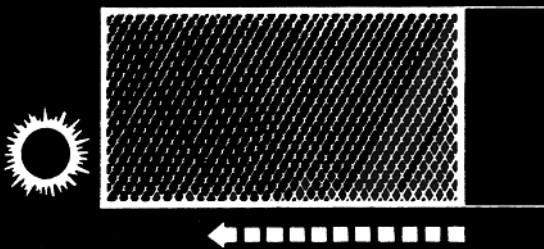




*Read
This
FIRST*



GENERAL INSTALLATION, OPERATION, MAINTENANCE, and PARTS MANUAL for your

1295DC SLIDE GATE OPERATOR

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G-991DC

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Note: We reserve the right to modify or change, without prior notice, any statements or information contained herein. If exact dimensions or specifications are required by the customer certified prints will be furnished without charge upon request to Crown Industrial. This manual covers standard catalogued operators only and does not cover special non-standard equipment.

1. INTRODUCTION

A. PURPOSE:

This Crown Industrial Operators Installation, Operation, Maintenance and Parts Manual has been developed to assist you in the installation, operation, and maintenance of your electric operator, and thus enable you to utilize it to its maximum efficiency.

B. MODELS COVERED:

At the time this manual is issued to you, it covers the current Model 1295, and contains the latest information and data available. The parts pages have been prepared so that you can easily determine the parts contained in your electric operator.

C. DESCRIPTION:

The 1295 Electric Operator consists of an instantly reversible gearmotor, solenoid brake, a safety friction disc clutch, an emergency release which can be locked open or closed, and a fully automatic limit switch. This unit is compact, easy and economical to install, and is completely wired at the factory. (Figure 1) all items are mounted on a heavy steel base and are protected by a weather resistant cover with padlock attachment. The standard 1295 Operator can be furnished with 1/2 or 1 horsepower gearmotors.

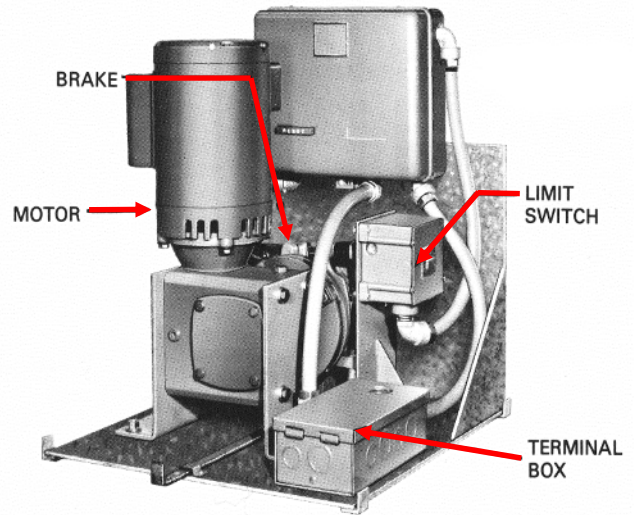


Figure 1. 1295 Slide Gate Operator
(shown without weather resistant cover)

2. INSTALLATION AND OPERATION

A. GENERAL

(1) The Crown Industrial 1295 Electric Gate Operator has been field proven for dependable, trouble-free operation of sliding gates. Four basic applications are shown in Figure 2A, B, C & D. To insure correct installation and proper operation, follow the instructions listed below.

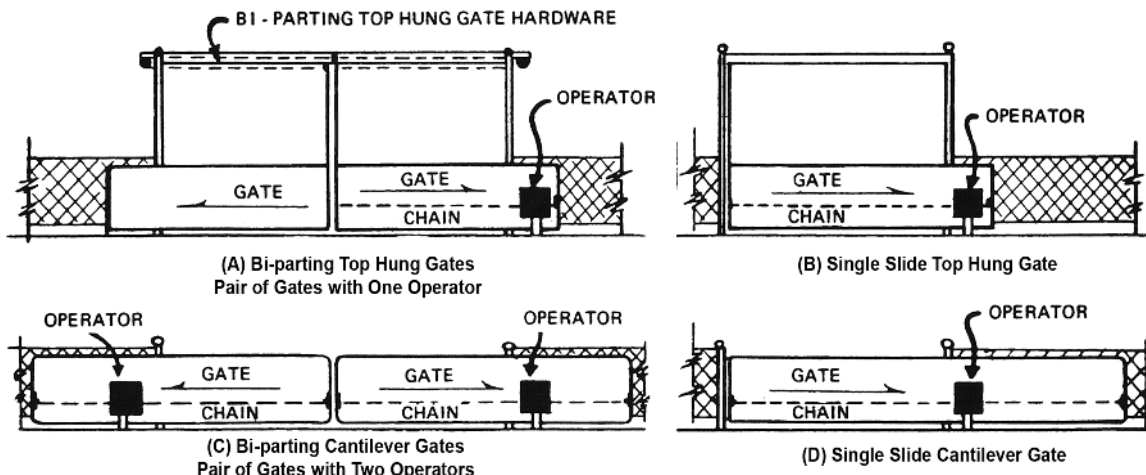
(2) Before Installation CHECK THE SHIPMENT for:

- Locate **Packing List** and verify all materials against it.
- Locate any supplemental, **job-specific drawings**. Use the dimensions on these drawings, as they take precedence over those in this manual.

- Locate **Wiring Diagram**. A copy of this diagram is included in the packing list envelope as well as on the inside cover of the operator control box.

(3) **CHECK THE GATE:** Before starting operator installation, inspect to insure that the gate is in good working condition, slides freely, is rigidly supported, and has no obstructions to block or retard its slide.

(4) **REVIEW THE INSTALLATION DRAWING:** The installation drawing shows the layout of the gate, template drilling for the gate bracket and channel post, and general terms used to describe components. Review of the drawing will familiarize you with the equipment.



Figures 2a, b, c, & d Basic Gate Applications

(5) PREPARING THE GATE:

The Electric Gate Operator powers the gate through the use of a single horizontal strand of heavy-duty roller chain connected to a gate 068240 chain adjusting screw assembly which in turn is mounted to a bracket on each end of the gate. Locate each bracket at the appropriate height and square with the gate and mounts. Included with the operator can be one or more 1295P376 Chain Guide Brackets, one per each 16 foot of gate length. For gates 31 feet or shorter in width, mount the chain guide bracket as close to the center of the gate as possible at a height suitable to clear the operator as chain guide bracket passes in front of the operator. For wider gates, space the chain guide brackets accordingly.

B. PREPARING THE MOUNTING CHANNEL

- (1) **CONCRETE EMBEDDED TYPE:** The #068545 embed operator support 10" S-beam is an optional extra cost item. When furnished as an optional part of the operator equipment, it will be predrilled for the mounting of the operator. When the embed post is not provided, consult the factory drawing for #068545 embed operator support 10" S-Beam for proper mounting hole locations. It is recommended that this post be hot dip galvanized or specially treated to avoid corrosion. Note, the size and depth of piers may vary with soil and fill types. The centerline of the channel to the edge of the opening should also be no closer than 1 foot.

NOTE: SUITABLE MOUNTING OF POST IS THE RESPONSIBILITY OF THE CUSTOMER AND/OR CONTRACTOR. THE POST MUST BE INSTALLED PLUM AND IN EXACT POSITION AS PER INSTALLATION DRAWINGS.

- (2) **PAD MOUNTED TYPE:** The #1295P375 pad mounted Column for support of the operator is available as an optional extra cost item. When furnished, they will be predrilled for mounting of the operator to the concrete pad and are hot dipped galvanized for added corrosion resistance.

NOTE: A SUITABLE MOUNTING PAD WITH (4) 3/4" DIAMETER STUDS IS THE RESPONSIBILITY OF THE CUSTOMER AND/OR CONTRACTOR. THE PAD MUST BE LEVEL AND THE STUDS IN THE EXACT POSITION AS SHOWN ON THE FACTORY DRAWING FOR THE #1295P375 OPERATOR MOUNTING COLUMN.

C. MOUNTING THE OPERATOR

- (1) Remove the Electric Gate Operator from the crate and then remove the weather resisting cover by lifting it straight up and off.
- (2) Mount the two angle supports to the channel with (4 ea.) bolts (3/8 x 1-3/4"), flat washers, lock washers and nuts.
- (3) Raise the Operator into Position on top of the channel, being sure the operator drive sprocket is on the side facing the gate. With the operator parallel to the gate, secure in place with (4 ea.) cap screws (3/8"x1"), flat washers and lock washers.

D. CONNECTING OF CHAIN

- (1) Push in on the operator release rod located on the lower rear side of the operator. Hold release rod in by placing a screwdriver or pin through the matching holes. Check to see if the drive sprocket is free to rotate.
- (2) As noted on the red tag attached to the operator, thread the drive chain under the idler sprockets and over the drive sprocket.
- (3) Connect the chain to the adjusting screws on each gate bracket and proceed to apply proper tension. For correct chain tension the change should sag at midspan approximately 1% of the total free run of the chain.

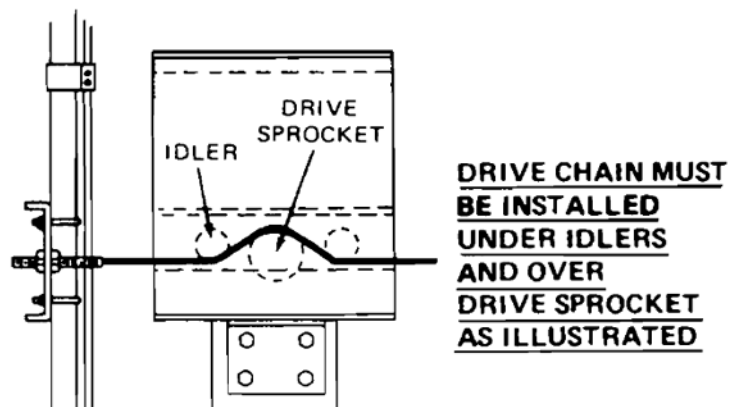


Figure 9
Drive Chain Installation

CAUTION: EXCESSIVE CHAIN TIGHTNESS COULD CAUSE EXTREME WEAR ON THE IDLER SPROCKET BUSHINGS AND SHORTEN THEIR LIFE. CONVERSELY, A LOOSE CHAIN COULD JUMP THE DRIVE SPROCKET AND JAMB OR CHANGE GATE STOPPING POINTS.

