

# Instruction Manual for the

# *Estate* SLIDIE



## Warning!

**READ ALL INSTRUCTIONS COMPLETELY** before installation and operation - failure to do so may result in serious injury or death!

**DANGER: HIGH VOLTAGE!**

Physical contact with gate operator circuitry can cause electrocution resulting in serious injury or death! All power must be disconnected before opening unit!

This gate operator is capable of producing a high level of force. Stay clear of the unit while it is operating and exercise caution at all times.

**FAAC** USA

An ISO 9001 Certified Company

## Estate Slide Summary of Functions

The Estate Slide is only to be used for vehicular slide gates in a Class I setting.

**Class I:** A vehicular gate opener (or system) intended for use in a home of one-to-four single family dwelling, or a garage or parking area associated therewith.

The FAAC Estate Slide automated system was designed and built for controlling vehicle access. Do not use for any other purpose.

The Estate Slide automated system automates residential slide-leaf gates with leaves of up to 40' in length, weighing up to 1500 lbs. and with a max opening of 30'.

The Estate Slide Gate Operator uses **GentleSlide™ Motion Management** to slide gates with a pulling force of up to 35 lb (16 kg). It comes as a package containing the drive unit and factory-wired electronic control panel inside the top cover of the unit. All external reversing devices and other accessories must be ordered separately. The advanced design of the operator features a small, self-contained unit composed of an electric motor with a built-in clutch and a reduction gear box, both housed in a die-cast aluminum casing. The chain is driven by the motor to slide the gate.

### *For Your Assistance*

**Keep this manual safely stored after installation.**

**Serial Number** \_\_\_\_\_

**Date of Purchase** \_\_\_\_\_

**Place of Purchase** \_\_\_\_\_

**Have this information on hand while handling all service and warranty issues.**

The table of contents are listed to assist you locating a desired section. We do however strongly suggest studying every page of the instruction manual before attempting installation.

## **Table of Contents**

	<b>PAGE(S):</b>
• Specifications of the Estate Slide	1
• System Overview & Safety Guidelines	2-4
• Unpacking Your Opener	5
• Estate Slide Parts List	6
• Manual Release Procedure	7
• Installation: Creating Mounting Slab	8
• Installation: Mounting the Operator	9
• Control Board Overview	10
• Terminal Connections	11
• Connecting Electrical Power	12
• Setting Dip Switches	13
• Logic Charts	14
• Setting Gate Motion Limits	15-16
• Testing Gate Motion Limits	17
• Adjusting the Clutch Torque	18
• Maintenance	19
• Troubleshooting	20
• Installing the FAAC Receiver and Transmitter	21
• Accessories Overview	22-24

**Specifications**

<b>MODEL</b>	<b>Estate Slide</b>
<b>Power voltage required</b>	A standard 220VAC, 60 Hz
<b>Built-in Control Panel</b>	746 MPS, 220 VAC
<b>Absorbed Power</b>	300 Watts
<b>Amperage Draw</b>	1.5 amps
<b>Horsepower Rating</b>	1/2 hp
<b>Speed of Motor Rotation</b>	1680 rpm
<b>Gear Ratio</b>	30:1
<b>Operating Temperature Range</b>	-13 to 158 deg F (-25 to +70 deg C)
<b>Thermal Cut Out of Motor</b>	248 deg F (120 deg C)
<b>Weight, including oil</b>	31 lbs
<b>Oil Quantity</b>	2.2 qt (2.1 liters)
<b>Oil Type</b>	FAAC XD 220 or Shell/Tellus #15
<b>Gate Speed</b>	10 in./sec.
<b>Maximum Motor Run Time*</b>	120 Seconds
<b>Pulling Force**</b>	35 lbs
<b>Duty Cycles/Hour</b>	50% at 72 deg F
<b>Maximum Amperage Draw for Accessories</b>	360 mA

\*If the motor completes its maximum run time, you will have to reset the control panel for normal operation.

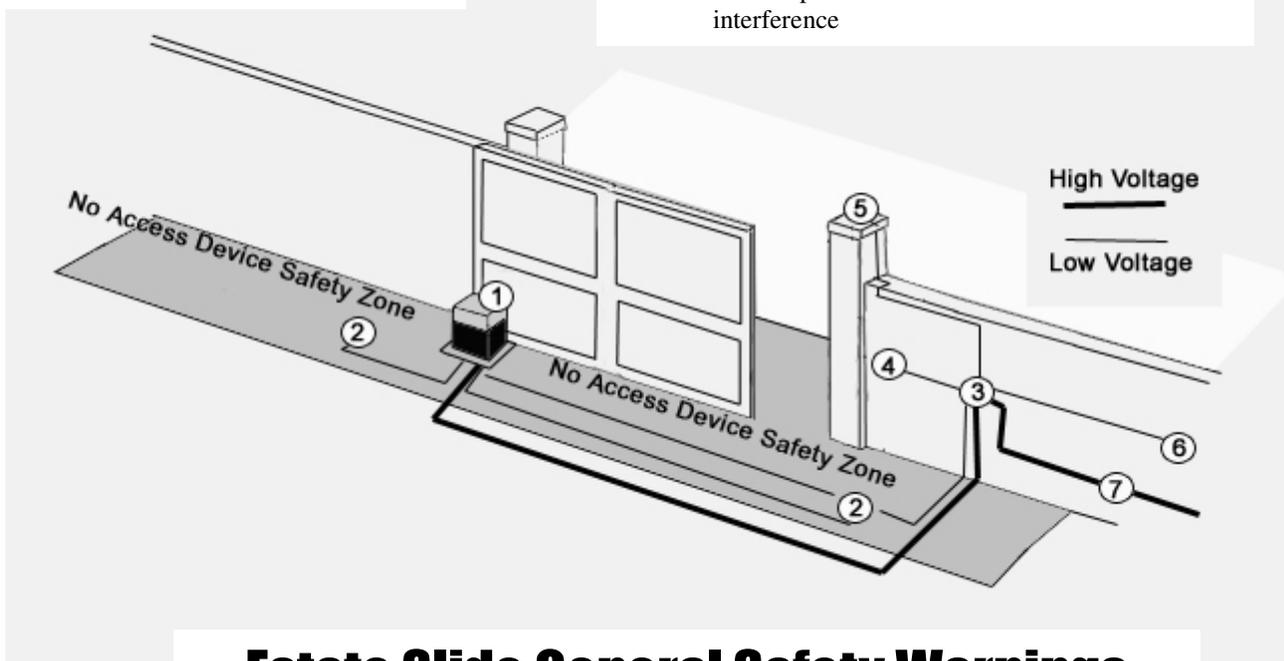
\*\*The maximum weight pulled at start up assumes nominal voltage (220 VAC) at 72 deg F (22 deg C) and assumes the use of high-quality, lubricated bearing rollers on a level track.

## Standard System Overview and Safety Zones

The system display to the right is a recommended standard system. Other approved accessories can be installed. Photo sensors and a flashing light indicating gate movement is recommended for safety purposes.

