

# POWERSMART<sup>®</sup>

## INSTRUCTION MANUAL

### 21" 3-in-1 Self Propelled Lawn Mower

Model # DB2194S



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

Website: [www.Amerisuninc.com](http://www.Amerisuninc.com)  
[www.powersmartusa.com](http://www.powersmartusa.com)

Toll free: 1-800-791-9458 Mon-Fri 9-5 EST  
Email: [support@amerisuninc.com](mailto:support@amerisuninc.com)



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## **TECHNICAL DATA**

21" 3-in-1 Self Propelled Lawn Mower      Model # DB2194S

Engine type:	4 stroke, OHV, single cylinder with forced air cooling system
Displacement:	161 cc
Fuel tank capacity:	0.21 Gallon
Oil capacity:	15.2 fl.oz
Cutting width:	21 inch
Cutting height:	1.18 – 3 inch
Height adjustment:	5 Position
Drive type:	Rear- wheel drive
Grass catcher capacity:	1.4 Bushels
Wheel:	Front: 7 inch / Rear: 8 inch
Package dimensions (L x W x H):	33.3 x 22.6 x 17.3 inches
Weight:	75.8lb

## **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 lawn mower.



This manual contains special messages to bring attention to potential safety concerns, 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, 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 lawn mower, read and observe all warnings, cautions, and instructions on the lawn mower 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 could result in damage to the engine.

## **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 before using the lawn mower.



### **DANGER: CARBON MONOXIDE**

Using an 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 CO. But even if you cannot smell the exhaust, you could be breathing CO.

**NEVER** use an engine inside homes, garages, crawlspaces, or other partly enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan, or opening windows and/or doors will **NOT** properly vent CO nor supply adequate fresh air. **ONLY** use an engine outside and far away from 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<sup>0</sup>F (65<sup>0</sup> 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.

# **IMPORTANT SAFETY INSTRUCTIONS**

## **General Operation**

Read, understand, and follow all instructions on the machine and in the manual(s) before starting.

1. Do not put hands or feet near or under the machine. Keep clear of the discharge opening at all times.
2. Only allow responsible adults, who are familiar with the instructions, to operate this machine.
3. Clear the area of objects such as rocks, wire, toys, etc., which could be thrown by the blade. Stay behind the handle when the engine is running.
4. Be sure the area is clear of bystanders before operating. Stop machine if anyone enters the area.
5. Do not operate machine barefooted or while wearing sandals. Always wear substantial footwear.
6. Do not pull machine backward unless absolutely necessary. Always look down and behind before and while moving backward.
7. Never direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Stop the blade when crossing gravel surfaces.
8. Do not operate machine without the entire grass catcher, discharge guard, rear guard, or other safety protective devices in place and working.
9. Never leave a running machine unattended.
10. Stop the engine and wait until the blade comes to a complete stop before cleaning the machine, removing grass catcher, or unclogging the discharge guard.
11. Operate machine only in daylight or good artificial light.
12. Do not operate machine while under the influence of alcohol or drugs.
13. Never operate mower in wet grass. Always be sure of your footing; walk; never run.
14. Disengage the drive system, if so equipped, before starting the engine.
15. If the machine should start to vibrate abnormally, stop the engine and check for the cause immediately. Vibration is generally a warning of trouble.
16. Always wear eye protection when operating machine.
17. See manufacturer's instructions for proper operation and installation of accessories. Only use accessories approved by the manufacturer.

## **Slope Operation**

Slopes are a major factor related to slip and fall accidents, which can result in severe injury. Operation on all slopes require extra caution. If you feel uneasy on a slope, do not mow it.

1. Mow across the face of slopes; never up and down. Exercise extreme caution when changing direction on slopes.
2. Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could cause a slip and fall accident. Tall grass can hide obstacles.
3. Do not mow on wet grass or excessively steep slopes. Poor footing could cause a slip and fall accident.
4. Do not mow near drop-offs, ditches, or embankments. You could lose your footing or balance.

## **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 lawn mower.

4. Use extra care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child.

### **Service**

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 lawn mower 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.

### **General Service**

1. Never operate machine in a closed area.
2. Keep all nuts and bolts tight to be sure the equipment is in safe working condition.
3. Never tamper with safety devices. Check their proper operation regularly.
4. Keep machine free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage and remove any fuel-soaked debris. Allow machine to cool before storing
5. If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before starting.
6. Never make any adjustments or repairs with the engine running. Disconnect the spark plug wire to prevent unintended starting.
7. Check grass catcher components and the discharge guard frequently and replace with manufacturer's recommended parts, when necessary.
8. Mower blades are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them.
9. Do not change the engine governor setting or overspeed the engine.
10. Maintain or replace safety and instruction labels, as necessary.

