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INTRODUCTION

Congratulations and thank you for your decision to purchase a home at Avia built by Milin Builders.

This Home Owner's Manual has been designed to provide you with useful information about your new home. It's a guide to moving in, establishing your service accounts and caring for your property.

In addition to this, it includes essential details in relation to manufacturer's instructions, operating manuals and warranty information.

This guide aims to assist in the preservation and longevity of the finishes and fixtures within your home.

From time to time you may be required to enlist the assistance of a trades-person to come to your home.

If this is the case, it's important that you only deal with a fully qualified professional and as such, we have compiled a list of preferred contractors and suppliers for you.

Please take the time to read through the information provided and we thank you again for choosing to purchase a home built by Milin Builders.

Sincerely,
Milin Builders

IMPORTANT INFORMATION

Dear Owner,

For your safety and trouble-free operation of your new appliances, please read the manuals and information provided within this Owner's Manual carefully and observe all of the manufacturers

"Warning", "Caution", "Danger", "Note" and "Do & Do Not" points within the individual manuals.

Maintenance and/or repairs of the appliances must be carried out by a licensed and approved installer or supplier, (information of which is supplied within this manual under "Contacts for Service Personnel").

Failure to observe the above points may lead to warranty cancellation, as well as the risk of electric shock or fatal injury.

Before calling for assistance, please read the "Trouble Shooting" or "Problem Solving" section within the appropriate appliance/ equipment manual. Also note the following points:

All information contained within this manual is in good faith; utilising information supplied by the installers or suppliers of the relevant appliances and was correct at the time of printing.

The following practices and recommendations relating to the new development at Googong NSW, known as Avia Apartments, must be adhered to in order to satisfy Fire Brigade, Australian Building Standards and Warranty requirements.

It is strongly advised that these rules and recommendations are followed. Unnecessary wear and tear to any of the articles mentioned can be minimised when items are monitored and checked regularly. For more information, contact Milin Builders through email on reception@milin.com.au, or call on (02)6260-3338.

MANDATORY REQUIREMENTS & INFORMATION

The following rules and recommendations are related to the Avia development, located at 15 Macfarlane Avenue, Googong, New South Wales, and must be followed in order to satisfy Fire Brigade, Australian Building Standards and Warranty regulations.

FIRE SAFETY REQUIREMENTS

Apartments - Interfering with any fire door (i.e. entry door to sole occupancy units, fire stairs and hallways) is strictly forbidden as per NSW Fire and Rescue regulations. This particularly includes propping open fire doors so that they stay open while residents are moving in and out. Doing so will damage the door hinge and render the fire door inoperable as well as reducing the integrity of the bounding construction. Furthermore, warranty on the door will be void.

Apartments - Storing any materials in the fire exit stairwells is strictly forbidden as per notices inside the stairwells titled "Offences Relating to Fire Stairs".

Apartments - Storing or placing any items in the Service cupboards (i.e. Communications cupboard or Electrical Switchboard cupboard) such as cleaning products and equipment, boxes etc, is strictly forbidden.

Apartments - Due to the sensitive nature of the fire detection system installed within the development, smoking in the stairwells and corridors is strictly forbidden. Smoke detectors outside of the individual units will automatically trigger a 'general' fire alarm, which will call NSW Fire and Rescue. NSW Fire and Rescue will charge the Body Corporate a call out fee for any false alarms induced by cigarette smoke as well as dense dust. Smoke alarms within each individual unit do not cause a 'general' fire alarm when triggered, and only sound within that unit.

Unit owners need to be particularly aware of this as residents may be tempted to open the unit entry door to allow smoke from burnt toast, or the like, to leave the unit. This has the risk of being sensed by the smoke detectors within the corridor and thereby triggering a 'general' fire alarm.

- Apartments - In case of a fire, an alarm may sound, please exit your unit promptly and close the front door.
- The escape route will be marked by green exit signs. Do not use the lifts during a fire. Please familiarise yourself with the fire safety devices, such as the fire extinguishers, fire hose reels, etc.
- Townhouses - It is the individual townhouse owner's responsibility to maintain smoke detectors/alarms in good operative condition inside of their home. This includes replacement of the back-up batteries in the smoke alarm unit itself, refer to the attached user manual for further information.
- Installation of "security chains" and "dead locks" are not recommended. Dead locks and chains can impact on your escape from a fire, or other emergency and the fitting of such devices to doors may be against NSW building and/or fire regulations.
- Parking on the basement Carpark driveway ramp is strictly forbidden.
- The use of fire extinguishers and fire hose reels for any purpose other than fire fighting is strictly forbidden.
- This includes all extinguishes and fire hose reels in the car park.
- Under no circumstances are fire hose reels to be used for washing vehicles or car park pavements.

TENANT & OWNER INFORMATION

Tenants and owners should note that the Body Corporate may have rules and information that are of a more general nature. You will need to liaise with the Body Corporate directly concerning these.

Please note that storage cages are not waterproof and that moisture levels are higher than that of habitable areas, as such items may be affected by moisture.

The basement is also fire sprinkler protected and damage can occur to personal items if the sprinklers are activated (Apartments).

The following items are not to be held in the storage areas (Apartments):

Any fresh or frozen food items including meat, fruit and vegetables.

Corrosive liquids and solids such as acids, fertilizers etc.

Explosive and combustible materials such as fireworks, flares etc.

Flammable Liquids such as Fuel (diesel, petrol, thinners, oils, paints, gas bottles, etc.)

Timber products that may attract termites and white ants such as cardboard, paper, timber furniture, boxes etc.

Items that may become affected by moisture

It will become the Body Corporate's responsibility to engage a licensed professional to attend to, and carry out routine maintenance on the following items:

Automatic Fire Alarm and detection Systems as per AS 1851 Part 8 1987.

Fire doors and frames.

Fire Extinguishers.

Fire Hose Reels.

Garage doors.

Garbage rooms.

Emergency and general Signage.

Common and Electrical Areas.

Irrigation Systems.

Lifts.

Car Park Ventilation System.

It is also the Body Corporate's responsibility to, on a regular basis, engage a qualified professional to

inspect and clean the gutters, storm water pumps and pits, drains, sumps and grates located throughout the car park area, podium, and surrounding area.

Failure to observe the above items may result in damage to property and dwelling.

As per Building Authority regulations and relevant NSW legislation, the car park is ventilated by the means of mechanical ventilation. Adjustments can be made to the timers for purposes of day light savings, however failure to activate the ventilation system at all is dangerous for the well-being of occupants (carbon monoxide poisoning), as well as being against the law. The main switch and timer for the Mechanical Ventilation system is located inside the Main Switch Board room, and is only to be accessed by Authorised personnel.

Keys

Each homeowner will receive two main door keys, as well as a number of other keys associated with their Unit such as car park remote controls, security fobs, mailbox keys and window & sliding door keys. If duplicate keys, fobs or swipes are required, please contact the Body Corporate Manager who will be able to arrange this.

Letterbox Locations

Blocks A & B share a Letter box which Is located on the street side of Wellsvale Drive between the blocks. Blocks C & D share a Letter box which Is located on the street side of Wellsvale Drive between the blocks. Blocks E & F Letter Box is located on the street side of Wellsvale Drive between the blocks.

Blocks G & H share a letter box which is located on the street side of McFarlane Avenue between the blocks.

Block J have individual letter boxes located on the street side of McFarlane Avenue.

Water Supply

Please note that this development has one common water meter located on the main entry into the complex, adjacent to Block E, inside the main shut off valve cabinet. Shutting off the main valve will cut all domestic water supplies to the Avia Development.

Inside the main shut off valve cabinet, you will also find the fire main shut off valve, which Under No Circumstances is to be interfered with. Closing off this valve by any person other than authorized Fire Brigade Officers is a criminal offence.

Within each apartment (Units 1-96), a Nefa High Performance Tempering Valve has been fitted. This controls the maximum hot water temperature available to your basin, shower and bathtub (where applicable). These Valves limit the hot water to 65 degrees Celsius as per the relevant regulations and legislation. This is to prevent scalding and as such, the water temperature is not ‘User Adjustable’.

Interfering with and/or readjusting the mixing valve is strictly forbidden as per regulations. The kitchen sink and laundry produce water at 65 degrees Celsius and caution should be taken to avoid scalding. All maintenance and repair requirements to mixing valve units is to be carried out by a licensed plumber.

Please Note: The hot water available to your kitchen sink and laundry is not Tempered and can reach as high as 65 Degrees Celsius.

Within each Townhouse (Units 97-123), these Valves limit the hot water to 48 degrees Celsius as per the relevant regulations and legislation. This is to prevent scalding and as such, the water temperature is not ‘User Adjustable’.

Shut Off Valves

Each residence comprises stop cocks for hot and cold water, a tempering valve and pressure limiting valves. The location of apartment valves are in the hallway above the front door behind the associated access panel. The townhouse water shut off valves are located out the front of the townhouse.. In addition, an isolation valve has been installed on the hot water units themselves for maintenance purposes.

Communications Supply

This dwelling is provided with data and communications wiring (CAD5) to areas as specified in the inclusions list. The main distribution panel for each residence is located within the bedroom robe in the apartment or in the garage for the townhouses.

Should you need any configuration work performed on the communications distribution, please contact the communications installer from the ‘Contacts for Service Personnel’ section located in this handbook.

All work performed on the wiring needs to be done by a licensed telecommunications technician.

The connection of this service to the dwelling is the owner’s responsibility and needs to be arranged through an appropriate supply company, we suggest Telstra 13 22 00.

Gas Supply

The gas supply to the development is metered by gas meters and OPSO regulators which are located on the main gas meter room outside of car park.

Ventilation & Condensation

In modern homes, all openings are tightly sealed. This makes the residence more energy efficient as it reduces loss of heat in winter and cool air in summer. One of the side effects of reducing air leakage is that moisture is also kept inside.

The most effective method of minimising moisture within the home is the use of extraction fans. Bathroom and laundry extraction fans are activated with the light switch. This will greatly assist in removing moisture from within the residence.

Other ways to assist in managing condensation and the risk of mould include:

- When weather allows it, open windows and leave a small gap where possible.
- Clean the wet areas of the home regularly.
- Avoid drying laundered clothes inside.
- Ensure steam is extracted when cooking by opening a window and using the range hood.
- Dispose of any wet, musty smelling items.

Please refer to the NSW Government fact sheet on the www.dhcs.gov.au "Damp and Mould Growth in homes."

Electricity Supply

Electricity supply to the complex is individually metered. Please note: general power outlets in laundries will not function unless the laundry fan is turned on. The main switchboards are located as follows:

Apartments – switchboards are located internally in the common corridors and the meters located on the outside of the buildings.

Townhouses - switchboards are located internally in the common corridors and the meters located on the outside of the buildings.

Access to these meter boxes is limited to authorised personnel only. Additionally, each unit is provided with a Consumer Switch Board located in the bedroom wardrobes.

If problems persist, please call the electrician from the 'Contacts for Service Personnel' section located within this handbook. Meter boxes need to be accessible and should not be covered or obstructed. Any work associated with the electrical supply and distribution needs to be performed by a licensed electrician, along with any installation of hard-wired appliances. The connection of this service to the dwelling is the owner's responsibility and needs to be arranged through an appropriate supply company, we suggest, Origin or visit www.originenergy.com.au Please make sure all circuit breakers are in the 'off' position before connection takes place.

Waste Removal

Apartments Block A & B:

- Waste Enclosure 3

Apartments Block C, D, E & F:

- Waste Enclosure 1

Townhouse Block G & H:

- Waste Enclosure 2

Townhouse Blocks J:

- Waste Enclosure 3

Please adhere to the recycling rules and use the bins provided.

Non-household waste items such as furniture, electrical items, etc. are not allowed to be deposited. The buildings' Body Corporate will be responsible for managing waste removal.

General Cleaning & Maintenance

- Keep showers and all wet areas clean and mould-free.
- Use of abrasive cleaning products, such as Jif, may permanently damage your bench-tops, windows, and bathroom and kitchen appliances. It is strongly recommended to avoid such cleaners and maintain cleanliness with mild soaps and aids that specifically target the affected area/s.
- The cleaning & maintenance guidelines/information provided within the Attachments to this Manual should be followed.

Bench-tops

The bench-tops installed in the kitchen and bathroom are a reconstituted stone material require minimal maintenance. They should return years of service provided the following simple rules are followed:

- Do not sit, lean or place heavy objects on unsupported parts of the bench top. The bench tops are made using reconstituted stone and are not a flexible material. Care should be taken not to overload them.
- Do not place hot pots and pans directly on to the bench surface as discolouration and cracking may occur. Always use heat resistant spacers Do not place liquids, particularly coloured liquids (i.e. cordials, wine, vinegar, etc), directly on the surface, as the tops are porous and may absorb the liquid and discolour.
- Do not use abrasives to clean the bench tops as they will scratch. Use a good quality surface spray and soft cloth or sponge only.
- Do not place objects that may scratch the surface of the bench tops. Always use pads.
- Do not cut or chop food directly on the bench-top as they will scratch and chip. Use a chopping board.
- Do not use razor blades, steel wool.
- This is to ensure that screws have not become loose, and to ensure that the hinges are operating smoothly.
- A couple of drops of sewing machine oil should be applied to the pivot pin on the metal hinge every six months
- Regular checks that there is adequate clearance between all glass edges is recommended.

Carpet & Vinyl

In order to prolong the life of your Godfrey Hirst carpet, please observe the following recommendations from the manufacturer.

Vinyl floor care: never use abrasive cleaners, nylon scouring pads, steel wool or scouring powder as they may damage the floor. Always read the manufacturer’s instructions before using any cleaning solution and never spray them directly on the floor.

Vacuum Cleaning

All areas shall be vacuumed with an upright suction cleaner with a pile beater at a minimum of once per week. The Pile Beater may consist of revolving bristle strips or a beater bar/bristle strip combination. It is recommended that the vacuum cleaner have an adjustable height beater. The height should be checked and adjusted each time the cleaner is used, to ensure that the carpet pile is not damaged by beating that is more vigorous than is necessary.

Several passes must be made over each area to ensure efficient removal of soiling material.

Spot Cleaning

Spillages, spots and stains shall be removed as soon as possible after they have occurred.

Highly alkaline spot cleaning chemicals should be avoided. However, if necessary, to remove difficult stains, the spot must be neutralized after cleaning by applying dilute acid - for example white vinegar - before the spot is allowed to dry out.

Periodic Deep Cleaning

Periodic cleaning is to be carried out annually using the hot water injection and extraction method (‘steam cleaning’) with a smooth wand attachment. Hot water injection solution shall be maximum of 50^0C in the solution tank. It is necessary to ensure that the solution application is uniform, that it is the minimum required to clean the carpet and that it is left for the minimum time possible on the carpet before being extracted. It is also necessary to extract the solution evenly and thoroughly to be sure that after cleaning, the moisture content of the pile is even throughout and as low as possible to assist the drying process.

- An adequate flow of drying air must be provided to allow the carpet to dry out in a reasonable time. Because each floor of modern buildings are effectively sealed, the air conditioning system should be run at a temperature of 20^{0}C to 25^{0}C while the carpet is being cleaned and then for a further 24 hours after completion of cleaning.

MAINTENANCE AND MANAGEMENT GUIDELINES, RULES AND RECOMMENDATIONS

Storm Water

It is the Body Corporate responsibility to engage licensed professionals to carry out routine maintenance for the following items on a six-monthly basis:

- To inspect and clean storm water pits and sumps, also to test and induce operation of the pumps located within the sumps.
- To inspect and clean storm water grate located in the base of the car park driveway.
- To inspect and clean the storm water retention tanks and to test and induce operation of the pumps located within the tanks.

Failure to maintain the above items may result in damage to property and dwelling.

Waste Enclosures

The enclosures are to be used for the waste of residents only and are not to be used for storage purposes. Skips and bins for these enclosures are to be provided by NSW Waste, and must be cleaned and monitored on a week basis. Below is a list of materials that are NOT permitted to be deposited in and around the waste enclosures:

- Large items such as: packaging for appliances (televisions, washing machines etc.), packing crates, removalists boxes or discarded luggage suit cases
- Building material waste, industrial waste or disused automobile parts
- Vegetation or grass clippings
- Chemicals or any flammable liquids

Interior Paint Care

The following recommendations have been provided by the Wattyl Group. A copy of these rules has been given to the tenants/owners and should be adhered to in order to prolong the integrity of any and all painted surfaces throughout the complex.

Three Monthly

Inspect all painted surfaces and remove any surface marks, stains or dust as follows:

- Dust: Use a soft cloth or soft bristled brush to remove any loosely adhering material. Avoid excessive rubbing or abrading as this can result in glossing up of the paint film.
- Stains/Marks: Wash stained areas with a mild detergent solution and a soft-cloth or soft bristled brush. Wash with clean water and let dry. Avoid excess rubbing or abrading as this can result in glossing up of the paint film.

All stains should be treated as soon as they are noticed as this is when they are easiest to remove.

Note: All cleaning treatments should be tested first on an inconspicuous section of the wall to ensure the treatment will not cause unacceptable damaged to the painted surface.

Annually

Repair all surface defects with appropriate patching compounds and touch up these areas using matching paint imitating the texture of the original coating. Where large areas of touch up are required then it is best to repaint the entire section back to a break in the wall e.g.: corner or doorway.

Five Years

Repaint all walls.

Ten Years

Repaint all ceilings.

Exterior Paint Care

The performance of any paint coating is reliant on its suitability for application to the substrate (i.e. underlying layer, material, texture etc.) on which it has been applied, and its suitability for the conditions to which it is exposed. Paint also acts as a protective coating and when left to deteriorate, can damage the substrate beneath.

Regular inspection, cleaning and repair of a paint coating will prolong its serviceability, highlight any structural problems and maintain the appearance of the painted item for longer.

Material that is deposited on, or grows into, a paint film can degrade the coating and mask any underlying structural problems which may arise.

A simple plan of regular inspection and maintenance will help highlight any potential areas of concern.

As a guide, for solid cover paints:

- Once a year clean the surface thoroughly using a "soft wash" approach.
- A combination of mild detergent, a soft brush and low water pressure will clean off most dirt and grime deposits and reveal any areas of potential concern. (Always be mindful of any water restrictions which may be in place and program the cleaning accordingly).
- Mould and other fungal growth will also be identified. This can be treated using a mild bleach solution and then rinsing well with water.
- Surfaces which have started to open due to changes in their structure will also now be apparent and some remedial action should be planned to cope with this. At this point it will be extremely important to identify and repair the cause of any underlying issues before reapplying any more paint coatings.

Note: While most paint finishes are long lasting it is much easier to repaint a sound surface in good condition than it is to repair and repaint a surface which has been left too long and has deteriorated badly. Where large areas of touch up are required then it is best to repaint the entire section back to a break in the wall e.g. corner or doorway.

As a guide, for oils, stains and varnishes:

- More frequent inspection is recommended with these types of finishes as they often require more maintenance than solid cover paints.
- Clean these finishes as above using the soft wash method, identify and treat any mould, and recoat those areas which are showing signs of wear or deterioration.
- Touch ups / repairs will be very noticeable if they are not controlled and should cover full sections of the oiled or stained substrate.

Surface Cleaning

Hard surfaces – such as concrete paths, drive ways and walk ways – should be kept free of leaves, grass, tree clippings, rubbish and any other form of debris at all times. Consistent monitoring and clearing of these items will decrease the likelihood of hazards, damage and/or permanent staining or discoloration. This should be done on a weekly or fortnightly basis, depending on surrounding landscape. Hard surfaces with an applied finish, such as sealer or colour sealer, should be monitored yearly to inspect for any moisture content, fading and/or wear and tear due to heavy foot or vehicle traffic.

Paved areas should be kept free of all vegetation debris and monitored yearly for any subsiding which may cause water pooling. Tiled areas (exterior in public areas) need to be kept clean of rubbish and vegetation debris to prevent discolouration and should be monitored weekly or fortnightly depending on surrounding conditions. Grout to tiling should be monitored on a yearly basis and repaired or re-grouted accordingly, depending on wear. Equipment such as steel wheeled trolleys or bins must not be used or wheeled over tiled areas. Transporting of heavy objects over tiled areas should also be avoided as a means of preventing cracks or breakage.

CONTACTS & SERVICE PERSONNEL

90-DAY MAINTENANCE PERIOD

At Milin Builders, we pride ourselves on delivering high quality living and good investments to our clients. Under your contract, there is a maintenance period of 90 days which gives Milin Builders the opportunity to work with you to make good any defects which may not be evident at the time of settlement. We have a specific process for submitting maintenance claims to ensure they are attended to in an efficient and reasonable time frame.

At around 10 weeks from settlement, Milin Builders will send you a letter requesting that you report all 90-day maintenance issues via email to reception@milin.com.au with the following particulars:

In the subject line of the email, include the project name and your unit number (e.g. Avia Unit 999).

In the body of the email include: your first and last name and a contact telephone number available during business hours AND the name and mobile phone number of the person who will be enabling access into the unit AND details of your maintenance issue/s, including attaching photographs where applicable.

Maintenance days with relevant contractors will be arranged to attend to your issues and you will be given notice of these. Please ensure you review the Guide to Standards and Tolerances at https://www.fairtrading.nsw.gov.au/housing-and-property/building-and-renovating/after-you-build-or-renovate/guide-to-standards-and-tolerances.

Milin Builders will always endeavour to respond to any claims expeditiously. If your issue has not been addressed in a reasonable time frame, please telephone us on 02 6260 3338.

If you have an urgent maintenance issue, please telephone 02 6260 3338 during business hours or your strata manager after hours.

WARRANTY INFORMATION

We understand that from time to time you may encounter issues with your appliances. If this is the case, we ask that you contact the supplier or manufacturer directly on the numbers provided below.

Be prepared to provide the model and serial number of the appliance, along with the settlement date of your Unit. Warranties generally cover the product from defects for a minimum period of 12 months from the date of settlement; however, we ask that you refer to the enclosed warranty card for definitive time frames.

The following is a list of your new products proudly supplied by Southern Plumbing Plus.

For more information on these products, including full terms and conditions of manufacturers warranties, please visit their websites, or contact our customer service team.

CONTACT FOR SERVICE PERSONNEL

APPLIANCE / SERVICE	COMPANY	CONTACT	PHONE
Kitchen Appliances	Southern Plumbing Plus	Customer Service	02 6143 2602
Laundry Tub	Southern Plumbing Plus	Customer Service	02 6143 2602
Air Conditioning	Millenium Air Conditioning	Don Barr	0417 023 685
Plumber	Advanced Plumbing	Jason	0429 693 184
Electrician/Communications/ Door Access/ Security/ Smoke Detectors/ TV	Allstar Electrical	Joe	0418 624 632
Landscaping/ Irrigation	Earth and Sun Landscaping	Phil Hommos	0407 775 598
Garage Doors	Sheridan Garage Doors	Customer Service	02 6299 6599
Unit Hardware/ Entry/ Doors	Canberra Trade Solutions	Mohammed	0414 677 906
Townhouse Hardware/ Entry/ Doors	Canberra Trade Solutions	Mohammed	0414 677 906
Windows	Taylors Windows	Brad	0438 421 408
Wardrobes/ Shower Screens/ Mirrors	Cesana	Mark Sinclair	0473396666
Metal/ FC Cladding	7Facade	Rory	0403163776
Fire Monitoring System	360 Fire	Customer Service	02 6299 0006
Kitchen	Mint Kitchens	Customer Service	02 6255 4171

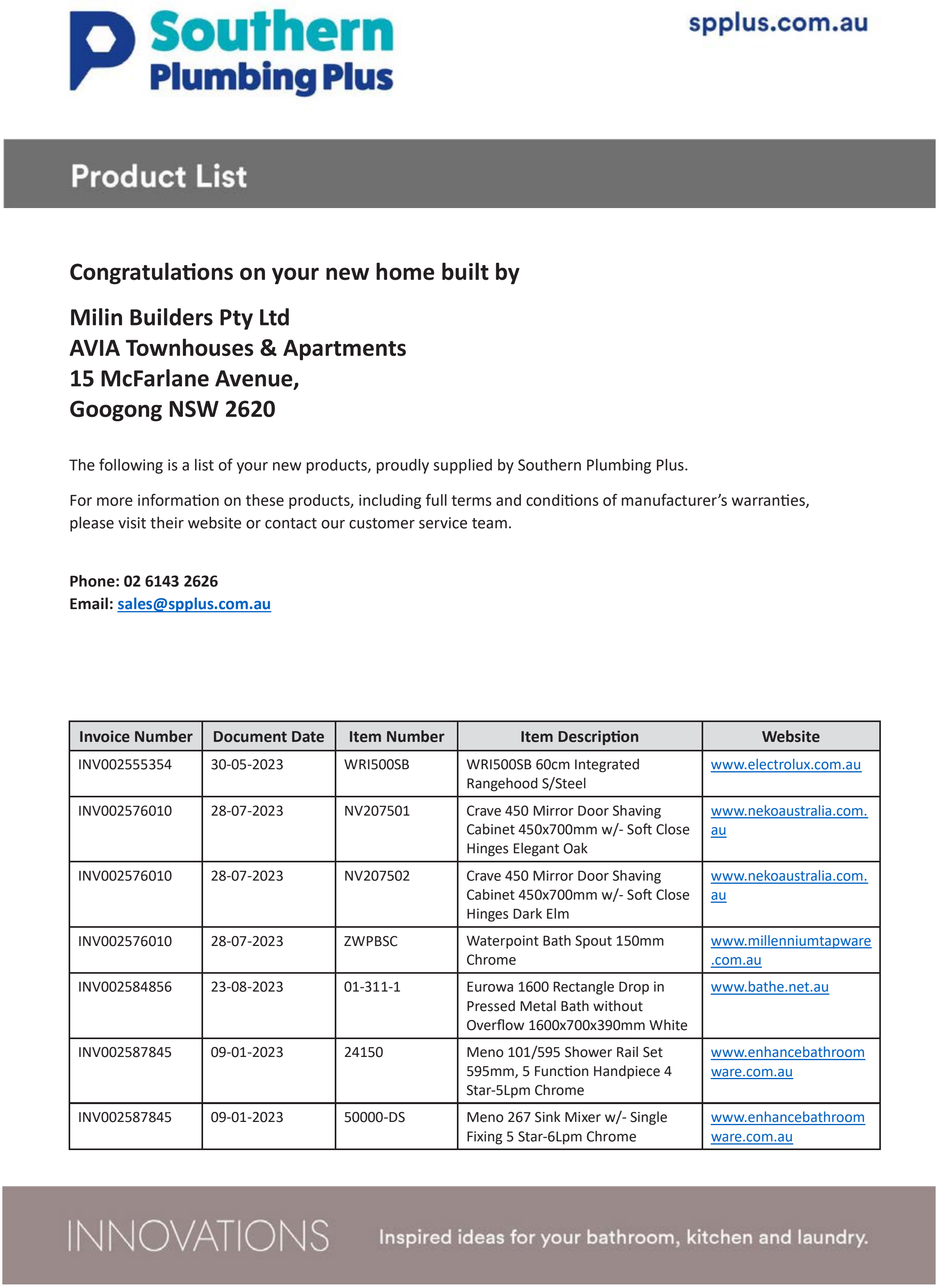
PRODUCTS AND FINISHES

SCHEME: LIGHT				
MATERIAL	**AREA**	**COLOUR**	**SPECIFICATION**	**SUPPLIER**
Carpet	Living Area and Bedrooms	Mist	Bayside Twist	Godfrey Hirst
Floor Tile and Bathroom Feature Wall	Kitchen, Bathroom and Laundry	Grey	600x300mm – Hickory Plain	Tile Touch
Wall Tiles	Laundry and Bathrooms	White	200x400mm – Satin Plain	Tile Touch
Kitchen Splash back	Kitchen	Latte	100x100mm – Rabat Zellige	Tile Touch
Bench Top	Kitchen	Matte	Concrete	QQStone
Feature Joinery	Kitchen	Plantation Ash Woodmatt	Polytec Melamine Colour: Plantation Ash Finish: Woodmatt Profile: Square with matching 1mm ABS Edge	Polytec
Main Joinery	Kitchen	Aston White Smooth	Polytec Melamine Colour: Aston White Finish: Smooth Profile: Square with matching 1mm ABS Edge	Polytec
Kickboard	Kitchen	Aston White Smooth	Polytec Melamine Colour: Aston White Finish: Smooth	Polytec
Paint	Walls	GREY REFLECTION	Wattyl ID Advance-Low Sheen	Wattyl
Paint	Doors, Architrave and Skirting	LEXICON QTR NEW	Wattyl Aqua Trim- Satin	Wattyl
Paint	Ceiling	LEXICON QTR NEW	Wattyl Ultra Toned-Hi OP	Wattyl

PRODUCTS AND FINISHES

SCHEME: DARK				
MATERIAL	**AREA**	**COLOUR**	**SPECIFICATION**	**SUPPLIER**
Carpet	Living Area and Bedrooms	Granite	Bayside Twist	Godfrey Hirst
Floor Tile and Bathroom Feature Wall	Living Area and Bedrooms	Mid Grey	600x300mm – Hickory Plain	Tile Touch
Wall Tiles	Laundry and Bathrooms	White	200x400mm – Satin Plain	Tile Touch
Kitchen Splash back	Kitchen	White	100x100mm – Rabat Zellige	Tile Touch
Bench Top	Kitchen	Winter White	Stone	YDL
Feature Joinery	Kitchen	Black Ply Woodmatt	Polytec Melamine Colour: Plantation Ash Finish: Woodmatt Profile: Square with matching 1mm ABS Edge	Polytec
Main Joinery	Kitchen	Aston White Smooth	Polytec Melamine Colour: Aston White Finish: Smooth Profile: Square with matching 1mm ABS Edge	Polytec
Kickboard	Kitchen	Aston White Smooth	Polytec Melamine Colour: Aston White Finish: Smooth	Polytec
Paint	Walls	GREY REFLECTION	Wattyl ID Advance-Low Sheen	Wattyl
Paint	Doors, Architrave and Skirting	LEXICON QTR NEW	Wattyl Aqua Trim- Satin	Wattyl
Paint	Ceiling	LEXICON QTR NEW	Wattyl Ultra Toned-Hi OP	Wattyl

WARRANTY CARDS



Southern Plumbing Plus

spplus.com.au

Product List

Congratulations on your new home built by

Milin Builders Pty Ltd
AVIA Townhouses & Apartments
15 McFarlane Avenue,
Googong NSW 2620

The following is a list of your new products, proudly supplied by Southern Plumbing Plus.

For more information on these products, including full terms and conditions of manufacturer's warranties, please visit their website or contact our customer service team.

Phone: 02 6143 2626
Email: sales@spplus.com.au

Invoice Number	Document Date	Item Number	Item Description	Website
INV002555354	30-05-2023	WRI500SB	WRI500SB 60cm Integrated Rangehood S/Steel	www.electrolux.com.au
INV002576010	28-07-2023	NV207501	Crave 450 Mirror Door Shaving Cabinet 450x700mm w/- Soft Close Hinges Elegant Oak	www.nekoaustralia.com.au
INV002576010	28-07-2023	NV207502	Crave 450 Mirror Door Shaving Cabinet 450x700mm w/- Soft Close Hinges Dark Elm	www.nekoaustralia.com.au
INV002576010	28-07-2023	ZWPBSC	Waterpoint Bath Spout 150mm Chrome	www.millenniumtapware.com.au
INV002584856	23-08-2023	01-311-1	Eurowa 1600 Rectangle Drop in Pressed Metal Bath without Overflow 1600x700x390mm White	www.bathe.net.au
INV002587845	09-01-2023	24150	Meno 101/595 Shower Rail Set 595mm, 5 Function Handpiece 4 Star-5Lpm Chrome	www.enhancebathroomware.com.au
INV002587845	09-01-2023	50000-DS	Meno 267 Sink Mixer w/- Single Fixing 5 Star-6Lpm Chrome	www.enhancebathroomware.com.au

INNOVATIONS Inspired ideas for your bathroom, kitchen and laundry.

Southern Plumbing Plus

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Invoice Number	Document Date	Item Number	Item Description	Website
INV002587845	09-01-2023	35001-WL	Meno Toilet Roll Holder without Lid Chrome	www.enhancebathroomware.com.au
INV002587845	09-01-2023	35004	Meno Towel Ring Chrome	www.enhancebathroomware.com.au
INV002587845	09-01-2023	35005	Meno Single Towel Rail 600mm Chrome	www.enhancebathroomware.com.au
INV002587845	09-01-2023	A1101	Senza 195 Basin Mixer 5 Star-5Lpm Chrome	www.harmonybathroomware.com.au
INV002587845	09-01-2023	A1103	Senza 196 Square Gooseneck Sink Mixer 5 Star-6Lpm Chrome	www.harmonybathroomware.com.au
INV002587845	09-01-2023	B260004RB	Senza II Shower/Bath Mixer Finish Set Chrome	www.enhancebathroomware.com.au
INV002587845	09-01-2023	FC10MUL01	Mode 460 Wall Basin 460x255x100mm 1TH w/- overflow White	www.argentaust.com.au
INV002587845	09-01-2023	NS604205	Cruze 1080 1.3/4 Left Hand Bowl Sink w/- Drainer 1TH 1080x480x170/145mm S/Steel	www.nekoaustralia.com.au
INV002587845	09-01-2023	NS604210	Cruze 1080 1.3/4 Right Hand Bowl Sink w/- Drainer 1TH 1080x480x170/145mm S/Steel	www.nekoaustralia.com.au
INV002587845	09-01-2023	W152+T151+S151H	Lento Back-to-Wall Rimless Toilet Suite Back-Entry White + Std S/Close Seat WELS 4*	www.harmonybathroomware.com.au
INV002587845	09-01-2023	YS65220	Sync 395 30lt Standard Laundry Tub + Cabinet w/- By-Pass 395x570x871mm S/Steel/White	www.nekoaustralia.com.au
INV002594857	21-09-2023	AEG0000	FFB51600ZM 60cm Freestanding Dishwasher WELS 4.5 Star, Energy 3.5 Star S/Steel	www.electrolux.com.au
INV002594857	21-09-2023	BEE455010M	BEE455010M 60cm Electric 8 Function Oven S/Steel (Commercial only)	www.electrolux.com.au
INV002594857	21-09-2023	HK654070XB	HK654070XB 60cm Electric 4 Zone Ceramic Cooktop S/Steel Trim	www.electrolux.com.au
INV002595125	21-09-2023	NV212205	Polymarble Top to suit 750mm Neko Vanity 1TH	www.nekoaustralia.com.au
INV002595125	21-09-2023	NV212210	Polymarble Top to suit 900mm Neko Vanity 1TH	www.nekoaustralia.com.au
INV002595125	21-09-2023	YS208105	Inspire 750 Cabinet only Wall Hung Double Drawer Elegant Oak	www.nekoaustralia.com.au
INV002595125	21-09-2023	YS208110	Inspire 900 Cabinet only Wall Hung Double Drawer Elegant Oak	www.nekoaustralia.com.au

INNOVATIONS Inspired ideas for your bathroom, kitchen and laundry.

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Invoice Number	Document Date	Item Number	Item Description	Website
INV002595125	21-09-2023	YS214105	Inspire 750 Cabinet only Wall Hung Double Drawer Dark Elm	www.nekoaustralia.com.au
INV002595125	21-09-2023	YS214110	Inspire 900 Cabinet only Wall Hung Double Drawer Dark Elm	www.nekoaustralia.com.au

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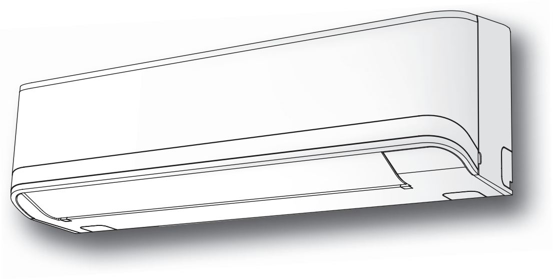
TOSHIBA

R32

INVERTER

OWNER'S MANUAL



AIR CONDITIONER (SPLIT TYPE)

For general public use

Indoor unit
RAS-22, 24E2KVG-A

Outdoor unit
RAS-22, 24E2AVG-A

1120650279

PRECAUTIONS FOR SAFETY

ℹ	Read the precautions in this manual carefully before operating the unit.	⚠	This appliance is filled with R32.

- Keep this manual where the operator can easily find it.
- Read the precautions in this manual carefully before operating the unit.
- This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.
- The precautions described herein are classified as DANGER, WARNING and CAUTION. They both contain important information regarding safety. Be sure to observe all precautions without fail.

⚠ DANGER

- Do not install, repair, open or remove the cover. It may expose you to dangerous voltages. Ask the dealer or the specialist to do this.
- Turning off the power supply will not prevent potential electric shock.
- The appliance shall be installed in accordance with national wiring regulation.
- Means for disconnection from the supply having a contact separation of at least 3 mm in all poles must be incorporated in the fixed wiring.
- The appliance must be stored in a room without continuously operating ignition sources (for example, open flames, an operating gas appliance or an operating electric heater).
- In order to avoid fire, explosion or injury, do not operate the unit when harmful gases (e.g. flammable or corrosive) are detected near the unit.

⚠ WARNING

- Do not expose your body directly to cool or warm air for a long time.
- Do not insert your finger or any article into the air inlet/outlet.
- When an abnormality (burning smell, etc.) occurs, stop the air conditioner and disconnect the power supply or turn off the breaker.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- This appliance is not intended for use by person (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- The air conditioner must be installed, maintained, repaired and removed by a qualified installer or qualified service person. When any of these jobs is to be done, ask a qualified installer or qualified service person to do them for you.
- Children should be supervised to ensure that they do not play with the appliance.

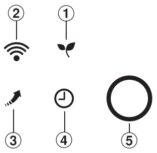
PRECAUTIONS FOR SAFETY

- Do not use any refrigerant different from the one specified (R32) for complement or replacement. Otherwise, abnormally high pressure may be generated in the refrigeration cycle, which may result in a failure or explosion of the product or an injury to your body.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Be aware that refrigerants may not contain an odour.
- Do not pierce or burn as the appliance is pressurized. Do not expose the appliance to heat, flames, sparks, or other sources or ignition. Else, it may explode and cause injury or death.

⚠ CAUTION

- Do not wash the unit with water. It may cause an electric shock.
- Do not use this air conditioner for other purposes such as preserving food, breeding animal, etc.
- Do not step or put anything on the indoor/outdoor unit. It may cause an injury or damage the unit.
- Do not touch aluminium fin because it may cause an injury.
- Before cleaning the unit, turn off the main switch or the circuit breaker.
- When the unit won’t be used for a long time, turn off the main switch or the circuit breaker.
- It is recommended that maintenance be performed by a specialist when the unit has been operated for a long time.
- The manufacturer shall not assume any liability for the damage caused by not observing the description of this manual.

1 INDOOR UNIT DISPLAY



① ECO (White)
② Wi-Fi access (White) ※
③ Hi-Power (White)
④ Timer (White)
⑤ Operation Mode
- Cool (Blue)
- Heat (Orange)

- Display brightness can be adjusted, follow procedure on ⑮.

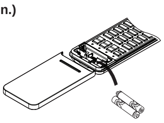
※ Require Wireless LAN connecting adapter which available as accessory.

2 PREPARATION BEFORE USE

Preparing Filters

1. Open the air inlet grille and remove the air filters.
2. Attach the filters. (see detail in the Installation Manual).

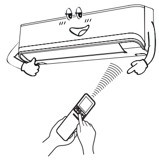
Loading Batteries (when use wireless operation.)



1. Remove the slide cover.
2. Insert 2 new batteries (AAA type) following the (+) and (–) positions.

Clock Setup

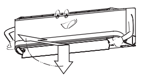
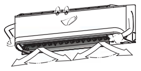
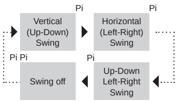
1. Push ○ CLOCK by tip of the pencil. If timer indication is flashing, go to the next step 2.
2. Press ☞ ▲ ON ▼ or ☞ ▲ OFF ▼ : adjust the time.
3. Press ☞ SET : Set the time.



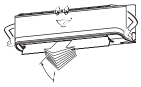
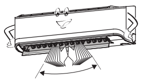
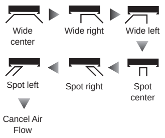
Remote Control Reset

Push ○ RESET by tip of the pencil or
1. Remove the batteries.
2. Press ☞ ⏻.
3. Insert the batteries.

3 AIR FLOW DIRECTION

<table>
<tr><td><b><i>1</i></b></td><td>Press ☞ FIX ▲▼ : Move the louver in the desired vertical direction.</td><td></td></tr>
<tr><td><b><i>2</i></b></td><td>Press ☞ FIX ◀▶ : Move the louver in the desired horizontal direction.</td><td></td></tr>
<tr><td><b><i>3</i></b></td><td>Press ☞ SWING : For select louver swing operation.


Pi
Pi
Vertical (Up-Down) Swing
Horizontal (Left-Right) Swing
Pi Pi
Pi
Swing off
Up-Down Left-Right Swing

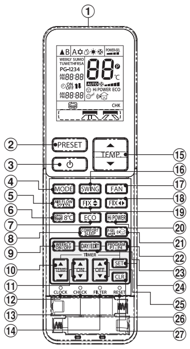
</td><td>• Vertical (Up-Down) swing

• Horizontal (Left-Right) swing
</td></tr>
<tr><td><b><i>4</i></b></td><td colspan="2">Press ☞ AIR FLOW to select provided air flow direction.


Wide center
Wide right
Wide left
Spot left
Spot right
Spot center
Cancel Air Flow

• Pressing Indoor unit causes “Pi” sound (receiving tone) and “PiPi” sound when AIR FLOW is canceled.</td></tr>
</table>

Note:
- Do not move the louver manually by hands or others.
- The louver may automation positioning by some operation mode.

4 REMOTE CONTROL



① Infrared signal emitter
② Memory and Preset button (PRESET)
③ Start/Stop button
④ Mode select button (MODE)
⑤ Air flow button
⑥ Fireplace/8℃ button
⑦ ECO button
⑧ Comfort sleep button (COMFORT SLEEP)
⑨ Weekly timer (ON/OFF)
⑩ Temp for Weekly timer
⑪ On timer button (ON)
⑫ Set clock button (CLOCK)
⑬ Check button (CHECK)
⑭ Filter reset button (FILTER)
⑮ Temperature button (TEMP)
⑯ Swing louver button (SWING)
⑰ Fan speed button (FAN)
⑱ Set louver Left-Right button (FIX ◀▶)
⑲ Set louver Up-Down button (FIX ▲▼)
⑳ High power button (Hi POWER)
㉑ Power selection/Silent button (P-SEL/SILENT)
㉒ Program P1 - P4
㉓ Day/Edit button
㉔ Setup button (SET)
㉕ Off timer button (OFF)
㉖ Clear button (CLR)
㉗ Reset button (RESET)

Note:
- The provided Remote Controller is a wireless type, which also can be used as a wire. Please see “How to Connect The Remote Controller for Wired Operation”, located in installation instruction, in case of wired control is required.
- In wire operation, remote controller will return to initial condition (PRESET, TIMER and CLOCK will return to initial condition) when user shutdown power supply of Air conditioner.

5 COOLING / HEATING / FAN ONLY OPERATION

1. Press ☞ MODE : Select Cool ❄, Heat ☼, or Fan only ✇.
2. Press ☞ ▲ TEMP. ▼ : Set the desired temperature. Min. 17°C, Max. 30°C.
   Fan Only: No temperature indication
3. Press ☞ FAN : Select AUTO, LOW ▂, LOW+ ▂▃, MED ▂▃▄, MED+ ▂▃▄▅, HIGH ▂▃▄▅▆ or Quiet ☺

6 AUTOMATIC OPERATION

To automatically select cooling, heating, or fan only operation

1. Press ☞ MODE : Select Auto A.
2. Press ☞ ▲ TEMP. ▼ : Set the desired temperature. Min. 17°C, Max. 30°C.
3. Press ☞ FAN : Select AUTO, LOW ▂, LOW+ ▂▃, MED ▂▃▄, MED+ ▂▃▄▅, HIGH ▂▃▄▅▆ or Quiet ☺

7 DRY OPERATION

For dehumidification, a moderate cooling performance is controlled automatically.

1. Press ☞ MODE : Select Dry 💧.
2. Press ☞ ▲ TEMP. ▼ : Set the desired temperature. Min. 17°C, Max. 30°C.

Note: DRY mode fan speed is set to Auto only.

8 Hi POWER OPERATION

To automatically control room temperature and airflow for faster cooling or heating operation (except in DRY and FAN ONLY mode)

Press ☞ Hi POWER : Start and stop the operation.

9 ECO OPERATION

To automatically control room temperature to save energy (except in DRY and FAN ONLY mode)

Press ECO : Start and stop the operation.

Note : Cooling operation; the set temperture will increase automatically 1 degree/hour for 2 hours (maximum 2 degrees increase).
For heating operation the set temperture will decrease.

10 FIREPLACE AND 8°C HEATING OPERATION

Fireplace Operation ( )

Keep indoor unit's fan blowing continuously during thermo off, to circulate heat from other sources over the room. There are three setting parameters: Default setting > Fireplace 1 > Fireplace 2

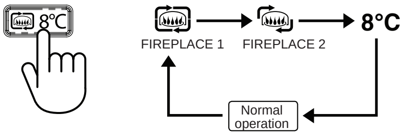
Fireplace 1:
During thermo off period, the indoor unit's fan will continue to run by the same speed, previously selected by end-user.

Fireplace 2:
During thermo off period, the indoor unit's fan will continue to run at super-low speed, programmed from factory.

8°C Heating Operation (8°C)

Heat mode operation for keep room temperature (5-13°C) with less of energy usage.

Fireplace and 8°C Heating Operation



Note:

- While Fireplace operation on heating mode, indoor unit fan always runs and cold air breezing might be occurred.
- Fireplace and 8°C will operate in Heating mode only.

11 COMFORT SLEEP OPERATION

For comfortable sleep, automatically control air flow and automatically turn OFF (Except in DRY mode).

1. Press COMFORT SLEEP : Select 1, 3, 5 or 9 hrs for OFF timer operation.
2. Press CLR to cancel the comfort sleep operation.

Note: The cooling operation, the set temperature will increase automatically 1 degree/hour for 2 hours (maximum 2 degrees increase). For heating operation, the set temperature will decrease.

12 POWER-SELECTION AND SILENT OPERATION (OUTDOOR UNIT)

Power-Selection (P-SEL)

This function is used when the circuit breaker is shared with other electrical appliances. It limits the maximum current and power consumption to 100%, 75%, or 50% and can be implemented by POWER-SELECTION. The lower percentage, the higher saving and also longer compressor lifetime.

Note:

- When the level is selected, POWER-SEL level flashes on remote LCD display for 3 seconds.
  In case of 75% and 50% level, number "75" or "50" also flashes for 2 seconds.
- Due to the reason that POWER-SELECTION function limits the maximum current, inadequate cooling or heating capacity may occur.

Silent Operation ( )

Keep outdoor unit operating silently to ensure either yourself or neighborhood will have a tight sleep in nighttime. By this feature, the heating capacity will be optimized to deliver such silent experience. The silent operation can be selected from one of two purposes (Silent 1 and Silent 2).
There are three setting parameters: Standard level > Silent 1 > Silent 2

Silent 1:

Though operating silently, the Heating (or Cooling) capacity is still prioritized to ensure having sufficient comfort inside the room.
This setting is a perfect balance between the Heating (or Cooling) capacity and the Sound level of outdoor unit.

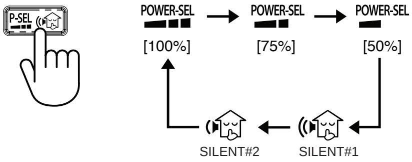
Silent 2:

Compromising the Heating (or Cooling) capacity to the Sound level in any circumstance where the outdoor unit's sound level is highly prioritized.
This setting has a purpose to reduce the maximum sound level of outdoor unit by 4 dB(A).

Note:

- While activating of Silent operation, inadequate heating (or cooling) capacity may occur.

Power-Selection and Silent Operation (Outdoor Unit)



13 TIMER OPERATION

Set the timer when the air conditioner is operating.

	Setting the ON Timer	Setting the OFF Timer
1	Press ▲ ON ▼ : Set the desired ON timer.	Press ▲ OFF ▼ : Set the desired OFF timer.
2	Press SET : Set the timer.	Press SET : Set the timer.
3	Press CLR : Cancel the timer.	Press CLR : Cancel the timer.

Note:

- Keep the remote control in accessible transmission to the indoor unit; otherwise, the time lag of up to 15 minutes will occur.
- The setting will be saved for the next same operation.

14 PRESET OPERATION

Set your preferred operation for future use. The setting will be memorized by the unit for future operation (except airflow direction).

1. Select your preferred operation.
2. Press and hold PRESET for 3 seconds to memorize the setting. The Ⓟ mark displays.
3. Press PRESET : Operate the preset operation.

15 DISPLAY LAMP BRIGHTNESS ADJUSTMENT

To decrease the display lamp brightness or turn it off.

1. Press and hold FAN for 3 seconds until brightness level (d0, d1, d2 or d3) is shown on remote control LCD then release the button.
2. Press TEMP. Rise or TEMP. Decrease to adjust brightness in 4 levels.

Remote control LCD	Operation display	Brightness
d3	Lamp illuminates full brightness.	100%
d2	Lamp illuminates 50% brightness.	50%
d1	Lamp illuminates 50% brightness and the operation lamp is turned off.	50%
d0	All lamps are turned off.	All turned off

- In the examples of d1 and d0, the lamp illuminates for 5 seconds before going off.

16 AUTO RESTART FUNCTION SETTING

This product is designed so that, after a power failure, it can restart automatically in the same operating mode as before the power failure.

Information
The product is shipped with Auto Restart function in the ON position.
Turn it OFF if this function is not required.

How to turn OFF the Auto Restart Function

- Press and hold the [OPERATION] button on the indoor unit for 3 seconds (3 beep sounds but OPERATION lamp does not blink).

How to turn ON the Auto Restart Function

- Press and hold the [OPERATION] button on the indoor unit for 3 seconds (3 beep sounds and OPERATION lamp blink 5 time/sec for 5 seconds).

Note:
- In case of ON timer or OFF timer are set, AUTO RESTART OPERATION does not activate.
- Default setting of AUTO RESTART OPERATION is ON.

17 SELF CLEANING OPERATION (COOL AND DRY OPERATION ONLY)

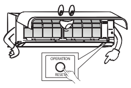
To protect bad smell caused by the humidity in the indoor unit.

1. If the ⏻ button is pressed once during "Cool" or "Dry" mode, the fan will continue to run for other 30 minutes, then it will turn off automatically. This will reduce the moisture in the indoor unit.
2. To stop the unit immediately, press the ⏻ more 2 times within 30 seconds.

18 TEMPORARY OPERATION

In case of the misplaced or discharged remote control

- Pressing the RESET button, the unit can start or stop without using the remote control.
- Operation mode is set on AUTOMATIC operation, preset temperature is 24°C and fan operation is automatic speed.



