IMPORTANT: Before you install the automatic gate lock be sure your gate is level, moves freely on its hinges, and does not bind or drag against the ground.

PLEASE NOTE: Because of the various mounting applications, **no mounting hardware is provided** with the GTO Automatic Gate Lock. All necessary mounting hardware can be obtained from your local hardware store; all other hardware is provided.

This manual shows two examples of the most common installations, and should provide insight into most other applications. If you have any questions during installation, please call (850) 575-4144 for technical support.
Before You Start...

For the GTO Automatic Gate Lock to work properly, the gate must close firmly and engage the lock catch against the lock receiver. Achieving optimal closure may require slight adjustments to the gate opener settings.

Installing the lock with the Mighty Mule® E-Z Gate® Opener may require slight movement of the stroke adjustment and changes to the obstruction sensitivity. See Setting the Gate Closed Position in your Mighty Mule Installation Manual for information on these adjustments.

Installing the lock with a GTO/PRO gate opener may require slight movement of the stroke adjustment and changes to the obstruction sensitivity (see your GTO/PRO Installation Manual for information on these adjustments).

If you are installing the lock on a Push-to-Open gate (gate opens out), the lock must be installed on the outside of the gate. Depending upon the installation, the gate post may need to be "pocketed" to accommodate the lock receiver. Contact the GTO Technical Service Department at (850) 575-4144 for assistance.

Be sure you have all 1

A - Lock with 20' of low voltage wire  
B - Lock Receiver  
C - Clevis Pin  
D - Locking Cap  
E - Lock Board Battery Lead Wires  
F - White Wire (motor lead to lock board)  
G - Lock Control Board  
H - 2 Double Spade Tongue terminals  
I - 6 nylon cable ties  
J - Wire Connector  
K - Lock Keys (for manual release)  
L - Lock Decal

What else do you need?

Mounting hardware is not included. Read these instructions completely and review the installation examples to determine the mounting hardware required for your application.

NOTE: The GTO Lock is designed to use mounting hardware up to 5/16" in diameter. For a more secure installation, use lock washers and lock nuts on all mounting hardware.

For most IRON or ALUMINUM TUBE gates you will need:  
Carriage bolts, washers, and nuts for the lock and receiver. (see Illustration B, page 3)

For most CHAIN LINK gates you will need:  
U-Bolts, saddles or carriage bolts, washers and nuts for the lock.  
Bolts, washers, and nuts for the receiver. (see Illustration C, page 3)

The installation has two parts:  
(1) Mounting The Lock and Lock Receiver  
(2) Connecting the Control Boards

Once you have the necessary mounting hardware, you can begin the installation.
Installing The Gate Lock

NOTE: The Automatic Gate Lock can be installed on single and dual gate systems. Use the appropriate instructions for the system you have - SINGLE GATE (below) or DUAL GATES (page 4).

Single Gate Installation

Disconnect gate opener by removing hairpin clip and clevis pin from the gate bracket end of the opener. Disconnecting the opener will allow the gate to swing freely during installation of the gate lock.

Step 1: With the gate in the closed position, determine the best location for the lock and lock receiver. The lock and receiver must be level and aligned with the opener. Also, the lock should have a solid surface or cross member to provide stability.

Step 2: Clamp receiver and lock together (with receiver pin hole and lock slot aligned) against the gate post, mark their positions to drill receiver holes (see Illustration B and C, page 3). The receiver must be mounted with carriage bolts, not U-bolts, to allow lock to seat properly. Fasten the receiver to the gate post.

Step 3: Recheck the lock’s position and alignment, then mark its position for drilling holes. Drill the holes on gate supports through the slots in the lock bracket. U-bolts and saddles can be used to mount the lock on chain link gate supports. Secure the lock to the gate. Install clevis pin and locking cap by placing clevis pin through slots in lock receiver and hammering the clevis pin into the locking cap (see Illustration D), secure the lock bracket and check the alignment again.
Illustration B

Iron or Aluminum Tube Fence and Gate Installation

Remember to check the alignment and mark positions before drilling holes in fence post and gate.

Illustration C

Chain Link Fence and Gate Installation

Remember to check the alignment and mark positions before drilling holes in fence post.

Illustration D

Locking Cap Assembly

Added cross member to support lock from force of slamming shut.

Added cross member to support lock from force of slamming shut.
Dual Gate Installation

Disconnect gate openers by removing hairpin clip and clevis pin from the gate bracket end of the openers. Disconnecting the openers will allow the gates to swing freely during installation of the gate lock.

NOTE: In a DUAL GATE INSTALLATION the gate opener on the same side of the driveway as the control box is known as the MASTER GATE OPENER and that gate is refered to as the MASTER GATE. Conversely the gate opener on the other gate is refered to as the SLAVE GATE OPENER and the gate is refered to as the SLAVE GATE.

