

DOR-O-MATIC INGERSOLL-RAND ARCHITECTURAL HARDWARE

Series 96000 Sliding Door

Installation Instructions and Service Manual

DOR - O - MATICT

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INSPECTION

- 1. Verify that the order was shipped complete and correct, including model number, color, and package width and height.
- 2. Verify at job site that all conditions are correct and in accordance with final approved shop drawings.
 - A. Check that the opening is the correct size. Correct size is package width plus ½" (13mm) and package height plus ½" (6mm), for shimming and caulking (Figure 1).

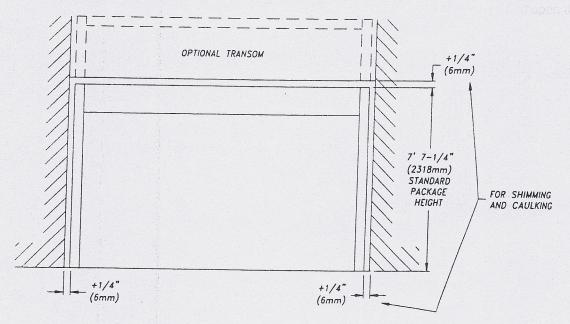
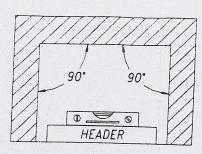
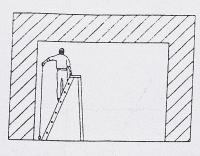


FIGURE 1: Clearance Required at Rough Opening

- B. Check that the floor is level. Use a minimum 6'-0" (1829mm) level **or** use the actual aluminum header turned upside down to check floor (Figure 2).
- C. Using a plumb bob, check that the rough opening where the jambs will be mounted is vertical (Figure 2).
- D. Check the diagonal measurements to insure that the opening is a true rectangle, not just a parallelogram (Figure 2).





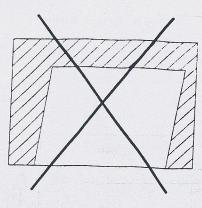


FIGURE 2: Check Rough Opening

E. Check that the electrical feed (120V, 15A single phase for North America, 220/240V, 5A single phase for Europe, Asia, etc.) is correctly located in accordance with final approved shop drawings and all conduits and electrical junction boxes for push plates or other activation devices (if required) are likewise correctly located.

NOTE: If any of the above items are not correct, do not attempt to install the Series 96000 Slide package!

Report any incorrect items to the general contractor immediately. Do not proceed until all conditions are correct.

HEADER & JAMB MOUNTING

1. Open the carton marked "HEADER". Remove the header and set on a piece of cardboard with the swing cover facing up. Remove the cover bumpers near the cover hinge. Do not lose the cover bumpers, as they must be re-installed to prevent the cover from coming off when opened. Using a screwdriver, press up on the cover lock tab (one each end) to disengage and open the cover. (Figure 3).

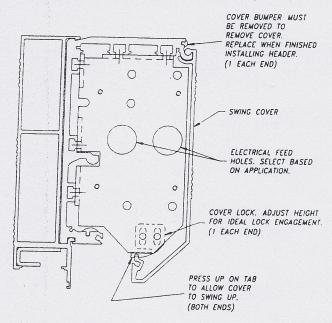


FIGURE 3: Cover Removal

- 2. Within the header (factory installed), are the motor/gearbox with drive pulley, belt drive, idler pulley and tensioner assembly, control box, transformer box, safety beam control box, any switches and the terminal block bracket. Also, lay out the items shipped in a blister-pack at a convenient location.
- 3. Align the jamb tubes with the ends of the header, making sure that the bolt holes and electrical feed hole line up. Use three ½-20 X 1" long bolts on each side to secure the header end cap to each jamb tube. Then install one dress end cap on each side using the #8-32 screws (Figure 4).

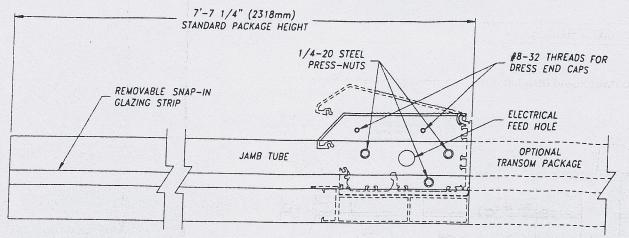


FIGURE 4: Jamb Tube Attachment to Header

- 4. Insert wood tapered shims at each jamb to plumb each jamb. Insert ½" (6mm) spacers around the header or horizontal transom tube at anchor locations to keep the tubes from being pulled tight.
- 5. With a helper, tip up the jamb/header assembly and position it within the rough opening, making sure the swing cover is on the correct side. Verify that the package is located correctly within the rough opening refer to the final approved shop drawings. The Series 96000 Slide package is usually centered within the opening or is mounted flush with the curtain wall, but verify the position with the drawings, contractor, architect, etc.
- 6. Use appropriate fasteners (four per jamb) to anchor through the glazing recess of the jamb tube to the wall or adjacent framing. Check the jamb tubes with a level to be sure that the tubes have not been pulled in by the anchors. Finally, install the snap-in glazing strips into the jamb tubes (Figure 5).

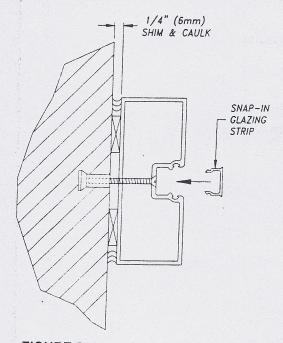


FIGURE 5: Anchoring the Jamb Tube

7. The standard package height is 7' 7-1/4" (2318mm). On occasion, the approved shop drawings sometimes require a package height of 7' 6-3/4" (2305mm). If this is the case, cut off ½" (13mm) from the bottom of each jamb tube in the field. This generally is performed for a recessed threshold application.

1. Refer to the following illustration for a detailed breakdown of internal drive components (Figure 6).

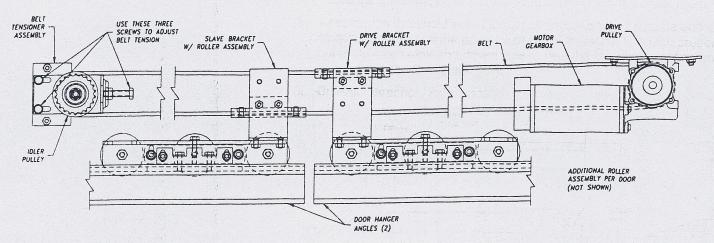


FIGURE 6: Belt Drive Assembly

2. Refer to the following illustration for a detailed section view of a typical Series 96000 Slide inside slide application (Figure 7).

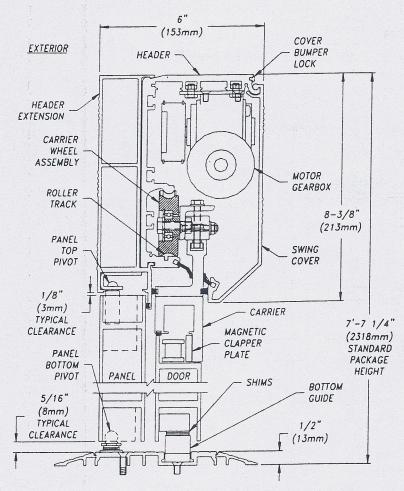


FIGURE 7: Section View through Header, Door and Panel

NOTE: If the package being installed is over 10' 0" (3048mm) wide and has a transom, a vertical transom tube must be anchored securely to the top transom tube in order to prevent deflection in the header.

THRESHOLD INSTALLATION

- 1. After again verifying that the floor is level, snap a chalk line 1-1/2" from the face of each jamb on both sides. Place the threshold between the jamb tubes within the chalk lines.
- Keeping the threshold within the chalk lines, use it as a guide and drill through holes into floor material. Prior
 to drilling, verify that the panel pivot in the threshold is on the proper side of the opening. Place plastic
 concrete inserts into the drilled holes. Use the stainless steel screws from the blister-pack to fasten the
 threshold to the floor (Figure 8).
- 3. Different threshold extrusions are provided for recessed threshold applications.

