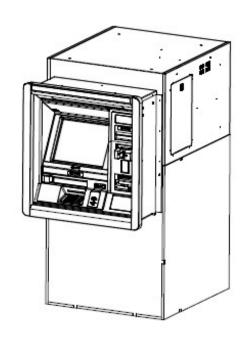
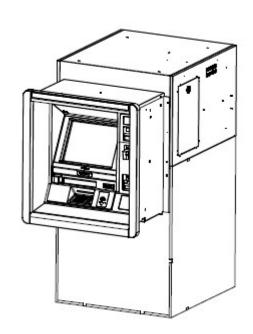


Installation Manual

MONiMAX7600TA System

V01.00.02 (2015.05.11)





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Revision History

No.	Version Date		Description of Change	Chapter	
1	V01.00.00	2012/12/10	New Publication	All	
2	V01.00.01	2015/01/14	Added the Minimum Installation & Service Clearance	Chapter 3	
3	V01.00.02	2015/05/11	Added the approximate weight of MX7600TA	Chapter 3	

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2015.05.11. 3rd Release

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Chapter 1. Preface

Purpose

▶ This manual provides guidelines for preparing and installing the MX7600TA ATM.

Audience

► This manual is written for bank branch personnel who are installing the MX7600TA. Additional audiences include designers and construction workers involved in this installation.

Support Information

► For questions or if errors occur while preparing and installing the MX7600TA, please contact the Nautilus Hyosung maintenance team. For contact information, see the email addresses and telephone numbers provided to you separately.

What is in This Manual

- ▶ In addition to installation guidelines for the MX7600TA, this manual includes important warnings you must take into consideration during installation.
- ► All measurements in this manual are in metric with inches provided in braces ().
- ➤ All information described in this manual is a licensed product of Nautilus Hyosung.

Some of the information in this manual may differ according to the network processor to be connected and may be subsequently updated for the bank's needs or from improvements by Nautilus Hyosung.

It is the policy of Nautilus Hyosung to improve products as new technology, components, software, and firmware become available. Therefore Nautilus Hyosung reserves the right to change specifications without notice.

Conventions

► Terminology

The terminology listed below is used in this document:

- Customer and consumer refer to any person who transacts business through the ATM.
- Device and unit refer to the standard and optional ATM equipment, such as monitor, card reader, printer and dispenser.
- Fascia refers to the entire front portion of the unit, including the portion where the customer transacts business.
- Module refers to a plug-in device that can be serviced or replaced.
- Note(s) and bill(s) refer to the individual documents loaded into and dispensed from the dispenser.
- Servicing and maintenance refer to the supervisor, operator and technician's tasks performed to keep the ATM operational.
- Screen refers to the text appearing on the customer display.

Abbreviations of ATM

▶ The abbreviations listed below are used in this document:

#	Abbreviations	Description
1	AD board	Analog to Digital conversion board
2	ADA	The American Disabilities Act
3	ALG	Alignment Module
4	AP	Application Program
5	Assy	Assembly
6	BATT S/W	Battery Switch
7	ВС	Bill Checker
8	BM1	Body Module1
9	BM2	Body Module2
10	BM3	Body Module3
11	BUNDLE	Bulk Note Separation Module
12	CAM	Camera Unit
13	CASSETTE	Cash & Check Cassette
14	CCIM	Cash & Check In Module
15	CCR	Contactless Card Reader
16	CDU	Cash Dispenser Unit
17	CE	Control Electronics
18	Earphone Jack	Voice Converter for Visually Disabled Persons (ADA)
19	EMV	Europay, Mastercard, Visa

#	Abbreviations	Description
20	EP	Elementary Program
21	EPP	Encryption PIN Pad
22	ESCROW	Escrow Module
23	FELT	Ink Head Cleaner Felt
24	H/W	Hardware
25	I/F	Interface
26	ISO	International Standard Organization
27	JPR	Journal Printer
28	LCD	Liquid Crystal Display
29	MCU	Magnetic Card Unit
30	OPL	Operation Panel for Customers to Operate
31	OSD board	On Screen Display Board
32	P/S	Power Supply
33	PIN	Personal Identification Number
34	PNC	Panel Control Board
35	PRT	Endorsement Module
36	PTR	Printer (mainly Receipt Printer)
37	RECOG	Recognition Module
38	REJECT	Reject Module
39	RT/A6	Retract & A6 Cassette
40	S/W	Switch
41	SCM	Separator Control Module
42	SIU	Sensor and Indications Unit
43	SP	Service Provider
44	SPR	Slip Printer (Receipt Printer)
45	TTU	Text Terminal Unit (OPL or SPL)
46	VFD	Vacuum Fluorescent Display



Safety Precautions (English)

► Common Safety Precaution



Precautions outlined this manual provide information on safe and proper handling of the product. Non-compliance of the precautions may result in injury or damage to the product. This precaution symbol with sample term tells you safety warnings during equipment handlings.

