

INSTRUCTIONS

FOR

INSTALLATION AND OPERATION

MODEL RBS60 TOWER with WONDER GROUND POST

"WARNING"

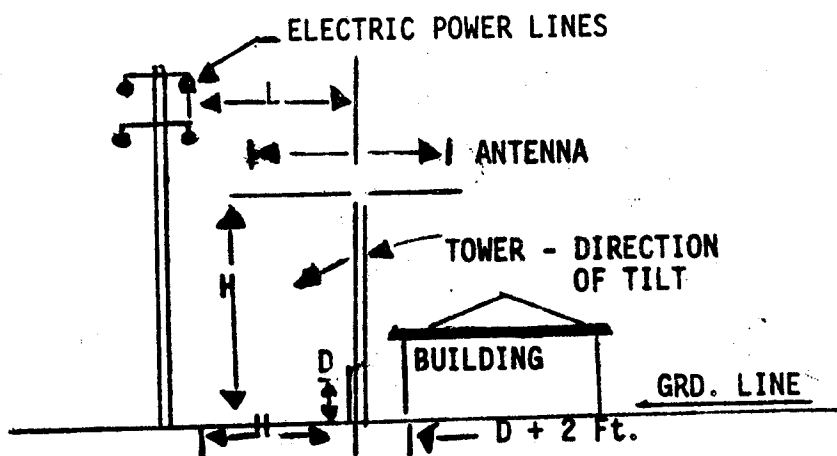
INSTALLATION OF THIS PRODUCT NEAR POWER LINES
IS DANGEROUS - FOR YOUR SAFETY, FOLLOW THE
INSTALLATION DIRECTIONS.

P.O. BOX 11535

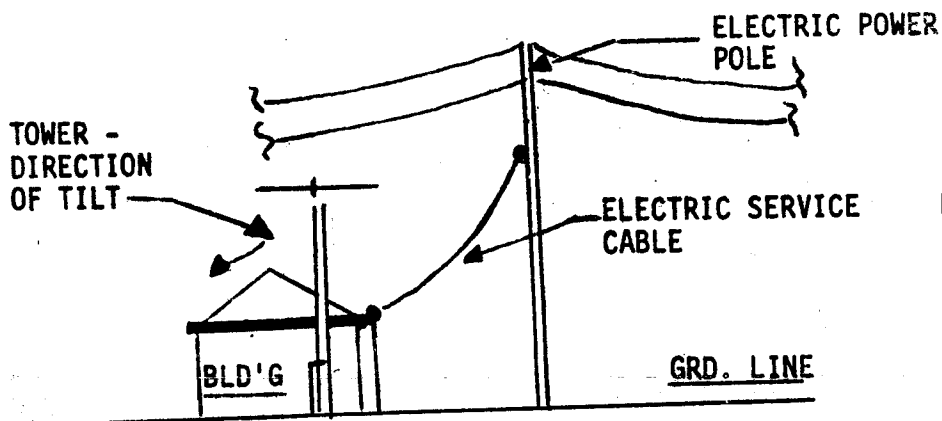
TAMPA, FLORIDA 33680

Phone Number (813) 677-7144

TOWER LOCATIONS - RECOMMENDED CLEARANCES



L - LENGTH of longest Antenna Element or Boom.
H - FULLY Lowered Height of Antenna.
D - HEIGHT of Tilt Over Hinge.
NOTE: USE L or H whichever is the largest.



NOTE: ALWAYS TILT TOWER AWAY FROM WIRES.

SAFETY SUGGESTIONS

- DO NOT INSERT hands or feet into TOWER.
- FULLY LOWER TOWER before tilting.
- SAFETY REST SHOULD be functioning at all times.
- DO NOT CLIMB TOWER - if it is necessary to climb TOWER for any reason - FIRST INSERT SAFETY BAR through the TOWER to prevent relative movement of the sections - REMOVE SAFETY BAR before trying to RAISE or LOWER TOWER.
- KEEP FIRM GRASP of WINCH HANDLE & KEEP WINCH PAWL ENGAGED when raising, lowering or tilting TOWER.
- SERVICE, REPAIR & LUBRICATE TOWER for trouble free use.
- KEEP TOWER LOWERED when not in use.

-CAUTION-

ELECTRICAL POWER AS LOW AS 110 VOLTS CAN KILL
KEEP TOWER, ANTENNAS & SERVICE LINES FROM CONTACTING
POWER CABLES - ELECTRICALLY GROUND TOWER.

The installation of any equipment is fully as important to satisfactory performance as its design and construction. Please read these instructions through several times before starting installation until the entire procedure is clearly understood.

