

REPLACEMENT OF BOBBIN WINDER SWITCH (UNIT) AND UPPER SHAFT SENSOR (UNIT)

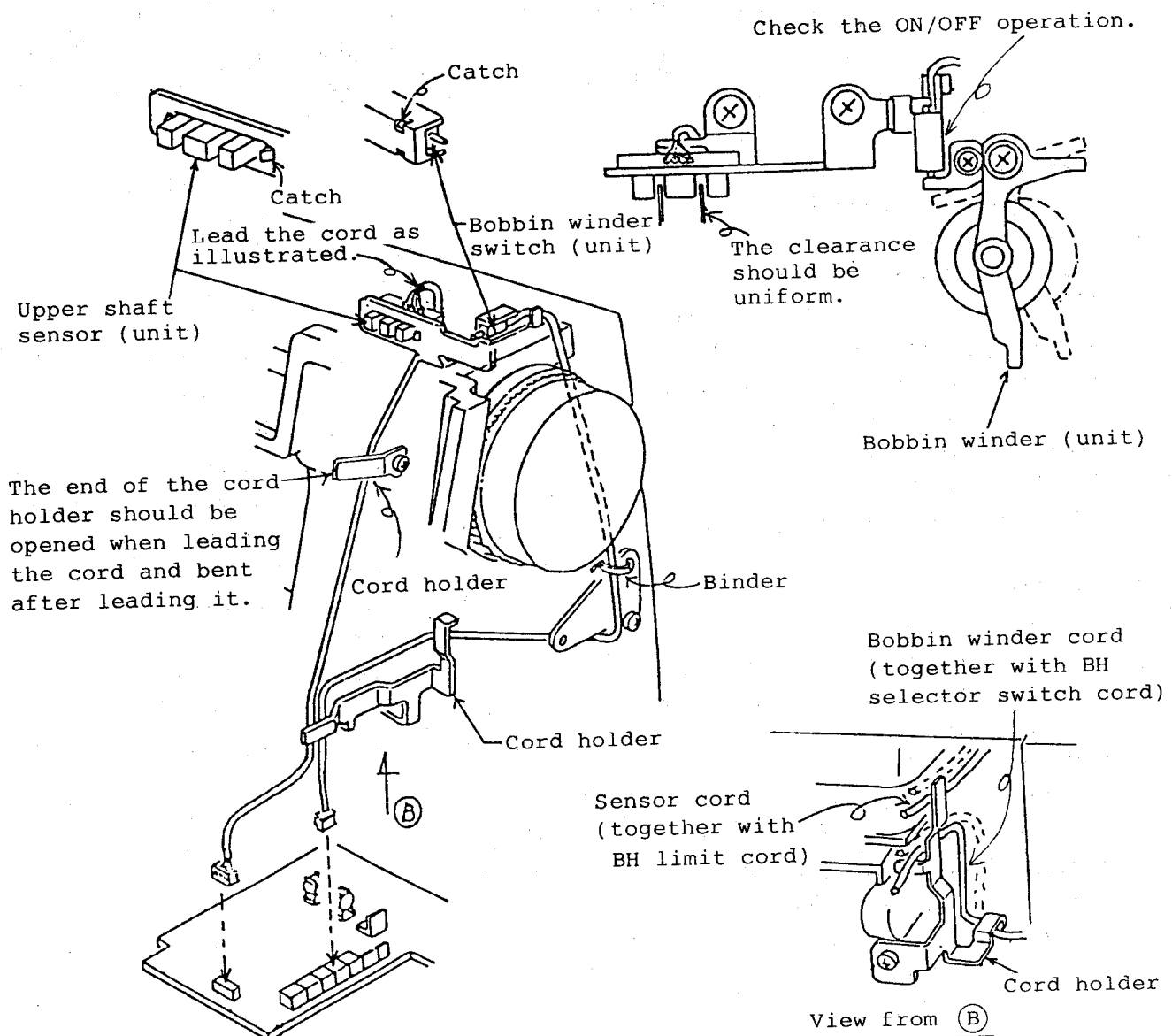
To remove:

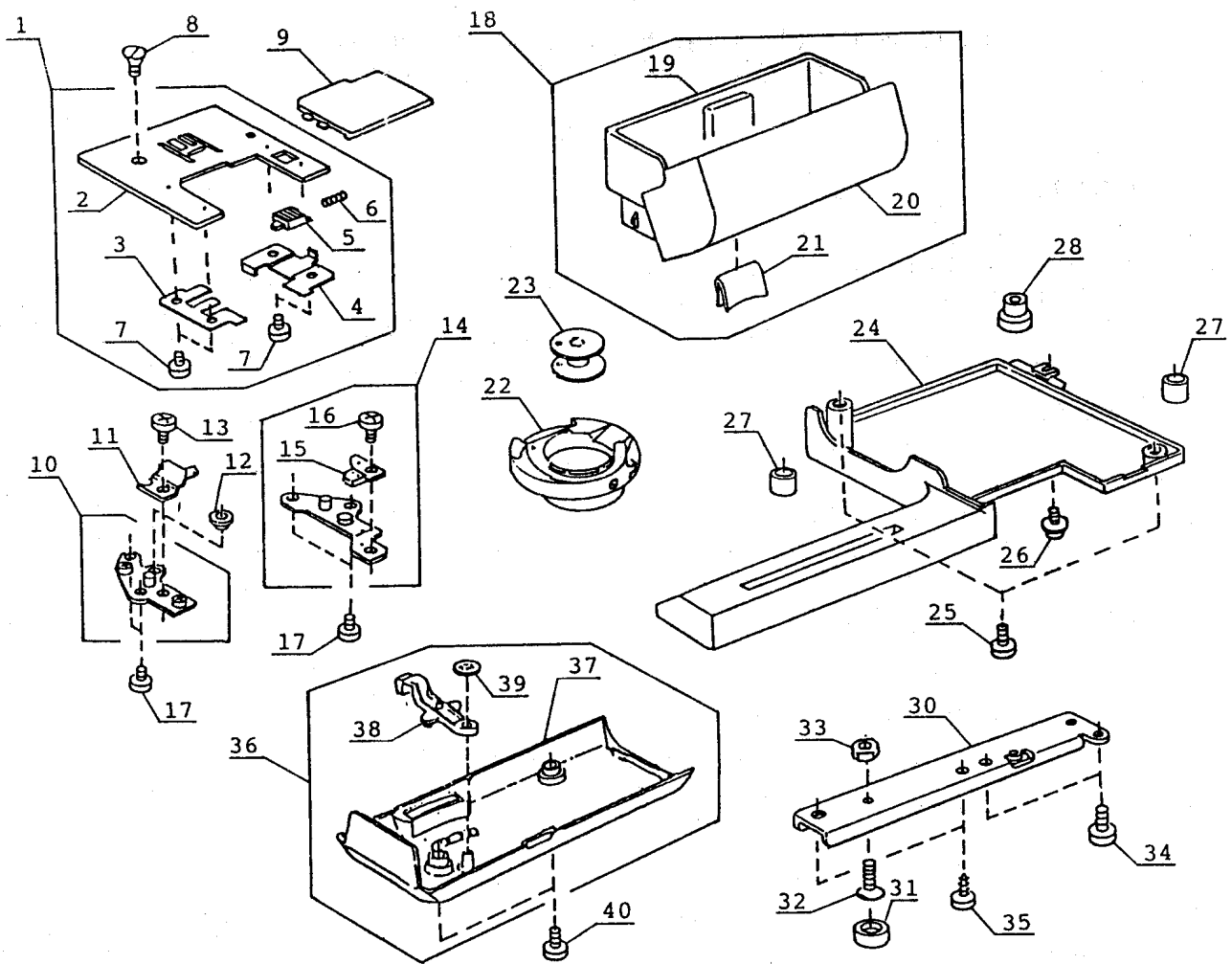
- (1) Remove the top cover (unit), belt cover, base and arm sole.
- (2) Detach the circuit board case (unit), unplug each connector, and remove the circuit board case cover (unit).
- (3) Unfasten the catch, and replace the bobbin winder switch (unit) or upper shaft sensor (unit).

