

Service Manual

Comact Plain Paper Fax



KX-FP80
KX-FP80C
KX-FP81
KX-FP81C
KX-FP85
KX-FP85C
KX-FP86

(for U.S.A)

(for Canada)

Subject : Parts Change

Please file and use this supplement manual together with the original service manuals for the following models.

Model No.	Order No.	Supplement No.
KX-FP80	KMF0002391C1	1
KX-FP80C	KMF0006414C1	1
KX-FP81	KMF0004401C1	1
KX-FP81C	KMF0004402C1	1
KX-FP85	KMF0004400C1	1
KX-FP85C	KMF0004406C1	1
KX-FP86	KMF0004403C1	1

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

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1 REPLACEMENT PARTS LISTS

1.1. REFERENCE CHART

Reason for Change	
*The following items (1-8) indicate the reason for change. See the "Notes" column for each part in ORIGINAL AND NEW PARTS COMPARISON LIST(S) .	
1. Improve performance	Remarks: *a: To improve the electric conduction. *b: For improvement of FAX communication. *c: To facilitate the production process. *d: To share the part with other models. *e: For the countermeasure of noise. *f: For the countermeasure for copy NG. *g: To change of material. *h: The factory for production is transferred from Malaysia to China. (The place of production described in the name plate is changed from "Made in Malaysia" to "Made in China".) *i: To improve the performance of PAPER TOP SENSOR. *j: To improve how to set up. *k: To correct error writing. *l: Sales company's request
2. Change of material or dimension	
3. To meet approved specification	
4. Standardization	
5. Addition	
6. Deletion	
7. Correction	
8. Other	

Interchangeability Code	
**The following items (V-Z) indicate the interchangeability. See the "Notes" column for each part in ORIGINAL AND NEW PARTS COMPARISON LIST(S) .	
Parts	Set Production
V Original New	Early (before change) Late (after change)
W Original New	Early (before change) Late (after change)
X Original New	Early (before change) Late (after change)
Y Original New	Early (before change) Late (after change)
Z Other	

Note:

Alphabets in the "Remarks" column in the following lists correspond to the alphabets in the "Remarks" in **REFERENCE CHART**.

1.2. ORIGINAL AND NEW PARTS COMPARISON LIST(S)

1.2.1. KX-FP80

Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
	Original Part No.	New Part No.						
CABINET AND ELECTRICAL SECTION								
1	PFGP1162X	PFGP1162R	PANEL, LCD	1	*a	1	W	
9	PFUV1027Y	PFUV1027X	COVER, OPERATION PANEL	1	*f	1	X	
17	PFHX1371Z	-----	-----	0	Deleted	---	---	
32	PFHR1189Z	PFHR1189Y	GUIDE, THERMAL HEAD (LEFT)	1	*f	1	W	
34	PFHR1190Z	PFHR1190Y	GUIDE, THERMAL HEAD (RIGHT)	1	*f	1	W	
35	PFHR1192Y	PFHR1192X	COVER, THERMAL HEAD	1	*f	1	W	
36	PFHX1342X	PFHX1342Z	INSULATOR,STATICIELEC. (RIGHT)	1	*f	1	V	
45	PF0U1022Z	PF0U1022Y	PHOTO ELECTRIC TRANSDUCER, IMAGE SENSOR(CIS)	1	*a	1	V	
51	-----	PFHX1457Z	SPACER,SHEET (Refer to UPPER CABINET SECTION)	2	*f	5	W	
58	-----	PFQT1749Z	LABEL,OPEN RELEASE (Refer to BACK COVER 1)	1	*l	1	X	
61	PFGT1608Z-M	PFGT1651Z-C	NAME PLATE	1	*h	5	V	
65	PFKV1025Y1	PFKV1025X1	COVER, UPPER TURN (Refer to BACK COVER 1)	1	*j	1	W	
68	PFUA1025Y	PFUA1025W	CHASSIS, UPPER TURN	1	*d	4	W	
94	PFHX1370Z	PFHX1370Z	INSULATOR, PAPER EXIT (Refer to BACK COVER 2)	2	*f	5	V	
102	PFUS1255Z	PFUS1255Y	SPRING, EARTH (Refer to HOW TO REMOVE THE BOTTOM FRAME)	1	*d	4	V	
120	PFNW1006Z	-----	-----	0	Deleted	---	---	
132	PFUA1024Z	PFZMFM189E	CHASSIS KIT, GEAR BASE (Refer to MOTOR SECTION)	1	*e	2	W	
136	PFUS1231Z	PFUS1231Y	SPRING, GEAR I	3	*e	1	V	
Note: Change Parts of Ref No.32 and No.34 at the same time.								
ACCESSORIES AND PACKING MATERIALS								

Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
	Original Part No.	New Part No.						
A7	PFQW1341Z	PFQW1423Z	INSTRUCTION BOOK (QUICK START SHEET)	1	*d	4	Y	
P1	PFPK1664Z-M	PFPK1778Z-M	GIFT BOX	1	*g	8	Z	
P1	PFPK1664Z-M	PFPK1781Z-C	GIFT BOX	1	*h	5	Z	
P5	PFPH1011Z	PFPH1030Z	PACKING SHEET	1	*d	4	V	
DIGITAL BOARD PARTS								
C508	ECUV1H333KDV	ECUV1H102KBV	CAPACITOR,0.001	1	*i	1	X	
L501	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L502	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L503	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L504	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L505	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L507	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L510	ERJ8GEY0R00	-----	-----	0	Deleted	---	---	
L511	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R503	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R504	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R505	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R506	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R507	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R509	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R511	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R512	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R536	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R551	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
OPERATION BOARD PARTS								
R305	ERJ3GEYJ102	ERJ3GEYJ681	RESISTOR,680	1	*a	1	V	
R318	-----	ERJ3GEYJ4R7	RESISTOR,4.7 (Refer to OPERATION BOARD (for KX-FP80, KX-FP81, KX-FP81C))	1	*a	1	Y	
POWER SUPPLY BOARD PARTS								
C206	ECKD3A102KBP	-----	-----	0	Deleted	---	---	
L103	EXCELD3R35	-----	-----	0	Deleted	---	---	
R203	ERDS2FJ470	-----	-----	0	Deleted	---	---	

1.2.2. KX-FP80C

Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
	Original Part No.	New Part No.						
CABINET AND ELECTRICAL SECTION								
9	PFUV1027Y	PFUV1027X	COVER, OPERATION PANEL	1	*f	1	X	
32	PFHR1189Z	PFHR1189Y	GUIDE, THERMAL HEAD (LEFT)	1	*f	1	W	
34	PFHR1190Z	PFHR1190Y	GUIDE, THERMAL HEAD (RIGHT)	1	*f	1	W	
35	PFHR1192Y	PFHR1192X	COVER, THERMAL HEAD	1	*f	1	W	
36	PFHX1342X	PFHX1342Z	INSULATOR,STATIC ELEC. (RIGHT)	1	*f	1	V	
45	PF0U1022Z	PF0U1022Y	PHOTO ELECTRIC TRANSDUCER, IMAGE SENSOR(CIS)	1	*a	1		
51	-----	PFHX1457Z	SPACER,SHEET (Refer to UPPER CABINET SECTION)	2	*f	5	W	
58	-----	PFQT1784Z	LABEL,OPEN RELEASE (Refer to BACK COVER 1)	1	*l	1	X	
65	PFKV1025Y1	PFKV1025X1	COVER, UPPER TURN (Refer to BACK COVER 1)	1	*j	1	W	
132	PFUA1024Z	PFZMFM189E	CHASSIS KIT, GEAR BASE (Refer to MOTOR SECTION)	1	*e	2	W	
Note: Change Parts of Ref No.32 and No.34 at the same time.								
ACCESSORIES AND PACKING MATERIALS								
A7	PFQW1341Z	PFQW1423Z	INSTRUCTION BOOK (QUICK START SHEET)	1	*d	4	Y	
P5	PFPH1011Z	PFPH1030Z	PACKING SHEET	1	*d	4	V	
DIGITAL BOARD PARTS								
L501	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L502	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L503	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L504	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L505	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L507	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	

Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
	Original Part No.	New Part No.						
L510	ERJ8GEY0R00	-----	-----	0	Deleted	---	---	
L511	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R503	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R504	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R505	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R506	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R507	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R509	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R511	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R512	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R536	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R551	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
POWER SUPPLY BOARD PARTS								
C206	ECKD3A102KBP	-----	-----	0	Deleted	---	---	
L103	EXCELD35	-----	-----	0	Deleted	---	---	
R203	ERDS2FJ470	-----	-----	0	Deleted	---	---	

1.2.3. KX-FP81

Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
	Original Part No.	New Part No.						
CABINET AND ELECTRICAL SECTION								
1	PFGP1162Z	PFGP1162Q	PANEL, LCD	1	*a	1	W	
9	PFUV1027Y	PFUV1027X	COVER, OPERATION PANEL	1	*f	1	X	
17	PFHX1371Z	-----	-----	0	Deleted	---	---	
32	PFHR1189Z	PFHR1189Y	GUIDE, THERMAL HEAD (LEFT)	1	*f	1	W	
34	PFHR1190Z	PFHR1190Y	GUIDE, THERMAL HEAD (RIGHT)	1	*f	1	W	
36	PFHX1342X	PFHX1342Z	INSULATOR,STATICIELEC. (RIGHT)	1	*f	1	V	
45	PF0U1022Z	PF0U1022Y	PHOTO ELECTRIC TRANSDUCER, IMAGE SENSOR(CIS)	1	*a	1		
35	PFHR1192Y	PFHR1192X	COVER, THERMAL HEAD	1	*f	1	W	
51	-----	PFHX1457Z	SPACER,SHEET (Refer to UPPER CABINET SECTION)	2	*f	5	W	
58	-----	PFQT1749Z	LABEL,OPEN RELEASE (Refer to BACK COVER 1)	1	*l	1	X	
59	-----	PFHX1433Z	SPACER,SHEET (Refer to BACK COVER 1)	1	*f	1	X	
65	PFKV1025Y1	PFKV1025X1	COVER, UPPER TURN (Refer to BACK COVER 1)	1	*j	1	W	
68	PFUA1025Y	PFUA1025W	CHASSIS, UPPER TURN	1	*d	4	W	
94	PFHX1370Z	PFHX1370Z	INSULATOR, PAPER EXIT (Refer to BACK COVER 2)	2	*f	5	V	
120	PFNW1006Z	-----	-----	0	Deleted	---	---	
132	PFUA1024Z	PFZMFM189E	CHASSIS KIT, GEAR BASE (Refer to MOTOR SECTION)	1	*e	2	W	
136	PFUS1231Z	PFUS1231Y	SPRING, GEAR I	3	*e	1	V	
Note: Change Parts of Ref No.32 and No.34 at the same time.								

