



FORD & DOONAN
Air Conditioning Systems

Operating Instructions

for your Ford & Doonan Ducted System



Congratulations!

Congratulations on your new Ford & Doonan Air Conditioning System. You can rest assured you have received a system of the highest quality, backed by the very best customer service. Before operating the air conditioner, please read this operating manual carefully. It will advise you on how to operate the unit correctly, understand the air conditioner's advanced features and help you in the unlikely event that a problem should occur.

Please keep this manual in a safe place for future reference.

Thank you
for purchasing
Ford & Doonan
Air Conditioning



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Scan to view our Operation Videos on our website or visit fordanddoonan.com.au/operation-videos-and-manuals

1. Important Safety Instructions

Never remove any fixed covers on the indoor or outdoor unit. Removal of the covers may expose fast moving fan blades or electrical components operating at a hazardous voltage. Contact with the blades or high voltage components may result in injury or electric shock.

Never insert any objects into the openings of the indoor or outdoor unit. This may damage the product or result in injury to the person inserting the object.

Do not expose the indoor unit or remote controller to rain or moisture. Water or other fluids on the electrical components may result in fire or electric shock.

Always replace any blown fuse with a fuse of the same specification. The use of the

wrong fuse may allow the electrical wiring to overheat and catch on fire. If the correct type of fuse continues to blow, or the circuit breaker continues to trip, contact Ford & Doonan Service Department.

Never operate the air conditioner without the return air filter(s) in place. Operating the unit without the filter(s) will allow dust to enter the indoor unit and build up on the heat exchanger coil and fan motor. This will cause a malfunction of the unit, which will not be covered by warranty.

This electrical appliance is not intended for use by young children. Young children should be supervised to ensure that they do not play with the outdoor unit.

Main switch

Ensure you are familiar with the location of the main switches for the air conditioning system. These switches are normally located adjacent to the outdoor unit and in the fuse box/switchboard.

If the air conditioner is not going to be used for an extended period of time or you are going away on holidays, the main

switch should be turned off to prevent accidental operation of the air conditioner. When turning the system back on, the main switch must be turned on at least 6 hours before the air conditioner is operated to warm up the compressor. Failure to do so may result in damage to the compressor, which will not be covered by warranty.

2. Zone Operation

Applicable when your new system has zones fitted

- For operational instructions please refer to the attached sub manual (if applicable).
- It is possible to run all zones at the same time, however, the system will not be running very efficiently.
- You may operate two or more zones at once, depending on the capacity of your unit, design and heat load. For example, under maximum heat load (a hot day) it is better to have fewer zones on than under a low heat load (at night) when an extra zone may be turned on.
- We recommend turning on the living areas during the day and closing any bedrooms and other zones that are not needed. At night it is best to turn off any living areas and keep the bedroom zones open. This will allow the best efficiency of the system.
- The zones can take up to 2 minutes to open or close.
- If some zones do not have enough air flow check how many zones are open. Close off any zones that are not needed and see if air flow increases.