IMPORTANT: To use the gate lock on a dual gate system, the gate sequencing must be set so the MASTER GATE opens first and closes last, and the gate lock has to be mounted on the MASTER GATE and the lock receiver is mounted on the SLAVE GATE. If your gates are not sequenced in a manner that works like this, you'll have to change the sequencing DIP switches on your gate opener control board. Follow the instructions in your gate opener installation manual for programming dual gate sequencing.

The diagrams below will show how most dual GTO/PRO® and Mighty Mule® gate sequencing is programmed. If your gate opener control board is different form these shown, please contact GTO Technical Service at 1-800-543-1236 for additional information.

For Mighty Mule® FM702, GTO/PRO® 1000 and GTO/PRO® 2000 Dual Gate Openers

FIRST OPERATOR OPENS FIRST, SECOND OPERATOR CLOSES FIRST

SEQ1 = OFF  SEQ2 = ON

If SEQ1 is set to OFF, and SEQ2 is set to ON, the FIRST OPERATOR will open first, and the SECOND OPERATOR will close first.

For Mighty Mule® FM502, GTO/PRO® 3000 and GTO/PRO® 4000 Dual Gate Openers

FIRST OPERATOR OPENS FIRST, SECOND OPERATOR CLOSES FIRST

Switch 1 = ON  Switch 2 = OFF

If Switch 1 is set to ON, and Switch 2 is set to OFF, the FIRST OPERATOR will open first, and the SECOND OPERATOR will close first.
With the sequencing set correctly follow the steps and diagrams below to mount the lock to the gates.

Step 1: With the gate in the closed position, determine the best location for the lock and lock receiver. The lock and receiver must be level and aligned with the opener. Also, the lock should have a solid surface or cross member to provide stability.

Step 2: Clamp receiver and lock together (with receiver pin hole and lock slot aligned) to the gates, mark their positions to drill holes (see Illustration E and F, page 6). The receiver must be mounted on the SLAVE GATE with carriage bolts, not U-bolts, to allow lock to seat properly.

Step 3: Recheck the lock’s position and alignment. Drill the holes on gate supports through the slots in the lock bracket. U-bolts and saddles can be used to mount the lock on chain link gate supports. Secure the lock to the MASTER GATE. Install clevis pin and locking cap by placing clevis pin through slots in lock receiver and hammering the clevis pin into the locking cap (see Illustration G), secure the lock bracket and check the alignment again.
Remember to check the alignment and mark positions before drilling holes in fence post and gate.

Illustration E

Illustration F

Illustration G

Locking Cap
Assembly
Connecting the Lock to the Opener Control Board:

**IMPORTANT:** All Mighty Mule® and GTO/PRO® gate opener control boards manufactured since March 2000, have terminal strip wire connections (see Illustration H). If your gate opener doesn't have terminal strip connectors, you will need to follow the instructions for "Wiring the Lock to Pre-March 2000 Gate Opener Control Boards".

**PLEASE NOTE:**
If a diagram of your control board is not pictured on page 8 or 10 please call the GTO Service Department at (800) 543-1236 or (850) 575-4144 for assistance.

**Wiring the Lock to Pre-March 2000 Gate Opener Control Boards**

**NOTE:** If your gate opener control board has terminal wiring strips, skip to page 9 and follow the instructions for "Wiring the Lock to Gate Opener Control Boards with Terminal Strips".

**Step 1.** Turn control box power switch OFF and unplug the transformer or disconnect the solar panel. Remove control box cover and disconnect battery lead wires from the battery terminals before wiring the lock board to the opener control board.

**Step 2.** Connect the **WHITE** wire (*included*) to Terminal #1 on the lock board. Connect the **RED** battery lead wire (*included*) to Terminal #5 on the lock board. Connect the **BLACK** Battery lead wire (*included*) to Terminal #2 on the lock board. (See Wiring Chart below). **DO NOT connect lock board battery lead wires to battery until Step 7!**

**Step 3.** Attach the **RED** control board battery lead wire to one spade tongue on a double spade tongue connector (*included*). Attach the **BLACK** control board battery lead wire to one spade tongue on the other double spade tongue connector (*included*).

**Step 4.** Attach the Wire Connector. Place the **WHITE** wire from the lock board inside the “blocked” channel on the Wire Connector. If the gate opens into the property (pull-to-open), place the **BLACK** wire from the opener power cable inside the “through” channel on the Wire Connector. Crimp the Wire Connector closed with pliers and fold plastic locking tab into place until it locks shut.
NOTE: If the gate opens away from the property (push-to-open) place the RED wire from the opener power cable inside the “through” channel on the Wire Connector. Crimp the Wire Connector closed with pliers and fold plastic locking tab into place until it locks shut.

