



# ELEMENTS

WEATHERPROOF FRIDGE

EN OPERATING AND SERVICE GUIDE ..... 1



Please read this operating and service guide carefully before starting your ARB Fridge for the first time. This guide should be kept in a safe place together with a copy of your receipt.

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## 1 INTRODUCTION

Congratulations on purchasing an ARB Fridge. Your ARB Fridge has been specifically designed for tough off road conditions and its primary purpose is for cooling down food and beverages. It may also be used as a freezer if desired. By following the instructions and guidelines listed in this document, you will ensure that you receive maximum performance and long term reliability out of your new fridge.

Your ARB Fridge is designed to operate on a 12V DC or 24V DC supply from a vehicle, boat or caravan. It can also be operated from a 100-240V AC mains supply using the inbuilt power inverter.

***CAUTION - If you wish to cool medicines, please check if the cooling capacity of the fridge is adequate for the purpose.***

## 2 SUPPLY DETAILS

Your ARB Fridge has been delivered with the following items. If any of these items have not been included with your fridge, please contact your local ARB Fridge dealer.

<b><i>ITEM</i></b>	<b><i>QUANTITY</i></b>
<i>ARB Fridge</i>	<i>1</i>
<i>Reversible basket</i>	<i>1</i>
<i>Basket divider</i>	<i>1</i>
<i>12/24V DC power cable</i>	<i>1</i>
<i>100-240V AC power cable</i>	<i>1</i>
<i>Cable Strap</i>	<i>1</i>
<i>Operating and service guide</i>	<i>1</i>

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## 3 SAFETY INSTRUCTIONS

### 3.1 General safety

For the safety of all people who will use your fridge, ARB recommends that you take note of the following general safety points:

- Always apply the correct voltage to the fridge with the correct polarity.
- Do not connect your fridge to a battery charger, AC/DC converter or rectifier.
- Disconnect the fridge from the battery before using a high-speed battery charger.
- Do not use sharp, abrasive or corrosive materials to clean or defrost the fridge.
- Children should be supervised whilst operating the fridge.
- 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.
- If your power cable is damaged, it must be replaced before the fridge is used.
- Disconnect your fridge from all power supplies before cleaning or maintenance.
- Do not store flammable liquids or gases in or near your fridge.
- Do not open or tamper with the refrigerant circuit.
- Do not remove or modify any of the electrical components.
- Do not store or transport caustic or solvent based material in the fridge.
- Do not use your fridge if there are visible signs of damage.
- Only have your fridge serviced by an authorised ARB Fridge Service Agent.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- 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 and by clients in hotels, motels and other residential type environments.
  - Bed and breakfast type environments.
  - Catering and similar non-retail applications.

### 3.2 Safe operation of the fridge

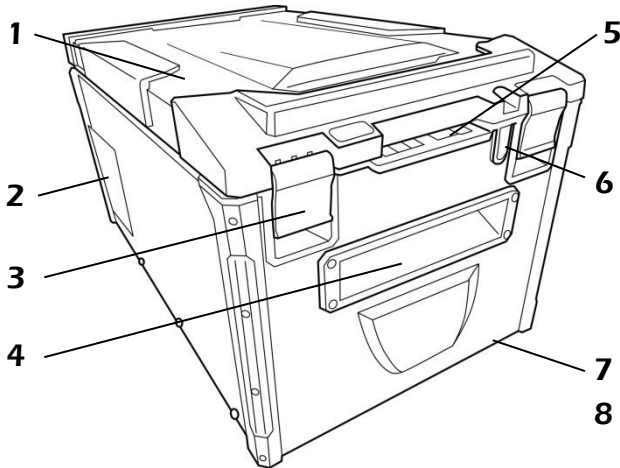
For safe operation of your fridge, ARB recommends that you take note of the following safety points.

- Ensure that there is always sufficient ventilation around the fridge to prevent overheating. Refer to section 5.1 for details.
- Do not touch the internal metal shell of the fridge with a wet hand.
- Do not place your fridge near naked flames or other heat sources (heaters, camp fires, gas ovens etc.).
- Do not fill your fridge cabinet with ice or fluid.
- Do not place electrical devices inside your fridge.
- Do not use your fridge if you suspect that the electrical system has been exposed to water.
- Do not use your fridge if it has been immersed in water.

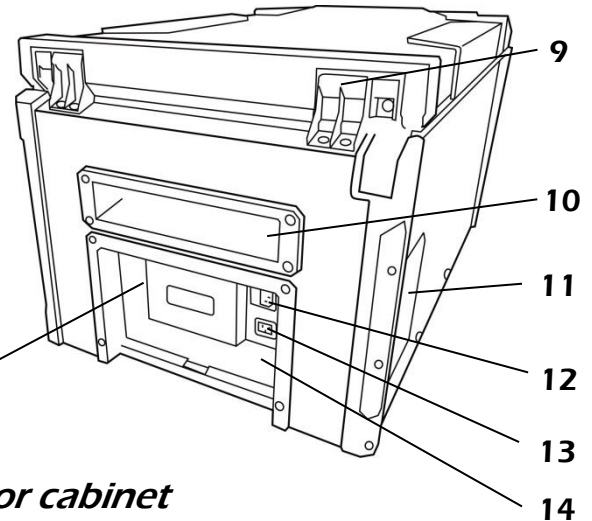
## 4 INTRODUCTION TO YOUR ARB FRIDGE

The key components of your ARB Fridge are identified below in Figures 1 to 4.

