SECTION II. INSTALLATION

9.2.1 INTRODUCTION

The ceilometer has a modular design which allows for easy installation. The ceilometer is normally shipped partially assembled in two boxes. The boxes contain the ceilometer, electronics box, mounting column, and blower assembly. This section provides instructions for installing all of the ceilometer assemblies. The procedures assume that the support pedestal has been installed.

9.2.2 ASSEMBLY

The ceilometer, electronics box, mounting column, and blower assembly are preassembled units and do not require any additional assembly prior to installation.

NOTE

If pedestal is equipped with a hinge, leave the hinge closed and pinned during installation.

9.2.3 INSTALLING THE CEILOMETER

The ceilometer is installed on the support pedestal using the procedures in table 9.2.1 and referencing figures 9.2.1 and 9.2.2.

Table 9.2.1. Ceilometer Installation

Step	Procedure
	Tools required: 5/8-inch socket, flat screwdriver **WARNING** Death or severe injury may result if power is not removed from sensor prior to maintenance activities. Ensure that heater and primary power circuit breakers (located in DCP) are set to off (right) position.
1	Inside DCP equipment cabinet, ensure that circuit breakers on ceilometer circuit breaker module are set to off (right) position.
2	Install four bolts and washers securing mounting column to bottom of ceilometer. If ceilometer is to be equipped with a snow radiation shield, it should be installed using the procedure in table 9.5.33.
	WARNING Ceilometer is heavy equipment (weighs approximately 150 pounds) and requires two-man or mechanical lift. Failure to comply may result in injury to personnel or damage to equipment.
3	Carefully lift mounting column with ceilometer attached and position base over mounting flange of support pedestal.
4	Orient the receiver side of ceilometer to face away from the sun (in the northern hemisphere, face toward north and in the southern hemisphere, face toward south).

Table 9.2.1. Ceilometer Installation -CONT

Step	Procedure
5	Install 5/8-inch hardware securing mounting column to support pedestal flange.
6	Pass free end of site cables through interface conduit hole (figure 9.2.2) on bottom of electronics box and up through enclosure.
7	Connect site conduit connector to interface conduit hole (figure 9.2.2) on bottom of electronics box.
8	Connect transmit fiberoptic cable to TX connector on fiberoptic modem and connect receive fiberoptic cable to RX connector on fiberoptic modem (RX connector on module is nearest DB-9 electrical connector).
9	Connect site wiring (TB-1) in electronics box and secure Faraday box cover plate. On high voltage power supply PS1, set CB1 and CB2 circuit breakers to ON position. On Processor Board A1, set A1S1 to NORMAL (middle position). On Unregulated Power Supply Board A2, set A2S1 to ON position and A2S2 to NORMAL position.
10	Attach ground wire to ground stud located on bottom of electronics box (figure 9.2.2).
11	Remove any temporary dust covers from the optics and carefully install lens cover assembly over ceilometer.
12	Snap latches closed securing lens cover.
13	Carefully install blower assembly and route blower assembly electrical wire down the side to blower power connector J2 on bottom of ceilometer (figure 9.2.2).
14	Tighten screws securing blower assembly to lens cover.
15	Connect blower ac power cable to blower power connector J2 on ceilometer.
16	At DCP circuit breaker module, apply power to ceilometer.

