# Installation Manual for the





1-800-543-GATE (4283) • www.mightymule.com

# **Automatic Gate Opener System**

for Single Swing Gates Only

# A WARNING! A

This equipment is similar to other gate or door equipment and meets or exceeds Underwriters Laboratory Standard 325 (UL 325). However, gate equipment has hazards associated with its use and therefore by installing this product the installer and user accept full responsibility for following and noting the installation and safety instructions. Failure to follow installation and safety instructions can result in hazards developing due to improper assembly. You agree to properly install this product and that if you fail to do so GTO, Inc. shall in no event be liable for direct, indirect, incidental, special or consequential damages or loss of profits whether based in contract tort or any other legal theory during the course of the warranty or at any time thereafter. The installer and/or user agree to assume responsibility for all liability and use of this product releasing GTO, Inc. from any and all liability. If you are not in agreement with this disclaimer or do not feel capable of properly following all installation and safety instructions you may return this product for full replacement value.

READ ALL INSTRUCTIONS CAREFULLY AND COMPLETELY before attempting to install and use this automatic gate opener. This gate opener produces a high level of force. Stay clear of the unit while it is operating and exercise caution at all times.

All automatic gate openers are intended for use on vehicular gates only.

This product meets and exceeds the requirements of the most current UL 325, the standard which regulates gate opener safety, as established and made effective March 1, 2000, by Underwriters Laboratories Inc.



# The Mighty Mule 250 is intended for use with single vehicular swing gates and is classified to be used in Class I applications.

#### VEHICULAR GATE OPENER CLASS CATEGORIES

**Residential Vehicular Gate Opener-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.

**Commercial/General Access Vehicular Gate Opener-Class II**: A vehicular gate opener (or system) intended for use in a commercial location or building such as a multifamily housing unit (five or more single family units), hotel, garages, retail store, or other building servicing the general public.

**Industrial/Limited Access Vehicular Gate Opener–Class III**: A vehicular gate opener (or system) intended for use in an industrial location or building such as a factory or loading dock area or other locations not intended to service the general public.

**Restricted Access Vehicular Gate Opener–Class IV**: A vehicular gate opener (or system) intended for use in a guarded industrial location or building such as an airport security area or other restricted access locations not servicing the general public, in which unauthorized access is prevented via supervision by security personnel.

	<ul><li>Conversion (</li></ul>	Chart ———	
Converting Metri When You Know	c Units to Engli. Multiply By	sh Equivalents To Find	Symbol
centimeters	0.3937	inches	in. (or ")
meters	3.2808	feet	ft. (or ')
kilograms	2.2046	pounds	lb. (or #)
Converting English When You Know		ic Equivalents  To Find	Symbol
0 0		*	Symbol
0 0		*	Symbol cm
When You Know	Multiply By	To Find	·
When You Know inches	Multiply By 2.5400	To Find centimeters	cm
When You Know inches feet pounds	Multiply By 2.5400 0.3048 0.4535	To Find centimeters meters	cm m
When You Know inches feet	Multiply By  2.5400 0.3048 0.4535  erature	To Find centimeters meters	m

#### FOR YOUR RECORDS

Please record the product serial number (located on the opener housing), and the date and place of purchase in the spaces provided below. Refer to this information when calling GTO for service or assistance with your automatic gate opener.

Serial Number	 <b>Date of Purchase</b>	
Place of Purchase	 	

# KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

# **Table of Contents**

Gate Opener Class Categories	inside cover
Units and Standards Conversion Chart	
PLEASE READ THIS FIRST!	page iii
Important Safety Instructions	page 1
Disconnecting the Opener	
Important Safety Instructions for the Consumer	
Secondary Means of Protection Against Entrapment	page 5
Required Safety Precautions for Gates	
Warning Signs and Labels	page 7
Parts List	naga 9
Tools and Materials You May Need	page 9
Technical Specifications	page 10
Installation Overview	page 11
Installation of the Mounting Hardware	page 12
Mounting the Opener	page 16
Installation of the Positive Stops	page 16
Preparing to Activate the System	page 17
Wiring the Receiver	page 18
Mounting the Receiver	page 18
Powering the System	page 19
Connecting the Battery	page 20
Connecting the Transformer	page 20
Setting the Closed Position Limit	page 22
Setting Your Personal Transmitter Code	page 23
Enabling the Auto-Close Feature	page 24
Connecting Additional Safety Devices	page 25
Connecting Accessories	page 26
FINAL STEP	page 27
Troubleshooting Guide	page 27
Warranty and Repair Service	page 29
Accessory Catalog	page 30
4 1/2" x 4 1/2" Sethack Template	incert



1-800-543-GATE (4283) · www.mightymule.com

# PLEASE READ THIS FIRST!

Thank you for purchasing a **Mighty Mule 250**—GTO's "do-it-yourself" automatic single gate swing opener! When correctly installed and properly used, your **Mighty Mule 250** will give you many years of reliable service. Please read the following information and watch the enclosed videotape to ensure you have the correct system for your particular needs and enable you to properly install your **Mighty Mule 250**.

The **Mighty Mule 250** is designed for installation on a **pull-to-open single leaf swing gate** (a gate that opens *into* the property). The gate must not exceed 12 feet in length nor weigh more than 250 pounds (please see *Technical Specifications* on page 10). The gate must be level, plumb and swing freely on its hinges (NO WHEELS). The **Mighty Mule 250** can be used on vinyl, aluminum, chain link, farm tube, panel and wrought iron gates. Use on solid surface gates is not recommended. Solid surface gates have a high resistance to wind. If the wind is strong enough it could damage the gate opener.

The **Mighty Mule 250** accommodates accessories such as; extra transmitters, digital keypads, push buttons, intercoms, telephone entry, and other contact (edges) and non-contact (photo beams) safety devices. These optional accessories (see the *Accessory Catalog* on page 30) are available at most authorized Mighty Mule retail stores or authorized GTO service centers. Your store should be able to special order any accessory not in stock. If your store cannot special order accessories, please call the GTO Sales Department at 1-800-543-GATE (4283).

The **Mighty Mule 250** features **inherent obstruction sensing.** This safety feature makes the gate stop and reverse direction when it comes in contact with an obstruction.

PLEASE NOTE—The Mighty Mule 250 will NOT meet the requirements of the following applications:

Swing gates longer than 12 feet or weighing more than 250 pounds;

Slide gates;

Dual gates;

Push-To-Open gates (gates that open out from property);

Solar applications;

Gates that need automatic locks:

Heavy duty or commercial uses;

Gate opening sensors;

If you have a requirement for one or more of these applications, please call GTO at (800) 543-GATE [4283] or (850) 575-0176 for assistance.

# **IMPORTANT:**

The Mighty Mule 250 E-Z Gate Opener will not function until the transformer is installed and the system is activated following the steps on pages 19-22.

The Mighty Mule 250 circuitry is designed to only operate with the transformer connected to the opener and plugged into an AC outlet. The battery in the Mighty Mule 250 will provide approximately 12-15 open and close cycles during a power outage. If the transformer is disconnected or the AC power is interrupted for a prolonged period of time, the battery will eventually drain down and the opener will not operate. When the power is restored it could take up two (2) hours to fully recharge the battery. Limited use may begin with 15 minutes after AC power is restored.

Following these instructions carefully and in order will assure that your Mighty Mule 250 will give you many years of reliable service.

# A

# A IMPORTANT SAFETY INSTRUCTIONS



Automatic gate openers produce high levels of force. Consumers should understand and inform all users of the potential hazards associated with improperly designed, installed, and maintained gate opener systems. *Keep in mind that the gate opener is just one component of the total gate operating system*. Each component must work in unison to provide the consumer with convenience, security, and safety.

This manual contains various safety precautions and warnings for the consumer. Because we cannot envision each and every potential use or applications of the gate opener, the safety precautions and warnings contained in this manual are not completely exhaustive in nature. They do, however, provide an overview of the safe design, installation, and use of this product. CAREFULLY READ AND FOLLOW ALL SAFETY PRECAUTIONS, WARNINGS, AND INSTALLATION INSTRUCTIONS TO ENSURE THE SAFE SYSTEM DESIGN, INSTALLATION, AND USE OF THIS PRODUCT.

Precautions and warnings in this manual are identified with this warning symbol. The symbol identifies conditions that can result in serious injury, or death.

Not following the instructions in this manual may also result in damage to the opener or its components.

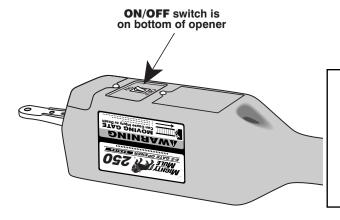
Mighty Mule automatic gate openers are *only part* of the total gate operating system, it is the responsibility of the consumer to ensure that the total system is safe for its intended use.

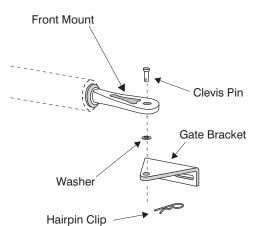
# To Manually Open and Close the Gate, Follow the Procedure Below:

# **Disconnecting the Opener**

- 1. Turn gate opener power OFF.
- Remove hairpin clip, clevis pin, and washer from front mount.
- 3. Pull front mount away from gate bracket.

The gate can be opened and closed manually when the opener is disconnected.





A CAUTION: Because the Mighty Mule gate opener is battery powered, disconnect the opener ONLY when the power switch on the opener is turned OFF. Unplugging the transformer does not turn power to the opener OFF.



