

20 GALLON PARTS WASHER WITH WHEELS

Model 98332

SET UP AND OPERATING INSTRUCTIONS



Distributed exclusively by Harbor Freight Tools®.
3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: http://www.harborfreight.com



Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

A DANGER

DANGER indicates a hazardous

situation which, if not avoided, will result in death or serious injury.

AWARNING

WARNING indicates a

hazardous situation which, if not avoided, could result in death or serious injury.

ACAUTION

CAUTION, used with the safety

alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert

symbol, is used to address practices not related to personal injury.

General Power Tool Safety Warnings



WARNING Read all safety warnings and instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.

Work area safety

- a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2. **Electrical safety**

a. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

SKU 98332

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Page 2

- b. Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
- c. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f. If operating a power tool in a damp location is unavoidable, use a Ground Fault Circuit Interrupter (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock.

3. Personal safety

- a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b. Use personal protective equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropri-

- ate conditions will reduce personal injuries.
- c. Prevent unintentional starting.
 Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- d. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. Do not overreach. Keep proper footing and balance at all times.

 This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust-related hazards.
- h. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.

- 4. Power tool use and care
 - a. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
 - b. Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
 - c. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
 - d. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
 - e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
 - f. Use the power tool and accessories in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

6. Service

a. Have your power tool serviced by a qualified repair person using only identical replacement parts.

This will ensure that the safety of the power tool is maintained.

Parts Washer Safety Warnings

- Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- Avoid unintentional starting. Prepare to begin work before turning on the tool.
- Do not leave the tool unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving.
- 4. This product is not a toy. Keep it out of reach of children.
- 5. Some dust created by cleaning, power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead-based paints
 - Crystalline silica from bricks and cement or other masonry products
 - Arsenic and chromium from chemically treated lumber
 Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with

- approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, et seq.)
- 6. Cleaning may produce Aluminum
 Oxide dust which can cause eye, skin
 or breathing irritation. Always use a
 NIOSH approved respirator, safety
 goggles and rubberized gloves when
 operating this tool.
- Always use water based solvents when operating this tool. Water based solvents have a pH greater than 7. Use of other types of solvents may cause injury.
- 8. DO NOT use any highly flammable, volatile or combustible solvents such as gasoline, kerosine, etc. in this tool.
- Parts being cleaned may deposit oil, grease, gasoline or other combustible contaminants in the tool. Check for volatile fumes, and use this tool only in a well-ventilated area.
- WARNING: Chlorinated solvents such as 1-1-1 Trichloroethane and Methylene Chloride can chemically react with aluminum and may explode. Many parts contain aluminum. Do not clean aluminum parts with these solvents.
- 11. WARNING: Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, et seq.)
- 12. The warnings, precautions, and instructions discussed in this instruction

manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



SAVE THESE INSTRUCTIONS.

GROUNDING



TO PREVENT ELECTRIC SHOCK

AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:

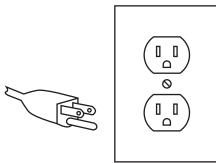


Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

SKU 98332

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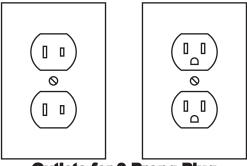
Grounded Tools: Tools with Three Prong Plugs



3-Prong Plug and Outlet

- 1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See 3-Prong Plug and Outlet.)
- The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. (See 3-Prong Plug and Outlet.)
- 3. The tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the preceding illustration. (See 3-Prong Plug and Outlet.)

Double Insulated Tools: Tools with Two Prong Plugs



Outlets for 2-Prong Plug

- Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. (See Outlets for 2-Prong Plug.)
- Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. (See Outlets for 2-Prong Plug.)

Extension Cords

- Grounded tools require a three wire extension cord. Double Insulated tools can use either a two or three wire extension cord.
- 2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage.

(See Table A.)

- 3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. (See Table A.)
- 4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. (See Table A.)
- 5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. (See Table A.)
- If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.
- Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
- 8. Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)					
NAMEPLATE	EXTENSION CORD LENGTH				
AMPERES (at full load)	25'	50,	75'	100′	150'
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-
* Based on limiting the line TABLE A voltage drop to five volts at					

Symbology

150% of the rated amperes.

