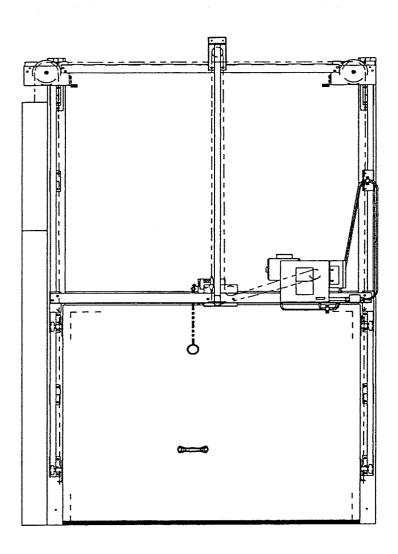
# Installation Instructions for Mark IV ™ Vertical Sliding Power Door

## "AFTER INSTALLING DOOR FORWARD TO MAINTENANCE DEPARTMENT OR OWNER"



### **JAMISON**

JAMISON DOOR COMPANY
P.O. BOX 70
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USA

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INTERNET: <a href="http://www.jamison-door.com">http://www.jamison-door.com</a>
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### Mark IV Vertical Sliding Power Door Miscellaneous Parts Application

| Application  | Item  |
|--|---|
| Attaching frame to panel wall                                  | o Bags of carriage bolts w/ washers and       |
|  | nuts, or                                      |
|  | o Lag screws, or                              |
|  | o 3/8-16UN Threaded rod                       |
| Attaching spreader angle to sheave brackets                    | o 3/8-16UN X 1-1/4 long hex head              |
| And lower spreader angle to mounting brackets                  | machine bolt                                  |
|  | o 3/8-16UN locknut                            |
| Attaching counterweight box to wall and cover                  | o #8 18X1/2 SST self drilling Phillips head   |
| To counterweight box   | screws  |
| Spare track fasteners  | o 5/16-18UN X ¾ hi-tensile oval head          |
|  | carriage bolt                                 |
|  | o 11/16 OD X 11/32 IDX 16 GA flat steel       |
|  | washer  |
|  | o 5/16 dia. Shakeproof lockwasher             |
|  | o 5/16-18UN heavy hex nut                     |
| For use in non-freezer applications                            | <ul> <li>Pull cord switch w/o heat</li> </ul> |
| For use in freezer applications                                | <ul> <li>Pull cord switch w/heat</li> </ul>   |
| For use with pull cord switches                                | o ¼-20UNX 1-1/2 round head machine            |
|  | screws  |
|  | o ¼-20UN hex nuts                             |
| Attaching gasket retainer to jambs (if jambs are ordered only) | o #14X1 truss head wood screws                |

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### **GENERAL INFORMATION:**

#### A. Contents of crates and Carton

1. Frame component parts and assemblies shipped knocked-down.

NOTE: If frame has jambs, casings and jambs shipped in separate crates.

- 2. One crate containing door leaf with all components, parts and assemblies attached.
- 3. One carton containing:
  - a. Packing List
  - b. Installation Instructions
  - c. Operating Instructions

#### **B.** Inspect for Damage and Shortages Immediately

- 1. Note on all copies of delivery receipt any apparent damages and shortages.
- 2. Open all shipping containers and inspect for concealed damage and shortages. Carefully repack to prevent further damage and pilferage.
- 3. Report within 15 days in writing to the transportation company and a copy to us, any concealed damage and /or shortages. After 15 days, the law permits the transportation company to reject all claims.

