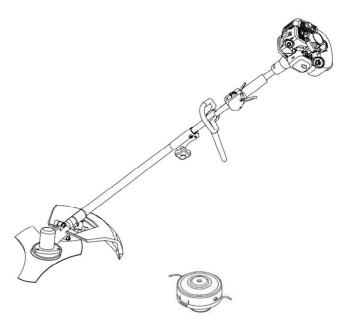


# **INSTRUCTION MANUAL**

# 25.4cc 2-Stroke Gas Powered Brush Cutter And String Trimmer

Model #PS4532





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

Website: <a href="https://www.Amerisuninc.com">www.Amerisuninc.com</a> <a href="https://www.powersmartusa.com">www.powersmartusa.com</a>

Toll free: 1-800-791-9458 Mon-Fri 9-5 EST

Email: support@amerisuninc.com

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## **TECHNICAL DATA**

25.4cc 2-Cycle Gas 2 in 1 Brush Cutter & String Trimmer

Model# PS4532

Engine type: Air-cooled,2 cycle, vertical piston valve, gasoline engine

Displacement: 25.4 cc

Fuel used: Unleaded gasoline mixed with lubricating oil (ratio of 50:1)

Fuel tank capacity: 18.6 fl.oz

Blade size: 10 inch

Trimmer line diameter: 0.095"

Cutting path diameter: 16"

Length of main pipe section: 59 inch

Length of drive shaft section: 60 inch

Package dimensions (L x W x H): 43.3 x 10.2 x10.4 inches

Net weight: 18.7 lb.

## **INTRODUCTION**

Thank You for purchasing your PowerSmart® Product. This manual provides information regarding the safe operation and maintenance of this product. Every effort has been made to ensure accuracy of the information found 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 product.



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

## **OUESTIONS? PROBLEMS?**

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

## NOTICE REGARDING EMISSIONS

Engines that are certified to comply with U.S. EPA emission regulations for SORE (Small Off Road Equipment), are certified to operate on regular unleaded gasoline, and may include the following emission control systems: (EM) Engine Modifications and (TWC) Three-Way Catalyst (if so equipped).

## **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:** When used without the alert symbol, indicates a situation that <u>could</u> result in damage to

the engine.

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

## **GENERAL SAFETY PROCEDURES**

For any questions regarding the hazard and safety notices listed in this manual or on the product, please call (800) 791-9458 Mon-Fri 9-5 EST. Please read and understand the instructions in this manual before starting the engine or attempting to operate this unit.

**WARNING:** When using the unit, all safety rules must be followed. Please read these instructions before operating the unit in order to ensure the safety of the operator and any bystanders. Please keep these instructions for later use.

**WARNING:** This unit can cause serious injury including loss of limb(s) or blindness to the operator and others. The warnings and safety instructions in this manual must be followed to provide reasonable safety and efficiency in using the unit. The operator is responsible for following the warnings and instructions in this manual and on the unit. Read the entire instruction manual before assembling and using the unit!

Restrict the use of this unit to persons who read, understand, and follow the warnings and instructions in this manual and on the unit. Never allow children to operate this unit.

## **OPERATOR 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 if 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).



## **DANGER: CARBON MONOXIDE**

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.

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.

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.
- 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.

## **UNIT/MAINTENANCE SAFETY**



**WARNING:** Stop unit and disconnect the spark plug before performing maintenance (except idle speed adjustments).

- 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.

### TRANSPORTING AND STORAGE

- Stop the unit before transporting.
- Keep the muffler away from your body.
- Allow the engine to cool and secure the unit before storing or transporting it in a vehicle.
- Empty the fuel tank before storing or transporting the unit. Run out of fuel left in the carburetor by starting the engine and letting it run until it stops.
- Store unit and fuel in area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.
- Store unit so the blade or line limiter blade cannot accidentally cause injury. The unit can be hung by the shaft.
- Store unit out of reach of children.

**SAFETY NOTICE:** Exposure to vibrations through prolonged use of gasoline powered hand tools could cause blood vessel or nerve damage in the fingers, hands, and joints of people prone to circulation disorders or abnormal swellings. Prolonged use in cold weather has been linked to blood vessel damage in otherwise healthy people. If symptoms occur such as numbness, pain, loss of strength, change in skin color or texture, or loss of feeling in the fingers, hands, or joints, discontinue the use of this tool and seek medical attention. A reduced-vibration system does not guarantee the avoidance of these problems. Users who operate power tools on a continual and regular basis must monitor closely their physical condition and the condition of this tool.

### Children

Sever injury can occur if the operator is not alert to the presence of children in the immediate area. Children are often attracted to the mowing activity. Never assume that children will remain where you last saw them.

- 1. Keep children out of the mowing area and under the watchful care of a responsible adult other than the operator.
- 2. Be alert and turn mower off if a child enters the area.
- 3. Never allow children under the age of 16 to operate the product.
- 4. Use extra care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child.

## **Fuel safety**

- 1. Safe Handling of Gasoline
- 2. To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.
- 3. Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- 4. Only use a US EPA approved compliant portable fuel container.
- 5. Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling.
- 6. Never attempt to refuel the product while indoors.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. 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.
- 11. If fuel is spilled on clothing, change clothing immediately.
- 12. Never overfill fuel tank. Replace gas cap and tighten securely.

