## **OPERATOR'S MANUAL**



# Pressure Washer — Model Series CC3224, CC3425, CC4033

#### **A 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.

MTD LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019

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To The Owner

#### **Thank You**

Thank you for purchasing a Pressure Washer manufactured by Cub Cadet LLC. 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. Cub Cadet LLC reserves the right to change product specifications, designs and equipment without notice and without incurring obligation.

This product has met the rigid safety standards of the Outdoor Power Equipment Institute and an independent testing laboratory. If you have any problems or questions concerning the machine, phone your local Cub Cadet dealer or contact us directly. Cub Cadet's 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.

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#### **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 operator's position and looking down at the rear of the deck. This information will be necessary, should you seek technical support via our web site, Customer Support Department, or with a local authorized service 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, you can seek help from the experts. Choose from the options below:

- ♦ Visit us on the web at www.cubcadet.com
- ♦ Call a Customer Support Representative at (800) 965-4CUB
- ♦ Locate your nearest Cub Cadet Dealer at (877) 282-8684
- Write us at Cub Cadet LLC P.O. Box 361131 Cleveland, OH 44136-0019

This manual contains information that is important for you to know and understand. This information relates to protecting YOUR SAFETY and PREVENTING EQUIPMENT PROBLEMS. To help you recognize this information, we use the symbols below. Please read the manual and pay attention to these symbols.



**DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING:** Indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.



**CAUTION:** Indicates a potentially hazardous situation which, if not avoided, **may** result in **minor** or moderate injury.

**NOTICE:** Indicates a practice **not related to personal injury** which, if not avoided, **may** result in **property damage**.

#### **CALIFORNIA PROPOSITION 65**



WARNING: This product and its exhaust contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. In addition, some cleaning products and dust contain chemicals known to the State of California to cause cancer, birth defects or other 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.



DANGER: Carbon Monoxide. Using an engine indoors can kill you in minutes. Engine exhaust contains high levels of carbon monoxide (CO), a poisonous gas you cannot see or smell. You may be breathing CO even if you do not smell engine exhaust.

- **NEVER** use an engine inside homes, garages, crawlspaces or other partly enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors does **NOT** supply enough fresh air.
- ONLY use outdoors and far away from open windows, doors and vents. These openings can pull in engine exhaust.
- Even when the engine is used correctly, CO may leak into your home. **ALWAYS** use a batterypowered or battery backup CO alarm in your house. Read and follow all directions for CO alarm before using. If you feel sick, dizzy or weak at anytime, move to fresh air immediately. See a doctor. You could have carbon monoxide poisoning.



WARNING: Do not operate this unit until you read this instruction manual and the engine instruction manual for safety, operation and maintenance instructions.



DANGER: Risk of injection or severe injury. Keep clear of nozzle. Do not direct discharge stream at persons or live animals. This product is to be used only by trained operators.

	WHAT CAN HAPPEN	HOW TO PREVENT IT	
•	Spilled gasoline and it's vapors can become ignited from cigarette sparks, electrical arcing, exhaust gases and hot engine components such as the muffler.		Shut off engine and allow it to cool before adding fuel to the tank.  Use care in filling tank to avoid spilling fuel. Move pressure washer away from fueling area before starting engine.
•	Heat will expand fuel in the tank which could result in spillage and possible fire explosion.	•	Keep maximum fuel level 1/2" (12.7 mm) below bottom of filler neck to allow for expansion.
•	Operating the pressure washer in an explosive environment could result in a fire.	•	Operate and fuel equipment in well-ventilated areas free from obstructions. Equip areas with fire extinguisher suitable for gasoline fires.
•	Materials placed against or near the pressure washer can interfere with its proper ventilation features causing overheating and possible ignition of the materials.	•	Never operate pressure washer in an area containing dry brush or weeds.
•	Muffler exhaust heat can damage painted surfaces, melt any material sensitive to heat (such as siding, plastic, rubber, vinyl or the pressure hose, itself), and damage live plants.	•	Always keep pressure washer a minimum of 4' (1.2 m) away from surfaces (such as houses, automobiles or live plants) that could be damaged from muffler exhaust heat.
•	Improperly stored fuel could lead to accidental ignition. Fuel improperly secured could get into the hands of children or other unqualified persons.	•	Store fuel in an OSHA approved container, in a secure location away from work area.
•	Use of acids, toxic or corrosive chemicals, poisons, insecti-	•	Do not spray flammable liquids.



#### DANGER: RISK TO BREATHING (Asphyxiation)

cides, or any kind of flammable solvent with this product

could result in serious injury or death.

	WHAT CAN HAPPEN		HOW TO PREVENT IT
•	Breathing exhaust fumes will cause serious injury or death! Engine exhaust contains carbon monoxide, an odorless and deadly gas.	•	Operate pressure washer in a well-ventilated area. Avoid enclosed areas such as garages, basements, etc.  Never operate unit in or near a location occupied by humans or animals.
•	Some cleaning fluids contain substances which could cause injury to skin, eyes or lungs.		Use only cleaning fluids specifically recommended for high pressure washers. Follow manufacturers recommendations. Do not use chlorine bleach or any other corrosive compound.



