TAIKO

太鼓

Service Manual

Issue: 04/2007

JAPAN CASHMACHINE CO., LTD.

Preface

Thank you for purchasing JCM's TAIKO Bill Acceptor. Please be sure to read the following and any related documents thoroughly to understand the correct operation and features of this unit.

Note

1. It is forbidden to copy the contents of this manual, in whole or in part, except for the user's personal use, without the express permission of Japan Cash Machine Co., Ltd.
2. The information provided in this manual is subject to change without notice.
3. This manual has been written with care and attention to detail; however, should you find any errors or omissions, please contact Japan Cash machine Co., Ltd. and inform them of you findings.
4. Please be aware that Japan Cash Machine shall not be held liable by the user for any damages, losses or third party claims arising from any uses of this product.
5. All Company/Manufacturer names used in this manual are the registered trademarks of those companies.

Precautions

■ Machine Design

- We take all possible measures to ensure the quality of this unit. However, performance degradation or possible short or open circuit faults could occur at the end of a product's life. Please ensure safety by sufficiently implementing a fail-safe design.
- Allow sufficient space around the unit to facilitate the collection of banknotes and cleaning of jams.

■ Installation

- Do not use the acceptor outside of the operation temperature and humidity ranges specified in this guide.
- Do not use the acceptor in locations that will obstruct the acceptor's air holes and cause the unit to become hot.
- Do not use the acceptor in locations with extreme temperature fluctuations.
- Do not use the acceptor in direct sunlight or incandescent lighting (3000 Lx or greater at a 15 degrees angle or less).
- Do not use or store the acceptor in locations with high levels of dust.
- The acceptor is for indoor use only; do not use it outside.
- Do not use the acceptor in locations where chemical vapor is present.

- When using the acceptor in a location where the air is subject to the car exhaust emissions or cigarette smoke, be sure to clean and maintain the unit at regular intervals.

■ Wiring

- When installing the TAIKO unit or connecting the wiring harness, make sure that the power harness from the power terminal.
- When connecting the wiring harness to the TAIKO unit, be sure to confirm the rated voltage and pin assignments. Failure to do so may result in damage to the unit.
- Be sure to connect the power harness properly. Failure to do so may result in incorrect input/output due to contact failure.
- Do not pull on the power harness with undue force, as that may cause the harness to break.

■ Operation

- Be sure to turn off the power to the TAIKO unit when opening the upper and lower covers. Failure to do so may result in your fingers becoming caught in the moving roller.
- Be careful not to get your finger caught when closing the upper cover.
- Do not modify the TAIKO unit. Doing so may damage the unit.
- Do not expose the TAIKO unit to strong impacts or drop the unit as doing so may damage the unit.
- Do not wipe the TAIKO unit, either outside or inside, with thinner or organic solvent.
- Do not allow moisture or liquid to enter the TAIKO unit.
- Do not store the acceptor outside of the specified storage temperature and humidity ranges.
- The following banknotes might be not accepted properly by the TAIKO unit or may cause a jam or damage to the unit.
  a. Banknotes with stain, wear, tears or excessive wrinkles, or that are wet or damp.
  b. Dog-eared or creased banknotes
  c. Banknotes with incorrect cut dimensions or printing displacement
  d. Banknotes with oil smear of oil or foreign objects

■ Disposal

- Disposal of this unit should be accomplished in accordance with your country's regulations for similar types of industrial waste.

Product Configurations

TAIKO unit's are configured as follows.

[Model] PUB-* [Type] *** - * * * 0 - X4
A B C D E F G

A. Validation Method	7: Optical/Transparency/Reflection 11: Optical/Transparency/Reflection/MAG
B. Country Code	ISO based 3-digit codes
C. Faceplate Type	0: Withdout faceplate 1: Acceptable Bill Width 82mm/67mm 2: Acceptable Bill Width 82mm/75mm 3: Acceptable Bill Width 82mm/71mm 5: Acceptable Bill Width 66mm
D. Optional Unit	0: Without optional unit 1: With interface pin assignment conversion harness (ccTalk-compatible)
E. Board Type	1: Standard 2: Interface pin assignment (ccTalk-compatible)
F. Operation Code	0: Standard
G. Interface	X4: SERIAL(ID-003)/MDB/PULSE/ccTalk

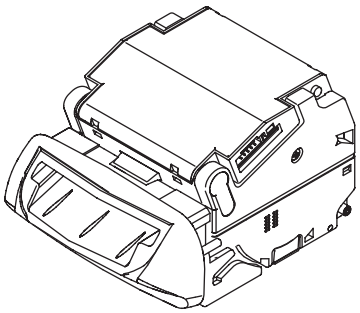
Example: **PUB-7 EUR-1020-X4**

Indicates the TAIKO model Bill Acceptor with Optical/Transparency Reflection Type, Type 1 faceplate, Euro software, no optional unit, interface pin assignment (ccTalk-compatible) type board, standard operation code, and an Serial(ID-003)/MDB/Pulse/ccTalk interface.

Package Contents

The following items are contained within the TAIKO Package.

■TAIKO unit



■Installation Guide

TAIKO
Integration
Guide

- **This unit has been carefully packed, with special attention taken in regard to quality. However if you happen to find anything damaged of missing, please contact your local distributor immediately.**

CE Marking Note

DECLARATION OF CONFORMITY

MANUFACTURER

Name	:	JAPAN CASH MACHINE CO., LTD.
Address	:	3-15, 2-chome, Nishiwaki, Hirano-ku, Osaka, 547-0035 Japan
Phone	:	+81-6-6703-8405
Fax	:	+81-6-6704-7843

DETAILS OF PRODUCT : BILL ACCEPTOR

MODEL TYPES : PUB-7, PUB-11

THIS PRODUCT CONFORMS TO THE ESSENTIAL REQURIEMENTS OF :

Electromagnetic Compatibility Directive		89/336/EEC
	Amended by	92/31/EEC, 93/68/EEC
Low Voltage Directive		73/23/EEC
	Amended by	93/68/EEC

and is supported by the following applicable standards

EN61000-6-1 : 2001
EN61000-4-2 : 1995+A1 : 1998+A2 : 2001
EN61000-4-3 : 2002+A1 : 2002
EN61000-4-8 : 1993+A1 : 2001
EN61000-6-3 : 2001
EN55022 : 1994+A1 : 1995+A2 : 1997(ClassB)
EN60950-1 : 2001+A11 : 2004 First Edition

Authorized signatory on behalf of the responsible person

Name/Signature : Tatsuya Urata/ *Tatsuya Urata*
Date : December 1, 2006
Position : Director and executive officer, general manager manufacturing division

Germany Office
Address : Mündelheimer Weg 60, 40472 Düsseldorf, Germany
Phone : +49-211-530645-0
Fax : +49-211-530645-65

RoHS Compliance

The TAIKO is a RoHS Compliant products. The following six kind of hazardous substances restricted by RoHS are NOT contained in the TAIKO unit.

nRestricted Hazardous Substances

- Plumbum
- Mercury
- Cadmium
- Chromium Hexavalent
- PBB
- PBDE

Documentation Conventions

The list below describes the documentation convertions used in this manual.

Icon/Mark	Descriptions
	This icon indecates important information or procedures that must be followed for correct and risk-free unit operation.
	This icon indicates useful or recommended supplemental information.
1. 2….	This indicates steps in a procedure. Be sure to perform these steps in the order given.
See=>	This indicates related information to refer.
*	This indicates useful or important supplemental inforamation

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Chapter 3 Installation / Operation

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Chapter 7 Exploded View / Parts List

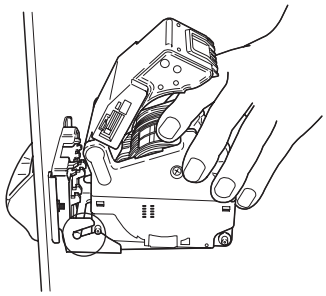
Chapter 1

Introduction

Issue: 10/2006

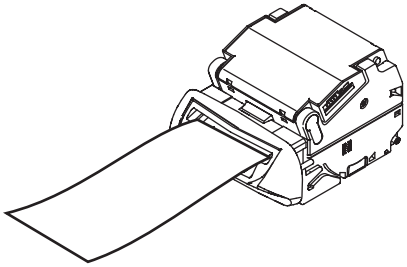
1-1. Main Features

In this section, TAIKO unit's main features are explained.



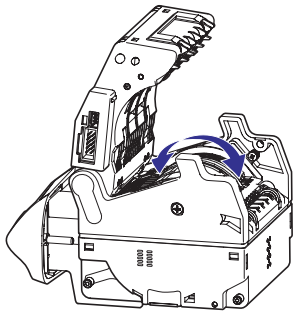
■ Easy Installation

Installation/removal of TAIKO unit is very easy in the clip-on style. Anyone can install the TAIKO unit easily.



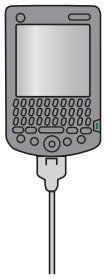
■Data Scanning Frequency

Data Scanning frequency can be selected with DIP Switch. Normal scan (once) or twice is selectable by DIP switch. The acceptance rate can be improved by setting it twice.



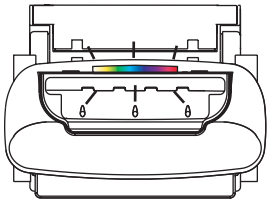
■ Anti-fishing Function

TAIKO unit is an Anti-Fishing function-equipped bill acceptor. It can prevent from the fishing such as a banknote with attached thread by rotating the dram. Normal operation (1 time) or 5 times dram cycles is selectable. It is selected with DIP switch. It prevent from the fishing more by setting it 5 times dram cycles.



■ Palm Programmable

TAIKO unit can connect Palm (Palm's Tungsten C). Software program can be downloaded from palm easily at the field.



■ LED Pattern Selectable

LED pattern can be changed with DIP switch depending on your circumstances. Pattern 1 or 2 is selectable.

1-2. Prior to Use

Be sure to follow these steps when creating the project for TAIKO unit.

1. Preperation

Before using TAIKO unit, check the all required hardware is present and read all specification, wiring, and installation infromation.

See => Chapter 2 Specifications or Chapter 3 Installation/Operation

2. Panel Cut Out

Creat the panel cut out on the door to install the TAIKO unit.

See => 2-6. Panel Cut Dimensions

3. Setting

Set the DIP switch depending on the connected machine or the features of TAIKO unit you want to use.

See => 2-7. DIP Switch Settings

4. Installation

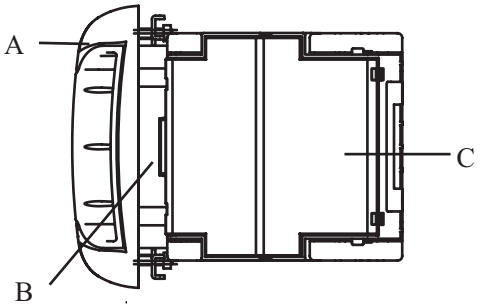
Install the TAIKO unit and connect the harness with the mashine.

See=> Chapter 2 Specifications, or Chapter 3 Installation/Operation

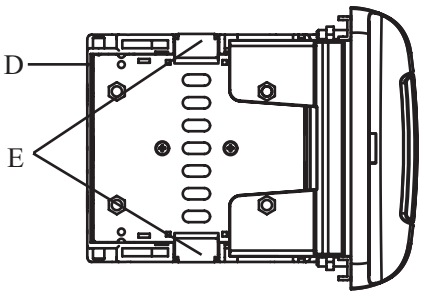
5. Operation

Turn on the power to the TAIKO unit.

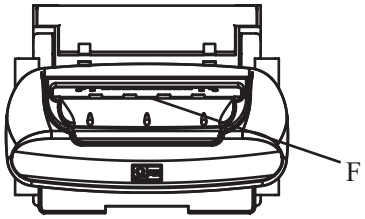
1-3. Name of Parts



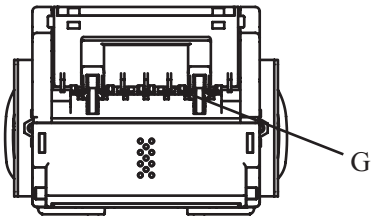
Top



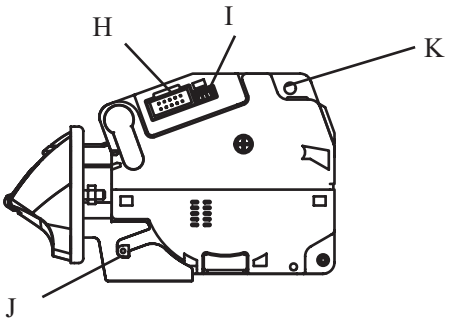
Bottom



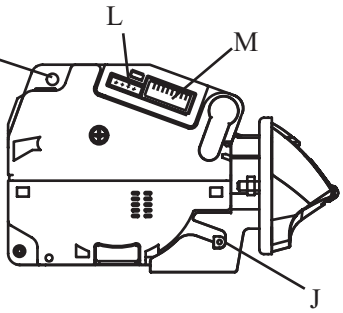
Front



Rear



Right

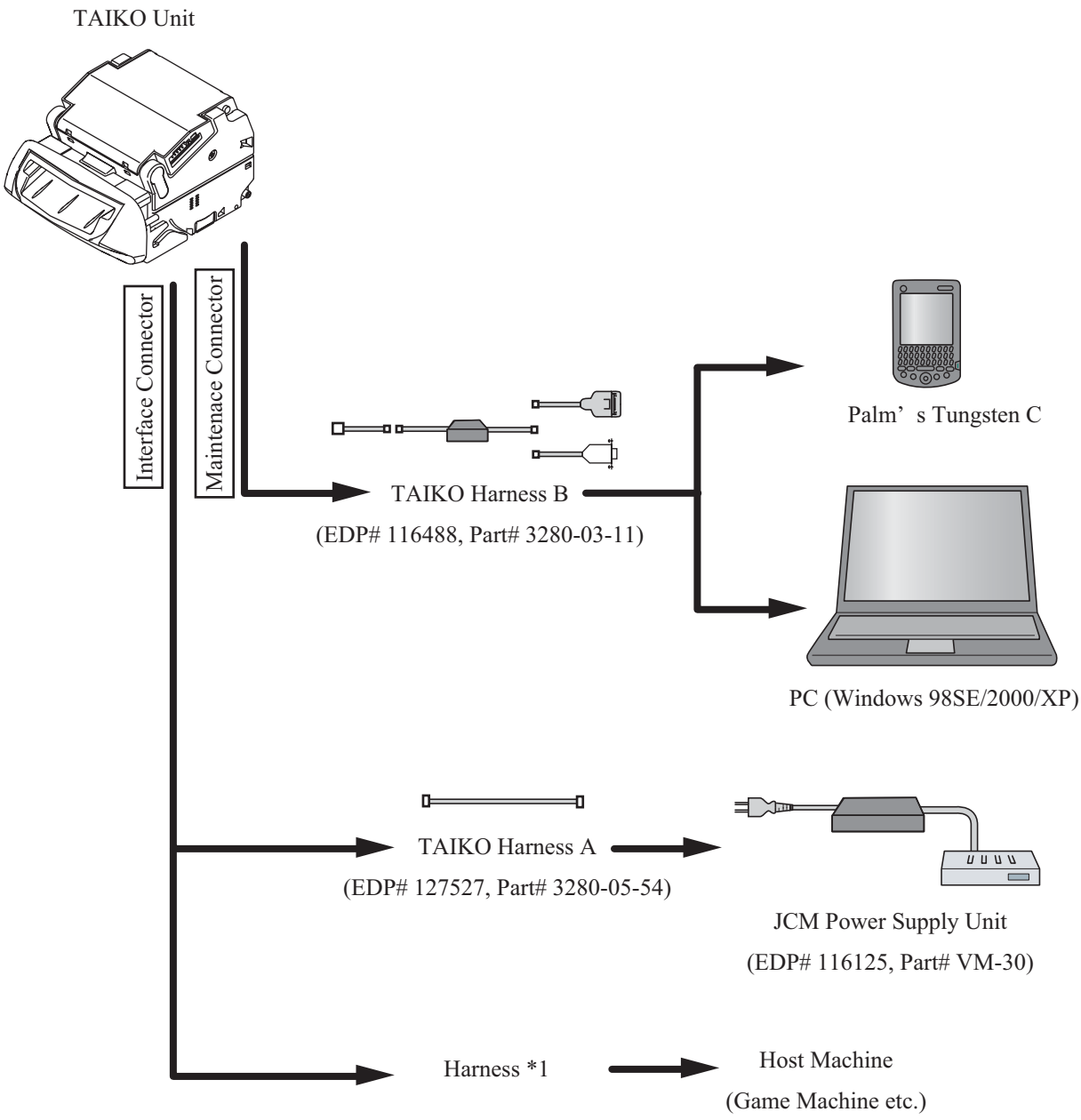


Left

A. Faceplate
B. LED lamp
C. Upper lid
D. Lower lid
E. Lower lid lock button
F. Bill insertion slot
G. Bill ejection slot
H. Interface connector
I. Maintenance connector
J. Faceplate installation guide
K. Upper lid open/close button
L. Optional connector
M. DIP switches

