WARNING
Instructions must be read before beginning installation. Please follow these instructions carefully, incorrect installation could affect gate operation. If you require more information, please contact Richmond Wheel & Castor Co on 1300 474 246

When mounting and positioning the motor ensure that the power cable is unplugged. The motor cover will need to be removed to mount the motor to the mounting plate. Any changes to the settings of the gate motor can only be made by a licensed electrician.

Please Note: This motor is AC 240V Power only and is not compatible with DC Battery Backup or Solar power.
Contents:

Gate Opening Default Setting Information .............................................4
General Safety .................................................................................5
Parts List ..........................................................................................6
Technical Specifications .....................................................................7

Motor Installation
Before you start ..................................................................................8
Tools Required / Example Sliding Gate Setup ....................................9
Step 1 - Gate Preparation Before Adding Your Motor .......................10
Step 2 – Motor Pad Footing ...............................................................10
Step 3 - Motor Position Installation ..................................................11
Step 4 – Removing Motor Cover for Mounting ..................................12
Step 5 – Drilling Holes for Anchor Bolts ............................................12
Step 6 – Fitting the Mounting Plate & Motor ....................................13
Step 7 – Gear Rack & Motor Alignment .............................................14
Step 8 – Limit Travel Stops ...............................................................16
Step 9 – Powering the Motor ...........................................................18
Step 10 – Testing the Limit Travel Stops .........................................19

Programming and Wiring
Control Board Diagrams ...................................................................20
Dip Switch Adjustment .......................................................................22
Further Settings and Programming ...................................................23
Connecting Infrared Photocells .........................................................26

Maintenance .....................................................................................27
Troubleshooting ................................................................................28
Pairing and Clearing Remotes .........................................................29

Additional Drawings and Diagrams ..................................................30
Gate Opening Default Setting Information:
The gate motor will close the gate to the right-hand side as its default setting (refer to fig 1).

Before Installing: Test the motor by plugging it into a power source and pressing the remote. You will see the motor cog turn. When it stops, press the remote again to see it turn in the opposite direction. This will give you an understanding of the way in which the motor will move the gate.

Note: Ensure that the motor is unplugged before proceeding with installation. Please keep fingers away from the motor cog whilst it is turning.

If your gate needs to open from the other direction (to the left, refer to fig 2) and, your motor is on the right-hand side, a qualified electrician will need to switch the MOT1 and MOT2 wires on terminal J4 (refer to pages 20 and 21).

Left-Hand Opening:
Motor mounted on the right-hand side

Any works done to the motor must be completed whilst the power is off, and the motor is unplugged.
Thank you for choosing this sliding gate opener. Please read the manual carefully before assembling and using it. Do not leave out the manual if you send this product to a third party. This product complies with the recognised technical standards and safety regulations. Our company has the right to change this manual without prior notice.

General Safety:

Warning: Incorrect or improper use of this product can cause damage to persons, animals or properties.

- Please ensure that the input voltage used matches with the supply voltage of gate opener (AC240V 50Hz).
- All modifications to wiring or electrics, and any adjustment or maintenance to 240VAC MUST be done by a qualified electrician.
- To avoid damaging gas, power or other underground utility lines, contact the relevant authority BEFORE digging.
- All potential hazards and exposed pinch points of the gate must be eliminated or guarded prior to installation of this gate motor.
- Never mount any device that operates the gate motor where the user can reach over, under, around or through the gate to operate the controls. These must be placed at least 1.8m from any moving part of the moving gate.
- Ensure power plug is disconnected from the power socket during installation or maintenance.
- Keep remote control and other control devices out of children’s reach, in order to avoid unintentional activation.
- Never allow anyone to hang onto the gate while moving.
- Please ensure a warning sign provided is fitted to the structure.
- To ensure safety, before installing the main motor, mount a Gate End Stop (GTR017) and a Gate Stopper (GTR017 or GTR018) at each end of the rail to prevent the gate travelling off the track.
- If required, install infrared photocells (GTR051, sold separately) to detect obstructions and prevent injury or damage.
- Instruct all users about the control systems provided and the manual opening operation in case of emergency.
- Ensure that the power cable is connected to a RCD protected weatherproof power outlet installed by a qualified electrician.
- Do not install the product in an explosive atmosphere or where there is any danger of flooding.
- This product was exclusively designed and manufactured for the use specified in the present documentation. Any other use not specified in this documentation could damage the product and be dangerous.
- Only use original parts for any maintenance or repair operation. Richmond Wheel & Castor Co declines all responsibility with respect to the automation safety and correct operation when other supplier’s components are used.
- Do not modify the automation components, unless explicitly authorised by Richmond Wheel & Castor Co.
- The user must avoid any attempt to carry out any works or repairs on the motor, and should always request the assistance of qualified personnel.
- This motor is suitable for use on one sliding gate only.
- Anything which is not expressly provided for in these instructions is not allowed and will void warranty.
- Dispose of all packing materials (plastic, cardboard, polystyrene etc.) according to current guidelines. Keep plastic bags and polystyrene out of children’s reach.
- Save these instructions for future use.
### Parts List:

