

Suspended Hover Mower Operator's Manual

Record Product Information

Before setting up and operating your new mower, please locate the serial number plate on the equipment and record the information in the provided area to the right. This information will be necessary, should you seek technical support via our web site or Customer Support Department.

Model - Framework

Serial Number - Framework

Serial Number - Gas Engine Only

WARNING

Read and follow all safety rules and instructions in this manual before attempting to operate this machine.
Failure to comply with these instructions may result in personal injury - SAVE THESE INSTRUCTIONS.

WARNING

CALIFORNIA PROPOSITION 65

Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to State of California to cause cancer and birth defects or other reproductive harm.

NOTE: This Operator's Manual covers several models. Features may vary by model. Not all features in this manual are applicable to all models and the model depicted may differ from yours.



WARNING: This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury.

When you see this symbol. **HEED ITS WARNING!**



DANGER: This machine was built to be operated according to the safe operation practices in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating fingers, hands, toes and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

General Information

1. Read, understand, and follow all instructions on the mower and in the manual(s) before attempting to assemble and operate. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Be familiar with all controls and their proper operation.
3. Never allow children under 14 years of age to operate this mower. Children 14 and over should read and understand the instructions and safe operation practices in this manual and on the mower and should be trained and supervised by an adult.
4. Never allow adults to operate this mower without proper instruction.
5. Store mower in a dry, clean area. Do not store next to corrosive materials, such as fertilizer.
6. If situations occur which are not covered in this manual, use care and good judgment. Contact your customer service representative for assistance.

Preparation Before Operating

1. Thoroughly inspect the area where the mower is to be used. Remove all stones, sticks, wire, bones, toys, and other foreign objects which could be tripped over or picked up and thrown by the blade(s). Thrown objects can cause serious personal injury.
2. To help avoid blade contact or a thrown object injury, stay in the operator zone behind the mower handles. Keep helpers at least 75 feet (23 meters) from the mower while it is in operation. Keep bystanders, children and pets inside while the mower is in operation. Stop mower if anyone enters the area.
3. Be aware of the mower and attachment discharge direction and do not point the mower discharge at anyone.
4. Always wear safety glasses or safety goggles during operation and while performing an adjustment or repair to protect your eyes. Thrown objects which ricochet can cause serious injury to the eyes.
5. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts. Loose fitting clothes, jewelry and long hair can be caught in moving parts. Shirts and pants that cover the arms and legs and steel-toed shoes are recommended.
6. Never operate mower in bare feet, sandals, slippery or light-weight (e.g. canvas) shoes.
7. Never over fill fuel tank. Fill tank to no more than 1" (2.5 cm) below bottom of filler neck to allow space for fuel expansion.
8. Replace gasoline cap and tighten securely.
9. Use only accessories and attachments approved for this mower by the mower manufacturer. Read, understand and follow all instructions provided with the approved accessory or attachment.

Operating

1. Data indicates that operators, age 65 years and above, are involved in a large percentage of mower-related injuries. These operators should evaluate their ability to operate the mower safely enough to protect themselves and others from serious injury.
2. Many injuries occur as a result of the mower being pulled over the foot during a fall caused by slipping or tripping. Do not hold on to the mower if you are losing your balance or footing; immediately release the handle.
3. If the mower should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
4. When starting engine, pull cord slowly until resistance is felt, then pull rapidly. Rapid retraction of starter cord (kickback) will pull hand and arm toward engine faster than you can let go. Broken bones, fractures, bruises or sprains could result.
5. Do not put hands or feet near rotating parts or under the cutting deck. Contact with the blade(s) can amputate hands and feet.
6. Plan your mowing pattern to avoid discharge of material toward roads, sidewalks, helpers and the like. Avoid discharging material against a wall or obstruction which may cause discharged material to ricochet back toward the operator.
7. A missing or damaged discharge door, chute or mulch plug can cause blade contact or thrown object injuries.
8. Do not operate the mower without the discharge door, chute, mulch plug or the entire grass catcher in its proper place.
9. Stop the mower blade when crossing gravel drives, walks, or roads and while not cutting grass.
10. Mow only in daylight or good artificial light.
11. Do not operate the mower while under the influence of alcohol or drugs.
12. The muffler and engine become very hot and can cause serious burn injuries. Do not touch. Allow the mower to cool for at least five minutes before storing or attempting any service.
13. Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.

