

The Ignition Module you are trying to replace has been made obsolete by the manufacturer. This kit is required to rewire your heater so that it can make use of the new ignition module. This change will not alter the performance of the heater.

The heater must be electrically grounded and bonded in accordance with local codes or, in the absence of local codes, in the USA, with the *National Electrical Code, ANSI/NFPA 7*; in Canada, with *Canadian Electric Code, CSA C22.1*. All wiring must be done by a certified electrician.

⚠ CAUTION — Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Wiring errors can also destroy the control board. Verify proper operation after servicing.

In order to install this new ignition module, the wiring harness will need to be modified as stated in these installation instructions.

In cases where the heater has already been altered to accept this new ignition module, disregard these instructions; instead, simply change out old and new ignition modules and install the three connectors in the same locations from which they were removed.

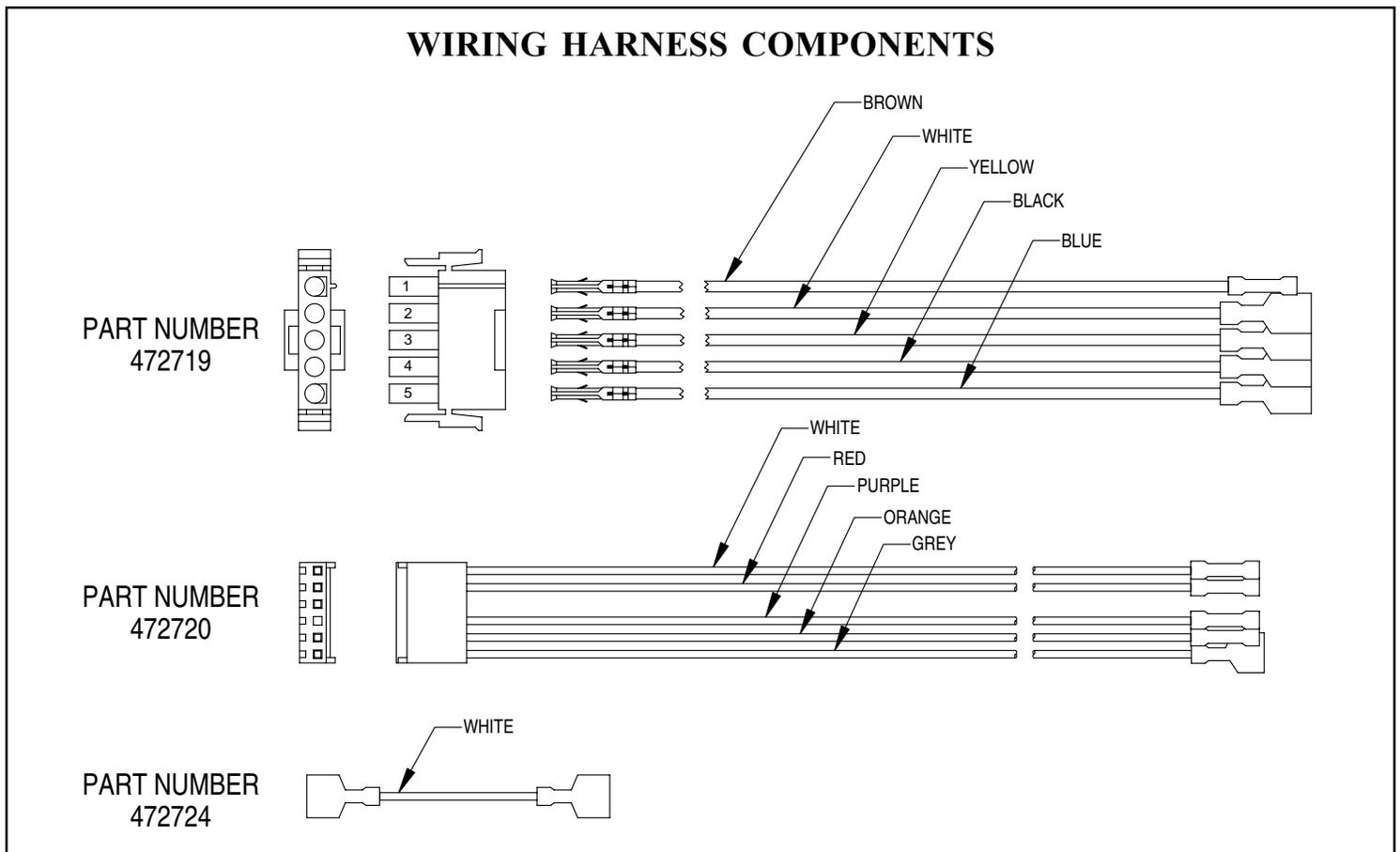
Tools required

- Flat Head Screwdriver or Nut Driver
- Wire cutter
- Wire stripper
- Wire crimper for insulated terminals

⚠ WARNING — **Risk of electrical shock or electrocution.**



This heater contains wiring that carries high voltage. Contact with these wires could result in death or serious injury to pool or spa users, installers, or others due to electrical shock, and may also cause damage to property. **Always disconnect power circuit before connecting the heater.**



Installation instructions:

For MiniMax[®] NT Low NOx only:

NOTE: To avoid miss-wiring remove one wire at a time and in the sequence specified below:

