

Do-It-Yourself GATE OPENERS



Mighty Mule® Heavy Duty Gate Openers (FM500/FM502) will handle gates up to 18 ft. (5.49 m.) in length or weighing up to 850 lbs. (384.55 kg.) Per gate leaf.

FM500/FM502 FEATURES:

- Commercial Grade Soft Start/Soft Stop, extends life of the gate opener.
- Gate Types: Chain link, tube, ornamental, aluminum, panel, wood and vinyl.
- Provides up to 225 cycles per day (using transformer) for FM500.
- Dual model FM502 provides up to 115 cycles per day (using transformer).
- Easy to install low-voltage system, no electrician required.
- Designed for gates that open into or away from the property.
- Built in adjustable auto-close option with alarm.
- Solar compatible (10 Watt minimum for FM502 & 5 Watt for FM500).

FM500 SINGLE

Mighty Mule Heavy Duty Single Gate Opener

FM500 Standard Components:

- One single gate opener
- One entry transmitter
- Installation hardware
- Control box (includes battery)
- Receiver
- Installation manual
- Plug-in transformer
- Installation video
- Warning signs (2)



Mighty Mule 500 Gate Capacity /Cycle Chart
Estimated number of daily cycles, based on use with a transformer and one(1) 12 Volt battery.

Gate Weight	Number of Cycles Per Day							
	6'	8'	10'	12'	14'	16'	18'	NR
850 lbs. (385.6 kg)	68	63	NR	NR	NR	NR	NR	NR
750 lbs. (340.2 kg)	73	68	63	NR	NR	NR	NR	NR
650 lbs. (294.8 kg)	78	73	68	63	NR	NR	NR	NR
550 lbs. (249.4 kg)	83	78	73	68	63	NR	NR	NR
450 lbs. (204.1 kg)	88	83	78	73	68	63	NR	NR
350 lbs. (158.8 kg)	93	88	83	78	73	68	63	NR
250 lbs. (113.4 kg)	98	93	88	83	78	73	68	63
150 lbs. (68 kg)	103	98	93	88	83	78	73	68
100 lbs. (45.4 kg)	108	103	98	93	88	83	78	68
50 lbs. (22.7 kg)	113	108	103	98	93	88	83	68
	6' (1.8 m)	8' (2.4 m)	10' (3.1 m)	12' (3.7 m)	14' (4.3 m)	16' (4.9 m)	18' (5.5 m)	

*(NR) NOT RECOMMENDED

Mighty Mule Heavy Duty Dual Gate Opener

FM502 DUAL

FM502 Standard Components:

- Two openers for dual gates
- One entry transmitter
- Installation hardware
- Control box (includes battery)
- Receiver
- Installation manual
- Plug-in transformer
- Installation video
- Warning signs (4)



18 Month Limited Warranty

*(NR) NOT RECOMMENDED

ACCESSORIES

FOR GATE OPENERS

ENTRY / EXIT ACCESSORIES

- 1 Single Button Entry Transmitter (FM135)**
The Mighty Mule entry transmitter includes a visor clip and has adjustable code settings. This is the standard transmitter included in every Mighty Mule gate opener kit. (Battery is included)
- 2 Dual Button Key Chain Transmitter (FM134)**
This transmitter is the same as Mighty Mule entry transmitter with the addition of a key chain and a second button. Both buttons are programmable to control multiple gate openers on different gates and / or garage door openers. (see Garage Door Receiver) (Battery is included)
- 3 Triple Button Transmitter (RB743)**
The three buttons on this transmitter are programmable to control multiple gate openers on different gates, and / or garage door openers. (see Garage Door Receiver) (Battery is included)

