TELESCOPIC GATE INSTALLATION MANUAL. EASYGATE VERSION

Telescopic gates have been manufactured for many years essentially in the same way they are largely today. In recent years hardware suppliers have developed telescopic kits which in the main is a box of all the components that we have always used. Some are complicated and fancy and cost as much as the gate itself but still work on the exact same principle.

The kit you are reading about today is about as simple as we could make it . The aim is a low cost and simple to build and install kit using the same principles that we have for many years.

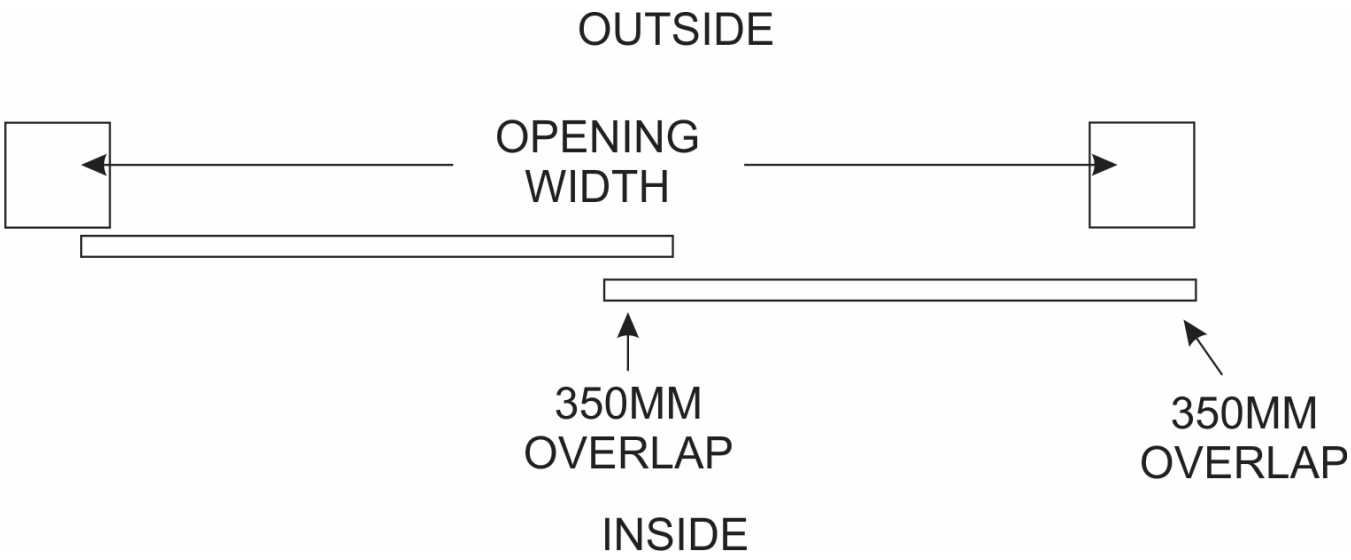
I addition to this kit you will require the following components -

- Track - available in three metre lengths
- Wheels - Four WHEELRND90
- Gate stops and receivers
- Automation kit - Suggest TONE6B or TONE10B

Important—This manual assumes you have assembled your Easy Gate kits and have attached your incline block guide channel.

HOW TO MEASURE A TELESCOPIC GATE

- Determine the opening width considering that the run off area required will be half of that width plus a minimum of 350mm. This becomes the opening width which is effectively your clear area when the gate or gates are fully open.
- Divide the opening width by two and add 350mm. This is the width of each leaf or gate. Example - If your opening width is 5000mm this is divided by two to make 2500mm and we then add 350mm which gives us 2850mm for each gate leaf.
- Measure your required height and deduct 35mm for track and wheels to come up with a finished gate height. NOTE - The telescopic kit can handle slight sloping sites but the slope must be consistent from one end to the other including the run off area. If your site is sloping we suggest a call to Automatic Solutions to discuss your options as your motor choice will also be critical.



You now have a width and height for each gate.

From here on we will refer to the right hand side gate above as gate one. This is the lead gate that has the automation fitted and the picture above we consider a right hand opening from inside. Yours might be the reverse but when we refer to “gate one” it is the lead gate or automated gate.

