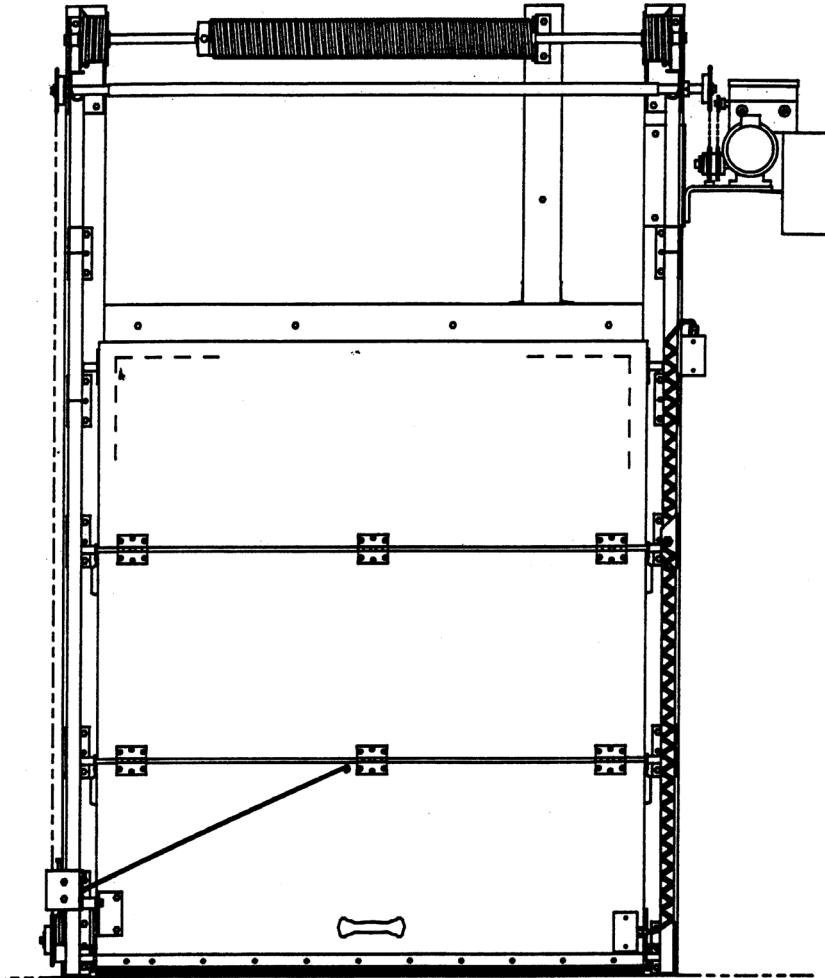


JAMISON

INSTALLATION INSTRUCTIONS FOR MARK IV OVERHEAD HIGHLIFT POWER WITH CHAIN HOIST OPERATOR

"AFTER INSTALLING DOOR FORWARD TO
MAINTENANCE DEPARTMENT OR OWNER"



JAMISON DOOR COMPANY
P.O. BOX 70
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INDEX

	SHEET
GENERAL I NFORMATION	3
MINIMUM CLEARANCE DIMENSIONS	4
COOLER FRAME ERECTION	5
FREEZER FRAME ERECTION	6
INSTALLING DOOR LEAVES	7
RADIUS TRACK INSTALLATION	8
TORSION SHAFT INSTALLATION	9
DRIVE SHAFT INSTALLATION	10
TORSION SPRING TENSIONING	11
POWER UNIT ATTACHMENT	12
DRIVE CHAIN INSTALLATION	13
SIDE LIFTING CHAIN INSTALLATION	14
PULL CORD SWITCH CONNECTIONS	15
DOOR WIRING	16
POWER SUPPLY CONNECTIONS	17
TEST OPERATION UNDER POWER	18
LIMIT SWITCH ADJUSTMENT	19
TORQUE LIMITER AND TRAVEL LIMIT SWITCH CHAIN ADJUSTMENT	20
CHAIN GUARD INSTALLATION	21
LUBRICATION INSTRUCTIONS	22
ELECTRICAL TROUBLE SHOOTING GUIDE	23
MASTER LABLE PLATE	24

GENERAL INFORMATION:

A. CONTENTS OF CRATES AND CARTON

1. FRAME COMPONENT PARTS AND ASSEMBLIES SHIPPED KNOCKED-DOWN.

NOTE: IF FRAME HAS JAMBS, CASING AND JAMBS ARE SHIPPED IN SEPARATE CRATE.

2. ONE CRATE CONTAINING DOOR LEAVES WITH ALL COMPONENTS PARTS AND ASSEMBLIES ATTACHED.
3. ONE CARTON CONTAINING:
 - a. PACKING LIST ITEMS
 - b. INSTALLATION INSTRUCTIONS

B. INSPECT FOR DAMAGE AND SHORTAGE IMMEDIATELY

1. NOTE ON ALL COPIES OF DELIVERY RECEIPT ANY APPARENT DAMAGES AND SHORTAGES.
2. OPEN ALL SHIPPING CONTAINERS AND INSPECT FOR CONCEALED DAMAGES AND SHORTAGES. CAREFULLY REPACK TO PREVENT FURTHER DAMAGE AND PILFERAGE.
3. REPORT **WITHIN 15 DAYS** IN WRITING TO TRANSPORTATION COMPANY, WITH A COPY TO JAMISON DOOR, ANY CONCEALED DAMAGE AND SHORTAGES. AFTER 15 DAYS, THE LAW PERMITS THE TRANSPORTATION COMPANY TO REJECT ALL CLAIMS.

C. HANDLE ALL PARTS CAREFULLY

1. CERTAIN PARTS SUCH AS GASKET, ETC. ARE VULNERABLE.

D. READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH ERECTION

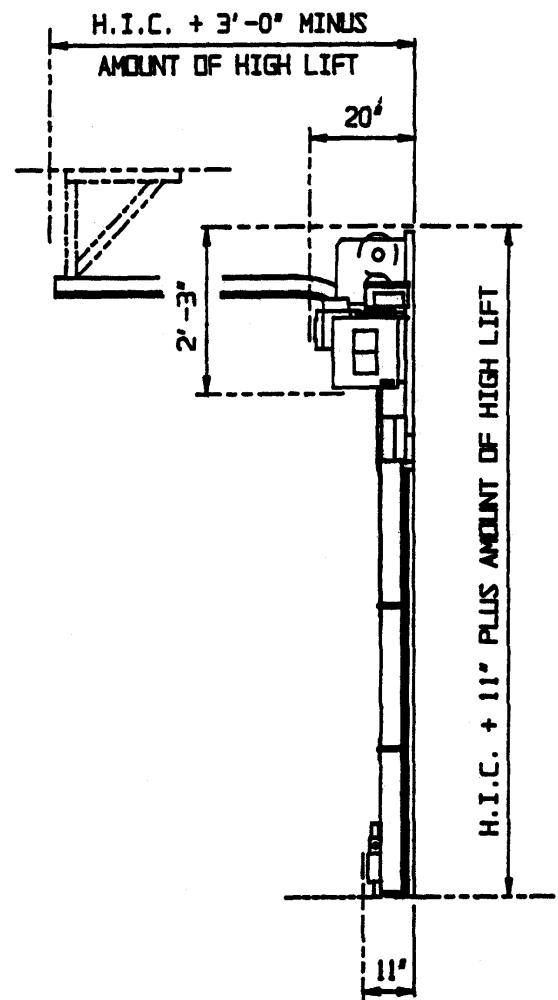
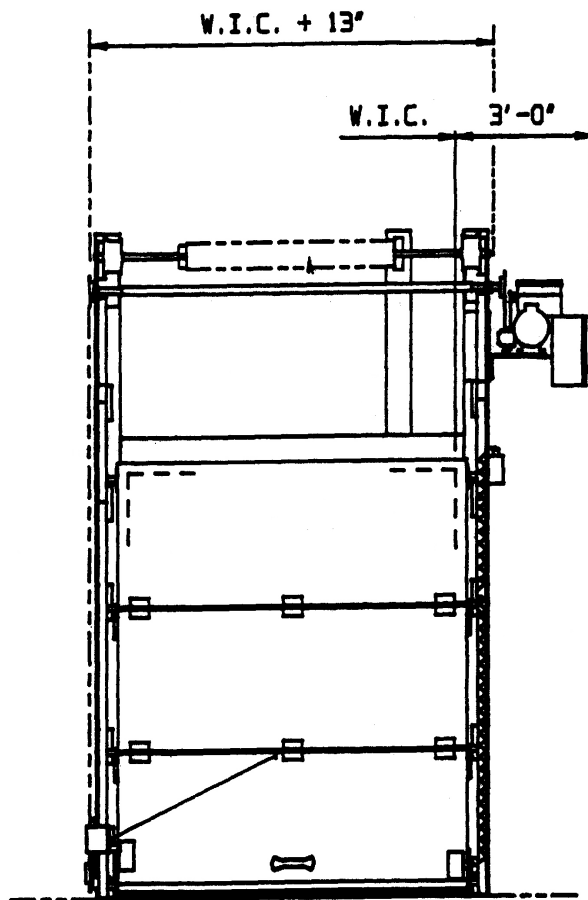
1. INSTRUCTIONS INCLUDE BASIC DRAWINGS FOR ALL DOORS TYPES.
2. USE DRAWINGS APPLICABLE TO YOUR DOOR.
3. REFER TO JOB DRAWINGS FOR SPECIAL FEATURES.

E. PLAN AHEAD

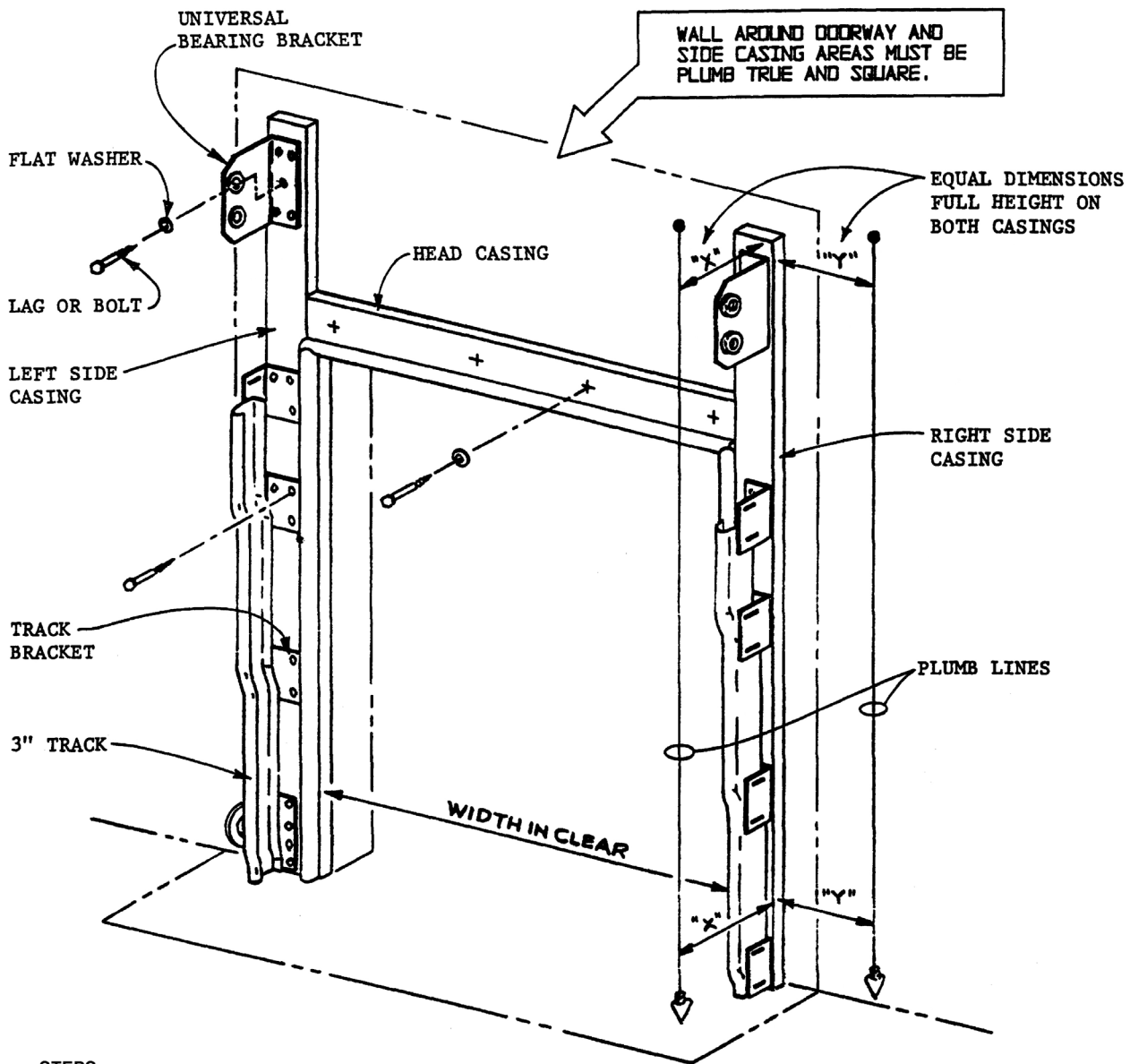
1. CHOOSE INSTALLERS WHO ARE MILLWRIGHTS OR HAVE EQUAL QUALIFICATIONS.
2. HAVE ALL TOOLS AND MATERIALS FOR INSTALLATION READILY AVAILABLE.

