



Access Blue Boom

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Technical specifications may change without prior notice.
All goods are subject to the standard factory warranty as laid out on the last page of this publication

Rev: 2008/03/001

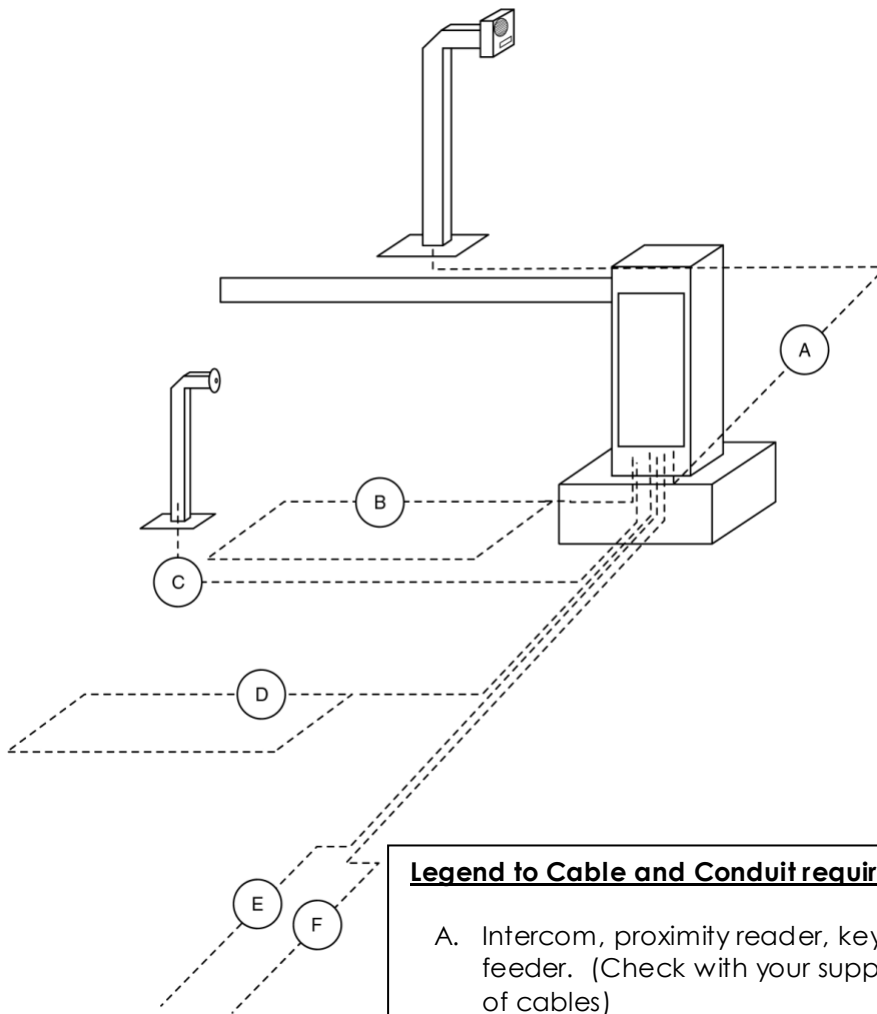
Access Blue Pole and fence options

Length Boom type	3m	4,5m	5m	5,8m	1.3m + 1.8m 180° Jack-knife
LH Boom pole	Ex-stock	Ex-stock		Ex-stock	
RH Boom pole	Ex-stock	Ex-stock		Ex-stock	
LH 180° Jack- knife					Ex-stock
RH 180° Jack- knife					Ex-stock
LH Fence	On order	On order	Ex-stock		
RH Fence	On order	On order	Ex-stock		
180° Jack- knife	Drive Arm		Towing Arm		Steering Arm
Length in mm	1300		1800		930

Access Blue Springs

Length Boom type	3m	4,5m	5m	5,8m	1.3m + 1.8m 180° Jack-knife
Boom pole	1 x 5mm	2 x 5mm		3 x 5mm	
180° Jack- knife					2 x 5mm
Fence	2 x 5mm	1 x 6.5mm 2 x 5mm	1 x 6.5mm 3 x 5mm		

Access Blue cabling requirements



Legend to Cable and Conduit requirements

- A. Intercom, proximity reader, keypad, ticket feeder. (Check with your supplier for number of cables)
- B. Presence safety loop (Single strand 1.5mm silicone panel flex)
- C. Safety IR beam TX (2 x0.5mm)
- D. Free exit loop (Single strand 1.5mm silicone panel flex)
- E. Internal pushbutton trigger (2x0.5mm)
- F. 220Vac mains supply (3x2.5mm 15A)

