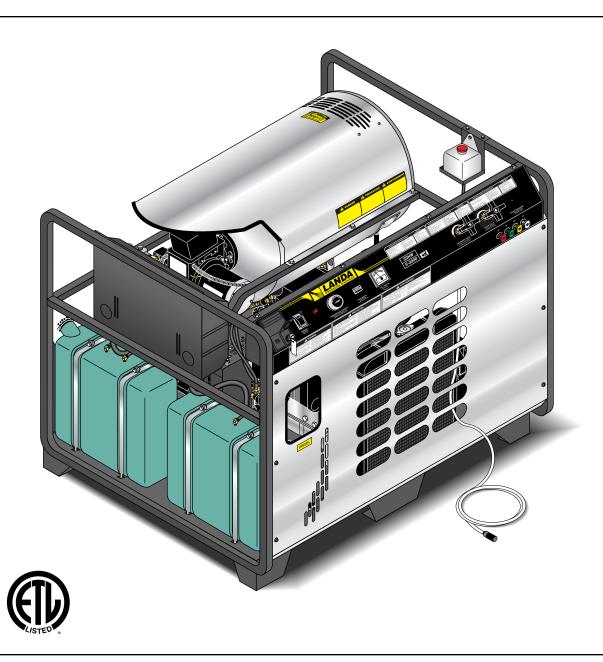


# **OPERATOR'S MANUAL**

■ SDHW5-3000

■ SDHW6-3500



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Model Number \_\_\_\_\_

Serial Number \_\_\_\_

Date of Purchase \_\_\_\_

The model and serial numbers will be found on a decal attached to the pressure washer. You should record both serial number and date of purchase and keep in a safe place for future reference.

### INTRODUCTION

Thank you for purchasing a Landa Pressure Washer.

This manual covers the operation and maintenance of the SDHW5-30821E, SDHW5-30824E, SDHW6-35821E and SDHW6-35824E washers. All information in this manual is based on the latest product information available at the time of printing.

Landa, Inc. reserves the right to make changes at any time without incurring any obligation.

The SDHW Series was designed for maximum use of 8 hours per day, 5 days per week.

### **Owner/User Responsibility**

The owner and/or user must have an understanding of the manufacturer's operating instructions and warnings before using this Landa pressure washer. Warning information should be emphasized and understood. If the operator is not fluent in English, the manufacturer's instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents.

Owner and/or user must study and maintain for future reference the manufacturers' instructions.

This manual should be considered a permanent part of the machine and should remain with it if machine is resold.

When ordering parts, please specify model and serial number.

# IMPORTANT SAFETY INFORMATION

CAUTION: When using this machine basic precautions should always be followed, including the following:



CAUTION: To reduce the risk of injury, read operating instructions carefully before using.

- Read the owner's manual thoroughly. Failure to follow instructions could cause a malfunction of the machine and result in death, serious bodily injury and/ or property damage.
- 2. Know how to stop the machine and bleed pressures quickly. Be thoroughly familiar with the controls.
- 3. Stay alert watch what you are doing.
- 4. All installations must comply with local codes. Con-

tact your electrician, plumber, utility company or the selling distributor for specific details.



WARNING: Risk of asphyxiation. Use this product only in a well ventilated area.

 Avoid installing machines in small areas or near exhaust fans. Exhaust contains poisonous carbon monoxide gas; exposure may cause loss of consciousness and may lead to

death. It also contains chemical known, in certain quantities, to cause cancer, birth defects, or other reproductive harm.



WARNING: Risk of explosion — Do not spray flammable liquids.

WARNING: Flammable liquids can create fumes which can ignite causing property damage or severe injury.

Do not place machine near flammable objects as the engine is hot.

WARNING: Risk of fire or explosion — Do not add fuel when the product is operating.

7. Allow engine to cool for 2 minutes before refueling. If any fuel is spilled, make sure the area is dry before testing the spark plug or starting the engine. (Fire and/ or explosion may occur if this is not done.) In an overfilling situation, additional precautions are necessary to ensure that the situation is handled in a safe manner.



WARNING: Risk of injection or serious injury to persons — Do not touch or direct discharge stream at persons. This machine is to be used only by qualified operators.

WARNING: High pressure stream of fluid that this equipment can produce can pierce skin and its underlying tissues, leading to serious injury.

CAUTION

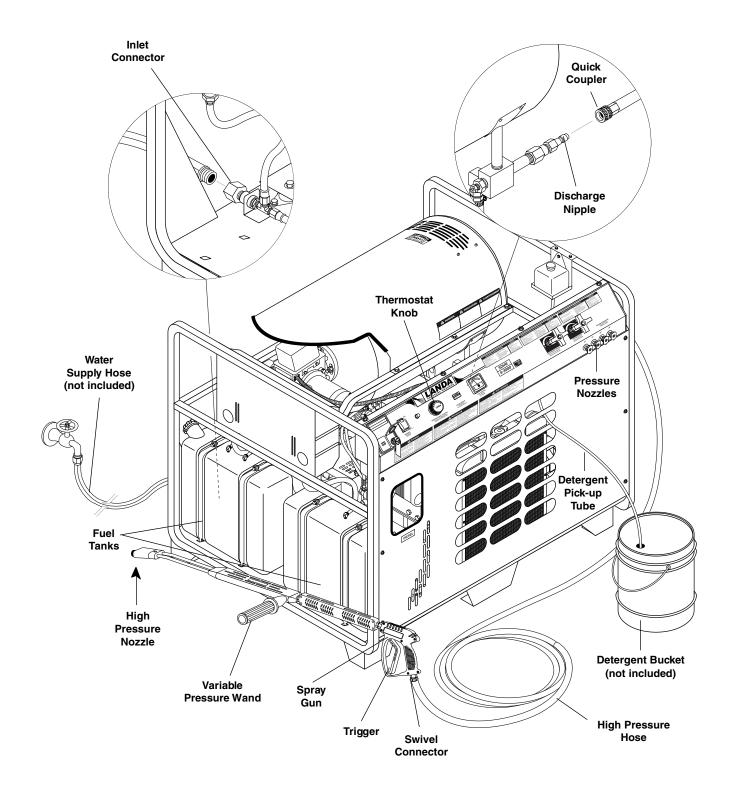


HOT DISCHARGE FLUID. DO NOT TOUCH OR DIRECT DISCHARGE STREAM AT PERSONS. CAUTION: Risk of injury — Hot discharge fluid. Do not touch or direct discharge stream at persons.

- 8. Never make adjustments on machine while in operation.
- To reduce the risk of injury, close supervision is necessary when a machine is used near children. DO NOT ALLOW

CHILDRENTO OPERATE the pressure washer. **This** machine must be attended during operation.

## **COMPONENT IDENTIFICATION**



 Do not operate this product when fatigued or under the influence of alcohol or drugs. Keep operating area clear of all persons.



WARNING: Risk of injury — High pressure spray can cause paint chips or other particles to become airborne and fly at high speeds.

 Eye safety devices, safety clothing and foot protection must be worn when using this equipment

## CAUTION: Risk of injury — spray gun kicks back. Hold securely with both hands.

- 12. Grip cleaning wand securely with both hands before starting the cleaner. Failure to do this could result in injury from a whipping wand.
- 13. Machines with spray gun should not be operated with the spray gun in the off position for extensive periods of time as this may cause damage to the pump.
- 14. Be certain all quick coupler fittings are secured before using pressure washer.
- 15. Protect discharge hose from vehicle traffic and sharp objects.
- 16. Before disconnecting discharge hose from water outlet, turn burner off and open spray gun to allow water to cool below 100° before stopping the machine. Then open the spray gun to relieve pressure. Failure to properly cool down or maintain the heating coil may result in a steam explosion.
- 17. The best insurance against an accident is precaution and knowledge of the machine.
- 18. Landa will not be liable for any changes made to our standard machines, or any components not purchased from Landa.



WARNING: Risk of electrocution

— Keep wand, hose and water
spray away from electric wiring or
fatal electric shock may result.

- 19. Read engine safety instructions provided.
- 20. Never run pump dry or leave spray gun closed longer than 5 minutes.
- 21. Use No. 1 or No. 2 Heating Oil (ASTM D306) only. NEVER use gasoline in your fuel oil tank. Gasoline is more combustible than fuel oil and could result in a serious explosion. NEVER use crankcase or waste oil in your burner. Fuel unit malfunction could result from contamination.

- 21. Do not confuse gasoline and fuel oil tanks. Keep proper fuel in proper tank.
- 22. Protect machine from freezing.
- 23. Do not allow acids, caustic, or abrasive fluids to pass through the pump.
- 24. Inlet supply water must be cold and clean fresh water.
- 25. Do not overreach or stand on unstable support. Keep good footing and balance at all times.

### PRE-OPERATION CHECK

- ☐ Pump oil (SAE 30W non-detergent oil)
- ☐ Cold water supply (10 GPM 5/8" 20 PSI)
- Hose, wand, nozzle (nozzle size per serial plate)
- Water filter (intact, non restrictive)
- ☐ Engine Oil (15W 40 CD/SE)
- ☐ Engine/Burner fuel diesel

### SETUP PROCEDURES

- 1. Attach a 5/8" water supply hose to inlet connector. Minimum flow should be 6 GPM.
- Attach high pressure hose to discharge nipple using quick coupler. Lock coupler securely into place by pulling back coupler collar and inserting it onto discharge nipple, then pushing collar forward to lock in place.
- 3. Attach variable pressure wand to spray gun using teflon tape on threads to prevent leakage.
- 4. Attach swivel connector on discharge hose to spray gun using teflon tape on threads.
- Check oil level on sight glass on side of pump. Oil should be visible half way up sight glass (SAE 30W non-detergent).
- 6. Check engine oil.
- 7. Fill diesel fuel tank.
- 8. Install proper battery making sure that the red cable is attached to the positive terminal. Use only a group 24 battery with a 90 amp hour rating.
- 9. Adding exhaust vent pipe to your oil fired burner is not recommended because it restricts air flow causing carbon build-up. This affects the operation, and increases maintenance on the coil. If a stack must be used, refrain from using 90° bends. If the pipe can not go straight up then use only 45° bends and go the next size pipe. The overall pipe length must not exceed 6 feet in length.
- 10. These machines are intended to be protected from the outside environment.

### **OPERATING INSTRUCTIONS**

- 1. Read engine warning and operating instructions.
- Turn on water at faucet to fill float tank. If needed, adjust float ball in tank.
- Pull wand coupler collar back and insert desired high pressure nozzle into coupler then secure by pushing collar forward.

**NOTE:** Variable pressure control wand handle must be turned clockwise to enable water to flow out of the high pressure nozzle.

- Read engine manual. The keyed ignition is located on the control panel. Simply turn key to first position. Glow plug light will illuminate. When light goes out, turn key to start (second) position.
- Pull trigger on spray gun allowing water to flow until all air has discharged from system. Check for water leaks; tighten as needed.
- With spray nozzle pointed away from you or anybody else, press trigger on spray gun to obtain pressurized cold water spray.
- 7. For hot water, turn the burner switch to ON when a steady stream of water flows out of the spray gun. Burner will now light automatically.

NOTE: Do not start machine with burner switch on.

- To apply detergent, place detergent pick-up tube into a container of detergent and turn the detergent valve counterclockwise.
- 9. For steam, open the steam valve counterclockwise to lower the pressure and raise the temperature.

