

OWNER'S MANUAL

THE EDGEWINDER

Propane Edger



WWW.AZTECPRODUCTS.COM

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INTRODUCTION

Thank you for purchasing this Aztec Products, Inc. machine. You have purchased a quality product and we welcome you to the Aztec family. It is critically important to utilize proper training, understanding, maintenance and care for this product. Neglect of the Safety Messages, especially the **DANGER**, **WARNING**, **CAUTION** and **NOTICE** statements throughout this Owner's Manual may lead to serious injury or death, and/or cause damage to the floor and/or facility.

For best results from your Aztec machine, you must read and understand this Owner's Manual, and follow all operation guidelines and safety messages. Protect your **WARRANTY** by following all maintenance guidelines and keeping a dated log. If a problem should arise, consult an authorized Aztec service center.

All information in this Owner's Manual is up to date and based on the latest product information available at the time of printing. Aztec Products, Inc. reserves the right to make changes at any time without notice or incurring obligation. This Owner's Manual and the maintenance log must be kept as a permanent part of the machine and remain with the machine if resold.

No part of this document may be copied or reproduced without written permission.

GENERAL SAFETY MESSAGE INFORMATION

Your safety and the safety of others is very important. As the manufacturer, we have provided important safety messages throughout this manual and on the machine. The purpose of these safety messages is to prevent damage to you, your machine, the property, and/or the environment.

Please read and understand this information thoroughly. A safety message alerts you to potential hazards that could result in injury or death, and/or cause damage to the floor and/or facility. Each safety message is preceded by a universal safety alert symbol (!) and one of these safety words: **DANGER**, **WARNING**, **CAUTION**, or **NOTICE**. These signal words mean:

	DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury
	WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury
	NOTICE is used to address practices not related to physical injury

IMPORTANT SAFETY INSTRUCTIONS

READ and UNDERSTAND all instructions and safety messages before operating this machine.

Follow the instructions given in this Owner's Manual and the training given by your supervisor for the safe operation of this machine. Failure to do so can result in personal injury and/or damage to the machine or property.

GENERAL OPERATION SAFETY INFORMATION

Liquefied petroleum gas (LPG or propane) is stored under pressure and must be handled in the proper manner to be safe. Observe the following safety messages to get the best performance, lowest emissions, and longest life out of your equipment.

NOTICE

The EPA has rated the PurePower by Aztec engine cleanest in the industry for CO (carbon monoxide) emissions. (Source: <https://www.epa.gov/compliance-and-fuel-economy-data/engine-certification-data#small-nrsi>).

DANGER

No smoking, no sparks, no flames near machine, engine or LPG tank. Do not operate this machine in an environment with a potential ignition source.

DANGER

If you smell gas: immediately stop the unit, check for leaks, open windows, don't touch electrical switches, extinguish any open flames, and contact a repair professional.

DANGER

Never change or alter the propane control equipment. It is precisely tuned to power machinery with minimal levels of carbon monoxide. Altering the control equipment could cause dangerous levels of engine emissions.

DANGER

Effective January 1, 2016, all Aztec Products, Inc. machinery is shipped with propane tank equipped with Overfill Protection Device (OPD). If you have an older LPG cylinder that is overfilled, always vent outdoors, away from closed areas where gas may accumulate, and away from any fire, flame, or spark-producing device. Use a screwdriver to vent excess propane, which escapes as a white mist until at proper level in tank. Propane will vent clear when correct tank level has been achieved.

DANGER

Because CO is always a byproduct of internal combustion engines, it is important to know the symptoms of CO exposure, which may include drowsiness, dizziness, nausea, vomiting, confusion, collapse, loss of consciousness and muscle weakness. If such symptoms occur during operation with this machine, immediately shut off the machine and go outside for fresh air. Have a qualified service technician test the machine for CO emissions before using again. Call for emergency medical attention and DO NOT operate this machine or other propane powered equipment until cleared by a physician. For more info on CO exposure effects, see <http://www.mayoclinic.org/diseases-conditions/carbon-monoxide/basics/symptoms/con-20025444>.

⚠ WARNING

Operate only in well ventilated areas. Buildings must be provided with:

- A. A continuous mechanical ventilation that removes the products of combustion to the outdoors of not less than 300 CFM for each 10,000 BTUH or fraction thereof; or
- B. Natural ventilation of not less than 300 CFM for each 10,000 BTUH input or fraction thereof, based on a maximum of one-quarter air exchange per hour for the net building volume.

⚠ WARNING

Although this machinery utilizes a catalytic muffler to treat and minimize all engine emissions, the exhaust may still contain trace amounts of carbon monoxide gas and chemicals known in the state of California to cause cancer, birth defects or other reproductive harm.

⚠ CAUTION

Never let an untrained or irresponsible person operate the machine. They may hurt themselves and/or damage the floor or other property.

⚠ CAUTION

Always check oil before attempting to start engine. Low oil may result in serious and expensive engine damage.

⚠ CAUTION

Never complete the connection of the propane tank to the machine by using a tool; always tighten and loosen by hand. Use of tools to tighten or loosen tank connection may result in damage to tank valve and insecure connection. Listen for the rush of fuel to the lock-out device when you open the tank valve. If you hear this, it will indicate that a good connection has been made at the tank.

⚠ CAUTION

Muffler is HOT. Keep all heat sensitive objects away from the exhaust system during and after operation. Damage can occur to the machine, furniture, buildings and/or personal injury.

⚠ CAUTION

Do not leave this machine unattended while the engine is running. Damage to floor surface or other property may occur and fumes may accumulate.

⚠ CAUTION

Keep machine moving to avoid floor damage. Do not operate machine in a stationary spot for more than a few seconds. Machine is designed to be moved continuously forward at a measured pace. Stationary operation will result in damage to floor surface.

⚠ CAUTION

When the LPG tank is attached to the machine and not running, the tank valve must be in closed position.

NOTICE

Using the electric starter for more than 5 seconds at a time will overheat the starter motor and can damage it.

STORAGE AND HANDLING SAFETY INFORMATION



Always store equipment away from heater rooms, boilers, gas-fired water heaters or any other source of open flame or ignition. The exhaust system will be very hot and takes several minutes to cool, so keep yourself and all materials clear.



Always store equipment away from possible damage by falling objects in warehouse-type areas.



Always store LPG tanks outside. Remove all propane tanks from inside building except during equipment use. Store them in a secure, well ventilated area.



If the engine has been running, allow it to cool for at least 15 minutes before loading the engine-powered equipment onto the transport vehicle. A hot engine and exhaust system can burn you and can ignite some materials.



This propane machine is intended for commercial use.



Safety is a full-time, every day job. Follow all information posted on the machine and the LPG tank. Never allow anyone untrained to operate this machine, and who has not read or cannot understand the given instructions.



A "NO SMOKING" sign should be permanently displayed at the storage area.

RETAILER/DISTRIBUTOR CONTACT INFO

PURCHASE DATE:

DISTRIBUTOR NAME:

DISTRIBUTOR PHONE NUMBER(S):

PROTECT YOUR WARRANTY!

**Read carefully; all questions regarding the care
and safety of this equipment, please call AZTEC PRODUCTS:
(800) 331-1423**

MAINTENANCE SAFETY INFORMATION

WARNING

Before attempting any service or maintenance, the engine switch must be in the OFF position and the propane tank valve must be in CLOSED position.

CAUTION

Because of the extended nose on the Edgewinder, which is designed to reach under racks, the machine should never be tilted back from the operator's position. Tilting the machine back will result in a very unstable and dangerous situation. In order to service or clean the Edgewinder, while standing in operator's position, gently tilt and lay down the machine on its RIGHT side.

CAUTION

DO NOT tip machine on its LEFT side to avoid damage to the engine.

NOTICE

The manufacturer's warranty will be voided if the machine is not maintained in accordance with the recommended maintenance instructions within this Owner's Manual, and the engine manufacturer's recommended maintenance procedures. Failure to do so may cause damage to the machine, equipment, furniture, buildings, and/or personal injury.