## **BRUSHCUTTER &STRING TRIMMER SAFETY**

The blade can violently thrust away from material that it does not cut. Blade thrust can cause amputation of arms or legs.

Do not use the trimmer head as a fastening device for the blade.

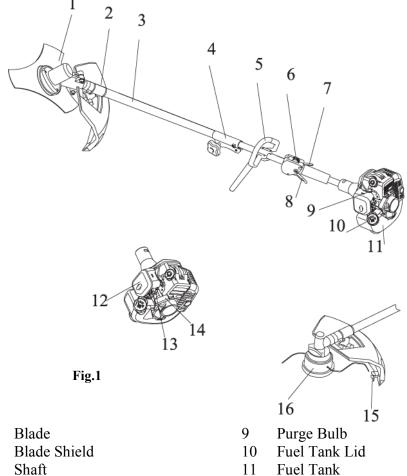
The blade will continue to spin after the trigger is released or engine is turned off. The coasting blade can throw objects or seriously cut you if accidentally touched. Stop the blade by contacting the right-hand side of the coasting blade with material already cut.

**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.

- Throw away and replace blades that are bent, warped, cracked, broken or damaged in any other way.
- Install required shield properly before using the unit.
- Use only specified blade and make sure it is properly installed and securely fastened.
- Cut from your left to your right. Cutting on the right side of the shield will throw debris away from the operator.
- Always use the handlebar and a properly adjusted shoulder strap with blade (see ASSEMBLY).

# **KNOWING YOUR BRUSH CUTTER**

Please use the illustration below to familiarize yourself with the location and function of the components that control of your brush cutter.



- 1
- 2
- 3
- 4 Connector Cover
- 5 D-Handle
- 6 On/Off Switch
- Safety Lever
- Throttle Trigger

- 12 Air Cleaner Cover
- 13 Choke
- 14 Starter Handle
- Cut-off Knife 15
- Trimmer head 16

## Unpacking

Unpack the blower 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 or E-mail us at support@amerisuninc.com if any parts are damaged or missing.

## Including:

Brush cutter /Trimmer head/Blade/Blade shield/Handle/Shoulder harness /S3 \ S4 Hex key/Spark plug wrench/Oiler /User manual

## **ASSEMBLY INSTRUCTION**

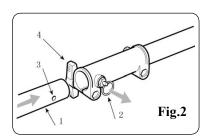
The following section describes steps necessary to prepare the brush cutter for initial use. If after reading this section, you are unsure about how to perform any of the steps please call (800) 791-9458 Mon-Fri 9-5 EST for customer service. Failure to perform these steps properly can damage the brush cutter or shorten its lifespan.

## INSTALLING BRUSH CUTTER ATTCHEMENT



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

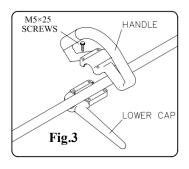
Pull out the stop pin (2) and push the lower part of the rod (1) right down until the stop pin (2) slots into the hole (3) in the rod. This is easier to do if you rotate the bottom of the rod (4) slightly in both directions. The pin (2) is in place when it is completely lodged in the hole. Lastly, tighten the knob (4) securely (See fig.2).



#### INSTALLING HANDLE

Position handle in a comfortable operating position and tighten four  $M5 \times 25$  screws.

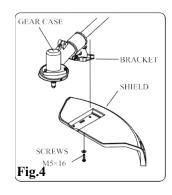
WARNING: Do not attempt to disassemble the two special screws. The two clamps position has been adjusted at a suitable place, do not attempt to remove or move them. Otherwise, it can result in serious personal injury.



### INSTALLING 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 (See fig.4).
- 2. Tighten the screws after setting the safety cover bracket at the appropriate position.



#### **BLADE INSTALLATION**

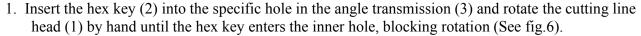


**WARNING:** Wear protective gloves when handling or performing maintenance on the blade to avoid injury. The blade is sharp and can cut you even when it is not moving.

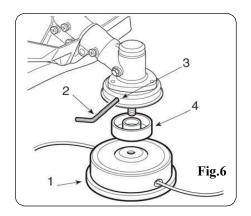
WARNING: Do not attempt to use any blades, washers, nuts, or fastening hardware other than shown in the following illustrations. These parts must be provided by the manufacturer and installed as shown below. Failure to use proper parts can cause the blade to fly off and seriously hurt you or others.

- 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 (See fig.5).
- 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) much 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).

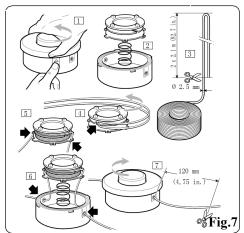


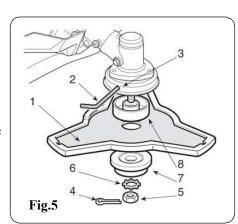


- 2. Ensure that the grooves in the inner ring-nut (4) much up perfectly with the angle transmission(3).
- 3. Fit the cutting line head (1) screwing it up in an anticlockwise direction.
- 4. Remove the hex key (2).