<table>
<thead>
<tr>
<th>No.</th>
<th>Picture</th>
<th>Name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="image" alt="Main motor" /></td>
<td>Main motor</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td><img src="image" alt="Motor Mounting Plate" /></td>
<td>Motor Mounting Plate</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td><img src="image" alt="Manual release keys" /></td>
<td>Manual release keys</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td><img src="image" alt="Remote controls" /></td>
<td>Remote controls (factory paired to motor)</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td><img src="image" alt="Gate Warning Signage" /></td>
<td>Gate Warning Signage</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td><img src="image" alt="In the accessories box you will find the items below" /></td>
<td>In the accessories box you will find the items below:</td>
<td>1</td>
</tr>
<tr>
<td>6a</td>
<td><img src="image" alt="Limit travel stops" /></td>
<td>Limit travel stops</td>
<td>2</td>
</tr>
<tr>
<td>6b</td>
<td><img src="image" alt="Limit travel stop mounting screw M6x18" /></td>
<td>Limit travel stop mounting screw M6x18</td>
<td>4</td>
</tr>
<tr>
<td>6c</td>
<td><img src="image" alt="Masonry Anchor bolt M12x100mm" /></td>
<td>Masonry Anchor bolt M12x100mm (Drill bit size: M12 Masonry)</td>
<td>4</td>
</tr>
<tr>
<td>6d</td>
<td><img src="image" alt="Motor mounting set screws, nuts, spring &amp; flat washers M10 x 50mm" /></td>
<td>Motor mounting set screws, nuts, spring &amp; flat washers M10 x 50mm</td>
<td>4</td>
</tr>
</tbody>
</table>
## Technical Specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td>GTR156</td>
</tr>
<tr>
<td>Power supply</td>
<td>240VAC/50Hz</td>
</tr>
<tr>
<td>Motor power</td>
<td>400W</td>
</tr>
<tr>
<td>Gate moving speed</td>
<td>11-13m/min</td>
</tr>
<tr>
<td>Maximum weight of gate</td>
<td>1200Kg</td>
</tr>
<tr>
<td>Maximum length of gate</td>
<td>12m</td>
</tr>
<tr>
<td>Remote control distance</td>
<td>Up to 30m</td>
</tr>
<tr>
<td>Remote control mode</td>
<td>Single Button Mode</td>
</tr>
<tr>
<td>Limit switch</td>
<td>Spring Limit Switch</td>
</tr>
<tr>
<td>Noise</td>
<td>Up to 60dB</td>
</tr>
<tr>
<td>Working duty</td>
<td>S2 - 20min (20 minutes maximum continuous operation)</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP45</td>
</tr>
<tr>
<td>Maximum # Remote Controls</td>
<td>25</td>
</tr>
<tr>
<td>Remote Control Frequency</td>
<td>433.92 MHz</td>
</tr>
<tr>
<td>Working temperature</td>
<td>-20°C ~ +70°C</td>
</tr>
<tr>
<td>Package weight</td>
<td>15Kg</td>
</tr>
</tbody>
</table>

1. **Open/Close**
   - Press the button for standard gate opening and closing operation.