Gate two is the follower - the left hand gate in our picture above.

TELESCOPIC GATE REQUIREMENTS (EASYGATE)

Telescopic Gates can be different from a typical sliding gate. We will cover the differences here and how to deal with them.

- **MOTOR**

You will need a motor with a manufacturer's rating of five times the leaf weight. Why? One gate travels twice as fast as the other creating a lot of load and when adding the pulley system. The effective gate weight is five times the leaf weight. Ideal motors are TONE6B and TONE10B.

- **WHEELS**

Telescopic gates are designed to be used with Recessed Wheels, but can be adapted for Bottom Mount Wheels. You will need two sets or four wheels in total. Ask for WHEELRND90.

- **TRACK**

Telescopic uses two lengths of track, one for each gate. Leaf one requires a track only half the driveway width whilst leaf two track runs the entire driveway width. It is probably neater and easier to run two full length tracks. The bolt down item is TRACKBOLT and comes in three metre lengths or you can choose to concrete in with TRACKCONC also in three metre lengths.

- **INCLINE GUIDE CHANNEL**

When assembling your EASYGATE kit you will require a U-channel for the incline block guide. The channel needs to be 25x32x25 x 2.5 to 3mm thickness. You will require enough for both gate widths.

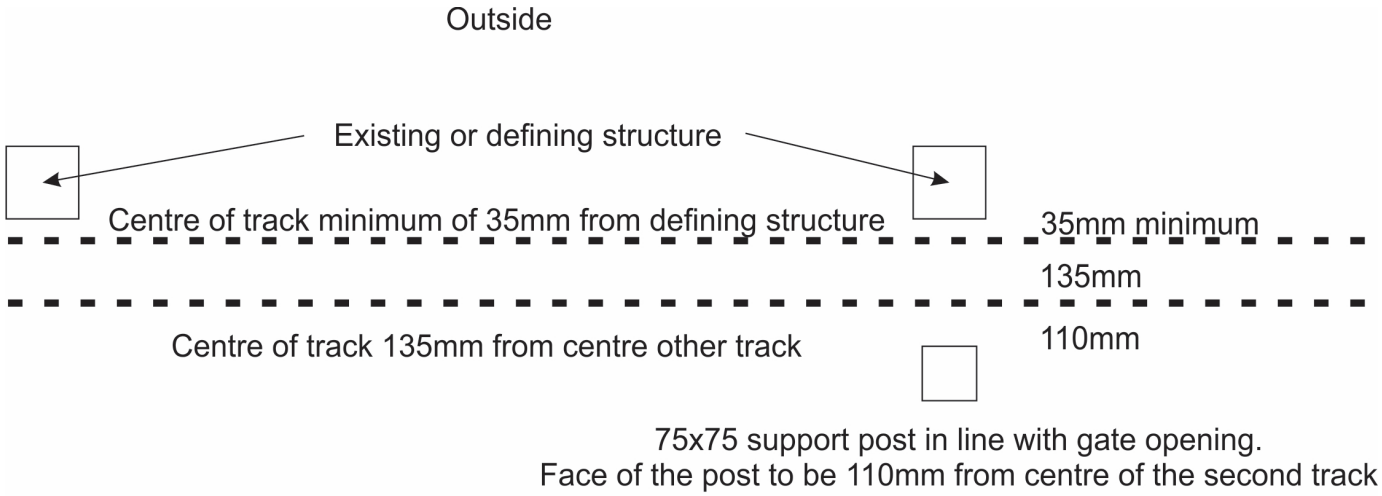
- **SUPPORT POST**

A 75x75mm support post is required to keep the gate/s upright. This post can be concreted in or bolted to a hardstand area but is usually the same height as your gates. If you choose to bolt down use POSTPLATE75.

STAGE 1 OF INSTALLATION - LAYOUT

Site layout varies from site to site as every site tends to be different but there are some simple rules that need to adhered to.

Two lengths of track need to be secured for the length of the opening and the run off area being one track for each gate. In most cases there are walls, fences or posts that determine both the opening width and the line along which the gate/s will run inside. The centre of the track closest to this outside line is used by gate two and can be as close as 35mm dependent on gate infill design but no less. The centre of the second track inside the first and used by gate one is 130mm from the centre of the first track.