To attach:

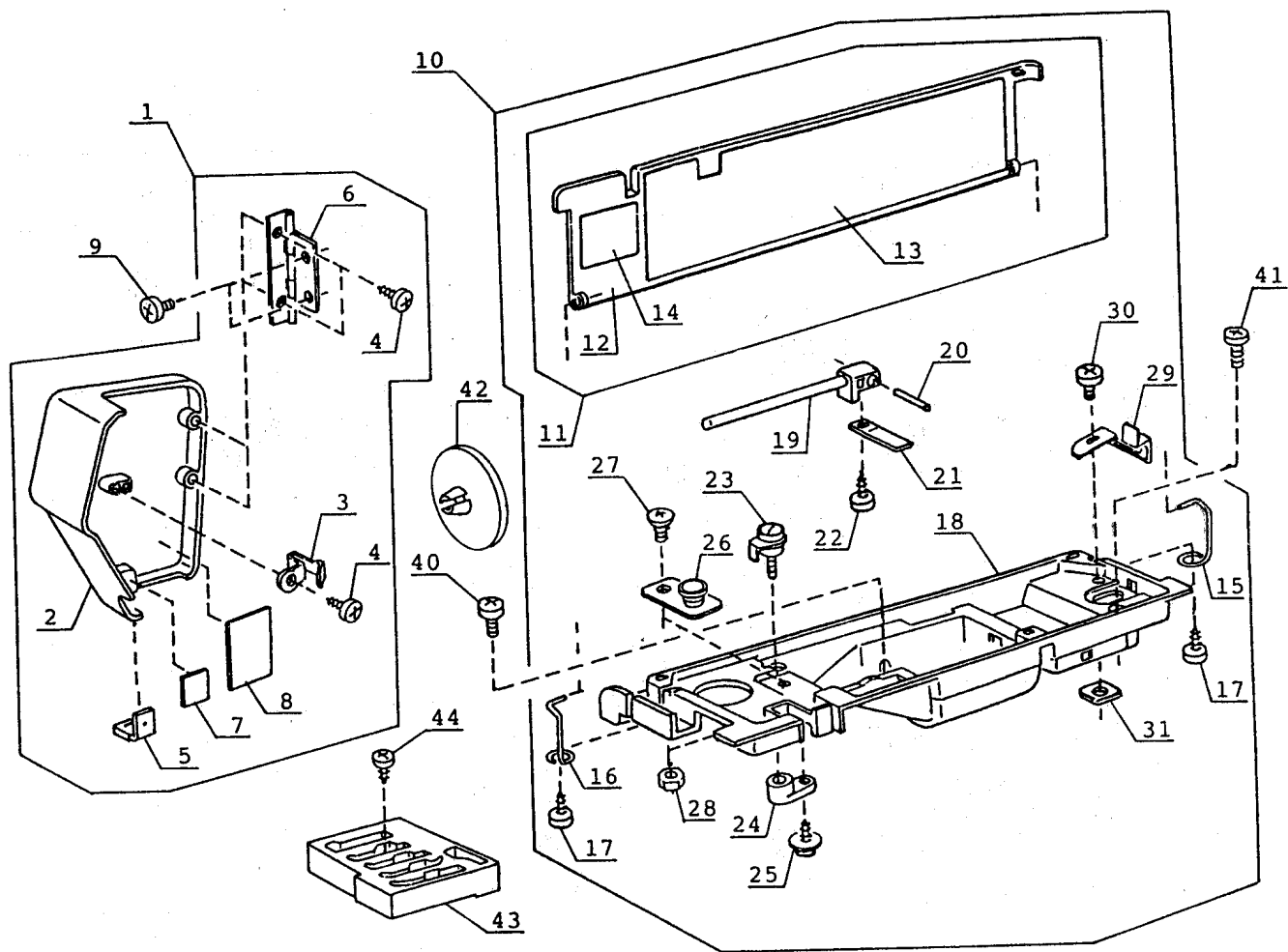
- (4) Attach the bobbin winder switch (unit) or upper shaft sensor (unit), and then lead the cord as shown in the figure below.
- (5) Attach the circuit board case cover (unit), connect each connector, and attach the circuit board case (unit) to the cover.
- (6) Attach the arm sole, base, belt cover and top cover (unit).

(Note) After replacement of the bobbin winder switch, make sure that it is turned ON with the bobbin winder (unit) in sewing condition and OFF with the unit in bobbin winding condition. After replacement of the sensor, make sure that it does not interfere with the shielding plate and the clearance between them is uniform.

