



BPR-1100H High Tip Power Barrow

User Manual

[Revision 1.0]

READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description, and packaging.



The product is NOT supplied with engine oil, although traces of oil from the manufacturing process may be present. It is essential to add adequate engine oil of the correct type to the engine before use.
Failure to add engine oil will void the product warranty.

Safety

Safety messages are designed to alert you to possible dangers or hazards that could cause death, injury or equipment or property damage if not understood or followed. Safety messages have the following symbols:



You **WILL** be KILLED or SERIOUSLY INJURED if you do not follow instructions.



You **CAN** be KILLED or SERIOUSLY INJURED if you do not follow instructions.



You **CAN** be INJURED if you do not follow instructions or equipment damage may occur.

It is vital that you read and understand this user manual before using the product, including safety warnings, and any assembly and operating instructions. Keep the manual for future reference.

Safety precautions and recommendations detailed here must be fully understood and followed to reduce the risk of injury, fire, explosion, electrical hazard, and/or property damage.

Safety information presented here is generic in nature – some advice may not be applicable to every product. The term "equipment" refers to the product, be it electrical mains powered, battery powered or combustion engine powered.

- **Before Use** - If you are not familiar with the safe operation/handling of the equipment or are in any way unsure of any aspect of suitability or correct use for your application, you should complete training conducted by a person or organization qualified in safe use and operation of this equipment, including fuel/electrical handling and safety.
- Do NOT operate the equipment in flammable or explosive environments, such as in the presence of flammable liquids, gases, or dust. The equipment may create sparks or heat that may ignite flammable substances.
- Keep clear of moving parts.
- Equipment may be a potential source of electric shock or injury if misused.
- Do NOT operate the equipment if it is damaged, malfunctioning or is in an excessively worn state.
- Do NOT allow others to use the equipment unless they have read this manual and are adequately trained.
- Keep packaging away from children - risk of suffocation! Operators must use the equipment correctly. When using the equipment, consider conditions and pay due care to persons and property.

General Work Area Safety

- Work areas should be clean and well lit.
- Do not operate the equipment if bystanders, animals etc are within operating range of the equipment or the general work area.
- If devices are provided for connecting dust extraction / collection facilities, ensure these are connected and used properly. Dust collection can reduce dust-related hazards.

General Personal Safety

- Wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect from eye and ear injury, poisoning, burns, cutting and crush injuries. Protective equipment such as safety goggles, respirators, non-slip safety footwear, hard hat, hearing protection etc should be used for appropriate equipment / conditions. Other people nearby should also wear appropriate personal protective equipment. Do not wear loose clothing or jewellery, which can be caught in moving parts. Keep hair and clothing away from the equipment.
- Stay alert and use common sense when operating the equipment. Do not over-reach. Always maintain secure footing and balance.
- Do not use the equipment if tired or under the influence of drugs, alcohol, or medication.
- This equipment is not intended for use by persons with reduced physical, sensory, or mental capabilities.

General Fuel Safety

- 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 off the equipment immediately – if fuel gets on your clothing, change clothing.
- Do NOT smoke near fuel or when refuelling.
- 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.

General Carbon-Monoxide Safety

- Using a combustion engine indoors **CAN KILL IN MINUTES**. Engine exhaust contains carbon-monoxide – a poison you cannot smell or see.
- Use combustion engines OUTSIDE only, and far away from windows, doors, and vents.

General Equipment Use and Care

- Keep packaging away from children and pets, potential risk of suffocation or choking.
- The equipment is designed for domestic use only.
- Handle the equipment safely and carefully.
- Before use, inspect the equipment for misalignment or binding of moving parts, loose components, damage, or any other condition that may affect its operation. If damaged, have the equipment repaired by an authorised service centre or technician before use.
- Prevent unintentional starting of the equipment - ensure equipment and power switches are in the OFF position before connecting or moving equipment. Do not carry equipment with hands or fingers touching any controls. Remove any tools or other items that are not a part of the equipment from it before starting or switching on.
- Do not force the equipment. Use the correct equipment for your application. Equipment will perform better and be safer when used within its design and usage parameters.
- Use the equipment and accessories etc. in accordance with these instructions, considering working conditions and the work to be performed. Using the equipment for operations different from those intended could result in hazardous situations.
- Always keep equipment components (engines, hoses, handles, controls, frames, housings, guards etc) and accessories (cutting tools, nozzles, bits etc) properly maintained. Keep the equipment clean and, where applicable, properly lubricated.
- Store the equipment out of reach of children or untrained persons. To avoid burns or fire hazards, let the equipment cool completely before transporting or storing. Never place or store the equipment near flammable materials, combustible gases, or liquids etc.
- The equipment is not weather-proof, and should not be stored in direct sunlight, at high ambient temperatures or locations that are damp or humid.
- Do not clean equipment with solvents, flammable liquids, or harsh abrasives.
- For specific equipment safety use and care, see Equipment Safety.

General Electrical Safety

- Inspect electrical equipment, extension cords, power bars, and electrical fittings for damage or wear before each use. Repair or replace damaged equipment immediately.
- Ensure all power sources conform to equipment voltage requirements and are disconnected before connecting or disconnecting equipment.
- When wiring electrically powered equipment, follow all electrical and safety codes.
- Always use a Residual Current Device (RCD) (GFCI) / Earth Leakage Circuit Breaker / Safety Switch when operating this item (electrical items only).
- High voltage / high current power lines may be present. Use extreme caution to avoid contact or interference with power lines. Electrical shock can be fatal.

General Electrical Safety

- Electrically grounded equipment must have an approved cord and plug and be connected to a grounded electrical outlet.
- Do NOT bypass the ON/OFF switch and operate equipment by connecting and disconnecting the electrical cord.
- Do NOT use equipment that has exposed wiring, damaged switches, covers or guards.
- Do NOT use electrical equipment in wet conditions or in damp locations.
- Do NOT use electrical cords to lift, move or carry equipment.
- Do NOT coil or knot electrical cords, and ensure electrical cords are not trip hazards.

General Service Information

- The equipment must be serviced or repaired at authorised service centres by qualified personnel only.
- Replacement parts must be original equipment manufacturer (OEM) to ensure equipment safety is maintained.
- Do NOT attempt any maintenance or repair work not described in this manual.
- After use, the equipment and components may still be hot – allow the equipment to cool and disconnect spark plugs and/or electrical power sources and/or batteries from it before adjusting, changing accessories, or performing repair or maintenance.
- Do NOT adjust while the equipment is running.
- Perform service-related activities in suitable conditions, such as a workshop.
- Replace worn, damaged or missing warning/safety labels immediately.

Child Choking Hazard!



• **WARNING: CHOKING HAZARD - CHILDREN UNDER 8 YRS. CAN CHOKER OR SUFFOCATE ON SMALL PARTS. ADULT SUPERVISION REQUIRED.**

- Carefully inspect anything a baby or child could gain access to, including this product & packaging.

- Dangers include anything of a size that could become stuck or lodged in a baby or child's airway.

• Dangers include things like raw, hard fruit and vegetable pieces, large pieces of meat, bones or sausage skins, popcorn, nuts, hard lollies and corn chips, small magnets and batteries, coins, beads, marbles and small uninflated balloons, broken toys and smaller toys, buttons, keys, and coins. But there are also many more.

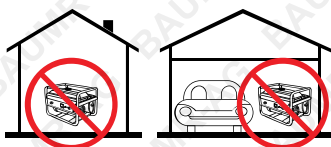
- Pay particular attention to accessories, nuts, bolts, screws, washers, caps, covers, loose parts, parts that could be removed or break off, pieces of packaging, staples, tape etc.

- In the case of any doubt, secure the item of concern in an appropriate manner, or completely remove the possibility of access by a baby or child.

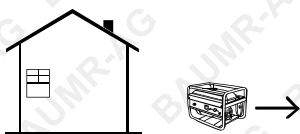
HAZARDOUS COMPONENTS!

⚠ DANGER ⚠

Using an engine or wood/charcoal/gas fuelled appliance indoors CAN KILL YOU IN MINUTES.
Engine exhaust and wood/charcoal/gas fumes contain carbon monoxide. This is a poison you cannot see or smell.



NEVER use inside a building, home, garage, boat, caravan or tent EVEN IF doors and windows are open.



Only use OUTSIDE and far away from windows, doors, and vents.

Avoid other hazards - READ MANUAL BEFORE USE.

GENERAL:

- Do not operate in a hazardous location. Such areas include where there is a risk of explosion of petrol fumes, leaking gas or explosive dusts.
- Do not operate in a confined area where exhaust gases or wood/charcoal/gas fumes could reach dangerous concentrations.

PRODUCTS FEATURING AN ENGINE

- Follow all warnings in the section titled "GENERAL".
- Explosion hazard - never smoke while refuelling.
- Take care not to spill fuel. When refuelling the engine, ensure that the engine has been allowed to cool. Prevent spilling of fuel as this may also ignite with a hot engine.
- Never refuel while engine is running.

GENERATORS

- Follow all warnings in the sections titled "GENERAL" and "PRODUCTS FEATURING AN ENGINE".
- The output of this generator is potentially lethal. The generator should not be connected to a fixed electrical installation except by an appropriately licensed person.
- Not weatherproof – protect your machine. This machine is not weatherproof and should not be exposed to direct sunlight, high ambient temperature, damp conditions, wet conditions or high humidity conditions.

- **BE AWARE THAT THE EQUIPMENT MAY INCLUDE HAZARDOUS COMPONENTS, SUCH HOT SURFACES AND MOVING PARTS.**
- **MOVING PARTS CAN CAUSE SERIOUS INJURY AND EVEN DEATH IF USED IMPROPERLY OR WITHOUT SUFFICIENT PPE.**
- **DO NOT USE THIS EQUIPMENT ON UNEVEN SURFACES AND ALWAYS MAINTAIN GOOD BALANCE WHEN USING THIS EQUIPMENT. FAILURE TO DO SO MAY CAUSE SERIOUS INJURY.**
- **MAINTAIN A SECURE GRIP OF THE TRIGGER ASSEMBLY / CONTROLS AT ALL TIMES.**

Recycling and Disposal



- This symbol indicates that this product must not be disposed of with general household waste.
- To prevent potential harm to the environment or human health from uncontrolled waste disposal, recycle the product responsibly to support the sustainable reuse of materials.

- To dispose of your used equipment, use appropriate return and collection systems or contact your local council for advice on environmentally safe recycling options.

Important Safety Symbols

THE LABELS ON YOUR MACHINE MAY SHOW SYMBOLS. THESE REPRESENT IMPORTANT INFORMATION ABOUT THE PRODUCT OR INSTRUCTIONS ON ITS USE.



Read these instructions carefully.



Wear eye protection.
Wear hearing protection.



Wear safety gloves.



Wear safety footwear.



Wear eye protection.



Wear safety helmet.



Do not remove or tamper with the protection and safety devices.



No smoking, sparks, or flames.



Do not touch parts that are hot from operation. Serious burns may result.



Never start or run the engine inside a closed area.



Do not touch the hydraulic oil. Corrosion may result.



Keep your hands clear from all rotating parts.



Keep your feet and hands away from moving parts. Moving parts can crush or cut.



Be careful with falling objects.



Be careful with your hands.



Be aware, flying objects may cause injury.



Fluid or air pressure could pierce skin and cause injury or death. Stay away.



Keep your hands clear from all rotating parts.



Keep children and bystanders off and away.



After operation, before leaving the machine, lower the attachment to the ground, shut off the engine and remove the key from the ignition.



Always turn off the engine before starting maintenance.



The exhaust fumes are dangerous, containing carbon monoxide. Staying in the environment can lead to unconsciousness and death.



Gasoline and its vapours are extremely flammable and explosive.



Do not overload.



Step on the foot plate on flat ground.



Max. horizontal inclination is 10°.



Max. longitudinal inclination during traveling is 15°.



Retract the foot plate when reversing.



Don not use the machine to carry people.



Do not travel or step on the foot plate during lifting.



Do not lift the dump box when the machine is horizontally incline. Tipping may result.



Do not lift the dump box on slopes. Tipping may result.



Do not leave the machine after lifting.



Do not lift people during operation.

Understand Your Machine

- Read this manual and all labels attached to the machine to understand its limitations and potential hazards.
- Be familiar with the controls and their correct operation. Know how to stop the machine and disengage the controls quickly.
- Read and understand all instructions and safety precautions before operating the machine. Do not operate the machine until you fully understand how to use and maintain it safely, and how to prevent accidental injury or property damage.
- If the unit is used by someone other than the original purchaser, or is loaned, hired out, or sold, always provide this manual and appropriate safety instruction before operation.
- The operator is responsible for preventing accidents or injuries to themselves, other people, and property.
- Do not operate the machine beyond its limits. Use the correct machine for the intended application.

Personal Safety

- Do not allow children to operate this machine.
- Keep children, pets and bystanders away from the work area. Stop the machine immediately if anyone enters the area. Children must be supervised by a responsible adult.
- Do not operate the machine while under the influence of alcohol, drugs, or medication that may impair your ability to use it safely.
- Wear appropriate clothing: long, heavy-duty trousers, safety boots and work gloves. Do not wear loose clothing, shorts, or jewellery. Tie back long hair above shoulder height.
- Keep hair, clothing and gloves away from moving parts. Loose items can become entangled.
- Protect your eyes, face and head from thrown objects. Always wear approved safety glasses or goggles with side shields.
- Wear suitable hearing protection.
- Keep hands and feet away from moving parts and pinch points at all times. Moving parts can cut or crush.
- Do not touch components that may be hot after operation. Allow them to cool before carrying out maintenance, adjustment or servicing.
- Stay alert and use common sense when operating the machine. Do not overreach.
- Do not operate the machine barefoot or while wearing sandals or lightweight footwear. Wear sturdy, protective footwear with good grip to reduce the risk of slipping.
- Maintain proper footing and balance at all times for better control in unexpected situations.

Inspect Your Machine

- Inspect the machine before use. Ensure all guards are fitted and in good working order.
- Check that all nuts, bolts and fasteners are secure.
- Do not operate the machine if it requires repair or is in poor mechanical condition. Replace damaged, missing or faulty parts before use. Check for fuel leaks. Keep the machine in safe working condition.
- Do not use the machine if the engine switch does not stop the engine. A machine that cannot be controlled with the engine switch is dangerous and must not be used.
- Before starting, ensure all tools, keys and adjusting spanners are removed from the machine. Tools left attached to rotating parts may cause serious injury.
- Avoid accidental starting. Ensure the engine switch is in the OFF position before transporting, maintaining or servicing the machine.
- If the machine vibrates abnormally, stop the engine immediately and investigate the cause. Excessive vibration is a warning sign of a problem.

Engine Safety

- This machine is fitted with an internal combustion engine. Do not operate it on or near forested or brush-covered land unless the exhaust system is fitted with a spark arrester that complies with applicable local regulations.
- If a spark arrester is fitted, it must be maintained in effective working order by the operator.
- Never start or run the engine in an enclosed area. Exhaust gases contain carbon monoxide, a colourless and deadly gas. Operate only in a well-ventilated outdoor area.
- Do not tamper with the engine to increase speed. The maximum engine speed is preset by the manufacturer and must not be altered.
- Keep a suitable fire extinguisher nearby when operating in dry conditions.

Fuel Safety

- Fuel is highly flammable and its vapours may explode if ignited. Take care to reduce the risk of serious injury.

- Refuel or drain the fuel tank only outdoors in a clean, well-ventilated area using an approved fuel container. Do not smoke and keep away from sparks, open flames and other ignition sources. Never refuel indoors.
- Keep conductive objects, such as tools, away from exposed electrical parts to prevent sparks that could ignite fuel vapours.
- Stop the engine and allow it to cool before refuelling. Never remove the fuel cap or add fuel while the engine is running or hot.
- Do not operate the machine if there are known fuel leaks.
- Loosen the fuel cap slowly to relieve pressure in the tank.
- Do not overfill the tank. Allow space for fuel expansion. Do not fill above approximately 12 mm below the bottom of the filler neck.
- Securely refit all fuel caps and wipe up any spilled fuel. Never operate the machine without the fuel cap properly fitted.
- If fuel is spilled, do not start the engine. Move the machine away from the spill and avoid ignition sources until vapours have dispersed.
- If fuel contacts your skin or clothing, wash immediately and change clothing.
- Store fuel in approved containers designed for fuel storage.
- Store fuel in a cool, well-ventilated area away from sparks, open flames and other ignition sources.
- Never store fuel, or a machine containing fuel, inside a building where vapours may reach an ignition source such as a hot water system, heater or clothes dryer. Allow the engine to cool before storing in an enclosed space.

