



# CYCLONE SAFETY MANUAL



*Caring for your Work Caravan in the event of a cyclone.*

November to April is cyclone season in Australia's North. Severe cyclones can cause injury and loss of life, major structural damage and disrupt electricity, gas and water supplies.

If you are living in a caravan during cyclone season you need to be well prepared by having an emergency plan ready to enact before a cyclone has formed. You should decide what you will do with your caravan; know how to tie it down and where you will go if a cyclone threatens the area.

This applies to people staying in caravan parks, travelling with caravans through the region or with caravans in remote campsites.

## About Cyclones

When a cyclone is coming community alerts will be issued by your local State Emergency Authority.

You can find community alert information on:

- ABC and other local media
- State Emergency website addresses
  - [Queensland](#)
  - [Northern Territory](#)
  - [Western Australia](#)
- State Emergency phone numbers
  - Queensland 132 500
  - Northern Territory 131 444
  - Western Australia 1300 657 209
- Bureau of Meteorology (BoM) website
  - [Bureau of Meteorology](#)
- BoM's Cyclone Warning Advice Line
  - Australia 1300 659 210

There are four stages of alerts: Blue, Yellow, Red and All Clear.

- **BLUE ALERT** means prepare for dangerous weather.
- **YELLOW ALERT** means take action and get ready to go to shelter.
- **RED ALERT** means go to shelter immediately.
- **ALL CLEAR** means that wind and storm surge dangers have passed but you need to take care to avoid the dangers caused by damage.



Due to their light weight construction, caravans are particularly susceptible to wind damage and are prone to being blown over. One of the essential items required to secure your caravan are purpose built ground anchors.

## ***High Wind Anchor points on your Work Caravan***

Your Work Caravan has been installed with four high wind tie-down points. These are located beside the stabiliser legs, both front and rear of the caravan.



## ***Ground Anchor Points must be installed on Site***

These ground points are where you will secure your tie-down chains to the caravan chassis.

- If you are staying in a commercial caravan park in the North of Australia, the ground anchor points are likely to be built into your van site.
- If your caravan is located in a remote campsite, you need to have the appropriate purpose built tie-down anchors installed well ahead of the cyclone season. At Work Caravans we recommend the Mega Anchor System.
- If your caravan is **not** in a location where there are suitable tie-down anchors, you will need to relocate your caravan to a safer storage site such as a large shed. As an alternative, if conditions are safe to do so, tow your caravan to another town away from the predicted cyclone area.
- If you have a caravan housed in your backyard or on a business premises you need to have the appropriate purpose built tie down anchors installed well ahead of the cyclone season. This job will require professional assistance from a professional contractor. You may also need approval from your local council.

# **Mega Anchor System**

## **Installation Instructions**

### **Tools and Hardware Needed**

- Mega Anchor alignment tool and multi tool (IT32# - IT3250#)
- Mega Anchor jack hammer dolly (fits a 30mm round hex jack hammer)
- Mega Anchor hand dolly
- 1700watt, 30mm round hex Jack Hammer
- Electric or air powered drill
- Hex bit
- Drill bit
- TTK Screws (class 4 20 x 22)
- Phillips Screw Driver
- Mega Anchor Removal Tool

### **Materials Needed**

- 32NB Extra light galvanised pipe
- Transport Grade 70 10mm 6 Ton rated
- Ratchet Load Binder 10mm x 4 units

### **Products Needed**

- **MA2# - Standard Building Mega Anchor**  
(Receives piles and riser – 2mm thick 38ID 42OD extra light galvanised pipe)
- **MA4# - Angle Top 75mm x 75mm x 100mm**  
(Receives - 2mm thick 38ID 42OD extra light galvanised pipe)

### **Installation**

The Mega Anchors should be installed as close as possible to the caravan tie-down points: being careful not to create a trip hazard.

### **Marking out where the anchors will go**

1. Using a screwdriver in the centre of the chosen area, make a hole by pushing a screwdriver into the ground and moving it in a circular motion. This hole is for the point of the alignment tool.

### **Aligning the anchor**

(See below illustration)

2. Slide the anchor of the end of the alignment tool and put the spike of the alignment tool into the hole, as created in step 1.



- a) Using the knocker; drive the point of the alignment tool into the ground until the 1<sup>st</sup> sleeve of the alignment sits on top of the anchor. Do not drive the anchor too far into the ground as it can make it difficult to insert the tek screws later.



