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TEL:0573-83225888-503 Http:www.yattool.com

名称: 说明书
客户: CH058
料号: 8458-A063001006-011
成品尺寸: A4(210x297mm)
材质: 70g双胶纸

颜色: 黑白印刷
页数: 11张A4纸

备注:



材质符合欧盟包装指令 (94/62/EC)

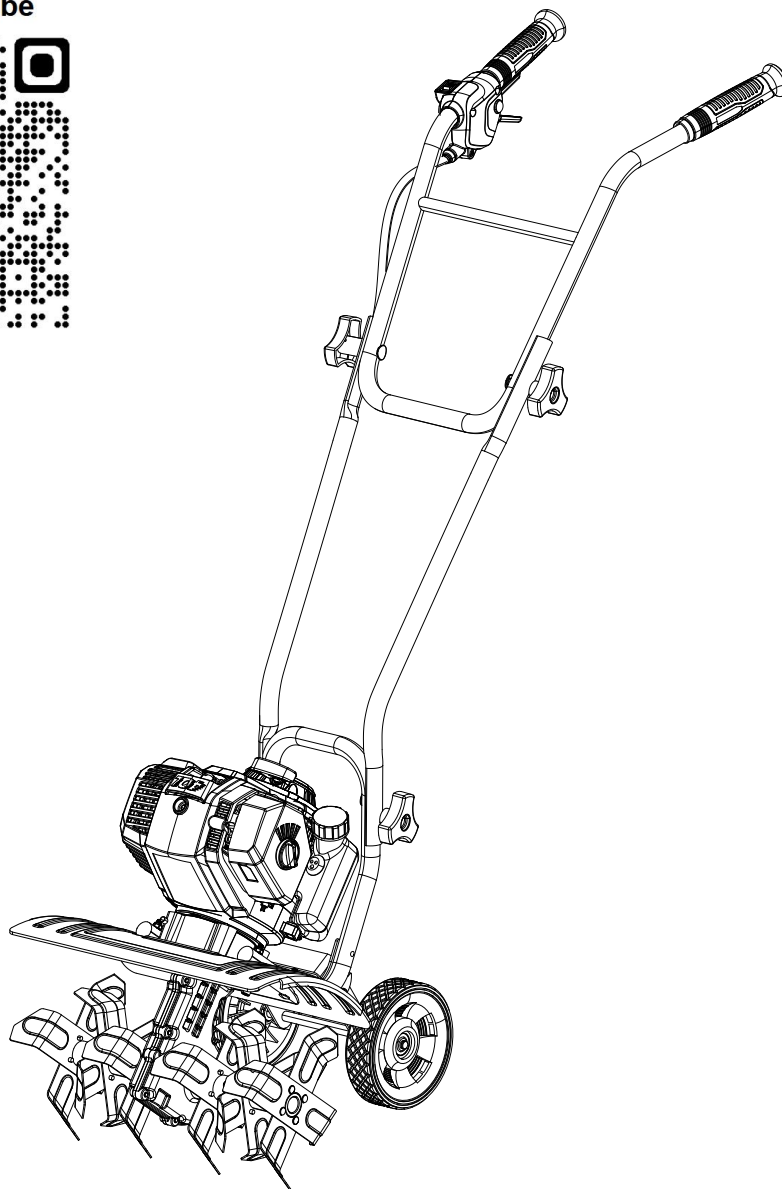


46cc Gasoline Powered Cultivator

Operator's manual

Model: TOA-0457

Using tips:
Video on Youtube



Inquiry@bilthardusa.com
Customer Support:(888)680-2849
MADE IN CHINA

• SAFETY & INTERNATIONAL SYMBOLS •

This operator's manual describes safety and international symbols and pictographs that may appear on this product. Read the operator's manual for complete safety, assembly, operating and maintenance and repair information.



Caution/ Warning.
WARNING-To reduce the risk of injury, user must read instruction manual.



OFF or STOP



Keep hands and feet away from sharp rotating parts – danger of injury! When cleaning, repairing, or inspecting, make certain the working tool and all moving parts have stopped.



Carry unit with carry handle.



Keep bystanders a minimum of 15m (50ft.) away while operating unit.



Risk of flying objects or debris. Be aware of that there is a risk of flying objects and/or debris when using the machine keep bystanders away.



Indicates danger, warning or caution. Precautions that involve your safety.



Wear ear protection.



DO NOT USE E85 OR E15 FUEL IN THIS UNIT. It has been proven that fuel containing greater than 10% ethanol will likely damage this engine and void the warranty.



Wear eye protection.



Always use clean, fresh unleaded fuel. Refer to operator's manual for the proper type of oil.



Avoid power lines, use in dry conditions.



Hot surface. Do not touch a hot muffler or cylinder. You may get burned. These parts get extremely hot from operation. They remain hot for a short time after the unit is turned off.



Do not expose to rain.



Do not smoke in the work area, around the product and in the vicinity of flammable materials!



Push primer bulb, fully and slowly, 10 times.



No open flames in the work area around the product.



ON / START / RUN

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SAFETY INFORMATION



WARNING:

Always wear the appropriate Personal Protective Equipment (PPE) when operating this machine.



DANGER:

Signals an **EXTREME** hazard. Failure to obey a safety **DANGER** symbol **WILL** result in serious injury or death to yourself or to others.



WARNING:

Crude oil, gasoline, diesel fuel and other petroleum products can expose you to chemicals including toluene and benzene, which are known to the State of California to cause cancer and birth defects or other reproductive harm. These exposures can occur in and around oil fields, refineries, chemical plants, transport and storage operations such as pipelines, marine terminals, tank trucks and other facilities and equipment. For more information go to: www.P65Warnings.ca.gov/petroleum.



WARNING:

Signals a **SERIOUS** hazard. Failure to obey a safety **WARNING** symbol **CAN** result in serious injury to yourself or to others.



CAUTION:

Signals a **MODERATE** hazard. Failure to obey a safety **CAUTION** symbol **MAY** result in property damage or injury to yourself or to others.

NOTE: Advises you of information or instructions vital to the operation or maintenance of the equipment.



WARNING:

This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm.



WARNING:

ENGINE EXHAUST, SOME OF ITS CONSTITUENTS AND CERTAIN FINISHED COMPONENTS CONTAIN OR EMIT CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. WASH HANDS AFTER HANDLING.

Read the operator's manual and follow all warnings and safety instructions. Failure to do so can result in serious injury to the operator and/or bystanders.

INTENDED USE

This engine gasoline powered cultivator is intended for loosening and working up the soil in a garden and for tilling coarse soil for mixing in fertilizer, peat and compost in domestic areas.

This product may not be used to till extremely dry or wet soil.

This product is intended for private domestic use only, not for any commercial trade use. It must not be used for any purposes other than those described.

