PENTAIR

TEMPERATURE SENSOR KIT
FOR USE WITH INTELLICENTER™, EASYTOUCH®, INTELLITOUCH®, SUNTOUCH® AND COMPOOL® TO EASYTOUCH UPGRADE CONTROL SYSTEMS

INSTALLATION GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Technical Support

(800) 831-7133
8.00 am to 8.00 pm ET
8.00 am to 5.00 pm PT

Kit contents

The following items are included in the water/air temperature sensor replacement kit:

Temperature Sensor Assembly - P/N 520872
- Temperature Sensor, 10k Temperature Sensor - P/N 520326
- Temperature Sensor, 10k Ohms, 40 ft - P/N 521583
- Temperature Sensor, 10k Ohms, 20 ft - P/N 521584
- Hose Clamp (1-7/8" - 5" Clamp) - P/N 476168
- Installation Instructions (this manual)

Related manuals

IntelliCenter™ Control System User's Guide (P/N 522990)
IntelliTouch® Control System User's Guide (P/N 521075)
EasyTouch® Control System User's Guide (P/N 521044)
SunTouch® Control System User's Guide (P/N 520785)

Water/Air Temperature Sensor

The sensor can be used as a water or air sensor. The 10k Ohms Temperature Sensor can be is used with IntelliCenter, IntelliTouch, EasyTouch, SunTouch and Compool to EasyTouch Upgrade Control Systems.

Sensor Installation

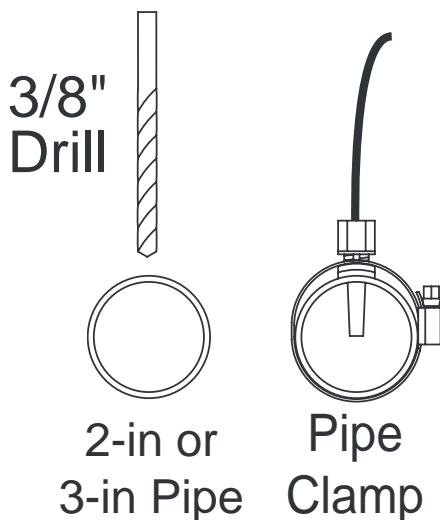Note: See page 4 and 5 for circuit board sensor connector locations.

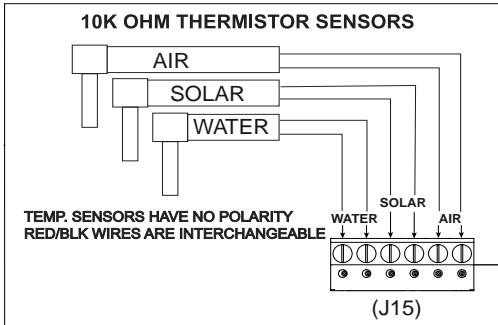> **IMPORTANT NOTE: Replacing the existing Water Temperature Sensor.**
> When replacing the existing water temperature sensor, be sure to use drill a 3/8th inch hole into the 3-in or 2-in pipe for the new sensor. Note: The existing water sensor hole is 5/16th inch, and will not fit the new replacement sensor.

1. The existing water sensor is located between the filter pump and the filter. Remove the sensor.
2. Drill a 3/8th inch hole in the 3-in or 2-in pipe. Position the hose clamp over the replacement sensor and gently tighten around pipe. **Caution: Do not overtighten clamp.**
3. Route the cable up through the low voltage compartment of the Load Center or Power Center to the Outdoor Control Panel circuit board.
4. Strip wires back 1/4 inch. Connect the sensor wires to **WATER** screw terminals. See page 4 and 5 for screw terminal location.
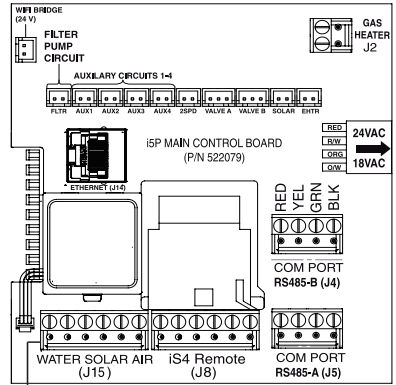
Ambient Air Temperature (Freeze Protection) Sensor Replacement

- Mount sensor in open air, in shaded area, away from air conditioners. Route the cable up through the low voltage compartment of the Load Center or Power Center to the Outdoor Control Panel circuit board. Use cable ties to fasten sensor cable to pipes. Strip wires back 1/4 inch. Connect the sensor wires to **AIR** screw terminals. See page 4 and 5 for screw terminal location.