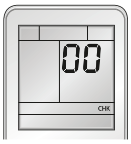
19 REMOTE CONTROL A-B SELECTION

To separate using of remote control for each indoor unit in case of 2 air conditioners are installed nearly.

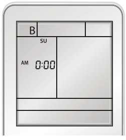
Remote Control B Setup.

1. Press RESET button on the indoor unit to turn the air conditioner ON.
2. Point the remote control at the indoor unit.
3. Push and hold CHECK button on the Remote Control by the tip of the pencil. "00" will be shown on the display. (Picture ①)
4. Press MODE during pushing CHECK. "B" will show on the display and "00" will disappear and the air conditioner will turn OFF. The Remote Control B is memorized. (Picture ②)

Note: 1. Repeat above step to reset Remote Control to be A.
2. Remote Control A has not "A" display.
3. Default setting of Remote Control from factory is A.



①



②

20 OPERATION AND PERFORMANCE

1. Three-minute protection feature: To prevent the unit from being activated for 3 minutes when suddenly restarted or switched to ON.
2. Preheating operation: Warm up the unit for 5 minutes before the heating operation starts.
3. Warm air control: When the room temperature reaches the set temperature, the fan speed is automatically reduced and the outdoor unit will stop.
4. Automatic defrosting: Fans will stop during defrost operation.
5. Heating capacity: Heat is absorbed from outdoors and released into the room. When the outdoor temperature is too low, use another recommended heating apparatus in combination with the air conditioner.
6. Consideration for accumulated snow: Select the position for outdoor unit where it will not be subjected to snow drifts, accumulation of leaves or other seasonal debris.
7. Some minor cracking sound may occur when unit operating. This is normal because the cracking sound may be caused by expansion/contraction of plastic.

Note: Item 2 to 6 for Heating model

Air conditioner operating conditions

Temp. / Operation	Outdoor Temperature	Room Temperature
Heating	–15°C ~ 24°C	0 ~ 28°C
Cooling	–10°C ~ 46°C	21°C ~ 32°C
Dry	–10°C ~ 46°C	17°C ~ 32°C

21 MAINTENANCE

⚠ Firstly, turn off the circuit breaker.

Indoor Unit and Remote Control

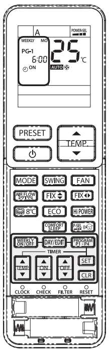
- Clean the indoor unit and the remote control with a wet cloth when needed.
- No benzine, thinner, polishing powder or chemically-treated duster.

Air filters
Clean every 2 weeks.
1. Open the air inlet grille.
2. Remove the air filters.
3. Vacuum or wash and then dry them.
4. Reinstall the air filters and close the air inlet grille.

22 TROUBLESHOOTING (CHECK POINT)

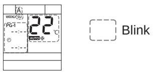
The unit does not operate.	Cooling or Heating is abnormally low.
• The power main switch is turned off. • The circuit breaker is activated to cut off the power supply. • Stoppage of electric current • ON timer is set.	• The filters are blocked with dust. • The temperature has been set improperly. • The windows or doors are opened. • The air inlet or outlet of the outdoor unit is blocked. • The fan speed is too low. • The operation mode is FAN or DRY. • POWER SELECTION function is set 75% or 50% (**This function is depend on remote controller**).

23 WEEKLY TIMER OPERATION

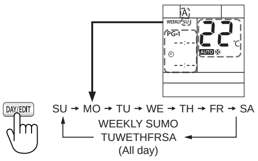


How to set WEEKLY TIMER

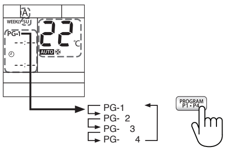
1. Press ☞ DAY/EDIT to enter WEEKLY TIMER setting.



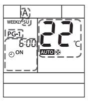
2. Press ☞ DAY/EDIT to select desired day in sequence.
   The sequence of day symbol appears on the LCD.



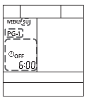
3. Press ☞ PROGRAM P1 - P4 to select the program number.
   - The program 1 is ready for setting while ☞ DAY/EDIT is pressed PG-1 appears on the LCD.
   - Press ☞ PROGRAM P1 - P4 to change the program number in the sequence program 1 to program 4.



4. Press ☞ ON or ☞ OFF to select the desired time.
   - The time can be set between 0:00 and 23:50 in 10 minute intervals.
   - Press and hold the button to change setting time for 1 hr.
   - Only one of ON or OFF timer can be set on each program.



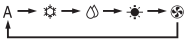
ON timer display



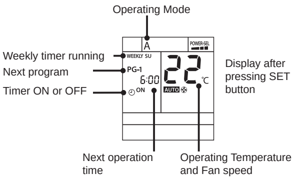
OFF timer display*

*OFF timer is used to stop the air conditioner only.
The display does not show Operation mode, Temperature, Fan speed and others.

5. Press ☞ MODE to select desired operation.



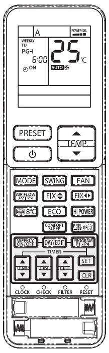
6. Press ☞ TEMP. or ☞ TEMP to select desired temperature.
   - The temperature can be set between 17°C and 30°C.
7. Press ☞ FAN to select the desired fan speed.
8. Add operations, if required.
   - Press ☞ 8°C to use 8°C operation.
     (Notes: Fireplace cannot select and memorize in weekly function)
   - Press ☞ ECO to use ECO operation.
   - Press ☞ Hi POWER to use Hi POWER operation.
   - Press ☞ P-SEL to use Silent operation.
9. Adding or editing the program.
   The program can be set to perform on all the required days until ☞ SET is pressed to confirm the setting.
10. If adding or editing a program is required, please repeat steps 2 - 8 before setting confirmation.
11. After adding or editing, press ☞ SET to confirm the setting*.



*Point remote control at air conditioner receiving module then, press SET button until you hear the "PiPi" sound. This means the setting operation has been completed. As the air conditioner is receiving the signal, you will hear separate "Pi" sounds corresponding to the number of days in the selected setting.
An incomplete setting is indicated if the TIMER lamp is blinking. Press ☞ WEEKLY ON/OFF twice.

Notes :

1. Place the remote control where the indoor unit can receive the signal. This will increase the accuracy of the timing between the remote control and the air conditioning unit.
2. The ON/OFF timer can be set during the WEEKLY TIMER operation. In this situation, the air conditioner will first follow the normal timer until it is complete; then, it will return to the WEEKLY TIMER function.
3. During WEEKLY TIMER operation, all of operation such as MODE, TEMP, FAN, Hi POWER, ECO and etc., can be adjusted but when the clock reaches the program setting, the operation will return to the set items in the program.
4. When the remote control is sending a signal to the air conditioner, avoid interference from objects that can block the signal.



Edit Weekly timer program

To edit the program after confirming the weekly timer setting, follow steps 1 - 3 below.

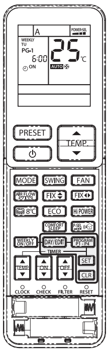
1. Press ☞ DAY/EDIT.
   - The day of the week and the program number of the current day will be displayed.
2. Press ☞ DAY/EDIT to select the day of the week and press ☞ PROGRAM P1 - P4 to select program number to be confirmed.
   - Resetting the operation.
3. Press ☞ SET to exit confirming mode.

Deactivating WEEKLY TIMER operation

Press ☞ WEEKLY ON/OFF while "WEEKLY" is displayed on the LCD.

- The "WEEKLY" indicator will disappear from the LCD. However, the program will remain in the remote control.
- The TIMER lamp goes off.
- To reactivate the WEEKLY TIMER operation again, press ☞ WEEKLY ON/OFF again, LCD shows the next program. The program, after reactivation, is related to the clock time.

To delete programs



The individual program

1. Press ☞ DAY/EDIT.
   - The day of the week and the program number is displayed.
   - Select the day to delete the program.
2. Press ☞ PROGRAM P1 - P4 to select the program number to be deleted.
3. Press ☞ CLR.
   - ON or OFF timer will be cleared and the LCD will blink.
4. Press ☞ SET to delete the program.
   - Press ☞ SET while the LCD is blinking.
     The program has now been deleted.

All programs

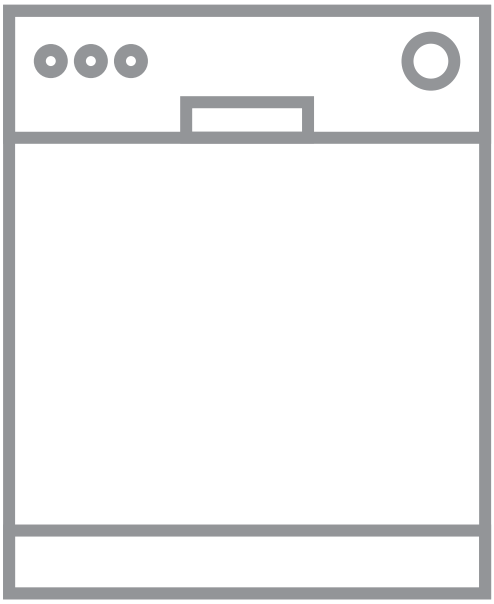
1. Press ☞ DAY/EDIT.
   - The day of the week and the program number will be displayed.
2. Press ☞ CLR and hold for 3 seconds.
   - All programs will be deleted and LCD displays current operation.

Notes :
Make sure the remote control receiving module on the air conditioner receives the signal from the remote control.

FFB51600ZM

EN **User Manual**
Dishwasher

USER
MANUAL



AEG

CONTENTS

IMPORTANT INFORMATION THAT MAY IMPACT YOUR MANUFACTURER'S WARRANTY

Adherence to the directions for use in this manual is extremely important for health and safety. Failure to strictly adhere to the requirements in this manual may result in personal injury, property damage and affect your ability to make a claim under the AEG manufacturer’s warranty provided with your product. Products must be used, installed and operated in accordance with this manual. You may not be able to claim on the AEG manufacturer’s warranty in the event that your product fault is due to failure to adhere to this manual.

FOR PERFECT RESULTS

Thank you for choosing this AEG product. We have created it to give you impeccable performance for many years, with innovative technologies that help make life simpler features you might not find on ordinary appliances. Please spend a few minutes reading to get the very best from it.
Visit our website for:

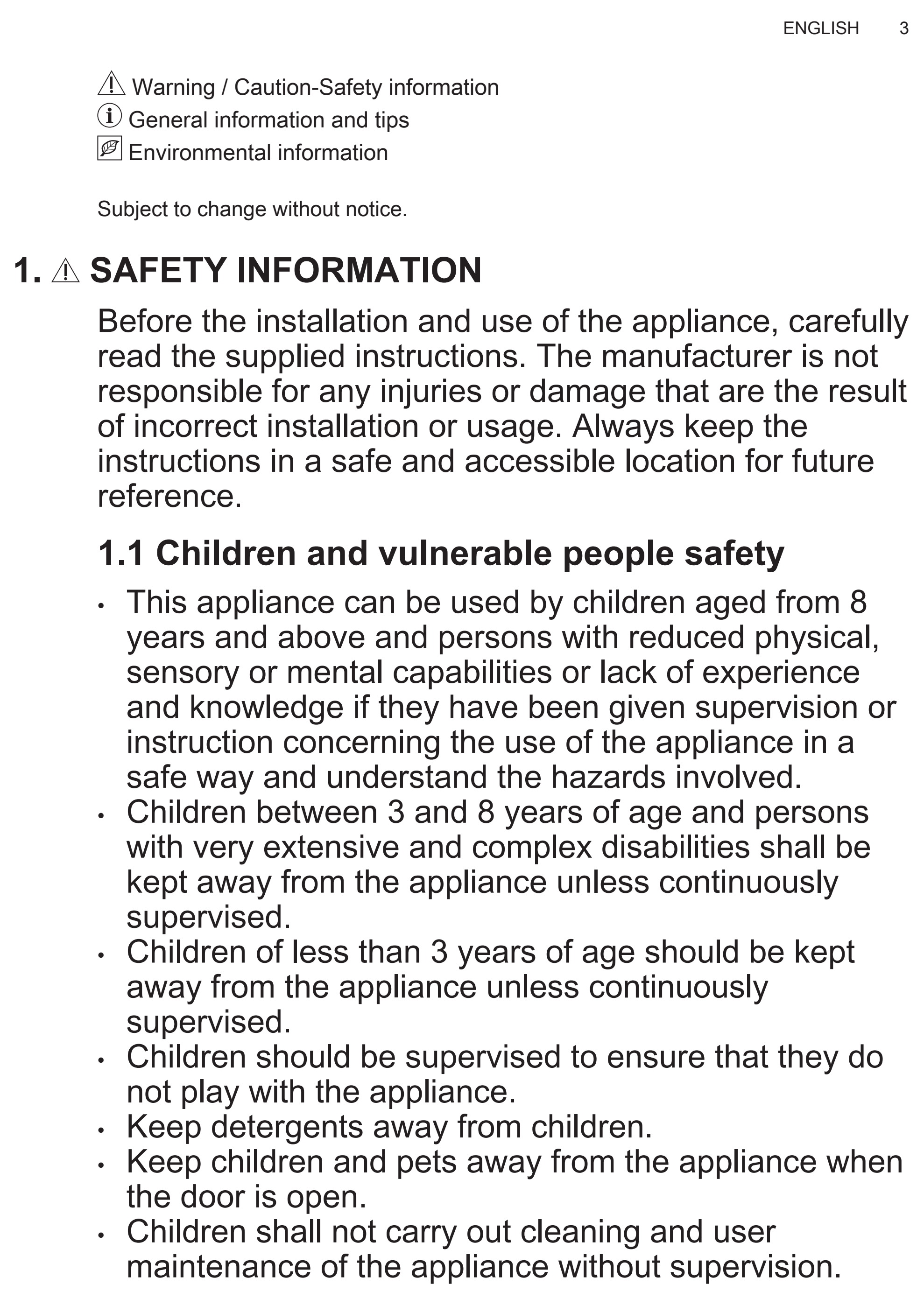
Get usage advice, brochures, trouble shooter, service information:
www.aeg.com

Register your product for better service:
www.registeraeg.com

Buy Accessories, Consumables and Original spare parts for your appliance:
www.aeg.com/shop

CUSTOMER CARE AND SERVICE

Always use original spare parts.
When contacting our Authorised Service Centre, ensure that you have the following data available: Model, PNC, Serial Number.
The information can be found on the rating plate.



⚠ Warning / Caution-Safety information
ⓘ General information and tips
▨ Environmental information

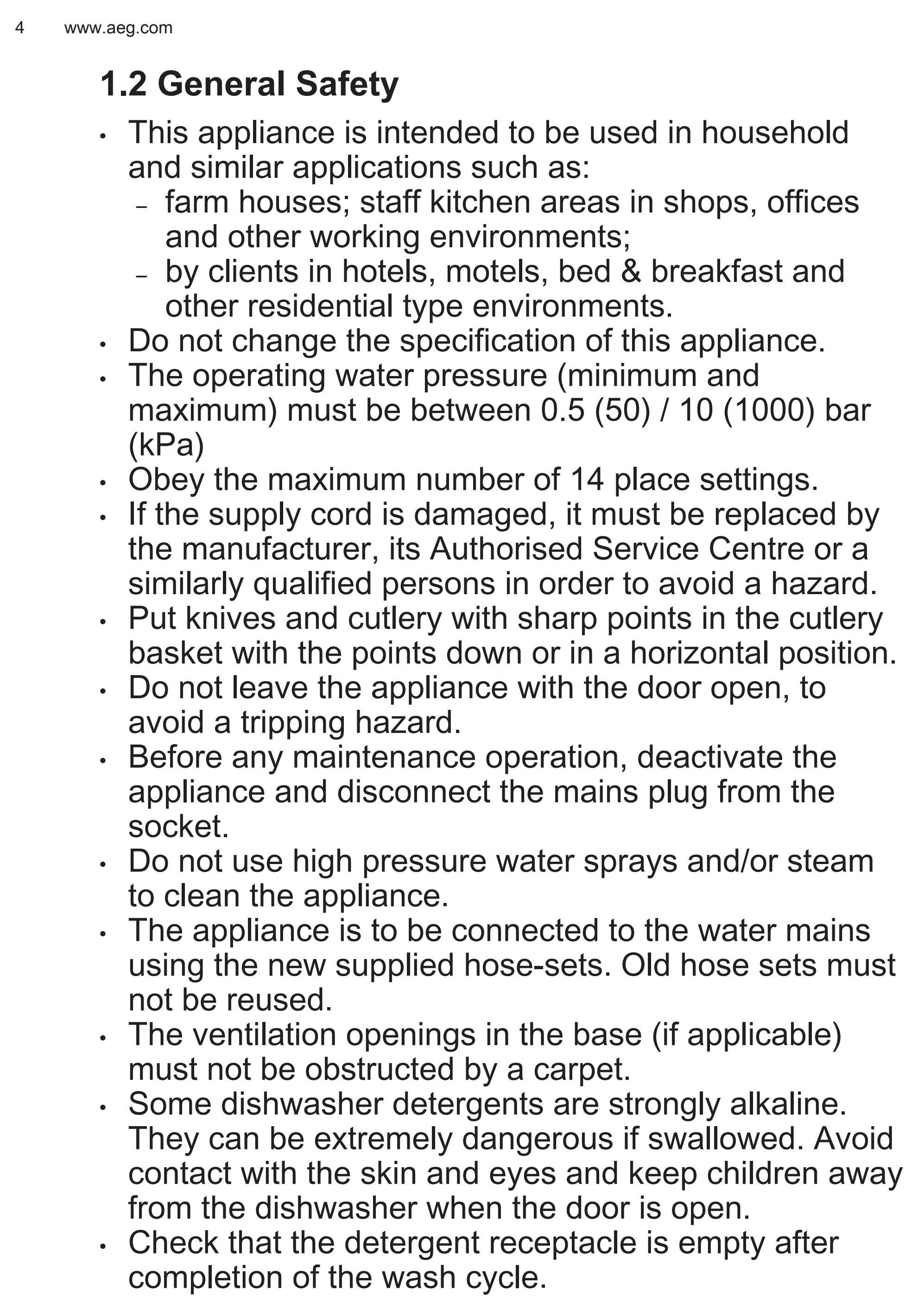
Subject to change without notice.

1. ⚠ SAFETY INFORMATION

Before the installation and use of the appliance, carefully read the supplied instructions. The manufacturer is not responsible for any injuries or damage that are the result of incorrect installation or usage. Always keep the instructions in a safe and accessible location for future reference.

1.1 Children and vulnerable people safety

- This appliance can be used by children aged from 8 years and above and 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 the hazards involved.
- Children between 3 and 8 years of age and persons with very extensive and complex disabilities shall be kept away from the appliance unless continuously supervised.
- Children of less than 3 years of age should be kept away from the appliance unless continuously supervised.
- Children should be supervised to ensure that they do not play with the appliance.
- Keep detergents away from children.
- Keep children and pets away from the appliance when the door is open.
- Children shall not carry out cleaning and user maintenance of the appliance without supervision.



1.2 General Safety

- This appliance is intended to be used in household and similar applications such as:
  - farm houses; staff kitchen areas in shops, offices and other working environments;
  - by clients in hotels, motels, bed & breakfast and other residential type environments.
- Do not change the specification of this appliance.
- The operating water pressure (minimum and maximum) must be between 0.5 (50) / 10 (1000) bar (kPa)
- Obey the maximum number of 14 place settings.
- If the supply cord is damaged, it must be replaced by the manufacturer, its Authorised Service Centre or a similarly qualified persons in order to avoid a hazard.
- Put knives and cutlery with sharp points in the cutlery basket with the points down or in a horizontal position.
- Do not leave the appliance with the door open, to avoid a tripping hazard.
- Before any maintenance operation, deactivate the appliance and disconnect the mains plug from the socket.
- Do not use high pressure water sprays and/or steam to clean the appliance.
- The appliance is to be connected to the water mains using the new supplied hose-sets. Old hose sets must not be reused.
- The ventilation openings in the base (if applicable) must not be obstructed by a carpet.
- Some dishwasher detergents are strongly alkaline. They can be extremely dangerous if swallowed. Avoid contact with the skin and eyes and keep children away from the dishwasher when the door is open.
- Check that the detergent receptacle is empty after completion of the wash cycle.

2. SAFETY INSTRUCTIONS

2.1 Installation

WARNING!
Only a qualified person must install this appliance.

- Remove all the packaging.
- Do not install or use a damaged appliance.
- Follow the installation instructions supplied with the appliance.
- Always take care when moving the appliance as it is heavy. Always use safety gloves and enclosed footwear.
- Do not install or use the appliance where the temperature is less than 0 °C.
- Install the appliance in a safe and suitable place that meets installation requirements.

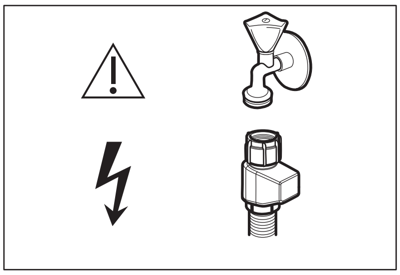
2.2 Electrical connection

WARNING!
Risk of fire and electric shock.

- The appliance must be earthed.
- Make sure that the parameters on the rating plate are compatible with the electrical ratings of the mains power supply.
- Always use a correctly installed shockproof socket.
- Do not use multi-plug adapters and extension cables.
- Make sure not to cause damage to the mains plug and to the mains cable. Should the mains cable need to be replaced, this must be carried out by our Authorised Service Centre.
- Connect the mains plug to the mains socket only at the end of the installation. Make sure that there is access to the mains plug after the installation.
- Do not pull the mains cable to disconnect the appliance. Always pull the mains plug.

2.3 Water connection

- Do not cause damage to the water hoses.
- Before connection to new pipes, pipes not used for a long time, where repair work has been carried out or new devices fitted (water meters, etc.), let the water flow until it is clean and clear.
- Ensure that there are no visible water leaks during and after the first use of the appliance.
- If the water inlet hose is damaged, immediately close the water tap and disconnect the mains plug from the mains socket. Contact the Authorised Service Centre to replace the water inlet hose.
- Without electrical power, the water protection system is not active. In this case there is a risk of flooding.
- The water inlet hose has a safety valve and a sheath with an inner mains cable.



WARNING!
Dangerous voltage.

2.4 Use

- Do not put flammable products or items that are wet with flammable products in, near or on the appliance.
- Dishwasher detergents are dangerous. Follow the safety instructions on the detergent packaging.
- Do not drink and play with the water in the appliance.
- Do not remove the dishes from the appliance until the programme is complete. Some detergent may remain on the dishes.
- Do not store items or apply pressure on the open door of the appliance.

- The appliance can release hot steam if you open the door while a programme operates.

2.5 Service

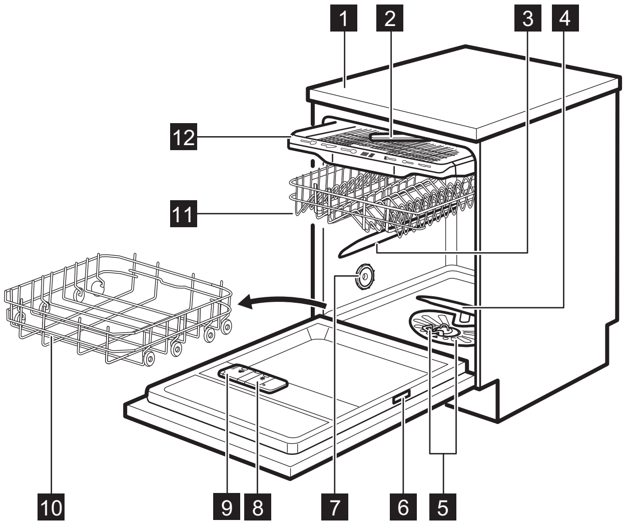
- To repair the appliance contact the Authorised Service Centre. Use original spare parts only.
- Please note that self-repair or non-professional repair can have safety consequences and might void the guarantee.
- Concerning the lamp(s) inside this product and spare part lamps sold separately: These lamps are intended to withstand extreme physical conditions in household appliances, such as temperature, vibration, humidity, or are intended to signal information about the operational status of the appliance. They are not intended to be used in other applications and are not suitable for household room illumination.

2.6 Disposal

⚠ **WARNING!**
Risk of injury or suffocation.

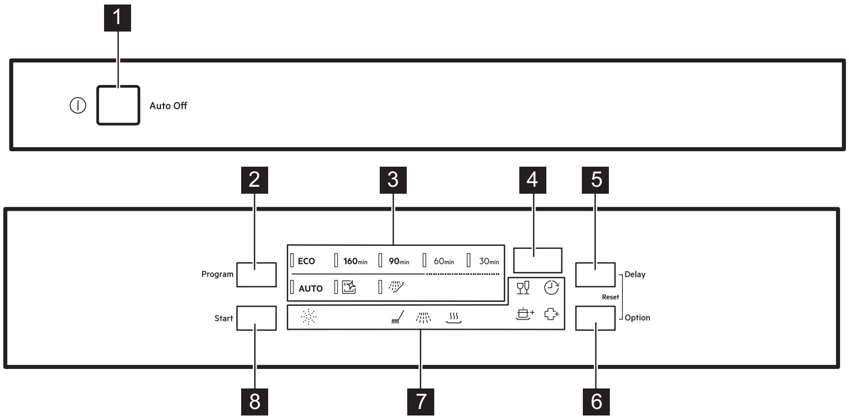
- Disconnect the appliance from the mains supply.
- Cut off the mains cable and discard it.
- Remove the door catch to prevent children and pets to get closed in the appliance.

3. PRODUCT DESCRIPTION



1 Worktop
2 Ceiling spray arm
3 Upper spray arm
4 Lower spray arm
5 Filters
6 Rating plate
7 Air vent
8 Rinse aid dispenser
9 Detergent dispenser
10 Lower basket
11 Upper basket
12 Cutlery drawer

4. CONTROL PANEL



1 On/off button
2 **Program** button
3 Programme indicators
4 Display
5 **Delay** button
6 **Option** button
7 Indicators
8 **Start** button

4.1 Indicators

Indicator	Description
✺	Rinse aid indicator. It is on when the rinse aid dispenser needs refilling. It is always off while the programme operates.
⟋	Washing phase indicator. It is on when the washing phase operates.
⁂	Rinsing phase indicator. It is on when the rinsing phase operates.
♨	Drying phase indicator. It is on when you select a programme with the drying phase. It flashes when the drying phase operates.
◷	Delay indicator. It is on when you set the delay start.
🍷	GlassCare indicator.
⊞+	ExtraPower indicator.
✚	ExtraHygiene indicator.

5. PROGRAMMES

The order of the programmes in the table may not reflect their sequence on the control panel.

Programme	Dishwasher load	Degree of soil	Programme phases	Options
ECO 1)	Crockery, cutlery, pots, pans	Normal, lightly dried-on	• Prewash • Dishwashing 50 °C • Intermediate rinse • Final rinse 55 °C • Drying • AirDry 2)	• ExtraPower • GlassCare • ExtraHygiene
160min	Crockery, cutlery, pots, pans	Normal to heavy, dried-on	• Prewash • Dishwashing 60 °C • Intermediate rinse • Final rinse 60 °C • Drying • AirDry 2)	• ExtraPower • GlassCare • ExtraHygiene
90min	Crockery, cutlery, pots, pans	Normal, lightly dried-on	• Dishwashing 60 °C • Intermediate rinse • Final rinse 55 °C • Drying • AirDry 2)	• ExtraPower • GlassCare • ExtraHygiene
60min	Crockery, cutlery	Fresh, lightly dried-on	• Dishwashing 60 °C • Intermediate rinse • Final rinse 50 °C • AirDry 2)	• ExtraPower • GlassCare • ExtraHygiene
30min	Crockery, cutlery	Fresh	• Dishwashing 50 °C • Intermediate rinse • Final rinse 50 °C • AirDry 2)	• ExtraPower • GlassCare • ExtraHygiene
AUTO 3)	Crockery, cutlery, pots, pans	All	• Prewash • Dishwashing 50 - 60 °C • Intermediate rinse • Final rinse 60 °C • Drying • AirDry 2)	
4)	None	Cleaning the appliance interior	• Cleaning 70 °C • Intermediate rinse • Final rinse • AirDry 2)	

Programme	Dishwasher load	Degree of soil	Programme phases	Options
5)	All	All	• Prewash	

---

[1] This programme offers the most efficient use of water and energy consumption for crockery and cutlery with normal soil. This is the standard programme for test institutes.

[2] Automatic door opening during the drying phase. Refer to "Settings".

[3] The appliance senses the degree of soil and the quantity of items in the baskets. It automatically adjusts the temperature and the quantity of water, the energy consumption and the programme duration.

[4] This programme is designed to clean the inside of the appliance effectively and efficiently. It removes limescale and grease buildup. The programme should be run at least once every 2 months with a descaler or a cleaning product designed for dishwashers and without any load.

[5] With this programme, you can quickly rinse off food remains from dishes and prevent odours forming in the appliance. Do not use detergent with this programme.

5.1 Consumption values

Programme [1][2]	Water (l)	Energy (kWh)	Duration (min)
ECO	11.5	0.735	180
160min	10.9	1.120	160
90min	11.5	1.030	90
60min	11.6	0.890	60
30min	11	0.620	30
AUTO	10.9	1.120	170
	10.6	0.680	60
	4.6	0.010	15

---

[1] The pressure and the temperature of the water, the variations of the mains supply, the options, the quantity of dishes and the degree of soil can change the values.

[2] The values for programmes other than ECO are indicative only.

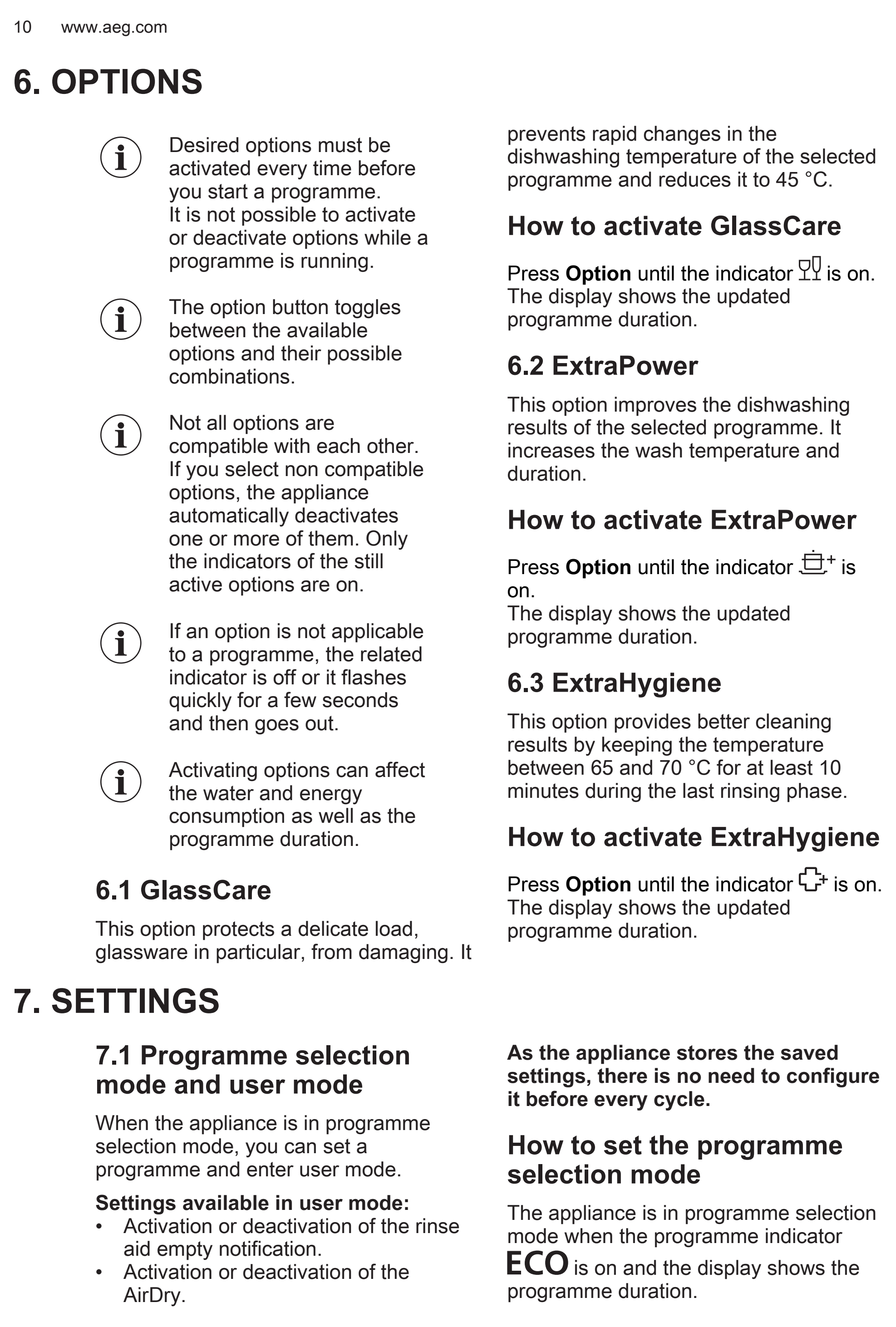
5.2 Information for test institutes

To receive the necessary information for conducting performance tests (e.g. according to: EN60436), send an email to:

info.test@dishwasher-production.com

In your request, include the product number code (PNC) from the rating plate.

For any other questions regarding your dishwasher, refer to the service book provided with your appliance.



6. OPTIONS

Desired options must be activated every time before you start a programme.
It is not possible to activate or deactivate options while a programme is running.

The option button toggles between the available options and their possible combinations.

Not all options are compatible with each other. If you select non compatible options, the appliance automatically deactivates one or more of them. Only the indicators of the still active options are on.

If an option is not applicable to a programme, the related indicator is off or it flashes quickly for a few seconds and then goes out.

Activating options can affect the water and energy consumption as well as the programme duration.

6.1 GlassCare

This option protects a delicate load, glassware in particular, from damaging. It prevents rapid changes in the dishwashing temperature of the selected programme and reduces it to 45 °C.

How to activate GlassCare

Press **Option** until the indicator is on.
The display shows the updated programme duration.

6.2 ExtraPower

This option improves the dishwashing results of the selected programme. It increases the wash temperature and duration.

How to activate ExtraPower

Press **Option** until the indicator is on.
The display shows the updated programme duration.

6.3 ExtraHygiene

This option provides better cleaning results by keeping the temperature between 65 and 70 °C for at least 10 minutes during the last rinsing phase.

How to activate ExtraHygiene

Press **Option** until the indicator is on.
The display shows the updated programme duration.

7. SETTINGS

7.1 Programme selection mode and user mode

When the appliance is in programme selection mode, you can set a programme and enter user mode.

Settings available in user mode:

- Activation or deactivation of the rinse aid empty notification.
- Activation or deactivation of the AirDry.

As the appliance stores the saved settings, there is no need to configure it before every cycle.

How to set the programme selection mode

The appliance is in programme selection mode when the programme indicator ECO is on and the display shows the programme duration.

After activation, the appliance is in programme selection mode by default. If not, set the programme selection mode the following way:

Press and hold simultaneously **Delay** and **Option** until the appliance is in programme selection mode.

How to enter user mode

Make sure the appliance is in programme selection mode.

To enter user mode, press and hold simultaneously **Delay** and **Option** until the indicators **ECO** and **160min** flash and the display is blank.

7.2 The rinse aid empty notification

The rinse aid helps to dry the dishes without streaks and stains. It is automatically released during the final rinse.

When the rinse aid chamber is empty, the rinse aid indicator turns on. If the drying results are satisfactory while using multi-tablets only, you can deactivate the notification for refilling the rinse aid. However, for best drying performance, always use rinse aid.

If standard detergent or multi-tablets without rinse aid are used, activate the notification to keep the rinse aid refill indicator active.

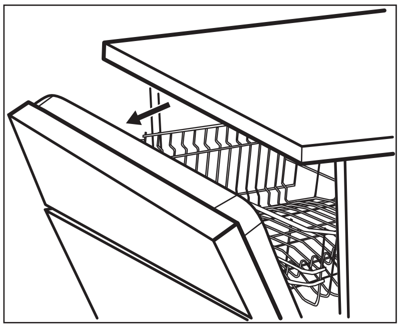
How to deactivate the rinse aid empty notification

Make sure the appliance is in user mode.

1. Press **Program**.
   - The indicator **ECO** still flashes.
   - The remaining indicators are off.
   - The display shows the current setting.
     - 0d = the rinse aid empty notification is deactivated.
     - 1d = the rinse aid empty notification is activated.
2. Press **Program** to change the setting.
3. Press on/off to confirm the setting.

7.3 AirDry

AirDry improves the drying results with less energy consumption. The appliance door opens automatically during the drying phase and remains ajar.



AirDry is automatically activated with all programmes other than (if applicable).

The duration of the drying phase and the door opening time vary depending on the selected programme and options.

When AirDry opens the door, the display shows the remaining time of the running programme.

⚠ **CAUTION!**
Do not try to close the appliance door within 2 minutes after automatic opening. This can cause damage to the appliance. If, afterwards, the door is closed for at least 3 minutes, the running programme ends.

⚠ **CAUTION!**
If children have access to the appliance, we advise to deactivate AirDry. The automatic opening of the door may pose a danger.

How to deactivate AirDry

Make sure the appliance is in user mode.

1. Press **Start**.
   - The indicator **160min** still flashes.

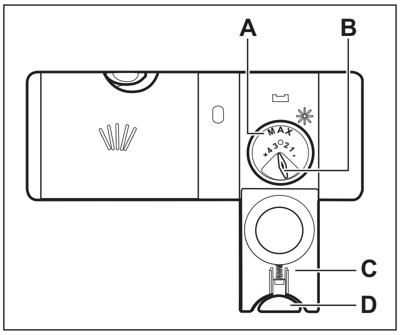
- The remaining indicators are off.
- The display shows the current setting:
  - 0 0 = AirDry is deactivated.
  - 1 0 = AirDry is activated.

2. Press Start to change the setting.
3. Press the on/off button to confirm the setting.

8. BEFORE FIRST USE

1. Fill the rinse aid dispenser.
2. Open the water tap.
3. Start a program to remove any processing residuals that can still be inside the appliance. Do not use detergent and do not load the baskets.

8.1 How to fill the rinse aid dispenser



⚠ **CAUTION!**
The compartment (**A**) is for rinse aid only. Do not fill it with detergent.

⚠ **CAUTION!**
Only use rinse aid designed specifically for dishwashers.

1. Press the release button (**D**) to open the lid (**C**).
2. Fill the dispenser (**A**) until the rinse aid reaches the marking "MAX".
3. Remove the spilled rinse aid with an absorbent cloth to prevent excessive foam formation.
4. Close the lid. Make sure that the release button locks into position.

ℹ You can turn the selector of the released quantity (**B**) between position 1 (lowest quantity) and position 4 or 6 (highest quantity).

9. DAILY USE

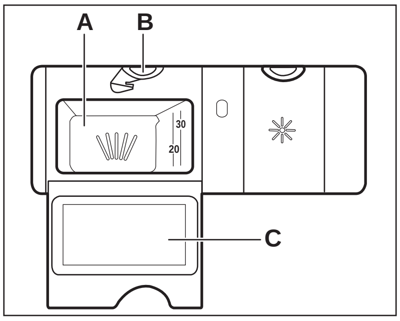
1. Open the water tap.
2. Press the on/off button to activate the appliance.

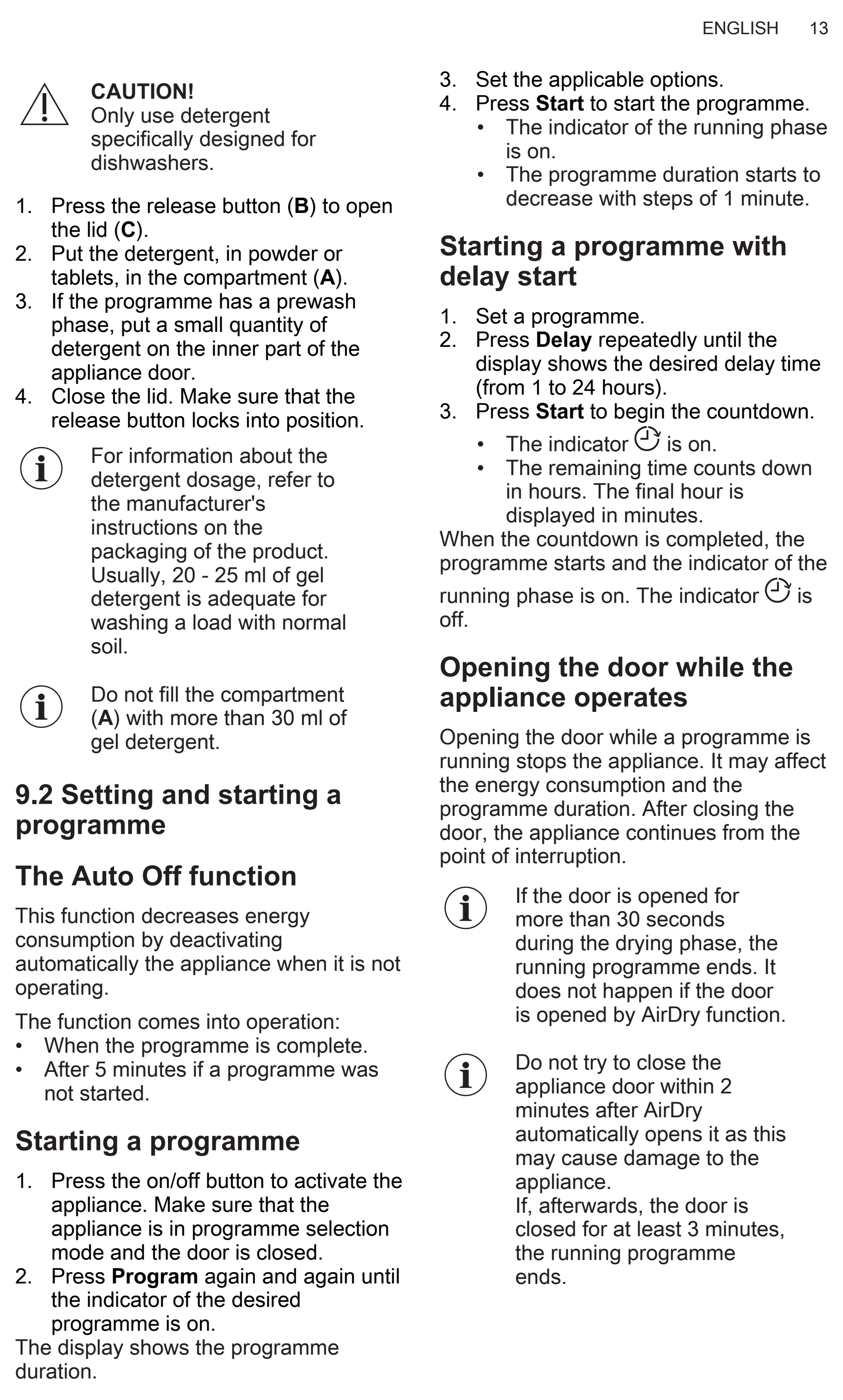
Make sure that the appliance is in programme selection mode.

- If the rinse aid indicator is on, fill the rinse aid dispenser.

3. Load the baskets.
4. Add the detergent.
5. Set and start the correct programme for the type of load and the degree of soil.

9.1 Using the detergent





CAUTION!
Only use detergent specifically designed for dishwashers.

1. Press the release button (**B**) to open the lid (**C**).
2. Put the detergent, in powder or tablets, in the compartment (**A**).
3. If the programme has a prewash phase, put a small quantity of detergent on the inner part of the appliance door.
4. Close the lid. Make sure that the release button locks into position.

For information about the detergent dosage, refer to the manufacturer's instructions on the packaging of the product. Usually, 20 - 25 ml of gel detergent is adequate for washing a load with normal soil.

Do not fill the compartment (**A**) with more than 30 ml of gel detergent.

9.2 Setting and starting a programme

The Auto Off function

This function decreases energy consumption by deactivating automatically the appliance when it is not operating.

The function comes into operation:
- When the programme is complete.
- After 5 minutes if a programme was not started.

Starting a programme

1. Press the on/off button to activate the appliance. Make sure that the appliance is in programme selection mode and the door is closed.
2. Press **Program** again and again until the indicator of the desired programme is on.

The display shows the programme duration.

3. Set the applicable options.
4. Press **Start** to start the programme.
   - The indicator of the running phase is on.
   - The programme duration starts to decrease with steps of 1 minute.

Starting a programme with delay start

1. Set a programme.
2. Press **Delay** repeatedly until the display shows the desired delay time (from 1 to 24 hours).
3. Press **Start** to begin the countdown.
   - The indicator ⏲ is on.
   - The remaining time counts down in hours. The final hour is displayed in minutes.

When the countdown is completed, the programme starts and the indicator of the running phase is on. The indicator ⏲ is off.

Opening the door while the appliance operates

Opening the door while a programme is running stops the appliance. It may affect the energy consumption and the programme duration. After closing the door, the appliance continues from the point of interruption.

If the door is opened for more than 30 seconds during the drying phase, the running programme ends. It does not happen if the door is opened by AirDry function.

Do not try to close the appliance door within 2 minutes after AirDry automatically opens it as this may cause damage to the appliance.
If, afterwards, the door is closed for at least 3 minutes, the running programme ends.

Cancelling the delay start while the countdown operates

When you cancel the delay start you have to set the programme and options again.

Press simultaneously **Delay** and **Option** until the appliance is in programme selection mode.

Cancelling the programme

Press and hold simultaneously **Delay** and **Option** until the appliance is in programme selection mode.

Make sure that there is detergent in the detergent dispenser before you start a new programme.

End of the programme

When the programme is complete, the Auto Off function switches the appliance off automatically.

All buttons are inactive except for the on/off button.

Close the water tap.

10. HINTS AND TIPS

10.1 General

Follow the hints below to ensure optimal cleaning and drying results in daily use and to help you protect the environment.

- Remove larger residues of food from the dishes into the waste bin.
- Do not pre-rinse dishes by hand. When needed, select a programme with a prewash phase.
- Always use the whole space of the baskets.
- Make sure that items in the baskets do not touch or cover each other. Only then can the water completely reach and wash the dishes.
- You can use dishwasher detergent and rinse aid separately or you can use the multi-tablets. Follow the instructions on the packaging.
- Select a programme according to the type of load and the degree of soil. **ECO** offers the most efficient use of water and energy consumption for crockery and cutlery with normal soil.

10.2 Using rinse aid and detergent

- Only use rinse aid and detergent for dishwasher. Other products can cause damage to the appliance.
- Detergent tablets do not fully dissolve with short programs. To prevent detergent residues on the tableware, we recommend that you use the tablets with long programs.
- Do not use more than the correct quantity of detergent. Refer to the instructions on the detergent packaging.

10.3 Loading the baskets

- Always use the whole space of the baskets.
- Use the appliance to wash dishwasher-safe items only.
- Do not wash in the appliance items made of wood, horn, aluminium, pewter and copper as they could crack, warp, get discoloured or pitted.
- Do not wash in the appliance items that can absorb water (sponges, household cloths).
- Put hollow items (cups, glasses and pans) with the opening facing downwards.
- Make sure that glass items do not touch each other.
- Put light items in the upper basket. Make sure that the items do not move freely.
- Put cutlery and small items in the cutlery drawer.
- Move the upper basket upwards to accommodate large items in the lower basket.
- Make sure that the spray arms can move freely before you start a programme.

10.4 Before starting a programme

Make sure that:

- The filters are clean and correctly installed.
- The spray arms are not clogged.
- There is dishwasher rinse aid (unless you use multi- tablets).
- The position of the items in the baskets is correct.
- The programme is applicable to the type of load and for the degree of soil.
- The correct quantity of detergent is used.

10.5 Unloading the baskets

1. Let the tableware cool down before you remove it from the appliance. Hot items can be easily damaged.
2. First remove items from the lower basket, then from the upper basket.

ⓘ After the programme is completed, water can still remain on the inside surfaces of the appliance.

11. CARE AND CLEANING

⚠ **WARNING!**
Before maintenance, deactivate the appliance and disconnect the mains plug from the main socket.

ⓘ Dirty filters and clogged spray arms decrease the washing results. Make a check regularly and, if necessary, clean them.

11.1 Internal cleaning

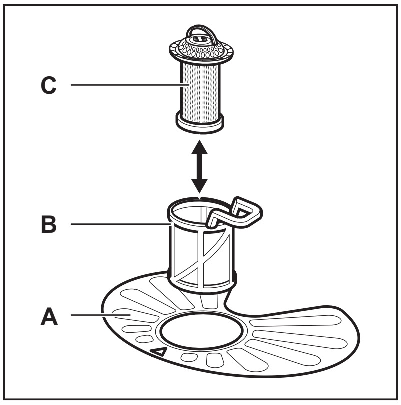
- Clean the appliance interior with a soft damp cloth.
- Do not use abrasive products, abrasive cleaning pads, sharp tools, strong chemicals, scourer or solvents.
- Wipe clean the door, including the rubber gasket, once a week.
- To maintain the performance of your appliance, use a cleaning product designed for dishwashers at least once every two months. Carefully follow the instructions on the packaging of the product.
- Use the automatic cleaning programme for optimal cleaning results.
- Using short-duration programmes regularly can cause grease and limescale buildup inside the appliance. Run long-duration programmes at least twice a month to prevent the buildup.

11.2 External cleaning

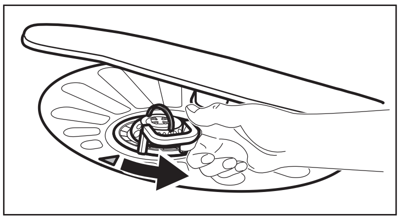
- Clean the appliance with a moist soft cloth.
- Only use neutral detergents.
- Do not use abrasive products, abrasive cleaning pads or solvents.

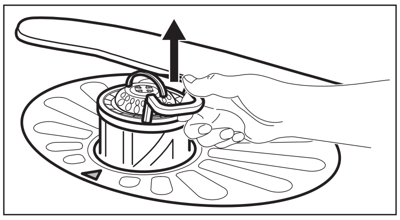
11.3 Cleaning the filters

The filter system is made of 3 parts.

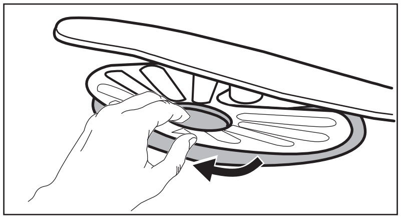


1. Turn the filter (**B**) counterclockwise and remove it.

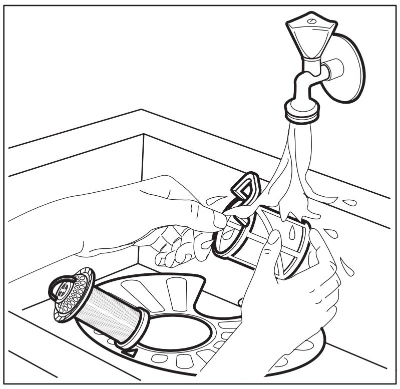




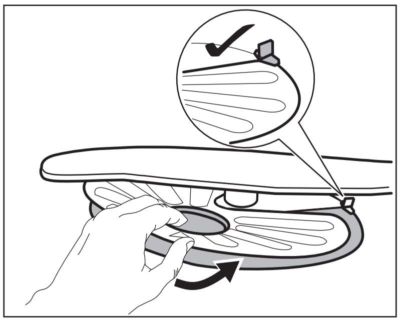
2. Remove the filter (**C**) out of filter (**B**).
3. Remove the flat filter (**A**).