- 1 Estate Slide Operator
- 2 Photocells (not included)
- 3 Junction Box
- 4 Emergency Stop Button (not included)
- 5 Warning Lamp (not included)
- 6 3-Button Switch (not included)
- 7 Main Power Circuit Breaker

**Notes:** 1) Do not run any wires while they are live  
2) When laying electrical cables, use appropriate rigid and/or flexible tube  
3) Do not run any wires in the same conduit as 220 AC power. This will cause unwanted interference



## Estate Slide General Safety Warnings

### WARNING! To reduce the risk of injury or death

1. Never let children operate or play with gate controls. Keep the remote control away from children.
2. Always keep people and objects away from the gate.
3. **NO ONE SHOULD CROSS THE PATH OF THE MOVING GATE.**
4. Test the gate operator monthly. The gate **MUST** reverse on contact with a rigid object or stop when an object activates the non-contact sensors. After adjusting the force or the limit of travel, retest the gate operator. Failure to adjust and retest the gate operator properly can increase the risk of injury or death. Use the emergency release only when the gate is not moving.
5. **KEEP GATES PROPERLY MAINTAINED.**
6. **Read the owner's manual COMPLETELY.**
7. Have a qualified service person make repairs to gate hardware.
8. The entrance is for vehicles only. Pedestrians must use separate entrance.
9. **SAVE THESE INSTRUCTIONS.**

## **Estate Slide Gate Design Safety Warnings**

1. A gate is a potential traffic hazard, so it is important that you locate the gate far enough away from the road to eliminate the potential of traffic getting backed up. This distance is affected by the size of the gate, how often it is used, and how fast the gate operates.
2. The operator you choose to install on your gate must be designed for the type and size of your gate and for the frequency with which you use the operator.
3. Your gate must be properly installed and must work freely in both directions before the automatic operator is installed.
4. An automatic operator should be installed on the inside of the property/fence line. Do not install the operator on the public side of the property/fence line.
5. Pedestrians should not use a vehicular gate system. Prevent such inappropriate use by installing separate gates for pedestrians.
6. Exposed, reachable pinch points on a gate are potentially hazardous and must be eliminated or guarded.
7. The operating controls for an automatic gate must be secured to prevent the unauthorized use of those controls.
8. The controls for an automatic gate should be located far enough from the gate so that a user cannot accidentally touch the gate when operating the controls.
9. An automatic gate operator should not be installed on a gate if people can reach or extend their arms or legs through the gate. Such gates should be guarded or screened to prevent such access.

## **Estate Slide Installation Safety Warnings**

1. If you have any question about the safety of the gate operating system, do not install this operator. Consult the operator manufacturer. 81-920-8634
2. The condition of the gate structure itself directly affects the reliability and safety of the gate operator.
3. Only qualified personnel should install this equipment. Failure to meet this requirement could cause severe injury and/or death, for which the manufacturer cannot be held responsible.
4. The installer must provide a main power switch that meets all applicable safety regulations.
5. Clearly indicate on the gate with a minimum of 2 warning signs (visible from either side of the gate) that indicate the following:
  - The gate is automatic and could move at any time, posing a serious risk of entrapment.
  - Children should not be allowed to operate the gate or play in the gate area.
  - The gate should be operated only when it is visible to the operator and the when the area is free of people and obstructions.
6. It is extremely unsafe to compensate for a damaged gate by over tightening a clutch.
7. Devices such as reversing edges and photocells must be installed to provide better protection for personal property and pedestrians. Install reversing devices that are appropriate to the gate design and gate application.
8. Before applying electrical power, be sure that the voltage requirements of the equipment correspond to your supply voltage. Refer to the label on your operator system.

## **Estate Slide USER Safety Warnings**

1. READ AND FOLLOW ALL SAFETY WARNINGS including, but not limited to, Estate Slide General Safety Warnings, Estate Slide Gate Design Safety Warnings and Estate Slide Installation Safety Warnings.
2. READ AND FOLLOW ALL INSTRUCTIONS.
3. Share all safety instruction with all parties authorized to operate your gate opener.
4. Use this equipment only in the capacity for which it was designed. Any use other than that stated should be considered improper and therefore dangerous.
5. When using any electrical equipment, observe some fundamental rules:
  - Do not touch the equipment with damp or humid hands or feet.
  - Do not install or operate the equipment with bare feet.
  - Do not allow small children or incapable persons to use the equipment.
6. If a gate system component malfunctions, turn off the main power before making any attempt to repair it.
7. Do not attempt to impede the movement of the gate. You may injure yourself as a result.
8. This equipment may reach high temperatures during operation; therefore, use caution when touching the external housing of the operator.
9. Learn to use the manual release mechanism according to the procedures found in this installation manual.
10. Before carrying out any cleaning or maintenance operations, disconnect the equipment from the electrical supply.
11. To guarantee the efficiency of this equipment, the manufacturer recommends that qualified personnel periodically check and maintain the equipment.

## Unpacking the Operator

**Read Prior to Unpacking and Installing - Failure to do so may result in injury or damage to the operator.**

Before you remove the operator from the carton, check for any physical shipping damage, such as a torn shipping carton or leaking oil. Notify the carrier immediately if you note any damage at the time of delivery. Inspect the operator carefully after removing it from the carton. If any hidden damage exists, follow the shipping agent's damage claim procedure.

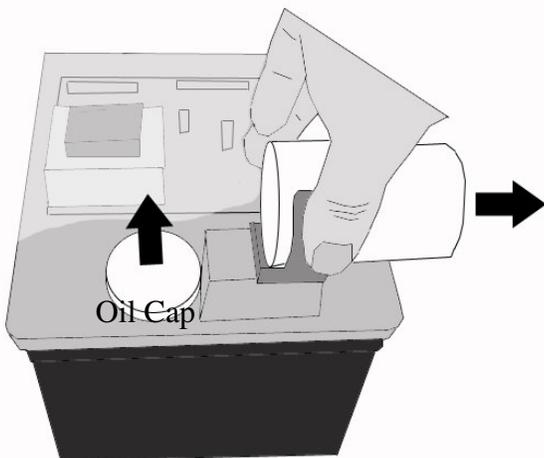
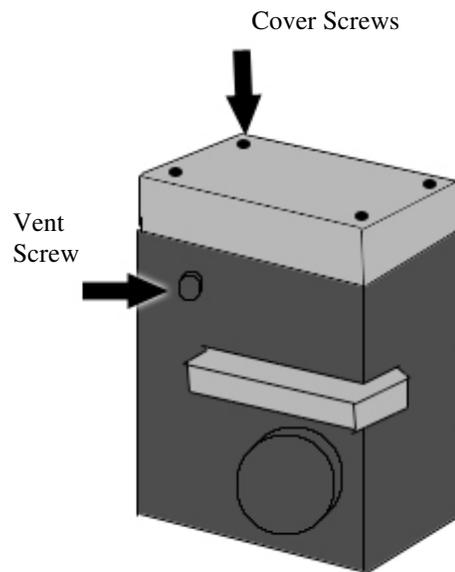
As you unpack the operator, insure that all parts are included. The package should contain all the items listed in the Parts List for your particular operator.

Remove the vent screw (If it is on your version of opener) from the operator before applying power. Be sure to save the vent screw for possible future use because the screw should be installed if you transport the operator.

**Caution: The vent screw *must* be removed before you start the operator. (If it is on your version of opener)**

Remove the top cover of the operator using a 3-mm Allen wrench or Philips head screwdriver (depending on version). Remove and discard the special Styrofoam block resting on the transformer in the center of the control panel.

Remove the oil plug with a 17-mm wrench and check for the proper oil level. The oil should be just slightly above the silver armature plate, located below the copper motor windings as viewed through the oil.



In order to gain access to the oil plug you must slide the capacitor out of the way. Then lift the Oil Cap to reveal the Oil Plug.

