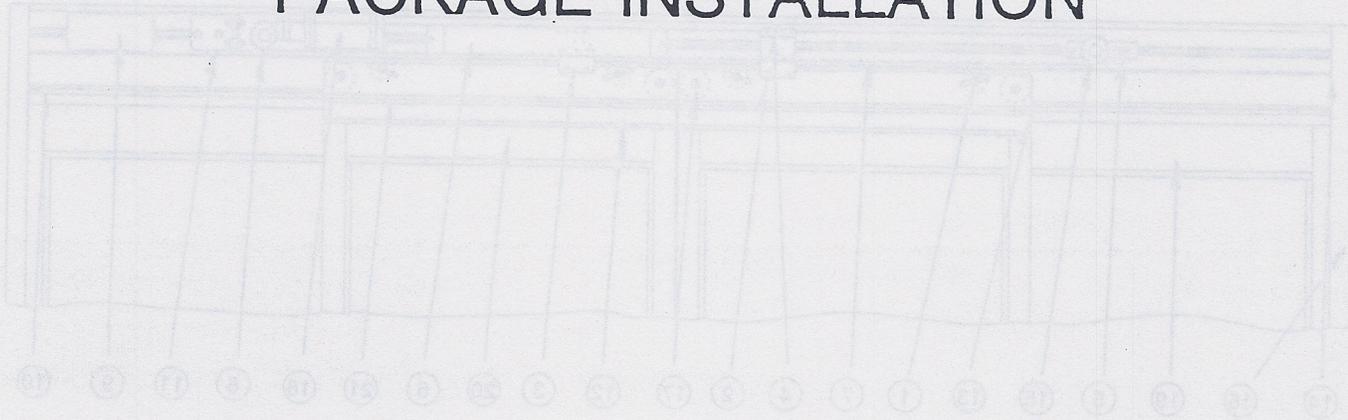


DURA-GLIDE™

AUTOMATIC SLIDING DOOR SYSTEM

3000 SERIES PACKAGE INSTALLATION



STANLEY MAGIC-DOOR

DIVISION OF THE STANLEY WORKS

Farmington, CT 06032

3000 CONTENTS

Basic package installation is in suggested order of execution.

Basic Package Data

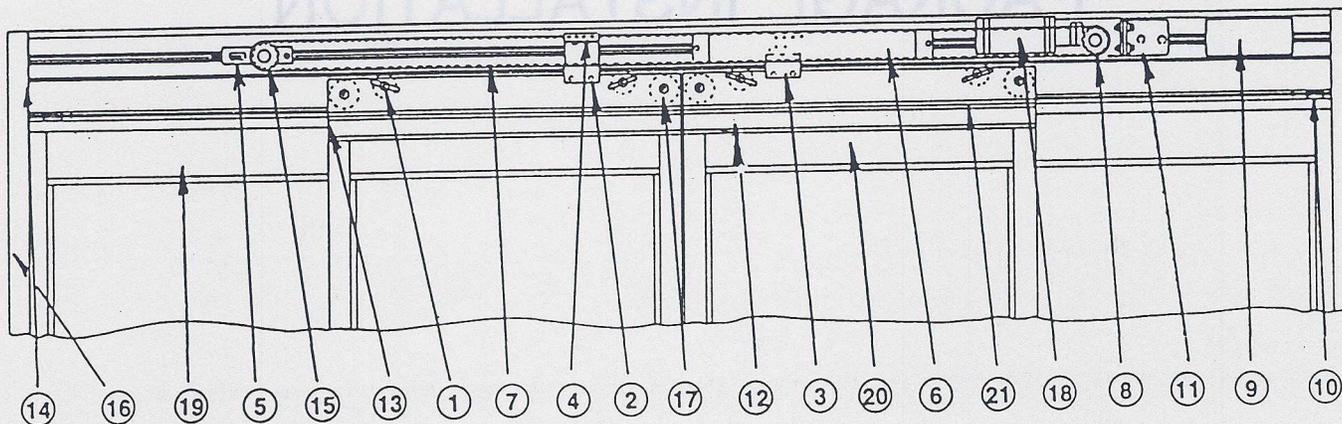
- (1) Masonry Opening
- (2) Assemble Header/Operator to jambs.
- (3) Install Header/Operator and jamb assembly.
- (4) Install Threshold.
- (5) Bottom Sweep, Location, SO, SX.
- (6) Install (SO) Panels
 - Bottom Pivot
 - Top Pivot
 - Holding Beam Leads
 - Door Holders
 - B/O Switches
- (7) Install (SX) Panels
 - Install (SX) Panels
 - Security Hooks
 - Prep. wheel positions
 - Hang panels on track
 - Set bottom guide
 - Adjust panel height, tilt
 - Adjust anti-risers
 - Connect panels to belt
 - Manually slide & set bumper stops
 - B/O detents
- (8) Glaze Panels
 - Standard glass sizes
 - Glazing Technique

APPENDIX - Transom Package

APPENDIX - Fasteners

APPENDIX - Jambs-By-Others
Jamb Template

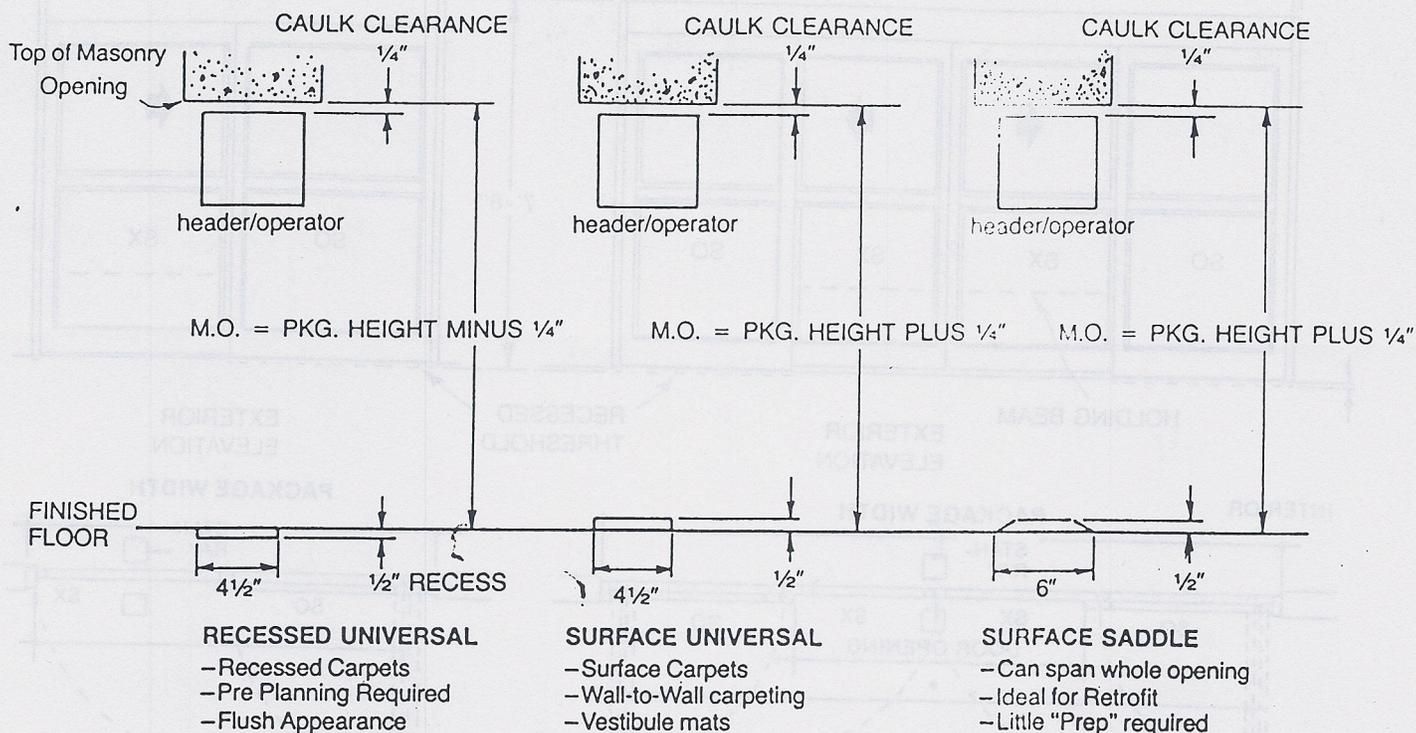
DURA-GLIDE BI-PART HEADER-OPERATOR ASSEMBLY



DURA-GLIDE COMPONENTS

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. ANTIRISER ADJUSTMENT (4) 2. BELT BRACKET-LONG 3. BELT BRACKET-SHORT 4. BELT CLAMP 5. BELT TENSION ADJUSTMENT 6. CONTROL BOX 7. DRIVE BELT 8. DRIVE PULLEY 9. ELECTRICAL CONNECTOR BOARD 10. END STOPS (2) 11. GEAR MOTOR BRACKET | <ol style="list-style-type: none"> 12. HANGER-DOOR (2) 13. HANGER END CAPS (4) 14. HEADER END CAPS (2) 15. IDLER PULLEY 16. JAMB (2) 17. LOAD WHEELS (4) 18. MOTOR/ENCODER 19. SO PANEL (2) 20. SX PANEL (2) 21. WEATHER STRIP (4) |
|---|--|

