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Model 1175 Whisper Slide All Glass Sliding Door Package

Mechanical Installation Manual

with U30 Control



WARNING

Do not install, operate or service this product unless you have read and understand the Safety Practices, Warnings, Installation and Operating Instructions contained in this manual. Failure to do so may result in property damage, or bodily injury.

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CAUTION!

IMPORTANT INFORMATION FOR THE INSTALLER AND OWNER

Read all of this First!

Read these safety practices before installing, operating or servicing the automatic door. Failure to follow these practices may result in serious consequences.

Read, study and understand the operating instructions contained in or referenced in this manual before operating. If you do not understand the instructions, ask the installing qualified technician to teach you how to use the door.

Do not install, operate or service this product unless you have read and understand the Safety Practices, Warnings, Installation and Operating Instructions contained in this manual. Failure to do so may result in property damage, or bodily injury.

This manual and the owners' manual must be given to and retained by the purchasing facility or end user.

- 1. If the door appears broken or does not seem to work correctly, it should be immediately removed from service and a qualified service technician contacted for corrective action.
- 2. Disconnect power at the fused disconnect during all electrical or mechanical service. When uncertain whether power supply is disconnected, always verify using a voltmeter.
- 3. All electrical troubleshooting or service must be performed by qualified electrical technicians and must comply with all applicable governing agency codes.
- 4. It is the responsibility of the installing door technician to install all warning and instructional labels in accordance with ANSI A156.10.
- 5. It is the responsibility of the purchasing facility or end user to keep warning and instructional labels and literature legible, intact and with the door.
- 6. Replacement labels and literature may be obtained from local NABCO Entrances Inc. distributors. For the name of a local distributor, contact NABCO Entrances Inc. at (877-622-2694) for assistance.
- 7. Do not place finger or uninsulated tools inside the electrical control box. Touching wires or other parts inside the enclosure may cause electrical shock, serious injury or death.

TO THE INSTALLER:

The purpose of this manual is to familiarize the purchaser with the proper installation and operation of this system. It is essential that this equipment be properly installed and operational before the door is used by the public. It is the installer's responsibility to inspect the operation of the entrance system to be sure it complies with any applicable standards. In the United States, ANSI Standard 156.10 covers the GT1175 Slide Door System. Other local standards or codes may apply. Use them in addition to the ANSI standard. The GT1175 is listed with the Underwriters Laboratory and is identified as such on the label.

Instruct the building owners and operator on the essentials of the operation of the door. The owner should follow these instructions to determine whether the door is operating properly and should immediately call for service if there is any malfunction. All installation changes and adjustments must be made by qualified, NABCO trained technicians.

OBJECTIVE:

The GT1175 is designed to be installed in the frame or to the surface of the frame of a door opening. The door function is controlled by the Microprocessor Control. This control offers many features to accommodate most installation options. This manual offers step by step instructions to install the GT1175. Refer to Setup and Programming Manual 15-9000-30 for setup of the Microprocessor Control. Refer to the "Electrical Installation Manual for Sliders 15-10596-30" for electrical diagrams. A trouble shooting section is found in "Electrical Installation Manual for Sliders 15-10596-30".

SPECIFICATIONS:

Power input:	120 (±10%) AC 50-60 Hz, 10 Amps
Available current for accessories:	U Series Control 0.35 Amps 12 Volts DC
Available wire size for incoming power:	14 AWG

• Electrical conduit and switch or sensor wires should be pulled through the frame before mounting the GT1175 System.

NOTE: TO PREVENT ELECTRICAL INTERFERENCE FOR THE 120 VAC LINE, ALWAYS ROUTE 120 VAC POWER IN FROM THE END OF THE HEADER THAT IS OPPOSITE TO THE CONTROLLER AND MOTOR/OPERATOR. REFER TO ELECTRICAL MANUAL P/N 15-10596-30 FOR MORE INFORMATION.

Tool List:	7/16" Wrench: Box or Open End 9/16" Wrench: Box or Open End 15/16" Wrench: Box or Open End 3/8" Drive Socket Wrench 3/8" Socket 9/16" Socket 6" Socket Extension	Phillips Screwdrivers: #2 and #3 Slotted Screwdrivers: small and medium Hand Drill: Electric and Cordless Drill Bits: 1/8" 7/32" 1/4" Masonry 82 Deg. Countersink
	6" Socket Extension	82 Deg. Countersink Broom
	Then wrenches. 5/52 and 5/10	Tape Measure



A. Masonry Opening (MO) Preparation

- 1. Check floor across entire opening. Make sure installation area is level.
- 2. Allow for tile or other materials that may change floor height.
- 3. MO width should be package width plus 1/4 inch per side. (See Figure 2).



