

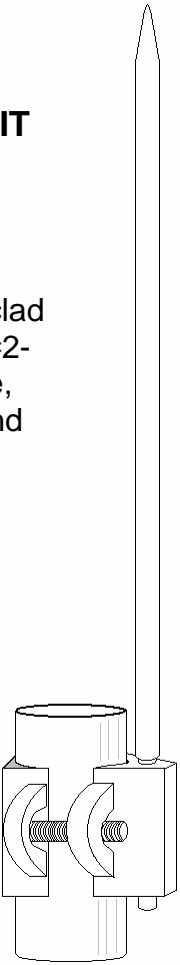
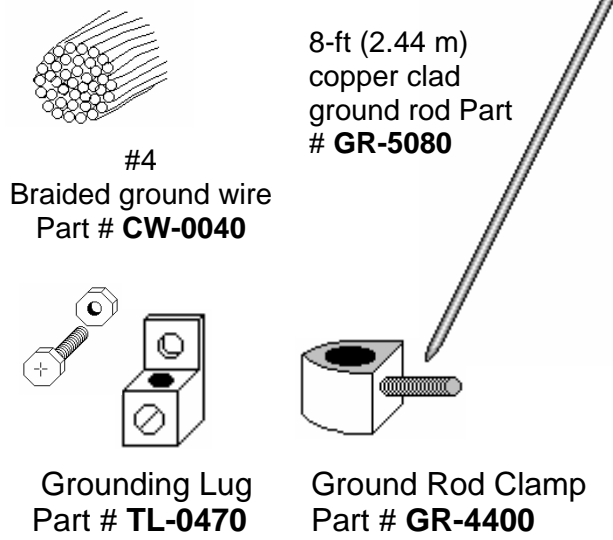
ACCESSORIES

GROUND ACCESSORIES

LIGHTNING ROD KIT

Complete kit with 18" tapered aluminum lightning rod, mast clamp, 8 foot copper clad ground rod, 4 feet of #2-Ø braided ground wire, one Grounding Lug and two Ground Rod Clamps.

Part # **LR-8400**



# MF-1331

## Fold-Over Tower

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**HOW TO ORDER** - Order from your authorized GlenMartin, Inc. distributor or call us at the number listed below. Check/money order/MasterCard/ Visa/ C.O.D. accepted. Our foreign sales department specializes in overseas shipments!

Notice: Dimensions, shipping weights and performance specifications are subject to variation within reasonable tolerances. Since changes and improvements are being made continually, specifications shown are subject to change without notice.

**GlenMartin, Inc.**  
13620 Old Hwy 40, Boonville,MO 65233  
Call our Customer Service Department Mon. - Fri. 9 am - 4:30 pm Central Time

**800-486-1223    <http://www.glenmartin.com>**



### Congratulations!

We would like to thank you for choosing a GlenMartin, Inc. **Fold-Over Meteorological Tower**. This fold-over tower is manufactured in the USA of quality 6061-T6 anodized aluminum, stainless steel and galvanized steel for durability and long life. Please take the time to inspect the winch cable and winch at least once a month for rust or other problems. Lightly grease the stainless steel winch cable as needed. With proper care, your fold-over meteorological tower should give you a lifetime of use.

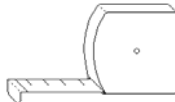
### TOOLS YOU'LL NEED FOR ASSEMBLY AND INSTALLATION



SOCKET SET



ADJUSTABLE  
END WRENCH



TAPE MEASURE

**READ CAREFULLY - THEN PLAN YOUR INSTALLATION PROCEDURE CAREFULLY**

Locate your tower site. Maintain a safe distance from all power lines. At least one and one-half to twice the height of the tower and antenna is a safe distance. Remember that any contact with power lines can be fatal to you! All towers should be properly guyed. All tower installations should be grounded per local or national codes. All towers should be installed by trained and experienced personnel and should be inspected by qualified personnel at least twice a year.