ACCESSORIES AND PACKING MATERIALS

A7	PFQW1341Z	PFQW1423Z	INSTRUCTION BOOK (QUICK START SHEET)	1	*d	4	Y	
P5	PFPH1011Z	PFPH1030Z	PACKING SHEET	1	*d	4	V	

DIGITAL BOARD PARTS

L501	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L502	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L503	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L504	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L505	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L507	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L510	ERJ8GEY0R00	-----	-----	0	Deleted	---	---	
L511	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R503	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R504	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R505	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R506	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R507	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R509	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R511	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R512	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R536	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R551	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	

Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
	Original Part No.	New Part No.						
OPERATION BOARD PARTS								
R305	ERJ3GEYJ102	ERJ3GEYJ681	RESISTOR,680	1	*a	1	V	
R318	-----	ERJ3GEYJ4R7	RESISTOR,4.7 (Refer to OPERATION BOARD (for KX-FP80, KX-FP81, KX-FP81C)	1	*a	1	Y	
POWER SUPPLY BOARD PARTS								
C206	ECKD3A102KBP	-----	-----	0	Deleted	---	---	
L103	EXCELD3R35	-----	-----	0	Deleted	---	---	
R203	ERDS2FJ470	-----	-----	0	Deleted	---	---	

1.2.4. KX-FP81C

Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
CABINET AND ELECTRICAL SECTION								
1	PFGP1162Z	PFGP1162W	PANEL, LCD	1	*k	7	Z	
3	PFGG1045Z1	PFGG1045P1	GRILLE, OPERATION PANEL	1	*k	7	Z	
9	PFUV1027Y	PFUV1027X	COVER, OPERATION PANEL	1	*f	1	X	
13	PFBX1097U1	PFBX1097V1	BUTTON, FUNCTION	1	*k	7	Z	
17	PFHX1371Z	-----	-----	0	Deleted	---	---	
32	PFHR1189Z	PFHR1189Y	GUIDE, THERMAL HEAD (LEFT)	1	*f	1	W	
34	PFHR1190Z	PFHR1190Y	GUIDE, THERMAL HEAD (RIGHT)	1	*f	1	W	
35	PFHR1192Y	PFHR1192X	COVER, THERMAL HEAD	1	*f	1	W	
45	PF0U1022Z	PF0U1022Y	PHOTO ELECTRIC TRANSDUCER, IMAGE SENSOR(CIS)	1	*a	1		
36	PFHX1342X	PFHX1342Z	INSULATOR,STATICELEC. (RIGHT)	1	*f	1	V	
51	-----	PFHX1457Z	SPACER,SHEET (Refer to UPPER CABINET SECTION)	2	*f	5	W	
58	-----	PFQT1784Z	LABEL,OPEN RELEASE (Refer to BACK COVER 1)	1	*l	1	X	
62	PFQT1642Z	PFQT1642W	LABEL, PAPER SET	1	*k	7	Z	
65	PFKV1025Y1	PFKV1025X1	COVER, UPPER TURN (Refer to BACK COVER 1)	1	*j	1	W	
68	PFUA1025Y	PFUA1025W	CHASSIS, UPPER TURN	1	*d	4	W	
94	PFHX1370Z	PFHX1370Z	INSULATOR, PAPER EXIT (Refer to BACK COVER 2)	2	*f	5	V	
102	PFUS1255Z	PFUS1255Y	SPRING, EARTH (Refer to HOW TO REMOVE THE BOTTOM FRAME)	1	*d	4	V	
120	PFNW1006Z	-----	-----	0	Deleted	---	---	
132	PFUA1024Z	PFZMFM189E	CHASSIS KIT, GEAR BASE (Refer to MOTOR SECTION)	1	*e	2	W	
136	PFUS1231Z	PFUS1231Y	SPRING, GEAR I	3	*e	1	V	
Note: Change Parts of Ref No.32 and No.34 at the same time.								
ACCESSORIES AND PACKING MATERIALS								
A5	PFKS1045Z1	PFKS1039Z1	TRAY, PAPER	1	*k	7	Z	
A6	PFQX1421Z	PFQX1430Z	INSTRUCTION BOOK	1	*k	7	Z	
A7	PFQW1341Z	PFQW1366Z	INSTRUCTION BOOK(QUICK START SHEET)	1	*k	7	Z	
P1	PFPK1653Z-M	PFPK1679Z-M	GIFT BOX	1	*k	7	Z	
P2	PFPN1253Z-M	PFPN1209Y	CUSHON, RIGHT	1	*k	7	Z	
P5	PFPH1011Z	PFPH1030Z	PACKING SHEET	1	*d	4	V	
DIGITAL BOARD PARTS								
L501	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L502	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L503	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L504	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L505	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L507	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
L510	ERJ8GEY0R00	-----	-----	0	Deleted	---	---	
L511	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R503	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R504	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R505	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R506	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R507	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R509	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R511	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R512	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
R536	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	

Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
R551	ERJ3GEY0R00	-----	-----	0	Deleted	---	---	
OPERATION BOARD PARTS								
R305	ERJ3GEYJ102	ERJ3GEYJ681	RESISTOR,680	1	*a	1	V	
R318	-----	ERJ3GEYJ4R7	RESISTOR,4.7 (Refer to OPERATION BOARD (for KX-FP80, KX-FP81, KX-FP81C))	1	*a	1	Y	
POWER SUPPLY BOARD PARTS								
C206	ECKD3A102KBP	-----	-----	0	Deleted	---	---	
L103	EXCELD35	-----	-----	0	Deleted	---	---	
R203	ERDS2FJ470	-----	-----	0	Deleted	---	---	

1.2.5. KX-FP85

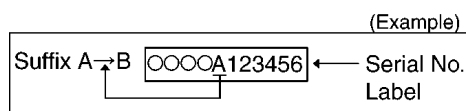
Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
	Original Part No.	New Part No.						
CABINET AND ELECTRICAL SECTION								
9	PFUV1027Y	PFUV1027X	COVER, OPERATION PANEL	1	*f	1	X	
32	PFHR1189Z	PFHR1189Y	GUIDE, THERMAL HEAD (LEFT)	1	*f	1	W	
34	PFHR1190Z	PFHR1190Y	GUIDE, THERMAL HEAD (RIGHT)	1	*f	1	W	
35	PFHR1192Y	PFHR1192X	COVER, THERMAL HEAD	1	*f	1	W	
36	PFHX1342X	PFHX1342Z	INSULATOR,STATIC ELEC. (RIGHT)	1	*f	1	V	
45	PF0U1022Z	PF0U1022Y	PHOTO ELECTRIC TRANSDUCER, IMAGE SENSOR(CIS)	1	*a	1	V	
51	-----	PFHX1457Z	SPACER,SHEET (Refer to UPPER CABINET SECTION)	2	*f	5	W	
58	-----	PFQT1749Z	LABEL,OPEN RELEASE (Refer to BACK COVER 1)	1	*l	1	X	
65	PFKV1025Y1	PFKV1025X1	COVER, UPPER TURN (Refer to BACK COVER 1)	1	*j	1	W	
68	PFUA1025Y	PFUA1025W	CHASSIS, UPPER TURN	1	*d	4	W	
94	PFHX1370Z	PFHX1370Z	INSULATOR, PAPER EXIT (Refer to BACK COVER 2)	2	*f	5	V	
102	PFUS1255Z	PFUS1255Y	SPRING, EARTH (Refer to HOW TO REMOVE THE BOTTOM FRAME)	1	*d	4	V	
132	PFUA1024Y	PFZMFM189E	CHASSIS KIT, GEAR BASE (Refer to MOTOR SECTION)	1	*e	2	W	
136	PFUS1231Z	PFUS1231Y	SPRING, GEAR I	3	*e	1	V	
Note: Change Parts of Ref No.32 and No.34 at the same time.								
ACCESSORIES AND PACKING MATERIALS								
A7	PFQW1360Z	PFQW1499Z	INSTRUCTION BOOK (QUICK START SHEET)	1	*d	4	Y	
P1	PFPK1665Z-M	PFPK1780Z-M	GIFT BOX	1	*g	8	Z	
P1	PFPK1665Z-M	PFPK1799Z-C	GIFT BOX	1	*h	8	Z	
P5	PFPH1011Z	PFPH1030Z	PACKING SHEET	1	*d	4	V	
OPERATION BOARD PARTS								
R318	-----	ERJ3GEYJ4R7	RESISTOR,4.7 (Refer to OPERATION BOARD (for KX-FP85, KX-FP86))	1	*a	1	Y	
R385	ERJ3GEY0R00V	ERJ3GEYJ331	RESISTOR,330	1	*a	1	V	
POWER SUPPLY BOARD PARTS								
C206	ECKD3A102KBP	-----	-----	0	Deleted	---	---	
L103	EXCELD35	-----	-----	0	Deleted	---	---	
R203	ERDS2FJ470	-----	-----	0	Deleted	---	---	

1.2.6. KX-FP85C

Change of the Suffix Code

Suffix Code	Reasons of change
A→B	To upgrade the ROM version for improvement of the Caller ID display. Program No. is changed from E571CA to E571CB .

