD718B8001	Screw bar	1	
A25	HD715B7101	Depth dial	1	

# B. NEEDLE PLATE MECHANISM

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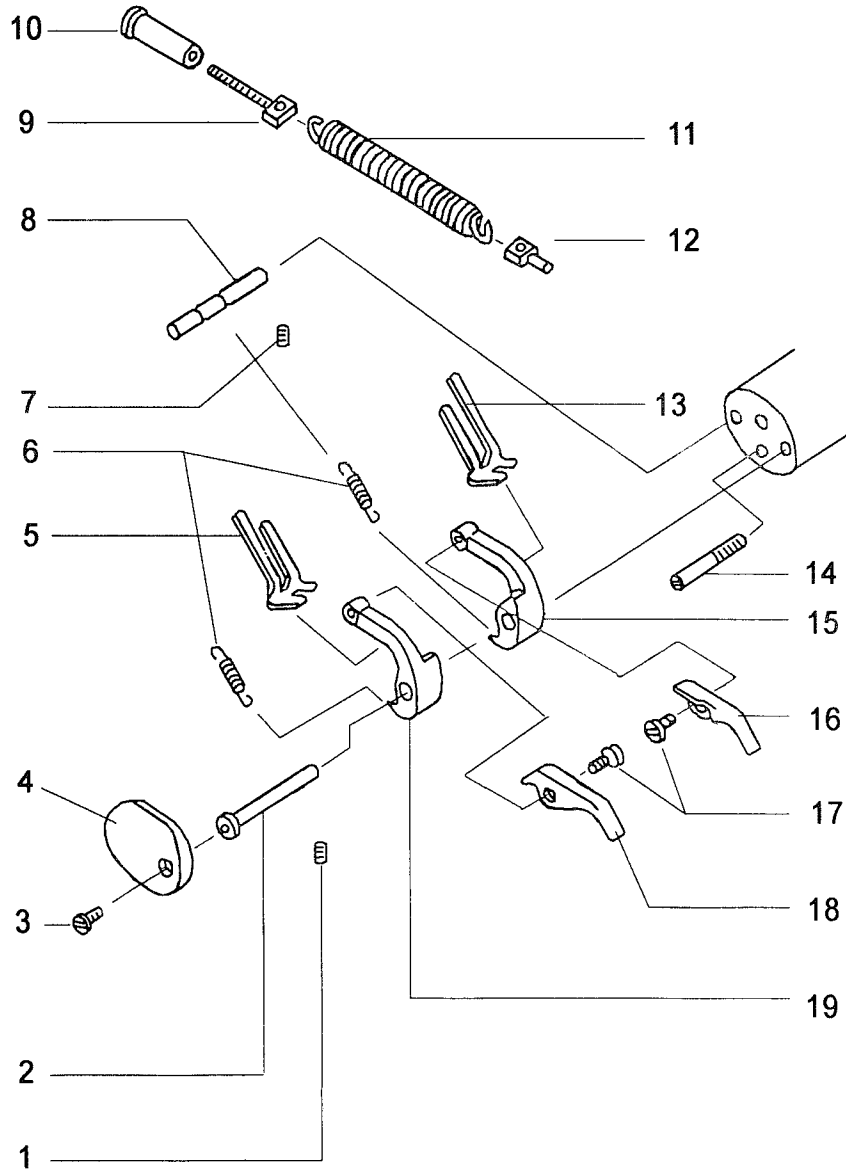


## B.NEEDLE PLATE MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
B01	HD710C8001	Cloth presser	1	
B02	HD711C8001	Screw	1	
B03	HD708C8001	Protecting needle plate	1	
B04	HD709C8001	Screw	1	
B05	HD704C8001	Needle plate	1	
B06	H401060100	Screw	1	
B07	HD705C8001	Fixing plate bracket for the needle plate	1	
B08	H3410C301L	Screw	2	
B09	HD706C8001	Screw	2	
B10	HD713C8001	Cloth presser spring	1	
B11	H3129F0691	Screw	1	
B12	HD707C8001	Protecting needle plate	1	
B13	HD712C8001	Cloth presser arm shaft	1	
B14	H431030050	Set screw	1	
B15	HD714C8001	Hemstitch gauge	1	
B16	HA500C2070	Screw	1	
B17	H005008060	Spring washer	1	