### Tower Installation:

**CONCRETE FOOTING SECTION - FB-13:** Dig appropriate size hole. Bolt three legs of footing section together and slip the bottom tower section into the base. Line up fixed base and tower leg holes, then ream 5/16" holes in 18 places (from square holes to round holes) in the tower legs. Bolt fixed base to first section of tower prior to setting fixed base in the hole. The steel portion of the base legs should extend about nine inches from the top of the concrete so that aluminum tower sections never come in contact with the concrete directly. The base assembly and first tower section should be leveled, plumbed, and temporarily guyed or braced while pouring the concrete. Crown the top of the concrete slightly to prevent water accumulation.

**TOWER CONSTRUCTION - M-13:** Lay out tower sections so that dark painted ends are at the bottom (pointing downward). Bolt complete sections together using short angle joint clips with a 7/16" nut driver. Make certain bolt heads are seated and torqued to nine foot-pounds. Take care that joining tower surfaces are flush.

**FOLD-OVER ASSEMBLY KIT:** See assembly instructions beginning on page 5.

**TOWER ERECTION:** Towers less than 50' may be hinged into vertical position with the help of several good men. Be cautioned to exert equal stress to tower legs to prevent undue stress, twist, or damage to tower. After tower is erected, replumb the tower with main leveling studs. In some cases, it may be preferable to hire a professional tower erector.

### 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.

*Please keep these instructions in a safe place after installation.*

### GlenMartin WARRANTY

GlenMartin, Inc. warrants this Fold-over tower for one full year. If this product fails to give the original purchaser complete satisfaction within one year from the original date of purchase, return it to the nearest authorized distributor and GlenMartin, Inc. will repair 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.



# TOWER OPERATING INSTRUCTIONS



To lower hinged section of your folding tower, remove the nuts from the bottom 2 U-Bolt clamps (being careful not to lose the 4 nuts). Next, unlock the leverage arm (if a padlock is being used) and manually pull the bottom of the leverage arm outward from the tower. Crank the winch cable to continue lowering the top sections of the tower.

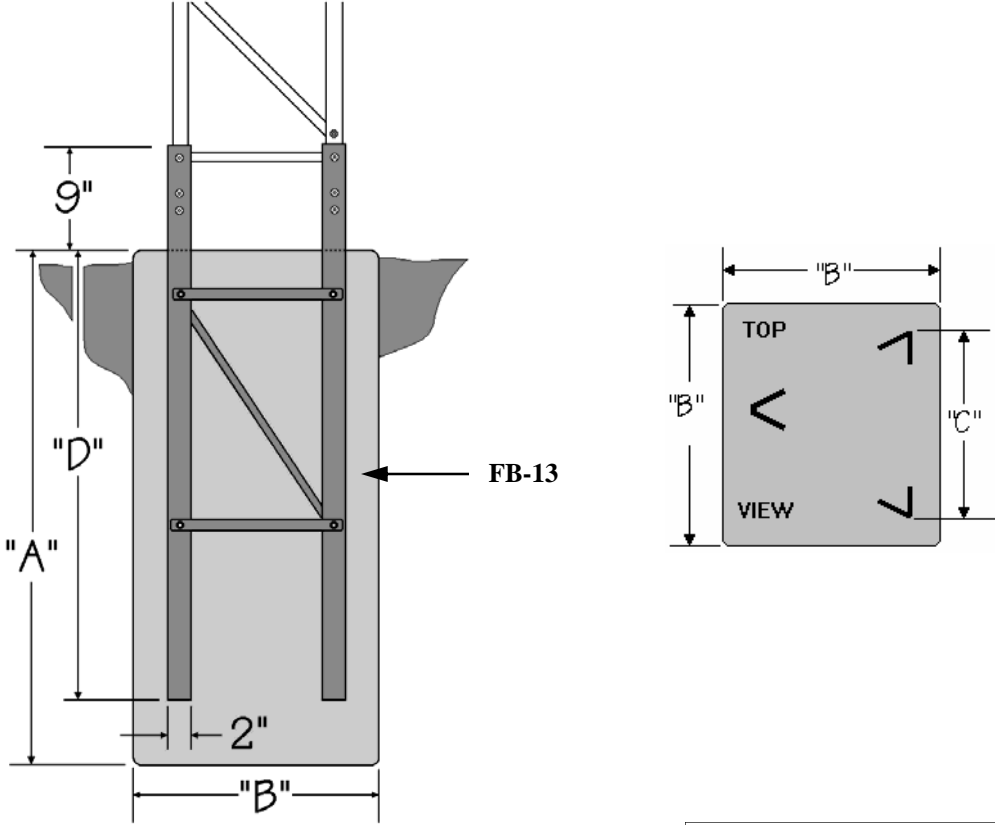
To return the tower to the normal position, crank the tower vertical with the hand winch, and replace four nuts on the bottom two U-Bolts holding the leverage arm to the bottom section of the tower. If locking the top section is desired, a paclock can be applied through the lock tab at the base of the leverage arm and the face plate on the tower.

