

# Repair Manual

## DP8340 Series

1<sup>st</sup> Edition

Issued Date: June 11, 2008



Star Micronics America, Inc.

# About This Manual

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- So a user has to treat the information concerned as private information.
- A user must not use this confidential information except for the purpose of the product repairs.
- Star cannot take any responsibility about the repair result influenced of this manual.
- Star cannot take any responsibility about the trouble which caused by 3<sup>rd</sup> party's parts or consumables.

# Change Record

Rev. #	Date of Issue	Note
1.0	06/11/2007	Release 1st Edition

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**Please confirm before repair**

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## 1-1 Removing Printer Cover Unit

1

Please confirm before repair

Turn off the Power Switch **A** and disconnect the Power Cable from the outlet.



### 1. Repair Mechanism

#### (1) Remove Printer Cover Unit

1-1) Starting from back side gently pull toward front as shown below.



## 1-2 Removing Upper Case Unit

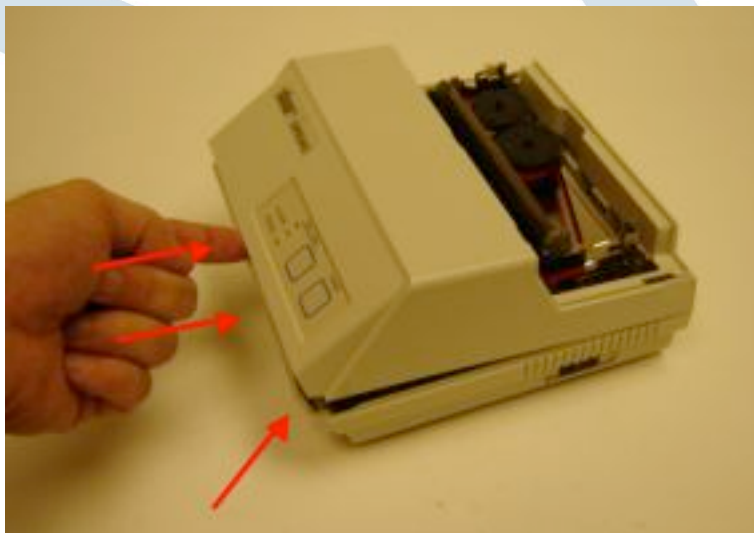
2

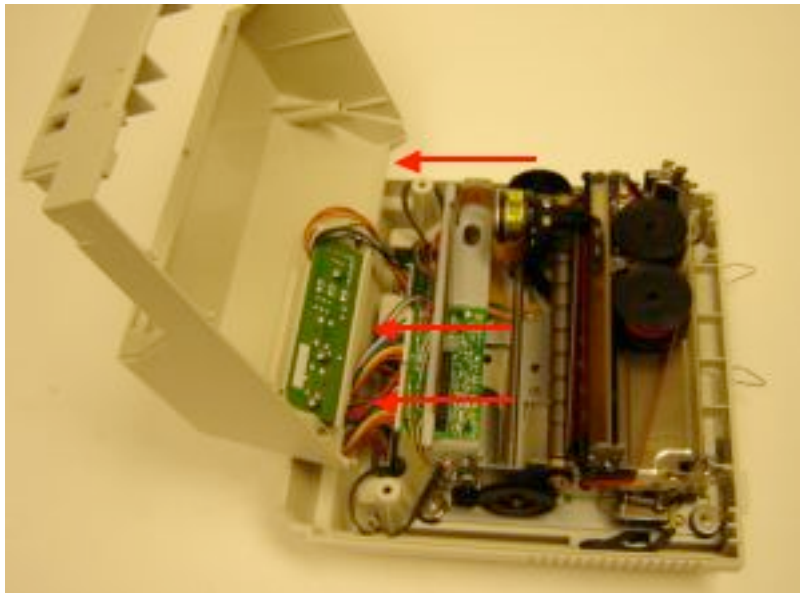
**(1) Remove Upper Case Unit** (You must remove lower case first)

1-1) Remove screws (2) from bottom of printer as shown below.

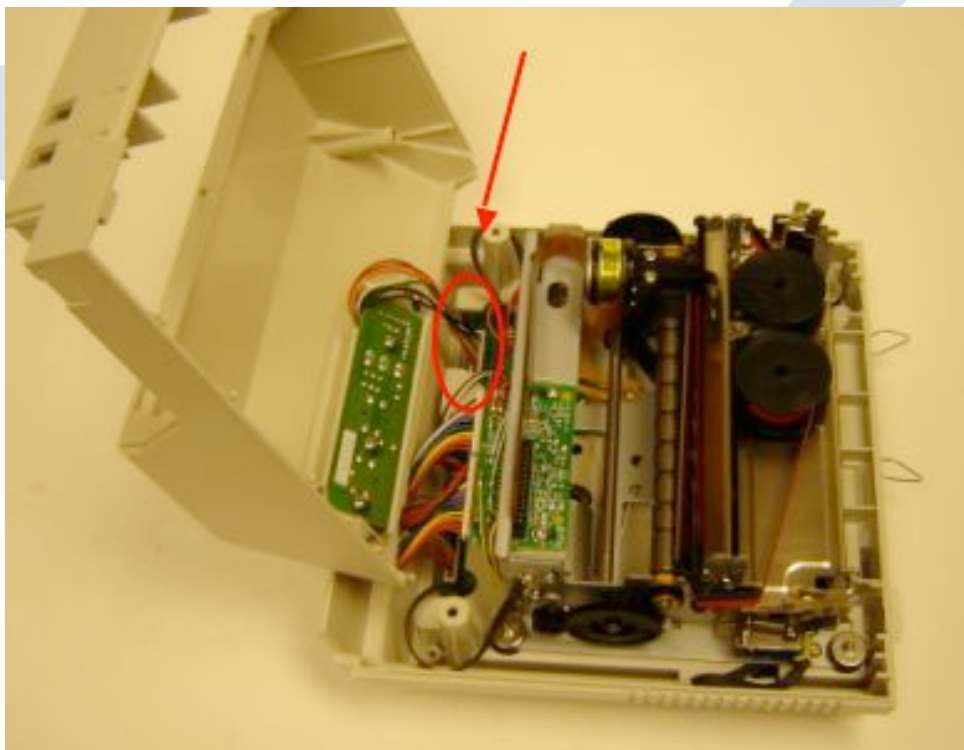


1-2) Turn printer over and pull cover front to back to loosen that pull forward as shown below





