



INSTALLATION INSTRUCTIONS

FOR

P.C. BOARD REPLACEMENT KIT

(USED ON 6795, 6535, 6536, 6537, 6538, 6636 MODELS)

Airxcel, Inc.
RV Products Division
P.O. Box 4020
Wichita, KS 67204

The 6535C3209 printed circuit board takes place of the 6535-320, 6535A320 and 6535B320 printed circuit boards. Most wire connections are on different places on the new board, and some wires will be discarded while others will be added.

Please review which printed circuit board you are removing and mark the wires accordingly.

Enclosed with the kit are wires you will need (though you may not use all of them) and instructions for the changeouts. There are also pictures of the printed circuit boards to assist you with the wiring changes and a wiring diagram of the finished product.

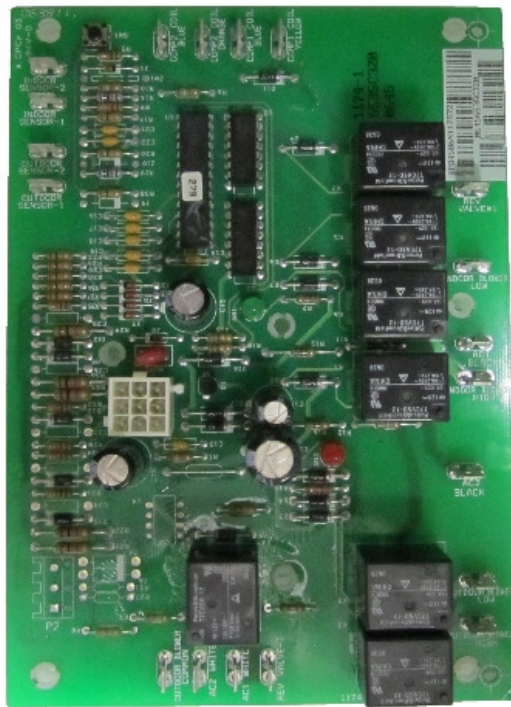
If you have any questions, feel free to contact us at 316-832-4357 Monday through Friday, 8 am to 5 pm Central Time.

The Green LED indicator flash codes:

- - - - System Normal
- — — Delay on Break Time Running
- --- ID Freeze Temperature Out of Range
- ---- AC1 Line Voltage Out of Range

Red LED = Is ON if AC2 voltage is in Range and Stage 2 is calling.

6535C320
New Printed Circuit Board



This Printed Circuit Board replaces the board in these models

- 6795B8*2
- All 6535 models
- All 6536 models
- All 6537 models
- All 6538 models
- All 6636 models

This Board is used in all of the following replacement kits

- 6535C3209
- 6536C3209
- 6538C3209
- 6636A3209

Heat Pump Only

1. (A and B) Remove the wires (white) from the **OUTDOOR** sensor terminals on the old board and place them on the **OUTDOOR** sensor terminals on the new board. You can place either wire on either of the terminals.
2. (A and B) Remove the wires (white) from the **INDOOR** sensor terminals on the old board and place them on the **INDOOR** sensor terminals on the new board. You can place either wire on either of these terminals.
3. Remove the **COMP 2 COIL BLUE** (blue) wire from the old board and place it on the **COMP 2 COIL BLUE** terminal on the new board. If the old board is the 6536A320, this terminal will be designated as “T3B”.
4. Remove the **COMP 2 COIL ORANGE** (orange) wire from the old board and place it on the **COMP 2 COIL ORANGE** terminal on the new board. If the old board is the 6536A320, this terminal will be designated as “T10”.
5. Remove the **COMP 1 COIL BLUE** (blue) wire from the old board and place it on the **COMP 1 COIL BLUE** terminal on the new board. If the old board is the 6536A320, this terminal will be designated as “T3A”.
6. Remove the **COMP 1 COIL YELLOW** (yellow) wire from the old board and place it on the **COMP 1 COIL YELLOW** terminal on the new board. If the old board is the 6536A320, this terminal will be designated as “T2”.
7. Remove the two black wires that are piggybacked together on the **REV VALVE OUT** terminal on the old board and place them on the **REV VALVE #1** terminal on the new board. Leave these wires piggybacked together.
8. Remove the **INDOOR BLOWER LOW OUT** wire (red) from the old board and place it on the **INDOOR BLOWER LOW** terminal on the new board.
9. Remove the **AC1 BLACK** wire (black) from the old board and place it on the **AC1 BLACK** terminal on the new board.
10. Remove the **INDOOR BLOWER HIGH OUT** (black) wire from the old board and place it on the **INDOOR BLOWER HIGH** terminal on the new board.
11. Use the orange wire provided with the new board to go from the **AC2 BLACK** terminal to the empty terminal on the **HIGH VOLTAGE TERMINAL BOARD (Black Circuit 2)**. This will be the only empty terminal on the High Voltage Terminal Board and is located next to the orange wire. (This board is the incoming voltage board and is not part of the printed circuit board kit.)
12. Remove the **OUTDOOR BLOWER LOW** (red) wire from the old board and place it on the **OUTDOOR BLOWER LOW** terminal of the new board.
13. Follow the black wire from the outdoor blower motor. **IF** this wire leads directly to the board, remove this wire and place it on the **OUTDOOR BLOWER HIGH** terminal on the new board.