Periodic inspection of your tower and fold-over assembly will assure long satisfactory service. A very light coat of oil on the stainless steel winch cable will help.

The winch has been fully lubricated at the factory; but for continued smooth performance and increased life, occasional greasing of gears, reel shaft and an occasional drop of oil on drive shaft bearings are recommended. The winch finish can be protected and will provide longer life if it is periodically washed with water and wiped with a light oil or wax.

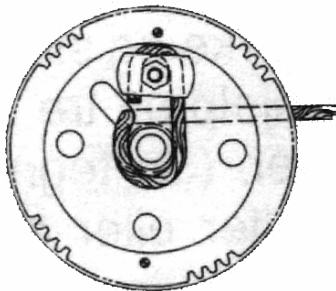
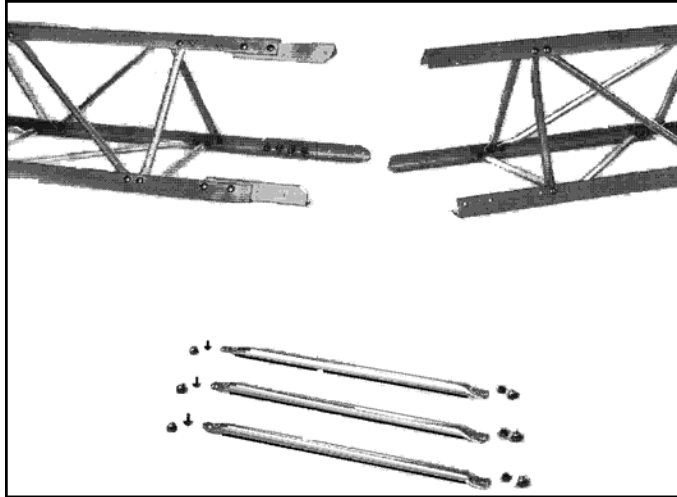
Keep winch in good working order. Damaged or severely-worn parts create unnecessary dangers and could result in personal injury or property damage.

Never install this fold-over tower in a position which, when folded over or erect, could come within one and one half times its height with mast of overhead power lines or other obstacles. The chart on Page 9 gives leverage-arm tolerances when tower is folded over.

