TRANE

Installation Instructions

SEL0022 and SEL0032

2764-0001-12-00

⚠ 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.

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TRANE TECHNOLOGIES

1

Warnings, Cautions, and Notices

Read this manual thoroughly before operating or servicing this unit. Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:

⚠ WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert
NOTICE	Indicates a situation that could result in equipment or property-damage only accidents.

Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants-including industry replacements for CFCs such as HCFCs and HFCs.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

2

⚠ WARNING

Proper Field Wiring and Grounding Required!

Failure to follow code could result in death or serious injury. All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state electrical codes.

⚠ WARNING

Personal Protective Equipment Required!

Installing/servicing this unit could result in exposure to electrical, mechanical and chemical hazards. Before installing/servicing this unit, technicians MUST put on all Personal Protective Equipment (PPE) recommended for the work being undertaken. ALWAYS refer to appropriate SDS sheets and OSHA guidelines for proper PPE. When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS sheets and OSHA guidelines for information on allowable personal exposure levels, proper respiratory protection and handling recommendations. If there is a risk of arc or flash, technicians MUST put on all necessary Personal Protective Equipment (PPE) in accordance with NFPA70E for arc/flash protection PRIOR to servicing the unit. Failure to follow recommendations could result in death or serious injury.

⚠ WARNING

Follow EHS Policies!

Failure to follow instructions below could result in death or serious injury.

- **All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.**
- **Non-Trane personnel should always follow local regulations.**

3

⚠ WARNING

Hazardous Voltage!

Failure to disconnect power before servicing could result in death or serious injury. Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized.

1. Scope and Purpose
   a. These installation instructions are for compressor shaft seals.
   b. Purpose is to assure proper installation of shaft seals in the field to assure satisfactory seal performance.
2. Requirements and Details
   a. Components of shaft seals consists of the components as shown in sketch.
   b. Preparation.
      1. Pump down compressor to a pressure of 5 psig. After closing the service valves, purge the compressor high side pressure to the suction side of the system. Use a refrigerant recovery device to minimize refrigerant emission to atmosphere.
      2. Remove motor to compressor coupling to allow for the removal of the seal assembly.
      3. Remove old seal cover and shaft seal assembly being careful not to score or damage the seal surfaces of the crankshaft.
      4. Seal cavity must be clean and free of foreign material. All seal parts must be clean and free from dust and foreign material.
      5. Inspect and carefully clean the seal surfaces of the crankshaft. Use 320 grift paper or finer to clean shaft.

c. Installation

1. Lubricate the rectangular O-ring on the Iron seal seat.
2. Slide iron seal seat into seal cover aligning the roll pin properly with the roll pin hole in the seat cover. The Iron seal seat should be in firm contact with the shoulder in the seal cover. Care should be taken to avoid damage to either the rectangular O-ring or the seating surface.
3. Inspect bellows to assure that the tail end of the bellows is square with the end of the drive band and not "Peeled" over.
4. Apply a piece of "scotch" tape lengthwise over the key way slot.
5. Lubricate the I.D of the neoprene bellows only with clean compressor oil. Do not allow oil to get between the tail end of the bellows and the drive band.
6. Lubricate the crankshaft extension with a light film of compressor oil.
7. Slide the shaft seal onto the crankshaft until the spring holder tube are firmly against the shaft shoulder. Lubricate the lapped surface of the carbon nose ring with clean compressor oil from a long spout oil can.

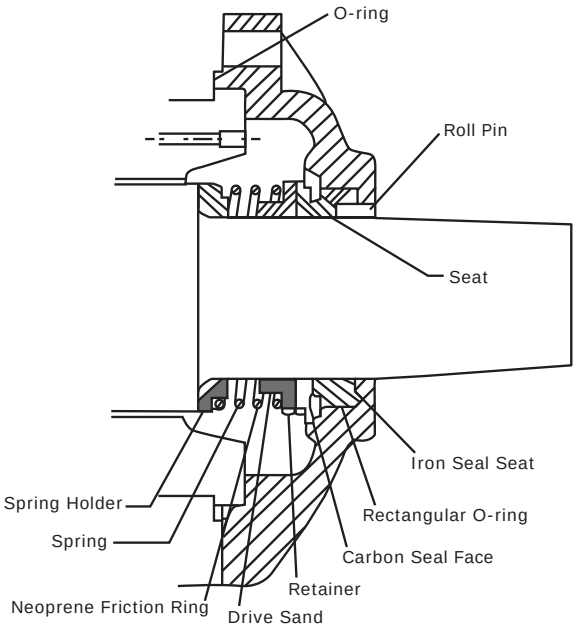
⚠ CAUTION

Do not touch the lapped surface of the carbon nose ring or gland plate with your fingers.

8. Lubricate the O-ring and position.
9. Remove the piece of "scotch" tape.
10. Using two capscrews, pin the seal cover to the compressor housing. Care should be taken to prevent damage to the carbon nose ring as the capscrews ar drawn down. Install the remaining cap screws and torque to 43 Ft-Lbs.
11. Evacuate the compressor to a pressure of 500 microns maximum and break the vacuum with the refrigerant charge.
12. Reinstall the coupling.

Note: *Link up between the compressor shaft and motor shaft must be within 0.005 inch T.I.R.*

13. Run-in the compressor for one-half hour. Then, check for leaks around the gland plate and coupling hub.



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