NOTES:

1. READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH ERECTION.
2. H.I.C. - HEIGHT IN CLEAR.
3. W.I.C. - WIDTH IN CLEAR.
4. HIGH LIFT = DISTANCE FROM H.I.C. TO BOTTOM OF HORIZONTAL TRACK.



CLEARANCE DIMENSIONS

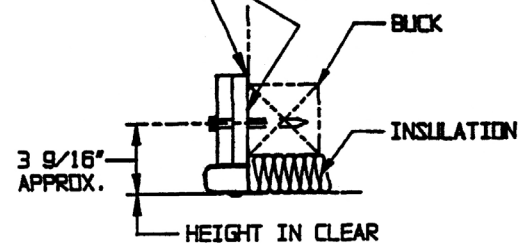


STEPS:

1. FLOOR THROUGH DOOR OPENING MUST BE TRUE AND LEVEL TO WITHIN $\pm 1/8"$.

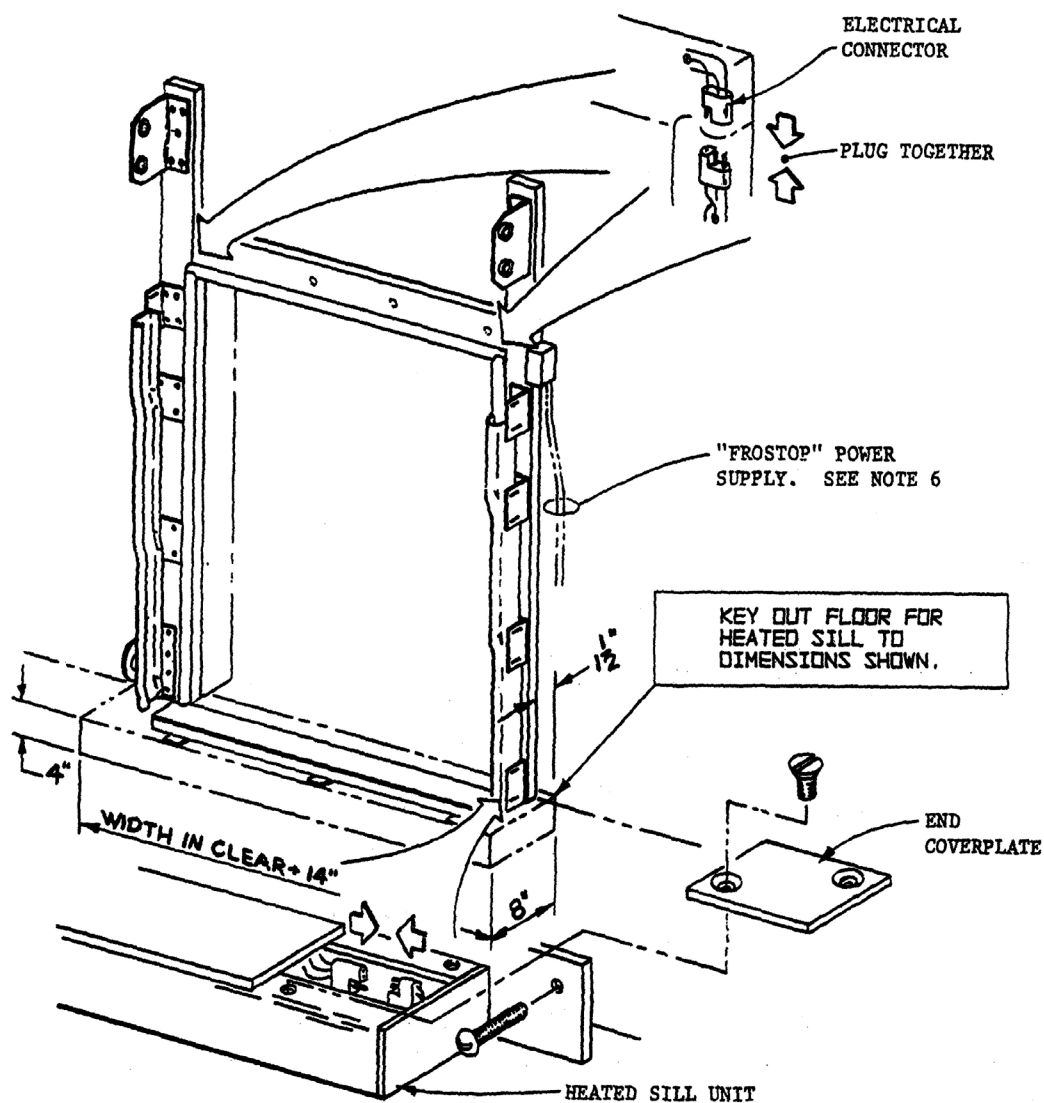
2. CAULK AND VAPOR SEAL BACK, BOTTOM AND AROUND EDGES OF EACH CASING. INSTALL FIRST SIDE CASING AT HIGH SIDE OF OPENING, SHIM OTHER SIDE CASING AS REQUIRED TO MAINTAIN A LEVEL CONDITION. INSTALL HEAD CASING, PLUMB SIDE CASING SHIM, IF REQUIRED, TO OBTAIN A TRUE PLANE. ATTACH CASING THROUGH EACH TRACK BRACKET AND TOP UNIVERSAL BEARING BRACKET, AS SHOWN.

CAULK AND SEAL WARM SIDE.