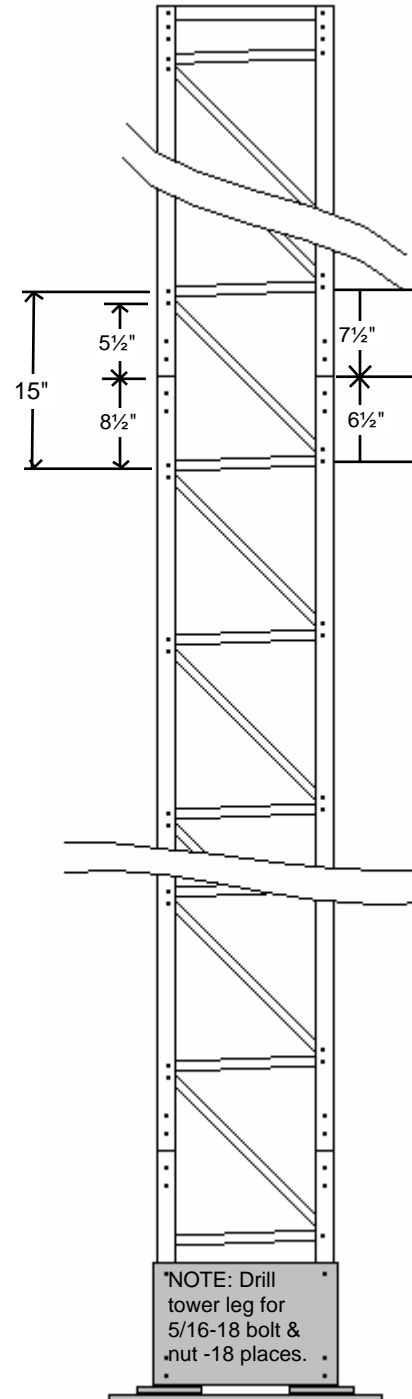


| FOOTING TYPE | "A" | "B" | "C"    | "D" | CU. YDS. CON-<br>CRETE REQ'D. |
|--------------|-----|-----|--------|-----|-------------------------------|
| FB-13        | 45" | 33" | 13"    | 39" | 1.05                          |
| CB-13        | 45" | 33" | 15.43" | 45" | 1.05                          |

| FB-13 Parts List |                         |
|------------------|-------------------------|
| 3                | Angle legs              |
| 6                | Horizontal braces       |
| 3                | Diagonal braces         |
| 18               | 5/16-18 Stainless bolts |
| 18               | 5/16-18 Stainless nuts  |
| 12               | 1/4-20x3/4 Hex bolts    |
| 12               | 1/4-20 nuts             |



**WINCH CABLE  
ANCHORING METHOD**



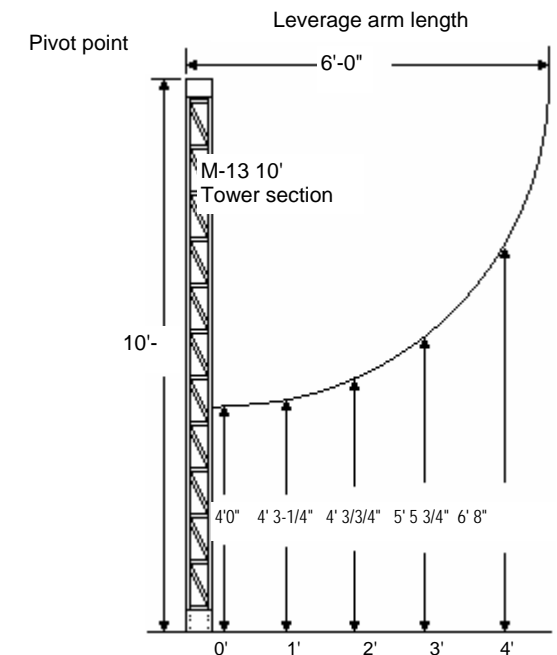
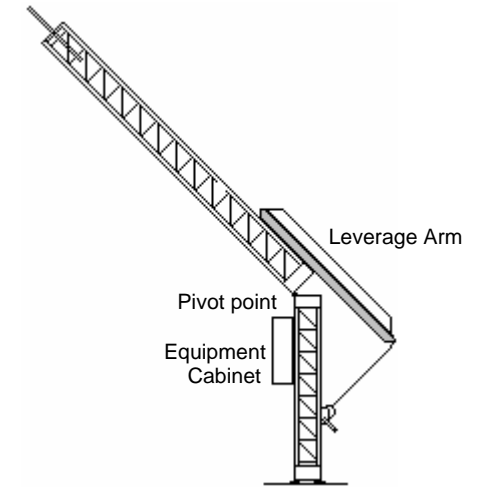
## Fold-Over Kit General Information

The fold-over assembly permits the installed tower to hinge at the 10' level. This allows the atmospherics mounted on the tower to be serviced by lowering the tower rather than having to reach them from a bucket truck. A hand operated winch lowers the upper section(s) of the tower to ground level for easy access to any components mounted at the top.

The assembly bolts to the tower using existing bolt holes and can be retrofitted to existing installed towers.

