

Installation and Maintenance Manual

Commercial Drive Bolt

Model: GDS DB Ent

Made in Australia from Australian & quality imported components



**AUTOMATIC
SOLUTIONS**

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1. Product description :

The drive bolt controls are specifically designed to be used in conjunction with the ATA CB-6 control board, and some others in the ATA range.

It can be adapted to be connected to other control boards as long as they have the following.

- A lock output with N/C dry contacts.
- An adjustable lock pre activation time before the motors start.
- Be able to hold the lock output on for the complete gate travel time.
- Have N/C limit inputs
- Be able to adjust the delay between gate leafs on dual swing gates

Specifications of drive bolt operator

Power Supply	– 24v dc 1.8 amp max
Push Pull Force	300N
Bolt size	25mm with 130mm travel

Operation of drive bolt with gate starting from closed position.

Upon a command to open the gate, the lock relay activate, driving the bolt up. After the pre programmed time delay, motor 1 will start and in turn, motor 2 will start up in the case of a dual gate set up.

Upon reaching the full open position, **if the operators (n.c) close limit switch/s have been wired through the drive bolt controls** it will remain up and will always stay up while the closed limit switch is in its N/C state.

Once the gate has returned to its full closed position the bolt will drive down.

If the PE cells are activated, depending on the setting on the CB-6 board, the gate will stop, delay for the pre programmed time equal to delay at start up, then return to the full open position then waiting for its next command. The drive bolt will again stay up.

2. Installation details

1. The drive bolt is controlled by relays and functions of the CB-6 control board.
2. It requires a minimum .75mm 2 core cable to be run between the din rail terminals marked brown and blue, corresponding to the brown and blue wires on the drive bolt assembly. If the cable run is over 15m use 1.5mm cable.
3. In the case of a single swing gate set up, instead of connecting the M1 limit switch close and open wires to the CB-6 (com, cl. op) connections, they have to be connected to the din rail limit switch terminals at the drive bolt controls. (terminal 3,4 for close limit) (terminal 5,6 for open limit). In doing this, if the limits are wired up with the common being already connected between the open and closed switches, (3 wire connection), that common connection will have to be separated and separate common wire be installed between terminal 3 and the limit switch. This is to totally separate any common connection between the two switches, so will now be a 4 wire connection **(If the controls are supplied the operators at same time the open and closed limit switches will have already been done)**.
4. In the case of a dual swing gate set up, M1 limit switch connections are same as above. But the M2 limit switch connections are made at the CB-6 control board marked (M2 com, op, cl). And will be standard 3 wire limits.
5. The drive bolt is protected by a 3A fuse located with the drive bolt controls.
6. The CB-6 board has been set with a special program (time that the lock release output activates to when motors are started) done through the special adjustments settings for the CB-6. This time delay has been set at 3 seconds, but if that time is not suitable for your application this setting can be changed, details are provided further on.

This programmed time delay the motors from starting until 3 seconds after the bolt has started to retract.

3. Mechanical installation

-This drive bolt has been designed to extend into its locating hole only when the gate has come to its fully closed position.

-The total travel of the bolt is 130mm in both directions and is not adjustable.

-It can be mounted vertically or horizontally depending on application. A suitable locating hole or catcher bracket has to be made and fitted to suit as every installation site is different.

- A gate stop also has to be fitted to the ground for a dual swing gate set up, or on the receiving post if in the case of a single swing gate, so that the gate leaf can stop in the correct position before the bolt extends.