# C. PRESSER FOOT MECHANISM

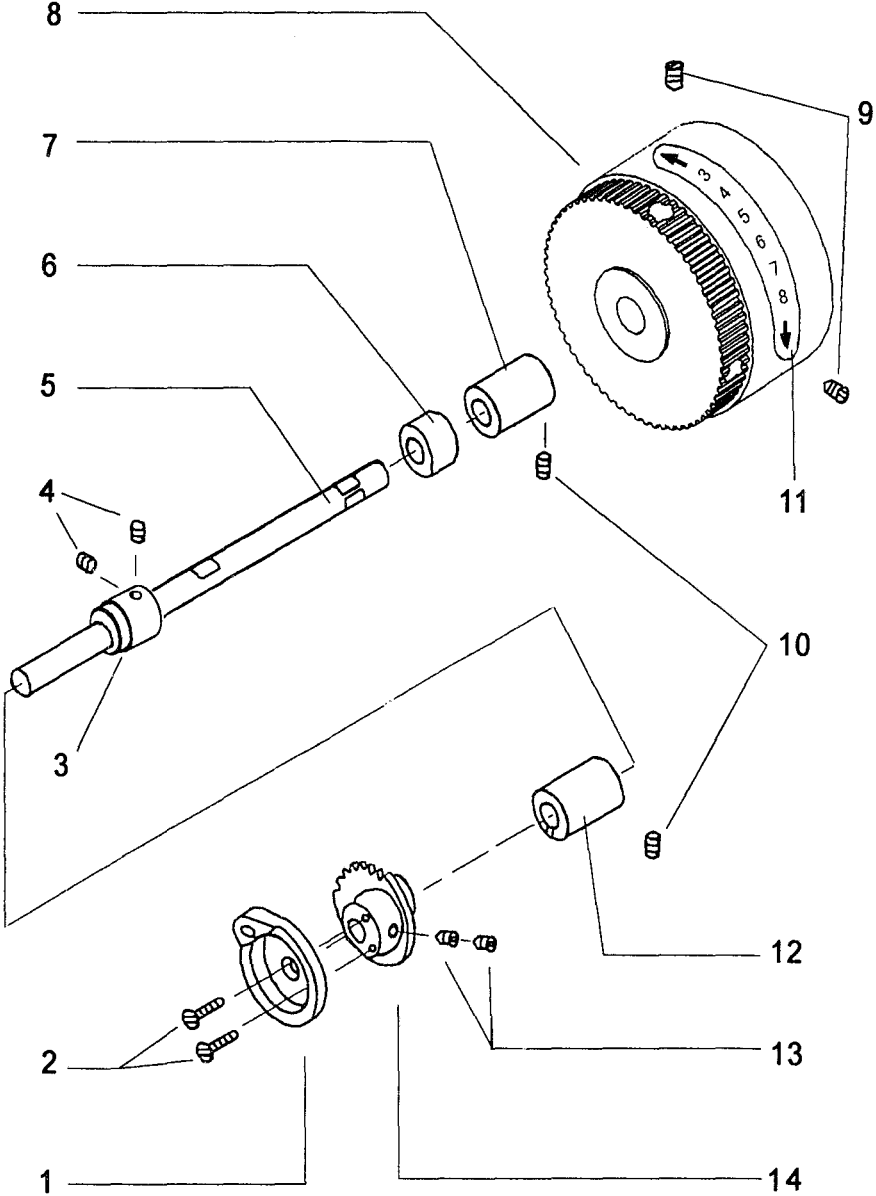
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## C.PRESSER FOOT MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
C01	H431040040	Set screw	1	
C02	HD721D8001	Crank shaft	1	
C03	HD706C8001	Screw	1	
C04	HD709D8001	Plate	1	
C05	HD719D8001	Presser foot spring (left)	1	
C06	HD722D8001	Foot spring	2	
C07	H431040040	Set screw	1	
C08	HD723D8001	Spring keeper	1	
C09	HD727D8001	Spring keeper screw	1	
C10	HD728D8001	Tension screw	1	
C11	HD725D8001	Cylinder spring	1	
C12	HD726D8001	Spring keeper	1	
C13	HD714D8001	Presser foot spring (right)	1	
C14	HD724D8001	Presser foot stopper	1	
C15	HD713D8001	Presser foot crank (right)	1	
C16	HD715D8001	Presser foot (right)	1	
C17	HD716D8001	Screw	2	
C18	HD720D8001	Presser foot (left)	1	
C19	HD718D8001	Presser foot crank (left)	1	

D. ARM SHAFT MECHANISM



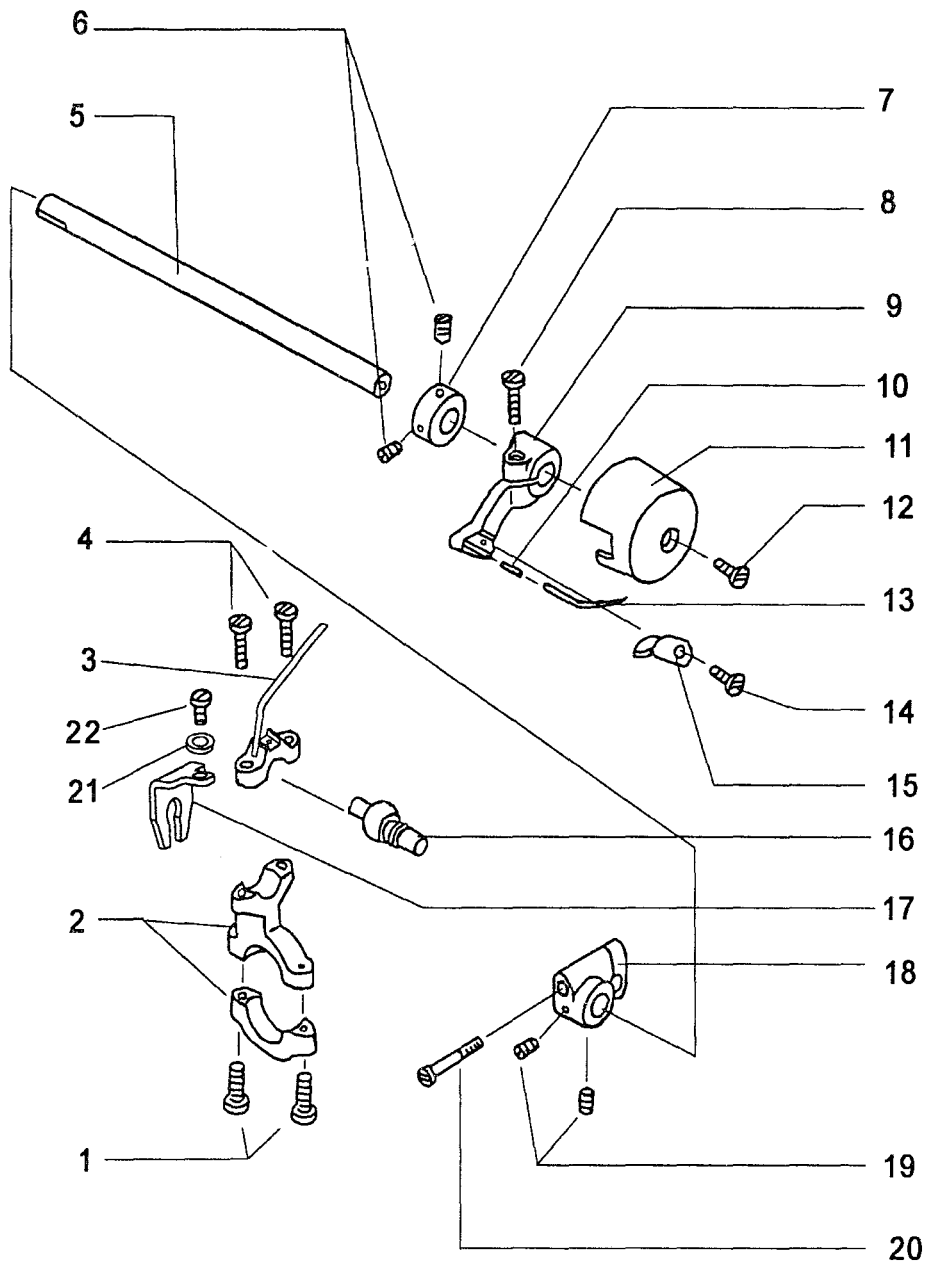
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# D.ARM SHAFT MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
D01	HD713E8001	Main cam	1	
D02	HD706C8001	Screw	2	
D03	HD710E8001	Collar	1	
D04	H431050050	Set screw	2	
D05	HD708E8001	Arm shaft	1	
D06	HD714E8001	Bushing	1	
D07	HD709E8001	Arm shaft bushing (right)	1	
D08	HD705E8001	Balance wheel	1	
D09	H431060080	Set screw	2	
D10	H431060060	Set screw	1	
D10	H431060060	Set screw	1	
D11	HD707E8001	Stitch length plate	1	
D12	HD711E8001	Arm shaft bushing (left)	1	
D13	H431060060	Set screw	2	
D14	HD712E8001	Main cam	1	