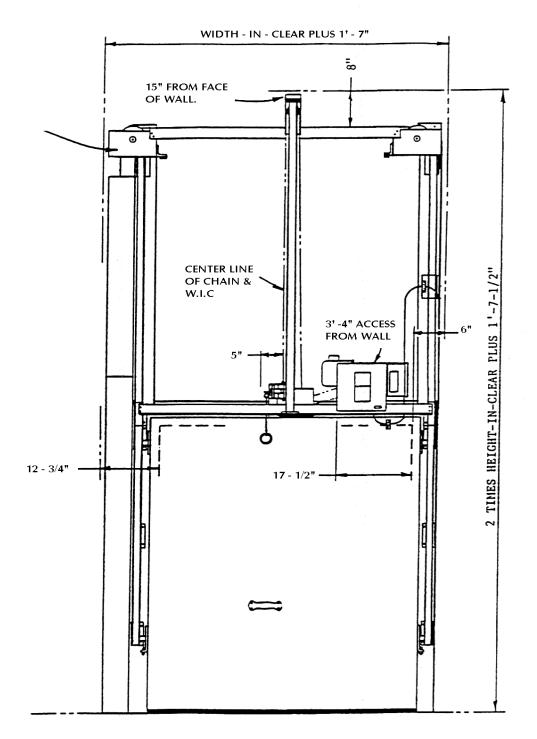
#### C. Handle All Parts Carefully

1. Certain parts such as gaskets, wiring, reversing edges, etc. are vulnerable.

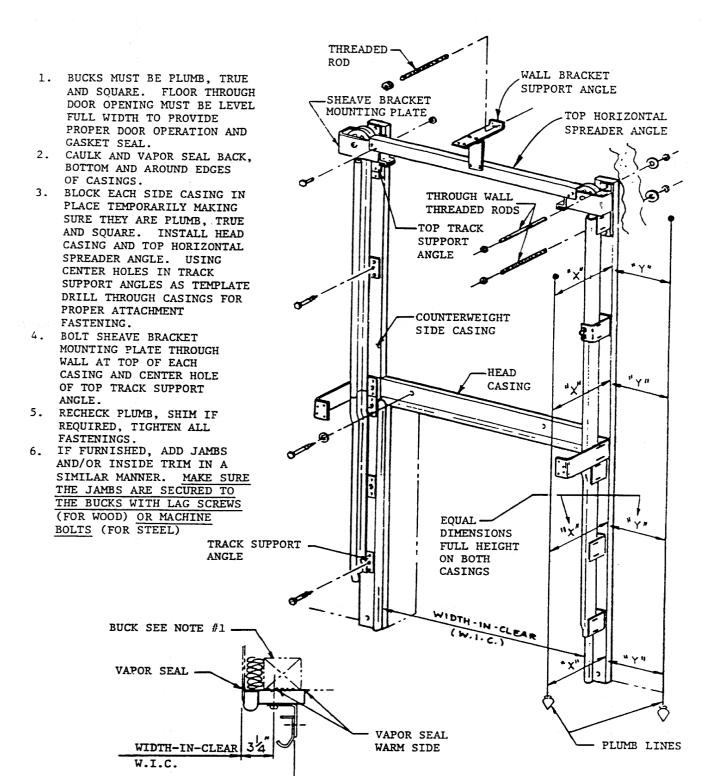
#### D. READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH ERECTION

#### E. Plan Ahead

- 1. Choose installers who are millwrights or have equal qualifications.
- 2. Have all tools and materials necessary for installation readily available.

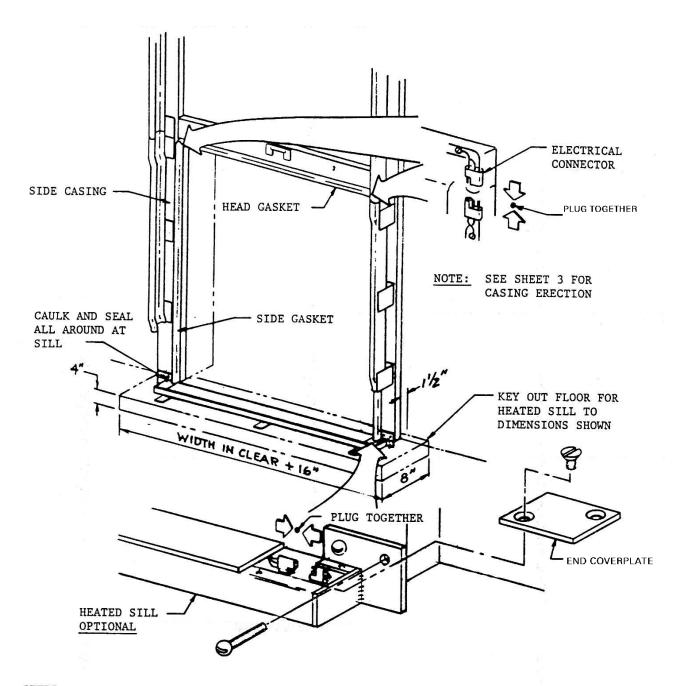


MARK IV POWER OPERATED VERTICAL SLIDING DOOR



**CASING ERECTION** 

W.I.C. +10-1/2"
INSIDE TRACK ANGLE



#### STEPS:

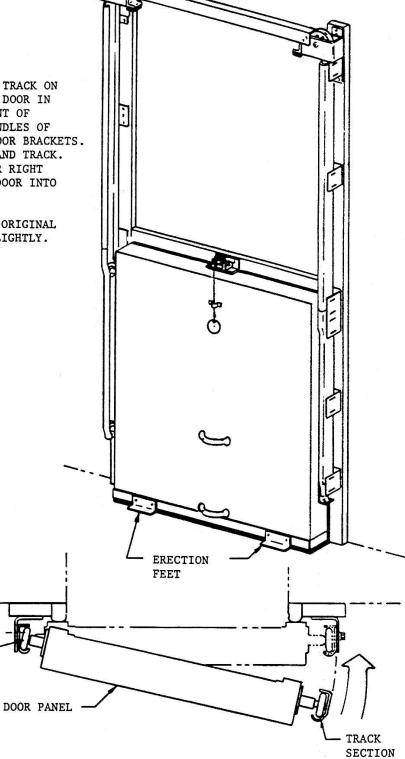
- ATTACH HEATED SILL TO CASING WITH FASTENINGS PROVIDED. SILL ASSEMBLY MUST BE LEVEL AND TRUE FROM CASING TO CASING.
- 2. PLUG ELECTRICAL CONNECTOR TOGETHER AT FOUR CORNERS OF FRAME AS SHOWN.
- 3. INSTALL END COVERPLATES, CAULK AND SEAL TO EXCLUDE MOISTURE.
  4. BRACE HEATED SILL SECURELY AND GROUT IN FINISHED CONCRETE FLOOR AROUND SILL.