## Headline replacement



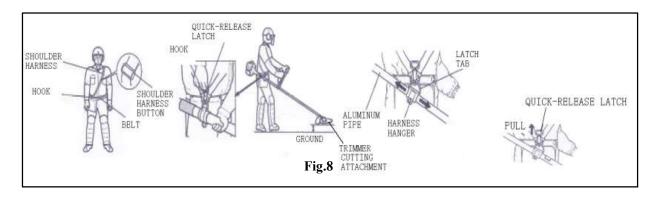


#### USING THE SHOULDER HARNESS



**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 (See fig.8).
- 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 the 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.





**WARNING:** 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.

## **FUEL&OIL MIXTURE**

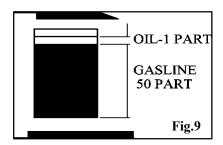


- **WARNING:** Never fill the fuel tank to the very top (under 3/4 of the tank).
  - Never add fuel to the tank in a closed non-ventilated area.
  - Do not add fuel to this unit close to an open fire or sparks.
  - Be sure to wipe off spilled fuel before attempting to start engine.
  - Do not attempt to refuel a hot engine.

Fuel used for this model is a mixture of unleaded gasoline and approved engine lubricant. When mixing gasoline with two-cycle engine oil, use only gasoline which contains NO ETHANOL or METHANOL(Types of Alcohol). Use fresh (within 30 days from purchase) 87 octane or higher unleaded gasoline known to be of good quality. This will help to avoid possible damage to engine fuel lines and other engine parts.

**WARNING:** Fuel mixture at the rate other than 50:1 may cause damage to the engine, Ensure mixture ratio is correct. Do not mix gasoline and oil directly in the engine fuel tank.

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



**MIXTURE RATIO IS 50:1** 

### **FUEL**

The engine uses two-stroke fuel, a mixture of gasoline and 2-stroke lubricant 50:1

## **GASOLINE**

Use fresh (within 30 days from purchase) 87 octane or higher unleaded gasoline known to be of good quality.

#### STORING FUEL

Store fuel only in a clean,safe, approved container. Check and follow local ordinances on type and location of storage container.

#### **IMPORTANT**

Two-stroke fuel may separate. Shake fuel container thoroughly before each use. Stored fuel ages. Do not mix more fuel than you expect to use within a month.

## FUEL AND OIL MIXTURE

Inspect fuel tank making sure that it is clean and fill with fresh fuel. Use a mixture of 50:1.

## **OPERATION**



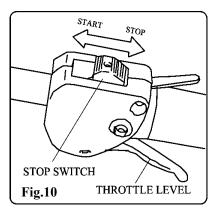
**WARNING:** Be sure to read the fuel information in the safety rules before you begin. If you do not understand the safety rules, do not attempt to fuel your unit. Call customer support.

#### 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. Move the stop switch to "START" position (See fig.10).
- 2. Give a gentle push on the primer pump repeatedly (7-10times) until fuel comes into the primer pump.
- 3. Cold Starts:Pull lever up to close choke.
- 4. Pull starter handle until engine flash fires.
- 5. Push choke lever inwards( excessive cranking with choke lever will cause flooding engine making it difficult to start.)
- 6. Pull starter handle until engine starts.
- 7. Allow engine to warm up for a few minutes before using.



## STARTING WARM ENGINE

- 1. The choke lever to the "RUN".
- 2. If fuel tank was not run dry, pull starter one to three times and engine should start.
- 3. If fuel tank was run dry, after refilling repeat steps 1-2-7 of starting cold engine instructions.

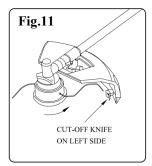
**NOTE:** If the starter rope is pulled repeatedly with the choke on, it may flood the engine and make starting difficult. If you have flooded the engine, remove the spark plug and gently pull the handle on the starter rope to eliminate any excess fuel; then dry the spark plug electrodes and replace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

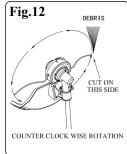
### STOPPING THE ENGINE

Release the throttle trigger and allow the engine to run idle for a few seconds. Move switch to STOP position.

## **CUTTING WITH A NYLON HEAD**

Line head rotates in a counter CLOCKWISE direction. The CUT-OFF KNIFE will be on the right side of the debris shield (See fig.11). For nearly all cutting, it is good to tilt the line head so that contact is made on the part of the line circle where the line is moving away from you and the debris shield. This results in the debris being thrown away from you.





WARNING: The proper debris shield must be in place on the unit when nylon cutting line is used. The cutting line can flap around if too much line is exposed. Always use the plastic debri shield with cut-off knife when using nylon cutting heads.

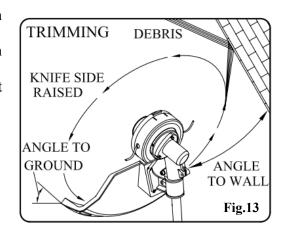
WARNING: Tilting the head to the wrong side will shoot the debris TOWARDS you. If the line head is held flat to the ground so that cutting occurs on the whole line circle, debris will be THROWN at you, drag will slow the engine down, and you will use up a lot of line.

