



TRANE™

Use and Care Ideas to Help You Save Money

Central Air Conditioning



PUB. NO. 22-5150-03-497 (EN)



Contents

LIMITED WARRANTY CENTRAL AIR CONDITIONER TTP, TTN, TTR, TTB, TTF AND TTA

Models Less Than 20 Tons for Residential Use*
(Parts Only)

This warranty is extended by The Trane Company, Unitary Products Group, to the original purchaser and to any succeeding owner of the real property to which the **Central Air Conditioner** is originally affixed, and applies to products purchased and retained for use within the U.S.A. and Canada.

If any part of your **Central Air Conditioner** fails because of a manufacturing defect within one year from the date of the original purchase, Trane will furnish without charge the required replacement part. **Any local transportation, related service labor, diagnosis calls, refrigerant and related items are not included.**

In addition, if the sealed motor-compressor fails or if the outdoor coil should become defective, either or both events occurring because of a manufacturing defect within the second through fifth year from the date of original purchase, Trane will furnish without charge the required replacement compressor and/or outdoor coil. **Any local transportation, related service labor, diagnosis calls, refrigerant and related items are not included.**

This warranty does not cover failure of your **Central Air Conditioner** if it is damaged while in your possession or if the failure is caused by unreasonable use. In no event shall Trane be liable for incidental or consequential damages. **In no event shall any implied warranty of merchantability or fitness for use exceed the term of the limited warranty stated above.**

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Parts will be provided by our factory organization through an authorized service organization in your area. All you need do is look us up in the Yellow Pages or write to the address given below. If you wish further help or information concerning this warranty, contact:

The Trane Company, Unitary Products Group
A Division of American Standard Inc.
Troup Highway, Tyler, TX 75707

Attention: Manager, After Sales Support

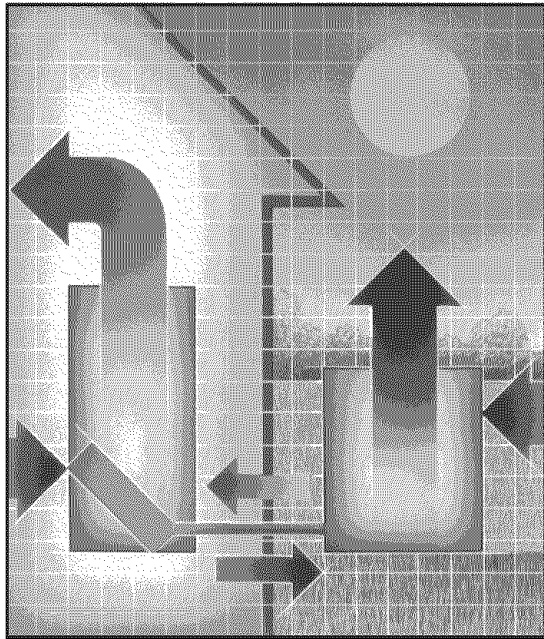
*This is a use other than commercial. A commercial use is any application where the end purchaser uses the product for other than personal, family or household purposes.

TW-341-2097

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How it works to keep you comfortable.



Your central air conditioner is designed to work with your indoor furnace and give you years of dependable service.

Your new central air conditioning system is designed to give you years of comfort and dependable performance. It will cool every room in your house — and use less energy to do it than ever before.

The reason: we've improved the compressor in many of our units. Now it pumps the heat out of your home more efficiently. And we've made our new coils bigger, so they dispose of this heat more quickly.

Your central air conditioner filters and dehumidifies.

As the Trane air conditioner circulates the air, it also filters it. The result: less housework for you, and a cleaner house year 'round. The air conditioner also extracts excess moisture from the air inside your home, thus helping to control humidity in muggy summer months.

At the end of the cooling season, it's easy to deactivate the air conditioner. Simply move the thermostat switch to HEAT. Now the furnace takes over. And the blower that circulated cool air in the summer now circulates warm air to keep you comfortable during the cold months.

Easy maintenance reduces electricity use.

A clean filter saves money.

