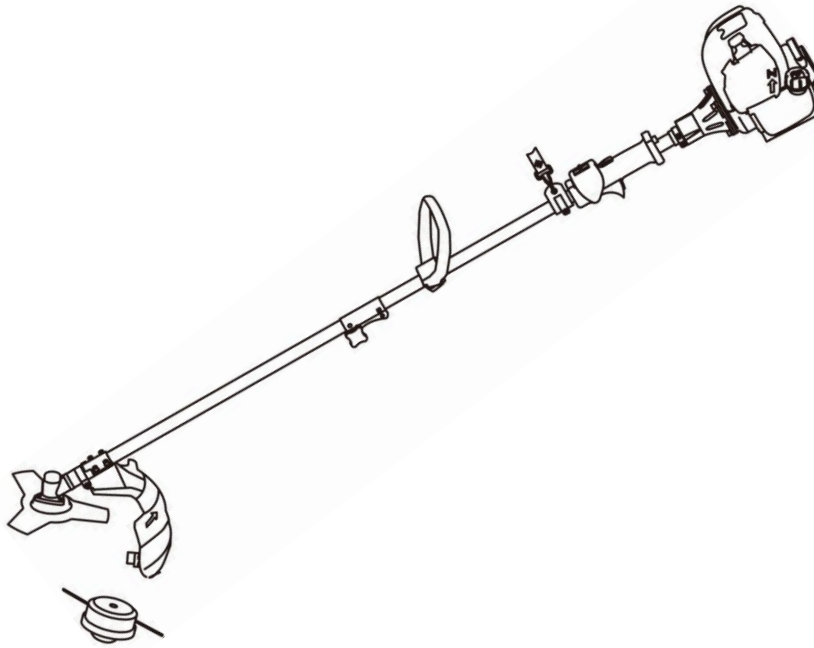


POWER SMART[®]

INSTRUCTION MANUAL

Gas Powered Brush Cutter & String Trimmer

Model # PS4531



Have product questions or need technical support? Please feel free to contact us!

Website: www.powersmartusa.com

Toll free: 1-800-791-9458 / 1-888-293-0024 Mon-Fri 9-5 EST

Email: support@amerisuninc.com / support@powersmartusa.com



Website

CONTENTS

TECHNICAL DATA.....	2
INTRODUCTION.....	3
SAFETY INFORMATION.....	3
GENERAL SAFETY RULES FOR STRING TRIMMER.....	3
KNOWING YOUR BRUSH CUTTER &STRING TRIMMER.....	7
ASSEMBLY INSTRUCTION.....	8
OPERATING INSTRUCTION.....	12
MAINTENANCE.....	14
TROUBLESHOOTING.....	15
EXPLODED VIEW & PARTS LIST.....	16
WARRANTY.....	18

TECHNICAL DATA

Gas Powered 2 in 1 Brush Cutter &String Trimmer

Model	PS4531
Engine type:	4-Cycle, Single Cylinder
Displacement:	37.7 cc
Fuel tank capacity:	22.9 fl.oz
Oil capacity:	2.8 fl.oz
Trimmer mechanism:	Bump head
Brush cutter cutting width:	10"
String trimmer cutting width:	16.3"
Trimmer line diameter:	0.095"
Overall length:	72.8"
Package dimensions (L x W x H):	43.5 x 10.6 x 11.6 inch
Weight:	22.9 lb.

INTRODUCTION

Thank You for Purchasing a PowerSmart® Product. This manual provides information regarding the safe operation and maintenance of this product. Every effort has been made to ensure the accuracy of the information in this manual. PowerSmart® reserves the right to change this product and specifications at any time without prior notice.

Please keep this manual available to all users during the entire life of the Robot Lawn Mower.



This manual contains special messages to bring attention to potential safety concerns, Robot Lawn Mower damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

QUESTIONS? PROBLEMS?

Please contact our Customer Service Dept. with any questions and/or comments, either by Email: support@amerisuninc.com/support@powersmartusa.com, or Toll Free at (800)791-9458 / (888)293-0024. We are available Mon-Fri 9am-5pm EST to help solve any issues that you might encounter.

SAFETY INFORMATION

Before operating this product, read and observe all warnings, cautions, and instructions on the product and in this Owner's Manual.

NOTE: The following safety information is not meant to cover all possible conditions and situations that may occur. Read the entire Owner's Manual for safety and operating instructions. Failure to follow instructions and safety information could result in serious injury or death.

This safety alert symbol is used to identify safety information about hazards that can result in personal injury.



A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to indicate the likelihood and the potential severity of injury. In addition, a hazard symbol may be used to represent the type of hazard.

DANGER Indicates a hazard, which, if not avoided, will result in death or serious injury.

WARNING Indicates a hazard, which, if not avoided, could result in death or serious injury.

CAUTION Indicates a hazard, which, if not avoided, might result in minor or moderate injury.

CAUTION Without the alert symbol, indicates a situation that could result in damage.

GENERAL SAFETY RULES FOR STRING TRIMMER

Safety is a combination of common sense, staying alert, and knowing how your lawn mower works. **SAVE THESE SAFETY INSTRUCTIONS.**



WARNING: Do not operate this unit until you read this instruction manual for safety, operation and maintenance instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.



WARNING: Any other use not expressly approved in the present instruction manual can damage the device and thus present a substantial risk for the user.
The manufacture is not liable for a damage caused by improper use or incorrect operation.