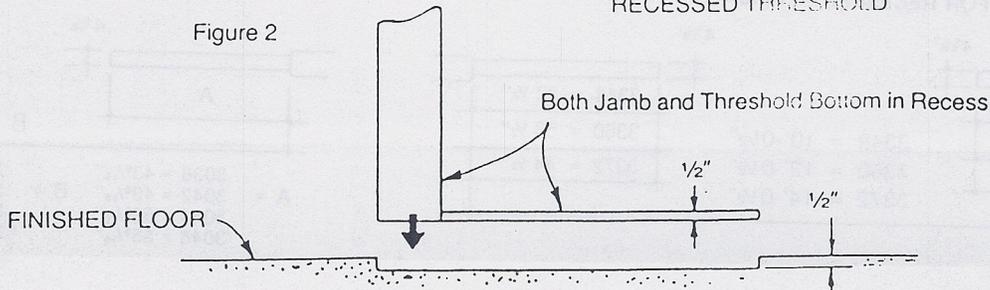
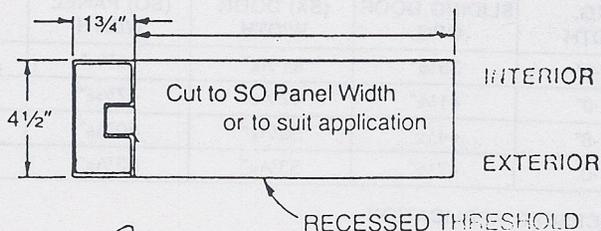
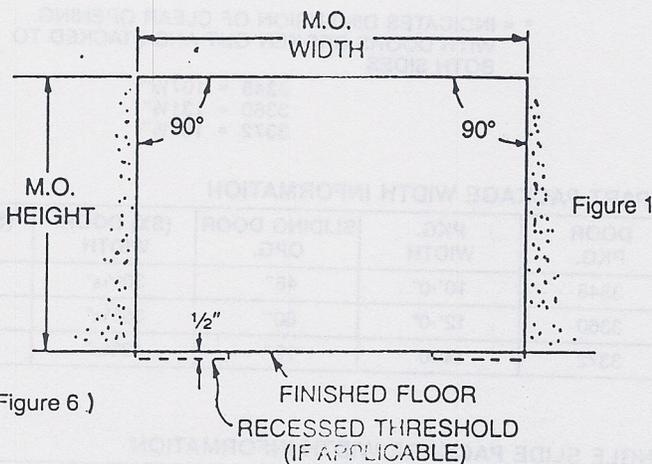
GENERAL PACKAGE DATA



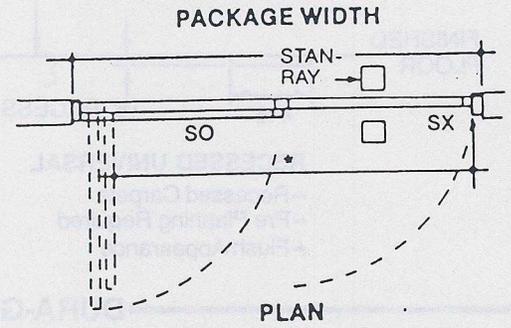
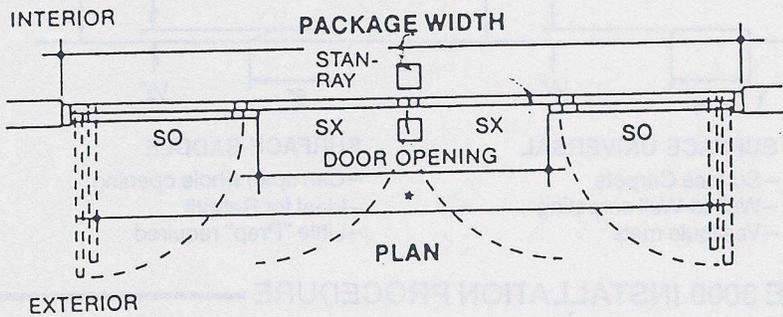
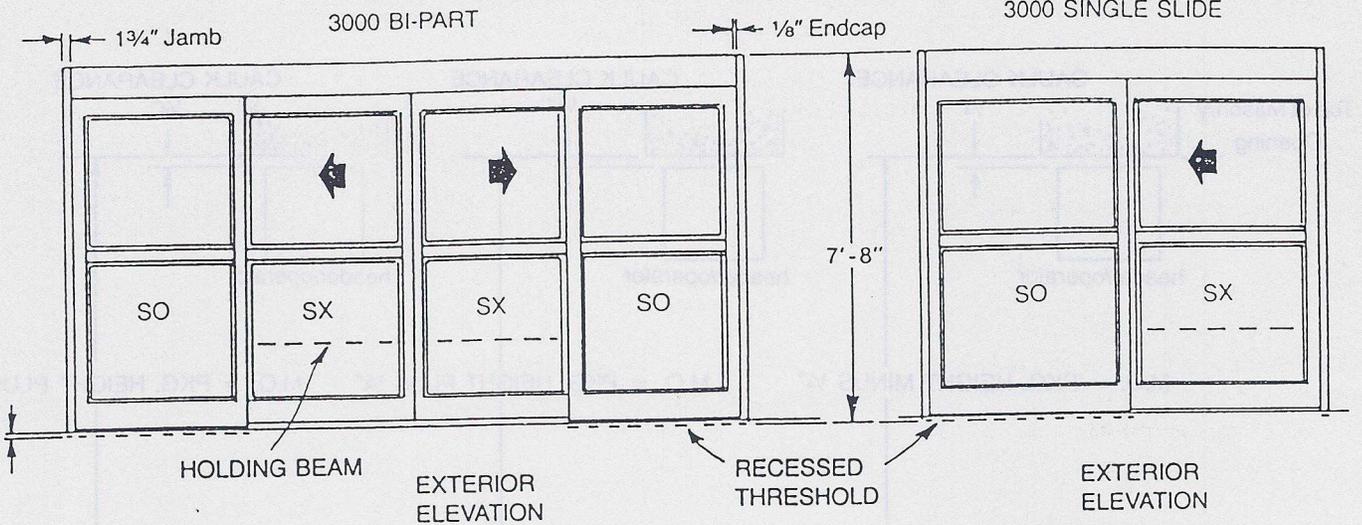
DURA-GLIDE 3000 INSTALLATION PROCEDURE

MASONRY OPENING

- 1 Check Floor across entire opening.
- 2 Fill any low areas to level condition.
- 3 Allow for tile, terrazzo, etc., when determining finished floor.
4. Check Threshold Recesses if used. (Figure 6)



GENERAL PACKAGE DATA



* = INDICATES DIMENSION OF CLEAR OPENING WITH DOORS BROKEN OUT AND STACKED TO BOTH SIDES

* = INDICATES DIMENSION OF CLEAR OPENING WITH DOORS BROKEN OUT AND STACKED TO ONE SIDE.

- 3348 = 107 1/2"
- 3360 = 131 1/2"
- 3372 = 155 1/2"

- 3036 = 75 3/4"
- 3042 = 87 3/4"
- 3044 = 93 3/4"
- 3048 = 99 3/4"

BI-PART PACKAGE WIDTH INFORMATION

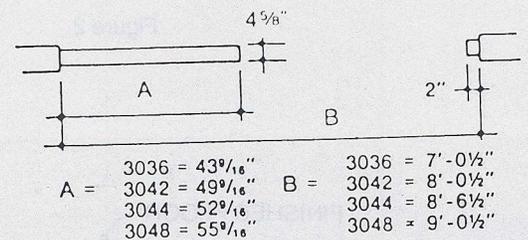
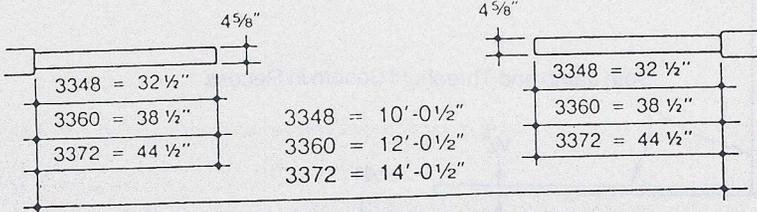
DOOR PKG.	PKG. WIDTH	SLIDING DOOR OPG.	(SX) DOOR WIDTH	(SO) PANEL WIDTH	DOOR TRAVEL	MASONRY OPENING	CAULKING ALLOWANCE
3348	10'-0"	48"	30 5/16"	30 5/16"	24"	10'-0 1/2"	1/4"/Side
3360	12'-0"	60"	36 5/16"	36 5/16"	30"	12'-0 1/2"	1/4"/Side
3372	14'-0"	72"	42 5/16"	42 5/16"	36"	14'-0 1/2"	1/4"/Side

SINGLE SLIDE PACKAGE WIDTH INFORMATION

DOOR PKG.	PKG. WIDTH	SLIDING DOOR OPG.	(SX) DOOR WIDTH	(SO) PANEL WIDTH	DOOR TRAVEL	MASONRY OPENING	CAULKING ALLOWANCE
3036	7'-0"	35 1/2"	41 7/16"	41 7/16"	35 1/2"	7'-0 1/2"	1/4"/Side
3042	8'-0"	41 1/2"	47 7/16"	47 7/16"	41 1/2"	8'-0 1/2"	1/4"/Side
3044	8'-6"	44 1/2"	50 7/16"	50 7/16"	44 1/2"	8'-6 1/2"	1/4"/Side
3048	9'-0"	47 1/2"	53 7/16"	53 7/16"	47 1/2"	9'-0 1/2"	1/4"/Side

FOR RECESSED APPLICATION

FOR RECESSED APPLICATION



6 Sweep Floor

7 Dura-Glide Electrical Requirements:

117 VAC 15 Amp for 1-2 operators, thru header end cap

117 VAC 20 Amp for 3-4 operators, thru header end cap

NOTE: Plan to bring 117 VAC thru end cap wiring hole at connector board end of header.

All wiring shall conform with Nat. Elec. Code.

ASSEMBLE HEADER TO JAMBS

1 Place Header on a flat surface with the swing up cover facing up.

Caution: Protect Header from scratches.

2 Set Jambs in against Header end caps and fasten with (4) 1/4-20 bolts into factory-mounted rivnuts.

For Jambs or Jamb Fasteners by others, see Appendix.

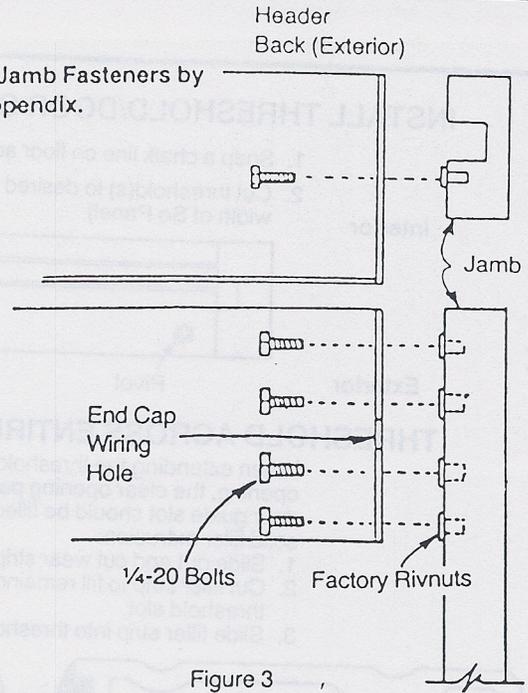


Figure 3

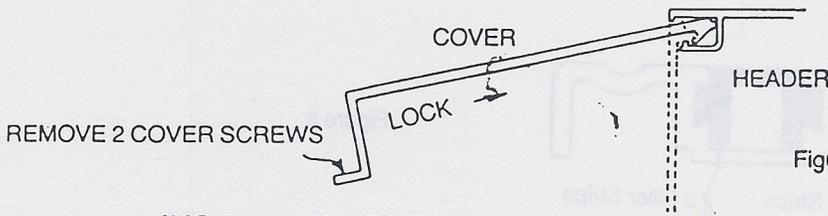


Figure 4

INSTALL HEADER AND JAMB ASSEMBLY

Important: Elevation must be taken from highest point of finished floor.

