

Installation Instructions

Variable Refrigerant Flow (VRF) System VRF Single-Phase Outdoor Unit Hail Guard

Model Number: TVRGARD003A

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 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 against unsafe practices.

NOTICE: Indicates a situation that could result in equipment or property-damage only accidents.

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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. 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.

WARNING

Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in death or serious injury. Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, MUST follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- Before installing/servicing this unit, technicians MUST put on all PPE recommended for the work being undertaken. ALWAYS refer to appropriate MSDS sheets and OSHA guidelines for proper PPE.
- When working with or around hazardous chemicals, ALWAYS refer to the appropriate MSDS 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 PPE in accordance with NFPA 70E or other country-specific requirements for arc flash protection, PRIOR to servicing the unit.

WARNING

Proper Field Wiring and Grounding Required!

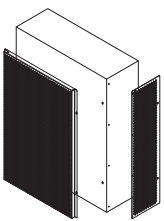
Failure to follow code could result in death or serious injury. All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding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

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Purpose

Hail guards are designed to protect the outdoor unit condenser coil from hail and general contact damage. Excessive damage to outdoor unit coils can result in diminished performance due to reduced air flow over the heat transfer surfaces.

Specifications

Hail guard model	TVRGARD003A
	
Outdoor unit capacity	3-5 ton
Weight	15 lbs.

Accessories

The hail guard is shipped with #8 x 1/2 in. hex-head self-tapping screws.

Installation

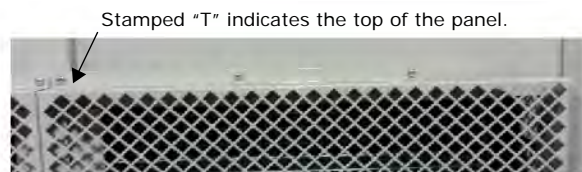
NOTICE

Use only the provided #8 x 1/2 in. hex-head self-tapping screws for pre-drilling and for installation. Screws longer than 1/2 in. could cause coil damage.

1. Identify the top of each hail guard panel by locating the stamped "T" on the top left edge (see Figure 1).

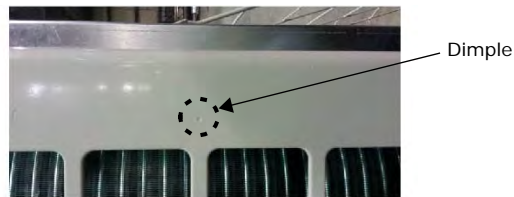
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Figure 1. Top of hail guard



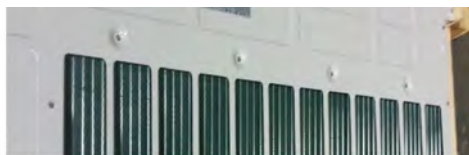
2. Locate the dimples on the condenser.

Figure 2. Dimples on the condenser



3. Using a #8 x 1/2 in. hex-head self-tapping screw, pre-drill the dimples on the condenser (see Figure 3).

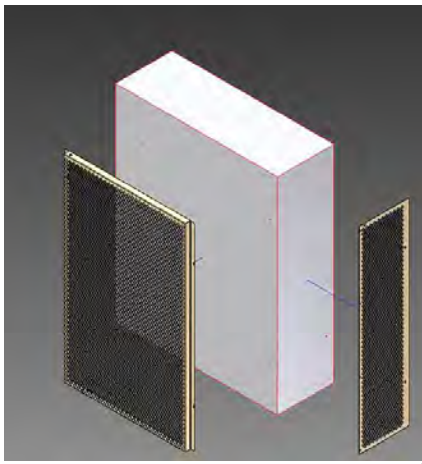
Figure 3. Pre-drilled dimples



4. Hold each hail guard panel in place, lining up panel holes with pre-drilled dimples on condenser. (Remove factory-installed screws, if necessary.)
5. Using the #8 x 1/2 in. hex-head self-tapping screws, install each panel (refer to Figure 4).