E. CLUTCH ADJUSTMENT

- (1) The clutch is designed to protect the equipment from shock loads that may occur in the system. Under normal operation, the clutch will not slip. The clutch should be adjusted to provide sufficient torque for the operator to start and stop the gate without slipping. However, it must not be so tight that it cannot slip under excessive loads.
- (2) To adjust the clutch, tighten the bolts marked "A" as shown in Figure 15. Never tighten bolts **consecutively**, but always directly across from each other so as to provide even tension. An **equal turn** of each bolt is an important adjustment procedure.

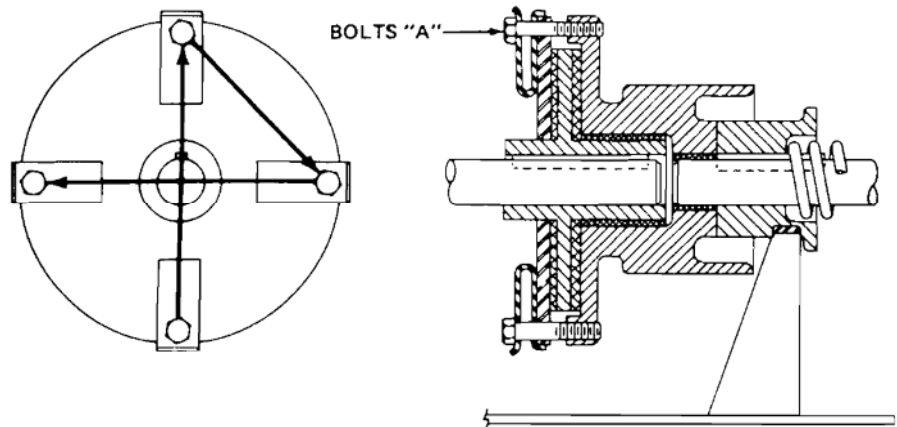


Figure 15
Adjusting Clutch

F. BRAKE ADJUSTMENT

- (1) The brake has been preadjusted at the factory and requires no further adjustment at initial installation.
- (2) When adjustment is required due to brake lining wear, refer to Figure 16. *Solenoid brake*. As the brake lining wears, the clearance "C" decreases. Never permit this clearance to become zero. When clearance "C" becomes minimal, restore it by turning screw "E" to increase the clearance by 1/64".

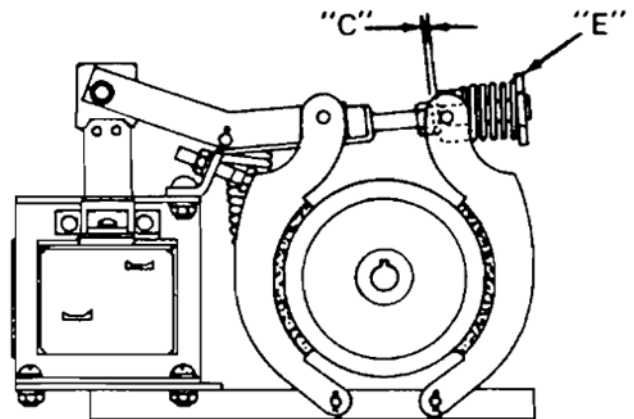
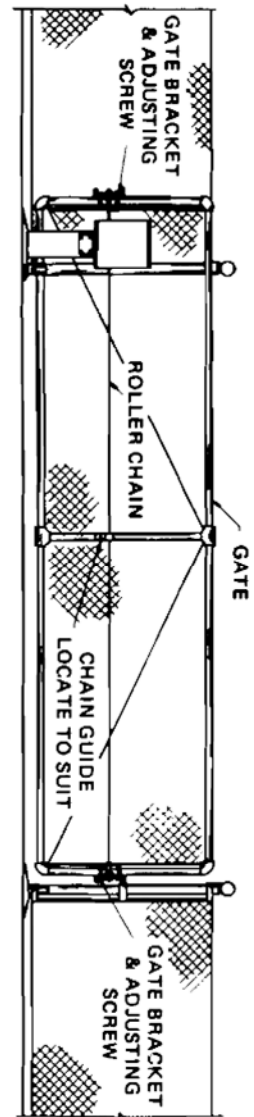
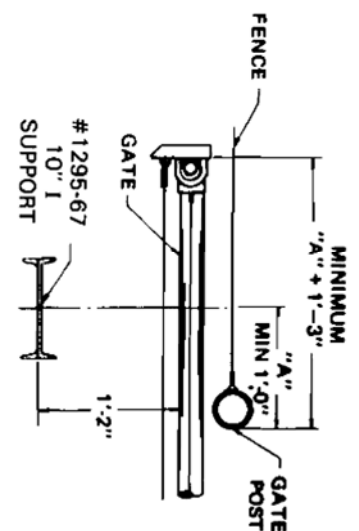


Figure 16
Solenoid Brake



NOTE: SEE PAGE 9 FIG. 8 FOR CHAIN BRACKET AND CHAIN GUIDE MOUNTING DETAILS.

ELEVATION VIEW
LOCATION OF OPERATOR
IS THE SAME FOR ALL GATES



PLAN AT OPERATOR

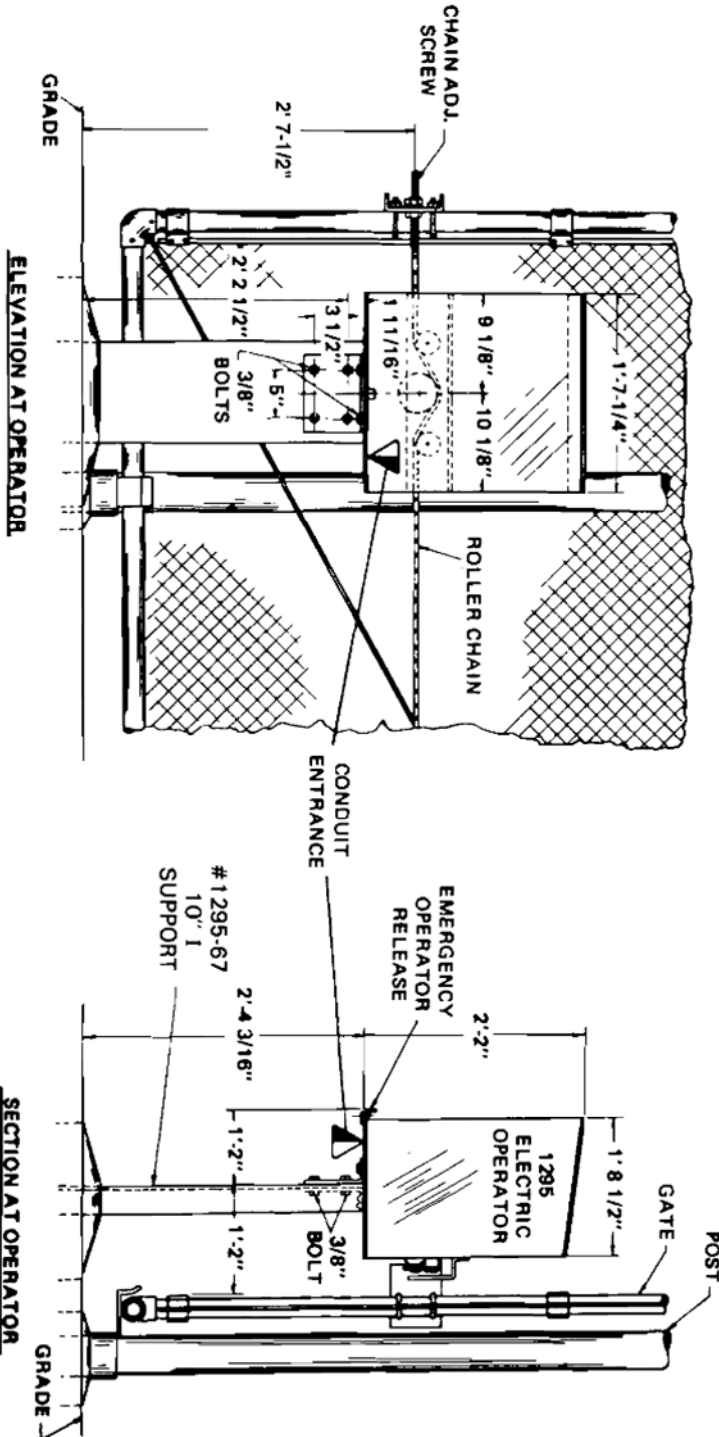
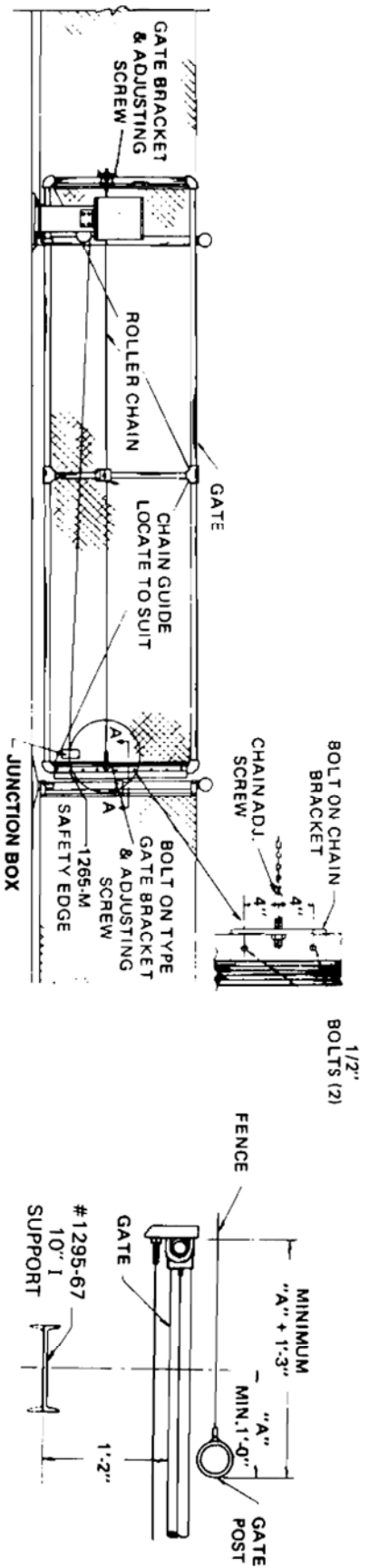


