

## Installation Instructions

# HotRod™

## 21D64-2

Universal Hot Surface Ignitor

## 120 Volt Nitride Ignitor

Universal Replacement for Silicon Carbide Ignitors

**Bel-Aire**  
ElectronicAirCleaners.com  
**Purchase Here!**



More than twice the  
ignition surface area  
than the competition

**White-Rodgers™**

# **WARNING**

We strongly recommend that the installation is carried out by a qualified gas appliance service provider.

## Warning

Follow the recommended installation instructions carefully. Failure to do so will void the warranty and may lead to injury or property damage.



## Shock Hazard

- Always turn off electric power before working on any appliance.
- Ensure proper connection to all wires.



### Explosion Hazard

- Shut off gas to appliance before installation begins, and do not reconnect until installation is complete.



### Fire Hazard

- Under no circumstances exceed the specified voltage of 120 volts.
- Ensure that components do not come into direct contact with water (for example, spray, dripping water or rain).
- Improper and dangerous operation can result from wiring errors.
- Ensure that wiring is routed securely, and away from any flame.

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Because of continued improvement to the product, White-Rodgers reserves the right to alter specification.

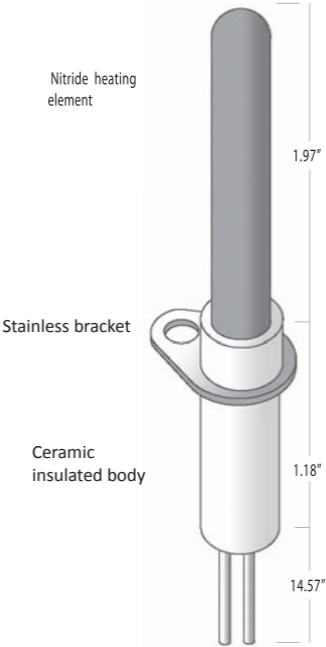
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## Ignitor Specifications

### Ignitor Specifications

Time to 1200°C	< 6 seconds @ 120 volt
Cold Resistance	8-15 ohms @ 25°C
Operating Voltage	120 volts +10% -15%
Power Rating	100-160 watts
Temperature Rating	250°C

# Ignitor Dimensions



# Installation Instructions

Please read all these instructions to the end carefully before beginning installation.

1. Turn off the gas and electrical supply and then identify which type of ignitor is inside your appliance. See pages 6--Inside back cover.
2. Unplug your existing ignitor retaining all fittings, and match it up with the diagrams.
3. Compare the position of the alignment tag on your existing ignitor carefully to the top view diagrams. Ensure that you have the correct ignitor type.
4. Fit the universal adaptor bracket to the appliance using existing screws. Screw the ignitor into adaptor, using the screw provided.
5. Attach the wires from the appliance onto the ignitor, by twisting the stripped ends together, matching one wire from the ignitor to one wire from the appliance.
6. Take the wire nuts provided and screw down tight over the joined stripped wires, ensuring that no wires are showing.
7. Check installation is secure and safe, routing leads away from the burner.

## **Check Out Instructions**

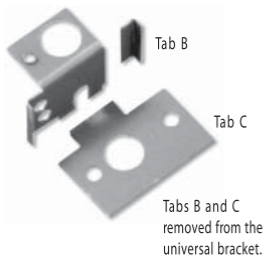
1. Turn on the gas and electrical supply to the appliance.
2. Turn the room thermostat to call for heat.
3. Test appliance for proper ignition and operation.
4. Verify that the Power-On LED is on during the warm-up.
5. During warm-up, use a voltmeter and measure the voltage across the ignitor leads. The voltage should be between 100 VAC and 120 VAC.
6. Make sure the Nitride ignitor does not remain on for no more than a few seconds after the gas ignites.
7. Replace burner compartment door and secure wiring.
8. Place the universal upgrade label on the front of the appliance with the date of installation and your contact information.
9. Turn room thermostat to normal setting.

# Ignitor Assembly 1

Ensure that you have this ignitor base.

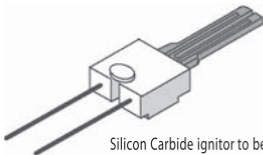


Original Silicon Carbide ignitor viewed from the top. Note the position of the alignment tab bottom left.





