

Freezing Rain Sensor Grounds

GENERAL

This note provides information and directions to ensure that the Freezing Rain Sensor is properly grounded. The Freezing Rain Sensor is a field replaceable unit (FRU) and should not be repaired by the technician, however, the technician can test the unit to ensure proper operation before installation. When improperly grounded, the Electronics Enclosure (case) will float to 60 volts AC and can supply up to 400 milliamps of current.

PROCEDURE

Testing

The technician can test the Freezing Rain Sensor before installation at a remote site. It is important that the following grounds are connected at the time of the test. If either of these grounds are not connected correctly, there can be 60 volts present on the Electronics Enclosure (case).

1. The internal ground is chassis ground and it is connected between terminals J1-3 by a green wire.
2. The second ground is the Electronics Enclosure (case) ground and it is the no. 10 American Wire Gauge (AWG) ground wire connected to the single barrel lug on the Electronics Enclosure (case).

Installation

1. At the time of installation, follow installation procedures in the ASOS Site Technical Manual S-100 (page 11-7, Table 11.2.1). Ensure that step 10/11, "Connecting the no. 10 AWG sensor ground to raceway ground strap and ground stud, " is done.
2. Ensure that the internal ground connection is made at terminal J-3 with the green wire.

EFFECT ON OTHER INSTRUCTIONS

None.

REPORT MAINTENANCE ACTION

None.

Acting Chief, Engineering Division