## GENERAL WASHING TECHNIQUES

Hold spray nozzle approximately one foot from the surface being cleaned. Spray at an angle to get under the material and lift it off.

When washing large objects, use detergent injector to apply detergent. Start washing from the bottom and work up. Better detergent economy and faster results will be obtained by allowing the detergent to set 5-10 minutes. After washing, rinse from the top down.

Cleaning heavy dirt or material away with a hard stream of clear water is recommended before using a cleaning agent.

## SHUTDOWN PROCEDURES

- 1. Rinse all lines with clean water, to remove any soap residue.
- 2. Turn burner switch off and continue spraying, allowing the water to cool below 100°.

- 3. To stop engine simply turn key to OFF position.
- 4. Turn off water supply.
- 5. Open spray gun to relieve remaining pressure.
- 6. Remove water supply hose.
- In freezing conditions, disconnect water supply and open spray gun to allow water to drain; then turn off engine. See winterizing procedure under Maintenance and Service.

CAUTION: Do not allow pump to run longer than 5 minutes without water. Disconnect all hoses to allow water to drain.

With machine off, open spray gun to release pressure before removing discharge hose.

### PREVENTATIVE MAINTENANCE

- 1. Check to see that water pump is properly lubricated.
- 2. Follow winterizing instructions to prevent freeze damage to pump and coils.
- 3. Always neutralize and flush detergent from system after use.
- If water is known to be high in mineral content, use a water softener on your water system, or de-scale as needed.
- 5. Do not allow acidic, caustic or abrasive fluids to be pumped through system.
- 6. Always use high grade quality Landa cleaning products.
- 7. Never run pump dry for extended periods of time.
- Use clean diesel fuel. Replace fuel filter every 100 hours of operation. Avoid water contaminated fuel as it will seize up the fuel pump.
- If burner combustion is operated with smoky or eye burning exhaust, the coils will soot up and not let water reach maximum operating temperature. (See section on Burner Adjustments.)
- Never allow water to be sprayed on or near the engine or burner assembly or any electrical component.
- 11. Periodically delime coils as per instructions.
- 12. Check to see that engine is properly lubricated.

It is advisable, periodically, to visually inspect the burner. Check air inlet to make sure it is not clogged or blocked. Wipe off any oil spills and keep this equipment clean and dry.

The area around the Landa washer should be kept clean and free of combustible materials, gasoline and other flammable vapors and liquids.

The flow of combustion and ventilating air to the burner must not be blocked or obstructed in any manner.

# HOW TO USE THE OPTIONAL DETERGENT INJECTOR



WARNING: Some detergents may be harmful if inhaled or ingested, causing severe nausea, fainting or poisoning. The harmful elements may cause property damage or severe injury.

The machine can siphon and mix detergents with the use of Landa's detergent injector kit (see page 5).

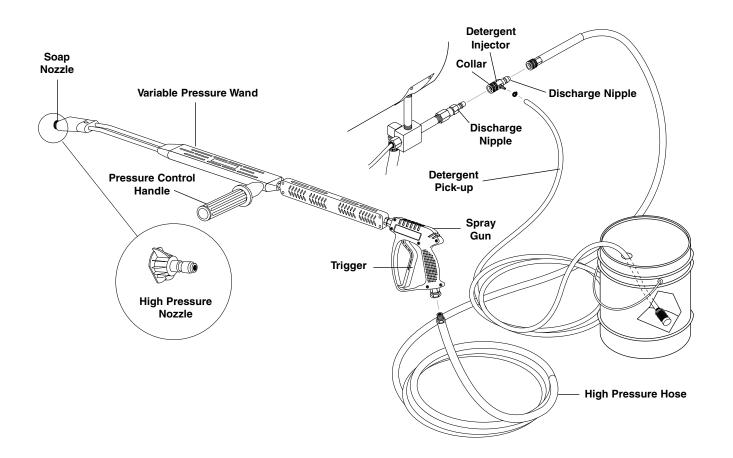
Selection of the detergent injector to use is determined by the GPM of the pressure washer being used.

 Pull detergent injector quick coupler collar back and secure it on discharge nipple. Injector valve body arrow should point in direction of flow.

- 2. Connect pressure discharge hose to injector discharge nipple securing quick coupler.
- 3. Start machine as outlined in Operating Instructions.
- Place detergent pick-up tube into container of detergent solution.
- Turn pressure control handle counterclockwise on variable pressure wand. This lowers pressure by directing water flow through soap nozzle and allows detergent injector to siphon soap.
- 6. Open spray gun. Water detergent ratio is approximately 15 to 1.
- 7. To rinse, simply turn variable pressure wand control handle clockwise to increase pressure.

**NOTE:** The detergent injector will not siphon detergent with the water flowing through the high pressure nozzle at the end of the wand.

8. For clean up, place detergent pick-up tube into container of clear water and follow steps 4 and 5 to prevent detergent deposits from damaging the injector.



### MAINTENANCE AND SERVICE

### **Unloader Valves**

Unloader valves relieve pressure in the line when a spray gun is closed. Unloader valves are preset and tested at the factory before shipping. Occasional adjustment of the unloader may be necessary to maintain correct pressure.

### **Winterizing Procedure**

Damage due to freezing is not covered by warranty. Adhere to the following cold weather procedures whenever the washer must be stored or operated outdoors under freezing conditions.

During winter months, when temperatures drop below 32° F, protecting your machine against freezing is necessary. Store the machine in a heated room. If this is not possible, then mix a 50/50 solution of anti-freeze and water in the float tank. If compressed air is available, screw an air fitting into the anchor connector beneath the 1/2" basket strainer inside the float tank. By injecting compressed air, all water will be blown out of the system.

### **High Limit Hot Water Thermostat**

For safety, each machine is equipped with a high limit control switch. In the event that the temperature of the water should exceed its operating temperature, the high limit control will turn the burner off until the water cools.

### **Pumps**

Use only SAE 30 weight non-detergent oil. Change oil after first 50 hours of use. Thereafter, change oil every three months or at 500 hour intervals. Oil level should be checked using dipstick found on top of pump or by checking red dot visible through oil gauge window. Oil should be maintained at that level.

### **Cleaning of Coils**

In alkaline water areas, lime deposits can accumulate rapidly inside coil pipes. This growth is increased by extreme heat build up in the coil. The best prevention for liming conditions is to use high quality cleaning detergents. In areas where alkaline water is an extreme problem, periodic use of Landa Deliming Powder (Landa Part #9-028008) will remove lime and other deposits before the coil becomes plugged. (See Deliming Instructions for use of Landa Deliming Powder.)

### **Deliming Coils**

Periodic flushing of coils or optional float tank is recommended.

**Step 1** Fill a container with 4 gallons of water, then add 1 lb. of deliming powder. Mix thoroughly.

- **Step 2** Remove wand assembly from spray gun and put spray gun into container. Secure the trigger on the spray gun into the open position.
- Step 3 Attach a short section (3-5 ft.) of garden hose to machine to siphon solution from an elevated container. Turn engine on, allowing solution to be pumped through coils back into the container. Solution should be allowed to circulate 2-4 hours.
- **Step 4** After circulating solution, flush entire system with fresh water. Reinstall wand assembly to spray gun.

### **Removal of Soot from Heating Coil**

In the heating process fuel residue, in the form of soot deposits, may develop between the heating coil pipe and may block air flow which affects burner combustion. When soot has been detected on visual observation, the soot on the coil must be washed off after following the coil removal steps (See Coil Removal on page 11).

### **Rupture Disk**

If pressure from pump or thermal expansion should exceed safe limits, the rupture disk will burst, allowing high pressure to be discharged through hose to ground. When disk ruptures it will need to be replaced. Torque to 35 ft. lbs

### **Fuel**

Use clean fuel oil that is not contaminated with water and debris. Replace fuel filter and drain tank every 100 hours of operation.

**NEVER** use gasoline in your burner or diesel fuel tank. Gasoline is more combustible than fuel oil and could result in a serious explosion. **NEVER** use crankcase or waste oil. Fuel burner and diesel engine malfunction could result from contamination in fuel.

### **Fuel Control System**

This machine utilizes a fuel solenoid valve located on the fuel pump to control the flow of fuel to the combustion chamber. The solenoid, which is normally closed, is activated by a flow switch when water is flowing through it. When an operator releases the trigger on the spray gun, the flow of water through the flow switch stops, turning off the electrical current to the fuel solenoid.

The solenoid then closes, shutting off the supply of fuel to the combustion chamber. Controlling the flow of fuel in this way gives an instantaneous burn-or-no-burn situation, thereby eliminating high and low water temperatures, and combustion smoke normally associated with machines incorporating a spray gun.

**NOTE:** Periodic inspection to insure that the fuel solenoid valve functions properly is recommended. This can be done by operating the machine and checking to see that when the spray gun is in the off position, the burner is not firing.

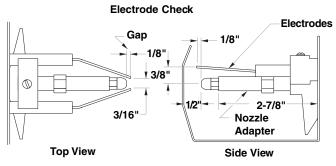
### **Fuel Pressure Adjustment**

To adjust fuel pressure, turn the adjusting screw clockwise to increase, counterclockwise to decrease. Do not exceed 200 PSI. **NOTE:** When changing fuel pump, a bypass plug must be installed in return port or fuel pump will not prime.

### **Burner Nozzle**

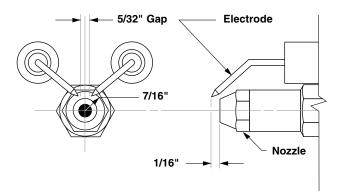
Keep tip free of surface deposits by wiping it with a clean, solvent-saturated cloth, being careful not to plug or enlarge nozzle. For maximum efficiency, replace nozzle each season.

### **Electrode Setting: Wayne**



Periodically check wiring connections. If necessary to adjust electrodes, use diagram.

### **Electrode Setting: Beckett**



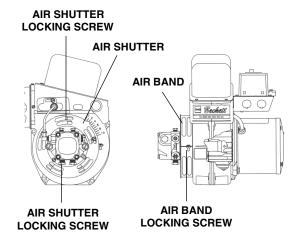
### Air Adjustment

Machines are preset and performance tested at the factory — elevation 100'. A one-time initial correction for your location will pay off in economy, performance, and extended service life. If a smoky or eye-burning exhaust is being emitted from the stack, two things should be checked. First, check the fuel to be certain that kerosene or No. 1 home heating fuel is being used. Next, check the air adjustment on the burner.

