

Installer's Guide

Cabinet Separation Guide for Hyperion™ and ForeFront™ Air Handlers

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.

Introduction

Read this manual thoroughly before operating or servicing this unit.

This document is customer property and is to remain with this unit. Return to the service information pack upon completion of work.

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.

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 Labelling 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.

⚠ WARNING**Cancer and Reproductive Harm!**

This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

⚠ WARNING**Safety Hazard!**

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

This unit is not to be used by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.

Do not allow children to play or climb on the unit or to clean or maintain the unit without supervision.

⚠ WARNING**Safety Hazard!**

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

All phases of the installation must conform to **NATIONAL, STATE, AND LOCAL CODES**. For additional information, please contact your local distributor.

⚠ WARNING**Safety Hazard!**

Failure to follow instructions below could result in death or serious injury and/or property damage. Only qualified personnel with adequate electrical and mechanical experience must repair the unit. The manufacturer or seller is not responsible for any interpretation or resulting liability.

⚠ WARNING**Live Electrical Components!**

Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

When it is necessary to work with live electrical components, have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks.

⚠ CAUTION**Safety Hazard!**

Failure to follow instructions below could result in minor to moderate injury.

Cutting of air handler cabinet materials for the cabinet separation procedure for Hyperion™ and ForeFront™ air handlers may result in debris being released into the air. Personal Protection Equipment (PPE) is recommended during the cabinet separation procedure for protection of the eyes, mouth, and nose.

⚠ CAUTION**Sharp Edges!**

Failure to follow instructions below could result in minor to moderate injury or property damage.

Be careful of sharp edges on equipment or any cuts made on sheet metal while installing or servicing.

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General Information

The instructions in this documents are to be used as a guide to separate the cabinets into halves when access to the installation point is restricted due to physical size.

Important: *Set the air handler in an open environment that provides plenty of room to perform the procedure.*

Notes:

- *It is recommended that the sheet metal pieces be prepared prior to getting to the job site.*
- *Debur the metal spline plates or foil tape the spline plates to avoid sharp edges.*

Materials Required

- 24-GA (minimum) sheet metal – 4 in. W x 61 in. L (sheet metal will be cut to length, model dependent)
- For best results, two rows of clearance holes spaced 4 inches apart should be pre-drilled based on dimensioned bracket drawings
- Sheet metal screws – 0.5 inch long
- Circular saw

Dimensional Data

Figure 1. Field supplied bracket dimension — A2 splice plate and blower splice plate