NOTICE

An abbreviated, quick reference schedule of the manufacturer's suggested maintenance is on the underside of the operating handle. This abbreviated schedule is for quick reference only and is not intended to replace the full maintenance schedule in the Owner's Manual.

NOTICE

A maintenance record must be kept, indicating all dates of service, hours on engine at time of service, and service performed in order to maintain manufacturer's warranty coverage. Perfect record keeping does not guarantee warranty coverage if the damage to the machine is non-warrantable. See warranty coverage policy details at the end of this Owner's Manual. The maintenance record must be kept with the machine and transferred to the new owner if resold.

NOTICE

If possible, avoid storage areas with high humidity, because that will promote rust and corrosion.

With the engine and exhaust system cool, cover a properly cooled down engine to keep out dust. A hot engine and exhaust system can ignite or melt some materials. Do not use sheet plastic as a dust cover. A nonporous cover will trap moisture around the engine, promoting rust and corrosion.

If equipped with a battery, recharge the battery once a month while the engine is in storage. This will help extend the service life of the battery.

GUIDE TO GRAPHICAL SYMBOLS AND PRODUCT LABELS



DANGER, WARNING OR CAUTION; read all instructions before using



Hot surface – Do not touch



Wear hearing protection when operating



Wear safety goggles when operating



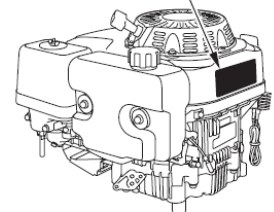
Switch "On" Position



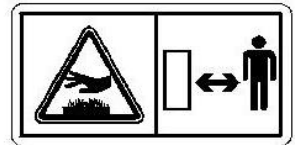
Switch "Off" position

SAFETY LABEL LOCATIONS

The safety labels warn you of potential hazards that can cause serious injury. Read and understand this Owner's Manual and all safety labels. If a label comes off or becomes hard to read, contact Aztec Products (800) 331-1423 for replacement.



WARNING HOT MUFFLER CAN BURN YOU. Stay away if engine has been running.



WARNING Although this HONDA engine is equipped with a catalytic muffler for safety, its exhaust still contains small amounts of poisonous carbon monoxide gas. Do not run the engine without adequate ventilation.



NOTICE Do not remove machine/engine labels and/or WARNING stickers on machine or engine. If any labels or stickers come lose, call Aztec at (800) 331-1423 for replacement.

BEFORE OPERATION CHECKLIST

For your safety, to ensure compliance with environmental regulations, and to maximize the service life of your equipment, it is very important to take a few minutes before you operate this machine to check its condition. Be sure to take care of any problem you find or have your service dealer correct it before you operate this machine.



Improperly maintaining this machine and its engine, or failure to correct a problem before operation, may cause a malfunction in which you can be seriously hurt or killed. Always perform a pre-operation inspection before each use and correct any problem.

Before beginning your pre-operation checklist, the machine and engine must be on a level surface, with the engine switch in the OFF position, and the propane tank valve is in the CLOSED position. Always check the following items before you start the engine:

A. READ AND UNDERSTAND ALL SAFETY MESSAGES

Carefully read and understand all **SAFETY INSTRUCTIONS** on pgs 3-8.

B. CHECK THE GENERAL CONDITION OF THE MACHINE

- 1.) Look around and underneath the machine and engine for signs of oil leaks.
- 2.) Remove any excessive dirt or debris, especially around the muffler and recoil starter.
- 3.) Look for signs of damage.
- 4.) Check that all shields and covers are in place, and all nuts, bolts and screws are tightened.

C. CHECK THE ENGINE

- 1.) Check the engine oil level and filters. Running the engine with a low oil level can cause engine damage. Your first oil change should be after the first 5 hours of use.
- 2.) If equipped, the "Oil Alert" buzzer will warn you when the engine oil needs to be added to the crankcase. If the buzzer sounds, stop the engine and add oil.
- 3.) Check the air filter element (see pg 20). A dirty air filter element will restrict air flow to the carburetor, reducing engine performance.

D. CHECK THE MAINTENANCE SCHEDULE

Review the maintenance log that should always be kept with the machine. Perform any maintenance necessary before proceeding. All machines are equipped with a multi-function maintenance meter. The functions include the following: hour meter, service alert and tachometer. (See **ENGINE MAINTENANCE METER** instructions on pg 22).

E. CHECK THE ENGINE OIL

Make sure the machine is level when checking the oil. Always take two (2) readings of the dipstick before adding oil. If the oil level is below the full mark, add just enough oil to the engine to bring the oil level up to the full mark. Never over fill. Check for foreign material on the dipstick.

F. CHECK THE PROPANE/LPG TANK AND LINES

- 1.) Every tank has been pressure and leak tested. However, every time a tank is filled and/or connected to the machine it should be soap tested. All LPG lines must be pressurized and every inch of line and connections must be sprayed. If you find a leak, make the proper repairs before operating the machine.
- 2.) Never overfill the LPG tank. The LPG tank is designed to hold a maximum of 20 pounds of propane. Make sure to weigh the tank as it is being filled. The gross weight of a full tank should not exceed 48 pounds. If, while operating the machine, you notice frost forming on the LPG lines or the regulator, your tank has been over filled. If you continue to operate the machine in this condition, damage will occur. The excess propane in the tank must be removed before normal operations resume. The bleeding of a propane tank must be done in a safe manner; refer to the **SAFETY INFORMATION** on pgs 3-8. In some cases, the regulator must defrost before restarting the engine.
- 3.) To connect the high pressure hose to the LPG tank, make sure the couplers are in line and screwed together, hand tight. If this is not done properly, fuel will not pass through to the regulator. Never complete the connection of the tanks to the machine by using a tool; refer to the **SAFETY INFORMATION** on pgs 3-8.

STARTING THE ENGINE / GETTING STARTED – EDGEWINDER

This propane edging machine is designed to strip and scrub edges along walls and shelving kick plates, and to reach under racks, gondolas, and shelving, to dig out years of accumulated dirt and grime. Easily cuts through layers of edge build up. No other application of this equipment should be attempted nor is recommended. Call Aztec (800) 331-1423 for any additional application questions.

Understand the operation of all controls and learn how to stop the engine quickly in case of emergency. First, refer to the **SAFETY INFORMATION** on pgs 3-8, and complete the **BEFORE OPERATION CHECKLIST** on pgs 9-10.

WARNING

Although this PurePower by Aztec 390 Series engine is equipped with a catalytic muffler for safety, its exhaust still contains small amounts of poisonous carbon monoxide. Do not run the engine without adequate ventilation.

WARNING

The engine and exhaust become very hot during operation. Keep the engine at least 1 meter (3 feet) away from buildings and other equipment. Keep flammable materials away, and do not place anything on the engine while it is running.

WARNING

Never tilt back machine while engine is running. Objects may fly out from underside of machine and damage can occur to the machine, furniture, buildings and/or personal injury.

NOTICE

Provide and use ear protection during operation.

NOTICE

All machines are equipped with tamper proof fuel systems. If a fuel problem exists, contact an authorized service center.

NOTICE

All machines are equipped with a multi-function maintenance meter. The functions include the following: hours, service alert and tachometer; see **ENGINE MAINTENANCE METER** instructions on pg 22.

NOTICE

Engine speed not to exceed 3400 RPM. High and low idle speeds may vary depending on the equipment on which the engine is used. Refer to the equipment specifications.

NOTICE

This machine is not suitable for picking up hazardous dust.

NOTICE

Do not use this machine on surfaces with a gradient exceeding 2%.

NOTICE

This machine is supplied with a centrifugal clutch. When the engine RPM is lower than 1800 RPM, the clutch will disengage; brushes/pads will stop.