The 75x75 support post needs to be installed in line with the gate opening with 110mm from the inside face of the post to the centre of track two carrying gate one. Remember this post should be at least the same height as your gate.

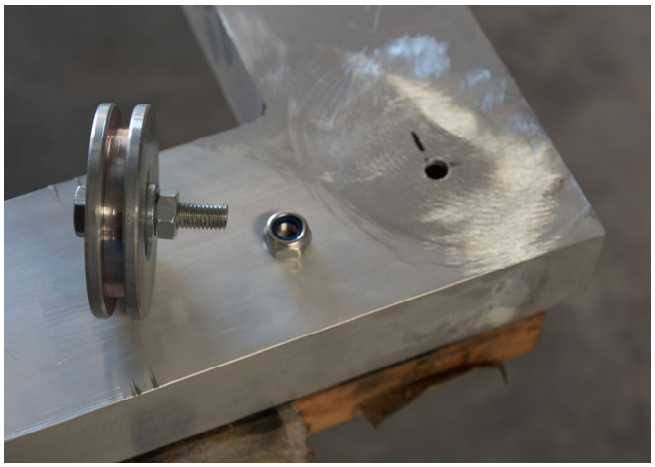
GATE ONE PREPARATION (THE LEAD GATE)

To prepare gate one for installation we need to -

- Install the two wheels
- Bolt on the two pulleys.
- Attach the cable and the tension bracket.

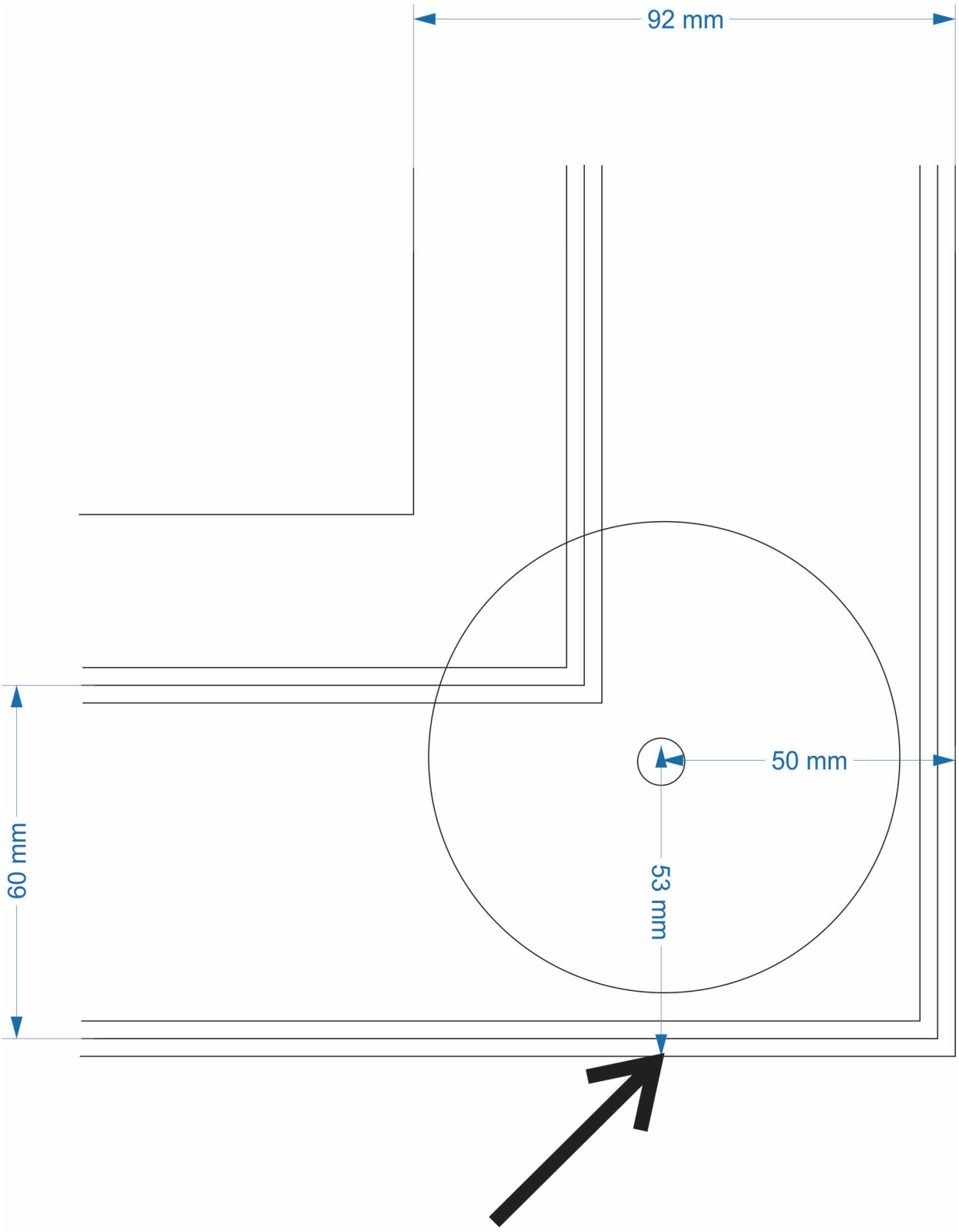
If you have not already made cutouts for your gate wheels in the bottom rail of your gate do so by cutting two slots 100mm x 35mm about 500mm in from each end of the gate. Secure your wheels using appropriate fasteners to the bottom rail

