



# HP Pump Station



## Owners Manual

Sonny's Enterprises, Inc.  
5605 Hiatus Road  
Tamarac, Florida 33321

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## **\*INTRODUCTION\***

This Owner's Manual contains information that is vital to the successful installation, operation and maintenance of your SONNY'S vehicle washing equipment.

Please read, and understand, the full contents of this manual before installation and operation of the equipment. Keep this booklet in a location where it may be used for ongoing reference.

Should you have any questions on the operation or servicing of this equipment please contact

TECHNICAL SERVICES DEPT.  
SONNY'S ENTERPRISES INC.

5605 Hiatus Road

TAMARAC, FLORIDA 33321

TELEPHONE: 800-327-8723      FAX: 800-495-4049

THANK YOU FOR YOUR CONFIDENCE IN SONNY'S !!!!!



## Product Specifications

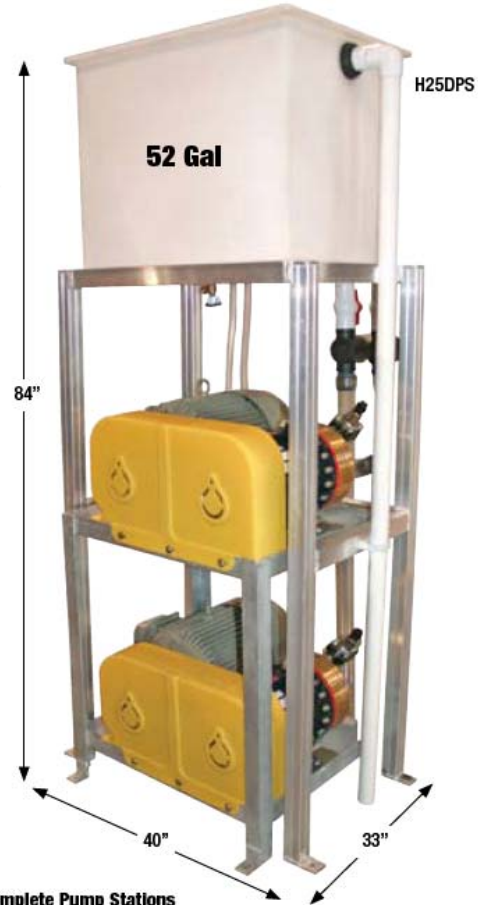
- Galvanized steel pump/motor mounting frame.
- Aluminum liquid storage tank mounting frame.
- Plastic liquid storage tank with lid.
- Wanner pump with unloader/regulator assembled.
- 7.5HP D10, 15HP H25, or 20HP D35 electric motor, 3 phase, 230VAC/460VAC, 60Hz.
- Pulleys/sheaves, drive belts and belt safety cover.
- Pump inlet hose assembled from storage tank.
- Pump bypass hose assembled to storage tank.
- Maximum pump ratings are 10, 25 or 36GPM @ 1000PSI.
- Storage tank automatic liquid fill.
- Storage tank overflow piping assembled to unit.
- Ball type shutoff valve assembled to pump inlet from liquid storage tank.
- In-line strainer to protect pump and prevent nozzle clogging.
- Overflow manifold to keep motor dry in case of overflow.
- Oversized pumps ensures long life span.

# Optional Related Equipment

## Wanner H-25 and D-35 Pump Stations

SONNY'S pump stations feature Wanner diaphragm pumps for greater reliability and performance. They meet the demands of high pressure cleaning equipment while requiring minimal maintenance.

