

OWNER'S MANUAL

These umbrellas are a permanent collapsible structure and must be installed and operated in accordance with this owner's manual.



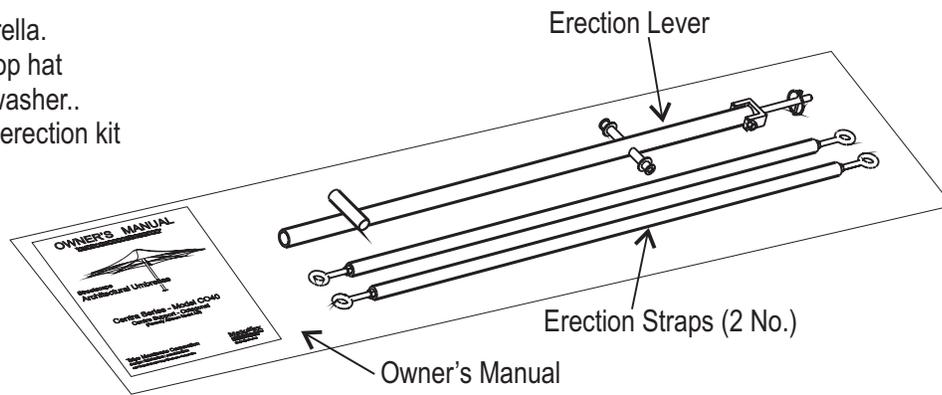
Street Umbrellas Australia

Centre Support Series User Manual

Unpacking and Installation

CRATE CONTENTS:

- Plastic wrapped umbrella.
- Packet containing a top hat and top hat bolt and washer.
- Packet containing an erection kit and owner's manual.



SITE PREPARATION

Prepare the footing in accordance with the footing detail on page 3.

For other installation details and advice contact our local SUA Dealer.

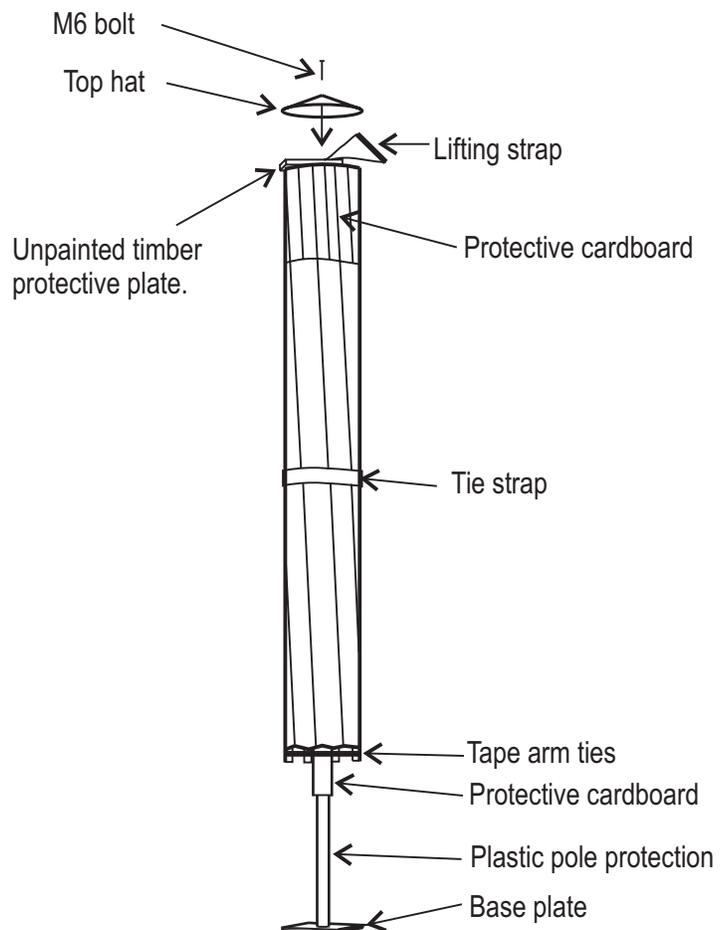
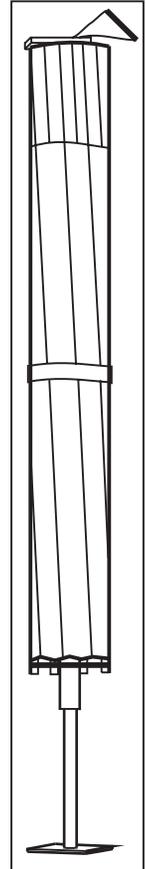
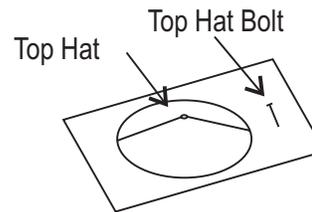
WARNING For the each umbrella dimension & weight please refer to frame detail. Ensure that correct lifting devices and methods are used to lift this weight

INSTALLATION

1. Lift the umbrella from crate by the lifting strap located at the top end of the structure near an unpainted timber protective plate and at the bottom near the base plate. Put aside the erection kit, which is used to open the structure, and the top hat.
2. Fold back the plastic outer protective packing cover from the bottom base plate only. Remove the cardboard packing from the base plate.
3. Carefully move the umbrella to the installation point and lift it onto the hold down bolts or ferrules and lower into place. (Refer to **Footing Details** for hold down bolts.)
4. Securely bolt down the base plate or, if using leveling nuts, put on the washers and then screw on the upper nuts but **DO NOT TIGHTEN**. Level the base plate and pole with the leveling nuts and then securely tighten the upper nuts.
5. Remove the top unpainted timber protective plate. Remove the plastic outer packing cover, the tape arm ties, the protective cardboard and the plastic pole protection cover. Remove the tie strap when ready to open the umbrella and retain for use when the umbrella is closed.
6. Fix the top hat to the top of the umbrella pole using the M8 bolt and washer provided.