## KNOWING YOUR LAWN MOWER

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



- |   |                                 |    |                         |
|---|---------------------------------|----|-------------------------|
| 1 | Recoil starter handle           | 9  | Primer Bulb             |
| 2 | Grass catcher                   | 10 | Fuel tank cap           |
| 3 | Cutting height adjustment lever | 11 | Rear discharge door     |
| 4 | Rear wheel                      | 12 | Lower handle            |
| 5 | Side discharge chute            | 13 | Upper handle            |
| 6 | Oil dipstick                    | 14 | Engine start/stop lever |
| 7 | Front wheel                     | 15 | Drive control bar       |
| 8 | Cutting height adjustment lever |    |                         |

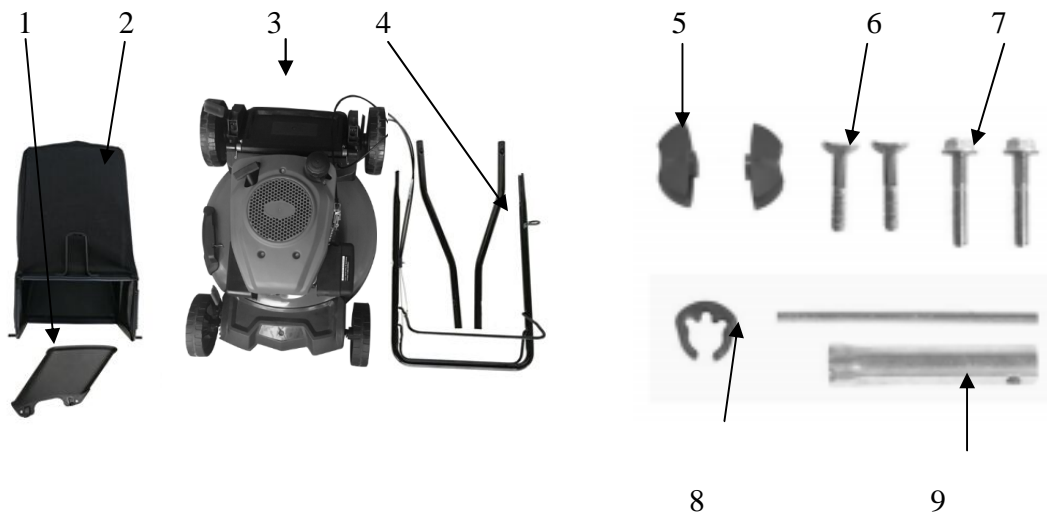


## **LAWN MOWER PREPARATION**

The following section describes steps necessary to prepare the lawn mower for 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 lawn mower or shorten its lifespan.

### **UNPACKING**

Unpack the lawn mower and all its parts, and compare against the list below. Do not discard the carton or any packaging until the lawn mower is completely assembled.



- 1 Side discharge chute
- 2 Grass Catcher
- 3 Lawn mower with upper handle
- 4 Lower handle
- 5 Knob (2)

- 6 Screw M8 (2)
- 7 Flange bolts M6 (2)
- 8 Cable clip
- 9 Spark plug wrench

## ATTACH LOWER & UPPER HANDLE

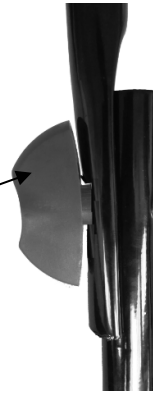
1. Take lower handle and line up the hole in the lower handle with the hole on the handle bracket.
2. Secure the lower handle with Sleeve with provided M6 Hexagonal flange bolts on each side.

M6 flange bolts



3. Pull upper handle up and lock it in position with bolts and knob on both side.

Knob and screw



4. Insert the recoil starter handle cable into the hook provided on the upper handle.

Recoil starter handle



## GRASS CATCHER

### Attach grass catcher

1. Lift mower rear discharge door.
2. Place grass catcher into the slots in the handle brackets.
3. Release the rear discharge door so that it rests on the grass catcher.



### Remove grass catcher

1. Lift mower rear discharge door.
2. Lift grass catcher up and off the slots in the handle bracket.
3. Release mower rear discharge door to allow it to close rear opening of mower.

## SIDE DISCHARGE CHUTE

To convert mower for side discharge, the grass catcher has been removed and that the rear discharge door is closed.

1. Lift the spring-loaded discharge cover located on the side of the mower.
2. Slide two hooks of the side discharge chute under the hinge pin and lower the spring on the side discharge cover.