NOTICE

All machines are equipped with a multi-function maintenance meter. The functions include the following: hours, service alert and tachometer; see **ENGINE MAINTENANCE METER** instructions on pg 22.

NOTICE

Make sure the operator receives adequate instruction before operating the equipment.

NOTICE

Do not allow children to operate the machine. Keep children and pets away from the area of operation.

- 1) Complete the **BEFORE OPERATION CHECKLIST** on pgs 9-10
- 2) Adjust the machine handle to comfortable position using pin provided to secure in place.
- 3) Open the LPG tank valve by turning counter clockwise.
- 4) Set the throttle control switch to the SLOW position.
- 5) Turn key to START position; after engine starts, hold key engaged for 3 seconds. Starter should not be engaged for more than 10 seconds at a time. If hard starting is a problem, carefully review **BEFORE OPERATION CHECKLIST** on pg 9-10.
 - a. As soon as engine starts, immediately move throttle cable to SLOW/idle position or into desired engine speed. The clutch will disengage when throttle is moved to the SLOW position.
- 6) Engage the brush by moving the cable switch past $\frac{1}{4}$ throttle (1900 RPM). Brush should be replaced when bristle length wears down to $\frac{1}{2}$ ".
- 7) Operate engine throttle at $\frac{1}{2}$ speed for stripping and scrubbing.
- 8) Begin operation of machine.

SETTING ENGINE SPEED

Position the throttle cable to the desired engine speed.

STOPPING THE ENGINE

NOTICE

Always remove from switch when leaving engine will be unattended or when engine is not in use.

To stop the engine in an emergency, simply move the control lever to the OFF position. Under normal conditions, use the following procedure:

Move the control lever to the OFF position. The control lever shown to the right is connected to a throttle cable.

- 1.) Turn the key switch to the OFF position.
- 2.) Turn the propane valve lever to the OFF position by turning the valve clockwise.

CONTROL LEVER

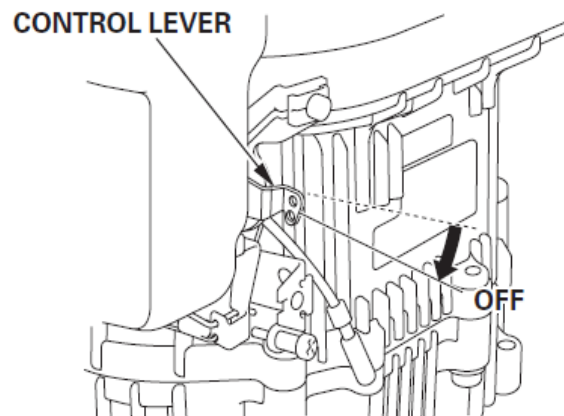
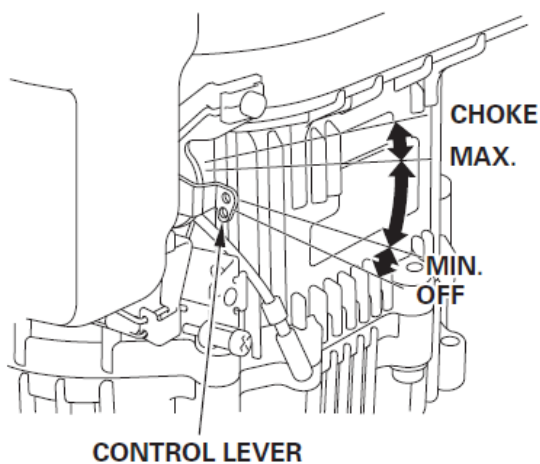
The control lever operates the engine switch and throttle.

OFF ----- Stop the machine by switching off the ignition system. All other control lever positions leave the ignition system switched ON.

MIN. ----- For running the engine at idle speed.

MAX. ----- For restarting a warm engine, and for running the engine at maximum speed.

The control lever shown here will be connected to a throttle cable.



TRANSPORTING THE EDGEWINDER

To transport the Edgewinder, first review the **SAFETY INFORMATION** on pg 3-8.

The machine must be on a level surface, with the engine switch in the OFF position, and the propane tank valve in the CLOSED position. If the engine has been running, allow to cool at least 15 minutes before loading the engine-powered equipment onto a transport vehicle. A hot engine and exhaust system can burn you.

Remove the propane tank from the machine, or disconnect the connection and securely fasten tank to machine. Pull the Edgewinder in reverse or push forward by raising brush off floor.

EDGEWINDER CLEAN UP

First, refer to the **SAFETY INFORMATION** on pgs 3-8. Once the job is complete for the day/night, clean up is required. The manufacturer's and engine warranty will be voided if the equipment is not properly maintained. Clean the entire machine after each use:

- A. Turn the propane tank valve clockwise to CLOSED position and turn the engine key to OFF position.
- B. Review the **SAFETY INFORMATION** on pg 3-8.
- C. Review the **TRANSPORTING THE EDGEWINDER** above, to properly tilt the machine on the right side, from operator's position.
- D. Check the machine for possible loose nuts and bolts; tighten and secure as needed.
- E. Rinse the underside of the machine with water after use.
- F. Brush should be replaced when bristle length reached $\frac{1}{2}$ ".

EDGEWINDER BELT & BRUSH MAINTENANCE

Brush Replacement:

- 1.) First, refer to the **SAFETY INFORMATION** on pgs 3-8.
- 2.) Access underside as directed.
- 3.) Remove 4 nuts with a 9/16" wrench or socket.
- 4.) Remove and replace brush.
- 5.) Replace washers and nuts.

Belt Replacement:

- 1.) Remove brush as directed above.
- 2.) Remove belt from the idler pulley and engine sheave.
- 3.) Pull belt out from driveshaft area.
- 4.) Reverse this procedure for belt replacement.

STORING THE MACHINE AND PROPANE TANKS

Once the job is complete for the day/night, remove the propane tank from the machine and store the tank in a well ventilated approved area. Complete the **MACHINE CLEAN UP** list on pg 14. Store your machine in a safe and secure area. Refer to the **SAFETY INFORMATION** on pgs 3-8.

NOTES:

ENGINE OIL AND MAINTENANCE

⚠ WARNING

Hot engine oil can cause severe burns. Allow engine temperature to drop from hot to warm level before attempting to remove oil filter.

⚠ WARNING

Check the engine oil daily before starting the engine, otherwise shortage of the engine oil may cause serious damage to the engine such as seizure.

⚠ WARNING

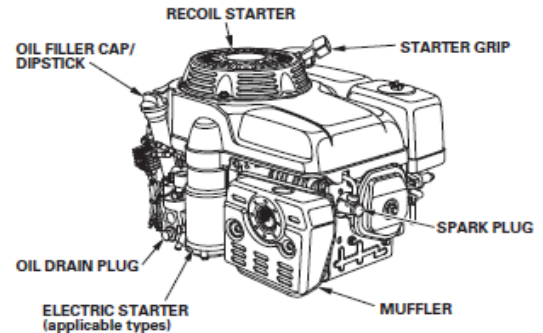
Engine oil is a toxic substance. Dispose of used oil properly and responsibly. Contact local authorities for approved disposal methods or possible recycling.

Refer to the **SAFETY INFORMATION** on pgs 3-8. Also refer to the **BEFORE OPERATION CHECKLIST** on pg 9-10 before operating this machine. Then carefully follow these guidelines.

NOTICE

If equipped, the Oil Alert ® buzzer indicates insufficient oil. Running the engine with insufficient oil can cause serious engine damage.