3/8"
Drill

2-in or
3-in Pipe

Pipe
Clamp

IntelliCenter™ Control System Circuit Board

10K OHM THERMISTOR SENSORS

AIR
SOLAR
WATER

TEMP. SENSORS HAVE NO POLARITY
RED/BLK WIRES ARE INTERCHANGEABLE
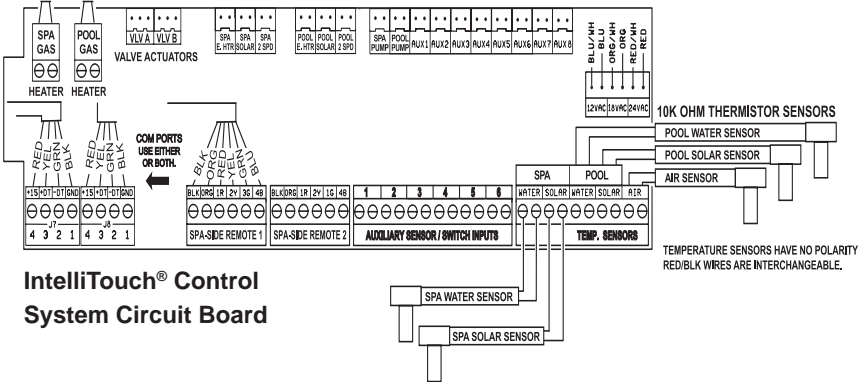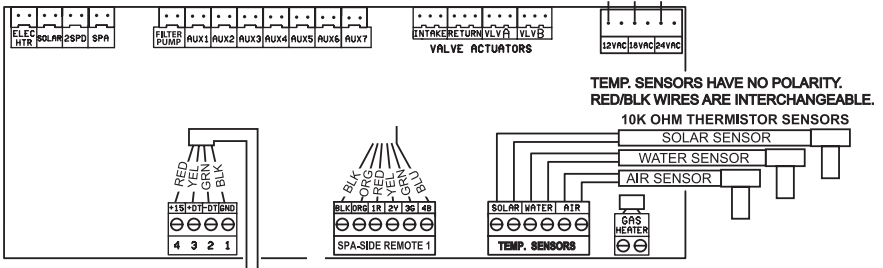
SOLAR
WATER   AIR

(J15)

IntelliCenter Control System Circuit Board
(Air, Water and Solar sensor location)

IntelliTouch® Control System Circuit Board

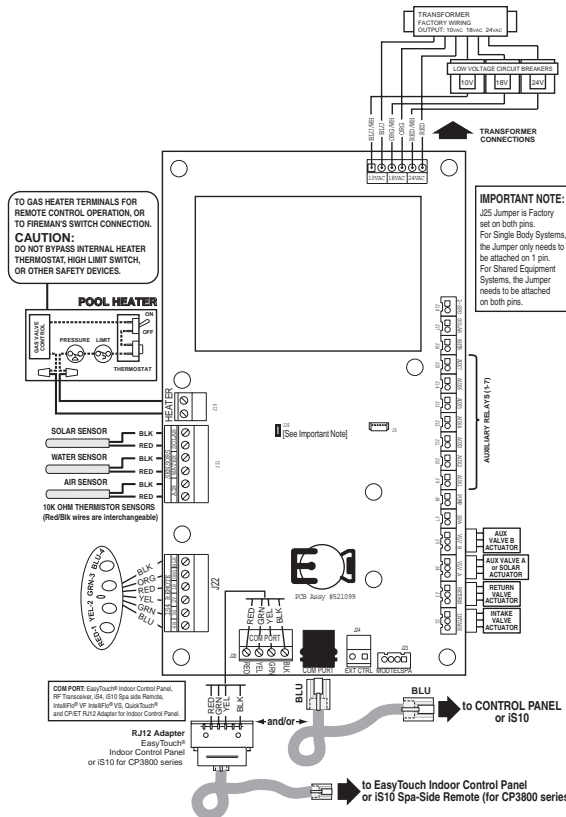**EasyTouch® Control System Circuit Board**