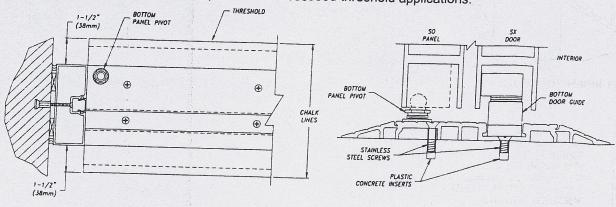


FIGURE 8: Installation of Threshold

4. Thread the panel pivot post (found in blister pack) into the pivot receiver in the threshold and adjust to correct height (Figure 9).

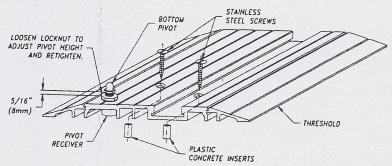


FIGURE 9: Bottom Panel Pivot Attachment

NOTE: Certain owners or builders prefer **not** to install a threshold across the door opening. Refer to the final approved shop drawings, general contractor, architect, etc. for details.

PANEL (SO) INSTALLATION

- Remove panels from carton. Lift panel and place bottom pivot block (factory prepped and installed in bottom panel stile) onto bottom pivot. Swing and proceed to install top pivot pin into pivot bracket mounted in header extension (Figure 10).
- 2. Top pivot pin is shipped in retracted position. Loosen set screw and release top pivot pin into the hole in the bracket. Tighten set screw when top pivot pin is set (Figure 11).
- 3. Adjust lock nut on bottom pivot to give the required 1/8" (3mm) clearance at the top of the panel (Figure 9).
- Top pivot removal tool #96022-100 is required to remove panel. Loosen set screw and push pin down with the tool (Figure 12).

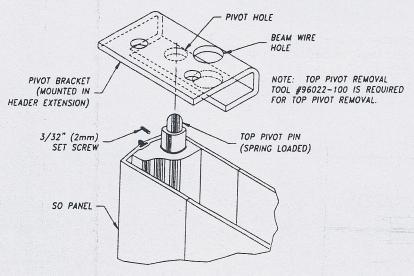


FIGURE 10: Panel Top Pivot Detail

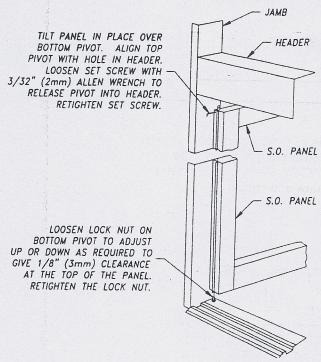
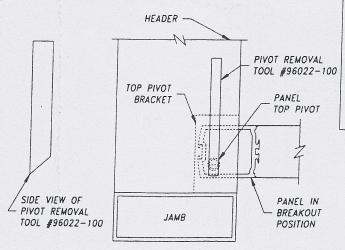


FIGURE 11: Panel Installation Detail



NOT TO DAMAGE OR CUT THE PENCIL BEAM CABLES THAT RUN THROUGH THE TOP PIVOT BRACKET WHEN REMOVING THE PANEL.

NOTE: BE CAREFUL

FIGURE 12: Panel Removal Detail

5. Slowly close the panel after securing the pivots into position. The clearance between the top of the panel and the bottom of the header should be 1/8" (3mm) (Figure 13). If the clearance is greater than 1/8" (3mm), the magnet in the top rail of the panel may not be close enough to the reed switch in the header to complete the circuit for door activation. To correct the clearance, refer to the previous illustrations to remove the panel and adjust the height.

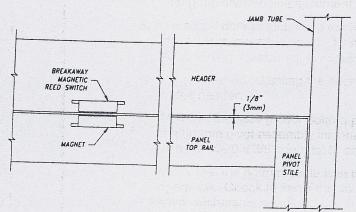


FIGURE 13: Panel (SO) Clearance for Reed Switch and Magnet

DOOR (SX) INSTALLATION

1. Remove the doors from the carton. Also, remove the M6 x 25mm metric bolt and M6 metric nuts from the roller assemblies in order to remove the door height adjustment blocks and door angle from the roller assembly **as one unit**. NOTE: All mention of M6 nuts and bolts refers to the thread diameter. Use a 10mm socket or 10mm open-end wrench when removing or installing these fasteners.

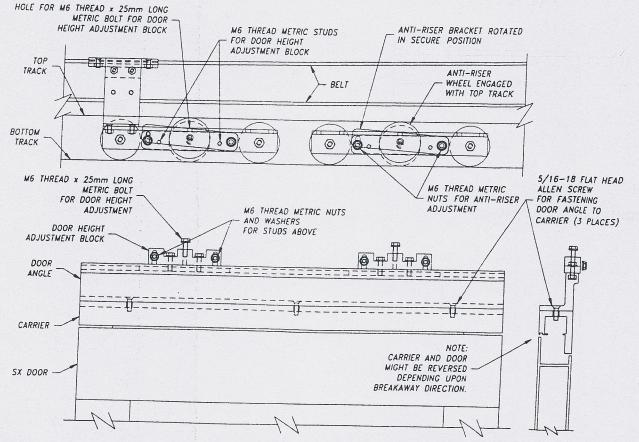


FIGURE 14: Anti-Riser Adjustment and Door (SX) Attachment Procedure

- 2. Verify that the anti-riser wheel is securely engaged with the top track of the header on all roller assemblies (Figure 14).
- 3. Using the 5/16-18 flat head socket screws supplied, attach the door angle/adjustment block assembly to the top of the carrier. Make sure that the door matches the angle and will break out to the proper side (Figure 14).
- 4. Hang the door/angle/adjustment block assembly back on the studs in the roller assemblies (2 per door).
- 5. To adjust door height, keep the M6 metric nuts loose and turn the M6 x 25mm metric bolt (RH to raise the door, LH to lower the door). To keep the door level, be sure to adjust both roller assemblies on each door. After finding the correct, level height, secure the assembly in place with the M6 metric nuts (Figure 15).
- 6. When finished adjusting the door height, again verify that the anti-riser wheels are engaged with the top track of the header.
- 7. Remove the sliding door bottom pivot assembly (which includes the floor guide) from the blister pack. Install the bottom pivot assembly into the bottom vertical door stile through the two prepped and countersunk holes with the ½-20 x 3/8" long flat head screws provided (Figure 16).
- 8. Verify that the bottom guide is in the threshold track and slowly slide the door back and forth to assure smooth operation. Check to see if the floor guide is deep enough in the track. It may be necessary to add or remove shim washers as required.

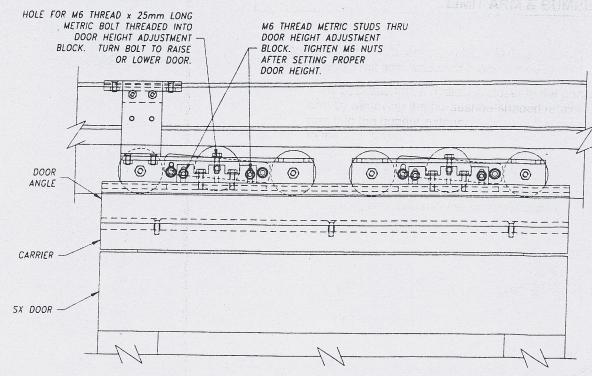


FIGURE 15: Door (SX) Height Adjustment

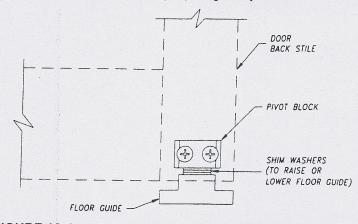


FIGURE 16: Installation of Door (SX) Bottom Pivot Assembly

9. Next, break open the door and panel. Slowly close the door and check the clearance between the top of the door and the bottom of the carrier. If the clearance is not 1/8" (3mm), loosen the ½" (6mm) allen head set screw at the bottom of the carrier. Adjust the clearances as required by turning the large allen head bolt. After setting the correct clearance, re-tighten the ½" (6mm) allen head set screw (Figure 17).