- 1 Swing Up Cover Faces Interior
- 2 Lift Header into position.
- 3 Level Header track. If required, shim under appropriate jamb.
- 4 Plumb one of the jams in both planes. If required, shim back of jamb.
- 5 Drill through factory holes in Jamb for appropriate fasteners. (See "Fasteners") Fasten jambs to structure (use jamb holes for template)
- 6 Plumb and repeat fastening for other jamb.
- 7 Fasten securely.
- 8 Check level of header and its height from highest point of finished floor. If not right, fix it now.
9. If Transom package, see "Transom" Appendix.

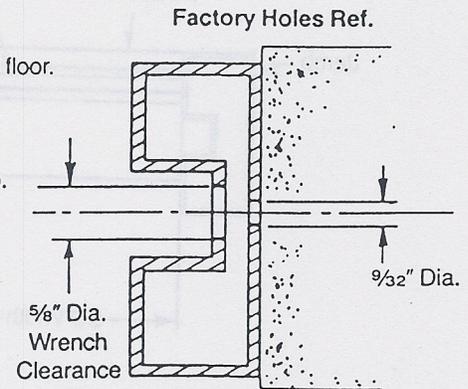


Figure 5

INSTALL THRESHOLD/DOOR GUIDE

Two Threshold types are available:

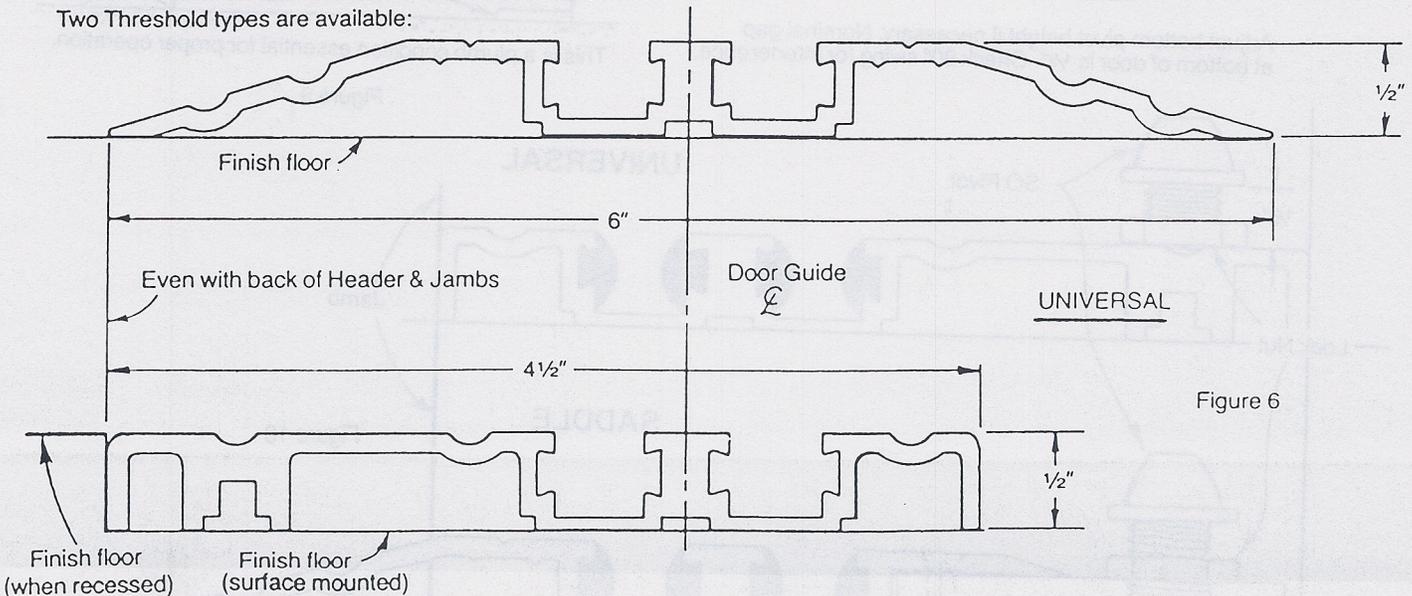


Figure 6

INSTALL THRESHOLD/DOOR GUIDE (CONT.)

1. Snap a chalk line on floor across exterior of Jamb.
2. Cut threshold(s) to desired length. (example: to width of So Panel)

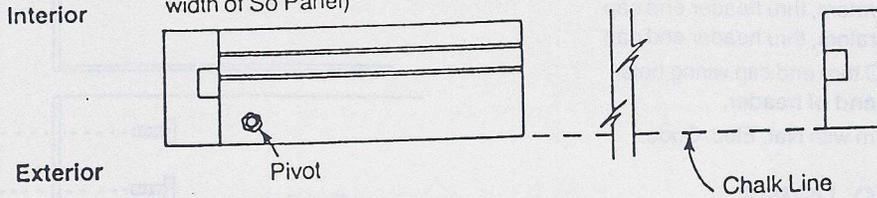


Figure 7

THRESHOLD ACROSS ENTIRE OPENING

When extending the threshold across the entire opening, the clear opening part of the threshold door guide slot should be filled with the solid filler extrusion:

1. Slide out and cut wear strips to SO panel width.
2. Cut filler strip to fill remainder of threshold slot.
3. Slide filler strip into threshold.

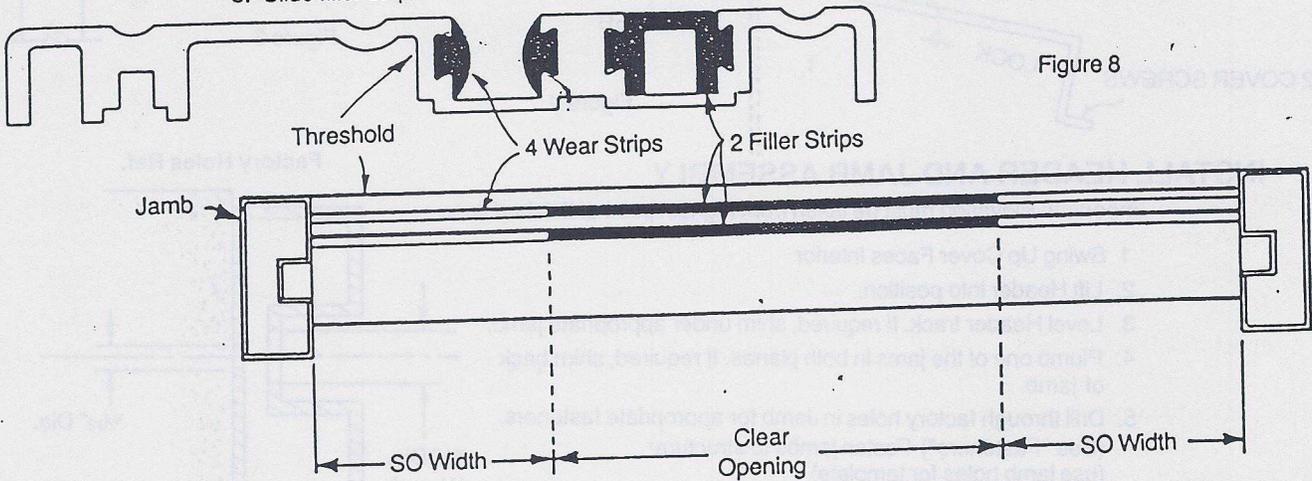
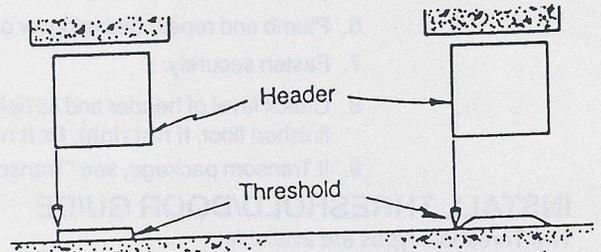


Figure 8

4. Check Threshold location with plumb from header.
5. Drill thru holes in Threshold into floor and fasten



This is a plumb condition essential for proper operation.

Figure 9

INSTALL SWING OUT (SO) PANEL

Adjust bottom pivot height if necessary. Nominal gap at bottom of door is $\frac{1}{4}$ ". Check 90° swing for interference.