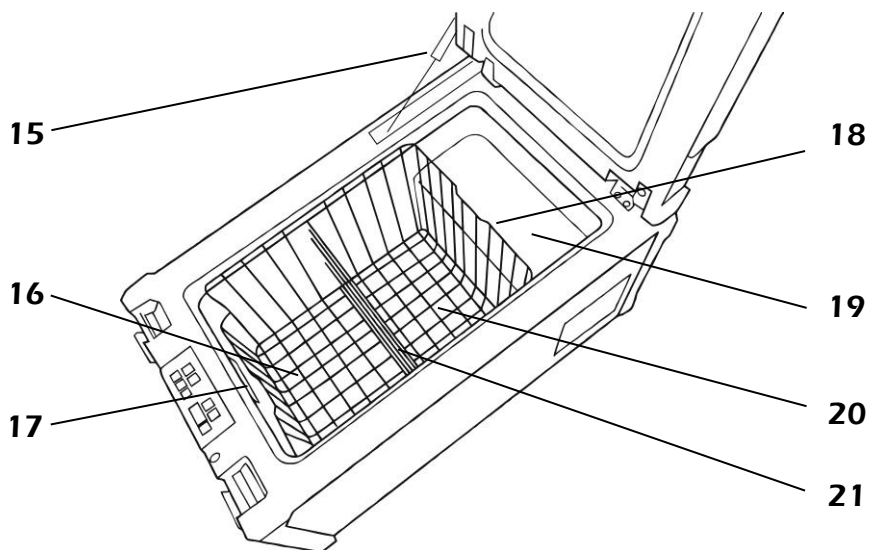
**Figure 1 – Front of fridge**



**Figure 2 – Rear of fridge**

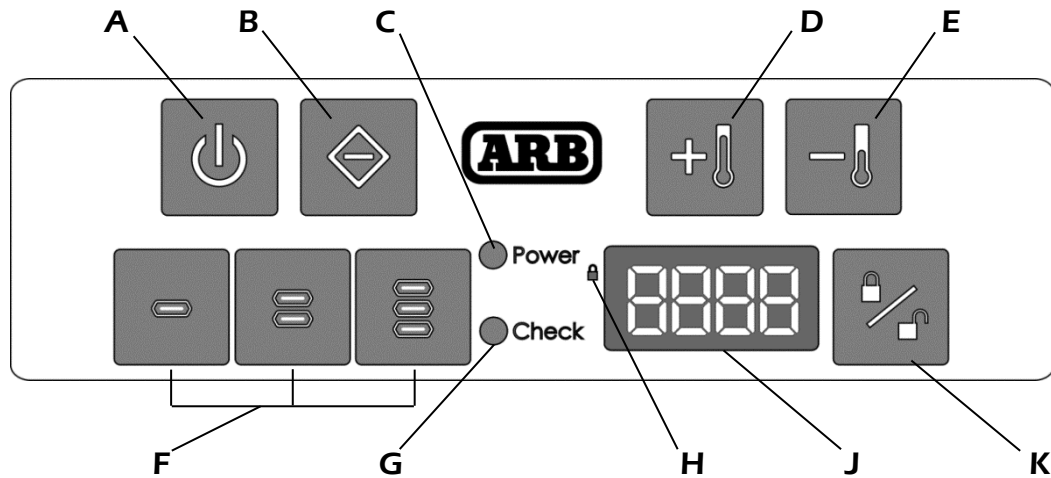


**Figure 3 – Interior cabinet**



- |                                    |  |
|------------------------------------|--|
| 1. Lid                             | 12. 100-240V AC power socket           |
| 2. Cooling vent LH                 | 13. 12/24V DC power socket             |
| 3. Lid latch x 2                   | 14. Compliance plate and serial number |
| 4. Front carry handle              | 15. Gas strut                          |
| 5. Control panel                   | 16. Drain plug                         |
| 6. Padlock position                | 17. LED cabinet light                  |
| 7. Rubber feet x 4                 | 18. Reversible basket                  |
| 8. Socket for wireless transmitter | 19. Secondary cooling cabinet          |
| 9. Hinge x 2                       | 20. Primary cooling cabinet            |
| 10. Rear carry handle              | 21. Basket divider                     |
| 11. Cooling vent RH                |  |

**Figure 4 - Control panel**



- |   |                                |
|---|--------------------------------|
| A. Power ON / OFF Button                                  | F. Key pad for electronic lock |
| B. Function Button  | G. Check Indication LED        |
| C. Power Indication LED *                                 | H. Lock Symbol                 |
| D. Temperature Up Button ( <i>change setting up</i> )     | J. Display                     |
| E. Temperature Down Button ( <i>change setting down</i> ) | K. Lock / Unlock Button        |

\* The power LED is green when the compressor is running. The power LED is orange when the compressor is not running (eg. when the fridge has reached its target temperature).

## 5 INSTALLATION

### 5.1 General installation

The following points should be considered when choosing a location to install your ARB Fridge.

- A minimum clearance of 50 mm must be maintained on all sides of the fridge.
- Whether the installation is permanent or temporary, the fridge must be attached to secure anchorage points.
- The ideal mounting position for the fridge is on a flat, horizontal surface. If the fridge is subject to sideways angles (eg heel on a boat), it can withstand a sideways angle of 30°.
- Avoid placing the fridge near sharp or hot objects.
- Avoid placing the fridge near loose objects that could fall on the cabinet and obstruct its operation.
- Never operate the fridge near flammable liquids or vapours.
- Avoid turning or storing your fridge on its side.

## 5.2 Vehicle Installation

### 5.2.1 Permanent mounting

Your ARB fridge can be permanently mounted to a flat solid surface using the four threaded inserts in its base or the ARB Solid Mounting Kit. If your fridge will be removed on a regular basis, please refer to section 5.2.2 (temporary mounting).

For further information on the ARB Solid Mounting Kit, refer to instructions provided with the kit.

To permanently mount the fridge using the threaded inserts in the fridge base:

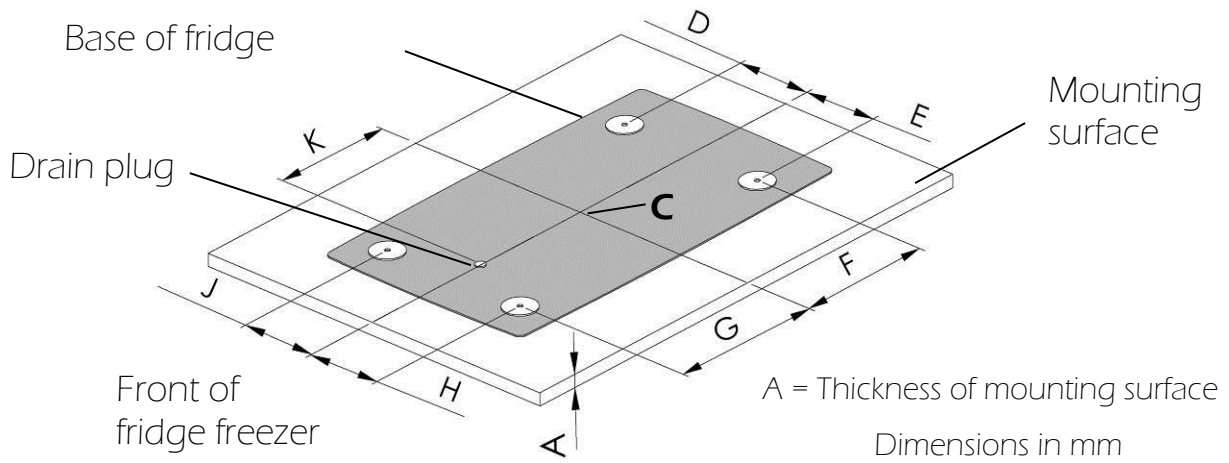
- Position the fridge on the mounting surface at the desired location and mark the outline of the cabinet.
- Remove the fridge and mark the centre of the cabinet. The centre is shown as point C in Figure 5a.
- Mark and drill four 6.5 mm holes in the mounting surface using the diagram in Figure 5a as a guide.
- To make use of the drain plug, mark and drill one 13 mm hole in the mounting surface at the point shown in Figure 5a.
- Remove the M6 bolt from the centre of each of the four rubber feet to expose the threaded inserts. Ensure that the rubber feet remain in the base of the cabinet.
- Position the fridge on the mounting surface so that the drilled holes line up with the threaded inserts in the cabinet.
- Attach the cabinet to the mounting surface using M6 bolts as shown in figure 5b. Do not exceed the fastener assembly torque of 3.5 Nm (2.5 lbft) when tightening the M6 bolts. ARB recommends applying no permanent thread sealant to the bolt threads.

