GYRO TECH

WHISPER SLIDE

NEW GENERATION SERIES 1100 "THERMO-GUARD

INSTALLATION

MAINTENANCE

TROUBLE SHOOTING

MANUAL

TABLE of CONTENTS

This manual will cover information necessary for the installation and trouble shooting of a Single or Bi-parting Slide Unit, with or with out Transom. One section deals with installation of the different types of Units and another section will deal with schematics, wiring diagrams, and trouble shooting mechanical and electrical problems.

Definition of Terms

1) FORWARD

2) FRAMING

3) HEADER ASSEMBLY

4) FIXED SIDE LITE PANEL(S)

5) SWING PANEL(S)-FULL OPEN

6) DOOR(S)

FORWARD

A GYRO TECH SLIDE UNIT shall come from the Factory containing everything required to assemble the Unit. Upon your request Activating Devices and any other special needs can be provided from the Factory.

When ordering a System from GYRO TECH these points should be considered:

1) The Unit is designed to support the weight of the Unit and Glazing materials ONLY. No part of any building should be supported by the Unit.

2) When placing an order, please give the Over All dimensions in INCHES, NOTE that the Unit should be ordered 1/2 of an inch less than the length of the opening and at least 1/4 of an inch less than the Height. This will give you the recommended spacing required for pluming of the unit.

3) A Fixed Side Lite Unit will be placed in it's opening with

the Access Cover facing the Interior of the building and the door(s) shall Slide on the Exterior of the building and "break out" towards the Exterior.

4) A Full Open Unit will be placed in it's opening with the Access Cover facing the Exterior of the building and the door(s) shall Slide on the Interior of the building and All panels shall "break out" towards the Exterior of the building, but toward the Access Cover. This will make the Unit, Reverse Panic.

FRAMING

In most cases the Framing is provided with the Unit. Framing for System 1100 WS shall be 2 - 1 3/4 x4 1/2 inch vertical jamb tubes, 2-2x5 inch tubes for surface mounted -no sidelite, floor track units, 2 -2x7 inch tubes for pocketed units and reverse panic-reverse sidelite units. The jamb tubes are prepared by the Factory and the Hardware for assembling the Jamb to the Header shall be mounted on them. A Holding Beam will be installed on ALL strike jamb tubes for Single units. For framing other than described above, please consult the Gyro Tech Sales department before placing an order.

HEADER ASSEMBLY

The header assembly is a set of extrusions assembled together to make up a housing that is 6 1/2 x 6 1/2 inch box with the length predetermined by your over all length requirements. The housing consists of: Fixed header, Header Base Rail, Two End Caps and Access Covers, split for easy access into the header cavity.

Operator Housing Components:

operator, popc control, auxilliary control, transfomer, idler, belt assembly, 3 proximity switches, electrical wiring, weathering extrusions (2 pieces), door stop and One Mullion attachment bracket per side lite.

FIXED SIDE LITE PANEL(S)

The panels shall come from the Factory preassembled consisting of these items:

1) Horizontal Top and bottom rails

2) Vertical mullion with weathering groove and Holding Beam

3) Fixed vertical mullion with special "closed cell" weathering tape

4) Horizontal Muntin bar, fixed at the standard height of 42 inches off the floor.

5) Glass Stop extrusions (gutter and face) and Vinyl.

6) Vertical Therm-L-Brush weathering (packaged seperately)

SWING PANELS-FULL OPEN

The swing panels shall come from the Factory preassembled consisting of :

1) Horizontal Top and bottom rails

2) Vertical Mullion with weathering groove and Holding Beam

3) Hinged vertical mullion with weathering

4) Horizontal Muntin bar, fixed at the standard height of 42 inches off the floor

5) Glass Stop extrusions (gutter and face) and Vinyl.

6) Adjustable inter locks.

7) Spring loaded weathering base assembly

8) Vertical Therm-L-Brush weathering (packaged seperately)

DOOR(S)

The Door panels shall come from the Factory preassembled consisting of items :

1) Horizontal Top and bottom rails

2) Active vertical strike stile/lock mechanism

3) Inactive vertical strike stile/Bi-parts

4) Hinged vertical stile/bottom guide assembly

5) Horizontal Muntin bar set at the standard height of 42 inches off the floor

6) Glass stop extrusions (gutter and face) and vinyl

7) Horizontal Top carrier bar and pivot assembly with two "ears" and a power down assembly, if used with fixed side lite

8) Interlocks and shims, for Full Opens.

9) Spring loaded weathering base assembly

10) 2 - point lock assembly with Thumb turn and Key cylinder (active door only)

ASSEMBLY OF FIXED SIDE LITE UNITS

FRAMING AND HEADER ASSEMBLY

1) Remove framing and header from shipping cartons and inspect for damage.

2) Place header on a protective surface and remove the access cover saving the screws for replacement later.

3) Refer to figure #1, place jamb tubes along side header, align hole pattern of jamb tubes to matching hole patterns in the header end caps, they will only line up one way.

4) Remove the eight (8) 1/4 x 20 HEX.HD.BOLTS and star washers, Items #4, from the jamb tubes then, pass these bolts from inside the header cavity thru the end caps install them into the rivnuts, Items #5 and secure.

NOTE: If your unit has a transom refer to figure #1. Assemble ALL Horizontal and Vertical members at the same time. Place the

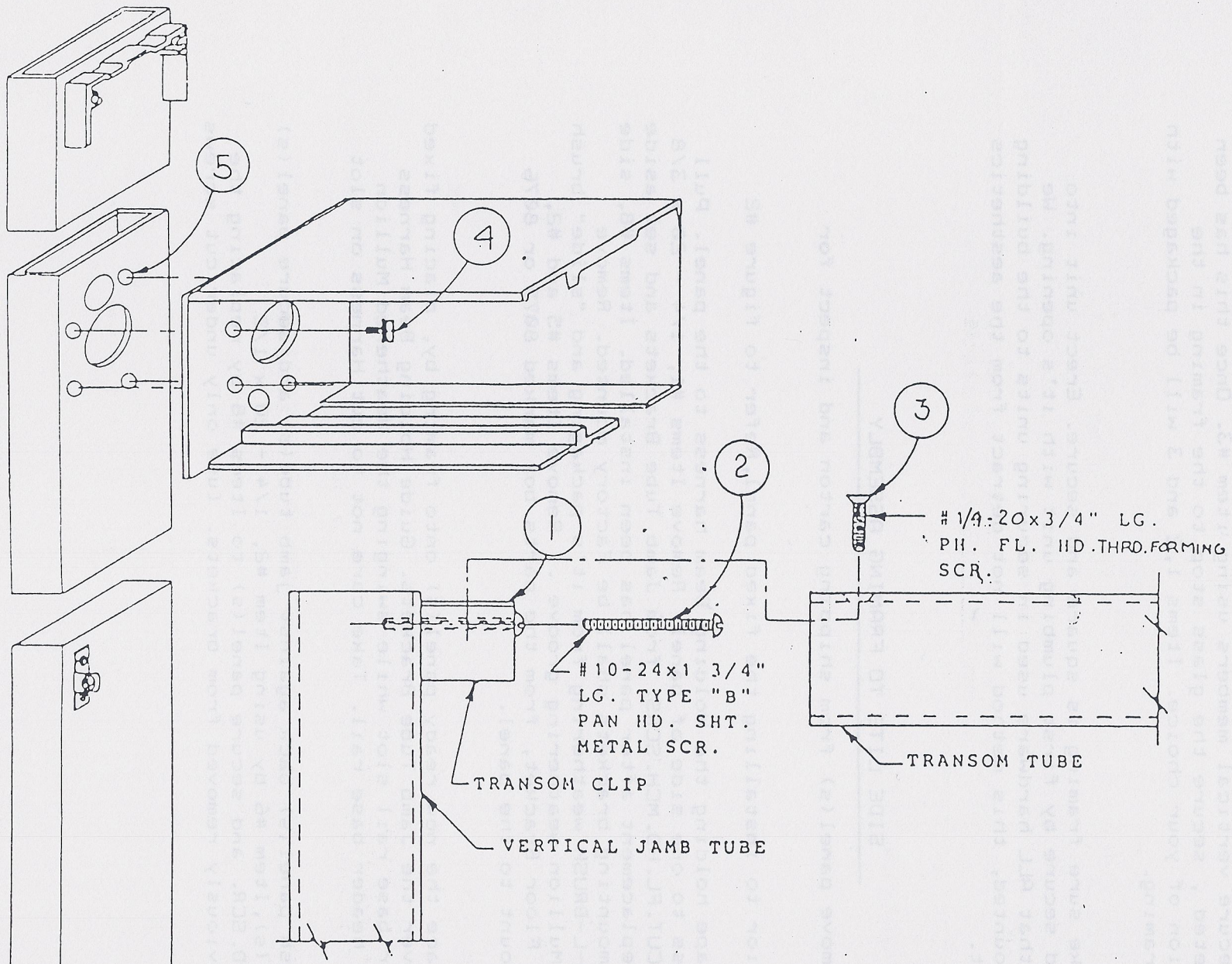

5
4
3
2
1
#1/4-20x3/4" LG.
PH. FL. HD. THRD. FORMING
SCR.
#10-24x1 3/4"
LG. TYPE "B"
PAN HD. SHT.
METAL SCR.
TRANSOM CLIP
TRANSOM TUBE
VERTICAL JAMB TUBE

FIGURE # 1

transom tube over item #1 and secure with item #3. If your unit has vertical transom member, refer to figure #1 and mount item #1, to the predrilled holes on the top of the header using item #2 and secure vertical members using item #3. Once this has been completed , secure the glass stop to the framing in the position of your choice. Items 1,2 and 3 will be packaged with the framing.

5) Make sure framing is square and secure. Erect unit into opening and secure by first plumbing unit with it's opening. We recommend that ALL hardware used in securing units to the building be flush mounted, this method will not detract from the aesthetics of the unit.

SIDE LITE TO FRAMING ASSEMBLY

1) Remove panel(s) from shipping carton and inspect for damage.

2) Prior to installing the fixed panel, Refer to figure #2

A) Remove tape holding the Holding Beam harness to the panel. Pull harness to one side of panel. Remove Items #1, 1/4 - 20 x 3/8 UNDR. CUT. FL. HD. MCH. SCRS. from Jamb Tube Brackets and set aside for replacement after panel has been installed. Items #8, side lite mounting brackets shall be Factory mounted. Remove THREM-L-BRUSH weathering from it's packaging and "slide" brush into Mullion weathering groove . Remove Items #5 and #2, Panel Floor Bracket, from the parts box marked 8075 or 8076 and mount to the panel.

3) Place the now ready panel(s) onto framing by, placing fixed verticle over the Jamb Tube Brackets. Guide Holding Beam Harness into Header base rail slot while swinging the Weathered Mullion "In" under header base rail. Take care not to cut Harness on slot edges.

4) Push panel(s) back against jamb tube(s) and secure panel(s) to bracket(s), Item #6 by using Item #2, 1/4 - 20 x 1/2 LG. PH. FL. HD. SCR. and secure panel(s) to Items #8 by replacing the screws previously removed from brackets. [use only under cut screws]

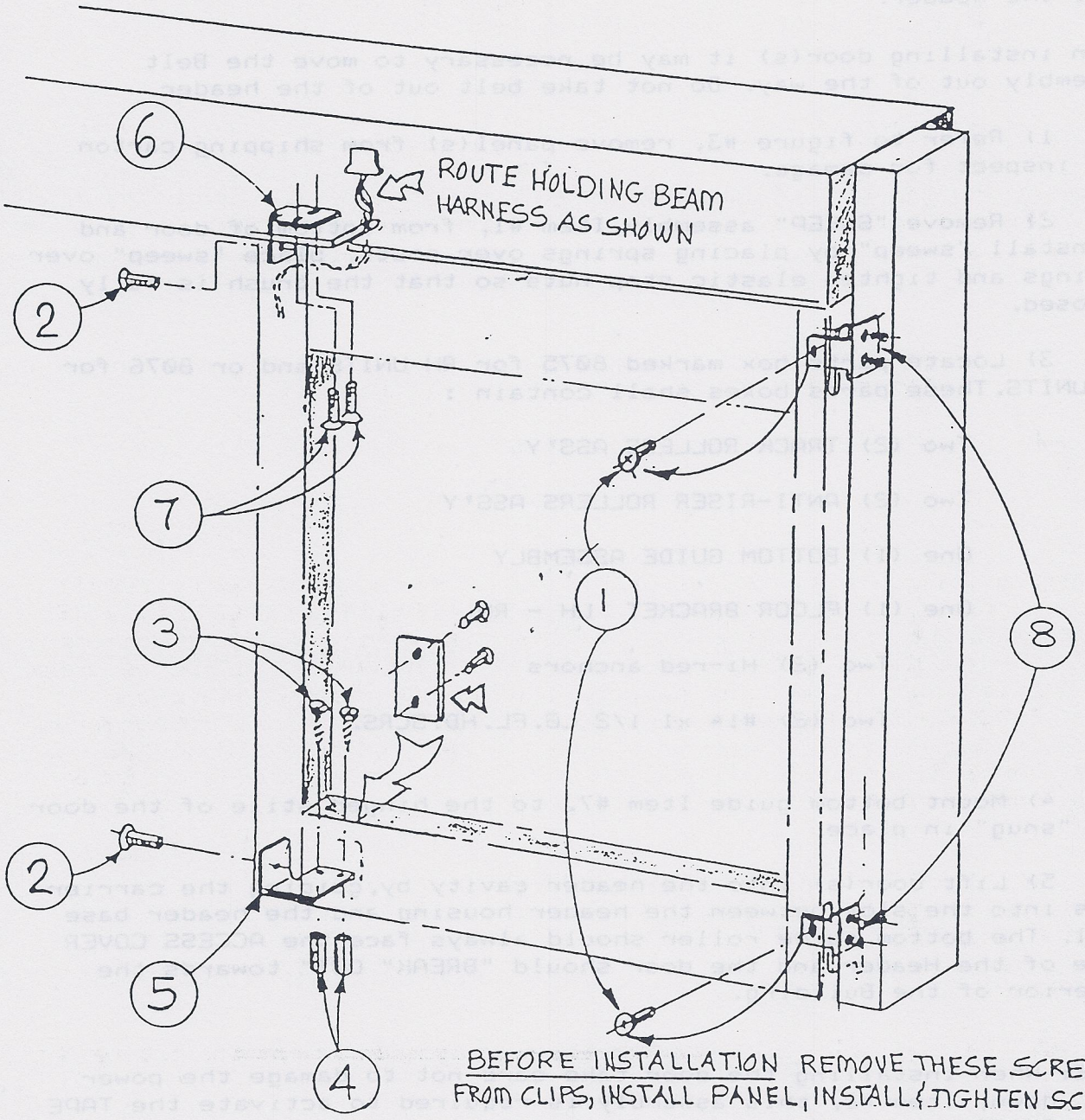

6
ROUTE HOLDING BEAM HARNESS AS SHOWN
2
7
3
1
8
2
5
4
BEFORE INSTALLATION REMOVE THESE SCREWS FROM CLIPS, INSTALL PANEL, INSTALL & TIGHTEN SCREWS.

FIGURE # 2

INSTALLATION OF DOOR(S)-FIXED SIDE LITE

If your System is a Bi-part, refer to figure #3, remove the belt attachment assembly Items # 4,5 and 6 before installing the door into the header.

When installing door(s) it may be necessary to move the Belt Assembly out of the way. Do not take belt out of the header.

1) Refer to figure #3, remove panel(s) from shipping carton and inspect for damage.

2) Remove "SWEEP" assembly, Item #1, from bottom of door and reinstall "sweep" by placing springs over posts, place "sweep" over springs and tighten elastic stop nuts so that the brush is fully exposed.

3) Locate parts box marked 8075 for RH UNITS and or 8076 for LH UNITS. These parts boxes shall contain :

Two (2) TRACK ROLLERS ASS'Y

Two (2) ANTI-RISER ROLLERS ASS'Y

One (1) BOTTOM GUIDE ASSEMBLY

One (1) FLOOR BRACKET LH - RH

Two (2) Hi-red anchors

Two (2) #14 x1 1/2 LG. FL. HD. SCRS.

4) Mount bottom guide Item #7, to the hinged stile of the door and "snug" in place.

5) Lift door(s) into the header cavity by, guiding the carrier ears into the slot between the header housing and the header base rail. The bottom guide roller should always face the ACCESS COVER side of the Header and the door should "BREAK" OUT" towards the exterior of the Building.

NOTE: When installing the door take care not to damage the power down, Item #2, this assembly is required to activate the TAPE SWITCH when the door is panicked open, adjustment of this assembly will be discussed later.