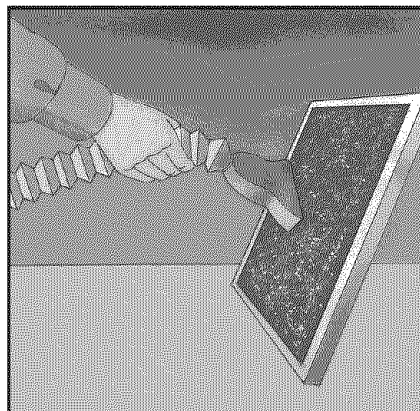
When the air conditioner circulates and filters the air in your home, dust and dirt particles build up on the filter. Excessive accumulation can block the airflow, forcing the unit to work harder to maintain desired temperatures.

And the harder your unit has to work, the more energy it uses. So you pay more any time your system is running with a dirty filter.

Help ensure top efficiency by Cleaning or replacing the filter once a month.

Clean it twice a month during seasons when the unit runs more often.

You can leave the filter in the frame and vacuum it. Or you can take it out of the frame and wash it like a sponge.



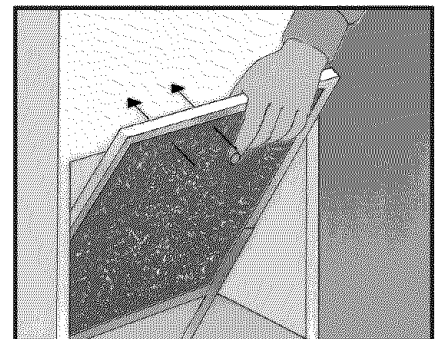
When replacing your furnace filters, always use the same size and type that was originally supplied. Filters are available from your dealer.

Where disposable filters are used, they must be replaced every month with the same size as originally supplied.

Both methods are quick and easy — and guaranteed to improve the performance of your system.

How to remove your filter.

Ask your Trane dealer where the filter is located when he installs your system. In most cases there will be one filter behind the bottom panel of your indoor unit.



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Maintenance (cont.)

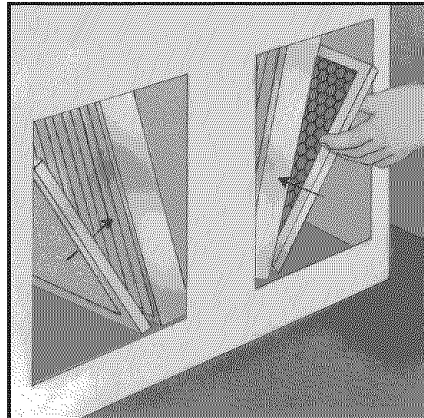
But your unit may have two filters.

In either case, removing the filter is easy. See the owners manual furnished with the indoor unit. Just be sure to replace it with the arrows on it pointing in the direction of the airflow.

Cut operating costs by keeping outdoor unit clear of the debris, leaves and shrubbery.

Efficient operation of your air conditioner depends on the free flow of air over the coil. Anything that blocks the airflow, causes the compressor to work harder to move the warm air out of your house.

To avoid overworking your unit, do not plant flowers or shrubbery right next to it. Also, make



sure that nothing is stacked against the sides of the unit or draped over it.

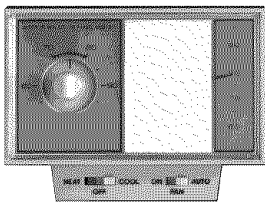
Making sure that your outdoor unit is kept clear at all times helps it work at peak efficiency. And that helps you save money.

CAUTION: Whenever your house is to be vacant, arrange to have someone inspect your house for proper temperature. This is very important in below freezing weather. If for any reason your heating system should fail to operate, damage could result, such as frozen water pipes.

How to operate your system to save electricity

Just set the temperature you want.

Here's how: place the system switch on COOL, and the fan switch on AUTO. Then set the temperature by using the indicator on the thermostat* control.



Now your system will cool your house whenever the indoor temperature climbs above the thermostat setting. It will shut off when the desired room temperature is reached.

In winter, it works the same way. When the system switch is on HEAT, the system will operate whenever the room temperature falls below the temperature setting. Once the desired temperature is reached, the system will shut off.