#### **NOTE :**

- ***The rubber feet must be fitted between the base of the cabinet and the mounting surface.***
- ***If longer bolts are required, M6 x 1.0 high tensile socket head cap screws with a minimum grade of 8.8 must be used. To avoid damaging electrical components within the fridge, the bolt length must only be increased by the thickness of the mounting surface (dimension 'A' in Figure 5a) plus 8 mm to allow for the recess in the rubber feet.***
- ***When removing the M6 bolts, avoid turning the fridge on its side.***

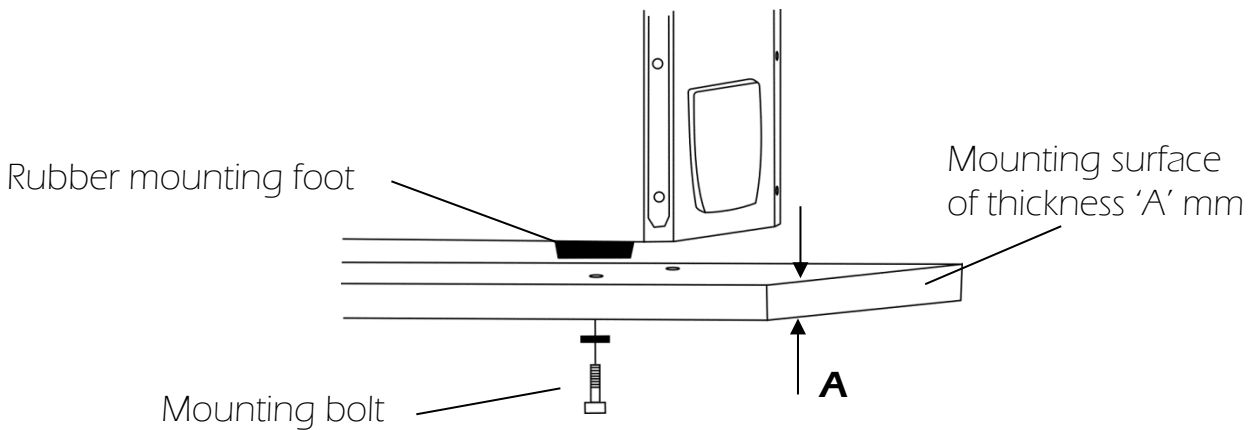


**Figure 5a**



Fridge Capacity	D	E	F	G	H	J	K
60/63qz (mm/in)	182/7.2	182/7.2	365/14.4	365/14.4	182/7.2	182/7.2	266/10.5

**Figure 5b**



### 5.2.2 Temporary mounting

ARB recommends that the ARB Tie Down Kit be used to mount the fridge to solid anchorage points. This kit includes a quick release feature to allow the fridge to be quickly and easily released from its mounting position.

## 6 OPERATION

### 6.1 Before use

Before starting your fridge for the first time, it should be cleaned inside and out with a damp cloth. Please refer to the chapter 7, "Cleaning and maintenance" for further details on maintaining your fridge.

### 6.2 Carrying your fridge

Your ARB Fridge is supplied with a handle at each end of the cabinet. These handles should be used to lift and move the fridge.

**WARNING** - The lid latches **MUST NEVER** be used to lift or move the fridge.

**CAUTION** - The fridge should always be lifted by at least two people using correct lifting techniques.

### 6.3 Opening your fridge

Your ARB fridge has two over-centre lid latches that provide positive closure between the lid, the cabinet and the lid seal.

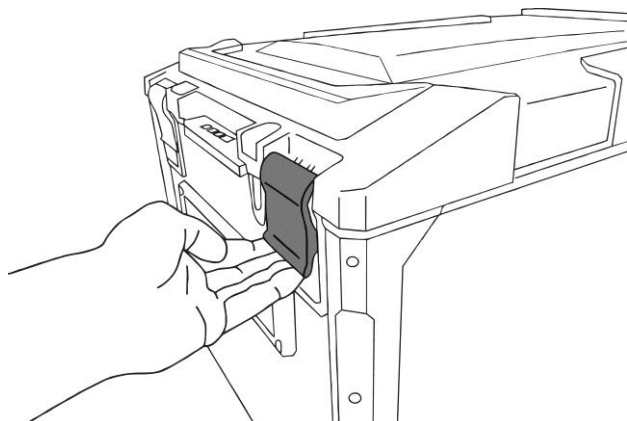
To open the lid:

- Place your hand under each latch and pull away from body of fridge.
- Once released, unhook latches from lid and open fridge. Refer to Figure 6a.

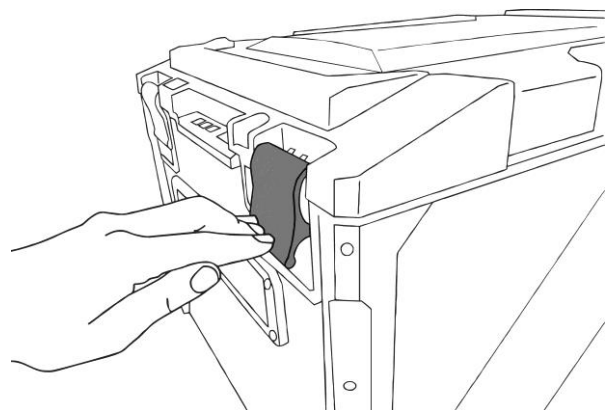
To close the lid:

- Position each latch onto latch stops in lid and press towards body of fridge.
- The latches will make a crisp, clicking noise as they close. Refer to Figure 6b.

**Figure 6a**



**Figure 6b**



## 6.4 Connecting your fridge

### 6.4.1 Connecting to 100-240V AC

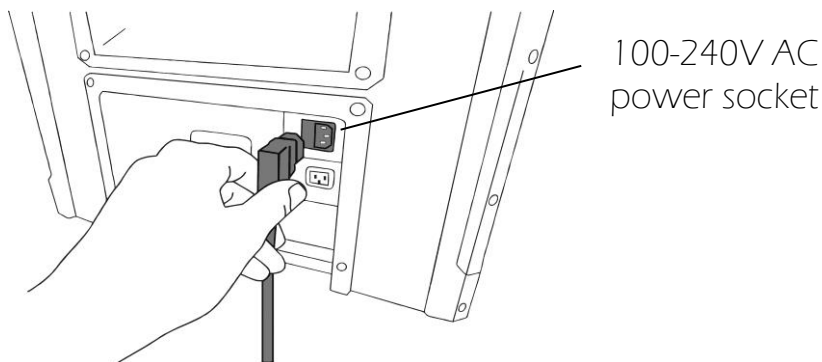
Your ARB Fridge can be operated on an AC voltage of 100 – 240V. The fridge has a priority circuit which gives priority to mains AC power over DC power. If the fridge is connected to both AC and DC power, the unit will run solely on the AC supply.