- Wanner H-25 pump rated for a maximum delivery of 20GPM @ 1000PSI  
 Also available with Wanner D-35 pumps rated for a maximum delivery of 35GPM @ 1200PSI
- Oversized pump ensures long life
- Includes in-line strainer to protect pump and prevent nozzle clogging
- Tank equipped with 1in automatic fill valve, rated at 70GPM
- Overflow manifold mounted to tank to keep motor dry in case of overflow



**For these and all other replacement parts see the Replacement section of SONNY'S Big car wash catalog.**

### SONNY'S Complete Pump Stations

Item #	Description	Price
H25SPS	Pump Station, H-25 Single	\$5445.00
H25DPS	Pump Station, H-25 Double, 1 Tank	10765.00
D35SPS	Pump Station, D-35 Single	9625.00
D35DPS	Pump Station, D-35 Double, 1 Tank	18335.00

### Wanner Pumps

Item #	Description	Price
PH25XKBTHFECA	Pump, H25 Hydra-Cell Brass	\$2206.69
PD35XKBTHFECA	Pump, D-35 Hydra-Cell Diaphragm	4217.04

### Motors

Item #	Description	Price
M2513T	Motor, Baldor 15HP 1800RPM ODP 254T	\$754.81
M2333T	Motor, Baldor 15HP 1800RPM 254T TEFC	766.23
ST1518E	Motor, Sterling 15HP 1800RPM TEFC 254T	638.75

## **\*SAFETY REQUIREMENTS\***

1. Only those employees specifically instructed by the location manager will be permitted to enter the wash tunnel to perform inspections or maintenance.
2. Do not enter the wash tunnel when the equipment is operating.
3. Always exercise caution when walking through the wash area, may be slippery conditions.
4. Be cautious when walking through the tunnel to avoid running into or tripping over equipment.
5. Do not ever run through the wash area.
6. Do not perform any work on equipment unless you performed Lock-Out Safety Precautions.
7. When maintenance requires that a piece of equipment be in operation, one qualified maintenance person must stay at the power disconnect switch while that equipment is operating.
8. All electrically powered equipment must have manually operated disconnects capable of being locked in the "OFF" position. Equipment that has been "locked out" for any reason can only be restarted by the person who performed the "lock out" operation.
9. Do not attempt to repair or adjust any pressurized liquid or pneumatic part, hose, pipe or fitting while that equipment is in operation.
10. Any "Stop" switch activated must be reset only by the person who initiated the operation.
11. Electrical connections and repairs are to be performed by a Licensed Electrician only.
12. Store all cleaning and washing solutions and oils in a well ventilated area.
13. Clean up fluid spills immediately to prevent hazardous safety conditions.
14. Be certain to follow all safety procedures on MSDS Sheets for each chemical product used.
15. All new employees must be thoroughly trained in safe operating and maintenance practices.
16. All employees must attend periodically scheduled safety procedure sessions.
17. Do not operate any piece of equipment that requires safety covers with those covers removed or improperly installed.
18. Do not allow any part of your body or other object to come in contact with moving machinery.
19. Do not wear loose fitting clothing or jewelry around moving machinery.
20. At least two qualified maintenance people must be present when performing equipment repairs or preventative maintenance.
21. When working on any equipment that is higher than a person's shoulders always use a fiberglass ladder that is in good condition.

# **\*INSTALLATION\***

## **Utilities Requirements**

**UTILITIES INTERCONNECTION AND THE MATERIALS REQUIRED FOR INTERCONNECTION TO SONNY'S EQUIPMENT ARE THE RESPONSIBILITY OF THE CUSTOMER !  
PERFORM ALL TRADES WORK TO ALL APPLICABLE LOCAL AND NATIONAL CODES !**

### **Water**

- The Customer's Plumber is to provide materials and install 1" water line @ 60PSI to the float valve inlet on the liquid storage tank from city water line or a re-pressurization system.

### **Electrical**

- The Customer's Electrician is to provide materials and install 208VAC or 230VAC or 460VAC, 3 phase, 60Hz power to the electric motor on the pump station from a properly sized three pole circuit breaker and motor starter with three thermal overloads.
- The Customer's Electrician is to provide materials and install single phase power (24VAC or 110VAC) from the supplied start/stop system to the motor starter coil for the pump station.