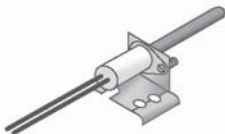
# Ignitor Assembly 1



Silicon Carbide ignitor to be replaced.



The universal bracket should look like this.



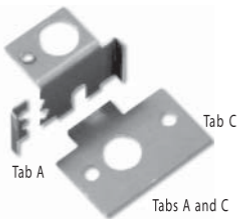
Completed assembly of Nitride replacement kit should look like this.

## Ignitor Assembly 2

Ensure that you have this ignitor Base.

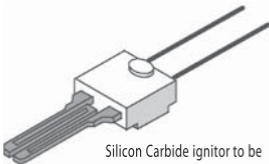


Original Silicon Carbide ignitor viewed from the top. Note the position of the alignment tab bottom right.



Tabs A and C removed from the universal bracket.

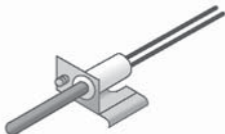
## Ignitor Assembly 2



Silicon Carbide ignitor to be replaced.



The universal bracket should look like this.



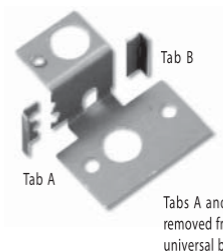
Completed assembly of Nitride replacement kit should look like this.

## Ignitor Assembly 3

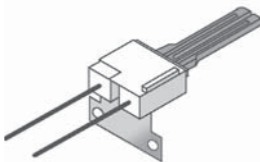
Ensure that you have this ignitor Base.



Original Silicon Carbide ignitor viewed from the top. Note the position of the alignment tab top left.



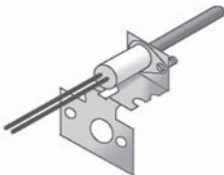
## Ignitor Assembly 3



Silicon Carbide ignitor to be replaced.



The universal bracket should look like this.



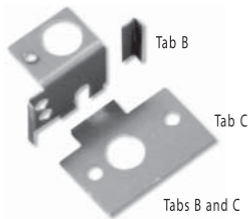
Completed assembly of Nitride replacement kit should look like this.

## Ignitor Assembly 4

Ensure that you have this ignitor Base.



Original Silicon Carbide ignitor viewed from the top.



Tabs B and C removed from the universal bracket.

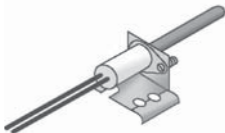
## Ignitor Assembly 4



Silicon Carbide ignitor to be replaced.



The universal bracket should look like this.



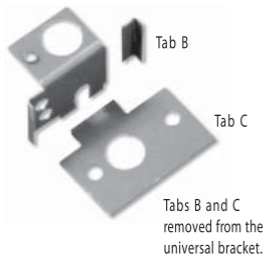
Completed assembly of Nitride replacement kit should look like this.

## Ignitor Assembly 5

Ensure that you have this ignitor base. (See note on Assembly 6)

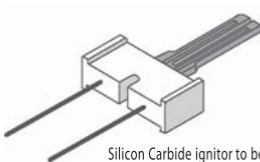


Original Silicon Carbide ignitor viewed from the top.





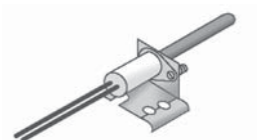
## Ignitor Assembly 5



Silicon Carbide ignitor to be replaced.



The universal bracket should look like this.



Completed assembly of Nitride replacement kit should look like this.

## Ignitor Assembly 6

Ensure that you have this ignitor base.



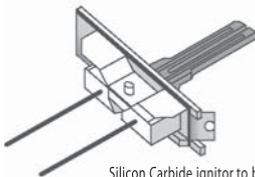
Original Silicon Carbide ignitor viewed from the top.



Adaptor plate

† Depending on ignitor type, some 5 and 6 assemblies might: 1) be assembled using either bracket 5 or plate 6, or 2) require combining with some original fittings.

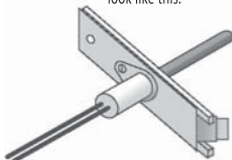
## Ignitor Assembly 6



Silicon Carbide ignitor to be replaced.



The adaptor plate should look like this.



Completed assembly of Nitride replacement kit should look like this.

**Technical Support:**  
**1-888-725-9797**

37-7488C

**White-Rodgers™**



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