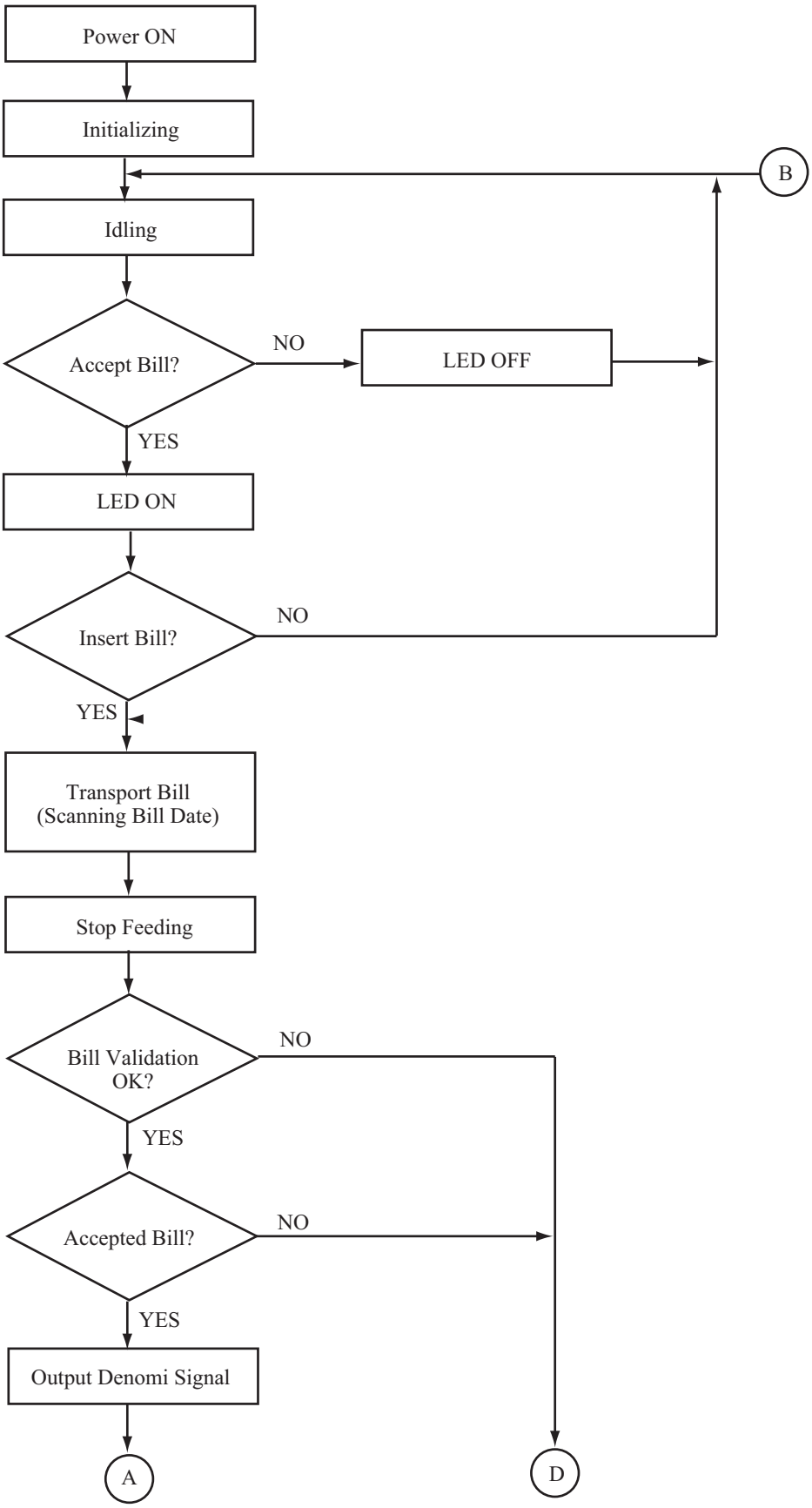
1-4. System Configuration

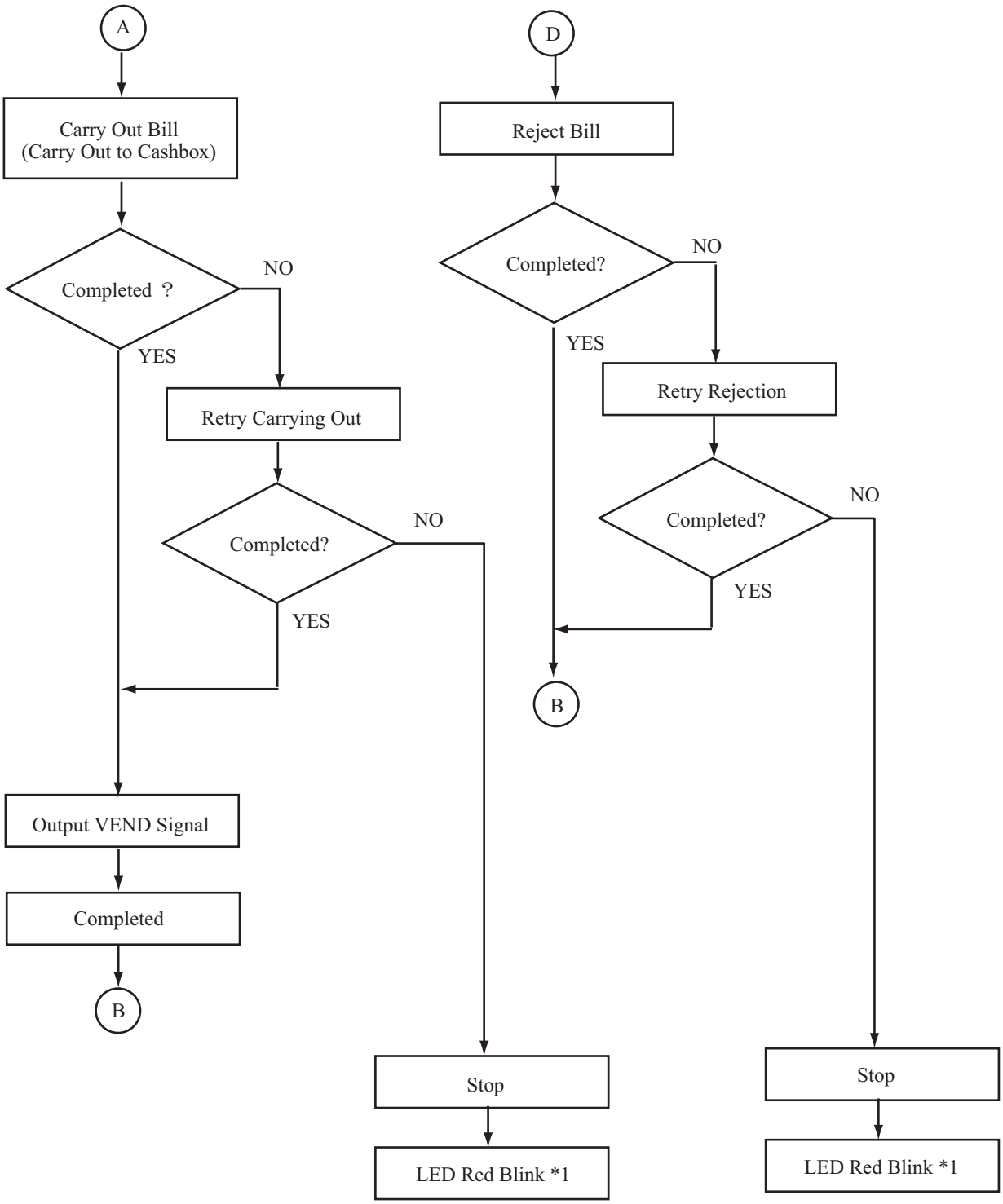
The following diagram represents the standard items can be connected to the TAIKO unit.



*1 Communication harness needs to be prepared by custmer.

1-5. Operation Flow Chart





*1 Turn the pouwer OFF and clear the jammed bill. Then turn on the power again.

NOTE

TAIKO Service Manual

Chapter 2

Specifications

Issue: 04/2007

2-1. Specifications

2-1-1. Basic Specifications

Acceptable Bankenote	Length: 120 mm to 160 mm Width: 62 mm to 82 mm
Insertion Direction *1	4-way
Accepting Rate *1	95% or higher
Validation Method	PUB-7: Optical/Transparency/Reflection PUB-11: Optical/Transparency/Reflection/MAG
Anti-Fishing Mechanism	Lever and optical sensor combination
Interface *2	ccTalk/Serial(ID-003)/MDB/Pulse
Escrow	1 banknote
LED *2	LED lamp (upper potion of faceplate) Full-color lightning (gradation/solid)

*1 May differ depending on the software for your country. For details, refer to the Software Information Sheet.

*2 Can be selected using the DIP switches. See=> 2-7. DIP Switch Setting

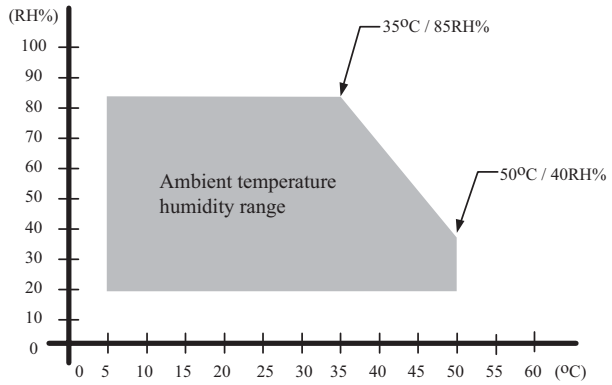
2-1-2. Electrical Specifications

Power Supply Voltage	12V DC ±5 %
Rated Power Consumption	Standby: Approx. 0.1 A Operation: Approx. 0.5 A Max: Approx. 1.4 A (Max. 300 ms)

2-1-3. Environmental Specifications

Operation Temperature *1	5°C to 50°C
Storage Temperature	-20°C to 60°C
Operation Humidity *1	20%RH to 85%RH (No condensation)
Storage Humidity	20%RH to 85%RH (No condensation)
Light Disturbande	Avoid direct sunlight Interior lighting must be incandescent lamp Angle: 15 dgrees or more Illumination: 3000 Lx or less
Installation	For indoor use only

*1 The overall operation temperature and humidity range is as follows.

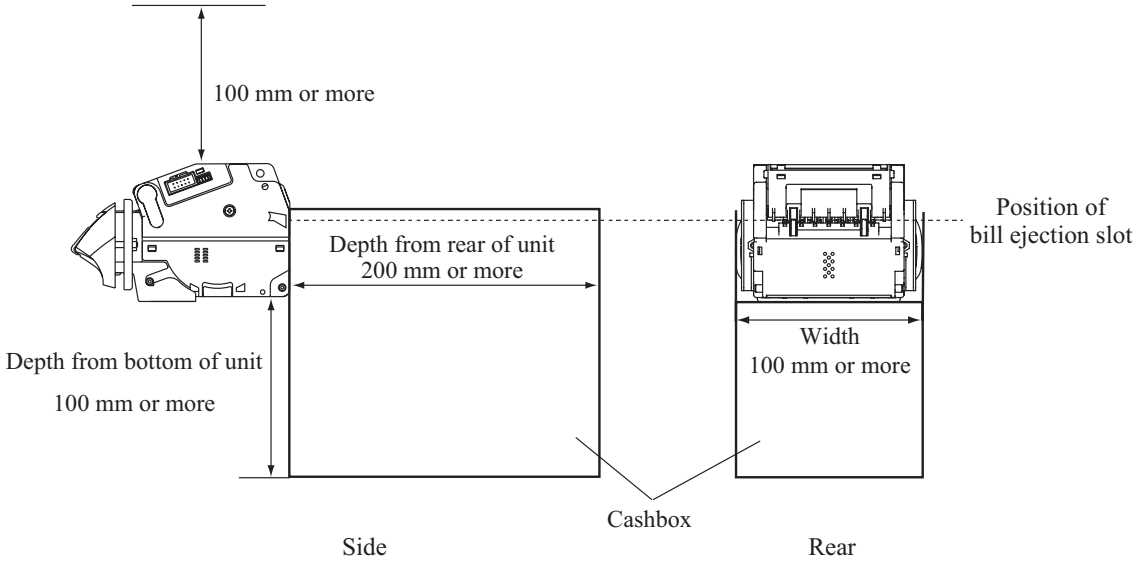


2-1-4. Installation Specifications

Installation *1	Door holizontal mounting (No vibration)
Weight	Approx. 0.6 kg
External Dimentions	With Type 1/2/3 faceplate: 124mm (W) x 88mm (H) x 145.2mm (D) With Type 5 faceplate: 124mm (W) x 88mm (H) x 143mm(D)
Cahsbox *2	Supplied by the customer

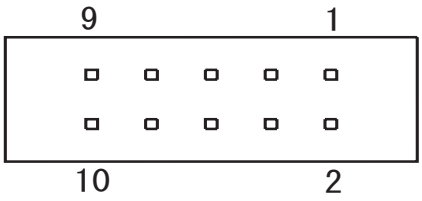
*1 Allow 100 mm above the unit to open the lid for removal of the unit from the faceplate.

*2 The cashbox must be 100 mm or more in depth from the bottom of the TAIKO unit, 200 mm or more in depth from the rear of the unit and 100 mm or more in width. Both sides of the cashbox must be higher than the position of the bill ejection slot.



2-2. Connector

The following diagram is the interface connector as viewed from the acceptor side or from a relay board.

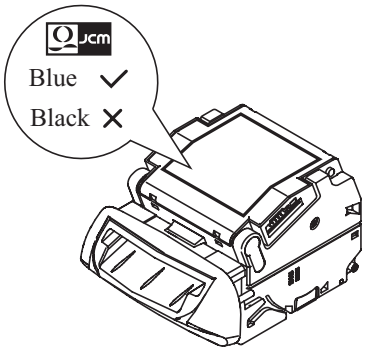


Box Type Plug XG4C-1034 (Omron)

- **If a relay board is attached to the TAIKO unit, do not attempt to remove it.**

2-3. Pin Assignment

- **The following pin assignment is for TAIKO units with a blue JCM logo label. If the logois black, the pin assignment may differ. For details, contact JCM.**



2-3-1. ccTalk Interface

Pin No.	Signal Name	I/O *1	Function
1	ccTalk+	IN/OUT	ccTalk Send/Receive Line
2	NC		Not Connected
3	NC		Not Connected
4	NC		Not Connected
5	NC		Not Connected
6	NC		Not Connected
7	Vcc		12V DC Power Supply
8	Vss		Power Supply GND
9	NC		Not Connected
10	NC		Not Connected

*1 Conditions for the I/O (Input/Output) column are from the Bill Acceptor side.

2-3-2. SERIAL(ID-003)/MDB Interface

Pin No.	Signal Name	I/O *1	Function
1	NC	-	Not Connected
2	NC	-	Not Connected
3	RXD-	IN	Data Send Line
4	RXD+		(Active when the current is applied)
5	TXD-	OUT	Data Receive Line
6	TXD+		(Active when the current is applied)
7	Vcc	-	12V DC Power Supply
8	Vss	-	Power Supply GND
9	NC	-	Not Connected
10	NC	-	Not Connected

*1 Conditions for the I/O (Input/Output) column are from the Bill Acceptor side.