Make sure you are working with the outside face of the gate. This face will be to the outside and does not have your channel covers. Mark and drill a hole for your pulleys at each end. This hole is to be 50mm up from the bottom of the gate and 50mm in from each end.



Assemble the wheel with bolt, spacers and nut and then bolt the wheel to the gate using the supplied lock nut and tighten. See next page for positioning and creating an access hole in your bottom rail for easy securing of the pulley wheel.

GATE ONE PULLEY POSITION & ACCESS



25mm Hole Saw here
in bottom rail gives access to
secure the pulley wheel and keeps
things neat and tidy.

GATE ONE PREPARATION (CONTINUED)

Take the cable tensioner and prepare by having about 20mm of thread wound out which you can use to tension later. Sit the tensioner on the middle of the bottom rail for now whilst you cut the cable to approximate length. Lay the cable along the top of the gate bottom rail and then position around the cable slot of each pulley and back along the bottom of the bottom rail to meet in the middle. Overlap the cable by about 100mm and cut to length.

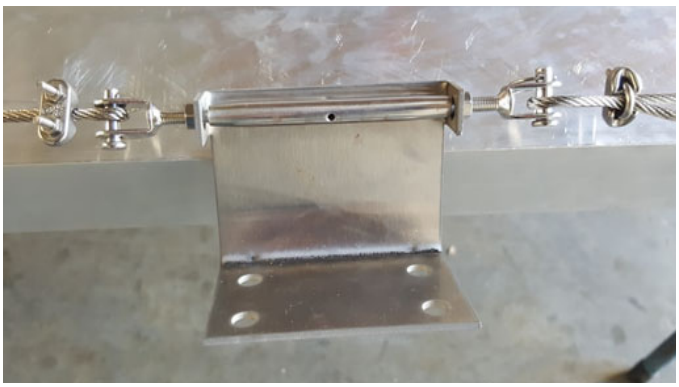
Overlap 100mm and cut to length

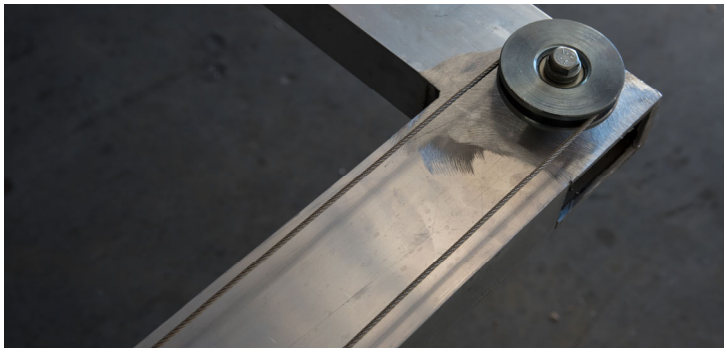
Take one end of the cable and insert through a wire rope clamp, then through one end of the tensioner form a loop back on itself and back through the wire rope clamp. Pull though until you have a nice small loop and tighten the wire rope clamp to secure.