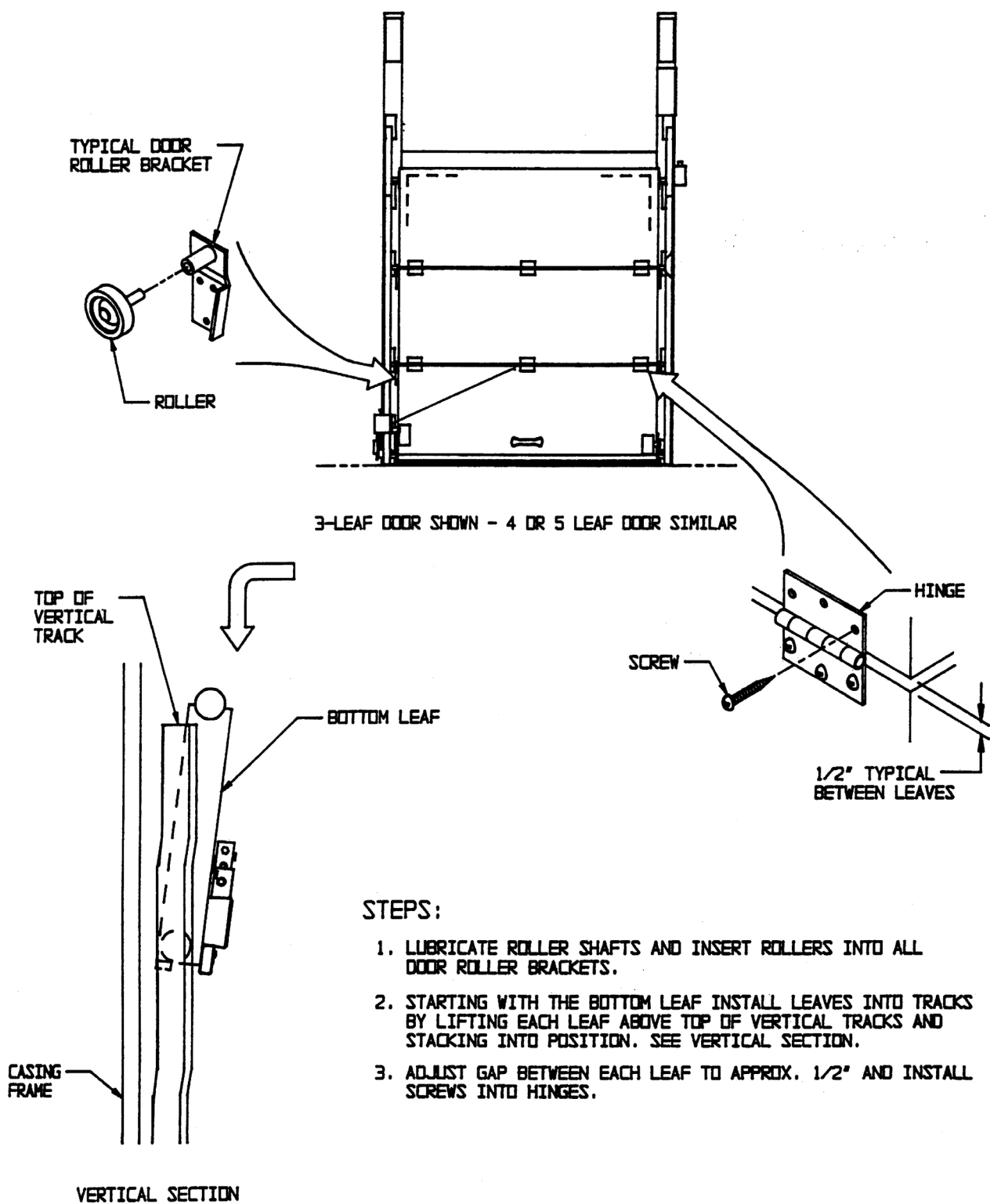
COOLER DOOR FRAME ERECTION - SEE NEXT PAGE FOR FREEZER

TYPICAL SECTION

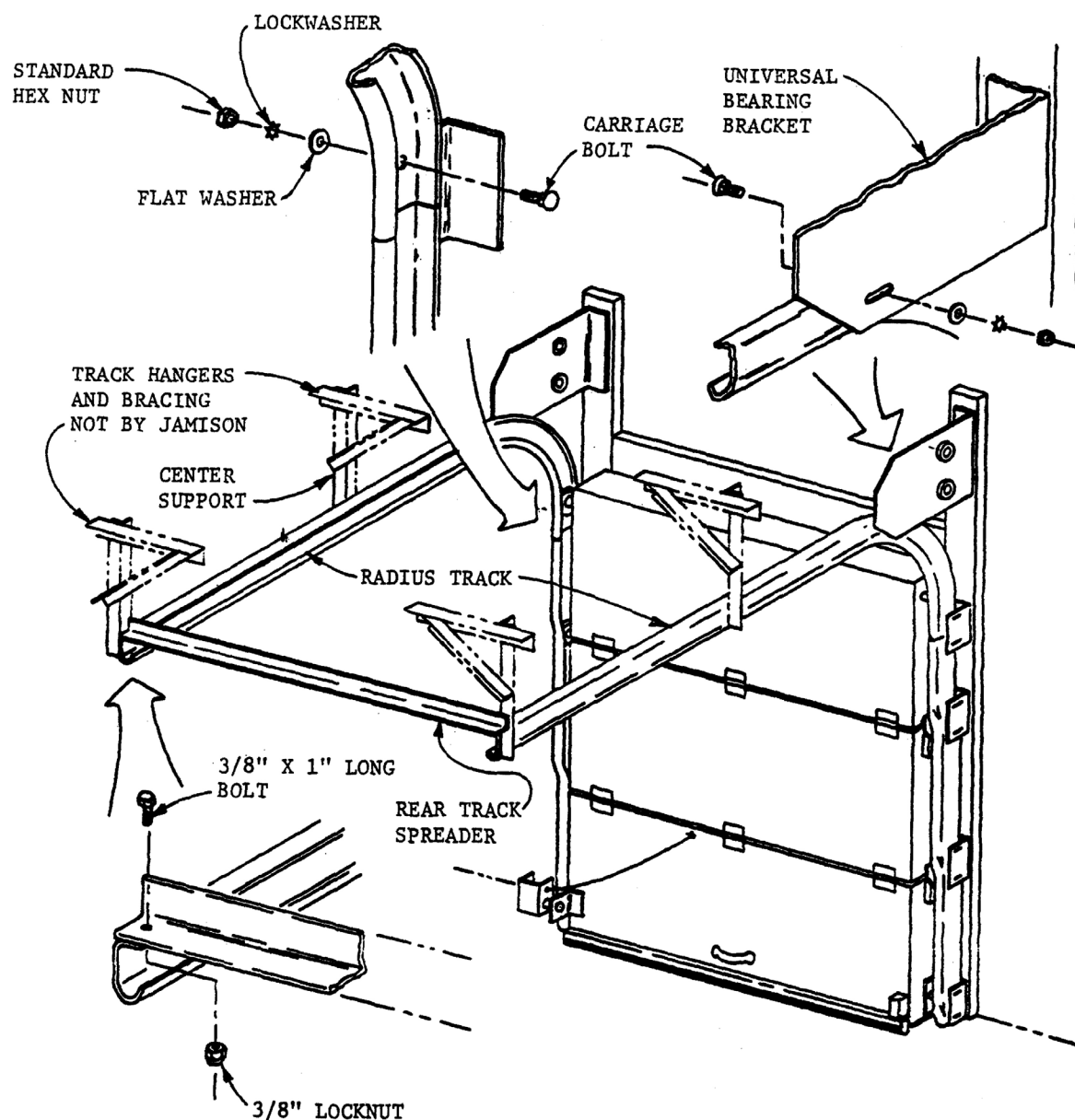
**STEPS:**

1. INSTALL FRAME SAME AS COOLER DOOR - SEE PAGE 3.
2. ATTACH HEATED SILL TO SIDE CASINGS.
3. PLUG TOGETHER ELECTRICAL CONNECTORS AT FOUR CORNERS OF FRAME AS SHOWN.
4. INSTALL END COVERPLATES, CAULK AND SEAL TO EXCLUDE MOISTURE.
5. BRACE HEATED SILL SECURELY AND GROUT IN FINISHED CONCRETE FLOOR AROUND SILL.
6. CONNECT 120 VOLT SUPPLY TO FRAME JUNCTION BOX THROUGH LOCKABLE DISCONNECT SWITCH (NOT BY JAMISON) IN ACCORDANCE WITH THE N.E.C. CODE.
7. CHECK FOR PROPER HEATING.

FREEZER DOOR FRAME ERECTION - SEE PAGE 3 FOR COOLER



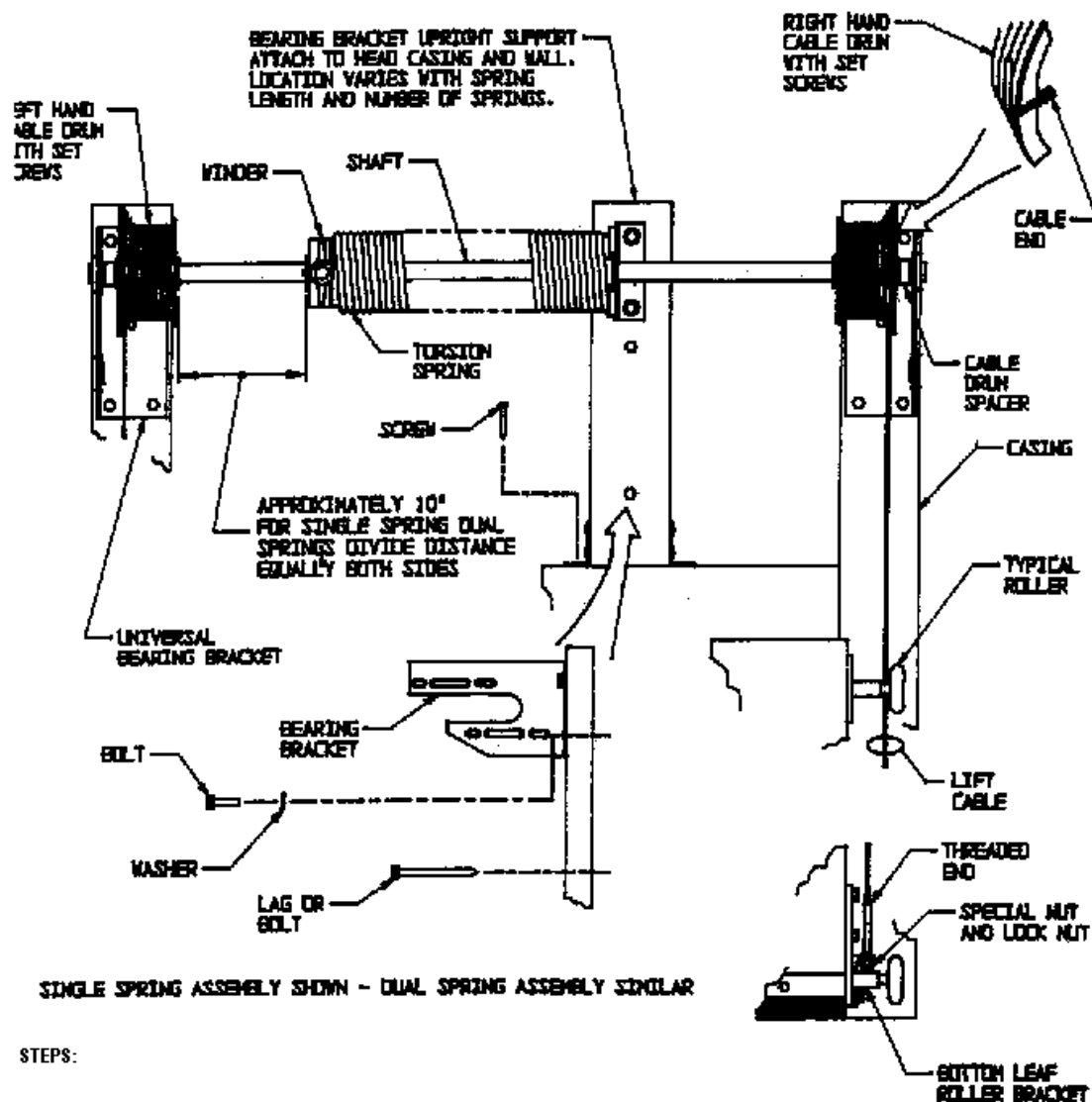
INSTALLING DOOR LEAVES



STEPS:

1. ASSEMBLE RADIUS TRACK SECTIONS AS SHOWN. ENTIRE SYSTEM MUST BE INSTALLED LEVEL, TRUE AND SQUARE.
2. SECURELY ATTACH HORIZONTAL PORTION OF TRACK TO ADEQUATE SUPPORT STRUCTURE BY INSTALLING ANGLED TRACK HANGERS SIMILAR TO THE ONES PICTURED, CENTER TRACK SUPPORT IS REQUIRED ON RADIUS TRACKS OVER 8'-0". TRACK SUPPORT BRACKETS NOT BY JAMISON.
3. ADJUST TRACKS TO OBTAIN 5/8" UNIFORM GASKET COMPRESSION BETWEEN DOOR LEAVES AND FRAME.

RADIUS TRACK INSTALLATION



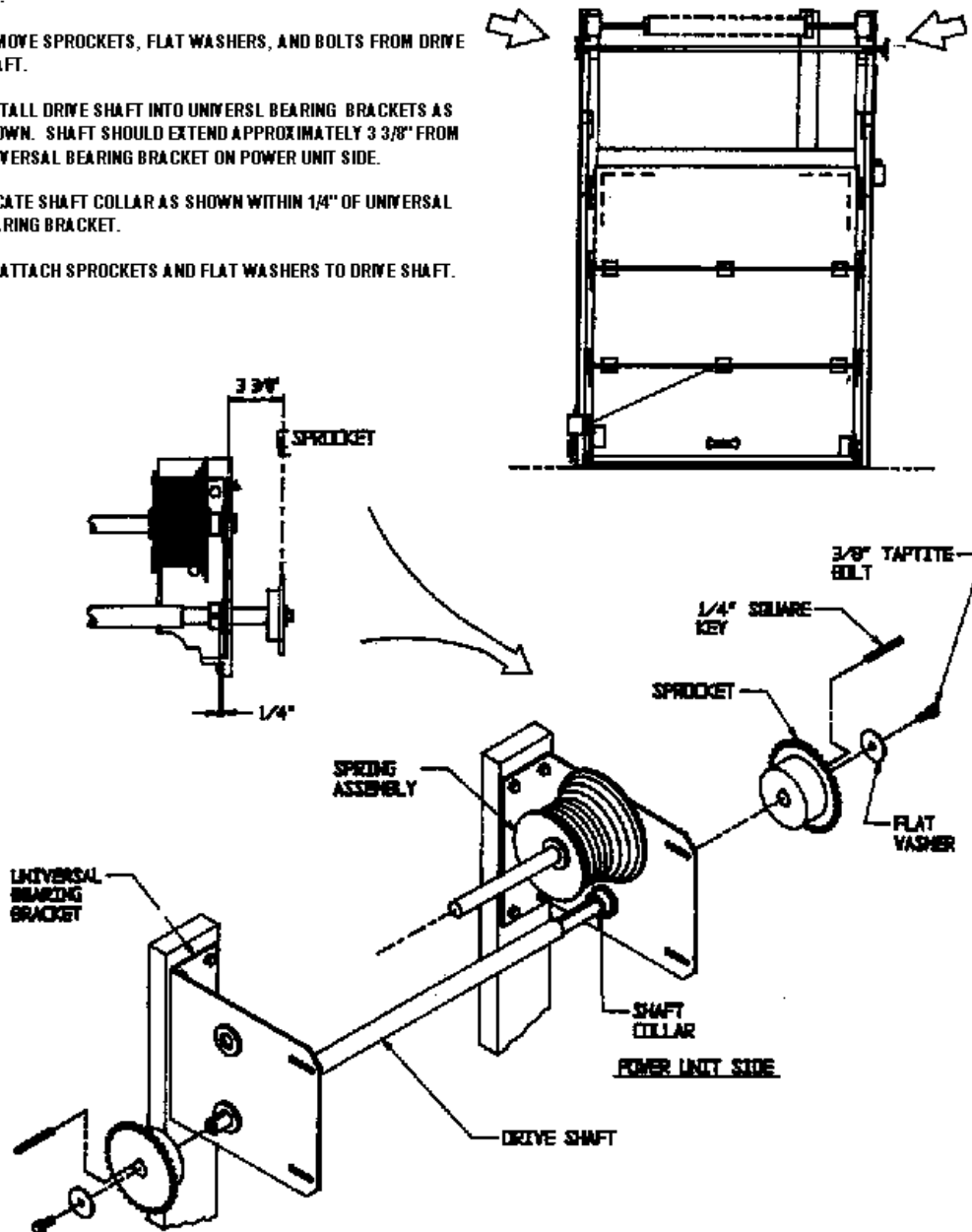
STEPS:

1. INSTALL TORSION SPRING ASSEMBLY INTO UNIVERSAL BEARING BRACKETS AS SHOWN. LEAVE SHAFT EXTEND AN EQUAL DISTANCE ON EACH SIDE.
2. SIMULTANEOUSLY INSTALL DRIVE SHAFT ON UNIVERSAL BEARING BRACKET, SEE NEXT PAGE.
3. SLIDE LEFT AND RIGHT CABLE DRUM SPACERS TO WITHIN APPROXIMATELY 1/16" OF UNIVERSAL BEARING BRACKET.
4. SLIDE LEFT AND RIGHT CABLE DRUMS TO WITHIN APPROXIMATELY 1/16" OF CABLE DRUM SPACERS. SECURE CABLE DRUMS TO SHAFT WITH 1/4" X 3 1/4" LONG KEY AND TIGHTEN CABLE DRUM SET SCREWS TO APPROXIMATELY 19' /LBS.
5. UNCOIL CABLES FROM BOTTOM LEAF AND THREAD CABLE BETWEEN DOOR ROLLER SPINDLES AND CASING. ATTACH CABLE TO DRUMS AS SHOWN AND WIND CABLE INTO DRUMS SO EACH SIDE HAS AN EVEN TENSION AND CABLE IS TAUT.