# Estate Slide Parts List



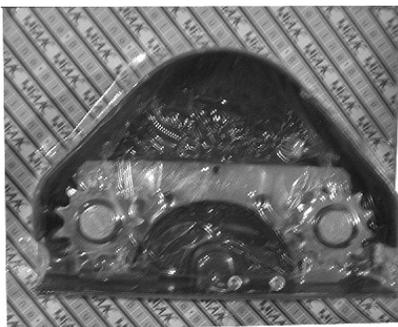
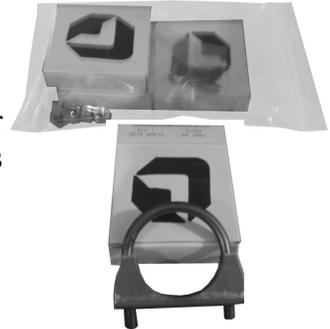
1. **1** E-SL 3000AC operator (equipped with chain drive mechanism); the cover is attached with 2 (of 4) 3-mm Allen-head bolts; mounting brackets are attached.

2. **1** E-SL 3000AC sprocket



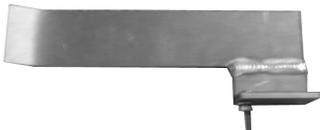
3. **1** Hardware package that contains the following:  
- 1 - 5 mm bolt with flat washer  
- 1 - Clutch adjusting tool  
- 4 - Rubber weather plugs for top cover hold down bolts  
- 1 - Top cover gasket  
- 2 - 3-mm Allen-head bolts or Philips head screws

4. **1** Chain mounting kit with the following:  
- 2 - Chain tension adjustment bolts, each with 3 nuts and 1 lockingwasher  
- 2 - Chain tension adjustment bolt mounting brackets with 4 clamps



5. **1** Idler assembly kit with the following:  
- 1 - Chain guard with 1 bolt and flat washer for mounting  
- 1 - Idler mounting bracket with 5 longer mounting bolts and 1 mounting stud for the chain guard  
- 2 - Idler sprockets with 2 snap rings for mounting  
- 2 - Rack limit switch plates with 4 mounting bolts and lock washers  
- 1 - Sprocket bolt

6. **2** Gate Mounting brackets



7. **2** Chain limit switch plates

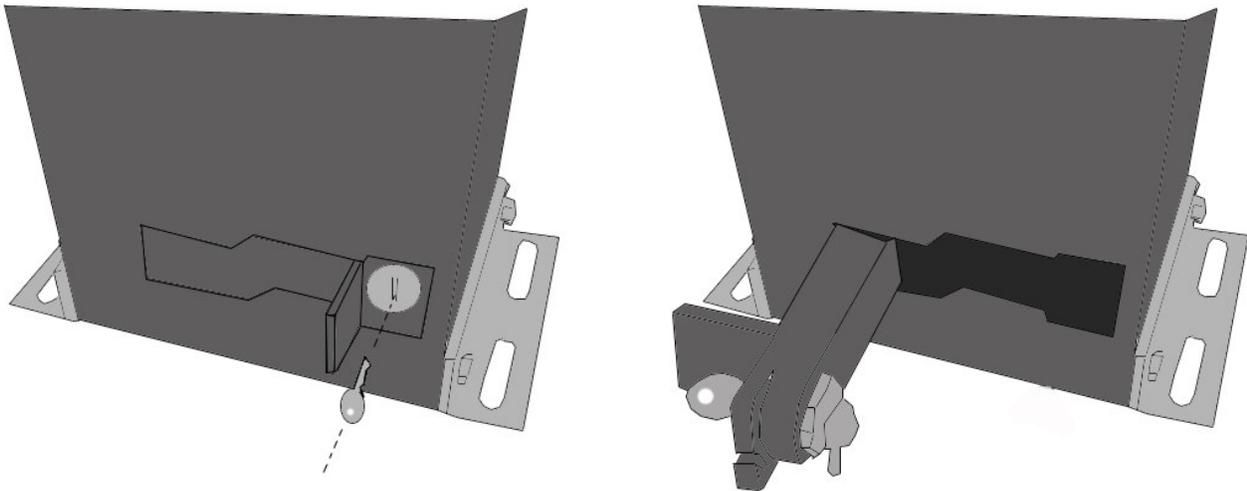
## Manual Release

**It is very important to learn how the manual release works before proceeding with the installation. It plays an important part in the installation process.**

The Manual Release mechanism is used during installation and when no electrical power is available.

To use the Manual Release mechanism, lift the lock cover and insert the key. Then rotate the key in the clockwise direction and pull the Manual Release lever out as shown as seen below. This disengages the operator motor from the chain sprocket. Now you have to move the gate by hand to open it or close it. Also, the gear reduction of the final drive is deactivated, so the gate will not lock in a closed position.

To re-engage the operator motor for normal operation, close the Manual Release lever, turn the key counterclockwise and remove it, and shut the lock cover. Push the gate leaf an inch or two in either direction to reengage the operator. You should feel the operator reengage.

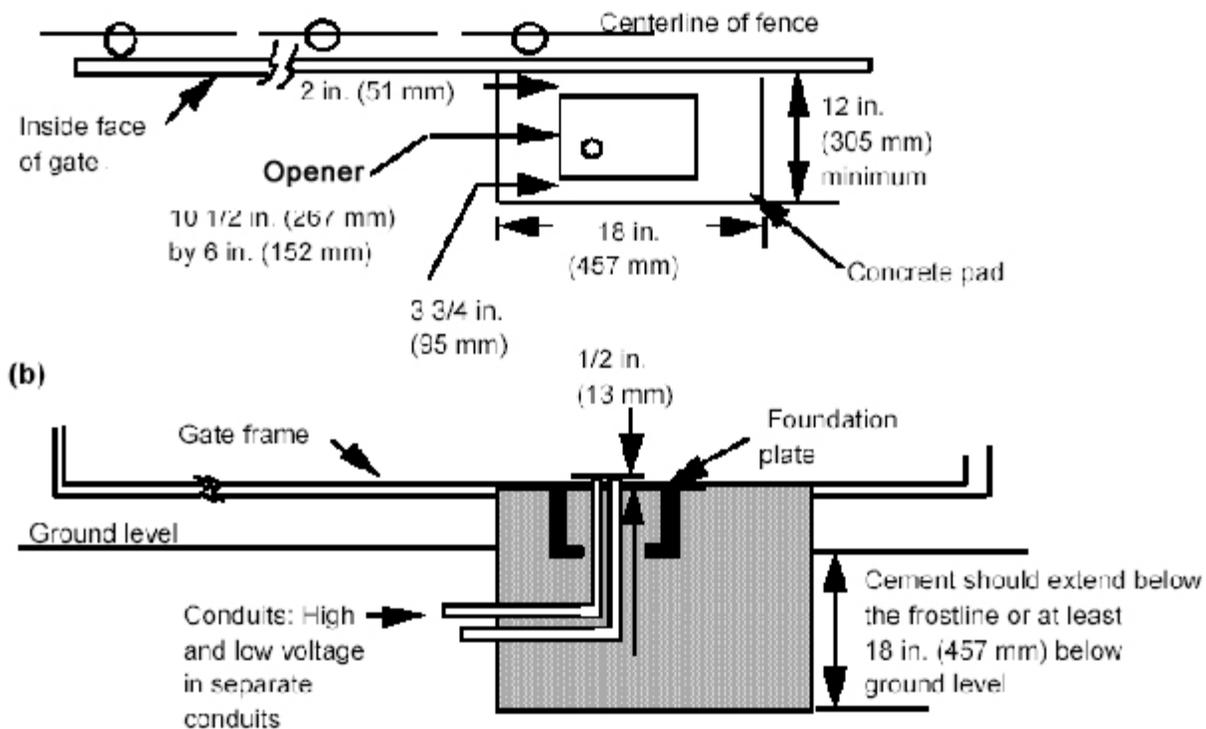


## Installation: Creating Mounting Slab

The first step to the installation of your Estate Slide Gate Opener is the installation of proper mounting slabs.