1. Remove the connector from the **IGN/120** terminal of the existing ignition module and attach it to the connector of the **blue** wire of wire harness P/N 472719.
2. Remove the connector from the **IGN/240** terminal of the existing ignition module and attach it to the connector of the **yellow** wire of wire harness P/N 472719
3. Remove the connector from the **L1** terminal of the existing ignition module and attach it to the connector of the **black** wire of wire harness P/N 472719
4. Remove the connector from the **L2** terminal of the existing ignition module and attach it to the connector of the **white** wire of wire harness P/N 472719. You must remove the cap covering the male terminal in order to make the connection.
5. Remove the connector from the **IGN** terminal of the existing ignition module. Remove the female quick connector by cutting the wire right next to it. Strip off the insulation leaving ¼-inch of exposed wire. Insert the stripped wire into the crimp connector of the **brown** wire on wire harness P/N 472719 and crimp the wire in place. No bare wire is to be exposed once complete.
6. Remove the connector from the **TH** terminal of the existing ignition module and attach it to the connector of the **grey** wire of wire harness P/N 472720.
7. Remove the connector from the **VAL** terminal of the existing ignition module. Remove the female quick connector by cutting the wire right next to it. Strip off the insulation leaving ¼-inch of exposed wire. Insert the stripped wire into the crimp connector of the **red** wire on wire harness P/N 472720 and crimp the wire in place. No bare wire is to be exposed once complete.
8. Remove the connector from the **GND** terminal of the existing ignition module. Remove the female quick connector by cutting the wire right next to it. Strip off the insulation leaving ¼-inch of exposed wire. Insert the stripped wire into the crimp connector of the **white** wire on wire harness P/N 472720 and crimp the wire in place. No bare wire is to be exposed once complete.
9. Remove the connector from the **24VAC** terminal of the existing ignition module. Remove the female quick connector by cutting the wire right next to it. Strip off the insulation leaving ¼-inch of exposed wire. Insert the stripped wire into the crimp connector of the **purple** wire on wire harness P/N 472720 and crimp the wire in place. No bare wire is to be exposed once complete.
10. Remove the connector from the **IND** terminal of the existing ignition module. Remove the female quick connector by cutting the wire right next to it. Strip off the insulation leaving ¼-inch of exposed wire. Insert the stripped wire into the crimp connector of the **orange** wire on wire harness P/N 472720 and crimp the wire in place. No bare wire is to be exposed once complete.
11. Jumper wire P/N 472724 is not used for the MiniMax NT Low NOx installation.
12. Remove connector attached to F1 and F2 from existing ignition module.
13. Remove existing ignition module from the heater by removing the two screws.
14. Install the new ignition module using the two screws provided.
15. Attach the three wire harness connectors to the new ignition module.
16. Use zip ties to secure any loosely hanging wires.
17. Place the new MiniMax NT Low NOx wiring diagram label over the old wiring diagram label. Be sure to clean and dry surface of old label before applying the new one.

For MiniMax[®] NT STD only:

NOTE: To avoid miss-wiring remove one wire at a time and in the sequence specified below:

1. Remove the connector from the **IGN/120** terminal of the existing ignition module and attach it to the connector of the **blue** wire of wire harness P/N 472719.
2. Remove the connector from the **IGN/240** terminal of the existing ignition module and attach it to the connector of the **yellow** wire of wire harness P/N 472719.
3. Remove the connector from the **L1** terminal of the existing ignition module and attach it to the connector of the **black** wire of wire harness P/N 472719.
4. Remove the connectors from the **L2** and **IGN** terminals of the existing ignition module. Attach both wires to each other using jumper wire P/N 472724.
5. Remove the connector from the **FS** terminal of the existing ignition module. Remove the female quick connector by cutting the wire right next to it. Strip off the insulation leaving ¼-inch of exposed wire. Insert the stripped wire into the crimp connector of the **brown** wire on wire harness P/N 472719 and crimp the wire in place. No bare wire is to be exposed once complete.
6. Remove the connector from the **TH** terminal of the existing ignition module and attach it to the connector of the **grey** wire of wire harness P/N 472720.
7. Remove the connector from the **VAL** terminal of the existing ignition module. Remove the female quick connector by cutting the wire right next to it. Strip off the insulation leaving ¼-inch of exposed wire. Insert the stripped wire into the crimp connector of the **red** wire on wire harness P/N 472720 and crimp the wire in place. No bare wire is to be exposed once complete.
8. Remove the connector from the **GND** terminal of the existing ignition module. Remove the female quick connector by cutting the wire right next to it. Strip off the insulation leaving ¼-inch of exposed wire. Insert the stripped wire into the crimp connector of the **white** wire on wire harness P/N 472720 and crimp the wire in place. No bare wire is to be exposed once complete.
9. Remove the connector from the **24VAC** terminal of the existing ignition module. Remove the female quick connector by cutting the wire right next to it. Strip off the insulation leaving ¼-inch of exposed wire. Insert the stripped wire into the crimp connector of the **purple** wire on wire harness P/N 472720 and crimp the wire in place. No bare wire is to be exposed once complete.
10. Remove the connector from the **IND** terminal of the existing ignition module. Remove the female quick connector by cutting the wire right next to it. Strip off the insulation leaving ¼-inch of exposed wire. Insert the stripped wire into the crimp connector of the **orange** wire on wire harness P/N 472720 and crimp the wire in place. No bare wire is to be exposed once complete.
11. Remove connector attached to F1 and F2 from existing ignition module.
12. Remove existing ignition module from the heater by removing the two screws.
13. Install the new ignition module using the two screws provided.
14. Attach the three wire harness connectors to the new ignition module.
15. Use zip ties to secure any loosely hanging wires.
16. Place the new MiniMax NT STD wiring diagram label over the old wiring diagram label. Be sure to clean and dry surface of old label before applying the new one.

SAVE THESE INSTRUCTIONS

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