COMPONENT & CONTROL LOCATION

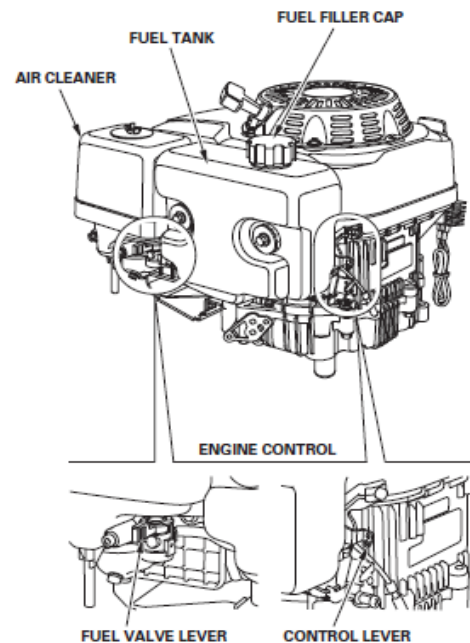


OIL ALERT® SYSTEM

The Oil Alert ® system, if equipped, is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase can fall below a safe limit, the Oil Alert ® system will sound a buzzer, warning you that oil needs to be added to the engine.

The Oil Alert ® system is not designed to be used in place of checking the oil. Check the oil level prior to each use.

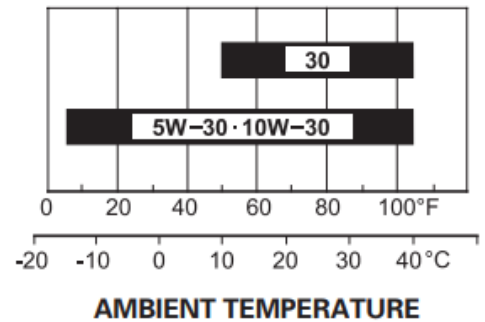
The Oil Alert ® buzzer will notify you when engine oil needs to be added to the crankcase. If the buzzer sounds, stop the machine and add oil, see pg 17-18.



RECOMMENDED OIL

Oil is a major factor affecting performance and service life of your engine. Use 4-stroke automotive detergent oil that meets or exceeds the requirements for API service classification SJ or later equivalent. Always check the API service label on the oil container to be sure it includes the letters SJ or later (or equivalent).

SAE 10W-30 is recommended for general use. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.

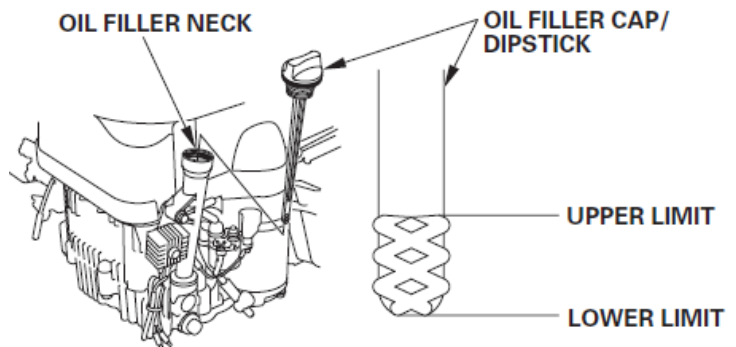


OIL LEVEL CHECK

First, review to the **HONDA ENGINE MAINTENANCE SCHEDULE** on pg 22. It is important to follow these guidelines to protect the engine.

To check the oil level, follow these steps:

- 1) Stop the engine and make sure the machine is on a level surface.
- 2) Remove the oil filler cap/dipstick and wipe it clean.
- 3) Insert and remove the oil filler cap/dipstick without screwing it into the oil filler neck. Check the oil level shown on the dipstick.
- 4) If the oil level is near or below the lower limit mark on the dipstick, fill to the upper limit mark on the dipstick with the recommended oil, see pg 17. Do not overfill.
- 5) Screw in the oil filler cap/dipstick securely.



NOTICE

Running the engine with a low oil level can cause serious engine damage.

NOTICE

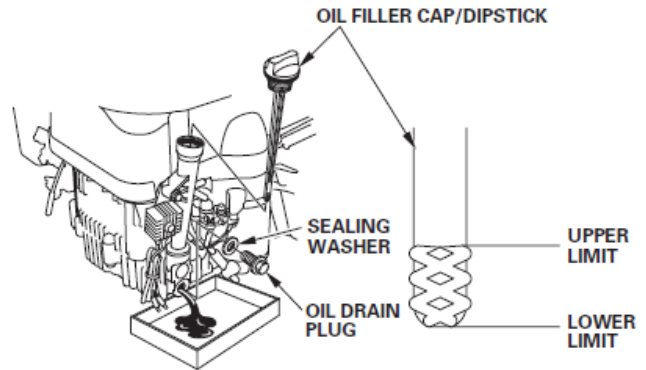
The Oil Alert® buzzer, if equipped, will warn you when the engine oil needs to be added to the crankcase. If the buzzer sounds, stop the engine and add oil.

OIL CHANGE

First, review to the **HONDA ENGINE MAINTENANCE SCHEDULE** on pgs 22-23. It is important to follow these guidelines to protect your engine.

Drain the used oil when the engine is warm. Warm oil drains quickly and completely. To change the oil, follow these steps:

- 1.) Stop the engine and make sure the machine is on a level surface.
- 2.) Place a suitable container below the engine to catch the used oil, then remove the oil filler cap/dipstick, oil drain plug and washer.
- 3.) Allow the used oil to drain completely, then reinstall the oil drain plug and new washer, and tighten the oil drain plug securely.
- 4.) With the engine in a level position, fill to the upper limit mark on the dipstick with the recommended oil, see pg 17. Do not overfill.
- 5.) Screw in the oil filler cap/dipstick securely.



NOTICE

Always dispose of used motor oil in a manner that is responsible and compatible with the environment. One option is to take used oil to in a sealed container to your local recycling center or service station for reclamation. DO NOT throw used oil in the trash, pour on the ground, or down the drain.

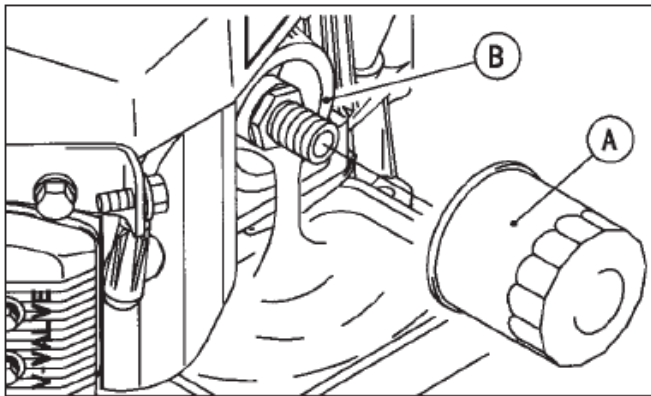
OIL FILTER CHANGE (IF EQUIPPED)

Change the oil filter every 100 hours of operation.

CAUTION

Before removing the oil filter, place a suitable pan under filter connection.

- 1.) Drain engine oil into a suitable container.
- 2.) Rotate the oil filter (A) counterclockwise to remove it.
- 3.) Coat a film of clean engine oil on seal of new filter.
- 4.) Install new filter rotating it clockwise until seal contacts mounting surface (B). Then rotate filter 3/4 turn more by hand.
- 5.) Supply engine oil as specified.
- 6.) Run the engine for about 3 minutes, stop engine, and check oil leakage around the filter.
- 7.) Add oil to compensate for oil level drop due to oil filter capacity (See **OIL LEVEL CHECK** on pg 17).



AIR CLEANER

A dirty air cleaner will restrict air flow to the carburetor, reducing engine performance. If you operate the engine in very dusty areas, clean the air filter more than specified in the **MAINTENANCE SCHEDULE** on pg 22.

NOTICE

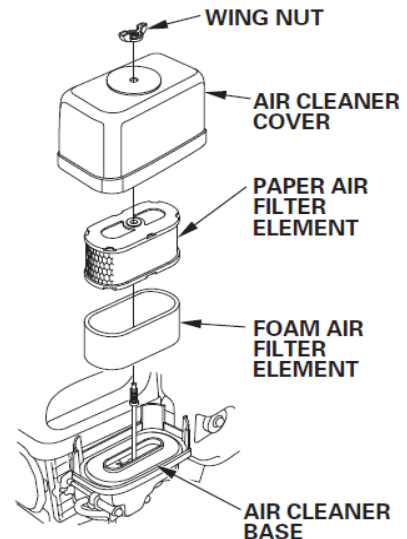
Operating the engine without an air filter, or with a damaged air filter, will allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered by the **WARRANTY** on pg 33.

