7. Practical trouble shooting

01. Poor print

Whenever you have a printing performance problem, check first if the carbon ribbon is suitable to the machine. Check the paper too, because some kind of paper are made of special material which repels the carbon ink.

1) Poor print impression

Adjust the volume resistor(located beneath 2 and 3 key) in the direction of A(X).

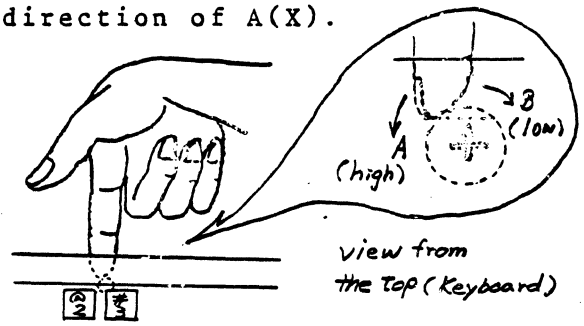


fig.1 fig.2

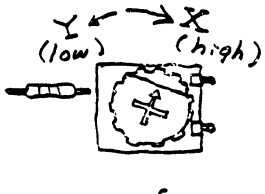


fig.3

If you make it too strong, the life of typewheel will be shortened. The adjustment position shown in fig.3 will be recommended.
Printing performance varies according to the type style.
With Pica: all letters should be printed completely in the middle position of the impression selector switch
With Elite or Micron : all letters should be printed completely in the low position of the impression selecto

2) Bottom or top of letters too light

If the top or bottom of some letters are slightly light, check and adjust the volume resistor in the same manner as item 1).

Excite the selection motor by turning switch on while shorting the AUX D/C which is located on the right corner of the keyboard PCB. A small piece of aluminum foil will be suggested to use for shorting.

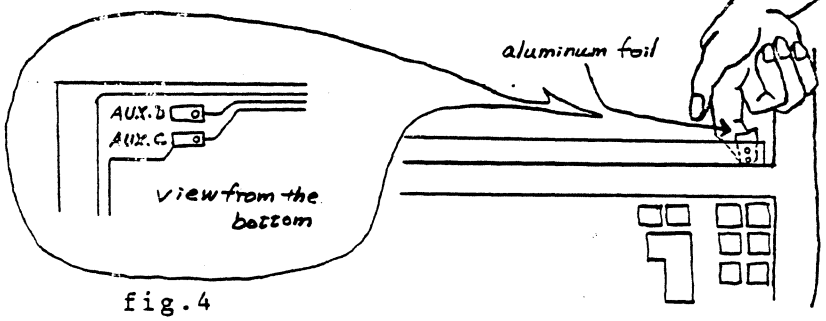


fig.4 fig.5

Loosen the hammer bracket set screws and position the hammer solenoid. Move the hammer solenoid backward if the top of prints is light. Move it forward if the bottom is light.
Use two holes on the base as a guide for positioning. If the hammer is too far from the typewheel, it might cause click sounds. (see fig.5)
When fasten the screws, adjust the hammer solenoid sideways so that the notch of hammer fits to the prism on spokes exactly. If it does not fit, it might cause click sounds or poor printing.(see fig. 6)

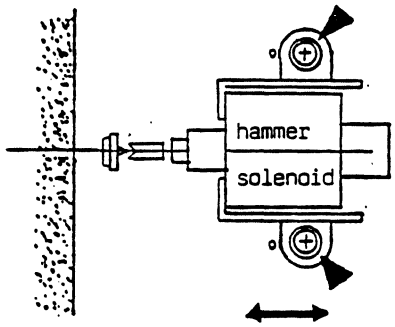


fig.5

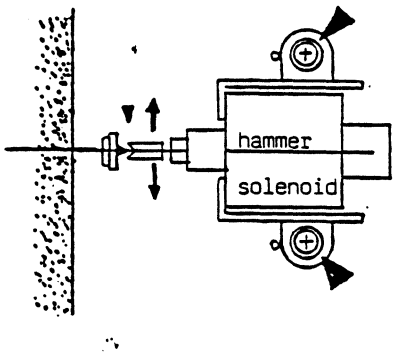


fig.6

This adjustment by excitation of motors should be completed in 10 minutes, or the motors will heat up.

3) Ring and cylinder

If the lightness of letters can not be fixed by above procedures, check the "Ring and cylinder" adjustment. Ring and cylinder means how the typefaces touch the platen roller when it is typed.

Step 1.
Check the distance in normal position between the typewheel and the platen roller in both right and left side. If it has the standard distance(approx.3.5mm), go to the step 2. (see fig.7)

Adjustment of the distance will be made as follws.
At first, loosen the set screws A,C on the adjust plate. Insert the flat screw driver-like into the slit of the adjust plate and move it so that the distance between the type wheel and the platen will be 3.5mm by pivoting on the screw B. If the plate does not move at all, loosen the screw B slightly. Check the distance with a thickness gauge 3.5mm.

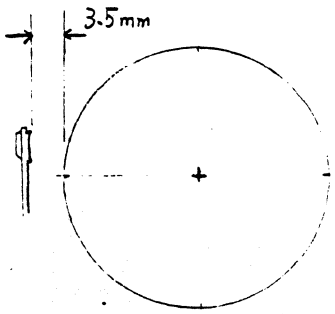
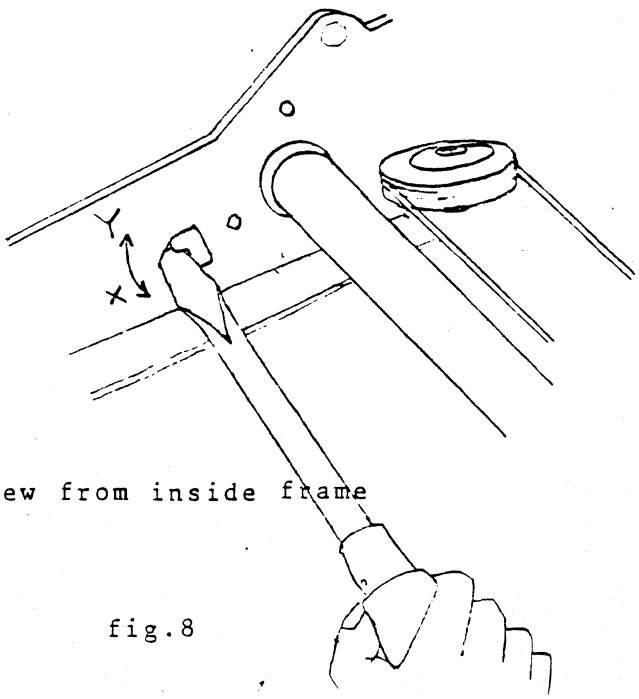
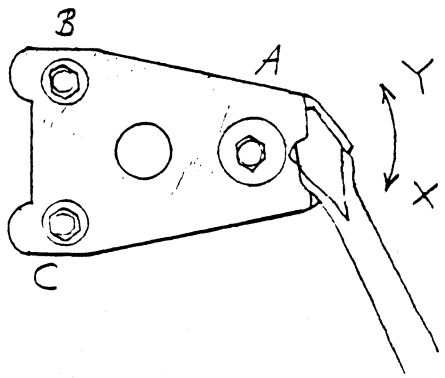


fig.7



view from inside frame

fig.8



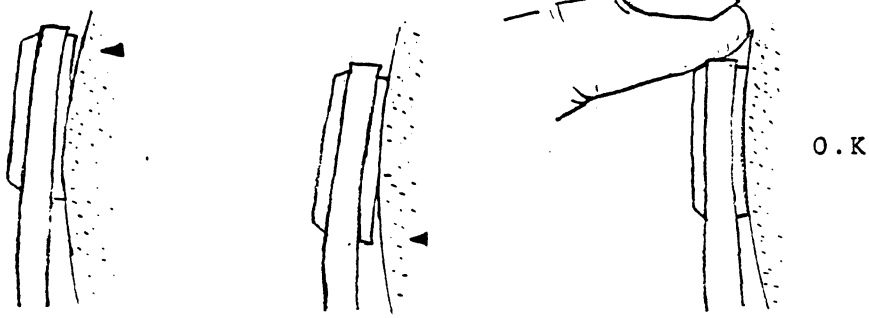
view from outside frame

fig.9

Step 2.

Fasten the screw C. Loosen the screw B. Insert a flat screw driver-like into the slit again. Adjust the contact surface of the typewheel and platen by pivoting the adjust plate on the screw C so that the typeface will meet the platen surface evenly.
If the upper part of contact surface has some clearance, move the adjust plate in the direction of arrow X. And arrow Y for the lower part has some clearance.(see fig.8,9,10)

fig.10



Some of longer typeface letters will be recommended to use. Fasten all the screws. Check the normal distance between the typewheel and the platen again. If the screw C is not fastened sufficiently, above adjustment might spoil the normal distance adjusted in step 1. In that case, take the step 1,2 again.

Step 3.

Do the same steps as step 1,2 in the other side of platen.

02. Ribbon problem

If the top of longer letters like §,$,#,(),Ü,Äetc. does not print, it might be caused by ribbon lifting being low.

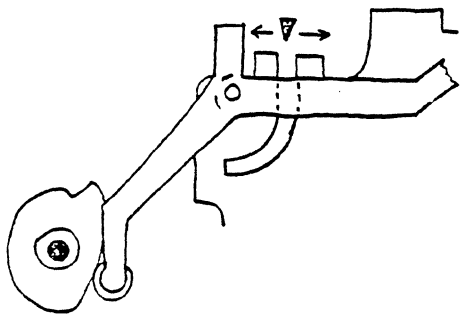


fig.11

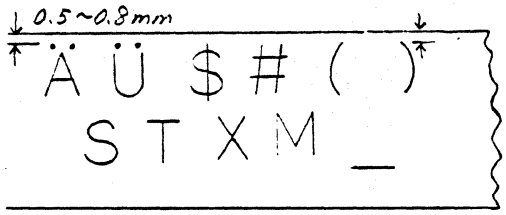


fig.12

Step 1.

Check the printed marks on the carbon ribbon. Open the slit on the right side of printer head chassis so that the clearance between the upper edge of the carbon ribbon and the printed marks on the carbon ribbon will be in 0.5-0.8mm.

Step 2.

After above adjustment, check if the overlapping amount of the carbon ribbon and the correction tape at the highest ribbon position is more than 1 mm. (see fig.13)
If the ribbon lifts too high, it might cause a ribbon jamming on the correction tape. (see fig.14)
About adjustment for correction tape height, see 03.Correction problem-item 3).

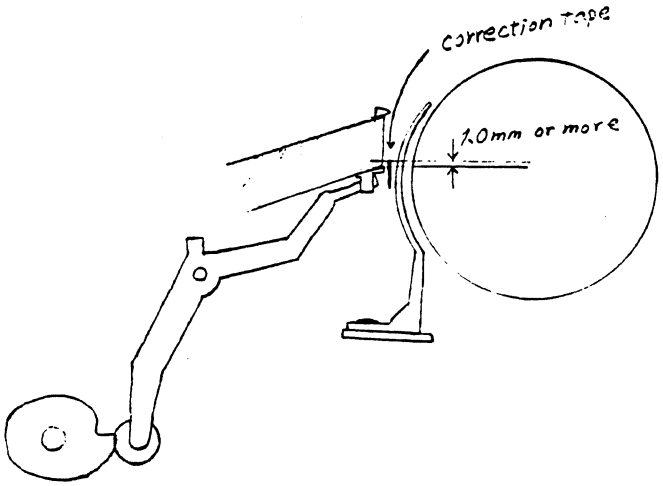


fig.13

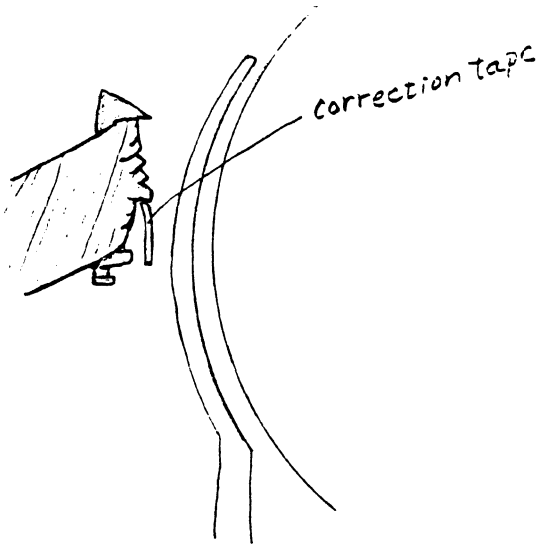


fig.14

03. Correction problem

1) Correction tape does not transport

Step 1.
Check if the correction retainer spring is not missing.

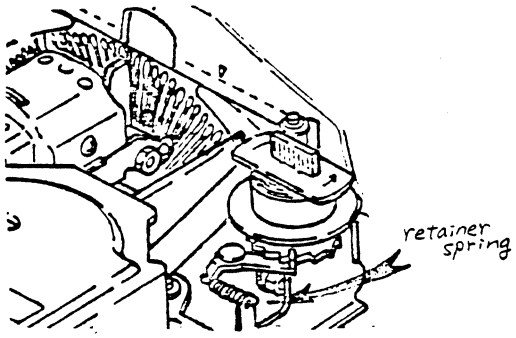


fig.15

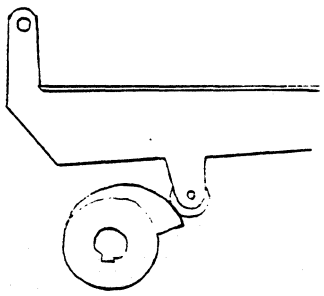


fig.16

Step 2.
Remove the correction tape spool right from the correct feed ratchet. Rotate the correct cam manually and check how the feed pawl and the retainer work.
When the correct cam comes to the highest position(fig.16), there should be some clearance(approx. 0.5mm) between the retainer and the ratchet after being fed.(see fig.17)

When the correct cam returns to the neutral position after a transportation of the correction tape, there should be some clearance between the feed pawl and feed ratchet. Adjustment will be made by bending the pawl holder on the ribbon base. (fig.17,18)

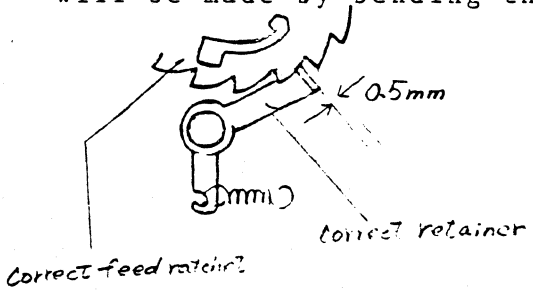


fig.17

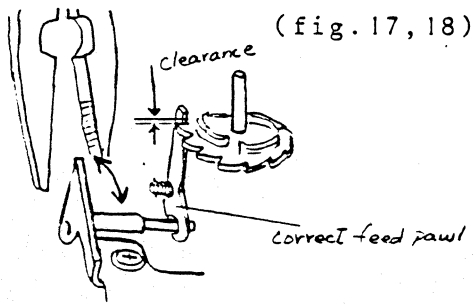


fig.18

2) Top of letters is not correctable

Step 1
Check if the windows of line locator does not prevent the correct rollers from going up.(fig.19,20)
If a correct roller leans forward to the line locator, straighten up the roller. If the line locator is too far from the platen roller, align the line locator.