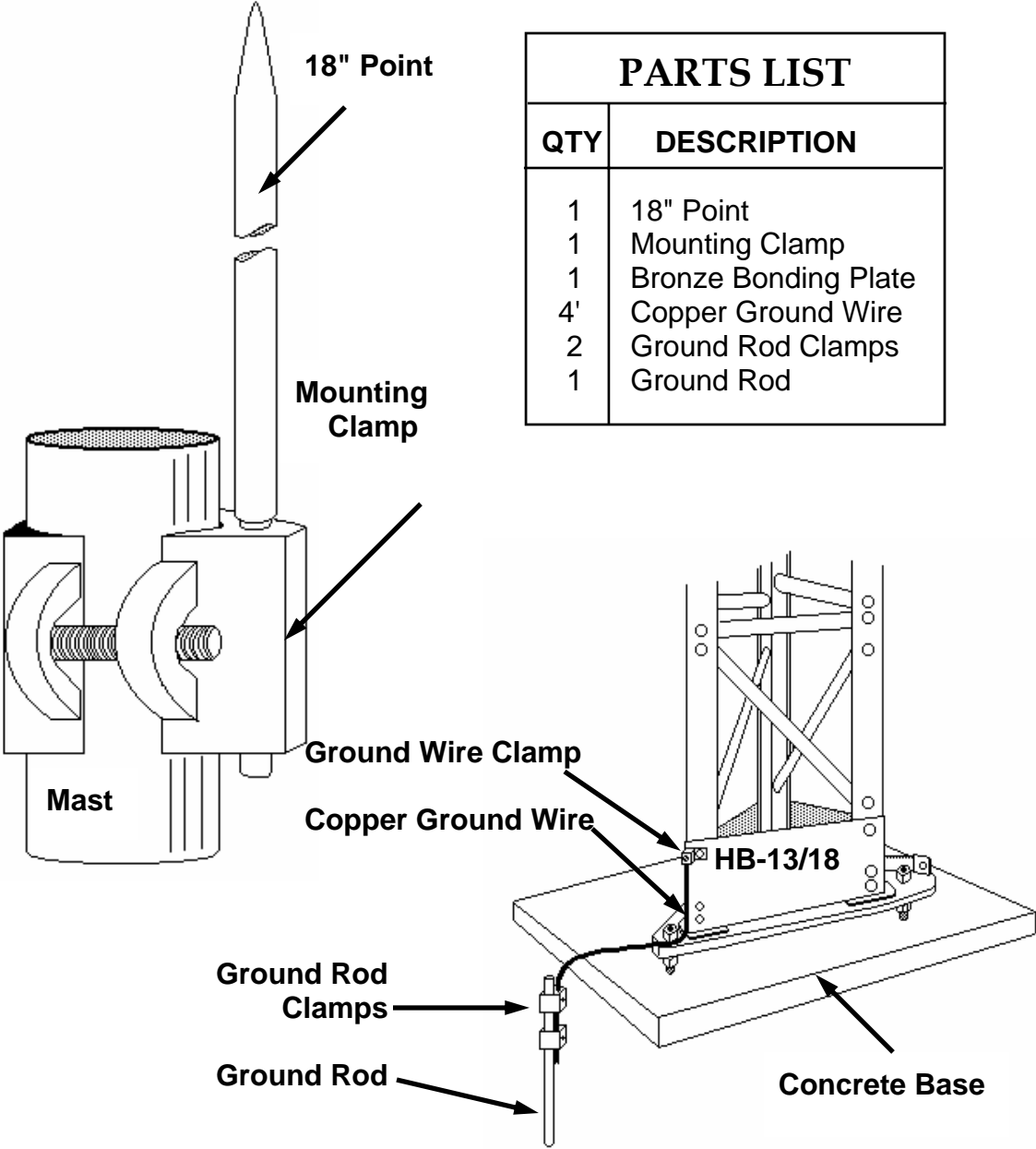
**Note: The tower folds OVER the equipment cabinet.**

Two legs of the tower are hinged and the third leg separates. A 2" pipe is bolted to this third leg serving as a leverage arm. All parts are made of 6061-T6 anodized aluminum, stainless steel or hot-dipped galvanized steel.



