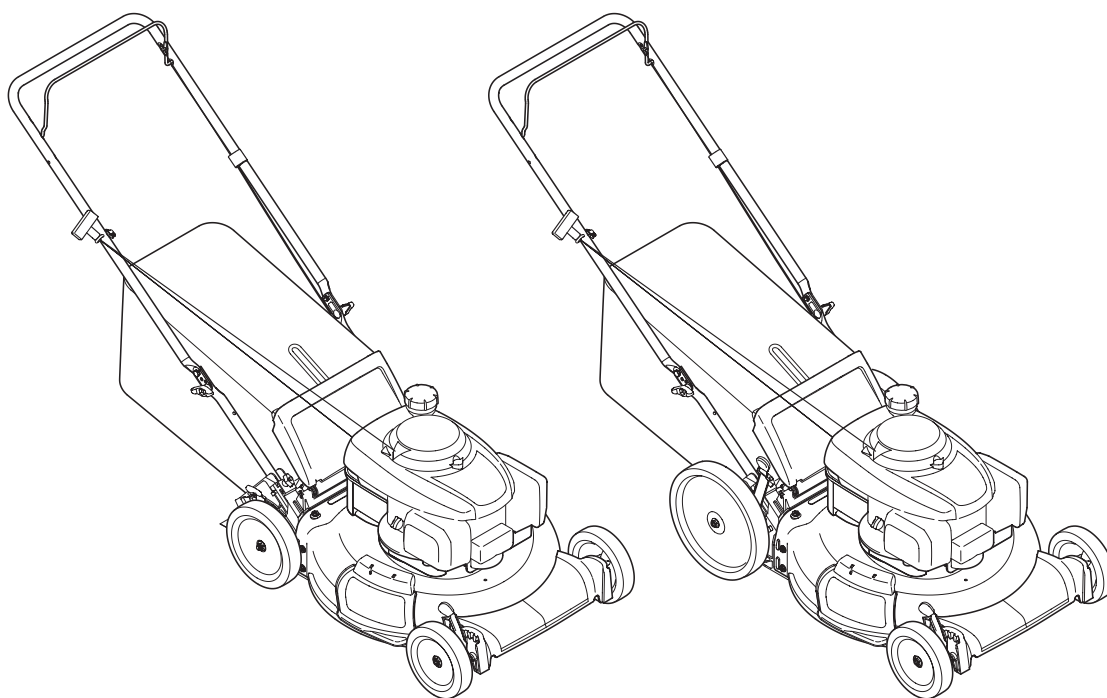


COLUMBIA

OPERATOR'S MANUAL



Push Mower — Model Series A00, A10, A20, B00, B10, & B20

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.**

**LES DISTRIBUTIONS RVI LIMITÉE, 2955, JEAN-BAPTISTE DESCHAMPS, LACHINE, QUEBEC H8T 1C5
MTD LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019**

Thank You

Thank you for purchasing your new equipment. It was carefully engineered to provide excellent performance when properly operated and maintained.

Please read this entire manual prior to operating the equipment. It instructs you how to safely and easily set up, operate and maintain your machine. Please be sure that you, and any other persons who will operate the machine, carefully follow the recommended safety practices at all times. Failure to do so could result in personal injury or property damage.

All information in this manual is relative to the most recent product information available at the time of printing. Review this manual frequently to familiarize yourself with the machine, its features and operation. Please be aware that this Operator's Manual may cover a range of product specifications for various models. Characteristics and features discussed and/or illustrated in this manual may not be applicable to all models.

The manufacturer reserves the right to change product specifications, designs and equipment without notice and without incurring obligation.

If you have any problems or questions concerning the machine, phone your local service dealer or contact us directly. Customer Support telephone numbers, website address and mailing address can be found on this page. We want to ensure your complete satisfaction at all times.

Throughout this manual, all references to *right* and *left* side of the machine are observed from the operating position.

The engine manufacturer is responsible for all engine-related issues with regards to performance, power-rating, specifications, warranty and service. Please refer to the engine manufacturer's Owner's/Operator's Manual, packed separately with your machine, for more information.

Table of Contents

<i>Safe Operation Practices</i>	<i>3</i>	<i>Service</i>	<i>17</i>
<i>Assembly & Set-Up</i>	<i>9</i>	<i>Troubleshooting</i>	<i>18</i>
<i>Controls & Features.....</i>	<i>13</i>	<i>Replacement Parts</i>	<i>19</i>
<i>Operation.....</i>	<i>14</i>	<i>Emission control warranty statement.....</i>	<i>20</i>
<i>Maintenance & Adjustment.....</i>	<i>15</i>	<i>Warranty</i>	<i>22</i>

Record Product Information

Before setting up and operating your new equipment, please locate the model plate on the equipment and record the information in the provided area to the right. You can locate the model plate by standing at the operating position and looking down at the rear of the machine. This information will be necessary, should you seek technical support via our web site or with your local dealer.

MODEL NUMBER

--	--	--	--	--	--	--	--	--	--	--	--

SERIAL NUMBER

--	--	--	--	--	--	--	--	--	--	--	--

Customer Support

If you have difficulty assembling this product or have any questions regarding the controls, operation, or maintenance of this machine, call an authorized dealer, see below.

Please have your unit's model number and serial number ready when you call. See previous section to locate this information.

In the U.S.A.:

MTD LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019. Phone: 1-877-282- 8684.

In Canada:

MTD Canada, 97 Kent Avenue, Kitchener, ON N2G 4J1 Phone: 1-800-668-1238 or

LES DISTRIBUTIONS RVI LIMITÉE, 2955, Jean-Baptiste Deschamps, Lachine, Quebec H8T 1C5 Phone: 1-800-361-5770.



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!**



WARNING: 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.



WARNING: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. *Wash hands after handling.*



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 Operation

1. Read this operator's manual carefully in its entirety before attempting to assemble this machine. Read, understand, and follow all instructions on the machine and in the manuals) before operation. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Be completely familiar with the controls and the proper use of this machine before operating it.
3. This machine is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times. This machine has been designed to perform one job: to mow grass. Do not use it for any other purpose.
4. Never allow children under 14 years of age to operate this machine. Children 14 and over should read and understand the instructions and safe operation practices in this manual and on the machine and should be trained and supervised by an adult.
5. Only responsible individuals who are familiar with these rules of safe operation should be allowed to use this machine.
6. Thoroughly inspect the area where the equipment 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. Thrown objects can cause serious personal injury.
7. Plan your mowing pattern to avoid discharge of material toward roads, sidewalks, bystanders and the like. Also, avoid discharging material against a wall or obstruction, which may cause discharged material to ricochet back toward the operator.
8. To help avoid blade contact or a thrown object injury, stay in operator zone behind handles and keep children, bystanders, helpers and pets at least 75 feet from mower while it is in operation. Stop machine if anyone enters area.
9. 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.
10. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts. Shirts and pants that cover the arms and legs and steel-toed shoes are recommended. Never operate this machine in bare feet, sandals, slippery or light-weight (e.g. canvas) shoes.
11. Do not put hands or feet near rotating parts or under the cutting deck. Contact with blade can amputate fingers, hands, toes and feet.

12. A missing or damaged discharge cover can cause blade contact or thrown object injuries.
13. 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 falling; release the handle immediately.
14. 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 and then follow these steps:
 - a. Step back from mower to fully extend your arms.
 - b. Be sure you are well balanced with sure footing.
 - c. Pull the mower back slowly, no more than half way toward you.
 - d. Repeat these steps as needed.
15. Do not operate the mower while under the influence of alcohol or drugs.
16. Do not engage the self-propelled mechanism on machines so equipped while starting engine.
17. The blade control handle is a safety device. Never attempt to bypass its operation. Doing so makes the safety device inoperative and may result in personal injury through contact with the rotating blade. The blade control handle must operate easily in both directions and automatically return to the disengaged position when released.
18. Never operate the mower in wet grass. Always be sure of your footing. A slip and fall can cause serious personal injury. If you feel you are losing your footing, release the blade control handle immediately and the blade will stop rotating within three seconds.
19. Mow only in daylight or good artificial light. Walk, never run.
20. Stop the blade when crossing gravel drives, walks or roads.
21. If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
22. Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute. The cutting blade continues to rotate for a few seconds after the blade control is released. Never place any part of the body in the blade area until you are sure the blade has stopped rotating.
23. Never operate mower without proper trail shield, discharge cover, grass catcher, blade control handle or other safety protective devices in place and working. Never operate mower with damaged safety devices. Failure to do so can result in personal injury.
24. Muffler and engine become hot and can cause a burn. Do not touch.
25. Never attempt to make a wheel or cutting height adjustment while the engine is running.
26. Only use parts and accessories made for this machine by the manufacturer. Failure to do so can result in personal injury.
27. 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.
28. If situations occur which are not covered in this manual, use care and good judgement. Contact Customer Support for assistance or the name of the nearest service dealer.