**WARNING:** Use only quality nylon monofilament line of the diameter 2.5mm. Never use wire or wire-reinforced line in place of nylon trimmer line. Load your nylon line cutting head only with nylon trimmer line of the proper diameter.

WARNING: Use extreme caution when operating over bare spots and gravel, because the line can throw small rock particles at high speeds. Debris shields on the unit cannot stop objects which bounce or ricochet off hard surfaces.

## Trimming (See fig.13)

This is feeding the trimmer carefully into the material you wish to cut. Tilt the head slowly to direct debris away from you. If cutting up to a barrier such as fence, wall or tree, approach from an angle where any debris ricocheting off the barrier will fly away from you. Move the line head slowly until the grass is cut right up the barrier, but do not jam(overfeed) the line into the barrier. If trimming up to a wire mesh or chain linked fence be careful to feed only up to wire. If you go to far the line will snap off around the wire. Trimming can be done to cut through weed stems one at a time. Place the trimmer line head near the bottom of the weed-never high up which could cause the weed to chatter and catch the line. Rather than cut the weed right through, just use the very end of the line to wear through the stem slowly.

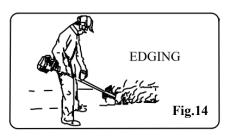


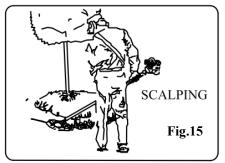
## Scalping and edging (See fig.14,15)

A

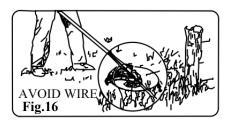
**WARNING:** Do not use a steel blade for edging or scalping.

Both of these are done with the line head tilted at a steep angle. Scalping is removing top growth. Edging is trimming the grass back where it has spread over a sidewalk or drive way. During both edging and scalping, hold the unit a steep angle and in a position where the debris, and any dislodging dirt and stones, will not come back towards you even if it ricochets off the hard surface. Although the picture shows how to edge and scalp every operator must find for himself the angles which suits his body size and cutting situation.





WARNING:Do not trim in any area where there are strands of fencing wire (See fig. 16). Wear protective safety protecting, Do not cut where you cannot see what the cutting device is cutting.



### **CUTTING WITH A BLADE**



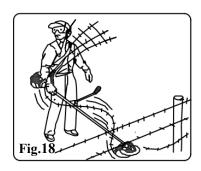
**WARNING:** Do not use a brush cutter for cutting trees.

There are many different types of blades, however the two most commonly used are the following. BRUSHBLADE is used for cutting brush and weeds up to 3/4" in diameter. Only 255mm 3-blade can be used in this type of brush cutter.

WARNING: Do not cut with dull, cracked or damaged metal blade. Before cutting growth, inspect for obstructions such as boulders, metal stakes or strands of wire from broken fences. If an obstruction cannot be removed, mark its location so that you can avoid it with the blade. Rocks and metal will dull or damage a blade (See fig.17). Wires can catch on the blade head and flap around or be thrown into the air.



Blade thrust is the reaction which may occur when the spinning blade contacts anything it cannot cut. This contact may cause the blade to stop for an instant ?and suddenly "thrust" the unit away from the object that was hit. This reaction can be violent enough to cause the operator to lose control of the unit. Blade thrust may 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 from cutting ease and safely, approach the weeds being cut from the right to the left, in the event that an unexpected object or woody stock is encountered, this could minimise the blade thrust reaction (See fig. 18).



## **Scything weeds**

This is cutting by swinging the blade in a level area. It can quickly clear areas of field grass and weeds. Scything should not be used to cut large, tough weeds or woody growths (See fig. 19).

**NOTE:** Do not use a brush blade to cut trees which exceed a diameter of 1/2 to 3/4 inches.



Scything can be done in both directions, or just in one way which results in the debris being thrown away from you.

That is using the side of the blade that it is rotating away from you. Tilt down the blade slightly on this same side .You will be hit by some debris if you scythe in both directions.

Do not force the blade to cut. Do not change the angle of cut after into the wood. Avoid using any pressure or leverage which could cause the blade to bind or crack.

## **MAINTENANCE**



**WARNING:** Use only original manufacturer's replacement parts, accessories and attachments. Failure to do so can cause possible injury, poor performance and may void your warranty.

- The cutting attachment must not rotate in idle mode. If this requirement is not satisfied, the cluth has to be adjusted or the machine needs an urgent maintenance by a qualified technician.
- You may make adjustments and repairs described here. For other repairs, have the trimmer serviced by an authorized service agent.
- Consequences of improper maintenance may include excess carbon deposits resulting in loss of performance and discharge of black oily residue dripping from the muffler.
- Make sure all guards, straps, deflectors and handles are properly and securely attached to avoid the risk of personal injury.

### EXHAUST PORT AND SILENCER

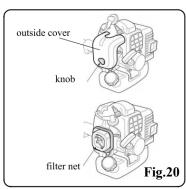
Depending on the type of fuel used, the type and amount of oil used, and/or your operating conditions, the exhaust port and silencer may become blocked with carbon deposits. If you notice a power loss with your petrol powered tool. A qualified service technician will need to remove these deposits to restore performance.

