

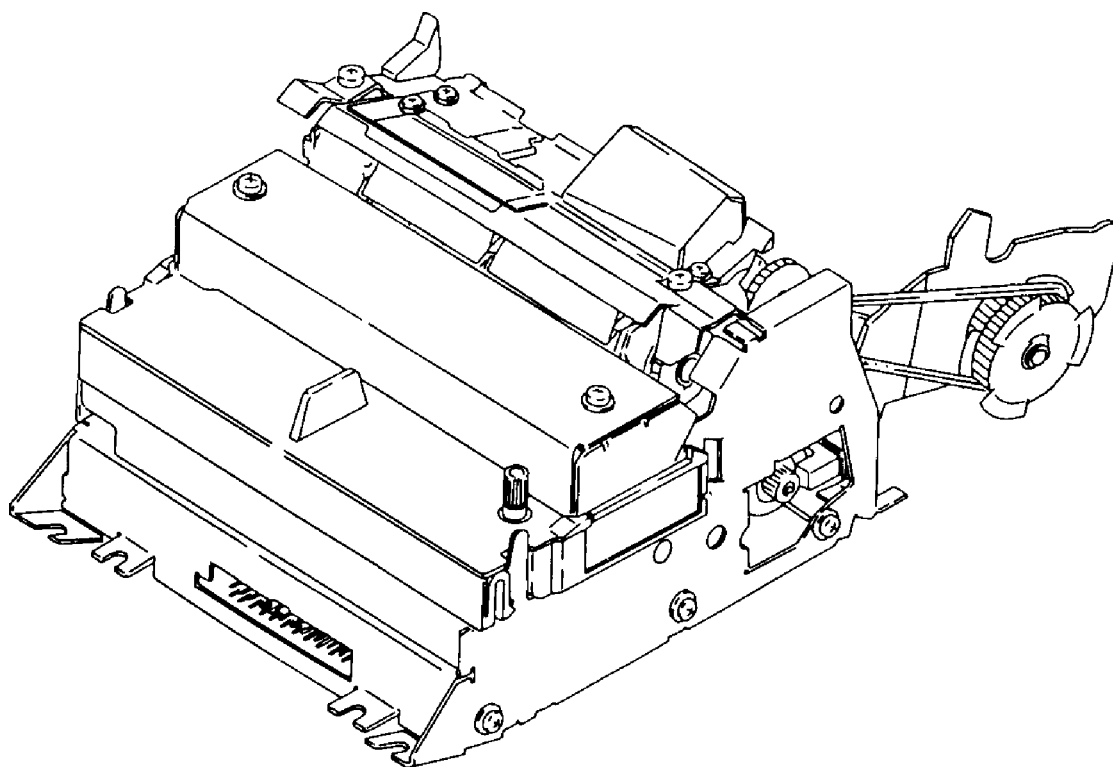
TECHNICAL MANUAL

(without price)

IMPACT DOT MATRIX PRINTER

M-U420

FEB. 2000



CASIO®

CONTENTS

CHAPTER 1 (FEATURES, GENERAL SPECIFICATIONS, AND PRINCIPLES OF OPERATION)

1.1 Features	1
1.2 General Specifications	1
1.3 Overview of Printer Mechanisms	2
1.4 Principles of Operation	2
1.4.1 Transmission Mechanism	2
Paper Feed Gear Train	2
Head Movement Gear Train	3
1.4.2 Detection Mechanism	3
Timing Detection Mechanism	3
Reset Detection Mechanism	3
Validation Detection Mechanism	4
1.4.3 Print Mechanism	4
Movement of Print Head Unit	4
Principle of Head Printing Operation	4
1.4.4 Paper Feed Mechanism	5
Paper Transport Mechanism	5
Paper Extension Mechanism	5
Release Mechanism	6
1.4.5 Clamshell Mechanism	6
1.4.6 Ribbon Feed Mechanism	7
Ribbon Feed Operation	7
1.4.7 Stamp Mechanism	7
Stamp Operation	7
1.4.8 Auto Cutter Mechanism (selectable function)	8
Partial Cut Operation	8
Full Cut Operation	8
Cutter Detector	8
1.4.9 Paper Take-Up Mechanism	9
Paper Take-Up Operation	9

CHAPTER 2 (HANDLING, MAINTENANCE, AND REPAIRS)