**Clearance Required at various  
distances from the base**

# OPTIONAL LIGHTNING ROD KIT INSTALLATION



## Fold-Over Assembly Kit Installation Instructions

1. Before assembling please take an inventory of parts received.
2. Bolt the winch to the winch plate using two 3/8" bolts and two 5/16" bolts. Locate the lower edge of the plate 3 feet from the start of the tower. Remove the six 1/4" carriage bolts from under the winch plate. Bolt the plate to the tower leg using six 1/4" hex head bolts. Drill two 1/4" holes in the tower leg and fasten the plate with two additional 1/4" hex head bolts.
3. Locate the U-bolt bracket at the 6'10" level. Remove four 1/4" carriage bolts under the clamp. Position the bracket and fasten with four 1/4" hex head bolts. Drill two additional 1/4" holes in the tower leg and fasten the bracket with two 1/4" hex head bolts.
4. The hinge assembly is bolted between the first two tower sections. If there are inside tower clips at the top of the first section, remove them at this time. Locate the hinge assembly on the tower sections and clamp in place so the mounting holes align. Drill through the mounting holes with a 5/16" bit so as to ream out the square holes in the tower leg. Secure the hinge assembly to the two lower sections with twenty-four 5/16" hex head bolts.

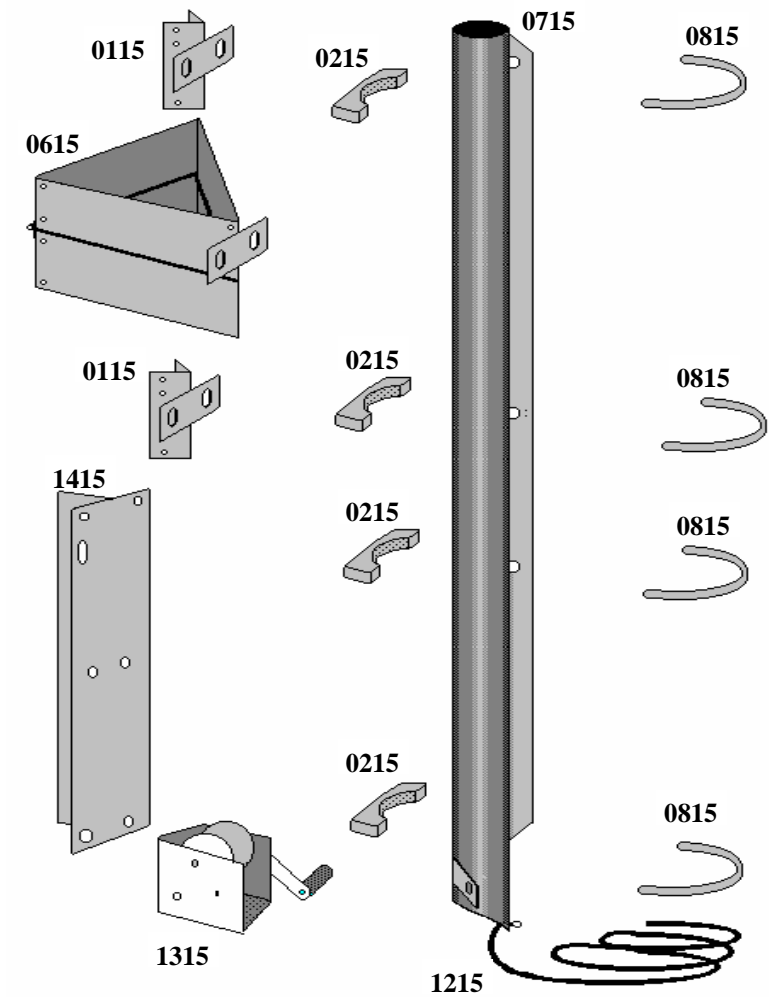
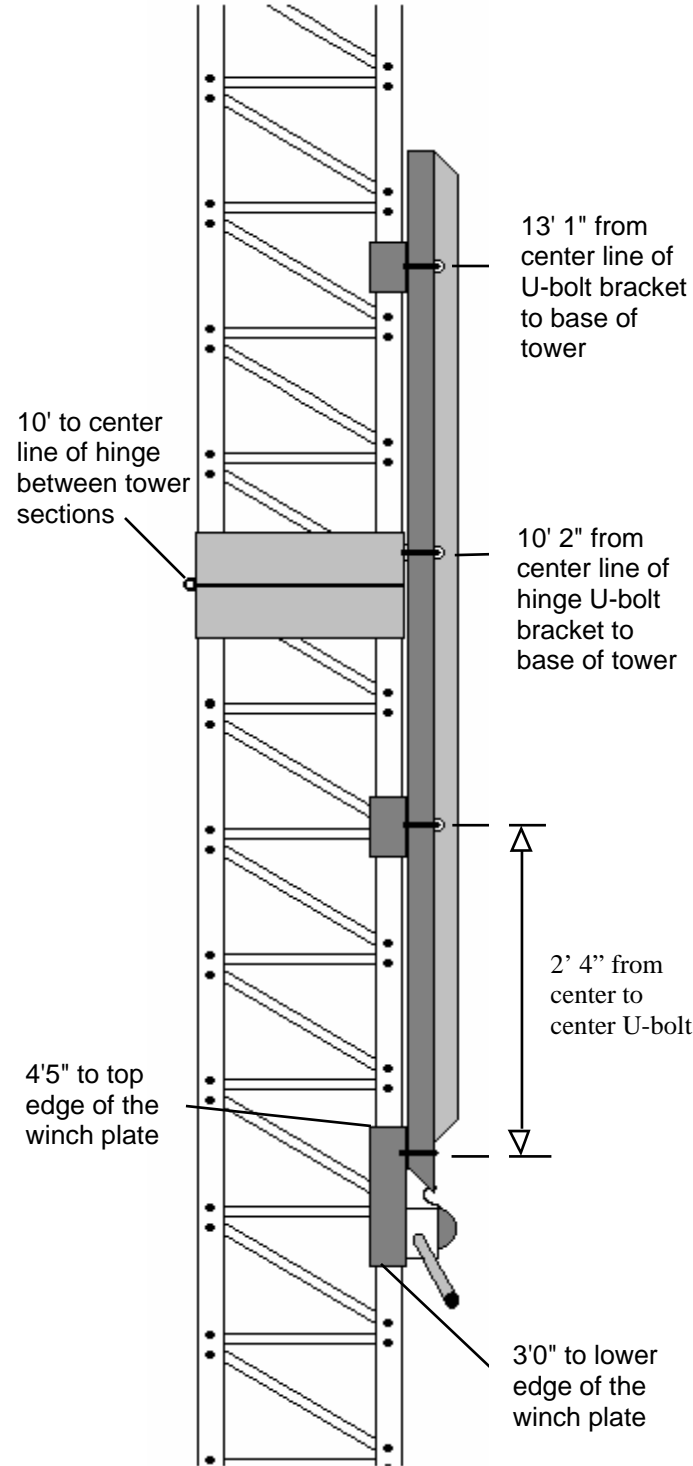
5. Repeat step 2 for the U-bolt bracket at the 13' 1" level.