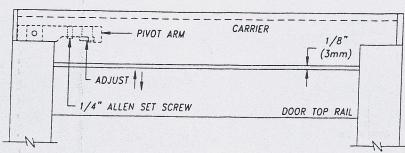


FIGURE 17: Door/Carrier Adjustment

LIMIT ARM & BUMPER BAR INSTALLATION

- 1. Depending on the specific package ordered, Dor-O-Matic provides one of three limit arm types: hydraulic closer arm, limit arm, and spring limit arm (Figure 18).
 - A. If the package has a hydraulic closer in the panel, the arm is shipped installed on the closer. Remove the arm by removing the horseshoe-shaped retaining clip from the closer shaft. Install the roller end of the arm into the header extension through the access slot provided. Turn the closer speed adjusting screws to the fully closed position. With a wrench, turn the closer pinion shaft to a position where, that when the door is set in the opening, the slot in the arm will easily slip over the shaft. Re-install the horseshoe-shaped clip through the closer shaft.
 - B. For all other packages, remove the shoulder screw from the limit arm, insert the roller up into the header extension, and re-install the shoulder screw.

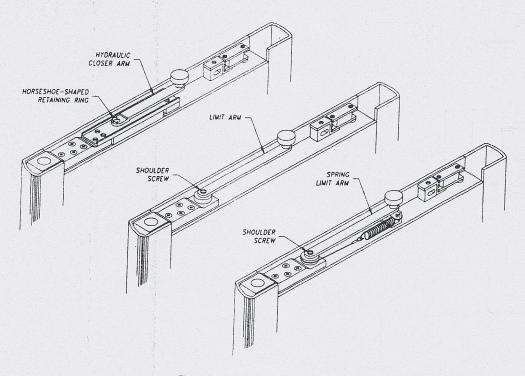


FIGURE 18: Limit Arm Details

2. Refer to the following illustration for Dor-O-Matic bumper bar installation (Figure 19).

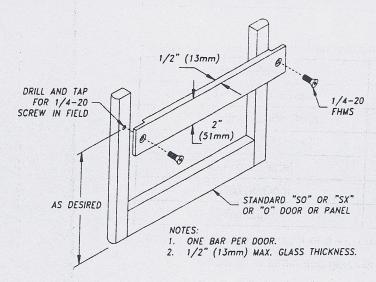


FIGURE 19: Bumper Bar Installation

WIRE DIAGRAM

Refer to the following illustration for connecting power to the Series 96000 Slide (Figure 20).

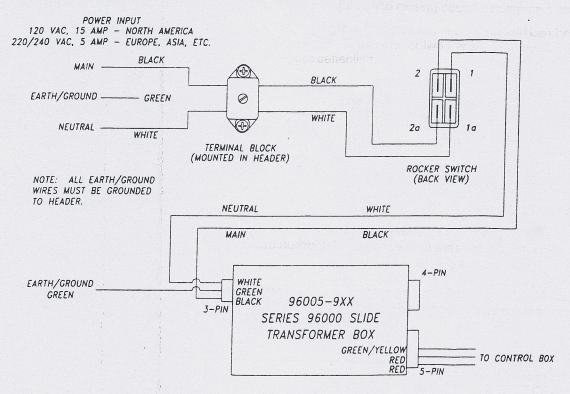


FIGURE 20: Series 96000 Slide Wiring Diagram

GLAZING

1. Refer to the following chart for maximum weight of door and glass as well as maximum glass thickness.

Door/Panel	Max. Weight of Door & Glass	Max. Glass Thickness
SX Door Inside Slide	150 lbs. (68kg.)	1" (25mm)
SX Door Outside Slide	150 lbs. (68kg.)	1" (25mm)
SO Swing Out Panel	200 lbs. (90 kg.)	5/8" (16mm)
O Fixed Panel	200 lbs. (90 kg.)	1" (25mm)
X Sliding Door	200 lbs. (90 kg.)	1" (25mm)
Transom	Varies Date Accepted	1/4" to 1" (6mm to 25mm)

NOTE: The average weight of a 42" (1067mm) door or panel less glass is 40 lbs. (18 kg.).

- A. Tempered or laminated glass is required in doors and panels per ANSI Z97.1-1972.
- B. If the installation is a "standard package", the glass sizes (both with 2" (51mm) muntins and without) are called out in the Dor-O-Matic details and specifications book, along with the model number of the package.
- C. If the installation is **not** a standard package, measure the width and height between the stile extrusions and **subtract** ½" (13mm) (Figure 21). This is the glass size to order.
- D. Order the correct glass stops for the thickness of glass in the application.
- E. All final opening and closing speed adjustments should be made after the glass is installed.
- F. Transom glass is measured in the field and can be ½" (6mm) to 1" (25mm) thick non-tempered glass. Remember to use one or two transom hanger tubes for packages over 10'-0" (3048mm) wire to prevent header deflection.

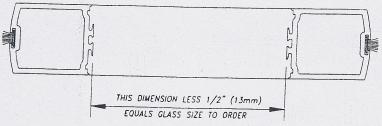


FIGURE 21: Glass Measurement

2. A feature unique to Dor-O-Matic is our "Security Glazing System". When glazing the doors and panels, snap in two horizontal and two vertical exterior glazing stops. Be sure the stops are securely snapped into the rails and stiles. Place the bottom of the glass onto the nylon glazing blocks and tilt up into vertical position. Have a helper hold the glass in place, and proceed to snap-in the interior glazing stops. This design makes the glass non-removable from the exterior. Finally, check that the rubber trim of the glazing stops are not pinched or tucked against the glass. Run a pocketknife or small scraper around the perimeter of the glass to correct any such problems.

RELEASE FOR SERVICE

Clean the glass. Install all safety, traffic control, and instruction decals to the door as required. This is very important! Failure to do this leaves the installer LIABLE for any accident that might occur. This must be done! Present the keys to the owner or general contractor. Demonstrate the unit, review all safety features as well as the safety check that is to be performed by the owner each morning.

DOR-O-MATIC 96500-900 Fail Safe Electric Lock and 96550-900 Fail Secure Electric Lock Installation Instructions

96500-084

GENERAL

These Dor-O-Matic Electric Lock Systems are designed for use with a Dor-O-Matic Quantum-Slide operator and Dor-O-Matic four-position key switch 96030-900. Refer to the following chart for door and lock functions.

	0-900 Fail Safe Electric Lock	96550-	900 Fail Secure Electric Lock
Key Position	Operation	Key Position	Operation
Off	Door is locked. Inside activation and outside activation are both non-functional.	Off	Door is locked. Inside activation and outside activation are both non-functional.
1-Way	Inside Activation: Door is locked until activation, at which point door unlocks and opens. Outside Activation: Door is locked. Outside activation is non-functional.	1-Way	Inside Activation: Door is locked until activation, at which point door unlocks and opens. Outside Activation: Door is locked. Outside activation is non-functional.
2-Way	Door is unlocked. Both inside activation and outside activation are functional.	2-Way	Door is unlocked. Both inside activation and outside activation are functional.
Hold Open	Door is unlocked and held open indefinitely.	Hold Open	Door is unlocked and held open indefinitely.
lo power to door	Door is unlocked	No power to door	Door is locked

Note: When morning entry is used with either of the above electric locks and a 4-position key switch, the door will activate regardless of the position of the key switch.