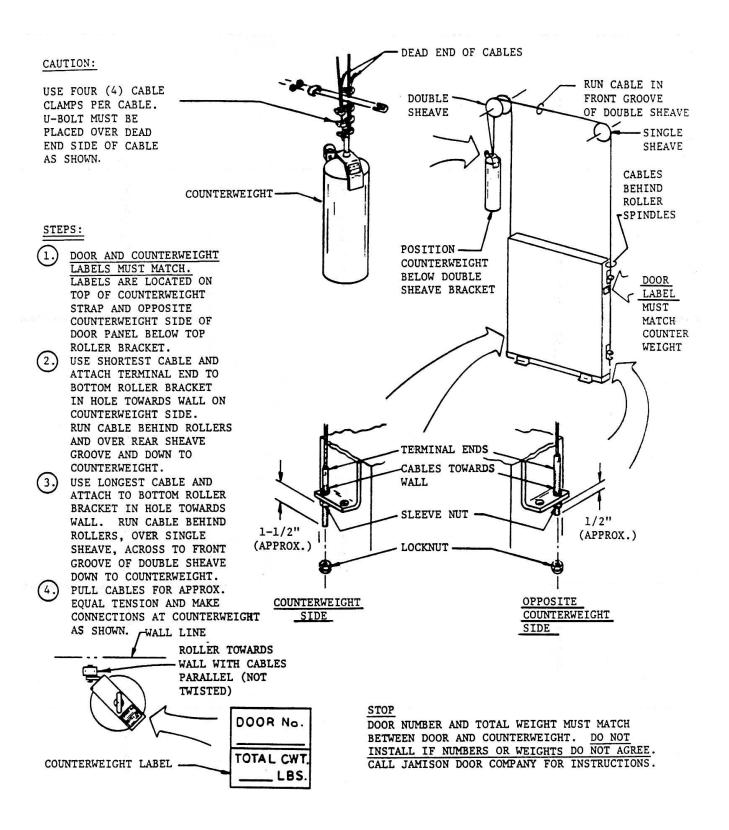
CASING ERECTION (SPECIAL FREEZER)

#### STEPS:

- 1. REMOVE LOWER SECTION OF TRACK ON RIGHT HAND SIDE. PLACE DOOR IN UPRIGHT POSITION IN FRONT OF OPENING. LUBRICATE SPINDLES OF ROLLERS AND INSERT IN DOOR BRACKETS. ENGAGE ROLLER IN LEFT HAND TRACK. PLACE TRACK SECTION OVER RIGHT HAND ROLLERS AND SLIDE DOOR INTO POSITION.
- 2. BOLT TRACK SECTION INTO ORIGINAL LOCATION. SNUG BOLTS SLIGHTLY.

ROLLER .

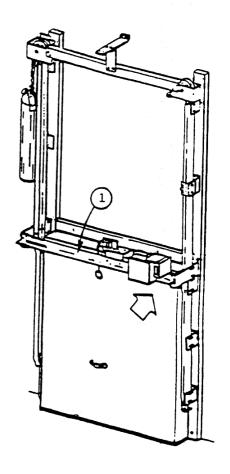


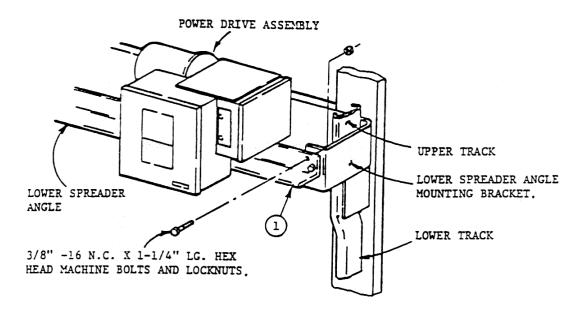


RIGGING DETAILS FOR L. H. COUNTERWEIGHT - R.H. COUNTERWEIGHT OPPOSITE

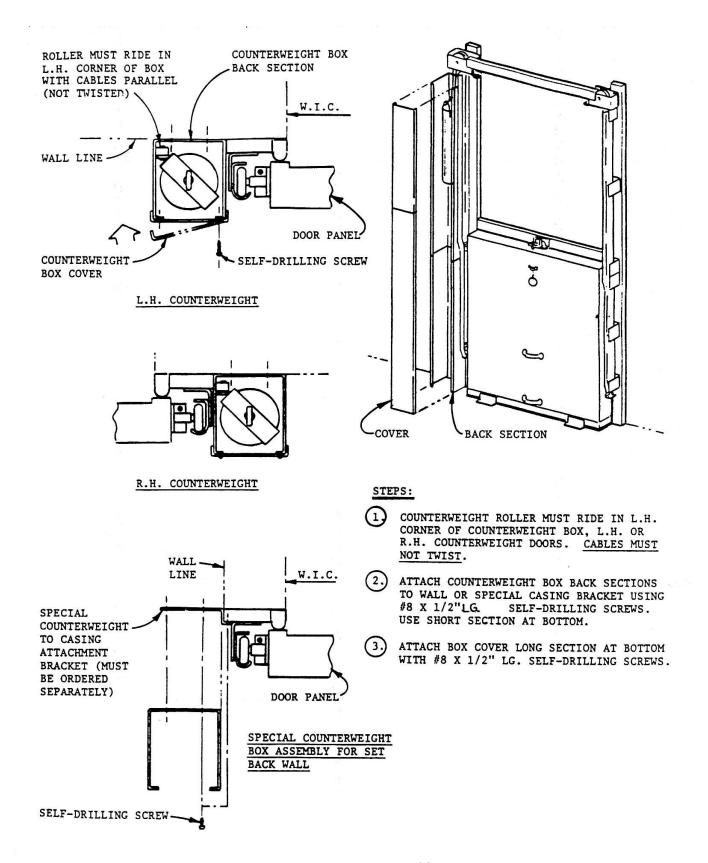
#### STEPS:

(1.) INSTALL HORIZONTAL SPREADER ANGLE TO MOUNTING BRACKET ON EACH SIDE WITH FASTENINGS PROVIDED AS SHOWN.