The next bit may be easier with another pair of hands. Take the other loose end of cable and insert through the other wire rope clamp, then through the other end of the tensioner, loop back over again and through the wire rope clamp. Now pull through until you achieve a nice small loop and a loose tension on the overall cable loop. Tighten the wire rope clamp.

Next apply tension by winding the tensioner in until it does not want to turn any more by finger. Test by moving the tensioner back and forward along the bottom rail. Adjust if necessary and using a small amount of Loctite tighten the lock nuts on the tensioner.

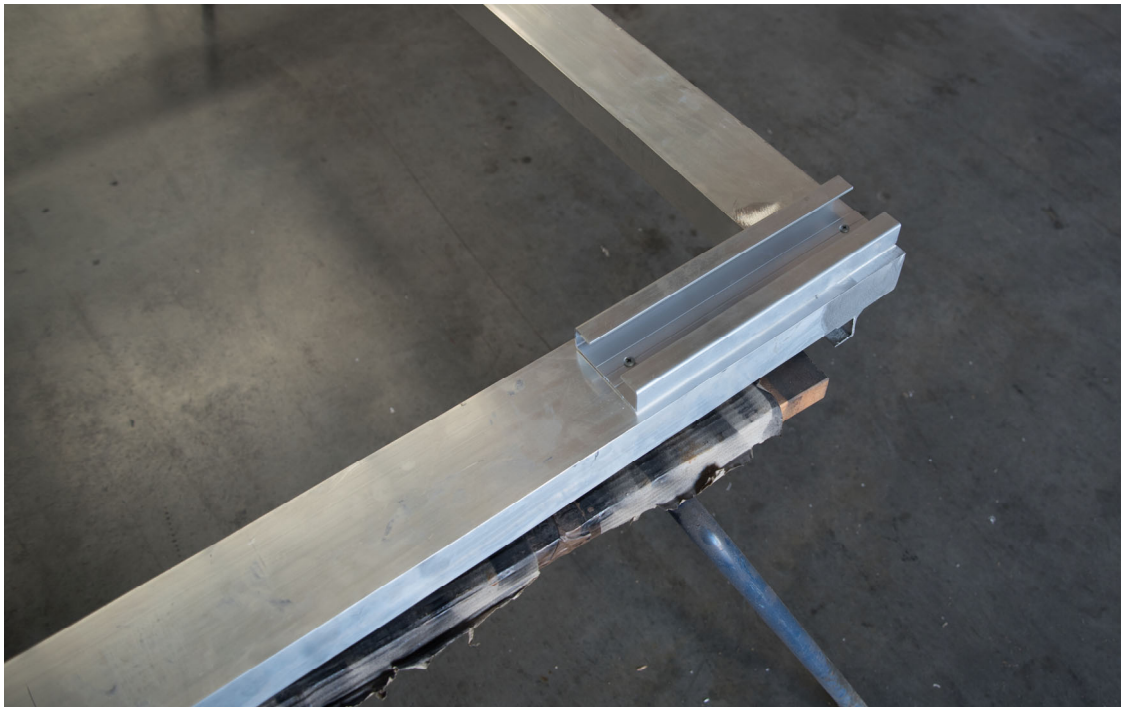
If happy you can trim the excess ends of your cables and a couple of turns of electrical insulation tape around the ends will not hurt.





GATE ONE PREPARATION (CONTINUED)

The final thing you need to do to gate one is attach the incline channel to the top corner of the gate on the outside face or the same side as the trolleys and cable.



Simply centre it at the top of the side rail on the end that will overlap with gate two and fasten with two self drilling screws.

Now is a good time to attach the other incline channel to the top of the 75x75 support post assuming the post is the same height as your gate.

Gate one is now ready to install.