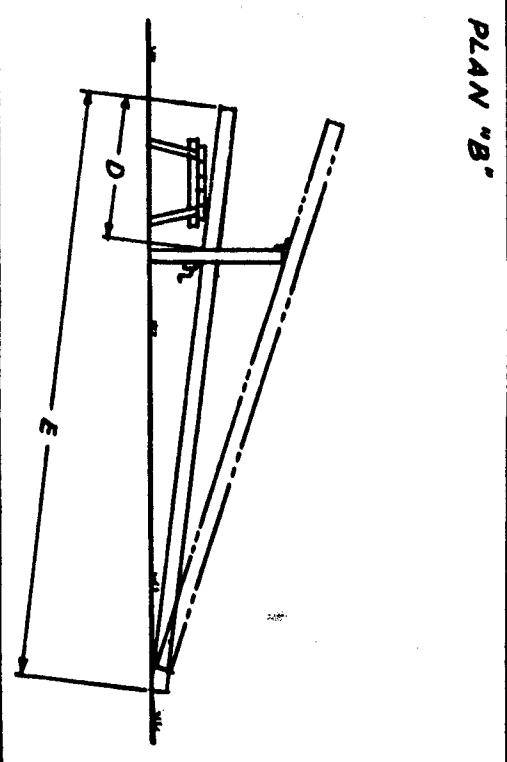
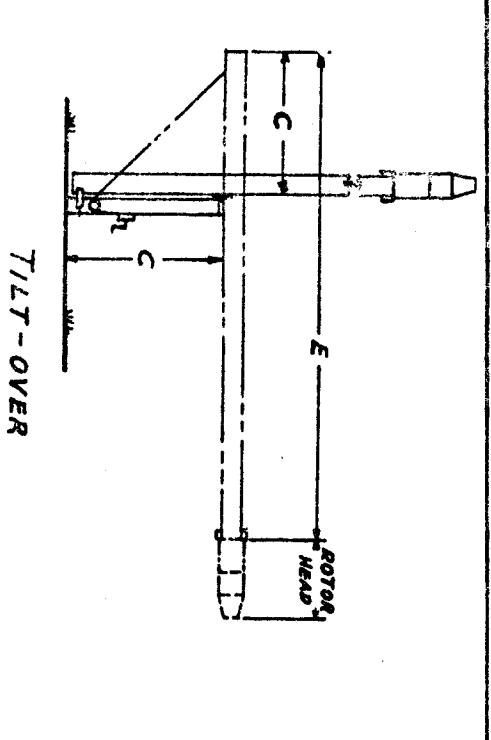
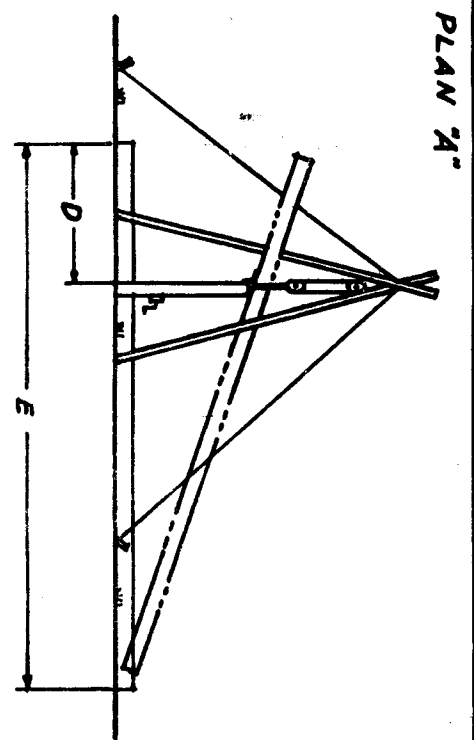
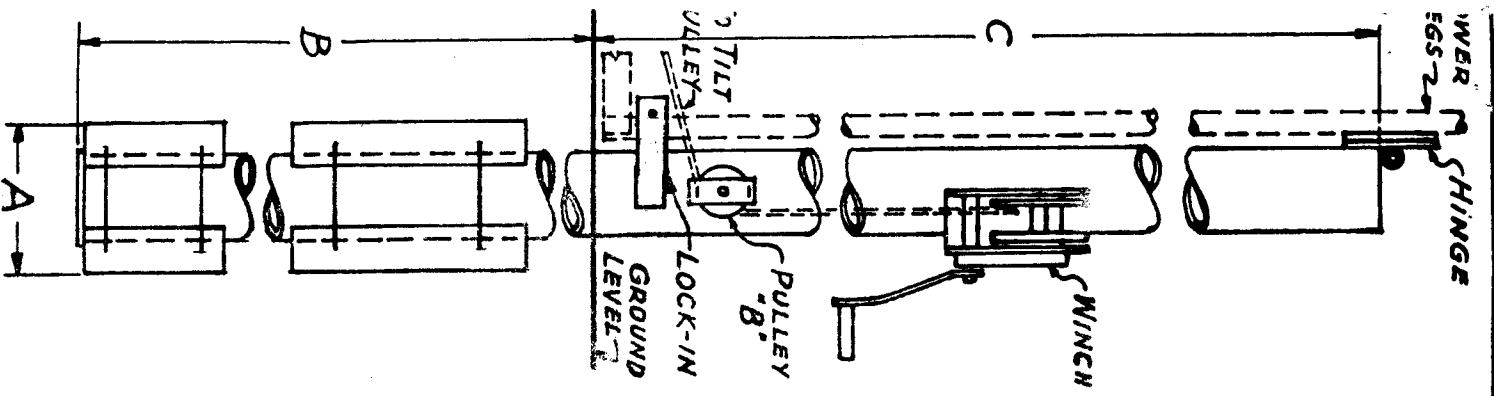
SECTION 1