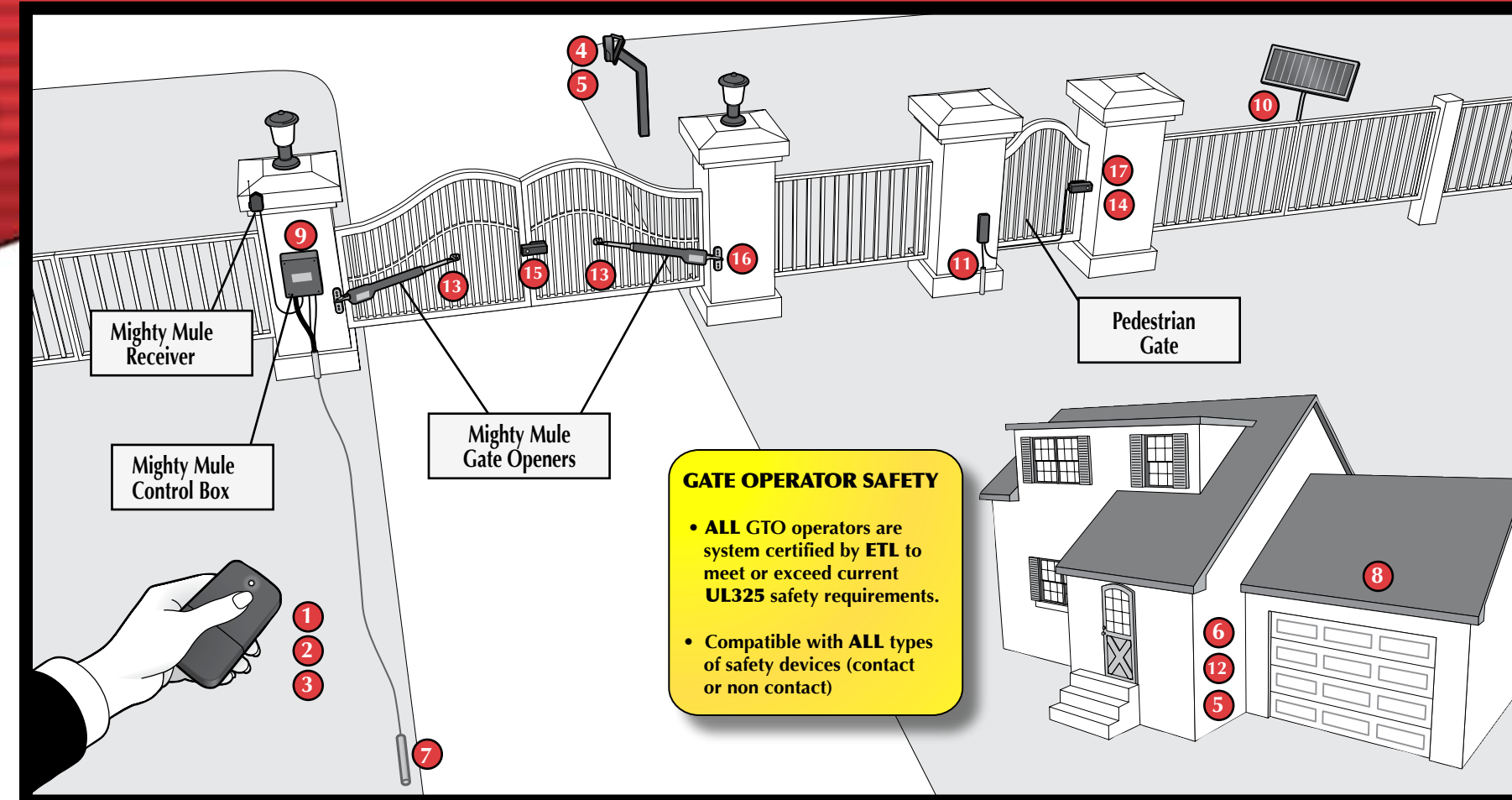
- 4 Digital Keypad (FM137)**
The digital keypad can be easily installed as a wireless or wired keypad. It can be programmed to use up to twenty-five different personal identification number (PIN) codes. This used in combination with the Mighty Mule automatic gate lock (see automatic gate lock) adds an additional layer of security for your property.

- 5 Wireless Intercom/Keypad (FM136)**
This versatile digital intercom with keypad system is ideal for any residential application, alerting you of visitors and allowing gate operator activation from the safety of inside your home. The intercom provides superior range with crystal clear two-way communication up to 500 ft. (152.4 m) wireless or 1,000 ft. (304.8 m) wired.