Personal Safety

- Always wear safety glasses or similar eye protection when operating, or performing maintenance on your unit. We recommend eye protection that is ANSI Z87 certified for impact resistance.
- Use appropriate hearing protection.
- Always wear long pants from a sturdy fabric, long sleeves, boots and gloves. Wearing safety leg guards is recommended. Dress appropriate to the terrain that you will be clearing.
- Being fully covered will also help to protect you from debris and/or pieces of toxic plants thrown by the spinning line/blade. A face or dust mask is recommended of the operation in dry conditions.
- It is recommended to wear foot protection with a reinforced toe.
- Never attempt to use this product while barefoot or in sandals.
- Secure longer hair to above the shoulders. Secure or remove loosely hanging clothing, jewelry, ties, straps, tassels, etc. They can become entangled and caught within the moving parts.
- Do not operate unit when you are tired, sick, upset or under the influence of alcohol, drugs, or medication. Watch what you are doing; use common sense. Stay alert.
- Never start or run the engine inside a room or building. Even with windows open, breathing CO exhaust fumes can quickly disorient and/or subsequently become lethal.
- Keep handles free of oil and fuel.
- Always use the handlebar and a properly adjusted shoulder strap with a blade (see ASSEMBLY).

Using The Device Safety

DANGER: CARBON MONOXIDE

- NEVER use an engine inside homes, garages, crawlspaces, or other partly enclosed areas. Deadly levels of carbon monoxide can build up quickly in these areas. Using a fan, or opening windows and/or doors will NOT properly vent CO or supply adequate fresh air. ONLY run an engine outside and far away from all windows, doors, and vents. These openings can pull in engine exhaust.
- Using any internal combustion engine indoors CAN KILL YOU IN MINUTES. Engine exhaust contains carbon monoxide (CO). This is a poison gas you cannot see or smell. If you can smell the engine exhaust, you are breathing carbon monoxide (CO). Even if you don't smell exhaust, you could still be breathing CO.
- Even if you use an engine correctly, CO may leak into the home. ALWAYS use a battery-powered or battery-backup CO alarm in the home. If you start to feel sick, dizzy, or weak after the engine has been running, move to fresh air RIGHT AWAY. See a doctor. You may have carbon monoxide poisoning.



WARNING: The exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.



WARNING: This engine may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to explosion even if it isn't directly in contact with gasoline.

- Do not operate near an open flame.
- The operator or others must not try to clear away cut material with the engine running or the blade turning to avoid serious injury. Stop engine and blade before removing materials wrapped around blade or shaft.
- Do not smoke near the engine.
- Always operate on a firm, level surface.
- Always turn engine off before refueling. Allow engine to cool for at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Do not overfill fuel tank. Gasoline may expand during operation. Do not fill to the top of the tank, allow for expansion.
- Always check for spilled fuel before operating.
- Empty fuel tank before storing or transporting the engine.



WARNING: This engine produces heat when running. Temperatures near exhaust can exceed 150°F (65° C). Do not touch hot surfaces. Pay attention to warning labels on the engine identifying hot parts of the machine. Allow engine to cool down after use before touching engine or areas of the engine that become hot during use.

CAUTION: Misuse of this engine can damage it or shorten its life.

Only use engine for its intended purposes.

- Look for and replace damaged or loose parts before each use. Look for and repair fuel leaks before use. Keep unit in good working condition.
- Throw away blades that are bent, warped, cracked, broken, or damaged in any other way. Replace trimmer head parts that are cracked, chipped, broken, or damaged in any other way before using the unit.
- Maintain unit according to recommended procedures. Keep blade sharp. Keep cutting line at the proper length.
- Use only specified replacement line. Never use wire, rope, string, etc.
- Install required shield properly before using the unit.
- Use only specified blade or trimmer head; make sure it is properly installed and securely fastened.
- Never start engine with clutch shroud removed. The clutch can fly off and cause serious injury.
- Be sure blade or trimmer head stops turning when engine idles.
- Make idle speed adjustments with the lower end supported to prevent blade or trimmer line from contacting any object. Hold unit by hand; do not use the shoulder strap for support.
- Keep others away when making idle speed adjustments.
- Use only recommended accessories and replacement parts.
- Have all maintenance and service not explained in this manual performed by your authorized service dealer.

Cutting Safety



WARNING: Inspect area before starting unit. Remove all debris and hard objects such as rocks, glass, wire, etc., that can ricochet, be thrown, or otherwise cause injury or damage during operation.

- Keep others including children, animals, bystanders, and helpers at least 50 feet (15meters) away. Bystanders should be encouraged to wear safety glasses. Stop engine immediately if you are approached.
- Always keep engine on the right hand side of your body.
- Hold the unit firmly with both hands.
- Keep firm footing and balance. Do not overreach.
- Keep blade or trimmer head below waist level. Do not raise engine above your waist.
- Keep all parts of your body away from blade, trimmer head, and muffler when engine is running. A hot muffler can cause serious burns.
- Cut from your left to your right. Cutting on right side of the shield will throw debris away from the operator.
- Use only in daylight or good artificial light.
- Use only for jobs explained in this manual.