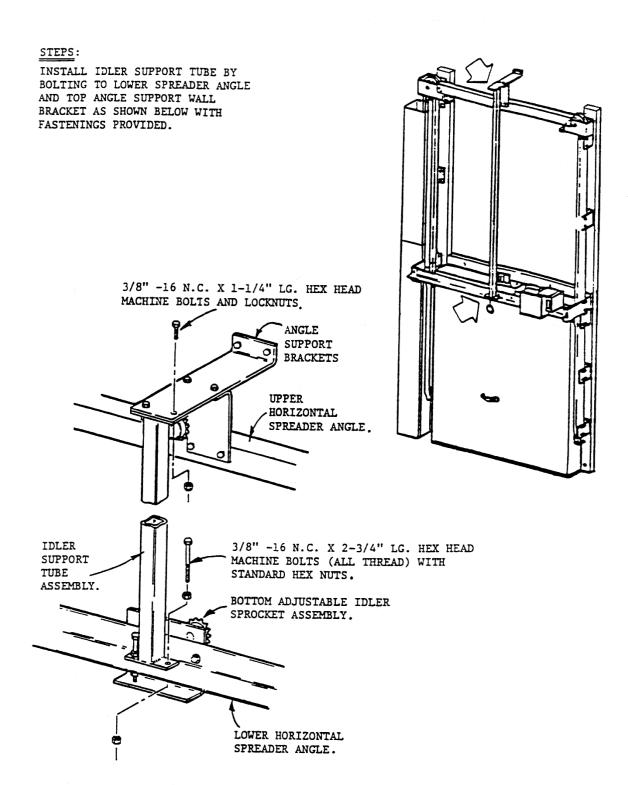




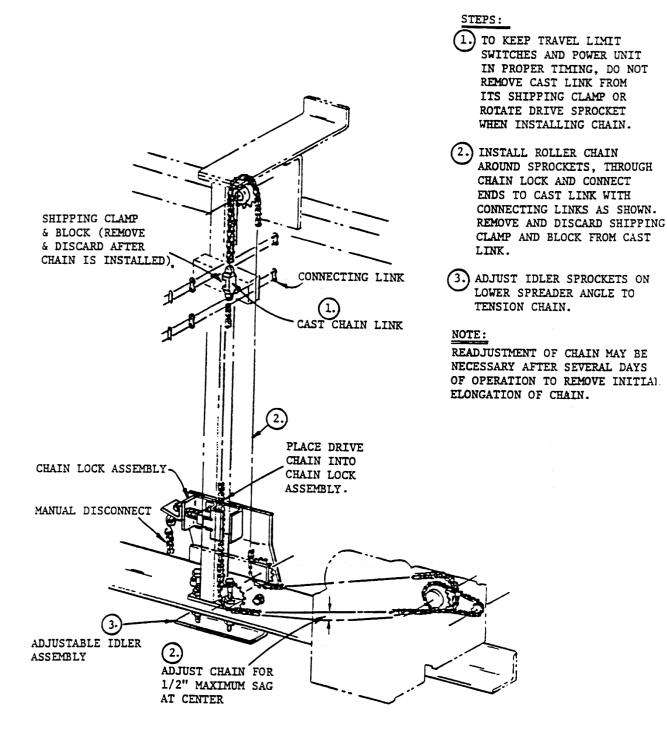
POWER DRIVE ASSEMBLY



**COUNTERWEIGHT BOX ASSEMBLY** 

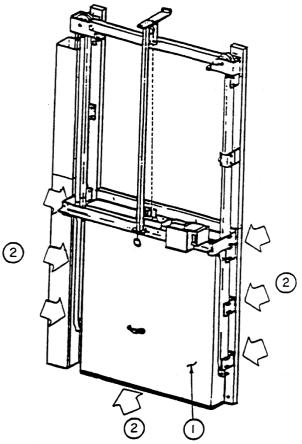


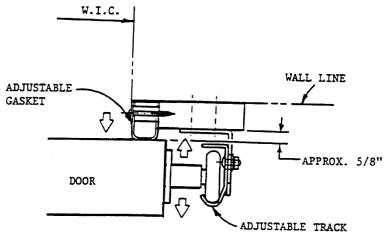
TOP AND BOTTOM IDLER ASSEMBLY ATTACHMENTS



CONNECTING DRIVE CHAIN

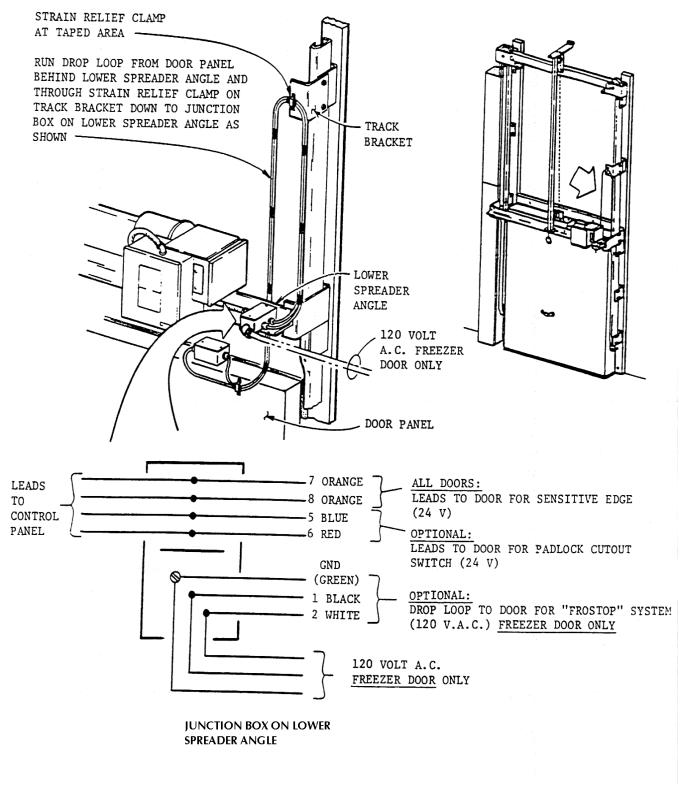
- OPERATE DOOR MANUALLY TO CHECK FOR ANY BINDING OR ALIGNMENT PROBLEMS.
- 2 ADJUST DOOR FOR PROPER GASKET SEAL.
  LOOSEN TRACK FASTENINGS AND MOVE TRACK
  IN OR OUT AS REQUIRED TO ACHIEVE A GOOD
  GASKET SEAL. SEE DETAIL "A" BELOW.
  TIGHTEN ALL TRACK FASTENINGS. DO NOT
  OVER COMPRESS GASKET.
  ADJUST FRAME GASKETS OR SLEEVE NUTS ON
  CABLE TERMINAL ENDS IF NECESSARY TO
  ACHIEVE A GASKET SEAL ACROSS SILL,
  SEE PAGE 6.