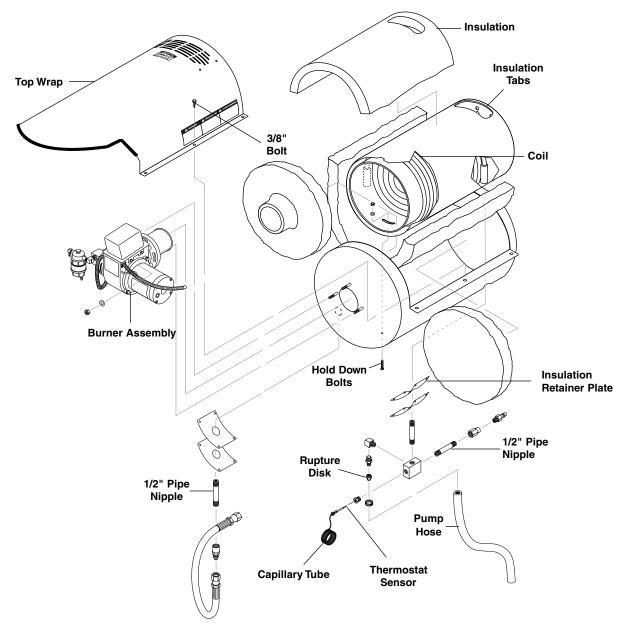
### **Air Band Adjustment:**

**To adjust:** start machine and turn burner ON. Loosen two locking screws found in the air shutter openings (refer to illustration) and close air shutter until black smoke appears from burner exhaust vent. Note air band position. Next, slowly open the air shutter until white smoke just starts to appear. Turn air shutter halfway back to the black smoke position previously noted. Tighten locking screws.

If the desired position cannot be obtained using only the air shutter, lock the air shutter in as close a position as can be obtained, then repeat the above procedure on the air band setting.



## COIL REMOVAL AND INSTALLATION EXPLODED VIEW



### **Coil Removal**

Removal of the coil, because of freeze breakage or to clean soot from it, can be done quickly and easily.

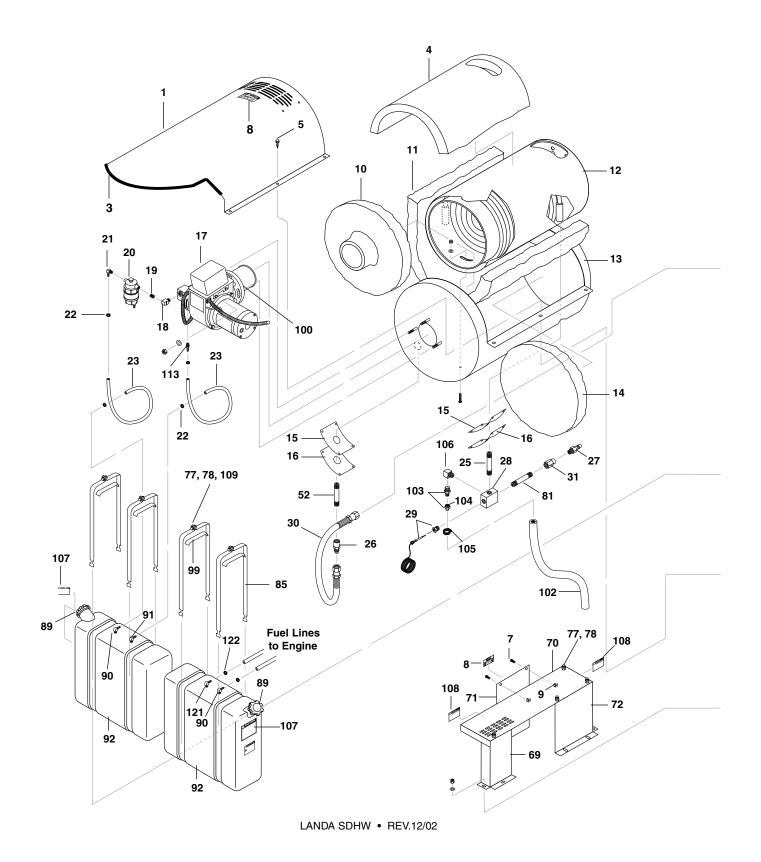
- 1. Disconnect hose from pump to inlet side of the coil.
- 2. Disconnect electrical connection to the thermostat.
- 3. Remove quick coupler from discharge side of coil.
- Remove burner assembly from combustion chamber.
- Remove the three 3/8" bolts from each side of coil and tank assembly (these bolts are used to fasten tank to chassis).

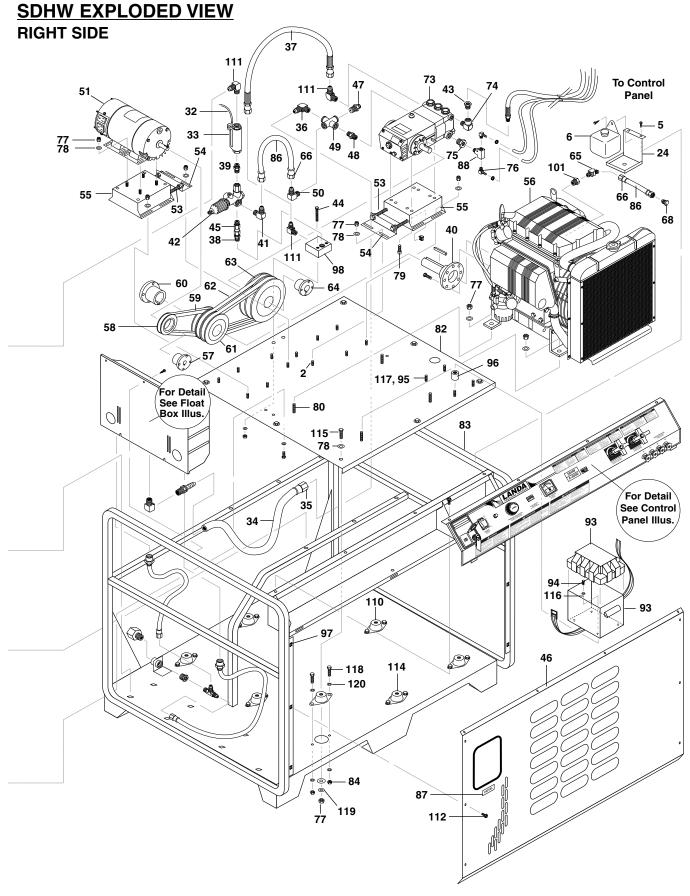
- 6. Disconnect 1/2" pipe nipples from inlet and discharge side of coil.
- 7. Remove top tank wrap exposing insulation and coil and fold back insulation.
- 8. Remove bolts that hold down coil to bottom wrap.
- 9. Remove coil.
- Replace or repair any insulation found to be torn or broken.

### **Coil Reinstallation**

Reinstall new or cleaned coil by reversing Steps 9 through 10 above.