- 6 Push Button Control (FM132)**
Unlit doorbell button for remote entry or exit control. Wire this control directly to the control board. Uses 16 gauge multi-stranded, dual conductor Low Voltage Wire. (RB509)

- 7 Gate Opening Sensor (FM138)**
The gate opening sensor is an electromagnetic sensor, which offers 'hands free' operation of the Mighty Mule Gate Opener with a 12 ft. (3.7 m) radius of detection of vehicles in motion.

- 8 Garage Door Receiver (RB709)**
The garage door receiver allows you to use the same Mighty Mule entry transmitter that is standard with your Mighty Mule gate opener kit or optional transmitters (see dual and triple transmitters) to operate multiple gate openers and / or garage door openers. Compatible with most garage door openers.



POWERING ACCESSORIES

- 9 Replacement Battery (FM150), (FM152)**
For models: FM500/FM502, FM700/FM702, use (FM150) which is a standard 12 Volt, 7.0 amp-hour, maintenance-free battery for the Mighty Mule® gate opener systems. For model FM250, use (FM152) which is a standard 12 Volt, 1.2 amp-hour, for the FM250 gate opener system and the Bulldog Pedestrian Gate Lock (FM145). For model FM350 please use a 12 Volt marine or automotive battery that is not provided in kit.

- 10 Solar Panel 5 Watt (FM121) or 10 Watt (FM123)**
The solar panel is for use for up to 30 Watts of solar charging power for Mighty Mule® models FM350, FM500 and FM502. Each solar panel comes with tubular steel support, mounting clips, wire connectors, and 8 ft. of Low Voltage Wire. (RB509) (Not compatible FM250)
NOTE: Dual gates require a minimum of 10 Watts.

- 11 Low Voltage Wire (RB509)**
The 16 gauge, multi-stranded, dual conductor Low Voltage Wire is for connecting the AC powered transformer, or the solar panel to the control board. Also used for the connection of accessories, such as automatic gate lock (FM143), digital keypad (FM137, FM136), Push Button (FM132) and other wired control devices. This specially designed wire is UV treated, PVC coated and ready for direct burial. Available in 1000 ft. (304.8 m) rolls or special lengths.

- 12 Replacement Transformer (RB570)**
For models: FM500/FM502/FM350. This is the standard 18 Volt AC transformer that is included with all Mighty Mule gate openers and is designed for maintaining battery backup.
For models FM700/702, use transformer (RB566).

LOCKING ACCESSORIES

- 13 Pin Lock (FM133)**
The Pin Lock is a substitute for the clevis pin at the front mounting point of all models of SWING Mighty Mule gate openers and the chains of the Mighty Mule SLIDE Gate Openers to help prevent theft of the opener.

- 14 Bulldog Pedestrian Gate Lock (FM145)**
Designed for horizontal use on "walk-thru" gates. The Bulldog is an affordable solution for protecting swimming pool areas, playgrounds, tennis courts, boat docks, etc., from unwanted access. Can be used with the digital keypad (FM137 or FM136) and is solar compatible.

- 15 Automatic Gate Lock (FM143)**
A MUST for added security. Unlocks and locks automatically as gates open and close. Used with Mighty Mule systems for maximum stability and security. Comes with a keyed manual release. Recommended for gates over 8 ft. (2.4 m) long. Ideal for animal enclosures or high wind areas. (Not compatible with FM250, MM-SL1000B/MMSL2000B)

HARDWARE ACCESSORIES

- 16 Push to Open Bracket (FM148)** for models: FM500/FM502/FM350 (FM149) for models: FM700/FM702 Required when a Mighty Mule gate opener(s) must push a gate open, such as on a sloping driveway or where space prevents gate(s) from opening into the property (pulled open). (Order two brackets for a dual swing gate installation. Not compatible with FM250)

- 17 Column Mount Lock Receiver (4331H)**
For mounting the automatic gate lock (FM143) or the Bulldog Pedestrian Gate Lock (FM145) on brick columns, walls, or for other applications with limited space between gate and post. (Not compatible with FM250)

Do-It-Yourself GATE OPENERS

FM350 SINGLE

FM350 Standard Components:

