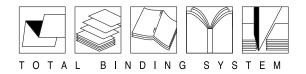
Standard QC-S30 10 Bin Friction Feed Collator

Instruction Manual



Call Us at 1-800-944-4573





HOPIZOM QC-S300/S30 TABLE TOP COLLATOR

Installation Manual For UL

HORIZON INTERNATIONAL, INC.

Kyoto, Japan

070406/QCS300QCS30UL/00E/IH UM201105-00

Table Top Collator

Horizon QC-S300/S30

Important Information

- This manual is designed to help you to install the QC-S300/QC-S30 Table Top Collator. Please read and understand this manual, and keep it in a safe and convenient place.
- Do not operate the QC-S300/QC-S30 until you have read and understood the instructions in this manual.
- Horizon International Inc. shall not be liable for incidental consequential damages resulting from: improper or inadequate maintenance by the customer, unauthorized modification or misuse, or operation outside of the environmental specifications for the product.
- Horizon International Inc. pursues a policy of continuing improvement in design and performance of the product. Therefore, the product design and specifications are subject to change without prior notice and without our legal obligation.
- All rights are reserved. No part of this manual may be photocopied, reproduced or translated into another language without the prior written consent of Horizon International Inc.



Safety Precautions

Safety precautions are indicated in this manual as follows:



The term WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

The term CAUTION indicates a potentially hazardous situation which, if not avoided, may result in serious injury, or damage to the machine.



This symbol indicates a note which includes important information. Follow the note to operate the machine safely.



This symbol indicates a prohibited action. Do not perform any prohibited action.



This symbol indicates an essential procedure. Follow the procedure to operate the machine safely.

Important	This lists the range of acceptable values and operating conditions.
Additional Information	This explains a mechanism in the machine.

- Horizon International Inc. cannot anticipate every possible situation that might involve a potential hazard. Therefore, the instructions in this manual and warning labels on the machine are therefore not all inclusive.
- All equipment shall be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy isolating device where it is locked or tagged out.
- Do not operate the machine when any covers are removed.
- Some of the drawings in this manual show the machine uncovered to help in explaining the details inside the machine.



Operating Safety Precautions

mance of the machine.

Warning for Installation



Do not give many loads on one electrical outlet. This can cause a fire or an electrical shock.

Cautions for Installation Do not install QC-S300/QC-S30 in a location where it will be exposed to direct sunlight, high temperature or humidity. Do not install the QC-S300/QC-S30 near any device which produces strong magnetic fields. Do not install the QC-S300/QC-S30 in a location which is dusty. This can cause a fire or an electrical shock. Do not install the QC-S300/QC-S30 in an unstable floor surface. This may allow the QC-S300/QC-S30 to fall over, and this can cause severe personal injury. This can also affect the perfor-



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Installation Instructions for Service Engineer

This page includes installation instructions for the machine. These instructions should only be used by trained service technicians.

How to Install a Single QC-S300/QC-S30 Collator	. 2
Stand-Alone Unit: QC-S300/QC-S30 Installation Space in mm (inches): 960 (37.8") x 1,630 (64.2") x 1,030 Stand-Alone Unit + MT-100: QC-S300/QC-S30 + MT-100	` ,
Installation Space in mm (inches): 994 (39.2") x 1,602 (63.1") x 1,030	(40.5")
How to Install Multiple QC-S300F/QC-S30F Collators	. 4
Multiple Collators: QC-S300/QC-S30 + QC-S300F/QC-S30F + QC-S300F/QC-S30F Installation Space in mm (inches): 960 (37.8") x 1,630 (64.2") x 2,692 Optional Table: MT-100	! (106")



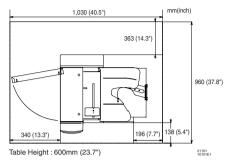
How to Install a Single QC-S300/QC-S30 Collator

Installing a Single QC-S300/QC-S30 Collator

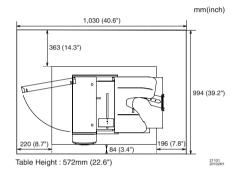
! CAUTION

- 0
- Do not install the QC-S300/QC-S30 on an unstable floor. The machine may fall over. The machine frame may be twisted, and this could affect the machine performance.
- The QC-S300/QC-S30 weighs about 73Kg (160.6 lb). This machine must be installed by at least two people.
- **1.** Unpack the collator.
 - This machine must be moved by at least two people.
 - · Check the accessories.

