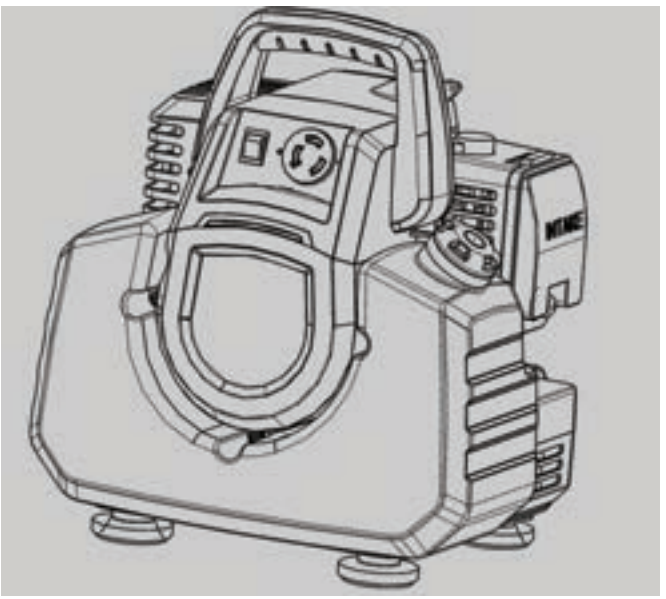
Bäumr-AG

DIGITAL INVERTER

GENERATOR USER'S MANUAL



MODEL: BM X20i

PREFACE

Thank you for purchasing the High-tech digital inverter generator. This manual covers the information on how to operate and maintain the BM X20i generator, please read it carefully. All information in this publication is based on the latest product information available at the best results from your new generator and to operate it safely. As you read this manual, you will find information precede.

⚠NOTICE! symbol. That information is intended to help you avoid damage to your generator, other property, or the environment.

When your generator needs scheduled maintenance, keep in mind that your servicing dealer is specially trained in servicing your generators.

Pay special attention to statements preceded by the following words.

⚠WARNING You can be killed or seriously hurt if you don't following instructions.

⚠CAUTION You can be hurt if you don't follow instructions.

ATTENTION:

The generator is a potential of electrical shock if misused.

Do not expose the generator to moisture, rain or snow.

Do not let the generator get wet, and do not operate it with hands.

Keep this owner's manual handy, so you can refer to at any time. This owner's manual is considered a permanent part of the generator and should remain with the generator if resold.

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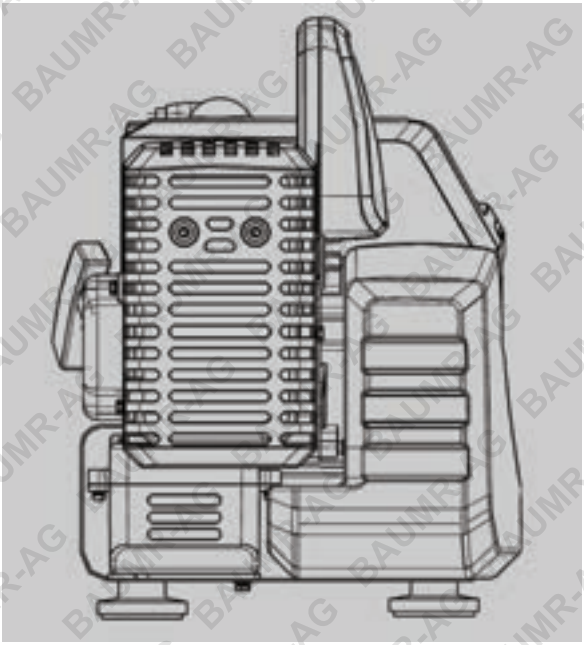
SPECIFICATIONS