1-3) Disconnect Control Panel Unit (part # 87200310)



## 1-3 Removing Control Board Unit

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### (1) Remove Control Board Unit

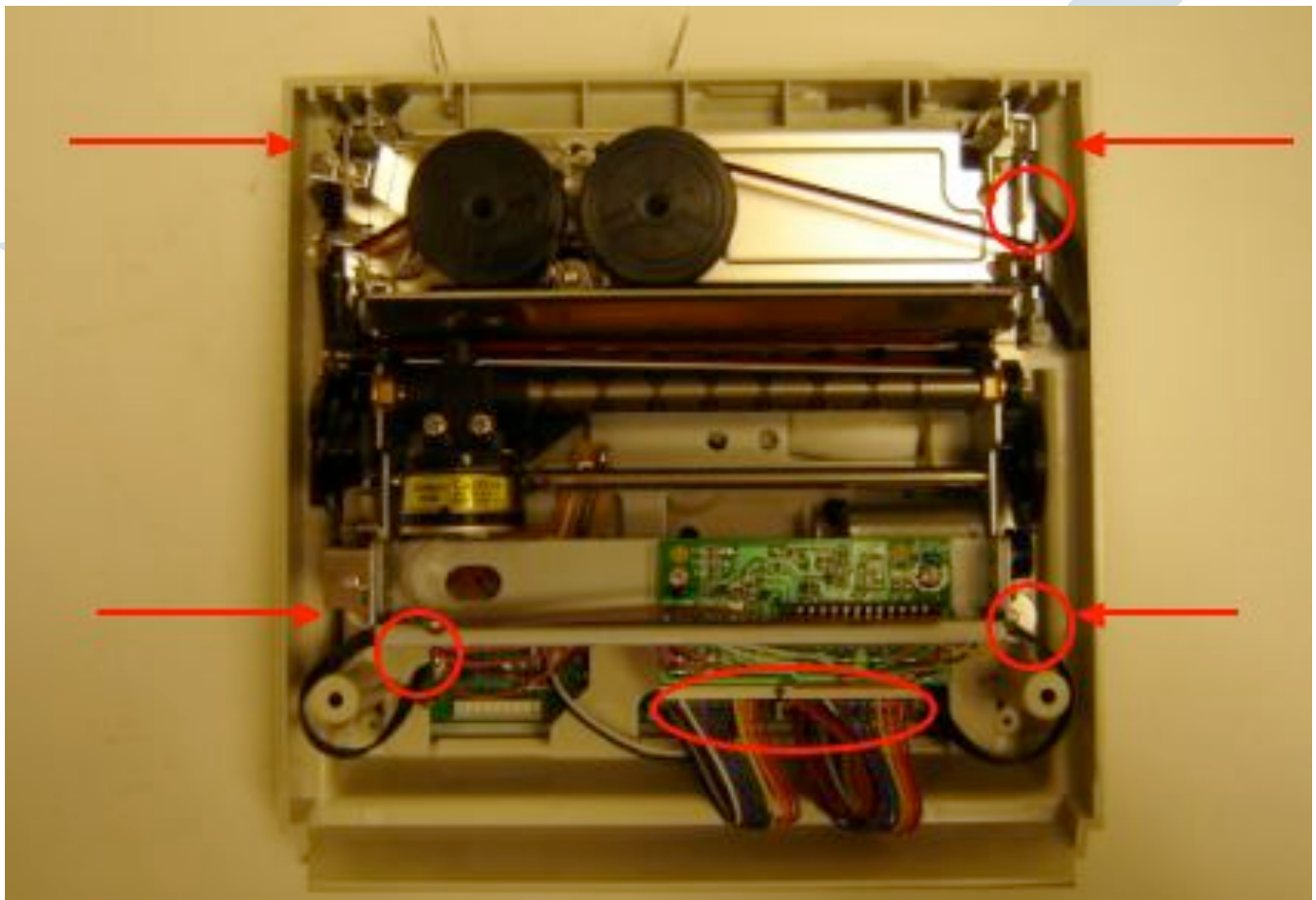
- 1-1) Remove screws (2) and remove from Upper Case.
- 1-2) Control Panel Unit shown below





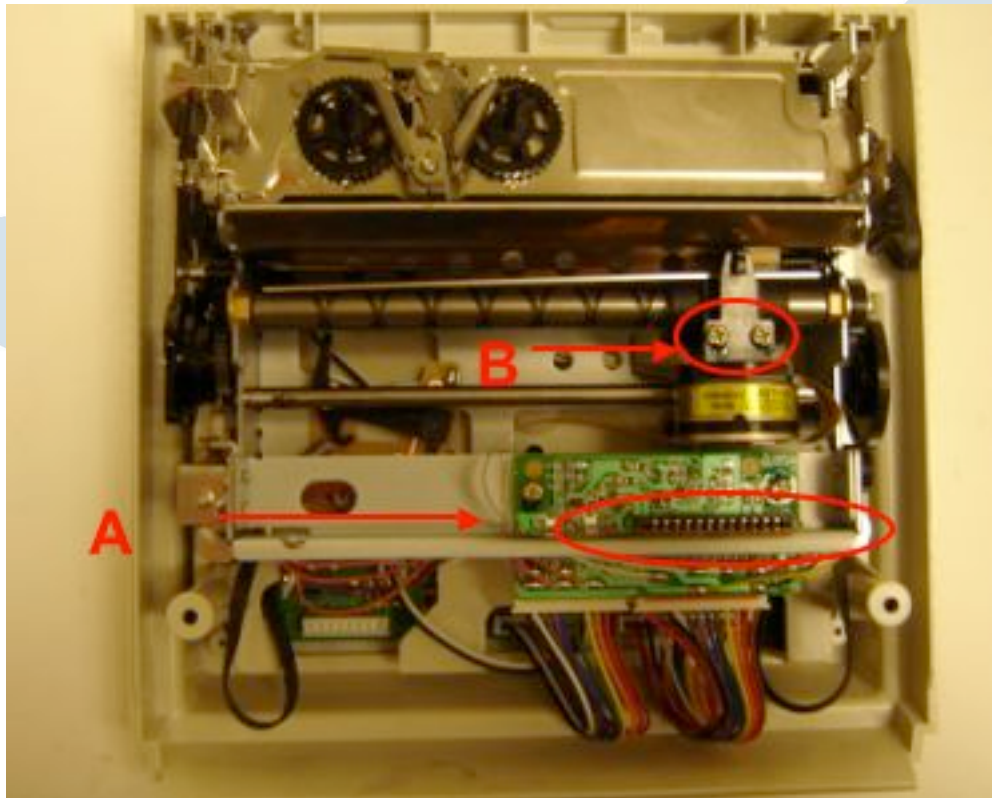
### (1) Remove Mechanism Chassis Unit

- 1-1) Remove screws (4) and flat washers identified by red arrow
- 1-2) Disconnect frame wires located circled area
- 1-3) Disconnect the two (2) connectors on Terminal board and gently lift Mechanism.