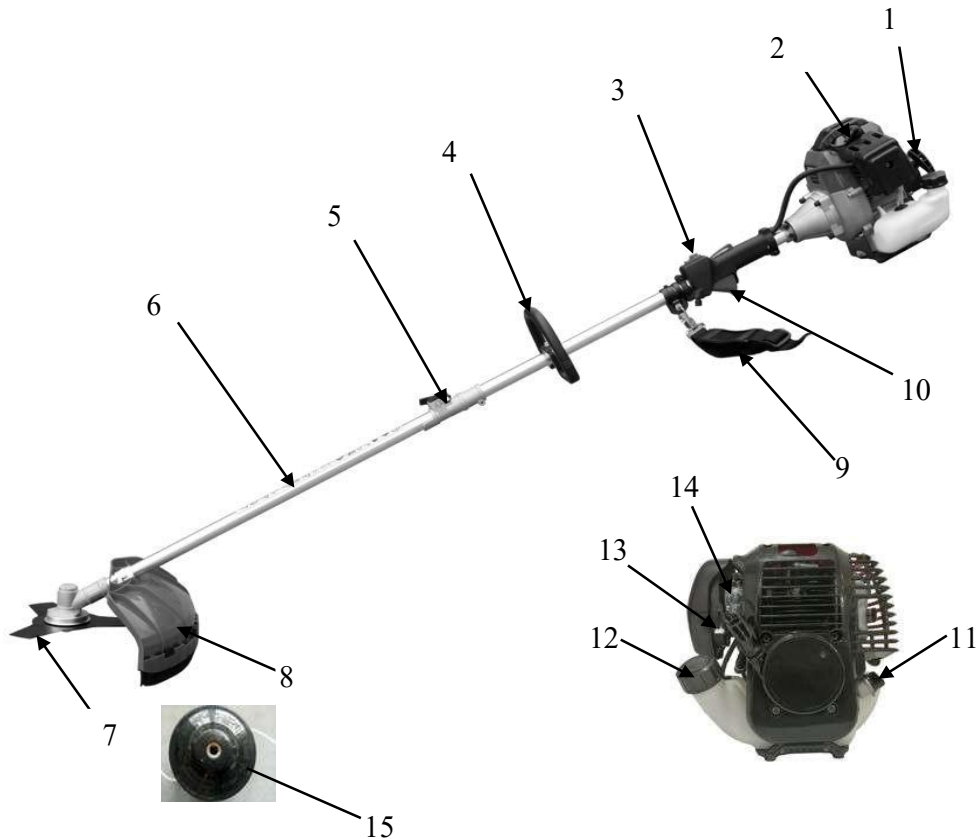
Fuel Safety

- To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.
- Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- Only use a US EPA approved compliant portable fuel container.
- Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling.
- Never attempt to refuel the product while indoors.
- Never store the machine or fuel container where there is an open flame, spark, or pilot light such as on a water heater or on other appliances.
- Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
- Remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle.
- Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
- If fuel is spilled on clothing, change clothing immediately.
- Never overfill fuel tank. Replace gas cap and tighten securely.

Service

- Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

KNOWING YOUR BRUSH CUTTER & STRING TRIMMER



- | | | | |
|---|-----------------------|----|---------------------|
| 1 | Recoil Starter Handle | 9 | Shoulder Strap |
| 2 | Spark Plug | 10 | Throttle Trigger |
| 3 | START/STOP Switch | 11 | Oil Fill & Dipstick |
| 4 | Handlebar | 12 | Fuel Tank |
| 5 | Coupler | 13 | Choke Lever |
| 6 | Shaft | 14 | Fuel Primer Bulb |
| 7 | Cutting Blade | 15 | Trimmer head |
| 8 | Blade Shield | | |

Unpacking

Unpack the machine and all its parts, and compare against the list below. Do not discard the carton or any packaging materials. Please call 1-800-791-9458/1-888-293-0024 or E-mail us at support@amerisuninc.com/support@powersmartusa.com if any parts are damaged or missing.

Including: Brush cutter /Trimmer head/Blade/Blade shield/Handle/Shoulder harness /S4、 S5 Hex key/Spark plug wrench/8x10 open-end wrench/Four Screw M5x16/Oiler/User manual

ASSEMBLY INSTRUCTION



WARNING: If any parts are damaged or missing do not operate this product until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.

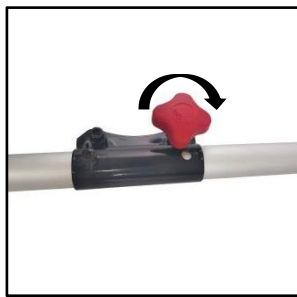
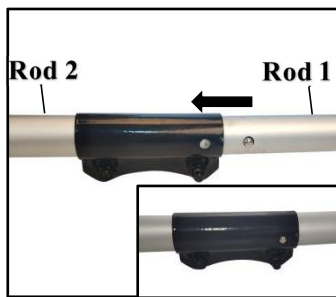


WARNING: Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

Installing Brush Cutter Attachment

When installing brush cutter attachment, place the unit on a flat surface for stability.

1. Push the rod 1 until the stop pin slots into the hole in the rod 2.
2. Tighten the knob securely by turning it clockwise.



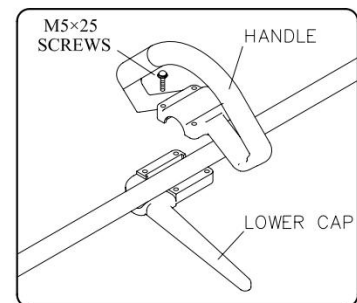
WARNING: Make sure the locking/release button is locked in the primary hole and that the knob is securely tightened before operating the unit.

Installing Handle

Position handle in a comfortable operating position and tighten four M5×25 screws.