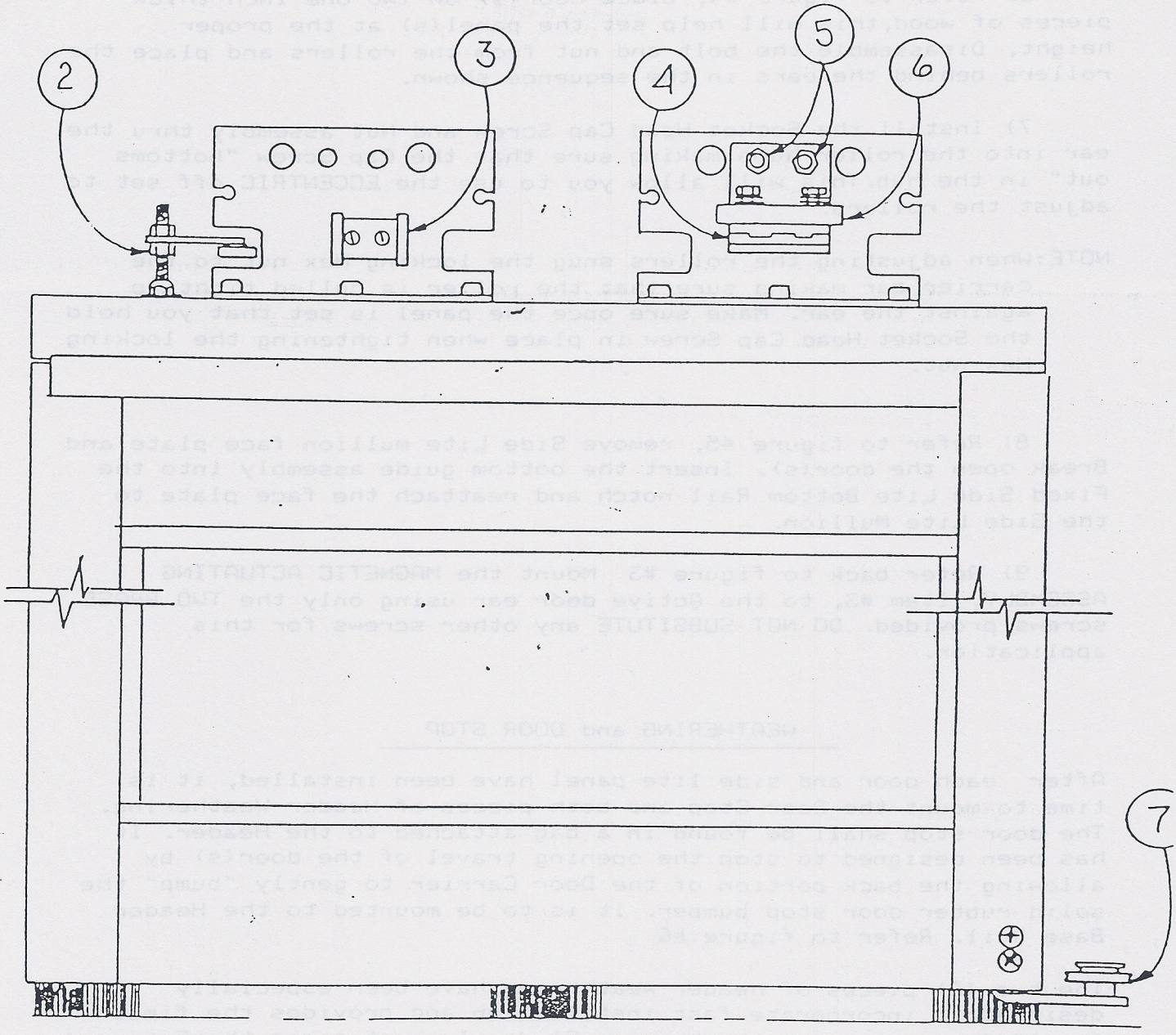
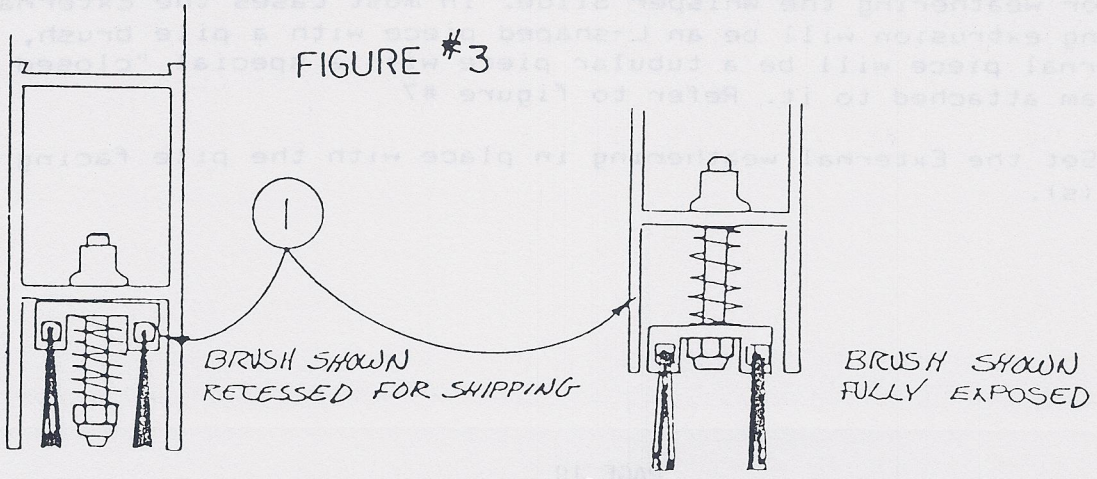

2
3
4
5
6
7

FIGURE #3


1
BRUSH SHOWN
RECESSED FOR SHIPPING
BRUSH SHOWN
FULLY EXPOSED

6) Refer to figure #4, place door(s) on Two one inch thick pieces of wood, this will help set the panel(s) at the proper height, Disassemble the bolt and nut from the rollers and place the rollers behind the ears in the sequence shown.

7) Install the Socket Head Cap Screw and Nut assembly thru the ear into the roller hubs making sure that the Cap Screw "bottoms out" in the hub. This will allow you to use the ECCENTRIC off set to adjust the rollers.

NOTE: When adjusting the rollers snug the locking Hex nut to the carrier ear making sure that the roller is pulled tight up against the ear. Make sure once the panel is set that you hold the Socket Head Cap Screw in place when tightening the locking Hex nut.

8) Refer to figure #5, remove Side Lite mullion face plate and Break open the door(s). Insert the bottom guide assembly into the Fixed Side Lite Bottom Rail notch and reattach the face plate to the Side Lite Mullion.

9) Refer back to figure #3 Mount the MAGNETIC ACTUATING ASSEMBLY, Item #3, to the Active door ear using only the TWO BRASS screws provided. DO NOT SUBSITUTE any other screws for this application.

WEATHERING and DOOR STOP

After each door and side lite panel have been installed, it is time to mount the Door Stop and both pieces of Header Weathering. The door stop shall be found in a bag attached to the Header. It has been designed to stop the opening travel of the door(s) by allowing the back portion of the Door Carrier to gently "bump" the solid rubber door stop bumper. It is to be mounted to the Header Base Rail. Refer to figure #6

The two (2) pieces of header weathering have been especially designed to incorporate fast installation and provides the final "seal" for weathering the Whisper Slide. In most cases the External weathering extrusion will be an L-shaped piece with a pile brush, the Internal piece will be a tubular piece with a special "closed cell" foam attached to it. Refer to figure #7

1) Set the External weathering in place with the pile facing the door(s).

6) Refer to figure #4, place door(s) on Two one inch thick pieces of wood, this will help set the panel(s) at the proper height, Disassemble the bolt and nut from the rollers and place the rollers behind the ears in the sequence shown.

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1) Set the External weathering in place with the pile facing the door(s).

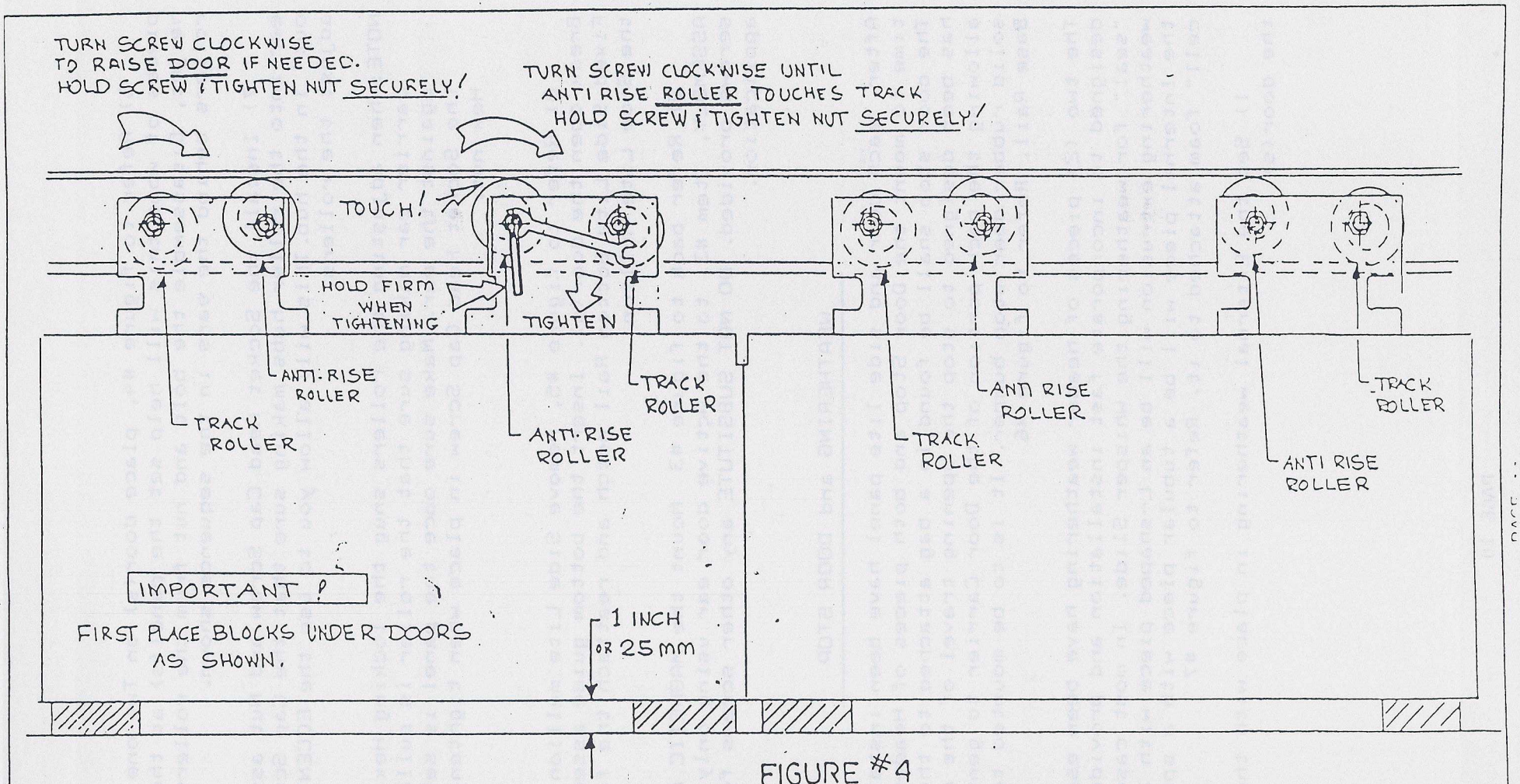
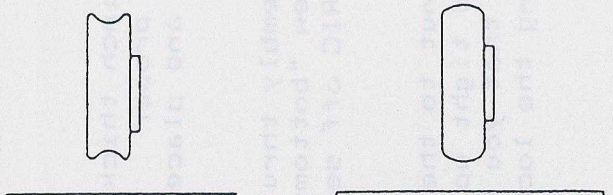


FIGURE #4



REVISIONS	DATE

DATE: 5.9.85
SCALE:
DRAWN BY: DES
APPROVED BY:

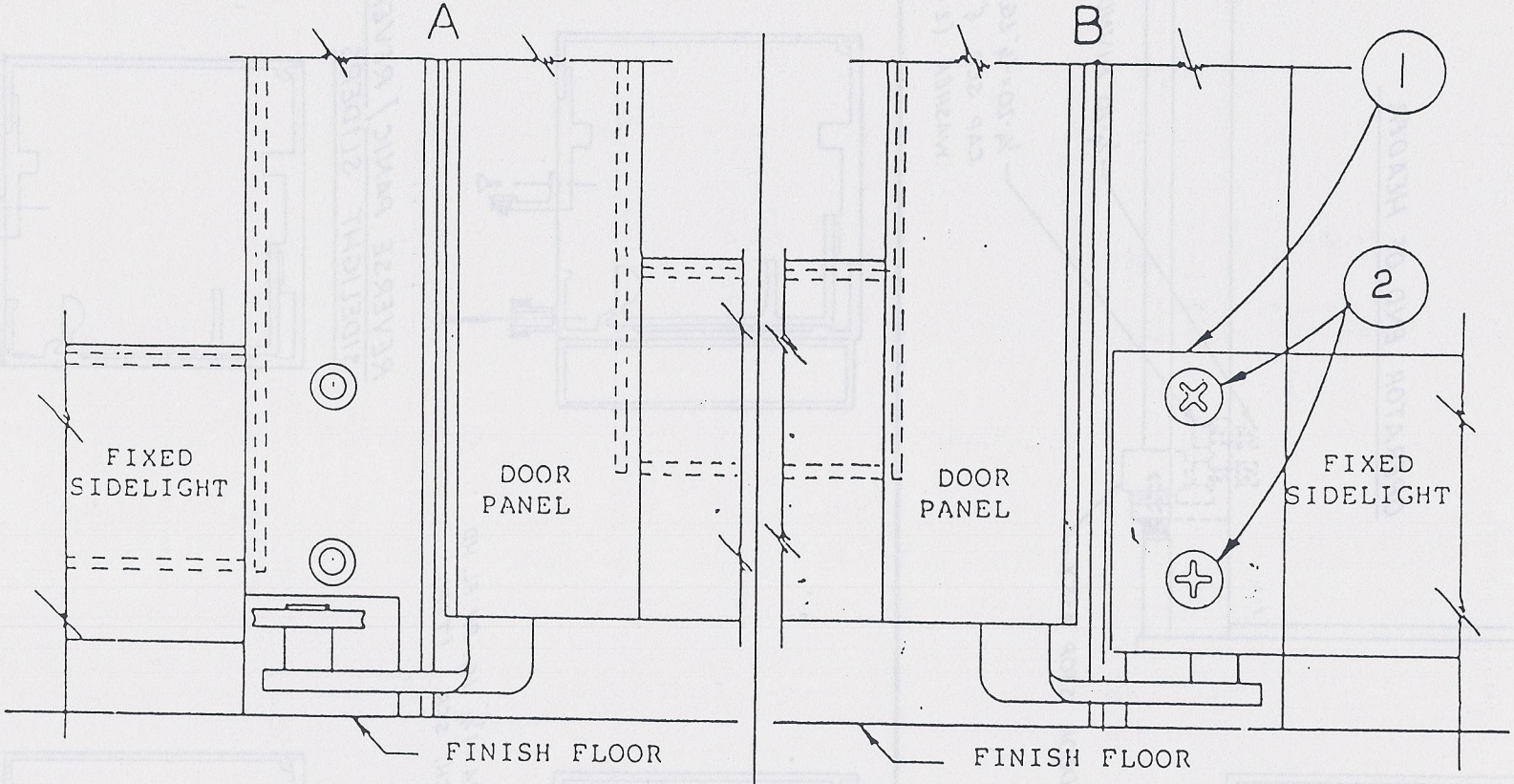
TOLERANCES (UNLESS NOTED):
FRACTIONAL ± 1/64
.. ± .010
... ± .005
ANGLES ± 1°

PART NAME: ROLLER INSTALLATION
MATERIAL:
SPECIFICATIONS: SYSTEM 1100 WS

GYRO TECH Inc.

DRAWING NO.

PART NO.