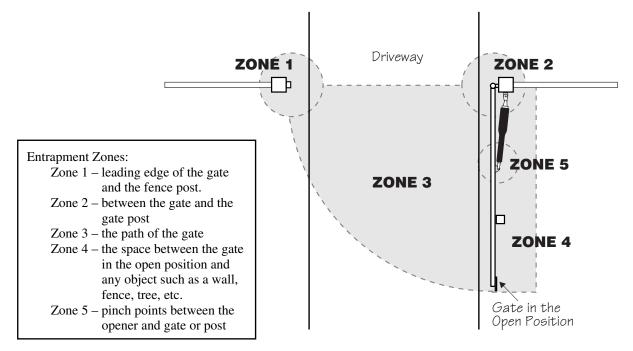
# **For The Consumer**

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

- 1. **READ AND FOLLOW ALL INSTRUCTIONS.** Failure to meet the requirements set forth in the instruction manual could cause severe injury and/or death, for which the manufacturer cannot be held responsible.
- 2. When designing a system that will be entered from a highway or main thoroughfare, make sure the system is placed far enough from the road to prevent traffic congestion.
- 3. The gate must be installed in a location that provides adequate clearance between it and adjacent structures when opening and closing to reduce the risk of entrapment. Swinging gates **must not** open into public access areas.
- 4. The gate and gate opener installation **must comply with any applicable local codes**.

#### I. Before Installation

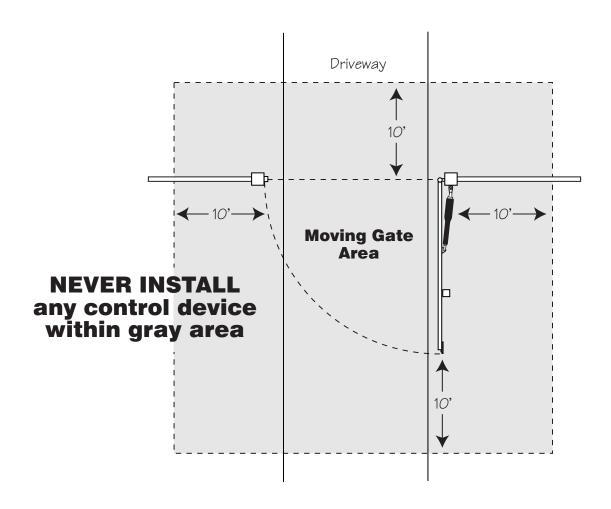
- 1. Verify this opener is proper for the type and size of gate, its frequency of use and the proper class rating.
- 2. Make sure the gate has been properly installed and swings freely in both directions. Repair or replace all worn or damaged gate hardware prior to installation. A freely moving gate will require less force to operate and will enhance the performance of the opener and safety devices used with the system.
- 3. Review the operation of the system to become familiar with its safety features. Understand how to disconnect the opener for manual gate operation (*see page 1*).
- 4. This gate opener is intended for vehicular gates ONLY. A separate entrance or gate must be installed for pedestrian use (see page 6).
- 5. Always keep people and objects away from the gate and its area of travel. NO ONE SHOULD CROSS THE PATH OF A MOVING GATE.
- 6. Pay close attention to the diagram below and be aware of these areas at all times.





#### **II. During Installation**

- 1. Install the gate opener on the inside of the property and fence line. **DO NOT** install an opener on the outside of the gate where the public has access to it.
- 2. Be careful with moving parts and avoid close proximity to areas where fingers or hands could be pinched.
- 3. Devices such as safety edges and photo beams provide additional protection against entrapment (see page 5).
- 4. If push buttons or key switches are installed, they should be within sight of the gate, yet located at least 10 feet from any moving part of the gate (see diagram below). Never install any control device where a user will be tempted to reach through the gate to activate the gate opener.
- 5. Do not activate your gate opener unless you can see it and can determine that its area of travel is clear of people, pets, or other obstructions. Watch the gate through its entire movement.
- 6. Secure outdoor or easily accessed gate opener controls in order to prohibit unauthorized use of the gate.





#### **III. After Installation**

- 1. Attach the **warning signs** (*included*) to each side of the gate to alert the public of automatic gate operation. It is *your responsibility* to post warning signs on both sides of your gate. If any of these signs or warning decals become damaged, illegible or missing, replace them immediately. Contact GTO for free replacements.
- 2. The gate is automatic and could move at any time, posing a serious risk of entrapment. No one should be in contact with the gate when it is moving or stationary.
- 3. Do not attempt to drive into the gate area while the gate is moving; wait until the gate comes to a complete stop.
- 4. Do not attempt to "beat the gate" while the gate is closing. This is extremely dangerous.
- 5. Do not allow children or pets near your gate. **Never let children operate or play with gate controls**. Keep the remote controls away from children and unauthorized users; store controls where children and unauthorized users do not have access to them.
- 6. **KEEP GATES PROPERLY MAINTAINED**. Always turn power to opener OFF before preforming any maintenance. Clean the push-pull tube with a soft, dry cloth and apply silicone spray to it at least once per month.
- 7. Service the gate and gate opener regularly. Grease hinges, spray push pull tube with high quality silicon and replace the battery every two (2) years.
- 8. To operate this equipment safely, YOU must know how to disconnect the opener for manual gate operation (*see page 1*). If you have read the instructions and still do not understand how to disconnect the opener, contact the GTO Service Department.
- 9. Disconnect the opener **ONLY** when the power is **TURNED OFF** and the gate is **NOT** moving.
- 10. Make arrangements with local fire and law enforcement for emergency access.
- 11. Distribute and discuss copies of the **IMPORTANT SAFETY INSTRUCTIONS** section of this manual with all persons authorized to use your gate.
- 12. IMPORTANT: Save these safety instructions. Make sure everyone who is using or will be around the gate and gate opener are aware of the dangers associated with automated gates. In the event you sell the property with the gate opener or sell the gate opener, provide a copy of these safety instructions to the new owner.

Should you lose or misplace this manual, a copy can be obtained by downloading one from the Mighty Mule web site (www.mightymule.com), by contacting GTO, Inc., at 3121 Hartsfield Road, Tallahassee, Florida 32303 or by calling 1-800-543-4283 and requesting a duplicate copy. One will be provided to you free of charge.



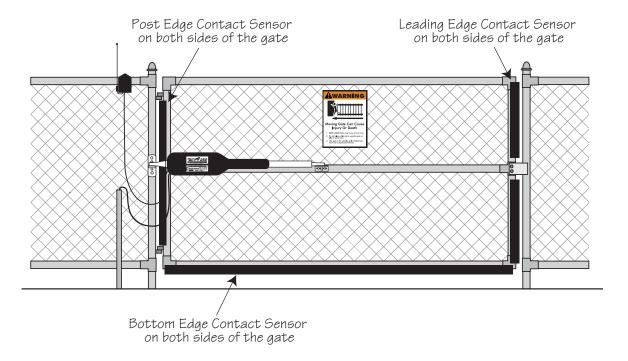
# A IMPORTANT SAFETY INSTRUCTIONS A



# Secondary Means of Protection Against Entrapment

As specified by Gate Operator Safety Standard, UL 325 (30A.1.1), automatic gate openers shall have *provisions for*, *or be supplied with*, at least one independent primary and one independent secondary means to protect against entrapment. The Mighty Mule 250 utilizes **Type A**, an inherent (i.e., built-in) entrapment sensing system as the *primary* type of entrapment protection. Also, the Mighty Mule 250 has *provisions for* the connection of **Type B2** protection to be used as the *secondary* type of entrapment protection, if desired.

- 1. For gate operators utilizing a contact sensor (e.g., safety edge sensor-Type B2) in accordance with UL 325 (51.8.4 [i]):
  - A. One or more contact sensors shall be located at the leading edge, bottom edge, and post edge, both inside and outside of a vehicular swing gate system.
  - B. A hard wired contact sensor shall be located and its wiring arranged so that the communication between the sensor and the gate opener is not subjected to mechanical damage.
  - C. A wireless contact sensor such as one that transmits radio frequency (RF) signals to the gate opener for entrapment protection functions shall be located where the transmission of the signals are not obstructed or impeded by building structures, natural landscaping or similar obstruction. A wireless contact sensor shall function under the intended end-use conditions.



# ENTRAPMENT ALARM (UL 325; 30A.1.1A)

The Mighty Mule 250 is designed to stop and reverse within 2 seconds when the gate comes in contact with an obstruction or when an object activates the contact sensors. Additionally, these openers are equipped with an **audio entrapment alarm** which will activate if the unit obstructs *twice* while opening or closing. This alarm will sound for a period of 5 minutes, or until the opener receives a manual input (hardwired cycle input) and the gate returns to a fully open or fully closed position.

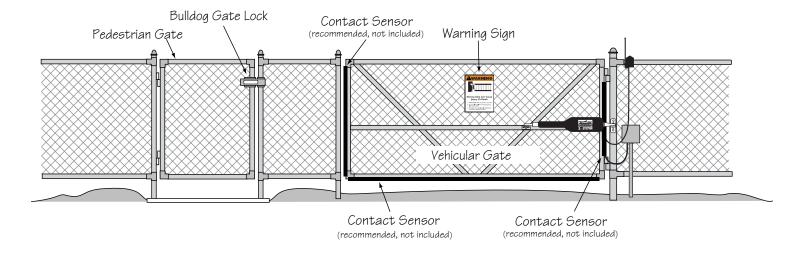


# A IMPORTANT SAFETY INSTRUCTIONS 4



# **Required Safety Precautions for Gates Install Warning Signs**

Warning signs included alert people of automatic gate operation and are required when installing the Mighty Mule 250. Furthermore, a walk-through gate **must be** installed if pedestrian traffic is expected near the vehicular gate. We recommend using the Bulldog Pedestrian Gate Lock (Call the GTO Sales Department at 1-800-543-4283) for controlled access.