Figure 3. Installation of Operator
Using Concrete Embedded Mounting Column
(left side cantilever gate shown, top hung similar)

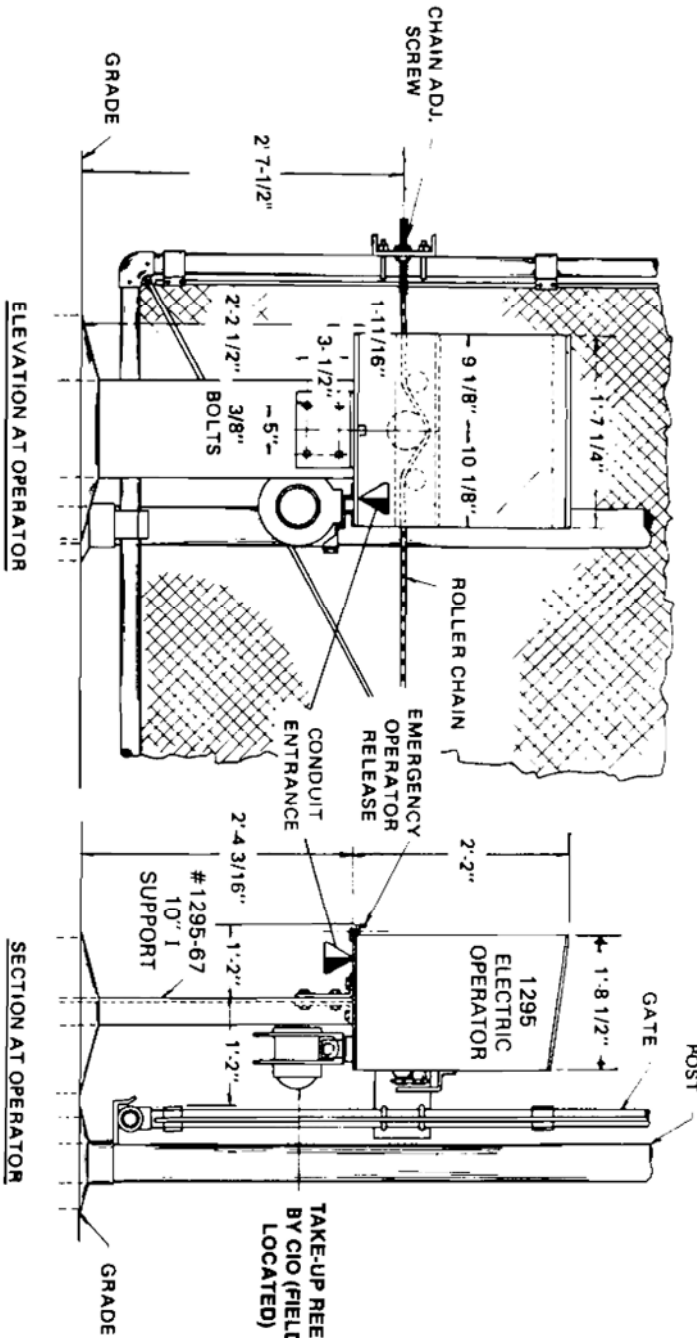


NOTE: SEE PAGE 9 FIG. 8 FOR CHAIN BRACKET AND CHAIN GUIDE MOUNTING DETAILS.

ELEVATION VIEW
LOCATION OF OPERATOR
IS THE SAME FOR ALL GATES

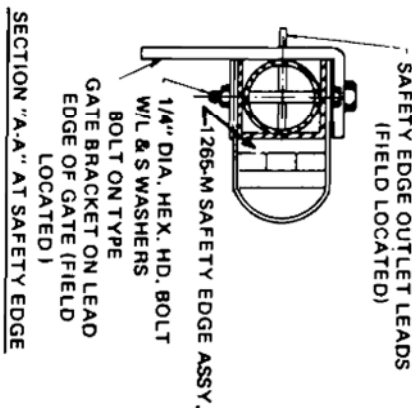
NOTE: ALL ELECTRICAL CONNECTORS
NOT BY CIO

PLAN AT OPERATOR



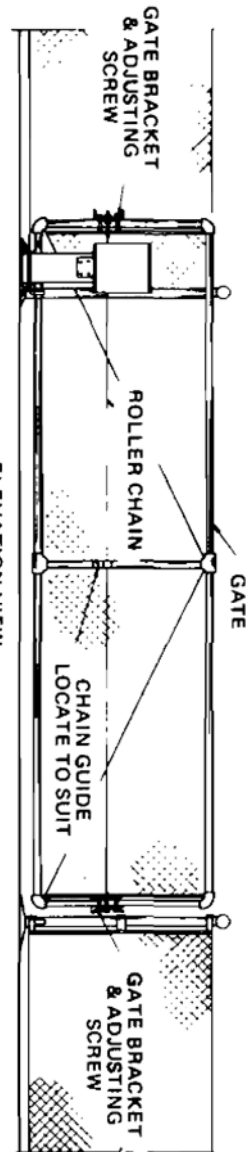
ELEVATION AT OPERATOR

SECTION AT OPERATOR



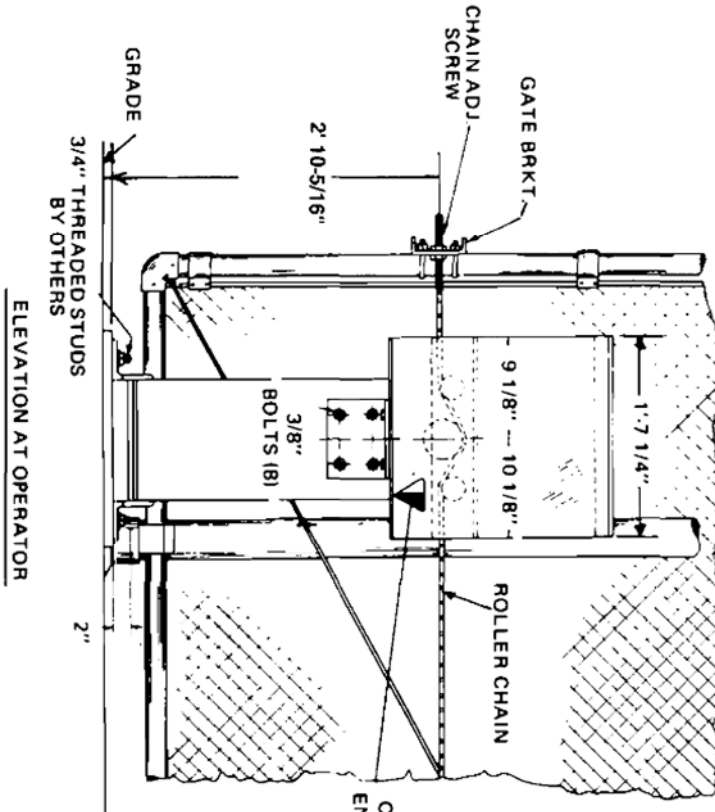
SECTION "A-A" AT SAFETY EDGE

Figure 4. Installation of Operator With Safety Edge
And Concrete Embedded Mounting Column
(left side cantilever gate shown, top hung similar)

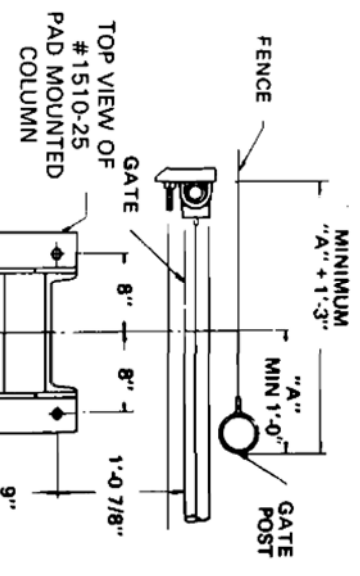


NOTE: SEE PAGE 9 FIG. 8 FOR CHAIN BRACKET AND CHAIN GUIDE MOUNTING DETAILS.