EXTERIOR VIEW OF A RIGHT HAND SLIDER

EXTERIOR VIEW OF A LEFT HAND SLIDER

FIGURE # 5

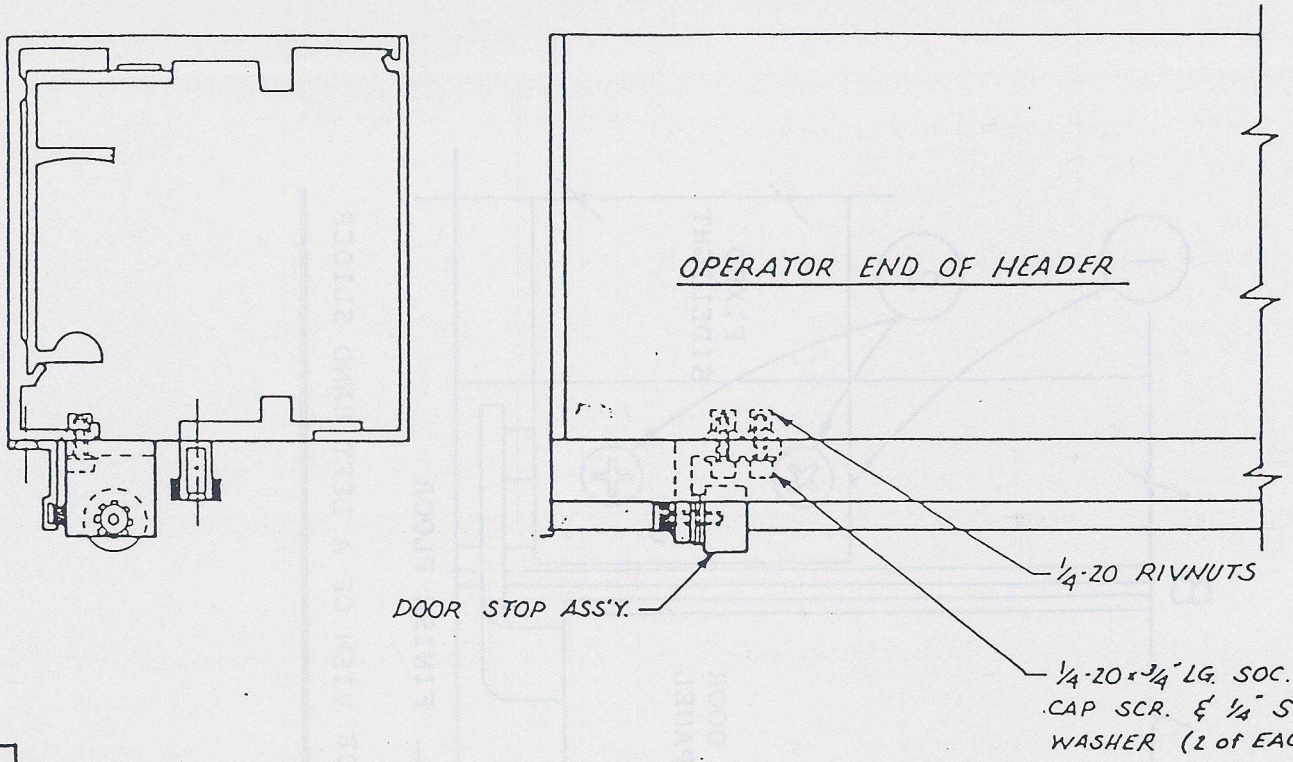
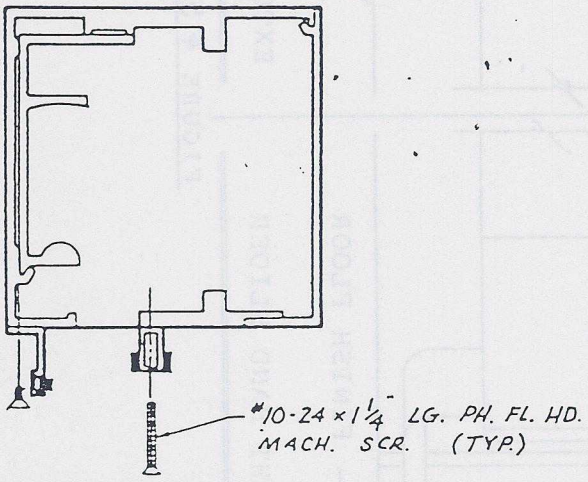
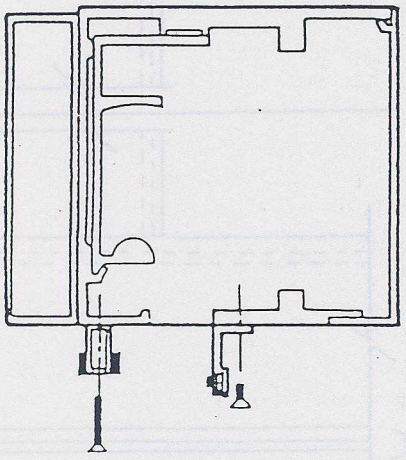


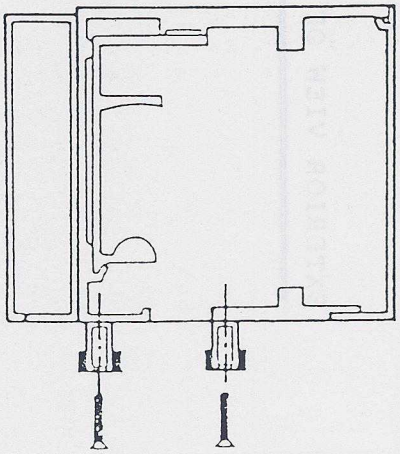
FIG. # 6



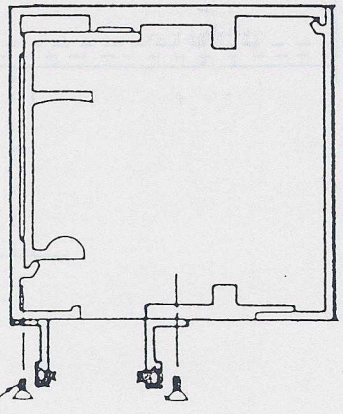
FIXED SIDELIGHT AND
FULL OPEN SLIDERS



REVERSE PANIC / REVERSE
SIDELIGHT SLIDERS



POCKETED SLIDERS



NON-SIDELIGHT
SLIDERS

2) Secure in place using the 10 - 24 x 5/16 LG. Under Cut Screws provided.

3) Place the Internal weathering between the door(s) and the Fixed Side Lite, with the LONG weathering foam facing the door(s), and align the hole patterns.

4) Secure in place using the 10 -24 x1 1/4 LG.PH.FL.HD.SCRS.

5) Install the door stop to header with rubber bumper facing the Hinge Stile of the door.

6) Secure in place using the 1/4-20 x 3/4 LG. SOC.HD.SCRS. provided.

INSTALLING DOOR(S) TO DRIVE SYSTEM

1) With power OFF, remove one of the motor leads from the motor, this will allow the door(s) to be manually operated with the least amount of resistance.

2) Refer to figure #8, slide each end of the Belt Assembly into the notches on the bent portion of the carrier ears and tighten securely.

3) If the Unit is a Bi-part mount the belt lock assembly that was removed earlier back onto the carrier ear in the position shown in figure #8 NOTE: The belt lock will be attached to the upper section of belt.

4) Refer to figure #9, Set the power down assembly so that the roller is approximatly 1/8" away from the tape switch. The roller should only press on the tape switch when the door(s) is panicked open.

5) Manually slide the door(s) several times to insure proper operation. When this as been completed replace the motor lead.

When manually sliding the door(s) ,look to see that the magnet passes approximatly 1/4 of an inch from the 3 proximity switches positioned on the base rail. Do not let them touch. Make sure at this time that the bottom guide system has the proper clearance in the bottom rail-no rubbing or scraping. The belt should roll smoothly and evenly in the center of both Idler and Operator sprockets. Some (1/8" to 1/4") lateral belt

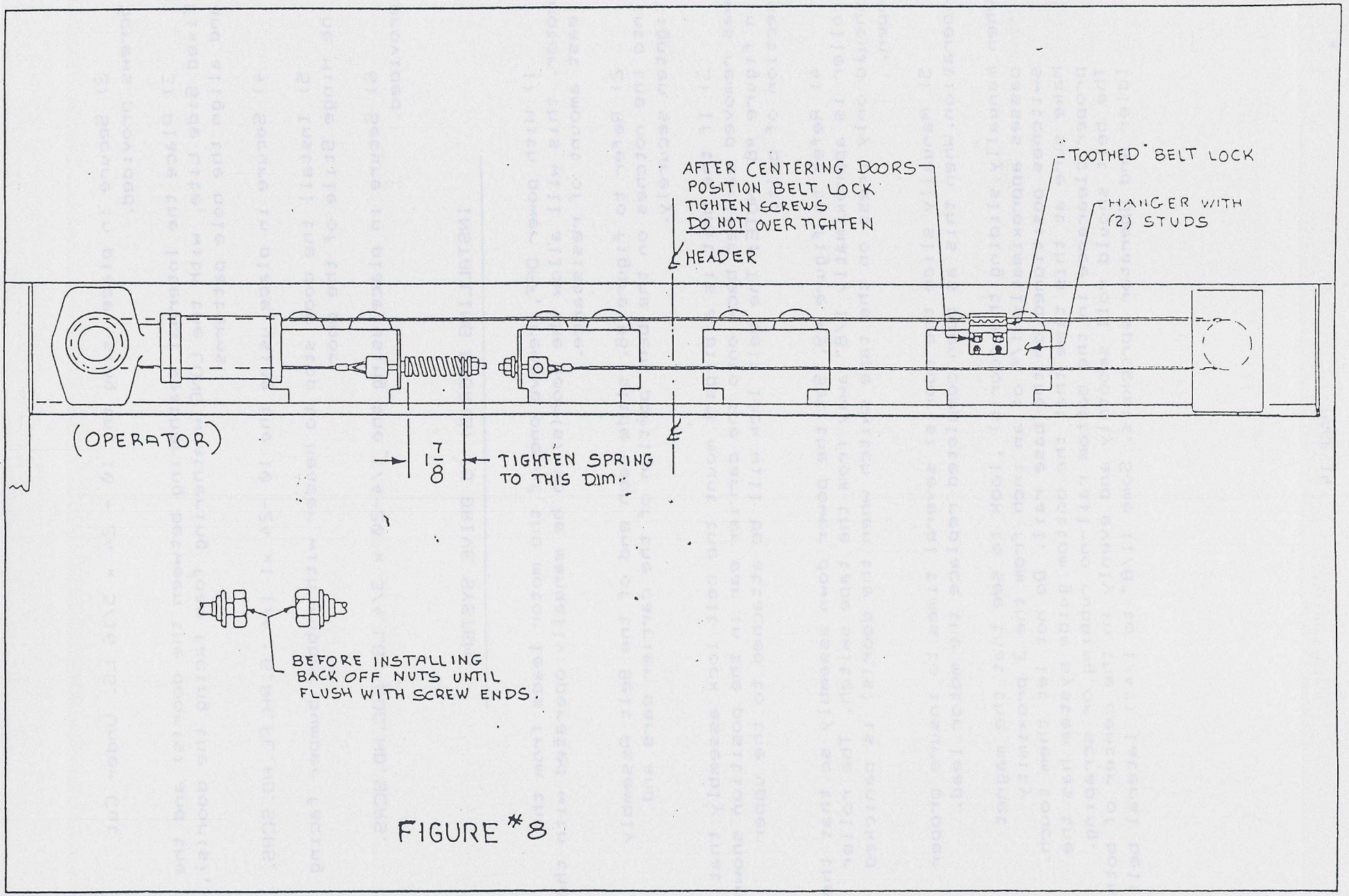


FIGURE *8

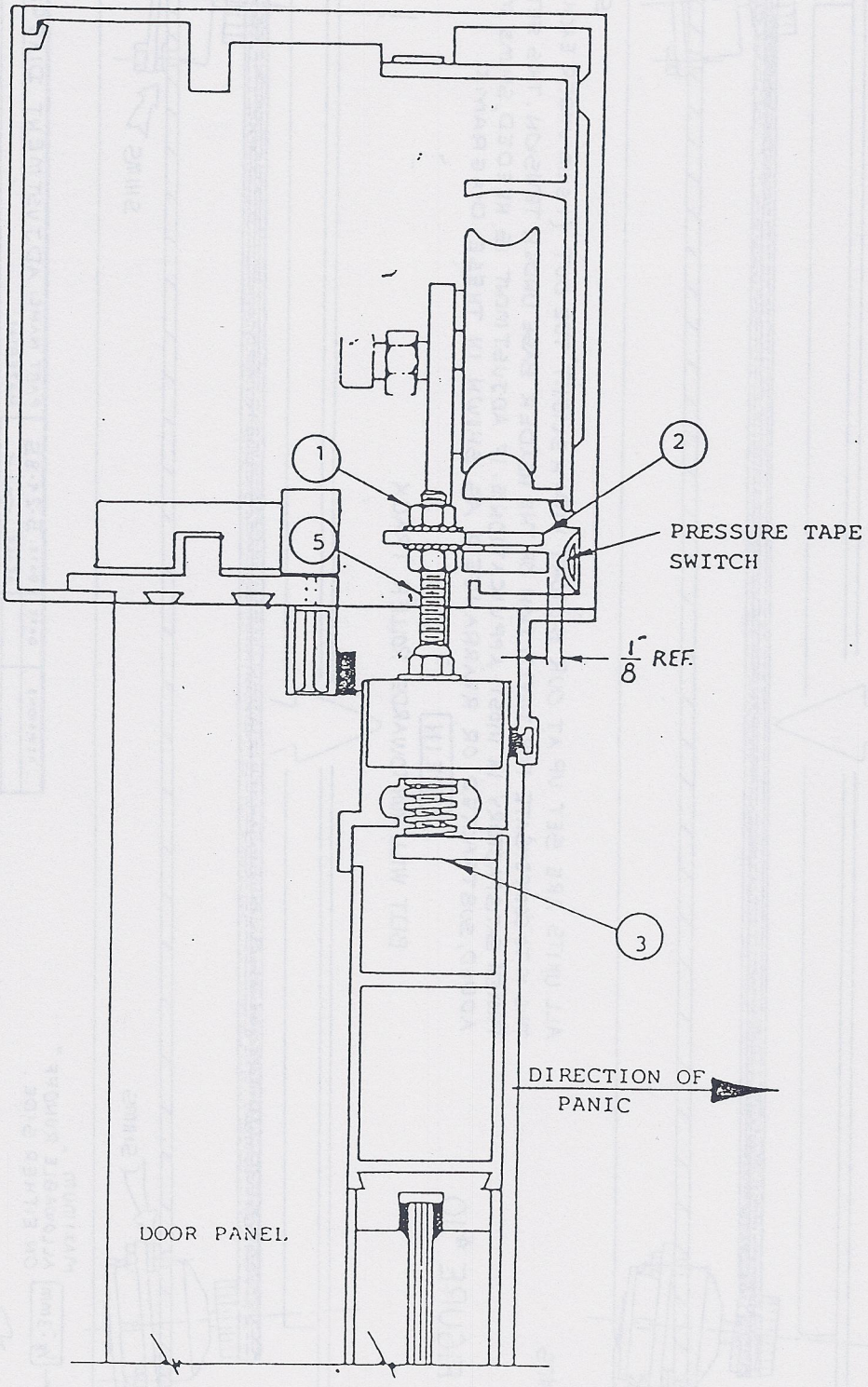
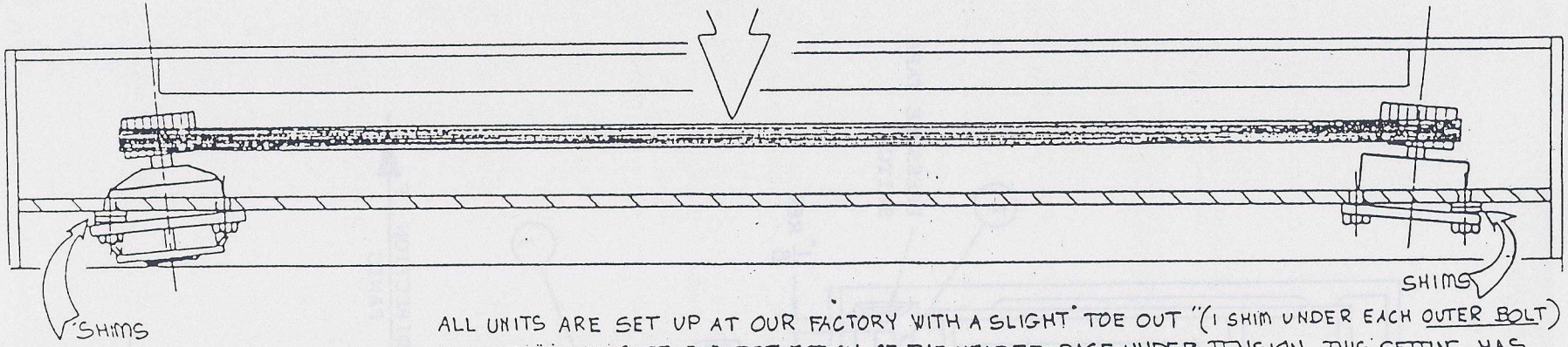