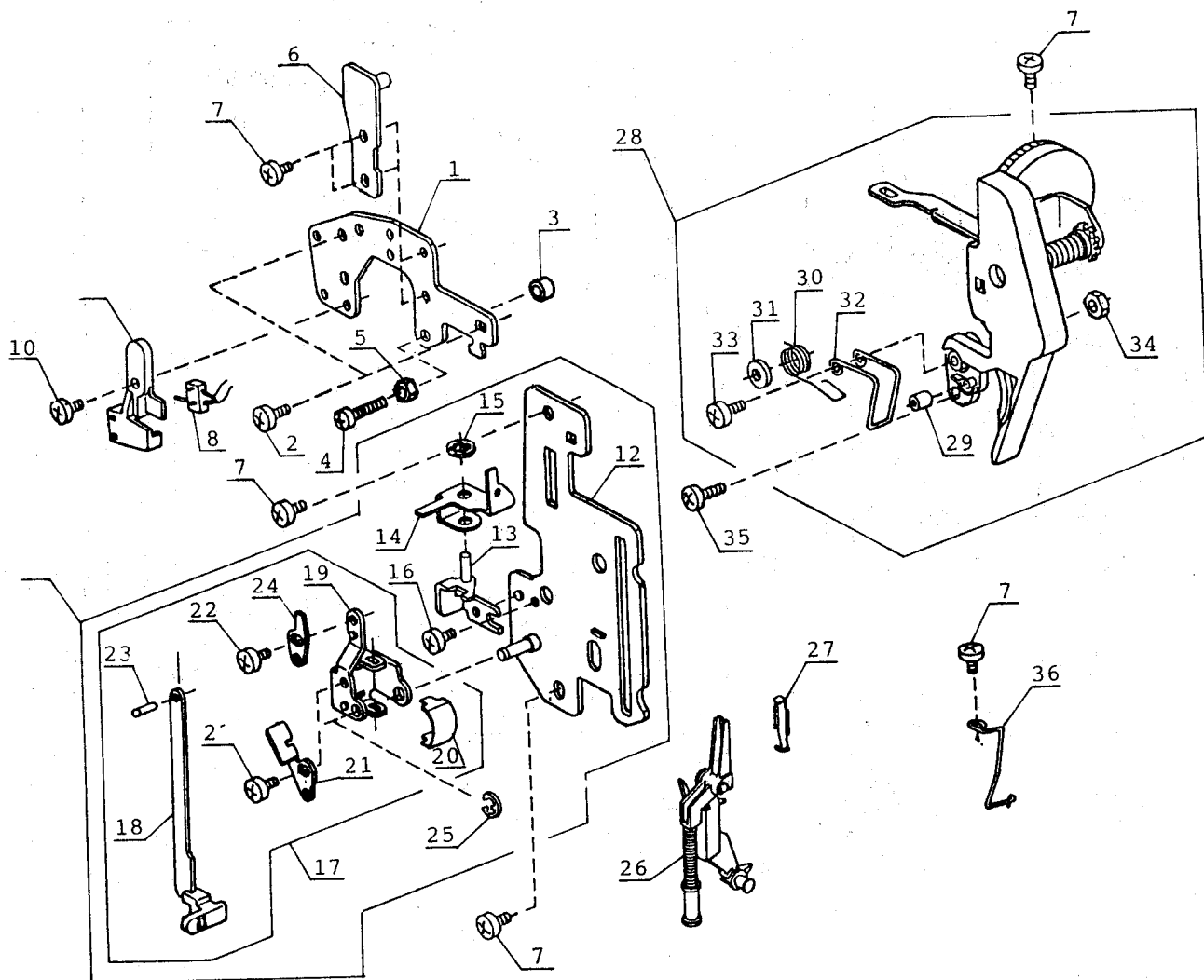




No.	Part No.	Part Name	No.	Part No.	Part Name
1	753603004	Needle plate complete (unit)	24	753003008	Base
2	753501001	Needle plate (unit)	25	000081005	Set screw 4 x 8
3	825014008	Slide plate holder (left)	26	000115205	TP screw 4 x 6
4	825015010	Slide plate holder (right)	27	647009002	Bed rubber seat
5	825016000	Slide plate release button	28	735003002	Rubber foot
6	825017001	Slide plate release button spring	30	753002007	Arm sole
7	820374004	Set screw 2 x 2.3	31	735002001	Rubber seat
8	820390109	Set screw	32	000097302	Set screw
9	825018013	Slide plate	33	000061319	Hexagon nut 5-1-8
10	650602001	Needle plate supporter (left) (unit)	34	000066808	Set screw 6 x 14
11	822011109	Pawl plate	35	000075604	Set screw 4 x 12
12	822314002	Nut	36	753601002	Bed cover (unit)
13	000103808	Set screw 3 x 5	37	652005107	Bed cover
14	650603002	Needle plate supporter (right) (unit)	38	753005000	Drop lever
15	627567001	Bobbin holder stopper (unit)	39	000013903	Snap ring CS-5
16	810220003	Set screw	40	000101703	Set screw 4 x 12
17	000107503	Tapping screw 4 x 6			
18	753526002	Extension table (unit)			
19	753006001	Extension table			
20	753007002	Extension table lid			
21	686010007	Extension table spring			
22	627569106	Bobbin holder (unit)			
23	102261103	Bobbin			