The umbrella is now installed and ready to be opened. Refer to **Opening Procedure**, page 4, for instructions.

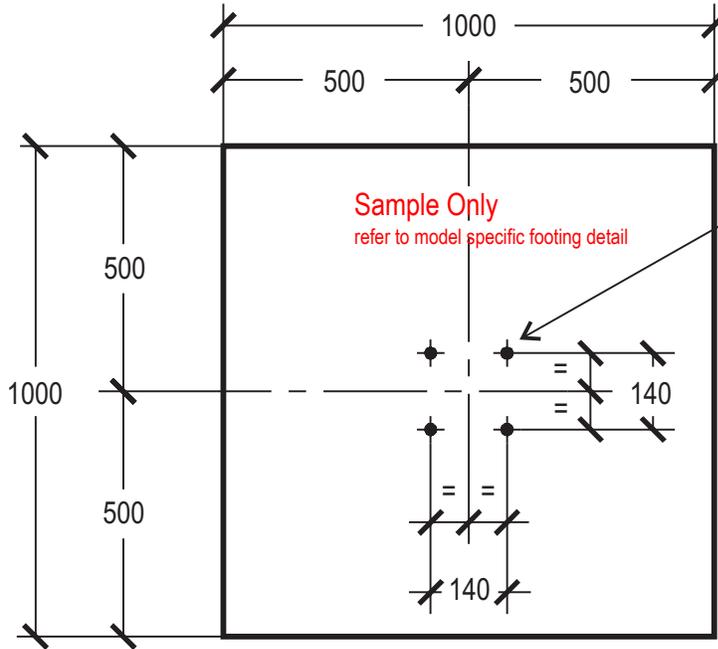
Erection Kit



Concrete Footing Details - Please refer to footing detail relating to the Umbrella Model purchased.

Assumed Soil Conditions

Bearing capacity 100kPa
 Design wind speed = 33m/sec (120 km/h)
 All measurements are in millimetres

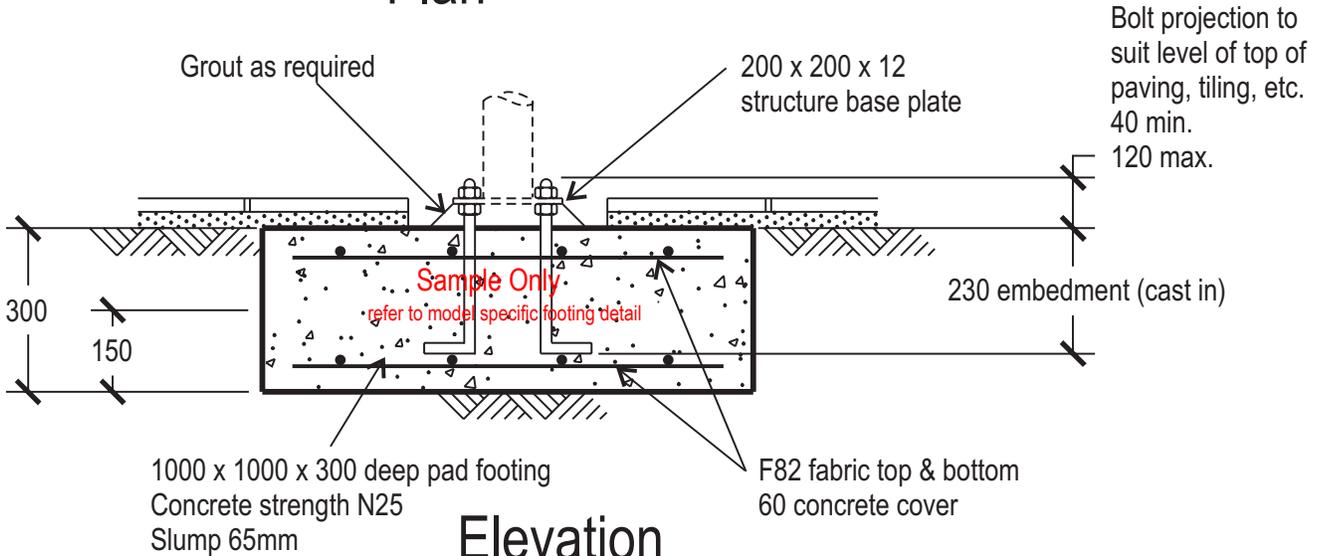


Sample Only
 refer to model specific footing detail

4-M12 Gr 4.6/S hot dipped galvanised bolts, cog 100mm, cast into footing.
 OR
 4-M12 stainless steel Gr.316 threaded rods fixed to footing in accordance with chemical anchor manufacturer's instructions.

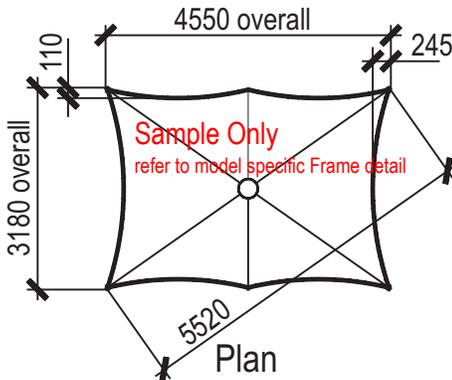
Supply with nuts, leveling nuts and washers and, if required, dome nuts.

Plan

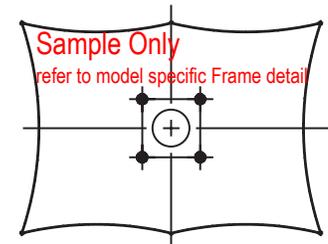


Bolt projection to suit level of top of paving, tiling, etc.
 40 min.
 120 max.