B. Framing and Header Assembly

- 1. Place header on a flat surface with removable cover facing up. Protect header from scratches.
- 2. Remove two screws from bottom of cover. Open cover (See Figure 4). Remove parts box. Set aside.
- 3. Position jamb tubes on each end of header. Fasten with provided 1/4-20 x 1 inch bolts into rivnuts in jambs (See Figure 5). Refer to label on jamb for proper location.
- 4. Lift header and jamb tubes into position.
- 5. Level header assembly by shimming under appropriate jamb if necessary.



- 6. Plumb one jamb tube in both planes. If required, shim back of jamb (See Figure 6). Fasten jamb to building.
- 7. Plumb and securely fasten other jamb.



C. Installation of Fixed Panel

- 1. There is approximately four feet of cable secured inside the header for the control panel harness. Withdraw a sufficient amount of the harness to reach the control panel switches in the jamb tube.
- 2. Locate loose connecter in parts box in header and install wires into connector, see Figure 8.
- 3. Remove control panel switch assembly packed inside the header.
- 4. Route the control panel harness from the side of the header through jamb tube and through the access cutout and then install switches in jamb.
- 5. Remove end caps on the rails prior to installation.
- 6. Locate the fixed panel near the jamb tube.
- 7. Connect the power down harness near the front of the top rail to the two yellow wire harnesses from the header. Push the excess harness back into the header or hide it in the top rail of the sidelite.



- 8. Position the front edge of the fixed sidelite near the panel block as shown in Figure 7A.
- 9. Turn the panel block to align it with the top rail as shown in Figure 7A.
- 10. Slide the sidelite onto the panel block as shown in Figure 7B. Ensure that no wires are pinched.
- 11. Rotate sidelite to align the back edge with the two panel blocks attached to the header as shown in Figure 7C.
- 12. Slide sidelite onto the two panel blocks as shown in Figure 7D. Again, be careful that no wires are pinched.
- 13. Holding sidelite in the desired installed position, drill through the holes provided in the top rail into the panel blocks using 7/32" drill. Secure sidelite with provided 1/4-20 self tapping screws to the block near and on the jamb tube first. Then, secure the sidelite to the block at the nose.



D. Installation of Floor Bracket and Bottom Guide

Figure 9 - Bottom Guides

- 1. Locate the bottom guide assembly in the parts box (see Figure 9). NOTE: There is a right hand and left hand bottom guide that will correspond to a right and left door.
- 2. Slide rollers into the end of the bottom rail of the sidelite. You will attach them to the door later. (see Figure 10).
- 3. Snap a chalk line from jamb to jamb across the face closest to the sidelite (see Figure 10).



- 4. Ensure that you have secured the sidelite to the blocks and bracket before installing the floor bracket.
- 5. Holding the sidelite parallel to the chalk line, place the floor bracket inside the bottom rail flush to the end of the rail. Mark the two holes in the bracket on the floor. Drill the holes with a masonry bit and fasten the bracket to the floor with the plastic anchors and #10 x 1-1/2 inch screws (see Figure 11)



Figure 11 - Sidelite with Floor Bracket

E. Installation of Sliding Door(s)

- CAUTION: To prevent damage to the sidelite, place a piece of cardboard against the sidelite such that it will be between the sidelite and door panel bottom rails when the door is hung in position.
 - 1. Loosen hanger roller (11/16" wrench) and anti-riser (15/16" wrench) nuts (See Figure 12).
 - 2. Lift door onto track. By slightly tilting door approach angle it will make it easier to allow rollers to catch track (See Figure 13).



Do not panic door until all adjustments are made and doors are secured.

F. Adjustment of Door

- 1. Door height from finished floor is adjustable from 5/16 inch to 9/16 inch (See Figure 14).
- 2. Place a 15/16 inch wrench on nut of roller. With another 15/16 inch open end wrench, rotate bolt clockwise to raise or lower door.

NOTE: Do not rotate the bolt counterclockwise. As this would unthread the bolt from the roller.