# SDHW EXPLODED VIEW LEFT SIDE





LANDA SDHW • REV. 12/02

## **SDHW EXPLODED VIEW PARTS LIST**

1         95-07121014S         Top Wrap, SS, PHW Series II         1           2         90-1017         Bolt, 3/8" x 1-1/4" NC HH         12           3         2-01104         Trim, 1/16" Black, /ft.         6           4         7-01484         Insulation/Blanket - Die Cut 28" x 24"         1           5         90-2990         Screw, SS #10 x 1/2" Hex Head Tek         8           6         2-011504         Radiator Recovery Tank         1           7         90-19711         Screw 1/4" x 1/2" HH NC, Whiz Loc         4           8         10-02025A         Label, "Hot/Caliente" w/Arrows Warning         2           9         90-20231         Nut, Cage, 1/4" x 12 Ga.         4           10         7-0141         Insulation, Burner Head, W/Hole1         1           11         7-01430         Insulation, Blanket - No Foil, 24" x 57"         1           12         95-07121212         Coil, Schedule 80 w/Mild Wrap 1         1           13         95-07121015         Wrap, Bottom, Stainless Steel 1         1           14         7-0140         Insulation, Front Head, No Hole 1         1           15         7-0144         Gasket, Burner Plate         2           16         95-07121113         PH	ITEM	PART NO.	DESCRIPTION	QTY
3   2-01104   Trim, 1/16" Black, /ft.   6   4   7-01484   Insulation/Blanket - Die Cut 28" x 24"   1   5   90-2990   Screw, SS #10 x 1/2" Hex Head Tek   8   8   6   2-011504   Radiator Recovery Tank   1   7   90-19711   Screw 1/4" x 1/2" HH NC, Whiz Loc   4   8   10-02025A   Label, "Hot/Caliente" w/Arrows Warning   2   9   90-20231   Nut, Cage, 1/4" x 12 Ga.   4   10   7-0141   Insulation, Burner Head, w/Hole1   11   7-01430   Insulation, Blanket - No Foil, 24" x 57"   1   12   95-07121212   Coil, Schedule 80 w/Mild Wrap 1   13   95-07121015   Wrap, Bottom, Stainless Steel 1   14   7-0140   Insulation, Front Head, No Hole 1   15   7-0144   Gasket, Burner Plate   2   16   95-07121113   PHW/VNG Insulation Retainer Plate   2   2   17   Burner Assembly, See Burner Spec's Page 21   1   18   2-1022   Elbow, 1/4" Street   1   19   2-1002   Nipple, 1/4" Close   1   1   2-1089   Hose Barb, 1/4" Barb x 1/4"   Pipe, 90°   1   2   2-9040   Clamp, Hose, 1/4" Barb x 1/4"   Pipe, 90°   1   2   2   2-9040   Clamp, Hose, 1/4" Barb x 1/4"   Pipe, 90°   1   2   2   2   2   2   3   Adapter, 1/2" JIC x 1/2" FPT   1   2   2   2   2   3   Adapter, 1/2" JIC x 1/2" FPT   1   2   2   2   3   4   3   4   3   3   4   4   4   4	1	95-07121014S	Top Wrap, SS, PHW Series II	1
4	2	90-1017	Bolt, 3/8" x 1-1/4" NC HH	12
28" x 24"   1   1   5   90-2990   Screw, SS #10 x 1/2" Hex   Head Tek   8   6   2-011504   Radiator Recovery Tank   1   7   90-19711   Screw 1/4" x 1/2" HH NC,   Whiz Loc   4   8   10-02025A   Label, "Hot/Caliente" w/Arrows   Warning   2   9   90-20231   Nut, Cage, 1/4" x 12 Ga.   4   10   7-0141   Insulation, Burner Head, w/Hole1   11   7-01430   Insulation, Blanket - No Foil,   24" x 57"   1   12   95-07121212   Coil, Schedule 80 w/Mild Wrap 1   13   95-07121015   Wrap, Bottom, Stainless Steel   1   14   7-0140   Insulation, Front Head, No Hole 1   15   7-0144   Gasket, Burner Plate   2   16   95-07121113   PHW/VNG Insulation   Retainer Plate   2   17   Burner Assembly, See Burner Spec's Page 21   1   18   2-1022   Elbow, 1/4" Street   1   19   2-1002   Nipple, 1/4" Close   1   19   2-1002   Nipple, 1/4" Close   1   10   2-1089   Hose Barb, 1/4" Barb x 1/4"   Pipe, 90°   1   1   22   2-9040   Clamp, Hose, 1/4"   Barb x 1/4"   Pipe, 90°   1   22   2-9040   Clamp, Hose, 1/4"   11   23   4-02100000   Hose, 1/4", Push-On   /ft.   15.32   24   95-07111428   Bracket, Rad. Rec. Tank   1   25   2-00120   Nipple, 1/2" x 5", Galv.   1   26   2-0083   Adapter, 1/2" JIC x 1/2" FPT   1   27   2-2007   Nipple, 3/8" x 3/8" NPT St Mal.   1   28   95-07101226   Discharge/Block 1/2"   1   1   29   4-05088   Thermostat, General, 302°   1   10   4-02047716   Hose, 16" x 3/8", 100R2,   Pres Loop   1   1   10   10   10   10   10   10	3	2-01104	Trim, 1/16" Black, /ft.	6
Head Tek	4	7-01484		1
7         90-19711         Screw 1/4" x 1/2" HH NC, Whiz Loc         4           8         10-02025A         Label, "Hot/Caliente" w/Arrows Warning         2           9         90-20231         Nut, Cage, 1/4" x 12 Ga.         4           10         7-0141         Insulation, Burner Head, w/Hole1           11         7-01430         Insulation, Blanket - No Foil, 24" x 57"         1           12         95-07121212         Coil, Schedule 80 w/Mild Wrap 1         1           13         95-07121015         Wrap, Bottom, Stainless Steel 1         1           14         7-0140         Insulation, Front Head, No Hole 1         1           15         7-0144         Gasket, Burner Plate 2         2           16         95-07121113         PHW/VNG Insulation Retainer Plate 2         2           17         Burner Assembly, See Burner Spec's Page 21         1           18         2-1022         Elbow, 1/4" Street 1         1           19         2-1002         Nipple, 1/4" Close 1         1           20         2-9905         Filter, Fuel/Oil H <sub>2</sub> O Separator 1         2           21         2-1089         Hose Barb, 1/4" Barb x 1/4" Pipe, 90° 1         1           22         2-9040         Clamp, Hose, 1/4" Pipe, 90°	5	90-2990		8
Whiz Loc	6	2-011504	Radiator Recovery Tank	1
Warning         2           9         90-20231         Nut, Cage, 1/4" x 12 Ga.         4           10         7-0141         Insulation, Burner Head, w/Hole1           11         7-01430         Insulation, Blanket - No Foil, 24" x 57"         1           12         95-07121212         Coil, Schedule 80 w/Mild Wrap 1         1           13         95-07121015         Wrap, Bottom, Stainless Steel 1         1           14         7-0140         Insulation, Front Head, No Hole 1         1           15         7-0144         Gasket, Burner Plate 2         2           16         95-07121113         PHW/VNG Insulation Retainer Plate 2         2           17         Burner Assembly, See Burner Spec's Page 21         1           18         2-1022         Elbow, 1/4" Street 1         1           19         2-1002         Nipple, 1/4" Close 1         1           20         2-9905         Filter, Fuel/Oil H <sub>2</sub> O Separator 1         2           21         2-1089         Hose Barb, 1/4" Barb x 1/4" Pipe, 90° 1         1           22         2-9040         Clamp, Hose, 1/4" Barb x 1/4" Pipe, 90° 1         1           23         4-02100000         Hose, 1/4", Push-On /ft. 15.32           24         95-0711	7	90-19711	· · · · · · · · · · · · · · · · · · ·	4
10	8	10-02025A	ŕ	
11	9	90-20231	Nut, Cage, 1/4" x 12 Ga.	4
24" x 57"       1         12       95-07121212       Coil, Schedule 80 w/Mild Wrap 1         13       95-07121015       Wrap, Bottom, Stainless Steel 1         14       7-0140       Insulation, Front Head, No Hole 1         15       7-0144       Gasket, Burner Plate 2         16       95-07121113       PHW/VNG Insulation Retainer Plate 2         17       Burner Assembly, See Burner Spec's Page 21 1         18       2-1022       Elbow, 1/4" Street 1         19       2-1002       Nipple, 1/4" Close 1         20       2-9905       Filter, Fuel/Oil H2O Separator 1         21       2-1089       Hose Barb, 1/4" Barb x 1/4" Pipe, 90° 1         22       2-9040       Clamp, Hose, 1/4" Barb x 1/4" Pipe, 90° 1         22       2-9040       Clamp, Hose, 1/4", Push-On /ft. 15.32         24       95-07111428       Bracket, Rad. Rec. Tank 1         25       2-00120       Nipple, 1/2" x 5", Galv. 1         26       2-0083       Adapter, 1/2" JIC x 1/2" FPT 1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal. 1         28       95-07101226       Discharge/Block 1/2" 1         29       4-05088       Thermostat, General, 302° 1         30       4-02047716	10	7-0141	Insulation, Burner Head, w/Ho	le1
13         95-07121015         Wrap, Bottom, Stainless Steel         1           14         7-0140         Insulation, Front Head, No Hole 1           15         7-0144         Gasket, Burner Plate         2           16         95-07121113         PHW/VNG Insulation Retainer Plate         2           17         Burner Assembly, See Burner Spec's Page 21         1           18         2-1022         Elbow, 1/4" Street         1           19         2-1002         Nipple, 1/4" Close         1           20         2-9905         Filter, Fuel/Oil H <sub>2</sub> O Separator         1           21         2-1089         Hose Barb, 1/4" Barb x 1/4" Pipe, 90°         1           22         2-9040         Clamp, Hose, 1/4"         11           23         4-02100000         Hose, 1/4", Push-On /ft.         15.32           24         95-07111428         Bracket, Rad. Rec. Tank         1           25         2-00120         Nipple, 1/2" x 5", Galv.         1           26         2-0083         Adapter, 1/2" JIC x 1/2" FPT         1           27         2-2007         Nipple, 3/8" x 3/8" NPT St Mal.         1           28         95-07101226         Discharge/Block 1/2"         1           29	11	7-01430		1
14         7-0140         Insulation, Front Head, No Hole 1           15         7-0144         Gasket, Burner Plate         2           16         95-07121113         PHW/VNG Insulation Retainer Plate         2           17         Burner Assembly, See Burner Spec's Page 21         1           18         2-1022         Elbow, 1/4" Street         1           19         2-1002         Nipple, 1/4" Close         1           20         2-9905         Filter, Fuel/Oil H <sub>2</sub> O Separator         1           21         2-1089         Hose Barb, 1/4" Barb x 1/4" Pipe, 90°         1           22         2-9040         Clamp, Hose, 1/4"         11           23         4-02100000         Hose, 1/4", Push-On /ft.         15.32           24         95-07111428         Bracket, Rad. Rec. Tank         1           25         2-00120         Nipple, 1/2" x 5", Galv.         1           26         2-0083         Adapter, 1/2" JIC x 1/2" FPT         1           27         2-2007         Nipple, 3/8" x 3/8" NPT St Mal.         1           28         95-07101226         Discharge/Block 1/2"         1           29         4-05088         Thermostat, General, 302°         1           30	12	95-07121212	Coil, Schedule 80 w/Mild Wrap	 о 1
15       7-0144       Gasket, Burner Plate       2         16       95-07121113       PHW/VNG Insulation Retainer Plate       2         17       Burner Assembly, See Burner Spec's Page 21       1         18       2-1022       Elbow, 1/4" Street       1         19       2-1002       Nipple, 1/4" Close       1         20       2-9905       Filter, Fuel/Oil H <sub>2</sub> O Separator       1         21       2-1089       Hose Barb, 1/4" Barb x 1/4" Pipe, 90°       1         22       2-9040       Clamp, Hose, 1/4"       11         23       4-02100000       Hose, 1/4", Push-On /ft.       15.32         24       95-07111428       Bracket, Rad. Rec. Tank       1         25       2-00120       Nipple, 1/2" x 5", Galv.       1         26       2-0083       Adapter, 1/2" JIC x 1/2" FPT       1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal.       1         28       95-07101226       Discharge/Block 1/2"       1         29       4-05088       Thermostat, General, 302°       1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop       1	13	95-07121015	Wrap, Bottom, Stainless Steel	1
16       95-07121113       PHW/VNG Insulation Retainer Plate       2         17       Burner Assembly, See Burner Spec's Page 21       1         18       2-1022       Elbow, 1/4" Street       1         19       2-1002       Nipple, 1/4" Close       1         20       2-9905       Filter, Fuel/Oil H <sub>2</sub> O Separator       1         21       2-1089       Hose Barb, 1/4" Barb x 1/4" Pipe, 90°       1         22       2-9040       Clamp, Hose, 1/4"       11         23       4-02100000       Hose, 1/4", Push-On /ft.       15.32         24       95-07111428       Bracket, Rad. Rec. Tank       1         25       2-00120       Nipple, 1/2" x 5", Galv.       1         26       2-0083       Adapter, 1/2" JIC x 1/2" FPT       1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal.       1         28       95-07101226       Discharge/Block 1/2"       1         29       4-05088       Thermostat, General, 302°       1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop       1	14	7-0140	Insulation, Front Head, No Ho	le 1
Retainer Plate         2           17         Burner Assembly, See Burner Spec's Page 21         1           18         2-1022         Elbow, 1/4" Street         1           19         2-1002         Nipple, 1/4" Close         1           20         2-9905         Filter, Fuel/Oil H <sub>2</sub> O Separator         1           21         2-1089         Hose Barb, 1/4" Barb x 1/4" Pipe, 90°         1           22         2-9040         Clamp, Hose, 1/4"         11           23         4-02100000         Hose, 1/4", Push-On /ft.         15.32           24         95-07111428         Bracket, Rad. Rec. Tank         1           25         2-00120         Nipple, 1/2" x 5", Galv.         1           26         2-0083         Adapter, 1/2" JIC x 1/2" FPT         1           27         2-2007         Nipple, 3/8" x 3/8" NPT St Mal.         1           28         95-07101226         Discharge/Block 1/2"         1           29         4-05088         Thermostat, General, 302°         1           30         4-02047716         Hose, 16" x 3/8", 100R2, Pres Loop         1	15	7-0144	Gasket, Burner Plate	2
18       2-1022       Elbow, 1/4" Street       1         19       2-1002       Nipple, 1/4" Close       1         20       2-9905       Filter, Fuel/Oil H2O Separator       1         21       2-1089       Hose Barb, 1/4" Barb x 1/4" Pipe, 90°       1         22       2-9040       Clamp, Hose, 1/4"       11         23       4-02100000       Hose, 1/4", Push-On /ft.       15.32         24       95-07111428       Bracket, Rad. Rec. Tank       1         25       2-00120       Nipple, 1/2" x 5", Galv.       1         26       2-0083       Adapter, 1/2" JIC x 1/2" FPT       1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal.       1         28       95-07101226       Discharge/Block 1/2"       1         29       4-05088       Thermostat, General, 302°       1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop       1	16	95-07121113		2
19       2-1002       Nipple, 1/4" Close       1         20       2-9905       Filter, Fuel/Oil H <sub>2</sub> O Separator       1         21       2-1089       Hose Barb, 1/4" Barb x 1/4" Pipe, 90°       1         22       2-9040       Clamp, Hose, 1/4"       11         23       4-02100000       Hose, 1/4", Push-On /ft.       15.32         24       95-07111428       Bracket, Rad. Rec. Tank       1         25       2-00120       Nipple, 1/2" x 5", Galv.       1         26       2-0083       Adapter, 1/2" JIC x 1/2" FPT       1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal.       1         28       95-07101226       Discharge/Block 1/2"       1         29       4-05088       Thermostat, General, 302°       1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop       1	17	Burner Assembly	, See Burner Spec's Page 21	1
20       2-9905       Filter, Fuel/Oil H2O Separator       1         21       2-1089       Hose Barb, 1/4" Barb x 1/4" Pipe, 90°       1         22       2-9040       Clamp, Hose, 1/4"       11         23       4-02100000       Hose, 1/4", Push-On /ft. 15.32         24       95-07111428       Bracket, Rad. Rec. Tank       1         25       2-00120       Nipple, 1/2" x 5", Galv.       1         26       2-0083       Adapter, 1/2" JIC x 1/2" FPT 1       1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal. 1       1         28       95-07101226       Discharge/Block 1/2" 1       1         29       4-05088       Thermostat, General, 302° 1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop 1	18	2-1022	Elbow, 1/4" Street	1
21       2-1089       Hose Barb, 1/4" Barb x 1/4" Pipe, 90°       1         22       2-9040       Clamp, Hose, 1/4"       11         23       4-02100000       Hose, 1/4", Push-On /ft. 15.32         24       95-07111428       Bracket, Rad. Rec. Tank 1         25       2-00120       Nipple, 1/2" x 5", Galv. 1         26       2-0083       Adapter, 1/2" JIC x 1/2" FPT 1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal. 1         28       95-07101226       Discharge/Block 1/2" 1         29       4-05088       Thermostat, General, 302° 1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop 1	19	2-1002	Nipple, 1/4" Close	1
Pipe, 90°         1           22         2-9040         Clamp, Hose, 1/4"         11           23         4-02100000         Hose, 1/4", Push-On /ft. 15.32           24         95-07111428         Bracket, Rad. Rec. Tank 1         1           25         2-00120         Nipple, 1/2" x 5", Galv. 1         1           26         2-0083         Adapter, 1/2" JIC x 1/2" FPT 1         1           27         2-2007         Nipple, 3/8" x 3/8" NPT St Mal. 1         1           28         95-07101226         Discharge/Block 1/2" 1         1           29         4-05088         Thermostat, General, 302° 1         1           30         4-02047716         Hose, 16" x 3/8", 100R2, Pres Loop 1         1	20	2-9905	Filter, Fuel/Oil H <sub>2</sub> O Separator	1
23       4-02100000       Hose, 1/4", Push-On /ft.       15.32         24       95-07111428       Bracket, Rad. Rec. Tank       1         25       2-00120       Nipple, 1/2" x 5", Galv.       1         26       2-0083       Adapter, 1/2" JIC x 1/2" FPT       1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal.       1         28       95-07101226       Discharge/Block 1/2"       1         29       4-05088       Thermostat, General, 302°       1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop       1	21	2-1089		1
24       95-07111428       Bracket, Rad. Rec. Tank       1         25       2-00120       Nipple, 1/2" x 5", Galv.       1         26       2-0083       Adapter, 1/2" JIC x 1/2" FPT       1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal.       1         28       95-07101226       Discharge/Block 1/2"       1         29       4-05088       Thermostat, General, 302°       1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop       1	22	2-9040	Clamp, Hose, 1/4"	11
25       2-00120       Nipple, 1/2" x 5", Galv.       1         26       2-0083       Adapter, 1/2" JIC x 1/2" FPT       1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal.       1         28       95-07101226       Discharge/Block 1/2"       1         29       4-05088       Thermostat, General, 302°       1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop       1	23	4-02100000	Hose, 1/4", Push-On /ft. 1	5.32
26       2-0083       Adapter, 1/2" JIC x 1/2" FPT       1         27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal.       1         28       95-07101226       Discharge/Block 1/2"       1         29       4-05088       Thermostat, General, 302°       1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop       1	24	95-07111428	Bracket, Rad. Rec. Tank	1
27       2-2007       Nipple, 3/8" x 3/8" NPT St Mal. 1         28       95-07101226       Discharge/Block 1/2" 1         29       4-05088       Thermostat, General, 302° 1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop 1	25	2-00120	Nipple, 1/2" x 5", Galv.	1
28       95-07101226       Discharge/Block 1/2"       1         29       4-05088       Thermostat, General, 302°       1         30       4-02047716       Hose, 16" x 3/8", 100R2, Pres Loop       1	26	2-0083	Adapter, 1/2" JIC x 1/2" FPT	1
29 4-05088 Thermostat, General, 302° 1  30 4-02047716 Hose, 16" x 3/8", 100R2, Pres Loop 1	27	2-2007	Nipple, 3/8" x 3/8" NPT St Mal	l. 1
30 4-02047716 Hose, 16" x 3/8", 100R2, Pres Loop 1	28	95-07101226	Discharge/Block 1/2"	1
Pres Loop 1	29	4-05088	Thermostat, General, 302°	1
	30	4-02047716		1
	31	2-00241		g 1