Serial No.Label tells you the suffix code as follows.



Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
	Original Part No.	New Part No.						
CABINET AND ELECTRICAL SECTION								
9	PFUV1027Y	PFUV1027X	COVER, OPERATION PANEL	1	*f	1	X	
32	PFHR1189Z	PFHR1189Y	GUIDE, THERMAL HEAD (LEFT)	1	*f	1	W	
34	PFHR1190Z	PFHR1190Y	GUIDE, THERMAL HEAD (RIGHT)	1	*f	1	W	
35	PFHR1192Y	PFHR1192X	COVER, THERMAL HEAD	1	*f	1	W	
36	PFHX1342X	PFHX1342Z	INSULATOR,STATIC ELEC. (RIGHT)	1	*f	1	V	
45	PF0U1022Z	PF0U1022Y	PHOTO ELECTRIC TRANSDUCER, IMAGE SENSOR(CIS)	1	*a	1	V	
51	-----	PFHX1457Z	SPACER,SHEET (Refer to UPPER CABINET SECTION)	2	*f	5	W	
58	-----	PFQT1784Z	LABEL,OPEN RELEASE (Refer to BACK COVER 1)	1	*l	1	X	
65	PFKV1025Y1	PFKV1025X1	COVER, UPPER TURN (Refer to BACK COVER 1)	1	*j	1	W	
94	Not Used	PFHX1370Z	INSULATOR, PAPER EXIT (Refer to BACK COVER 2)	2	*f	5	V	
132	PFUA1024Y	PFZMFM189E	CHASSIS KIT, GEAR BASE (Refer to MOTOR SECTION)	1	*e	2	W	
Note: Change Parts of Ref No.32 and No.34 at the same time.								
ACCESSORIES AND PACKING MATERIALS								
P5	PFPH1011Z	PFPH1030Z	PACKING SHEET	1	*d	4	V	
DIGITAL BOARD PARTS								
IC502	PFWIFP85C	PFWIFP85C1	IC(ROM)	1	*b	1	X	B
IC502	PFWIFP85C1	PFWIFP85C2	IC(ROM)	1	*b	1	W	
POWER SUPPLY BOARD PARTS								
C206	ECKD3A102KBP	-----	-----	0	Deleted	---	---	
L103	EXCELD3R35	-----	-----	0	Deleted	---	---	
R203	ERDS2FJ470	-----	-----	0	Deleted	---	---	

