



T-Mech Mini Tracked Petrol Transporter

210929

INSTRUCTION MANUAL

www.monstershop.co.uk



SPECIFICATION

PRODUCT DESCRIPTION

Your new mini transporter will more than satisfy your expectations. It has been manufactured under stringent quality standards to meet superior performance criteria. You will find it's easy and safe to operate, and with proper care, it will give you many years of dependable service.

The four-speed gearbox, three forward and one reverse, lies at the heart of the unit. It is oversized so as to manage safely the huge torques generated by the engine. Thanks to its efficient reduction gearing, it is capable of moving around in every situation and bearing any load.

The Engine manufacturer is responsible for all engine-related issues with regards to performance, power rating, specifications, warranty and service. Please refer to the engine manufacturer's owner's/operator's manual, packed separately with your unit for more information.

PRODUCT SPECIFICS

Engine	196cc 6.5HP
Fuel Type	Unleaded (95)
Transmission	3F + 1R
Load Capacity	300kg
Box Length	907-1004mm
Box Width	600-860mm
Box Depth	210mm
Track Width	180mm
Sound Power Level	103dB
Weight	178kg

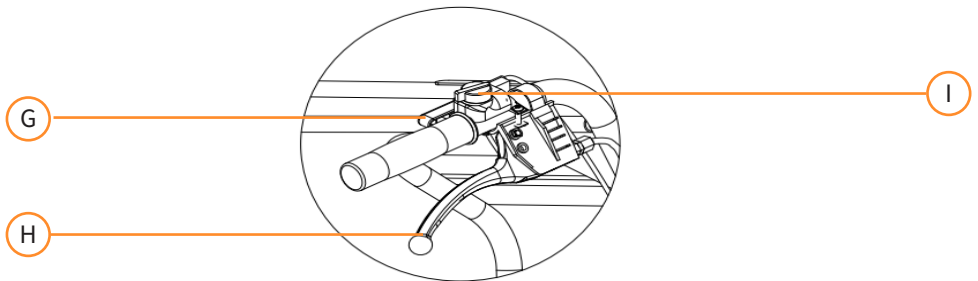
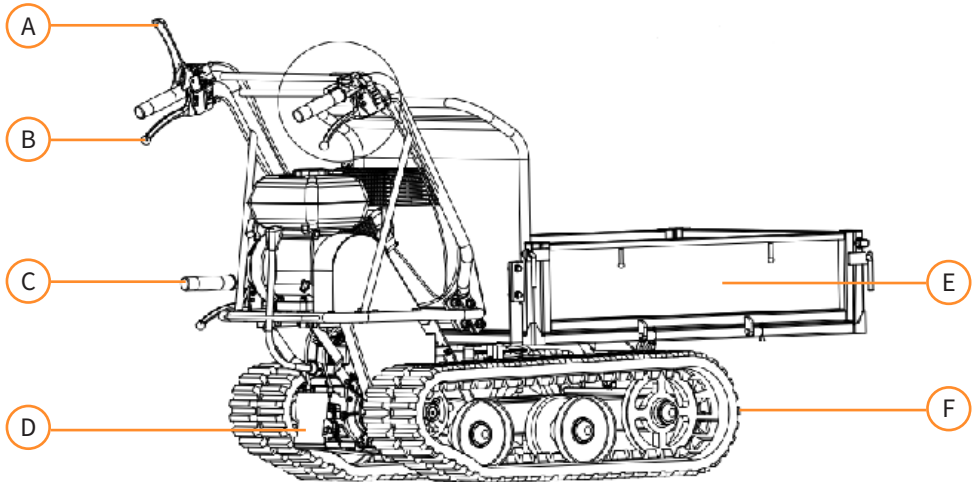
ITEM CONTENTS

Part No.	Description	Quantity
1	Main Frame	1
2	Handbar Assembly	1
3	Tipping Handle	1
4	Dumper Box	1
5	Instruction Manual	1

SPECIFICATION

PRODUCT FEATURES

- A. Clutch Lever
- B. Left Steering Lever
- C. Tipping Handle
- D. Gearbox
- E. Dumper Box
- F. Track
- G. Throttle Lever
- H. Right Steering Lever
- I. On / Off Switch



Monster Group UK Limited's liability will be limited to the commercial value of the product only.

SAFETY ADVICE

SAFE WORKING PRACTICE



WARNING!

This machine must be used by over 18's only.

Understand your machine

- Read and understand the operator's manual and labels affixed to the machine. Learn its application and limitations as well as the specific potential hazards peculiar to it.
- Be thoroughly familiar with the controls and their proper operation. Know how to stop the machine and disengage the controls quickly.
- Make sure to read and understand all the instructions and safety precautions as outlined in the Engine Manufacturer's Manual, packed separately with your unit.
- DO NOT attempt to operate the machine until you fully understand how to properly operate and maintain the engine and how to avoid accidental injuries and/or property damage.

Work area

- DO NOT start or run the machine inside a closed area. The exhaust fumes are dangerous, containing carbon monoxide, an odorless and deadly gas. Operate this unit only in a well ventilated outdoor area.
- DO NOT operate the machine without good visibility or light.

Dress properly

- Wear heavy long pants, boots and gloves.
- DO NOT wear loose clothing, shorts and jewelry of any kind.
- Secure long hair so it is above shoulder level.
- Keep your hair, clothing and gloves away from moving parts.

SAFETY ADVICE

SAFE WORKING PRACTICE

Use safety equipment

- Always wear eye protection. Safety equipment such as a dust mask, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Check your machine before starting it. Keep guards in place and in working order. Make sure all nuts, bolts, etc. are securely tightened.
- DO NOT operate the machine when it is in need of repair or is in poor mechanical condition. Replace damaged, missing or failed parts before using it. Check for fuel leaks. Keep the machine in safe working condition.
- DO NOT remove or tamper with safety devices. Check their proper operation regularly.
- DO NOT use the machine if the engine's switch does not turn it on or off. Any petrol powered machine that can not be controlled with the engine switch is dangerous and must be replaced.
- Form a habit of checking to see that keys and adjusting wrenches are removed from machine area before starting it. A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.
- Stay alert, watch what you are doing and use common sense when operating the machine.
- DO NOT overreach.
- DO NOT operate the machine while barefoot or when wearing sandals or similar lightweight footwear. Wear protective footwear that will protect your feet and improve your footing on slippery surfaces. Keep proper footing and balance at all times. This enables better control of the machine in unexpected situations.
- Avoid accidental starting. Be sure the engine is off before transporting the machine or performing any maintenance or service on the unit. Transporting or performing maintenance or service on a machine with engine on invites accidents.

SAFETY ADVICE

SAFE WORKING PRACTICE

Personal safety

- DO NOT operate the machine while under the influence of drugs, alcohol, or any medication that could affect your ability to use it properly.

Fuel safety

- Fuel is highly flammable, and its vapors can explode if ignited. Take precautions when using to reduce the chance of serious personal injury.
- When refilling or draining the fuel tank, use an approved fuel storage container while in a clean, well-ventilated outdoor area.
- DO NOT smoke, or allow sparks, open flames or other sources of ignition near the area while adding fuel or operating the unit. Never fill the fuel tank indoors.
- Keep grounded conductive objects, such as tools, away from exposed, live electrical parts and connections to avoid sparking or arcing. These events could ignite fumes or vapors.
- Always stop the engine and allow it to cool before filling the fuel tank. Never remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot.
- DO NOT operate the machine with known leaks in the fuel system.
- Loosen the fuel tank cap slowly to relieve any pressure in the tank.
- Never overfill fuel tank. Fill tank to no more than 12.5mm (1/2") below the bottom of the filler neck to provide space for expansion as the heat of the engine can cause fuel to expand.
- Replace all fuel tank and container caps securely and wipe up spilled fuel. Never operate the unit without the fuel cap securely in place.

SAFETY ADVICE

SAFE WORKING PRACTICE

- Avoid creating a source of ignition for spilled fuel. If fuel is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have dissipated.
- Store fuel in containers specifically designed and approved for this purpose.
- Store fuel in a cool, well-ventilated area, safely away from sparks, open flames or other sources of ignition.
- Never store fuel or machine with fuel in the tank inside a building where fumes may reach a spark, open flame or other sources of ignition, such as a water heater, furnace, clothes dryer etc. Allow the engine to cool before storing in any enclosed area.

Machine use and care

- Position the machine in such a way that it can not move during maintenance, cleaning, adjustment, assembly of accessories or spare parts, as well as under storage.
- DO NOT force the machine. Use the correct machine for your application. The correct machine will do the job better and safer at the rate for which it was designed.
- DO NOT change the engine governor settings or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
- DO NOT run the engine at a high speed when you are not working.
- DO NOT put hands or feet near rotating parts.
- Avoid contact with hot fuel, oil, exhaust fumes and hot surfaces.
- DO NOT touch the engine or exhaust. These parts get extremely hot. They remain hot for a short time after you turn off the machine. Allow the engine to cool before doing maintenance or making adjustments.

SAFETY ADVICE

SAFE WORKING PRACTICE

- If the machine should start to make an unusual noise or vibration, immediately shut off the engine, disconnect the spark plug wire and check for the cause. Unusual noise or vibration is generally warning of trouble.
- Use only attachments and accessories approved by the manufacturer. Failure to do so can result in personal injury.
- Maintain the machine. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the machine's operation. If damaged, have the machine repaired before use. Many accidents are caused by poorly maintained equipment.
- Keep the engine and exhaust free of grass, leaves, excessive grease or carbon build up to reduce the chance of a fire hazard.
- Never douse or squirt the unit with water or any other liquid. Keep handles dry, clean and free from debris. Clean after each use.
- Observe proper disposal laws and regulations for petrol, oil, etc. to protect the environment.
- Store the machine out of reach of children and do not allow persons unfamiliar with the machine or these instructions to operate it. Machine is dangerous in the hands of untrained users.

Service

- Before cleaning, repair, inspecting or adjusting, shut off the engine and make certain all moving parts have stopped. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
- Have your machine serviced by qualified repair personnel using only identical replacement parts. This will ensure that the safety of the machine maintained.

SAFETY ADVICE

SAFE WORKING PRACTICE

- Thoroughly inspect the area to be worked, keep the working area clean and free of debris to prevent tripping. Operate on a flat level ground.
- NEVER place any part of your body where it would be in danger if movement should occur during assembly, installation, and operation, maintenance, repairing or moving.
- Keep all bystanders, children, and pets at least 23m (75 feet) away. If you are approached, stop the unit immediately.
- DO NOT climb on dump box and never carry passengers.
- NEVER park the machine on unstable ground which could give way, particularly when it is full.
- Disengage clutch lever before starting the engine.
- Start the engine carefully according to instructions and with feet well away from the moving parts.
- NEVER leave the operating position when the engine is running.
- Always hold the unit with both hands when operating. Keep a firm grip on the handlebars. Be aware that the machine may unexpectedly bounce upward or jump forward if the machine should strike buried obstacles such as large stones.
- Walk, never run with the machine.
- DO NOT overload the machine capacity.
- Drive at a safe speed, adjusting the speed to the slope of the land, the surface conditions of the road, and the weight of the load.
- Use extreme caution when in reverse or pulling the machine towards you.

SAFETY ADVICE

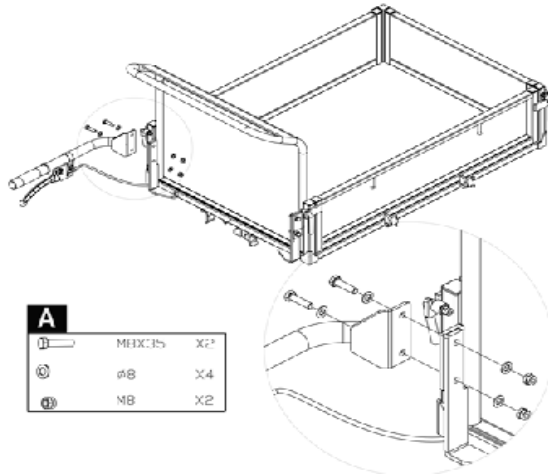
SAFE WORKING PRACTICE

- Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.
- On soft ground, drive at the first forward/reverse gear.
- DO NOT rapidly accelerate, turn sharply or stop.
- Pay the utmost attention when working on frozen ground as the machine may tend to skid.
- If possible, avoid driving on pebbly river bed, crushed stone terrains, steel concrete, stumpy field, logs etc., since such operation causes fatal damage or shortens life span of tracks.
- DO NOT operate the machine in confined areas where there may be a risk of crushing the operator between the machine and another object.
- NEVER operate the machine on slopes where angle is over 20°.
- When moving over a slope, whether moving forward or in reverse, always make certain that the weight is evenly balanced. Always move in directions parallel with the slope (up or down). To avoid danger, do not shift gears on slopes.
- When tipping the load from a dumper, the center of gravity will change continuously and the ground conditions will be essential for the stability of the machine. There are special hazards for dumpers working on soft ground and when the load is sticking to body e.g. wet clay.