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# E.NEEDLE ROCKING MOTION MECHANISM

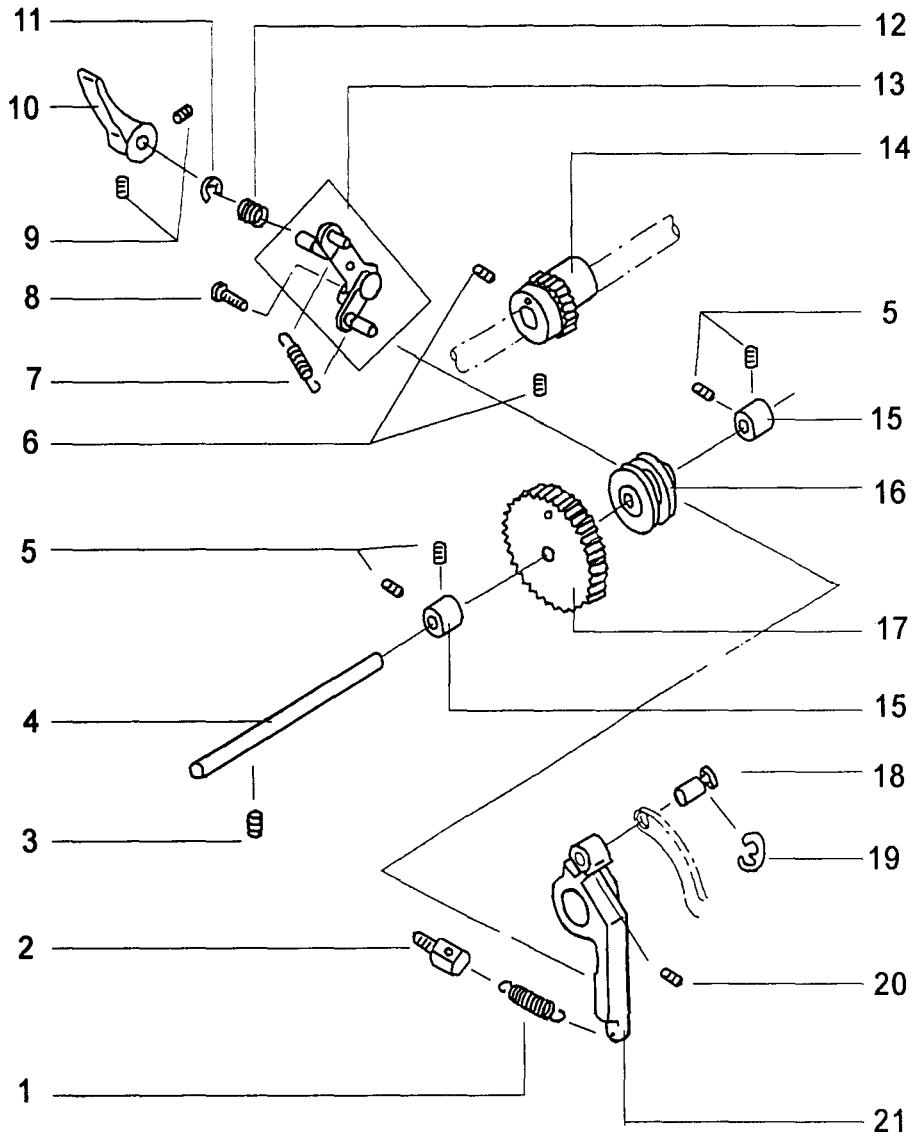


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## E.NEEDLE ROCKING MOTION MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
E01	HD721F8001	Screw	2	
E02	HD719F8001	Swing crank rod holder	1	
E03	HD722F8001	Oil wick	1	
E04	HD720F8001	Screw	2	
E05	HD711F8001	Needle swing shaft	1	
E06	H431040040	Set screw	2	
E07	HD712F8001	Thrust collar	1	
E08	HD707F8001	Screw	1	
E09	HD706F8001	Needle setting arm	1	
E10	H609020080	Spring pin	1	
E11	HD704F8001	Shaft cap	1	
E12	HA111G0683	Screw	1	
E13	HD710F8001	Needle	1	
E14	HD709F8001	Screw	1	
E15	HD708F8001	Needle presser	1	
E16	HD716F8001	Swing eccentric ball	1	
E17	HD723F8001	Bracket	1	
E18	HD714F8001	Crank for vibrating shaft	1	
E19	H431040040	Set screw	2	
E20	HD715F8001	Set screw	1	
E21	H3200I2030	Washer	1	
E22	H32481BC21	Screw	1	