Specific Safety Rules

- Thoroughly inspect the work area. Keep it clean and free of debris to prevent tripping hazards. Operate only on firm, level ground.
- Never place any part of your body where it could be at risk during assembly, installation, operation, maintenance, repair or transport.
- Keep all bystanders, children and pets at least 23 m away. Stop the machine immediately if anyone approaches.
- Do not attach items to the skip and never carry passengers.
- Never park the machine on unstable ground, especially when loaded.
- Disengage the clutch lever before starting the engine.
- Start the engine carefully, following instructions, and keep feet clear of moving parts.
- Never leave the operating position while the engine is running.
- Always operate the machine with both hands on the handlebars and maintain a firm grip.
- Be aware that the machine may bounce or lurch forward if it strikes buried obstacles such as large rocks or tree roots.
- Walk — never run — when operating the machine.
- Do not exceed the machine's load capacity. Travel at a safe speed, adjusting for slope, surface conditions and load weight.
- Use extreme caution when reversing or pulling the machine towards you.
- Take care when operating on or crossing gravel driveways, paths or roads. Watch for hidden hazards and traffic.
- On soft ground, use first gear (forward or reverse). Do not accelerate sharply, turn abruptly or stop suddenly.
- Use extra caution on frozen or slippery ground, as the machine may skid.
- Do not operate in confined areas where there is a risk of being crushed between the machine and another object.
- Do not operate on slopes greater than 15°. Do not tip the skip on a slope.
- When operating on slopes, ensure the load is evenly balanced. Move parallel to the slope at all times. Do not change gears while on a slope.
- When tipping the skip, the centre of gravity shifts continuously. Ground conditions are critical to stability. Use extra caution when tipping, particularly on soft or wet surfaces such as clay.



Running combustion 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 combustion engine in confined areas EVEN IF windows and doors are open. ONLY run petrol engines OUTDOORS and away from doors, windows, and vents.

Do not operate the equipment in hazardous locations, such as where there may be a risk of fire or explosions from flammable liquids, gases or dust.

Do not operate the equipment in confined areas where exhaust gases, smoke or fumes could reach dangerous concentrations.

Do not refuel a combustion engine while it is running on or hot.

Never smoke while refueling combustion engines or handling flammable substances.

For generators, the electrical output is potentially lethal and must only be connected to a fixed electrical installation by an appropriately licensed person.

Be aware that the equipment may include hazardous components, such as blades, hot surfaces and moving parts.

Handle any flammable substance with extreme caution.

Safety Symbols

The product may have safety warning labels attached to it, explained below. Understand the symbols on your product and their meanings. If any stickers become unreadable, unattached etc., replace them.

 Flammable Material Hazard Flammable liquids, gases, or substances etc may present. Avoid ignition sources and open flames. Danger of fire.	 Read User Manual Read and fully understand product safety warnings, operation, procedures etc before using the product.	 Use Hand Protection Wear appropriate hand protection and take due care as the product or use of the product may present hand hazards.	 Carbon-Monoxide Hazard Do not use the product in confined areas or without adequate ventilation. Carbon-monoxide poisoning can be fatal.
 Electrocution / Electrical Shock Hazard High voltage or high current electricity may be present or required by the product. Take due care when handling electrical products, cables, plugs and leads. Electrical shock can be fatal.	 Toxic Fumes / Dust Hazard Using the product or by-products from use may produce fumes, smoke or particles that could be harmful if inhaled. Wear appropriate breathing protection and have adequate ventilation.	 Explosive Material Hazard Combustible liquids, gases, or substances etc may be present. Avoid ignition sources and open flames. Danger of explosion.	 Cutting / Amputation Hazard The product may have blades, edges or mechanical devices that can cause severe cut injury to fingers, limbs etc. Take due care when handling and using the product.
 Crush Hazard The product may have blades, edges or mechanical devices that can cause severe crush injury to fingers, limbs etc. Take due care when handling and using the product.	 Single Operator Only The product must be operated by a single person only. More than one person operating the product may introduce additional hazards.	 Use Face Protection Wear appropriate full-face protection and take due care as the product or use of the product may present face and eye hazards.	 Use Foot Protection Wear appropriate foot protection and take due care as the product or use of the product may present foot hazards.
 Use Eye / Ear / Head Protection Wear appropriate eye and / or ear and / or head protection and take due care as the product or use of the product may present eye, hearing, and head hazards.	 Running Hazard Do not run on or near the product as doing so may present a fall hazard.	 Diving Hazard Do not dive into the product as doing so may present a neck / head injury hazard.	 Adult Supervision Required Always supervise children and other users of a product to prevent drowning or injury.
 Skin Penetration / Puncture Hazard The product may produce pressure, emit liquids or objects that can cause severe injury to fingers, limbs, blood etc. Take due care when handling and using the product.	 Hot Surface Hazard Be aware that the product may produce high temperatures and hot surfaces that can cause burn injuries.	 Flying Debris Hazard Be aware that the product or use of the product may present hazards produced by flying debris. Wear appropriate clothing and protective devices.	 Moving Parts Hazard Be aware that the product contains or uses mechanical devices that move or rotate. Always wait for moving parts to stop fully before handling the product, adjusting, maintenance etc.

 Carbon-Monoxide Hazard Do not use the product in confined areas or without adequate ventilation. Carbon-monoxide poisoning can be fatal.	 Pull Hazard Be aware that the product contains or uses mechanical devices that can pull in objects and can cause severe injury to fingers, limbs etc. Take due care when handling and using the product.	 Slope / Fall Injury Hazard Be aware that using the product on sloping surfaces or in slippery conditions may present additional dangers from falls and contact with blades, moving parts, hot surfaces etc.	 "Slam Dunk" Warning Do NOT attempt "slam dunk" manoeuvres as this may result in severe injury due to falling, product breakage or collapse etc.
 Electrocution / Electrical Shock Hazard - Outdoor High voltage or high current electricity may be present or required by the product. Do NOT use in rain, damp, or wet conditions. Electrical shock can be fatal.	 Electrocution / Electrical Shock Hazard - Disconnect High voltage or high current electricity may be present or required by the product. Always disconnect the product from the electrical supply before handling the product, adjusting, maintenance etc.	 Power Line Electrocution Hazard High voltage / high current power lines may be present. Use extreme caution to avoid contact or interference with power lines. Electrical shock can be fatal.	 "Kick-Back" Hazard High level of "kick-back" hazard that can cause the machine to suddenly rotate towards operator. Kick-back injury can be fatal.
 Winch Operator Position Hazard Do NOT stand between winch and load. Do NOT use winch to move people.	 Winch Lift Hazard Do NOT LIFT load vertically. Use machine to PULL only.	 Cable Hazard Ensure that load bearing cable is not kinked or knotted.	 Winch Cable Hazard Ensure that there is a minimum number of cable coils on winching mechanism.
 Winch Hook Hazard Carry hook to load – do NOT throw or run.	 Flash / Blinding Hazard Wear appropriate eye protection for welding. Direct exposure to weld arcs may cause permanent eye injury.	 Laser Hazard Laser may be in use – do NOT look directly at laser or allow others to.	 Choking Hazard Children under 8 yrs. Can choke or suffocate on small parts. Adult supervision required.

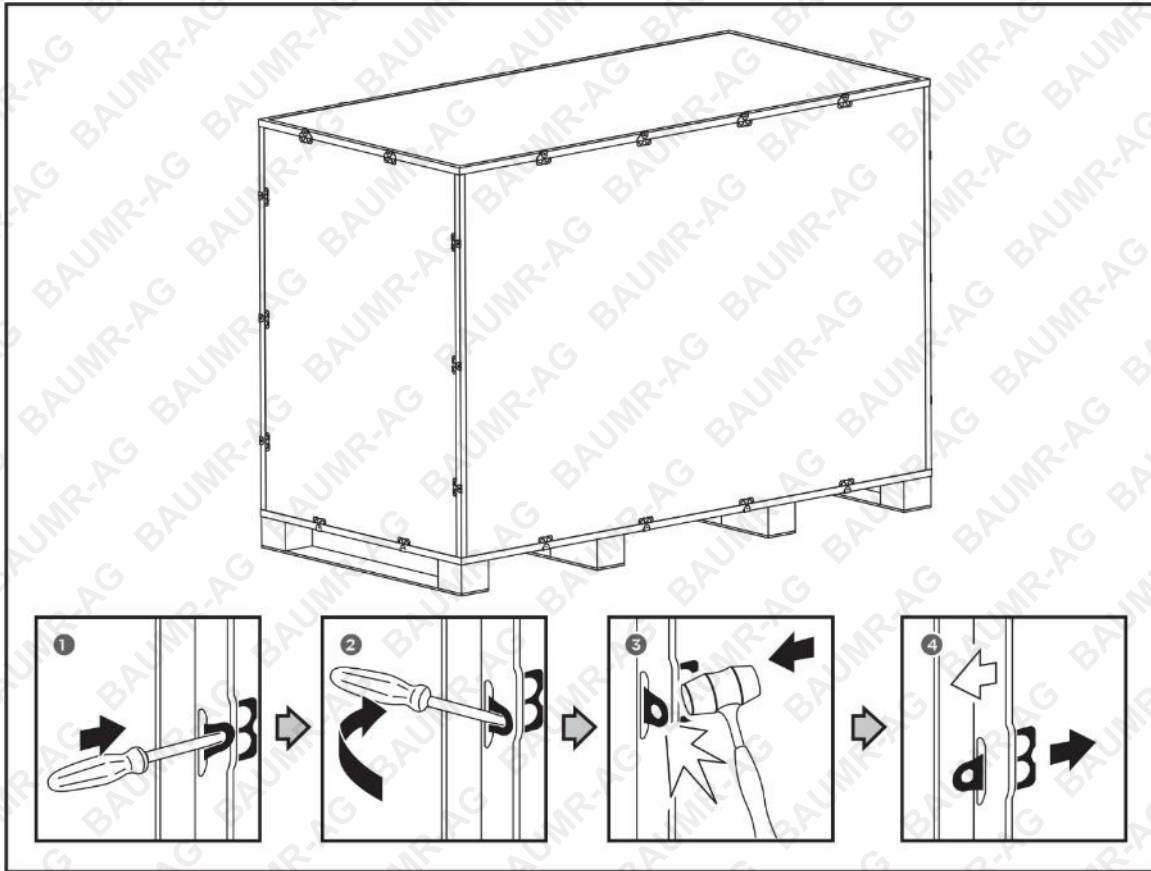
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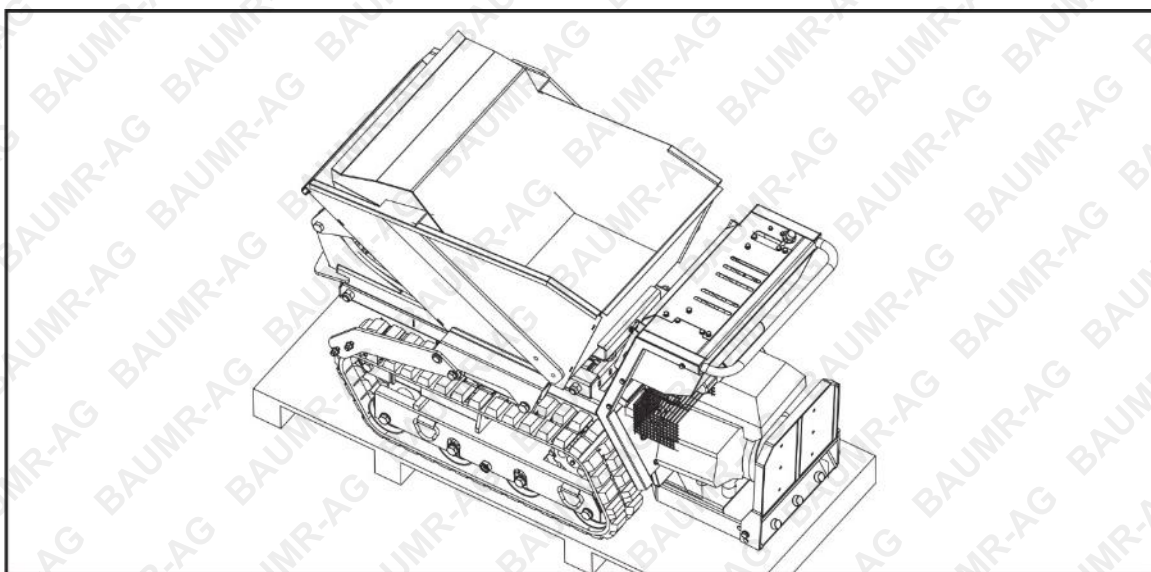
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Unpacking the Container

1. Use a screwdriver and hammer to release all side latches.

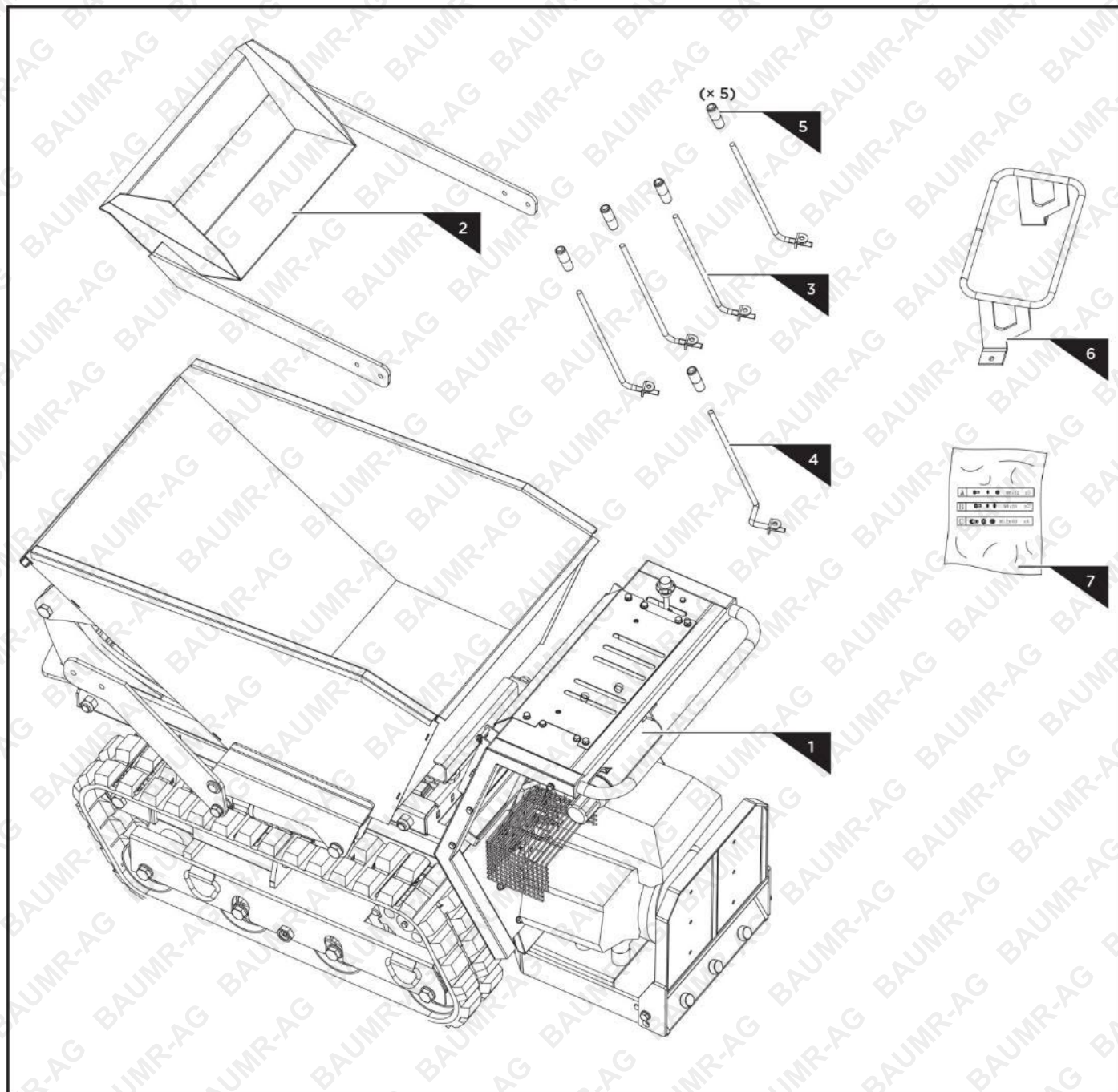


2. Remove all plywood panels.
3. Remove all loose components from the base pallet.



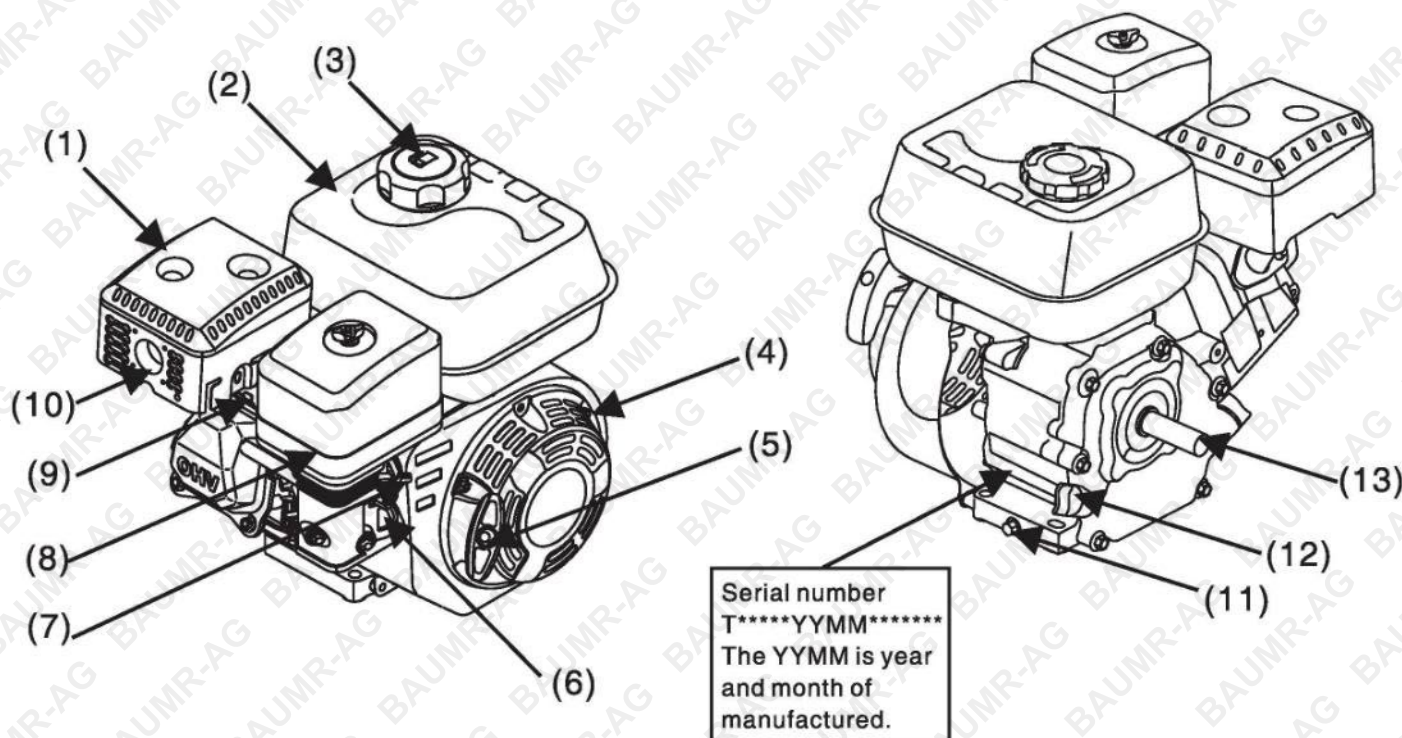
Contents Supplied

The Mini Tracked Dumper is supplied partially assembled and carefully packaged. After removing all components from the packaging, you should have the following items:



No.	Name	No.	Name
1	Main Body	5	Control Lever Sleeves (x5)
2	Self-Loading Shovel	6	Handle Assembly
3	Control Lever (Single Bend)	7	Hardware Pack
4	Control Lever (Double Bend)		

Engine Components



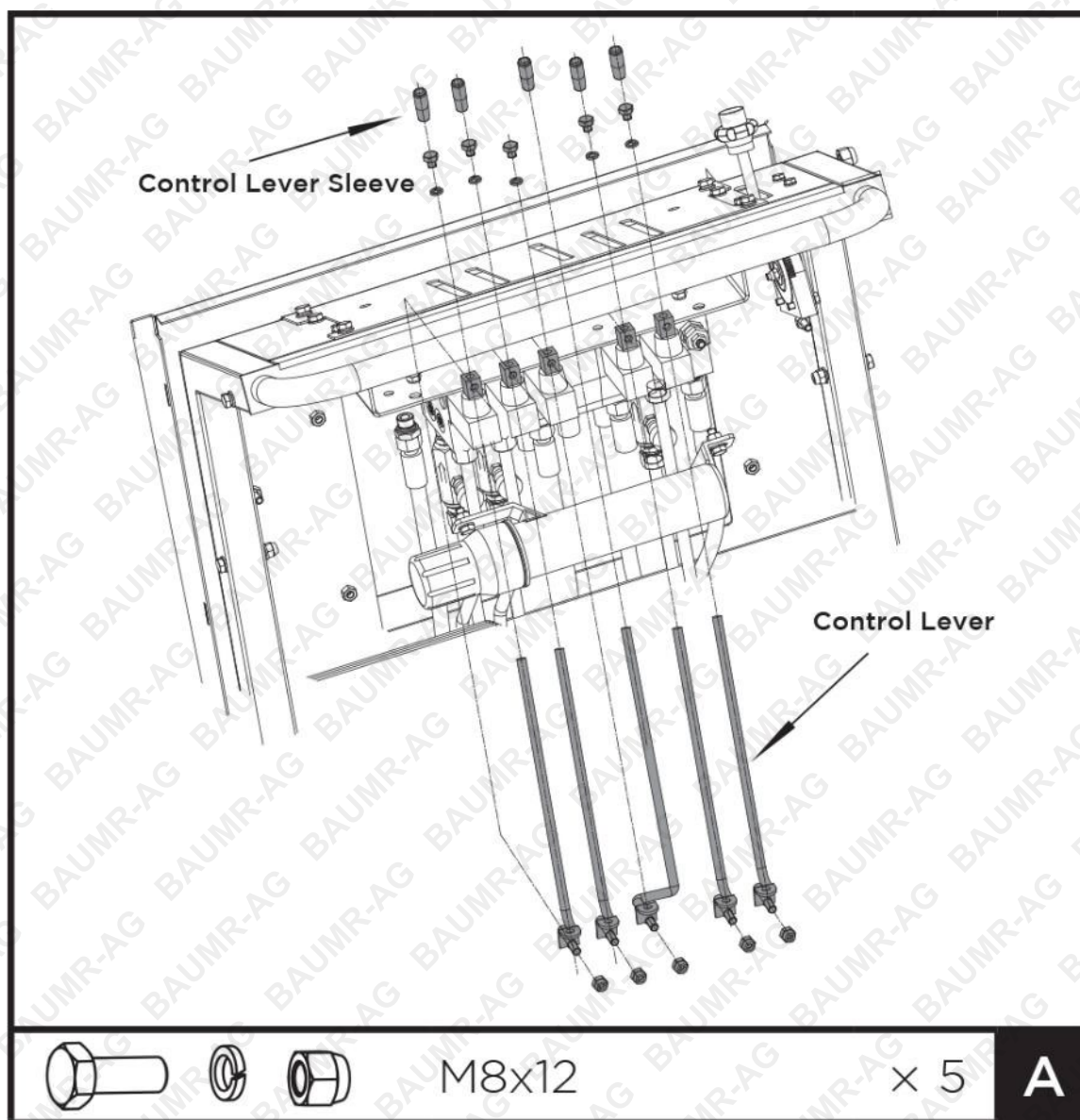
No.	Name	No.	Name
1	Muffler	8	Air Filter
2	Fuel Tank	9	Spark Plug
3	Fuel Tank Cap	10	Exhaust Port
4	Recoil Starter	11	Oil Drain Bolt
5	Starter Handle	12	Oil Filler Cap / Dipstick
6	Fuel Valve	13	Output Shaft
7	Choke Lever		

Assembly

This Mini Tracked Dumper is partially assembled at the factory. Follow the instructions below to complete assembly.

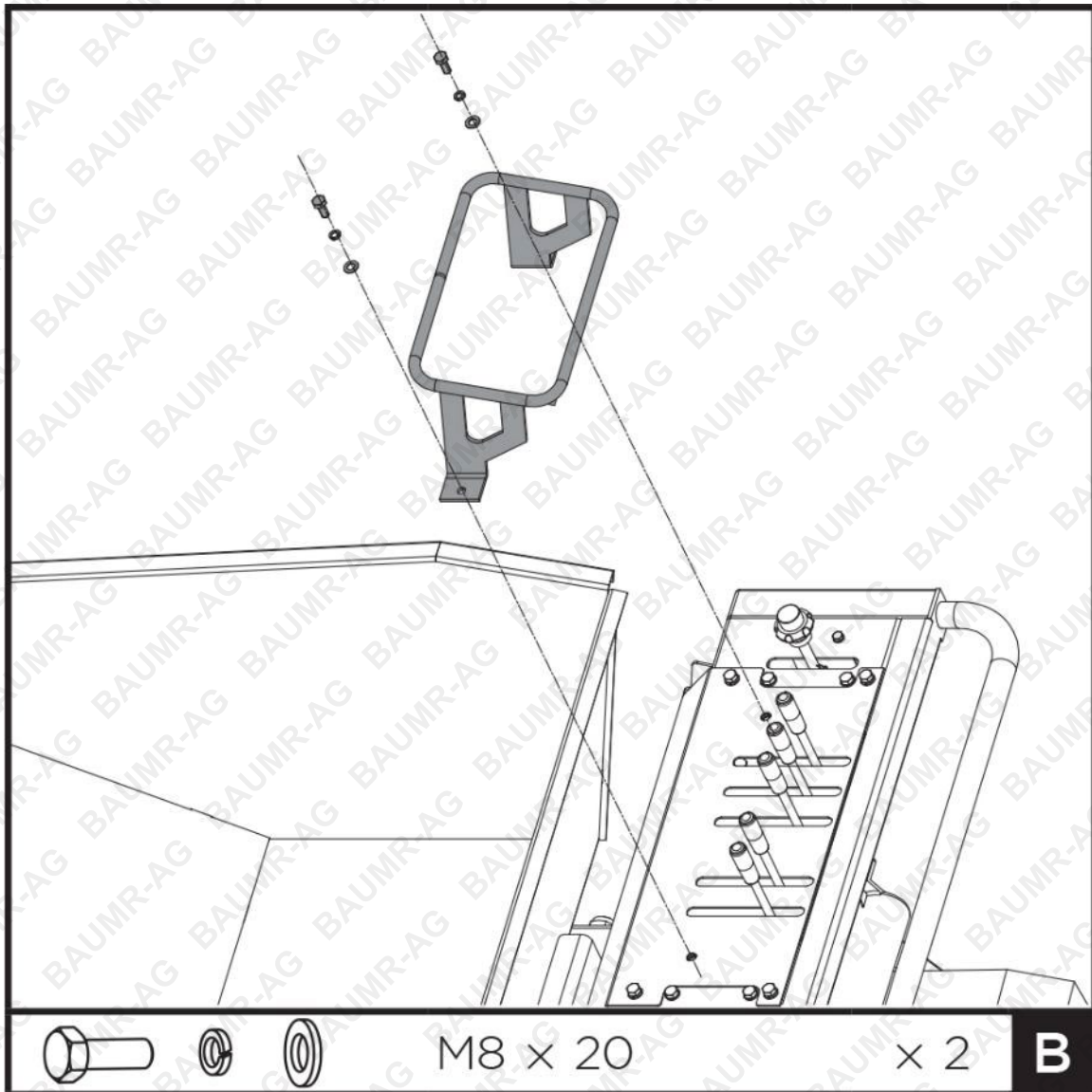
Control Lever Assembly

Insert the control levers into the connecting sleeves. Secure using M8 nuts and washers. Tighten all nuts firmly.



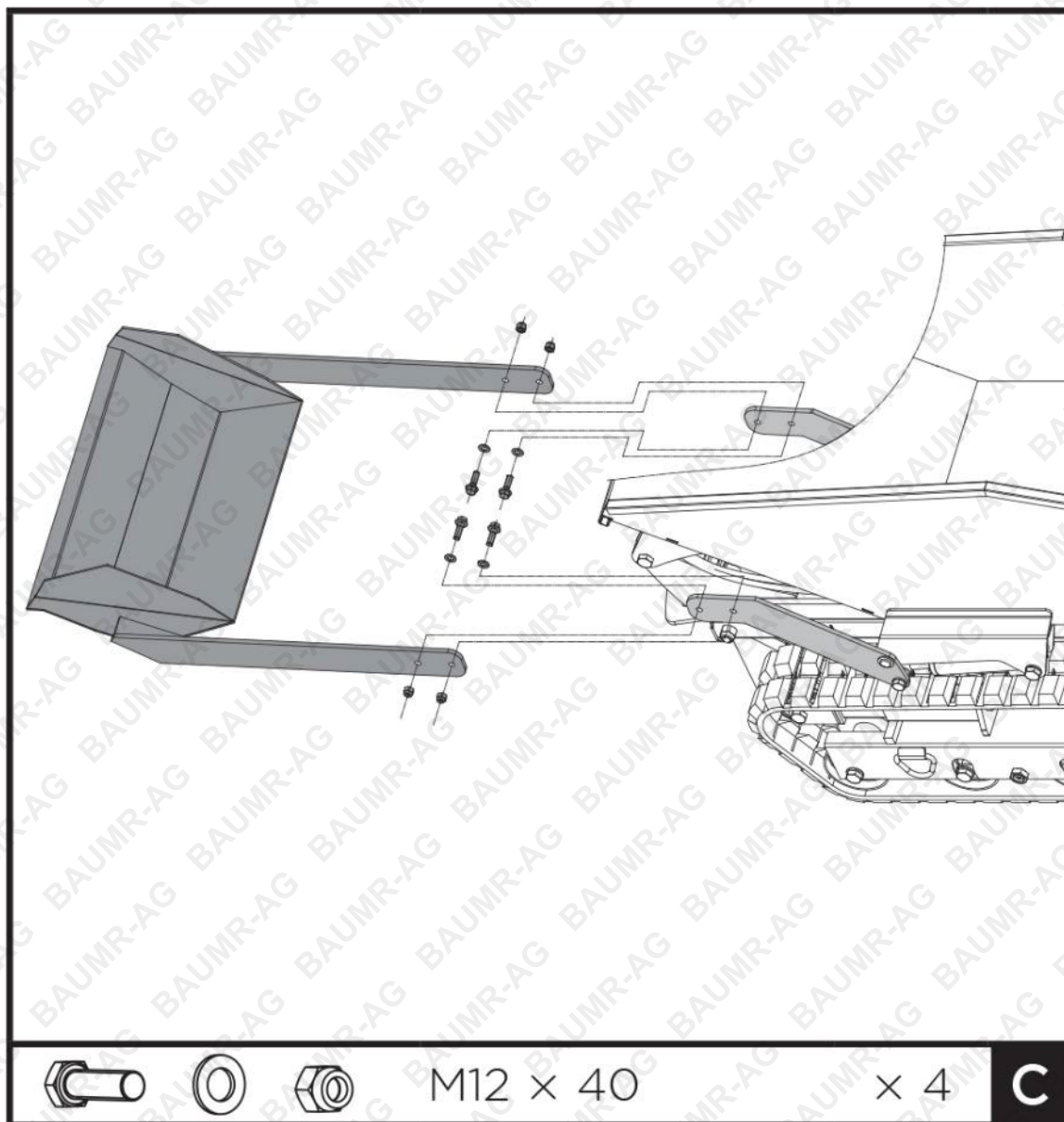
Handle Assembly

Secure the handle frame assembly to the control panel using two M8 × 20 bolts. Tighten securely.



Shovel Assembly

1. Position the self-loading shovel connecting plates against the chassis connecting plates from the outside and align the holes.
2. Secure each side using two M12 × 40 bolts, washers and nuts. Tighten all fasteners firmly.

