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PACKAGED UNITS - KITS

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Supersedes 02/2012

NOVAR 2024 DDC KIT

INSTALLATION INSTRUCTIONS FOR NOVAR 2024 DDC KIT 86W93 AND 86W94 USED WITH SCC/SGC UNITS

THIS MANUAL MUST BE LEFT WITH THE OWNER FOR FUTURE REFERENCE

Shipping and Packing List

Package 1 of 1 contains:

- 1 – NOVAR 2024 DDC assembly (A1)
- 1 – Discharge air sensor (RT1) with P63 connector
- 1 – Bracket, DDC controls
- 1 – Bag assembly containing:
 - 4 – #8–32 X 1/2” screws
 - 1 – Wiring diagram sticker
 - 6 – #10–16 X 5/8” screws

Application

The NOVAR 2024 DDC is used with SCC/SGC series units. An A74 room air sensor is used to monitor space temperature. Do not install the return air sensor if a room air sensor used. The room air sensor is wired to the Prodigy® control by the controls contractor.

The RT1 discharge air sensor monitors discharge or supply air temperature.

!WARNING

Improper installation, adjustment, alteration, service or maintenance can cause personal injury, loss of life, or damage to property. Installation and service must be performed by a qualified installer or service agency.

!CAUTION

Physical contact with metal edges and corners while applying excessive force or rapid motion can result in personal injury. Use caution when working near these areas during installation or while servicing this equipment.

!WARNING



Electric shock hazard. Can cause injury or death. Before attempting to perform any service or maintenance, turn the electrical power to unit OFF at disconnect switch(es). Unit may have multiple power supplies.

Installation

1. Disconnect all electrical power to unit.
2. Open compressor section access doors.
3. Depending on the size of unit, perform step 4 or 5.
4. 036, 060, 120 Units: Position DDC hinged mounting panel as shown in figure 1. Make sure the DDC faces the A55 Prodigy control board. Align holes on hinged bracket with dimples on the unit side. Secure DDC panel to unit with two 5/8” screws.

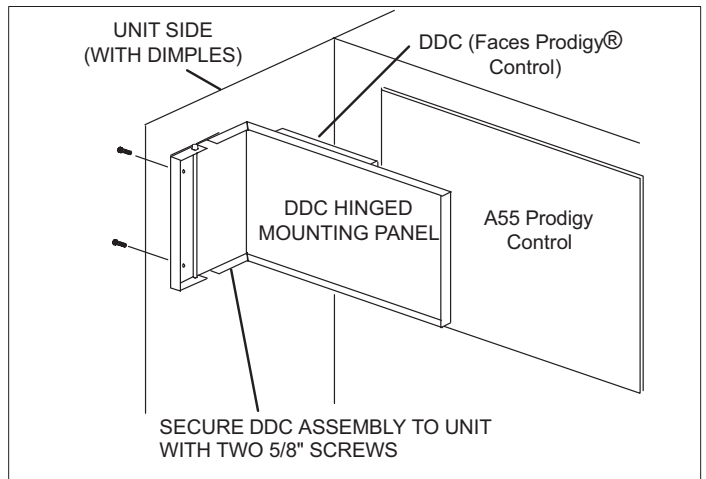


Figure 1. 036, 060, 120 Units – Installing DDC Hinged Mounting Panel

Pivot hinged panel away from Prodigy® control board to access the DDC. See figure 2.

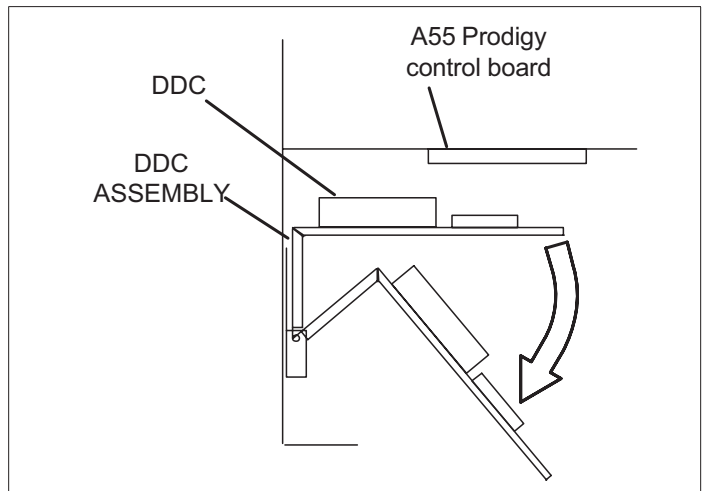


Figure 2. 036, 060, 120 Units – Accessing DDC (Top View)

5. 240 Units: Attach the hat section provided in the kit to the DDC assembly using two 5/8" screws (see figure 3.)