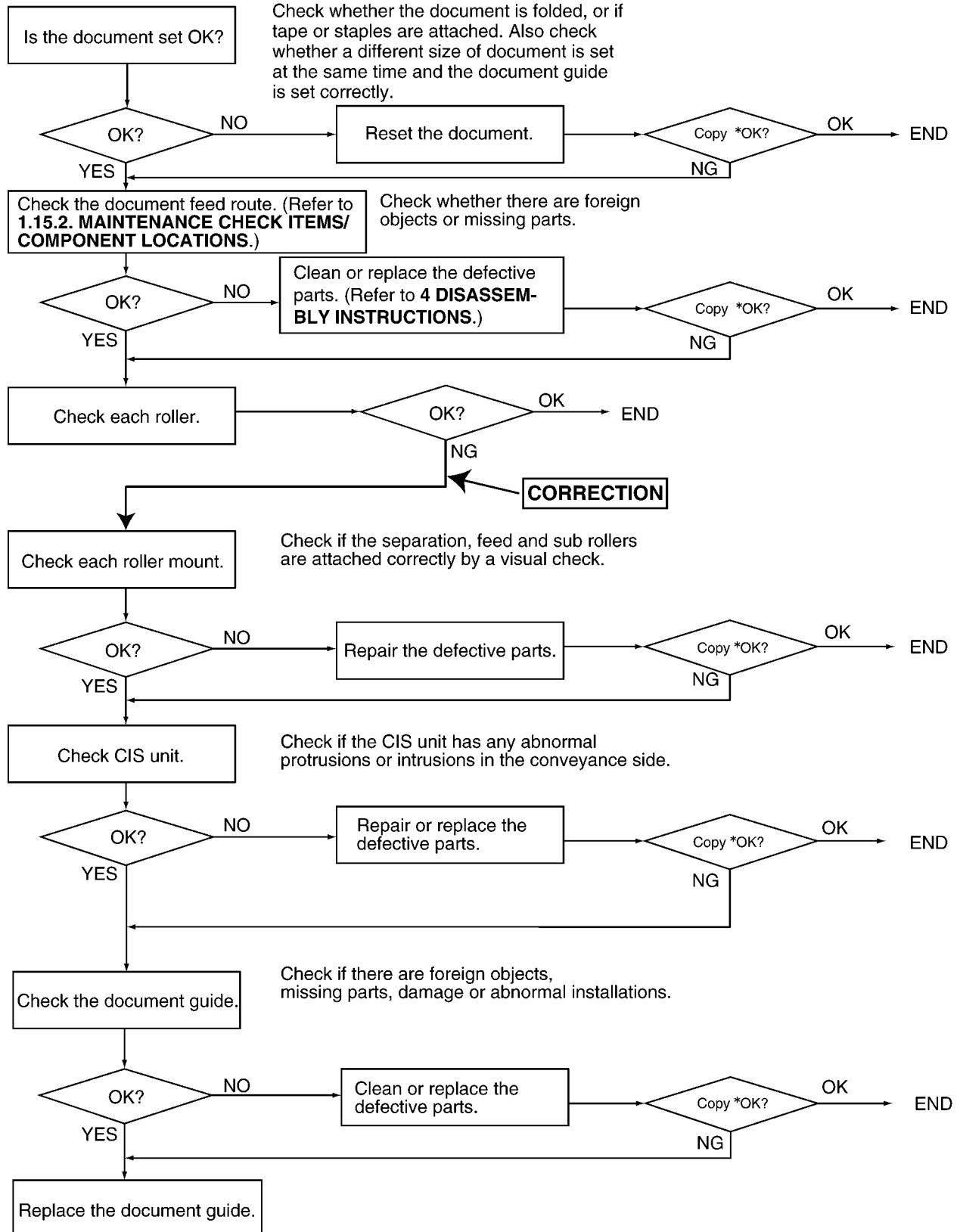
1.2.7. KX-FP86

Ref No.	Part No.		Part Name & Descriptions	Pcs/Set	Remarks	Notes		Suffix
	Original Part No.	New Part No.						
CABINET AND ELECTRICAL SECTION								
9	PFUV1027Y	PFUV1027X	COVER, OPERATION PANEL	1	*f	1	X	
32	PFHR1189Z	PFHR1189Y	GUIDE, THERMAL HEAD (LEFT)	1	*f	1	W	
34	PFHR1190Z	PFHR1190Y	GUIDE, THERMAL HEAD (RIGHT)	1	*f	1	W	
35	PFHR1192Y	PFHR1192X	COVER, THERMAL HEAD	1	*f	1	W	
36	PFHX1342X	PFHX1342Z	INSULATOR,STATICELEC. (RIGHT)	1	*f	1	V	
45	PF0U1022Z	PF0U1022Y	PHOTO ELECTRIC TRANSDUCER, IMAGE SENSOR(CIS)	1	*a	1	V	
51	-----	PFHX1457Z	SPACER,SHEET (Refer to UPPER CABINET SECTION)	2	*f	5	W	
58	-----	PFQT1749Z	LABEL,OPEN RELEASE (Refer to BACK COVER 1)	1	*l	1	X	
65	PFKV1025Y1	PFKV1025X1	COVER, UPPER TURN (Refer to BACK COVER 1)	1	*j	1	W	
68	PFUA1025Y	PFUA1025W	CHASSIS, UPPER TURN	1	*d	4	W	
94	PFHX1370Z	PFHX1370Z	INSULATOR, PAPER EXIT (Refer to BACK COVER 2)	2	*f	5	V	
132	PFUA1024Y	PFZMFM189E	CHASSIS KIT, GEAR BASE (Refer to MOTOR SECTION)	1	*e	2	W	
136	PFUS1231Z	PFUS1231Y	SPRING, GEAR I	3	*e	1	V	
Note: Change Parts of Ref No.32 and No.34 at the same time.								
ACCESSORIES AND PACKING MATERIALS								
A7	PFQW1360Z	PFQW1499Z	INSTRUCTION BOOK (QUICK START SHEET)	1	*d	4	Y	
P1	PFPK1692Z-M	PFPE1100Z-M	PACKAGE ASSY	1	*l	8	X	
P5	PFPH1011Z	PFPH1030Z	PACKING SHEET	1	*d	4	V	
OPERATION BOARD PARTS								
R318	-----	ERJ3GEYJ4R7	RESISTOR,4.7 (Refer to OPERATION BOARD (for KX-FP85, KX-FP86))	1	*a	1	Y	
R385	ERJ3GEY0R00V	ERJ3GEYJ331	RESISTOR,330	1	*a	1	V	
POWER SUPPLY BOARD PARTS								
C206	ECKD3A102KBP	-----	-----	0	Deleted	---	---	
L103	EXCELDR35	-----	-----	0	Deleted	---	---	
R203	ERDS2FJ470	-----	-----	0	Deleted	---	---	

2.1.1.2. SKEW

Please replace original Service Manual page as follows. (2.3.4.4. SKEW)