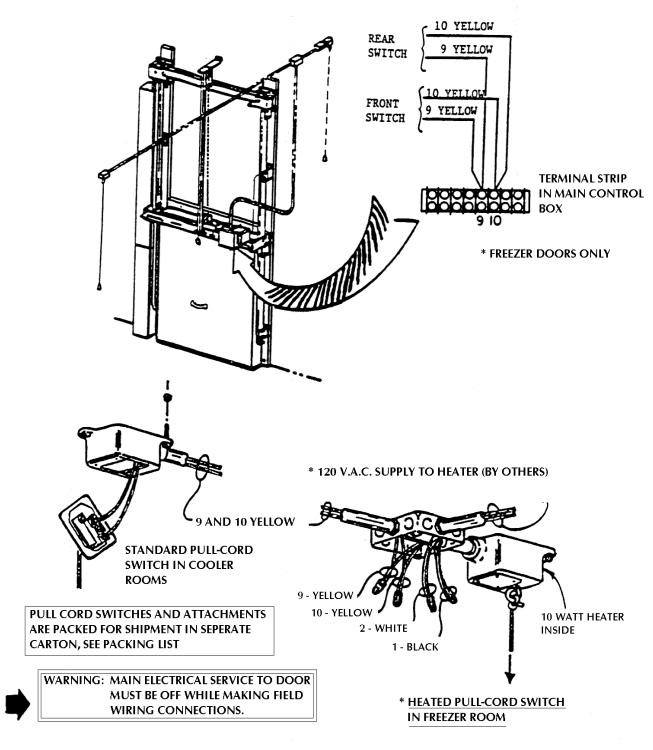


Detail "A"

#### DOOR AND GASKET ADJUSTMENTS



WIRING CONNECTION TO DOOR PANEL



PULL-CORD SWITCH CONNECTION WIRING AND CONDUIT NOT BY JAMISON - SEE WIRING DIAGRAM

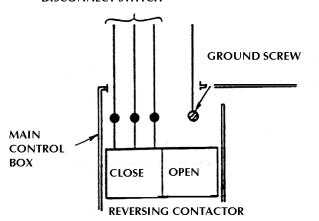
#### **INSTALL DISCONNECTS AND WIRE DOOR**

POWER SUPPL MINIMUM #12 A.W.G. IN METAL CONDUIT (WIRE AND WIRING NOT BY JAMISON).

FUSE OR CURCUIT BREAKER DISCONNECT SWITCH (NOT BY JAMISON) 3 POLE FOR 3 PHASE, 1 POLE FOR 1 PHASE SYSTEM.

120 V.A.C. SUPPLY TO "FROSTOP" THRU KEY-SWITCH (NOT BY JAMISON). FREEZER DOOR ONLY

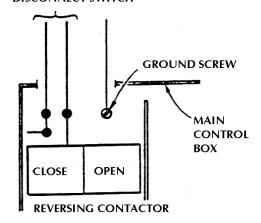
208/240/480 V.A.C., 3-PHASE POWER SUPPLY THRU DISCONNECT SWITCH



MAIN POWER CONNECTION 208/240/480 V.A.C. 3-PHASE SYSTEM

CHECK MOTOR ROTATION: RIGHT SIDE OF MOTOR STARTER RELAY MUST OPEN DOOR. IF NOT, REVERSE ANY TWO (2) LEADS ABOVE. THIS WILL CORRECT PROBLEM. SEE PAGE 14.

120 V.A.C., 1 PHASE POWER SUPPLY THRU DISCONNECT SWITCH



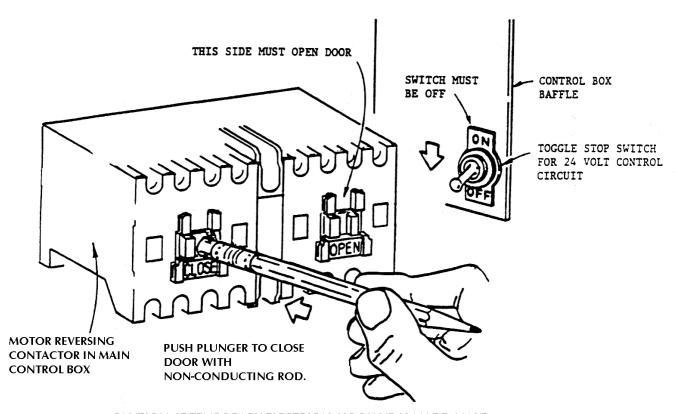
MAIN POWER CONNECTION 120 V.A.C., 1 PHASE SYSTEM

CAUTION: DO NOT OPERATE DOOR UNTIL ELECTRIC CHECK-OUT IS MADE, SEE PAGE 14.