#### DANGER: RISK OF FLUID INJECTION AND LACERATION

WHAT CAN HAPPEN	HOW TO PREVENT IT
Your pressure washer operates at fluid pressures and velocities high enough to penetrate human and animal flesh which could result in amputation or other serious injury. Leaks caused by loose fittings or worn or damaged hoses can result in injection injuries. DO NOT TREAT FLUID INJECTION AS A	<ul> <li>Inspect the high pressure hose regularly. Replace the hose immediately if it is damaged, worn, has melted from contacting the engine, or shows any signs of cracks, bubbles, pinholes, or other leakage. Never grasp a high pressure hose that is leaking or damaged.</li> </ul>
SIMPLE CUT! See a physician immediately!	<ul> <li>Never touch, grasp or attempt to cover a pinhole or similar water leak on the high pressure hose. The stream of water IS under high pressure and WILL penetrate skin.</li> </ul>
	<ul> <li>Never place hands in front of nozzle.</li> </ul>
	<ul> <li>Direct spray away from self and others.</li> </ul>
	<ul> <li>Make sure hose and fittings are tightened and in good condition. Never hold onto the hose or fittings during opera- tion.</li> </ul>
	<ul> <li>Do not allow hose to contact muffler.</li> </ul>
	<ul> <li>Never attach or remove wand or hose fittings while system is pressurized.</li> </ul>
	<ul> <li>When using replacement lances or guns with this pressure washer, DO NOT use a lance and/or lance/gun combination that is shorter in length than what was provided with this pressure washer as measured from the nozzle end of the lance to the gun trigger.</li> </ul>
Injuries can result if system pressure is not reduced before attempting maintenance or disassembly.	<ul> <li>To relieve system pressure, shut off engine, turn off water supply and pull gun trigger until water stops flowing.</li> </ul>
	<ul> <li>Use only accessories rated equal to or higher than the ratin of the pressure washer.</li> </ul>



### DANGER: RISK OF INJURY FROM SPRAY

	WHAT CAN HAPPEN		HOW TO PREVENT IT
•	High-velocity fluid spray can cause objects to break, projecting particles at high speed.	•	Always wear ANSI-approved Z87.1 safety glasses. Wear protective clothing to protect against accidental spraying.
			Never point wand at or spray people or animals.
•	Light or unsecured objects can become hazardous projectiles.	•	Always secure trigger lock when wand is not in service to prevent accidental operation.
		•	Never permanently secure trigger in pull-back (open) position.



DANGER: RISK OF UNSAFE OPERATION		
WHAT CAN HAPPEN	HOW TO PREVENT IT	
<ul> <li>Unsafe operation of your pressure washer could lead to serious injury or death to you or others.</li> </ul>	Do not use chlorine bleach or any other corrosive compound.	
	<ul> <li>Become familiar with the operation and controls of the pressure washer.</li> </ul>	
	• Keep operating area clear of all persons, pets and obstacles.	
	<ul> <li>Do not operate the product when fatigued or under the influence of alcohol or drugs. Stay alert at all times.</li> </ul>	
	Never compromise the safety features of this product.	
	<ul> <li>Do not operate machine with missing, broken or unauthorized parts.</li> </ul>	
	Never leave wand unattended while unit is running.	

ON (CONTINUED)
<ul> <li>HOW TO PREVENT IT</li> <li>If engine does not start after two pulls, squeeze trigger of gun to relieve pump pressure. Pull starter cord slowly until resistance is felt. Then pull cord rapidly to avoid kickback and prevent hand or arm injury.</li> </ul>
Keep children away from the pressure washer at all times.
<ul> <li>Do not overreach or stand on an unstable support.</li> <li>Do not use pressure washer while standing on a ladder.</li> <li>Grip gun/wand firmly with both hands. Expect the gun to kickback when triggered.</li> </ul>

WHAT CAN HAPPEN	HOW TO PREVENT IT
Fuel or oil can leak or spill and could result in fire or breathing hazard. Serious injury or death can result. Fuel or oil leaks will damage carpet, paint or other surfaces in vehicles or trailers.	If pressure washer is equipped with a fuel shut-off valve, turn the valve to the OFF position before transporting to avoid fuel leaks. If pressure washer is not equipped with a fuel shut-off valve, drain the fuel from tank before transporting. Only transport fuel in an OSHA-approved
Oil could fill the cylinder and damage the engine if the unit is not stored or transported in an upright position.	container.
•	<ul> <li>Always place pressure washer on a protective mat when transporting to protect against damage to vehicle from leaks.</li> </ul>
	<ul> <li>Always transport and store unit in an upright position.</li> <li>Remove pressure washer from vehicle immediately upor arrival at your destination.</li> </ul>



#### DANGER: RISK OF ELECTRICAL SHOCK

	WHAT CAN HAPPEN		HOW TO PREVENT IT
•	Spray directed at electrical outlets or switches, or objects connected to an electrical circuit, could result in a fatal electrical shock.	•	Unplug any electrically operated product before attempting to clean it. Direct spray away from electric outlets and switches.



## DANGER: RISK OF CHEMICAL BURN

	WHAT CAN HAPPEN		HOW TO PREVENT IT
•	Use of acids, toxic or corrosive chemicals, poisons, insecticides, or any kind of flammable solvent with this product could result in serious injury or death.	•	Do not spray acids, gasoline, kerosene, or any other flammable materials with this product. Use only household detergents, cleaners and degreasers recommended for use with pressure washers.
		•	Wear protective clothing to protect eyes and skin from contact with sprayed materials.