GENERAL SAFETY RULES

- Read, understand, and follow all instructions on the machine and in the manual(s). Be thoroughly familiar with the controls and the proper use of the machine before starting.
- Use this equipment for its intended purpose only.
- Familiarize yourself with all of the safety and operating decals on this equipment and on any of its attachments or accessories.
- Do not put hands or feet near or under rotating parts.
- Only allow responsible individuals who are familiar with the instructions to operate the machine. Do not allow children to operate this machine. Do not allow adults to operate the machine without proper instruction. Thoroughly inspect the area where the machine is to be used and remove all foreign objects. Your equipment can propel small objects at high speed causing injury or property damage. Stay away from breakable objects, such as house windows, automobiles, greenhouses, etc.
- Wear appropriate clothing such as a long-sleeved shirt or jacket. Also wear long trousers or slacks. Do not wear shorts. Never wear sandals, sneakers or open shoes, and never operate the machine with bare feet.
- Do not wear loose clothing or jewelry. They can get caught in moving parts. Always keep hands, feet, hair and loose clothing away from any moving parts of the engine and machine.
- Always wear safety goggles or safety glasses with side shields when operating the machine to protect your eyes from foreign objects which can be thrown from the unit. Always wear a protective hearing device.
- Always wear work gloves and sturdy footwear. Wear footwear that will improve footing on slippery surfaces. Leather work shoes or short boots work well for most people. These will protect the operator's ankles and shins from small sticks, splinters, and other debris.
- It is advisable to wear protective headgear to prevent the possibility of being struck by small flying particles, or being struck by low hanging branches, twigs, or other objects which may be unnoticed by the operator.
- Do not operate the machine without proper guards or other safety protective devices in place.
- See manufacturer's instructions for proper operation and installation of accessories. Only use accessories approved by the manufacturer.
- Operate only in daylight or good artificial light.
- Do not operate product when fatigued or under the influence of alcohol, drugs or other medication which can cause drowsiness or affect your ability to operate this machine safely.
- Never operate machine in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk; never run.
- Watch for traffic when operating cultivator near, or when crossing roads.
- If the equipment should start to

vibrate abnormally, stop the engine (motor) and press and hold the On/Off switch in the off position till the engine stops. The switch will return to the On position automatically.

- Check immediately for cause. Vibration is generally a warning of trouble. If the noise or vibrations of the machine increase, stop immediately and perform an inspection.
- Never leave the machine unattended when the engine is running. Press and hold the On/Off switch in the off position till the engine stops. The switch will return to the On position automatically. The OFF switch will come back to the ON position automatically.
- Regularly inspect the machine. Ensure that no parts are bent, damaged, or loose.
- Temperature of muffler and nearby areas may exceed 150° F (65° C). Never pick up or carry the machine while the engine is running. Allow muffler and engine areas to cool before touching.
- Prolonged exposure to noise and vibration from gasoline engine-powered equipment should be avoided. Take intermittent breaks and/or wear ear protection from engine noise as well as heavy work gloves to reduce vibration in the hands.
- Keep all screws, nuts and bolts tight.
- Do not transport the machine from one place to another with the engine running.
- When moving the packaged machine, always do so with a partner.
- Check local regulations for age restrictions on use of this machine.

PRODUCT-SPECIFIC SAFETY RULES

- Do not cultivate above underground utilities, including water lines, gas lines, electric cables, or pipes. Do not

operate the machine on terrain/soil with large rocks and foreign objects which can damage the equipment.

- After striking a foreign object, stop the engine. Press and hold the On/Off switch in the off position till the engine stops. The switch will return to the On position automatically. Inspect the machine for damage. If damaged, repair before starting and operating the machine.
- The tines of the cultivator should not rotate when the engine is idling. If it does rotate when engine is idling, contact us at Inquiry@bilthardusa.com.
- If an object becomes lodged in the tines, press and hold the On/Off switch in the off position till the engine stops. The switch will return to the On position automatically. Allow to cool before attempting to remove the foreign object.
- The clutch will transfer maximum power after about two hours of normal operation. During this break-in period clutch slippage may occur. The clutch should be kept free of oil or other moisture for efficient operation.

ENGINE SAFETY PRECAUTIONS

If your product comes with a separate engine manual, be sure to read and follow all safety and warning precautions outlined there, in addition to any in this manual.

Preventing Carbon Monoxide Poisoning

- Always start and run engine outdoors. Do not start or run engine in an enclosed area, even if doors or windows are open.
- Never try to ventilate engine exhaust indoors. Carbon monoxide can reach dangerous levels very quickly.
- Never run engine outdoors where exhaust fumes may be pulled into a building.
- Never run engine outdoors in a poorly

ventilated area where the exhaust fumes may be trapped and not easily taken away. (Examples include: in a large hole or areas where hills surround your working area.)

- Never run engine in an enclosed or partially enclosed area. (Examples include: buildings that are enclosed on one or more sides, under tents, car ports or basements.)
- Always run the engine with the exhaust and muffler pointed in the direction away from the operator.
- Never point the exhaust muffler towards anyone. People should always be many feet away from the operation of the engine and its attachments.
- Do not change the engine governor settings or over-speed the engine.

Gasoline Fires and Handling Fuel Safely

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
- When storing extra fuel be sure that it is in an appropriate container and away from any fire hazards.
- Prevent fire and explosion caused by static electricity discharge. Use only nonmetal, portable fuel containers approved by the Underwriter's Laboratory (U.L.) or the American Society for Testing & Materials (ASTM).
- Always fill fuel tank outside in a well ventilated area. Never fill your fuel tank with fuel indoors. (Examples include: basement, garage, barn, shed, house, porch, etc.) Never fill tank near appliances with pilot lights, heaters, or other ignition sources. If the fuel has to be drained, this should be done outdoors. The drained fuel should be stored in a container specifically designed for fuel storage or it should be disposed of carefully.
- Never remove the fuel cap or add fuel with the engine running. Stop engine

and allow to cool before filling.

- Never drain fuel from engine in an enclosed area.
- Always wipe up excess (spilled) fuel from engine before starting.
- Clean up spilled fuel immediately. If fuel is spilled, do not start the engine but move product and fuel container from area. Clean up spilled fuel and allow to evaporate and dry after wiping and before starting.
- Allow fuel fumes/vapors to escape from the area before starting engine.
- Test the fuel cap for proper installation before starting and using engine.
- Always run the engine with fuel cap properly installed on the engine.
- Never smoke while refilling engine fuel tank.
- Do not store engine with fuel in fuel tank indoors. Fuel and fuel vapors are highly explosive.
- Never siphon fuel by mouth to drain fuel tank.
- Always have an adult fill the fuel tank and never allow children to fill the fuel tank.
- Never allow an adult or anyone under the influence of drugs or alcohol to fill the fuel tank.
- When storing gasoline or equipment with fuel in the tank, store away from furnaces, stoves, water heaters or other appliances that have a pilot light or other ignition source because they can ignite gasoline vapors.



WARNING:

ENGINES GIVE OFF CARBON MONOXIDE, AN ODORLESS, COLORLESS, POISONOUS GAS. CARBON MONOXIDE MAY BE PRESENT EVEN IF YOU DO NOT SMELL OR SEE ANY ENGINE EXHAUST. BREATHING CARBON MONOXIDE CAN CAUSE NAUSEA, FAINTING OR DEATH, IN ADDITION TO DROWSINESS,

DIZZINESS AND CONFUSION. IF YOU EXPERIENCE ANY OF THESE SYMPTOMS, SEEK FRESH AIR AND MEDICAL ATTENTION IMMEDIATELY.

BURNS AND FIRES

The muffler, muffler guard and other parts of the engine become extremely hot during the operation of the engine. These parts remain extremely hot after the engine has stopped.

Prevention of Burns and Fires

- Never remove the muffler guard from the engine.
- Never touch the muffler guard because it is extremely hot and will cause severe burns.
- Never touch parts of the engine that become hot after operation.
- Always keep materials and debris away from muffler guard and other hot parts of the engine to avoid fires.

CHILDREN AND BYSTANDERS

Tragic accidents can occur if the operator is not alert to the presence of children and/or bystanders. Never assume that others will remain where you last saw them.

- Keep the area of operation clear of all persons, especially small children and pets. Keep children under the watchful care of a responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and while moving backwards, look behind and down for small children.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.



WARNING:

HOT GASES ARE A NORMAL BY-PRODUCT OF A FUNCTIONING

INTERNAL COMBUSTION ENGINE. FOLLOW ALL SAFETY INSTRUCTIONS TO PREVENT BURNS AND FIRES.