* Choose a stable table which can support at least 73 kg (160.6 lb) to install QC-S300/QC-S30.



* If optional table MT-100 is used, installation space is mentioned below.



2. Install each QC-S300/QC-S30 on the table by following the steps below.

If optional MT-100 table is used, follow the steps (1) through (3) described below.

(1) Attach the base plate at the bottom of the QC-S300/QC-S30 using two mounting screws.

Important

- Attach the base plate in the correct direction referring to the figure to the right. (Two left feet enter the holes on the base plate.)
- (2) Place the QC-S300/QC-S30 on the MT-100.
- Insert the projection on the base plate into the holes on MT-100.
- (3) Install four skirts.

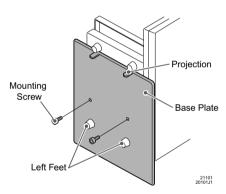
Important

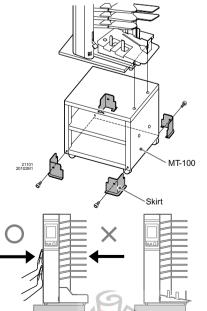
• Be sure to push the bottom of the transport door side of the QC-S300/QC-S30 when moving the machine. Do not push the bin side. This could cause the QC-S300/QC-S30 to fall over.

! CAUTION



• Be sure to turn off the power switch on the QC-S300/QC-S30.

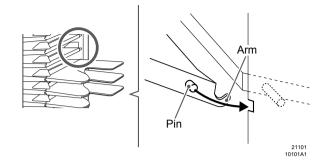




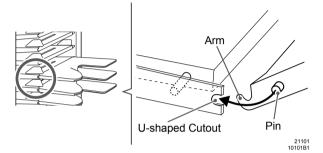


How to Install a Single QC-S300/QC-S30 Collator

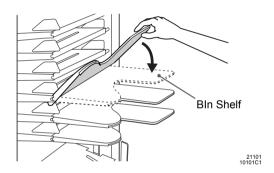
- 2. Attach the bin shelves, beginning from the bottom, by following the steps below.
 - (1) On the drive side of each bin shelf, an arm fits under a pin inside the machine. A pin on the bin shelf fits into a notch in the frame of the machine.



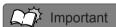
(2) On the near side of the machine, fit the arm under the pin inside the machine. A pin on the bin shelf fits into an U-shaped output on the machine frame.



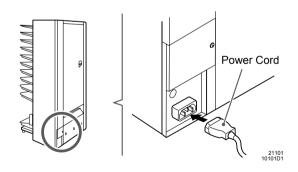
- (3) Swing the bin shelf down to lock it in position.
- (4) Install all of the other bin shelves by repeating the steps 1 through 3.



- **3** Plug the power cord into the QC-S300/QC-S30.
- $\boldsymbol{4}$. Plug the power cord into an outlet.



- Plug the power cord into a properly-grounded outlet.
- If you must use an ungrounded outlet, be sure to ground the machine separately. A poor ground can cause problems for the machine due to by static electricity, lightning strikes, or current leakage.