# F. SKIPPING STITCH MECHANISM



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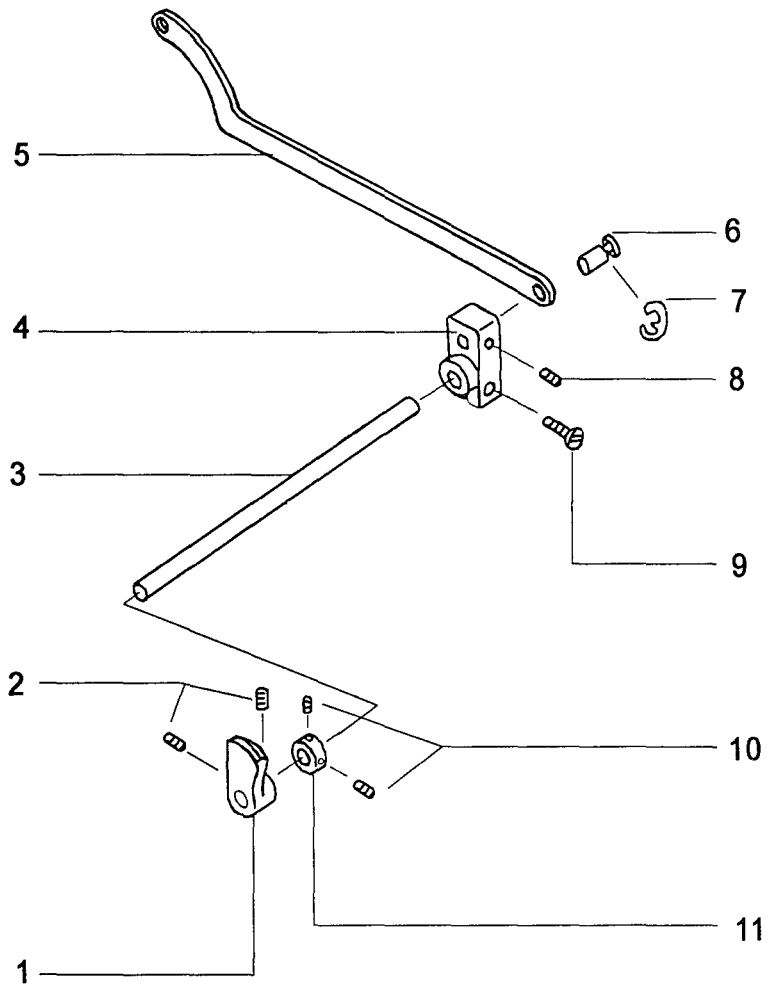


## F.SKIPPING STITCH MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
F01	HD724G8001	Arm spring	1	
F02	HD725G8001	Spring keeper	1	
F03	H431060060	Set screw	1	
F04	HD720G8001	Cam shaft	1	
F05	H431040040	Set screw	4	
F06	H431050060	Set screw	2	
F07	HD716G8001	Link spring	1	
F08	HD726G8001	Screw	1	
F09	H431040040	Set screw	2	
F10	HD705G8001	Skip stitch lever	1	
F11	H007013060	E-type ring	1	
F12	HD706G8001	Shaft spring	1	
F13	HD707G7101	Skip stitch lever set	1	
F14	HD719G8001	Small gear	1	
F15	HD721G8001	Thrust collar	2	
F16	HD717G8001	Shifter pulley	1	
F17	HD718G8001	Large gear	1	
F18	HD723G8001	Connecting pin	1	
F19	H007013040	E-type ring	1	
F20	H431040040	Set screw	1	
F21	HD722G8001	Switch arm	1	

# G. LIFTING MECHANISM

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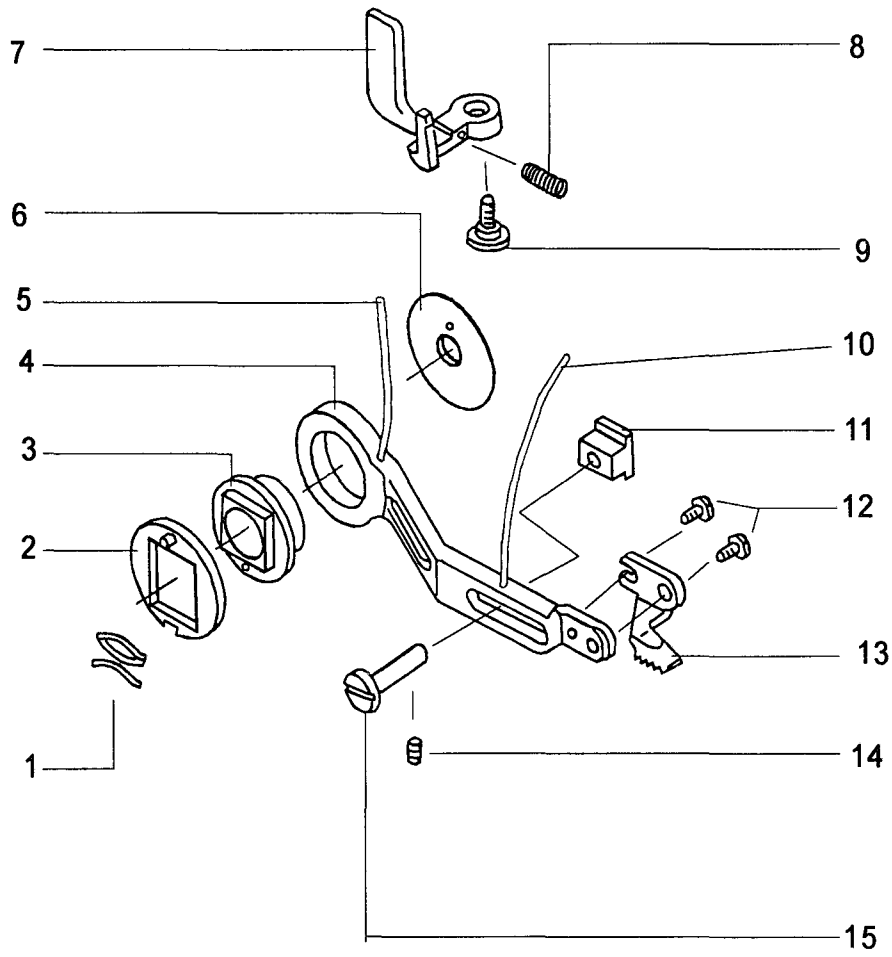
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## G.LIFTING MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
G01	HD704H8001	Cloth lifter	1	
G02	H431040040	Set screw	2	
G03	HD705H8001	Lifter shaft	1	
G04	HD708H8001	Lifter arm	1	
G05	HD709H8001	Cloth lifter rod	1	
G06	HD723G8001	Connecting pin	1	
G07	H007013040	E-type ring	1	
G08	H431040040	Set screw	1	
G09	HD726G8001	Screw	1	
G10	H431030040	Set screw	2	
G11	HD706H8001	Thrust collar	1	