**NOTE: The red LED on the control panel may light up briefly when the supply voltage is switched between AC and DC.**

To connect your fridge to 100 – 240 V AC supply:

- Plug the 100-240 V power lead into the AC power socket on the back panel of the fridge as shown in Figure 7.
- Connect the free end of the power lead to a 100 – 240 V AC supply.

**Figure 7**



**CAUTION - Never handle the plugs, leads or switches with wet hands or while standing on a wet surface.**

**CAUTION - If you are operating your fridge from a 100-240 V AC supply, a residual current circuit breaker must be installed in the circuit. ARB advises seeking advice from a qualified technician.**

### 6.4.2 Connecting to an engine driven generator

Take note of the following points before connecting your fridge to an engine driven generator.

- The generator must be fitted with an automatic voltage regulator. It must supply a standard, pure sine wave AC voltage, without fluctuation in voltage or frequency (eg 120 VAC~60Hz or 240 VAC~50Hz).
- When using the DC output from your generator, a battery of correct voltage (12 or 24V) must be connected between the generator and the fridge.
- The fridge should be turned off when starting and stopping your generator.

**CAUTION – Some engine driven generators are not suitable for powering your fridge.**

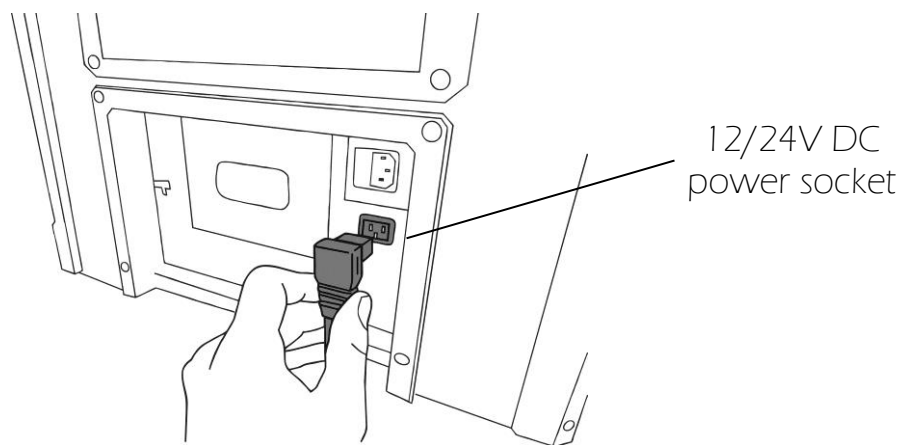
### 6.4.3 Connecting to 12/24V DC

Your ARB fridge can be operated on either 12V or 24V DC. Your fridge is fitted with a control circuit to prevent polarity reversal and possible short-circuiting when the unit is connected to a battery.

To connect your fridge to a 12 V or 24V DC supply:

- Plug the 12/24V power lead into the DC power socket on the back panel of the fridge as shown in Figure 8.
- Connect the free end of the power lead to a 12V or 24V DC supply that is suitably fused. Refer to section 6.4.4 for information about DC wiring and fusing.

**Figure 8**



### 6.4.4 12/24 V DC wiring requirements

To ensure optimum performance of your fridge, it is important that your wiring system is capable of carrying the required load. The accessories wiring system in many vehicles is not adequate for such a task.

ARB recommends that a dedicated wiring circuit be installed to power the fridge. This circuit should be as short as practical and be connected directly to the power supply via a 15 Amp fuse. The ARB DC wiring kit provides all material for such a circuit.

For an automotive or marine installation, ARB recommends that the wiring circuit be connected to an isolated power supply like an auxiliary battery system. This will prevent discharge of the main starting battery.

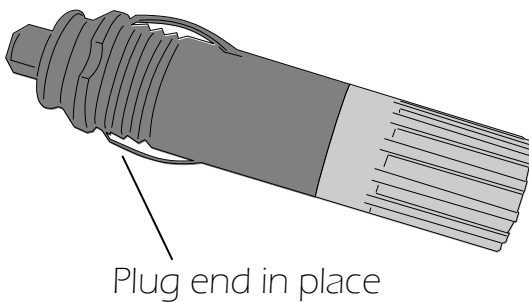
For cable lengths up to 6m (20'), ARB recommends a minimum of 6mm automotive cable (4.5mm<sup>2</sup> / AWG11).

For cable lengths greater than 6m (20'), ARB recommends that you consult a qualified technician for advice on the correct cable size.

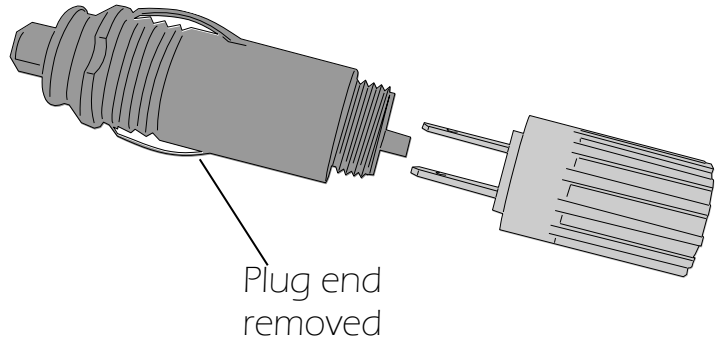
### 6.4.5 12/24V DC power socket

The plug on your 12/24V DC power lead has a removable end. With the end in place as shown in Figure 9a, this plug will fit into a conventional vehicle accessories power socket (cigarette lighter). With the end removed as shown in Figure 9b, this plug will fit into an ARB 2 pole auxiliary power socket.

**Figure 9a**



**Figure 9b**



ARB highly recommends that this 2 pole connection be used for all 12V DC and 24V DC connections of your fridge. This will provide a positive and secure connection between your power source and your fridge.

The following points should be considered when choosing a location for your fridge auxiliary power socket:

- Position the power socket as close to the fridge as is practical.
- Position the power socket in a convenient location that will allow the user to easily connect and disconnect the plug from the socket.
- Position the power socket in a protected location away from dust and moisture.
- Position the socket high in the vehicle to prevent it from becoming wet should the vehicle ingest water.

**NOTE – If the plug or adaptor collar are removed and the fridge is connected to a 12V or 24V DC circuit, a 15 Amp inline fuse must be included in the circuit.**

## 6.5 Turning the fridge on or off

To turn your ARB Fridge on:


- Open lid
- Press and hold  for 2 – 3 seconds.

When the fridge is on, the power LED will light up green.

The display will show the current cabinet temperature.






*NOTE - The current cabinet temperature is a reading of the temperature at the centre of the cabinet. The temperature at other areas of the cabinet can deviate from this temperature.*

To turn the fridge off:

- Open lid
- Press and hold  for 2 – 3 seconds.
- When the fridge is off, the power LED and the display will go blank.

## 6.6 Setting the target cabinet temperature

To set the target cabinet temperature of your ARB Fridge:




- Open lid and turn the fridge on.
- Press  once to display current cabinet target temperature.
- Press  to increase the target temperature by one degree.
- Press  to decrease the target temperature by one degree.
- Continue pressing  or  until the desired target cabinet temperature is reached.
- After 5 to 6 seconds of inactivity, the display will flash and return to displaying the current cabinet temperature.