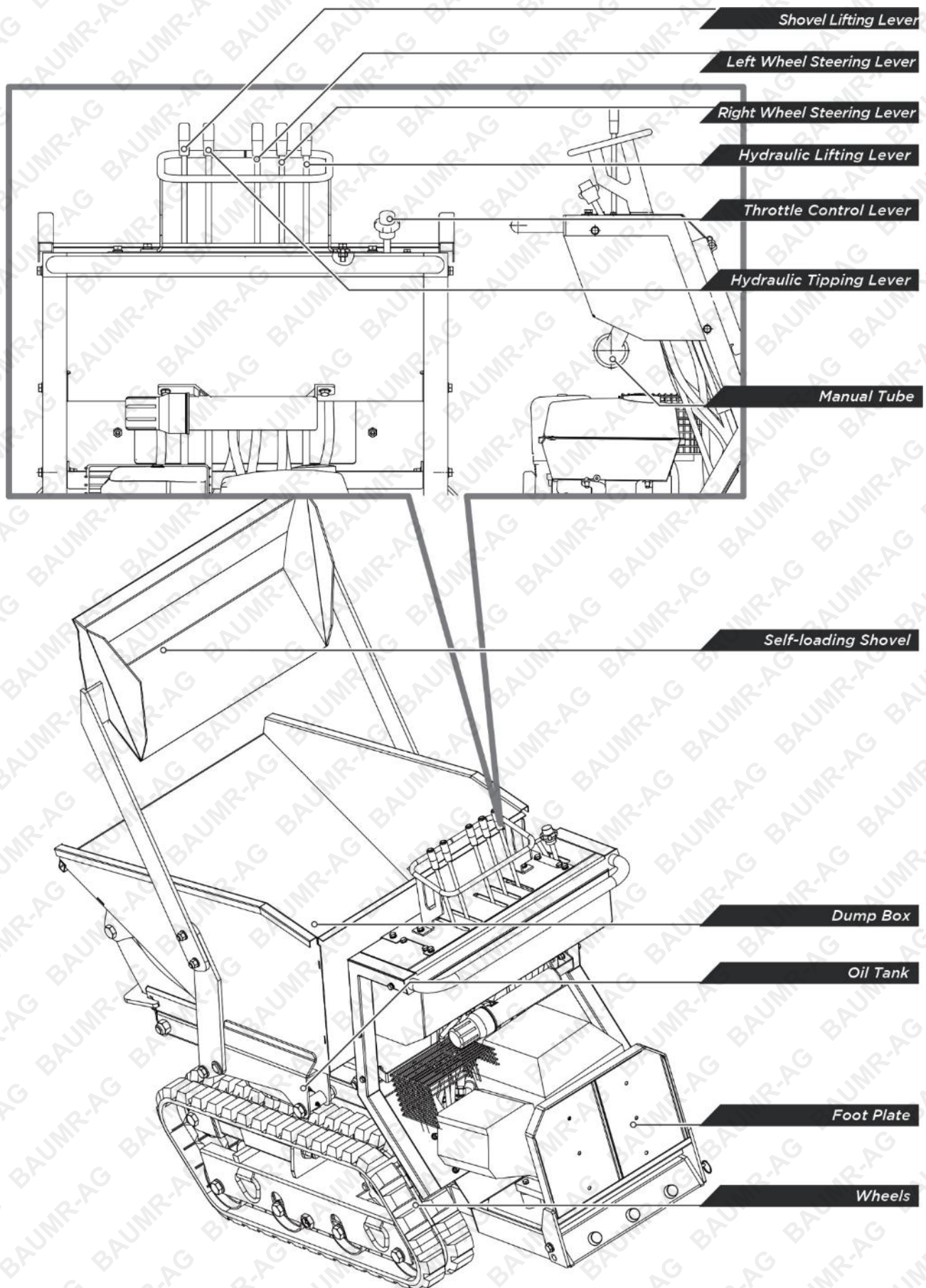


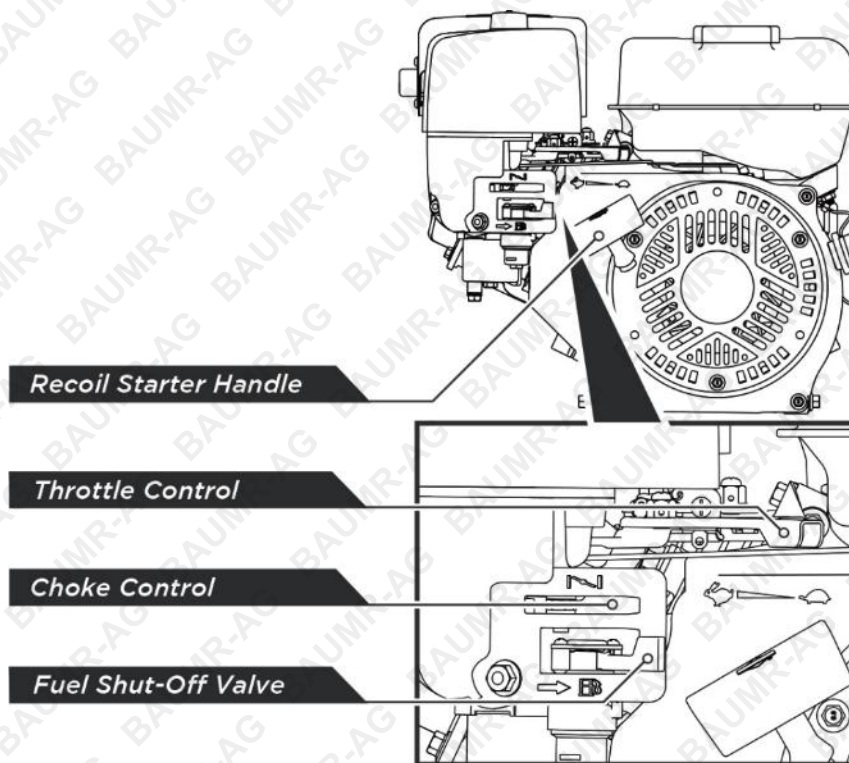
Engine Oil

Engine oil has been drained for transport.

Before starting the engine, fill with the recommended engine oil (SAE 10W-30) to the correct level.
Failure to do so will cause permanent engine damage.

Know Your Machine





Shovel Lifting Lever

Pull the lever back to lower the shovel to the ground for loading. Push it forward to raise the shovel and unload material into the skip.

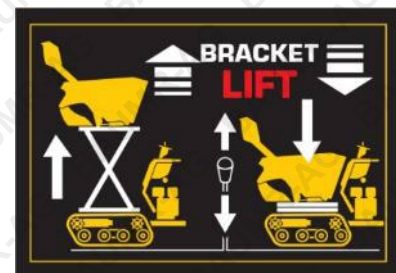
The hydraulic self-loading shovel allows material to be loaded into the skip with minimal effort.



Hydraulic Lifting Lever

Push the lever forward to raise the bracket. Pull it back to return the bracket to its original position.

This function allows the skip to be loaded and unloaded at various working heights.



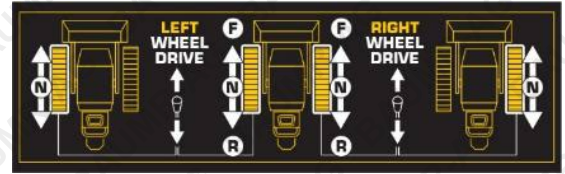
Hydraulic Tipping Lever

Push the lever forward to tip the skip. Pull it back to return the skip to its original position.



Left/Right Track Steering Levers

Operate the steering levers to turn left or right.



Use the steering levers only at reduced speed.

Shovel Speed Control Valve & Skip Speed Control Valve

The valves are factory set and do not require adjustment under normal conditions.

If adjustment is necessary:

- Turn the left valve anticlockwise to increase shovel lifting speed; turn clockwise to decrease speed.
- Turn the right valve anticlockwise to increase skip lowering speed; turn clockwise to decrease speed.

Engine On/Off Switch

The engine switch has two positions:

- **OFF** – Engine will not start or run.
- **ON** – Engine will start and run.

Recoil Starter Handle

Use the recoil starter handle to start the engine.

Choke Control

The choke control restricts airflow to assist with cold starting.

The control slides between:

- **CHOKE CLOSED** – For starting a cold engine
- **CHOKE OPEN** – For normal operation

Never use the choke to stop the engine.

Fuel Shut-Off Valve

The fuel shut-off valve has two positions:

- **CLOSED** – Use when servicing, transporting or storing the machine.
- **OPEN** – Use for normal operation.

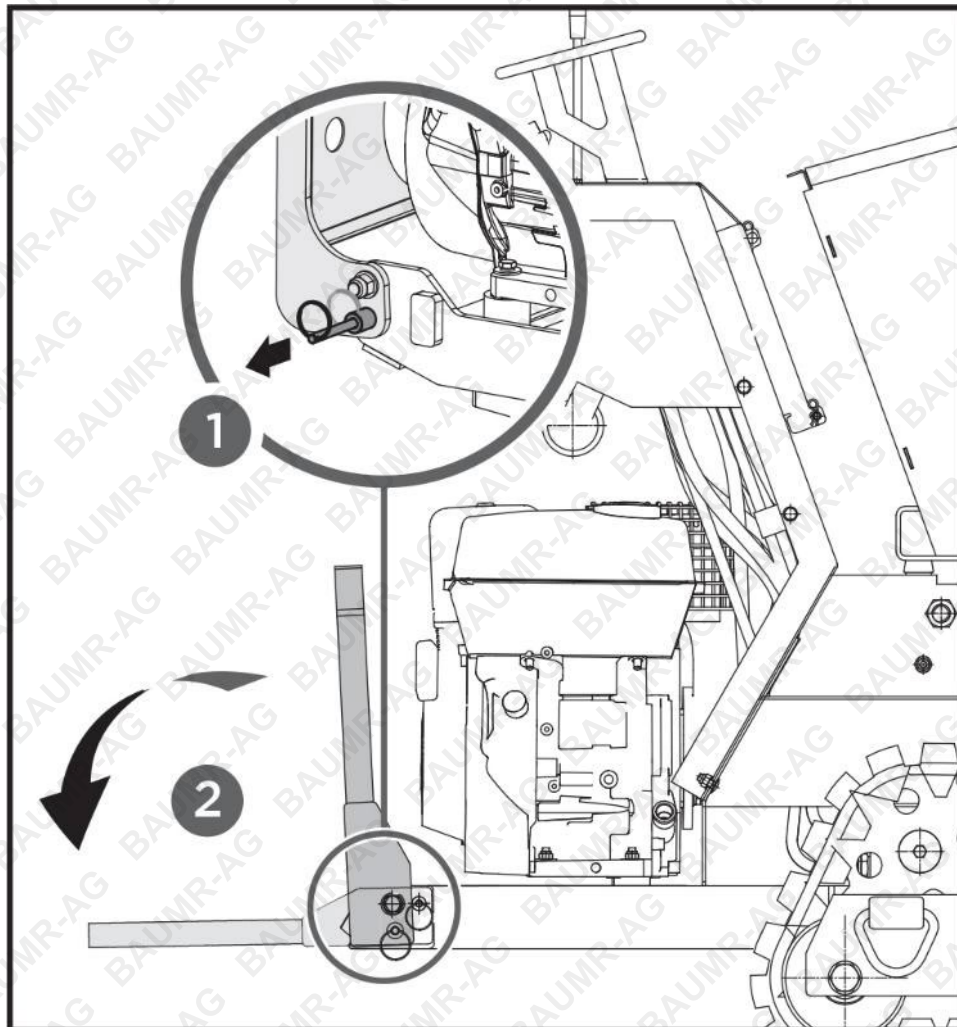
Throttle Control

The throttle control regulates engine speed.

- **FAST** – Increases engine speed
- **SLOW** – Decreases engine speed

Foot Plate

1. Pull the ring to remove the locking pin (Step 1), then rotate the foot plate to the level position.
2. Lift the plate until the locking pin re-engages to secure it in the upright position.

**Operating Instructions**

Perform turning operations at low speed. Adjust the throttle according to the load before turning. Do not turn at high speed.

When driving, operate the travel control levers smoothly. Avoid sudden starts or stops.

For normal take-off, ensure the machine is in low speed and apply the travel control levers steadily.

To stop from higher speed, reduce to low speed or idle before bringing the machine to a complete stop.

During normal operation, do not release either of the travel control levers independently, as this may cause sudden high-speed turning.

When travelling up or down slopes, keep the foot plate closed. Do not stand on the foot plate when operating on a slope.

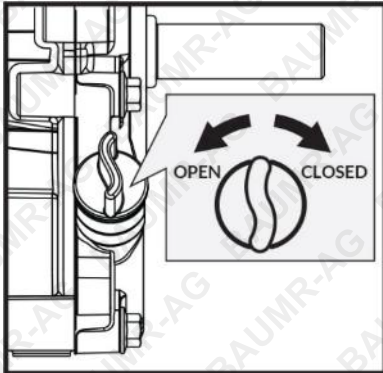
When lowering the self-loading shovel, operate the control levers smoothly to prevent heavy impact between the shovel and the ground.

Barrow Operation

Adding Engine Oil

The engine is supplied without oil. Do not start the engine until oil has been added.

1. Place the tracked dumper on a flat, level surface.
2. Remove the oil filler cap/dipstick.



3. Using a funnel, add the recommended engine oil until it reaches the FULL mark on the dipstick.

Do not overfill. Check the engine oil level daily and top up as required.

Adding Fuel

Petrol is highly flammable and explosive. Serious injury may result if handled incorrectly. Use extreme care when refuelling.

Refuel outdoors only. Never refuel indoors, as fuel vapours may ignite.

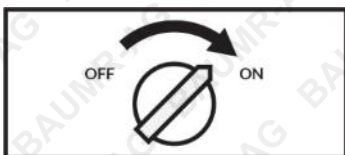
1. Ensure the engine is switched off and allow it to cool for at least two minutes before refuelling.
2. Remove the fuel cap and fill the tank with clean, fresh unleaded petrol.

Do not overfill. Fill only to the recommended level to allow space for fuel expansion. Overfilling may cause fuel spillage or damage to the evaporative emissions system. Use an approved fuel container with a suitable pouring spout. Do not use any device that obstructs your view of the fuel level while filling.

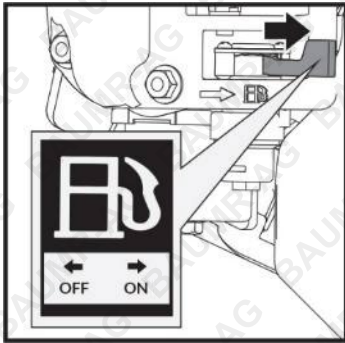
3. Refit the fuel cap securely and clean up any spilled fuel immediately.

Starting the Engine

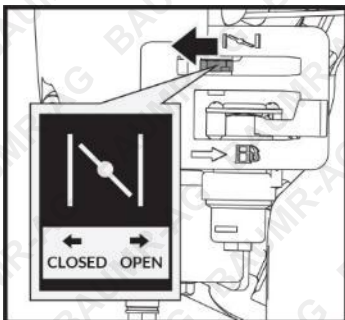
1. Move the engine switch to the **ON** position.



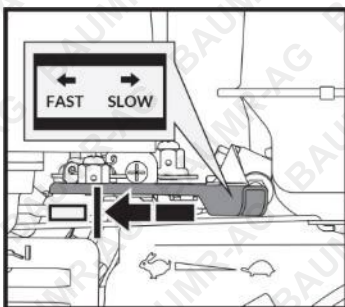
2. Open the fuel shut-off valve.



3. Move the choke lever to the **CLOSED** position. (If the engine is warm, the choke may not be required.)



4. Move the throttle lever slightly towards the **FAST** position.



5. Pull the recoil starter handle until the engine starts. Allow the starter handle to return gently after each pull. Repeat as necessary.

Once the engine has started, gradually move the choke to the **OPEN** position (if used) and set the throttle to **FAST** before operating the machine.

WARNING: Rapid retraction of the starter cord (kickback) may pull your hand or arm towards the engine faster than you can release it. This may result in fractures, bruising or sprains.

Operating

- After the engine has warmed up, move the throttle lever to increase engine speed.
- The tracked dumper is fitted with steering levers on the handlebars for easy operation. To turn left or right, operate the corresponding steering lever.
- Steering sensitivity increases with travel speed. When the machine is empty, light pressure on the lever is sufficient to turn. When loaded, more pressure is required.
- The maximum load capacity is 500 kg. Always assess the load and adjust it according to ground conditions.
- Use low gear and proceed with caution on rough or uneven terrain. Keep the machine in low gear when travelling over difficult ground.

- Avoid sharp turns and frequent changes of direction, particularly on hard, rough surfaces with high traction.
- Take extra care when operating in adverse weather conditions (ice, heavy rain or snow) or on unstable ground.
- When the clutch control lever is released, the machine will stop and brake automatically.
- If the machine is stopped on a steep slope, place a suitable wheel chock against one of the tracks to prevent movement.

Idle Speed

- Set the throttle lever to the SLOW position when not actively working.
- Reducing engine speed decreases engine wear, saves fuel and lowers noise levels.

Stopping the Engine

In an emergency, turn the engine switch to the OFF position immediately.

For normal shutdown:

1. Move the throttle lever to the SLOW position.
2. Allow the engine to idle for one to two minutes.
3. Turn the engine switch to the OFF position.
4. Turn the fuel shut-off valve to the OFF position.

IMPORTANT: Do not stop the engine suddenly at high speed while under heavy load, as this may cause engine damage.

Do not use the choke to stop the engine. Backfiring or engine damage may occur.

Engine Operation

Pre-Operation Checks

Before starting the engine, carry out the following checks:

- Inspect the fuel hose and connections for looseness or leaks. Fuel leaks are a serious safety hazard.
- Check that all bolts and nuts are secure. Loose fasteners may cause engine damage.
- Check the engine oil level. Top up if required.
- Check the fuel level. Refill if necessary, taking care not to spill fuel or overfill the tank.
- Ensure the cylinder cooling fins and recoil starter area are free from dust, grass clippings and debris.
- Wear close-fitting work clothing. Loose clothing, belts, towels or long hair may become entangled in moving parts.

Notice: The engine is supplied without oil. Before starting, fill with the correct engine oil. Do not overfill.

