

Installer's Guide

Variable Speed Side Discharge HP AOC Replacement KIT18534

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES

IMPORTANT — These instructions do not cover all variations in systems, nor do they provide for every possible contingency to be met in connection with the installation. Should further information be desired, or should particular problems arise which are not sufficiently covered for the purchaser's purposes, the matter should be referred to your local distributor.

Table of Contents

Section 1. Safety 1
 Section 2. Tools and Parts Required 2
 Section 3. Terminology 2
 Section 4. Remove AOC assembly 2
 Section 5. Install the AOC assembly 4
 Section 6. Perform Final Inspection..... 4

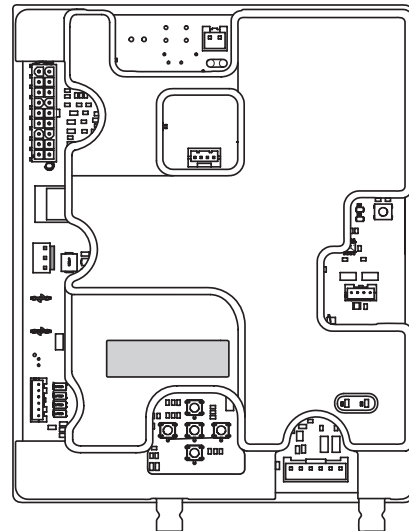
Section 1. Safety

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

⚠ WARNING

HAZARDOUS VOLTAGE!
 Failure to follow this Warning could result in property damage, severe personal injury, or death. Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized.



⚠ WARNING

HIGH LEAKAGE CURRENT!
 Failure to follow this warning could result in property damage, severe personal injury, or death. Earth connection essential before connecting supply.


⚠ CAUTION

HOT SURFACE!
 May cause minor to severe burning. Failure to follow this Caution could result in property damage or personal injury. Do not touch compressor.

⚠ CAUTION

GROUNDING REQUIRED!
 Failure to inspect or use proper service tools may result in equipment damage or personal injury. Reconnect all grounding devices. All parts of this product that are capable of conducting electrical current are grounded. If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.


⚠ WARNING



400 VOLTS

ELECTRICAL HAZARD
 Failure to follow this warning could result in personal injury or death.

WAIT TWO (2) MINUTES after disconnecting power prior to touching electrical components as they may hold a dangerous charge of 400VDC, then verify DC Voltage is less than 42 VDC at Drive test points labeled +VDC and -VDC before servicing board.



If voltage does not drop to 42VDC or less, contact your local service representative

Section 2. Tools and Parts Required

2.1 - Tools Required

The following tools are required to perform the procedures described in this document:

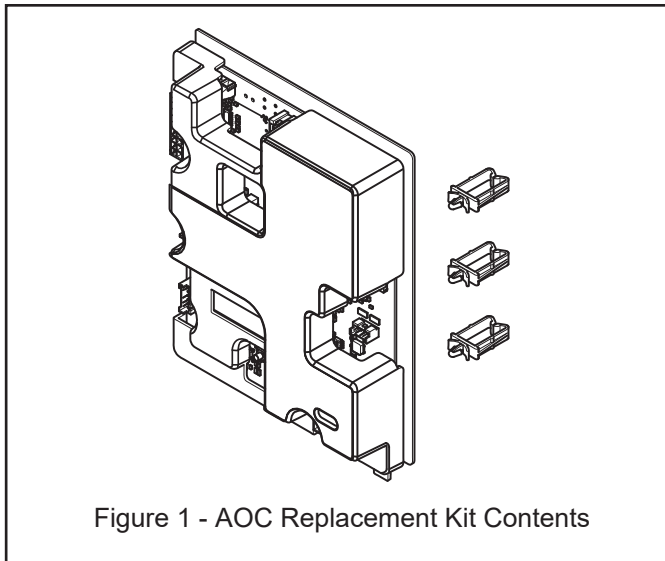
- DC Volt Meter
- 5/16" Nut Driver
- Small screwdriver (may be required if external ambient temperature thermister is used)

2.2 - Parts Required

All required parts are contained in the Replacement Kit that accompanies this document. The kit includes:

- AOC assembly - includes the AOC board, AOC cover, and AOC mount plate
- Three wire retension clips

Verify that you have the required tools and parts before proceeding.