4. **Pedestrian Mode**
   - Press the button while the gate is closed, the gate will open 1m wide to allow pedestrian access. Press the remote again to close, unless your motor is set to auto-close.
Motor Installation:

Before you start:

- The GTR156 Sliding Gate Automation Kit is suitable for powering the opening and closing motion of gates up to 1200kg in weight, up to a length of 12m.
- Gate motion is achieved by the rotating cog of the gate motor driving the gear rack fitted to the moving gate.
- The gate motor itself must be fitted within private property, never externally to a property’s boundary.

Power Supply: The GTR156 requires 1 x 10Amp AC240V 50Hz power supply (RCD Protected Weatherproof PowerPoint). The GTR156 comes complete with a power lead and plug that is 1m long. If you do not have a suitable RCD protected weatherproof power point within 1m of the gate motor you will need to consult a licenced electrician.

*Any works done to the motor must be completed whilst the power is off and the motor is unplugged.*

*Any modifications/alterations/works to the 240V AC power components must only be completed by a licensed electrician for your state/country.*

Please Note:

Your weatherproof power outlet should be no more than 1m from the electric gate motor.

If your weatherproof power outlet is more than 1m from the gate motor, you will require a licensed electrician to fit a new power cable.

Any excess cable length should be cable tied and secured out of the way of moving objects.
For Installing Your Gate Motor, You Will Need:

- Power drill
- Tape measure
- Level
- 12mm Masonry Drill Bit (for the 4 motor masonry anchor bolts)
- Socket and Spanner Set
- Phillips Head Screwdriver

Example Sliding Gate Setup:

If you require any gate hardware, contact Richmond Wheel & Castor Co or an authorised reseller.
Please ensure that the motor power cable is not plugged in at any stage before Step 9

Step 1 - Gate Preparation Before Adding Your Sliding Gate Motor:

- Ensure that the sliding gate is correctly installed.
- The gate is horizontal and level and the gate can glide back and forth smoothly when moved by hand before installing the automatic gate opener.
- Wheels and guide rollers should rotate easily and be free from dirt/grime.
- Track should be flat, level and firmly affixed.
- Any misalignment in the gate will affect performance of the automatic gate opener.

The gate should slide smoothly by hand before attempting to install the gate opener.

Step 2 - Motor Pad Footing (Minimum Requirement):

- The motor pad concrete footing requires an area of no less than 450mm long x 300mm wide and a minimum depth of 200mm (Standard requirement).
- Ensure surface is level and parallel to the driveway

Mounting Plate Dimensions:
Step 3 - Motor Position Installation:

- Insert the key and open the manual release bar to put the motor into manual mode, and check that the motor cog rotates freely by hand (As per Fig 16).
- Place the motor and motor mounting plate on the concrete pad.
- Make sure the distance between the gate motor cog and gear rack position are aligned (see Fig 4)
- Mark all four outside corners of the mounting plate on the concrete pad using a pencil, chalk or similar, to ensure the mounting plate is in the correct position before drilling.
- Remove motor from the mounting plate.
Step 4 – Removing Motor Cover for Mounting:

- Unscrew the two motor cover screws located at each side of the motor cover.
- Remove the rubber grommet below the spring limit switch (as per fig 5).

Please Note: the rubber grommet must be fitted back onto the motor cover once the cover has been re-fitted/replaced onto the base of the motor.

Step 5 - Drilling Holes for Anchor Bolts:

- Ensure the mounting plate is positioned within the marked corners.
- Proceed to mark the (4) positions for your anchor bolts ready for drilling (refer to Fig 6).
- Remove Mounting plate.
- Using a M12 masonry drill bit, drill holes to a minimum depth of 120mm (Fig 7).
Step 6 - Fitting Mounting Plate & Motor:

- Fit motor mounting plate back into place and fit and tighten anchor bolts (as per figures 8 an 9).
- Fit motor back on mounting plate, ensuring the power cord is positioned into the end slot of the mounting plate in the direction of the power point, making sure there are no pinch points (as per Fig 10).
- Slide rubber grommet along the power cable and into the end slot of the mounting plate (as per figures 11 and 12).
- Bolt motor to the mounting plate using the M10 x 50mm bolts with spring and flat washers provided and tighten as required (as per figure 13).