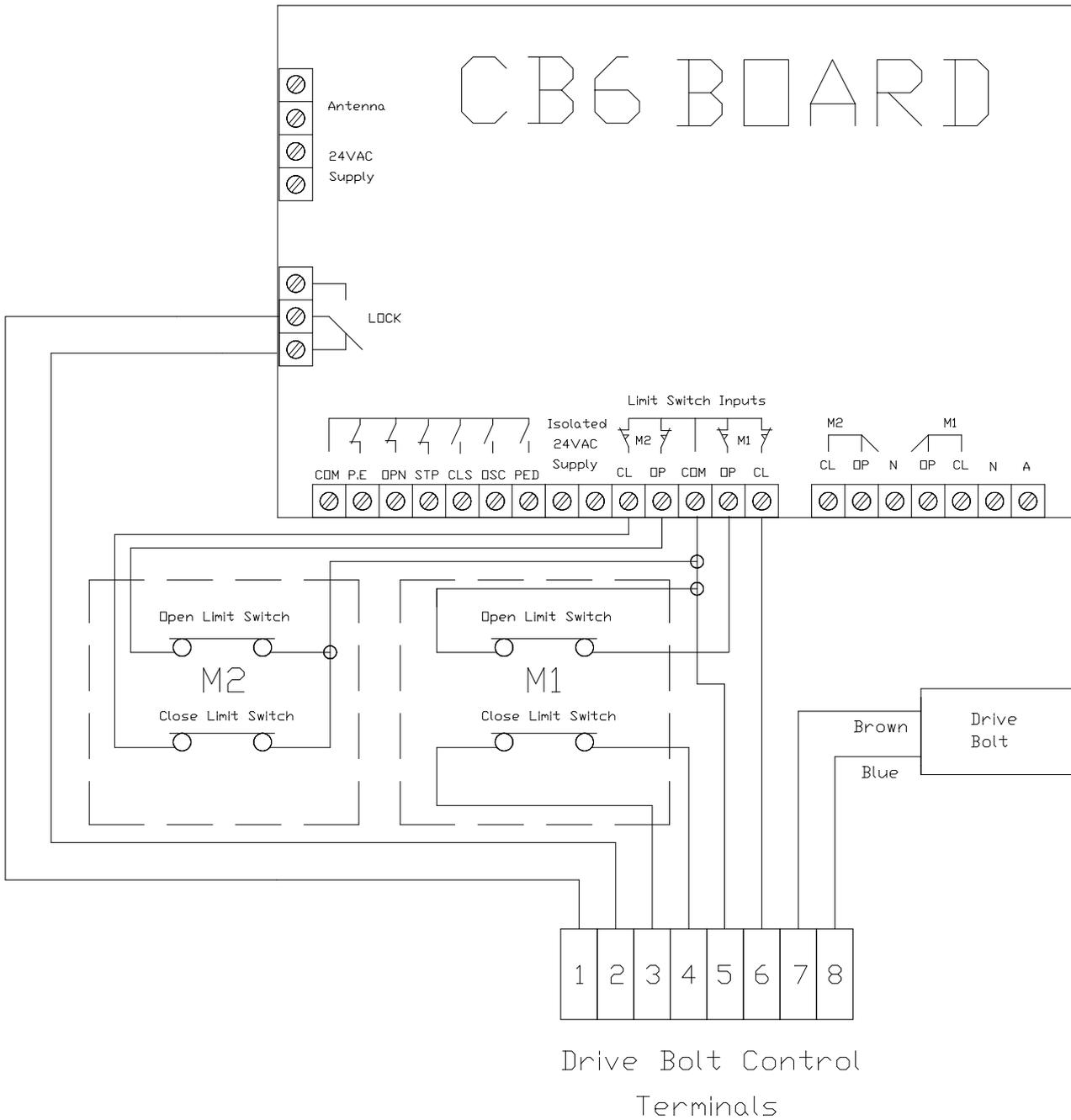
A) Prepare a suitable mounting position on the gate frame, and fix suitable gate stop in position.

b) Determine the mounting height of the operator by ensuring that, with the bolt fully retracted, there is suitable clearance between the end of the bolt and the ground throughout the complete travel of the gate. Also keeping in mind, if the assembly has to be mounted higher, that you still have enough of the bolt located into the hole when the bolt is extended.

c) Run the power cable between the controls and the drive bolt operator and connect the brown and blue wires correspond to the terminal marked brown and blue at the controls.

4.