IF the wire from the outdoor blower motor goes to the **COMPRESSOR RELAY**, you will need to remove this wire from the **COMPRESSOR RELAY** as well as the other black wire on the relay. You will place the wire that you traced from the outdoor blower motor onto the **OUTDOOR BLOWER HIGH** terminal on the new board, and you can discard the other black wire as it will no longer be needed (smaller wire will be discarded).

14. Remove the two black wires that are piggybacked together from the **REV VALVE OUT** terminal on the old board and move them to the **REV VALVE 2** terminal on the new board. You will leave these wires piggybacked together.

15. Remove the AC1 WHITE (white) wire from the old board and place it on the AC1 WHITE terminal on the new board.
16. Remove the AC2 WHITE (yellow) wire from the old board and place it on the AC2 WHITE terminal on the new board.
17. Remove the OUTDOOR BLOWER COMMON (white) wire from the old board and place it on the OUTDOOR BLOWER COMMON terminal on the new board.

NOTE: Terminals for the COMP 1 CONTACT IN and COMP 2 CONTACT IN do NOT exist on the new board. You will need to complete the following steps.

1. Follow the black wire from the COMP 1 CONTACT IN terminal on the old board to the COMP 1 RELAY. Remove both wires from the COMP 1 CONTACT IN on the old board. Remove the smaller black wire from the piggyback and discard as it will not be used. Place the remaining wire on the COMP 1 RELAY.
2. Follow the orange wire from the COMP 2 CONTACT IN terminal on the old board to the COMP 2 RELAY. Remove both wires from the COMP 2 CONTACT IN terminal on the old board. Remove the smaller orange wire from the piggyback and discard as it will not be used. Place the remaining wire on the COMP 2 RELAY.

WINNEBAGO OWNERS:

If the coach is a Winnebago, you may have the energy management system. The difference will be that you will have two extra wires coming down to the board with the lifeline. These will be a white wire with a black stripe and an orange wire with a black stripe. The orange wire going to the coil side of the COMP 2 RELAY has a female plug and will attach to the male plug on the orange wire with a black stripe in the lifeline. The white wire with a black stripe will plug into the COMP 2 COIL ORANGE terminal on the new board.

In the event that wires are too short to reach their designated terminals, extra wires have been provided with this kit to lengthen the existing wires. Please try to keep the colors the same when possible. These wires may or may not be needed during installation.

