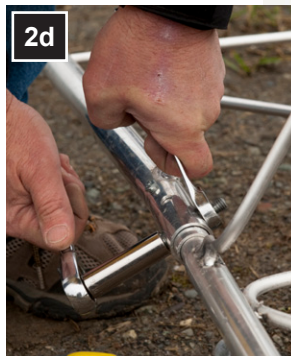
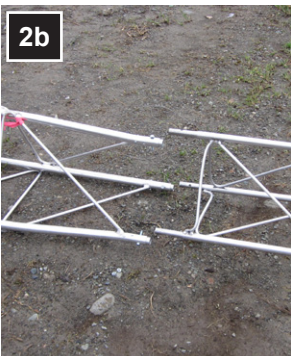




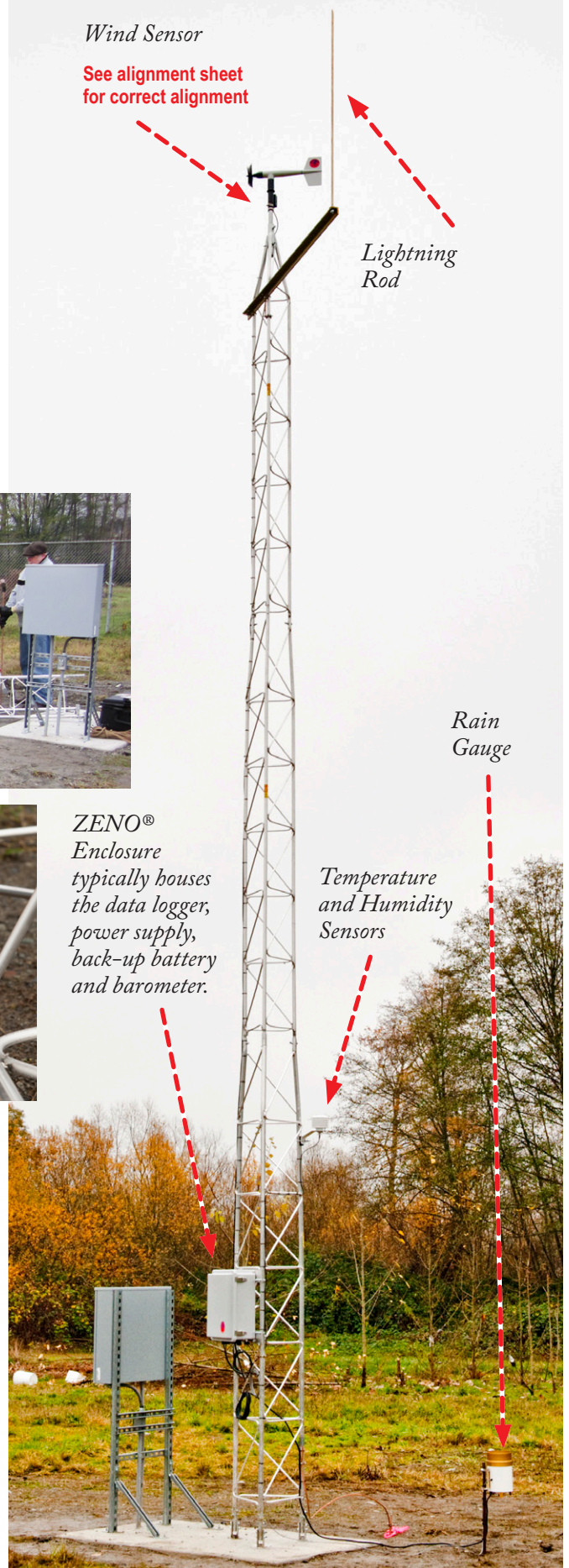
This is a generic overview of a permanent ZENO® tower installation. Your system may not include all of the components listed, or may have different components. Please refer to the installation documentation provided for each component in your system or contact Coastal for assistance.

TOWER

1. (Detailed tower assembly instructions can be found in the Tower Installation Package.) Attach two legs of the bottom tower section to the “front” anchors. Lay the tower base on its side.



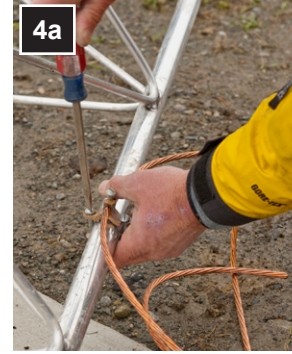
2. Align the top two tower sections end to end in line with the tower base. Connect the sections together, and tighten.