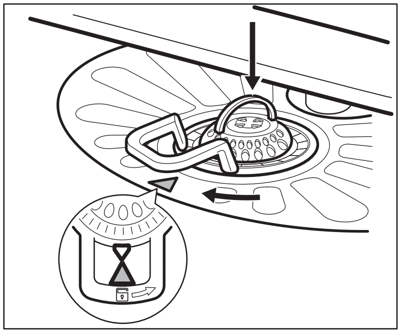
4. Wash the filters.



5. Make sure that there are no residues of food or soil in or around the edge of the sump.
6. Put back in place the flat filter (**A**). Make sure that it is correctly positioned under the 2 guides.



7. Reassemble the filters (**B**) and (**C**).
8. Put back the filter (**B**) in the flat filter (**A**). Turn it clockwise until it locks.



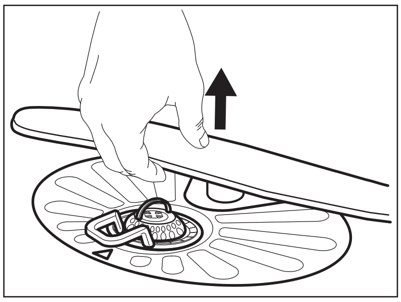
CAUTION!
An incorrect position of the filters can cause bad washing results and damage to the appliance.

11.4 Cleaning the lower spray arm

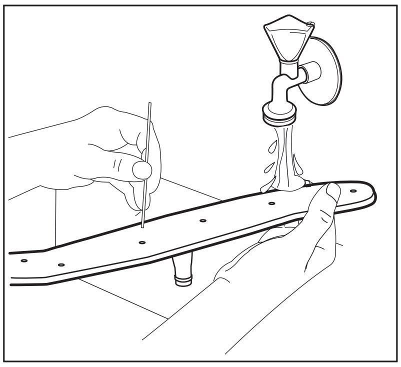
We recommend to clean the lower spray arm regularly to prevent soil from clogging the holes.

Clogged holes can cause unsatisfactory washing results.

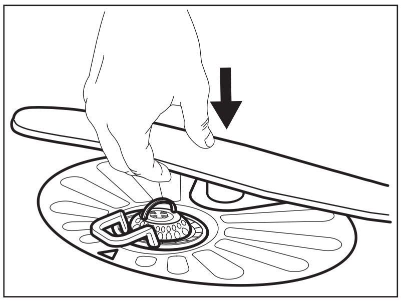
1. To remove the lower spray arm, pull it upwards.



2. Wash the spray arm under running water. Use a thin pointed tool, e.g. a toothpick, to remove particles of soil from the holes.



3. To install the spray arm back, press it downwards.



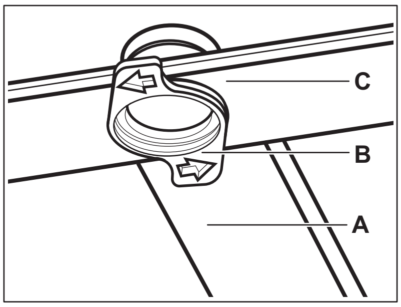
11.5 Cleaning the upper spray arm

Do not remove the upper spray arm. If the openings in the spray arm are clogged, remove the remaining particles of soil with a thin pointed object, e.g. a toothpick.

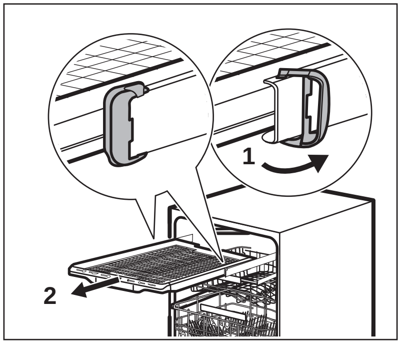
11.6 Cleaning the ceiling spray arm

We recommend to clean the ceiling spray arm regularly to prevent soil from clogging the holes. Clogged holes can cause unsatisfactory washing results.

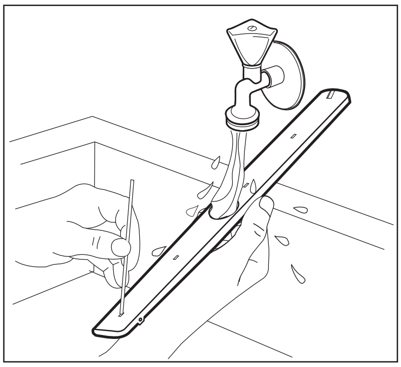
The ceiling spray arm is placed on the ceiling of the appliance. The spray arm (**C**) is installed in the delivery tube (**A**) with the mounting element (**B**).



1. Release the stoppers on the sides of the sliding rails of the cutlery drawer and pull the drawer out.



2. Move the upper basket to the lowest level to reach the spray arm more easily.
3. To detach the spray arm (**C**) from the delivery tube (**A**), turn the mounting element (**B**) counterclockwise and pull the spray arm downwards.
4. Wash the spray arm under running water. Use a thin pointed tool, e.g. a toothpick, to remove particles of soil from the holes. Run the water through the holes to wash soil particles away from the inside.



5. To install the spray arm (**C**) back, insert the mounting element (**B**) in the spray arm and fix it in the delivery tube (**A**) by turning it clockwise. Make sure that the mounting element locks into place.
6. Install the cutlery drawer on the sliding rails and block the stoppers.

12. TROUBLESHOOTING

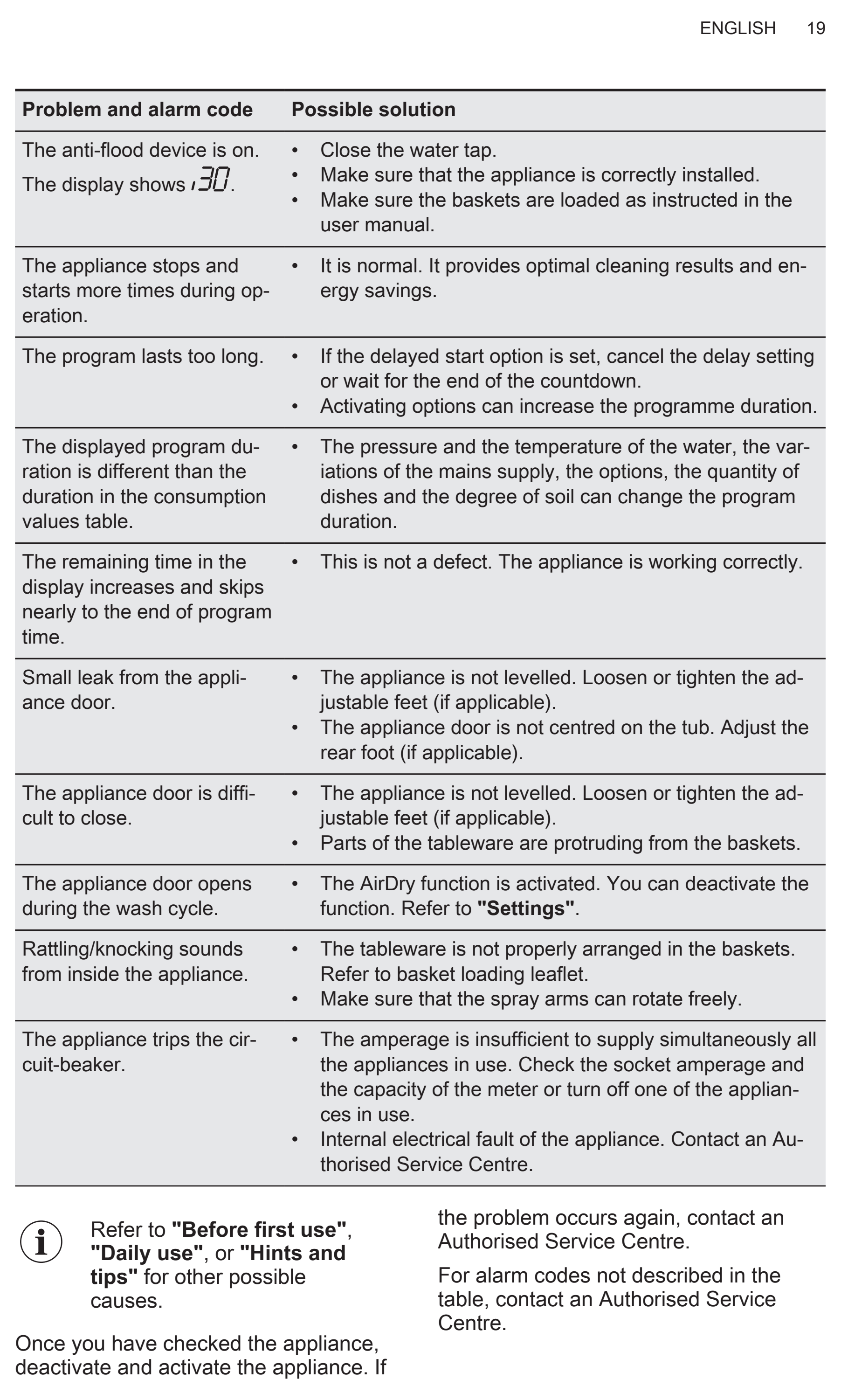
⚠ **WARNING!**
Improper repair of the appliance may pose a danger to the safety of the user. Any repairs must be performed by qualified personnel.

The majority of problems that may occur can be solved without the need to contact an Authorised Service Centre.

Refer to the below table for information on possible problems.

With some problems, the display shows an alarm code.

Problem and alarm code	Possible solution
You cannot activate the appliance.	• Make sure that the mains plug is connected to the mains socket. • Make sure that there is no damaged fuse in the fuse box.
The programme does not start.	• Make sure that the appliance door is closed. • Press **Start**. • If the delay start is set, cancel the setting or wait for the end of the countdown.
The appliance does not fill with water. The display shows i10 or i11.	• Make sure that the water tap is open. • Make sure that the pressure of the water supply is not too low. For this information, contact your local water authority. • Make sure that the water tap is not clogged. • Make sure that the filter in the inlet hose is not clogged. • Make sure that the inlet hose has no kinks or bends.
The appliance does not drain the water. The display shows i20.	• Make sure that the sink spigot is not clogged. • Make sure that the interior filter system is not clogged. • Make sure that the drain hose has no kinks or bends.



Problem and alarm code	Possible solution
The anti-flood device is on. The display shows i30.	- Close the water tap. - Make sure that the appliance is correctly installed. - Make sure the baskets are loaded as instructed in the user manual.
The appliance stops and starts more times during operation.	- It is normal. It provides optimal cleaning results and energy savings.
The program lasts too long.	- If the delayed start option is set, cancel the delay setting or wait for the end of the countdown. - Activating options can increase the programme duration.
The displayed program duration is different than the duration in the consumption values table.	- The pressure and the temperature of the water, the variations of the mains supply, the options, the quantity of dishes and the degree of soil can change the program duration.
The remaining time in the display increases and skips nearly to the end of program time.	- This is not a defect. The appliance is working correctly.
Small leak from the appliance door.	- The appliance is not levelled. Loosen or tighten the adjustable feet (if applicable). - The appliance door is not centred on the tub. Adjust the rear foot (if applicable).
The appliance door is difficult to close.	- The appliance is not levelled. Loosen or tighten the adjustable feet (if applicable). - Parts of the tableware are protruding from the baskets.
The appliance door opens during the wash cycle.	- The AirDry function is activated. You can deactivate the function. Refer to **"Settings"**.
Rattling/knocking sounds from inside the appliance.	- The tableware is not properly arranged in the baskets. Refer to basket loading leaflet. - Make sure that the spray arms can rotate freely.
The appliance trips the circuit-beaker.	- The amperage is insufficient to supply simultaneously all the appliances in use. Check the socket amperage and the capacity of the meter or turn off one of the appliances in use. - Internal electrical fault of the appliance. Contact an Authorised Service Centre.

Refer to **"Before first use"**, **"Daily use"**, or **"Hints and tips"** for other possible causes.

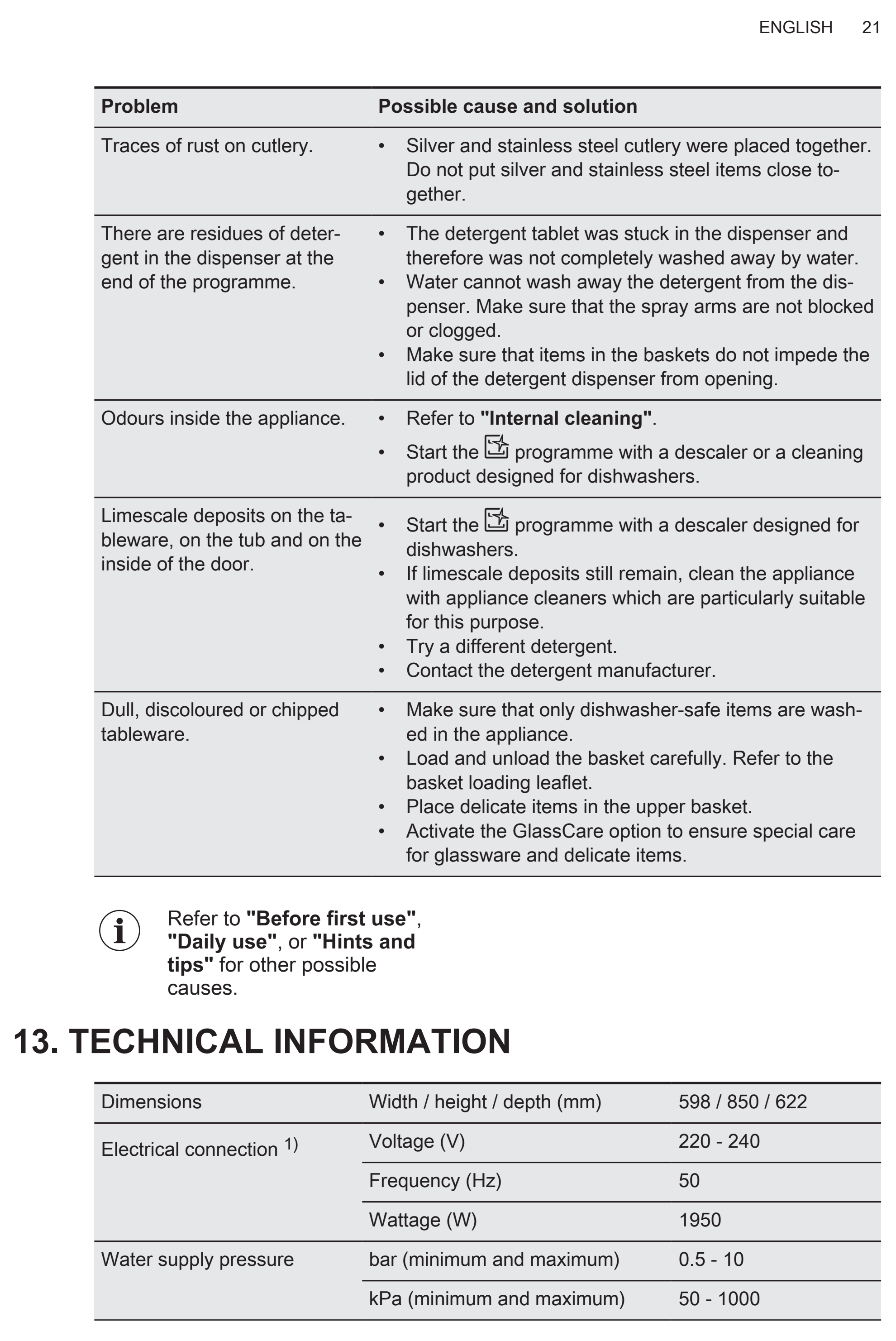
Once you have checked the appliance, deactivate and activate the appliance. If the problem occurs again, contact an Authorised Service Centre.

For alarm codes not described in the table, contact an Authorised Service Centre.

WARNING!
We do not recommend using the appliance until the problem has been completely fixed. Unplug the appliance and do not plug it in again until you are certain that it operates correctly.

12.1 The dishwashing and drying results are not satisfactory

Problem	Possible cause and solution
Poor washing results.	• Refer to **"Daily use"**, **"Hints and tips"** and the basket loading leaflet. • Use more intensive washing programme. • Activate the ExtraPower option to improve the washing results of a selected programme. • Clean spray arm jets and filter. Refer to **"Care and Cleaning"**. • Make sure that the spray arms are correctly positioned.
Poor drying results.	• Tableware was left for too long inside the closed appliance. Activate AirDry to set the automatic opening of the door and to improve the drying performance. • There is no rinse aid or the dosage of rinse aid is not sufficient. Fill the rinse aid dispenser or set the level of rinse aid to a higher level. • The quality of the rinse aid can be the cause. • We recommend to use rinse aid always, even in combination with multi-tablets. • Plastic items may need to be towel dried. • The programme does not have the drying phase. Refer to **"Programmes overview"**.
There are whitish streaks or bluish layers on glasses and dishes.	• The released quantity of rinse aid is too high. Adjust the rinse aid level to a lower level. • The quantity of detergent is too high.
There are stains and dry water drops on glasses and dishes.	• The released quantity of rinse aid is not sufficient. Adjust the rinse aid level to a higher level. • The quality of the rinse aid can be the cause.
The interior of the appliance is wet.	• This is not a defect of the appliance. Humid air condensates on the appliance walls.
Unusual foam during washing.	• Use the detergent designed specifically for dishwashers. • Use a detergent from a different manufacturer. • Do not pre-rinse dishes under running water.



Problem	Possible cause and solution
Traces of rust on cutlery.	• Silver and stainless steel cutlery were placed together. Do not put silver and stainless steel items close together.
There are residues of detergent in the dispenser at the end of the programme.	• The detergent tablet was stuck in the dispenser and therefore was not completely washed away by water. • Water cannot wash away the detergent from the dispenser. Make sure that the spray arms are not blocked or clogged. • Make sure that items in the baskets do not impede the lid of the detergent dispenser from opening.
Odours inside the appliance.	• Refer to **"Internal cleaning"**. • Start the programme with a descaler or a cleaning product designed for dishwashers.
Limescale deposits on the tableware, on the tub and on the inside of the door.	• Start the programme with a descaler designed for dishwashers. • If limescale deposits still remain, clean the appliance with appliance cleaners which are particularly suitable for this purpose. • Try a different detergent. • Contact the detergent manufacturer.
Dull, discoloured or chipped tableware.	• Make sure that only dishwasher-safe items are washed in the appliance. • Load and unload the basket carefully. Refer to the basket loading leaflet. • Place delicate items in the upper basket. • Activate the GlassCare option to ensure special care for glassware and delicate items.

ℹ Refer to **"Before first use"**, **"Daily use"**, or **"Hints and tips"** for other possible causes.

13. TECHNICAL INFORMATION

Dimensions	Width / height / depth (mm)	598 / 850 / 622
Electrical connection 1)	Voltage (V)	220 - 240
	Frequency (Hz)	50
	Wattage (W)	1950
Water supply pressure	bar (minimum and maximum)	0.5 - 10
	kPa (minimum and maximum)	50 - 1000

Water supply	Cold water or hot water [2]	max 60 °C
Capacity	Place settings	14

[1] Refer to the rating plate for other values.

[2] If the hot water comes from alternative source of energy (e.g. solar panels), use the hot water supply to decrease energy consumption.

14. WARRANTY - AUSTRALIA AND NEW ZEALAND

FOR SALES IN AUSTRALIA AND NEW ZEALAND

ALL AEG BRANDED APPLIANCES

This document sets out the terms and conditions of the product warranties for AEG Appliances. It is an important document. Please keep it with your proof of purchase documents in a safe place for future reference should there be a manufacturing defect in your Appliance. This warranty is in addition to other rights you may have under the Australian Consumer Law.

1. **In this warranty:**
    a) ‘ACL’ or ‘Australian Consumer Law’ means Schedule 2 to the Competition and Consumer Act 2010;
    b) ‘Appliance’ means any Electrolux product purchased by you and accompanied by this document;
    c) ‘ASC’ means Electrolux’s authorised serviced centres;
    d) ‘AEG’ is the brand controlled by Electrolux Home Products Pty Ltd of 163 O’Riordan Street, Mascot NSW 2020, ABN 51 004 762 341 in respect of Appliances purchased in Australia and Electrolux (NZ) Limited (collectively “Electrolux”) of 3-5 Niall Burgess Road, Mount Wellington, in respect of Appliances purchased in New Zealand;
    e) ‘Warranty Period’ means the period specified in clause 3 of this warranty;
    f) ‘you’ means the purchaser of the Appliance not having purchased the Appliance for re-sale, and ‘your’ has a corresponding meaning.
2. **Application:** This warranty only applies to new Appliances, purchased and used in Australia or New Zealand and is in addition to (and does not exclude, restrict, or modify in any way) other rights and remedies under a law to which the Appliances or services relate, including any non-excludable statutory guarantees in Australia and New Zealand.
3. **Warranty Period:** Subject to these terms and conditions, this warranty continues for in Australia for a period of 60 months and in New Zealand for a period of 60 months, following the date of original purchase of the Appliance.
4. **Repair or replace warranty:** During the Warranty Period, Electrolux or its ASC will, at no extra charge if your Appliance is readily accessible for service, without special equipment and subject to these terms and conditions, repair or replace any parts which it considers to be defective. Electrolux may, in its absolute discretion, choose whether the remedy offered for a valid warranty claim is repair or replacement. Electrolux or its ASC may use refurbished parts to repair your Appliance. You agree that any replaced Appliances or parts become the property of Electrolux.
5. **Travel and transportation costs:** Subject to clause 7, Electrolux will bear the reasonable cost of transportation, travel and delivery of the Appliance to and from Electrolux or its ASC. Travel and transportation will be arranged by Electrolux as part of any valid warranty claim.

6. **Proof of purchase** is required before you can make a claim under this warranty.
7. **Exclusions:** You may not make a claim under this warranty unless the defect claimed is due to faulty or defective parts or workmanship. This warranty does not cover:
    a) light globes, batteries, filters or similar perishable parts;
    b) parts and Appliances not supplied by Electrolux;
    c) cosmetic damage which does not affect the operation of the Appliance;
    d) damage to the Appliance caused by:
        - negligence or accident;
        - misuse or abuse, including failure to properly maintain or service;
        - improper, negligent or faulty servicing or repair works done by anyone other than an Electrolux authorised repairer or ASC;
        - normal wear and tear;
        - power surges, electrical storm damage or incorrect power supply;
        - incomplete or improper installation;
        - incorrect, improper or inappropriate operation;
        - insect or vermin infestation;
        - failure to comply with any additional instructions supplied with the Appliance;

    In addition, Electrolux is not liable under this warranty if:
        - the Appliance has been, or Electrolux reasonably believes that the Appliance has been, used for purposes other than those for which the Appliance was intended, including where the Appliance has been used for any non-domestic purpose;
        - the Appliance is modified without authority from Electrolux in writing;
        - the Appliance's serial number or warranty seal has been removed or defaced.
8. **How to claim under this warranty:** To enquire about claiming under this warranty, please follow these steps:
    a. carefully check the operating instructions, user manual and the terms of this warranty;
    b. have the model and serial number of the Appliance available;
    c. have the proof of purchase (e.g. an invoice) available;
    d. telephone the numbers shown below.
9. **Australia:** For Appliances and services provided by Electrolux in Australia: Electrolux goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the Appliance repaired or replaced if the Appliance fails to be of acceptable quality and the failure does not amount to a major failure. 'Acceptable quality' and 'major failure' have the same meaning as referred to in the ACL.
10. **New Zealand:** For Appliances and services provided by Electrolux in New Zealand, the Appliances come with a guarantee by Electrolux pursuant to the provisions of the Consumer Guarantees Act, the Sale of Goods Act and the Fair Trading Act. Where the Appliance was purchased in New Zealand for commercial purposes the Consumer Guarantee Act does not apply.
11. **Confidentiality:** You accept that if you make a warranty claim, Electrolux and its agents including ASC may exchange information in relation to you to enable Electrolux to meet its obligations under this warranty.

Important Notice
Before calling for service, please ensure that the steps listed in clause 8 above have been followed.

SERVICE AUSTRALIA **aeg.com/au**	
FOR SERVICE or to find the address of your nearest authorised service centre in Australia **PLEASE CALL 1300 363 664** **OR EMAIL** **customercare@aegaustralia.com.au** For the cost of a local call (Australia only)	**FOR SPARE PARTS** or to find the address of your nearest spare parts centre in Australia **PLEASE CALL 13 13 50** **OR EMAIL** **customercare@aegaustralia.com.au** For the cost of a local call (Australia only)

SERVICE NEW ZEALAND **aegnewzealand.co.nz**	
FOR SERVICE or to find the address of your nearest authorised service centre in New Zealand **PLEASE CALL 0800 234 234** **OR EMAIL** **customercare@electrolux.co.nz** (New Zealand only)	**FOR SPARE PARTS** or to find the address of your nearest spare parts centre in New Zealand **PLEASE CALL 0800 10 66 20** **OR EMAIL** **customercare@electrolux.co.nz** (New Zealand only)

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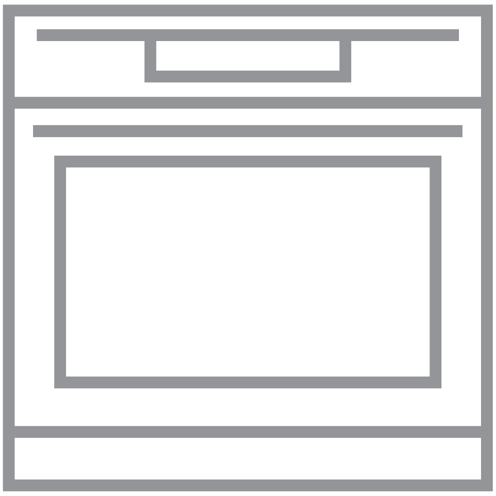
15. ENVIRONMENTAL CONCERNS

Recycle materials with the symbol ♻. Put the packaging in relevant containers to recycle it. Help protect the environment and human health by recycling waste of electrical and electronic appliances. Do not dispose of appliances marked with the symbol ⊠ with the household waste. Return the product to your local recycling facility or contact your municipal office.

BEE455010M

EN **User Manual**
Oven

USER MANUAL



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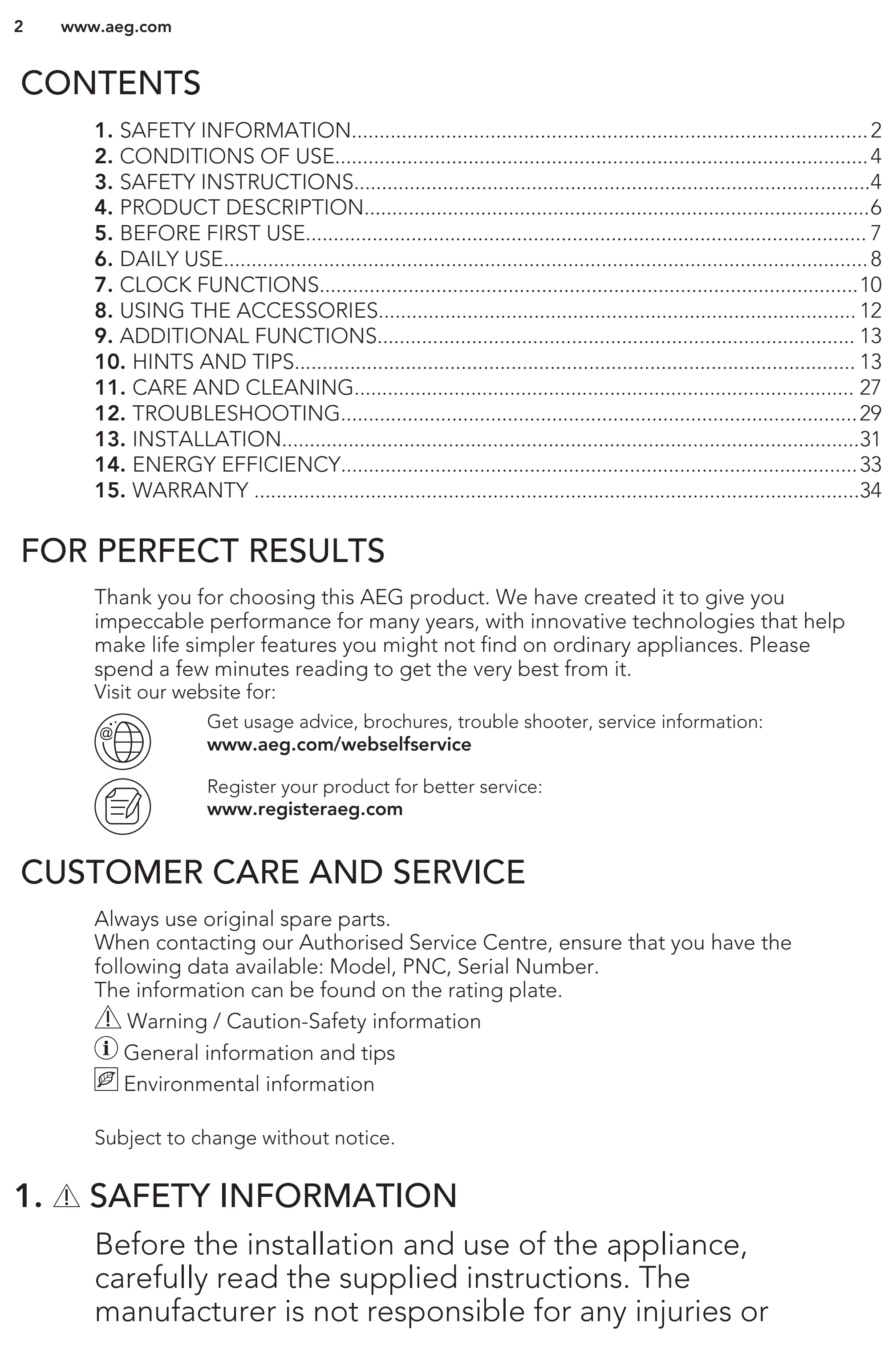


CONTENTS

FOR PERFECT RESULTS

Thank you for choosing this AEG product. We have created it to give you impeccable performance for many years, with innovative technologies that help make life simpler features you might not find on ordinary appliances. Please spend a few minutes reading to get the very best from it.
Visit our website for:

Get usage advice, brochures, trouble shooter, service information:
www.aeg.com/webselfservice

Register your product for better service:
www.registeraeg.com

CUSTOMER CARE AND SERVICE

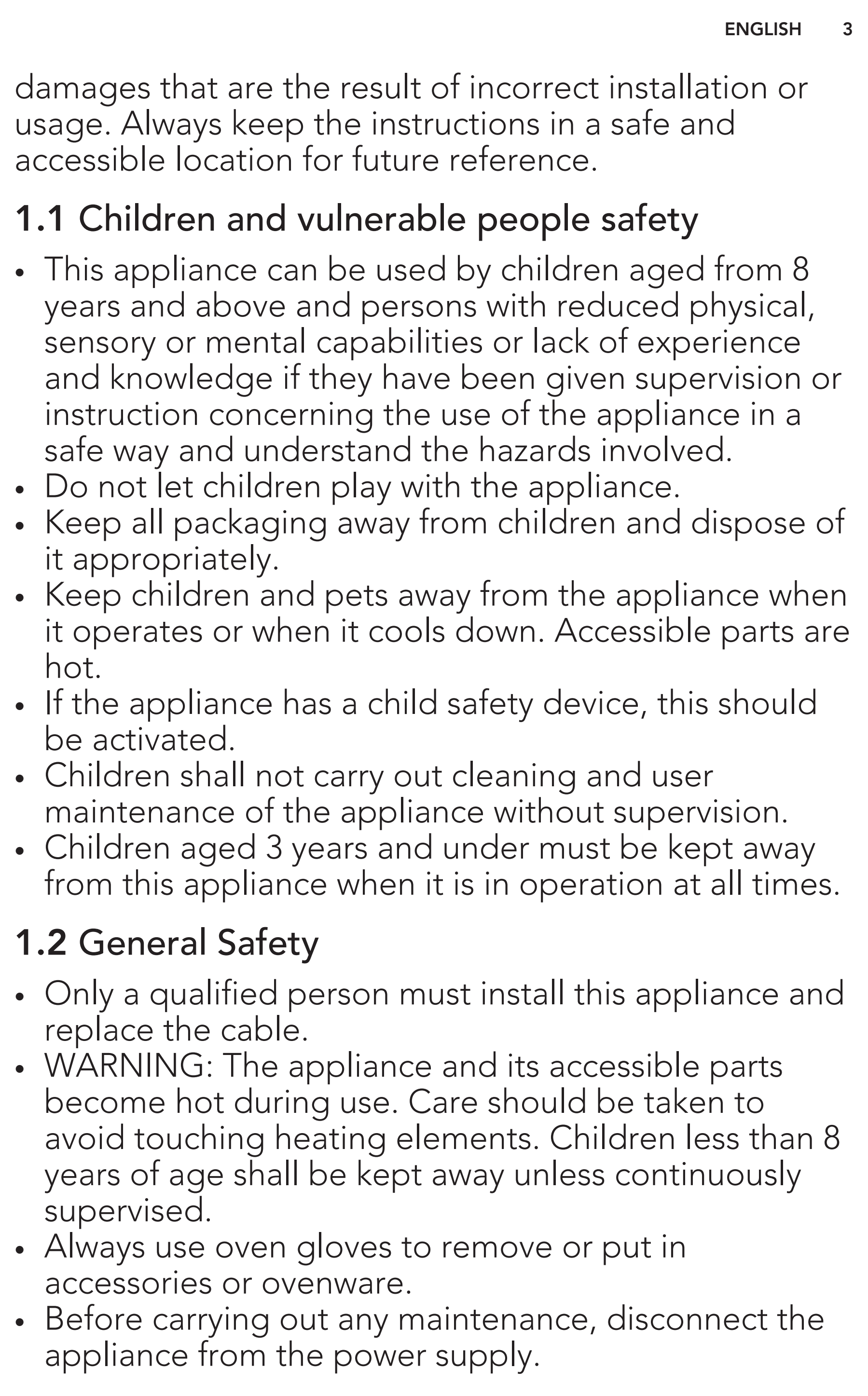
Always use original spare parts.
When contacting our Authorised Service Centre, ensure that you have the following data available: Model, PNC, Serial Number.
The information can be found on the rating plate.

⚠ Warning / Caution-Safety information
ⓘ General information and tips
🌿 Environmental information

Subject to change without notice.

1. ⚠ SAFETY INFORMATION

Before the installation and use of the appliance, carefully read the supplied instructions. The manufacturer is not responsible for any injuries or



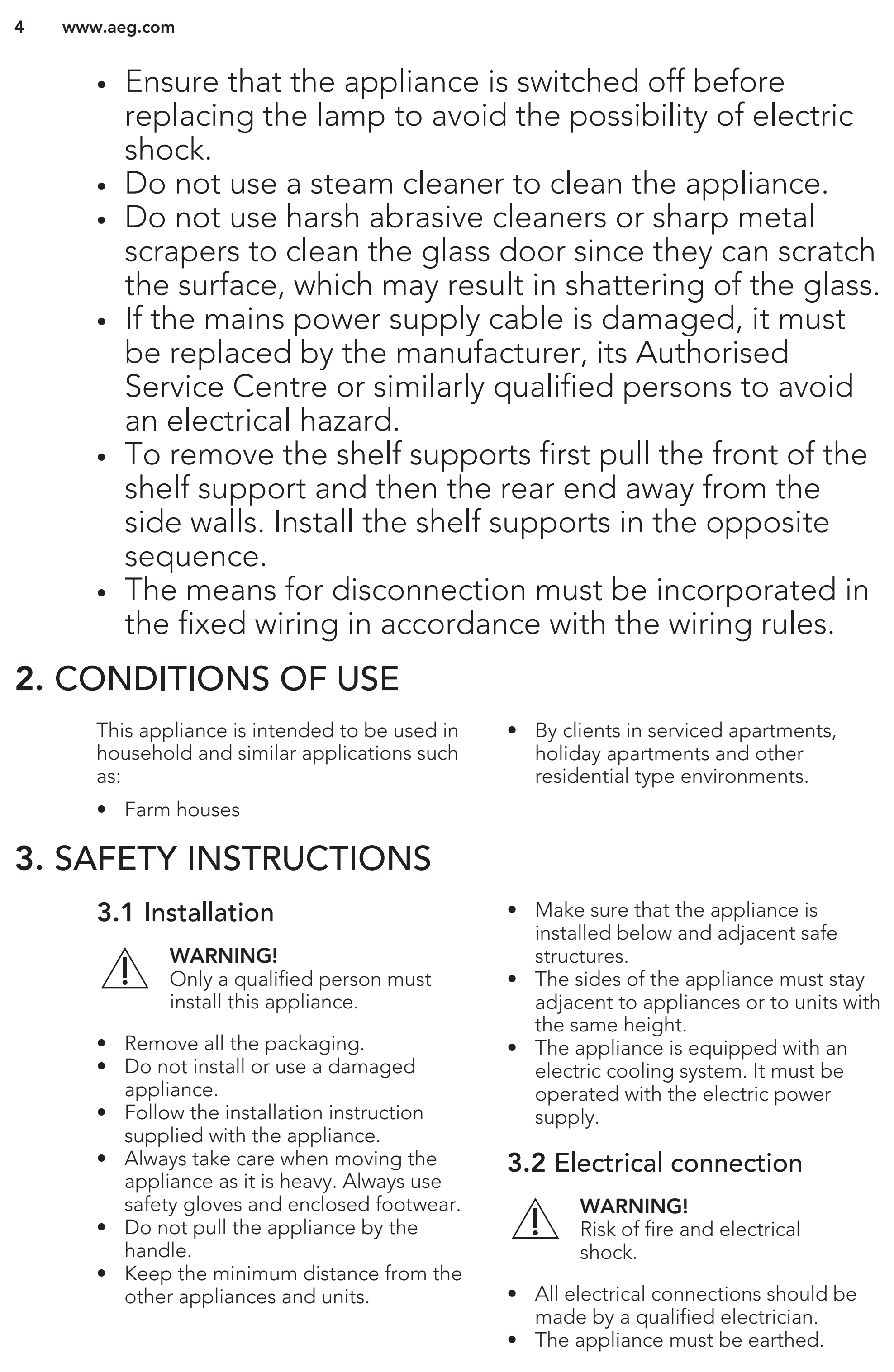
damages that are the result of incorrect installation or usage. Always keep the instructions in a safe and accessible location for future reference.

1.1 Children and vulnerable people safety

- This appliance can be used by children aged from 8 years and above and 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 the hazards involved.
- Do not let children play with the appliance.
- Keep all packaging away from children and dispose of it appropriately.
- Keep children and pets away from the appliance when it operates or when it cools down. Accessible parts are hot.
- If the appliance has a child safety device, this should be activated.
- Children shall not carry out cleaning and user maintenance of the appliance without supervision.
- Children aged 3 years and under must be kept away from this appliance when it is in operation at all times.

1.2 General Safety

- Only a qualified person must install this appliance and replace the cable.
- WARNING: The appliance and its accessible parts become hot during use. Care should be taken to avoid touching heating elements. Children less than 8 years of age shall be kept away unless continuously supervised.
- Always use oven gloves to remove or put in accessories or ovenware.
- Before carrying out any maintenance, disconnect the appliance from the power supply.



- Ensure that the appliance is switched off before replacing the lamp to avoid the possibility of electric shock.
- Do not use a steam cleaner to clean the appliance.
- Do not use harsh abrasive cleaners or sharp metal scrapers to clean the glass door since they can scratch the surface, which may result in shattering of the glass.
- If the mains power supply cable is damaged, it must be replaced by the manufacturer, its Authorised Service Centre or similarly qualified persons to avoid an electrical hazard.
- To remove the shelf supports first pull the front of the shelf support and then the rear end away from the side walls. Install the shelf supports in the opposite sequence.
- The means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.

2. CONDITIONS OF USE

This appliance is intended to be used in household and similar applications such as:

- Farm houses
- By clients in serviced apartments, holiday apartments and other residential type environments.

3. SAFETY INSTRUCTIONS

3.1 Installation

⚠ **WARNING!**
Only a qualified person must install this appliance.

- Remove all the packaging.
- Do not install or use a damaged appliance.
- Follow the installation instruction supplied with the appliance.
- Always take care when moving the appliance as it is heavy. Always use safety gloves and enclosed footwear.
- Do not pull the appliance by the handle.
- Keep the minimum distance from the other appliances and units.
- Make sure that the appliance is installed below and adjacent safe structures.
- The sides of the appliance must stay adjacent to appliances or to units with the same height.
- The appliance is equipped with an electric cooling system. It must be operated with the electric power supply.

3.2 Electrical connection

⚠ **WARNING!**
Risk of fire and electrical shock.

- All electrical connections should be made by a qualified electrician.
- The appliance must be earthed.

- Make sure that the parameters on the rating plate are compatible with the electrical ratings of the mains power supply.
- Always use a correctly installed shockproof socket.
- Do not use multi-plug adapters and extension cables.
- Make sure not to cause damage to the mains plug and to the mains cable. Should the mains cable need to be replaced, this must be carried out by our Authorised Service Centre.
- Do not let mains cables touch or come near the appliance door, especially when the door is hot.
- The shock protection of live and insulated parts must be fastened in such a way that it cannot be removed without tools.
- Connect the mains plug to the mains socket only at the end of the installation. Make sure that there is access to the mains plug after the installation.
- If the mains socket is loose, do not connect the mains plug.
- Do not pull the mains cable to disconnect the appliance. Always pull the mains plug.
- Use only correct isolation devices: line protecting cut-outs, fuses (screw type fuses removed from the holder), earth leakage trips and contactors.
- The electrical installation must have an isolation device which lets you disconnect the appliance from the mains at all poles. The isolation device must have a contact opening width of minimum 3 mm.
- This appliance complies with the E.E.C. Directives.

3.3 Use

⚠ **WARNING!**
Risk of injury, burns and electrical shock or explosion.

- Do not change the specification of this appliance.
- Make sure that the ventilation openings are not blocked.
- Do not let the appliance stay unattended during operation.
- Deactivate the appliance after each use.
- Be careful when you open the appliance door while the appliance is in operation. Hot air can release.
- Do not operate the appliance with wet hands or when it has contact with water.
- Do not apply pressure on the open door.
- Do not use the appliance as a work surface or as a storage surface.
- Open the appliance door carefully. The use of ingredients with alcohol can cause a mixture of alcohol and air.
- Do not let sparks or open flames to come in contact with the appliance when you open the door.
- Do not put flammable products or items that are wet with flammable products in, near or on the appliance.

⚠ **WARNING!**
Risk of damage to the appliance.

- To prevent damage or discoloration to the enamel:
  - do not put ovenware or other objects in the appliance directly on the bottom.
  - do not put aluminium foil directly on the bottom of cavity of the appliance.
  - do not put water directly into the hot appliance.
  - do not keep moist dishes and food in the appliance after you finish the cooking.
  - be careful when you remove or install the accessories.
- Discoloration of the enamel or stainless steel has no effect on the performance of the appliance.
- Use a deep pan for moist cakes. Fruit juices cause stains that can be permanent.
- This appliance is for cooking purposes only. It must not be used for other purposes, for example room heating.
- Always cook with the oven door closed.
- If the appliance is installed behind a furniture panel (e.g. a door) make sure the door is never closed when the appliance is in operation. Heat and

moisture can build up behind a closed furniture panel and cause subsequent damage to the appliance, the housing unit or the floor. Do not close the furniture panel until the appliance has cooled down completely after use.

3.4 Care and cleaning

WARNING!
Risk of injury, fire, or damage to the appliance.

- Before maintenance, deactivate the appliance and disconnect the mains plug from the mains socket.
- Make sure the appliance is cold. There is the risk that the glass panels can break.
- Replace immediately the door glass panels when they are damaged. Contact the Authorised Service Centre.
- Be careful when you remove the door from the appliance. The door is heavy!
- Clean regularly the appliance to prevent the deterioration of the surface material.
- Clean the appliance with a moist soft cloth. Only use neutral detergents. Do not use any abrasive products, abrasive cleaning pads, solvents or metal objects.
- If you use an oven spray, follow the safety instruction on it's packaging.
- Do not clean the catalytic enamel (if applicable) with any kind of detergent.

3.5 Internal light

WARNING!
Risk of electrical shock.

- The type of light bulb or halogen lamp used for this appliance is only for household appliances. Do not use it for house lighting.
- Before replacing the lamp, disconnect the appliance from the power supply.
- Only use lamps with the same specifications.

3.6 Disposal

WARNING!
Risk of injury or suffocation.

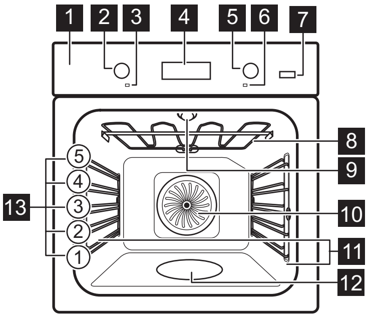
- Disconnect the appliance from the mains supply.
- Cut off the mains electrical cable close to the appliance and dispose of it.
- Remove the door catch to prevent children or pets from becoming trapped in the appliance.

3.7 Service

- To repair the appliance contact an Authorised Service Centre.
- Use original spare parts only.

4. PRODUCT DESCRIPTION

4.1 General overview

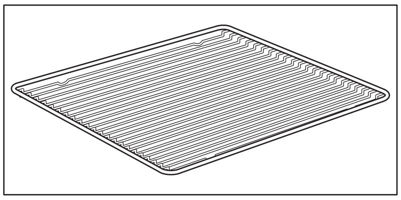


1	Control panel
2	Knob for the oven functions
3	Power lamp / symbol
4	Electronic programmer
5	Knob for the temperature
6	Temperature indicator / symbol
7	Plus Steam button
8	Heating element
9	Lamp
10	Fan

11 Shelf support, removable
12 Cavity embossment
13 Shelf positions

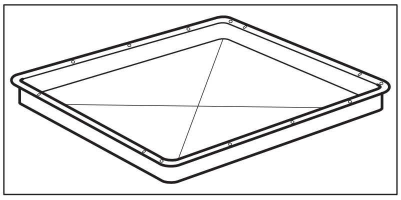
4.2 Accessories

Wire shelf



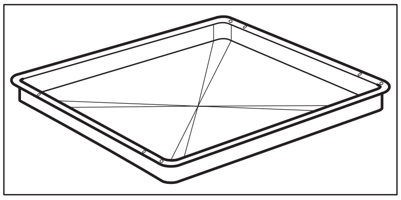
For cookware, cake tins, roasts.

Baking tray



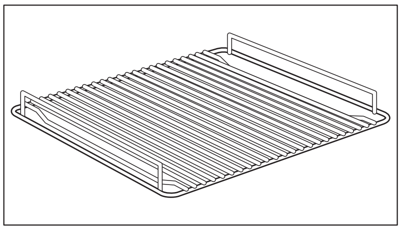
For cakes and biscuits.

Grill- / Roasting pan



To bake and roast or as a pan to collect fat.

Trivet



For roasting and grilling.

ⓘ Use the trivet only with the Grill- / Roasting pan.

5. BEFORE FIRST USE

⚠ **WARNING!**
Refer to Safety chapters.

ⓘ To set the Time of day refer to "Clock functions" chapter.

5.1 Initial Cleaning

Remove all accessories and removable shelf supports from the oven.

ⓘ Refer to "Care and cleaning" chapter.

Clean the oven and the accessories before first use.
Put the accessories and the removable shelf supports back to their initial position.

6. DAILY USE

WARNING!
Refer to Safety chapters.

6.1 Retractable knobs

To use the appliance, press the control knob. The control knob comes out.

6.2 Activating and deactivating the appliance

It depends on the model if your appliance has lamps, knob symbols or indicators:

- The lamp turns on when the appliance operates.
- The symbol shows whether the knob controls the oven functions or the temperature.
- The indicator turns on when the oven heats up.

1. Turn the knob for the oven functions to select an oven function.
2. Turn the knob for the temperature to select a temperature.
3. To deactivate the appliance, turn the knobs for the oven functions and temperature to the off position.

6.3 Oven functions

Oven function		Application
0	Off position	The oven is off.
	Light	To turn on the lamp without a cooking function.
	True Fan Cooking	To bake on up to three shelf positions at the same time and to dry food. Set the temperature 20 - 40 °C lower than for Conventional Cooking.
	True Fan Cooking PLUS / Aqua Cleaning	To add humidity during the cooking. To get the right colour and crispy crust during baking. To give more juiciness during reheating. For more information about Aqua Cleaning, refer to the chapter "Care and cleaning".
	Pizza Setting	To bake food on one shelf position for a more intensive browning and a crispy bottom. Set the temperature 20 - 40 °C lower than for Conventional Cooking.

Oven function		Application
☐	Conventional Cooking (Top / Bottom Heat)	To bake and roast food on one shelf position.
☐	Bottom Heat	To bake cakes with crispy bottom and to preserve food.
❄	Defrost	This function can be used for defrosting frozen foods, such as vegetables and fruits. The defrosting time depends on the amount and size of the frozen food.
⊛	Moist Fan Baking	This function is designed to save energy during cooking. For more information refer to "Hints and tips" chapter, Moist Fan Baking. The oven door should be closed during cooking so that the function is not interrupted and to ensure that the oven operates with the highest energy efficiency possible. When you use this function, the temperature in the cavity may differ from the set temperature. Due to the use of the residual heat - the heating power may be reduced. For general energy saving recommendations refer to: "Energy Efficiency" chapter, Energy Saving.This function was used to comply with the energy efficiency class according to EN 60350-1.
▽	Grilling	To grill flat food and to toast bread.
⊛	Turbo Grilling	To roast larger meat joints or poultry with bones on one shelf position. Also to make gratins and to brown.

ℹ The lamp may automatically deactivate at a temperature below 60 °C during some oven functions.

6.4 Activating the True Fan Cooking PLUS function

This function allows to have an improvement of humidity during the cooking.

⚠ **WARNING!**
Risk of burns and damage to the appliance.

Released humidity can cause burns:

- Open the appliance door with care after the True Fan Cooking PLUS function stops.

ℹ Refer to "Hints and tips" chapter.

1. Open the oven door.
2. Fill the cavity embossment with tap water.
   The maximum capacity of the cavity embossment is 250 ml.
   Fill the cavity embossment with water only when the oven is cold.
3. Put food in the appliance and close the oven door.
4. Set the True Fan Cooking PLUS function: ⊛♨.
5. Press the Plus Steam button ♨.

The Plus Steam button works only with the True Fan Cooking PLUS function.

The indicator turns on.

6. Turn the knob for the temperature to select a temperature.

> ⚠ **CAUTION!**
> Do not refill the cavity embossment with water during cooking or when the oven is hot.