SERVICE

- Always stop the engine whenever you leave the equipment, before cleaning, repairing or inspecting the unit. Engine should be turned off and cool. Never make adjustments or repairs with the engine (motor) running.
- Always wear eye protection when you make adjustments or repairs.
- Keep all nuts and bolts tight and keep equipment in good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- When servicing or repairing the machine, do not tip the machine over or up unless specifically instructed to do so in this manual. Service and repair procedures can be done with the machine in an upright position. Some procedures will be easier if the machine is lifted on a raised platform or working surface.
- To reduce fire hazard, keep machine free of grass, leaves or other debris build-up. Clean up oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Clean and replace safety and instruction decals as necessary.
- Inspect machine before storage. When not in use, press and hold the On/Off switch in the off position till the engine stops. The switch will return to the On position automatically. And store indoors in a dry place locked or otherwise inaccessible to children.
- Use only original equipment parts for the manufacturer including all nuts and bolts.

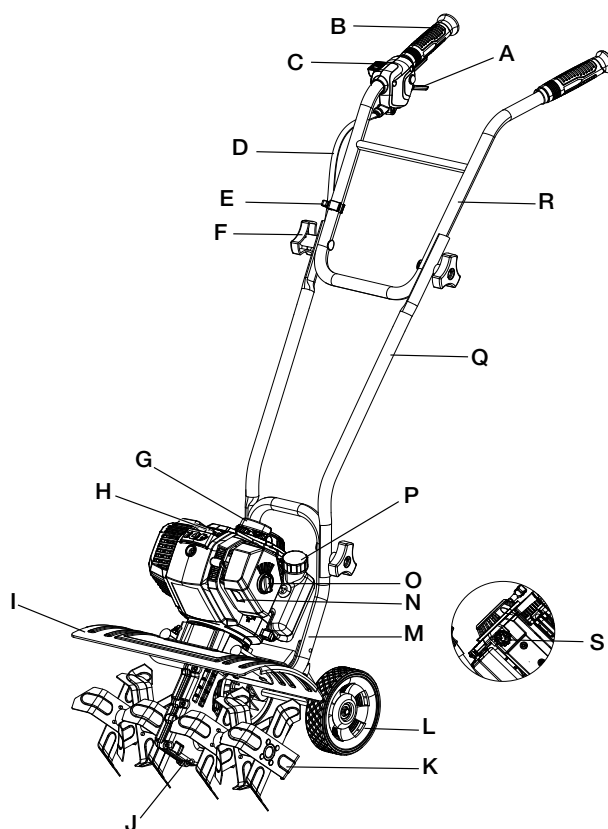
SAVE THESE INSTRUCTIONS

KNOW YOUR UNIT

Model: TOA-0457




As a cultivator:

Loosening and working up the soil in a garden and for tilling coarse soil for mixing in fertilizer, peat and compost in domestic areas.



A	Throttle lever	K	Tines
B	Handle grip (left and right)	L	Wheel
C	On/off switch	M	Lower handle bar
D	Cable	N	Choke button
E	Cable clip	O	Air filter knob
F	Knob	P	Fuel cap
G	Starter grip and rope	Q	Middle handle bar
H	Primer bulb	R	Upper handle bar
I	Guard	S	Oil fill plug
J	Gearbox		

Hardware Pack

Image	Part	Quantity
	Knob Ø55	4
	Bolt M8*51.2	4
	Gaskets Ø18.7	4

SPECIFICATIONS*

Model	TOA-0457
Engine displacement	46 cc
Max. engine power	1400 W
Blade speed	250 RPM
Blade cutting width	15.7 in. (400 mm)
Blade cutting depth	7.84 in. (200 mm Max.)
Fuel tank capacity	28.16 oz. (800 ml)
Oil tank capacity	3.37 oz. (100 ml)
Weight approx.	33 lbs. (15 Kg)

ASSEMBLY

This product requires assembly. Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included. Inspect the product carefully to make sure no breakage or damage occurred during shipping.

Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.

WARNING:

The equipment and packaging material are not toys. Do not let children play with plastic bags, foils, or small parts. These items can be swallowed and pose a suffocation risk!

INSTALLING THE HANDLE BAR

The product must be fully assembled before operation! Do not use a product that is only partly assembled or assembled with damaged parts.

Follow the assembly instructions step-by-step and use the pictures provided as a visual guide to easily assemble the product!

Never start the engine before it is completely assembled!

1. Set up the cultivator on flat and firm ground to ensure safe and sturdy operating.
2. Align the holes in the middle handle bar (BB) with the holes in the lower handle bar (M) and secure the connection with the bolts (AA), knobs (DD), and gaskets (CC) (Fig. 1).
3. Align the holes in the upper handle bar (R) with the holes in the middle handle bar (BB) and secure the connection with the bolts (AA), knobs (DD), and gaskets (CC) (Fig. 2).

Fig. 1

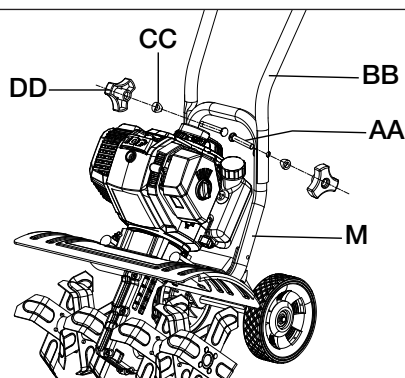
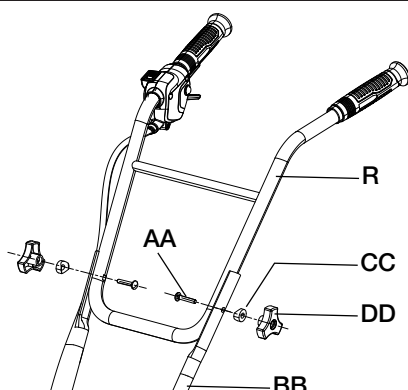
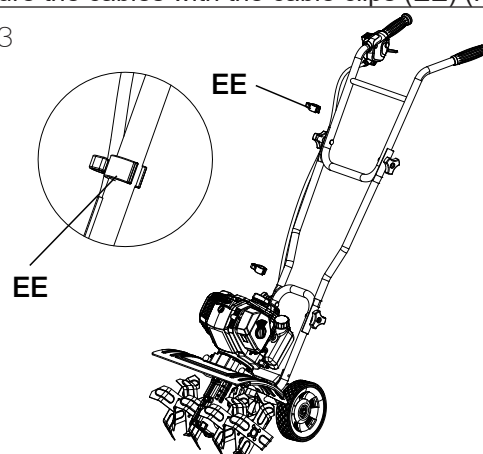


Fig. 2



4. Secure the cables with the cable clips (EE) (Fig. 3).

Fig. 3



ADDING OIL: INITIAL USE

CAUTION:

Attempting to start the engine before it has been properly filled with lubricant will result in equipment failure not covered by the warranty.

WARNING:

Overfilling the crankcase may cause serious issues. Check the oil level before each use. The importance of maintaining the proper oil level cannot be overemphasized. Change the oil according to the Maintenance Schedule.

CAUTION:

Do not overfill. Overfilling the crankcase may cause excessive smoke, oil loss, and engine damage.

NOTE: Oil must be added before starting the unit.

NOTE: This unit comes with a 3.37 fluid oz. (100 ml SAE 10W-30) container of oil.

