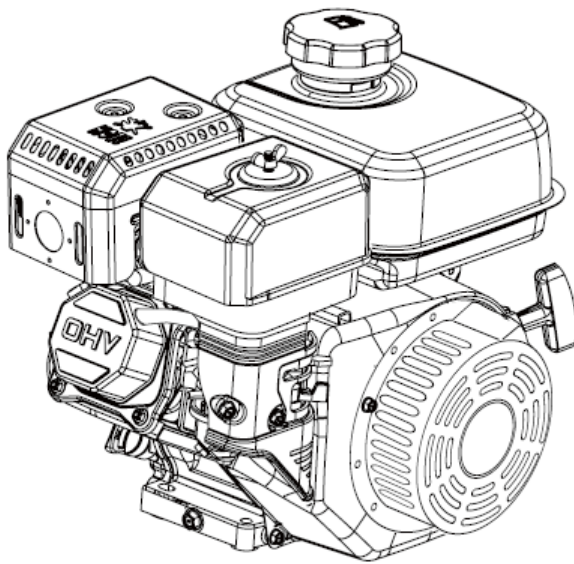




212cc Horizontal Engine

Item # 56212
Owner's Manual
Manual del Propietario



Questions? Problems?
Please call our customer help line:

(800) 232-1195 M-F 8-5 CST

FEATURES

- Low Oil Automatic Shutoff
- Circuit Breaker for Overload Protection
- 0.9 Gallon Fuel Tank Capacity
- Meets EPA Phase III Emission Standards and CARB Emission Standards

2013

ENGINE IDENTIFICATION

For information and questions, please contact the Customer Service Help Line by calling **800-232-1195**. Certain information will be requested by the Customer Service Representative and to facilitate that, please fill in the information below.

Refer to the illustration below for the location of Serial Number. Record engine information in the spaces provided below.

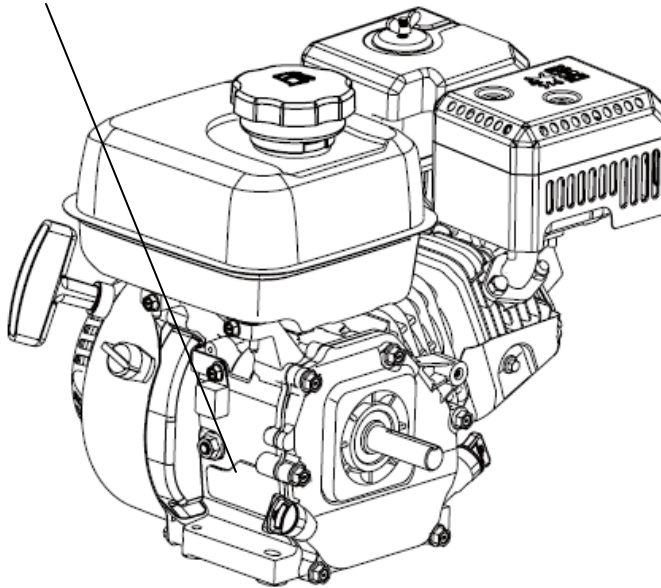
DATE OF PURCHASE: _____

PURCHASED FROM: _____

ITEM NUMBER: _____

ENGINE SERIAL NUMBER: _____

ENGINE SERIAL NUMBER



SERVICE RECORD

Record Service Dates:

	Date	Date	Date	Date	Date	Date
Oil Change						
Change spark plug						
Clean Fuel Tank						
Clean Air Cleaner						

TABLE OF CONTENTS

ENGINE IDENTIFICATION	i
SERVICE RECORD	i
INTRODUCTION	1
SAFETY INFORMATION.....	2
GENERAL SAFETY PROCEDURES	3
IMPORTANT SAFETY INSTRUCTIONS	4
ENGINE COMPONENTS.....	4
ENGINE PREPARATION	6
Using the Engine for the First Time	6
Step 1 - Fill Oil	6
Step 2- Add Gasoline.....	7
STARTING THE ENGINE	8
SUBSEQUENT STARTING OF THE ENGINE.....	9
Step 1- Check the Oil.....	9
Step 2 – Check the Fuel Level.....	9
STOPPING THE ENGINE	11
MAINTENANCE / CARE	11
Cleaning the Engine.....	12
Checking the Oil.....	12
Changing/ Adding Oil	12
Air Cleaner Maintenance.....	13
Spark Plug Maintenance.....	13
Draining the Fuel Tank.....	14
STORAGE / TRANSPORT PROCEDURES	15
SPECIFICATIONS	16
TROUBLESHOOTING	18
EXPLODED VIEW AND PARTS LIST	21
WARRANTY STATEMENT	24

INTRODUCTION

Thank You for Purchasing a WEN Power™ 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. WEN Power™ 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.

Special Messages

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



Questions? Problems?

In order to answer questions and solve problems in the most efficient and speedy manner, contact Customer Service at:

(800) 232-1195 M-F 8-5 CST

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 engine read and observe all warnings, cautions, and instructions on this sheet, on the engine, and in the 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**.



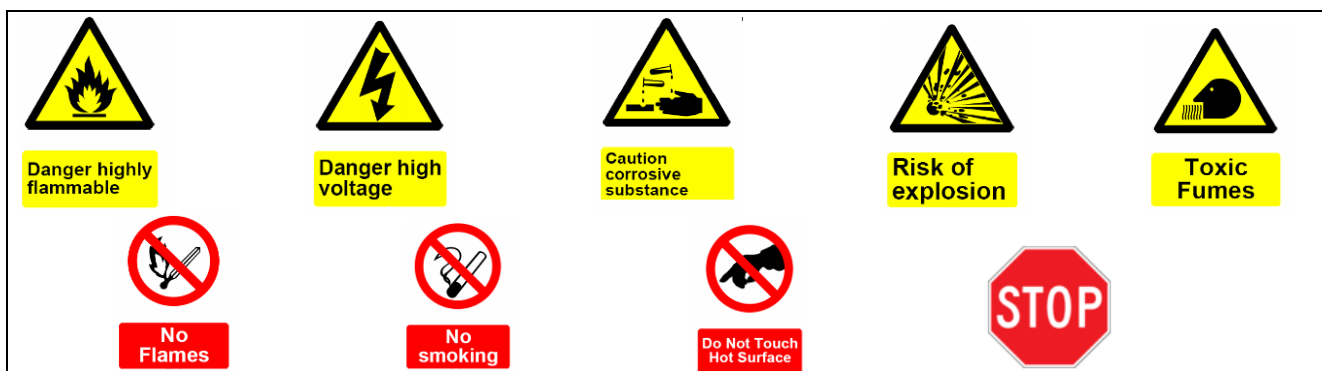
WARNING indicates a hazard, which, if not avoided, **could result in death or serious injury**.