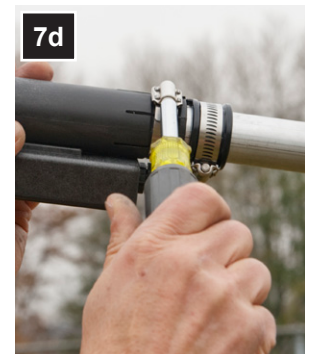
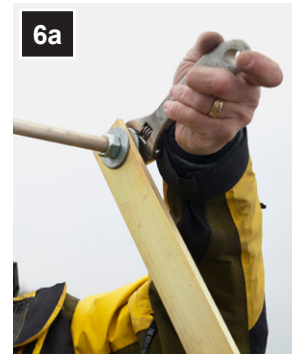
GROUNDING ROD

- Approximately two feet from the tower base, insert the grounding rod into the earth until approx. six inches remain above ground.
- Attach a grounding wire to the tower base with the provided clamp. Connect the other end to the grounding rod, leaving enough slack that the tower can be tipped down for maintenance. If preferred, the ground rod can be driven below the surface.



LIGHTNING ROD & MOUNT

- Attach the lightning mount to the top of the tower, just below the first horizontal bar, using two u-bolts. Secure a short grounding wire to one of the u-bolts and then to an adjacent tower leg.
- Install the Lightning Rod on the mount. The top of the Lightning Rod should be higher than the top of the Wind Sensor.



WIND SENSOR

- Mount the one-inch extension pipe to the top of the tower, then attach the Wind Sensor to the top of the extension pipe. See the Wind Sensor Alignment sheet to correctly align your Wind Sensor (when the tower is upright).

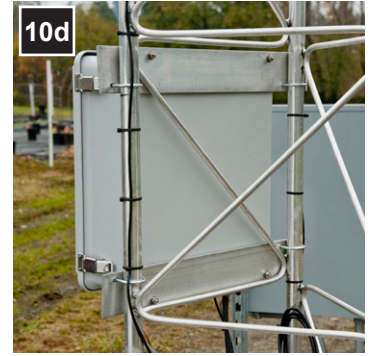
TEMPERATURE & HUMIDITY SENSORS

- Attach the Temperature and Humidity Sensor assembly to the tower base two meters above ground.



SOLAR RADIATION SENSOR

- The solar radiation sensor should be installed on the **SOUTH*** side of the tower, slightly above the Temperature and Humidity Sensor assembly, and in a manner so that it is never shaded by the tower or other sensors.
*(*NORTH side in the southern hemisphere)*



ZENO® ENCLOSURE

10. Bolt the two mounting plates to the top and bottom of the ZENO® enclosure.* Install the enclosure to the tower base at eye level using four u-bolts. (*Rotate the mounting plates 180 degrees to fit narrower towers.)
11. Attach one end of a small grounding wire to the base of the ZENO® enclosure and the other end to an adjacent tower leg.



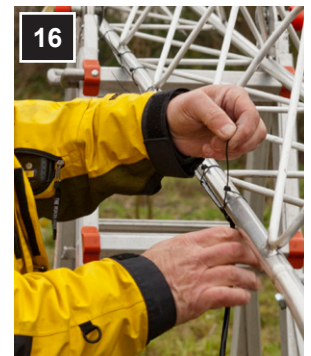
RAINFALL SENSOR

12. Mount the Rain Gauge to a sturdy support, with nothing over the top. Remove the top funnel from the sensor and verify that the tipping mechanism moves freely. Remove any device used to hold the tipping mechanism in place during shipping.



OTHER SENSORS

13. Carefully insert or bury the Soil Temperature Sensor in the area of soil to be monitored and attach the cable to the enclosure.
14. Fully insert the Soil Moisture Sensor prongs into the area of soil to be monitored and attach the cable to the enclosure.
15. Attach the Solar Panel to the tower base above the ZENO® enclosure so that it is **facing toward the Sun (SOUTH*)**. ****In the southern hemisphere, align the Solar Panel to face NORTH.***



ATTACH WIRES TO TOWER

16. Run all sensor wires down the nearest tower leg to the ZENO® enclosure, Using cable ties, attach every six to eight inches. When installing cables for power, communication, rain gauge or any other connection which is separate from the tower: leave enough slack in the cable to allow the tower to be lowered properly.



RAISE THE TOWER

17. Once all sensors are attached and the wires are secured to the tower, slowly raise the tower. While one person steadies the tower, insert the final bolts in the third tower leg and secure.

FINISH WIRING

18. Run all cables through the gasket feedthroughs and attach to the ZENO® as shown in the wiring diagram. Tighten gasket feedthroughs by hand.

