

## INSTRUCTION MANUAL MANUAL DE INSTRUCCIONES MODEL MODELO

DCV2420





**NOTICE:** Do not use E15 or E85 fuel (or fuel containing greater than 10% ethanol) in this product. It is a violation of federal law and will damage the unit and void your warranty.

**AVISO:** No utilice combustibles E15 o E85 (ni combustibles que contengan más de 10% de etanol) con este producto. Esto constituye una violación a la ley federal, dañará la unidad y anulará la garantía.

If your pressure washer is not working properly or if there are parts missing or broken, please DO NOT RETURN IT TO THE PLACE OF PURCHASE. Contact our customer service department at **1-877-362-4271** or www.simpsoncleaning.com

Si su lavadora a presión no trabaja correctamente ó encuentra partes rotas o faltantes, por favor NO LA REGRECE AL LUGAR DONDE LA COMPRO. Contáctese con nuestro Departamento de Servicio al Cliente llamando al **1-877-362-4271 o www.simpsoncleaning.com** 

**IMPORTANT:** Please make certain that the person who is to use this equipment carefully reads and understands these instructions before operating.

**IMPORTANTE:** Aségurese por favor de que la persona que vaya a utilizar este equipo lea con cuidado y comprenda estas instrucciones antes de operar.

**VEA EL ESPAÑOL EN LA CONTRAPORTADA.** INSTRUCTIVO DE OPERACIÓN, CENTROS DE SERVICIO Y PÓLIZA DE GARANTÍA. **ADVERTENCIA:** LÉASE ESTE INSTRUCTIVO ANTES DE USAR EL PRODUCTO.

### SAVE THIS MANUAL FOR FUTURE REFERENCE CONSERVE ESTAS INSTRUCCIONES PARA FUTURAS CONSULTAS

Part No. 7106967 Rev. 0 AUG 2013

## **SAFETY GUIDELINES - DEFINITIONS**

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**.

## **IMPORTANT SAFETY INSTRUCTIONS**

▲ 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 battery-powered 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. If you have any questions regarding the product, please contact our customer service department at 1-877-362-4271.

 $\triangle$  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.

**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.** 

▲ 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.

## SAVE THESE INSTRUCTIONS



#### **▲ DANGER: RISK OF EXPLOSION OR FIRE**

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul> <li>Spilled gasoline and it's vapors can become ignited from cigarette sparks, electrical arcing, exhaust gases and hot engine components such as the muffler.</li> </ul>	<ul><li>adding fuel to the tank.</li><li>Use care in filling tank to avoid spilling fuel.</li></ul>
<ul> <li>Heat will expand fuel in the tank which could result in spillage and possible fire explosion.</li> </ul>	
Operating the pressure washer in an explosive environment could result in a fire.	, , ,
<ul> <li>Materials placed against or near the pressure washer can interfere with its proper ventilation features causing overheating and possible ignition of the materials.</li> </ul>	containing dry brush or weeds.
<ul> <li>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.</li> </ul>	of 4' (1.2 m) away from surfaces (such as houses, automobiles or live plants) that
<ul> <li>Improperly stored fuel could lead to accidental ignition. Fuel improperly secured could get into the hands of children or other unqualified persons.</li> </ul>	er, in a secure location away from work
<ul> <li>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.</li> </ul>	



## A DANGER: RISK TO BREATHING (ASPHYXIATION)

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.	ventilated area. Avoid enclosed areas
<ul> <li>Some cleaning fluids contain substances which could cause injury to skin, eyes or lungs.</li> </ul>	



A DANGER: RISK OF FL	UID INJECTION AND LACERATION
WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul> <li>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 SIMPLE CUT! See a physician immediately!</li> <li>Injuries can result if system pressure is not reduced before attempting maintenance or disassembly.</li> </ul>	<ul> <li>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> <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> <li>Never place hands in front of nozzle.</li> <li>Direct spray away from self and others.</li> <li>Make sure hose and fittings are tightened and in good condition. Never hold onto the hose or fittings during operation.</li> <li>Do not allow hose to contact muffler.</li> <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>