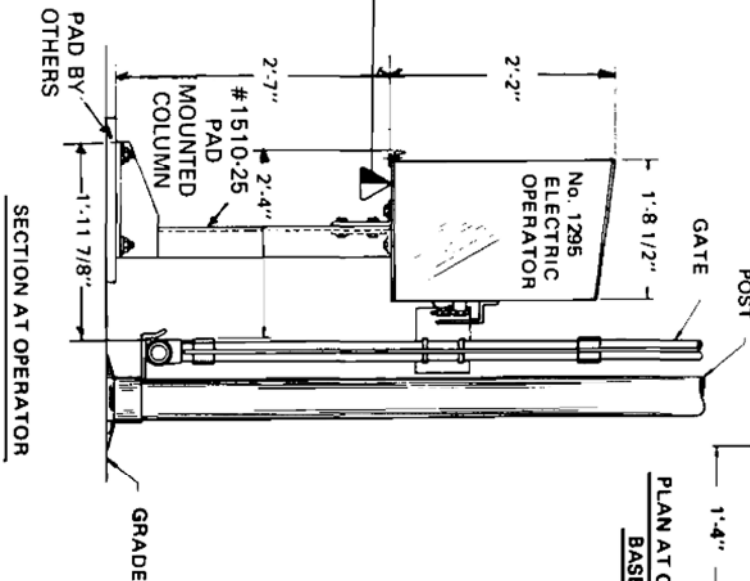
ELEVATION VIEW
LOCATION OF OPERATOR
IS THE SAME FOR ALL GATES



ELEVATION AT OPERATOR

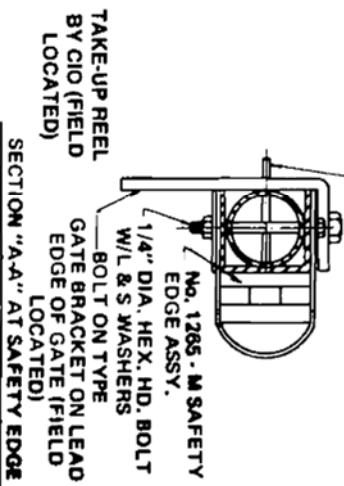
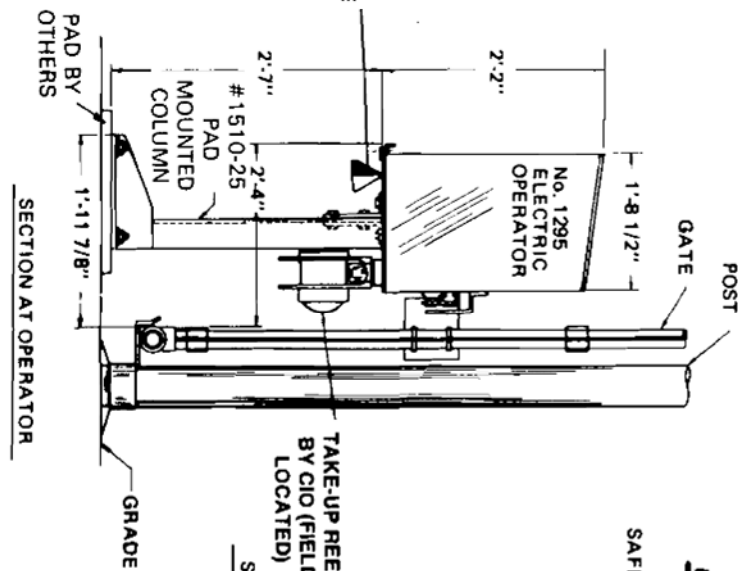
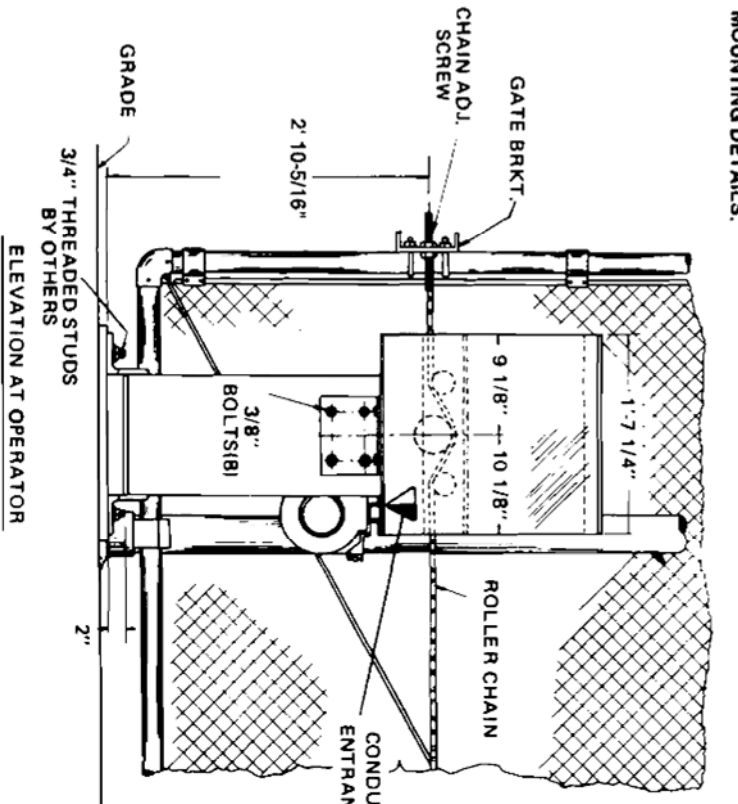
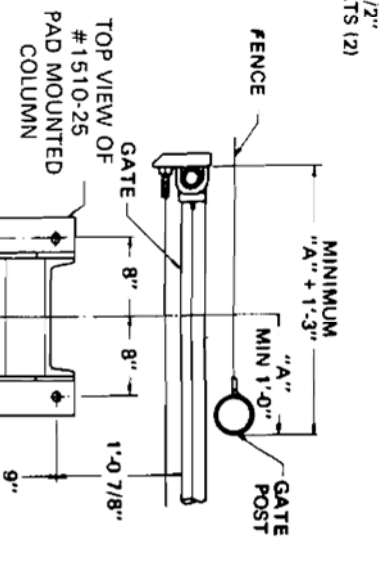
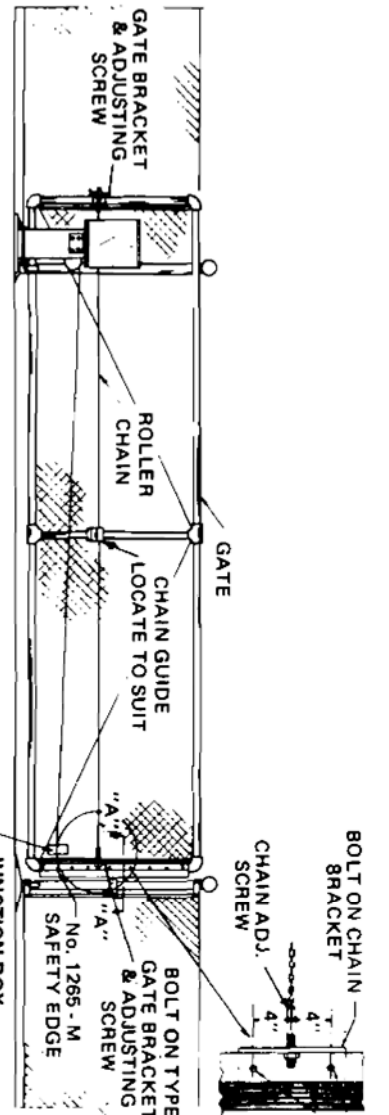


PLAN AT COLUMN
BASE



SECTION AT OPERATOR

Figure 5. Installation of Operator
Using Pad Mounted Column
(left slide cantilever gate shown, top hung similar)



PLAN AT COLUMN
BASE
SAFETY EDGE OUTLET LEADS (FIELD LOCATED)

Figure 6. Installation of Operator With Safety Edge
And Pad Mounted Column
(left slide cantilever gate shown, top hung similar)