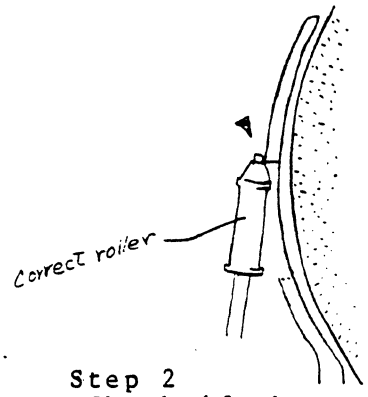


fig.19

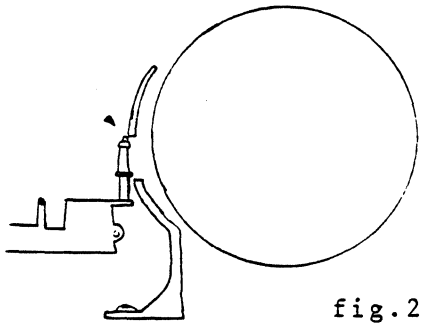


fig.20

Step 2
Check if the correction ribbon goes up high enough in its lifting stroke.(see fig.21) If the correction tape is too low , bend the cam follower bracket of the right correction arm. However, there should be some clearance between the cam and the cam follower before it starts cam function(point A in fig 22)

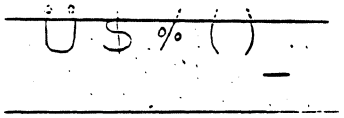


fig.21

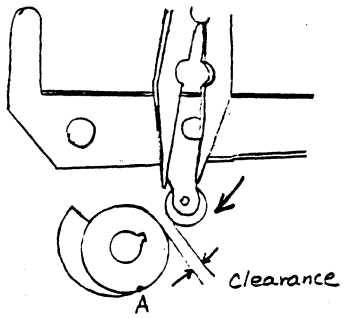


fig.22

3) Underscore does not print

This problem is mostly caused by the height of correction tape being too high in its normal position.
The normal height of correction tape will be adjusted by the stopper on the ribbon base(fig.23) or on theline locator base right(fig.24)

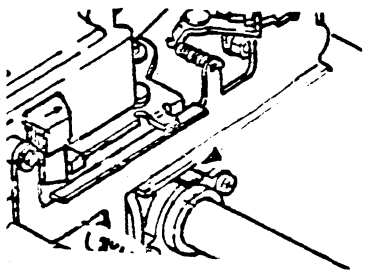


fig.23

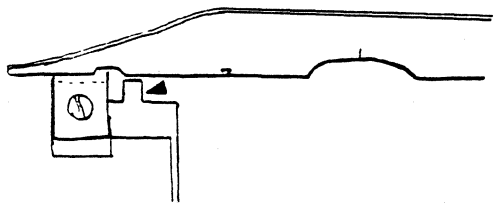


fig.24

Ajusting by the line locator base might affect the line locator alignment.

4) Part of letters is not correctable

fig.25

Check if the correction tape touches the edge of window on the line locator and correctable material is sticking on it. (see fig.26)

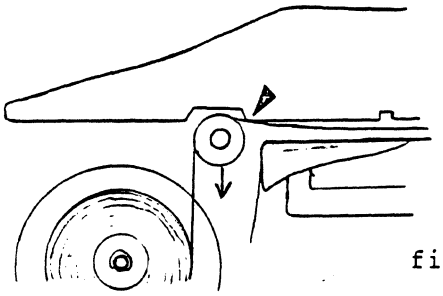


fig.26

Bend the correct roller in the direction of arrow so that the correct tape does not touch the edge of line locator.
(This problem tends to appear when a customer inserts many papers at one time for making carbon copies.)
However, if the tape is too close to the carbon ribbon, it might cause some difficulty in setting the cassette.
On the other hand, if the line locator is too far from the platen, align the line locator.

5) Poor correction performance

When you have any correction problem, check first if the customer is using a proper carbon ribbon and suitable correction tape. And the type of paper is also very important for the printing and correction performance.

Step 1.
Check the adjustment on the carrier drive gear and the drive pulley. There should not exist any backlash or tightness in mesh.(fig.27)

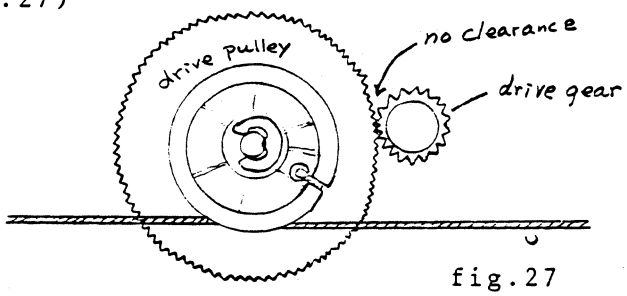


fig.27

Loosen the set screw(upper one) and move the carrier drive motor.

Step2.
Check the tension of the drive wire. The tension should be 16mm by 500g as in fig.28. It will be adjusted by the tension pulleys which have eccentric set screws. Two tension pulleys should be adjusted equally(symmetrically) in the direction of arrow A so that the wire will be parallel to the base plate. Before the final positioning of the tension pulleys, align the wire around the drive pulley and pull the wire in order to take up the slack in the wire on the drive pulley.

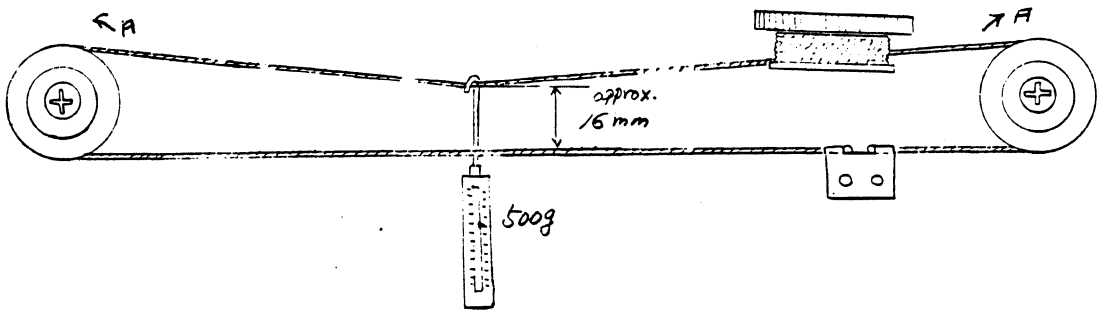


fig.28

Step 3.
Check if there is a lateral play on the hammer. There should be no play. Adjustment will be made by fastening screw, however, do not make it too tight and make sure that the hammer works free.

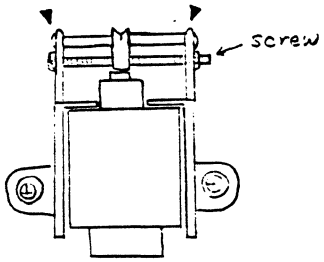


fig.29

Step 4.
Check if the line locator is not pressing the paper too tightly. The line locator moves the paper when the carrier makes backspace in its correction movement and causes poor correction.
For the adjustment see 04.Line locator adjustment.

Step 5.
Check if the tension pully set nuts, the carrier drive motor set screws and the drive wire set screws are not loose.

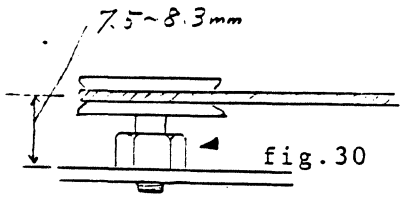


fig.30

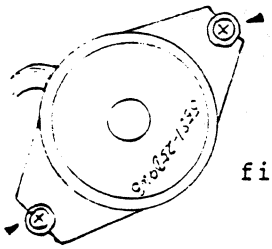


fig.31

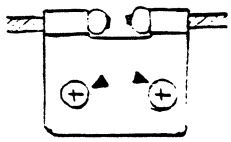


fig.32

Step 6.
Check if the correct brake spring beneath the correct tape spool has not excessive tension.
Adjustment will be made by making the diameter of spring wider.

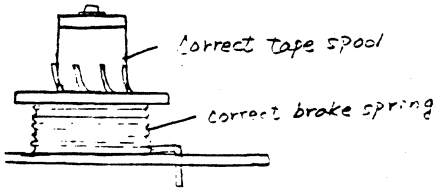


fig.33

Step 7.
Check if the impression by the volume resistor is not too high.
For the adjustment, see 01.

04. Line locator adjustment

1) Guide for typing letters

Adjust horizontally so that the bottom line of "1" and "i" meet the dash scale on the line locator.
Adjust vertically so that the center mark "⊥" and triangle marks "▽" will meet the "1" and "i".
See fig.34-39.

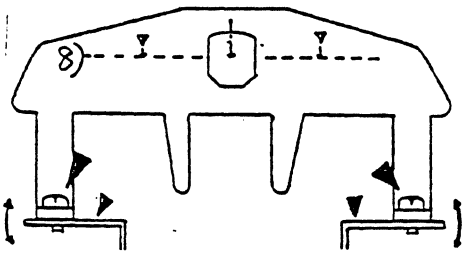
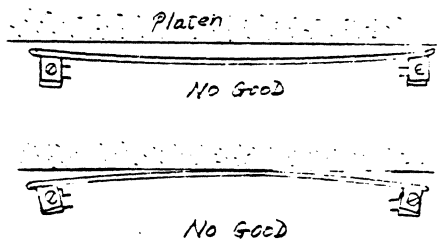


fig.34

2) Distance from the platen

The clearance between the line locator and the platen roller is critical for proper ribbon function.
The clearance should be equal from side to side on the line locator. The adjustment will be made by loosening 2 set screws or forming the line locator base on the carrier chassis.



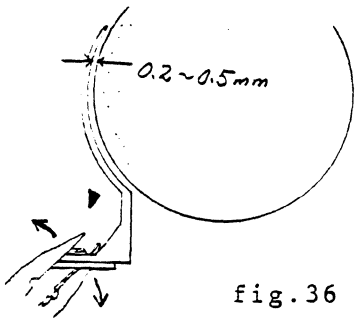


fig.36

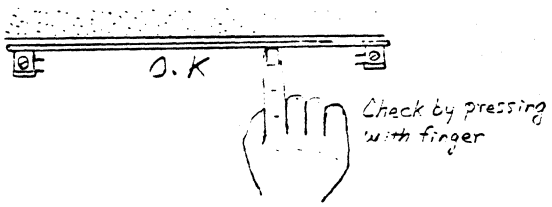


fig.35

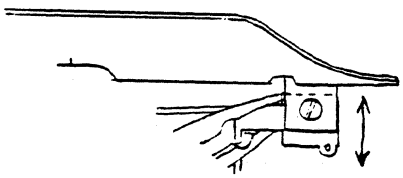


fig.37

If the clearance between the line locator and the platen is too much, the line locator might push the correction tape and make it jam with the carbon ribbon. In that case, you can see some scratches on the carbon ribbon made by the edge of the correction tape like in fig.38. You may also find that the ribbon does not get in between the correction tape and the typewheel when setting the cassette. (see fig.39)

Note: At the end of line locator adjustment, be sure to fasten the set screws firmly.

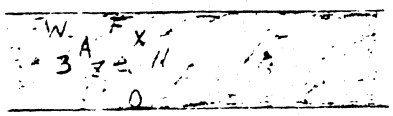


fig.38

05. Standard position of parts
(platen, line locator, correction tape, carbon ribbon, ribbon center guide, typewheel)

The standard positioning of printing parts is shown below.

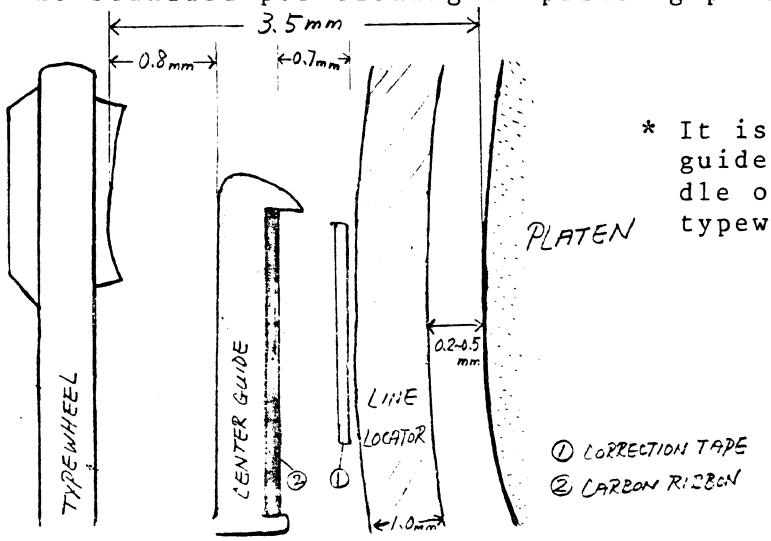


fig.39

* It is preferable that the center guide is positioned in the middle of the line locator and the typewheel.

You can also adjust the posioning of the center guides by filing it and putting a plastic washer.

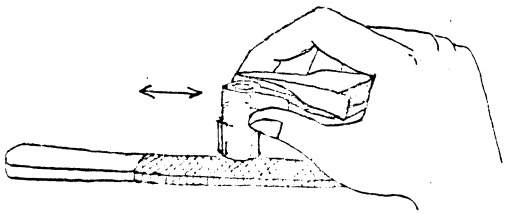


fig.40

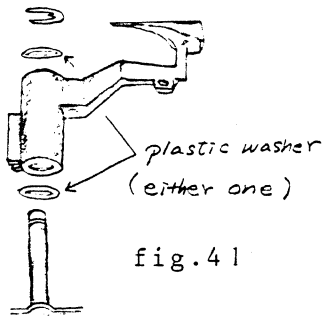


fig.41

06. Carbon ribbon does not transport

Step 1.
Check if the cassette is not deffective by replacing it.

Step 2.
Check if the referring springs are all in the proper position and all referring parts work free. (see fig.42)

Step 3.
Check if the surface of the feed pulleys and feed spring are not greasy with excessive oil. (see fig.42 ①⑦⑧)

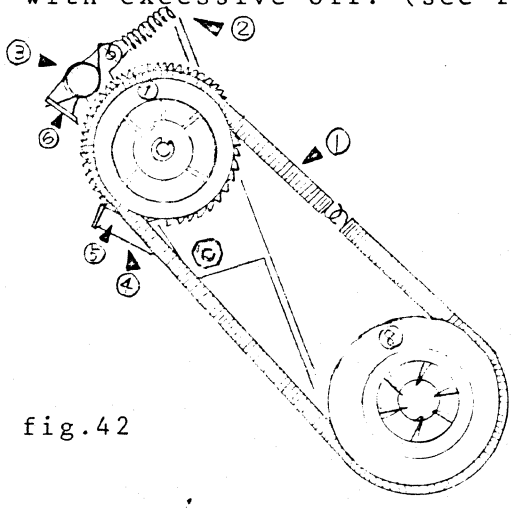


fig.42

① ribbon feed spring
② feed finger spring
③ feed torsion spring
④ stop finger spring

⑤ stop finger
⑥ feed finger

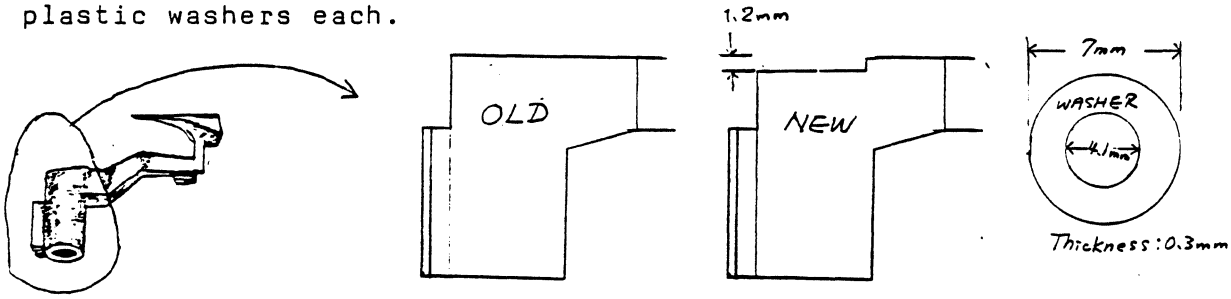
⑦ ribbon feed pulley (small)
⑧ ribbon feed pulley (large)

Revise

July,1982

05. Standard position of parts

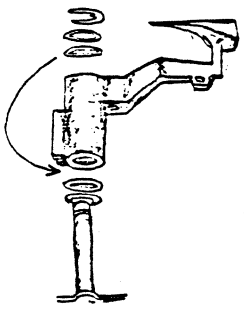
Dimension of the ribbon center guide left and right have been changed in order to make the adjustment and service easier. Instead of filing the ribbon center guides, use new ones with 4 plastic washers each.