#### ADJUSTING CARBURETOR

**NOTE:** Do not adjust carburetor unless necessary. If you have trouble with the carburetor, see your dealer. Improper adjustment may cause engine damage and void warranty.

### AIR FILTER

- Accumulated dust in the air filter will reduce engine efficiency. Increase fuel consumption and allow abrasive particles to pass into the engine. Remove the air filter as often as necessary to maintain in a clean condition.
- Light surface dust can readily be removed by tapping the filter. Heavy deposits should be washed out in suitable solvent.
- Remove filter cover by loosening air filter cover knob (See fig.20).



#### FUEL FILTER

- Fuel tank is fitted with a filter. Filter is situated at the free end of fuel pipe and can be picked out through fuel port with a piece of hooked wire or the Like (See fig. 21).
- Check the fuel filter periodically. Do not allow dust to enter into fuel tank. Clogged filter will cause difficulty in starting engine or abnormalities in engine performance.
- When filter is dirty, replace the filter.
- When the inside of the fuel tank is dirty, it can be cleaned by rinsing the tank out with gasoline.

## SPARK PLUG

- Do not attempt to remove the plug from a hot engine in order to avoid possible damage to the threads.
- Clean or replace the plug if fouled with heavy oily deposits.
- Replace the plug if the center electrode is worn rounded at the end.
- Spark gap 0.6-0.7mm (.023".028") (See fig.22).
- Fastening torque =14-15Nm(125-135in.lb)



After working (40-50) hours, fill with the right quantity of grease. Remove the screw and put in the lithium-based grease. turning the shaft manually until grease emerges, then refit the wash the screw (See fig.23).

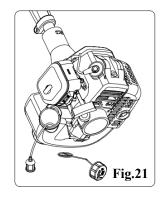


Fig.22

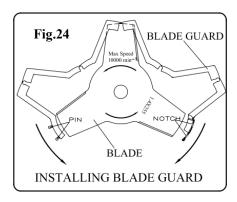


## TRANSPORT&STORAGE

## TRANSPORT, HANDLING

**WARNING:** Please empty the fuel tank before transporting, to avoiding the engine leaked. For avoiding the cutting attachment damaged the brush cutter and people, please removed the cutting attachment, and at the same time, resile the brush cutter as factory state, and then casting all parts into the package. Before transporting, all parts should be packed and validated safe.

- The engine should be turned off when the unit is moved between work areas.
- After the engine has stopped, the muffler is still hot. Never touch hot parts such as the muffler.
- Confirm that the fuel has not leaked from the tank.
- Allow the engine to cool, empty the fuel tank and secure the unit from moving before transporting in a vehicle, if the blade is fitted, always use the blade guard.
- Installing blade guard (See fig.24).
- Open the blade guard and install on the blade, then put the pin into the guard notch.





**WARNING:** Always place the blade guard on the blade when the unit is not in use. Remove the blade guard before using the unit. If not removed the blade guard could become a thrown object as the blade begins to turn.

## **EXTENDED STORAGE**



WARNING: Do not store in a closed area where fuel vapors can reach an open flame from hot water heaters, heaters, furnaces, etc. Store in a locked, well ventilated area only.

- Inspect, clean and repair unit if necessary.
- Remove all fuel from tank.
- Start engine-This will consume all fuel in fuel line and carburetor.
- Remove spark plug and pour one tea spoon of clean motor oil into spark plug hole of cylinder-replace spark plug.
- Store in clean, dry, dust free area.

# **TROUBLESHOOTING**

## 1. FAILURE TO START

Symptom				Probable cause	Remedy
Spark plug		Fuel system		These is no fuel in tank Fuel filter obstructed	Add fuel in tank  Clean fuel filter
Cylinder	spark normal	Fuel system normal	Fuel	Fuel is too dirty There is water in fuel There is too much fuel in cylinder Mixture ratio is improper	Replace fuel Replace fuel Take down spark plug and dry it Mixture proration
compress		High		Spark plug fouled with oily	Clean the oily deposits
pressure  system  normal  normal	voltage Spark plug stem wire spark normal	deposits  Spark plug insulation damage  Spark gap is too large or small	Replace spark plug Adjust spark gap 0.6-0.7mm		
			High voltage wire breach or break off	Replace or tighten	
				Coil looseness	Tighten
				Piston ring attrite	Replace a new
Fuel system	Ignition system	Compression is inadequat	n pressure	Piston ring is broken Piston ring cementation Spark plug looseness Conjoint surface of the cylinder and crank case leak	Replace Eliminate Tighten Eliminate
normal	normal normal Compression r			High voltage wire and spark plug contact poor	Tighten the spark plug cap
				Stop switch failure or short circuit	Repair or replace

## 2. LOW OUTPUT

Symptom	Probable cause	Remedy
Flameout when speedup  The smoke is thin, carburetor spout backward	Muffler fouled with oily deposits	Clean fuel filter、clean fuel road、adjust carburetor Clean the oily deposits
Compress press is inadequate	Piston piston ring cylinder attrite	Replace piston viston ring
Engine leak	Conjoint surface of the cylinder and crank case leak	Repair
The end of two crank shaft leak	The seal is bad	Replace seal
		Avoid use it for long time, high speed and heavy load clean the oily deposits

