

SMARTLITE®  
CONTROL BOARD  
FOR GAS FURNACES



TOUGH.  
SMART.  
TAPPAN.™



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## Tappan Gas Furnace Featuring SmartLite® Control Board

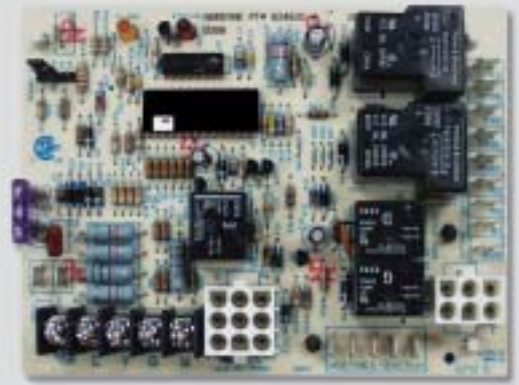
Tappan Gas Furnaces with SmartLite® Control Boards provide extended life to igniters in furnaces using hot surface ignition technology. They are programmed to learn the heat-up characteristics of the igniter, then adapt the ignition time to the characteristics of the furnace so the igniter is energized 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.

Tappan employs hot surface ignition systems (HSI) in our residential furnace products. These use an igniter which, 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, Tappan engineering has focused on ways to further improve igniter life. The state-of-the-art of 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, laboratory life-cycle tests and 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 exacting standard of quality, the manufacturer's confidence shows in its warranty. At Tappan we offer an 8-year warranty on all parts and a 5-year quality pledge. Ask your Tappan dealer for details on warranties, extended product protection and consumer financing programs.



**90-92 AFUE**  
two-stage  
or single-stage  
upflow/horizontal  
or downflow  
gas furnaces.



**80 AFUE**  
two-stage or  
single-stage  
upflow/horizontal  
or downflow  
gas furnaces.



**92+ AFUE**  
upflow/  
horizontal  
low profile  
gas furnace.



**80 AFUE**  
upflow/  
horizontal  
low profile  
gas furnace.

### Testing Certifications



**TAPPAN**  
Heating and Cooling Products

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PUBLICATION SERIAL #729B-0904  
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Pictured installation varies per household.