Installation Instructions

Trane Rental Service

Start-Up and Shutdown - RSGP0140, 180, 250F4 Generator

⚠ 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.

July 2021 **TEMP-SVN001A-EN**

Introduction

Read this manual thoroughly before operating or servicing this unit.

Warnings, Cautions, and Notices

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 against unsafe practices.

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 and HCFCs such as saturated or unsaturated HFCs and HCFCs.

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.

⚠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/national electrical codes.

⚠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 required for the work being undertaken (Examples; cut resistant gloves/sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). ALWAYS refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.**
- **When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labeling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.**
- **If there is a risk of energized electrical contact, arc, or flash, technicians MUST put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, PRIOR to servicing the unit. NEVER PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.**

⚠ 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.**

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Note: *Replace Manual in Cabinet After Use!*

Human Machine Interface

Figure 1. Human machine interface

This control system includes an intuitive operator interface panel that allows for complete genset control as well as system metering, fault annunciation, configuration and diagnostics. The interface includes five genset status LED lamps with both internationally accepted symbols and English text to comply with customer's needs. The interface also includes an LED backlit LCD display with tactile feel soft-switches for easy operation and screen navigation. It is configurable for units of measurement and has adjustable screen contrast and brightness. All data on the control can be viewed by scrolling through screens with the navigation keys. The control displays the current active fault and a time-ordered history of the five previous faults.

Start-Up

⚠WARNING

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1. Level the generator using front jack and appropriate cribbing as needed.
   Wheels must be chocked.

Important: *Do not attempt to utilize the electric emergency brake as a means to keep the unit stationary. Ensure generator is grounded properly in accordance with local code.*

2. Plug in battery charger to 120 Vac power receptacle. Plug is located on passenger side of generator inside the same door as the controller.

3. Locate camlock/BUS connections on driver side of the generator.
4. Connect cables to the generator and the load.

5. Verify generator voltage by checking the voltage selector switch inside the cable connection door.

Important:

- *Do not change the voltage when the generator is running.*
- *Ensure the connection door is closed and latched to prevent Bus bar door open fault.*

6. Verify all cables are correctly connected at both the generator and load.
7. Locate the battery disconnect switch on the drivers side of the engine and turn the switch **ON**.

8. Open the controller door on the right side of the unit.
9. Press the **HOME** button on the controller.
10. Verify the display is not showing any faults.
    If **Local E-stop** is displayed, pull the **EMERGENCY STOP** button. The button is located directly below the unit controller.
    If faults are shown on the display, press the **STOP** button and then the **RESET** button.

    Note: *Low coolant temperature is an expected fault.*

Important: *Run the generator in idle mode until the engine temperature reaches 100°F or five minutes have passed.*

11. Ensure the toggle switch is in the **IDLE** position.

12. To start the unit, press the **MANUAL** button.

13. Press the **START** button.
    Unit should now be running in low idle.

14. Run the unit for five minutes or until the coolant temperature reaches 100°F.
15. To supply power to the load, flip the toggle switch to **RUN**.

16. Press **CB Close** to close the breaker and supply power to the load.
    The breaker will close and a red light will illuminate on the **CB Close** button.

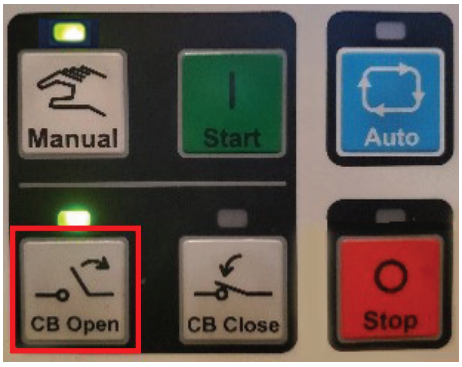
The GenSet is successfully started and energy is supplied to the load.

Shutdown

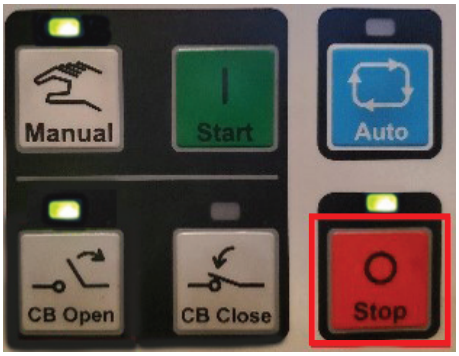
Follow the manufacturer's instructions to shutdown all equipment powered by the generator.

Important: *Verify there is no generator load.*

1. Press the **CB Open** button.



2. Press the **Stop** button.



Note: *The generator will continue to run in cooldown mode for several minutes.*

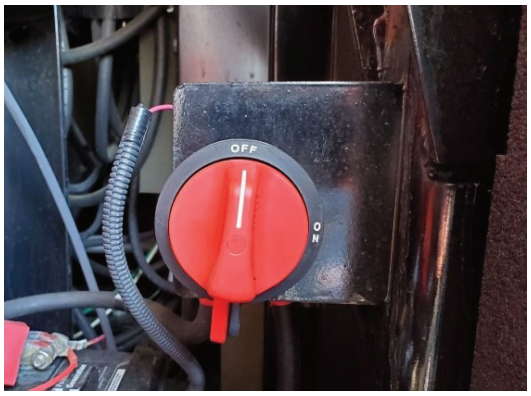
Delay to Stop will display on the controller. The genset will run for two minutes with no load to cool down.

After the cool down period, the genset will shutdown.

3. Once engine stops, wait 60 seconds and turn the battery disconnect switch to **OFF.**
   Battery disconnect switch is located on driver side of engine.

Note: *If there is no need for the GenSet in the near future, ensure the battery switch is **OFF**.*

Important: *If decomissioning unit, continue to Step 4.*



4. Disconnect cabling from the generator, main generator output cables, battery charger cable, and generator grounding cable.
5. Ensure all cable access doors are latched closed.

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TEMP-SVN001A-EN 10 Jul 2021
(NEW)