1. Set the unit on a flat, level surface horizontally as shown below (Fig. 4).
2. Unscrew the oil fill plug (Fig. 5).
3. Pour the 3.37 fluid oz. (100 ml) oil into the oil fill hole. DO NOT overfill.
4. Insert the dipstick into the fill spout but do NOT screw in. Remove dipstick and check the oil level.
5. When oil level is full, the oil will be between the upper limit and lower limit on the dipstick. If oil level is below the lower limit, add oil until the fluid level rises between the upper limit and lower limit on the dipstick (Fig. 5).

NOTICE: Never add oil to the fuel tank. This unit has a four-cycle engine. DO NOT mix oil with gasoline.

6. Wipe up any oil that may have spilled.
7. Reinstall the oil fill plug (Fig. 5).

ASSEMBLY

Fig. 4

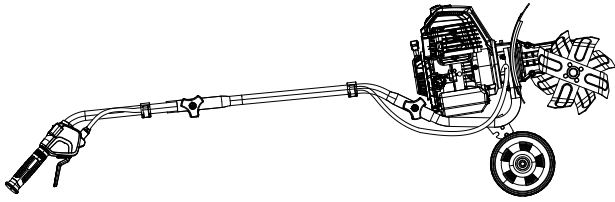
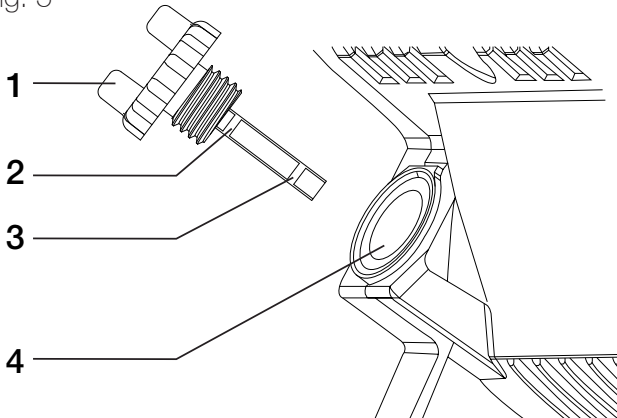


Fig. 5



1	Oil fill plug/Dipstick
2	Upper limit
3	Lower limit
4	Oil fill hole

USING THE RIGHT OIL

Use a high-quality SAE 10W-30 weight oil. DO NOT use dirty oil. Failure to use clean oil of the correct type can cause premature engine wear and failure.

FUELING THE UNIT



WARNING:

Gasoline is extremely flammable. Ignited vapors may explode. Always stop the engine and allow it to cool before filling the fuel tank. Do not smoke while filling the tank. Keep sparks and open flames at a distance from the area.

Remove the fuel cap slowly to avoid injury from fuel spray. Never operate the unit without the fuel cap securely in place.

Add fuel in a clean, well-ventilated outdoor area. Wipe up any spilled fuel immediately. Avoid creating a source of ignition for spilled fuel. Do not start the engine until fuel vapors dissipate.



WARNING:

Gasoline and its vapors are highly flammable and explosive. To prevent serious injury and property damage, handle it with care. Keep away from ignition sources

and open flames, handle outdoors only.

Pour fuel outdoors where there are no sparks or flames. Slowly remove the fuel cap after stopping the engine. Do not smoke while fueling. Wipe spilled fuel from the unit. Move at least 3 m (10 ft) away from the fueling source before starting the engine.

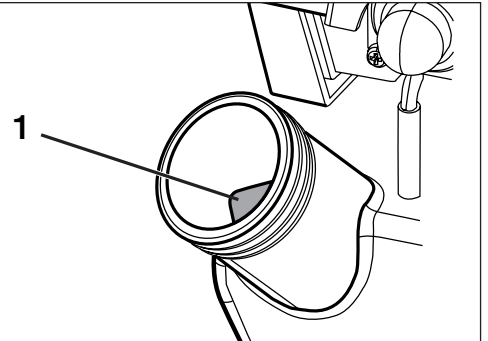


WARNING:

Always wear heavy, long pants, boots, gloves, and a long-sleeve shirt. Do not wear loose clothing, jewelry, short pants, sandals, or go barefoot. Secure hair so it is above shoulder level.

1. Position the unit with the fuel cap facing up.
2. Slowly remove the fuel cap.
3. Place the fuel container spout into the fuel tank fill hole and fill the tank. Stop adding fuel when you see that the level reaches the base of the tank spout (Fig. 6).
4. Wipe up any fuel that may have spilled.
5. Reinstall the fuel cap.
6. Move the unit at least 3 m (10 ft) from the fuel container and the fueling site before starting the engine.

Fig. 6



1	Base of the tank spout
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OPERATION

WARNING:

Do not allow familiarity with this product to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

WARNING:

Always wear eye protection along with hearing protection. Failure to do so could result in objects being thrown into your eyes and other possible serious injuries.

WARNING:

Do not use any attachments or accessories not recommended by the manufacturer of this product. The use of attachments or accessories not recommended can result in serious injury.

WARNING:

Operation of this equipment could create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

USING THE RIGHT FUEL

The use of old fuel is the most common cause of performance problems. Use only fresh, clean unleaded gasoline less than 30 days old.

NOTICE: This unit has a four-cycle engine. DO NOT mix oil with gasoline.

Definition of Blended Fuels

Today's fuels are often a blend of gasoline and oxygenates such as ethanol, methanol or MTBE (ether). Alcohol-blended fuel absorbs water. As little as 1% water in the fuel can make fuel and oil separate, forming acids when stored. ALWAYS use fresh fuel (less than 30 days old) with less than 10% ethanol. Dispose of old fuel according to federal, state and local regulations.

Using Blended Fuels

If using a blended fuel:

Always use fresh, unleaded gasoline.

Use the fuel additive STA-BILL® or an equivalent.

WARNING:

DO NOT USE E85 OR E15 FUEL IN THIS UNIT. It has been proven that fuel containing greater than 10% ethanol will likely damage this engine and void the warranty.

WARNING:

Operate this unit only in a well-ventilated outdoor area. Carbon monoxide exhaust fumes can be lethal in a confined area.

USING THE RIGHT OIL TYPE

Using the proper type and weight of oil in the crankcase is extremely important.

Check the oil before each use and change the oil regularly. Failure to use the correct oil, or using dirty oil, can cause premature engine wear and failure.

Use a high-quality SAE 10W-30 weight oil of API (American Petroleum Institute) service class SF, SG, SH.

WARNING:

Avoid accidentally starting the unit. To avoid serious injury, the operator and the unit must be in a stable position when pulling the starter rope.

WARNING:

Do not operate the unit inside a closed environment, such as a room or building; breathing carbon monoxide from exhaust fumes can kill.

WARNING:

Inspect unit before each use. Replace damaged parts. Check for fuel leaks. Make sure all fasteners are in place and secure. Replace cutting attachment parts that are cracked, chipped, or damaged in any way. Make sure the cutting attachment is properly installed and securely fastened. Make sure the cutting attachment shield is properly attached and in the position recommended by the manufacturer.

CAUTION:

Clear the area to be tilled before each use. Remove all objects such as rocks, broken glass, nails, wire, or string which can be thrown or become entangled in the cutting attachment. Clear the area of children, bystanders, and pets outside a 50 ft (15 m) radius: there is still a risk of injury from thrown objects outside the 50 ft (15 m) zone. Bystanders should be encouraged to wear eye protection.

If you are approached, stop the engine and cutting attachment. In the case of bladed units, there is the added risk of injury to bystanders from being struck with the moving blade.

WARNING:

In some countries regulations define at what time of the day and on what special days products are allowed to be used and what restrictions apply! Ask your community for detailed information and observe the regulations in order to preserve a peaceful neighborhood and avoid committing administrative offences.

WHEEL ADJUSTMENT

WARNING:

Always wear safety glasses, ear protection and work gloves during operation. Avoid wearing loose clothing and accessories.

