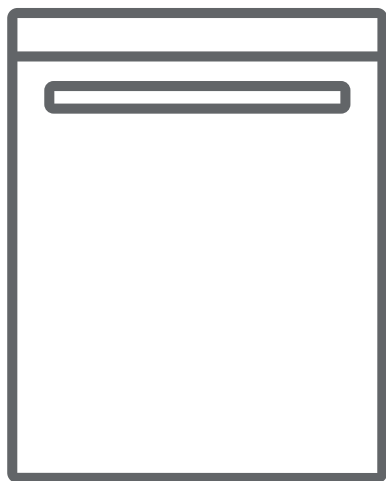


# TORNADO

**EN** Dishwasher / User Manual



**TDV-FN158COX/TDV-FN158CDX**

**Thank you for choosing this product.**

This User Manual contains important information on safety and instructions intended to assist you in the operation and maintenance of your appliance.

Please take the time to read this User Manual before using your appliance and keep this book for future reference.

Icon	Type	Meaning
	WARNING	Serious injury or death risk
	RISK OF ELECTRIC SHOCK	Dangerous voltage risk
	FIRE	Warning; Risk of fire / flammable materials.
	CAUTION	Injury or property damage risk
	IMPORTANT / NOTE	Operating the system correctly

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# 1. SAFETY INSTRUCTIONS


## 1. General Safety Warnings


- Read these instructions carefully before using your appliance and keep this manual for future reference.


 Please check the packaging of your machine before installation and the outer surface of the machine once the packaging has been removed. Do not operate the machine if it appears damaged or if the packaging has been opened.

- Packaging materials protect your machine from any damage that might occur during transportation. The packaging materials are environmentally friendly as they are recyclable. Use of recycled material reduces raw material consumption and decreases waste production.

 This appliance can be used by children aged from 8 years and above, and by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand hazards involved. Children should not be allowed to play with the appliance.

 Remove packaging and keep it out of reach of children.


 Keep children away from detergents and rinse aids.

 There may be some residue left in the machine after washing. Keep children away from the machine when it is open.


## 2. Installation Warnings


- Choose a suitable and safe place to install your machine.
- Only original spare parts should be used with the machine.


 Unplug the machine before installation.


 Your machine must only be installed by an authorised service agent. Installation by anyone other than an authorised agent may cause your warranty to be void.

 Check that the indoor electrical fuse system is connected in line with safety regulations.


 All electrical connections must match the values on the plate.


 Ensure the machine does not stand on the electrical supply cable.


 Never use an extension cord or a multiple socket connection.

 The plug should be accessible after the machine is installed.

- After installation, run your machine unloaded for the first time.

 The machine must not be plugged in during positioning.

 Always use the coated plug supplied with your machine.


 If the electrical cable is damaged, it should only be replaced by a qualified electrician.


- Connect the hose directly to the water inlet tap. The pressure supplied by the tap should be a minimum of 0.03 MPa and a maximum of 1 MPa. If the

pressure exceeds 1 MPa, a pressure relief valve must be fitted between the connection.

### 3. During Usage

- This machine is for domestic use only; do not use it for other purposes. Commercial use will void the guarantee.


 Do not stand, sit or place loads on the open door of the dishwasher.


 Only use detergents and rinse aids produced specifically for dishwashers. Our company is not responsible for any damage that may occur due to misuse.


 Do not drink water from the machine.

 Due to the danger of explosion, do not place any chemical dissolving agents into the machine's washing section.



- Check the heat-resistance of plastic items before washing them in the machine.

 Only put items in the machine which are suitable for dishwashing, and take care not to overfill the baskets.


 Do not open the door while the machine is in operation, hot water may spill out. Safety devices ensure the machine stops if the door is opened.



 The machine door should not be left open. It may cause accidents.

 Place knives and other sharp objects in the cutlery basket in a blade-down position.


  For models with the automatic door-opening system, when the EnergySave option is active, the door will open at the end of a program. To prevent damage to your dishwasher, do not attempt to close


the door for one minute after it has opened. For effective drying, keep the door open for 30 minutes after a programme has ended. Do not stand in front of the door after the auto-open signal sounds.



 In the case of a malfunction, repair should only be performed by an authorised service company, otherwise the warranty will be void.

  Before repair work, the machine should be disconnected from the mains. Do not pull the cable to unplug the machine. Switch off the water tap.

 Operation at a low voltage will cause a decline in performance levels.

 For safety, disconnect the plug once a program has finished.

 To avoid an electric shock, do not unplug the machine with wet hands.

  Pull the plug to disconnect the machine from the mains, never pull on the cord.

## **RECYCLING**

- Some machine components and packaging consist of recyclable materials.
- Plastics are marked with the international abbreviations:(>PE<, >PP<, etc. )
- The cardboard parts consist of recycled paper. They can be put into waste paper containers for recycling.
- Material unsuitable for domestic waste must be disposed of at recycling centres.
- Contact a relevant recycling centre to obtain information about disposal of different materials.

## **PACKAGING AND THE ENVIRONMENT**

- Packaging materials protect your machine from damage that may occur during transportation. The packaging materials are environmentally friendly as they are recyclable. The use of recycled material reduces raw material consumption and therefore decreases waste production.



## CE Declaration of Conformity

We declare that our products meet the applicable European Directives, Decisions and Regulations and the requirements listed in the standards referenced.

## Disposal of your old machine



The symbol on the product or on its packaging indicates that this product may not be treated as household waste. Instead, it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where the product was purchased.

## 2. INSTALLATION

### 2.1. Machine positioning


When positioning the machine, place it in an area where dishes can be easily loaded and unloaded. Do not put the machine in an area where the ambient temperature falls below 0°C.

Read all warnings located on the packaging before removing the packaging and positioning the machine.

Place the machine close to a water tap and drain. Take into consideration that the connections will not be altered once the machine is in position.

Do not hold the machine by its door or panel.

Leave an adequate distance around the machine to allow ease of movement when cleaning.

 Ensure the water inlet and outlet hoses are not squeezed or trapped and that the machine does not stand on the electrical cable while positioning.

Adjust the feet so the machine is level and balanced. The machine should be placed on flat ground otherwise it will be unstable and the door of the machine will not close properly.