Slope Operation

Slopes are a major factor related to slip and fall accidents, which can result in severe injury. Operation on slopes requires extra caution. If you feel uneasy on a slope, do not mow it. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this machine on a sloped or hilly area. If the slope is greater than 15 degrees, do not mow it.

Do:

1. Mow across the face of slopes; never up and down. Exercise extreme caution when changing direction on slopes.
2. Watch for holes, ruts, rocks, hidden objects, or bumps which can cause you to slip or trip. Tall grass can hide obstacles.
3. Always be sure of your footing. A slip and fall can cause serious personal injury. If you feel you are losing your balance, release the blade control handle immediately and the blade will stop rotating within three (3) seconds.

Do Not:

1. Do not mow near drop-offs, ditches or embankments, you could lose your footing or balance.
2. Do not mow slopes greater than 15 degrees as shown on the slope gauge.
3. Do not mow on wet grass. Unstable footing could cause slipping.

Children

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.

1. Keep children out of the mowing area and under watchful care of a responsible adult other than the operator.
2. Be alert and turn mower off if a child enters the area.
3. Before and while moving backwards, look behind and down for small children.
4. Use extreme care when approaching blind corners, doorways, shrubs, trees, or other objects that may obscure your vision of a child who may run into the mower.
5. Keep children away from hot or running engines. They can suffer burns from a hot muffler.
6. Never allow children under 14 years of age to operate this machine. Children 14 and over should read and understand the instructions and safe operation practices in this manual and on the machine and be trained and supervised by an adult.

Service

Safe Handling Of Gasoline:

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. Use only an approved gasoline container.
3. 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.
4. 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.
5. 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-on device.
6. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
7. Never fuel machine indoors because flammable vapors will accumulate in the area.
8. Never remove gas cap or add fuel while engine is hot or running. Allow engine to cool at least two minutes before refueling.
9. Never over fill fuel tank. Fill tank to no more than 1 inch below bottom of filler neck to provide for fuel expansion.
10. Replace gasoline cap and tighten securely.
11. If gasoline is spilled, wipe it off the engine and equipment. Move machine to another area. Wait 5 minutes before starting engine.
12. Never store the machine or fuel container near an open flame, spark or pilot light as on a water heater, space heater, furnace, clothes dryer or other gas appliances.
13. To reduce fire hazard, keep machine free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage and remove any fuel soaked debris.
14. Allow machine to cool at least 5 minutes before storing.
3. Check the blade and engine mounting bolts at frequent intervals for proper tightness. Also, visually inspect blade for damage (e.g., bent, cracked, worn) Replace blade with the original equipment manufacture's (O.E.M.) blade only, listed in this manual. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
4. Mower blades are sharp and can cut. Wrap the blade or wear gloves, and use extra caution when servicing them.
5. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
6. Never tamper with safety devices. Check their proper operation regularly.
7. After striking a foreign object, stop the engine, disconnect the spark plug wire and ground against the engine. Thoroughly inspect the mower for any damage. Repair the damage before starting and operating the mower.
8. Never attempt to make a wheel or cutting height adjustment while the engine is running.
9. Grass catcher components, discharge cover, and trail shield 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, listed in this manual. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
10. Do not change the engine's governor setting or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
11. Check fuel line, tank, cap, and fittings frequently for cracks or leaks. Replace if necessary.
12. Do not crank engine with spark plug removed.
13. Maintain or replace safety and instruction labels, as necessary.
14. Observe proper disposal laws and regulations. Improper disposal of fluids and materials can harm the environment.
15. According to the Consumer Products Safety Commission (CPSC) and the U.S. Environmental Protection Agency (EPA), this product has an *Average Useful Life* of seven (7) years, or 140 hours of operation. At the end of the *Average Useful Life* have the machine inspected annually by an authorized service dealer to ensure that all mechanical and safety systems are working properly and not worn excessively. Failure to do so can result in accidents, injuries or death.

General Service:

1. Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.
2. 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.

Do not modify engine

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.

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), Oxidizing Catalyst (OC), Secondary Air Injection (SAI) and Three Way Catalyst (TWC) if so equipped.

Spark Arrestor



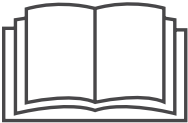








WARNING: This machine is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any).

If a spark arrester is used, it should be maintained in effective working order by the operator.

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

Safety Symbols

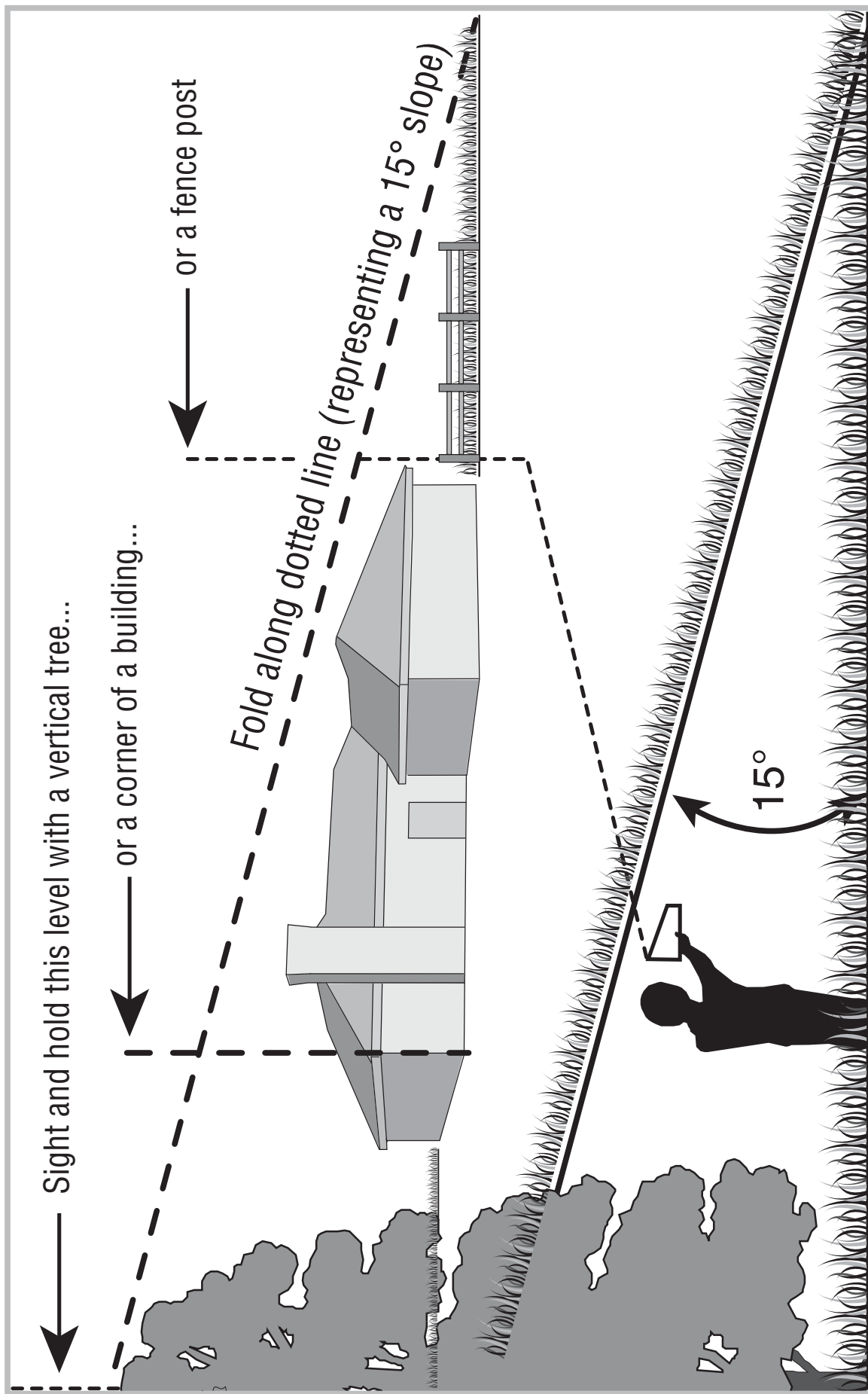
This page depicts and describes safety symbols that may appear on this product. Read, understand, and follow all instructions on the machine before attempting to assemble and operate.