Checking Engine Oil

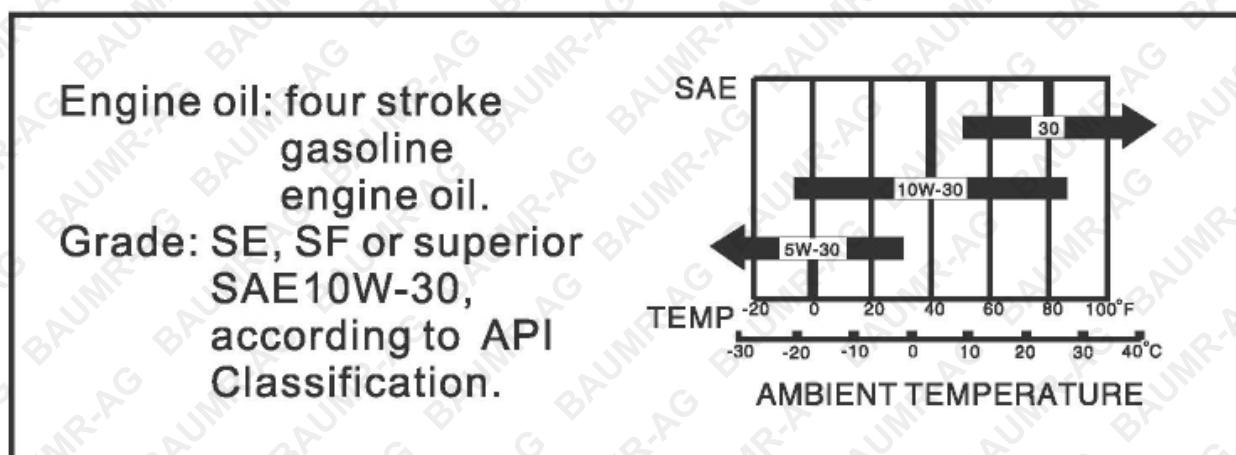
Place the machine on level ground before checking the oil level. Remove the dipstick, wipe it clean, reinsert fully, then remove again to check the level. Oil should be at the FULL mark.

Add oil if required and refit the dipstick securely.

Recommended Engine Oil

Use high-quality, clean engine oil suitable for four-stroke petrol engines. Do not use special additives.

Select the oil viscosity according to the expected ambient temperature. Refer to the viscosity chart below to choose the appropriate oil grade for operating conditions.



If the ambient temperature in your area falls within the range specified for a particular oil grade, use that recommended oil.

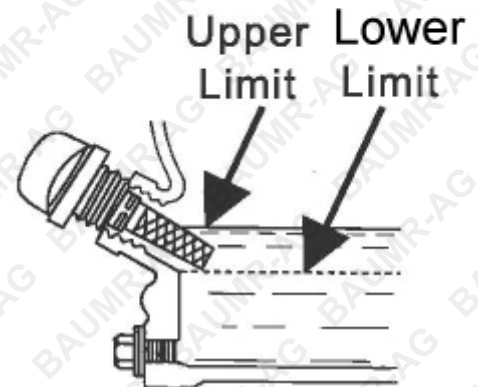
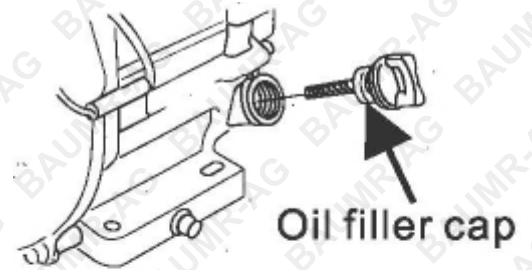
Notice: Before checking or adding engine oil, ensure the engine is switched off and positioned on level ground.

Checking and Adding Engine Oil

1. Remove the dipstick and wipe it clean.
2. Reinsert the dipstick without tightening it, then remove it again to check the oil level.
3. If the oil level is near or below the lower mark, add the recommended engine oil until it reaches the upper mark. Do not overfill.
4. Refit and tighten the dipstick securely.

For engines fitted with an oil-bath type air cleaner, fill the air cleaner reservoir to the specified oil level.

Notice: If the engine is equipped with a low oil alert system, the engine will stop automatically when the oil level falls below the safe limit. To prevent unexpected shutdown, check the engine oil level before each start.



Checking the Fuel

Recommended Petrol

Fuel must meet the following requirements:

- Clean and fresh unleaded petrol
- Minimum octane rating of 92 RON

Using unleaded petrol reduces carbon build-up and extends the service life of the exhaust system.

Fuel containing up to 10% ethanol (E10) or up to 5% methanol may be used.

Notice: Do not use fuels such as E85. Do not mix engine oil with petrol. Do not modify the engine to use alternative fuels.

Failure to follow these instructions may damage engine components and void the warranty.

Engine Operation at High Altitude

If operating at altitudes above 1,500 metres, high-altitude adjustment may be required to maintain performance and emissions compliance.

Without adjustment:

- Engine performance may decrease
- Fuel consumption may increase
- Emissions may increase

Contact the manufacturer or an authorised service agent for high-altitude adjustment information.

Carburettor Adjustment for High Altitude

At high altitude, the standard air–fuel mixture may become too rich. This can:

- Reduce engine performance
- Increase fuel consumption
- Cause carbon build-up
- Make starting difficult

If the engine is operated continuously above 1,524 metres (5,000 ft), carburettor modification may be required.

Contact an authorised service agent for carburettor adjustment.

When correctly modified and maintained, the engine will continue to meet applicable emissions standards throughout its service life.

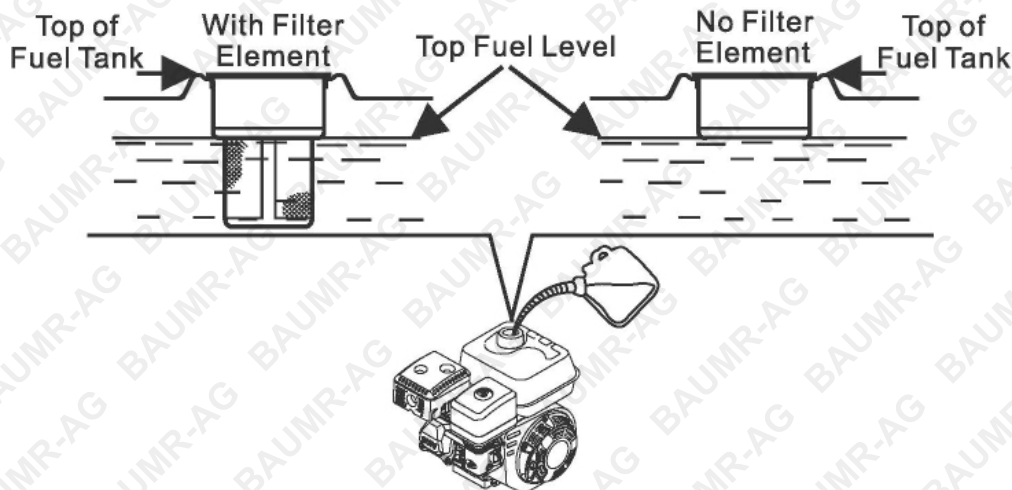
Adding Fuel

WARNING: Petrol and its vapours are highly flammable and explosive. Fire or explosion may cause serious burns or death.

When refuelling, observe the following precautions:

- Switch off the engine and allow it to cool for at least 2 minutes before removing the fuel cap.
- Refuel outdoors or in a well-ventilated area.
- Do not overfill. Fill to approximately 25 mm below the top of the fuel tank to allow for fuel expansion.
- Keep petrol away from sparks, open flames, pilot lights, heat sources and other ignition sources.
- Regularly inspect the fuel hose, fuel tank and fuel cap for cracks or leaks. Replace damaged parts if necessary.
- If fuel is spilled, clean it up immediately before starting the engine.

Refuelling Procedure



1. Ensure the machine is on level ground and the engine is switched off. Clean around the fuel cap before removing it.
2. Add clean, fresh unleaded petrol up to the recommended level. Do not allow fuel to overflow.
3. Refit and tighten the fuel cap securely.

Notice: Keep fuel away from heaters, furnaces, electrical appliances and power tools. Clean up spilled petrol immediately to reduce fire risk and environmental contamination.

Fuel Tank Capacity:

Refer to the specifications section for details.

Checking the Air Filter

Remove the air filter cover and inspect the filter element.

- If the filter element is dirty, clean it.
- If the filter element is damaged, replace it with a new one.

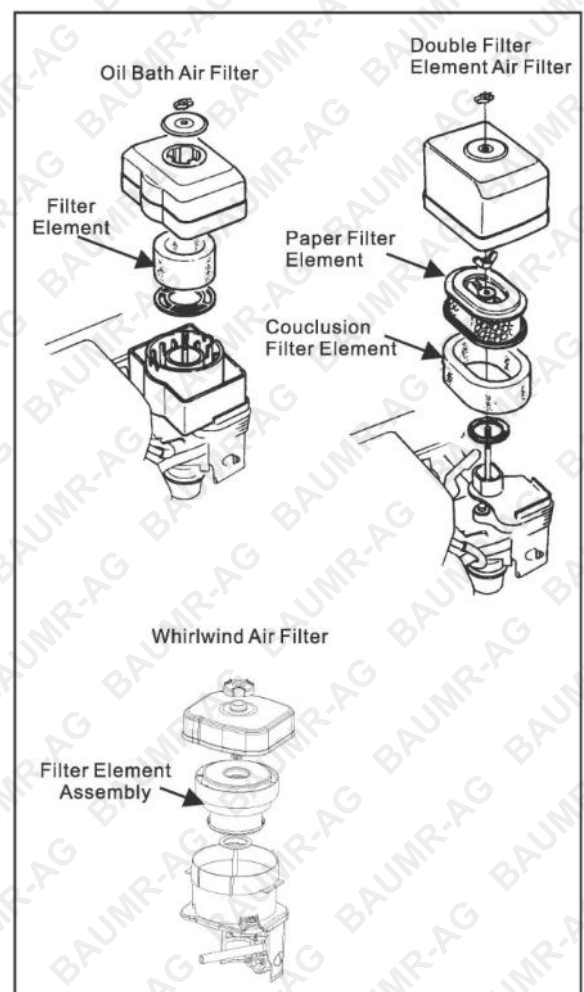
For engines fitted with an oil-bath type air cleaner, also check the oil level and refill to the specified level if required.

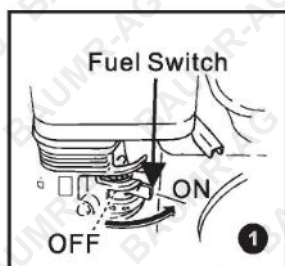
Starting the Engine

Before starting the engine, ensure the following:

- The spark plug, silencer, fuel cap and air filter are correctly fitted.
- Do not attempt to start the engine if the spark plug has been removed.

WARNING: Engine exhaust contains carbon monoxide — a colourless, odourless and poisonous gas. Inhaling carbon monoxide may cause nausea, unconsciousness or death. Operate only in a well-ventilated outdoor area.

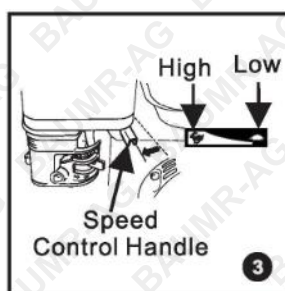


Starting Procedure:

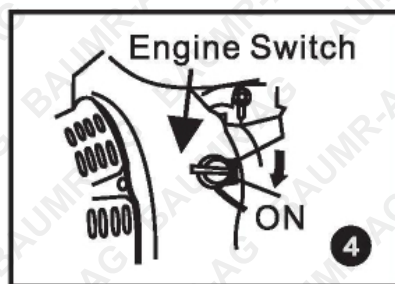
1. Turn the fuel valve to the **ON** position.



2. For a cold start, move the choke to the **CLOSED** position.
For a warm start, leave the choke in the **OPEN** position.



3. Move the throttle lever from LOW to approximately one-third towards the FAST position.

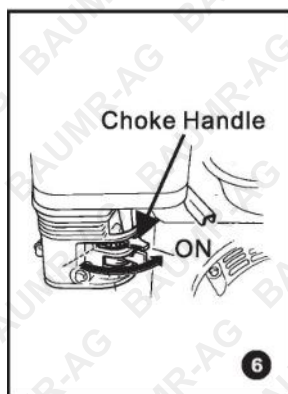


4. Turn the engine switch to the ON position.



5. Pull the recoil starter handle slowly until resistance is felt, then pull sharply to start the engine.

After the engine starts, allow the starter handle to return gently. Do not release it suddenly, as this may damage the starter mechanism.

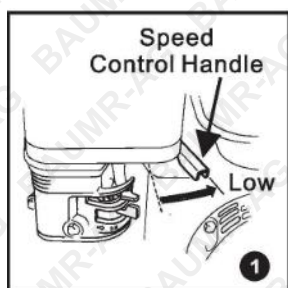


6. If the engine was started with the choke closed, gradually move the choke to the OPEN position once the engine has warmed up.

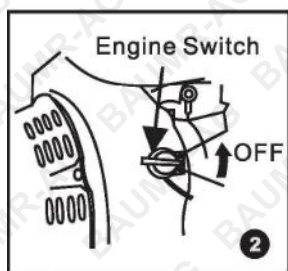
Stopping the Engine

In an emergency, stop the engine immediately by turning the engine switch to the OFF position.

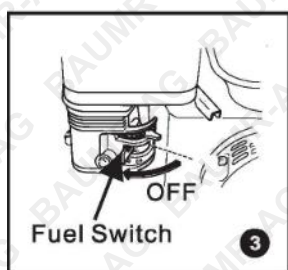
Under normal conditions, follow these steps:



1. Move the throttle lever to the **LOW** speed position.



2. Turn the engine switch to the **OFF** position.



3. Turn the fuel valve to the **OFF** position.

Barrow Maintenance

ATTENTION: Surface corrosion will occur on metal surfaces over time and the rate of oxidation depends on factors such as proximity to the ocean and humidity or condensation of water vapour on metal surfaces. To mitigate this, WD40 can be used to remove surface corrosion then, when applied periodically, it will prevent rust from forming.

Regular maintenance will extend the service life of the tracked dumper and its components.

Preventive Maintenance

1. Stop the engine and disengage all control levers. Allow the engine to cool.
2. Move the throttle to the SLOW position.
3. Disconnect the spark plug lead and secure it away from the spark plug.

Inspect the general condition of the tracked dumper. Check for:

- Loose fasteners
- Misalignment or binding of moving parts
- Cracked, worn or damaged components
- Any condition that may affect safe operation

Clean the machine using a soft brush, vacuum or compressed air to remove debris. Lubricate moving parts with a high-quality light oil as required.

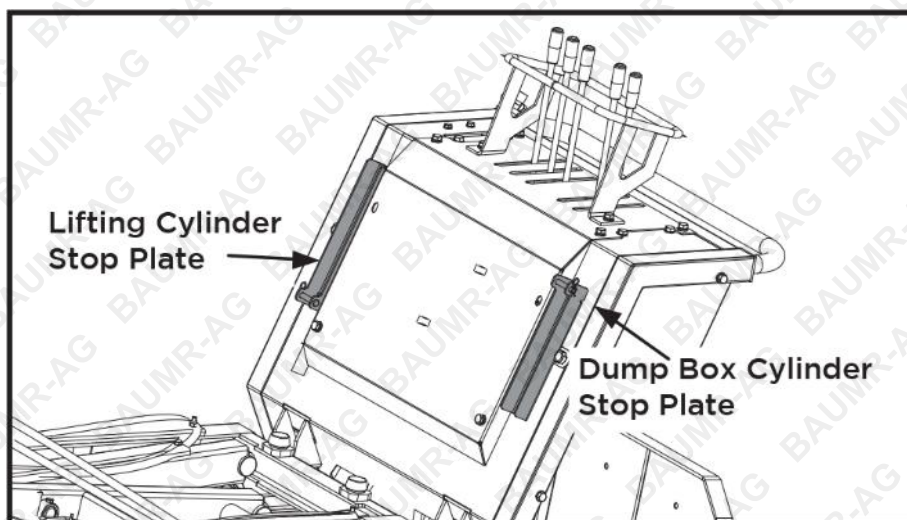
Inspect the spark plug lead regularly for wear or damage and replace if necessary.

Do not use a pressure washer to clean the machine.

Water may enter sealed areas such as the transmission housing and cause damage to bearings, gears or the engine. Pressure washing may reduce service life and reliability.

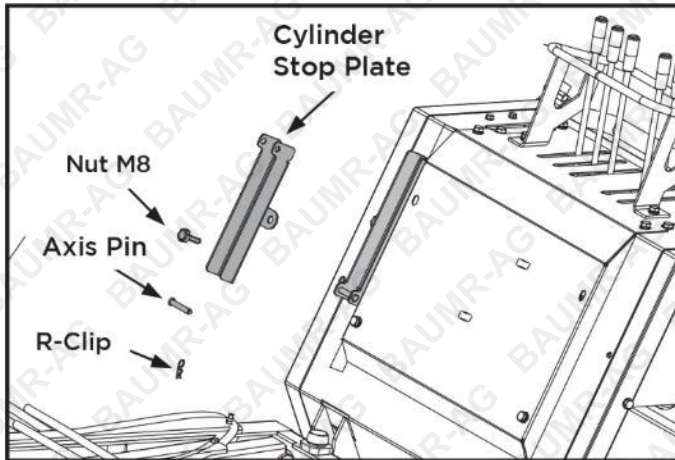
Cylinder Stop Plate

The cylinder stop plate is stored at the rear of the control console. It supports the lifting bracket and skip during maintenance and prevents them from falling.