Engine	2-stroke, single cylinder		
Displacement	42.7cc		
Compression	7.6:1		
Rated RPM	6500		
Ignition system	Non-contract transistorized ignition		
Start system	Recoil hand-operated		
Fuel tank capacity	3.5l (0.92 gallon)		
Fuel	Non-ethanol unleaded petrol		
Lubricant	FB grade 2-stroke oil		
Ratio of fuel & lubricant	50:1		
Rated AC frequency	50Hz	60Hz	50Hz
Rated AC voltage	220v/230v	110v	240v
Rated AC current	5.5A	7.2A	5.0A
Rated AC output	1200VA		
Surge AC output	2000VA		
Total harmonic distortion	≤3%		
Power factor cos	1.0		
Frequency stability	±0.1Hz		
Voltage stability	±4V		
Operating noise level	60Db(7m)		
Fuel consumption (g/kw*h)	550 at full load		
Continuous operation at 1/2 rated load	6.5h		
Dry weight	8.5 kg		

SAFETY LABEL LOCATIONS

These labels warn you of potential hazards that can cause serious injury. Read them carefully.

If a label comes off or becomes hard to read, contact your generator dealer for a replacement.



Warning	
	Petrol/fuel/gasoline is extremely flammable – keep clear of naked flames or other ignition sources. • Do not spill fuel. If you spill fuel, wipe it from equipment immediately – if fuel gets on your clothing, change them immediately • Do not smoke near fuel. • Always shut off the engine before refuelling. • Do not refuel a hot engine. • Open the fuel cap carefully to allow any pressure build-up in the tank to release slowly. • Always refuel in well ventilated areas. • Always check for fuel leakage. If fuel leakage is found, do not start or run the engine until all leaks are fixed. • After every use, place the engine switch in the OFF position and close the fuel tap.
	Running petrol engines in confined areas CAN KILL IN MINUTES. Engine exhaust fumes contain carbon-monoxide – a deadly gas that you cannot smell or see. NEVER run a petrol engine in confined areas EVEN IF windows and doors are open. ONLY run petrol engines OUTDOORS and away from doors, windows and vents.

Warning	
	Electrical shock and fire hazard - Never connect the generator to a mains electrical circuit.
	Electrical shock hazard - Keep the generator dry at all times. Never operate the generator with wet hands.
	Please read the user's manual carefully before operating the equipment.

SAFETY INFORMATION

The generator is designed to give safe and dependable service if operated according to instructions. Read and understand this owner's manual before operating the generator. You can help prevent accidents by being familiar with the generator controls, and by observing safe operating procedures.

Operator Responsibility

- Know how to stop the generator quickly in case of emergency.
- Understand the use of all generator controls, output sockets, and connections.
- Do not let children operate the generator.

Carbon Monoxide Hazards

- Exhaust contains poisonous carbon monoxide, a colorless and odorless gas. Breathing exhaust can cause loss of consciousness and may lead to death. To keep exhaust gas from accumulating, provide adequate ventilation.

Electric Shock Hazards

- The generator produces enough electric power to cause a serious shock or electrocution if misused.

Fire and Burn Hazards

- The exhaust system gets hot enough to ignite some materials.

- Keep the generator at least 1 meter (3') away from buildings and other equipment during operation.
- Do not enclose the generator in any structure.
- Keep flammable materials away from the generator.

- Fuel vapors are extremely flammable and may ignite after the engine has started. Make sure that any spilled fuel has been wiped up before starting the generator.

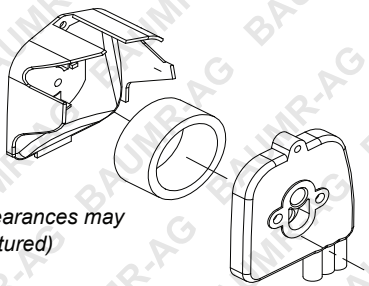
PREPARATION

1. Fuel.

Use a mixture of non-ethanol unleaded petrol and 2-stroke engine oil in a ratio of 50:1 (20ml oil per liter of petrol). Use a funnel when filling and do not over-fill the fuel tank.

