MODEL 905
TRIPOD

OPERATION MANUAL

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The Model 905 is a lightweight collapsible tripod designed for rapid deployment and retrieval. It can be easily transported and erected by a single person. It is intended to support a complement of weather or atmospheric instrumentation weighting up to 15 pounds at winds up to 90 mph.

Specification:

Weight	15 pounds
Collapsed length	48 inches
Erected height	6 feet or telescoping to 10 feet. Unit is provided with guy cables when mast is erected to 10 feet height.
Instrument mounting	Top of mast is same diameter as ¾ inch water pipe, to fit most cross arm clasps. All other members are 1-5/16 inch diameter.
Materials	Stainless steel or epoxy painted aluminum.

Transport Mode

When collapsed, the tripod legs are folded upward. The stainless steel release pins are replaced in their holes to prevent loss. The mast is telescoped inward and retained by the long stainless steel release pin. In this mode the overall length is 48 inches and the overall diameter is 9 inches. The guy cables are normally removed in this mode to make handling easier. Place them in the plastic bags provided to avoid tangling and damage.

Erecting

See Figure 1. This is usually easier if the tripod is placed upside down. Remove one of the stainless steel pins and pivot the leg until the tongue bottoms between the two plates on the hub; then reinsert the release pin. Repeat for the remaining two legs. Turn the tripod right side up and stand it on its legs.