1
2
5
PRESSURE TAPE SWITCH
1/8" REF.
3
DIRECTION OF PANIC
DOOR PANEL

FIGURE # 9

TOE OUT

BELT WILL RUN TOWARDS ACCESS COVER

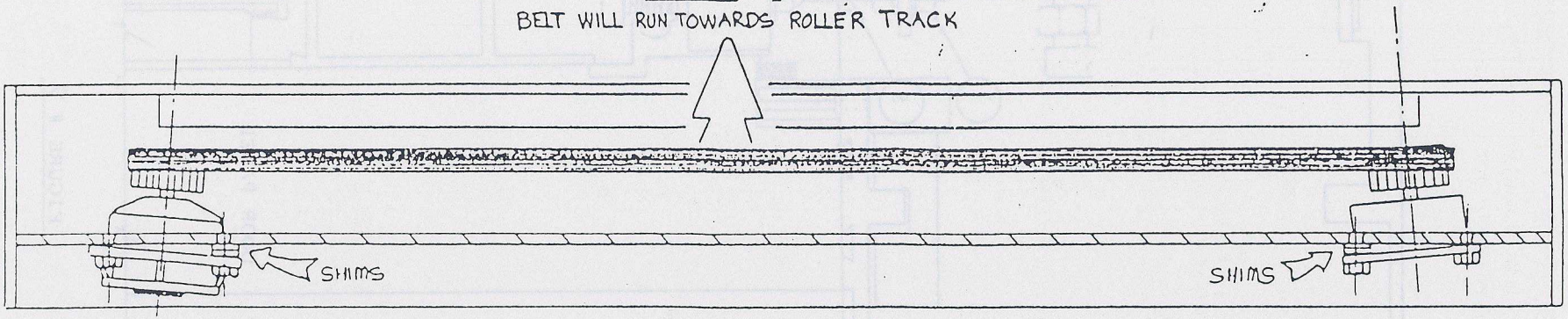


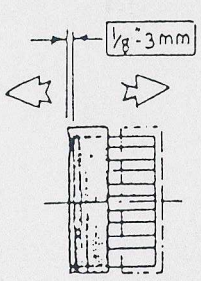
ALL UNITS ARE SET UP AT OUR FACTORY WITH A SLIGHT TOE OUT "(1 SHIM UNDER EACH OUTER BOLT) THIS IS TO COMPENSATE FOR DEFLECTION OF THE HEADER BASE UNDER TENSION. THIS SETTING HAS PROVEN SATISFACTORY IN MOST APPLICATIONS. IF ADJUSTMENT IS NEEDED, SHIMS MAY BE ADDED, SUBTRACTED, OR REARRANGED AS SHOWN IN THESE DIAGRAMS.

FIGURE #10

TOE IN

BELT WILL RUN TOWARDS ROLLER TRACK





MAXIMUM ALLOWABLE "RUNOFF" ON EITHER SIDE.

WHEN CYCLING, THE BELT WILL DRIFT FROM SIDE TO SIDE WITH EACH REVERSAL OF DIRECTION. THIS DRIFT IS NORMAL AND HELPS DISTRIBUTE WEAR. IF "RUNOFF" EXCEEDS 1/8" · 3mm PLEASE ADJUST THE SHIMS AS SHOWN ABOVE.

REVISIONS	DATE

DATE: 5-29-85
SCALE:
DRAWN BY: JES.
APPROVED BY:

TOLERANCES (UNLESS NOTED)
FRACTIONAL ± 1/64
.XX ± .010
.XXX ± .005
ANGLES ± 1/2°

PART NAME: ADJUSTMENT DIAGRAM - WHISPERSUDE
MATERIAL:
SPECIFICATIONS: PROCEDURE FOR FIELD ADJUSTMENT OF BELT TRACKING

GYRO TECH Inc.

DRAWING NO.

PART NO. 258270

travel on the sprocket is acceptable. Any more lateral travel may require shimming the Idler and Operator to correct the condition. Refer to figure # 10

SECURING SIDE LITE PANEL

1) Biparts - Move door panels to the fully closed position and aligning the bottom edges of the panels place a mark on the floor where the Side Lite shall be positioned. Break open the doors and reset Side Lite on the mark. Using the floor bracket as a template, drill the concrete with a 1/4 inch mason bit. Place the anchors Item #4, into the holes and secure the panels using Item #3, 1/4 x 1 1/2 ST.FL.HD.SCRS.

2) Singles - follow step #1, Align the door with the strike jamb tube.

PRELOAD ADJUSTMENT

The preload can not be set at the Factory, because each door will be fitted with the Glazing materials of your choice GYRO TECH recommens that AFTER Glazing the door panels, the panic feature is be tested in the following manner: Break open each door and relatch, if the door needs to be pulled down or lifted up to resecure the panic catch, the Preload adjustment feature should be adjusted.

1) Using figure # 11, break panel open.

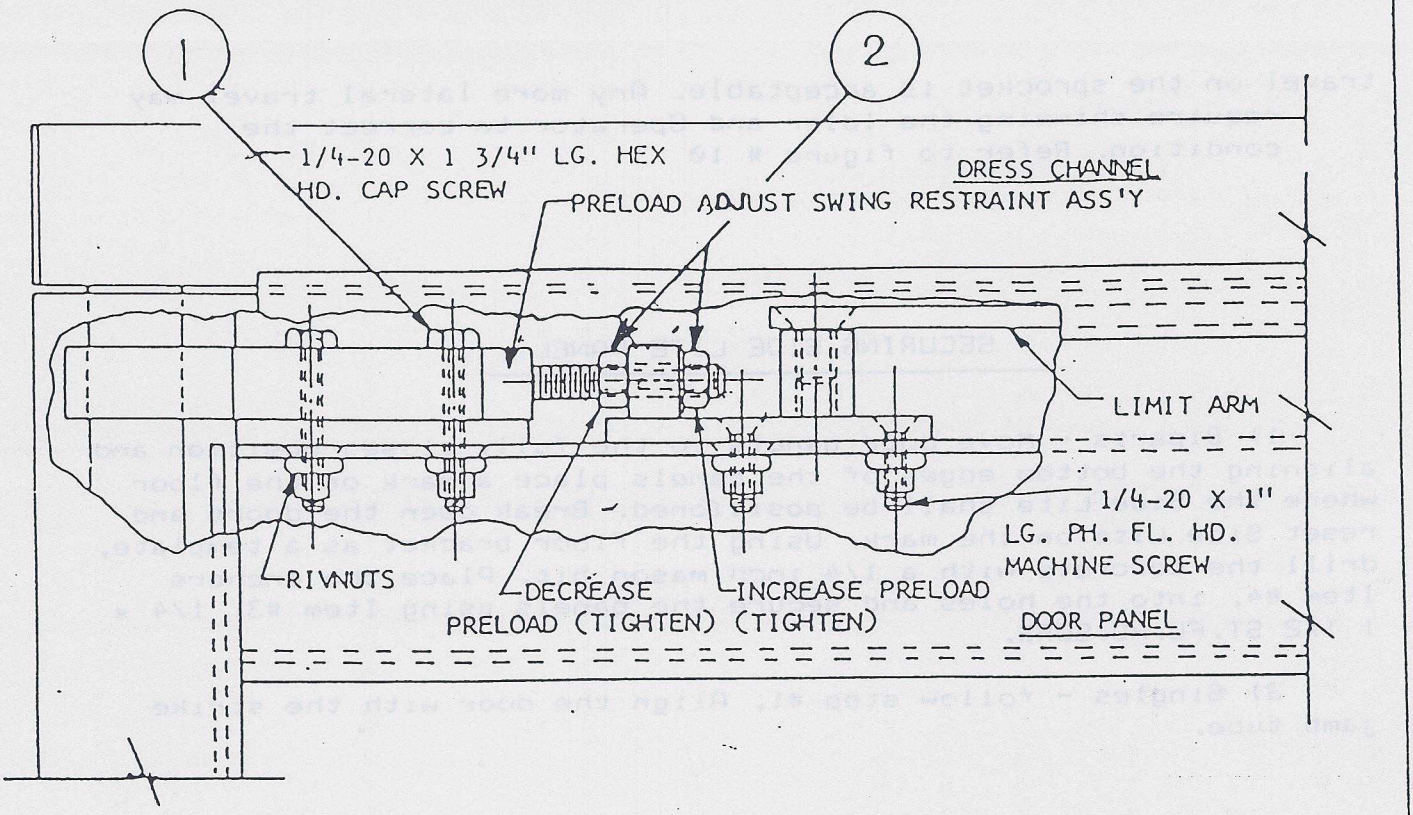
2) Loosen the Two (2) HEX HD SCRS Item #1

3) Loosen the Two (2) 3/16 nuts

4) To raise or lower the door(s) Increase or decrease preload by tightening the proper nut and relatch door untill properly set.

5) Once the proper setting has been accomplished retighten both Items #1 and #2 securely.

PANIC CATCH BALL PLUNGER ADJUSTMENT


1
2
1/4-20 X 1 3/4" LG. HEX HD. CAP SCREW
PRELOAD ADJUST SWING RESTRAINT ASS'Y
DRESS CHANNEL
LIMIT ARM
1/4-20 X 1" LG. PH. FL. HD. MACHINE SCREW
RIVNUTS
DECREASE PRELOAD (TIGHTEN)
INCREASE PRELOAD (TIGHTEN)
DOOR PANEL

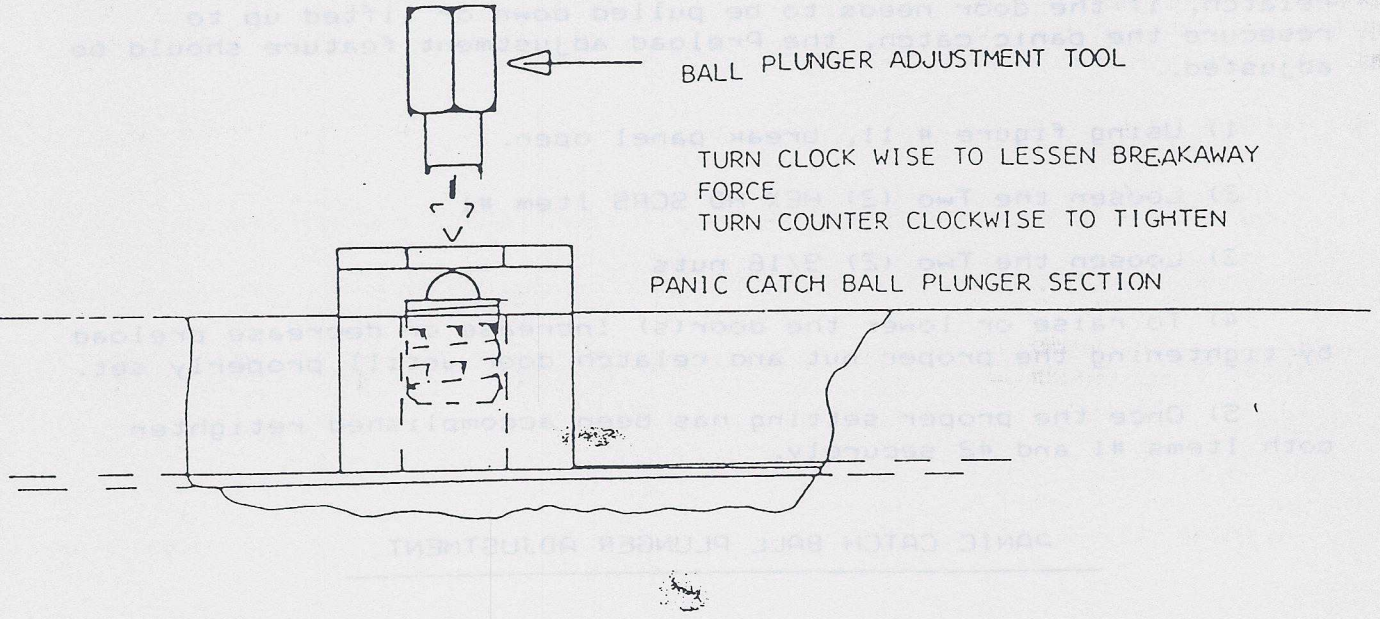

BALL PLUNGER ADJUSTMENT TOOL
TURN CLOCK WISE TO LESSEN BREAKAWAY FORCE
TURN COUNTER CLOCKWISE TO TIGHTEN
PANIC CATCH BALL PLUNGER SECTION

FIGURE #11

Refer to figure #11

Panic Break Out for Swing Panels and Doors shall require no more than a 50 lbf applied one inch from the edge of the leading stile. The Ball Plunger located in the panic catch is adjustable and shall be adjusted in the field to meet this requirement.

1) Using tool #143774 adjust ball plunger.

2) Turn clock-wise to loosen panic forece - Turn Counter clock wise to tighten panic force.

FINAL ADJUSTMENTS

Refer to figure # 16

Make sure all is secured and apply power to the unit. The system should function properly. Properly means that upon the opening signal the door(s) should power open at a fast speed and then reduces to a lower speed when approching the Fixed Panel, this is refered to as BACK CHECK.
To achieve a full opening cycle the motor timer control will need to be adjusted untill the door opens fully.
[Refer to the section titled Electrical System].

Adjust the time delay pot located in the main POPC control box and once the delay has timed out, the door(s) should close at a fast speed. Upon reaching the closed position, the door(s) will slow to a reduced speed, this is refered to as LATCHING. If this does not occur refer to the section TROUBLE SHOOTING.

Wire in all activating devices and reinstall the Access covers.

INSTALLATION OF FULL OPEN (Inside Slide)

When installing a Full Open Unit, remember that the Access Cover must face the Exterior of the building. This will allow each door and swing panel to "break out" towards the Exterior of the building.

Review ALL instructions for the Fixed Side Lite Unit prior to reading these instructions. When the instructions are the same the

manual will call out which section to refer back to.

HEADER ASSEMBLY

The Header Assembly consists of : operator, popc control, auxillary control, idler, belt assembly, NO tape swtich, 3proximity switches, a base rail proximity swich per swing panel, panic latch per swing panel, electrical wiring, mounting nole for limiting arm, a bronze pivot bushing per swing panel, weathering extrusions (2) pieces and a door stop.

1) Assemble Header to the jamb tubes according to the set of instructions in the Fixed Side Lite section labeled Framing and Header Installation.

2) Mount Swing Panel pivot Floor Bracket, Item #3, to the jamb tube using Item # 5, 1/4 - 20 x3/4 PH.FL.HD.MACH.SCR. Refer to figure # 12

3) After the Unit nas been erected, and making sure Item #3, is square and perpendicular to the framing, drill concrete using 1/4 inch concrete drill bit. Fasten the pivot to the floor by inserting the anchors, items #7, into tne drilled holes and passing the anchor screws, Items #6 thru the bracket into the anchors, fasten the bracket to the floor.

4) Place the plastic cap, Item #8, into the bracket and "tap" into place.

5) Secure Unit to the building according to the previous instructions.

INSTALLATION OF SWING PANEL

The Swing Panel will come from the Factory with the holding beam and the interlocks installed. Refer to figure #12. The Therm-L-Brush needs to be installed by the Distributor. Notice the Magnet mounted to the inside of the top rail, this magnet will need to be in close proximity to the switch mounted on the Header Base Rail. This is the panic breakaway switch. When the panel is closed this will be an open set of contacts. [For more information on this see ELECTRICAL section of manual]

1) Remove swing panel from shipping carton and inspect for damages.

