

INSTALLATION INSTRUCTIONS

Start Capacitor & Relay Kit

NASA003SC, NASA004SC, NASA005SC

These instructions must be read and understood completely before attempting installation.

Safety Considerations:

Installing and servicing of air conditioning equipment can be hazardous due to system pressure and electrical components. Only trained personnel should install or service air conditioning equipment.

Untrained personnel can perform basic maintenance functions such as cleaning coils or cleaning and replacing filters. All other operations should be performed by trained service personnel. When working on air conditioning equipment observe precautions in the literature and on tags and labels attached to the unit.

Follow all safety codes. Wear safety glasses and work gloves. Use a quenching cloth for brazing operations. Have a fire extinguisher available.

Safety Labeling and Signal Words

DANGER, WARNING, CAUTION, and NOTE

The signal words **DANGER**, **WARNING**, **CAUTION**, and **NOTE** are used to identify levels of hazard seriousness. The signal word **DANGER** is only used on product labels to signify an immediate hazard. The signal words **WARNING**, **CAUTION**, and **NOTE** will be used on product labels and throughout this manual and other manuals that may apply to the product.

DANGER – Immediate hazards which **will** result in severe personal injury or death.

WARNING – Hazards or unsafe practices which **could** result in severe personal injury or death.

CAUTION – Hazards or unsafe practices which **may** result in minor personal injury or product or property damage.

NOTE – Used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

Signal Words in Manuals

The signal word **WARNING** is used throughout this manual in the following manner:



WARNING

The signal word **CAUTION** is used throughout this manual in the following manner:



CAUTION

Signal Words on Product Labeling

Signal words are used in combination with colors and/or pictures on product labels.

INTRODUCTION

These instructions cover the installation of Start Capacitor & Relay Kits on split-system air conditioners and heat pumps.

The Start Capacitor & Relay Kit is designed to boost compressor starting torque.



WARNING

ELECTRICAL SHOCK HAZARD

Failure to turn off electric power could result in personal injury or death.

Before installing or servicing system, turn off main power to the system. There may be more than one disconnect switch, including accessory heater(s).

DESCRIPTION AND USAGE

The Start Capacitor & Relay kit causes the start capacitor to give the compressor a hard boost at each start-up. The relay takes the start capacitor out of the circuit after start-up.

Kit P/N	Start Capacitor
NASA003SC	HC95DE088 (88–108 μ F / 330 VAC)
NASA004SC	HC95DE297 (270–324 μ F / 330 VAC)
NASA005SC	HC95DE045 (176–216 μ F / 330 VAC)

Included in the kit are:

Start Capacitor	----- 1
Relay HN61HB540	----- 1
Strap (capacitor)	----- 1
Screws	----- 3
Black Wire	----- 1
Blue Wire	----- 1
Brown Wire	----- 1
Yellow Wire	----- 1
Installation Instructions	----- 1

INSTALLATION

NOTE: Remove and discard PTC start thermistor if present.

Refer to Figures 1 and 2.

1. Remove 2 existing screws above run capacitor.
2. Fasten Start Relay at top center of control box. Position tab on relay into dimple on control box and fasten bracket with one screw.
3. Position Strap to Start Capacitor with flap pointing left and capacitor terminals pointing up.
4. Fasten Start Capacitor and Strap assembly to control box above run capacitor. Use provided screw.
5. Connect black wire to terminal 5 on start relay and terminal 21 on contactor.
6. Connect blue wire to terminal 2 on start relay and H on unit run capacitor.
7. Connect brown wire to terminal 1 on start relay and to either terminal on start capacitor.
8. Connect yellow wire to open terminal on start capacitor and C on unit run capacitor.