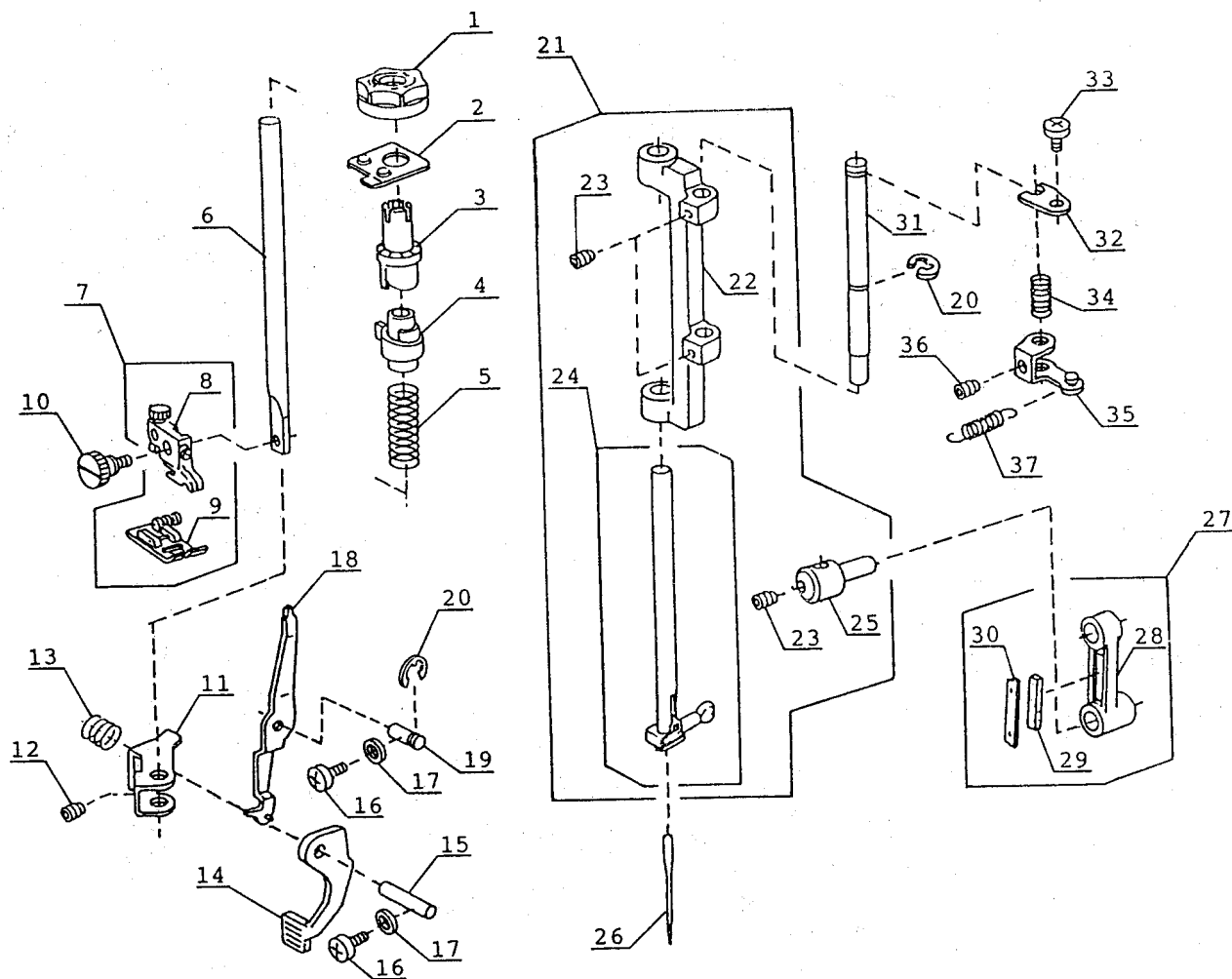


No.	Part No.	Part Name	No.	Part No.	Part Name
1	753606007	Face plate (unit)	24	822021009	Thread guide holder
2	753017005	Face plate	25	000149002	Set screw 3 x 10
3	650025004	Face plate spring	26	753502002	Top cover thread guide holder (unit)
4	000076502	Set screw 3 x 8	27	693093006	Set screw
5	822532008	Thread cutter (unit)	28	000062701	Hexagon nut 3.5-3-6
6	366501102	Face plate hinge (unit)	29	687022005	Bobbin winder stopper
7	724024005	Reflecting plate (1)	30	000066727	Set screw 3 x 8
8	724025006	Reflecting plate (2)	31	630005006	Nut
9	000081119	Set screw 4 x 6	40	000170507	Set screw 4 x 12
10	753604005	Top cover complete (unit)	41	000080901	Set screw 4 x 25
11	753605006	Top cover (unit)	42	822020307	Spool holder (large)
12	753012000	Top cover	43	686016209	Foot container
13	753013001	Flip-top sewing instruction panel	44	000120214	Tapping screw 3 x 8 (B)
14	753154005	BH sticker			
15	753014002	Hinge rod (right)			
16	753129001	Hinge rod (left)			
17	000120203	Tapping screw 3 x 8 (B)			
18	753015003	Top cover body			
19	822016403	Spool pin			
20	822017002	Pin			
21	822018003	Spring			
22	000107318	Tapping screw 3 x 8 (B)			
23	730501000	Bobbin winder thread guide (unit)			

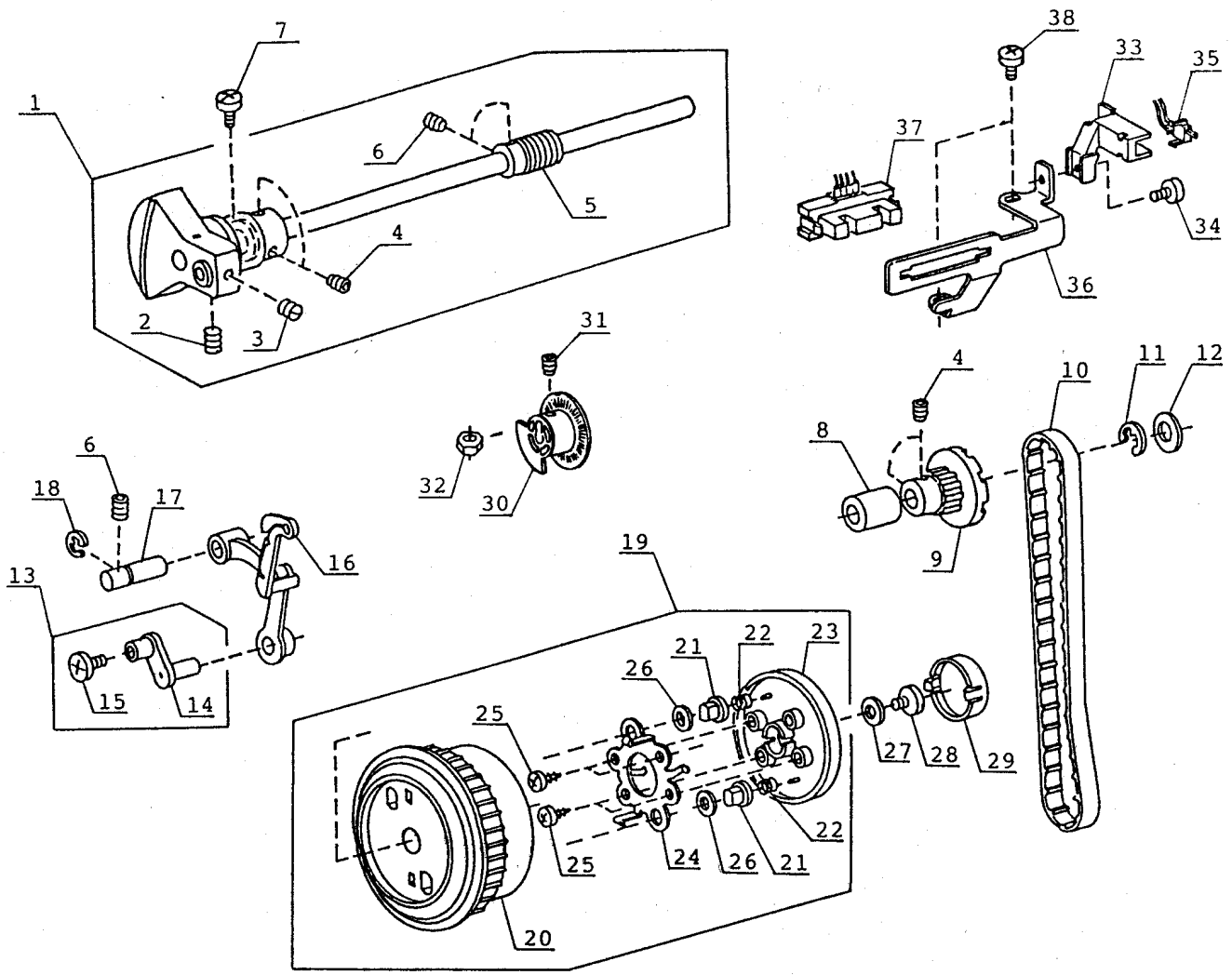


No.	Part No.	Part Name
1	753019007	Lamp socket holder plate
2	000081005	Set screw 4 x 8
3	685042005	Supporter stopper
4	000104809	Set screw 4 x 35
5	000160102	Adjustable nut 4
6	686059008	Handle supporter plate
7	000101404	Set screw 4 x 6
8	753504004	BH limit switch (unit)
9	753134009	Switch holder
10	000078319	Set screw 3 x 6
11	753625002	Front base plate (unit)
12	753022003	Front base plate
13	753023004	Drag rod link (front) holder
14	753024005	Drag rod link (front)
15	000014007	Snap ring CS-4
16	000081119	Set screw 4 x 6
17	753608009	BH lever (unit)
18	753629006	BH lever (unit)
19	753026007	BH lever supporter
20	753027008	Friction spring
21	753028009	Switch adjusting plate
22	000101105	Set screw 3 x 4
23	000023009	Spring pin 1.6 x 4