**(1) Remove Print Head. Part# 89180021**

- 1-1) Remove Cover Unit as outlined in section 1.1
- 1-2) Remove Upper Case as outlined in section 1.2
- 1-3) Disconnect Print Head cable **A** as shown below
- 1-4) Remove Print Head screws as shown below **B**
- 1-5) Remove Print Head

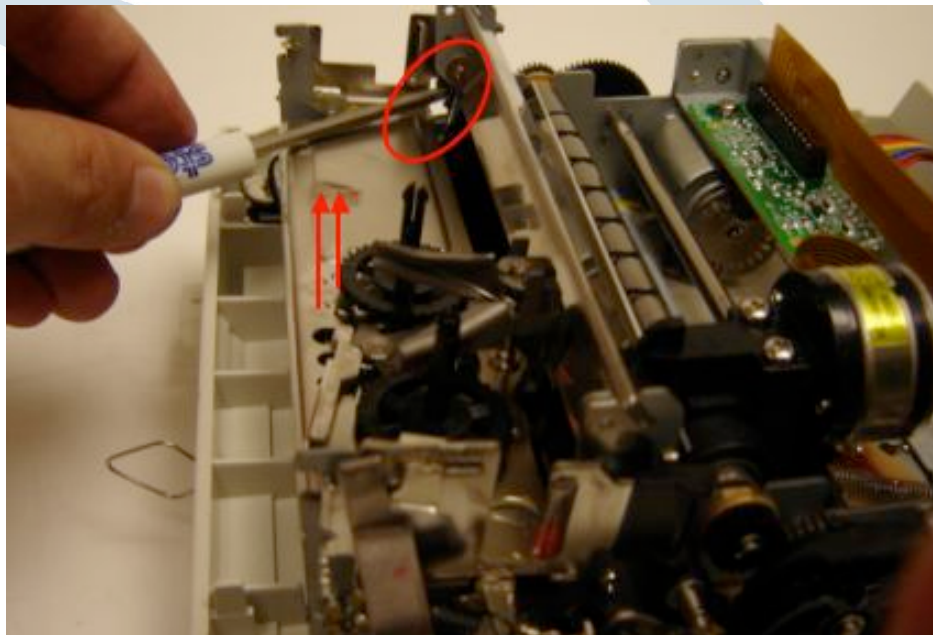
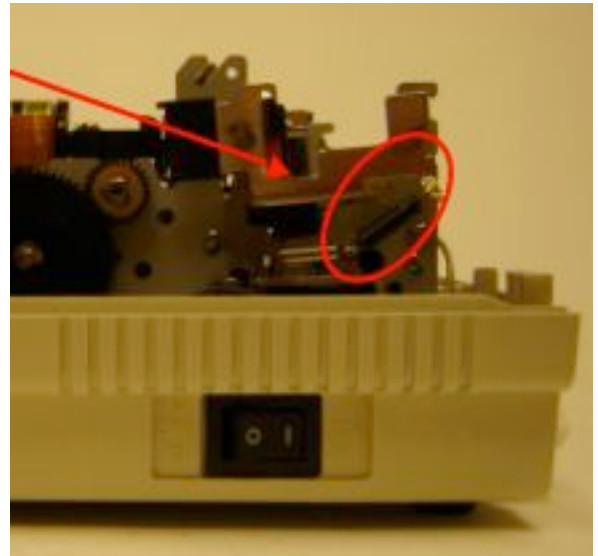
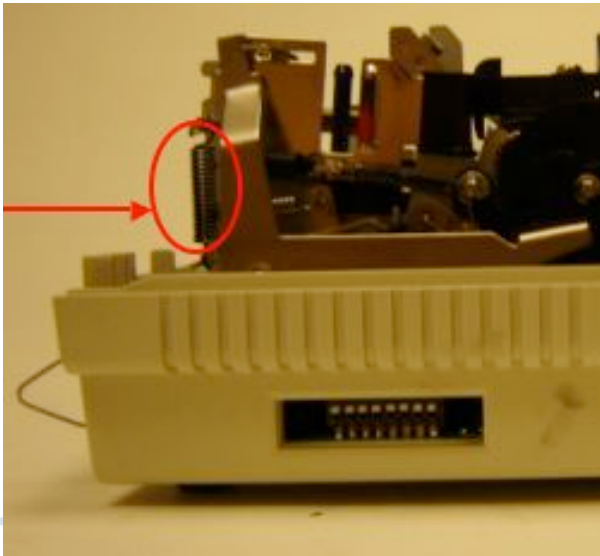


## 1-6 Removing Ribbon Base Unit

7

### (1) Remove Ribbon Base Unit. Part# 87119020

- 1-1) Remove Cover Unit outlined in section 1.1
- 1-2) Remove Upper Case Cover outlined in section 1.2
- 1-3) Remove Springs on both sides as shown below
- 1-4) Snap Base Unit away from Mechanism
- 1-5) Slide Ribbon base towards right side and remove

