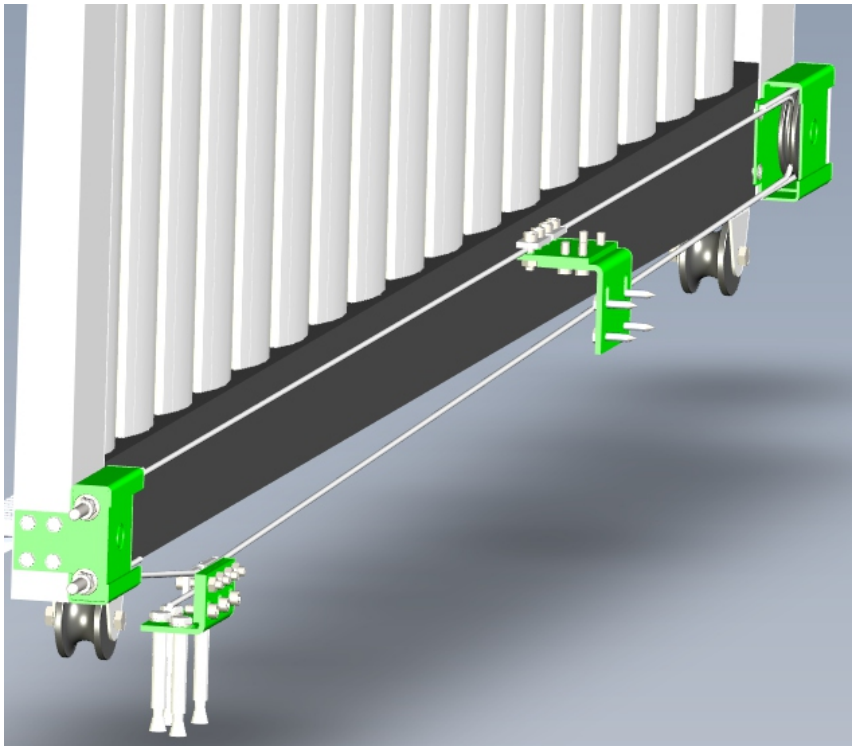
Automation Systems

AUSTRALIA

# Telescopic Sliding Gate Installation Guideline

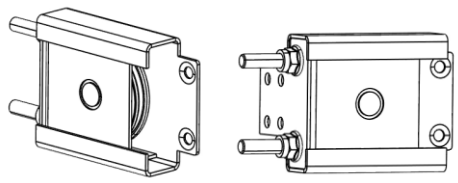


**<u>This is an engineering product</u> and this booklet is purely a <u>guideline</u>, it does not and cannot take into account each site and there specific requirements, this includes but is not limited to exact support post positions, wheel types and clearance areas.**

## Telescopic System Components

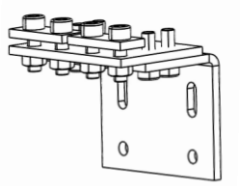
**A**

**Adjustable Pulley Carrier Assemblies**
Fitted to the FRONT side of the gate closest to the motor (Drive Gate) on each side of the gate



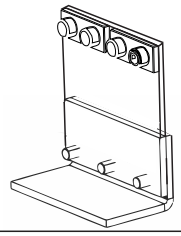
**B**

**Trailing Bracket**
Fitted to the REAR side of the gate closest to the street (Slave Gate)



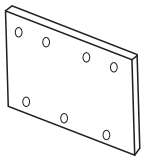
**C**

**PRE-ASSEMBLED**
**Raised Bracket + Anchor Bracket**
Anchored to the Concrete between both the gates
*for Flat Mount Wheels*



**D**

**Lowering Plate**
Anchored to the Concrete between both the gates using the anchor bracket from part C
*for Recess Mount Wheels*