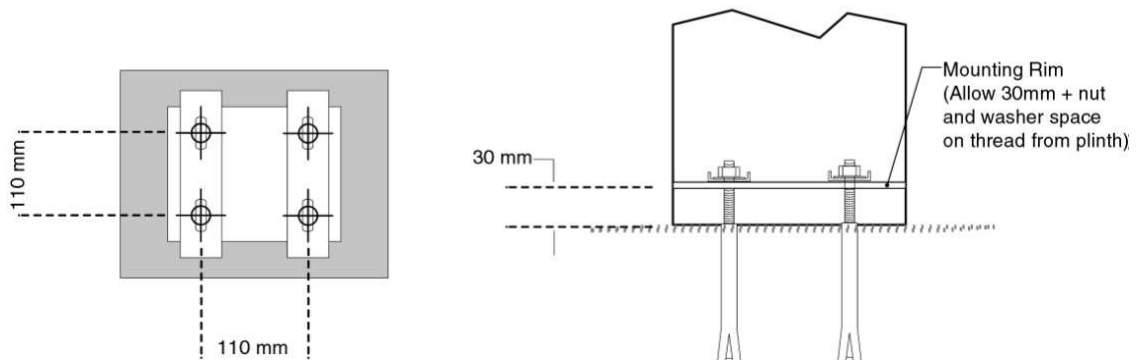
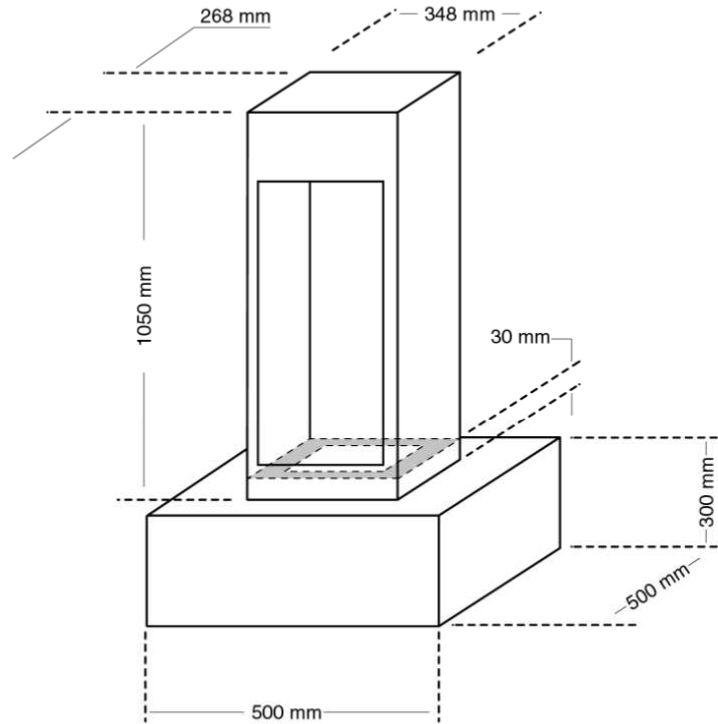
ALL TRENCHING SHOULD BE COMPLETED BEFORE CASTING THE MOUNTING PLINTH

Notes about the Cabling and Conduiting.

- A.** When making use of an intercom, proximity tag reader, ticket feeder, keypad or other entry trigger device ensure that the output is potential free.
- B.** When determining the position of your safety presence loop ensure that it is halfway between the entry and exit side of the boom pole/arm/fence position. This will ensure that the arm/fence will not falsely activate the safety reverse routine. The loop should also be positioned halfway along the length of the pole.
- C.** When determining the position of your safety IR beam set, ensure that the fence or arm will not falsely trigger the safety reverse routine. In the case of high undercarriage vehicles also using the entry/exit, install two safety IR beam receivers. These receivers need to be wired in series to one another.
- D.** When using a Free exit loop in conjunction with a entry trigger (Bi-directional access point. Entry/exit) Please note that the common of the loop detectors relay is connected to the closed limit input of the boom. That way when the boom is closing behind a vehicle entering the property it will not stop and reopen as the vehicle passes over the Free exit loop.
- E.** In the case of a long cable run (>10m) it is advised that a relay be installed at the end of the cable run. This minimizes the possibility of false triggers being cause by induction around the cable run. The output of the device connected to this cable needs to be potential free.
- F.** Please check with the local council electrical department for the wiring bylaws in that area before installing and connecting any 220Vac mains supply.