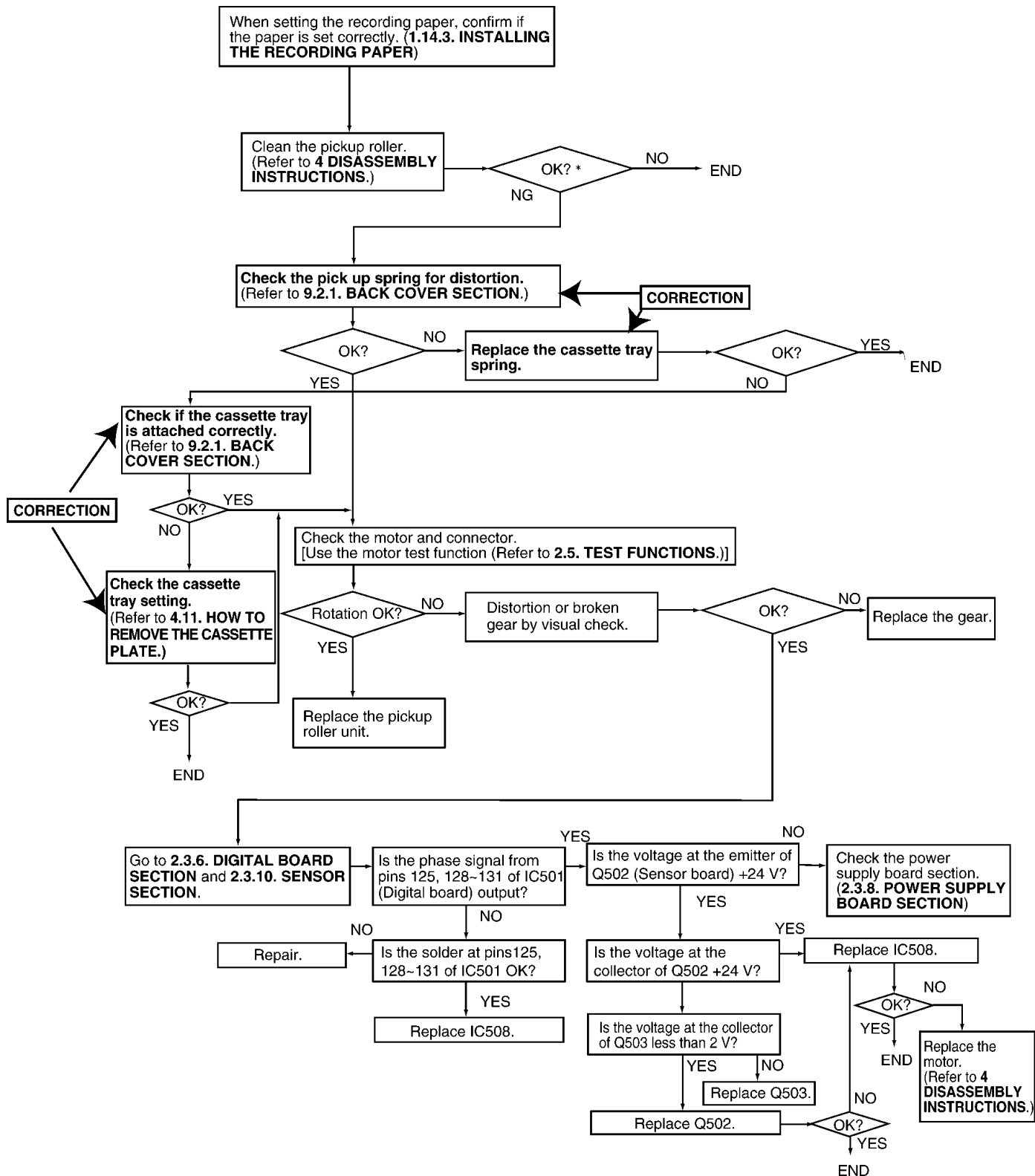
- Page 36 in the **KX-FP80**
- Page 35 in the **KX-FP81**
- Page 36 in the **KX-FP81C**
- Page 37 in the **KX-FP85**
- Page 37 in the **KX-FP85C**
- Page 37 in the **KX-FP86**



2.1.1.3. THE RECORDING PAPER DOES NOT FEED

Please replace original Service Manual page as follows. (2.3.4.5. THE RECORDING PAPER DOES NOT FEED)

- Page 37 in the **KX-FP80**
- page 36 in the **KX-FP81**
- Page 37 in the **KX-FP81C**
- Page 38 in the **KX-FP85**
- Page 38 in the **KX-FP85C**
- Page 38 in the **KX-FP86**



