

Lightning Rod kit with Aluminum Tapered Point, Mast Clamp, 8' Ground Rod & clamps, & leg Grounding Lug. Order wire separately below.
LR-8400

#4 Ground Wire, order next longer length from tip of mast to ground rod

CW-2540 25 feet **CW-5040** 50 feet
CW-7540 75 feet **CW-1040** 100 feet
CW-1240 125 feet **CW-1540** 150 feet
GR-5080 5/8 by 8 ft. ground rod weight 8lbs
GR-4400 Ground rod wire clamp weight .5lb
TL-0470 Terminal lug, for wire size to 4 /00



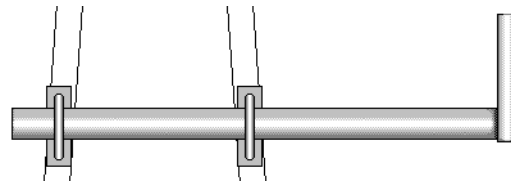
Thrust Bearing premium weatherized twin bearing for rotating setups, 1.3 to 2.6 mast diameter; **TB-25**



Mast Adaptor for non-rotating setups. Secures masts, 1.3 to 2.1 dia. two required, one at tower top and one at base of mast. **MC-10**

Side Arm for adding other antennas, weather gear, etc. 7" high by 1.31" diameter mast, U bolt mounting hardware included.

24" Long # **RA-6024** 48" Long # **RA-6048**



MASTS Select the mast that matches your needs

| | | |
|---------------|---|--------|
| M1049 | 9' X 1.90" OD X .145 wall galv. steel heavy dty | 25 lbs |
| MA2069 | 9' X 2.375" OD ,.154 wall aluminum heavy dty | 12 lbs |
| MA1049 | 9' X 1.90" OD, .145 wall aluminum medium dty | 9 lbs |
| MA5050 | 5' X 1.315 OD, .133 wall aluminum light duty | 3 lbs |
| MA1050 | 5' X 1.90 OD, .145 wall aluminum medium duty | 5 lbs |

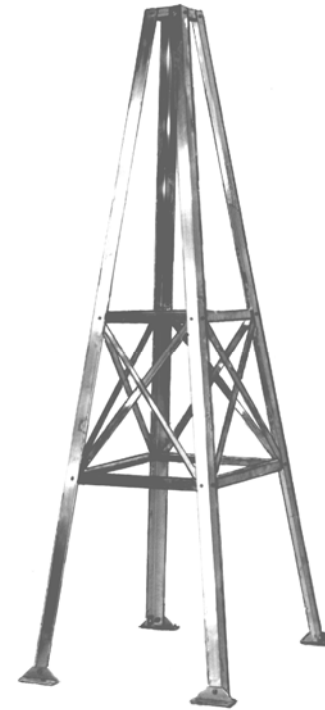


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Call (800) 486-1223
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RT-832

OWNER'S MANUAL



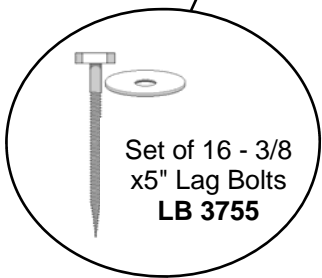
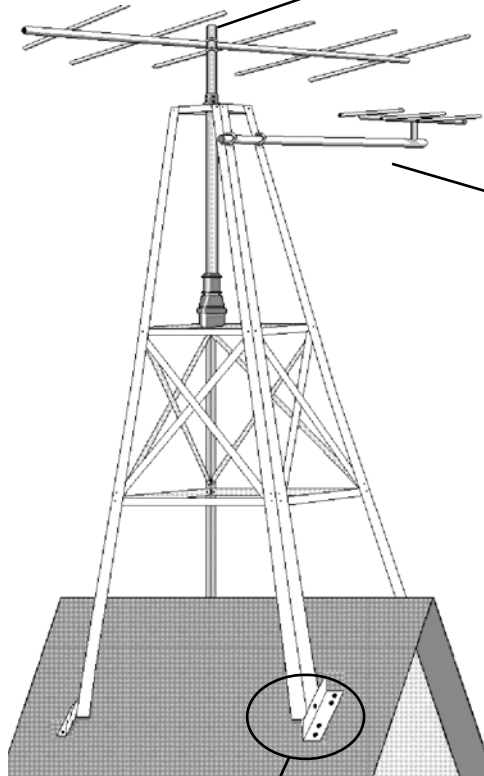
DATE PURCHASED:

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RT-832 TOWER SPECIFICATIONS

| | |
|---------------------------|-------------------------------------|
| Maximum Height | 8 Feet / 2.44 Meters |
| Maximum Width | 32 Inches / 0.81 Meters |
| Material | 6061-T6 Al. 1/8"x 2"x 2" Angle |
| Stainless steel Hardware | Nylon self-locking Nuts |
| Maximum Mast Diameter | 2-3/8 Inches / 6 cm |
| Maximum length of Mast | 9 Feet / 2.74 Meters |
| Max. balanced load weight | 125 pounds / 55kg (center balanced) |
| Rotator Plate | Fits most 4-bolt mounted rotators |

Notes to Loading Chart:

- 1) Tower designed in accordance with applicable IBC, AASHTO, and ANSI/TIA-222 standards
- 2) Tower designed with 3-Second gust, exposure C, structure class II, topographic I
- 3) Max. projected area is the total equipment wind area the tower can support under a specific wind speed
- 4) Roof elevation assumed to be 100 ft. Wind areas in loading chart based on this assumption
- 5) Specific structure study may be required if roof is significant higher than 100 ft and with heavy loading
- 6) Reactions at tower legs and base are factored per ASCE 7's load combinations
- 7) Roof shall be verified to meet specified reactions listed in loading chart before installation

Wind Load Chart

| | | | | | | | | |
|-----------------------------|------|------|------|------|------|------|------|------|
| Wind speed (mph) | 85 | 90 | 95 | 100 | 105 | 110 | 115 | 120 |
| Max. projected area (sq.ft) | 7 | 6.2 | 5.9 | 5.3 | 5.1 | 4.6 | 4.2 | 4 |
| Down at leg (kip) | 1.04 | 1.07 | 1.11 | 1.15 | 1.20 | 1.23 | 1.27 | 1.32 |
| Uplift at leg (kip) | 0.90 | 0.93 | 0.99 | 1.03 | 1.10 | 1.13 | 1.17 | 1.23 |
| Shear at leg (kip) | 0.23 | 0.23 | 0.25 | 0.26 | 0.27 | 0.29 | 0.30 | 0.32 |
| Shear at base (kip) | 0.56 | 0.59 | 0.65 | 0.68 | 0.74 | 0.78 | 0.83 | 0.88 |
| O.T.M (kip-ft) | 3.66 | 3.78 | 3.97 | 4.10 | 4.32 | 4.46 | 4.61 | 4.81 |

PARTS LIST

| PART # | QUANTITY | DESCRIPTION |
|--------|----------|---|
| 1 | 4 | 1/8x1.9x1.9x96" (.318cm x 4.83 cm x 4.83cm) legs |
| 2 | 4 | 22" (55.9 cm) lower horizontal braces |
| 3 | 4 | 15-1/2" (40 cm) center horizontal braces |
| 4 | 2 | 15-1/2" Rotator support bars with diagonal slots |
| 5 | 4 | 5" x(12.7cm) top braces with one slot and 1/4" holes |
| 7 | 8 | Flat diagonal braces 1/8" x 30" (76.2cm) |
| 8 | 4 | 2x5x1 1/2x1/4" Mounting brackets (3/8" holes) |
| 9 | 1 | Hardware kit: 4-3/8 hex bolts, flat washers & locking nuts –18-8SS 28-1/4" ss lock nuts & ss screws |

SAFETY RULES

1. Never mount any tower system close to wires or power lines. Stay at least 1½ times the overall height away from any power lines or wires.
2. Never attempt to touch someone who is in contact with power lines or wires.
3. Never climb the tower. Serious injury could result from a fall. This is even more dangerous when you are on a roof top.
4. If you drop something while working on a roof, NEVER try to catch or stop it. Let it fall and keep your own balance secure.
5. Use the buddy system. Always have someone helping nearby.
6. Always keep children away.
7. NEVER attempt to install or attempt to repair equipment while under the influence of drugs, alcohol or any medication.
8. *Certain applications may require field drilling.*

Please keep these instructions in a safe place after installation. If you sell your tower, pass these instructions on to the new owner.