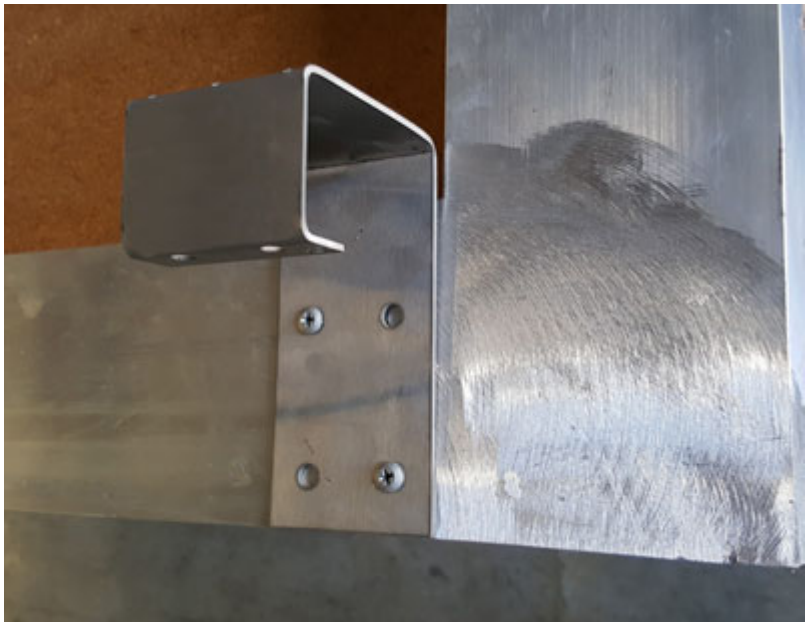
GATE TWO PREPARATION (THE FOLLOWING GATE)

Gate two preparation is relatively simple -

- Install two wheels just as in gate one
- Attach the cable clamp bracket.

Start by installing the two wheels in the bottom rail following the exact same method as gate one.

Next working on the inside face of gate two (the side with the guide channel) position the cable clamp bracket on the bottom rail and in line with the inside edge of the side rail that will be closest to gate one when closed.



Note the edge of the cable clamp bracket lines up with the inside edge of the side rail and the bottom of the cable clamp bracket is level with the bottom rail of the gate.

Fix the cable clamp bracket in this position.

Gate two is now ready for installation.

PUTTING IT ALL TOGETHER

You have arrived at the part that can be fiddly and frustrating depending on the infill of your gate. Closed style gates mean tight working spaces and lots of swearing but take your time and check things as you go.

1. Start with gate one on the inside most track and slide the incline block down into the incline channel on the support post and then slide gate one into the incline block. The gate will now stand by itself and in fact slide along the track. Do not let go of the gate whilst sliding at this point. Bring the gate to the closed position which will leave 350mm of gate behind the front edge of the support post (the rear overlap).
2. Hold the gate in this position and adjust the cable tension bracket along until it is positioned midway along the 350mm rear overlap. This is the fastening position and you can use a marker to mark the fixing holes for the tensioner bracket to the ground at this position.
3. Fix the tensioner at this position.
4. Slide gate one fully open so the front edge of the gate is close to level with the support post and then install a gate stop at the bottom rear of gate one which will be as far as gate one can travel in the open position.

PUTTING IT ALL TOGETHER (CONTINUED)

5. Now slide the second incline block into the incline channel on gate one. Position gate two onto the outermost track and slide gate two and gate one together using the incline block on gate one. Gate two should now be supported by gate one. NOTE - This will require lifting gate two slightly so that the cable clamp bracket can get past the pulley on gate one.

6. Slide gate one into its fully closed position with rear 350mm overlap and then in turn slide gate two into the fully closed position which should leave it overlapping gate one by 350mm. If you have not already installed a receiver post and/or bracket for gate two which also acts as a closing gate stop then do so now.

7. Carefully open gate one to the fully open position pulling gate two with you as you go. When gate one is fully open continue to open gate two until it also is fully open and aligns with gate one.

8. With both gates aligned the cable clamp bracket is now in position and by ensuring the cable is sitting in the inside corner of the bracket use the two Phillips Head Machine Screw to secure the cable at this point.

TESTING THE INSTALL

If everything has gone to plan you can now test the system by manually sliding gate one. There should be no need to touch gate two as it will simply follow gate one.

Once happy with your manual installation you can proceed to the automation phase of the installation. That phase is not covered by this manual but good practice is to install the motor and rack and program this first before adding any accessories.

QUESTIONS

If you have further questions please contact your local branch or email the service department at -

service@automaticsolutions.com.au