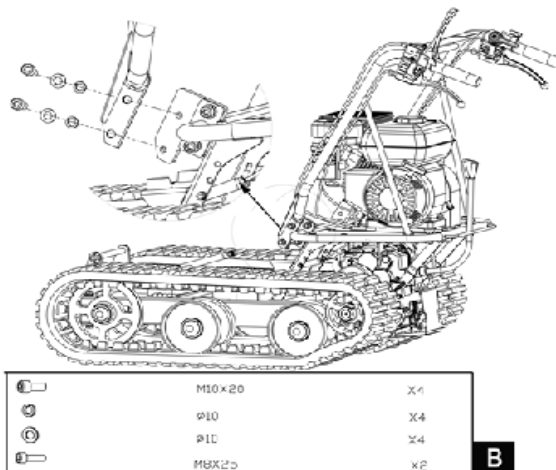
USER GUIDE

ASSEMBLY INSTRUCTIONS

- Mount the tipping handle on panel right side. Align holes and fasten with two M8x35 hex bolts, four washers and two nuts.



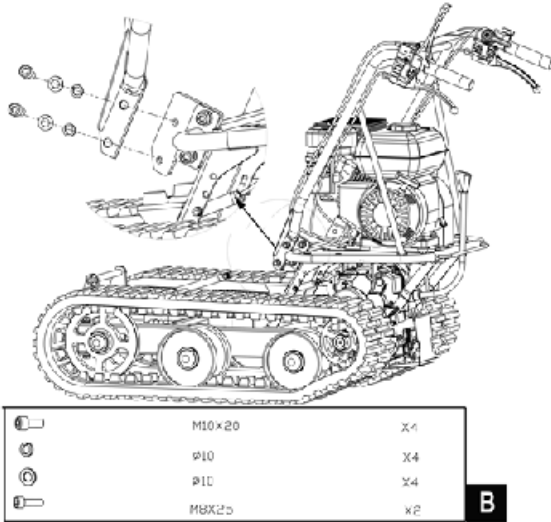
- Align the holes of the handlebar with the mount bracket and secure each with a spring washer, flat washer and a M10x20 bolt. Fasten each handlebar support onto the engine deck with a spring washer, flat washer and a M8x25 hex bolt.



USER GUIDE

ASSEMBLY INSTRUCTIONS

- Position the bottom panel inside the mounting bracket. Align the holes with the mounting bracket. Insert a long pin through holes and secure each side with a flat washer and cotter pin.



Engine oil



WARNING!

Oil has been drained for shipping. Failure to fill engine sump with oil before starting engine will result in permanent damage and will void engine warranty.

Add oil according to Engine Manual packed separately with your unit.

USER GUIDE

OPERATING INSTRUCTIONS

Starting Engine

A more detailed description of the engine operation and all related precautions and procedures can be found in the Engine Manual packed separately with the mini transporter.

Follow the procedure below for cold starts:

- Put the gear shift lever in neutral position
- Turn choke lever on the engine to full choke position.
- Turn the engine switch on.
- Pull the starting rope slowly several times to allow the petrol to flow into the engine's carburetor. Then hold the start handle firmly and pull rope out a short distance until you feel some resistance. Then pull the rope smoothly and briskly, and allow rope to return gently. Do not let the rope snap back. If necessary, pull the rope several times until the engine starts.
- Allow the engine to run for several seconds to warm up. Then, gradually move choke lever to "OPEN" position.



WARNING!

Please let the engine warm up for a few seconds before engaging a gear.

Restarting an engine that is already warm from previous running does not normally require use of the choke.

- Set the throttle lever on the handlebar at half- way position.
- Hold the start handle firmly and pull rope out a short distance until you feel some resistance. Then pull the rope smoothly and briskly, and allow rope to return gently. Do not let the rope snap back

USER GUIDE

OPERATING INSTRUCTIONS

- After the engine has warmed up, slowly squeeze the clutch control lever, then engage the required gear, if the gear does not engage straight away, slowly release the clutch lever and try again. In this way the mini dumper will start moving.
- Pull throttle lever to accelerate engine speed.
- The mini dumper has the steering levers on the handlebars and this makes steering very easy. To turn right or left, simply operate the corresponding right or left steering lever.
- The sensitivity of the steering increases in proportion to the speed of the machine and that with the empty machine, light pressure on the lever is all that is needed to turn. While when the machine is loaded, more pressure is required.
- The mini dumper has a maximum capacity of 300kg, however, it is advisable to assess the load and adjust it according to the ground on which the machine will be used.
- Never Load more than 300kg
- It is therefore advisable to cover such stretches using low gear and taking extra care. In such situations, the machine should be kept in low gear for the whole stretch.
- Avoid sharp turns and frequent changes of direction while driving on the road, in particularly on rough, hard terrains full of sharp, uneven points with a high degree of friction.
- Even though the unit has rubber tracks, remember to be careful when working in adverse weather conditions (ice, heavy rain and snow) or on types of ground that could make the mini dumper unstable.
- Please note that as this is a tracked vehicle, it is subject to a considerable pitching movement when passing over bumps, holes and steps.
- When the clutch control lever is released, the machine will stop and brake automatically, throttle lever will be disabled.
- If the machine is stopped on a steep slope, a wedge should be placed against one of the tracks.

USER GUIDE

OPERATING INSTRUCTIONS

Idle speed

Set throttle control lever to its “SLOW” position to reduce stress on the engine when working is not being performed. Lowering the engine speed to idle the engine will help extend the life of the engine, as well as conserve fuel and reduce the noise level of the machine.

Stopping engine

To stop the engine in an emergency, release the clutch control lever, then turn the engine switch to the “OFF” position. Under normal conditions, use the following procedure:

- Move the throttle lever to the “SLOW” position.
- Let engine idle for one or two minutes.
- Turn the engine switch to the “OFF” position.
- Turn the fuel valve lever to the “OFF” position.



WARNING!

DO NOT move choke control to CHOKE to stop engine. Backfire or engine damage may occur.

USER GUIDE

MAINTENANCE

A proper maintenance and lubrication will help the machine in a perfect working condition.

Preventive maintenance

- Turn off engine and disengage all control levers. Engine must be cool.
- Inspect the general condition of the unit. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, and any other condition that may affect its safe operation.
- Remove all debris and other materials that may have accumulated to the track and unit. Clean after each use. Then use a premium quality lightweight machine oil to lubricate all moving parts.



WARNING!

Never use a “pressure washer” to clean your unit. Water can penetrate tight areas of the machine and its transmission case and cause damage to spindles, gears, bearings, or the engine. The use of pressure washers will result in shortened life and reduce serviceability.

Adjusting clutch

As clutch wears out, the same lever could have a wider opening, being so uneasy to use. This means that it is necessary to adjust the cable, setting clutch lever on its original position acting on the adjustment device and on counter-nut.

Adjusting steering

If you have difficulty steering the unit, you will need to adjust the steering levers with the special adjusters. Slacken the locknut and unscrew the adjusters to eliminate the play in the cable, which can occur after initial use or normal wear. Be very careful not to unscrew the adjusters too much because this can create another problem: the loss of traction. Remember to tighten the locknut when you have finished.

USER GUIDE

MAINTENANCE

Lubrication

The gearbox is pre-lubricated and sealed at the factory.

Check oil level every 50 hours of working. Remove the plug and check, with machine horizontal, oil reaches the two notches. If necessary, add the oil.

Use portable tool lithium #0 grease such as Lubriplate 630AA, Lubriplate GR-132, or Multifak, e.g. EP-O.

Oil must be replaced when hot by unscrewing filler cap and plug equipped with an oil dipstick. When oil is completely drained, replace filler cap and fill up with new oil.

Tightening tracks

With use, tracks tend to loosen. When operating with loose tracks, they tend to slip over the driving wheel causing it to jump its housing or to work in precarious situation, thus damaging wear to the housing.

To check track tightness, proceed as follows.

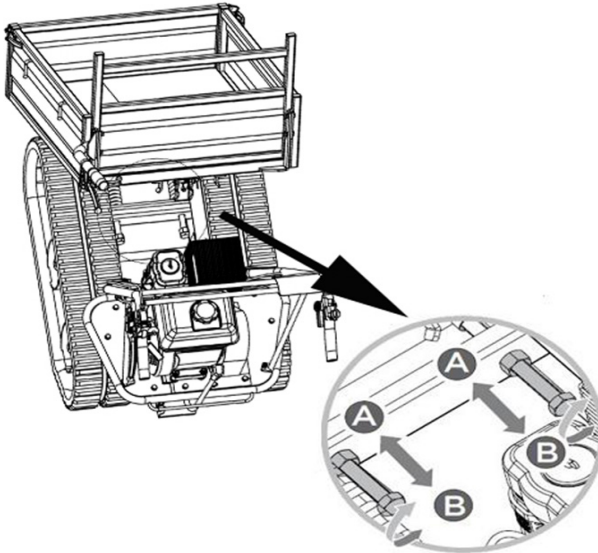
- Set the machine on a flat surface with compact ground, better on an asphalt or stone pavement.
- Lift the machine and set it on blocks or supports rated for the weight of the machine so that the tracks are approximately 100mm off the ground.
- Measure the track midline vs. the horizontal line. The reading must not be more than 10-15mm.

USER GUIDE

MAINTENANCE

If the distance is greater, proceed as follows.

- Use the tipping handle to tip the dump box and set it on blocks or supports rated for the weight of the box.



- Loosen locknut 'A'.
- Tighten bolt 'B' until the correct tightness is restored.
- Secure bolt 'B' by tightening locknut 'A' thoroughly.
- Return the dump box to its original position.



WARNING!

The adjustment of the track and the brakes are linked, therefore be very careful because if the track is over-tightened, the braking effect will be lost.



WARNING!

If the adjustment bolt has no more adjustment left, the tracks may have to be replaced.

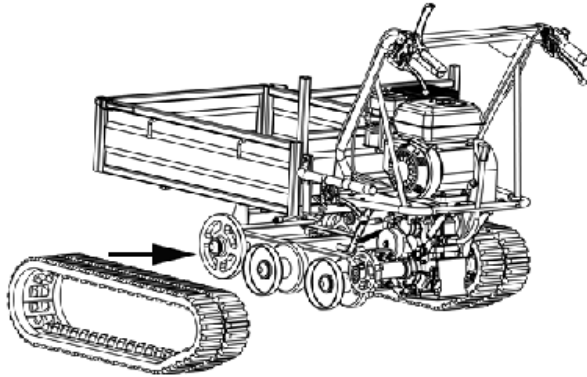
USER GUIDE

MAINTENANCE

Replacing tracks

Check the condition of the tracks periodically. If a track is cracked or frayed, it should be replaced as soon as convenient.

- Loosen the Locknut 'A' and bolt 'B' shown in 'Tightening tracks' to loosen tracks



- Slip the old tracks and install the new tracks
- Adjust bolt 'B' to assure correct tightness
- Secure bolt 'B' by tightening locknut 'A' thoroughly



WARNING!

When removing or installing the tracks, be careful not to trap fingers between the track and pulley.

USER GUIDE

MAINTENANCE

Engine maintenance

Refer to the Engine Manual included in your unit for the information on engine maintenance. Your engine manual provides detailed information and a maintenance schedule for performing the tasks.

If the mini dumper will not be used for a period longer than 30 days, follow the steps below to prepare your unit for storage.