# **Entrapment Protection**

GTO's inherent obstruction settings may not be sensitive enough to prevent bodily injury in some circumstances. For this reason, safety devices such as contact sensors (safety edges) and non-contact sensors (photo beams), which stop and reverse gate direction upon sensing an obstruction, are required for augmented protection against entrapment.

# **Warning Signs**

The warning signs (at right) must be installed on both sides of the gate.



# A

# MPORTANT SAFETY INSTRUCTIONS



These warning labels should be placed at the locations specified below. If any of them are missing, immediately contact GTO for free replacements at 1-800-543-4283.



Warning signs (2 enclosed) to be installed on each side of the gate (3—5 feet above the bottom of the gate)

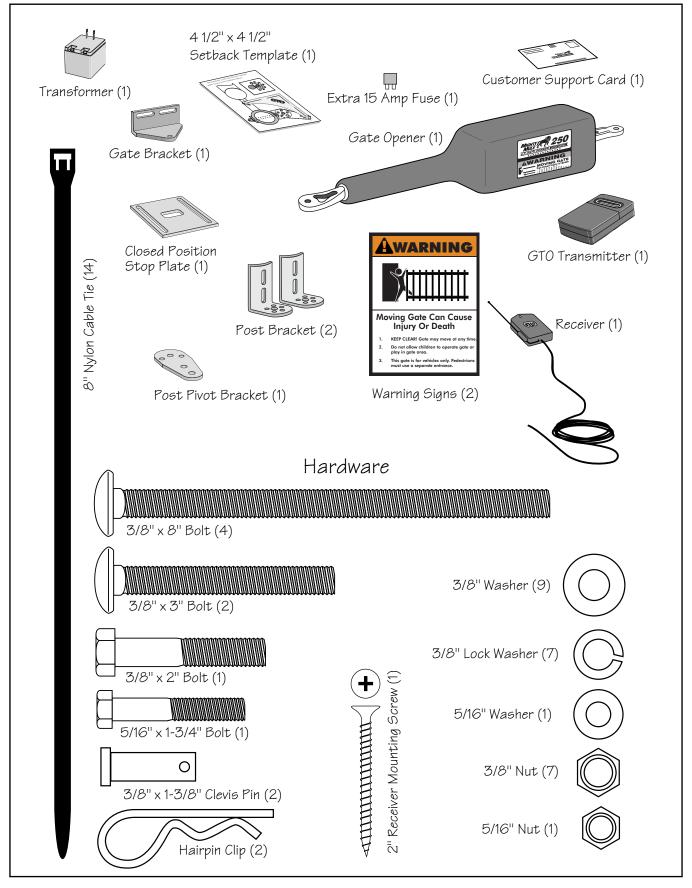


Logo and warning labels (2) installed on each side of opener housing

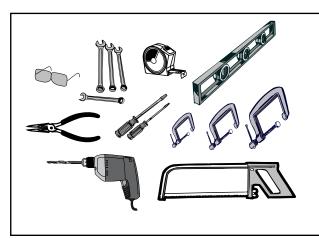


Product identification and manual operation instruction label (1) installed at the rear of the opener housing

# Gate Opener Parts List Opener and Mounting Hardware



# **Tools and Materials You May Need**



#### **Tools Needed**

- Safety Glasses
- Power Drill
- Open End Wrenches 7/16" and 9/16"
- 3/8" Drill Bit
- Hacksaw or Heavy Duty Bolt Cutters
- Slotted (Flat Bladed) Screwdriver
- Phillips Screwdriver
- Tape Measure
- Level
- Wire Strippers
- C-Clamps small, medium, and large

#### ALSO, YOU WILL NEED THESE ITEMS BEFORE YOU BEGIN THE INSTALLATION

- The gate needs a **stop post** for the open position. This post is not provided. You will also need hardware for mounting the closed position stop plate. See **Installation of the Positive Stops** on page 16 for more information.
- If your fence post is made of wood and is less than 6" in diameter or 6" square, see page 12.
- If your fence post is larger than 6" in diameter you will need **threaded rods or carriage bolts longer than 8"**. See page 14.
- If you have thin walled tube or panel gates, see **Recommended Reinforcement Examples** on page 12.
- Depending on the type of gate, a horizontal cross member or mounting plate may be needed to mount the front of the opener and gate bracket to the gate. See page 11, step 2; page 15, step 10.
- If you will be plugging the transformer into an outside outlet you will need a weatherproof housing for the outlet and transformer. Available at most retail centers.

# **Technical Specifications**

#### **MIGHTY MULE 250**

DRIVE

- Low friction screw drive (linear actuator) rated for -5 °F to +160 °F (-19 °C to +88.8 °C).
- Powered by a 12 Vdc motor with integral case hardened steel gear reducer. Motor speed reduced to 270 rpm.
- Maximum opening arc of 110°. Approximate 90° opening time is 18 to 20 seconds, depending on weight of gate.

**POWER** 

• 12 Volt, 1.2 Amp hour sealed lead acid battery. The charging circuit built in to the Mighty Mule 250 is designed for the GTO battery. To avoid possible damage to the Mighty Mule 250 and the battery, ONLY use GTO replacement batteries.

= CONTROL =

- GTO microprocessor-based control board is designed for single leaf, pull-to-open gate installations.
- Auto-memorization of digital transmitter code and limit positions.
- GTO remote-mounted RF receiver tuned to 318 MHz.
- Adjustable range of push-pull tube is 2" to 12". Opener length with push-pull tube fully retracted is 37<sup>1</sup>/<sub>4</sub>", mounting point to mounting point.
- Optional auto-close (60 second) with audible warning, inherent obstruction sensitivity built in.
- Fully compatible with push button controls, digital keypads, other safety devices, etc.
- Audio entrapment alarm sounds if unit encounters an obstruction twice while opening or closing.

— OPERATIONAL CAPACITY =

• Maximum Gate Length: 12 feet; Maximum Gate Weight: 250 pounds.

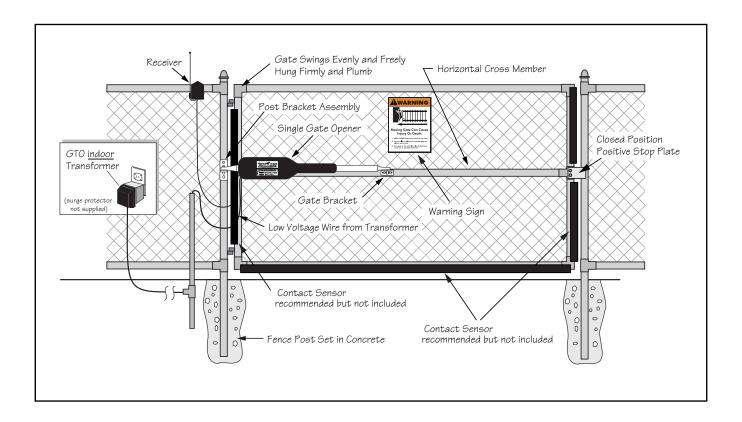
# **Gate Cycling Chart**

ţ	Estimated number of cycles per day.				
Length	12 ft.	120	100	80	60
	up to <b>10 ft.</b>	130	110	90	70
Gate		100 lb.	150 lb.	200 lb.	250 lb.
O			<b>Gate Weight</b>		

An operation cycle is one full opening and closing of the gate.

# Installing the Mighty Mule 250 Installation Overview

The diagram shown below is an example of a pull-to-open installation on a single gate chain link fence. Mounting the opener on a masonry column requires special procedures; call GTO Technical Service at 1-800-543-1236 if you intend to mount the opener on a column.



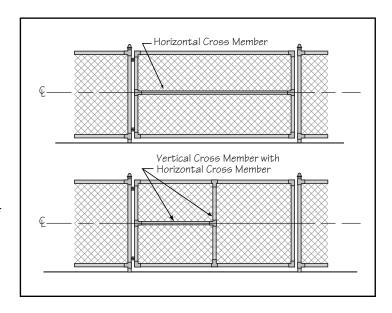
# **Preparation of the Gate**

# Step 1

The gate **must** be plumb, level, and swing freely on its hinges. Wheels must not be attached to the gate. The gate must move throughout its arc **without binding or dragging on the ground**. Note that gates over 200 lb. should have ball bearing hinges with grease fittings.

# Step 2

The fence post must be secured in the ground with concrete so it will not twist or flex when the opener is activated. To prevent accelerated wear and tear of the gate hardware and gate opener, be sure to position the opener near the **centerline** of the gate. The addition of a **horizontal or vertical cross member** (if one is not already in place) to provide a stable area for mounting the gate bracket is also important.



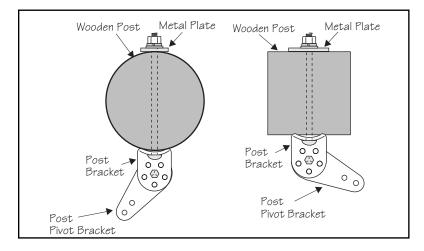
# **Installation of Mounting Hardware**

The position of the post bracket determines the leverage and efficiency of the opener. The post bracket position also sets the clearance between the opener and gate in the open and closed positions.

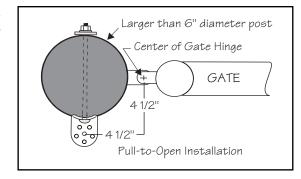
The curved design of the post bracket works well for installations on round and square fence posts. Because the post bracket carries the entire thrust of the active opener, **bolts that completely penetrate the fence post must be used**.