**CONNECT MAIN POWER SUPPLY** 

#### TEST OPERATION UNDER POWER

- A. ENGAGE DOOR TO DRIVE LINK BEFORE MAKING ELECTRICAL CONNECTIONS OUTLINE BELOW:
- B. WARNING: MAKE SURE TOGGLE STOP SWITCH IS IN OFF POSITION.
- C. TURN ON MAIN POWER SUPPLY TO DOOR OPERATOR.
- D. CHECK MOTOR ROTATION: (3 PHASE ONLY) 1-PHASE PROCEED TO STEP 3 STEPS:
  - MOMENTARILY DEPRESS LEFT SIDE OF STARTER RELAY INSIDE MAIN CONTROL PANEL WHILE OBSERVING DOOR, DOOR MUST CLOSE.
  - 2. DOOR TRAVEL:
    - A. IF DOOR RUNS CLOSE PROCEED TO STEP NO. 3.
    - B. IF DOOR OPENS YOU HAVE REVERSE ROTATION OF MOTOR. TO CORRECT, TURN OFF MAIN POWER SUPPLY AND REVERSE ANY TWO (2) LEADS OF INCOMING POWER SUPPLY. CHECK BY REPEATING STEP #1 ABOVE.
  - 3. AFTER CHECKING MOTOR ROTATION TURN STOP SWITCH TO ON POSITION.



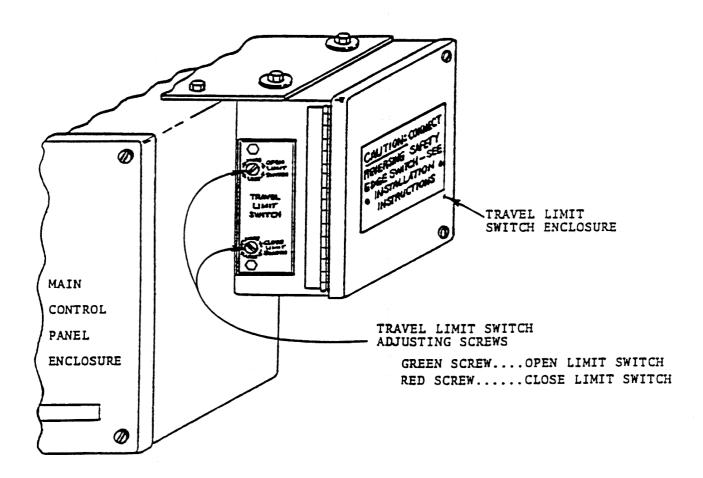
CAUTION: IF TEMPORARY ELECTRICAL HOOK-UP IS MADE, MAKE SURE MOTOR ROTATION IS NOT CHANGED WHEN PERMANENT POWER IS CONNECTED.

TEST OPERATION UNDER POWER

#### TO ADJUST TRAVEL LIMIT SWITCH

#### STEPS:

- OPERATE DOOR MANUALLY FIRST. IF DOOR IS NOT ROLLING SMOOTHLY ON TRACK OR IS BINDING: RESOLVE PROBLEM THEN PROCEED WITH STEP NUMBER 2.
- OPERATE DOOR UNDER POWER TO DETERMINE AMOUNT OF OVER-TRAVEL OR UNDER-TRAVEL, IF ANY. MAKE PROPER LIMIT SWITCH ADJUST-MENT PER INSTRUCTIONS ON OUTSIDE LABEL OF ENCLOSURE, SEE DRAWING BELOW. SCREW DRIVER TYPE ADJUSTMENT CAN BE MADE WITHOUT REMOVING ENCLOSURE COVER AS SHOWN. START WITH NO MORE THAN 1/4 TURN.....THEN PRECEDE UNTIL PROPER TRAVEL IS ACHIEVED. ADJUSTMENT SHOULD BE SUCH THAT DOOR WILL COAST TO A FULL OPEN OR CLOSED POSITION WITHOUT SLAMMING INTO DOOR STOPS.



TRAVEL LIMIT SWITCH ADJUSTMENT

#### **TEST OPERATION UNDER POWER:**

- 1. THOROUGHLY TEST DOOR FOLLOWING "INSTRUCTIONS FOR OPERATION".
  - a. IF THE DOOR IS NOT FUNCTIONING PROPERLY, CAREFULLY RECHECK THE INSTALLATION PROCEDURE.

b. IF YOU CANNOT RESOLVE THE DIFFICULTY, CALL "SERVICE ENGINEER" AT HAGERSTOWN, MARYLAND. 1-800-532-3667 OR MD PHONE (301) 733-3100.

HAVE ALL INSTRUCTIONS IN FRONT OF YOU.