WHAT CAN HAPPEN	HOW TO PREVENT IT				
<ul> <li>High-velocity fluid spray can cause objects to break, projecting particles at high speed.</li> </ul>					
Light or unsecured objects can become hazardous projectiles.	<ul> <li>Always secure trigger lock when wand is not in service to prevent accidental operation.</li> <li>Never permanently secure trigger in pull- back (open) position.</li> </ul>				
<b>X</b>					



## ▲ 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> <li>If proper starting procedure is not followed, engine can kickback causing serious hand and arm injury.</li> </ul>	<ul> <li>Do not use chlorine bleach or any other corrosive compound.</li> <li>Become familiar with the operation and controls of the pressure washer.</li> <li>Keep operating area clear of all persons, pets and obstacles.</li> <li>Do not operate the product when fatigued or under the influence of alcohol or drugs. Stay alert at all times.</li> <li>Never compromise the safety features of this product.</li> <li>Do not operate machine with missing, broken or unauthorized parts.</li> <li>Never leave wand unattended while unit is running.</li> <li>If engine does not start after two pulls,</li> </ul>
<ul> <li>The spray gun/wand is a powerful cleaning tool that could look like a toy to a child.</li> <li>Reactive force of spray will cause gun/wand to kickback, and could cause the operator to slip or fall or misdirect the spray. Improper control of gun/wand can result in injuries to self and others.</li> </ul>	<ul> <li>washer at all times.</li> <li>Do not overreach or stand on an unstable support.</li> <li>Do not use pressure washer while standing on a ladder.</li> </ul>

▲ DANGER: RISK OF INJURY OR PROPERTY DAMAGE WHEN TRANSPORTING OR STORING					
WHAT CAN HAPPEN	HOW TO PREVENT IT				
<ul> <li>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.</li> <li>Oil could fill the cylinder and damage the engine if the unit is not stored or transported in an upright position.</li> </ul>	<ul> <li>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 container. Always place pressure washer on a protective mat when transporting to protect against damage to vehicle from leaks.</li> <li>Always transport and store unit in an upright position. Remove pressure washer from vehicle immediately upon arrival at your destination.</li> </ul>				
A DANGER: RISK OF ELECTRICAL SHOCK					
WHAT CAN HAPPEN	HOW TO PREVENT IT				
<ul> <li>Spray directed at electrical outlets or switches, or objects connected to an electrical circuit, could result in a fatal electrical shock.</li> </ul>	before attempting to clean it. Direct spray				

## A DANGER: RISK OF CHEMICAL BURN

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul> <li>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.</li> </ul>	or any other flammable materials with this product. Use only household detergents,

	G: 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> <li><b>NOTE:</b> 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>
<ul> <li>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.</li> </ul>	



# A WARNING: RISK OF HOT SURFACES

WHAT CAN HAPPEN	HOW TO PREVENT IT
• Contact with hot surfaces, such as	
engine exhaust components, could	surfaces of the pressure washer. Keep
result in serious burn.	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

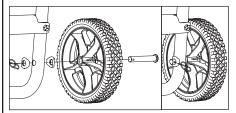
WHAT CAN HAPPEN				PEN			HOW TO PREVENT IT
٠	Serious	injury	can	result	from	٠	The pressure washer is too heavy to be
	attempting to lift too heavy an object.			lifted by one person. Obtain assistance			
			from others before lifting.				

## SAVE THESE INSTRUCTIONS FOR FUTURE USE

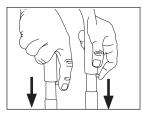
## **QUICK SETUP GUIDE**

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

A Slide the axle pin through the wheel, formed washer, frame and other formed washer. Slide clip through hole in axle pin to secure wheel in place. Repeat steps for second wheel.



Add/Check Oil The engine is shipped without oil. Before starting engine, add the oil provided. Check oil level prior to each use. Refer to Engine Owner's Manual for complete procedure. B Install the Handle Place handle onto frame, depress the snap buttons, and slide the handle assembly onto the frame until snap buttons snap into place.