### 2.2. Water connection

We recommend fitting a filter to your water inlet supply in order to prevent damage to your machine due to contamination (sand, rust, etc.) from indoor plumbing. This will also help prevent yellowing and deposit formation after washing.


Note printing on the water inlet hose! If models are marked with 25°, the water temperature may be max. 25 °C (cold water).


For all other models:


Cold water preferred; hot water max. temperature 60 °C.


### 2.3. Water inlet hose

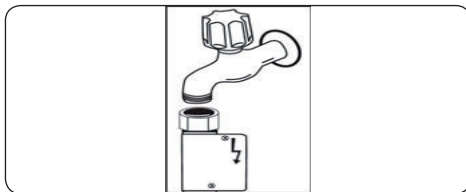



 **WARNING:** Use the new water inlet hose supplied with your machine, do not use an old machine's hose.

 **WARNING:** Run water through the new hose before connecting.

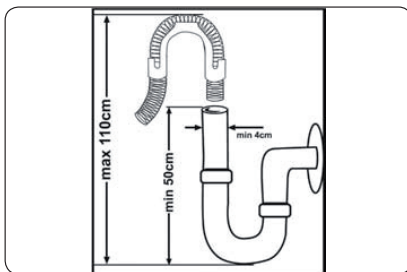
 **WARNING:** Connect the hose directly to the water inlet tap. The pressure supplied by the tap should be a minimum of 0.03 MPa and a maximum of 1 MPa. If the pressure exceeds 1 MPa, a pressure relief valve must be fitted between the connection.

 **WARNING:** After the connections are made, turn the tap on fully and check for water leaks. Always turn off the water inlet tap after a wash program has finished.




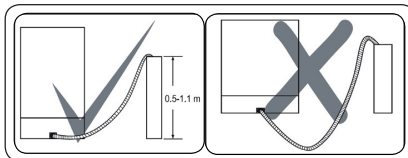
 An Aquastop water spout is available with some models. Do not damage it or allow it to become kinked or twisted.

### 2.4. Drain Hose



Connect the water drain hose directly to water drain hole or to the sink outlet spigot. This connection should be minimum 50 cm and maximum 110 cm from floor plane.

 **IMPORTANT:** Items will not wash properly if a drain hose longer than 4 m is used.



2.5. Electrical connection

**⚠ WARNING:** Your machine is set to operate at 220-240 V. If the mains voltage supply to your machine is 110 V, connect a transformer of 110/220 V and 3000 W between the electrical connection.

**⚡ ⚠** Connect the product to a grounded outlet protected by a fuse complying with the values in the "Technical Specifications" table".

**⚡ ⚠** The earthed plug of the machine must be connected to an earthed outlet supplied by suitable voltage and current.

**⚡ ⚠** In the absence of earthing installation, an authorised electrician should carry out an earthing installation. In the case of use without earthing installed, we will not be responsible for any loss of use that may occur.

**⚡ ⚠** The plug on this appliance may incorporate 13A fuse depending on the target country. (For Example UK, Saudi Arabia)

2.6. Fitting the machine undercounter

If you wish to fit your machine undercounter, there must be sufficient space to do so and the wiring-plumbing must be suitable to do so (1). If the space under the countertop is suitable for fitting your machine, remove the worktop as shown in the illustration (2).

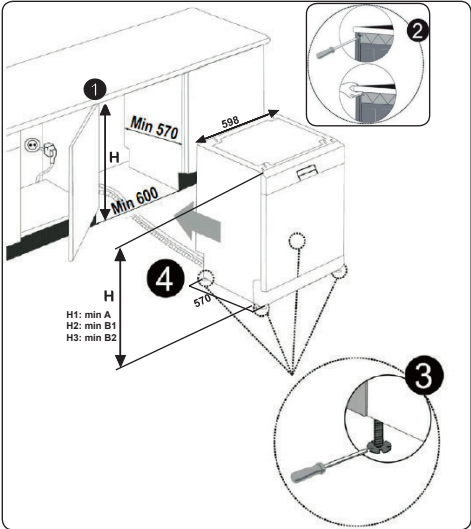
**⚠ WARNING:** The countertop, of which the machine will be placed under, must be stable in order to prevent imbalance.

The top panel of the dishwasher must be removed to fit the machine under the countertop.

To remove the top panel, remove the screws that hold it on, located at the rear of the machine. Then, push the panel 1 cm from the front towards the rear and lift it. Adjust the machine feet according to the slope of the floor (3).

Fit your machine by pushing it under the counter taking care not to crush or bend the hoses (4).

**⚠ WARNING:** After removing the top panel of your dishwasher, the machine should be placed in a space of the dimensions shown in the figure below.



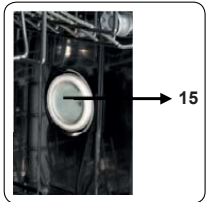
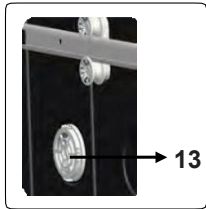
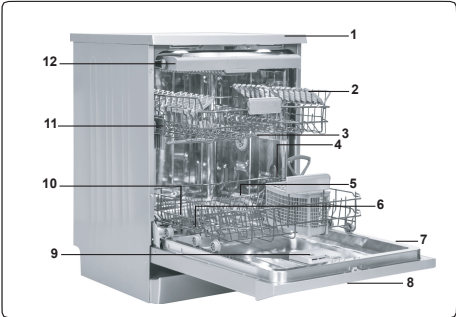
	A	B	
	All Products	B <sub>1</sub>	B <sub>2</sub>
Product's Height (±2 mm)	820 mm	830 mm	835 mm

**A:** If there is no felt on the top of the product; you should take into account this product's height.

**B1:** If there is felt on the top of the product with 2nd basket; you should take into account this product's height.

**B2:** If there is felt on the top of the product with 3rd basket; you should take into account this product's height.

3. TECHNICAL SPECIFICATIONS



3.1. General appearance

- 1. Worktop
- 2. Upper basket with racks
- 3. Upper spray arm
- 4. Lower basket
- 5. Lower spray arm
- 6. Filters
- 7. Rating plate
- 8. Control panel
- 9. Detergent and rinse-aid dispenser
- 10. Cutlery basket
- 11. Salt dispenser
- 12. Upper basket track latch
- 13. Turbo Drying Unit: This system provides better drying performance for your dishes.
- 14. Ceiling Spray Arm: It provides better washing for the dishes at upper basket.
- 15. Interior light : Provides illumination inside the dishwasher helping with loading and un-loading.