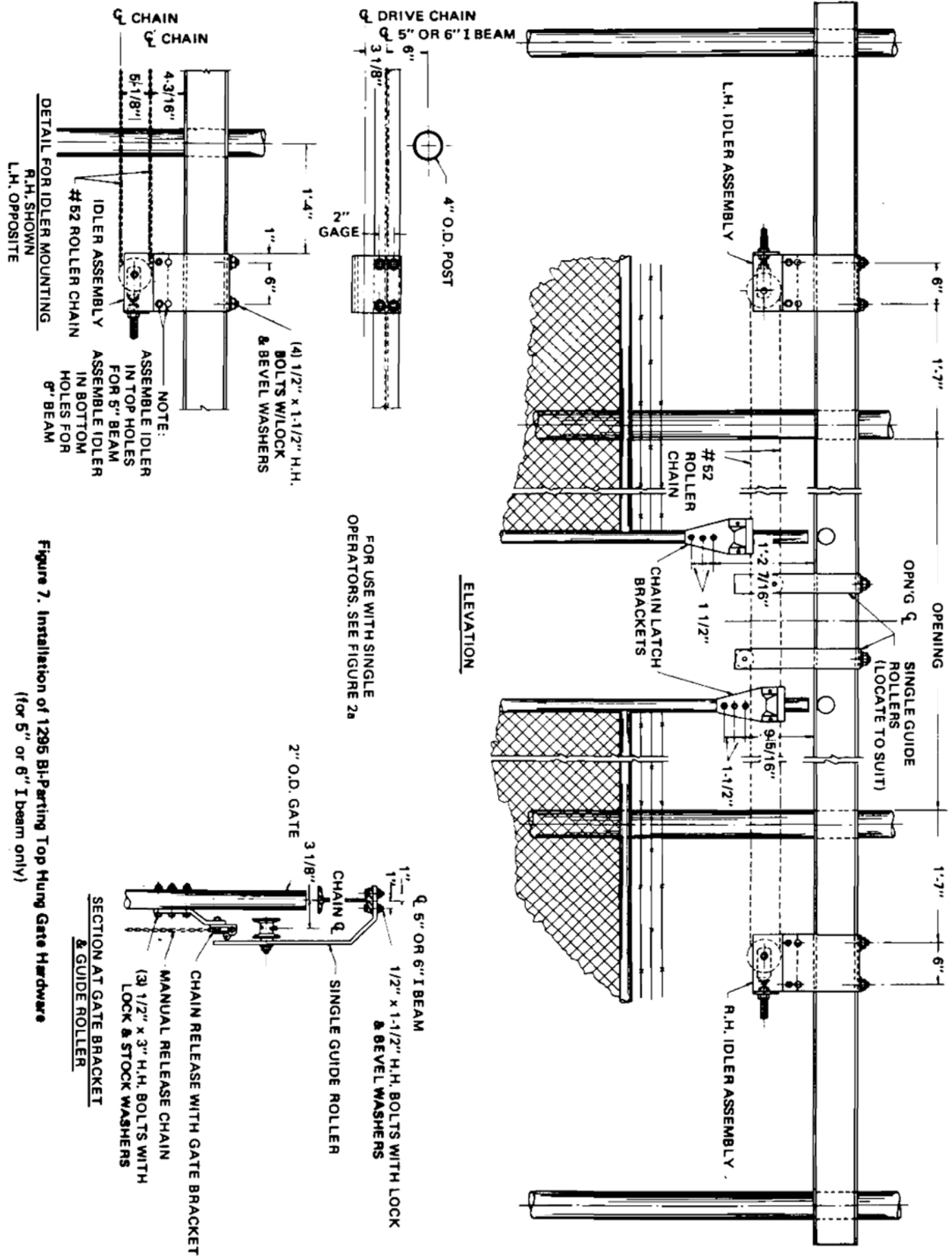
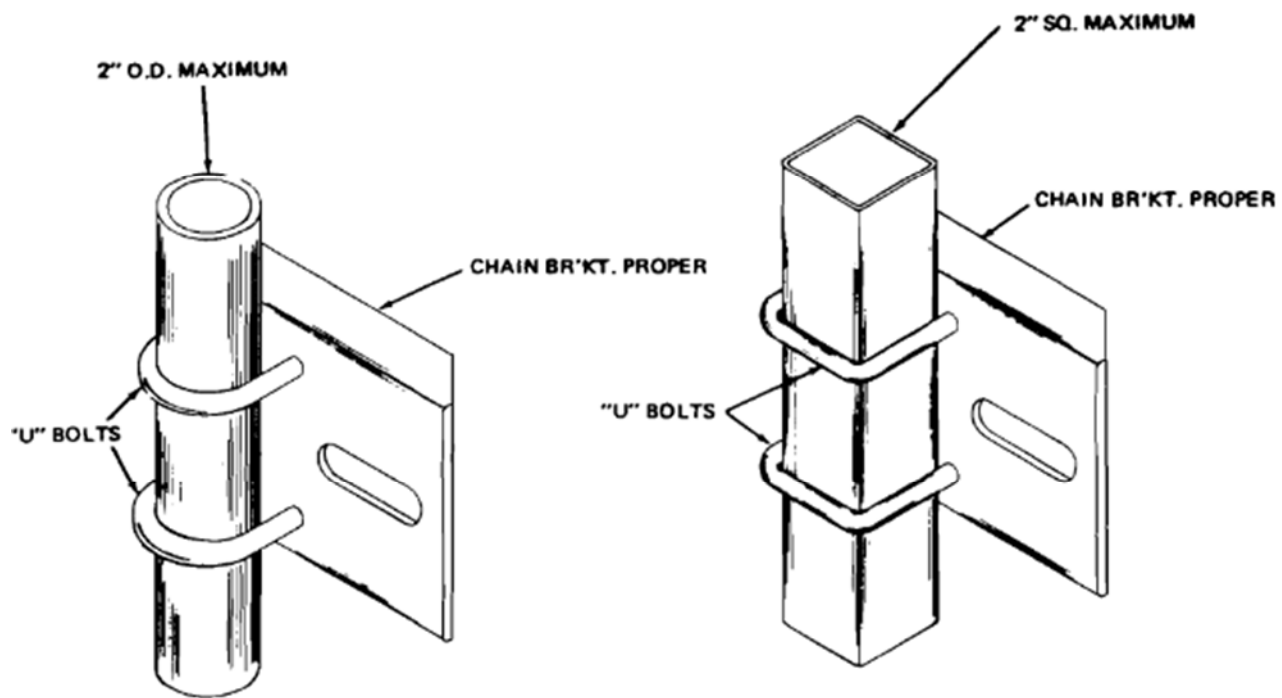
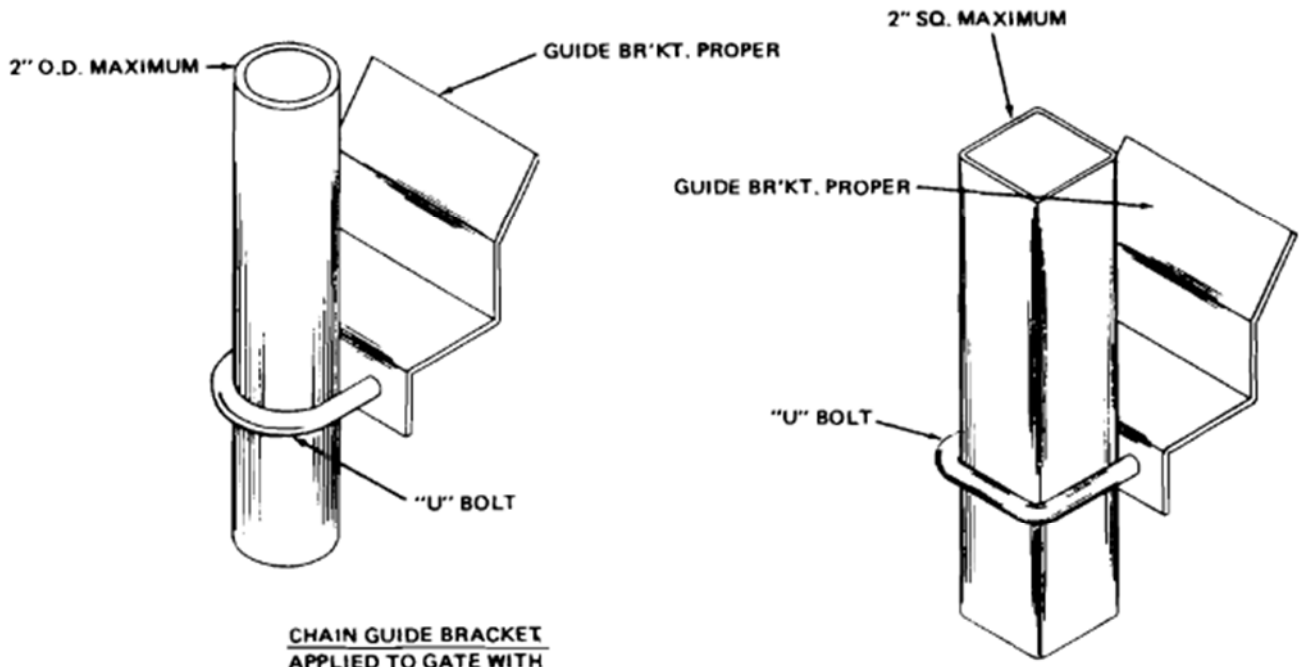


Figure 7. Installation of 1295 Bi-Parting Top Hung Gate Hardware
(for 5" or 6" I beam only)



GATE CHAIN BRACKET
APPLIED TO GATE WITH ROUND
FRAME

GATE CHAIN BRACKET
APPLIED TO GATE WITH SQUARE
FRAME



CHAIN GUIDE BRACKET
APPLIED TO GATE WITH
ROUND FRAME

CHAIN GUIDE BRACKET
APPLIED TO GATE WITH
SQUARE FRAME

Figure 8. Chain Bracket and Chain Guide Bracket Attachment



CROWN INDUSTRIAL OPERATORS

Door Hardware, Operators, and Complete Systems

Electrical Wiring

This electric door operator is intended for application to motor branch circuits with voltage and current characteristics to meet operator ratings. Ensure input voltage and amperage match what is indicated on the wiring diagram for your specific unit. Branch circuit, branch circuit disconnecting means, and branch circuit overcurrent protection are to be properly sized in respect to the operator horsepower rating.

With power OFF, wire Operator Motor, Limit Switches, Actuator Controls and Safety Devices as shown on the wiring diagram provided in the operator packing list envelope or on the inside cover of the operator control box unit.

Warning: Ensure operator branch circuit is disconnected from power source when installing, adjusting, or servicing operator.

Door Direction—DC Motor Rotation

Purpose: To determine if your door is moving in the correct direction and address the issue if it is not.

- 1) Ensure all controls are properly wired and connected along with safety devices.
- 2) Get familiar with the controls of the unit. Ensure you understand how the controls run and stop the Operator Motor Unit.
- 3) Turn Off Power to Operator Motor Unit but switching off the power disconnect at the operator control box.
- 4) Loosen all bolts on the Operator Clutch or Torque Limiter so the drive sprocket is free to rotate with the roller chain, when the Operator Motor Unit is not running. The door should be free to move by hand.
- 5) Identify which direction the gearbox output shaft needs to spin in order for the door to open.
- 6) Restore power to the Operator Motor Unit.
- 7) Activate the actuator to cause an "open" signal. DOES THE GEARBOX TURN IN THE CORRECT DIRECTION as identified in step #5?
- 8) If "NO"
 - A) Turn off Power to the Control Box.
 - B) Switch the motor lead wires typically labeled "A1" and "A2" located on the terminal strip in the control box.
 - C) Restore power and confirm direction of rotation at the gearbox is correct.
 - D) Tighten all bolts on the Operator Clutch or Torque Limiter.

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MDC1

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CROWN INDUSTRIAL OPERATORS

Vent Plug

Door Hardware, Operators, and Complete Systems



Figure VP2

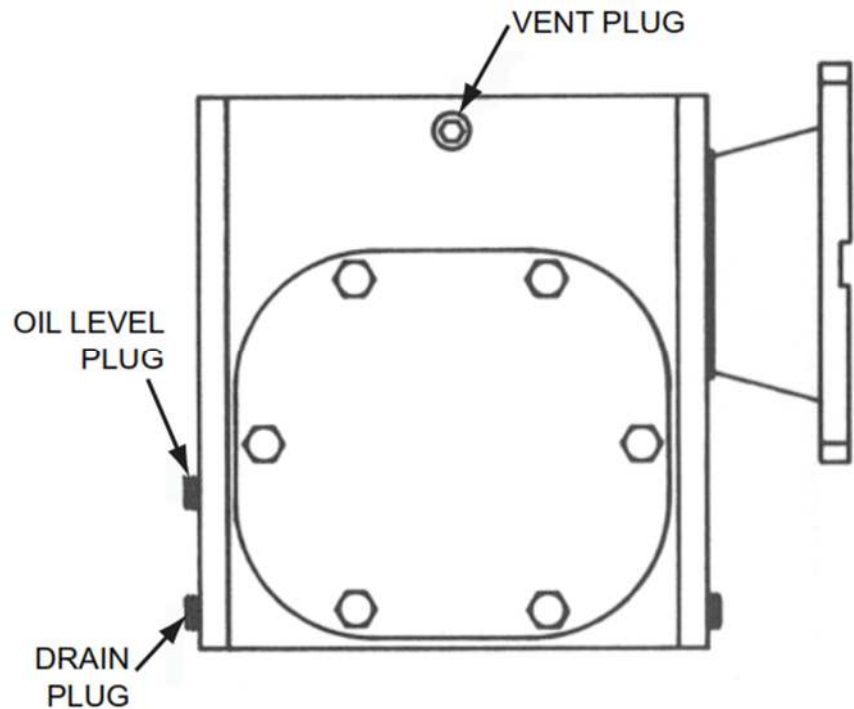


Figure VP1

Once the operator/gearbox is positioned correctly and installed, remove the 1/2" NPT steel pipe plug located nearest the top of the gearbox (Figure VP1) and replace it with the blue plastic vent plug (Figure VP2) provided with the operator. The plastic vent plug allows for pressure equalization for the oil reserve inside of the gearbox.

Maintenance:

The drive unit is pre-lubricated and shipped with Mobil "SHC 634" synthetic lubricant. This oil is a lifetime lubricant rated for operation in ambient temperatures ranging from -40°F to +125°F.