2-3-3. Pulse Interface

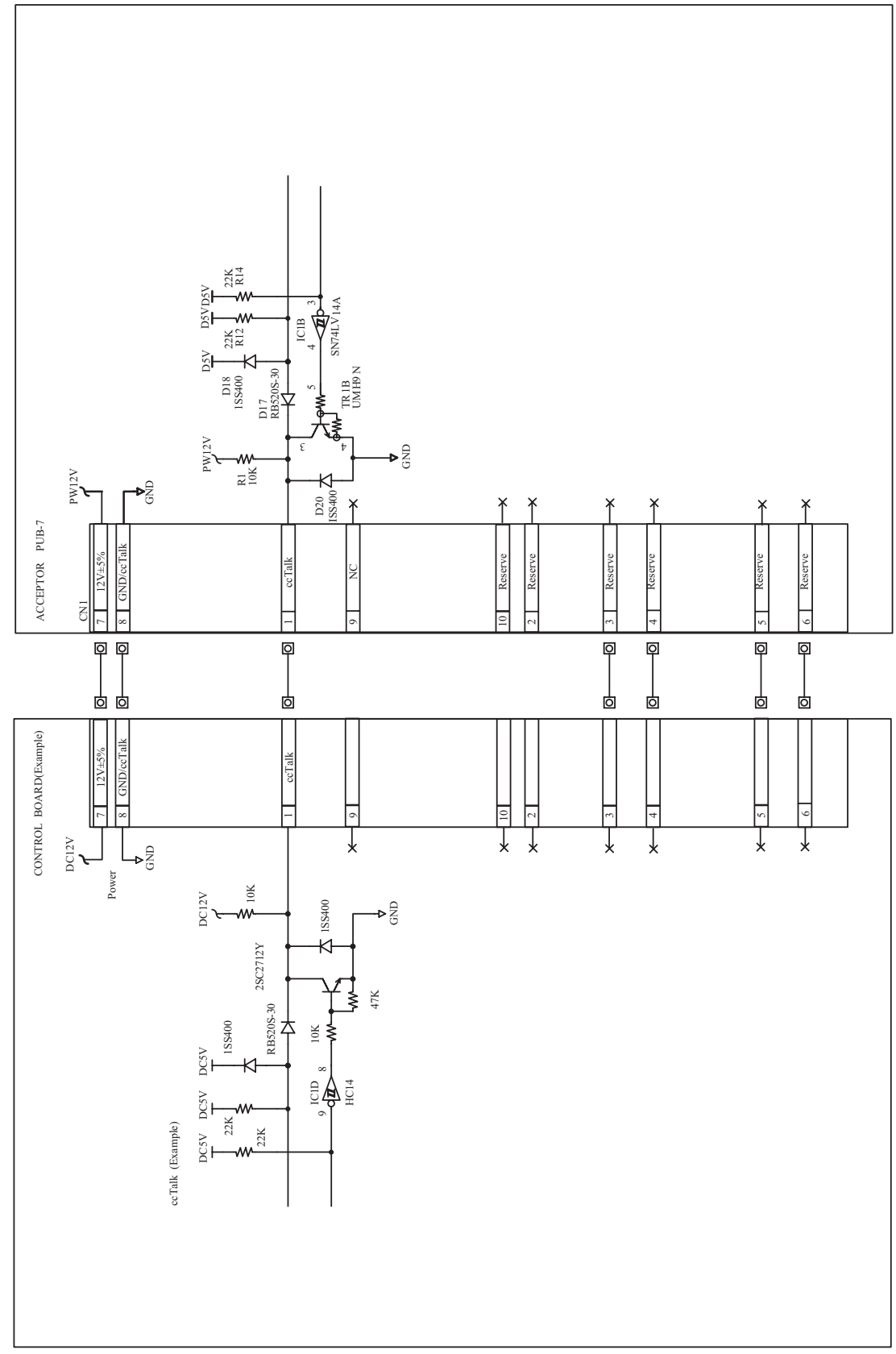
Pin No.	Signal Name	I/O *1	Function
1	NC	-	Not Connected
2	NC	-	Not Connected
3	Enable/Disable (-)	In	Enable/Disable Signal Input Line
4	Enable/Disable (+)		(Enable when the current is applied. Disable when the current is NOT applied.)
5	Vend(-)	Out	PULSE Signal Output Line
6	Vend(+)		(Active when the current is applied.)
7	Vcc	-	12V DC Power Supply
8	Vss	-	Power Supply GND
9	NC	-	Not Connected
10	NC	-	Not Connected

*1 Conditions for the I/O (Input/Output) column are from the Bill Acceptor side.

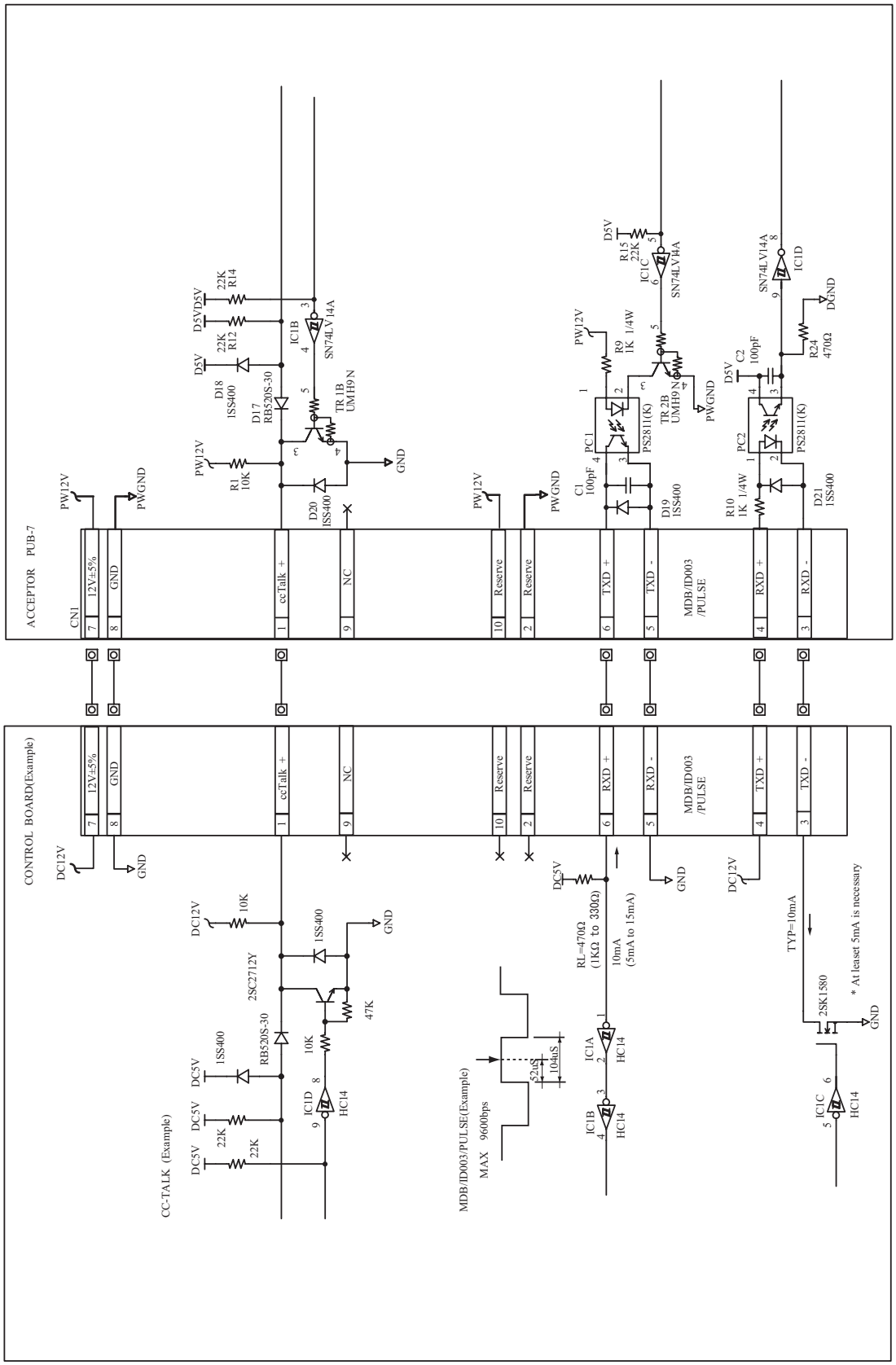
CHAPTER 2

2-4. Interface Circuit

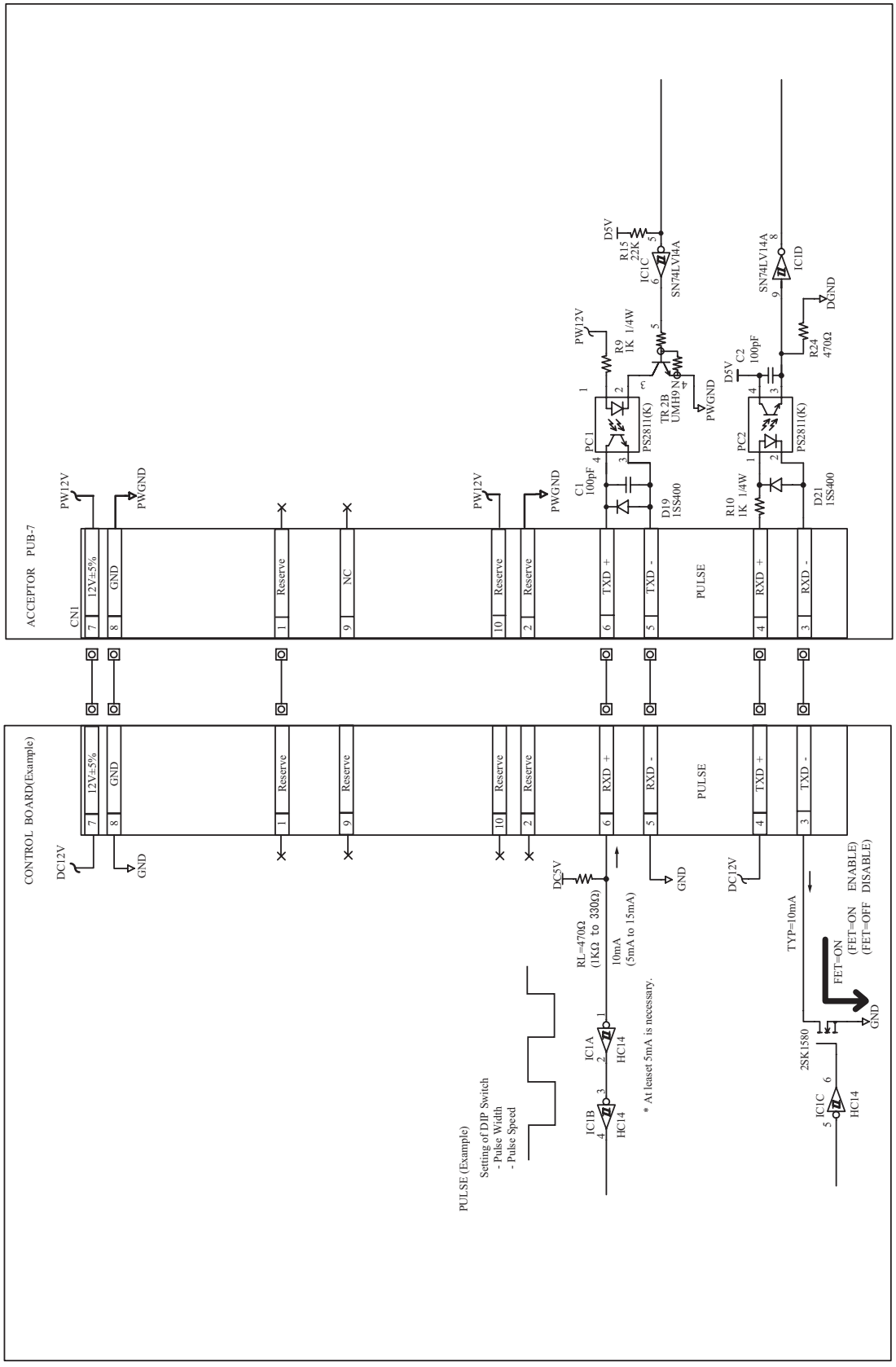
2-4-1. ccTalk Interface Circuit



2-4-2. Serial(ID-003)/MDB Interface Circuit



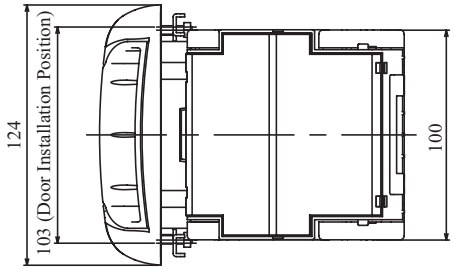
2-4-3. Pulse Interface Circuit



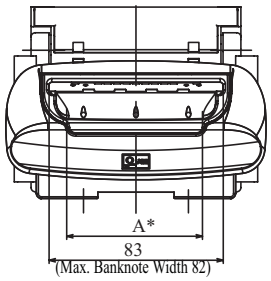
2-5. External Dimensions

2-5-1. When installing the Type1/Type2/Type3 faceplate with TAIKO unit

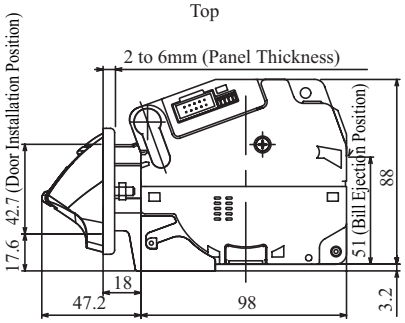
Unit:mm



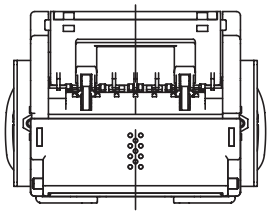
Top



Front

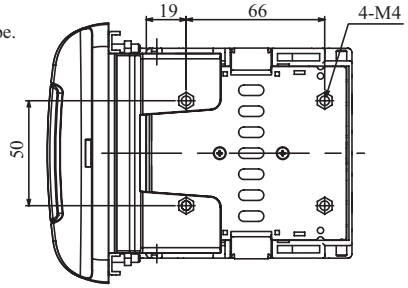


Right Side



Rear

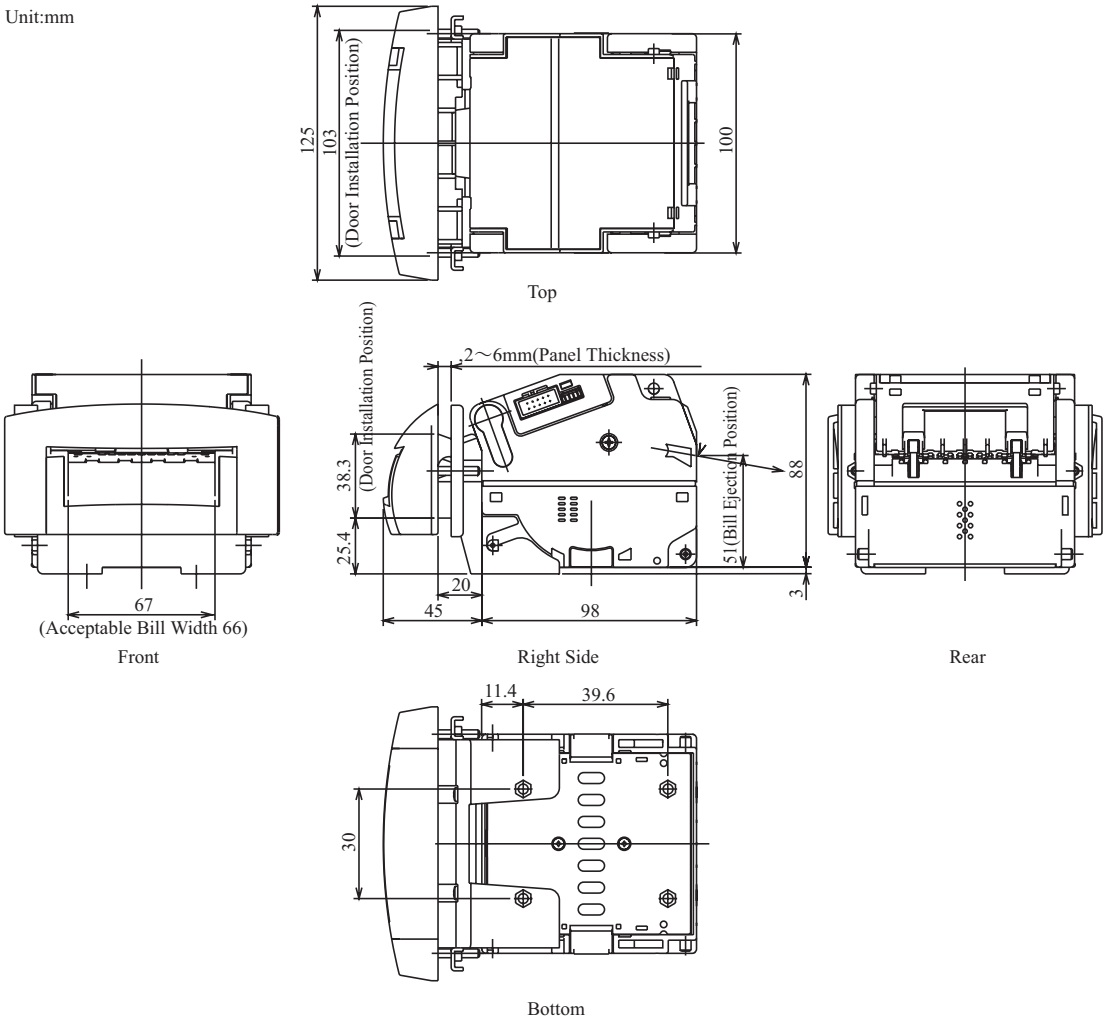
* The length of A differs depending on the faceplate type.
Type1: 68(Min. Banknote Width 67)
Type2: 76(Min. Banknote Width 75)
Type3: 71(Min. Banknote Width 70)



Bottom

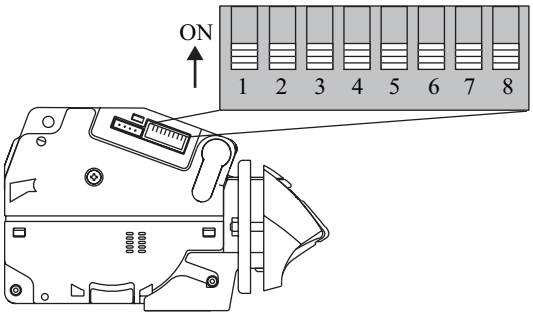
2-5-2. When installing the Type5 faceplate with TAIKO unit

Unit:mm



2-6. DIP Switch Settings

The communication method and various functions of the TAIKO unit can be set with the DIP switches on the left side of the unit.