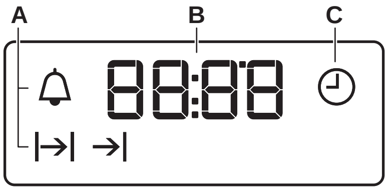
7. To deactivate the appliance, press the Plus Steam button ♨, turn the knobs for the oven functions and temperature to the off position.

The indicator of the Plus Steam button turns off.

8. Remove water from the cavity embossment.

> ⚠ **WARNING!**
> Make sure that the appliance is cool before you remove the remaining water from the cavity embossment.

6.5 Display



A. Function indicators
B. Time display
C. Function indicator

6.6 Buttons

Sensor field / Button	Function	Description
—	MINUS	To set the time.
◷	CLOCK	To set a clock function.
+	PLUS	To set the time.
♨	PLUS STEAM	To turn on the True Fan Cooking PLUS function.

7. CLOCK FUNCTIONS

7.1 Clock functions table

Clock function		Application
◷	TIME OF DAY	To set, change or check the time of day.
|→|	DURATION	To set how long the appliance operates.
→|	END	To set when the appliance deactivates.

Clock function		Application
|→|→|	TIME DELAY	To combine DURATION and END function.
🔔	MINUTE MINDER	To set countdown time. This function has no effect on the operation of the appliance. You can set the MINUTE MINDER at any time, also when the appliance is off.

7.2 Setting the time. Changing the time

You must set the time before you operate the oven.

The 🕘 flashes when you connect the appliance to the electrical supply, when there was a power cut or when the timer is not set.

Press the + or − to set the correct time.
After approximately five seconds, the flashing stops and the display shows the time of day you set.

To change the time of day press ⏲ again and again until 🕘 starts to flash.

7.3 Setting the DURATION

1. Set an oven function and temperature.
2. Press ⏲ again and again until |→| starts to flash.
3. Press + or − to set the DURATION time.

The display shows |→|.

4. When the time ends, |→| flashes and an acoustic signal sounds. The appliance deactivates automatically.
5. Press any button to stop the acoustic signal.
6. Turn the knob for the oven functions and the knob for the temperature to the off position.

7.4 Setting the END

1. Set an oven function and temperature.
2. Press ⏲ again and again until →| starts to flash.
3. Press + or − to set the time.

The display shows →|.

4. When the time ends, →| flashes and an acoustic signal sounds. The appliance deactivates automatically.
5. Press any button to stop the signal.
6. Turn the knob for the oven functions and the knob for the temperature to the off position.

7.5 Setting the TIME DELAY

1. Set an oven function and temperature.
2. Press ⏲ again and again until |→| starts to flash.
3. Press + or − to set the time for DURATION.
4. Press ⏲.
5. Press + or − to set the time for END.
6. Press ⏲ to confirm.

Appliance turns on automatically later on, works for the set DURATION time and stops at the set END time. At the set time an acoustic signal sounds.

7. The appliance deactivates automatically. Press any button to stop the signal.
8. Turn the knob for the oven functions and the knob for the temperature to the off position.

7.6 Setting the MINUTE MINDER

1. Press ⏲ again and again until 🔔 starts to flash.
2. Press + or − to set the necessary time.

The Minute Minder starts automatically after 5 seconds.

3. When the set time ends, an acoustic signal sounds. Press any button to stop the acoustic signal.
4. Turn the knob for the oven functions and the knob for the temperature to the off position.

7.7 Cancelling the clock functions

1. Press the ⏲ again and again until the necessary function indicator starts to flash.
2. Press and hold —.

The clock function goes out after some seconds.

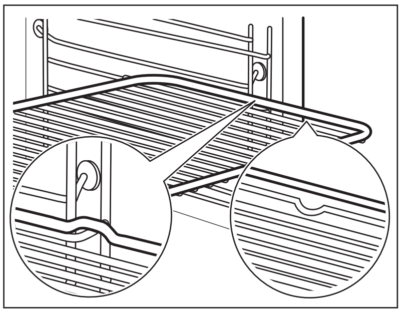
8. USING THE ACCESSORIES

WARNING!
Refer to Safety chapters.

8.1 Inserting the accessories

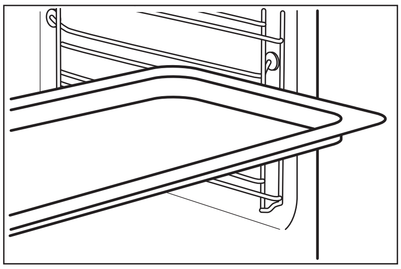
Wire shelf:

Push the shelf between the guide bars of the shelf support and make sure that the feet point down.



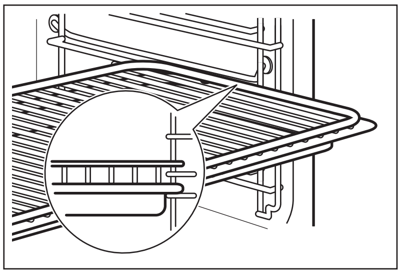
Baking tray / Deep pan:

Push the baking tray / deep pan between the guide bars of the shelf support.



Wire shelf and baking tray / deep pan together:

Push the baking tray / deep pan between the guide bars of the shelf support and the wire shelf on the guide bars above.



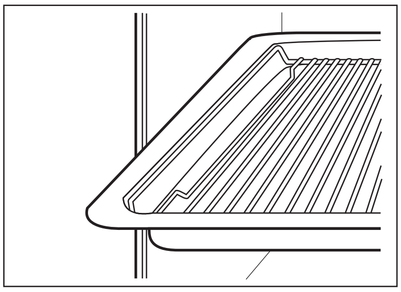
Small indentation at the top increase safety. The indentations are also anti-tip devices. The high rim around the shelf prevents cookware from slipping of the shelf.

8.2 Trivet and Grill- / Roasting pan

WARNING!
Be careful when you remove the accessories from a hot oven. There is a risk of burns.

You can use the trivet to roast larger pieces of meat or poultry on one shelf position.

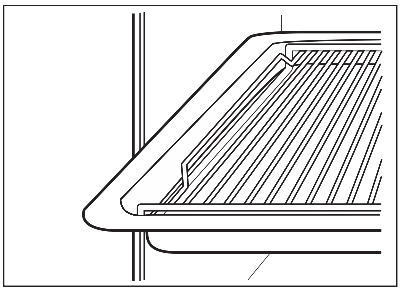
1. Put the trivet into the deep pan so that the supports of the wire shelf point up.



2. Put the deep pan into the oven on the necessary shelf position.

You can use the trivet to grill flat dishes in large quantities and to toast.

1. Put the trivet into the deep pan so that the supports of the wire shelf point down.



2. Put the deep pan into the oven on the necessary shelf position.

9. ADDITIONAL FUNCTIONS

9.1 Cooling fan

When the oven operates, the cooling fan turns on automatically to keep the surfaces of the oven cool. If you turn off the oven, the cooling fan can continue to operate until the oven cools down.

10. HINTS AND TIPS

WARNING!
Refer to Safety chapters.

The temperature and baking times in the tables are guidelines only. They depend on the recipes and the quality and quantity of the ingredients used.

10.1 Inner side of the door

In some models, on the inner side of the door you can find:

- the numbers of the shelf positions.
- information about the oven functions, recommended shelf positions and temperatures for typical dishes.

10.2 True Fan Cooking PLUS

Before preheating fill the cavity embossment with water only when the oven is cold.

Refer to "Activating the True Fan Cooking PLUS function"

Bakery products

Food	Water in the cavity embossment (ml)	Temperature (°C)	Time (min)	Shelf position	Comments
Bread	100	180	35 - 40	2	Use baking tray.1)
Bread rolls	100	200	20 - 25	2	Use baking tray.1)

Food	Water in the cavity embossment (ml)	Temperature (°C)	Time (min)	Shelf position	Comments
Homestyle pizza	100	230	10 - 20	2	Use baking tray.[1]
Focaccia	100	200 - 210	10 - 20	2	Use baking tray.[1]
Cookies, scones, croissants	100	150 - 180	10 - 20	2	Use baking tray.[1]
Plum cake, apple pie, cinnamon rolls	100 - 150	160 - 180	30 - 60	2	Use cake mould.[1]

[1] Preheat in an empty oven for 5 minutes before cooking.

Cook from frozen

Food	Water in the cavity embossment (ml)	Temperature (°C)	Time (min)	Shelf position
Pizza frozen	150	200 - 210	10 - 20	2[1]
Frozen lasagna	200	180 - 200	35 - 50	2[1]
Frozen croissant	150	170 - 180	15 - 25	2[1]

[1] Preheat in an empty oven for 10 minutes before cooking.

Food regeneration

Food	Water in the cavity embossment (ml)	Temperature (°C)	Time (min)	Shelf position
Bread	100	110	15 - 25	2
Bread rolls	100	110	10 - 20	2
Homestyle pizza	100	110	15 - 25	2
Focaccia	100	110	15 - 25	2
Vegetables	100	110	15 - 25	2
Rice	100	110	15 - 25	2
Pasta	100	110	15 - 25	2
Meat	100	110	15 - 25	2

Roasting

Food	Water in the cavity embossment (ml)	Temperature (°C)	Time (min)	Shelf position	Comments
Roast pork	200	180	65 - 80	2	Glass baking dish
Roast beef	200	200	50 - 60	2	Glass baking dish
Chicken	200	210	60 - 80	2	Glass baking dish

10.3 Baking

- Your oven may bake or roast differently to the oven you had before. Adapt your usual settings such as temperature, cooking time and shelf position to the values in the tables.
- Use the lower temperature the first time.
- If you cannot find the settings for a special recipe, look for the similar one.
- You can extend baking times by 10 – 15 minutes if you bake cakes on more than one shelf position.
- Cakes and pastries at different heights do not always brown equally at first. If this occurs, do not change the temperature setting. The differences equalize during the baking procedure.
- Trays in the oven can twist during baking. When the trays become cold again, the distortions disappear.

10.4 Tips on baking

Baking results	Possible cause	Remedy
The bottom of the cake is not browned sufficiently.	The shelf position is incorrect.	Put the cake on a lower shelf.
The cake sinks and becomes soggy, lumpy or streaky.	The oven temperature is too high.	The next time you bake, set a slightly lower oven temperature.
The cake sinks and becomes soggy, lumpy or streaky.	The baking time is too short.	Set a longer baking time. **You cannot decrease baking times by setting higher temperatures.**
The cake sinks and becomes soggy, lumpy or streaky.	There is too much liquid in the mixture.	Use less liquid. Be careful with mixing times, especially if you use a mixing machine.
The cake is too dry.	The oven temperature is too low.	The next time you bake, set a higher oven temperature.
The cake is too dry.	The baking time is too long.	The next time you bake, set a shorter baking time.
The cake browns unevenly.	The oven temperature is too high and the baking time is too short.	Set a lower oven temperature and a longer baking time.

Baking results	Possible cause	Remedy
The cake browns unevenly.	The mixture is unevenly distributed.	Spread the mixture evenly on the baking tray.
The cake is not ready in the baking time given.	The oven temperature is too low.	The next time you bake, set a slightly higher oven temperature.

10.5 Baking on one level:

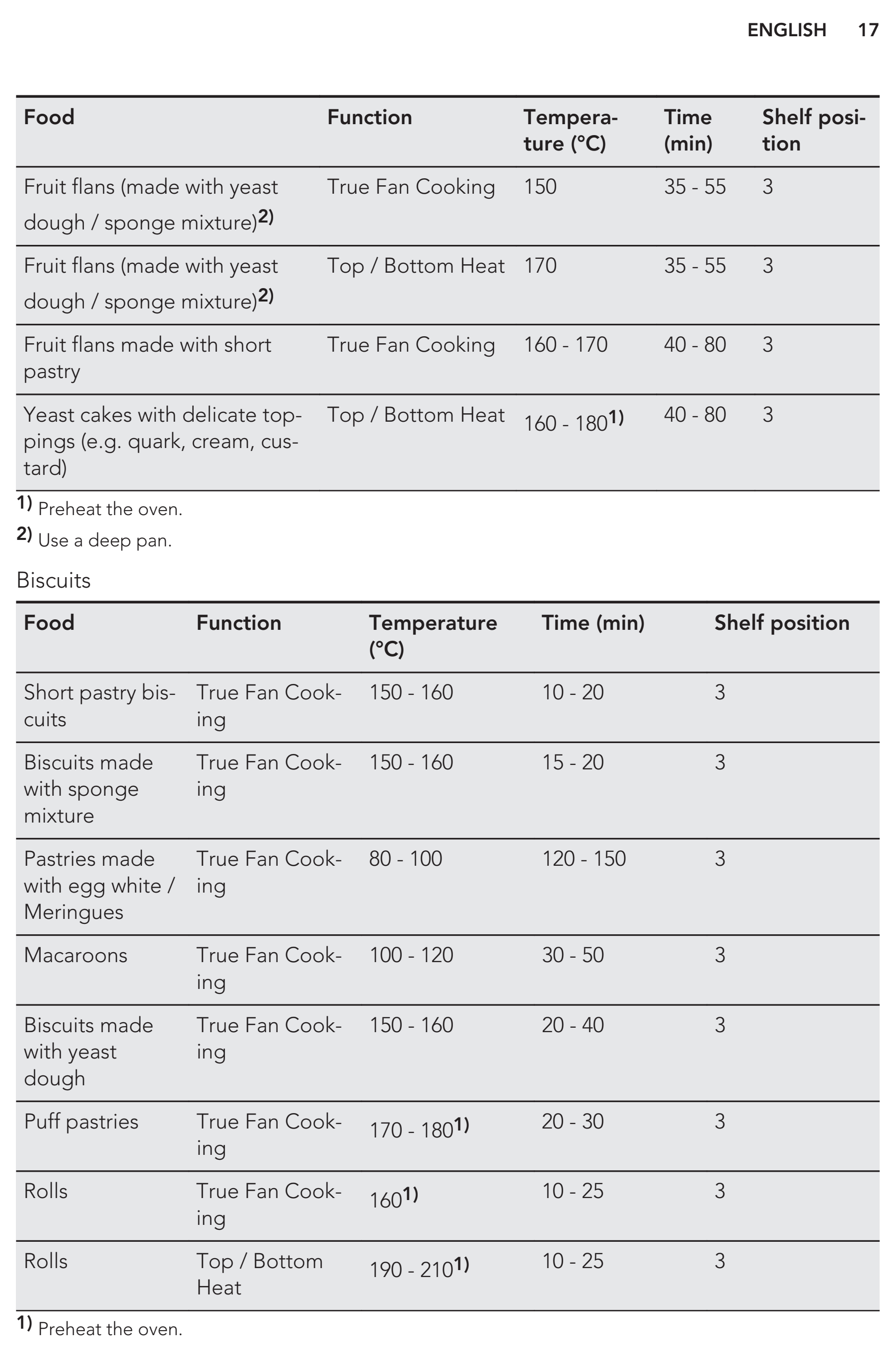
Baking in tins

Food	Function	Temperature (°C)	Time (min)	Shelf position
Ring cake / Brioche	True Fan Cooking	150 - 160	50 - 70	1
Madeira cake / Fruit cakes	True Fan Cooking	140 - 160	70 - 90	1
Flan base - short pastry	True Fan Cooking	170 - 180[1]	10 - 25	2
Flan base - sponge mixture	True Fan Cooking	150 - 170	20 - 25	2
Cheesecake	Top / Bottom Heat	170 - 190	60 - 90	1

[1] Preheat the oven.

Cakes / pastries / breads on baking trays

Food	Function	Temperature (°C)	Time (min)	Shelf position
Plaited bread / Bread crown	Top / Bottom Heat	170 - 190	30 - 40	3
Christmas stollen	Top / Bottom Heat	160 - 180[1]	50 - 70	2
Bread (rye bread): 1. First part of baking procedure. 2. Second part of baking procedure.	Top / Bottom Heat	1. 230[1] 2. 160 - 180	1. 20 2. 30 - 60	1
Cream puffs / Eclairs	Top / Bottom Heat	190 - 210[1]	20 - 35	3
Swiss roll	Top / Bottom Heat	180 - 200[1]	10 - 20	3
Cake with crumble topping (dry)	True Fan Cooking	150 - 160	20 - 40	3
Buttered almond cake / Sugar cakes	Top / Bottom Heat	190 - 210[1]	20 - 30	3



Food	Function	Temperature (°C)	Time (min)	Shelf position
Fruit flans (made with yeast dough / sponge mixture)2)	True Fan Cooking	150	35 - 55	3
Fruit flans (made with yeast dough / sponge mixture)2)	Top / Bottom Heat	170	35 - 55	3
Fruit flans made with short pastry	True Fan Cooking	160 - 170	40 - 80	3
Yeast cakes with delicate toppings (e.g. quark, cream, custard)	Top / Bottom Heat	160 - 1801)	40 - 80	3

1) Preheat the oven.

2) Use a deep pan.

Biscuits

Food	Function	Temperature (°C)	Time (min)	Shelf position
Short pastry biscuits	True Fan Cooking	150 - 160	10 - 20	3
Biscuits made with sponge mixture	True Fan Cooking	150 - 160	15 - 20	3
Pastries made with egg white / Meringues	True Fan Cooking	80 - 100	120 - 150	3
Macaroons	True Fan Cooking	100 - 120	30 - 50	3
Biscuits made with yeast dough	True Fan Cooking	150 - 160	20 - 40	3
Puff pastries	True Fan Cooking	170 - 1801)	20 - 30	3
Rolls	True Fan Cooking	1601)	10 - 25	3
Rolls	Top / Bottom Heat	190 - 2101)	10 - 25	3

1) Preheat the oven.

10.6 Bakes and gratins

Food	Function	Temperature (°C)	Time (min)	Shelf position
Pasta bake	Top / Bottom Heat	180 - 200	45 - 60	1
Lasagne	Top / Bottom Heat	180 - 200	25 - 40	1
Vegetables au gratin[1)	Turbo Grilling	160 - 170	15 - 30	1
Baguettes topped with melted cheese	True Fan Cooking	160 - 170	15 - 30	1
Sweet bakes	Top / Bottom Heat	180 - 200	40 - 60	1
Fish bakes	Top / Bottom Heat	180 - 200	30 - 60	1
Stuffed vegetables	True Fan Cooking	160 - 170	30 - 60	1

1) Preheat the oven.

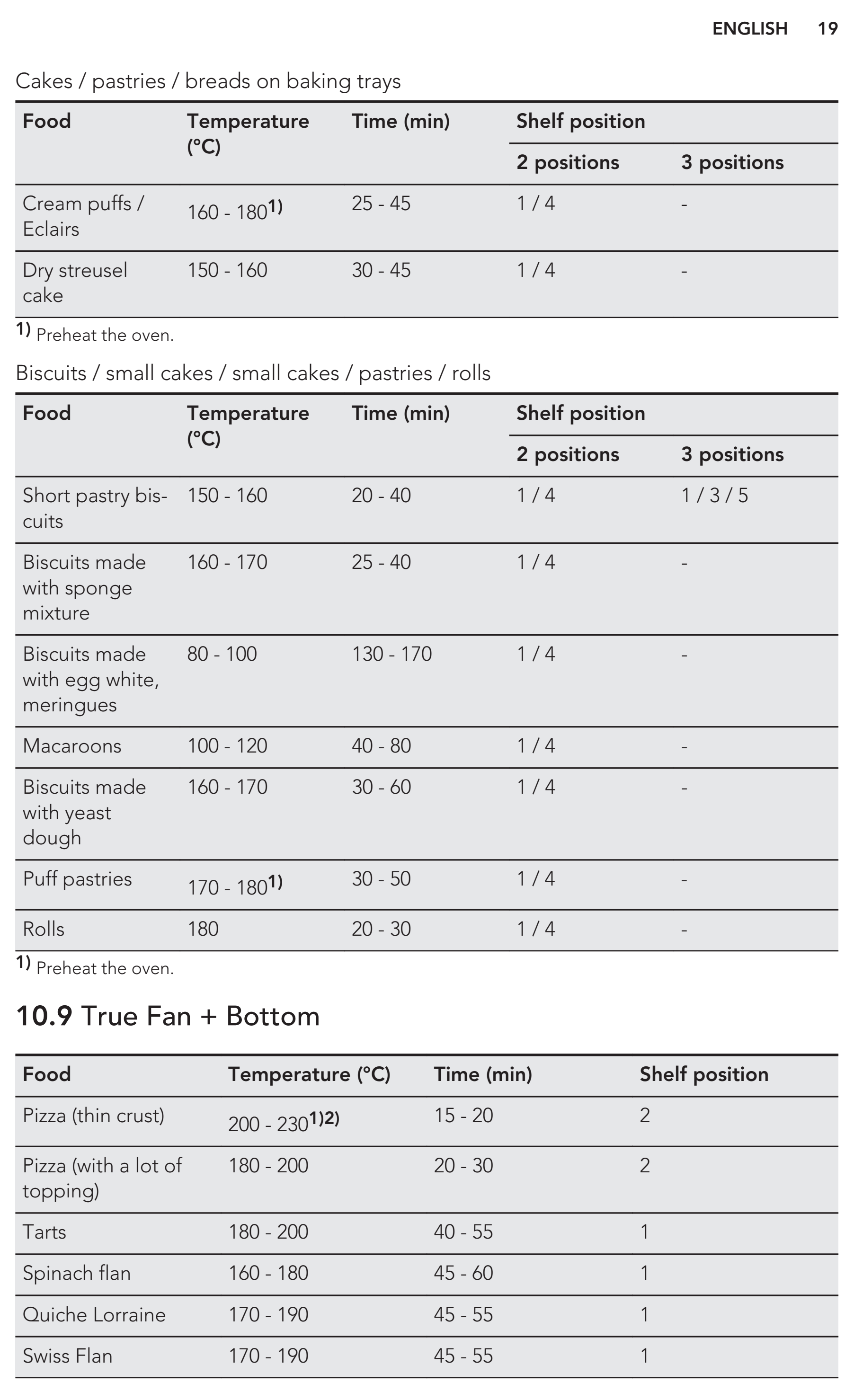
10.7 Moist Fan Baking

ⓘ For best results follow the baking times listed in the table below.

Food	Temperature (°C)	Time (min)	Shelf position
Bread sticks (500 g in total)	190 - 200	50 - 60	3
Baked scallops in shell	180 - 200	30 - 40	4
Whole fish (300 - 500 g) in salt	190 - 200	45 - 50	4
Whole fish (300 - 500 g) in parchment	190 - 200	50 - 60	3
Amaretti (20; 500 g in total)	170 - 180	40 - 50	3
Apple crumble	190 - 200	50 - 60	4
Chocolate muffins (20; 500 g in total)	160 - 170	35 - 45	3

10.8 Multilevel Baking

Use the function True Fan Cooking.



Cakes / pastries / breads on baking trays

Food	Temperature (°C)	Time (min)	Shelf position	
			2 positions	3 positions
Cream puffs / Eclairs	160 - 180[1]	25 - 45	1 / 4	-
Dry streusel cake	150 - 160	30 - 45	1 / 4	-

[1] Preheat the oven.

Biscuits / small cakes / small cakes / pastries / rolls

Food	Temperature (°C)	Time (min)	Shelf position	
			2 positions	3 positions
Short pastry biscuits	150 - 160	20 - 40	1 / 4	1 / 3 / 5
Biscuits made with sponge mixture	160 - 170	25 - 40	1 / 4	-
Biscuits made with egg white, meringues	80 - 100	130 - 170	1 / 4	-
Macaroons	100 - 120	40 - 80	1 / 4	-
Biscuits made with yeast dough	160 - 170	30 - 60	1 / 4	-
Puff pastries	170 - 180[1]	30 - 50	1 / 4	-
Rolls	180	20 - 30	1 / 4	-

[1] Preheat the oven.

10.9 True Fan + Bottom

Food	Temperature (°C)	Time (min)	Shelf position
Pizza (thin crust)	200 - 230[1][2]	15 - 20	2
Pizza (with a lot of topping)	180 - 200	20 - 30	2
Tarts	180 - 200	40 - 55	1
Spinach flan	160 - 180	45 - 60	1
Quiche Lorraine	170 - 190	45 - 55	1
Swiss Flan	170 - 190	45 - 55	1

Food	Temperature (°C)	Time (min)	Shelf position
Cheesecake	140 - 160	60 - 90	1
Apple cake, covered	150 - 170	50 - 60	1
Vegetable pie	160 - 180	50 - 60	1
Unleavened bread	230 - 250[1)]	10 - 20	2
Puff pastry flan	160 - 180[1)]	45 - 55	2
Flammekuchen (Pizza-like dish from Alsace)	230 - 250[1)]	12 - 20	2
Piroggen (Russian version of calzone)	180 - 200[1)]	15 - 25	2

1) Preheat the oven.

2) Use a deep pan.

10.10 Roasting

- Use heat-resistant ovenware to roast. Refer to the instructions of the ovenware manufacturer.
- You can roast large roasting joints directly in the deep pan or on the wire shelf above the deep pan.
- Put some liquid in the deep pan to prevent the meat juices or fat from burning on it's surface.
- All types of meat that can be browned or have crackling can be roasted in the roasting tin without the lid.
- If necessary, turn the roast after 1/2 to 2/3 of the cooking time.
- To keep meat more succulent:
  - roast lean meat in the roasting tin with the lid or use roasting bag.
  - roast meat and fish in pieces weighting minimum 1 kg.
  - baste large roasts and poultry with their juices several times during roasting.

10.11 Roasting tables

Beef

Food	Quantity	Function	Temperature (°C)	Time (min)	Shelf position
Pot roast	1 - 1.5 kg	Top / Bottom Heat	230	120 - 150	1
Roast beef or fillet: rare	per cm of thickness	Turbo Grilling	190 - 200[1)]	5 - 6	1
Roast beef or fillet: medium	per cm of thickness	Turbo Grilling	180 - 190[1)]	6 - 8	1
Roast beef or fillet: well done	per cm of thickness	Turbo Grilling	170 - 180[1)]	8 - 10	1

1) Preheat the oven.

Pork

Food	Quantity (kg)	Function	Temperature (°C)	Time (min)	Shelf position
Shoulder / Neck / Ham joint	1 - 1.5	Turbo Grilling	160 - 180	90 - 120	1
Chop / Spare rib	1 - 1.5	Turbo Grilling	170 - 180	60 - 90	1
Meatloaf	0.75 - 1	Turbo Grilling	160 - 170	50 - 60	1
Pork knuckle (precooked)	0.75 - 1	Turbo Grilling	150 - 170	90 - 120	1

Veal

Food	Quantity (kg)	Function	Temperature (°C)	Time (min)	Shelf position
Roast veal	1	Turbo Grilling	160 - 180	90 - 120	1
Knuckle of veal	1.5 - 2	Turbo Grilling	160 - 180	120 - 150	1

Lamb

Food	Quantity (kg)	Function	Temperature (°C)	Time (min)	Shelf position
Leg of lamb / Roast lamb	1 - 1.5	Turbo Grilling	150 - 170	100 - 120	1
Saddle of lamb	1 - 1.5	Turbo Grilling	160 - 180	40 - 60	1

Game

Food	Quantity (kg)	Function	Temperature (°C)	Time (min)	Shelf position
Saddle / Leg of hare	up to 1	Top / Bottom Heat	230 1)	30 - 40	1
Saddle of venison	1.5 - 2	Top / Bottom Heat	210 - 220	35 - 40	1
Haunch of venison	1.5 - 2	Top / Bottom Heat	180 - 200	60 - 90	1

1) Preheat the oven.

Poultry

Food	Quantity (kg)	Function	Temperature (°C)	Time (min)	Shelf position
Poultry portions	0.2 - 0.25 each	Turbo Grilling	200 - 220	30 - 50	1
Half chicken	0.4 - 0.5 each	Turbo Grilling	190 - 210	35 - 50	1
Chicken, poulard	1 - 1.5	Turbo Grilling	190 - 210	50 - 70	1
Duck	1.5 - 2	Turbo Grilling	180 - 200	80 - 100	1
Goose	3.5 - 5	Turbo Grilling	160 - 180	120 - 180	1
Turkey	2.5 - 3.5	Turbo Grilling	160 - 180	120 - 150	1
Turkey	4 - 6	Turbo Grilling	140 - 160	150 - 240	1

Fish (steamed)

Food	Quantity (kg)	Function	Temperature (°C)	Time (min)	Shelf position
Whole fish	1 - 1.5	Top / Bottom Heat	210 - 220	40 - 60	1

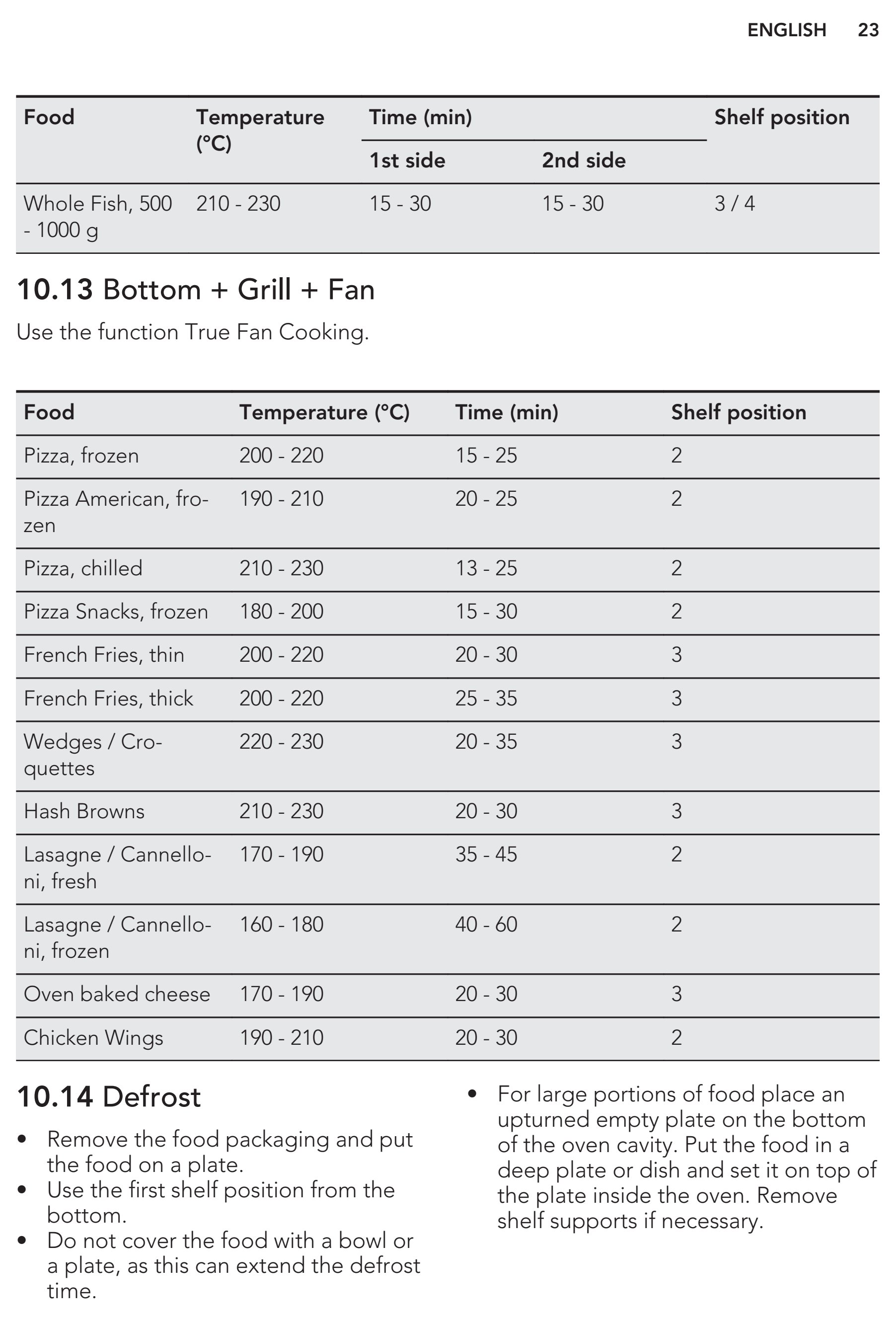
10.12 Grilling

- Always grill with the maximum temperature setting.
- Set the shelf into the shelf position as recommended in the grilling table.
- Always set the pan to collect the fat into the first shelf position.
- Grill only flat pieces of meat or fish.
- Always preheat the empty oven with the grill functions for 5 minutes.

⚠ **CAUTION!**
Always grill with the oven door closed.

Grilling

Food	Temperature (°C)	Time (min)		Shelf position
		1st side	2nd side	
Roast beef	210 - 230	30 - 40	30 - 40	2
Filet of beef	230	20 - 30	20 - 30	3
Back of pork	210 - 230	30 - 40	30 - 40	2
Back of veal	210 - 230	30 - 40	30 - 40	2
Back of lamb	210 - 230	25 - 35	20 - 25	3



Food	Temperature (°C)	Time (min)		Shelf position
		1st side	2nd side	
Whole Fish, 500 - 1000 g	210 - 230	15 - 30	15 - 30	3 / 4

10.13 Bottom + Grill + Fan

Use the function True Fan Cooking.

Food	Temperature (°C)	Time (min)	Shelf position
Pizza, frozen	200 - 220	15 - 25	2
Pizza American, frozen	190 - 210	20 - 25	2
Pizza, chilled	210 - 230	13 - 25	2
Pizza Snacks, frozen	180 - 200	15 - 30	2
French Fries, thin	200 - 220	20 - 30	3
French Fries, thick	200 - 220	25 - 35	3
Wedges / Croquettes	220 - 230	20 - 35	3
Hash Browns	210 - 230	20 - 30	3
Lasagne / Cannelloni, fresh	170 - 190	35 - 45	2
Lasagne / Cannelloni, frozen	160 - 180	40 - 60	2
Oven baked cheese	170 - 190	20 - 30	3
Chicken Wings	190 - 210	20 - 30	2

10.14 Defrost

- Remove the food packaging and put the food on a plate.
- Use the first shelf position from the bottom.
- Do not cover the food with a bowl or a plate, as this can extend the defrost time.
- For large portions of food place an upturned empty plate on the bottom of the oven cavity. Put the food in a deep plate or dish and set it on top of the plate inside the oven. Remove shelf supports if necessary.

Food	Quantity (kg)	Defrosting time (min)	Further defrosting time (min)	Comments
Chicken	1	100 - 140	20 - 30	Put the chicken on an upturned saucer in a big plate. Turn halfway through.
Meat	1	100 - 140	20 - 30	Turn halfway through.
Meat	0.5	90 - 120	20 - 30	Turn halfway through.
Trout	0.15	25 - 35	10 - 15	-
Strawberries	0.3	30 - 40	10 - 20	-
Butter	0.25	30 - 40	10 - 15	-
Cream	2 x 0.2	80 - 100	10 - 15	Whip the cream when still slightly frozen in places.
Gateau	1.4	60	60	-

10.15 Preserving - Bottom Heat

- Use only preserve jars of the same dimensions available on the market.
- Do not use jars with twist-off and bayonet type lids or metal tins.
- Use the first shelf from the bottom for this function.
- Put no more than six one-litre preserve jars on the baking tray.
- Fill the jars equally and close with a clamp.
- The jars cannot touch each other.
- Put approximately 1/2 litre of water into the baking tray to give sufficient moisture in the oven.
- When the liquid in the jars starts to simmer (after approximately 35 - 60 minutes with one-litre jars), stop the oven or decrease the temperature to 100 °C (see the table).

Soft fruit

Food	Temperature (°C)	Cooking time until simmering (min)	Continue to cook at 100 °C (min)
Strawberries / Blueberries / Raspberries / Ripe gooseberries	160 - 170	35 - 45	-

Stone fruit

Food	Temperature (°C)	Cooking time until simmering (min)	Continue to cook at 100 °C (min)
Pears / Quinces / Plums	160 - 170	35 - 45	10 - 15

Vegetables

Food	Temperature (°C)	Cooking time until simmering (min)	Continue to cook at 100 °C (min)
Carrots[1]	160 - 170	50 - 60	5 - 10
Cucumbers	160 - 170	50 - 60	-
Mixed pickles	160 - 170	50 - 60	5 - 10
Kohlrabi / Peas / Asparagus	160 - 170	50 - 60	15 - 20

[1] Leave standing in the oven after it is deactivated.

10.16 Drying - True Fan Cooking

- Cover trays with grease proof paper or baking parchment.
- For a better result, stop the oven halfway through the drying time, open the door and let it cool down for one night to complete the drying.

Vegetables

Food	Temperature (°C)	Time (h)	Shelf position	
			1 position	2 positions
Beans	60 - 70	6 - 8	3	1 / 4
Peppers	60 - 70	5 - 6	3	1 / 4
Vegetables for sour	60 - 70	5 - 6	3	1 / 4
Mushrooms	50 - 60	6 - 8	3	1 / 4
Herbs	40 - 50	2 - 3	3	1 / 4

Fruit

Food	Temperature (°C)	Time (h)	Shelf position	
			1 position	2 positions
Plums	60 - 70	8 - 10	3	1 / 4
Apricots	60 - 70	8 - 10	3	1 / 4
Apple slices	60 - 70	6 - 8	3	1 / 4
Pears	60 - 70	6 - 9	3	1 / 4

10.17 Information for test institutes

Tests according to EN 60350-1:2013 and IEC 60350-1:2011.

Baking on one level. Baking in tins

Food	Function	Temperature (°C)	Time (min)	Shelf position
Fatless sponge cake / Fatless sponge cake	True Fan Cooking	140 - 150	35 - 50	2
Fatless sponge cake / Fatless sponge cake	Top / Bottom Heat	160	35 - 50	2
Apple pie / Apple pie (2 tins Ø20 cm, diagonally off set)	True Fan Cooking	160	60 - 90	2
Apple pie / Apple pie (2 tins Ø20 cm, diagonally off set)	Top / Bottom Heat	180	70 - 90	1

Baking on one level. Biscuits

Food	Function	Temperature (°C)	Time (min)	Shelf position
Short bread / Short bread / Pastry stripes	True Fan Cooking	140	25 - 40	3
Short bread / Short bread / Pastry stripes	Top / Bottom Heat	160 1)	20 - 30	3
Small cakes / Small cakes (20 per tray)	True Fan Cooking	150 1)	20 - 35	3
Small cakes / Small cakes (20 per tray)	Top / Bottom Heat	170 1)	20 - 30	3

1) Preheat the oven.

Multilevel Baking. Biscuits / small cakes / small cakes / pastries / rolls

Food	Function	Temperature (°C)	Time (min)	Shelf position	
				2 positions	3 positions
Short bread / Short bread / Pastry Stripes	True Fan Cooking.	140	25 - 45	1 / 4	1 / 3 / 5
Small cakes / Small cakes (20 per tray)	True Fan Cooking.	150 1)	23 - 40	1 / 4	-

1) Preheat the oven.

Grilling

Food	Function	Temperature (°C)	Time (min)	Shelf position
Toast / Toast	Grilling	max	1 - 3 1)	5

Food	Function	Temperature (°C)	Time (min)	Shelf position
Beef Steak / Beef Steak	Grilling	max	24 - 30[1][2]	4

[1] Preheat the oven for 5 minutes.

[2] Turn halfway through.

11. CARE AND CLEANING

WARNING!
Refer to Safety chapters.

11.1 Notes on cleaning

- Clean the front of the oven with a soft cloth with warm water and a cleaning agent.
- To clean metal surfaces, use a dedicated cleaning agent.
- Clean the oven interior after each use. Fat accumulation or other food remains may result in a fire. The risk is higher for the grill pan.
- Clean stubborn dirt with a special oven cleaner.
- Clean all accessories after each use and let them dry. Use a soft cloth with warm water and a cleaning agent.
- If you have nonstick accessories, do not clean them using aggressive agents, sharp-edged objects or a dishwasher. It can cause damage to the nonstick coating.

11.2 Cleaning the cavity embossment

The cleaning procedure removes limestone residue from the cavity embossment after cooking with steam.

We recommend to do the cleaning procedure at least every 5 - 10 True Fan Cooking PLUS cycles.

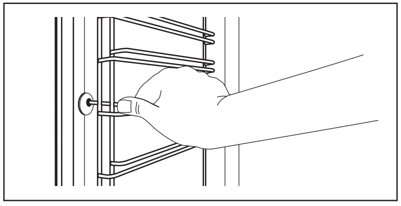
1. Put 250 ml of white vinegar into the cavity embossment at the bottom of the oven.
   Use maximum 6% vinegar without herbs.
2. Let the vinegar dissolve the residual limestone at the ambient temperature for 30 minutes.
3. Clean the cavity with warm water and a soft cloth.

11.3 Removing the shelf supports

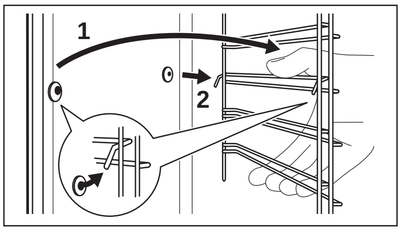
To clean the oven, remove the shelf supports.

CAUTION!
Be careful when you remove the shelf supports.

1. Pull the front of the shelf support away from the side wall.

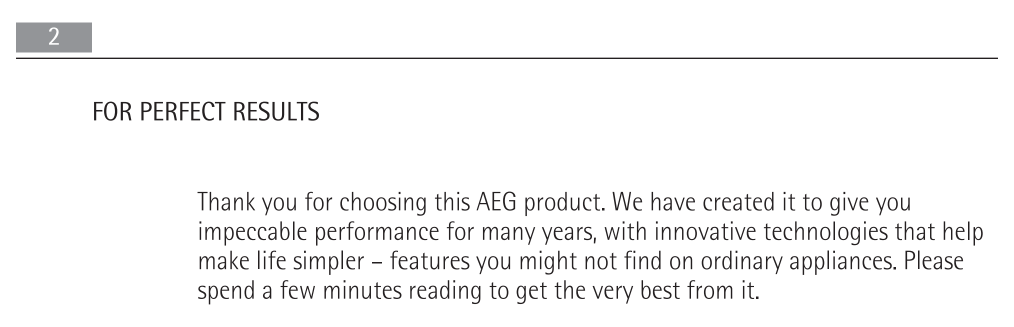


2. Pull the rear end of the shelf support away from the side wall and remove it.



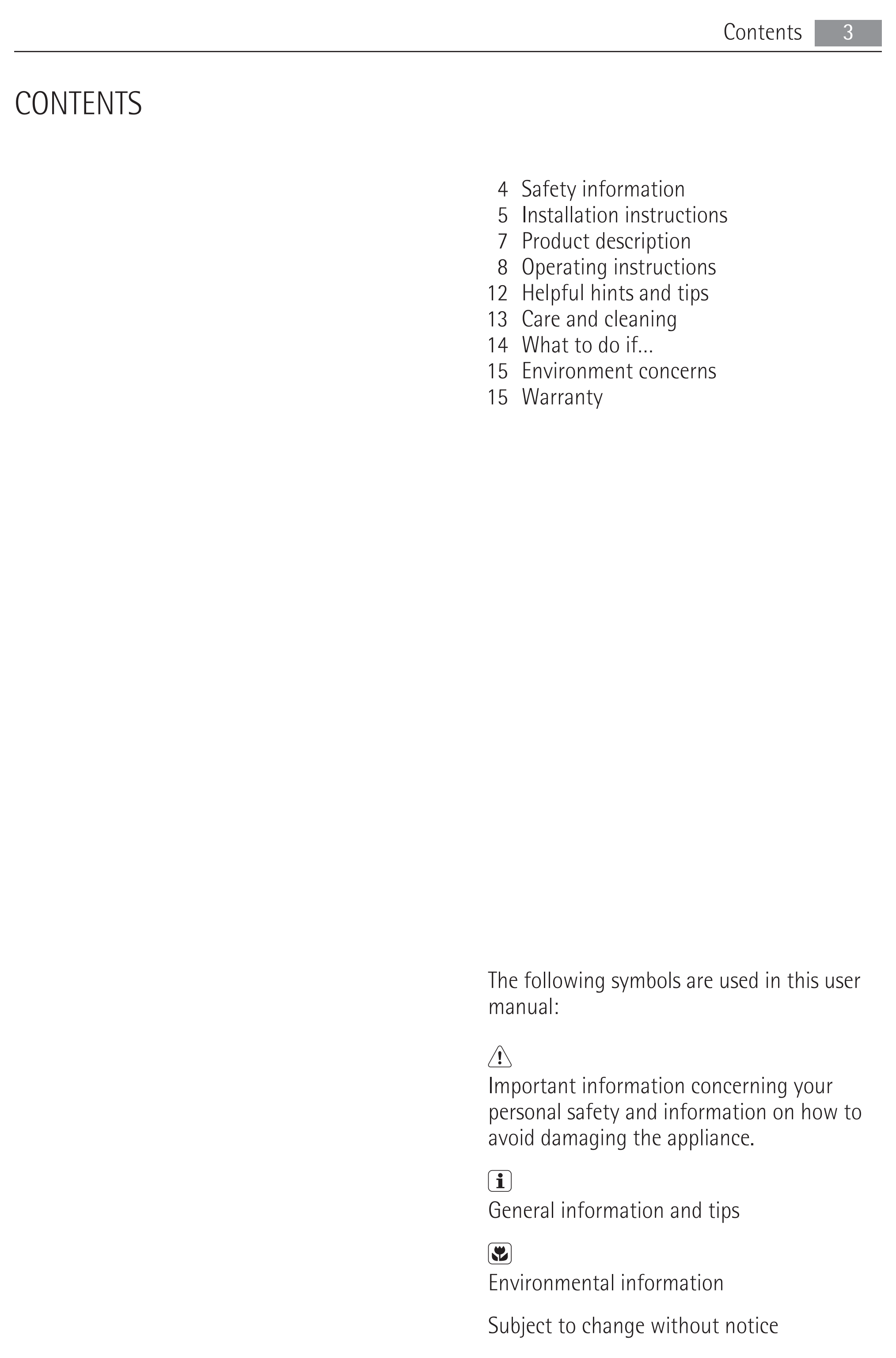
Install the removed accessories in the opposite sequence.

HK654070XB HOB USER MANUAL



FOR PERFECT RESULTS

Thank you for choosing this AEG product. We have created it to give you impeccable performance for many years, with innovative technologies that help make life simpler – features you might not find on ordinary appliances. Please spend a few minutes reading to get the very best from it.



CONTENTS

The following symbols are used in this user manual:

⚠
Important information concerning your personal safety and information on how to avoid damaging the appliance.

ℹ
General information and tips

✿
Environmental information

Subject to change without notice

SAFETY INFORMATION

For your safety and correct operation of the appliance, read this manual carefully before the installation and use. Always keep these instructions with the appliance also if you move or sell it. The users must fully know the operation and safety functions of the appliance.

Children and vulnerable people safety

WARNING!
Do not let persons, children included, with reduced physical sensory, reduced mental functions or lack of experience and knowledge to use the appliance. They must have supervision or instruction for the operation of the appliance by a person who is responsible for their safety.

- Keep all packaging away from children. There is the risk of suffocation or injury.
- Keep the children away from the appliance during and after the operation, until the appliance is cold.

WARNING!
Activate the child safety device to prevent small children and pets from an accidental activation of the appliance.

Safety during operation

- Remove all packaging, stickers and layers from the appliance before the first use.
- Set the cooking zones to "off" after each use.
- The Risk of burns! Do not put cutlery or saucepan lids on the surface that you cook, as they can become hot.

WARNING!
Fire risk! Too hot fats and oils can occur with ignition very quickly.

Correct operation

- Always monitor the appliance during operation.
- The appliance is only for domestic use!
- Do not use the appliance as a work or a storage surface.
- Do not put or keep very flammable liquids and materials, easy fusible objects (made of plastic or aluminium) on or near the appliance.
- Be careful when you connect the appliance to the near sockets. Do not let the electricity bonds touch the appliance or hot cookware. Do not let the electricity bonds to tangle.

How to prevent a damage to the appliance

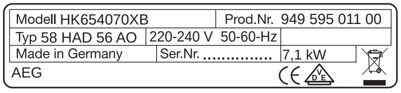
- If the objects or cookware fall on the glass ceramic, the surface can be damaged.
- Cookware made of cast iron, cast aluminium or with damaged bottoms can cause scratch of the glass ceramic. Do not move them on the surface.
- Do not let cookware boil dry to prevent the damage to cookware and glass.
- Do not use the cooking zones with empty cookware or without cookware.

- Do not put the aluminium foil on the appliance.

WARNING!
If there is a crack on the surface, disconnect power supply to prevent the electrical shock.

INSTALLATION INSTRUCTIONS

Before the installation, note down the serial number (Ser. Nr.) from the rating plate.**The rating plate of the appliance is on its lower casing.**



Modell HK654070XB | Prod.Nr. 949 595 011 00
Typ 58 HAD 56 AO | 220-240 V 50-60-Hz
Made in Germany | Ser.Nr. .... | 7,1 kW
AEG

The Safety Instructions

WARNING!
You must read these!

- Make sure that the appliance is not damaged because of transportation. Do not connect a damaged appliance. If it is necessary, speak to the supplier.
- Only an authorized servicing technician can install, connect or repair this appliance. Use only original spare parts.
- Only use the built-in appliances after you assemble the appliance into correct built-in units and work surfaces that align to the standards.
- Do not change the specifications or change this product. Risk of injury and damage to the appliance.
- Fully obey the laws, ordinances, directives and standards in force in the country where you use the appliance (safety regulations, recycling regulations, electrical safety rules etc.)!
- Keep the minimum distances to other appliances and units!
- Install shock protection, for example install the drawers only with a protective floor directly below the appliance!
- Keep safe the cut surfaces of the worktop from moisture with a correct sealant!
- Seal the appliance to the work top with no space between with a correct sealant!
- Keep safe the bottom of the appliance from steam and moisture, e.g. from a dishwasher or oven!
- Do not install the appliance adjacent to doors and below windows! If not, when you open the doors or windows they can push off hot cookware from the appliance.

WARNING!
Risk of injury from electrical current. Carefully obey the instructions for electrical connections.

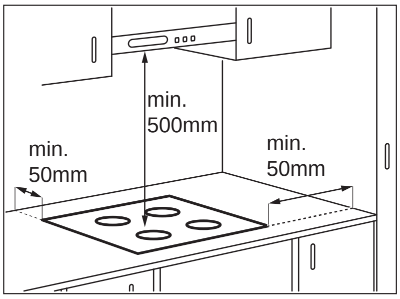
- The electrical mains terminal is live.
- Make electrical mains terminal free of voltage.

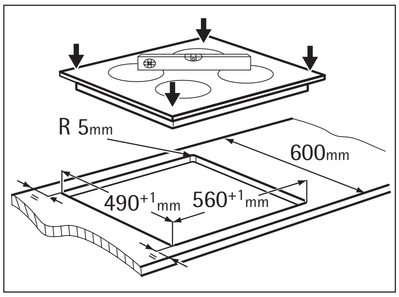
- Install correctly to give shock protection.
- Loose and incorrect plug and socket connections can make the terminal become too hot.
- A qualified electrician must install the connections in the clamps correctly.
- Use a strain relief clamp on cable.
- Use the correct mains cable of type H05BB-F Tmax 90°C (or higher) for a single phase or two phase connection.
- Replace the damaged mains cable with a special cable (type H05BB-F Tmax 90°C; or higher). Speak to your local Service Centre.