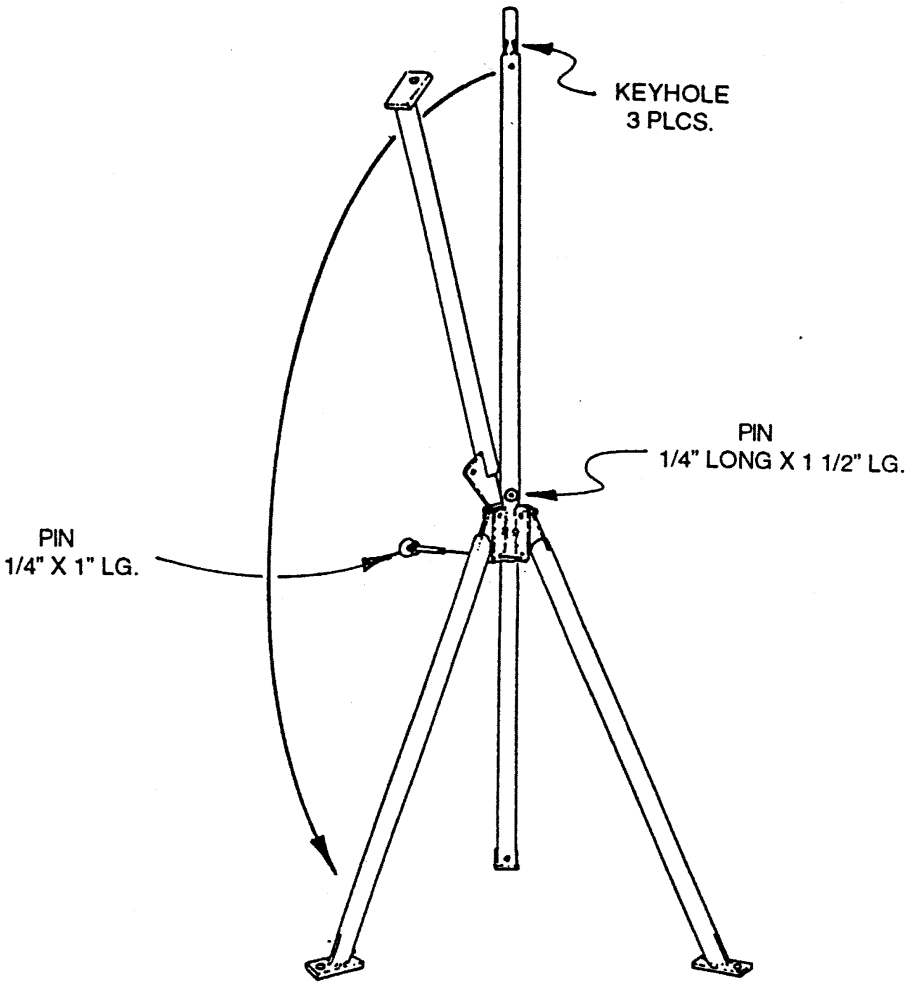

FIGURE 1

Raising and Lowering

At the 6-foot height, the mast release pin will always remain in place to ensure North orientation. If the 10-foot height is being used, note that the telescoping section has two aligned holes, one at the top and one further down. Any alignment made with the mast at six feet will be maintained when the mast is elevated to 10 feet if these holes are used. To raise the mast, simply remove the pin, slide the mast up until the upper set of holes align and re-pin.

Guying

At the 6-foot height, guy cables are not required. At 10 feet the guy cables should be used. To install the guy cables, simply slip the ball end of the cable into one of the holes at the top of the mast, bring the cable down through the slot at the bottom of the hole. See Figure 2. Open the latch at the bottom of the cable and insert the hook into the slit at the bottom of the appropriate leg. Repeat for all three legs. Do not close the latches at the lower ends of the cables until all three cables are attached. To lower the mast, it is necessary to first release all three latches. The guy cables are spring loaded and should never require adjustment.

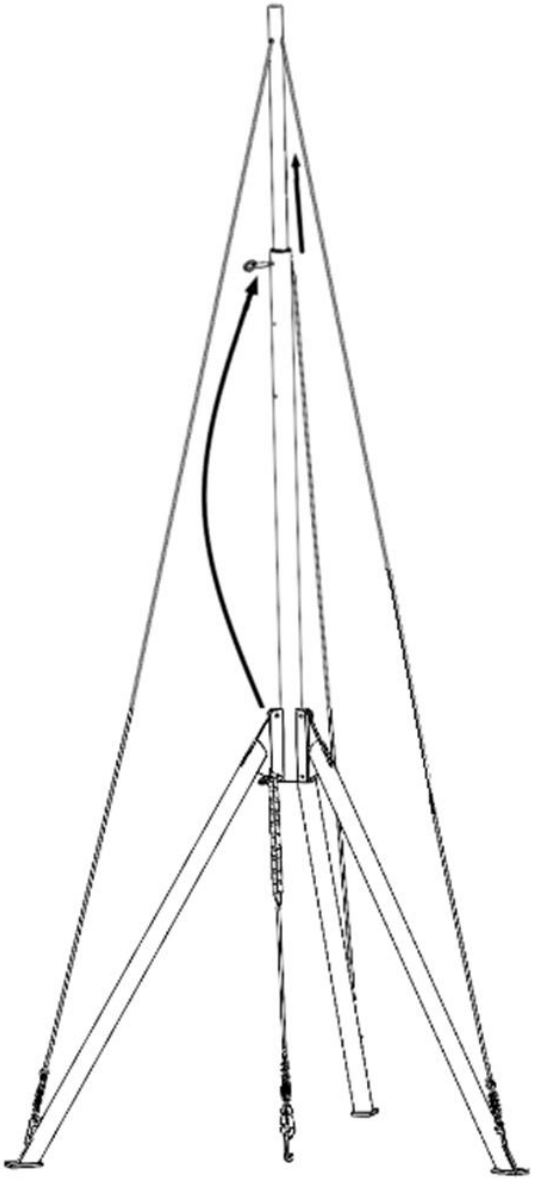

Figure 2 Guying

Securing the Tripod to the Ground

The unit will free stand in no-wind conditions. In wind up to 30 mph, the center tether may be used. See Figure 3.