Left Side

2-6-1. Basic Settings

SW#	Setting Item	
	ON	OFF
1	Test Mode *1	Normal Mode
2	Double-Scan Mode *2	Normal Scan Mode
3	Reserved	
4	Five (5) drum cycles (fishing prevention) *3	Normal Operation
5	Refer to the Software Specifications	
6 7 8	See table below	

6	7	8	I/F Setting
OFF	OFF	OFF	SERIAL (ID-003)
ON	OFF	OFF	MDB
OFF	ON	OFF	ccTalk (Non Encrypted)
ON	ON	OFF	ccTalk (Encrypted) *4
-	-	ON	PULSE *5

*1 For details about the Test Mode, refer to 5-2-2. Test Mode.

*2 The acceptance rate will be improved but operation time will be increased if a banknote is rejected.

*3 Fishing prevention will be improved but operation time will be increased.

*4 If the encryption code become unclear, refer to 2-7-5. Encryption Code Initializing Setting Mode to initialize the encryption code.

*5 For Details about Communication Setting, refer to the Software Information Sheet.

2-6-2. Special Settings

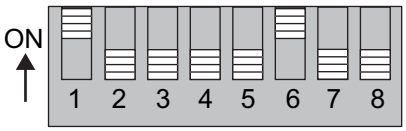
Setting Items		SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
Denomination Setting Mode	Accept Setting	**ON**	OFF	OFF	OFF	OFF	**ON**	OFF	OFF
	Inhibit Setting	**ON**	OFF	OFF	OFF	OFF	**ON**	**ON**	OFF
LED Pattern Setting Mode	Define Pattern 1	**ON**	**ON**	OFF	OFF	OFF	OFF	**ON**	OFF
	Define Pattern 2	**ON**	OFF	**ON**	OFF	OFF	OFF	**ON**	OFF
Encryption Code Initializing Setting Mode		**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	OFF	OFF
Download Mode *1		**ON**	OFF	OFF	OFF	OFF	OFF	**ON**	**ON**
Adjustment Mode *1		**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	**ON**

*1 For details about Software Download and Adjustment, refer to Chapter 4 Download/Adjustment.

■ Denomination Setting Mode

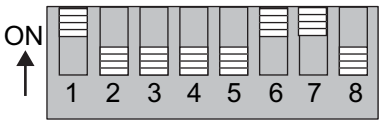
Perform the accept/inhibit setting for the banknote denomination based on the software for your country. The default settings are to accept all denominations.

◆ Accept Setting



To perform the accept setting, set DIP switch Nos.1 and 6 to ON and then turn on the power to the TAIKO unit. After the LED flashes white, set DIP switch No.1 to OFF to enter the setting mode. Insert the denomination of banknote that you want accepted into the insertion slot. The setting is registered if the LED remains lit light blue and the banknote is returned. Insert the next denomination of banknote that you want accepted.

◆ Inhibit Setting



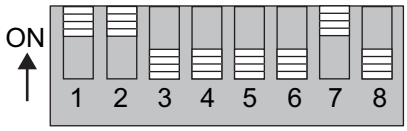
To perform the inhibit setting, set DIP switch Nos.1, 6 and 7 to ON and then turn on the power to the TAIKO unit. After the LED flashes white, set DIP switch No.1 to OFF to enter the setting mode. Insert the denomination of banknote that you want inhibit into the insertion slot. The setting is registered if the LED remains lit orange and the banknote is returned. Insert the next denomination of banknote that you want inhibited.

- The accept/reject setting for banknote denominations can be confirmed with the LED lamp. After the initial operation is performed, the LED will flash a number of times equal to the total number of banknote denominations. Blue indicates an accept setting and red means a reject setting.
  Example: If 5, 10 and 20 euro notes are set to be accepted and 50 and 100 euro notes to be rejected, the LED will flash the corresponding 5 times as follows: blue, blue, blue, red and red.

■ LED Pattern Setting Mode

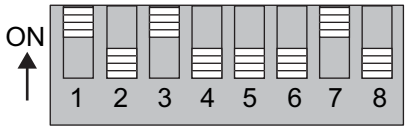
The LED pattern can be changed according to your perference. Select between pattern 1 and pattern 2. The default setting is pattern 1.

◆ Define Pattern 1



Set DIP switch Nos.1, 2 and 7 to ON and then turn on the power to the TAIKO unit. Set DIP switch No.1 to OFF to set the LED pattern to pattern 1.

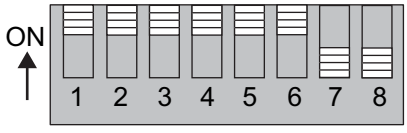
◆ Dfine Pattern 2



Set DIP switch Nos.1, 3 and 7 to ON and then turn on the power to the TAIKO unit. Set DIP switch No.1 to OFF to set the LED pattern to pattern 2.

■ Encryption Code Initializing Setting Mode

When using ccTalk Communication (Encryption) Mode and the encryption code is unknown, perform the Encryption Code Initializing Setting to initialize the Encryption Code to the last 6 digits of the TAIKO serial number.



Set DIP switch Nos. 1 to 6 to ON (Set DIP switch Nos. 7 and 8 to OFF) and then supply the power to the TAIKO unit. Set DIP switch No. 1 to OFF to initialize the encryption code.

NOTE

Chapter 3

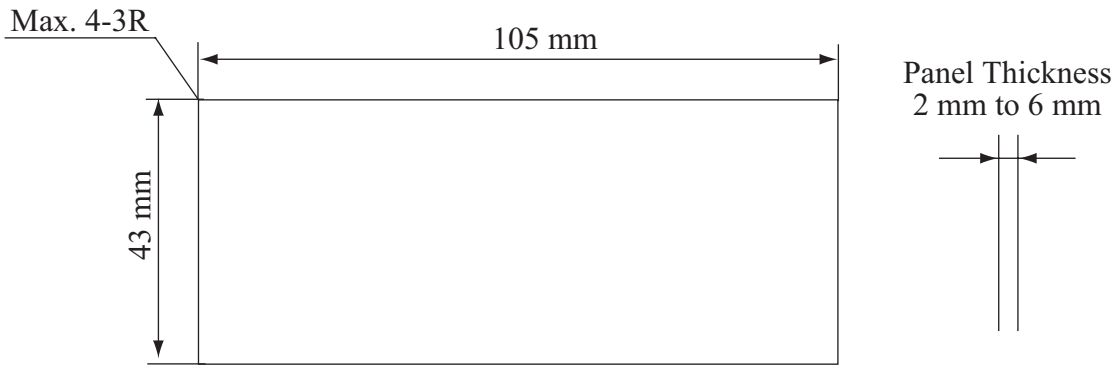
Installation/ Operation

Issue: 10/2006

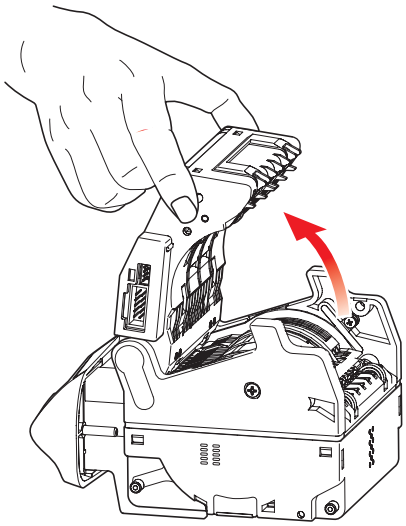
3-1. Installation/Removal

This section describes the procedures for installing of TAIKO unit. Perform the following procedure when installing the TAIKO unit.

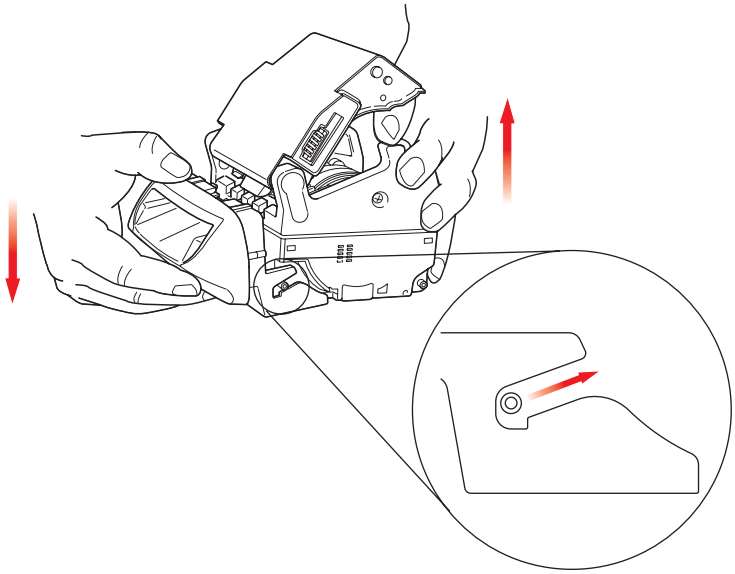
1. Use the panel cutting dimensions given below and create the correct size of opening required for installing the TAIKO unit to the door.



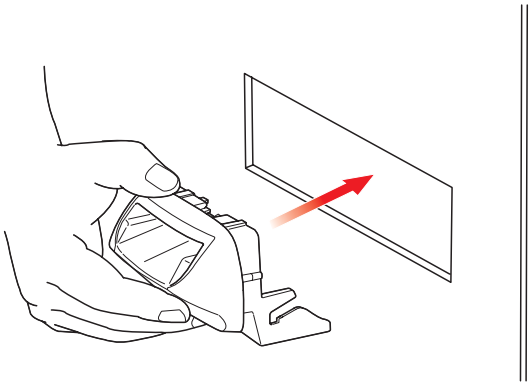
2. Hold in the upper lid open/close buttons on both sides of the TAIKO unit and open the upper lid in the direction of the arrow.



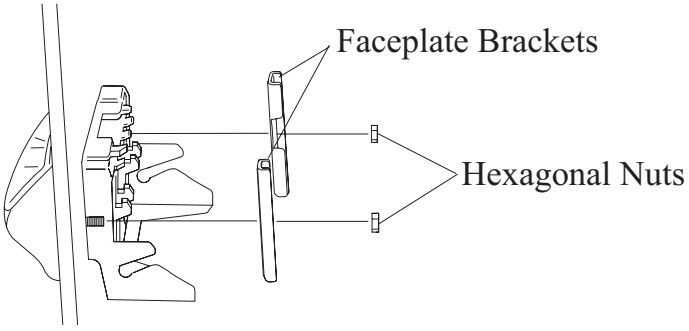
3. Grasp the TAIKO unit with your hand under the upper lid.
4. Press down slightly on the faceplate and raise up on the TAIKO unit. Slide the TAIKO unit up and back to detach it from the faceplate. back and up to detach it from the faceplate.



5. Remove the faceplate brackets (2) and the hexagonal nuts (2) from the faceplate, then insert the faceplate into the cutout from the front side of the door.

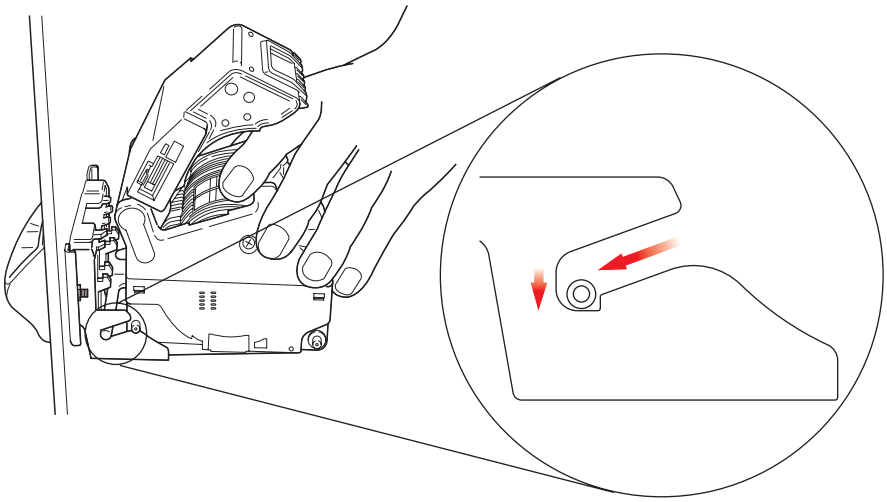


6. Fix the faceplate onto the door using the faceplate brackets (2) and the hexagonal nuts (2).

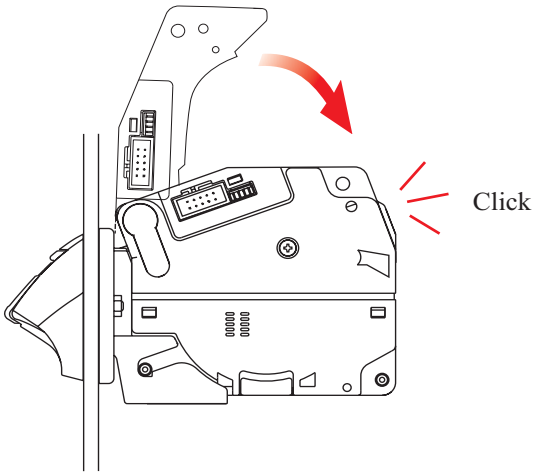


- **Tightening the nuts with too much force can damage the face-plate. The required torque is 0.7 Nm.**

7. Hold in the upper cover open/close buttons once again, open the upper cover, and grasp the TAIKO unit with your hand under the upper cover.
8. Insert the faceplate installation guide pin into the faceplate guide, and slide the TAIKO unit all the way into the guide and then push down, as indicated by the arrows.



9. Close the upper lid firmly until it clicks into place.



- **Be careful not to get your finger caught when closing the upper lid.**
- **Confirm that the TAIKO unit and faceplate are installed securely to the door.**

Note

- To remove the TAIKO unit, perform the procedure shown above in reverse order.

3-2. Wiring

This section describes the procedures for connecting the power harness to the TIKO unit. Follow the steps given below when connecting the power harness to the TAIKO unit.

- **When installing the TAIKO unit or connecting the wiring harness, make sure that the power harness is unplugged from the power terminal.**
- **The TAIKO unit is designed to use only 12V (±5%) DC input. Any other power level can damage the unit.**
- **Do not pull on the power harness with undue force, as that may cause the power socket to become disconnected.**

3-2-1. Recommended Parts

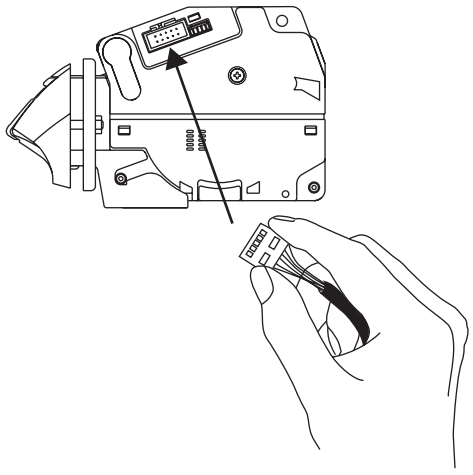
We recommend the following parts for wiring.

Socket	Rock Lever Socket XG5M-1032-N (Omron)	Socket for flat cable XG4M-1030-T (Omron)
Semi Cover	XG5X-0501 (Omron)	-
Rock Lever II	XG4Z-0002 (Omron)	-
Applicable Wires	UL1061 AWG24	1.27 mm pitch flat cable AWG28 UL2651/UL20012

3-2-2. Wiring Procedure

Perform the following procedure when connecting the power harness.

1. Confirm that there is no power being supplied to the power harness.
2. Connect the power harness to the TAIKO unit's interface connector.
3. Turn on the power and confirm that the TAIKO unit operates properly.



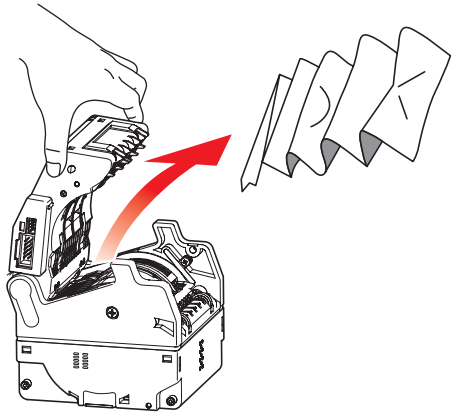
3-3. Clearing a Banknote Jam

When a banknote becomes jammed inside the TAIKO unit, follow the instructions below to remove the jammed banknote.

- **Be sure to turn off the power to the TAIKO unit when opening the upper and lower covers. Failure to do so may result in your fingers becoming caught in the moving roller.**

■Open the upper lid

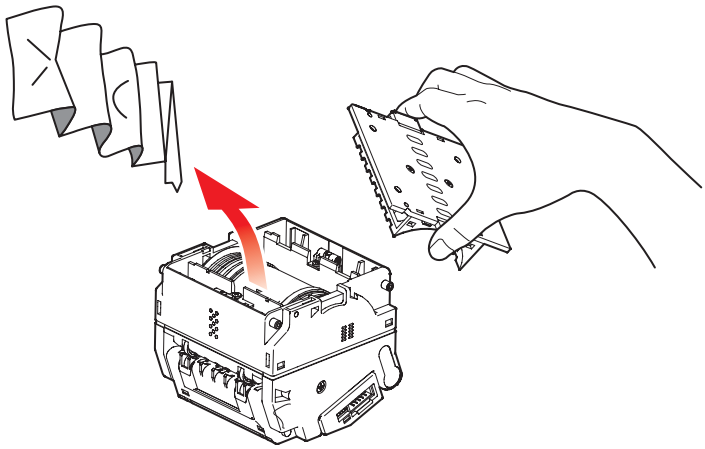
1. Confirm that the power to the TAIKO unit is turned off.
2. Hold in the upper cover open/close buttons and open the upper cover, then pull out the jammed banknote.