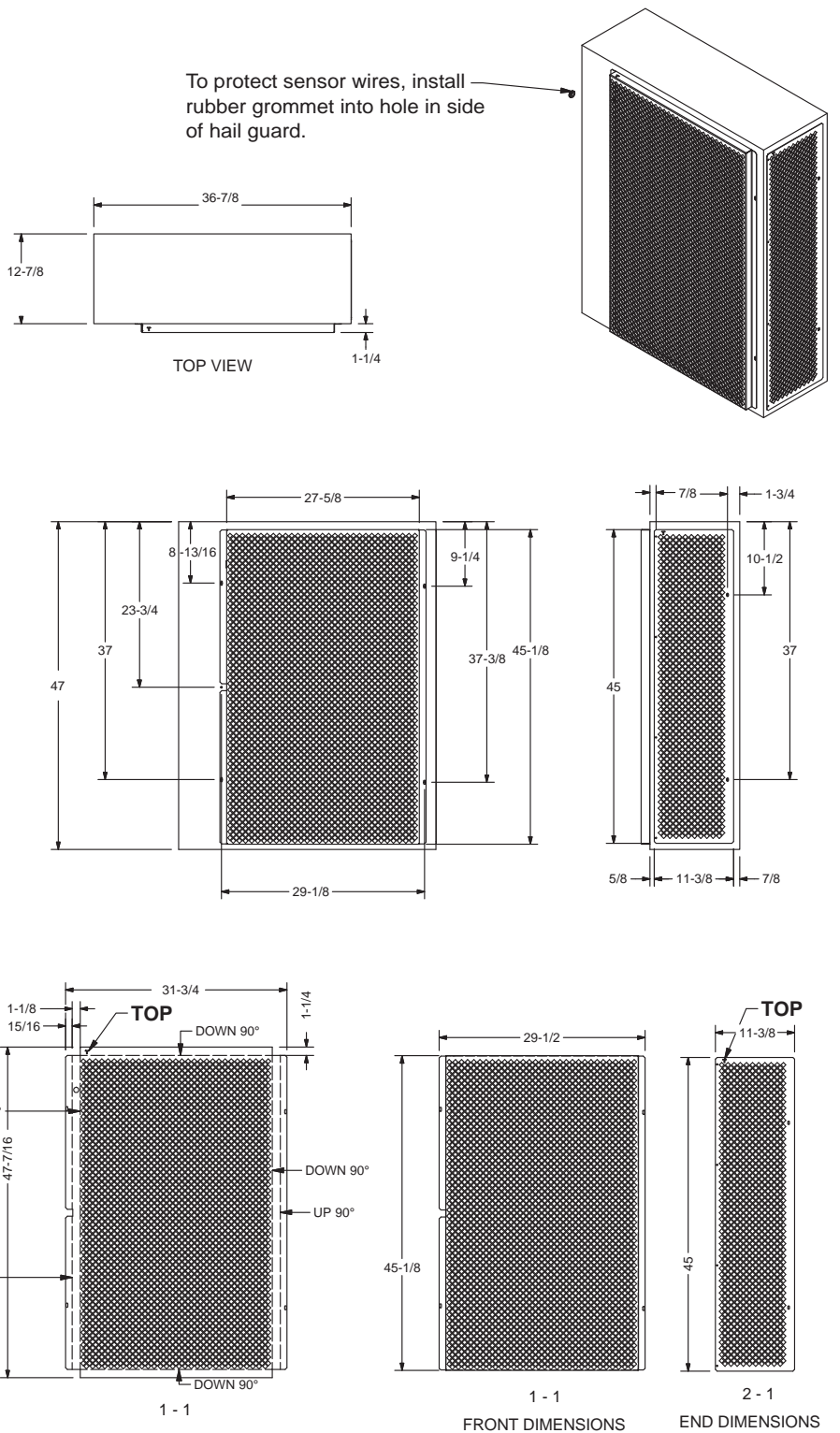
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Figure 4. Installing hail guard panels



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Figure 5. Dimensions



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