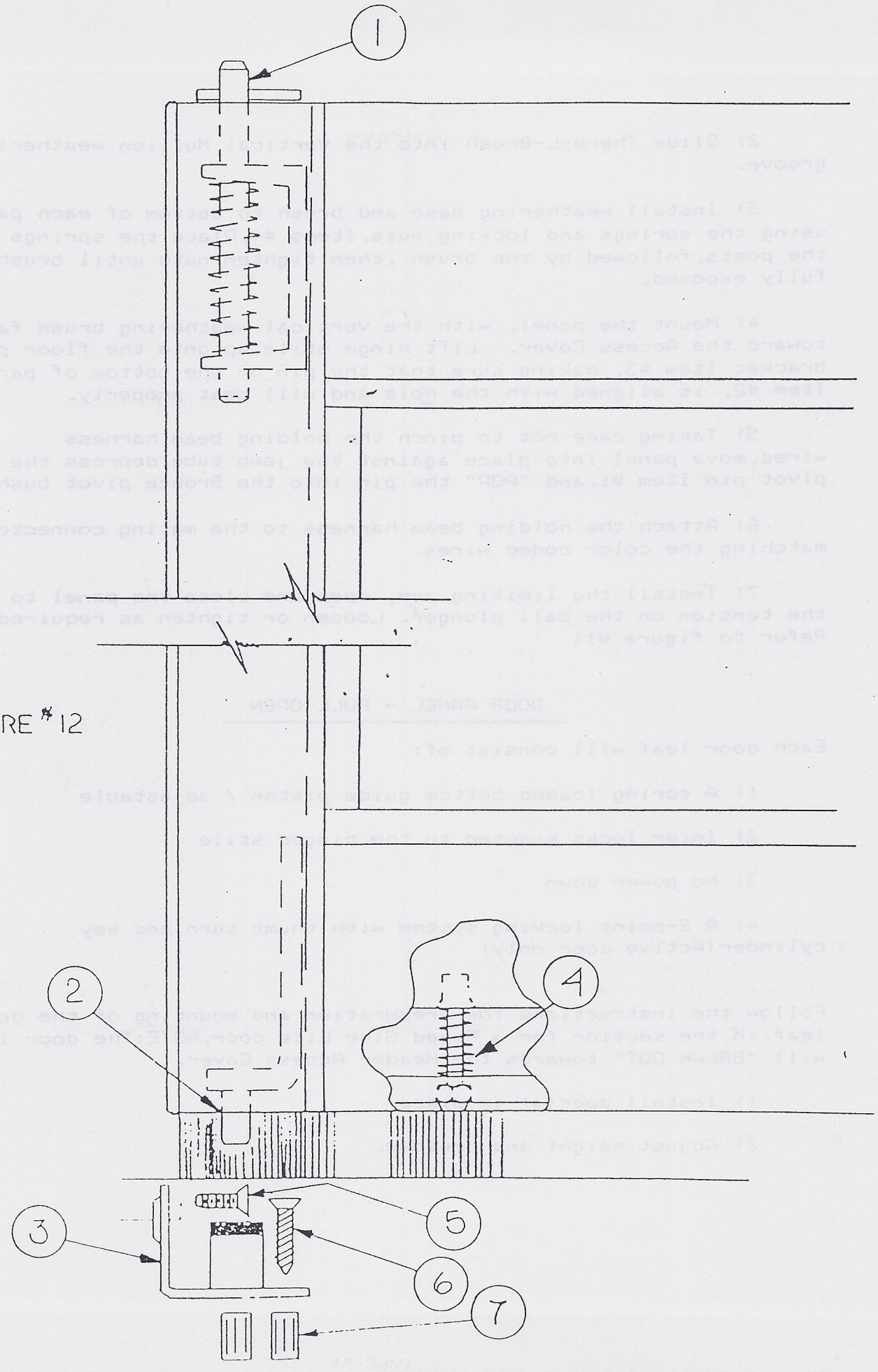


FIGURE # 12

2) Slide Therm-L-Brush into the Vertical Mullion weathering groove.

3) Install weathering base and brush to bottom of each panel using the springs and locking nuts, Items #4, Place the springs onto the posts, followed by the brush , then tighten nuts until brush is fully exposed.

4) Mount the panel, with the Vertical weathering brush facing toward the Access Cover. Lift hinge stile up onto the floor pivot bracket Item #3, making sure that the pin on the bottom of panel, Item #2, is aligned with the hole and will seat properly.

5) Taking care not to pinch the holding beam harness wires, move panel into place against the jamb tube, depress the top pivot pin Item #1, and "POP" the pin into the Bronze pivot bushing.

6) Attach the holding beam harness to the mating connector matching the color coded wires.

7) Install the limiting arm, open and close the panel to check the tension on the ball plunger. Loosen or tighten as required. Refer to figure #11

DOOR PANEL - FULL OPEN

Each door leaf will consist of:

1) A spring loaded bottom guide piston / adjustable

2) Inter locks mounted to the hinged stile

3) No power down

4) A 2-point locking system with thumb turn and key cylinder(Active door only)

Follow the instructions for preperation and mounting of the door leaf in the section for a Fixed Side Lite door. NOTE: The door leaf will "BREAK OUT" towards the Header Access Cover.

1) Install door(s) in place.

2) Adjust height and preload.

INTER-LOCK ADJUSTMENT AND INSTALLATION

NOTE: The following procedure must be done with All glass installed and the door(s) completely adjusted.

Refer to figure # 13A and 13B

Figure # 13A will cover most Bi-parts and Singles. Figure #13B will cover ONLY Bi-parts that have a Over All Door Opening Width of 46 inches or less.

1) Manually slide the door(s) open.

2) Break away the swing panel, loosen the four (4) 1/4 -20 SOC.HD.CAP.SCRS. that hold the swing panel inter-locks in place. Loosen just enough to allow the inter-locks to move with some resistance.

3) Slide inter-locks as far back as possible towards the Jamb Tube. Relatch the panel(s).

4) Manually slide the door(s) closed and check the engagement of the inter-locks (top and bottom). Refer to figure # 13A , if they do not engage properly the inter-lock on the door leaf may be shimmed.

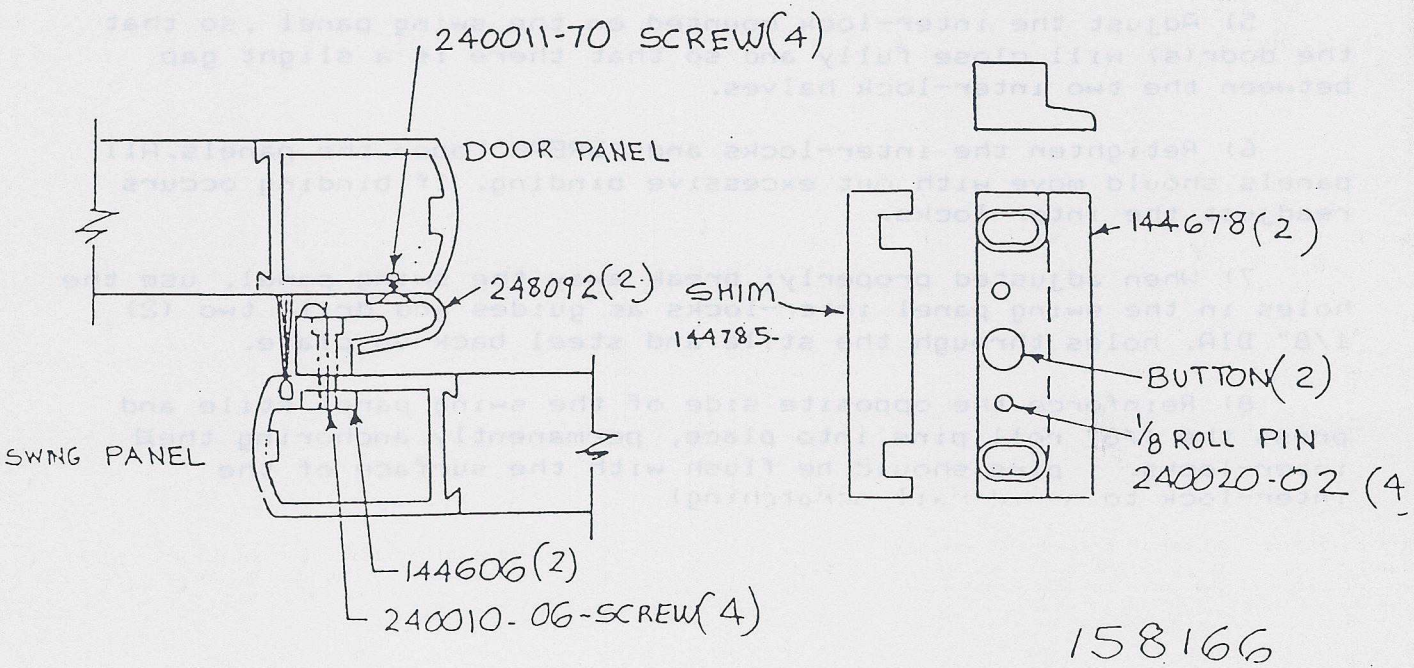
5) Adjust the inter-lock mounted on the swing panel , so that the door(s) will close fully and so that there is a slight gap between the two inter-lock halves.

6) Retighten the inter-locks and "BREAK" open the panels. All panels should move with out excessive binding. If binding occurs readjust the inter-locks.

7) When adjusted properly; break away the swing panel, use the holes in the swing panel inter-locks as guides and drill two (2) 1/8" DIA. holes through the stile and steel back up plate.

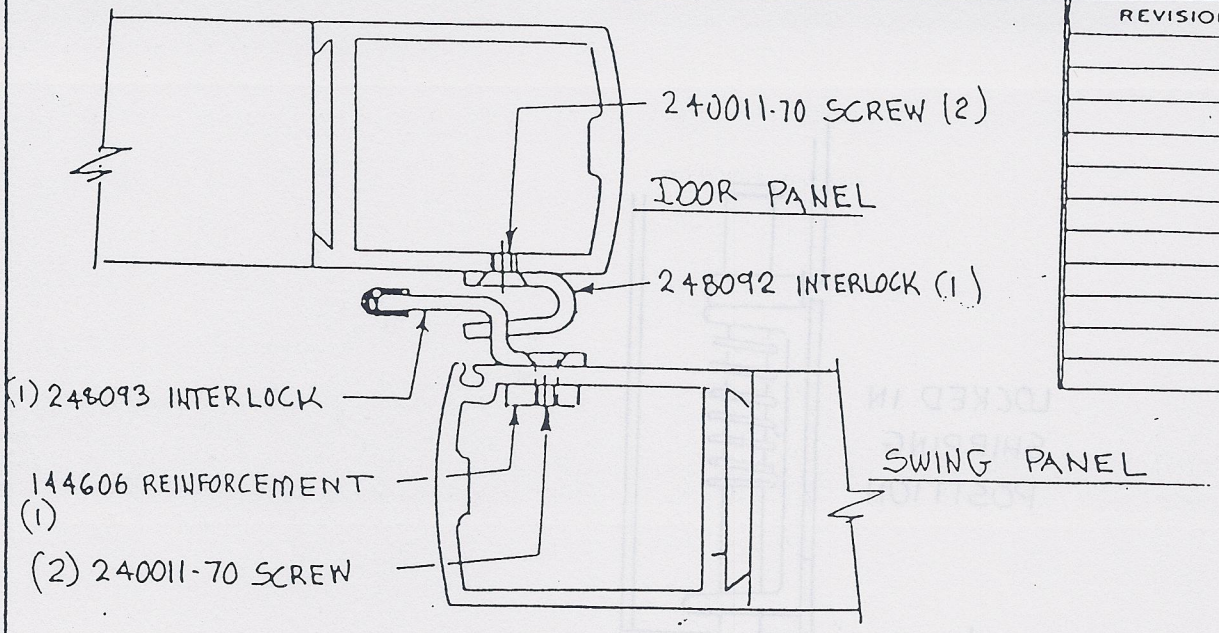
8) Reinforce the opposite side of the swing panel stile and press the 1/8" roll pins into place, permanently anchoring the inter-locks. (pins should be flush with the surface of the inter-lock to avoid nail scratching)

FIGURE #13A

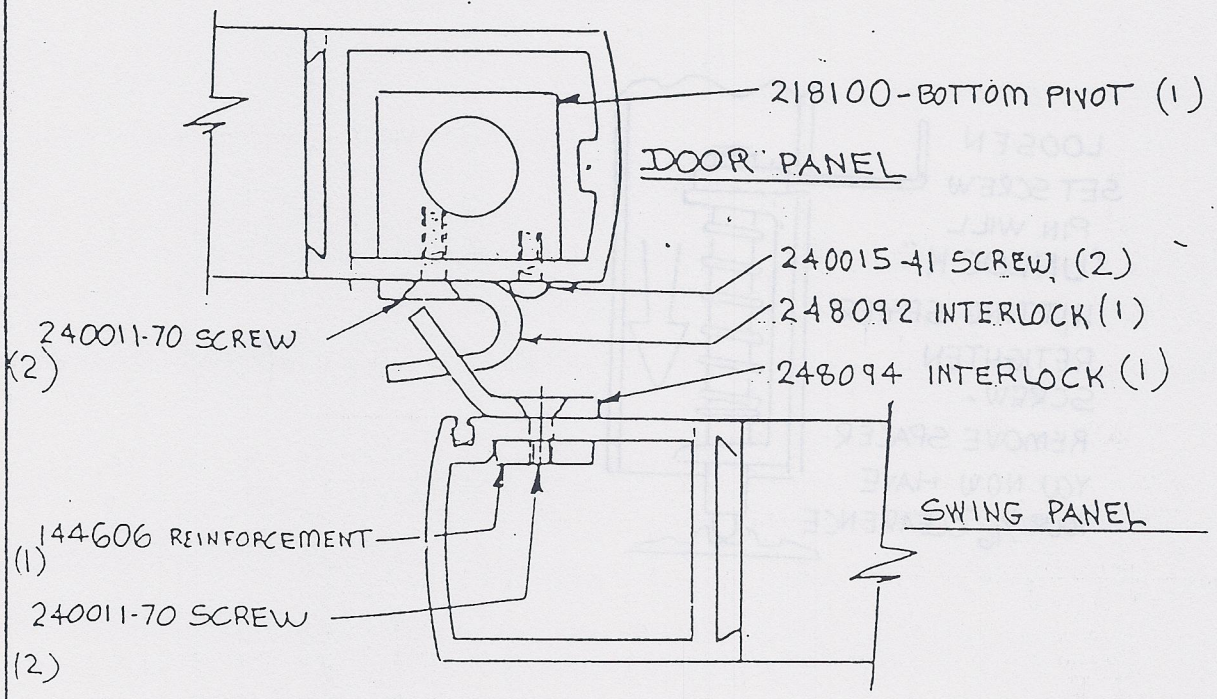


158166

REVISIONS	DATE



UPPER INTERLOCK



LOWER INTERLOCK

DATE: 1-19-85	PART NAME: INTERLOCK ARRANGEMENT / WHISPER SLIDE
SCALE: FULL	MATERIAL:
DRAWN BY: Jes	SPECIFICATIONS: SPECIAL FOR 44 INCH BI-PARTS
APPROVED BY:	

FIGURE # 13B

TOLERANCES (UNLESS NOTED)
FRACTIONAL ± 1/64
XX ± 010
XXX ± 005
ANGLES ± ½°

GYRO TECH inc

DRAWING NO.

PART NO.