2.1 Handling the Printer	10
2.1.1 Precautions	10
Transport Precautions	10
Correct way to Carry and Handling way	10
Storage Precautions	10
Usage Precautions	10
2.1.2 Inserting and Removing Paper	11
Inserting Paper Roll	11
Removing Paper Roll	11
Inserting a Validation Card	11

2.1.3	Operating the Release Levers	11
	Function	11
	Clamshell Access	11
2.1.4	Installing and Removing the Ribbon Cassette	12
	Installing the Cassette	12
	Removing the Cassette	12
2.1.5	Installing and Removing the Stamp Assembly	12
	Installing the Stamp Assembly	12
	Removing the Stamp Assembly	12
2.1.6	Stamp Assembly Ink Refill	13
2.1.7	Replacing the Stamp Face	13
	Disassembly	13
	Reassembly	13
2.2	Maintenance	14
2.2.1	Cleaning	14
2.2.2	Inspection	14
	Daily Check	14
	Periodic Inspection	14
2.3	Lubrication	15
2.3.1	Lubricant Types	15
2.3.2	Lubrication Standards	15
2.3.3	Lubrication Sites	15
2.3.4	List of Lubricants and Adhesives	17
2.4	Tools	17
2.4.1	List of Tools	17
2.5	Repair	17
2.5.1	Repair Levels	17
2.5.2	Repair Procedure	17
2.5.3	Repair Guidelines	18
	Arrangement of Connector Terminal	24

CHAPTER 3 (DISASSEMBLY, ASSEMBLY, AND ADJUSTMENT)

3.1	Disassembly	25
3.2	Assembly	25
	Main Assemblies	26
	Assembly 1 Installation of Fixing lever, J Fixing lever, R and Main motor sub ass'y	26
	Assembly 2 Assembly of Paper guide, lower unit	27
	Assembly 3 Assembly of Take-up frame unit	28
	Assembly 4 Installation of Take-up frame unit and Paper guide, lower unit	29
	Assembly 5 Assembly of Driven plate ass'y	30
	Assembly 6 Installation of Driven plate ass'y and Carriage drive pulley	31
	Assembly 7 Assembly of Paper feed trigger ass'y	32
	Assembly 8 Installation of Paper feed trigger ass'y	33
	Assembly 9 Installation of Platen ass'y; Shaft, paper feed ass'y and Paper guide outlet	34
	Assembly 10 Assembly of Shaft, paper feed pressure ass'y	35

Assembly 11	Installation of Shaft, paper feed pressure ass'y	36
Assembly 12	Installation of Release lever, RPT and Release lever, JNL	37
Assembly 13	Installation of Paper guide, upper unit	38
Assembly 14	Installation of Timing detector ass'y and V detector ass'y	39
Assembly 15	Installation of Shaft, ribbon drive ass'y	40
Assembly 16	Assembly of Shaft, paper extension ass'y and Gear, paper extension shaft	41
Assembly 17	Assembly of Gear train unit	42
Assembly 18	Installation of Gear train unit	43
Assembly 19	Installation of Guide frame	44
Assembly 20	Installation of Timing detector ass'y	45
Assembly 21	Installation of Cutter unit	46
Assembly 22	Assembly of Timing carriage drive belt ass'y	53
Assembly 23	Installation of Main board ass'y	54
Assembly 24	Soldering of lead wires	55
Assembly 25	Assembly of Validation guide and Card stopper	56
Assembly 26	Installation of Carriage ass'y and Shaft, carriage guide	57
Assembly 27	Assembly of FPC, head ass'y and Print head ass'y Ab	58
Assembly 28	Assembly of Paper feed cover sub ass'y (Manual cutter modes only)	59
Assembly 29	Installation of Cutter unit (Auto cutter models only)	60
Assembly 30	Installation of Journal writing stand (Auto cutter models only)	61
Assembly 31	Assembly of Head cover ass'y	62
Assembly I	Timing carriage drive belt tension adjustment	63
Assembly II	Adjustment of Platen gap	64
Assembly III	Corrention of print skew	65

APPENDIX

Exploded Diagram	66
Lubrication Points 1	67
Lubrication Points 2	68
PARTS PRICE LIST M-U420(061)	69
EXPLODED DIAGRAM M-U420(061)	71
PARTS PRICE LIST M-U420(071)	72
EXPLODED DIAGRAM M-U420(071)	75

[Click here to download the full manual at THE-CHECKOUT-TECH.COM](http://THE-CHECKOUT-TECH.COM)