

Installation Instructions

High Static Drive Kit

Model Number: BAYHSDR012*
Used With: TSC072E*, TSC072H*
YSC072E*, YSC072H*
BAYHSDR013* (T,Y,W)SC060BD, (T,Y,W)SC072BD, (T,Y,W)SC072ED,
(T,Y,W)SC090BD, (T,Y,W)SC090ED, (T,Y)SC102BD,
(T,Y)SC102ED, (T,Y,W)SC120BD, (T,Y,W)SC120ED

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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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.

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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.

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General Information

The high static kit may be used when the required CFM is not being delivered with the standard motor and sheaves due to high static pressure parameters.

Inspection

1. Inspect the shipping carton and its contents. Check for concealed damage before it is stored or used. If damaged, it should be reported to, and claims made against the transportation company. Replace damaged parts with authorized parts only.
2. Compare the order number on the shipping label with the accessory identification information on the ordering and shipping documents to verify that the correct accessory has been received.

Installation

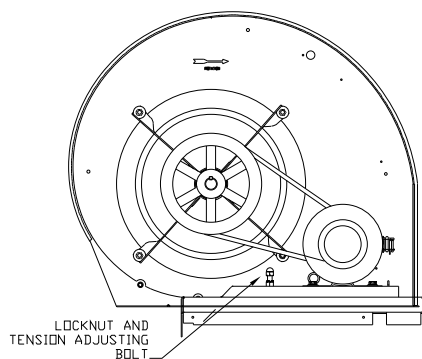
WARNING

Hazardous Voltage w/Capacitors!

Failure to disconnect power and discharge capacitors before servicing could result in death or serious injury. Disconnect all electric power, including remote disconnects and discharge all motor start/run capacitors before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized. Verify with an appropriate voltmeter that all capacitors have discharged.

Refer to [Figure 1](#) when reading these instructions.

Figure 1.



1. Ensure that all power to the unit has been disconnected and locked off.
2. Loosen the locknut and tension adjustment bolt on the motor plate assembly and remove the belt. See Figure 1. A belt tightening instruction label is glued to the motor mounting plate.
3. Remove the existing fan sheave (for 50 Hz, remove the existing motor sheave).
4. Install the replacement fan sheave (for 50 Hz, install the replacement motor sheave).
5. Check the alignment between the fan and motor sheaves using a straight edge. Adjust as necessary. Torque the fan sheave set screw to 126-165 inch pounds (14.2-18.6 N-m).
6. Adjust the motor sheave to the proper turns open for the required RPM to produce the desired airflow. Refer to Table 1 or 2 for the sheave data.

NOTICE**Equipment Damage!**

Proper adjustment of the fan belt is important to ensure optimal unit operation. Over tightening or under tightening the fan belt can result in belt slippage and excessive wear, bearing damage, sheave misalignment, and possible failure of fan motor mounts.

7. Adjust the tension of the fan belt. The correct operating tension for a "V"-belt fan drive is the lowest tension at which the belt will not slip under peak load conditions. The locknut should be tightened sufficiently to ensure that the motor plate assembly maintains the desired belt tension.

Note: Since new "V"-belts tend to "stretch" after having been placed in operation, re-check the tension of the belt periodically.

⚠ 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 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.

8. Being careful not to touch any electrical or moving parts, close the unit disconnect switch and check the unit supply fan for minimum vibration.
9. Open and Lock the disconnect switch in the Off position.
10. Replace all panels.
11. Close the unit disconnect switch.

Table 1. High static kit - components of converted unit

Unit	Kit	Motor Sheave
T/YSC072E*, T/YSC072H*	BAYHSDR012A	AK56 x 1.0" (25.4mm) Bore
(T,Y,W)SC060BD	BAYHSDR013A	1VP50 x 7/8"
(T,Y,W)SC072(B,E)D		
(T,Y,W)SC090(B,E)D		
(T,Y)SC102(B,E)D		
(T,Y,W)SC120(B,E)D		

Table 2. High static drive fan speed (rpm), 60Hz

Model Number	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
TSC072E*, TSC072H*	831	895	959	1022	1086	1150
YSC072E*, YSC072H*	831	895	959	1022	1086	1150

Table 3. High static drive fan speed (rpm), 50Hz

Model Number	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turns Open	Closed
(T,Y,W)SC060BD	N/A	1243	1311	1379	1450	1515	1588
(T,Y,W)SC072BD	N/A	967	1021	1075	1128	1183	1235
(T,Y,W)SC090BD	1020	1073	1127	1181	1235	1289	N/A
(T,Y)SC102BD	936	981	1032	1083	1134	1182	N/A
(T,Y)SC120BD	1062	1118	1174	1229	1285	1341	N/A
(T,Y,W)SC072ED	N/A	968	1018	1068	1118	1169	1219
(T,Y,W)SC090ED	1053	1091	1129	1166	1204	1242	N/A
(T,Y)SC102ED	926	964	1002	1042	1079	1118	N/A
(T,Y)SC120ED	1110	1159	1209	1258	1308	1357	N/A

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