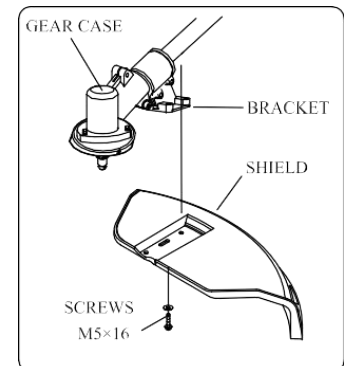
WARNING: Do not attempt to disassemble the two special screws. The two clamps position has been adjusted at a suitable place, do not attempt to remove or move them. Otherwise, it can result in serious personal injury.



Attaching The Plastic Blade Shield

CAUTION: The blade shield must be properly installed. This shield helps provide partial protection to the operator, and others from the risk of thrown objects and other debris.

1. Install the safety cover on the shaft with the safety cover bracket and the screws provided.
2. Tighten the screws after setting the safety cover bracket at the appropriate position.



Replacing The Blade

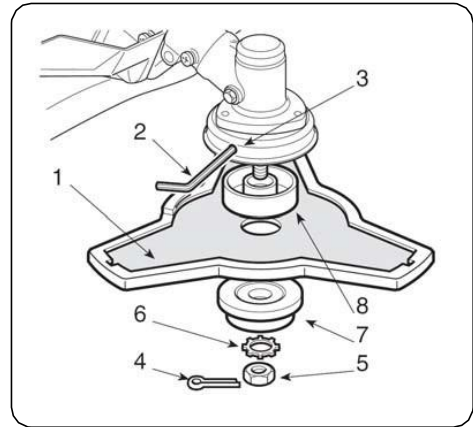


WARNING: Wear protective gloves when handling or performing maintenance on the blade to avoid injury. The blade is sharp and can cut you even when it is not moving.



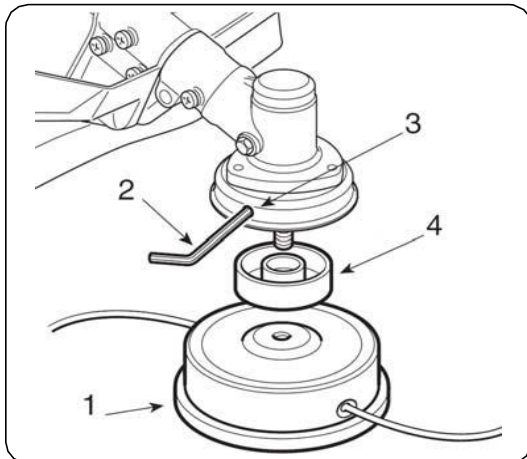
WARNING: Do not attempt to use any blades, washers, nuts, or fastening hardware other than shown in the following illustrations. These parts must be provided by the manufacturer and installed as shown below. Failure to use proper parts can cause the blade to fly off and seriously hurt you or others.

1. Insert the hex key (2) into the specific hole in the angle transmission (3) and rotate the blade (1) by hand until the hex key enters the inner hole, blocking rotation.
2. Remove the split pin (4) and unscrew the nut (5) in a clockwise direction.
3. Pull out the washer (6) and the outer ring-nut (7) and remove blade.
4. Ensure that the grooves in the inner ring-nut (8) mach up perfectly with the angle transmission (3).
5. Fit the blade (1) and outer ring-nut (7).
6. Refit the washer (6) and the nut (5), fully tightening it in an anticlockwise direction.
7. Reposition the split pin (4) and refold the two ends.
8. Remove the hex key (2).

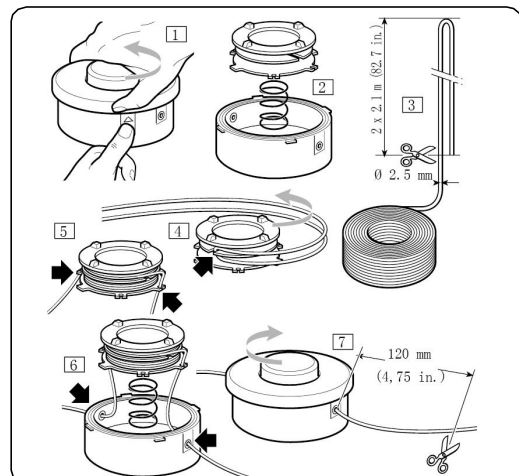


Headline Installation/Replacement

1. Insert the hex key (2) into the specific hole in the angle transmission (3) and rotate the cutting line head (1) by hand until the hex key enters the inner hole, blocking rotation.
2. Ensure that the grooves in the inner ring-nut (4) mach up perfectly with the angle transmission (3).
3. Fit the cutting line head (1) screwing it up in an anticlockwise direction.
4. Remove the hex key (2).