Carefully read the accompanying thermostat manual for operating instructions.

Save energy with an electronic programmable thermostat.

Just program the thermostat* for the temperatures you are most comfortable with. The Trane electronic

programmable thermostat has up to four setup or setback periods each day, plus weekend and vacation programs. It saves energy while it keeps you comfortable day or night.

Let the thermostat do its job.

Your system will perform most efficiently when you let the thermostat control it. Turning the system on and off manually is usually much less efficient. So let the thermostat do its job. You'll be sure to save energy.

We recommend keeping the temperature setting at 78°F for cooling, 68°F for heating. But you can select the temperature you're most comfortable with.

The point is, once you've set the thermostat, keep subsequent adjustments to a minimum.

At all other times, let the thermostat keep you comfortable. And keep energy bills down.

Don't waste money heating and cooling when you don't need to.

When you're going to be away from home for a few days — or when outdoor temperatures are moderate — don't let the air conditioner run unnecessarily. Lower the thermostat to 55°F in the winter. And raise it to 85°F in summer. Then when you return — or when temperature conditions dictate — you can reset the system and it will immediately begin making your home comfortable again.

Never stop the system by shutting off the main power.

If the main power is ever disconnected for more than three hours, turn off the thermostat. Then wait for at least three more hours after power has been restored before turning the thermostat back on. Failure to follow this procedure could result in damage to your system.

CAUTION: If unit is not operational during the cold weather months, provisions must be taken to prevent freeze-up of all water pipes and water receptacles.

How to help reduce summer humidity.

In summer, your air conditioner does more than cool the air. It also helps remove the excess moisture that can make the inside of your home feel muggy. When removing this moisture your system must work harder than when simply cooling the air.

That's why kitchens, bathrooms and utility rooms should have vents and exhaust fans. These devices help prevent accumulation of moisture throughout the rest of the house. So your air conditioner works less to keep you comfortable. And that helps keep operating cost down.

*Operation accessory, purchased separately.



The Problem Solver.

A central air conditioner is not a household appliance. It's a complex self-contained system that requires professional maintenance and repair.

That's why attempts at "do-it-yourself" repairs on an in-warranty unit may void the remainder of your warranty.

Other than performing the simple maintenance recommended in this manual, you should not attempt to make any adjustments to your central air conditioning system. Your dealer will be able to take care of any questions or problems you may have.

Keep your air conditioner looking like new for years.

Clean the enamel finish of your air conditioner with ordinary soap and water. For stubborn grease spots, use a household detergent. Lacquer thinner or other synthetic solvents may damage the finish.

IMPORTANT: If you have a cooling coil installed with your unit, condensate drains should be checked and cleaned periodically to assure that condensate can drain freely from coil to drain. If condensate cannot drain freely water damage could occur.

Reduce the burden of unexpected repair bills with a Trane Extended Warranty.

Trane offers the finest quality products and manufacturer's warranties on the market. But, like

Save time and money. Before you call for service, check the following:

Problem	Possible cause	Remedy
Insufficient heating or cooling	a. dirty filters b. air not circulating freely c. blocked outdoor coil	a. clean or replace b. check supply registers and dampers for blockage c. clear away leaves or other debris
Failure to operate	a. power off b. open circuit breaker or burned-out fuses c. improperly adjusted thermostat	a. make sure main switch is in ON position b. reset circuit breaker, or replace fuses c. check setting, adjust thermostat
No Heating or Cooling — Blower does not operate	Blower door removed or ajar	Close door securely to restore power to blower
Unusual Noise		Call your local servicer

all good things, the Trane-provided limited warranty on your new comfort equipment will come to an end. To keep you protected, Trane offers you the Extended Warranty Program. It picks up right where your Trane limited warranty leaves off. And, it offers you years and years of reliable protection at a low cost. Ask your dealer for program details.

The Trane Extended Warranty provides:

1. The opportunity to purchase coverage in five, or ten year increments.

2. Coverage that may include parts only or parts and labor for the duration of the agreement. **Be certain you read the Extended Warranty for complete details and exclusions.**
3. Service work performed by servicers knowledgeable of the operation of Trane equipment.