Access Blue boom and plinth Dimensions

	Height	Width	Depth
Boom	1050	348	268
Plinth	300	500	500



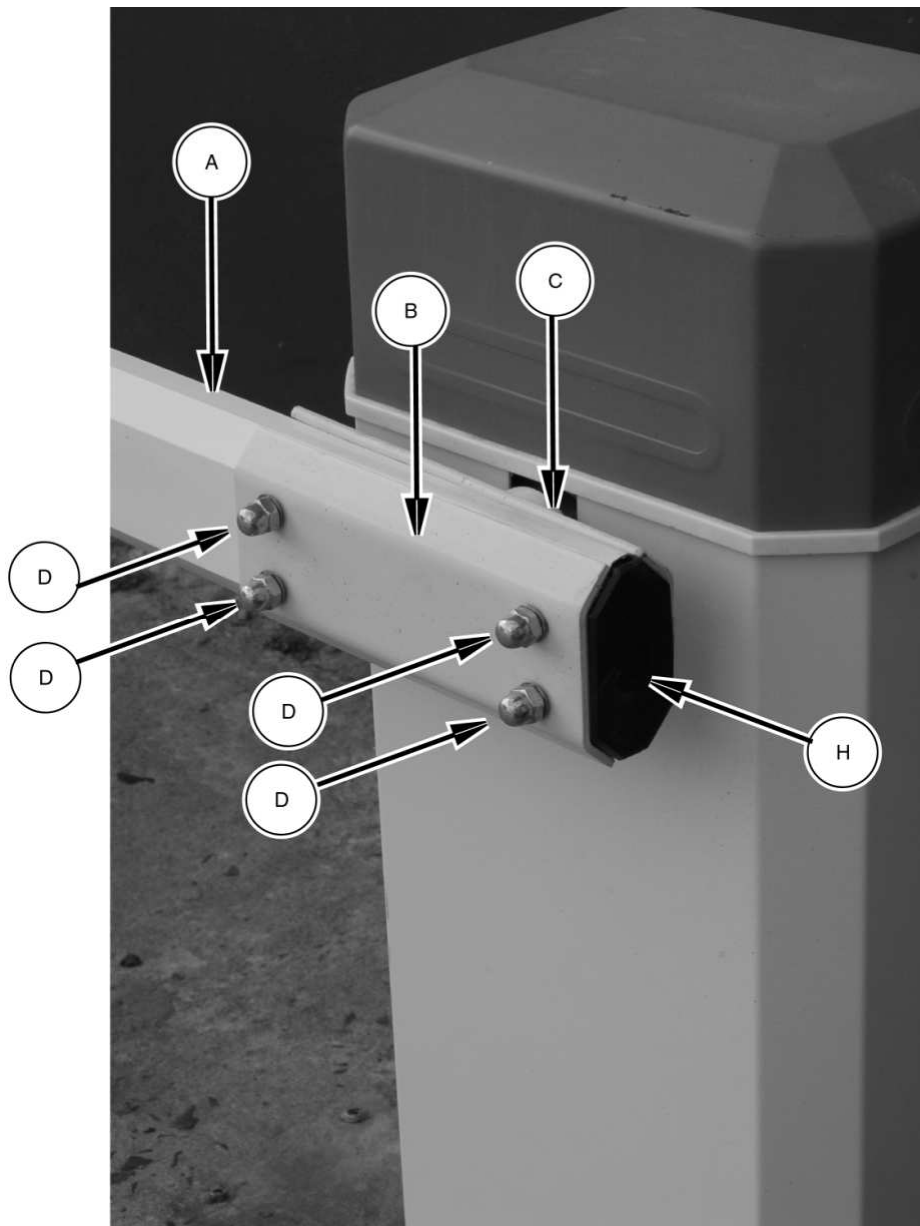
Notes about mounting the Access Blue Boom

1. It is advisable to prepare a plinth that is raised above the road level. This prevents damming of water around the base.
2. All conduiting should be prepared prior to casting of the plinth and no additional holes should be cut or drilled into the sides of the boom box as this will interfere with the weather proofing. All cable access is up through the base of the boom. Prepare your conduits so that they do not interfere with the mounting straps in the base. Use a cable tie to hold them together at the centre of your plinth.

If casting your bolts in the concrete ensure you have enough thread exposed to reach above the mounting rim.

3. If using the anchor bolts supplied ensure that the plinth has set before drilling. Lightly fasten the mounting plates onto the bolts without expanding the sheaths. Insert the bolts into the holes you have prepared and tighten the bolts until the sheaths have expanded sufficiently. Beware not to over tighten the bolts as this can crack your newly cast plinth.
4. When leveling the boom use a level on the sides of the box rather than the top of it. Use spacers braced under the mounting rim.

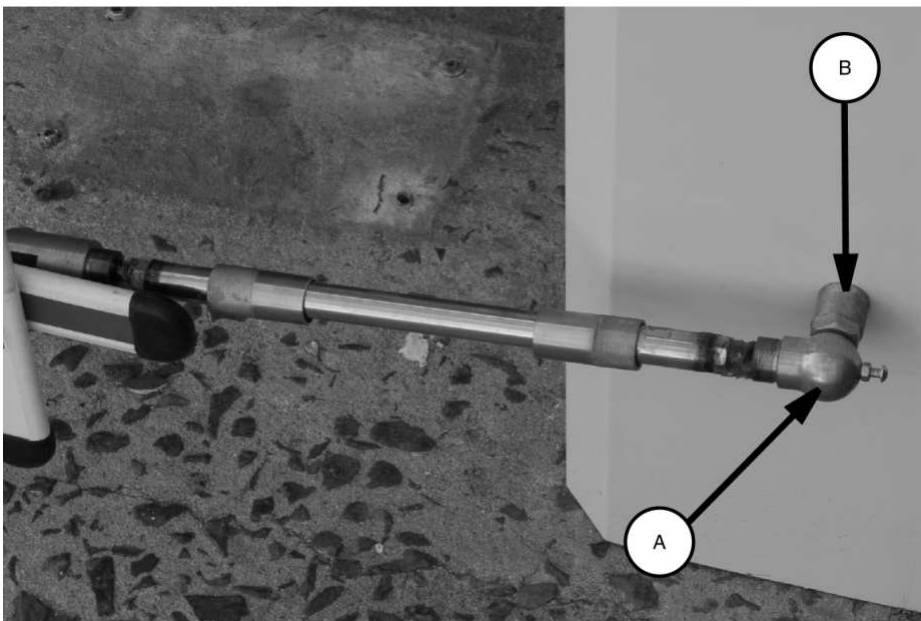
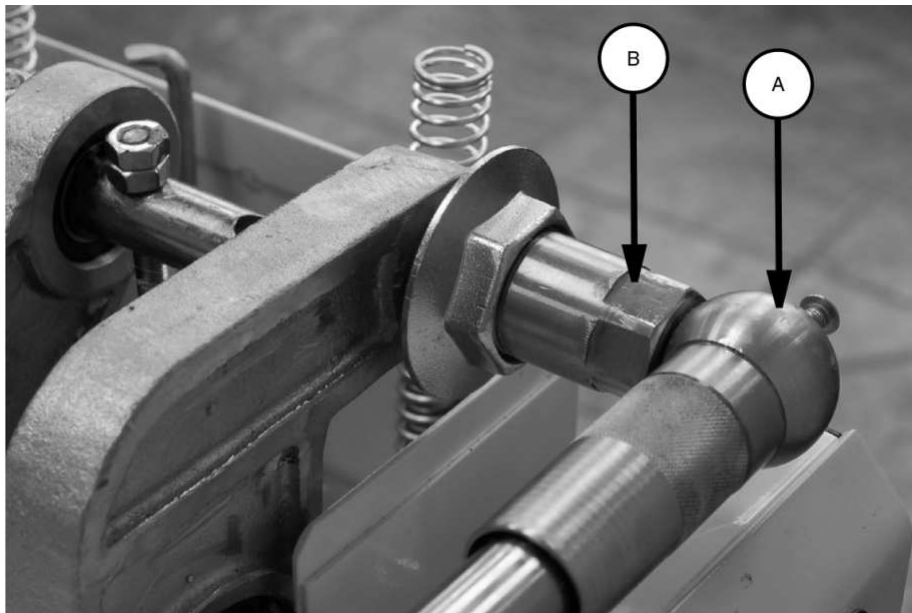
Attaching the Pole, arm or fence
DONE IN THE RAISED POSITION !