**Caution:** Do not attempt to remove the permanently mounted spring loaded side discharge cover at any time.



## ADJUSTING THE CUTTING HEIGHT

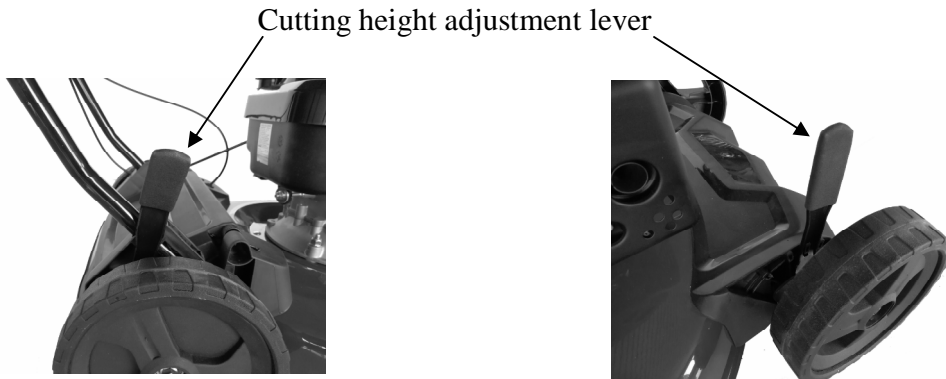


**Warning!** Cutting height adjustments should only be performed after the engine and blades have come to a complete stop!

It is always best to begin cutting your lawn with a higher deck height to prevent scalping your lawn.

The cutting height is adjusted with a single lever.

Actuate the adjustment lever and pull it to the required position. Please make sure that the lever locks into position.



# **OPERATION**

## **ADD OIL**

The lawn mower is shipped without oil. User must add the proper amount of oil before operating the lawn mower for the first time. The oil capacity of the engine crankcase is 15.2 fl. oz. For general use, we recommend 5W, 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.



To add oil, follow these steps:

1. Make sure the lawn mower is on a level surface. Tilting the lawn mower to assist in filling will cause oil to flow into engine areas and will cause damage. Keep lawn mower level!
2. Remove the dipstick from the engine.
3. Add oil slowly as to not overflow the unit.
4. To check the oil level, wipe the dipstick with a clean rag. Insert the dipstick into the oil fill opening without screwing it in. Remove the dipstick to check the oil mark.
5. Slowly add more oil and repeat step 4 until the oil mark reaches to the top of the dipstick. Do not overfill the crankcase.
6. Check for oil leaks. Tighten dipstick firmly.

## **ADD GASOLINE**

Use fresh (within 30 days from purchase), lead-free gasoline with a minimum of 87 octane rating. Do not mix oil with gasoline.

To add gasoline, follow these steps:

1. Make sure the lawn mower is on a level surface.
2. Unscrew fuel tank 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 0.21 gallons. 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.

### **IMPORTANT:**

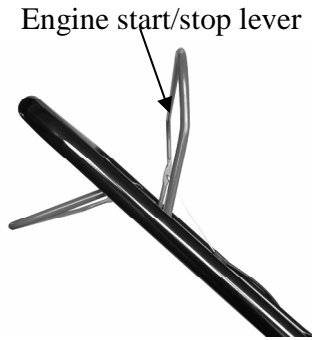
- Never use an oil/gasoline mixture.
- Never use old gasoline.
- Avoid getting dirt or water into the fuel tank.
- Gasoline can age in the tank and make starting difficult. Never store lawn mower for extended periods of time with fuel in the tank or the carburetor.

**NOTE:** After completing the above preparation, the engine is ready to be started.

### **ENGINE START/STOP LEVER**

This lawn mower comes equipped with an engine start/stop lever to prevent unintentional starting and to ensure safe operation. Releasing this lever will quickly stop the blade in case of danger. The lever must be actuated before the lawn mower is started. When the engine start/stop lever is released, it must return to its initial position.

Before you start mowing, you should run through this process several times in order to ensure that the lever and actuator cables are working properly. Repeat the test several times after the engine has started up. When the engine start/stop lever is released, the engine must stop within a few seconds. If not, contact Customer Service.



**Warning:** The blade begins to rotate as soon as the engine is started.

### **START THE ENGINE**

To start the engine, perform the following steps:

1. Check the oil and fuel levels.
2. Press the primer bulb 3 times.
3. Pull on the recoil starter handle slowly until a slight resistance is felt, then pull quickly to start the engine. Return cord gently into the recoil starter. Never allow the cord to snap back.
4. If engine fails to start, repeat step 3. NOTE: After repeated failed attempts to start the engine, please consult the troubleshooting guide before attempting again. If problems persist, please call customer service.

