# CANTILEVER BOOM INSTALLATION MANUAL





### **GENERAL**

There are two versions of the cantilever boom—CANTBOOM6 for openings up to six metres and CANTBOOM9 for openings up to 9 metres. Most installation is identical for both accept the length of the boom, the cover and the three rails between the two trolleys.

The recommended motor for the cantilever boom is the TONE10B. A high quality opener with a 12 volt motor either battery backup or solar power are both simply additions.

### REQUIRED FOUNDATION

The first stage of installing a cantilever boom gate is set out and installation of concrete hardstands for boom supports at each end and the cantilever boom cabinet enclosure in the centre section.

The two boom support hardstands should be 300 mm square and 400mm deep whilst the centre hardstand needs to be 2200mm long x 600mm wide and 400mm deep for the CANTBOOM6 and 3200mm x 600mm x400mm deep for the CANTBOOM9.

Drawings for set out for both the CANTBOOM6 and CANTBOOM9 are on following pages.

If using mains power this should be run prior to pouring the hardstands.

When pouring new hardstands we recommend installing positioning plates and rag bolts which will improve the installation and make the second stage of installation much easier.

Order 5—POSTPLATE75 and 20—RAGBOLTS

Drawings for post plate set out are on following pages.

It is important that all three hardstands are on the same level.

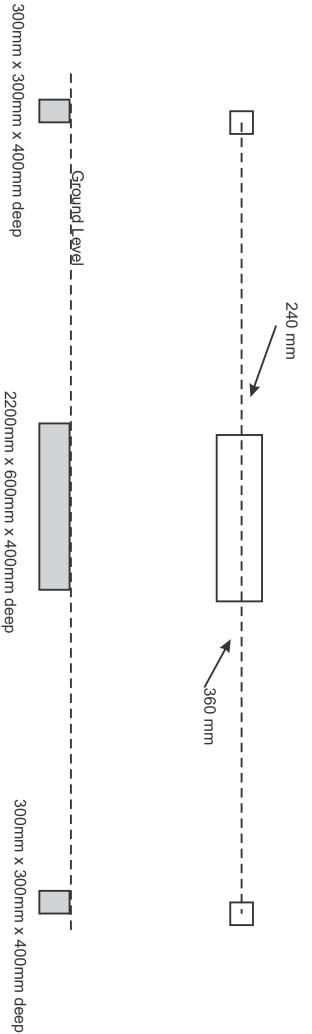
## **CANTBOOM6 SET OUT**

Centre hard stand is 2200mm long x 600mm wide and 400mm deep.

The boom line is not centred.
It is offset 240mm / 360mm.

The boom support handstands need to be 300mm x 300mm and 400mm deep.

They are centred on the boom line and 5900mm from the edge of the centre hard stand to the centre of the boom support hard stands.

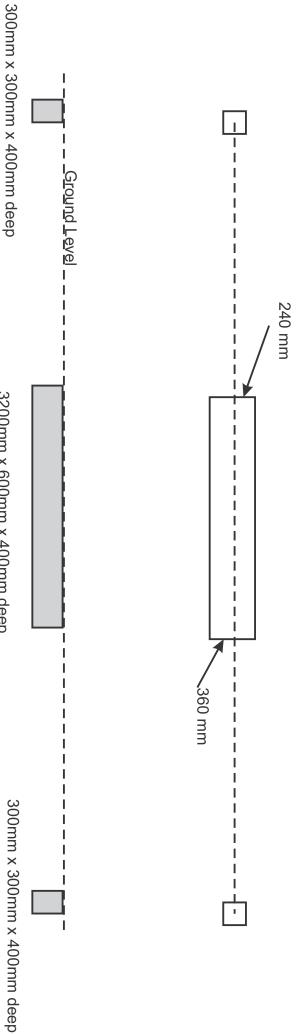


### 362 mm 175 mm 1100.00 mm 1850 mm 41½ mm ► 175 mm 362 mm

# CANTBOOM6 PLATE SETOUT

## **CANTBOOM9 SET OUT**

to be 300mm x 300mm and 400mm deep. and 8900mm from the edge of the centre hard stand to the centre of the boom The boom support handstands need Centre hard stand is 3200mm long They are centred on the boom line x 600mm wide and 400mm deep. The boom line is not centred. It is offset 240mm / 360mm. support hard stands.



