

PRINTER MECHANISM
TMP900 SERIES

TECHNICAL MANUAL

[FIRST EDITION]

INTRODUCTION

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This manual describes the thermal printer mechanism TMP900 series.

It is designed for use as a reference for periodic inspections and maintenance procedures to be executed by service personnel. It is not intended for the general user. Users of this manual should have a basic knowledge and understanding of the English language.

- This manual is divided into the following sections:

Chapter 1	Adjustments
Chapter 2	Maintenance and Lubrication
Chapter 3	Parts List

- First edition : May 2002

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CHAPTER 1

ADJUSTMENTS

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This printer mechanism has no adjustable parts.

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CHAPTER 2

MAINTENANCE AND LUBRICATION

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1. Maintenance

In order to maintain the optimum performance of this printer and to prevent trouble, maintenance must be carried out according to the following items.

1-1. Cleaning

(1) Removal of dirt

Wipe off dirt with a soft cloth soaked in alcohol or benzine.

Note: Do not use thinner, trichlene or ketone solvents because they may damage plastic parts. Also during cleaning, be careful not to moisten or damage electronic parts, wiring, or mechanical parts.

(2) Removal of dust, pile, etc.

Vacuum cleaning (with an electric cleaner) is preferred. Remove all dust, etc., inside the printer.

Note: After cleaning, check the oil level. If it is not adequate due to cleaning, replenish it.

1-2. Checks

Checks must be carried out at two levels: “a daily check” which the operator can easily carry out during operation, and a “periodic check” which an expert should carry out.

(1) Daily check

When the printer is used on a daily basis, check that the printer is used properly. Make sure that the printer is operating under the best conditions.

- Is there any foreign matter inside the printer? (Remove if any.)
- Is the print head getting excessively dirty?

(2) Periodic check

After 6 months or printing 1 million lines, the periodic check and lubrication must be carried out.

- Check for deformation of springs.
- Remove dust, dirt, etc., around the detectors.

2. Lubrication

Lubrication is very important to maintain optimum performance and to prevent trouble.

2-1. Lubricant

The type of lubricant greatly affects the performance and durability of the printer, especially in a low temperature environment. We recommend use of the grease listed below for this printer.

Type of oil	Product name	Maker
Grease	Molykote EM-30L	Dow Corning Corporation

2-2. Lubricating Method

When lubrication is carried out in assembly and disassembly, wash parts well to remove dust and dirt before lubrication. Lubrication must be carried out regularly once every 6 months or after 1 million lines have been printed. Lubrication is necessary irrespective of the regular lubrication whenever lubricant becomes deficient after cleaning or whenever parts have been disassembled or replaced.

2-3. Lubricated Areas

NO.	Lubricating Point	Grease/Oil
①	Rubbing surfaces of Lock shaft and Platen holder	EM-30L
②	Rubbing surfaces of Lock shaft and Base Frame Unit	EM-30L
③	Rubbing surfaces of Platen Pivot and Base Frame Unit	EM-30L
④	Rubbing surfaces of Gear and Gear	EM-30L
⑤	Rubbing surfaces of Gear and Shaft	EM-30L