2. Air filter.

Inspect the air filter for accumulations of dirt and dust. A dirty filter reduces engine efficiency and power output. If dirty, clean the air filter element in warm water and mild detergent, then dry it. Place a few drops of oil it then squeeze is to distribute the oil before re-installing it.



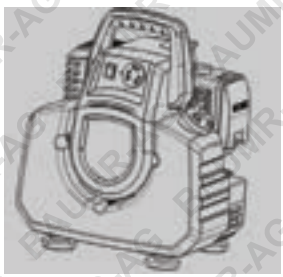
Air filter *(appearances may vary to that pictured)*

ENGINE SWITCH

To run and stop the engine:

OFF ("O"): To stop the engine.

ON ("I"): To start and run the engine.

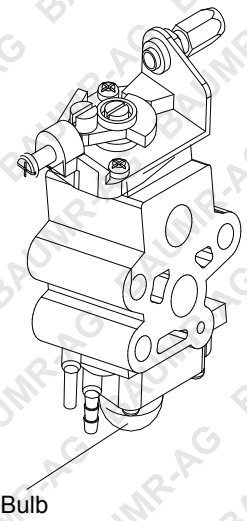


Engine Switch *(appearances may vary to that pictured)*

STARTING

1. Place the fuel tap in the ON position, then press the priming build repeatedly until fuel can be seen in the clear tube.
2. If the engine is cold, place the choke in the COLD position. If the engine is warm, place the choke in the RUN position.
3. Place the engine switch in the ON position.
4. Gently pull the starter cord until you feel it engage with the motor, then pull rapidly.

Note: If excessive petrol ("flooding") causes starting difficulty, remove the spark plug, close the fuel tap, place the engine switch in the OFF position, place the choke in the RUN or HOT position and fully open the throttle, then pull the starter several times. Afterward, re-install the spark plug and follow the normal starting procedure.

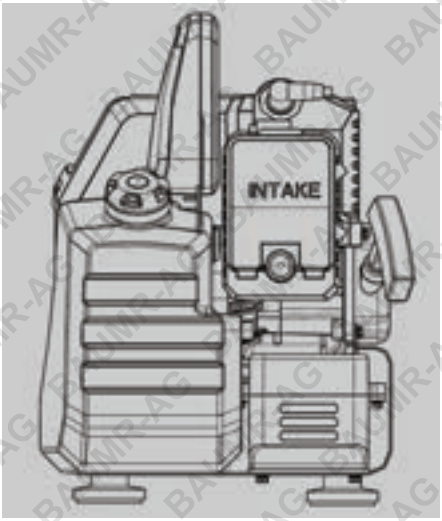


⚠NOTICE!

Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.

OVERLOAD ALARM INDICATOR

If the generator is overloaded (in excess of 1250VA), or a short-circuit occurs in a connected appliance, the indicator light will become red. After approximately 4 seconds, current to the connected appliances is shut off. When under normal loads, the indicator is green.



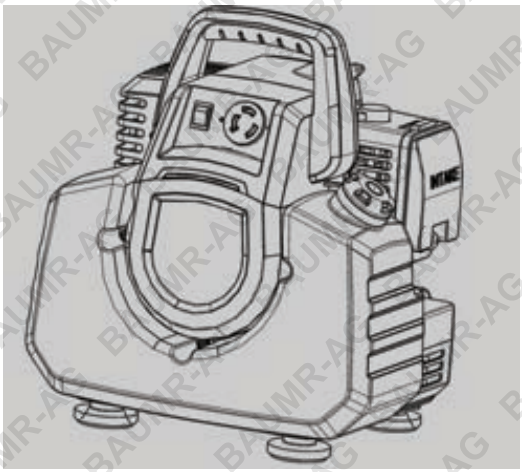
Output Indicator

GROUND TERMINAL

The generator ground terminal is connected to the generator frame, the metal non-current-carrying parts of the generator, and the ground terminals of each electrical connection socket.

Before using the ground terminal, consult a qualified electrician, electrical inspector or electrical codes authority that apply to the intended use of the generator.