*NOTE - When the target temperature is reached, the compressor will stop running and the Power LED will change to orange.*

## 6.7 Changing between °C and °F

Your ARB Fridge is capable of displaying temperature in either degrees Celsius (°C) or degrees Fahrenheit (°F.)


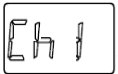


To change the display between °C and °F:

- Open lid and turn the fridge on.
- Press  twice to display current temperature unit setting.
- Press  or  to change between °C and °F.
- After 5 to 6 seconds of inactivity, the display will flash and return to displaying the current cabinet temperature.

## 6.8 Changing transmission channel

Your ARB fridge can be used with the ARB wireless fridge display (sold separately) that has the choice of 4 transmission channels.

To change the transmission channel:





- Open lid and turn fridge on.
- Press  four times to display current transmission channel (eg ).
- Press  or  to change between Ch1, Ch2, Ch3 and Ch4.
- After 5 to 6 seconds of inactivity, the display will flash and return to displaying the current cabinet temperature.

Refer to instructions provided with the ARB wireless fridge display for information about its installation and use.

## 6.9 Changing control panel brightness

The brightness of the control panel display on your ARB fridge is adjustable.


To change the brightness of the control panel display:

- Open lid and turn fridge on.
- Press  five times to display .
- Press  or  to change between the two brightness levels.
- After 5 to 6 seconds of inactivity, the display will flash and return to displaying the current cabinet temperature.

## 6.10 Displaying supply voltage

Your ARB fridge can display the voltage being supplied to your fridge.

To display the supply voltage:

- Open lid and turn fridge on.
- Press  to display supply voltage.






When connected to DC power, the supply voltage will be shown

When connected to AC power, 'AC' will be displayed






## 6.11 Electronic lock

Your ARB fridge can be locked to prevent access to the cooling compartment and changes to the control panel settings. This lock is controlled by the control panel on the front of the fridge. When the fridge is new, the lock is turned off and must be activated before use.



### 6.11.1 To activate electronic lock

- Open lid and turn fridge on.
- Press and hold  for 3-5 seconds.
- Enter Code. Unless otherwise changed, the default code is .
- Press  or  to select .
- After 3-5 seconds of inactivity, the display will flash 3 times and return to displaying current cabinet temperature.

### 6.11.2 To deactivate electronic lock

- Open lid and turn fridge on.
- Press and hold  for 3-5 seconds.
- Enter Code. Unless otherwise changed, the default code is .
- Press  or  to select .
- After 3-5 seconds of inactivity, the display will flash 3 times and return to displaying current cabinet temperature.

### 6.11.3 To lock fridge

- Turn fridge on and close lid.
- Press  to lock fridge.
-  will flash 3 times as fridge is locked. There will be a single dot visible on the top left hand (LH) corner of the display indicating that the fridge is locked as shown in Figure 10.


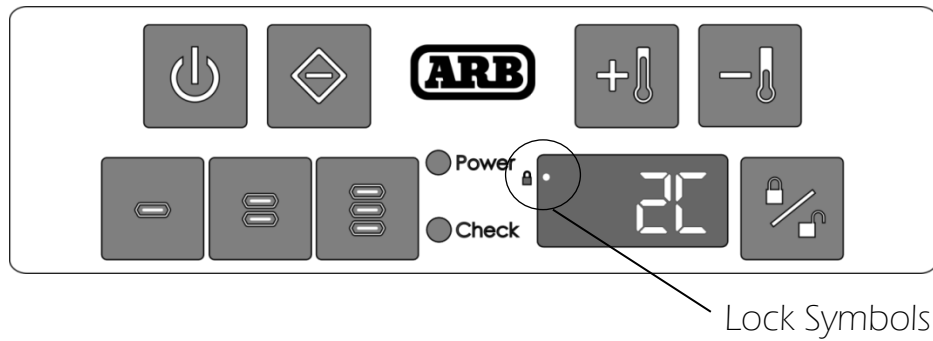
**NOTE:** *If the electronic lock is not activated,  will display.  
If the lid is not closed, the fridge will not lock.*



Figure 10.



### 6.11.4 To unlock fridge

- Press to unlock fridge.
- Enter 4 digit using control panel.
- will flash 3 times as the fridge is unlocked.

**NOTE:** If the incorrect code is entered, will display.

If the electric lock is turned off, will display.

### 6.11.5 To change access code

- Open lid and turn fridge on.
- Press and hold for 3 seconds.
- Enter 4 digit code. The default code is .
- Press or to select .
- Wait until is displayed.
- Enter new 4 digit code - eg . Note single dot on top LH corner to indicate 1st entry.
- will be displayed again.
- Re-enter new 4 digit code - eg . Note two dots on top LH corner to indicate 2nd entry.

**NOTE:** If new codes are not the same then will display and user will be prompted to re-enter new codes.

## 6.12 Using the battery monitor

Your ARB Fridge is fitted with a battery monitor to control the level of discharge of your battery. The battery monitor has three settings; HIGH, MEDIUM and LOW. When set to HIGH, the battery monitor will provide maximum protection for the battery against excessive discharging. When set to LOW, the battery monitor will allow maximum use of the energy stored in the battery. Table 1 shows the voltage cutout levels for the three battery monitor settings.

If your fridge can operate without the vehicle ignition being on, the battery monitor will cause the unit to switch off as soon as the supply voltage falls below the set level. The fridge will automatically restart once the restart voltage is reached.

***NOTE - When the battery monitor is active, the cooling unit (including compressor) will not run. The power LED on the control panel will be OFF and the check LED will flash RED. The cooling unit will not restart until the voltage level of the battery reaches the restart voltage listed in Table 1.***

***Table 1***




	BATTERY MONITOR MODE		
	LOW	MED	HIGH
Switch off voltage – 12V DC	10.1V	11.4V	11.8V
Restart voltage – 12V DC	11.1V	12.2V	12.6V
Switch off voltage – 24V DC	21.5V	24.1V	24.6V
Restart voltage – 24V DC	23.0V	25.3V	26.2V

If your fridge is connected to the starting battery on a 12/24V DC system, ARB recommends that the battery monitor level be set to HIGH/MEDIUM.

If your fridge is connected to an auxiliary battery on a 12/24V DC system, ARB recommends that the battery monitor level be set to LOW.

***NOTE - ARB recommends that the battery be charged once the battery monitor has been triggered. ARB also recommends that all non-essential electrical equipment that draws power from the same source as the fridge be turned off until the battery is fully charged.***

To change the battery protection level:

- Open lid and turn the fridge on.
- Press  three times to display current battery protection setting.
- Press  or  to change the battery protection voltage between High (HI), Medium (nEd) and Low (Lo).
- After 5 to 6 seconds of inactivity, the display will flash and return to displaying the current cabinet temperature.