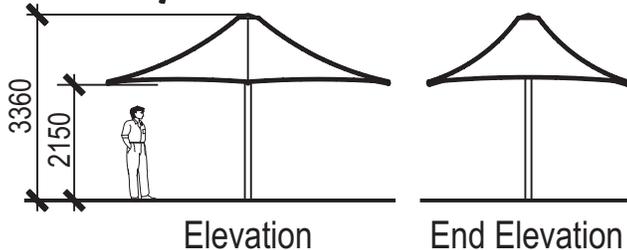
Elevation



Overall dimensions represent clearance dimensions for the complete structure. Membrane dimensions differ depending on variations in tensioning and fabrication. All dimensions are nominal and have a tolerance of +/- 30mm. All dimensions are in millimetres.



H.D. Bolt Orientation to Umbrella (Not to scale)

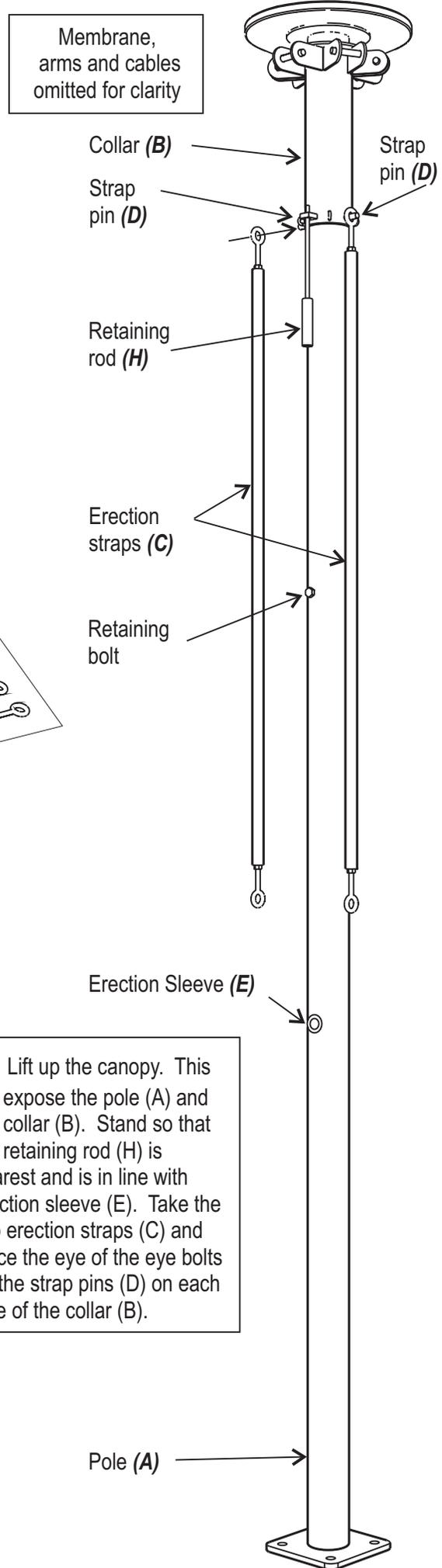
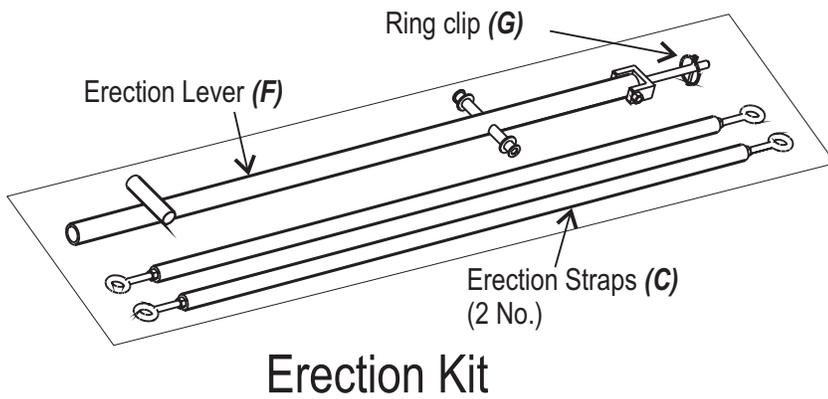


Opening Procedure

After having installed and secured the umbrella in accordance with the footing and installation sections, the canopy can now be opened.

