

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

## PARTS INCLUDED

- 1 – 789A-751A1 Hot Surface Ignitor
- 1 – Ignitor Mounting Bracket
- 2 – ½" Sheet Metal Mounting Screws
- 1 – Ignitor Adapter Harness
- 1 – Installation Instructions



Ignitor mounting bracket



Ignitor Adapter Harness (use to connect  
new nitride ignitor with old carbide  
furnace connector)



789A-751A1 Hot Surface Ignitor

## DESCRIPTION

The 789A-751KT1 is an aftermarket direct replacement Hot Surface Ignitor Kit. This kit can be utilized to replace a Silicon Carbide Ignitor (Carrier model LH33ZS001 or valid cross

reference) with Silicon Nitride on 33-1/3" Carrier/ICP Brand mid-efficiency furnaces.

## SPECIFICATION

### Rated Voltage:

120 volts + 10%, -15%, 50/60 Hz.

### Cold Resistance:

20 to 100 ohms

### Current:

0.4 to 1.2 amps at 120  $\pm$  1.0 volts

**Time to 1796 °F (980 °C):** 8 seconds maximum at 102

$\pm$  1.0 volts

### Ignitor Life:

100,000 cycles at 120 volts under typical conditions

### Agency:

CSA Certified

**NOTE:** Internal wires to ignitor connections to withstand operational temperature of 482 °F (250 °C).

### ⚠ CAUTION



#### Shock Hazard

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



#### Explosion Hazard

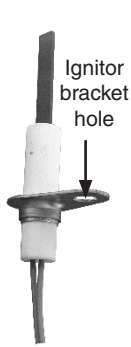
- Shut off gas to appliance before installation, and do not reconnect until installation is complete.



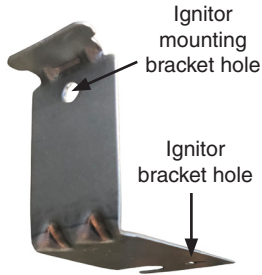
#### Fire Hazard

- Do not exceed the specified voltage of 120 volts.
- Ensure the components do not come into direct contact with water (spray, dripping water or rain).
- Improper and dangerous operation can result from wiring errors.

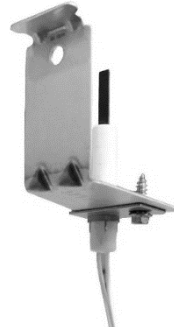
**NOTE:** Install all wiring according to local and national electrical codes and ordinances.



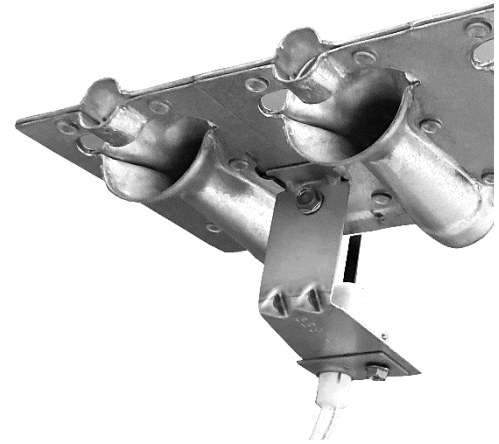
**Fig. 1: New ignitor – 789A-751A1**



**Fig. 2: New ignitor mounting bracket**

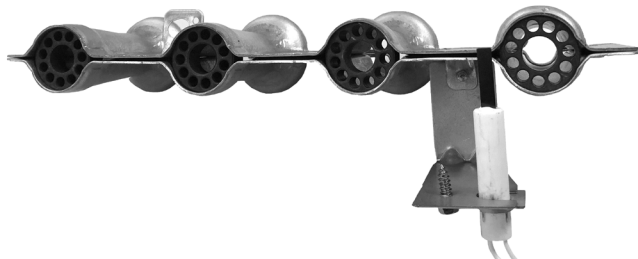


**Fig. 3: New ignitor and mounting bracket assembly**

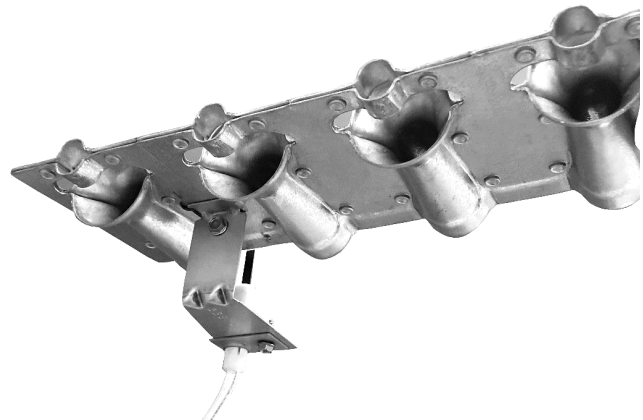


**Fig. 4: New ignitor installed into burner assembly**

1. Disconnect electrical power.
2. Disconnect wires from gas valve, flame sensor and hot surface ignitor.
3. Locate old ignitor and remove the screw that secures old ignitor mounting bracket to the burner assembly.
  - a. Note: some applications may require the burner assembly to be removed first.
  - b. Take note of location of old ignitor.
4. Slide old ignitor mounting bracket out of burner assembly.
5. Attach new ignitor to new ignitor mounting bracket, screwing into the ignitor bracket hole (Fig. 1 & 2) using one of two screws provided.
6. Slide new ignitor and mounting bracket assembly back into same location as noted in 3b.
7. Secure new ignitor mounting bracket to the burner assembly by placing the remaining screw through the ignitor mounting bracket hole (Fig. 2).
8. Verify ignitor is in the correct position (see Fig. 5 and 6).
9. Re-attach burner assembly if necessary.
10. Use ignitor adapter harness to connect new nitride ignitor to furnace control board harness.



**Fig. 5: Flame-side view of correct ignitor position**



**Fig. 6: Gas-side view of correct ignitor position**

**TECHNICAL SUPPORT: 1-888-725-9797**