- **Inspecting the Air Cleaner** – Remove the air cleaner cover and inspect filter elements. Clean or replace dirty filter elements. Always replace damaged filter elements.
- **Cleaning the Air Cleaner** – See diagram and follow these steps:

- 1.) Remove the wing nut from the air cleaner cover, and remove the cover.
- 2.) Remove the air filter elements.
- 3.) Remove the foam air filter element from the paper air filter element.
- 4.) Inspect both air filter elements, and replace them if they are damaged. Always replace the paper air filter element at the scheduled interval (see **MAINTENANCE SCHEDULE** on pg 22.)
- 5.) Clean the air filter elements if they are to be reused:

PAPER AIR FILTER ELEMENT: Tap the filter element several times on a hard surface to remove dirt, or blow compressed air (not exceeding 207 kPa (2.1 kgf/cm², 30 psi) through the filter element from the inside. Never try to brush off dirt; brushing will force dirt into the fibers.

FOAM AIR FILTER ELEMENT: Clean in warm, soapy water, rinse, and allow to dry thoroughly. Or clean in nonflammable solvent and allow to dry. Dip the filter element in clean engine oil, then squeeze out all excess oil. The engine will smoke when started if too much oil is left in the foam.



- 6.) Wipe dirt from the inside of the air cleaner base and cover, using a moist rag. Be careful to prevent dirt from entering the air duct that leads to the carburetor.
- 7.) Place the foam air filter element over the paper element, and reinstall the assembled air filter.
- 8.) Install the air cleaner cover, and tighten the wing nut securely.

SPARK PLUG

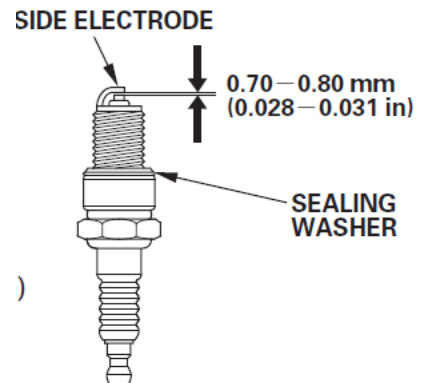
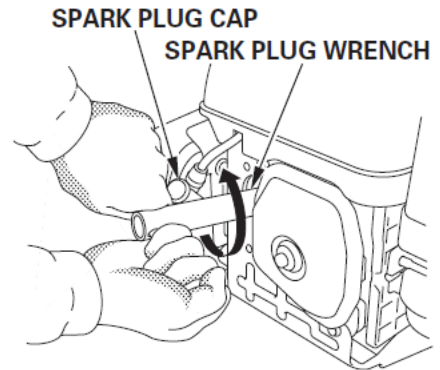
NOTICE

An incorrect spark plug can cause engine damage. For good performance, the spark plug must be properly gapped and free of deposits.

Recommended Spark Plugs: BPR5ES (NGK)

The recommended spark plug is the correct heat range for normal engine operating temperatures.

- 1.) Stop the engine and make sure the machine is on a level surface.
- 2.) Disconnect the spark plug cap and remove any dirt from around the spark plug area.
- 3.) Remove the spark plug with a 13/16-inch spark plug wrench.
- 4.) Inspect the spark plug. Replace if damaged, badly fouled, if the sealing washer is in poor condition, or if the electrode is worn.
- 5.) Measure the spark plug electrode gap with wire-type feeler gauge. Correct the gap, if necessary, by carefully bending the side electrode. The gap should be: 0.70-0.80 mm (0.028-0.031 in).
- 6.) Install the spark plug carefully, by hand, to avoid cross-threading.
- 7.) After the spark plug is seated, tighten with a 13/16-inch spark plug wrench to compress the sealing washer.
- 8.) Securely attach the spark plug cap to the spark plug.



NOTICE

When installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer.

NOTICE

When reinstalling the original spark plug, tighten 1/8-1/4 turn after the spark plug.

NOTICE

A loose spark plug can overheat and damage the engine. Overtightening the spark plug can damage the threads in the cylinder head.

ENGINE MAINTENANCE - PUREPOWER BY AZTEC 390 SERIES

Consistent maintenance is essential for safe, economical and trouble-free operation. It will also help reduce pollution.

WARNING

Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed. Always follow the inspection and maintenance recommendations and schedules in this Owner's Manual.

To properly care for and maintain your machine and its engine, the following pages include a maintenance schedule, routine inspection procedures and simple maintenance procedures using basic hand tools. Other service tasks that are more difficult, or require special tools, are best handled by professionals and are normally performed by an engine technician or other qualified mechanic.

The maintenance schedule applies to normal operating conditions. If you operate your engine under severe conditions, such as sustained high-load or high temperature operation, or use in unusually wet or dusty conditions, consult an authorized service center for recommendations applicable to your individual needs and use.

Maintenance, replacement, or repair of the emission control devices and systems may be performed by an engine repair establishment or individual, using parts that are "certified" to EPA standards.

ENGINE MAINTENANCE SAFETY

Some of the most important safety precautions follow. However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

WARNING

Failure to following maintenance instructions and precautions can cause you to be seriously hurt or killed. Always follow the procedures and precautions in this Owner's Manual.

ENGINE MAINTENANCE METER

This multi-function meter acts as a preventive maintenance tool, which benefits you with increased fuel economy, less down-time and longer engine life.

The meter displays are:

- **Hour Meter:** Displays total run hours when machine is off.
- **Tachometer:** Indicates engine RPM during operation.
- **Service Alert:** The display flashes to alert you to lube and change the oil at 25 hour intervals. After the service is complete, the meter can be reset by pushing the reset button on the face of the meter. Therefore, it is recommended that a separate maintenance log be kept to track of oil changes.

ENGINE MAINTENANCE SCHEDULE

REGULAR SERVICE PERIOD (3) Perform at every indicated month or operating interval, whichever comes first.		Each Use	First Month or 20 Hrs	Every 3 months or 50 Hrs	Every 6 Months or 100 Hrs	Every Year or 200 Hrs	Refer to Owner's Manual Page
Engine Oil	Check Level	●					16-19
	Change		●		●		
Air Filter	Check						20
	Clean			● (1)			
	Replace					● *	
Spark Plug	Check/adjust				●		21
	Replace					●	
Idle Speed	Check/adjust					● (2)	13
Valve Clearance	Check/adjust					● (2)	28
Combustion Chamber	Clean	After every 250 Hrs (2)					

* Replace paper element type only.

(1) Service more frequently when used in dusty areas.

(2) These items should be serviced by your authorized servicing dealer, unless you have the proper tools and training.

(3) For commercial use; log hours of operation to determine proper maintenance intervals.

(4) See authorized dealer for support.

NOTICE

Failure to follow the above maintenance schedule could result in non-warrantable failures.

NOTICE

An authorized HONDA servicing dealer knows your engine best and is fully equipped to maintain and repair it. To ensure the best quality and reliability, use only new genuine Honda parts or their equivalents for repair and replacement.