! WARNING

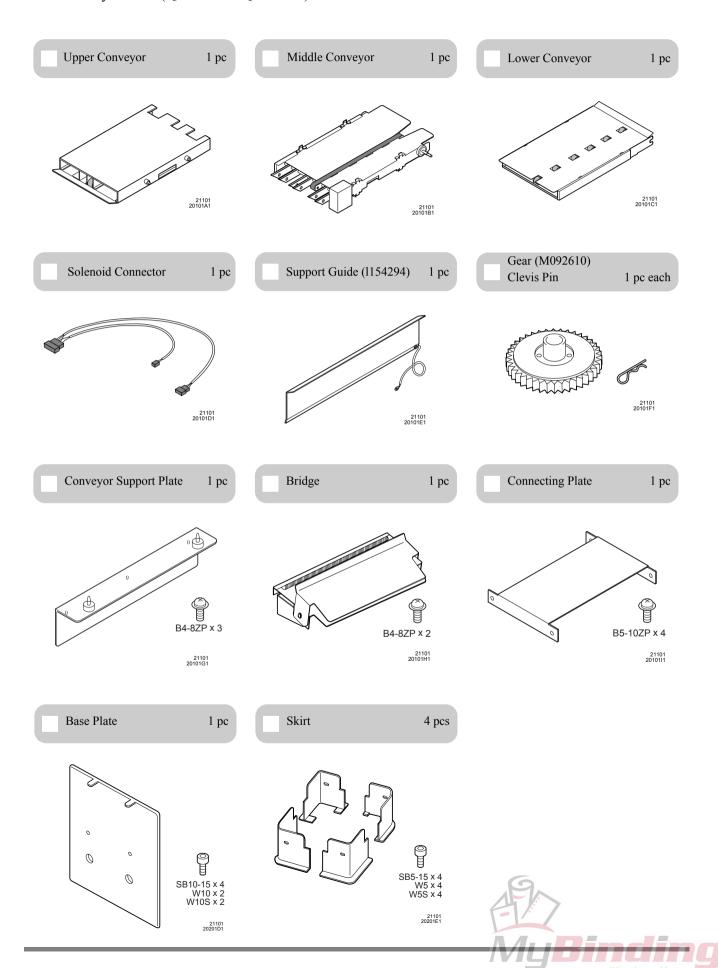


• Do not ground the machine to a gas pipe.

After the installation is complete, set the AC power supply frequency. See the instructions for "QC-S300/QC-S30 Frequency Setting." This is shipped with the machine.

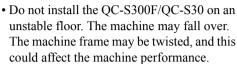


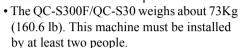
Accessory Check (QC-S300F/QC-S30F)



Installing a QC-S300F/QC-S30F Extension Module

! WARNING





1. Unpack the collator.

- This machine must be moved by at least two people.
- Check the accessories shipped with the machine.

2. Install each QC-S300F/QC-S30F on the table by following the steps below.

If optional MT-100 table is used, follow the steps (1) through (3) described below.

(1) Attach the base plate at the bottom of the QC-S300F/QC-S30F using two mounting screws.

Important

- Attach the base plate in the correct direction referring to the figure to the right. (Two left feet enter the holes on the base plate.)
- (2) Place the QC-S300F/QC-S30F on the MT-100.
- Insert the projection on the base plate into the holes on MT-100.
- (3) Temporarily place the QC-S300F/QC-S30F 1 m (40") to the left of the other QC-S300F/QC-S30F unit as shown in the illustration (viewed from the front).

Important

- Be sure to push the bottom of the transport door side of the QC-S300F/QC-S30F when moving the machine. Do not push the bin side. This could cause the QC-S300F/QC-S30F to fall over.
- (4) Install four skirts.

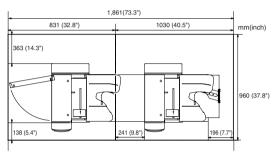
! CAUTION



 Be sure to turn off the power switch on the QC-S300F/QC-S30F. Additional Collators: QC-S300F/QC-S30F Optional Table: MT-100

* If you are installing QC-S300F/QC-S30F on any table except the MT-100, choose a stable table which can support at least 80 kg (176 lb).

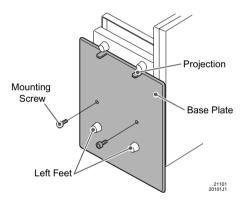
Before installing the QC-S300F/QC-S30F, complete the installation of the QC-S30 and set the AC frequency for the AC power supply.

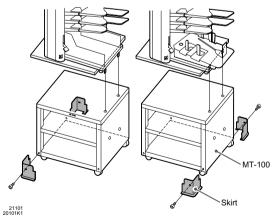


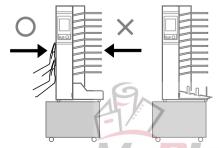
Height: 600mm (23.7")

** To connct one more collator, extra 831mm (32.8") length is required.

1101 0102L1



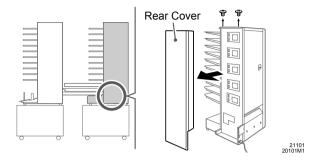


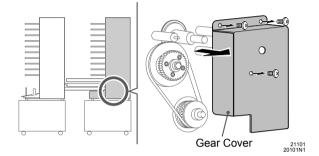


3. Install the conveyors on the QC-S300F/QC-S30F.

Preparation for Multiple QC-S300F/QC-S30F Collators

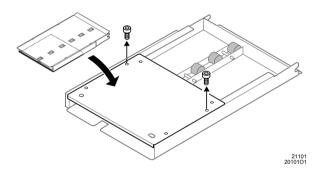
- (1) Remove the rear cover from the unit.
- (2) Remove the three screws and the gear cover.