# H. FEEDING MECHANISM

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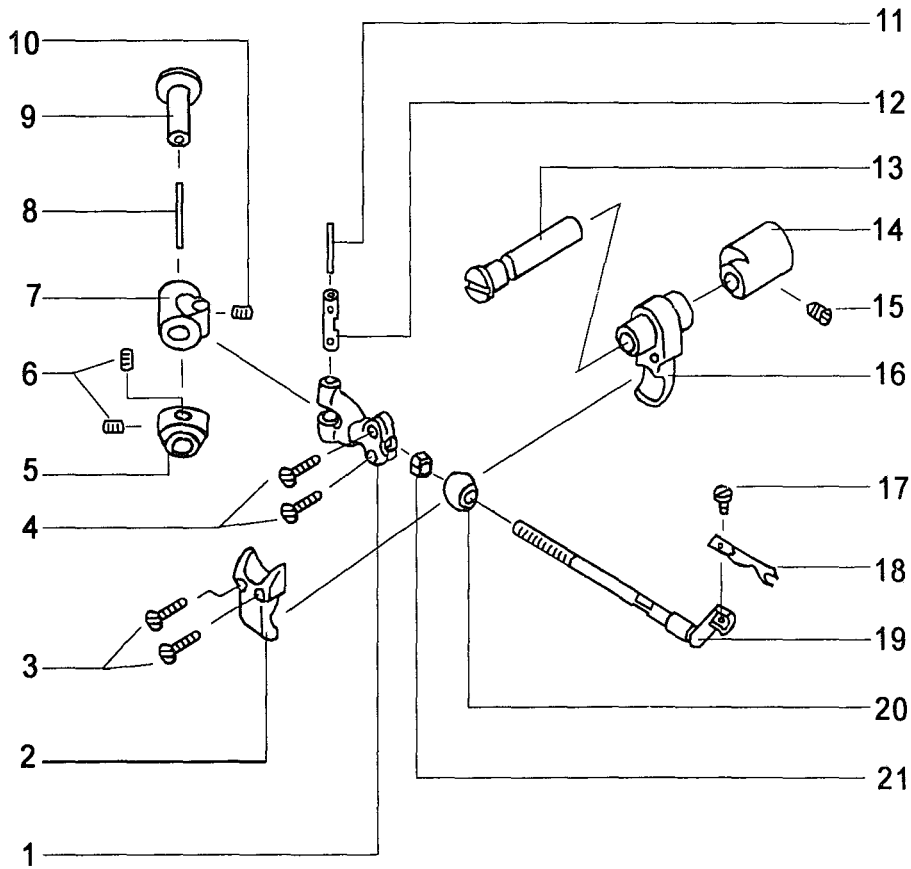


## H.FEEDING MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
H01	HD71318001	Ratchet spring	3	
H02	HD71018001	Ratchet	1	
H03	HD70918001	Feed adjusting cam	1	
H04	HD70418001	Feed rod	1	
H05	HD71718001	Oil wick	1	
H06	HD70818001	Washer	1	
H07	HD71418001	Stitch length lever	1	
H08	HD71618001	Lever spring	1	
H09	HD71518001	Screw	1	
H10	HD722F8001	Oil wick	1	
H11	HD70618001	Feed rod bock	1	
H12	HA719B0709	Screw	2	
H13	HD70518001	Feed dog	1	
H14	H431060060	Set screw	1	
H15	HD70718001	Feed rod block pin	1	

# I. LOOPER MECHANISM

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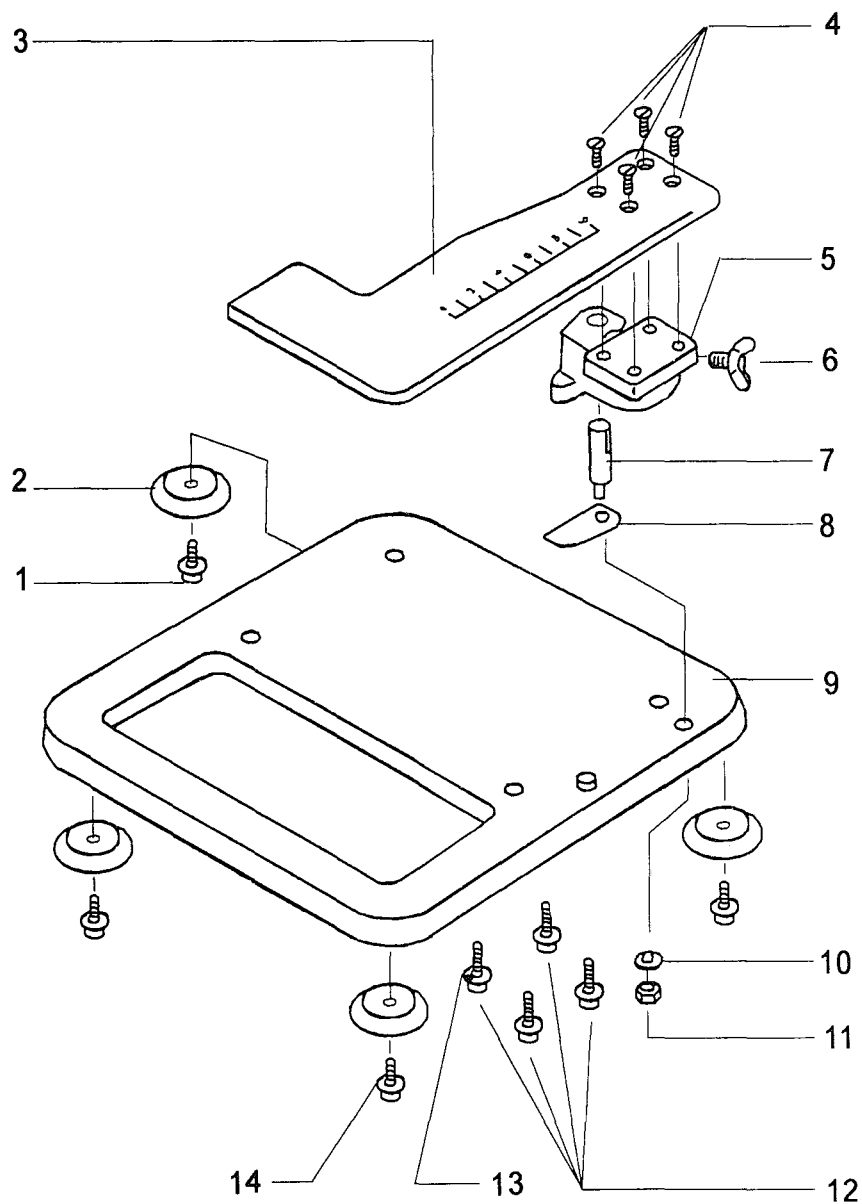
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# I.LOOPER MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
101	HD709J8001	Forked connector	1	
102	HD713J8001	Looper rod half arm	1	
103	HD714J8001	Screw	2	
104	H7327F8001	Screw	2	
105	HD725J8001	Thrust collar	1	
106	H431040040	Set screw	2	
107	HD721J8001	Looper joint	1	
108	HD724J8001	Oil wick	1	
109	HD723J8001	Tilted shaft	1	
110	H431040040	Set screw	1	
111	HD719J8001	Oil wick	1	
112	HD718J8001	Connecting pin	1	
113	HD715J8001	Rod arm shaft	1	
114	HD716J8001	Adjusting bushing	1	
115	H431060060	Set screw	1	
116	HD712J8001	Looper rod arm	1	
117	HE106F8001	Screw	1	
118	HD704J8001	Looper	1	
119	HD707J8001	Looper rod	1	
120	HD708J8001	Ball	1	
121	HD710J8001	Looper rod nut	1	