Please ensure that the motor power cable is not plugged in at any stage before Step 9
Step 7 - Gear Rack & Motor Alignment:

- See Fig 16 for recommended gear rack mounting height.
- Insert the key and open the manual release bar to put the motor into manual mode and check that the motor cog rotates freely by hand (as per Fig 16).
- Ensure that the gate drive cog has a minimum clearance of 1-2mm along the entire length of gear rack fitted to the gate (as per Fig 14).
- Ensure motor cog and gear rack are correctly aligned. Under no circumstances should the gate motor drive cog carry any weight of the gate. It is the task of the gate castors or wheels to carry the weight of the gate (as per Fig 15).
- If the gate doesn’t slide freely by hand, adjust the height of the gear rack accordingly until the full length of gate slides freely by hand.

At this stage of assembly, the cover is removed (not shown) and the power cable is still unplugged.

To put the gate motor into manual mode, insert the key and open the manual release bar as shown.

In manual mode, the gear can turn freely and the gate can be operated by hand.

Fig 14

Fig 15

Gear rack correctly aligned at 90° to the motor cog

Gear rack misaligned. Do not attempt to use if misaligned.
At this stage of final assembly, the cover is removed (not shown) and the power cable is still unplugged.

Now that your gear rack and motor are aligned, and your gate is sliding freely, fully tighten the motor mounting set screws (Part 6d) and reinstall motor cover and tighten screws provided.
Step 8 - Limit Travel Stops:

Included in your gate motor kit are two limit travel stops (Part 6a) which must be fitted to the gear racks on your gate to ensure safe operation.

The limit travel stops are designed to set the desired opening and closing position of your gate. These limit travel stops are designed to come into contact with the spring limit switch.

Please note: gates can open and close in different positions due to different weights of gates, terrains, slopes (uphill or downhill). The distance the gate will travel after contacting the spring limit switch may vary.

Setting the Limit Travel Stops:

Closed Position

- Position gate 150-200mm back from the gate end catch closed position. This will help in making sure you do not slam the gate into the end stop/catch when setting the closed position under power.
- Fit limit travel stop onto the top of gear rack at the point where it meets the spring limit switch on the motor.
- Tighten locking screws.

Open Position

- Position gate 150-200mm back from the gate stopper open position. This will help in making sure you do not slam the gate into the end stop/catch when setting the open position under power.
- Fit limit travel stop onto the top of gear rack at the point where it meets the spring limit switch on the motor.
- Tighten locking screws.

Test the spring limit travel stops by moving the gate manually until you hear a click, making sure contact is made with the spring limit switch on the motor.
The installation of spring limit switch block is shown in Figure 21

Please Note:
The warning signage provided (Part 5) must be displayed on the street facing side of your automatic gate at all times.
Step 9 - Powering the Motor:

- Ensure that the outer cover has been fitted and fastened back onto the motor housing.
- Before powering up the motor make sure the gate can travel by hand in manual mode (key unlocked).
- The gate must be put in the open position before locking the key (key locked) in readiness for automatic mode.
- Plug the power cord into an approved RCD protected weatherproof outlet.
- Remote controls (Part 4) included in this kit are factory paired ready for use.

Note:

- The default setting is closing to the right.
- If you want the gate to close to the left, then you will need to change the direction of opening by switching the MOT1 and MOT2 lines on the J4 terminal (as per fig 25).
- Soft start/soft stop function - The GTR156 is set by default to provide the soft start/soft stop function. We recommend this default position is always maintained.
- This must be done when the power is off and unplugged. This must be done by a licensed electrician.