Symbol	Description
	READ THE OPERATOR'S MANUAL(S) Read, understand, and follow all instructions in the manual(s) before attempting to assemble and operate.
	DANGER — ROTATING BLADES To reduce the risk of injury, keep hands and feet away. Do not operate unless discharge cover or grass catcher is in its proper place. If damaged, replace immediately.
	DANGER — BYSTANDERS Do not mow when children or others are around.
	DANGER — HAND/ FOOT CUT Keep hands and feet away from rotating parts.
	DANGER — THROWN DEBRIS Remove objects that can be thrown by the blade in any direction. Wear safety glasses.
	DANGER — SLOPES Use extra caution on slopes. Do not mow slopes greater than 15°.
	WARNING—GASOLINE IS FLAMMABLE Allow the engine to cool at least two minutes before refueling.
	WARNING— CARBON MONOXIDE Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.
	WARNING— HOT SURFACE Engine parts, especially the muffler, become extremely hot during operation. Allow engine and muffler to cool before touching.



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!



Use this page as a guide to determine slopes where you may not operate safely.



WARNING: Do not operate your lawn mower on such slopes. Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2-1/2 feet every 10 feet). A riding mower could overturn and cause serious injury. Operate riding mowers up and down slopes, never across the face of slopes. Operate walk-behind mowers across the face of slopes, never up and down slopes.

Contents of Carton

- One Lawn Mower
- One Grass Catcher†
- One Bottle of Oil
- One Lawn Mower Operator's Manual
- One Engine Operator's Manual
- One Side Discharge Chute†

† If Equipped

NOTE: Please be aware that this Operator's Manual covers both the low and high wheel models of this mower. While this manual illustrates the low wheel model, the instructions and features are equally applicable to the high wheel model as well, unless otherwise noted.

Assembly

NOTE: This unit is shipped without gasoline or oil in the engine. Fill up with gasoline and oil as instructed in the accompanying engine manual BEFORE operating your mower.

Handle

1. Remove any packing material which may be between upper and lower handles.
 - a. Remove wing nuts and carriage bolts from handle as shown in Fig. 3-1. Do not loosen or remove adjacent hex head screws.

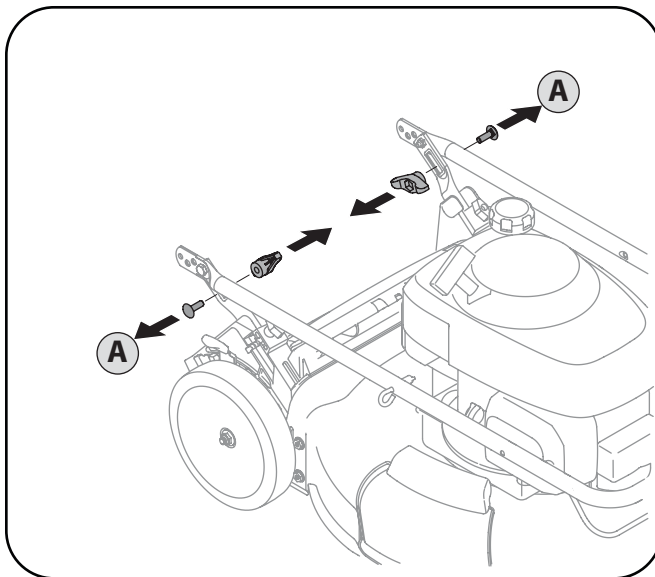


Figure 3-1

- b. While stabilizing mower so it doesn't move, pivot upper handle up as shown in Fig. 3-2. Do not crimp cable while lifting the handle up.

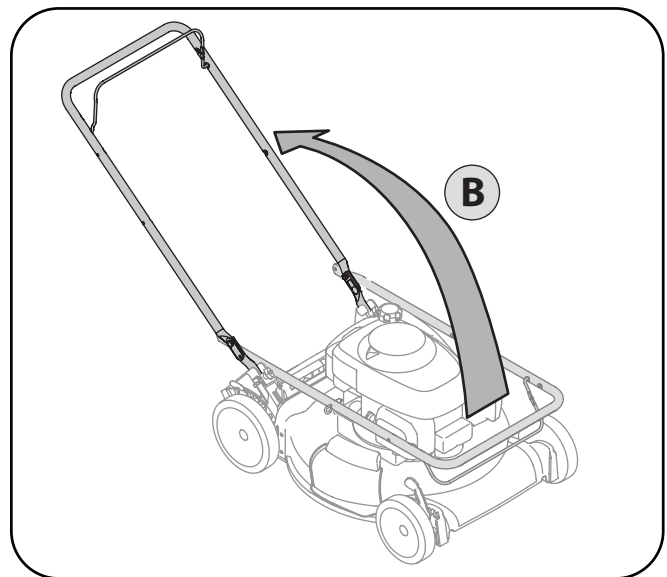


Figure 3-2

2. Remove the T-bolts from the handle brackets as shown in Fig. 3-3.

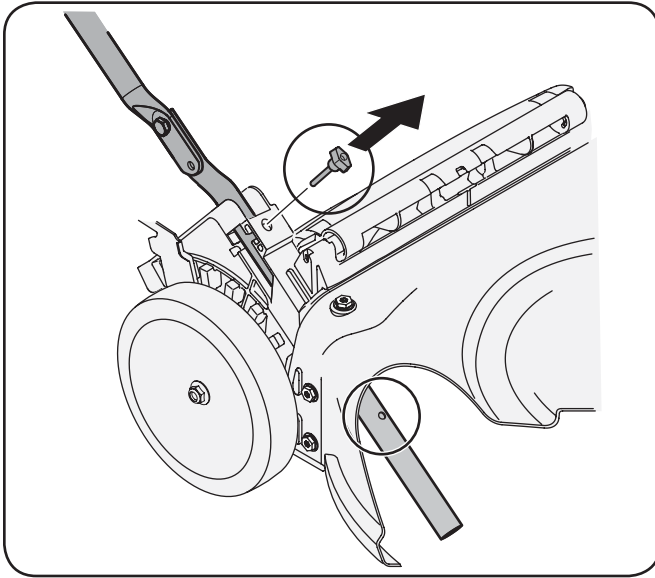


Figure 3-3

3. Follow the steps below to complete handle assembly:
 - a. Pull upward on the handle until holes in lower handle (shown in Fig. 3-3 deck cutaway) line up with holes in handle bracket. See Fig. 3-4.

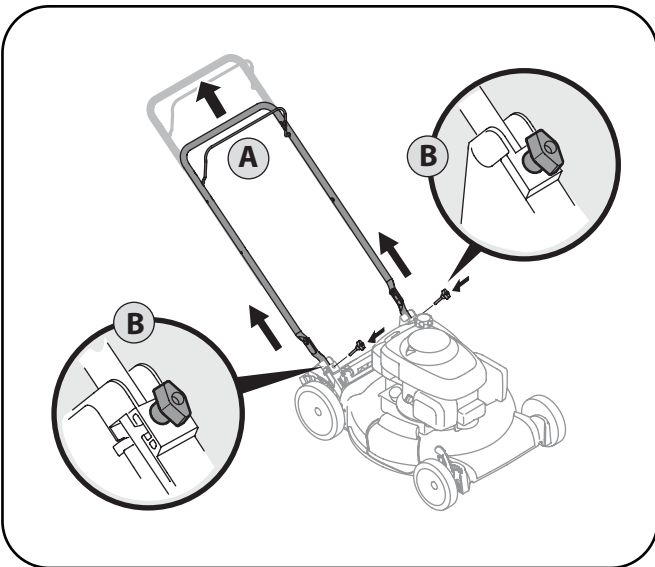


Figure 3-4

NOTE: When pulling upward on handle, make sure to not pull handle all the way out.

- b. Insert the T-bolts removed earlier through the handle brackets and lower handle and tighten securely to secure the handle in place. See Fig. 3-4.
- c. Reattach wing nuts and carriage bolts removed earlier into lower holes of handle as shown in Fig. 3-5.