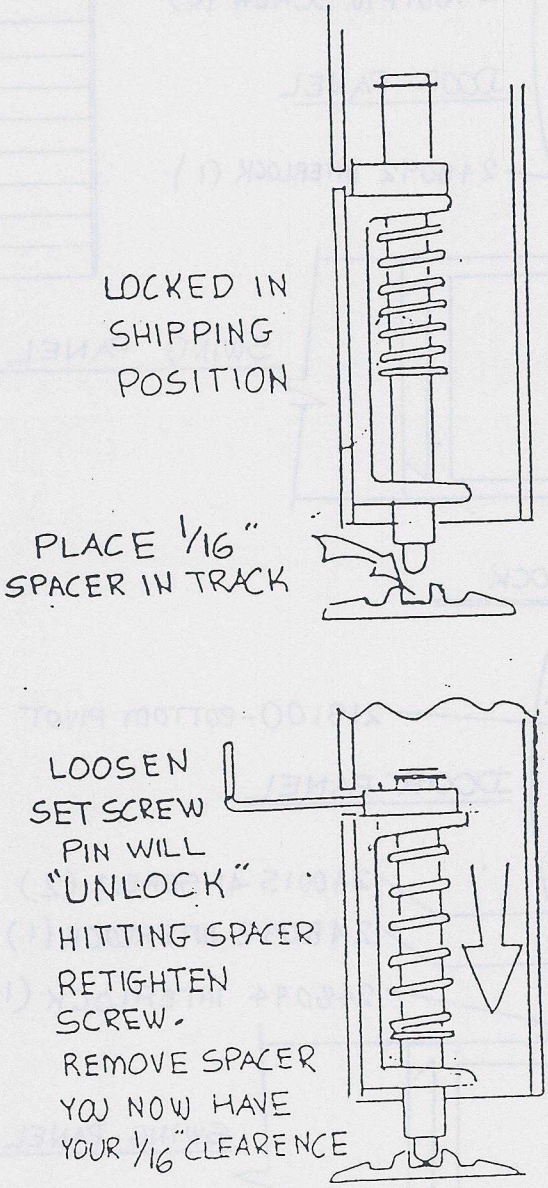

LOCKED IN
SHIPPING
POSITION
PLACE 1/16"
SPACER IN TRACK
LOOSEN
SET SCREW
PIN WILL
"UNLOCK"
HITTING SPACER
RETIGHTEN
SCREW.
REMOVE SPACER
YOU NOW HAVE
YOUR 1/16" CLEARENCE

FIGURE #14A

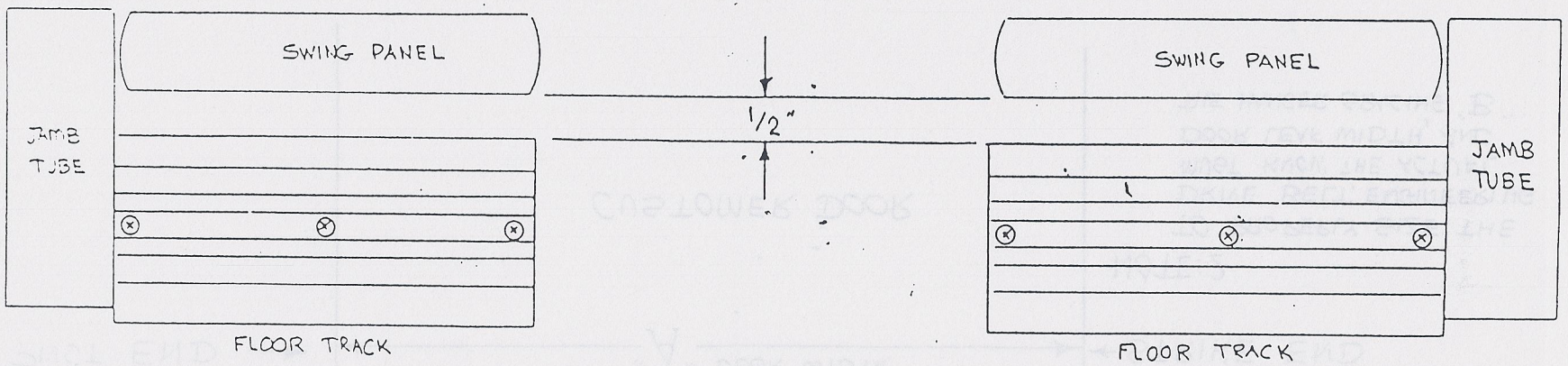


FIGURE * 14

REVISIONS	DATE

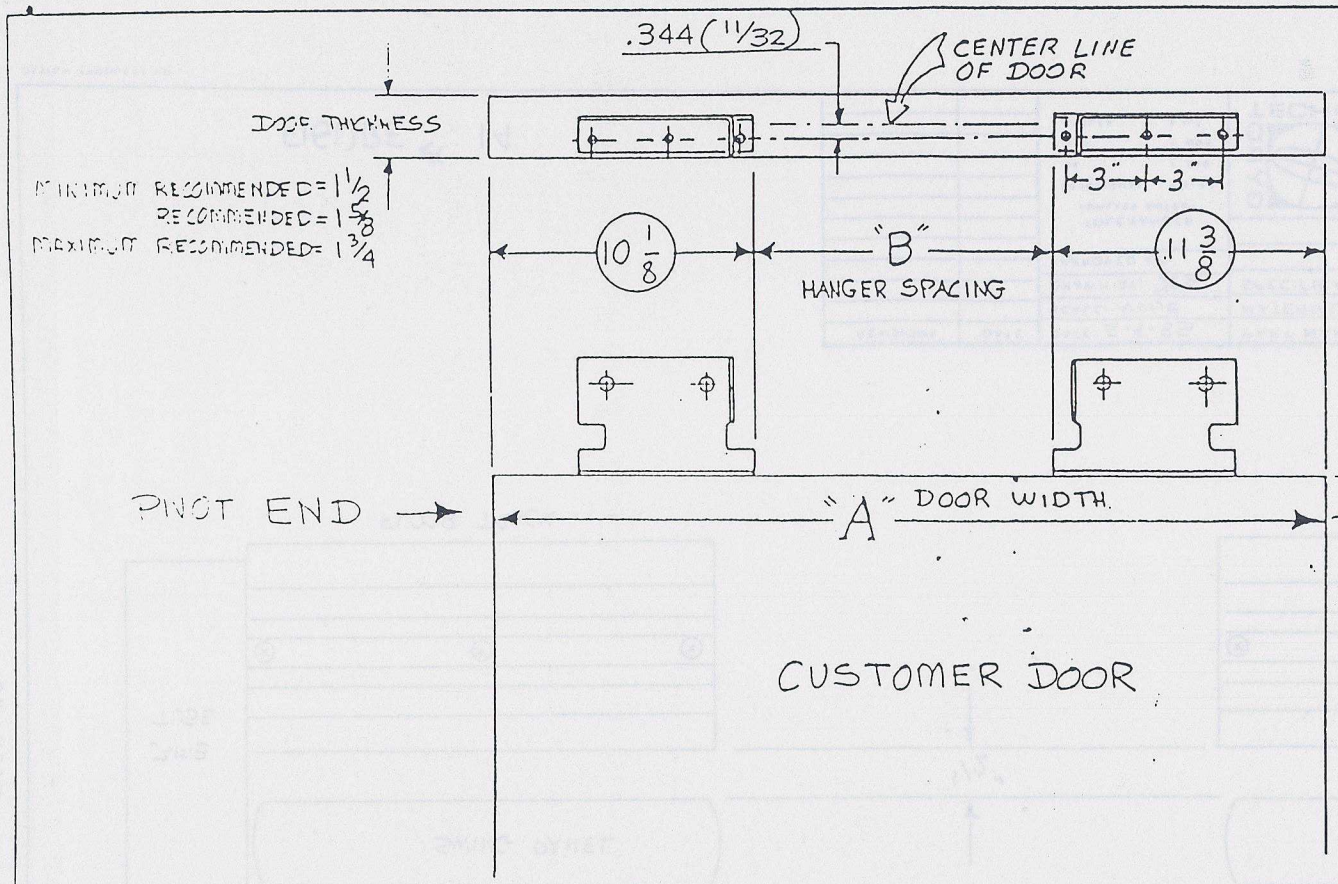
DATE: 5-1-85
SCALE: NONE
DRAWN BY: JES.
APPROVED BY:

TOLERANCES (UNLESS NOTED)
FRACTIONAL ± 1/64
.XX ± .010
.XXX ± .005
ANGLES ± ½°

PART NAME: FLOOR TRACK LOCATION
MATERIAL:
SPECIFICATIONS: SYSTEM 1100 WS - FULL OPEN

GYRO TECH Inc.

DRAWING NO.
PART NO



NOTE: 1

CIRCLED DIMENSIONS (X) MUST BE MAINTAINED

$(10\frac{1}{8}) + (11\frac{3}{8}) = 21\frac{1}{2}$

SUBTRACT $21\frac{1}{2}$ FROM YOUR DOOR WIDTH "A"
THE ANSWER WILL BE "B" YOUR HANGER SPACING

NOTE: 2

TO PROPERLY SIZE THE DRIVE BELT, ENGINEERING MUST KNOW THE ACTUAL DOOR LEAF WIDTH, AND THE HANGER SPACING "B"

FIGURE* 15

REVISIONS	DATE

DATE: 6/27/65
SCALE:
DRAWN BY: JES
APPROVED BY:

TOLERANCES (UNLESS NOTED)
FRACTIONAL ± 1/64
.XX ± .010
.XXX ± .005
ANGLES ± ½°

PART NAME: HANGER SPACING - CUSTOMER DOORS
MATERIAL:
SPECIFICATIONS: THIS PRINT TO BE SHIPPED WITH ORDER

GYRO TECH Inc.

DRAWING NO.
PART NO.

FLOOR TRACK

Refer to figure # 14 A

The floor track is an Aluminum extruded part. It shall be presized by the requirements of your order.

1) Set track against the jamb tube, butting one end tight up against the jamb and parallel to the swing panel.

2) Place inside edge of track 1/2 inch from the inside surface of the swing panel.

3) Place door guide piston into track and release guide post so that it makes full contact into track.

4) Place door so that it is fully closed and Inter locks are aligned in the proper position.

5) When this has been done attach track to the floor.

6) Drill concrete using a 1/4 concrete drill bit. Set anchors and secure track to floor using the #14 screws provided.

OPTIONAL DOOR PREPERATION

If it is your option to use a door leaf other than the one supplied by the Factory, Refer to figure # 15. Use this Drawing to mount the Whisper Slide Ears to your door.

****

ELECTRICAL SYSTEM

****

The electrical wiring of the system 1100WS may look complicated but once you understand the principals it becomes very simple.

An Electrician should connect 115 VAC Single Phase with a minimum of 5 Amps, power to the harness which extends beyound the operator. This harness will be color coded Black, White and Green. It will supply power and Ground to the (POPC) box and the Auxillary

control.

P.O.P.C

Power Open Power Close

CONTROL BOX

The POPC box will have several connections to and from it. Refer to figure # 16

1) J1 plug- Power Harness

2) J2 plug- Header Harness

3) J3 plug- Switching Harness

4) J4 plug- Soft Start

5) Power Time / adjustable control

6) Time Delay / adjustable control

The power timer control is adjustable. This control is used to set up the amount of time the operator motor will stay "on". It needs to be set so that the door(s) will beable to complete their full cycle in both directions of travel.

The time delay control needs to be set so that once the door(s) have reached their full open position , the system pauses for a time [set by you] before beginning it's closing cycle.

The J2 plug will have a Header Harness consisting of 4 color coded wires. Pin 1-BLACK, Pin 2-RED, Pin 3-WHITE and Pin 4-ORANGE. The harness will run across the length of the header and will have connectors set in the proper locations to plug in the Holding Beams and any Activating device, such as GYRO SCANS, LANSON MATS... etc. The Black and Red wires will act as a normaly open set of contacts and any time you close that set of contacts the door(s) will open. Upon release the system will time out and begin to close.

The Red and Orange wires will supply 24 Volts AC to the Holding Beams. The White wire that comes directly out of the POPC will be a ground contact for the Auxilliary Box.

The J3 Switching Harness runs between the POPC and the Auxillary

Control, this harness performs the switching from "HI" to "LOW" voltage. This will control Back Check and Latching. A RED and BLACK motor lead wire will come from this harness and be attached to the motor. Observe the decal on the motor, Match colors for RH and Mismatch for LH slide operation.

Any Slide Unit with the operator mounted on the Left side of the Header, when facing the Access Cover, will be considered, Electrically to be a Left Hand Unit. The P3 (WHITE) wire from the J3 connector will interface with a "pig tail" of the Switching harness to supply a ground and a control signal for the Auxilliary Box.

The J4 Soft Start Harness is a direct connection to a 30 micro farad capacitor, designed to give a smooth operating cycle. This Capacitor is more commonly refered to as the SOFT START.

AUXILLIARY CONTROL

Refer to figure # 17

The Auxilliary Control has been designed to control the switching of the Back Check and Latching modes. This is accomplished by having Three (3) Proximity Switches mounted on the Header Base Rail. Looking at the box you will see Three (3) Relays: K1-K2-K3, One (1) Transformer, Three (3)Connectors: J1-J2-J3, One (1) Relay Socket and an assortment of discrete components. A description follows:

K1) control relay J1) 115 V AC source

K2) Latching relay J2) 4 Pin Socket

K3) Back Check relay J3) 4 pin Socket

K4) Limit open relay socket

When the POPC is given an activation signal the door(s) will begin to open in HIGH voltage. At this time all relays shall be in their ready state. When the Magnet mounted to the door (see door installation) passes the Back Check proximity switches [these switchs will use Blue and Green wire] the K3 relay will "pick" and latch into position causing the relay to select a Lower voltage from the POPC control. The system will "time out" according to the amount of Hold Open time you have set on the POPC control. Once the time delay has timed out the Auxilliary box will reset to the READY MODE and the door(s) will begin to close. The system will start out in a HIGH voltage and once the magnet passes the Latching Proximity

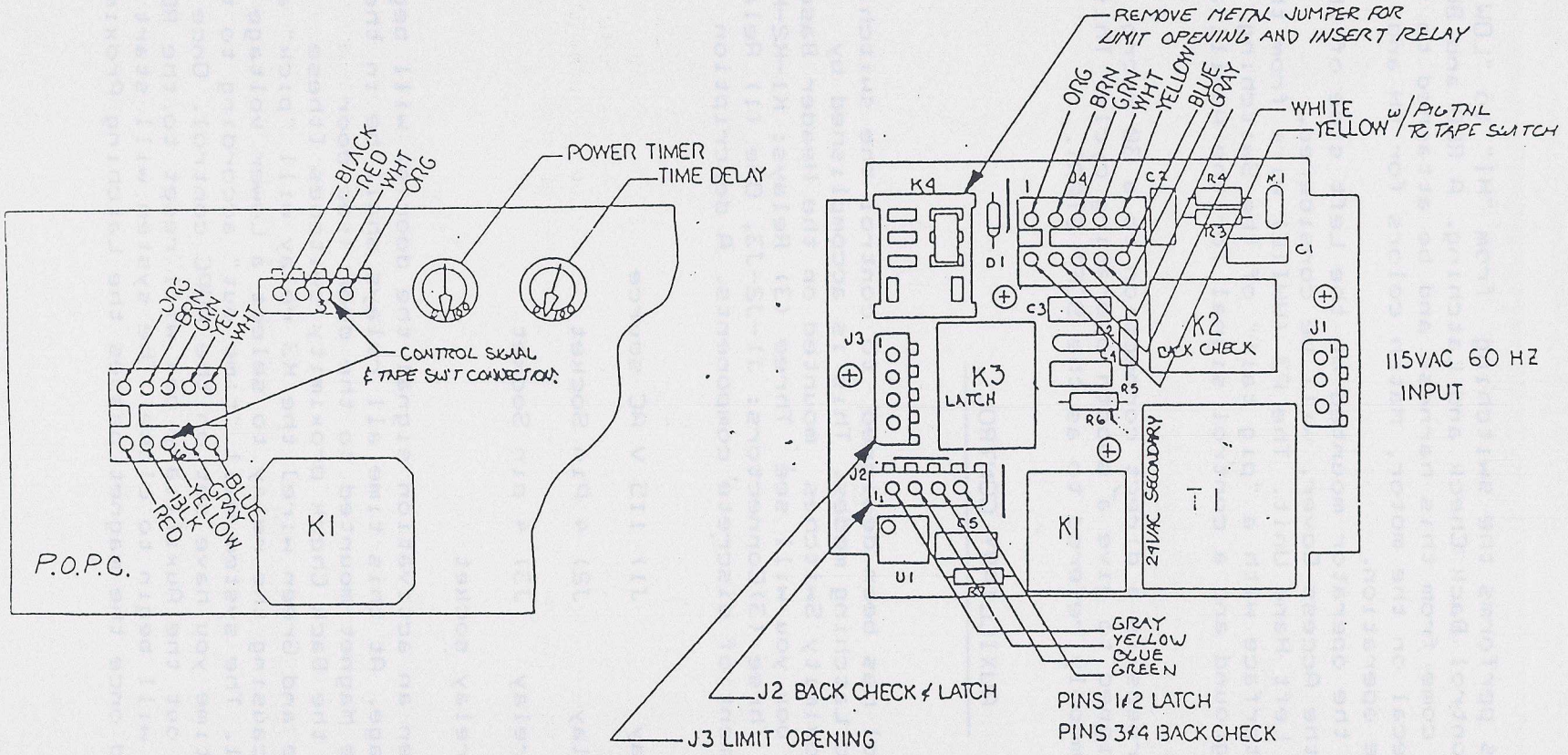


FIGURE # 16

REVISIONS	DATE

DATE: 7-15-85
SCALE:
DRAWN BY: LORNE
APPROVED BY:

TOLERANCES (UNLESS NOTED)
FRACTIONAL . ± 1/64
.XX . . . . . ± .010
.XXX . . . . . ± .005
ANGLES . . . . ± ½°

PART NAME: CONTROL SYS 1100 WS
MATERIAL:
SPECIFICATIONS:

GYRO TECH Inc.

DRAWING NO.
PART NO.

switch [this switch will use GRAY and YELLOW wire] the K2 relay will "pick" causing the door(s) to slow and come to a rest in the fully closed position.

If an optional LIMITED DOOR OPENING SWITCH PACKAGE is requested, you, the Distirbutor can order a package designed to accomplish this function.