Children

1. Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the mower and the mowing activity. They do not understand the dangers. Never assume that children will remain where you last saw them.
2. Keep bystanders, children and pets inside while the mower is in operation under watchful care of a responsible adult other than the operator. Stop mower if anyone enters the area.
3. Be alert and turn mower off if a child or bystander enters the area.
4. Never allow children under 14 years of age to operate this mower. Children 14 and over should read and understand the instructions and safe operation practices in this manual and on the mower and should be trained and supervised by an adult.
5. This mower is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times. This mower has been designed to perform one job: to mow grass. Do not use it for any other purpose.
6. Use extreme care when approaching blind corners, doorways, shrubs, trees or other objects that may block your vision of a child who may run into the path of the mower.
7. Keep children away from hot or running engines. They can suffer burns from a hot engine or muffler.
8. If your mower is equipped with an Electric Start Push Key, remove the key when the mower is unattended to prevent unauthorized operation. Make certain the key is inaccessible to small children.

Fire & Fuel

1. To avoid personal injury or property damage use extreme care in handling gasoline. **Gasoline is extremely flammable and the vapors are explosive.** Serious personal injury can occur when gasoline is spilled on yourself or your clothes which can ignite. Wash your skin and change clothes immediately.
2. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
3. Only use an approved portable fuel (gasoline) container. Use only containers certified by EPA, CARB, and/or OSHA.
4. Never remove gas cap or add fuel while the engine is hot or running. Allow engine to cool at least five minutes before refueling.
5. Never fuel the mower indoors.
6. Never store the mower or fuel container inside where there is an open flame, spark or pilot light as on a water heater, space heater, furnace, clothes dryer or other gas appliances.
7. If fuel is spilled, wipe it off the engine and mower. Clean up oil or fuel spillage and remove any fuel soaked debris. Move the mower to another area. Wait at least 5 minutes before starting the engine.
8. To reduce fire hazards, keep mower free of grass, leaves, or other debris build-up. Follow the instructions in the Service and Maintenance section to keep your mower free of debris.
9. Never over fill fuel tank. Fill tank to no more than 1" (25mm) below bottom of filler neck to allow space for fuel expansion.
10. Replace gas cap and tighten securely.
11. Allow a mower to cool at least five minutes before fueling or storing.
12. 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.
13. When practical, remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a gasoline dispenser nozzle.
14. 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.

Service

1. Keep the mower in good working order. Replace worn or damaged parts.
2. To avoid serious injury or death, do not modify engine in any way. Tampering with the governor setting can lead to a runaway engine and cause it to operate at unsafe speeds. Never tamper with factory setting of engine governor. Do not change the engine governor settings or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
3. Mower blades are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them.
4. Before cleaning, repairing, or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire and ground against the engine to prevent unintended starting.
5. Ensure the blade comes to a complete stop within (3) three seconds after operating the blade control.
6. Check the mower blade and engine mounting bolt torque. Also, visually inspect blade for damage (e.g., excessive wear, bent, cracked). Replace the blade with the original equipment manufacturer's (O.E.M.) blade only.
7. Use of service parts which do not meet the original equipment specifications may lead to improper performance and compromise safety.
8. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition. Check all hardware for tightness per the Service and Maintenance section.
9. After striking a foreign object, stop the engine, disconnect the spark plug wire(s) and ground against the engine. Thoroughly inspect the mower for any damage. Repair the damage before starting and operating
10. Never attempt to make wheel cutting height adjustments or repairs to the mower while the engine is running.
11. Grass catcher components and the discharge cover are subject to wear and damage which could expose moving parts or allow objects to be thrown. For safety protection, frequently check components and replace immediately with original equipment manufacturer's (O.E.M.) parts only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety."
12. Maintain or replace safety and instruction labels, as necessary.
13. Observe proper disposal laws and regulations for gas, oil, etc. to protect the environment.