### **STOP THE ENGINE**

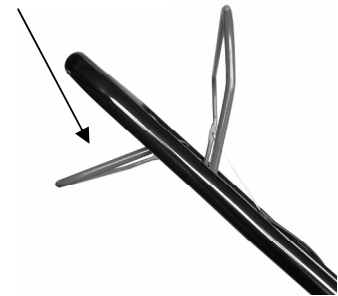
Release the engine start/stop lever to stop the engine.

### **DRIVE CONTROL BAR**

If you press drive control bar the clutch for the drive will be closed and the lawnmower will start to move with the engine running. Release the drive control bar in good time to stop the moving lawnmower.

Practice starting and stopping before you use the mower for the first time until you are familiar with controlling the mower.

Drive control bar



### **MOWING**

The engine throttle on your mower has been preset to provide optimum bagging and mulching performance for years to come.

Only use a sharp blade that is in good condition. This will prevent the grass blades from becoming frayed and the lawn from turning yellow.

Mow in straight lines for a nice, clean look. The swaths should overlap each other by a few inches in order to avoid stripes.

It's import to keep the underside of the mower deck clean and remove grass build-up. This buildup will decrease mulching quality, and make it harder for the equipment to bag the grass.

Always mow along inclines (not up and down). You can prevent the lawn mower from slipping down by holding a position at an angle upwards. Select the cutting height according to the length of the grass. If necessary, mow a number of times so that you never cut more than 2 inches of grass in one go.

Turn off the engine before doing any checks on the blade. Keep in mind that the blade continues to rotate for a few seconds after the engine has been turned off. Never attempt to manually stop the blade. Regularly check to see if the blade is securely attached, is in good condition and is sharp. If the contrary is the case, sharpen the blade or replace it. In the event that the blade strikes an object, immediately turn off the lawn mower and wait for the blade to come to a complete stop. Then inspect the condition of the blade and the blade mount. Replace any parts that are damaged.

### USING AS SIDE DISCHARGE

You should fit the mulching adapter in order to use the side discharge.

1. On the side of the mower, lift the side discharge cover.
2. Slide two hooks of side discharge chute under hinge pin on the side discharge cover. Lower the side discharge cover.

**Caution:** Do not remove side discharge cover at any time.



### USING AS A REAR BAGGER

To use the grass catcher to collect clippings while you are operating the mower.

1. Attached grass catcher following instruction in the lawn mower preparation. Grass clippings will automatically collect in bag as you run the mower. Operate mower until grass catcher is full.
2. Stop engine completely by releasing the engine start/stop lever. Make sure that the engine has come to a complete stop.
3. Lift rear discharge door and pull grass catcher up and away from the mower to remove the grass catcher. Dispose of the grass clippings and reinstall the grass catcher when complete.



**Warning:** If you strike a foreign object, stop the engine. Remove spark plug wire, thoroughly inspect mower for any damage, and repair damage before restarting and operating. Excessive vibration of the mower during operation is an indication of damage. The mower should be promptly inspected and repaired.

## **MAINTENANCE**

Proper routine maintenance of this mower will help prolong the life of the machine.

Always observe safety rules when performing any maintenance.

The warranty on this lawn mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from warranty, operator must maintain the lawn mower as instructed here.

Changing of engine-governed speed will void engine warranty.

All adjustments should be checked at least once each season.

Periodically check all fasteners and make sure these are tight.



**Warning:** Always stop engine, allow engine to cool, disconnect spark plug wire before performing any type of maintenance on your machine.

## **DECK CARE**

It is important to clean underside of the mower deck after use to prevent the build-up of grass clippings or other debris. Follow steps below for proper cleaning.

1. Allow the engine to run until it is out of fuel. Do not attempt to pour fuel from the engine.
2. Disconnect spark plug wire. Refer to engine operator's manual.
3. Slowly tip mower so that it rests on the housing.
4. To prevent oil spills, always tip the mower so that the Air Filter is facing up.
5. Hold mower firmly and scrape and clean the underside of the deck with a suitable tool.
6. Gently lower the mower back on its wheels on the ground.

**Warning:** Never tip the mower more than 90° in any direction and do not leave the mower tipped for any length of time. Oil can drain into the upper part of the engine causing a starting problem.

## **MOWER BLADE**

To ensure safe operation, have all blade sharpening, balancing and mounting work carried out by an authorized service center. To achieve optimal results, we recommend having the blade checked once a year.