The position of center guides will be adjusted by placing those washers in suitable position-behind or in front of the ribbon center guides.

*Example

If you want to get the ribbon guides forward, move a washer(front) to between the ribbon guides and printer head chassis



New parts number etc. will be informed later officially.

Installation of ribbon feed spring. ①→②→③

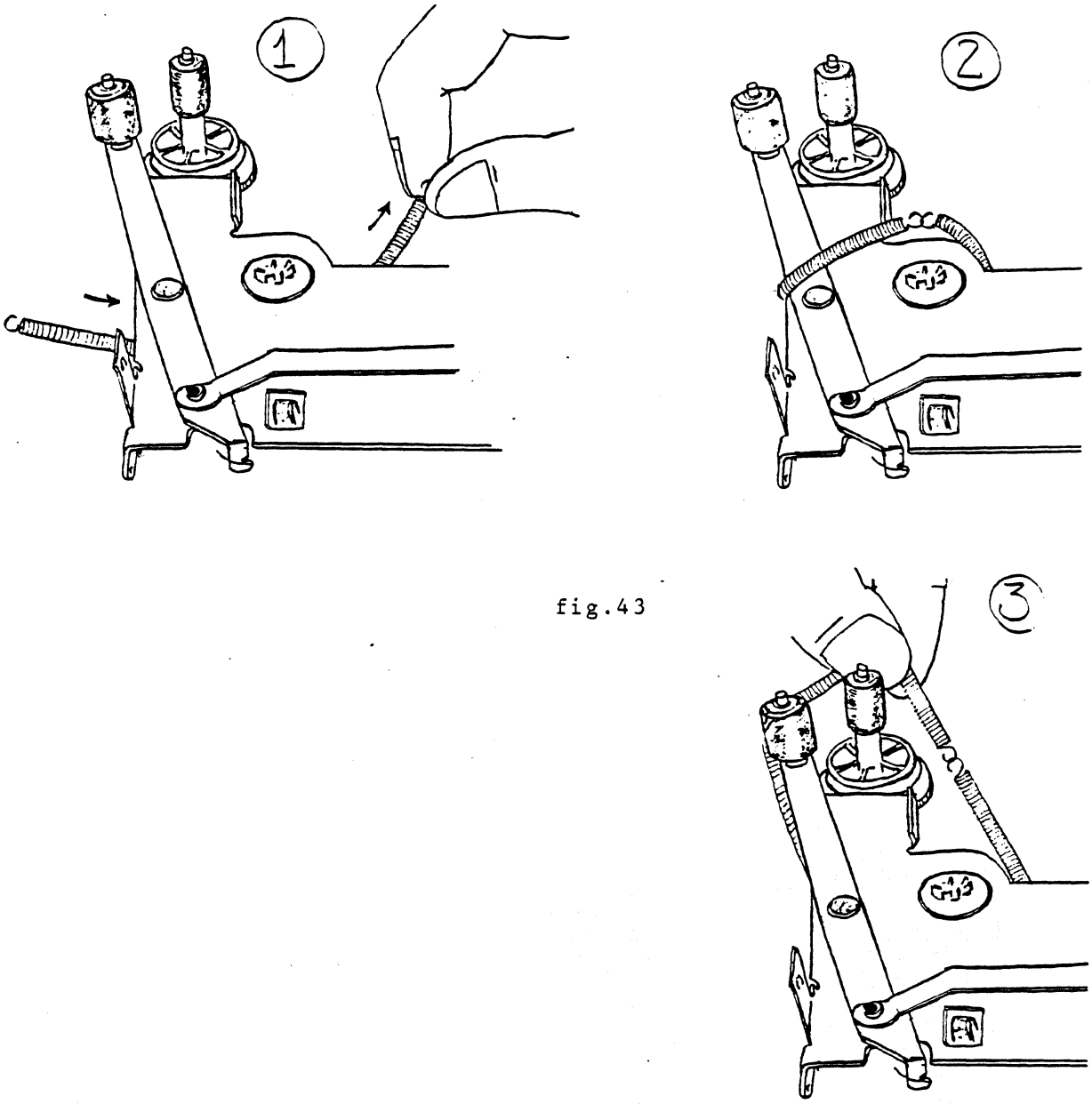


fig.43

07. Platen adjustment

1) Right side of the platen

Adjustment will be made by loosening 2 set screws. When fastening the screws, make sure that the screws meet the flat part of the platen shaft.

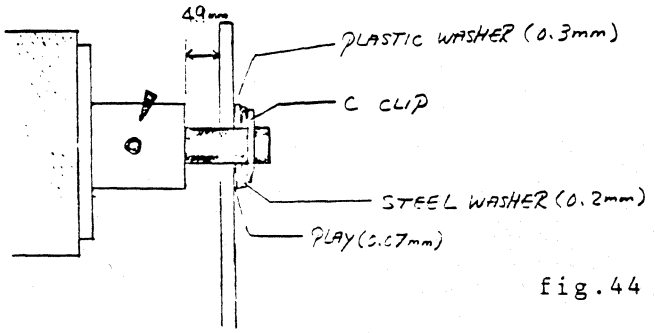


fig.44

2) Left side of the platen (Installation of platen knob shaft)

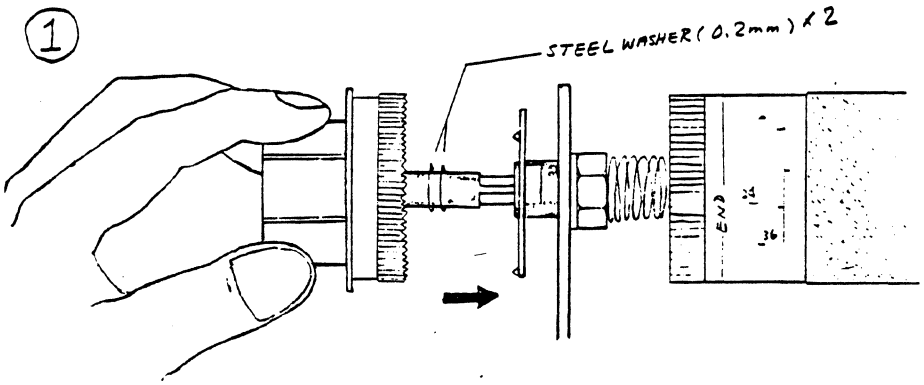


fig.45

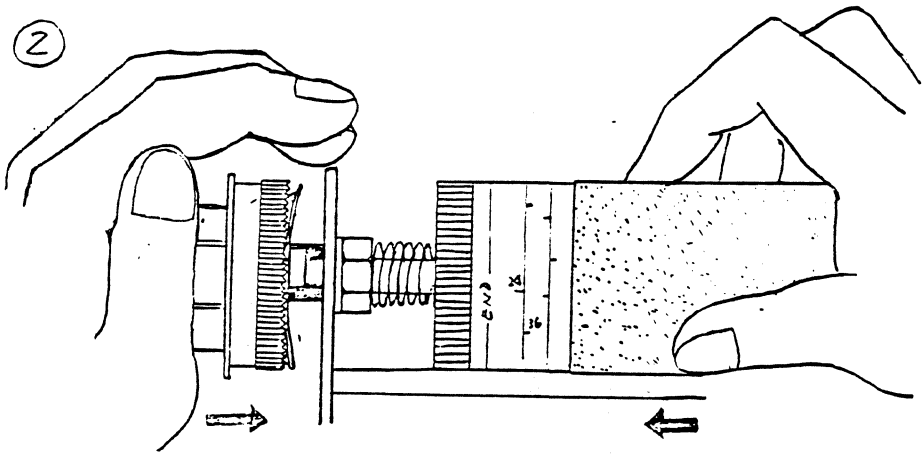


fig.46

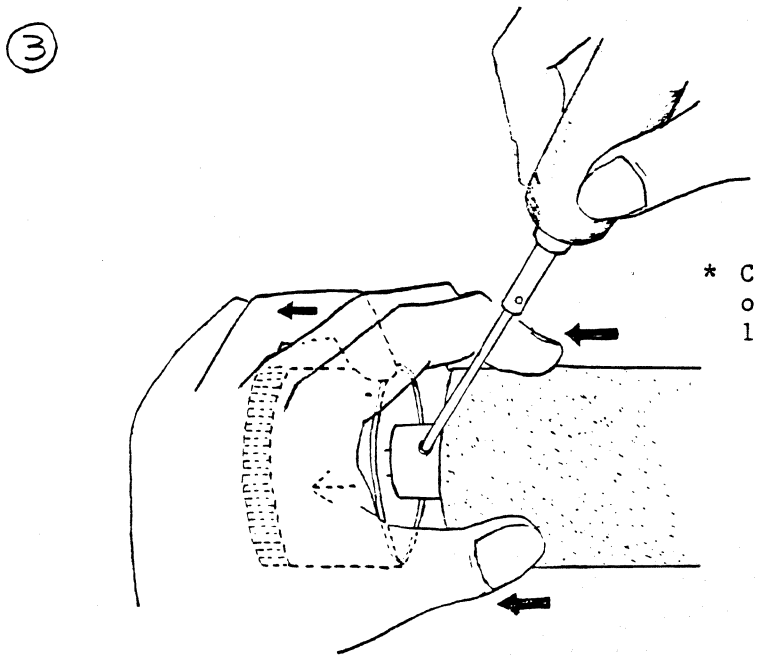


fig.47

* Check the lateral play of platen, after completion of installation. (approx.0.07mm)

3) Detent spring adjustment

Fit the 3 tips of the detent spring on to grooves of the platen pulley after the excitation of the index motor.

(see fig.4,5 in 01. Poor print)

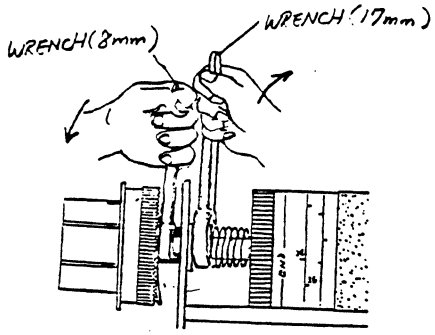


fig.48

Turn the platen knob shaft manually and check where the 3 tips of the detent spring will remain stationary. (with the index motor excited)

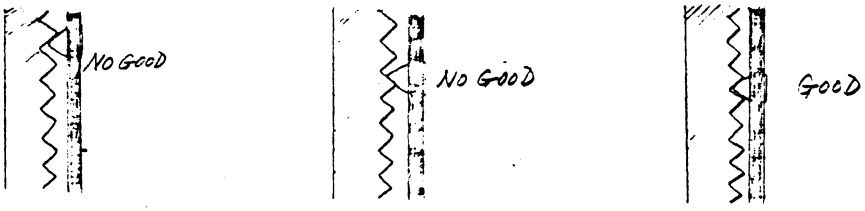


fig.49

1. Paper stand
2. platen knob
3. Erasure table
4. Paper end gauge
5. Platen roller
6. Line locator
7. Paper injector
8. Paper release lever
9. Paper bail
10. Paper pan support
11. Drive pulley
12. Index motor
13. Tension pulley
14. Carrier
15. Front rail
16. Ribbon motor
17. Keyboard