- Drain the fuel tank completely. Stored fuel containing ethanol or MTBE can start to go stale in 30 days. Stale fuel has high gum content and can clog the carburetor and restrict fuel flow.
- Start the engine and allow it to run until it stops. This ensures no fuel is left in the carburetor. Run the engine until it stops. This helps prevent gum deposits from forming inside the carburetor and possible engine damage.
- While the engine is still warm, drain the oil from the engine. Refill with fresh oil of the grade recommended in the Engine Manual.
- Use clean cloths to clean off the outside of the machine and to keep the air vents free of obstructions.



WARNING!

DO NOT use strong detergents or petroleum based cleaners when cleaning plastic parts. Chemicals can damage plastics.

- Inspect for any loose or damaged parts. Repair or replace damaged parts and tighten loose screws, nuts or bolts.
- Store your unit on flat ground in a clean, dry building that has good ventilation.



WARNING!

DO NOT store the machine with fuel in a nonventilated area where fuel fumes may reach flame, sparks, pilot lights or any ignition sources.

TROUBLESHOOTING

RESOLUTION GUIDE

WHAT DO I DO IF THERE ARE MISSING PARTS FROM MY ORDER?

If there appears to be any part missing from your order, contact our friendly and helpful Customer Support Team within 7 days of receipt.

Problem	Cause	Remedy
Engine fails to start	<ol style="list-style-type: none"> 1. Spark plug wire disconnected 2. Out of fuel. 3. Choke not in open position. 4. Blocked fuel line. 5. Fouled spark plug. 6. Engine flooding. 	<ol style="list-style-type: none"> 1. Attach spark plug wire securely to spark plug. 2. Fill with clean, fresh gasoline. 3. Throttle must be positioned at choke for a cold start. 4. Clean the fuel line. 5. Clean, adjust gap, or replace. 6. Wait a few minutes to restart, but do not prime.
Engine runs erratically.	<ol style="list-style-type: none"> 1. Spark plug wire loose. 2. Unit running on CHOKE. 3. Blocked fuel line or stale fuel. 4. Vent plugged. 5. Water or dirt in fuel system. 6. Dirty air cleaner. 7. Improper carburetor adjustment. 	<ol style="list-style-type: none"> 1. Connect and tighten spark plug wire. 2. Move choke lever to "OFF". 3. Clean fuel line. Fill tank with clean, fresh petrol. 4. Clear vent. 5. Drain fuel tank. Refill with fresh fuel. 6. Clean or replace air cleaner. 7. Refer to Engine Manual.

TROUBLESHOOTING

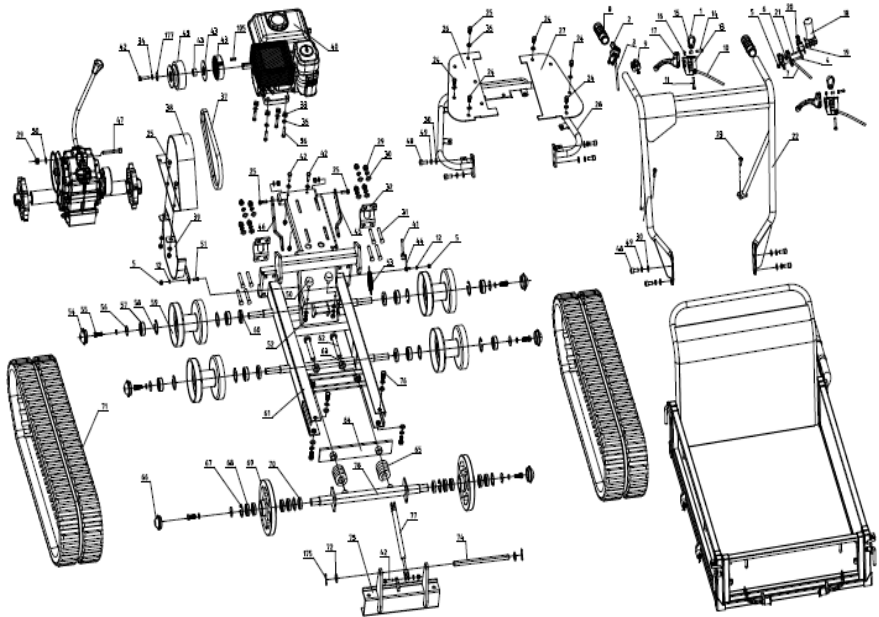
RESOLUTION GUIDE

Problem	Cause	Remedy
Engine overheats	<ol style="list-style-type: none">1. Engine oil level low.2. Dirty air cleaner.3. Air flow restricted.4. Carburetor not adjusted properly.	<ol style="list-style-type: none">1. Fill crankcase with proper oil.2. Clean air cleaner.3. Remove housing and clean.4. Refer to Engine Manual.
One of the two tracks is blocked.	Foreign bodies have worked their way between the track and the frame.	Remove the foreign body.
Machine does not move while engine is running.	<ol style="list-style-type: none">1. Gear is not properly selected.2. Driving tracks not tight enough.	<ol style="list-style-type: none">1. Ensure gear lever is not in between two different gears.2. Tighten driving tracks

FOR ALL OTHER ISSUES, PLEASE CONTACT OUR
CUSTOMER SUPPORT TEAM.

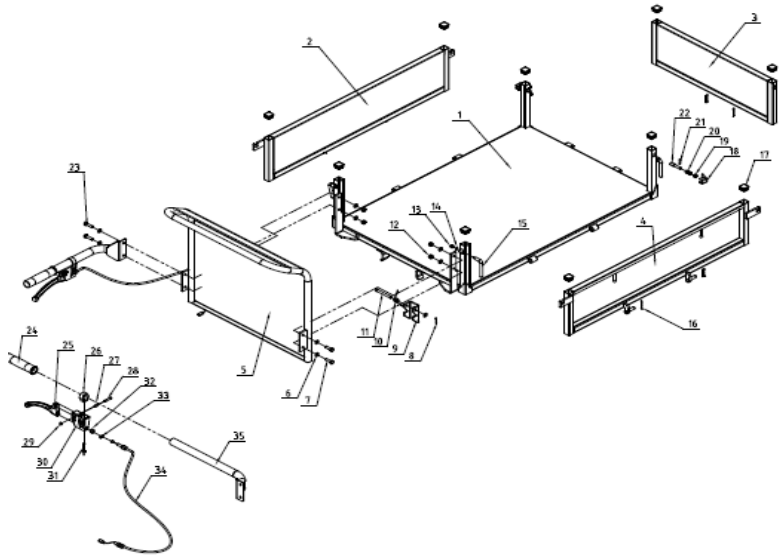
PARTS BREAKDOWN

TRANSPORTER PARTS

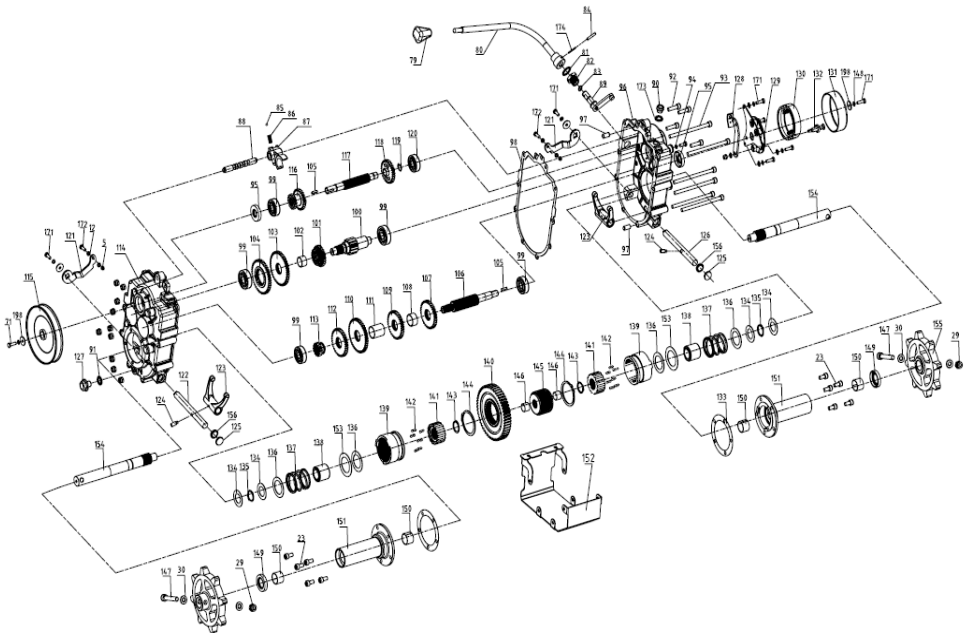


PARTS BREAKDOWN

DUMPER BOX



GEAR BOX



USER GUIDE

ENGINE MANUAL

ENGINE SAFETY

IMPORTANT SAFETY INFORMATION

Most accidents with engines can be prevented if you follow all instructions in this manual and on the engine. Some of the most common hazards are discussed below, along with the best way to protect yourself and others.

OWNER RESPONSIBILITIES

The engines are designed to give safe and dependable service if operated according to instructions. Read and understand this owner's manual before operating the engine. Failure to do so could result in personal injury or equipment damage.

Know how to stop the engine quickly and understand the operation of all controls.

NEVER permit anyone to operate the engine without proper instructions.

DO NOT allow children to operate the engine. Keep children and pets away from the area of operation.

REFUEL WITH CARE

Petrol is extremely flammable and petrol vapor can explode. Refuel outdoors, in a well-ventilated area, with the engine stopped.

NEVER smoke near petrol and keep other flames and sparks away. Always store petrol in an approved container. If any fuel is spilt, make sure the area is dry before starting the engine.

CARBON MONOXIDE HAZARD

Exhaust gas contains poisonous carbon monoxide. Avoid inhalation of exhaust gas.

NEVER run the engine in a closed garage or confined area.

USER GUIDE

ENGINE MANUAL

HOT EXHAUST

The exhaust becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the exhaust while it is hot. Let the engine cool before storing it indoors.

To prevent fire hazards and to provide adequate ventilation for stationary equipment applications, keep the engine at least 3 feet (1 meter) away from building walls and other equipment during operation. DO NOT place flammable objects close to the engine.

OTHER EQUIPMENT

Review the instructions provided with the equipment powered by this engine for any additional safety precautions that should be observed in conjunction with engine start-up, shutdown, operation, or protective apparel that may be needed to operate the equipment.

ENGINE CAPACITIES

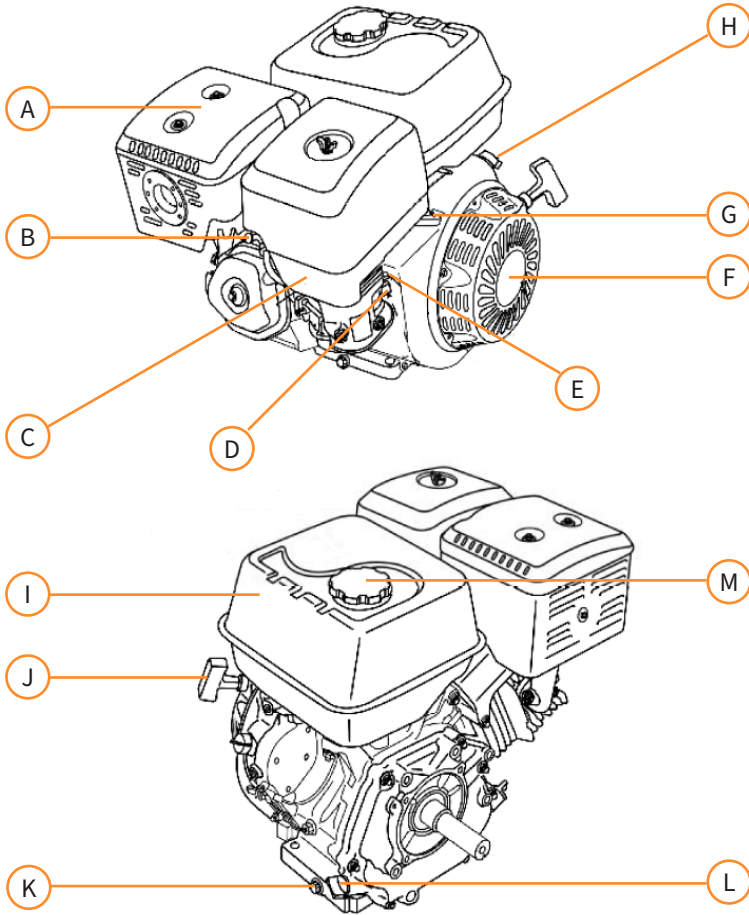
Fuel tank capacity G200F	3.8 litres
Oil Capacity	0.6 litres
Engine Oil	10W-30

