Installation Instructions

Low Static Drive Kit

3 to 10 Ton Packaged Cooling Unit, 60 Hz 5 to 10 Ton Packaged Cooling Unit, 50 Hz

Model Number: Used With:

BAYI SDR006*

BAYLSDR009*

BAYLSDR0053

THC036E, THC048E, THC060E, THC048F, THC060F TSC092H, TSC102H, T/YHC072F, WSC090H, WSC102H (T,Y,W)SC060BD, (T,Y,W)SC060ED (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

A 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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Installation

Refer to Figure 1 when reading these instructions.

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.

- 1. Ensure that all power to the unit has been disconnected and locked off.
- 2. Remove the evaporator fan access panel.
- 3. 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.
- 4. Remove the existing fan sheave (motor sheave for 50 Hz units).
- 5. Install the replacement fan sheave (motor sheave for 50 Hz units).

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

- 6. Adjust the motor sheave to the proper turns open for the required RPM to produce the desired airflow. Refer to Table 1 and Table 2 for the sheave data.
- 7. Check the alignment between the fan and motor sheaves using a straight edge. Adjust as necessary. Torque the fan and motor sheave set screws to 126-165 inch pounds (14.2-18.6 N-m).
- 8. Torgue the motor securing bolts to 144 151 inch pounds (16.3 17.1 Nm).

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:



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious njury ndicates a potentially hazardous situation which,



if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe 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.

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.

9. 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.

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 gualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks

10.Being careful not to touch any electrical or moving parts, close the unit disconnect switch and check the unit supply fan for minimum vibration.

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 remot 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.

11.Open and Lock the disconnect switch in the Off position. 12.Replace all panels.

13.Close the unit disconnect switch.

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.

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 wor being undertaken. ALWAYS refer to appropriate SDS sheets and OSHA guidelines for proper PPE. When working with or around hazardous chemic 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.

General Information

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.

The Low Static Kit may be used when the required CFM can not be delivered with the standard motor and sheaves. Each kit contains 2 sheaves and 2 belts (1 sheave and 1 belt for 50 Hz units). Refer to Table 1 for proper selection of sheave and belt based on desired fan speed (RPM).

Table 1.	Fable 1. Low static drive kit fan speed (rpm), 60 Hz units								
Tons	Unit Model Number	Drive Accessory Kit	Fan Sheave	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turns Open	Closed
3 4 5	THC036E THC048E,THC048F THC060E,THC060F	BAYLSDR006*	AK71x3/4 AK99x3/4	556 385	607 424	657 462	707 501	758 539	808 578
6 7.5 7.5 8.5 8.5	T/YHC072E WSC090H TSC092H WSC102H TSC102H	BAYLSDR009*	AK79x1 AK99x1	631 512	676 548	721 583	766 619	811 654	856 690

Table 2. Low static drive kit fan speed (rpm), 50 Hz units

Tons	Unit Model Number	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turns Open	Closed
5	(T,Y,W)SC060BD	691	760	829	898	967	1036
6	(T,Y,W)SC072BD	537	590	644	698	752	806
7.5	(T,Y,W)SC090BD	671	714	757	800	843	886
8.5	(T,Y)SC102BD	629	664	701	737	773	811
10	(T,Y,W)SC120BD	717	754	799	844	855	922
5	(T,Y,W)SC060ED	720	791	861	931	1002	1072
6	(T,Y,W)SC072ED	558	612	665	718	772	825
7.5	(T,Y,W)SC090ED	688	737	787	837	887	N/A
8.5	(T,Y)SC102ED	606	651	695	739	784	N/A
10	(T,Y,W)SC120ED	724	776	828	880	932	984



Inspection

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- 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.

Parts List

- 2 Fan Sheaves (1 motor sheave for 50 Hz units)
- 2 Belts (1 belt for 50 Hz)
- 1 Accessory Label

Figure 1.



Table 3. Low static drive kit components (60 Hz units)

Tons	Unit Model Number	Drive Accessory Kit	Fan Sheave	Belt
3	THC036E	BAYLSDR006*	AK71x3/4 AK99x3/4	AX32 AX38
4	THC048E, THC048F	BAYLSDR006*	AK71x3/4 AK99x3/4	AX32 AX38
5	THC060E, THC060F	BAYLSDR006*	AK71x3/4 AK99x3/4	AX32 AX38
6	T/YHC072F	BAYLSDR009*	AK79x1 AK99x1	AX40 AX42
7.5	TSC092H	BAYLSDR009*	AK79x1 AK99x1	AX40 AX42
7.5	WSC090H	BAYLSDR009*	AK79x1 AK99x1	AX40 AX42
8.5	WSC102H	BAYLSDR009*	AK79x1 AK99x1	AX40 AX42
8.5	TSC102H	BAYLSDR009*	AK79x1 AK99x1	AX40 AX42

Table 4. Low static drive kit components (50 Hz units)

Tons	Unit Model Number	Drive Accessory Kit	Motor Sheave
5	(T, Y, W) SC060(B, E) D	BAYLSDR005*	1VP34 x 7/8 (22.2mm) Bore
6	(T,Y,W)SC072(B,E)D	BAYLSDR005*	1VP34 x 7/8 (22.2mm) Bore
7.5	(T, Y, W)SC090(B, E)D	BAYLSDR005*	1VP34 x 7/8 (22.2mm) Bore
8.5	(T,Y)SC102(B,E)D	BAYLSDR005*	1VP34 x 7/8 (22.2mm) Bore
10	(T,Y,W)SC120(B,E)D	BAYLSDR005*	1VP34 x 7/8 (22.2mm) Bore

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