Ground Terminal



GENERATOR USE

CONNECTIONS TO A BUILDING ELECTRICAL SYSTEM

Connections for standby power to a building electrical system must be made by a qualified electrician. The connection must isolate the generator power from utility power, and must comply with all applicable laws and electrical codes.

⚠WARNING

Improper connections to a building electrical system can allow electrical current from the generator to feedback into the utility lines. Such feedback may electrocute utility company workers or others who contact the lines during a power outage, and the generator may explode, burn, or cause fires when utility power is restored. Consult the utility company or a qualified electrician.

AC APPLICATIONS

Before connecting an appliance or power cord to the generator:

Make sure that it is in good working order. Faulty appliances or power cords can create an electrical shock hazard.

If an appliance begins to operate abnormally, becomes sluggish or stops suddenly, turn it off immediately. Disconnect the appliance, and determine whether the problem is the appliance, or if the rated load capacity of the generator has been exceeded.

Make sure that the electrical rating of the tool or appliance does not exceed that of the generator. Never exceed the maximum power rating of the generator. Power levels at the rated maximum (1250VA) should be used for no more than 15 minutes continuously.

⚠NOTICE!

Substantial overloading will bypass the AC circuit protector.

Exceeding the time limit for maximum power operation will shorten the service life of the generator.

Limit operation requiring maximum power to 15 minutes. Maximum power is 1250VA.

For continuous operation, do not exceed the rated power of 1200VA.

In either case, the total power requirements (VA) of all appliances connected must be considered. Appliance and power tool manufacturers usually list rating information near the model or serial number.

AC OPERATION

1. Start the engine and make sure the output indicator is green.

2. Plug in the appliance require more than their rated wattage for startup.

3. If the generator is overloaded (in excess of 1250VA), or a short-circuit occurs in a connected appliance, the indicator light will become red. After approximately 4 seconds, current to the connected appliances is shut off, then the output indicator light (green) will go OFF. Stop the engine and investigate the problem. Determine if the cause is a short-circuit in a connected appliance or an overload. Correct the problem and restart the generator.

HIGH ALTITUDE OPERATION

High altitude performance can be improved by specific modifications to the carburetor, If you always operate your generator at altitudes above 1500 meters (5000'), have your servicing dealer perform this carburetor modification. This engine, when operated at high altitude with the carburetor modification, engine horsepower will decrease about 3.5% for each 300m (1000') increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

STOPPING THE ENGINE

To stop the engine in an emergency, simply turn the engine switch to the OFF position. Under normal conditions, use the following procedure.

1. Unplug appliances from the generator sockets.
2. Turn the engine switch to the OFF position.

MAINTENANCE

1. Daily check

★ Check all screws and nuts are tight.

★ Check for fuel or air leaks.

2. Check after running 20 hours

★ Clean the air filter and clean or replace as necessary.

★ Clean the fuel strainer.

3. Check after running 50 hours

★ Tighten the cylinder head nuts.

★ Clean any accumulated carbon both in the combustion chamber and in the exhaust of the cylinder

★ Clean any accumulated carbon on the spark plug, and adjust the gap to 0.6mm.

★ Clean any accumulated carbon both in the intake and in the exhaust.

⚠WARNING

Safety Precautions

■ Make sure the engine is off before you begin any maintenance or repairs. This will eliminate several potential hazards:

—Carbon monoxide poisoning from engine exhaust.

Be sure there is adequate ventilation whenever running the engine.

—**Burns from hot parts.**

Let the engine and exhaust system cool before touching.

—**Injury from moving parts.**

Do not run the engine unless safe to do so.

■ Read the instructions before you begin, and make sure you have the tools and skills required.

■ **Problems That May Affect Emissions**

If you are aware of any of the following symptoms, have your engine inspected and repaired by your servicing dealer.

■ Hard starting or stalling after starting.
■ Rough idle.
■ Misfiring or backfiring under load.
■ Afterburning (backfiring).
■ Black exhaust smoke or high fuel consumption.