Air Conditioner Only

1. (A and B) N/A. Since the unit is not a heat pump, an outdoor coil sensor is not required.
 2. (A and B) Remove the wires (white) from the **INDOOR** sensor terminals on the old board and place them on the **INDOOR** sensor terminals on the new board. You can place either wire on either of these terminals.
 3. Remove the **COMP 2 COIL BLUE** (blue) wire from the old board and place it on the **COMP 2 COIL BLUE** terminal on the new board. If the old board is the 6795, this terminal will be designated as “T3B”. If the old board is the 6636, this terminal will be designated as “T3A”.
 4. Remove the **COMP 2 COIL ORANGE** (orange) wire from the old board and place it on the **COMP 2 COIL ORANGE** terminal on the new board. If the old board is the 6795 or the 6636, this terminal will be designated as “T10”.
 5. Remove the **COMP 1 COIL BLUE** (blue) wire from the old board and place it on the **COMP 1 COIL BLUE** terminal on the new board. If the old board is the 6795, this terminal will be designated as “T3A”. If the old board is the 6636, this terminal will be designated as “T3B”.
 6. Remove the **COMP 1 COIL YELLOW** (yellow) wire from the old board and place it on the **COMP 1 COIL YELLOW** terminal on the new board. If the old board is the 6795 or the 6636, this terminal will be designated as “T2”.
 7. N/A. Since this is not a heat pump, it will not have reversing valve wires.
 8. Remove the **INDOOR BLOWER LOW OUT** wire (red) from the old board and place it on the **INDOOR BLOWER LOW** terminal on the new board.
 9. Remove the **AC1 BLACK** wire (black) from the old board and place it on the **AC1 BLACK** terminal on the new board.
 10. Remove the **INDOOR BLOWER HIGH OUT** (black) wire from the old board and place it on the **INDOOR BLOWER HIGH** terminal on the new board.
 11. Use the orange wire provided with the new board to go from the **AC2 BLACK** terminal to the empty terminal on the **HIGH VOLTAGE TERMINAL BOARD (Black Circuit 2)**. This will be the only empty terminal on the High Voltage Terminal Board and is located next to the orange wire. (This board is the incoming voltage board and is not part of the printed circuit board kit.)
 12. Remove the **OUTDOOR BLOWER LOW** (red) wire from the old board and place it on the **OUTDOOR BLOWER LOW** terminal of the new board.
 13. Follow the black wire from the outdoor blower motor. **IF** this wire leads directly to the board, remove this wire and place it on the **OUTDOOR BLOWER HIGH** terminal on the new board.
- IF** the wire from the outdoor blower motor goes to the **Compressor Relay** you will need to remove this wire from the **Compressor Relay** as well as the other black wire on the relay. You will place the wire that you traced from the outdoor blower motor onto the **OUTDOOR BLOWER HIGH** terminal on the new board, and you can discard the other black wire as it will no longer be needed (smaller wire will be discarded).
14. N/A. Since this is not a heat pump, it will not have reversing valve wires.
 15. Remove the **AC1 WHITE** (white) wire from the old board and place it on the **AC1 WHITE** terminal on the new board.

16. Remove the AC2 WHITE (yellow) wire from the old board and place it on the AC2 WHITE terminal on the new board.
17. Remove the OUTDOOR BLOWER COMMON (white) wire from the old board and place it on the OUTDOOR BLOWER COMMON terminal on the new board.

NOTE: Terminals for the COMP 1 CONTACT IN and COMP 2 CONTACT IN do NOT exist on the new board. You will need to complete the following steps.