#### **WARNING: RISK OF BURSTING**

	WHAT CAN HAPPEN	HOW TO PREVENT IT	
•	Over inflation of tires could result in serious injury and property damage.	<ul> <li>Use a tire pressure gauge to check the tires pressure before each use and while inflating tires; see the tire sidewall for the correct tire pressure.</li> </ul>	
		<ul> <li>NOTE: Air tanks, compressors and similar equipment used to inflate tires can fill small tires similar to these very rapidly. Adjust pressure regulator on air supply to no more than the rating of the tire pressure. Add air in small increments and frequently use the tire gauge to prevent over inflation.</li> </ul>	
•	High-velocity fluid spray directed at pneumatic tire sidewalls (such as found on automobiles, trailers and the like) could damage the sidewall resulting in serious injury.	<ul> <li>On pressure washers rated above 1600 PSI (11032 kPa) use the widest fan spray (40° nozzle) and keep the spray a minimum of 8" (20 cm) from the pneumatic tire sidewall. D not aim spray directly at the joint between the tire and rim</li> </ul>	



#### **WARNING: RISK OF HOT SURFACES**

	WHAT CAN HAPPEN		HOW TO PREVENT IT
•	Contact with hot surfaces, such as engine exhaust compo-	•	During operation, touch only the control surfaces of the
	nents, could result in serious burn.		pressure washer. Keep children away from the pressure
			washer at all times. They may not be able to recognize the
			hazards of this product.





#### **WARNING: RISK OF INJURY FROM LIFTING**

	WHAT CAN HAPPEN		HOW TO PREVENT IT
•	Serious injury can result from attempting to lift too heavy	•	The pressure washer is too heavy to be lifted by one person.
	an object.		Obtain assistance from others before lifting.

#### 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 product may not be equipped with a spark-arresting muffler. If the product is not equipped and will be used around flammable materials or on land covered with materials such as agricultural crops, forest, brush, grass or other similar items, then an approved spark arrester must be installed and is legally required in the state of California. It is a violation of California statutes section 130050 and/or sections 4442 and 4443 of the California Public Resources Code, unless the engine is equipped with a spark arrester, as defined in section 4442, and maintained in effective working order. Spark arresters are also required on some U.S. Forest Service land and may also be legally required under other statutes and ordinances.

A spark arrestor for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 361131 Cleveland, Ohio 44136-0019.



**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!**

#### **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 —RISK OF FIRE OR EXPLOSION. Shut off engine before adding fuel. Keep work area free of combustible materials. Do not spray flammable liquids.	
	DANGER — RISK TO BREATHING. Engine exhaust fumes can cause death. For outdoor use only. Work in a well ventilated area	
	WARNING— RISK OF FLUID INJECTION. Fluid stream can penetrate skin and cause serious injury requiring immediate medical treatment!	
	WARNING — RISK OF SPRAY INJURY. Spray can propel objects. Always wear ansi approved z87.1 Safety glasses.	
	WARNING— RISK OF CHEMICAL BURN.  Never spray acids, corrosive or toxic chemicals. Use only cleaners formulated for pressure washers.	
K/E	WARNING—RISK OF UNSAFE OPERATION. Keep children away from this equipment. Gun kicks back - hold with both handS.	
	WARNING— RISK OF HOT SURFACES.  Avoid contact with hot engine exhaust components. Don't allow hoses to contact the hot engine muffler during or after use.	
	WARNING— RISK OF INJURY. MOVING PART. DO NOT OPERATE WITH COVER REMOVED.	
	WARNING— RISK OF TIRE BURSTING. Inflate tires slowly to rated pressure marked on tire. Read instruction manual.	
	WARNING— RISK OF INJURY. Check high pressure hose prior to each use and replace if damaged.	
•	WARNING— RISK OF INJURY. Check high pressure hose prior to each use and replace if damaged.	



**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**

- One Pressure Washer
- One Pressure Washer Operator's Manual
- One Engine Operator's Manual
- One Handle
  - One High Pressure Hose
  - One Quick-Connect Spray Wand
- One Spray Gun
- Five Quick-Connect Nozzles
- One Bottle of Oil

#### **Assembly**

**NOTICE:** 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.

**NOTICE:** The high-pressure pump was filled with oil at the factory. Always check oil level before using (refer to Maintenance & Adjustments for more information).

#### Handle

 Slide the handle assembly onto the frame and secure with saddle bolts and knobs.

**NOTICE:** Risk of personal injury. Avoid placing hands between handle and frame when assembling to prevent pinching.

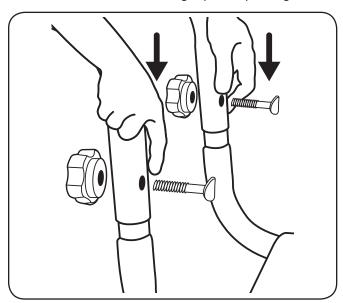


Figure 3-1

#### **Nozzles**

 Remove the colored quick-connect nozzles from the plastic bag and insert them into correct grommet on the nozzle holder. Nozzles are color coded to match colored nozzles on label.

