

USER GUIDE

REDBACK RB2

INVERTER GENERATOR



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OVERVIEW

The Redback RB2 Inverter Generator is a compact, lightweight power solution designed for reliability and ease of use across a wide range of applications. Whether you're powering essentials during a camping trip, running small tools on-site, or providing backup power for your home, the RB2 delivers clean, stable power wherever it's needed.

The RB2 features a simple recoil (pull rope) starting system, ECO Mode for improved fuel efficiency, and built-in protection systems to keep your generator and appliances safe. Designed for dependable performance in Australian conditions, the RB2 provides reliable power whenever and wherever you need it.

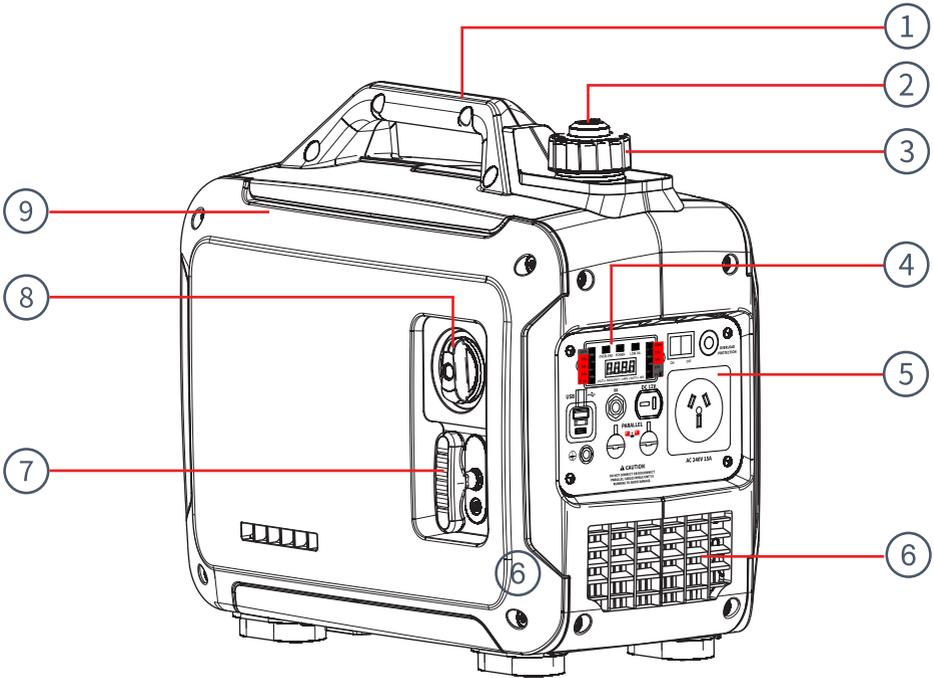
KEY FEATURES

- Australian design and development
- Ultra quiet silenced muffler
- Clean, stable, Pure Sine Wave power
- Compact and lightweight
- Heavy-duty casing
- ECO mode
- Over 15 hours of runtime
- Overload protection

PACKAGE CONTENTS

 RB2 2000W Inverter Generator	 User Guide	 15A Output Plug	 DC Output Clamps	 Spark Plug Removal Tool
 Screwdriver	 Funnel	 Spark Plug	 Air Filter	