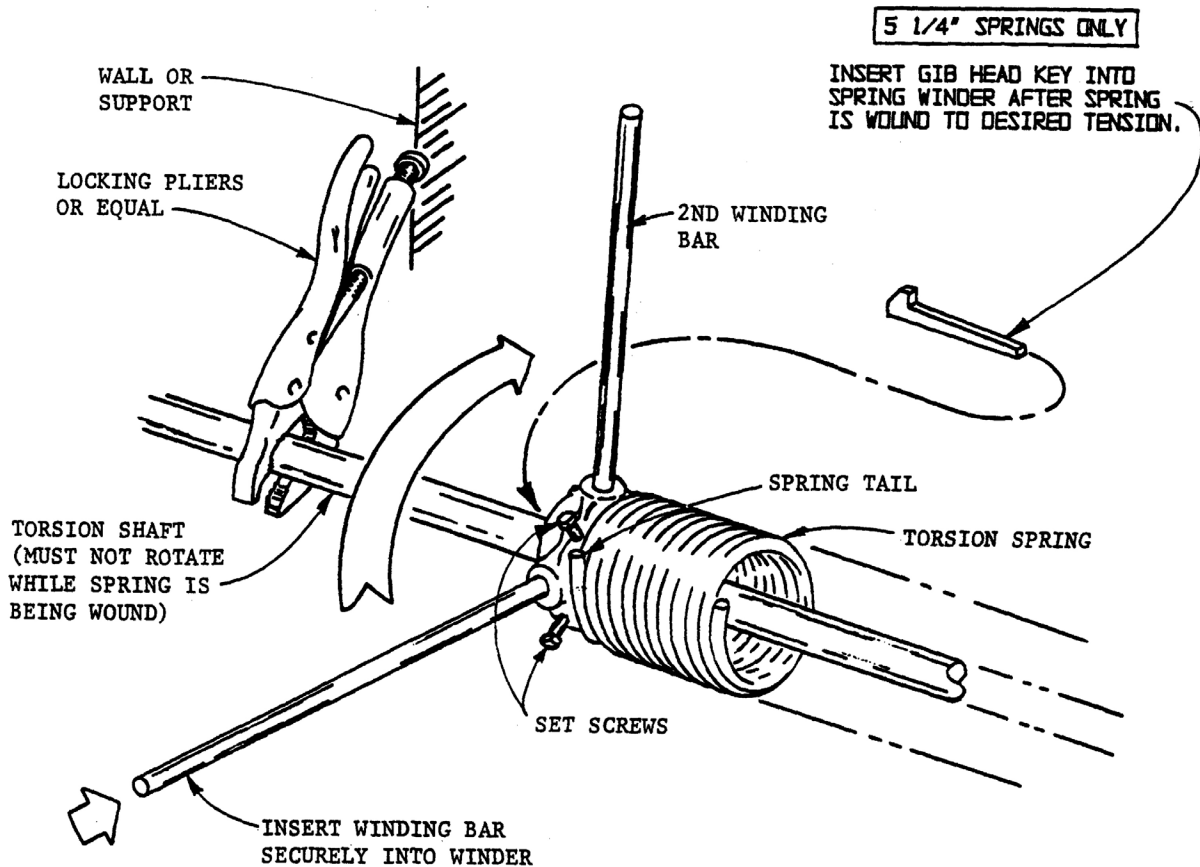
TORSION SHAFT INSTALLATION

STEPS:

1. REMOVE SPROCKETS, FLAT WASHERS, AND BOLTS FROM DRIVE SHAFT.
2. INSTALL DRIVE SHAFT INTO UNIVERSAL BEARING BRACKETS AS SHOWN. SHAFT SHOULD EXTEND APPROXIMATELY $3 \frac{3}{8}$ " FROM UNIVERSAL BEARING BRACKET ON POWER UNIT SIDE.
3. LOCATE SHAFT COLLAR AS SHOWN WITHIN $\frac{1}{4}$ " OF UNIVERSAL BEARING BRACKET.
4. RE-ATTACH SPROCKETS AND FLAT WASHERS TO DRIVE SHAFT.



DRIVE SHAFT INSTALLATION



SINGLE SPRING SHOWN - DUAL SPRING SIMILAR

CAUTION:

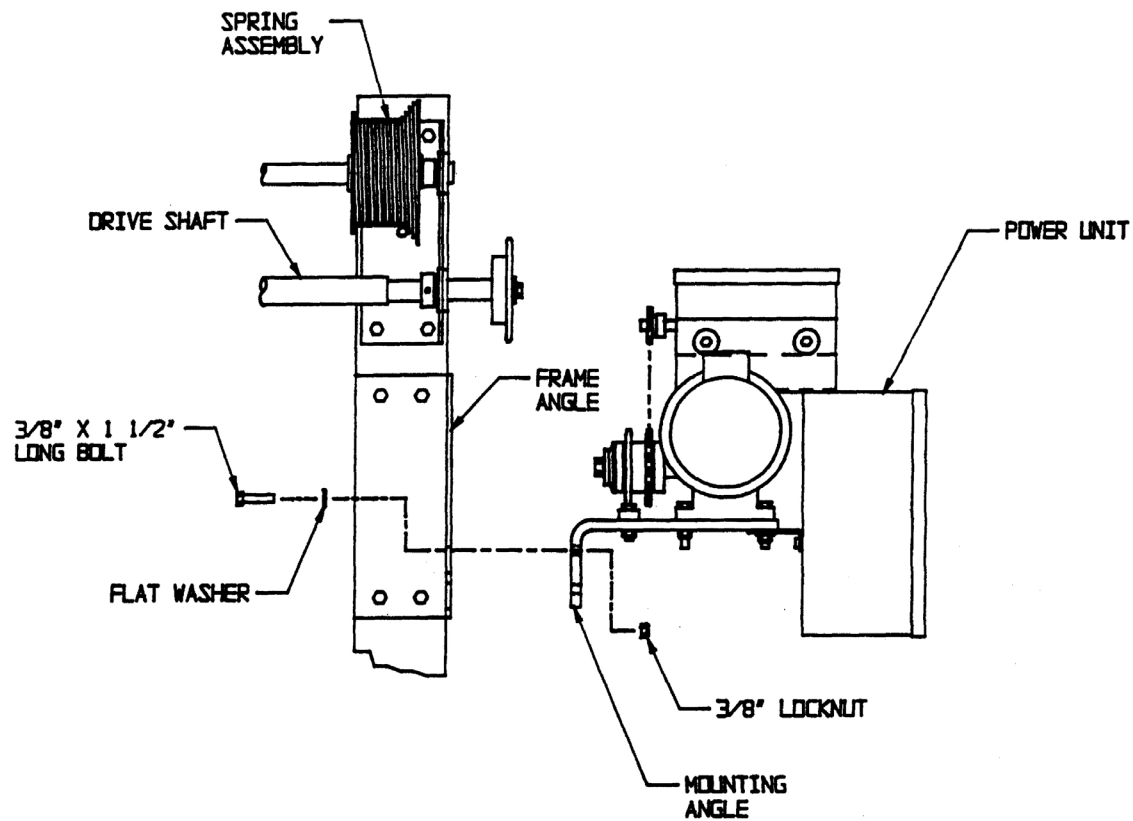
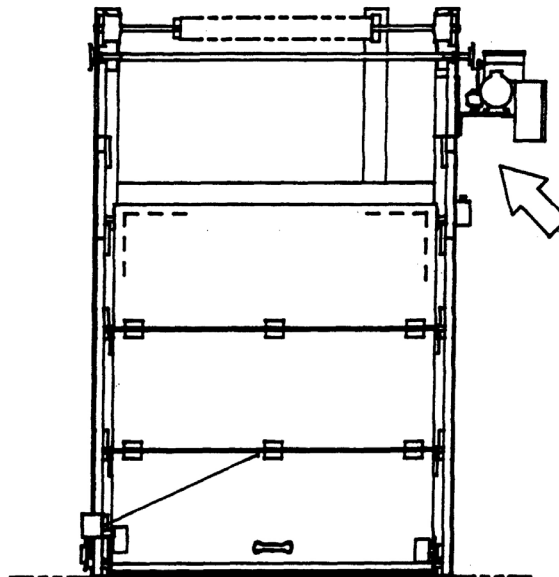
WINDING OF TORSION SPRINGS CAN BE DANGEROUS. NEVER STAND IN FRONT OF WINDING BARS WHILE WINDING SPRINGS. MAKE SURE YOU HAVE A SECURE FOOTING. NEVER USE UNDERSIZED RODS OR OTHER TOOLS FOR WINDING SPRINGS.

STEPS:

1. USE LOCKING PLIERS OR EQUIVALENT MEANS TO PREVENT TORSION SHAFT FROM ROTATING.
2. INSERT WINDING ROD FULLY INTO WINDER, ROTATE SPRING IN THE SAME DIRECTION AS THE SPRING TAIL POINTS TO INCREASE TENSION (SEE ILLUSTRATION). ROTATE 1ST ROD APPROXIMATELY 1/4 TURN AND INSERT 2ND ROD. REPEAT THIS PROCEDURE UNTIL DESIRED NUMBER OF TURNS ARE ON SPRING. SEE TAG FOR NUMBER OF TURNS REQUIRED.
3. TIGHTEN SET SCREWS APPROXIMATELY 19' /LBS.
4. CHECK FOR PROPER OPERATION, DOOR SHOULD BE COUNTER-BALANCED DURING OPEN AND CLOSE CYCLES. RE-ADJUST IF REQUIRED. SECURELY TIGHTEN ALL SET SCREWS.

TORSION SPRING TENSIONING

ATTACH POWER UNIT TO FRAME ANGLE AS SHOWN. KEEP POWER UNIT AS HIGH AS POSSIBLE IN SLOTTED HOLES UNTIL CHAIN IS INSTALLED.