Connections Between Drive Bolt Controls and ATA CB-6 Board



1 - To lock relay common

2 - To lock relay N/C

3 - To closed position limit switch common M1

4 - To closed position limit switch N/C M1

5 - To gate controller (CB-6) common limit terminal

6 - To gate controller (CB-6) close limit terminal

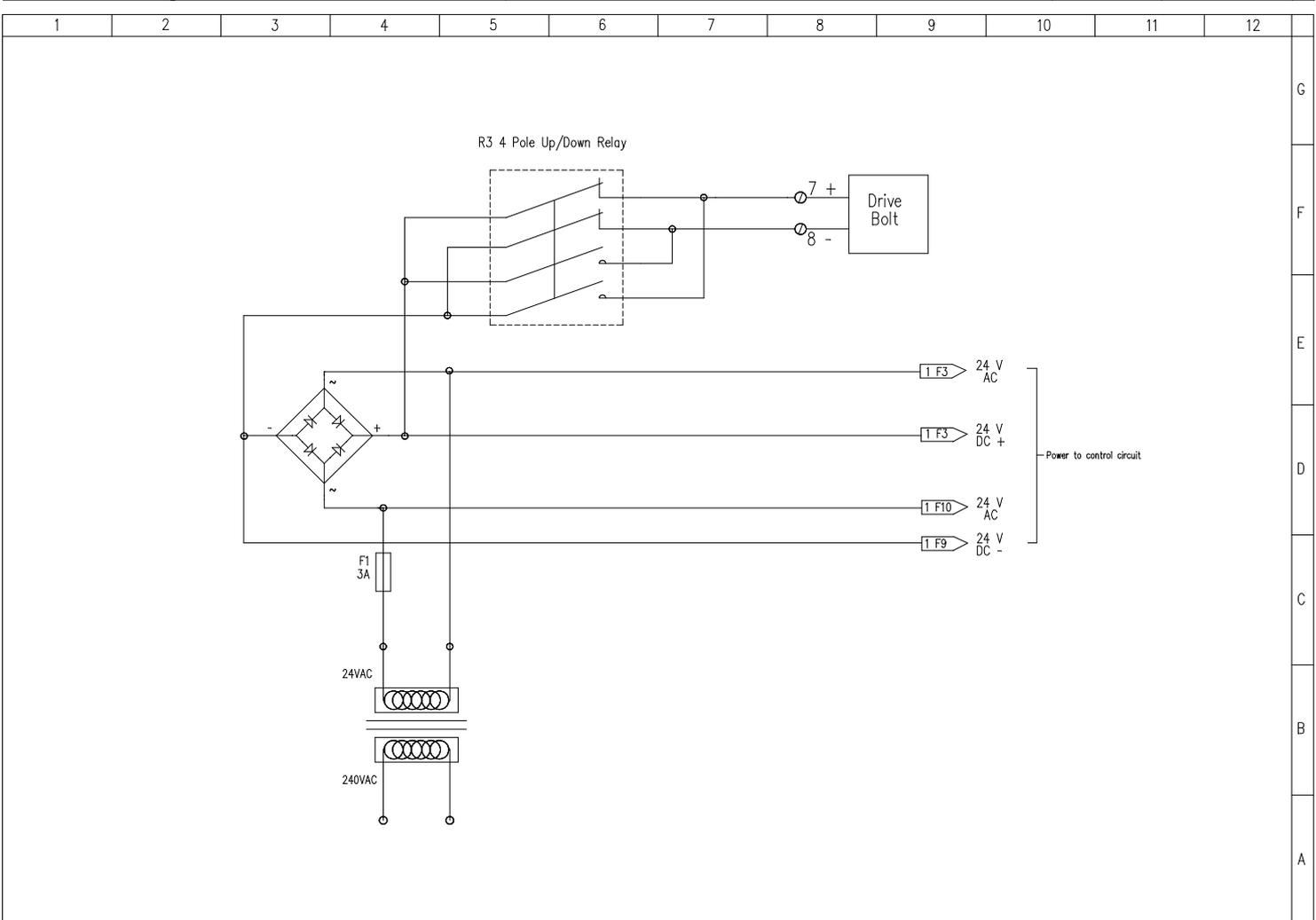
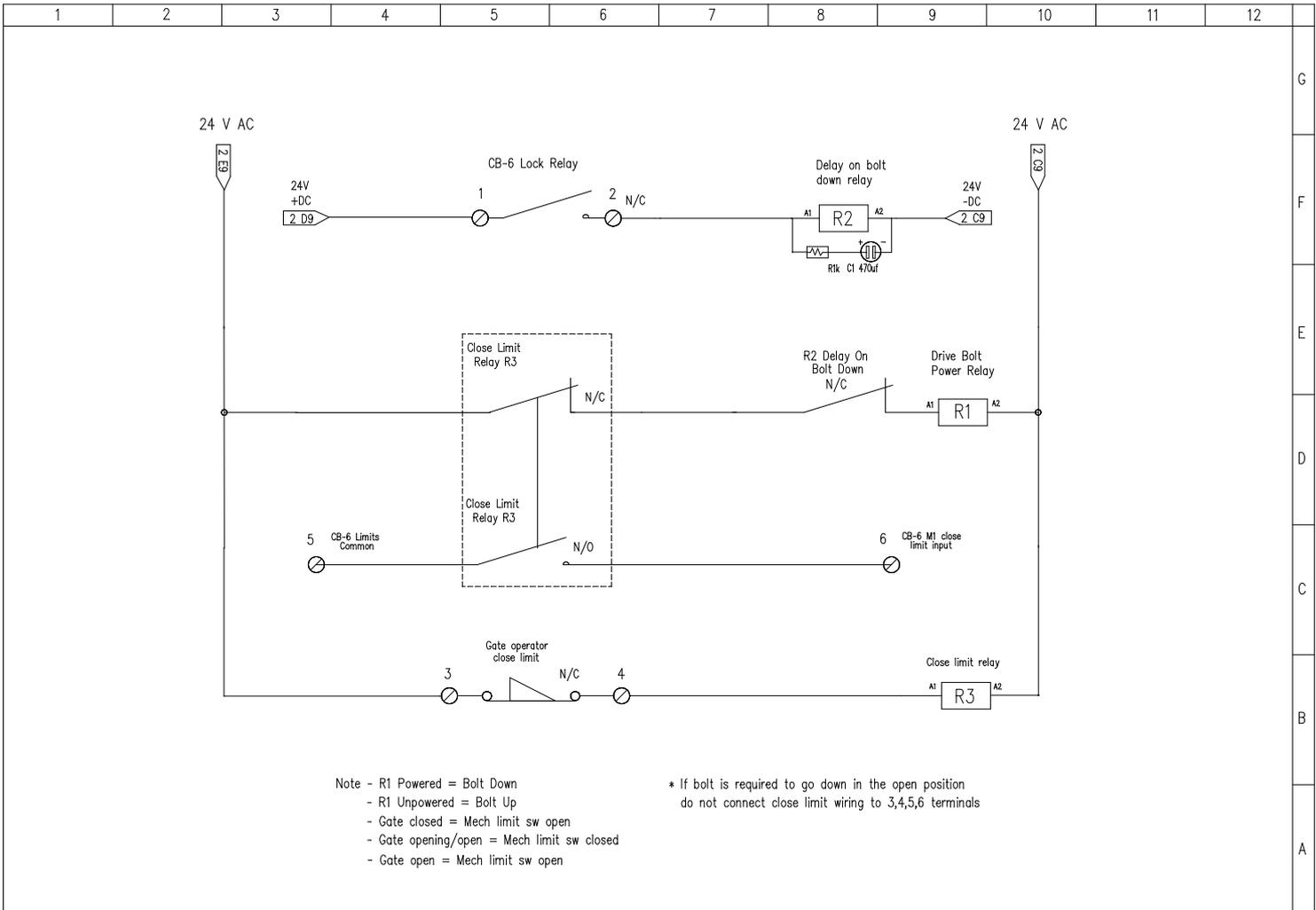
7 - Drive bolt operator + (brown)