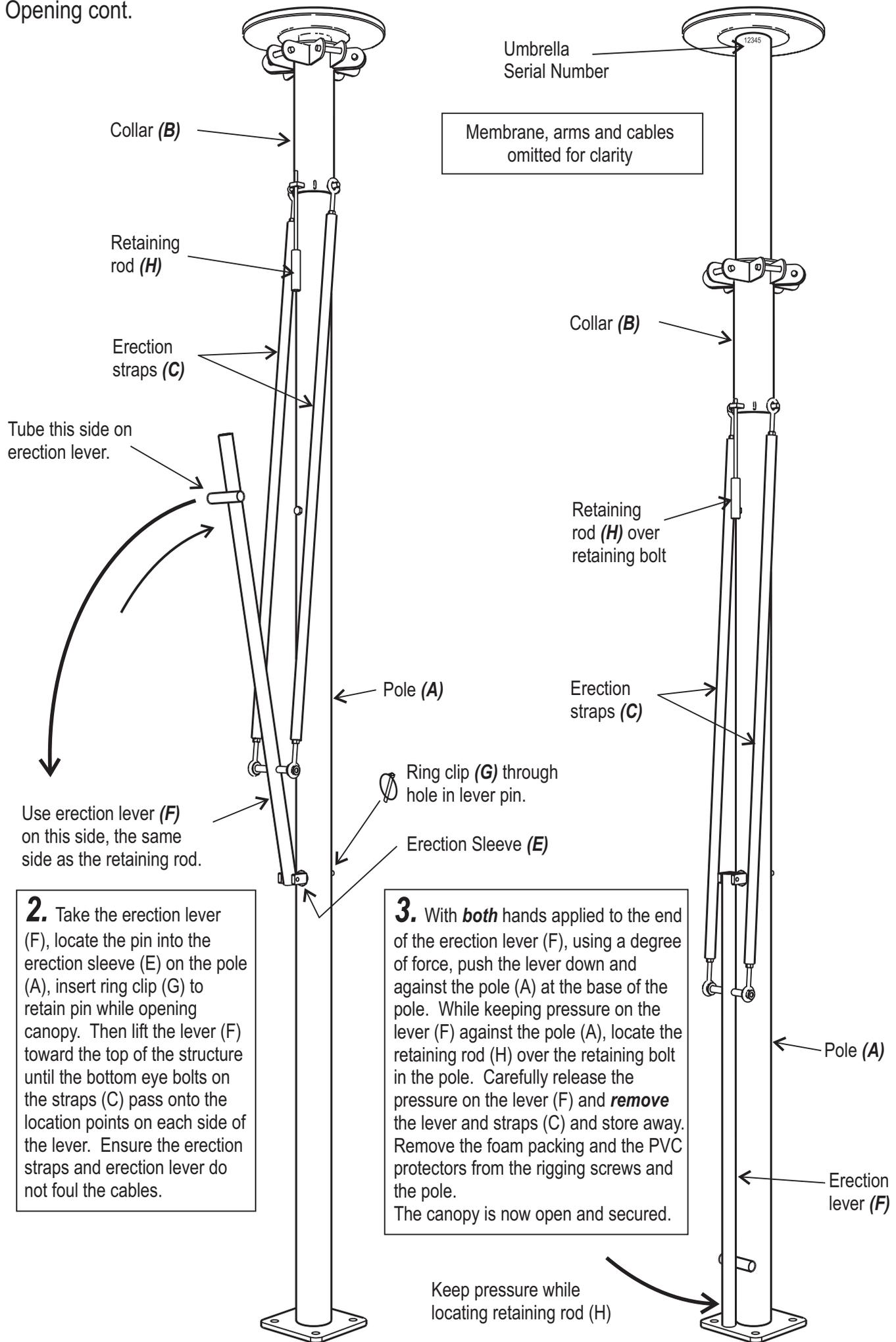
The umbrella is opened using the erection kit to pull the collar (B) down, thereby raising the arms and opening the canopy. The collar is then locked off and the erection kit removed and stored for future use.

NOTE that the umbrella is a tensioned membrane structure and some force is required on the erection lever (F) to open the canopy. Employ two people if the required force is too much for one person.



1. Lift up the canopy. This will expose the pole (A) and the collar (B). Stand so that the retaining rod (H) is nearest and is in line with erection sleeve (E). Take the two erection straps (C) and place the eye of the eye bolts on the strap pins (D) on each side of the collar (B).

Opening cont.



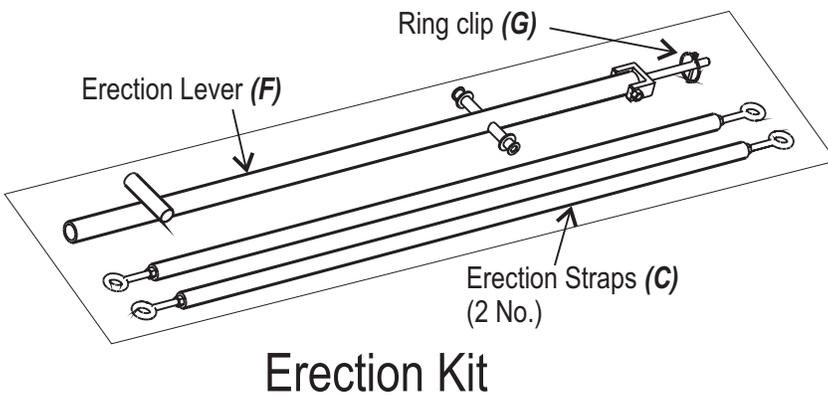
2. Take the erection lever (F), locate the pin into the erection sleeve (E) on the pole (A), insert ring clip (G) to retain pin while opening canopy. Then lift the lever (F) toward the top of the structure until the bottom eye bolts on the straps (C) pass onto the location points on each side of the lever. Ensure the erection straps and erection lever do not foul the cables.

3. With **both** hands applied to the end of the erection lever (F), using a degree of force, push the lever down and against the pole (A) at the base of the pole. While keeping pressure on the lever (F) against the pole (A), locate the retaining rod (H) over the retaining bolt in the pole. Carefully release the pressure on the lever (F) and **remove** the lever and straps (C) and store away. Remove the foam packing and the PVC protectors from the rigging screws and the pole. The canopy is now open and secured.