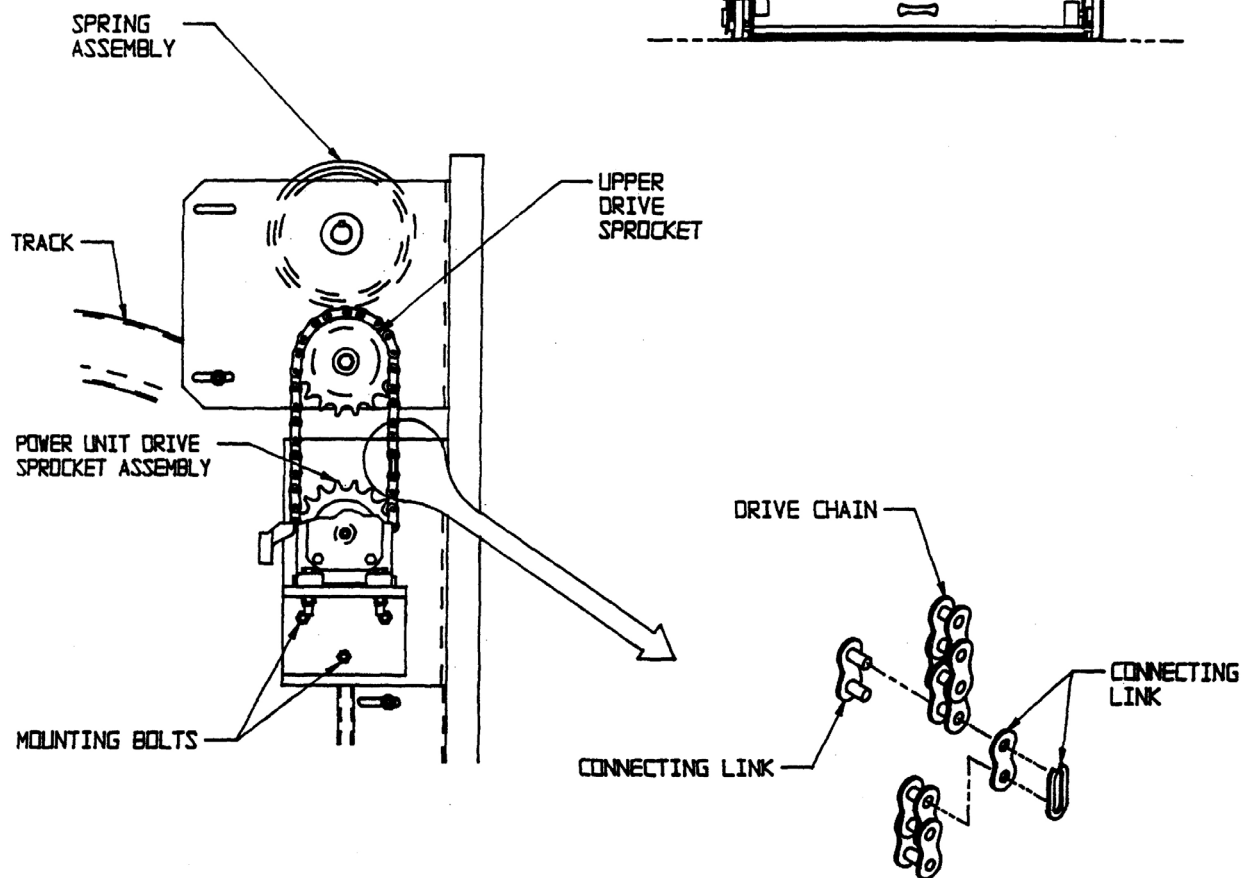
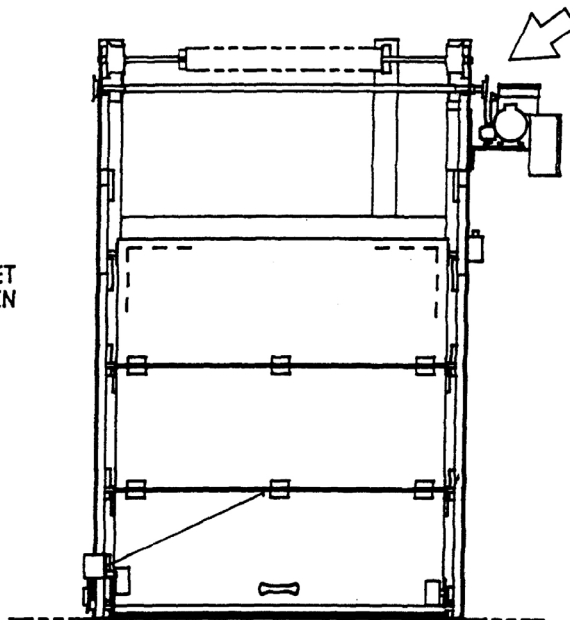
POWER UNIT ATTACHMENT

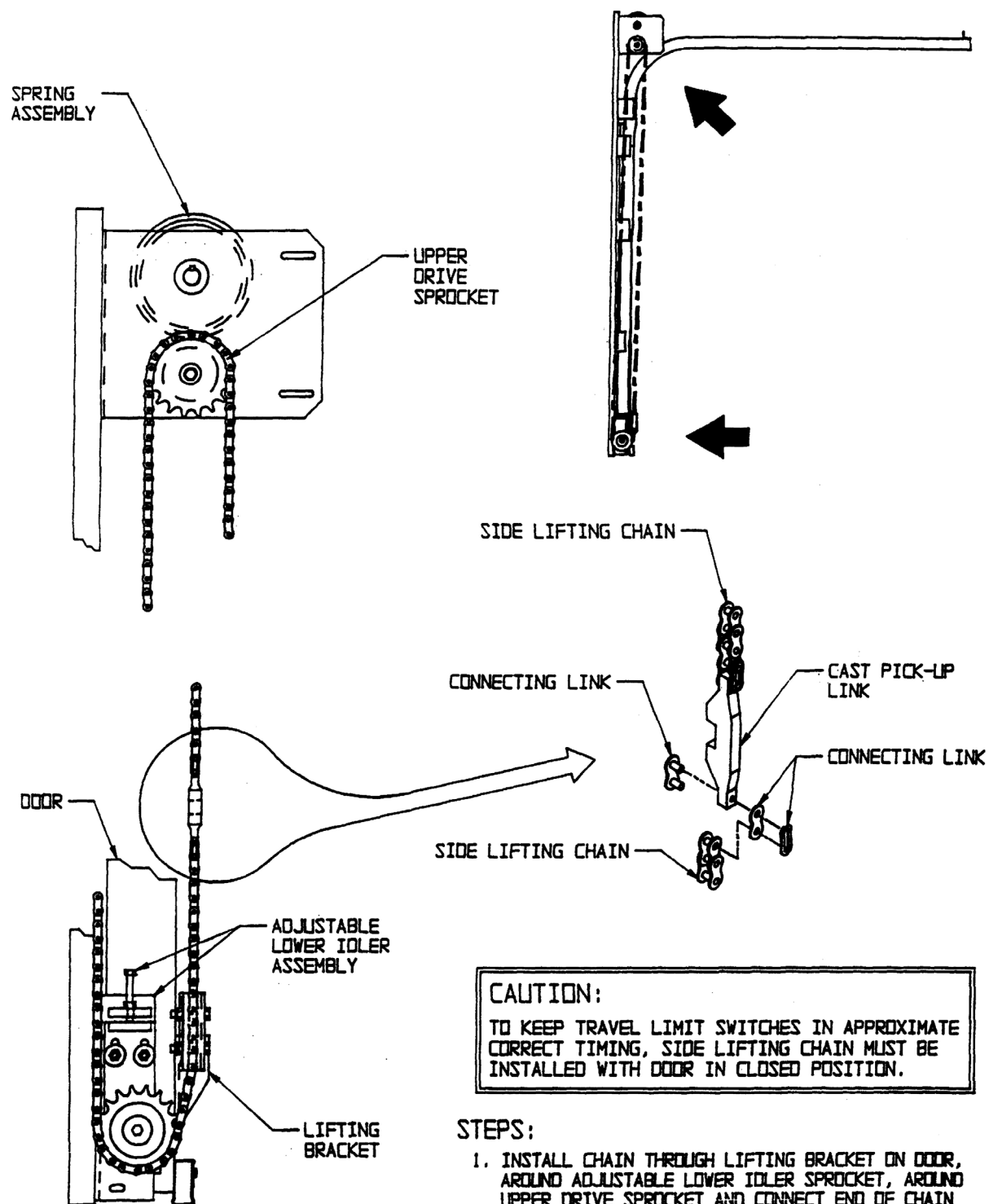
CAUTION:

TO KEEP TRAVEL LIMIT SWITCHES IN APPROXIMATE CORRECT TIMING, DRIVE CHAIN MUST BE INSTALLED WITH DOOR IN CLOSED POSITION.

STEPS:

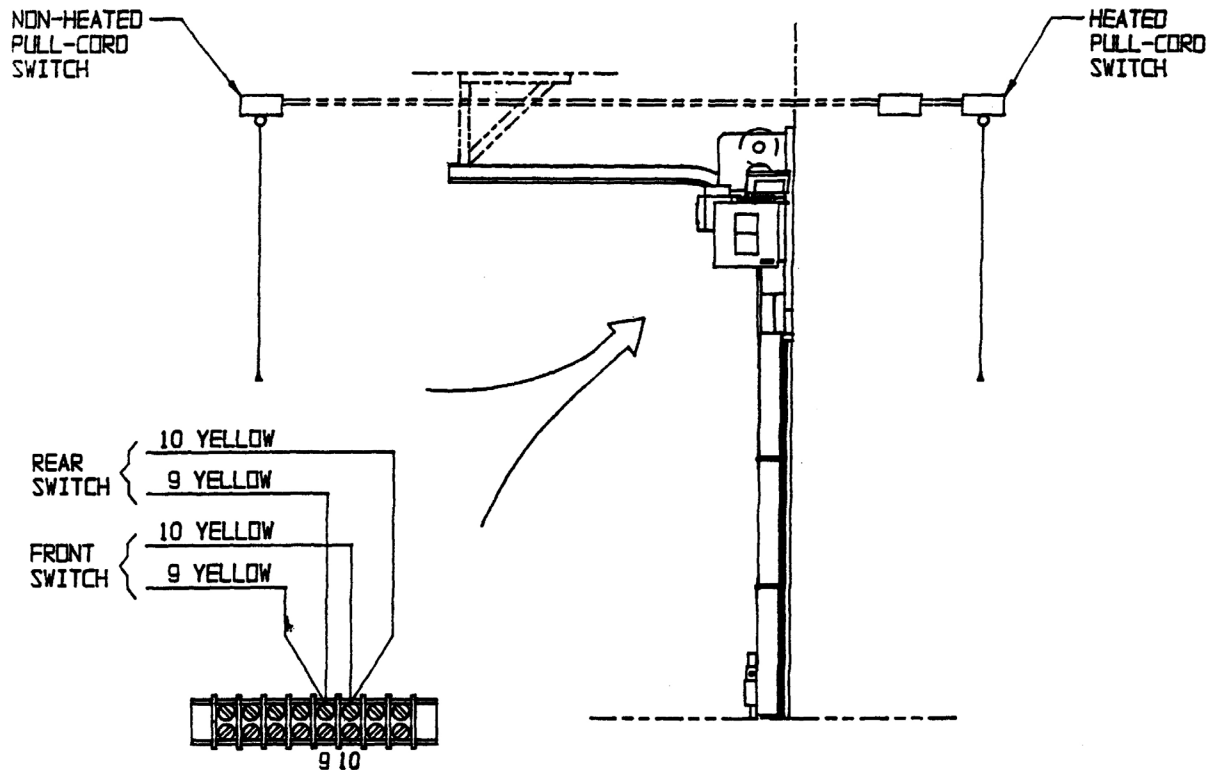
1. INSTALL DRIVE CHAIN AROUND UPPER DRIVE SPROCKET AND POWER UNIT DRIVE SPROCKET ASSEMBLY AND JOIN TOGETHER WITH CONNECTING LINK PROVIDED.
2. ADJUST POWER UNIT DOWN TO TENSION CHAIN. LEVEL UNIT AND TIGHTEN MOUNTING BOLTS.

**DRIVE CHAIN INSTALLATION**

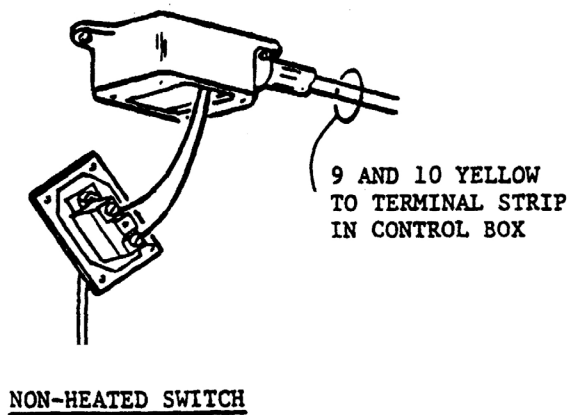
**STEPS:**

1. INSTALL CHAIN THROUGH LIFTING BRACKET ON DOOR, AROUND ADJUSTABLE LOWER IDLER SPROCKET, AROUND UPPER DRIVE SPROCKET AND CONNECT END OF CHAIN TO CAST PICK-UP LINK.
2. ADJUST LOWER IDLER ASSEMBLY TO TENSION CHAIN.
3. CUT AND REMOVE WIRE LOCKING TRAVEL LIMIT SWITCH CHAIN ON POWER UNIT.