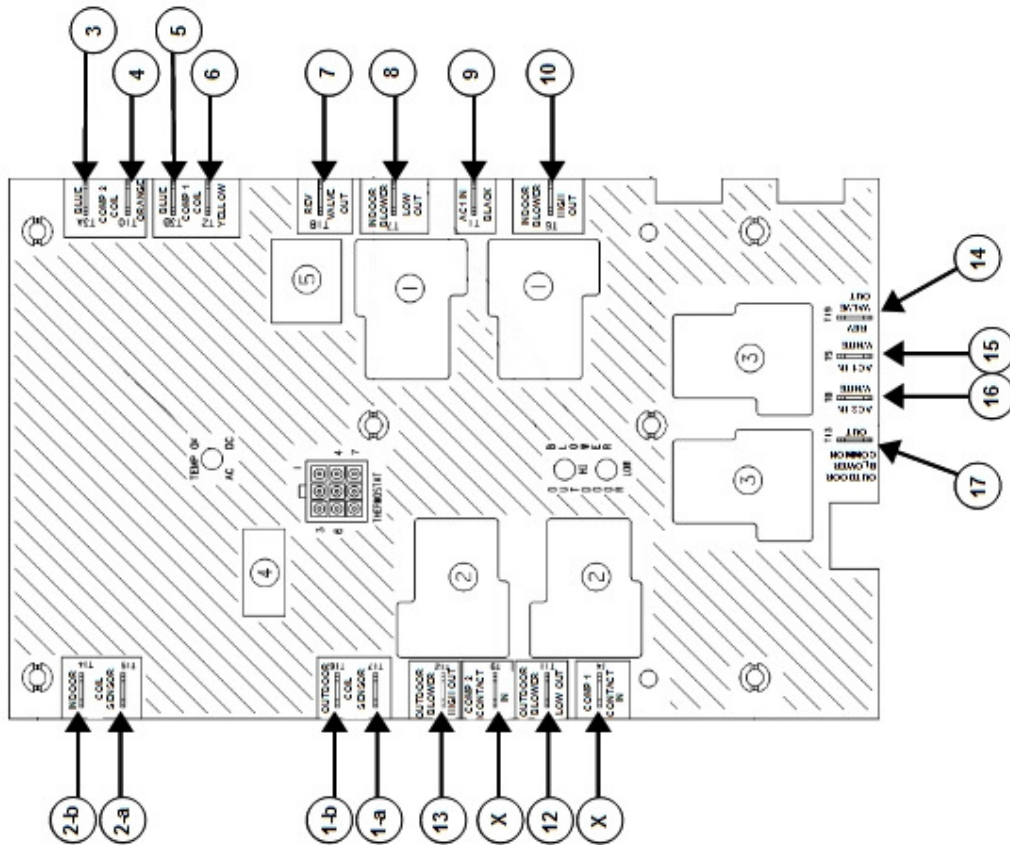
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2. Follow the orange wire from the COMP 2 CONTACT IN terminal on the old board to the COMP 2 RELAY. Remove both wires from the COMP 2 CONTACT IN terminal on the old board. Remove the smaller orange wire from the piggyback and discard as it will not be used. Place the remaining wire on the COMP 2 RELAY.

WINNEBAGO OWNERS:

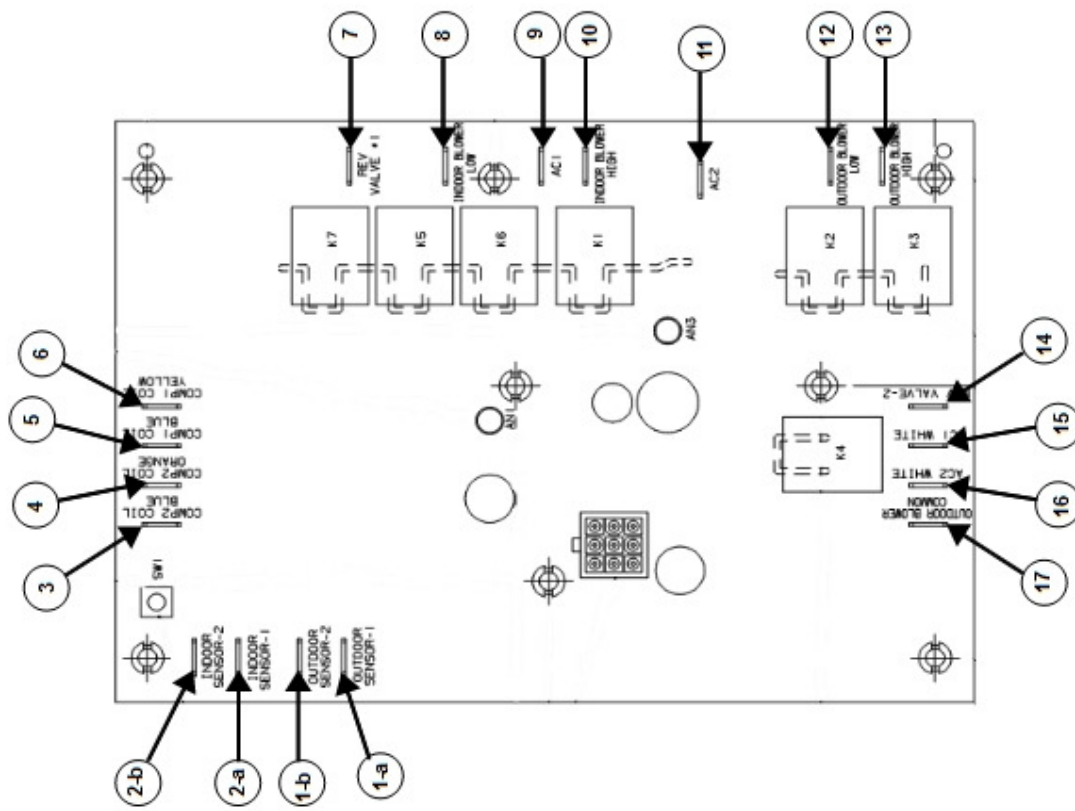
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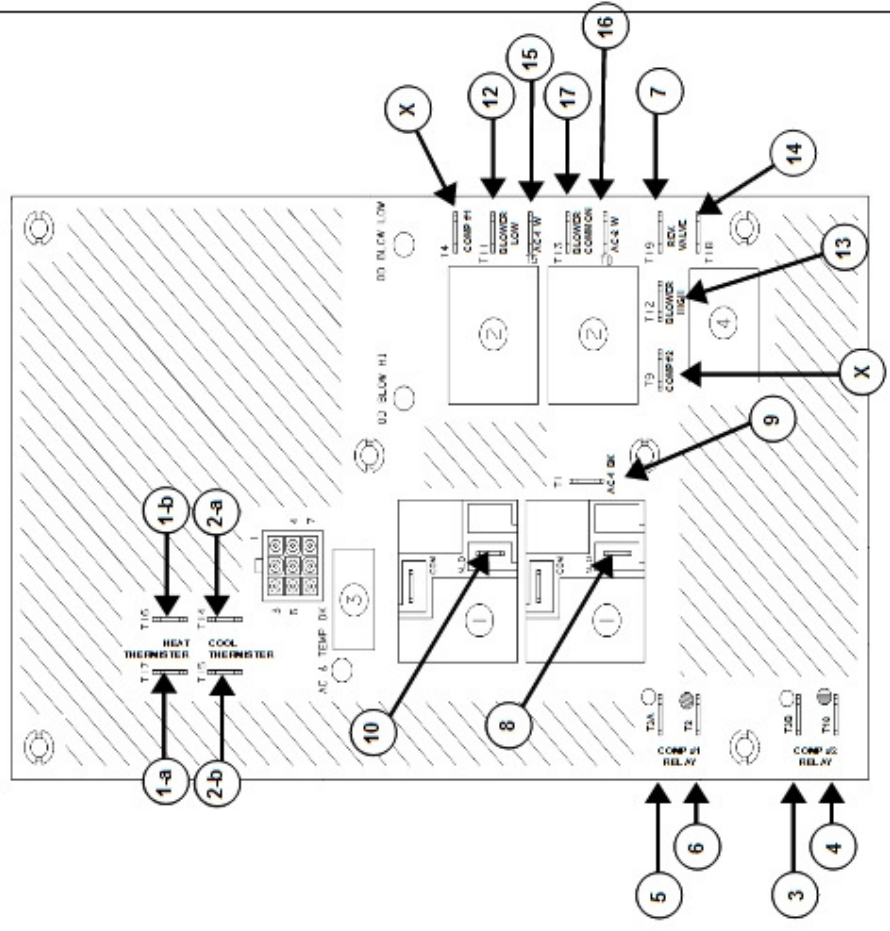
6535(A or B) (old board)