On wooden posts, place a metal plate or washer (*not supplied*) between the nuts and the fence post to prevent the thrust of the opener from pulling the bolts and washers out of the wood.

**NOTE:** A fence post smaller than 6" in diameter or 6" square should be made of metal instead of wood so that it will remain stable while the opener is moving the gate.

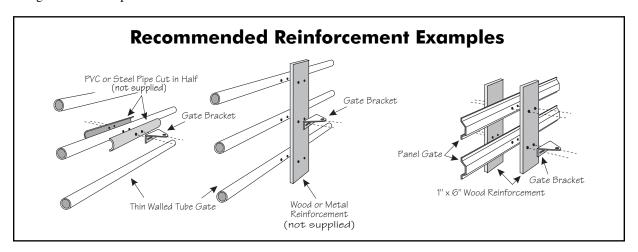


On round posts of 6" diameter or larger, the post pivot bracket may not be necessary for the installation. In this instance, the two post brackets are mounted by themselves.



#### **IMPORTANT:**

We **strongly recommend** using steel pipe, thick walled PVC pipe, wood or metal to reinforce thin walled tube gates or wood to reinforce panel gates as shown. These reinforcement methods will prevent damage to the opener and gate when the opener is installed.



# Determining the Mounting Position of the Post Bracket Assembly and the Gate Bracket

#### Step 3

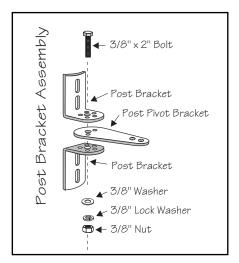
Study the 4 <sup>1</sup>/2" x 4 <sup>1</sup>/2" setback template (*see insert*) provided with this manual. Once you are familiar with its illustrations, cut and save the template from the insert. The template will determine the correct position of the post pivot bracket before mounting the opener on the fence post.

#### Step 4

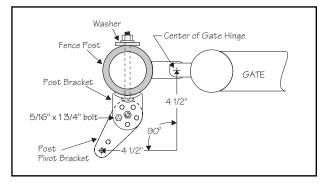
Insert the <sup>3</sup>/8" x 2" bolt through the center hole of the post brackets and post pivot bracket as shown. Fasten a <sup>3</sup>/8" washer, lock washer and nut on the end of the bolt. DO NOT *overtighten* the nut because the post pivot bracket will have to be adjusted later.

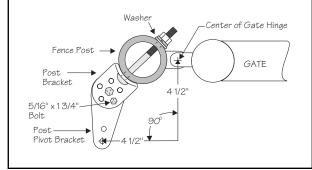
# Step 5

Holding the post pivot bracket assembly on the fence post, place one end of setback template over center of gate hinge and the other end of template over the post pivot bracket hole (either of the two mounting holes in post pivot bracket can be used) where the opener will be attached. Be sure to hold the template at a 90° angle between these two points and measure 4 <sup>1</sup>/<sub>2</sub>" back from the center of the gate hinge. You will need to rotate the post pivot bracket or the entire post bracket assembly to align it with the *square* angle of the template (see the examples below). THE ANGLE BETWEEN THE GATE HINGE AND THE POST PIVOT BRACKET MUST MATCH THE ANGLE OF THE SETBACK TEMPLATE.



# Examples of a 4 1/2" x 4 1/2" Setback

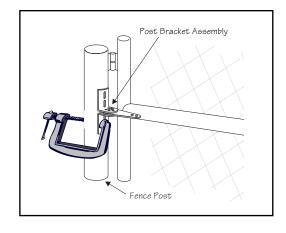




**NOTE:** If you move the post pivot bracket, be sure one of the post bracket holes is aligned with the rest of the assembly (the center hole should already have a bolt through it). **Flipping the Post Pivot Bracket over gives more position options.** 

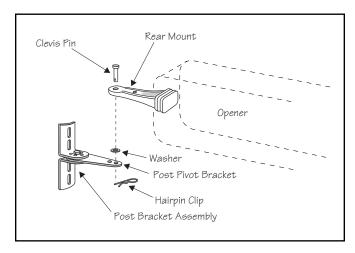
# Step 6

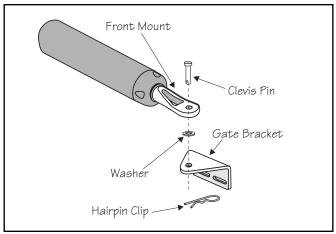
Use C-clamps to *temporarily* attach the post bracket assembly to the fence post in the position that best satisfies the  $4 \frac{1}{2}$ " x  $4 \frac{1}{2}$ " setback.



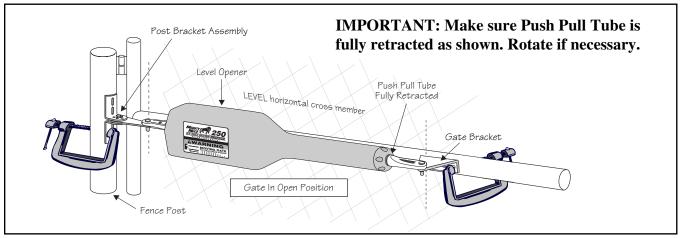
#### Step 7

Attach the gate bracket to the front mount of the opener using a clevis pin, washer and hairpin clip. Now attach the rear mount of the opener to the post pivot bracket, that is clamped to the fence post, using the clevis pin washer and hairpin clip.

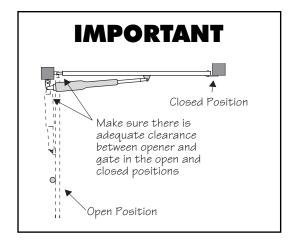




With the gate in the open position (80° to 110° from its closed position), adjust the post bracket assembly and gate bracket until the opener is level. While holding the opener level, use C-clamps to *temporarily* attach the gate bracket in it's position on the gate.



After verifying that you have complied with the  $4^{1}/2$ " x  $4^{1}/2$ " setback, insert the 5/16" x  $1^{3}/4$ " bolt through the aligned holes of the post bracket and post pivot bracket (*illustrated below*) and fasten it with the 5/16" washer and nut. **IMPORTANT:** If you loosened the clamp on the post bracket assembly to achieve the  $4^{1}/2$ " x  $4^{1}/2$ " setback, tighten it in its new position and recheck the gate bracket with the gate in the open position (move the gate bracket and re-clamp it if necessary).



# Verify the Position of the Gate Bracket and Post Bracket Assembly:

With the gate in the open position, make sure the following conditions are met:

- 1 The opener is level.
- 2 The 4  $\frac{1}{2}$ " x 4  $\frac{1}{2}$ " setback measurement is correct.
- 3 There is sufficient clearance between opener and gate in the open and closed positions.

# **Installing the Post Bracket Assembly and Gate Bracket**

#### Step 7

Mark reference points for bolt holes on the fence post through middle of bracket slots. Marking reference points in this manner allows room for adjustment when mounting the post bracket assembly and gate bracket. After marking your

reference points, remove the opener and brackets from the fence and gate.

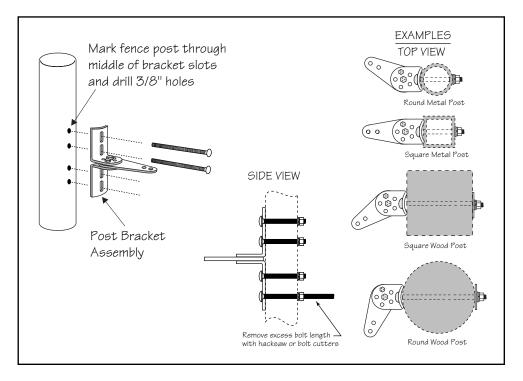
# Step 8

Drill <sup>3</sup>/8" holes into fence post as marked.

# Step 9

Fasten post bracket assembly to the fence post using (4) <sup>3</sup>/8" x 8" bolts, washers, lock washers, and nuts (*provided*). Remove excess bolt length extending beyond the tightened nuts with a hacksaw or bolt cutters.

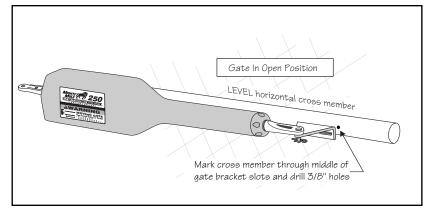
**NOTE:** In cases where the fence post has a diameter larger than 6", **threaded rods or carriage bolts longer than 8"** (*not supplied*) must be used.



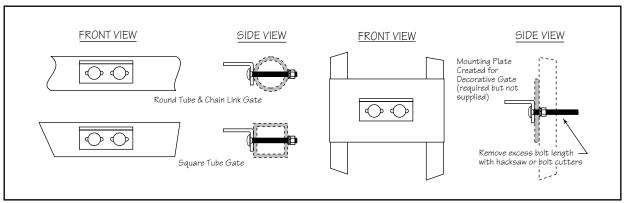
# Step 10

Mark reference points for bolt holes on the gate cross member through middle of gate bracket slots. Drill <sup>3</sup>/8" holes into the gate cross member as marked.

Mount gate bracket using (2) <sup>3</sup>/8" x 3" bolts, washers, lock washers, and nuts (*provided*). Cut off excess bolt length extending beyond the tightened nuts.