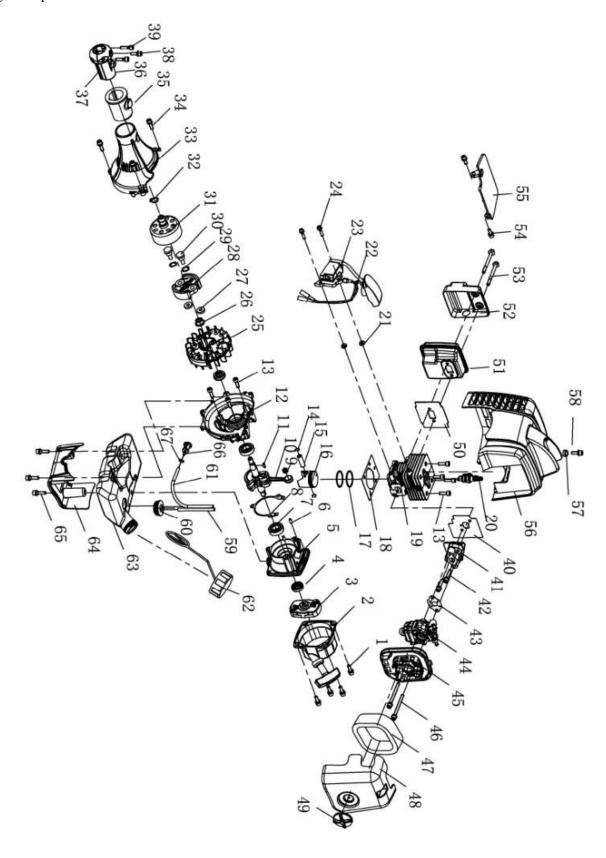
## 3. ENGINE RUNNING UNSTABLE

Symptom	Probable cause	Remedy	
There are knock sound in engine	Piston piston ring cylinder attrite Piston pin piston attrite Bearing of crank shaft attrite	Replace piston piston ring Replace piston pin piston Replace bearing	
There are including sound	Engine overheats Burning room fouled with oily deposits Gasoline branded is unfit	Avoid use it for long time, high speed and heavy load Clean the oily deposits Replace with required branded octane	
Engine ignition break off	There is water in fuel spark gap is wrong coil gap is wrong	Instead fuel Adjust spark gap 0.6-0.7mm Adjust coil gap 0.3-0.4mm	

## 4. THE ENGINE SUDDENLY STOPPED

Probable cause	Remedy
Fuel has been used up Spark plug fouled with oily deposits and short circuit high voltage wire fall off	Add fuel Clean the oily deposits connect

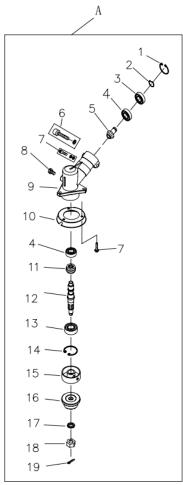
# EXPLODED VIEW AND PARTS LIST Engine exploded view



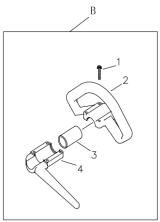
# Engine parts list

Item	Stock #	Description	Qty	Item	Stock #	Description	Qty
1	GB70.1+GB93+GB97	Screw M5×16	4	35	CG305F-HS.1-3	Rubber	1
2	P23.10A	Starter	1	36	CG305F-HS.1-1	Holder A	1
3	P23.9A	Guide Cover assy	1	37	CG305F-HS.1-2	Holder B	1
4	1E36F.2	Oil seal	2	38	GB70.1+GB93+GB97	Screw M5×16	1
5	P23.11-2	Crank case R	1	39	GB70.1+GB93+GB97	Screw M5×25	2
6	GB/T119.1	Pin 4×h8×8	2	40	P23-7	Gasket insulator	1
7	GB/T276	Bearing 6001/P53	2	41	P23.3	Insulator	1
8	P23.11-3	Gasket crank case	1	42	GB70.1+GB93+GB97	Screw M5×25	2
9	KBK081211.5	Bearing	1	43	1E36F-2A-1	Gasket carburetor	1
10	P23.6A.1	Crank shaft assy	1	44	1E34F-2E.1A	Carburetor	1
11	1E40FP-3Z.3-1	Key	1	45	1E34F.1.1	Cleaner base assy	1
12	P23.11-1	Crank case F	1	46	GB70.1+GB97.1	Screw M5×60	2
13	GB/T70.1	Screw M5×16	7	47	1E34F.1-1	Air filter element	1
14	1E34F.6-2	Ring snap	2	48	HP23.1-1	Cover cleaner	1
15	1E34F.6-3	Piston pin	1	49	1E34FG.1.1	Knob cover	1
16	P26.1A-1	Piston	1	50	1E34F-3	Gasket muffler	1
17	1E34F.6-5	Ring piston	2	51	1E34F-2E.2	Muffler	1
18	P23-2	Gasket cylinder	1	52	HP23-5A	Cover	1
19	P26-1	Cylinder	1	53	HP23-8	Screw M5×25-10.9	2
20	CMR6A	Spark plug	1	54	GB70.1+GB93+GB97	Screw M5×14	2
21	PO40-5	Spacer Ig coil	2	55	HP23-2	Clapboard	1
22	P23.5.2	Wire lead assy	1	56	HP23.3	Top cover	1
23	HP23.2.1	IG coil	1	57	1E33F-4	Spacer Ig coil	1
24	GB70.1+GB93+GB97	Screw M4×20	2	58	GB70.1+GB93+GB97	Screw M5×18	1
25	P23.5.1.1	Rotor magnet	1	59	EB-415.4.2-4	Fuel pipe 2.5×1.25× 100	1
26	GB/T6177	Nut M8	1	60	EB415.4.2-2	Plug	1
27	1E34F-11	Wave washer	2	61	CG420.1.3.2-2	Fuel pipe $3 \times 1 \times 165$	1
28	1E34F.10D	Clutch assy	1	62	IE32FL.6.2B	Tank cap assy	1
29	1E34F-13	Washer	2	63	HP23.6.1	Fuel tank	1
30	1E34F-12	Clutch bolt	2	64	HP23.4	Stand	1
31	CG260A.1A.1	Clutch drum assy	1	65	GB70.1+GB93+GB97	Screw M5×20	3
32	GB/T894.1	Circlips for shaft-type A15	1	66	P40.12.2-3A	Filter	1
33	HP23.5.1	Fan cover	1	67	P23.12-1	Snap rings	1
34	GB70.1+GB93+GB97	Screw M5×18	3				