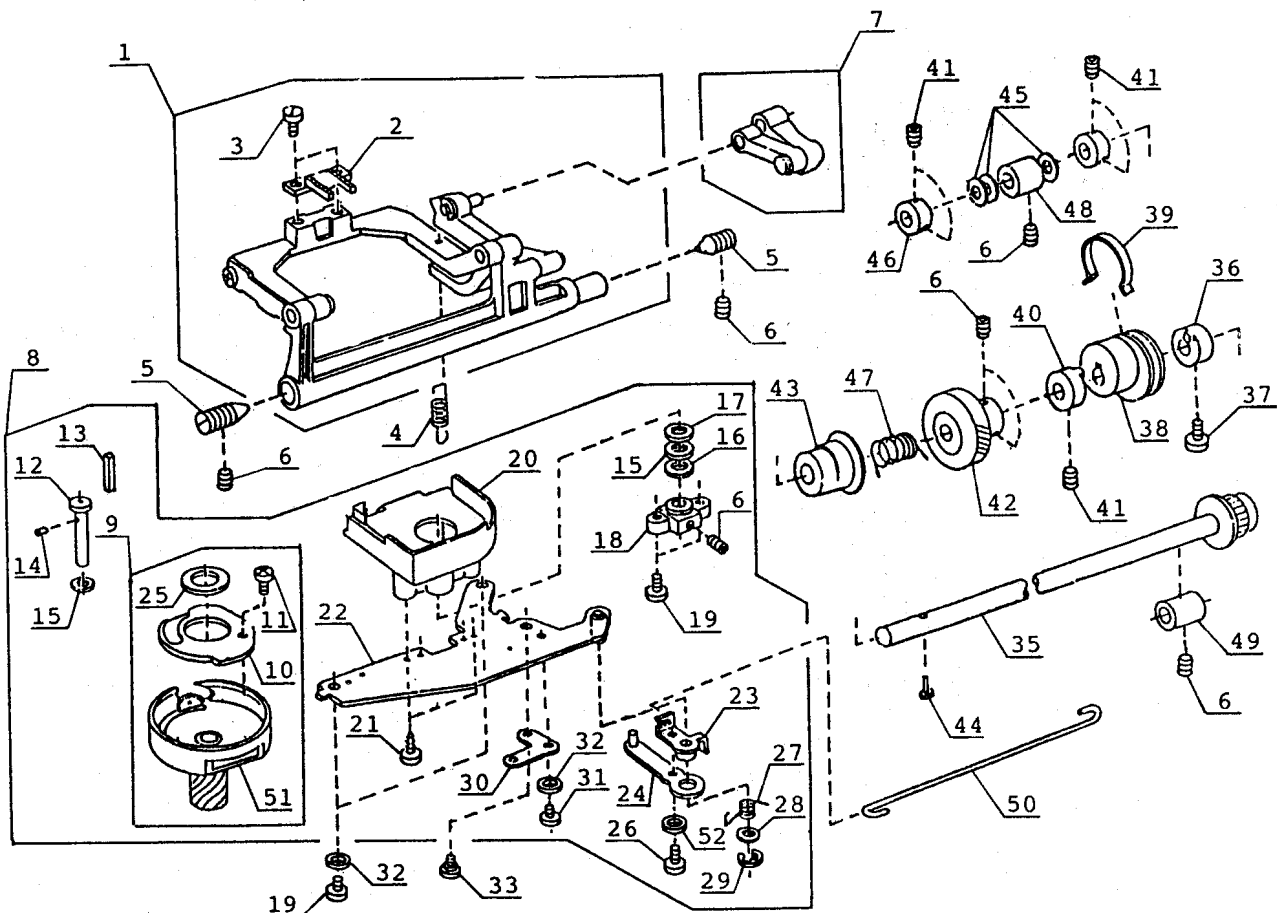
No.	Part No.	Part Name
24	753029000	BH lever adjusting plate
25	000001207	Snap ring E-2.5
26	822510000	Threader (unit)
27	625084003	Spring
28	753503003	Thread tension dial (unit)
29	650043008	Check spring cushion
30	652038006	Check spring
31	652039007	Washer
32	652037005	Thread guide
33	000104304	Set screw 3 x 14
34	000060857	Hexagon nut 3-1-5.5
35	000101703	Set screw 4 x 12
36	652137006	Arm thread guide (2)