ITEM	PART NO.	DESCRIPTION	YTÇ		
32	6-02174	Switch, Reed (Replacement)	1		
33	6-021730	Switch, Flow, MV 60	1		
34	4-02120000	Hose, 3/4", Push-On /ft.	5		
35	2-11050	Swivel, 3/4" JIC Fem, Push-Or	n 1		
36	2-10630	Elbow, 3/4" JIC x 1/2", 90°	1		
37	4-02047725	Hose, 25" x 3/8", 100R2, Pres Loop	1		
38	2-0051	Nipple, 1/2" JIC x 3/8" Pipe	1		
39	2-0006	Nipple, 3/8" Hex	1		
40	74-9997832	Shaft, Lombardini	1		
41	2-1060	Elbow, 1/2" JIC x 3/8", 90°	1		
42	5-3208	Unloader, AR, AL 607	1		
43	2-00682	Bushing, 3/8" x 1/4" Steel	1		
44	90-1020	Bolt, 3/8" x 2", NC HH	2		
45	2-0079	Swivel, 1/2" JIC x 3/8" Male	1		
46	95-07141032	Panel, Front	1		
47	2-30082	Pump Protector, 1/2" PTP	1		
48	2-1007	Nipple, 1/2" Hex	1		
49	2-1035	Cross, 1/2" Female, Pipe	1		
50	2-1062	Elbow, 1/2" JIC x 1/2", 90°	1		
51	6-0601	Generator, Winco 2000 Watt	1		
52	2-00101	Nipple, 1/2" x 4", GALV. SCH.80	1		
53	90-10220	Bolt, 3/8" x 3-1/2", Tap	5		
54	95-07141110	Retainer, Pump Take Up, Plated	2		
55	95-071211125	Pump & Gen. Rail, Heavy Duty	y 2		
56	Engine Assembly	See Spec's Page 22-23			
	74-5460150	▲ Muffler, 23 HP (6-3500)	1		
	74-5460464	▲ Muffler, 15 HP (5-3000)	1		
	74-4501118	▲ Gasket, Muffler, 23 HP (6-3500)	1		
	74-4501113	▲ Gasket, Muffler, 15 HP (5-3000)	1		
	95-07141037	▲ Guard, Muffler, Lombardini			
57	Bushing, See Spe	ec's Page 22-23	1		
58	Pulley, Generator	, See Spec's Page 22-23	1		
59	Belt, Generator, See Spec's Page 22-23 1				

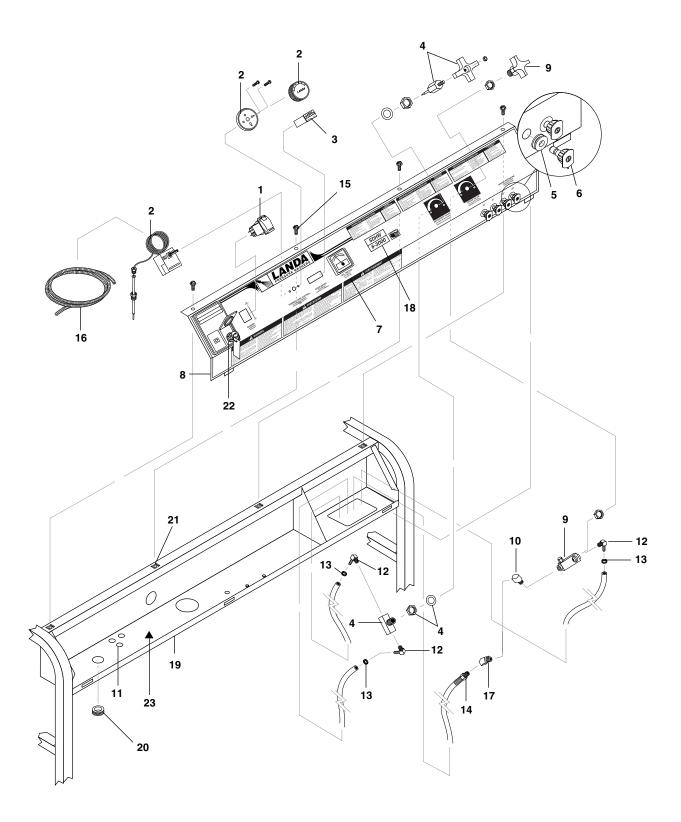
## **SDHW EXPLODED VIEW PARTS LIST**

ITEM	PART NO.	DESCRIPTION	QTY				
60	Bushing, Engine	e, See Spec's Page 22-23	1				
61	Pulley, Engine, See Spec's Page 22-23 1						
62	Belt, Engine, Se	ee Spec's Page 22-23	1				
63	Pulley, Pump, S	ee Spec's Page 22-23	1				
64	Bushing, Pump,	See Spec's Page 22-23	1				
65	2-0053	Elbow, 1/2" JIC x 3/8" 90°	1				
66	2-1105	Swivel, 1/2" JIC Fem, Push-0	On 4				
68	2-1050	Plug, 1/2" JIC, Flare	1				
69	95-07141038	Belt Guard, End Support, Gen. End	1				
70	95-07141296	Belt Guard, Cover,	1				
71	95-07141060	Face, Plate, Belt Guard	1				
72	95-07111422	End Support, Belt Guard, Pump End	1				
73	Pump Assembly	, See Spec's Page 22-23	1				
74	90-1017	Bolt, 3/8" x 1-1/4"	10				
75	2-1076	Bushing, 1/2" x 1/4" Pipe	1				
76	2-1089	Hose Barb, 1/4" Barb x 1/4" Pipe, 90°	2				
77	90-2002	Nut, 3/8", ESNA, NC	49				
78	90-4002	Washer, 3/8", SAE, Flat	70				
79	90-10343	Bolt, 10 mm x 20 mm, HH	4				
80	90-101810	Bolt, 3/8" x 1-1/2" NG HH GRD8	4				
81	2-0009	Nipple, 1/2" x 3" Gal.	1				
82	95-07141059	Platform, Power (5-3000)	1				
	95-07141058	Platform, Power (6-3500)	1				
83	95-07141025	Cage, SDHW (6-3500, 5-300	00) 1				
84	90-2001	Nut, 5/16", ESNA	18				
85	95-07164010	Strap, MP Fuel Tank w/Hole	8				
86	4-02110000	Hose, 1/2" /ft.	3.5				
87	10-020090	Label, Diesel	2				
88	2-1037	Tee, 1/4" Branch Tee	1				
89	2-01167	Cap, Fuel Tank, Plastic	2				
90	2-010064	Diptube, Plastic, w/Elbow	2				
	2-010061	▲ Bushing, Rubber, Nitrile	2				
91	2-010068	Elbow, Fuel Tank	1				
	2-010061	▲ Bushing, Rubber	1				