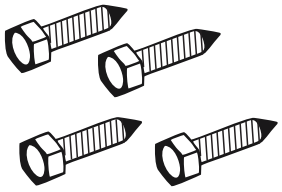


**E**

**4mm Stainless Steel Cable (10m Length)**

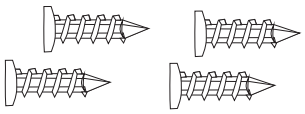
**F**

**12x** Self Drilling Tek Screw (M6 25mm)



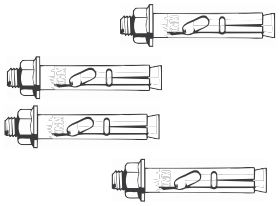
**G**

**4x** Self Drilling Countersunk Screws (M6 25mm)

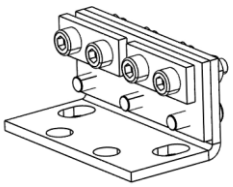


**H**

4x Dynabolts (M8 80mm)



**C + D**



**Lowering Plate + Anchor Bracket**
*Combined Set*
Anchored to the Concrete between both the gates
*for Recess Mount Wheels*

## About Telescopic Gates

The Telescopic gate systems kit is unique to all other telescopic kits.

Whilst many others require the pulley to be bolted through the gate the system has its pulley and sealed bearing enclosed within an adjustable carrier. The key benefits of such a setup is aside from the quality parts used it also allows for the installer to adjust final cable tension from either end of the gate NOT reaching between the gates.

Furthermore the Anchor bracket has two options for height to suit both recessed type wheel and flat mounted bolt on type wheels.

Finally the trailing bracket is adjustable in depth to allow for a smaller and larger gap between the gates based on the final gate guiding system.

## Automating a Telescopic Gate

The telescopic gate systems is unlike the normal sliding gate, it is important to use a large capacity sliding gate motor with speed control adjustability such as the Titan2410.

## Specifications

| | |
|---|---|
| Max. Gate Width | 4600mm |
| Max. Driveway Width | 8500mm |
| Gate Weight Max. | 250Kg Each |
| Replacement bearing size | 32mm OD -15mm ID - 9mm Thick - Deep Groove Ball bearing 6002 |
| Cable | 10m, 4mm Stainless Steel |

## Construction

The telescopic gate systems is unlike the normal sliding gate, it is important to try to keep the weight down to a minium due to the pulling forces required between leading and trailing gate

We suggest to use 40x40 or 50x50 RHS while the bottom rail must be at  80x40mm, 75x50mm or 100x50mm.

When possible use light weight steel or Aluminium to keep the weight down.

## Gate Sizing Guideline

Driveway width ÷ 2 = (gate base size)
Take the (gate base size) and add 400mm.

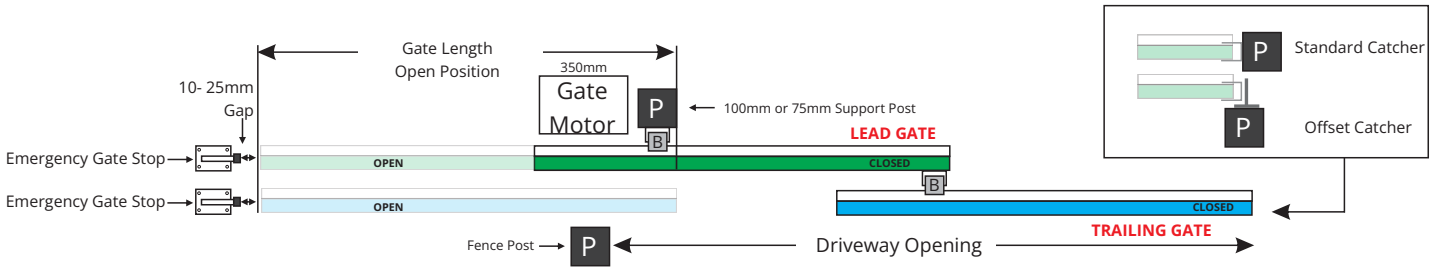
*Example calculation*
*Driveway width is 4000mm ÷ 2 = (2000mm base size)*
*(2000mm base size) + 400mm = 2400mm each gate*

## Floor Track Requirement Guideline

Trailing Gate: Complete Driveway Width + Final gate Size
Leading Gate: Final gate size x 2