COMPONENTS & CONTROL LOCATIONS

- A. EXHAUST
- B. SPARK PLUG
- C. AIR CLEANER
- D. FUEL VALVE
- E. CHOKE
- F. RECOIL STARTER
- G. THROTTLE
- H. IGNITION SWITCH
- I. FUEL TANK
- J. STARTER GRIP
- K. OIL DRAIN PLUG
- L. OIL FILTER CAP / DIPSTICK
- M. FUEL TANK CAP

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ENGINE MANUAL



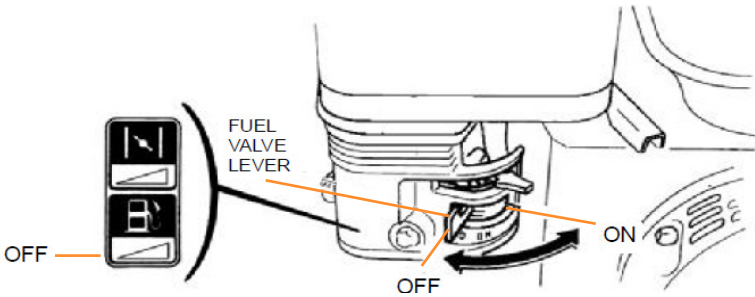
USER GUIDE

ENGINE MANUAL

CONTROLS

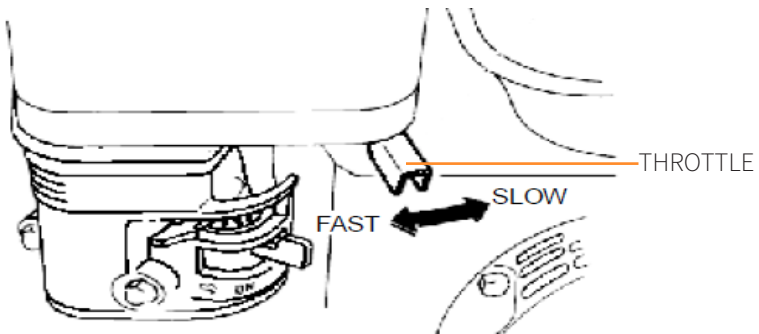
FUEL VALVE LEVER

The fuel valve opens and closes the passage between the fuel tank and the carburettor. The fuel valve lever must be in the ON position for the engine to run. When the engine is not in use, leave the fuel valve lever in the OFF position to prevent carburettor flooding and to reduce the possibility of fuel leakage.



THROTTLE LEVER

The throttle lever controls engine THROTTLE speed. Moving the throttle lever in the directions shown makes the engine run faster or slower.

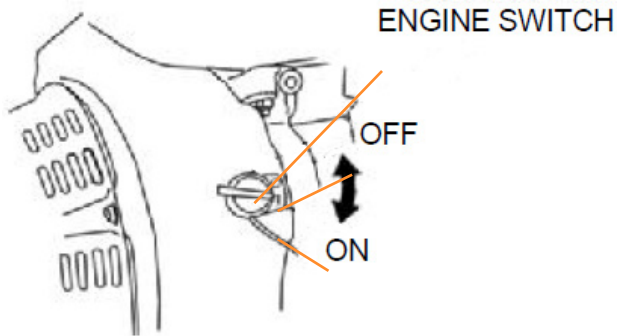


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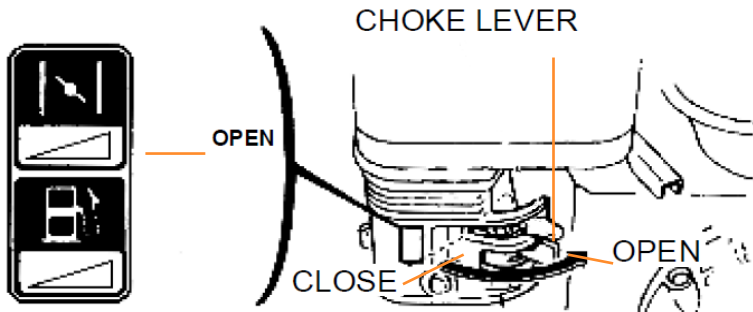
ENGINE SWITCH

The engine switch enables and disables the ignition system.
The engine switch must be in the ON position for the engine to run.
Turning the engine switch to the OFF position stops the engine.



CHOKE LEVER

The choke lever opens and closes the choke valve in the carburettor.
The CLOSE position enriches the fuel mixture for starting a cold engine.
The OPEN position provides the correct fuel mixture for operation after starting and for restarting a warm engine.
Some engine applications use a remotely mounted choke control rather than the engine-mounted choke lever shown here.

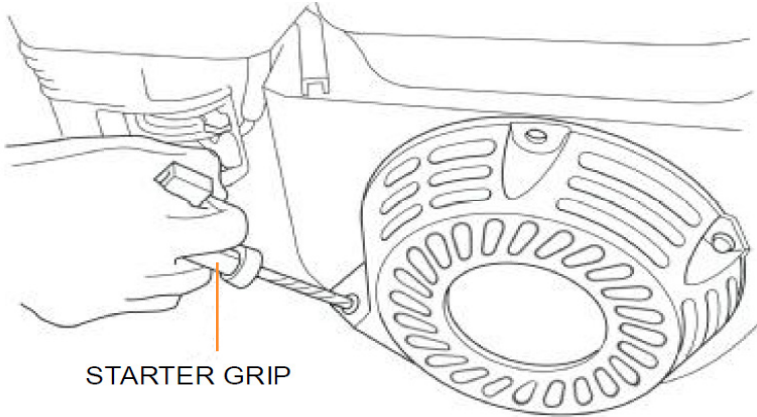


USER GUIDE

ENGINE MANUAL

RECOIL STARTER GRIP

Pulling the starter grip operates the recoil starter to crank the engine.



CHECK BEFORE OPERATION

IS YOUR ENGINE READY TO GO?

For your safety, and to maximize the service life of your equipment, it is very important to take a few moments before you operate the engine to check its condition. Be sure to take care of any problem you find or have your servicing dealer correct it before you operate the engine.



WARNING!

Improperly maintaining this engine, or failing to correct a problem before operation, could cause a malfunction in which you could be seriously injured.

Always perform a preoperation inspection before each operation, and correct any problem.

Before beginning your preoperation checks, be sure the engine is level and the engine switch is in the OFF position.

USER GUIDE

ENGINE MANUAL

CHECK THE GENERAL CONDITION OF THE ENGINE

- Look around and underneath the engine for signs of oil or petrol leaks.
- Remove any excessive dirt or debris, especially around the exhaust and recoil starter.
- Look for signs of damage.
- Check that all shields and covers are in place, and all nuts, bolts, and screws are tightened.

CHECK THE ENGINE

- Check the engine oil level. Running the engine with a low oil level can cause engine damage.
- The Oil Alert system (applicable engine types) will automatically stop the engine before the oil level falls below safe limits. However, to avoid the inconvenience of an unexpected shutdown, always check the engine oil level before startup.
- Check the air filter. A dirty air filter will restrict air flow to the carburetor, reducing engine performance.
- Check the fuel level. Starting with a full tank will help to eliminate or reduce operating interruptions for refueling.

CHECK THE EQUIPMENT POWERED BY THIS ENGINE

- Review the instructions provided with the equipment powered by this engine for any precautions and procedures that should be followed before engine startup.

USER GUIDE

ENGINE MANUAL

SAFE OPERATING PRECAUTIONS

Before operating the engine for the first time, please review the IMPORTANT SAFETY INFORMATION and the chapter titled BEFORE OPERATION.



WARNING!

Carbon monoxide gas is toxic. Breathing it can cause unconsciousness and even kill you.

Avoid any areas or actions that expose you to carbon monoxide.

Review the instructions provided with the equipment powered by this engine for any safety precautions that should be observed in conjunction with engine startup, shutdown, or operation.

STARTING THE ENGINE

- Move the fuel valve lever to the ON position.
- To start a cold engine, move the choke lever to the CLOSE position. To restart a warm engine, leave the choke lever in the OPEN position.
- Move the throttle lever away from the SLOW position, about 1/3 of the way toward the FAST position.
- Turn the engine switch to the ON position.
- Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.
- If the choke lever has been moved to the CLOSE position to start the engine, gradually move it to the OPEN position as the engine warms up.

USER GUIDE

ENGINE MANUAL

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.

- Move the throttle lever to the SLOW position.
- Turn the engine switch to the OFF position.
- Turn the fuel valve lever to the OFF position.

SETTING ENGINE SPEED

- Position the throttle lever for the desired engine speed.
- Some engine applications use a remotely-mounted throttle control rather than the engine-mounted throttle lever shown here.
- For engine speed recommendations, refer to the instructions provided with the equipment powered by this engine.

USER GUIDE

ENGINE MAINTENANCE

MAINTENANCE

Good maintenance is essential for safe, economical, and trouble-free operation. It will also help reduce air pollution.



WARNING!

Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed. Always follow the procedures and precautions in the owner's manual.

To help you properly care for your engine, the following pages include a maintenance schedule, routine inspection procedures, and simple maintenance procedures using basic hand tools.

Other service tasks that are more difficult, or require special tools, are best handled by professionals and are normally performed by a technician or other qualified mechanic.

The maintenance schedule applies to normal operating conditions. If you operate your engine under unusual conditions, such as sustained high-load or high-temperature operation, or use in unusually wet or dusty conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

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 you operate 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 instructed to do so.

USER GUIDE

ENGINE MAINTENANCE

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

To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not petrol, to clean parts. Keep cigarettes, sparks and flames away from all fuel-related parts.

To ensure the best quality and reliability, use only new, genuine parts or their equivalents for repair and replacement.

MAINTENANCE SCHEDULE

REGULAR SERVICE PERIOD Performed at every indicated month or operating hour interval, whichever comes first.		ITEM	Each use	First month or 20 Hrs.	Every 3 months or 50 Hrs.	Every 6 months or 100 Hrs.	Every year or 300 Hrs.	
•	Engine oil	Check level	○					
		Change		○		○		
•	Air cleaner	Check	○					
		Clean			○(1)			
		Replace					○☆	
•	Sediment Cup	Clean				○		
•	Spark plug	Check-Clean				○		
		Replace					○	
	Spark arrester (optional parts)	Clean				○		
•	Idle speed	Check-Adjust					○(2)	
•	Valve clearance	Check-Adjust					○(2)	
•	Fuel tank and strainer	Clean					○(2)	
•	Combustion chamber	Clean	After every 300 Hrs. (2)					
•	Fuel line	Check	Every 2 years (Replace if necessary) (2)					

☆ Replace the paper element type only.

(1) Service more frequently when used in dusty areas.

(2) These items should be serviced by your servicing dealer unless you have the proper tools and are mechanically proficient. Refer to manual for service procedures.

USER GUIDE

ENGINE MAINTENANCE

REFUELLING

Fuel tank capacity G200F: 3.8 litres

With the engine stopped, remove the fuel tank cap and check the fuel level. Refill the tank if the fuel level is low.

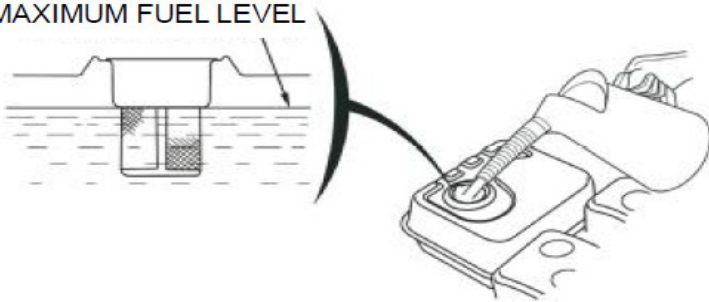


WARNING!