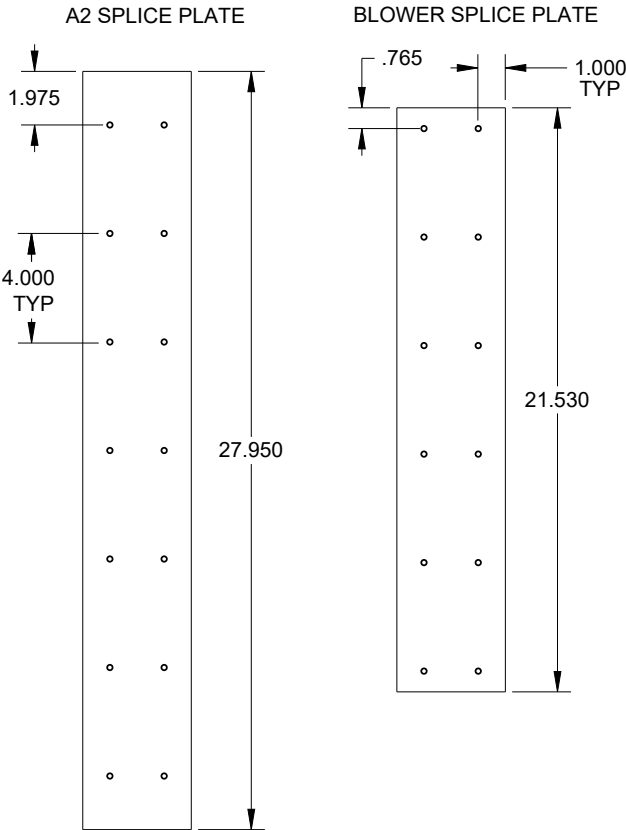


Figure 2. Field supplied bracket dimension — B4 splice plate

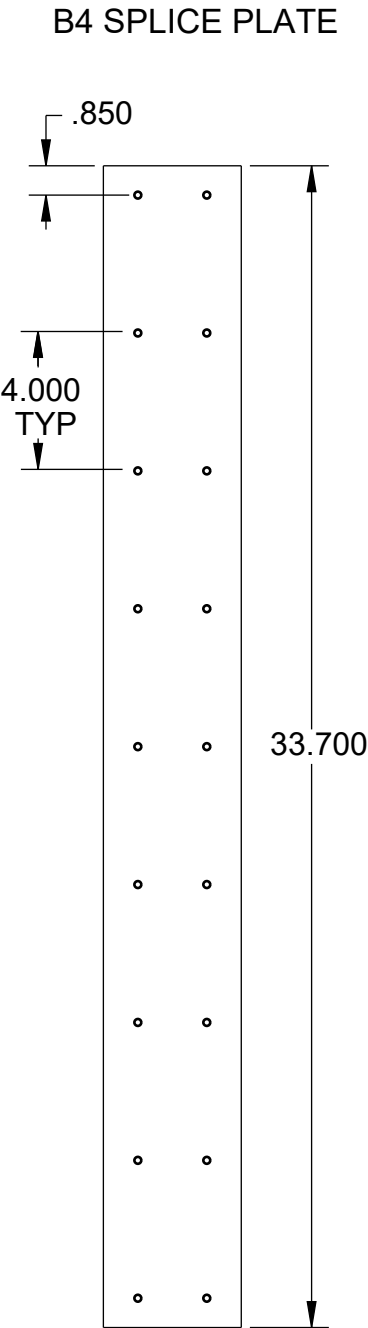


Figure 3. Field supplied bracket dimension — C5 and C6 splice plate

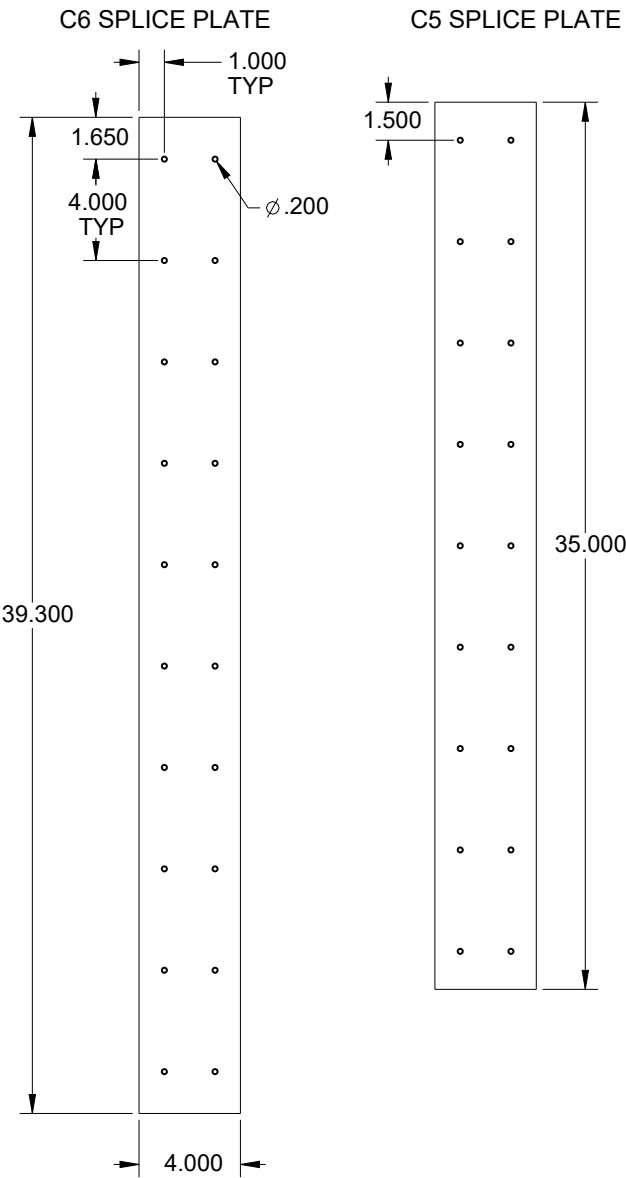


Table 1. Slice plate and models

Splice Plate	Used with Models
A2 Splice Plate	• 5TAM5B01 • 5TAM5B02 • 5TAMXB02
Blower Splice Plate	All models
B4 Splice Plate	• 5TAM5C03 • 5TAM5C04 • 5TAMXC03
C5 Splice Plate	• 5TAM5D05 • 5TAMXD04
C6 Splice Plate	• 5TAM5D06 • 5TAM5D07 • 5TAMXD05 • 5TAMXD06 • 5TAMXD07

Installation Instructions

1. Remove and separate coil and blower cabinets.
 2. Remove top plate and bottom rail on coil cabinet.
 3. Remove upper and lower rails on blower cabinet.
- Note:** Refer 5TAM5 and 5TAMX Installation, Operation, and Maintenance to perform steps 1 through 3.
4. Lay the cabinet so that the back is facing up.
 5. Mark the back of the cabinet per the dimensions below as a guide for cutting.
 - 23.5 inch cabinets = Mark at 11.75 inch
 - 21.5 inch cabinets = Mark at 10.75 inch
 - 17.5 inch cabinets = Mark at 8.75 inch

Figure 4. Marking dimensions on back of the cabinet



Important: Set skill saw at 0.5 inch maximum cutting depth (do not cut the inner cabinet).