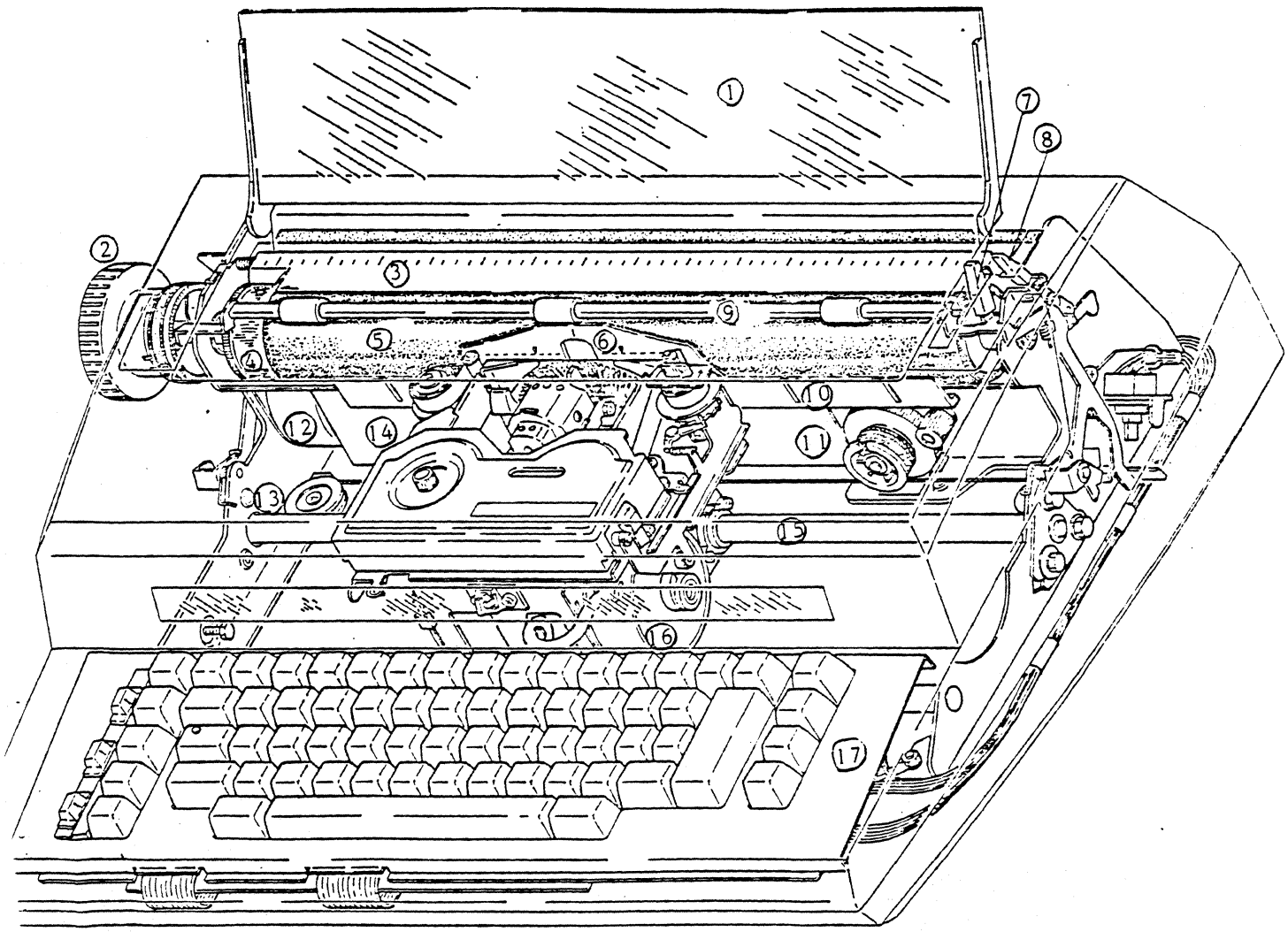
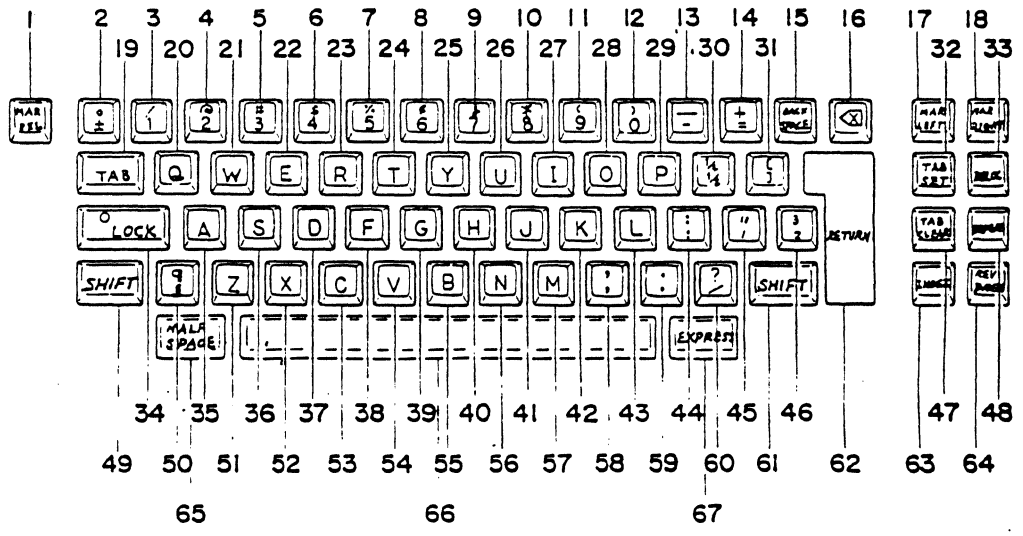
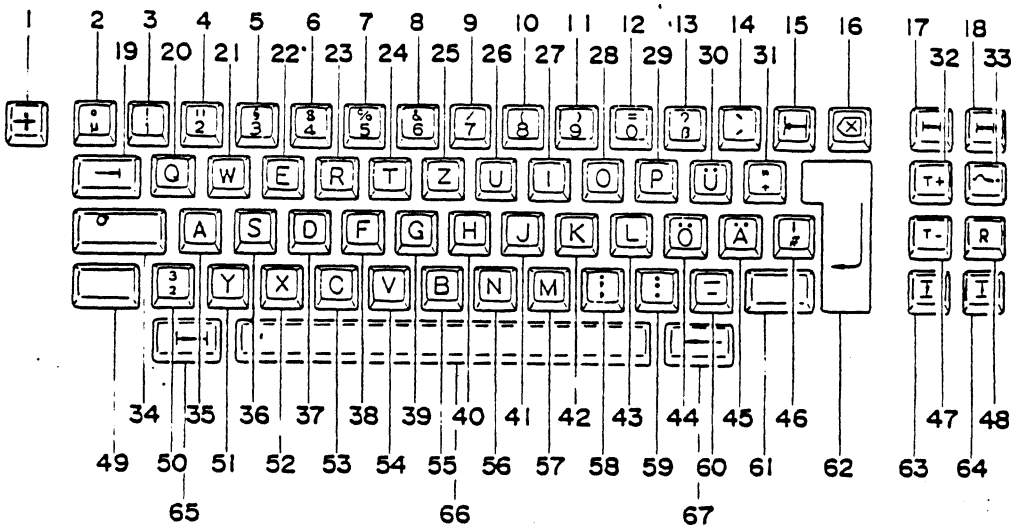


TABLE NO.		FUNCTIONAL GROUP NAME	KEY ARRANGEMENT (for OLYMPIA-American)



REF NO.	PARTS CORD	PARTS NAME	REF NO.	PARTS CORD	PARTS NAME
1	330-90510	Margin release key	36	330-90250	key (S)
2	332-91020	key (°)	37	330-90260	key (D)
3	330-90000	key (!)	38	330-90270	key (F)
4	332-91030	key (")	39	330-90280	key (G)
5	332-91040	key (#)	40	330-90290	key (H)
6	330-90030	key ($)	41	330-90300	key (J)
7	332-91050	key (%)	42	330-90310	key (K)
8	332-91060	key (&)	43	330-90320	key (L)
9	332-91070	key (')	44	330-90330	key (:)
10	332-91080	key (()	45	332-90340	key (;)
11	332-90080	key ())	46	330-91100	key (½)
12	330-90090	key (0)	47	332-90490	TAB-Clear key
13	330-90100	key (=)	48	332-91140	Repeat key
14	330-91090	key (~)	49	330-91150	Shift key left
15	330-90520	Back space key	50	330-90230	key (Q)
16	330-90530	Correction key	51	330-90360	key (Z)
17	330-90460	Margin left key	52	330-90370	key (X)
18	330-90470	Margin right key	53	330-90380	key (C)
19	330-90580	TAB-key	54	330-90390	key (V)
20	330-90120	key (Q)	55	330-90400	key (B)
21	330-90130	key (W)	56	330-90410	key (N)
22	330-90140	key (E)	57	330-90420	key (M)
23	330-90150	key (R)	58	332-91110	key (<)
24	330-90160	key (T)	59	332-91120	key (>)
25	330-90170	key (Y)	60	332-91130	key (?)
26	330-90180	key (U)	61	330-90610	Shift key right
27	330-90190	key (I)	62	330-90620	Return key
28	330-90200	key (O)	63	330-90560	Index key
29	330-90210	key (P)	64	330-90570	Revers index key
30	330-90220	key (*)	65	332-91160	Half space key
31	332-91090	key ([)	66	330-90650	Space ber
32	330-90480	TAB-Set key	67	332-91170	Express key
33	330-90550	Relocation key			
34	330-90590	Shift lock key			
35	330-90240	key (A)			

TABLE NO.		FUNCTIONAL GROUP NAME	KEY ARRANGEMGNT(for OLYMPIA German)



REF NO.	PARTS CORD	PARTS NAME	REF NO.	PARTS CORD	PARTS NAME
1	331-90890	Margin release key	36	330-90250	key (S)
2	333-91180	key ($\hat{\mu}$)	37	330-90260	key (D)
3	330-90000	key ($\dot{1}$)	38	330-90270	key (F)
4	333-91190	key ($\ddot{2}$)	39	330-90280	key (G)
5	333-91200	key ($\S$)	40	330-90290	key (H)
6	330-90030	key ($\$$)	41	330-90300	key (J)
7	332-91050	key ($\%$)	42	330-90310	key (K)
8	331-90710	key ($\&$)	43	330-90320	key (L)
9	331-90720	key ($\acute{}$)	44	331-90800	key ($\ddot{O}$)
10	333-91210	key ($($)	45	331-90810	key ($\ddot{A}$)
11	333-91220	key ($)$)	46	331-90820	key ($\doteq$)
12	331-90750	key ($\overline{=}$)	47	331-90380	TAB-Clear key
13	331-90760	key ($?$)	48	333-91240	Repeat key
14	333-91230	key ($\grave{}$)	49	333-91250	Shift key left
15	331-90900	Back space key	50	332-91100	key ($>$)
16	330-90530	Correction key	51	330-90170	key (Y)
17	331-90850	Margin left key	52	330-90370	key (X)
18	331-90860	Margin right key	53	330-90380	key (C)
19	331-90950	TAB-key	54	330-90390	key (V)
20	330-90120	key (Q)	55	330-90400	key (B)
21	330-90130	key (W)	56	330-90410	key (N)
22	330-90140	key (E)	57	330-90420	key (M)
23	330-90150	key (R)	58	331-90330	key (;)
24	330-90160	key (T)	59	331-90840	key (:)
25	330-90360	key (Z)	60	330-90100	key (_)
26	330-90180	key ($\ddot{U}$)	61	331-90980	Shift key right
27	330-90190	key (U)	62	331-90990	Return key
28	330-90200	key (O)	63	331-90930	Index key
29	330-90210	key (P)	64	331-90940	Revers index key
30	331-90780	key ($\ddot{U}$)	65	333-91260	Half space key
31	331-90790	key ($*$)	66	330-90650	Space bar
32	331-90870	TAB-Set key	67	333-91270	Express key
33	331-90920	Relocation key			
34	331-90960	Shift lock key			
35	330-90240	key (A)			

TABLE NO.		FUNCTIONAL GROUP NAME	KEY BORD MECHANISM(for OLYMPIA)

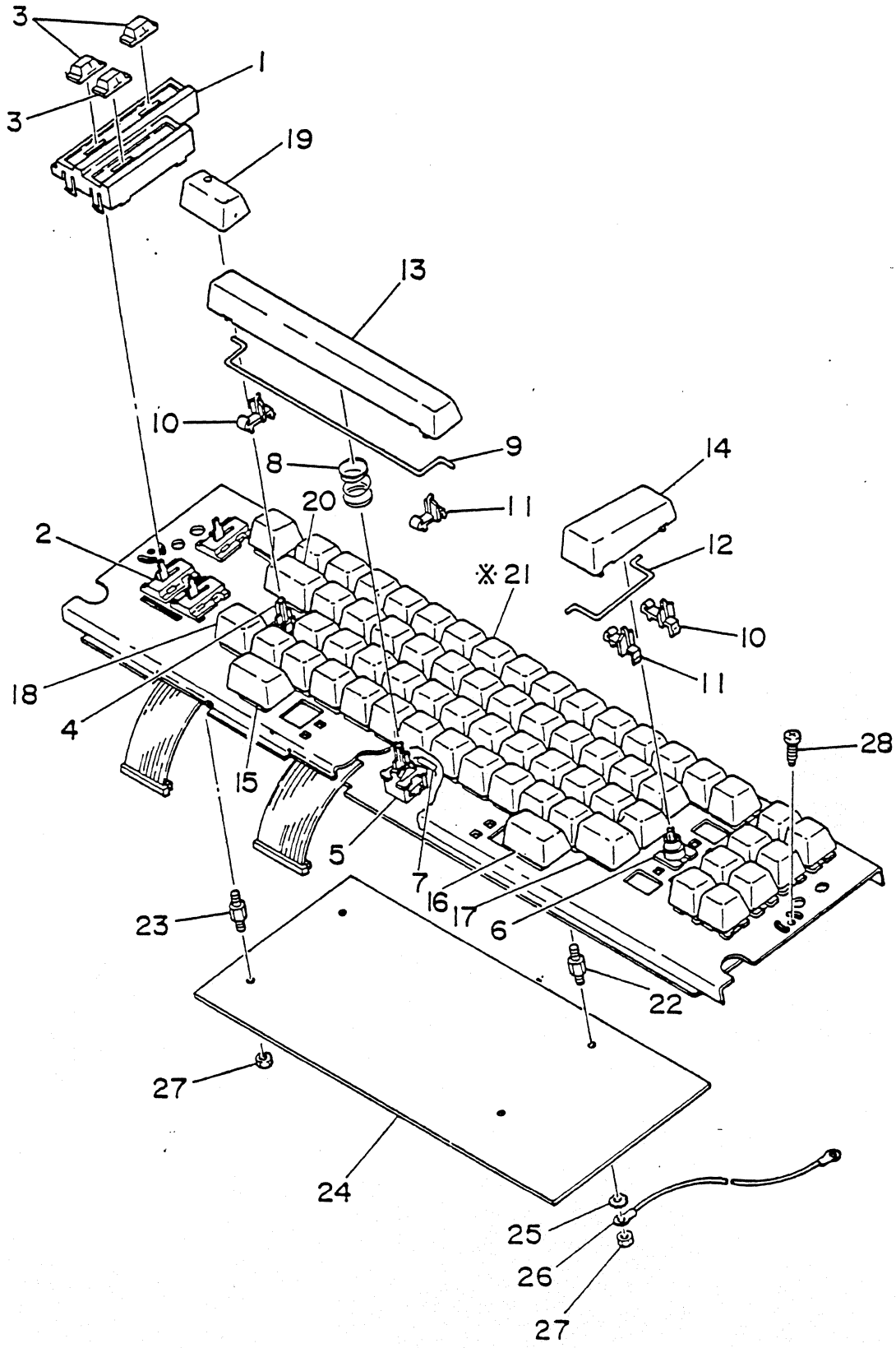


TABLE NO.		FUNCTIONAL GROUP NAME	KEY BORD MECHANISM(for OLYMPIA)			
REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.S	REMARK
1-21	KY0-10001-01	key bord unit-German	1set			
1-21	KY0-10011-01	key bord unit-American	1set			
1	332-41180	Slide switch cover	1			
2	330-41060	Slide switch	3			
3	330-41130	Side key cap	3			
4	330-41190	Switch-LED	1			
5	330-41040	Double switch	5			
6	330-41030	Single switch	61			
7	330-30300	Diode	73			1S953
8	330-41200	Spring	1			
9	330-41090	Space bar crank	1			
10	330-41070	Crank support L. H	2			
11	330-41080	Crank support R. H	2			
12	330-41100	Return key crank	1			
13	330-90650	Space bar	1			
14	330-90620	Return key-letter	1			
	331-90990	Return key-sign	1			
15	332-91160	Half space key-english letter	1			
	333-91260	Half space key-sign	1			
16	332-91170	Express key-english letter	1			
	333-91270	Express key-sign	1			
17	330-90610	Shift key right-english letter	1			
	331-90980	Shift key right-no sign	1			
18	332-91150	Shift key left-english letter	1			
	333-91250	Shift key left-no sign	1			
19	330-90590	Shift lock key-english letter	1			
	331-90960	Shift lock key-no sign	1			
20	330-90580	TAB key-english letter	1			
	331-90950	TAB key-sign	1			
21	※	Other key	U. R			see key arrangement
22	330-41160	Spacer screw B	1			
23	330-41150	Spacer screw A	3			
24	332-30000	Control P. C. B Ass'y-American	1set			
	333-30000	Control P. C. B Ass'y-Germaner	1set			
25	531-00850	Tooth washer	1			
26	330-40030	Wire earth lead	1			
27	011-03510	Nut	4			M-3
28	880-90051	Tapping screw	2			M3× 16