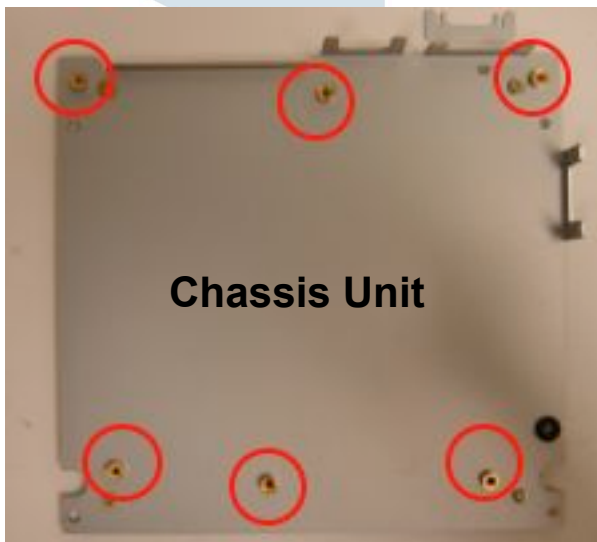


### (1) Remove Main Control Board

- 1-1) Remove Cover unit outlined in section 1.1
- 1-2) Remove Upper case outline in section 1.2
- 1-3) Remove Ground wires black (3) from Mechanism outlined in section 1.4
- 1-4) Remove screws (4) from bottom plate of printer as shown below.
- 1-5) Separate Control Board and Chassis Unit from Lower Case
- 1-6) Remove from Chassis Unit



Example 1.4



Example 1.6

**Be careful of the handling of a product at the repair as below.**

**= Storage of a product =**

(1) We recommend the following storage condition for our products:

The temperature:      Less than 45 degrees.

The humidity:          Less than 70%.

A thing without condensation

**Dew condensation or humid environment cause rust and damage.**

(2) Shut out the sunlight.

(3) Don't put a product on the floor directly. (Put the product on the palette.)

(4) Cover a product (carton box) for protection of coming dust and such foreign substance after opening the package.

(5) Don't put each product without carton box.

**= Assembly and checking operation =**

(6) We recommend the following working condition for your production line.

Environment

Temperature    :      Less than 25 degrees.

Humidity       :      Less than 55%.

(7) Use gloves and finger sack when touch a printer.

(Please do not touch directly with hands.)

**If frame or chassis are touched directly with hands, it will become easy to generate rust.**

(8) Protect a product against static electricity.

**For example, prepare earth band for workers, ground the working table and testing tools.**

(9) Don't loose Screws and modify a product.

(10) Don't connect or disconnect cable (or flat cable) with a product when test tool power on.

(11) Please replace the cable (or flat cable) to connect with test tool periodically because the pattern of cable top is easily damaged.

(12) If test tool is damaged, a printer is also damaged.

Therefore be careful of state of test tool. And we recommend to prepare protection circuit between test tool and our product.

(13) The control board should be passed the customer's testing.

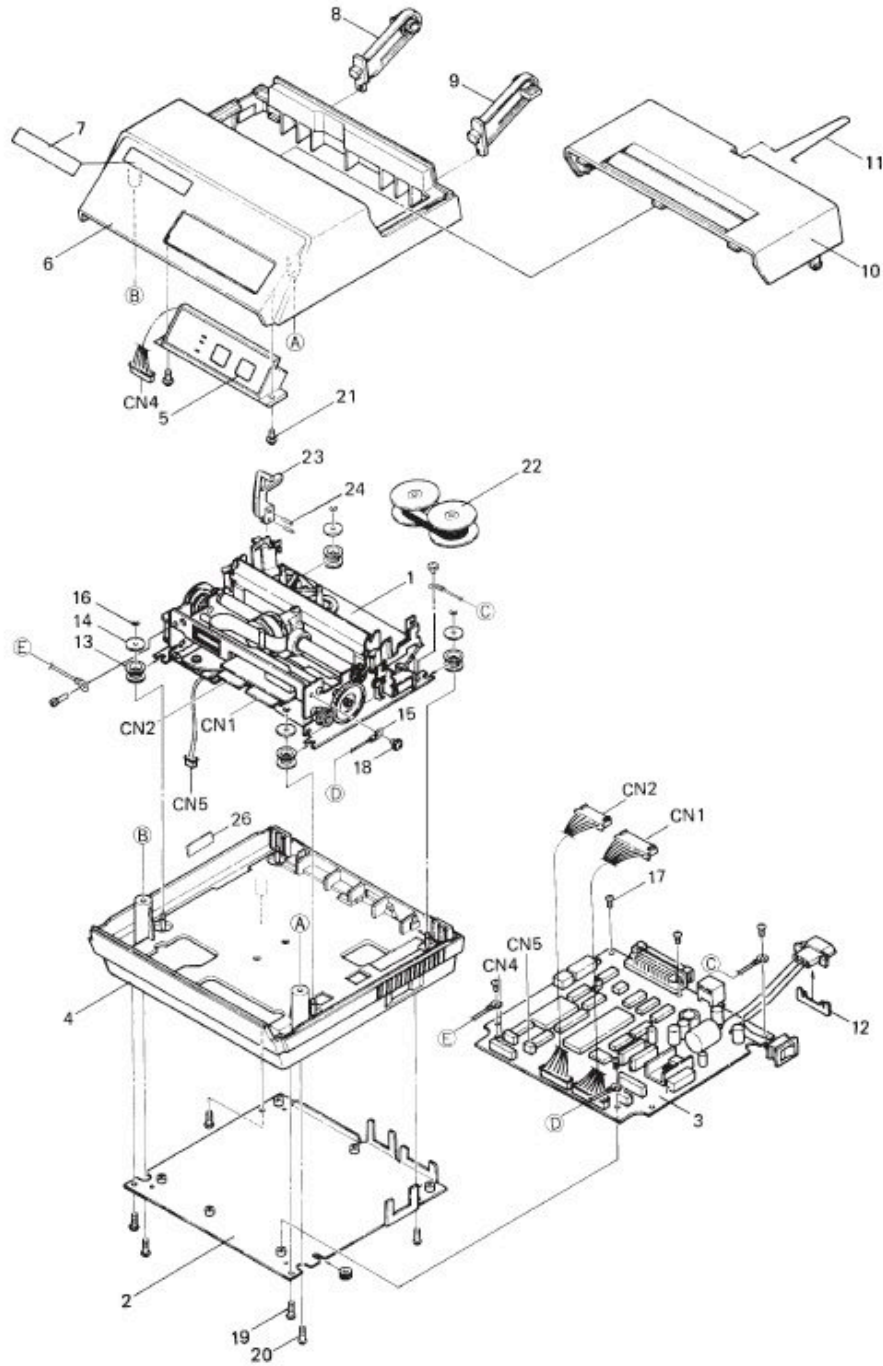
Because our product may be destroyed if control board is broken.