Install the lower conveyor on the QC-S300F/QC-S30F

(1) Remove the two locking screws on the bottom of the lower conveyor

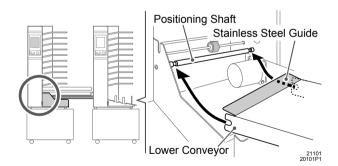


(2) Push in the lower conveyor so that the U-shaped cutouts on the end of the lower conveyor fit over the shaft on the QC-S300F/QC-S30F.

/!\ CAUTION

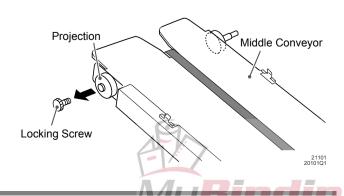


• The tip of the stainless steel guide can bend easily. Install the guide carefully.

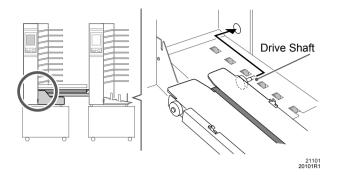


Mount the middle conveyor on the QC-S300F/QC-S30F

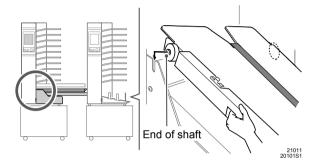
(1) Remove the locking screw on the middle conveyor.



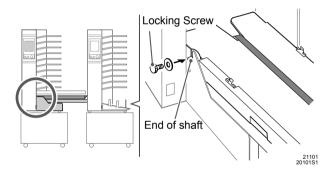
(2) Insert the end of the drive shaft on middle conveyor into a hole on the rear frame.



(3) Insert the end of shaft into a cutout in the front frame.

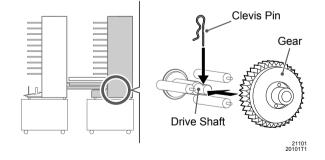


(4) Tighten the locking screw removed in step (1) to attach the parts.



Attach the accessory gear to the QC-S300F/QC-S30F.

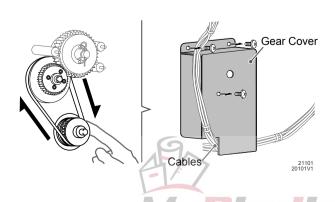
- (1) Attach the accessory gear to the rear of the machine.
- (2) Attach the gear using a clevis pin.



- (3) Rotate the pulley by hand and check that the gear turns smoothly.
- (4) Attach the gear cover using three screws.

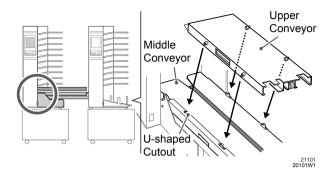


• Be careful that the nearby cables are not caught.



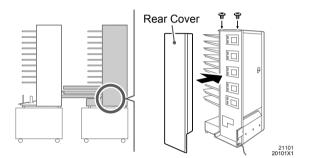
Attach the upper conveyor to the middle conveyor.

(1) Insert the four pins on the upper conveyor into the U-shaped cutouts on the middle conveyor.

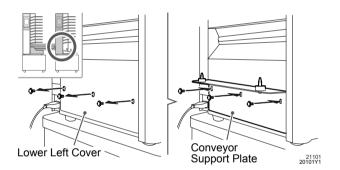


Connecting the QC-S300/QC-S30 and the QC-S300F/QC-S30F

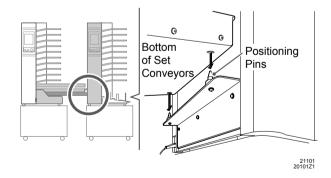
(1) Attach the rear cover on the QC-S300F/QC-S30F using two screws.



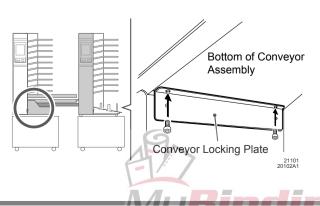
- (2) Remove three screws on the lower left cover of the QC-S300/QC-S30.
- (3) Attach conveyor support plate using the three screws removed in step (2).
- Fasten the three screws in the tops of the holes so that the conveyor support plate is positioned as low as possible.