### Slab Characteristics:

- The top surface must be level with the **top** of the bottom frame member of the gate.
- The depth of the concrete slab should be at least 18 in. below ground level or just below the frost line, whichever is greater. (Your soil conditions will also determine the size of the concrete footing.)
- Locate the electrical conduits (one for high- and one for low-voltage lines) in the concrete forms so that they protrude from the top approximately 1/2 in. The conduits should be placed 6-1/4 in. from the right edge of the foundation plate (facing the operator and gate) and 4-1/2 in. from the inside edge to line up with the hole in the foundation plate.

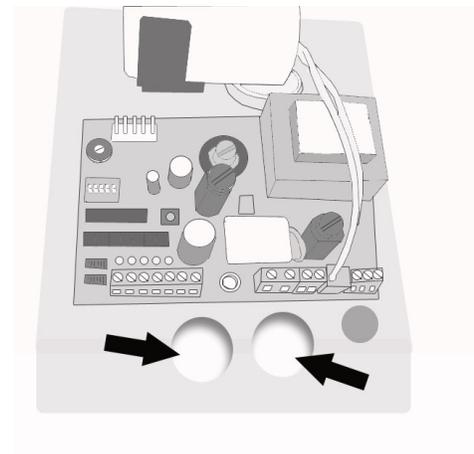
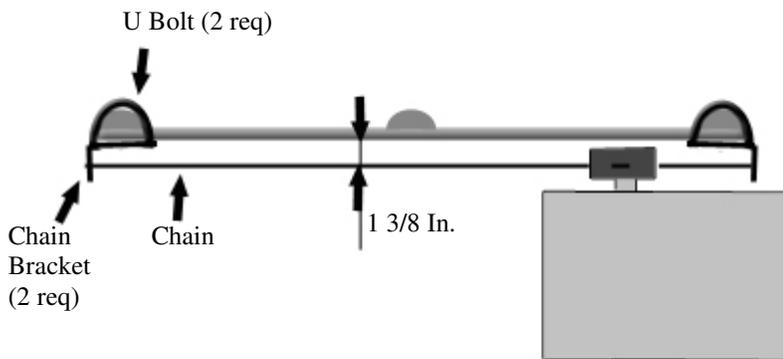


After the concrete is poured in the forms and before it has a chance to set, insert the foundation plate (if being used) into the cement and position it flush with the top of the concrete and aligned with the top of the lower gate frame. Allow the concrete to set for a **minimum of two days** prior to installing the operator.

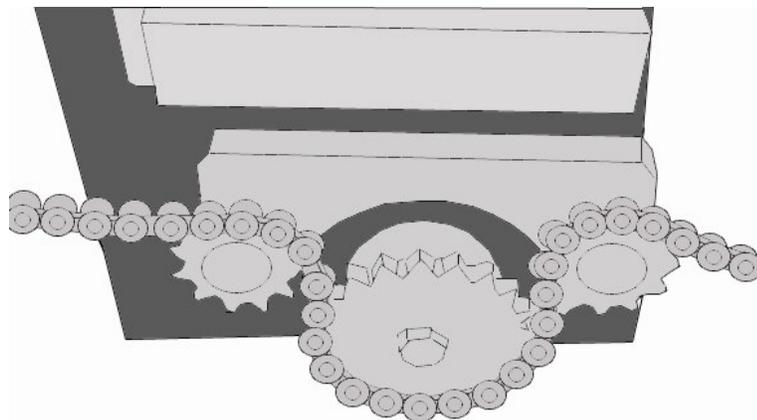
## Installation: Mounting the Operator

Place the operator on the foundation with the sprocket facing the gate and with approximately 1-3/8 in. between the inside edge of the gate frame and the center of the drive sprocket.

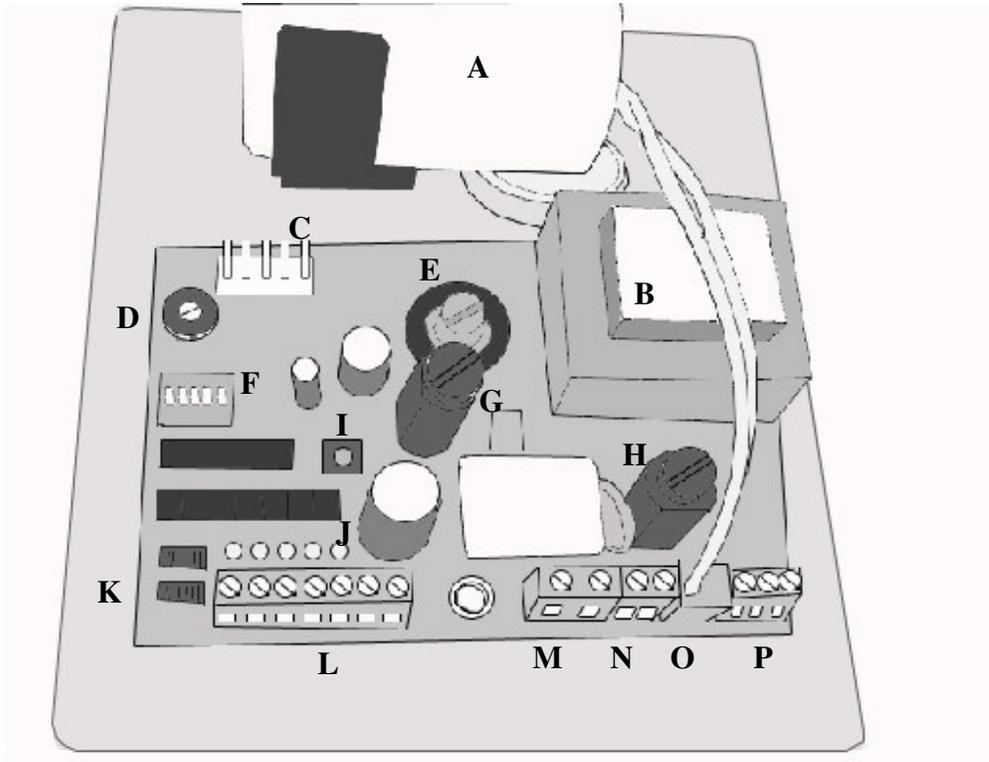
While placing the operator on the foundation plate, thread the electrical wiring through the operator using the pre-made holes near the terminals on the control board (fig A). Secure the gate chain brackets to the vertical front and back posts of the gate leaf using the U bolts provided. Set the height of the gate chain brackets so that the center of each idler sprocket (located on either side of the drive sprocket) is slightly higher than the center line of the brackets. This alignment will compensate for any sag in the chain.



Assemble the E-SL 3000AC Sprocket and Idler assembly kit using the provided screws and sprocket bolt found in the Idler assembly kit. Place the chain over the top of the idler sprockets and under the drive sprocket. Activate the Manual Release to maneuver the chains over the gears.