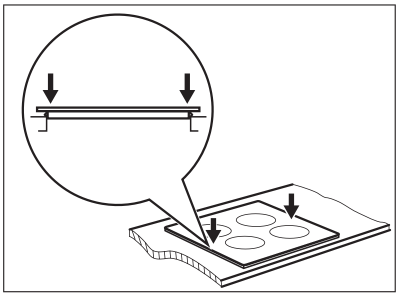
The appliance must have the electrical installation which lets you disconnect the appliance from the mains at all poles with a contact opening width of minimum 3 mm.

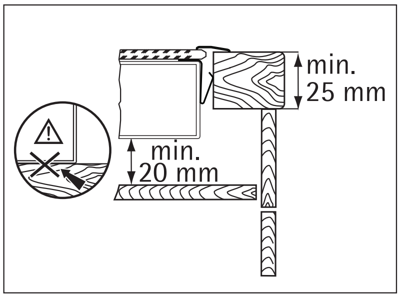
You must have correct devices to isolate: line protecting cut-outs, fuses (screw type fuses removed from the holder), earth leakage trips and contactors.

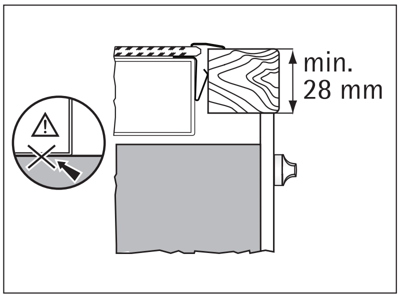
Assembly



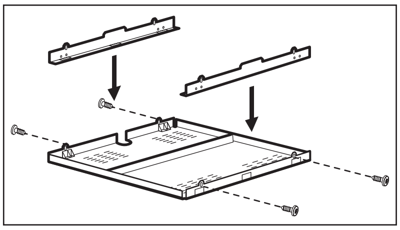






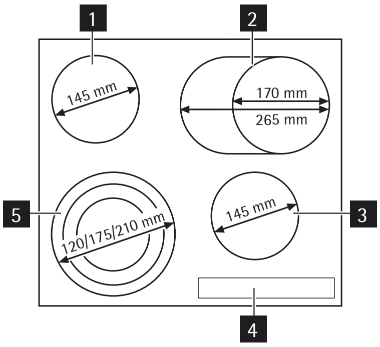


If you use a protection box (the additional accessory[1]), the protective floor directly below the appliance is not necessary.
You can not use the protection box if you install the appliance above an oven.



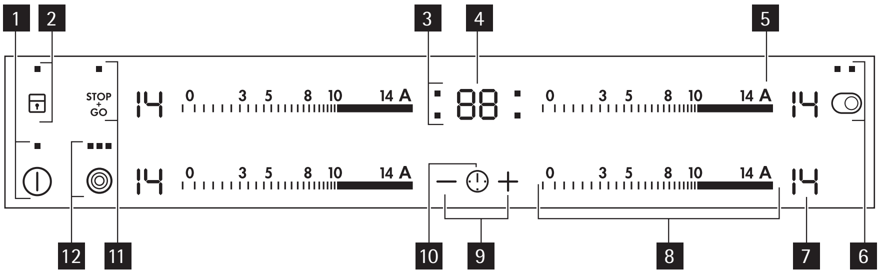
PRODUCT DESCRIPTION

General overview



1 Single cooking zone 1200 W
2 Oval zone 1500/2400 W
3 Single cooking zone 1200 W
4 Control panel
5 Triple cooking zone 800/1600/2300 W

Control panel layout



Use the sensor fields to operate the appliance. The displays, indicators and sounds tell which functions operate.

	sensor field	function
1	⏻	It activates and deactivates the appliance.
2	🔒	It locks/unlocks the control panel.
3	Cooking zones' indicators of timer	It shows for which zone you set the time.
4	The timer display	It shows the time in minutes.

---

1) The protection box accessory may not be available in some countries. Please contact your local supplier.

	sensor field	function
5	A	It activates Automatic Heat Up function.
6	◎	It activates and deactivates the outer ring.
7	A heat setting display	It shows the heat setting.
8	A control bar	To set the heat setting.
9	+ / —	It increases or decreases the time.
10	⏲	It sets the cooking zone.
11	STOP + GO	It activates and deactivates the STOP+GO function.
12	◎	It activates and deactivates the outer ring .

Heat setting displays

Display	Description
0	The cooking zone is deactivated.
1 - 14	The cooking zone operates.
u	The STOP + GO function operates.
A	The Automatic Heat Up function operates
E + digit	There is a malfunction.
≡ / = / _	OptiHeat Control (3 step Residual heat indicator) : continue cook / stay warm / residual heat.
L	Lock/The Child Safety function operates.
-	The Automatic Switch Of function operates.

OptiHeat Control (3 step Residual heat indicator)

⚠ **WARNING!**
≡ / = / _ The risk of burns from residual heat!

OptiHeat Control shows the level of the residual heat.

OPERATING INSTRUCTIONS

Activation and deactivation

Touch ⏻ for 1 second to activate or deactivate the appliance.

Automatic Switch Off

The function deactivates the appliance automatically if:

- All cooking zones are deactivated (0).
- You do not set the heat setting after you activate the appliance.

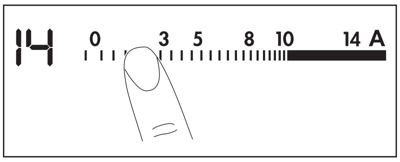
- You spill something or put something on the control panel for more than 10 seconds, (a pan, a cloth, etc.). The sound operates some time and the appliance deactivates. Remove the object or clean the control panel.
- You do not deactivate a cooking zone or change the heat setting. After some time, - comes on and the appliance deactivates. See the table.

The times of Automatic Switch Off

The heat setting	u , 1 - 3	4 - 7	8 - 9	10 - 14
The cooking zone deactivates after	6 hours	5 hours	4 hours	1.5 hours

The heat setting

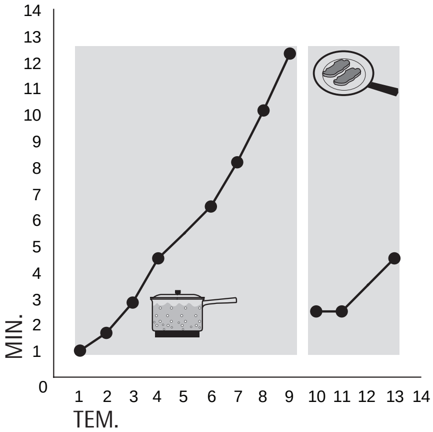
Touch the control bar at the heat setting. Change to the left or the right, if it is necessary. Do not release before you have a correct heat setting. The display shows the heat setting.



Activation and deactivation of the outer rings

You can adjust the surface you cook to the dimension of the cookware.
To activate the outer ring touch the sensor field ◎ / ◯ . The indicator comes on. For more outer rings touch the same sensor field again. The subsequent indicator comes on. Do the procedure again to deactivate the outer ring. The indicator goes out.

Automatic Heat Up



You can get a necessary heat setting in a shorter time if you activate the Automatic Heat Up function. This function sets the highest heat setting for some time (see the illustration), and then decreases to the necessary heat setting.
To start the Automatic Heat Up function for a cooking zone:

1. Touch A (A comes on in the display).

2. Immediately touch the necessary heat setting. After 3 seconds A comes on in the display.

To stop the function change the heat setting.

Timer

Count Down Timer

Use the Count Down Timer to set how long the cooking zone operates for only this one time.

Set the Count Down Timer after the selection of the cooking zone.

You can set the heat setting before or after you set the timer.

- **To set the cooking zone:** touch ⏲ again and again until the indicator of a necessary cooking zone comes on.
- **To activate the Count Down Timer:** touch + of the timer to set the time (00 - 99 minutes). When the indicator of the cooking zone start to flash slow, the time counts down.
- **To see the remaining time:** set the cooking zone with ⏲ . The indicator of the cooking zone starts to flash quickly. The display shows the remaining time.
- **To change the Count Down Timer:** set the cooking zone with ⏲ . Touch + or − .
- **To deactivate the timer:** set the cooking zone with ⏲ . Touch − . The remaining time counts back to 00 . The indicator of the cooking zone goes out. To deactivate you can also touch + and − at the same time.

When the countdown comes to an end, the sound operates and 00 flashes. The cooking zone deactivates.

- **To stop the sound:** touch ⏲

CountUp Timer (The count up timer)

Use the CountUp Timer to monitor how long the cooking zone operates.

- **To set the cooking zone (if more than 1 cooking zone operate) :** touch ⏲ again and again until the indicator of a necessary cooking zone comes on.
- **To activate the CountUp Timer:** touch − of the timer UP comes on. When the indicator of the cooking zone starts to flash slow, the time counts up. The display switches between UP and counted time (minutes).
- **To see how long the cooking zone operates:** set the cooking zone with ⏲ . The indicator of the cooking zone starts to flash quickly. The display shows the time that the cooking zone operates.
- **To deactivate the CountUp Timer:** set the cooking zone with ⏲ and touch + or − to deactivate the timer. The indicator of the cooking zone goes out.

Minute Minder

You can use the timer as a **Minute Minder** while the cooking zones do not operate. Touch ⏲ . Touch + or − of the timer to set the time. When the time comes to an end, the sound operates and 00 flashes.

- **To stop the sound:** touch ⏲

STOP+GO

The STOP+GO function sets all cooking zones that operate to the lowest heat setting (u).
When STOP+GO operates, you cannot change the heat setting.
The STOP+GO function does not stop the timer function.

- **To activate** this function touch STOP+GO . The symbol u comes on.
- **To deactivate** this function touch STOP+GO . The heat setting that you set before comes on.

Lock

When the cooking zones operate, you can lock the control panel, but not Ⓘ . It prevents an accidental change of the heat setting.
First set the heat setting.
To start this function touch ⊟ . The symbol L comes on for 4 seconds.
The Timer stays on.
To stop this function touch ⊟ . The heat setting that you set before comes on.
When you stop the appliance, you also stop this function.

The child safety device

This function prevents an accidental operation of the appliance.

To activate the child safety device

- Activate the appliance with Ⓘ . **Do not set the heat settings.**
- Touch ⊟ for 4 seconds. The symbol L comes on.
- Deactivate the appliance with Ⓘ .

To deactivate the child safety device

- Activate the appliance with Ⓘ . **Do not set the heat settings.** Touch ⊟ for 4 seconds. The symbol 0 comes on.
- Deactivate the appliance with Ⓘ .

To override the child safety device for only one cooking time

- Activate the appliance with Ⓘ . The symbol L comes on.
- Touch ⊟ for 4 seconds. **Set the heat setting in 10 seconds.** You can operate the appliance.
- When you deactivate the appliance with Ⓘ , the child safety device operates again.

OffSound Control (Deactivation and activation of the sounds)

Deactivation of the sounds

Deactivate the appliance.
Touch Ⓘ for 3 seconds. The displays come on and go out. Touch ⊟ for 3 seconds. b0 comes on, the sound is on. Touch + , b1 comes on, the sound is off.
When this function operates, you can hear the sounds only when:

- you touch Ⓘ
- the Minute Minder comes down
- the Count Down Timer comes down
- you put something on the control panel.

Activation of the sounds

Deactivate the appliance.
Touch ⏻ for 3 seconds. The displays come on and go out. Touch 🔒 for 3 seconds. b1 comes on, because the sound is off. Touch +, b0 comes on. The sound is on.

HELPFUL HINTS AND TIPS

Cookware

- The bottom of the cookware must be as thick and flat as possible.
- Cookware made of enamelled steel and with aluminium or copper bottoms can cause the color change on the glass-ceramic surface.

Energy saving

- If it is possible, always put the lids on the cookware.
- Put cookware on a cooking zone before you start it.
- Stop the cooking zones before the end of the cooking time to use residual heat.
- The bottom of pans and cooking zones must have the same dimension.

Öko Timer (Eco Timer)

To save the energy, the heater of the cooking zone deactivates before the count down timer signal. The difference in the operation time is depends of the heat setting level and the time you cook.

The examples of cooking applications

The data in the table is for guidance only.

Heat setting	Use to:	Time	Hints
⊔ 1	Keep cooked foods warm	as necessary	Put a lid on a cookware.
1-3	Hollandaise sauce, melt: butter, chocolate, gelatine	5-25 min	Mix from time to time.
1-3	Solidify: fluffy omelettes, baked eggs	10-40 min	Cook with a lid on.
3-5	Simmer rice and milkbased dishes, heating up ready-cooked meals	25-50 min	Add the minimum two times as much liquid as rice, mix milk dishes at some point of the procedure through.
5-7	Steam vegetables, fish, meat	20-45 min	Add some tablespoons of liquid.
7-9	Steam potatoes	20-60 min	Use max. ¼ l water for 750 g of potatoes.

Heat setting	Use to:	Time	Hints
7-9	Cook larger quantities of food, stews and soups	60-150 min	Up to 3 l liquid plus ingredients.
9-12	Gentle fry: escalope, veal cordon bleu, cutlets, rissoles, sausages, liver, roux, eggs, pancakes, doughnuts	as necessary	Turn halfway through.
12-13	Heavy fry, hash browns, loin steaks, steaks	5-15 min	Turn halfway through.
14	Boil large quantities of water, cook pasta, sear meat (goulash, pot roast), deep fry chips.		

Information on acrylamides

Important! According to the newest scientific knowledge, if you brown food (specially the one which contains starch), acrylamides can pose a health risk. Thus, we recommend that you cook at the lowest temperatures and do not brown food too much.

CARE AND CLEANING

Clean the appliance after each use.
Always use cookware with clean bottom.

WARNING!
The sharp objects and abrasive cleaning agents can cause damage to the appliance.
For your safety, do **not** clean the appliance with steam cleaners or high-pressure cleaners.

Scratches or dark stains on the glass-ceramic cause no effect on how the appliance operates.

To remove the dirt:

1. - **Remove immediately:** melted plastic, plastic foil, and food with sugar. If not, the dirt can cause damage to the appliance. Use a special scraper for the glass . Put the scraper on the glass surface at an acute angle and move the blade on the surface .
   - **Remove after the appliance is sufficiently cool:** limescale rings , water rings, fat stains, shiny metallic discolorations. Use a special cleaning agent for glass ceramic or stainless steel.
2. Clean the appliance with a moist cloth and some detergent.
3. At the end **rub the appliance dry with a clean cloth.**

WHAT TO DO IF...

Problem	Possible cause and remedy
You cannot activate the appliance or operate it.	• Activate the appliance again and set the heat setting in 10 seconds. • You touched 2 or more sensor fields at the same time. Only touch one sensor field. • The Child Safety Device or the Lock or Stop+Go operates. See the chapter Operating instructions. • There is water or fat stains on the control panel. Clean the control panel.
A Sound operates and the appliance deactivates. A sound operates when the appliance is deactivated.	You put something on one or more sensor fields. Remove the object from the sensor fields.
The appliance deactivates.	You put something on the ⏻ . Remove the object from the sensor field.
The residual heat indicator does not comes on.	The cooking zone is not hot because it operated only for a short time. If the cooking zone should be hot, speak to the service centre.
The Automatic Heat Up function does not operate.	• There is still residual heat on the cooking zone. Let the cooking zone become sufficiently cool. • The highest heat setting is set. The highest heat setting has the same power as the Automatic Heat Up function.
You cannot activate the outer ring.	Activate the inner ring first.
The sensor fields become hot.	The cookware is too large or you out it too near to the controls. Put large cookware on the rear cooking zones if it is necessary.
There is no signal when you touch the panel sensor fields.	The signals are deactivated. Activate the signals (see OffSound Control).
⊟ comes on	The Automatic Switch Off operates. Deactivate the appliance and activate it again.
E and number comes on.	There is an error in the appliance. Disconnect the appliance from the electrical supply for some time. Disconnect the fuse from the electrical system of the house. Connect again. If E comes on again, speak to the service centre.

If you tried the above solutions and cannot repair the problem, speak to your dealer or the customer service. Give the data from the rating plate, three digit letter code for the glass ceramic (it is in the corner of the glass surface) and an error message that comes on.
Make sure, you operated the appliance correctly. If not the servicing by a customer service technician or dealer will not be free of charge, also during the warranty period. The instructions about the customer service and conditions of guarantee are in the guarantee booklet.

ENVIRONMENT CONCERNS

The symbol on the product or on its packaging indicates that this product may not be treated as household waste. Instead it should be taken to the appropriate 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 council, your household waste disposal service or the shop where you purchased the product.

Packaging material

The packaging materials are friendly to the environment and can be recycled. The plastic components are identified by marking: >PE<,>PS<, etc. Discard the packaging materials as household waste at the waste disposal facilities in your municipality.

AEG Warranty

FOR SALES IN AUSTRALIA AND NEW ZEALAND
ALL AEG BRANDED APPLIANCES

This document sets out the terms and conditions of the product warranties for AEG Appliances. It is an important document. Please keep it with your proof of purchase documents in a safe place for future reference should you require service for your Appliance.

1. In this warranty
   (a) 'acceptable quality' as referred to in clause 10 of this warranty has the same meaning referred to in the ACL;
   (b) 'ACL' means Trade Practices Amendment (Australian Consumer Law) Act (No.2) 2010;
   (c) 'Appliance' means any AEG product purchased by you accompanied by this document;
   (d) 'ASC' means AEG' authorised serviced centres;
   (e) AEG is the brand controlled by Electrolux Home Products Pty Ltd of 163 O'Riordan Street, Mascot, NSW 2020, ABN 51 004 762 341 in respect of Appliances purchased in Australia and Electrolux (NZ) Limited of 3-5 Niall Burgess Road, Mount Wellington, in respect of Appliances purchased in New Zealand;
   (f) 'major failure' as referred to in clause 10 of this warranty has the same meaning referred to in the ACL and includes a situation when an Appliance cannot be repaired or it is uneconomic for Electrolux, at its discretion, to repair an Appliance during the Warranty Period;
   (g) 'Warranty Period' means:
      (i) where the Appliance is used for personal, domestic or household use (i.e. normal single family use) as set out in the instruction manual, the Appliance is warranted against manufacturing defects in Australia and New Zealand for 60 months, following the date of original purchase of the Appliance;
      (ii) this Appliance is not designed for commercial use and therefore no warranty applies in this case;
   (h) 'you' means the purchaser of the Appliance not having purchased the Appliance for re-sale, and 'your' has a corresponding meaning.
2. This warranty only applies to Appliances purchased and used in Australia or New Zealand and is in addition to (and does not exclude, restrict, or modify in any way) any non-excludable statutory warranties in Australia or New Zealand.
3. During the Warranty Period AEG or its ASC will, at no extra charge if your Appliance is readily accessible for service, without special equipment and subject to these terms and conditions, repair or replace any parts which it considers to be defective. AEG or its ASC may use remanufactured parts to repair your Appliance. You agree that any replaced Appliances or parts become the property of AEG. This warranty does not apply to light globes, batteries, filters or similar perishable parts.
4. Parts and Appliances not supplied by AEG are not covered by this warranty.
5. You will bear the cost of transportation, travel and delivery of the Appliance to and from AEG or its ASC. If you reside outside of the service area, you will bear the cost of:
   (a) travel of an authorised representative;
   (b) transportation and delivery of the Appliance to and from AEG or its ASC,

   In all instances, unless the Appliance is transported by AEG or an AEG authorised representative, the Appliance is transported at the owner's cost and risk while in transit to and from AEG or its ASC.
6. Proof of purchase is required before you can make a claim under this warranty.
7. You may not make a claim under this warranty unless the defect claimed is due to faulty or defective parts or workmanship. AEG is not liable in the following situations (which are not exhaustive):
   (a) the Appliance is damaged by:
      (i) accident
      (ii) misuse or abuse, including failure to properly maintain or service
      (iii) normal wear and tear

        - (iv) power surges, electrical storm damage or incorrect power supply
        - (v) incomplete or improper installation
        - (vi) incorrect, improper or inappropriate operation
        - (vii) insect or vermin infestation
        - (viii) failure to comply with any additional instructions supplied with the Appliance;
    - (b) the Appliance is modified without authority from AEG in writing;
    - (c) the Appliance's serial number or warranty seal has been removed or defaced;
    - (d) the Appliance was serviced or repaired by anyone other than AEG, an authorised repairer or ASC.
8. This warranty, the contract to which it relates and the relationship between you and AEG are governed by the law applicable where the Appliance was purchased. Where the Appliance was purchased in New Zealand for business purposes the Consumer Guarantee Act does not apply.
9. To the extent permitted by law, AEG excludes all warranties and liabilities (other than as contained in this document) including liability for any loss or damage whether direct or indirect arising from your purchase, use or non use of the Appliance.
10. For Appliances and services provided by AEG in Australia, the Appliances come with a guarantee by AEG that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the Appliance repaired or replaced if the Appliance fails to be of acceptable quality and the failure does not amount to a major failure. The benefits to you given by this warranty are in addition to your other rights and remedies under a law in relation to the Appliances or services to which the warranty relates.
11. At all times during the Warranty Period, AEG shall, at its discretion, determine whether repair, replacement or refund will apply if an Appliance has a valid warranty claim applicable to it.
12. For Appliances and services provided by AEG in New Zealand, the Appliances come with a guarantee by AEG pursuant to the provisions of the Consumer Guarantees Act, the Sale of Goods Act and the Fair Trading Act.
13. To enquire about claiming under this warranty, please follow these steps:
    - (a) carefully check the operating instructions, user manual and the terms of this warranty;
    - (b) have the model and serial number of the Appliance available;
    - (c) have the proof of purchase (eg an invoice) available;
    - (d) telephone the numbers shown below.
14. You accept that if you make a warranty claim, AEG and its ASC may exchange information in relation to you to enable AEG to meet its obligations under this warranty.

Important Notice
Before calling for service, please ensure that the steps listed in point 13 above have been followed.

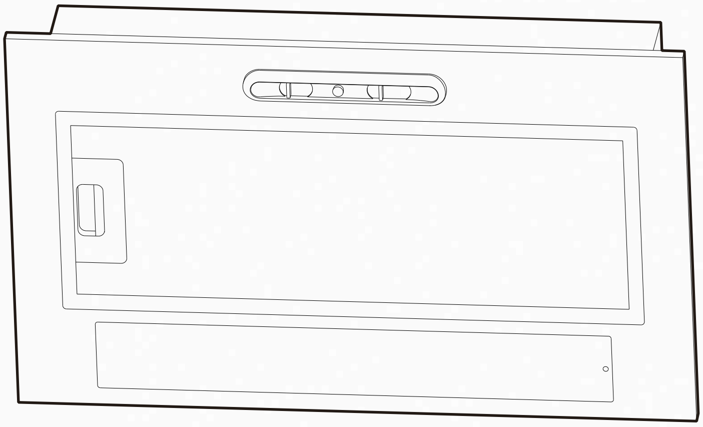
FOR SERVICE or to find the address of your nearest state service centre in Australia **PLEASE CALL 1300 363 664** **OR EMAIL** customercare@aegaustralia.com.au For the cost of a local call (Australia only)	**SERVICE AUSTRALIA** AEG www.aeg.com/au	**FOR SPARE PARTS** or to find the address of your nearest state spare parts centre in Australia **PLEASE CALL 13 13 50** **OR EMAIL** customercare@aegaustralia.com.au For the cost of a local call (Australia only)

FOR SERVICE or to find the address of your nearest authorised service centre in New Zealand **FREE CALL 0800 10 66 10** **OR EMAIL** customercare@electrolux.co.nz (New Zealand only)	**SERVICE NEW ZEALAND** AEG	**FOR SPARE PARTS** or to find the address of your nearest state spare parts centre in New Zealand **FREE CALL 0800 10 66 20** **OR EMAIL** customercare@electrolux.co.nz (New Zealand only)

AEG_Warr_Jul11

Westinghouse

INSTALLATION & USER MANUAL



INTEGRATED RANGEHOOD

WRI500SB, WRI700SB

WELCOME TO WESTINGHOUSE

Thank you for purchasing an Westinghouse appliance. You've chosen a product that brings with it decades of professional experience and innovation. Ingenious and stylish, it has been designed with you in mind. So whenever you use it, you can be safe in the knowledge that you'll get great results every time.

Welcome to Westinghouse.

LEGEND

The symbols you will see in this booklet have these meanings:

⚠ **WARNING!**
This symbol indicates information concerning your personal safety

⚠ **CAUTION!**
This symbol indicates information on how to avoid damaging the rangehood

ℹ **IMPORTANT!**
This symbol indicates tips and information about use of the rangehood

ENVIRONMENT!
This symbol indicates tips and information about economical and ecological use of the rangehood

CONDITIONS OF USE

This appliance is intended to be used in household and similar applications such as:

- Staff kitchen areas in shops, offices and other working environments
- Farm houses
- By clients in hotels, motels and other residential type environments
- Bed and breakfast type environments.
- Catering and similar non-retail applications

CONTENTS

RECORD MODEL AND SERIAL NUMBER HERE:

Model: ______________________

Serial No: ______________________

IMPORTANT INFORMATION THAT MAY IMPACT YOUR MANUFACTURER'S WARRANTY

Adherence to the directions for use in this manual is extremely important for health and safety. Failure to strictly adhere to the requirements in this manual may result in personal injury, property damage and affect your ability to make a claim under the Electrolux manufacturer's warranty provided with your product. Products must be used, installed and operated in accordance with this manual. You may not be able to claim on the Electrolux manufacturer's warranty in the event that your product fault is due to failure to adhere this manual.

SAFETY INSTRUCTIONS

Please read this manual carefully prior to installing and using the rangehood in order to avoid damage or injury. The manufacturer will not accept liability for damage caused from not following these instructions. If you need assistance contact Customer Care. Please keep the manual for future reference and pass it on to any new owners of the appliance.

ENVIRONMENT!

Remove and discard any packaging material before using this accessory. Most of the packaging materials are recyclable. Please dispose of those materials through your local recycling depot or by placing them in the appropriate collection containers.

⚠ **WARNING!**

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
  Children should be supervised to ensure that they do not play with the appliance.
- Ensure the rangehood is switched off before carrying out maintenance, to avoid any possibility of electric shock.
- Grease filters must be removed every four weeks (maximum) for cleaning to reduce the risk of fire.
- Do not flambe or have an exposed flame under the rangehood.
- This rangehood is not recommended for barbecues.
- The exhaust air from the rangehood must not be discharged into any heating flue, which may carry combustion products from other sources.
- Exhaust air must not be discharged into a wall cavity, unless the cavity is designed for the purpose.
- There must be adequate ventilation of the room when the rangehood is used at the same time as appliances burning gas or other fuels.
- Always cover lit gas burners with pots or pans when the rangehood is in use.
- Always switch off gas burners before you remove pots or pans.

⚠ **CAUTION**

- Accessible parts may become hot when used with cooking appliance.
- Regulations concerning the discharge of air have to be fulfilled.
- Failure to install the screws or fixing device in accordance with these instructions may result in electrical hazards.
- In order to avoid a hazard due to inadvertent resetting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

Cleaning

- Wipe the rangehood body and flue with a sponge or soft cloth soaked in warm soapy water, and dry with a soft cloth, for stainless steel models apply a stainless steel protector. Do not use oven cleaners or other abrasive materials.
- There is a fire risk if cleaning is not carried out in accordance with the instructions.

Electrical Connection

- Check that the mains voltage matches with the voltage on the data plate inside the rangehood.
- Check that the installation complies with standards of local gas and electricity authorities.
- If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- This appliance has a 1.2m power cord and 10A plug, ensure that the plug is accessible after installation.

Accessories

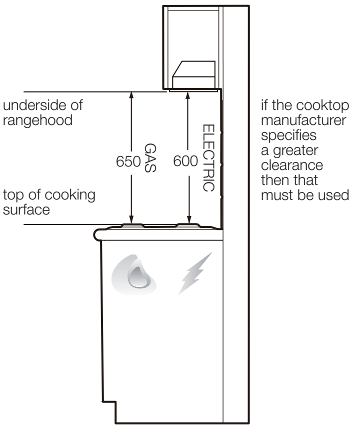
- Use 120mm round exhaust ducting for best performance.
- When using flexible duct always install duct with the wire helix pulled taut to minimise pressure loss.
- Try to keep exhaust duct short and straight.
- Keep bends in the exhaust duct to a minimum.
- Do not restrict exhaust duct.
- Reducing the size of the exhaust duct will reduce the airflow of the rangehood. Please read instructions carefully. Service calls resulting from incorrect installation will be charged for.

Installation must comply in all respects with your gas and electrical authorities. This rangehood is an indoor domestic appliance, and has been manufactured and tested to comply with Australian and New Zealand Standard AS/NZS 60335.2.31

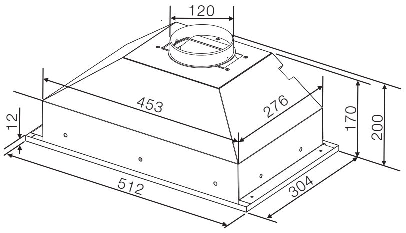
INSTALLATION

Standard ducting installation

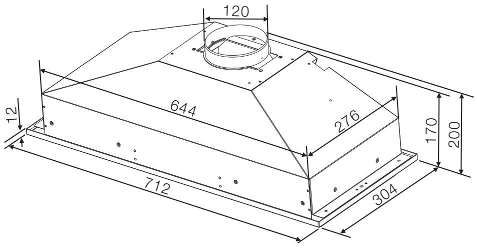
It is recommended that the unit be positioned at a minimum of 600mm for an electric cooktop and 650mm for a gas cooktop, and no further from the cooktop than 800mm. The unit becomes less effective as the distance from the cooking surface to the rangehood increase.


underside of rangehood
650
GAS
600
ELECTRIC
top of cooking surface
if the cooktop manufacturer specifies a greater clearance then that must be used

Fixing point dimensions – WRI500SB



Fixing point dimensions – WRI700SB



⚠ WARNING!

Failure to install the screws or fixing device in accordance with these instructions may result in electrical hazards.

Parts supplied with hood

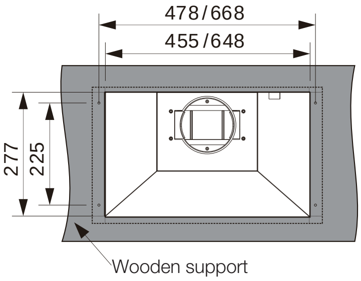
1 x Ø 120mm air outlet
4 x self tapping screws 3.5 x 12mm
4 x self tapping screws 4 x 32mm
2 x air intake grilles

Parts to be purchased

- Aluminium tape or cable ties to secure flue pipe
- Ducting accessories

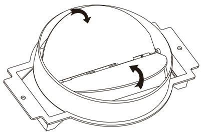
Cutting the wooden support

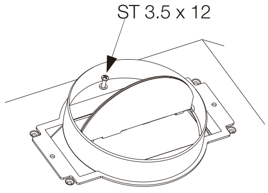
Cut the slot in the wooden support as pictured below



Fixing the air outlet

Flip the non-return valves and fix them with tape or clamp temporarily. Use screws to fix the air outlet to the rangehood then release the non-return valves.

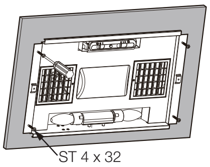




INSTALLATION

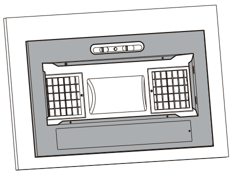
Fixing the rangehood

Use screw to fasten the rangehood to the wood support from botton side.



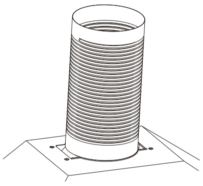
Fixing the front panel and filter

Replace the front cover by replacing the 4x screws, then refit the filters.
-Note:The Edision Screw lamps may have come loose during transportation. Ensure that lamps are tighted firmly into the socket before fixing the front panel.



Fixing the flue pipe

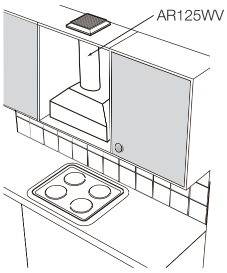
Fix a Ø 120mm, non-combustible, rigid flue pipe to the exhaust transition duct using cable ties or duct tape.



IMPORTANT!
If using a flexible duct, always install duct with the wire helix pulled taut to minimise pressure and noise.

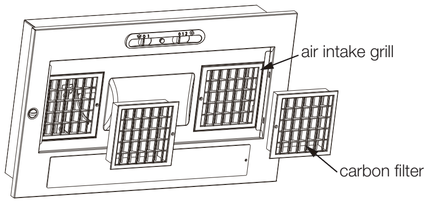
Recirculating installation

If recirculating installation is used, carbon filters are recommended.



Installing carbon filters

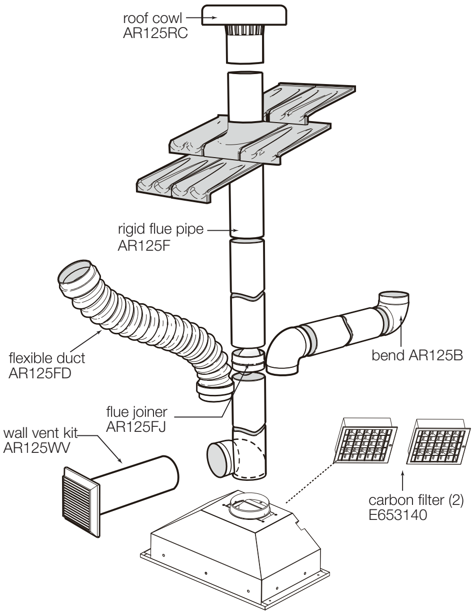
Replace the air intake grills with carbon filters.



Optional carbon filters diminish cooking odours in the recirculated air. Depending on the frequency of use and the type of cooking, the expected life of carbon filters is 3 months. Using carbon filters will reduce the airflow of the angehood.

Ducting accessories - WRI500SB, WRI700SB

For best performance Ø 120mm ducting is recommended



Accessories can be bought from your local appliance retailer, or in Australia at our online spare parts and accessories store: shop.electrolux.com.au

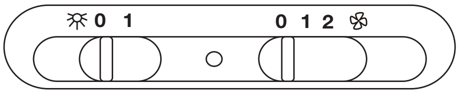
OPERATION & MAINTENANCE

IMPORTANT!

The Edison Screw lamps may have come loose during transportation.

Ensure that lamps are tightened firmly into the socket before power is applied.

Best result are obtained by using a low speed for normal conditons and a high speed when odours are more concentrated. Turn the hood on a few minutes before you start cooking. It should be left on after cooking for about 15 minutes or untill all odours have disappeared.



Light switch:	This switch is used to turn the light fitted in the hood on and off.
Extractor fan switch:	Used to select fan speeds.
Slide position 0:	Fan off
Slide position 1:	Fan speed Low.
Slide position 2:	Fan speed High.

Maintenance

WARNING!

- **Before maintenance or cleaning is carried out, the rangehood should be disconnected from the main power supply. Ensure that the rangehood is switched off at the wall socket and the plug removed.**
- **External surfaces are susceptible to scratches and abrasions, so please follow the cleaning instructions to ensure the best possible result is achieved without damage.**
- **There is a fire risk if cleaning is not carried out in accordance with the instructions.**
- **Do not change the light bulb or carry out maintance immediately after use as the bulb and the cooker hood maybe hot. Allow it to cool first.**
- **Use both hands for removing and re-fitting the filter and the front panel to avoid accidentally dropping the filter or the front panel on to your cooktop or kitchen bench.**
- **Take care of sharp edges during installation, maintenance and cleaning. When the filters, light cover or fascia panel are removed, wear gloves for protection.**

Cleaning steel surface

Clean stainless steel surfaces using non-abrasive cleaning products that are specifically for use on stainless steel.

To ensure best results also use an even pressure and follow the grain of the stainless steel. Use of a soft cloth reduces the risk of scratching. If the cloth is wet ensure that a dry soft cloth is used to wipe down the surface again reducing the risk of any surface rust appearing.

Cleaning grease filters

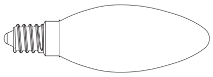
The mesh filters can be cleaned by hand in warm soapy water. Soak in warm water and some washing up liquid. For stubborn grease stains use a soft nylon brush to help remove these stains. After cleaning ensure that the filters are completely dry before refitting.

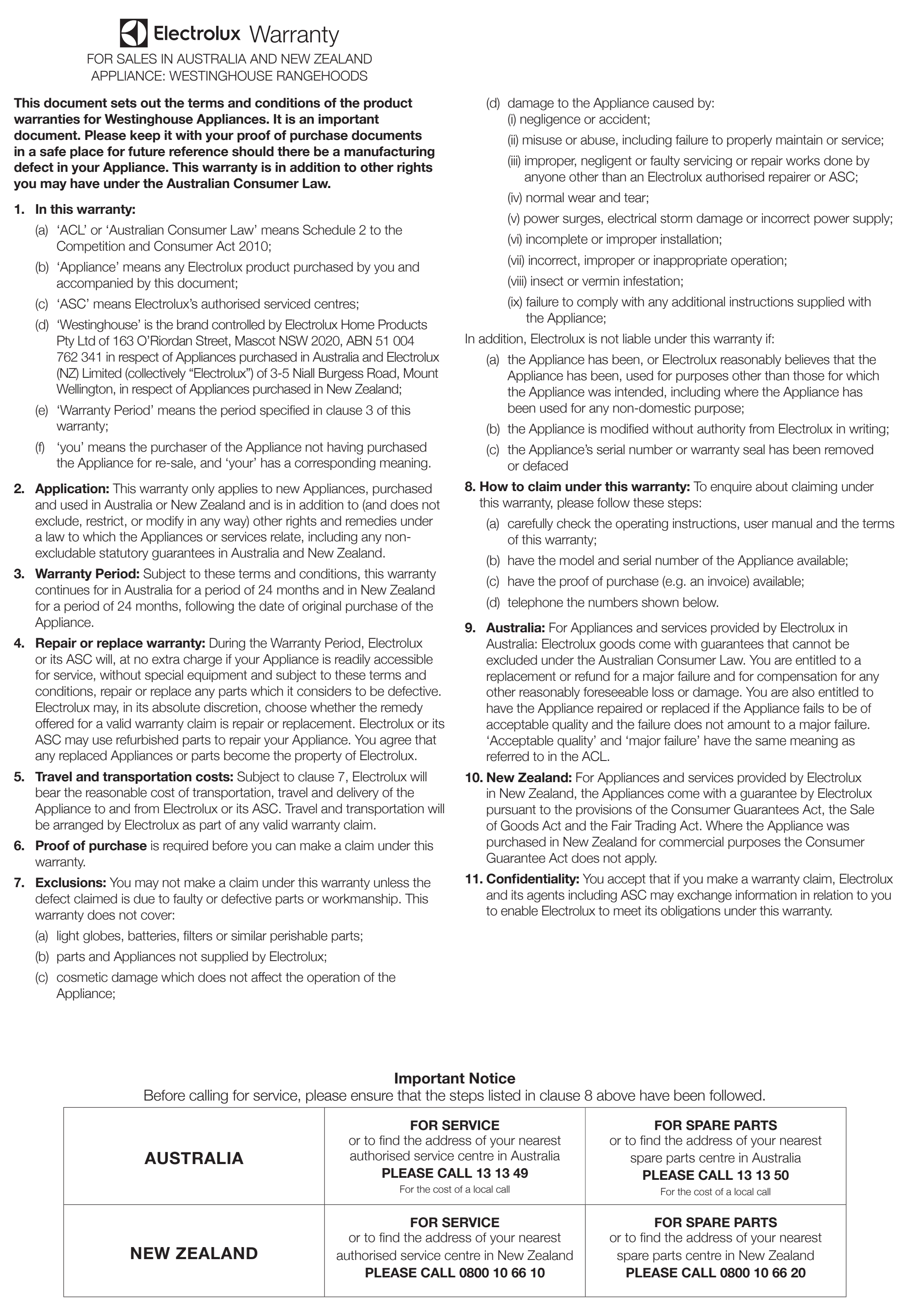
Replacing the lamp

1. Remove the filter, then unfasten the front panel fixing screws then remove the front panel.
2. Replace with 5.5W maximum E14 LED candle lamp. The lamp assembly includes a sillicone seal, this must be replaced when a new lamp is used. The silicone seal is placed over the lamp thread and then the lamp is screwed into the holder. Ensure replacement lamp is tightened firmly. Replacement lamps from Electrolux Parts Centres are supplied with sillicone seals.

Suitable lamp for replacement

E14 5.5W LED -> DBL-5.5-H-E14-35/102





Electrolux Warranty

FOR SALES IN AUSTRALIA AND NEW ZEALAND
APPLIANCE: WESTINGHOUSE RANGEHOODS

This document sets out the terms and conditions of the product warranties for Westinghouse Appliances. It is an important document. Please keep it with your proof of purchase documents in a safe place for future reference should there be a manufacturing defect in your Appliance. This warranty is in addition to other rights you may have under the Australian Consumer Law.

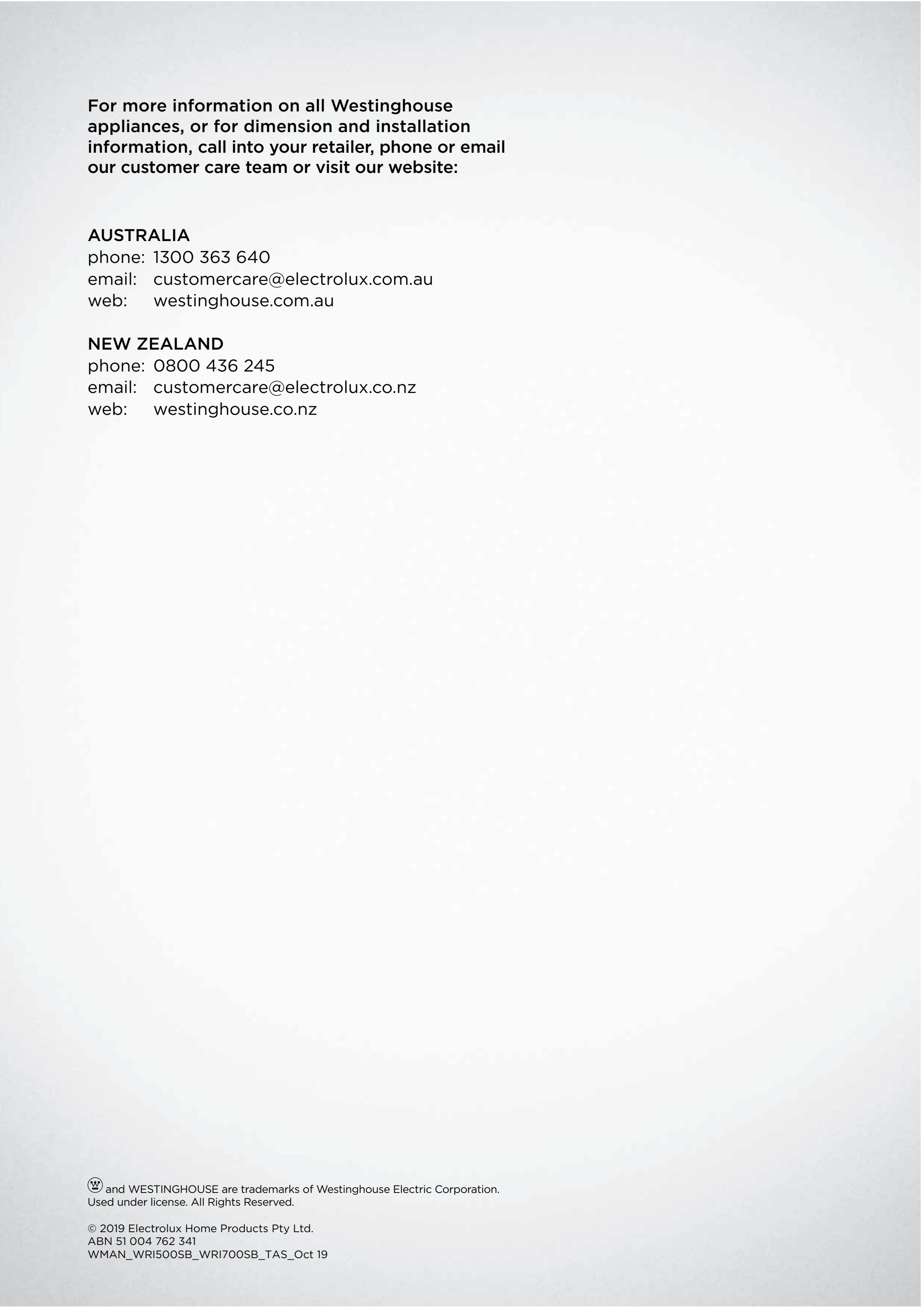
1. **In this warranty:**
   (a) 'ACL' or 'Australian Consumer Law' means Schedule 2 to the Competition and Consumer Act 2010;
   (b) 'Appliance' means any Electrolux product purchased by you and accompanied by this document;
   (c) 'ASC' means Electrolux's authorised serviced centres;
   (d) 'Westinghouse' is the brand controlled by Electrolux Home Products Pty Ltd of 163 O'Riordan Street, Mascot NSW 2020, ABN 51 004 762 341 in respect of Appliances purchased in Australia and Electrolux (NZ) Limited (collectively "Electrolux") of 3-5 Niall Burgess Road, Mount Wellington, in respect of Appliances purchased in New Zealand;
   (e) 'Warranty Period' means the period specified in clause 3 of this warranty;
   (f) 'you' means the purchaser of the Appliance not having purchased the Appliance for re-sale, and 'your' has a corresponding meaning.
2. **Application:** This warranty only applies to new Appliances, purchased and used in Australia or New Zealand and is in addition to (and does not exclude, restrict, or modify in any way) other rights and remedies under a law to which the Appliances or services relate, including any non-excludable statutory guarantees in Australia and New Zealand.
3. **Warranty Period:** Subject to these terms and conditions, this warranty continues for in Australia for a period of 24 months and in New Zealand for a period of 24 months, following the date of original purchase of the Appliance.
4. **Repair or replace warranty:** During the Warranty Period, Electrolux or its ASC will, at no extra charge if your Appliance is readily accessible for service, without special equipment and subject to these terms and conditions, repair or replace any parts which it considers to be defective. Electrolux may, in its absolute discretion, choose whether the remedy offered for a valid warranty claim is repair or replacement. Electrolux or its ASC may use refurbished parts to repair your Appliance. You agree that any replaced Appliances or parts become the property of Electrolux.
5. **Travel and transportation costs:** Subject to clause 7, Electrolux will bear the reasonable cost of transportation, travel and delivery of the Appliance to and from Electrolux or its ASC. Travel and transportation will be arranged by Electrolux as part of any valid warranty claim.
6. **Proof of purchase** is required before you can make a claim under this warranty.
7. **Exclusions:** You may not make a claim under this warranty unless the defect claimed is due to faulty or defective parts or workmanship. This warranty does not cover:
   (a) light globes, batteries, filters or similar perishable parts;
   (b) parts and Appliances not supplied by Electrolux;
   (c) cosmetic damage which does not affect the operation of the Appliance;
   (d) damage to the Appliance caused by:
      (i) negligence or accident;
      (ii) misuse or abuse, including failure to properly maintain or service;
      (iii) improper, negligent or faulty servicing or repair works done by anyone other than an Electrolux authorised repairer or ASC;
      (iv) normal wear and tear;
      (v) power surges, electrical storm damage or incorrect power supply;
      (vi) incomplete or improper installation;
      (vii) incorrect, improper or inappropriate operation;
      (viii) insect or vermin infestation;
      (ix) failure to comply with any additional instructions supplied with the Appliance;

   In addition, Electrolux is not liable under this warranty if:
   (a) the Appliance has been, or Electrolux reasonably believes that the Appliance has been, used for purposes other than those for which the Appliance was intended, including where the Appliance has been used for any non-domestic purpose;
   (b) the Appliance is modified without authority from Electrolux in writing;
   (c) the Appliance's serial number or warranty seal has been removed or defaced
8. **How to claim under this warranty:** To enquire about claiming under this warranty, please follow these steps:
   (a) carefully check the operating instructions, user manual and the terms of this warranty;
   (b) have the model and serial number of the Appliance available;
   (c) have the proof of purchase (e.g. an invoice) available;
   (d) telephone the numbers shown below.
9. **Australia:** For Appliances and services provided by Electrolux in Australia: Electrolux goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the Appliance repaired or replaced if the Appliance fails to be of acceptable quality and the failure does not amount to a major failure. 'Acceptable quality' and 'major failure' have the same meaning as referred to in the ACL.
10. **New Zealand:** For Appliances and services provided by Electrolux in New Zealand, the Appliances come with a guarantee by Electrolux pursuant to the provisions of the Consumer Guarantees Act, the Sale of Goods Act and the Fair Trading Act. Where the Appliance was purchased in New Zealand for commercial purposes the Consumer Guarantee Act does not apply.
11. **Confidentiality:** You accept that if you make a warranty claim, Electrolux and its agents including ASC may exchange information in relation to you to enable Electrolux to meet its obligations under this warranty.

Important Notice

Before calling for service, please ensure that the steps listed in clause 8 above have been followed.