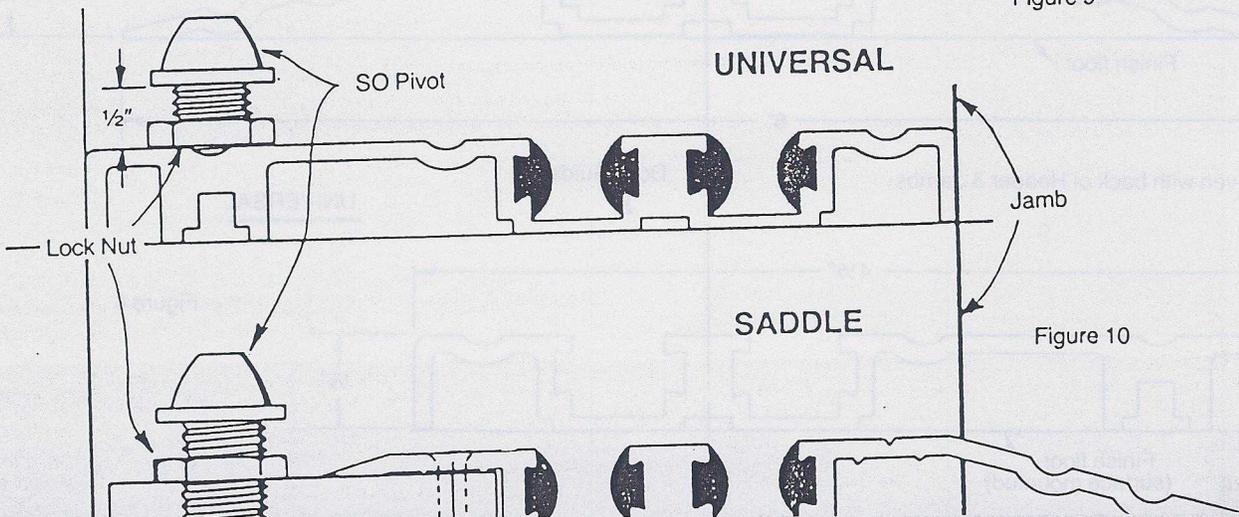


Figure 10

ALL PANELS—SET BOTTOM SWEEP LOCATIONS

SURFACE MOUNTED DOOR PACKAGE

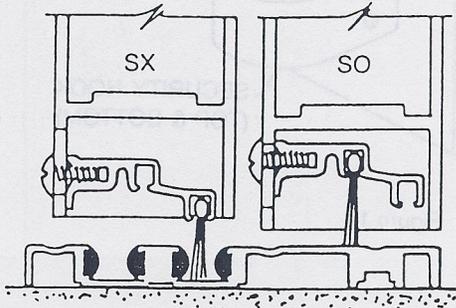
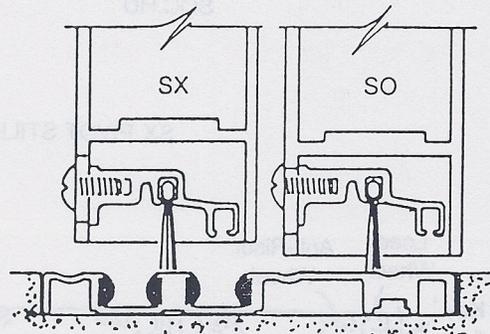


Figure 11

RECESSED DOOR PACKAGE



The bottom sweep is shipped in the upper position on the (SX) door. If you have a surface mounted installation, it will be necessary to remove the sweep and position it in the lower slot of the extrusion. After repositioning the sweep, stake it in place.

INSTALL SWING OUT (SO) PANEL

1. Feed Holding Beam wires through header torque tube.
2. Swing panel into position.
3. Set and lock top pivot. Set SO Top Pivot flush with top of door.

To Retract for Panel installation or removal:

- loosen locking screw
- push pivot pin down (if door is installed, push on pivot retracting pin with the door in 90° open position)
- set with locking screw

To Extend Pivot for panel installation:

- feed wires thru hole in header while lining up pivot
- loosen locking screw
- pivot snaps up and fully engages header hole
- pull up on retracting pin if necessary
- set locking screw

Attach and Adjust door holders.

- S.O. Panel(s) are equipped with adjustable friction door holders
1. Remove holder tape from holder arm.
 2. Fasten holder arm to header with special shoulder screw.
 3. Adjust door holder for resistance
- Note: Door drag increases as door swings to 90° so check adjustment with full swing.

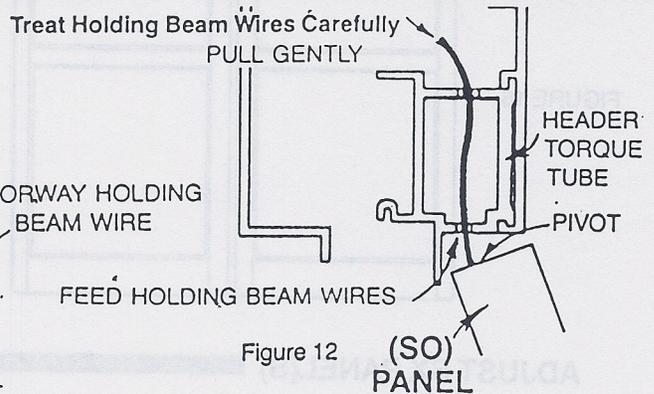
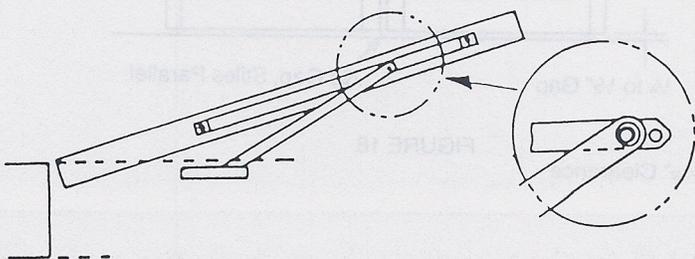


Figure 12

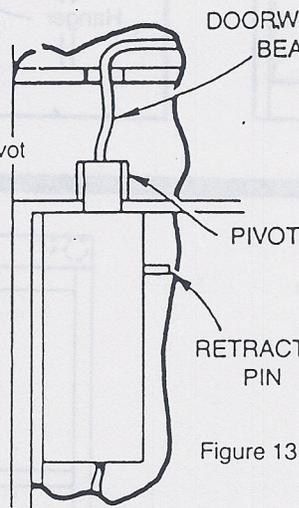
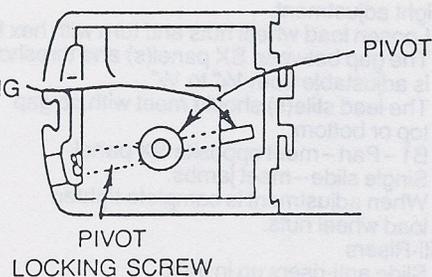


Figure 13



PIVOT LOCKING SCREW

S.O. Panel(s) are equipped with magnetic reed Break Out Switches, NO ADJUSTMENT IS REQUIRED

1. Be sure switches are wired to proper terminals of connector board.

TEST SWITCH

When door is in closed position—the switch is also closed due to the influence of the magnet.

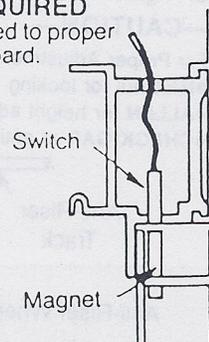


Figure 14

S.O. Panel

INSTALL (SX) SLIDING PANEL

FASTEN SECURITY HOOKS

10-32 x 3/8" FHMS
SOC.HD

SX PIVOT STILE

SECURITY HOOK
(TOP & BOTTOM)

Figure 15

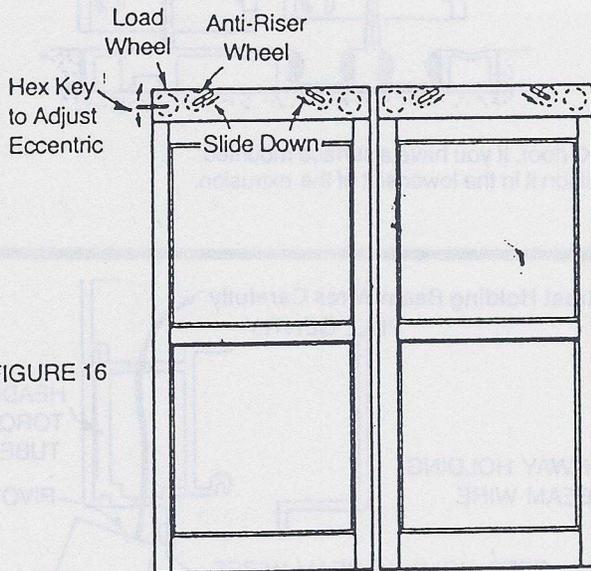


FIGURE 16

Loosen nuts and adjust load wheels to lowest position in hanger. Tighten load wheel nuts. This adjustment will set the panel to its highest position—to ease bottom guide insertion and keeps antirisers from interfering while hanging panel.

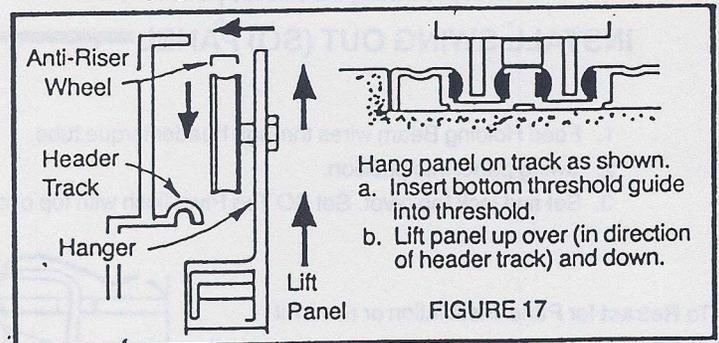


FIGURE 17

ADJUST SX PANEL(S)

1. Height adjustment.
 - a. Loosen load wheel nuts and turn with hex key
 - b. The gap between SX panel(s) and threshold is adjustable from 1/4" to 1/2"
 - c. The lead stile(s) should meet with no gap top or bottom.
B1 - Part - meet opposite SX panel.
Single slide - meet jambs.
 - d. When adjustment is complete tighten load wheel nuts.
2. Anti-Risers
 - a. Slide anti-risers up in their slots 1/64" to 1/32" clearance to track.
A match book cover inserted between wheel and anti-riser track makes a handy gauge.
 - b. Tighten nuts.

—CAUTION—

For Proper Adjustment Use:

- HEX nut for locking
- ALLEN for height adjustment only
- CHECK GAP at anti-riser AFTER final tightening

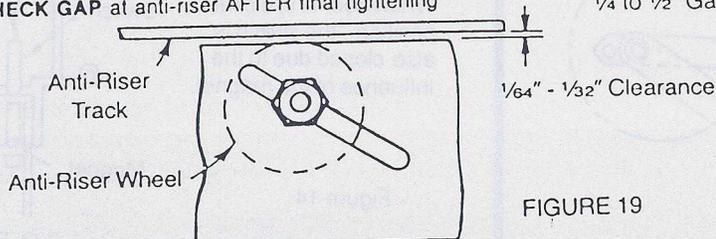


FIGURE 19

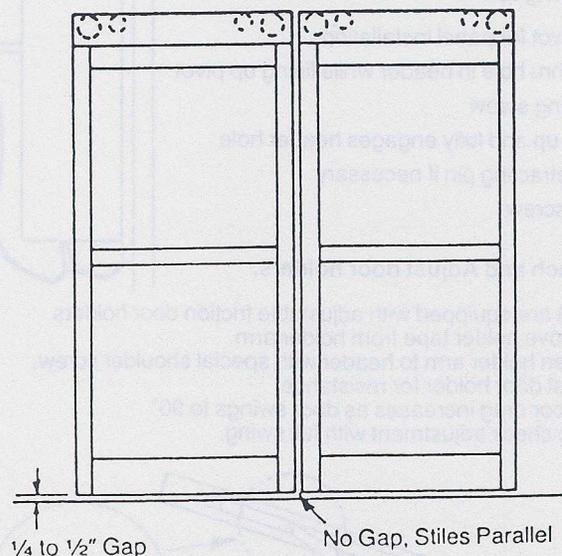


FIGURE 18

INSTALL (SX) SLIDING PANEL (cont.)