INSTALLATION OF GROUND POST

NOTE: Please refer to Drawing No. 235 on reverse side of this sheet. The chart on this drawing indicates depth and diameter of the hole required for the ground post used with your model tower. Also indicated are clearance required for tilt-over to enable you to select a site for your tower which will allow adequate working space around your tower when it is in the horizontal position. In addition, clearance should also be provided for the mast and antenna system.

The ground post is shipped with Pulley "B" and the tilt-over hinge pre-installed at factory. After the post has been set in place and plumbed, the remaining hardware, (packaged with the rotor head of your tower) may be installed. Check your packing list to be sure all parts have been received.

- (a) When a suitable site for the tower has been selected, and the direction of tilt has been established, dig a hole for the ground post to dimensions indicated on the chart. An auger or clam shell post hole digger can be used.
- (b) Set the finned end of the post in the hole. Be sure that the hinge faces in the proper direction (toward clearance dimension "C"). On large size ground posts, an "A" Frame with block and tackle or chain hoist rigged over the hole will be of assistance.
- (c) Back fill hole, tamping around the post and water pack as you fill. CHECK THE POST WITH LEVEL AND/OR PLUMB LINE FREQUENTLY AS YOU BACK FILL. IF THE GROUND POST IS NOT PLUMB, THE TOWER WILL BE OUT OF PLUMB. If your soil has a high clay content or tends to be plastic when wet, mix in about 50% sand and water pack, or fill the hole entirely with sand. Write for special instructions, for rock or marshy soil.
- (d) Bolt the winch to the bracket welded on the ground post. The winch should be mounted so that the drum is uppermost and the crank handle faces away from the tower and post. See Installation Detail Sheet.
- (e) Unreel cable from winch and lace cable down under sheave of Pulley "B". Attach cable to bottom of tower or lace through pulley bracket and attach to cable eye on ground post as shown on cable lacing diagram for your model of tower. Cable Lacing Diagram on Installation Detail Sheet.



| TOWER MODEL | A | B | C | D | E | ROTOR HEAD |
|-------------|-----|-----|----|----|-------|------------|
| HD-40 | 12" | 48" | 6' | 7' | 20'3" | 3' |
| RBS-40 | 13" | 50" | 6' | 7' | 20'3" | 3'6" |
| RBX-40 | 19" | 67" | 8' | 9' | 20'3" | 5' |
| RBS-50 | 14" | 66" | 8' | 9' | 25'3" | 3'6" |
| RBX-50 | 19" | 67" | 8' | 9' | 25'3" | 5' |
| RBS-60 | 14" | 66" | 8' | 9' | 20'6" | 3'6" |
| RBX-60 | 19" | 67" | 8' | 9' | 20'6" | 5' |