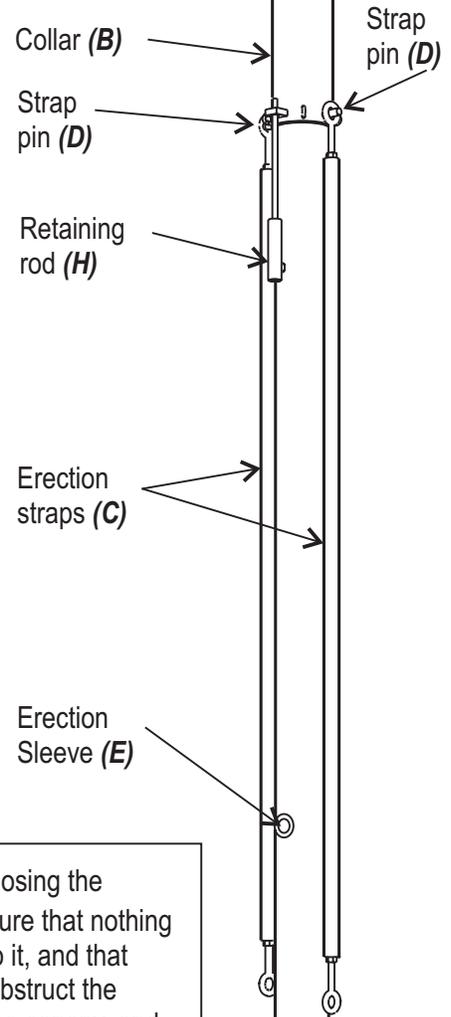
Closing Procedure

The umbrella is closed using the erection kit to slowly raise the collar (B), thereby lowering the arms and closing the canopy. The erection kit is removed and stored for future use, and the umbrella tied with the tie strap supplied.

NOTE that the umbrella is a tensioned membrane structure and some force is required on the erection lever (F) to close the canopy. Employ two people if the force required is too much for one person.

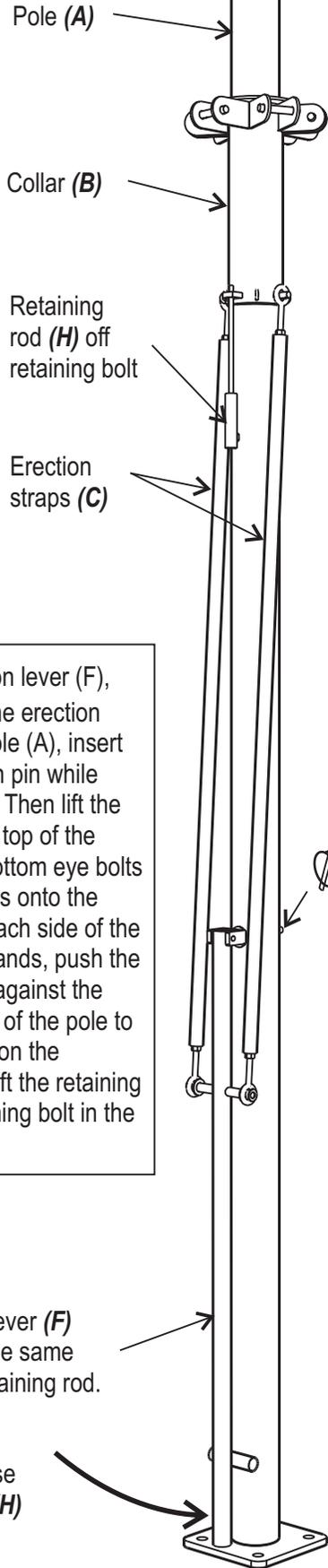


Membrane,
arms and cables
omitted for clarity

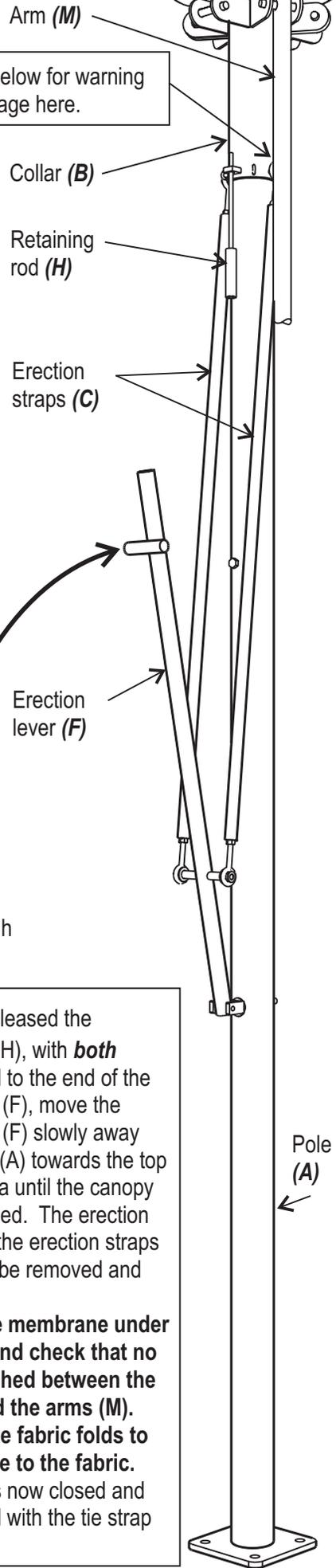


1. Before closing the umbrella ensure that nothing is attached to it, and that nothing will obstruct the lowering of the canopy, and ensure that any attached lights and heaters are **cold**. Stand so that the retaining rod (H) is nearest and is in line with erection sleeve (E). Take the two erection straps (C) and place the eye of the eye bolts on the strap pins (D) on each side of the collar (B).

Membrane, arms and cables omitted for clarity



See Note 3* below for warning on fabric damage here.



2. Take the erection lever (F), locate the pin into the erection sleeve (E) on the pole (A), insert ring clip (G) to retain pin while closing the canopy. Then lift the lever (F) toward the top of the umbrella until the bottom eye bolts on the strap (C) pass onto the location points on each side of the lever. Using both hands, push the lever (F) with force against the pole (A) at the base of the pole to release the tension on the retaining rod (H). Lift the retaining rod (H) off the retaining bolt in the pole (A).

Ring clip (G) through hole in lever pin.

3. Having released the retaining rod (H), with **both** hands applied to the end of the erection lever (F), move the erection lever (F) slowly away from the pole (A) towards the top of the umbrella until the canopy has been closed. The erection lever (F) and the erection straps (C) may then be removed and stored away.
***Examine the membrane under the canopy and check that no fabric is pinched between the collar (B) and the arms (M). Rearrange the fabric folds to avoid damage to the fabric.**
 The canopy is now closed and should be tied with the tie strap provided.