Headline installation



Headline replacement

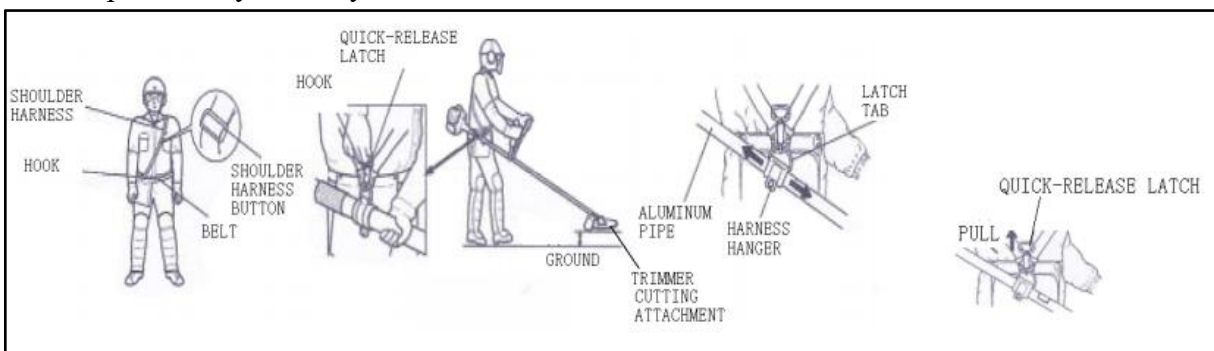
Assembly Of Shoulder Strap



WARNING: Proper shoulder strap and handlebar adjustments must be made with the engine completely stopped before using unit.

1. Assemble and adjust the shoulder harness and belt.
2. Adjust the shoulder-harness button, and move the hook to your waist, then adjust the belt (If there is a belt).
3. Hang the latch tab on the harness hook.
4. If the brush cutter doesn't balance, then adjust the harness hanger, and the handlebar, until it balances.
5. To quickly detach the brush cutter from the harness, pull the quick-release latch tab upward.
6. Insert the latch tongue in the slot of the quick-release latch to reattach the brush cutter to the harness.

NOTE: Before using, please check the shoulder harness and confirm it is OK. Encounter danger, please stop the brush cutter immediately, and pull the quick-release latch tab, the brush cutter will be depart from your body.

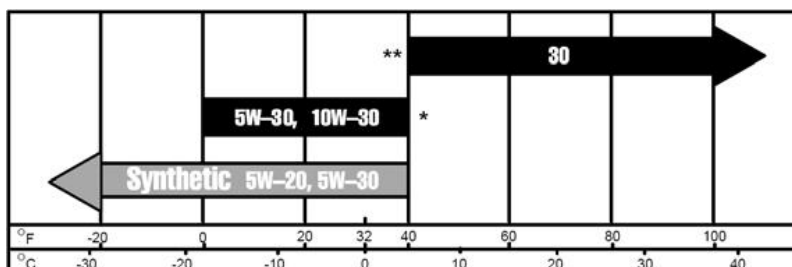


Add Oil

This product is shipped without oil. User must add the proper amount of oil before operating the product for the first time. The oil capacity of the engine crankcase is 2.8 fl. oz. For general use (above 40° F), we recommend 30W, 4-stroke engine oil.

Engine oil recommendations

Select good quality detergent oil bearing the American Petroleum Institute (API) service classifications SJ, SL, or SM (synthetic oils may be used). Use the ASE viscosity grade of oil from the following chart that matches the starting temperature anticipated before the next oil changes.

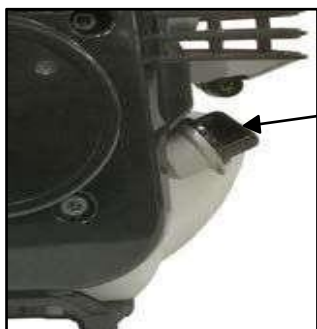


Engine Oil Temperature Recommendations

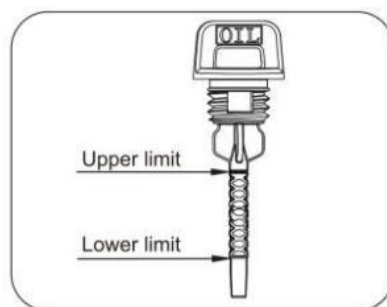
To add oil, follow these steps:

1. Make sure the product is on a level surface. Tilting the product to assist in filling will cause oil to flow into engine areas and will cause damage.
2. Unscrew the dipstick from the engine.
3. Slowly add the engine oil.
4. To check the oil level, wipe the dipstick with a clean rag.

5. Next, insert the dipstick into the oil fill opening without screwing it in. Remove the dipstick to check the oil level mark.
6. If required, slowly add more oil until the mark reads just below the upper limit line on the dipstick. Do not overfill the crankcase.
7. Firmly tighten the dipstick and check for any leaks.



Location of oil fill & dipstick



Add Gasoline



WARNING: This product may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to explosion even if not directly in contact with gasoline.

Use fresh (within 30 days from purchase), lead-free gasoline with a minimum of 87 octane rating. Using a gas/oil mixture with unit will damage the engine. Do not mix oil with gasoline.

To add gasoline, follow these steps:

1. Make sure the product is on a level surface.
2. Unscrew fuel cap and set aside.

NOTE: The fuel cap may be tight and hard to unscrew.

3. Slowly add unleaded gasoline to the fuel tank. Be careful not to overfill. The capacity of the fuel tank is 22.9 fl. oz.

NOTE: Do not fill the fuel tank to the very top. Gasoline will expand and spill over during use even with the fuel cap in place.

4. Reinstall fuel cap and wipe clean any spilled gasoline with a dry cloth.

Fuel tank cap



IMPORTANT!

- Never use an oil/gasoline mixture.
- Never use stale or old gasoline.
- Avoid getting dirt or water into the fuel tank.
- Gasoline can age in the tank and make starting difficult. Never store brush cutter for extended periods of time with fuel in the tank or the carburetor.
- Turn the fuel cock off and drain the fuel from the carburetor.