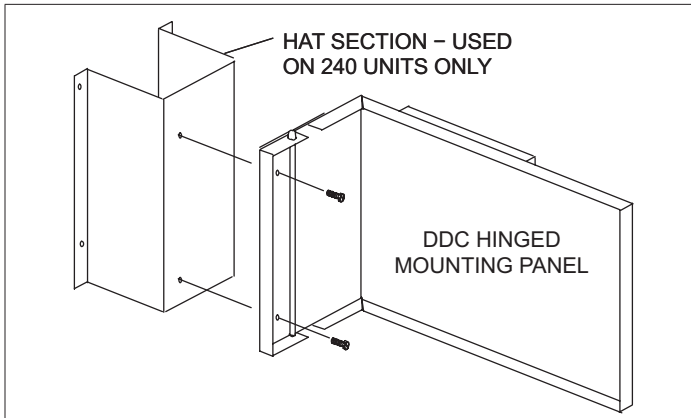


Figure 3. 240 Units – Attaching DDC Hinged Mounting Panel to Hat Section

Position the DDC assembly as shown in figure 4. Make sure the DDC faces the A55 Prodigy control board. Align holes on hat section with dimples on the unit side. Secure hat section to unit with four 5/8" screws.

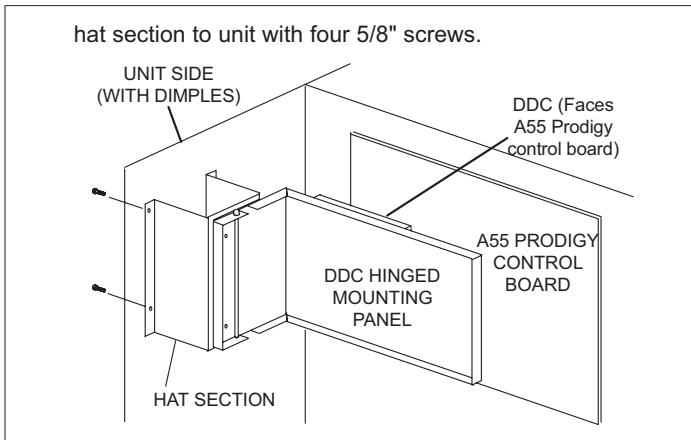


Figure 4. 240 Units – Installing DDC/Hat Section

Pivot hinged panel away from A55 Prodigy control board to access DDC (see figure 5).

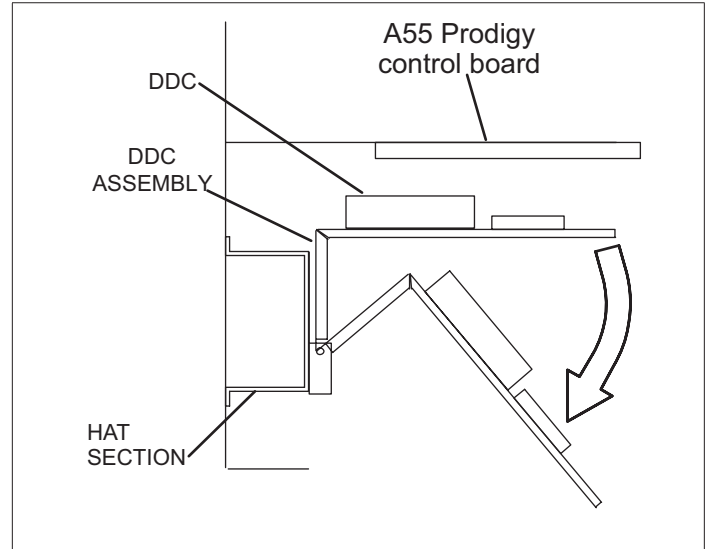


Figure 5. 240 Units – Accessing DDC (Top View)

Route harnesses coming from sub-assembly as shown in figure 6 for the following steps 1 through 3.

1. Disconnect J264C from M2 board and connect to P303 of controller sub-assembly.
2. Connect connectors (J297A, B and C) to M2 board J297.
3. Route J63 Harness through conduit bushing.
4. Route harnesses coming from DDC Control sub-assembly J63 down to lower blower support panel.
 - SCC/SGC 036/060 units: see "Figure 7. Routing J63 RT1 Harness (036,060 Units)" on page 3.
 - SCC/SGC 120/240 units: see "Figure 8. Routing J63 RT1 Harness (120,240 Units)" on page 3.