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 or engine**.

SAFETY SYMBOLS AND MEANINGS



GENERAL SAFETY PROCEDURES



For any questions regarding the hazard and safety notices listed in this manual or on the product, please call (800) 232-1195 M-F 8-5 CST before using the engine.



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 doors does **NOT** supply enough 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.



Risk of explosion



Danger highly flammable



No Flames



No smoking

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 not directly in contact with gasoline.

- Do not operate near open flame.
- Do not smoke near 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.
- Before transporting, turn fuel valve to off and disconnect spark plug wire.



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.

- Use engine only for its intended purposes.
- Operate only on dry, level surfaces.
- Turn engine switch to “off” position when the engine is not running.

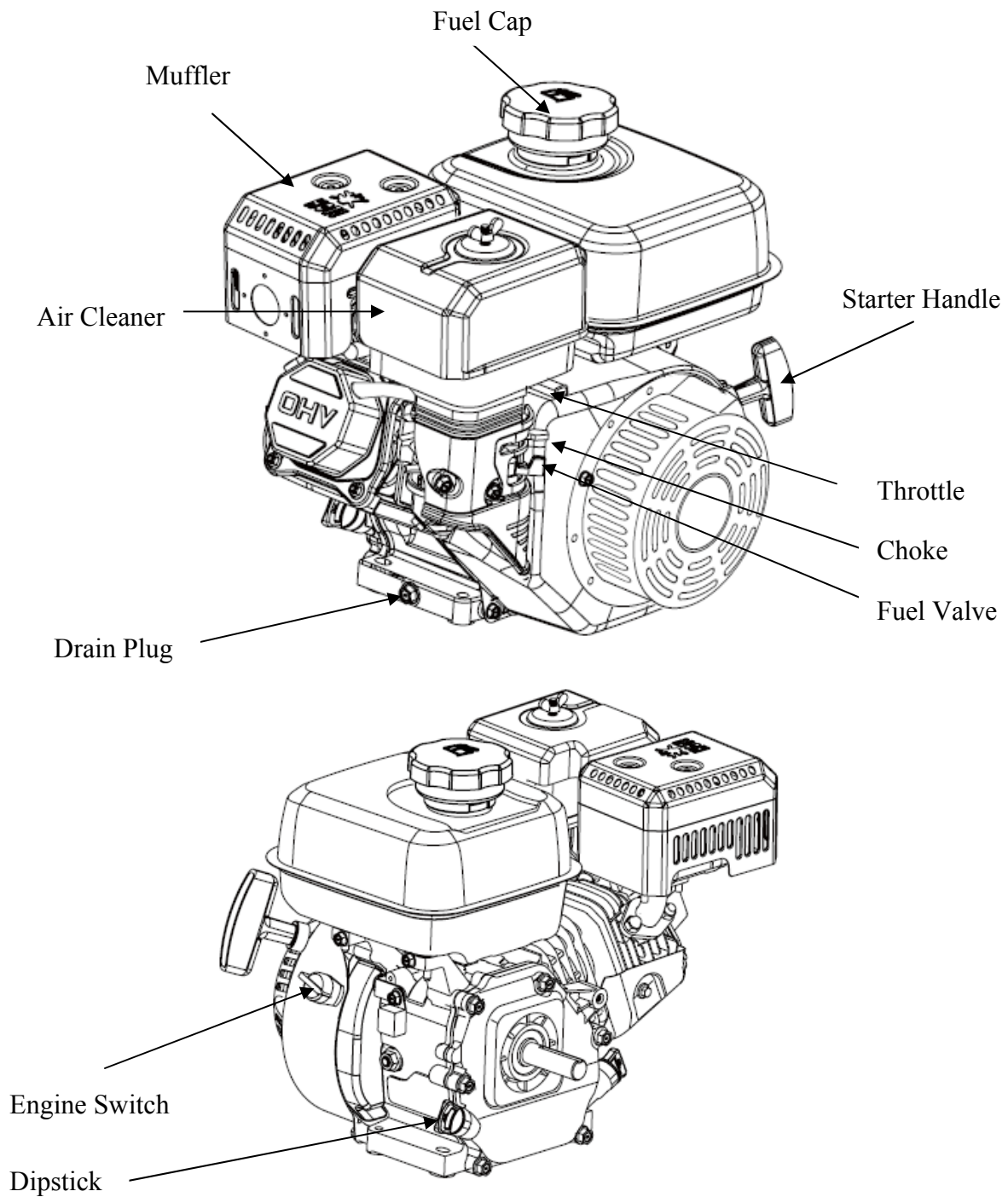
IMPORTANT SAFETY INSTRUCTIONS

- **SAVE THESE INSTRUCTIONS** – This manual contains important instructions for WEN engine that should be followed during installation and maintenance of the engine.
 - Engines vibrate in normal use. Have damaged items repaired or replaced as necessary.
-

In addition to the previous safety notices, please become familiar with the safety and hazard markings on the engine.

ENGINE COMPONENTS

Please familiarize yourself with the locations and functions of the various components and controls of your engine.



ENGINE PREPARATION

Using the Engine for the First Time



The following section describes steps necessary to prepare the engine for use. If after reading this section, you are unsure about how to perform any of the steps please call (800) 232-1195 M-F 8-5 CST for customer service. Failure to perform these steps properly can damage the engine or shorten its life.

Step 1 - Fill Oil

The engine is shipped without oil. User must add the proper amount of oil before operating the engine for the first time. The oil capacity of the engine crankcase is 0.5 quart.