GROUND POST INSTALLATION

Date 10/8/63 F.L.L. Appvd. *WJG*

Revised 1/3/67 K.P. Appvd. *WJG*

E-Z WAY PRODUCTS, INC.
TAMPA, FLORIDA

REVISED DWG. No. 235

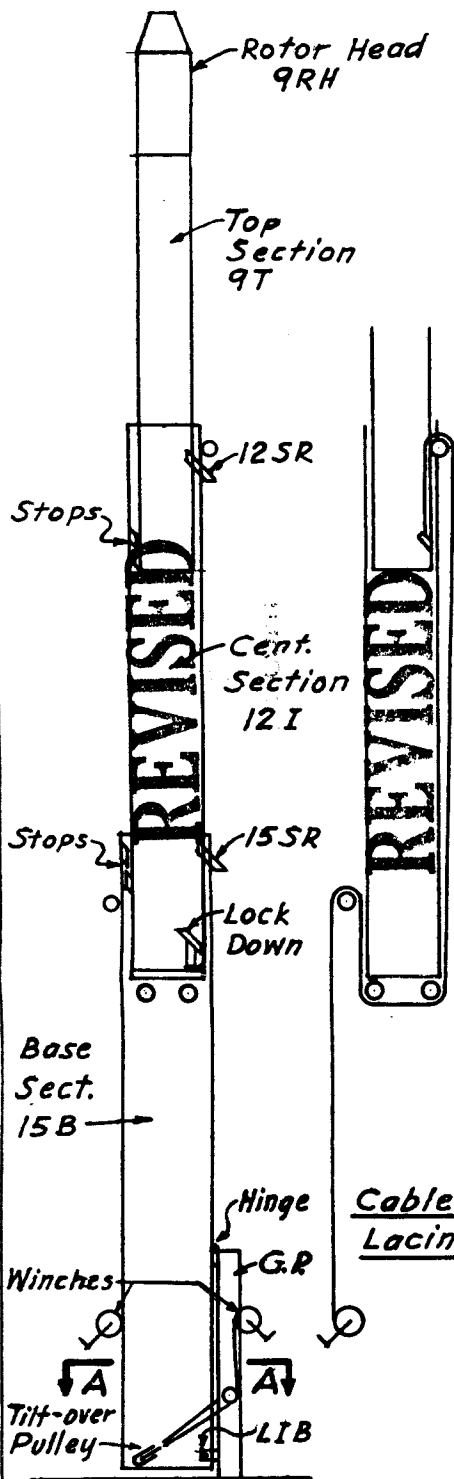
SECTION 2

RBS-60
(5/66)

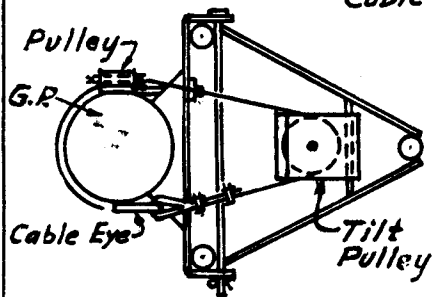
ASSEMBLY OF RBS-60 TOWER

NOTE: To simplify installation, your tower has been partially pre-assembled at factory. The Elevating Cable, Pulleys, Safety Rests, Lock-Down Assemblies, and Section Stops have already been installed. To avoid damage in shipment, however, the upper Safety Rest (12 SR) has been inverted so that its arm will not project outward, and the retaining roll pin of the lower Safety Rest (12 SR) has not been inserted to permit rotating its blade into safer position for shipment. This roll pin is taped to the blade and must be inserted during final assembly. This procedure, and restoration of the upper Safety Rest to proper position are described in the following instructions.

- (a) Lay tower on two saw horses. Remove tie wires and mast assembly wired inside tower.
- (b) Remove upper Safety Rest (12 SR) by withdrawing pin and set aside temporarily.
- (c) Slide sections all the way in and out of each other to determine whether any binding develops due to possible rough handling in shipment. The Lock-Down which holds the top section (9T) in the center section (12I) must be tripped before the 9T section can be withdrawn. Excessive friction between sections can usually be relieved by slight bending of interfering members, and adequate lubrication. If binding persists, report condition to the carrier so that a claim can be filed for damage in transit.
- (d) Lubricate skids and cable with heavy grease and oil pulleys.
- (e) Push all sections together so that tower is fully telescoped.
- (f) Re-install upper Safety Rest (SR-12) so that trip tab projects outward. See Fig. 2-a.
- (g) Complete assembly of lower Safety Rest (SR-15) by rotating blade to align retaining pin holes, and insert roll pin. See Fig. 2-b. The roll pin is taped to the blade of the Safety Rest.
- (h) Tie the light wire from the spring on each Safety Rest to the ladder rung immediately above, allowing enough tension in the spring to insure positive engagement of the blades with the ladder rungs.
- (i) Attach a trip cord to each trip tab on the Safety Rests, using the 34' long cord on the upper Safety Rest, and the 16' long cord on the lower Safety Rest.
- (j) Attach the remaining 14' cord to the Lock-Down.
- (k) Mount the DL-6826 Elevating Winch on the right hand side of the winch mounting straps on the tower with the winch drum uppermost so that the crank handle extends to the right side.
- (l) Insert end of elevating cable through hole in winch drum flange and clamp securely. Crank up slack.
- (m) Your tower is now ready for attachment to its mounting. See Section 3.