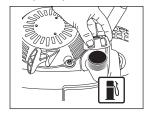




Add Gasoline In a well ventilated

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 **Engine Owner's Manual** for complete procedure.





## QUICK START GUIDE

### A DANGER:

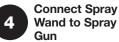
- Never run engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains carbon monoxide, an odorless and deadly gas.
- Risk of fluid injection and laceration. When using the high pressure setting, DO NOT allow the high pressure spray to come in contact with unprotected skin, eyes or with any pets or animals. Serious injury will occur.



### Connect Garden Hose to Pump

Thread the garden hose to the pump inlet. See Label #1 on the front of the unit.





Thread the spray wand into the end of the spray gun.



#### Connect High Pressure Hose to Pump

Thread the high pressure hose to the pump outlet. See Label #2 on the front of the unit.





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



#### Connect High Pressure Hose to Spray Gun

Thread the other end of the high pressure hose to the spray gun.





Do not run the unit without water supply connected and turned on. Use Cold Water Only.





## Release Air from System

Release all air from pump and high pressure hose by depressing trigger until a steady stream of water is present. Approximately 30 seconds.





Verify the Fuel Valve is turned to the OPEN Position

8

The Fuel Valve has been preset by the factory to be in the OPEN position.

See Label #8 on the side of the engine.





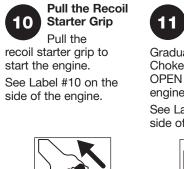


#### Verify the Choke Pin is Pushed In to the CLOSED Position

The Choke Pin has been preset by the factory to be in the CLOSED Position.

See Label #9 on the front of the unit.







Gradually move the Choke Pin to the OPEN Position after engine starts.

See Label #11 on the side of the engine.

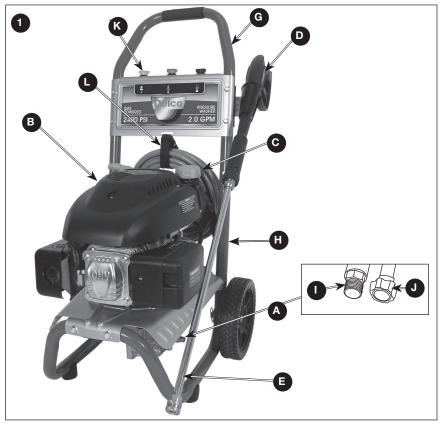




**WARNING:** This Guide is not a substitute for reading the operator's manual. User must read and understand operator's manual before using this product.

## NOTE: Photographs and line drawings used in this manual are for reference only and do not represent a specific model.

Compare the illustrations with your unit to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.



#### **BASIC ELEMENTS OF A PRESSURE WASHER (FIG. 1)**

- A. High Pressure Pump: Increases the pressure of the water supply.
- **B.** Engine: Drives the high pressure pump. Refer to the Engine Owner's Manual for location and operation of engine controls.
- **C. High Pressure Hose:** Carries the pressurized water from the pump to the gun and spray wand.
- **D.** Spray Gun: Connects with spray wand to control water flow rate, direction and pressure.
- E. Quick-Connect Spray Wand: Allows the user to quickly change out high pressure nozzles. See How To Use Spray Wand instructions in *Operation* section.

- F. 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 *Operation* section.
- G. Handle
- H. Frame
- I. Pump Outlet
- J. Pump Inlet
- K. Quick Connect Nozzles
- L. Hose Storage Strap

### **BASIC ELEMENTS OF AN ENGINE**

Refer to the Engine Owner's Manual for location and operation of engine controls.

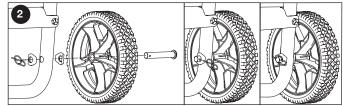
Choke Control: Opens and closes carburetor choke valve.

Starter Grip: Pulling starter grip operates recoil starter to crank engine.

Engine Switch: Enables and disables ignition system.

## ASSEMBLY INSTRUCTIONS (FIG. 2–6)

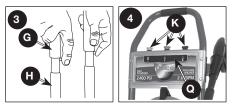
- 1. Locate and remove all loose parts from the carton.
- 2. Cut four corners of the carton from top to bottom and lay the panels flat.
- 3. Slide the axle pin through the wheel, formed washer, frame and other formed washer as shown in figure 2. Slide clip through hole in axle pin to secure wheel in place. Repeat steps for second wheel.