TABLE NO.		FUNCTIONAL GROUP NAME	CHASSIS MECHANISM

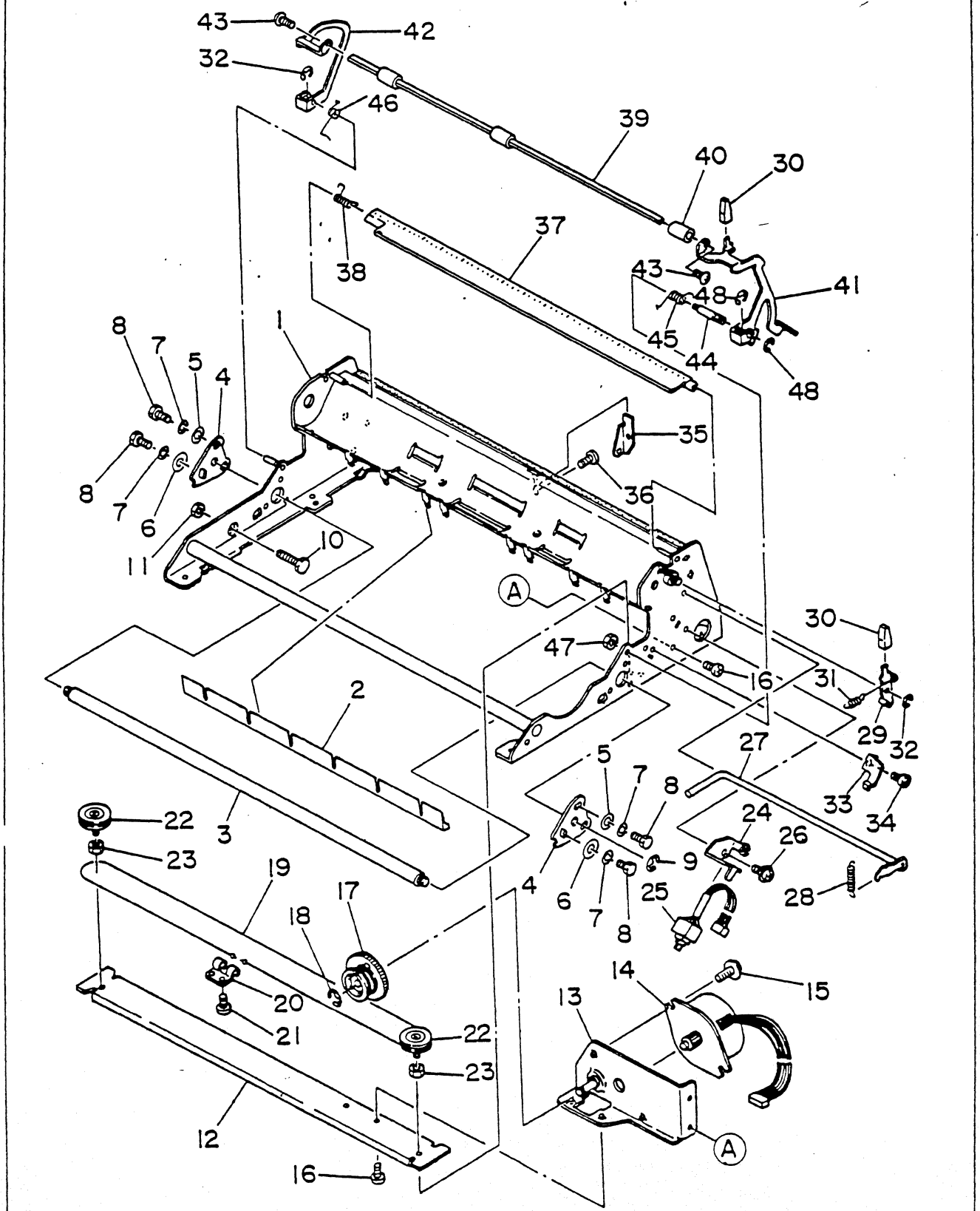


TABLE NO.		FUNCTIONAL GROUP NAME	CHASSIS MECHANISM			
REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.$	REMARK
1	330-60015	Chassis comp	1			
2	330-61120	Paper support	1			
3	330-60060	Guide shaft	1			
4	330-60040	Adjust plate	2			
5	330-60080	Washer A	4			
6	330-60090	Washer B	2			
7	011-05530	Washer spring	6			M-4
8	521-20010	Hexagon head screw	6			M4× 8
9	330-60100	E-Ring special	1			E-5special
10	371-30200	Hexagon head screw	1			M3× 14
11	011-03510	Nut	1			M3
12	330-60210	Support chassis	1			
13	330-60205	Drive motor base comp	1			
14	330-31215	Motor carrier drive	1			5SSI-25D9WB
15	551-10020	Screw flange	2			M3.5× 8
16	011-00050	Screw	4			
17	330-60230	Pulley drive	1			
18	501-70510	E-Ring	1			E-5
19	330-60315	Drive wire	1			
20	330-52240	Holder wire	1			
21	011-00100	Tapping screw	2			M3× 6
22	330-60255	Pulley drive	2			
23	501-70030	Nut	2			M4
24	330-61260	Holder switch	1			
25	330-41045	Paper injector switch comp	1			
26	550-10040	Screw flange	1			M3× 5
27	330-61135	Release shaft comp	1			
28	550-02000	Spring	1			
29	330-61190	Paper release lever comp	1			
30	330-61080	Lever cap	2			
31	880-30030	Spring	1			
32	011-02040	E-Ring	2			E-3
33	330-61250	Paper bail cam spring	1			
34	011-00010	Screw	1			M3× 4
35	330-61150	Release shaft support	1			
36	501-70200	Screw	1			M3× 5
37	330-61160	Erase table	1			
38	330-61100	Spring erase table	1			
39	330-61240	Paper bail shaft	1			
40	330-61310	Bail roller	3			

TABLE NO.	FUNCTIONAL GROUP NAME	CHASSIS MECHANISM

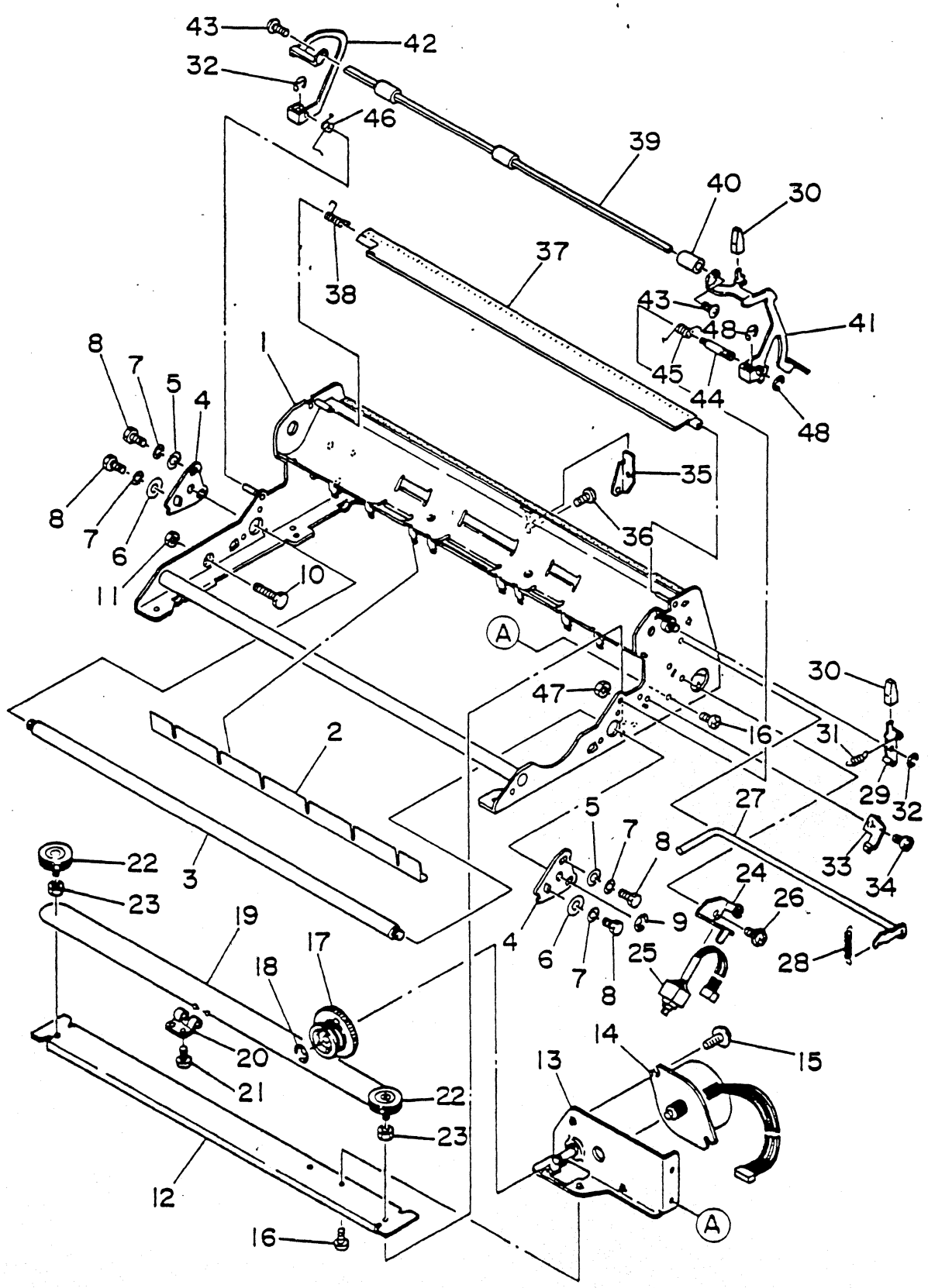


TABLE NO.		FUNCTIONAL GROUP NAME	CHASSIS MECHANISM			
REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.$	REMARK
41	330-61280	Paper bail arm R. H	1			
42	330-61270	Paper bail arm L. H	1			
43	501-70110	Screw	2			M2.6× 5
44	330-61230	Paper bail pin	1			
45	330-61410	Bail spring R. H	1			
46	330-61420	Bail spring L. H	1			
47	011-03520	Nut	1			M3.5
48	501-70500	E-Ring	2			E-4

TABLE NO.		FUNCTIONAL GROUP NAME	PAPER FEED MECHANISM

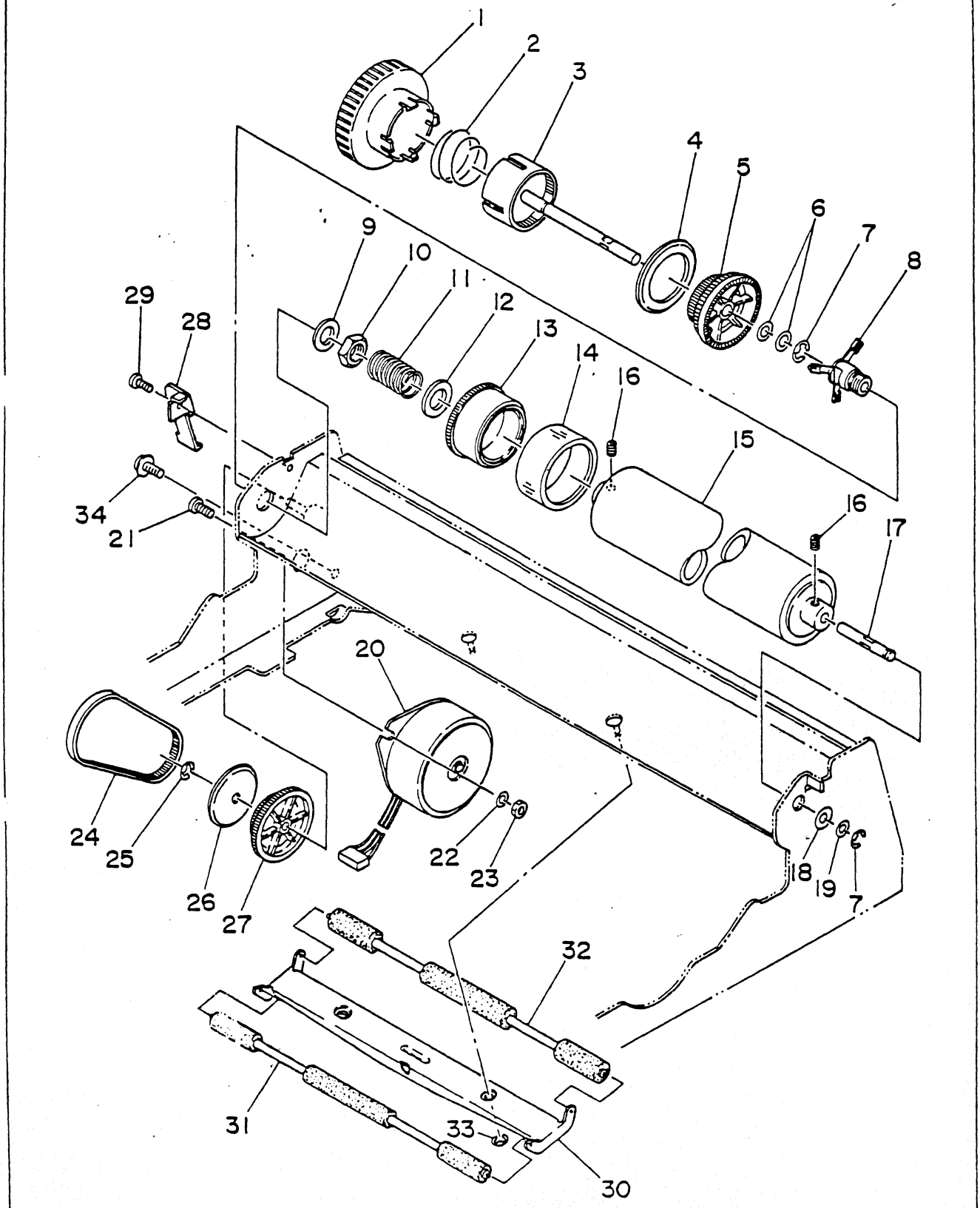


TABLE NO.		FUNCTIONAL GROUP NAME	PAPER FEED MECHANISM			
REF NO.	PARTS CORD	PARTS NAME	Q'TY.	NEW PARTS CODE	PRICE US.$	REMARK
1	330-60500	Platen knob	1			
2	330-60650	knob spring	1			
3	330-60510	Platen knob shaft	1			
4	330-60590	Guide flange A	1			
5	330-60520	Platen pulley	1			
6	521-35050	Thrust washer	2			6× 10× 0.5
7	501-70510	E-Ring	2			E-5
8	330-60535	Variable spring comp	1			
9	330-60550	Spacer	1			
10	330-60560	Nut	1			M-10
11	330-61400	Spring	1			
12	330-61110	Washer	1			
13	330-61215	Paper end gauge comp	1			
14	330-61200	Paper end gauge cover	1			
15	330-61015	Platen	1			
16	011-00150	Set screw	4			M4× 4
17	330-60580	Platen shaft R. H	1			
18	501-10930	Nylon washer	1			6× 11× 0.3
19	521-35020	Thrust washer	1			6× 10× 0.2
20	330-31235	Index motor	1			DAF
21	011-00070	Screw	2			M4× 8
22	011-07570	Washer	4			
23	501-70030	Nut	2			
24	330-60600	Drive belt	1			
25	501-70500	E-Ring	1			E-4
26	330-60621	Guide frange	1			
27	330-60610	Drive pulley	1			
28	330-60640	Belt guide	1			
29	011-00010	Screw	1			
30	330-61070	Feed roller holder	1			
31	330-61370	Feed roller front	1			
32	330-61380	Feed roller rear	1			
33	011-02030	E-Ring	2			E-2.5
34	551-10010	Screw flange	1			M4× 8