## Installing the Anchor

(See below illustration)

3. Insert the 3 pre-cut piles into the Mega Anchor guide holes.
  - a) Place the jack hammer in one of the piles (be sure to hold the alignment tool, due to the weight of the jack hammer, which can pull the anchor out).
  - b) Drive the 1<sup>st</sup> pile to about 1/3 of the way.
  - c) Check the level and adjust accordingly.
  - d) Finish driving the 1<sup>st</sup> pile to half way then move on to the 2<sup>nd</sup> pile.
  - e) Repeat steps 3b – 3d until all 3 piles are done.
  - f) Drive all 3 piles into the ground, so that they are level with the guide.



## Fixings

(See below illustration)

4. When the piles have been installed, drill the tek screws into the 4 guide holes of each pile.



## Riser

(See below illustration)

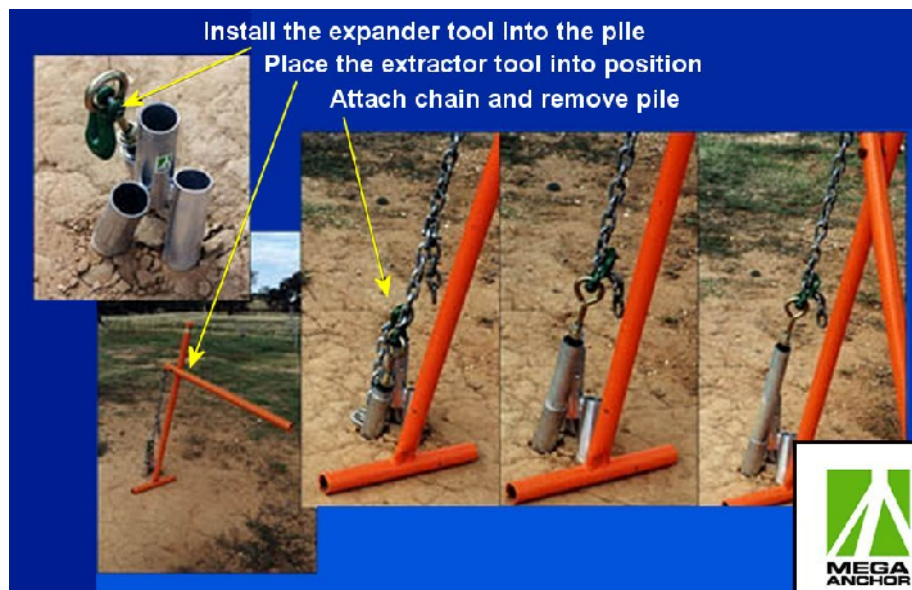
5. When all the anchors have been installed, insert the centre fixing pole into the centre of the anchor and gently tap the fixing pole until there is enough pole remaining for the custom built Angle Top to sit flush against the anchor.
  - a) Slide on the custom built Angle Top and screw in 4-6 tek screws into the guide holes and 1 bolt hole.



## Fixing the Chain

6. Insert the Transport Grade 70 10mm 6 Ton rated chain through the caravan tie-down point and the Mega Anchor tie-down point, using the Ratchet Load Binder 10mm.
  - a) Tighten the chain, so it is firm, being careful not to over tighten, causing the chassis or stabiliser legs to bend or become damaged.

## Removing the Mega Anchor



## ***Additional Cyclone Safety Tips***

- Apply the park brake and wheel chocks to the caravan;
- Make sure you store all of your outdoor equipment in a safe place. This includes the annex, awnings, chairs, tables, garbage bins and other items.
- Heavy or bulky items that cannot be put in the van should be laid on their side, roped together and tied to ground anchor points with strong rope.
- Board or heavily tape caravan windows
- Draw curtains and lock doors
- Turn off the electricity, water supplies and gas at the meters and or cylinders

Now that you have secured and prepared the caravan for an impending cyclone, it is recommended that you consult a licensed Engineer to assess the tie-downs, as soil composition and environmental conditions vary greatly, and more specific requirements may be necessary dependent upon your individual location.

As with all cyclones, there are many dangers: additional to the high winds, you can encounter flying debris, storm surges and possible flooding. With these dangers in mind, it is important that you re-evaluate the situation regularly and keep updated with the local Government reports. Always remember that the health and safety of you, your work force and/or family is the priority. We recommend that you, your work force and/or family take refuge in a Government Cyclone Shelter, or as recommended by the local authorities.

### **Disclaimer**

The information contained in this booklet is intended as a guide only. We strongly recommend both installation and removal procedures to be carried out by Trained Personnel at all times.

While Work Caravans use and recommend the Mega Anchor System we are in no way liable for its suitability or any damage caused from using this system. Tie-down ratings will vary on soil conditions and it is recommended that a Licensed Engineer approve all installations for suitability.