3. Outlets

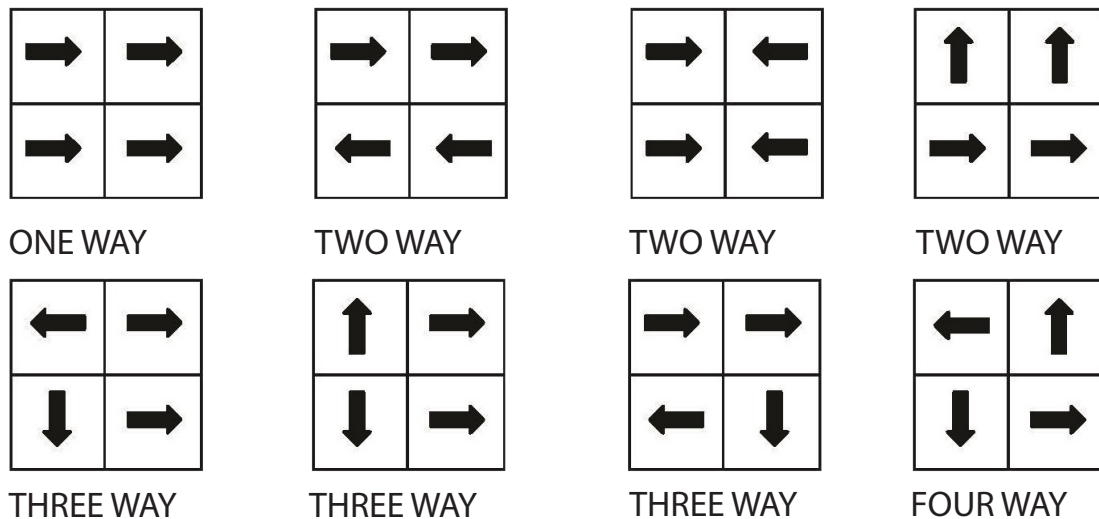
Multi-Directional outlets

Multi-Directional outlets (if applicable) are designed to give maximum adjustment to airflow. Each of the four cores (called louvre panels) is adjustable by lifting and turning to direct air from one direction to another. For the distribution of cool air, the louvre panels are set to deflect air horizontally across the ceiling. For high ceilings and heating systems the louvre panels are adjusted to achieve 40% downward flow. For spot cooling and heating, the louvre panels oppose each other for a vertical down airflow. The outlets can be manually closed

during winter if the system is not used for heating, although this is not a necessity.

Sidewall registers

Sidewall registers (if applicable) have vertical and horizontal blades that are adjustable. The blades are manufactured not to rattle. Any adjustments are required to be done with the assistance of long nose pliers with insulation tape wrapped around the ends so the paint of the register is not damaged. Gently move the blades to the desired position.



4. Maintenance

1. Cleaning the air filter

If you have a clean air filter pack, please call your Ford & Doonan store to purchase a replacement filter. We recommend replacing the filter every 12 months, if you have allergies or pets, we recommend replacing the filter every 6 months.

To clean your filter, remove the filter, hose it down and leave it a couple of hours to dry. Once this is done do not forget to press the filter reset button on your air conditioning controller.

2. Cleaning the outside panel

Cleaning of the outside panel is easy, by using a soft cloth or a cloth dampened by a neutral detergent solution. Never use paint thinner, other chemical products, or polishing powder when cleaning the outside panel. A good quality car polish can be applied to the painted surfaces to increase the paint's durability.

3. When the unit is not being used for an extended period

- Switch off the main power switch.

- Rust preventative coating has been applied to the outside cover. If corroded, repair by painting.
- Clean the condenser to remove dust and excess waste (leaves, paper, etc.).

4. Maintenance service contract recommended

To ensure your system delivers cool, fresh air throughout the year and that your warranty is valid, it's essential you maintain it regularly. Preventative maintenance by qualified technicians has been proven to reduce the risk of failure of plant and equipment and maintain the efficiency of the overall installation.

Servicing by a qualified Ford & Doonan technician is recommended. For domestic operation of the air conditioning system we recommend an annual service. If equipment is subjected to heavy use a bi-annual service frequency is desirable.

Contact your Service Department (9331 8800) to set up automatic service reminders and ask about our three year service packages at a reduced cost.

We recommend replacing your disposable filter every 12 months

DISPOSABLE filter WASHABLE filter



5. Common Queries

If the air conditioning is not running or the cooling effect cannot be achieved as desired, check the following points before requesting repair or service.

If the air conditioner does not function please check the following:

Is the power switched ON?

Has the power fuse failed?

Is power supplied?

Has the circuit breaker tripped?

Is the temperature indicator set in the correct operating position, or to a position which is too high for the cooling operation?

How to perform a reboot of your air conditioning system

Before calling the Service Department please perform a reset of your air conditioning system. As any electrical appliance, power dropouts or surges can interrupt the operation of the system. In most cases a reboot is all that is required. In case the system has never been used before, make sure that the main switch has been turned on for at least 6 hours before using the air conditioning unit.

Locate the isolator switch at the outdoor unit. It is a big white switch at the outdoor unit. Turn it off and wait 3 minutes before turning it back on.

If the system does not reboot, or the fault still appears please call the Ford & Doonan Service Department.

Not cooling or heating as desired please check the following:

Is the thermostat set to the proper position to heating or cooling?

Is there an obstruction near the air intake or outlet port?

Is the air filter free from clogging by dust, dirt, etc.?

Are doors and windows completely closed?

Smoke coming from outdoor unit?

In cold weather you may see what appears to be smoke coming from the unit. This is just steam being released when the unit is in de-ice mode. Further you may notice the unit icing up and appearing frozen. This is normal as long as the system completes a de-ice cycle.

“Filter clean” displays

If a small tap or spanner symbol appears, this indicates it is time to clean or replace the filter. Press this switch to reset and clear the symbol once you have cleaned or replaced the filter. Please see Maintenance for more information on how to clean your filter. If the spanner symbol appears with a fault code, it is advising you of a problem and you will need to contact your Service Department.