The package will consist of:

1) Surface mounted rocker switch

1) Harness

1) Plug in 24 VAC relay

1) Proximity switch assembly

Remove the metal jumper located in the K4 relay socket, Refer to figure # 16, and install the plug in relay. Plug the wiring harness, that is furnished with the option package, into the J3 plug. Connect the Two (2) Brown wires to the rocker switch. This switch is used to turn ON and OFF the limiting function. Position the proximity switch on the Header Base Rail where you want the door(s) to stop and connect the Two RED wires to the mating connector.

When the Magnet passes the Proximity switch, the K4 relay will pull in and the power being supplied to the operator will be disconnected . The door travel will stop with in inches of the proximity switch. This relay is not necessary for normal operation, if it is not being used the metel jumper must be in place.

TAPE SWITCH

The Tape Switch is nothing more than a set of normally open contacts. It is a continuous strip running adjacient to the Travel portion of the door(s). When the Door(s) are broken open the Power Down roller makes contact, pressing the strips together and becomes a closed set of contacts. This action will instantly stop ALL drive functions and the door(s) will become inoperable untill they are reset.

HOLDING BEAMS

The holding beam is a Factory installed unit consisting of an

emitter and detector. They are flush mounted in opposite door frames, 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 travel back to the POPC control causing the door(s) to open and remain open untill the object or person is safely out of the way . The beam automatically resets itself.

PROXIMITY SWITCHES

Refer to figure # 17

The Proximity Switches are set on the Header Base Rail from the Factory in a temporary setting. They need to be fine tuned to your particullar application, dependant on the size and needs of your system.

These switches are Normally Open sets of contacts, when checked with an ohm meter they should read no continuity. When a Magnet is passed in front of it, the switch will close. This action will cause the relay in the Auxilliary Box to select the proper operating voltage from the POPC Control Box.

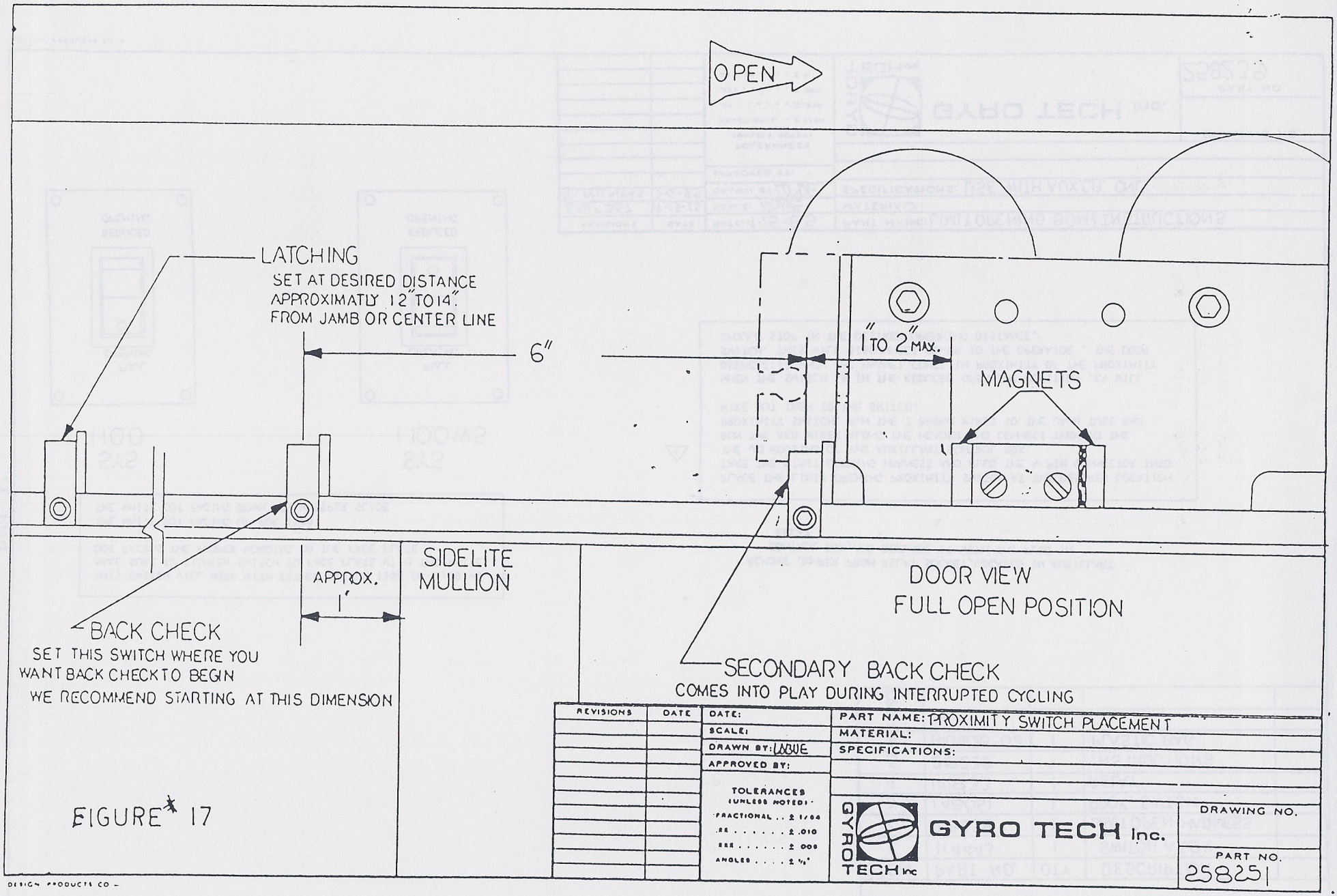


FIGURE* 17

REVISIONS	DATE

DATE:
SCALE:
DRAWN BY: LAQUE
APPROVED BY:

TOLERANCES (UNLESS NOTED)
FRACTIONAL . . ± 1/64
.XX . . . . . ± .010
.XXX . . . . . ± .005
ANGLES . . . . ± ½°

PART NAME: PROXIMITY SWITCH PLACEMENT
MATERIAL:
SPECIFICATIONS:

GYRO TECH Inc.

DRAWING NO.

PART NO. 258251

DESIGN PRODUCTS CO -

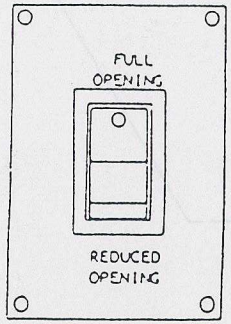
BILL OF MATERIALS

ITEM	PART NO.	QTY	DESCRIPTION
1	114443	1	SWITCH ASSY
2	218238	1	LIMIT OPEN HARNESS
3	148051	1	PROX. SWTCH
4	141833	1	RELAY
5	218239	1	INSTRUCTIONS
6	140828-02	1	PLASTIC BAG
7			
8			

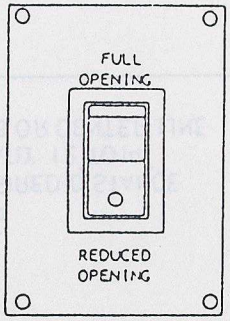
THIS SWITCH WILL WORK WITH EITHER SYSTEM 1100 OR 1100 WS
MAKE SURE TO TIGHTEN SWITCH TO FACE PLATE WITH THE WHITE DOT FACING THE PROPER WORDING ON THE FACE PLATE

THE WHITE DOT FACING UP FOR 1100
THE WHITE DOT FACING DOWN FOR WHISPER SLIDE

SYS 1100



SYS 1100WS



REMOVE JUMPER FROM RELAY SOCKET, LOCATED IN AUXILLARY CONTROL BOX, AND REPLACE IT WITH THE PLUG IN RELAY

⚠1

PLACE THE LIMIT OPENING PROXIMITY SWITCH AT THE DESIRED LOCATION
TAKE THE LIMIT OPENING HARNESS AND PLUG THE 4 PIN CONNECTOR INTO THE J3 HOUSING OF THE AUXILLARY CONTROL BOX.
RUN THE RED WIRES ALONG THE HEADER AND CONNECT THEM TO THE PROXIMITY SWITCH. RUN THE 2 BROWN WIRES TO THE JAMB TUBE AND WIRE NUT THEM TO THE SWITCH.

WHEN THE SWITCH IS IN THE REDUCED OPENNING POSITION, K4 WILL DEENERGIZE WHEN THE MAGNET COMES IN PROXIMITY OF THE PROXIMITY SWITCH. THIS WILL DISCONNECT POWER TO THE OPERATOR. THE DOOR SHOULD STOP IN THE DESIRED OPENNING DISTANCE.

REVISIONS	DATE
ERN # 357	4-15-85
⚠1 ECN # 1943	5-6-85

DATE: 4-15-85
SCALE: NONE
DRAWN BY: LOCKE
APPROVED BY:

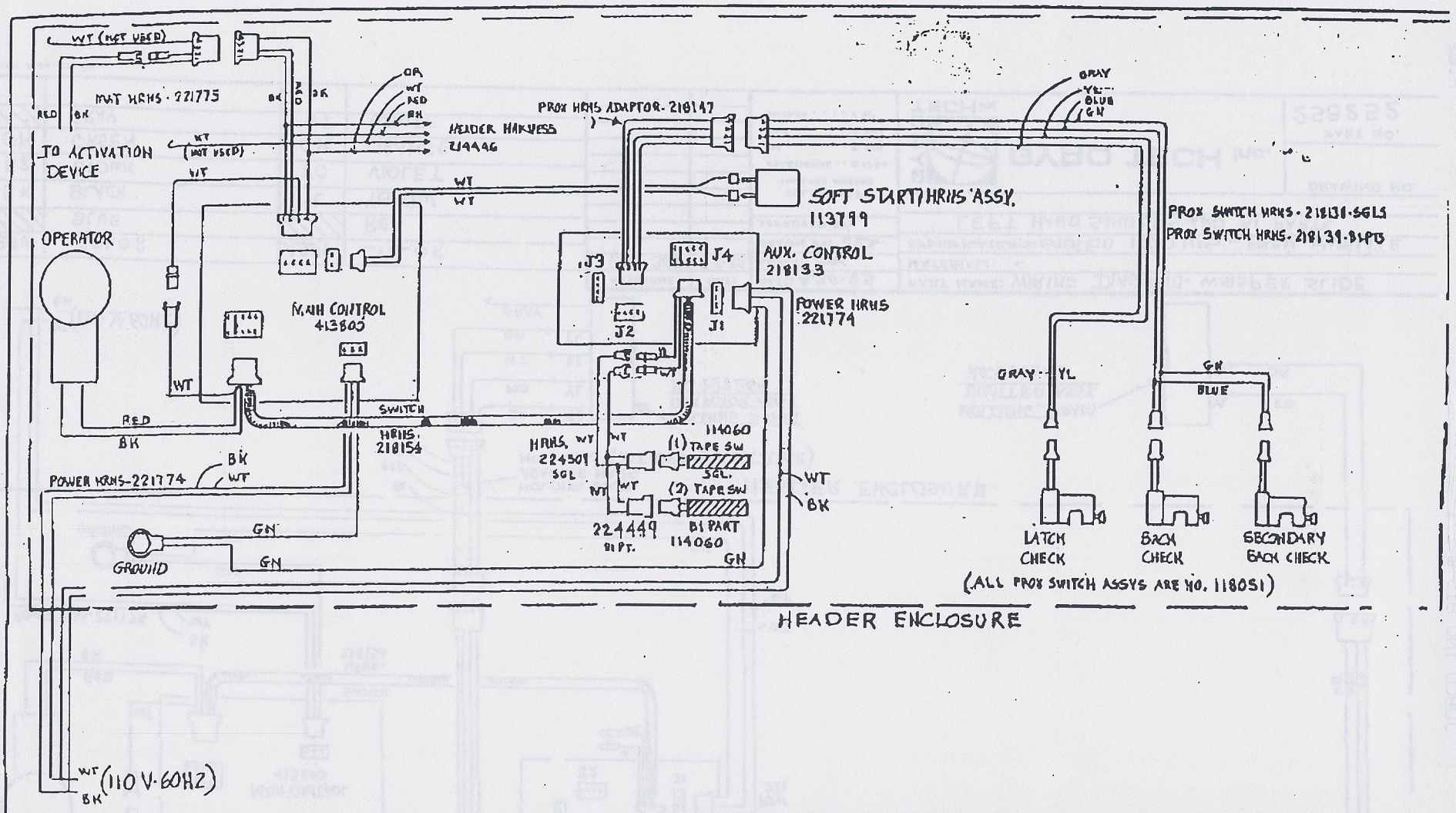
TOLERANCES (UNLESS NOTED)
FRACTIONAL . ± 1/64
.XX . . . . . ± .010
.XXX . . . . . ± .005
ANGLES . . . . ± ½°

PART NAME: LIMIT OPENING BOM & INSTRUCTIONS
MATERIAL:
SPECIFICATIONS: USE WITH AUX.CIR. ONLY

GYRO TECH Inc.

DRAWING NO.

PART NO. 258239



ABBV.	COLOR	ABBV.	COLOR
///	BLUE	///	RED
BK	BLACK	YL	YELLOW
BR	BROWN	VO	VIOLET
GN	GREEN	OR	ORANGE
///	GRAY	WT	WHITE

REVISIONS	DATE
ERN 362	5-2-85

DATE: 4-30-85
SCALE: NTS
DRAWN BY: JES
APPROVED BY:

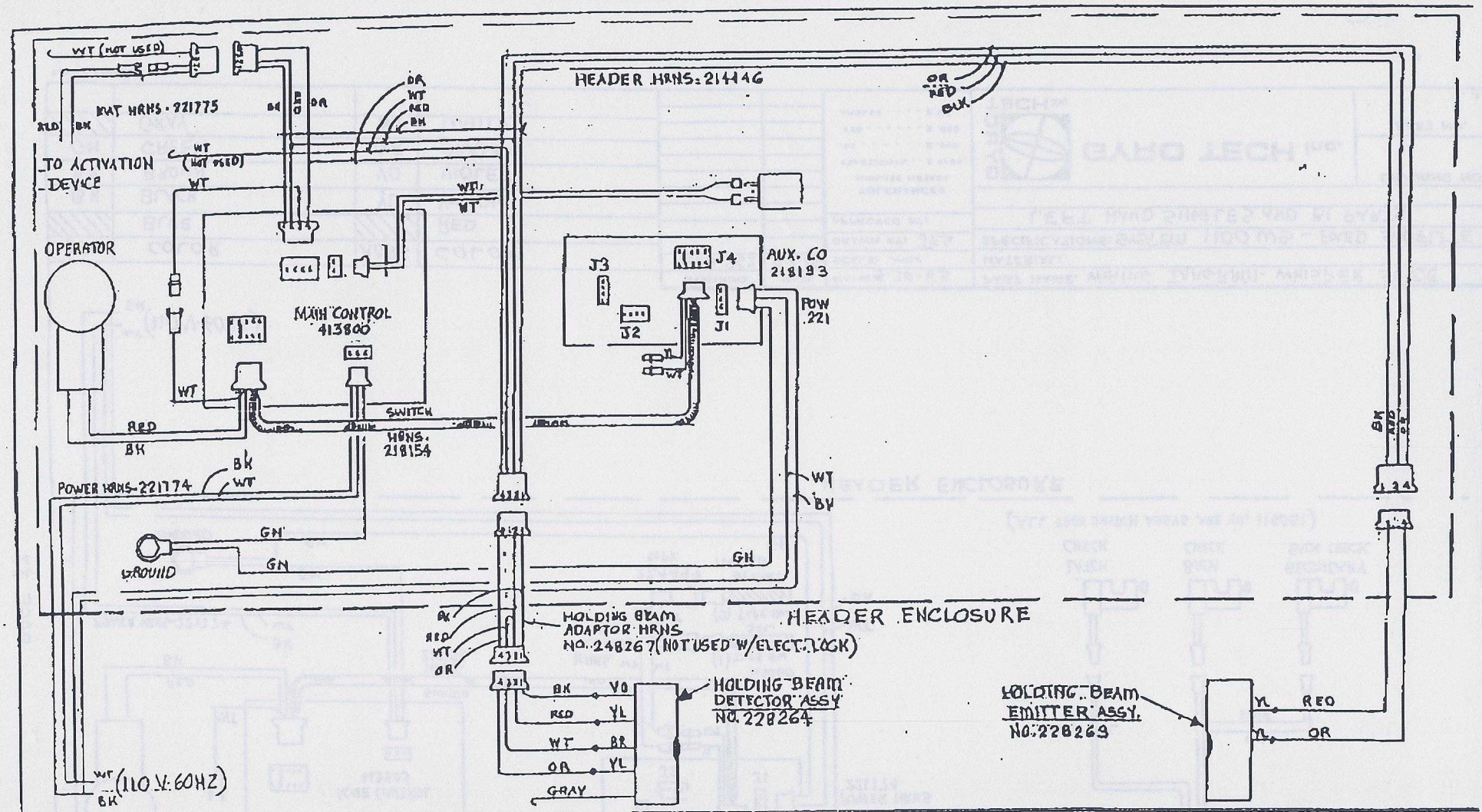
TOLERANCES (UNLESS NOTED)
FRACTIONAL . . . ± 1/64
.XX . . . . . ± .010
.XXX . . . . . ± .005
ANGLES . . . . ± ½°

PART NAME: WIRING DIAGRAM - WHISPER SLIDE
MATERIAL:
SPECIFICATIONS: SYSTEM 1100 WS - FIXED SIDELITE
LEFT HAND SINGLES AND BI PARTS

GYRO TECH Inc.