6. Cut along the marked line (a straight edge may be useful). The edges(ends) may need to be cut with tin snips.
7. Separate the cabinet by setting cabinet upright and squeezing the cabinet together. Deburr as necessary.

Important: Reinstall the top plate and all crossmembers before installing the spline plates. The coil and blower sections are assembled in the same manner.

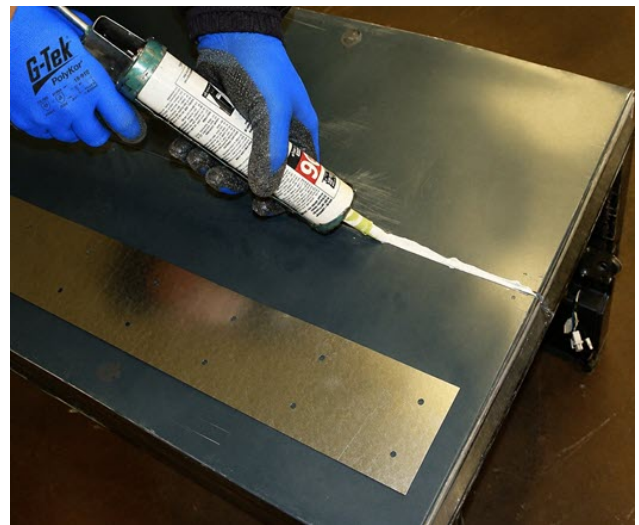
8. Line up cabinet halves and reinstall the top plate and all crossmembers on the cabinet.

Figure 5. Cutting along marked line



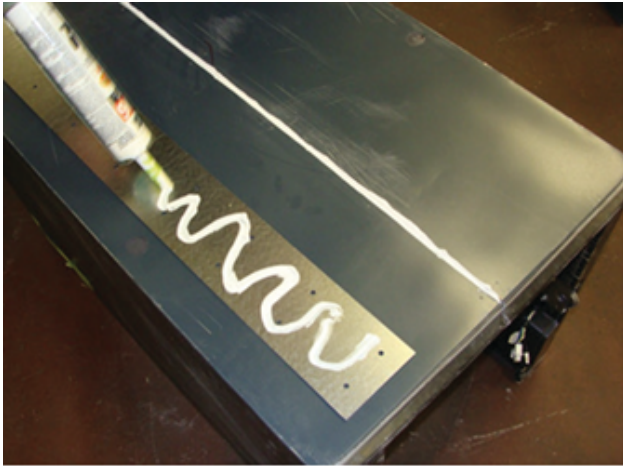
9. Lay the cabinet with the back facing up.
10. Apply silicone-based caulk down the cut seam.

Figure 6. Silicone-based caulk down the cut seam



11. Apply additional caulk on the pre-cut sheet metal.

Figure 7. Additional caulk on pre-cut sheet metal



12. Center the sheet metal over the cut seam and apply screws.

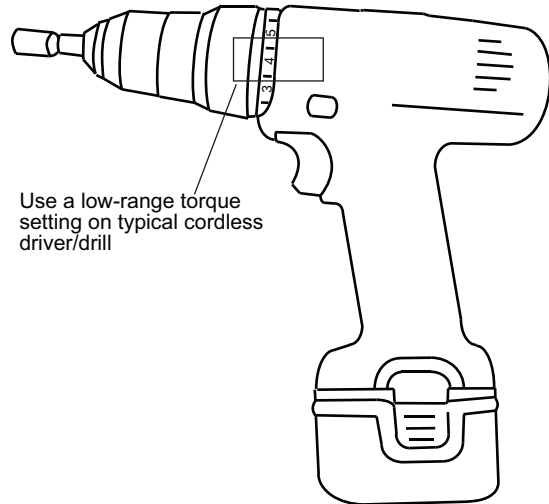
Figure 8. Fasten sheet metal over cut seam



Note: Do not use a cordless driver that is set to drill setting. Use a low-range torque setting for optimal results (13 in-lb).

13. Repeat steps for other cabinet. No other sealing material is required on the inner cabinet.

Figure 9. Low-range torque setting on drill



Note: Foil tape the spline plates if sharp edges are present.

14. Reassemble cabinet in the reverse order above. Refer 5TAM5 and 5TAMX Installation, Operation, and Maintenance

About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit www.trane.com or www.americanstandardair.com.

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