1. Firstly fasten four of the dome nuts (D) to the threaded rods supplied
2. Insert all four of the threaded rods with washers, through the clamping plate (B), and the pole/arm/fence (A) with the wooden inserts in place inside (A)
3. Hold the pole/arm/fence upright and feed the threaded rods into the holes in the drive shaft cradle (C)
4. Fasten the remaining dome nuts (D) with washers onto the threaded rod that protrudes on the boom box side of the cradle (C)
5. Insert end cap (H) into the open end of (A)

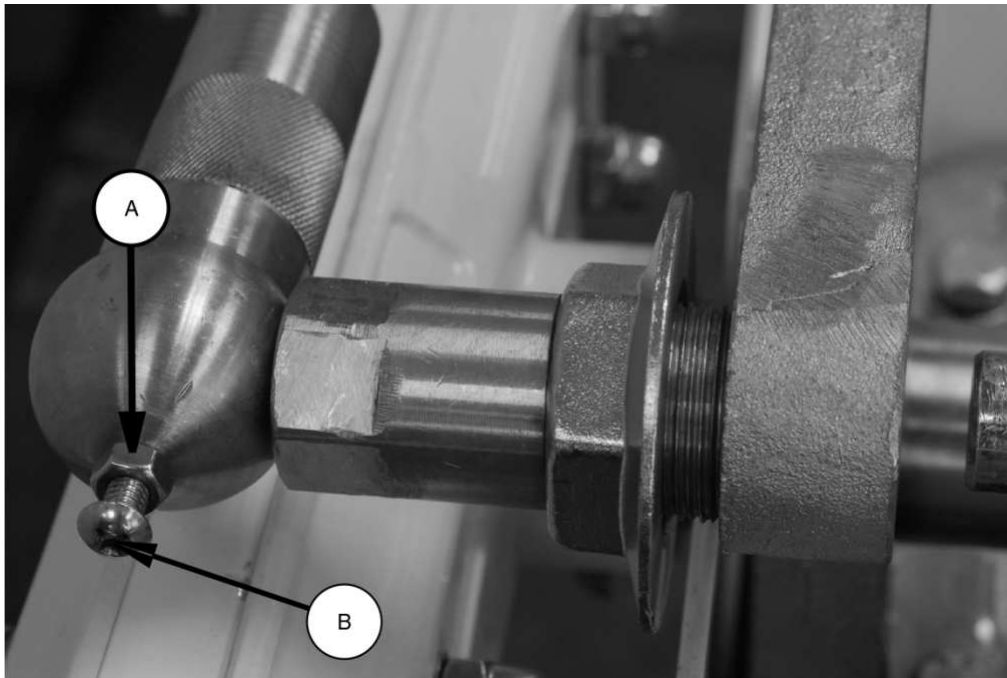
The Arms, Poles and Fences come pre-assembled. The table at the front of this manual lists the standard available options.

1. There is no modification necessary to the 180 Jack-knife arm or the Fence these are ready to mount directly onto the pole mounting cradle of the output drive shaft.
2. Both the 180 Jack-knife arm and the fence make use of a steering arm. The mounting for these differ in that the 180 Jack-knife's steering arm attaches to the top of the boom box above and behind the drive shaft and the Fence's steering arm attaches to the just above the base of the boom box.
3. In both cases fit the pivot end A over the mounting B as shown on the facing page.