If, in spite of all caution, the blade comes into contact with an obstacle, switch off the engine immediately and pull off the spark plug connector. Tilt the lawn mower to the rear and check the blade for damage. Always keep the side with the air cleaner facing up. Damaged or bent blades must be replaced. Never straighten a bent blade. Never work with bent or heavily worn blades as this will result in vibrations, causing further damage to the mower.



**Warning:** Risk of injury when working with a damaged blade.



## **STORAGE**

**CAUTION:** Never place any type of storage cover or tarp on the MOWER while it is still hot.

If the MOWER is being stored for short periods of time (30 to 60 days), add stabilized fuel to the gas tank until it is full. Run the engine for 2 – 3 minutes allowing stabilized fuel mixture to circulate through the carburetor.

**NOTE:** Keeping the fuel tank full, reduces the amount of air and vapor and helps reduce deterioration of the fuel. This will also help minimize moisture accumulation common with ethanol blended fuels.

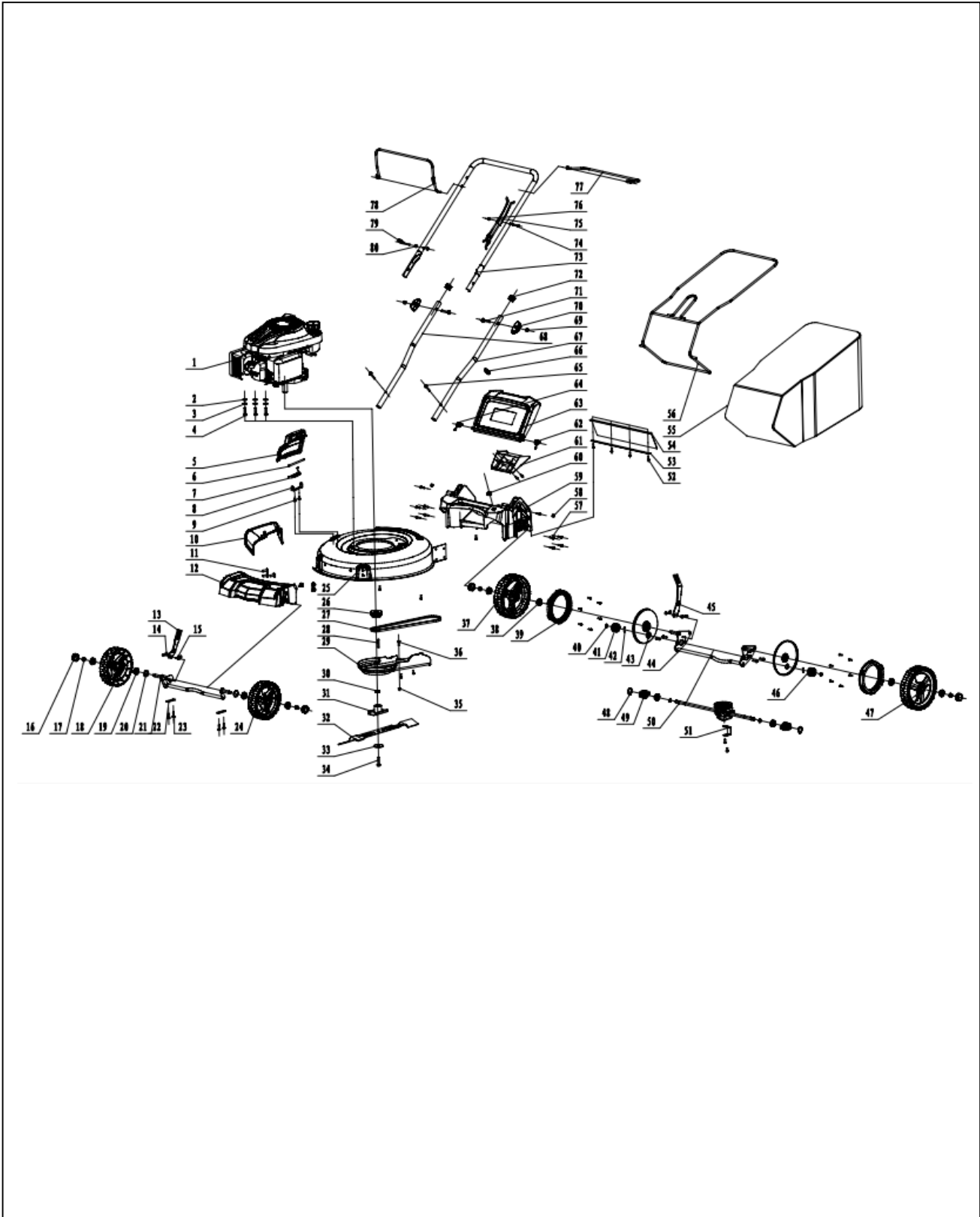
When storing the mower for extended periods of time:

1. Start the engine and run it until the tank and fuel line are completely empty and the engine stalls.
2. Change the oil after each season.
3. Remove the spark plug. Use an oil-can to fill the cylinder with approx. 2 ml of oil. Slowly pull back the starter handle, which will bathe the cylinder wall with oil. Screw the spark plug back in.
4. Clean the cooling fins of the cylinder and the housing.
5. Be sure to clean the entire equipment to protect the paint.
6. Store the equipment in a well-ventilated place.

## **TROUBLESHOOTING**

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
Engine fails to start	Engine start/stop lever disengaged.	Engage engine start/stop lever.
	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.
Mower will not mulch grass.	Wet grass.	Do not mow when grass is wet, wait until dry to cut.
Uneven cut.	Excessively high grass.	Mow once at a high cutting height, then mow again at desired height or make a narrower cutting path.
	Dull blade.	Sharpen or replace blade.

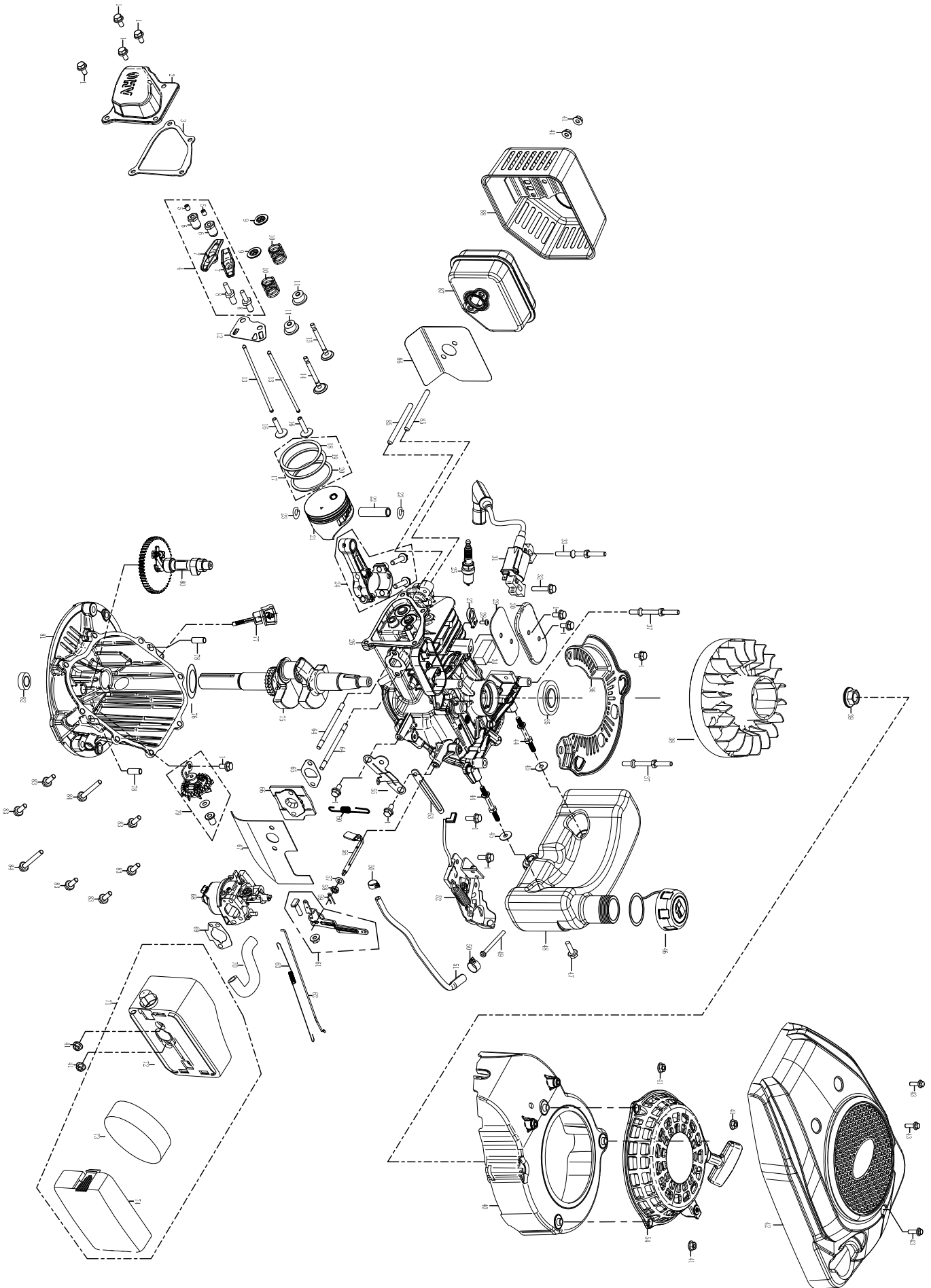
# EXPLODED VIEW AND PARTS LIST



Item	Stock#	Description	Qty
1	303190275	Engine	1
2	303042023	Fflat washer	3
3	303041022	Washer	3
4	303020265	Hex washer screw M8x30mm	3
5	203050381	Side discharge deflector	1
6	303090066A	Spring pin shaft	1
7	303160455	Torsional spring	1
8	303160456	Side discharge Bracket	1
9	303020468	Hex washer screw	2
10	203050382	Side discharge chute	1
11	303010329	Self-tapping screw	6
12	203050399	Front cover	1
13	303071058	Front adjustment spring leaf assembly	1
14	303030032	Nylon locknut M6	4
15	303020339	hex washer screw M6X14	6
16	203050393	Wheel cover	4
17	303030118	Flange nylon nut M8	4
18	203050394	7"Right wheel	1
19	203021112	Front axle seaming	4
20	303043005	Axle keeper	2