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

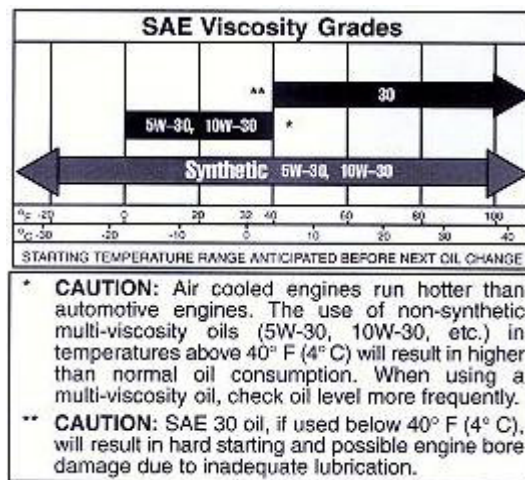


Figure1- Engine oil recommendations

To fill oil to the crankcase, follow these steps:

1. Make sure the engine is on a level surface. **Tilting the engine to assist in filling will cause oil to flow into engine areas and will cause damage. Keep engine level!**
2. Remove the oil filler/dipstick cap from the engine as shown in figure 2.
3. Using a funnel, add the appropriate type and amount of oil into the crankcase. The crankcase is full when the oil level has reached the second thread from the lip of the opening (see figure 3).
4. Check for oil leaks. Reinstall oil filler cap before starting engine.

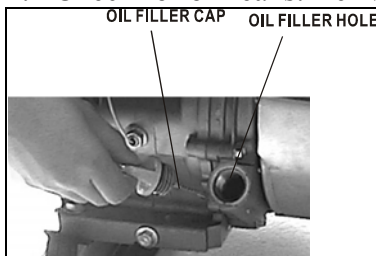


Figure 2- Unscrewing the oil cap

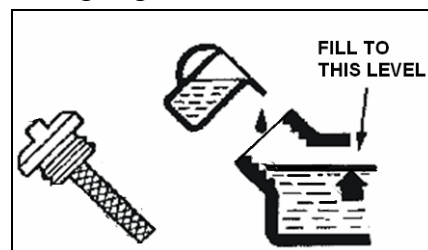


Figure 3- filling oil

Step 2- Add Gasoline



Danger highly flammable



Risk of explosion



No Flames



No smoking

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 not directly in contact with gasoline.

- Do not operate near open flame.
- Do not smoke near 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. Clean up any spilled fuel before starting.
- Empty fuel tank before storing or transporting the engine.
- Before transporting, turn fuel valve to off position and disconnect spark plug wire.

Use fresh (within 30 days from purchase), unleaded gasoline with a minimum 87 octane rating. Do not use gasoline which contains Methanol. Do not mix oil with gasoline.

To add gasoline, follow these steps:

1. Make sure the engine 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 fuel tank capacity is 0.9 gallon. NOTE: **Do not fill the fuel tank to the very top.** (See Figure 4). Gasoline will expand and spill over during use even with the fuel cap in place.
4. Reinstall fuel cap and wipe off any spilled gasoline with a dry cloth.

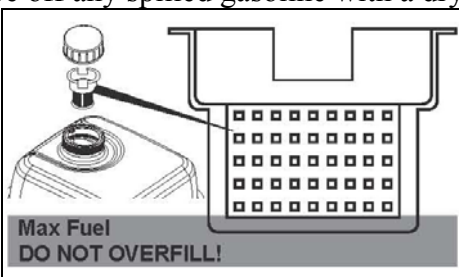


Figure 4

IMPORTANT:

- Never use an oil/gasoline mixture.
- Never use old gasoline.
- Avoid letting dirt or water into the fuel tank.
- Gasoline can age in the tank and make it hard to start up the engine in the future. Never store engine for extended periods of time with fuel in the tank.

STARTING THE ENGINE



Before starting the engine, make sure you have read and performed the steps in the “Engine Preparation” section of this manual. If you are unsure about how to perform any of the steps in this manual please call (800) 232-1195 M-F 8-5 CST for customer service.



Toxic
Fumes

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 doors does **NOT** supply enough 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.

To start your engine, perform the following steps:

1. Follow the Set Up Instructions in the equipment manual to prepare the equipment.
2. Inspect the equipment and engine.
3. Check the oil and fuel levels.
4. Read the Equipment Operation section in the equipment manual.
5. Turn the fuel valve to the “ON” position (see figure 5).
6. Move the choke lever to the “CHOKE” position (see figure 6).
7. Set the engine switch to the “on” position.
8. Slide the Throttle or Speed Control Lever to 1/3 away from the SLOW position (the “turtle”).
9. 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 machine. Never allow the cord to snap back.
10. If engine fails to start, repeat step 9. **NOTE:** After repeated failed attempts to start the engine, please consult the troubleshooting guide before attempting again. If problems persist please call **(800) 232-1195 M-F 8-5 CST**.
11. Once the engine has started, **slowly** return the choke lever all the way to the “RUN” position.
12. Allow the engine to run for several minutes at no load. This allows the engine to stabilize its speed and temperature.
13. Adjust the Throttle as needed.

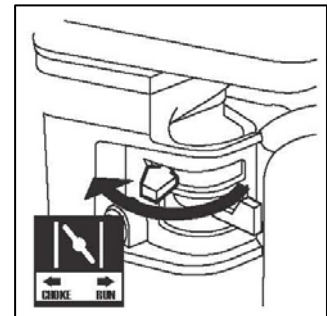


Figure 5

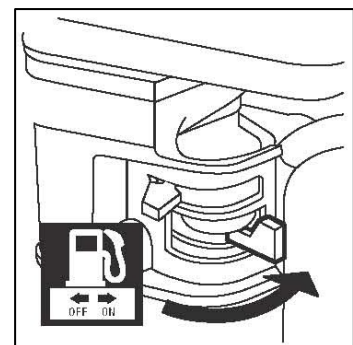


Figure 6

SUBSEQUENT STARTING OF THE ENGINE

If this is not the first time using the engine, user should take the following steps to prepare it for operation.

IMPORTANT: At this point the user should be familiar with the procedures described in the section titled “Using the Engine for the First Time.” If the user has not yet read this section, go back and read it now.

Step 1- Check the Oil

Oil consumption is normal during engine usage. The engine is equipped with a low-oil shutoff to protect it from damage. The oil level in the engine should be checked before each use to ensure that the engine crankcase contains sufficient lubricant.

To check or add oil, follow these steps:

1. Make sure the engine is on a level surface. Clean around oil fill.
2. Remove the oil filler/dipstick cap and check oil level.
3. If oil level is below the second thread from the lip of the oil fill opening, slowly add oil until the engine crankcase is filled.
4. Reinstall and tighten oil filler cap before starting the engine. .

Step 2 – Check the Fuel Level

Before starting the engine, check to see that there is sufficient gasoline in the fuel tank. The fuel gauge on top of the engine will indicate the fuel level in the tank. Add gasoline if necessary but leave sufficient room in tank for expansion.



Danger highly flammable



Risk of explosion



No Flames



No smoking

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 not directly in contact with fuel.