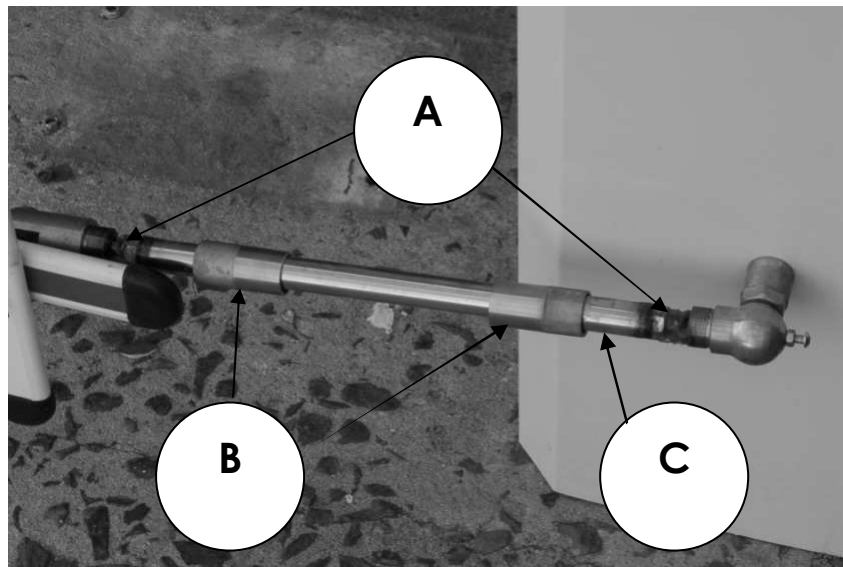
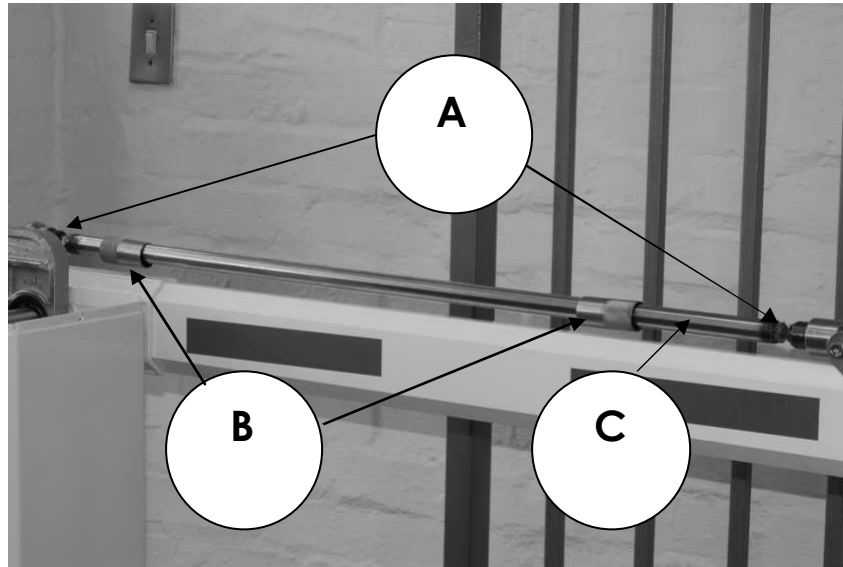


Attaching the steering arm continued...

1. Remember to lock the steering arm onto its mounting using the nut A and the screw B.

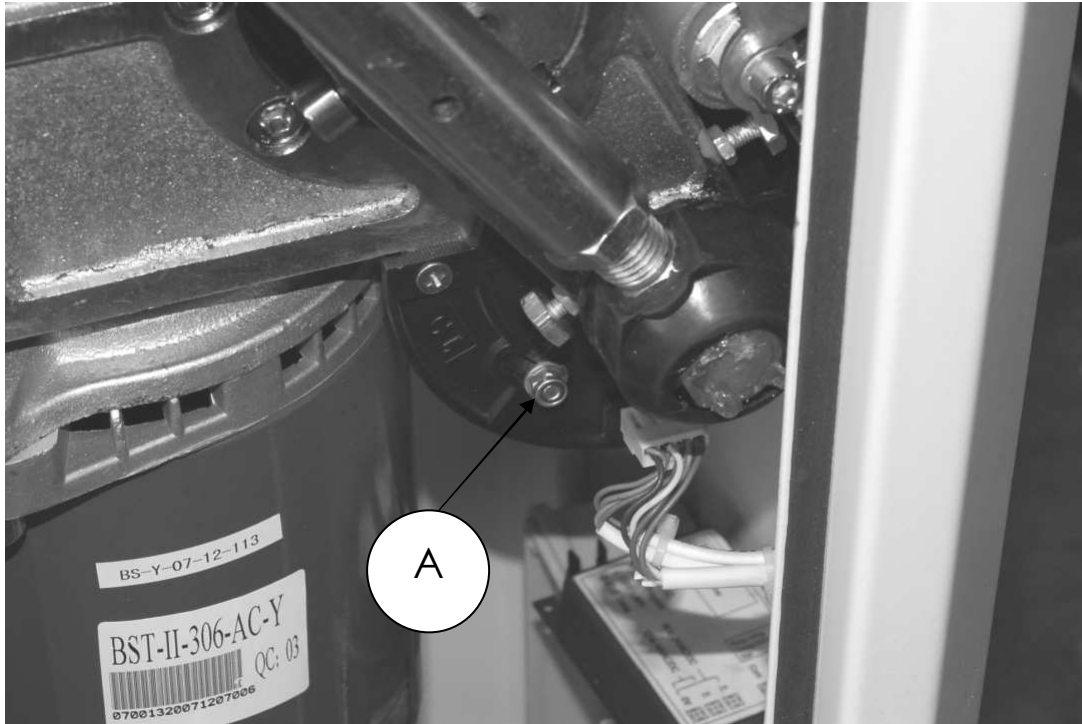


2. To level the 180 Jack-knife arm or straighten the pickets on the fence by lengthening or shortening the steering arm.
- a. This is done by unscrewing the covers (B) at either end of the steering arm and exposing the locking nuts (A)
 - b. Loosening the locking nuts (A) at either end
 - c. Twisting the steering arm (C) to lengthen or shorten it.
 - d. Once the steering arm is at the necessary length. Re-fasten the nuts (A).
 - e. Replace the covers (B) at either end.