AUSTRALIA	**FOR SERVICE** or to find the address of your nearest authorised service centre in Australia **PLEASE CALL 13 13 49** For the cost of a local call	**FOR SPARE PARTS** or to find the address of your nearest spare parts centre in Australia **PLEASE CALL 13 13 50** For the cost of a local call
NEW ZEALAND	**FOR SERVICE** or to find the address of your nearest authorised service centre in New Zealand **PLEASE CALL 0800 10 66 10**	**FOR SPARE PARTS** or to find the address of your nearest spare parts centre in New Zealand **PLEASE CALL 0800 10 66 20**



For more information on all Westinghouse appliances, or for dimension and installation information, call into your retailer, phone or email our customer care team or visit our website:

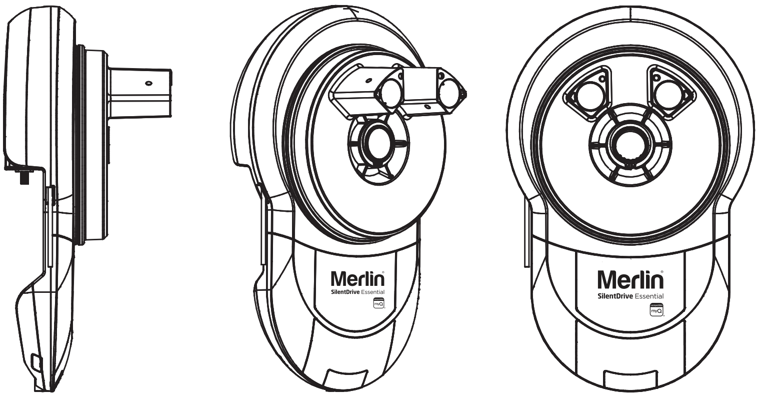
AUSTRALIA
phone: 1300 363 640
email: customercare@electrolux.com.au
web: westinghouse.com.au

NEW ZEALAND
phone: 0800 436 245
email: customercare@electrolux.co.nz
web: westinghouse.co.nz

ABN 51 004 762 341
WMAN_WRI500SB_WRI700SB_TAS_Oct 19

Merlin®

gomerlin.com.au
gomerlin.co.nz



compatible myQ®

SilentDrive Essential

MR655MYQ

Garage Roller Door Opener

Installation and Operating Instructions

Owners Copy: Please keep these instructions for future reference

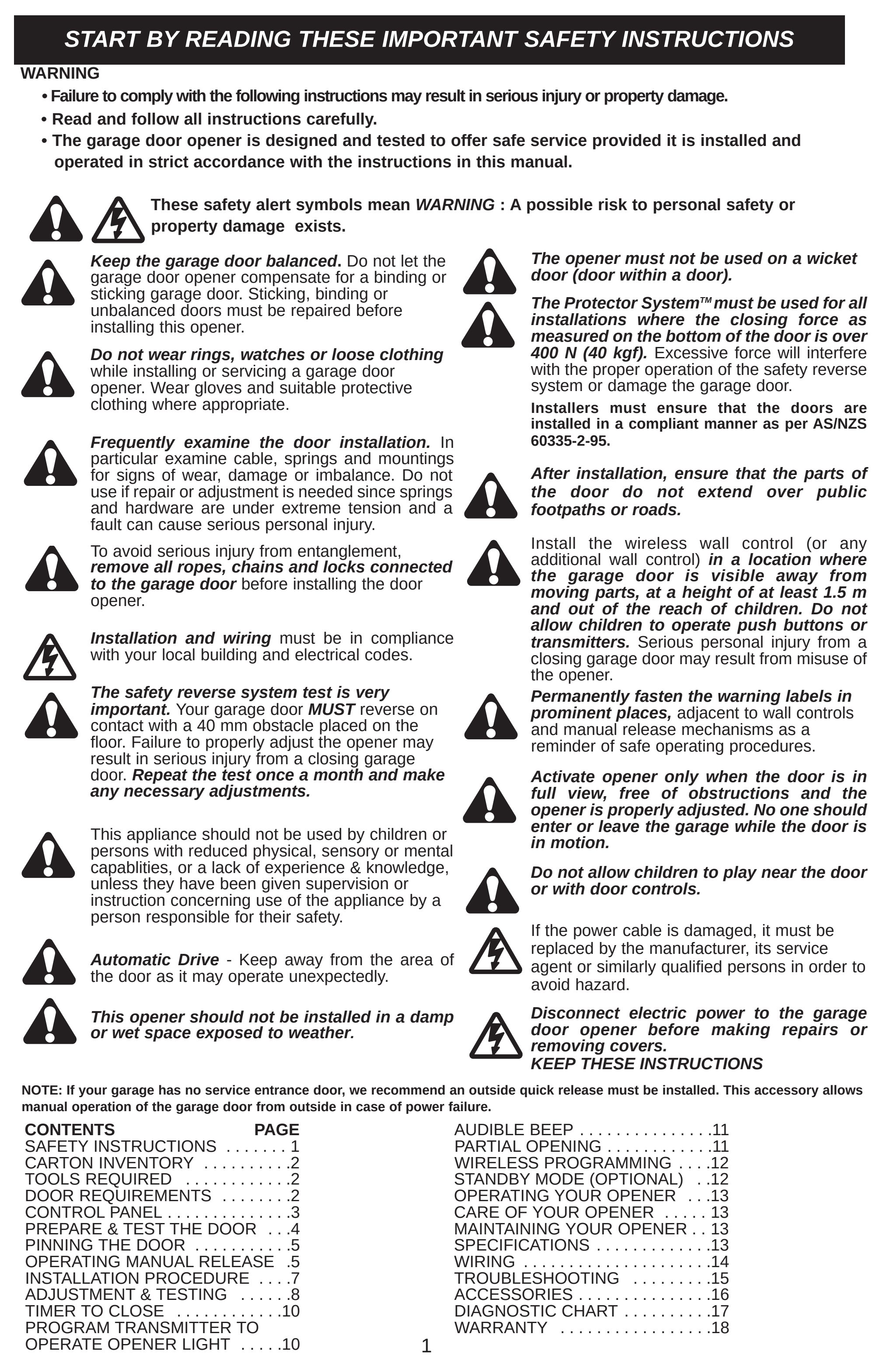
This manual contains IMPORTANT SAFETY information
DO NOT PROCEED WITH THE INSTALLATION UNTIL READING THE INSTRUCTIONS THOROUGHLY

Warranty Registration

To validate your warranty you must complete the registration form online at:

gomerlin.com.au/warranty
or
gomerlin.co.nz/warranty

Merlin®
Powering Garage Doors



START BY READING THESE IMPORTANT SAFETY INSTRUCTIONS

WARNING

- **Failure to comply with the following instructions may result in serious injury or property damage.**
- **Read and follow all instructions carefully.**
- **The garage door opener is designed and tested to offer safe service provided it is installed and operated in strict accordance with the instructions in this manual.**

These safety alert symbols mean *WARNING* : A possible risk to personal safety or property damage exists.

Keep the garage door balanced. Do not let the garage door opener compensate for a binding or sticking garage door. Sticking, binding or unbalanced doors must be repaired before installing this opener.

Do not wear rings, watches or loose clothing while installing or servicing a garage door opener. Wear gloves and suitable protective clothing where appropriate.

Frequently examine the door installation. In particular examine cable, springs and mountings for signs of wear, damage or imbalance. Do not use if repair or adjustment is needed since springs and hardware are under extreme tension and a fault can cause serious personal injury.

To avoid serious injury from entanglement, ***remove all ropes, chains and locks connected to the garage door*** before installing the door opener.

Installation and wiring must be in compliance with your local building and electrical codes.

The safety reverse system test is very important. Your garage door ***MUST*** reverse on contact with a 40 mm obstacle placed on the floor. Failure to properly adjust the opener may result in serious injury from a closing garage door. ***Repeat the test once a month and make any necessary adjustments.***

This appliance should not be used by children or persons with reduced physical, sensory or mental capablities, or a lack of experience & knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Automatic Drive - Keep away from the area of the door as it may operate unexpectedly.

This opener should not be installed in a damp or wet space exposed to weather.

The opener must not be used on a wicket door (door within a door).

The Protector System™ must be used for all installations where the closing force as measured on the bottom of the door is over 400 N (40 kgf). Excessive force will interfere with the proper operation of the safety reverse system or damage the garage door.

Installers must ensure that the doors are installed in a compliant manner as per AS/NZS 60335-2-95.

After installation, ensure that the parts of the door do not extend over public footpaths or roads.

Install the wireless wall control (or any additional wall control) ***in a location where the garage door is visible away from moving parts, at a height of at least 1.5 m and out of the reach of children. Do not allow children to operate push buttons or transmitters.*** Serious personal injury from a closing garage door may result from misuse of the opener.

Permanently fasten the warning labels in prominent places, adjacent to wall controls and manual release mechanisms as a reminder of safe operating procedures.

Activate opener only when the door is in full view, free of obstructions and the opener is properly adjusted. No one should enter or leave the garage while the door is in motion.

Do not allow children to play near the door or with door controls.

If the power cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid hazard.

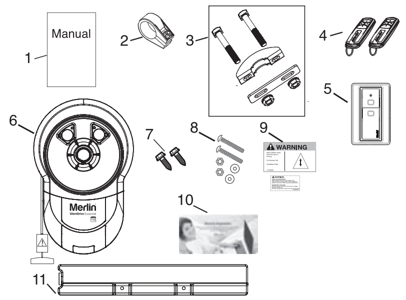
Disconnect electric power to the garage door opener before making repairs or removing covers.
KEEP THESE INSTRUCTIONS

NOTE: If your garage has no service entrance door, we recommend an outside quick release must be installed. This accessory allows manual operation of the garage door from outside in case of power failure.

CONTENTS **PAGE**

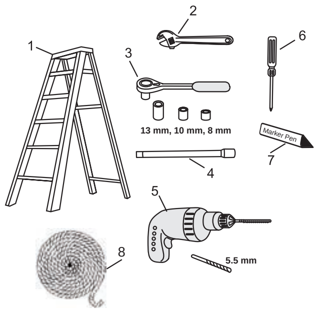
1 CARTON INVENTORY

1. Instruction manual (this document)
2. Stop collar
3. Clamp bracket, plates, washers (2) and nuts (2)
4. E960M Premium transmitter (2)
5. E138M wireless wall button (1)
6. Opener
7. Self tapping screws (2) (for pinning the door)
8. Weight bar screws (2), washers (2) and nuts (2)
9. Warning label and risk of entrapment label
10. Warranty registration card
11. Weight bar



2 TOOLS REQUIRED

1. Ladder
2. Adjustable wrench for U-bolts already installed on the door
3. 8 mm socket, 10 mm socket and 13 mm extended socket and socket wrench
4. 300 mm socket extension (for minimum side-room installations)
5. Drill and 5.5 mm drill bit
6. Philips-head screwdriver
7. Marker pen
8. Rope
9. Door stand (not shown)



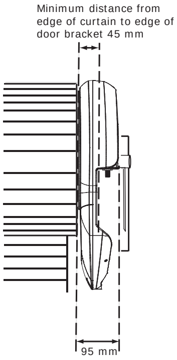
3 DOOR REQUIREMENTS

The SilentDrive Essential (MR655MYQ) is suitable for spring balanced Residential Rolling garage doors with:

- Maximum door height of 4.5 m.
- Maximum curtain area of 16.5 m^2.
- Maximum door mass of 100 kg.

*The Protector System™ (IR Beams) must be installed if the force at the edge of the closing door exceeds 400N (40 kgf).

Door axle diameter must not exceed 35 mm.


Minimum distance from edge of curtain to edge of door bracket 45 mm
95 mm

Ensure that there is at least 45 mm from the edge of the curtain to the edge of the bracket. If the roller door drum wheel is on the edge of the curtain or is a smaller diameter, additional clearance may be required.

Assemble the opener to the door axle and the existing door bracket using the U clamp assembly provided. Tighten to 25-28 Nm. Full installation process is in section 13.

4 *CONTROL PANEL*

1. Terminal Block: used for external accessories (see chart below).

Colour	Function	Polarity	Comment
Red	Push button	+ve	Dry contact input for push button wired wall controls
White	Common	-ve	Common terminal for push button, obstruction detection beams & accessory power
White	Common	-ve	Common terminal for push button, The Protector System™ (IR Beams) & accessory power
Grey	The Protector System™ (IR Beams)	+ve	The Protector System™ (IR Beams) input (pulsing type only)
Green	Accessory Power	+ve	24v dc 50 mA accessory output available for a universal receiver (output not active in Standby Mode)

NOTE: The terminal block is behind a plastic cover in the back housing. Use a small screwdriver to lever open the plastic cover if access to the terminal block is required. All wires should be secured appropriately.

2. DN Button: used to drive the door DOWN.

3. UP Button: used to drive the door UP.

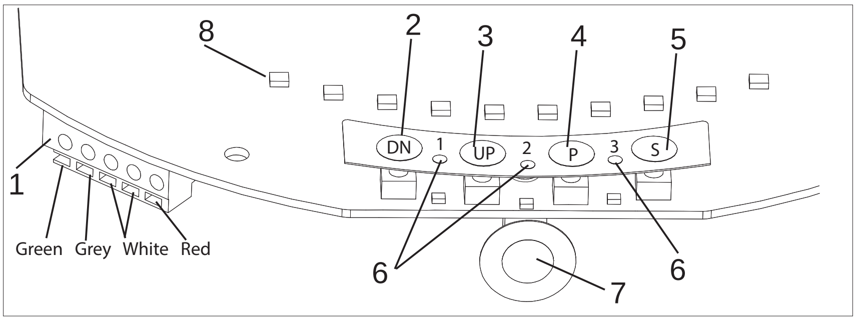
4. P Button: used to "PROGRAM" the DOOR LIMITS (see section 14).

5. S Button: used to "SAVE" and "DELETE" the "REMOTE CONTROLS" (see section 22).

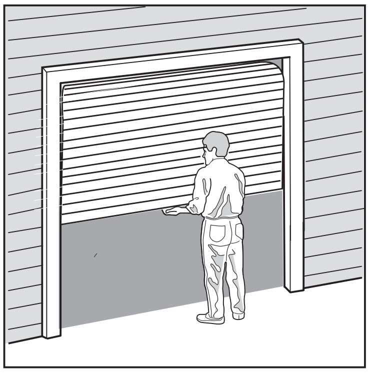
6. LEDs: 1. Program DOWN, and Diagnostic code indicator Number 1.
2. Program UP indicator.
3. Diagnostic code indicator Number 2.

7. Control Button: Used to activate the door when remote controls are not available. Open - Stop - Close.

8. Courtesy Light: turns on during operation and automatically turns off after a period of 3 minutes .



5 TESTING THE DOOR



Complete the following test to ensure your door is well balanced, and not sticking or binding:

- Disable all locks and remove any ropes connected to the garage door.
- Lift the door to about halfway and then release it. The door should remain spring balanced.
- Raise and lower the door to determine if there are any sticking or binding points (20 kgf is the absolute maximum allowable to raise or lower the door in any position).

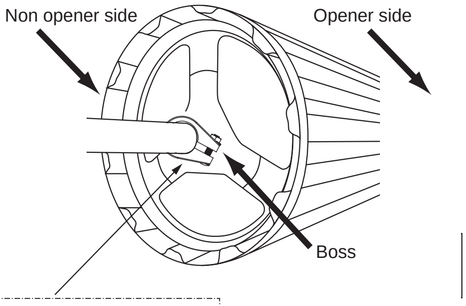
If your door does not hold in place or the door binds or sticks, call a qualified door technician before installing the opener.

6 ATTACHING THE STOP COLLAR

- The stop collar is required to be installed on the opposite side of the door to where the opener is to be installed.
- Ensure the U-Bolt holding the door shaft to the door bracket is tightly secure.

(**NOTE:** This U-Bolt must not be removed or loosened)

- Remove the bolt assembly from the plastic stop collar. Open the collar as wide as possible and push it onto the door shaft.
- Fit the stop collar hard against the boss of the door drum. Reinstall the bolt assembly onto the stop collar and tighten.



SAFETY CHECK!
Is the stop collar installed?
YES: proceed to the next step

NO: install the stop collar before proceeding

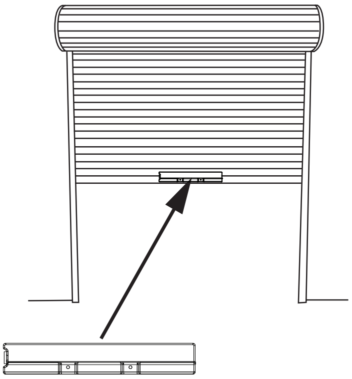
7 ATTACHING THE WEIGHT BAR

If the door has a lifting handle, remove the handle, nuts & bolts. Place the weight bar over the handle holes, insert the extended bolts through the weight bar & fasten the handle back in place.

- Place the weight bar in the centre of the door as shown.

If the door curtain does not have a handle you will need to follow these instructions:

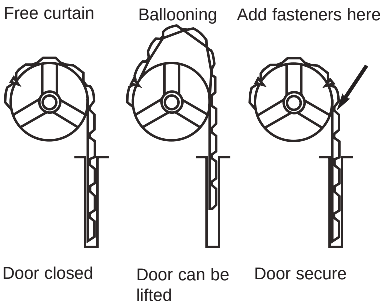
- Use a marker pen to mark the two hole positions.
- Drill two 5.5 mm holes through the two marked positions, then place the weight bar on the inside of the door.
- Use the bolts, washers and nuts (provided) to fasten the weight bar in place.



8 PINNING THE DOOR

Note: A ballooning door may delay the safety reversal response and can compromise garage door security.

- To remedy any ballooning, insert the supplied self tapping metal screws into where the curtain leaves the roll. Secure these through the curtain into the drum wheel at each end of the roll.
- After determining the correct fastener location as shown, lift the door approximately half a turn from the closed position to allow access for securing the screws.

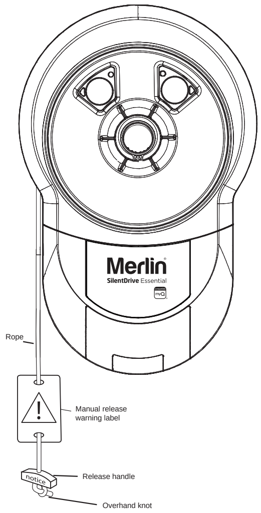


9 THE RELEASE HANDLE & CORD

Do not disengage the opener to manual operation with children, persons or other objects including motor vehicles within the doorway. The door is under significant tension and if the door has developed a fault or incorrect tension, it may be unsafe and may fall rapidly.

The manual release mechanism enables the door to be manually operated during power outages or in an emergency.

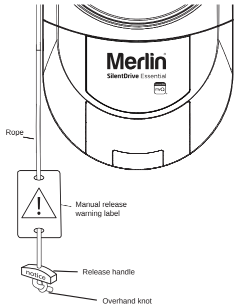
The RED Manual Release cord is preassembled to the opener. When the opener is installed the handle should be no higher then 1.8 metres from the floor. The cord may need to be extended for high door installations.



10 OPERATING THE MANUAL RELEASE

To disengage the opener
Pull the release cord down firmly,
(the opener will make a clicking noise).

To re-engage the opener
Pull the release cord down firmly,
(the opener will make a clicking noise).

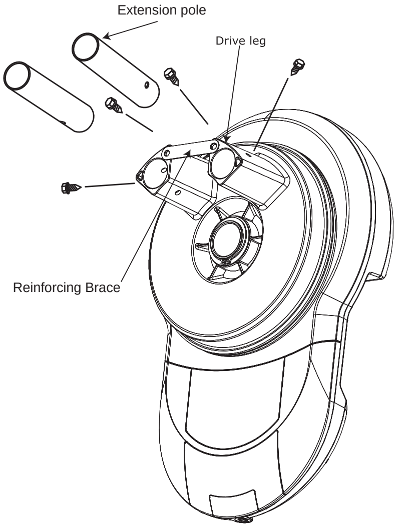


Disable all locks and remove any ropes connected to the garage door.
Take care when operating the manual release as an open door may fall rapidly due to weak or broken springs, or being out of balance.

11 ATTACHING EXTENSION POLES (IF REQUIRED)

Optional accessory not provided

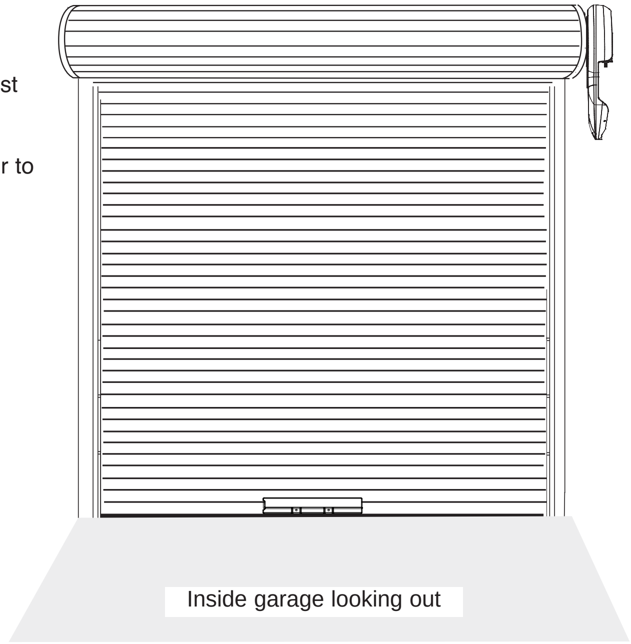
- Insert the extension poles into the drive legs.
- Align the holes on the extension poles with the holes on the drive legs.
- Using the screws provided, secure the extension poles.
- Align the holes of the reinforcing brace with the two holes on the end of the drive legs as shown and fix in place using the screws provided. Please note that the reinforcing brace MUST be applied.



Reinforcing brace must be used. Use extension pole kit part number 002A1828.

12 LEFT / RIGHT HAND INSTALLATION

LEFT
(handing must
be changed
during limit
setting - refer to
section 14)



RIGHT
(factory
default
setting)

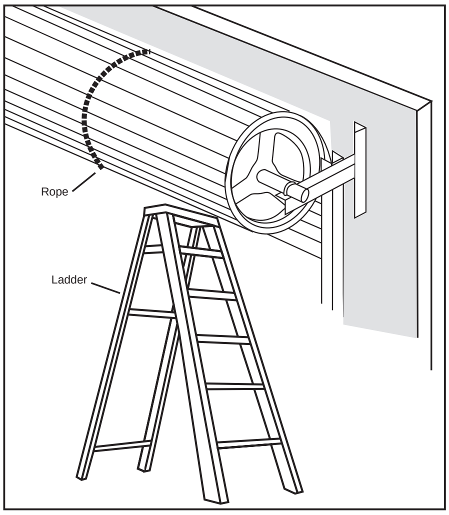
13 *INSTALLATION PROCEDURE*

Do not allow people to walk under or around the door during the installation process as serious injury can occur.

NOTE: The opener can be installed on either side of the door. The following instructions are for RIGHT HAND INSTALLATIONS (as illustrated i.e. inside the garage looking out). For left hand installations, reverse the instruction terminology (eg LEFT for RIGHT etc).

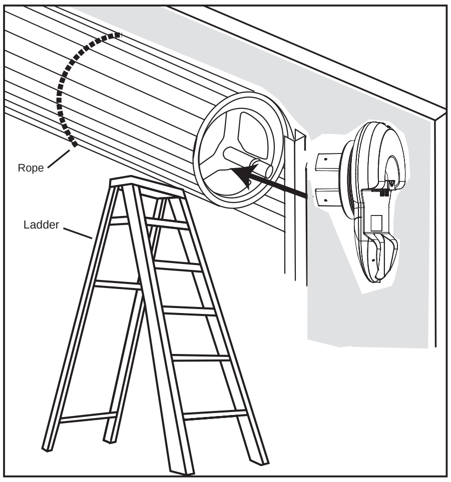
Preparation:

- Place the opener in manual release mode (refer to section 10).
- Completely open the roller door. For safety, tie a rope around the door.
- Ensure the door axle U-BOLT and door mounting bracket on the left hand side (non opener side) are securely fastened.
- Support the door with a door stand, ladder or similar device to safely support the door.
- Mark the position of the door shaft on the right hand door bracket (for reassembly purposes).
- While the door is supported, remove the right hand axle U-Bolt and door mounting bracket from the wall.



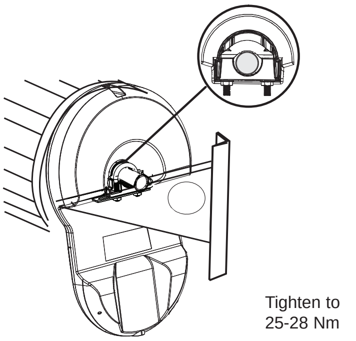
Install the opener:

- Slide the opener over the door axle and engage the drive legs into the door drum wheel, either side of a spoke.
- Refit the door mounting bracket to the wall.
- Clamp the opener on the door axle and door bracket in the marked position using the clamp assembly supplied (tighten to 25 – 28 Nm).
- Remove all ropes and the support stand.
- Check the operation of the door in manual mode by raising and lowering by hand. It should operate smoothly without sticking or binding. The disengage handle should already be attached less than 1.8m above the floor.



Connect the power:

- Position the power cable away from the door curtain and any moving parts.
- Plug the opener into a nearby power point and turn ON.
- The opener light will turn ON and remain ON for 3 minutes.



14 *SETTING THE LIMITS FOR RIGHT OR LEFT HAND OPERATION AND FORCE*

Travel limits set how far your door goes up and down. Your opener must also be configured for right or left hand installation. If not the door will rotate in the reverse direction.

Program Buttons: The Control Panel diagram in section 4 identifies the Control Buttons and LED layout

Audible Beep: An audible “BEEP” also occurs with each button press. This feature can be turned OFF

Courtesy light: During the programming sequence, the courtesy light will flash at half strength

NOTE: The SilentDrive Essential (MR655MYQ) opener is factory configured for right hand installation.

The opener will operate during this procedure. Make sure the door is clear of obstruction. Ensure your hands are away from any moving parts before activating the door.

Setting the Right or Left Hand Operation:

Refer to the diagrams on the right for guidance.
Ensure the door is positioned halfway and the opener is engaged (out of manual mode).
Turn the opener Power **ON,** the courtesy light will turn ON.

1. Press the “P” button for 5 seconds until LED 3 will flash, as well as LED 2 or LED 1 will flash. For Right Hand setting LED 2 will flash, and for Left Hand setting LED 1 will flash.
2. To change to the opposite setting, simply press the “S” button, and the opposite LED will flash.
3. When the correct hand setting is selected, Press and Release the “P” program button to accept this setting. (continue).

Setting the Door Limits:

4. Press and hold the “UP” button until the door reaches the desired OPEN position (You can toggle between the “UP” and “DN” buttons to move the door to the correct position. Make sure there is enough room for your vehicle to pass under).
5. Press and release the “P” program button to accept this setting.
6. Press and hold the “DN” button until the door reaches the desired CLOSED position (You can toggle between the UP and DN buttons to move the door to the correct position).
7. Press and release the “P” program button to accept this setting. (LED 2 should flash to indicate you are now in Force Learn mode).

Setting the Force Automatically:

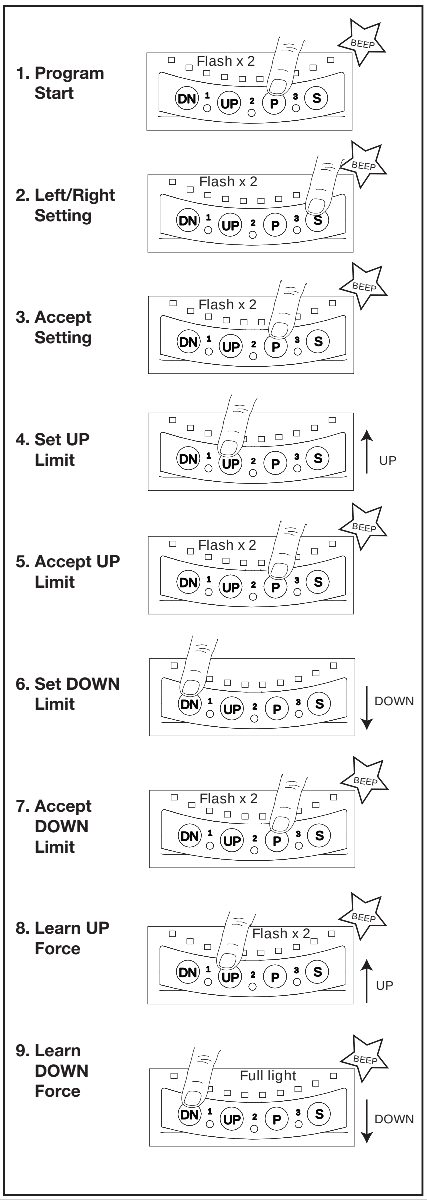
8. Press and release the “UP” button. The door will travel to the OPEN position with LED 2 flashing.
9. Press and release the “DN” button. The door will travel to the CLOSED position with LED 1 flashing. When fully closed, LED 1 will stop flashing and the courtesy light will change to full power.

This process is now complete

Setting the Force manually: (Only perform if Limits are already set)

- Start with the door fully CLOSED.
- Press the “S” button twice to enter into force learn mode. The Courtesy light will go to half strength, and LED 2 will flash quickly.
- Press and release the “UP” button. The door will travel to the OPEN position, then LED 1 will flash quickly.
- Press and release the “DN” button. The door will travel to the CLOSED position, then LED 1 will stop and the courtesy light will change to full power.

This process is now complete.

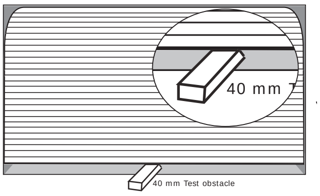


15 TESTING THE SAFETY REVERSE SYSTEM

The safety reverse system test is important. The garage door must reverse on contact with a 40 mm obstacle laid flat on the floor. Failure to properly adjust the opener may result in serious personal injury from a closing garage door.

Operate the door in the down direction. The door must reverse upon contact with the obstacle. If the door stops on the obstacle, remove obstacle and repeat limit and force setting (refer to section 14).

Repeat the safety reverse system test.



16 FIXING WARNING LABELS

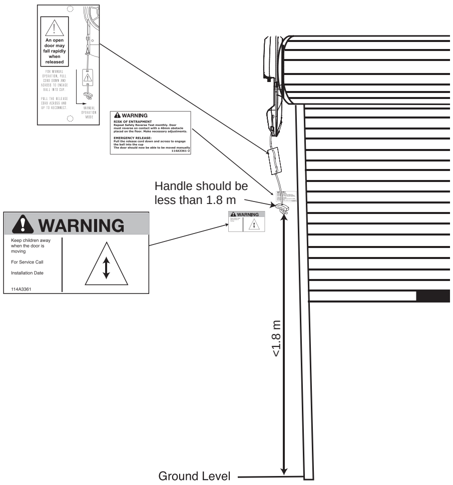
Once you have completed your installation and successfully carried out the safety reverse system test (outlined above), install the warning labels provided with your opener as shown.

The **risk of entrapment label** must be installed adjacent to the release handle at a height of less than 1.8 m from the floor.

The **WARNING** label must be installed in a prominent place near any fixed control.

Any fixed wall control or wireless door control must be mounted at a height of no less than 1.5 m **out of the reach of children.**

Read the safety instructions (page 1) for further details concerning safety.

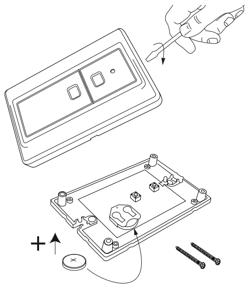

An open door may fall rapidly when released
WARNING
Handle should be less than 1.8 m
WARNING
Keep children away when the door is moving.
For Service Call
Installation Date
114A3361
<1.8 m
Ground Level

17 INSTALLING YOUR E138M WIRELESS WALL BUTTON

Disconnect power to the opener whilst installing this accessory to prevent accidental activation. Locate minimum 1.5 m above the floor.

To install:

- Carefully pry open the E138M and locate the two screws for mounting.
- Attach to the wall using the two screws and wall anchors provided if mounting to a plaster wall. If using a recessed wall box do not use anchors.



NOTE: Do not overtighten screws.

NOTE: The wall control supplied with your opener should be pre-programmed by the factory. If adding a new wall control, program into the opener before mounting the unit as detailed in the "Wireless Programming" in section 22.

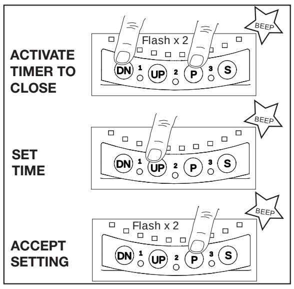
STANDARD INSTALLATION COMPLETE

18 *TIMER TO CLOSE FEATURE (TTC)*

Auto close is NOT recommended for households with young children.

TIMER TO CLOSE feature: (TTC) 10 to 180 seconds.
NOTE: The Protector System™ MUST be installed before TTC will operate.

The Timer to Close feature allows the door to automatically close after a specified time period. During the OPEN door waiting period, the courtesy light will flash continuoulsy.
If the door encounters an obstruction while closing, the opener will return to the OPEN position and the waiting period will begin again.



To activate the Timer to Close:

- Start with The Protector System™ (IR Beams) installed and the door fully CLOSED.
- Press and Hold both “P” and “DN” buttons for 3 seconds. When the Courtesy light flashes “TWICE”, release both buttons.
- Press the “UP” for each 10 second interval required for Timer to Close. A “BEEP” will register for each press. “DN” button will reduce the count if needed.
- Press and release the “P” button to accept this setting.

To deactivate the Timer to Close:

- Start with the door fully CLOSED.
- Press and Hold both “P” and “DN” buttons for 3 seconds. When the Courtesy light flashes “TWICE”, release both buttons.
- Press and release the “P” button to accept this setting.

The door may operate unexpectedly, therefore do not allow anything to obstruct the path of the door.

SAFETY FIRST!

Whilst Merlin have engineered safety features into your garage door opener, we urge you to consider fitting The Protector System™ (IR Beams) to your new garage door opener. In many countries these devices are compulsory to assist in preventing serious injury or property damage. For your own peace of mind and the safety of others please consider installing this safety device.

19 *PROGRAM TRANSMITTERS TO THE OPENER LIGHT*

To Program your transmitters to operate your garage door opener light follow the below steps:

1.Press and release the “S” button, and the “courtesy light” will flash twice (fig.1).
2.Press and release the “P” button and the garage door opener will go into Courtesy Light learn mode for 30 seconds (fig.2).
3.Press any Transmitter button (fig.3) to learn this channel to the garage door opener courtesy Light, the garage door opener "courtesy Light" will flash twice.

fig.1

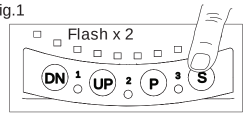


fig.2

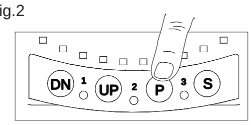


fig.3

NOTE: Do not use the same transmitter button that has been previously learned to the garage door opener for operation.

The transmitter is now learnt to the garage door opener courtesy Light.

To Erase all Remote Control Codes
1.Press and hold the “S” button on the opener until the courtesy light flashes twice, and continue holding for approximately 8 seconds, until the courtesy light flashes twice again.
2.Release the button, all codes are now erased.

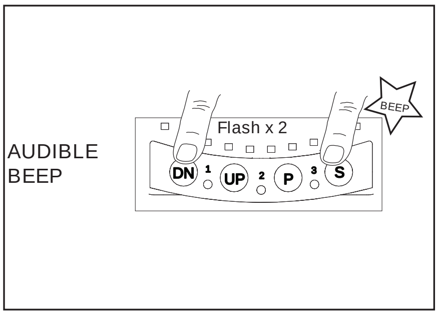
20 *AUDIBLE BEEP (OPTIONAL)*

The SilentDrive Essential (MR655MYQ) has been factory set for an audible “BEEP”.

The Audible beep can be turned OFF by using the following method.

- Start with the door fully CLOSED.
- Press and Hold both “S” and “DN” buttons for 3 seconds.
- The Courtesy light will flash “TWICE”. Release the buttons.

To turn the audible beep back ON, simply repeat the above process.



21 *VENTILATION MODE - PARTIAL OPENING FEATURE*

This is an adjustable, second stop position, that can be pre-set, partially open for ventilation, pedestrian or pet access, programmed to the Remote Control.

To activate the ventilation mode:

1. Start with the door fully **CLOSED** (figure 1). Drive the opener UP and stop at the position required for you wish to set the door at.
2. Enter ventilation activation mode by pressing the **P** and **UP** buttons together for 3 seconds (figure 2). Release when the courtesy light flashes once.
3. Press the remote control button that you have allocated for this feature (figure 3). Do not use the button already allocated for normal operation. The courtesy light will flash when the code is accepted.

The remote will now operate to and from the “programmed” and the “fully closed position”. Outside this range the remote will operate as normal.

To deactivate the partial opening feature:

1. Start with the door fully **CLOSED.**
2. Enter ventilation mode by pressing the **P** and **UP** buttons together for 3 seconds (figure 2). The courtesy light will flash twice, indicating that deactivation has occurred.

fig.1

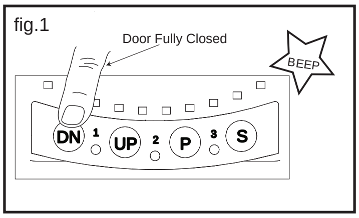


fig.2

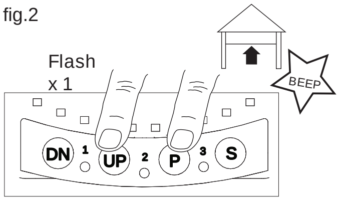


fig.3

22 *WIRELESS PROGRAMMING (REMOTE ACCESSORIES)*

NOTE: The transmitters supplied with your opener are preprogrammed by the factory.

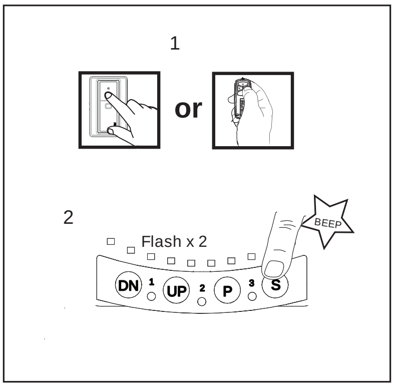
Activate the opener only when door is in full view, free of obstruction and properly adjusted. No one should enter or leave the garage while the door is in motion. Do not allow children to operate push buttons or remotes. Do not allow children to play near the door.

If you purchase additional transmitters, the garage door opener must be programmed to accept the new remote code.

Program the receiver to match additional transmitter codes:

Using the “S” SAVE Button

1. Press and hold the button on the remote that you wish to use (1).
2. Press and release the “S” button on the opener (2).
3. Release the remote button when the courtesy light flashes twice. It has learnt the code. If you release the remote control push button before the opener light flashes, the opener has not learnt the code.



The opener will now operate when the remote control button is pressed.

To Erase all Remote Control Codes

1. Press and hold the “S” button on the opener until the courtesy light flashes twice, and continue holding for approximately 8 seconds, until the courtesy light flashes twice again.
2. Release the button, all codes are now erased.

23 *STANDBY MODE (OPTIONAL)*

The SilentDrive Essential has been factory set for low standby mode (sub 1 watt usage).

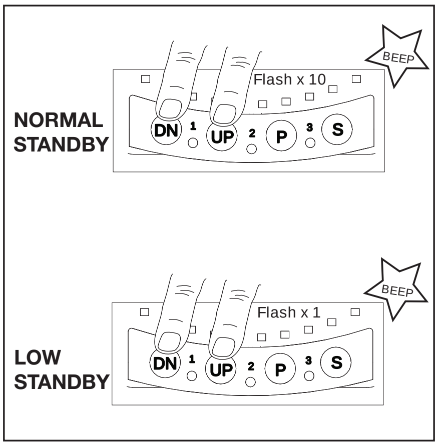
This will deliver the lowest possible standby power. The External Accessory Power is turned OFF in this mode, so if this output is required, Normal Standby mode will need to be activated (eg. for using an external receiver).

To Activate NORMAL STANDBY mode:

- Turn the mains power OFF.
- Press and Hold both “UP” and “DN” buttons.
- Turn ON mains power while both buttons are still pressed.
- Courtesy light comes ON, and after 5 seconds another 10 flashes. Release both buttons.

To Activate LOW STANDBY mode:

- Turn the mains power OFF.
- Press and Hold both “UP” and “DN” buttons.
- Turn ON mains power while both buttons are still pressed.
- Courtesy light comes ON, and after 5 seconds another 1 flash. Release both buttons.



OPERATION OF YOUR OPENER

Your opener can be activated by any of the following devices:

- **Opener Control Panel:** UP & DOWN buttons, and O.S.C. control button.
- **Remote Control Transmitter:** hold the button down until the door starts to move.
- **Wireless Entry Keypad**: This is an accessory that opens the door using a four digit keycode.

When the opener is activated:

- If open, the door will close. If closed, the door will open.
- If closing, the door will stop.
- If opening, the door will stop (allowing space for entry and exit of pets and for ventilation).
- If the door has been stopped in a partially open or closed position, it will reverse direction.

Obstruction behaviour:

- If an obstruction is encountered while closing, the door will reverse.
- If an obstruction is encountered while opening, the door will reverse and stop.
- The Protector System™ (IR Beams) use an invisible beam which, when broken by an obstruction, causes a closing door to open and prevents an open door from closing. It is **STRONGLY RECOMMENDED** for homeowners with young children or pets.

Opening the door manually:

⚠ ***When releasing the door, the door should be fully closed if possible. Weak or broken springs could allow an open door to fall rapidly. Property damage or serious injury could result.***

The door can be opened manually by pulling the release cord down firmly.
To re-engage the door, pull the release cord down firmly.

The opener light will turn on for 3 minutes when the opener is activated.

CARE OF YOUR OPENER

When properly installed, your opener will operate with minimal maintenance. The opener does not require additional lubrication.

Limit and Force Settings: These settings must be checked and properly set when the opener is installed. Weather conditions may cause some minor changes in the door operation, requiring some re-adjustments, particularly during the first year of operation. Refer to limit and force setting in section 14.

Follow the instructions carefully and repeat the safety reverse test after any adjustment.

Transmitter: Additional transmitters can be purchased at any time. Refer to gomerlin.com.au or gomerlin.co.nz for compatible transmitters. Any new transmitters must be programmed into the opener.

Transmitter battery: If the transmission range decreases, replace the battery.

MAINTENANCE OF YOUR OPENER

Once a Month:

- Repeat the safety reverse test (see section 15). Make any necessary adjustments.
- Manually operate the door. If it is unbalanced or binding, call for professional garage door service.
- Check to be sure that the door opens and closes fully.
  Set the limits and/or force if necessary.

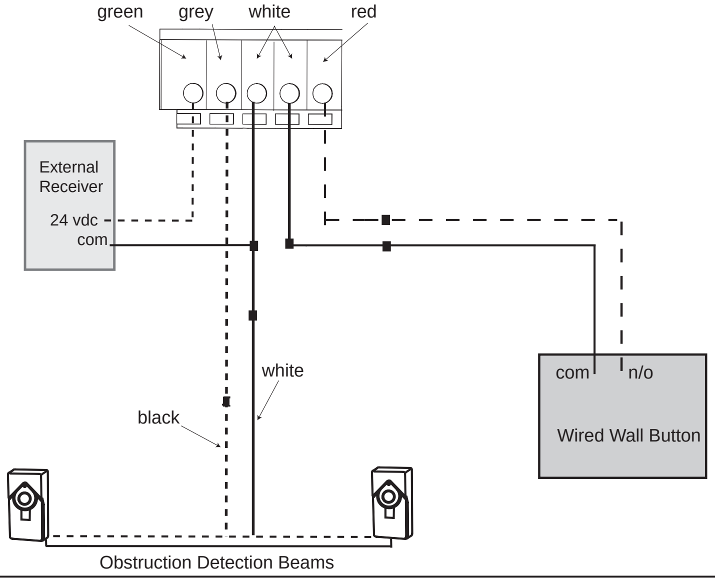
SPECIFICATIONS SILENTDRIVE ESSENTIAL (MR655MYQ)

Input Voltage:	220-240 VAC, 50-60 Hz, 110 W
Rated Load:	32 Nm
Max.Pull Force:	500 N @ Ø300 mm
Max. door weight:	100 kg
Max lift under Spring Tension:	20 kg
Max. door area:	16.5 m^2
Standby Power:	<1 watt
Drive:	DC gear motor permanent lubrication
Max. Drum Rotations:	$4^{1}/_{2}$
Memory Registers:	64
Operating Frequency:	433.30/433.92/434.54 MHz
Operating Temperature:	55^{0}C to -25^{0}C

SPECIAL NOTE: Merlin strongly recommends that The Protector System™ (IR Beams) be installed on all garage door openers.

24 TYPICAL WIRING DIAGRAM SILENTDRIVE ESSENTIAL (MR655MYQ)

Information for Service Personnel



25 REPLACE BATTERIES IN REMOTES

Battery of the remote control:

The batteries in the remote have a long life.
If the transmission range decreases, the batteries should be replaced. Batteries are not covered by the warranty.

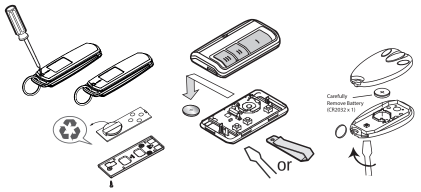
To prevent SERIOUS INJURY OR DEATH: observe the following instructions for the battery

- ***NEVER allow small children near batteries.***
- ***If battery is swallowed, immediately notify a Doctor.***
- ***Danger of explosion if battery is replaced improperly.***
- ***Replacement only by identical or equivalent type.***
- ***Dispose of old battery properly. Batteries should not be treated as household waste. All consumers are required by law to dispose of batteries properly at the designated collection points.***
- ***Never recharge batteries that are not meant to be recharged.***
- ***Do not short-circuit batteries or take them apart.***
- ***If necessary, clean contacts on batteries and contacts before loading.***
- ***Never expose batteries to excessive heat such as sunshine, fire or the like!***

Replacing battery (CR2032 or equivalent):

To replace the battery, turn the remote control around and open the case with a screwdriver. Lift the cover and lift the control board. Slide the battery to one side and remove the old battery. Be sure to observe the polarity of the battery.

Assemble the transmitter again following the steps in reverse.



26 *TROUBLESHOOTING*

1. The opener will not operate from either the UP/DOWN activation button or the transmitters :
- Does the opener have electric power? Plug a lamp into the outlet. If it does not work, check the fuse box.
- Have you disabled all door locks? Review the installation safety instruction warnings on page 1.
- Is there a build-up of ice or snow under the door? The door may be frozen to the ground. Remove any restriction.
- The garage door spring may be broken. Have it replaced by contacting a garage door repairer.

2. Opener operates from the transmitter, but not from the wired wall control terminals:
- Check that the wiring connections are correct.

3. The door operates from the UP/DOWN activation buttons but not from the wireless wall control or transmitter:
- Program the opener to match the transmitter code. Repeat with all transmitters.

4. The transmitter has short range:
- Change the location of the transmitter.
- Check to be sure the antenna on the bottom of the opener extends fully downward.
- Some installations may have shorter range due to a metal door, foil backed insulation, or metal garage siding.
- The batteries may be flat. Replace the batteries.

5. The garage door opens and closes by itself:
- Be sure that no transmitter buttons are being pressed.
- Clear the memory and re-program all wireless wall controls and transmitters.

6. The door reverses and stops before opening completely:
- Is something obstructing the door? Is it out of balance, or are the springs broken? Remove the obstruction or repair the door.

7. Door reverses for no apparent reason and opener lights flash 10 times:
- Check The Protector System™ (IR Beams) (if you have installed this accessory). If the red light on the beam is flashing, the alignment is incorrect.
- The red light on the beams may not be on if the opener is in Standby mode. Activate the door to temporarily exit standby mode and check lights are on constantly. If the LEDs are flashing, realign the beams.

8. The door opens but will not close (or reverses while closing):
- Is something obstructing the door? Pull the manual release handle. Operate the door manually. If it is unbalanced or binding, call a trained door systems technician.
- Clear any ice or snow from the garage floor area where the door closes.
- Repeat the limit and force setting. Repeat safety reverse test after adjustments.

9. The opener strains to operate the door:
- The door may be out of balance or the springs may be broken. Close the door and use the manual release to disconnect the door. Open and close the door manually. A properly balanced door will stay in any point of travel while being supported entirely by its springs. If it does not, disconnect the opener and call a trained door systems technician.

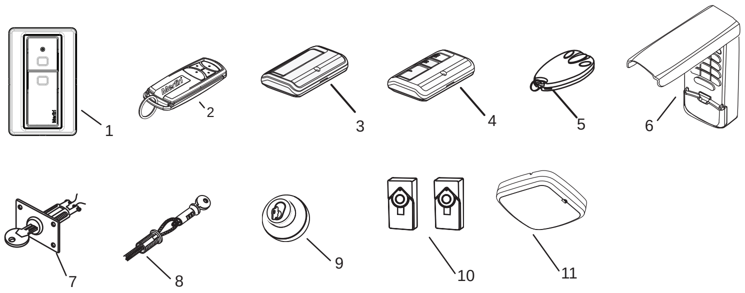
10. The opener motor hums briefly, then will not work:
- Check that the door is not in manual release mode (refer to sections 9 or 10).
- The garage door springs may be broken.
- If the problem occurs on the first operation of the opener, the door may be locked. Disable any door locks.

11. The opener will not operate due to a power failure:
- Use the manual release handle to disconnect the door. The door can be opened and closed manually. When power is restored, re-engage the opener to operate it via a transmitter.

12. The LED Indicators on the control panel are flashing in sequence:
- Check the diagnostic code in section 29.

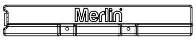
27 ACCESSORIES

1. Model E138M 2 Channel wireless wall button
2. Model E960M 4 Channel Premium transmitter
3. Model E940M 1 Channel transmitter
4. Model E943M 3 Channel transmitter
5. Model E945M 3 Channel mini transmitter
6. Model E840M Keyless entry system
7. Model 760AML Outside keyswitch
8. Model CM1702 Outside quick release (steel fix)
9. Model DMK1 Outside quick release (brick fix)
10. Model 774ANZ The Protector System™ (IR Beams)
11. Model 827AU Remote LED light

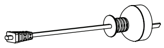


NOTE: Use of any Chamberlain Group accessories are approved to use with this opener. This includes genuine Merlin accessories. Generic compatible accessories are **NOT** approved for use with this opener.