Petrol is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.

MAXIMUM FUEL LEVEL



Refuel in a well-ventilated area before starting the engine. If the engine has been running, allow it to cool. Refuel carefully to avoid spilling fuel. Do not fill above the fuel strainer shoulder. After refueling, tighten the fuel tank cap securely.

NEVER refuel the engine inside a building where petrol fumes may reach flames or sparks. Keep petrol away from appliance pilot lights, barbecues, electric appliances, power tools, etc.

Spilled fuel is not only a fire hazard, it causes environmental damage. Wipe up spills immediately.

USER GUIDE

ENGINE MAINTENANCE

FUEL RECOMMENDATIONS

Use unleaded petrol with a pump octane rating of 86 or higher.

These engines are certified to operate on unleaded petrol. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

NEVER use stale or contaminated petrol or an oil/petrol mixture. Avoid getting dirt or water in the fuel tank.

Occasionally you may hear a light “spark knock” or “pinging” (metallic rapping noise) while operating under heavy loads. This is no cause for concern.

If spark knock or pinging occurs at a steady engine speed, under normal load, change brands of petrol. If spark knock or pinging persists, see an authorized servicing dealer.

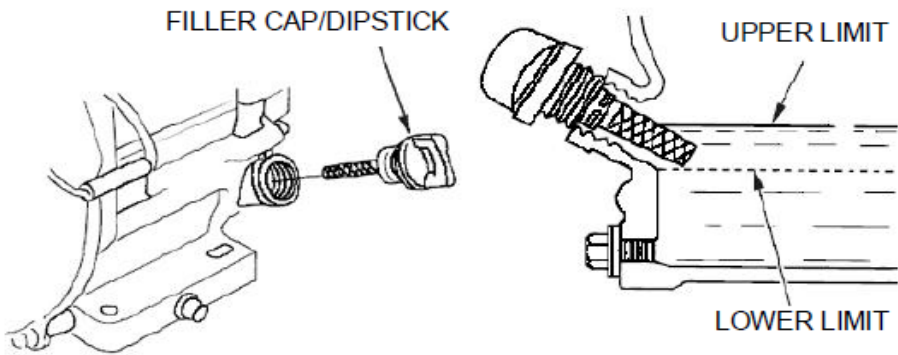
USER GUIDE

ENGINE MAINTENANCE

ENGINE OIL LEVEL CHECK

Check the engine oil level with the engine stopped and in a level position.

- Remove the filler cap/dipstick and wipe it clean.



- Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.
- If the oil level is low, fill to the edge of the oil filler hole with the recommended oil.
- Screw in the filler cap/dipstick securely.

Running the engine with a low oil level can cause engine damage.

USER GUIDE

ENGINE MAINTENANCE

ENGINE OIL CHANGE

Drain the used oil while the engine is warm. Warm oil drains quickly and completely.

- Place a suitable container below the engine to catch the used oil, and then remove the filler cap/dipstick and the drain plug.
- Allow the used oil to drain completely, and then reinstall the drain plug, and tighten it securely.

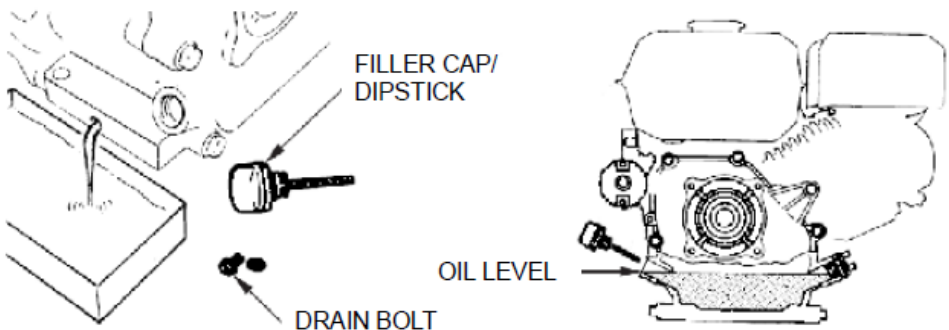
Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take used oil in a sealed container to your local recycling center. DO NOT throw it in the bin, pour it on the ground or down a drain.

- With the engine in a level position, fill to the outer edge of the oil filler hole with the recommended oil.
- Screw in the filler cap/dipstick securely.

Running the engine with a low oil level can cause engine damage.

The Oil Alert system (applicable engine types) will automatically stop the engine before the oil level falls below the safe limit.

However, to avoid the inconvenience of an unexpected shutdown, fill to the upper limit, and check the oil level regularly.



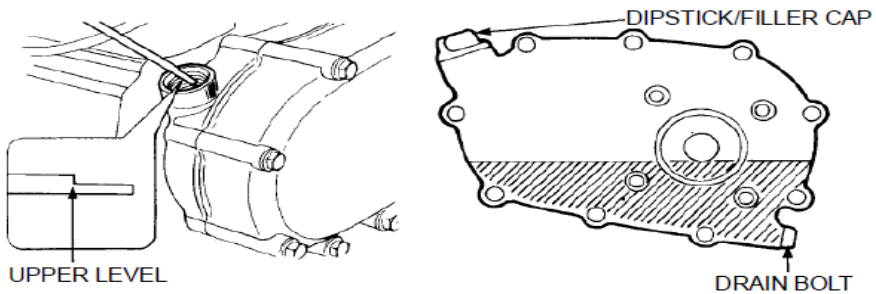
USER GUIDE

ENGINE MAINTENANCE

REDUCTION GEAR OIL

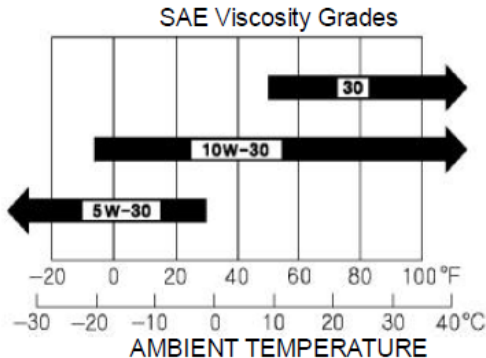
- Remove the oil filler cap and wipe the dipstick clean.
- Insert the dipstick into the filler neck but do not screw it in.
- If the level is low, fill to the upper level mark with the same oil recommended for the engine.

Oil capacity of G200 - B: 500 cc



ENGINE OIL RECOMMENDATIONS

Oil is a major factor affecting performance and service life. Use 4-stroke automotive detergent oil. SAE 10W-30 is recommended for general use. Other viscosities shown in the chart may be used when the average temperature in your area is within the recommended range.



USER GUIDE

ENGINE MAINTENANCE

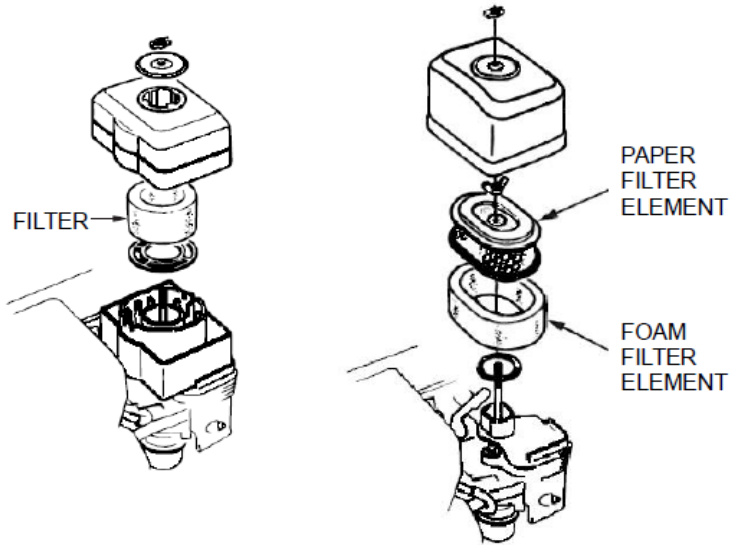
AIR FILTER INSPECTION

Remove the air cleaner cover and inspect the filter.

Clean or replace dirty filter elements.

Always replace damaged filter elements.

If equipped with an oil-bath air cleaner, also check the oil level.



AIR FILTER INSPECTION

A dirty air filter will restrict air flow to the carburetor, reducing engine performance and cause rapid engine wear and damage.

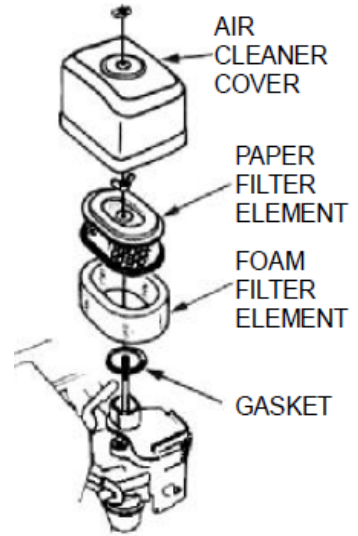
If you operate the engine in very dusty areas, clean the air filter more often than specified in the MAINTENANCE SCHEDULE.

USER GUIDE

ENGINE MAINTENANCE

DUAL-FILTER-ELEMENT TYPES

- Remove the wing nut from the air cleaner cover, and remove the air cleaner cover.
- Remove the wing nut from the air filter, and remove the filter.
- Remove the foam filter from the paper filter.
- Inspect both air filter elements, and replace them if they are damaged. Always replace the paper air filter element at the scheduled interval.
- Clean the air filter elements if they are to be reused.



Paper air filter element: Tap the filter element several times on a hard surface to remove dirt, or blow compressed air [not exceeding 30 psi (207 kPa)] through the filter element from the inside. Never try to brush off dirt; brushing will force dirt into the fibers.

Foam air filter element: Clean in warm soapy water, rinse, and allow drying thoroughly. Or clean in nonflammable solvent and allow drying. Dip the filter element in clean engine oil, and then squeeze out all excess oil. The engine will smoke when started if too much oil is left in the foam.

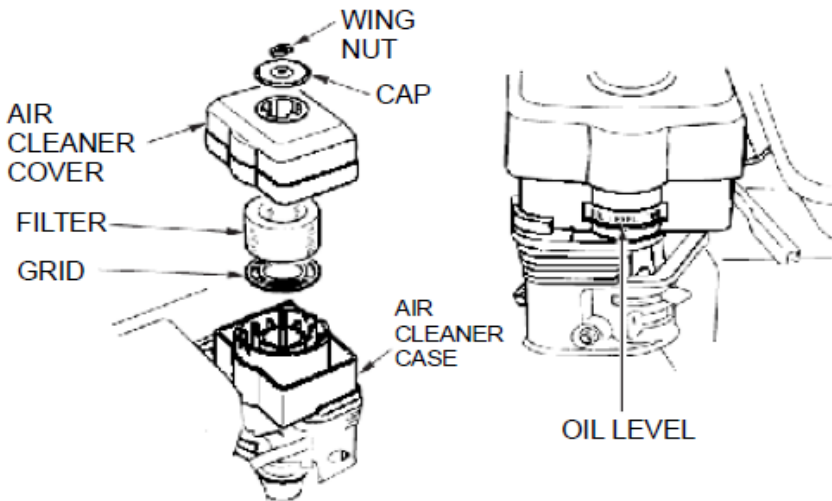
- Wipe dirt from the inside of the air cleaner base and cover, using a moist rag. Be careful to prevent dirt from entering the air duct that leads to the carburetor.
- Place the foam air filter element over the paper element, and reinstall the assembled air filter. Be sure the gasket is in place beneath the air filter. Tighten the air filter wing nut securely.
- Install the air cleaner cover, and tighten the cover wing nut securely.

USER GUIDE

ENGINE MAINTENANCE

OIL-BATH TYPE

- Remove the wing nut, and remove the air cleaner cap and cover.
- Remove the air filter from the cover, Wash the cover and filter in warm, soapy water, rinse, and allow drying thoroughly. Or clean in nonflammable solvent and allow drying.
- Dip the filter in clean engine oil, and then squeeze out all excess oil. The engine will smoke if too much oil is left in the foam.
- Empty the used oil from the air cleaner case, wash out any accumulated dirt with nonflammable solvent, and dry the case.
- Fill the air cleaner case to the OIL LEVEL mark with the same oil that is recommended for the engine. Oil capacity: 2.0 US oz (60 cm³)
- Reassemble the air cleaner, and tighten the wing nut securely.