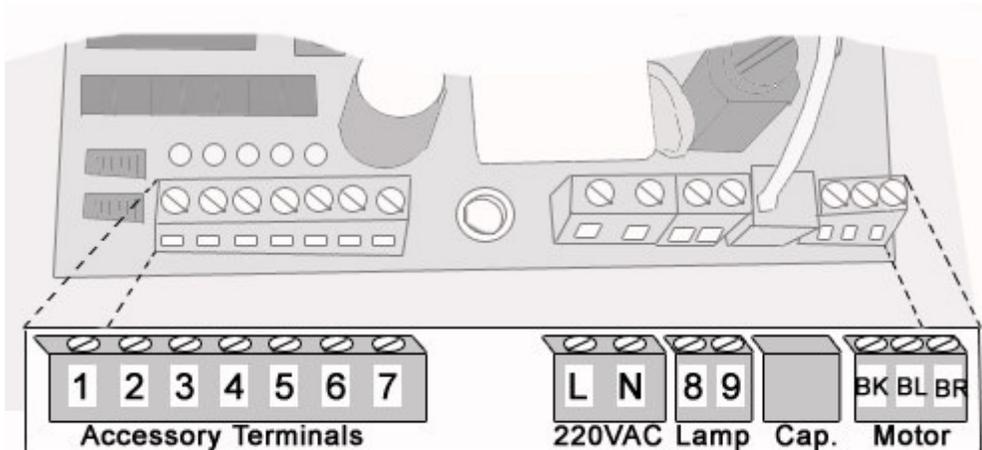


## Control Board Overview



- |  |  |
|--|--|
| <b>A. Capacitor</b>                      | <b>I. Reset Button</b>                   |
| <b>B. TF1, Transformer</b>               | <b>J. Status LED lights</b>              |
| <b>C. Quick Plug Receiver Connection</b> | <b>K. Limit Switch Connections</b>       |
| <b>D. TR1, Brake adjuster</b>            | <b>L. J2, Low voltage terminal strip</b> |
| <b>E. Clutch Adjustment</b>              | <b>M. J7, Main power</b>                 |
| <b>F. DIP Switches</b>                   | <b>N. J8, Lamp connection</b>            |
| <b>G. F2, 500 mA fuse</b>                | <b>O. J6, Capacitor connection</b>       |
| <b>H. F1, 5 A fuse</b>                   | <b>P. J5, Motor connection</b>           |

## Terminal Connections



**Terminal 1** - “Common” This is a common or negative terminal. It can be used in conjunction with all Normally open and Normally closed devices.

**Terminal 2** - “Normally Open” The N.O. terminal is used for all opening devices that operate the gate by closing a normally open connection.

**Terminal 3** - “Normally Closed - Stop Device” This is a normally closed terminal where by any device (i.e. push button) which, by opening a contact, halts gate movement. **IMPORTANT:** *If a connection is not made from this terminal to a common terminal (terminal 1 or 5) gate motion will not commence.*

**Terminal 4** - “Normally Closed - Reversing Device” This is a normally closed terminal where by any device (i.e. photocells, sensitive edge, magnetic loops) reverses gate direction upon obstructions. **IMPORTANT:** *If a connection is not made from this terminal to a common terminal (terminal 1 or 5) gate motion will not commence.*

**Terminal 5** - “Common” This is a common or negative terminal. It can be used in conjunction with all Normally open and Normally closed devices.

**Terminal 6** - “30 V DC output” For use with 30V DC products such as receivers, sensors, etc.

**Terminal 7** - “Pulsed Common” this is a common or negative terminal to be used in conjunction with flashing “gate motion” warning lights.

**Terminal L & N** - “220VAC Input” These terminals are for wiring in the wires coming from your 220VAC power source. **WARNING - Always turn power off before working with high voltage wires. There is no polarity in these terminals, AC by nature has alternating currents.**

**Terminal 8 & 9** - “220 VAC FAAC Lamp” For wiring in the suggested 220 VAC safety lamp.

**Terminals BK, BL, & BR** - “Motor connection terminals” BK indicates Black wire, BL indicates Blue wire, BR indicates Brown wire.

## Connecting Electrical Power

**The Estate Slide runs on 220V AC only. Adhere to your local regulations for running 220V AC. Always exercise great caution around high voltage.**

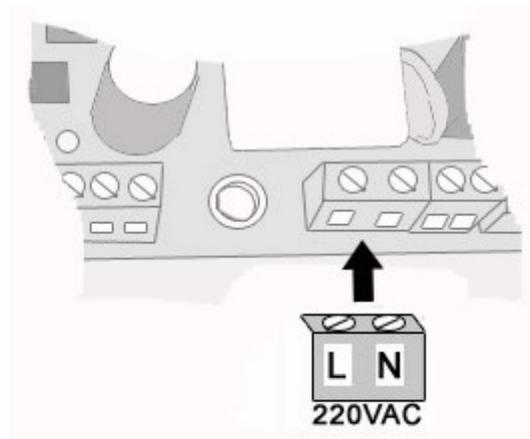
**WARNING!** Turn the main power off before you make any electrical connections or set any switches on the control panel. The installer is responsible for providing a power cable (with ground protected by a circuit breaker) from the main 220 VAC power source to the operator. All wiring should conform to applicable electrical codes, and all wiring and fittings should be weatherproof and/or suitable for burial.

Connecting the electrical power to the operator consists of connecting the 220-V power source to the terminals labeled L and N on terminal block J7.

**Do not turn on the main power yet.**

Before applying power to the system make all of your accessory and safety device.

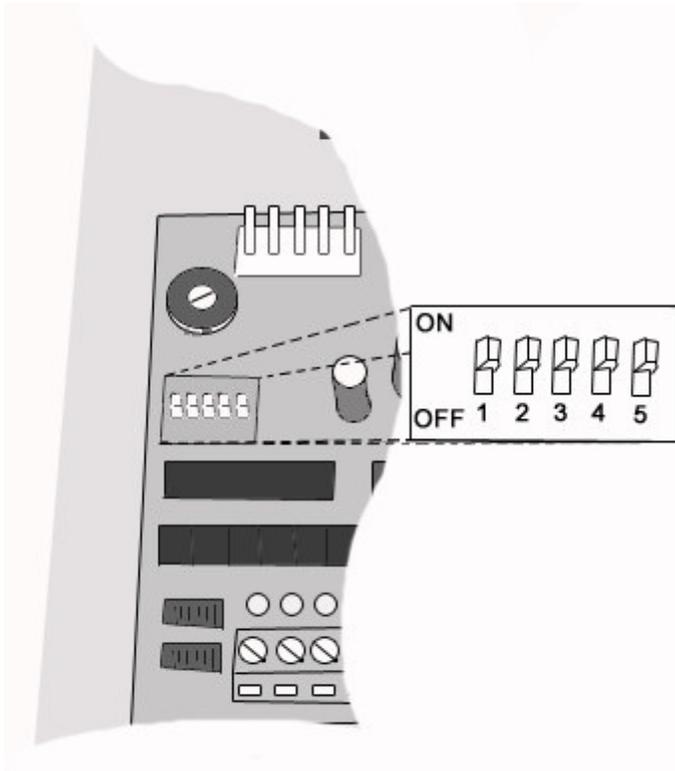
- Connect all reversing devices in series to terminals 4 and 1. To operate, they must be normally closed. If no reversing devices are installed, then you must install a jumper between terminals 4 and 1 for the operator to work properly.
- Connect all stop devices in series to terminals 1 and 3. To operate, they must be normally closed. If no stop device is installed, then you must install a jumper between terminals 1 and 3 for the operator to work properly.
- Connect all activating accessory devices in parallel to terminals 1 and 2. Each device must be normally open to activate the gate. An activating device momentarily closes the switch to activate the operator.



## Setting Dip Switches

**WARNING!** Turn the main power off before you make any electrical connections or set any DIP switches on the control panel.

You need to set five DIP switches prior to limit learning for the proper operation of your gate. After you set the switches be sure to turn on the power and then press the reset button on the control panel so that the settings you have made take effect.