(14) Since the causes of generating differ, please distinguish and manage the defect products in a receiving inspection and the assembly line's inspection.



#### 1. Printer Assembly

##### 1-1. Disassembly Drawing



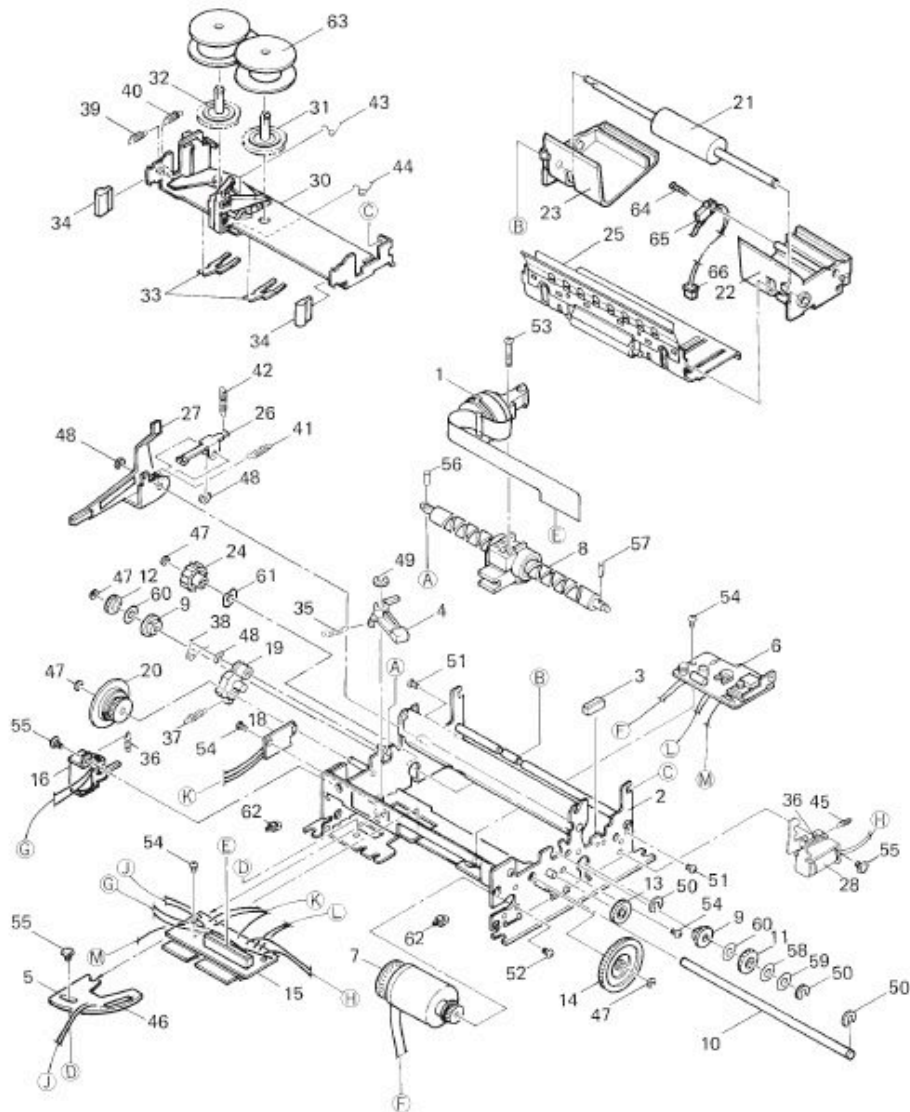
## 1-2. Parts List

## Printer Assembly

DRWG. NO.	REV.	PARTS NO.	PARTS NAME	Q'TY	REMARKS	RANK
1		89111020	PRINTER MECHANISM DP834P-12	1	F TYPE:INCLUDE NO.22	S
	#1	89111050	PRINTER MECHANISM DP834SP-12	1	S TYPE:INCLUDE NO.22	S
2		87204010	BOARD CHASSIS UNIT B340	1		
3	*2	87202010	CONTROL BOARD UNIT BD83NM-12	1	FOR M TYPE : VER.1	
	#2	87202011	CONTROL BOARD UNIT BD83NM-12	1	FOR M TYPE : VER.2	S
	*2	87202020	CONTROL BOARD UNIT BD83ND-12	1	FOR D TYPE : VER.1	
	#2	87202021	CONTROL BOARD UNIT BD83ND-12	1	FOR D TYPE : VER.2	S
	#2	87202030	CONTROL BOARD UNIT BD83NC-12	1	FOR FC TYPE	S
	#2	87202040	CONTROL BOARD UNIT BD83SC-12	1	FOR SC TYPE	S
	#3	87202050	CONTROL BOARD UNIT BD83RM-12	1	FOR RM TYPE	S
	#3	87202070	CONTROL BOARD UNIT BD83SM-12	1	FOR SM TYPE	S
	#3	87202080	CONTROL BOARD UNIT BD83SD-12	1	FOR SD TYPE	S
4		87201010	LOWER CASE UNIT B340	1	FOR M TYPE	S
		87201020	LOWER CASE UNIT B340EC	1	FOR D TYPE	S
	#2	87201030	LOWER CASE UNIT B340P	1	FOR C TYPE	S
5		87200310	CONTROL PANEL UNIT B340	1		S
6	*4	83022010	UPPER CASE B340	1		S
	#4	87200010	UPPER CASE UNIT B340	1	INCLUDES NO.5,7,21	S
	#4	87200040	UPPER CASE UNIT B340S	1	INCLUDES NO.5,7,21	S
7		80034990	BRAND PLATE DP8340	1	FOR F TYPE	S
		80080520	BRAND PLATE B340S	1	FOR S TYPE	S
8		83910671	ROLL PAPER HOLDER L B340	1		S
9		83910661	ROLL PAPER HOLDER R B340	1		S
10	*2	87200020	PRINTER COVER UNIT B340	1	FOR F TYPE	
	#2	87200021	PRINTER COVER UNIT B340	1	FOR F TYPE	S
	*2	87200030	PRINTER COVER UNIT B340S	1	FOR S TYPE	
	#2	87200031	PRINTER COVER UNIT B340S	1	FOR S TYPE	S
11	*2	80530420	PAPER SEPARATION B340	1	RE-ROLL PREVENTION	
	#2	80530421	PAPER SEPARATION B340	1	RE-ROLL PREVENTION	S
12		82210010	DC SPACER B340	1		S
13		80200430	RUBBER FOOT B340	4		S
14		82200270	WASHER 3.1X13 B340	4		S
15	*2	80704020	MESHED GROUND WIRE B340	1		
	#2	80923410	MESHED GROUND WIRE 100T	3		S
16	*2	04020003	STOP RING SE2.0	4		
	#2	04020010	STOP RING SE2.0	4		S
17	*3	00630504	SCREW TR 3-5	5		S
	#3	00830604	SCREW TR 3-6	5		S
18	#2	01903026	SCREW TR 3-5 WB	3		S
19		00930803	SCREW TAT 3-8 PT	4		S
20		01903001	SCREW TR 3-10	2		S
21		01903038	SCREW TAT 3-10 PT-FL	2		S
22		80900300	INK RIBBON SF-03BR	1		S
23		83400390	RELEASE LEVER B340S	1	ONLY S TYPE	S
24	*2	81301250	RELEASE LEVER PIN B340S	2	ONLY S TYPE	
	#2	04011801	ROLL PIN SP1.8X8 BS	2	ONLY S TYPE	S
25	*2	04020001	STOP RING SE1.2	2	ONLY S TYPE	
26	#2	83910890	DIP SWITCH COVER B340	1		S
-		09100329	CONNECTOR 5480-03-RED	1	OPTION	
		09990142	TERMINAL 5479PBT	3	OPTION	
	#4	09990713	FERRITE CORE TRCC-16-8-16 CASE	1	FOR EU	
	#4	04991204	FASTENER T18S	1	FOR EU	