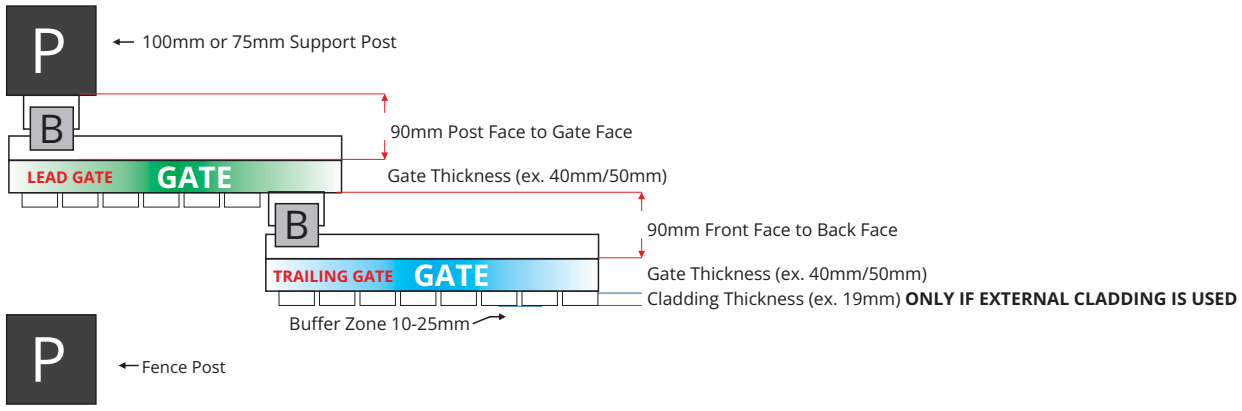
*Example calculation*
*Gate 1: Driveway size is (4000mm) + Final gate size (2400mm) gate 1 requires 6400mm total track*
*Gate 2: If final gate size is (2400mm) x 2 then gate 2 requires 4800mm of track*