Fasten belt brackets to hangers.

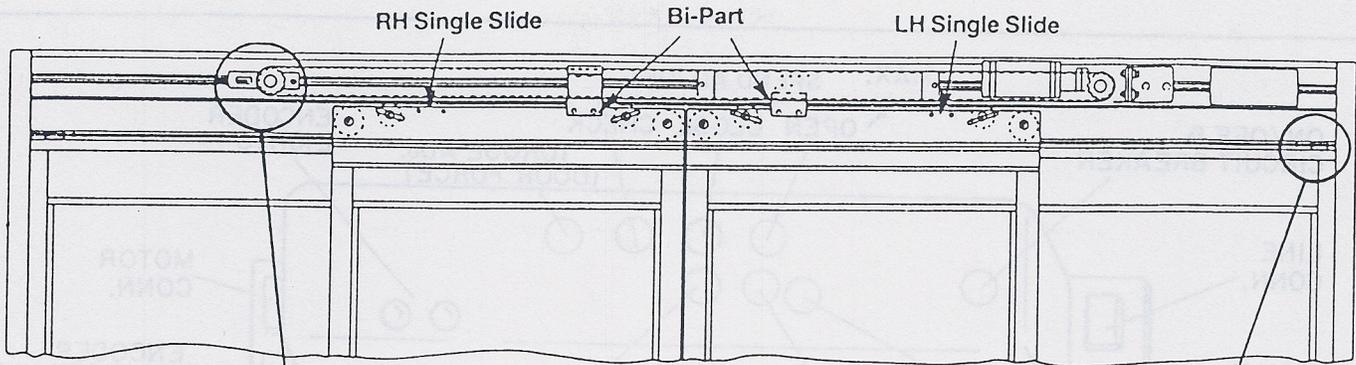


FIGURE 20

Adjust full open bumper stops on bi-parts to be sure the two panels hit their stops simultaneously.

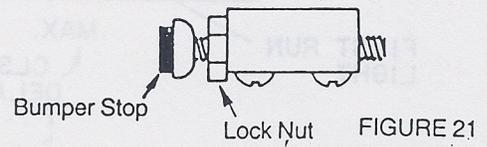


FIGURE 21

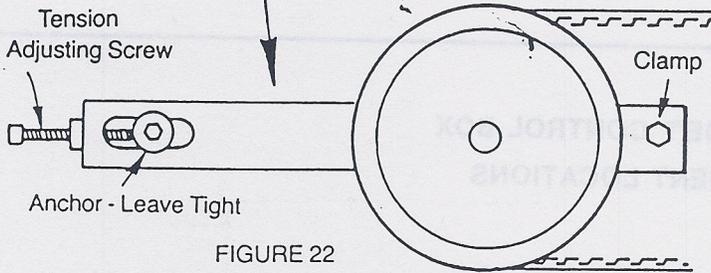


FIGURE 22

Belt Tension Belt tension is factory set and should not need adjustment.

DO NOT OVERTIGHTEN BELT.

If the belt is set **too tight**, gear reducer or bearing failure can result.

Remember that this belt drive has a long span so some deflection is normal.

Symptoms of loose belt:

- belt hitting header, especially on recycle.
- drive pulley skipping on belt teeth
- belt almost "climbing" out of engagement with drive pulley on opening cycle.

Break Out Detents are factory set to average requirements.

If more or less breakout force is required (up to 50 lb. by code):

- a. Break out panel
- b. Loosen (2) detent block set screws
- c. Slide detent block from hanger
- d. Adjust detent
- e. Replace
- f. Be sure detent block lines up with clearance slot in door.

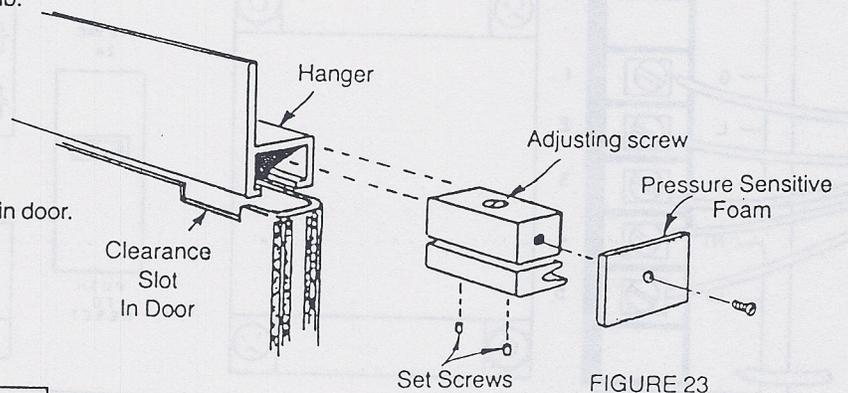
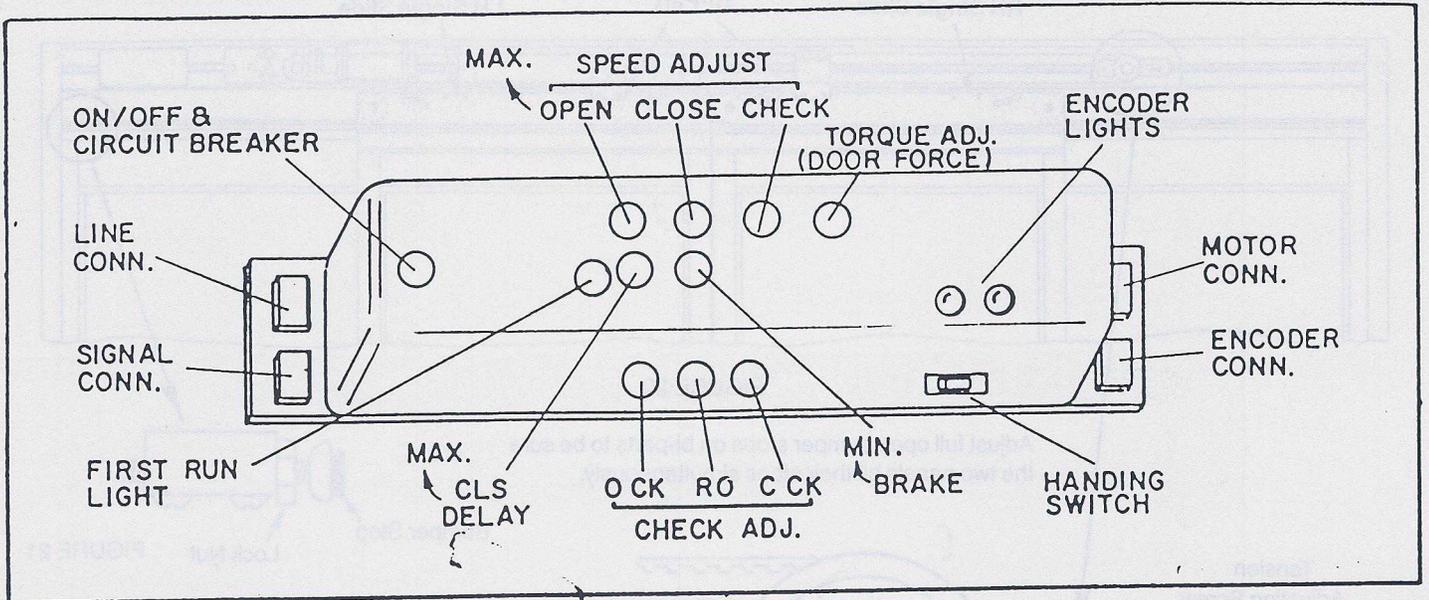
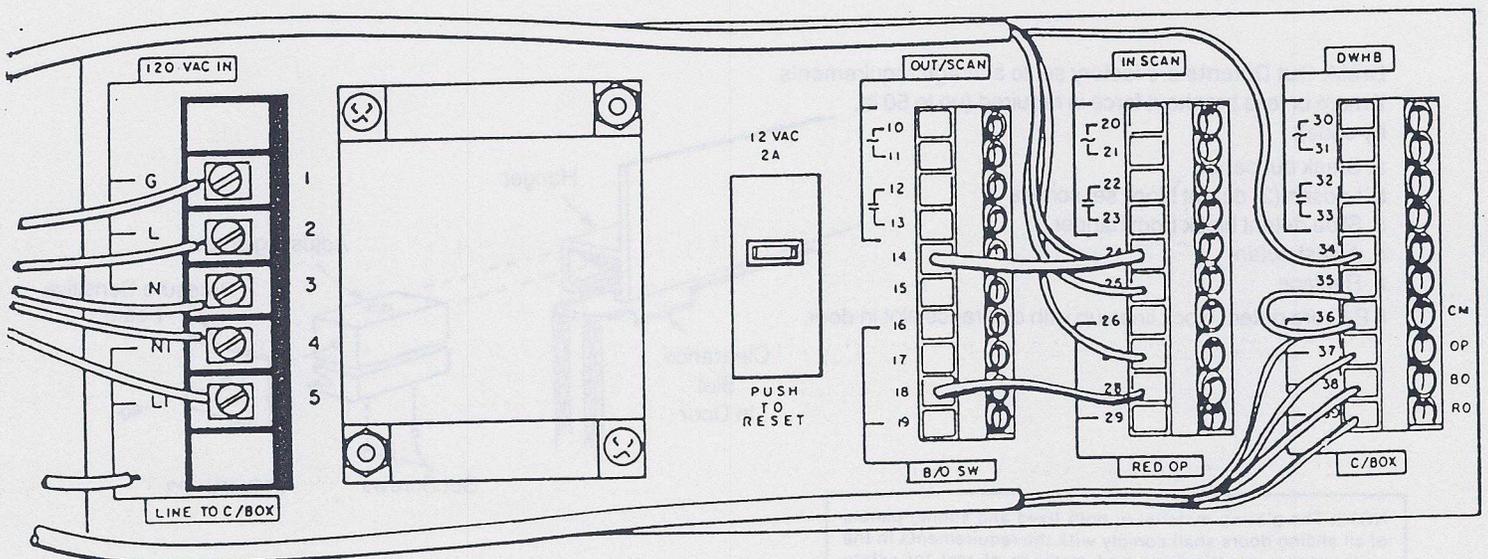


FIGURE 23

NOTE: The glazing material in both fixed and sliding panels of all sliding doors shall comply with the requirements in the performance specifications and methods of test for safety glazing materials used in buildings. ANSI Z 97.1 - 1975



**DURA-GLIDE™ CONTROL BOX
ADJUSTMENT LOCATIONS**



**DURA-GLIDE™
ELECTRICAL CONNECTOR BOARD**

APPENDIX

TRANSOM PACKAGE

1. Assemble horizontal transom member to jambs with angle clips provided.
2. Fasten horizontal transom member to overhead with appropriate fasteners. Holes for mounting are to be field drilled.
3. Install glass adapter, centered on jambs, to top of header. Spot drill in header and fasten with appropriate screws.
Caution: When Drilling Holes in Header, do not drill over motor or any other component that might touch screws.
4. Install vertical tube transom member, if any.
5. Snap in vertical glass adapters.
6. Snap in horizontal glass adapters.