3.2. Technical specifications

Capacity	15 place settings
Dimensions	
Height	850(mm)
Width	598(mm)
Depth	598(mm)
Net weight	53,600 (kg)
Operating voltage / frequency	220-240 50 (Hz)
Total current	10(A)
Total power	1900(W)
Water supply pressure	Maximum: 1 (Mpa) Minimum: 0.03 (Mpa)

## 4. BEFORE USING THE APPLIANCE

### 4.1. Preparing your dishwasher for first use

- Make sure the electricity and supply water specifications match the values indicated in the installation instructions for the machine.
- Remove all packaging material inside the machine.
- Set the water softener level.
- Fill the rinse aid compartment.

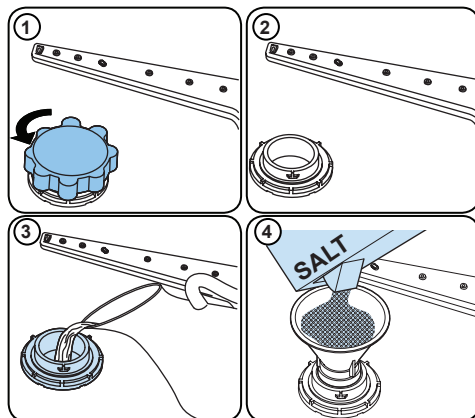
### 4.2 Salt usage (IF AVAILABLE)

For a good washing function, the dishwasher needs soft, i.e. less calcareous water. Otherwise, White lime residues will remain on the dishes and the interior equipment. This will negatively affect your machine's washing, drying and shining performance. When water flows through the softener system, the ions forming the hardness are removed from the water and the water reaches the softness required to obtain the best washing result. Depending on the level of hardness of the inflowing water, these ions that harden the water accumulate rapidly inside the softener system. Therefore, the softener system has to be refreshed so that it operates with the same performance also during the next wash. For this purpose, dishwasher salt is used.

Machine can only be used by special dishwasher salt to soften the water. Do not use any small grained or powdered type of salts which can easily soluble. Using any other type of salt can damage your machine.

### 4.3 Fill the salt (IF AVAILABLE)

To add softener salt, open the salt compartment cap by turning it counter clockwise. **(1)** **(2)** At first use, fill the compartment with 1 kg salt and water **(3)** until it is almost overflowing. If available, using a funnel **(4)** will make filling easier. Replace the cap and close it. After every 20-30 Cycles add salt into your machine until it fills up (approx. 1 kg).








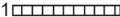





### Only add water to the salt compartment on first use.

Use softener salt specifically produced for use in dishwashers.

When you start your dishwasher, the salt compartment is filled with water, therefore put the softener salt in prior to starting your machine.

If the softener salt has overflowed and you do not start the machine immediately, run a short washing program to protect your machine against corrosion.

## 4.4 Test Strip

	Run water through the tap (1min.)	Keep the strip in the water (1sec)	Shake the strip.	Wait (1min.)	Set the hardness level of your machine.
					1  2  3  4  5  6 

**NOTE:** The level is set to 3 as default. If the water is well water or has a hardness level above 90 dF, we recommend that you use filter and refinement devices.

## 4.5 Water Hardness Table

Level	German dH	French dF	British dE	Indicator
1	0-5	0-9	0-6	L1 is seen on the display.
2	6-11	10-20	7-14	L2 is seen on the display.
3	12-17	21-30	15-21	L3 is seen on the display.
4	18-22	31-40	22-28	L4 is seen on the display.
5	23-31	41-55	29-39	L5 is seen on the display.
6	32-50	56-90	40-63	L6 is seen on the display.

## 4.6 Water Softener System

The dishwasher is equipped with a water softener which reduces the hardness in the mains water supply. To find out the hardness level of your tap water, contact your water company or use the test strip (if available).

## 4.7 Setting

- Turn on the machine by pressing the On/Off button.
- Press the Program button for at least 3 seconds immediately after the machine is turned on.
- Release the Program button when “SL” is shown. Next, the last setting level is displayed.
- Press the program button to set the desired level. Each press of the program button increases the level. Once level 6 has been reached, the next press returns the level to 1.
- The last selected water hardness level is stored in the memory by turning the machine off with the On/Off button.

## 4.8. Detergent usage

Only use detergents specifically designed for domestic dishwashers. Keep your detergents in cool, dry places out of reach of children.

Add the proper detergent for the selected program to ensure the best performance. The amount of detergent needed depends on the cycle, load size, and soil level of dishes.

Do not fill detergent into the detergent compartment more than required; otherwise you can see whitish streaks or bluish layers on glass and dishes and may cause glass corrosion. Continued use of too much detergent may cause machine damage.

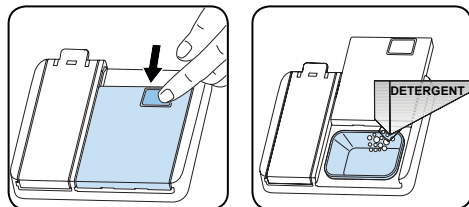
Using little detergent can result in poor cleaning and you can see whitish streaks in hard water.

See the detergent manufacturer's instructions for a further information.

#### 4.9 Filling the detergent

Push the latch to open the dispenser and pour in the detergent.

Close the lid and press it until it locks in place. The dispenser should be refilled just before the start of each programme. If the dishes are heavily soiled, place additional detergent in the pre-wash detergent chamber.



#### 4.10 Using combined detergents

These products should be used according to the manufacturer's instructions.

Never put combined detergents into the interior section or the cutlery basket.

Combined detergents contain not only the detergent but also rinse-aid, salt replacement substances and additional components depending on the combination.