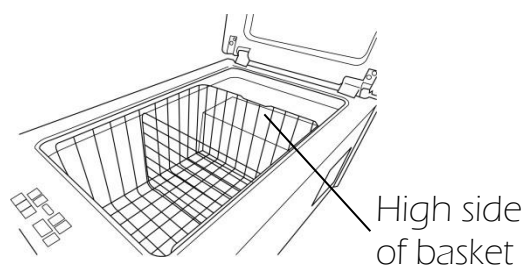
## 6.13 Making use of the basket

Your ARB Fridge is supplied with a reversible wire basket that helps to protect the internal walls of the fridge cabinet. The basket can be installed with the high side of the basket against the front of the fridge as shown in Figure 11a. This allows long items to be laid across the top section of the fridge cabinet. The basket can also be repositioned so that the high side of the basket is in the centre of the cabinet as shown in Figure 11b. This provides a full height divider between the primary and secondary cooling zones.

**Figure 11a**



**Figure 11b**



To remove the basket from the cabinet:

- Lift the basket vertically out of the fridge cabinet. Some models have a fixed basket. To remove such baskets, remove the fastener and replace when basket is repositioned.

To reinstall the basket into the cabinet:

- Slide the basket down into the cabinet of the fridge. The basket is correctly positioned when its base is in contact with the base of the fridge cabinet.
- Fix basket if required using original fastener.

## 6.14 Basket divider

Your ARB Fridge is supplied with a removable basket divider which can be easily removed by lifting it vertically from the basket. When refitted, it is important that the basket divider is located between the ribs on the sides of the wire basket. For models with a fixed divider, the divider must not be detached from the basket.

## 6.15 Drain plug

Your ARB Fridge has a removable drain plug in the base of the cabinet as shown in Figure 12. The drain plug can be removed to drain liquid from the cabinet of the fridge.

**Figure 12**



To remove the drain plug:

- Open the lid of the fridge.
- Grip the drain plug with your fingers.
- Gently lift the drain plug away from the base of the cabinet.

To refit the drain plug:

- Open the lid of the fridge.
- Locate the tip of the drain plug in the drain.
- Apply gentle pressure to the drain plug so that it slides into the drain. The drain plug is correctly located when the lip of the drain plug makes full contact with the base of the cabinet.

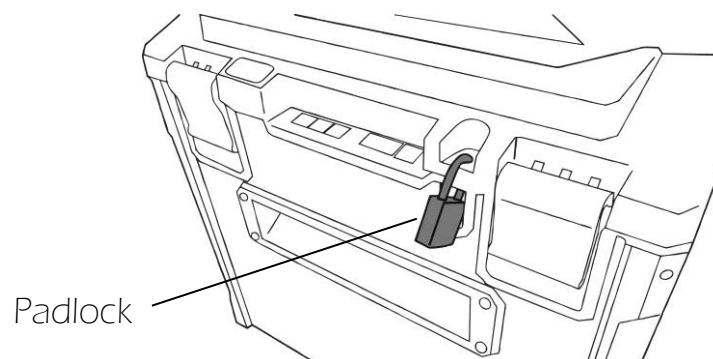
**NOTE - It is important the drain plug is refitted before operation of fridge**

## 6.16 Locking fridge with padlock

Your ARB fridge can be locked with a padlock to prevent access to the cooling compartment and changes to the control panel settings.

To lock the fridge, install a padlock between the lid and the cabinet as shown in Figure 13.

**Figure 13.**



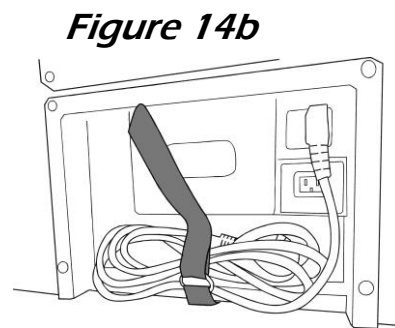
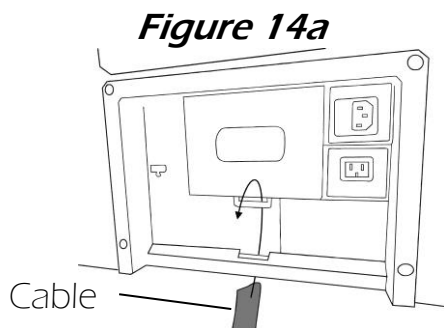
## 6.17 Cable Strap

Your ARB fridge is supplied with a woven strap that can be used to retain the power cables when they are not in use.

To install the strap:

1. Starting from the bottom, feed the free end of the strap through both strap points on the back of the fridge as shown in Figure 14a.
2. Bundle cable and place between the strap points.
3. Pass free end of the strap over cable and through eyelet. Tighten strap and secure to itself as shown in Figure 14b.

**NOTE:** When not in use, the strap can be tightened and stored in position on the back of the fridge.



## 6.18 Energy saving advice

To help you achieve the optimum performance from your fridge, ARB makes the following recommendations.

- Place the fridge in a well ventilated area which is protected from direct sunlight.
- Try to minimise the frequency with which the fridge is opened.
- Do not leave the lid open for longer than necessary.
- Avoid setting the target temperature unnecessarily low.
- Defrost the fridge once ice starts to form.

## 6.19 Defrosting your fridge

From time to time, ice may form on the inside of your ARB Fridge. This can reduce both its internal capacity and its thermal efficiency. ARB recommends that you defrost your fridge on a regular basis.

To defrost your ARB Fridge:

- Remove the contents of the fridge.
- Turn the fridge off.
- Open the lid so that the ambient temperature air will cause the ice to melt.
- Remove the drain plug and allow any water to drain from the cabinet.
- Wipe the cabinet with a soft cloth to remove any remaining water.

**WARNING:** Never use hard or pointed objects to defrost the fridge or to loosen objects that have become frozen in place.

## 6.20 Replacing the plug fuse (12/24V)

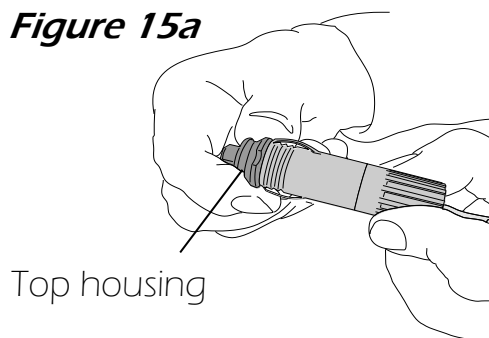
Your fridge is equipped with a fuse that is located in the 12/24V DC plug.

**CAUTION – Disconnect the fridge from all power sources before replacing the plug fuse.**

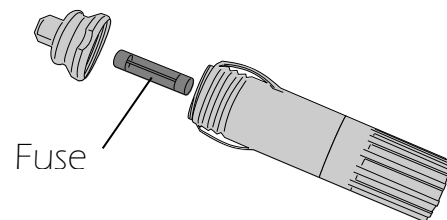
To replace the plug fuse:

- Separate and remove the top housing from the body of the plug by unscrewing as shown in Figure 15a.
- Replace the defective fuse with a new fuse that has the same rating. The correct rating for the fuse is 3AG 15 Amp. Refer to Figure 15b.
- Reassemble the plug by reversing the steps listed above.