- ▶ Please read the following instructions before operating equipment.
 - Operate equipment in the order outlined in this manual.
 - Follow precautions indicated in this manual, as well as the equipment itself.
 Failure to properly address these precautions may lead to injury or damage to the product.
 - Avoid operations not addressed in this manual.
 - If you cannot remedy system problems using the methods outlined in this manual, please refer to contact information listed in the manual.
 - Any change or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

<Note!>

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

▶ Description of Precaution Symbols

Symbol	Description	
	Electrical Shock Warning Do not remove cover. Only a maintenance engineer is allowed to open the cover. Do not touch. You may receive electric shock. Make sure to turn off the power when servicing the equipment.	
	High Temperature Warning Do not touch the equipment when it is running. The equipment can get extremely hot and may cause a burn. Make sure to close the cover before running the equipment.	





Use Precaution when Moving

- The equipment is heavy. Make sure at least 2 people lift or move the equipment.
- Do not attempt to move the equipment alone. You may be injured from dropping the heavy equipment.



Fire Hazard

- Place the equipment in an area away from any combustible materials.
- The equipment may catch on fire from overheating or short circuit of the power supply unit.



Disassembly Warnings

- Do not disassemble or modify the equipment unless you are a certified engineer.
- Contact the service center for maintenance, adjustments and repairs.
- Improper disassembly may cause fire or electrical shock.



Collapse Precautions

- Do not place the equipment where the floor cannot sustain the weight of the equipment, or on slanted or unstable surface.
- Equipment may fall and cause injury or damage.



Unplug the Equipment

- Stop using the equipment immediately if it smokes, emits an unusual smell, makes abnormal sounds, or if liquids or other foreign materials enter the equipment.
- If the above-mentioned abnormalities occur, immediately turn off the power, unplug the equipment and contact the service center.
- If you ignore these symptoms, the equipment may catch on fire or cause electric shock.

<CAUTION>

- 1. TO REDUCE THE RISK OF FIRE, USE ONLY No. 26 AWG OR LARGER TELECOMMUNICATION LINE CORD
- 2. RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSED OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS
- 3. FOR PLUGGABLE EQUIPMENT, THE SOCKET-OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AN SHALL BE EASILY ACCESSIBLE
- 4. THE EQUIPMENT IS TO BE SECURED TO THE BUILDING STRUCTURE BEFORE OPERATION



Précautions pour la sécurité (French)

Précaution générale pour la sécurité



Précautions décrits de ce manuel fournissent des informations sur une manipulation sûre et appropriée du produit. Le nonrespect des précautions peut causer des blessures ou endommager le produit.

Ce symbole de précaution avec le terme d'example vous indique des consignes de sécurité lors de la manipulation de l'équipement.

- ▶ Veuillez lire des instructions suivantes avant d'utiliser l'équipement
 - Fonctionner l'équipement dans l'ordre indiqué dans ce manuel.
 - Suivre les précautions indiquées dans ce manuel, ainsi que l'équipement lui-même.
 Le défaut de traiter correctement de ces précautions peut entraîner des blessures ou endommager le produit.
 - Évitez des opérations non traitées dans ce manuel.
 - Si vous ne pouvez pas résoudre des problèmes du système en utilisant des méthodes décrites dans ce manuel, veuillez se référer aux informations de contact figurant dans le manuel, s'il vous plaît.
 - Certain changement ou des modifications dans la construction de ce dispositif qui ne sont pas expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur de faire fonctionner l'équipement.

<REMAQUE!>

Cet équipement a été testé et fondé pour se conformer aux limites pour un équipement numérique de classe A, conformément à la partie 15 des règles FCC. Ces limites sont conçues pour fournir une protection raisonnable contre des interférences nuisibles lorsque l'équipement est utilisé dans un environnement commercial. Cet équipement génère, utilise et peut émettre des fréquences radios et, s'il n'est pas installé et utilisé conformément aux instructions de ce manuel, peut causer des interférences nuisibles aux communications radios.