	Double Insulated
1 .	Canadian Standards Association
(l)	Underwriters Laboratories, Inc.
V~	Volts Alternating Current
Α	Amperes
n ₀ xxxx/min.	No Load Revolutions per Minute (RPM)

SPECIFICATIONS

Electrical Requirements	120 V~ / 60 Hz
Fluid Capacity	20 Gallons
Maximum Flow	5.28 Gallons per Minute
Fusible Link	Tested at 185° F.

UNPACKING

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

List of contents

Description	Q'ty
Middle Shelf	1
Parts Washer Tank	1
Pump with Cord and Switch	1
Support Legs	4
Swivel Casters	4
Work Basket	1

INSTRUCTIONS FOR PUTTING INTO USE



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

AWARNING

TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool to its "OFF" position and unplug the tool from its electrical outlet before assembling or making any adjustments to the tool.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Assembly

- Assemble the four Legs (13) to the Shelf (12) using Pan Screw (14) Washer (8) and Nut (9). Tighten loosely.
- Attach the Legs / Shelf assembly to the Body (7) using Screw (14) Washer (8) and Nut (9). Tighten securely.
- 3. Tighten the Fasteners holding the Shelf (12) to the Legs (13) securely.
- Attach the Casters (37 and 38) to the Legs (13) using Washers (39) and Nuts (40). The Locking Casters (37) should be installed on the front of the tool, where they can be easily reached.
- 5. Install the Pump Assembly (18) on the inside of the Body (7) using Screws (22), Washers (31 and 32) and Nuts (31). Ensure that the Switch Box (21) and Electric Cord (19) are on the outside of the Body (7). Tighten fasteners securely.

Functions

- When used with an appropriate solvent (not included) this Parts Washer is useful for cleaning mechanical parts of dirt, grease and other contaminants.
- When activated, the pump directs a stream of solvent into the Body (7). The solvent is recirculated through the Screen (17) and back into the Body.
- 3. The solvent may be reused many times until it has become too dirty and must be replaced.
- 4. This tool includes a wash tub shaped Body (7), Work Shelf (6) and Work Basket (2). For holding, sorting or soaking parts.
- 5. The Cover (1) may be lowered to close the tool when not in use.
- 6. A fusible link in the Safety Plate (5) will melt in the case of fire, shutting the Cover (1) and suffocating the fire.

OPERATING INSTRUCTIONS



Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Tool Set Up



TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool to its "OFF" position and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

 Prior to use, the tool must be filled with up to 20 gallons of suitable solvent (not included). Appropriate solvents are available from Harbor Freight Tools.

Work Piece and Work Area Set Up

- Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent injury and distraction.
- Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.
- There must not be hazardous objects, such as utility lines or foreign objects, nearby that will present a hazard while working.
- Safety goggles or face shield, rubberized gloves, apron, floor mat and other safety equipment must be provided to the operator for safe operation of this tool.

- 5. Appropriate brushes, grips, rags, etc. should be provided for effective cleaning.
- 6. Safe disposal must be provided for any rags or other materials used in the cleaning process.

General Operating Instructions

- 1. To fill parts Washer, Lift Cover (1) of Parts Washer to open.
- 2. Check to be sure Drain Plug (11) and associated O-Ring (10) are secure to prevent leaks.
- 3. Pour in up to 20 Gallons of approved non-flammable solvent (not included).
- 4. Plug the Electric Cord (19) into an appropriate power source.
- 5. With Parts Washer filled, direct the Flexible Pipe (24) into the Tub area of the Body (7).
- 6. Press the Switch (23) to the ON position. The Pump (30) will operate, circulating solvent through the Flexible Pipe (24).
- 7. To clean parts, you may use the solvent in the tub portion of the Body (7) or spray solvent directly on the parts using the Flexible Pipe (24).
- 8. The Work Shelf (6) and Work Basket (2) may be used to soak, support or drain parts during the cleaning process.
- 9. When work is completed, press the Switch (23) to the OFF position.
- 10. Remove cleaned parts.
- 11. Shut the Cover (1).

12. To prevent accidents, turn off the tool and disconnect its power supply after use. Clean, then store the tool indoors out of children's reach.

MAINTENANCE AND SERVICING



Procedures not specifically explained in this manual must be performed only by a qualified technician.



TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool to its "OFF" position and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

 BEFORE EACH USE, inspect the general condition of the tool. Check for leaks, loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.