Your motor is now set up for basic remote-control operation. To set further functions and settings, see pages 18-26
Step 10 – Testing the Limit Travel Stops:

Testing the closed position
- Ensure motor is plugged in as per step 9 and the gate is in the open position.
- Press remote (remotes included in kit are factory paired to the motor). The gate will begin to close.
- The limit travel stop will hit the spring limit switch and the gate will stop.
- When the gate stops, measure the distance remaining between the gate and the desired closed position.
- You have now determined the closed position of the gate when the travel limit stop hits the spring limit switch.
- Adjust the limit travel stop from the measurement you have taken to get your final gate closed position. The ideal closed final position for the gate frame is 10-15mm from closed gate end catch (GTR019).

Testing the open position
- Press remote. The gate will begin to open.
- The limit travel stop will hit the spring limit switch and the gate will stop.
- When the gate stops, measure the distance remaining between the gate and the desired open position.
- You have now determined the open position of the gate when the travel limit stop hits the spring limit switch.
- Adjust the limit travel stops from the measurement you have taken to get your final gate open position. The ideal open final position for the gate frame is 10-15mm from the gate stopper (GTR017).

![Fig 24](image-url)
Programming and Wiring:
Control board wiring diagram 01

Any works to the 240V AC must only be performed by a licensed electrician. Ensure power is off before any modifications are made.

Fig 25
Please refer to page 24 for added description of terminals J2 & J5
Dip Switch Adjustment:
All changes to these settings must be completed by a licensed electrician

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Soft Start/Close Function</strong></td>
</tr>
<tr>
<td></td>
<td>OFF – enabled</td>
</tr>
<tr>
<td></td>
<td>ON – disabled</td>
</tr>
<tr>
<td></td>
<td>Default position is OFF (recommended)</td>
</tr>
<tr>
<td>2</td>
<td><strong>Limit Switch Setting (disable or enable the spring limit switch)</strong></td>
</tr>
<tr>
<td></td>
<td>OFF – Normal Open</td>
</tr>
<tr>
<td></td>
<td>ON – Normal Close</td>
</tr>
<tr>
<td></td>
<td>Default position is ON, <strong>this should not be changed.</strong></td>
</tr>
<tr>
<td>3</td>
<td><strong>Automatic Close Function</strong></td>
</tr>
<tr>
<td></td>
<td>3 OFF 4 ON: automatic close delay time is 12s.</td>
</tr>
<tr>
<td></td>
<td>3 ON 4 OFF: automatic close delay time is 24s.</td>
</tr>
<tr>
<td></td>
<td>3 ON 4 ON: automatic close delay time is 36s.</td>
</tr>
<tr>
<td></td>
<td>3 OFF 4 OFF: no automatic close function. Gate will remain open until</td>
</tr>
<tr>
<td></td>
<td>closed again with a remote.</td>
</tr>
<tr>
<td></td>
<td>Once the gate has been opened by the remote, pressing the remote button</td>
</tr>
<tr>
<td></td>
<td>again will close the gate.</td>
</tr>
<tr>
<td></td>
<td>3 ON 4 OFF: Hard wire keypad. Automatic close function.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Stall Force Mode (When in default position, detects obstacles, stops gate, and reverses. To adjust, refer to VR1: Stall Force Mode)</strong></td>
</tr>
<tr>
<td></td>
<td>Default position is OFF (enabled) <strong>this should not be changed.</strong></td>
</tr>
<tr>
<td></td>
<td>If the switch is set to ON, stall force mode will be disabled</td>
</tr>
</tbody>
</table>
Further Settings & Programming:
All changes to these settings must be completed by a licensed electrician

VR1: Stall Force Mode

**Maximum** = More Force = Less sensitive
**Minimum** = Less Force = More sensitive

When Stall Force Mode is enabled (Dip switch 5 is at OFF position), the motor will detect obstacles and impacts to the gate. If this is during opening, the gate will stop, if this is during closing the gate will stop, and then re-open.

Rotate VR1 clockwise to increase the stall force, anti-clockwise to decrease.

For safety we strongly recommend that Stall Force Mode is left enabled (Dip switch 5 is at the OFF position). Do not turn Dip switch 5 to the ON position.

VR2: Brake Force Adjustment

For adjusting brake force at the limit position during gate opening and closing. This should only be adjusted for heavy gates that need additional force to brake when limit switch is detected.