WIRE DIAGRAM

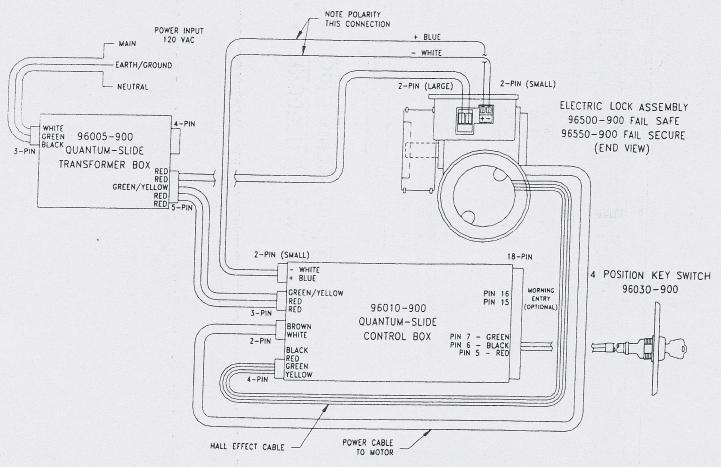
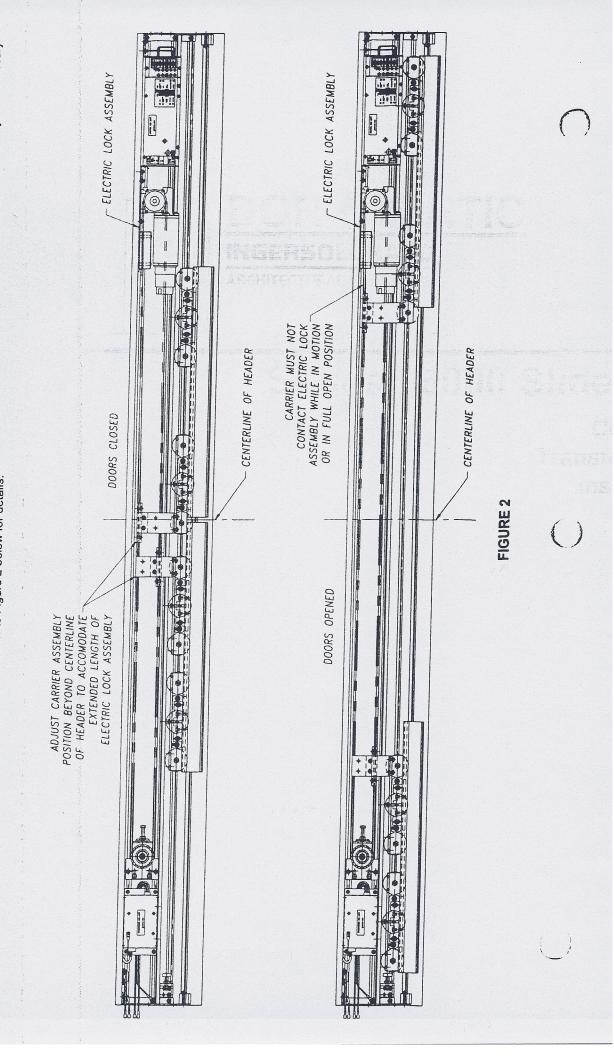


FIGURE 1

CARRIER ADJUSTMENTS

On header lengths under 9 ½ feet, it may be necessary to relocate the carrier assemblies to accommodate the electric lock assembly. Prior to operating the door, manually open the door to the full open position. Check to see that the carrier assembly does not contact the electric lock assembly. If there is interference, relocate the carrier assembly the necessary distance beyond the centerline of the header to prevent interference. Refer to Figure 2 below for details.





DOR-O-MATIC MINGERSOLL-RAND ARCHITECTURAL HARDWARE

Series 96000 Slide Control Box

Control Box 96010-900
Transformer Box 96005-900
Installation Instructions

DOR - O - MATIC™

7350 W. Wilson Ave. Harwood Heights, IL 60656

Toll Free:

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INSTALLATION

Preparation: Refer to Series 96000 Slide Installation Manual #96000-984 for header preparation instructions.

Final Wire Connection: 2.

Using the appropriate wiring diagrams, connect power (Figure 2) and accessories (Figure 3) as needed.

A. Use a 115 volt, 60Hz, fused, 15 amp, 3-wire power supply.

- Secure all conductors and connections against physical damage.
- Route all wiring away from moving parts, sharp edges and heat sources. C.

Use copper conductors only.

NOTE: Always disconnect main power to operator prior to servicing or cleaning.

Operational Check and Adjustments:

NOTE: Refer to the latest revision of ANSI/BHMA A156.10-1991 Standard for Power Operated Pedestrian Doors for all settings and adjustments.

Closing Speed:

1 foot per second or more

Auto Reverse Force:

30 pounds or less 4 seconds or more

Latch Position: Hold Open:

2 inches from closing or more

Sizing:

Connect main power to the Transformer Box. After the first activation signal, the door should open and close one time, after which it is ready for normal operation. If the door does not size to full open position, first check for binds, then increase the sizing speed by rotating P6 CCW just enough to overcome the door weight, etc.

Opening Speed Adjustment:

- Opening speed is adjusted by rotating P2 (CW=SLOWER, CCW=FASTER). It allows for proper adjustment of any normal weight and size door.
- Cycle the door open and close several times and observe the opening speed. Select a setting that gives desired opening speed. NOTE: It is recommended that the door be operated as slow as is practical for the traffic conditions.

Closing Speed Adjustment:

Continue to cycle the door open and close while making adjustments. Set the closing speed of the door by rotating P4 (CW=SLOWER, CCW=FASTER).

NOTE: Reset power to the control box after setting the opening speed and closing speed. This must be done before making any other adjustments.

Back Check Position:

Rotate SW2 to adjust the back check position (0=MINIMUM, F=MAXIMUM).

Back Check Speed Adjustment:

The back check speed is controlled by rotating P3 (CW=SLOWER, CCW=FASTER).

Latch Position:

Latch position is controlled by rotating SW1 (0=MINIMUM, F=MAXIMUM).

Latch Speed Adjustment:

The latch speed is controlled by rotating P5 (CW=SLOWER, CCW=FASTER).

Time Delay Adjustment:

Adjustment is made by rotating P1 (CW=LESS HOLD OPEN TIME, CCW=MORE HOLD OPEN TIME). The total adjustment range on the control box is 1 to 30 seconds of time delay.

Normal/Delayed Activation:

This function is selected with switch SW3. In the normal position, the door opens immediately upon reception of the activation signal. In the delayed position, when the door is fully closed, there is a 1 second delay between reception of the activation signal and the actual opening of the door. This delayed activation allows most electric or magnetic locks time to retract before the door opens.

Auto Reverse in Closing:

The amount of force required to reverse the door when closing is adjusted by rotating P7 (CW=MORE FORCE, CCW=LESS FORCE). The force cannot be greater than 30 lbs.

Auto Reverse in Opening:

The amount of force required to reverse the door when opening is adjusted by rotating P8 (CW=MORE FORCE, CCW=LESS FORCE).

After setting all of the adjustments, reset power to the control box. Cycle the door to verify all of the settings are correct. If any settings need to be corrected, be sure to reset power again. Power must be reset after any adjustments are made.

Operational Walk-Through Test:

NOTE: It is assumed that during the installation process, any problems would have been found and corrected before this point. However, it is recommended that a complete walk-through test now be performed.

A. Activate door operator. The door should open smoothly and silently to the back check point, where it should slow down rapidly and drift into the full open position without slamming.

B Remain standing in the activating area for a while, making sure that the door does not time out and close while being activated.

If a door safety device is used, step into the door opening. Remain in the door opening making sure that the door does not close.

Step out of the door opening. After both the activating area and door opening are clear, the door should time out at the pre-set time delay period. The door should then close quietly and smoothly to the latch point, where it rapidly slows down and drifts into the fully closed position without slamming.

Release of the System for Service:

Remove all tools and installation equipment, and clean any debris from the vicinity of the door.

Install all safety, traffic control, and instruction decals to the door as required. THIS IS VERY IMPORTANT! Failure to do this leaves the installer LIABLE for any accident that might occur. THIS MUST BE DONE!

Verbally explain the proper operation of the door system to the owner or to the person in charge.