## Site Preparation Example

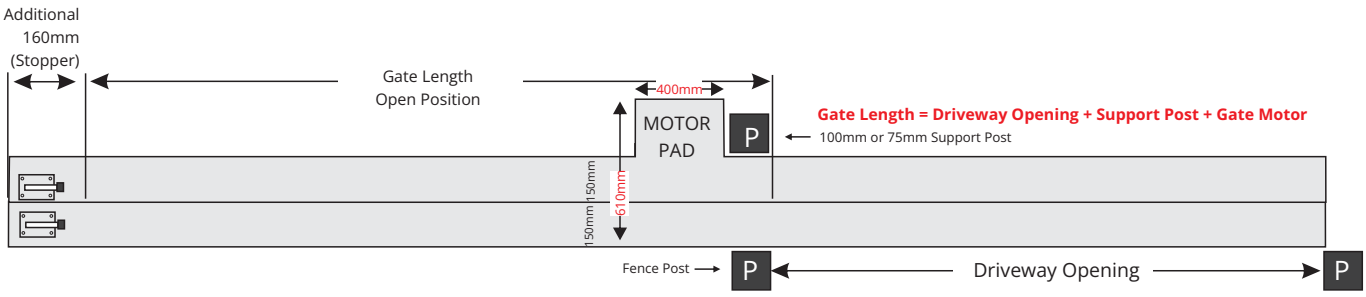



**EACH Gate Length = Driveway Opening ÷ 2 +400mm Each**

## Support Post Positioning Guideline



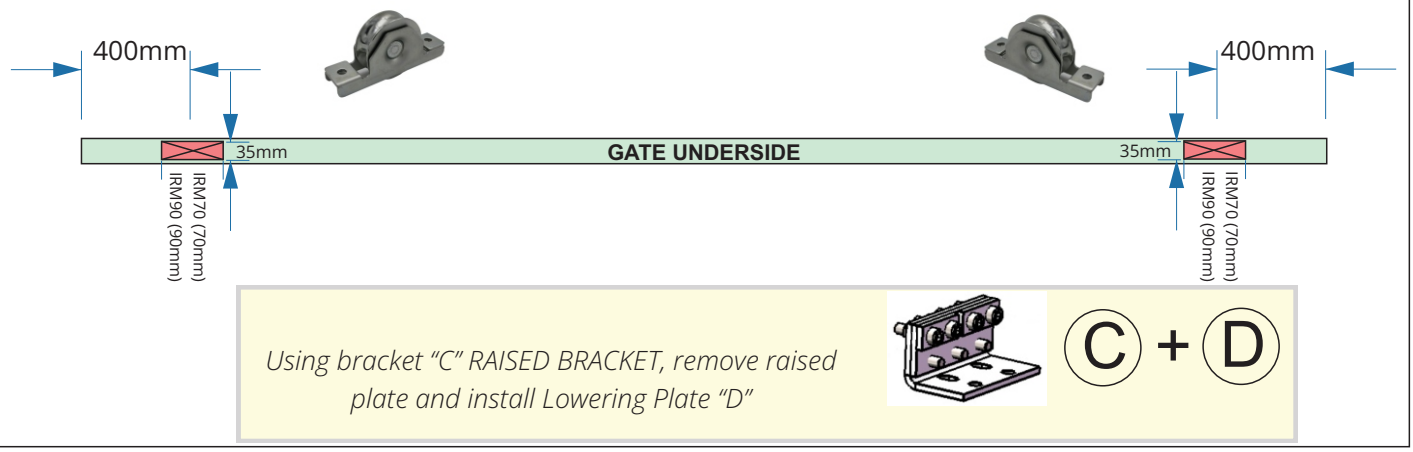

## Concrete Strip Footing Guideline



## Gate Wheel/Anchor Plate Preperation

If using INTERNAL wheels prepare the anchoring bracket in the “LOW” position. FIG 1
If using EXTERNAL wheels prepare the anchoring bracket in the “HIGH” position. FIG 2

**FIG 1. Internal Recess Mount Wheel Position & Cut Out**



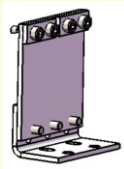

*Using bracket “C” RAISED BRACKET, remove raised plate and install Lowering Plate “D”*



C + D

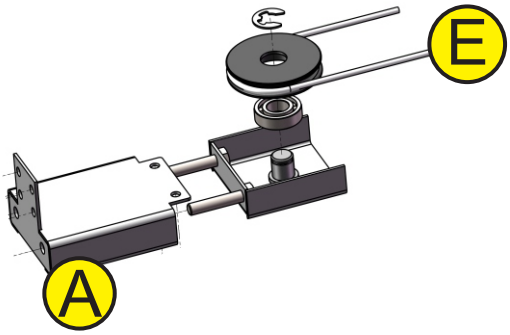
**FIG 2. External Wheel Position**


*Using bracket “C” RAISED BRACKET*

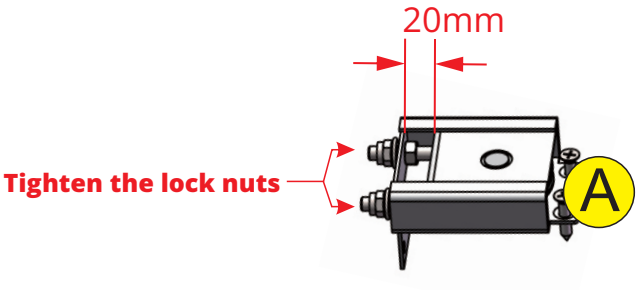


C

## Carrier and Cable Preparation



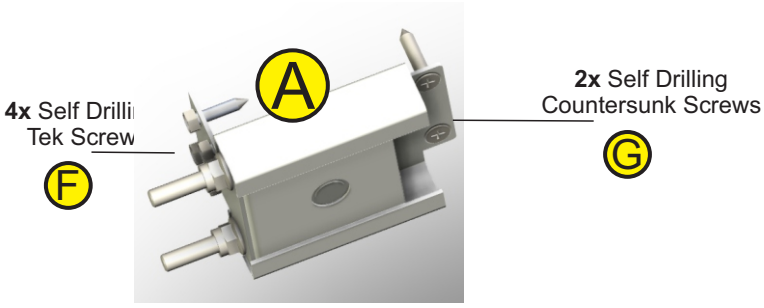

Run the cable through BOTH pulley carrier systems to simplify installation later.