3200mm x 600mm x 400mm deep

### 362 mm 175 mm 1600.00 mm 2850 mm 41½ mm ► 175 mm 362 mm

# CANTBOOM9 PLATE SETOUT

### **LEGS & SUPPORTS**

The next stage of installation is to securely fasten the three cabinet legs and the boom support posts at each end. If you have previously installed rag bolts in your hardstand this will be a simple case of positioning the post plates and securing with nuts and washers.

If you did not use rag bolts use the previous pages to set out your posts and legs, mark and secure in place.

### ATTACH RAILS

Next attach the three rails using the fasteners and holes pre drilled to the cabinet legs. The drawing on the next page shows how the two 75x50 sections secure to the automated side whilst the 50x50 rail to the opposing side. Secure these using the threaded rods supplied and following the drawing on the following page. Twelve threaded rods in total (six to each end) and four bolts to the centre support leg.

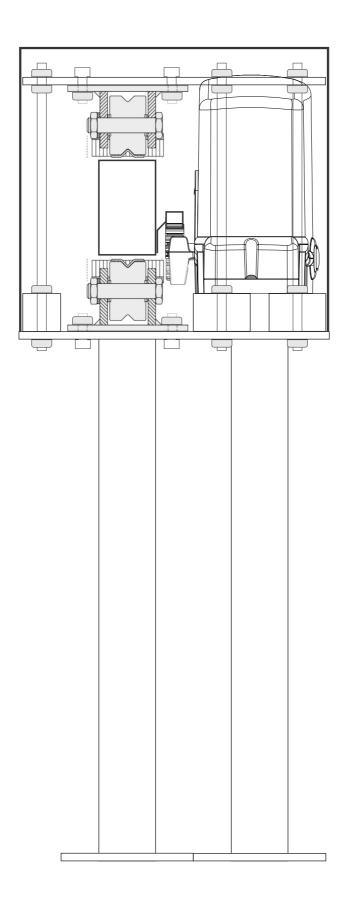
### **TROLLEYS & BOOM**

You will have four trolleys. Using the fasteners provided secure the two bottom trolleys—one to each end. Next secure the two top trolleys to the two top trolley plates.

Prepare the boom by fixing the "V" track to the top and bottom of the boom (75mm edges). This may be welded or screwed. Note the track should be centred from end to end of the boom for the full length of the boom. You may need to trim the track to length.

The boom can now be positioned on top of the bottom trolleys by centring the boom for even weight distribution. Next secure the two top trolley plates on top and adjust the nuts top provide a smooth sliding boom operation without impediment.

If you have positioned everything correctly the boom should be stopped at each end by the boom support posts. You can now position and secure the supports and attach the boom end caps. The supports need only minimal clearance under the boom.



#### AUTOMATION

Please refer to your motor and logic control board manual for detailed information .

Good practice -

- 1. Install your motor to the rails.
- 2. Attach your rack and test manually for smooth movement.
  - 3. Connect power and program without accessories.
- 4. When you have successful operation add accessories one by one testing after each addition for correct operation.

### **AUTOMATION NOTES**

- This cantilever boom has been designed around the TONE10B. Other operators can be used although modification may be required. The TONE10B requires nothing more than a 9ah battery for battery backup and is solar power ready.
- Suggested photocells are the BEAMIRBRET. With the TONE10B the photocells can be used in both the open and closed movements.

### **INSTALL COVERS**

The final finishing touch is to install the covers. Top cover first secured along each side with the self drilling screws provided and then the end covers using four small bolts and nyloc nuts at each end.