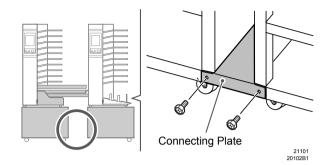
- (4) Lift up all of the conveyors and insert the two positioning pins on the conveyor support plate into the two holes on the bottom of the conveyor.
- When inserting the positioning pin, move the QC-S300/QC-S30.



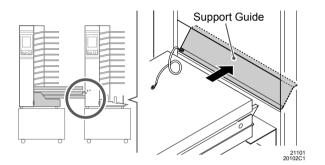
(5) Attach the lower conveyor using the conveyor locking plate using two mounting screws.



(6) Connect the two MT-100 tables using the connecting plate. Set the connecting plate between the tables and attach it using four screws.

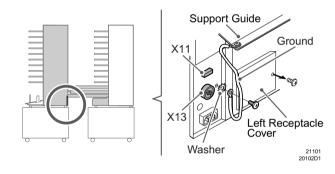


- (7) Insert the bridge between the lower conveyor and the lower left cover, and push it down into position
- (8) Lock the casters on both MT-100 tables.



Wiring Between the QC-S300/QC-S30 and the QC-S300F/QC-S30F

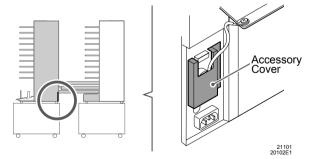
(1) Remove a screw and the left receptacle cover on the rear of the QC-S300/QC-S30. Mount the ground of support guide next to the connector using a screw.



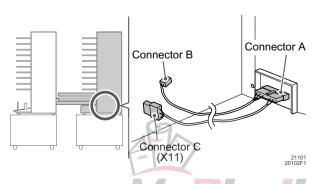
! CAUTION



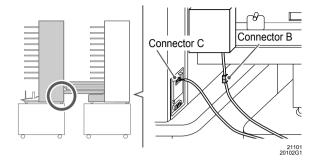
- Connectors X11 and X13 are NON-LPS.
- (2) Attach the accessory cover on the rear of the QC-S300/QC-S30 using the screw removed in previous step.



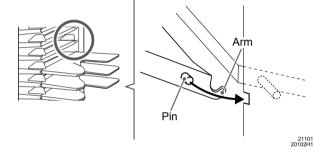
(3) Attach solenoid connector A to the right connector on the QC-S300F/QC-S30F.



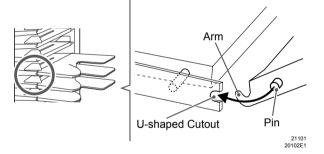
- (4) Attach solenoid connector B to the connector on the conveyor.
- (5) Attach solenoid connector C to the left connector on the QC-S300/QC-S30.
- (6) Insert connector cables into the duct of the middle conveyor.



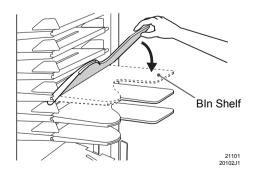
- 4. Attach the bin shelves, beginning at the bottom by following the steps below.
 - (1) On the drive side of each bin shelf, an arm fits under a pin inside the machine. A pin on the bin shelf fits into a notch in the frame of the machine.



(2) On the near side of the machine, fit the arm under the pin inside the machine. A pin on the bin shelf fits into a U-shaped cutout on the machine frame.

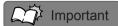


- (3) Swing the bin shelf down to lock it in position.
- (4) Install all of the other bin shelves by repeating the steps 1 through 3.





- **5.** Plug the power cord into the QC-S30F.
- **6.** Plug the power cord into an outlet.

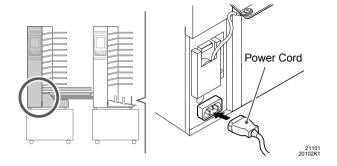


- Plug the power cord into a properly-grounded outlet.
- If you must use an ungrounded outlet, be sure to ground the machine separately. A poor ground can cause problems for the machine due to by static electricity, lightning strikes, or current leakage.

WARNING



• Do not attach the ground to a gas pipe.



- * When connecting three collators, repeat these steps to connect the two QC-S300F/QC-S30F's.
- * After the installation is complete, set the AC power supply frequency for each unit. See the "QC-S300F/QC-S30F Frequency Setting" instructions which are shipped with each machine.

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