Adjusting the limit switches if necessary

The limit positions have been setup in the factory. If however you need to adjust the limit position then loosen (A) here and adjust to the required position. Take care the cam arm does not ride up heavy against the rubber stoppers. Re-fasten (A)



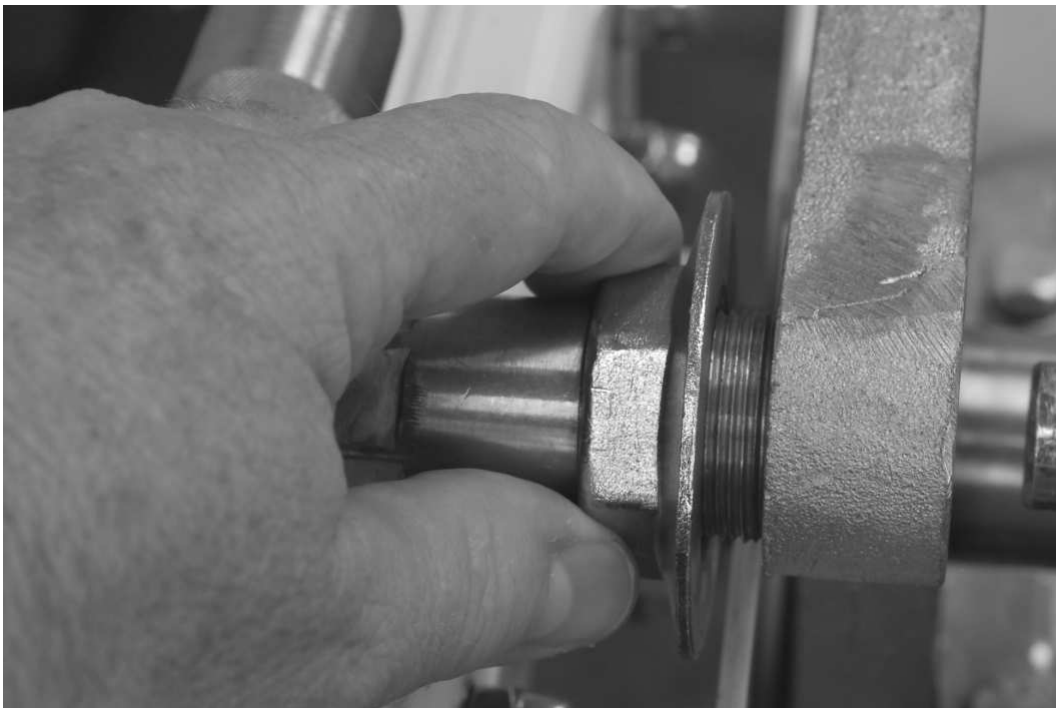
The Last picket which is also the rest for the entire fence can be adjusted by turning the spring loaded stopper further into or out of the bottom of the picket. Use this to assist with the leveling of the fence.