We recommend you do not use combined detergents in short programmes. Please use powder detergents instead. If you encounter problems when using combined detergents, please contact the detergent manufacturer.

When you stop using combined detergents, make sure that water hardness and rinse aid settings are set to the correct level.

#### 4.11 Rinse-aid usage

The rinse aid helps to dry the dishes without streaks and stains. Rinse-aid is required for stain-free utensils and clear glasses. The rinse aid is automatically released during the hot rinse phase. If rinse aid dosage setting set too low, whitish stains remains on dishes and dishes do not dry and washed clean.

If rinse aid dosage setting set too height, you can see bluish layers on glass and dishes.

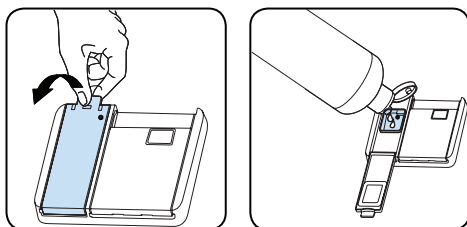
#### 4.12 Filling the rinse-aid and setting

To fill the rinse aid compartment, open the rinse-aid compartment cap. Fill the compartment with rinse aid to the MAX level and then close the cap. Be careful not to overfill the rinse aid compartment and wipe up any spills.

**In order to change the rinse aid level, follow the below steps before turning on the machine:**

- Push the programme button and hold it down.
- Turn the machine on.
- Hold down the programme button until "rA" appears on the display. Rinse aid setting follows water hardness setting.
- The machine will display the last setting.
- Set the level by pushing the programme button.
- Switch off the machine to save the setting.
- The factory setting is "4".

If the dishes are not drying properly or are spotted, increase the level. If blue stains form on your dishes, decrease the level.



Level	Brightener Dose	Indicator
1	Rinse-aid not dispensed	r1 is shown on the display.
2	1 dose is dispensed	r2 is shown on the display.
3	2 doses are dispensed	r3 is shown on the display.
4	3 doses are dispensed	r4 is shown on the display.
5	4 doses are dispensed	r5 is shown on the display.



## 5. LOADING YOUR DISHWASHER

For best results, follow these loading guidelines.

Loading the household dishwasher up to the capacity indicated by the manufacturer will contribute to energy and water savings.

Manual pre-rinsing of tableware items leads to increased water and energy consumption and is not recommended.

You can place cups, glasses, stemware, small plates, bowls, etc. in upper basket.


Do not lean long glasses against one another or they cannot remain steady and may receive damage.


When placing long stem glasses and goblets, lean them against the basket edge or rack and not against other items.

Place all containers such as cups, glasses and pots into the dishwasher with the opening facing downwards otherwise water can collect on items.

If there is cutlery basket in machine, you are recommended to use the cutlery grid in order to obtain the best result. Place all large (pots, pans, lids, plates, bowls etc.) and very dirty items in the lower rack.


Dishes and cutlery should not be placed above each other.


 **WARNING:** Take care not to obstruct the rotation of spray arms.

 **WARNING:** Make sure after loading the dishes do not prevent opening the detergent dispenser.

### 5.1. Recommendations

Remove any coarse residue on dishes before placing the dishes in the machine. Start the machine with full load.

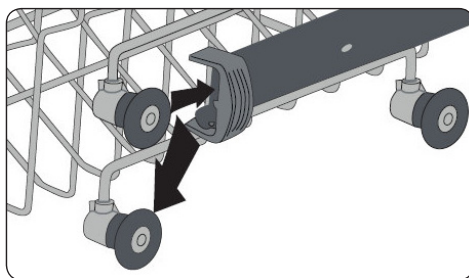
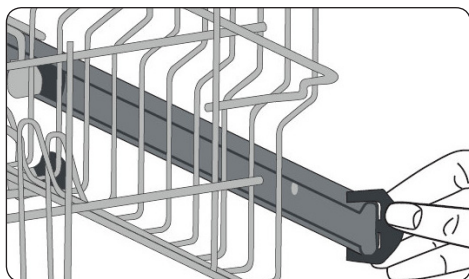
 Do not overload the drawers or place dishes in the wrong basket.

 **WARNING:** To avoid any possible injuries, place long-handle and sharp-pointed knives with their sharp points facing down or horizontally on the baskets.

### Upper Basket

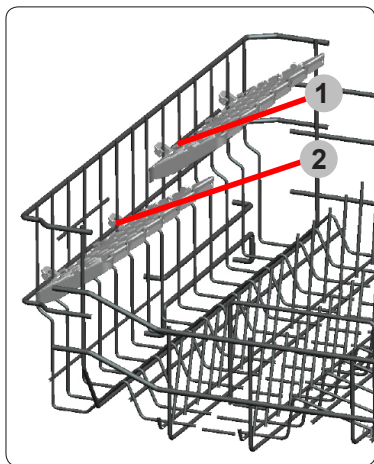
#### Height adjustment

Turn the Rail Stop Clips, at the ends of the rails, to the sides to open them (as shown in the image below), then pull out and remove the basket. Change the position of the wheels, then reinstall the basket to the rail, making sure to close the Rail Stop Clips. When the upper basket is in the higher position, large items such as pans can be placed on the lower basket.



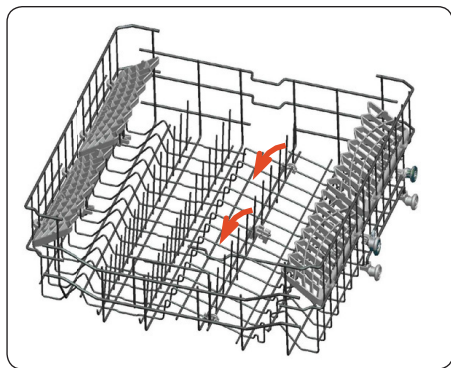
### Height Adjustable Rack (peg type)

The height adjustable racks enable glasses and cups to be placed on or under the racks. The racks can be adjusted to 2 different heights. Cutlery and utensils can also be placed on the racks horizontally.