# Equipment Installation

## HP Pump Station Installation

### Tools

1. Safety Glasses
2. 1/2" Drive Ratchet Set
3. Standard Combo Wrenches
4. Standard Screwdriver
5. 1" Hammer Drill
6. Sledge Hammer
7. Tape Measure

### Consumables

1. Stainless Shims
2. Teflon Tape
3. Teflon Paste

### Manpower

Two (2) men

### Time (assuming no problems)

1.00 - 2.00 hours

### Installation Steps

1. Determine where the Pump Stations are to be installed, should be in an area not subjected to direct water spray or freezing.
2. Sweep any debris from where the pack will sit.
3. Bring the Pump Stations into the building set it in place.
4. Lag the Pump Stations down, shim as needed.
5. Connect 1" line to liquid storage tank float valve inlet port with a ball valve shut-off and minimum 18" long flexible hose.
6. Connect 1" line from the discharge side of the pump unloader/regulator to the equipment to be operated by this pump. Be certain that all pipe and fittings used are capable of safely handling the maximum operating pressure of the pump. Minimize plumbing elbows to reduce friction loss and install approximately 3 ft. of high pressure hose at each end of this system (pump discharge and equipment) to reduce potential vibration and hammer effect.

# Adjustments and Testing

## BEFORE START-UP

1. Check pump and motor mounting hardware for tightness.
2. Check that belt safety cover is on and secured.
3. Check for proper level on pump oil dipstick.
4. Is the liquid storage tank filled?
5. Are all shut-off valves open?
6. Confirm that the spray nozzles being fed by EACH pump do not exceed a total of 20GPM @1000PSI !!!

## INITIAL START-UP

1. With the pump motor power ON listen for erratic noise and look for inconsistent discharge flow.
2. Adjust the regulator/unloader to the desired operating and bypass pressures (not to exceed 1000PSI).
3. If the pump fails to prime itself perform the following:
  - a. Turn the pump motor power OFF.
  - b. Remove the drain plug directly below the pump liquid suction line.
  - c. Restart the pump motor and operate it until fluid runs from the open drain plug port.
  - d. Turn the pump motor power OFF and reinstall the drain plug.

## **\*GENERAL OPERATION\***

### **HP PUMP OPERATION**

Starting and stopping of the electric motor is controlled by the motor starter coil for the designated function of the pump station.

The water pressure of the pump may be changed by the regulator/unloader on the discharge of the pump.

## **\*PREVENTIVE MAINTENANCE\***

### **DAILY**

1. Check all lines and fittings for leaks. Repair, or replace, as needed.
2. Check for proper operation, listening for any unusual noise.

### **WEEKLY**

1. Inspect all hardware and fittings for tightness.
2. Check and if necessary clean the in-line strainer.

### **MONTHLY**

1. Check the drive belts for wear and abrasions, always replace as a set.
2. Clean sediment and dirt from the liquid storage tank.

### **SEMI-ANNUALLY**

1. Measure and Record Full Load Amp Readings.
  - a. Measure and record, full load current readings from each of the three legs of each of the three phase electric motors.
  - b. If the differential of current load exceeds 10% between the legs, or the balanced load current of all three legs has increased over 10% since the most recent measurements, order a replacement motor.
  - c. Record readings in the semi-annual log.

### **ANNUALLY**

1. Drain and refill the pump with new Wanner Hydra Oil (Sonny's # A011143430).

# \*PARTS LIST\*



## H25 PUMP



Includes brass head, Buna-N diaphragms & heat treated valves. Capable of delivering 20 GPM @ 1050 PSI. Stainless Steel valves.