**DURA GLIDE SYSTEM
REQUIRED FASTENERS**

FASTENERS	SUPPLIED	BY OTHERS
1. Header End-Caps/Stanley Jambs with Riv.-Nuts 1/4-20x3/4" Hex Hd. scr.	X	
2. Header End-Caps/Jambs-By-Others #14-10x3/4 Rd. Hd. scr.	X	
3. Header End-Caps/Wood opening Jambs/Wood opening #14x1 1/2 Rd. Hd. Wood scr.		X
4. Header End-Caps/Masonry Jambs/Masonry Transom Tube/Masonry 1/4-20 Scr. & appropriate anchors		X
5. Transom Tube Corner Angle Clips #14-10x3/4 Rd. Hd. scr.	X	
6. Security Hooks/Stile 1/4-20 1/2 F.H.M.S. Soc. Hd. scr.	X	
7. SO Pivot Lock Nut 7/16-20 Hex Jam	X	
8. Belt Bracket/Hanger 5/16-18x5/8 Hx. Hd. scr.	X	
9. Door Holder Arm/Header 5/16-18 Special Shoulder scr.	X	

JAMBS SUPPLIED – OTHERS

The Dura-Glide header can be end-cap mounted to other than factory-prepared jambs. Remember to check:

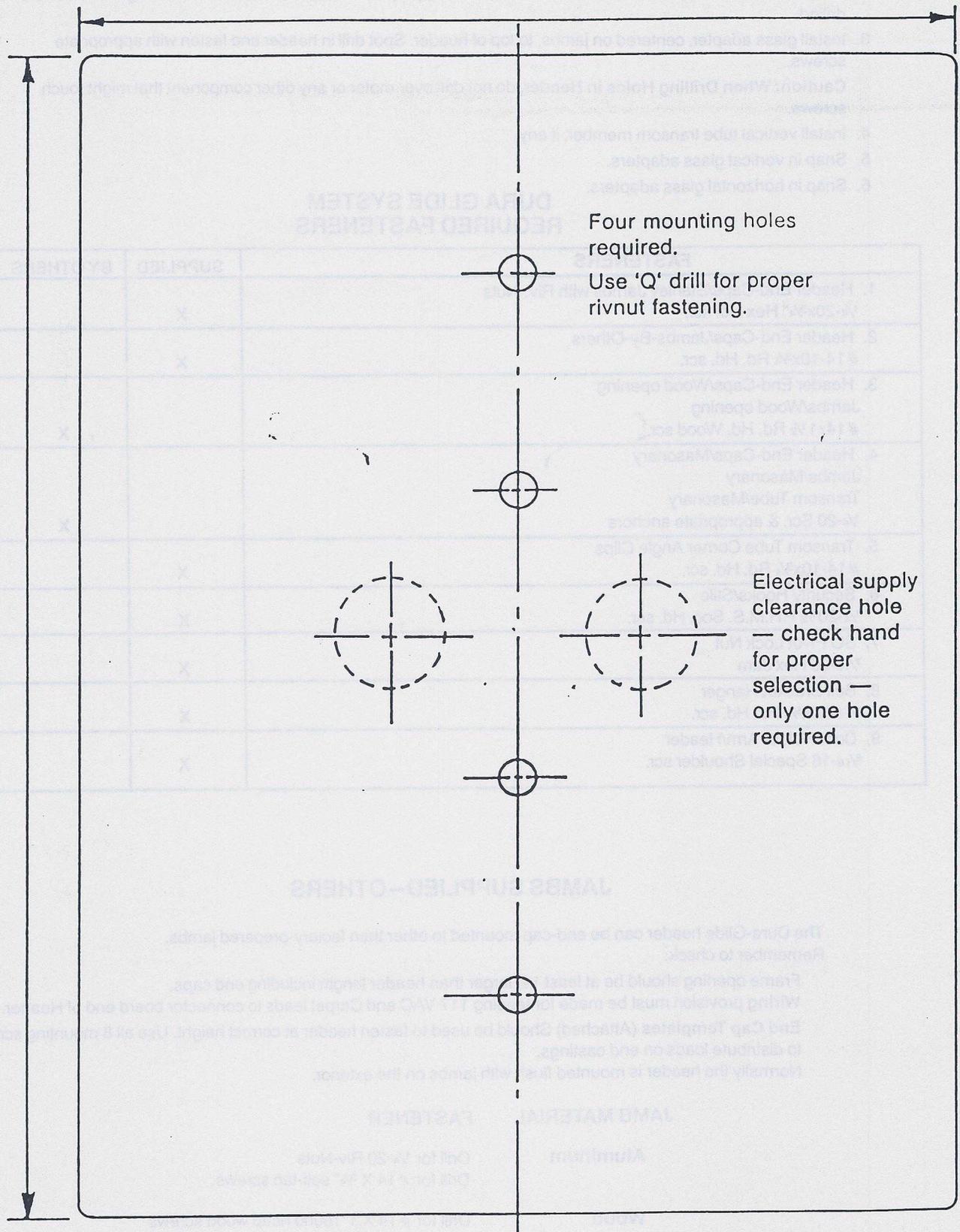
Frame opening should be at least 1/8" larger than header length including end caps.

Wiring provision must be made for feeding 117 VAC and Carpet leads to connector board end of Header.

End Cap Templates (Attached) Should be used to fasten header at correct height. Use all 8 mounting screws to distribute loads on end castings.

Normally the header is mounted flush with jambs on the exterior.

JAMB MATERIAL	FASTENER
Aluminum	Drill for 1/4-20 Riv-Nuts Drill for #14 X 3/4" self-tap screws.
Wood	Drill for #14 X 1" round head wood screws
Masonry	Drill for Anchors with 1/4-20 threads for round head screws.



DURA-GLIDE™ Header END CAP Template

DURA-GLIDE INSTALLATION WIRING INSTRUCTIONS

The header assembly is delivered with the operator, motor/encoder, control box, function switches, and electrical connector board assembled and tested. The line power, Doorway Holding Beam, operate sensors (Stan-Ray, mats, etc.) must be installed and connected to the electrical connector board (Figure 1.1)

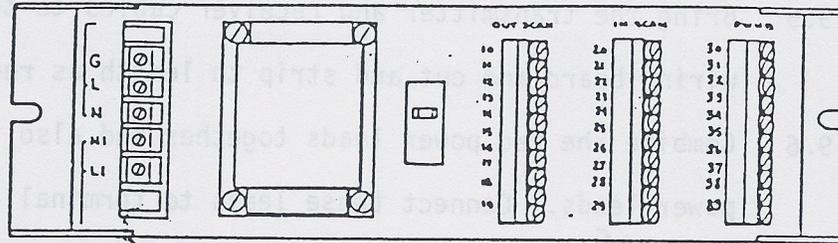


Figure 1.1 Electrical Connector Board

9.0. Line Power Connections.

9.1. Requirements: 117 VAC 50/60 Hz to be supplied from either end of the header assembly and terminated at the electrical connector board.

NOTE: All electrical wiring must conform to the National Electrical Code requirements.

9.2. It is recommended that a separate electrical circuit from the main power panel be supplied to the header assembly. Do not connect more than four operator assemblies to one circuit.

9.3. The wires are routed on the bottom of the header extrusion which serves as a wire channel.

- 9.4. Connect the power ground, line, and neutral wires to G, L, and N connector on the electrical power board.

Doorway Holding Beam. (DWHB)

- 9.5 Bring the transmitter and receiver cables to the electrical wiring board and cut and strip to length as required.
- 9.6 Combine the red power leads together and also the black power leads. Connect these leads to terminal Nos. 30 & 31 of the DWHB terminal block.

NOTE: Color polarity does not matter.

- 9.7 Connect the white and green leads to terminal Nos. 32 & 33.

NOTE: Color polarity does not matter.

- 9.8 B/O Switch connection.

Scan Mounting on Header.

Important: Due to physical limitations of the header/operator assembly, care must be taken for placement of header mounted accessories. (see Figure 4.1.)

Rules for mounting scans:

- Header cover mounting
 - Keep the scans as low as possible to keep electrical cables and mounting hardware away from the belt.
 - Electrical cables thru header should not be any higher than 3" from the bottom edge on the front of the cover.