- **Be careful not to get your finger caught when closing the upper cover.**

■Open the lower lid

1. Confirm that the power to the TAIKO unit is turned off.
2. Remove the faceplate from the TAIKO unit. See =>6. Installation/Removal
3. Hold in the lower cover lock release buttons and remove the lower cover, then pull out the jammed banknote.



TAIKO Service Manual

Chapter 4

Download & Adjustment

Issue: 05/2007

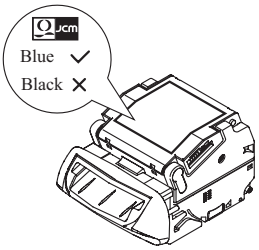
4-1. Download

The software download procedure is described in this section. When the software has been upgraded or the TAIKO unit's CPU board has been replaced, please download the software to the TAIKO unit.
When downloading a software from Palm, please refer 4-2. Palm.

4-1-1. Requirements

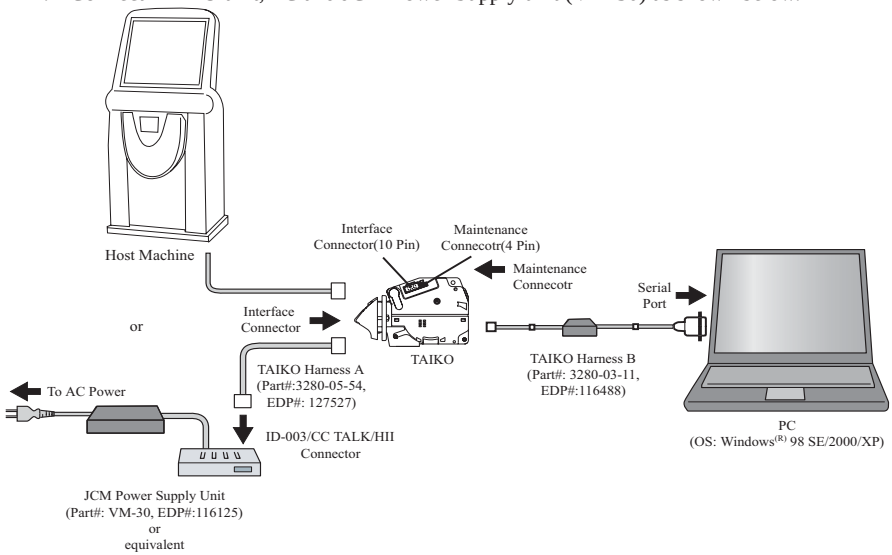
When downloading, the following items are required.
- TAIKO unit
- JCM power supply unit (Part#.VM-30, EDP#.116125) or equivalent
- TAIKO harness A (Part#.3280-05-54, EDP#.127527) *
- TAIKO harness B (Part#.3280-03-11, EDP#.116488)
- Downloader (Download Program Ver. 1.21.exe)
- Software program (Ex. P07X3102.G_S)

* This harness is only for TAIKO units with a blue JCM logo label. If the logo is black, the harness may differ. For details, contact JCM.



4-1-2. Connecting Procedure

1. Set the DIP switch Nos.1, 7 and 8. DIP switch is located on the right side of TAIKO unit.
2. Connect TAIKO unit, PC and JCM Power Supply unit (VM-30) as shown below.

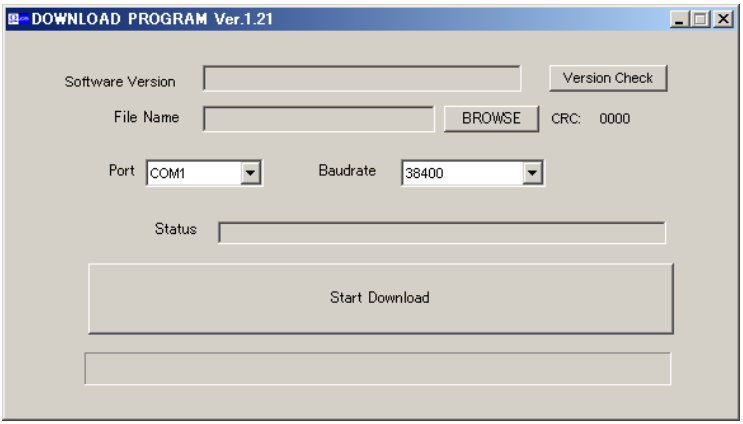


3. Turn the power of the JCM power supply unit ON to turn on the power to the TAIKO unit.
4. Confirm the TAIKO's green LED lamp is flashing.

4-1-3. Download Procedure

When downloading software, follow the steps as shown bellow.

1. Double Click the Download Program Ver. 1.21.exe. The following window will be appear.

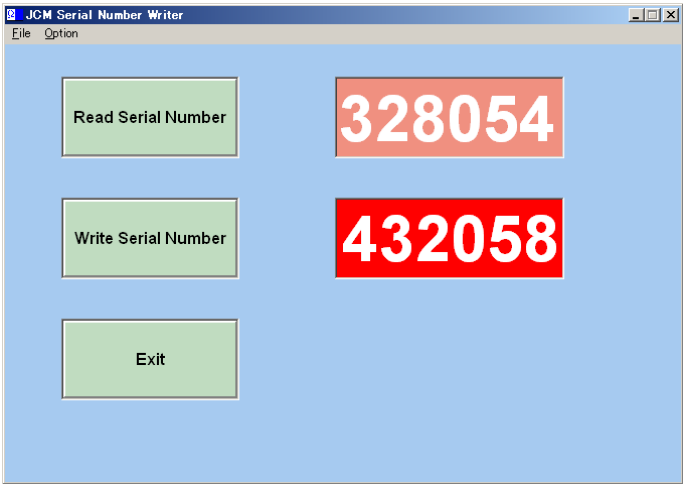


2. Select your PC's COM Port # from the Port pull down menu.
3. Select 38400 from the Baudrate pull down menu.
4. Press the [Version Check] button to display current software which is installed in the TAIKO unit.
5. Press the [BROWSE] button and select a software program you want to download to the TAIKO unit.
6. Press the [Start Download] button to start downloading.
7. When downloading is completed. TAIKO's LED lamp turn into Blue.
8. Turn off the power and remove the TAIKO unit.

4-1-4. Writing Serial No.

When replacing CPU board, follow the steps below and write Serial No..

1. Double click SerialNo.exe and then the following window will appear.



2. Click [Read Serial Number] button and then 6-digit of current serial number will be displayed in the box next to the button. When the CPU board is new, nothing is displayed in the box.
3. Enter 6-digit of new serial number in the input box next to the [Write Seiral Number] button.
   Example: If the serial number is 03050438058, enter the last 6-digit 438058.
4. Press the [Write Serial Number] button to start writing serial no.
5. Press the [Exit] button to close the window.

4-2. Adjustment

You learn how to adjust TAIKO unit in this section. After software program is downloaded or CPU/Sensor Board is replaced, the TAIKO unit needs to be adjusted.

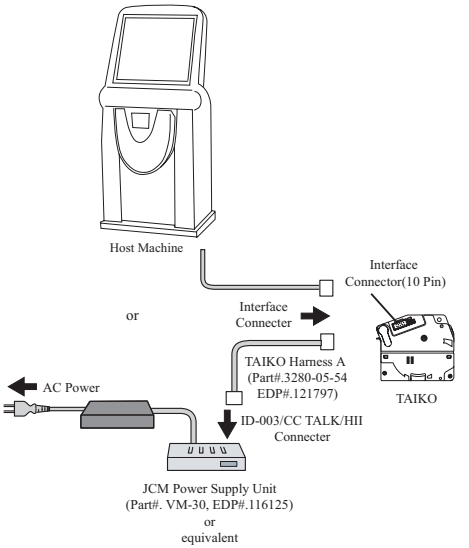
4-2-1. Requirements

When adjusting TAIKO unit, the following items are required.

- JCM power supply unit (Part#. VM-30, EDP#.116125)
- Reference Paper (Part#.KS-070, EDP#.119581)

4-2-2. Adjustment Procedure

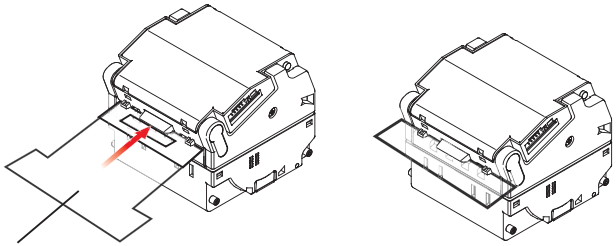
1. Confirm the power is not supplied to the TAIKO unit and remove the TAIKO unit from the faceplate. For details about removing the faceplate, refer to the 3-1. Installing/ Removing.
2. Connect the TAIKO unit and JCM Power Supply unit as shown below.



3. Set the TAIKO's DIP switch Nos.1, 2 and 8 ON. The DIP switch is located on the right side of the unit.

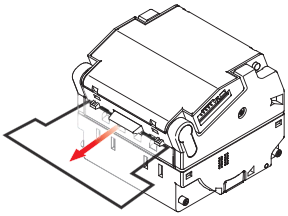
4. Turn on the power to the TAIKO unit. Confirm that TAIKO's white LED lamp is flashing.
5. Set the DIP switch No.1 OFF and confirm that TAIKO's green LED lamp lights.

6. Insert the reference paper (KS-070) to the TAIKO unit. Then the roller start rotating and then continue to insert the reference paper all the way in.



Reference Paper (KS-070)

7. When the reference paper reaches all the way in, green LED flashes.
8. Set the DIP switch No.8 OFF to start the paper adjustment. Confirm that TAIKO's yellow LED lights.
9. When the paper adjustment is completed, the reference paper come out of the TAIKO unit automatically. Remove the reference paper.



10. Confirm the green LED lights and set the DIP switch No.8 ON to start the no paper adjustment.
11. Confirm that TAIKO's yellow LED lights.
12. When the paper adjustment and EEPROM writing is completed successfully, confirm that TAIKO's blue LED lights.

- **If the adjustment and EEPROM writing is not completed successfully, the red LED lights. Please start again from the beginning.**

4-3. Palm

Download procedure using Palm is described in this section.

4-3-1. Requirement

When adjusting TAIKO unit, the following items are required.

- Palm (Palm(R)'s Tungsten C)
- TAIKO Harness B (Part#.3280-03-11, EDP#.116488)
- File Converter Installer (setup.exe/SETUP.LST/PdbConvEN.CAB)
- Download Program (ID003DWN.prc)
- Software Program (Ex. P07X3102.G_S)

4-3-2. Installing File Converter (PdbConvEN.exe)

When downloading a software from palm, the file needs to be convert into prc format.

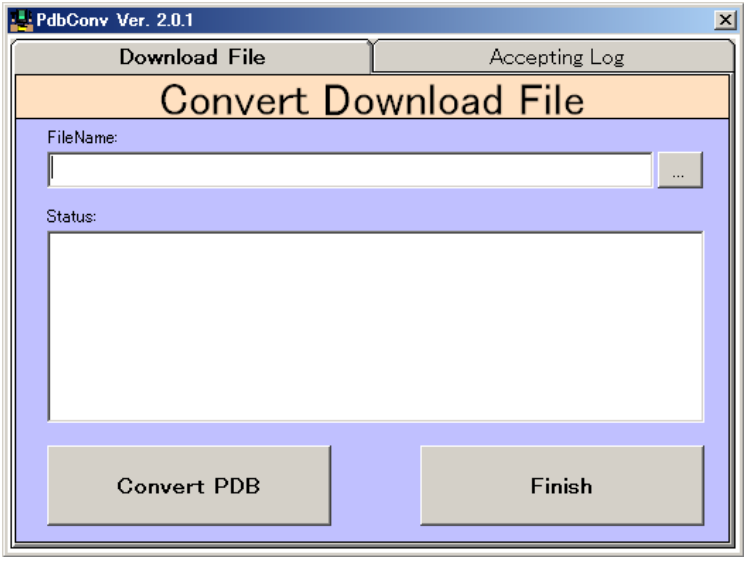
Follow the steps below to install the File Converter (PdbConvEN.exe).

1. Save the setup.exe/SETUP.LST/PdbConvEN.CAB to your PC.
2. Double click the setup.exe to start to install.
3. Follow the instruction on the screen and complete installing.
4. PdbConvEn.exe icon is created on your PC's desktop.

4-3-3. Converting Software Program

Follow the steps below, convert the software program into prc format.

1. Double click the PdbConvEn.exe icon to start the PdbConvEn. The following window will appear.



2. Confirm the Download File tab and click the [...] button to select a file you want to convert.
3. Click the [Convert PDB] button to start the conversion.
4. After CRC is displayed, convension is completed.
5. Click the [Finish] button and close the PdbConvEn.exe.

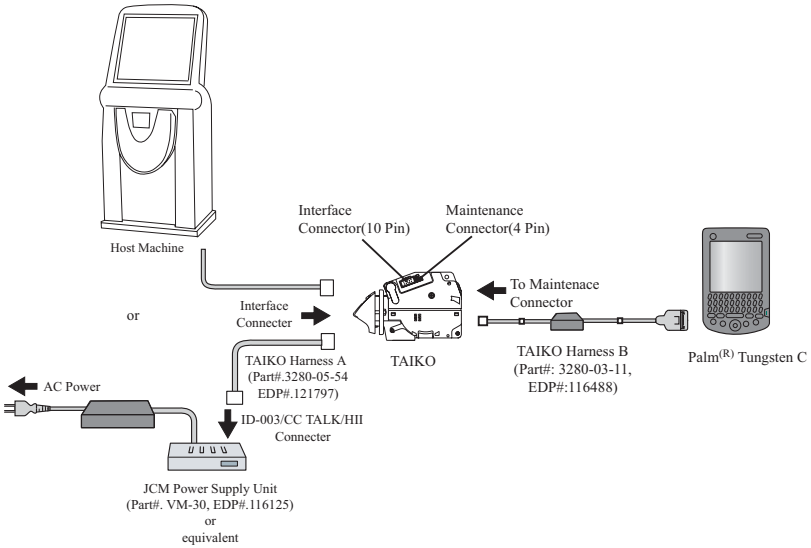
Note

- **Please import the downlader(ID003DWN.prc) for the palm and the software converted into prc format to palm referring to your Tungsten C Manual.**

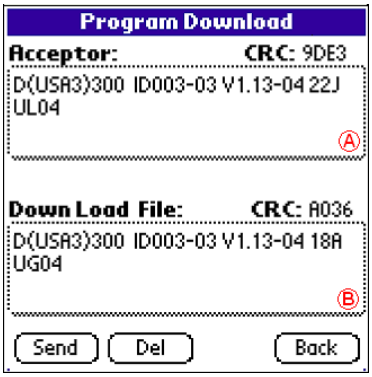
4-3-4. Download Procedure

When downloading a software from your palm, follow the instructions below.

1. Set the TAIKO unit's DIP switch Nos. 1, 7 and 8 ON.
2. Connect your palm with the TAIKO unit as shown below and supply the power to the TAIKO unit.



3. Turn on your palm and tap the DWN-03 icon. The following screen will be displayed.



4. When tapping the area (A) shown below, the software information which is currently installed in the TAIKO unit will be showed.
5. Tap the area (B) and select the software you want to download.
6. Tap the [Send] button to start downloading.
7. When the downloading is complete, the screen returns to the previous automatically.

4-4. Cloning

Using the Clone Harness, the software can be copied from the Master TAIKO unit to Salve TAIKO unit. (Cloning)

4-4-1. Required Items

When cloning, the following items are required.

- TAIKO unit installed the cloning feature applicable software (Master)
- TAIKO unit to copy the software (Slave)
- Clone Harness (Part#: 3280-05-52, EDP#: 124528)
- JCM Power Supply Unit (Part#: VM-30, EDP#: 116125) or equivalent

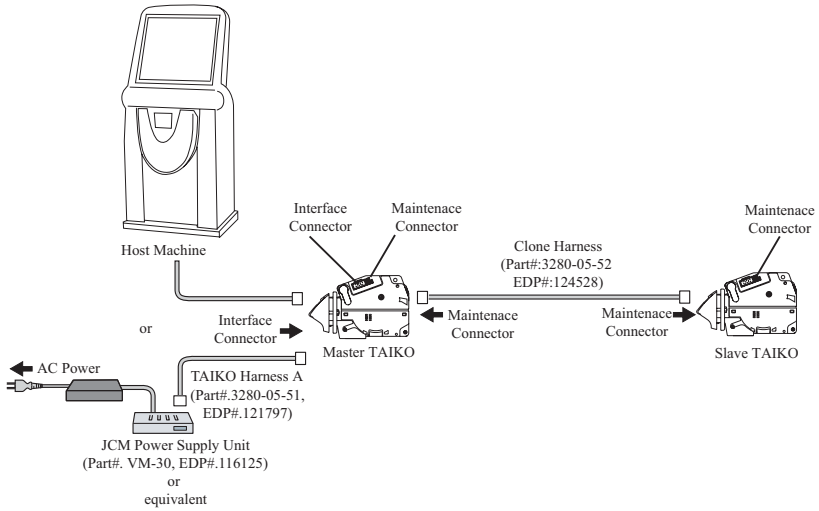
Note

- For the cloning features applicable software, refer to the Software Information Sheet.
- If the master TAIKO unit is connected with the host machine, the power supply unit is not required.