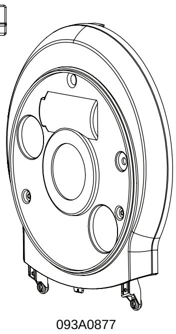
28 SPARE PARTS



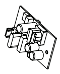
002A1873
Weight bar



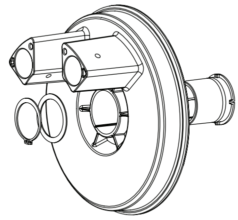
026A0189
Power cord



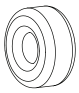
093A0877
Upper housing



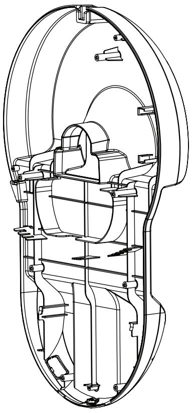
002A1867
Sub 1 watt PCB



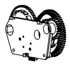
002A1956
Sungear assembly



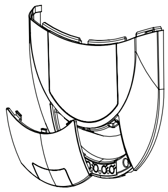
204A0307
Transformer



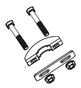
093A0880
Base housing



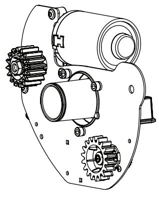
002A1959
APE assembly



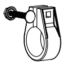
002A2123
Front lower housing assembly



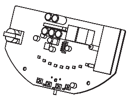
002A2095
RDO clamp



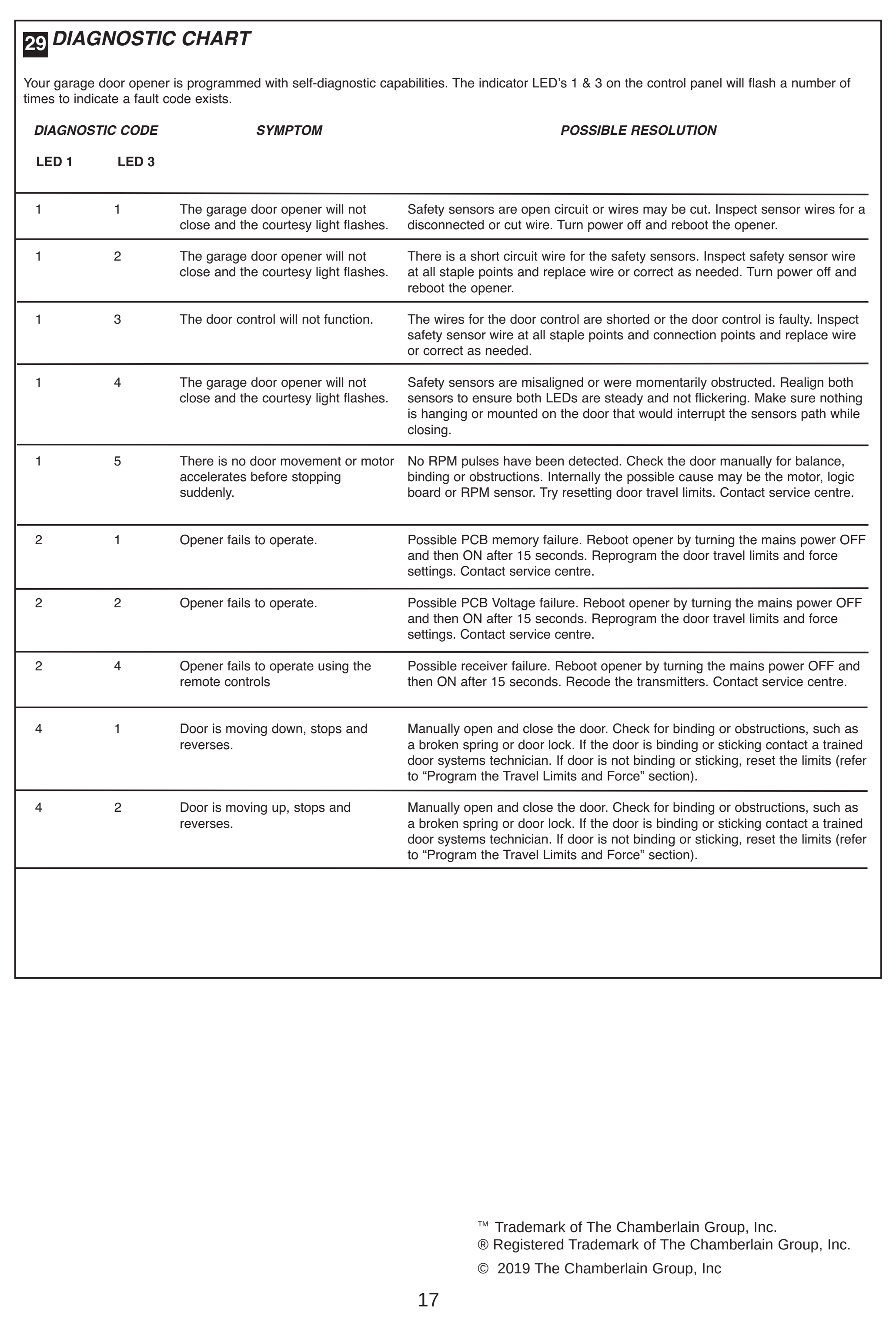
002A1958
Chassis sub-assembly



002A1960
Stop collar



014A1462
PCB assembly



29 DIAGNOSTIC CHART

Your garage door opener is programmed with self-diagnostic capabilities. The indicator LED's 1 & 3 on the control panel will flash a number of times to indicate a fault code exists.

DIAGNOSTIC CODE		*SYMPTOM*	*POSSIBLE RESOLUTION*
LED 1	**LED 3**		
1	1	The garage door opener will not close and the courtesy light flashes.	Safety sensors are open circuit or wires may be cut. Inspect sensor wires for a disconnected or cut wire. Turn power off and reboot the opener.
1	2	The garage door opener will not close and the courtesy light flashes.	There is a short circuit wire for the safety sensors. Inspect safety sensor wire at all staple points and replace wire or correct as needed. Turn power off and reboot the opener.
1	3	The door control will not function.	The wires for the door control are shorted or the door control is faulty. Inspect safety sensor wire at all staple points and connection points and replace wire or correct as needed.
1	4	The garage door opener will not close and the courtesy light flashes.	Safety sensors are misaligned or were momentarily obstructed. Realign both sensors to ensure both LEDs are steady and not flickering. Make sure nothing is hanging or mounted on the door that would interrupt the sensors path while closing.
1	5	There is no door movement or motor accelerates before stopping suddenly.	No RPM pulses have been detected. Check the door manually for balance, binding or obstructions. Internally the possible cause may be the motor, logic board or RPM sensor. Try resetting door travel limits. Contact service centre.
2	1	Opener fails to operate.	Possible PCB memory failure. Reboot opener by turning the mains power OFF and then ON after 15 seconds. Reprogram the door travel limits and force settings. Contact service centre.
2	2	Opener fails to operate.	Possible PCB Voltage failure. Reboot opener by turning the mains power OFF and then ON after 15 seconds. Reprogram the door travel limits and force settings. Contact service centre.
2	4	Opener fails to operate using the remote controls	Possible receiver failure. Reboot opener by turning the mains power OFF and then ON after 15 seconds. Recode the transmitters. Contact service centre.
4	1	Door is moving down, stops and reverses.	Manually open and close the door. Check for binding or obstructions, such as a broken spring or door lock. If the door is binding or sticking contact a trained door systems technician. If door is not binding or sticking, reset the limits (refer to "Program the Travel Limits and Force" section).
4	2	Door is moving up, stops and reverses.	Manually open and close the door. Check for binding or obstructions, such as a broken spring or door lock. If the door is binding or sticking contact a trained door systems technician. If door is not binding or sticking, reset the limits (refer to "Program the Travel Limits and Force" section).

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CHAMBERLAIN LIMITED WARRANTY

Merlin® Professional SilentDrive Essential MR655MYQ
Roller Garage Door Opener

Chamberlain Australia Pty Limited / Chamberlain New Zealand Limited (**Chamberlain**), the manufacturer of Merlin® automatic garage door openers, is committed to manufacturing and supplying high quality goods. As part of this commitment, we seek to provide reliable service and support for our goods and are pleased to provide you, the original purchaser, with this Chamberlain Limited Warranty.

The benefits given to you under this Chamberlain Limited Warranty are in addition to any rights and remedies that you may have under Australian or New Zealand consumer protection laws. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law, or New Zealand Consumer Guarantess Act 1993. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Chamberlain's warranty

What is covered

Chamberlain warrants to the original purchaser of the Merlin SilentDrive Essential MR655MYQ Roller Door Opener (Unit) that all parts of the Unit, other than remote controlled transmitters, battery back up units and accessories, globes and batteries, are free from defects in materials and workmanship for a period of 60 months or 10,000 cycles (each opening & closing of the garage door equals 1 cycle) whichever comes first, from the date of purchase when installed by a Professional dealer appointed or authorised by Chamberlain in a residential premise with a residential specified garage door that is designed for the sole purpose of a single-family dwelling.

Chamberlain warrants that the remote controlled transmitters (E960M) included with the Unit are free from defects in materials and workmanship for a period of 24 months from the date of purchase and all other accessories included with the Unit are free from defects in materials and workmanship for a period of 12 months from the date of purchase.

What is not covered

Batteries and globes are not covered under the Chamberlain Limited Warranty.

Travel costs incurred by Chamberlain or the Professional Dealer in either travelling to or from areas outside a capital city metropolitan area. These costs will be at the purchaser's expense.

Additional access costs incurred by a Professional Dealer or Chamberlain in obtaining access where the Unit is not readily accessible. These cost will be at the purchaser's expense.

Warranty Conditions

It is a condition of this Chamberlain Limited Warranty that the Unit is sold, installed and serviced by a Professional Dealer appointed or authorised by Chamberlain. A Merlin branded garage door opener purchased over the internet and installed by a person other than a Professional Dealer will not be covered by this Chamberlain Limited Warranty.

It is also a condition of this Chamberlain Limited Warranty that for the operating life of the Unit:

1. the garage door is spring balanced, is operable by hand and opens and closes with no more than a maximum of 20 kg of lifting weight;
2. the garage door and the Unit is professionally maintained and serviced by a Professional Dealer, at a minimum, during the third year of the Chamberlain Limited Warranty period such that the spring balanced door operates according to manufacturer specifications. If your door binds, sticks, or is out of balance, then it must not be used until serviced by a trained door technician or Profesional Dealer. The garage door service fee will be at the purchaser's expense;
3. the warranty is registered by completing the online form at *www.gomerlin.com.au* or *www.gomerlin.co.nz*; and
4. you retain your sales docket or invoice as proof of purchase, and attach it to this manual to enable you to establish the date of purchase in the unlikely event of a warranty service being required.

Making a claim

During the applicable Chamberlain Limited Warranty period, if you are concerned that the Unit may be defective, call the Professional Dealer that sold/installed the opener, or our service centre on the toll free number below and a Chamberlain technician will diagnose the problem and arrange for this to be rectified.

Once the problem has been diagnosed, subject to your rights under the applicable Australian and New Zealand consumer protection laws with respect to major failures, Chamberlain or its Professional Dealer will provide you with either, repairs to the Unit or a replacement Unit.Repairs and replacement parts provided under this Chamberlain Limited Warranty are provided free of charge and are warranted for the remaining portion of the original warranty period.

This Chamberlain Limited Warranty provides benefits which are in addition to your other rights and remedies as a consumer.

Exclusions - what voids the warranty

If our service centre determines that a warranty claim has been made in respect of a failure or defect arising under or out of any exclusion detailed below such that the claim is not covered under this Chamberlain Limited Warranty, we may, subject to your other rights and remedies as a consumer, charge you a fee to repair, replace and/or return the Unit to you.

This Chamberlain Limited Warranty does not cover any failure of, or defect in, the Unit due to:

1. non-compliance with the instructions regarding specifications, installation, operation, maintenance and testing of the Unit or of any product with which the Unit is used;
2. any attempt by a person other than a Professional Dealer to repair, dismantle, reinstall or move the Unit to another location once it has been installed;
3. use of any copy, imitation or replica garage door remotes with your Merlin Unit;
4. tampering, neglect, abuse, wear and tear, accident, electrical storm, excessive use or conditions other than normal domestic use;
5. problems with, or relating to, the garage door or garage door hardware, including but not limited to the door springs, door rollers, door alignment or hinges;
6. problems caused by electrical faults or replacement of batteries or light bulbs, blown fuses, electrical surges, power surges or power strikes, fire, flood, rain, water, lightning or storms;
7. water or moisture ingress that causes corrosion or electrical malfunction;
8. corrosion caused by sea air if located near a waterway, beach etc;
9. fitment to a commercial door or in a commercial operating application, installation of a residential garage door opener in a commercial or industrial premises other than a single-family dwelling.
10. lack of proper maintenance, service or care of the door and Unit;
11. any unauthorised modification to the Unit; or
12. damage caused by insects, pests or other after sale damage caused by events or accidents outside Chamberlain's reasonable control and not arising under normal and standard operating conditions.

NB: A General Purpose Outlet (GPO) ie: power point must be supplied by the consumer as this electrical fitting does not form a part of the Unit (opener).

If this Chamberlain Limited Warranty does not apply, you may have rights available to you under the Australian and New Zealand consumer protection laws.

Liability – Australia only

Except as set out in the Australian Consumer Law (being Schedule 2 of the *Competition and Consumer Act 2010*) (as amended, consolidated or replaced):

1. all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that Chamberlain can lawfully exclude them; and
2. under no circumstances will Chamberlain be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

Liability – New Zealand only

Except as set out in the *Fair Trading Act 1986 and the Consumer Guarantees Act 1993* (as amended, consolidated or replaced):

1. all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that Chamberlain can lawfully exclude them; and
2. under no circumstances will Chamberlain be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

Note

Chamberlain reserves the right to change the design and specifications of the Unit without prior notification. Some features or accessories of the Unit may not be available in certain markets or areas. Please check with your distributor.

Chamberlain service centre contact details

Australia
Phone toll free 1800 638 234
Fax toll free 1800 888 121
Website: gomerlin.com.au

Chamberlain Australia Pty. Ltd.
Unit1, 75 Epping Road
North Ryde NSW 2113
(PO BOX 1446, Lane Cove NSW 1595)

New Zealand
Phone toll free 0800 653 667
Fax toll free 0800 653 663
Website: gomerlin.co.nz
Email: customerservice@chamberlainanz.com

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TOSHIBA

Owner's Manual

Wired Remote Controller

For commercial use

Model name:

RBC-AMSU51-ES
RBC-AMSU51-EN

- Read this manual before using the RBC-AMSU51-ES, RBC-AMSU51-EN remote controller.
- Refer to the Owner's Manual supplied with the indoor unit for any instructions other than operations of the remote controller.

Multilingual installation manuals and owner's manual

The manuals in the following languages can be downloaded at our website.
Български / Česky / Dansk / Deutsch / Ελληνικά / English / Español / Eesti / Suomi / Français / Hrvatski / Magyar / Italiano / 한국어 / Latviešu / Norsk / Nederlands / Polski / Português / Română / Русский / Slovensky / Slovenščina / Svenska / Türkçe / 中文

https://www.toshiba-carrier.co.jp/global/manual/rbc-amsu51-e.htm

English

Contents

1 Precautions for Safety

- Read these "Precautions for Safety" carefully before using.
- The precautions described below include important items regarding safety. Observe them without fail. Understand the following details (indications and symbols) before reading the body text, and follow the instructions.
- Keep this Manual at accessible place for future reference.

Indication	Meaning of Indication
⚠ **WARNING**	Text set off in this manner indicates that failure to adhere to the directions in the warning could result in serious bodily harm (*1) or loss of life if the product is handled improperly.
⚠ **CAUTION**	Text set off in this manner indicates that failure to adhere to the directions in the caution could result in minor bodily injury (*2) or damage (*3) to property if the product is handled improperly.

*1: Serious bodily harm indicates loss of eyesight, injury, burns, electric shock, bone fracture, poisoning, and other injuries which leave aftereffect and require hospitalization or long-term treatment as an outpatient.

*2: Bodily injury indicates injury, burns, electric shock, and other injuries which do not require hospitalization or long-term treatment as an outpatient.

*3: Damage to property indicates damage extending to buildings, household effects, domestic livestock, and pets.

⚠ WARNING

Installation

- **Do not attempt to install the air conditioner yourself.**
  Ask your dealer or a contractor with specialized experience to install the air conditioner. Electric shocks and / or a fire may result if you attempt to install the air conditioner yourself and the air conditioner ends up not being installed perfectly.
- **Use only with the authorized air conditioner units.**
  Be absolutely sure to use only the authorized air conditioner units designated by the manufacturer.
  Also, ask a contractor with specialized experience to install them. Electric shocks and / or a fire may result if you attempt to install the parts yourself and the parts end up not being installed perfectly.

Operation

- **Do not operate the buttons with wet hands.**
  Failure to heed this warning may result in electric shocks and / or trouble.
- **Do not get the control unit wet.**
  Take steps to avoid getting the control unit wet. Failure to heed this warning may result in electric shocks, a fire and / or trouble.
- **If trouble (such as the smell of burning) has occurred, stop operation and turn off the main power switch.**
  Allowing operation to continue while the trouble has not been remedied may cause electric shocks, a fire and / or trouble. Consult your dealer.

Relocation

- **Do not undertake any repair work yourself.**
  Under no circumstances must you attempt to do any repair work yourself.
  Instead, consult your dealer or a contractor with specialized experience. Electric shocks and / or a fire may result if you attempt to do repair work yourself and this work ends up not being carried out perfectly.
- **Consult your dealer when the control unit is to be relocated and re-installed.**

⚠CAUTION

Installation

- **Do not install the remote controller unit where there are high levels of moisture, oils, grease or vibration.**
  Failure to heed this caution may cause trouble.
- **Do not install the remote controller unit direct sunlight or near a heat source.**
  Failure to heed this caution may cause malfunctioning.
- **Do not install the remote controller unit where there are sources of electro-magnetic noise.**
  Failure to heed this caution may cause unintended operation.
- **Do not use this device in locations where children may be present.**

Operation

- **Do not drop the product or subject it to strong impact.**
  Failure to heed this caution may cause malfunctioning.

2 Before Use

Operate the remote controller according to the following procedure when it is used for the first time or when the settings are changed. Pushing the [⏻ ON/OFF] button starts running the air conditioning unit with the settings made on the remote controller from the next time.

Preparation

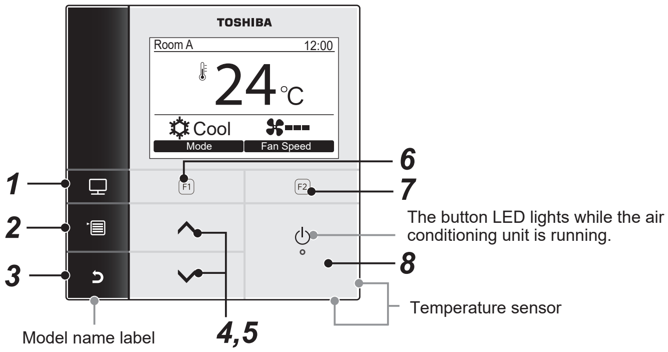
Turn on the circuit breaker.

- "⌛ Setting" appears on the display of the remote controller when the power is turned on.
  - * When the power is turned on, it takes about 5 minutes before the remote controller becomes operable. This is not a malfunction.
- **For initial settings, refer to "10. Initial setting" on page 34.**

NOTE

- Do not turn off the circuit breaker during the season using the air conditioning unit.
- Turn on the circuit breaker 12 hours or more before starting running the air conditioning unit when the unit has not been used for an extended period of time.

3 Part Names and Functions

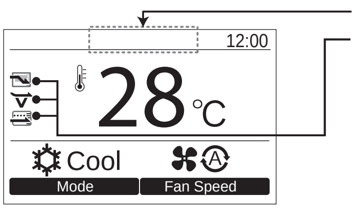


1. **[🖥 MONITOR] button**
   Displays the monitoring screen.
   (page 9)
2. **[☰ MENU] button**
   Displays the menu screen.
   (page 10)
3. **[↩ CANCEL] button**
   Functions as indicated on the screen, such as returning to the previous menu screen.
   (page 10)
4. **[∧ ∧] button**
   During normal operation: adjusts the temperature.
   On the menu screen: selects a menu item.
   (page 8)
5. **[∨ ∨] button**
   During normal operation: adjusts the temperature.
   On the menu screen: selects a menu item.
   (page 8)
6. **[F1 F1] button**
   Varies its function according to the setting screen.
   (page 7)
7. **[F2 F2] button**
   Varies its function according to the setting screen.
   (page 7)
8. **[⏻ ON/OFF] button**
   (page 7)

Switching between the normal display and detailed display

Push and hold the [⮌ CANCEL] button and [🖥 MONITOR] button at the same time for more than 4 seconds to switch the display mode.
The normal display mode is selected as a factory default setting.

Normal display mode (factory default)



Energy saving icon

- Displayed when performing the power saving operation of the air conditioner.

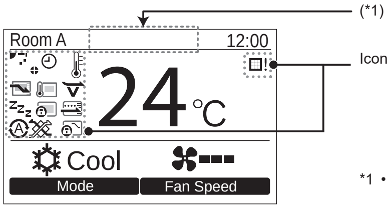
Soft cooling icon

- Shows the air conditioner is performing the soft cooling operation.

Saving icon

- Displayed when performing operation by suppressing excessive heating or excessive cooling through automatic correction of the temperature set point.

Detailed display mode



Icons appear on the screen when the detailed display mode is selected.

*1 • The "✺ Preparing to heat" icon appears when the heating operation starts or when defrosting operation.
The indoor fan stops or the operation becomes the blowing operation when it is displayed.
• It may be displayed depending on the model when "⏻ Preparing to operate" is displayed.

▼ Icon list

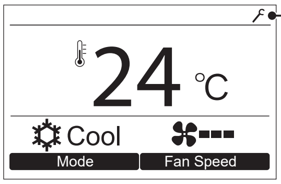
↘	Shows the Energy saving operation is activated. (page 28)	◷	Shows a timer function is activated. (page 19, 21)
🌡	Shows the remote sensor is activated. (*2)	✥	Shows the Louver lock is activated. (page 18)
Zzz	Shows the Night operation is activated. (page 25)	≋	Shows the setting of the louver. (page 13, 14)
🔒	Shows the central control device prohibits the use of the remote controller (page 47)	▦!	Shows the filter needs to be cleaned. (page 26, 48)
▤	Shows the saving operation is activated. (page 33)	V	Shows soft cooling is activated. (page 41)
		🔒	Shows operation switching control is in progress.

*2 Normally the temperature sensor of the indoor unit senses the temperature. The temperature around the remote control can also be sensed. For details, contact the dealer where you purchased the air conditioner. * Do not use the function when the air conditioner is controlled in a group.

▼ Ventilation icon list

- Ventilation icons appear on the display only when a ventilation unit is connected.
- Refer to the Owner's Manual supplied with the Air to Air Heat Exchanger for details about the ventilation icons.

	Automatic mode	24H	24-hour ventilation mode
	Bypass mode		Nighttime heat purge mode
	Total heat exchange mode		



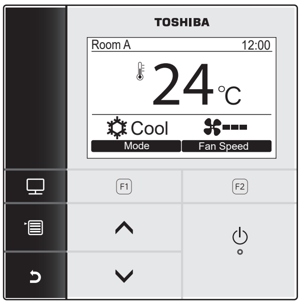
Notice code icon

- This icon appears on the display when a notice code has occurred. For details, contact your dealer (distributor).

4 Operation

■ Running operation

* Some operation modes are not available depending on the type of indoor unit.



1 **Push the [⏻ ON/OFF] button to start running.**

2 **Push the “Mode Mode” [F1 F1] button to select the operation mode.**

→The operation mode changes as follows each time the button is pushed.

Auto → Heat → Dry → Cool → Fan →

3 **Push the [⏻ ON/OFF] button to stop running.**

■ Changing the fan speed

* The available fan speeds vary depending on the indoor unit connected.

1 **Push the “Fan speed Fan speed” [F2 F2] button to select the fan speed.**

→The fan speed changes as follows each time the button is pushed.

✻Ⓐ Auto → ✻■■■ High → ✻■■ Med → ✻■ Low →

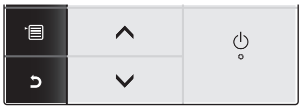
When the remote controller is used in combination with an indoor unit that supports 5 speeds, each push of the “Fan speed Fan speed” [F2 F2] button changes the fan speed display.

✻Ⓐ Auto → ✻■■■■■ High → ✻■■■■ Med+ → ✻■■■ Med → ✻■■ Low+ → ✻■ Low →

→“✻⊘” appears on the display when the connected indoor unit is not equipped with the fan speed.

→“✻Ⓐ” is not available when “Fan” is selected as the operation mode.

■ Changing the temperature



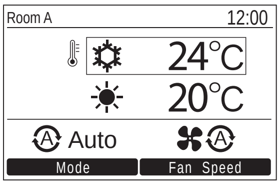
1 **Push the [∧ ∧] / [∨ ∨] button to adjust the temperature.**

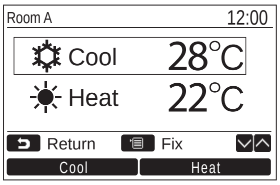
→Push the [∧ ∧] button to raise the temperature setting, push the [∨ ∨] button to lower it.

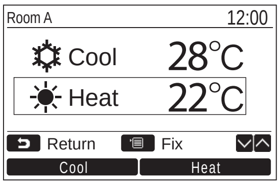
- Refer to "Set temp. range limit" for the temperature range available. (page 31)
- The temperature cannot be adjusted when "Fan" is selected as the operation mode.

▼ When dual automatic mode

In dual set point setting, the temperature set point of individual cooling and heating can be set to adjust the indoor temperature.
Thermo.OFF for temperature range between the temperature set points for cooling and heating.
If you wish to use the dual automatic mode, ask your dealer to set the setting.







1 **Push the [∧ ∧] / [∨ ∨] button to switch to the display shown on the left.**

2 **To set the cooling temperature set point, push [Cool] and adjust the setting with [∧ ∧] / [∨ ∨].**
A box will surround [❄ Cool] and [Temperature set point]. To set the heating temperature set point, push [Heat] and adjust the setting with [∧ ∧] / [∨ ∨].
A box will surround [☀ Heat] and [Temperature set point].

→Push [▤ MENU] to confirm the settings and return to the normal display.

→Push [⮌ CANCEL] to cancel the settings and return to the normal display.

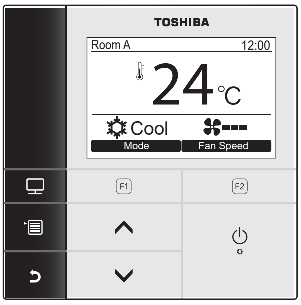
NOTE

When connecting to an air conditioning control system which does not support dual set point

- The temperature set point, a value half the heating temperature and Cooling temperature set point will be displayed.
- When temperature setting has been changed by the unsupported controller, the cooling temperature set point and heating temperature set point displayed on the dual set point screen will be set automatically.
- For details, contact the dealer where you purchased the air conditioner.

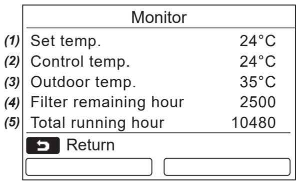
■ Monitor screen

Check the current usage status.



1 **Push [MONITOR] button.**
The monitor screen appears.

2 **Push [CANCEL] button to return.**



Monitor

(1)	Set temp.	24°C
(2)	Control temp.	24°C
(3)	Outdoor temp.	35°C
(4)	Filter remaining hour	2500
(5)	Total running hour	10480

(1) Displays the set temperature.
(2) Displays the temperature measured by the indoor temperature sensor of the indoor unit. If the sensor is set to that of the remote controller, the temperature measured by the remote sensor is displayed.
(3) Displays the temperature measured by the TO ambient air sensor within the outdoor unit.
(4) Displays the remaining time until the filter sign lights up.
(5) Displays the accumulated operating time.

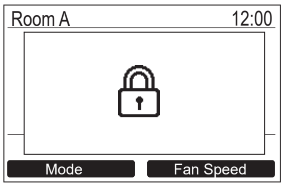
NOTE

Total running hour
- The operating time is recorded on the remote controller.
- The time is not recorded during self clean operation or fan operation.

Temperature around the outdoor unit
- Displays the temperature around the vent of the outdoor unit.
- The displayed temperature may differ from the actual outdoor temperature.

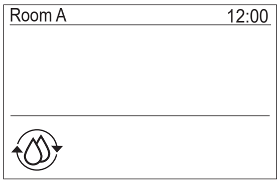
Others
- The Header status appears during group connection.
- The screen returns to the previous display if no operation is performed for 60 seconds.
- When using a Remote sensor or a sensor with Wired remote controller, the setting temperature may not be controlled accurately due to a difference between the temperature of their sensor and room temperature that can arise due to radiant heat effects of the wall etc.

Activating the key lock function



- Push and hold the [CANCEL] button for more than 4 seconds to activate the key lock function. Push and hold the [CANCEL] button for more than 4 seconds again to release the key lock.
- “🔒” appears on the screen when the button set to be locked is pushed while the key lock function is activated.
- Select the buttons to be locked from “Key lock” in “10. Initial setting" on the menu screen. (page 36)

Self clean operation (only for models equipped with the function)



- The self clean operation is the function to dry inside the air conditioner after the “Auto” (cooling), “Cool”, or “Dry” operation so that the inside of air conditioner is kept clean.
- The self clean operation time differs depending on the time of the “Auto” (cooling), “Cool”, or “Dry” operation.

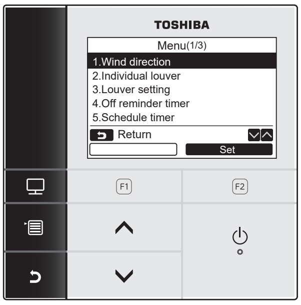
Time of the “Auto” (cooling), “Cool”, or “Dry” operation	self clean operation time
Less than 10 minutes	The self clean operation is not performed.
Between 10 minutes and 1 hour	1 hour*
1 hour or more	2 hours*

* These are approximate times. They differ depending on the type of indoor unit.

- Push the [⏻ ON/OFF] button twice to stop the self clean operation forcibly.
- “ Self clean” appears on the screen while the self clean operation is in progress.
  The LED of the [⏻ ON/OFF] button turns off.
- Refer also to the Owner’s Manual supplied with the indoor unit about the self clean operation.

■ Menu operation

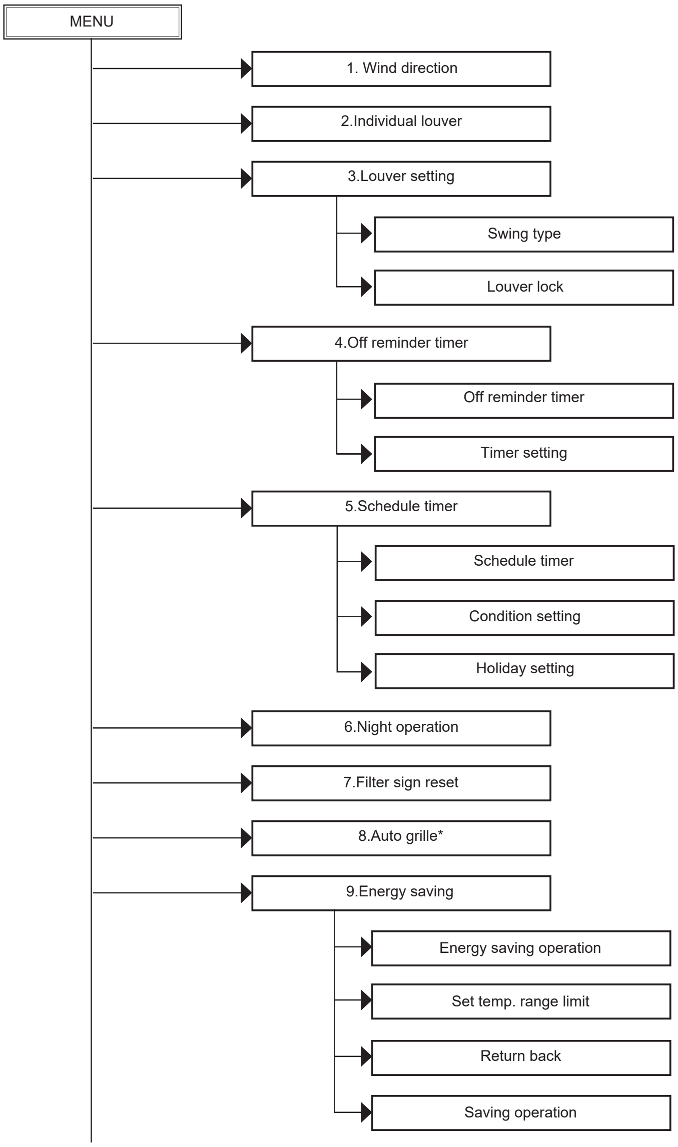
* Refer to the next pages for details about the menu screen.

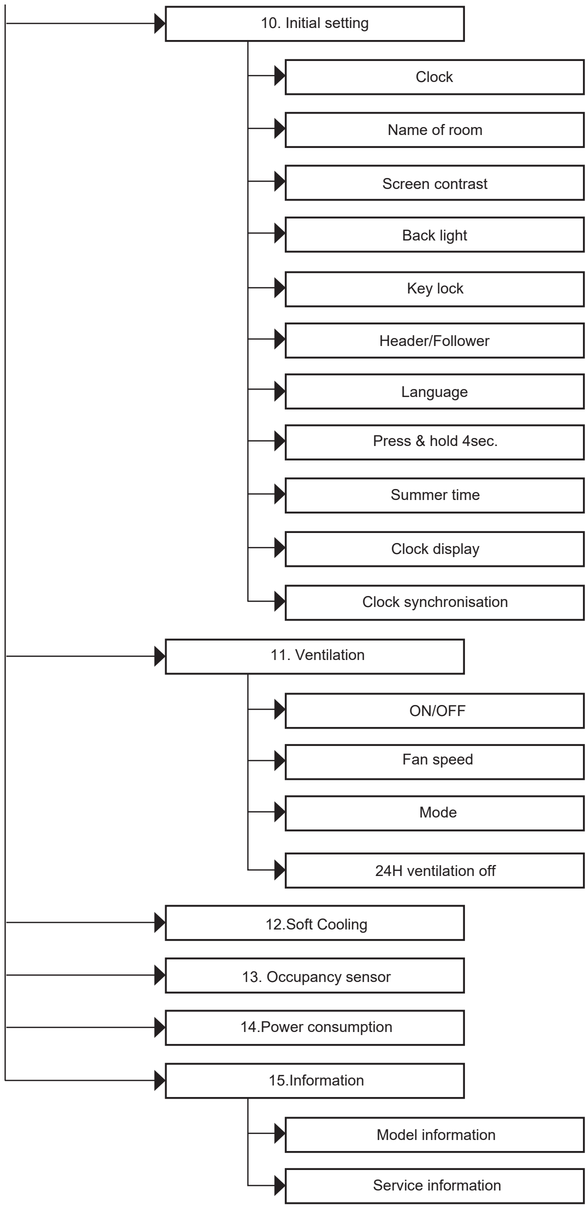


* The menu screen returns to the normal / detailed display if no operation is performed for 60 seconds.

1. **Push the [▤ MENU] button.**
2. **Push the [∧ ∧] / [∨ ∨] button to select an item.**
   →The selected item is highlighted.
3. **Push the “ Set Set” [F2 F2] button.**
   →The setting screen appears.
4. **(To undo)**
   Push the [↩ CANCEL] button to return.
   →The screen returns to the previous screen.

5 Menu items


MENU
1. Wind direction
2.Individual louver
3.Louver setting
Swing type
Louver lock
4.Off reminder timer
Off reminder timer
Timer setting
5.Schedule timer
Schedule timer
Condition setting
Holiday setting
6.Night operation
7.Filter sign reset
8.Auto grille*
9.Energy saving
Energy saving operation
Set temp. range limit
Return back
Saving operation



NOTE

* “8.Auto grille” cannot be set.
“⦸ No function” appears when it is selected.

1. Wind Direction

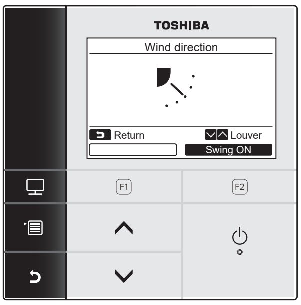
■ Wind direction

* Set the wind direction.

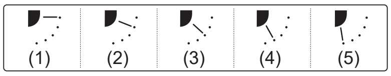
⚠CAUTION

Refer to the instructions (for the wind direction adjustment) in the Owner's Manual supplied with the indoor unit before setting.

Before setting



1. **Push the [∧ ∧] / [∨ ∨] button to select "1. Wind direction" on the menu screen, then push the "Set Set" [F2 F2] button.**
2. **Push the [∧ ∧] / [∨ ∨] button to select the wind direction.**

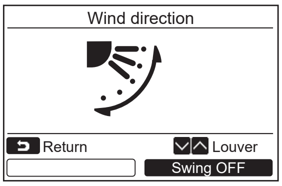


Operation mode	Available directions
Heat, Fan, Auto (heating)	(1)⇔(2)⇔(3)⇔(4)⇔(5)
Cool, Dry, Auto (cooling)	(1)⇔(2)⇔(3)

3. **Push the [↩ CANCEL] button to return.**
→The screen returns to the menu screen.

■ Turning on/off the louver swing

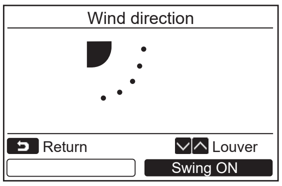
To swing the louver



* When the louver is stopped, "Swing ON Swing ON" is displayed.

1. **Push the "Swing ON Swing ON" [F2 F2] button on the "Wind direction" screen.**
→Pushing the [∧ ∧] / [∨ ∨] button on the "Wind direction" screen while the louver swing is on stops swinging and sets the wind direction to (1).
2. **Push the [↩ CANCEL] button.**
→The screen returns to the menu screen.

To stop the louver swing



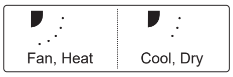
* When the louver is swinging, “Swing OFF Swing OFF” is displayed.

1 **Push the “Swing OFF Swing OFF” [F2 F2] button on the “Wind direction” screen.**

→Push the “Swing OFF Swing OFF” [F2 F2] button to stop swinging. The louver stops in the position where the button is pushed.

- The louver does not stop in the position (4) or (5) when the operation mode is “Cool” or “Dry”. The louver stops in the position (3) even if the button is pushed when the louver is in the position (4) or (5)

Display when the louver swing is stopped



- Pushing [∧ ∧] / [∨ ∨] while the display when the louver swing is stopped appears on the screen sets the louver in the position (1).

2 **Push the [↩ CANCEL] button.**

→The screen returns to the menu screen.

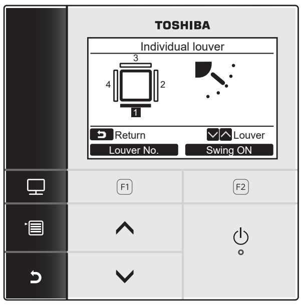
NOTE

- “⊘ No function” appears on the display for the models not equipped with the Wind direction setting.
- Refer to “15. Information ■ Group control”. (page 47)
- “✥” appears on the display when the Louver lock function is used. (page 18)

2. Individual louver

■ Individual louver

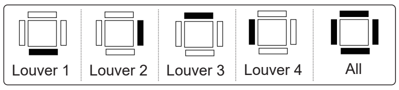
* For 4-way cassette types, the wind direction and swing operation of each louver can be set individually.



1 **Push the [∧ ∧] / [∨ ∨] button to select "2.Individual louver" on the menu screen, push the " Set Set" [F2 F2] button.**

2 **Push the " Louver No. Louver No." [F1 F1] button to select the louver to set.**

→The display changes as follows each time the button is pushed.



3 **Push the [∧ ∧] / [∨ ∨] button to select the wind direction.**

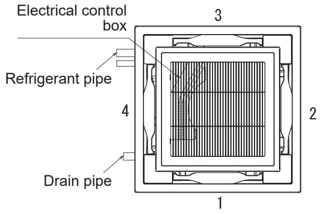
→Refer to "Wind direction" about how to set the wind direction. (page 13)

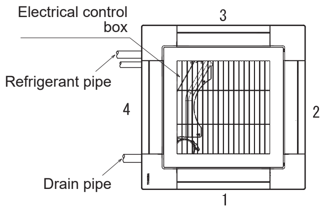
4 **Push the [⮌ CANCEL] button.**

→The screen returns to the menu screen.

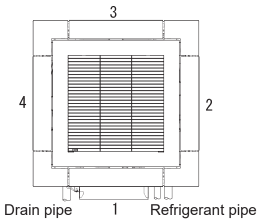
Louver No.

<4-Way Air Discharge Cassette type>
RAV-SM*4UT*, MMU-AP***4H***
RAV-RM**UT*, MMU-UP****H***
RAV-GM**UT***





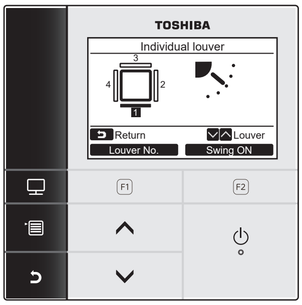
<Compact 4-Way Air Discharge Cassette type>
RAV-SM*7MUT*, MMU-AP***7MH***
RAV-RM**MUT*, MMU-UP****MH***



2. Individual louver

■ Individual louver

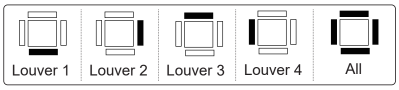
* For 4-way cassette types, the wind direction and swing operation of each louver can be set individually.



1 **Push the [∧ ∧] / [∨ ∨] button to select “2.Individual louver” on the menu screen, push the “Set Set” [F2 F2] button.**

2 **Push the “Louver No. Louver No.” [F1 F1] button to select the louver to set.**

→The display changes as follows each time the button is pushed.



3 **Push the [∧ ∧] / [∨ ∨] button to select the wind direction.**

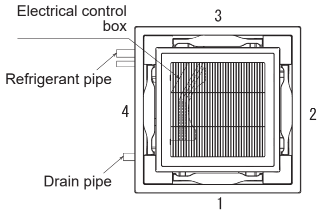
→Refer to “Wind direction” about how to set the wind direction. (page 13)

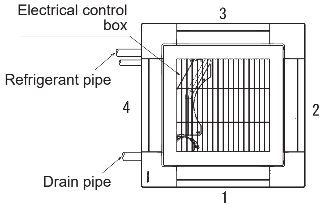
4 **Push the [CANCEL] button.**

→The screen returns to the menu screen.

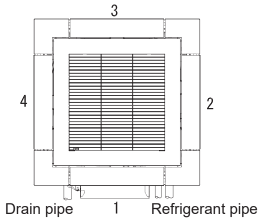
Louver No.

<4-Way Air Discharge Cassette type>
RAV-SM*4UT*, MMU-AP***4H***
RAV-RM**UT*, MMU-UP****H***
RAV-GM**UT***



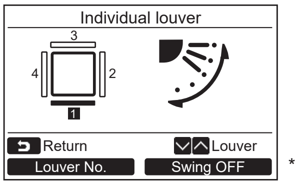


<Compact 4-Way Air Discharge Cassette type>
RAV-SM*7MUT*, MMU-AP***7MH***
RAV-RM**MUT*, MMU-UP****MH***



■ Turning on/off the louver swing

To swing the louver

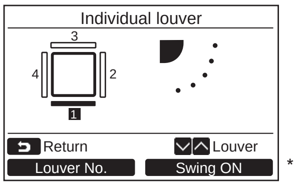


* When the louver is stopped,
“Swing ON Swing ON” is displayed.

1 **Push the “Swing ON Swing ON” [F2 F2] button on the “Individual louver” screen.**

2 **Push the [↩ CANCEL] button.**
→The screen returns to the menu screen.

To stop the louver swing



* When the louver is swinging,
“Swing OFF Swing OFF” is displayed.

1 **Push the “Swing OFF Swing OFF” [F2 F2] button on the “Individual louver” screen.**

2 **Push the [↩ CANCEL] button.**
→The screen returns to the menu screen.

NOTE

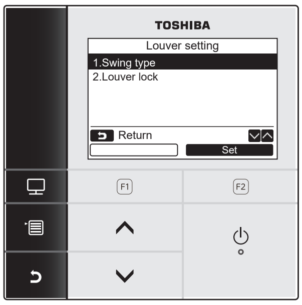
- “⊘ No function” appears on the display for the models not equipped with the Individual louver setting.
- Pushing [∧ ∧] / [∨ ∨] while the louver is swinging stops swinging and sets the louver in the position (1).
- Refer to “15. Information ■ Group control”. (page 47)
- “✣ ” appears on the display when the Louver lock function is used. Individual louver setting is not available for the louver set to be locked. (page 18)

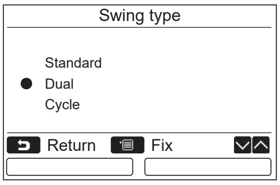
3. Louver setting

■ Swing type

* Select the louver swing type from the standard swing, dual swing or cyclic swing.
Carry out the setting operation while the indoor unit is stopped. (Turn off the air conditioning unit before starting the setting operation.)

Before setting




Swing type

○ Standard
● Dual
○ Cycle

↩ Return ≡ Fix ∨∧

1. **Push the [∧ ∧] / [∨ ∨] button to select “3.Louver setting” on the menu screen, then push the “Set Set” [F2 F2] button.**
2. **Push the [∧ ∧] / [∨ ∨] button to select “1.Swing type”, then push the “Set Set” [F2 F2] button.**
3. **Push the [∧ ∧] / [∨ ∨] button on the “Swing type” screen to select the swing type.**
   →Refer to the Owner’s Manual supplied with the indoor unit about the swing type.
4. **Push the [≡ MENU] button.**
   →“⧗ Setting” appears on the display.
   →The unit selection screen appears when the group control is used. Push the [↩ CANCEL] button on the unit selection screen to finish the setting operation. “⧗ Setting” appears on the display.

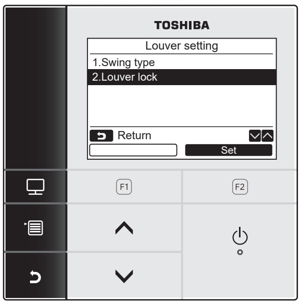
NOTE

- “⃠ No function” appears on the display for the models not equipped with the Swing type setting.
- Push the [↩ CANCEL] button to stop the setting procedure. No setting has been made and the screen returns to “Louver setting”.
- Refer to “15. Information ■ Group control”. (page 47)

■ Louver lock

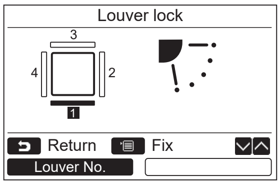
* The direction of the louver can be locked individually.
Carry out the setting operation while the indoor unit is stopped. (Turn off the air conditioning unit before starting the setting operation.)

Before setting



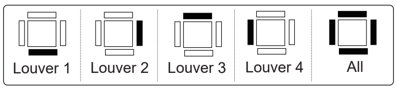
1 **Push the [∧ ∧] / [∨ ∨] button to select “3.Louver setting” on the menu screen, then push the “ Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select “2.Louver lock”, then push the “ Set Set” [F2 F2] button.**

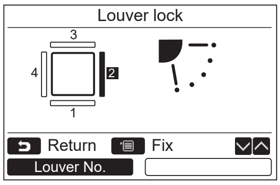


3 **Push the “ Louver No. Louver No.” [F1 F1] button to select the louver to set.**

→The display changes as follows each time the button is pushed.

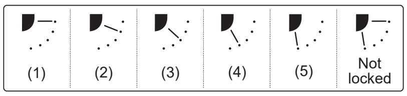


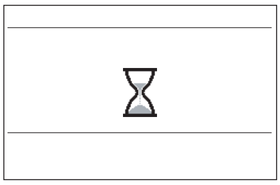
Refer to the section on “Individual Louver” on page 15 for the louver number by model.



4 **Push the [∧ ∧] / [∨ ∨] button to select the louver (wind) direction.**

→Push the [∧ ∧] button to move the louver upward. Push the [∨ ∨] button to move it downward.





5 **Push the [MENU] button.**

→“⌛ Setting” appears on the display.

→The unit selection screen appears when the group control is used. Push the [CANCEL] button on the unit selection screen to finish the setting operation. “⌛ Setting” appears on the display.

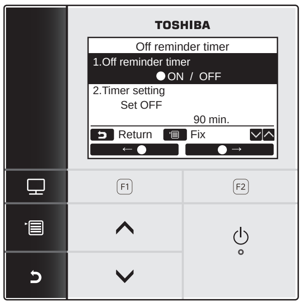
NOTE

- “⊘ No function” appears on the display for the models not equipped with the Louver lock setting.
- Push the [⮌ CANCEL] button to stop the setting procedure. No setting has been made and the screen returns to “Louver setting”.
- “ ✥ ” appears on the display when the Louver lock function is used.
- Push the [∧ ∧] / [∨ ∨] button repeatedly to select the “Not locked” setting as the louver direction to release the lock.
- Condensation may occur if the louver is locked in the position (4) or (5) while cooling.
- Refer to “15. Information ■ Group control”. (page 47)

4. Off reminder timer

■ Off reminder timer

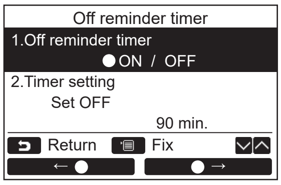
Before setting

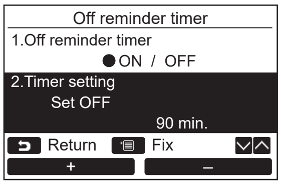


1 **Push the [∧ ∧] / [∨ ∨] button to select “4.Off reminder timer” on the menu screen, then push the “ Set Set” [F2 F2] button.**

Off reminder timer

Set the length of time until the air conditioner stops automatically.





1 **Push the [∧ ∧] / [∨ ∨] button to select “1. Off reminder timer”.**

2 **Push the “ ←● ←●” [F1 F1] button.**
→Push the “ ●→ ●→” [F2 F2] button to turn off the Off reminder timer.

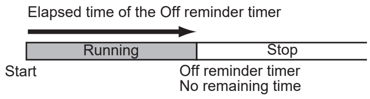
3 **Push the [∧ ∧] / [∨ ∨] button to select “2. Timer setting”.**

4 **Push the “ + +” [F1 F1] / “ – -” [F2 F2] button to set the time.**
→The time can be set at 10 minutes intervals.

5 **Push the [MENU] button.**
→The screen returns to the menu screen.

NOTE

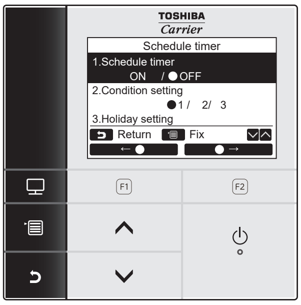
- The air conditioner stops running after the specified time has elapsed.



- “⏲” appears on the detailed display when the Off reminder timer is used.
- The Off reminder timer does not work in the following cases:
  When the Off reminder timer is deactivated
  When an error has occurred
  While the test operation is in progress
  While setting the functions
  When the central control is used (when the run and stop operation is prohibited)
- The Off reminder timer cannot be set on the Follower remote controller when the dual remote controller system is used.
- The time of Off reminder timer can be set within the range from 30 minutes to 240 minutes.
- Push the [↩ CANCEL] button to stop the setting procedure. No setting has been made and the screen returns to the menu screen.

5. Schedule timer

* Up to 8 different running patterns per day can be programmed with the schedule timer.
Up to 3 patterns of settings that differ per day can be set.
Days of the week when the schedule timer is not used can also be set in "Holiday setting".

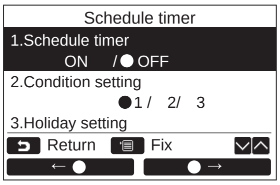


TOSHIBA
Carrier
Schedule timer
1.Schedule timer
ON / ● OFF
2.Condition setting
●1 / 2/ 3
3.Holiday setting
Return Fix
←● ●→

1 **Push the [∧ ∧] / [∨ ∨] button to select "5.Schedule timer" on the menu screen, then push the "Set Set" [F2 F2] button.**

2.Condition setting
Set the running condition of each day.

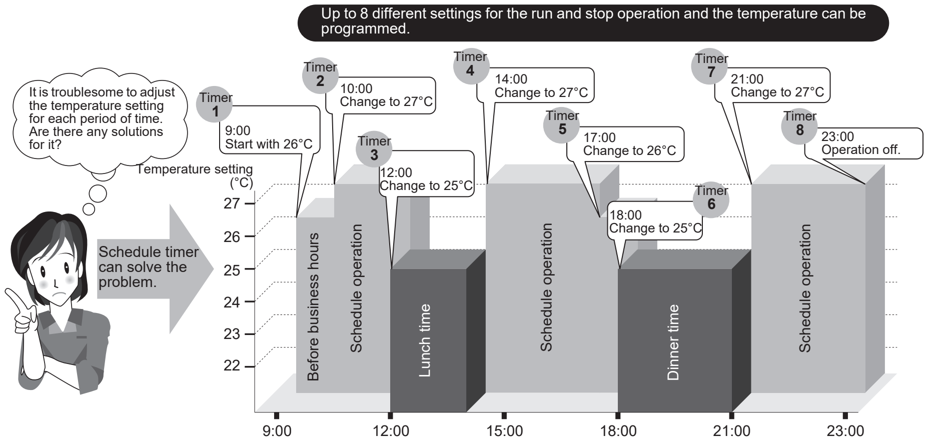
3. Holiday setting
Set the day when the schedule timer is not used.