Notice Regarding Emissions

Engines which are certified to comply with California and federal 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: Engine Modification (EM) and Three Way Catalyst (TWC) if so equipped.

When required, models are equipped with low permeation fuel lines and fuel tanks for evaporative emission control. California models may also include a carbon canister. Please contact Customer Support for information regarding the evaporative emission control configuration for your model.

Spark Arrestor



WARNING: This mower is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrestor meeting applicable local or state laws (if any).

If a spark arrestor is used, it should be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.












A spark arrestor for the muffler is available through your nearest engine authorized service dealer.



WARNING: This mower is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrestor meeting applicable local or state laws (if any).

Safety Symbols

This page depicts and describes safety symbols that may appear on this product. Read, understand, and follow all instructions on the machine before attempting to assemble and operate.

Symbol	Description
 <p>OPESymbol.com</p>	<p>WARNING – READ THE OPERATOR’S MANUAL(S) - Read, understand and follow all the safety rules and instructions in the manual(s) and on the mower before attempting to operate this mower. Failure to comply with this information may result in personal injury or death. Keep this manual in a safe location for future and regular reference.</p>
	<p>DANGER — AVOID AMPUTATION INJURY - Do not put hands or feet near or under the cutting deck. Contact with the blade can amputate hands and feet.</p>
	<p>DANGER — AVOID THROWN OBJECT INJURY - Remove all stones, sticks, wire, bones, toys, and other foreign objects which could be picked up and thrown by the blade(s). Stay in the operator zone behind the mower handles. Keep helpers at least 75 feet (23 meters) from mower during operation. Stop mower if anyone enters the area.</p>
	<p>DANGER — AVOID CHILD BLADE CONTACT/THROWN OBJECT INJURY - To help avoid blade contact or a thrown object injury, do not mow when children or others are around. Keep bystanders, children and pets inside while the mower is in operation. Stop mower if anyone enters the area.</p>
	<p>DANGER — AVOID THROWN OBJECT INJURY - Do not operate the mower without the trail shield, discharge cover or entire grass catcher in its proper place. Stay in the operator zone behind the mower handles.</p>
	<p>DANGER — ROTATING BLADES - To reduce the risk of injury, keep hands and feet away. Do not operate unless discharge cover or entire grass catcher is in its proper place. If damaged, replace immediately.</p>
	<p>DANGER — AVOID SLIP AND FALL ON SLOPES - Slopes are a major factor related to slip and fall accidents which can result in severe injury or death. All slopes require extra caution. If you feel uneasy on the slope, do not mow it. Do not mow on slopes greater than 15 degrees (25%). Only mow across slopes, never mow up and down slopes.</p>
	<p>DANGER— AVOID EYE INJURY - Always wear safety glasses or safety goggles during operation and while performing an adjustment or repair to protect your eyes. Thrown objects which ricochet can cause serious injury to the eyes.</p>
	<p>DANGER— AVOID TRIPPING INJURY- Never pull the mower back toward you while you are walking. If you must back the mower away from a wall or obstruction first look down and behind to avoid tripping.</p>
	<p>WARNING— GASOLINE IS FLAMMABLE Allow the engine to cool at least five minutes before refueling.</p>
	<p>WARNING— AVOID BURN INJURY - The muffler and engine become very hot and can cause serious burn injuries. Do not touch. Allow the mower to cool for at least five minutes before storing or attempting any service.</p>



WARNING: Your Responsibility—Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

SAVE THESE INSTRUCTIONS!

Contents of Carton

- Mower (1)
 - Mower Operator's Manual (1)
 - Suspension Chains with Wheel Guards and *colored* Double Ended Snap Clips (6)
 - Stainless Steel and Galvanized Rollers (2)
 - Engine Operator's Manual - Gas Engine Only (1)
 - Hardware Pack (1)
 - Oil (1)
-

Assembly

NOTE: This mower is shipped without gasoline or oil in the engine. Fill up the gasoline and oil as instructed in the Engine Operator's Manual BEFORE operating your mower.