4-4-2. Cloning Procedures

Follow the steps below to clone.

1. Connect the master TAIKO unit and the slave TAIKO unit as shown below.



2. Set the DIP switch of the master TAIKO unit Nos. 1, 2, 7 and 8 ON and the DIP switch of the slave TAIKO unit Nos. 1, 7 and 8 ON.
3. Confirm the LED lamp of the master TAIKO unit is flashing withe, the LED lamp of the slave TAIKO unit is flashing green.

4. Set the DIP switch of the master TAIKO unit No. 1 OFF to start cloning.
5. When starting cloning, the LED lamp of the master TAIKO unit lights pink, the LED of the slave TAIKO unit lights yellow.
6. When the LED lamp of the slave TAIKO unit lights blue (or flashes green), the cloning is complete. (Approx. 15 minutes)
7. Set the DIP switch of the master TAIKO unit No.1 ON.
8. When producing another clone TAIKO, turn off the power, connect another slave TAIKO unit and perform from the step 2.

TAIKO Service Manual

Chapter 5

Trouble Shooting / Maintenance

Issue: 04/2007

5-1. Error Codes

Number of Red flashes of the LED lamp indicates the Error of TAIKO unit.
LED lamp is located in the middle of the faceplate.

5-1-1. Error Codes

# of Flashes	Diagnostic Description
2	ROM error
3	Banknote remains inside ejection slot
4	Banknote remains inside transport path
5	EEPROM read/write error
6	Motor error
8	Entrance solenoid error
9	Exit solenoid error
12	Fraud detected

5-2. Trouble Shooting

When an error message appears or trouble is occures and the TAIKO unit does not work properly, recover the TAIKO unit following the instruction below.

5-2-1. General Troubles

Symptom/Error Message	Possible Causes	Recovery Action
Acceptor is not working (Acceptor does not accept any bill)	Power is not supplied to the acceptor.	Verify the specified voltage and ground are supplied to appropriate pins of the interface connector.
	Connection is wrong.	Verify if all harnesses and connectors are connected properly. Verify if the connector pin has been any bend, missing, broken. Verify if the specified voltage is supplied to the appropriate pin. See=> Chapter 2 Specifications
	Software is not downloaded.	Download the appropriate software to the TAIKO unit. See=> 4-1.Download
	CPU/Sensor Board is Corrupted.	Perform Acceptance Test. See => 4-2. Test Mode (Diagnostics) If the test result is NG, replace the CPU/Sensor Board. See=> Chapter 6 Replacement procedure After CPU/Sensor board is replaced, perform the adjustment. See=> 4-2. Adjustment

Symptom/Error Message	Possible Causes	Recovery Action
JAM bill occurs often.	Feed or Pinch roller is spoiled with dirt or broken.	Clean the feed or Pinch roller. See=> 6-4. Cleaning If any corruption is found, replace it. See=> 6-2. Replacement of Sensor Board
	Feed or Pinch roller spring is missing or loose.	Verify the condition of the Feed or Pinch roller spring and replace it as required.
	There is any foreign objects is on the transport path.	Remove the foreign objects from the transport path and clean. See=> 5-4. Cleaning
	Faceplate does not match with the bill width.	Change the faceplate guide depending on the bill width. See=> 3-3. Replace of Faceplate Guide
	The bill width is 83mm or larger or 62mm or less. (Out of TAIKO Specifications)	Use the only acceptable bills. See=> Chapter 2 Specifications
Acceptor is not working. (Acceptor does not accept any bills.)	Entrance Sensor is not working or there is any foreign object at the entrance.	Remove the foreign object and clean the entrance sensor. See=> 5-4. Cleaning Perform Aging. See=> 5-2-6. Aging details If any sensor error is found, replace the CPU/Sensor board. See=> Chapter 6 Replacement Procedure
Acceptance rate is low.	Rollers, belts and lenses is soiled with dirt.	Clean the rollers, belts and lenses. See=> 5-4. Cleaning
	Sensor needs to be adjusted.	Adjust the TAIKO unit. See=> 5-4. Cleaning
	After disassembled, the TAIKO has not been adjusted.	Adjust the TAIKO unit. See=> 5-4. Cleaning
	The software revision is old.	Download the latest software program. See=> 4-1. Download
	The bill that software program is not supported is inserted.	Verify if the denomination, issued year is appropriate in the software information sheet.

Symptom/Error Message	Possible Causes	Recovery Action
All bills are returned.	Software does not match with the currency.	Download the appropriate software program to the TAIKO unit. See=> 4-1. Download
	DIP Switch setting is wrong.	Set the accepting setting properly. See=> 2-7-3. Denomination Setting
	The command from Host is set to inhibit.	Set the command to accept.
	CPU/Sensor failure is occurred.	Replace CPU/Sensor Board. See=> Chapter 6 Replacement Procedure.
	Sensor needs to be cleaned and adjusted.	Clean all sensors. See=> Cleaning Perform adjustment See=>4-2. Adjustment
Motor rotates a few times and stop.	CPU board failure	Replace the CPU board. See=> 6-1. Replacement of CPU board
	DIP Switch setting is wrong.	Set the DIP Switch No.1 ON and supply the power to the TAIKO unit.
Cannot enter the Test Mode.	DIP Switch is broken.	Perform the DIP Switch TEST. See=> 5-3-3. DIP Switch Test Details If the test result is NG, replace the CPU board. See=> 6-1. Replace of CPU board
	CPU board failure	Replace the CPU board. See=>6-1. Replacement of CPU board

5-2-2. Adjustment Troubles

Symptom/Error Message	Possible Causes	Recovery Action
Adjustment Error	Reference paper is wrong.	Use the reference paper (KS-070) for TAIKO.
	CPU/Sensor board failure.	Replace the CPU/Sensor board. See=> Chapter 6 Replacement Procedure

5-2-3. Communication Troubles

Symptom/Error Message	Possible Causes	Recovery Action
Cannot communicate with Host	DIP switch setting is wrong.	Set all DIP Switches OFF and supply the power to the TAIKO unit.
	Connector is unplugged or is not connected properly.	Connect all connector properly.
	Connector pin is broken.	Verify if the connector pin is any bend, broken or missing. Replace the CPU board as required.
	CPU board failure	Replace the CPU board. See=> 6-1. Replacement of CPU board
	Interface is wrong.	Verify if the interface is appropriate with Host. If wrong, set the interface properly. See=> 2-7. DIP Switch

- **When you cannot solve the problem even if you follow the instruction above, please contact JCM. See => 5-6. Support**

5-3. Test Mode (Diagnostics)

TAIKO has the diagnostics function. TAIKO can be specified the part of the error using the diagnostic funktion.

5-3-1. DIP Switch Setting List

Test Items	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
DIP Switch Test	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**
Transport Motor Forward Rotation Test	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Transport Motor Reverse Rotation Test	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF
Sensor Test	**ON**	OFF	**ON**	OFF	OFF	OFF	OFF	OFF
Solenoide Test	**ON**	**ON**	**ON**	**ON**	OFF	OFF	OFF	OFF
Accepting Test	**ON**	OFF	OFF	OFF	**ON**	OFF	OFF	OFF
Entrance Flapper Test	**ON**	OFF	OFF	**ON**	**ON**	OFF	OFF	OFF
Exit Flapper Test	**ON**	**ON**	OFF	**ON**	**ON**	OFF	OFF	OFF

5-3-2. DIP Switch Test Procedure

Test the DIP switches.

1. Set all DIP switches ON and then supply the power to the TAIKO uit.
2. Set the switch No.1 OFF to start the test. Set the switch Nos.3, 5 and 7 OFF and verify if the LED lamp lights Green.
3. Then set the switch Nos.2, 4, 6 and 8 OFF and verify the LED lamp lights Blue.

- **IIf TAIKO's red LED lights, the DIP Switch has a problem.**

5-3-3. Transport Motor Forward Rotation Test Procedure

Test the condition of the Transport Motor forward rotation.

1. Set the switch No.1 ON and supply the power to the TAIKO unit.
2. Set the switch No.1 OFF to start the test. The transport motor rotates forward. 3. If the Blue LED lamp blinks despite the number, the test is completed. No error is found.

- **If TAIKO's red LED lamp lights, the Transport Motor has a problem.**

5-3-4. Transport Motor Reverse Rotation Test Procedure

Test the condition of the Transport Motor reverse rotation.

1. Set the switch No.1 and 2 ON and supply the power to the TAIKO unit.
2. Set the switch No.1 OFF to start the test. Ther transport motor rotates reverse.
3. If the Blue LED lamp blinks despite the number, the test is completed. No error is found.

- **If TAIKO's red LED lamp lights, the Transport Motor has a problem.**

5-3-5. Aging Procedure

1. Set the switch Nos.1, 2 and 4 ON and supply the power to the TAIKO unit. Set the switch No. 1 OFF to start the test.
2. TAIKO unit repeates the following operation.
   LED lamp lights => Motor rotates foward => Motor rotates reverse
3. If an sensor error is found while aging, the TAIKO stop the operation. You can specified the error of the sensor with the number of the LED lamp blinks.

# of Flashes	Sensor Position
1	Enterance Sensor Right
2	Enterance Sensor Left
3	Upper Transit Sensor
4	Lower Transit Sensor
5	Enterance Solenoid Sensor
6	Exit Solenoid Sensor
7	VEND Lever Sensor
8	Encoder Sensor
1	Penetration (Upper to Lower) Right IR
2	Penetration (Upper to Lower) Left IR
3	Penetration (Upper to Lower) Right RED
4	Penetration (Upper to Lower) Left RED
5	Penetration (Upper to Lower) Right NIR
6	Penetration (Upper to Lower) Left NIR
7	Penetration (Upper to Lower) Right BLUE
8	Penetration (Upper to Lower) Left BLUE
1	Penetration (Lower to Upper) Right IR
2	Penetration (Lower to Upper) Left IR
3	Penetration (Lower to Upper) Right RED
4	Penetration (Lower to Upper) Left RED
5	Penetration (Lower to Upper) Right NIR
6	Penetration (Lower to Upper) Left NIR
7	Penetration (Lower to Upper) Right BLUE
8	Penetration (Lower to Upper) Left BLUE

5-3-6. Solenoid Test Procedure

Test the condition of the solenoids.

1. Set the switch Nos.1, 2, 3 and 4 ON and turn ON the power to the TAIKO unit.
2. Set the switch No.1 OFF to start the test. Then the TAIKO unit repeates the following operation.
   Entrance Flapper On/Off => Exit Flapper On/OFF
3. If the Blue LED lamp lights, no error is found.

- **If TAIKO's red LED lights, the Solenoid has a problem.**

5-3-7. Accepting Test Procedure

Test the condition of the acceptance of the bils.

1. Set the switch No.1 and 5 ON and supply the power ON.
2. Set the switch No.1 OFF to start the test. Then insert the bill to the TAIKO unit.
3. If the bill is returned, the LED flashes depending on the reason for the retering.

# of Flashes	Diagnostic Description
2	ROM Error
3	JAM inside Acceptor
4	Bill remains inside transport path
5	Adjustment Error
6	Motor Error
8	Entrance Solenoid Error
9	Exit Solenoid Error
12	Sensor operation at the abnormal timing
1	Reject by slant insertion
4	X-rate Error
5	Bill Transportation Error
7	Pattern Error
8	Photo Level Error
9	Reject by Inhibit Setting
12	Magnetism Pattern Error (PUB-11 Only)
13	Bill Length Error
14	Ir/Red Error
15	Reject by counterfeiting currency

5-3-8. Entrance Flapper Test Procedure

Test the entrance flapper.

1. Set the switch Nos.1, 4 and 5 ON and turn the power to the TAIKO unit.
2. Set the switch No.1 OFF to start the test. Then the entrance flapper repeates open/close operation.
3. If the Blue LED lamp lights, no error is found.

- **If TAIKO's red LED lamp lights, the Entrance Flapper has a problem.**

5-3-9. Exit Flapper Test Procedure

Test the exit flapper.

1. Set the switch Nos.1, 2, 4 and 5 ON and turn ON the power to the TAIKO unit.
2. Set the switch No.1 OFF to start the test. Then the exit flapper repeates open/close operation.
3. If the Blue LED lamp lights, no error is found.

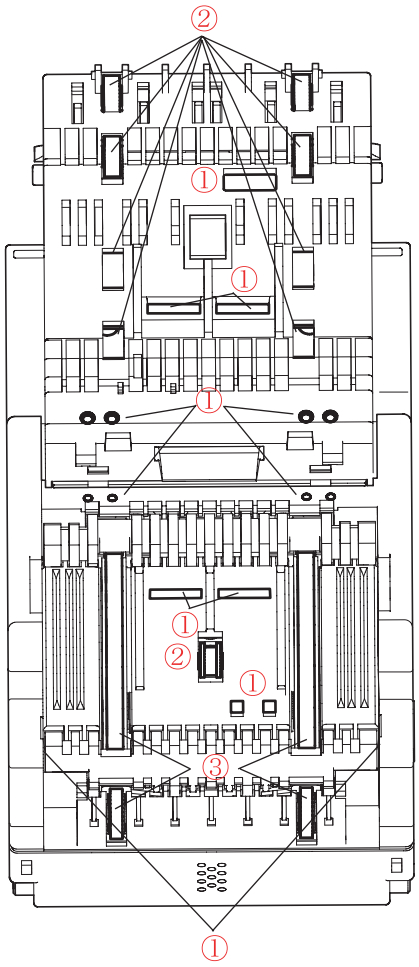
- **If TAIKO's red LED lamp lights, the Exit Flapper has a problem.**

5-4. Cleaning

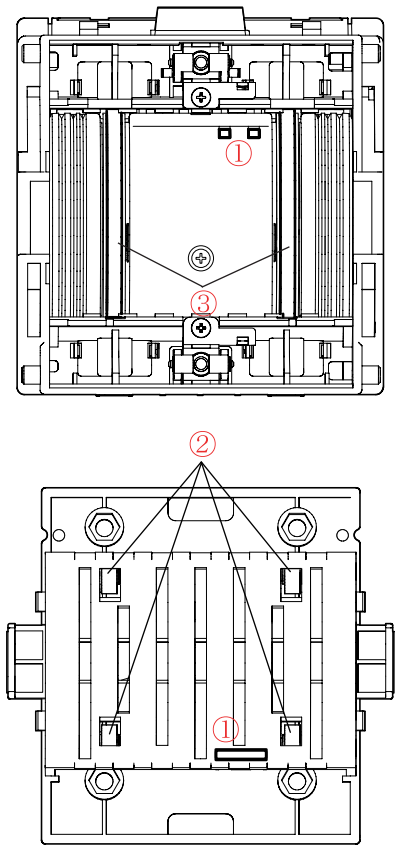
If the paper dust or foreign object spotted in the acceptor parts, the acceptance rate may go down. Clean the acceptor parts once a month. Wipe out on the sensor with lint-free cloth or cotton bud. Remove the paper dust or foreign object completely on the rollers.

- **DO NOT use the organic solvent such as thinner or benzin, when wiping the TAIKO unit.**

■ Sensor/Roller Location



Open Upper Lid



Open Lower Lid

① Sensor
② Pinch Roller
③ Feed Roller

CHAPTER 5

5-5. Maintenance Tool List

When maintenace or adjust TAIKO unit, the following parts need to be parchased.

Items	EDP#	Part#	Description
Power Supply Unit	116125	VM-30	This unit is to supply the power to TAIKO unit.
TAIKO Harness A	127527	3280-05-54	This harness is to connect with TAIKO unit ant Power Supply Unit.
TAIKO Harness B	116488	3280-03-11	This harness is to connect with PC and TAIKO unit when downloding or connecting with palm.
Clone Harness	124528	3280-05-52	This harness is to connect with a master TAIKO and a slave TAIKO when cloning.
Reference Paper	119581	KS-070	This is a reference paper to adjust TAIKO unit.

5-6. Product Support

If you happen to experience any problems or errors with your TAIKO unit, or have any inquiries regarding your unit, consult with your nearest JCM contact as shown below. Please be sure to make a note of the problem points andy symptoms, or the content of your inquiry, prior to making contact.