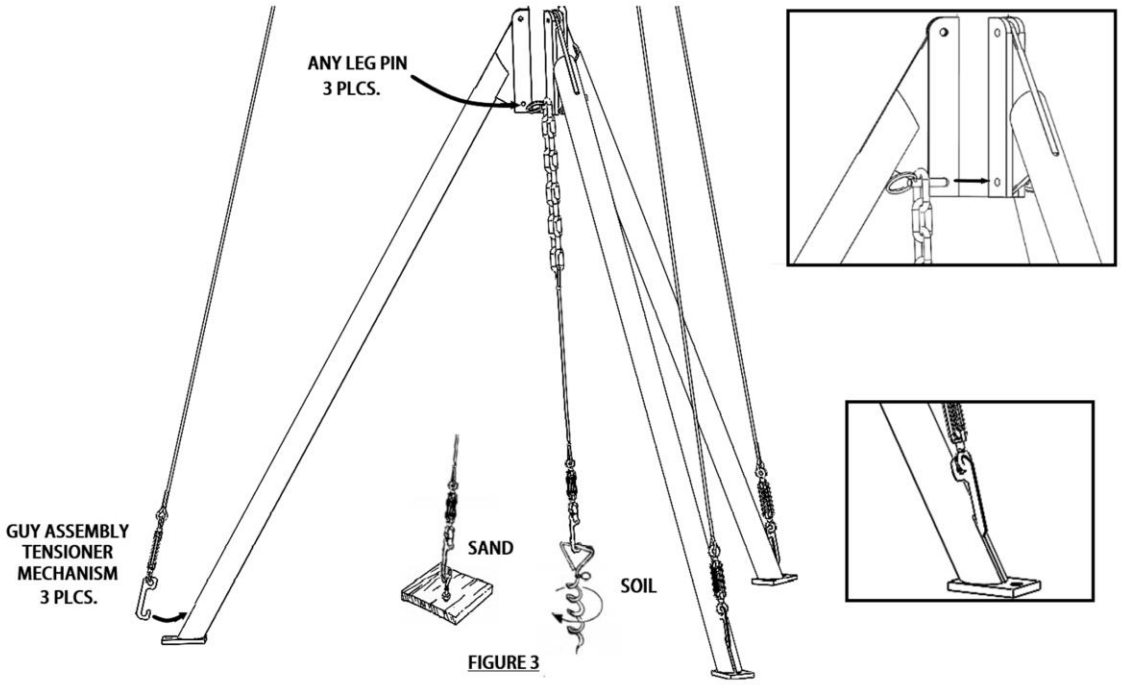

FIGURE 3

The auger is intended for use in firm soil. If the terrain is soft (i.e. sand or snow) the tether can be attached to a buried plate. The tether is supplied with an eyebolt, which may be fastened to a piece of plywood, sheet metal, or other convenient material, then buried. If the legs sink into soft terrain, likewise attach a piece of wide flat material to each leg with a bolt through each foot. Foot pads do not get buried.

The unit can also be staked to firm soil with steel re-bar stakes at each foot.

In winds over 30 mph the unit should be bolted or lag screwed to a solid deck. Holes are provided in the feet for this purpose.

If properly secured to a solid deck and with the guy wires in place, the unit will withstand 90 mph winds.

