

# Trailer Tower Setup Instructions For Unguyed Towers



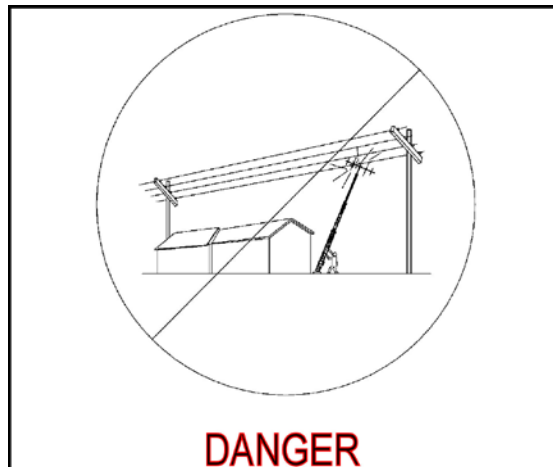
To be used for the following unguyed trailer tower models:

- TM61HY80-EB4S8H/T-85UGH
- TM61HY80-EB4S8H/T-100UGH
- TM61HY80-EB4S8H/T2-85UG
- TM61HY80-EB4S8H/T2-100UG
- TM61WA812-EB4S812/T-85UGH
- TM61WA812-EB4S812/T-100UGH
- TM61WA812-EB4S812/T2-85UG
- TM61WA812-EB4S812/T2-100UG

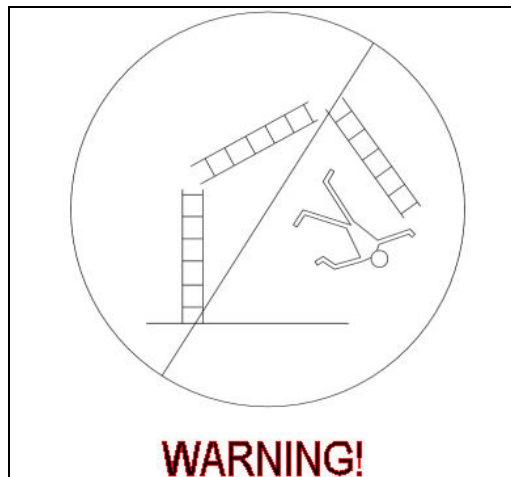
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Vero Beach, FL 32961  
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## UNGUYED TRAILER TOWER SETUP INSTRUCTIONS

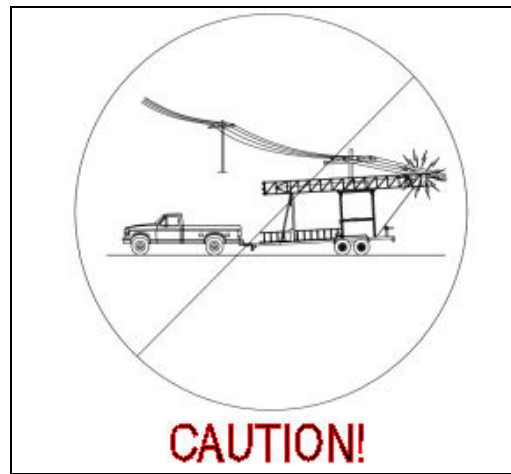
### *CAUTIONS AND WARNINGS*



⇒ **NEVER** setup the tower within 120 feet of a power line.



⇒ **NEVER** attempt to climb your tower under any circumstances. Always lower tower completely and access your tower by use of a suitable ladder. The rungs cannot support the weight of a person.



- ⇒ **ALWAYS** tow the trailer in a level position to meet height restrictions. Adjust coupler height as needed.
- ⇒ **ALWAYS** insure your tow vehicle and hitch capacity are suitable for the trailer you are towing. These items must be rated according to the GVWR on the V.I.N. decal on the front of your trailer tower unit.
- ⇒ **NEVER** overload your trailer or the tongue of your trailer. The GVWR noted on your V.I.N. decal is the maximum loaded weight of your trailer tower unit.
- ⇒ **ALWAYS** evenly distribute your load to maintain safe handling conditions when towing your trailer tower unit (see “weight Distribution” notice)
- ⇒ **ALWAYS** maintain the proper tire pressure according to the specification decal located on the front of your trailer tower unit
- ⇒ **NEVER** tow the trailer with the outrigger jacks in place. Remove them and stow on rear frame or in storage box.
- ⇒ **BEFORE** transporting trailer/tower check to see that the tower hold down cables are in place and secure.
- ⇒ **WHEN** transporting trailer and tower, drive within the speed limits and **do not exceed 55MPH.**