■ **Japan**
Japan Cash Machine Co. Ltd. (Headquarters)
3-15, Nishiwaki 2-Chome, Hirano-ku, Osaka 547-0035
Japan
Phone: +81-66-703-8406 **Fax:** +81-66-704-7843
URL: www.jcm-hq.co.jp

■ **Americas, Oceania**
JCM American Corporation
925 Pilot Road,
Las Vegas, NV 89119
U.S.A.
Phone: +1-702-651-0000 **Fax:** +1-702-644-5512
e-mail: customerservice@jcm-american.com **URL:** www.jcmamerican.com

■ **Europe, Russia, Middle East, Africa**
Japan Cash Machine Germany GmbH
Mündelheimer Weg 60
D-40472 Düsseldorf
Germany
Phone: +49-211-530645-0 **Fax:** +49-211-530645-65
e-mail: support@jcm-germany.com **URL:** www.jcm-germany.com

■ **UK, Ireland**
JCM United Kingdom Ltd.
Unit B, Third Avenue, Denbigh West Business Park
Bletchley, Milton Keynes, Buckinghamshire MK1 1EJ,
UK
Phone: +44-870-770-2863 **Fax:** +44-190-837-7834
e-mail: info@jcm-uk.com **URL:** www.jcm-uk.com

■ **Asia (other than Japan)**
JCM Gold (HK) Ltd.
Unit 1-7, 3F., Favor Industrial Centre
2-6 Kin Hong Street, Kwai Chung, N.T.
Hong Kong
Phone: +852-2429-7187 **Fax:** +852-2929-7003
e-mail: cs@jcmgold.com.hk **URL:** www.jcmgold.com.hk

TAIKO Service Manual

Chapter 6

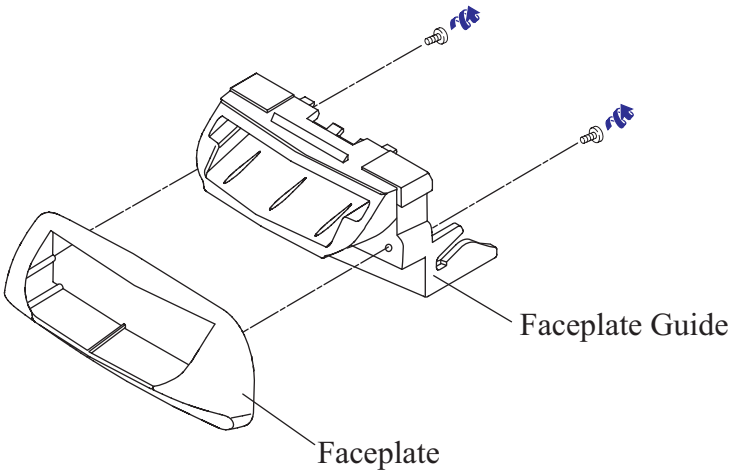
Replacement Procedure

Issue: 04/2007

6-1. Replacement of Faceplate Guide

When replacing the Faceplate Guide, follow the instructions below.

1. Take out two (2) screws from bihind the Faceplate unit.
2. Remove a (1) Faceplate Guide from the Faceplate.
3. Insert a (1) new Faceplate Guide into the Faceplate and then tighten two (2) screws to hold the Faceplate Guide.

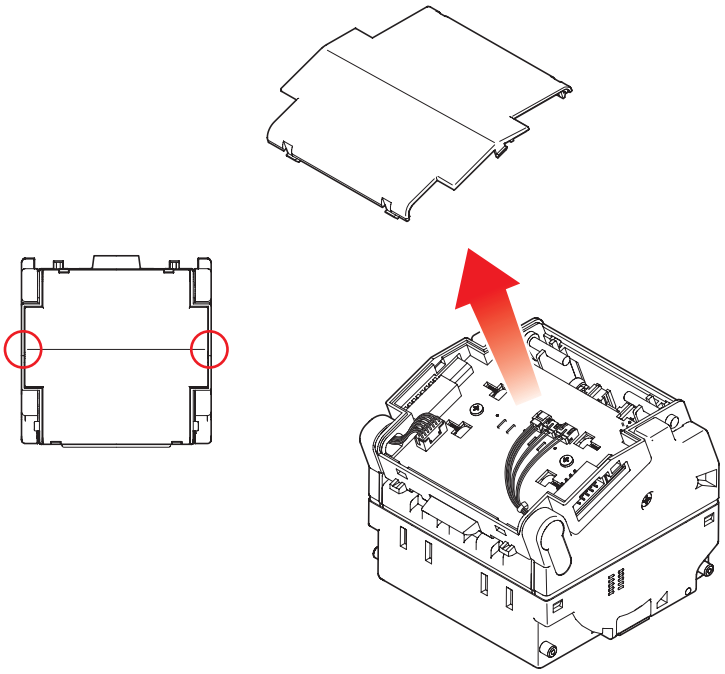


- **Tightening the nuts with too much force can damage the faceplate. The necessary torque is 0.7N◆m.**

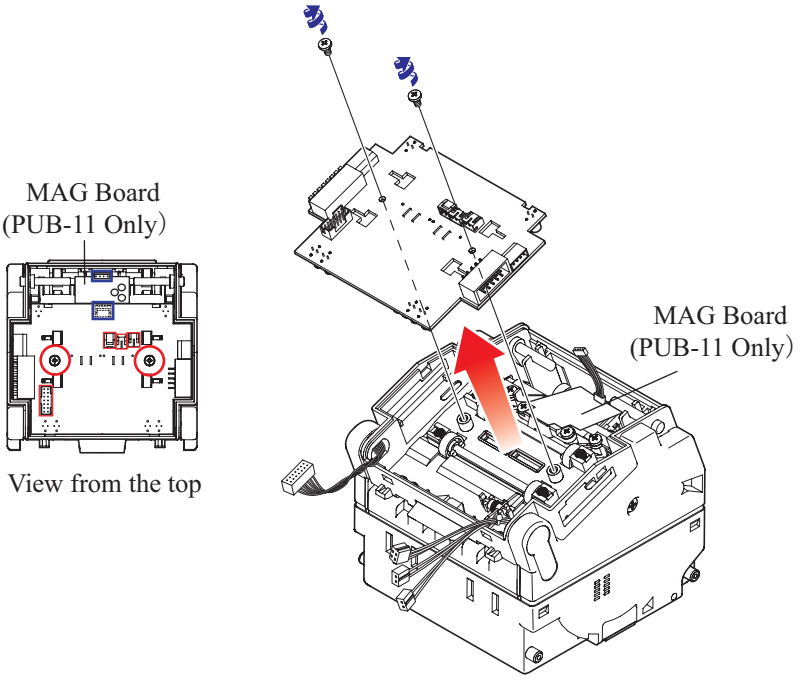
6-2. Replacement of CPU Board

When replacing the CPU Board, follow the instructions below.

1. Insert your fingernail into the gap of left or right side of the Upper Lid. Lift up the Upper Lid Cover with your fingernail and remove it.



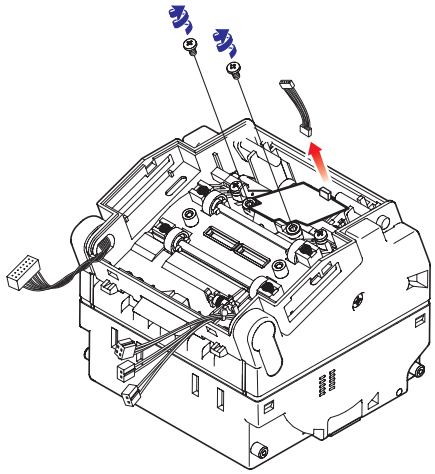
2. Unplug four (4) connectors and take out two (2) tapping screws on the CPU Board to remove the CPU Board.



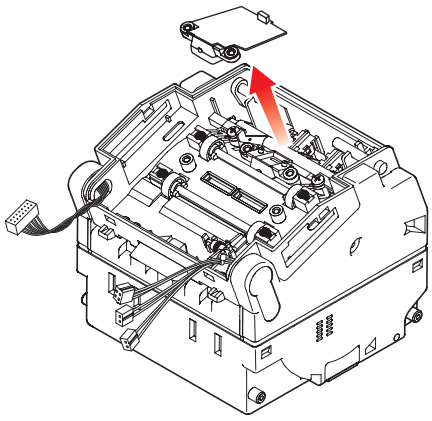
6-3. Replacement of MAG Board (PUB-11 Only)

The MAG board is mounted in the PUB-11 unit. When replacing the MAG Board, follow the instructions below.

1. Take out a connector and two (2) screws from the MAG board.



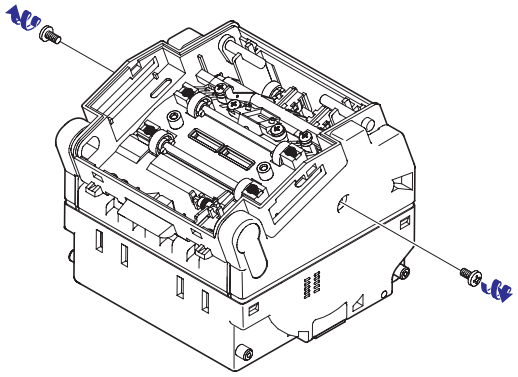
2. Remove the MAG board from the unit.



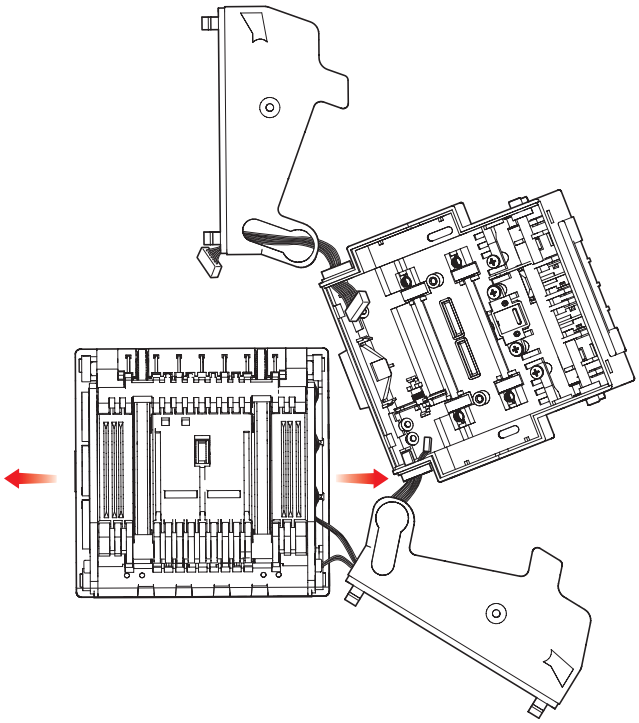
6-4. Replacement of Sensor Board

When replacing the Sensor Board, follow the instructions below.

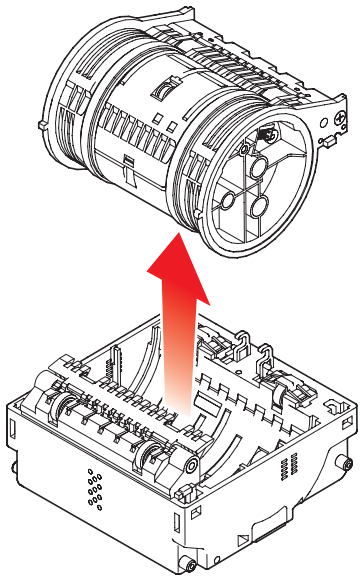
1. Take out two (2) screws from the both left and right side of the TAIKO unit.



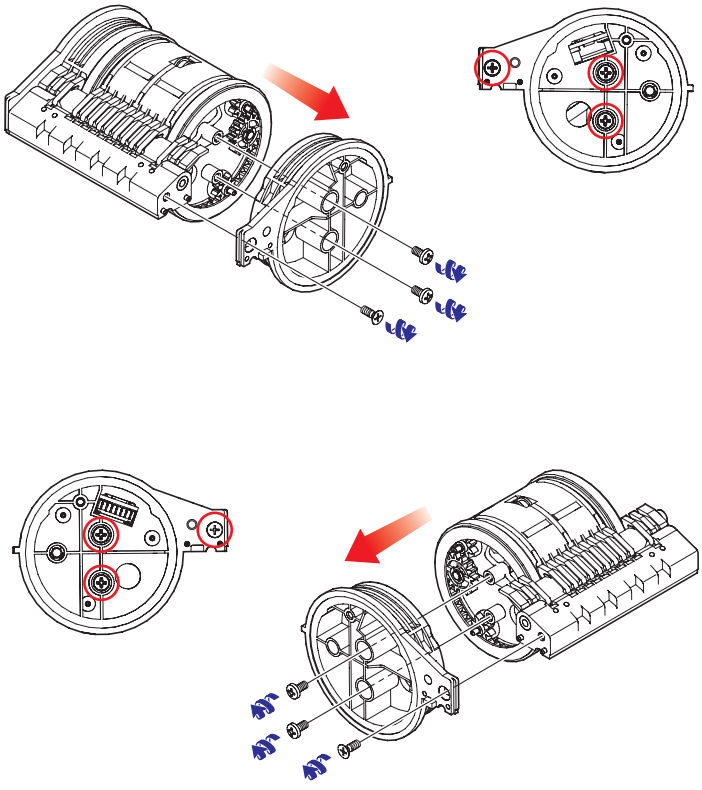
2. Remove a Upper Lid, Side Cover L and R. Unplug two (2) connectors of the both left and right side of the transport unit.



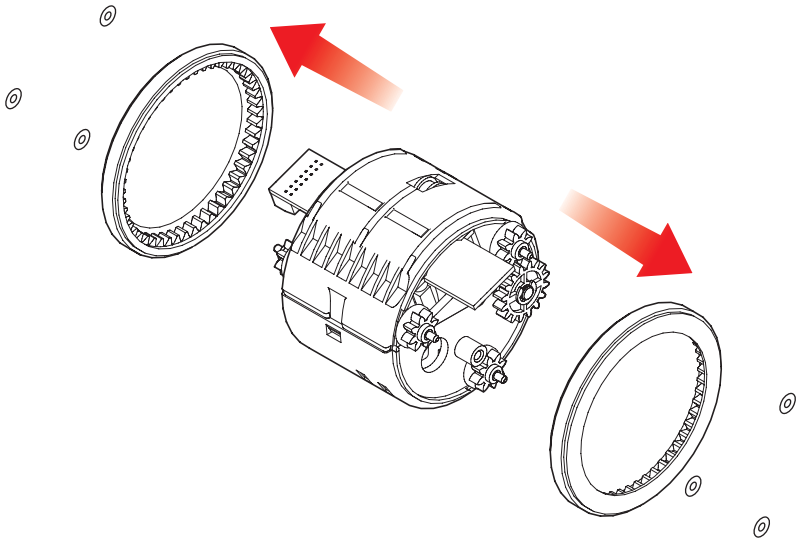
3. Remove the transport unit form the Lower Base.



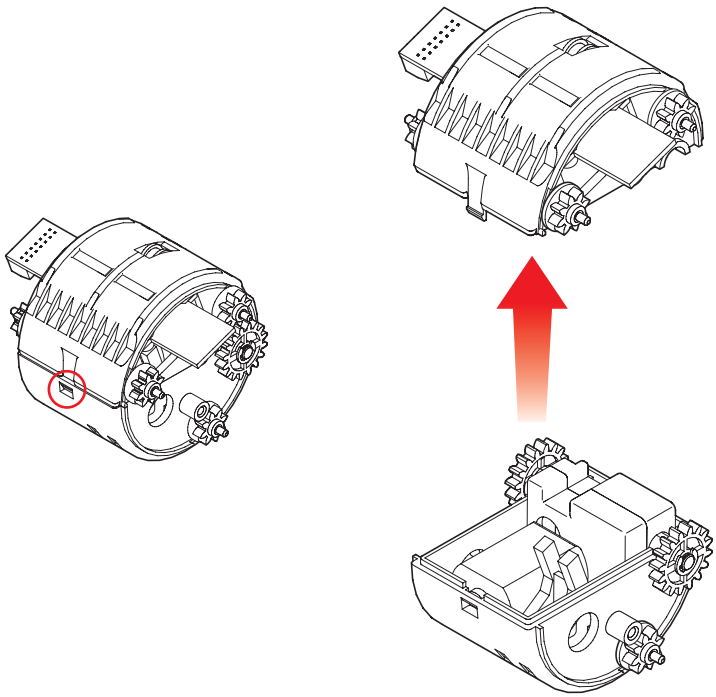
4. Take out three (3) screws each from the both side of the Transport Unit. Remove the Center Guide.



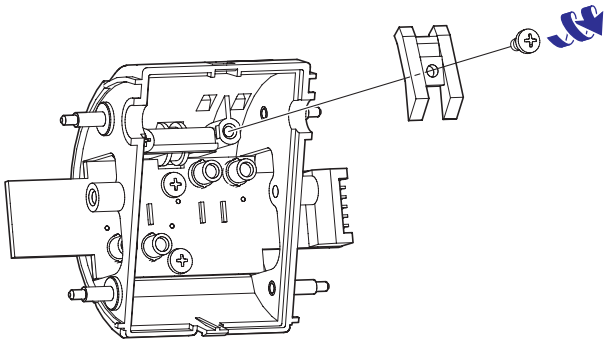
5. Remove the Feed Roller Assy of the both side of the Center Unit. Take out three (3) washers each from the both side of the Center Unit.