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# J. AUXILIARY PLATE MECHANISM

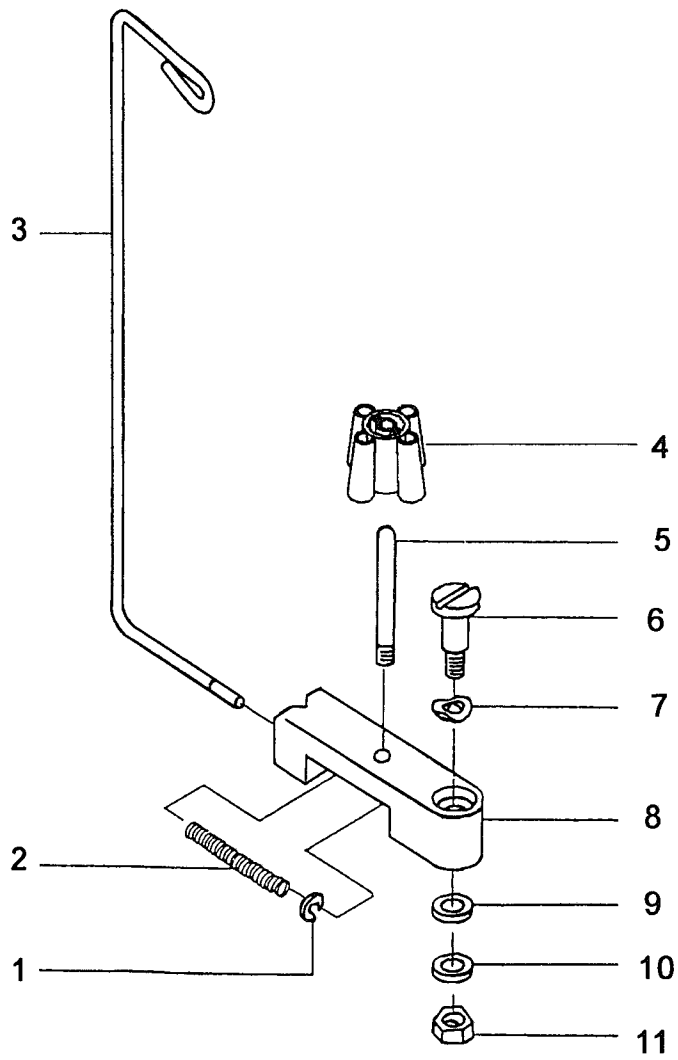


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# K. THREAD STAND MECHANISM

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## J.AUXILARY PLATE MECHANISM