Tower



Section A-A

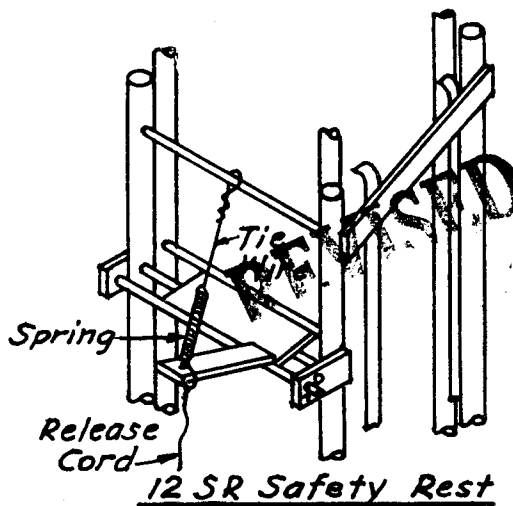


Fig. 2-a

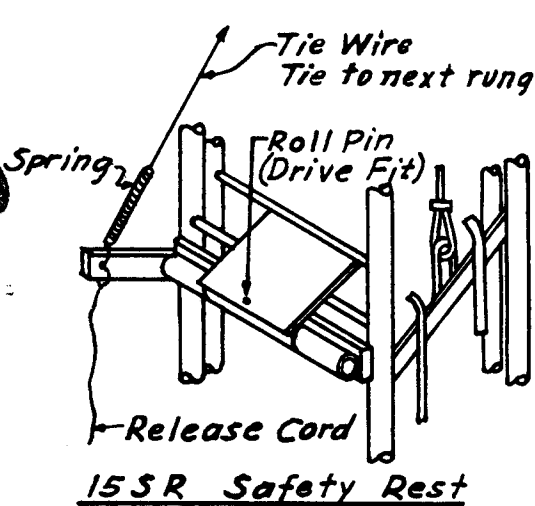


Fig. 2-b

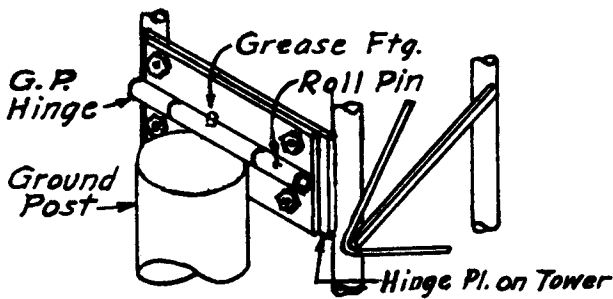
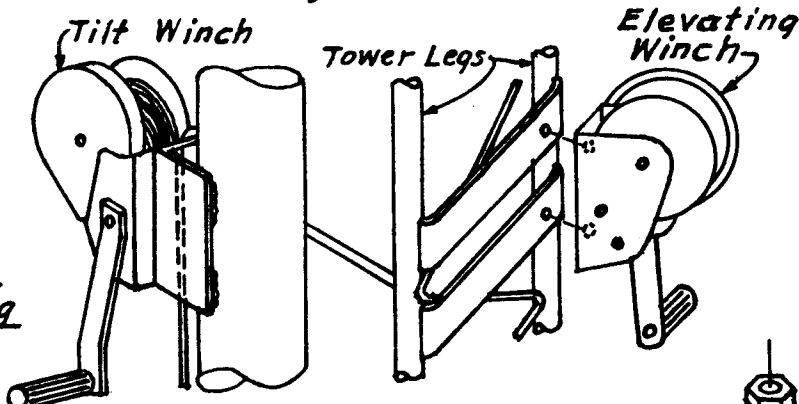


Fig. 4



**Ground Post - Fig. 5 Tower - Fig. 6
 Winch Mounting Details**

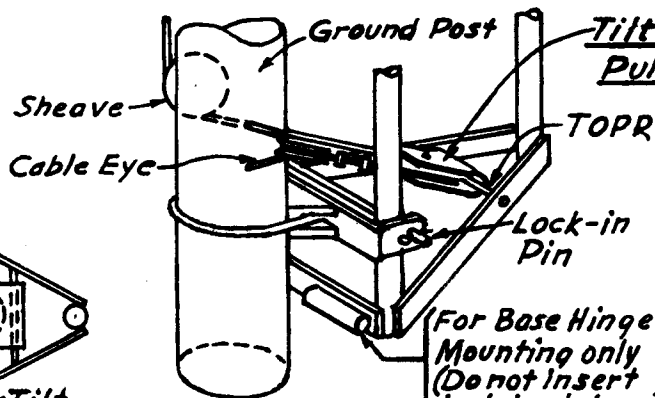


Fig. 1

(For Base Hinge Mounting only
 Do not insert Lock-in pin here)

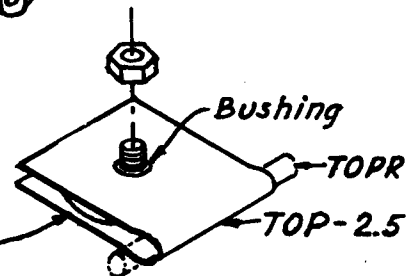


Fig. 3

**INSTALLATION DETAIL SHEET
 RBS - 60 - 3**

Date 7/14/66 *K.P.* Appvd.

Revised Appvd.