NOTE: Emission related items.

(1) Service more frequently when used in dusty areas.
(2) These items should be serviced by your servicing dealer, unless the owner has the proper tools and is mechanically proficient. See the Shop Manual.
(3) Log hours of operation to determine proper maintenance intervals.

SPARK PLUG SERVICE

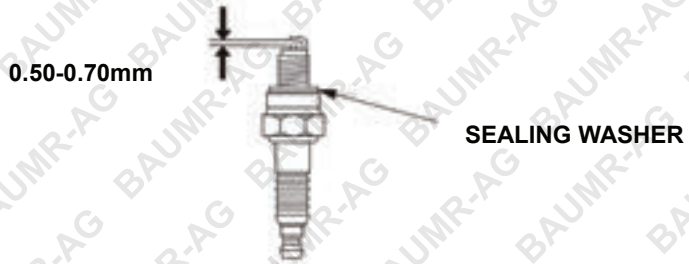
In order to service the spark plug, you will need a spark plug wrench (supplied). Before removing the spark plug, clean around it to ensure no dirt or material enters the engine.

Recommended spark plug: L8RTC.

To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

An incorrect spark plug can cause engine damage.

The gap should be: 0.50—0.70mm



STORAGE

If the engine is not to be used for an extended period, it must be maintained as follows:

1. Remove the fuel in the tank and carburetor, then fully close the choke.
2. Remove the spark plug, and pour approximately 30ml of engine oil into the spark plug hole, then slowly draw the starter several times.
3. Bring the piston to the top dead center, the install the spark plug.
4. Use a soft cloth with a little engine oil to clean the surface of the engine, then store the unit in a dry place.

TROUBLESHOOTING

1. Engine does not start

★ Fuel contaminated with water. Drain fuel from tank and carburettor, and replace fuel.

★ The spark plug has accumulated carbon or is broken. Clean and/or replace spark plug.

★ Poor contact of the high-voltage wire with spark plug. Check connection.

2. Engine starts, but runs slowly

★ Choke is closed. Place choke in HOT or RUN position.

★ Incorrect petrol-oil ratio. Ensure correct ratio (50:1)

★ Fuel contaminated with water. Drain fuel from tank and carburettor, and replace fuel.

3. Engine runs, but lacks power

★ Blocked air filter. Clean and/or replace.

★ Accumulated carbon in the exhaust. Clean.

★ Piston, piston rings and cylinder worn. Replace parts as required.

★ Fuel strainer blocked. Clean.

★ Leak in air intake or combustion chamber not sealed. Repair.

4. Engine stops suddenly when running

★ Run out of petrol. Refuel.

★The spark plug has accumulated carbon or is broken. Clean and/or replace spark plug.

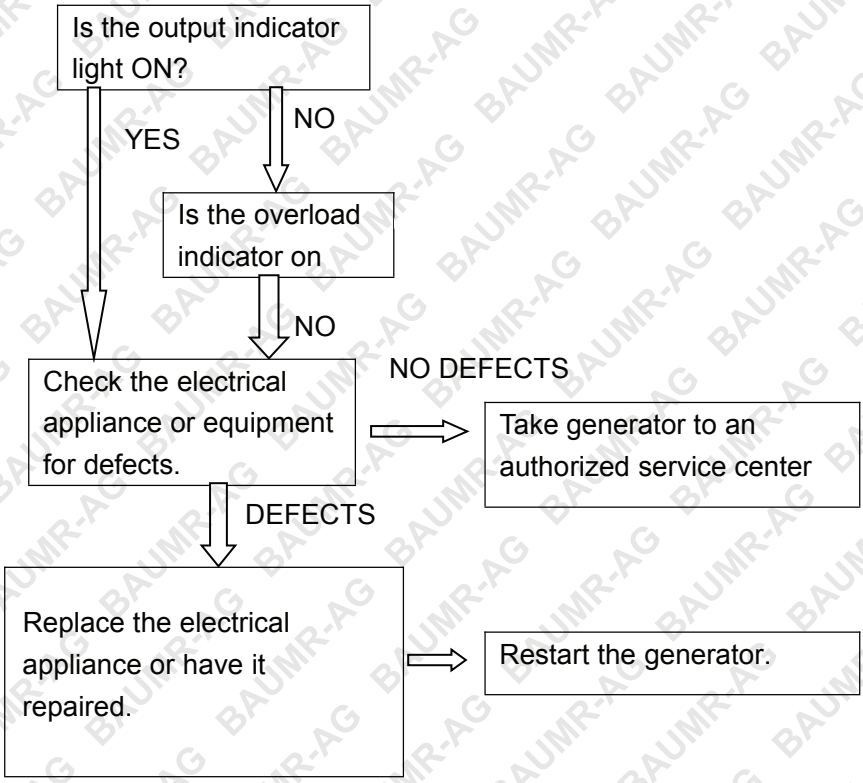
★Poor contact of the high-voltage wire with spark plug. Check connection.