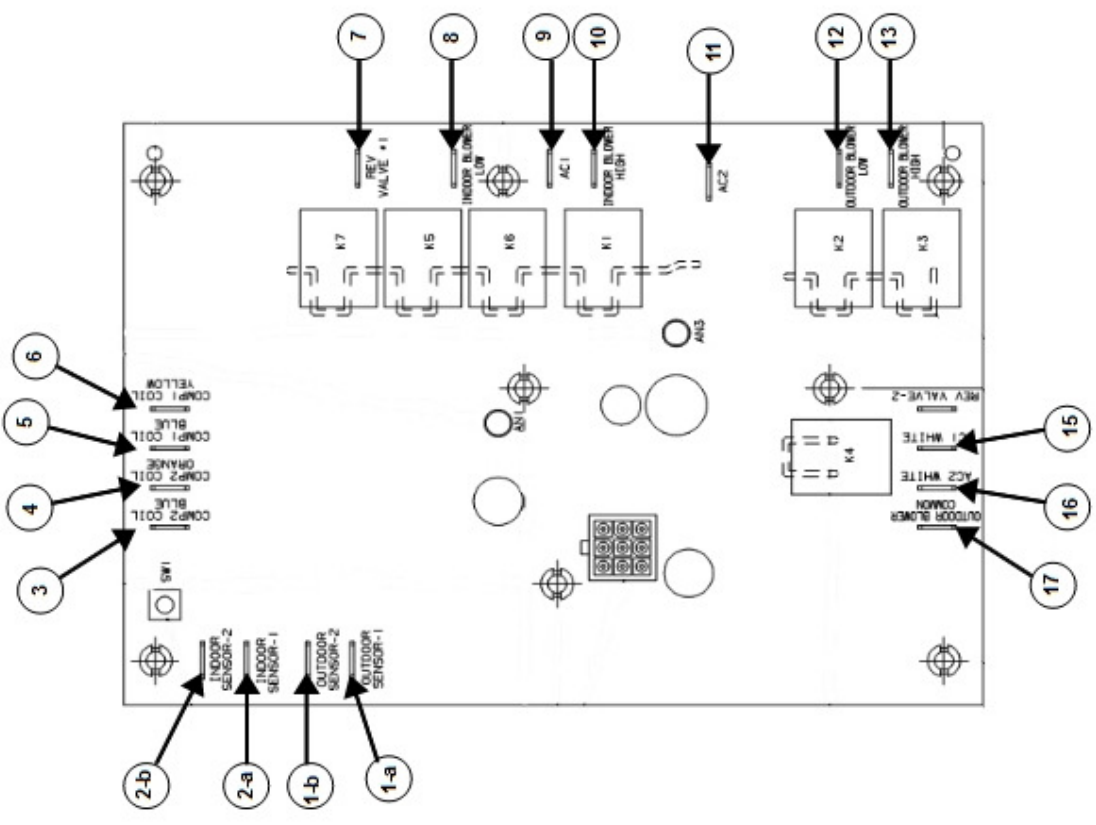
6535C320 (new board)



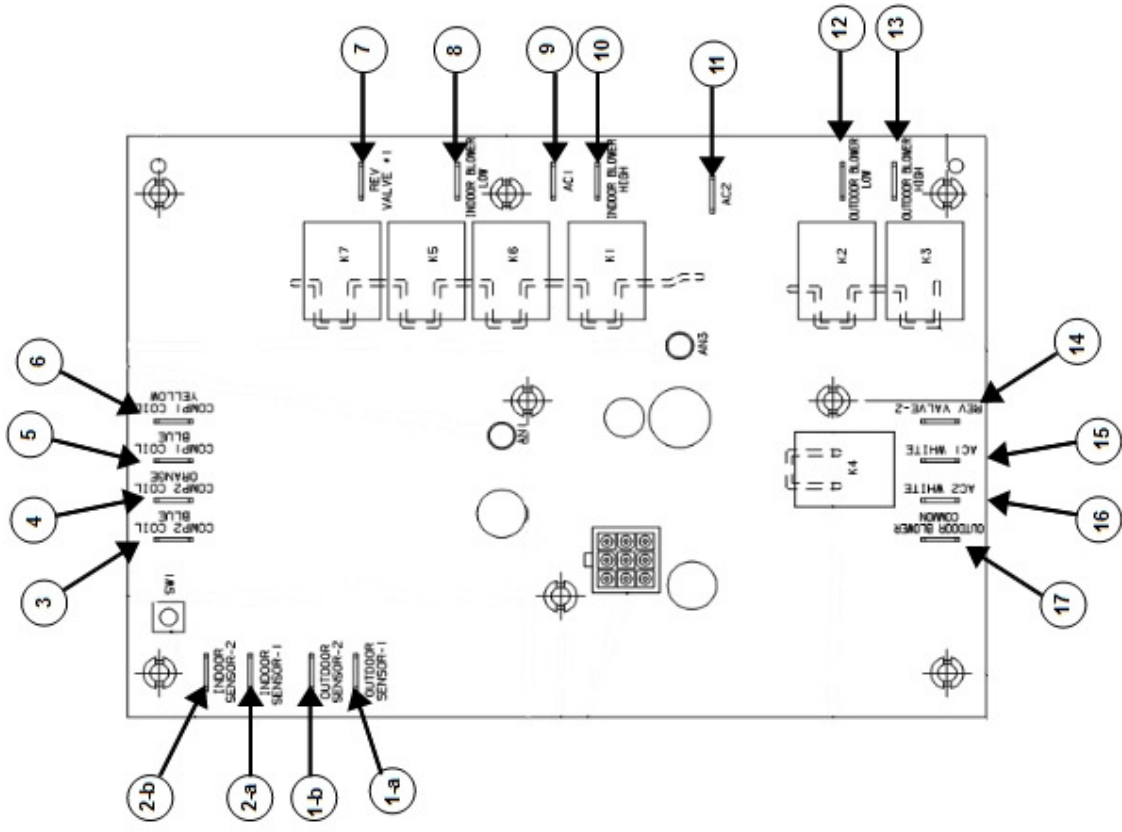
6536A320
(old board)