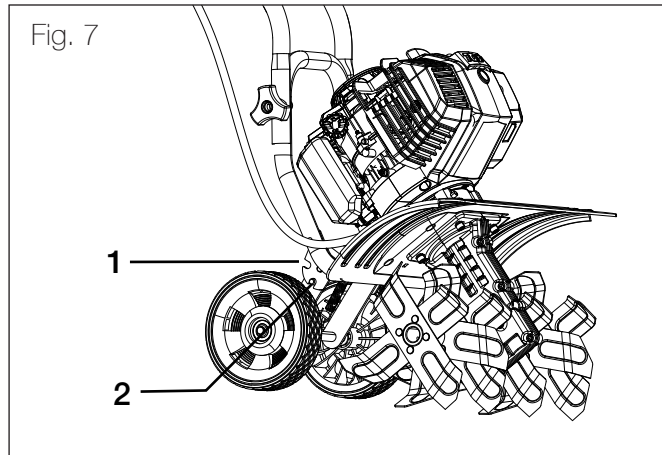
OPERATION

The wheels can be adjusted to two positions.

1. Pull on the wheel and move it to required position, let go of the wheel and make sure it locks in position (Fig. 7).

WARNING:

The wheels can be adjusted in two different positions. Always ensure the wheels are securely locked! Do not attempt to use the product with the wheels in any other position or unlocked!



1	Working
2	Transport

STARTING INSTRUCTIONS

1. When oil level is full, the oil will be between the upper limit and lower limit on the dipstick. If oil level is below the lower limit, add oil until the fluid level rises between the upper limit and lower limit on the dipstick. Reinstall the oil fill plug. (Fig. 5)
2. Fill the fuel tank. Stop adding the fuel when you see that the level reaches the base of the tank spout.
3. Slowly press and release the primer bulb 10 times (Fig. 8).
4. Push the choke button in until it clicks (Fig. 9).

NOTE: The choke automatically disengages when the throttle lever is squeezed.

5. Pull the starter rope with a controlled and steady motion five times until engine starts or attempts to start (Fig. 10).
6. Squeeze the throttle lever to release the choke button (Fig. 11).

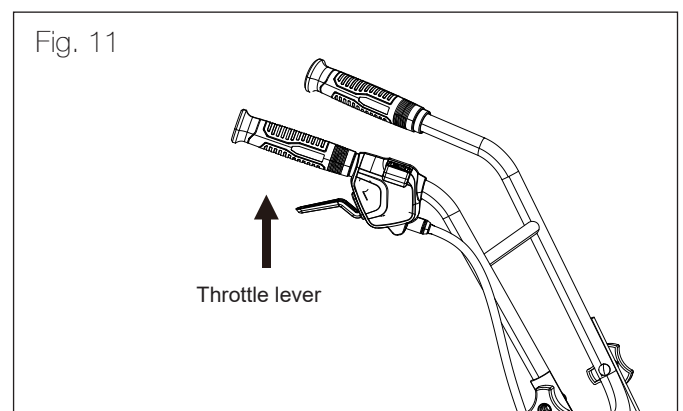
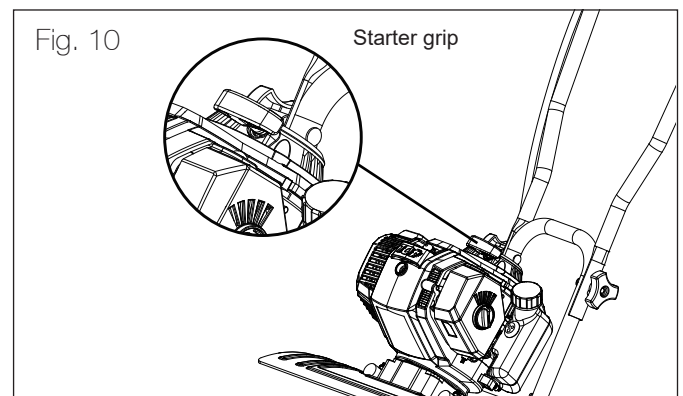
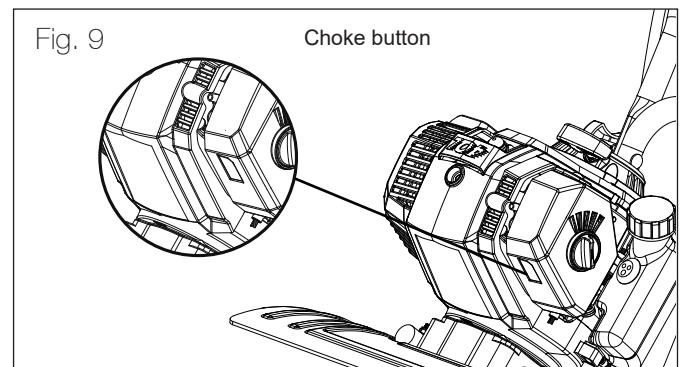
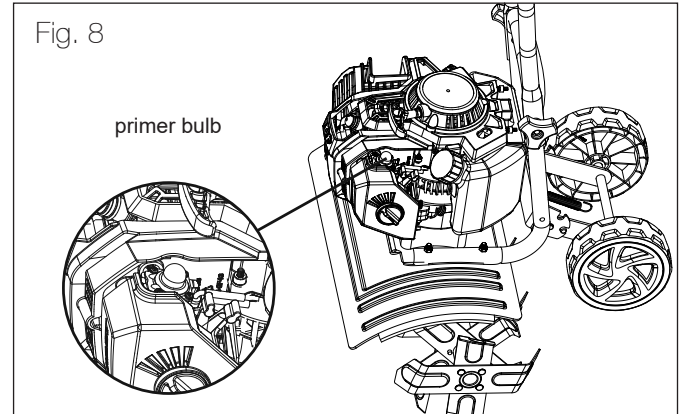
IF the engine fails to start, squeeze the throttle control to release choke button, then pull the starter rope until the engine starts.

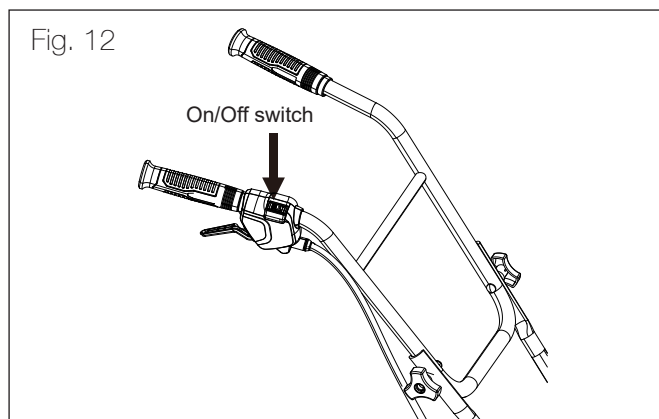
IF THE ENGINE IS HOT... begin the starting procedure with step 5.

STOPPING INSTRUCTIONS

1. Release the throttle lever and allow the engine to idle.
2. Press and hold the On/Off switch in the Off (O) position until the engine comes to a complete stop (Fig. 12). Make sure the cutting attachment has stopped before the unit is set down.

NOTE: This OFF switch will come back to the ON position automatically.





HOLDING THE UNIT

- Stand in the operating position (hold the machine in front of your body). Stand up straight. Do not bend over.
- Keep feet apart and firmly planted.
- Hold the handle with two hands. Keep the arms straight.
- Do not over-reach; Keep all parts of your body away from the rotating cutting attachment and hot surfaces.

WARNING:

Do not operate the machine with a damaged or excessively worn cutting device.