ITEM	PART NO.	DESCRIPTION	QTY
92	2-011501	Tank, Fuel, 10 Gallon Poly, Green	2
93	2-0115	Box, Battery, M100, Large	1
	2-011500	▲ Plate, Battery Box, Large, Polypro	1
94	90-10051	Screw, 5/16" x 1/2", Buttonhead	4
95	90-4008	▲ Washer, 5/16", Lock Split Ring	4
96	2-01011	Isolator, 5/16", F x F 1"	4
97	90-2018	Nut, Cage 10/32" x 16 GA	10
98	95-07101216/B	Block, Unloader 3/8" x 3/8"	1
99	2-4019	Gasket, Fuel Tank /ft	2.33
100	7-12484	▲ Gasket, Standard, Large	1
101	2-11065	Adapter, M18 - 1.5" x 3/8" Fe	m 1
102	4-02130050	Hose, Conduit, 7/8" /ft	1.75
103	2-3408	Rupture Disk Assy, 8000 PSI	1
104	2-3480	Rupture Disk, Replacement, 8000 PSI	1
105	2-9004	Clamp, Screw	1
106	2-0032	Elbow, 1/2" Street	1
107	10-020110	Label, Use Only Kerosene/ Diesel	1
108	10-02028	Label, Warning, Exposed Pulleys	2
109	90-1019	Bolt, 3/8" x 1-3/4" Tap	4
110	2-01014	Vibration Isolator, LRI 150	2
111	2-0053	Elbow, 1/2" JIC x 3/8" Male	3
112	90-19995	Screw, 10/32" x 3/4" SOC SS	10
113	2-1085	Hose Barb, 1/4" ML Pipe x 1/4" Barb	1
114	2-01013	Vibration Isolator, LRI 100	6
115	90-1021	Bolt 3/8" x 2-1/2" HH	12
116	90-4011	Washer, 5/16", Star	4
117	90-1006	Bolt, 5/16" x 3/4"	5
118	90-1007	Bolt, 5/16" x 1", NC HH	18
119	2-011981	Washer, Snubbing	8
120	90-4001	Washer, 5/16" Flat	37
121	2-010066	Elbow, Fuel Tank	1
	2-010061	▲ Bushing, Rubber	1
122	2-9000	Clamp, Screw, #4	2

▲ Not Shown

## **SDHW CONTROL PANEL**

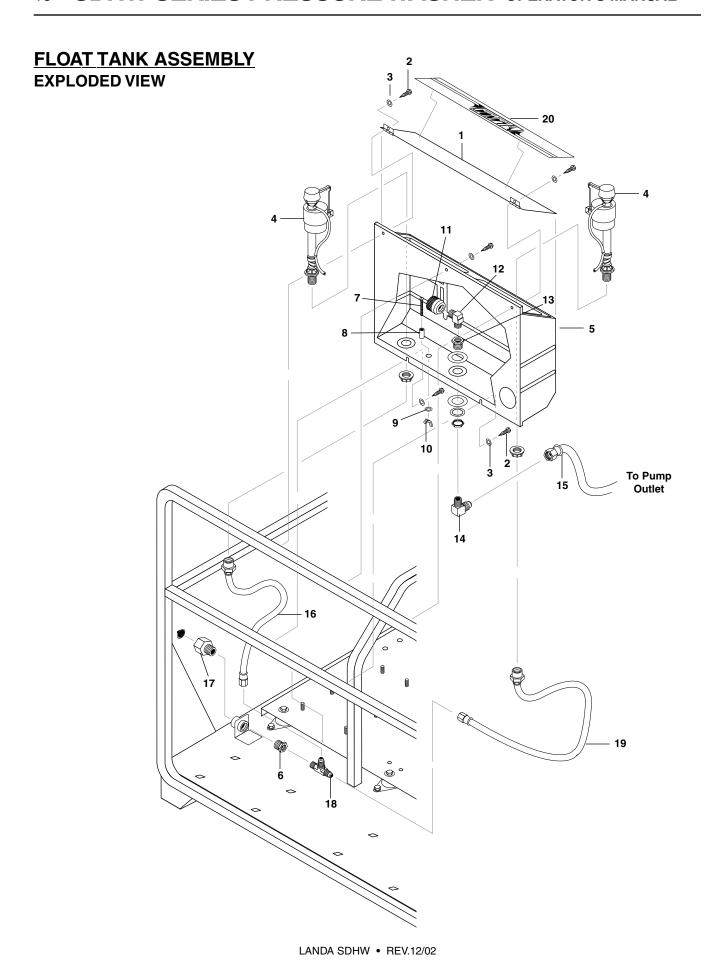


## **SDHW CONTROL PANEL PARTS LIST**

ITEM	PART NO.	DESCRIPTION	QTY
1	6-020240	Switch, Rocker, Green Lens	1
2	4-05088	Thermostat, General, 302°	1
3	4-050822	Hour Meter, ENM, 115V, 50/60 Hz	1
	4-05070	Hour Meter, 220V AC (5-30821E/K only)	1
4	2-3015	Valve, Control, Metering	1
	90-4005	▲ Washer, 5/8" SAE, Flat, Zi	inc 1
	90-40073	▲ Washer, 5/8", Internal Star - Zinc	1
5	2-0103	Grommet, 1/8", Rubber	4
6	4-12805500	Nozzle, SAQCMEG0005.5 Red (6-3500)	1
	4-12805515	Nozzle, SAQCMEG 1505.5, Yellow (6-3500)	1
	4-12805525	Nozzle, SAQCMEG 2505.5, Green (6-3500)	1
	4-12805540	Nozzle, SAQCMEG 4005.5, White (6-3500)	1
	4-12805000	Nozzle, SAQCMEG 0005, Red (5-3000)	1
	4-12805015	Nozzle, SAQCMEG 1505, Yellow (5-3000)	1
	4-12805025	Nozzle, SAQCMEG 2505, Green (5-3000)	1
	4-12805040	Nozzle, SAQCMEG 4005, White (5-3000)	1
7	4-0507	Voltmeter, 120V (All models)	1

ITEM	PART NO.	DESCRIPTION	QTY
8	95-07141034	Panel, Control	1
9	2-30151	Valve, Flow w/Metering	1
	90-4005	▲ Washer, 5/8" SAE, Flat, Z	inc 1
	90-40073	▲ Washer, 5/8" Star, Zinc	1
10	2-0030	Elbow, 1/4", Street 90°	1
11	2-01403	▲ Bushing, 5/8", Snap	1
	6-0516	▲ Strain Relief, 1/2"	2
12	2-1089	Hose Barb, 1/4" Barb x 1/4" Pipe, 90°	3
13	2-9040	Clamp, Hose, 1/4"	3
14	4-02021242	Hose, 1/4" x 42", 100R2, Steam Line (5-3000)	1
	4-02021248	Hose, 1/4" x 48", 100R2 (6-3500)	1
15	90-19942	Screw, 10/32" x 3/4"	4
16	6-01270	Conduit, Thermostat, Tube	/ft. 4
17	2-00330	Elbow 1/4" Street 45°	1
18	10-08007	Label, Control Panel	1
19	95-07141039	▲ Bracket, Front Guard	1
_20	2-01033	Grommet, 1-3/4"	1
21	90-2018	Nut, Cage 10/32" x 16 Ga.	4
22	6-020602	Nut, Rubber Faced	1
23	90-1994	▲ Screw, 10/32" x 1-1/4" (Ground)	1
	90-017	▲ Nut, 10/32"	3
	11-1042	▲ Label, Ground	1

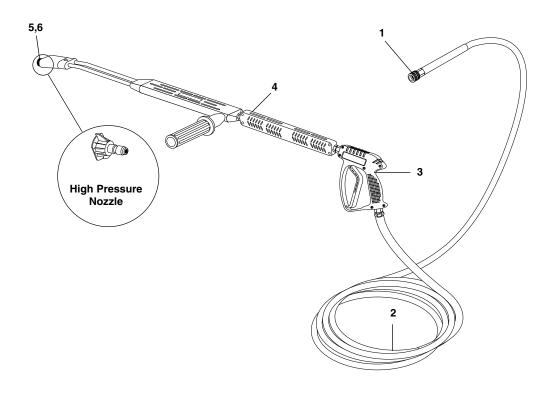
▲ Not Shown



## **FLOAT TANK ASSEMBLY PARTS LIST**

ITEM	PART NO.	DESCRIPTION	QTY
1	95-07121207	Lid & Hinges, Plastic, Flt. Tank	1
2	90-300210	Screw, #14 x 1", Tek, Blk, Zinc	5
3	90-40002	Washer, 1/4", SAE, Black, Zinc	3
4	2-3014	Valve, Fluidmaster, Float	2
5	2-01164	Tank, Plastic Universal Float	1
6	2-1081	Bushing, 3/4" x 1/2"	1
7	90-4030	Screw, 5/8" - 18 x 1-1/2" SS, Button Socket	1
8	2-0151	Plug, Float Tank	1
9	90-4032	Washer, 5/16", SS	1
10	90-4031	Nut, 5/16" - 18, Wing, SS	1
11	2-1906	Strainer, 1/2" Basket	1
12	2-1062	Elbow, 1/2" JIC x 1/2", 90°	1
13	2-11041	Connector, 1/2" Anchor	1
14	2-10630	Elbow, 3/4" JIC x 1/2", 90°	1
15	2-11050	Swivel, 3/4" JIC Fem, Push-On	1
16	4-02100030	Inlet Hose, 30", Supply Water	1
17	2-10942	Swivel, 1/2" MP x 3/4" GHF w/Strainer	1
18	2-10712	Tee, 1/2" x 1/2" JIC	1
19	4-02100045	Inlet Hose, 45" Supply Water	1
20	10-99057	Label, Float Tank	1

# HOSE & SPRAY GUN ASSEMBLY ALL MODELS



1 2-2002 Coupler, 3/8" Female 2-0121	ITEM	PART NO.	DESCRIPTION	QTY
Replacement only         2       4-02043450       Hose, 50' x 3/8" 100R2         3       4-01212       Spray Gun, Shut-off, 2000         4       4-0111391       VP Wand, Only, AR SS (AL344), SS         83-SSVPKIT       ▲ Repair Kit, AR Wand         5       4-06540       ▲ Soap Nozzle, 1/8" Brass         6       2-2001       ▲ Quick Coupler, 1/4" Male	1	2-2002	Coupler, 3/8" Female	1
3 4-01212 Spray Gun, Shut-off, 2000 4 4-0111391 VP Wand, Only, AR SS (AL344), SS 83-SSVPKIT ▲ Repair Kit, AR Wand 5 4-06540 ▲ Soap Nozzle, 1/8" Brass 6 2-2001 ▲ Quick Coupler, 1/4" Male		2-0121	•	1
4 4-0111391 VP Wand, Only, AR SS (AL344), SS  83-SSVPKIT ▲ Repair Kit, AR Wand  5 4-06540 ▲ Soap Nozzle, 1/8" Brass  6 2-2001 ▲ Quick Coupler, 1/4" Male	2	4-02043450	Hose, 50' x 3/8" 100R2	1
83-SSVPKIT ▲ Repair Kit, AR Wand  5 4-06540 ▲ Soap Nozzle, 1/8" Brass  6 2-2001 ▲ Quick Coupler, 1/4" Male	3	4-01212	Spray Gun, Shut-off, 2000	1
5 4-06540 ▲ Soap Nozzle, 1/8" Brass 6 2-2001 ▲ Quick Coupler, 1/4" Male	4	4-0111391	VP Wand, Only, AR SS (AL344), SS	1
6 2-2001 ▲ Quick Coupler, 1/4" Male		83-SSVPKIT	▲ Repair Kit, AR Wand	1
	5	4-06540	▲ Soap Nozzle, 1/8" Brass	1
2-0119 ▲ Quick Coupler O-ring, 1/4" Replacement Only	6	2-2001	▲ Quick Coupler, 1/4" Male	1
		2-0119	▲ Quick Coupler O-ring, 1/4" Replacement Only	1