TABLE NO.		FUNCTIONAL GROUP NAME	CARRIER CHASSIS MECHANISM

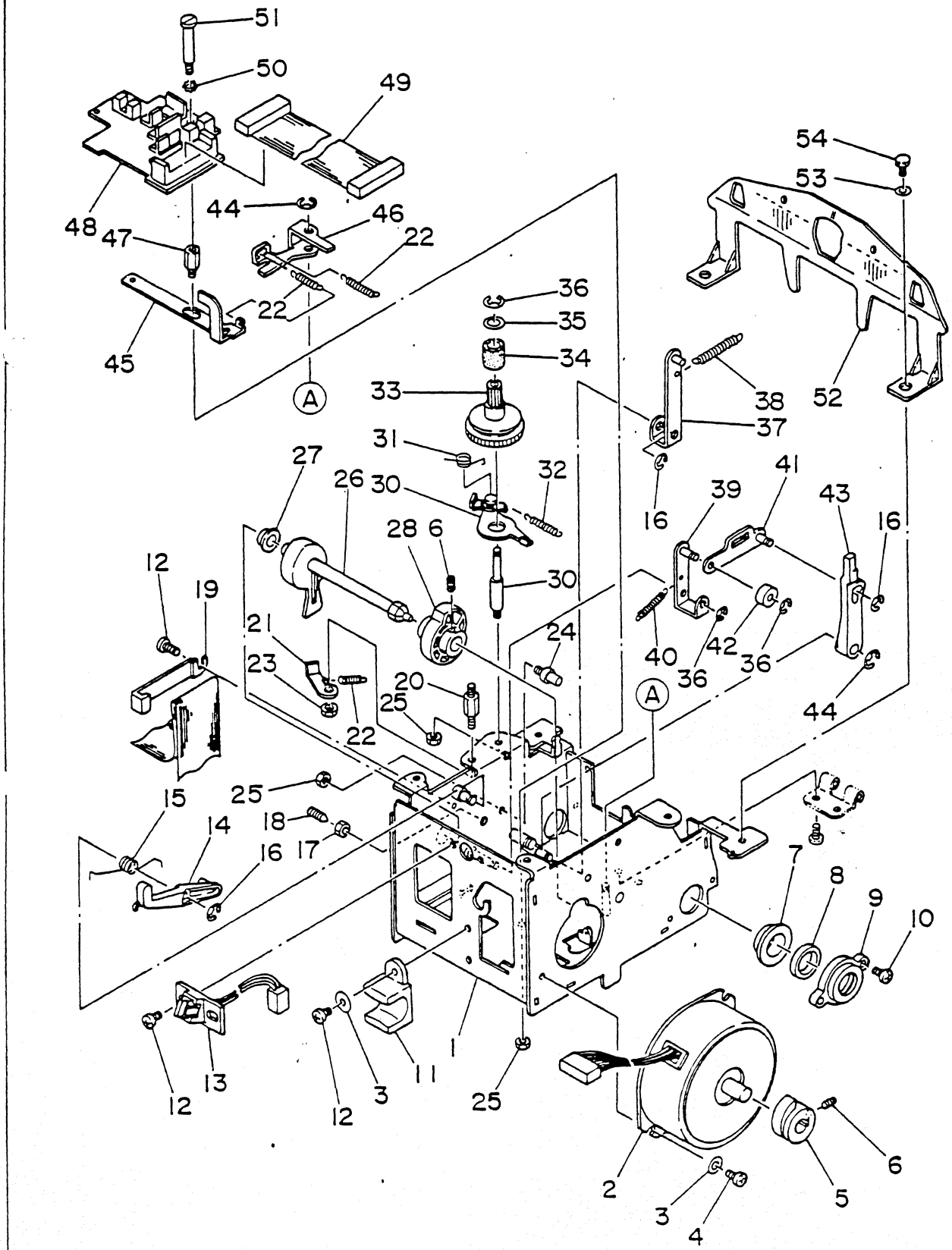


TABLE NO.		FUNCTIONAL GROUP NAME	CARRIER CHASSIS MECHANISM			
REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.$	REMARK
1-51	330-51005	Carrier chassis Assy	1set			
1	330-52315	Carrier chassis comp	1			
2	330-31225	Motor ribbon feed	1			55SI-25DAG
3	011-07570	Washer	3			4×9×0.5
4	011-00050	Screw	2			3.5×8
5	330-52050	Cam correct	1			
6	880-90030	Set screw	3			3×4
7	330-52200	Slide bush	2			
8	330-52220	Felt ring	2			
9	330-52210	Cover bush	2			
10	820-90230	Screw	4			M2.6×5
11	330-52230	Carrier holder	1			
12	011-00100	Tapping screw	4			M3×6
13	330-31095	L E D comp	1			
14	330-51280	Ribbon change lever	1			
15	330-51650	Spring change lever	1			
16	011-02030	E-Ring	3			E-2.5
17	501-70030	Nut	1			M-4
18	551-00760	Center screw	1			
19	330-51400	Cable holder	1			
20	330-51510	Lock scerew	1			
21	330-51360	Stop finger	1			
22	501-11250	Spring	3			
23	330-51520	Lock nut	1			
24	330-51610	Feed excentric screw	1			
25	011-03510	Nut	3			M3
26	330-51175	Cam shaft	1			
27	330-51660	Bushing metal	1			
28	330-51190	Ribbon lift cam	1			
29	330-51330	Feed roller shaft	1			
30	330-51355	Finger plate comp	1			
31	330-51710	Feed torsion spring	1			
32	330-51570	Feed finger spring	1			
33	330-51300	Feed pulley	1			
34	330-51340	Rubber roller	1			
35	011-15250	Washer	1			3.2×7.5×0.2
36	011-02020	E-Ring	3			E-2
37	330-51086	Toggle lever	1			
38	330-51740	Spring toggle lever	1			
39	330-51255	Follower arm	1			

TABLE NO.		FUNCTIONAL GROUP NAME	CARRIER CHASSIS MECHANISM

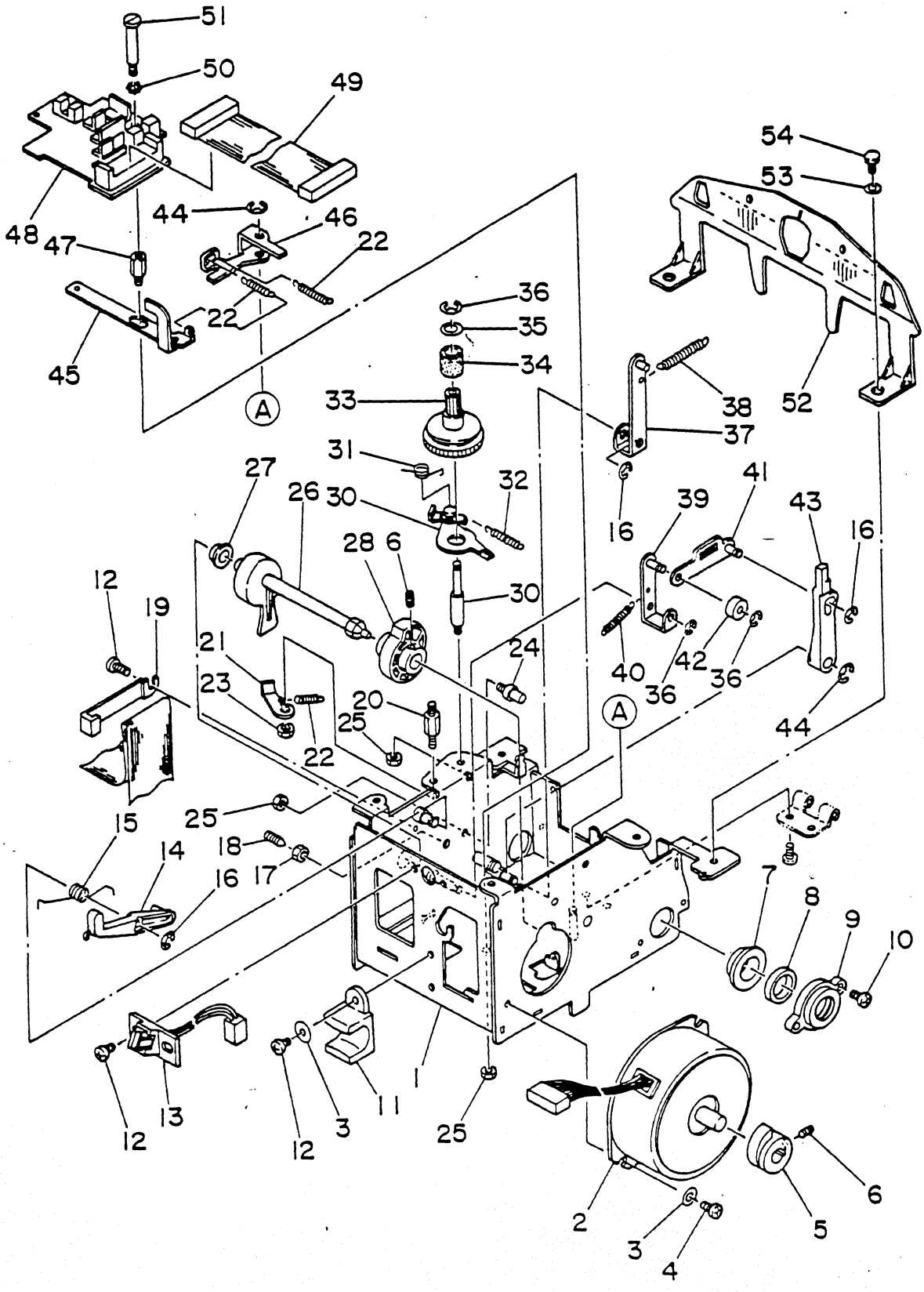


TABLE NO.		FUNCTIONAL GROUP NAME	CARRIER CHASSIS MECHANISM			
REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.$	REMARK
40	551-02000	Spring	1			
41	330-51215	Cam change lever	1			
42	330-51160	Cam follower	1			
43	330-51290	Ribbon feed arm	1			
44	011-02040	E-Ring	2			E-3
45	330-51120	Reset plate	1			
46	330-51100	Reset crank	1			
47	330-51130	Terminal screw	1			
48	330-31105	Carrier P. C. B comp	1			see
49	330-30835	Flat cable	1			
50	501-35160	Tooth washer	1			M3
51	551-01120	Arm screw	1			
52	330-52190	Line locator	1			
53	011-07520	Washer	2			3× 6× 0.5
54	330-52350	Hexagon head screw	2			M2.6× 4

TABLE NO.		FUNCTIONAL GROUP NAME	PRINTER HEAD MECHANISM

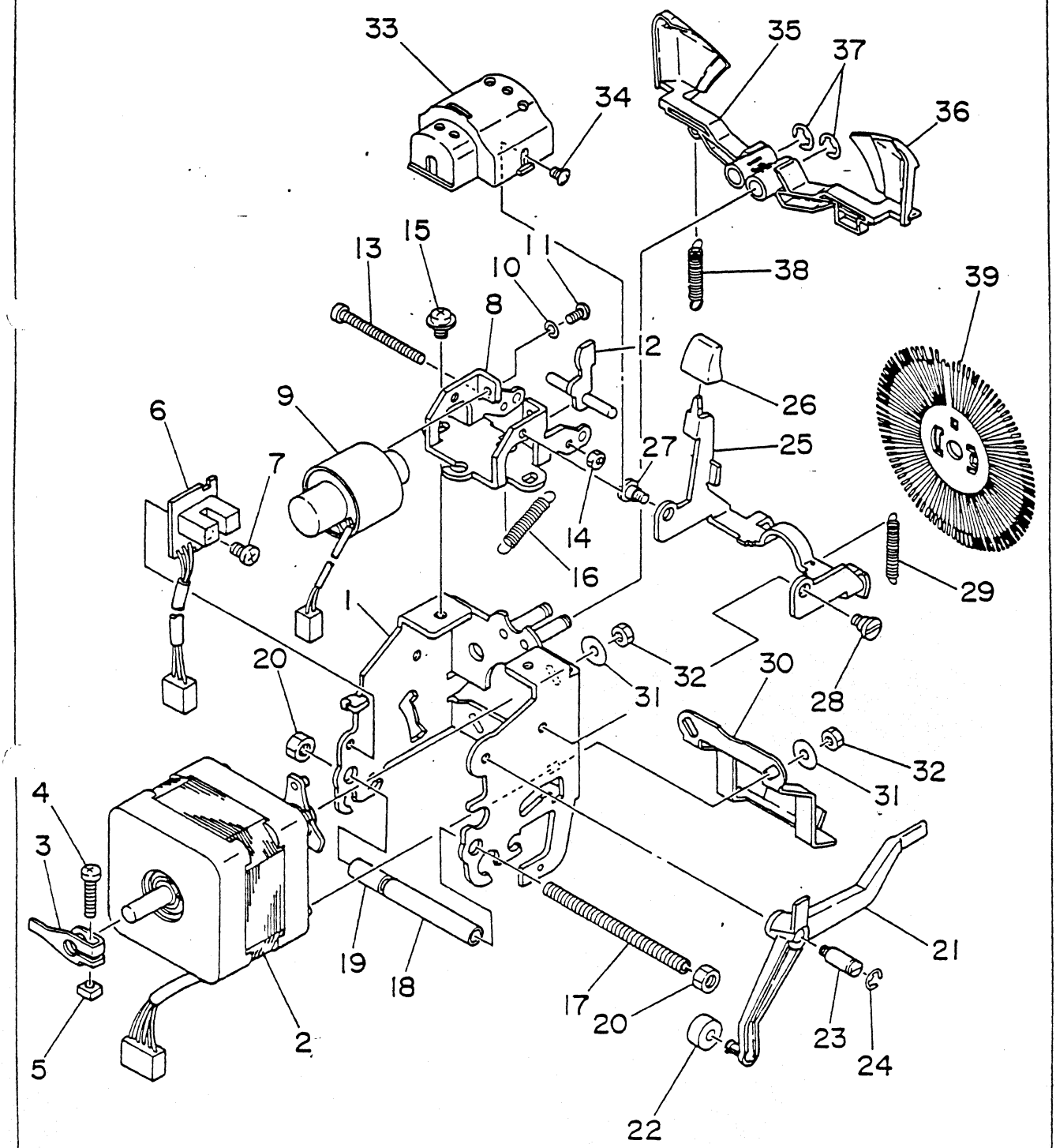


TABLE NO.		FUNCTIONAL GROUP NAME	PRINTER HEAD MECHANISM			
REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.$	REMARK
1-38	330-52005	Printer head Assy	1set			without wheel
1	330-51110	Printer head chassis conp	1			
2	330-31200	Selection motor	1			17ps-coil
3	330-52260	Position detector	1			
4	551-03140	Screw	1			M3× 12
5	330-52420	Nut square	1			M-3
6	330-31115	Phot interrupter comp	1			
7	501-70200	Screw	1			M3× 5
8	330-52170	Hammer bracket	1			
9	330-50015	Hammer solenoid comp	1			
10	011-05510	Washer spring	2			M-3
11	301-00760	Screw	2			M2.6× 4
12	330-52370	Hammer comp	1			
13	330-52430	Screw	1			M2.6× 30
14	011-03530	Nut	1			M-2.6
15	551-10040	Screw flange	2			M3× 5
16	330-52400	Spring hammer	1			
17	330-51531	Head frame shaft	1			
18	330-51700	Spacer	1			
19	880-60200	Spacer	1			
20	330-51730	Nut	2			M-5
21	330-51030	Center guide lift crank	1			
22	330-51160	Cam follower	1			
23	330-51141	Lift crank screw	1			
24	011-02030	E-Ring	1			E-2.5
25	330-51040	Release lever wheel	1			
26	330-51050	Lever cap	1			
27	330-51070	Lever set screw-2	1			
28	330-51060	Lever set screw-1	1			
29	551-02000	Spring	1			
30	330-52160	Wheel bracket	1			
31	301-27420	Washer	3			3.3× 8×0.5
32	011-03510	Nut	3			M-3
33	330-52180	Cover solenoid	1			
34	301-00700	Screw	2			
35	330-51023	Center guide L. H	1			
36	330-51021	Center guide R. H	1			
37	011-02040	E-Ring	2			
38	011-11100	Spring	1			
39		Printing wheel 96-German	1			
		Printing wheel 96-American	1			