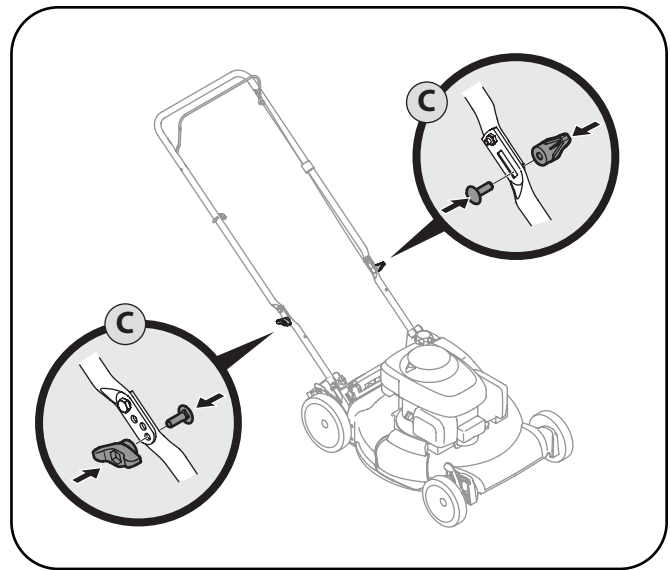


Figure 3-5

4. The rope guide is attached to the right side of the upper handle. Loosen the wing knob which secures the rope guide. See Fig. 3-6.
 - a. Hold blade control against upper handle.
 - b. Slowly pull starter rope handle from engine and slip starter rope into the rope guide. See Fig. 3-6.

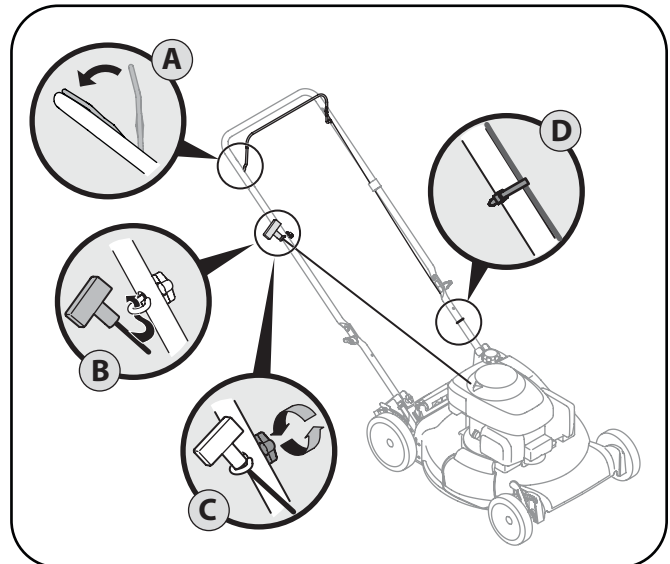


Figure 3-6

- c. Tighten rope guide wing knob.
- d. Use cable tie(s) to secure cable(s) to lower handle.

Grass Catcher (If Equipped)

1. Follow steps below to assemble the grass catcher (if needed). Make certain bag is turned right side out before assembling (warning label will be on the outside).
 - a. Place bag over frame so that its black plastic side is at the bottom.

- b. Slip plastic channel of grass bag over hooks on the frame. See Fig. 3-7.

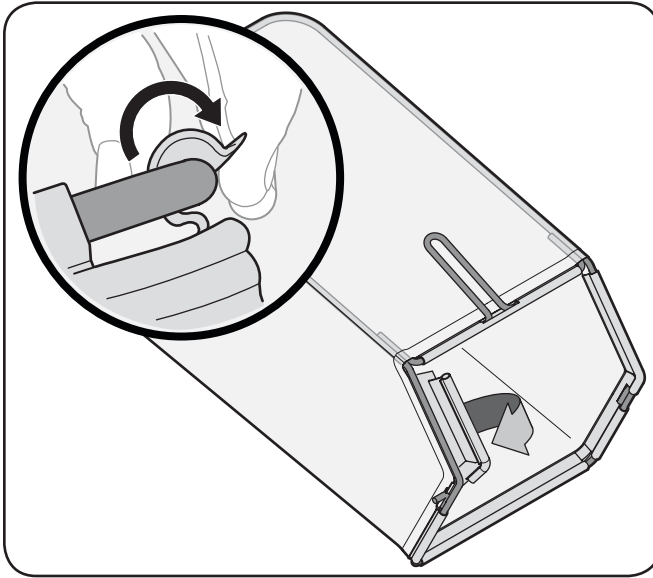


Figure 3-7

2. Follow steps below to attach grass catcher:
 - a. Lift rear discharge door.
 - b. Place grass catcher into the slots in the handle brackets as shown in Fig. 3-8. Let go of discharge door so that it rests on the grass catcher.

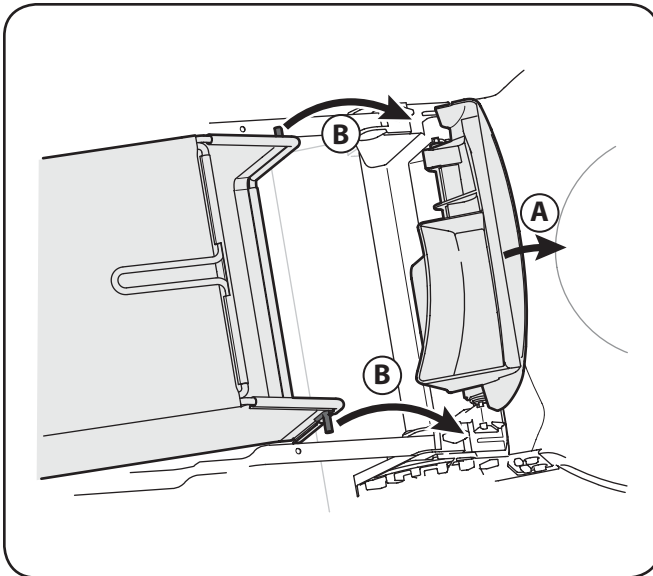


Figure 3-8

To remove grass catcher, lift rear discharge door on the mower. Lift grass catcher up and off the slots in the handle brackets. Release rear discharge door to allow it to close rear opening of mower.

Side Discharge Chute (If Equipped)

Your mower may be shipped as a mulcher. To convert to side discharge, make sure grass catcher (if equipped) is off of the unit and rear discharge door (if equipped) is closed.

1. On the side of the mower, lift the side mulching plug. See Figure 3-9.

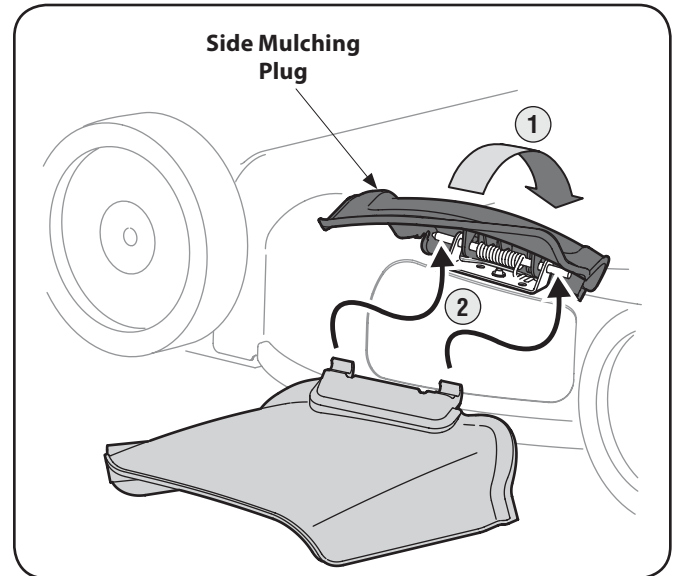


Figure 3-9

2. Slide two hooks of side discharge chute under hinge pin on mulching plug assembly. Lower the mulching plug. Do not remove side mulching plug at any time, even when you are not mulching.

Adjustments

Cutting Height

There is a cutting height adjustment lever located above the front and rear wheel.

1. Pull the height adjustment lever towards wheel.
2. Move lever to desired position for a change in cutting height. See Fig. 3-10 and Fig. 3-10A.