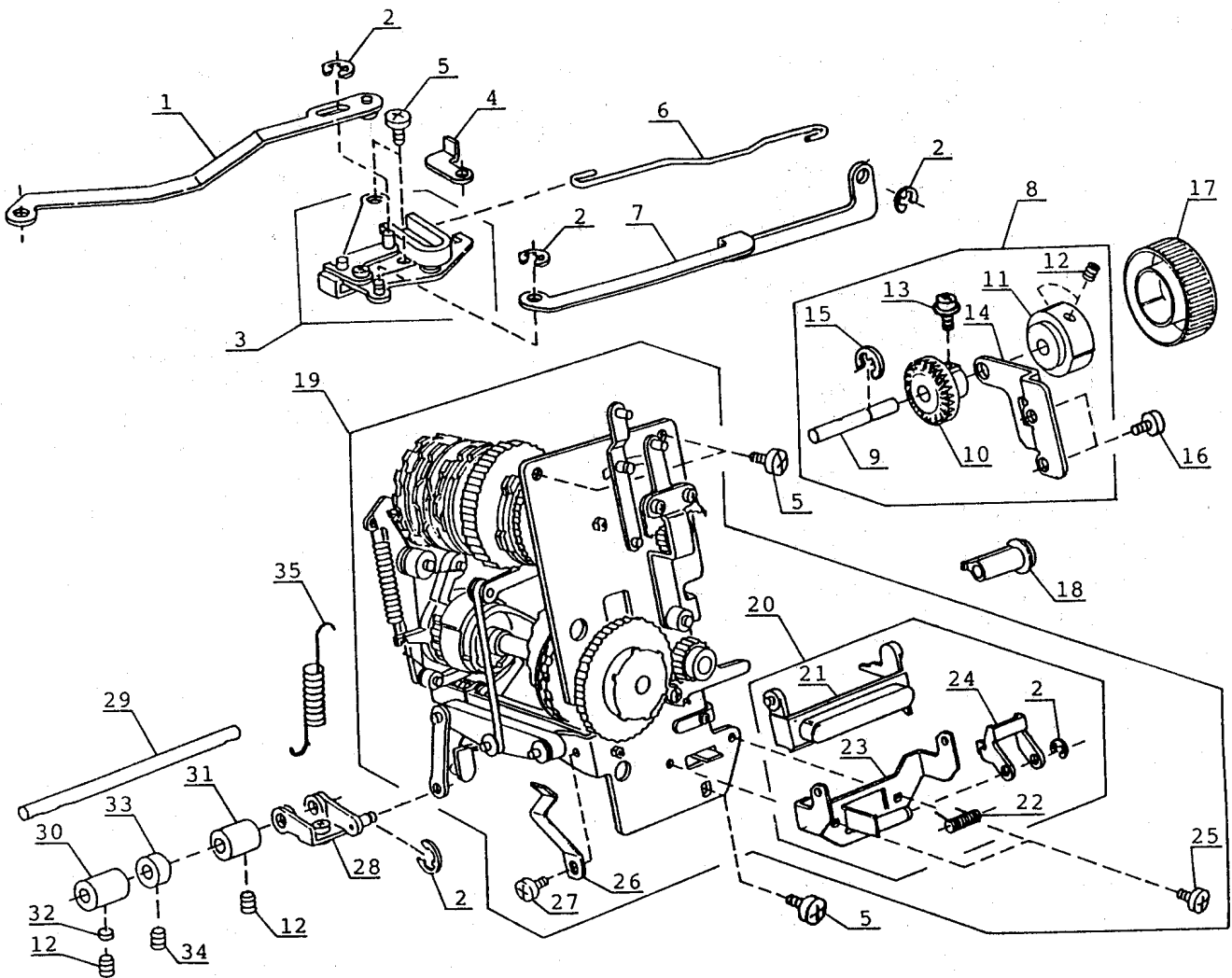
No.	Part No.	Part Name	No.	Part No.	Part Name
1	822065005	Pressure dial	24	822658xxx	Needle bar (unit)
2	824009007	Pressure adjusting cam holder	25	650100004	Needle bar connecting stud
3	686027007	Pressure adjusting cam (1)	26	102408089	Needle HA1-14
4	686028008	Pressure adjusting cam (2)	27	686612005	Needle bar crank rod (unit)
5	815023009	Presser bar spring	28	625226009	Needle bar crank rod
6	102801008	Presser bar	29	650040005	Felt
7	822525008	Presser foot (unit)	30	650041006	Felt holder spring
8	804509000	Foot holder (unit)	31	650033005	Needle bar supporter shaft
9	822508005	Zigzag foot (unit)	32	650034006	Needle bar supporter shaft holder plate
10	102012004	Thumb screw	33	000101404	Set screw 4 x 6
11	686074009	Presser bar bracket	34	650036008	Needle bar supporter shaft spring
12	000111500	Hexagon socket screw 4 x 8	35	650035007	Zigzag width crank
13	102222009	Darner spring	36	000111108	Hexagon socket screw 4 x 6
14	652145007	Presser foot lifter	37	686085003	Needle bar supporter spring
15	822072005	Presser foot lifter pin			
16	000103509	Set screw 4 x 10			
17	000070506	Plain washer 4			
18	652146008	Thread tension release lever			
19	652042003	Thread tension release lever pin			
20	000001609	Snap ring E-5			
21	650038000	Needle bar supporter (unit)			
22	650038000	Needle bar supporter			
23	000111201	Hexagon socket screw 4 x 4			



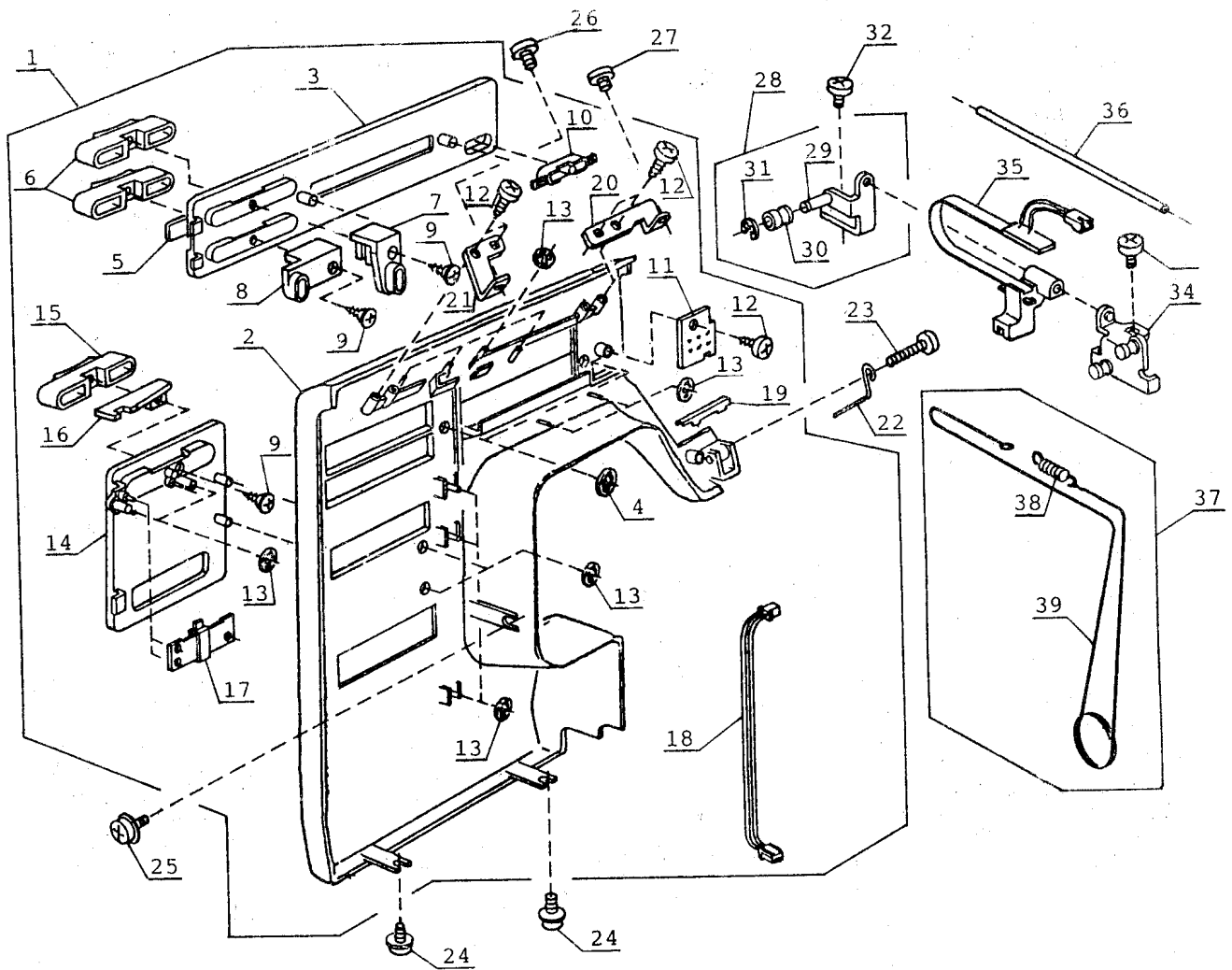
No.	Part No.	Part Name	No.	Part No.	Part Name
1	686623009	Upper shaft (unit)	24	650068009	Clutch spring
2	102073003	Set screw	25	000107307	Tapping screw 3 x 8 (B)
3	102063000	Set screw	26	000036201	Thrust washer 8-0.5
4	000111304	Hexagon socket screw 5 x 5	27	650174009	Washer
5	650060001	Worm gear	28	810346006	Cam shaft screw
6	000111201	Hexagon socket screw 4 x 4	29	650070509	Clutch cap
7	000101301	Set screw 5 x 10	30	753133101	Shielding plate
8	673062004	Upper shaft bushing (rear)	31	000111108	Hexagon socket screw 4 x 6
9	650063004	Upper shaft timing gear	32	000061102	Hexagon nut 4-1-7
10	650071005	Timing belt	33	753131006	Switch holder
11	000030205	Snap ring E-8	34	000078319	Set screw 3 x 6
12	000036706	Thrust washer 10-0.5	35	753505005	Bobbin winder switch (unit)
13	627568002	Needle bar crank pin (unit)	36	753132007	Sensor holder plate
14	627183009	Needle bar crank pin	37	735514104	Photosensor (unit)
15	532041007	Needle bar crank pin cap	38	000101404	Set screw 4 x 6
16	820511005	Thread take-up lever (unit)			
17	650062003	Thread take-up lever shaft			
18	000001702	Snap ring E-6			
19	650609503	Balance wheel (unit)			
20	650064500	Balance wheel			
21	650065006	Clutch pin			
22	650066007	Clutch pin spring			
23	650067503	Clutch knob			