## 2. Printer Mechanism DP834P-12(F-Type)

### 2-1. Disassembly Drawing





## 2-2. Parts List

Printer Mechanism DP834P-12

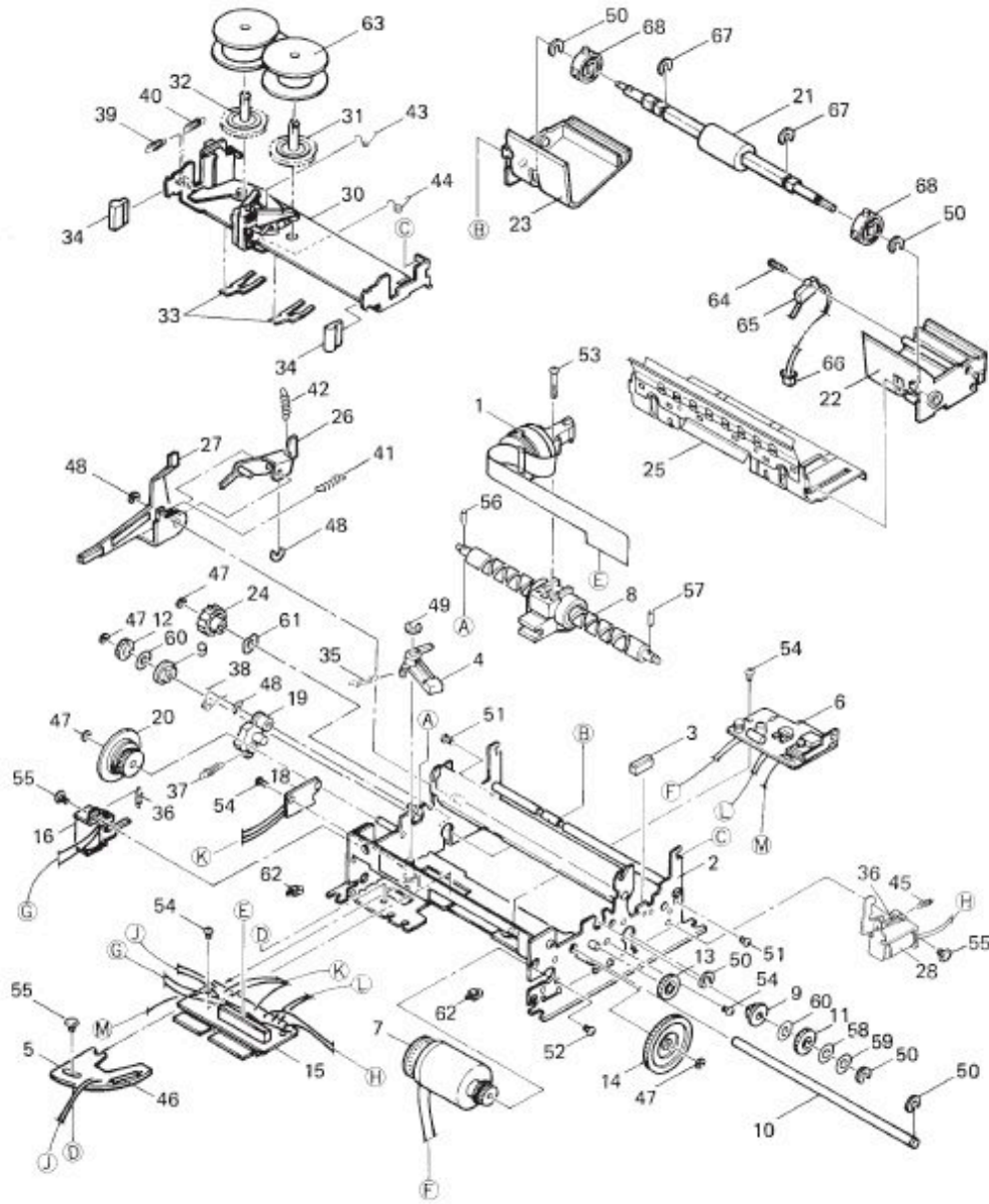
DRWG.NO.	REV.	PARTS NO.	PARTS NAME	Q'TY	REMARKS	RANK
1		89180021	PRINT HEAD DP8304A	1		S
2		87110020	FRAME UNIT	834	1	
3		80990900	CUSHION	832	2	
4		87115010	RESET LEVER UNIT	832	1	
5		87117050	RESET BOARD UNIT	834	1	INCLUDES DRWG. NO.46
6		87112310	GOVERNOR ASSY	832	1	S
7		87112330	MOTOR 12V-24G NL ASSY	834P	1	S
8		87111020	DRIVE SHAFT UNIT	834	1	
9		80200010	DRIVE SHAFT BEARING	822	2	
10		81360290	CARRIAGE STAY	834	1	
11		*4 83100342	DRIVE SHAFT GEAR	832	1	S
		#4 83100343	DRIVE SHAFT GEAR	832	1	S
12		*4 83100372	CLUTCH DRIVE GEAR	832	1	S
		#4 83100373	CLUTCH DRIVE GEAR	832	1	S
13		*4 83100360	SECONDARY GEAR	832	1	S
		#4 83100361	SECONDARY GEAR	832	1	S
14		*4 83100350	PRIMARY GEAR	832	1	S
		#4 83100351	PRIMARY GEAR	832	1	S
15		87117010	TERMINAL BOARD UNIT	832	1	
16		87118030	CLUTCH SOLENOID UNIT	834	1	INCLUDES DRWG. NO.36 S
18		87117040	CAM BOARD UNIT	834	1	S
19		87116010	PAPER FEED LEVER UNIT	832	1	INCLUDES DRWG. NO.38 S
20		87114010	CONTROL CAM UNIT	832	1	S
21		*2 80200350	PAPER FEED ROLLER	834	1	
		#2 80200351	PAPER FEED ROLLER	834	1	
22		*2 83910491	PAPER GUIDE R	834	1	
		#2 83910492	PAPER GUIDE R	834	1	
23		*2 83910501	PAPER GUIDE L	834	1	
		#2 83910502	PAPER GUIDE L	834	1	
24		83110061	PAPER FEED RATCHET	832	1	
25		*2 87113020	PAPER CHUTE UNIT	834	1	
		#2 87113021	PAPER CHUTE UNIT	834	1	S
26		82400680	PAPER FEED INDEX	832	1	
27		87116020	CAM LEVER UNIT	832	1	
28		87118010	RIBBON SHIFT SOLENOID UNIT	832	1	INCLUDE DRWG. NO.36 S
29		*2 82400700	CHANGE TRIGGER	832	1	INCLUDED IN NO.28 S
30		87119020	RIBBON BASE UNIT	834	1	INCLUDE 31-34,43,44 S
31		*4 83120190	SPOOL SHAFT R	832	1	S
		#4 83120191	SPOOL SHAFT R	832	1	S
32		*4 83120200	SPOOL SHAFT L	832	1	S
		#4 83120201	SPOOL SHAFT L	832	1	S
33		*2 82500290	SLIP SPRING	832	2	
		*4 82500291	SLIP SPRING	832	2	S
		#4 82500292	SLIP SPRING	832	2	S
34		83900670	RIBBON GUIDE	832	2	
35		*2 80510620	SPRING E040-029-0193	1	FOR RESET LEVER	
		#2 80510621	SPRING E051-029-0182	1	FOR RESET LEVER	
36		80510490	SPRING E032-026-0125	2	FOR CLUTCH TRIGGER	S
37		*1 80510430	SPRING E050-040-0194	1	FOR PAPER FEED LEVER	
		*2 80510690	SPRING E055-045-0235	1	FOR PAPER FEED LEVER	
		#2 80510691	SPRING E055-045-0249	1	FOR PAPER FEED LEVER	S
38		80530260	PAPER FEED RATCHET SPRING 832	1		S
39		*2 80510480	SPRING E040-035-0162	1	FOR PF LEVER SHAFT	
		#2 80510481	SPRING E040-035-0180	1	FOR PF LEVER SHAFT	S
40		*2 80510650	SPRING E052-060-0169	1	RIBBON FEED LEVER	
		#2 80510651	SPRING E054-060-0169	1	RIBBON FEED LEVER	S