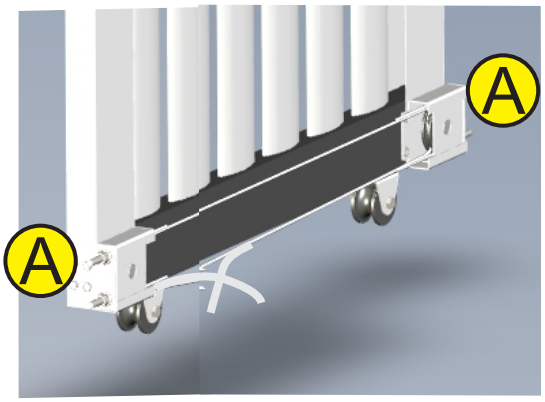



It is recommended that you have each of the carriers set 20mm through there adjustment range so that at the end of the installation process when final tensioning occurs you can loosen/tighten to achieve the correct tension.

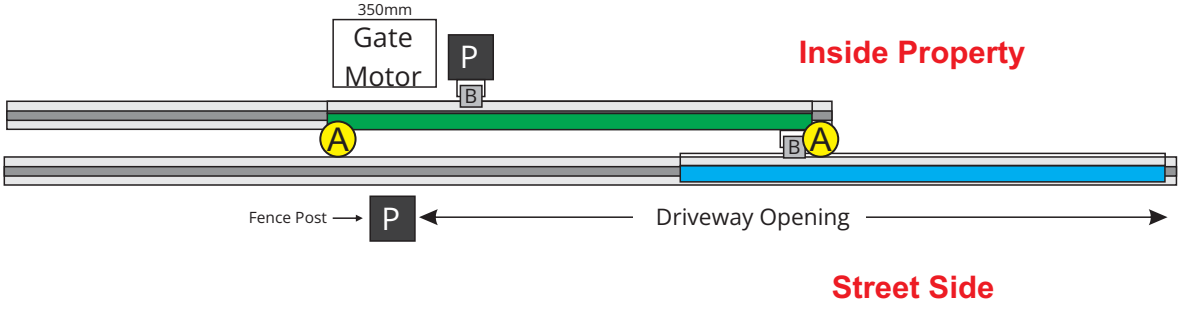
## Carrier and Cable Installation

Install the Pulley carrier assembly (A) to each side of the LEAD GATE bottom rail **on the street side** using the self drilling metal screws supplied (F) and (G).




**Leave the open ends of the cable facing the ground,**
**they will be connected towards the end of the installation to the anchor plate**



## Lead Gate Installation

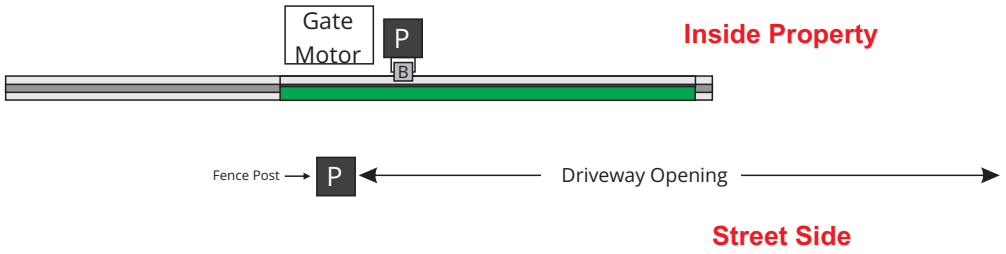
1. Sit one piece of sliding gate track In front of the Support post.

2. Sit the Lead gate on top of the sliding gate tracks using the guide block and channel system as the top guide.

3. Sit the remaining tracks in place

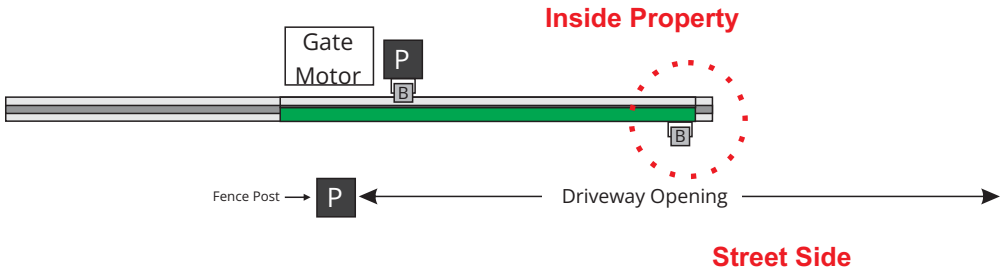
3. Slide the gate back and forth ensuring all pieces are in the correct position and that the gate is plumb. Realign the pieces if necessary.