★ Fuel strainer blocked. Clean.

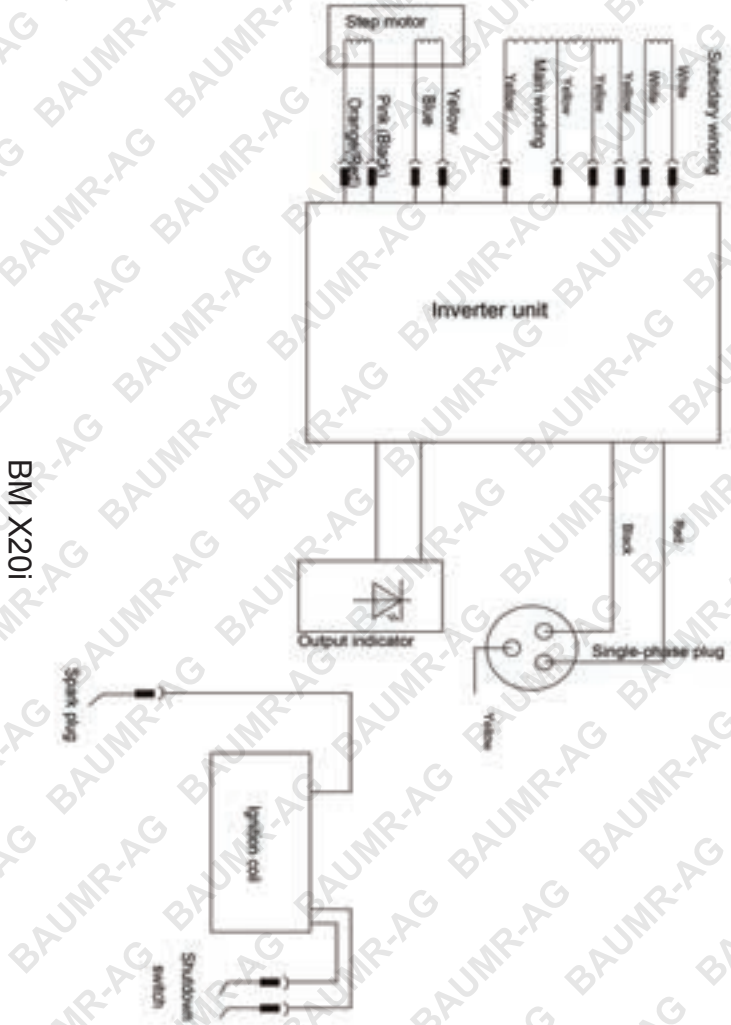
★ Fuel contaminated with water. Drain fuel from tank and carburettor, and replace fuel.

★ Vent hole in fuel cap blocked. Clean.

Appliance does not operate:



ELECTRICAL WIRING DIAGRAM



BM X20i

Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see www.datastreamserver.com/safety

- Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
- Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.
- Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
- Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.
- If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.

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