CLEARING JAMS

If the blades get jammed by a wire or other obstruction and cannot move, follow these important safety rules:

- NEVER reach for, or try to remove, jammed material while the engine is running.
- ALWAYS switch the unit off and wait for blades to stop before clearing a jam.
- ALWAYS inspect the blades after clearing a jam to make sure all jammed material has been cleared, and to make sure blades are not damaged.

MAINTENANCE

When servicing, use only identical replacement parts. Use of any other parts could create a hazard or cause product damage.

NOTICE: Users are not allowed to set the carburetor or ignition. If further assistance is required, take the unit to a qualified service dealer.

! WARNING:

To avoid serious injury, always stop the engine and allow it to cool before cleaning or maintaining the unit. Never perform cleaning or maintenance while the unit is running. Disconnect the spark plug wire to prevent the unit from starting accidentally.

! WARNING:

Wear protective clothing and observe all safety instructions to prevent serious injury.

CLEANING

Use a small brush to clean the outside of the unit. Do not use strong detergents. Household cleaners that contain aromatic oils such as pine and lemon, and solvents such as kerosene, can damage plastic. Wipe off any moisture with a soft cloth.

Correct and regular cleaning is not only important for the safe use of this product, but also extends its life span.

LUBRICATION

For a long lifespan, make sure that the cutting blades are cleaned and lubricated at regular intervals in order to ensure the best possible performance. Routinely apply a thin film of lubricating oil.

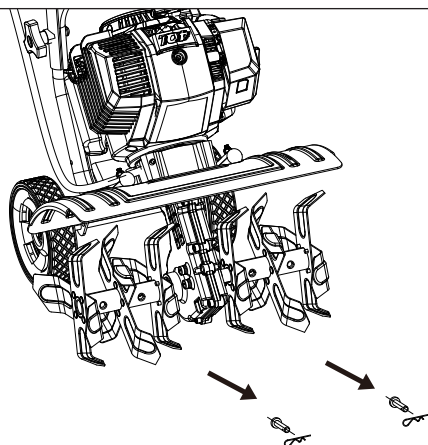
REPLACING THE BLADES

! WARNING:

To avoid serious injury, always stop the engine and allow it to cool before replacing the blades.

To replace the blades, take off the pin. Take off the broken blades and replace the new blades according to the original position (Fig. 13). Re-insert the pin to secure the blades.

Fig. 13



MAINTENANCE SCHEDULE

! WARNING:

While the engine is idling, the user should routinely check that the cutting attachment stops turning.

! WARNING:

To prevent any danger or defects, user should check and maintain every part of the machine before use and after dropping or other impacts.

Perform these required maintenance procedures at the frequency stated in the table. These procedures should also be a part of any seasonal tune-up.

NOTE: Some maintenance procedures may require special tools or skills. If you are unsure about these procedures, take the unit to a qualified service dealer.

NOTE: Maintenance, replacement, or repair of the emission control devices and system may be performed by a qualified service dealer.

NOTE: Please read the California/EPA statement that came with the unit for a complete listing of terms and coverage for the emissions control devices, such as the spark arrestor, muffler, carburetor, etc.

FREQUENCY	MAINTENANCE REQUIRED
Every 10 hours	<ul style="list-style-type: none">Clean the air filter. Refer to Maintaining the Air Filter.
Every 20 hours	<ul style="list-style-type: none">Change the oil. Refer to Changing the Oil.Replace the oil after the first 5 hours.
Every 30 hours	<ul style="list-style-type: none">Have the rocker arm clearance checked by a qualified service dealer.Check the spark plug condition and gap. Refer to Maintaining the Spark Plug.

NOTE: If the engine frequently work under dusty or other severe circumstances, increase the cleaning frequency.

REMARKS

- The maintenance interval is only a recommendation for machines in ordinary operating condition.
- If there are any abnormal signs from the machine, please do the proper inspection and maintenance immediately.
- All other repairs or maintenance should be done by a qualified service center

CHECKING THE OIL LEVEL

! WARNING:

Check the oil level before each use. The importance of maintaining the proper oil level cannot be overemphasized.

Inspecting the Oil Level

MAINTENANCE

1. Stop the engine and allow it to cool.
2. Set the unit on a flat, level surface horizontally.

NOTE: Failure to keep the engine level may result in a faulty oil level reading.

3. Remove dipstick and check oil level. When oil level is full, the oil will be between the upper limit and lower limit on the dipstick (Fig. 14). If the oil level is too low, add oil. Refer to Adding Oil.

Adding Oil

1. Set the unit on a flat, level surface horizontally.
2. Clean the area around the oil fill plug (Fig. 14) to prevent debris from entering the oil fill hole.
3. Unscrew the oil fill plug.
4. Insert the dipstick into the fill spout but do NOT screw in. Remove the dipstick and check the oil level. Add oil until the fluid level rises between the upper limit and lower limit on the dipstick (Fig. 14).

NOTE: If the oil level is too high, tip the unit and drain the excess oil into an appropriate container.

5. Wipe up any oil that may have spilled.
6. Reinstall the oil fill plug.

WARNING:

DO NOT overfill the oil level. Overfilling will result in too much oil in the engine crankcase, and may cause smoke or fumes that can injure the user.

CHANGING THE OIL

WARNING:

Old engine oil is considered special waste and has to be disposed according to your local environment protection regulation. Do not pour the oil into a garbage can, sewer, soil etc.

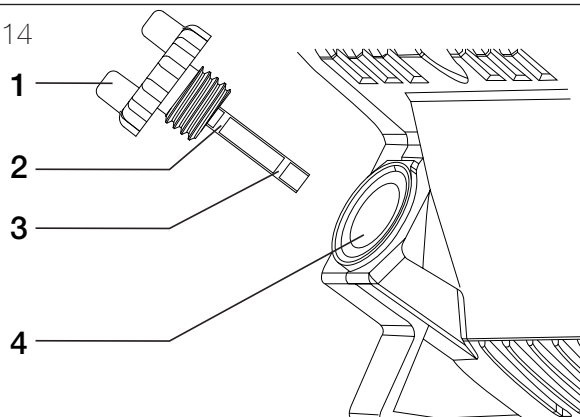
Change the oil while the engine is still warm. The oil will flow freely and carry away more impurities.

1. Clean the area around the oil fill plug (Fig. 14) to prevent debris from entering the oil fill hole.
2. Unscrew the oil fill plug.
3. Tip the unit vertically to pour the oil out of the oil fill hole and into a container (Fig. 15). Allow ample time for complete drainage.

NOTE: Dispose of the old oil according to federal, state and local regulations.

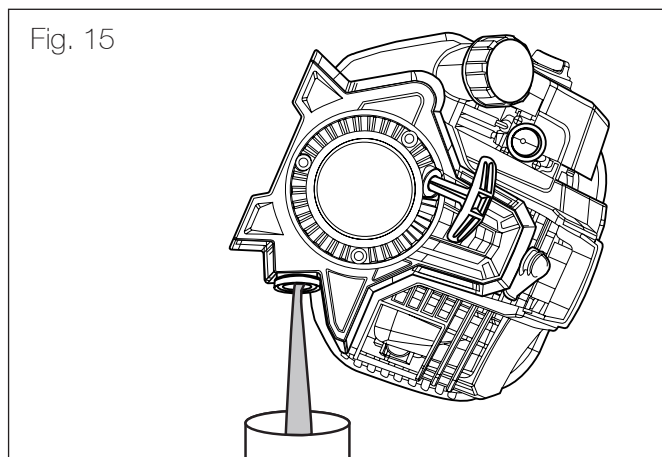
4. Wipe up any oil that may have spilled.
5. Set the unit on a flat, level surface horizontally.
6. Pour 3.37 oz. (100 ml SAE 10W-30) of SAE 30 oil into the oil fill hole. When oil level is full, the oil will be between the upper limit and lower limit on dipstick (Fig. 14). If the oil level is too low, add oil. Refer to Adding Oil.
7. Wipe up any oil that may have spilled.
8. Reinstall the oil fill plug.