Faults:

If the **“CHECK”** indicator starts flashing, this means there is a fault at hand.

In this case, or if fault codes appear, please call your Service Department with the fault code, explain the problem and they will be able to assist with the issue.

6. Performance Expectations

Hot weather

Heat load calculations and manufacturers capacity ratings are based on an outside temperature of 36°C. When the temperature exceeds this, the performance of your air conditioner will fall away the hotter it gets and room temperatures will increase accordingly.

Cold weather

Heat load calculations and manufacturers capacity ratings are based on an outside temperature of 7°C. When the temperature is lower than this, the performance of your air conditioner will fall away the colder it gets and room temperatures will decrease accordingly. The above conditions do occur in Perth and there will be nothing wrong with your air conditioning unit when it happens.

Heating performance

Hot air rises and the room temperatures at different levels will be different. It is normal that some parts of the room will be warmer than others. The same applies on cooling mode but to a lesser degree.

Return air

Your system will usually be designed with one only return air grille. The area around the return air grille will always be drafty, and in Winter, always much cooler than the rooms. This is why we select hallways or other “non occupied rooms”. You will have to leave any room’s entry door ajar to allow the conditioned air to come back to the grille. You cannot close the door as performance will be affected. We have options to overcome these situations, so please discuss this with your consultant.

Zones

If we have installed zones, then they cannot all be turned on together without effecting performance. On low load days or nights your air conditioner can handle a larger area at one time. Your air conditioner can only handle the percentage of the home we mention in our letter at typical design temperatures. Turning on less zones will effectively increase the available capacity you have.



7. Performance Tips

1. Temperature setting on your air conditioning unit

We recommend that in summer you set the cooling cycle at 24 degrees and in Winter the heating at 21 degrees. On very hot days (above 36 degrees) or cold days (below 7 degrees) one can increase the temperature in Summer and decrease in Winter, to keep the efficiency of the air conditioning.

2. To keep the comfortable temperature without extra heat loading

The easiest solution to start your air conditioner earlier in the day by using your timer setting. On hot days start the air conditioner before your heat load increases so the air conditioner can get a head start. On cold days start the air conditioner whilst it is still warm outside (above 12-15°C). This will let the air conditioner deliver maximum capacity before performance falls away. If your system has zones (residential only) reduce the number of zones turned on when

the external conditions are extreme. The smaller the area being air conditioned, the better it can cope.

3. Close doors of rooms that are not being air conditioned

When operating an air conditioning system that utilises the zoning technique, remember the system has only a certain capacity, therefore the idea is to air condition the areas you are occupying at the time. With this in mind, it becomes prudent to habitually close the doors that lead to a non air conditioned area, thereby reducing the total area being subjected to air conditioning. This will enhance the effectiveness of the machine.

4. Allow air flow to return air grille

You will notice that the larger return air grill is normally located in a central position in the building. It is important to encourage the airflow towards this grille. This grille is drawing the total air capacity of the system through it and therefore

requires unrestricted airflow. Depending upon the building, you may need to open or close doors around this area to keep the air flowing to this grille.

5. Regular cleaning of the filter is important

The return air grille in most cases also contains an air filter. This air filter, depending on the system usage and other air quality factors, will need to be cleaned regularly. To do this, simply open the grille and slide out the filter. In most cases it is best to hose the filter clean, although some people prefer to vacuum the filter. Remember, regular cleaning of the filter will improve the system efficiency.

6. Clean outdoor unit and surroundings

The condensing or outdoor unit is located in a position to best suit the building and the occupants. It is important to maintain cleanliness around the unit, for example sweeping away any build-up of leaves or general flotsam. It is critical to not inhibit the airflow coming from the condenser, therefore general garden paraphernalia or other equipment should never be stacked

on or lent against the condenser. Similarly if a garden is developing around the condenser, this can be an advantage as some of the sound from the condensing unit will be absorbed, although a robust bush can block the air flow so consideration should be given to this. It is also imperative to keep the condensing unit accessible for servicing purposes.

7. Sizing of equipment

When we recommend a unit we have completed a heat load calculation on the area. We have assumed the following:

- Curtains will be drawn closed in both sunny Summer days and at night in Winter.
- Ceiling insulation has been installed directly above your ceiling (not just anti-con or sisalation)
- Doors and windows will be left closed.

If any of the above changes, your air conditioner may not be large enough to maintain acceptable room temperatures.

