

## GALVANISED PIPE WINCH-TILT TOWER

These towers, available from Soma Power, come in 2 heights: 13m and 19.5m.

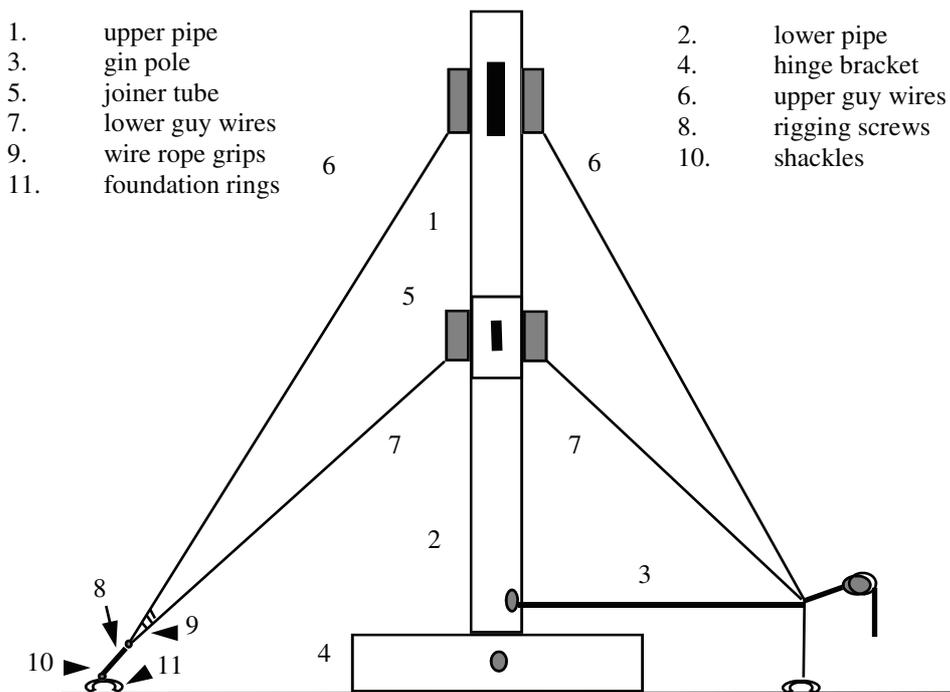
The tower consists of 6.5 metre lengths of galvanised pipe supported by guy wires. Generally 2 lengths of pipe are used to provide a 13 metre tower. The tower requires concrete foundations and it pivots at the base to enable it to be raised and lowered for ease of installation and maintenance of the wind generator. A jockey pole or gin pole is used for leverage to raise the tower and a winch is secured to one of the guy wire foundations to winch the tower up and down.

Tower kits are available from your SOMA agent which include all of the components necessary, except for the lengths of galvanised pipe and the concrete.

The galvanised pipe can also be supplied by Soma Power, but high shipping costs usually mean it is easier and more cost effective for a local steel supplier to supply and pre-drill the poles for you.

Drilling details for the poles are supplied in the tower manual to assist local supply.

## COMPONENTS FOR 13 METRE TOWER



# WINCH TOWERS

**SAFE  
&  
EASY**

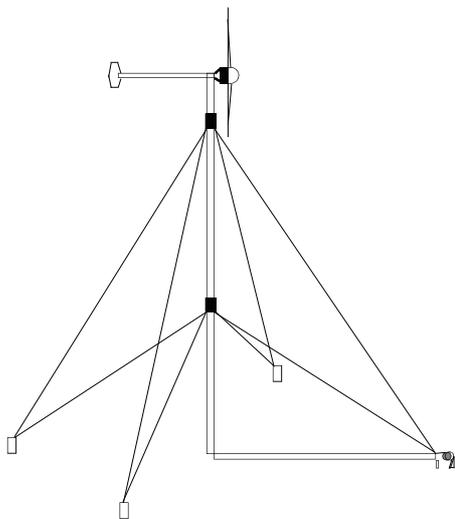
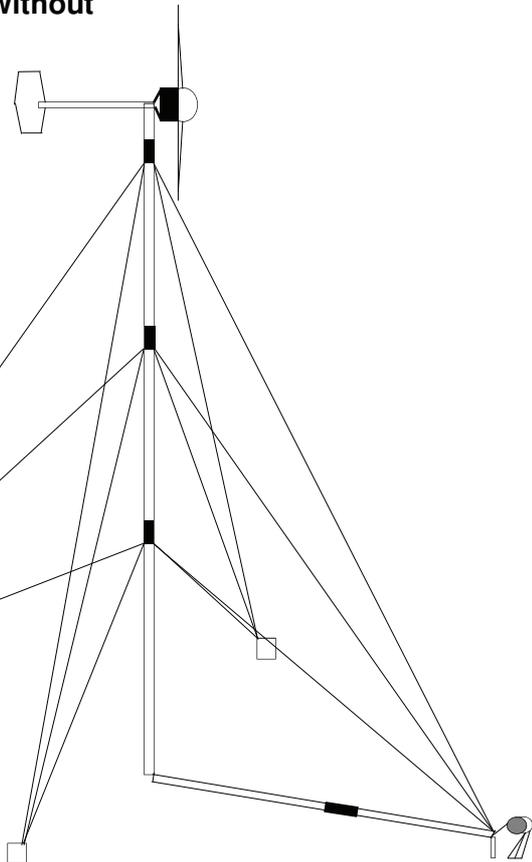
*features*