- 2. AFTER USE, clean external surfaces of the tool with clean cloth.
- - **Replacing the Cleaning Solvent**
- When the solvent has become dirty, it will not clean effectively and must be replaced.
- 2. To drain solvent, place a sturdy container that is large enough to contain at least 20 gallons of solvent under the Drain Plug (11).
- Be aware that when the Drain Plug
 (11) is removed some solvent will be splashed and spilled. Prepare the area to contain spilled solvent.
- 4. Remove the Drain Plug (11) by turning it counterclockwise.
- 5. Solvent will pour out of the Body (7) into the container.
- 6. When the solvent is all drained, replace the Drain Plug (11) and wipe out the Parts Washer with a clean dry rag.
- 7. Dispose of the cleaning solvent properly. Check with your local authority for proper disposal method.

Cleaning Parts Washer Components

1. The Flexible Pipe (24), Pump Housing Cover (15), Screen (17) and other components may occasional need to be cleaned.

- 2. After draining the Parts Washer of solvent, remove these parts and blow clean with dry compressed air.
 - Wipe the components clean and reinstall before refilling the Parts Washer with clean solvent.

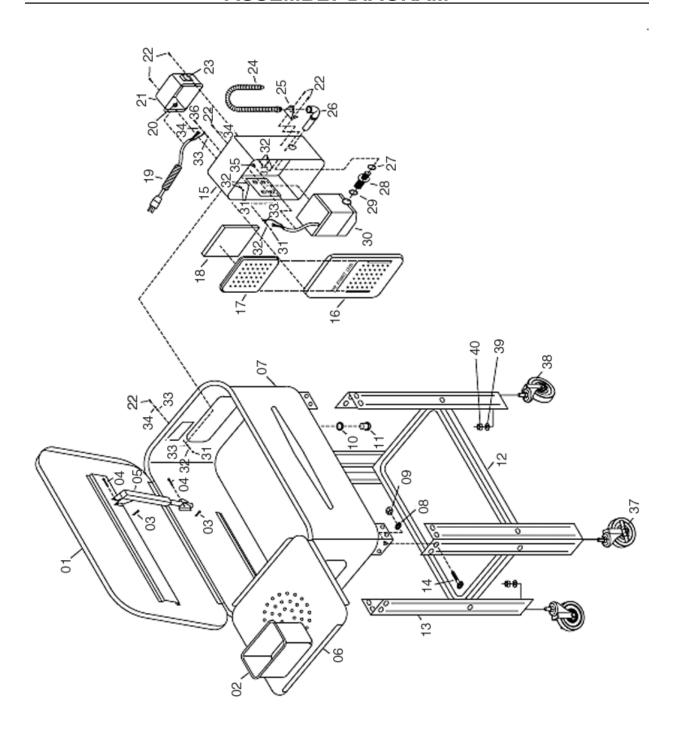
	PARTS LIST		
Part	Description	Qty.	
1	Cover	1	
2	Work Basket	1	
3	Spring Pan	1	
4	Pin	2	
5	Safety Plate	1	
6	Work Shelf	1	
7	Body	1	
8	Spring Washer	24	
9	Nut	24	
10	O-ring	1	
11	Drain Plug	1	
12	Shelf	1	
13	Leg	4	
14	Pan Screw	24	
15	Pump Housing Cover	1	
16	Filter Cover	1	
17	Screen	1	
18	Pump Housing	1	
19	Electric Cord	1	
20	Strain Relief	1	

PARTS LIST			
Part	Description	Qty.	
21	Switch Box	1	
22	Screw	6	
23	Switch	1	
24	Flexible Pipe	1	
25	Elbow Seat	1	
26	Elbow	1	
27	Plastic Washer	1	
28	Spigot	1	
29	Seal Ring	1	
30	Pump	1	
31	Nut	7	
32	Spring Washer	7	
33	Toothed Washer	2	
34	Flat Washer	4	
35	Rubber Sheath	1	
36	Hex Screw	1	
37	Locking Caster	2	
38	Caster	2	
39	Washer	4	
40	Nut	4	

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

ASSEMBLY DIAGRAM



Record Product's Serial Number Here:

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

SKU 98332 For technical questions, please call 1-800-444-3353. Page 13

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESS-LY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

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

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