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ENGINE MAINTENANCE



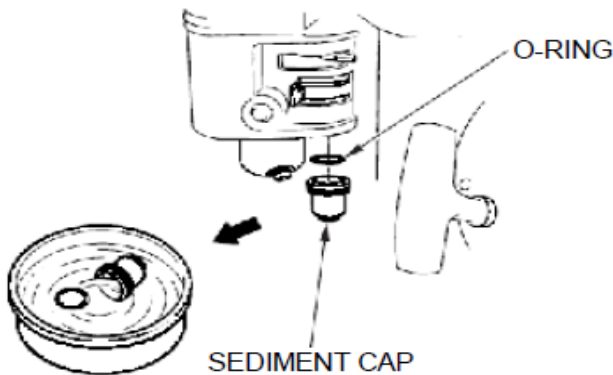
WARNING!

Petrol is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.

SEDIMENT CUP CLEANING

- Move the fuel valve to the OFF position, and then remove the fuel sediment cup and O-ring.
- Wash the sediment cup and O-ring in nonflammable solvent, and dry them thoroughly.
- Place the O-ring in the fuel valve, and install the sediment cup. Tighten the sediment cup securely.
- Move the fuel valve to the ON position, and check for leaks. Replace the O-ring if there is any leakage.



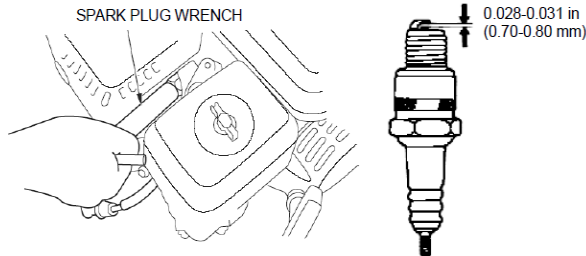
USER GUIDE

ENGINE MAINTENANCE

SPARK PLUG SERVICE

Recommended spark plugs: F7RTC or other equivalents. An incorrect spark plug can cause engine damage.

- Disconnect the spark plug cap, and remove any dirt from around the spark plug area.
- Remove the spark plug with a spark plug wrench.



- Measure the spark plug electrode gap with a suitable gauge.
- The gap should be 0.028 in -0.031 in (0.70 mm - 0.80 mm). Correct the gap, if necessary, by carefully bending the side electrode.
- Install the spark plug carefully, by hand, to avoid cross-threading.
- After the spark plug seats, tighten with a spark plug wrench to compress the water.

If reinstalling the used spark plug tighten 1/8 - 1/4 turn after the spark plug seats.

If installing a new spark plug, tighten 1/2 turn after the spark plug seats.

- Attach the spark plug cap.



WARNING!

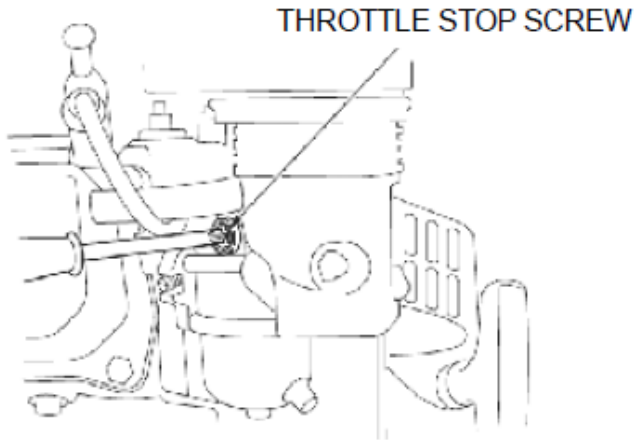
A loose spark plug can overheat and damage the engine. Over tightening the spark plug can damage the threads in the cylinder head.

USER GUIDE

ENGINE MAINTENANCE

IDLE SPEED ADJUSTMENT

- Start the engine outdoors, and allow it to warm up to operating temperature.
- Move the throttle lever to its slowest position.
- Turn the throttle stop screw to obtain the standard idle speed.
Standard idle speed: $1,400 \pm 150$ rpm



USER GUIDE

ENGINE MAINTENANCE

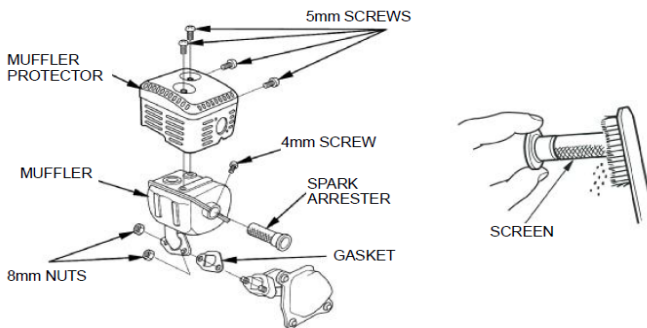
SPARK ARRESTER SERVICE (optional equipment)

Your engine is not factory-equipped with a spark arrester. In some areas, it is illegal to operate an engine without a spark arrester. Check local laws and regulations. A spark arrester is available from authorized servicing dealers.

The spark arrester must be serviced every 100 hours to keep it functioning as designed.

If the engine has been running, the exhaust will be very hot. Allow the exhaust to cool before servicing the spark arrester.

- Remove the three 4 mm screws from the exhaust deflector, and remove the deflector.
- Remove the four 5 mm screws from the muffler protector and remove the muffler protector.
- Remove the 4 mm screw from the spark arrester, and remove the spark arrester from the muffler.



- Use a brush to remove carbon deposits from the spark arrester screen. Be careful to avoid damaging the screen.

The spark arrester must be free of breaks and holes. Replace the spark arrester if it is damaged.

- Install the spark arrester, exhaust protector, and exhaust deflector in the reverse order of disassembly.

USER GUIDE

STORAGE / TRANSPORTING

STORING YOUR ENGINE

STORAGE PREPARATION

Proper storage preparation is essential for keeping your engine trouble free and looking good. The following steps will help to keep rust and corrosion from impairing your engine's function and appearance, and will make the engine easier to start after storage.

CLEANING

If the engine has been running, allow it to cool for at least half an hour before cleaning. Clean all exterior surfaces, touch up any damaged paint, and coat other areas that may rust with a light film of oil.



WARNING!

Using a garden hose or pressure washing equipment can force water into the air cleaner or muffler opening. Water in the air cleaner will soak the air filter, and water that passes through the air filter or muffler can enter the cylinder, causing damage.



WARNING!

Water contacting a hot engine can cause damage. If the engine has been running, allow it to cool for at least half an hour before washing.

FUEL

Petrol will oxidize and deteriorate in storage. Old petrol will cause hard starting, and it leaves gum deposits that clog the fuel system. If the petrol in your engine deteriorates during storage, you may need to have the carburetor and other fuel system components serviced or replaced.

The length of time that petrol can be left in your fuel tank and carburetor without causing functional problems will vary with such factors as petrol blend, your storage temperatures, and whether the fuel tank is partially or completely filled. The air in a partially filled fuel tank promotes fuel deterioration. Very warm storage/temperatures accelerate fuel deterioration. Fuel deterioration problems may occur within a few months, or even less if the petrol was not fresh when you filled the fuel tank.

USER GUIDE

STORAGE / TRANSPORTING

FUEL cont.

The Distributor's Limited Warranty does not cover fuel system damage or engine performance problems resulting from neglected storage preparation.

You can extend fuel storage life by adding a fuel stabilizer that is formulated for that purpose, or you can avoid fuel deterioration problems by draining the fuel tank and carburetor.

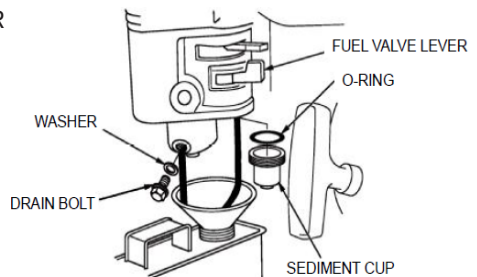
ADDING A FUEL STABILIZER TO EXTEND FUEL STORAGE LIFE

When adding a fuel stabilizer, fill the fuel tank with fresh petrol. If only partially filled, air in the tank will promote fuel deterioration during storage. If you keep a container of petrol for refueling, be sure that it contains only fresh petrol.

- Add fuel stabilizer following the manufacturer's instructions.
- After adding a fuel stabilizer, run the engine outdoors for 10 minutes to be sure that treated petrol has replaced the untreated petrol in the carburetor.
- Stop the engine, and move the fuel valve to the OFF position.

DRAINING THE FUEL TANK AND CARBURETOR

- Place an approved petrol container below the carburetor, and use a funnel to avoid spilling fuel.
- Remove the carburetor drain bolt and sediment cup, and then move the fuel valve lever to the ON position.
- After all the fuel has drain into the container, reinstall the drain bolt and sediment cup. Tighten them securely.



USER GUIDE

STORAGE / TRANSPORTING

STORAGE PRECAUTIONS

- Change the engine oil.
- Remove the spark plugs.
- Pour a tablespoon (5-10 cc) of clean engine oil into the cylinder.
- Pull the starter rope several times to distribute the oil in the cylinder.
- Reinstall the spark plugs.
- Pull the starter rope slowly until resistance is felt. This will close the valves so moisture cannot enter the engine cylinder. Return the starter rope gently.

If your engine will be stored with petrol in the fuel tank and carburetor, it is important to reduce the hazard of petrol vapor ignition. Select a well-ventilated storage area away from any appliance that operates with a flame, such as a furnace, water heater, or clothes dryer. Also avoid any area with a spark-producing electric motor, or where power tools are operated.

If possible, avoid storage areas with high humidity, because that promotes rust and corrosion.

Unless all fuel has been drained from the fuel tank, leave the fuel valve lever in the OFF position to reduce the possibility of fuel leakage.

Position the equipment so the engine is level. Tilting can cause fuel or oil leakage.

With the engine and exhaust system cool, cover the engine to keep out dust. A hot engine and exhaust system can ignite or melt some materials. Do not use sheet plastic as a dust cover. A nonporous cover will trap moisture around the engine, promoting rust and corrosion.

If equipped with a battery for an electric starter, recharge the battery once a month while the engine is in storage. This will help to extend the service life of the battery.

USER GUIDE

STORAGE / TRANSPORTING

REMOVAL FROM STORAGE

Check your engine as described in the chapter CHECK BEFORE OPERATION.

If the fuel was drained during storage preparation, fill the tank with fresh petrol. If you keep a container of petrol for refueling, be sure that it contains only fresh petrol. Petrol oxidizes and deteriorates over time, causing hard starting.

If the cylinders were coated with oil during storage preparation, the engine may smoke briefly at startup. This is normal.

TRANSPORTING

If the engine has been running, allow it to cool for at least 15 minutes before loading the engine-powered equipment on the transport vehicle. A hot engine and exhaust system can burn you and can ignite some materials.

Keep the engine level when transporting to reduce the possibility of fuel leakage. Move the fuel valve lever to the OFF position.

TROUBLESHOOTING

RESOLUTION GUIDE

WHAT DO I DO IF THERE ARE MISSING PARTS FROM MY ORDER?

If there appears to be any part missing from your order, contact our friendly and helpful Customer Support Team within 7 days of receipt.

ENGINE WILL NOT START	POSSIBLE CAUSE	CORRECTION
Electric starting: check battery	Battery discharged.	Recharge battery.
Check control positions	Fuel valve OFF	Move lever to ON
	Choke OPEN	Move lever to CLOSE unless engine is warm
	Engine switch OFF	Turn engine switch to ON
Check fuel.	Out of fuel	Refuel
	Bad fuel; engine stored without treating or draining petrol, or refueled with bad petrol.	Drain fuel tank and carburetor. Refuel with fresh petrol.
Remove and inspect spark plugs	Spark plugs faulty, fouled, or improperly gapped.	Gap, or replace spark plugs.
	Spark plugs wet with fuel (flooded engine).	Dry and reinstall spark plugs. Start engine with throttle lever in FAST position.
Take engine to an authorized servicing dealer, or refer to manual.	Fuel filter clogged, carburetor malfunction, ignition malfunction, valvestuck, etc.	Replace or repair faulty components as necessary

TROUBLESHOOTING

RESOLUTION GUIDE

ENGINE LACKS POWER	POSSIBLE CAUSE	CORRECTION
Check air filter	Filter element(s) clogged.	Clean or replace filter element(s).
Check fuel.	Out of fuel.	Refuel.
	Bad fuel; engine stored without treating or draining petrol, or refueled with bad petrol.	Drain fuel tank and carburetor. Refuel with fresh petrol.
Take engine to an authorized servicing dealer, or refer to manual.	Fuel filter clogged, carburetor malfunction, ignition malfunction, valve stuck, etc.	Replace or repair faulty components as necessary.