21	303180934	Front axle seaming	1
22	303071034	Axle keeper	4
23	303010216	Self-tapping screw	10
24	203050395	7" left wheel	1
25	303180943	21"steel deck	1
26	303160454	Small pulley	1
27	302040071	Belt	1
28	303110033	Square Key	1
29	203050396	Belt cover	1
30	303160741	flat washer	1
31	303180937	Blade connector	1
32	303071037	21"blade	1
33	303043023A	Butterfly washer	1
34	303020469	Hex washer screw	1
35	303030087	Nut	1
36	303020159	Square bolt	1
37	203050397	8" Right wheel	1
38	303100065	Stamping bearings	6
39	203021209	Internal gear	2
40	303050007	Shaft ring	4

Item	Stock#	Description	Qty
41	303160470	Advance gear Right	1
42	303123017A	Cylindrical pin	2
43	203010750	Rear defense cover	2
44	303180942	Rear self drive axle seaming	1
45	303071059	Rear adjustment spring leaf	1
46	303160471	Advance gear Left	1
47	203050398	8"Left wheel	1
48	303050050	Shaft ring	2
49	203021115	Rear axle sleeve	2
50	303240504	Drive assembly	1
51	303071049	Fixed support	1
52	303010095	Self-tapping screw	23
53	303071047	Rubber keeper	1
54	302080050	Rubber sheet	1
55	302120048	Grass collector	1
56	303080491	Collector holder	1
57	303010332	Self-tapping screw	8
58	303030119	Square Nut	2
59	203050400	Rear base	1
60	302060025	Rubber stopper	1
61	203050389	Rear block cover	1
62	303130336	Rear cover torsional spring left	1
63	203050390	Rear cover	1
64	303130337	Rear cover torsional Spring right	1
65	303020558	Bolt	2
66	203040007	Wire clip	1
67	303080488	Lower Tube L	1
68	303080503	Lower tube R	1
69	303030066	Nut	2
70	203020336A	Knob	2
71	303020057	T bolt	2
72	302060012	Plug	2
73	303080489	Upper tube	1
74	303020442	Hex washer screw M6X30	1
75	302080057	Cable	1
76	303030025	Upper frame	2
77	303080502	Drive control bar	1
78	303080490	Cutting control bar	1
79	303160531	Hook	1
80	303030065	Nut	1