- One single gate opener
- One entry transmitter
- Installation hardware
- Battery harness
- Receiver
- Installation manual
- Plug-in transformer
- Installation video
- Warning signs (2)

12 month limited warranty

NOTE: Requires 12 Volt automotive or marine type battery, weather proof case and battery terminal adaptors. (Not included)



Mighty Mule One Piece Single Gate Opener

Mighty Mule® 350 will handle gates up to 16 ft. (4.88 m) long or up to 550 lbs. (249.5 kg)

- Easy to install one piece low-voltage system
- No electrician required.
- Solar Compatible.
- Up to 1500 battery back up cycles when using a 12 Volt automotive or marine type battery.

Mighty Mule 350 Gate Capacity /Cycle Chart
Estimated number of daily cycles, based on use with a transformer and one(1) 12 Volt battery.

Gate Weight	Number of Cycles Per Day					
	6' (1.8 m)	8' (2.4 m)	10' (2.4 m)	12' (2.4 m)	14' (2.4 m)	16' (2.4 m)
550 lbs. (249.5 kg)	125	115	NR	NR	NR	NR
450 lbs. (204.1 kg)	135	125	115	NR	NR	NR
350 lbs. (158.8 kg)	145	135	125	115	NR	NR
250 lbs. (113.4 kg)	155	145	135	125	115	NR
150 lbs. (68 kg)	165	155	145	135	125	115
100 lbs. (45.4 kg)	175	165	155	145	135	125
50 lbs. (22.7 kg)	185	175	165	155	145	135

* (NR) NOT RECOMMENDED

Commercial Grade GATE OPENERS

MIGHTY MULE SLIDER COMMERCIAL GRADE SLIDE GATE OPENER



MM-SL1000B For gates weighing up to 500 lbs. (226.8 kg) and up to 30 ft. (9.1 m) in length with a 20 ft. (6.1 m) opening. (per leaf)

MM-SL2000B For gates weighing up to 1000 lbs. (453.6 kg) and up to 30 ft. (9.1 m) in length with a 20 ft. (6.1 m) opening. (per leaf)

- Includes a built-in internal locking device that locks the gate in the closed position.
- Access ready package includes battery, radio receiver, entry transmitter, AC transformer, and all necessary mounting hardware.
- Full systems capable "add on ready" heavy-duty control board includes adjustable obstruction sensing and gate sequencing.
- Solar compatible.
- Includes 12 Volt battery; a second battery is required for solar applications.

Note: Dual (double) gate applications require a master and slave opener.

- Use MM-SL1000B (master) and MM-SL1200B (slave) for a dual slide gate application up to 500 lbs. (226.8 kg) (per leaf).
- For double slide gates that weigh up to 1000 lbs. (453.6 kg) (per leaf), use MM-SL2000B (master) and MM-SL2200B (slave).

Ball bearing rollers should be used on all slide gates. (Not included)

12 month limited warranty

MM-SW3000XL For gates up to 16 ft. (4.88 m) in length, weighing up to 650 lbs. (294.8 kg)

MM-SW3200XL Second gate opener required for dual (double) gates.

MM-SW4000XL For gates up to 20 ft. (6.1 m) in length, weighing up to 1000 lbs. (453.6 kg)

MM-SW4200XL Second gate opener required for dual (double) gates.

FEATURES:

- Durable metal construction.
- Oversized control box with room for all accessories.
- Commercial electronic control board which includes adjustable obstruction sensing, gate sequencing, with plug and play easy wiring terminals and adjustable auto close (0-120 seconds).
- True soft start and soft stop operation, which extends the life of both opener and hardware.
- Includes battery, radio receiver, entry transmitter, and AC transformer and all the mounting hardware.