- tower tilts down to the ground
- bi-directional brake winch
- hot dip galvanised
- supplied in kit form with or without

<b>19.5m TOWER</b>	
<i>Specifications</i>	
Height	19.5metres
Base Dimensions	13.8m x 13.8m
Outside Foundations	0.7 x 0.7 x 0.7m
Centre Foundation	1 x 1 x 0.25m deep

*benefits*

- no climbing
- no towing
- safe
- anti corrosion
- simplifies installation &



<b>13m TOWER</b>	
<i>Specifications</i>	
Height	13 metres
Base Dimensions	9.2 x 9.2m
Outside Foundations	0.6 x 0.6 x 0.6m
Centre Foundation	1 x 1 x 0.25m deep

**SOMA POWER**  
*natural power systems*

Available from

## INSTALLATION & OPERATION

### FOUNDATION

A comprehensive installation manual is provided with each tower kit. Follow these instructions for laying out the footings. For the 19.5m tower, 17m<sup>3</sup>/<sub>4</sub> of concrete is required, while for the 13m tower, use at least 1.2m<sup>3</sup>. While the concrete is wet, the foundation brackets are placed in position. Allow at least 48 hours for the concrete to strengthen before raising the tower.

### ASSEMBLY

Lay out the pipes and guy ropes on the ground in position. Feed the cable up through the centre of the mast, then join the mast sections together using the sleeves provided. Bolt the mast and gin pole to the base plate and shackle all the guy ropes to the mast and base loops. Use the rope grips to set the approximate length of the guy ropes. Raise the tower using the winch and set the guy lengths as required. Adjust the turnbuckles to tighten the guys and make the tower vertical and straight.

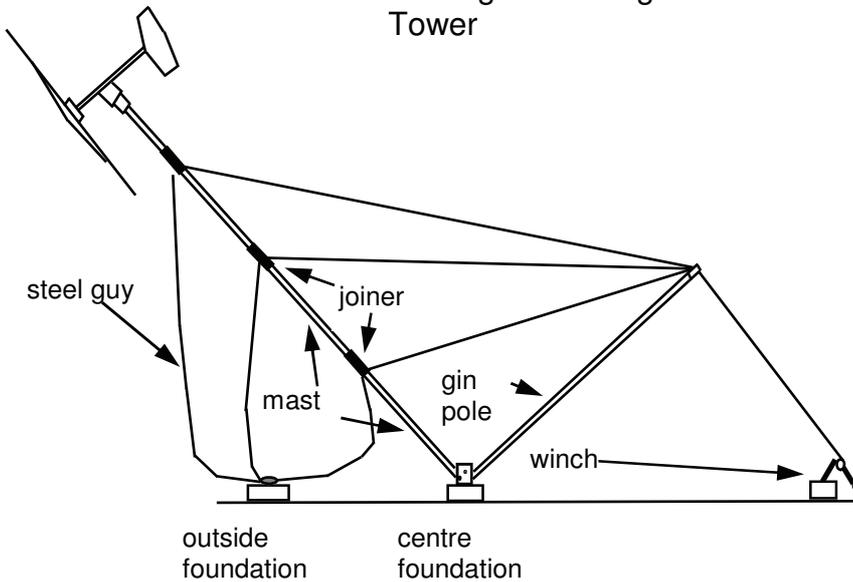
### WIND GENERATOR

Once the tower has been raised and lowered a few times, attach the wind generator and raise it for operation.

### MAINTENANCE

Wind generator maintenance now becomes a simple, safe half hour operation.

### Raising & lowering the Tower



### SHIPPING INFORMATION

Tower kits include everything required except for the poles and concrete. Poles can be supplied by Soma Power, but due to shipping costs, these are normally supplied by your local agent. Specifications for the poles are in the tower kit manual.

	BOX DIMENSIONS	WEIGHT
19.5m kit	700x450x450mm	90kg
19.5m poles	6500x220x220mm	233kg
13m kit	700x450x450mm	43kg
13m poles	6500x160x160mm	120kg