Section 3. Terminology

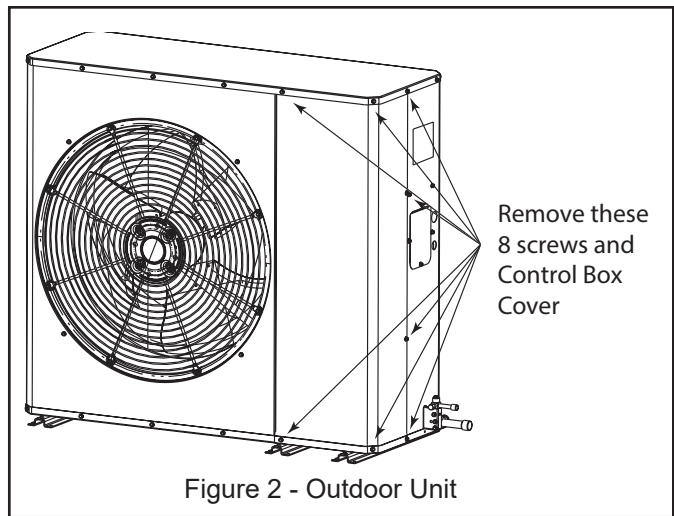
The following terms and abbreviations are used in this document.

- Drive.....same as MOC
 PM..... Personality Module

Section 4. Remove AOC assembly

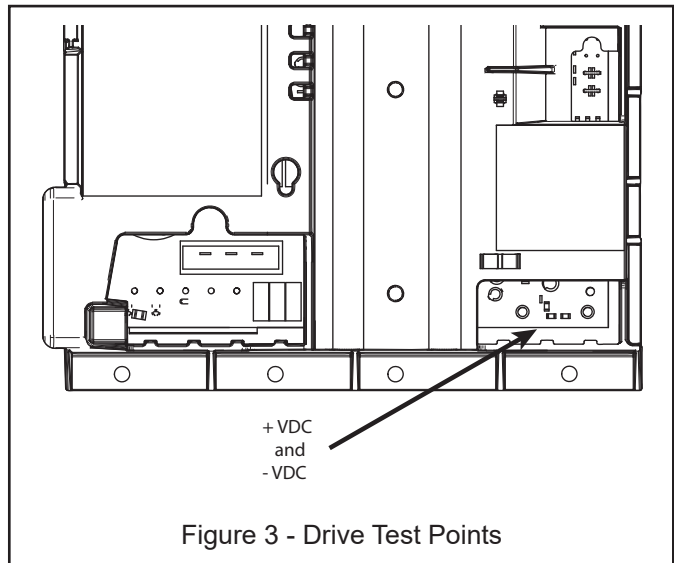
4.1 - Power Down Unit and Remove Cover

1. Power down the Outdoor Unit and wait at least 2 minutes.
2. Remove the 8 screws securing the Control Box cover and place screws and cover aside. See Figure 2 - Outdoor Unit.



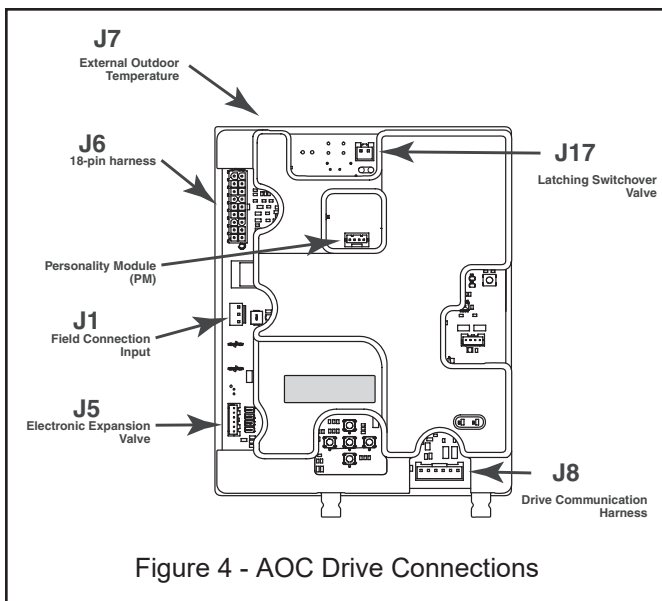
3. Test voltage across Drive test points (see "Section 2. Tools and Parts Required on page 2.")