- Do not operate near open flame.
- Do not smoke near 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. Clean up any spilled fuel before starting.
- Empty fuel tank before storing or transporting the engine.
- Before transporting, turn fuel valve to off and disconnect spark plug wire.

IMPORTANT:

- Use only UNLEADED gasoline with an octane rating of 87 or higher.
- Do not use old gasoline.
- Never use an oil/gasoline mixture.
- Avoid letting dirt or water into the fuel tank.

HIGH ALTITUDE OPERATION ABOVE 3000 FEET

The fuel system on this engine may be influenced by operation at higher altitudes. Proper operation can be ensured by installing an altitude kit at altitudes higher than 3000 feet above sea level. At elevations above 8000 feet, the engine may experience decrease performance, even with the proper main jet. Operating this engine without the proper altitude kit installed may increase the engine's emissions and decrease fuel economy and performance. The kit should be installed by a qualified mechanic.



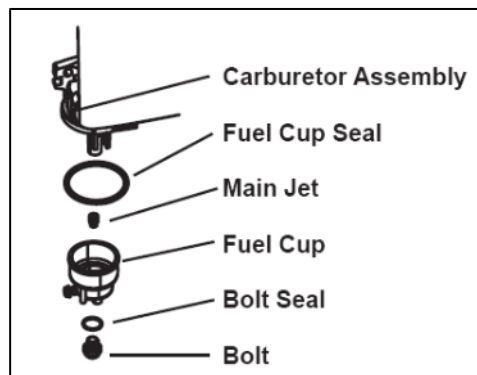
WARNING! TO prevent serious injury from fire: Follow kit procedures in a well-ventilated area away from ignition sources. If the engine is hot from use, shut the engine off and wait for it to cool before proceeding. Do not smoke.

Notice: Warranty Void if necessary adjustments are not made for high altitude use.

High Altitude Kit Installation Instructions

1. Turn off the engine.
2. Close the fuel valve.
3. Place a bowl under the fuel cup to catch any spilled fuel.
4. Unthread the bolt holding the fuel cup.

Caution! Carburetor bowl may have gas in it which will leak upon removing the bolt.



5. Remove the bolt, bolt seal, fuel cup, fuel cup seal and main jet from the body of the carburetor assembly.
6. Replace the main jet with the replacement jet needed for your altitude range.

Note: the Fuel cup seal and bolt seal may be damaged during removal and should be replaced with the new ones from the kit.

7. Replace the fuel cup seal, fuel cup, bolt seal and bolt. Tighten in place.
8. Wipe up any spilled fuel and allow excess to evaporate before starting engine. To prevent FIRE, do not start the engine while the smell of fuel hangs in the air.

part #	Description	Qty
P54173-5	Main Jet 3000-6000 feet	1
P54173-6	Main Jet 6000-8000 feet	1
P54173-7	Bolt Seal	1
P54173-1	Fuel Cup Seal	1

STOPPING THE ENGINE

To stop the engine:

1. Turn the engine switch to the “OFF” position.
2. Turn the fuel valve to the “OFF” position.



Do Not Touch
Hot Surface

WARNING: Allow the engine to cool for several minutes before touching areas that become hot during use.

CAUTION: Allowing gasoline to sit in the engine tank for long periods of time without use can make it difficult to start the engine in the future. Never store engine for extended periods of time with fuel in the tank.

MAINTENANCE / CARE

Proper routine maintenance of your engine will help prolong the life of your machine. Please perform maintenance checks and operations according the schedule in figure 7.



If you have questions about any of the maintenance procedures listed in this manual, please call (800) 232-1195 M-F 8-5 CST.

CAUTION: Never perform maintenance operations while the engine is running.

Recommended Maintenance Schedule

		each use	first month then every 20 hrs	every 3 months or 50 hrs	every 6 months or 100 hrs	every year or 300 hrs
Engine oil	check level	x				
	replace		x	x		
Air cleaner	check	x				
	clean			x		
fuel filter cup	clean				x	
spark plug	check/ clean				x	
fuel tank	check fuel level	x				
	clean					x

Figure 7- Recommended maintenance schedule

Cleaning the Engine

Never clean the engine when it is running! Never clean with a bucket of water or a hose. Water can get inside the working parts of the engine and cause a short circuit or corrosion. Always try to use the engine in a cool, dry place. If the engine becomes dirty, clean the exterior with a damp cloth, a soft brush, vacuum or pressurized air.

Checking the Oil

Check the oil level of the engine according to the Recommended Maintenance Schedule in Figure 7. The engine is equipped with an automatic shutoff to protect it from running with low oil pressure. The engine should be checked before each use for proper oil level. This is a critical step for proper engine starting.

To check or add oil, follow these steps:

1. Make sure the engine is on a level surface. Clean around oil fill.
2. Remove the oil filler/dipstick cap and check oil level.
3. If oil level is below the second thread from the lip of the oil fill opening, slowly add oil until the engine crankcase is filled.
4. Reinstall and tighten oil filler cap before starting the engine.

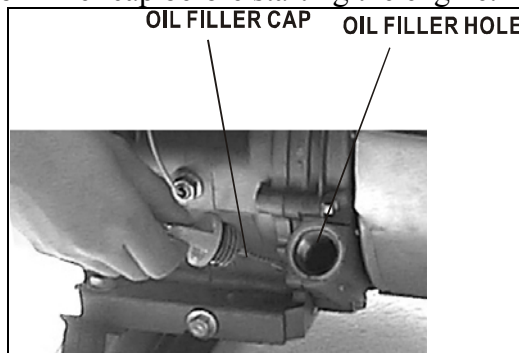


Figure 8- Checking the oil

Changing/ Adding Oil

Change the oil according to the maintenance schedule in figure 19. Change the oil when the engine is warm. This will allow for complete drainage. Change oil more often if operating under heavy load or high ambient temperatures. It is also necessary to drain the oil from the crankcase if it has become contaminated with water or dirt.

The oil capacity of the engine in this engine is 0.5 quart. Add oil when the oil level is low.

Drain the oil from the engine according to the following steps:

1. Place a container underneath the engine to catch oil as it drains.
2. Using a 10 mm hex wrench, unscrew the oil drain plug (see figure 9). Allow all the oil to drain from the engine.
3. Reinstall the oil drain plug and tighten with a 10 mm hex wrench.