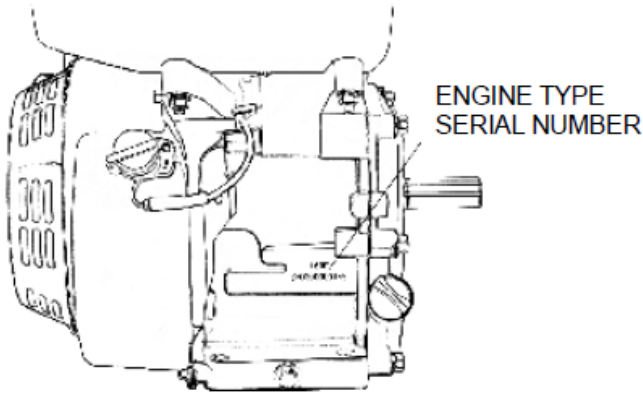
**FOR ALL OTHER ISSUES, PLEASE CONTACT OUR
CUSTOMER SUPPORT TEAM.**

EXTRA INFORMATION

TECHNICAL INFORMATION

TECHNICAL INFORMATION

SERIAL NUMBER LOCATION



Record the engine serial number in the space below. You will need this serial number when ordering parts, and when making technical or warranty inquiries.

Engine serial number: _____

BATTERY CONNECTIONS FOR ELECTRIC STARTER

Use a 12-volt battery with an ampere-hour rating of at least 18 Ah.

Be careful not to connect the battery in reverse polarity, as this will short circuit the battery charging system. Always connect the positive (+) battery cable to the battery terminal before connecting the negative (-) battery cable, so your tools cannot cause a short circuit if they touch a grounded part while tightening the positive (+) battery cable end.

EXTRA INFORMATION

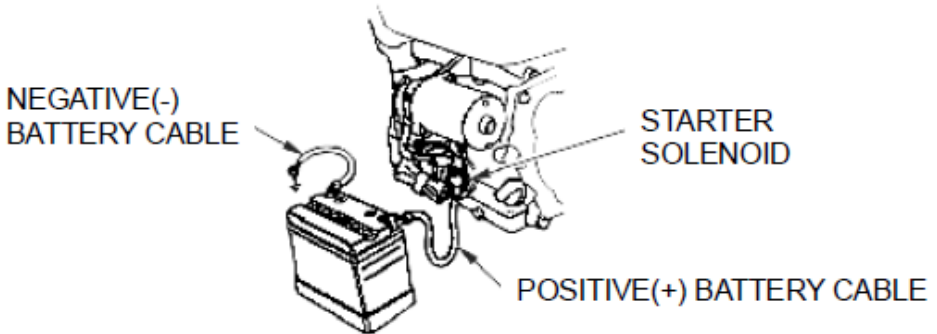
TECHNICAL INFORMATION



WARNING!

A battery can explode if you do not follow the correct procedure, seriously injuring anyone nearby.
Keep all sparks, open flames, and smoking materials away from the battery.

- Connect the battery positive (+) cable to the starter solenoid terminal as shown.
- Connect the battery negative (-) cable to an engine mounting bolt, frame bolt, or other good engine ground connection.
- Connect the battery positive (+) cable to the battery positive (+) terminal as shown.
- Connect the battery negative (-) cable to the battery negative (-) terminal as shown.
- Coat the terminals and cable ends with grease.



EXTRA INFORMATION

TECHNICAL INFORMATION

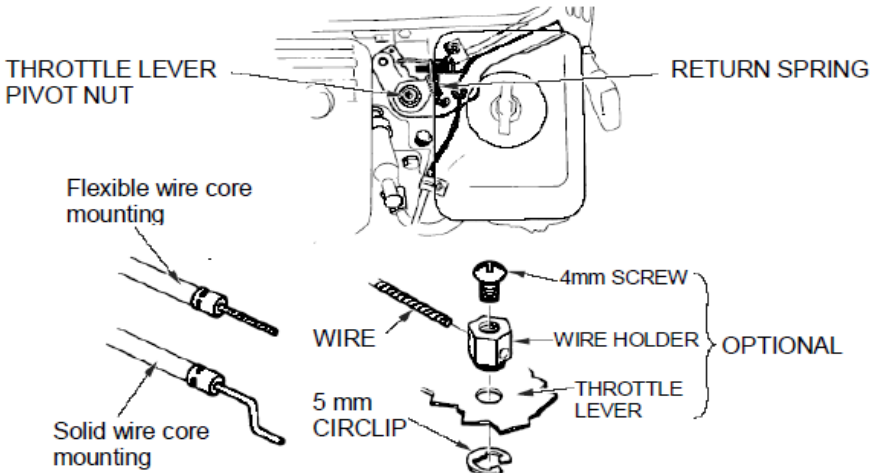
REMOTE CONTROL LINKAGE

The throttle and choke control levers are provided with holes for optional cable attachment.

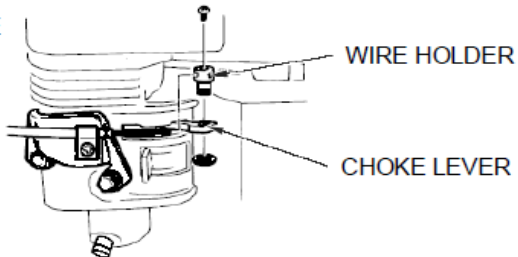
The following illustrations show installation examples for a solid wire cable and for a flexible, braided wire cable. If using a flexible, braided wire cable, add a return spring as shown.

It is necessary to loosen the throttle lever friction nut when operating the throttle with a remotely-mounted control.

REMOTE THROTTLE LINKAGE



REMOTE CHOKE LINKAGE



EXTRA INFORMATION

TECHNICAL INFORMATION

CARBURETOR MODIFICATION FOR HIGH ALTITUDE OPERATION

At high altitude, the standard carburetor air-fuel mixture will be too rich. Performance will decrease, and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting. Operation at an altitude that differs from that at which this engine was certified, for extended periods of time, may increase emissions.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your engine at altitudes above 5,000 feet (1,500 meters), have your servicing dealer perform this carburetor modification. This engine, when operated at high altitude with the carburetor modifications for high altitude use, will meet each emission standard throughout its useful life.

Even with carburetor modification, engine horsepower will decrease about 3.5% for each 1,000-foot (300-metre) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.



WARNING!

When the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at altitudes below 5,000 feet (1,500meters) with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have your servicing dealer return the carburetor to original factory specifications.

EXTRA INFORMATION

TECHNICAL INFORMATION

OXYGENATED FUELS

Some conventional gasolines are being blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels. To meet clean air standards, some areas use oxygenated fuels to help reduce emissions.

If you use an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirement.

Before using an oxygenated fuel, try to confirm the fuel's contents. Some areas require this information to be posted on the pump.

The following are the EPA approved percentages of oxygenates:

ETHANOL - (ethyl or grain alcohol) 10% by volume

You may use petrol containing up to 10% ethanol by volume. Petrol containing ethanol may be marketed under the name 'E10 Petrol'.

If you notice any undesirable operating symptoms, try another service station, or switch to another brand of petrol.

Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentages of oxygenates mentioned above are not covered under warranty.

EXTRA INFORMATION

EMISSION CONTROL SYSTEM INFORMATION

SOURCE OF EMISSIONS

The combustion process produces carbon monoxide, oxides of nitrogen, and hydrocarbons. Control of hydrocarbons and oxides of nitrogen is very important because, under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but it is toxic.

This utilizes lean carburetor settings and other systems to reduce the emissions of carbon monoxide, oxides of nitrogen and hydrocarbons.

TAMPERING AND ALTERING

Tampering with or altering the emission control system may increase emissions beyond the legal limit. Among those acts that constitute tampering are:

- Removal or alteration of any part of the intake, fuel or exhaust systems.
- Altering or defeating the governor linkage or speed-adjusting mechanism to cause the engine to operate outside its design parameters.

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.

EXTRA INFORMATION

EMISSION CONTROL SYSTEM INFORMATION

REPLACEMENT PARTS

The emission control systems on your engine were designed, built. We recommend the use of genuine parts whenever you have maintenance done. These original-design replacement parts are manufactured to the same standards as the original parts, so you can be confident of their performance. The use of replacement parts that are not of the original design and quality may impair the effectiveness of your emission control system.

A manufacturer of an aftermarket part assumes the responsibility that the part will not adversely affect emission performance. The manufacturer or rebuilder of the part must certify that use of the part will not result in a failure of the engine to comply with emission regulations.

MAINTENANCE

Follow the maintenance schedule. Remember that this schedule is based on the assumption that your machine will be used for its designed purpose. Sustained high-load or high-temperature operation, or use in unusually wet or dusty conditions, will require more frequent service.

ENGINE TUNE-UP

ITEM	SPECIFICATION
Spark plug gap	0.028-0.031 in (0.70 mm -0.80 mm)
Valve clearance	0.15 mm±0.02 mm (cold) EX: 0.20 mm±0.02 mm (cold)
Other specifications	No other adjustments needed

EXTRA INFORMATION

CONSUMER INFORMATION

PUBLICATIONS

These publications will give you additional information for maintaining and repairing your engine. You may order them from your engine dealer.

PARTS CATALOG

This manual provides complete, illustrated parts lists.

QUICK REFERENCE INFORMATION

Engine Oil	Type	SAE 10W-30,API SE or SF, for general use
	Capacity	G200F: 0.6 L
Spark Plug	Type	F7RTC or other equivalents.
	Gap	0.028-0.031 in (0.70 mm-0.80 mm)
Carburetor	Idle speed	1400 rpm±150 rpm
Maintenance	Each use	Check engine oil. Check air filter.
	First 20 hours	Change engine oil.
	Subsequent	Refer to the maintenance

EXTRA INFORMATION

SPECIFICATIONS

Type	Single cylinder, 4-Stroke, Forced Air Cooling, OHV
Rated power(kW/3600rpm)	3.8
Max. torque(N·m/rpm)	13/3000
Fuelconsumption(g/kW·h)	≤395
Idle speed	1400±150
Speed Fluctuating Ratio	≤10%
Transmission Mode	-
Reduction Ratio	-
Noise(≤)	70db(A)
Bore×Stroke(mm)	68×54
Displacement(cc)	196
Compression Ratio	8.5:1
Lubricating mode	Splash
Starting Mode	Recoil start (Recoil start / Electric starting)
Rotation	Anti-clockwise (from P.T.O. side)
Valve Clearance	input valve - 0.10 - 0.15mm, output valve - 0.15 - 0.20mm
Spark plug clearance	0.7 - 0.8mm
Igniting Mode	Transistorized magneto Ignition
Air cleaner	Semi-dry, Oil bath, Foam filter
Dimension (Length)	312mm
Dimension (Width)	376mm
Dimension (High)	335mm
Net weight (kg)	16(19)