**Note:** DIP switch 6 is not used on the Estate Slide control panel.

**Set DIP switches (See below charts):**

- 1 and 2 represent logic
- 3 and 4 represent pause time
- 5 represents warning light function

**Note:** Be sure to press the Reset button after you have made your DIP switch settings.

Logic Settings		
	Dip Switch	
Logic	1	2
E1	On	On
E2	On	Off
A1	Off	On
A2	Off	Off

Pause Time Settings		
	Dip Switch	
Pause Time	3	4
5 sec	On	On
10 sec	Off	On
30 sec	On	Off
120 sec	Off	Off

Settings for Warning Light Flashing	
	Dip Switch 5
5 sec Pre-flashing	On
Pre-Flash	On
No Pre-Flash	Off

Logic Charts are on the following page. Logics determine how your gate will function during various stages of motion. i.e. during opening, closing, at open pause, etc. **The logic will also control the auto close feature.**

# Logic Charts

**E Logics - E Logics work like a garage door. In these logics auto close is off—recommended if user is not using safety devices**

**A Logics - A Logics utilize the auto close feature. It is recommended the user has safety devices installed.**

## Logic E1

Gate Status	Signal from Terminal		
	1 - N/O	2 - N/C Stop	3 - N/C Reverse
Closed	Opens	No effect	No effect
Opening	Stops	Stops	No effect
Opened	Closes	No effect	No effect
Closing	Reverses	Stops	Reverses
Stopped	Closes.	No effect	No effect

## Logic E2

Gate Status	Signal from Terminal		
	1 - N/O	2 - N/C Stop	3 - N/C Reverse
Closed	Opens	No effect	No effect
Opening	Stops	Stops	No effect
Opened	Closes	No effect	No effect
Closing	Reverses	Stops	Stops. Reverses when reversing device no longer triggered.
Stopped	Closes.	No effect	No effect

## Logic A1

Gate Status	Signal from Terminal		
	1 - N/O	2 - N/C Stop	3 - N/C Reverse
Closed	Opens and then closes after pause time	No effect	No effect
Opening	No effect	Stops	No effect
Opened	Closes after 5 sec pause	Pause count is disabled	Pause count is interrupted until reversing device is no longer triggered
Closing	Reverses	Stops	Reverses
Stopped	Closes. Opens if reversing device is triggered.	No effect	No effect

## Logic A2

Gate Status	Signal from Terminal		
	1 - N/O	2 - N/C Stop	3 - N/C Reverse
Closed	Opens and then closes after pause time	No effect	No effect
Opening	No effect	Stops	No effect
Opened	Closes after 5 sec pause	Pause count is disabled	Pause count is canceled. Closes 5 sec after reversing device is no longer triggered.
Closing	Reverses	Stops	Stops. Opens when reversing device is no longer triggered.
Stopped	Closes. Opens if reversing device is triggered.	No effect	No effect



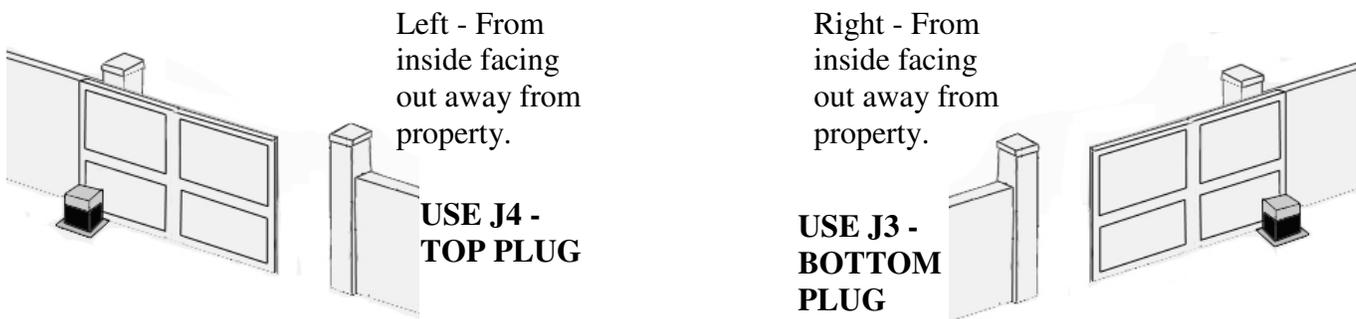
Indicates change.

## Setting Gate Motion Limits

**WARNING!** Turn the main power off before you make any electrical connections or set any switches on the control panel.

### Preparing the Limit Plates

The maximum travel of the gate when it opens and closes is controlled by inductive limit switches. Depending on which side of the driveway you have your operator mounted on, you will choose one of the two limit switch connections. These limit switches are controlled by the wiring of blocks J3 and J4 on the control panel.

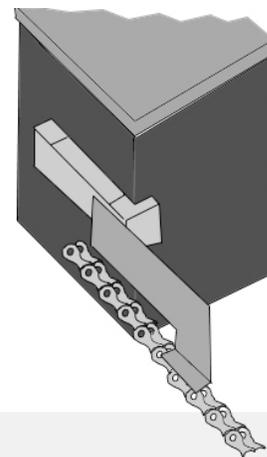


Be sure the cable is well seated in its receptacle.

The pair of limit switch plates furnished with the operator activate the limit switch. They are fixed to each end of the chain on the gate leaf. This is done by inserting the small bolts through the chain and securing them with the provided washer and nut.

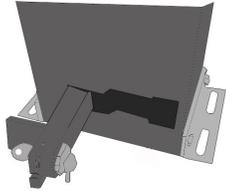
The distance between the plates and the limit switch located on the gate side of the Estate Slide should be  $\frac{3}{16}$  in. This means when the chain brings the limit plate next to the operator, there should be  $\frac{3}{16}$  inches between the plate and limit switch on the side of the operator.

The limit switch plates should be positioned on chain to enter the magnetic field of the limit switch when the gate is still about 2 in. from the fully opened or fully closed position. The 2-in. distance prevents abrupt braking and avoids over stressing the entire gate mechanism.

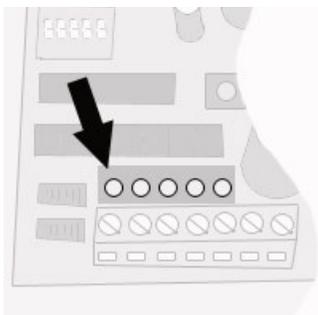
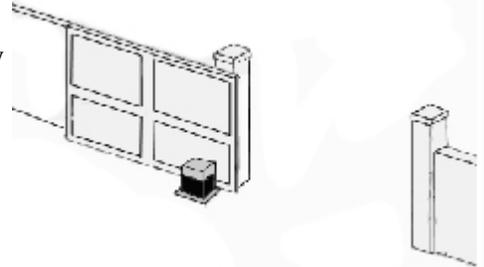


# Setting Gate Motion Limits

## Setting The Limit Points

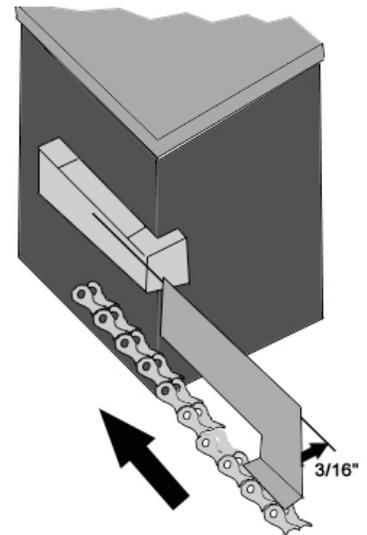


1. Disengage the operator's motor with the Manual Release and then fully open the gate by hand.



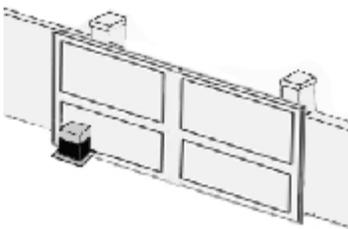
2. Remove the cover from the operator so that you can see the status light-emitting diodes (LEDs) on the control panel.