UNIT DIAGRAM



① CARRY HANDLE

② FUEL SWITCH

③ FUEL TANK CAP

④ LED DISPLAY

⑤ CONTROL PANEL

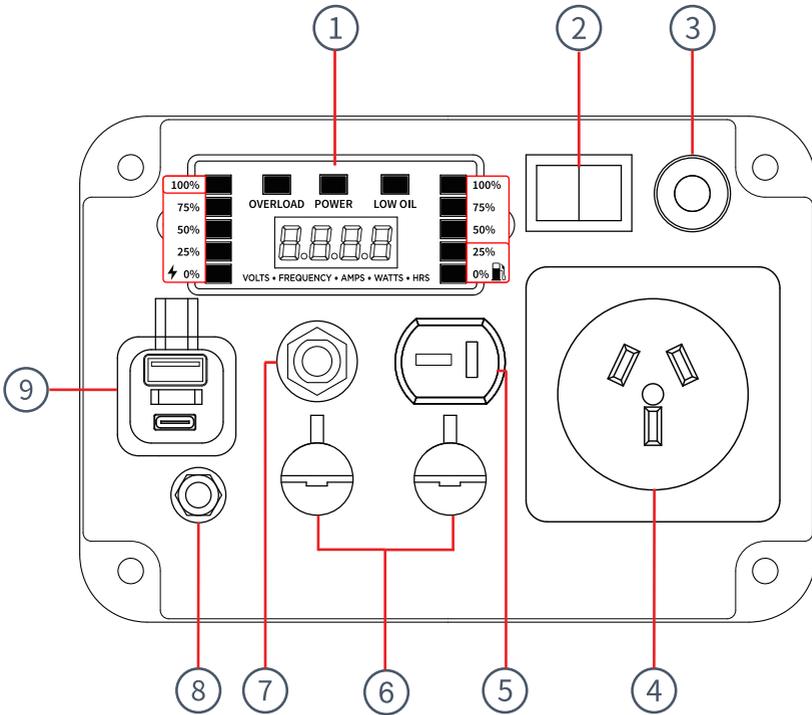
⑥ AIR INTAKE / OUTLET

⑦ PULL ROPE HANDLE

⑧ MULTI SWITCH

⑨ PULL ROPE MAINTENANCE COVER

CONTROL PANEL DIAGRAM



① LED DISPLAY

② ECO SWITCH

③ RESET

④ AC 240V OUTPUT PORT

⑤ DC OUTPUTS

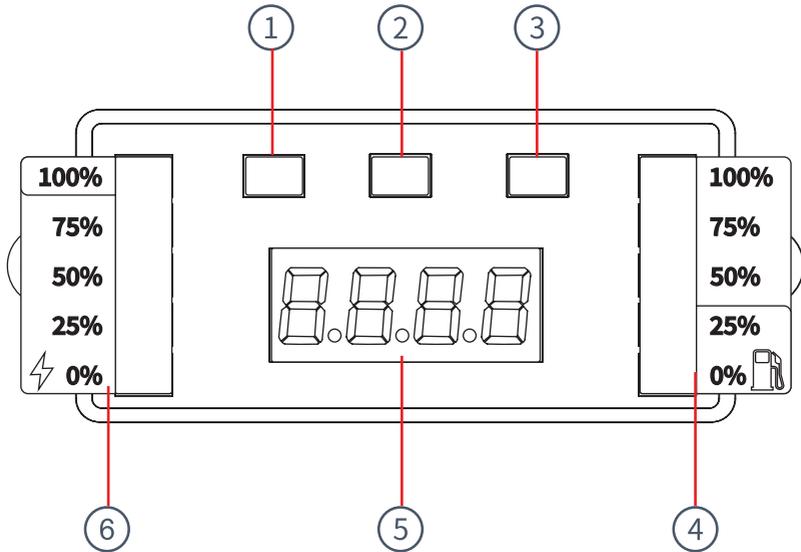
⑥ PARALLEL PORTS

⑦ DC CIRCUIT BREAKER

⑧ GROUND TERMINAL

⑨ USB/C OUTPUTS

LED DISPLAY



① OVERLOAD INDICATOR

② POWER INDICATOR

③ LOW OIL INDICATOR

④ FUEL GAUGE

⑤ VOLTS, FREQUENCY, AMPS, WATTS,
& CUMULATIVE HOURS DISPLAY

⑥ LOAD GAUGE

GETTING STARTED

PREPARATION

Before starting your generator, place it outdoors in a well-ventilated area on a solid, level surface. Ensure the generator is positioned at least 2 metres away from any buildings, equipment, or combustible materials.

Before each start, make sure no appliances are connected and all cables are unplugged from the control panel.

NOTE: Never operate the generator in wet or rainy conditions, or in areas where moisture may accumulate. Doing so may result in risk of electric shock or damage to the unit.

GROUNDING

Grounding of the generator is mandatory before use to prevent damage or injury.

Locate the grounding point on the control panel of the RB2. Ground the generator by securely attaching a copper cable which is at least 4 mm². Connect the other end of the mentioned copper cable to a metal grounding rod and drive it at least 20cm into the earth.