3 DISASSEMBLY INSTRUCTIONS

3.1. HOW TO REMOVE THE BOTTOM FRAME

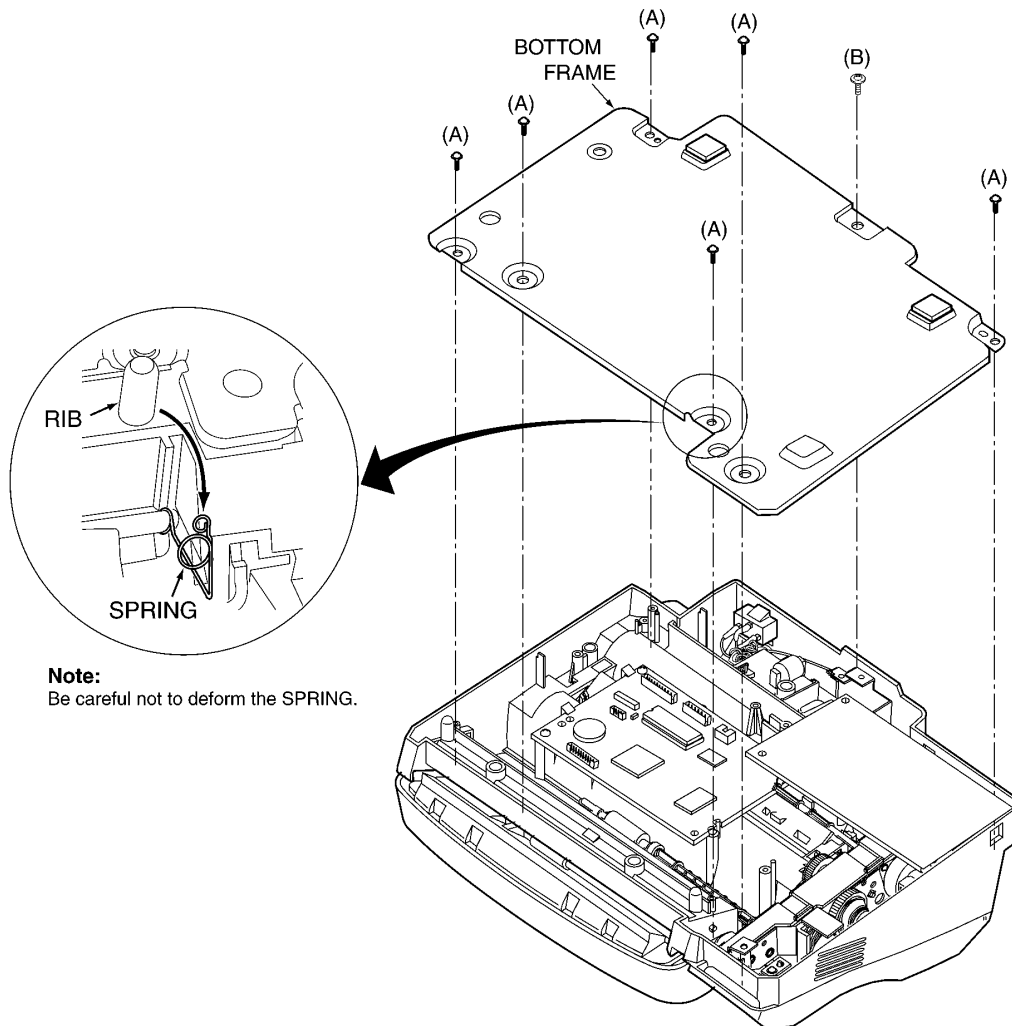
If you use a new SPRING / EARTH that part No. is **PFUS1255Y**, please refer the below picture. Original Service Manual page as follows. (4.1.HOW TO REMOVE THE BOTTOM FRAME)

- Page 107 in the **KX-FP80**
- Page 107 in the **KX-FP81C**
- Page 111 in the **KX-FP85**

Procedure: 1

REF No. 1

- 1) Remove the 6 screws (A).
- 2) Remove the 1 screw (B).
- 3) Remove the SPRING from the RIB.
- 4) Remove the BOTTOM FRAME.



4 CIRCUIT OPERATIONS

4.1. FACSIMILE SECTION (for KX-FP80)

4.1.1. THERMAL HEAD

Please replace original Service Manual page 138 in the **KX-FP80**. (6.4.3.THERMAL HEAD)

2.Circuit Operation

Refer to the block diagram and the timing chart on the following page.

There are **9** driver ICs aligned horizontally on the thermal head and each one of these ICs can drive **192** heat-emitting registers. This means that one line is at a density of **192×9=1728 dots**=(8 dots/mm).

White/Black (white=0, black=1) data in one line increment is synchronized at IC501 pin **115** (THCLK), and sent from IC501 pin **114** (THDAT) to the shift register of the ICs. The shift registers of the **9** ICs are connected in series, and upon the shift of the 1728 dot increment, the shift register becomes filled with data, and a latch pulse is emitted to each IC from IC501 pin **118** (THLAT).

With this latch pulse, all the contents of the shift registers are latched to the latch registers. Thereafter, through the addition of strobes from the IC501 pins (**105, 106**), only the dot location of black (=1) among latched data activates the driver, and the current passes to heat the emitting body to cause heat emission.

Here, the **two** line strobes, STB1 to STB2, impress at intervals of 9.216 msec, as required for one-line printout.

The sequence is shown on the next page. [Moreover, for the strobe width, the thermistor value inside the thermal head is detected according to IC501 pin 2. Depending on that value, the strobe width is recorded in ROM (IC502). Accordingly, the strobe width is determined.]

When the thermal head is not used, the IC501 (**23**, THON) becomes low, Q501 turns OFF, IC506 turns OFF, and the +24V power supply for the thermal head driver is not impressed to protect the IC.

Circuit Diagram