CONTENTS INCLUDED:

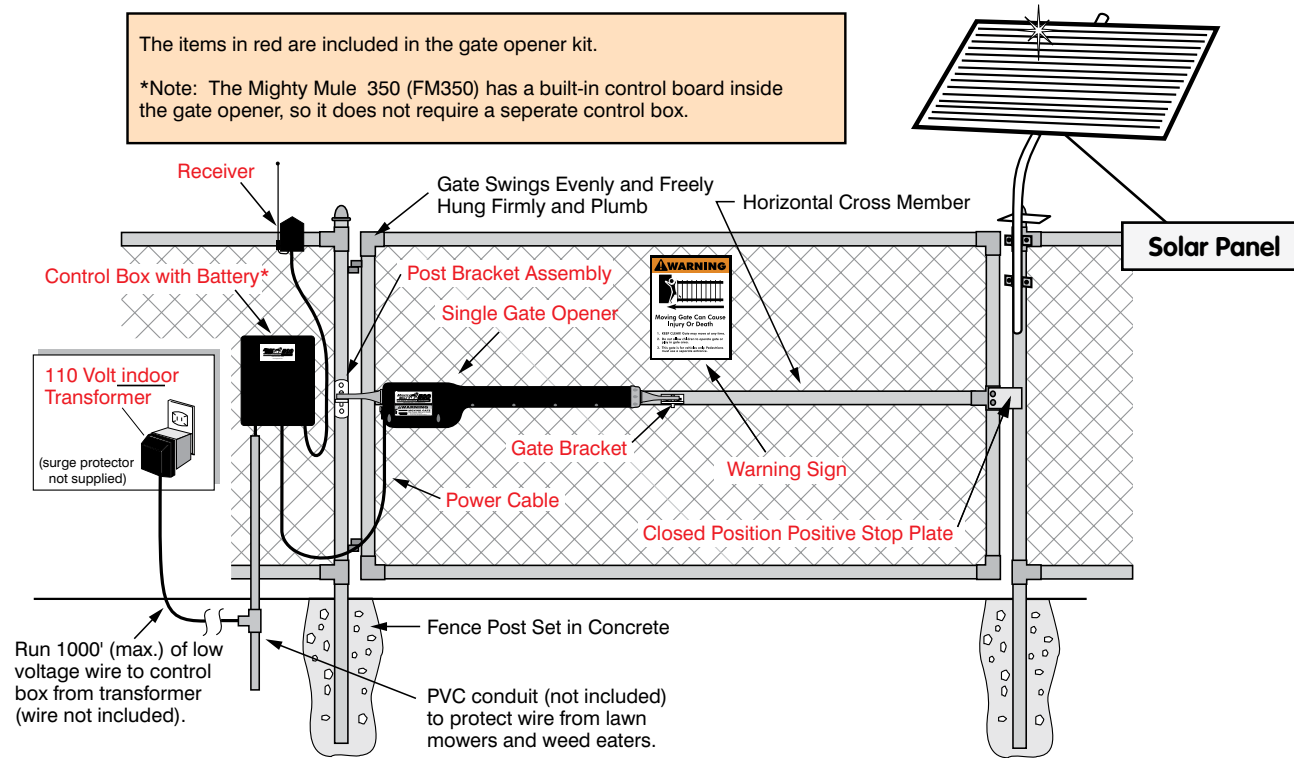
- One commercial grade operator
- One entry transmitter
- Installation hardware
- Extra large control box
- 12 Volt battery included
- Receiver
- Installation manual
- Plug-in transformer
- Warning signs (2)

MIGHTY MULE SWING COMMERCIAL GRADE SWING GATE OPENER



12 month limited warranty

MIGHTY MULE GATE OPENER TYPICAL INSTALLATION:



FREQUENTLY ASKED QUESTIONS...

1. What is a Mighty Mule E-Z Gate Opener?

A Mighty Mule E-Z Gate is a remote controlled automatic gate opener system. It is the industry leading gate opener for the "Do-It-Yourself" installer. It is battery operated, low voltage system; it is **safe** (no electrician needed), **affordable**, and **easy to install**.

2. Is the Mighty Mule Gate Opener Difficult to Install?

No. Most installations can be completed easily in two to three hours. Dual gates will take slightly longer because two operator arms are required. All installations can be completed with tools commonly used by most homeowners. Kit includes an installation video and easy to read instructions. Our technical service team is available to answer any installation questions. (see box for details.)

3. What Maintenance is required?

All Mighty Mule E-Z Gate Opener are designed to be virtually maintenance free. However, it is recommended that the push-pull tube be sprayed once a month with a good grade of "silicone" spray. Do not use an oil based spray as this will attract sand and dirt.