WARNING - DO NOT PROCEED until DC voltage measures less than 42 VDC.



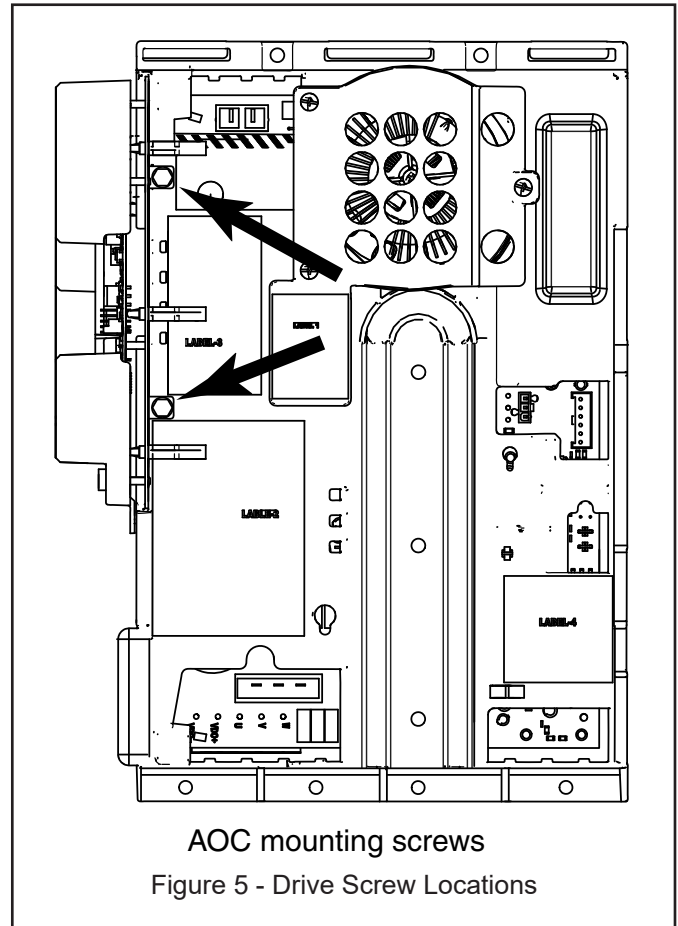
4.2 - Remove Harness Connectors

1. Use care when removing the connectors. Some have latching tabs that must be depressed while removing. **DO NOT PULL ON WIRES.** Grasp by connector only when removing plug from Board.
2. Remove the following wiring and harnesses from the AOC. See Figure 4 - AOC Drive Connections.
 - J6- 18 pin harness
 - J1- DRB low voltage harness
 - J5- EEV Stepper motor
 - J7- External Outdoor Temp Sensor (if used)
 - J17- LSOV Solenoid
 - J8- Drive Communication Harness
 - Personality Module (PM)



4.3 - Remove the AOC from the MOC Drive

1. Remove 2 screws holding the AOC mounting plate assembly to the MOC Drive. See Figure 5.
2. Slide the AOC assembly out of track.



Section 5. Install the AOC assembly

5.1 - Install the new AOC assembly to the MOC

1. Slide the new AOC assembly into the track on the MOC Drive then secure with 2 screws.

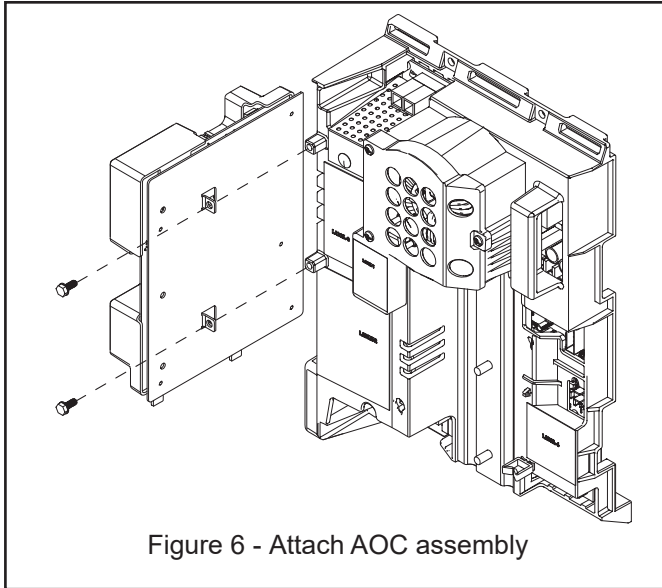


Figure 6 - Attach AOC assembly

5.2 - Install the wire harness retaining clips to the new AOC assembly.