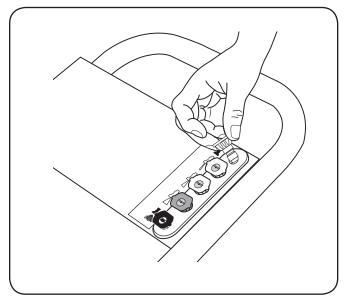


Figure 3-2

#### Wand to Gun

2. Connect wand to gun. Tighten securely.

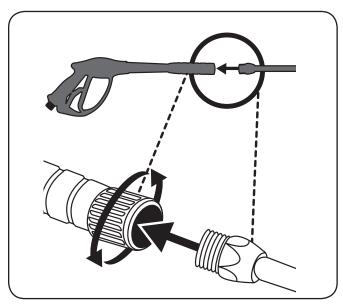


Figure 3-3

#### Hose to Gun

1. Attach high pressure hose to gun. Tighten securely.

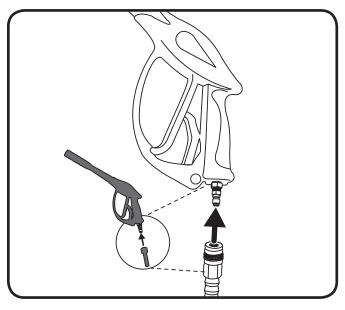


Figure 3-4

#### 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.

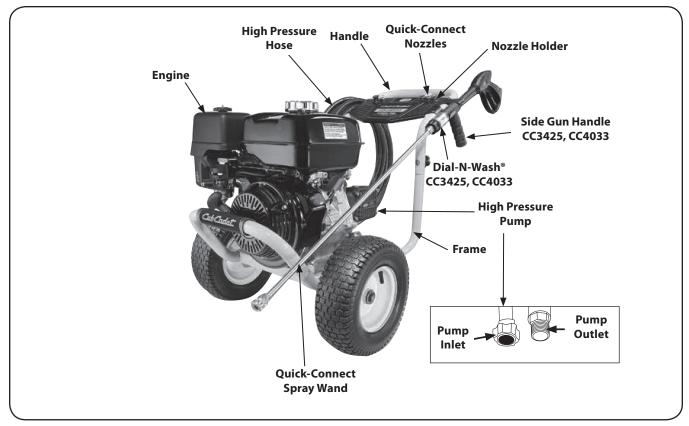


Figure 4-1

#### **High Pressure Pump**

Increases the pressure of the water supply.

#### **Engine**

Drives the high pressure pump. Refer to the Engine Operator's manual packed with your pressure washer for location and operation of engine controls.

#### **High Pressure Hose:**

Carries the pressurized water from the pump to the gun and spray wand.

#### **Spray Gun**

Connects with spray wand to control water flow rate, direction and pressure. Only Models CC3425 and CC4033 are equipped with the Dial-N-Wash pressure adjustment and side handle.

#### **Quick-Connect Spray Wand**

Allows the user to quickly change out high pressure nozzles. Refer to "How To Use Spray Wand" instructions in Controls and Features section.

#### **Detergent Siphon Hose (not shown)**

Feeds cleaning agents into the pump to mix with the water. See "How To Apply Chemicals/Cleaning Solvents" instructions in Controls and Features section.

#### **Pressure Washer Terminology**

#### PSI

Pounds per Square Inch. The unit of measure for water pressure. Also used for air pressure, hydraulic pressure, etc.

#### **GPM**

Gallons per Minute. The unit of measure for the flow rate of water.

#### CU

Cleaning Units. GPM multiplied by psi equals CU.

#### **Bypass Mode**

Allows water to re-circulate within the pump when the gun trigger is not pulled. This feature allows the operator to release the trigger gun and reposition themselves without having to turn the engine off in between cleaning actions.

**NOTICE:** Allowing the unit to run for more than two minutes without the gun trigger being pulled could cause overheating and damage to the pump. Do not let the pressure washer run for more than two minutes in Bypass Mode. Turn off the engine and relieve the pressure in the gun during these extended situations.

#### Thermal Relief Valve

When the temperature inside the pump rises too high, this valve will open and release a gush of water in an effort to lower the temperature inside the pump. The valve will then close.

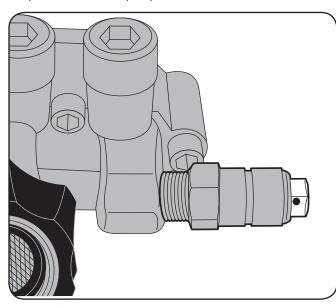


Figure 4-2

#### **Detergent Injection System**

Mixes cleaners or cleaning solvents with the water to improve cleaning effectiveness.

#### **Water Supply**

All pressure washers must have a source of water. The minimum requirements for a water supply are 20 psi and 5 Gallons Per Minute. If your water source is a well, the garden hose length can only be 30 ft. (9 m) max.



**WARNING:** To reduce the possibility of contamination always protect against backflow when connected to a potable water system.

#### **Pressure Washer Operating Features**

#### **Pressure Adjustments**

The pressure setting is preset at the factory to achieve optimum pressure and cleaning. If you need to lower the pressure, it can be accomplished by these methods.

- Back away from the surface to be cleaned. The further away you are, the less the pressure will be on the surface to be cleaned.
- CC3224- Change to the 40° nozzle (white). This nozzle delivers a less powerful stream of water and a wider spray pattern. Refer to "How To Use Spray Wand".
- CC3425, CC4033 Use the Dial-N-Wash to increase and decrease the pressure. Refer to the "Dial-N-Wash Adjustment" paragraph.

**NOTICE:** DO NOT attempt to increase pump pressure. A higher pressure setting than the factory set pressure may damage pump.

#### Dial-N-Wash Adjustment (CC3425, CC4033)

- Choose the correct high pressure nozzle (0°, 15°, 25° or 40°) for the job to be performed. Refer to "How To Use Spray Wand".
- The Dial-N-Wash is shipped in the MAX pressure setting, the MAX pressure bar is aligned with the arrow on the collar as shown.
- Rotating the Dial-N-Wash counterclockwise until it stops places it in the MIN pressure setting, the arrow will align with the MIN pressure bar as shown.
- Adjust the pressure by rotating the Dial-N-Wash clockwise for higher pressure or counterclockwise for lower pressure, aligning the arrow with the desired pressure bar on the Dial-N-Wash.

**NOTE:** To apply chemicals the black low pressure nozzle must be installed and the Dial-N-Wash must be in the MAX pressure setting.

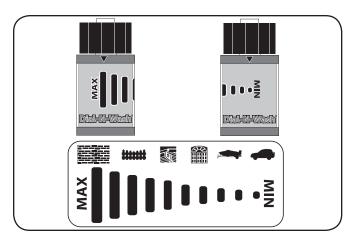


Figure 4-3

#### **How To Use Spray Wand**

The nozzles for the spray wand are stored in the nozzle holder on the panel assembly. Colors on the panel identify nozzle location and spray pattern. Refer to the following chart to choose the correct nozzle for the job to be performed.