## Printer Mechanism DP834P-12

DRWG. NO.	REV.	PARTS NO.	PARTS NAME	Q'TY	REMARKS	RANK
41		80510400	SPRING E040-045-0183	1	FOR CAM LEVER	
42	*2	80510450	SPRING E04B-060-0189	1	FOR PAPER FEED INDEX	
	#2	80510451	SPRING E04B-060-0200	1	FOR PAPER FEED INDEX	S
43		80530290	RIBBON FEED RATCHET SPRING 832	1		S
44		80530270	ANTI-INVERSION SPRING 832	1	REVERSING PROTECTION	
45	*2	80510460	SPRING E040-050-0149	1		S
	#2	80510461	SPRING E040-050-0164	1		S
46		09050001	LEAD SWITCH RD6-1825	1		S
47		04020010	STOP RING SE2.0	4		S
48		04020004	STOP RING SE2.5	3		S
49		04020015	STOP RING SE3.0	1		S
50		04020016	STOP RING SE4.0	3		S
51		01902022	SCREW TAT 2-6 PT	6		S
52		00626404	SCREW TR 2.6-4	2		
53	*2	01902610	SCREW TAB 2.6-14 PT	2		S
	#2	01902611	SCREW TA 2.6-15	2		S
54		00630404	SCREW TR 3-4	5		S
55		01903048	SCREW TR 3-5 WF	3		
56	*2	81301160	PARALLEL PIN PP1.6X7.5 832	1		S
	#2	81301161	PARALLEL PIN 1.6X7.4 832	1		S
57		81301150	PARALLEL PIN PP2.0X9 832	1		S
58	#2	82500430	WASHER 5.2X0.15 832	2		S
59	#2	82500420	WASHER 5.2X0.25 832	2		S
60		02305025	POLY-SLIDER WP5X0.25	2		S
61		82500040	WAVE WASHER 1 DT	1		S
62		04991225	FASTENER PLT0.7M	2		S
	#3	09991389	VINYL TUBE 0.8	3	L=110mm	
63		80900300	INK RIBBON SF-03BR	1		S
64		01901603	SCREW TAT 1.6-8 PT	1		
65	*2	09040012	MICRO SWITCH MOS-2M	1	PAPER OUT DETECTOR	S
	#2	09040013	MICRO SWITCH MOS-2M1	1	PAPER OUT DETECTOR	S
66		80924830	CABLE UNIT 2X450C	1		