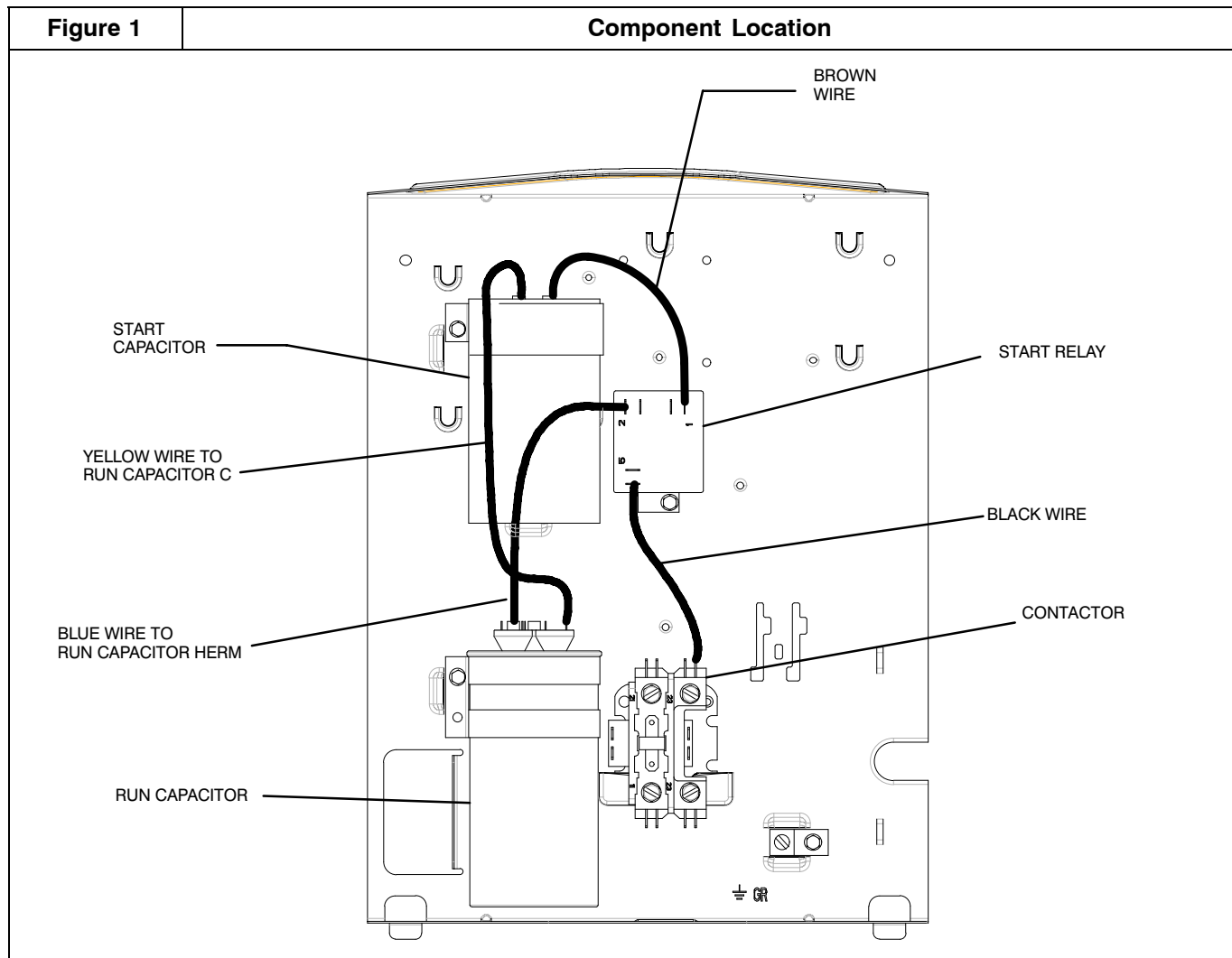
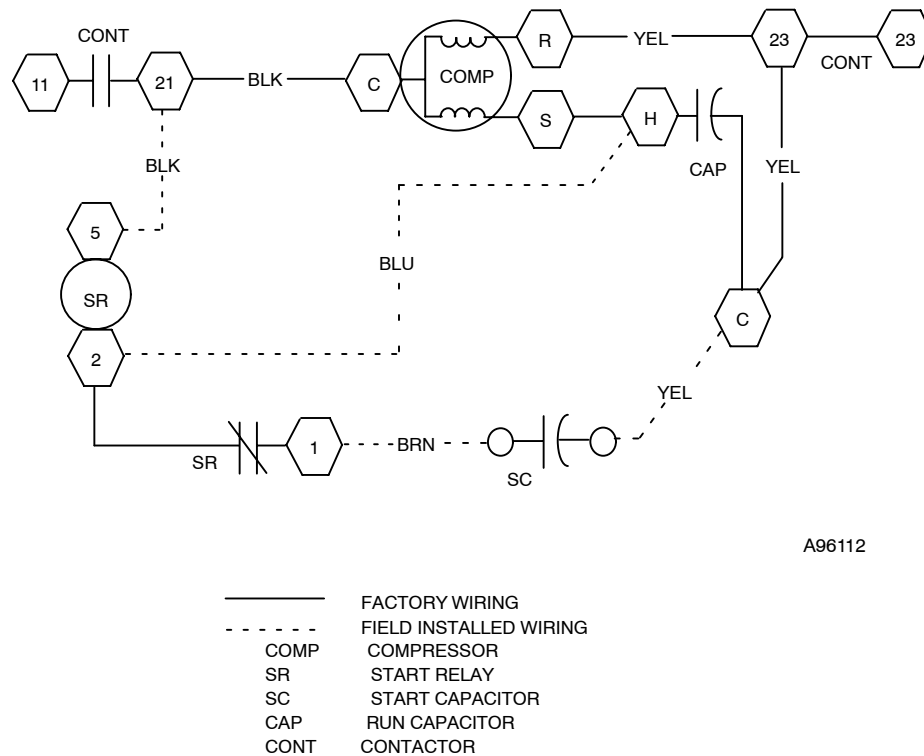


Figure 2

Start Capacitor & Relay Wiring



SYSTEM START-UP

Check all electrical connections for proper position. Check system pressures for equalization. Restore power to unit and start compressor. If the compressor fails to start, check unit wiring. Power supply must be within operating voltage range indicated on unit rating plate.