- 1) Unpack mower assembly.
- 2) Remove any packing materials.
- 3) Chains, wheel guards, and *colored* clips come attached to roller plates. Rollers are attached as well.
- 4) Mower deck wheels may need to be installed. We recommend the highest height blade position which is the lowest hole location. Fig 3-6.
- 5) Clip the chains on the frame matching colors with eyelets on frame. See pic.
- 6) Mower is shipped with the suspension length in shortest position (recommended). For more length adjustments, move chains to the end of last length.
RECOMMENDED POSITION: Outside four (4) corner chains on the twelfth (12th) link. Front angle chain on the twelfth (12th) link and back chain link on the fifteenth (15th) link.
SUSPENSION LENGTH: The corner chains and front angle chain lengths can be shortened proportionately to raise the mower height but not recommended below ten (10) links. The back chain link can be shortened to the thirteenth (13th) link.
NOTE: These link adjustment locations are important for the mowing deck to track during operation in the forward movement. See video for chain adjustments.
- 7) Electric Start: Connect male to female plug at mower deck and at bucket. Install key switch within operator's reach. To start, turn switch on engine to "On" position. When ready to start, turn key to start; release. Engine should remain running. To turn "Off", turn key to "Off" position then turn switch on engine to "Off" as well. Engine will not start if either switch is in the "Off" position.
- 8) Hydraulics: Attach hydraulics according to your tractor function. A third function can be used for the hydraulic cylinder slide. A continuous flow with flow switch should be attached to deck hydraulic motor. For additional information on hydraulic connections see your tractor dealer. Also see our video on hydraulic functions.

Chute Deflector

NOTE: Use the hardware in Group 2 to complete the following steps.

1. Align the holes on the chute deflector with the corresponding holes on the deck surface. See Figure 3-5.

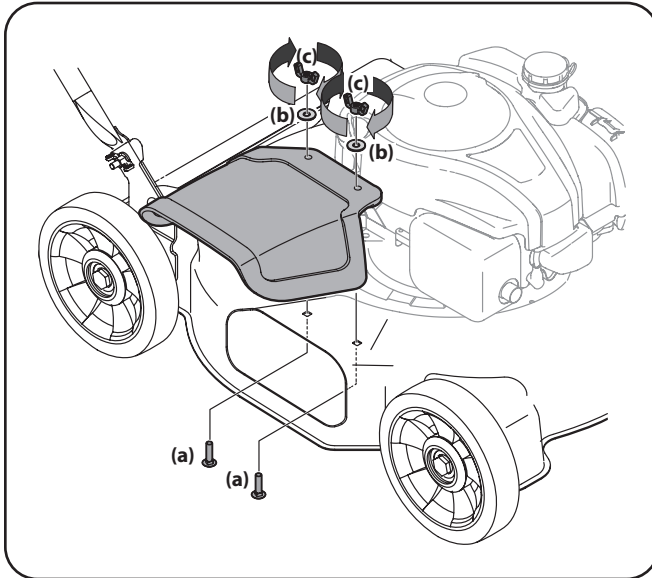


Figure 3-5

2. Insert carriage screws (a) up through the underside of the deck and through the chute deflector.
3. Secure each screw (a) with a washer (b) and metal wing nut (c).