8 - Drive bolt - (blue)

* Motor 2 limit switch connections shown

for a dual set up only

* If drive bolt is to be allowed to drive down in the open position, do not connect close limit wiring. So leave terminals 3,4,5,6 un terminated.



5. Programming CB-6 for motor start delay

A 3 second delay has been programmed at the factory, if a different time is required, follow these instructions to changed, or alternatively, the ATA PG-3 universal hand held programmer can used.

SPECIAL ADJUSTMENTS.

This section gives instructions on how to make some of the less common adjustments. To do this the controller must be placed in the special adjustment mode. This is done by following the steps below.

- a) Turn the control board's power off
- b) Place the slide switch [26] into the "set" position
- c) Press and hold the CLS button [31]
- d) Turn the control board's power on. (Keep holding the CLS button)
- e) Wait until both the status L.E.Ds [25] turn off and then release the CLS button [31].
- f) Both the status L.E.Ds [25] will come on to indicate that the special adjustment mode is selected.

The controller is now ready to adjust the special parameters. **Follow detail below.**

Make sure the slide switch [26] is placed into the "RUN" position after adjustments made.

To aid adjustment the status L.E.Ds [25] will both be turned off when timer adjustment starts and the CLS status led [25] will flash at one second intervals while the button is pressed.

SETTING TIME FROM WHEN LOCK RELEASE OUTPUT IS ACTIVATED TO WHEN MOTORS ARE STARTED.

The controller can be made to activate the lock release output before the motors are started. To set the duration of the pause - Press and hold the OSC button [28] for the required pre-drive lock activation time.

6. Manual release of drive bolt

- a) Using the key provided, insert into lock and turn clockwise.
- b) Once turned lift cover upwards and remove.
- c) Pull drive bolt operator upwards to withdraw drive bolt out of its locating hole.

6. Maintenance

1. Check that locating hole is clear and clean out as necessary.
2. Make sure gate limits are set correctly and gate stop isn't loose and make adjustments as necessary.
3. Make sure drive bolt is greased regularly, a grease nipple is provided.