Le fonctionnement de cet équipement dans une zone résidentielle est susceptible de provoquer des interférences nuisibles dans le cas, l'utilisateur devra corriger ces interférences à ses propres frais.

▶ Description des symboles de précaution

Symbole	Description
A	 Choc électrique Ne pas retirer le couvercle. Seul le technicien d'entretien est autorisé à ouvrir le couvercle. Ne pas toucher. Vous pouvez avoir un choc électrique. Assurez-vous d'éteindre l'appareil lors de l'entretien de l'équipement.



À haute temperature

- Ne pas toucher l'équipement quand il est en marche.
- L'équipement peut devenir extrêmement chaud et peut provoquer une brûlure.
- Assurez-vous de fermer le couvercle avant de lancer l'équipement.



Soyez prudent lors du déplacement

- L'équipement est lourd. Assurez-vous d'au moins 2 personnes pour soulever ou déplacer l'équipement
- N'essayez pas de déplacer l'équipement seul. Vous pouvez être blessés par la chute de l'équipement lourd.



Risque d'incendie

- Placer l'équipement dans une zone éloignée de tous les matériaux combustibles.
- L'équipement peut s'enflammer de surchauffe ou de courtcircuit de l'unité d'alimentation.



Démontage

- Ne pas démonter ou de modifier l'équipement, sauf si vous êtes ingénieur certifié.
- Contacter le centre de service pour l'entretien, le réglage et la réparation.
- Le mauvais démontage peut provoquer un incendie ou un choc électrique.



Tomber

- Ne pas placer l'équipement dont le sol ne peut pas supporter le poids de l'équipement, ou sur une surface inclinée ou instable.
- L'équipement peut tomber et provoquer des blessures ou des dommages.



Débrancher l'équipement

- Cessez d'utiliser l'équipement immédiatement si il fume, émet une odeur inhabituelle, fait des bruits anormaux ou si des liquides ou d'autres matériaux étrangers dans l'équipement.
- Si les anomalies mentionnées ci-dessus se produisent, éteignez immédiatement la puissance, débranchez l'appareil et contactez le centre de service.
- Si vous ignorez ces symptômes, l'équipement peut prendre feu ou provoquer un choc électrique.

AVERTISSEMENT:

- 1. POUR RÉDUIRE LES RISQUES D'INCENDIE, UTILISEZ UNIQUEMENT AWG n° 26 OU LA LIGNES DE TELECOMMUNICATION PLUS GROSSE
- 2. RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACEE PAR UN TYPE INCORRECT. DISPOSER POUR UTILISATION DES BATTRIES SELON LES INSTRUCTIONS
- 3. POUR LES APPAREILS RACCORDES, LA PRISE DOIT ETRE INSTALLEE PRES D'EQUIPEMENT POUR ÊTRE FACILEMENT ACCESSIBLE



4. L'EQUIPEMENT DOIT ETRE SECURISE A LA STRUCTURE DU BATIMENT AVANT D'UTILISER

Related Document

- ▶ Related documents are listed below. If needed, please contact our technical support team or maintenance team for copies.
 - Operator Manual
 - Service Manual
- ► To contact the Nautilus Hyosung maintenance staff, see the email addresses and telephone numbers provided separately.

Chapter 2. Introduction

About the MX7600TA

► The MX7600TA is a through-the-wall, walk-up ATM. Consumers can deposit mixed cash/check in one slot and receive dispensed cash and transaction records through openings in the fascia.

The MX7600TA is a versatile, easily maintained delivery system that can be modified to keep pace with the bank's changing needs.

- ▶ The benefits that the new concept MX7600TA provides are as follows.
 - Removes inconvenience which occurs when bank tellers directly handle cash and checks with customers and relieves workload upon tellers by processing deposit/withdrawal of cash/check automatically.
 - 2. Relieves risks and burden of directly handling cash/check by directly keeping cash/check deposited in a safe.
 - 3. Allows tellers to calculate and close amount on hand faster than the existing manual calculation.
 - 4. A bank customer and a teller can easily interact on a touch screen, just like talking, through Nautilus Hyosung's intuitive and easy UI.
 - 5. Supports expanded options as well as basic functions of deposit/withdrawal of cash/check.
 - 6. Allows easy and quick installation and maintenance.