To fill the crankcase with oil, follow these steps:

1. Make sure the engine is on a level surface. **Tilting the engine to assist in filling will cause oil to flow into engine areas and will cause damage. Keep engine level!**
2. Remove the oil filler/dipstick cap from the engine as shown in figure 8 above.
3. Using a funnel, add the appropriate type and amount of oil into the crankcase. The crankcase is full when the oil level has reached the second thread from the lip of the opening (see figure 10).
4. Check for oil leaks. Reinstall oil filler cap before starting engine.

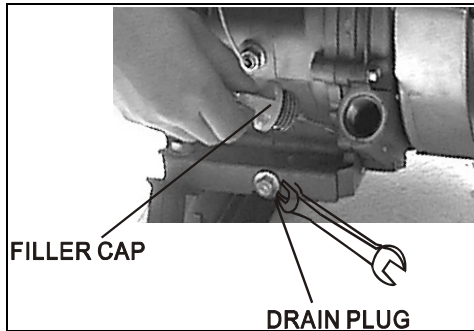


Figure 9- Draining oil

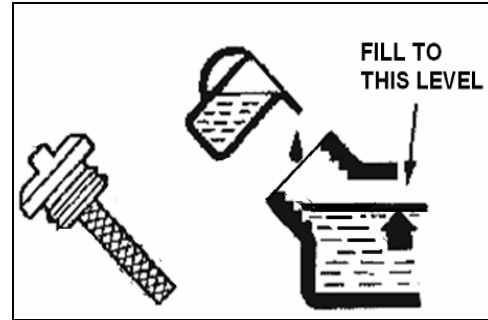


Figure 10- Adding oil

NOTE: Never dispose of used motor oil in the trash or down a drain. Please call your local recycling center or auto garage to arrange oil disposal.

Air Cleaner Maintenance

Routine maintenance of the air cleaner helps maintain proper air flow to the carburetor. Check that the air cleaner is free of excessive dirt.

1. Remove the air cleaner cover and the air cleaner elements and check for dirt. Clean or replace if necessary.
2. Wipe the dirt from inside the empty air cleaner casing.
3. Wash the sponge-like element in household detergent and warm water. Allow to dry.
4. Reinstall the sponge-like element in the air cleaner casing and reinstall the cover.

Spark Plug Maintenance

The spark plug is important for proper engine operation. A good spark plug should be intact, free of deposits, and properly gapped. To inspect the spark plug:

1. Pull on the spark plug cap to remove it.
2. Unscrew the spark plug from the engine using the spark plug wrench included with this product.
3. Visually inspect the spark plug. If it is cracked or chipped, discard and replace with a new spark plug.
4. Measure the plug gap with a gauge (see figure 11). The gap should be 0.7-0.8mm (0.028-0.031in).
5. If you are re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base and then re-gap the spark plug.
6. Screw the spark plug back into its place on the engine using the spark plug wrench. **Do not** over-tighten spark plug. Recommended tightening of spark plug is $\frac{1}{2}$ to $\frac{3}{4}$ of a turn after spark plug gasket contacts spark plug hole. Reinstall the spark plug cap.

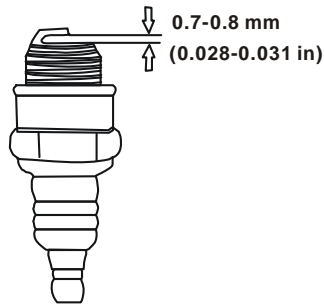


Figure 11- Measuring the spark plug gap
 Recommended Spark Plug: NGK- BP7ES, Torch- F6TC

Draining the Fuel Tank

Clean fuel tank each year or before storing the engine for extended periods of time. To drain the fuel tank and carburetor:

1. Turn the fuel valve to the “OFF” position. Move the engine in a well-ventilated area away from ignition sources.
2. Place a funnel leading to a proper gasoline container below the carburetor.
3. Remove the drain bolt from the bottom of the carburetor bowl and allow the fuel to drain.
4. Open the fuel valve. After all fuel has drained, reinstall the drain bolt. Tighten securely.
5. Store the emptied gasoline in a suitable place.

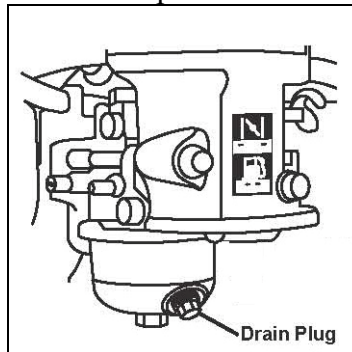


Figure 12 Carburetor Drain Bolt

⚠ CAUTION: Do not store fuel for more than 3 months.

STORAGE / TRANSPORT PROCEDURES



CAUTION: Never place any type of storage cover on the engine while it is still hot.

If the engine is being stored for short periods of time (30 – 60 days), add stabilized fuel to the fuel tank until full. NOTE: Filling the tank reduces the amount of air in the tank and helps reduce deterioration of fuel. Run the engine for 2 – 3 minutes allowing stabilized fuel mixture to circulate through the carburetor.

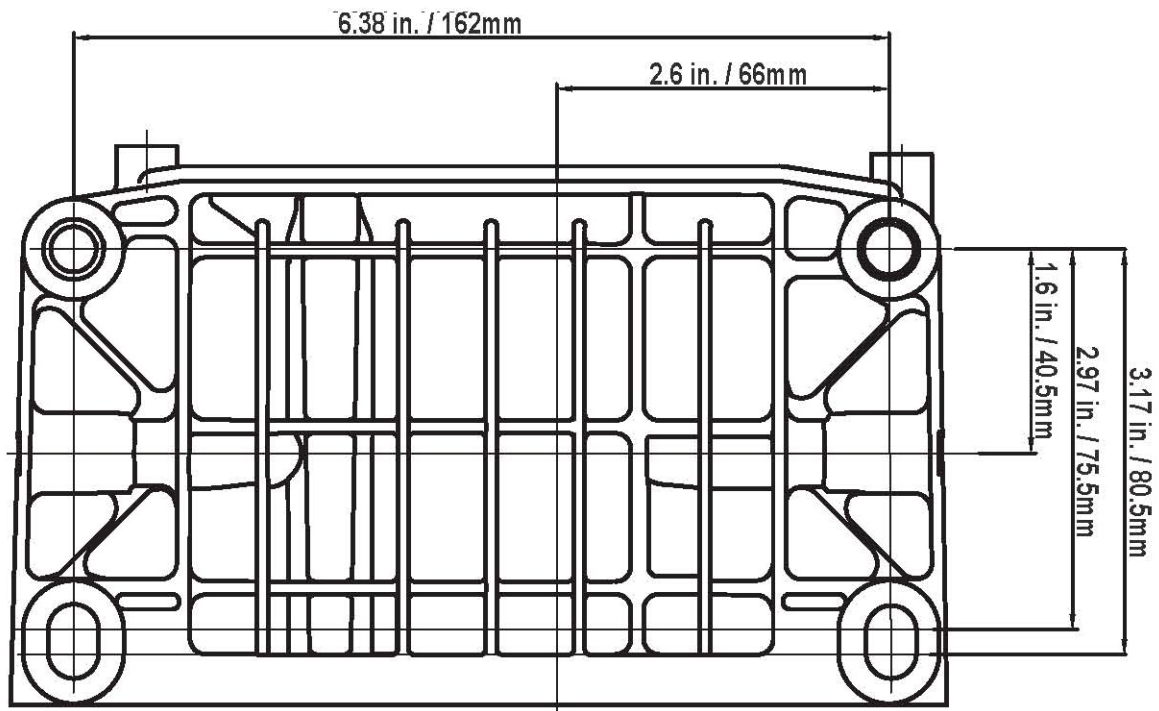
When transporting or storing the engine for extended periods of time:

- Drain the fuel tank (see “Draining the Fuel Tank” in the “Maintenance” section).
- Disconnect the spark plug cap from the spark plug.
- Do not obstruct any ventilation openings.
- Keep the engine in a cool dry area.

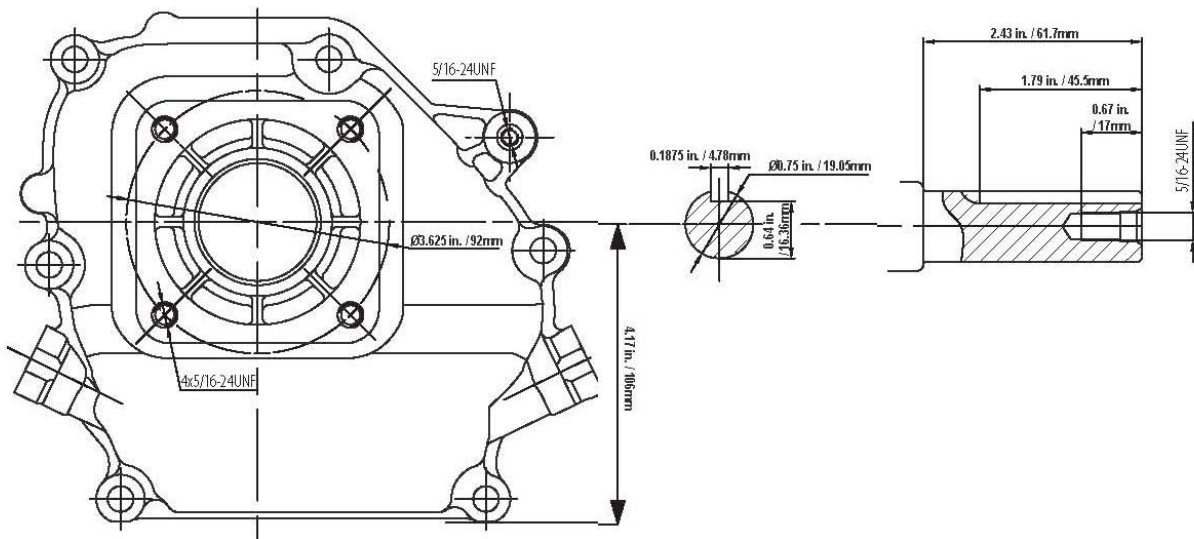
SPECIFICATIONS

Displacement		212cc
Max. Output		4.2 KW/3600RPM
Max. Torque		12 N·m/2500RPM
Engine Type		Horizontal Single Cylinder 4 stroke OHV
		Meets EPA phase III and CARB compliant
Cooling System		Forced air cooled
Fuel	Type	87+ octane unleaded gasoline
	Capacity	0.9 Gallon
Engine Oil	Type SAE	10W-30 above 32° F
		5W-30 at 32° F or below
	Capacity	0.5 Quart
Lubrication System		Forced Splash
Run Time @ 50% Load with full tank		3 hours
Sound Level at 22 feet		104 dB
Bore x Stroke		70 mm x 55 mm
Compression Ratio		8.5:1
Rotation viewed from PTO (power takeoff - the output shaft)		Counterclockwise
Shaft	Shaft	3/4" x 2.43"
	Keyway	3/16" (4.76 mm)
	End Tapped	5/16" - 24 UNF
Spark Plug	Type	NGK: BP-6ES, Torch: F6TC
	Gap	0.7-0.8 mm
Valve Clearance	Intake	0.10-0.15 mm
	Exhaust	0.15-0.20 mm
Idle Speed		1,800 ± 50 RPM
Dimensions		17.9x15x16.5 inches
Weight		35.2 lbs

MOUNTING HOLE DIAGRAM



POWER TAKE-OFF DIAGRAM



Note: Not to scale.

TROUBLESHOOTING

IMPORTANT: If trouble persists please call our customer help line at **(800) 232-1195** M-F 8-5 Central Time.