TABLE NO.		FUNCTIONAL GROUP NAME	RIBBON BASE MECHANISM

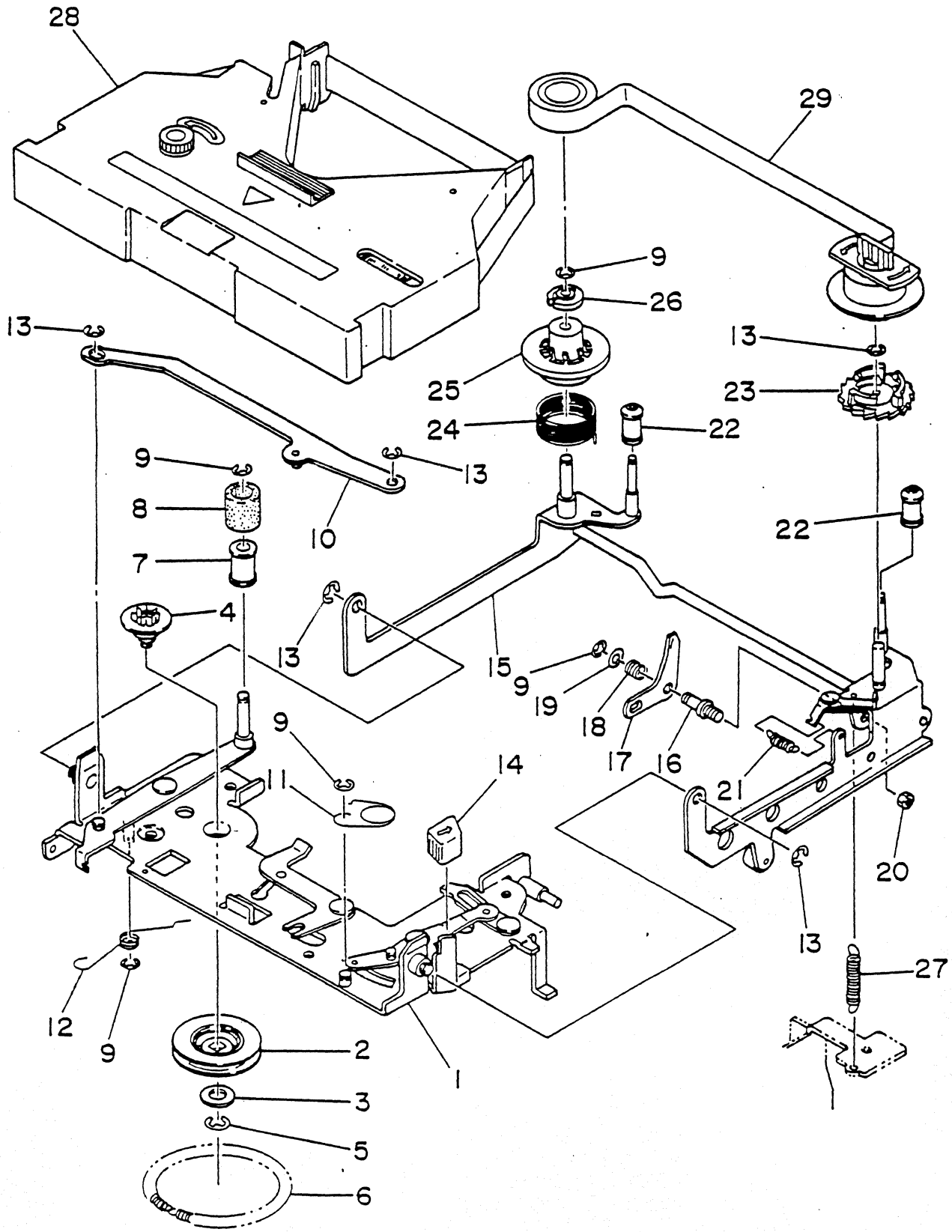
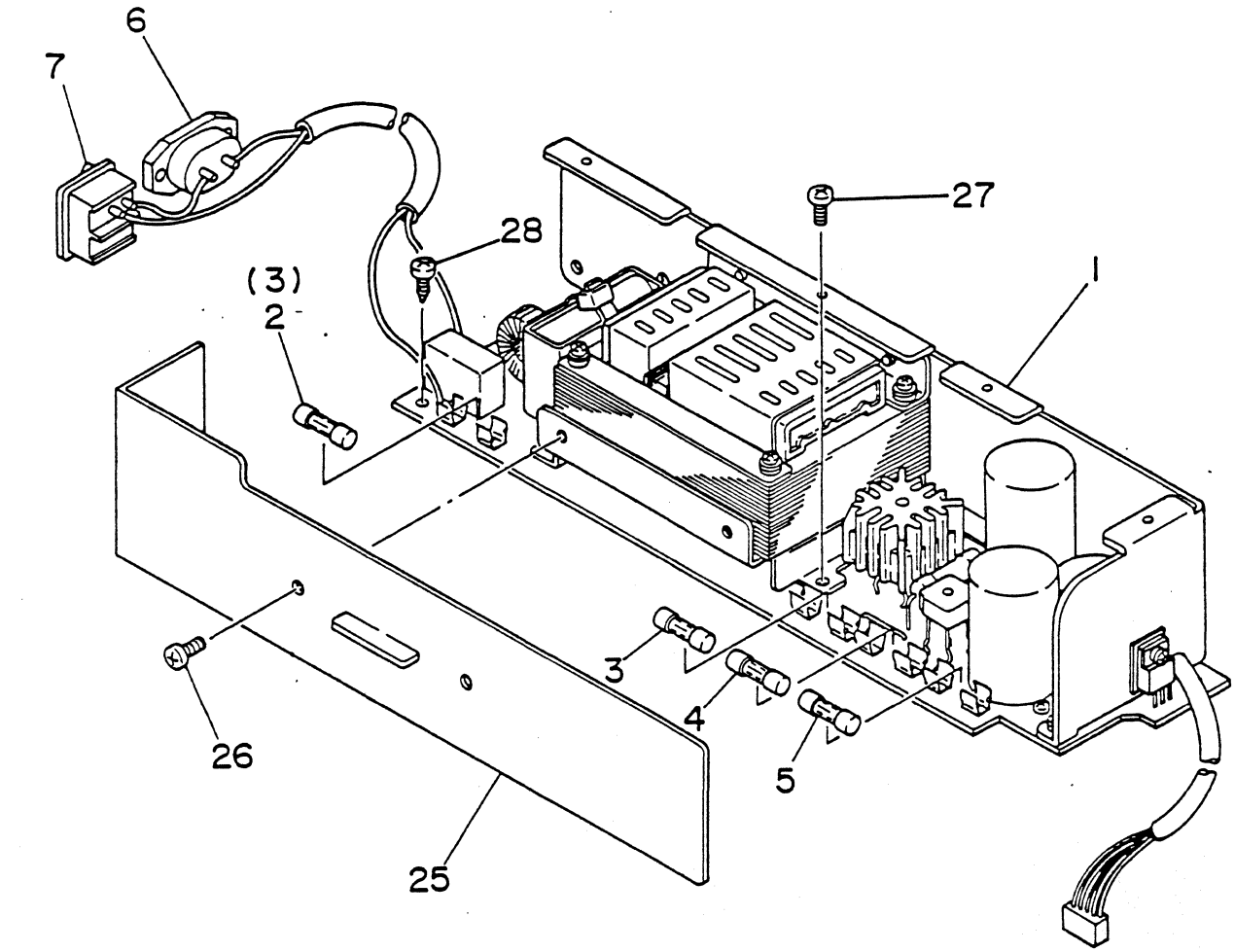
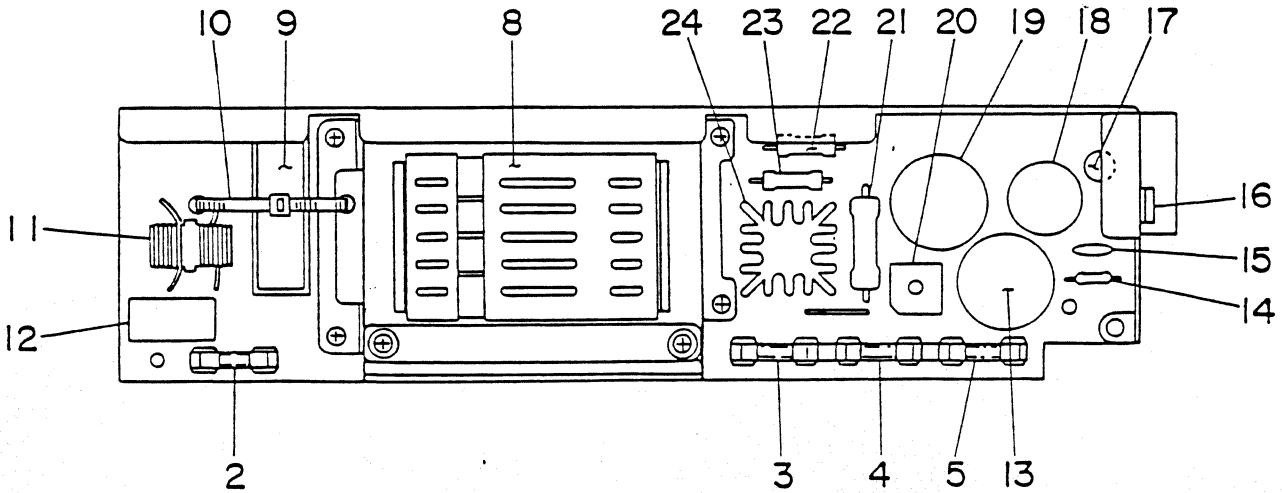


TABLE NO.		FUNCTIONAL GROUP NAME	RIBBON BASE MECHANISM			
REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.$	REMARK
1-26	330-53005	Ribbon base unit	1set			
1	330-51505	Ribbon base comp	1			
2	330-51320	Ribbon feed pulley	1			
3	880-90040	PB-Washer	1			4.5× 9× 0.3
4	330-51310	Ribbon feed gear	1			
5	011-02040	E-Ring	1			E-3
6	330-51540	Ribbon feed spring	1	330-51541		
7-8	330-51455	Rubber roller B	1			
7	330-51450	Inner roller	1			
8	330-51470	Rubber roller	1			
9	011-02030	E-Ring	5			E-2
10	330-51435	Cassette release crank	1			
11	330-51670	Toggle spring	1			
12	330-51721	Roller arm spring	1			
13	011-02030	E-Ring	5			E-2.5
14	330-51481-11	Lever cap A	1			
15	330-52015	Correct arm comp	1			
16	330-52120	Feed pawl shaft	1			
17	330-52060	Feed pawl	1			
18	330-52380	Feed pawl spring	1			
19	011-07520	Washer	1			
20	011-03510	Nut	1			
21	880-30161	Spring	1			
22	330-52080	Guide roller	2			
23	330-52030	Correct feed ratchet	1			
24	330-52340	Brake spring	1			
25	330-52040	Correct tape spool	1			
26	330-52300	Sppol bush	1			
27	880-70360	Spring	1			
28	330-75005	Cassette tape	1			
29	330-75105	Correction tape	1			

TABLE NO.		FUNCTIONAL GROUP NAME	POWER SUPPULY MECHANISM(for 115 V and 220V)





3 (only fo 115v 60Hz)

TABLE NO.		FUNCTIONAL GROUP NAME	POWER SUPPULY MECHANISM(for 115 V and 220V)

REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.$	REMARK
1-24	330-20205	Power supply comp(for 115V-60Hz)	1set			
1-24	331-20205	Power supply comp(for 220V-50Hz)	1set			
1	330-20200	Cooling plate	1			
2	330-21010	Fuse(for 220V)	1			T0.315A250V
3	330-21020	Fuse	1(2)			T1.25A250V (for 115V-2pcs)
4	330-21030	Fuse	1			T2.5A250V
5	330-21040	Fuse	1			T2.0A250V
6-7	330-21406	Power inlet Assy	1			
6	330-21410	Power inlet	1			
7	330-21400	Switch	1			
8	330-20035	Transformer comp(for110V 60Hz)	1			
	331-20035	Transformer comp(for220V 50Hz)	1			
9	330-21130	Capacitor	1			2μF350V
10	330-20250	Band	1			
11	330-21140	Choking coil	1			SC-02-101
12	330-21050	Capasitor(for 110V 60Hz)	1			0.22μF125V
	331-21050	Capasitor(for 220V 50Hz)	1			0.22μF250V
13	330-21080	Capasitor	1			3300μF50V
14	330-21310	Resistor	1			330Ω0.5W
15	330-21110	Capasitor	1			0.1μF 25V
16	330-21190	Regulator	1			C7805H
17	330-21120	Capasitor	1			10μF 50V
18	330-21100	Capasitor	1			3300μ16V
19	330-21090	Capasitor	1			15000μF 16V
20	330-21150	Rectifier	1			S2VB40
21	330-21280	Resistor	1			1.2kΩ3W
22	330-21300	Resistor	1			1.6Ω2W
23	330-21290	Resistor	1			330Ω2W
24	330-21165	Rectifier	1			S4VB20
25	330-20010	Front cover	1			
26	880-90170	Tapping screw	2			M3× 8
27	011-00070	Screw	4			M4× 8
28	501-70210	Tapping screw	2			M3× 8
29		Power suppley cord	1			

TABLE NO.		FUNCTIONAL GROUP NAME	HOUSING HOUSING

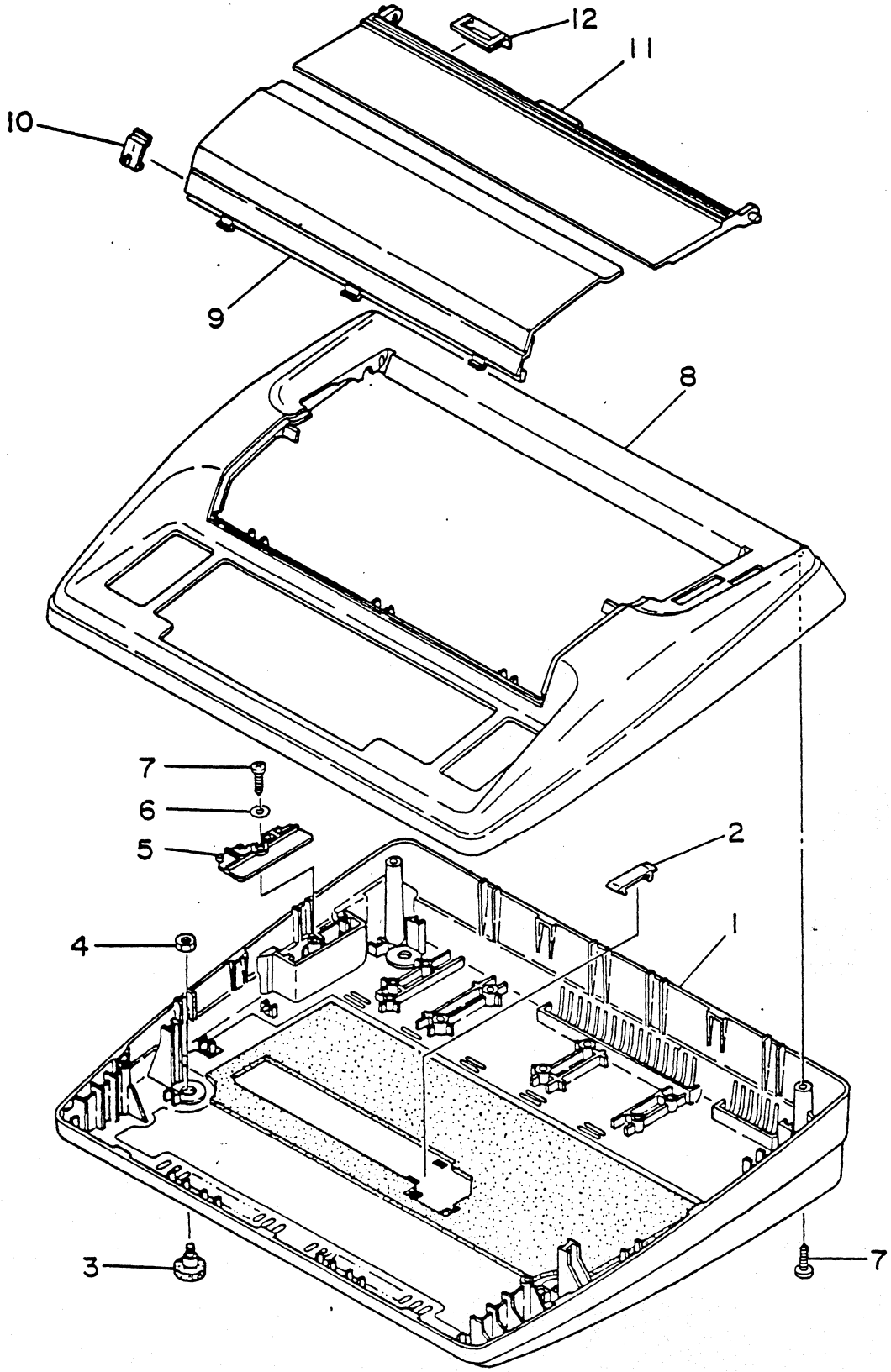


TABLE NO.		FUNCTIONAL GROUP NAME	HOUSING			
REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.$	REMARK
1-12	332-70005	Housing set	1set			
1	332-70205	Bottom pan comp	1			
2	330-70050	Wire clamp	2			
3	330-70025	Rubber leg	4			
4	011-03520	Nut	4			M-3.5
5	330-70040	Switch cover	1			
6	011-07540	Washer	1			
7	880-90051	Tapping screw	3			M3× 16
8	332-70225	Main cover	1			
9	332-70235	Top cover	1			
10	332-70250	Marker slide	2			
11	330-70080	Paper stand	1			
12	330-70090	Paper guide	1			