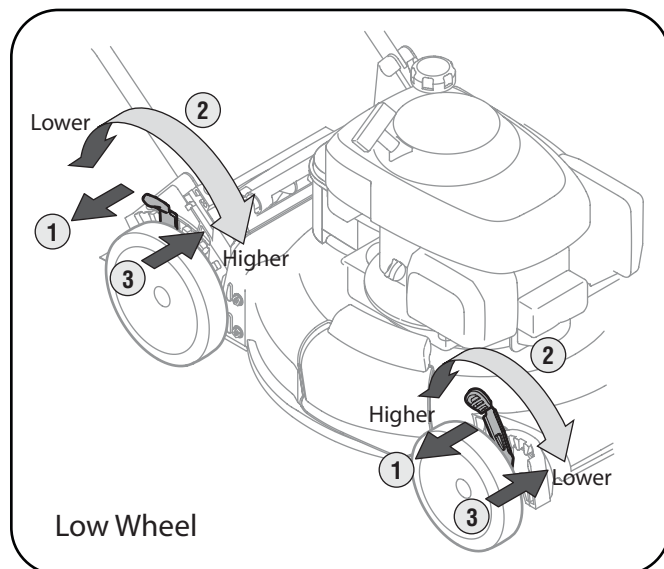


Figure 3-10

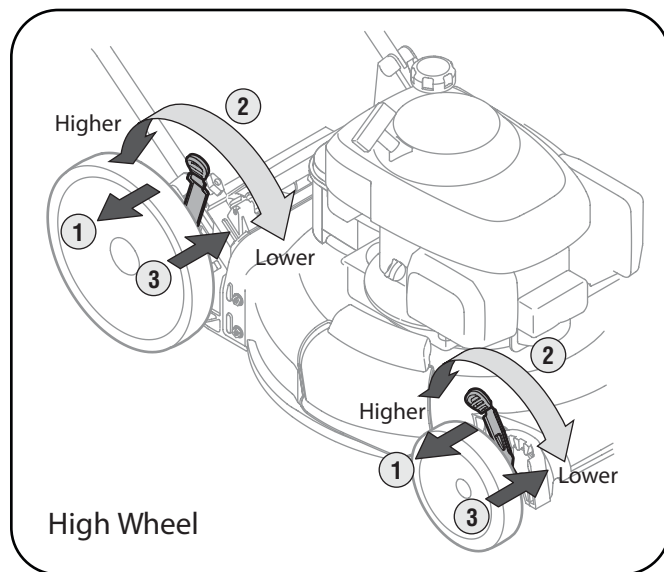


Figure 3-10A

NOTE: For mowers with low wheels, the height adjustment levers move in the opposite direction to adjust; for those with high wheels, the levers move in the same direction.

3. Release lever towards deck.

IMPORTANT: Both the front and rear wheels must be placed in the same relative position. For rough or uneven lawns, move the height adjustment levers to a higher position. This will stop scalping of grass.

Handle Pitch (If Equipped)

For convenience of operation, you may be able to adjust the pitch of the handle as follows:

1. Remove wing nuts and carriage bolts from handle. See Fig. 3-11.

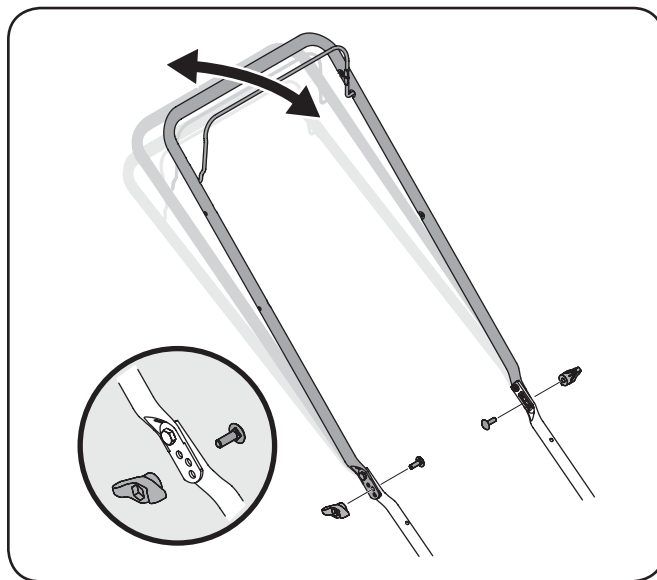


Figure 3-11

2. Position the handle in one of the three positions that is most comfortable. See Fig. 3-11 inset.
3. Secure into position with wing nuts and carriage bolts removed earlier.

Set-Up

Gas and Oil Fill-Up

Refer to the separate engine owner'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 separate engine owner'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 other sources of ignition.

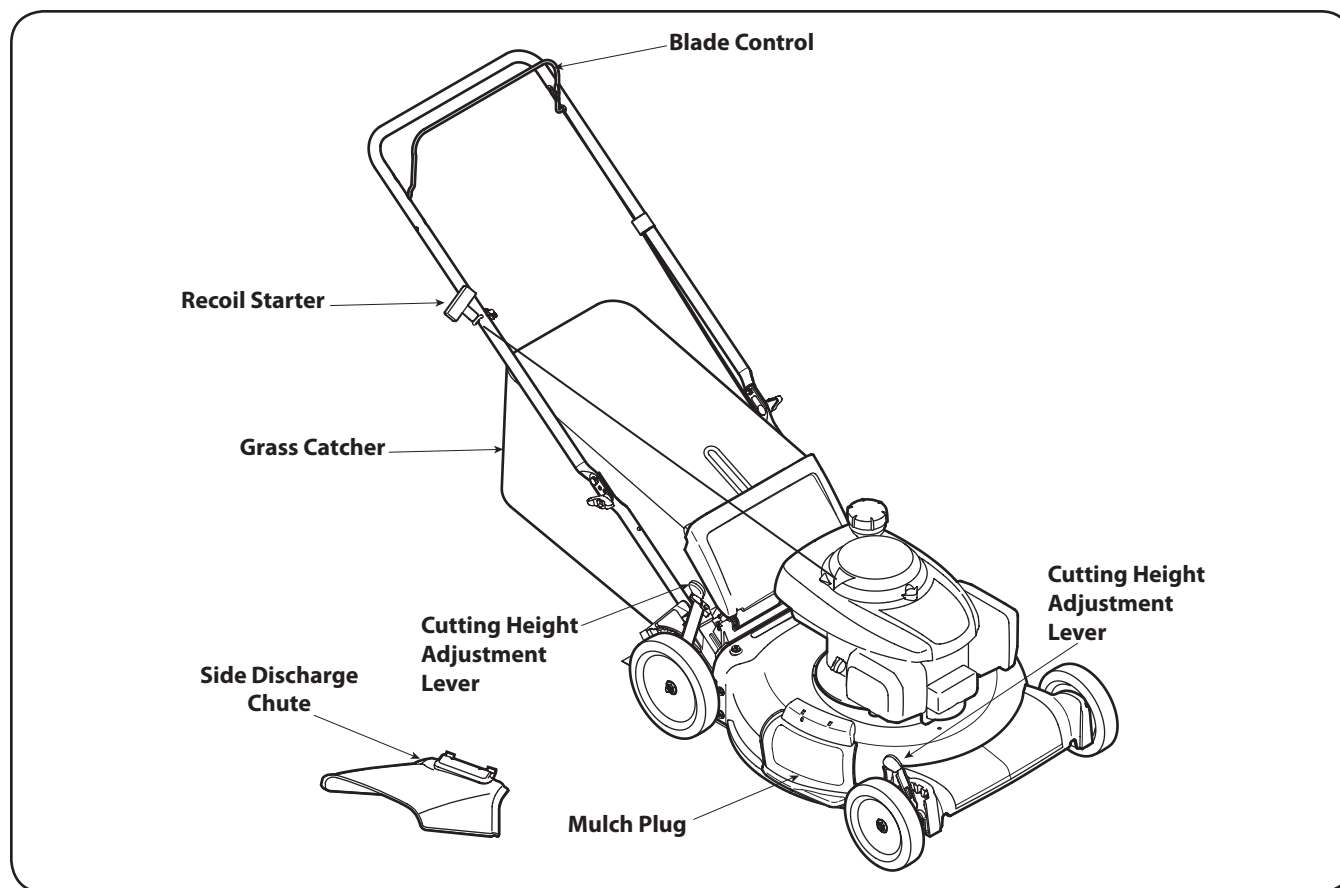


Figure 4-1

Blade Control

The blade control is attached to the upper handle of the mower. Depress and squeeze it against the upper handle to operate the unit. Release it to stop engine and blade.



WARNING: This blade control is a safety device. Never attempt to bypass its operations.

Cutting Height Adjustment Lever

One adjustment lever is located on the right rear wheel and one is located on the right front wheel. Both levers have to be at the same relative position to ensure a uniform cut. To adjust the cutting height, refer to the "Assembly & Set-Up" Section.