**E-Z WAY PRODUCTS, INC.
 TAMPA, FLORIDA**

DWG. No. 720

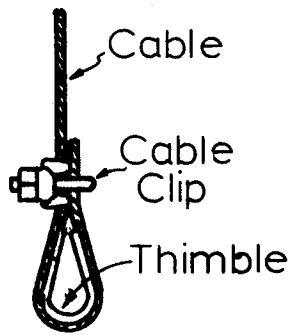
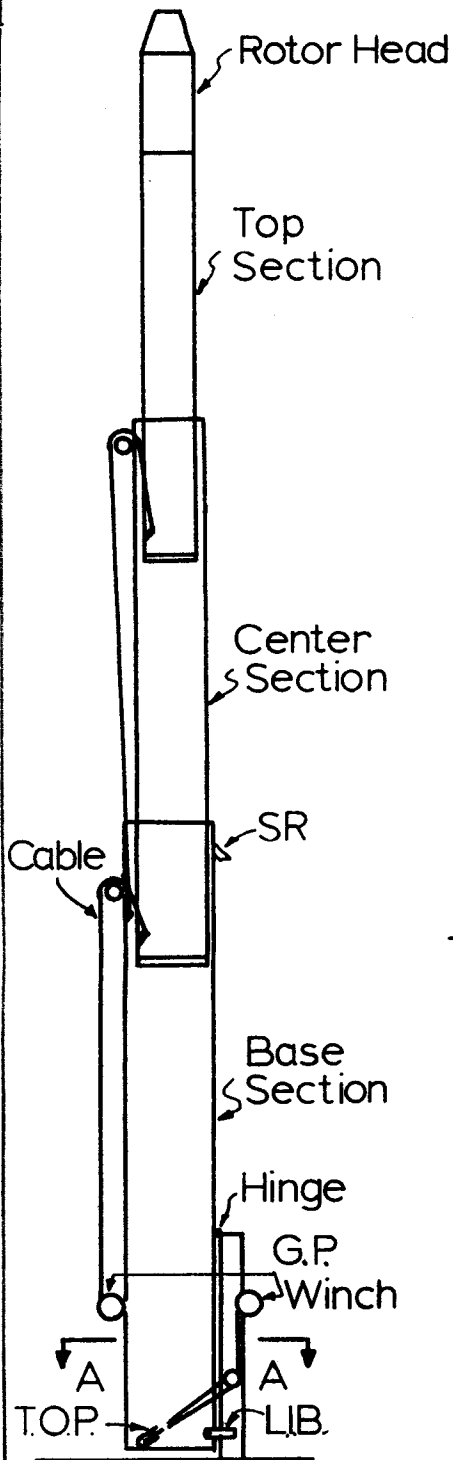
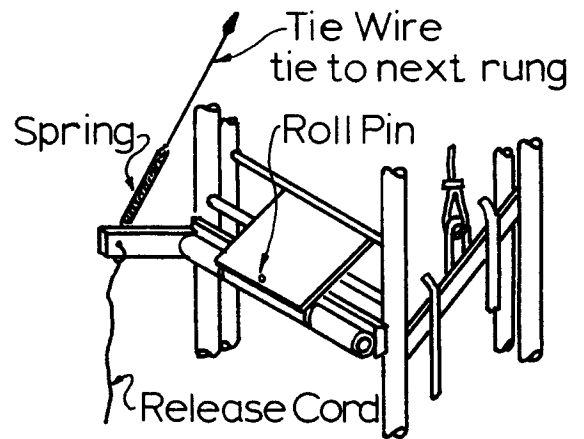


FIG. 7



SAFETY REST

FIG. 2

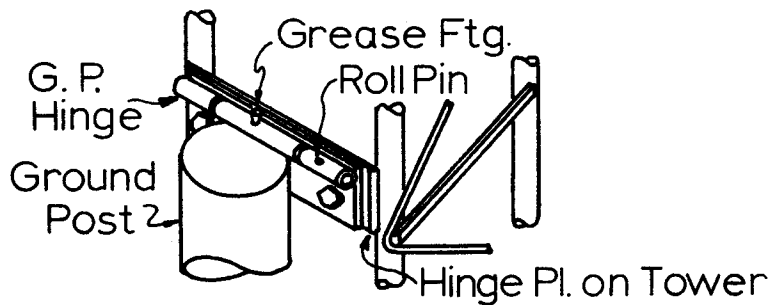
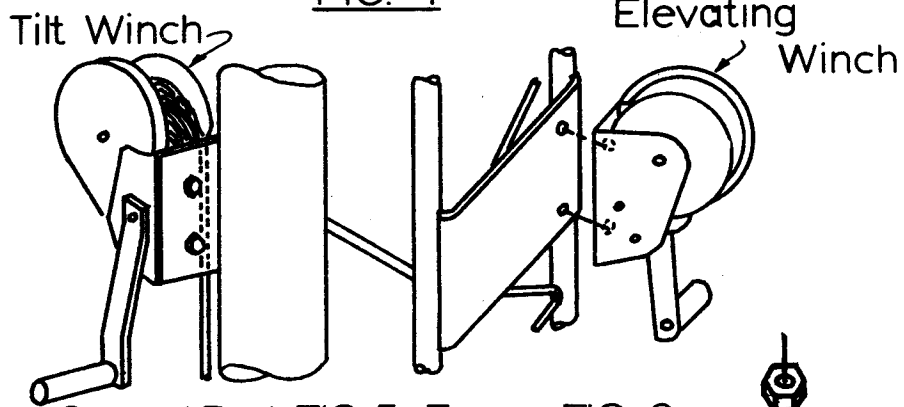