4. Anchor the sliding gate track in place using knock in anchors.




## Trailing Gate Installation

Install the second guide block and channel system to the street side of the Lead gate in the TOP CORNER closest towards the centre of the driveway.




1. Sit one piece of sliding gate track In front of the Lead Gate.

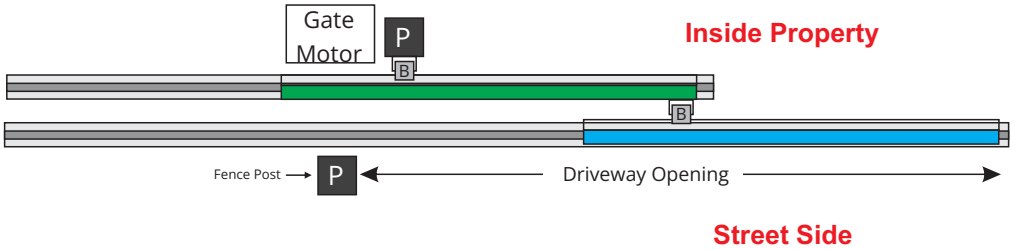
2. Sit the Trailing gate on top of the sliding gate tracks using the guide block system as the top guide.

3. Sit the remaining tracks in place

3. Slide the gate back and forth ensuring all pieces are in the correct position and that the gate is plumb. Realign the pieces if necessary.

4. Anchor the sliding gate track in place using knock in anchors.

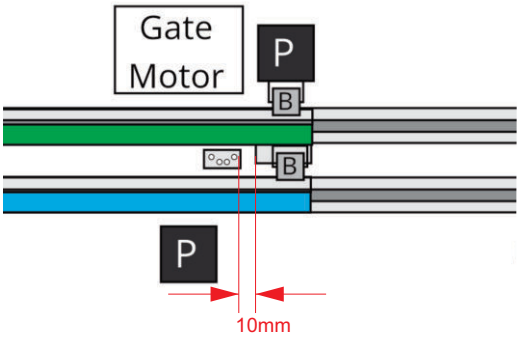
5. Slide BOTH gates to the open position and install the gate stops with a 10-25mm Gap.

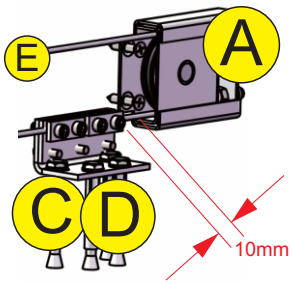


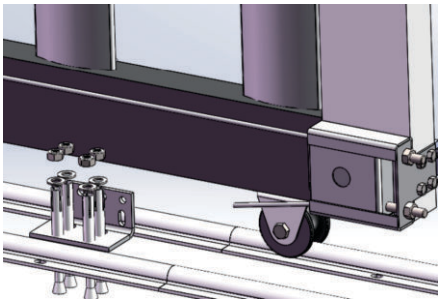
## Anchoring Plate

1. Open both gates flush with the edge of the Mid Post, this is there full open position.
2. Install the anchor bracket (C) 10mm from the edge of the carrier (closest to the driveway) to the edge of the bracket using the supplied 4x M8x80 Dynabolts (H). The trailing gate can be removed during the installation of anchoring bracket after marking the position to allow for space for the installer.