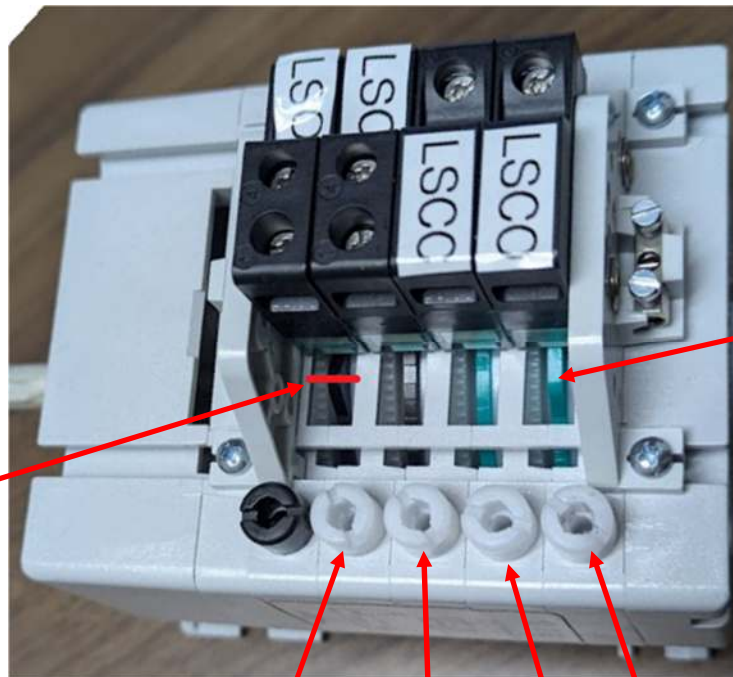
Every **6 Months** check the oil level by removing the oil level plug. The oil should be up to the bottom of the plug hole.



CROWN INDUSTRIAL OPERATORS

Rotary Limit Switch Setup

Door Hardware, Operators, and Complete Systems



Black Colored, Short Cam of an Open or Close Limit

Teal Colored, Long Cam of a Creep Limit

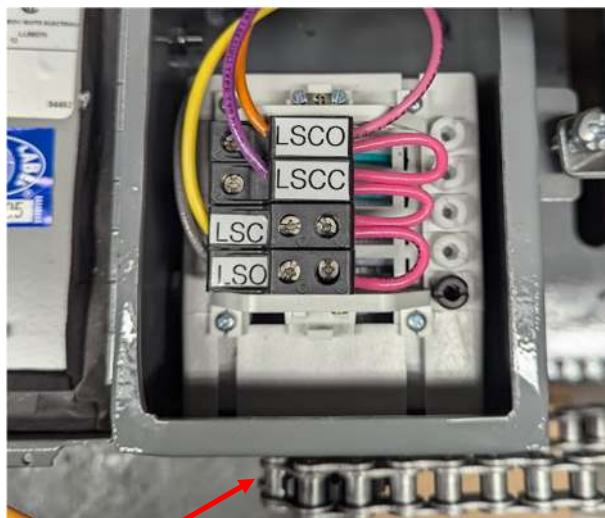
Adjusting Screw for LSO Limit Switch

Adjusting Screw for LSCO Limit Switch

Adjusting Screw for LSC Limit Switch

Adjusting Screw for LSCC Limit Switch

Figure LS1



Limit switch shaft with limit switch sprocket

Figure LS2



CROWN INDUSTRIAL OPERATORS

Rotary Limit Switch Setup

Door Hardware, Operators, and Complete Systems

Purpose:

To set the full Open (LSO), Close (LSC), Creep Open (LSCO) and Creep Close (LSCC) limits of your operator.

- Limit Switch Open (LSO): defines where your door will stop in the full open position.
- Limit Switch Close (LSC): defines where your door will stop in the full closed position.
- Limit Switch Creep Open (LSCO): This limit activates the creep mode during the end of the open cycle. When the limit switch is actuated the door travels in the opening direction at a reduced speed set by the Creep Potentiometer in the Control Box.
- Limit Switch Creep Open (LSCC): This limit activates the creep mode during the end of the close cycle. When the limit switch is actuated the door travels in the closing direction at a reduced speed set by the **Creep Potentiometer in the Control Box**.

Description:

The rotary limit switch is designed to accurately control the end limits of the door travel provided by the electric operator as well as the activation point and duration of the creep mode. The limit switch input shaft drives a set of planetary gears which in turn drives a set of nylon cams (See Figure LS1). Each precision limit switch unit is actuated by its individual nylon cam. The cam rotate as the operator travels the door back and forth. The cam contacts the electrical snap switches to either stop the travel of the operator or initiate the creep modes. The limit switch typically has 4 switches.

To adjust each individual limit switch, turn the screw adjustment for each specific limit switch. Note that depending upon the handing of the operator the cams travel from either the clockwise or counterclockwise direction to activate the appropriate snap switches.

Limit Switch Adjustment	Limit Switch Adjusting Screw Rotation Direction			
Limit Switch Sprocket Rotation Direction	LSO (Limit Switch Open)	LSC (Limit Switch Close)	LSCO (Limit Switch Creep Open)	LSCC (Limit Switch Creep Close)
Rotates <u>Counter Clockwise</u> to Open	<u>Counter Clockwise</u> to Open More	Clockwise to Close More	Clockwise to Creep Open Longer	<u>Counter Clockwise</u> to Creep Close Longer
Rotates <u>Clockwise</u> to Open	Clockwise to Open More	<u>Counter Clockwise</u> to Close More	<u>Counter Clockwise</u> to Creep Open Longer	Clockwise to Creep Close Longer

Table LS T1



CROWN INDUSTRIAL OPERATORS

Rotary Limit Switch Setup

Door Hardware, Operators, and Complete Systems

Preliminary Rotary Limit Switch Adjustment:

1. PREPARATION FOR ADJUSTMENT:

- a. Disconnect the Electrical Power Supply to the Operator Control Box.
- b. Unscrew limit switch cover and expose assembly.

2. ROUGH ADJUSTMENT:

- a. Manually Slide or Swing the door in the open direction and note the direction the Limit Switch Sprocket is rotating. Is it turning clockwise or counterclockwise? Reference **Table LS T1**.
- b. Manually Slide or Swing the door to approximately 6" from the full open position.
- c. Adjust the LSO cam adjuster until the cam contacts the electrical snap switch from the same direction and you hear it click.
- d. Manually Slide or Swing the door towards the closed direction and back towards the open direction. The snap switch should click when the door gets approx. 6" from the full open position.
- e. Position the door approx. 12" from the full open position.
- f. Turn the LSCO cam adjusting screw until the cam contacts the electrical snap switch from the same direction as the LSO switch and you hear it click. Note: This cam is longer and the operator shall only travel in closed creep mode while this cam is depressing the snap switch.
- g. Repeat Step (d). The LSCO the snap switch should click when the door gets approx. 12" from the full open position.
- h. Manually Slide or Swing the door to approximately 6" from the full closed position.
- i. Turn the LSC adjusting screw until the cam contacts the electrical snap switch from the opposite direction and you hear it click.
- j. Manually Slide or Swing the door towards the open direction and back towards the closed direction. The snap switch should click when the door gets approx. 6" from the full closed position.
- k. Position the door approx. 12" from the fully closed position.
- l. Turn the LSCO cam adjusting screw until the cam contacts the electrical snap switch from the same direction as the LSC switch and you hear it click. Note: This cam is longer and the operator shall only travel in open creep mode while the cam is depressing the snap switch.
- m. Repeat step (j) LSCO the snap switch should click when the door gets approx. 12" from the full open position.
- n. Move the door back and forth noting that the proper snap switches are being contacted from the proper direction at the proper time.

Final Rotary Limit Switch Adjustment:

After the Run Speed, Creep speed and ACCEL & DECEL trimpots have been adjusted, the final limit switch settings can be made. (Reference "DC Drive Controller and RUN/CREEP Speed Settings" section of this catalog, begins on sheet DC1)

- a. Actuate the operator controls and adjust the rotary limit switches (LSO & LSC) to stop the door in the full open and closed positions.
- b. Actuate the operator and adjust the rotary limit switches (LSCO & LSCC) to initiate the creep mode at the desired time. Keep in mind that the operator only travels in creep mode as long as the cam lobe is depressing the snap switch.
- c. After adjusting LSCO & LSCC check the travel of the door. LSC & LSO may need to be re-adjusted.
- d. Activate the operator to open and close the door several times and fine tune the limit switches.

Note: The length of time the operator is running in creep mode must be long enough to allow for it to dynamically brake from run speed to creep speed plus the desired length of time the operator is traveling under creep mode. If the DECEL time is set for too long, the creep mode may be adversely affected.