▲ Not Shown

## **BECKETT BURNER SPECIFICATIONS**

Model No.	Burner Assy No.	Fuel Nozzle	Transformer	Burner Motor	Fuel/Pump Solenoid/Cord	Fuel Solenoid Coil	Electrode
SDHW5-30821E	7-00011	7-01284	7-51824	7-21344U	7-21844U	7-21755U	7-578703
SDHW5-30824E	7-00011	7-01284	7-51824	7-21344U	7-21844U	7-21755U	7-578703
SDHW6-35821E	7-00011	7-01284	7-51824	7-21344U	7-21844U	7-21755U	7-578703
SDHW6-35824E	7-00011	7-01284	7-51824	7-21344U	7-21844U	7-21755U	7-578703

### **WAYNE BURNER SPECIFICATIONS**

Model No.	Burner Assy No.	Fuel Nozzle	Transformer	Burner Motor	Fuel/Pump Solenoid/Cord	Fuel Solenoid Coil	Electrode
SDHW5-30821E	7-00034	7-0128	7-20358	7-0005	7-0009	7-0009611	7-13286
SDHW5-30824E	7-00034	7-0128	7-20358	7-0005	7-0009	7-0009611	7-13286
SDHW6-35821E	7-00034	7-0128	7-20358	7-0005	7-0009	7-0009611	7-13286
SDHW6-35824E	7-00034	7-0128	7-20358	7-0005	7-0009	7-0009611	7-13286

## PARTS SPECIFICATIONS: LANDA PUMP

	PUMP -													
Machine	PSI	Pump			Pulley		Bushing	Belt	Belt					
Model	Nozzle	Model	Part#	Pulley	Part#	Bushing	Part#	Size/Qty	Part#	Size	Type	Part#	Pulley	
5-35324E	05	NA	N/A	N/A	N/A	25mm	5-512501	N/A	N/A	15HP	LOMBARDINI	5-0405	N/A	
6-35824E	05.5	LT6035/L	5-1733	2BK90	5-40509001	25mm	5-512501	BX39(2)	5-604039	24HP	LOMBARDINI	5-0407	37B34	

## **PARTS SPECIFICATIONS: GENERAL PUMP**

							PI	UMP 💳						
Machine	PSI	Pump			Pulley		Bushing	Belt	Belt					
Model	Nozzle	Model	Part#	Pulley	Part#	Bushing	Part#	Size/Qty	Part#	Size	Type	Part#	Pulley	
5-30821E	05	TS2021/L	5-2306	2BK100H	5-40510001	24mm	5-512401	BX40(2)	5-604040	15HP	LOMBARDINI	5-0405	3TB34	
6-35821E	05.5	TS2021/L	5-2306	2BK80H	5-40508001	24mm	5-512401	BX37(2)	5-604037	24HP	LOMBARDINI	5-0407	3TB40	

•			ENGINE			GENERATOR ————					
	Model	Pulley		Bushing		Pulley		Bushing	Belt	Belt	
	(Contt)	Part#	Bushing	Part#	Pulley	Part#	Bushing	Part#	Size/Qty	Part#	
	5-35324E	NA	P2x1-1/2"	5-531114	N/A	NA	5/8"	5-511063	BX22(1)	5-604022	
	6-35824E	5-407034	P2x1-1/2"	5-531114	BK34	5-40503401	5/8"	5-511063	BX22(1)	5-604022	

_			ENGINE			GENERATOR					
	Model	Pulley		Bushing		Pulley		Bushing	Belt	Belt	
	(Cont)	Part#	Bushing	Part#	Pulley	Part#	Bushing	Part#	Size/Qty	Part#	
	5-30821E	5-407034	P2x1-1/2"	5-531114	BK32H	5-40503201	5/8"	5-511063	BX22(1)	5-604022	
	6-35821E	5-407040	P2x1-1/2"	5-531114	BK30H	5-40503001	5/8"	5-511063	BX22(1)	5-604022	

## **TROUBLESHOOTING**

PROBLEM	POSSIBLE CAUSE	SOLUTION
LOW OPERATING	Faulty pressure gauge	Install new gauge.
PRESSURE	Insufficient water supply	Use larger supply hose; clean filter at water inlet.
	Old, worn or incorrect spray nozzle	Match nozzle number to machine and/or replace with new nozzle.
	Belt slippage	Tighten or replace; use correct belt.
	Plumbing or hose leak	Check plumbing system for leaks. Retape leaks with teflon tape.
	Faulty or misadjusted unloader valve (Where applicable)	Adjust unloader for proper pressure. Install repair kit when needed.
	Worn packing in pump	Install new packing kit.
	Fouled or dirty inlet or discharge valves in pump	Clean inlet and discharge valves.
	Worn inlet or discharge valves	Replace with valve kit.
	Obstruction in spray nozzle	Remove obstruction.
	Leaking pressure control valve (where applicable)	Rebuild or replace as needed.
	Slow engine RPM	Set engine speed at proper specifications.
BURNER WILL	Little or no fuel	Fill tank with fuel.
NOT LIGHT	Improper fuel or water in fuel	Drain fuel tank and fill with proper fuel.
	Clogged fuel line	Clean or replace.
	Plugged fuel filter	Replace as needed.
	Misadjusted burner air bands	Readjust air bands for clean burn.
	Little or no fuel pressure from fuel pump	Increase fuel pressure to specification and/or replace fuel pump.
	Faulty burner transformer	Test transformer for proper arc between contacts. Replace as needed.
	Disconnected or short in electricial wiring	All wire contacts should be clean and tight. No breaks in wire.
	Flex coupling slipping on fuel pump shaft or burner motor shaft	Replace if needed.
	On-Off switch defective	Check for electrical current reaching burner assembly with burner switch on.
	Heavy sooting on coil and burner can cause interruption of air flow and shorting of electrodes	Clean as required.
	Improper electrode setting	Check and reset according to diagram in Operator's Manual.
	Fuel not reaching combustion chamber	Check fuel pump for proper flow. Check solenoid flow switch on machines with spray gun control, for proper on-off fuel flow control.
	Clogged burner nozzle	Clean as required.

## **TROUBLESHOOTING**

LIGHT cont.  Spee Flow Flow MACHINE SMOKES  Impre Low Plugg caus Heav and I  Misa Obst  Low  BURNER MOTOR WILL NOT RUN  Burn Defe Loos Defe Loos Defe Low Wea	mostat faulty or slow engine d switch malfunction solenoid malfunction oper fuel or water in fuel oper air adjustment fuel pressure ged, dirty or faulty burner nozzle ing incorrect spray pattern by accumulation of soot on coils ourner assembly ligned electrode setting ruction in smoke stack engine RPM pump seized er fan loose or misaligned	Increase engine RPM to increase voltage.  Remove, test for continuity and replace as needed.  Replace if needed.  Drain tank and replace contaminated fuel.  Readjust air bands on burner assembly.  Adjust fuel pump pressure to specifications. Call local Landa Dealer.  Replace nozzle.  Remove coils and burner assembly, clean thoroughly. Call local Landa Dealer.  Realign electrodes to specifications.  Check for insulation blockage or other foreign objects.  Increase RPM. See serial plate for RPM.  Replace fuel pump.  Position correctly, tighten set screws.							
MACHINE SMOKES  Impro Impro Low Plugg caus Heav and I  Misa Obst  Low  BURNER MOTOR WILL NOT RUN  Burn Defe Loos Defe Loos Defe Low Wea	solenoid malfunction  oper fuel or water in fuel oper air adjustment fuel pressure  ged, dirty or faulty burner nozzle ing incorrect spray pattern ry accumulation of soot on coils ourner assembly  ligned electrode setting ruction in smoke stack  engine RPM pump seized	as needed.  Replace if needed.  Drain tank and replace contaminated fuel.  Readjust air bands on burner assembly.  Adjust fuel pump pressure to specifications. Call local Landa Dealer.  Replace nozzle.  Remove coils and burner assembly, clean thoroughly. Call local Landa Dealer.  Realign electrodes to specifications.  Check for insulation blockage or other foreign objects.  Increase RPM. See serial plate for RPM.  Replace fuel pump.							
MACHINE SMOKES  Impro Impro Low Plugg caus Heav and I  Misa Obst  Low  BURNER MOTOR WILL NOT RUN  Burn Defe Loos Defe Loos Defe Low Water TEMPERATURE  Impro Wea	oper fuel or water in fuel oper air adjustment fuel pressure ged, dirty or faulty burner nozzle ing incorrect spray pattern ry accumulation of soot on coils burner assembly ligned electrode setting ruction in smoke stack engine RPM pump seized	Drain tank and replace contaminated fuel.  Readjust air bands on burner assembly.  Adjust fuel pump pressure to specifications. Call local Landa Dealer.  Replace nozzle.  Remove coils and burner assembly, clean thoroughly. Call local Landa Dealer.  Realign electrodes to specifications.  Check for insulation blockage or other foreign objects.  Increase RPM. See serial plate for RPM.  Replace fuel pump.							
Impro Impro Low Plugg caus Heav and I  Misa Obst  Low  BURNER MOTOR WILL NOT RUN  Burn Defe Loos Defe Loos Defe Low Wea	oper air adjustment fuel pressure  ged, dirty or faulty burner nozzle ing incorrect spray pattern ry accumulation of soot on coils ourner assembly  ligned electrode setting ruction in smoke stack  engine RPM pump seized	fuel.  Readjust air bands on burner assembly.  Adjust fuel pump pressure to specifications. Call local Landa Dealer.  Replace nozzle.  Remove coils and burner assembly, clean thoroughly. Call local Landa Dealer.  Realign electrodes to specifications.  Check for insulation blockage or other foreign objects.  Increase RPM. See serial plate for RPM.  Replace fuel pump.							
BURNER MOTOR WILL NOT RUN  BURNER MOTOR WILL NOT RUN  Burn  Defe Loos  Defe Low  TEMPERATURE  Low  Wea	fuel pressure  ged, dirty or faulty burner nozzle ing incorrect spray pattern ry accumulation of soot on coils burner assembly  ligned electrode setting ruction in smoke stack  engine RPM pump seized	Adjust fuel pump pressure to specifications. Call local Landa Dealer.  Replace nozzle.  Remove coils and burner assembly, clean thoroughly. Call local Landa Dealer.  Realign electrodes to specifications.  Check for insulation blockage or other foreign objects.  Increase RPM. See serial plate for RPM.  Replace fuel pump.							
BURNER MOTOR WILL NOT RUN  BURNER MOTOR WILL NOT RUN  Burn Defer Loos Defer Low Wea	ged, dirty or faulty burner nozzle ing incorrect spray pattern by accumulation of soot on coils burner assembly ligned electrode setting ruction in smoke stack engine RPM pump seized	specifications. Call local Landa Dealer.  Replace nozzle.  Remove coils and burner assembly, clean thoroughly. Call local Landa Dealer.  Realign electrodes to specifications.  Check for insulation blockage or other foreign objects.  Increase RPM. See serial plate for RPM.  Replace fuel pump.							
BURNER MOTOR WILL NOT RUN  BURNER MOTOR WILL NOT RUN  Burn Defer Loos Defer Low Wea	ing incorrect spray pattern ry accumulation of soot on coils burner assembly  ligned electrode setting ruction in smoke stack  engine RPM pump seized	Remove coils and burner assembly, clean thoroughly. Call local Landa Dealer.  Realign electrodes to specifications.  Check for insulation blockage or other foreign objects.  Increase RPM. See serial plate for RPM.  Replace fuel pump.							
BURNER MOTOR WILL NOT RUN  BURNER MOTOR WILL NOT RUN  Burn Defe Loos Defe Low TEMPERATURE  Impro Low Wea	ligned electrode setting ruction in smoke stack engine RPM pump seized	clean thoroughly. Call local Landa Dealer.  Realign electrodes to specifications.  Check for insulation blockage or other foreign objects.  Increase RPM. See serial plate for RPM.  Replace fuel pump.							
BURNER MOTOR WILL NOT RUN  Burn Deference Loos Deference LOW WATER TEMPERATURE  LOW Wea	engine RPM pump seized	Check for insulation blockage or other foreign objects.  Increase RPM. See serial plate for RPM.  Replace fuel pump.							
BURNER MOTOR WILL NOT RUN  Burn Defe Loos Defe LOW WATER TEMPERATURE  LOW Wea	engine RPM pump seized	foreign objects.  Increase RPM. See serial plate for RPM.  Replace fuel pump.							
BURNER MOTOR WILL NOT RUN  Burn  Defe  Loos  Defe  LOW WATER  TEMPERATURE  LOW  Wea	pump seized	Replace fuel pump.							
NOT RUN  Burn  Defer  Loos  Defer  LOW WATER  TEMPERATURE  Low  Wea	•								
Deference Loos Deference Low WATER TEMPERATURE Low Wear	er fan loose or misaligned	Position correctly tighten set screws							
Loos Defer LOW WATER TEMPERATURE Low Wea		1 dolation domoday, agritori dot dolowo.							
LOW WATER Impro TEMPERATURE Low Wea	ctive control switch	Replace switch.							
LOW WATER TEMPERATURE Low Wea	e wire	Check and replace or tighten wiring.							
TEMPERATURE Low Wea	ctive burner motor	Replace motor.							
Wea	oper fuel or water in fuel	Replace with clean and proper fuel.							
	fuel pressure	Increase fuel pressure.							
	k fuel pump	Check fuel pump pressure. Replace pump if needed.							
Fuel	filter partially clogged	Replace as needed.							
	buildup on coils not allowing transfer	Clean coils. Call local Landa Dealer.							
Impre	oper burner nozzle	See breakdown for model.							
	ning water to machine warm or hot	Lower incoming water temperature.							
TEMPERATURE Fuel	pump pressure too high	Call local Landa Dealer for proper fuel pressure.							
Fuel	pump defective	Replace fuel pump.							
Dete	rgent line sucking air	Tighten all clamps. Check detergent lines for holes.							
Defe	ctive high limit switch	Replace.							
Incor	rect fuel nozzle size	See breakdown for model.							
Insuf	ficient water supplied	Check water G.P.M. to machine.							
Rest		Check serial plate for proper size.							
(Fc	ricted water flow	Restricted water flow Check serial plate for proper size.  (For parts and information call your Landa Dealer)							