FIG. 4



Ground Post FIG. 5 Tower FIG. 6
WINCH MOUNTING DETAILS

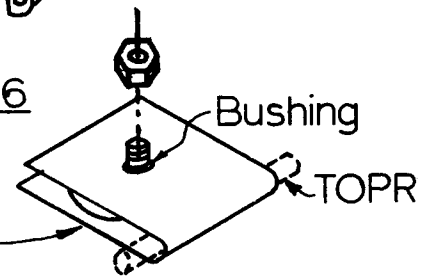
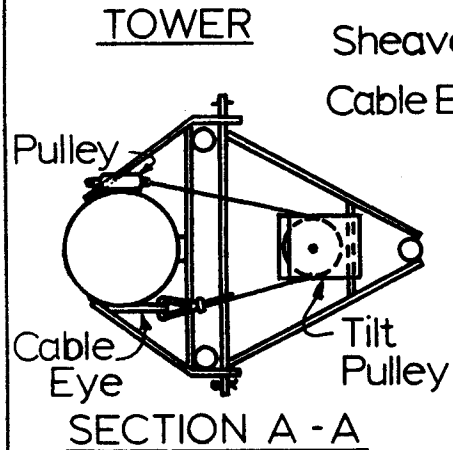


FIG. 3



SECTION A - A

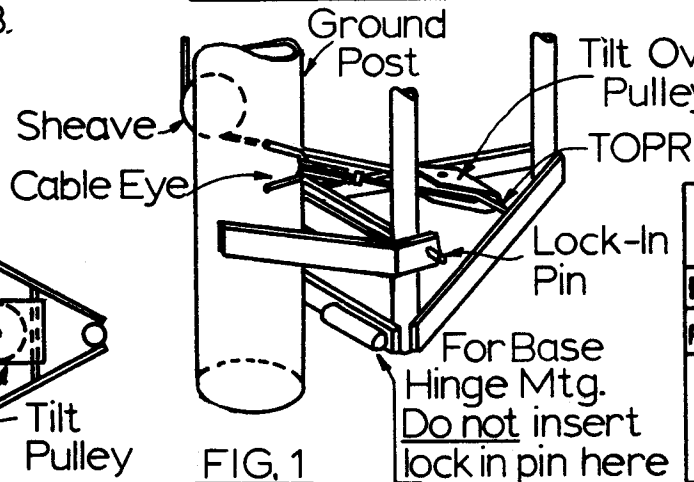


FIG. 1

For Base Hinge Mtg.
Do not insert lock in pin here

INSTALLATION DETAILS
3-SECTION TOWER

Date 11-15-76 K₅ Appvd. *car*

Revised Appvd.

E-Z WAY PRODUCTS, INC.
TAMPA, FLORIDA

A 1578

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SECTION 4

SECTION 4
OPERATION
(11/76)

OPERATION OF TOWER

NOTE: BE SURE TO KEEP A FIRM GRIP ON THE WINCH HANDLE - ESPECIALLY WHILE LOWERING

- (a) Start cranking tower up with Elevating winch. You will note that the center section and top section will start their travel together. Continue cranking until the center or top section stop hits the stop at the top end of the base section.
- (b) Reverse the pawl in the winch and lower tower slightly until Safety Rest engages.
- (c) Tie the release cord from the Safety Rest to some convenient point on the tower near the winch so it may be operated with one hand while cranking the winch with the other.
- (d) To lower the tower, first crank it up enough to release the Safety Rest. Pull Safety Rest release cord, and lower section(s) slowly. Keep firm grip on crank handle.
- (e) Repeat above procedure several times until you are completely familiar with the operation.