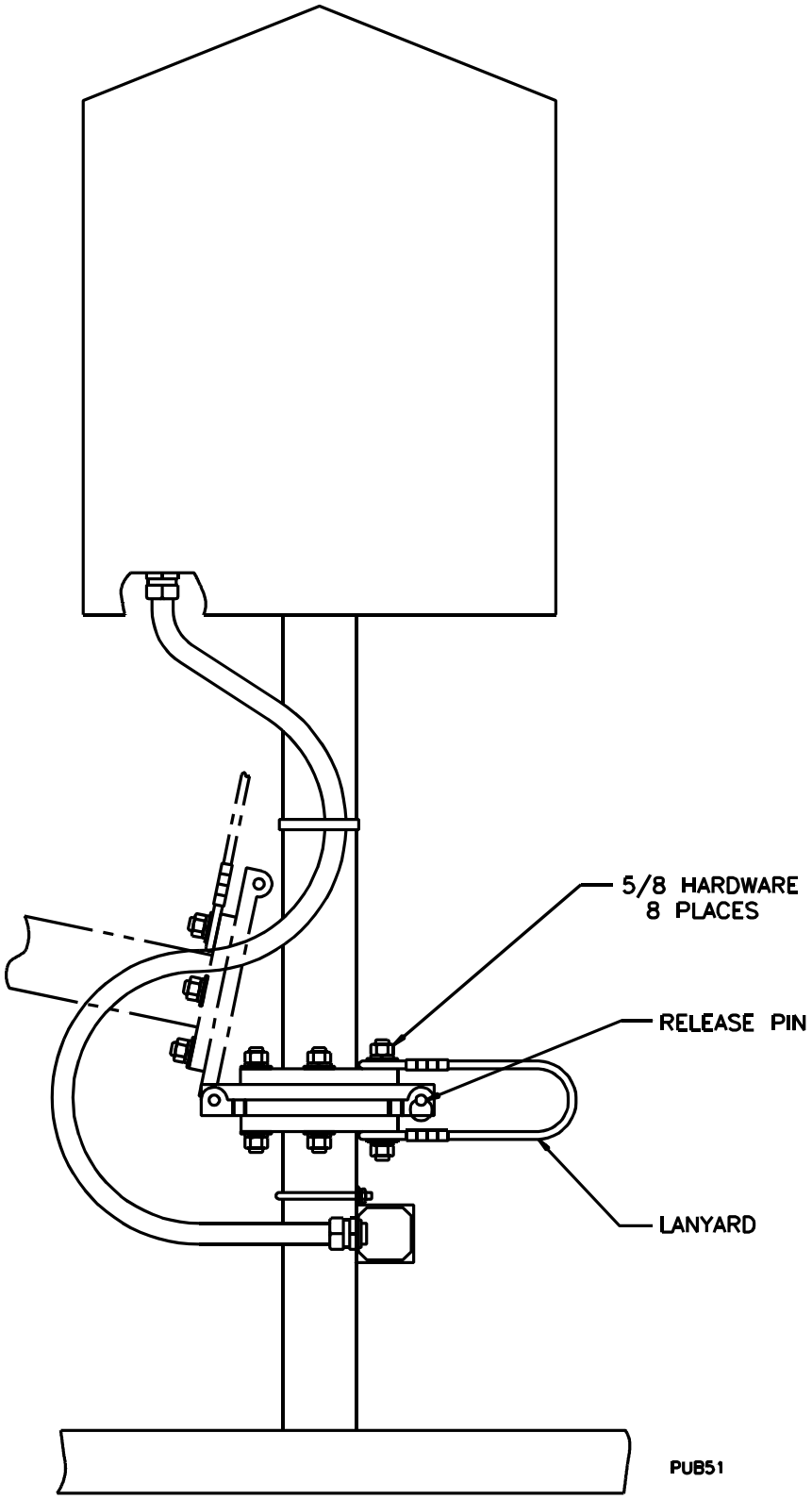

Figure 9.2.1. Ceilometer Mounting Diagram

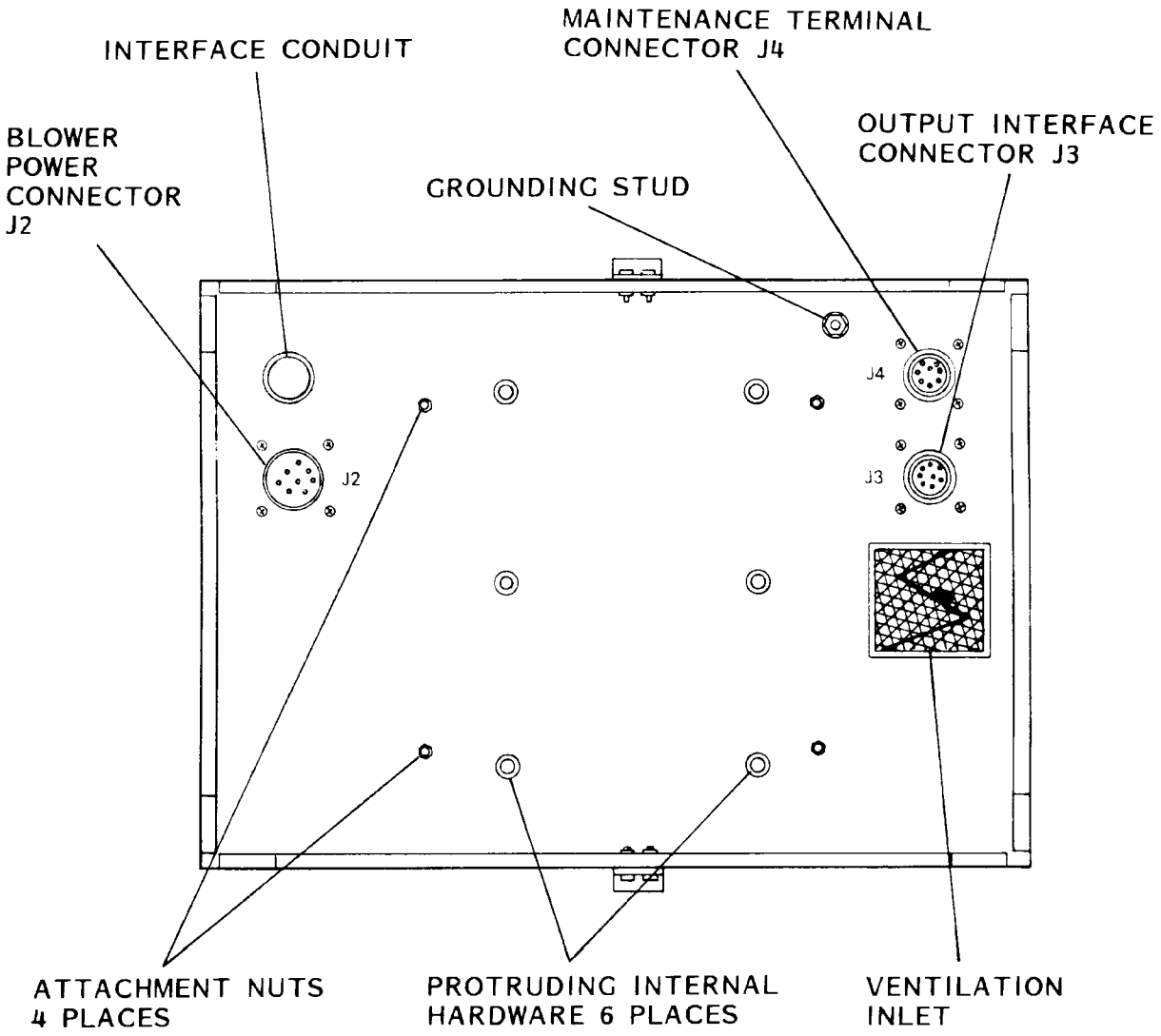

Figure 9.2.2. Ceilometer Connections (Bottom)