Installation Manual Chapter 2. Introduction

System Identification Label

▶ The System Label sample below shows the layout of the product identification label which is located inside the side box of the ATM.



Chapter 3. Installation Information

Installation Condition and Space

- ▶ When you determine the location of your MX7600TA ATM, ensure that the physical environment, including the temperature and humidity, meets the requirements. Following conditions should be met before installing the equipment.
 - 1. Avoid locations where intense direct light is reflected off the LCD screen.
 - 2. Avoid locations where strong static electricity can occur.
 - 3. The floor must allow easy wheelchair access from the front or the side.
 - 4. Space required for servicing the machine should be considered before installation.

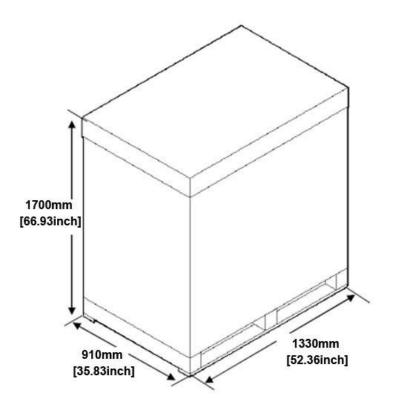
► Temperature & Humidity

Temperature	In Storage	-5°C ~ 50°C (23°F ~ 122°F)
remperature	Operating	-10°C ~ 40°C (14°F ~ 104°F)
Humidity	In Storage	10% ~ 90%
Trainialty	Operating	25% ~ 86%

Packing Dimensions

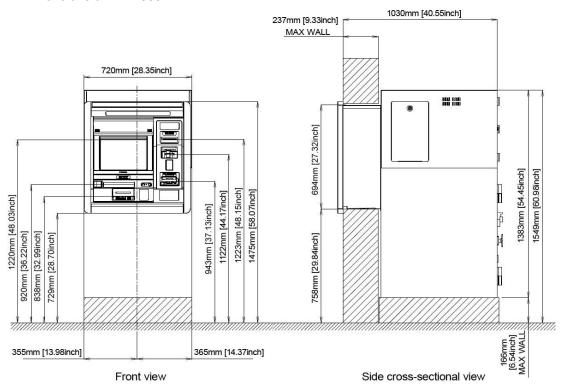
► Packaging Dimensions

In some cases it may be necessary to store the ATM (in its box) before it is installed. See the figure below for information on the dimensions of a boxed Monimax7600TA ATM.

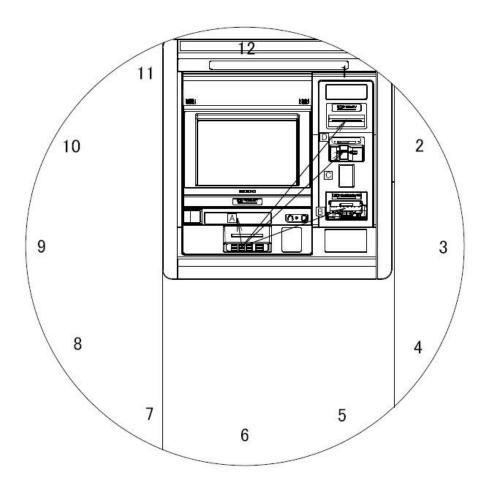


Weight & Dimensions

- ► Approximate Weight: 820kg (1,807.79lbs).
- ▶ Dimensions of MX-7600TA ATM



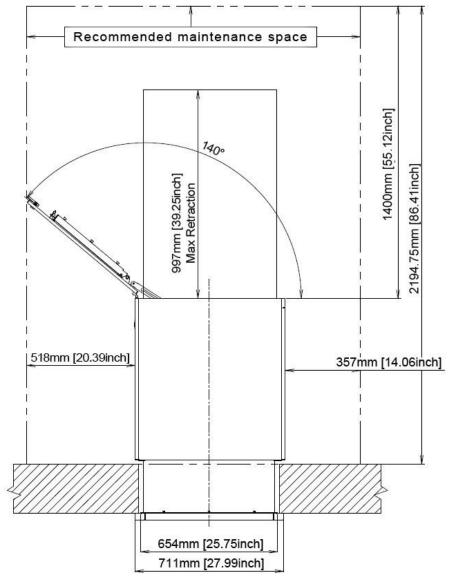
Fascia Item Locations for Voice Guidance