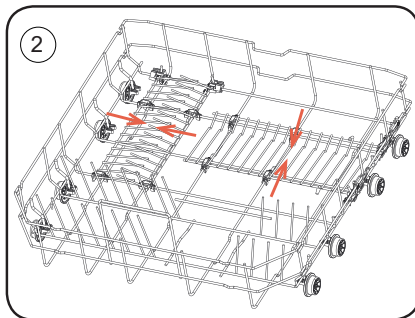
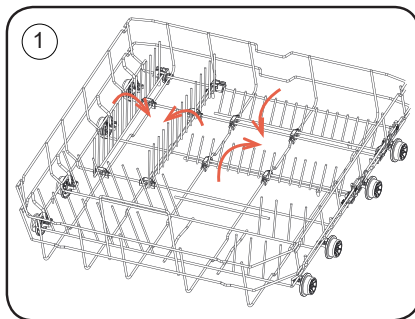
### Height Adjustable Rack (peg type)

The foldable racks in the upper basket enable the placement of large items such as pots and pans. Each section can be folded separately. The foldable racks can be either raised up or folded down.



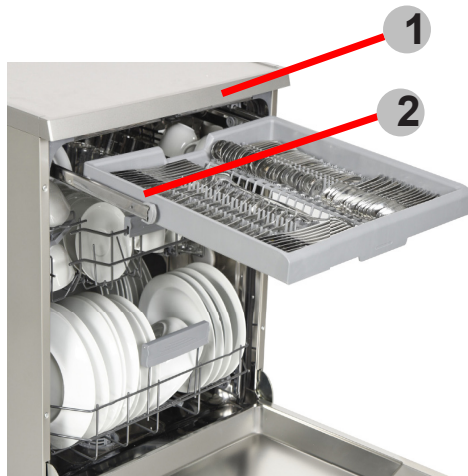
### Four Folding Racks

The folding racks allow easier placement of larger items, such as pots and pans. Each section can be folded separately. The racks can be raised up, or folded down, as shown in the images.



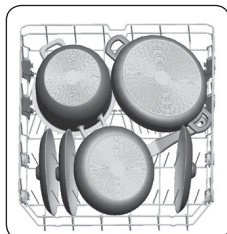
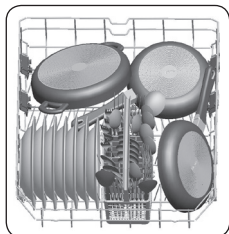
### Upper Cutlery Basket

The upper cutlery basket is designed for the placement of large and small cutlery and utensils.

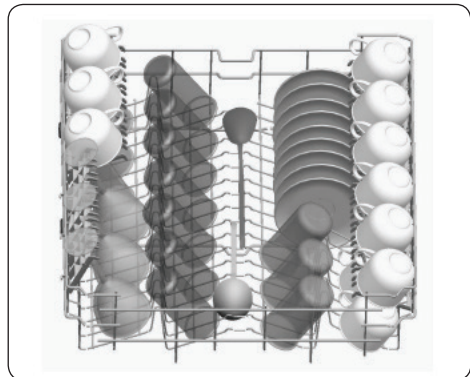


**WARNING:** Knives and other sharp objects must be placed horizontally in the cutlery basket.

## 5.2. Alternative basket loads Lower basket

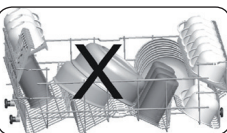
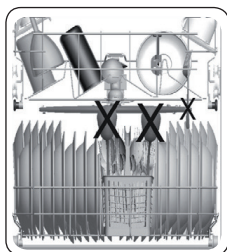
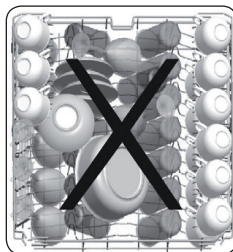


## Upper basket



## Incorrect loads

Incorrect loading can cause poor washing and drying performance. Please follow the manufacturer's recommendations for a good performance result.



## Unsuitable items for dishwasher

- Cigarette ashes, candle leftovers, polish, paint, chemical substances, iron-alloy materials.
- Forks, spoons and knives with wooden, bone, ivory or nacrecoated handles; glued items, items soiled with abrasive, acidic or base chemicals.
- Temperature-sensitive plastics, copper or tincoated containers.
- Aluminium and silver objects.
- Some delicate glasses, ornamental printed porcelains; some crystal items, adhered cutlery, lead crystal glasses, cutting boards, synthetic fibred items.
- Absorbent items such as sponges or kitchen rugs.



**IMPORTANT:** In future, purchase dishwasher-proof kitchenware.

## Important Note for Test Laboratories

For detailed information required for tests according to EN normatives and a softcopy of the manual, please send the model name and serial number to the following address: **dishwasher@standardtest.info**

## 6. PROGRAMME TABLE

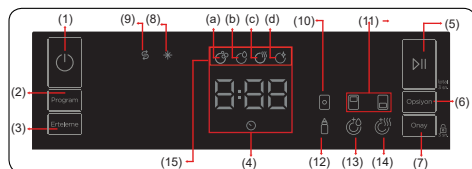
Programme		Duration (min)	Description
P1	Prewash	15	Suitable to rinse dishes that you plan to wash later
P2	Mini 14' (Jet Wash)	14	Fastest program for lightly soiled and recently used dishes and suitable for 4 place settings.
P3	Quick 30' 40°C	30	Suitable for lightly soiled dishes and quick wash.
P4	Eco	222	Standard program for normally soiled daily using dishes with reduced energy and water consumptions.
P5	Super 50' 65°C	50	Suitable for normally soiled daily dishes with faster program.
P6	Auto Delicate 30°C - 50°C	69 - 92	Auto program for normally soiled delicate dishes.
P7	Auto Flex 50°C - 60°C	89 - 121	Auto program for normally soiled dishes.
P8	Auto Intensive 60°C-70°C	97 - 178	Auto program for heavily soiled dishes.



**NOTE:** THE PROGRAMME DURATION MAY CHANGE ACCORDING TO THE AMOUNT OF DISHES, THE WATER TEMPERATURE, THE AMBIENT TEMPERATURE AND SELECTED ADDITIONAL FUNCTIONS.

- Only use powder detergent for short programmes.
- Short programmes do not include drying.
- To assist drying, we recommend slightly opening the door after a cycle is complete.