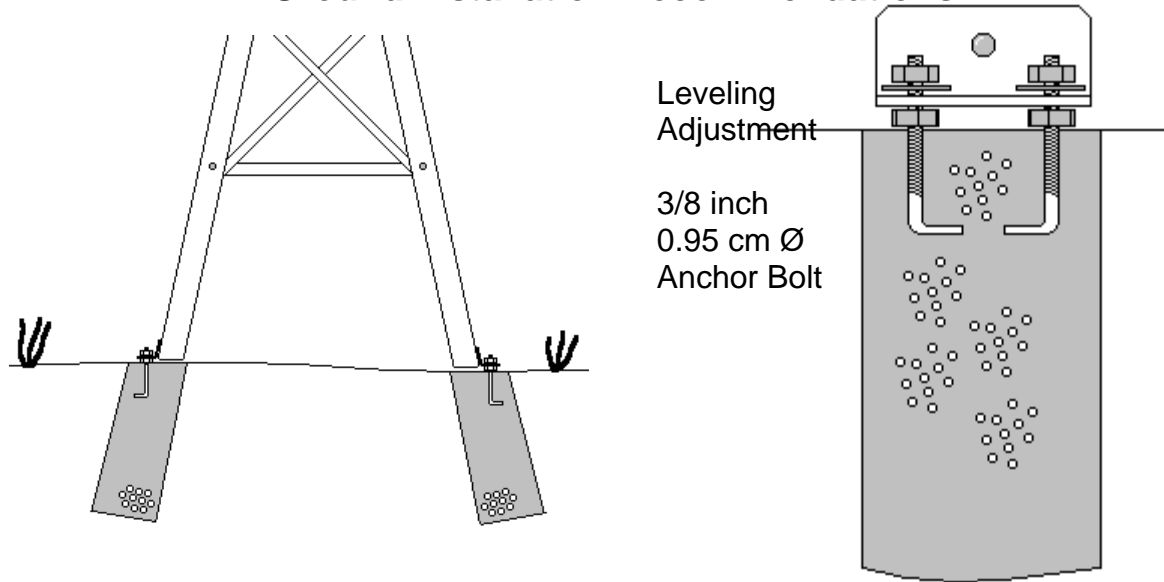
Glenmartin WARRANTY

Glenmartin warrants the RT-832 Roof Tower for 90 days from purchase. If this tower fails to give the original purchaser complete satisfaction within 90 days from the original date of purchase, return it to GlenMartin, Inc. and we will repair it, or replace it free of charge. GlenMartin, Inc. will not be liable for loss or damage to property or any incidental or consequential loss or expense from property damage due directly or indirectly from the use of this product.



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Ground Installation Recommendations