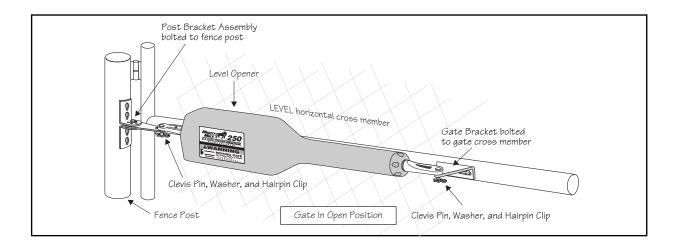
# **Gate Bracket Mounting Examples**



# **Mounting the Opener**

#### Step 11

Attach the opener to the securely bolted post bracket assembly and gate bracket using clevis pins, washers, and hairpin clips. Verify that the opener is level and adjust the post bracket assembly if necessary.



# **Installation of the Positive Stops**

The positive stops hold the gate firmly in the open and closed positions. The positive stops also form the boundaries of the gate operating arc and help stabilize the gate. Moreover, a stable gate maintains the long life of your automatic gate opener system.

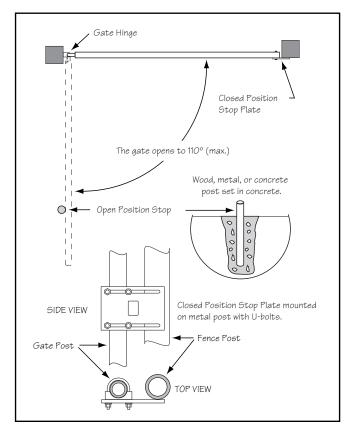
# Step 12

With the gate at its *maximum open position*, measure the distance from the gate hinge to the end of the gate. At approximately <sup>2</sup>/3 of this distance (using the hinge as your starting point), place a mark on the ground directly under the gate. Install the open position stop at this mark (*see illustration*). The open position stop post may be made of wood, metal, or concrete and should be firmly secured in the ground (we recommend setting it in concrete). When the open position stop post is in the ideal position, the gate will strike the post just as the opener motor shuts down.

# Step 13

Remove hairpin, clevis pin, and washer from front mount and close the gate (remember to support opener). Fasten the *closed position stop plate* to the end of the gate frame on the **gate centerline**, but *do not* tighten it completely. Slide the stop plate toward the fence post until they touch (*see illustration*). Once you have moved the stop plate to the correct position, tighten its hardware completely.

Use the appropriate hardware for your type of gate (use U-bolts if you have a tube or chain link gate; wood or lag screws for wood gates; etc.). This hardware is not provided.

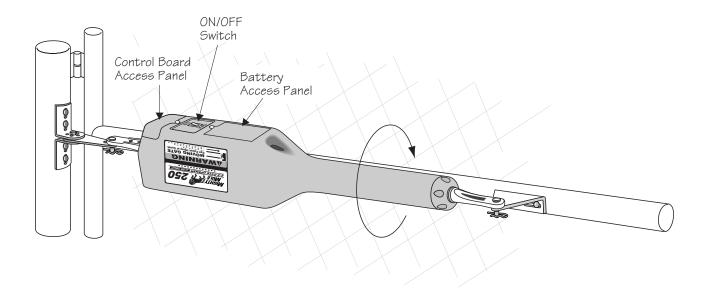


# **Preparing to Activate the System**

#### **Check List**

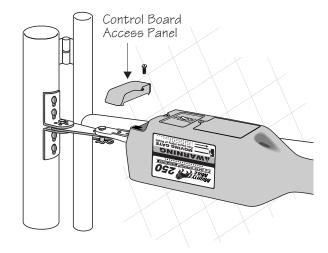
- The gate is plumb, level, and swings smoothly on its hinges.
- $\bullet$  After measuring with the 4  $^{1}/^{2}$ " x 4  $^{1}/^{2}$ " setback template, the post bracket assembly was bolted to the fence post.
- A plate or support was added for the gate bracket (if necessary).
- The opener is level and mounted on the centerline of the gate.
- Positive stops are installed.

In order to have easy access to the control board during the rest of the installation, remove the opener and remount it upside down.



Step 14

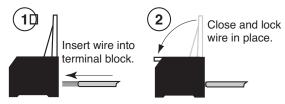
Remove the Control Board Access Panel on the bottom of the opener arm.



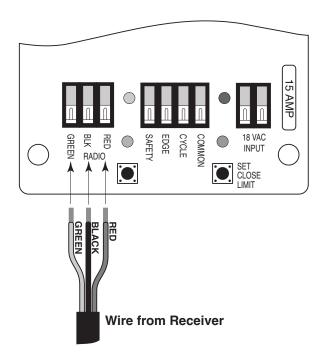
# Wiring the Receiver

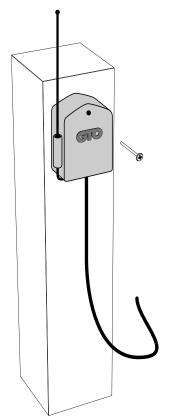
#### Step 15

The receiver wire has three leads. Connect the RED, BLACK and GREEN leads to the RADIO TERMINAL BLOCK on the control board. Insert each wire into its corresponding terminal block and secure the wires by pressing down on the white terminal block tabs until they lock in place. (shown below).



**No-Tool Terminal Blocks** 





# **Mounting the Receiver**

Consider the following when mounting the receiver:

- Standard receiver cable length is 10 feet (receivers with a longer cable are available as special order items; *call the GTO Sales Department*). NEVER splice receiver cable!
- DO NOT run cable in conduit containing AC wiring.
- The receiver range can vary from 50 to 100 feet depending upon weather, topography, and external interference.

# Step 16

Use the screw or ty wrap provided to secure the receiver in place.

#### **FCC Regulation**

This device complies with FCC rules Part 15. Operation is subject to the following conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept an interference that may cause undesired operation.

Transmitter distance may vary due to circumstances beyond our control.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

# **Powering the System**

Following these instructions carefully will assure that your Mighty Mule 250 will give you many years of reliable service.

# IMPORTANT INFORMATION, please read:

The Mighty Mule 250 E-Z Gate Opener will not function until the transformer is installed and the system is activated following the steps on pages 20-22.

The Mighty Mule 250 circuitry is designed to only operate with the transformer connected to the opener and plugged into an AC outlet. The battery in the Mighty Mule 250 will provide approximately 12-15 open and close cycles during a power outage. If the transformer is disconnected or the AC power is interrupted for a prolonged period of time, the battery will eventually drain down and the opener will not operate (this is normal). When the power is restored it could take up two (2) hours to fully recharge the battery. Limited use may begin with 15 minutes after AC power is restored.

The transformer is designed and intended for indoor use. If the transformer will be plugged only into an outside electrical outlet, a weatherproof cover or housing (available at local electrical supply stores) **must** be used.

The only wire acceptable for use with GTO transformers is; 16 gauge, dual conductor, multi-stranded, direct burial, low voltage, PVC sheathed wire. This particular gauge enables the transformer to provide an adequate charge through the control board to the battery at distances up to 1000 ft.

**DO NOT use telephone wire or solid core wire.** Unlike multi-stranded wire, these types of wire are inadequate for use with your gate opener system. Telephone wire and solid core wire do not deliver enough voltage for your gate opener to function properly and will cause the system to stop working.

**Avoid splicing wires together.** Splicing permits corrosion and seriously degrades the wire's ability to carry an adequate current. If you must splice wires contact GTO Technical Service at 1-800-543-1236.

**Do not run more than 1000 feet of wire.** If your gate is more than 1000 feet from an AC power source, you will need to run an AC power source to the gate or within 1000 feet Comply with all local codes.

# **Connecting the Battery**

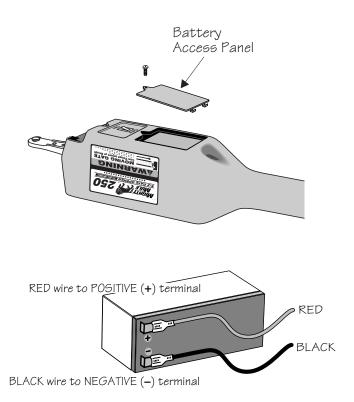
#### Step 17

Remove the Battery Access Panel on the bottom of the opener arm.

#### Step 18

Make sure the opener power switch is in the **OFF** position. Connect the **RED** battery wire to the **POSITIVE** (+) terminal on the battery. The **BLACK** wire should already be connected to the **NEGATIVE** (-) terminal from the factory. Replace the Battery Access Cover.

IMPORTANT: Pay close attention to the color of the wires. If the wires are connected incorrectly, the control board will be damaged.



**TIP:** Apply a small dab of petroleum jelly to the terminals to help prevent corrosion.

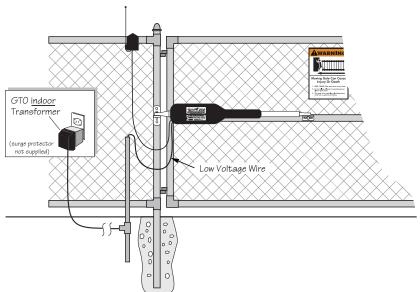
# **Connecting the Transformer**

# Step 19

Select the 110 Volt electrical outlet into which you will plug the transformer. Lay the low voltage wire in a trench following a path from the selected electrical outlet to the control box. Wires coming up from the ground should be run through PVC conduit to protect them from lawn mowers, weed eaters, and grazing animals. Be sure to bury the wire laid in the trench.

# Step 20

Bring enough wire up through the PVC conduit to allow for gate movement from open to closed position. See example right.

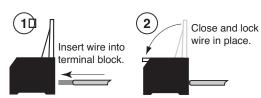


IMPORTANT: The charging circuit built in to the Mighty Mule 250 is designed for the GTO battery. To avoid possible damage to the Mighty Mule 250 or the battery, ONLY use GTO replacement batteries.