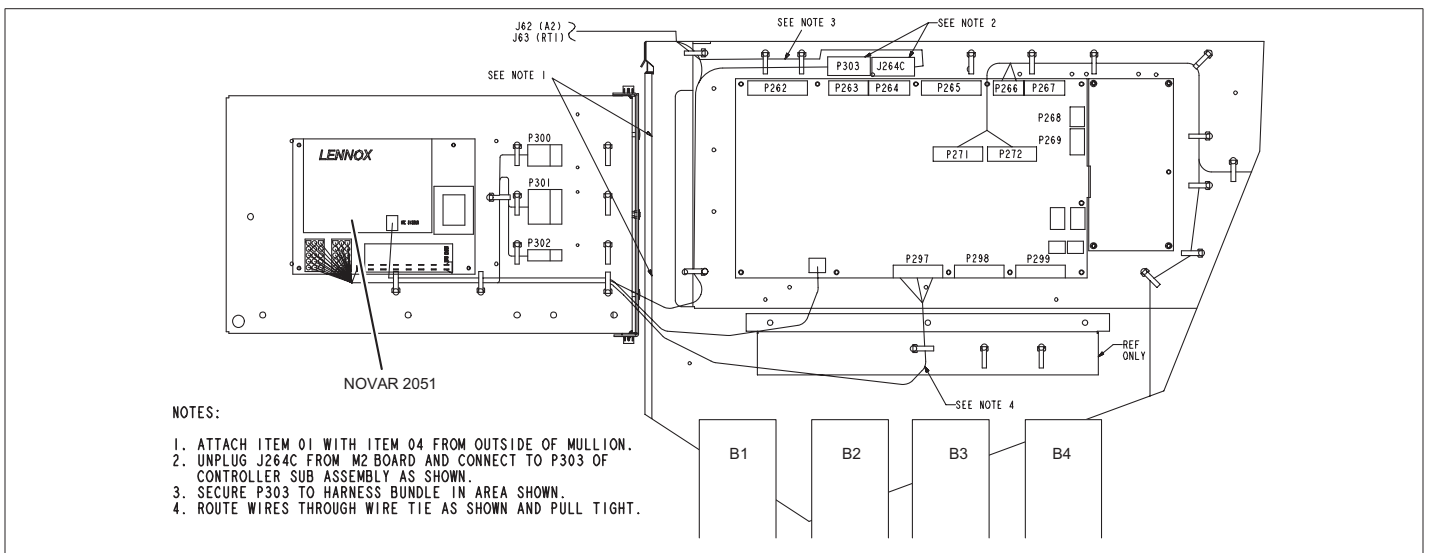


Figure 6. 240 Units – Accessing DDC (Top View)

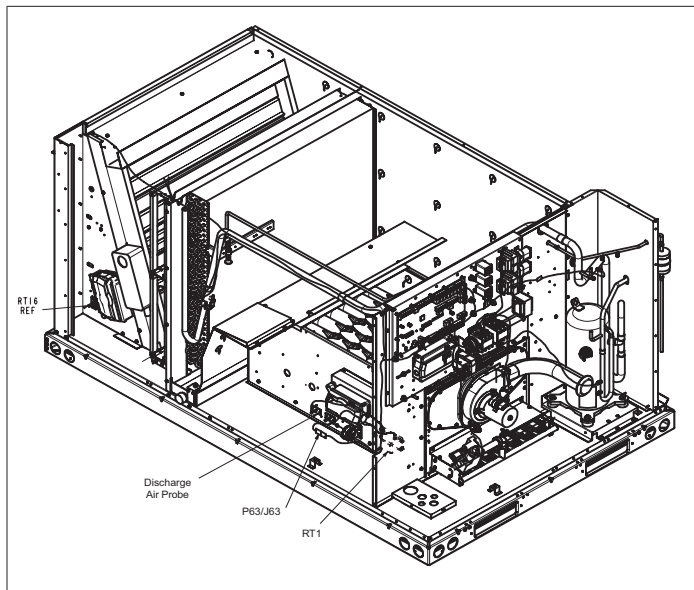


Figure 7. Routing J63 RT1 Harness (036,060 Units)