# ENGINE EXPLODED VIEW AND PART LIST



Item	Stock #	Description	Qty
1	5787.06012.00.01	Reel bolt M6x12	11
2	E65.0001.001.00.00	Cylinder head cover	1
3	E65.3000.001.00.00	Gasket, cylinder head cover	1
4	E65.0100.001.00.00	Rocker assembly	1
5	E65.0100.001.00.04	Lock nut	2
6	E65.0100.001.00.03	Adjust nut sphere	2
7	E65.0100.001.00.02	Rocker	2
8	E65.0100.001.00.01	Stud, rocker assembly	2
9	168.0060.001.00.00	Spring seat intake valve	2
10	168.0040.001.00.00	Valve spring	2
11	F68.0085.001.00.00	Oil baffle over	2
12	E65.1480.001.00.00	Pusher guide	1
13	E65.0160.001.00.00	Pusher	2
14	E65.0020.001.00.00	Intake valve	1
15	E65.0030.001.00.00	Exhaust valve	1
16	E65.1030.001.00.00	Tappet	2
17	165.0210.001.00.00	piston ring assembly	1
18	165.0210.001.00.01	First air ring	1
19	165.0210.001.00.02	Second air ring	1
20	165.0210.001.00.03	Oil ring assembly	1
21	E65.0200.001.00.00	Piston	1
22	P65.0220.001.00.00	Piston pin	1
23	160.0230.001.00.00	Clip piston pin	2
24	G65.0190.001.00.00	Connecting rod assembly	1
25	E65.2160.001.00.00	Spark plug	1
26	E65.1000.001.00.00	Crankcase body	1
27	E65.7061.001.00.00	Respiration valve	1
28	0818.04010.00.01	Cross round head screw M4x10	1
29	E65.1352.001.00.00	Back oil chamber cover gasket	1
30	E65.1351.001.00.00	Return oil chamber cover seal	1
31	E65.2100.001.00.00	Ignition coil	1
32	5787.06030.00.01	Reel bolt M6x30	1
33	E65.7071.001.00.00	Double head bolt	1
34	E65.7080.001.00.00	Oil filter	1
35	E65.3150.001.00.00	Oil seal 25x45x7	1
36	E65.2230.002.00.00	Windshield	1
37	E65.7072.001.00.00	Double head bolt	2
38	E65.2040.001.00.00	Flywheel assembly	1
39	6177.14000.06.01	Reel nut	1
40	E65.2000.001.04.03	Start small cap	1
41	6177.06000.00.03	Reel nut M6	7
42	E65.2000.001.04.01	Start cap	1
43	5787.05010.20.01	Cross plate bolt M5x10	3
44	E65.7076.001.00.00	Double head bolt	2

Item	Stock #	Description	Qty
45	0096.06000.00.01	Flat mat	3
46	E65.3200.C01.04.02	Fuel tank cap	1
47	5787.06025.00.01	Reel bolt M6x25	1
48	E65.3200.C01.04.01	Fuel tank	1
49	P70.3208.001.00.00	Filter	1
50	458.2360.007.00.00	Tubing clamp	2
51	E65.2330.C01.00.00	Tubing	1
52	E65.7070.001.00.00	Brake group assembly	1
53	188.1220.002.00.00	Line pressing board	1
54	E65.2000.001.04.02	Start pull plate	1
55	E65.1180.001.00.00	Speed control controller	1
56	E65.1100.001.00.00	Sway bar	1
57	168.1110.001.67.00	Washer	1
58	P70.3150.001.00.00	Oil seal 6x11x4	1
59	168.1120.001.00.00	Split clip	1
60	E65.1150.001.00.00	Reset spring	1
61	E65.1130.A01.00.00	Speed adjustment assembly	1
62	E65.2275.001.00.00	Throttle lever	1
63	E65.1160.001.00.00	Fine adjustment spring	1
64	0900.06089.00.01	Double head bolt M6x89	2
65	E65.3080.001.00.00	Intake seal	1
66	E65.2300.001.00.00	Carburetor patch	1
67	E65.2301.001.00.00	Carburetor insulation pad	1
68	E65.2260.004.00.00	Carburetor	1
69	E65.2280.001.00.18	Air filter gasket	1
70	E65.2370.002.00.00	Exhaust pipe	1
71	P65.2280.004.00.00	Air filter assembly	1
72	P65.2280.004.00.01	Air filter base	1
73	P65.2280.004.00.02	Filter element of air filter	1
74	P65.2280.004.00.03	Air filter cover	1
75	G65.0180.001.60.00	Crankshaft	1
76	P70.0185.001.00.00	Crankshaft washer	1
77	E65.1230.001.03.00	Oil gauge assembly	1
78	E65.3170.001.00.00	Positioning pin 8x20	2
79	E65.7059.001.00.00	Governor gear assembly	1
80	E65.1040.001.62.00	Camshaft	1
81	E65.1010.002.00.00	Crankcase cover	1
82	P65.3150.003.00.00	Oil seal 25x38x7	1
83	5787.06018.00.01	Reel bolt M6x18	6
84	5787.06050.00.01	Reel bolt M6x50	2
85	0900.06081.00.01	Double head bolt M6x81	2
86	E65.3100.001.00.00	Exhaust gasket	1
87	E65.2400.001.00.00	Muffler	1
88	E65.2402.001.00.00	Muffler outer cover	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, is 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 CST)

Email: [support@amerisuninc.com](mailto:support@amerisuninc.com)

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