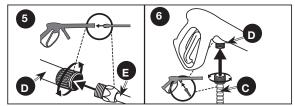
4. Place handle (G) onto frame (H), depress the snap buttons, and slide the handle assembly onto the frame until snap buttons snap into place

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

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



- 6. Connect wand (E) to gun (D). Tighten securely.
- 7. Attach high pressure hose (C) to gun (D). Tighten securely.



**NOTE:** The pump on this unit is maintenance free and requires no oil. If there is a problem with the pump, contact our Customer Service Group on **1-877-362-4271** as soon as possible.

**NOTICE:** The engine is shipped without oil. Before starting engine, add the oil provided. Damage to the engine will occur if the engine is run without oil, this damage will not be covered under warranty.

## **OPERATION**

#### 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 (P, Fig. 7):** 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.



**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.

<u>∧</u> 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.

- 1. 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.
- 2. Change to the 25° nozzle. This nozzle delivers a less powerful stream of water and a wider spray pattern. Refer to How To Use Spray Wand.

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

#### 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 (FIG. 8)

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

<u>∧</u> 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 (E) back and insert nozzle (K).
- 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.



NOZZLE COLOR	SPRAY PATTERN	USES	SURFACES*
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
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 (FIG. 9)

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 (F, Figure 9) is attached to barbed fitting location near high pressure hose connection of pump as shown.
- 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.



- 3. Install low pressure (black) nozzle into quick connect fitting of spray wand, see **How To Use Spray Wand** paragraph in this section.
- 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.

#### STARTING (FIG. 10–13)

## $\underline{\land}$ 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.

## <u>∧</u> 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.

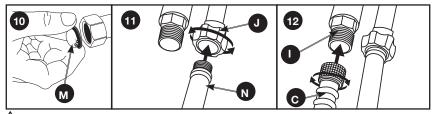
**NOTICE:** Risk of property damage. Never pull water supply hose to move pressure washer. This could damage hose and/or pump inlet.

- 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 at 1-877-362-4271

#### Prior to starting, refer to your engine manual for proper starting procedure.

- 1. 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 **Engine Owner's Manual** for correct procedure.
- 2. Check engine oil level. See Engine Owner's Manual for correct procedure.
- 3. 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.
- 4. Verify the filter screen (M) is in water inlet of pump. **NOTE:** Convex side faces out.
- 5. Connect water source (N) to pump inlet (J). **NOTE:** Water source must provide a minimum of 5 gallons per minute at 20 psi.
- 6. Connect high pressure hose (C) to pump outlet (I).



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

- 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.
- 8. Turn water source on.

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

9. Remove all air from the pump and high pressure hose by depressing trigger until a steady stream of water is present.

10. Start engine. See Engine Owner's Manual for correct procedure.

<u>∧</u> 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.

11. 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.

12. Release trigger to stop water flow.

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

#### SHUTTING DOWN



1. 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.

2. Turn engine off. See Engine Owner's Manual.

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

- 3. Turn water source off.
- 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.
- 5. See *Storage* section in this manual for proper storage procedures.

## 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.

▲ 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.

To ensure efficient operation and longer life of your pressure washer, a routine maintenance schedule should be prepared and followed. If the pressure washer is used in unusual conditions, such as high-temperatures or dusty conditions, more frequent maintenance checks will be required.

#### ENGINE

Consult the **Engine Owner's Manual** for the manufacturer's recommendations for any and all maintenance. **NOTE:** The engine drain plug is located at the rear of the unit.

#### PUMP

The pump was filled with oil at the factory. The pump on this unit is maintenance free and requires no oil to be added or changed. If there is a problem with the pump, contact us at 1-877-362-4271

#### 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 (FIG. 14)

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 (K) from the spray wand. Remove any obstructions with the nozzle cleaning tool provided and backflush with clean water.
- 5. Direct water supply (N) 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 (FIG. 10)

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

- 1. Remove filter by grasping end and removing it from water inlet of pump.
- 2. Clean filter by flushing it with water on both sides.
- 3. Re-insert filter into water inlet of pump. **NOTE:** Convex side faces out.