Rotate VR2 clockwise to increase, counter-clockwise to decrease. Default setting is at minimum.

VR3: Slow Start/Stop Width Adjustment

This switch controls how many seconds the motor operates at maximum speed. Rotate VR3 clockwise to increase, rotate counter-clockwise to reduce.

Default setting is at minimum.

VR4: Motor Output Force Adjustment

For best performance set the torque at the lowest setting that you require.

Rotate clockwise to increase, counter-clockwise to decrease.

Default setting is at maximum.
All changes to these settings must be completed by a licensed electrician.

**J2 Terminal:** (as per fig 17)

- **Terminal 1:** Optional External Close Push Button Switch.
- **Terminal 2:** Optional External Open Push Button Switch.
- **Terminal 3:** Optional External Stop Push Button Switch.
- **Terminal 4:** Common Terminal for All Optional Push Buttons. (Hard-Wired keypad connection between terminals 4 & 5)
- **Terminal 5:** Optional External Open/Stop/Close Single Push Button (does the 3 open/stop/close functions)
- **Terminal 6:** Optional External Push Button Pedestrian Switch

**J5 Terminal:** Limit Switch and Accessories

*Additional accessories sold separately*

- **Terminal 7:** Power supply for accessories of J5 (+15V)
- **Terminal 8:** Photocell input (Normally Closed). If no photocell is fitted use jumper between terminals 8 & 9.
- **Terminal 9:** Ground/Earth (GND)
- **Terminal 10:** Exit wand connection between terminals 9 & 10
- **Terminals 11, 12, and 13 are factory fitted (pre-wired)**
- **Terminal 11:** Close spring limit switch
- **Terminal 12:** Spring limit switch common terminal
- **Terminal 13:** Open spring limit switch

**Connecting Wires to the Terminal:**

- Using a screwdriver, loosen the screw on the side of the terminal.
- Insert the wire into the number on the terminal that you are looking to connect to. Refer to Pages 20 & 21
- Tighten with a screwdriver to secure the wire in place.
All changes to these settings must be completed by a licensed electrician

**J6 Terminal:**

Motor Capacitor

**J4 Terminal:**

**MOT1:** Motor Terminal, swap with MOT2 to change gate direction.
**MOT2:** Motor Terminal, swap with MOT1 to change gate direction.
**MOTCOM:** Motor Common Terminal.

**LAMP (L&N):** Connection for warning lamp.

**PE:** Motor and warning lamp earth

**J3 Terminal - Main Power Terminal:**

**PE:** Earth (yellow/green wire).
**L:** Power (brown wire).
**N:** Power (blue wire).
Connecting Infrared Photocells:
The below steps must be completed by a licensed electrician

Richmond highly recommend the use of infrared photocells as an additional safety feature.

While closing, if the ray of the Infrared Photocell is blocked, the gate will stop and reverse immediately, to protect user and property security.

To install photocells, connect wiring as per Figure 21. You must remove the wire jumper between terminal 8 and terminal 9 on J5 (ref to Fig 24 and 25).

Dip switch 2 should be set to ON, for Normal Close.

Before Installing Photocells

Loosen J5 Terminals 8 and 9 with a screwdriver. Make sure the power is disconnected before doing so.

Remove the wire jumper between J5 Terminals 8 & 9.
**Maintenance:**

Under normal operation, the gate should be checked every 6 months:

- Lubricate shafts and sprockets
- Check and tighten anchor bolts
- Check for loose and corroded wires.
- Check the earth wire (green/yellow) on Terminal J4 (refer to Fig 19 and 20) is firmly attached to the housing with the screw. This should be checked by a qualified electrician.
- Always check the stall force after performing any maintenance. If this function does not work, do not use the gate motor until this is rectified.
# Troubleshooting:

Any works done to the motor must be completed by a licensed electrician and only whilst the power is off and the motor is unplugged.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Reason</th>
<th>Solution</th>
</tr>
</thead>
</table>
| The gate cannot open or close normally, and LED does not light. | 1. The power is off.  
2. Fuse is blown.  
3. Control PCB is damaged | 1. Switch on the power supply.  
2. **Licensed Electrician:** Check the fuse (see page 17) and replace if necessary.  
3. Contact Richmond Wheel & Castor Co for replacement PCB (board) |
| Remote control doesn’t work.                 | 1. Remote control battery is flat.  
2. Remote control is not paired correctly. | 1. Check LED lights up when button is pressed. If not, change the remote-control battery (A27 battery required)  
2. **Licensed Electrician:** Repeat pairing procedure (refer to page 26) |
| The gate opens but cannot close.             | 1. Stall force is set too low  
2. Photocell settings not correct.  
3. Photocell beam is interrupted (if installed). | 1. Increase stall force to the minimum value that the gate still operates. (see page 20)  
2. **Licensed Electrician:** If photocell is not connected, ensure that there is a jumper wire between 8 and 9 on the J5 terminal. If photocell is connected, ensure the wiring is correct.  
3. Check and remove any obstructions. |
| Gate does not move when button is pressed, but motor makes a noise. | 1. Gate is out of alignment.  
2. Capacitor has blown or is otherwise damaged. | 1. Put motor into manual mode and check if it can be opened freely by hand. If not, check that the gear rack freely moves over the motor cog.  
2. Contact Richmond Wheel & Castor Co for replacement PCB (board) |
| Gate does not stop at the limit switch when opening/closing. | 1. The brackets are positioned incorrectly.  
2. The gate opening direction is incorrect  
3. Limit switch is damaged. | 1. Check that LEDs 11/13 turn off when spring is contacted and reposition if required.  
2. **Licensed Electrician:** Swap the wires between ‘11’ and ‘13’ on the J5 terminal. This must be done while power is disconnected.  
3. Check wiring for any damage. Contact Richmond Wheel & Castor for a new limit switch if required. |
| Gate does not fully open or close             | 1. The gate meets an obstacle.  
2. Motor output force is too low.  
3. Stall force is too low. | 1. Remove the obstacle.  
2. **Licensed Electrician:** Increase VR4: Motor Output Force Adjustment (Page 21).  
3. **Licensed Electrician:** Increase VR1: Stall Force (Page 21). |
The below steps must be completed by a qualified electrician

**Clearing Remote Controls:**

To delete all paired remote controls, press and hold the button ‘S1’ for approx. 8 seconds. When the ‘LEARN’LED turns off, all previously paired remote controls will be deleted.

**Pairing Additional Remote Controls:**

Remove motor outer cover and continue to remove the clear PCB cover, press the button ‘S1’ on the control board, until the ‘LEARN’LED turns on, then release the button. While the light is on, press the first button on the remote control twice, the ‘LEARN’ LED will flash repeatedly and then turn off when remote control is paired.

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**Technical Support**

For support or assistance with installing your gate motor, ring your local Richmond Wheel & Castor Branch on 1300 474 246. For detailed technical support, ring our Engineering Department on 03 9551 2233.

Richmond Wheel & Castor Co declines all responsibility for any consequences resulting from improper use of the product, or use which is different from that expected and specified in the present documentation.

Richmond Wheel & Castor Co declines all responsibility for any consequences resulting from failure to observe Good Technical Practice when constructing closing structures (door, gates etc.), as well as from any deformation which might occur during use.
Additional Drawings and Measurements:

Optional Accessories Available:

**Additional Remotes (GTR179):** Spare/Additional remotes for the automatic gate kit, these will need to be paired to the motor.

**Infrared Photocells (GTR196):** Detects pedestrians, vehicles and objects that cross an infrared beam and prevents the gate from closing.

**Exit Wand (GTR147):** Senses cars or trucks moving at more than 8km per hour and opens the gate without the need for using a remote or keypad.

**Wireless Keypad (GTR180):** Allows secure access through the gate used with a user set code.

**Hard Wire Keypad (GTR199):** Allows secure access through the gate used with a user set code.

**Warning Light (GTR198):** Alerts people near the gate and users that the gate is in operation.

**External Receiver (GTR197):** Allows for pairing of up to 250 remotes to the gate kit.