

# Installation instructions SZ146 (Anker tube to be embedded in existing bore for Schattello)

The following instructions include all information necessary for the installation and operation of this anchor tube. To avoid any misunderstanding we advise you to read these instructions carefully and then keep them for later reference.

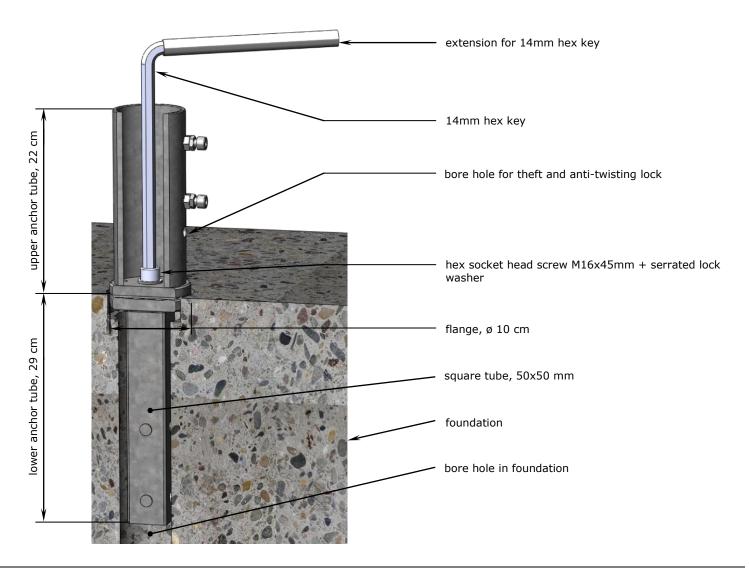


### Non- observation of operating instructions can result in personal injuries or damage to property!

Please note that if these instructions are not observed, the manufacturer cannot assume any liability or guarantee.

- Always follow the safety regulations.
- Should you not understand any part of these operating instructions, please contact your MAY dealer.

# **Diagram showing installation materials and tools**





## **Conditions for this installation method**

If you intend to lay a foundation with bore for your parasol, be sure to meet the following requirements for the correct installation of the SZ146.

- 1. The bore hole must have a minimum diameter of 71 mm.
- 2. The bore for the anchor tube must be in a concrete foundation. The size of your foundation should be dimensioned to accord with the size of your parasol. Please consult the chart below for the correct size. The depth of the foundation will depend on how sensitive the ground is to frost. We recommend a depth of at least 60 cm.

Size of parasol	Foundation: width, length
Ø 4m, Ø 5m, 2x4m, 2.5x3.5m, 2.5x4m 2.5x5m, 3x3m,	50cm / 50cm
3x4.5m, 3.5x3.5m, 3.5x4m, 3.5x4.5m, 3.5x5m, 4x4m,	
4.5x4.5m, 3x4m, 3x5mm, 4x5m, 4x4x4m, 6x6x6m	
Ø 6m, 4x6m, 5x5m	60cm / 60cm



#### A falling sunshade can cause serious or even fatal injury!

If the foundation for the lower anchor tube is not dimensioned to match the size of the umbrella, the sunshade may fall and cause injuries.

- Keep to the dimensions specified in the above chart.
- In case of poor-quality ground, opt for a larger-size foundation.
- 3. The foundation must be laid in frost-proof ground.



### The concrete foundation can be damaged by frost.

Temperatures below freezing point may have a negative impact on the concrete foundation.

- Inquire up to what depth the ground of the designated location for your anchor tube is frost-proof.
- 4. Allow sufficient space between sunshades or between the wall of the house and the sunshade.



#### Sunshades that are located too close together wear sooner!

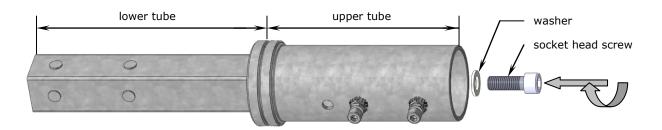
Sunshades may sway slightly. If there is not enough space between them, they may touch and abrade or scour the canopy fabric at the spoke ends.

- Make sure that there is a clearance of approx. 15 20cm between the sunshades (or between sunshade and the wall of the house).
- 5. We would like to stress that uneven patios are no problem for us. We are able to compensate any unevenness of the ground by adjusting the height of each individual sunshade. Extra length upper anchor tubes are available at 10 cm gradation and can be adjusted and accommodated on location.