FEATURES

- Easy Open: When the door is fully closed and is manually opened a few inches, the door will automatically open the rest of the way under normal opening speed.
- Adjustable Automatic Reversing: If the door is stalled during the closing cycle, it will automatically stop and reverse fully. The door will then return to the point of obstruction and drop to slow speed, looking for the obstruction. The door will perform this cycle 5 times until the obstruction is

removed. After the fifth cycle, the door will stop. If the door is stalled during the opening cycle, it will automatically stop and reverse fully. The door will remain closed until the next activation signal, at which point it will open normally Potentiometers on the control box adjust the force and should be adjusted in accordance with all applicable safety codes.

Weatherwise: The Weatherwise feature allows the customer to reduce the opening size. When the Weatherwise switch is set to "narrow", the door will be allowed to open to about 75% of the normal door opening.

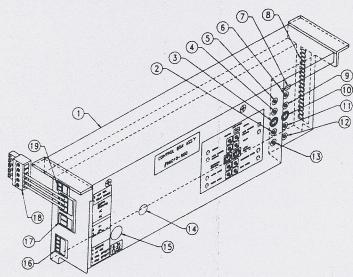
Safety Beam Shut-Off: When the door is fully closed, the safety beam signal is disregarded so that it cannot be used to open the door. Once the door is activated, the safety beam signal is allowed to re-open the door if either safety beam is interrupted during the closing cycle.

Morning Entry: When morning entry is used with a 4-way switch, the door will activate regardless of the position of the switch.

DO'S AND DON'TS

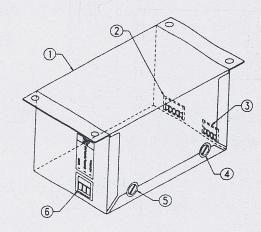
- Do Not try to use this operator on large, heavy doors without checking with the factory first.
- Do Not connect any remote activating device to the door unless it is located within the "line of sight" of the door. 2.
- Do Not attempt to use a fuse larger than specified. 3.
- Do Not attempt to modify the factory wiring or connect any wiring into an existing electrical circuit or any other electrical device. 4
- Do make certain that the operator is connected to a dedicated 115 volt circuit from the main circuit breaker panel. 5.
- Do make certain that the operator is properly grounded with a separate green wire. 6
- Do make certain that all connections are proper and secure before turning the power on.
- Do make certain that all wires are properly dressed and secured to prevent any interference. 8.
- Do make certain that all safety labels and instruction decals relating to door operation are properly applied to the door before leaving the job.
- Do verbally instruct the owner or person in charge of the proper operation of the door.
- Do disconnect main power to the operator prior to servicing or cleaning.
- 12. Do instruct the owner or person in charge of his responsibility of inspecting the door for the following:
 - Occasional damage
 - B Developing problems
 - Minor preventative maintenance
 - Who and where to call for service when required

DIAGRAMS



- SERIES 96000 SLIDE CONTROL BOX #96010-900
- LATCH SPEED ADJUSTMENT (PS)
- BACKCHECK POSITION SELECTOR DIAL (SW2)
- AUTO REVERSE CLOSING ADJUSTMENT (P7)
- SIZING ADJUSTMENT (P6)
- AUTO REVERSE OPENING ADJUSTMENT (P8)
- ACTIVATION SWITCH NORMAL/DELAYED (SW3)
- 18-PIN CONNECTOR, ACCESSORIES
- DELAY ADJUSTMENT (P1)
- 10. LATCH POSITION SELECTOR DIAL (SW1)

- 11. BACKCHECK SPEED ADJUSTMENT (P3)
- OPENING SPEED ADJUSTMENT (P2)
- 13. CLOSING SPEED ADJUSTMENT (P4)
- CIRCUIT BREAKER, 4 AMP
- FUSE, 6.3 AMP (DOM #87083-600) (BUSS #GDCT6.3AL250V)
- 16. 4-PIN CONNECTOR, HALL EFFECT
- 17. 2-PIN CONNECTOR, TO MOTOR
- 5-PIN CONNECTOR, POWER INPUT
- 2-PIN CONNECTOR (SMALL), ELECTRIC LOCK



- SERIES 96000 SLIDE TRANSFORMER BOX 4. # 96005-900
- 5-PIN CONNECTOR, POWER TO CONTROL BOX # 96010-900
- 4-PIN CONNECTOR, POWER TO
- FUSE, 2.5 AMP (DOM # 96012-600) (UTTELFUSE # 239 02.5)
- FUSE, 2 AMP (DOM # 96011-600) (LITTELFUSE # 239 002)
- 3-PIN CONNECTOR, POWER INPUT 115V

FIGURE 1: CONTROL BOX & TRANSFORMER BOX DETAILS

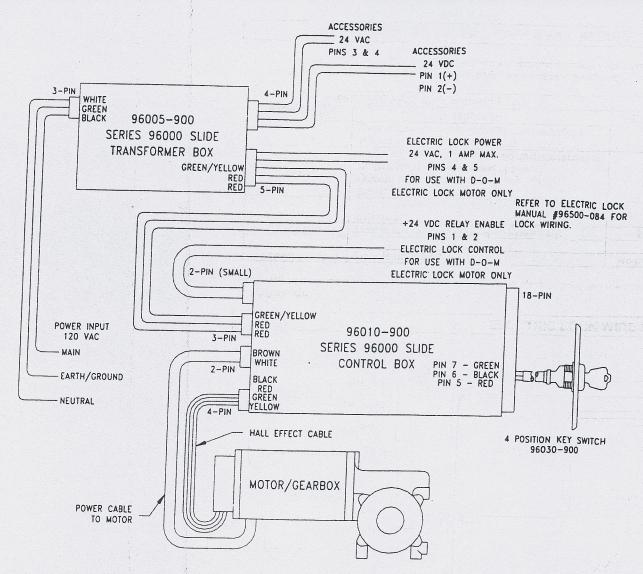


FIGURE 2: POWER WIRING DIAGRAM

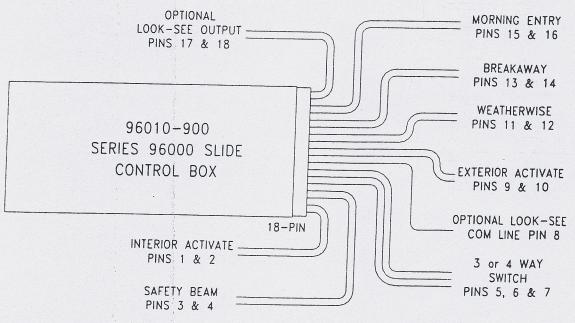


FIGURE 3: ACCESSORIES WIRING DIAGRAM

FAIL SAFE & FAIL SECURE ELECTRIC LOCKS

These Dor-O-Matic Electric Lock Systems are designed for use with a Dor-O-Matic Quantum-Slide operator and Dor-O-Matic four-position key switch 96030-900. Refer to the following chart for door and lock functions.

Van Danisi	5500-900 Fail Safe Electric Lock	96550-900 Fail Secure Electric Lock					
Key Position	Operation	Key Position					
Off	Door is locked. Inside activation and outside activation are both non-functional.	Off	Operation Door is locked. Inside activation and outside				
1-Way	Inside Activation: Door is locked until activation, at which point door unlocks and opens. Outside Activation: Door is locked. Outside activation is non-functional.	1-Way	activation are both non-functional. Inside Activation: Door is locked until activation at which point door unlocks and opens. Outside Activation: Door is locked. Outside				
2-Way	Door is unlocked. Both inside activation and outside activation are functional.	2-Way	activation is non-functional. Door is unlocked. Both inside activation and				
Hold Open	Door is unlocked and held open indefinitely.	Hold Open	outside activation are functional. Door is unlocked and held open indefinitely.				
lo power to door	Door is unlocked	No power to door	Door is locked				

Note: When morning entry is used with either of the above electric locks and a 4-position key switch, the door will activate regardless of the position of the key switch.