4. What Happens if the Gate Opener Hits Something?

All Mighty Mule E-Z Gate openers have built-in safety obstruction sensing which will cause the gate(s) to "Stop" and "Reverse" direction for two seconds if it comes in contact with an object. If the gate comes in contact with the object twice (obstructs) before returning to its fully open or close position, an alarm will sound for five (5) minutes.

5. Can I Manually Open the Gate?

Yes! Each opener arm is mounted to the brackets on the post(s) and gates with clevis pins and clips. By removing the pin and clip at the front end, the arm can be removed and the gate can be opened manually.

6. How is a Mighty Mule E-Z Gate Opener Powered?

All Mighty Mule gate openers are low voltage systems with a 12 Volt battery back up system. This assures limited operation of your gate during a power outage. The battery can be charged by the transformer, (included) OR can it be charged by solar panel(s) (optional).

7. How do I Install the Solar Panels?

The Mighty Mule solar panel (FM121) is a complete kit for easy mounting within 8 ft. (2.4 m) of the control box. If your panel(s) must be placed farther away than 8 ft. (2.4 m) up to 250 ft. (76.2 m) to receive maximum sunlight; additional low voltage wiring will be required. It is important that the solar panels face South and are placed in full sunlight, away from overhanging trees, or any obstacle that may shade the panel(s).

8. Will the Mighty Mule Open During A Power Outage?

Yes. A fully charged FM500 or FM502 battery will provide an average of fifty (50) cycles (open and close) and the FM350 battery (12 Volt car or marine battery not included) provides 1500 cycles during a power outage. This number can vary depending on factors such as the type of gate, number of accessories added, and weather conditions if using solar

Sales: 1-800-543-GATE (4283) Technical Service: 1-800-543-1236

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AUTOMATIC GATE OPENERS

OPENING GATES AROUND THE WORLD SINCE 1987!



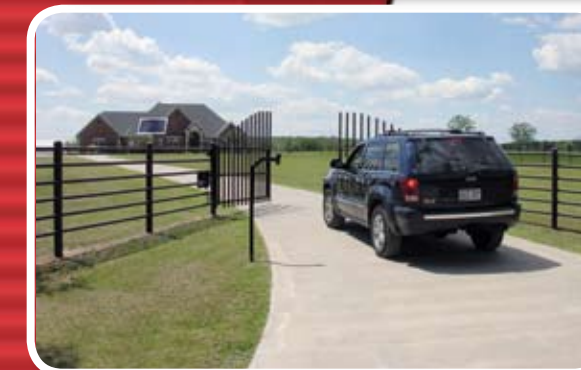
Mighty Mule **SWING** and **SLIDE** gate openers and access control accessories are designed for Do-It-Yourself installers.

No electrician or welding is required and the Mighty Mule will work equally well on farm, ranch and residential gates made of wood, vinyl, chain link, tube and iron.



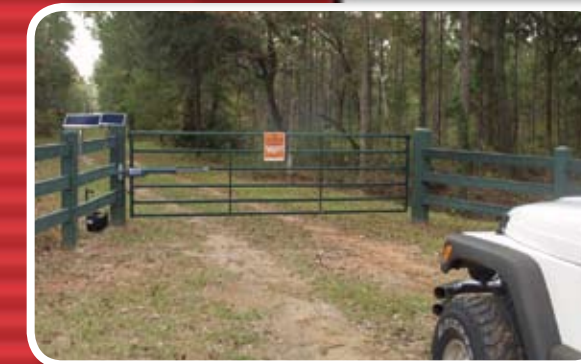
Mighty Mule Heavy Duty Single Gate Opener

For single swing gates up to 18 ft. (5.5 m) long or up to 850 lbs. (385.6 kg)



Mighty Mule Heavy Duty Dual Gate Opener

For dual swing gates up to 18 ft. (5.5 m) long or up to 850 lbs. (385.6 kg)



Mighty Mule One Piece Single Gate Opener

For single swing gates up to 16 ft. (4.9 m) long or up to 550 lbs. (249.5 kg)



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