**The anchor brackets clamping points must stay inline with the cable system as they will become interconnected.**



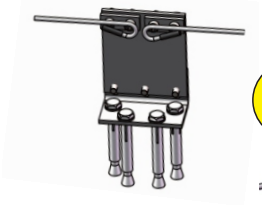



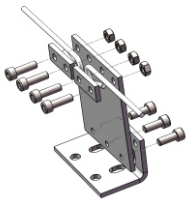



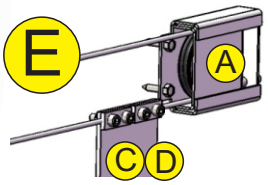
## Cable to Anchoring Plate

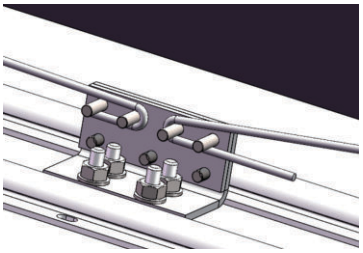
1. Feed one end of the cable through the bracket as illustrated below and tighten both locking bolts. The first end to be feed through should be the one closest to the centre of the gate.

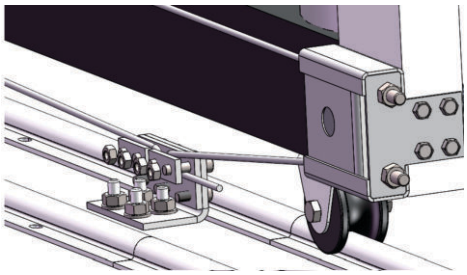
2. Pull the other end of the cable TIGHT using multigrips or pliers and feed it through the anchor bracket also as illustrated below and tighten both locking bolts.





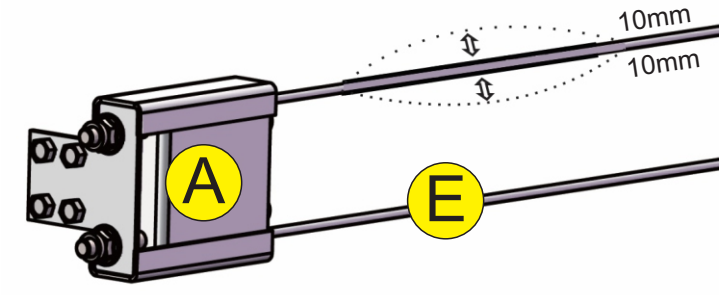




## Tensioning

At each of the pulley carriers there are two tensioning nuts, each of these nuts can be tightened to pull the carrier further towards the end of the gate providing a greater tension on the stainless steel cable. It is important to have the cable tensioned correctly and not Over tightened or Loose. The ideal tension is 10mm TOTAL movement (UP/DOWN) from the cables natural parallel path (20mm total).