## 7. CONTROL PANEL



1. On/Off Key
2. Program Selection Key
3. Time Delay Key
4. Remaining Time Display
5. Start/Pause Key
6. Option Key
7. Confirm Key
8. Rinse Aid Display
9. Salt Display
10. Tablet Option Display
11. Half Load Option Displays
12. Extra Hygiene Option Display
13. Extra Rinse Option Display
14. Extra Dry Option Display
15. Washing Step Progress Displays
- a- Washing Step Symbol
- b- Rinsing Step Symbol
- c- Drying Step Symbol
- d- End Step Symbol

### 1. On/Off Key

Turn on the appliance by pressing the on/off key.

### 2. Program Selection Key

Press the program key to select a suitable program.

### 3. Time Delay Key

You can press the Time Delay Key to delay the start time of the program by 1-2...24 hours before it starts. If you want to change the delay time, press the Start/Pause key and then press the Time Delay Key to select the new delay time. Press the Start/Pause key to activate the new delay time. To cancel the time delay, press the time delay key while the machine is paused and switch the time value to 0.



**NOTE:** If you switch off the machine after selecting the delay time and starting the program, the delay time will be cancelled.

## 4. Remaining Time Display

Program flow can be tracked with Washing, Rinsing, Drying, End lights and the Remaining Time Display.

## 5. Start/Pause Key

Start the program by pressing the Start/Pause key. Washing light will turn on and program time will be shown on the Remaining Time Display. It also shows the time remaining during program flow. If you open the door of the machine while the program is running, the program time will pause.

## 6. Option Key

You can consecutively press the option key to make selections. The option you have chosen will be shown with a flashing LED.

## 7. Confirm Key

You can press this key to confirm the option you have chosen, for which the LED is flashing. LED of the confirmed option will light up continuously.

## 8. Rinse Aid Display

When the rinse aid level is low, the rinse aid display will turn on. In this case, you will need to fill the rinse aid compartment.

## 9. Salt Display

If there is not enough salt in the machine, the salt display will turn on. In this case, you will need to fill the salt compartment.

## 10. Tablet Option Display

Select the Tablet Detergent option when using all-in-one detergents that contain salt, rinse aid and extra functions.

## 11. Half Load Option Displays

You can select the Half Load option to wash your dishes in three different ways, namely both baskets, upper basket only and lower basket only. Ideal for small loads, these options ensure less consumption during the washing cycle.

## 12. Extra Hygiene Option Display

You can select the Extra Hygiene option if you want to change the water temperature and washing time of the selected program to ensure a more hygienic washing cycle.

### 13. Extra Rinse Option Display

If you select the rinsing option, washing-rinsing steps will be added to this program to ensure that your dishes are extra dry and shiny.

### 14. Extra Dry Option Display

If you select the Extra Drying function, extra heating and drying steps will be added to the selected program. This will ensure that your dishes dry better.

**NOT:** If you have used one of the extra options in the last washing program, this option will be enabled in the newly selected program until the machine is switched off. To cancel this option in the newly selected program, press the Option key (6) until its light goes off.

### 15. Washing Step Progress Display

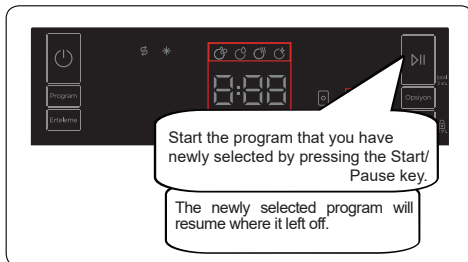
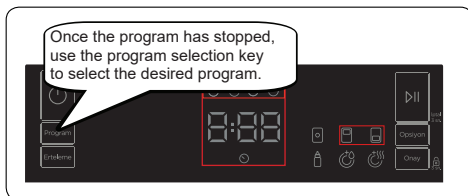
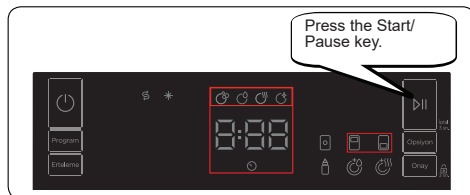
Washing, Rinsing, Drying and End symbols of the running program will be shown on the display alternately. While the drying symbol is on, the product will be silent for 15 to 100 minutes according to the selected program.

**NOTE:** To enable/disable Child Lock, press and hold the Confirm key (7) for about 3 seconds. When this function is enabled, all LEDs will flash and "CL" will be shown once on the Remaining Time Display (4).

**NOTE:** To store a program as your favorite program, press Program (2) and Time Delay (3) keys at the same time. To select the favorite program, press and hold the Program (2) key for 3 second.

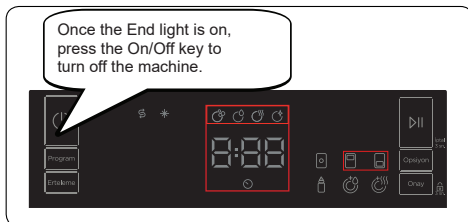
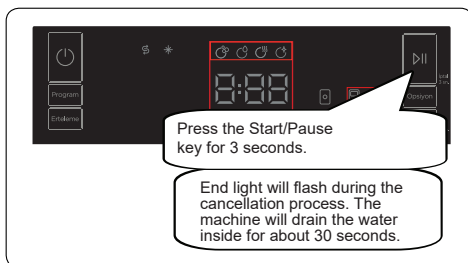
#### 7.1. Changing the Program

If you want to change the program while the machine is running.



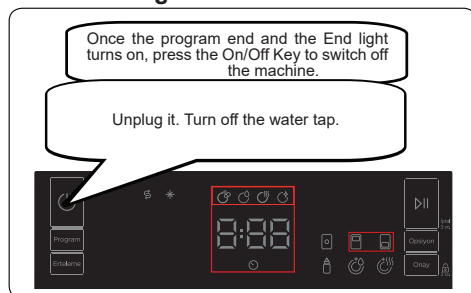
#### 7.2. Cancelling the Program

If you want to cancel the program while it is running.