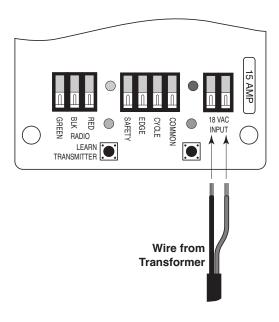
#### Step 21

Strip <sup>3</sup>/16" off the ends of the low voltage wire and twist tightly. Insert these ends to the **18 VAC INPUT** terminal block located on the control board (*see illustration at right*). The wires can be inserted into either terminal regardless of color. **Be certain not to let the exposed wires touch each other!** 

Secure the wires by pressing down on the white terminal block tabs until they lock in place. A dab of household petroleum jelly on each terminal will help prevent corrosion.



**No-Tool Terminal Blocks** 



# Step 22

At the AC outlet strip 1/2" of insulation from the ends of the low voltage wire. Attach these stripped ends to the transformer terminals.

A dab of household petroleum jelly on each terminal will help prevent corrosion.

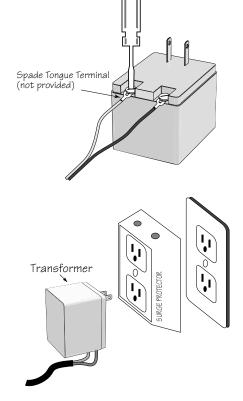
We suggest crimping a spade tongue terminal (*not provided*) to the end of each wire before attaching it to the transformer.

Make sure the exposed wires do not touch each other!

# Step 23

Plug the transformer into the electrical outlet and turn the power switch on the opener to the ON position.

The use of a surge protector with the transformer is **strongly** recommended.



NOTE: In some cases the battery may need to be charged for at least 1 hour before proceeding to the next step.

**Programming the Closed Limit Position** 

Transformer MUST be plugged in before proceeding with this next section.

Your Mighty Mule 250 has two Limit Settings

1) **OPEN Limit setting:** (Gate in the OPEN POSITION / FACTORY SET & NOT ADJUSTABLE)

The open limit setting is the fully open position.

#### 2) **CLOSED** Limit setting:

The CLOSED Limit setting (gate in the CLOSED POSITION)
To achieve optimum closed position, you are required to complete the following FOUR STEPS:



Confirm that the power switch in the ON position, the gate is in the OPEN POSITION and the operator is mounted upsidedown with "SET CLOSE LIMIT" program button is visible on the control board.

#### Step 2

Activate your opener by pressing the entry transmitter. Your gate should now be moving from the fully open position toward the closing position. Prepare to STOP gate when it

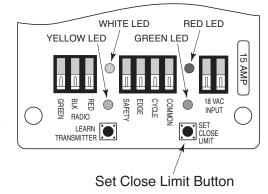
reaches the desired closed position by pressing the entry transmitter again. The optimum CLOSED POSITION is when the gate closes firmly, without excess tension, against the gate post. The motor should run for one-half second after the gate closes against the gate post. This step may be repeated until desired close position is achieved. If this step requires you to cycle the opener more than 8-10 times, please allow the battery to recharge at least 1 hour before trying again. Once the desired CLOSE position has been achieved, proceed to step 3.



With your gate firmly closed. Program the closed limit setting by PRESSING & HOLDING the "SET CLOSE LIMIT" button on the control board for 5 seconds.

# Step 4

Press the transmitter button and allow the gate to return to the fully open position. YOUR CLOSED POSITION LIMIT IS NOW PROGRAMMED.

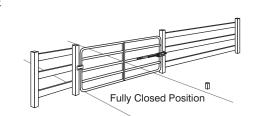


#### **TESTING YOUR CLOSED LIMIT SETTING:**

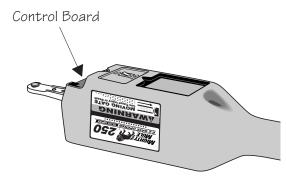
Press your entry transmitter and allow your gate to close. If CLOSED position is not correct or needs to be changed you will need to CLEAR your CLOSED LIMIT setting and follow steps 1-4 again.

#### **CLEARING PROGRAMMED CLOSED LIMIT SETTING:**

If you make a mistake and set the limit at the wrong position – press your transmitter to return the gate to its fully opened position, then press and hold the "SET CLOSE LIMIT" button for 10 seconds. This will clear the memory for the closed limit position. Follow steps 1-4 again.



Fully Open Position



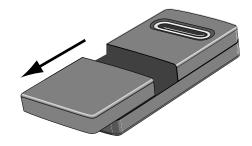
# **Setting Your Personal Transmitter Code**



All GTO transmitters are set to a standard code at the factory and are ready to operate your Mighty Mule 250. For your safety and security, however, we **strongly recommend** that you replace the factory setting with your own personal code. Follow the directions below:

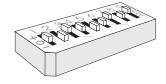
#### Remove the Transmitter Cover

Grasp the sides of the access cover and slide it away from the transmitter button (*see illustration*). When the access cover is removed, the battery and the DIP switches will be exposed. To set a new code, use a small screwdriver to move the switches.



#### 2. Set the transmitter DIP Switches

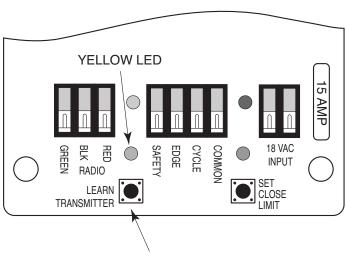
There are nine (9) transmitter DIP switches; each can be placed in three different positions (+, 0, -). **DO NOT** set all the switches in the same position, such as all +, all 0, or all -. Once the DIP switches have been set to a personal code, replace and close the access cover.



WARNING: No other adjustments should be made inside the transmitter.

#### 3. "Teach" the New Code to Control Board Memory

- A. Unscrew and remove the electronic access cover on the bottom of the opener.
- B. Press and hold transmitter button.
- C. Press and hold the LEARN TRANSMITTER button on the control board until the YELLOW LED light goes out.
- D. Release transmitter button.
- E. Release **LEARN TRANSMITTER** button. The new code is stored in control board memory.



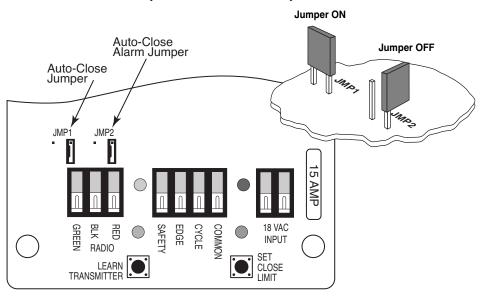
Learn Transmitter Button

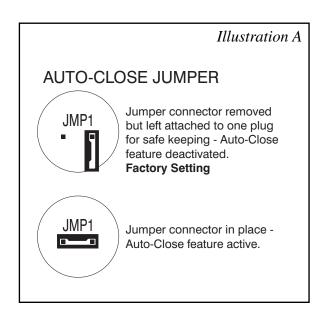
# **Enabling the Auto-Close Feature**

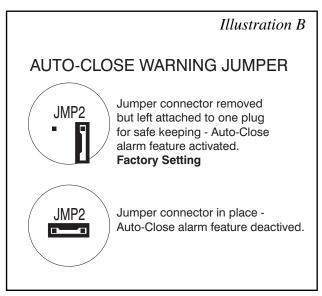
The Mighty Mule 250 is equipped with a built-in auto-close feature option. The auto-close feature will automatically activate the Mighty Mule 250 and close the gate if it is left at the open position more than 60 seconds. The auto-close feature comes disabled from the factory, allowing the gate to remain open until activated by a transmitter, push button or keypad.

To enable the auto-close feature, place the small black jumper connector on the JMP1 plug on the control board as shown in Illustration "A" below. When the auto-close feature is activated, an audible warning will sound for 2.5 seconds prior to the gate closing. This audible warning alerts anyone standing close to the gate that the gate is about to move. The audible warning will only sound if the gate is closed by the auto-close feature, not by keypads, transmitters or other manual control devices.

**IMPORTANT:** We recommend leaving this audible warning feature enabled if the auto-close feature is enabled. The audible warning can be disabled by connecting the jumper to JMP2, see Illustration "B" below. The only reason the audible warning should be disabled is if it disturbs live stock in a way that would create a safety hazard.







# **Connecting Additional Safety Devices**

Although GTO strongly recommends the use of additional safety devices, we do not endorse any specific brand names. Only use products that are certified and listed to be in compliance with UL (United Laboratories) and national and regional safety codes.

Call GTO Sales at 1-800-543-4283 for information on compatible products for your specific application.

The Mighty Mule 250 will ONLY accept accessory devices with normally open contact output.

# **Contact Sensors (safety edges)**

If not installing a contact sensor skip to next section.

PLEASE NOTE: Contact sensors are not included with the Mighty Mule 250.

The Mighty Mule 250 is equipped with built-in obstruction sensitivity. The opener is designed to stop and reverse the gate for 2 seconds when it comes in contact with an obstruction. However, obstruction sensitivity, although functioning properly, *may not be sensitive enough to prevent bodily injury in some circumstances*. To augment your protection against entrapment, **GTO** *recommends* using some form of additional safety

**device.** When installed, contact sensors must be mounted in compliance with UL 325, Underwriters Laboratories safety standard for gate openers. Review page 5 for information about mounting requirements for safety edges ("contact sensors").

Refer to the sensor manufacturer's instructions for information about installing these devices on a vehicular gate.