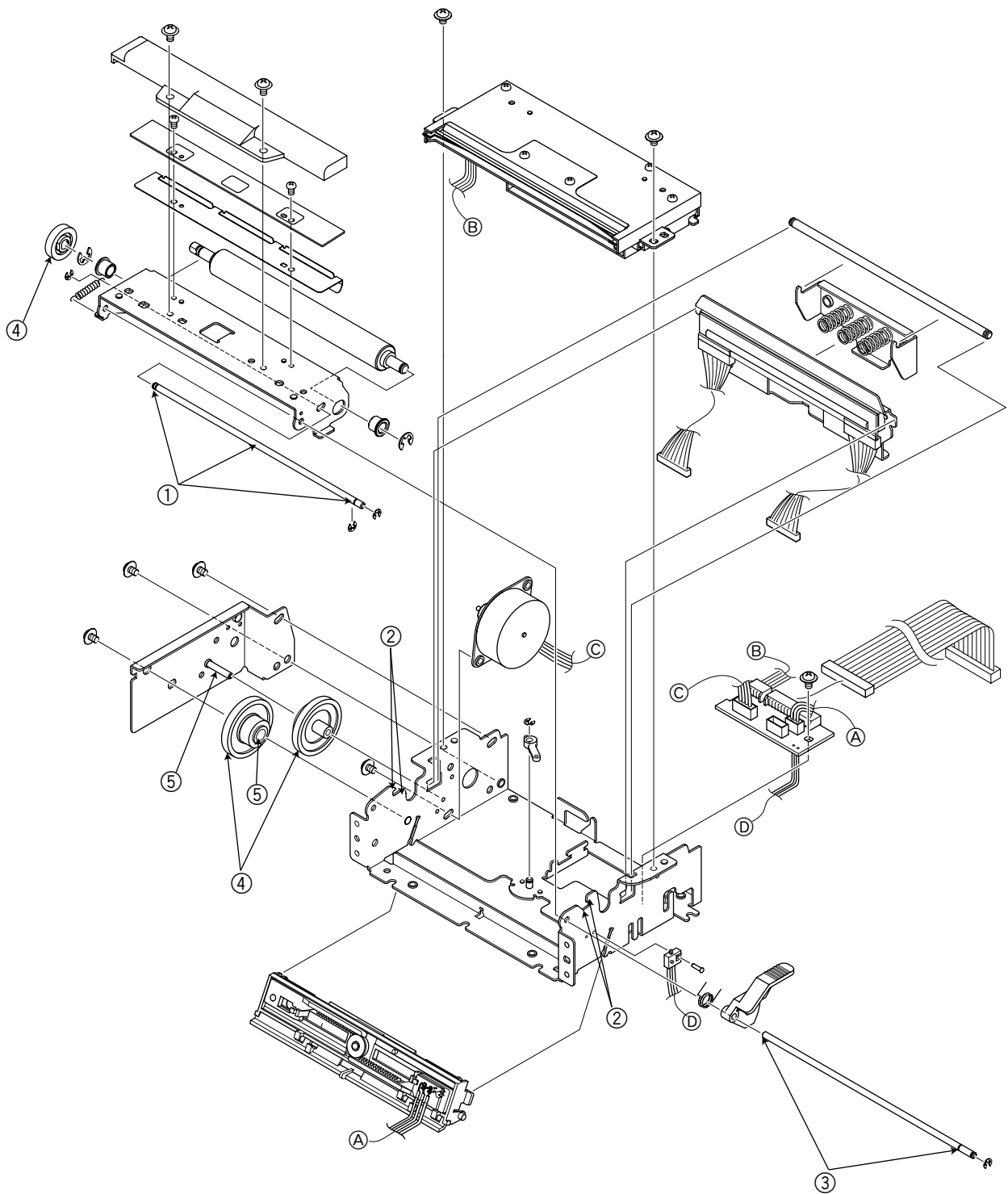


Fig. 2-1 Lubricated Areas

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CHAPTER 3

PARTS LIST

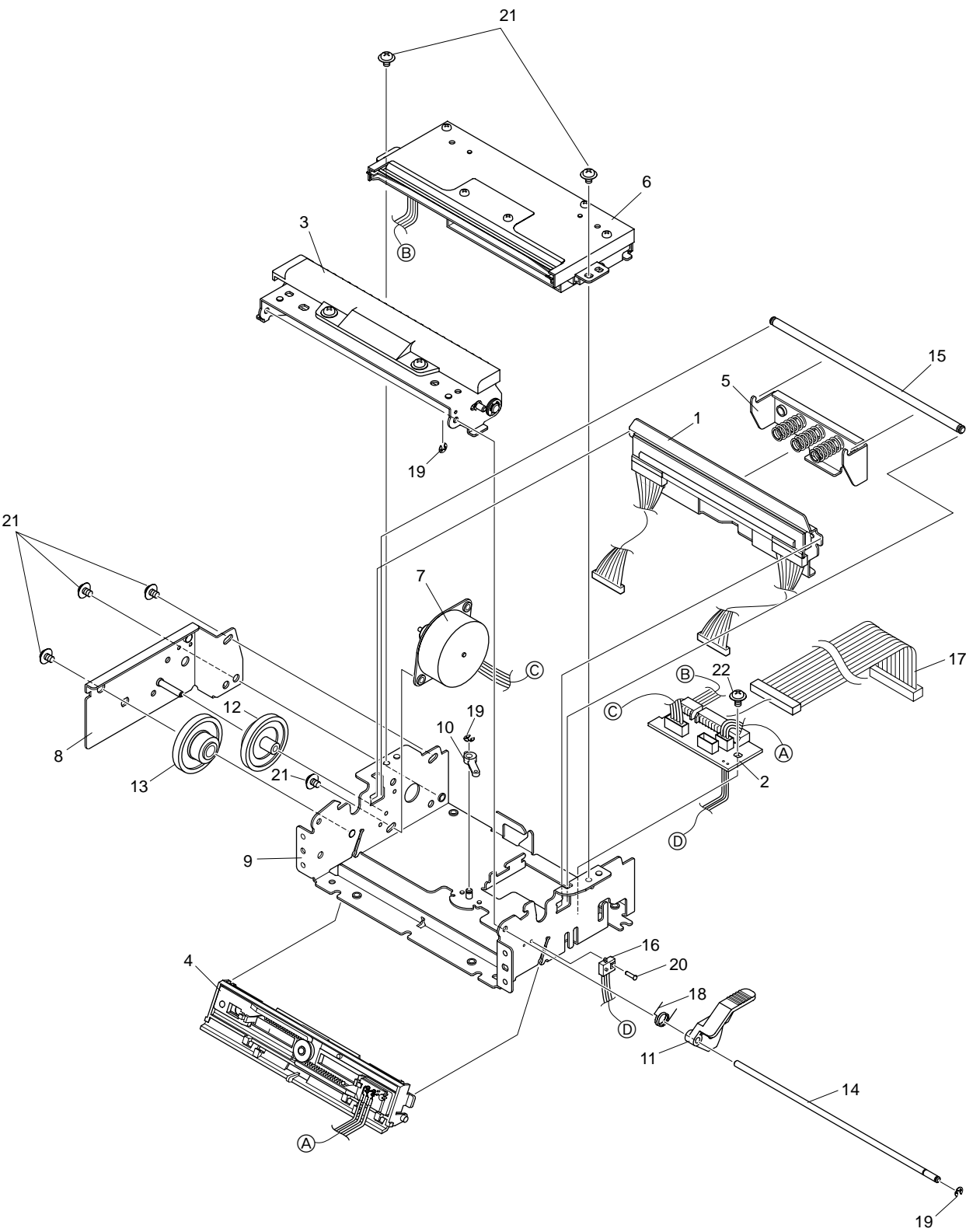
HOW TO USE PARTS LIST

- (1) DRWG. NO.
This column shows the drawing number of the illustration.
- (2) REVISED EDITION MARK
This column shows a revision number.
Part that have been added in the revised edition are indicated with “#”.
Part that have been abolished in the revised edition are indicated with “*”.
#1 : First edition → Second edition
*1 : First edition → Second edition
- (3) PARTS NO.
Parts numbers must be notified when ordering replacement parts. Parts described as “NPN” have no parts number and are not in stock, unavailable.
- (4) PARTS NAME
Parts names must be notified when ordering replacement parts.
- (5) Q'TY
This column shows the number of the part used as indicated in the figure.
- (6) REMARKS
Where differences in specifications exist depending on location/destination.
- (7) RANK
Parts marked “S” in the rank column can be ordered. Other parts, as a rule, cannot be supplied even if ordered.
Parts marked “O” are optional parts.