Grass Catcher (If Equipped)

The grass catcher, located at the rear of the mower, is used to bag the grass clippings for disposal at another site. Once the bag is full, remove it up through the handles using the strap provided and empty it before any further mowing.

Mulch Plug (If Equipped)

The mulch plug is used for mulching purposes. Instead of collecting the grass clippings in a grass catcher or using the side discharge chute, some mower models have the option of recirculating the clippings back to the lawn. This is called mulching.

Side Discharge Chute (If Equipped)

Your mower may be shipped as a mulcher. To discharge the grass clippings to the side instead, follow the instructions in the "Assembly & Set-Up" section to attach the side discharge chute.



WARNING: Keep hands and feet away from the chute area on cutting deck. Refer to warning label on the unit.

Recoil Starter

The recoil starter is attached to the right upper handle. Stand behind the unit and pull the recoil starter rope to start the unit.

Starting & Stopping Engine

Refer to the Engine Operator's manual packed with your lawn mower for instructions on starting and stopping the engine.

Using Your Lawn Mower

Be sure lawn is clear of stones, sticks, wire, or other objects which could damage lawn 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 lawn 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.

Using as Mulcher (If Equipped)

For mulching grass, remove the side discharge chute (if equipped) or the grass catcher (if equipped) and allow the rear discharge door (if equipped) to close the rear opening of mower. For effective mulching, do not cut wet grass. If the grass has been allowed to grow in excess of four inches, mulching is not recommended. Use the grass catcher to bag clippings instead.

Using Grass Catcher (If Equipped)

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

1. Attach grass catcher following instructions in the "Assembly & Set-Up" section. Grass clippings will automatically collect in bag as you run mower. Operate mower till grass bag is full.
2. Stop engine completely by releasing the blade control. Make sure that the unit has come to a complete stop.
3. Lift discharge door and pull grass bag up and away from the mower to remove the bag. Dispose of the grass clippings and reinstall the bag when complete.



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

1. Always observe safety rules when performing any maintenance.
2. The warranty on this lawn mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from warranty, operator must maintain the lawn mower as instructed here.
3. Changing of engine-governed speed will void engine warranty.
4. All adjustments should be checked at least once each season.
5. Periodically check all fasteners and make sure these are tight.



WARNING: Always stop engine, 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. The blade control must operate freely in both directions. See Fig. 6-1.

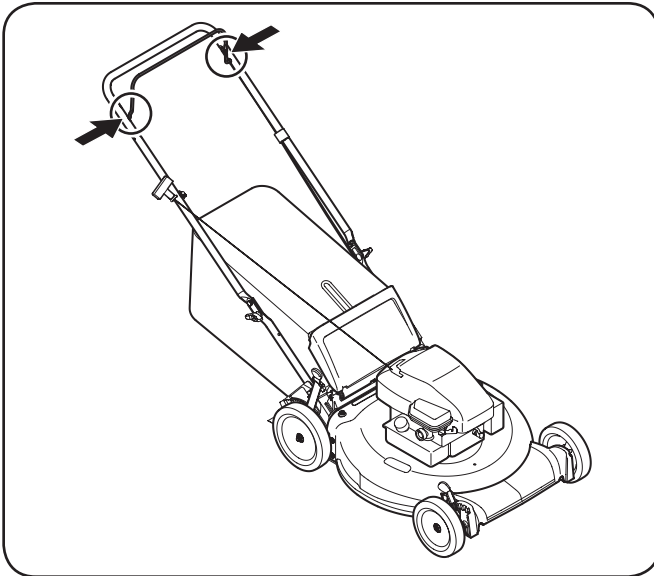


Figure 6-1

2. If your mower is equipped with ball bearing wheels, lubricate at least once a season with a light oil, all other types require no lubrication. However, if the wheels are removed for any reason, lubricate the surface of the axle bolt and the inner surface of the wheel with light automotive oil.
3. Follow the accompanying engine 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 this job.

1. Disconnect spark plug wire. Drain gasoline from lawn mower or place a piece of plastic under the gas cap.
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 to clean your unit. This may cause damage to bearings, or the engine.
4. Put the mower back on its wheels on the ground. If you had put plastic under the gas cap earlier, make sure to remove it now.

Engine

1. Refer to the separate engine manual for engine maintenance instructions.
2. Maintain engine oil as instructed in the separate engine manual packed with your unit. Read and follow instructions carefully.
3. Under normal conditions service air cleaner as instructed in the separate engine manual packed with your unit. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced.
4. The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specifications.

NOTE: This spark ignition system meets all requirements of the Canadian Interference-Causing Equipment Regulations.

5. Clean the engine regularly with a cloth or brush. Keep the cooling system (blower housing area) clean to permit proper air circulation which is essential to engine performance and life. Be certain to remove all grass, dirt and combustible debris from muffler area.

Deck Wash (If Equipped)

Your mower's deck may be equipped with a water port on its surface as part of its deck wash system.

Use the deck wash to rinse grass clippings from the deck's underside and prevent the buildup of corrosive chemicals. Complete the following steps **AFTER EACH MOWING**:

1. Push the mower to a level, clear spot on your lawn, near enough for your garden hose to reach.



CAUTION: Make certain the mower's discharge chute is directed **AWAY** from your house, garage, parked cars, etc.

2. Thread the hose coupler (packaged with your mower's Operator's Manual) onto the end of your garden hose.
3. Attach the hose coupler to the water port on your decks surface. See Fig. 6-2.
4. Turn the water on.
5. Start the engine as as instructed in the separate engine manual packed with your unit.
6. Run the engine for a minimum of two minutes, allowing the underside of the cutting deck to thoroughly rinse.
7. Release blade control to stop the engine and blade.
8. Turn the water off and detach the hose coupler from the water port on your deck's surface.

IMPORTANT: After cleaning your deck, restart the mower. Keep the engine and blade running for a minimum of two minutes, allowing the underside of the cutting deck to thoroughly dry.

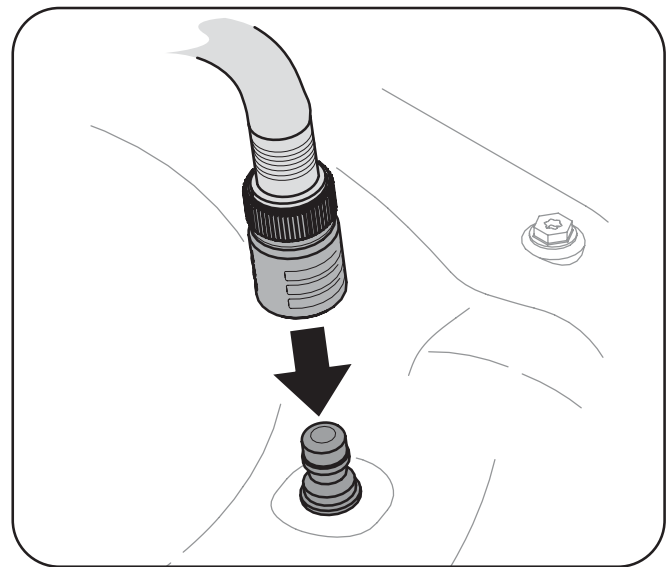


Figure 6-2

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. Disconnect spark plug boot from spark plug. Turn mower on its side making sure that the air filter and the carburetor are facing up.
2. Remove the bolt which holds the blade and the blade adapter to the engine crankshaft. See Fig. 7-1.
3. Remove blade and adapter from the crankshaft. See Fig. 7-1.

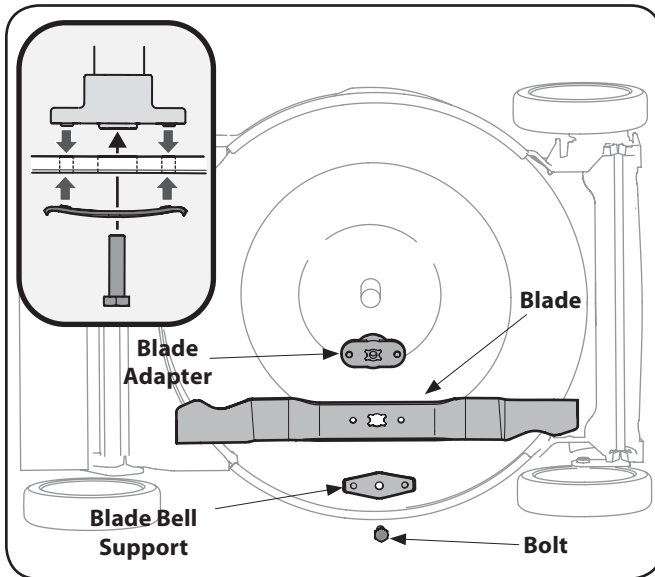


Figure 7-1

4. 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.