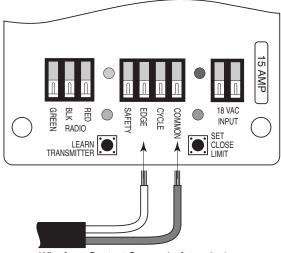


Make sure the power to the opener is turned off before connecting safety device wiring to the terminal blocks. Unplugging the transformer does not turn power to the opener OFF.

#### **Contact Sensor Input Connection:**

Connect one of the contact sensor wires to the **COMMON** terminal and the other to the **EDGE** terminal on the Mighty Mule 250 control board.

Activation of the contact sensor while the gate is in motion will cause the gate to stop and reverse for 2 seconds.



Wire from Contact Sensor (safety edge)

# **Non-Contact Sensors (photo beams)**

If not installing a non-contact sensor skip to next section.

PLEASE NOTE: Non-contact sensors are not included with the Mighty Mule 250.

The Mighty Mule 250 can also accept "Safety" input from normally open "dry-contact" output devices such as safety beams connected to the SAFETY input terminal.

Refer to the sensor manufacturer's instructions for information about installing these devices on a vehicular gate.

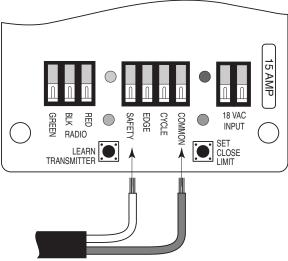


Make sure the power to the opener is turned off before connecting safety device wiring to the terminal blocks. Unplugging the transformer does not turn power to the opener OFF.

#### **Non-Contact Sensor Connection:**

Connect one of the non-contact sensor dry contact output wires to the **COMMON** terminal and the other to the **SAFETY** terminal on the Mighty Mule 250 control board.

This input is ONLY monitored when the gate is closing. Activating the non-contact (obstructing the safety beam path) will cause the gate to reverse to the fully open position.



Output Wire from Non-Contact Sensor (photo beam)

# **Connecting Accessories**

If not connecting accessories skip to next section.

The Mighty Mule 250 can accept NORMALLY OPEN CONTACT accessories, such as; Push Button Entry Devices and Key Pads.

Refer to the sensor manufacturer's instructions for information about installing these devices on a vehicular gate.



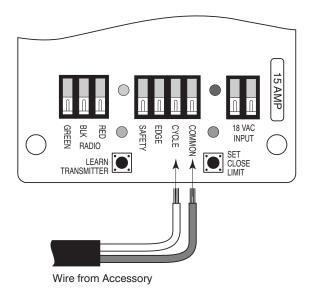
Make sure the power to the opener is turned off before connecting safety device wiring to the terminal blocks. Unplugging the transformer does not turn power to the opener OFF.

#### **Accessory Input Connection:**

Connect one of the accessory wires to the **COMMON** terminal and the other to the **CYCLE** terminal on the Mighty Mule 250 control board.

Each activation of the accessory will cause the gate to cycle as follows:

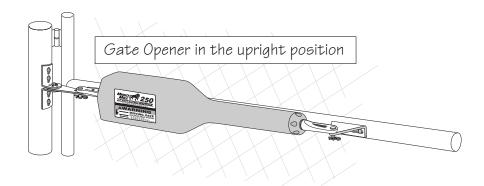
→ OPEN → STOP → CLOSE → STOP-



# FINAL STEP

# **Installation is Complete**

Replace control board access cover. If you were working with the opener with the control board access facing up, remove the opener arm from both mounts and remount it in the upright position. Failure to remount opener in the up right position will cause damage to the opener.



# **Troubleshooting Guide**

If your gate opener does not function properly after it is installed, use this guide before calling the GTO Service Department.

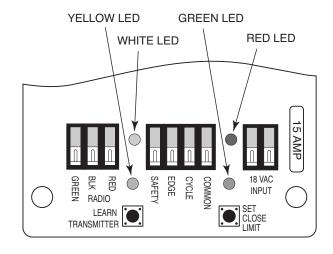
Routinely grease the gate hinges at least 4 times a year; more frequently if the gate is near a coastal area. Spray push pull tube with a high quality silicon and wipe clean regularly and replace the battery every two (2) years.

# **LEDs Indicators Diagnostic:**

GREEN: AC power indicator.

- a. ON: 18 Vac power is present. This LED will be on regardless of the ON/ OFF switch position.
- b. OFF: No AC power is present. The battery will not be charged. The operator may still operate, however AC power should be restored as soon as possible.

RED: Charging indicator. This LED will cycle ON and OFF as it trickle charges the battery under normal operation.



YELLOW: RF receiver signal indicator. Blinking

on/off as RF signal is received. This LED is typically blinking under normal operation.

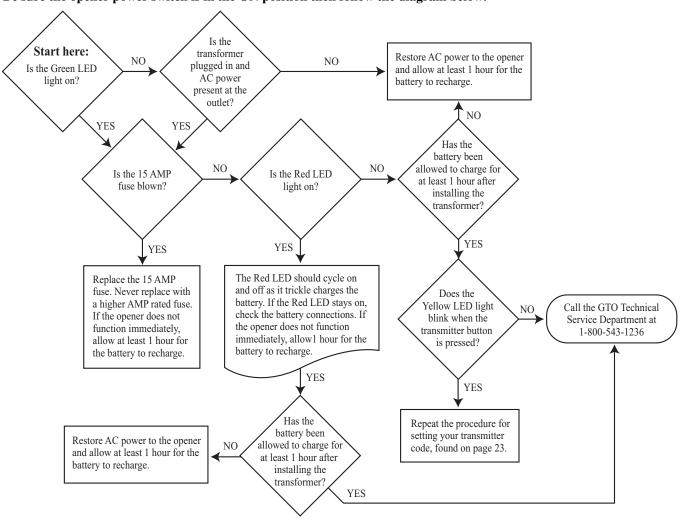
- a. ON: RF signal (318 MHz) is received.
- b. OFF: RF signal (318 MHz) is NOT received.

WHITE: Activity/status indicator. (Normally OFF)

a. This LED will blink once whenever there is a change at any of the inputs.

# If the Opener Does Not Work:

Be sure the opener power switch is in the ON position then follow the diagram below.



If you are unable to make a diagnoses from this chart, please call the GTO Technical Service Department at 1-800-543-1236. We can resolve most installation issues over the phone in just a few minutes. Please use a phone that will allow you to call from your gate.

# The Gate CLOSES Then OPENS Partially on its Own:

- 1. Check the position of the mounting brackets and readjust if necessary.
- 2. Check the gate for binding or hinge damage.
- 3. Closed position is set too tight and binds.

# The Gate OPENS Then CLOSES Again on its Own:

- 1. Check the position of the mounting brackets and readjust if necessary.
- 2. Check the gate for binding or hinge damage.
- 3. Binds against the open position stop.

The **GTO, Inc. Technical Service Department** is open Monday – Thursday 7:30 A.M. – 5:30 P.M. and Friday 8:00 A.M. – 12:00 P.M. (Eastern Time)

Telephone (800) 543-1236 · (850) 575-4144

Fax (850) 575-8950 · Web site: www.mightymule.com

E-Mail: techsupport@gtoinc.com

# **Warranty and Repair Service**

If your Mighty Mule 250 is not operating properly, DO NOT RETURN to the store. First try the TROUBLE SHOOTING GUIDE beginning on page 27. If that doesn't help, call GTO's Service Department at 1-800-543-1236, or (850)575-4144 and we will be glad to help you solve any problems you may still have.

You will need the serial number (located on the control box cover) and date of purchase when calling for assistance.

If repair or replacement of your gate opener is necessary, the Service Department will assign a **Return Goods Authorization (RGA) number** to you.

Securely pack the component(s) authorized for return to the factory. Write the RGA number issued to you on the outside of the package in LARGE BOLD PRINT. Ship the package(s) to: GTO, Inc., 3121 Hartsfield Road, Tallahassee, Florida, USA 32303.

NOTE: Products returned to GTO without a Return Goods Authorization (RGA) number in LARGE BOLD PRINT on the outside of the package *WILL NOT* be accepted. Also, items returned to GTO freight collect *WILL NOT* be accepted.



# **One Year Limited Warranty**

Your Mighty Mule 250<sup>®</sup> is warranted by the manufacturer against defects in materials and manufacturer workmanship for a period of one (1) year from date of purchase, *provided the recommended installation procedures have been followed.* 

In the case of product failure due to defective material or manufacturer workmanship within the one (1) year warranty period, the opener will be repaired or replaced (at the manufacturer's option) at no charge to the customer, if returned to GTO, Inc., 3121 Hartsfield Road, Tallahassee, Florida, USA 32303. IMPORTANT: Call (850) 575-4144 or Fax (850) 575-8950 for a Return Goods Authorization (RGA) number before returning item(s) to the factory. Products shipped to the factory without an RGA number will not be accepted. Replacement or repaired parts are covered by this warranty for the remainder of the one (1) year warranty period or six (6) months, whichever is greater. GTO will pay shipping costs (equal to United Parcel Service ground rate) for return to owner of item(s) repaired under warranty.

An additional one (1) or two (2) year Extended Warranties are available during the original one (1) year warranty period. Fill out the from on inside back cover of this manual and mail to **the address shown on the form.** 

The manufacturer will not be responsible for any damage or cost incurred in the removal of the defective parts for repair, or for the reinstallation of those parts after repair. This warranty shall be considered void if damage to the product was due to improper installation or use, tampering (if the seal on the housing is broken), connection to an improper power source, or if damage was caused by lightning, wind, fire, flood, insects, or other natural agent. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state. This warranty is in lieu of all other warranties, either expressed or implied. **NOTE: Verification of the warranty period requires copies of receipts or other proof of purchase. Please retain these records.** 

After the warranty period expires, GTO (or one of its authorized service centers) will perform necessary repairs for a nominal fee. Call GTO at (800) 543-1236 or (850) 575-4144 for more information.