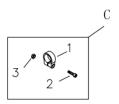
# Brush cutter &String trimmer exploded view



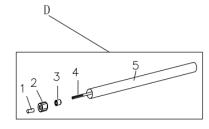
Item	Stock #	Description	Qty
A	PS4532-A	Gear Case Ass'y	1
1	PS4532-A-001	Stop Ring 26	1
2	PS4532-A-002	Stop Ring 10	1
3	PS4532-A-003	Bearing 6000-2RS/P6	1
4	PS4532-A-004	Bearing 6000/P6	2
5	PS4532-A-005	Pinion	1
6	PS4532-A-006	Screw M5×20	1
7	PS4532-A-007	Screw M5×12	4
8	PS4532-A-008	Bolt M5×20	1
9	PS4532-A-009	Gear Case	1
10	PS4532-A-010	Safety Guard	1
11	PS4532-A-011	Gear	1
12	PS4532-A-012	Gear Shaft	1
13	PS4532-A-013	Bearing 6002-2RS/P6	1
14	PS4532-A-014	Stop Ring 32	1
15	PS4532-A-015	Holder A	1
16	PS4532-A-016	Holder B	1
17	PS4532-A-017	Washer 10	1
18	PS4532-A-018	Left Nut	1
19	PS4532-A-019	Pin 2×16	1



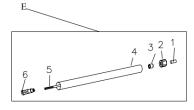
Item	Stock #	Description	Qty
В	PS4532-B	Handle	1
1	PS4532-B-001	Screw M5×35	4
2	PS4532-B-002	Handle	1
3	PS4532-B-003	Rubber Cover	1
4	PS4532-B-004	Handle Cover	1



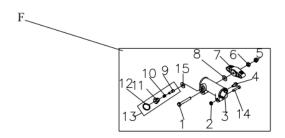
Item	Stock #	Description	Qty
С	PS4532-C	Clamp	2
1	PS4532-C-001	Clamp	1
2	PS4532-C-002	Screw M5×35	1
3	PS4532-C-003	Nut M5	1



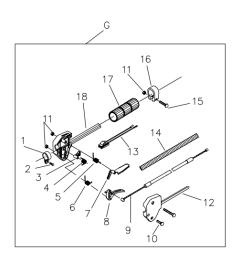
Item	Stock #	Description	Qty
D	PS4532-D	Fore-Pipe Comp.	1
1	PS4532-D-001	Hose Sleeve	1
2	PS4532-D-002	Rubber Cover	3
3	PS4532-D-003	Oil-bearing	3
4	PS4532-D-004	Drive Shaft	1
5	PS4532-D-005	Pipe	1



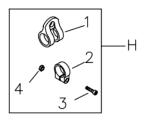
Item	Stock #	Description	Qty
Е	PS4532-E	Rear-Pipe Comp.	1
1	PS4532-E-001	Ribber Pipe (5mm)	1
2	PS4532-E-002	Rubber Cover	3
3	PS4532-E-003	Oil-bearing	3
4	PS4532-E-004	Pipe	1
5	PS4532-E-005	Drive Shaft	1
6	PS4532-E-006	Adapter Comp.	1