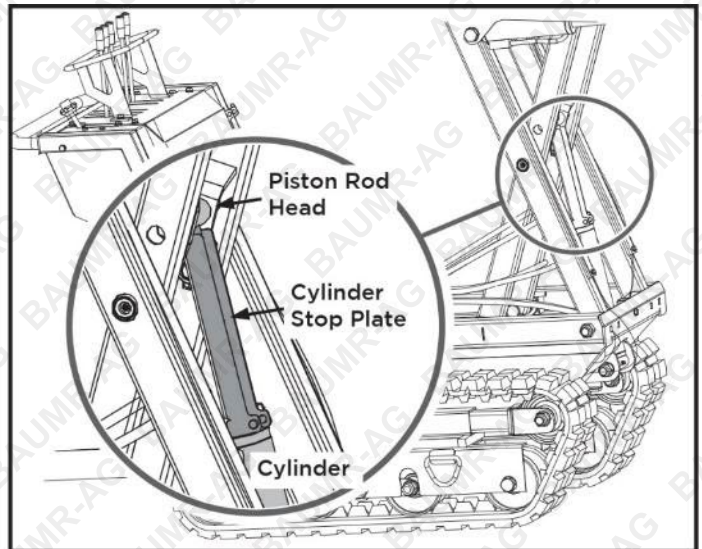
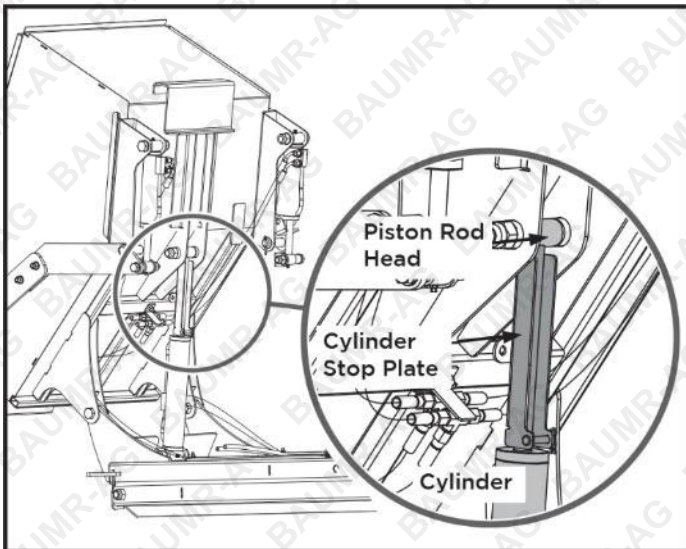


To Fit the Cylinder Stop Plate:

1. Loosen the M8 nut.
2. Remove the cylinder stop plate.
3. Remove the pivot pin and R-clip.



4. Position the stop plate over the cylinder piston rod, ensuring:
 - The upper end braces against the piston rod head.
 - The lower end braces against the cylinder body.
5. Reinsert the pivot pin and secure it with the R-clip.

**After Maintenance:**

1. Remove the cylinder stop plate.
2. Refit it to the rear of the console.
3. Secure with the M8 nut.

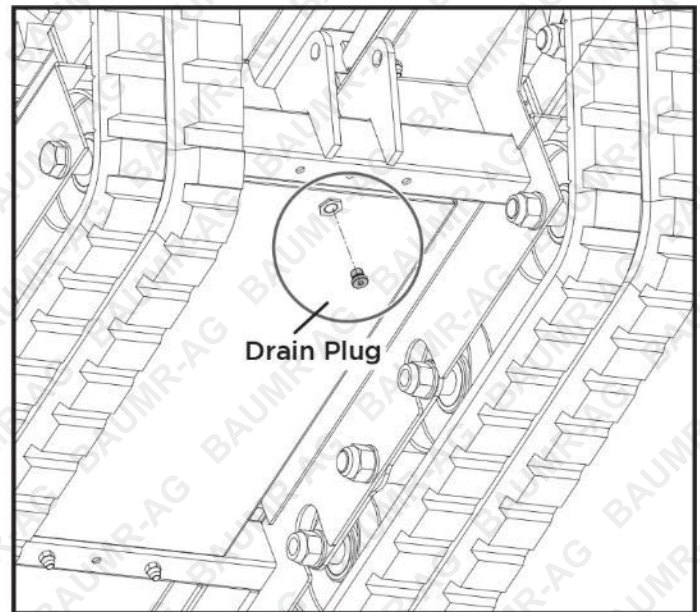
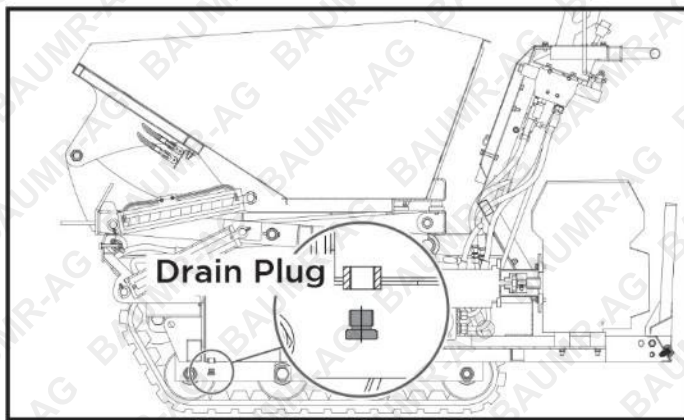
WARNING: Always use the cylinder stop plate to support the lifting bracket and skip during maintenance. Failure to do so may result in serious injury.

Hydraulic Oil

WARNING: Do not operate the control levers while draining or adding hydraulic oil. This may cause the shovel or skip to fall.

Draining Hydraulic Oil:

1. Park the machine on flat, level ground.
2. Place a suitable container under the drain plug.
3. Remove the hydraulic oil drain plug and allow the oil to drain completely.
4. Refit and tighten the drain plug securely.



Adding Hydraulic Oil:

1. Use the control levers to raise the self-loading shovel to its highest position and fully tip the skip.
2. Fit the cylinder stop plate onto the cylinder piston rod and insert the safety pin to secure it.
3. Remove the oil filler cap/dipstick.
4. Add hydraulic oil as required.

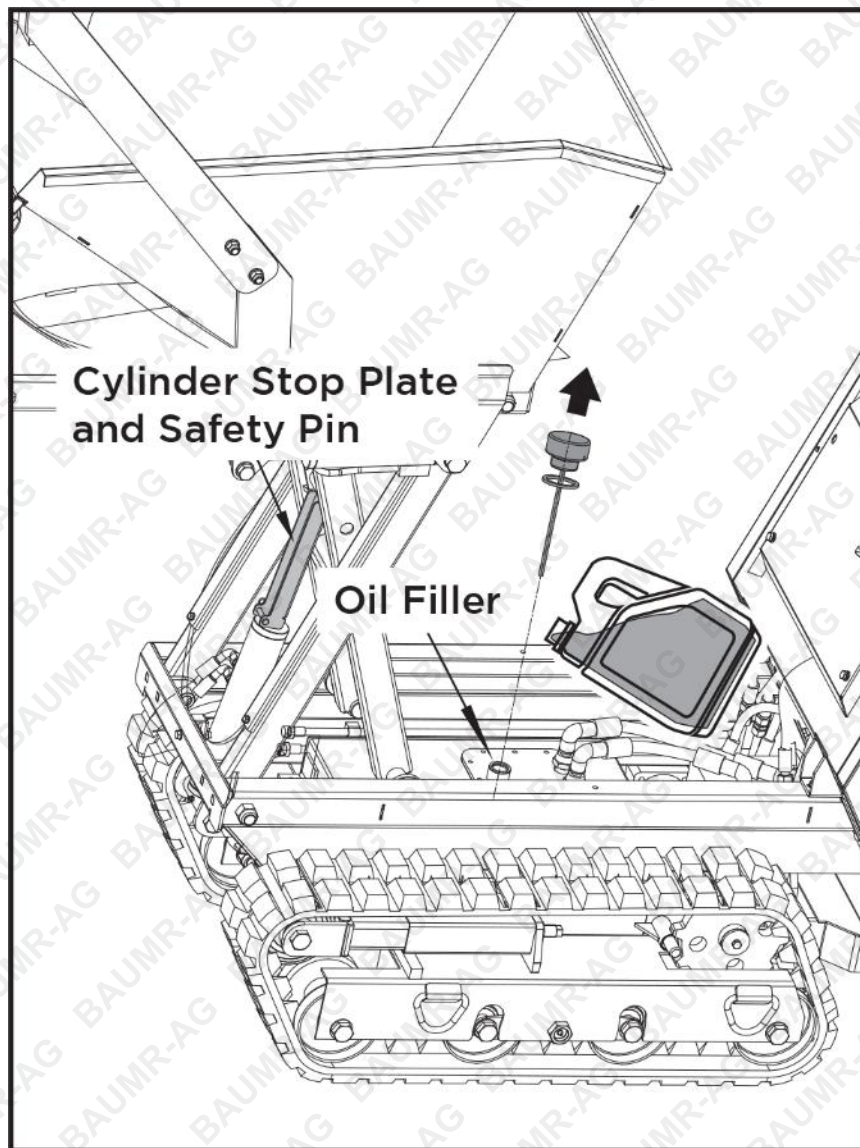
Recommended hydraulic oil:

- 10W AW32
- AW32
- ISO 32

Hydraulic tank capacity: 22.5 L

5. After filling, remove the safety pin and cylinder stop plate.

Ensure all components are correctly refitted before operating the machine.



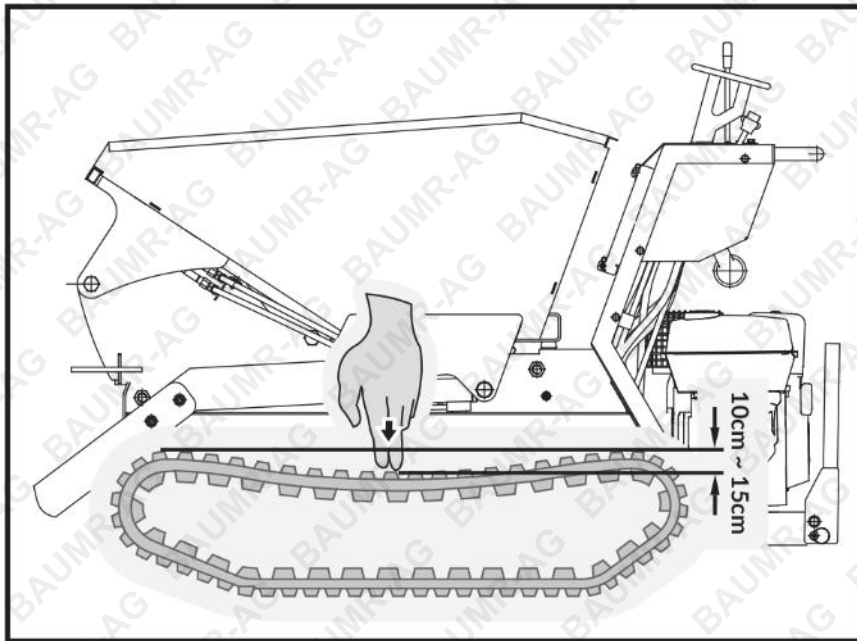
Track Tension Adjustment

Tracks may loosen during operation. Loose tracks can slip over the drive sprocket and cause damage to the housing.

Checking Track Tension:

1. Park the machine on firm, level ground such as compacted soil or paved surface.
2. Press down on the centre of the track using normal finger pressure, as shown in the illustration.
3. Measure the vertical movement from the track to the horizontal reference line.

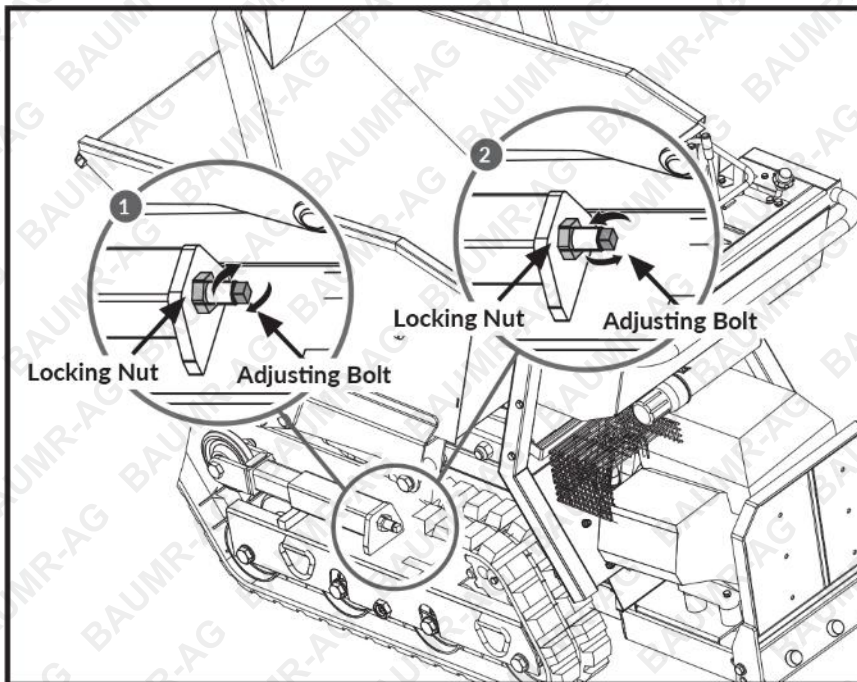
Correct track deflection: 10–15 mm



Adjusting Track Tension

If the deflection is outside the specified range, adjust as follows:

1. Loosen the locking nut.
2. If deflection is too great (track too loose), turn the adjustment bolt clockwise to tighten the track until correct tension is achieved.
3. If deflection is too small (track too tight), turn the adjustment bolt anticlockwise to loosen the track until correct tension is achieved.
4. Retighten the locking nut securely.



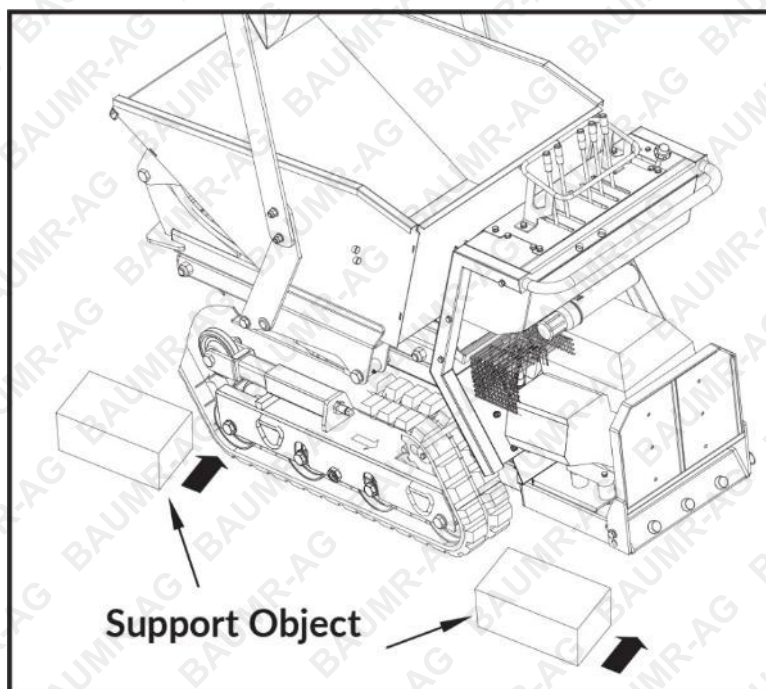
Important: Do not overtighten the tracks. Track tension affects braking performance — excessive tension may reduce braking effectiveness. If no further adjustment is available, the tracks may need to be replaced.

Replacing Tracks

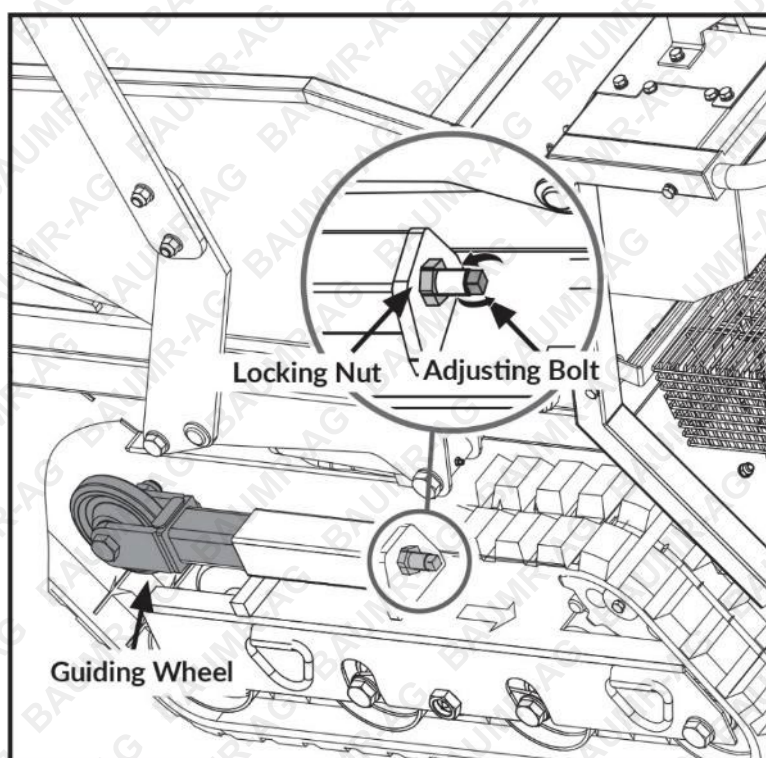
Inspect the tracks regularly. If a track is cracked, frayed or excessively worn, replace it as soon as possible.