Tripod Mounting Base Detail

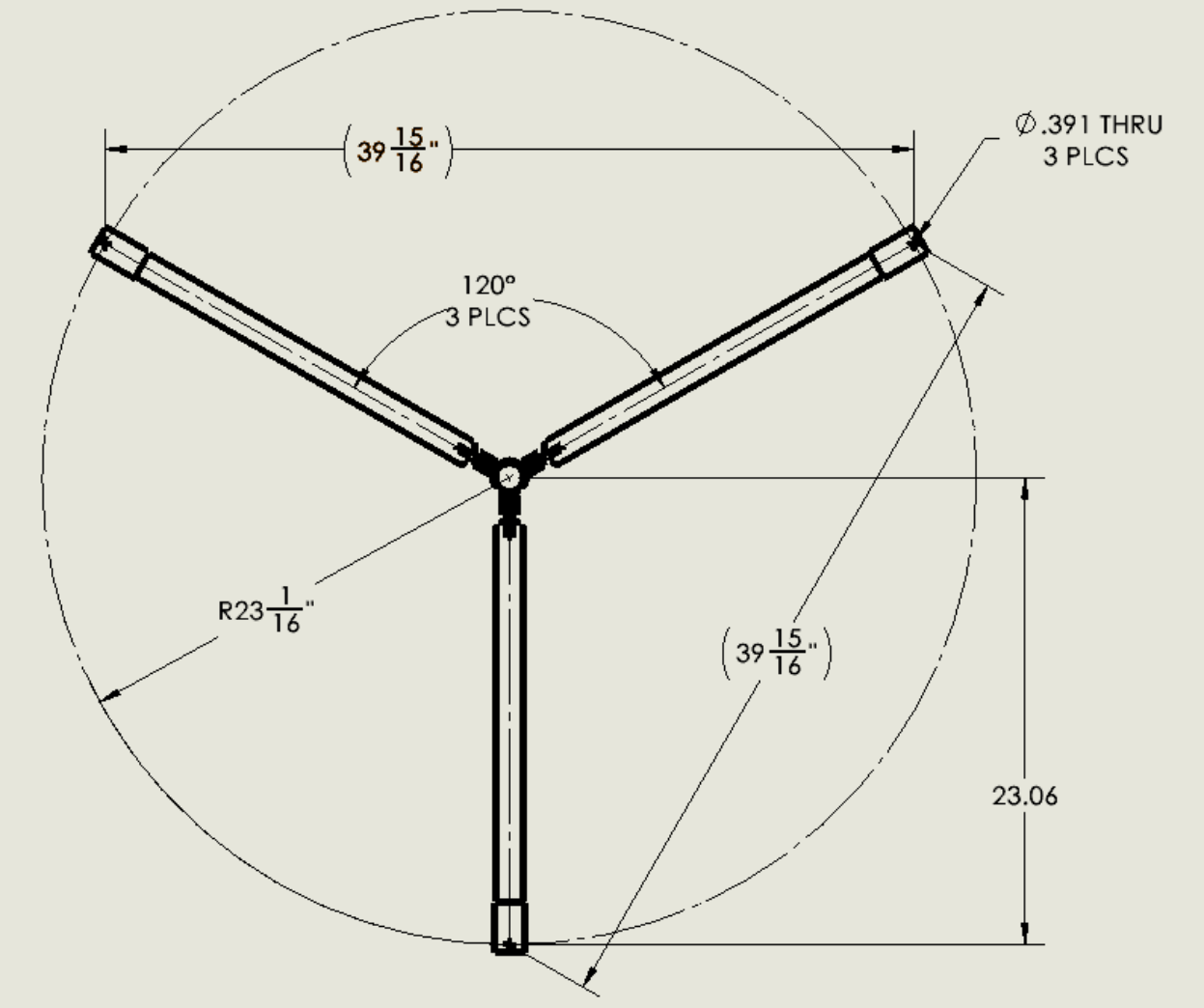

Fig. 4 Mounting Base Detail of 905 Tripod

Note: The radius dimension does have some tolerance to it as the legs on the tripod can shift out or in about 3/16 of an inch while in installation.

Replacement parts

The following replacement parts may be ordered from Met One Instruments.

1. Guy wire kit, MOI#10037
2. Short stainless steel release pin. ¼" X 1" (For legs, 3 required), MOI#790232
3. Long stainless steel release pin. ¼" X 1 ½" (For telescoping mast), MOI#790233
4. Ground tether kit, including: latch, spring, chain, eyebolt and auger. MOI#7090-1
5. Replacement guy wires. 1/16" X 105" S.S. ,MOI#975002
6. Mast Guide (top guide) attached to the fixed (outer) mast housing. MOI#3177
7. Mast Sleeve (bottom guide) attached to the sliding (inner) mast. MOI#3176