### 7.3. Switching off the Machine



**NOTE:** Do not open the door until the program finishes.

**NOTE:** At the end of the washing program, you can leave the door of the machine ajar to speed up the drying process.

**NOTE:** If you open the door of the machine or if power gets cut during the washing cycle, the program will resume once the door has been closed or the power has recovered.

#### Warning Sound Check

Follow the steps below to change the volume of the warning sound:

1. Press the On/Off key (1) to turn on your machine. Press the Option (6) and Confirm (7) keys simultaneously for 3 seconds.
2. When the sound setting is detected, a long warning sound will be heard and the machine will show the last level set, which will be between "S0" and "S3".
3. Press the Confirm key (7) to turn the volume down. Press the Option key (6) to turn the volume up.
4. Switch off the machine to save the volume selected.  
"S0" means all sounds are off. Factory default is "S3".

#### Power Saving Mode

Follow the steps below to enable or disable the power saving mode.

1. Press the On/Off key (1) to switch on your machine. Press the Program (2) and Option (6) keys simultaneously for 3 seconds.
2. 3 seconds later, the machine will show the last setting, which is "IL1" or "IL0".

3. "IL1" will be displayed when the Power Saving Mode is enabled. In this mode, the inner light will turn off 4 minutes after the door is opened and the machine will turn off in 15 minutes if no key is pressed to save power.

4. "IL0" will be displayed when the Power Saving Mode is disabled. If the Power Saving Mode is disabled, the inner light will remain on as long as the door is open and the machine will remain on unless it is switched off by the user.

5. Switch off the machine to save the setting selected.

Power Saving Mode is enabled in default factory settings.

#### Active Ion Technology (Depends on the Model)

This function provides extra hygiene thanks to the Ion Technology. It works as an independent program. To enable this function, press the Option key (6) for 3 seconds in ready state. After 3 seconds, "Ion" message will be displayed to indicate that the Active Ion Technology function has been enabled. Release the key once the "Ion" is displayed. The Active Ion Technology function will be cancelled automatically in 24 hours unless the user intervenes.

**NOTE:** The Active Ion Technology function will be cancelled if the machine is switched off.

**NOTE:** The Active Ion Technology function does not run together with any program.

**NOTE:** If the Active Ion Technology function is enabled, the Active Ion Technology LEDs will flash when the door is opened.

## 8. CLEANING AND MAINTENANCE

Cleaning your dishwasher is important to maintain the machine's service life. Make sure that the water softening setting (If available) is done correctly and correct amount of detergent is used to prevent limescale accumulation. Refill the salt compartment when the salt sensor light comes on.

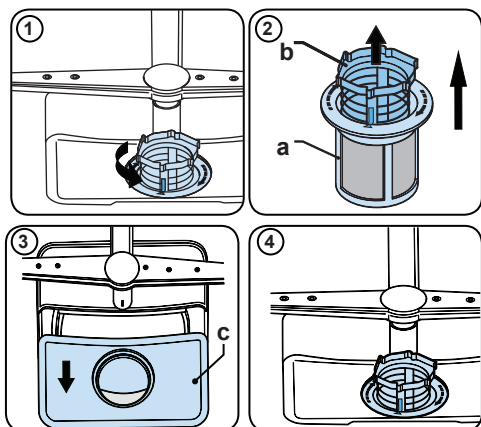
Oil and limescale may build up in your Dishwasher over time. If this occurs:

- Fill the detergent compartment but do not load any dishes. Select a programme which runs at high temperature and run the Dishwasher empty. If this does not clean your Dishwasher sufficiently, use a cleaning agent designed for use with dishwashers.
- To extend the life of your dishwasher, clean the appliance regularly on each month
- Wipe the door seals regularly with a damp cloth to remove any accumulated residue or foreign objects.

### 8.1. Filters

Clean the filters and spray arms at least once a week. If any food waste remains or foreign objects on the coarse and fine filters, remove them and clean them thoroughly with water.

- a) Micro Filter      b) Coarse Filter  
c) Metal Filter

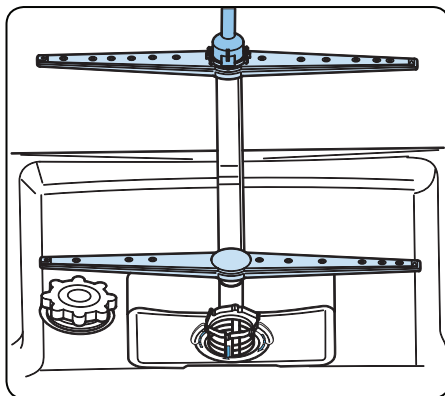


To remove and clean the filter combination, turn it counter clockwise and remove it by lifting it upwards (1). Pull the coarse filter out of the micro filter (2). Then pull and remove the metal filter (3). Rinse the filter with lots of water until it is free of residue. Reassemble the filters. Replace the filter insert, and rotate it clockwise (4).

- Never use your dishwasher without a filter.
- Incorrect fitting of the filter will reduce the washing effectiveness.
- Clean filters are necessary for proper running of the machine.

### 8.2. Spray arms

Make sure that the spray holes are not clogged and that no food waste or foreign object is stuck to the spray arms. If there is any clogging, remove the spray arms and clean them under water. To remove the upper spray arm undo the nut holding it in position by turning it clockwise and pulling it downwards. Make sure that the nut is properly tightened when refitting the upper spray arm.





### 8.3 Drain Pump

Large food residues or foreign objects which were not captured by the filters may block the waste water pump. The rinsing water will then be above the filter.

#### Warning Risk of cuts!

When cleaning the waste water pump, ensure that you do not injure yourself on pieces of broken glass or pointed implements.

In this case:

1. First always disconnect the appliance from the power supply.
2. Take out baskets.
3. Remove the filters.
4. Scoop out water, use a sponge if required.
5. Check the area and remove any foreign objects.
6. Install filters.
7. Re-insert baskets.