#### **Changing Nozzles on Spray Wand**



DANGER: Risk of fluid injection. Do not direct discharge stream toward persons, unprotected skin, eyes or any pets or animals. Serious injury will occur.



WARNING: Flying objects could cause risk of serious injury. Do not attempt to change nozzles while pressure washer is running. Turn engine off before changing nozzles.

- 1. Pull quick-connect coupler back and insert nozzle.
- 2. Release quick-connect coupler and twist nozzle to make sure it is secure in coupler.



WARNING: Flying object could cause risk of serious injury. Ensure nozzle is completely inserted in quick-connect socket and quick-connect collar is fully engaged (forward) before squeezing gun trigger.

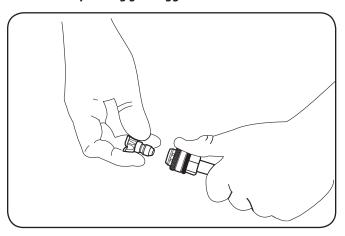


Figure 4-4

Nozzle Color	Spray Pattern	Uses	Surfaces*
Red	0°	powerful pinpoint for spot cleaning of hard, unpainted surfaces or for high reach areas	unpainted metal or concrete; DO NOT use on wood
Yellow	15°	intense cleaning of unpainted hard surfaces	grills, driveways, concrete or brick walkways, unpainted brick or stucco
Green	25°	standard cleaning nozzle for most applications	yard tools, sidewalks, lawn furniture, unpainted siding, stucco, gutters and eaves, concrete, brick surfaces
White	40°	cleaning of painted or delicate surfaces	auto/RV, marine, wood, painted brick and stucco, vinyl, painted siding
Black	low pressure	applies cleaning solutions	Low pressure spray is safe on all surfaces. Always verify compatibility of cleaning solution prior to use.

\*NOTICE: The high pressure spray from your pressure washer is capable of causing damage to surfaces such as wood, glass, automobile paint, auto striping and trim, and delicate objects such as flowers and shrubs. Before spraying, check the item to be cleaned to assure yourself that it is strong enough to resist damage from the force of the spray.

#### **How To Apply Chemicals/Cleaning Solvents**

Applying chemicals or cleaning solvents is a low pressure operation.

**NOTE:** Use only soaps and chemicals designed for pressure washer use. Do not use bleach.

#### **To Apply Chemicals:**

 Ensure detergent siphon hose is attached to barbed fitting location near high pressure hose connection of pump as shown.

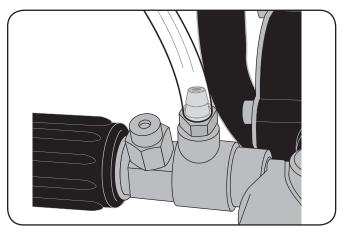


Figure 4-5

- Place other end of detergent siphon hose with filter on it into container holding chemical/cleaning solution.
   NOTE: For every 7 gallons of water pumped 1 gallon of chemical/cleaning solution will be used.
- CC3224 Install low pressure (black) nozzle into quick connect fitting of spray wand, see "How To Use Spray Wand" paragraph in this section.
   CC3425, CC4033 – Install the black low pressure nozzle
  - into the quick connect fitting of the spray wand and rotate the Dial-N-Wash to the MAX pressure setting as shown. See "How To Use Spray Wand" paragraph in this section.
    - **NOTE:** To apply chemicals the black low pressure nozzle must be installed and the Dial-N-Wash must be in the MAX pressure setting as shown.
- 4. After use of chemicals, place detergent siphon hose into container of clean water and draw clean water through chemical injection system to rinse system thoroughly. If chemicals remain in the pump, it could be damaged. Pumps damaged due to chemical residue will not be covered under warranty.

**NOTE:** Chemicals and soaps will not siphon if the black soap nozzle is not installed on the spray wand.

Operation 5

#### Starting



**WARNING:** To reduce the risk of injury, read the pressure washer instruction manual and the engine instruction manual before starting pressure washer.



**DANGER:** Risk of fluid injection and laceration. When using the high pressure setting, DO NOT allow the high pressure spray to come in contact with unprotected skin, eyes, or with any pets or animals. Serious injury will occur.

 Your washer operates at fluid pressures and velocities high enough to penetrate human and animal flesh, which could result in amputation or other serious injury. Leaks caused by loose fittings or worn or damaged hoses can result in injection injuries. DO NOT TREAT FLUID INJECTION AS A SIMPLE CUT! See a physician immediately!



**DANGER:** Carbon Monoxide. Using an engine indoors can kill you in minutes. Engine exhaust contains high levels of carbon monoxide (CO), a poisonous gas you cannot see or smell. You may be breathing CO even if you do not smell engine exhaust.

- Breathing exhaust fumes will cause serious injury or death! Engine exhaust contains carbon monoxide, an odorless and deadly gas.
- Operate pressure washer in a well-ventilated area. Avoid enclosed areas such as garages, basements, etc.
- Never operate unit in or near a location occupied by humans or animals.



**WARNING:** Risk of Fire, Asphyxiation and Burn. Never fill fuel tank when engine is running or hot. Do not smoke when filling fuel tank.

- Never fill fuel tank completely. Fill tank to 1/2" (12.7 mm) below bottom of filler neck to provide space for fuel expansion. Wipe any fuel spillage from engine and equipment before starting engine.
- DO NOT let hoses come in contact with very hot engine muffler during or immediately after use of your pressure washer. Damage to hoses from contact with hot engine surfaces will NOT be covered by warranty.