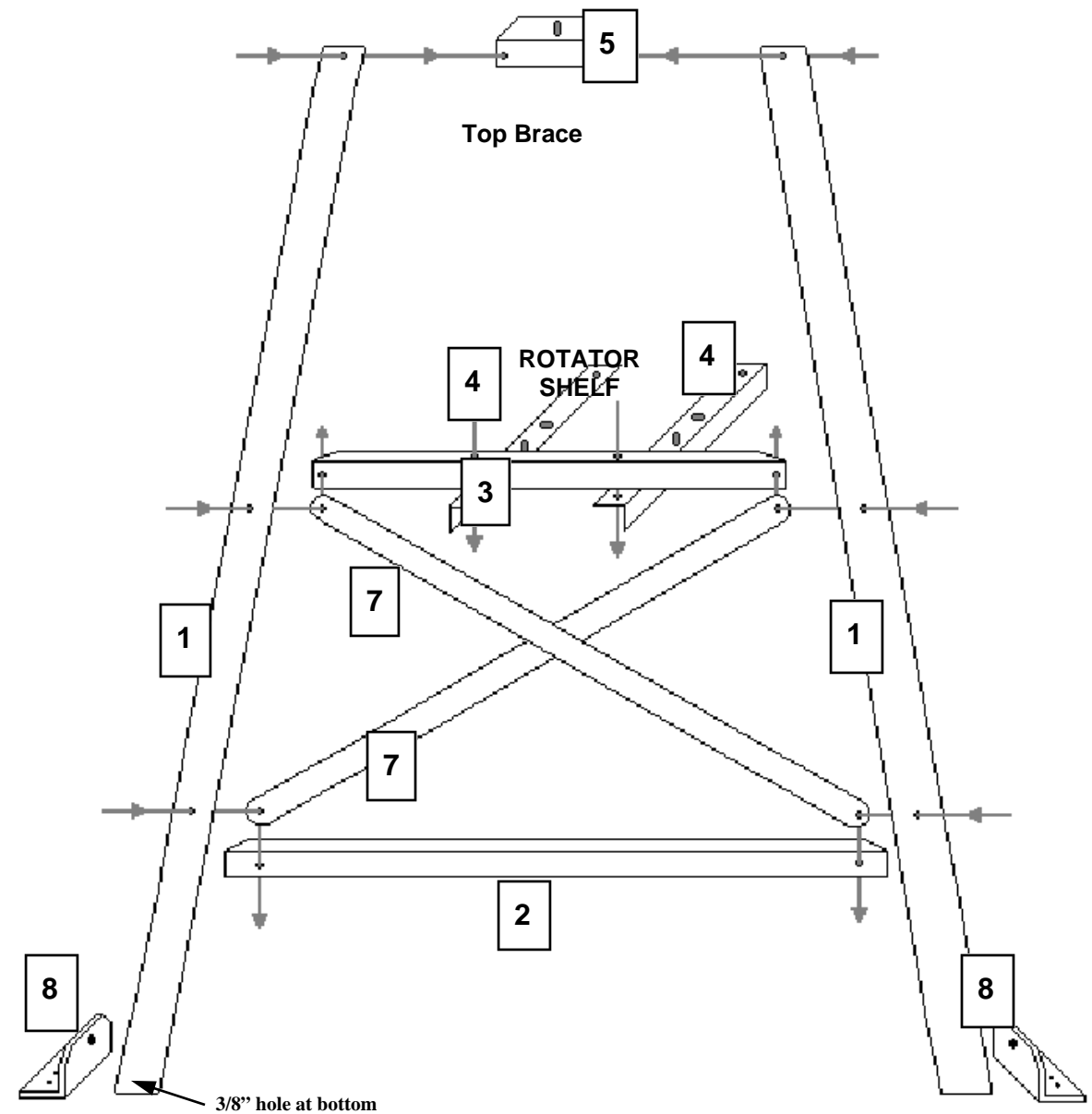


GROUND INSTALLATION RECOMMENDATIONS

1. Place 4 concrete post holes 6" (10-15cm) in diameter 24" (61cm) deep, or AT LEAST 6" (15cm) below the frost line.
2. Use 3/8" (0.95cm) anchor bolts with leveling nuts (order our Part # EL-3744) to secure mounting brackets. Ensure at least 1½" of the threaded portion of the anchor bolt is above the concrete surface.
3. Always install adequate grounding on your tower. (See back page.)

RECOMMENDATIONS ON MOUNTING ANTENNAS

1. Mount rotator on rotator shelf.
2. A Thrust Bearing should be used when using a rotator.
3. Use the shortest mast necessary to match installation.
4. Always keep tower, mast & antennas 1½ times the height away from overhead power lines.
5. Adjust rotator, thrust bearing and mast so they are concentric (centered).
6. We **strongly** advise lightning protection for your new tower. Ground your system to achieve a goal of ground resistance at 25 ohms or less. See our tower accessories on Page 8 of this manual.