Unit	CDU	CCIM	MCU	SPR
Symbol	Α	В	С	D
Distance From No.5 Key	88.63mm [3.49inch]	341.64mm [13.45inch]	432.78mm [17.04inch]	508mm [20inch]
Clock Face Position	12	2'30"	1'30"	1'15"

Recommended Installation and Service Clearances

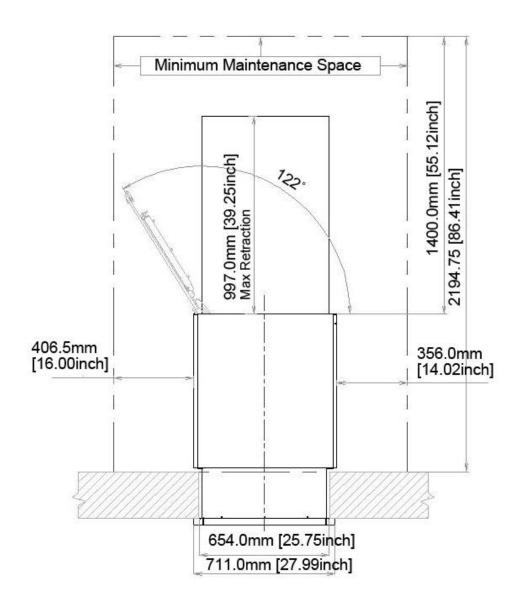
- ▶ The following diagram describes the recommended areas required for installing and servicing the MX-7600TA ATM.
 - <Note!> Hyosung highly recommends that your service personnel have the maintenance space described below to service this ATM.



Plane cross-sectional view (RECOMMEND)

Minimum Installation and Service Clearance

▶ Minimum Installation and Service Clearance Area – Areal View

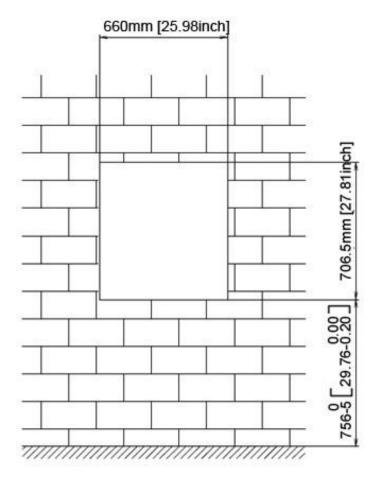


Exterior Wall

► Hole in the Wall for Installation

The wall should be prepared according to the following guidelines before installing the MX7600TA ATM.

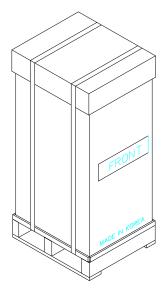
- The maximum thickness of wall that enables you to install this machine should not exceed 237mm (9.33 inch).
- The installation of a TTW is based on the floor from customer's foot of outside building.
- After installation TTW, the gap between collar and wall will be waterproofed by using of silicon.
- "The minimum maintenance space" should be secured in the rear of the TTW.
- All the measurements shown on the plan, ±5mm (0.2 inch) tolerance should be kept.

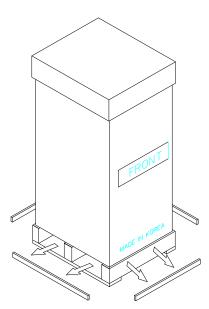


Chapter 4. System Installation

Unpacking the ATM

- ▶ Unpack the machine on top of the palette.
 - 1. Cut the straps that are fastened around the box with a knife. (Be careful when cutting the straps. Refer to the figure below.)
 - 2. Use an appropriate tool to remove the nails from the palette.
 - 3. Remove the lid, then box from the top. Do not discard the packaging materials until you have verified any shipping damage claim. Contact your distributor immediately if you see any shipping damage. Store the box in a safe place to re-use or discard of appropriately.
 - 4. Verify the contents carefully with the packing list to be sure all items listed are included. Notify your distributor of any shortages.
 - 5. If only the palette needs to be removed, lift the whole machine from the bottom and set it aside.