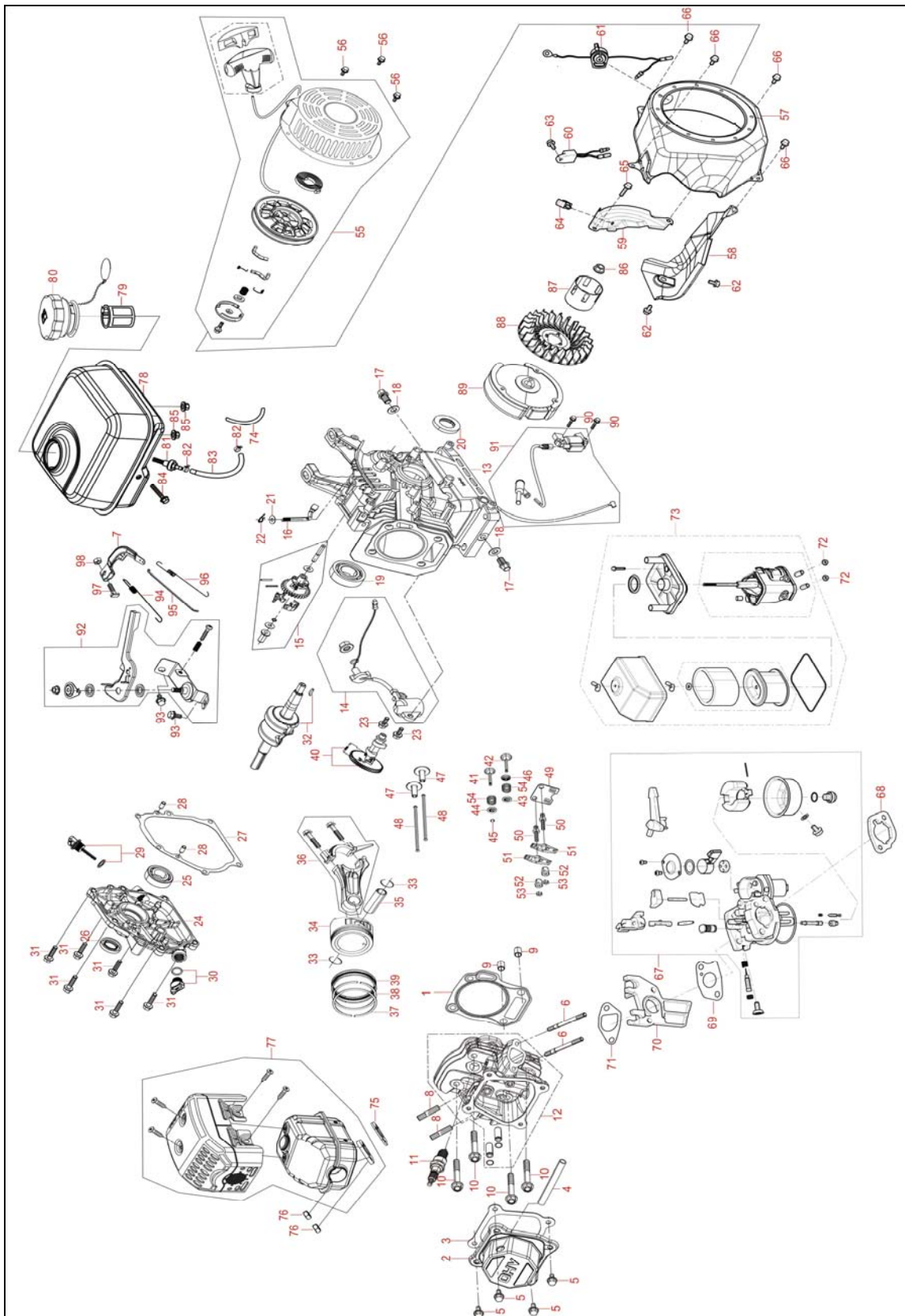
Problem	Cause	Solution
Engine will not start	<p>Fuel Related:</p> <p>No fuel in tank or fuel valve closed. Choke not in CHOKE position, cold engine.</p> <p>Gasoline with more than 10% ethanol used. (E15, E20, E85, etc.)</p> <p>Low quality or deteriorated, old gasoline.</p> <p>Carburetor not primed. Dirty fuel passageways.</p> <p>Carburetor needle stuck. Fuel can be smelled in the air.</p> <p>Too much fuel in chamber. This can be caused by the carburetor needle sticking.</p> <p>Clogged Fuel Filter.</p>	<p>Fuel Related:</p> <p>Fill fuel tank and open fuel valve. Move Choke to CHOKE position.</p> <p>Clean out ethanol rich gasoline from fuel system. Replace components damaged by ethanol. Use fresh 87+ octane unleaded gasoline only. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.).</p> <p>Use fresh 87+ octane unleaded gasoline only. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.).</p> <p>Pull on Starter Handle to prime. Clean out passageways using fuel additive. Heavy deposits may require further cleaning.</p> <p>Gently tap side of carburetor float chamber with screwdriver handle.</p> <p>Turn Choke to RUN position. Remove spark plug and pull the start handle several times to air out the chamber. Reinstall spark plug and set Choke to CHOKE position.</p> <p>Replace Fuel Filter.</p>
	<p>IGNITION (SPARK) RELATED:</p> <p>Spark plug cap not connected securely.</p> <p>Spark plug electrode wet or dirty.</p> <p>Incorrect spark plug gap.</p> <p>Spark plug cap broken.</p> <p>Incorrect spark timing or faulty ignition system.</p>	<p>IGNITION (SPARK) RELATED:</p> <p>Connect spark plug cap properly.</p> <p>Clean spark plug.</p> <p>Correct spark plug gap.</p> <p>Replace spark plug cap.</p> <p>Have qualified technician diagnose/repair ignition system.</p>

Problem	Cause	Solution
Engine will not start	<p>COMPRESSION RELATED: Cylinder not lubricated. Problem after long storage periods.</p> <p>Loose or broken spark plug. (Hissing noise will occur when trying to start.)</p> <p>Loose cylinder head or damaged head gasket. (Hissing noise will occur when trying to start.)</p> <p>Engine valves or tappets misadjusted or stuck.</p>	<p>COMPRESSION RELATED: Pour tablespoon of oil into spark plug hole. Crank engine a few times and try to start again.</p> <p>Tighten spark plug. If that does not work, replace spark plug. If problem persists, may have head gasket problem.</p> <p>Tighten head. If that does not remedy problem, replace head gasket.</p> <p>Have qualified technician diagnose/repair ignition system.</p>
Engine misfires	Spark plug cap loose.	Check wire connections.
	Incorrect spark plug gap or damaged spark plug.	Re-gap or replace spark plug.
	Defective spark plug cap.	Replace spark plug cap.
	Old or low quality gasoline.	Use only fresh 87+ octane unleaded gasoline.
	Incorrect compression.	Diagnose and repair compression. (Use Engine will not start: COMPRESSION RELATED section.)
Engine stops suddenly	Low oil shutdown.	Fill engine oil to proper level. Check engine oil before EVERY use.
	Fuel tank empty or full of impure or low quality gasoline.	Fill fuel tank with fresh 87+ octane unleaded gasoline.
	Defective fuel tank cap creating vacuum, preventing proper fuel flow.	Test/replace fuel tank cap.
	Faulty magneto.	Have qualified technician service magneto.
	Disconnected or improperly connected spark plug cap.	Secure spark plug cap.