Adjustments

Cutting Height

1. Remove the shoulder screws (a), washers (b) (front wheels only), and nuts (c) from the wheels. See Figure 3-6.

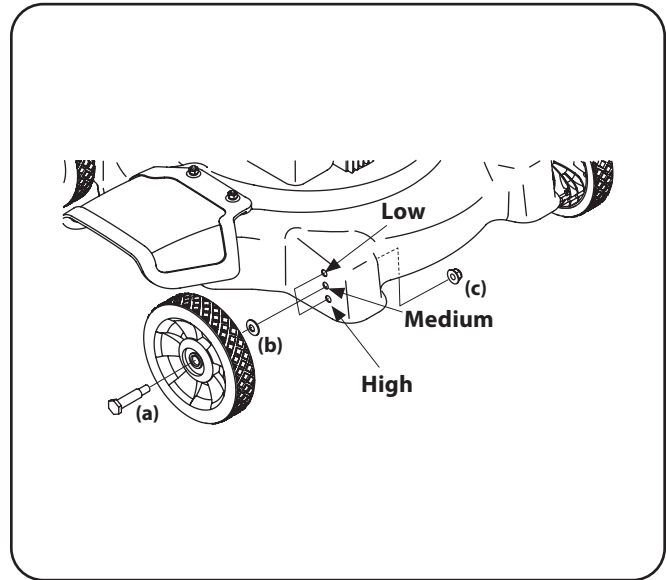


Figure 3-6

2. Reattach the wheels with shoulder screws, washers (b) (front wheels only), and nuts (c) at one of the other two holes. Remember to attach ALL wheels at the same relative position to ensure an even cut. For a higher cutting height, use the lower hole on the deck. For a lower cutting height, use the upper hole.

Set-Up (not applicable to hydraulic motor)

Gas and Oil Fill-Up

Refer to the Engine Operator's Manual for additional engine information.

1. Add oil provided before starting unit for the first time out of the box.
2. Service the engine with gasoline as instructed in the Engine Operator's Manual.



WARNING: Use extreme care when handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Never fuel the machine indoors or while the engine is hot or running. Extinguish cigarettes, cigars, pipes and any other sources of ignition.

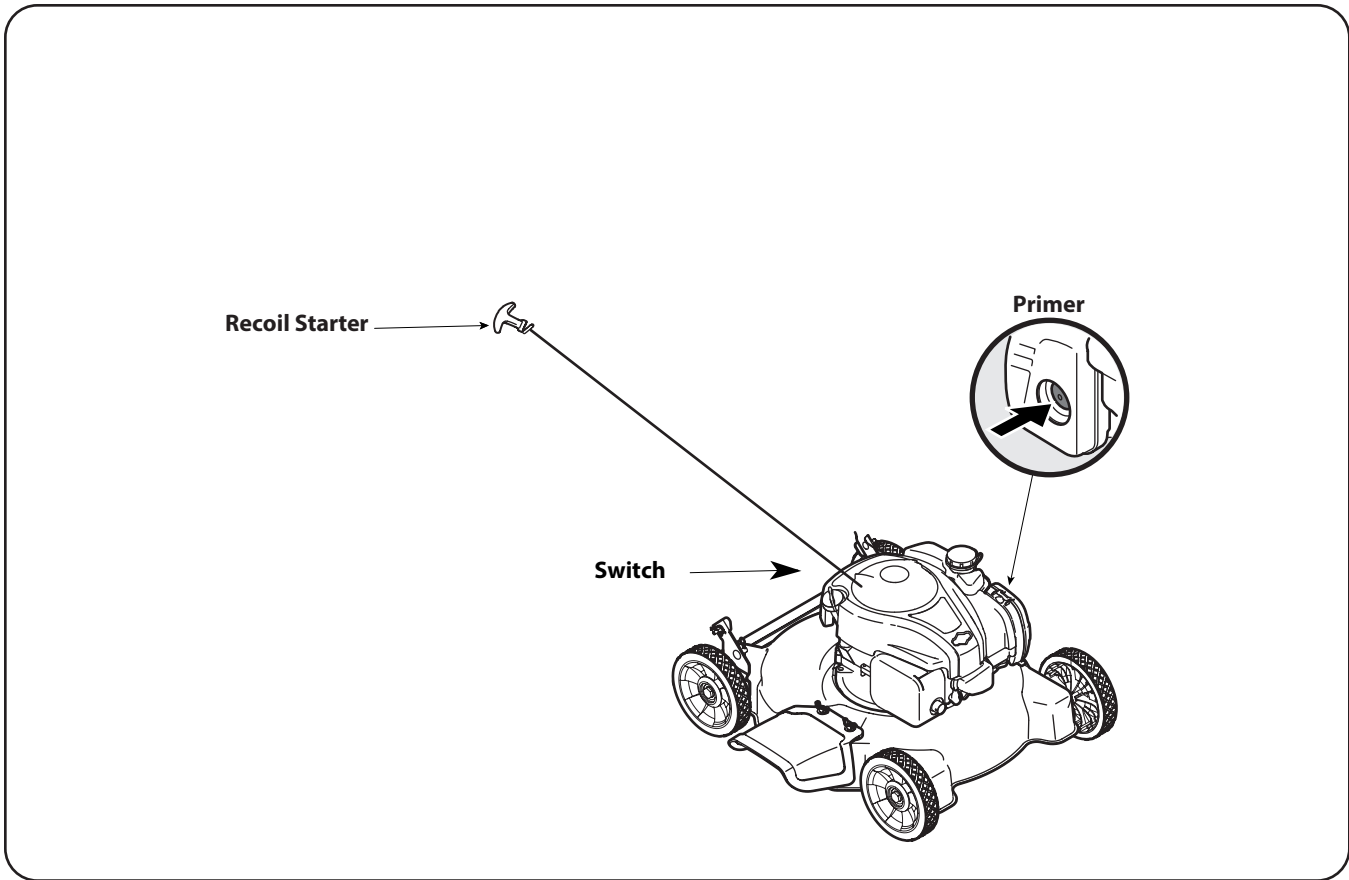
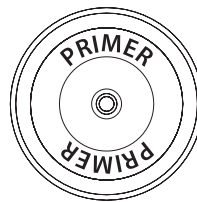