- 3. Still holding bolt head, secure nut against door carrier. Repeat this process on remaining rollers.
- 4. Leading edge of doors should meet with no gap between opposite door (or jamb tube in the case of a single unit) at top or bottom. If necessary, readjust height and angle of doors. See Step 2 above.
- 5. Slide anti-risers up in slot until there is a 1/64 inch to 1/32 inch gap between anti-riser wheel and anti-riser track (See Figure 12). Tighten nut on anti-riser wheel.
- Attach belt clip(s) using #12 x 3/4 inch self drilling/self tapping screws. Starter mounting holes have been pre-drilled in door carrier. Belt clips should be installed toward leading edge of doors (See Figure 15)



Figure 14



Figure 15

G. Adjustment of Nose Caster

- 1. If your door has a nose caster, it is important that the height is properly adjusted prior to operating the door.
- 2. Loosen the nut that locks the nose caster in place (see Figure 16).
- 3. Rotate the nose caster until the correct height is achieved. This should be 1/16 to 1/8 inch from the highest point on the floor.
- 4. Holding the wheel perpendicular to the door panel, tighten the nut.
- 5. Slide the door through one complete cycle to ensure that the caster does not hit at any point.



H. Preload Adjustment



- 1. Make sure to properly support the weight of the door. Break door open just enough, approximately 5 degrees, to expose the preload adjustment nut inside the carrier, (see Figure 18).
- 2. Use a 9/16 wrench to turn the nut clockwise to increase the height of the leading edge of the door and turn the opposite way to decrease the height of the leading edge.
- 3. The door is properly adjusted when it can be closed with slight or no downward pressure on the leading edge of the door.
- 4. Once the door is properly adjusted, lock the preload in place using the 1/4-20 UNC setscrew provided.



I. Installation of Bottom Guide

- 1. The bottom guide rollers should be located in the bottom sidelite rail from previous steps.
- 2. Place a piece of cardboard between the bottom door rail and sidelite rail.
- 3. Carefully panic the door open ensuring that the door is not allowed to come in contact with the sidelite.
- 4. Being careful to support the weight of the door, swing the door to the fully broken open position.
- 5. Attach the bottom guide to the door panel using the two 1/4-20 x 1 inch hex head bolts and 2 washers to the bottom rail of the door (See Figure 19).



Figure 19

J. Adjusting Belt Tension

NOTE: Belt tension is factory set and should not require any adjustment except for unusual circumstances in header mounting or component adjustment.

- 1. Loosen mounting nuts on idler bracket (See Figure 20).
- 2. Loosen lock nut on tension adjustment screw. Turn tension adjustment screw to tighten or loosen belt. The screw should push idler bracket in the header. If idler bracket does not move, loosen the two mounting nuts a few more turns.
- 3. Tension belt so it is to approximately the same tension as received from factory. It should not be so taut that it bends drive or idler shafts. Tighten lock nut on adjustment screw against bracket and secure mounting nuts.



K. Belt Alignment

NOTE: The alignment of the belt is factory set. Flanges on the pulleys will compensate for minor misalignments and keep the belt on the pulleys. If the belt does come off the pulleys, the alignment of the shafts should be checked.

L. Installation of Bottom Sweep Brushes

- 1. Slide the brush into the weathering extrusions. The brush is longer than the extrusion. The excess brush should hang out the end of the holder at the rear end of the door.
- 2. Locate the weathering brush on the outside of the door along the bottom edge.
- 3. Mark the three slots of the extrusion on the door. Drill three 1/8" mounting holes.
- 4. Mount the weathering on the door face using $\#6 \times 1/2$ inch self-tapping color-coordinated screws from the parts box.





M. Door Panic Adjustment

NOTE: Panic adjustment should be made after door preload is adjusted. The weight of the door will affect the amount of force required to panic door open. If force required to panic door is not acceptable, it can be adjusted by performing the following steps.

Also, if panic hardware is installed on the doors (Jackson Paddles or Adams Rite push bars) you should adjust the ball plunger down so as to lower the breakout force of the doors.

- 1. Panic door open. This may require slightly lifting the door or a slight hit with a rubber mallet to the top rail approximately three inches from the nose of the door. Protect the surface of the door to prevent damage.
- 2. Remove panic block in top of door (See Figure 23).
- 3. Loosen set screw on front of block.
- 4. Raise or lower ball plunger with screw on underside of block.



N. Breakout Magnet

1. The magnet is installed inside the top rail of the door. Place a steel washer on the interior side of the rail to confirm it is installed. The magnetic reed switch is installed inline with the magnet in the top rail of the sidelite facing towards the door.