## **TROUBLESHOOTING**

PROBLEM	POSSIBLE CAUSE	SOLUTION		
PUMP RUNNING NORMALLY BUT	Pump sucking air	Check water supply and possibility of air seepage.		
PRESSURE LOW ON INSTALLATION	Valves sticking	Check and clean or replace if necessary.		
	Unloader valve seat faulty	Check and replace if necessary.		
	Nozzle incorrectly sized	Check and replace if necessary (See serial plate for proper size).		
	Worn piston packing	Check and replace if necessary.		
FLUCTUATING	Valves worn	Check and replace if necessary.		
PRESSURE	Blockage in valve	Check and replace if necessary.		
	Pump sucking air	Check water supply and air seepage at joints in suction line.		
	Worn piston packing	Check and replace if necessary.		
PUMP NOISY	Air in suction line	Check water supply and connections on suction line.		
	Broken or weak inlet or discharge valve springs	Check and replace if necessary.		
	Excessive matter in valves	Check and clean if necessary.		
	Worn bearings	Check and replace if necessary.		
PRESENCE OF	Oil seal worn	Check and replace if necessary.		
WATER IN OIL	High humidity in air	Check and change oil twice as often.		
WATER DRIPPING FROM UNDER PUMP	Piston packing worn	Check and replace if necessary.		
	O-Ring plunger retainer worn	Check and replace if necessary.		
	Cracked piston	Check and replace if necessary.		
	Pump protector	Lower water supply pressure. Do not run with spray gun closed longer than 5 minutes.		
OIL DRIPPING	Oil seal worn	Check and replace if necessary.		
EXCESSIVE VIBRATION IN DELIVERY LINE	Irregular functioning of the valves	Check and replace if necessary.		
DETERGENT NOT DRAWING	Air leak	Tighten all clamps. Check detergent lines for holes.		
	Restrictor in float tank is missing	Replace restrictor. Check for proper orifice in restrictor. See parts breakdown for proper restrictor.		
	Filter screen on detergent suction hose plugged	Clean or replace.		
	Dried up detergent plugging metering valve	Disassemble and clean thoroughly.		
	High viscosity of detergent	Dilute detergent to specifications.		
	Hole in detergent line(s)	Repair hole.		
	Low detergent level	Add detergent if needed.		
RELIEF VALVE LEAKS WATER	Relief valve defective	Replace or repair.		
	(For parts and information call your	Landa Dealer)		

### PREVENTATIVE MAINTENANCE

This pressure washer was produced with the best available materials and quality craftsmanship. However, you as the owner, have certain responsibilities for the correct care of the equipment. Attention to regular preventative maintenance procedures will assist in preserving the performance of your equipment. Contact your Landa, Inc. dealer for maintenance. Regular preventative maintenance will add many hours to the life of your pressure washer. Perform maintenance more often under severe conditions.

	MAII	NTENANCE SCHEDULE					
Engine Oil	Inspect	Daily					
(30W Motor Oil)	Change	Every 50 hours or monthly					
	Filter	Every 50 hours					
Air Cleaner	Inspect	Every 50 hours					
	Clean	Monthly					
Battery Level		Check Monthly					
Engine Fuel Filter		500 hours or 6 months					
Spark Plug Maintenance		500 hours or annually					
Clean Fuel Tank(s)		Annually					
Replace Fuel Line	es	Annually					
Pump Oil (Non detergent	Inspect	Oil level daily					
30W)	Change	After first 50 hours, then every 500 hours or annually					
Replace High Pre	ssure Nozzle	6 months					
Replace Quick Co	onnects	Annually					
Discharge Pressu	re Relief Valve	Annually					
Clean Water Scre	en/Filter	Weekly					
Replace HP Hose	•	Annually					
Belts	Tighten	6 months					
Dells	Inspect/Replace	6 months					
Pump	Grease	Every 100 hours					

## **OIL CHANGE RECORD**

Date Oil Changed Month/Day/Year	Estimated Operating Hours Since Last Oil Change

Date Oil Changed Month/Day/Year	Estimated Operating Hours Since Last Oil Change



## LANDA LIMITED NEW PRODUCT WARRANTY PRESSURE WASHERS

### WHAT THIS WARRANTY COVERS

All LANDA pressure washers are warranted by LANDA, INC. to the original purchaser to be free from defects in materials and workmanship under normal use, for the periods specified below. This Limited Warranty is subject to the exclusions shown below, is calculated from the date of the original purchase, and applies to the original components only. Any parts replaced under this warranty will assume the remainder of the part's warranty period.

### FIVE YEAR PARTS AND ONE YEAR LABOR WARRANTY:

Components manufactured by LANDA, such as frames, handles, top and bottom wraps, float tanks, fuel tanks, belt guards, and heating coils. Internal components on the oil-end of all branded pumps have a five year warranty.

### ONE YEAR MINIMUM ON PARTS AND ONE YEAR LABOR WARRANTY:

All other components, excluding normal wear items as described below, will be warranted for one year on parts and labor. Parts and labor warranty on these parts will be for one year regardless of the duration of the original component manufacturer's part warranty.

### WARRANTY PROVIDED BY OTHER MANUFACTURERS:

Motors, generators, and engines, which are warranted by their respective manufacturers, are serviced through these manufacturers' local authorized service centers. LANDA cannot provide warranty on these items.

### WHAT THIS WARRANTY DOES NOT COVER

This warranty does not cover the following items:

- 1. Normal wear items, such as nozzles, guns, discharge hoses, wands, quick couplers, seals, filters, gaskets, O-rings, packings, pistons, pump valve assemblies, strainers, belts, brushes, rupture disks, fuses, pump protectors.
- 2. Damage or malfunctions resulting from accidents, abuse, modifications, alterations, incorrect installation, improper servicing, failure to follow manufacturer's maintenance instructions, or use of the equipment beyond its stated usage specifications as contained in the operator's manual.
- 3. Damage due to freezing, chemical deterioration, scale build up, rust, corrosion, or thermal expansion.
- 4. Damage to components from fluctuations in electrical or water supply.
- 5. Normal maintenance service, including adjustments, fuel system cleaning, and clearing of obstructions.
- 6. Transportation to service center, field labor charges, or freight damage.

### WHAT YOU MUST DO TO OBTAIN WARRANTY SERVICE

While not required for warranty service, we request that you register your LANDA pressure washer by returning the completed registration card. In order to obtain warranty service on items warranted by LANDA, you must return the product to your Authorized LANDA Dealer, freight prepaid, with proof of purchase, within the applicable warranty period. If the product is permanently installed, you must notify your Authorized LANDA Dealer of the defect. Your Authorized LANDA Dealer will file a claim with Landa, who must subsequently verify the defect. In most cases, the part must be returned to LANDA freight prepaid with the claim. For warranty service on components warranted by other manufacturer's, your Authorized LANDA Dealer can help you obtain warranty service through these manufacturers' local authorized service centers. If you are unable to resolve the warranty claim satisfactorily, write to LANDA at 4275 N.W. Pacific Rim Blvd., Camas, WA 98607, ATTN: Warranty Dept., detailing the nature of the defect, the name of the Authorized LANDA Dealer, and a copy of the purchase invoice.

### LIMITATION OF LIABILITY

LANDA'S liability for special, incidental, or consequential damages is expressly disclaimed. In no event shall LANDA'S liability exceed the purchase price of the product in question. LANDA makes every effort to ensure that all illustrations and specifications are correct, however, these do not imply a warranty that the product is merchantable or fit for a particular purpose, or that the product will actually conform to the illustrations and specifications. THE WARRANTY CONTAINED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. LANDA does not authorize any other party, including authorized LANDA Dealers, to make any representation or promise on behalf of LANDA, or to modify the terms, conditions, or limitations in any way. It is the buyer's responsibility to ensure that the installation and use of LANDA products conforms to local codes. While LANDA attempts to assure that its products meet national codes, it cannot be responsible for how the customer chooses to use or install the product.



4275 NW Pacific Rim Blvd. • Camas, WA 98607 USA

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