# **Accessory Catalog**

#### These Accessories are Available From Your Retail Store



#### **GTO Digital Keypad (FM137)**

The specially designed digital keypad can easily be installed as a wireless or wired keypad. It can be programmed to use up to fifteen different personal identification number (PIN) codes. Each code is face programmable with additional security features built in. Requires 3 AA batteries (*not included*).



#### Mighty Mule Entry Transmitter (FM135)

The **Mighty Mule** entry transmitter, with adjustable code settings, is standard equipment with **Mighty Mule** systems. Battery included.



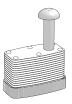
#### **Key Chain Mini Transmitter (FM134)**

The Key Chain Mini Transmitter is a miniature version of the **Mighty Mule** entry transmitter and has the same adjustable code settings. Battery included.



#### Push Button (Doorbell) Control (FM132)

Unlit doorbell button for remote entry or exit control. Connects directly to the control board and uses 16 gauge, multi-stranded low voltage wire (*not included*).



#### Pin Lock (FM133)

The **Pin Lock** substitutes for the clevis pin at the front mount of the opener. Helps prevent theft of the opener from the gate, while allowing quick release of the opener.



#### Low Voltage Wire (RB509)

The 16 gauge, multi-stranded, dual conductor **Low Voltage Wire** connects the AC powered transformer to the control board. Also used for the connection of accessories, such as keypads, push buttons and other wired control devices. This specially designed wire is UV treated, PVC coated and ready for direct burial. Available in 1000' rolls or special lengths.



#### **Replacement Battery (RB422)**

Standard 12 volt, 1.2 amp-hour, maintenance-free battery for the **Mighty Mule FM250** gate opener system. This is the only battery approved for use with the **Mighty Mule FM250** gate opener system. Life expectancy is 3-5 years.

# The Following Accessories Are Available Through Your Retail Store's Special Order Desk.



#### **Dual Transmitter (RB742)**

The Dual Transmitter is a two button transmitter for remote control of two separate gate openers, or a gate opener and garage door opener (see *Garage Door Receiver*). Battery included.

#### **Triple Transmitter (RB743)**

The Triple Transmitter is a three button transmitter for remote control of three separate gate openers and/or garage door openers (see *Garage Door Receiver*). Battery included.



#### **Garage Door Receiver (RB709)**

The Garage Door Receiver allows you to use the same **Mighty Mule** entry transmitter (see *dual and triple transmitters*) to operate your gate opener and your garage door opener. Compatible with most garage door openers.



#### Replacement Transformer (RB566)

Standard 18 volt AC transformer for maintaining the battery included with the **Mighty Mule** gate opener. This is the only transformer approved for use with the **Mighty Mule**.

# If you have a question about any special order item, just call 1-800-543-GATE!

# Mighty Mule Accessory Limited One Year Warranty:

GTO, Inc., gate openers and accessories are warranted by the manufacturer against defects in materials and manufacturer workmanship for a period of one (1) year from date of purchase, *provided the recommended installation procedures have been followed.* 

In the case of product failure due to defective material or manufacturer workmanship within the one (1) year warranty period, the product will be repaired or replaced (at the manufacturer's option) at no charge to the customer, if returned to GTO, Inc., 3121 Hartsfield Road, Tallahassee, Florida, USA 32303. **IMPORTANT:** Call (850) 575-4144 or Fax (850) 575-8950 for a Return Goods Authorization (RGA) number before returning accessory to factory. Products received at the factory without an RGA number will not be accepted. Replacement or repaired parts are covered by this warranty for the *remainder* of the one (1) year warranty period or six (6) months, whichever is greater. GTO, Inc. will pay the shipping charges (equal to United Parcel Service GROUND rate) for return to the owner of items repaired under warranty.

The manufacturer will not be responsible for any charges or damages incurred in the removal of the defective parts for repair, or for the reinstallation of those parts after repair. This warranty shall be considered void if damage to the product(s) was due to improper installation or use, connection to an improper power source, or if damage was caused by lightning, wind, fire, flood, insects or other natural agent.

After the one (1) year warranty period, GTO, Inc. or one of its authorized service centers will make any necessary repairs for a nominal fee. Call GTO at (800) 543-1236 for more information. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state. This warranty is in lieu of all other warranties, expressed or implied. **NOTE: Verification of the warranty period requires copies of receipts or other proof of purchase. Please retain these records.** 

#### GTO, Inc.

# **Installation Check List**

This operator conforms to CLASS I applications.

Γhe installer verifies that:	
WARNING SIGNS are securely installed, one on each	n side of the gate panel.
Non-contact sensors (photo beams) are installed, one a	across each side of the gate opening.
Contact sensors (safety edges) are installed and are fur	nctional at all hazard or pinch points.
Hard wired contact sensors are located and wired to av	void any mechanical damage.
All controls intended to reset the gate opener after an o	obstruction are installed in sight of gate.
Customer has read all the instructions and is clear on t	he proper use of the gate operator.
Customer understands proper use of all control device	s used with the gate opener.
Customer understands that this gate is for vehicular us	e ONLY. Pedestrians MUST NOT use this gate.
A separate gate or entrance is installed for pedestrian u	use (if pedestrian access is desired).
Closed position stop plate is securely fastened.	
The position of the post bracket assembly complies wi	th the 4 $^{1}/^{2}$ " x 4 $^{1}/^{2}$ " setback requirement.
All power cables, receiver cables, and transformer plu	gs are securely fastened.
Petroleum jelly is applied to the control board termina	ls and battery connections.
Safety instructions are reviewed and understood by the	e customer.
Customer and authorized users understand how to disc	connect the operator for manual operation of the gate.
Customer has filled out the customer support card and	mailed it to GTO, Inc.
Customer is reminded to retain <b>all receipts</b> of Mighty	Mule purchase (receipts mandatory for warranty repairs).
The completed installation should be photographed from	om both the front and back of the gate. Photo was dated.
Customer's Signature	Date
5	<del></del>
Installer Signature (if not the same)	Date



# Extended Warranty for Mighty Mule 250 E-Z Gate Opener



An **EXTENDED WARRANTY** is now available for Mighty Mule 250 E-Z Gate openers. The Warranty will provide an additional ONE (1) or TWO (2) Year Limited Warranty after the original ONE (1) Year Limited Mighty Mule 250 Warranty you received with your original purchase.

This offer is only valid within 90 days of your Mighty Mule 250 purchase. To take advantage of this offer, fill in the information below and send this form, your payment for a ONE (1) or TWO (2) Year Warranty and a copy of your original Mighty Mule 250 Opener purchase receipt to:

Extended Warranty - GTO, Inc. 3121 Hartsfield Rd. Tallahassee, FL 32303.

An EXTENDED WARRANTY receipt will be sent to you for your records. You will need to keep this Warranty receipt and your original purchase receipt in the event you require warranty work in the future.

\$50.00 within 90 days — for a one (1) Year Extended Warranty \$75.00 within 90 days — for a two (2) Year Extended Warranty

# Mighty Mule 250 E-Z Gate Opener Limited Warranty

GTO, Inc., gate openers are warranted by the manufacturer against defects in materials and manufacturer workmanship for the extended period you choose following the original one (1) year warranty, provided the recommended installation procedures have been followed. This warranty is only valid if the serial number registered matches the serial number of the gate opener claimed under this warranty. Please note that batteries are only covered under the original one (1) year warranty, and are not covered under the extended warranty.

In the case of product failure due to defective material or manufacturer workmanship within the extended warranty period, the product will be repaired or replaced (at the manufacturer s option) at no charge to the customer, if returned freight prepaid to GTO, Inc., 3121 Hartsfield Road, Tallahassee, Florida, USA 32303. IMPORTANT: Call (850) 575-0176 or Fax (850) 575-8950 for a Return Goods Authorization (RGA) number before returning to factory. Products received at the factory without an RGA number will not be accepted. Replacement or repaired parts are covered by this warranty for the remainder of the entended warranty period or six (6) months, whichever is greater. GTO, Inc. will pay the shipping charges (equal to United Parcel Service GROUND rate) for return to the owner of items repaired under warranty.

The manufacturer will not be responsible for any charges or damages incurred in the removal of the defective parts for repair, or for the reinstallation of those parts after repair. Any components that **are not** GTO specified (i.e. battery and transformer) will void the warranty. This warranty shall be considered void if damage to the product(s) was due to improper installation or use, connection to an improper power source, or if damage was caused by lightning, wind, fire, flood, insects or other natural agent.

After the extended warranty period, GTO, Inc. or one of its authorized service centers will make any necessary repairs for a nominal fee. Call GTO at (800) 543-4283 for more information. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state. This warranty is in lieu of all other warranties, expressed or implied. NOTE: Verification of the warranty period requires copies of receipts or other proof of purchase. Please

IMPORTANT: So		Located on	the cover of the op	ener.		
Last Name	First Name		M.I.	Purchase infor A copy of the M	rmation. lighty Mule purchase receipt is mand	is mandatory
Address				Store Name	Date of Pi	urchase
City	State	Zip	Country	Store Address		
Phone Please m		e:mail th credit ca	urd, money o	City rder or cashiers o	State Zip	
One (1) Year l	Extended Warr	anty	Two (2)	Year Extended V	Warranty	
<b>\$50.00</b>			<b>\$75.0</b>	00		
	IT Money Order [	Cashiers Che	eck Master Co	ard VISA	This information will be entered in our custor systems data base, which will enable us	