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1. Mechanism Unit

1-1. Disassembly Drawing

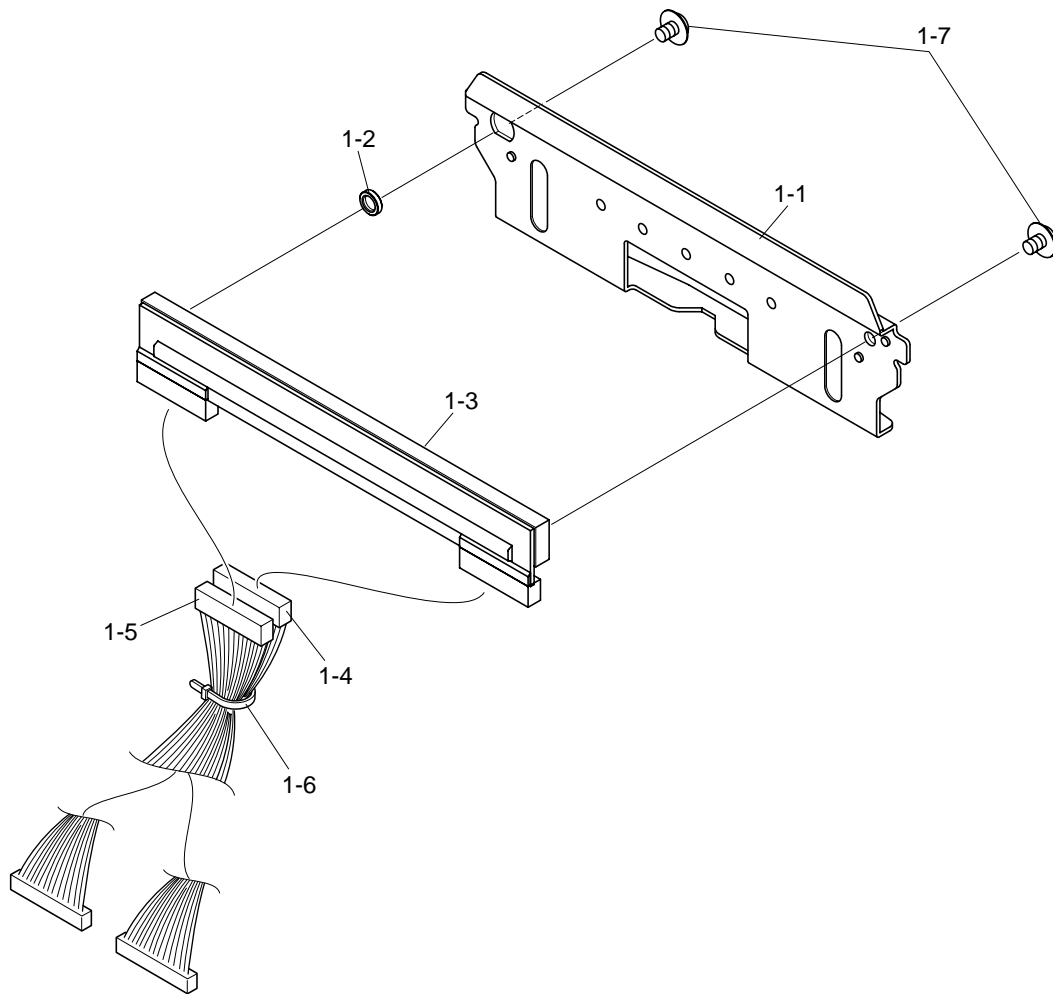


1-2. Parts List

DRWG.NO.	REV.	PARTS NO.	PARTS NAME	Q'TY	REMARKS	RANK
1		37489010	HEAD UNIT TMP9	1		S
2		37487700	TERMINAL BOARD ASSY TMP9	1		S
3		37483110	PLATEN HOLDER UNIT TMP9	1		S
4		37483040	PAPER GUIDE UNIT TMP9	1		S
5		37483030	SPRING HOLDER UNIT TMP9	1		S
6		37482110	CUTTER UNIT TMP9	1		S
7		37482010	PAPER FEED MOTOR UNIT TMP9	1		S
8		NPN	GEAR COVER UNIT TMP9	1		
9		NPN	BASE FRAME UNIT TMP9	1		
10		33490060	HEAD ADJUSTER TMP9	1		S
11		33400120	RELEASE LEVER TMP9	1		S
12		33102300	GEAR 36X56X0.5 TMP9	1		S
13		33102290	GEAR 18X0.7-58X0.5 TMP9	1		S
14		NPN	PLATEN PIVOT TMP9	1		
15		NPN	PRESS SHAFT TMP9	1		
16		37487320	PLATEN SWITCH ASSY TMP9	1		S
17		30721700	CABLE UNIT 14X300CC TMP9	1		S
18		30531160	RELEASE SPRING TMP9	1		S
19		04020010	STOP RING SE2.0	3		S
20		00716604	SCREW TR 1.6-6	1		S
21		01903030	SCREW TR 3-4 FL	6		S
22		01903101	SCREW TAT 3-6 CT-FL	1		S

