The Fan 50 Plus Pins has been designed to work with the industry standard 6-pin “edge connector” or the newer 6-pin “header” style connector to address changes in the industry while maintaining backwards compatibility. It comes with a “removable” MODE SELECT jumper on the board and a separate set of red and orange wires to convert “older furnaces”, giving them fan control features. Please note: The “fan control feature” must be used!

IF you are replacing an OEM fan board such as the PN 232613 or PN 232614 in a Suburban® furnace; or PN 37875 or PN 33488 in the Atwood® / Hydroflame® furnace, the mode select jumper STAYS on both pins as shown. The RED and ORANGE wires that came in the box DO NOT get used. Connect the spark wire to the spark coil. Connect the power and fan motor wire onto the board. Connect the main cable to either the 6-pin “edge” connector or the new 6-pin “header” style connector and you’re off and running!

IF you are upgrading an older furnace that has a standard ignitor board and a time-delay relay:
1) Move the MODE SELECT jumper over to just one pin (doesn’t matter which) or remove it completely.

2) Connect the RED and ORANGE wires to the board - RED for power and ORANGE for blower. They can only be connected one way!

3) After installing the board, remove the “hot” leg of the fan motor from the time delay relay and connect it to the “male” end of the ORANGE wire. Connect the “female” end of the RED power wire to the time delay relay terminal that used to feed the motor.

4) Connect the spark wire to the spark coil and the main cable to either the 6-pin edge connector or the new 6-pin “header” style connector and you’re off and running!
Characteristics of the Fan 50 Plus Pins for either type of installation.

The ignition portion of the board is a standard “3 try” with “local flame sense”. The timing is a 20 sec delay & 5 sec ignition, three times in a row. If NO flame is sensed after the third try, the board will wait 1½ minutes and shut off the fan motor.

NOW! The Fan 50 Plus Pins will wait for one full hour and try the whole sequence again before “locking out”.

IF!? The installation is a replacement of a Suburban® or Atwood® /Hydro-flame® fan board, you can simply turn the thermostat down and back up to restart the whole “3 try” sequence.

IF!? The installation is an upgrade of an older furnace and the time delay relay is still in use, to restart the sequence at any time, you must turn the thermostat down and allow enough time for the time delay relay to reset before turning the thermostat up again.

IF!? For some reason the motor comes on and the GREEN LED on the Fan 50 Plus Pins DOES NOT come on, there is a problem in the circuitry of the “sail switch, high limit switch, etc.” The fan will run for ten minutes and shut off.

IF!? For some reason the fan does not come on and the GREEN LED is lit on the circuit board, the sail switch is stuck in the closed position. The Fan 50 Plus Pins is designed to stop and do nothing if the sail switch is stuck closed.