Use erection lever (F) on this side, the same side as the retaining rod.

Push to release retaining rod (H)

Maintenance Recommendations

As a condition of the warranty, the umbrella must be maintained and cleaned regularly.

The period and nature of the maintenance requirements depends on the exposure of the umbrella to climatic conditions (rain, hail, wind) and airborne pollutants (leaves, dust, pollutants, bird droppings, sea air, etc).

The umbrella needs to be maintained as often as window glass or a car would need to be inspected and cleaned if kept in the same environment.

Periodic Inspections.

The recommended period for inspections and cleaning is no longer than 3 months.

The periodic inspection includes:

To the fabric membrane:

- tears on the sides and inside of the fabric membrane.
- peeling off at the seam welds.
- broken yarns and tears at the sewn sections.
- small holes, cuts etc in the fabric membrane.
- abrasion of the fabric (against tree branches, lights, etc).
- heavy build up on the surface (dead leaves, insects, pollution etc).
- tension in the cables should be taut (not sagging down)
- tension in the fabric should be 'drum like' (when hit with an open hand) and should never be 'slack'.

To the frame

- fraying of cables and webbing loops.
- scratches and damage to the powder coat finish.
- excessive distortion, damage and corrosion.
- tightness of connections.
- tightness of hold down bolts at the base.
- corrosion to hold down bolts.
- crumbling of grout under the base plate.

When carrying out the inspections if any signs of the above are noticed, the manufacturer should be informed and advice will be given as to what action is needed.

Specific Inspections

Specific inspections should be performed immediately after an unusual or exceptional event, which includes:

- storm with winds over 70 km/h.
- heavy snowfall or hail.
- impact by heavy objects that may cut or abrade the fabric and webbing.
- impact by heavy object that may damage or overstress the steel frame.
- vandalism.
- ponding of stormwater, snow or hail on the fabric membrane.
- lightning strike.
- earthquake.
- initial erection and tensioning of the umbrella.

Cleaning Recommendations

Fabric Membrane Canopy

Clean the canopy if the fabric has become very dirty or the recommended maintenance period of 3 months has been exceeded.

Brush down the fabric using a soft brush and water to remove the build up of dirt and superficial stains. Work on the most exposed side first.

Spray or sponge cold or lukewarm water with a 1% to 5% concentration of normal household liquid detergent on the membrane. (dishwashing liquids "gentle on hands" are adequate and will not damage the membrane coating)

Wash using a sponge or soft cloth then rinse off with low pressure clean fresh water to remove dirt and detergent.

NOTE: Under NO circumstances are abrasive cleaners, scrubbing brushes, bleach or high pressure water blast to be used on the fabric, as these will damage the surface coatings.

Frame

The steel frame should be cleaned as often as it would take to keep clear glass in the same location free of residues. Wash loose dirt, salt residues and grime, with fresh clean water. Use a pH neutral detergent, clean fresh water and a sponge, to remove remaining dirt, grime and salts. Rinse clean with fresh clean water. Polish with a non-abrasive auto polish, if required.

NOTE: Do not use abrasive (cutting compound) auto polishers, abrasive cleaners, bleach or high pressure water blast.

Stainless steel cables

The stainless steel cables and shackles should be regularly cleaned by removing dust, insects, spider webs etc with a soft brush and water. Wash with water and detergent using a sponge or brush and rinse with clean fresh water. Wipe over with a damp cloth.

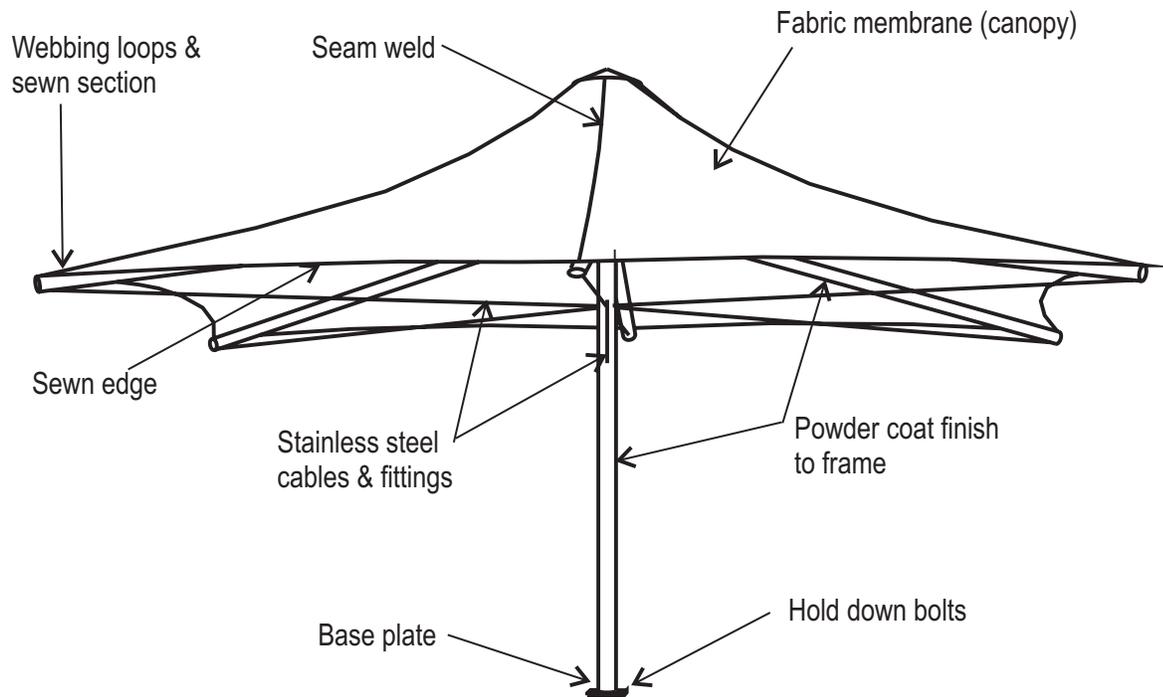
Ensure that all soiling and detergent is fully washed off all components of the umbrella.