5. Lubricate the engine crankshaft and the inner surface of the blade adapter with light oil. Slide the blade adapter onto the engine crankshaft. Place the blade on the adapter such that the side of the blade marked "Bottom" (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.
6. Place blade bell support on the blade. Align notches on the blade bell support with small holes in blade.
7. Replace hex bolt and tighten hex bolt to torque: 450 in. lbs. min., 600 in. lbs. max.

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

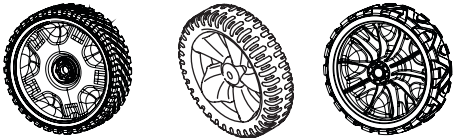
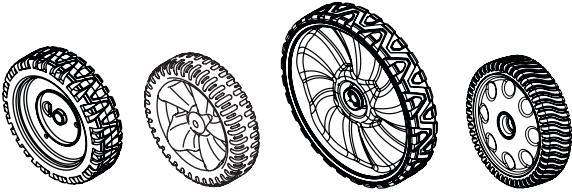
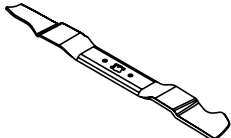
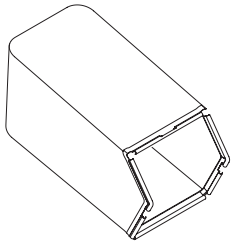
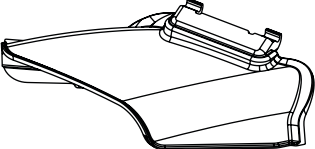
Off-Season Storage

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

- Clean and lubricate mower thoroughly as described in the lubrication instructions.
- Coat mower's cutting blade with chassis grease to prevent rusting.
- Refer to engine manual for correct engine storage instructions.
- Do not use a pressure washer or garden hose to clean your unit.
- 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 lawn mower before storage.

Problem	Cause	Remedy
Engine Fails to start	<ol style="list-style-type: none"> 1. Blade control disengaged. 2. Spark plug boot disconnected. 3. Fuel tank empty or stale fuel. 4. Engine not primed (if equipped with primer). 5. Faulty spark plug. 6. Blocked fuel line. 7. Engine flooded. 8. Fuel valve (if equipped) closed. 9. Engine not choked (if equipped with choke). 10. Burnt fuse. (Electric Start Only). 	<ol style="list-style-type: none"> 1. Engage blade control. 2. Connect wire to spark boot. 3. Fill tank with clean, fresh gasoline. 4. Prime engine as instructed in the Operation section. 5. Clean, adjust gap, or replace. 6. Clean fuel line. 7. Wait a few minutes to restart, but do not prime. 8. Open fuel valve. See engine manual. 9. Choke engine. See engine manual. 10. Replace fuse. (See Maintenance Section).
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. 6. Unit running with CHOKE applied or in the "ON" position (if equipped). 	<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 manual. 6. Put CHOKE in the "OFF" position..
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 to .030". Refer to engine 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 to .030" or replace spark plug. 2. Refer to engine 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.
Mower will not mulch grass	<ol style="list-style-type: none"> 1. Wet grass. 2. Excessively high grass. 3. Dull blade. 	<ol style="list-style-type: none"> 1. Do not mow when grass is wet; wait until later to cut. 2. Mow once at a high cutting height, then mow again at desired height or make a narrower cutting path. 3. Sharpen or replace blade.
Uneven cut	<ol style="list-style-type: none"> 1. Wheels not positioned correctly. 2. Dull blade. 	<ol style="list-style-type: none"> 1. Place front and rear wheels in same height position. 2. Sharpen or replace blade.

Component	Part Number and Description
	<p>634-04607 Wheel (Front - 7" X 2", S-Wave)</p> <p>734-04562 Wheel (Front - 7" x 1.8", Bar)</p> <p>634-04642 Wheel (Front - 7" x 2", SL:Z)</p>
	<p>734-04568 Wheel (Rear - 8" x 2.125" SL:Z)</p> <p>734-04563 Wheel (Rear - 8" x 1.8", Bar)</p> <p>634-04630 Wheel (Rear - 11" x 2", SL:Z)</p> <p>734-04014C Wheel (Rear - 8" x 2.125" S:Idle)</p>
	<p>942-0741A Mulching Blade</p>
	<p>764-04077A† Grass Bag (Black)</p> <p>964-04116† Grass Bag (Yardman)</p>
	<p>731-07486† Discharge Chute</p>

† If Equipped

NOTE: Download a complete Parts Manual, refer to customer support on page 2. Be sure to have your model number and serial number ready. Refer to page 2 for more information regarding locating your model and serial numbers.

FEDERAL and/or CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

MTD Consumer Group Inc, the United States Environmental Protection Agency (EPA), and, for those products certified for sale in the state of California, the California Air Resources Board (CARB) are pleased to explain the emission (evaporative and/or exhaust) control system (ECS) warranty on your outdoor 2006 and later small off-road spark-ignited engine and equipment (outdoor equipment engine) In California, new outdoor equipment engines must be designed, built and equipped to meet the State's stringent anti-smog standards (in other states, 1997 and later model year equipment must be designed, built, and equipped to meet the U.S. EPA small off-road, spark ignition engine regulations. MTD Consumer Group Inc must warrant the ECS on your outdoor equipment engine for the period of time listed below provided there has been no abuse, neglect or improper maintenance of outdoor equipment engine.

Your ECS may include parts such as the carburetor, fuel-injection system, the ignition system, catalytic converter, fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, connectors, and other associated emission-related components.

Where a warrantable condition exists, MTD Consumer Group Inc will repair your outdoor equipment engine at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

This emission control system is warranted for two years. If any emission-related part on your outdoor equipment engine is defective, the part will be repaired or replaced by MTD CONSUMER GROUP INC.

OWNER'S WARRANTY RESPONSIBILITIES:

As the outdoor equipment engine owner, you are responsible for performance of the required maintenance listed in your owner's manual. MTD Consumer Group Inc recommends that you retain all receipts covering maintenance on your outdoor equipment engine, but MTD Consumer Group Inc cannot deny warranty solely for the lack of receipts.

As the outdoor equipment engine owner, you should however be aware that MTD Consumer Group Inc may deny you warranty coverage if your outdoor equipment engine or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.

You are responsible for presenting your outdoor equipment engine to MTD Consumer Group Inc's distribution center or service center as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact the MTD Consumer Group Inc Service Department.

In the U.S.A.: MTD LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, or call 1-800-800-7310 or 1-330-220-4683 or log on to our Web site at www.mtdproducts.com.

In Canada: MTD Products Limited, Kitchener, ON N2G 4J1, or call 1-800-668-1238 or log on to our Web site at www.mtdcanada.com.

GENERAL EMISSIONS WARRANTY COVERAGE:

MTD Consumer Group Inc warrants to the ultimate purchaser and each subsequent purchaser that the outdoor equipment engine is: Designed, built and equipped so as to conform with all applicable regulations; and free from defects in materials and workmanship that cause the failure of a warranted part to be identical in all material respects to that part as described in MTD Consumer Group Inc's application for certification.

The warranty period begins on the date the outdoor equipment engine is delivered to an ultimate purchaser or first placed into service. The warranty period is two years.

Subject to certain conditions and exclusions as stated below, the warranty on emission-related parts is as follows:

1. Any warranted part that is not scheduled for replacement as required maintenance in the written instructions supplied, is warranted for the warranty period stated above. If the part fails during the period of warranty coverage, the part will be repaired or replaced by MTD Consumer Group Inc according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period.
2. Any warranted part that is scheduled only for regular inspection in the written instructions supplied is warranted for the warranty period stated above. Any such part repaired or replaced under warranty will be warranted for the remaining warranty period.
3. Any warranted part that is scheduled for replacement as required maintenance in the written instructions supplied is warranted for the period of time before the first scheduled replacement date for that part. If the part fails before the first scheduled replacement, the part will be repaired or replaced by MTD Consumer Group Inc according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period prior to the first scheduled replacement point for the part.
4. Repair or replacement of any warranted part under the warranty provisions herein must be performed at a warranty station at no charge to the owner.
5. Notwithstanding the provisions herein, warranty services or repairs will be provided at all of our distribution centers that are franchised to service the subject engines or equipment.