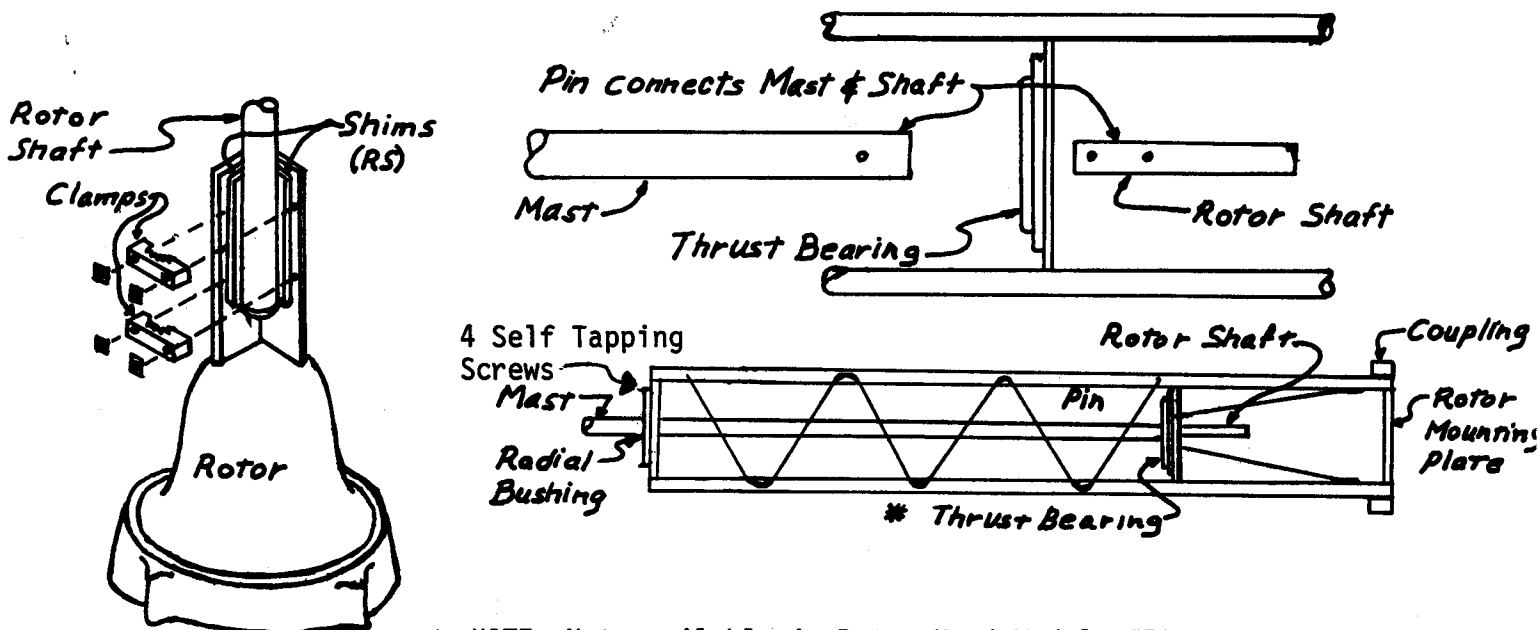
TILT-OVER OPERATION

- (a) With the tower fully retracted, crank up about one foot until Safety Rest engages.
- (b) Let off about three feet of cable from the tilt-over winch, and set winch pawl to prevent further release of cable.
- (c) Remove lock-in pin, and pull base of tower out to break it off plumb (about one foot).
- (d) Continue tilt-over by cranking winch to release cable until tower is in horizontal position. Support top of tower with step ladder or other support to take strain off cable.
- (e) To tilt back to vertical position, crank tilt-over winch until base of tower enters lock-in bracket. Insert lock-in and cotter pin retainer.
- (f) Tilt tower up and down several times until the operation becomes familiar.
- (g) You are now ready to add the rotor head and antenna system.

ROTOR HEAD ASSEMBLY AND INSTALLATION - CDR ROTATORSSection 5

Rotator and mast should be assembled in rotor head before attaching to tower in accordance with the following procedure (refer to Drawing below).

- (a) Remove base casting from rotator - discard; remove mast clamps from rotator.
- (b) Bring rotator control cable through hole in rotator mounting plate; attach wires to rotator per manufacturer's instructions.
- (c) Check rotator wiring by trial operation.
- (d) Remove pin from mast assembly; slide end of mast with connecting pin hole through top bearing; reassemble rotor shaft to mast with connection pin.
(Note: Use upper hole on rotor shaft for Ham M rotator, lower hole for other CDR models).
- (e) Insert phenolic shoulder bushing in top bulkhead and hold in place with four (4) self tapping screws and washers.
- (f) Slide mast and rotor shaft through*lower bearing until mast or collar rests on thrust bearing and rotor shaft sets in rotator.
- (g) Insert two (2) 3/16 X 4 X 1" shims on each side of rotor shaft in "V" of rotator; replace mast clamps and secure.
- (h) With tower tilted over, bolt rotor head to tower using three (3) 5/8 X $2\frac{3}{4}$ " bolts and nuts.
- (i) Loop the rotator control cable and tape to one leg of rotor head.



* NOTE: Not available in Rotor Head Models #53690 & #4360

SECTION 6
MAINTENANCE

Section 6
Maintenance
3/75

Your E-Z Way Tower is ruggedly designed and constructed to give years of satisfactory service with a minimum amount of care. As with any equipment, however, periodic inspection and maintenance procedures will prolong service life and insure trouble free operation. We suggest the following maintenance routine at least once every three months.

1. Lubricate cable and skids with heavy waterproof grease.
2. Lubricate bearings and all moving parts on following components:

| | |
|-----------------|--------------------------------|
| Winches | Safety Rest Assembly |
| Tilt-Over Hinge | Lock-Down Assembly |
| All Pulleys | Cable Tension Spring (if used) |
3. Tighten all bolts and nuts.
4. Replace any cotter pins showing wear or damage.
5. Repaint Ground Post and any other painted parts at least once each year.
6. Observe lubrication and maintenance instructions for Motor Winch unit, when tower is electrically operated.
7. Always relieve stress on elevating cables and winch by making sure that safety rests are engaged and cable slacked off when tower is in extended position.
8. Relieve stress on tilt-over cable and winch by supporting top end of tower on step ladder or other support when tower is tilted to horizontal position. Be sure tower is fully retracted before tilting.
9. When high winds are anticipated, or when leaving tower site for extended periods, lower the tower to fully retracted position. If hurricane winds are expected, lower tower and remove antennas to safe storage.