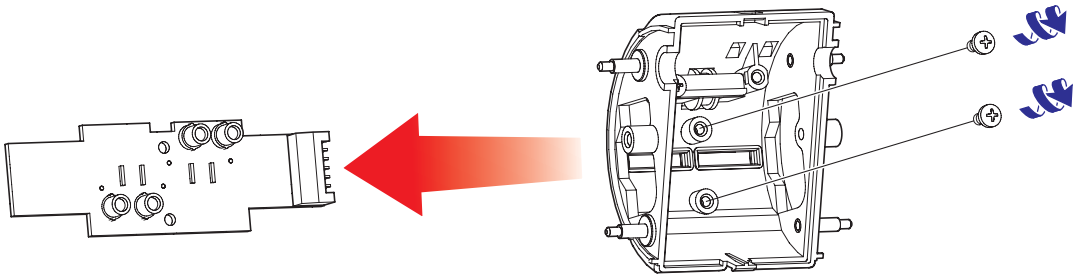
6. Insert the minus driver or equivalent into the encircled area as shown below. Lift up the Center Guide A and remove it from the Center Guide B.



7. Take out a (1) screw and a (1) prism from the Center Guide A.



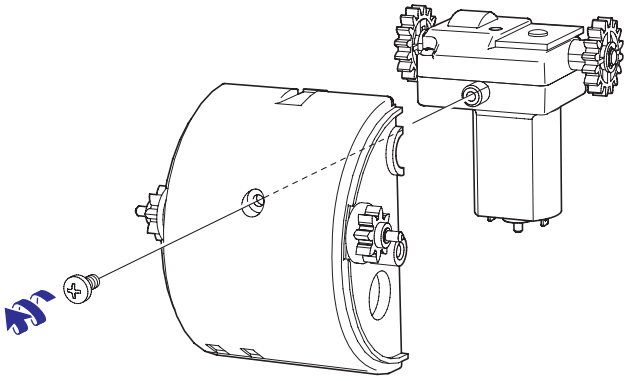
8. Take out two (2) screws on the Sensor Board. Slide aside the Sensor Board and remove it from the Center Guide A.



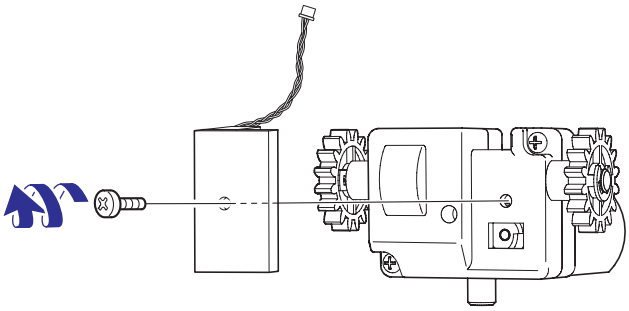
6-4. Replacement of Encoder Board/Motor Unit

When replacing the Encoder Board and Motor Unit, follow the instructions below.

1. Take out a (1) screw from the Center Guide B (Refer replacement procedure 6. of 6-2. Replacement of Sensor Board. Remove the motor Unit.



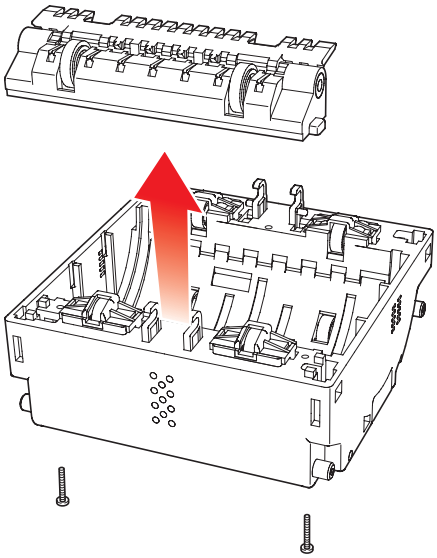
2. Take out a (1) screw and a (1) Encoder Board from the Motor Unit.



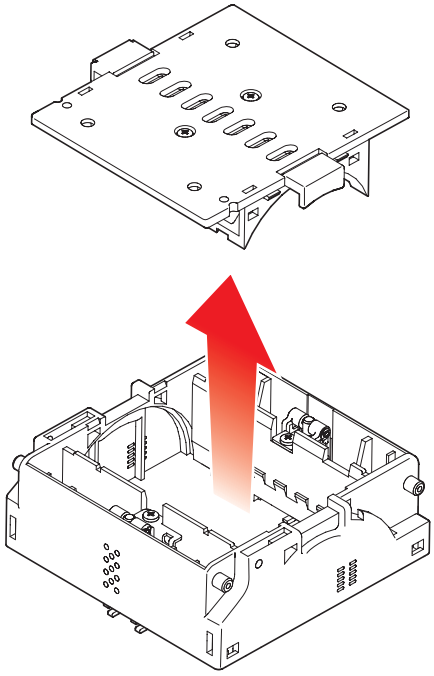
6-5. Replacement of Solenoid

When replacing the Entrance and Exit Solenoid, follow the instructions below.

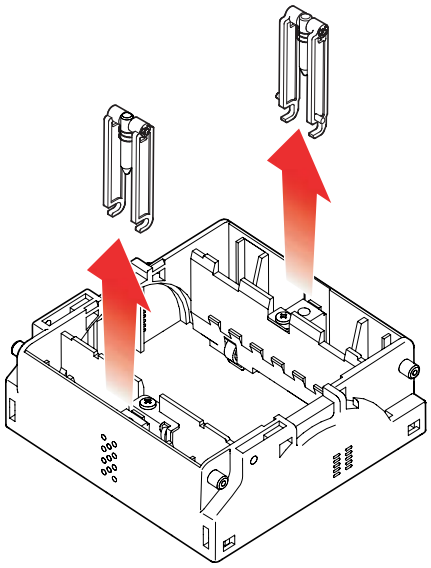
1. Take out two (2) screws from the Lower Guide and then remove the Guide Assy.



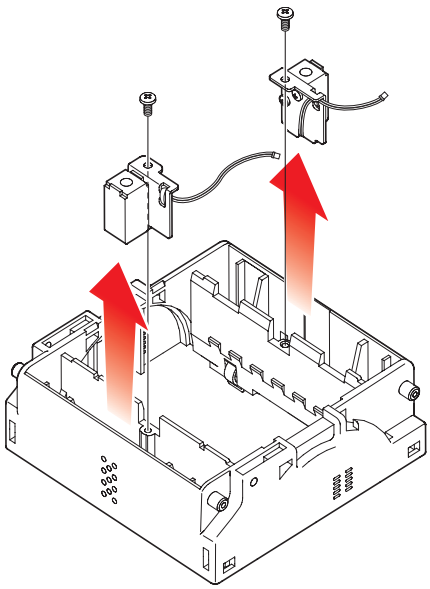
2. Put the Lower Guide upside down and open the Lower lid pressing the Lower Lid Open/Close Button.



3. Remove two (2) Guide Levers from the Lower Guide.



4. Take out two (2) screws and then remove a (1) Entrance and a (1) Exit Solenoid.



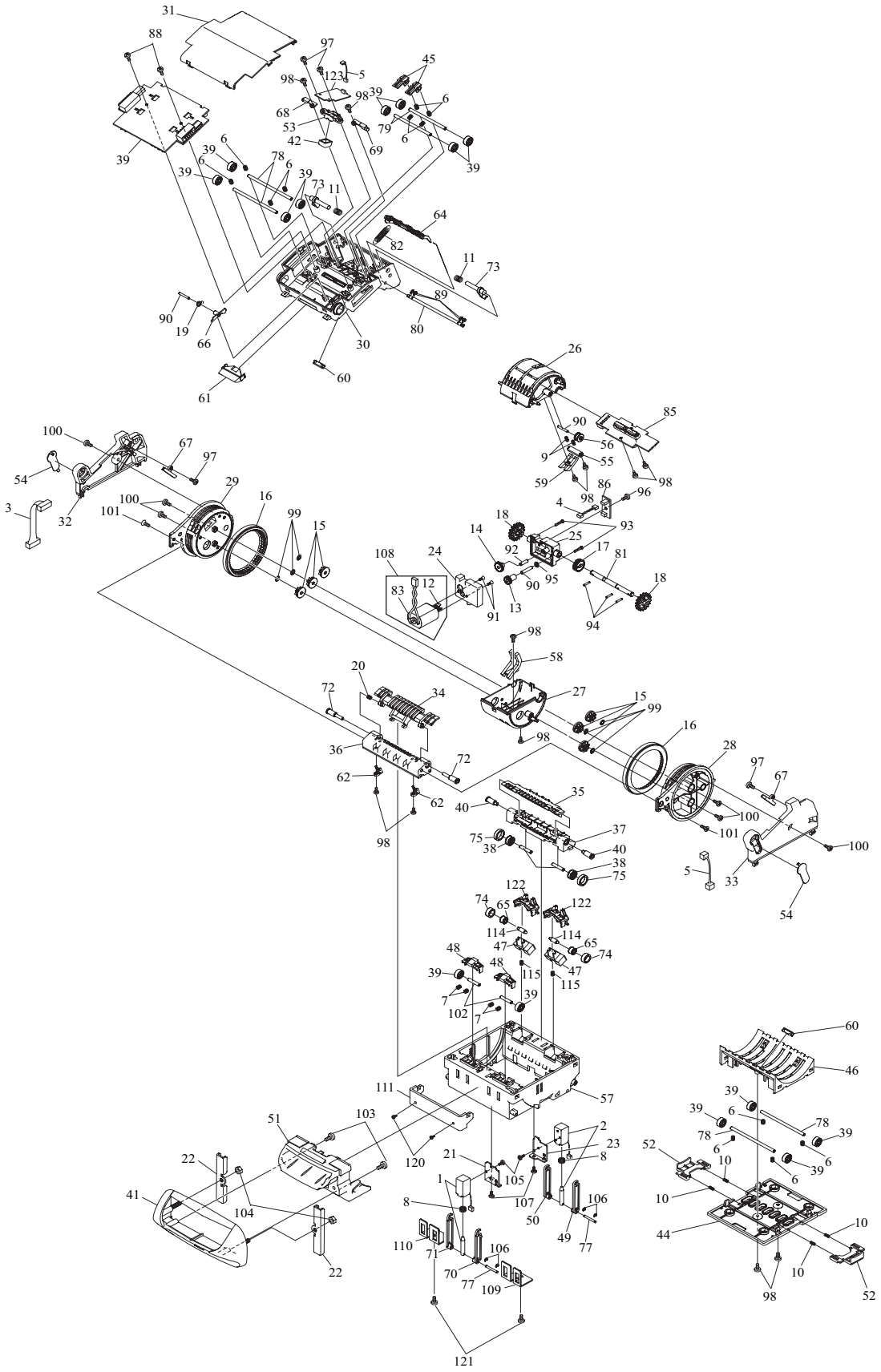
TAIKO Service Manual

Chapter 7

Exploded View/ Parts List

Issue: 04/2007

7-1. Exploded View



7-2. Parts List

No.	EDP No.	Part No.	Description	Remark
1	115543	TDS-04B-328	Enterance Solenoid	
2	115544	TDS-04B-327	Exit Solenoid	
3	114977	3280-05-01	Relay Harness (14P)	
4	114978	3280-05-02	PI Harness (3P)	
5	114980	3280-05-04	Relay Harness 2 (4P)	
6	115484	4045CS0101	Pinch Roller Spring (A)	
7	115485	4045CS0102	Pinch Roller Spring (B)	
8	115486	4045CS0103	Solenoid Spring	
9	115487	4045CS0104	MG Roller Spring	
10	115488	4045CS0105	Lower Guide Lock Spring	
11	115511	4045CS0106	Lock Spring	
13	110923	4045GE0103	Worm Gear	
14	110914	4045GE0102	Idle Gear	
15	110915	4045GE0106	Guide Gear	
16	120609	4045AS0101	Feed Roller Assy	
17	110924	4045GE0104B	Worm Wheel	
18	110925	4045GE0105A	Drive Gear	
19	115509	4045KS0103A	Shutter Sensor Spring	
20	115510	4045KS0104	Shutter Spring	
21	115491	4045PT0105	Solenoid Bracket (B)	
22	115492	4045PT0103	Faceplate Bracket	
23	115493	4045PT0101A	Solenoid Bracket	
24	110865	4045RE0101	G Box B	
25	110866	4045RE0102B	G Box A	
26	110867	4045RE0103A	Center Guide A	
27	110868	4045RE0104A	Center Guide B	
28	110869	4045RE0105B	Center Guide R	
29	110870	4045RE0106B	Center Guide L	
30	110871	4045RE0107C	Upper Guide	
31	110872	4045RE0108A	Upper Guide Cover	
32	110873	4045RE0109B	Side Cover L	
33	110874	4045RE0110B	Side Cover R	
34	110875	4045RE0126A	Guide Lever A	
35	110876	4045RE0127A	Guide Lever B	
36	110877	4045RE0128B	Center Guide C	
37	110878	4045RE0129B	Rear Guide	
38	110879	4045RE0130	Drive Pulley	
39	110880	4045RE0131	Pinch Roller	
40	110881	4045RE0132	Lever Bush (A)	
41	110884	4045RE0135A	Faceplate	
42	110885	4045RE0147	Dummy Head	
44	110889	4045RE0113	Lower Guide Cover	
45	110890	4045RE0118A	Spring Guide	
46	110892	4045RE0121A	Lower Guide	
48	110894	4045RE0123	Clamp B	
49	110895	4045RE0124A	Lever Link L	
50	110896	4045RE0125A	Lever Link R	
51	110897	4045RE0136B	Faceplate Guide Type1	For Euro
	118069	4045RE0158B	Faceplate Guide Type2	For England
	121519	4045RE0161B	Faceplate Guide Type3	For Chaina-Taiwan
	131111	4045RE0164	Faceplate Guide Type5	For USA
52	110898	4045RE0137	Lower Guide Lock	
53	110899	4045RE0139A	MG Head Holder	
54	110900	4045RE0140	Harness Cover	
55	110903	4045RE0143	Spring Stopper	

No.	EDP No.	Part No.	Description	Remarks
56	110904	4045RE0144	MG Head Roller	
57	110906	4045RE0146D	Lower Base	
58	110907	4045RE0114	Prism (A)	
59	110908	4045RE0115	Prism (B)	
60	110909	4045RE0116B	Prism (C)	
61	110910	4045RE0120A	Right Guide	
62	110911	4045RE0138	Prism (D)	
64	110955	4045RE0117B	Sensor Lever	
65	115494	4045RE0150A	Drive Pulley (F)	
66	115495	4045RE0151A	Shutter Sensor Lever	
67	115496	4045RE0152	EXIT Prism (A)	
68	115497	4045RE0153	EXIT Prism (B) L	
69	115498	4045RE0154	EXIT Prism (B) R	
70	115499	4045RE0155	Guide Lever Link R	
71	115500	4045RE0156	Guide Lever Link L	
72	115501	4045RE0157	Lever Bush (B)	
73	097342	4023RE0112B	Lock Lever	
74	115502	4045RU0103B	Reject Roller (F)	
75	115503	4045RU0102B	Reject Roller	
77	115507	4045SH0103	Solenoid Shaft	
78	115490	4045SH0102A	Pinch Roller Shaft	
79	115505	4045SH0105A	Pinch Roller Shaft (B)	
80	115956	4045SH0106	Sensor Lever Shaft	
81	115489	4045SH010A	Drive Gear Shaft	
82	115508	4045TS0101B	Sensor Lever Spring	
83	115545		FEED Motor Harness Assy	
84	129970	4045-3280-06-11-01	PUB7 CPU Board	
85	109456	4045-3280-06-02B	PUB7 Sensor Board	
86	114831	4045-3280-06-03	Interrupter Board	
88	082040		2.6x6 P Tight Pan Head	
89	003705		E-Ring f2	
90	090776		Parallel Pin f2x14	
91	006022		Flat Bis M2x4	
92	072361		Parallel Pin f3x10	
93	062887		P Tight Pan Head M2x10	
94	104019		Parallel Pin f1.6x8	
95	006026		Flat Washer 3x6x0.5	
97	057260		P Tight Bind M2.6x5	
98	082040		P Tight Pan Head M2.6x6	
99	116015		Polley Slider f2x6.5x0.8	
100	107111		P Tight Bind M3.10	
101	092229		P Tight Flat Bis M3x8	
102	109658		Parallel Pin M3x16	
103	116910		P Tight Bind M4x10	
104	116908		Hexagonal Nut M4	
105	006244		Pan Head Screw M2x3	
106	003704		E-Ring f1.5	
107	116909		P Tight Pan Head M2.6x10	
108	120529		PUB-7 Trans Motor Assy	
109	127557	4045PT0106	Face Installation Plate R	
110	127555	4045PT0107	Face Installation PlateL	
111	127556	4045PT0108A	Fixed Fook For Face	
112	006037		3x12 Pan Head W Sems Screw	
113	116909		2.6x10 Pan Head P Tight Screw	
114	127512	4045RE0162	Idle Slider	
115	127511	4045CS0107	Idle Roller Spring	

No.	EDP No.	Part No.	Description	Remarks
116	127519	4045AS0104A	Drive Pulley ASSY	
117	127518	4045AS0103A	Drive Pulley (F)ASSY	
118	115504	4045RU0101A	Feed Roller	
119	120609	4045AS0101A	Fee Roller ASSY	16&118
120	003591		Pan Head Screw M3X15	
121	055413		P Tight Bind Screw M2.6X6	
122	127513	4045RE0163	CLAMP (A-N)	
123	130880	4045-3280-06-05-01	MAG Sensor Board	PUB-11 Only

NOTE