Please consult a licensed electrician to ensure your application meets Australian / New Zealand standards.

NOTE: Improper grounding may result in risk of electric shock. For safe operation, always use an appropriate grounding setup when operating the generator.

ENGINE OIL

The generator is shipped without engine oil, which must be added before use. Due to the internal safety features, you will not be able to start the unit with low oil detected. Additionally the generator is also equipped with a low oil shutdown sensor, which will automatically shut the engine down if the threshold is reached. It will then not start until oil is added.

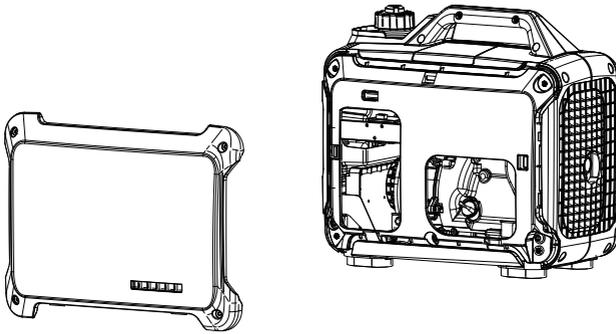
Use only high quality 4-stroke engine oil, such as 10W/30. The engine oil capacity is 0.33L, however we recommend adding 0.3L during maintenance. This leaves a buffer to avoid overfilling.

Always check your engine oil and petrol levels before each use. Engine oil should only be added when the unit is on a flat, level surface to ensure accurate readings.

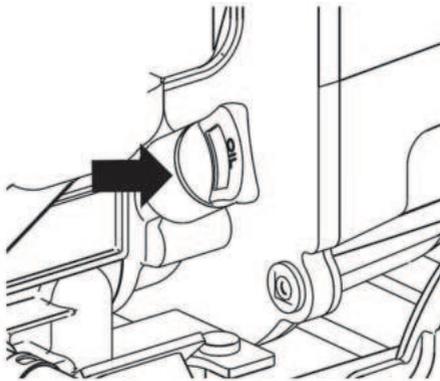
CAUTION: While running, internal pressure can build up inside the crankcase. Removing the dipstick while the engine is still hot may result in hot engine oil spraying out. Allow the generator to cool before removing the dipstick.

To add engine oil, follow the steps below:

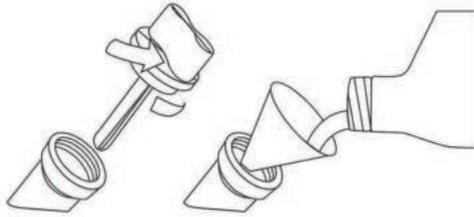
1. Unscrew the bolts and open the maintenance cover.



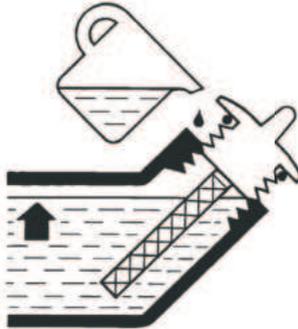
2. Clean the area around the dipstick, then remove it.



3. Pour 0.33L of engine oil into the engine using a funnel.



NOTE: Do not overfill, if the oil level is too high, excess engine oil will drain out. Always add or check engine oil on a flat, level surface for accurate readings.



FUEL & REFUELLING

The generator runs on unleaded petrol with a minimum octane rating of 95 RON. You may use:

- Petrol containing up to 10% ethanol (E10)
- Petrol containing up to 5% methanol, provided it includes corrosion inhibitors and co-solvents.

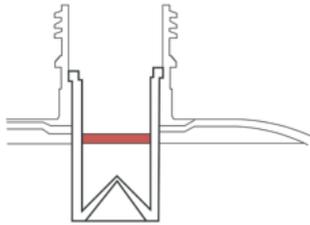
Using fuel with a higher ethanol or methanol content can cause starting or performance issues and may damage the generator's fuel system components - including metal, rubber, and plastic parts. Damage caused by improper fuel is not covered under warranty.

CAUTION: Never refuel while the generator is running or hot. Fuel is highly flammable and may ignite, causing fire, injury, or damage.