Removing the top cover



To release the top cover turn the cover release rod as shown above here



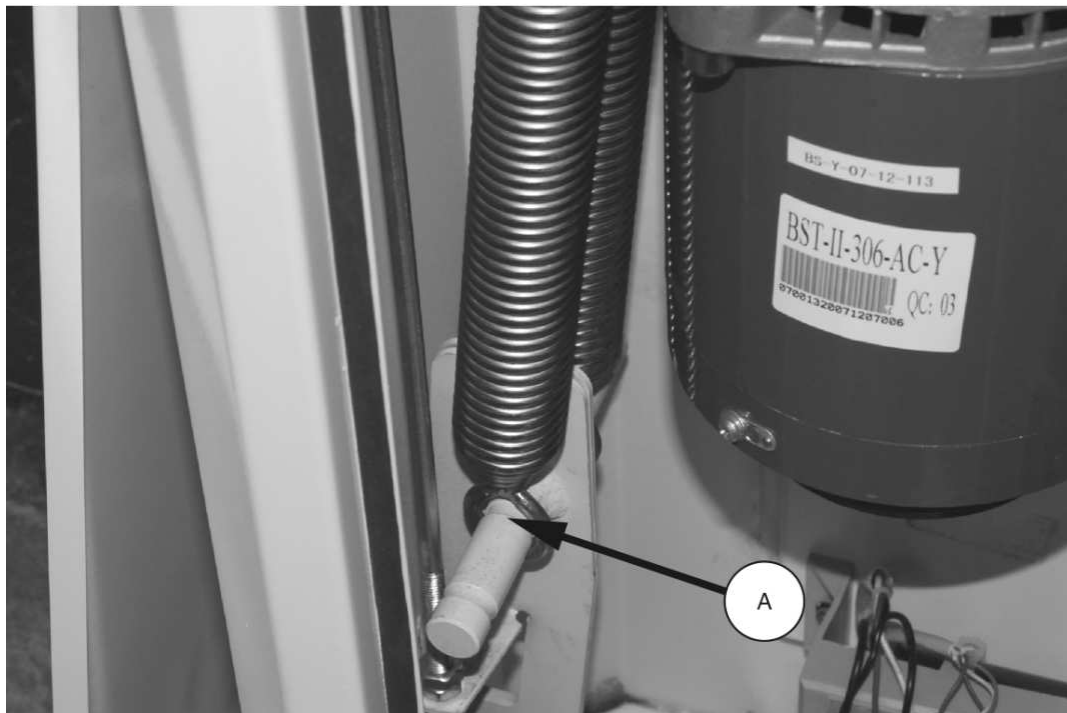
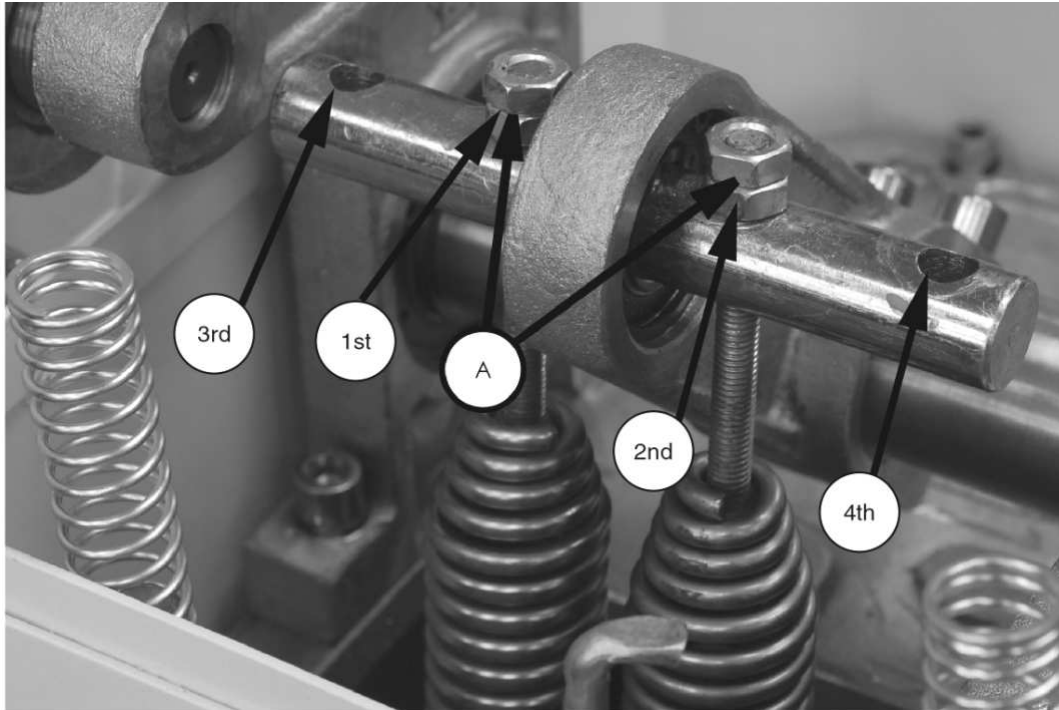
In the case of the 180 Jack-knife loosen the flange nut and remove the steering arm mounting stud before unlocking the cover. When replacing the cover replace the steering arm mounting stud and refasten the flange nut after the cover is locked in place



Remove cover by lifting the side above the release rod first

Springs and tensioning

First ensure that you have the correct springs and number of springs for the pole/arm/fence as per the table at the beginning of this manual.
If needed the spring tension can be adjusted with the boom in the raised position **(only)**. Do this by adjusting nuts (A)



Ensure the springs rest in the slots of the spring mounting rods.

Using the manual maneuver

To raise or lower the boom manually, turn the manual maneuver crank at the base of the electric motor as shown here.

This would be used to test the spring tension.
The boom should move with the same degree of resistance either up or down.