3. Between the gate leaf and the operator, hold one plate in your hand just above the chain on the driveway end of the gate leaf and within  $\frac{3}{16}$  in. of the limit switch. Move the limit switch plate in your hand in the direction of gate's opening travel.



4. Watch the status LEDs. The point where the **FCA LED** on the control panel goes out is the triggering point of the limit switch. **You need to continue moving the limit switch plate 1-3/4 in. farther in the gate's opening direction in order to allow for braking distance.**

5. Bolt the limit switch plate in this position to test the mounting.

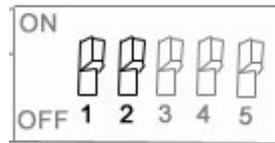
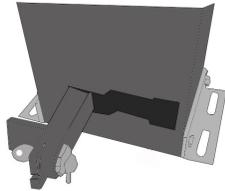


6. Move your gate to the full closed position.

7. Repeat this same procedure for the limit switch for the gate's closing travel using the other end of the gate leaf. Put the gate in the closed position and use the **FCC LED** as the trigger indicator. Note that each limit switch plate must be located 1-3/4 in. in advance of the limit switch trigger point to allow for smooth braking.

## Testing the Gate Motion Limits

**Preliminary Step:** To check whether the limit switches are correctly positioned, disengage the motor with the Manual Release lever and select the E operating mode by setting both DIP switches 1 and 2 to *on*.



To test the mountings of the limit switch plates, turn on the power and generate an input signal. The motor will turn in the opening direction but the gate will not move because the motor is disengaged.

Move the gate by hand in the opening direction and listen to the motor as the limit switch plate moves by the limit switch. The motor should turn off when the gate is 2 in. from the fully opened position.

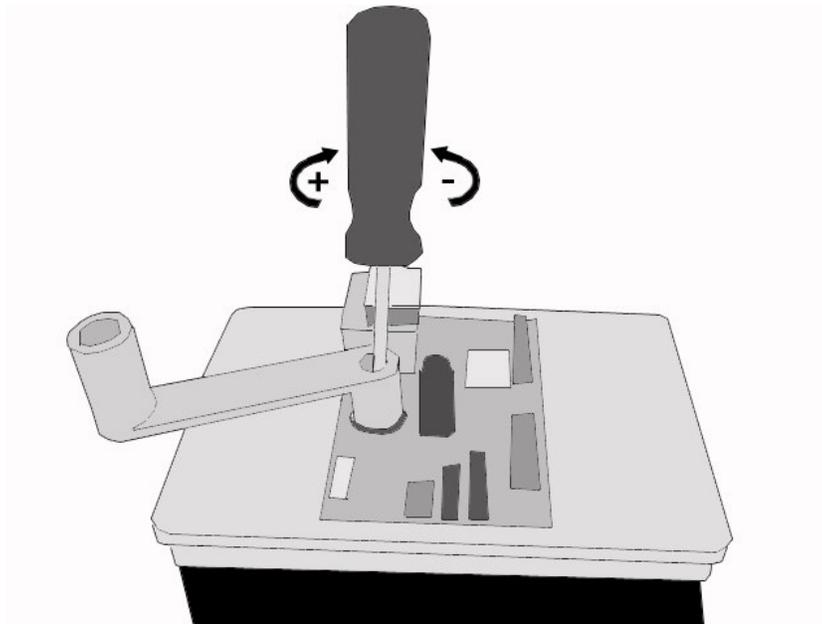
**Note:** If the motor completes its maximum motor run time before you test a limit switch, you will have to reset the control panel. To reset, either press the Reset button on the control panel, or cycle the main power off and then on. The operator will then run normally.

## Adjusting the Clutch Torque

**Torque determines how much force the gate operator will exert. This is a very important issue to consider from both a safety standpoint as well as a performance standpoint.**

A torque adjustment is incorporated in the Estate Slide Operator. FAAC recommends that the gate should stop when it meets with a force of approximately 33 lbs. or less to adjust the torque pressure:

1. Turn off the main power.
2. Hold the drive shaft (with the clutch adjustment tool or with a 13-mm open-end wrench)
3. Using a flat-blade screwdriver, turn the clutch adjustment screw clockwise to increase the torque and counterclockwise to lessen the torque. Increased torque means more force is required to stop the gate.



Adjust the clutch so the minimum amount of force is used to properly open the gate.

**Caution: Do not over tighten the clutch adjustment screw or you may damage the clutch pin.**

# Maintenance

Three things need periodic checking on your Estate Slide Operator:

- Oil level
- Clutch adjustment
- Reversing devices

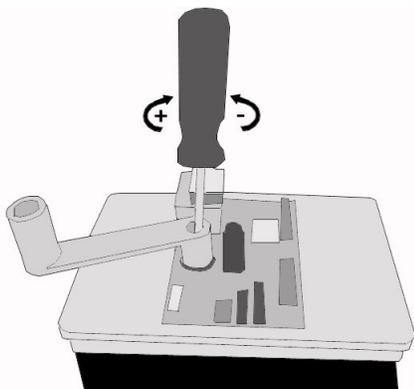
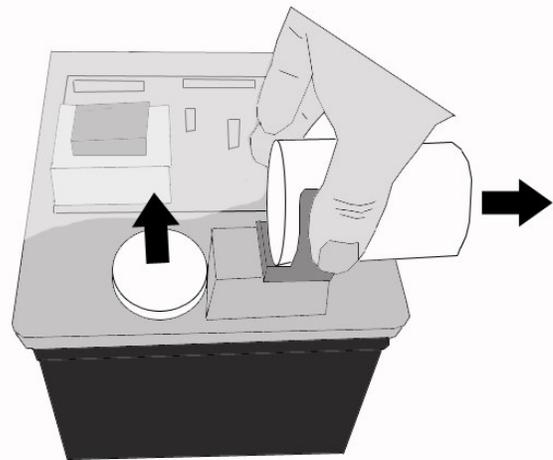
Follow the directions below to check each of these.

## Oil Level

You can visually check the oil in your Estate Slide operator by removing the oil plug. Unscrew the plug so that you can see inside the operator. The oil should cover the copper coil of the motor inside. If necessary, add oil. Check the oil level in your operator according to the following schedule:

Light duty use: Check once every 2 years

Heavy duty use: Check once every year



## Clutch Adjustment

Every six months you should check the clutch adjustment on your operator. Make sure the gate stops if it encounters a force of about 33 lb (15 kg) or less. Adjust the clutch if necessary.

**DO NOT use your body to test force or obstruction sensing/reversing.**

## Reversing Devices

Every six months you should check that each reversing device installed on your gate system functions properly. Repair or replace any device that does not properly work. **DO NOT use your body to test force or obstruction sensing/reversing.**

## Troubleshooting

**WARNING!** Turn the main power off before you make any electrical connections or set any switches inside the operator.

If you have a problem installing the operator, check the problems and solutions listed below.

**Problem: The operator does not respond to the activating signal.**

**Solutions:**

Make sure the main power switch is on.

Make sure the Open LED is not steadily illuminated. If it is, remove all wires from terminal 2 to see if that turns off the Open LED. If the Open LED goes off when you unwire terminal 2, check your activating devices.

Check the control panel terminal strip for possible broken or disconnected wires.

If a radio signal is being used to activate the operator, be sure the code sets on both the transmitter and receiver are the same.

Momentarily short across terminals 1 and 2 on the control panel. If this activates the operator and if the Open LED illuminates, a problem probably exists in the activating device itself.