For further cleaning instructions please contact the manufacturer.

In some Australian states SUA offers a scheduled umbrella cleaning and maintenance service using trained, accredited personnel. Call your local SUA office for more details.

Note 1. Some regions have statutory bodies (eg. Environmental Protection Agency, local council authorities, landlords, etc) which issue specific requirements regarding the use of water and/or cleaning agents in outdoor areas. TMC recommends that a check of the requirements for the site/region be made before undertaking any cleaning works.

Glossary of Terms



MAINTENANCE AND CLEANING RECORD FOR WARRANTY PERIOD				
Period	Due Date	Required Activity	Date Serviced	Signature
At Installation		Inspect & clean fabric membrane. Inspect and clean stainless steel fittings. Inspect and clean powder coated frame.		
3 months after install				
6 months after install				
9 months after install				
12 months after install				

To ensure that the umbrella performs safely, remains attractive and lasts as long as possible, the above maintenance and cleaning activities should be carried out every three (3) months.

Specific Inspections should be carried out immediately after an unusual or exceptional event, which would include extreme weather conditions or heavy impact of any kind on the umbrella.

Refer to the 'Maintenance and Cleaning Recommendations' Technical Manual sheet or the 'Owners Manual' pages for the maintenance and cleaning activities and for the procedure for tensioning the cables.

Umbrella Specification

Engineering Design

The umbrellas have been designed in accordance with the principles of structural mechanics to resist loading in accordance with the Building Code of Australia and the relevant Australian Standard Codes.

The umbrellas are engineered to withstand wind-speeds of up to 120kph (ie: 33 metres per second, for all Portable Series Umbrellas please refer to frame detail pages for wind rating). Please note that weather bureau reports will not take into account your site's local topography (ie: the affects of the surrounding land formation and adjacent structures). Local topographical affects can cause an overall net increase in wind speed due to funneling, as well as change the angle of attack of the wind onto the structure. In other words, wind gusts due to variations in local topography may cause wind-speeds in excess of those reported by the local weather bureau. It is for this reason that the structures must be closed and tied before reported wind speeds reach gusts of 100km/h (60mph).

Steelwork and Workmanship

The materials and workmanship comply with the relevant Australian Standard Codes.

Membrane cover

The tensile membrane is fabricated from UV-stabilised, architectural-grade PVDF-coated white polyester fabric. The finish is low maintenance, pollution resistant and rot-free.

Frame

The structure employs galvanised tubular steel components treated with a scratch-resistant white polyester powder coating. All exposed fittings and connectors are of stainless steel.

Serial Number

The umbrella Serial Number is located at the top of the pole (A). Refer to diagram opposite.

Structure Weight

Refer to Your Models Frame Detail Page

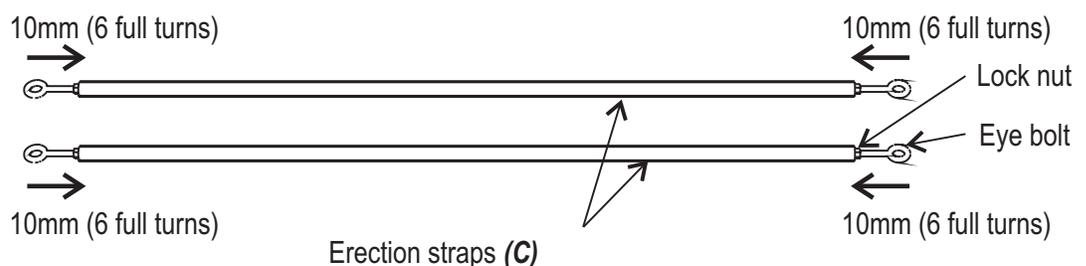
Tensioning the Umbrella

Over a period of time the membrane cover, being under tension, will stretch and thereby allow the stainless steel cables to 'sag'.

The membrane and cables will then need to be re-tensioned by adjusting the erection system and locking off the umbrella in the new tensioned position.

NOTE: For multiple structure installations, ensure that all structures and all erection systems are adjusted equally. On linked structures, the cable directly under the membrane will have to be adjusted to suit.