Fig. 14



1	Oil fill plug/Dipstick
2	Upper limit
3	Lower limit
4	Oil fill hole

Fig. 15



WARNING:

DO NOT overfill the oil level. Overfilling will result in too much oil in the engine crankcase, and may cause smoke or fumes that can injure the user.

MAINTAINING THE AIR FILTER

Failure to maintain the air filter can result in poor performance or can cause permanent damage to the engine. Engine failure due to improper air filter maintenance is not covered by the product warranty.

Cleaning the Air Filter

1. Unscrew the air filter knob completely. Remove the air filter cover from the air filter housing (Fig. 16).
2. Remove the air filter from the air filter housing.
3. Wash the air filter in detergent and water. Rinse the air filter thoroughly and allow it to dry.
4. Reinstall the air filter in the air filter housing (Fig. 16).

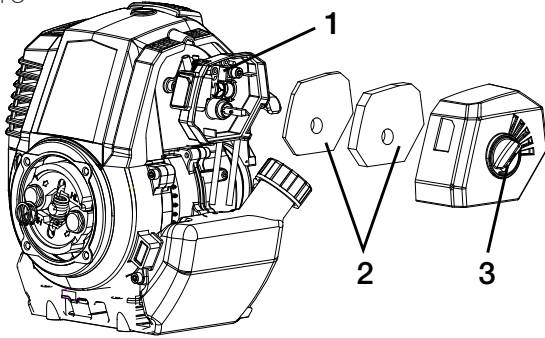
NOTICE: Operating the unit without the air filter and air filter cover will VOID the warranty.

5. Insert the tab on the air filter cover into the hole in the air filter housing. Push the air filter cover back onto the air filter housing. Tighten the air filter knob to se-

MAINTENANCE

cure the air filter cover (Fig. 16).

Fig. 16



1	Air filter housing
2	Air filter
3	Air filter knob

NOTICE: Do not overtighten as this may strip the air filter knob.

ADJUSTING THE IDLE SPEED

! WARNING:

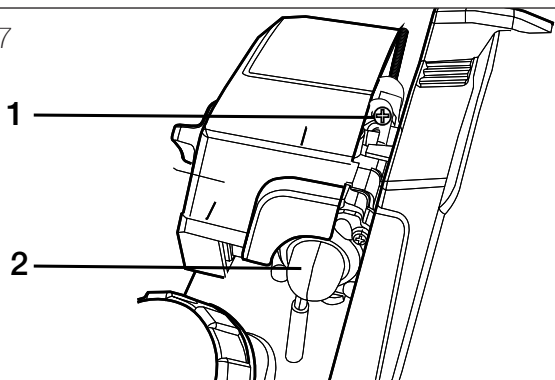
The cutting blades will move when adjusting the idle speed. Wear all protective clothing and keep all bystanders, children, and pets at least 50 ft. away. Make adjustments with the unit supported by hand so that the cutting blades does not contact the ground or any object.

Keep all parts of your body away from the cutting blades and muffler. Failure to follow these instructions could result in serious injury.

If the engine will not idle properly:

1. Start the engine. Refer to STARTING INSTRUCTIONS.
2. Release the throttle control and let the engine idle.

Fig. 17



1	Idle speed screw
2	Primer bulb

- If the engine stops, increase the idle speed. Use a small screwdriver to turn the idle speed screw clockwise, 1/8 of a turn at a time, until the engine idles

smoothly (Fig. 17).

- If the cutting blades spin when the engine idles, reduce the idle speed. Turn the idle speed screw counterclockwise, 1/8 of a turn at a time, until the cutting head stops moving.

! WARNING:

The cutting attachment should never turn at idle. Turn the idle speed screw counterclockwise to reduce the idle RPM and stop the cutting attachment, or contact us at 1-800-261-3981 for adjustment and discontinue use until the repair is made. Serious injury could result from the cutting attachment turning at idle.

MAINTAINING THE SPARK PLUG

1. Stop the engine and allow it to cool. Grasp the spark plug boot firmly and pull it from the spark plug.
2. Clean around the spark plug. Remove the spark plug from the cylinder head with a 5/8-inch socket, turning counterclockwise.

! CAUTION:

Do not remove the spark plug when the engine is hot.

! CAUTION:

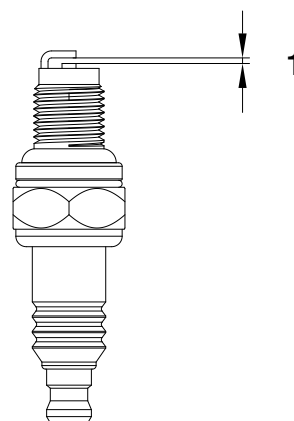
Do not sand blast, scrape or clean spark plug electrodes. Grit in the engine could damage the cylinder.

3. Inspect the spark plug. If the spark plug is cracked, fouled or dirty, replace it with replacement part refer to PART or an equivalent spark plug.
4. Use a feeler gauge to set the air gap at 0.6 mm - 0.8 mm (0.025 in. - 0.031 in.) (Fig. 18).
5. Install the spark plug in the cylinder head. Tighten the spark plug with a 5/8-inch socket, turning it clockwise until snug.

NOTICE: If using a torque wrench, torque to 12 N•m. Do not over tighten.

6. Reattach the spark plug boot.

Fig. 18



1	0.60 mm - 0.80 mm 0.025 in. - 0.031 in.
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STORAGE

- Never store a fueled unit where fumes may reach an open flame or spark.
- Allow the engine to cool before storing.
- Lock up the unit to prevent unauthorized use or damage.
- Store the unit in a dry, well-ventilated area.
- Store the unit out of the reach of children.
- Store the unit after cleaning the cutting blade.

Short-term Storage (1-2 weeks)

Store the unit in a horizontal position.

Long-term Storage

1. Remove the fuel cap, tip the unit and drain the fuel into an approved container. Reinstall the fuel cap.
2. Start the engine and allow it to run until it stalls. This ensures that all fuel has been drained from the carburetor.
3. Allow the engine to cool. Remove the spark plug and put 5 drops of any high quality motor oil into the cylinder. Pull the starter rope slowly to distribute the oil. Reinstall the spark plug.
4. Thoroughly clean the unit and inspect it for any loose or damaged parts. Repair or replace damaged parts and tighten loose screws, nuts or bolts.
5. Store the unit in a horizontal position.

Preparing the Unit for Use after Long-term Storage

1. Remove the spark plug. Tip the unit and drain all of the oil from the cylinder into an approved container. Reinstall the spark plug.
2. Change the oil. Refer to Changing the Oil.

NOTICE: Do not use fuel that has been stored for more than 30 days. Dispose of old fuel and oil according to federal, state and local regulations.

TRANSPORTATION



CAUTION:

Protect the product from any heavy impact or strong vibrations which may occur during transportation in vehicles.

Transport the unit in a horizontal position. If not possible, transport the unit vertically with the engine at the top. Secure the unit to prevent damage during transport. Secure the unit to prevent it from slipping or falling over.