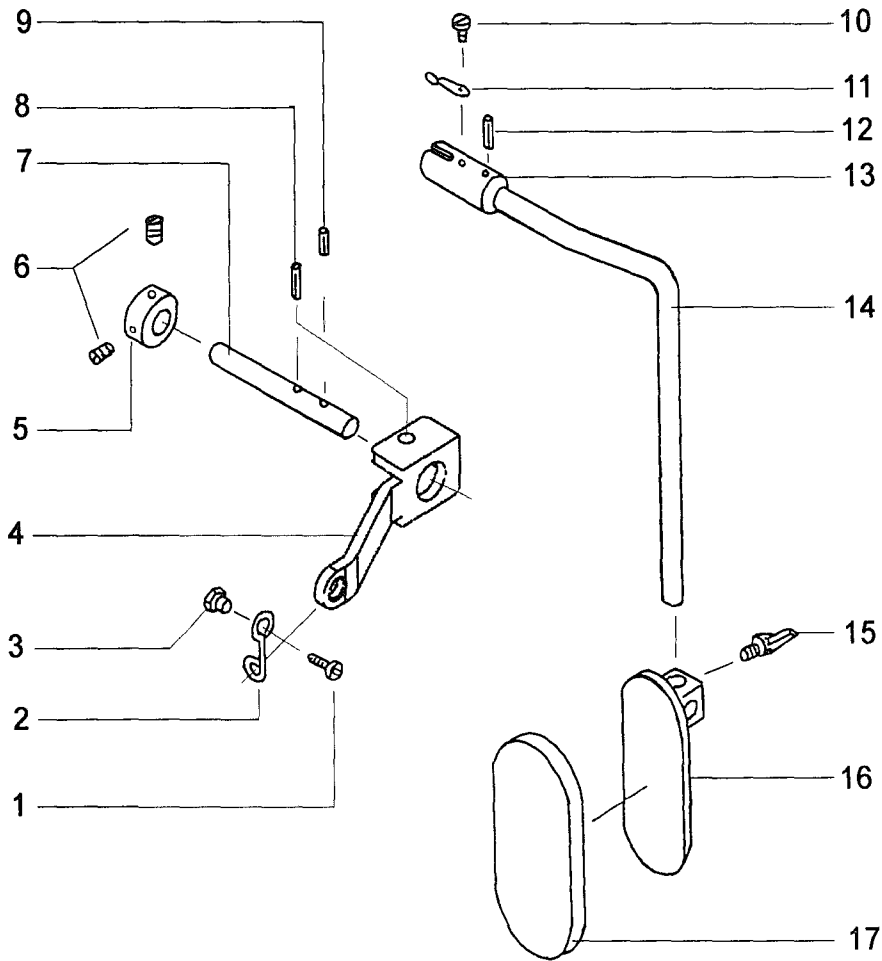
Fig No.	Part No.	Description	Pcs.	Remarks
J01	H401050080	Screw	4	
J02	HD708K8001	Rubber cushion	4	
J03	HD710K8001	Auxiliary plate	1	
J04	HD713K8001	Screw	4	
J05	HD712K8001	Table arm	1	
J06	HD714K8001	Screw	1	
J07	HD717K8001	Table rod	1	
J08	HD718K8001	Table pad	1	
J09	HD704K7101	Body base plate	1	
J10	H005008060	Spring washer	1	
J11	H003004060	Nut	1	
J12	H401060120	Screw	4	
J13	H005008060	Spring washer	4	
J14	H005001060	Washer	4	

# K.THREAD STAND MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
K01	H007013030	E-type ring	1	
K02	HD707L8001	Spool stand spring	1	
K03	HD705L8001	Thread guide pole	1	
K04	HRX300B201	Spool wedge	1	
K05	HD709L8001	Thread stand pole	1	
K06	HD710L8001	Screw	1	
K07	H005014080	Washer	1	
K08	HD706L8001	Thread spool arm	1	
K09	H005001060	Washer	1	
K10	H005008060	Spring washer	1	
K11	H003002060	Nut	1	

# L. KNEE LIFTER MECHANISM

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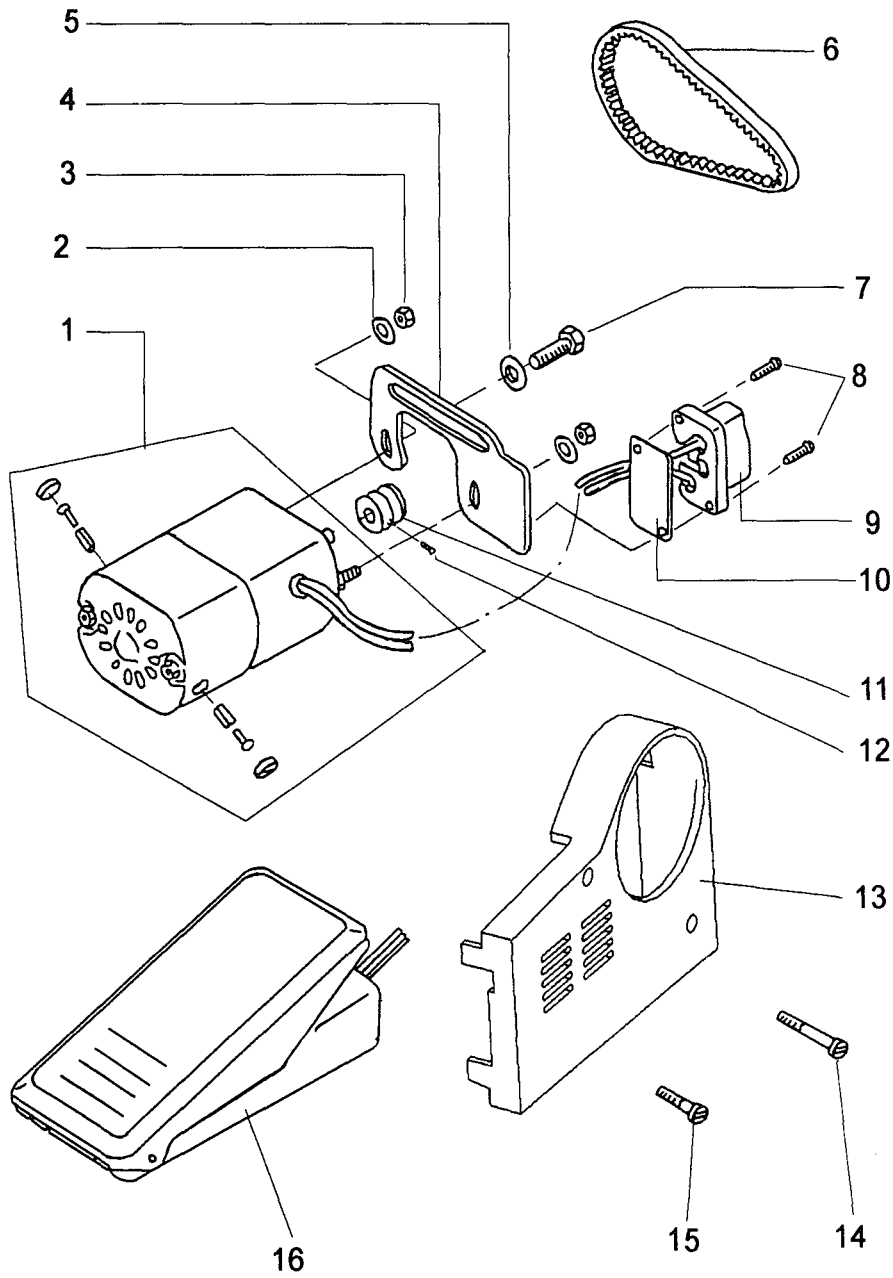