IMPORTANT: IN ALL COMMUNICATIONS, PLEASE STATE THE DOOR "MODEL NUMBER", "SERIAL NUMBER" AND "SERIES LETTER" FOUND ON THE FRONT OF THE CONTROL PANEL.

| MODEL NO. | SERIES   |
|-----------|--|
| PHASE     | OR DATA  VOLTS ACHE HZ AMPS   FOOT LBS. PER SECOND CONTROL CIRCUIT ATA: 120 VOLTS A.C. |
| JAMISON   | DOOR COMPANY  BOX 70  WN, MARYLAND 21741   |

MASTER LABEL PLATE ON FRONT OF CONTROL PANEL

17

MARK IV VERTICAL SLIDING POWER DOOR OPERATING INSTRUCTIONS

- 1. POWER OPERATION: (POWER MUST BE ON AND DRIVE LINK IN CHAIN LOCK ASSEMBLY.)
- (a) TO OPEN:
- 1. WHEN DOOR IS CLOSED, PULL CORD ON "REMOTE CONTROL SWITCH."
- 2. WHEN DOOR IS IN MOTION CLOSING, CONTACT "SAFETY EDGE" UNDER DOOR. (CONTACTING "SAFETY EDGE" WILL ALSO OPEN DOOR IF FULLY CLOSED).

#### **CAUTION:**

A QUICK (LIGHTENING LIKE) CONTACT WITH THE "SAFETY EDGE" WILL STOP THE DOOR. IF THIS HAPPENS THE "SAFETY EDGE" MUST BE GIVEN A FIRM CONTACT TO REACTIVATE THE CIRCUIT. UNTIL CIRCUIT IS REACTIVATED, DOOR CANNOT BE OPERATED BY REMOTE PULL SWITCH.

(b) TO CLOSE:

WHEN DOOR IS OPEN, PULL CORD ON "REMOTE CONTROL SWITCH".

2. MANUAL OPERATION: (IF POWER FAILS)

FROM FRONT OF DOOR: (STANDARD)

PULL DOWN ON PULL RING TO MANUALLY RELEASE DOOR AND LIFT UP ON DOOR PULL SIMULTANEOUSLY. THIS WILL MANUALLY DISCONNECT DOOR FROM POWER DRIVE CHAIN AT CHAIN LOCK ASSEMBLY. RAISE DOOR WITH DOOR PULL AS NECESSARY.

IF DRIVE CHAIN FAILS TO PICK UP DOOR, PULL DOOR TO "PARTIALLY OPEN POSITION" AND AGAIN OPERATE BY "REMOTE PULL SWITCH".

DRIVE PICK-UP LINK MAY MOVE AWAY FROM DOOR ON FIRST PULL OF SWITCH. ALLOW TIME FOR CHAIN TO GO "FULLY OPEN" AND "FULLY CLOSED".

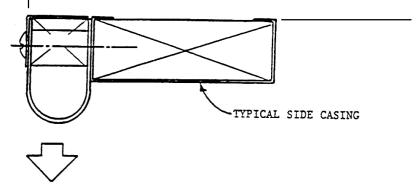
3.OPERATED DOORS BY POWER: (MANUAL OPERATION SHOULD ONLY BE USED WHEN NECESSARY)

<u>CAUTION:</u> IF YOU PULL CORD ON REMOTE CONTROL SWITCH AND MOTOR RUNS BUT DOORS DO NOT OPEN, CHECK FOR THE FOLLOWING.

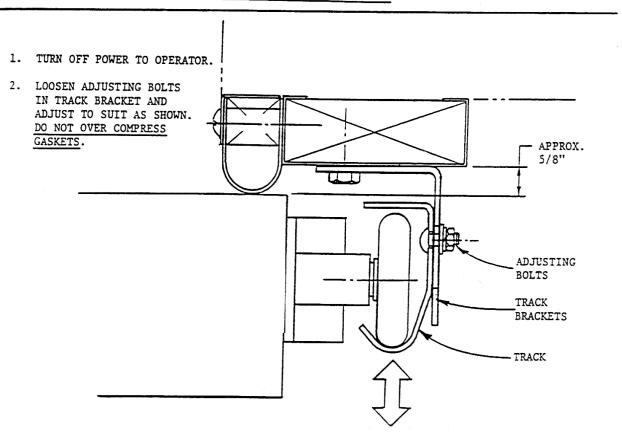
- (a) SOMETHING MAY BE WEDGED UNDER OR BEHIND DOOR.
- (b) DOOR IS NOT ENGAGED WITH LINK IN MAIN DRIVE CHAIN.

#### **HOW TO ADJUST**

- 1. TURN OFF POWER TO OPERATOR.
- 2. MOVE DOOR TO OPEN
  POSITION. LOOSEN GASKET
  ATTACHMENT SCREWS, PULL
  OUT GASKET AS REQUIRED
  TO OBTAIN A GOOD GASKET
  SEAL (APPROX. 1/8"
  COMPRESSION).
  DO NOT OVER COMPRESS
  GASKETS.
- 3. RETIGHTEN ATTACHMENT SCREWS.
- 4. CHECK FOR PROPER SEAL.

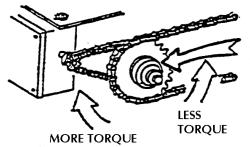


#### 1 - SEALING GASKET ADJUSTMENT



SEALING GASKET AND TRACK ADJUSTMENT

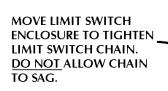
## TORQUE LIMITER ADJUSTMENT TORQUE LIMITER IS LOCATED ON OUTPUT SPROCKET OF GEAR REDUCER

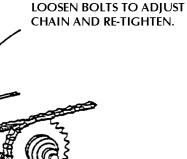


TORQUE LIMITER

NOTE:
TORQUE LIMITER IS PRE-SET AT FACTORY AND SHOULD NOT NEED ADJUSTMENT.
HOWEVER, IF NECESSARY, SEE DRAWING AT LEFT FOR MORE OR LESS TORQUE FOR POWER UNIT DRIVING FORCE.