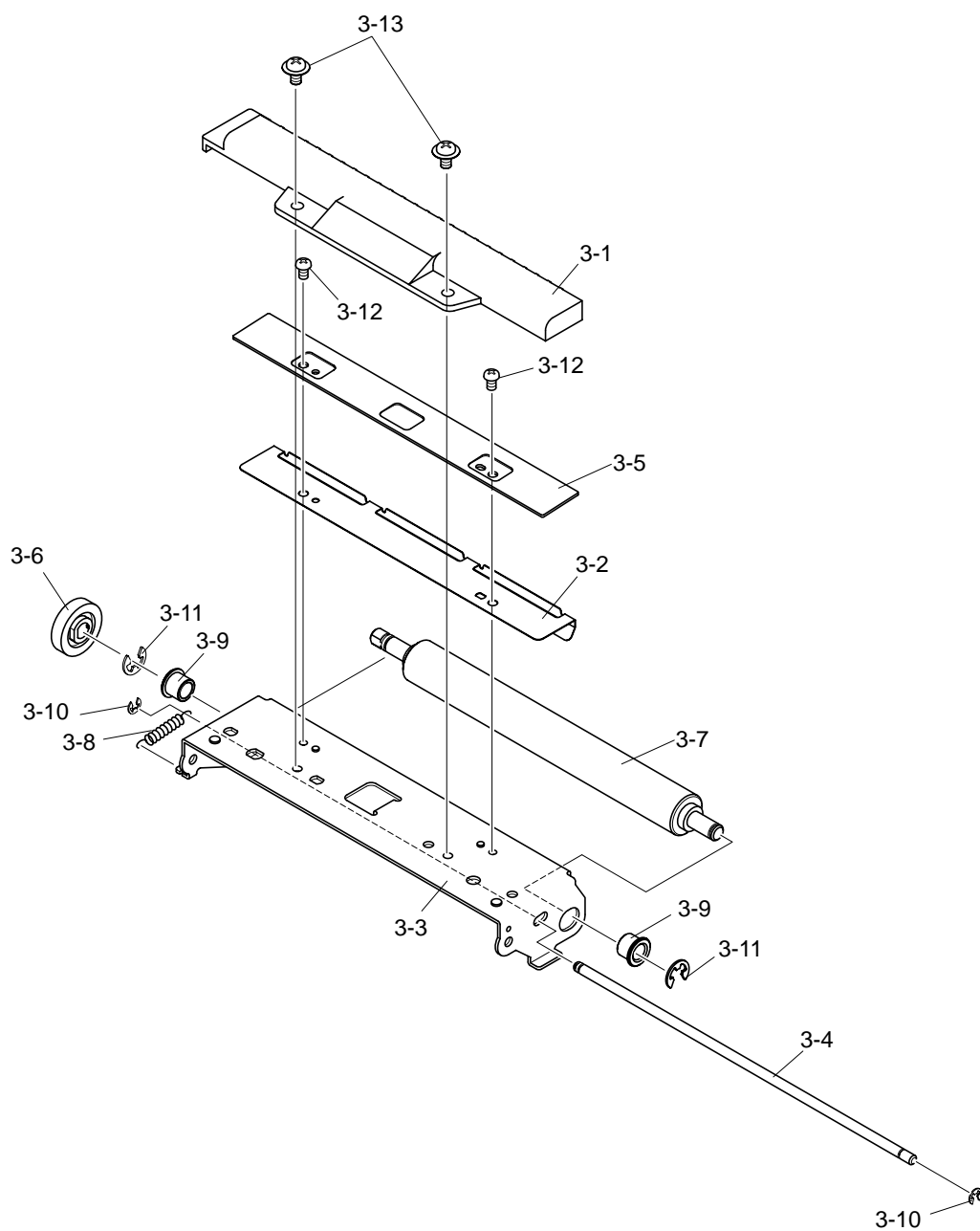
2. Sub-Assembly

2-1. Head Unit



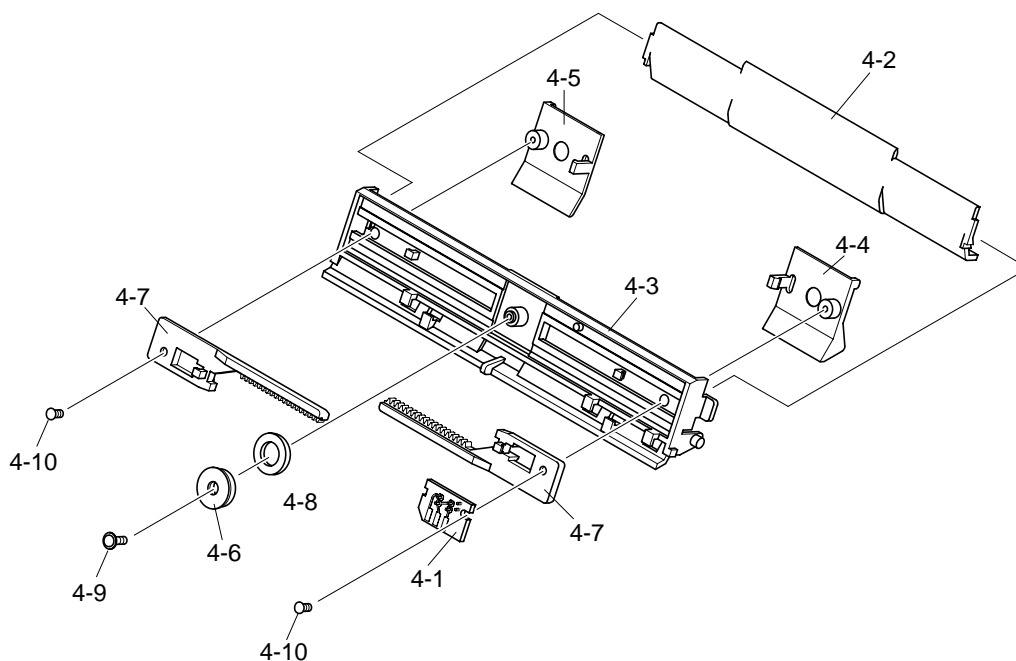
DRWG.NO.	REV.	PARTS NO.	PARTS NAME	Q'TY	REMARKS	RANK
1-1		NPN	HEAD HOLDER	1		
1-2		31210001	COLLAR	1		S
1-3		30905040	THERMAL HEAD KF2004-GD31B	1		S
1-4		30721720	CABLE UNIT B	1		S
1-5		30721710	CABLE UNIT A	1		S
1-6		04991204	FASTENER T18S	1		S
1-7		01903030	SCREW TR 3-4 FL	2		S

2-2. Platen Holder Unit



DRWG.NO.	REV.	PARTS NO.	PARTS NAME	Q'TY	REMARKS	RANK
3-1		NPN	BLADE COVER	TMP9	1	
3-2		NPN	BLADE GUIDE	TMP9	1	
3-3		NPN	PLATEN HOLDER	TMP9	1	
3-4		NPN	LOCK SHAFT	TMP9	1	
3-5		30903070	STATIONARY KNIFE KC-GS120		1	S
3-6		33103020	PLATEN GEAR 22X0.7	TMP9	1	S
3-7		30375050	PLATEN	TMP9	1	S
3-8		NPN	SPRING E030-032-0114		1	
3-9		30211050	PF ROLLER BEARING	TMP6	2	S
3-10		04020010	STOP RING SE2.0		2	S
3-11		04020016	STOP RING SE4.0		2	S
3-12		00926403	SCREW TAT 2.6-4 CT		2	S
3-13		01903101	SCREW TAT 3-6 CT-FL		2	S

2-3. Paper Guide Unit



DRWG.NO.	REV.	PARTS NO.	PARTS NAME	Q'TY	REMARKS	RANK
4-1		37487330	PE DETECTOR ASSY	1		S
4-2		NPN	UPPER GUIDE	1		
4-3		NPN	PAPER GUIDE BASE	1		
4-4		33910440	SIDE GUIDE L	1		S
4-5		33910430	SIDE GUIDE R	1		S
4-6		NPN	GUIDE PINION 18X0.5	1		
4-7		NPN	RACK	2		
4-8		04300782	O-RING 7.8X1.9 P8SILICON50	1		S
4-9		01902024	SCREW TAT 2-6	1		S
4-10		01902028	SCREW TAT 2-4	2		S



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