Removal and Installation

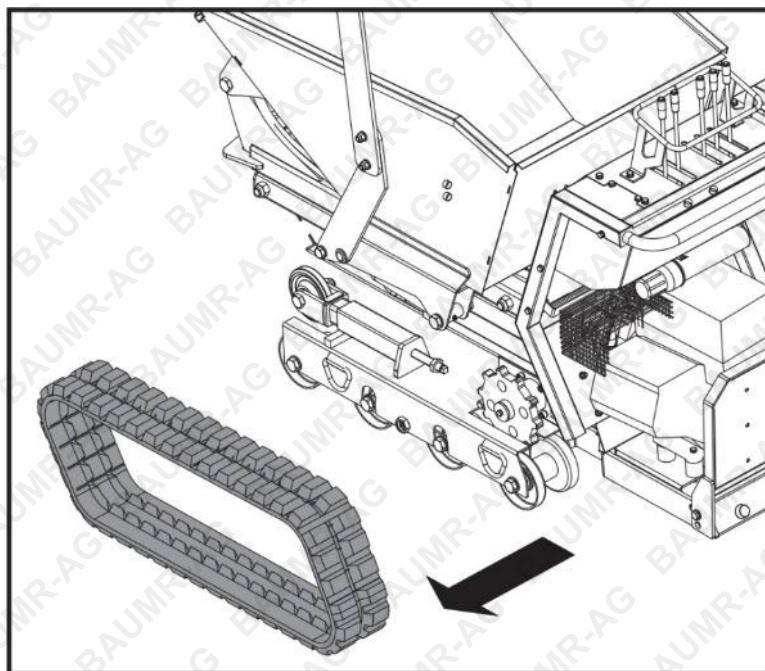
1. Raise the machine and support it securely on blocks or stands rated for its weight. The tracks should be approximately 100 mm clear of the ground.



2. Loosen the locking nut. Turn the square-head adjustment bolt anticlockwise to move the guide wheel outward until it is fully released from the track.



3. Remove the track in the direction indicated. Repeat the procedure on the opposite side if required.



4. Fit the new track. Turn the adjustment bolt clockwise to tension the track correctly. Tighten the locking nut securely and remove the support stands.

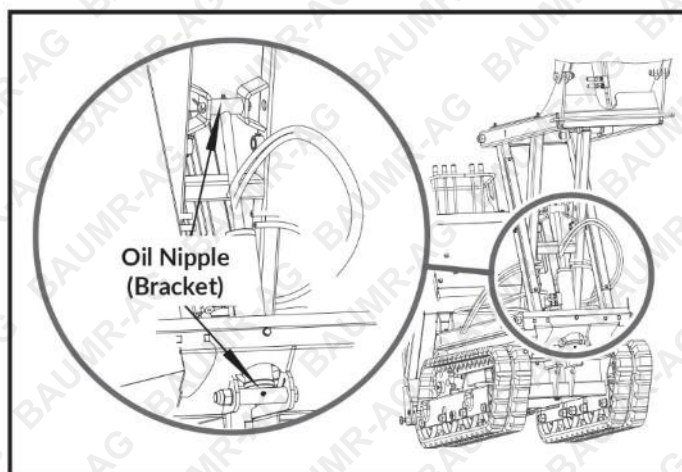
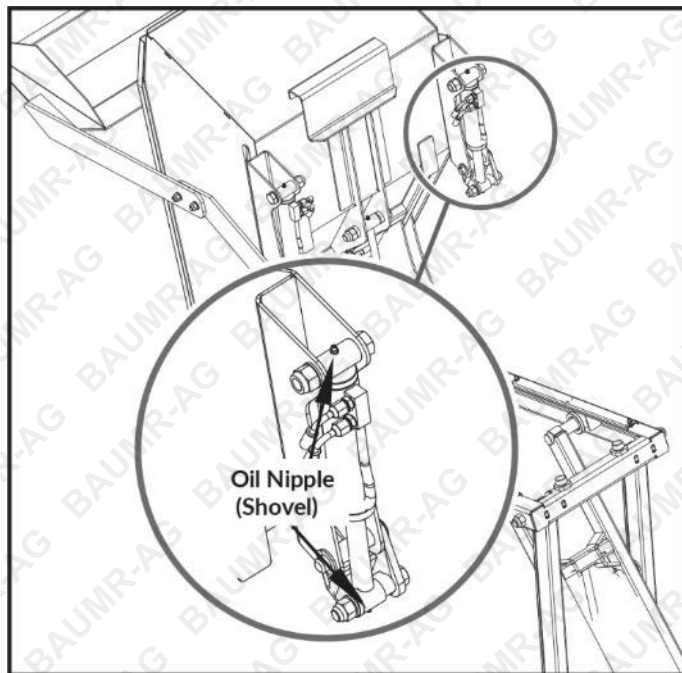
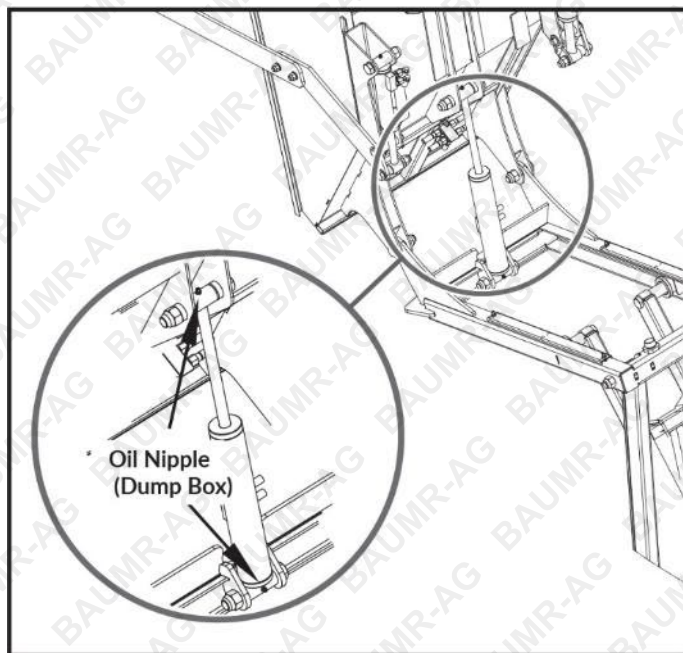
WARNING: Keep hands and fingers clear when removing or installing tracks. There is a risk of injury between the track and pulley.

Lubrication

There are two grease nipples fitted to each of the following cylinders:

- Shovel cylinder
- Skip cylinder
- Bracket cylinder

Apply suitable grease to each grease nipple regularly to ensure smooth operation and to prevent premature wear.



Engine Maintenance

Inspect the engine regularly for loose or damaged components. Repair or replace damaged parts and tighten any loose screws, nuts or bolts.

Engine Maintenance

Importance of Maintenance

Proper maintenance is essential for safety, economy and reliable operation. It also helps reduce emissions.

Failure to maintain the engine correctly, or operating it without addressing faults, may result in serious injury or death.

Daily Inspection

Before operating the engine, check the following:

- All bolts and nuts are secure and undamaged.
- The air cleaner is clean.
- The engine oil level is correct and the oil is clean.
- There are no fuel or oil leaks.
- The fuel level is adequate.
- The surrounding area is safe for operation.
- There are no abnormal vibrations or unusual noises.

Carburettor Adjustment

- Do not adjust the carburettor. It has been factory set for normal operating conditions.
- If adjustment is required, contact the manufacturer or an authorised service agent.

NOTICE: The maximum engine speed is preset by the manufacturer. Do not exceed this speed.

Periodic Inspection

Regular maintenance ensures safe and efficient engine operation.

If the engine is operated in dusty conditions or under heavy load, reduce the maintenance intervals accordingly. Maintenance frequency should be based on:

- Engine oil condition
- Air filter contamination
- Component wear

Refer to the Maintenance Schedule for detailed service intervals.

Maintenance Schedule

Warning: Switch off the engine before carrying out any maintenance. Use only approved replacement parts specified by the manufacturer. For further information, contact an authorised service agent.

Routine Maintenance Schedule

Item	Action	Every Use	20 Hours or 1 Month	50 Hours or 3 Months	100 Hours or 6 Months	300 Hours or 12 Months
Engine Oil	Check level	✓				
	Replace		✓		✓	
Air Filter	Check	✓				
	Clean			✓ (1)		
	Replace					✓
Fuel Sediment Bowl	Clean				✓	
Battery Electrolyte Level*	Check	✓				
Spark Plug	Clean				✓	
	Replace					✓
Valve Clearance	Inspect/Adjust					✓ (2)
Cylinder Head Cover	Clean	Every 300 hours (2)				
Fuel Tank & Filter Screen	Clean	Every 2 years (2)				
Fuel Hose	Replace	Every 2 years (2)				

*If fitted.

Notes:

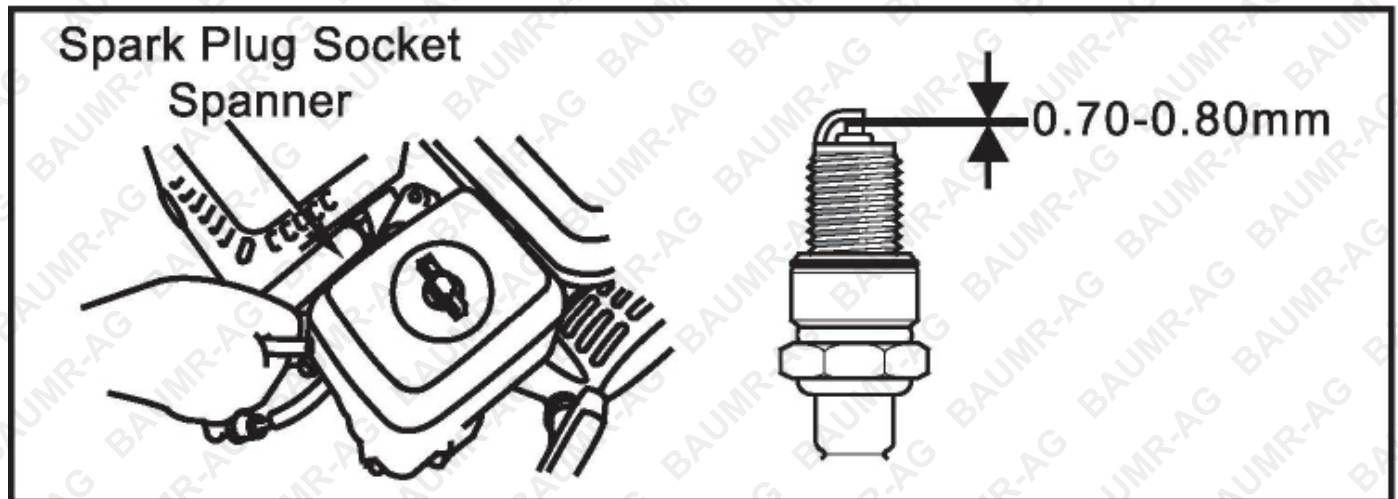
- (1) Service more frequently if operating in dusty conditions.
- (2) These items should be carried out by an authorised service agent unless you have the correct tools and technical expertise.

Spark Plug Inspection

Recommended spark plug: F7RTC or equivalent.

Notice: Using an incorrect spark plug may damage the engine. The spark plug must be correctly gapped and free from carbon deposits to ensure proper performance.

Inspection and Replacement



1. Remove the spark plug cap and clean any dirt from around the spark plug.
2. Remove the spark plug using a suitable spark plug socket.
3. Inspect the spark plug:
 - Replace if the electrode is worn or damaged.
 - Replace if the insulator is cracked or damaged.
 - Ensure the electrode gap is 0.70–0.80 mm. Adjust carefully if required.
4. Install the spark plug by hand first to avoid damaging the cylinder head threads.
5. Tighten using a spark plug socket:
 - For a used spark plug: tighten an additional 1/8 to 1/4 turn after seating.
 - For a new spark plug: tighten approximately 1/2 turn after seating.
6. Refit the spark plug cap securely.

Notice: An under-tightened spark plug may cause overheating and engine damage. Over-tightening may damage the cylinder head threads.

Replacing Engine Oil

- First oil change: after the first 20 hours of operation.
- Thereafter: every 100 hours of operation.

Oil Change Procedure

1. Stop the engine and allow it to cool slightly.
2. Place a suitable container beneath the oil drain bolt.
3. Remove the oil drain bolt and drain the oil while it is still warm. Warm oil drains more quickly and completely.

CAUTION: Take care when draining warm oil to avoid burns.

4. Refit and tighten the oil drain bolt securely.
5. Refill with the recommended engine oil to the correct level. Refer to the specifications section for oil capacity and grade.

Notice: Use only clean, high-quality engine oil. Low-quality or insufficient oil may cause engine damage and reduce service life.

Cleaning the Fuel Sediment Bowl

WARNING: Petrol is highly flammable. Handling fuel may result in fire, burns or serious injury. Stop the engine before servicing. Keep away from heat, sparks and open flames. Do not service fuel components indoors. Clean up any spilled fuel immediately.

Cleaning Procedure

1. Turn the fuel valve to the OFF position. Remove the sediment bowl and the O-ring.
2. Clean the sediment bowl and O-ring in a non-flammable solvent. Dry thoroughly.
3. Reinstall the O-ring and sediment bowl. Tighten securely.
4. Turn the fuel valve to the ON position and check for leaks.
5. If leakage occurs, replace the O-ring.



Air Filter Maintenance

A dirty air filter restricts airflow, reducing engine performance.

If operating in dusty conditions, service the air filter more frequently than specified in the Maintenance Schedule.

Warning: Keep away from open flames or ignition sources when servicing.

Notice: Do not operate the engine without a filter element or with a damaged filter. Dust entering the engine will cause rapid wear. This type of damage is not covered by warranty.

Removal and Inspection

1. Remove the wing nut and take off the air filter cover.
2. Remove the wing nut securing the filter elements and remove both the paper element and foam element.
3. Separate the paper and foam elements.
4. Inspect both elements. Replace if damaged. The paper element should be replaced at the intervals specified in the Maintenance Schedule.

Cleaning

Paper Filter Element:

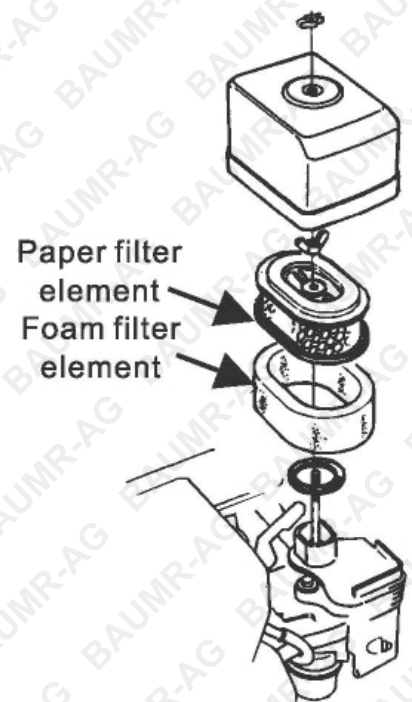
- Gently tap the element several times to remove loose dirt.
- Blow compressed air (maximum 207 kPa) from the inside outwards.
- Do not use a brush, as this may block the filter media.

Foam Filter Element:

- Wash in warm water with mild detergent, or clean using a non-flammable, high flash-point solvent.
- Allow to dry completely.
- Soak in clean engine oil, then squeeze out excess oil.

Reassembly

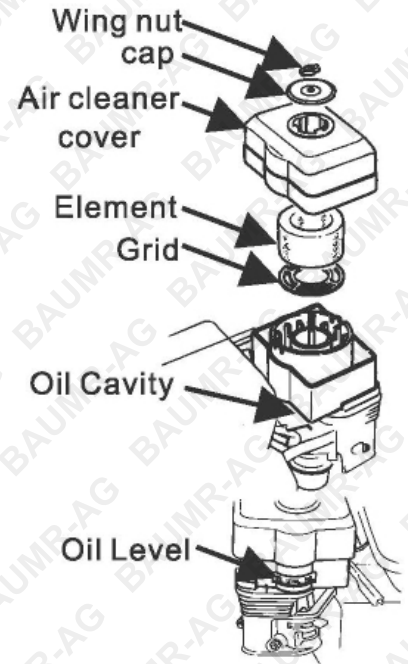
5. Clean the lower housing, cover and sealing gasket. Ensure no debris enters the carburettor air intake.
6. Reassemble the foam and paper elements. Ensure the gasket is correctly positioned. Secure with the wing nut.
7. Refit the cover and tighten the wing nut securely.