## ***GETTING READY TO TRANSPORT***

After hooking up the trailer to the tow vehicle, fully retract the front tongue jack by cranking the handle. Next, remove the pin for the dropleg portion, then push the dropleg up into the jack body until the two lowest holes are aligned. Reinsert the pin to retain the dropleg portion at the highest position.

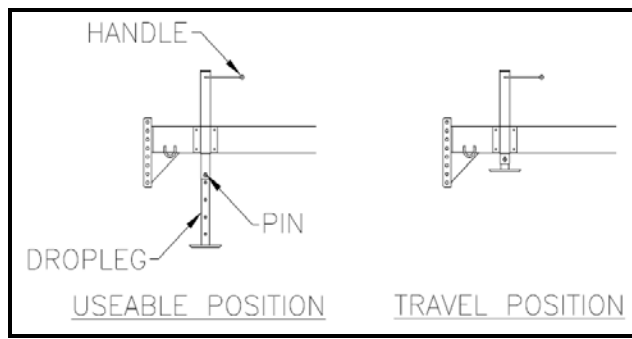


Fig. 1 Tongue Jack Positions

Attach the hooks on the safety chains to the tow vehicle frame. Be sure to cross the chains under the coupler and leave enough slack for turning (*see Fig.2*). Hook up the trailer lights by plugging the connector into the receptacle on the tow vehicle. Check all lights (Brake, Stop, and Running) to see that they are functioning properly. Check to see that the electric brakes are properly connected and that the brake controller is in proper working order. Next, hook up the small wire cable that operates the breakaway brake control (*see Fig. 3*).

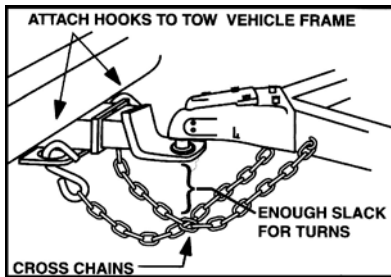


Fig. 2 Proper Safety Chain Hook Up

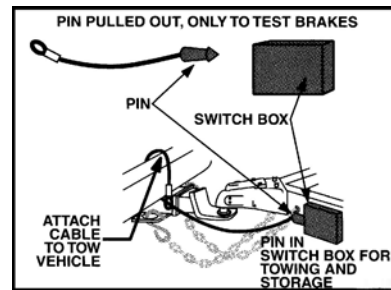


Fig. 3 Proper Breakaway Cable Hook Up

## POSITIONING THE TRAILER/TOWER

1. Locate the trailer tower unit in a place that will allow a minimum clearance of 19 ft. wide by 34 ft. long to allow for full extension of the outrigger assemblies (*see Fig. 4*).