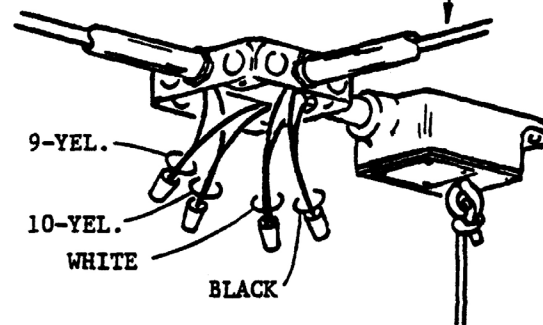
SIDE LIFTING CHAIN INSTALLATION



PULL-CORD SWITCH CONNECTIONS TO
TERMINAL STRIP IN MAIN CONTROL PANEL



120 V.A.C. POWER SUPPLY
TO HEATED SWITCH
(FREEZER ROOM ONLY)



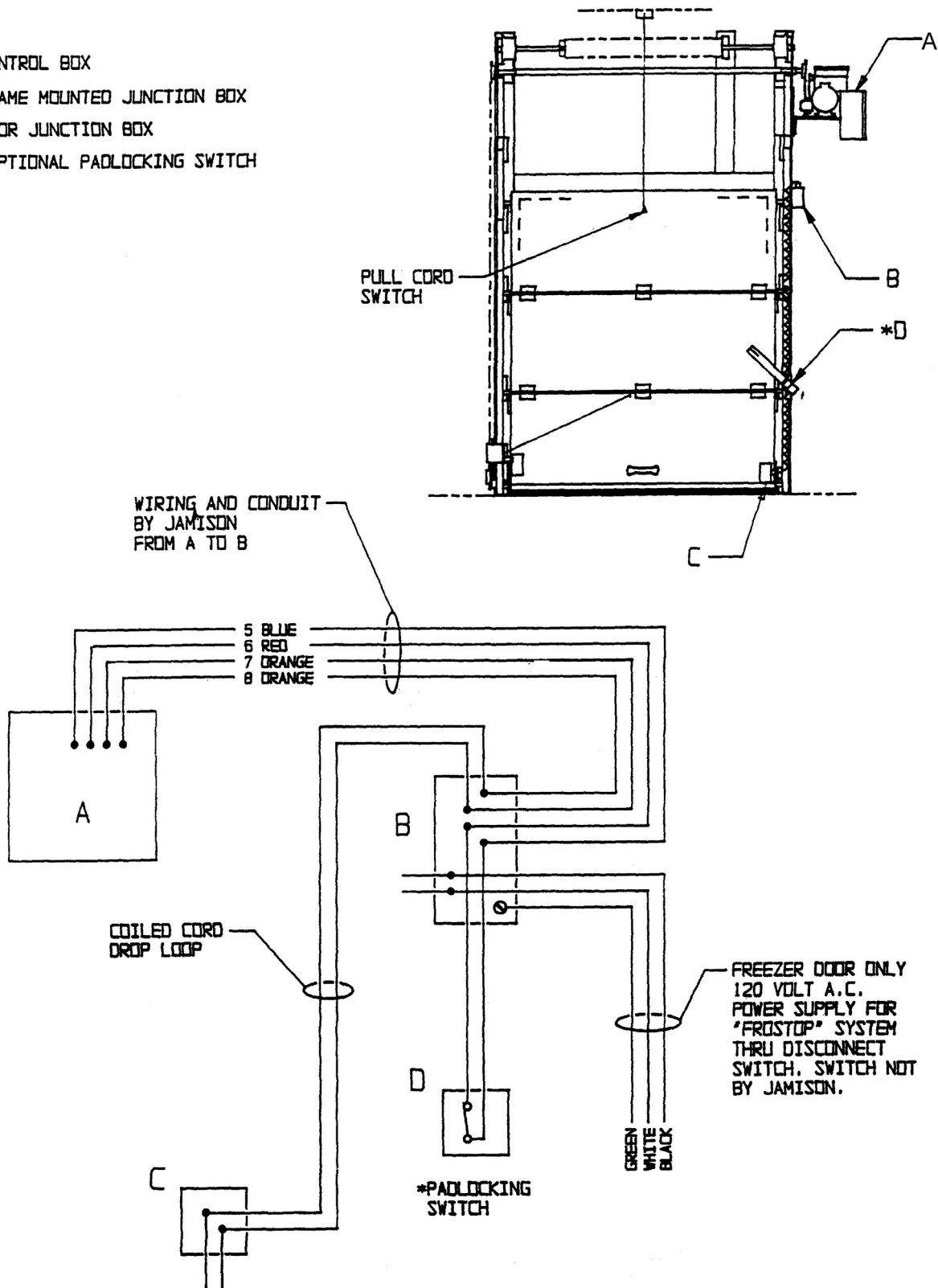
WARNING:

MAIN ELECTRICAL SERVICE TO DOOR MUST BE OFF WHILE MAKING
FIELD WIRING CONNECTIONS.

PULL CORD SWITCH CONNECTION WIRING AND CONDUIT NOT BY
JAMISON - WIRING DIAGRAM IN CONTROL BOX.

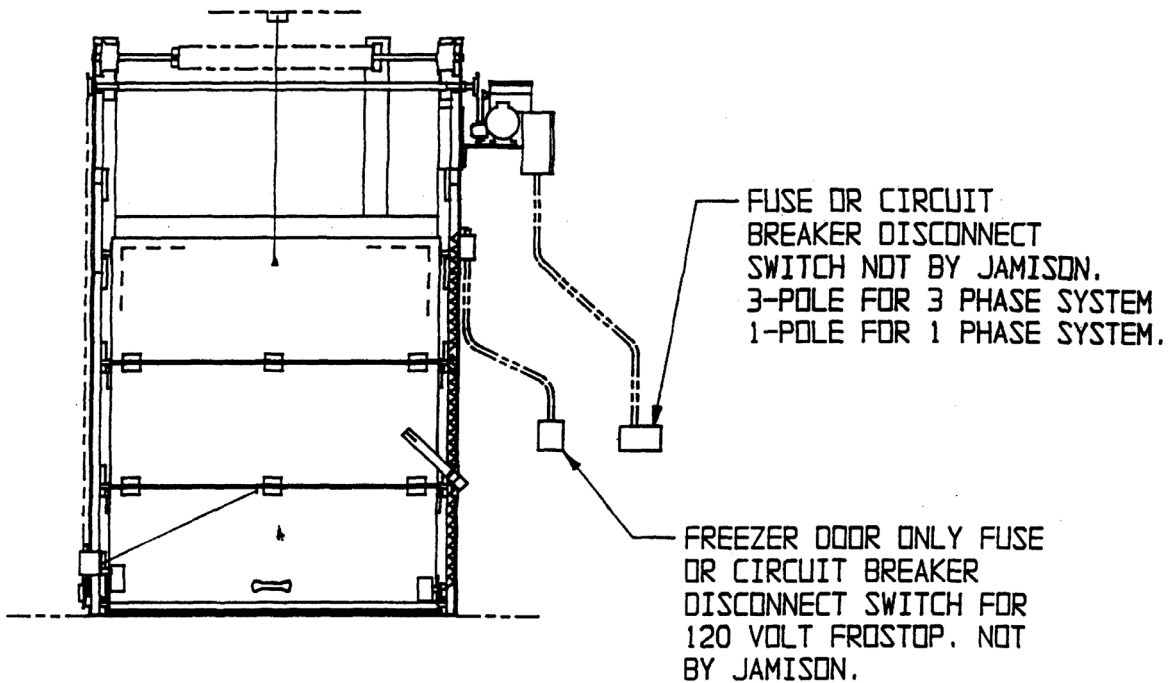
PULL CORD SWITCH CONNECTIONS

- A - CONTROL BOX
- B - FRAME MOUNTED JUNCTION BOX
- C - DOOR JUNCTION BOX
- D - *OPTIONAL PADLOCKING SWITCH



DOOR WIRING

POWER SUPPLY CONNECTIONS

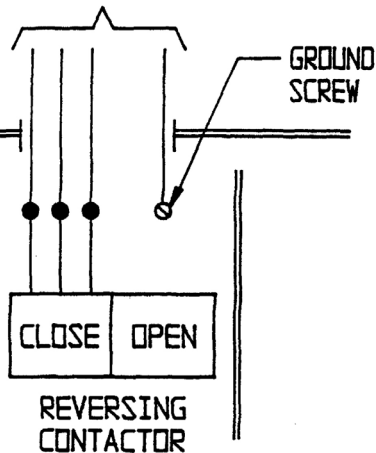


208/240/380/480 V.A.C.,
3-PHASE POWER SUPPLY THRU
A DISCONNECT SWITCH

MAIN
CONTROL
PANEL

GROUND
SCREW

CHECK MOTOR
ROTATION:
RIGHT SIDE
OF MOTOR
STARTER RELAY
MUST OPEN
DOOR, IF NOT,
REVERSE ANY
TWO (2) LEADS
OF SUPPLY LINE.
THIS WILL
CORRECT PROBLEM.
SEE PAGE 16.