NOTE: After completing the above preparation, the brush cutter is ready to be started.

OPERATING INSTRUCTION



WARNING: Be sure to read the fuel information in the safety rules before you begin. If you do not understand the safety rules, do not attempt to fuel your unit.

Check Points Before Operation

- Check for loose bolts, nuts and fittings.
- Check the air cleaner for dirt. Clean the air filter of all dirt, etc. before operation.
- Check to be sure that protector is securely in place.
- Check to be sure that fuel is not leaking.
- Check to be sure that blade is not cracked.

Starting Cold Engine

1. Set unit on a flat surface.
2. Slowly press the primer bulb(14) about 5 times, then move choke lever(13) to the START position.
3. Move the START/STOP Switch(3) to "START" position.
4. Catch the machine handle, Squeeze and hold the throttle trigger(10) locked(press the button beside the START/STOP Switch(3) together or we can not lock it successfully).
5. Pull recoil starter handle(1) sharply 1~6 times until engine starts. Slowly move choke lever to the RUN position.
6. Allow engine to warm up for a few minutes before using.



Starting Warm Engine

1. The choke lever(13) to the "RUN" position .
2. Squeeze and hold trigger(3).
3. Pull recoil starter handle(1) until engine starts.

NOTE: If the starter rope is pulled repeatedly with the choke on, it may flood the engine and make starting difficult. If you have flooded the engine, remove the spark plug and gently pull the handle on the starter rope to eliminate any excess fuel; then dry the spark plug electrodes and replace it on the engine.

Stopping The Engine

1. Release the throttle trigger and allow the engine to run idle for a few seconds.
2. Move START/STOP switch(3) to STOP position.

Operating

When operating the unit, you should clip the shoulder strap onto the clamp, check for the following:

- Wear hearing protection, eye protection, head protection and heavy clothing.
- Extend your left arm and hold handlebar grip with your left hand.

- Hold throttle grip with your right hand with finger on throttle trigger. Keep unit below waist level.
- Keep shoulder strap pad centered on your left shoulder and danger sign centered on your back.
- Maintain full weight of tool on your left shoulder.
- Without bending over, keep the blade or trimmer head near and parallel to the ground and not crowded into material being cut.

RISK OF KICK-OUT (Blade Thrust)– This reaction can only occur when using a bladed unit. This sudden and violent reaction can cause serious injury. Please carefully review this section. It is important that you understand what causes Blade Kick-out, and how you can reduce the chance of it occurring. It is critical to understand how to remain in control of the unit if blade thrust occurs.

WHAT CAUSES KICK-OUT (Blade Thrust) – Blade Thrust can occur when the spinning blade contacts an object that it cannot cut. This contact causes the blade to stop for an instant and then suddenly move or “thrust” away from the object that was hit. The “thrusting” reaction can be violent enough to cause the operator to be propelled in any direction and lose control of the unit. The uncontrolled unit can cause serious injury if the blade contacts the operator or others in the area.

WHEN KICKOUT OCCURS – Blade Thrust can occur without warning if the blade snags, stalls, or binds. This is more likely to occur in areas where it is difficult to see the material being cut. By using the unit properly, the occurrence of blade thrust will be reduced and the operator will be less likely to lose control.

- Cut only grass, weeds, and woody brush up to 1/2 inch (1 cm) in diameter with the blade. Do not let the blade contact material it cannot cut such as stumps, rocks, fences, metal, etc., or clusters of hard, woody brush having a diameter greater than 1/2 inch (1 cm).
- Keep the blade sharp. A dull blade is more likely to snag and thrust.
- Cut only at full throttle. The blade will have maximum cutting power and is less likely to bind or stall.
- “Feed” the blade deliberately and not too rapidly. The blade can thrust away if it is fed too rapidly.
- Cut only from your left to your right. Cutting on right side of the shield will throw debris away from the operator.
- Use the shoulder strap and keep a firm grip on the unit with both hands. A properly adjusted shoulder strap will support the weight of the unit, freeing your arms and hands to control and guide the cutting motion.
- Keep feet comfortably spread apart and braced for a possible sudden, rapid thrust of unit. Do not overreach. Keep firm footing and balance.
- Keep blade below waist level; it will be easier to maintain control of unit.
- Do not raise the engine above your waist as the blade can come dangerously close to your body.
- Do not swing unit with such force that you are in danger of losing your balance.

Bring the engine to cutting speed before entering the material to be cut. If the blade does not turn when you squeeze the throttle trigger, make sure shaft is fully inserted into the engine.

Always release the throttle trigger and allow engine to return to idle speed when not cutting. The blade should not turn while the engine is running at idle. If the blade turns at idle, do not use your unit. Refer to contact customer service.

Maintain good firm footing while using the unit. Cut while swinging the upper part of your body from left to right. As you move forward to the next area to cut, be sure to maintain your balance and footing.

MAINTENANCE



WARNING: Disconnect the spark plug before performing any maintenance.

Check For Damaged Or Worn Parts

Contact customer service for replacement of damaged or worn parts.

ON/OFF Switch – Ensure ON/OFF switch functions properly by pushing and releasing the switch. Make sure engine stops. Wait 5 seconds before attempting to restart unit to allow switch to reset. Restart engine and continue.

Fuel Tank – Immediately discontinue use of unit if fuel tank shows signs of damage or leaks.

Debris Shield – Discontinue use of unit if debris shield is damaged.

