



Prep Station Pressure Gun



Owner's Manual

Sonny's Enterprises, Inc.
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13V2



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Equipment Program - Manuals Prep Station Pressure Gun HPG Series

WARNING *SAFETY REQUIREMENTS* WARNING

1. All employees must be thoroughly trained in safe operation and standard maintenance practices. All employees must review this entire manual monthly.
2. Do not enter the wash tunnel when the equipment is operating. Death or dismemberment may occur.
3. Do not wear loose fitting clothing or jewelry around moving equipment. Do not allow any part of your body or other objects (including ladders, hoses or tools) to come in contact with moving equipment. Entanglement may result causing death or dismemberment.
4. Do not leave a ladder or any other items such as wash down hoses or tools in the wash tunnel while equipment is running. Vehicle damage and injury, including death, can occur.
5. Always exercise caution when walking (never run) through the wash tunnel as there may be slippery conditions. Be careful so you do not bump into or trip over equipment.
6. Only those employees specifically instructed and trained by the location management are permitted to enter the wash tunnel to perform inspections or maintenance. At least two qualified maintenance people must be present when performing equipment repairs or preventive maintenance.
7. Do not perform any maintenance or work on equipment unless you first perform Lock-Out Safety Precautions. 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 must be restarted only by the person who performed the "lock out" operation.
8. When working on any equipment that is higher than your shoulders, always use a fiberglass ladder that is in good condition.
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. Electrical connections and repairs must be performed by a Licensed Electrician Only.
11. Emergency "STOP" buttons must be well marked and their location and proper use reviewed with all personnel. Any activated "STOP" button must be reset only by the person who activated it. Clear the wash tunnel of any people, ladders, hoses, tools and other loose items before restarting the equipment. An audible device must sound to warn people that the equipment is starting.
12. Do not operate any piece of equipment that requires safety covers with those covers removed or improperly installed. Do not operate any piece of equipment if any component of that piece is suspected to be defective or malfunctioning.



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13. Store all cleaning and washing solutions and oils in a well-ventilated area. Clean up fluid spills immediately to prevent hazardous safety conditions. Be certain to follow all safety procedures on SDS Sheets for each chemical product used.
14. All hydraulic and electric systems in the wash tunnel equipped with a torque relief or overload should be checked and set at the minimum amount that will allow for proper functionality under normal washing conditions.
15. No unauthorized people should ever be permitted in the wash tunnel or near the equipment at any time.

* * *

!! CAUTION !!

When a piece of equipment must be in operation during inspection or maintenance, one qualified technician must stay at the power disconnect switch while another qualified technician performs the inspection or maintenance.



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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

- Aluminum pump/motor/tank frame.
- Plastic liquid storage tank with lid.
- Model 530 Hydrominder with mounting bracket.
- Standard K-508 Arimitsu pump with pulsation dampener and unloader assembled.
- 7.5HP, 3-phase, 208V/230V/460V, 60Hz electric motor.
- Pulleys/Sheaves, drive belts and belt safety cover.
- Two 24 inch long spray wands with non-weep trigger guns, spray nozzles and nozzle protectors.
- Two 15 ft. long 3/8" high pressure hose assemblies with 3/8" male NPT fittings each end.
- Pump inlet hose assembled from storage tank.
- Pump bypass hose assembled to storage tank.
- Each wand sized, when new, to deliver 3.5GPM @1000PSI.



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HPG Series



Model 508 offers performance and durability required in such applications as: *Car Wash Prep, Reverse Osmosis, and Multi-Gun Cleaning,*

Manufactured by Arimitsu Industry Co, Ltd., of Osaka, Japan, a leading supplier of Industrial plunger pumps and systems used by Industrial leaders throughout the World.