**Figure 15a**



**Figure 15b**



## 6.21 Replacing the cabinet fuse

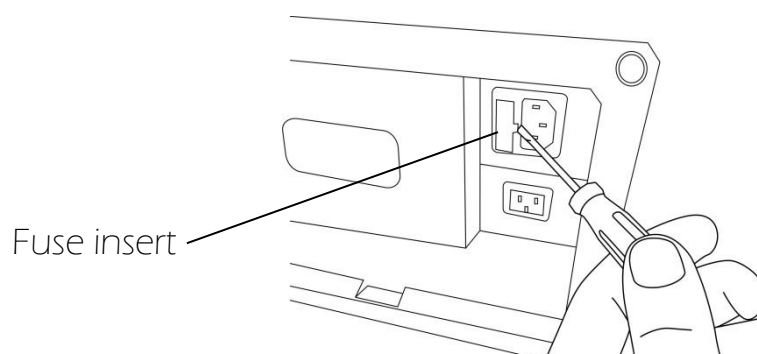
Your fridge is equipped with a fuse that is located in the rear of the cabinet.

**CAUTION – Disconnect the fridge from all power sources before replacing the cabinet fuse.**

To replace the cabinet fuse:

- Remove the AC and DC power leads from the power sockets.
- Remove the fuse insert from the rear panel of the fridge as shown in Figure 16. A small flat blade screwdriver may be required to help pry the insert away from its housing.
- Replace the defective fuse with a new fuse that has the same rating. The correct rating for the fuse is 4A, specified as: F4L250V.
- Replace the fuse insert back into its housing.

**Figure 16a**



## 6.22 Storing your fridge

If you are storing your fridge for an extended period of time, ARB makes the following recommendations.

- Switch the fridge off and disconnect it from all sources of power.
- Remove all items except the basket and basket divider from within the cabinet.
- Leave the lid slightly open to allow airflow through the cabinet.

***HINT – To ensure lid remains open, lift lid and place latches on top of cabinet before gently lowering lid onto them. For additional ventilation, remove drain plug.***

## 7 CLEANING AND MAINTENANCE

To clean the inside or outside of the fridge, use a damp cloth and warm water containing a mild non-abrasive household detergent. Stainless steel surfaces can be cleaned with a good quality stainless steel cleaner. Minor scratches and marks can be removed from the stainless steel using a good quality stainless steel metal polish.

If your fridge operates in dusty conditions, ARB recommends that you clean the outside surfaces on a regular basis to prevent the buildup of dirt and grit. In particular, ARB recommends that you routinely clean around the hinge mechanisms and the motor surround. To clean around the motor surround, place the fridge in a well ventilated area and use a vacuum cleaner or a gentle stream of compressed air.

***WARNING - Under no circumstances is the motor surround to be removed.***

Please take note of the following points before cleaning your fridge.

- Always turn off power and remove the plugs from the fridge before cleaning or servicing the unit.
- Never use hard objects or abrasive cleaning agents to clean the fridge.
- Do not use brushes, scouring pads or hard or pointed tools to defrost the fridge.
- Do not clean the fridge under running water or with a high pressure washer.

## 8 DISPOSAL

Please place the packaging material in the appropriate recycling waste bins where possible.

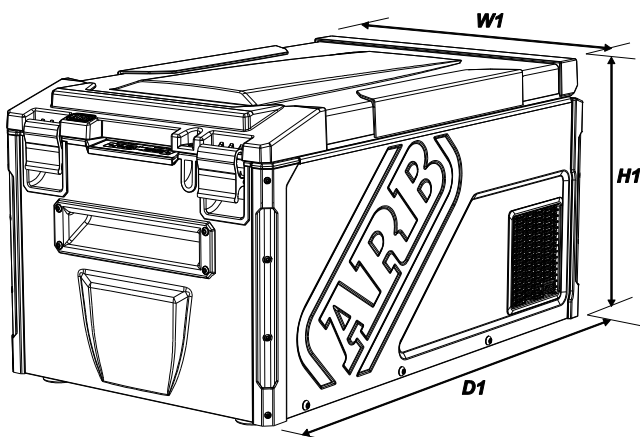
If you wish to finally dispose of your fridge, ask your local recycling center or authorised ARB Fridge dealer for details about how to do this in accordance with the applicable disposal regulation.

## 9 TECHNICAL DATA

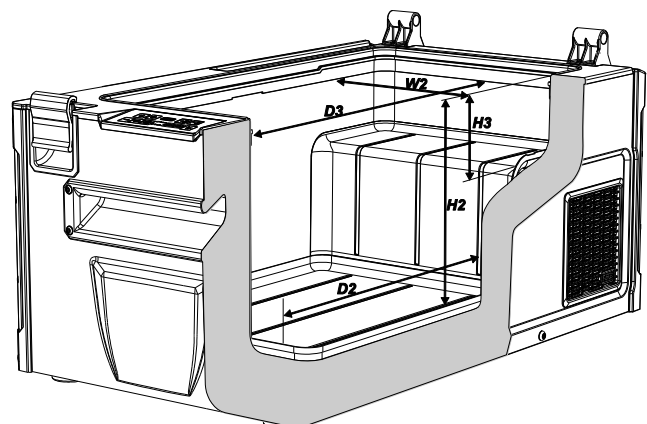
Overall capacity – Litre (quarts)	60 (63)
Type	1080050
Category	I
Annual Energy Consumption (KWh/annum)	100
Climate Class	N,T
Energy Efficiency Index (EEL)	A+
Connection voltage (except North America)	12/24 V DC and 100-240 V AC
Connection voltage North America	12/24 V DC and 120V AC ~ 60Hz
Rated current	
- 12V DC	6.8 A
- 24V DC	3.4 A
- 100-240 VAC	1.0 – 0.5 A
- 120 VAC	1.0 A
Cooling Capacity	+ 10 °C to -18 °C (+50 °F to 0 °F)
Ambient Temperature	+16°C to +43°C (+70 °F to +109°F)
Weight – Nett - Kg (lb)	32 (70)
Noise (dbA)	50
Refrigerant - R134a – g (oz)	58 (2.0)
External Dimensions – mm (in) – Figure 17a	
- H1	435 (17.3)
- W1	490 (19.3)
- D1	820 (32.3)
Internal Dimensions – mm (in) – Figure 17b	
- H2	332 (13.1)
- H3	144 (5.7)
- W2	355 (14.0)
- D2	477 (18.8)
- D3	633 (24.9)

**Note: The maximum cooling capacity is 50°C (122°F) below ambient temperature. If the ambient temperature is above 32° (90°F) the minimum temperature cannot be achieved.**

**Figure 17a**



**Figure 17b**



This device is CFC-free. The coolant circuit contains R134a. Removal or recharge of refrigerant should only be done by an authorised refrigeration mechanic.