Clean Air Filter

A dirty air filter will decrease engine performance and increases fuel consumption and harmful emissions. It is important to clean the filter after every 5 hours of operation.

1. Clean the filter cover, and the area around it to keep dirt from falling into the carburetor chamber when removed.
2. Press the tabs on the air filter cover to remove the cover and air filter.

NOTE: To avoid creating a fire hazard or producing harmful evaporate emissions, do not clean filter in gasoline or other flammable solvent.

3. Wash the filter in soap and water.
4. Allow the filter thoroughly dry be for reinstalling.
5. Replace parts.

Replace Spark Plug

Replacing the spark plug each year will help ensure that the engine starts easier, and runs better. Set spark plug gap at 0.023”~0.028”(0.6~0.7 mm). The ignition timing is fixed and does not require adjustment.

Storage

CAUTION: Perform the following steps after each use:

- Allow engine to cool before storing or transporting.
- Store unit and fuel in a well-ventilated area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.
- Store unit with all guards in place. Position unit so that any sharp object cannot accidentally cause injury.
- Store this unit and the fuel well out of the reach of children.

Prepare your unit for storage at the end of season or if it will not be used for 30 days or more. If your unit is to be stored for a period of time:

1. Clean the entire unit before lengthy storage.
2. Store in a clean dry area.

Fuel System

Adding fuel stabilizer helps to minimize the formation of fuel gum deposits during storage. Add stabilizer to the gasoline in the fuel tank and/or fuel storage container. Run the engine for at least 5 minutes after adding to distribute stabilizer throughout the system.

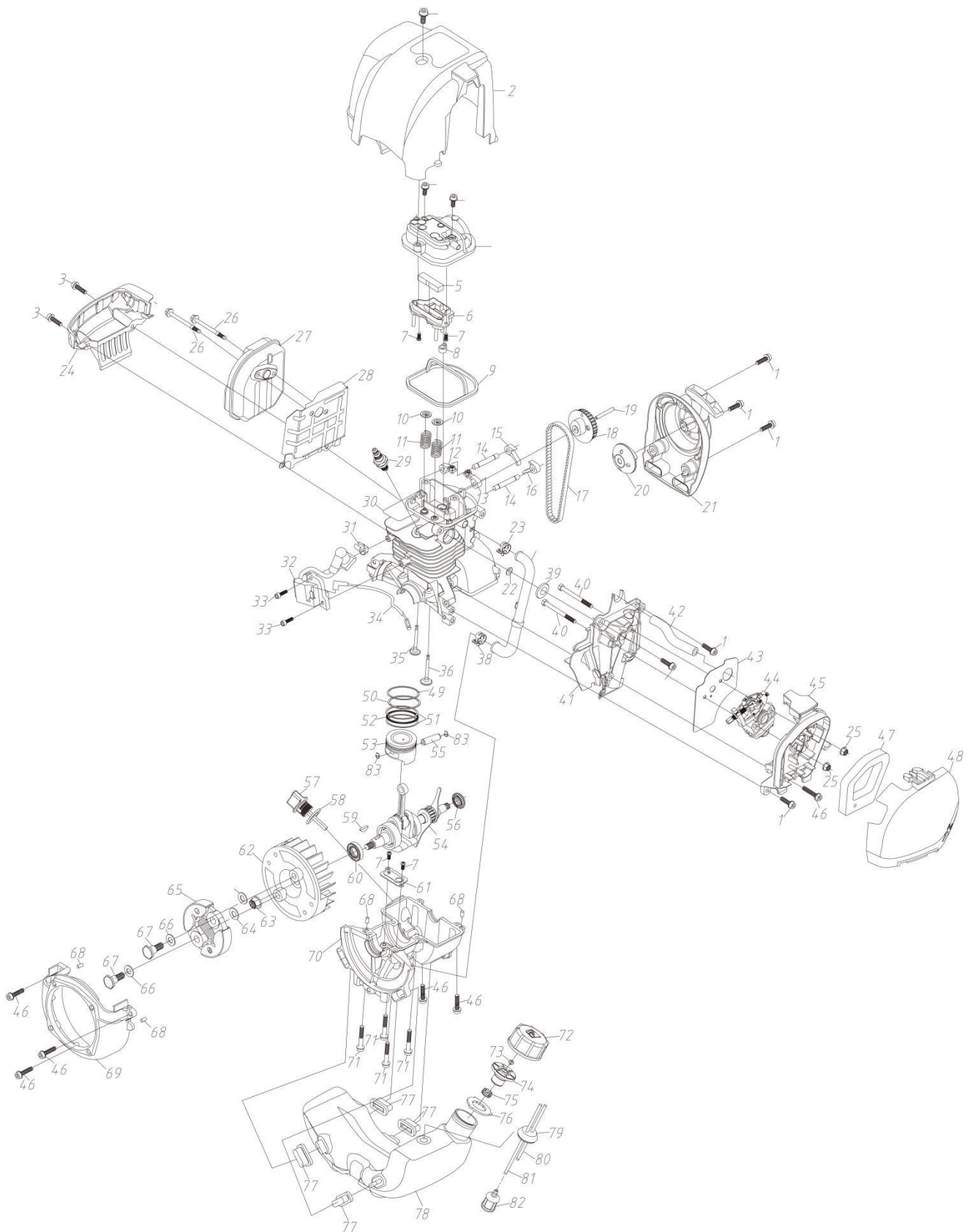
Engine

1. Replace the spark plug with new one of recommended type.
2. Clean air filter.
3. Check the entire unit for loose screws, nuts, and bolts. Replace any damaged, broken, or worn parts.
4. At the beginning of the next season, use only fresh fuel.