Figure 4-1

Switch

Rotate switch to the "On" position to start. Rotate switch to the "Off" position to stop.



Primer

The primer is located on the left side of the engine. The primer is used to pump gas into the carburetor and aid in starting the engine.

Recoil Starter

The recoil starter is attached to the top of the engine. Stand behind the unit and pull the recoil starter rope to start the unit.

Starting Engine (not applicable to hydraulic motor)



WARNING: Be sure no one other than the operator is standing near the mower while starting engine or operating mower. Never run engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains carbon monoxide, an odorless and deadly gas. Keep hands, feet, hair and loose clothing away from any moving parts on engine and mower.

Refer to Engine Operator's Manual for help with the engine.

1. Push the primer three times. Do not prime to restart a warm engine.
NOTE: If you push the primer too many times, excessive fuel will flood the engine and it will be difficult to start.
2. Standing behind the mower, turn switch to "On" position.
3. Grasp recoil starter handle, placing your other hand firmly on top of the recoil starter to hold the mower in place, pull rope out with a rapid, continuous, full arm stroke. Keeping a firm grip on the starter handle, let the rope rewind slowly. Repeat until engine cranks. Let the rope rewind each time slowly.

Stopping Engine (not applicable to hydraulic motor)

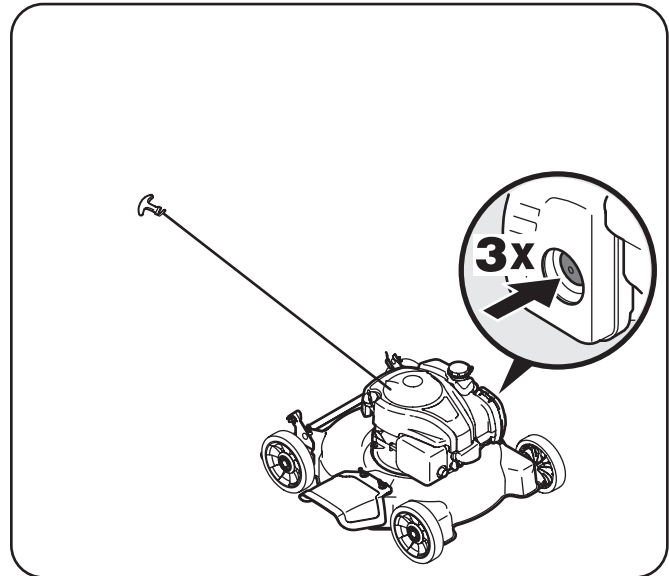
1. Turn switch to "Off" position.



WARNING: Wait for the blade to stop completely before performing any work on the mower or to remove the mulching baffle.

Using Your Mower

Be sure area is clear of stones, sticks, wire, or other objects which could damage mower or engine. Such objects could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator and others.