## Embedding the anchor tube in concrete

1. Screw the upper anchor tube onto the lower tube (cf. illus.). Slip the 16 mm washer on the M16x45 mm socket head screw and tighten, using the enclosed 14mm hex key and extension.





### Screws that are not tightened correctly will work loose.

If screws are not tightened firmly enough, there will not be sufficient tensile force to trigger self-locking. If the screws are tightened too firmly and over-stressed, the screw connection may slacken.

- Tighten the screw manually using the enclosed hex key and extension. Exert as much force as possible. With the enclosed tools there is virtually no risk of over-stressing.
- The correct torque for a torque wrench is 210 Nm.

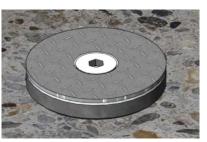


## The thread can get damaged.

As sand is harder than steel, the thread may get damaged if a sand-covered screw is turned.

- Clean and grease screw and thread hole.
- 2. If the bore hole is less than 105 mm in diameter, the top plate will become a tripping hazard (cf. illus.). However, this will only be the case if the upper anchor tube is dismounted for the winter.

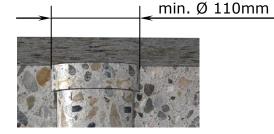




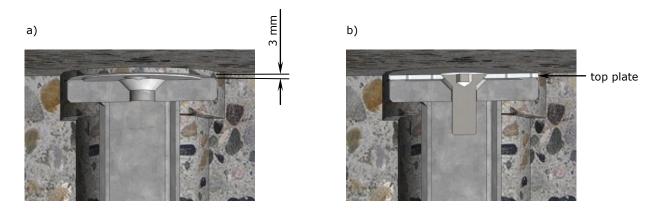


3. The bore hole should have a diameter of at least 90 mm. If necessary, widen the top part of the ground bore.





- 4. Pour liquid concrete into the bore hole. Insert the lower anchor tube and make sure it is completely enclosed with the concrete so as to avoid any trapped air. Surplus liquid concrete may leak out down the side of the flange.
- 5. To assure that the top plate is flush with the ground after the upper anchor tube has been removed, (cf. illus. b) insert the lower anchor tube 3 mm deeper into the concrete than the patio surface (cf. illus. a: for a clearer picture, the upper anchor tube has been omitted). In this way tripping hazard is eliminated.



6. Check that the anchor tube is straight, using a spirit level. (cf. illus.)

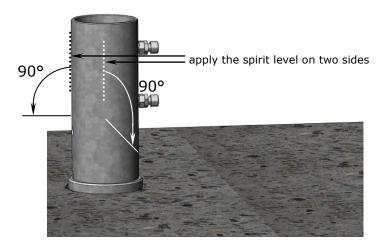


### If the sunshade is to be in a vertical position, the anchor tube must be embedded in the concrete absolutely vertically.

If necessary, align the anchor tube with the help of washers.

- Remove the base clamp on the upper anchor tube.
- Apply the spirit level on two sides.





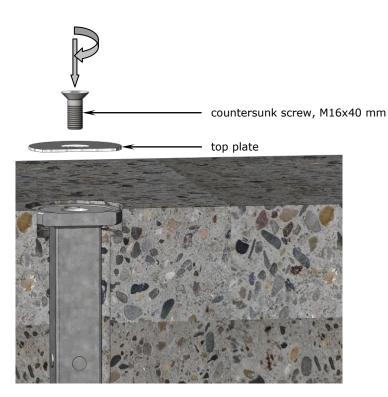
## Storage / Dismounting

- 1. Lift the sunshade out of the anchor tube.
- 2. Screw off the upper anchor tube.
- 3. Screw the top plate onto the lower anchor tube. (cf. illus.)



## The thread can get damaged!

When the top plate is not on the lower anchor tube, sand may get washed into the flanks of the thread. As sand is harder than steel, the thread may get damaged when the screw is turned.





4. If you have two or more sunshades, it is advisable to mark them and their accessories (e.g. with metal-stamped numerals or using a waterproof marker) as soon as they have been dismounted (e.g. for winter storage).

#### Marking saves a lot of time and helps to keep things in order!

Тір

If clearly marked, each sunshade can easily be assigned to its proper location and re-erected parallel to the wall of the house or next to the others.

- For clear and easy later assignment use the same number to mark the centre pole, the upper anchor tube and the lower anchor tube. For example, for sunshade No. 1, all three parts should carry number 1, all three parts of sunshade No. 2 should be marked with a 2, etc.
- 5. Grease the screws regularly to prevent them from rusting.