NOTE: Always use fresh, clean petrol and avoid leaving fuel in the tank or lines for extended periods.

To refuel safely, follow the steps below:

- 1.** Turn the fuel switch to the STOP position.
- 2.** Turn the multi switch to the STOP position.
- 3.** Allow the generator to cool completely.
- 4.** Place the unit on a flat, level surface.
- 5.** Clean the area around the fuel cap.
- 6.** Fill the fuel tank with unleaded petrol (95 RON min). The petrol level should not exceed the red ring.



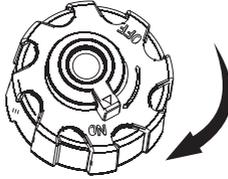
- 7.** Reinstall the fuel cap and tighten securely.

OPERATION

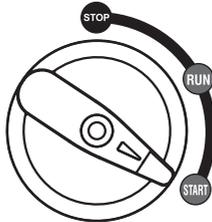
STARTING

To start the generator safely, follow the steps below:

1. Place the generator on a flat, level surface.
2. Disconnect all appliances and unplug all cords from the control panel.
3. Turn the fuel switch to the ON position.



4. Flip the ECO switch to the STOP position.
5. Turn the Multi Switch to the START position.



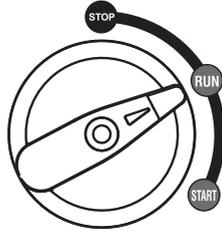
NOTE: When the engine is warm, the generator can be started with the multi switch in the RUN position. You only need to move the multi switch to the START position when starting the generator from cold.

NOTE: Never start or stop the generator with appliances plugged in.

6. Firmly grip the pull rope handle until you feel resistance, then pull to start the engine.



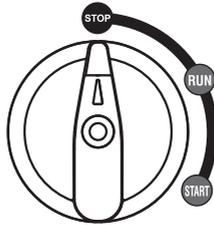
7. Turn the multi switch to the RUN position.



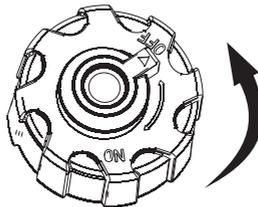
STOPPING

Place the generator on a flat, level surface.

1. Disconnect all appliances and unplug all cords from the control panel.
2. Turn the multi switch to the STOP position.



3. Turn the fuel switch to the STOP position.



ECO MODE

ECO mode improves the fuel efficiency by allowing the generator to automatically adjust the engine speed to match the connected load.

NOTE: ECO mode should only be used after the generator has run for at least 10 minutes. If you are powering sensitive appliances, turn STOP Low Idle mode to minimise voltage fluctuations. ECO mode is suitable for loads up to 900W.

- 1.** Flip the ECO switch to the ON position. The engine will idle at a lower RPM if no load is connected. When a load is applied, the engine will automatically increase its RPM to match.
- 2.** Flip the ECO switch to the STOP position to run the generator at full power.

MAINTENANCE

Regular maintenance is essential to keep your Redback RB2 Inverter Generator running smoothly and extend its lifespan. Before performing any maintenance, ensure the generator is turned STOP, completely cooled down, and placed on a flat, level surface.

ENGINE OIL

Check the oil level before each use and replace it at the recommended log book intervals. Using clean engine oil helps to prevent engine wear and keeps the generator running as expected.

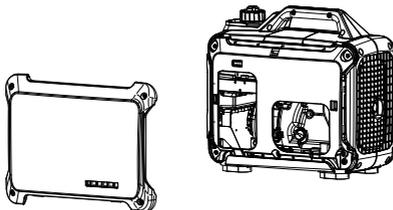
NOTE: Only use 10W-30 engine oil

To check the engine oil level:

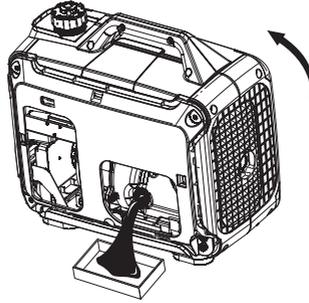
1. Turn the multi switch to the STOP position.
2. Allow the engine to cool completely.
3. Open the maintenance cover to access the oil fill and dipstick.
4. Clean around the dipstick with a damp cloth.
5. Remove the dipstick and check the oil level.
6. If low, add oil slowly until the bottom thread of the dipstick shows oil after being screwed back in.