DRAWING NO.
PART NO.

DESIGN PRODUCTS CO —



ABBV.	COLOR
	BLUE
BK	BLACK
BR	BROWN
GN	GREEN
	GRAY

ABBV.	COLOR
	RED
YL	YELLOW
VO	VIOLET
OR	ORANGE
WT	WHITE

REVISIONS	DATE
ERN 362	5-2-85

DATE: 4.30.85
SCALE: —
DRAWN BY: JES
APPROVED BY:

TOLERANCES (UNLESS NOTED)
FRACTIONAL . . . ± 1/64
.XX . . . . . ± .010
.XXX . . . . . ± .005
ANGLES . . . . ± 1°

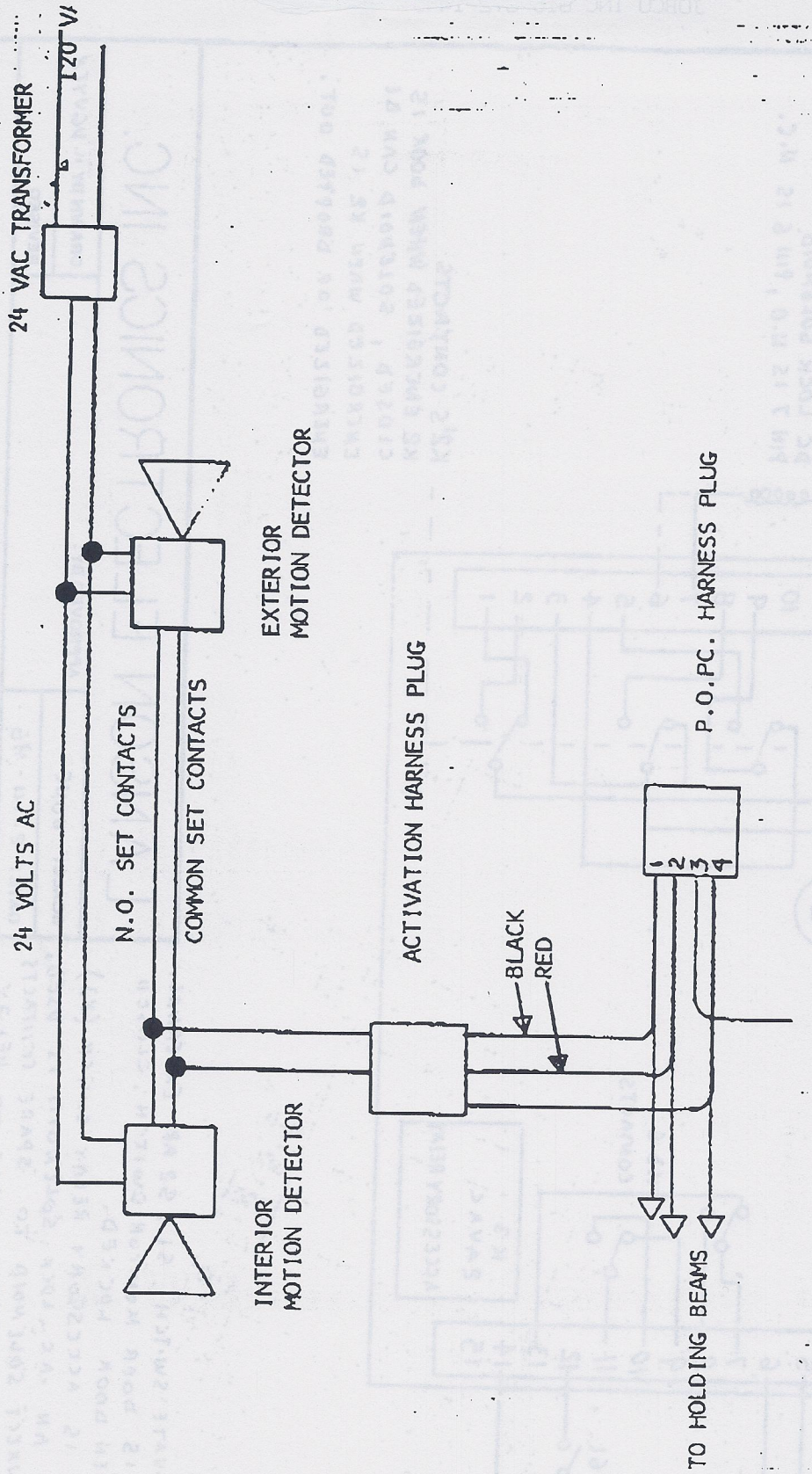
PART NAME: WIRING DIAGRAM - WHISPER SLIDE
MATERIAL:
SPECIFICATIONS: SYSTEM 1100 WS - FIXED SIDELITE
LEFT HAND SINGLES AND BI PARTS

GYRO TECH Inc.

DRAWING NO.

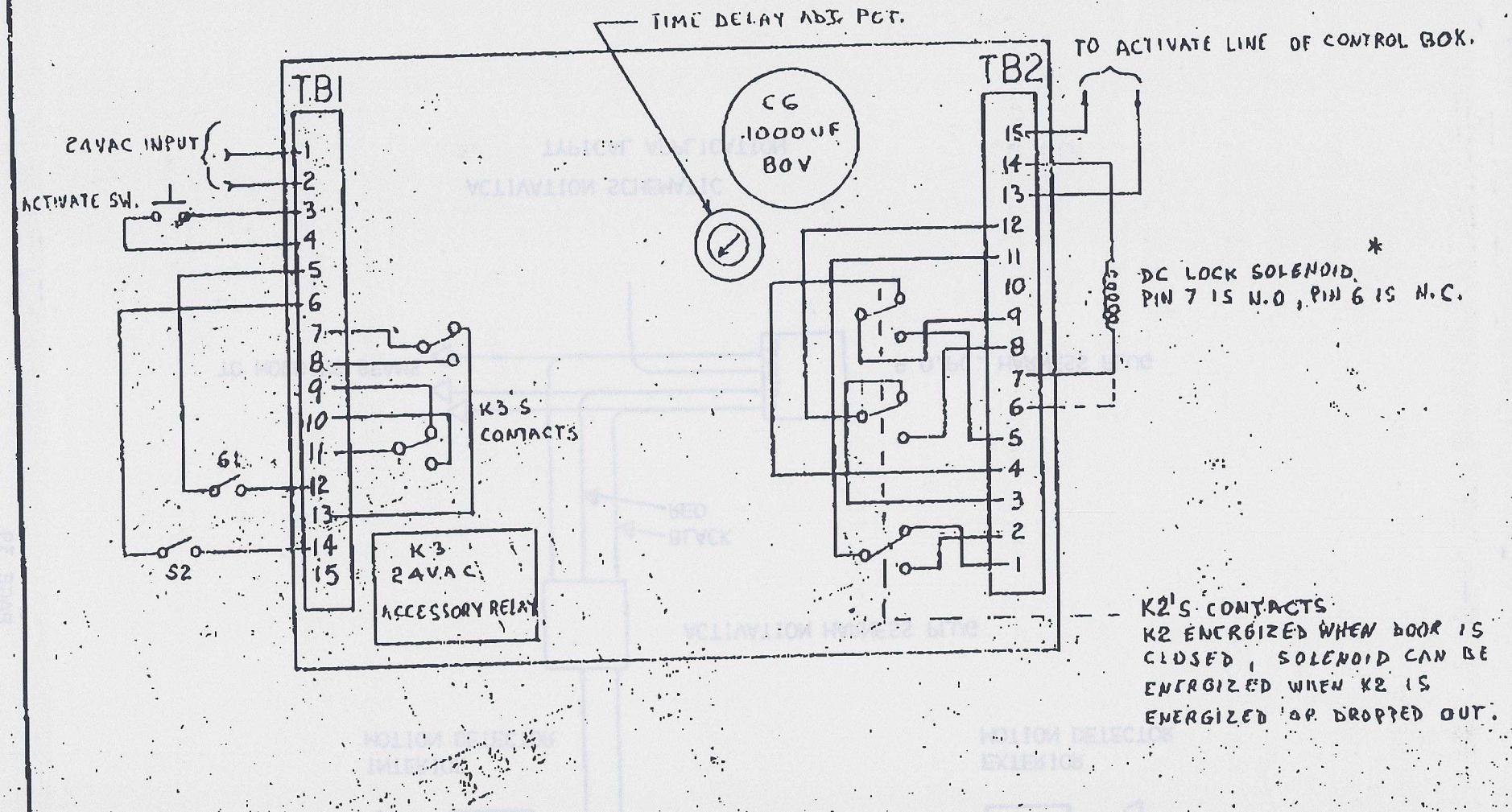
PART NO. 258252

DESIGN PRODUCTS CO —



ACTIVATION SCHEMATIC

TYPICAL APPLICATION



NOTES:

- ACTIVATE SWITCH, S1, S2 ARE EXTERNAL.
- S1 IS DOOR MONITOR SWITCH, CLOSED WHEN DOOR LOCKED.
- S2 IS ACCESSORY RELAY SWITCH (K3).
- * IF AN A.C. LOCK SOLENOID IS USED, CONNECT SOLENOID TO SPARE CONTACTS OF K2 AND FEED 24VAC TO RELAY COMMONS (K2).

LANSON ELECTRONICS INC.		
SCALE: NONE	APPROVED BY:	DRAWN BY N. NGUYEN
DATE: 8-14-96		REVISED
ELECTRIC LOCK CONTROL MODULE		
WIRING DIAGRAM		DRAWING NUMBER 1806

DAILY SAFETY CHECK

For Your Customers' Safety and Your Own Protection
Perform This Safety Check DAILY on Each Automatic Sliding Door

Figure 1

1. Step on the "opening" mat. Door should slide open smoothly and stop without impact.
2. Step through the doorway onto the mat on the other side. Door should remain open without interruption.

   NOTE: If there is more than one mat on each side, each mat should be tested.
3. Check the mat molding and threshold. It should be complete and secured with all screws required.
4. Step off the mat; after a brief time delay, the door should close smoothly and fully without impact.

—or if sensors are used—

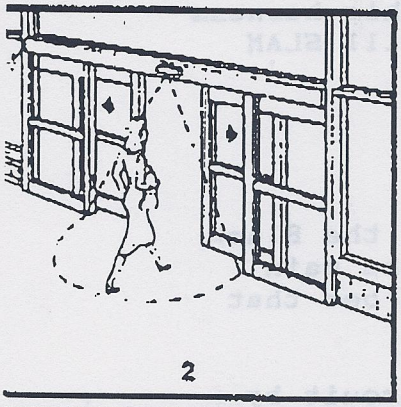


Figure 2

5. Check electronic sensor by walking towards door opening. Door should start opening when you are about five feet from the door, should slide open smoothly, and stop without impact. Repeat on other side of opening.
6. Step out of the sensor zone. After a brief time delay, the door should slide closed smoothly and should close fully without impact.

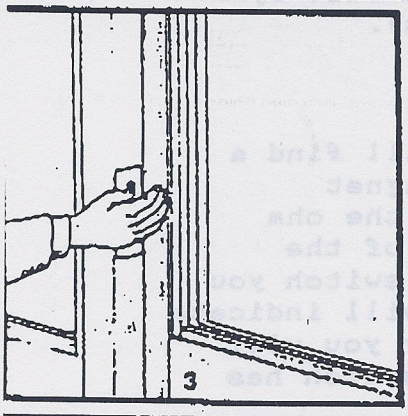


Figure 3

7. Cover the doorway holding beam with your hand. The door should open fully if closed; if open, it should remain open.

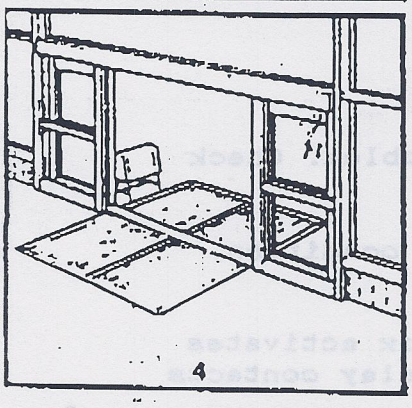


Figure 4

8. Check the door area for tripping or slipping hazards.
9. Check all door panels for broken or cracked glass. There should be no bulletin boards, literature racks, merchandise displays, or other attractions in the door area where people could be hit by the door.
10. Door should have decals properly displayed.
11. IF YOU HAVE A PROBLEM YOU CANNOT CORRECT, TURN OFF THE DOOR OPERATING EQUIPMENT AND CALL YOUR SERVICE REPRESENTATIVE.

TROUBLE SHOOTING

All GT System 1100 Whisper Slides are thoroughly tested before leaving the Factory. The system that you have should need no "Debugging".

However should a problem develope , follow these simple steps in Trouble Shooting the condition.

TECHNIQUE_____

When testing the system for opening and closing, ALWAYS leave the Header Harness plugged into the POPC Control Box. This harness supplies the signals for the Auxilliary Control. Unit will SLAM open and closed with this harness removed.

Test using the "mat harness" leads.

To eliminate your activating devices, simply touch the Black and Red lead wires together, this will go directly to the main control. If the Slider functions properly, it is a safe bet that the Motion Detectors or Detector is bad.

To test the Holding Beams, Remove them from the circuit by disconnecting them at the Side Lite Verticles (mullions).

NOTE: When trouble shooting Electrical problems, you will find a VOLT METER, OHM meter, jumper wires and a spare magnet essential. When testing a proximity switch, place the ohm meter across the leads and pass a magnet in front of the switch. When the magnet is close proximity of the switch you will observe a change in the meter readimg which will indicate the switch closing. When the Magnet is pulled away you will notice a change in the meter indicating that the switch has opened.

Problem A) Doors will not open.

1) First, check to see if it is a binding problem. Check All rollers and bottom guide.

A) If there is binding adjust to remove this condition.

2) Check to see that the Relay in the POPC box activates when a open signal is sent to the control. (ie. relay contacts close or "snap in"). Refer to figure #17

A) If it does not, make sure that it has not come loose

in shipping. If it is firmly in place and still does not, Remove and Replace control box.

Problem B) Doors open and close, NO back catch or latching.

1) Check to see if Magnet needs to be adjusted closer to the Proximity switches.

A) The closer the Magnet to the proximity switch, the less chance that the proximity switches will not activate.

2) Tilt the proximity switches on an angle, this will help make maximum use of the switches.

3) Remove and Replace the Auxillary control.

4) Check All proximity switches, making sure they open and close with the Magent. Follow the procedure for checking the proximity switches as described above.

Problem C) Doors open but will not close.

1) Check holding beams, as previously described.

A) If holding beam is bad replace.

2) Check for obstruction or binding of doors.

3) Check the Power Down roller switch to make sure it has not released prematurely.

4) If the system is a FULL OPEN, check for obstructions in the security latches.

Problem D) Doors only open part of the way.

1) Make sure motor timer has been adjusted to allow door(s) to open fully. Refer to figure #17

2) Make sure limited opening switch is in the off position, If the system is so equiped.

Problem E) Motion Detector does not activate door.

Isolating Detector problems:

Using a Volt Meter, place the meter setting to the AC mode and select a scale that will read higher than 24 Volts AC. Place the meter leads, one on each secondary terminal of the Transformer used to supply power to the Motion Detector. With the power ON, you do not read approximately 24 Volts AC, Replace the transformer.

Remove the MAT harness. Refer to page 37 and 38, place a jumper across the Black and Red terminals, If the door functions normally, one or more of the motion detectors may be bad. Remove and Replace.

Problem F) Holding Beam does not function.

Isolating Holding Beam problems:

Disconnect beams from the header harness, located at each mullion or strike jamb. If the holding beam has been holding the door open, disconnecting shall allow the doors to close. If the beam was not opening the doors, then replace the beam.