## 9. TROUBLESHOOTING

FAULT	POSSIBLE CAUSE	TROUBLESHOOTING
The programme does not start.	Your Dishwasher is not plugged in.	Plug your Dishwasher in.
	Your Dishwasher is not switched on.	Switch your Dishwasher on by pressing the On/Off button.
	Fuse blown.	Check your indoor fuses.
	Water inlet tap is closed.	Turn on the water inlet tap.
	Your Dishwasher door is open.	Close the Dishwasher door.
	Water inlet hose and machine filters are clogged.	Check the water inlet hose and machine filters and make sure they are not clogged.
Water remains inside the machine.	Water drain hose is clogged or twisted.	Check the drain hose, then either clean or untwist it.
	The filters are clogged.	Clean the filters.
	The programme is not finished yet.	Wait until the programme is finished.
Machine stops during washing.	Power failure.	Check mains power.
	Water inlet failure.	Check water tap.
Shaking and hitting noises are heard during a wash operation.	The spray arm is hitting the dishes in the lower basket.	Move or remove items blocking the spray arm.
Partial food wastes remain on the dishes.	Dishes placed incorrectly, sprayed water not reaching affected dishes.	Do not overload baskets.
	Dishes leaning each another.	Place dishes as instructed in the section on loading your dishwasher.
	Not enough detergent used.	Use the correct amount of detergent, as instructed in the programme table.
	Wrong wash programme selected.	Use the information in the programme table to select the most appropriate programme.
	Spray arms clogged with food waste.	Clean the holes in the spray arms with thin objects.
	Filters or water drain pump clogged or filter misplaced.	Check the drain hose and filters are correctly fitted.

FAULT	POSSIBLE CAUSE	TROUBLESHOOTING
Whitish stains remains on dishes.	Not enough detergent used.	Use the correct amount of detergent, as instructed in the programme table.
	Rinse aid dosage and/or water softener setting set too low.	Increase rinse aid and/or water softener level.
	High water hardness level.	Increase water softener level and add salt.
	Salt compartment cap not closed properly.	Check that the salt compartment cap is closed properly.
Dishes do not dry.	Drying option is not selected.	Select a programme with a drying option.
	Rinse aid dosage set too low.	Increase rinse aid dosage setting.
Rust stains form on the dishes.	Stainless-steel quality of the dishes is insufficient.	Use only dishwasher-proof sets.
	High level of salt in wash water.	Adjust the water hardness level using water hardness table.
	Salt compartment cap not closed properly.	Check that the salt compartment cap is closed properly.
	Too much salt spilled in the Dishwasher while filling it with salt.	Use funnel while filling salt to the compartment to avoid spillage.
	A poor mains grounding.	Consult a qualified electrician immediately.
Detergent remains in the detergent compartment.	Detergent was added when the detergent compartment was wet.	Make sure detergent compartment is dry before use.

## AUTOMATIC FAULT WARNINGS AND WHAT TO DO

TROUBLE CODE	POSSIBLE FAULT	WHAT TO DO
FF	Water inlet system failure	Make sure the water inlet tap is open and water is flowing.
		Separate the inlet hose from the tap and clean the filter of the hose.
		Contact for service if the error continues.
F5	Pressure system failure	Contact for service.
F3	Continuous water input	Close the tap and contact for service.
F2	Inability to discharge water	Water discharge hose and filters may be clogged.
		Cancel the program.
		If the error continues, contact for service.
F8	Heater error	Contact for service.
F1	Overflow	Unplug the machine and close the tap.
		Contact for service.
FE	Faulty electronic card	Contact for service.
F7	Overheating	Contact for service.
F9	Diverter position error	Contact for service.
F6	Faulty heater sensor	Contact for service.
HI	High voltage failure	Contact for service.
LO	Low voltage failure	Contact for service.

The installation and repairing procedures should always be carried out by the Authorised Service Agent in order to avoid possible risks. The manufacturer shall not be held liable for damages that may arise from procedures carried out by unauthorised persons. Repairs may be carried out by technicians only. If a component has to be replaced, ensure that only original spare parts are used.

Improper repairs or use of non-original spare parts may cause considerable damage and put the user at considerable risk.

Contact information for your customer service can be found on the back of this document.

Function-relevant genuine spare parts according to the corresponding Ecodesign order can be obtained from Customer Service for a period of at least 10 years from the date on which your appliance was placed on the market within the European Economic Area.

## PRACTICAL INFORMATION

1. When the machine isn't in operation:
  - Disconnect the plug and close the tap.
  - Leave the door slightly open to prevent odour formation.
2. Select the dry option to remove water droplets.
3. Place dishes in the machine properly to achieve the best energy consumption, washing and drying performance. Please see the programme and consumption table for more information.
4. Rinse dirty dishes before placing them in the dishwasher.
5. Only use the Prewash programme when necessary.
6. Do not place the machine near a refrigerator because it will reach high temperatures.
7. If the machine is located in an area that is at risk of freezing, close the tap, disconnect the inlet hose from the tap and drain the water inside the hose and the machine completely.

## THE PRODUCT FICHE

Supplier s trade mark	TORNADO
Supplier s model	TDV-FN158COX / TDV-FN158CDX
Capacity of dishwasher	15
The energy efficiency class	A++
Annual energy consumption in kWh per year (AEc) ( 280 Cycle )	245
Energy consumption (Et) (kWh per cycle)	0,949
Off-mode power consumption (W) (Po)	0,50
Left-on mode power consumption (W) ( P )	1,00
Annual water consumption in litres per year (AWc) ( 280 Cycle )	2520
Drying efficiency class	A
Standard programme name	Eco
Programme time for standard cycle ( min)	222
Duration of the left-on mode ( T ) (min)	-
Airborne acoustical noise emissions ( dB(A) re 1 pW )	49
FFreestanding/Built-in	FFreestanding

Energy consumption **245** kwh per year, based on 280 standard cleaning cycles using cold water fill and the consumption of low power modes. Actual energy consumption will depend on how the appliance is used.

Water consumption **2520** litres per year based on 280 standard cleaning cycles. Actual water consumption will depend on how appliance is used.

Drying efficiency class **A** on a scale from G (least efficient) to A (most efficient).

The “**Eco**” is the standard cleaning cycle to which the information in the label and the fiche relates. This programme is suitable to clean normally soiled tableware and it is the most efficient programme in terms of combined energy and water consumption.



**52336829 R60**