To change the engine oil:

1. Turn the multi switch to the STOP position.
2. Allow the engine to cool completely.
3. Open the maintenance cover to access the oil fill and dipstick.



4. Place an oil pan beneath the oil fill and dipstick.
5. Remove the dipstick.
6. Tilt the generator to drain the engine oil.



7. Refill with 0.3L of 10W-30 engine oil using a funnel.
8. Check the level, then reinsert the dipstick and close the maintenance cover.

AIR FILTER

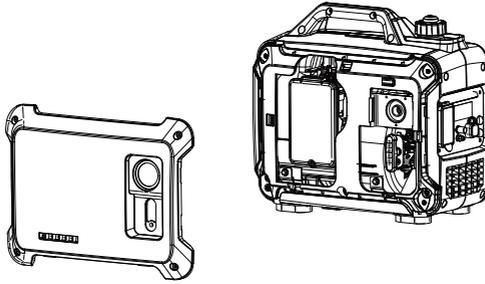
Keep the air filter clean to maintain airflow and engine performance. Check and clean the air filter as outlined in the logbook.

WARNING: Never use petrol or other flammable liquids to clean the air filter. Only use household detergent and warm water.

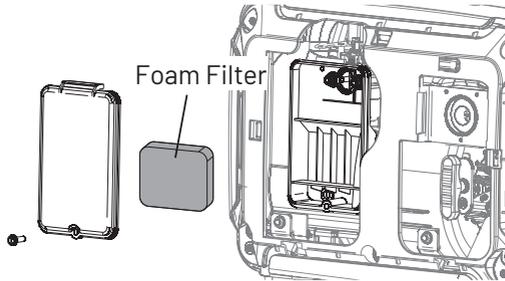
To clean the air filter, follow the steps below:

1. Turn the multi switch to the STOP position.
2. Allow the generator to cool completely.

3. Open the pull rope maintenance cover to access the air filter.



4. Unscrew the air filter cover and tip it downward to remove it.
5. Remove the foam filter from the air cleaner housing.



6. Wash the air filter in warm, soapy water.
7. Rinse thoroughly in clean water.
8. Dry the air filter.

NOTE: Twisting the foam filter may damage it. Only use a light squeezing motion when cleaning or drying.

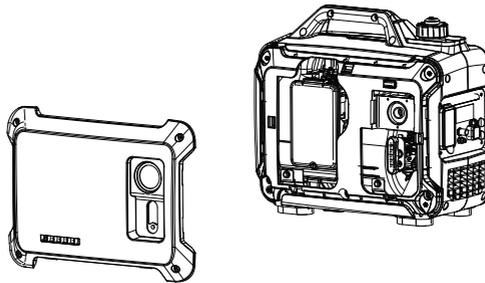
9. Reinstall the foam filter into the air cleaner housing.
10. Reinstall the air cleaner cover and ensure the tabs lock in place.
11. Close the maintenance cover.

DRAINING FLUIDS

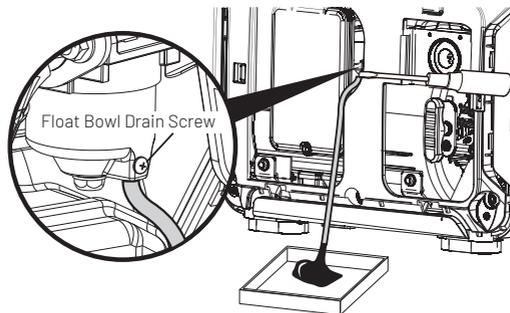
Draining the float bowl helps remove residual fuel from the carburettor and prevents stale fuel from causing issues during storage.

To drain the float bowl, follow the steps below:

1. Turn the multi switch to the STOP position.
2. Allow the generator to cool completely.
3. Open the pull rope maintenance cover to access the carburettor.



4. Locate the clear plastic fuel drain hose exiting from the bottom of the carburettor, and place a suitable container underneath.
5. Loosen the float bowl drain screw until fuel begins draining through the hose.