CROWN INDUSTRIAL OPERATORS

DC Drive Controller and RUN/CREEP Speed Settings

Door Hardware, Operators, and Complete Systems

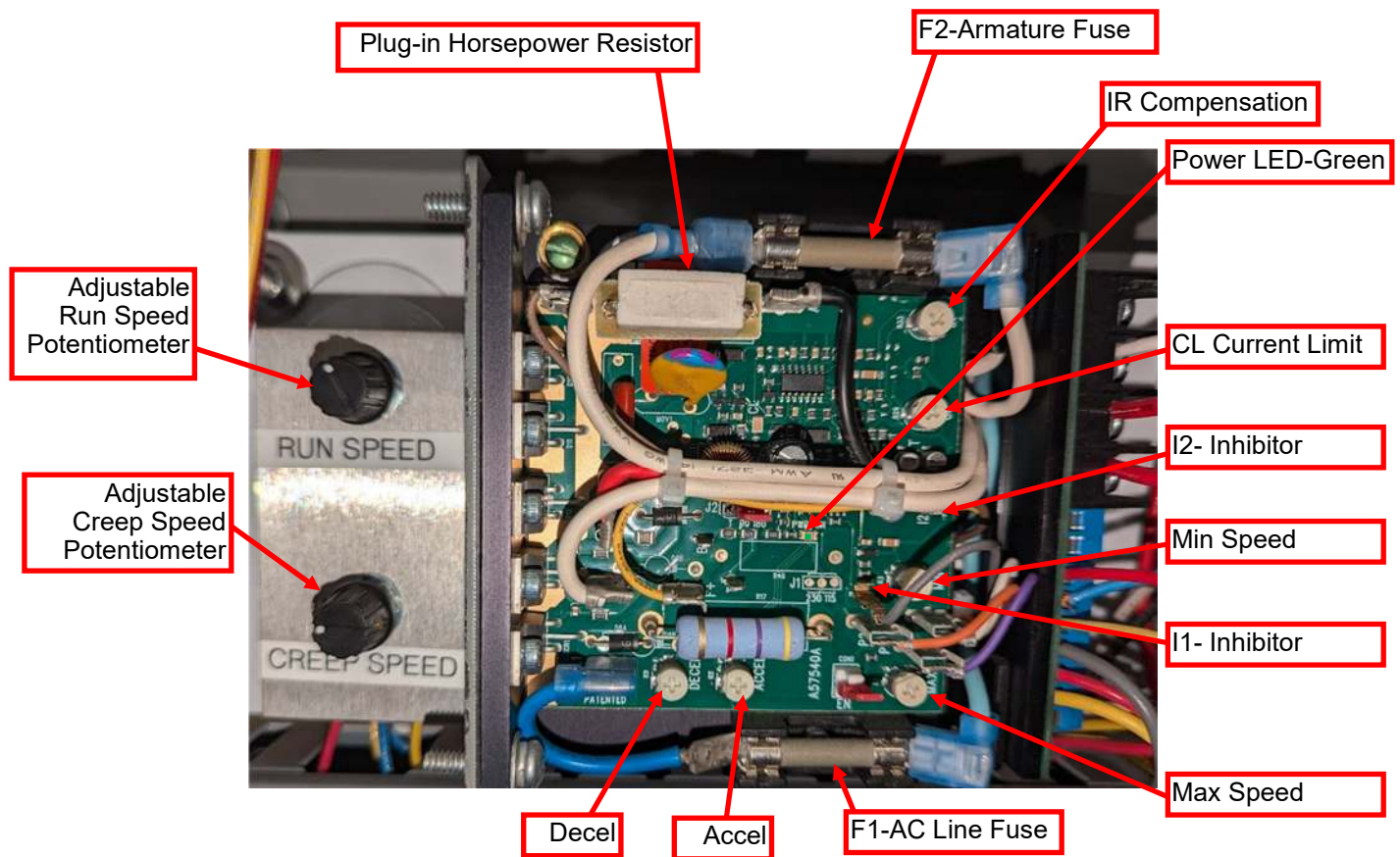


Figure CB1
DC Control Board with Speed Control Potentiometers

The DC Drive Control board and Speed Control Potentiometers for the Run and Creep speeds can be found in the operator control box (Reference Figure CB1). When power is provided to the unit, you will see Power LED-Green lit in the middle of the DC Drive Control Board.

A. Set Run and Creep Speeds of Operator Unit

The run speed is adjusted by turning the potentiometer labeled “RUN SPEED”. Turning this pot clockwise will increase the speed of the door.

- For doors up to 8'-0" wide a run speed of 45 ft/min or 9 in/sec is recommended.
- For doors over 8'-0" wide a run speed of 60 ft/min or 12 in/sec is recommended.

Creep Speed is activated by the LSCC (Limit Switch Creep Closed) or LSCO (Limit Switch Creep Open) limit switches. These limits are set near the end of the door travel to allow the door to slow down and come to a stop. For larger and heavier doors we suggest a longer creep set on the limit switch. (Reference “Rotary Limit Switch Setup” section of this catalog, begins on sheet LS1).

IMPORTANT: Once Run and Creep Speeds are adjusted, Make Final Rotary Limit Switch Adjustments (Reference “Rotary Limit Switch Setup” section of this catalog, begins on sheet LS1).



CROWN INDUSTRIAL OPERATORS

DC Drive Controller and RUN/CREEP Speed Settings

Door Hardware, Operators, and Complete Systems

B. DC Drive Controller Settings

1) Acceleration (ACCEL) / Deceleration (DECEL) Trimpots:

Both the ACCEL and DECEL trimpots should **NOT** need adjustment. Depending upon the size and weight of the specific door, it may be necessary to field adjust the ACCEL and DECEL trimpots to allow for the operator to smoothly ramp-up to full run speed and to smoothly ramp-down to creep speed.

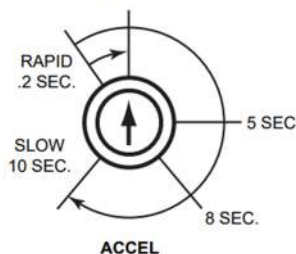
The ACCEL trimpot controls the ramp-up time when transitioning from Creep Speed to Full Run Speed. **Note: the minimum ACCEL setting should be 1 second.** Adjusting the ACCEL below 0.5 seconds increases the inrush current. The DECEL trimpot controls the amount of ramp-down time when transitioning from Full Run Speed to Creep Speed.

The following procedure, presented in order of adjustment sequence, should be used when re-adjusting all trimpot functions:

CAUTION!

[PM motors only]. Adjusting the accel time below .5 seconds increases inrush current. It may be necessary to measure the peak inrush current and consult with motor manufacturer since field magnet demagnetization may occur.

FACTORY SETTING 1 SEC.



FACTORY SETTING 1 SEC.

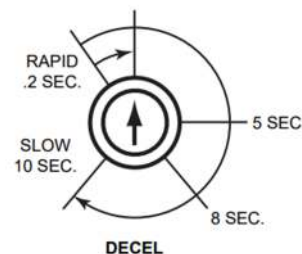


Figure CB2

ACCEL/DECEL TRIMPOT ADJUSTMENT

WARNING: DO NOT ATTEMPT TO ADJUST ANY OF THE FOLLOWING POTS ON THE DC CONTROL BOARD. THEY ARE FACTORY SET AND ADJUSTMENT COULD DAMAGE THE UNIT AND VOID THE WARRANTY. CONSULT THE FACTORY BEFORE MAKING ANY ADJUSTMENTS.

2) Minimum Speed: Adjustment (Min)

This trimpot sets the minimum run speed of the motor, when not on a creep limit. This trimpot should be set higher than zero to ensure the motor attempts to run when activated. **Note:** Adjusting the min speed will affect the max speed setting and therefore the Maximum Speed Trimpot should be further adjusted after a change has been made.

3) Maximum Speed: Adjustment (Max)

This trimpot sets the maximum run speed of the motor, when not on a creep limit. **Note:** Do not adjust the max speed above the voltage rating of the motor. This could be 90V DC or 180V DC depending on type of motor. Turn the adjustable RUN SPEED Potentiometer clockwise to it's maximum setting, then check voltage across terminals A1 & A2 and confirm voltage does not exceed the voltage rating of the motor.

4) Current Limit (CL)

This trimpot protects the motor and controller against overloads and demagnetization of PM motors. It also limits the inrush current to a safe level during startup. The CL is factory set to approximately 1.5 times the full load rating of the motor (65% of the full CW rotation).

5) IR Compensation Adjustment

This trimpot helps to improve load regulation. If the load presented to the motor does not vary substantially, the IR adjustment may be set at a minimum level (approx. 1/4 of a full setting). This is factory set and should not be adjusted.

6) Inhibit Terminals I1 & I2

By connecting terminals I1 & I2 together, this will electronically extinguish any output of the control.



CROWN INDUSTRIAL OPERATORS

DC Drive Controller and RUN/CREEP Speed Settings

Door Hardware, Operators, and Complete Systems

C. Troubleshooting DC Control Board

Symptom	Possible Cause	Corrective Action
Motor Does not Run		
	AC voltage not brought to L1, L2 Terminals	Check wiring and power disconnect
	Blown Line or Armature fuse.	Check F1 & F2 fuses for continuity and replace.
	Adjustable RUN SPEED and/or CREEP SPEED pots turned to 0.	Turn up pots Clockwise.
	Ensure limits are set correctly	Reference Rotary Limit Switch Setup section of this catalog, begins on sheet LS1
	Defective Motor	Check for defective or worn motor
Motor Hums or runs at very low speed (with RUN SPEED and CREEP SPEED pots turned CW to max) or motor slows down substantially when load is applied.		
	Low Voltage	Check Line Voltage
	Overload Condition: Control in current limit mode (CL)	CL Trimpot setting may need to be increased.
	Plug-In Horsepower Resistor not correct size.	Consult factory for proper resistor sizing.
Motor Runs in Wrong Direction		
	Armature (motor) Leads A1 & A2 reversed	Disconnect power and rewire armature (motor) leads



CROWN INDUSTRIAL OPERATORS

Door Hardware, Operators, and Complete Systems

3. MAINTENANCE FOR 1295 SLIDING GATE OPERATORS

A. GENERAL

To insure the operator is ready for operation at all times, it must be inspected systematically at least **EVERY 6 Months**. Proper adjustment and lubrication must be maintained and checked as recommended below.

B. PREVENTATIVE MAINTENANCE

1) Gearbox Lubrication:

The drive unit is pre-lubricated and shipped with Mobil "SHC 634" synthetic lubricant. This oil is a lifetime lubricant rated for operation in ambient temperatures ranging from -40°F to +125°F. Every **6 Months** check the oil level by removing the blue plastic oil level vent plug. The oil should be up to the bottom of the plug hole. Reference Vent Plug Installation, sheet VP1 section of this manual for any additional information.

2) Chain Lubrication:

Every 900 cycles, where one cycle consists of opening and closing of the door, or every **6 months**, whichever comes first, clean and lubricate the roller drive chain with a SAE lubricant as required for the ambient temperature.

3) Check Tension of Chain:

Overtime the drive roller chain may stretch and must be retightened. Move the gate until it is into the full open position. Go to the middle of the chain and confirm the chain sags approximately 1% of the total free run of chain. Take care to not overtighten roller chain. The slack of the chain can be taken out at either of the chain adjustment screws located at each end of the chain.

4) Check Electrical Components & Wiring:

Ensure all electrical components are and wiring for tightness. Check battery life on all battery operated components such as wireless safety devices.

5) Check Clutch:

Reference Clutch Adjustment on Sheet 5 Section E of the 1295 Manual to confirm the tightness. Confirm clutch does not slip under normal condition.

6) Check Sprockets & Sprocket Keys:

Check the wear on sprocket teeth. Ensure set screws are tight and secured in place using Blue Loctite. Check condition of keys of sprockets.

7) Check All Bolts & Nuts for Tightness



CROWN INDUSTRIAL OPERATORS

1295 PARTS

Door Hardware, Operators, and Complete Systems

4. PARTS

A. TO ORDER REPLACEMENT PARTS

Order all replacement parts using the number shown on the following parts list pages.

1) Identify Serial Number & Model Number

Located the serial number and confirm the model number as located on the identification plate on the motor unit.