Specifications

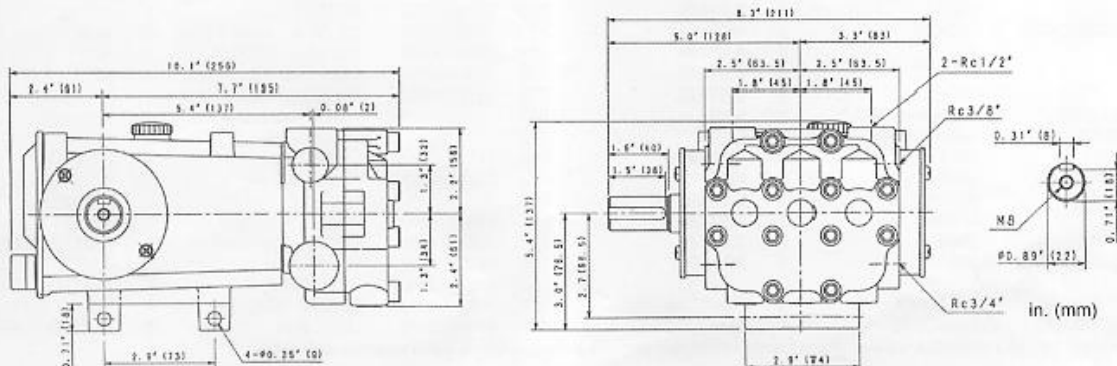
Max. Flow (GPM)	12.0	Inlet Ports (NPT)	3/4" (2)
Max. Pressure (PSI)	1200	Outlet Ports (NPT)	3/8" (2), 1/2" (2)
Max. RPM	1450	Shaft Diameter (mm)	22
Max. HP	8.5	Shaft Location	Left or Right
Max. Inlet Pressure (PSI)	70	Weight (lbs.)	20.5
Max. Fluid Temperature	175 °F	Dimensions	10.1 (L) x 8.3 (W) x 5.4 (H)
Bore (mm)	25		
Stroke (mm)	22		
Crankcase Capacity (oz)	18		

Pump life may be decreased by operating at more than one maximum rating, simultaneously. Please consult Arimitsu of N.A. for guidance when operating near any maximum ratings.

Model 508 Performance Chart

RPM	400 PSI		600 PSI		800 PSI		1000 PSI		1200 PSI	
	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
600	5.0	1.3	5.0	2.0	5.0	2.7	5.0	3.3	5.0	4.0
900	7.5	2.0	7.5	3.0	7.5	4.0	7.5	5.0	7.5	6.0
1000	8.3	2.2	8.3	3.3	8.3	4.4	8.3	5.5	8.3	6.6
1100	9.1	2.4	9.1	3.7	9.1	4.9	9.1	6.1	9.1	7.3
1250	10.4	2.8	10.4	4.2	10.4	5.5	10.4	6.9	10.4	8.3
1450	12.0	3.2	12.0	4.8	12.0	6.4	12.0	8.0	12.0	9.6*

* For intermittent duty only. Not recommended for continuous operation above 8.5 HP.





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Problem:

You need a powerful prep station to quickly process cars, accurately proportion detergent to eliminate expensive wastage – and it has to be reliable, affordable, and easy to maintain.

Solved:

SONNY'S Pressure Gun Unit does everything you need – simply, reliably, and affordably. Featuring either direct-drive or belt-driven pumps, it delivers constant pressure to handle all prepping demands.

- Includes (2) pressure guns, each with its own insulated lance with nozzle & nozzle protector
- Includes 20ft of 3/8in wire braided hose for each of the (2) included pressure guns
- Unit has its own 40gal poly reservoir with lid, filled by a 530 Hydrominder (9GPM) - allows optional proportioning of cleaning solution into reservoir
- Includes Arimitsu D510 Direct Drive pump.



Features

Reduce maintenance and increase reliability with SONNY'S HPG200 Direct Drive Pressure Gun Unit. With no pulleys, no belts, quieter operation, and using less horsepower to run, the HPG200 is available with either single or dual pumps with the same small footprint. Each pump can operate two spray guns with 3GPM at 1,000PSI, enabling operators to run their wash more efficiently.

Specifications

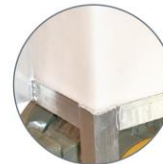
	Inches	Metric
Footprint Length	35 1/2in	902mm
Footprint Width	19 1/2in	495mm
Height (single pump station)	52in	1.32m
Height (dual pump station)	72in	1.82m
Water	3/4in	19mm
Electrical	208V -230V/ 460V3 Phase 7.5HP	



530 Hydrominder to fill tank.



Pump is gravity-fed from tank.



Belt driven models available with CAT 7CP, Arimitsu K508, or Wanner D10 pump.



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 and install a 3/4 inch city water line @60PSI nominal pressure to the inlet fitting on the Hydrominder mounted to the pump station.
- The Customer's Plumber is to provide and install a high pressure pipe tee at the pump discharge port with two 3/8 inch NPT swivel fittings for wand connection.

Electric

- The Customer's Electrician is to provide and install and interconnect a 3-pole circuit breaker and motor starter with 3 thermal overloads to the 7.5HP motor and connect for 208V OR 230V OR 460V.
- The Customer's Electrician is to provide, install and interconnect pump Start-Stop stations as required by the Customer.

OPTIONAL AUTOMATIC PUMP SHUTOFF ASSEMBLY

- The Customer's Plumber is to install the 3/8 inch poly line supplied by SONNY'S to a city water connection with nominal 60PSI pressure.
- The Customer's Electrician is to provide and install the interconnection of single phase power between the supplied flow switch and timer and the Customer supplied motor starter coil.