3. Printer Mechanism DP834P-12(S-Type)

3-1. Disassembly Drawing



## 3-2. Parts List

## Printer Mechanism DP834SP-12

DRWG.NO.	REV.	PARTS NO.	PARTS NAME	Q'TY	REMARKS	RANK
1		89180021	PRINT HEAD DP8304A	1		S
2		87110020	FRAME UNIT	834		
3		80990900	CUSHION	832		
4		87115010	RESET LEVER UNIT	832		
5		87117050	RESET BOARD UNIT	834	INCLUDES DRWG. NO.46	
6		87112310	GOVERNOR ASSY	832		S
7		87112330	MOTOR 12V-24G NL ASSY	834P		S
8		87111020	DRIVE SHAFT UNIT	834		
9		80200010	DRIVE SHAFT BEARING	822		
10		81360290	CARRIAGE STAY	834		
11	*4	83100342	DRIVE SHAFT GEAR	832		S
	#4	83100343	DRIVE SHAFT GEAR	832		S
12	*4	83100372	CLUTCH DRIVE GEAR	832		S
	#4	83100373	CLUTCH DRIVE GEAR	832		S
13	*4	83100360	SECONDARY GEAR	832		S
	#4	83100361	SECONDARY GEAR	832		S
14	*4	83100350	PRIMARY GEAR	832		S
	#4	83100351	PRIMARY GEAR	832		S
15		87117010	TERMINAL BOARD UNIT	832		
16		87118030	CLUTCH SOLENOID UNIT	834	INCLUDES DRWG. NO.36	S
18		87117040	CAM BOARD UNIT	834		S
19		87116030	PAPER FEED LEVER UNIT	834S	INCLUDES DRWG. NO.38	S
20		87114010	CONTROL CAM UNIT	832		S
21	*2	80201020	PAPER FEED ROLLER	834S		
	#2	80201021	PAPER FEED ROLLER	834S		
22	*2	83910491	PAPER GUIDE R	834		
	#2	83910492	PAPER GUIDE R	834		
23	*2	83910501	PAPER GUIDE L	834		
	#2	83910502	PAPER GUIDE L	834		
24		83110061	PAPER FEED RATCHET	832		
25	*2	87113040	PAPER CHUTE UNIT	834S		
	#2	87113041	PAPER CHUTE UNIT	834S		S
26		87116040	PAPER FEED INDEX UNIT	834S		
27		87116020	CAM LEVER UNIT	832		S
28		87118010	RIBBON SHIFT SOLENOID UNIT	832	INCLUDES DRWG. NO.36	S
29	*2	82400700	CHANGE TRIGGER	832	BE INCLUDE IN NO.28	S
30		87119020	RIBBON BASE UNIT	834	INCLUDE 31-34,43,44	S
31	*4	83120190	SPOOL SHAFT R	832		S
	#4	83120191	SPOOL SHAFT R	832		S
32	*4	83120200	SPOOL SHAFT L	832		S
	#4	83120201	SPOOL SHAFT L	832		S
33	*2	82500290	SLIP SPRING	832		
	*4	82500291	SLIP SPRING	832		
	#4	82500292	SLIP SPRING	832		
34		83900670	RIBBON GUIDE	832		
35	*2	80510620	SPRING E040-029-0193	1	FOR RESET LEVER	
	#2	80510621	SPRING E051-029-0182	1	FOR RESET LEVER	
		80510490	SPRING E032-026-0125	2	FOR TRIGER	S
36		80510430	SPRING E050-040-0194	1	FOR PAPER FEED LEVER	
37	*1	80510690	SPRING E055-045-0235	1	FOR PAPER FEED LEVER	
	*2	80510690	SPRING E055-045-0235	1	FOR PAPER FEED LEVER	
	#2	80510691	SPRING E055-045-0249	1	FOR PAPER FEED LEVER	S
38		80530441	PAPER FEED RATCHET SPRING 834S	1		S
39	*2	80510480	SPRING E040-035-0162	1	FOR PF LEVER SHAFT	
	#2	80510481	SPRING E040-035-0180	1	FOR PF LEVER SHAFT	S
40	*2	80510650	SPRING E052-060-0169	1	RIBBON FEED LEVER	
	#2	80510651	SPRING E054-060-0169	1	RIBBON FEED LEVER	S



## Printer Mechanism DP834SP-12

DRWG. NO.	REV.	PARTS NO.	PARTS NAME	Q'TY	REMARKS	RANK
41		80510400	SPRING E040-045-0183	1	FOR CAM LEVER	
42	*2	80510450	SPRING E048-060-0189	1	FOR PAPER FEED INDEX	
	#2	80510451	SPRING E048-060-0200	1	FOR PAPER FEED INDEX	S
43		80530290	RIBBON FEED RATCHET SPRING 832	1		S
44		80530270	ANTI-INVERSION SPRING 832	1	REVERSING PROTECTION	
45		80510460	SPRING E040-050-0149	1	FOR RIBBON BASE	S
	#2	80510461	SPRING E040-050-0164	1	FOR RIBBON BASE	S
46		09050001	LEAD SWITCH RD6-1825	1		S
47		04020010	STOP RING SE2.0	4		S
48		04020004	STOP RING SE2.5	3		S
49		04020015	STOP RING SE3.0	1		S
50		04020016	STOP RING SE4.0	5		S
51		01902022	SCREW TAT 2-6 PT	6		S
52		00626404	SCREW TR 2.6-4	2		S
53	*2	01902610	SCREW TAB 2.6-14 PT	2		
	#2	01902611	SCREW TA 2.6-15	2		S
54		00630404	SCREW TR 3-4	5		S
55		01903048	SCREW TR 3-5 WF	3		S
56	*2	81301160	PARALLEL PIN PP1.6X7.5	832	1	
	#2	81301161	PARALLEL PIN 1.6X7.4	832	1	S
57		81301150	PARALLEL PIN PP2.0X9	832	1	S
58	#2	82500430	WASHER 5.2X0.15	832	2	S
59	#2	82500420	WASHER 5.2X0.25	832	2	S
60		02305025	POLY-SLIDER WPSX0.25	2		S
61		82500040	WAVE WASHER 1	DT	1	S
62		04991225	FASTENER PLTD.7M	2		S
63		80900300	INK RIBBON SF-03BR	1		S
64		01901603	SCREW TAT 1.6-8 PT	1		S
65	*2	09040012	MICRO SWITCH MQS-2M	1	PAPER OUT DETECTOR	
	#2	09040013	MICRO SWITCH MQS-2M1	1	PAPER OUT DETECTOR	S
66		80924830	CABLE UNIT 2X450C	1		S
67		04020021	STOP RING SE4.0	2		S
68		83120420	SPROCKET WHEEL	8345	2	S