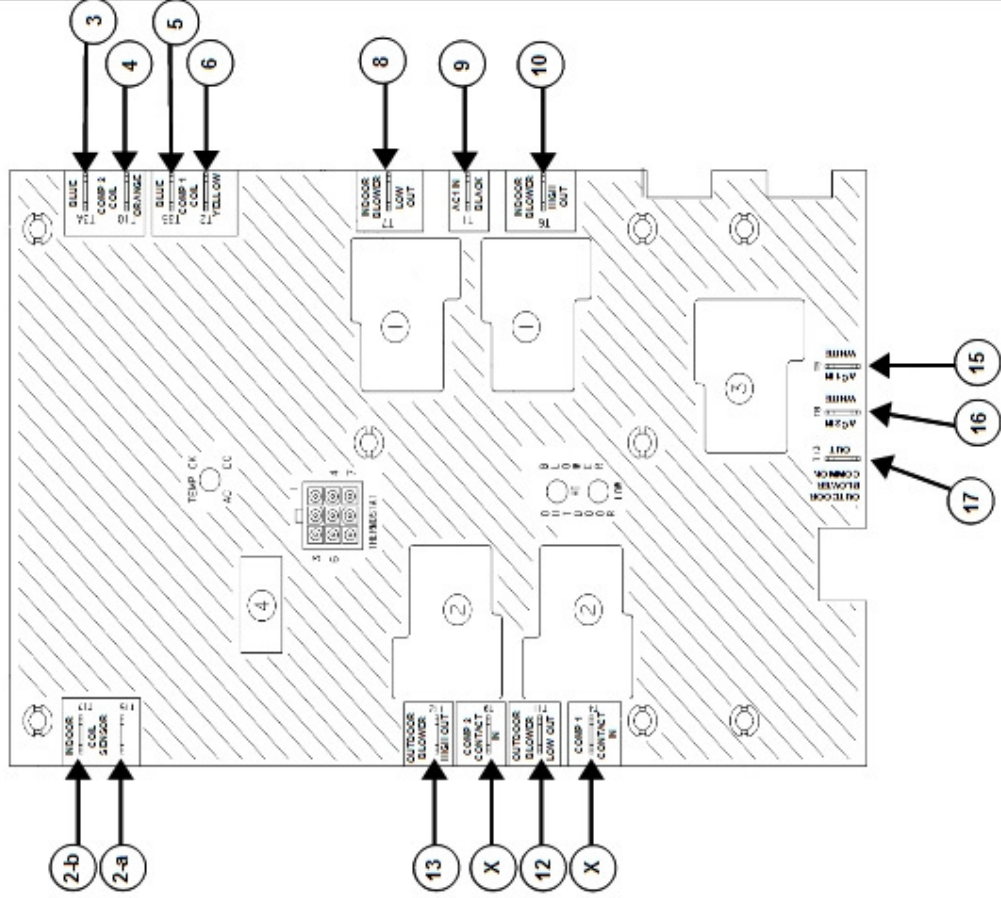
6535C320
(new board)



6535C320
(new board)



6636
(old board)



**Parts List for
6535C3209 Replacement Board Kit**

1 – 6535C320 Printed Circuit Board

2 – 1318-12272 Blue Wire

1 – 1318-12261 Orange Wire

1 – 1318-12250 Yellow Wire

1 – 1318-16210 Black Wire

2 – New 6” x 16 gauge Black Wire

1 – New 6” x 16 gauge White Wire

1 – 1316-16260 Orange Wire

3 – Wire Nuts (Yellow)

1 – 1976*304 Wiring Diagram

Installation Instructions