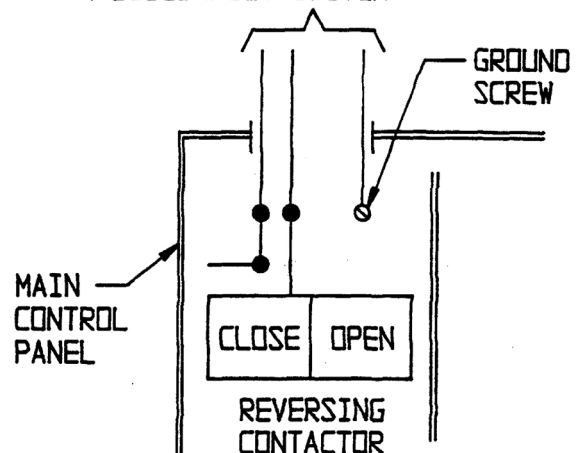


MAIN POWER CONNECTION
208/240/380/480 V.A.C.
3-PHASE SYSTEM

120/240 V.A.C., SINGLE
PHASE POWER SUPPLY THRU
A DISCONNECT SWITCH

MAIN
CONTROL
PANEL

GROUND
SCREW



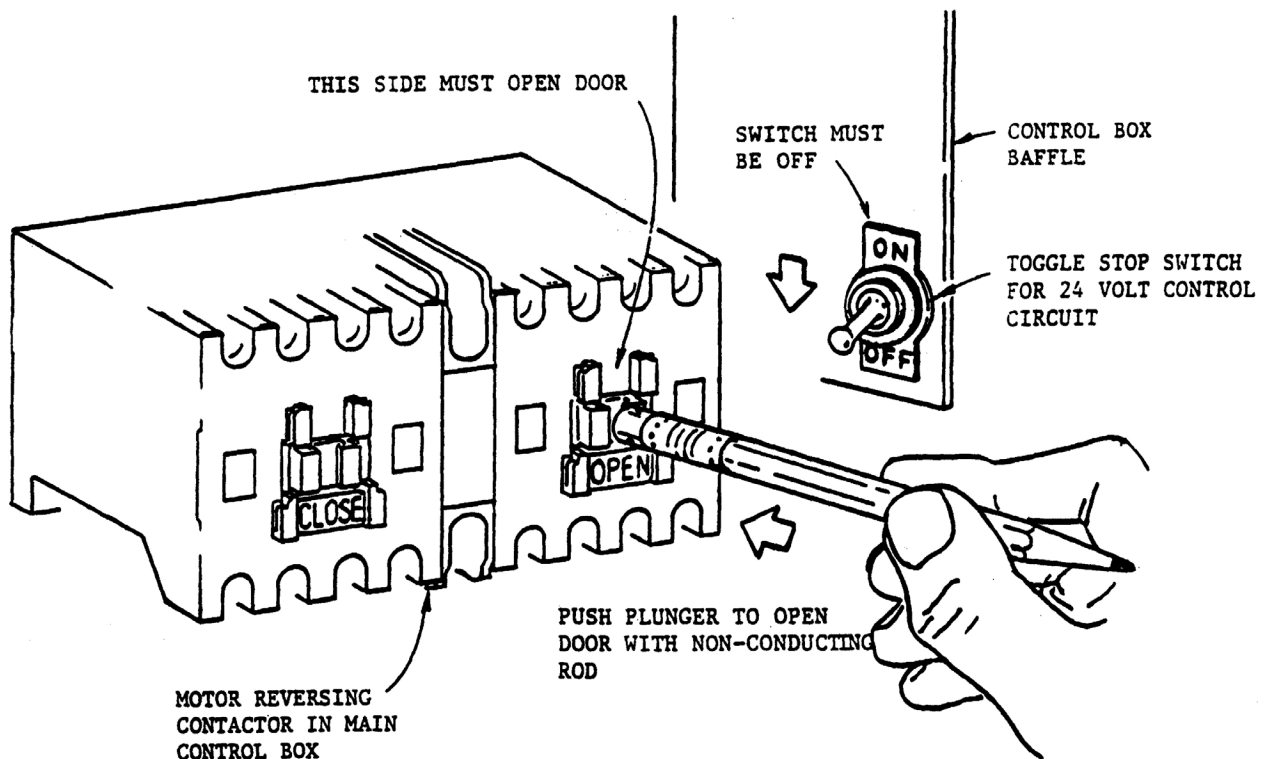
MAIN POWER CONNECTION
120/240 V. A. C.
SINGLE PHASE SYSTEM

CAUTION: DO NOT OPERATE DOOR UNTIL
ELECTRICAL CHECK-OUT IS
MADE, SEE PAGE 16

- A. **ENGAGE DOOR TO DRIVE LINK BEFORE MAKING ELECTRICAL CONNECTIONS OUTLINED 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:

1. MOMENTARILY DEPRESS RIGHT SIDE OF MOTOR REVERSING CONTACTOR INSIDE MAIN CONTROL PANEL WHILE OBSERVING DOOR. **DOOR MUST OPEN.**
2. DOOR TRAVEL:
 - A. IF DOOR RUNS OPEN PROCEED TO STEP #3.
 - B. IF DOOR CLOSES 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:

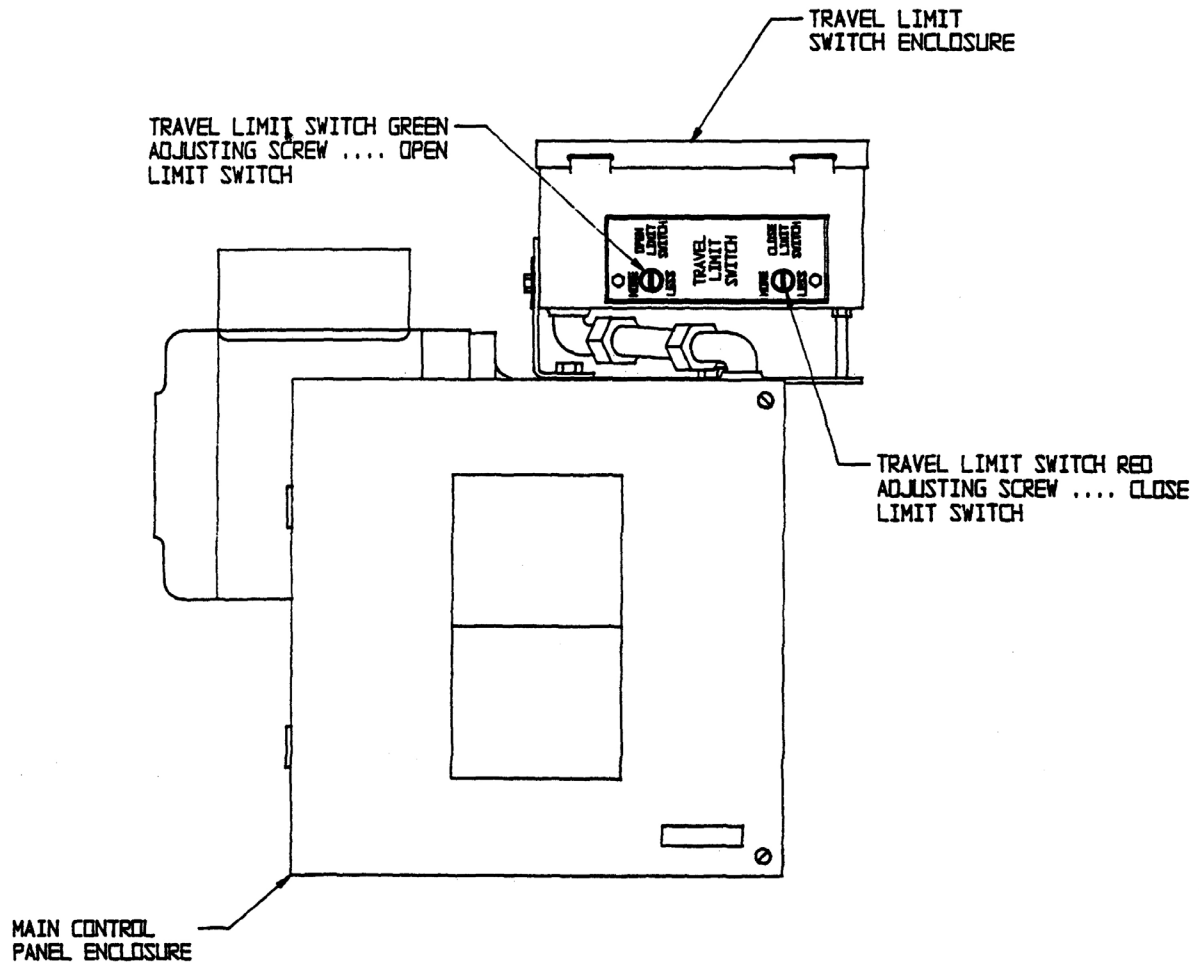
IF TEMPORARY ELECTRICAL HOOK-UP IS MADE, MAKE SURE MOTOR ROTATION IS NOT CHANGED WHEN PERMANENT POWER IS CONNECTED.

TEST OPERATION UNDER POWER

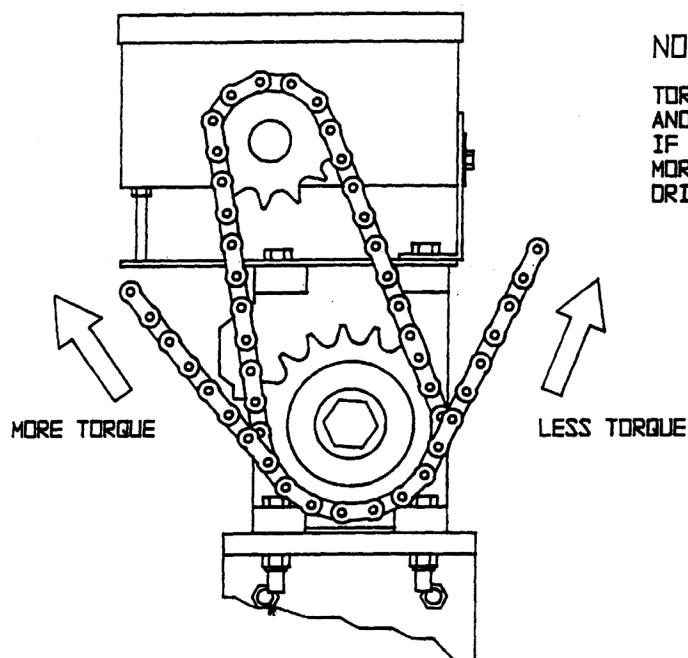
TO ADJUST TRAVEL LIMIT SWITCH

STEPS:

1. OPERATE DOOR MANUALLY FIRST THRU ITS FULL TRAVEL TO CHECK FOR ANY BINDING OR ALIGNMENT PROBLEMS. IF ANY EXIST RESOLVE PROBLEM THEN PROCEED WITH STEP NUMBER 2.
2. OPERATE DOOR UNDER POWER TO DETERMINE AMOUNT OF OVER-TRAVEL, IF ANY. MAKE PROPER LIMIT SWITCH ADJUSTMENT PER INSTRUCTIONS ON OUTSIDE LABEL OF ENCLOSURE, SEE DRAWING BELOW. SCREW DRIVER TYPE ADJUSTMENT CAN BE MADE WITHOUT REMOVING ENCLOSURE COVER. START WITH NO MORE THAN 1/4 TURN THEN PROCEED 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.



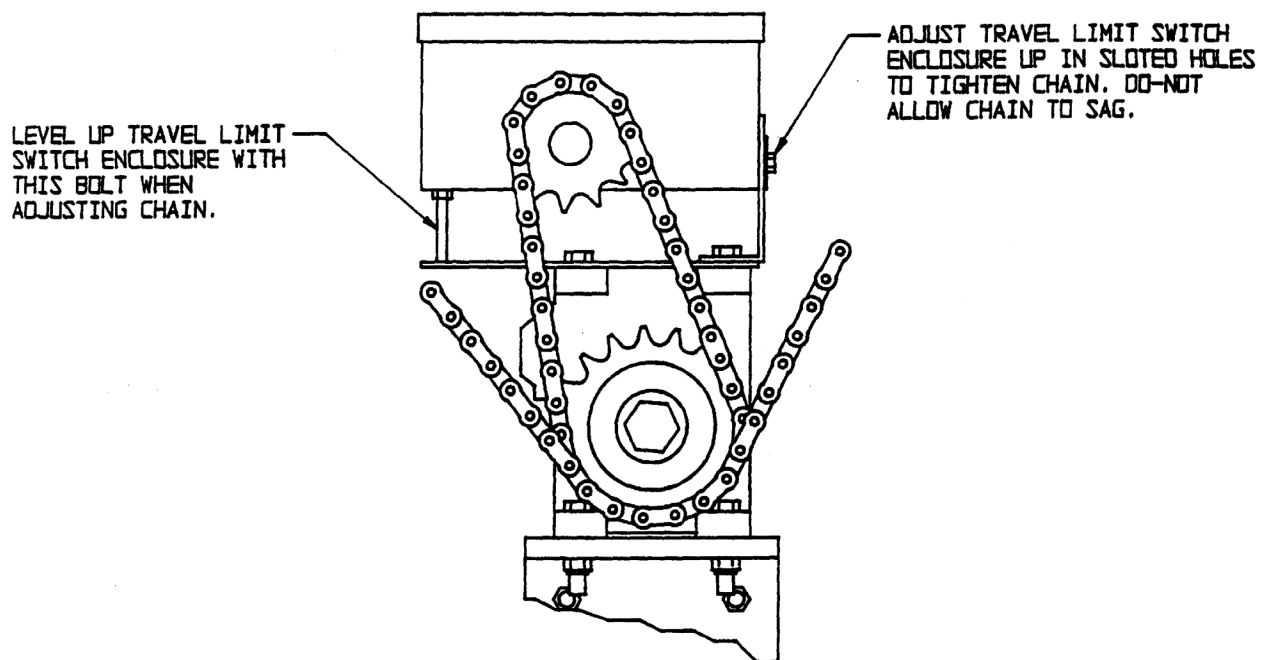
TRAVEL LIMIT SWITCH ADJUSTMENT



NOTE:

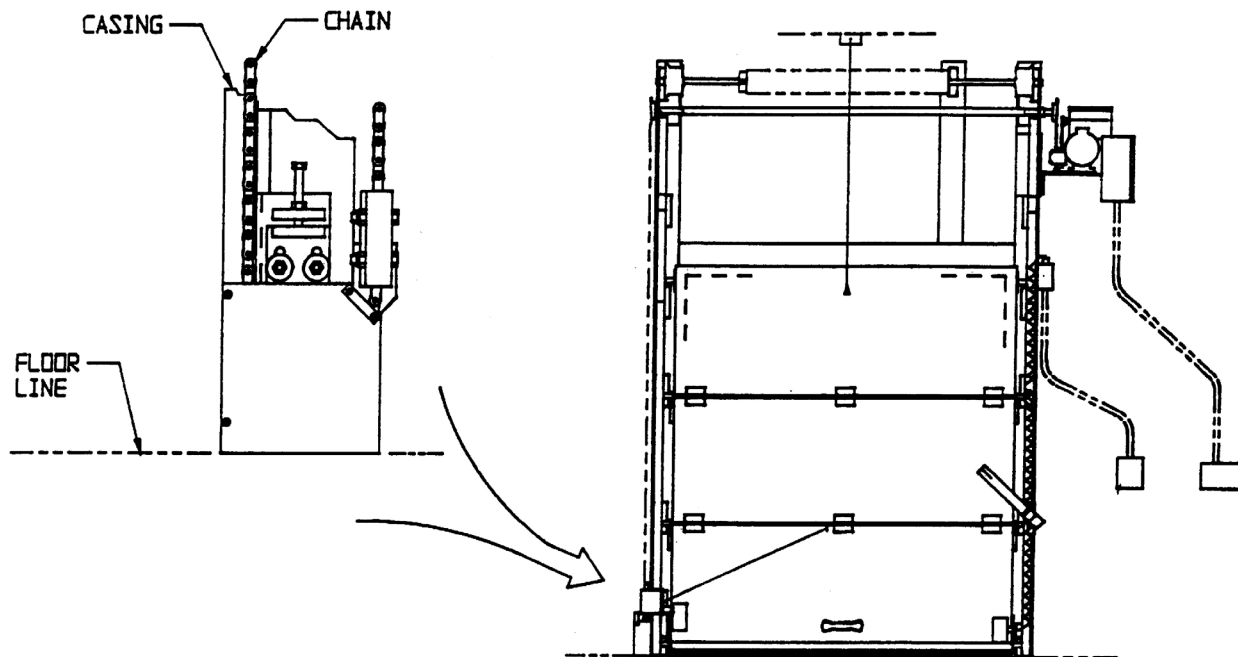
TORQUE LIMITER IS PRE-SET AT FACTORY AND SHOULD NOT NEED ADJUSTMENT. HOWEVER, IF NECESSARY, SEE DRAWING AT LEFT FOR MORE OR LESS TORQUE FOR POWER UNIT DRIVING FORCE.

TORQUE LIMITER ADJUSTMENT



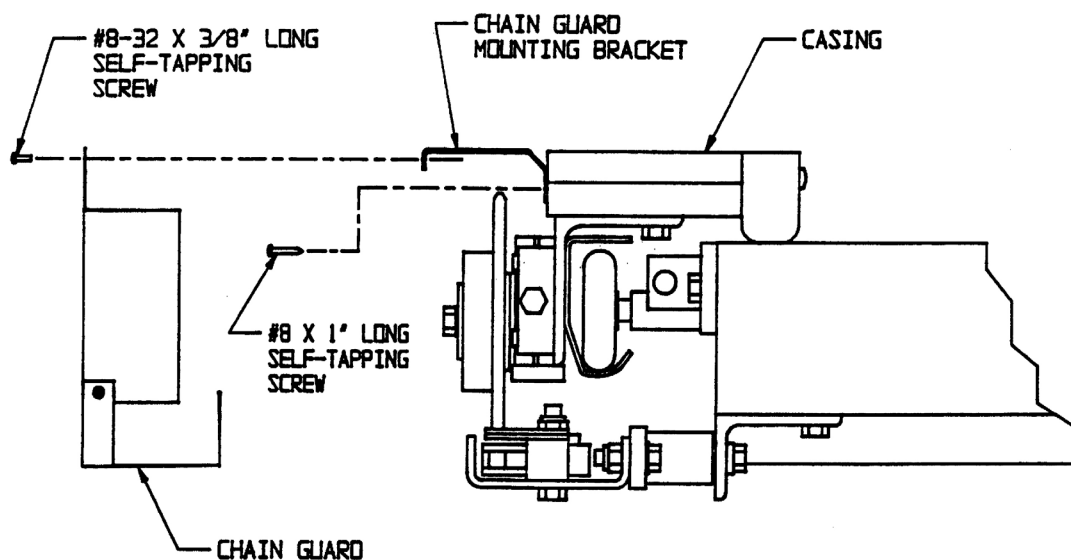
TRAVEL LIMIT SWITCH CHAIN ADJUSTMENT

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

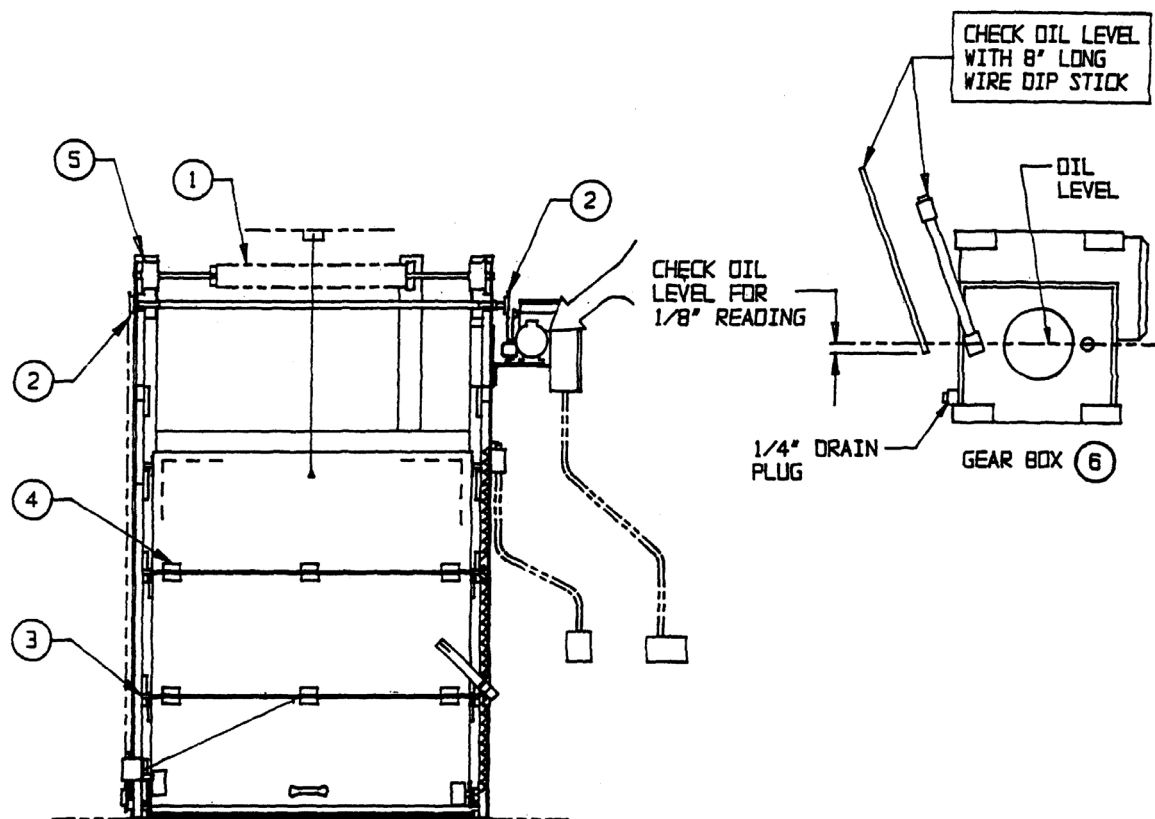


STEPS:

1. ATTACH CHAIN GUARD MOUNTING BRACKET TO CASING WITH #8 X 1" LONG SELF-TAPPING SCREWS.
2. ATTACH CHAIN GUARD TO MOUNTING BRACKET WITH #8-32 X 3/8" LONG SELF-TAPPING SCREWS.



CHAIN GUARD INSTALLATION



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. TORSION SPRING - OIL
2. ROLLER CHAIN - OIL
3. ROLLERS - OIL
4. HINGES - OIL
5. LIFTING CABLES - APPLY WIRE ROPE LUBRICANT
6. GEAR BOX OIL LEVEL, USE MOBIL S-H-C #626 OR EQUAL CHECK AT 6 MONTH INTERVALS

LUBRICATION INSTRUCTIONS

ELECTRICAL TROUBLE SHOOTING GUIDE

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.	1. NO POWER TO DOOR. 2. STOP SWITCH IN OFF POSITION. 3. PULL CORD SWITCHES. 4. DOOR IN MID TRAVEL.	1. CONNECT MAIN POWER SUPPLY TO DOOR. 2. TURN STOP SWITCH ON. 3. CHECK WIRES #9 AND #10. 4. DEPRESS SAFETY EDGE.
B. DOOR OPENS OR CLOSES APPROXIMATELY 6" THEN STOPS.	1. DEFECTIVE HOLD SWITCH ON REVERSING STARTER. 2. OPEN OR CLOSED LIMIT SWITCH DEFECTIVE.	1. REPLACE SWITCH ON STARTER. 2. REPLACE TRAVEL LIMIT SWITCH.
C. DOOR WILL NOT CLOSE, OPENS OKAY.	1. DEFECTIVE SAFETY EDGE. (SHORTED)	1. REPAIR OR REPLACE SAFETY EDGE ASSEMBLY AS NECESSARY.
D. DOOR WILL NOT OPEN BY SAFETY EDGE.	1. DEFECTIVE SAFETY EDGE. 2. DROP-LOOP WIRE BROKEN.	1. REPAIR OR REPLACE SAFETY EDGE ASSEMBLY AS NECESSARY. 2. REPLACE DROP-LOOP WIRE.
E. 3-PHASE POWERTRON UNITS, DOOR TRAVELS IN WRONG DIRECTION-DOOR CLOSES BY SAFETY EDGE.	1. CHECK MOTOR ROTATION.	1. REVERSE ANY 2-LEADS OF MAIN POWER SUPPLY.
F. DOOR OVER TRAVELS OR UNDER TRAVELS.	1. TRAVEL LIMIT SWITCH ADJUSTMENT.	1. RE-ADJUST SO DOOR COASTS INTO DESIRED POSITION.
G. POWER UNIT RUNS (WILL NOT MOVE DOOR) AND MOTOR RUNNING LIGHT IS ON.	1. BINDING IN DRIVE. 2. TORQUE LIMITER.	1. TURN OFF POWER, CHECK DOOR MANUALLY. 2. TURN OFF POWER THEN TIGHTEN (IF REQUIRED) SO THAT DOOR WILL RUN SMOOTHLY WITHOUT A JERKY OPERATION. SEE TORQUE LIMITER ADJUSTMENT PAGE 18.

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 (AERA CODE 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 MASTER LABEL PLATE ON THE FRONT OF THE CONTROL PANEL.

MODEL NO	<input type="text"/>		
SERIAL NO	<input type="text"/>	SERIES	<input type="text"/>
POWER OPERATOR DATA: <input type="text"/> VOLTS A.C.			
PHASE	<input type="text"/>	HZ.	<input type="text"/> AMPS <input type="text"/>
RATING <input type="text"/> FOOT LBS. PER SECOND			
24 VOLT CONTROL CIRCUIT			
FROSTOP DATA: 120 VOLTS A.C.			
TOTAL AMPS <input type="text"/>		TOTAL WATTS <input type="text"/>	
JAMISON DOOR COMPANY			
P.O. BOX 70			
HAGERSTOWN, MARYLAND			
21740			

MASTER LABEL PLATE ON FRONT OF CONTROL PANEL.