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# L.KNEE LIFTER MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
L01	HA111G0683	Screw	1	
L02	HD707M8001	Knee lifter link	1	
L03	HD708M8001	Nut	1	
L04	HD706M8001	Knee lifter arm	1	
L05	HD712F8001	Thrust collar	1	
L06	H431040040	Set screw	2	
L07	HD705M8001	Knee lifter shaft	1	
L08	H610040180	Spring pin	1	
L09	H610040120	Spring pin	1	
L10	H4915J8001	Screw	1	
L11	HD712M8001	Sleeve spring	1	
L12	H610040180	Spring pin	1	
L13	HD711M8001	Lifter bar bushing	1	
L14	HD710M8001	Lifter bar	1	
L15	HD714K8001	Screw	1	
L16	HD714M8001	Knee pad	1	
L17	HD715M8001	Knee pad rubber	1	

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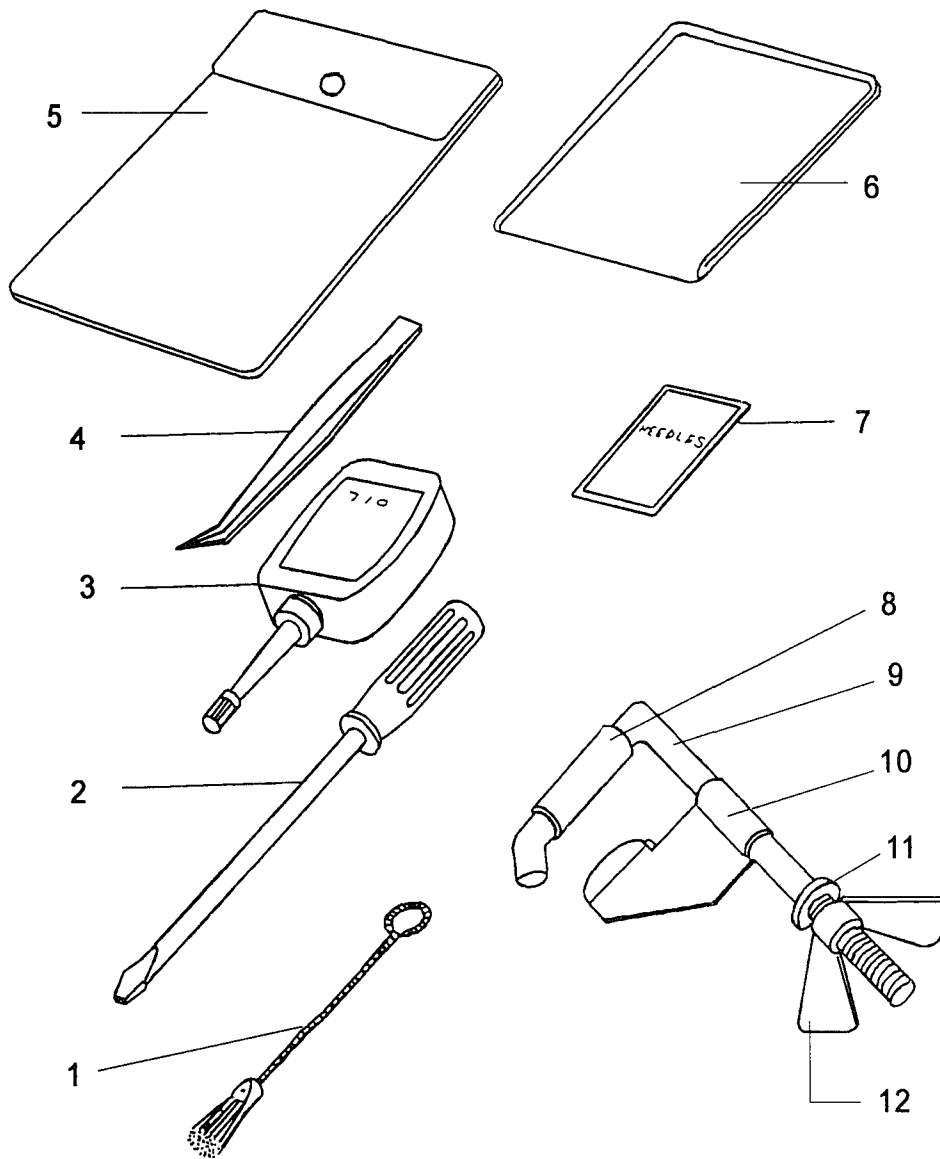


## M.MOTOR MECHANISM

Fig. No.	Part No.	Description	Pcs.	Remarks
M01	HD709N8001	Motor	1	
M02	HD711N8001	Washer	2	
M03	HD710N8001	Nut	2	
M04	HD705N8001	Motor bracket	1	
M05	HE049J8001	Washer	1	
M06	HD708N8001	Belt	1	
M07	HD706N8001	Screw	1	
M08	H401030160	Screw	2	
M09	HD712N8001	Terminal box	1	
M10	HD713N8001	Insulating plate	1	
M11	HD715N8001	Belt pulley	1	
M12	H427040050	Set screw	1	
M13	HD716N8001	Belt Cover	1	
M14	H415040160	Screw	1	
M15	H415040350	screw	1	
M16	HD714N8001	Controller set	1	

# N. ACCESSORIES

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# N.ACCESSORIES

Fig. No.	Part No.	Description	Pcs.	Remarks
N01	HD716O8001	Cleaning brush	1	
N02	HA300J2200	Screwdriver	1	
N03	HA100J2110	Oiler	1	
N04	HE015M8001	Tweezers	1	
N05	HD714O8001	Accessory case	1	
N06	HD715O8001	Vinyl cover	1	
N07	HD710F8001	Needle	4	
N08	HD708O8001	Tubing	1	
N09	HD707O8001	Stretch rod	1	
N10	HD706O8001	Support shelf	1	
N11	H005001060	Washer	1	
N12	HD709O8001	Nut	1	





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The description covered in this manual is subject to change for improvement of the commodity without notice

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