TABLE NO.		FUNCTIONAL GROUP NAME	CONTROL-P.C.B (for OLYMPIA)

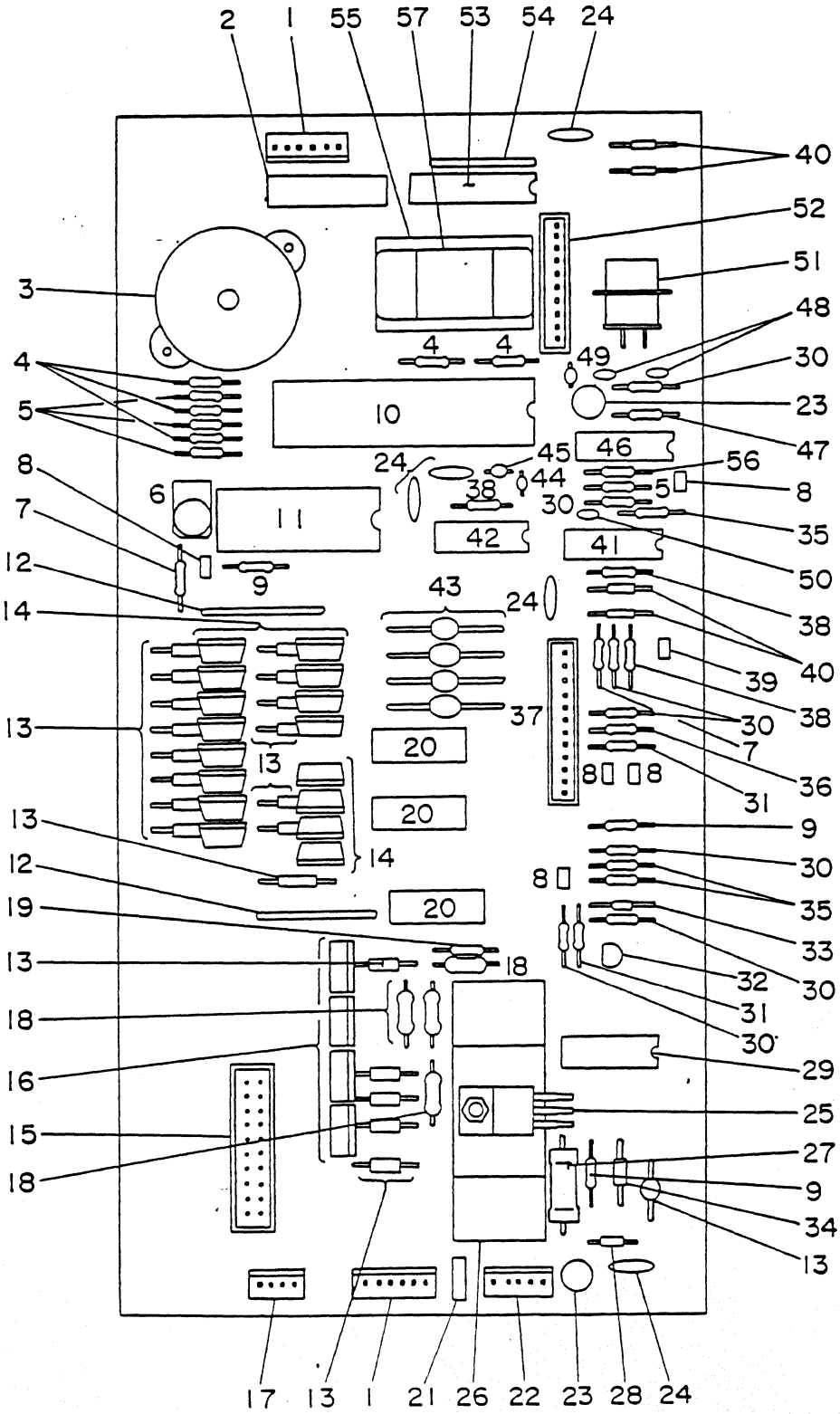


TABLE NO.		FUNCTIONAL GROUP NAME	CONTROL-P.C.B (for OLYMPIA)			
REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.$	REMARK
1-57	332-30000	Control-P.C.B Assy. German	1set			with EPROM
1-57	333-30000	Control-P.C.B Assy American	1set			with EPROM
1-56	330-30005	Control-P.C.B comp	1set			withou EPROM
1	330-30720	Plug	2			6-pin
2	330-30120	IC	1			M74LS373P
3	330-30680	Buzzer	1			PB-2720
4	330-30550	Resistor	5			2KΩ -0.25w
5	330-30460	Resistor	4			47KΩ -0.25w
6	330-30560	Variable resistor	1			500Ω
7	330-30430	Resistor	2			150Ω -0.25w
8	330-30210	Transistor	5			2SC2785
9	330-30530	Resistor	3			330Ω -0.25w
10	330-30130	IC	1			D8039LC
11	330-30150	IC	1			D8243C
12	330-30410	Resistor array	2			RA-16-102-8K
13	330-30310	Diode	22			EM1Z
14	330-30250	Transistor	16			2SD560
15	330-30750	Plug	1			20-pin
16	330-30240	Transistor	4			2SB601
17	330-30740	Plug	1			4-pin
18	330-30520	Resistor	4			6.8kΩ -0.5W
19	330-30510	Resistor	1			2.5kΩ -0.25W
20	330-30180	IC	3			M53205P
21	330-30230	Transistor	1			2SB795
22	330-30730	Plug	1			5-pin
23	330-30630	Capacitor	2			25V-47μF
24	330-30650	Capacitor	7			0.047μF
25	330-30260	Transistor	1			2SD633
26	330-30820	Cooling plate	1			
27	330-30540	Resistor	1			1Ω -1W
28	330-30370	Zener diode	1			RD51FB
29	330-30190	Transistor array	1			PA2004C
30	330-30440	Resistor	7			10kΩ-0.25W
31	330-30490	Resistor	2			470Ω-0.25W
32	330-30220	Transistor	1			2SA952
33	330-30340	Zener diode	1			RD7.5EB
34	330-30330	Diode	1			U05B
35	330-30480	Resistor	3			5kΩ-0.25W
36	330-30500	Resistor	1			6kΩ-0.25W
37	330-30710	Plug	1			12-pin

TABLE NO.		FUNCTIONAL GROUP NAME	CONTROL-P.C.B (for OLYMPIA)

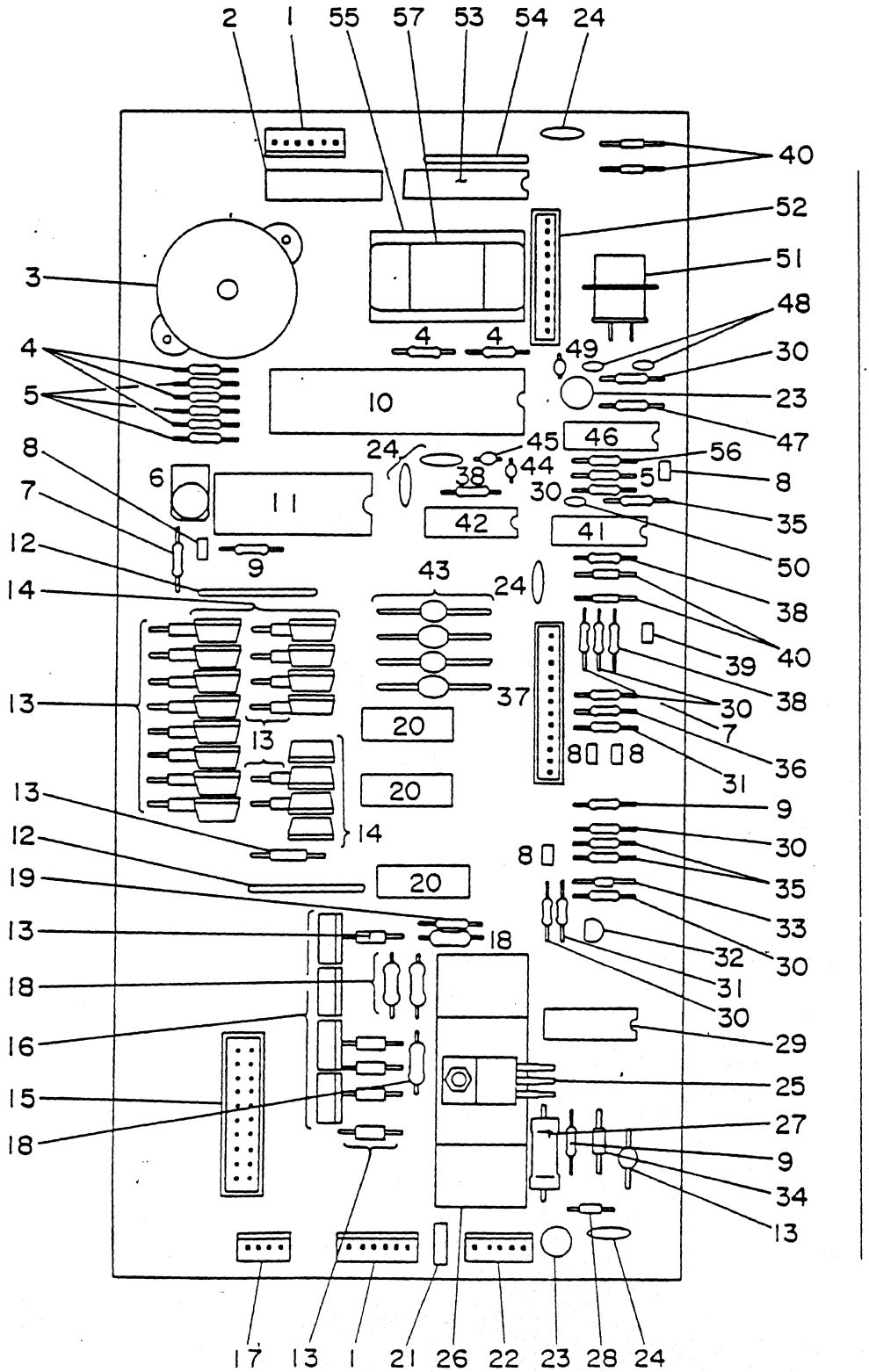


TABLE NO.		FUNCTIONAL GROUP NAME	CONTROL-P.C.B(for OLYMPIA)			
REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US $	REMARK
38	330-30420	Resistor	3			51kΩ-0.25W
39	330-30200	Transistor	1			2SA1175
40	330-30300	Diode	4			1S953
41	330-30160	IC	1			D4001BC
42	330-30140	IC	1			D4028BC
43	330-30350	Zener diode	4			AU01-24
44	330-30600	Capacitor,	1			16V-0.1μF
45	330-30610	Capacitor	1			16V-1.0μF
46	330-30170	IC	1			D4011BC
47	330-30470	Resistor	1			3kΩ-0.25W
48	330-30660	Capacitor	2			20pF
49	330-30620	Capacitor	1			25V-1.0μF
50	330-30640	Capacitor	1			2200μF
51	330-30670	Quarz-oscillator	1			6MHz
52	330-30700	Plug	1			10-pin
53	330-30100	IC	1			TC40H244
54	330-30400	Resistor array	1			X 513K
55	330-30800	IC-Socket	1			IC30-2406G4
56	330-30450	Resistor	1			1MΩ
57	332-30110	EP-ROM(for American)	1			D2716D
	333-30110	EP-ROM(for German)	1			D2716D

TABLE NO.		FUNCTIONAL GROUP NAME	CARRIER-P.C.B

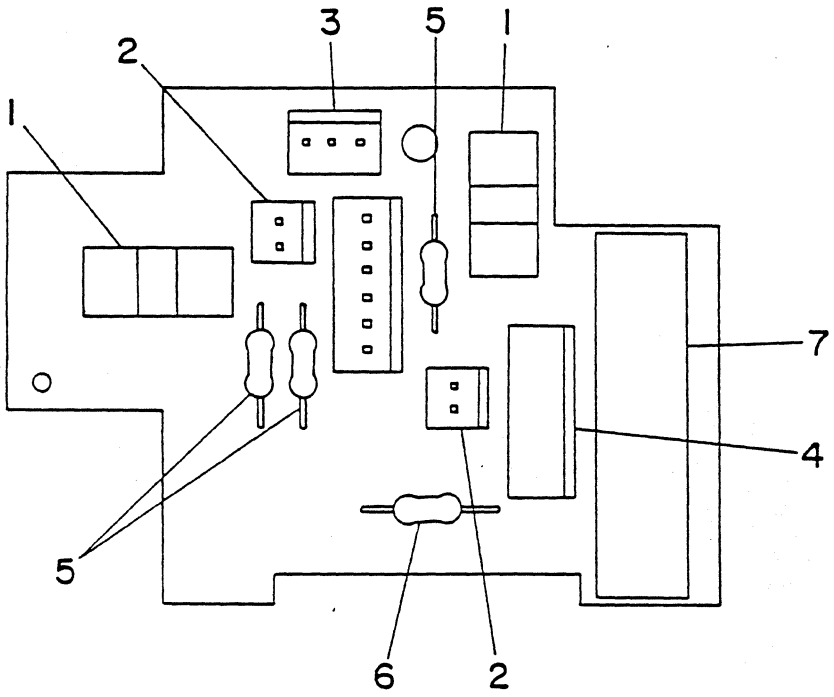


TABLE NO.		FUNCTIONAL GROUPNAME	CARRIER-P.C.B

REF NO.	PARTS CORD	PARTS NAME	Q'TY	NEW PARTS CODE	PRICE US.$	REMARK
1-7	330-31105	Carrier P.C.B comp	1set			
1	330-31020	Photo-interruptor	2			EE-SJ3-B
2	330-31040	Plug	2			2-pin
3	330-31030	Plug	1			3-pin
4	330-30640	Plug	2			6-pin
5	330-31000	Resistor	3			180Ω -0.25W
6	330-31010	Resistor	1			120Ω -0.25W
7	330-30650	Plug	1			20-pin