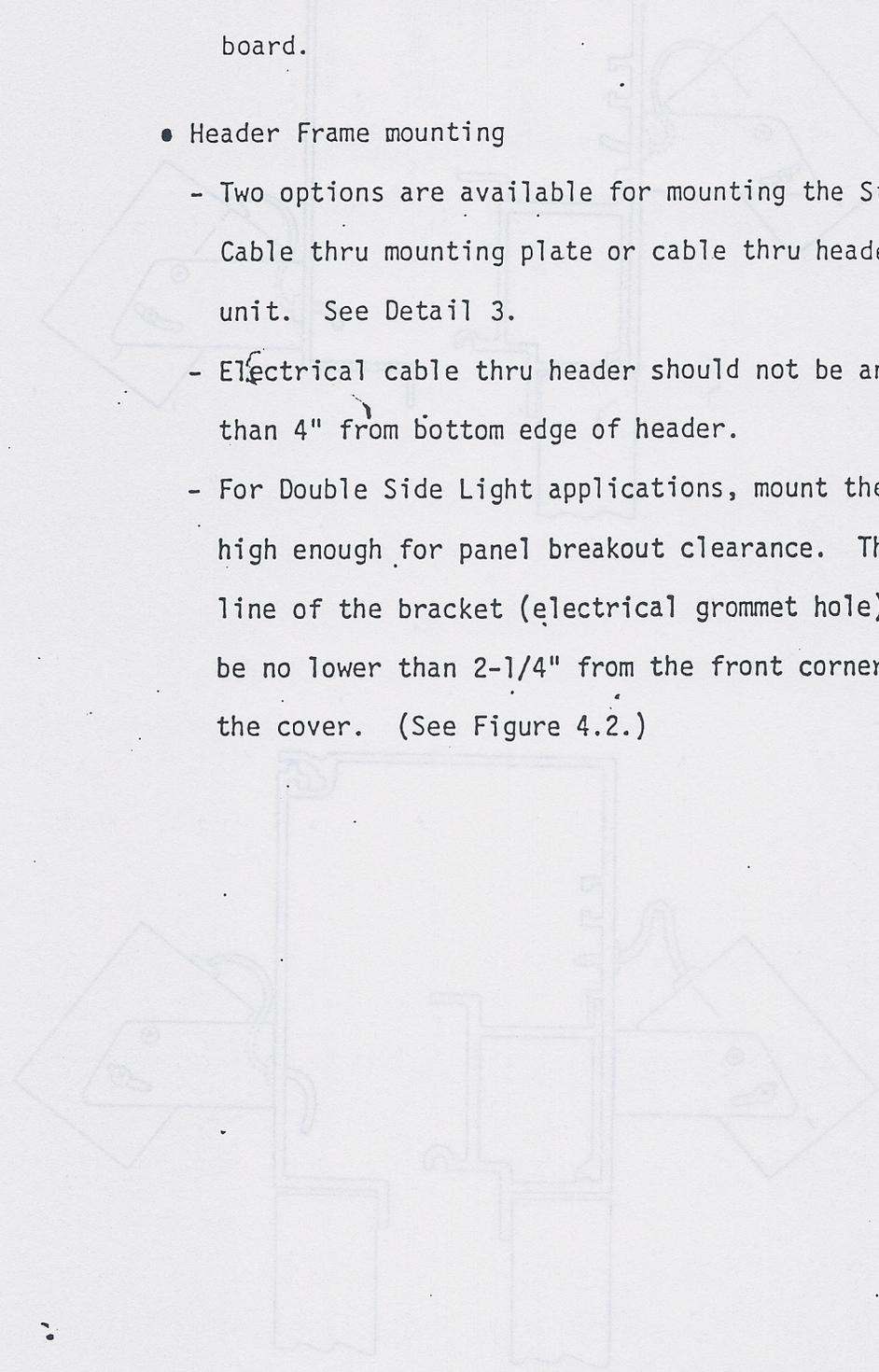
- Route the electrical cable with the function switch harness assembly to the electrical connector board.

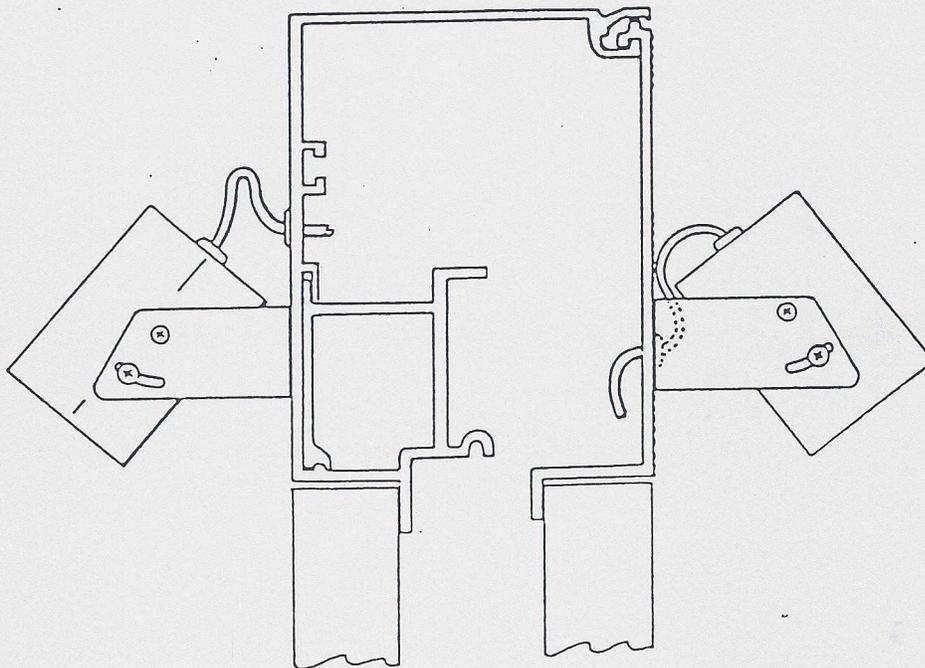
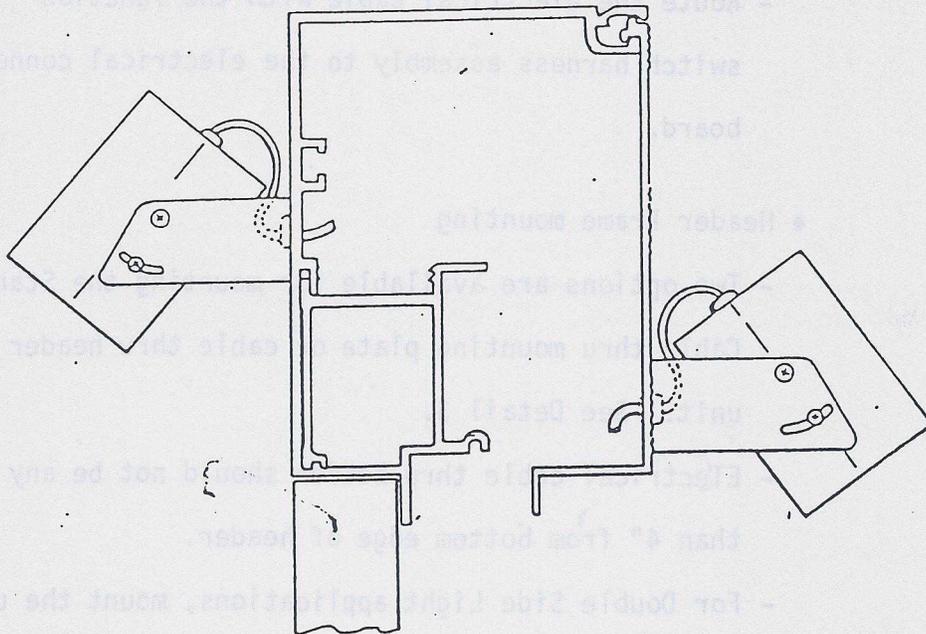
● Header Frame mounting

- Two options are available for mounting the Stan-Ray: Cable thru mounting plate or cable thru header above unit. See Detail 3.

- Electrical cable thru header should not be any lower than 4" from bottom edge of header.

- For Double Side Light applications, mount the unit high enough for panel breakout clearance. The center line of the bracket (electrical grommet hole) should be no lower than 2-1/4" from the front corner edge of the cover. (See Figure 4.2.)





DURA-GLIDE CONTROL BOX OPERATING INSTRUCTIONS

- A. INSTALLATION: Control box is delivered installed, wired and tested in the header.

For removing the box:

- Turn power off
 - Disconnect box by removing 4 connectors
 - Slacken the two mounting screws and remove box by passing it through the belt loop.
- Reverse above steps in installing a new box.

- B. ADJUSTMENT:

1. Close door by hand. Set all adjustment fully CCW
Set AUT/CLS/OPN switch to CLS. For the rest of tune-in procedure use the OPN and CLS positions of this switch to operate door with no interference from sensors.
2. Power on. The "FIRST RUN" light must be on.
3. Push doors partially open by hand. Notice encoder lights blinking on and off.

CAUTION: If encoder lights are permanently off or on while door is moved, do not continue start-up and refer to troubleshooting section.

