BROAN®
HEATING AND COOLING SYSTEMS

# SmartLite® control board

## for gas furnaces



# BROAN® GAS FURNACES FEATURING SMARTLITE® CONTROL BOARD

LONGER IGNITER LIFE

Broan gas furnaces with SmartLite® control boards provide extended life to igniters in furnaces using hot surface ignition technology. They are programmed to learn the heat-up characteristics of the igniter, then adapt the ignition time to the characteristics of the furnace so the igniter is energized appropriately.

Most modern residential furnaces utilize a hot surface igniter or a high voltage spark ignition device for fuel gas ignition. Direct spark ignition systems (DSI) utilize a coil to generate a spark of several thousand volts intensity and a high voltage wire to connect the igniter electrode to the voltage source. While effective, these systems tend to generate electrical interference and built-in safeguards are required for trouble-free operation.

Broan employs hot surface ignition systems (HSI) in our residential furnace products. These use an igniter that, when energized, rapidly generates an intense heat sufficient to ignite the fuel gas. These systems are safe, well proven and have a good track record. Although they perform well and are reliable, the igniter itself is still the most vulnerable component in these systems. Therefore, Broan engineering has focused on ways to further improve igniter life. Hot surface igniter technology is advancing, both in manufacturing processes and product application. We have been working to achieve and implement significant igniter life improvements in our furnaces. These improvements have been validated through our field experience and laboratory life-cycle tests and are reflected in our product warranty history.

The improved control board contains a program that varies the igniter heat-up time interval. It learns the heat-up characteristics of the igniter in the furnace by searching for the threshold of ignition failure. It then adjusts the heat-up interval on the next trial accordingly. This upgrade has been accomplished by microchip software reprogramming. The introduction of this control represents a significant advance in HSI furnace technology.

When a furnace is truly built to an exacting standard of quality, the manufacturer's confidence shows in its warranty. Broan offers a 10-year limited warranty on all parts and a 10-year Quality Pledge when product is registered.

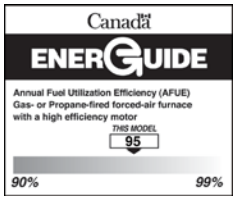
Ask your Broan contractor or go to broanhvac.net for warranty details.

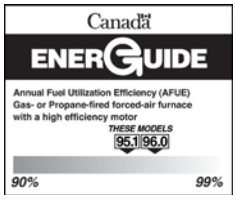
Product registration required.

10 YEAR WARRANTY

QUALITY PLEDGE

* If installed in SCAQMD only: These furnaces do not meet the SCAQMD Rule 1111 14 ng/J NOx emission limit (14 ng/J), and thus are subject to a mitigation fee of up to $450. These furnaces are not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.







TWO-STAGE GAS FURNACES: 96% AFUE DEDICATED UPFLOW AND DOWNFLOW, 95.1% AFUE* UPFLOW/HORIZONTAL & 80% AFUE* UPFLOW/HORIZONTAL




SINGLE-STAGE GAS FURNACES: 95% AFUE* UPFLOW/HORIZONTAL, 92.1% AFUE* UPFLOW/HORIZONTAL & 80% AFUE* UPFLOW/HORIZONTAL OR DOWNFLOW

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TESTING CERTIFICATIONS

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