



# WHITE-RODGERS

## F145-1378

### Outdoor Remote Sensor INSTALLATION INSTRUCTIONS

**Operator: Save these instructions for future use!**

**FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY BEFORE  
INSTALLING OR OPERATING THIS CONTROL COULD CAUSE PERSONAL  
INJURY AND/OR PROPERTY DAMAGE.**

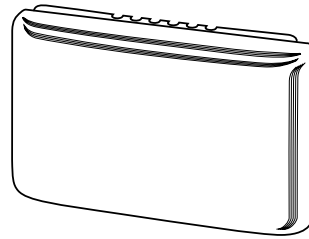
## DESCRIPTION

### APPLICATIONS:

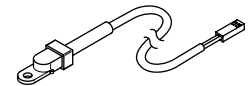
Outdoor temperature sensing as an accessory with:

1F93-380, 1F94-371, 1F95-371, 1F95-377, and any Comfort-Set 90® Series thermostat accepting an outdoor sensor.

The remote sensor **cannot** be used with systems where power interruptions are part of normal system operation.



Interior Mounting Base



Outdoor Probe

## PRECAUTIONS

### NOTE

If in doubt about whether your wiring is millivolt, line, or low voltage, have it inspected by a qualified heating and air conditioning contractor or electrician.

Do not exceed the specification ratings.

All wiring must conform to local and national electrical codes and ordinances.

This control is a precision instrument, and should be handled carefully. Rough handling or distorting components could cause the control to malfunction.

### CAUTION

**To prevent electrical shock and/or equipment damage disconnect electric power to system at main fuse or circuit breaker box until installation is complete.**

### WARNING

**Do not use on circuits exceeding specified voltage. Higher voltage will damage control and could cause shock or fire hazard.**

**Do not short out terminals on gas valve or primary control to test. Short or incorrect wiring will damage thermostat and could cause personal injury and/or property damage.**

**Thermostat installation and all components of the system shall conform to Class II circuits per the NEC code.**

## SPECIFICATIONS

**Temperature range of outdoor probe:** -40° to 140° F.

20 gauge, three-conductor shielded cable must be used for all remote sensor wiring.

## INSTALLATION

### SELECT SENSOR LOCATION

Proper location insures that the remote sensor will provide a correct outdoor temperature reading. Observe the following general rules when selecting a location:

1. The interior mounting base can be located a **maximum** of 200 feet from the thermostat.

2. Install the interior mounting base within 12 ft. of the intended outdoor probe location.
3. Never install the outdoor probe where it will be exposed to direct light from lamps, sun, fireplaces or any temperature radiating equipment.

(Installation instructions continue on page 2.)



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Replaces 37-6153B  
0126

## INSTALLATION (cont'd)

- Make sure there are no pipes or ductwork in the wall chosen for the base location.
- Outdoor temperature measurement requires installing the probe outdoors. Good probe locations would be under a bay window or overhang, out of direct sunlight. Direct sun exposure will affect sensed temperature. Install probe with spacer to obtain a more accurate temperature.

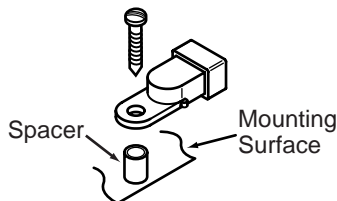


Figure 1. Probe with spacer

- Although connected to the probe wire for outdoor temperature sensing, the interior mounting base must be placed **indoors**. Therefore, the interior mounting base must be installed near the perimeter of the building, so that the probe wire can be run through to the outside of the structure and placed in the selected (shaded) location. The outdoor probe wire is 12 feet long (**and should not be cut or spliced**), so plan the placement of both the probe and interior mounting base accordingly. Any excess wire may be coiled or bundled. The probe should be connected to E2 as shown in figure 2.

## WIRING REMOTE SENSOR

Installation of the interior mounting base requires 20 gauge, three-conductor shielded thermostat wire. The thermostat and interior mounting base must be wired so that terminals “+”, “S”, and “-” on the base match up correctly with “+”, “OT”, and “-” on the thermostat.

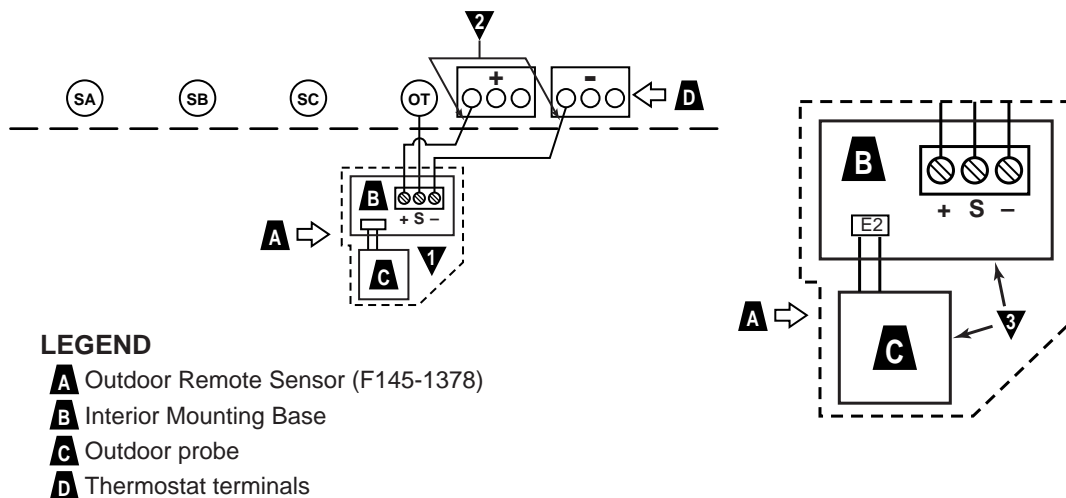
See fig. 2 for correct wiring between thermostat and interior mounting base.

### ⚠ CAUTION

Do not allow the 3-conductor wire to be pinched between the mounting base and the wall.

Check wire connections before applying power. Improper connections will lead to permanent damage to the mounting base.

Shielded cable must be used. Cable shield must be connected to “-” on the THERMOSTAT ONLY.



### LEGEND

- A** Outdoor Remote Sensor (F145-1378)
- B** Interior Mounting Base
- C** Outdoor probe
- D** Thermostat terminals

### NOTES

- See detail view at right
- Systems with three indoor and one outdoor remote sensors will require “doubling up” + and - connections at two screw terminals
- Interior Mounting Base should be located inside building.** Only probe should be placed outdoors.

Figure 2. Typical wiring diagram for outdoor remote sensor

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