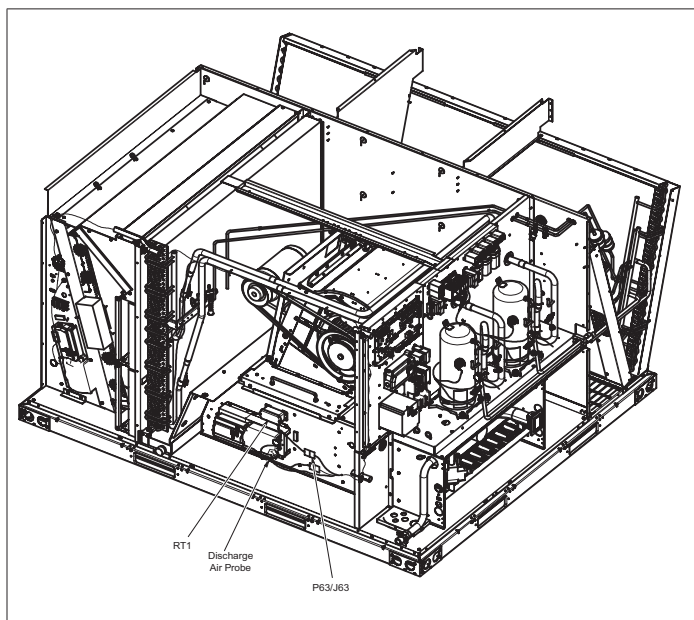


Figure 8. Routing J63 RT1 Harness (120,240 Units)

Discharge Air Sensor RT1

1. Insert discharge air sensor probe into knockout as shown in figure 9 (036, 060 units) or figure 10 (120, 240 units). Secure with two screws provided.

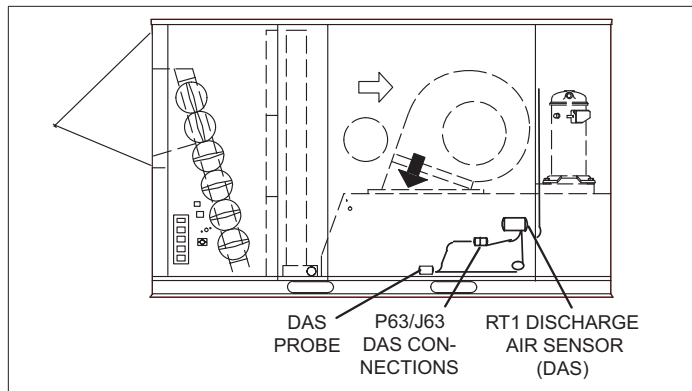


Figure 9. RT1 Discharge Air Sensor (036, 060 Units)

2. Connect RT1 discharge air sensor plug P63 to RT1 discharge air sensor jack J63.

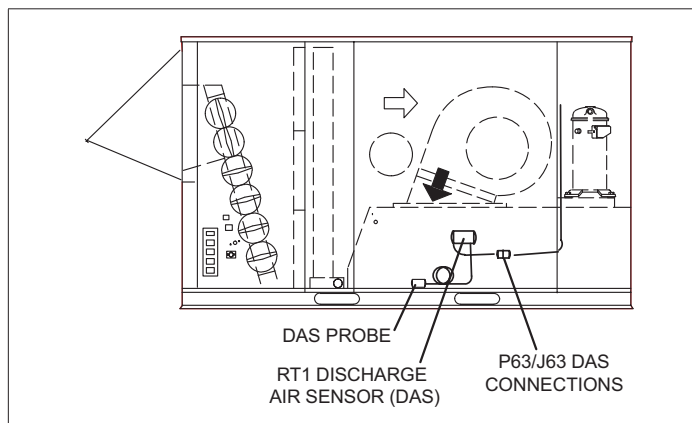


Figure 10. RT1 Discharge Air Sensor (120, 240 Units)

Wiring

FIELD WIRING

Controls contractor completes field wiring connections to optional system components shown in dotted lines in “Figure 12. 240 Units – Accessing DDC (Top View)” on page 4.

WIRING DIAGRAMS

Wiring diagram sections are affixed to inside of unit panel in alpha-numeric order. Figure 11 shows an example of a complete system diagram on an installation consisting of an SGA240 unit with an electro-mechanical or electronic control system and a modulating economizer. Affix the C7” section wiring diagram, provided, over the top of the existing C” section wiring diagram.

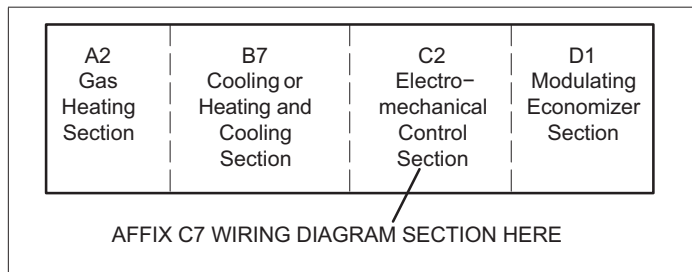


Figure 11. Complete System Diagram