ENGINE TROUBLESHOOTING

COMMON PROBLEMS & PROBABLE CAUSES	SOLUTIONS *
ENGINE WILL NOT START: Check battery Check engine oil Remove and inspect spark plug Take engine to an authorized HONDA servicing dealer	Battery may be discharged; recharge battery Engine oil level may be low; fill with recommended oil to the proper level (see pgs 16-19) Spark plug may be faulty, fouled, or improperly gapped; correct the gap or replace spark plug (see pg 21) May be a regulator malfunction, ignition malfunction, valves stuck, etc; replace or repair faulty components as necessary
ENGINE CRANKS BUT WILL NOT START: Fuel cylinder is empty Shutoff valve is closed Clogged, obstructed, kinked or cut fuel or vacuum line Spark plug lead disconnected Faulty choke or throttle settings Faulty ignition coil Faulty kill switch Faulty regulator	Refill cylinder Open valve Remove obstruction or replace line Connect lead to spark plug Set controls to correct positions Replace coil Replace switch Replace regulator
ENGINE STARTS HARD: Faulty choke or throttle settings Clogged, obstructed, kinked or cut fuel or vacuum line Faulty regulator Low compression	Set controls to correct position Remove obstruction or replace line Replace regulator Take engine to an authorized HONDA servicing dealer
ENGINE WILL NOT CRANK: Battery is discharged Loose or faulty connections or wires Faulty ignition key switch or starter control switch	Charge or replace battery Tighten, repair or replace wires Repair or replace switch(es)
ENGINE OVERHEATS: Incorrect fuel settings Air intake filter screen or cooling fins clogged Low oil level	Have engine serviced Clean and clear debris or replace filter Check and add oil
EXHAUST EMISSIONS OR EXHAUST ODOR Regulator setting incorrect Dirty or clogged air filter Loose fittings, clamps or hoses cracked, hoses cut or leaking	Have engine serviced Replace air filter Tighten or seal; check with soap and
ENGINE LACKS POWER: Check air filter Take engine to an authorized HONDA servicing dealer	Filter elements may be restricted; clean or replace filter elements (see pg 20) May be a regulator malfunction, ignition malfunction, valves stuck, etc; replace or repair faulty components as necessary

** Remember that an authorized HONDA servicing dealer knows your engine best and is fully equipped to maintain and repair it. To ensure the best quality and reliability, use only new genuine Honda parts or their equivalents for repair and replacement.*

ELECTRICAL TROUBLESHOOTING

WARNING

Always wear a face shield, safety glasses and protective clothing when working around a battery. The gases can be explosive and the acid is highly corrosive to metals, cloth and ALL HUMAN TISSUE (skin, eyes, etc.).

NOTICE

Safety first. Contact an authorized service center as needed.

- Check all wire connections for obvious problems. Remove propane tank, then remove battery box cover. Check all connections visibly and physically. If any “loose”, damaged or unconnected wires are noticed, replace or repair as needed.
- Check the battery posts and wires. If the battery post(s) are corroded, remove the wires and clean posts and wires. Applying some axle grease on the posts of the battery after they are cleaned will slow down the battery corrosion process. If nothing obvious is noted, a more detailed investigation is warranted. Before any such troubleshooting begins, the following things should be done:
 - Replace propane tank with one from a machine that runs.
 - Charge the battery or provide an absolute source of 12-volt DC power capable of 50 amperes total output. Jumper cables from a car or truck battery will suffice. Use a 12-volt test light.
- If the problem appears to be in the electrical control equipment, disconnect the starter from the system so as to check the system without spinning the engine.
- Battery rundown is a common problem. An engine key left in the ON position when engine is turned OFF will result in battery running down.

TECHNICAL AND CONSUMER INFORMATION

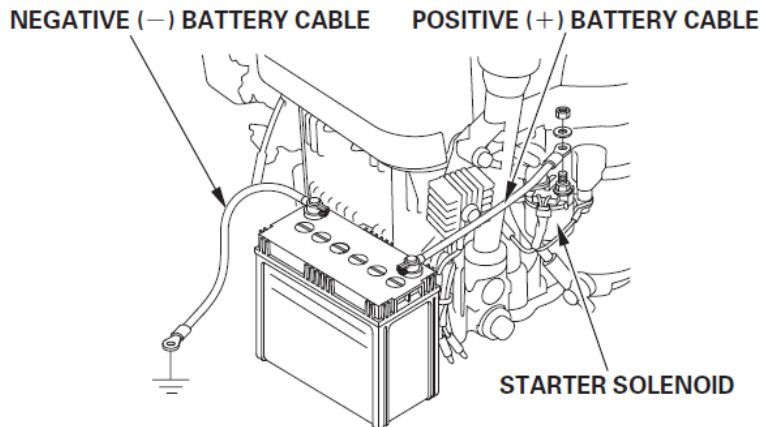
BATTERY CONNECTIONS FOR ELECTRIC STARTER

Use a 12-volt battery with an ampere-hour rating of at least 18 Ah. Be careful not to connect the battery in reverse polarity, as this will short circuit the battery charging system. Always connect the positive (+) battery cable to the battery terminal before connecting the negative (–) battery cable, so your tools cannot cause a short circuit if they touch a grounded part while tightening the positive (+) battery cable end.

⚠ WARNING

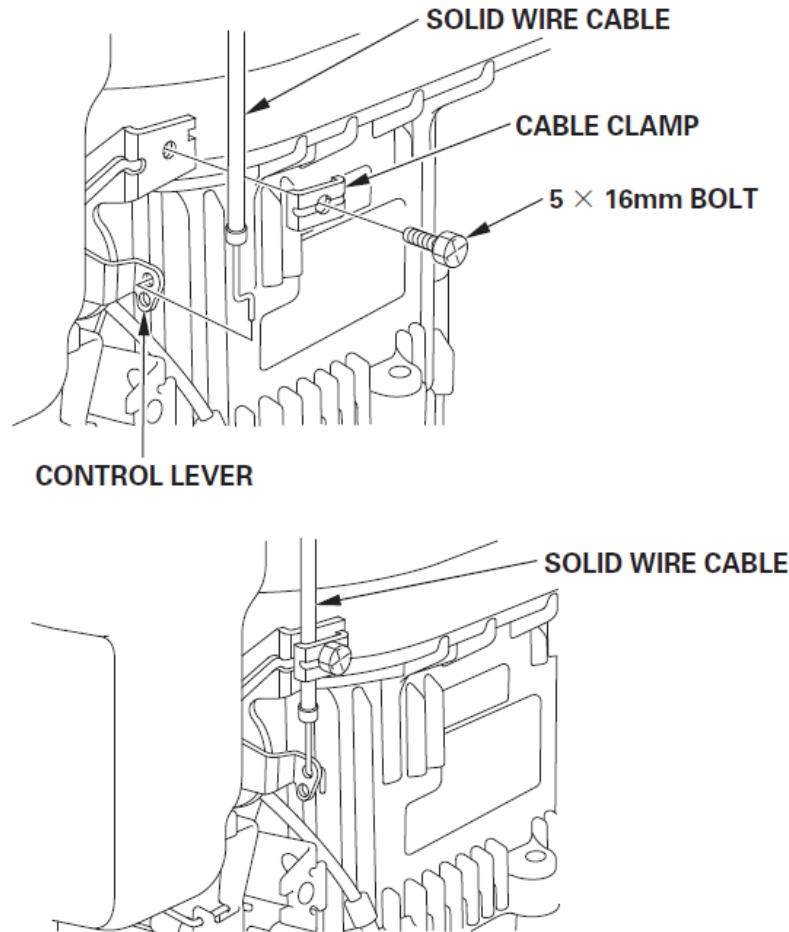
A battery can explode if you do not follow the correct procedure, seriously injuring yourself and anyone nearby. Keep all sparks, open flames, and smoking materials away from the battery.

- 1.) Connect the battery positive (+) cable to the starter solenoid terminal as shown.
- 2.) Connect the battery negative (–) cable to an engine mounting bolt, frame bolt, or other good engine ground connection.
- 3.) Connect the battery positive (+) cable to the battery positive (+) terminal as shown.
- 4.) Connect the battery negative (–) cable to the battery negative (–) terminal as shown.
- 5.) Coat the terminals and cable ends with grease.



REMOTE CONTROL LINKAGE

The control is provided with a hole for cable attachment. Install a solid wire cable as shown below. Do not use braided wire cable.