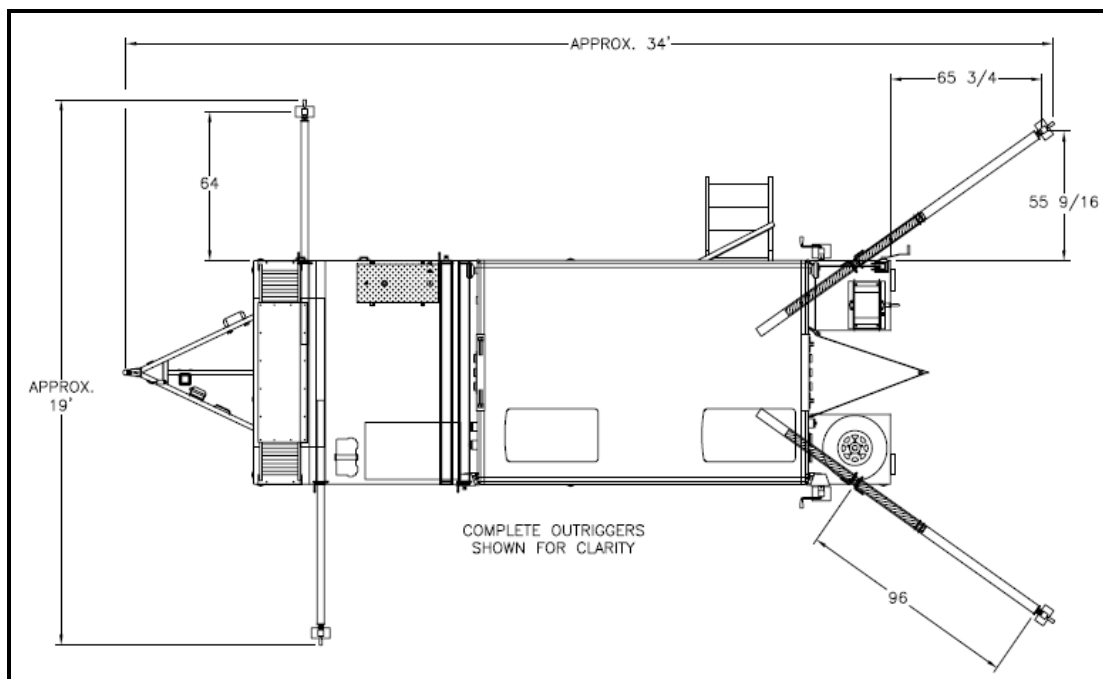


Fig. 4 Dimensions with Outriggers Fully Extended

2. The tow vehicle must now be uncoupled from the unit. Remove the safety pin and unlatch the coupler. Pull the pin on the dropleg jack and allow the leg to drop to it's lowest position. Realign the through holes and reinsert the pin. Crank down the jack to raise the trailer coupler high enough so the tow vehicle can be moved away. Disconnect the safety chains, light connector cable, and breakaway cable from the tow vehicle.
3. Remove the hitch pin that holds the front curbside "outrigger" (item 1) in the stowed position. Carefully pull it out until the second set of pinholes is visible. Then reinsert the pin with the outrigger in the extended position (*see Fig. 5*). Repeat for the roadside. Next, remove the hitch pin that holds the rear curbside "outrigger" (item 2) in the stowed position. Carefully pull it out until the second set of pinholes is visible. Then reinsert the pin with the outrigger in the extended position. Now, add the extension (item 3) to the rear outrigger which is stowed under the curbside trailer frame, just in front of the shelter. Remove the hitch pin that holds the rear curbside extension "outrigger" (item 3) in the stowed position. Carefully pull it completely out and place it over the extended item 2 at the rear of the trailer until the 2 sets of pinholes are aligned. Then reinsert the pin with the outrigger in the fully extended position (*see Fig. 5*). Repeat for roadside.