## 10 WARRANTY

ARB warrants the ARB Products against defects in workmanship and materials for the Warranty Period. If defective workmanship or materials become apparent in the Warranty Period, ARB will replace or repair the defective Product.

The benefits to the customer given by this warranty are in addition to other rights and remedies of the customer under a law in relation to the goods or services to which the warranty relates.

1) In this warranty:

- **ARB** means ARB Corporation Limited (ABN 31 006 708 756) of 42-44 Garden St, Kilsyth Victoria 3137
- **ARB Outlet** means an outlet which has been authorised by ARB to sell and fit ARB Products
- **ARB Product** means products which ARB manufactures or for which ARB is the exclusive supplier
- **Product Information** means the information about the relevant ARB Product which may be contained in any of: documentation provided with the ARB Products, owner's manual, operating manual, service manual of the manufacturer's manual or labels attached to the ARB Product
- **Warranty Period** means, in respect of an ARB Product, means the period that this warranty against defects applies and which is set out in the tables in paragraph 8.

2) To be entitled to claim the warranty, the customer must:

- a) have the ARB Product fitted in accordance with the Product Information
- b) carry out normal care and maintenance of the ARB Product, including any required by the Product Information
- c) provide proof of purchase of the ARB Product
- d) make the claim in the Warranty Period

2) The warranty will not apply in circumstances where the defect is caused by:

- a) unusual, improper or negligent use or misuse of the ARB Product
- b) incorrect fitting of the ARB Product other than at an ARB Outlet
- c) loading the ARB Product with weights in excess of Product Information
- d) use of non-genuine ARB components in or with the ARB Product
- e) use on vehicles with modifications not approved in the Product Information or at an ARB Outlet at the time of fitting
- f) caused by racing or competition use
- g) use of the ARB Product outside of the requirements of the Product Information

3) The procedure for the customer to claim the warranty is:

- a) Return the ARB Product to the nearest ARB Outlet or contact ARB to arrange a time to bring a vehicle fitted with the ARB Product to an ARB Outlet for inspection. Contact details are in paragraph 7 below if further information is required regarding local outlet details
- b) bring proof of purchase of the ARB Product to the ARB Outlet
- c) ARB will review the ARB Product and advise whether the conditions of the warranty have been met

4) Where ARB accepts a customer's warranty claim, ARB will rectify any defective workmanship or materials at its own expense.

5) Expenses incurred by the customer in claiming the warranty are to be borne by the customer.

6) This warranty is given by: ARB Corporation Limited  
42-44 Garden Street Kilsyth VIC 3137, Australia  
Phone: 03 9761 6622  
Fax: 03 9721 9090  
www.arb.com.au

7) The period within which a defect in the ARB Products must appear if the customer is to be entitled to claim the warranty is 3 years starting on the date of purchase unless:

- a) The ARB Product is used in Commercial use. Commercial use means use in industry or commerce including (without limitation) use in the mining industry or as a hire vehicle. In this case, the Warranty Period is the less of 1 year or 20,000 km, or one third of the period or distance specified in the table, starting on the date of purchase.

8) The warranty against defects contained in this document replaces any other warranty against defects or voluntary warranty given in relation the Products.

Our 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 compensation for any other reasonable 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.

## 11 TROUBLESHOOTING

The following checklist will help to identify the source of the problem with your fridge. If after carrying out this checklist you are still unsure of the cause of the fault, please contact your nearest ARB Fridge Service Agent.

### ***1. The fridge has stopped operating. The power LED does not glow.***

#### **1.1 The power lead connections could be loose or dirty at the fridge or power supply end.**

- Check that the fridge power lead connections have not become loose or disconnected.
- Check that the electrical contacts have not become dirty and are preventing full voltage flow to the fridge.

#### **1.2 The fuse in the 12/24V DC cable plug may have blown.**

- Check the 12/24V DC cable plug fuse and replace if necessary. Refer to section 6.20.

#### **1.3 The cabinet fuse may have blown.**

- Check the cabinet fuse and replace if necessary. Refer to section 6.21.

### ***2. The fridge compressor has stopped operating. The power LED is ORANGE.***

#### **2.1 The fridge has reached the desired target cabinet temperature.**

- The fridge is operating correctly. No action is required.

### ***3. The fridge has stopped operating. The power LED is OFF and the RED check LED is flashing.***

#### **3.1 The internal battery protection system has caused the fridge to switch off because the battery voltage is low.**

- The fridge will automatically restart once the restart voltage is reached. Refer to section 6.12 for switch off and restart voltages.

### ***4. The fridge does not cool or has stopped operating. The power LED is green.***

#### **4.1 There may be an internal fault within the fridge.**

- This can only be repaired by an authorised ARB Fridge Service Agent.

### ***5. The control panel displays an error message (eg "ERR1", "ERR2" or "ERR3") and the fridge does not cool.***

#### **5.1 The fridge may have switched off due to an internal fault.**

- This can only be repaired by an authorised ARB Fridge Service Agent.

***6. When connected to a vehicle wiring circuit with the vehicle running, the fridge occasionally shudders or stops operating.***

**6.1 It is likely that there is loss of voltage occurring within your vehicle wiring.**

- This can be confirmed by taking a voltage reading at the end of the power lead for the fridge while the fridge is running. If the reading is below 11.8 volts (12VDC) or 24.1 volts (24VDC), you should have the wiring system checked.
- If necessary, upgrade your fridge wiring circuit using the information in section 6.4.4 as a guide.

***7. The fridge stops and starts or runs erratically***

**7.1 The internal battery protection system may be causing the fridge to switch off because the battery voltage is low.**

- Check whether the voltage supply at the fridge plug has dropped below the shut down voltage listed in section 6.12. The voltage must be read at the fridge plug as there is normally at least one to two volts lost between the power source (battery) and the fridge plug.
- The vehicle battery may need replacement or the wiring to the fridge may need to be upgraded. Refer to section 6.4.4 for details on wiring requirements.

***8. The fridge is running too long and is not cooling properly.***

**8.1 Good fridge performance, especially in hot ambient temperatures, is dependent on good air flow around the fridge cooling slots.**

- Check that all ventilation slots are unobstructed and there is enough clearance for good airflow around the fridge. Refer to section 5.1 for details.

***9. When the fridge lid is open, the LED cabinet light does not come on.***

**9.1 The fridge may not be connected to a suitable power supply.**

- Check the connection between the power source and the fridge.

**9.2 The fridge may not be turned on at the control panel.**

- Turn fridge on at control panel.

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## **ARB 4x4 ACCESSORIES**

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European enquiries  
Thailand enquiries  
Middle East and North African enquiries  
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[sales@arbusa.com](mailto:sales@arbusa.com)  
[sales@arbeurope.com](mailto:sales@arbeurope.com)  
[sales.thailand@arb.com.au](mailto:sales.thailand@arb.com.au)  
[purchasingmena@arb.com.au](mailto:purchasingmena@arb.com.au)  
[exports@arb.com.au](mailto:exports@arb.com.au)

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