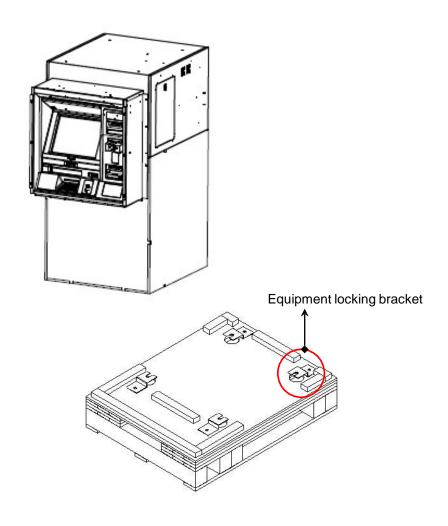


- ▶ Remove the ATM from the palette
 - 1. Remove the bolts from the locking bracket.
 - 2. Remove the Adjustor with a spanner.
 - 3. Lift the ATM using a lifting device.
 - 4. Move the ATM machine to the installation site.

PRECAUTION:

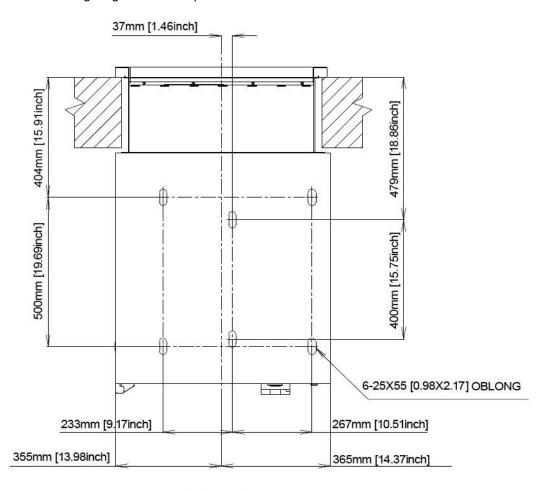
MX7600TA ATM is very heavy and can cause injuries if not handled with caution. Read the following carefully:

- Firmly close the vault door and lock the door by turning the knob completely.
- Only experienced staff members should move the ATM.
- Do not tilt the ATM when moving.



Bolting Down the MX7600TA

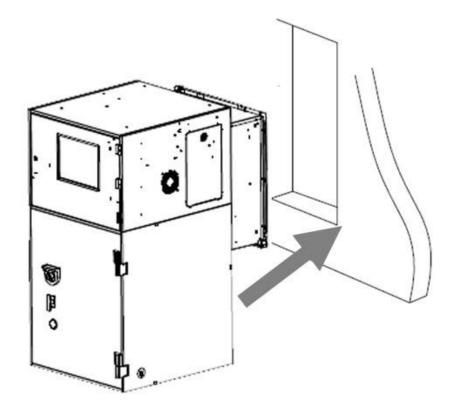
- ➤ To bolt down the MX7600TA using the Anchor Bolt Location Sheet (template), perform the following steps:
 - 1. Ensure that the surface where the MX7600TA is to be placed is level so that the unit will not tip over when opening the upper/lower modules or the door.
 - 2. Place the anchor bolt location sheet where the MX7600TA is to be installed.
 - 3. Drill the correct diameter and depth holes at the locations marked on the sheet.
 - 4. With the groove of the anchor bolt facing up, drive the anchors into the holes drilled in step 3.
 - 5. Place the MX7600TA on the bolt location sheet, matching the mounting holes of the unit with the anchors.
 - 6. Firmly tighten the mounting bolts in the anchors.
- ▶ The following diagram is a sample Anchor Bolts Location Sheet for the MX7600TA ATM.



Bottom view

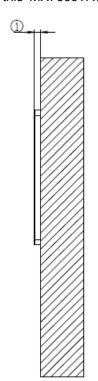
System Positing

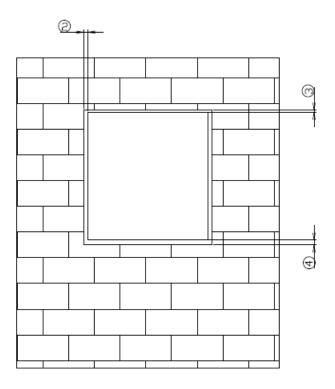
▶ Position the ATM equipment through the opening in the wall and adjust its position.



Checking the location of the opening in the wall to estimate whether the collar can be installed

► Refer to the following values for the maximum gap allowed between the wall and this MX7600TA ATM.