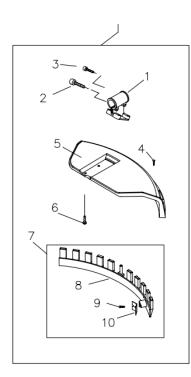
Item	Stock #	Description	Qty	Item	Stock #	Description	Qty
F	PS4532-F	Joining Ass'y	1	8	PS4532-F-008	Washer 6	1
1	PS4532-F-001	Bolt M6×55	1	9	PS4532-F-009	Bin	1
2	PS4532-F-002	Nut M5	1	10	PS4532-F-010	Spring	1
3	PS4532-F-003	Joining	1	11	PS4532-F-011	Cover	1
4	PS4532-F-004	Bolt M5×12	1	12	PS4532-F-012	Loop	1
5	PS4532-F-005	Nut M6	1	13	PS4532-F-013	Bin comp.	1
6	PS4532-F-006	Screw M6	1	14	PS4532-F-014	Screw M5×25	1
7	PS4532-F-007	Handle	1	15	PS4532-F-015	Washer	1



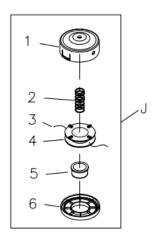
Item	Stock #	Description	Qty
G	PS4532-G	Level Ass'y	1
1	PS4532-G-001	Clamp	1
2	PS4532-G-002	Screw M5×16	1
3	PS4532-G-003	Tine	1
4	PS4532-G-004	Spring	1
5	PS4532-G-005	Spring	1
6	PS4532-G-006	Spring	1
7	PS4532-G-007	Safety Lever	1
8	PS4532-G-008	Throttle Lever	1
9	PS4532-G-009	Cable Comp.	1
10	PS4532-G-010	Screw M5×25	2
11	PS4532-G-011	Nut M5	3
12	PS4532-G-012	Box, left	1
13	PS4532-G-013	Stop Switch	1
14	PS4532-G-014	Tube (12.5×170)	1
15	PS4532-G-015	Screw M5×30	1
16	PS4532-G-016	Clamp	1
17	PS4532-G-017	Rubber Cover	1
18	PS4532-G-018	Box, Right	1



Item	Stock #	Description	Qty
Н	PS4532-H	Holder Ass'y	1
1	PS4532-H-001	Harness Clamp	1
2	PS4532-H-002	Clamp	1
3	PS4532-H-003	Screw M5×20	1
4	PS4532-H-004	Nut M5	1



Item	Stock #	Description	Qty
I	PS4532-I	Guard Ass'y	1
1	PS4532-I-001	Bracket	1
2	PS4532-I-002	Screw M5×30	2
3	PS4532-I-003	Screw M5×12	1
4	PS4532-I-004	Screw ST4.2×16	1
5	PS4532-I-005	Safety Guard	1
6	PS4532-I-006	Screw M5×16	4
7	PS4532-I-007	Guard Ass'y	1
8	PS4532-I-008	Guard	1
9	PS4532-I-009	Screw ST4.2×16	2
10	PS4532-I-010	Blade	1



Item	Stock #	Description	Qty
J	PS4532-J	Nylon Cutter Head	1
1	PS4532-J-001	Case	1
2	PS4532-J-002	Spring	1
3	PS4532-J-003	Cord Φ2.5×2100	2
4	PS4532-J-004	Cord Holder	1
5	PS4532-J-005	Cover	1
6	PS4532-J-006	Cover	1





Item	Stock #	Description	Qty
K	PS4532-K	Harness Ass'y	1
L	PS4532-L	Blade	1
M	PS4532-M	Blade Guard	1

## TWO (2) YEARS LIMITED WARRANTY

PowerSmart is committed to building equipment that will provide years of dependable service. Our warranties are consistent with our commitment and dedication to quality.

TWO (2) YEARS LIMITED WARRANTY OF POWER SMART PRODUCTS FOR HOME USE.

PowerSmart ("Seller") warrants to the original purchaser only, that all PowerSmart consumer power tools will be free from defects in material or workmanship for a period of two (2) years from date of purchase. If the tool(s) is used while providing professional or commercial services, the warranty coverage shall be for a maximum of (90) days.

SELLER'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Two (2) Years Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or improperly repaired, by person(s) other than an Authorized Seller or Service Center.

Please be aware that normal wear parts are not covered this warranty. This includes drive belts, blades and grass bags. Carburetor issues, and/or other damage found to be the result of stale, contaminated or compromised fuel, are not covered under this limited warranty.

To make a claim under this Limited Warranty, you must return the entire power tool product; transportation prepaid, to PowerSmart. The owner must include a legible copy of the original receipt, which shall list the date of purchase, along with the company's name where the product was purchased.

THIS LIMITED WARRANTY DOES NOT APPLY TO ANY ACCESSORY ITEMS INCLUDED WITH THE TOOL SUCH AS CIRCULAR SAW BLADES OTHER RELATED ITEMS OR TO ANY REPLACEMENT PARTS LISTED UNDER MAINTENANCE.

ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LIABILITY FOR LOSS OF PROFITS) ARISING FROM THE SALE OR USE OF THIS PRODUCT. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE U.S., PROVINCE TO PROVINCE IN CANADA AND FROM COUNTRY TO COUNTRY.

For questions, comments, technical assistance or to order repair parts

Please call toll free at: 1-800-791-9458 (M-F 9am – 5pm EST)

Email: support@amerisuninc.com

PLEASE SAVE ALL OF YOUR ORIGINAL RECEIPTS. THIS WARRANTY IS VOID WITHOUT THEM.