QuickServe II

Dumbwaiter Installation Manual

June 25, 2019

This dumbwaiter was designed to meet the stringent requirements of ASME A17.1, and ASME A17.5 when installed properly. Before installing this product, check with local authorities to assure local code compliance, installation requirements, and to determine if permits are required.

Save these instructions.

For ease of installation, we recommend that one hoistway wall at the lower level be left open until the dumbwaiter is installed.

Basic installation steps:

- 1. Mount lower section of track and unit to hoistway wall.
- 2. Attach other pieces of track.
- 3. Mount limit cams.
- 4. Mount hoistway junction box.
- 5. Install interlocks.
- 6. Install hall station controls.
- 7. Lubricate track and gear rack.
- 8. Completion checklist.

DUMBWAITER OVERVIEW



The dumbwaiter car is fully assembled onto the chassis and bottom piece of track. If necessary, the car can be removed from the chassis for installation.

1. Stand dumbwaiter assembly inside hoistway and fasten to wall at brackets. Refer to the application drawing for location and required running clearances.



Attach (3) track brackets to each remaining piece of track.
Note that the limit switch cams will mount to the wall in an area between 5" and 10" below each landing level. Avoid locating a track bracket in this area. *See page 6 for cam locations.*



3. The lower end of each additional track section with have splice bars inside the slots. Loosen the set screws and slide the splice bars half-way out of the track and tighten the set screws.



- 4. Stack the additional track pieces onto the top end of the track already mounted to the wall and fasten to the wall at the track brackets.
- 5. Plug install control switch into the 3-pin connector that is wired to the circuit board (control may already be installed).

Turn the dumbwaiter switch on and wait for a single beep. If the LED below the on/off switch is a solid color with no flashes, then the dumbwaiter is ready to run. If the LED flashes, then a safety circuit is open. Refer to wiring diagram for flash codes.

Use the install control switch to run the car up far enough that you can work underneath it.

Note: There is a wire jumper wire factory installed between terminals 4 and 9. This is bypasses the door closed safety circuit so the dumbwaiter can run during installation until the interlocks are installed. This jumper must be removed before completing the installation.

6. Attach the limit cams to the hoistway wall with wood screws. See illustration below for locations. The cams are slotted to allow for adjustment later.



7. Mount hoistway junction box to hoistway wall in the lower part of the hoistway, below bottom landing where it will not interfere with moving car.

Carefully unwind the cable leading to the car before attaching to wall. It is important to not have any twists in the cable.

The hoistway junction box is where the interlocks and battery charger connect to the control system. All wire connections at the junction box have been made at the factory.



Note: Travel is measured from bottom floor sill to top floor sill.

- 8. Carefully run the car to the top and bottom limits to verify the travel cable length.
- 9. Connect the battery charger to 120VAC power source.

- 10. Mount each interlock per the instructions provided with the interlock.
- 11. Route the 4-conductor cables between the hoistway junction box and each interlock. Each cable is marked with the appropriate floor number.

12. (Connect w	ire to eac	ch interloc	k as follows:

Wire Color	Interlock Terminal
Red	А
Black	В
White	С
Green	D

- 13. Mount the machine access switch so that the switch is held closed when the machine access door is closed. This switch is at the end of a 6' long cable connected to the junction box and is wired in series with the interlock door closed switches.
- 14. At the controller terminal blocks, remove one end of the wire jumper between terminals 4 and 9. This jumper is intended for troubleshooting and installation purposes only. It bypasses the 'door closed' circuit. This jumper should never be left in place.

WARNING!

Once the batteries are installed in the hall stations, a push of a control button will cause the dumbwaiter to run automatically until the directional limit switch or final limit switch is made. If a person needs to be inside the hoistway, open the car gate to prevent accidental startup.

The hall station buttons are connected to a wireless RF transmitter inside a 2X4 gang box. The transmitters are factory programmed to the RF receiver that is mounted on the controller on the bottom side of the dumbwaiter car.

15. Remove each hall station plate and insert the 2032 battery into the transmitter. (Battery is supplied inside the gang box.)



16. Lubricate the track and gear rack with a lithium grease. A tube is provided with the small parts box.



17. Perform the completion checklist before turning the dumbwaiter over to the customer.

COMPLETION CHECKLIST

- Verify each hall station 'calls' and 'sends' the dumbwaiter to the appropriate landing.
- Verify the floor of the dumbwaiter stops level with the sill at each stop. Adjust position of cams if necessary.
- Verify all controls are inoperable if the car gate is open.
- Verify all controls are inoperable if a hoistway door is open. *Test each hoistway door individually.*
- Verify each hoistway door locks when the dumbwaiter is not parked at that landing.
- Verify all controls are inoperable if the final limit switch is actuated.
- Verify that the travel cable travels freely.
- Verify that the track and gear rack are lubricated.
- Verify all track mounting hardware, switch cams and car hardware are securely tightened.

AUDIO/VISUAL STATUS INDICATIONS

The dumbwaiter is equipped with a 3-color LED to indicate the operating condition of the lift. The LED is on the bottom side of the controller beneath the car. Accompanying this is an audible alarm that will sound accordingly.

STATUS LIGHT	AUDIBLE ALARM	CONDITION
RED-YELLOW-GREEN	1 Second beep	Power-up Cycle
SOLID GREEN	None	Ready to Operate
YELLOW BLINK	1/4 Second beep (30 Seconds)	Batteries are not being charged (Beeping repeats every 10 minutes)
YELLOW PULSE	1/2 Second beep (5 Minutes)	Low Battery Voltage (under 22.5 volts)
2 YELLOW FLASHES	1/2 Second beep	Car Gate or Hoistway Door Open
2 RED FLASHES*	3 Second beep	Sensor Fault (2 or more sensors engaged)
3 RED FLASHES*	3 Second beep	Final Limit
4 RED FLASHES*	3 Second beep	Travel Timeout (Motor running for more than 2-1/2 minutes)
5 <mark>RED</mark> FLASHES*	3 Second beep	Overspeed Governor set
YELLOW SOLID (30 SECONDS)	Rapid beeps	Overload (Over 22 amps for 3 seconds) (automatically resets after 30 seconds)
OFF (SLEEP)*	None	Very Low Battery Voltage (Under 20.5 Volts for 5 minutes)
FLASH = 2 per second		
BLINK = 1 per second		
PULSE = 1 per 10 seconds		

*Requires power to be cycled OFF/ON.