TROUBLESHOOTING

Problem	Cause	Solution
Engine fails to start	Engine ON/OFF switch is off.	Engage ON/OFF switch.
	Spark plug wire disconnected.	Connect spark plug wire.
	Fuel tank empty or stale fuel.	Fill tank with clean, fresh gasoline.
	Engine not primed.	Press primer bulb.
	Faulty spark plug.	Clean, adjust gap, or replace.
	Blocked fuel line.	Clean fuel line.
	Engine flooded.	Wait a few minutes to restart, do not prime.
Engine runs erratic	Spark plug wire loose.	Connect and tighten spark plug wire.
	Blocked fuel line or stale fuel.	Clean fuel line. Fill tank with clean, fresh gasoline.
	Water or dirt in fuel system.	Drain fuel tank. Refill with fresh fuel.
	Dirty air filter	Please refer to engine manual.
Engine overheats	Engine oil level low.	Fill crankcase with proper oil.
	Air flow restricted.	Clean area around and on top of engine.
Idles poorly	Spark plug fouled, faulty, or gap too wide.	Reset gap or replace spark plug.
	Dirty air cleaner.	Please refer to engine manual.
Excessive vibration/noise	Blade loose or unbalanced.	Tighten and balance blade.
	Bent/damaged blade.	See an authorized service dealer.

EXPLODED VIEW & PARTS LIST



Item	Stock#	Description	Qty	Item	Stock#	Description	Qty
1	PS4531-001	Screw M5*15	7	43	PS4531-043	Gasket	1
2	PS4531-002	Cylinder cover	1	44	PS4531-044	Carburetor	1
3	PS4531-003	Screw M5*12	4	45	PS4531-045	Cleaner inside cover	1
4	PS4531-004	Cylinder valve cover	1	46	PS4531-046	Screw M5*22	6
5	PS4531-005	Oil gas separator	1	47	PS4531-047	Filter net	1
6	PS4531-006	Inside cover	1	48	PS4531-048	Air filter cover	1
7	PS4531-007	Screw M4*8	4	49	PS4531-049	NO1. piston ring	1
8	PS4531-008	Rubber cushion	1	50	PS4531-050	NO2. piston ring	1
9	PS4531-009	Rubber cushion	1	51	PS4531-051	Oil scraper ring	2
10	PS4531-010	Valve spring seat	2	52	PS4531-052	Liner ring	1
11	PS4531-011	Valve spring	2	53	PS4531-053	Piston	1
12	PS4531-012	E*haust valve rocker	1	54	PS4531-054	Crankshaft	1
13	PS4531-013	Inlet valve rocker	1	55	PS4531-055	Piston pin	1
14	PS4531-014	Rocker pin	2	56	PS4531-056	Oil seal	1
15	PS4531-015	E*haust rocker	1	57	PS4531-057	Oil scale	1
16	PS4531-016	Inlet rocker	1	58	PS4531-058	O-seal ring 14*3	1
17	PS4531-017	Synchronous belt	1	59	PS4531-059	Key3*5*13	1
18	PS4531-018	Cam wheel	1	60	PS4531-060	Oil seal	1
19	PS4531-019	Camshaft	1	61	PS4531-061	Reed vavle	1
20	PS4531-020	Start reel	1	62	PS4531-062	Magneto rotor comp	1
21	PS4531-021	Starter	1	63	PS4531-063	Nut M8	1
22	PS4531-022	Admitting gasket	1	64	PS4531-064	Washer	2
23	PS4531-023	Holding-down clip	1	65	PS4531-065	Clutch	1
24	PS4531-024	Muffler baffle-II	1	66	PS4531-066	Washer	2
25	PS4531-025	Nut M5	2	67	PS4531-067	Screw pin	2
26	PS4531-026	Screw M5*55	2	68	PS4531-068	Pin B4*8	4
27	PS4531-027	Muffler	1	69	PS4531-069	Magneto cover	1
28	PS4531-028	Muffler baffle	1	70	PS4531-070	Crankcase	1
29	PS4531-029	Spark plug	1	71	PS4531-071	Screw M5*32	4
30	PS4531-030	Cylinder	1	72	PS4531-072	Fuel tank lid	1
31	PS4531-031	Fastener	1	73	PS4531-073	Air admission valve	1
32	PS4531-032	Ignition stator	1	74	PS4531-074	Inside cover	1
33	PS4531-033	Screw M4*14	2	75	PS4531-075	Shell cover	1
34	PS4531-034	Stopping wire	1	76	PS4531-076	Air proof gasket	1
35	PS4531-035	E*haust valve	1	77	PS4531-077	Rubber cushion	4
36	PS4531-036	Inlet valve	1	78	PS4531-078	Fuel tank	1
37	PS4531-037	Balancing pressure pipe	1	79	PS4531-079	Plug	1
38	PS4531-038	Holding-down clip	1	80	PS4531-080	Fuel return pipe	1
39	PS4531-039	O-seal ring	1	81	PS4531-081	Fuel suction pipe	1
40	PS4531-040	Screw M5*55	2	82	PS4531-082	Filter	1
41	PS4531-041	Admitting pipe	1	83	PS4531-083	Ring	1
42	PS4531-042	Blast pipe	1				

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