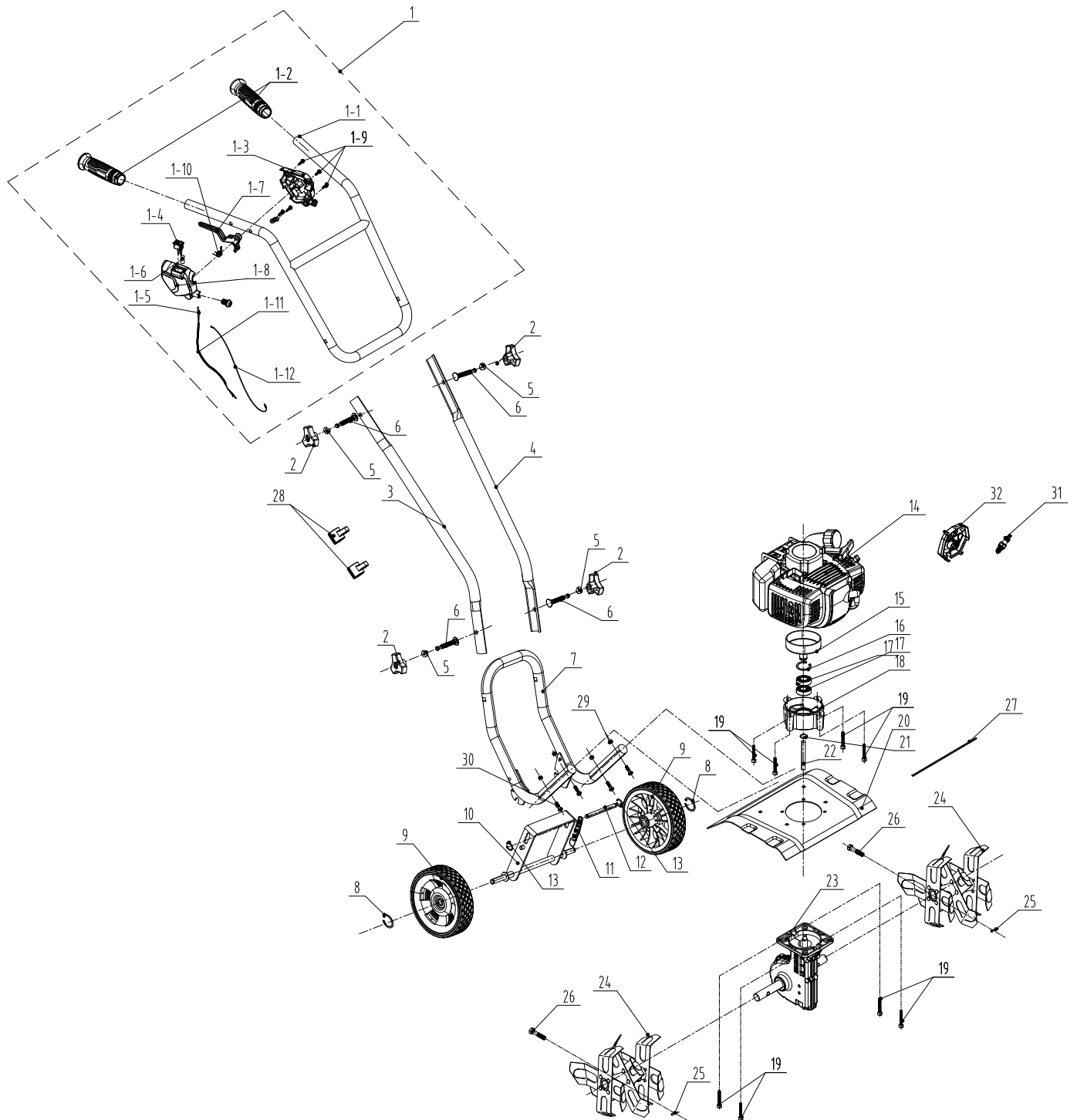
TROUBLESHOOTING

PROBLEM	SOLUTION
THE ENGINE WILL NOT START.	
The fuel tank is empty.	Fill the fuel tank with fresh fuel.
The primer bulb was not pressed enough.	Press the primer bulb 10 times.
The fuel is old (over 30 days).	Drain the fuel tank and add fresh fuel.
The spark plug is fouled.	Replace the spark plug.
THE ENGINE WILL NOT IDLE.	
The air filter is dirty.	Clean or replace the air filter.
The fuel is old (over 30 days).	Drain the fuel tank and add fresh fuel.
Idle speed screw needs adjustment.	Turn idle speed screw clockwise to increase idle speed.
THE ENGINE EMITS TOO MUCH SMOKE.	
Too much oil in crankcase.	Drain engine oil and refill with correct amount of engine lubricant.
THE ENGINE WILL NOT ACCELERATE.	
The fuel is old (over 30 days).	Drain the fuel tank and add fresh fuel.
The cutting blades is bound with any objects.	Stop the engine and clean the cutting blades.
The air filter is dirty.	Clean or replace the air filter.
THE ENGINE LACKS POWER OR STALLS.	
The fuel is old (over 30 days).	Drain the fuel tank and add fresh fuel.
The air filter is dirty.	Clean or replace the air filter.
The spark plug is fouled.	Replace the spark plug.
UNSATISFACTORY CUTTING PERFORMANCE.	
Cutting blade is dull/damaged.	Replace or contact a qualified service dealer.
Cutting material exceeds capacity.	Only cut material according to the capacity of the unit.
EXCESSIVE VIBRATION/NOISE OR EXHAUST.	
Bolts/Nuts are loose.	Tighten.
Gas/oil is incorrect.	Empty unused fuel and oil. Refill with fresh fuel and oil.

If further assistance is required, take the unit to a qualified service dealer.

PARTS

MODEL TYPE: TOA-0457



PARTS

No.	Part #	Description	Qty.
1	6949393101229	Switch box assembly	1
1-1	6949393075155	Upper push rod	1
1-2	6949393075162	Pipe Sleeve	2
1-3	6949393075308	Switch box	1
1-4	6949393069871	Rocker switch	1
1-5	6949393075278	Flameout line	1
1-6	6949393075346	Heat shrinkable tube	0.03
1-7	6949393101236	Trigger	1
1-8	6949393075292	Switch box	1
1-9	6949393075339	Self tapping screw	3
1-10	6949393075322	Double torsion spring	1
1-11	6949393069888	Wave tube	1.3
1-12	6949393075261	Cable assembly	1
1-13	6949393075315	Rubber cap	1
2	6949393101243	Knob	4
3	6949393075179	Middle push rod Q235	1
4	6949393075186	Middle push rod Q235	1
5	6949393050046	Plastic pad	4
6	6949393075193	Bolt Q235	4
7	6949393075209	Lower push rod Q235	1
8	6949393046278	Collar	2
9	6949393101250	wheel	2
10	6949393075223	Wheel Shaft bracket	1
11	6949393049811	Wheel regulate spring	1
12	6949393075230	Shaft Q235	1
13	6949393017070	Shaft retaining ring	2
14	6949393101267	Engine head assembly 46CC	1
15	6949393075513	Passive disk Q235+45,	1
16	6949393075520	Retaining Ring 65Mn	1
17	6949393075537	Deep groove ball bearing	2
18	6949393075544	Fixed seat	1
19	6949393075551	Bolt M6*40	8
20	6949393075568	Panel Q235	1
21	6949393075575	Circlip	1
22	6949393075582	Flexible shaft 65Mn	1
23	6949393075599	Turbine box assembly	1
24	6949393049729	Rotary tilling knife assembly	2
25	6949393075605	Cotter pin	2
26	6949393075612	Pin Shaft	2
27	6949393002557	Cable tie	1
28	6949393075629	Thread buckle PP	2
29	6949393006746	Lock nut	4
30	6949393006739	Cup head square neck bolt	4
31	6949393069420	Spark plug	1
32	6949393101274	Air filter	1