EMISSION CONTROL SYSTEM INFORMATION

Aztec utilizes lean carburetor settings and other systems to reduce the emissions of carbon monoxide, oxides of nitrogen, and hydrocarbons.

The U.S., California Clean Air Acts and Environment Canada

EPA, California and Canadian regulations require all manufacturers to furnish written instructions describing the operation and maintenance of emission control systems.

The following instructions and procedures must be followed in order to keep the emissions from your HONDA engine within the emission standards.

Tampering and Altering

Tampering with or altering the emission control system may increase emissions beyond the legal limit. Among those acts that constitute tampering are:

- Removal or alteration of any part of the intake, fuel, or exhaust systems.
- Altering or defeating the governor linkage or speed-adjusting mechanism to cause the engine to operate outside its design parameters.

Problems That May Affect Emissions

If you are aware of any of the following symptoms, have your engine inspected and repaired by an authorized servicing dealer:

- Hard starting or stalling after starting.
- Rough idle.
- Misfiring or backfiring under load.
- Afterburning (backfiring).
- Black exhaust smoke or high fuel consumption.

Maintenance

Follow the **MAINTENANCE SCHEDULE** on pg 23. Remember that this schedule is based on the assumption that your machine will be used for its designed purpose. Sustained high-load or high-temperature operation, or use in unusually wet or dusty conditions, will require more frequent service.

Specifications

ITEM	SPECIFICATION	MAINTENANCE
Spark plug gap	0.70-0.80 mm (0.028-0.031 in)	Refer to pg 21
Idle speed	1,400 +/- 150 rpm	See your authorized HONDA dealer
Valve clearance (cold)	IN: 0.15 +/- 0.02 mm EX: 0.20 +/- 0.02 mm	See your authorized HONDA dealer
Other specifications	No other adjustments needed.	

Quick Reference Information

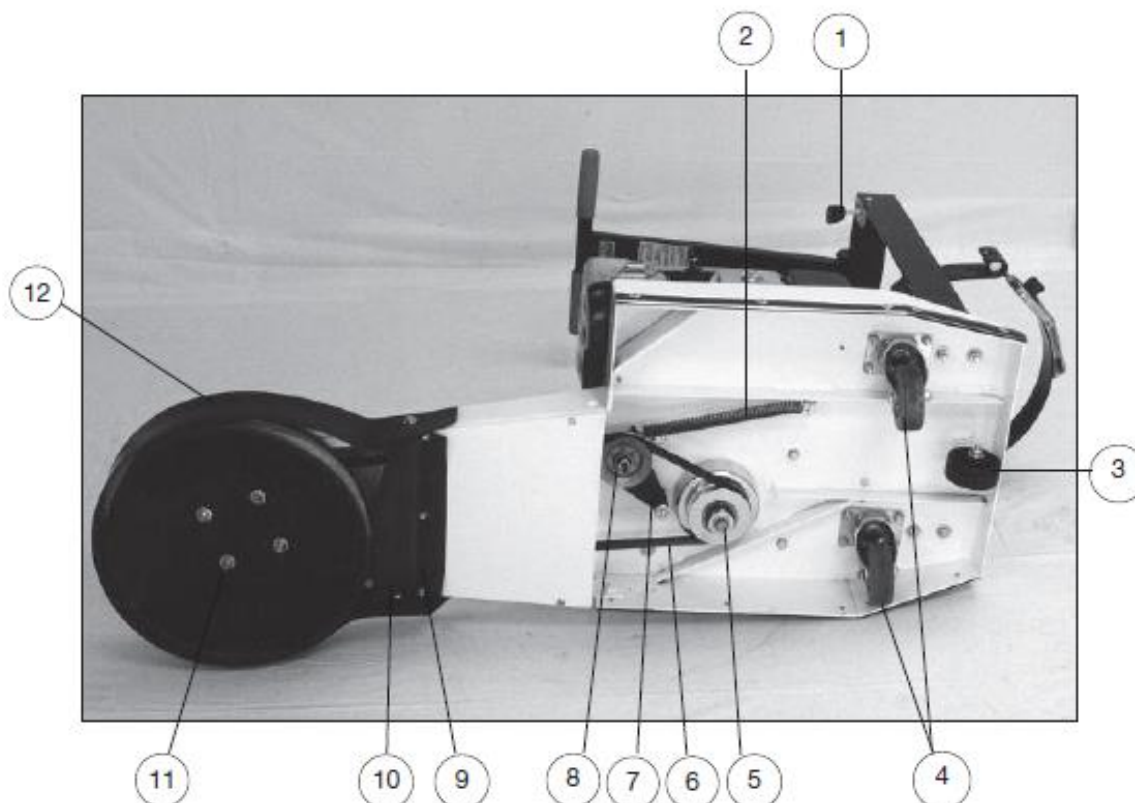
Engine Oil	SAE 10W-30, API SF or SL, for general use. Refer to pg 17
Spark Plug	BPR5ES (NGK)
Maintenance	Before each use: <ul style="list-style-type: none"> • Check engine oil level. Refer to pg 17 • Check air filter. Refer to pg 20
	First 20 hours: <ul style="list-style-type: none"> • Change engine oil. Refer to pg 18
	Subsequent: Refer to the MAINTENANCE SCHEDULE on pg 22-23.

AZTEC EDGEWINDER QUICK START GUIDE

<p>1.) Read, understand and observe all important SAFETY INSTRUCTIONS before operating the machine (see pgs 3-8).</p> <p>2.) Complete the BEFORE OPERATION CHECKLIST on pgs 9-10.</p> <p>3.) Make sure the machine is properly maintained prior to use (see pgs 22-23).</p> <p>4.) Make sure the LPG tank (A) is filled, connected and checked for leaks (see pg 10).</p>	<p>5.) Open the LPG tank by turning the knob (B) counter-clockwise.</p> <p>6.) Set throttle lever (C) to idle SLOW position</p> <p>7.) Turn key (D) to start [I] position</p> <p>8.) Move throttle lever (C) toward run FAST position. If motor fails to start, return to Step 5 above.</p> <p>9.) Set throttle lever (C) to desired operating speed and follow the moving machine (straight ahead) at moderate walking pace (keep moving).</p>
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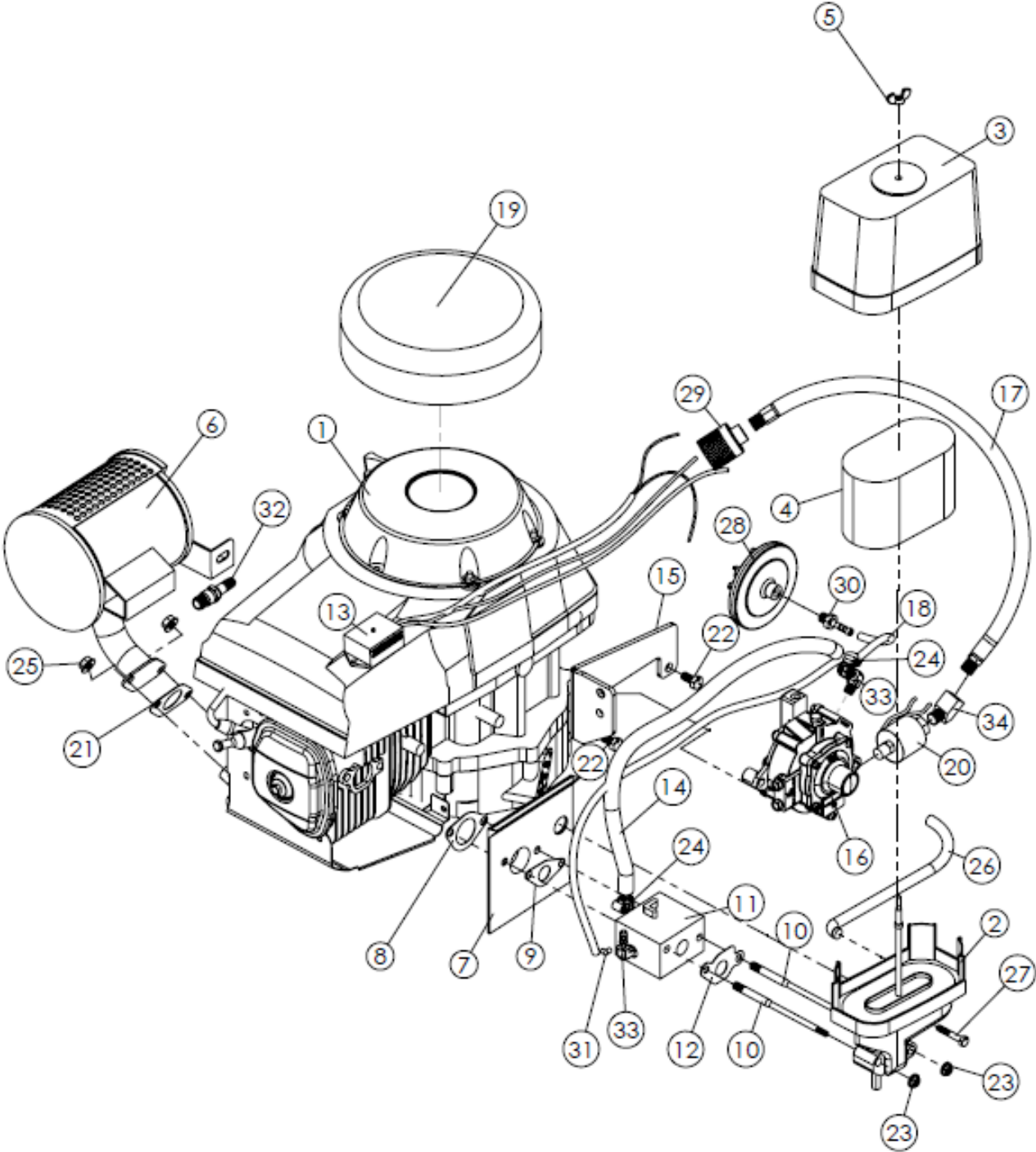
AZTEC EDGEWINDER REPAIR PARTS