If this is a dual gate installation, use the RED (push-to-open) or BLACK (pull-to-open) wire from the MASTER GATE OPENER that extends from the power cable to the opener.

Step 5. Pull RED and BLACK wires from gate lock through the strain relief and into the control box. Attach BLACK wire to Terminal #3 on lock board. Attach RED wire to Terminal #4 on lock board (see Wiring Chart on page 7).

Step 6. Attach RED lock board battery lead wire to the double spade tongue terminal with the RED control board lead wire. Attach the BLACK lock board battery lead wire to the double spade tongue connector with the BLACK control board Lead Wire.

Step 7. Reconnect opener to gate bracket. Connect RED wires (with double spade tongue terminal) to POSITIVE (+) battery terminal and the BLACK wires (with double spade tongue terminal) to the NEGATIVE (−) battery terminal. Plug the transformer in and turn the control box power switch ON. Test opener and lock to make sure it functions properly and make adjustments if necessary.
Wiring the Lock to Gate Opener Control Boards with Terminal Strips

Step 1. Turn control box power switch OFF and unplug the transformer or disconnect the solar panel. Remove control box cover and disconnect battery lead wires from the battery terminals before wiring the lock board to the opener control board.

Step 2. Connect the WHITE wire (included) to Terminal #1 on the lock board. Connect the RED battery lead wire (included) to Terminal #5 on the lock board. Connect the BLACK Battery lead wire (included) to Terminal #2 on the lock board. (See Lock Board Wiring Chart below). DO NOT connect lock board battery lead wires to battery until Step 7!

Step 3. Attach the RED control board battery lead wire to one spade tongue on a double spade tongue connector (included). Attach the BLACK control board battery lead wire to one spade tongue on the other double spade tongue connector (included).

Step 4. Pull RED and BLACK wires from gate lock through the strain relief and into the control box. Attach BLACK wire to Terminal #3 on lock board. Attach RED wire to Terminal #4 on lock board (see Lock Board Wiring Chart below).

Step 5. Attach RED lock board battery lead wire to the double spade tongue terminal with the RED control board lead wire. Attach the BLACK lock board battery lead wire to the double spade tongue connector with the BLACK control board Lead Wire.

Step 6. Connect the WHITE wire from the lock board directly to the MASTER OPENER terminal block along with the power cable wire from the opener arm. Connect the WHITE wire to the BLACK terminal for a Pull-to-Open installation or connect WHITE wire to the RED terminal for a Push-to-Open installation (see illustration on page 10).

Step 7. Reconnect opener to gate bracket. Connect RED wires (with double spade tongue terminal) to POSITIVE (+) battery terminal and the BLACK wires (with double spade tongue terminal) to the NEGATIVE (−) battery terminal. Plug the transformer in or rewire the solar and turn the control box power switch ON. Test opener and lock to make sure it functions properly and make adjustments if necessary.

* Place a dab of petroleum jelly on the terminal contacts to prevent corrosion.
Wiring the Lock to Mighty Mule FM-700/702 and GTO/PRO 1000 and 2000 Gate Opener Control Boards with Terminal Strips

Power Cable from First Operator

Opener Control Board (Generation 2000)

Lock Board

Double Spade Tongue Connectors

12 Volt Battery

Double Spade Connector

1 2 3 4 5

Lock Board

RED Wire To Battery Positive (+) Terminal

RED Wire From Lock

BLACK Wire To Battery Negative (-) Terminal

BLACK Wire From Lock

WHITE Wire to BLACK on Operator Terminal

Double Spade Connector

Strain Relief

15 15
Wiring the Lock to Mighty Mule 500/502 and GTO/PRO SW-3000 and SW-4000 Gate Opener Control Boards

500/502 and 3000/4000 Control Board

MASTER OPENER POWER CABLE

SWITCH

WHITE Wire to RED Master Terminal for Pull-To-Open gates or BLK for Push-To-Open

BLACK Wire To Battery Negative (–) Terminal

Double Spade Connector

Lock Board

RED Wire To Battery Positive (+) Terminal

RED Wire From Lock

BLACK Wire From Lock

Double Spade Connector

Manual Lock Release:

The GTO Automatic Gate Lock is **keyed for manual release**. Should the electronic release be disabled for any reason, simply use the key to manually open the lock.
**IMPORTANT:** For the optimum service and safety, find the ideal obstruction sensing setting for your gate opener. Depending on the weight of your gate, the ideal setting will be just enough to move your gate without self-obstruction (stopping or reversing due to its own weight), yet sensitive enough to reverse and stop when it meets with an obstruction such as a car or animal. See the *GTO Installation Manual* for information on obstruction settings.

**NOTE:** Be sure your gate moves freely on its hinges without binding or dragging.