**NOTICE:** Risk of property damage. Never pull water supply hose to move pressure washer. This could damage hose and/or pump inlet.

- DO NOT use hot water, use cold water only.
- Never turn water supply off while pressure washer engine is running or damage to pump will result.
- DO NOT stop spraying water for more than two minutes at a time. Pump operates in bypass mode when spray gun trigger is not pressed. If pump is left in bypass mode for more than two minutes internal components of the pump can be damaged.

If you do not understand these precautions, please contact our customer service department.

Refer to engine manual for help with the engine.

 In a well ventilated outdoor area add fresh, high quality, unleaded gasoline with a pump octane rating of 86 or higher. Do not overfill. Wipe up spilled fuel before starting the engine. Refer to the Engine Operator's manual packed with your pressure washer for instructions.



**NOTICE:** Use of fuels with greater than 10% ethanol are not approved for use in this product per EPA regulations and will damage the unit and void the warranty.

- Check engine oil level. Refer to the Engine Operator's manual packed with your pressure washer for instructions.
- 3. Check pump oil level. The oil level should come to the dot in the middle of the sight glass. Refer to the "Pump" paragraph under Maintenance & Adjustments.
- Connect the water hose to the water source. Turn the water source on to remove all air from the hose. When a steady stream of water is present, turn the water source off.
- Verify the filter screen is in water inlet of pump.
   NOTE: Convex side faces out.

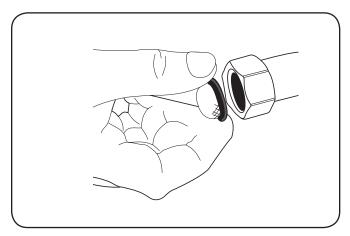


Figure 5-1

 Connect water source to pump inlet.
 NOTE: Water source must provide a minimum of 5 gallons per minute at 20 PSI.

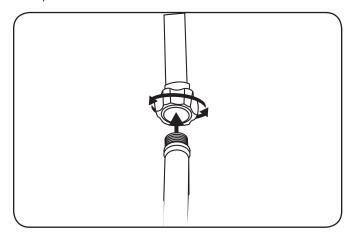


Figure 5-2

7. Connect high pressure hose to pump outlet.



WARNING: To reduce the possibility of contamination always protect against backflow when connected to a potable water system.

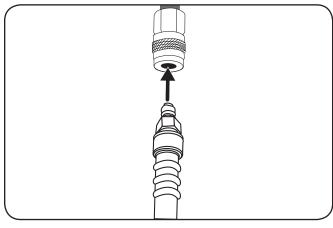


Figure 5-3

- Choose the correct nozzle for the job to be performed.
   See "How To Use spray Wand" instructions in this section.
   NOTE: If applying a chemical or cleaning solution, see "How To Apply Chemicals/Cleaning Solvents" instructions in this section.
- 9. Turn water source on.

**NOTICE:** Risk of property damage. Failure to do so could cause damage to the pump.

- Remove all air from the pump and high pressure hose by depressing trigger until a steady stream of water is present.
- 11. Start engine. Refer to the Engine Operator's manual packed with your pressure washer for instructions.



**WARNING:** Risk of unsafe operation. If engine does not start after two pulls, squeeze trigger of gun to relieve pump pressure. Pull starter cord slowly until resistance is felt. Then pull cord rapidly to avoid kickback and prevent hand or arm injury.

**NOTE:** If the oil level in the engine is low, the engine will not start. If the engine does not start, check the oil level and add oil as needed.

12. Depress trigger on gun to start water flow.



WARNING: Risk of unsafe operation. Stand on a stable surface and grip gun/spray wand firmly with both hands. Expect the gun to kick when triggered.

13. Release trigger to stop water flow.



Risk of injury from spray. Always engage the trigger lock when gun is not in use. Failure to do so could cause accidental spraying.



Figure 5-4

#### **Shutting Down**

 After each use, if you have applied chemicals, place detergent siphon hose into container of clean water and draw clean water through chemical injection system to rinse system thoroughly.

**NOTICE:** Risk of property damage. Failure to do so could cause damage to the pump.

Turn engine off. Refer to the Engine Operator's manual packed with your pressure washer for instructions.

**NOTICE:** Risk of property damage. NEVER turn the water off with the engine running.

- 3. Turn water source off.
- 4. Pull trigger on spray gun to relieve any water pressure in hose or spray gun.

**NOTE:** Failure to release system pressure will prevent removal of high pressure hose from spray gun or pump connection.

See Service section in this manual for proper storage procedures.

#### **Maintenance**

#### **General Recommendations**

- Always observe safety rules when performing any maintenance.
- The warranty on this pressure washer does not cover items that have been subjected to operator abuse or negligence.
   To receive full value from warranty, operator must maintain the pressure washer 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:** Risk of fire hazard. Always disconnect, spark plug wire, let the engine cool and release all water pressure before performing any maintenance or repair. The engine contains flammable fuel. Do not smoke or work near open flames while performing maintenance.



**WARNING:** Risk of burn hazard. When performing maintenance, you may be exposed to hot surfaces, water pressure or moving parts that can cause serious injury or death.

#### **Pump**

**NOTE:** The Pump was filled with oil at the factory. The preferred oil is SIMPSON° Premium Pump Crankcase Oil. If this oil is not available, an SAE 15W-40 oil may be used. Change the pump oil after the first 50 hours of operation and every 100 hours thereafter, or every 3 months.

#### To Check Oil

The oil level should come to the dot in the middle of the sight glass.