6. The outdoor equipment engine owner will not be charged for diagnostic labor that is directly associated with diagnosis of a defective, emission-related warranted part, provided that such diagnostic work is performed at a warranty station.
7. MTD Consumer Group Inc is liable for damages to other engine or equipment components proximately caused by a failure under warranty of any warranted part.
8. Throughout the off-road engine and equipment warranty period stated above, MTD Consumer Group Inc will maintain a supply of warranted parts sufficient to meet the expected demand for such parts.
9. Any replacement part may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of MTD Consumer Group Inc.
10. Add-on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts by the ultimate purchaser will be grounds for disallowing a warranty claims. MTD Consumer Group Inc will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

WARRANTED PARTS:

The repair or replacement of any warranted part otherwise eligible for warranty coverage may be excluded from such warranty coverage if MTD Consumer Group Inc demonstrates that the outdoor equipment engine has been abused, neglected, or improperly maintained, and that such abuse, neglect, or improper maintenance was the direct cause of the need for repair or replacement of the part. That notwithstanding, any adjustment of a component that has a factory installed, and properly operating, adjustment limiting device is still eligible for warranty coverage. Further, the coverage under this warranty extends only to parts that were present on the off-road engine and equipment purchased.

The following emission warranty parts are covered (if applicable):

(1) Fuel Metering System

- Cold start enrichment system (soft choke)
- Carburetor and internal parts (or fuel injection system)
- Fuel pump
- Fuel tank

(2) Air Induction System

- Air cleaner
- Intake manifold

(3) Ignition System

- Spark plug(s)
- Magneto ignition system

(4) Exhaust System

- Catalytic converter
- SAI (Reed valve)

(5) Miscellaneous Items Used in Above System

- Vacuum, temperature, position, time sensitive valves and switches
- Connectors and assemblies

(6) Evaporative Control

- Fuel hose
- Fuel hose clamps
- Tethered fuel cap
- Carbon canister
- Vapor lines

NOTE: If you require warranty service in Canada and your product was sold by MTD Products Limited within Canada to the retailer you purchased it from in Canada then the MTD Consumer Group Inc portion of this warranty will be honored by MTD Products Limited in Canada.

GDOC-100223CN Rev. A

For equipment purchased in Canada only.

THREE YEAR LIMITED WARRANTY

The limited warranty set forth below is given by MTD Products Limited with respect to new merchandise purchased and used in Canada and/or its territories and possessions (either entity respectively, "MTD").

MTD warrants this product (excluding its normal wear parts as described below) against defects in material and workmanship for a period of three (3) years commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster. Damage resulting from the installation or use of any part, accessory or attachment not approved by MTD for use with the product(s) covered by this manual will void your warranty as to any resulting damage.

Normal wear parts are warranted to be free from defects in material and workmanship for a period of thirty (30) days from the date of purchase. Normal wear parts include, but are not limited to items such as: batteries, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, friction wheels, shave plates, auger spiral rubber, tires, engine oil, air filters and spark plugs.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE, through your local authorized service dealer. To locate the dealer in your area;

In the U.S.A.: Check your Yellow Pages, or contact MTD LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, or call 1-800-800-7310 or 1-330-220-4683 or log on to our Web site at www.mtdproducts.com.

In Canada: Contact MTD Products Limited, Kitchener, ON N2G 4J1, or call 1-800-668-1238 or log on to our Web site at www.mtdcanada.com.

This limited warranty does not provide coverage in the following cases:

- a. The engine or component parts thereof. These items may carry a separate manufacturer's warranty. Refer to applicable manufacturer's warranty for terms and conditions. The Powermore engine is not excluded under this agreement.
- b. Log splitter pumps, valves, and cylinders have a separate one-year warranty.
- c. Routine maintenance items such as lubricants, filters, blade sharpening, tune-ups, brake adjustments, clutch adjustments, deck adjustments, and normal deterioration of the exterior finish due to use or exposure.
- d. Service completed by someone other than an authorized service dealer.
- e. MTD does not extend any warranty for products sold or exported outside of Canada, including possessions and territories.
- f. Replacement parts that are not genuine MTD parts.
- g. Transportation charges and service calls.
- h. If Products are used commercially. (MTD may separately offer Limited Commercial Warranties on certain select products. Ask your dealer or retailer for details or contact MTD Service for more information.)

No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind MTD. During the period of the warranty, the exclusive remedy is repair or replacement of the product as set forth above.

The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale. MTD shall not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. **Alteration of safety features of the product shall void this warranty.** You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

HOW LOCAL LAWS RELATE TO THIS WARRANTY: This limited warranty gives you specific legal rights, and you may also have other rights that vary in different jurisdictions.

IMPORTANT: Owner must present Original Proof of Purchase to obtain warranty coverage.

MTD LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019; Phone: 1-800-800-7310, 1-330-220-4683

MTD Products Ltd., P. O. BOX 1386, KITCHENER, ON N2G 4J1; Phone: 1-800-668-1238

08.08.08

For equipment purchased in United States only.

**CONSUMER'S WARRANTY
COLUMBIA OUTDOOR
THREE YEARS- 120 Hrs. LIMITED WARRANTY**

For three (3) years-120 hrs. whichever come first, from the date of original purchase of COLUMBIA products, COLUMBIA will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part found to be defective in material and workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser unless return is requested by COLUMBIA.

This warranty DOES NOT apply to any part which has become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons.

This limited warranty does not extend to the replacement of parts which are not defective, but where regular usage has exhausted the life of the part.

TRACTOR ATTACHMENT WARRANTY

Mower decks included with, or sold separately, as an attachment for COLUMBIA garden tractors will be warranted according to the above terms of the COLUMBIA THREE (3) YEARS - 120 hrs. limited consumer warranty.

ALL OTHER ATTACHMENTS will be sold under the same conditions as above except the warranty will be ONE YEAR FROM DATE OF ORIGINAL PURCHASE.

ENGINES, ELECTRIC START KITS, HYDRO-GEAR, PEERLESS TRANSMISSIONS AND PEERLESS TRANSAXLES ARE WARRANTED BY THEIR RESPECTIVE MANUFACTURER. ALL CLAIMS AGAINST THESE COMPONENTS MUST BE HANDLED THROUGH THE RESPECTIVE MANUFACTURERS SERVICE DEALERS.

Belts, light bulbs, clutch parts (friction wheels), grass bags, tires, seats, rider deck wheels and cutting blades are covered by a 60 day limited warranty.

Batteries are warranted against defect for 90 days at 100% of their value and 50% of their value for the period between the 91st day and the 120th day.

Fuses, shear bolts and blade adapters are considered consumable items and as such are not warranted.

Note: Regular maintenance replacement parts and related inspections and adjustments are excluded from coverage when made as part of normal maintenance service.

EXTERIOR FINISH

NORMAL DETERIORATION OF THE EXTERIOR FINISH DUE TO USE OR EXPOSURE TO THE ELEMENTS, CORROSIVE PRODUCTS ETC... IS NOT WARRANTED. LABELS ARE COVERED FOR 1 YEAR FROM THE ORIGINAL DATE OF PURCHASE.

PERSONAL USE

THE FOREGOING PARAGRAPHS CONSTITUTE COLUMBIA'S ENTIRE WARRANTY WITH RESPECT TO ANY PRODUCT PURCHASED AND USED FOR PERSONAL, FAMILY, HOUSEHOLD/RESIDENTIAL PURPOSES, AS DISTINGUISHED FROM COMMERCIAL USAGE.

COMMERCIAL USE

ALL APPLICATIONS OTHER THAN PERSONAL USE AS OUTLINED ABOVE, ARE CONSIDERED COMMERCIAL USAGE.

COLUMBIA products purchased by a company or used for commercial purposes are not covered by any warranty.

WARRANTY SERVICE CAN ONLY BE PERFORMED BY AN AUTHORIZED COLUMBIA SERVICE DEALER. ANY NON-ORIGINAL EQUIPMENT REPLACEMENT PART USED ON OR IN A PRODUCT UNDER WARRANTY WILL BE EXCLUDED FROM THAT WARRANTY COVERAGE, AS WILL BE ANY RELATED DAMAGED COMPONENTS RESULTING FROM THE INSTALLATION OF A NON-COLUMBIA REPLACEMENT PART.

MTD LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019; Phone: 1-800-800-7310, 1-330-220-4683

1.07.10

Notes

[illegible]