WARNING: The operation of any mower can result in foreign objects being thrown into the eyes, which can damage your eyes severely. Always wear safety glasses while operating the mower, or while performing any adjustments or repairs on it.



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

Maintenance

General Recommendations

- Always observe safety rules when performing any maintenance.
- The warranty on this mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from warranty, operator must maintain the 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, and ground against engine before performing any type of maintenance on your machine.

Lubrication

1. Lubricate pivot points on the blade control at least once a season with light oil. This control must operate freely in both directions. See Figure 6-1.
2. Lubricate the wheels after every four hours of operation with light oil (or motor oil). If wheels are removed for any reason, lubricate surface of the axle bolt and inner surface of the wheel with a light grease.
3. Follow the Engine Operator's Manual for lubrication schedule and instruction for engine lubrication.

Deck Care

Clean underside of the mower deck after each use to prevent 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. Disconnect spark plug wire. Refer to Engine Operator's Manual.
2. Tip mower so that it rests on the housing. Keep the side with the air cleaner facing up. Hold mower firmly.



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.

3. Scrape and clean the underside of the deck with a suitable tool. Do not spray with water.

IMPORTANT: Do not use a pressure washer or garden hose to clean your unit. These may cause damage to the engine. The use of water will result in shortened life and reduce serviceability.

4. Put the mower back on its wheels on the ground.

Engine Care (not applicable to hydraulic motor)

A list of key engine maintenance jobs required for good performance by the mower are listed below. Follow the Engine Operator's Manual for a detailed list and instructions.

- Maintain oil level as instructed in Engine Operator's Manual.
- Service air cleaner every 25 hours under normal conditions. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced. To service the air cleaner, refer to the Engine Operator's Manual.
- Clean spark plug and reset the gap once a season. Spark plug replacement is recommended at the start of each mowing season. Check Engine Operator's Manual for correct plug type and gap specifications.
- Clean engine regularly with a cloth or brush. Keep the top of the engine clean to permit proper air circulation. Remove all grass, dirt, and combustible debris from muffler area.
- Engines stored between 30 and 90 days need to be treated with a gasoline stabilizer to prevent deterioration and gum from forming in fuel system or on essential carburetor parts.

Blade Care



WARNING: When removing the cutting blade for sharpening or replacement, protect your hands with a pair of heavy gloves or use a heavy rag to hold the blade.

Periodically inspect the blade adapter for cracks, especially if you strike a foreign object. Replace when necessary. Follow the steps below for blade service.

1. Allow the engine to run until it is out of fuel. Do not attempt to pour fuel from the engine. Disconnect spark plug wire. Refer to Engine Operator's Manual.
2. Turn mower on its side making sure that the air filter and the carburetor are facing up.
3. Remove the bolt (a) and the blade bell support (b) which hold the blade and the blade adapter to the engine crankshaft. See Figure 7-1.

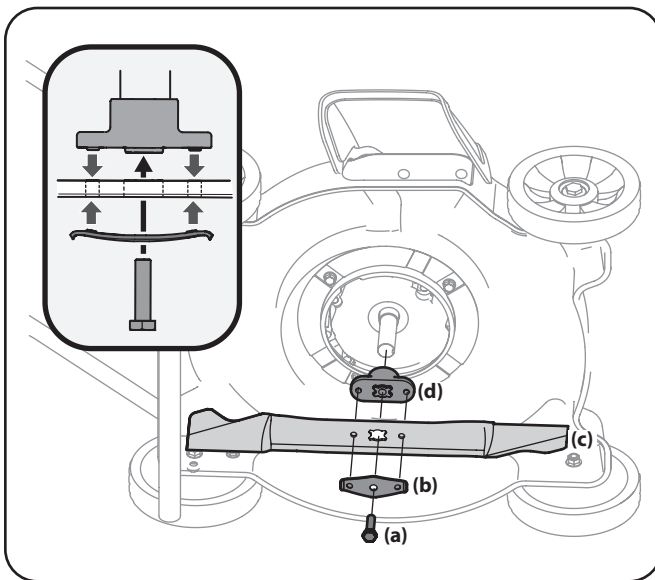


Figure 7-1

4. Remove blade (c) and adapter (d) from the crankshaft. See Figure 7-1.
5. Remove blade from the adapter for testing balance. Balance the blade on a round shaft screwdriver to check. Remove metal from the heavy side until it balances evenly. When sharpening the blade, follow the original angle of grind. Grind each cutting edge equally to keep the blade balanced.