Example of Identification Plate

Parts List - 1295 Operator, Gate Bracket and Chain Guide			
	ID #	Stock Part #	Description
Chain			
	1295P19	068240	Chain Adjusting Screw (2 per Operator)
		096845	#52 Roller Chain
		098312	#52 Connecting (Master Link)
	1295P376	1295P376	Chain Guide Bracket
Operator Mount			
		1295P375	Operator Mounting Column (Pad Mount) Assembly, HDG
	1295P67	068545	Embed Operator Support 10" S-Beam HDG
	1295P377	1295P377	Operator Column Support Assembly
Operator Motor Unit			
		1295IDLER	Idler Sprockets Replacement Kit
	1295P328	1295.00328	#52 Idler Sprocket Only
	1295P333	1295.00333	Idler Axle Only
	1295P327	1295.00327	#52 Drive Sprocket Only
	1295P195	068595	Operator Cover Assembly
		1295-GB	1295 Gear Box (HP Dependent)
		1265Motor	DC Motor (HP & Input Voltage Dependent)
	1295P101	0961XX	Solenoid Drum Brake (Input Voltage Dependent)
		09614XC	Replacement Solenoid Brake Coil only (Input Voltage Dependent)
	1295P332	415B12x5/16	12 Tooth Limit Switch Timing Sprocket, Ptd
		SRLS-xxxx	Limit Switch (Opening Size Dependant)
	1295P331	1295.00331	25 Tooth Timing Sprocket, Ptd.
Clutch Components			
		1295Clutch	Clutch Assembly w. Sliding Clutch
	1295P92		Driver Disc (HP Dependent)
	1265P6	067020	Clutch Disc (2 Per Operator)
	1265P7	067030	Outer Clutch Plate, Ptd.
	1265P20	067090	(4 ea) Clutch Spring w. 3/8-24 x 1-3/4 Hex Bolt (Fine Thread)
	1295P38	068370	Release Arm Clip, Ptd.
	1295P41	068391	Sliding Clutch, Ptd.
	1295P42	068400	Release Spring
	1295P51	1295.00324	Shaft Extension
	1295P52	068450	Release Arm Weldment
	1295P53	068459	Clutch Drum
	1250P138	065290	Clutch Drum Bushing
	925P122	056680	1295 Spacer, Zinc



CROWN INDUSTRIAL OPERATORS

1295 PARTS

Door Hardware, Operators, and Complete Systems

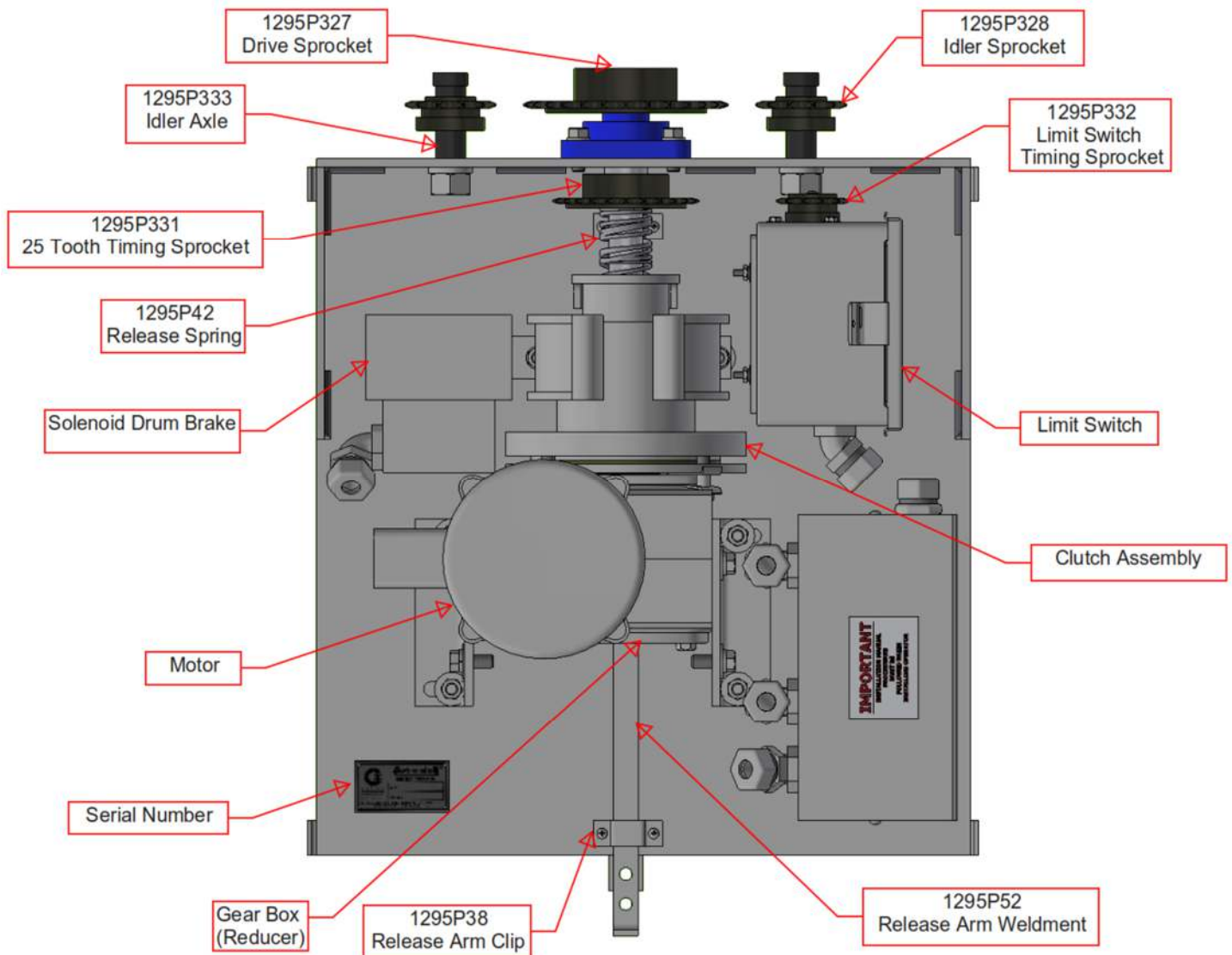


Figure PL2.1 Illustration of Parts: Plan View of 1295 Operator



CROWN INDUSTRIAL OPERATORS

1295 PARTS

Door Hardware, Operators, and Complete Systems

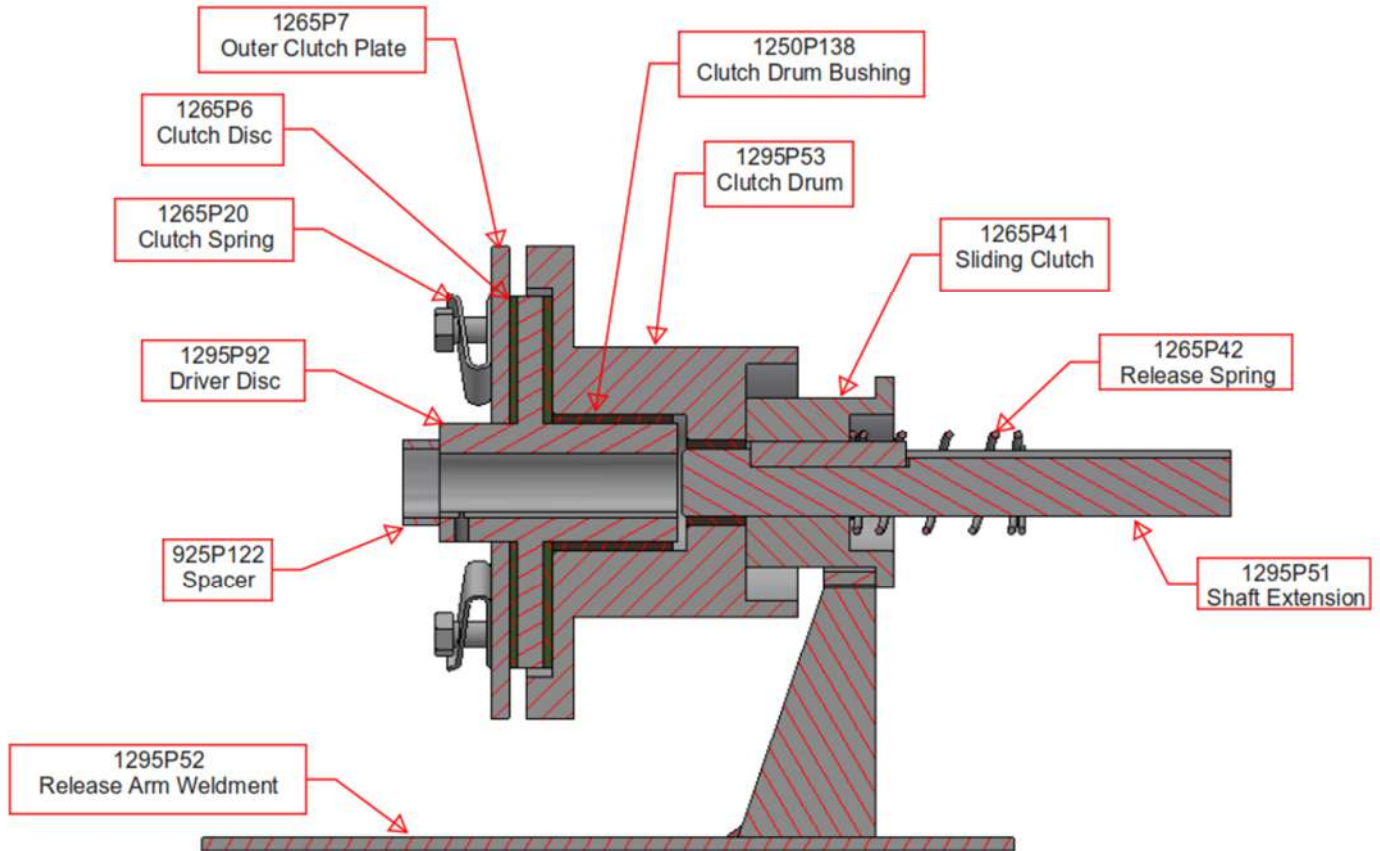


Figure PL2.2 Illustration of Parts: Sectional Detail View of Clutch Assembly



Figure PL2.3 Illustration of Parts: Chain Adjusting Screw Detail