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

### STORAGE

#### ENGINE

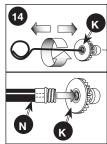
Consult the **Engine Owner's Manual** for manufacturer's recommendations for storage.

#### PUMP

**NOTICE:** The manufacturer recommends using a pump protector/winterizer when storing the unit for more than 30 days and/or when freezing temperatures are expected. **FREEZE DAMAGE IS NOT COVERED BY THE WARRANTY.** 

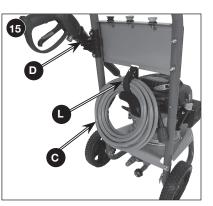
Pump protector/winterizer is usually available at the store where the pressure washer was purchased. If a pump protector/winterizer is not available, RV antifreeze needs to be run through the pump.

**NOTE:** Using a pump protector/winterizer or RV antifreeze is to provide proper lubrication to the internal seals of the pump regardless of temperature or environment.



#### PRESSURE WASHER (FIG. 15)

- 1. Drain all water from high pressure hose. Use hose storage strap (L) to secure high pressure hose (C) for storage.
- 2. Drain all water from the spray gun and wand by holding spray gun (D) in a vertical position with nozzle end pointing down and squeezing trigger. Store in gun holder.
- 3. Wrap up and secure detergent siphon hose so it is protected from damage.



## ACCESSORIES

▲ DANGER: Risk of fluid injection. When using replacement spray wands or guns with this pressure washer, DO NOT use a spray wand and/or spray gun/ wand combination that is shorter in length than what was provided with this pressure washer as measured from the nozzle end of the wand to the gun trigger.

**NOTICE:** The use of any other accessory not recommended for use with this tool could be hazardous. Use only accessories rated equal to or greater than the rating of the pressure washer.

MODEL	DCV2420
PSI Max*	2400 psi
GPM Max*	2.0 gpm
High Pressure Hose	25 ft. (7.6 m)
Presure of Inlet Water	20–100 psi
Inlet Water	cold tap
Soap Consumption Rate	10% max

## **SPECIFICATIONS**

\* 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.

## **SERVICE INFORMATION**

**Do not return this product to your retailer.** Please contact our customer service department at 1-877-362-4271

#### 90 DAY LIMITED WARRANTY ON PRODUCT COMPONENTS EXCLUDING PUMP

*DELCO*<sup>®</sup> warrants to the original purchaser that the wheels, gun, hose, wand, spray nozzle(s) and other components of the *DELCO*<sup>®</sup> pressure washer covered under this warranty are free from defects in material and workmanship for 90 days from the date of purchase.

#### ONE YEAR LIMITED WARRANTY ON PUMP AND FRAME

*DELCO<sup>®</sup>* warrants to the original purchaser that the pump and frame of the *DELCO<sup>®</sup>* pressure washer covered under this warranty is free from manufacturer's defects in material and workmanship for one year from the date of purchase. The one year limited warranty applies to the pump and frame only.

*DELCO<sup>®</sup>* will repair or replace, at *DELCO<sup>®</sup>*'s option, products or components which have failed within the above warranty periods. Service will be scheduled according to the normal work flow and business hours at the service center location, and the availability of replacement parts. All decisions of *DELCO<sup>®</sup>* with regard to this limited warranty shall be final.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### ENGINE WARRANTY

The engine warranty is covered under the terms and conditions as outlined by the engine manufacturer's warranty contained herein and is sole responsibility of the engine manufacturer.

#### **RESPONSIBILITY OF ORIGINAL PURCHASER (INITIAL USER):**

- To process a warranty claim on your DELCO<sup>®</sup> pressure washer, report the concern to 1-877-362-4271 for authorization and direction to the nearest authorized service center in your area.
- Retain original cash register sales receipt as proof of purchase for warranty work.
- Use reasonable care in the operation and maintenance of the product as described in the Owner's Manual(s).