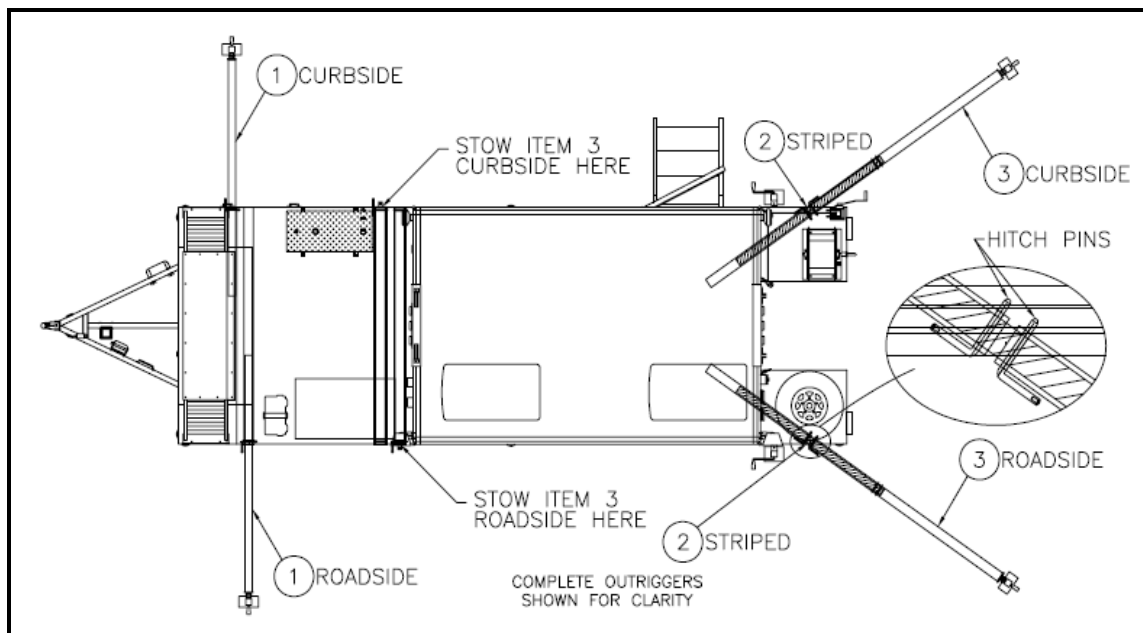


Fig. 5 Outrigger Assembly

4. Remove jacks from storage box and install two jacks on the front outriggers of the trailer and two jacks on the rear outriggers of the trailer.
5. Level the trailer by using the four jacks and the bubble levels located on the rear corners of the shelter and the 4 ft. beam level as a guide.

### ***ATTACHING THE MAST, ANTENNA, AND COAX CABLE***

1. Remove the thru bolts from the upper and lower mast adaptor plates. Insert mast through upper plate mast adaptor. Slide mast into lower plate mast adaptor until it is fully seated against plate. Turn mast to align bolt thru holes. Reinsert bolts and

fully tighten nuts.

2. Feed the coax cable through the middle of the smallest section and on up through the mast at the top of the tower.
3. Attach your antenna to the supplied mast per the manufacturer's specifications.
4. Connect the coax to the antenna.

## ***ERECTING THE TOWER AT FULL HEIGHT***

1. While the tower is still in the horizontal position, loosen and remove the hold down restraining cables and latches that hold the tower in place for transporting. These cables are located on the top front of the shelter (*see Fig. 6*).

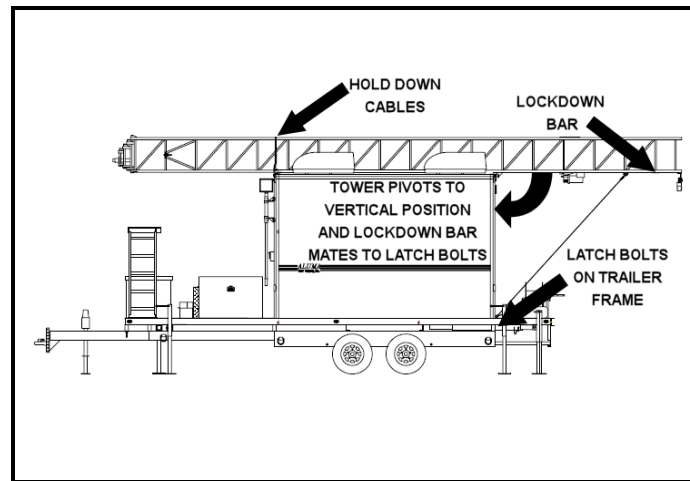


Fig. 6 Trailer Tower Component Locations

2. Using the manual brake winch on the rear support, crank the tower from the horizontal to the vertical position. At the halfway position undo the nuts from the latch bolts at the bottom rear of the trailer frame (*see Fig. 6*).

**NOTE:** Sufficient load must be applied to the cable to overcome internal resistance and operate brake properly. *NEVER CONTINUE TURNING THE HANDLE COUNTER-CLOCKWISE IF THE CABLE DOES NOT KEEP MOVING OUT.* This will disengage the brake mechanism and create an unsafe or hazardous condition.

MINIMUM OPERATING LOAD REQUIREMENTS - MODEL 5353 - 525 lbs.

**Failure to read and apply the instructions and warnings contained in this manual can result in sudden failure of equipment, property damage and serious injury.**

3. Secure the tower in the vertical position with the tower lockdown bar pivoting over the latch bolts on bottom of rear trailer frame (*see Fig. 6*). Tighten the nuts with wrenches supplied in tool kit TM-TK, which is stored in the #664 or #684 storage box.
4. **IMPORTANT:** Undo the Red Safety strap from the bottom of the tower (if equipped) and remove it from the inner sections. It is necessary for this strap to be removed. The power winch raising the tower is capable of damaging the tower if this strap is not removed. *Please note that this strap is used to keep*

*the tower from telescoping out on its own when in the transport mode.*

Additionally, you should pull the orange safety stop release cord to insure the safety stop releases properly before raising the tower.