Schedule timer
1.Schedule timer
ON / ● OFF
2.Condition setting
●1 / 2/ 3
3.Holiday setting
Return Fix
←● ●→

2 **Push the [∧ ∧] / [∨ ∨] button to select "1. Schedule timer".**

3 **Push the "←● ←●" [F1 F1] button.**
→Push the "●→ ●→" [F2 F2] button to turn off the Schedule timer.



Up to 8 different settings for the run and stop operation and the temperature can be programmed.

NOTE

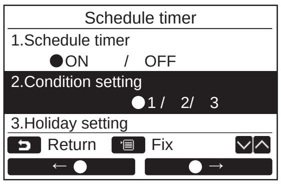
- "⏲" appears on the detailed display when the Schedule timer is used.
- The Schedule timer does not work in the following cases:
  When the Schedule is deactivated
  Days of the week when the Schedule timer is set not to work
  When the clock display is blinking (the clock has not been adjusted)
  When an error has occurred
  While the test operation is in progress

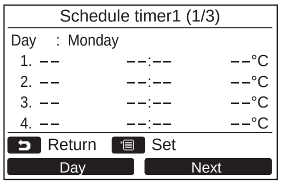
While setting the functions
When the central control is used (when the run and stop operation is prohibited)

- The Schedule timer cannot be set on the Follower remote controller when the dual remote controller system is used.
- Adjust the clock before setting the Schedule timer. (page 34)
- The time can be adjusted by the minute.
- The temperature can be set within the range from 18°C to 29°C. (The limited temperature range is applied if the Set temp. range limit function is activated.)
- The operation mode for the Schedule timer is the mode selected last time when the air conditioning unit was used.
- When dual automatic mode is used, "––", "ON", "OFF", and "Auto" can be selected for the operation mode.
  If dual automatic mode is selected in the schedule timer settings, select "Auto".
  If "ON" is selected and operation is started in automatic operation mode, the cooling temperature set point and heating temperature set point will be set automatically.
- The operation mode can be selected. For details, refer to "6. Setting timer operation mode" of "Field setting menu" in the Installation Manual.

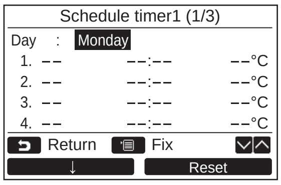
■ Condition setting

* Up to 8 different running patterns per day can be programmed.



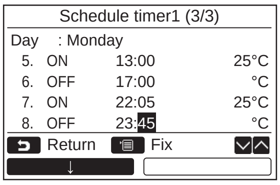


(1)

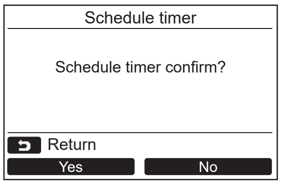


1. **Push the [∧ ∧] / [∨ ∨] button to select "2. Condition setting" on the "Schedule timer" screen.**
2. **Push the"←● ←●" [F1 F1]/ "●→ ●→" [F2 F2] button to select one of ○1/2/3, then push the [▤ MENU] button.**
   →Push the "Day Day" [F1 F1] button to confirm the settings for each day.
   →Push the "Next Next" [F2 F2] to confirm the current settings. 8 different settings appears.
   →Push the [⮌ CANCEL] button to return to the "Schedule timer" screen.
3. **Push the [▤ MENU] button.**
4. **Push the [∧ ∧] / [∨ ∨] button to select the day to set, then push the "↓ ↓" [F1 F1] button.**
   →Push the [⮌ CANCEL] button to switch to the "Unconfirmed check" screen.
5. **Push the [∧ ∧] / [∨ ∨] button to select "--", "ON", "OFF", "Auto*".**
   →Select "ON" to change the operation start time and the set temperature settings.
   →Select "OFF" to change the operation stop time setting.
   →"--" indicates that the item has not been set.
6. **Push "→ →" [F2 F2] to select time or temperature.**
   →When "--" is displayed, time or temperature cannot be selected for that item.
7. **Push the [∧ ∧] / [∨ ∨] button to set time or temperature.**

(2)



Schedule timer1 (3/3)
Day : Monday
5. ON 13:00 25°C
6. OFF 17:00 °C
7. ON 22:05 25°C
8. OFF 23:45 °C



Schedule timer

Schedule timer confirm?

8 **Push the “↓ ↓” [F1 F1] button to program the next running pattern.**

→Up to 8 different running patterns per day can be programmed.

9 **Push the [MENU] button.**

→The screen returns to the day selection screen (1).

10 **Push the [∧ ∧] / [∨ ∨] button to select the day to set, (for programming the other days).**

→Repeat the procedure from step 4 to 9 to program the running patterns for each day. ***(2)***

11 **Push the [MENU] button.**

→Push the “Yes Yes” [F1 F1] button to confirm the programmed schedule.

→Push the “No No” [F2 F2] button to return to the Schedule timer setting screen.

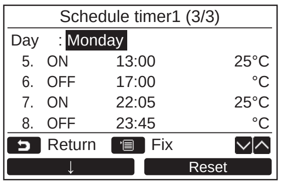
12 **To set Schedule timer2 and Schedule timer3, repeat steps 2 to 11.**

NOTE

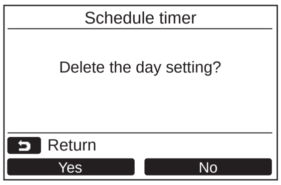
- Do not duplicate the same day and time in a single schedule timer.

To delete the settings for each day

(3)



Schedule timer1 (3/3)
Day : Monday
5. ON 13:00 25°C
6. OFF 17:00 °C
7. ON 22:05 25°C
8. OFF 23:45 °C



Schedule timer

Delete the day setting?

1 **Push the “Reset Reset” [F2 F2] button on the Schedule timer setting screen.**

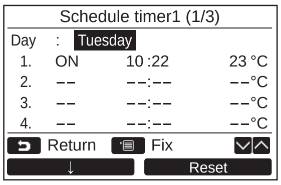
2 **Push the “Yes Yes” [F1 F1] button.**

→The schedule of the day selected is deleted.

→Push the “No No” [F2 F2] button to return to the Schedule timer setting screen. ***(3)***

To copy the settings of the previous day

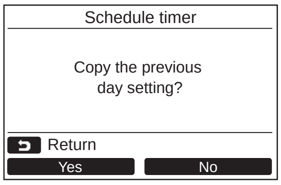
(4)



Schedule timer1 (1/3)

Day : Tuesday

1.	ON	10 :22	23 °C
2.	−−	−−:−−	−−°C
3.	−−	−−:−−	−−°C
4.	−−	−−:−−	−−°C



Schedule timer

Copy the previous day setting?

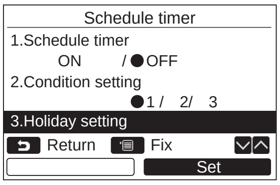
1. **Push the [MONITOR] button on the day selection screen.**
2. **Push the “ Yes” [F1] button.**
   →The schedule of the previous day is copied.
   →Push the “ No” [F2] button to return to the Schedule timer setting screen. ***(4)***

NOTE

- Push the [CANCEL] button to stop the setting. No setting has been made and the screen returns to the “Schedule timer” screen.
- *“Auto” is displayed only when dual automatic mode is selected.

■ Holiday setting

* Set the days of the week when the schedule timer is not used.

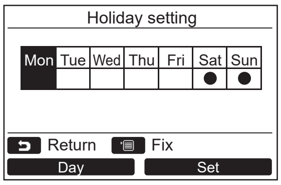


Schedule timer

1.Schedule timer
ON / ● OFF

2.Condition setting
● 1 / 2/ 3

3.Holiday setting



Holiday setting

Mon	Tue	Wed	Thu	Fri	Sat	Sun
					●	●

1. **Push the [∧] / [∨] button to select “3. Holiday setting” on the “Schedule timer” screen.**
2. **Push the “ Set” [F2] button.**
3. **Push the “ Day” [F1] button to select the day, then push the “ Set” [F2] button to set.**
   →Push the “ Set” [F2] button so that “●” is displayed on the day when the Schedule timer is not used.
4. **Push the [MENU] button.**
   →The screen returns to the “Schedule timer” screen.

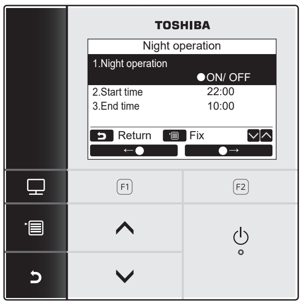
NOTE

- Operations other than the Schedule timer, such as operations on the remote controller or using the central control are available on the days set as “Holiday”.
- Push the [CANCEL] button to stop the setting procedure. No setting has been made and the screen returns to the “Schedule timer” screen.

6. Night operation

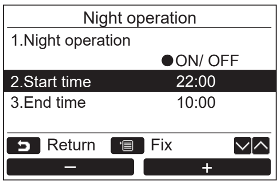
(Only for models equipped with the function)

Set the operation time that suppressing the operation sound of the outdoor unit is preferable such as nighttime.



1. **Push the [∧ ∧] / [∨ ∨] button to select “6.Night operation” on the menu screen, then push the “Set Set” [F2 F2] button.**
2. **Push the [∧ ∧] / [∨ ∨] button to select “1.Night operation” on the “Night operation” screen.**
3. **Push the “←● ←●” [F1 F1] / “●→ ●→” [F2 F2] button to select “ON” or “OFF”.**
   →Select “ON” when the function is used.
4. **Push the [▤ MENU] button.**
   →Push the [∧ ∧] / [∨ ∨] button to select “2.Start time” or “3.End time” for setting the Night operation time

To set the Night operation time


Night operation
1.Night operation
●ON/ OFF
2.Start time 22:00
3.End time 10:00

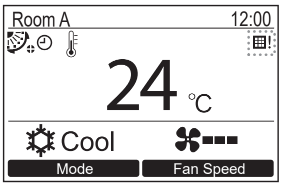
1. **Push the [∧ ∧] / [∨ ∨] button to select “2.Start time” on the “Night operation” screen.**
2. **Push the “– -” [F1 F1] / “+ +” [F2 F2] button to set the time.**
3. **Push the [∧ ∧] / [∨ ∨] button to select “3.End time”.**
4. **Push the “– -” [F1 F1] / “+ +” [F2 F2] button to set the time.**
5. **Push the [▤ MENU] button.**
   →The screen returns to the menu screen.

NOTE

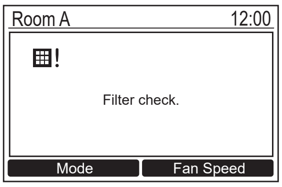
- The Night operation is not available for multi type air conditioning system. “⃠ No function” appears on the display.
- The 24-hour operation of Night operation is performed when the end time is the same as the start time.
- Cooling / heating performance may be reduced a little because the operation priority is put on the quietness for the Night operation.
- Adjust the clock before setting the Night operation. (page 34)
- “zzz” appears on the detailed display when the Night operation is activated.
- The Night operation cannot be set on the Follower remote controller in the dual remote controller system.
  “⃠ No function” is displayed on the screen.

7. Filter sign reset

“▦! ” (filter sign) appears on the detailed display (not displayed when it is in the normal display mode) to tell the time for cleaning the filter.



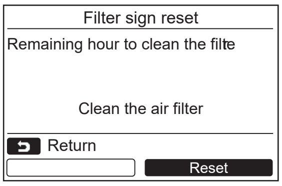
- Reset the filter sign after cleaning the filter.
  Refer to the Owner’s Manual supplied with the indoor unit about how to clean the filter.



Filter check.

- “Filter check” is displayed on the screen if you start running the air conditioner when “▦! ” (filter sign) appears on the detailed display. Push one of the operation buttons to erase the message or wait for more than 5 seconds until the message disappears.

When the filter sign is displayed on the screen (To reset the filter sign)



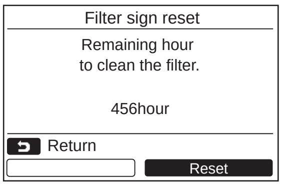
Remaining hour to clean the filte

Clean the air filter

1 **Push the [∧ ∧] / [∨ ∨] button to select “Filter sign reset” on the menu screen, then push the “Set Set” [F2 F2] button.**

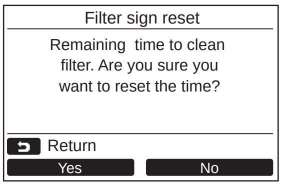
2 **Push the “Reset Reset” [F2 F2] button.**

When the filter sign is not displayed on the screen (To check the remaining time for filter cleaning)



Remaining hour
to clean the filter.

456hour



Remaining time to clean
filter. Are you sure you
want to reset the time?

1 **Push the [∧ ∧] / [∨ ∨] button to select “Filter sign reset” on the menu screen, then push the “Set Set” [F2 F2] button.**
→If you checked only the remaining time until the filter check, push the [↩ CANCEL] button to return to the menu screen.

2 **To reset the filter check remaining time, push the “Reset Reset” [F2 F2] button, then push the “Yes Yes” [F1 F1] button.**
→Push the “No No” [F2 F2] button to return to the “Filter sign reset” screen.
→Push the [↩ CANCEL] button to return to the “Filter sign reset” screen.

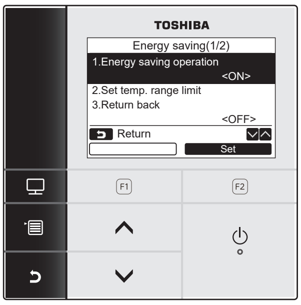
EN

NOTE

- “Clean the air filter” or “Filter check”appears on the display when there is no remaining time for filter cleaning.
- “▦! ” (filter sign) appears on the detailed display. The sign is not displayed when the remote controller is in the normal display mode.
- The remaining time for filter cleaning of the Header air conditioning unit is displayed when 2 or more indoor units are connected.
- The remaining time for filter cleaning differs depending on the connected indoor unit.

9. Energy saving

Set for the energy saving operation: Energy saving operation, Set temp. range limit, Return back and Saving operation.



1 **Push the [∧ ∧] / [∨ ∨] button to select “9.Energy saving” on the menu screen, then push the “ Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select the item to set.**

3 **Push the “ Set Set” [F2 F2] button.**

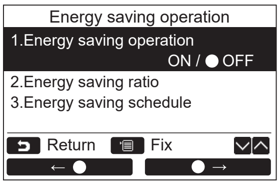
Item	Function
1. Energy saving operation	Perform the power saving operation of the air conditioner.
2. Set temp. range limit	Set the temperature range limit of the remote controller operation.
3. Return back	Set the function that changes the temperature back to the specified temperature automatically if the temperature has been changed on the remote controller.
4. Saving operation	Performs operation by suppressing excessive heating or excessive cooling through automatic correction of the temperature set point. * “⃠ No function” is displayed in the case of a model for which the saving operation cannot be set.

⚠CAUTION

Refer to the Owner’s Manual supplied with the indoor unit about “Energy saving operation”, “Saving operation”.

■ Energy saving operation

Set for the power saving operation of the air conditioner.



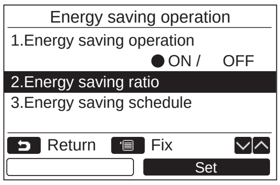
1 **Push the [∧ ∧] / [∨ ∨] button to select “1. Energy saving operation” on the “Energy saving” screen.**

2 **To start the Energy saving operation: After setting “2. Energy saving ratio” and “3. Energy saving schedule”, push the “ ←● ←●” [F1 F1] button to select “ON”, then push the [MENU] button.**
To stop the Energy saving operation: Push the“ ●→ ●→” [F2 F2] button to select “OFF”, then push the [MENU] button.

EN

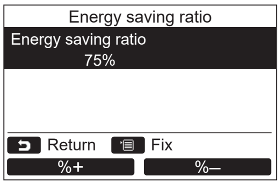
Energy saving ratio

Carry out the setting operation while the indoor unit is stopped. (Turn off the air conditioning unit before starting the setting operation.)



Energy saving operation
1.Energy saving operation
● ON / OFF
2.Energy saving ratio
3.Energy saving schedule
↩ Return ▤ Fix ∨∧
Set

1 **Push the [∧ ∧] / [∨ ∨] button to select “2. Energy saving ratio” on the “Energy saving operation” screen, then push the “Set Set” [F2 F2] button.**



Energy saving ratio
Energy saving ratio
75%
↩ Return ▤ Fix
%+ %–

2 **Push the “%+ %+” [F1 F1] / “%– %-” [F2 F2] button to set the value.**

→The Energy saving ratio can be set within the range from 50% to 100% by 1 %. The lower the value is set, the higher the power saving effect becomes.

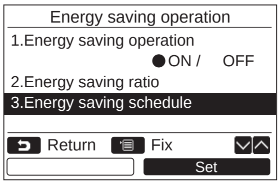
3 **Push the [▤ MENU] button.**

→“⧖ Setting” appears on the screen, then the screen returns to the “Energy saving operation” screen.

NOTE

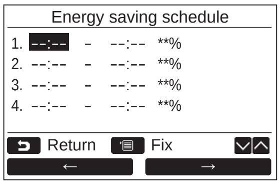
- Cooling / heating performance may be reduced a little because its power is saved during the Energy saving operation.
- “ ” appears on the display when the Energy saving operation is activated.
- The Energy saving operation cannot be set on the Follower remote controller when the dual remote controller system is used.
- Adjust the clock before setting the Energy saving schedule operation. (page 34)
- The remote controller may not be used for setting the Energy saving operation depending on the settings of the central control remote controller or the outdoor unit.
- The Energy saving schedule operation is not available when the clock display is blinking (the clock has not been adjusted).

Energy saving schedule

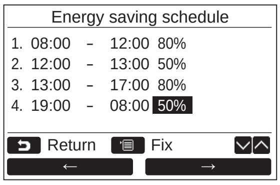


1 **Push the [∧ ∧] / [∨ ∨] button to select “3. Energy saving schedule” on the “Energy saving operation” screen, then push the “Set” [F2 F2] button.**

→The “Clock” setting screen appears if the clock has not been adjusted. (page 34)


Energy saving schedule

1. --:-- - --:-- **%
2. --:-- - --:-- **%
3. --:-- - --:-- **%
4. --:-- - --:-- **%


Energy saving schedule

1. 08:00 - 12:00 80%
2. 12:00 - 13:00 50%
3. 13:00 - 17:00 80%
4. 19:00 - 08:00 50%

2 **Push the [∧ ∧] / [∨ ∨] button to set the time and energy saving ratio.**

→Push the “← ←” [F1 F1] / “→ →” [F2 F2] button to set the value.

3 **Push the [MENU] button.**

→The screen returns to the “Energy saving operation” screen.

NOTE

- The time of the schedule setting for the Energy saving operation can be set within the range from 0:00 to 23:50 at 10 minute intervals.
- The save ratio of the schedule setting for the Energy saving operation can be selected only from “random (*1)”, “50%”, or “0%”.
- Adjust the clock before setting the Energy saving schedule. (page 34)
- The lower save ratio is applied when the different save ratios are set at the same hours on the schedule.

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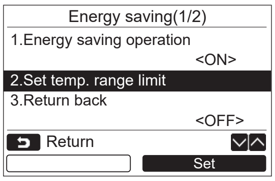
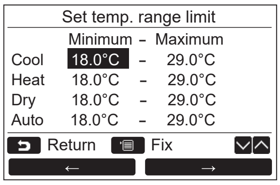
*1: Random is the value set at “Energy saving ratio”.

■ Set temp. range limit

Set the temperature range for each operation mode.


Energy saving(1/2)
1.Energy saving operation <ON>
2.Set temp. range limit
3.Return back <OFF>


Set temp. range limit

	Minimum	–	Maximum
Cool	18.0°C	–	29.0°C
Heat	18.0°C	–	29.0°C
Dry	18.0°C	–	29.0°C
Auto	18.0°C	–	29.0°C

1. **Push the [∧ ∧] / [∨ ∨] button to select “2. Set temp. range limit” on the “Energy saving” screen, then push the “Set Set” [F2 F2] button.**
2. **Push the [∧ ∧] / [∨ ∨] button to set the temperature.**
   →Push the “← ←” [F1 F1] / “→ →” [F2 F2] button to set the value.
3. **Push the [▤ MENU] button.**
   →The screen returns to the “Energy saving” screen.

When an error occurs during setting

“Error” appears on the display when the [▤ MENU] button is pushed under either condition:

1) the upper limit value falls below the lower limit
2) the lower limit value exceeds the upper limit

Push the [↩ CANCEL] button to erase the error message or wait for 10 seconds until the message disappears. The screen returns to the “Set temp. range limit” screen.

Priority for the Set temp. range limit function

Set the same settings for the Set temp. range limit on each remote controller when the dual remote controller system is used.

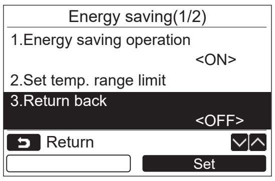
NOTE

The operation at the temperature beyond the temperature range may be performed in the following cases:

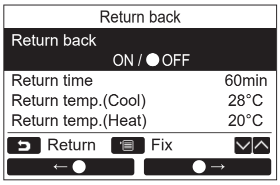
1. In case that the different values of temperature are set on each remote controller when the dual remote controller system is used.
2. In case that the temperature beyond the temperature range is set on the central control remote controller and the wireless remote controller.

■ Return back

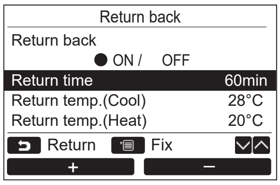
The temperature setting returns back to the specified temperature automatically if the temperature has been changed on the remote controller. The time and temperature to return can be set.



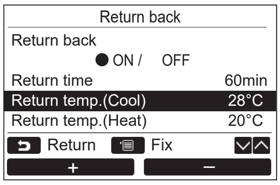
Energy saving(1/2)
1.Energy saving operation <ON>
2.Set temp. range limit
3.Return back <OFF>



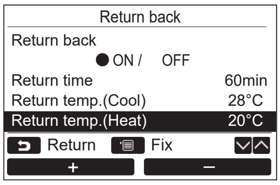
Return back
Return back ON / ● OFF
Return time 60min
Return temp.(Cool) 28°C
Return temp.(Heat) 20°C



Return back
Return back ● ON / OFF
Return time 60min
Return temp.(Cool) 28°C
Return temp.(Heat) 20°C



Return back
Return back ● ON / OFF
Return time 60min
Return temp.(Cool) 28°C
Return temp.(Heat) 20°C



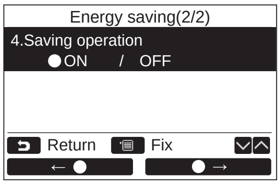
Return back
Return back ● ON / OFF
Return time 60min
Return temp.(Cool) 28°C
Return temp.(Heat) 20°C

1. **Push the [∧ ∧] / [∨ ∨] button to select “3. Return back” on the “Energy saving” screen, then push the “ Set Set” [F2 F2] button.**
2. **Push the [∧ ∧] / [∨ ∨] button to select “Return back”.**
3. **Push the “ ←● ←●” [F1 F1] button to select “ON”.**
   →Select “OFF” when the function is not used.
4. **Push the [∧ ∧] / [∨ ∨] button to select “Return time”, then push the “ + +” [F1 F1] / “ – -” [F2 F2] button to set the time.**
   →The time can be set within the range from 10 minutes to 120 minutes at 10 minute intervals.
5. **Push the [∧ ∧] / [∨ ∨] button to select “Return temp (Cool)” or “Return temp (Heat)”, then push the “ + +” [F1 F1] / “ – -” [F2 F2] button to set the temperature.**
6. **Push the [MENU] button.**
   →The screen returns to the “Energy saving” screen.

NOTE

The Return back function cannot be set on the Follower remote controller in the dual remote controller system.

■ Saving operation


Energy saving(2/2)

4.Saving operation

●ON / OFF

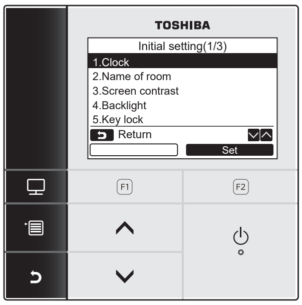
1. **Push the [∧ ∧] / [∨ ∨] button to select “4. Saving operation” on the “Energy saving setting” screen, then push the “Set Set” [F2 F2] button.**
2. **To set the saving operation, push the “←● ←●” [F1 F1] button to select “ON”.**
3. **Push the [MENU] button.**
   →The screen returns to the “Energy saving” screen.

NOTE

- The saving operation is performed by determining a comfortable state within the room from data such as the average room temperature, air speed, and outdoor temperature for the past 20 minutes and then automatically correcting the temperature set point within a range in which there will be no significant variation in the level of comfort.
- The temperature ranges for automatic correction are +1.5°C to -1.0°C when cooling and -1.5°C to +1.0°C when heating. The temperature set point indication on the remote controller does not change.
- “ ” is displayed on the remote controller display screen during the saving operation.
- The saving operation is performed when Auto (cooling/heating automatic operation), cooling operation, and heating operation. The saving operation may not be possible depending on the indoor unit that is connected.
- The saving operation cannot be set on the Follower remote controller when a dual remote controller system is used.

10.Initial setting

Set the initial setting of the remote controller.



1 **Push the [∧ ∧] / [∨ ∨] button to select “10. Initial setting” on the menu screen, then push the “Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select the item to set.**

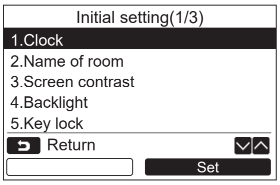
3 **Push the “Set Set” [F2 F2] button.**

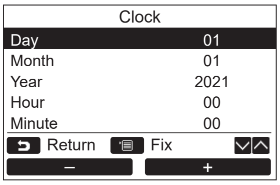
Initial setting items

Item	Function
1. Clock	Settings for the clock (Year, Month, Day, time)
2. Name of room	Refer to the Installation Manual supplied with the remote controller.
3. Screen contrast	Contrast adjustment of the LCD
4. Back light	Turning on / off the back light of the LCD
5. Key lock	Prohibiting the button operations
6. Header / Follower	Refer to the Installation Manual supplied with the remote controller.
7. Language	Setting for the language displayed on the remote controller.
8. Press & hold 4sec.	Setting for the “press and hold” operation for the [⏻ ON / OFF] key.
9. Summer time	Settings for the Summer time (Daylight saving time)
10. Clock display	Select the “12-hour clock” and “24-hour clock” in the “Normal display mode” and “Detailed display mode”.
11. Clock synchronisation	Refer to the Installation Manual supplied with the remote controller.

■ Clock

Set the Year, Month, Day, and time.





Day 01
Month 01
Year 2021
Hour 00
Minute 00

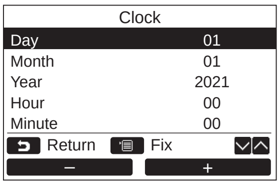
1 **Push the [∧ ∧] / [∨ ∨] button to select “1. Clock” on the “Initial setting” screen, then push the “Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select the Year, Month, Day, and time.**

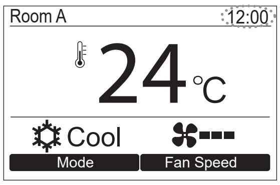
→Push the “– -” [F1 F1] / “+ +” [F2 F2] button to set the value.

3 **Push the [▤ MENU] button.**

To adjust the clock



Day 01
Month 01
Year 2021
Hour 00
Minute 00



1 **Push the [∧ ∧] / [∨ ∨] button to select “1. Clock” on the “Initial setting” screen, then push the “Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select the Year, Month, Day, and time.**
→Push the “– -” [F1 F1] / “+ +” [F2 F2] button to set the value.

3 **Push the [▤ MENU] button.**
→The screen returns to the “Initial setting” screen.

The clock display appears on the upper right of the screen.

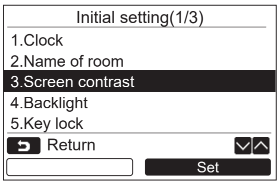
- The clock display blinks if the clock setting has been reset due to power failure or other cause.

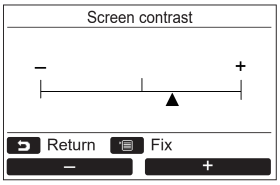
NOTE

The available date range is from January 1st, 2021 to December 31st, 2099.

■ Screen contrast

Adjust the contrast of the LCD.





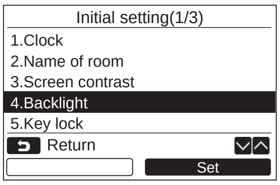
1 **Push the [∧ ∧] / [∨ ∨] button to select “3.Screen contrast” on the “Initial setting” screen, then push the “Set Set” [F2 F2] button.**

2 **Push the “– -” [F1 F1] / “+ +” [F2 F2] button to adjust.**

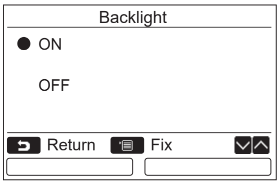
3 **Push the [▤ MENU] button.**
→The screen returns to the “Initial setting” screen.

■ Backlight

Turn on or off the backlight of the LCD.



Initial setting(1/3)
1.Clock
2.Name of room
3.Screen contrast
4.Backlight
5.Key lock
Return
Set



Backlight
● ON
OFF
Return Fix

1 **Push the [∧ ∧] / [∨ ∨] button to select “4.Backlight” on the “Initial setting” screen, then push the “Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select “ON” or “OFF”.**

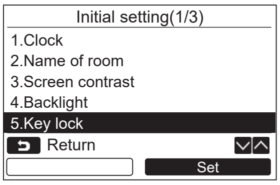
3 **Push the [▤ MENU] button.**
→When “ON” is selected, the back light is turned on during operating with the remote controller.
→When “OFF” is selected, the back light is not turned on.

NOTE

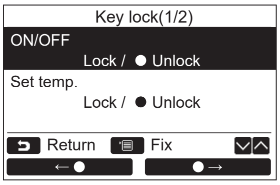
- The back light of the LCD is turned on as a factory default.
- The back light is on for a predetermined time after button operation.

■ Key lock

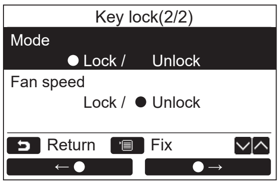
Select whether to lock / unlock [ON / OFF], [∨∧], [MODE](F1) and [FAN SPEED](F2).



Initial setting(1/3)
1.Clock
2.Name of room
3.Screen contrast
4.Backlight
5.Key lock
Return
Set



Key lock(1/2)
ON/OFF
Lock / ● Unlock
Set temp.
Lock / ● Unlock
Return Fix
←● ●→



Key lock(2/2)
Mode
● Lock / Unlock
Fan speed
Lock / ● Unlock
Return Fix
←● ●→

1 **Push the [∧ ∧] / [∨ ∨] button to select “5 Key lock” on the “Initial setting” screen, then push the “Set Set” [F2 F2] button.**

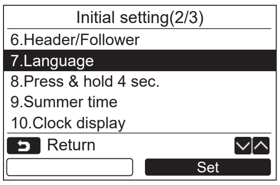
2 **Push the [∧ ∧] / [∨ ∨] button to select a key to lock / unlock.**

3 **Push the “←● ←●” [F1 F1] button to select “Lock”, or “●→ ●→” [F2 F2] button to select “Unlock”.**

4 **Push the [▤ MENU] button.**
→When “Lock” is selected, the key cannot be used during key lock.
When “Unlock” is selected, the key can be used even during key lock.
→All keys are unlocked while “Check” is displayed.
→For the key lock setting, refer to “Activating the key lock function” on page 9.
→The factory default is “Lock”.

■ Language

Select a language for the screen text.



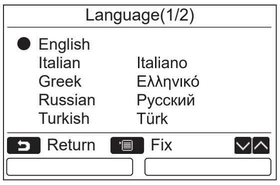
Initial setting(2/3)
6.Header/Follower
7.Language
8.Press & hold 4 sec.
9.Summer time
10.Clock display

1 **Push the [∧ ∧] / [∨ ∨] button to select “7.Language” on the “Initial setting” screen, then push the “Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select the language.**

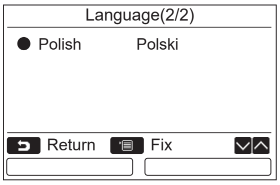
3 **Push the [▤ MENU] button.**
→The screen returns to the “Initial setting” screen.

These two screens appear for RBC-AMSU51-EN.



Language(1/2)

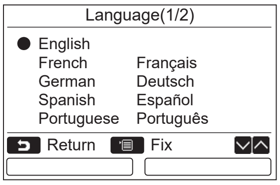
● English	
Italian	Italiano
Greek	Ελληνικό
Russian	Русский
Turkish	Türk



Language(2/2)

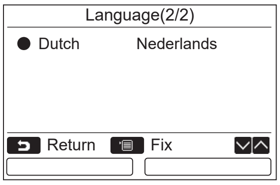
● Polish	Polski

These two screens appear for RBC-AMSU51-ES.



Language(1/2)

● English	
French	Français
German	Deutsch
Spanish	Español
Portuguese	Português

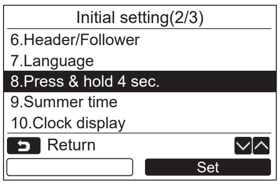


Language(2/2)

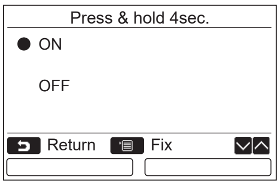
● Dutch	Nederlands

■ Press & hold 4sec.

Set the “press and hold 4 sec.” operation for the [⏻ ON / OFF] button.



Initial setting(2/3)
6.Header/Follower
7.Language
8.Press & hold 4 sec.
9.Summer time
10.Clock display



Press & hold 4sec.
● ON
OFF

1 **Push the [∧ ∧] / [∨ ∨] button to select “8.Press & hold 4sec.” on the “Initial setting” screen, then push the “Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select “ON” or “OFF”.**

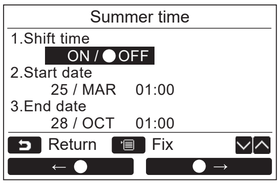
3 **Push the [MENU] button.**

→When “ON” is selected, the air-conditioner starts / stops running when the [⏻ ON / OFF] button is pressed and hold 4 seconds.

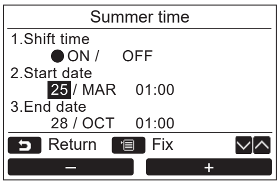
→When “OFF” is selected, the air-conditioner starts / stops running when the [⏻ ON / OFF] button is pressed.

■ Summer time

Set summer time (Daylight saving time).



Summer time
1.Shift time
ON / ●OFF
2.Start date
25 / MAR 01:00
3.End date
28 / OCT 01:00



Summer time
1.Shift time
●ON / OFF
2.Start date
25 / MAR 01:00
3.End date
28 / OCT 01:00

1 **Push the [∧ ∧] / [∨ ∨] button to select “9. Summer time” on the “Initial setting” screen, then push the “Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select “1. Shift time” on the “Summer time” screen.**

3 **Push the “←● ←●” [F1 F1] button to select “ON”.**

4 **Push the [∧ ∧] / [∨ ∨] button to change the start date and the end date.**

5 **Push the “– –” [F1 F1] / “+ +” [F2 F2] button to set the Day, Month, and time.**

6 **Push the [MENU] button.**

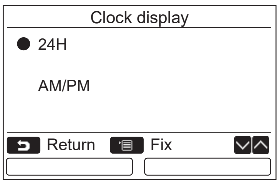
→The screen returns to the “Initial setting” screen.

NOTE

- When “Shift Time” is ON and the time in “Start Date” is reached, the time setting in the remote controller shifts by 1 hour, and when the time in “End Date” is reached, the time setting returns to the original time.
- When the following scheduled operation set by the time changes due to the switch to summer time, the operation will start at the time after the change.
  Schedule timer, outdoor unit quiet setting, saving operation
  However, the scheduled operation will not be carried out during the 1-hour shifted by the Start Date.
- The operating time will not be affected even if the following function set by the time changes with summer time.
  Off reminder timer, Return back (Energy saving), Occupancy sensor operation

■ Clock display

Select the “12-hour clock” and “24-hour clock” in the “Normal display mode” and “Detailed display mode”.



1 **Push the [∧ ∧] / [∨ ∨] button to select “10. Clock display” on the menu screen, then push the “Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select “24H” or “AM/PM”.**
24H: 24-hour clock
AM/PM: 12-hour clock

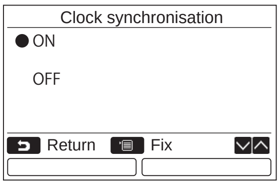
3 **Push the [MENU] button.**
→The screen returns to the “Initial setting” screen.

NOTE

Even if you select the “12-hour clock”, the “24-hour clock” display will still appear in the setting screen of the schedule timer etc.

■ Clock synchronisation

You can set whether to synchronize year, month, day, and time with the air-conditioning management controller. (This feature is only implemented for the relevant air-conditioning management controller.)



1 **Push the [∧ ∧] / [∨ ∨] button to select “11. Clock synchronization” on the “Initial setting” screen, then push the “Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select “ON” or “OFF”.**

3 **Push the [MENU] button.**
→The screen returns to the “Initial setting” screen.

NOTE

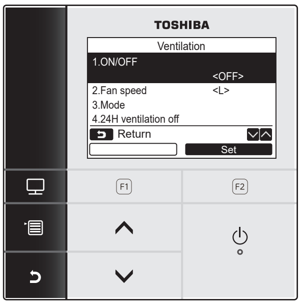
“Clock synchronization” is set as the factory default.

11.Ventilation

(Only for models equipped with the function)

■ Ventilation

Set for the ventilation operation linked to the air conditioner.



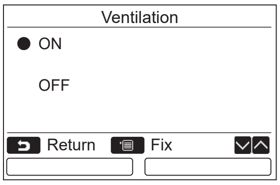
1 **Select “11. Ventilation” on the menu screen, then push the “Set Set” [F2 F2] button.**

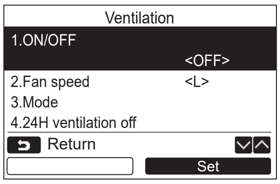
2 **Push the [∧ ∧] / [∨ ∨] button to select the item to set.**

3 **Push the “Set Set” [F2 F2] button.**

Item	Function
1. ON/OFF	The run and stop operation of ventilation
2. Fan speed	Setting of the fan speed
3. Mode	Setting of the ventilation mode
4. 24H ventilation off	Setting of 24H ventilation operation stop time.

Operation





1 **Push the [∧ ∧] / [∨ ∨] button to select “1. ON/OFF” on the “Ventilation” screen, then push the “Set Set” [F2 F2] button.**

2 **Push the [∧ ∧] / [∨ ∨] button to select “ON” or “OFF”.**

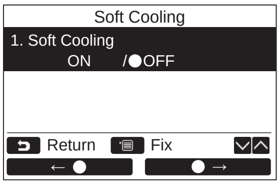
3 **Push the [MENU] button.**
→The screen returns to the “Ventilation setting” screen.

NOTE

- “Impossible” appears on the display when no ventilation unit is connected or the individual operation for the ventilation unit is not activated.
- “2. Fan speed” or “3. Mode”, “4. 24H ventilation off” is available only for the air conditioning system using the Air to Air Heat Exchanger VN-M*HE series. Refer to the Owner’s Manual supplied with the Air to Air Heat Exchanger for details.
- “ ” appears on the detailed display during the ventilation operation when the ventilation unit other than the Air to Air Heat Exchanger VN-M*HE series is used and the individual operation for the ventilation unit is activated.

12.Soft cooling setting

Soft cooling performs operation by limiting the operation range of the louver or suppressing the capacity to prevent discharge air fall down or excessive cooling.


Soft Cooling

1. Soft Cooling

ON /●OFF

1. **Push the [∧ ∧] / [∨ ∨] button to select “12. Soft cooling setting” on the menu screen, then push the “ Set Set” [F2 F2] button.**
2. **To set the soft cooling operation, push the “ ←● ←●” [F1 F1] button to select “ON”.**
3. **Push the [MENU] button.**
   →The screen returns to the menu screen.

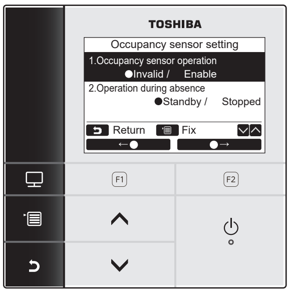
NOTE

- The room may not be cooled properly because the Soft cooling operation performs operation by suppressing the capacity of the air conditioner.
- “⊽” is displayed on the display screen during the Soft cooling operation.
- “⊘ No function” appears in the case of a model without the Soft cooling operation or a model that cannot perform the cooling operation.
- Only the function to suppress the capacity operates in the case of a model for which the wind direction cannot be set.

13.Occupancy sensor

■ Occupancy sensor setting

- An “Occupancy sensor” can detect whether people are present or not present.
  If people are not present, the air conditioner automatically operates in an energy saving mode.



Occupancy sensor setting

1.Occupancy sensor operation
●Invalid / Enable

2.Operation during absence
●Standby / Stopped

Return Fix

1 **Push the [MENU] button to display the menu screen.**

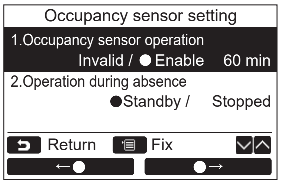
2 **Push the [∧] / [∨] button to select “Occupancy sensor setting” on the menu screen, then push the “Set Set” [F2 F2] button.**

Item	Function
Occupancy sensor operation	You can decide whether to disable the occupancy sensor or select the time required to determine that people are not present. Factory default setting is 60 minutes for determining time. You can select Disable, 30 minutes, 60 minutes, 90 minutes, 120 minutes, or 150 minutes.
Operation during absence	You can select the operation of the air conditioner when people are not present. Standby: Circulation mode (thermostat OFF) Stopped: Stops the air conditioner

NOTE

If an occupancy sensor has not been connected, “⃠ No function” is displayed.

■ Occupancy sensor operation



Occupancy sensor setting

1.Occupancy sensor operation

Invalid / ● Enable 60 min

2.Operation during absence

●Standby / Stopped

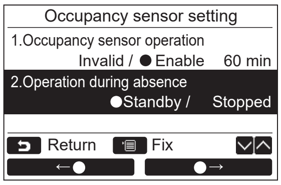
1 **Push the [∧ ∧] / [∨ ∨] button to select “1.Occupancy sensor operation” on the “Occupancy sensor setting” screen.**

2 **Push the “ ←● ←●” [F1] / “ ●→ ●→” [F2] button to select the desired absence time.**

3 **Push the [MENU] button.**

→The screen returns to the menu screen.

■ Operation during absence



Occupancy sensor setting

1.Occupancy sensor operation

Invalid / ● Enable 60 min

2.Operation during absence

●Standby / Stopped

1 **Push the [∧ ∧] / [∨ ∨] button to select “2.Operation during absence” on the “Occupancy sensor setting” screen.**

2 **Push the “ ←● ←●” [F1] / “ ●→ ●→” [F2] button to select the desired operation.**

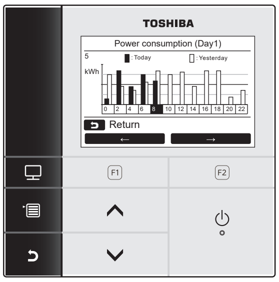
3 **Push the [MENU] button.**

→The screen returns to the menu screen.

14.Power consumption

■ Power consumption

The power consumption is displayed in a graph. (It may not be displayed depending on the models.)



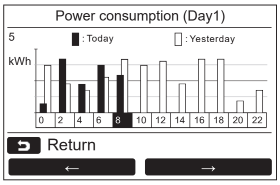
1 **Push the [∧ ∧] / [∨ ∨] button to select "14. Power consumption" on the menu screen, then push the " Set Set" [F2 F2] button.**

2 **Push the " ← ←" [F1 F1] / " → →" [F2 F2] button to select the mode.**

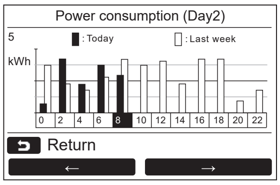
Day1 ↔ Day2 ↔ Week

3 **Push the [⮌ CANCEL] button to return.**

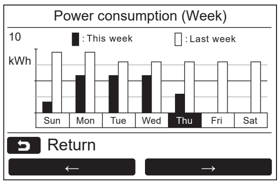
→The screen returns to the menu screen.



Day1 mode
Today and Yesterday data



Day2 mode
Today and last week data



Week mode
This week and last week data

NOTE

- This function can only be used with corresponding indoor units and outdoor units.
  It cannot be used when incompatible models are included in the group connected to the remote controller.
  "⃠ No Function" appears.

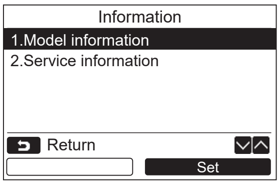
  Compatible models
  Indoor unit: RAV-GM series, RAV-RM series
  Outdoor unit: RAV-GP series

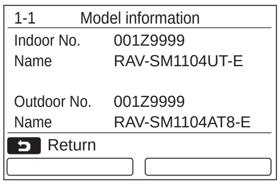
- The power consumption will not appear when the Air to Air Heat Exchanger and Ventilation unit are inside the group.
- Graph data is updated every 30 minutes.
- The power consumption displayed is just an estimate as it is calculated simply. It may sometimes differ from the result measured by the power meter.
- Do not use the values of display for considering the contracted power and calculating the power charge.
- Data is displayed at that time during the summer time period.
- When a power failure occurs, data for up to 30 minutes before the power failure will not be displayed.
- When setting data for the indoor unit is checked and/or changed, data for that period of time may not be displayed.
- When using the air conditioner in two remote controllers, this function cannot be used with the sub (follower) remote controller.
- Always set the clock before using this function.
- The display will return to the menu screen if the remote controller is not operated for approx. 60 seconds.

15.Information

■ Model information

Shows the model names and serial numbers.





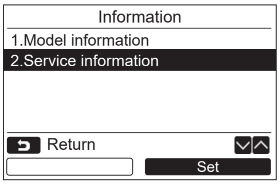
Indoor No. 001Z9999
Name RAV-SM1104UT-E

Outdoor No. 001Z9999
Name RAV-SM1104AT8-E

1. **Push the [∧ ∧] / [∨ ∨] button to select “15.Information” on the menu screen, then push the “Set Set” [F2 F2] button.**
2. **Push the [∧ ∧] / [∨ ∨] button to select “1.Model information”, then push the “Set Set” [F2 F2] button.**

■ Service information

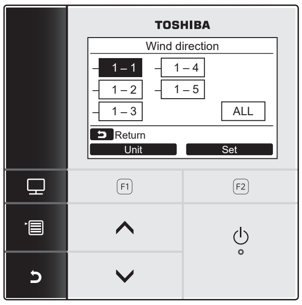
Check the contact number for service.



1. **Push the [∧ ∧] / [∨ ∨] button to select “2. Service information” on the “Information” screen, then push the “Set Set” [F2 F2] button.**

■ Group control

The following functions can be set individually for each unit when the group control is used:
“Wind direction”, “Individual louver”, “Swing type”, “Louver lock”
Operate the remote controller according to the procedure below before setting each function.



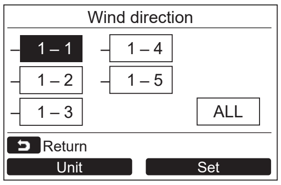
1 **Select the group-controlled function on the menu screen, then push the “Set Set” [F2 F2] button.**

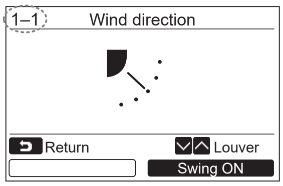
2 **Push the “Unit unit” [F1 F1] button to select the unit to set.**
→The selected unit changes as follows each time the button is pushed:

1-1 → 1-2 → ········ → ALL

3 **Push the “Set Set” [F2 F2] button.**
→The setting display for the selected unit appears.

4 **Push the [↩ CANCEL] button.**
→Pushing the [↩ CANCEL] button returns to the previous screen.
→Pushing the [↩ CANCEL] button when setting “Swing type” or “Louver lock” shows “⌛ Setting” on the screen.

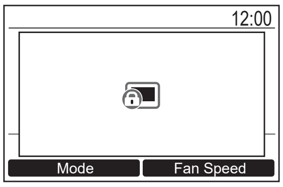




- The number (address) of the selected unit appears on the upper left of the screen, unless “All” is selected for the unit selection.
- “All” is not available for some settings.

■ When central control is performed

When an operation button that is a target of the operation lock is pushed while the operation lock is activated by central control, the following indication is displayed for 5 seconds.



Details of operation lock activated by central control
- The start and stop operations are prohibited.
- Changing the operation mode is prohibited.
- Changing the temperature set point is prohibited.
- Changing the fan speed is prohibited.

6 Maintenance

Turn off the power before maintenance.

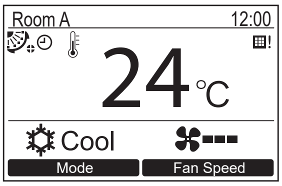
⚠CAUTION

Do not operate the unit with wet hands.
Doing so may result in electric shocks.

■ Daily maintenance

Wipe the remote controller with a dry, soft cloth. Using water to clean the remote controller may result in a malfunction.

■ Cleaning the air filter

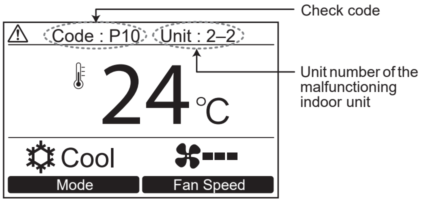


Clean the air filter when "▦!" (filter sign) appears on the detailed display. (page 26)
("▦!" is not displayed in the normal display mode.)

- Clogged air filter reduces the cooling or heating performance.

7 Troubleshooting

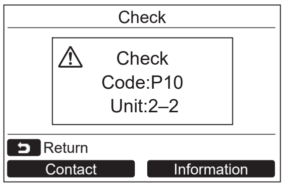
■ Confirmation and check



When an error has occurred in the air conditioner, the check code and the unit number of the indoor unit appear on the display of the remote controller.

* The check code appears only while the unit is running.

Push the [MONITOR] button or [CANCEL] button to display the check information screen.



Check
Code:P10
Unit:2–2

While the check information screen appears:
Push the “Contact Contact” [F1 F1] button to display the contact number for service.
Push the “Information Information” [F2 F2] button to display the model name and serial number of the unit.