WARNING: An unbalanced blade will cause excessive vibration when rotating at high speeds. It may cause damage to mower and could break causing personal injury.

6. Lubricate the engine crankshaft and the inner surface of the blade adapter with light oil. Slide the blade adapter (d) onto the engine crankshaft. Place the blade on the adapter such that the side of the blade marked "Grass Side" (or with part number) faces the ground when the mower is in the operating position. Make sure that the blade is aligned and seated on the blade adapter flanges.
7. Place blade bell support (b) on the blade (c). Align notches on the blade bell support with small holes in blade.
8. Replace hex bolt (a) and tighten hex bolt to torque: 450 in-lb (min.), 600 in-lb (max.).

To ensure safe operation of your mower, periodically check the blade bolt for correct torque.

Off-Season Storage

The following steps should be taken to prepare your mower for storage.

- Clean and lubricate mower thoroughly.
- Do not use a pressure washer to clean your unit.
- Coat mower's cutting blade with chassis grease to prevent rusting.
- Refer to Engine Operator's Manual for correct engine storage instructions.
- Store mower in a dry, clean area. Do not store next to corrosive materials, such as fertilizer.

When storing any type of power equipment in a poorly ventilated or metal storage shed, care should be taken to rust-proof the equipment. Using a light oil or silicone, coat the equipment, especially cables and all moving parts of your mower before storage.

Problem	Cause	Remedy
Engine fails to start	<ol style="list-style-type: none"> 1. Spark plug boot disconnected. 2. Fuel tank empty or stale fuel. 3. Engine not primed (if equipped with primer). 4. Faulty spark plug. 5. Blocked fuel line. 6. Engine flooded. 	<ol style="list-style-type: none"> 1. Connect wire to spark boot. 2. Fill tank with clean, fresh gasoline. 3. Prime engine as instructed in the Operation section. 4. Clean, adjust gap, or replace. 5. Clean fuel line. 6. Wait a few minutes to restart, but do not prime.
Engine runs erratic	<ol style="list-style-type: none"> 1. Spark plug boot loose. 2. Blocked fuel line or stale fuel. 3. Vent in gas cap plugged. 4. Water or dirt in fuel system. 5. Dirty air cleaner. 	<ol style="list-style-type: none"> 1. Connect and tighten spark plug boot. 2. Clean fuel line; fill tank with clean, fresh gasoline. 3. Clear vent. 4. Drain fuel tank. Refill with fresh fuel. 5. Refer to Engine Operator's Manual.
Engine overheats	<ol style="list-style-type: none"> 1. Engine oil level low. 2. Air flow restricted. 	<ol style="list-style-type: none"> 1. Fill crankcase with proper oil. 2. Clean area around and on top of engine.
Occasional skips (hesitates) at high speed	<ol style="list-style-type: none"> 1. Spark plug gap too close. 	<ol style="list-style-type: none"> 1. Adjust gap. Refer to Engine Operator's Manual.
Idles poorly	<ol style="list-style-type: none"> 1. Spark plug fouled, faulty, or gap too wide. 2. Dirty air cleaner. 	<ol style="list-style-type: none"> 1. Reset gap or replace spark plug. 2. Refer to Engine Operator's Manual.
Excessive vibration	<ol style="list-style-type: none"> 1. Cutting blade loose or unbalanced. 2. Bent cutting blade. 	<ol style="list-style-type: none"> 1. Tighten blade and adapter. Balance blade. 2. See an authorized service dealer.
Uneven cut	<ol style="list-style-type: none"> 1. Wheels not positioned correctly. 2. Dull blade. 	<ol style="list-style-type: none"> 1. Place all four wheels in same height position. 2. Sharpen or replace blade.