**CAUTION !** Do not attempt to raise tower in winds over 10 mph.

5. Raise the tower by operating the winch controls. The safety stop engages at a rung approximately every 20 inches. Remember that the electric winch is capable of damaging the tower, so be alert to any unusual noises or signs that may indicate that you are doing damage to the tower. **Do not try to overextend the tower.**

The tower is fully extended when the black and orange tape bands on the vertical legs of the outer section are aligned with the bands on the inner section. When at maximum height, the rung marked with orange reflective tape is just above the safety stop mechanism located at the top of the lowest section. **Serious damage will occur if overextended!**

THE TOWER IS NOW READY FOR USE.

## ***ERECTING THE TOWER AT LESS THAN FULL HEIGHT***

In some instances, erecting the tower at less than it's full height may prove to be adequate for desired communications.

1. Raise the tower to the desired height by operating the winch controls. The safety stop engages at a rung approximately every 20 inches. Remember that the electric winch is capable of damaging the tower, so be alert to any unusual noises or signs that may indicate that you are doing damage to the tower. The tower can be used at any height below full extension provided that the safety stop is engaged in a fully horizontal position.

**NOTE:** The radial pressure slide bar mechanism is only engaged when at full height. If expected winds exceed 30 mph or excessive movement is noticed, guy wires must be used.

## ***LOWERING THE TOWER***

1. To start the procedure of lowering the tower, it is first very important to insure the safety stop is disengaged. The safety stop is controlled by an orange cord attached to one leg of the tower. Pull the orange cord until the safety stop clears the rung above it. It may be necessary to raise the tower up slightly to allow the safety stop to swing out of the way. Start lowering the tower while keeping tension on the orange cord. *The safety stop must be kept out of the way for the complete lowering of the tower or serious damage may occur.*
2. Lower the tower so the guy ears at the top of each section are just above the section below it. *Care should be taken to not lower the tower more than necessary or serious damage may occur.* After the tower has been lowered to the retracted position, **be sure to** reattach the **“Red Safety Strap”** around the inner sections.

3. Remove the nuts from the latch bolts on tower lockdown bar. Be sure to retighten the nuts with a wrench so that it will not vibrate loose while transporting. Pull the tower away from the trailer while playing out the cable from the winch.

Sufficient load must be applied to the cable to overcome internal resistance and operate brake properly. NEVER CONTINUE TURNING THE HANDLE COUNTER-CLOCKWISE IF THE CABLE DOES NOT KEEP MOVING OUT. This will disengage the brake mechanism and create an unsafe or hazardous condition. MINIMUM OPERATING LOAD REQUIREMENTS - Model 5351 - 75 lbs.

**Failure to read and apply the instructions and warnings contained in this manual can result in sudden failure of equipment, property damage and serious injury.**

4. Lower the tower to the horizontal position and secure the tower with the hold down cables and latches. Be sure locking mechanism on cables is engaged. Remove the coax cable, antenna and mast and put in stowage position.
5. Raise the front leveling jacks until the weight is on the tongue jack. Remove the front leveling jacks and stow them in the storage box. Remove the hitch pins from the outriggers and slide them into their stowed position and reinsert the hitch pins.
6. Remove the rear outrigger leveling jacks and stow them in the storage box. Remove the hitch pins from the extension outriggers (item 3) and place into corresponding stowage tubes on each side of trailer (*see Fig. 5*). Remove the hitch pins from the outriggers (item 2) and slide them in to their stowed position and reinsert the hitch pins.
7. You are now ready to hook up the trailer to the tow vehicle. Once again recheck all securing straps and safety wires. Repeat procedure for “*Getting ready to transport*”.

**NOTES:**

***APPROVED FINAL REVISION April 17, 2009***

***ADDED T2 TOWERS TO COVER PAGE OCTOBER 18, 2011***

***ADDED TESTING SAFETY STOP RELEASE VERBIAGE TO #4 UNDER  
“ERECTING THE TOWER AT FULL HEIGHT”  
JANUARY 10, 2012***