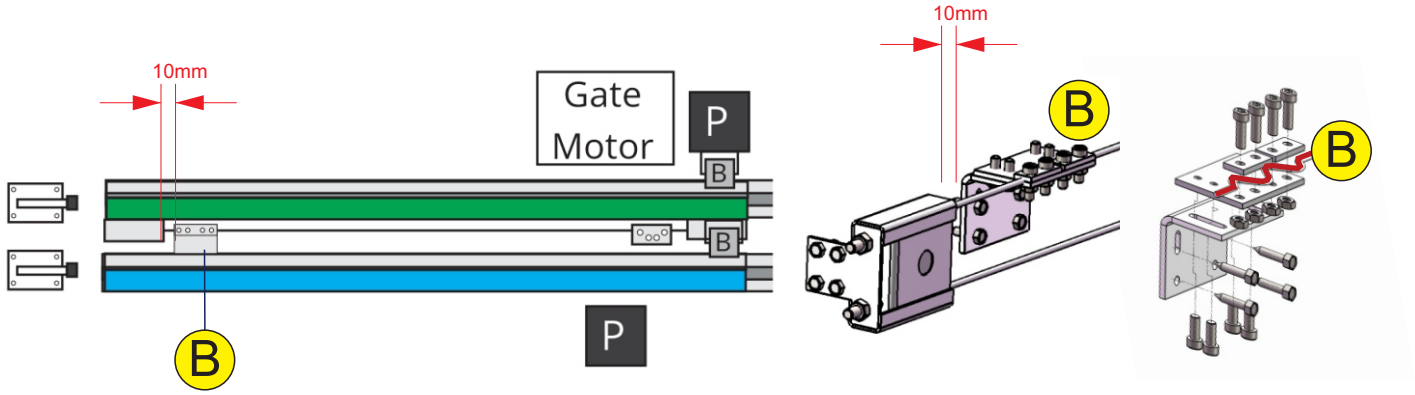
## Cutting Excess Cable

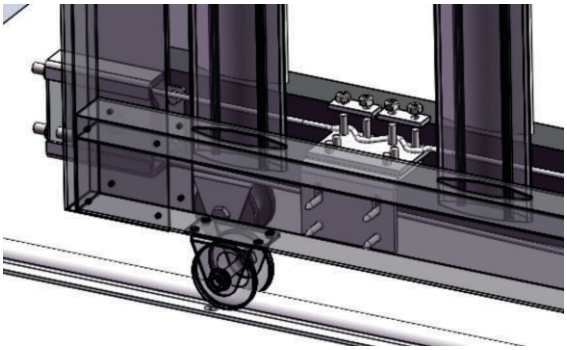
1. Tape the EXCESS ends with electrical tape or heat shrink as close as possible to the anchor bracket.
2. Adhering to safety standards cut through the excess cable which is wrapped in tape or heat shrink, this can be done using stainless steel wire cutters or an angle grinder.
3. Using heat shrink tubing seal the cut end of the cable to prevent fraying in the future.

## Installing the Connecting Bracket

1. Whilst the gate is open fit the trailing bracket (B) to the trailing gate using 4x Tek Screws (F) with a 10mm gap between the pulley carrier (CLOSEST to the stop) and the edge of the bracket.

2. Snake the cable through the top of the bracket installing one bolt at a time.



## TITAN 2410 Speed Adjustment

Install the Titan 2410 Sliding gate motor following the normal installation steps with the exception of the FS Setting should be decreased to “04" then calibration is required.

Warranty Terms and Conditions

The product is warranted for a period of twelve months (one year) from the date of purchase, unless expressly specified as extended warranty (extension to the warranty period). The product is to be installed for its intended purpose and for normal use as outlined within the installation manual, the product warranty is exclusively for defects in manufacturing and manufacturing workmanship. It does not cover out of guidelines use, natural or other disasters, abnormal weather conditions, damage incurred in shipping or handling, damage caused by disaster such as fire, flood, wind, earthquake, lightning, excessive voltage, mechanical shock, water damage, damage caused by unauthorized attachment, alterations, modifications, or foreign objects, damage caused by peripherals (unless such peripherals were supplied by Automation Systems Australia), defects caused by failure to provide a suitable installation environment for the products, damage caused by usage of the products for purpose other than those for which it was designed, damage from improper maintenance, damage arising out of any other abuse, mishandling, and improper application of the products.

At is discretion Automation Systems Australia will require the item determined by the support staff to be returned to base in it original unmodified condition for a warranty inspection if within the warranty period. A return authorization “RA” number will be provided to be enclosed with the product in question. The warranty will not cover freight fees to base, customs fees or any labour costs at the installation site but will cover repair or replacement of the product as seen fit. Automation Systems Australia will cover the freight of the returned item to the original address if deemed as a warranty repair or replacement item. Any warranty repairs or replacements continue to carry through the remaining warranty period and do not extend or restart the period.

Under no circumstances shall Automation Systems Australia be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, loss of profits, loss of the product or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property.

This warranty contains the entire warranty and shall be in lieu of any and all other warranties, whether expressed or implied (including all implied warranties of merchantability or fitness for a particular purpose). And of all other obligations or purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

Automation Systems Australia will at its option repair or replace out-of-warranty products at a determined cost which are returned to its base according to the following conditions. Anyone returning goods to Automation Systems Australia must first obtain an authorization number. Automation Systems Australia will not accept any shipment whatsoever for which prior authorization has not been obtained. Products which Automation Systems Australia determines to be repairable will be repaired and returned. A set fee which Automation Systems Australia has been predetermined and which may be revised from time to time will be charged for each unit repaired. Products which Automation Systems Australia determines not repairable will be replaced by the nearest equivalent product available at that time. The current market price for the replacement product will be charged for each replacement unit.