Problem	Cause	Solution
Engine stops when under heavy load	Dirty air filter	Clean or replace element.
	Engine running cold.	Allow engine to warm up prior to operating equipment.
Engine knocks	Old or low quality gasoline.	Fill fuel tank with fresh 87+ octane unleaded gasoline.
	Engine overloaded.	Do not exceed equipment's load rating.
	Incorrect spark timing, deposit buildup, worn engine, or other mechanical problems.	Have qualified technician diagnose and service engine.
Engine backfires	Impure or low quality gasoline.	Fill fuel tank with fresh 87+ octane unleaded gasoline.
	Engine too cold.	Use cold weather fuel and oil additives to prevent backfiring.
	Intake valve stuck or overheated engine.	Have qualified technician diagnose and service engine.
	Incorrect timing.	Check engine timing.

Follow all safety precautions whenever diagnosing or servicing the equipment or engine.

EXPLODED VIEW AND PARTS LIST



Part #	Stock #	Description
1	56212-001	CYLINDER HEAD GASKET
2	56212-002	CYLINDER HEAD COVER
3	56212-003	HEAD COVER GASKET
4	56212-004	BREATHER TUBE
5	56212-005	BOLT
6	56212-006	STUD
7	56212-007	GOVERNOR SUPPORT
8	56212-008	STUD
9	56212-009	PIN
10	56212-010	CYLINDER HEAD BOLT
11	56212-011	SPARK PLUG
12	56212-012	CYLINDER HEAD
13	56212-013	CRANKCASE
14	56212-014	OIL SENSOR
15	56212-015	GOVERNOR GEAR ASSEMBLY
16	56212-016	GOVERNOR ARM
17	56212-017	DRAIN PLUG
18	56212-018	WASHER
19	56212-019	BEARING
20	56212-020	OIL SEAL
21	56212-021	WASHER
22	56212-022	PIN
23	56212-023	BOLT
24	56212-024	CRANKCASE COVER
25	56212-025	BEARING
26	56212-026	OIL SEAL
27	56212-027	CRANKCASE GASKET
28	56212-028	PIN
29	56212-029	OIL DIPSTICK
30	56212-030	ENGINE OIL PLUG
31	56212-031	BOLT
32	56212-032	CRANKSHAFT ASSEMBLY
33	56212-033	PISTON PIN CLIP
34	56212-034	PISTON
35	56212-035	PISTON PIN
36	56212-036	CONNECTING ROD
37	56212-037	THE FIRST RING
38	56212-038	THE SECOND RING
39	56212-039	OIL RING SET
40	56212-040	CAMSHAFT ASSEMBLY
41	56212-041	EXHAUST VALVE
42	56212-042	INTAKE VALVE
43	56212-043	VALVE SPRING SEAT
44	56212-044	EXHAUST VALVE RETAINER
45	56212-045	VALVE ROTATOR
46	56212-046	SEAL GUIDE
47	56212-047	VALVE TAPPET
48	56212-048	VALVE LIFTER
49	56212-049	LIFTER STOPPER PLATE
50	56212-050	VALVE ADJUSTING BOLT

Part #	Stock #	Description
51	56212-051	VALVE ROCKER
52	56212-052	VALVE ADJUSTING NUT
53	56212-053	VALVE LOCK NUT
54	56212-054	VALVE SPRING
55	56212-055	RECOIL STARTER ASSEMBLY
56	56212-056	BOLT
57	56212-057	SHROUD
58	56212-058	CYLINDER BODY SHROUD
59	56212-059	LOWER SHIELD
60	56212-060	OIL PROTECTOR
61	56212-061	ENGINE SWITCH
62	56212-062	BOLT
63	56212-063	BOLT
64	56212-064	COLLAR
65	56212-065	BOLT
66	56212-066	BOLT
67	56212-067	CARBURETOR ASSEMBLY
68	56212-068	AIR CLEANER GASKET
69	56212-069	CARBURETOR GASKET
70	56212-070	CARBURETOR INSULATOR PLATE
71	56212-071	CARBURETOR INSULATOR GASKET
72	56212-072	NUT
73	56212-073	AIR CLEANER
74	56212-074	RUBBER JACKET
75	56212-075	EXHAUST OUTLET GASKET
76	56212-076	NUT
77	56212-077	MUFFLER ASSY
78	56212-078	FUEL TANK
79	56212-079	FUEL STRAINER
80	56212-080	FUEL TANK CAP
81	56212-081	FUEL TANK FUEL LINE
82	56212-082	CLAMP
83	56212-083	TUBE, FUEL
84	56212-084	BOLT
85	56212-085	NUT
86	56212-086	FLYWHEEL NUT
87	56212-087	STARTER PULLEY
88	56212-088	IMPELLER
89	56212-089	FLYWHEEL
90	56212-090	BOLT
91	56212-091	IGNITION COIL
92	56212-092	THROTTLE CONTROL
93	56212-093	BOLT
94	56212-094	GOVERNOR SPRING
95	56212-095	GOVERNEOR ROD
96	56212-096	RETURNING SPRING
97	56212-097	SUPPORT BOLT
98	56212-098	NUT

NOTES:

[illegible]

WARRANTY STATEMENT FOR WEN® ENGINES

WEN® engines are warranted (to the original purchaser) to be free from defects in materials and workmanship for a period of two (2) years from the date of original purchase. Engines used for commercial or for rental have a warranty period of 90 days from date of original purchase. Please fill out and mail the enclosed warranty card and mail it to Power Pro Technology along with a copy of the receipt. The information is required to process warranty claims.

WEN® will repair or replace, at its discretion, any part that is proven to be defective in materials or workmanship under normal use during the two (2) year warranty period. Warranty repairs or replacements will be made without charge for parts or labor. Parts replaced during warranty repairs will be considered as part of the original product and will have the same warranty period as the original product.

TO EXERCISE WARRANTY COVERAGE:

Do not return to retailer! For warranty and technical support call the toll-free Customer Service Number: (800) 232-1195 and you will be informed of the nearest authorized service center. We will prearrange the repair with the center.

WARRANTY COVERAGE:

This warranty is conveyed to the original purchaser and is not transferable. Engines contain parts that will wear out with usage and parts that need maintenance. The warranty does not cover wear or maintenance parts. Specifically, the warranty does not cover replacement of air filter, spark plug, brush and recoil starter rope. Warranty does not extend to engines damaged or affected by accidents, neglect, misuse, contaminated fuel, unauthorized alterations, use in applications beyond product design and any other modification or abuse.

WEN® is not liable for any indirect, incidental or consequential damages from the sale or use of this product. Any implied warranties are limited to two (2) years as stated in this written limited warranty. Some states do not allow limitation on the length of an implied warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty gives you the specific legal right, and you may have other rights that vary by state.

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