#### How To Change Pump Oil

- 1. Loosen pump oil fill plug.
- 2. Place a container under the pump oil drain plug.
- Remove pump oil drain plug.
- 4. After oil is drained, replace pump oil drain plug. Tighten securely.
- 5. Refill pump using SIMPSON\* Premium Pump Crankcase Oil. If this oil is not available, an SAE 15W-40 oil may be used.
- 6. Replace pump oil fill plug and tighten securely.

If there is a problem with the pump, please contact our customer service department.

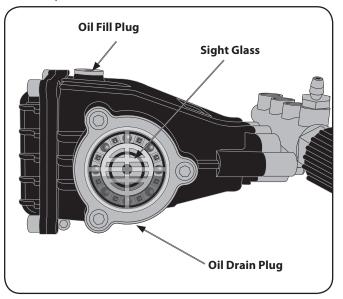


Figure 6-1

#### **Connections**

Connections on pressure washer hoses, gun and spray wand should be cleaned regularly and lubricated with light oil or lithium grease to prevent leakage and damage to the o-rings.

#### **Nozzle Cleaning**

If the nozzle becomes clogged with foreign materials, such as dirt, excessive pressure may develop. If the nozzle becomes partially clogged or restricted, the pump pressure will pulsate. Clean the nozzle immediately using the nozzle kit supplied and the following instructions:

- 1. Shut off the pressure washer and turn off the water supply.
- 2. Pull trigger on gun handle to relieve any water pressure.
- 3. Disconnect the spray wand from the gun.
- Remove the high pressure nozzle from the spray wand.
   Remove any obstructions with the nozzle cleaning tool provided and backflush with clean water.

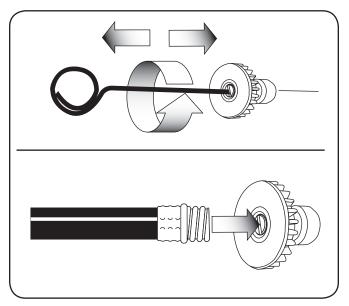


Figure 6-2

- Direct water supply into nozzle to backflush loosened particles for 30 seconds.
- 6. Reassemble the nozzle to the wand.
- 7. Reconnect spray wand to gun and turn on water supply.
- 8. Start pressure washer and place spray wand into high pressure setting to test.

#### **Clean The Water Inlet Filter**

This screen filter should be checked periodically and cleaned if necessary.

- Remove filter by grasping end and removing it from water inlet of pump.
- 2. Clean filter by flushing it with water on both sides.

Re-insert filter into water inlet of pump.
 NOTE: Convex side faces out.

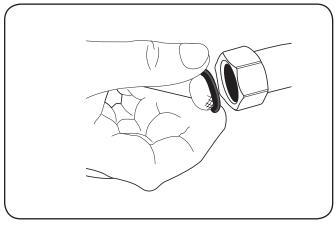


Figure 6-3

**NOTE:** Do not operate the pressure washer without filter properly installed.

#### **Engine Care**

A list of key engine maintenance jobs required for good performance by the pressure washer is given below. Follow the accompanying engine manual for a detailed list and instructions.

- Maintain oil level as instructed in engine manual.
- Service air cleaner as instructed in engine manual. 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 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 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 such as STA-BIL® to prevent deterioration and gum from forming in fuel system or on essential carburetor parts.

Service 7

DO NOT RETURN THIS PRODUCT TO YOUR RETAILER.

If you have difficulty assembling this product or have any questions regarding the controls, operation, or maintenance of this machine, you can seek help from the experts. Choose from the options below:

- Visit us on the web at www.cubcadet.com
- ♦ Call a Customer Support Representative at (800) 965-4CUB
- ♦ Locate your nearest Cub Cadet Dealer at (877) 282-8684
- Write us at Cub Cadet LLC P.O. Box 361131 Cleveland, OH • 44136-0019

#### **Off-Season Storage**

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

- Drain all water from high pressure hose and wrap it onto hose wrap.
- Drain all water from the spray gun and wand by holding spray gun in a vertical position with nozzle end pointing down and squeezing trigger. Store in gun holder.
- Wrap up and secure detergent siphon hose so it is protected from damage.
- Refer to engine manual for correct engine storage instructions.
- Store pressure washer 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 pressure washer before storage.

#### **Pump**

The manufacturer recommends using SIMPSON° / POWERWASHER® Pump Guard or equivalent when storing the unit for more than 30 days and/or when freezing temperatures are expected. SIMPSON° / POWERWASHER® Pump Guard is environmentally friendly.

**NOTE:** Using pump guard helps provide proper lubrication to the internal seals of the pump regardless of temperature or environment.

**NOTICE:** Risk of property damage. Use only SIMPSON® / POWERWASHER® Pump Guard or equivalent. Other products could be corrosive and/or contain alcohol which may cause pump damage.

- 1. Turn off pressure washer and disconnect hoses from pump.
- Unscrew bottle valve from Pump Guard bottle and remove seal.

- 3. Screw bottle valve back onto bottle.
- 4. Attach bottle to water inlet of pump.
- 5. Squeeze bottle to inject contents into pump.
- With ignition switch off, simultaneously pull starter rope and squeeze bottle. Repeat until protector fluid exits pump outlet. NOTE: This step may require two people.

#### **Specifications**

Model	CC3224	CC3425	CC4033
PSI Max*	3200	3400	4000
GPM Max*	2.4	2.5	3.3
High Pressure Hose	25 ft. (7.6 m)	25 ft. (7.6 m)	50 ft. (15.2 m)
Presure of Inlet Water	20-100 PSI	20-100 PSI	20-100 PSI
Inlet Water	cold tap	cold tap	cold tap
Soap Consumption Rate	10% max	10% max	10% max

<sup>\*</sup> Rated Pressure and Rated Water Flow is within manufacturing tolerance of (+/- 10%).