Extra Energy Tips.

Insulation

1. Make sure your home is properly insulated. This is the single most important step in conserving energy. Thermal insulation should be specified in terms of thermal resistance (R-values). R-30 (10") is recommended for ceilings, R-11 (3½") for exterior walls and floors over unheated areas. In colder climates, consider additional insulation.
2. Infiltration of humid outside air is your heating and cooling system's worst enemy — it could account for 15 to 30% of air conditioning energy requirements. Find the places where air can sneak into the home and plug them

up with caulking, weatherstripping or plastic. Also weatherstrip and caulk around all entrance doors and windows.

3. Cut heat transfer through your windows by 40 to 50% with double glazing (two panes of glass separated by a sealed air space).
4. Use wood or metal-frame storm windows even if single-glazed windows are high quality. The extra layer of glass and the layer of still air will cut heat transfer considerably.
5. Install storm doors at all entrances to your house.
6. Keep all windows and doors closed.

7. Remember that by increasing the glass area, you increase the amount of heat added in summer and lost in winter.

8. Keep the overhead door of an attached garage closed. This will block cold winds from infiltrating the connecting door between the house and garage.
9. Make sure fireplaces have tight-fitting dampers which can be closed when the fireplace is not in use.
10. Invest in a humidifier to conserve energy in wintertime. The air in your home won't be as dry, so you stay comfortable at a lower temperature setting.

(continued on page 6)

Extra Energy Tips. (cont.)

Heating

11. Locate the thermostat on an inside wall away from windows and doors.
12. Set the thermostat as low as comfort permits. Each degree over 68°F can add 3% to the amount of energy needed for heating.
13. People generate heat. So lower the thermostat a degree or two when expecting a large group of guests. Otherwise your home may be wastefully overheated.

Cooling

14. When possible, locate any window air conditioning units on the north or shady side of the house.
15. Set the thermostat as high as comfort will permit.
16. Make sure attics are adequately ventilated to relieve heat build-up. If necessary, improve airflow by adding or enlarging vents.

17. When building a new house or renovating an old one, choose light-colored roof shingles to reflect more of the sun's heat.
18. During moderate weather, don't use the air conditioner unnecessarily.
19. Draw blinds or drapes to block the sunlight during the hottest part of the day.
20. Install awnings over windows exposed to direct sunlight.
21. In the cooling season, don't run kitchen and bath exhaust fans longer than necessary.
22. Don't place lamps, TV sets or other heat-producing devices beneath a wall-mounted thermostat. Rising heat from the equipment may cause the air conditioner system to overcool your house.

Water heating

23. Keep your water heating system properly maintained. Once or twice a year, drain a

bucket of water out of the bottom of the tank as it may be full of sediment.

24. Add an extra layer of protection with a water heater insulation kit. It will keep the heat from being lost through the walls of your tank.
25. Locate water heaters as close to the points of hot water as possible. (The longer the supply pipe, the more heat lost.)
26. Repair leaky faucets promptly. A steady drip of water can waste many gallons per month and the energy used to heat it.
27. Running water is wasted water. When you shave, use a sink stopper. When you handwash dishes, use a dishpan.

Clean and check

28. It is recommended that an annual "clean and check" be performed on heating / air conditioning equipment. Call your local Trane service professional for details.

Important Service Information.

It's always a good idea to keep records which will save you time and money. If it's necessary to have your air conditioner repaired, the service man will want to know if your unit is still under Warranty. To save time, take a few minutes to record the following information here:

Outdoor Model Number _____

Indoor Model Number _____

Thermostat Model Number _____

Date of Purchase _____

Dealer _____

Service Information

Call your installing dealer if the unit is inoperative. Before you call, always check the following to be sure service is really required:

- a. Be sure the main switch that supplies power to the unit is in the ON position.
- b. Replace any burned-out fuses or reset circuit breakers.
- c. Be sure the thermostat is properly set.

Service Phone _____



TRANE™

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Unitary Products Group
6200 Troup Highway
Tyler, TX 75707

An American-Standard Company



Since the Trane Company has a policy of continuous product improvement, it reserves the right to change the specifications and design without notice.