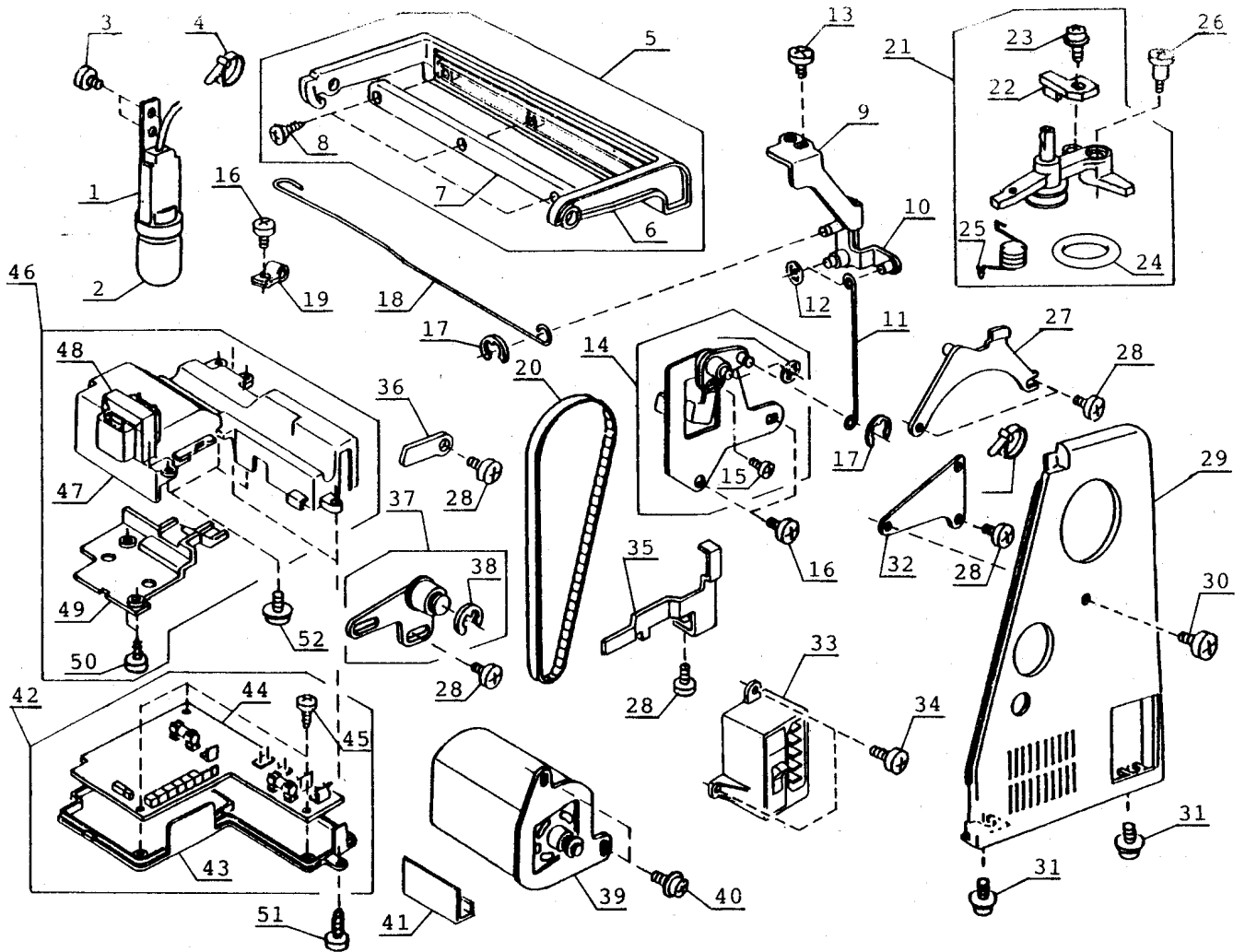
No.	Part No.	Part Name	No.	Part No.	Part Name
1	652620001	Feed rock shaft (unit)	28	650023002	Plain washer
2	652109009	Feed dog	29	000002105	Snap ring E-3
3	614025002	Set screw	30	650171006	Positioning plate
4	650085002	Feed bar spring	31	000101404	Set screw 4 x 6
5	532030003	Screw center	32	000070506	Plain washer 4
6	000111304	Hexagon socket screw 5 x 5	33	650172007	Hinge screw
7	650612004	Feed regulator (unit)	35	686613006	Lower shaft (unit)
8	650614006	Hook complete (unit)	36	650074008	Forward feed cam ring
9	652623004	Hook (unit)	37	000121606	Tapping screw 3 x 12 (S)
10	627191000	Hook bottom plate	38	625120105	Feed cam
11	820374004	Set screw 2 x 2.3	39	627207000	Feed cam spring
12	820123006	Hook shaft	40	625118007	Feed cam ring
13	820124007	Hook shaft oil felt (1)	41	000111201	Hexagon socket screw 4 x 4
14	820125008	Hook shaft oil felt (2)	42	650076000	Lower shaft gear
15	000036500	Thrust washer 6-0.5	43	686036102	Feed lifting cam
16	625102008	Plain washer	44	820161006	Feed lifting pin
17	627192001	Hook shaft washer	45	000036201	Thrust washer 8-0.5
18	650094004	Hook shaft base	46	820166001	Ring
19	000081005	Set screw 4 x 8	47	686035008	Feed lifting cam spring
20	650095005	Hook race cover	48	650078002	Lower shaft bushing (front)
21	000107204	Tapping screw 3 x 12 (B)	49	650079003	Lower shaft bushing (rear)
22	650096006	Hook holder plate	50	650101005	Feed shift rod
23	650097007	Feed shift arm	51	652515002	Hook body (unit)
24	650098008	Feed shift plate	52	656159006	Plain washer 3.3
25	627190009	Hook magnet			
26	000103808	Set screw 3 x 5			
27	650099009	Feed shift spring			