**Problem: The gate is closed and does not open.**

**Solutions:**

Make sure the clutch adjustment is not too weak. Increase the torque if the motor is running and the gate is not moving. This may be necessary for especially heavy gates.

Check that the closed limit switch is working. The FCC status light should be off and the FCA LED should be illuminated. If the FCA LED is not on, the gate leaf has traveled too far in the closing direction.

Make sure that the Manual Release is not preventing the operator from working.

Check fuse F1 and replace it if necessary.

**Problem: The gate opens, but will not close.**

**Solutions:**

If there are no optional reversing devices connected to the control panel, make sure a jumper is installed between terminals 1 and 4 of the control panel.

If optional reversing devices have been installed, check them to see if they are working properly (an activated reversing device will prevent the gate from closing).

Temporarily short across terminals 1 and 4 to bypass the reversing devices to see if the gate closes. If the gate closes and if the FTSW LED illuminates, then the problem exists within the reversing device(s).

**Problem: The gate opens and the operator continues to run.**

**Solutions:**

Check the FCA light on the control panel. It should be off. If it is not, check the alignment of the limit switch plate.

If the FCA light is not off and the limit switch plate is correctly adjusted, then replace the limit switch.

**Note:** If the limit switch plates are not detected by the limit switch, the operator will run for approximately 120 seconds and then stop. You will have to reset the control panel if the motor completes its maximum run time. To reset, either cycle the main power off and then on, or press the Reset button on the control panel.

# Installing and Setting FAAC Transmitters and Receivers

## Installing the Receiver

- 1) Locate the 5 Silver Pins on your Estate Slide control board, located above the dip switches near the capacitor.
- 2) Locate the **white** connector on the receiver.
- 3) Push the **white** connector from the receiver on the 5 pins on your Estate Slide board with the dip switches of the receiver board facing the center of the Estate Slide board.

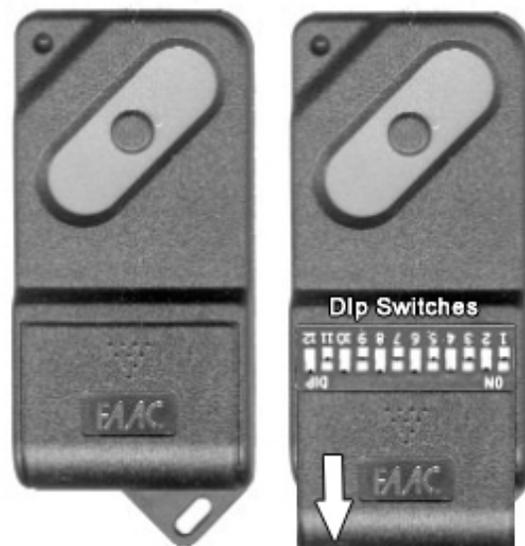


## Setting the Dip Switches

- 1) Set the dip switches 1-12 on the receiver by switching them in the up or down position.  
*Record this dip switch combination*
- 2) Slide off the battery cover of the transmitter  
*(located at the bottom front cover)*
- 3) Set the dip switches in the transmitter to the same settings as the dip switches on the receiver.
- 4) Repeat this for all of the transmitters.

## Positioning the Antenna

Bend the antenna so it does not touch the control board..



## Accessory Overview

### Push Button Wiring

The Push Button is a simple normally open connection non-lighted push button.

1. Run 18 gauge low voltage wire from the *Estate Slide* Terminal 2 to either of the terminals on the push button.
2. Run 18 gauge wire from the second terminal on the push button to one of the negative/common terminals on the *Estate Slide* control board.



Connection Terminals

### Keypad Wiring and Programming

Although the *Estate Slide* can work with most keypads, the instructions are based on the installation procedure for the Gate Crafters Stainless Steel Keypad. The wiring section of the instructions can be applied to most other keypads.

The Stainless Steel Keypad can be used wired or wireless with the *Estate Slide*. Wireless operation can only be achieved with the optional Gate Crafters 318 mhz receiver.

The keypad will shut down for approximately 40 seconds if your entry code is not correct within a string of 18 digits. This is designed to discourage an unauthorized individual from trying to use random numbers to access your property.



For all application, wired or wireless, 4 AA batteries must be used.

**IMPORTANT:** Never install a keypad where a person can touch the gate while activating the keypad.

This keypad can only be used wired with this unit.

### Wired Installation

1. Before attempting any wiring, disconnect the power from the *Estate Slide* control board and from the keypad.
2. Set the transmitting time to 0 seconds (J0) by moving the jumper on the Tx transmitting time board on the keypad board.
2. Using 18 gauge low voltage wire connect the O/P terminal on the keypad board with terminal 2 on the *Estate Slide* board. (Fig 1-c)
3. Connect the Ground terminal on the keypad board with one of the negatives/commons on the *Estate Slide* board.

Fig 1-B

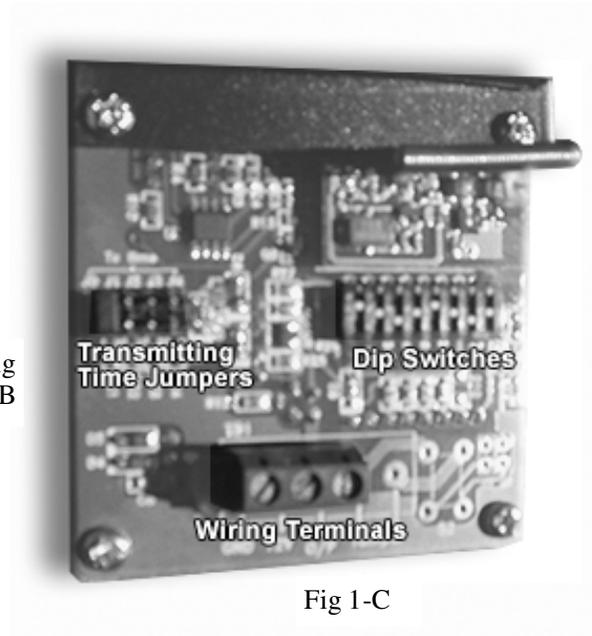


Fig 1-C

Programming is found on the following page.

### **Programming the Master Code**

1. Enter the “Master Code” – Default is 1234.
2. Press the programming button.
3. Enter “1” to enter code changing mode.
4. Enter “00” to select the Master Code as the code to be changed.
5. Enter the new “Master Code” (4 digits)
6. Press the programming button to exit the programming mode and save your new code.

### **Programming the User Entry Codes**

1. Enter the “Master Code” – Default is 1234.
2. Press the programming button.
3. Enter “1” to enter code changing mode.
4. Enter “01, or 02, or 03, and so on...” to select the User Code to be entered. (Up to 60 different User Entry Codes)
5. Enter the new “User Entry code” (4 digits)
6. Press the programming button to exit the programming mode and save your new code.

### **Deleting a User Code**

1. Enter the “Master Code” – Default is 1234.
2. Press the programming button.
3. Enter “2” to enter code deleting mode.
4. Enter “01, or 02, or 03, and so on...” to select the User Code to be deleted.
5. Press the programming button to exit the programming mode and save your change.

### **Returning to Default Settings**

1. Disconnect the power by removing one of the batteries.
2. Depress and hold “3”, “6”, and “9” keys simultaneously.
3. Power the keypad again. (Reinsert the battery)
4. Release the “3”, “6”, and “9” keys.

### **Multi-colored Status LED Interpretation**

- Orange – A key is depressed
- Red – Correct code enter and transmitting
- Green – In programming mode
- Green (flash 3 times) – Error during programming mode
- Red (flashing slowly) – Low battery, replace the batteries soon.