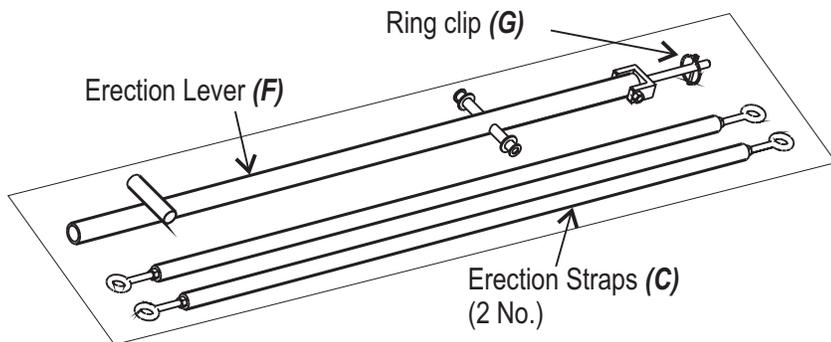
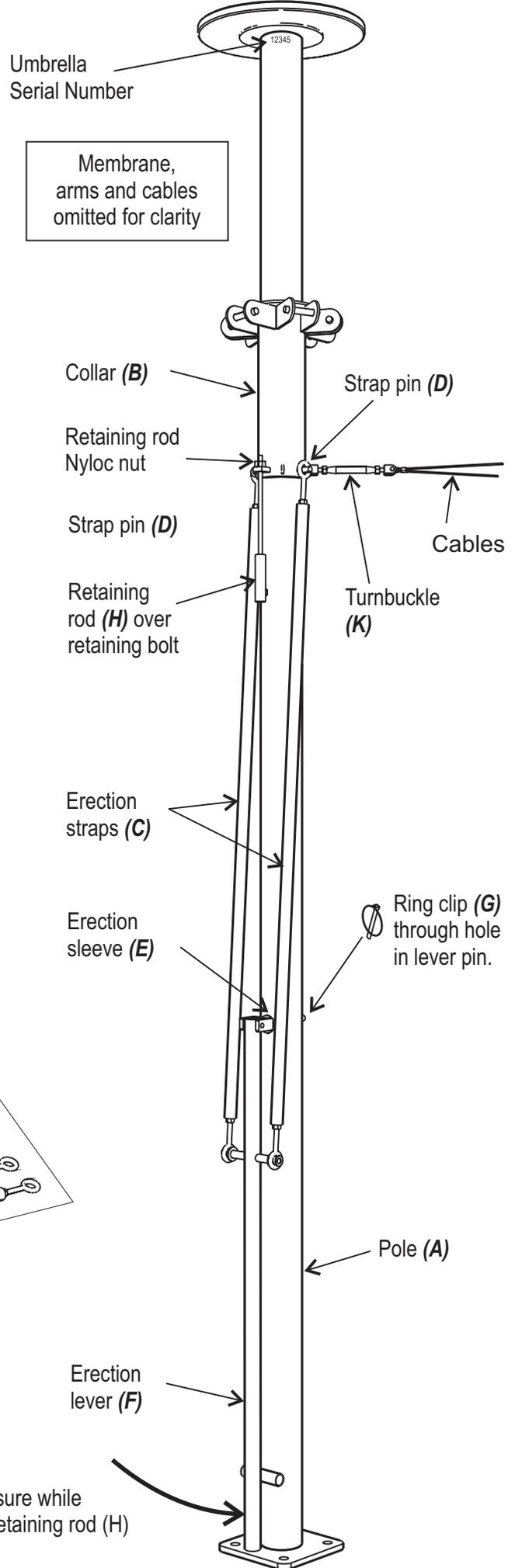
1. On both the erection straps (C) loosen the lock nuts and wind in the eyebolts on each end approximately 10mm (6 full turns), then tighten the lock nuts. This will reduce the length of the straps by 20mm and thereby pull the collar (B) down an extra 20mm.



2. Take the two new adjusted erection straps (C) and place the eye of the eye bolts on the strap pins (D) on each side of the collar (B).
3. Take the erection lever (F), locate the pin into the erection sleeve (E) on the pole (A), insert ring clip (G) to retain pin while adjusting canopy. Then lift the lever (F) toward the top of the structure until the bottom eye bolts on the straps (C) pass onto the location points on each side of the lever.
4. Push the erection lever (F) against the pole (A). Keep the lever against the pole while proceeding.
5. Turn the Nyloc nut to adjust the length of the erection retaining rod (H) by 20mm such that the hole in the retaining rod lines up with the retaining bolt in the pole (A).
6. Lock the collar (B) in place by locating the retaining rod (H) over the retaining bolt in the pole.
7. Carefully release the pressure on the lever (F) and remove the lever and straps (C) and store away.

If the cables are still not tensioned, repeat the above steps to pull the collar (B) down further.

When there is no longer any adjustment left on the collar, release the lock nuts on the cable turnbuckles (K) and wind the turnbuckles until the cables are just taut with no slack. The lock nuts should then be tightened.



Erection Kit

Keep pressure while adjusting retaining rod (H)

Warranty

The Centre Support Series is warranted by Street Umbrellas Australia. (herein called the supplier), for a period of twelve (12) months from the date of purchase within the following terms:

- (a) The umbrellas are warranted against all manufacturing defects.
 - (b) The umbrellas are warranted against all material defects, provided the umbrellas are installed, maintained and cleaned in accordance with the installation instructions.
1. This warranty does not cover any service consequent upon the following:
 - Accident, alterations, misuse, fire, floods, civil unrest or Acts of God.
 - Willful, or malicious damage.
 - Damage caused by onsite neglect.
 - Damage caused during installation or delivery to site.
 - Wind stress damage if the umbrellas are left open in high winds. **The umbrellas must be closed and tied before wind speeds reach gusts of 100km/h (60mph)** Refer to page 10, umbrella Specification - Engineering Design.
 - Damage from snow loading on the canopy if the umbrella is left open during snowfall. **The umbrellas must be closed and tied before and during snowfall.**
 - Damage resulting from incorrect installation or installation not in accordance with manufacturer's specifications.
 2. This warranty does not cover footings and slabs and fixing to footings and slabs.
 3. All replacement or repair to umbrellas will take place at the manufacturer's Brisbane plant. All costs of freight will be borne by the claimant. The manufacturer will pay the costs of repairing or replacing all parts the manufacturer finds defective.
 4. The manufacturer reserves the right to determine whether or not the fault is faulty workmanship or material or that any part is defective.
 5. Nothing in this warranty, however, shall be construed as affecting any rights you may have under the Trade Practices Act or any other Commonwealth or State Legislation which gives you rights which cannot be modified or excluded by agreement.

Owner's Record - Keep the receipt with this manual.

Model No.

Date of purchase

AUSTRALIAN HEAD OFFICE:
2/410 Pittwater Rd, North Manly

NSW 2100, Australia

email: info@streetumbrellas.com.au
website: www.streetumbrellas.com.au



architectural membrane
innovative solutions