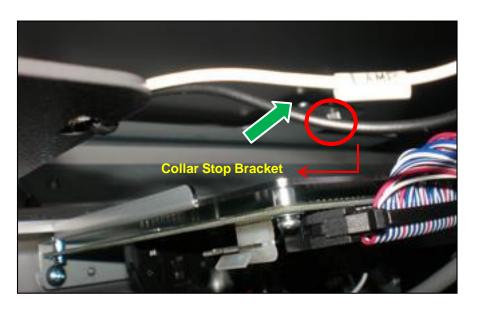
1	33.85mm [1.33inch]
2	25.5mm [1.00inch]
3	12.10mm [0.48inch]
4	26.70mm [1.05inch]

<Note!>

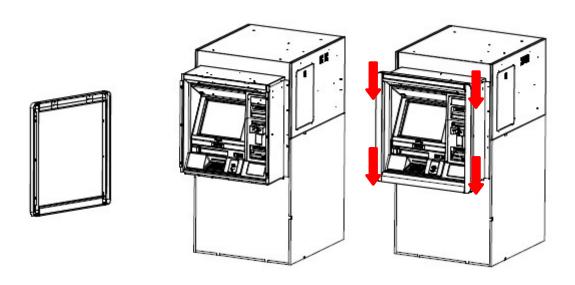
In case that the wall clearances are less that above dimensions, just take out the collar locking bracket and put it together again after installing the machine!!

Inserting the Collar Wing

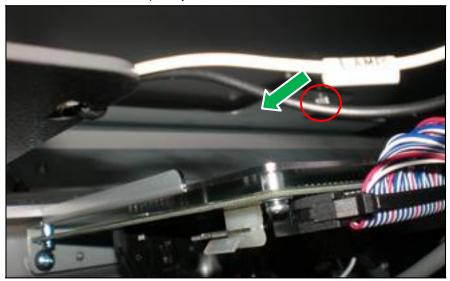
- 1. Unlocking the collar locking bracket
 - Turn off the power.
 - Open the side door.
 - Unscrew the thumb screw on the collar stop bracket inside the Front body and pull it out as far as possible.



- 2. Lift the collar wing so that the pin at the back of the bezel fits into the hole.
- 3. Push the collar wing in and then push it downward completely.



- 4. Locking the collar stopper back:
 - Push the collar stop bracket all the way in so that it is firmly in place.
 - Close the thumb screw completely.

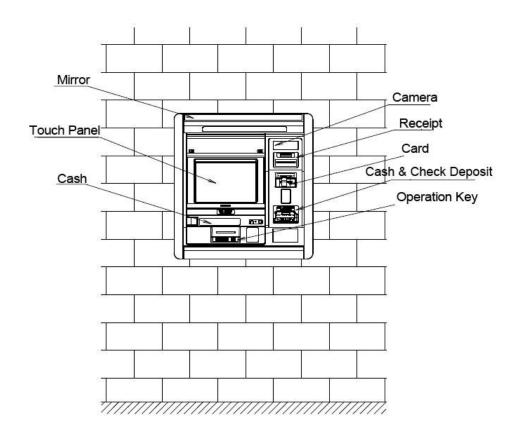


5. Seal with Silicone:

Sealing the space between the wall and the collar with silicon is recommended for maximum system function and safety.

- Seal both the top and the sides of the collar with waterproof silicone.
- Remove excess silicone.
- Do NOT apply silicone to the bottom of the collar to all for drainage.

The external appearance after the completion of installation



Appendix

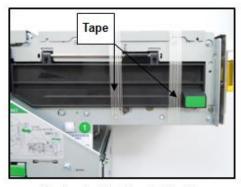
Precaution

▶ Prior to the operation of this ATM machine, firstly make sure that all connectors like communication cables, power cables and data cables inside modules which are connected to cash dispenser, card reader, receipt printer, CCIM, control electronics and so on are completely connected or not. It is likely that one of them to be disconnected due to long and unsafe transportation and may cause unexpected problem after the installation.

Cash & Check in Module (CCIM) in the Safety Body

Removing the Protective Material from the main body of Cash & Check In Module

- ▶ Bundle Section
 - 1. Remove the tape from the Bundle Door.
 - 2. Lift up the door and remove the Bubble Bag inside.



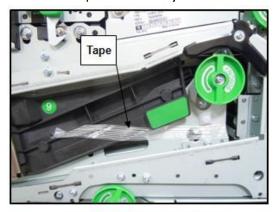
The front of the Bundle Section



Opening the door of the Bundle and removing the Bubble Bag

► Reject Section

Remove a tape from the Reject Section.



The front of the Reject Section

▶ Bottom Section

Remove the desiccant attached on the bottom.