1. Install the three harness retaining clips found in the kit onto the AOC mount bracket side of the AOC assembly

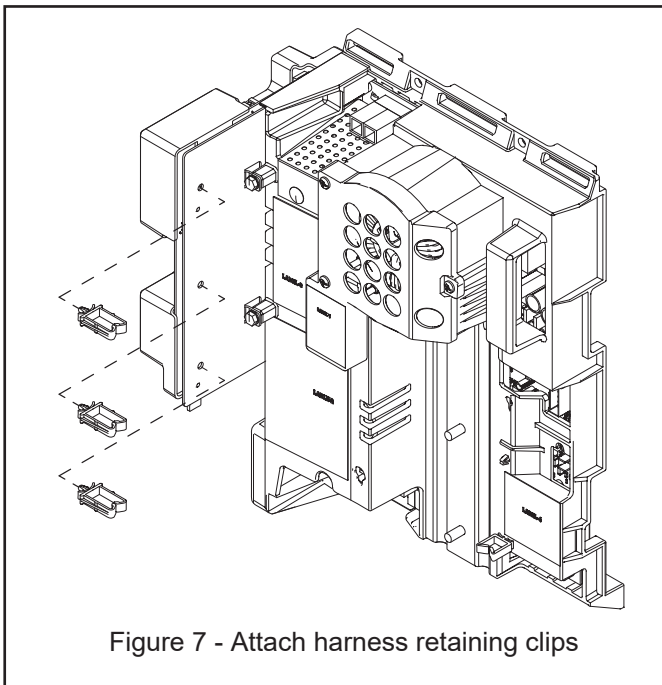


Figure 7 - Attach harness retaining clips

5.3 - Reattach all Harnesses and Wiring

Reattach the following wires and connectors. While the order in which you reattach the wiring is not significant, you may find it easiest to start in the upper left hand of the Board. Refer to Figure 4 for connection locations.

1. Reinstall all harnesses and wiring on the AOC.
 - J6- 18 Pin harness to
 - J1- DRB low voltage harness
 - J5- EEV stepper motor
 - J7- External OD temp sensor (if used)
 - J17- LSOV Solenoid harness
 - J8- Drive Communication Harness
 - Personality Module- PM

5.4 - Secure line voltage wiring into routing clips on the AOC mount bracket.

Clip locations are shown in the figure below.

Note: It is important to run the line voltage wire with ferrite through the retaining clips to support the weight of the ferrite.

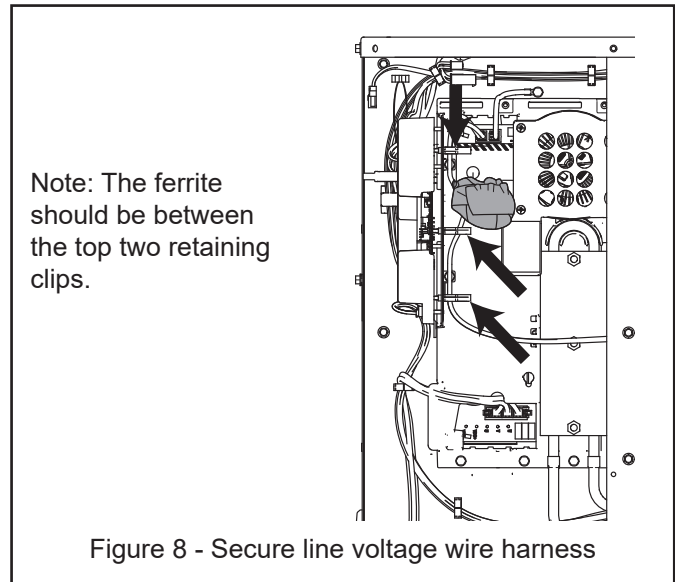


Figure 8 - Secure line voltage wire harness

5.5 - Re-apply power to Outdoor Unit.

Section 6. Perform Final Inspection

1. Verify that all wires and plugs are reconnected and that no wires are pinched between the AOC assembly and Drive.
2. Start up Unit and verify operation.
3. Replace the Control Box cover and secure the 8 screws.

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