SunTouch® Control System Circuit Board

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GAS HEATER
J12

CR2032 +3V        RESET

RED  YEL  GRN  BLK

+15  +DT  -DT  GND        WATER  SOLAR  AIR
  4    3    2    1

J9

18VAC  24VAC

INTAKE  RETURN  SOLAR  PUMP  AUX 1  AUX 2  AUX 3
VLV A   VLV B   VLV C
VALVE ACTUATORS

SOLAR ONLY
CLNR
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WATER SENSOR
SOLAR SENSOR
AIR SENSOR
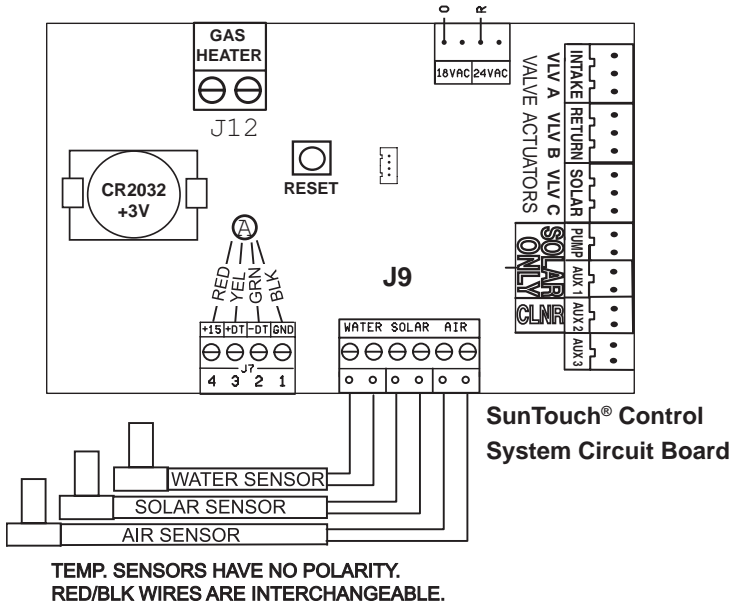
TEMP. SENSORS HAVE NO POLARITY.
RED/BLK WIRES ARE INTERCHANGEABLE.

COMPOOL® TO EASYTOUCH® WIRING DIAGRAM

TRANSFORMER FACTORY WIRING
OUTPUT: 10VAC 18VAC 24VAC

LOW VOLTAGE CIRCUIT BREAKERS
10V   18V   24V

TRANSFORMER CONNECTIONS

10VAC 18VAC 24VAC

IMPORTANT NOTE:
J25 Jumper is Factory set on both pins.
For Single Body Systems, the Jumper only needs to be attached on 1 pin.
For Shared Equipment Systems, the Jumper needs to be attached on both pins.

TO GAS HEATER TERMINALS FOR REMOTE CONTROL OPERATION, OR TO FIREMAN'S SWITCH CONNECTION.
CAUTION:
DO NOT BYPASS INTERNAL HEATER THERMOSTAT, HIGH LIMIT SWITCH, OR OTHER SAFETY DEVICES.

POOL HEATER

GAS VALVE CONTROL   ON / OFF
PRESSURE LIMIT
THERMOSTAT

HEATER

SOLAR SENSOR   BLK / RED
WATER SENSOR   BLK / RED
AIR SENSOR   BLK / RED
10K OHM THERMISTOR SENSORS
(Red/Blk wires are interchangeable)

[See Important Note]

AUXILIARY RELAYS (1-7)

AUX VALVE B ACTUATOR
AUX VALVE A or SOLAR ACTUATOR
RETURN VALVE ACTUATOR
INTAKE VALVE ACTUATOR

BLK ORG RED YEL GRN BLU
RED-1 YEL-2 GRN-3 BLU-4

RED GRN YEL BLK
COM PORT

PCB Assy 8521099

COM PORT
EXT CTRL   MODEM/SPA

COM PORT: EasyTouch® Indoor Control Panel, RF Transceiver, iS4, iS10 Spa side Remote, IntelliFlo® VF IntelliFlo® VS, QuickTouch® and CP/ET RJ12 Adapter for Indoor Control Panel.

RED GRN YEL BLK

BLU   BLU → to CONTROL PANEL or iS10

RJ12 Adapter
EasyTouch® Indoor Control Panel or iS10 for CP3800 series

← and/or →

→ to EasyTouch Indoor Control Panel or iS10 Spa-Side Remote (for CP3800 series)

Compool® EasyTouch® Upgrade Control System Circuit Board

Notes

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