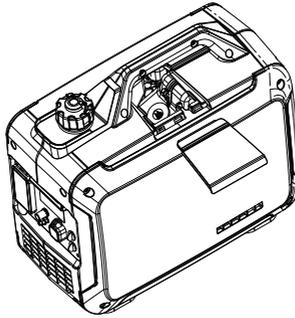
6. Allow the fuel to drain fully into the container.
7. Tighten the float bowl drain screw.
8. Close the pull rope maintenance cover.

SPARK PLUG

The spark plug must be inspected and cleaned regularly to maintain starting performance. Check the spark plug as outlined in the log book.

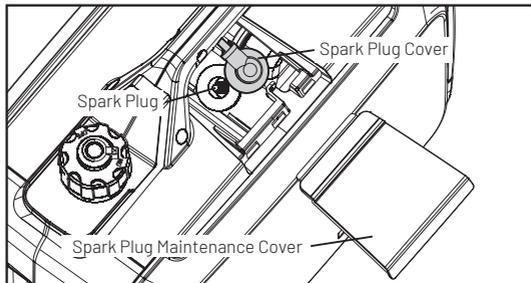
To check the spark plug, follow the steps below:

1. Turn the multi switch to the STOP position.
2. Allow the generator to cool completely.
3. Open the spark plug maintenance cover to access the spark plug.



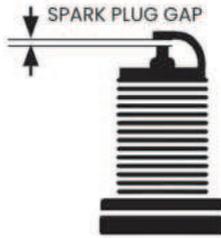
4. Remove the spark plug cover by pulling it straight back.

NOTE: Never apply sideways pressure when removing the spark plug cover, this may damage the cover or crack the spark plug.



5. Clean around the spark plug to prevent debris entering the engine.
6. Use the supplied spark plug removal tool to remove the spark plug from the cylinder head.
7. Place a clean rag over the opening to prevent dirt entering the combustion chamber.

8. Inspect the spark plug for the below, and replace if any of the criteria is met:
- Cracked or chipped insulator
 - Excessive wear
 - Spark plug gap of 0.8mm



NOTE: Only use the recommended spark plugs, using non-approved spark plugs may result in engine damage.

- TORCH: A5RTC
- NGK: C7HSA / CR6HSA

To reinstall the spark plug, follow the steps below:

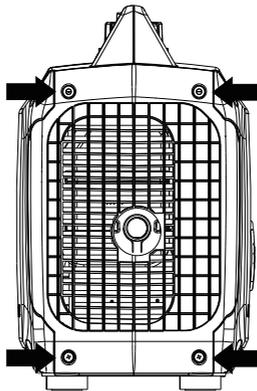
1. Insert the spark plug into the cylinder head by hand and thread it until it cannot be threaded anymore.
2. Tighten with the spark plug removal tool until tight.
3. Reinstall the spark plug cover, ensuring it locks onto the spark plug.
4. Reinstall the spark plug maintenance cover.

SPARK ARRESTOR

The spark arrestor must be inspected and cleaned regularly to prevent exhaust blockages. Check and clean the spark arrestor as outlined in the log book.

To clean the spark arrestor, follow the steps below:

1. Turn the multi switch to the STOP position.
2. Allow the generator to cool completely.
3. Place the generator on a flat, level surface.
4. Remove the screws securing the muffler exhaust cover, then remove the cover.



5. Loosen the clamp holding the spark arrestor band in place.
6. Slide the clamp STOP the spark arrestor screen.

7. Remove the spark arrestor screen from the muffler exhaust.
8. Use a wire brush to clean any dirt or debris from the spark arrestor screen.

NOTE: If the spark arrestor is torn or damaged, replace it before reinstalling. To reinstall the spark arrestor, follow the steps below:

9. Push the spark arrestor screen back onto the muffler exhaust.
10. Slide the clamp back over the screen and tighten it with a flathead screwdriver.
11. Reinstall the muffler exhaust cover and tighten all screws.

Regular cleaning helps prevent overheating and ensures the generator continues to operate efficiently.