O. Mounting of Sensors

Two identical Acusensors are typically provided with your GT1175 Sliding Door Package. The header is wired from the factory so that the *activation* circuitry on the exterior sensor is turned off in One Way Traffic Mode (the safety circuitry remains active and can not be turned off). The exterior sensor is located on the side of the header in the direction of panic or panel breakout. This can easily be reversed in the field by swapping the connectors where each sensor plugs into the main harness

Note: For units with greater than 72" clear door opening (2) Acumotions are used in place of the Acusensors. For units greater than 92" clear door opening (4) Acusensors are used.

- 1. Locate sensors provided inside header. The drilling template can be discarded when headers are factory prepped.
- 2. Carefully pry off cover of either sensor. Route connector from header through access hole in sensor and plug into connector on sensor.
- 3. Use screws provided inside sensor (in screw holes) to mount sensor to header (See Figure 24).
- 4. Reinstall cover by snapping into place. If it does not snap into place, the sensor has been mounted too tightly. Loosen mounting screws slightly and try again. If it is not properly secured, the cover may loosen and fall off.
- 5. Repeat installation for the sensor on the other side of the header.
- To reverse One Way Traffic Mode, locate connectors mating sensor harnesses to control box harness found under plastic wire cover. Swap connectors and re-secure plastic wire cover. Refer to Manual 15-10596-30 for more information.



Figure 24

P. Wiring

1. Typical wiring diagrams are found in 15-10596-30 Electrical Installation Manual.

Q. Microprocessor Control

1. The Microprocessor Control has been designed to control the numerous operating characteristics of the slide door system including speed, recycling sensitivity and reduced door opening width. It will need to be programmed after installation is complete (See the Microprocessor Manual 15-9000-30 for more details).

R. Holding Beams

 The holding beam is a factory installed unit consisting of an emitter and a detector. They are flush mounted in the jambs facing each other. A pulsed, infrared light beam is continuously transmitted across the door opening. Interruption of the beam causes a relay switch closure. This signal will cause the doors to open and stay open until the object or person is out of the way or, in the case of panic breakout, go into Breakout Mode and shut the unit down. Wiring diagrams for both functions are found in 15-10596-30 Electrical Installation Manual.

S. Electric Lock (Optional)

- 1. Electric locks are available in two configurations: fail safe and fail secure. These locks will prevent someone from opening the doors until an activation signal is received by the microprocessor. This signal could be from a remote switch, transmitter or activation device on the face of the door. Wiring diagrams for both locks are found in 15-10596-30 Electrical Installation Manual.
- 2. Fail Safe: Allows the door to be manually slid open if power to the door is interrupted.
- 3. Fail Secure: Will not permit the door to be manually opened if power is interrupted.
- 4. Neither lock will prevent the panic breakout from working. If it is necessary to prevent panic breakout from working, panic hardware must be fitted to the sliding panels.
- 5. Each electric lock is factory 6" installed and wired into the Header REF. control box. The only adjustments required will be to the strike mounted in the header. 3/8-16 X 1 1/3" It may be necessary to loosen the Hex Hd. Screw Electric Strike and Hex Nut strike mounting bolts and slide Loosen to the strike to align with the latch move strike. BELT CLAMP WITH LATCHBOLT bolt in the fully closed position SHOWN ENGAGED WITH ELECTRIC STRIKE WITH (See Figure 25). DOOR IN CLOSED POSITION RH SINGLE F.O. & LH SINGLE F.S. **BI-PART UNITS &** LH SINGLE F.O. & RH SINGLE F.S. LATCHBOLT POSITION LATCHBOLT POSITION



T. Transom

- 1. Attach transom clips to top of header using #8 x 1 1/2" Long screws provided (See Figure 26 & 27).
- 2. Attach transom verticals to transom clips (attached to header) using 1/4-20 x 1 inch long screws provided (See Figure 27).
- 3. Install screw down glass stop in-line with glass pocket in jamb tube (See Figure 26).
- 4. Attach the horizontal transom tube to the vertical jamb tubes using the #8 x 1 inch long screws provided (See Figure 27).
- 5. Secure the vertical transom tubes to the horizontal transom tube using the #8 x 1 inch long screws provided (See Figure 27)



for 1, 2 or 3 Verticals

U. Troubleshooting

1. A list of possible problems and their solutions can be found in 15-10596-30 Electrical Installation Manual.

V. Replacement Parts