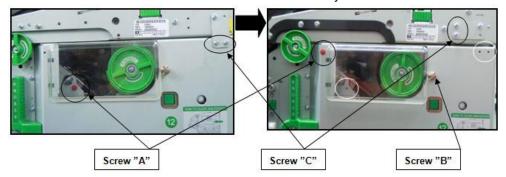


Removing the desiccant from the Bottom Section

Removing the locking section from the main body of Cash & Check In Module

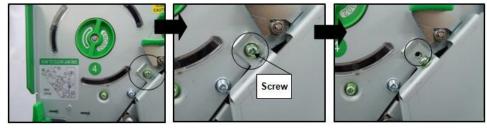
► Escrow Section

- Move the location of the Red Screw "A" fastened on the Escrow Section.
 (Unfasten the Screw "B" and open the cover. After Moving the location of the Screw "A", fasten the screw "B" again)
- 2. Move the location of the Screw "C" fastened on the Body Section.



Moving the location of the screw fixing the guide on Escrow Section

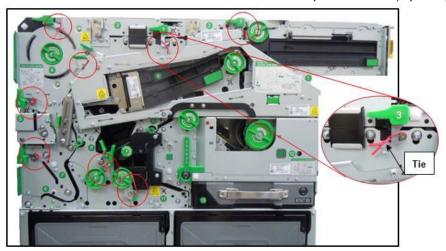
▶ Transport Section of BM2 Disassemble the green screw.



Removing the screw fixing the transport section of BM2

► Removing the Lock Lever Tie from the main body

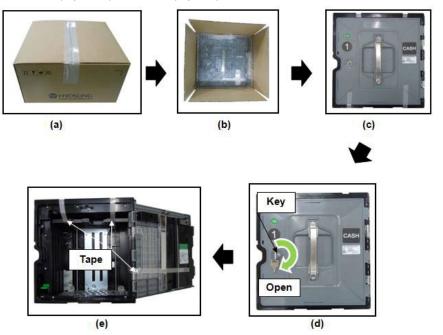
Remove the tie from the Lock Section marked in the picture below (9 points).



Removing the Lock Lever Tie from the main body

Separating the Cassette Section

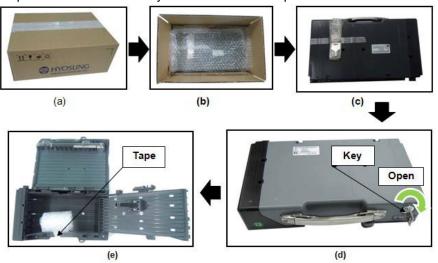
- ► Cash & Check Cassette Section
 - 1. Open the box and take out the cassette.
 - 2. Separate the key attached on the top of the cassette. And insert the key in the cassette key hole.
 - 3. Open the door with the key and remove the tape from the fixing section of upper Push Plate and (2 points) and door (1 point).



<Procedure to remove the protective material from the cassette section>

- ► RT/A6 Cassette Section
 - 1. Open the box and take out the cassette.
 - 2. Separate the key attached on the top of the Cassette. And insert the key in the cassette key hole.

3. Open the door with the key. Then remove the tape on the bottom of the middle guide.



<Procedure to remove the protective material from the RT/A6 Cassette Section>

Installing Section

► Installing the Cash & Check & RT/A6 Cassette Section
Insert and push the Cash & Check & RT/A6 cassette in body module completely.
Then it is locked automatically.





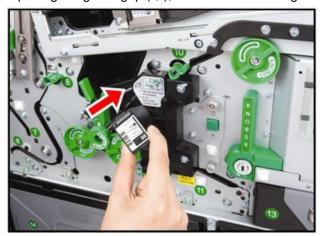
► Installing the PRT Cartridge Section

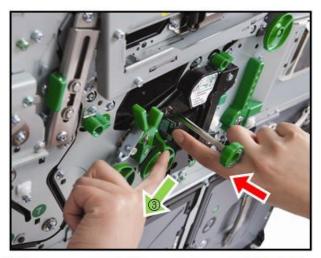


1. Pulling the green knob until stopping (①), at the same time rotating right (②) and pulling it completely.



2. After opening the green grip (③), insert the ink cartridge in the cartridge adaptor (④).







- 3. And then release the green grip, the ink cartridge is locked.

 (Before mounting it, see the ink cartridge installation guide on the packing bag)
- 4. Push the green knob completely to the left arrow direction (⑤) to sound the click of the latch, and then it is locked automatically.

Installation Manual Notes

Notes