#### TRAVEL LIMIT SWITCH CHAIN ADJUSTMENT

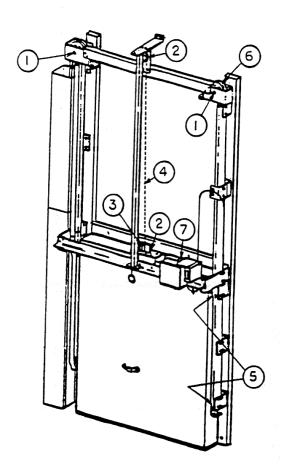


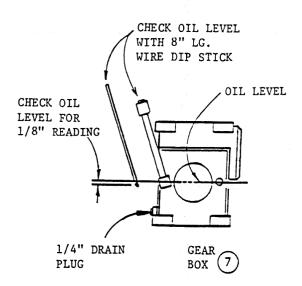


CHAIN IS ADJUSTED AT THE FACTORY AND SHOULD NOT REQUIRE ADJUSTMENT. HOWEVER, IF NECESSARY, SEE DRAWING ABOVE FOR ADJUSTMENT.

#### **DRIVE CHAIN ADJUSTMENT**

SEE PAGE 9 AND MAKE DRIVE CHAIN ADJUSTMENT AS OUTLINED IN STEP 3. DO NOT OVERTIGHTEN.





#### LUBRICATION INSTRUCTIONS

#### LUBRICATE AT 3 MONTH INTERVALS

#### GREASE - TO BE GOOD GRADE OF LITHIUM BASE GREASE

#### OIL --- TO BE GOOD GRADE OF S.A.E. 30 NON-DETERGENT MOTOR OIL

- (1) CABLE SHEAVES BEARINGS GREASE
- (2) SPROCKET BEARINGS GREASE
- (3) CHAIN LOCK GREASE
- (4) ROLLER CHAIN OIL
- (5) ROLLERS OIL
- (6) LIFTING CABLES APPLY WIRE ROPE LUBRICANT
- (7) GEAR BOX OIL LEVEL, USE MOBIL S-H-C #626 OR EQUAL. CHECK AT 6 MONTH INTERVALS.

## NOTE: DOOR MUST ROLL FREELY WITHOUT ANY DRAG OR BINDING DURING MANUAL OPERATION CHECK.

CAUTION: PRIOR TO THE FOLLOWING ELECTRICAL CHECK-OUT, DOOR MUST BE FULL OPEN OR FULL CLOSED.

#### TROUBLE SHOOTING STANDARD POWER CIRCUIT AND DRIVE SYSTEM

| PROBLEM   | PROBABLE CAUSE   | REMEDY OR CHECK  |
|---|--|--|
| A. DOOR WILL NOT RUN  | <ol> <li>NO POWER TO DOOR</li> <li>STOP SWITCH IN OFF<br/>POSITION</li> </ol>  | <ol> <li>CONNECT MAIN POWER<br/>SUPPLY TO DOOR</li> <li>TURN STOP SWITCH ON</li> <li>CHECK WIRES #9  </li> <li>RESET OVERLOAD</li> </ol>   |
| B. DOOR OPENS OR CLOSES<br>APPROX. 6" THEN<br>STOPS                                       | <ol> <li>DEFECTIVE HOLD         SWITCH ON         REVERSING         CONTACTOR</li> <li>OPEN OR CLOSE LIMIT         SWITCH DEFECTIVE</li> </ol> | <ol> <li>REPLACE REVERSING         CONTACTOR</li> <li>REPLACE TRAVEL LIMIT         SWITCH</li> </ol>   |
| C. DOOR WILL NOT CLOSE,<br>OPENS OKAY   | 1. DEFECTIVE REVERSING<br>EDGE (SHORTED)   | 1. REPAIR OR REPLACE<br>REVERSING EDGE<br>ASSEMBLY AS<br>NECESSARY   |
| D. DOOR WILL NOT OPEN<br>BY REVERSING EDGE  | <ol> <li>DEFECTIVE REVERSING<br/>EDGE</li> <li>DROP-LOOP WIRE<br/>BROKEN</li> </ol>  | <ol> <li>REPAIR OR REPLACE         REVERSING EDGE         ASSEMBLY AS         NECESSARY</li> <li>REPLACE DROP-LOOP         WIRE</li> </ol>   |
| E. 3-PHASE POWERTRON UNITS, DOOR TRAVELS IN WRONG DIRECTION-DOOR CLOSES BY REVERSING EDGE | 1. CHECK MOTOR<br>ROTATION   | 1. REVERSE ANY 2-LEADS OF MAIN POWER SUPPLY  |
| F. DOOR OVERTRAVELS OR UNDERTRAVELS   | 1. TRAVEL LIMIT SWITCH ADJUSTMENT  | 1. RE-ADJUST SO DOOR<br>COASTS INTO DESIRED<br>POSITION  |
| G. POWER UNIT RUNS (WILL<br>NOT MOVE DOOR) AND<br>MOTOR RUNNING LIGHT IS<br>ON            | <ol> <li>BINDING IN DRIVE</li> <li>TORQUE LIMITER</li> </ol>   | <ol> <li>TURN OFF POWER,         CHECK DOOR         MANUALLY</li> <li>TURN OFF POWER,         THEN TIGHTEN         TORQUE LIMITER SO         DOOR WILL RUN         SMOOTHLY WITHOUT         A JERKY OPERATION</li> </ol> |