ITEM #	DESCRIPTION	PART #	QTY
1	THROTTLE CABLE	212-1	1
2	IDLER SPRING	173-7599-DWG	1
3	GUIDE WHEEL	156-PB-03041-08	1
4	3 1/2 SWIVEL CASTER	156-2-3056-445	1
5	CENTRIFUGAL CLUTCH	311-160015	1
6	BELT	113-L568	1
7	IDLER ASSEMBLY	017-600I	1
8	V IDLER	188-V42B	1
9	SPLASH STRIP BRACKET	283-17210	1
10	SPLASH STRIP	175-03125N	1
11	15" STRIP BRUSH**	017-15	1
12	SPLASH SKIRT	017-350S	1

** OLDER MODEL EDGEWINDERS USE 14" STRIP BRUSH, PART # 017-900STB (QTY 1)

PUREPOWER ENGINE DRAWING



PUREPOWER ENGINE REPAIR PARTS

ITEM #	DESCRIPTION	PART #	QTY
1	HONDA 390 ENGINE		1
2	AIR INLET		1
3	AIR FILTER COVER		1
4	AIR FILTER		1
5	WING NUT, AIR FILTER COVER		1
6	CATALYTIC MUFFLER 152-ERM/SASE		1
7	CARBURATOR HEAT SHIELD-PLASTIC		1
8	GASKET, HEAT SHIELD TO CYLINDER HEAD		1
9	GASKET, CARBURATOR TO HEAT SHIELD		1
10	CARBURATOR MOUNTING STUD		2
11	CARBURATOR		1
12	GASKET, CARBURATOR INLET		1
13	EMISSION SHUT DOWN COMPLETE		1
14	HOSE-REGULATOR TO CARBURATOR		1
15	REGULATOR BRACKET		1
16	REGULATOR		1
17	HOSE, LP TANK TO REGULATOR		1
18	CARBURATOR VACUUM TUBING (CLEAR)		1
19	BLOWER DUST COVER		1
20	FUEL LOCKOUT		1
21	GASKET, CYLINDER HEAD TO MUFFLER		1
22	M8 x 1.25 MM THREAD		2
23	FLANGED HEX NUT M6 x 1 MM		2
24	HOSE CLAMP		2
25	HEX NUT M7 x 1.25 MM		2
26	CRANKCASE VENT TUBE		1
27	HEX CAP SCREW M6 x 1 MM THREAD		1
28	VACUUM SAFETY SWITCH		1
29	FUEL HOSE QUICK CONNECT		1
30	HOSE CONNECTOR NPT TO BARB		1
31	45 ELBOW NPT TO HOSE BARB		1
32	O2 SENSOR		1
33	90 ELBOW, NPT TO HOSE BARB		2

AZTEC EDGEWINDER WARRANTY

This warranty is limited as follows:

Component	Term of Warranty
Engine	2 yrs from engine manufacturer
Fuel System	1 yr
LPG Tank	1 yr on valve, 3 yrs on cylinder from date of mfg
Body Parts	1 yr
Battery	1 yr from battery mfg
Centrifugal Clutch	1 yr

The warranty does not apply to certain consumable or wear parts such as:

Brushes
Belts
Engine tune up parts

Aztec Products, Inc. warrants its products to be free from defects in material and workmanship for a period of one year from the date of sale. All engines are warranted by the manufacturers (Honda) for a period of two years when engine maintenance schedules are followed.

The warranty does not apply to damage or failure caused by abuse, misuse, neglect, disassembly, alteration, unauthorized modification or repair, lack of proper maintenance, theft or damage by freight carriers. The warranty applies to parts, labor, and ground freight only. Aztec is not liable for transportation to or from repair centers or travel for on-site repairs. Aztec Products, Inc. will not be liable for incidental or consequential damages arising from the use of any of its products, whether defective or not.

Aztec Products, Inc. agrees, at its discretion, to repair or replace at its own expense any product or part(s) which examination proves to be defective in workmanship or materials provided that the purchaser notifies Aztec Products, Inc. directly within the warranty period and follows the Return Goods Policy. Engine repairs may be performed at engine manufacturer's service centers. For your closest center you may call Honda: 800-426-7701.

In order to obtain parts warranty, the following procedures must be followed:

1. Customer must call Aztec Products, Inc. for an RGA (Return Goods Authorization) Number.
2. We maintain the serial number, date of shipment or sale, and customer name on each piece of equipment sold. If you were the purchaser, please reference that information on your request for replacement or repair. If you purchased the equipment through a distributor, please contact them first. If you are not satisfied, contact Aztec and give us the distributor name, purchase date, and the serial number of the product.
3. The defective part must be returned via ground freight prepaid to Aztec Products, Inc. with an RGA number accompanied by a copy to the original purchase invoice. Aztec is not responsible for the cost of packaging inbound freight, nor inbound freight damage. Pack machine carefully.
4. Only Aztec Products, Inc. or its authorized dealers may make warranty repairs on Aztec Products, Inc. products. Others do so at their own risk and expense.
5. We also offer to do warranty related repairs free of charge at our facility. Arrangements must be made in advance as outlined above. We will not accept freight collect returns or returns that do not indicate the RGA number on the packing list.

The need for proper maintenance and care for this product cannot be overstated. Poor maintenance, neglect or abuse can prove to be very expensive.

You have purchased a quality product. Each of its components have been tested and approved for use by Aztec Products, Inc. It is unlikely that you will ever have a warranty claim if you properly maintain your machine.

This warranty is non-transferable.
AZTEC PRODUCTS, INC. • www.aztecproducts.com
201 Commerce Drive • Montgomeryville, PA 18936 • 800-331-1423 • Fax 215-393-4800