STORAGE

If the generator will not be used for an extended period of time, it must be prepared for storage. This helps prevent corrosion, fuel system issues, and damage to internal engine components.

WARNING: Never store the generator indoors or in a poorly ventilated area with fuel in the fuel tank. Fuel vapour may accumulate and ignite near an ignition source.

NOTE: Petrol can begin to deteriorate in as little as 30–60 days, even with stabilisers. If not drained, gum and varnish may form inside the fuel system, leading to blockages or starting failure.

To prepare the generator for storage, follow the steps below:

1. Turn the multi switch to the STOP position.
2. Allow the generator to cool completely.
3. Clean the exterior surfaces with a dry cloth.
4. Drain fuel from the fuel tank using the instructions mentioned in the DRAINING FLUIDS section.
5. Start the generator and run it until it shuts STOP to clear residual fuel from the fuel lines.
6. Change the engine oil if due.
7. Remove the spark plug and add 1 tablespoon of clean engine oil into the cylinder.
8. Place a clean rag over the spark plug hole and slowly pull the pull rope several times to coat the cylinder wall.
9. Reinstall the spark plug and the spark plug cover.
10. Store the generator in a dry area, away from direct sunlight and moisture.

SPECIFICATIONS

General Specifications	
Model Name	Redback RB2
Dimensions	475 x 270 x 405mm
Weight	14kg
Starting Watts	2kW
Running Watts	1.8kW
Charging Voltage	12V
Rated Voltage	240V
Frequency	50Hz
Current	7.5A
RPM	4850
Displacement	79.7cc
Fuel Tank Capacity	2.4L
Engine Oil Capacity	0.33L
Noise Level	58db
Starting System	Recoil (Pull Rope)
Engine Type	Single Cylinder, 4-Stroke
Fuel Type	Unleaded Petrol (95 RON min)
50% Rated Output time	7 Hours

TROUBLESHOOTING

Issue	Possible Cause	Solution
Engine is running, but no output	Overload protection has tripped	Reset the circuit breaker
	Appliance cable not fully plugged in	Ensure the cable is plugged in straight and fully inserted
	Faulty Appliance	Connect a different appliance to confirm the generator is outputting power
Generator will not start or remain running	Out of fuel	Add fresh unleaded petrol (95 RON mins)
	Blocked or restricted fuel line	Inspect and clean the fuel system
	Low oil shutdown has activated	Check the oil level and top up if necessary
	Spark plug cover not fully connected	Push the cover down until it clicks into place
	Faulty spark plug	Remove, inspect and replace the spark plug if necessary
	Stale fuel	Drain the tank and refill with fresh unleaded petrol (95 RON min)
	Generator is overloaded	Reduce the load and restart the generator
Engine runs erratically	Dirty air filter	Inspect and clean the air filter if necessary
	Load is cycling on and STOP	RPM changes may occur, this is normal

If your generator won't start:

- 1.** Make sure the multi switch is in the START position.
- 2.** Check that the fuel switch is ON and the tank has fuel.
- 3.** Check the oil level, the low oil shutdown will prevent the unit from starting.
- 4.** Inspect the spark plug cover, push it firmly down until it clicks into place.

If there's no output while the engine is running:

- 1.** Check if overload protection has tripped, if so, reset it.
- 2.** Disconnect all appliances and try again.
- 3.** Confirm your appliance is working by testing it on another AC 240V power source.
- 4.** Try a different power cable, the cable itself may be damaged.

CIRCUIT BREAKER RESET

The Redback RB2 is equipped with two circuit breakers to protect different parts of the generator. If an overload occurs, the circuit breaker will trip to prevent damage. The engine may continue to run, but there will be no power output.

Overload Protection

Protects the generator's inverter from total system overload.

Circuit Breaker (DC 12V)

Protects the 12V 8A DC output port.

To reset the circuit breakers, follow the steps below:

- 1.** Turn the multi switch to the STOP position.
- 2.** Disconnect all appliances and cables.
- 3.** Wait 30 seconds.
- 4.** Locate and press all two circuit breakers individually. These are found on the control panel.
- 5.** Turn the multi switch back to the START position.
- 6.** Reconnect appliances one at a time, ensuring the total load does not exceed the generator's rated output.