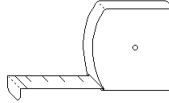
TOOLS YOU'LL NEED FOR ASSEMBLY AND INSTALLATION



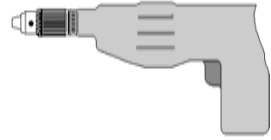
SOCKET SET



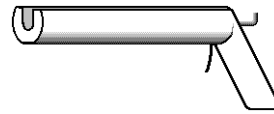
**ADJUSTABLE
END WRENCH**



TAPE MEASURE



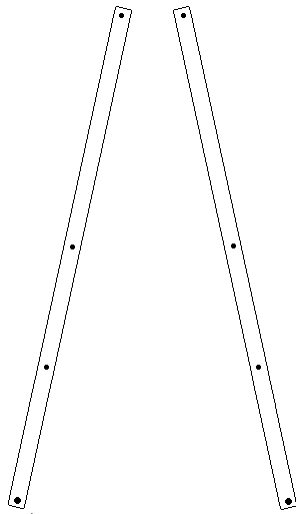
**ELECTRIC DRILL
5/16"/79mm DRILL BIT**



CAULKING GUN

ASSEMBLY

1. Lay out two legs (part #1) with the two large 3/8" holes at the bottom for attaching legs to mounting brackets (part #8).



3/8" hole at bottom

2. Bolt braces #2,3,5, and 7 between two legs with 1/4-20 stainless steel screws and nuts. The braces bolt to the inside of leg angle. Roof brackets (part #8) bolt on outside of the legs at the bottom with 3/8" bolt, washer and nut.

3. Lay out two more legs (part #1) and repeat step 2.

4. This is getting easier now. Join the previously assembled sides with the remaining parts (#2,3,5 and 7) in the same fashion as in step number 2.

5. Bolt the rotator support bars (part #4) in place between the part 3 pieces.

6. Tighten all nuts.

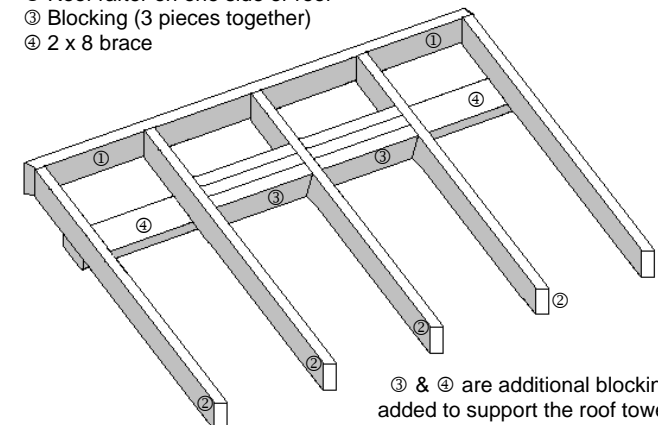
7. Bolt mounting brackets to outside of each leg so base of brackets can match pitch angle of roof.

TYPICAL ROOF INSTALLATION

1. These instructions assume a composition shingle roof on wood decking.
2. When possible, it is best to bolt the mounting brackets directly to the center of rafters (tower designed to fit 16" center rafters). If that is not possible, bracing should be added as in the drawing shown below.
3. Mastic is applied under & between the shingle flaps, then under the tower mounting brackets.
4. Drill pilot holes for the lag bolts. Fill the pilot holes with silicone before inserting lag bolts.
5. Once lag bolts are tight, caulk heads of bolts with additional silicone.
6. Use a level across the thrust bearing plates to ensure plumbness.

TYPICAL ROOF INSTALLATION PICTURE

- ① Ridge rafter at peak of roof
- ② Roof rafter on one side or roof
- ③ Blocking (3 pieces together)
- ④ 2 x 8 brace



③ & ④ are additional blocking added to support the roof tower