In a continued commitment to improve quality, the manufacturer reserves the right to make component changes, design changes, or specification changes when necessary and without notice.

Problem	Cause	Remedy
Engine will not start, refer to engine	1. No fuel.	Add fresh fuel. See engine manual.
manual	Pressure builds up after two pulls on the recoil starter or after initial use.	Squeeze gun trigger to relieve pressure.
	3. Choke lever in the "No Choke" position.	Move choke to the "Choke" position. See engine manual.
	4. Spark plug wire not attached.	Attach spark plug wire. See engine manual.
No or low pressure (initial use)	Spray wand not in high pressure.	See "How to Use Spray Wand"     instructions in the Features and Controls     Section.
(Illitial use)	2. Low water supply.	Water supply must be at least 5 gpm @     20 PSI.
	3. Leak at high pressure hose fitting.	Repair leak. Apply sealant tape if
	4. Nozzle obstructed.	necessary.  4. See "Nozzle Cleaning" instructions in the Maintenance section.
	<ul><li>5. Water filter screen clogged.</li><li>6. Air in hose.</li></ul>	5. Remove and clean filter. See "Cleaning Water Inlet Filter "paragraph in the Maintenance section for the correct procedure.
	6. Air in nose.	6. Turn off the engine, then the water source. Disconnect the water source from the pump inlet and turn the water source on to remove all air from the hose. When there is a steady stream of water present, turn water source off. Reconnect water source to pump inlet and turn on water source. Squeeze trigger to
	7. Choke in the "Choke" position.	remove remaining air.  7. Move choke to the "No Choke"
	8. High pressure hose is too long.	position. See engine manual.
		8. Use high pressure hose under 100 feet (30 m).

Problem	Cause	Remedy
Will not draw chemicals	Spray wand not in low pressure.	See How to "Use Spray Wand" paragraph in the Features and Controls Section.
	2. Chemical filter clogged.	2. Clean filter.
	3. Chemical screen not in cleaning solution.	Make sure end of detergent siphon hose is fully submerged into cleaning solution.
	4. Chemical too thick.	Dilute chemical. Chemical should be the same consistency as water.
	5. Pressure hose is too long.	5. Lengthen water supply hose instead of high pressure hose.
	6. Chemical build up in chemical injector.	6. See an authorized service dealer.
No or low pressure	1. Worn seal or packing.	See an authorized service dealer.
(after period of normal use)	2. Worn or obstructed valves.	2. See an authorized service dealer.
	3. Worn unloader piston.	3. See an authorized service dealer.
Water leaking at gun/spray wand	1. Worn or torn o-ring.	1. Check and replace.
connection	2. Loose hose connection	2. Tighten.
Water leaking at pump	1. Loose connections.	1. Tighten.
	2. Piston packings worn.	2. See an authorized service dealer.
	3. Worn or torn o-ring.	3. See an authorized service dealer.
	Pump head or tubes damaged from freezing.	4. See an authorized service dealer.
Pump pulsates	Nozzle obstructed.	See "Nozzle Cleaning" paragraph in the Maintenance section for the correct procedure.
Oil leaking at pump	1. Oil seals worn.	See an authorized service dealer.
	2. Loose drain plug.	2. Tighten.
	3. Worn drain plug o-ring .	3. Check and replace.
	4. Worn fill plug o-ring.	4. Check and replace.
	5. Pump overfilled.	5. Check for correct amount.
	6. Incorrect oil used.	Drain and fill with correct amount and type of oil.
	7. Vent plug is clogged.	7. Clean vent plug; blow air through it to remove any blockage. If problem persists, replace plug. See engine manual.
	8. Air filter filled with oil.	Clean and/or replace filter element. See engine manual.

Notes	

Notes	

# CUB CADET LLC MANUFACTURER'S LIMITED WARRANTY FOR PRESSURE WASHERS

**IMPORTANT:** To obtain warranty coverage owner may be required to present an original proof of purchase and applicable maintenance records to the servicing dealer. Please see the operator's manual for information on required maintenance and service intervals.

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

Cub Cadet 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 retail purchase or lease and will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship.

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 original purchase or lease. Normal wear parts include, but are not limited to items such as: nozzles, hoses, O-rings, spray guns, wands, feet and tires.

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 or rental use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water conditions, corrosion, chemical exposure, freezing, thawing, 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 Cub Cadet for use with the product(s) covered by this manual will void your warranty as to any resulting damage.

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

#### In the U.S.A.:

Check your Yellow Pages, or contact Cub Cadet LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, or call 1-877-282-8684, or log on to our Web site at www.cubcadet.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.

Without limiting the foregoing, this limited warranty does not provide coverage in the following cases:

- Routine maintenance items such as lubricants, filters, tune-ups, adjustments, and normal deterioration of the exterior finish due to use or exposure.
- Service completed by someone other than an authorized service dealer.
- c. Cub Cadet does not extend any warranty for products sold or exported outside of the United States and/or Canada, and their respective possessions and territories, except those sold through Cub Cadet's authorized channels of export distribution.
- Replacement parts and\or accessories that are not genuine Cub Cadet parts.
- e. Transportation charges and service calls.
- f. Commercial or Institutional Use

There are no implied warranties including without limitation any implied warranty of merchantability or fitness for a particular purpose. No warranties shall apply after the applicable period of express written warranty above. No other express warranties beyond those mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Cub Cadet. The exclusive remedy is repair or replacement of the product as set forth above.

The terms of this warranty provide the sole and exclusive remedy arising from the sale and/or lease of the products covered hereby. Cub Cadet shall not be liable for any 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.