ELECTRIC LOCK WIRE DIAGRAM

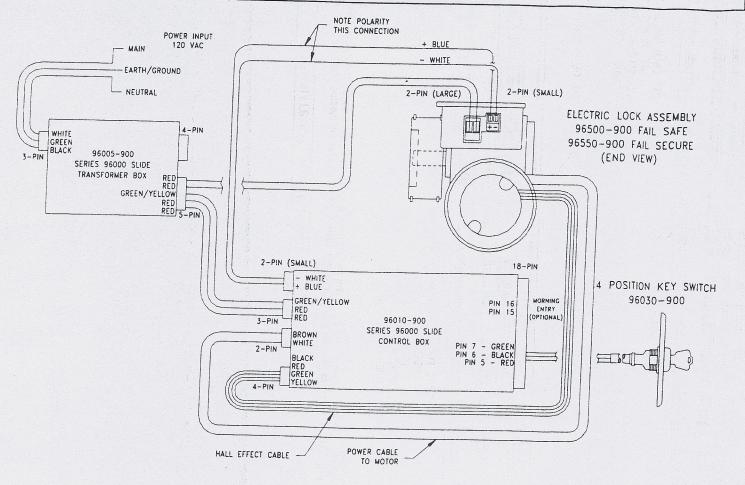


FIGURE 4

ELECTRIC LOCK CARRIER ADJUSTMENTS

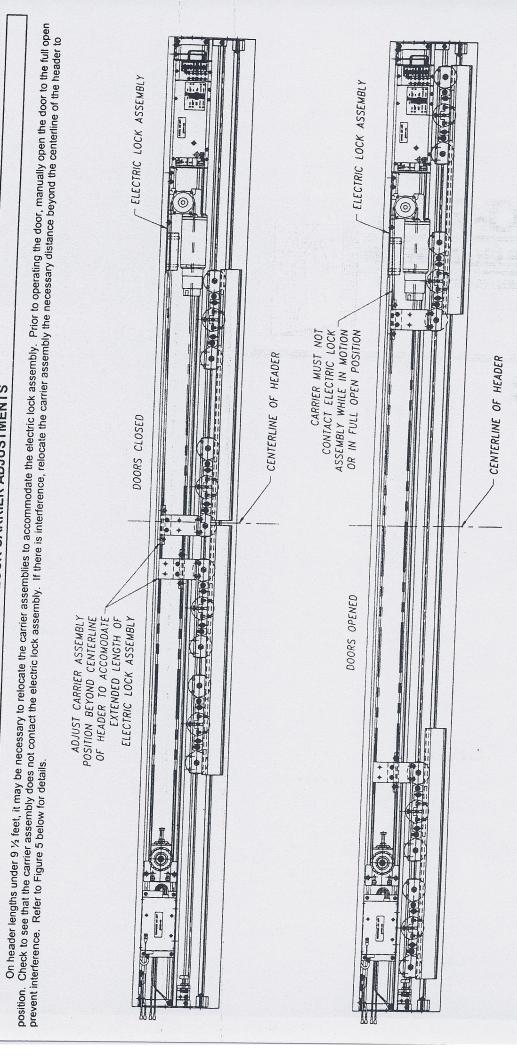


FIGURE 5

96010-084 REV. A

Pages 6 of 6.



DOR-O-MATIC INGERSOLL-RAND ARCHITECTURAL HARDWARE

Series 96000 Sliding Door

Parts Manual

DOR - O - MATIC™

7350 W. Wilson Ave. Harwood Heights, IL 60656

Toll Free:

1-800-543-4635

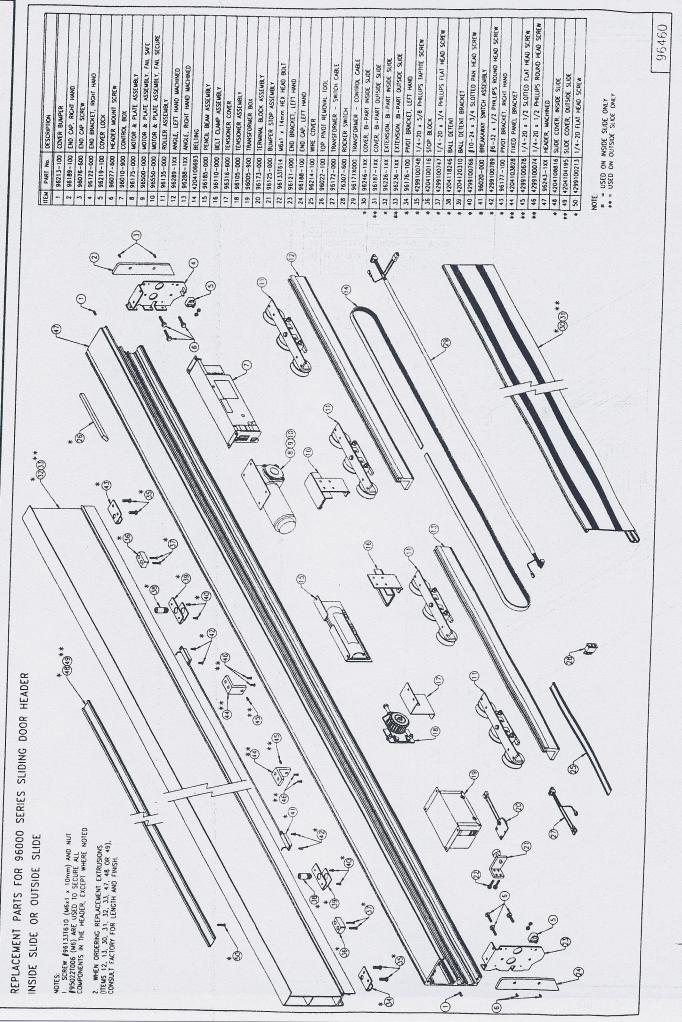
In Illinois:

708-867-7400

Automatic Sales FAX: www.doromatic.com

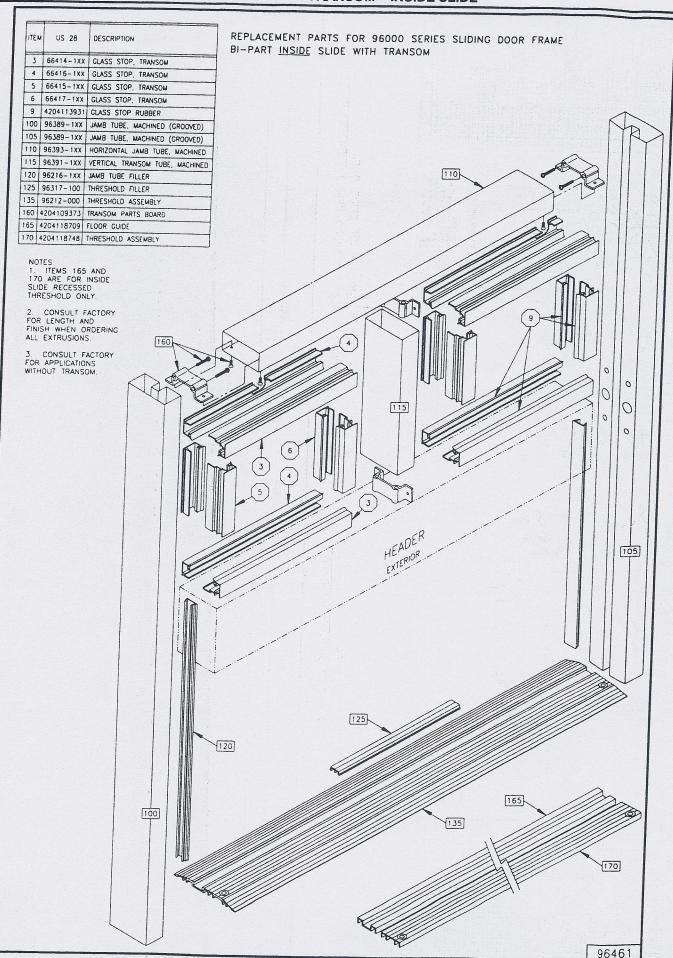
708-867-0291

HEADER - INSIDE & OUTSIDE SLIDE



Sept-99

FRAME WITH TRANSOM - INSIDE SLIDE



REPLACEMENT PARTS FOR 96000 SERIES RIGHT HAND PANEL BI-PART INSIDE SLIDE ONLY

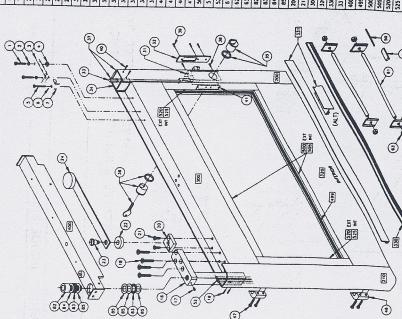
REPLACEMENT PARTS FOR 96000 SERIES RIGHT HAND DOOR BI-PART INSIDE SLIDE ONLY

PART No	DESCRIPTION
4299100766	-
4299100489	110 LOCK WASHER
4204120309	CATCH BRACKET
4299100100	5/16 FLAT WASHER
4299100606	#8-32 SELF-TAP SCREW
4201102854	MAGNET - \$37 REED
4204102005	SPACER
4204109771	TOP PIVOT ASSEMBLY. RH PANEL
4204109772	
4299100616	200
4204100244	
4299100747	1/4-20 THREAD FORMING SCREW
4204100063	
4204100147	SHOULDER SCREW
4204110674	
4204109798	R PRO
4204101929	
96193-600	TRANSMITTER CABLE - RED
4204115034	10
4204100709	SETTING BLOCK BAG
4204106653	WEATHERSTRIP, 437 x 470
4204100658	3/8 R00
4204100703	BACK UP PLATE
4204100702	3/8-16 SEMS NUT
4204118028	LOCK STILE, BI-PART RH PANEL
-	LAR PANEL PINOT STILE N/S
_	TOP RAIL, RH PANEL N/S
4204110415	1
42D4105980	1
4204110400	SWEEP HOLDER
4204102601	RUBBER WEATHERSTRIP
4204110810	CLASS STOP, 5/8 HORIZOWIA
4204101966	5/8 VERTICAL
10685	GLASS STOP. 5/8 VERTICAL
-	5/8
4204101948	GLASS STOP 5/8 MOBIZONIE

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100 3

. CONSULT FACTORY FOR LENGTH ND FINISH WHEN ORDERING ALL XTRUSIONS.



| 19 | 4201100635 | 5/16-24 SOCKET Que SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 42981100051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SCREW | 19 | 4298110051 | 1/4-20 IOAN HAD SC COMPOSITE ARM ASSEMBLY
1/4-20 ALLIN SET SCREW
5/16-24 SOCKET CAP SCREW
1/4-20 FAT HEAD SCREW
SPACEN B.COX MOTES.

1. PARTS LISTED ARE FOR A US28
RIGHT MAND ROWR (SS) WITH AMPROM
STIES, 3-1-1/2" TOP BALL, 3" BOTTOM
GLASS DAILY, CONSULT, STOPS FOR 1/4"
ANY OTHER APPLICATIONS. 2. CONSULT FACTORY FOR LENGTH AND FINISH WHEN ORDERING ALL EXTRUSIONS.

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NOTES

1 PARIS USTED ARE FOR A US28

LEFT MAND DOOR (SA) WITH MARROW
FOLKE, SALL, S BOTTOM
FOLK AND S/R GLASS STOPS FOR 1/A

GLASS OWNE, CONSULT FACIORY FOR
ANY OTHER APPLICATIONS.

2. CONSULT FACTORY FOR LENGTH AND FINISH WHEN ORDERING ALL EXTRUSIONS.

MOTES.

1. PART USIED ARE FOR A US28.

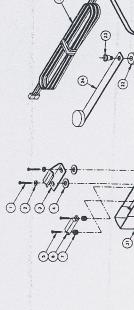
ELET HAND PARELE SOD WITH MARROW STILES. 3-1/72. FOR POLICE. 5 BOTTOW MARROW CALASS STOPES FOR 1/4-CALASS OWEY. CALASS STOPES FOR 1/4-ANY OTHER APPLICATIONS.

REPLACEMENT PARTS FOR 96000 SERIES LEFT HAND PANEL BI-PART INSIDE SLIDE ONLY

110-24 PAN HEAD SCREY

1/16 FLAT WASHER

2. CONSULT FACTORY FOR LENGTH AND FINISH WHEN ORDERING ALL EXTRUSIONS.

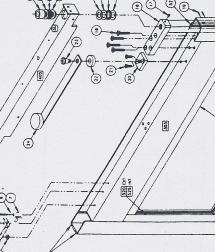


D TOP PNOT ASSEMBLY, LH PAMEL
BOTTOM PNOT ASSEMBLY, LH PAME
10-32 THREAD FORMING SCREW

1/4-20 THREAD FORMING SCREW SPACER

| 1 | 129910906 | 19-25 SELP | 19-26 SERP |

	<u>Q</u> @
	3) /. _! /



HADOK LOCK

1/4-20 THREAD FORMING SCREY

GLASS STOP ANCHOR

4204101930 4299100747 4204115034 4204100709 42041006653 4204100658

WEATHERSTRIP, 437 a 470

SETTING BLOCK BAG

2 3/8-16 SEMS NUT
2 3/4-10 SOCKET CAP SCREW
7 NEEDLE THRUST BEARING

CARRER THRUST RACE WASHER B THRUST RACE WASHER
4 LOCK STILE, LH BI-PART
2 PHOT STILE, LH DOOR N/S

82 4204100703 5 83 4204100702 5 83 4204100808 6 84 4204100080 6 85 4204100080 6 85 4204100080 6 85 4204100203 7 85 4204100203 7 85 4204100203 7 85 4204100203 7 85 4204100203 7 85 4204100203 7 85 4204100203 7 85 4204100203 7

5/16-24 SOCKET CAP SCREW 1/4-20 FLAT HEAD SCREW SPACER BLOCK

1/4-20 FLAT HEAD SCREW

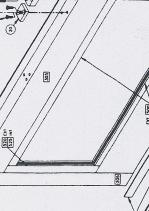
SHOULDER SCREW
DOOR LIMIT ARM

HANGER BLOCK
COMPOSITE ARM ASSEMBLY
1/4-20 ALLEN SET SCREW

\$10-24 SEUS-TAP SCREW

3

3



1

1

4204110810 GLASS STOP, 5/8 HORIZONTA

CARRER ASSEMBLY, UH BI-PART WEATHERSTRAP SWEEP HOLDER

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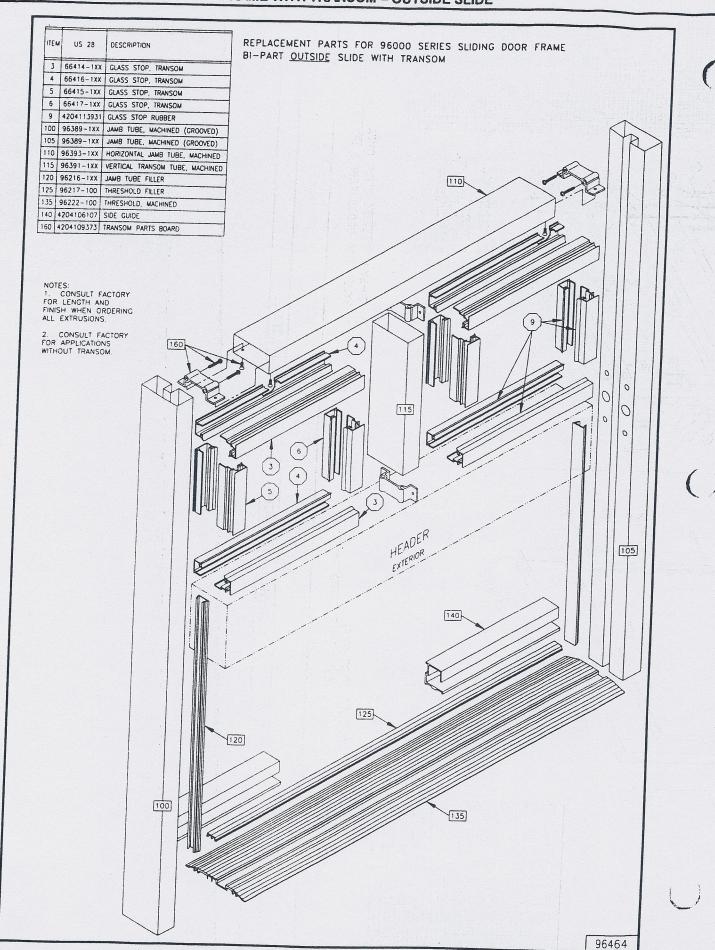
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FRAME WITH TRANSOM - OUTSIDE SLIDE