- H-25 Pumps with Ser. No. 103,200 and above have a finned, diecast pump housing and metric fasteners

Item #	Description	Price
PH25XKBTHFECA	Pump, H25 Hydra-Cell Brass	\$2206.69
PD25K52THFEC	Pump Kit, H25 Repair Fluid End	244.50
PD25D52TXXX	Pump Kit, H25 Diaphragm & O-Ring	68.25



## Hydra-Cell By-pass Valves



- Good for multi-gun systems
- Max temp. 160° F
- Brass body with Buna O-Rings, Stainless Steel seats and plunger valve

Item #	Description	Price
PWC23AB	Wanner Reg, 10-20GPM 500-1000	\$220.55
PWC23KIT	Wanner Reg Repair Kit 023	6.19



## In-line Strainer



- White nylon top & clear polycarbonate bowl
- EPDM gasket & 40-mesh screen

Item #	Description	Price
PS242440CE	Strainer, 1 1/2In 40 Mesh Clear EPDM	\$22.95

## Motor Pulley & Taper Bushing



P115218MP



P115218MT

Item #	Description	Price
P115218MP	Pulley Only, 3 Groove H25 Motor	\$45.77
P115218MT	Bushing Only, 1 5/8 Taper H25 Motor	12.66

## Pump Pulley & Taper Bushing

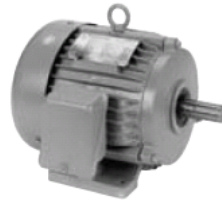


P115218PP



P115218PTH

Item #	Description	Price
P115218PP	Pulley Only, 3 Groove H25 Pump	\$52.73
P115218PTH	Bushing Only, 1 1/8 Taper H25 Pump	12.62



## Electric Motor



- 15 HP / 208V / 230V / 460V
- 60Hz 3-phase
- 254T frame
- 1800 RPM
- TEFC

Item #	Description	Price
M2333T	Motor, Baldor 15HP 1800RPM 254T TEFC	\$766.23
ST1518E	Motor, Sterling 15HP 1800RPM TEFC 254T	638.75



## Pressure Gauge

- 0-2000 PSI
- Liquid Filled, Dual-Scale Gauge
- SS Case Ring, Bronze Tube, Brass Tube
- 2 1/2In Case

Item #	Description	Price
PG-2000	Gauge, 0-2000 1/4In Bottom Mount	\$7.28



## Belt Guard & Belt

Item #	Description	Price
B45	Belt, V 47In	\$12.19
P115218BG	Belt Guard, H25 Pump Station Belt Guard	125.00

R1830LID (Lid)



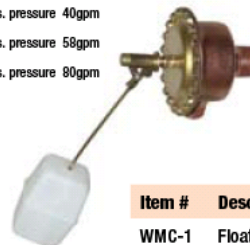
## Plastic Tank

R183018P (Tank)

Item #	Description	Price
R183018P	Tank, 18In x 30In x 18In 40gal	Single H25 \$224.25
R1830LID	Lid, Tank 18In x 30In	52.45
R212724P	Tank, DPS 21In x 27In x 24In 52gal	Double H25 264.75

## FLOW RATES

- 20lbs. pressure 40gpm
- 40lbs. pressure 58gpm
- 80lbs. pressure 80gpm



## Water Master Float Valve

- Two interacting valves, low section valve kicks in first, protecting main valve from turbulence, adding years of life
- Safely dispenses additives to water automatically with no waste or overdose

Item #	Description	Price
WMC-1	Float Valve, Water Master Special 1In	\$65.63

## \*CUSTOMER SERVICE\*

Please contact SONNY'S Equipment Department for installation and/or operational questions regarding this piece of equipment.

Please refer to the Parts list in this manual or our Parts Catalog and contact SONNY'S Customer Service Order Entry Department for any replacement parts for this piece of equipment.

For Equipment Repairs please visit the web at [www.sonnysdirect.com/manuals](http://www.sonnysdirect.com/manuals).

**DEPARTMENT**

Toll Free Main Line  
Equipment Department

**PHONE NUMBERS**

800-327-8723  
954-720-4100

**FAX NUMBERS**

800-495-4049  
954-720-9292

Or you can email Sales at [sales@sonnysdirect.com](mailto:sales@sonnysdirect.com)

*Thank you for being a SONNY'S car wash equipment owner!*

*From all of us here at*