Equipment Installation

HP Pump Station Installation

Tools

1. Safety Glasses
2. ½" 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

Work Force

Two (2) persons

Time (assuming no problems)

1.00 - 2.00 hours

Installation Steps

1. Determine where the Pump Stations are to be installed. It 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 water feed line to liquid storage tank float valve inlet port with a ball valve shut-off and minimum 18" long flexible hose.

Note: Be certain that all pipe and fittings used are capable of safely handling the maximum operating pressure of the pump.

6. Connect line from the discharge side of the pump to the plumbing for 2 prep guns to be operated by this pump.
7. If the automatic shut-off assembly is being used, connect the flow switch from the discharge port of the pump to the two spray wands and connect the tubing supplied from a city water supply line to the "Pilot" port on the flow switch.
8. Have an electrician connect the flow switch cable and timer assembly to the pump motor starter.



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?

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 1000 psi).
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

PREP GUN OPERATION

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

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

With the optional automatic flow switch shut-off assembly the pump will shut off when the spray guns are not in use and turn on when they are used.



PREVENTIVE MAINTENANCE

DAILY

1. Opening Checks
 - a. Check for leaks around hoses and fittings, repair any high pressure water leaks immediately.
 - b. Check for sufficient chemical supply for the day's use.
2. Operational Checks
 - a. Perform general examination of operation, listening for any unusual noises.

WEEKLY

1. Check pump oil level, refill with 10W30 Weight Mobil 1 Synthetic.
2. Inspect wand spray nozzles for excessive wear.

MONTHLY

1. If the unit is belt driven, check the drive belts for wear and abrasions, always replace as a set.
2. Clean sediment and dirt from the liquid storage tank.
3. Inspect all hardware and fittings for tightness.
4. Clean the entire assembly thoroughly.

SEMI-ANNUALLY (Or every 500 operating hours)

1. Drain and refill the pump with new 10W30 Weight Mobil 1 Synthetic.



WARRANTY

SONNY'S ENTERPRISES, INC. FACTORY LIMITED LIFETIME WARRANTY

Equipment manufactured by SONNY'S ENTERPRISES, INC. is warranted to be free from defect in material and workmanship. Welded metal framework and other non-moving, non-wearable fabricated metal components manufactured by SONNY'S are warranted for the life of the equipment to the original purchaser. Fabricated metal wearable surface and moving components manufactured by SONNY'S are warranted for a period of one (1) year to the original purchaser of the equipment.

All components assembled to SONNY'S equipment that are manufactured by others are warranted by the appropriate manufacturer and subject to that manufacturer's limited warranty. Contact SONNY'S for the specific information on other component manufacturer's warranty terms. All new cloth shipped with new SONNY'S equipment is warranted for a period of one (1) year or 80,000, whichever occurs first.

This warranty is not assignable or transferable. The warranty period begins the first day following installation or 30 days from the original invoice date, whichever occurs first. The Seller's liability shall be limited to repair or replacement of materials found to be defective within the warranty period. In the event of repair or replacement this limited warranty is noncumulative. The Purchaser must supply the Seller with immediate written notice when any defects are found. The Seller shall have the option of requiring the return of defective material to establish the Purchaser's claim. Neither labor nor transportation charges are included in this warranty. Transportation damage claims are to be submitted to the carrier of the damaged materials.

This warranty is based upon the Purchaser's reasonable care and maintenance of the warranted equipment. It does not apply to any equipment which has been subject to misuse, including neglect, accident or exposure to harsh chemicals or chemicals that react violently with: water, organic acids (e.g. acetic acid), inorganic acids (e.g. hydrofluoric acid), oxidizing agents (e.g. peroxides), and metals (e.g. aluminum). Chemicals corrosive to: aluminum alloys, carbon steel, and other metals. Nor does it apply to any equipment which has been repaired or altered by anyone not so authorized by SONNY'S. Further, the equipment must be properly installed with proper accuracy of all specified plumbing, electrical, and mechanical requirements. This warranty does not apply to normal wear and tear or routine maintenance components.

EXCEPT AS EXPRESSLY STATED HEREIN, SONNY'S SHALL NOT BE LIABLE FOR DAMAGES OF ANY KIND IN CONNECTION WITH THE PURCHASE, MAINTENANCE, OR USE OF THIS EQUIPMENT INCLUDING LOSS OF PROFITS AND ALL CLAIMS FOR CONSEQUENTIAL DAMAGES. THE LIMITED WARRANTY EXPRESSED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. SONNY'S NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION HEREWITH.



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CUSTOMER SERVICE

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

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

You can also visit the web at www.SonnysDirect.com.

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

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

From all of us here at