REPLACEMENT PARTS FOR 96000 SERIES RIGHT HAND PANEL BI-PART OUTSIDE SLIDE ONLY

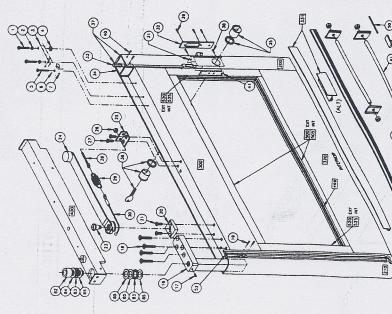
REPLACEMENT PARTS FOR 96000 SERIES RIGHT HAND DOOR BI-PART OUTSIDE SLIDE ONLY

1 001.	PART No. 96193-600	-
	4204120564	END CAP
	4299101302	_
	4204115034	1
	4204100709	_
	4204100658	_
	4204100703	BACK UP PLATE
	4204100702	1
	4204118060	
	4204104610	LACK PAWEL PINOT STILE N/S
	4204106064	ASTRACAL PANEL
	4204101648	TOP RAIL, PANEL N/S
	4204104569	BOTTOM RAIL, FIXED PANEL N/S
	4204102601	RUBBER WEATHERSTRIP
	4204110810	GLASS STOP, 5/8 HORIZONTAL
	4204100670	GUSS STOP, 5/8 HORIZONTAL
	4204110685	GLASS STOP, 5/8 VERTICAL
	04100645	4204100645 GLASS STOP, 5/8 VERTICAL

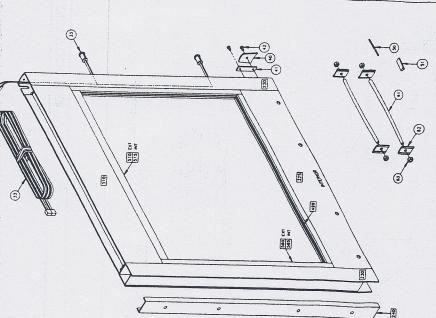
MOTES.

PARTS USED ARE FOR A USZB RECHT HAND PARTS USED A MORROW STILES. 3-1/2 FOW RM. THOUSED A MORROW CONS. STORS FOR 10 THE APPLICATION FOR STAND ANY OTHER APPLICATION.

CONSULT FACTORY FOR LENGTH ND FINISH WHEN ORDERING ALL XTRUSIONS.



1 429100722 10.24 1NE.4.0 OSENBRICON 1 429100722 10.24 1NE.4.0 OSENBRICON 2 4291100722 10.24 1NE.4.0 OSENBRICON 2 4291100722 10.24 1NE.4.0 OSENBRICON 2 4201100720 10.24 S.C. C.C. C.C.	1 1 1 1 1 1 1 1 1 1 1 1	4204116070 4204102225 4204102224 4204101305 420410170 4204100118 4289100735 4289100735 4289100735 4289100735 4284100118 4204100118 4204100108	32 4700106633 J/R MAINESTIRP, 437 470 12 4700110033 J/R MO C J M
NOTES: REAP PARTS LISTED ARE FOR A US28 REAP MAN AND ROOM (S.M.) AND			



Pana 7 nf B

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REPLACEMENT PARTS FOR 96000 SERIES LEFT HAND DOOR BI-PART OUTSIDE SLIDE ONLY

REPLACEMENT PARTS FOR 96000 SERIES LEFT HAND PANEL BI-PART OUTSIDE SLIDE ONLY

MOTES.

1. PARTS LISTED ARE FOR A USSB.
LIEFT WAND DOOR (ISA) WITH WARROW.
STILES. 3-1/22 (100 ML. S. BOTTOM.
RAV. AND 5/6 GLAGS STOPS FOR 1/4.
ANY OTHER APPLICATIONS.

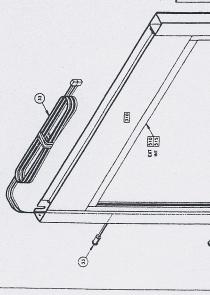
NOTES.

1. PARTS LISTED ARE FOR A US28
LET PARTS LISTED ARE FOR A US28
STILES 1-17.7 TOP BALL 5' BOTTOM
ROLL AND 5/10° CASS STOPS FOR 1/4"
ART OTHER APPLICATIONS.

2. CONSULT FACTORY FOR LENGTH AND FINISH WHEN ORDERING ALL EXTRUSIONS.

2. CONSULT FACTORY FOR LENGTH AND FINISH WHEN ORDERING ALL EXTRUSIONS.



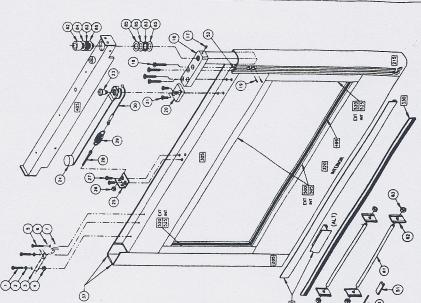


10 DOOR LAIT ARA
DO SPRING BOLCKET
11 1/4-20 HZW MJT
11 1/4-20 HREW GREW
12 PRING DINKE SCREW
13 EXTENSON SPRINGS

20 COMPOSITE AND ASSCRIBEY
20 1/4-20 ALLEN SET SCREN
20 5/4-24 SCORET CAP SCREN
21/4-20 FLAT HELD SCREN
21/4-20 FLAT HELD SCREN
21/4-20 FLAT HELD SCREN
21/4-20 FLAT HELD SCREN
22 FLAT HELD SCREN
23 FLAT HELD SCREN
24 FLAT

2 429100275 Killing Seption 275 Killing Septiminary Se

DESCRIPTION	RECEINER CABLE - BLUF		END CAP BRACKET	\$6-32 PAN HEAD SCREW	GLASS STOP ANCHOR	SETTING BLOCK BAG	3/8 ROD	4204100703 BACK UP PLATE	4204100702 3/8-16 SEMS NUT	4204118066 LOCK STILE, BI-PART LH PANET (D)	4204104616 LH PANEL PRIOT STILE N/S	ASTRACAL PANEL	4204101648 TOP RML, PANEL N/S	BOTTOM RAIL, FIXED PAMEL N/S	RUBBER WEATHERSTRIP	GLASS STOP, 5/8 HORIZONIA	4204100670 GLASS STOP, 5/8 HORIZONTA	4204110685 GLASS STOP. 5/8 VERTICAL	565 4204100645 CLASS STOR & AR ACTOR
PART No.	96192-600	4204120567	4204120564	4299101302	4204115034	4204100709	4204100658	4204100703	1204100702	1204118066	1204104616	4204106064	1204101648	4204104569	4204102601	4204110810	204100670	204110685	204100645
TEN.	3	9	=	42	8	5	5	62	3	225	22	240	310	325	499	510	515	260	565



| 3/9 R00 | 3/9

SWEEP HOLDER CARRER ASSEMBLY, LH BI-PART

199 4204102601 WEATHERSTREP 500 4204110860 GAASS STOP, 5/9 HOREZONIAL 500 4204110860 GAASS STOP, 5/9 HOREZONIAL 500 4204110860 GAASS STOP, 5/9 VERTICAL 520 4204100864 GAASS STOP, 5/9 VERTICAL

28 (299100726) 1/4-20 NR MU
29 (299100726) 1/4-20 NR MU
29 (20110972) 59400 DAW SCRE
29 (20110972) 59400 DAW SCRE
29 (20110972) 59400 DAW SCRE
20 (20110972) 59400 DAW SCRE
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