4. Turn CHECK adjustment 1/4 turn CW.
5. Operate door (set switch to OPN). Door will open slowly.

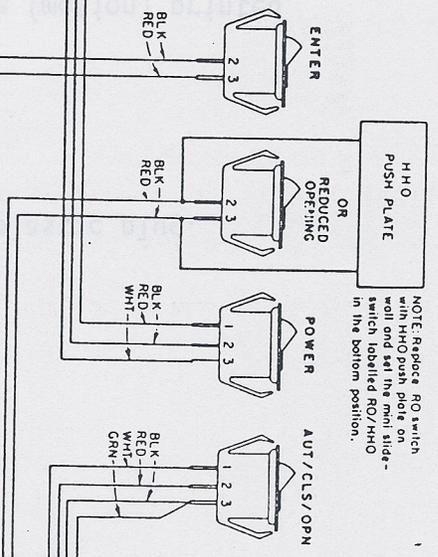
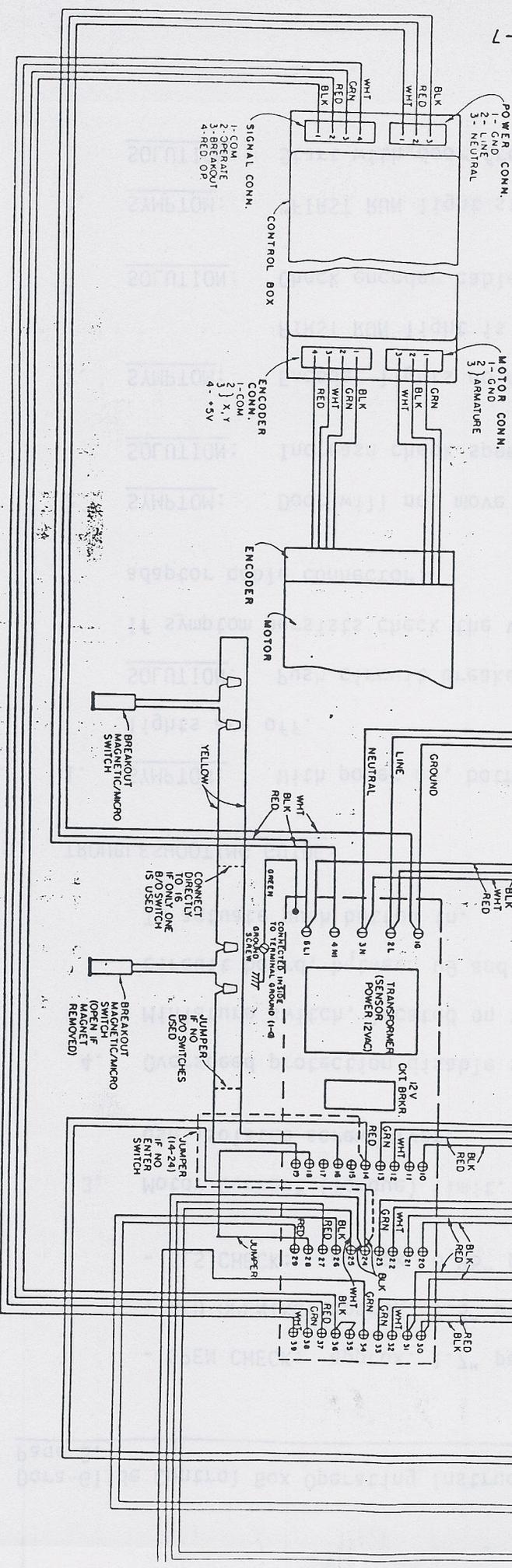
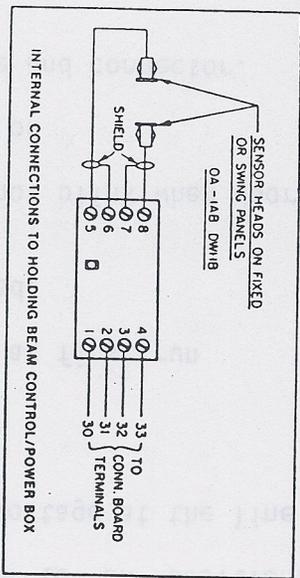
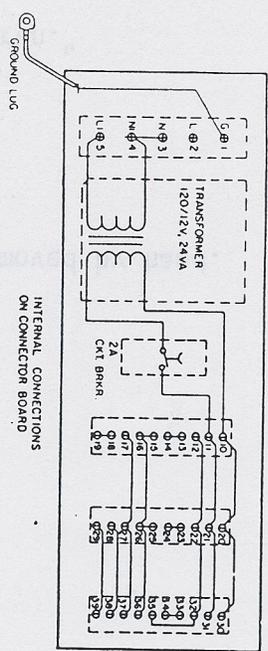
Dura-Glide Control Box Operating Instructions
Page 2.

6. Switch CLS. Door will close slowly.
Notice "FIRST RUN" light goes off.
Adjust slow (check) speed as required.
7. Operate door by switching alternately to OPN and CLS.
Adjust open and close speeds.
Adjust BRAKE to smoothen fast to slow speed transition.
Readjust speeds to obtain desired operation.
8. Switch momentarily to OPN.
Adjust the OPERATE DELAY for desired hold open time.
9. Set RED.OPENING switch to "ON" and check operation.
10. Set AUT/CLS/OPN switch to AUT.
Check operation of sensors and DWHB
Check operation of ENTER Switch (will disable outside sensor in "off" position).

C. INTERNAL ADJUSTMENTS:

Not for normal use. Use only when necessary.

1. Handing switch. Use when replacing a control box in a "reverse handed" door package (e.g. right hand single slide).
Remove cover and set switch to "Right" position for reverse operation.
2. OPEN CHECK, RED.OPENING, CLOSE CHECK switches.
Accessible through holes in the side of box cover. Will increment (CW) or decrement (CCW) the points of slowdown as follows:



NOTE: Reducer RO switch will and set in the switch labelled RO/HHO in the bottom position.

DURA-GLIDE™ SYSTEM SCHEMATIC DIAGRAM

FIGURE 5

- OPEN CHECK: approx. 1.7" per step
- RED OPENING: approx. 3.5" per step
- CLS CHECK: approx. 0.85" per step

3. Motor Current (Torque) limit. Remove plastic plug.
Use isolated screwdriver.

4. Overspeed protection disable switch.
Miniature switch, located on the middle (motion) printed
circuit board, between u9 and u16, marked S1.
To actuate push button in.

D. TROUBLESHOOTING GUIDE:

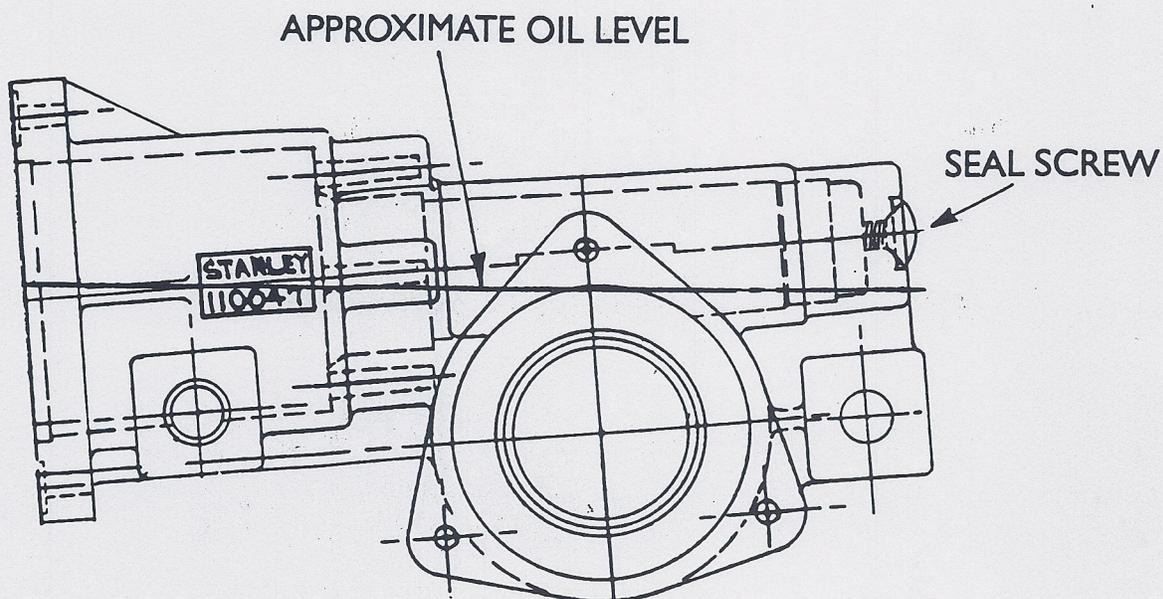
1. SYMPTOM: With power on, both FIRST RUN light and encoder
lights are off.
SOLUTION: Push circuit breaker to "on" position.
If symptom persists check the voltage at the line
adaptor cable connector.

2. SYMPTOM: Door will not move at first run
SOLUTION: Increase check speed.

3. SYMPTOM: Encoder lights do not blink when door moved by hand.
FIRST RUN light is on
SOLUTION: Check encoder cable and connector.

4. SYMPTOM: "FIRST RUN light stays on after first run."
SOLUTION: Start with door from closed position.

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DURA-GLIDE GEAR REDUCER

Pressure Relief

LOOSEN SEAL SCREW AFTER INSTALLATION

**THIS WILL PREVENT THE BUILD UP OF
PRESSURE WITHIN THE GEAR REDUCER.**

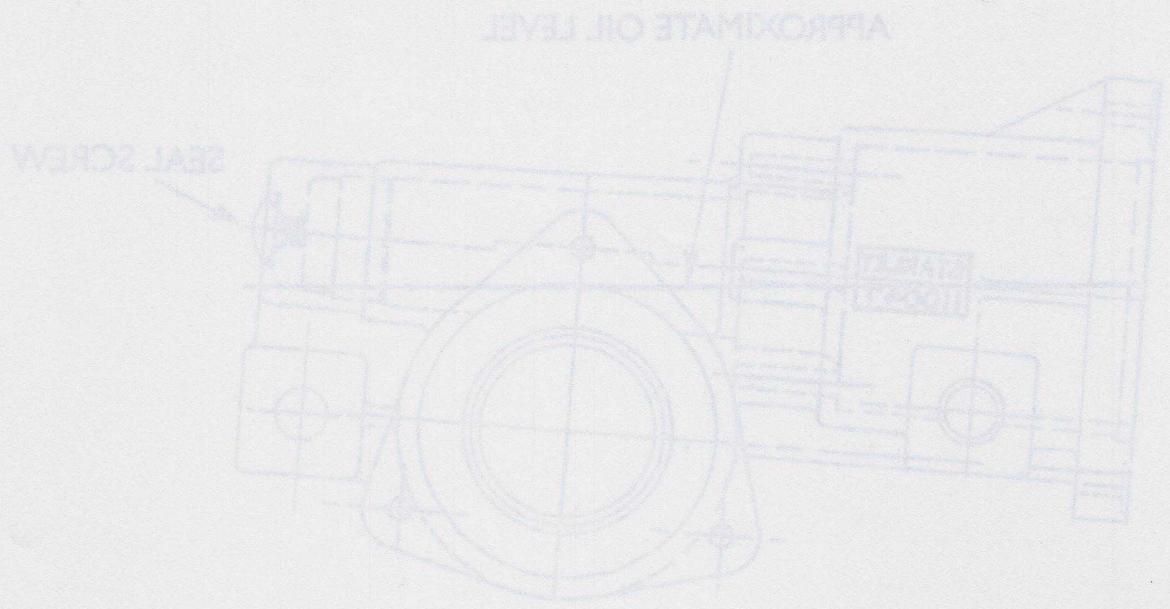
PRIOR TO REMOVING THE GEAR REDUCER

FOR SERVICE, TIGHTEN THE SEAL SCREW

TO PREVENT SPILLAGE DURING HANDLING

OR SHIPMENT.

STANLEY



DURA-GLIDE GEAR REDUCER

Pressure Relief

LOOSEN SEAL SCREW AFTER INSTALLATION
THIS WILL PREVENT THE BUILD UP OF
PRESSURE WITHIN THE GEAR REDUCER.
PRIOR TO REMOVING THE GEAR REDUCER
FOR SERVICE, TIGHTEN THE SEAL SCREW
TO PREVENT SPILLAGE DURING HANDLING
OR SHIPMENT.