

# INSTALLATION INSTRUCTIONS

## Crankcase Heater Kit

NASA001CH, NASA002CH, NASA003CH, NASA004CH

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.



**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).

## INTRODUCTION

This instruction covers the installation of Crankcase Heater Kits in air conditioning equipment.

Crankcase Heaters are used to warm the oil, to reduce refrigerant migration, and to ensure proper compressor lubrication.

## DESCRIPTION AND USAGE

The crankcase heater warms the compressor crankcase during the off cycle when ambient temperature is below 66° F. Crankcase heater is wired across the open contacts of the contactor. When contactor is de-energized, crankcase heater is on. When contacts are closed, no current flows through the heater because it is on the same line voltage side as the compressor.

Included in the kit are:

- Crankcase heater----- 1
- Wiring Label ----- 1
- Installation Instructions ----- 1
- Temperature switch ----- 1

## INSTALLATION

Remove unit access panel and control box access panel. Install crankcase heater on compressor as shown in Figure 1.

Wrap heater around compressor base below oil level (heater arms may be spread to slip over piping and terminal box). Position heater below compressor terminal box, and approximately 2 inches above compressor mounting plate. Fasten heater firmly in place with clip provided on heater.

Wiring: Route one crankcase heater wire into control box and attach to quick-connect line voltage terminal 11 on

contactor. Cut quick-connect off other crankcase heater wire, strip and connect to stripped temperature switch wire with a wire nut. Route other temperature switch wire into control box and attach to quick-connect line voltage terminal 21 on contactor.

Temperature switch must be exposed to ambient temperature. Wire tie temperature switch to wire bundle outside control box enclosure.

Reinstall control and unit access panels and check unit operation.