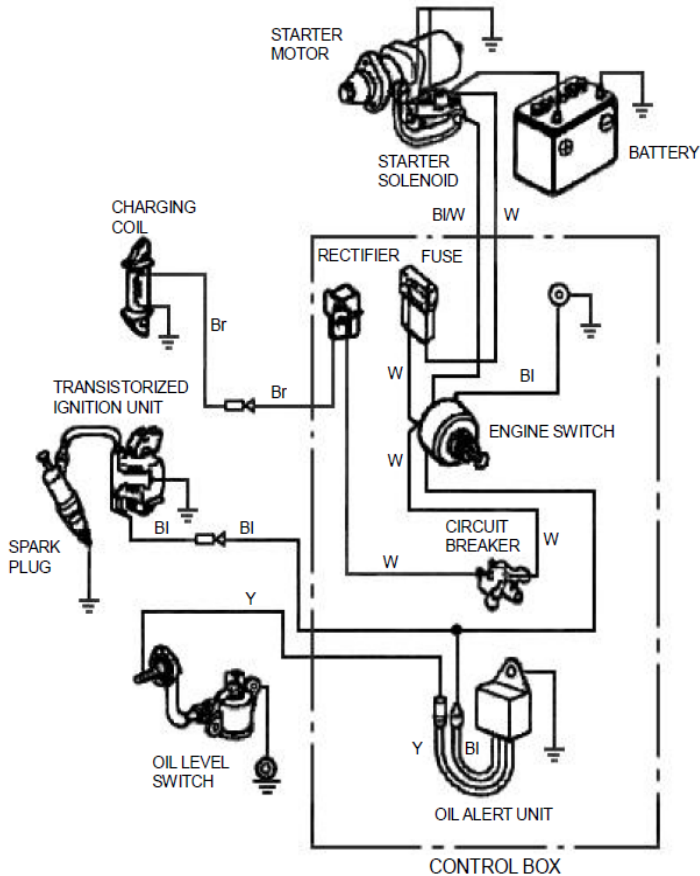
EXTRA INFORMATION

WIRING DIAGRAMS

ENGINE SWITCH

	IG	E	ST	BAT
OFF	O	O		
ON				
START			O	O

BI	BLACK	BR	BROWN
Y	YELLOW	R	RED
W	WHITE	G	GREEN

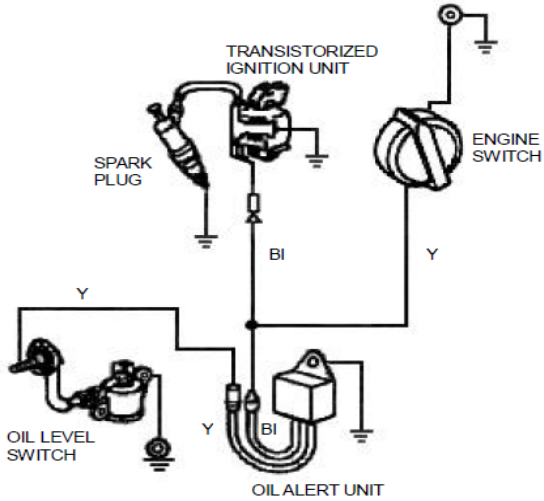


EXTRA INFORMATION

WIRING DIAGRAMS

ENGINE TYPE WITH OIL ALERT AND WITHOUT ELECTRIC STARTING

Bl	BLACK
Y	YELLOW
G	GREEN



EXTRA INFORMATION

OPTIONAL PARTS

BATTERY

BATTERY - OPTIONAL PART

Use a battery rated at 12V, 18Ah or more.



WARNING!

Do not reverse polarity. Serious damage to the engine and/or battery may occur.



WARNING!

A battery can explode if you do not follow the correct procedure, seriously injuring anyone nearby.
Keep all sparks, open flames, and smoking materials away from the battery.

Check the electrolyte level to be sure that it is between the marks on the case. If the level is below the lower mark, remove the caps and add distilled water to bring the electrolyte level to the upper mark. The cells should be equally full.



SPÉCIFICATIONS

DESCRIPTION DU PRODUIT

DÉTAILS DU PRODUIT

LISTE DES PIÈCES

SPÉCIFICATIONS

CARACTÉRISTIQUES DU PRODUIT

La responsabilité de Monster Group UK Limited sera limitée à la valeur commerciale du produit.

CONSEILS DE SÉCURITÉ

 PRATIQUE DE TRAVAIL SÉCURITAIRE

MODE D'EMPLOI

INSTRUCTIONS DE MONTAGE

MODE D'EMPLOI

ENTRETIEN

DÉPANNAGE

GUIDE DE RÉOLUTION

QUE FAIRE S'IL MANQUE DES PIÈCES À MA COMMANDE?

S'il semble manquer des pièces à votre commande, contactez notre équipe du service client dans les 7 jours suivant la réception.

**POUR TOUT AUTRE PROBLÈME, VEUILLEZ
CONTACTER NOTRE ÉQUIPE DU SERVICE CLIENT.**



SPEZIFIKATIONEN

PRODUKTBESCHREIBUNG

PRODUKTSPEZIFIKA

TEILELISTE

SPEZIFIKATION

PRODUKTMERKMALE

Die Haftung von Monster Group UK Limited ist auf den Handelswert des Produkts beschränkt.

SICHERHEITSHINWEIS

 SICHERES ARBEITEN

BENUTZERLEITFADEN

MONTAGEANLEITUNGEN

BENUTZERLEITFADEN

WARTUNG

FEHLERBEHEBUNG

LÖSUNGSGUIDE

WAS MACHE ICH, WENN BEI MEINER BESTELLUNG TEILE FEHLEN?

Falls bei Ihrer Bestellung ein Teil zu fehlen scheint, wenden Sie sich bitte innerhalb von 7 Tagen nach Erhalt der Ware an unser freundliches und hilfsbereites Kundenservice-Team.

**FÜR ALLE ANDEREN FRAGEN WENDEN SIE SICH BITTE AN
UNSER KUNDENSERVICE-TEAM.**



ESPECIFICACIONES

DESCRIPCIÓN DEL PRODUCTO

ESPECIFICACIONES DEL PRODUCTO

LISTA DE PIEZAS

ESPECIFICACIONES

CARACTERÍSTICAS DEL PRODUCTO

La responsabilidad de Monster Group UK Limited estará limitada únicamente al valor comercial del producto.

CONSEJOS DE SEGURIDAD

PRÁCTICAS DE TRABAJO SEGURAS

GUÍA DEL USUARIO

INSTRUCCIONES DE ENSAMBLAJE

GUÍA DEL USUARIO

MANTENIMIENTO

SOLUCIÓN DE PROBLEMAS

GUÍA DE RESOLUCIÓN

¿QUÉ PUEDO HACER SI LE FALTAN PIEZAS A MI PEDIDO?

Si parece faltar alguna pieza en su pedido, por favor, comuníquese con nuestro amable y servicial Equipo de Atención al Cliente en los 7 días posteriores a la recepción de su pedido.

**PARA CUALQUIER OTRO PROBLEMA, POR FAVOR CONTACTE
CON NUESTRO EQUIPO DE ATENCIÓN AL CLIENTE**



SPECIFICHE

DESCRIZIONE DEL PRODOTTO

SPECIFICHE DEL PRODOTTO

LISTA COMPONENTI

SPECIFICHE

CARATTERISTICHE DEL PRODOTTO

La responsabilità di Monster Group UK Limited sarà limitata al solo valore commerciale del prodotto.

CONSIGLI PER LA SICUREZZA

 PRATICHE DI LAVORO SICURO

GUIDA UTENTE

ISTRUZIONI PER IL MONTAGGIO

GUÍA DEL USUARIO

MANTENIMIENTO

RISOLUZIONE DEI PROBLEMI

GUIDA ALLA RISOLUZIONE DEI PROBLEMI

COSA DEVO FARE SE NEL MIO ORDINE CI SONO DELLE PARTI MANCANTI?

Se sembra che all'interno del tuo ordine manchino delle parti, contatta il nostro gentile e disponibile team di assistenza clienti entro 7 giorni dalla ricezione del tuo ordine.

**PER QUALUNQUE ALTRO PROBLEMA, CONTATTA IL NOSTRO
TEAM DI ASSISTENZA CLIENTI.**



OMSCHRIJVING

PRODUCT OMSCHRIJVING

PRODUCTSPECIFICATIES

ONDERDELENLIJST

SPECIFICATIE

PRODUCT SPECIFICATIE

De aansprakelijkheid van Monster Group UK Limited is beperkt tot de commerciële waarde van het product.

VEILIGHEIDSADVIIES

 VEILIG GEBRUIK

HANDLEIDING

MONTAGE-INSTRUCTIES

HANDLEIDING

ONDERHOUD

PROBLEEM OPLOSSEN

OPLOSSINGEN

WAT MOET IK DOEN ALS ER ONDERDELEN VAN MIJN BESTELLING ONTBREKEN?

Neem wanneer een onderdeel van je bestelling ontbreekt binnen 7 dagen na ontvangst contact op met onze vriendelijke en behulpzame klantenservice.

**NEEM VOOR ALLE ANDERE KWESTIES CONTACT
MET ONZE KLANTENSERVICE OP.**



SPECIFIKATION

PRODUKTBESKRIVNING

PRODUKTSPECIFIKATIONER

MEDFÖLJANDE DELAR

SPECIFIKATION

PRODUKTFUNKTIONER

SÄKERHETSÅD

 SÄKER ARBETSÖVNING

ANVÄNDARGUIDE

MONTERINGS INSTRUKTIONER

BRUKSANVISNING

SKÖTSEL

FELSÖKNING

LÖSNINGSGUIDE

VAD GÖR JAG OM DET SAKNAS DELAR FRÅN MIN BESTÄLLNING?

Om det verkar som om någon del saknas i din beställning, kontakta vårt vänliga och hjälpsamma kundsupportteam inom 7 dagar efter mottagandet.

**FÖR ALLA ANDRA FRÅGOR, VÄNLIGEN KONTAKTA VÅRT
KUNDSUPPORTTEAM.**

Monster Group (UK) is one of the UK's fastest growing online retailers. We supply a diverse range of products which offer exceptional value for money. We strive to provide the best possible customer experience with free UK delivery across all our products and a Monster Guarantee for 100% satisfaction.

For information regarding this device or other products from our Monster divisions please contact Sales.

SALES

TEL: 01347 878 888

EMAIL: hello@monstershop.co.uk

For queries about this device, warranty, returns or reporting faults please contact Support.

SUPPORT

TEL: 01347 878 887

EMAIL: help@monstershop.co.uk

Pour plus d'informations concernant cet appareil ou d'autres produits de nos divisions de Monster veuillez utiliser les détails suivants ci-dessous.

DÉPARTEMENT COMMERCIAL

TEL: 01347 878 888

EMAIL: bonjour@monstershop.eu

Pour les interrogations concernant cet appareil, la garantie, les retours ou les défauts de déclaration veuillez utiliser les détails suivants ci-dessous.

DÉPARTEMENT DE SOUTIEN

TEL: 01347 878 887

EMAIL: help@monstershop.co.uk

Para información sobre este dispositivo u otros productos de nuestras divisiones de Monster por favor use los siguientes detalles.

DEPARTAMENTO DE VENTAS

TEL: 01347 878 888

EMAIL: hola@monstershop.eu

Para consultas sobre este dispositivo, la garantía, devoluciones o denuncias de fallos por favor use los siguientes detalles.

DEPARTAMENTO DE SOPORTE

TEL: 01347 878 887

EMAIL: help@monstershop.co.uk

Für Informationen bezüglich dieses Geräts oder anderer Produkte aus unserer Monster-Abteilung, benutzen sie die folgenden unten aufgeführten Angaben.

VERKAUFABTEILUNG

TEL: 01347 878 888

EMAIL: hallo@monstershop.eu

Für Fragen über dieses Gerät, die Garantie, Rückgaben oder bei Störungen, benutzen sie die folgenden unten aufgeführten Angaben.

SUPPORT-ABTEILUNG

TEL: 01347 878 887

EMAIL: help@monstershop.co.uk

Per informazioni riguardanti questo dispositivo o altri prodotti dalle categorie Monster utilizzare i dettagli sotto riportati.

DIPARTIMENTO VENDITE

TEL: 01347 878 888

EMAIL: ciao@monstershop.eu

Per domande riguardo dispositivo, garanzia, reso o per riferire di guasti, utilizzare i dettagli sotto riportati.

DIPARTIMENTO SUPPORTO

TEL: 01347 878 887

EMAIL: help@monstershop.co.uk

Monster House, Alan Farnaby Way,
Sheriff Hutton Industrial Estate,
Sheriff Hutton, York, YO60 6PG
www.monstershop.co.uk



 Try **Monster**. Buy **Monster**. Be **Monster**. 