6. Using a U-bolt and saddle placed between the mast pipe and the top mount, attach the mast to the tower. Check the location of the bottom of the mast to make sure the lock tab aligns with the lock hole in the winch plate. Tighten the U-bolt nuts.

7. Install the three other U-bolts in a similar manner.

8. Run the wire rope through the 1/4" hole in the end of the mast and attach the loose end to the winch with the clamps provided (see page 4 for winch cable attachment).

Note: Use existing punched holes in all assemblies and drill through with 5/16 bit to change the 1/4" square hole in tower leg to a 5/16 hole for the bolt.



KM-1000 Fold - Over Part List

| Line | Item | Qty | Description  | Line | Item | Qty | Description                 |
|------|------|-----|--|------|------|-----|-----------------------------|
| 1    | 0115 | 2   | Top Tower Mount  | 5    | 0715 | 1   | Mast Pipe                   |
| 2    | 0215 | 4   | Saddle   | 6    | 0815 | 4   | U-Bolt and two locknuts, SS |
| 3    | 0615 | 1   | Hinge Assembly   | 7    | 1215 | 1   | SS Winch Cable & stop       |
| 4    | 1515 | 1   | Hardware Kit<br>14 -1/4-20 bolts & nuts<br>2 -3/8 bolt, for winch<br>2 -5/16 bolts for winch<br>24 -5/16 bolts & nuts, hinge | 8    | 1315 | 1   | Winch and handle            |
|      |      |     |  | 9    | 1415 | 1   | Winch Plate Assembly        |