#### THIS WARRANTY DOES NOT COVER:

- Merchandise sold as reconditioned, used as rental equipment, or floor or display models.
- Merchandise that has become damaged or inoperative because of ordinary wear, misuse, cold, heat, rain, excessive humidity, freeze damage, use of improper chemicals, negligence, accident, failure to operate the product in accordance with the instructions provided in the Owner's Manual(s) supplied with the product, improper maintenance, the use of accessories or attachments not recommended by DELCO<sup>®</sup>, or unauthorized repair or alterations.
- Repair and transportation costs of merchandise determined not to be defective.
- Transportation costs for the purpose of evaluation or repair of equipment.
- Costs associated with assembly, required oil, adjustments or other installation and start-up costs.
- Expendable parts or accessories supplied with the product which are expected to become inoperative or unusable after a reasonable period of use, including but not limited to springs, nozzles, o-rings, washers, and similar accessories.
- Merchandise sold by *DELCO<sup>®</sup>* which has been manufactured by and identified as the product of another company, such as gasoline engines. The product manufacturer's warranty, if any, will apply.

- ANY INCIDENTAL, INDIRECT OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE OR MALFUNCTION OF THE PRODUCT IS NOT COVERED BY THIS WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

OPERATIONAL ISSUE	POSSIBLE CAUSE	SOLUTION	
Engine will	No fuel	Add fresh fuel	
not start (see Engine Owner's Manual for further engine troubleshooting) No or low pressure (initial use)	Pressure builds up after two pulls on the recoil starter or after initial use	Squeeze gun trigger to relieve pressure	
	Throttle control is in the STOP position Spark plug wire not attached.	Move the throttle control to the FAST position Attach spark plug wire.	
	Spray wand not in high pressure	See How to Use Spray Wand instructions in the Operation Section	
	Low water supply	Water supply must be at least 5 gpm @ 20 psi	
	Leak at high pressure hose fitting	Repair leak. Apply sealant tape if necessary	
	Nozzle obstructed	See <b>Nozzle Cleaning</b> instructions in the <i>Maintenance</i> section	
	Water filter screen clogged	Remove and clean filter. See <b>Cleaning Water Inlet</b> <b>Filter</b> paragraph in the <i>Maintenance</i> section for the correct procedure	
	Air in hose	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. Re-connect water source to pump inlet and turn on water source. Squeeze trigger to remove remaining air	
	Throttle control is in the STOP position	Move the throttle control to the FAST position	
	High pressure hose is too long	Use high pressure hose under 100 feet (30 m)	

### **TROUBLE SHOOTING GUIDE**

OPERATIONAL ISSUE	POSSIBLE CAUSE	SOLUTION
Will not draw chemicals	Spray wand not in low pressure	See <b>How to Use Spray</b> <b>Wand</b> paragraph in the <i>Operation</i> Section
	Chemical filter clogged	Clean filter
	Chemical screen not in cleaning solution	Make sure end of detergent siphon hose is fully submerged into cleaning solution
	Chemical too thick	Dilute chemical. Chemical should be the same consistency as water
	Pressure hose is too long	Lengthen water supply hose instead of high pressure hose
	Chemical build up in chemical injector	Please contact our customer service department at 1-877-362-4271
No or low pressure (after period of normal use)	Worn seal or packing	Please contact our customer service department at 1-877-362-4271
	Worn or obstructed valves	Please contact our customer service department at 1-877-362-4271
	Worn unloader piston	Please contact our customer service department at 1-877-362-4271
Water leaking at	Worn or torn o-ring	Check and replace
gun/spray wand connection	Loose hose connection	Tighten
Water leaking	Loose connections	Tighten
at pump	Piston packings worn	Please contact our customer service department at 1-877-362-4271
	Worn or torn o-ring	Please contact our customer service department at 1-877-362-4271
	Pump head or tubes damaged from freezing	Please contact our customer service department at 1-877-362-4271
Pump pulsates	Nozzle obstructed	See <b>Nozzle Cleaning</b> paragraph in the <i>Maintenance</i> section for the correct procedure

Internet Address: www.simpsoncleaning.com Warranty Registration via Internet

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