8. WARRANTY

- a. For the goods not manufactured by Gate Drive Systems Australia, we shall pass on the manufacturers warranty to the Customer from the date of invoice. It is the manufacturers discretion to repair or replace goods deemed to be defective as a result of faulty workmanship or materials.
- b. All goods must be returned to Gate Drive Systems Australia or its representative for inspection or testing to assess if a claim is justified. It is the responsibility and at the cost of the Customer, to Gate Drive Systems Australia warrants that the goods manufactured by it shall be free from defect in manufacture for a period of 12 months from the date of invoice. Should any fault occur within that period as a result of faulty workmanship or materials, Gate Drive Systems Australia will make all necessary repairs, or at its discretion replace the product at no charge to the Customer except for freight. The appropriate Serial Number must be quoted for all warranty claims.
- c. return the goods for inspection and freight costs are the responsibility of the Customer.
- d. The warranty is negated and will not apply in the following circumstances:-
 - i. If no proof of date of purchase can be produced.
 - ii. If the product has been used in a manner beyond its design parameters.
 - iii. If the product is tampered with or repaired by personnel not authorised to do so.
 - iv. In respect of loss or damage caused by rough treatment.
 - v. If the product is not used and maintained in accordance with instructions or recommendations listed in this Installation and Maintenance Manual.
 - vi. In respect of loss or damage caused by an Act of God or any other cause not within the manufacturers control.
- e. Goods returned under warranty for repair or testing will incur a charge to be fixed by the manufacturer if no fault is found.
- f. The Customer shall bear freight charges for returning the goods for inspection and for the delivery of any replacement or repaired product from a justified warranty claim.
- g. Save for the express conditions and warranties herein contained all other conditions or warranties (whether as the quality, fitness for purpose or any other matter) expressed or implied by statute, common law, equity, trade custom, usage or otherwise are hereby expressly excluded provided that nothing in these terms and conditions shall exclude or limit any breach or condition implied by law, the exclusion or limitation of which is not permitted by law.

SELF INSTALL - NEED TECHNICAL ASSISTANCE?

OPTION 1: DIRECT WITH THE SERVICE DESK – QUICKEST AND MOST EFFECTIVE METHOD

Submit your enquiry direct with the service desk at – service@automaticsolutions.com.au

The service desk has the most experienced staff in Australia to help with your problem but they need your help.

- Describe your problem in detail and as clearly as possible. Don't forget to include a telephone number.
- Be certain to detail which model or models of you are working with.
- Send photos of the installation – they love photos. The people at the service desk are good but they are even better when they can see the installation. Send photos of the overall scene so they can see the entire installation. Also send photos of the wiring to the control board and any other part of the installation you think is relevant.
- Send video if appropriate. Smartphone's these days take remarkably good video in small file sizes which can be emailed in a moment. If your problem needs a video to show the issue please feel free to send it.

**NOTE: THIS IS BY FAR THE FASTEST AND MOST SUCCESSFUL WAY TO SOLVE YOUR PROBLEM
PHOTOS AND VIDEOS ARE THE NEXT BEST THING TO BEING THERE**

OPTION 2: LODGE YOUR ENQUIRY LOCALLY - SLOWER BUT CAN STILL BE EFFECTIVE

Make contact with the store of purchase. Branch staffs are typically not technicians and dependent on their length of service will have varying degrees of technical knowledge. If they cannot help however they will certainly either source help locally from their technicians or make contact with the service technicians on your behalf.

OPTION 3: SERVICE CALL WITH AUTOMATIC SOLUTIONS TECHNICIAN – SLOWEST METHOD

If you fall within the local branch service area it may be possible to book a local technician to look at your installation. Wait times will vary dependent on local workloads. The cost is a service fee which includes the first half hour and the hourly rate thereafter. If any Automatic Solutions provided parts are found to be defective and within warranty these will be provided free of charge.

(NOTE: If you suspect that any parts are defective and within warranty you may wish to consider option 4)

A note on this option: If you decide on this option you will be asked to sign an "authorisation to proceed" which will provide legal authority and payment security. This form has three options available of which only the first two are available to you. The third option is for warranty repairs only for full install customers. Self install customers requiring warranty only service need to refer to option four below.

IMPORTANT: IN SHORT THIS OPTION WILL INCUR CHARGES

OPTION 4: RETURN THE PRODUCT IF BELIEVED TO BE FAULTY

As a self install customer who has purchased product if you believe the product to be faulty rather than an installation or site problem you have the option of returning the product for evaluation and to exercise your right to a replacement, repair or refund as applicable. All returned product is forwarded immediately to the service technicians for evaluation and response. There are two main methods available to return product –

- Direct to the service centre – this is the quickest method as it cuts out the branch delay
- Via the branch of purchase – slower because of the delay at the branch

When choosing this option you need to complete a product return form. This form gives you all the information on procedure involved and where to send to. These are available at the branch of purchase, can be emailed to you (contact your branch), or available here - <http://automaticsolutions.com.au/page/warranty.php>