No.	Part No.	Part Name	No.	Part No.	Part Name
1	650156005	Zigzag width rod (front)	21	753047004	R button
2	000002105	Snap ring E-3	22	753147005	R button spring
3	686618001	Zigzag width crank (unit)	23	753046003	R button supporter
4	688003003	Zigzag stopper	24	753150001	R button arm (2)
5	000081005	Set screw 4 x 8	25	000103808	Set screw 3 x 5
6	688004004	Zigzag width rod	26	753061004	Pattern selector index spring
7	753084003	Zigzag width adjusting rod	27	000101105	Set screw 3 x 4
8	753647000	Pattern selector dial shaft (unit)	28	652607002	Feed regulating arm (unit)
9	753203000	Pattern selector dial shaft	29	650091001	Feed shaft
10	753082001	Dial gear	30	625144002	Feed shaft bushing (front)
11	753202009	Pattern selector dial seat	31	650092002	Feed shaft bushing (rear)
12	000111201	Hexagon socket screw 4 x 4	32	650175000	Screw stopper plate
13	000115009	TP screw 3 x 8	33	820387000	Ring
14	753083002	Dial supporter	34	000111108	Hexagon socket screw 4 x 6
15	000001609	Snap ring E-5	35	753033007	Regulator spring
16	000101404	Set screw 4 x 6			
17	753201008	Pattern selector dial			
18	650162406	SS adjusting knob			
19	753630000	Control mechanism block (unit) for Model ML3023			
19	753623000	Control mechanism block (unit) for Model MW3018			
20	753611005	R button (unit)			



No.	Part No.	Part Name	No.	Part No.	Part Name
1	753615009	Front panel (unit) for U.S.A.	21	753109005	Front panel retaining plate (rear)
1	753615102	Front panel (unit) for Canada/Aust./N.Z.	22	753126008	Arm thread guide
1	753615205	Front panel (unit) for U.K.	23	000093608	Set screw 3.5 x 30
2	753100109	Front panel for U.S.A.	24	000115205	TP screw 4 x 6
2	753100305	Front panel for Canada/Aust./N.Z.	25	000115607	TP screw 4 x 8
2	753100501	Front panel for U.K.	26	000081005	Set screw 4 x 8
3	753101007	Pattern indication plate	27	000101105	Set screw 3 x 4
4	000014007	Snap ring CS-4	28	753616000	Indicator guide holder (front) (unit)
5	753102008	Band plate	29	753110009	Indicator guide holder (front)
6	753103009	Slide button	30	652099005	Guide roller
7	753104000	Zigzag width adjusting slider	31	000001207	Snap ring E-2.5
8	753105001	Stitch length adjusting slider	32	000101404	Set screw 4 x 6
9	000163105	Tapping screw 2.3 x 5	34	753111000	Indicator guide holder (rear)
10	753106002	Up/down needle position button	35	753508008	Flexible circuit board (unit)
11	753511004	Circuit board UD (unit)	36	753112001	Indicator guide
12	000120203	Tapping screw 3 x 8 (B)	37	753618002	Indicator string (unit)
13	000014306	Snap ring CS-3	38	818033001	Indicator string spring
14	753128103	R button frame	39	753113002	Indicator string
15	753103009	Slide button			
16	753107003	Slide piece			
17	653507107	Slide volume (unit)			
18	753528004	Junction cord (unit)			
19	753108007	Thread protecting plate			
20	753108004	Front panel retaining plate (front)			



No.	Part No.	Part Name	No.	Part No.	Part Name
1	753520006	Lamp socket (unit) for U.S.A.	30	000101806	Set screw 4 x 16
1	753527003	Lamp socket (unit) for Canada	31	000115205	TP screw 4 x 6
1	826516101	Lamp socket (unit) for Aust./U.K./N.Z.	32	753116005	Belt cover retaining plate
2	000008606	Light bulb 120 V 15 W E12 for U.S.A./Canada	33	753509009	Machine socket (unit) for U.S.A./Canada
2	000009009	Light bulb 240 V 15 W BA15D for Aust./U.K./N.Z.	33	753516009	Machine socket (unit) for Aust./U.K./N.Z.
3	000101105	Set screw 3 x 4	34	000101703	Set screw 4 x 12
4	000053008	Binder	35	753143001	Cord guide
5	753620007	Carrying handle (unit)	36	753200007	Cord guide
6	753121003	Carrying handle	37	753619003	Idler (unit)
7	753122004	Carrying handle plate	38	000002806	Snap ring E-6
8	000120502	Tapping screw 3 x 8 (B)	39	013990110	Motor (unit) for U.S.A./Canada
9	753117006	Drag rod link holder plate	39	023197110	Motor (unit) for Aust./U.K./N.Z.
10	753118007	Drag rod link	40	000115504	TP screw 5 x 10
11	753099001	BH drag rod (2)	41	753148006	Protecting sheet
12	000014007	Snap ring CS-4	42	753621008	Circuit board case (unit) for U.S.A./Canada
13	810220003	Set screw	42	753627004	Circuit board case (unit) for Aust./U.K./N.Z.
14	753614008	Step-up base (unit)	43	753123005	Circuit board case
15	000101507	Set screw 3.5 x 5	44	753518001	Circuit board B (unit) for U.S.A./Canada
16	000101404	Set screw 4 x 6	44	753519002	Circuit board B (unit) for Aust./U.K./N.Z.
17	000002105	Snap ring E-3	45	000107905	Tapping screw 3 x 6 (B)
18	753098000	BH drag rod	46	753622009	Circuit board case cover (unit) for U.S.A./Canada
19	000126508	Nylon clip SL-6N	46	753622009	Circuit board case cover (unit) for Aust./U.K./N.Z.
20	650166008	Timing belt	47	753124006	Circuit board case cover
21	653633000	Bobbin winder (unit)	48	688509004	Transformer (unit) for U.S.A./Canada
22	653133005	Switch pressing plate	48	688514002	Transformer (unit) for Aust./U.K./N.Z.
23	000114709	TP screw 3 x 6	49	753144105	Transformer cover
24	365976007	Rubber ring	50	000107318	Tapping screw 3 x 8 (B)
25	823119008	Bobbin winder frame spring	51	000076317	Tapping screw 3 x 10
26	686063005	Hinge screw	52	000115607	TP screw 4 x 8
27	753120002	Carrying handle supporter plate			
28	000081005	Set screw 4 x 8			
29	753115004	Belt cover			

