

789A-\* Series
Direct OEM Replacement
120V Nitride Ignitors

Product Launch - Fall 2019



# Introducing WHITE-RODGERS OEM Direct Replacement 120v Nitride Ignitors

# The White-Rodgers 789A-\* line of 120v Nitride Ignitors

## What is a 120v Nitride Ignitor?

A Nitride Ignitor is a compound of Silicon & Nitrogen ( $Si_3N_4$ ) and has been used to make an energy efficient ignition system in which the nitride probe has 120v applied to the wire leads. This causes the probe to glow hot enough to ignite the gas/oxygen mixture coming out of the furnace burners.

Old technology of a standing pilot ignition system burnt gas 24/7/365, wasting gas unnecessarily.

W/R OEM Nitride Ignitors are now available\* for:

- Carrier
- Trane \*repackaged
- Goodman

York

Lennox





Note: Check cross-reference list for exact match.

# **Current Efficient Ignition Systems**



## **Direct Spark Ignition**

- Spark probe rarely wears out.
- Spark coil on board is ignition part that fails most, making repair highest \$ of 3.
- Quick Ignition –
   doesn't have to wait
   for anything to heat
   up.



## Silicon Carbide

- Carbide probes are known to fail within a year or 2 in some environments.
- The ignitor probe is ignition part that fails most.
- Very fragile & breaks easy – even during install.



#### Silicon Nitride

- Premium durable probe.
- Durability & longevity over Carbide outweighs initial cost.
- Not sensitive to oils or easily broken.
- Retrofitting from Carbide becoming easier w/ universal options.

The Silicon Nitride ignition system is preferred by most furnace manufactures.

# Silicon Nitride Benefits



## **Durable**

Silicone Nitride is much tougher to break than Silicon Carbide.

The surface of Nitride is non-porous and visually smoother. This additional density creates strength within the material



## **Long Life**

Silicon Nitride life will typically outlast Carbide 2 to 7 times.

Due to properties of Silicon Carbide, it is more sensitive to chemicals in it's environment and operates fewer cycles before burning out.



## Time Saving

Diagnosing a defective Nitride ignitor is faster than spark ignition.

A technician also can remove a screw, unplug a harness, and replace a Nitride ignitor faster than replacing a spark control and moving all the wires over.



# Ignition Type History



Carborundum Co. makes 1<sup>st</sup> Silicon Carbide ignitor The National
Appliance Energy
Conservation Act set
a minimum of 78%
Annual Fuel
Utilization Efficiency
(AFUE)

Manufactures stop building furnaces with standing pilot light ignition systems 1997-2018

Trane & Lennox

lead the way in

switching from

Silicon Carbide to

**80v Silicon Nitride** 

26M Furnaces installed Nationally

Most\*
manufactures have
switched from
Spark ignition,
Silicon Carbide, &
80v Nitride to 120v
Nitride

\* Exception: Rheem still uses Direct Spark Ign.

Universal 120v
Silicon Nitride
designed to
replace Silicon
Carbide introduced

Upgrading to SiNi is made available

1969

1987

1997

2006

2012

Era of Direct Spark & Silicon Carbide

Era of Silicon Carbide & 80v Silicon Nitride

Era of 120v Silicon Nitride







W/R is now offering 120v Direct OEM Replacements

Existing Markets already covered with White-Rodgers product offerings



# Premium Direct OEM Replacement 120V Nitride Ignitors















White-Rodgers
789A Series gives
you 120V OEM
Plug-n-Go
Harness
Connectors.





# Upgrade Carbide to Nitride for CARRIER/ICP Brands

## **CARRIER**



#### 789A-751A1

- 120v input
- 9.25" Wire Leads
- Carrier/ICP Brand Connector
- No Bracket or Extension included
- Crosses over to OEM ICP part #'s

## CARRIER



## 789A-751KT1

- 120v input
- 9.25" Wire Leads
- Carrier/ICP Connector
- Bracket & Nitride Adapter included
- For Carrier/ICP 33-1/3" Tall Furnaces

#### **CARRIER**



#### 789A-751KT2

- 120v input
- 9.25" Wire Leads
- Carrier/ICP Brand Connector
- Bracket & Nitride Adapter included
- For Carrier/ICP 40"
   Tall Furnaces

Use of correct Bracket kit for Furnace height and proper ignitor placement is necessary for proper ignition without delay/boom.

# HOTROD Series Universal Upgrade 120V Nitride review







- HotRod™ replaces over 170 spiral ignitors
- HotRod™ EX replaces over 260 flat ignitors
- Wire leads are 14.5" & 15.5" w/ stripped ends
- Includes universal mounting brackets & 2 ceramic wire nuts
- HotRod<sup>™</sup> also comes in a 5 single ignitor kits pack (21D64-5PK)

White-Rodgers HOTROD Series gives you options to upgrade from silicon carbide for longer life & fewer callbacks.



# Premium Direct OEM Replacement 80V Nitride review













- OEM spec lead length, dimensions, and connectors
- White Teflon coated leads

White-Rodgers 768A Series gives you 80V OEM Plug-n-Go Harness Connectors.



# Direct OEM Replacement 120V Silicon Carbide review

ОЕМ	Model #	Voltage	Lead Length
Amana, Lennox	767A-356	120V	6"
White-Rodgers	767A-357	120V	5.25"
York, Lennox	767A-361	120V	5.25"
White-Rodgers	767A-365	120V	5.69"
White-Rodgers	767A-366	120V	5.31"
Amana, Lennox	767A-369	120V	5.5"
Carrier, Trane, Rheem	767A-370	120V	5.25"
Goodman, York, Nordyne, Trane, Amana, Armstrong	767A-371	120V	19.13"
Rheem, Lennox, Trane	767A-372	120V	5.25"
Goodman, York, Nordyne, Trane, Amana, Armstrong	767A-373	120V	5.25"
Whirlpool	767A-374	120V	11"
White Rodgers	767A-375	120V	1.38"
Trane	767A-376	120V	4.5"
Trane	767A-377	120V	4.5"
Amana	767A-378	120V	5.13"
York	767A-379	120V	7.5"
Armstrong	767A-380	120V	6.13"
York	767A-381	120V	7.5"
-	767A-382	120V	5.25"
Rheem	767A-383	120V	5.25"
Goodman	767A-384	120V	5.25"
Goodman	767A-385	120V	5.25"



White-Rodgers still carries a wide selection of 120V OEM style carbide direct replacements.

- Wide range of mounting styles
- Works with 15,17,& 45sec HSI systems
- All models come with wire nuts
- Extensive cross reference information
   Online or on the W/R Mobile App.



# White-Rodgers Ignitor Warranties

#### **5 Years**



 HotRod<sup>TM</sup> Nitride Universal

Honeywell Glowfly warranty: 3 years

## 3 Years



#### 1 Year



- 120V Nitride
  OEM replacement
- Existing 80V Nitride OEM replacement

 All Silicon Carbide OEM replacement