Oil-Bath Type Air Filter

Cleaning Procedure

1. Remove the wing nut. Remove the air filter cover and top nut, then take out the filter element.
2. Wash the filter element in warm water with detergent, or clean it using a non-flammable, high flash-point solvent. Dry completely.
Soak the element in clean engine oil and squeeze out excess oil.
3. Wash the cover and top nut in warm water with detergent. Dry thoroughly.
4. Drain all used oil from the oil reservoir. Clean the reservoir with a non-flammable solvent and dry it.
5. Refill the oil reservoir with clean engine oil to the oil level mark.
6. Initial oil quantity: approximately 60 ml.
7. Reassemble all components and tighten the wing nut securely.



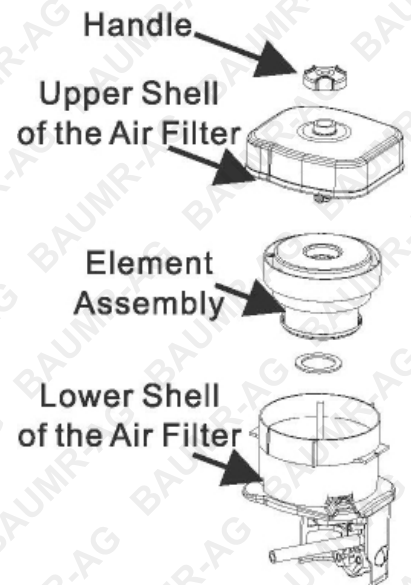
Whirlwind Air Filter

Cleaning Procedure

1. Unscrew the threaded knob and remove the upper air filter cover.
2. Remove the wing nut and take out the foam filter element from the filter assembly.
3. Inspect the filter element. Replace if damaged.

At the intervals specified in the Maintenance Schedule, clean the foam element as follows:

- Wash in warm water with detergent, or clean with a non-flammable, high flash-point solvent.
 - Allow to dry completely.
 - Soak in clean engine oil and squeeze out excess oil.
4. Clean the upper housing, lower housing and sealing gasket. Ensure no debris enters the carburettor air intake.
 5. Reinstall the foam element, secure with the wing nut, refit the cover and tighten the threaded knob.



Inspection of Bolts, Nuts and Screws

- Tighten any loose bolts and nuts.
- Check for fuel or engine oil leaks.
- Replace any damaged or worn parts.

Barrow Storage

If the tracked dumper will not be used for more than 30 days, prepare it for storage as follows:

1. Drain the fuel tank completely. Fuel containing ethanol may deteriorate within 30 days, forming deposits that can clog the carburettor and restrict fuel flow.
2. Start the engine and allow it to run until it stops. This ensures all fuel is cleared from the carburettor and helps prevent gum deposits and engine damage.
3. While the engine is still warm, drain the engine oil and refill with fresh oil of the recommended grade.
4. Clean the exterior of the machine using a clean cloth. Ensure all cooling vents and air passages are free from debris.

Do not use strong detergents or petroleum-based cleaners on plastic components, as these may cause damage.

5. Inspect the machine for loose or damaged parts. Repair or replace as necessary and tighten all fasteners.
6. Store the machine on level ground in a clean, dry, well-ventilated area.

Do not store the machine with fuel in a poorly ventilated area where fuel vapours may contact flames, sparks, pilot lights or other ignition sources.

Engine Storage

Cleaning

After stopping the engine, allow it to cool for at least 30 minutes before cleaning.

- Clean all external surfaces.
- Touch up damaged paintwork.
- Apply a light coating of anti-rust oil to exposed metal surfaces.

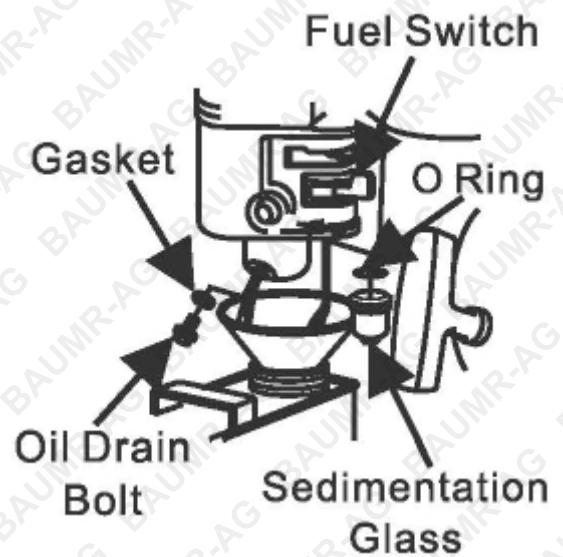
Notice: Do not use high-pressure water to clean the engine. Water may enter the air filter, silencer or cylinder, causing corrosion and damage. Clean the engine only after it has cooled completely.

Draining the Fuel

If the engine will not be used for more than one month, drain the fuel to prevent deterioration and fuel system blockage.

Procedure:

1. Place a suitable container beneath the carburettor. Use a funnel to prevent spillage. Turn the fuel valve to the OFF position.
2. Remove the drain bolt and sediment bowl. Turn the fuel valve to the ON position and allow all fuel to drain.
3. After draining, reinstall the sediment bowl and drain bolt. Tighten securely.
4. Replace the engine oil.
5. Remove the spark plug.
6. Add approximately 5–10 ml of clean engine oil into the cylinder.
7. Pull the recoil starter slowly several times to distribute the oil inside the cylinder.
8. Reinstall the spark plug.
9. Pull the starter gently until resistance is felt, then release slowly. This closes the valves and helps prevent moisture entering the cylinder.
10. Cover the engine and store in a dry, well-ventilated area.



Important Fuel Storage Information

- Fuel storage life depends on fuel composition, storage temperature and whether the tank is full.
- Fuel stored for extended periods may oxidise and deteriorate, making the engine difficult to start and causing deposits that block the fuel system.
- Fuel system damage caused by improper storage is not covered under warranty.

Engine Oil (Storage Protection)

- Replace the engine oil with fresh oil before storage.
- Remove the spark plug and add approximately 5 ml of engine oil into the cylinder.
- Pull the recoil starter slowly several times, then refit the spark plug.

Returning to Service

- Check the engine according to the "[Pre-Operation Checks](#)" section.
- Refill the tank with fresh unleaded petrol.
- Use only fresh fuel from a clean container.

Note: Light smoke during initial start-up after storage is normal due to residual oil in the cylinder.

Transport

If the engine has been operating, allow it to cool for at least 15 minutes before transport.

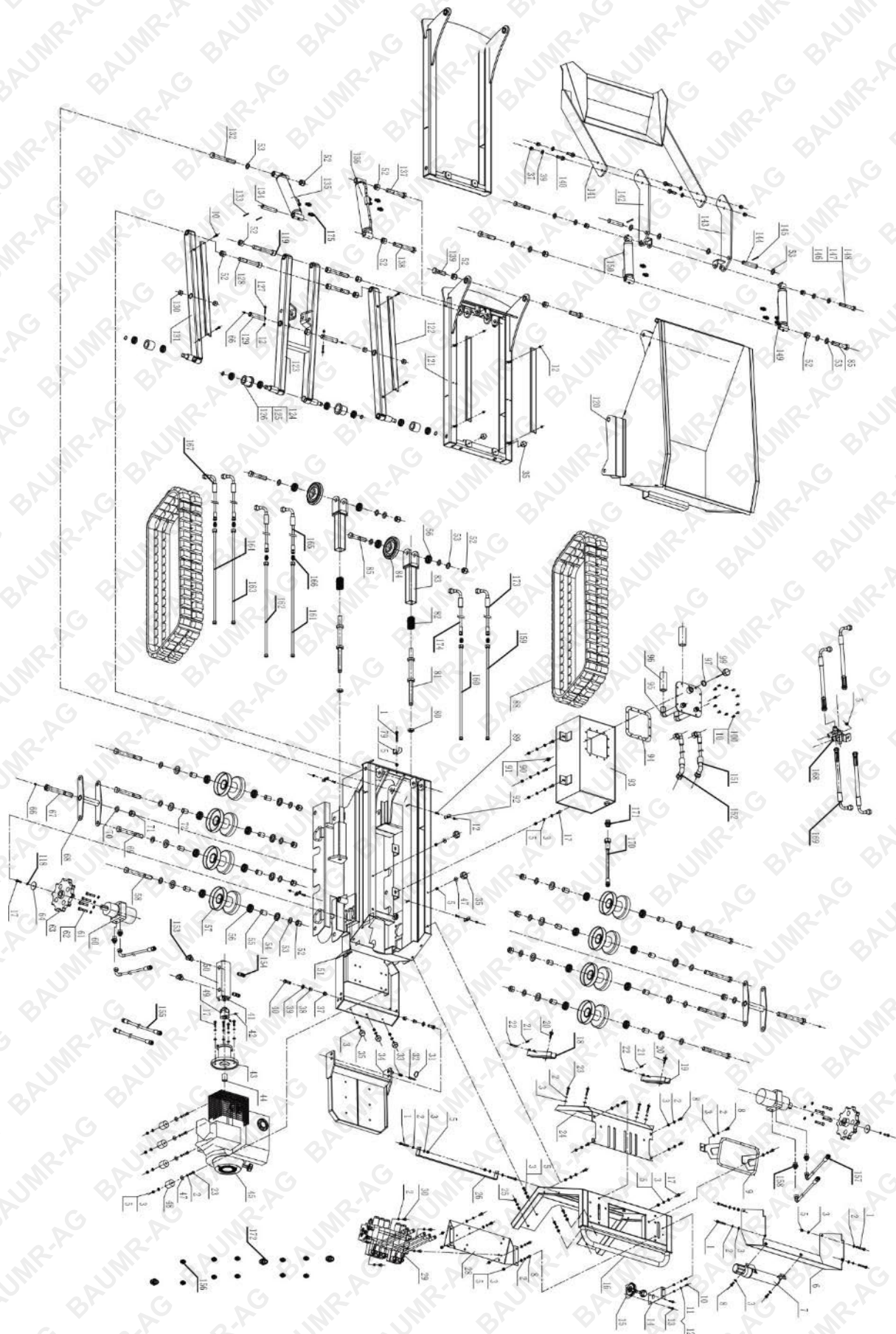
- Transport the engine in a level position to minimise the risk of fuel leakage.
- Ensure the fuel valve is in the OFF position.

Keep the hot engine and exhaust system away from flammable materials during handling and transport.

Troubleshooting

Problem	Possible Cause	Remedy
Engine fails to start	Spark plug lead disconnected	Reconnect spark plug lead securely
	Out of fuel or stale fuel	Fill with clean, fresh unleaded petrol
	Choke not in correct position	Set choke correctly for cold start
	Blocked fuel line	Clean fuel line
	Fouled spark plug	Clean, adjust gap, or replace spark plug
	Engine flooded	Wait a few minutes before restarting. Do not prime
Engine runs erratically	Spark plug lead loose	Reconnect and tighten spark plug lead
	Running with choke engaged	Move choke to OPEN position
	Blocked fuel line or stale fuel	Clean fuel line and refill with fresh petrol
	Blocked fuel tank vent	Clear vent
	Water or dirt in fuel system	Drain tank and refill with fresh fuel
	Dirty air cleaner	Clean or replace air cleaner
	Incorrect carburettor adjustment	Adjust carburettor as required
Engine overheats	Low engine oil level	Fill with correct engine oil
	Dirty air cleaner	Clean air cleaner
	Restricted airflow	Clean cooling areas and remove debris
	Incorrect carburettor adjustment	Adjust carburettor as required
One track is blocked	Foreign material between track and frame	Remove obstruction
Machine does not move while engine is running	Gear not properly selected	Ensure gear lever is fully engaged
	Drive tracks too loose	Adjust and tighten track tension

Parts Schedule



No.	Description	Qty
1	Bolt M8 × 55	7
2	Washer 8	32
3	Washer 8	49
5	Nut M8	29
6	Valve Guard Plate	1
7	Manual Holder	1
8	Bolt M8 × 20	12
9	Handle	1
10	Bolt M6 × 16	18
11	Washer 6	2
12	Nut M6	12
13	Bolt M6 × 25	2
14	Throttle Mounting Plate	1
15	Throttle Control	1
16	Operating Frame	1
17	Bolt M8 × 25	12
18	Lifting Cylinder Stop Plate	1
19	Dump Box Cylinder Stop Plate	1
20	Knob Nut M8	2
21	R-Clip 8 × 2	2
22	Axis Pin AD8 × 45	2
23	Bolt M8 × 35	8
24	Operating Frame Guard	1
25	Bolt M8 × 20	4
26	Hose Retainer	1
28	Valve Mounting Plate	1
29	5-Way Valve	1
30	Bolt M8 × 16	4
31	Pull Ring	1
32	Rotating Pin	1
33	Reset Spring	1
34	Driving Platform	1
35	Rubber Support	7
37	Nut M10	6
38	Guide Bush	2

No.	Description	Qty
79	U-Plate	1
80	Nut M20	2
81	Guide Wheel Shaft	2
82	Short Moment Spring	2
83	Guide Wheel Bracket	2
84	Guide Wheel	2
85	Bolt M20 × 100	4
87	Rubber Track (160 × 40p)	2
89	Bolt M6 × 20	4
90	Hex Oil Plug	1
91	Combined Sealing Washer 14	1
92	Hose Clamp	4
93	Hydraulic Oil Tank	1
94	Sealing Gasket	1
95	Oil Tank Cover	1
96	Oil Filter M27 × 2	2
97	Combined Sealing Washer 27	1
98	Oil Dipstick	1
100	O-Ring 6 × 1.8	12
118	Washer D8	2
119	Screw M20 × 100	2
120	Dump Box	1
121	Dump Box Support	1
122	Hose Fixing Plate	4
123	Lifting Bracket	1
124	Circlip 42	4
125	Bearing Pedestal	4
126	Bearing 6004-2RS	8
127	Bolt M6 × 40	2
128	Screw M20 × 140	2
129	Connecting Shaft	2
130	Shaft Sleeve	4
131	Connecting Rod	2
132	Bolt M20 × 160	1
133	Cotter Pin 4 × 35	2

No.	Description	Qty
39	Washer 12	6
40	Bolt M12 × 55	2
41	Screw M8 × 170	2
42	Screw M8 × 10	2
43	Connecting Flange	1
44	Spacer Bush	1
45	Engine	1
47	Washer 8	4
48	Rubber Damper	4
49	Coupling	1
50	Duplex Pump	1
51	Chassis	1
52	Nut M20	19
53	Washer 20	29
54	Seal 25 × 47 × 7	16
55	Bearing Sleeve 2	8
56	Bearing 6204-2RS	20
57	Track Roller	8
58	Bolt M20 × 180	4
60	Hydraulic Motor	2
61	Screw M10 × 50	8
62	Washer 10	8
63	Driving Wheel	2
64	Large Washer	2
66	Oil Nipple M6	4
67	Balance Wheel Axle	2
68	Balance Wheel Bracket	2
69	Bolt M20 × 170	4
70	Washer 22	2
71	Nut M22	2
72	Bearing Sleeve 1	8

No.	Description	Qty
134	Pin 20 × 110	1
135	Lifting Frame Cylinder	1
136	Tipping Cylinder	1
137	Bolt M20 × 120	1
138	Bolt M20 × 140	1
139	Bolt M20 × 70	2
140	Bolt M12 × 35	4
141	Shovel Bucket	1
142	Left Lifting Arm	1
143	Right Lifting Arm	1
144	Axis Pin AD20 × 35	2
145	Cotter Pin 5 × 40	4
146	Nut M16	2
147	Washer 16	2
148	Bolt M16 × 100	2
149	Shovel Bucket Cylinder – R	1
150	Shovel Bucket Cylinder – L	1

Hydraulic Pipeline

No.	Description	Qty
151	Oil Suction Hose	1
152	Oil Suction Hose	1
153	Pump Suction Elbow Connector	2
154	Pump Outlet Elbow Connector	2
155	Pump–Valve Inlet Hose 1	2
156	Multi-way Valve Connector	10
157	Motor Hose	4
158	Motor Connector	6
159	Oil Return Steel Pipe for Lifting Cylinder	1
160	Oil Inlet Steel Pipe for Lifting Cylinder	1
161	Oil Inlet Steel Pipe for Tipping Cylinder	1
162	Oil Return Steel Pipe for Tipping Cylinder	1
163	Oil Return Steel Pipe for Shovel Bucket Cylinder	1
164	Oil Inlet Steel Pipe for Shovel Bucket Cylinder	1
165	Oil Inlet Hose for Shovel Bucket Cylinder	1
166	Straight Connector	6
167	Oil Inlet Hose for Shovel Bucket Cylinder	2
168	T-Connector M14 × 1.5	2
169	Shovel Bucket Cylinder – T-Connector Hose	4
170	Oil Return Hose	1
171	Oil Return Connector	1
172	Multi-way Valve Oil Return Port Connector	1
173	Oil Inlet Hose for Lifting Cylinder	1
174	Oil Return Hose for Lifting Cylinder	1
175	Cylinder Connector	8

Specifications

Power Type	Petrol
Engine Type	9hp
Engine Make	Loncin G270F
Engine Displacement	270cc
Emissions Compliance	Euro V
Max Tip Height	1.3m (at bucket pivot)
Track Width	160mm
Max Climb Angle	10° (max 500kg load)
Forward Max Speed	3.1km/h
Reverse Max Speed	3.1km/h



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.
- 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.
- 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.