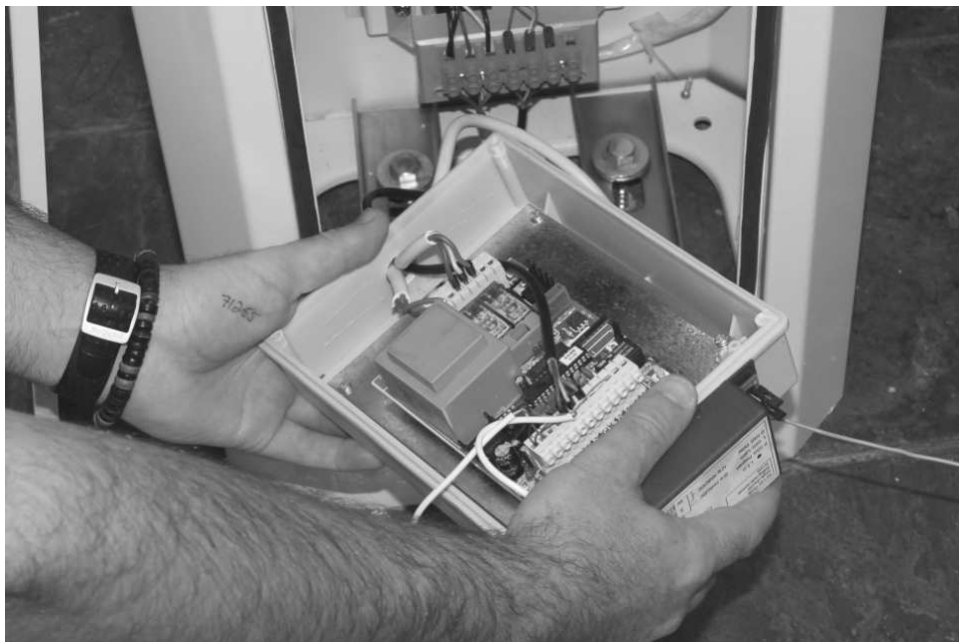


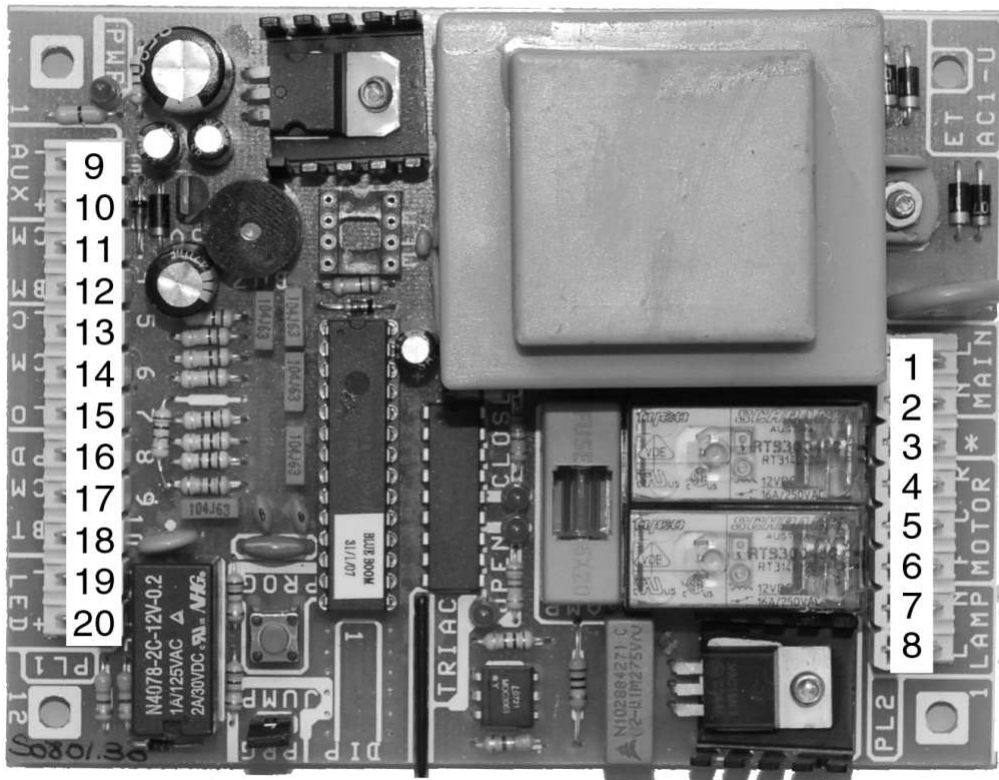
Gaining access to the electronics

To access the control card remove the controller box from its mounting, by sliding it up and then forward away from the side.



The entire control box can now be removed from the box. Remove the cover by unscrewing the four cover screws.





PRG JUMPER

ON:

TRIGGER TO OPEN

TRIGGER TO CLOSE

TRIGGER WHILE OPENING WILL STOP THE POLE, TRIGGER AGAIN TO CLOSE

TRIGGER WHILE CLOSING WILL REVERSE THE POLE DIRECTION

OFF:

- TRIGGER TO OPEN
- If NO BEAM INPUT IS ACTIVATED, THE POLE WILL CLOSE AFTER 20 SECONDS
- If THE BEAM INPUT IS ACTIVATED, THE POLE WILL CLOSE AFTER 2 SECONDS.
- If THE BUTTON INPUT IS MADE WHILE THE POLE IS IN THE OPEN POSITION THE 20 SECOND COUNT WILL RESTART.
- If THE BUTTON INPUT IS MADE WHILE THE POLE IS CLOSING THE POLE WILL REVERSE AND THE 20 SECOND COUNTER WILL RESTART. If BEAM INPUT IS ACTIVATED THE POLE WILL CLOSE AFTER 2 SECONDS.

Wiring of the AC1U/Blue boom (N/O Limit) Control card

1. 220Vac Live input
2. 220Vac Neutral input
3. Not used
4. Capacitor white and motor Brown
5. Motor Green
6. Capacitor white and motor Blue
7. Fan
8. Fan

9. Common output
10. 12Vdc 0,8A Aux output
11. Common output (with wire link to Safety presence loop/IR Beam input remove link when installing beams or loop)
12. Safety presence loop/IR Beam input (Linked to common remove link when installing beams or loop) (N/C)
13. Closed Limit input Blue (N/O)
14. Common output
15. Open Limit input Brown (N/O)
16. Not Used
17. Common output
18. Button trigger input (N/O)
19. Status LED Cathode output
20. Status LED Anode output

In the case of a bi-directional entry and exit point using a free exit loop, connect the common of the detector relay to the closed limit input. This prevents the car from stopping the boom from lowering when the car passes over the loop.

WARRANTY: All goods manufactured by G&C Electronics cc T/A ET Systems carry a 12 month factory warranty from date of invoice. All goods are warranted to be free of faulty components and manufacturing defects. Faulty goods will be repaired or replaced at the sole discretion of ET Systems free of charge. This warranty is subject to the goods being returned to the premises of ET Systems. The carriage of goods is for the customers account. This warranty is only valid if the correct installation and application of goods, as laid out in the applicable documentation accompanying said goods, is adhered to. All warranty claims must be accompanied by the original invoice. All claims made by the end user must be directed to their respective service provider/installer.

The following conditions will disqualify this product from the warranty as laid out above. These conditions are non-negotiable.

- Any unauthorized non-manufacturer modifications to the product or components thereof.