SAFETY PRECAUTIONS

For safe operation and optimal performance, the Redback RB2 Inverter Generator must be operated correctly. Please carefully read, understand, and follow all instructions and guidelines in this user guide. Failure to follow these instructions may result in damage to the unit, property, death, or serious injury.

Disclaimer: While Redback Generators has taken every precaution to ensure the accuracy of the contents of this user guide, Redback Generators assumes no responsibility for any errors or omissions.

Furthermore, all specifications and functionality may change at any time without notice.

It is best to view our website for the most up-to date information.

ELECTRIC SHOCK WARNINGS

- Generators produce high-voltage electricity. Incorrect use may cause serious injury or death from electrical shock.
- Do not operate the generator in rain, or wet conditions.
- Keep the generator dry. Never operate with wet hands or near moisture.
- If stored outdoors, thoroughly dry all electrical components before use.
- Never connect the generator directly to a building's electrical system unless it has been connected and grounded by a licensed electrician.
- Always use heavy-duty, 3-prong extension cables rated for generator use.
- Do not modify or bypass the grounding mechanism.
- Never operate in highly conductive areas like steel decking.

CARBON MONOXIDE WARNINGS

This generator produces carbon monoxide, a deadly, invisible gas.

- Only use the generator outdoors, away from doors, windows, and enclosed spaces.
- Never use indoors, including garages, basements, crawlspaces, or enclosed tents.
- If you feel dizzy, lightheaded, or nauseous, get to fresh air immediately and seek medical attention.
- Consider using a carbon monoxide detector in any nearby living areas.

FUEL & FIRE WARNINGS

Improper use of fuel and exposure to hot surfaces can result in fire, explosion burns, or serious injury. The generator's engine and exhaust system become extremely hot during use, and petrol is highly flammable.

- Only refuel outdoors in a well-ventilated area.
- Shut down the generator and allow it to cool before refuelling.
- Keep the generator at least 1 metre away from the buildings with flammable materials during use.
- Do not enclose the generator or obstruct ventilation.
- Do not smoke or allow open flames, sparks, or other ignition sources near the generator while fuelling.
- Only fill the fuel tank with clean, fresh unleaded petrol (95 RON min).
- Never overfill the fuel tank, leave room for fuel expansion.
- Immediately wipe up any petrol spills before starting the generator.
- Do not use petrol as a cleaning agent.
- Check for fuel leaks after refuelling, never operate the generator if a leak is found.

WARNING

Do not operate the generator if it is sparking, misfiring, or smoking.

WARNING

Do not operate if any sockets appear damaged.

WARNING

Do not disassemble or modify the generator.

WARNING

Do not drop the generator.

WARNING

Always disconnect all appliances before starting the generator.

WARNING

Do not use the generator or its accessories if any part is damaged.

LIMITATIONS OF USE

This generator is not intended for life-support systems or critical medical equipment. Do not use it for any application where failure could result in injury or death.

WARRANTY REQUIREMENTS

For warranty to remain valid:

- The log book provided with your generator must be completed in full by a licensed small engine mechanic.
- All receipts and service records must be retained and provided in the event of a warranty claim.
- Failure to provide a completed log book or supporting documentation may result in your warranty being void.
- Failure to follow the safety precautions in this user guide may also void your warranty.



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At iTechworld, we proudly lead the way in pioneering innovative STOP-grid power and battery solutions that bring cutting-edge technology to adventure seekers, remote workers, and outdoor enthusiasts across Australia. Since we began our journey all the way back in 2006, our passion has been to develop high-performance lithium batteries, solar panels, power stations, generators, and battery management systems tailored to caravans, camping, 4WDs, and STOP-grid living.

We believe in empowering people with reliable, portable, and efficient energy solutions, giving them the power they need—wherever their journey takes them. Our commitment to quality is unwavering, with every product rigorously tested to meet Australian conditions and backed by our knowledgeable power experts.

Driven by innovation, reliability, and sustainability, iTechworld is your trusted partner in power solutions, helping you stay powered anywhere, anytime.

iTechworld. The Power Expert.

LOVE YOUR REDBACK RB2 INVERTER GENERATOR? LEAVE A REVIEW

