

AMAZING MACHINERY

THE PRESSURE WASHER PEOPLE



HBS12V60 / HBS11560 / HBSLP50 Hot Boxes

READ THIS MANUAL

This manual contains important information for the use and safe operation of your AMAZING MACHINERY™ machine. **FAILURE TO READ THIS MANUAL AND FOLLOW ITS INSTRUCTIONS PRIOR TO OPERATING OR ATTEMPTING ANY SERVICE OR MAINTENANCE PROCEDURE COULD RESULT IN SERIOUS INJURY OR DEATH TO YOU OR OTHER PERSONS; ALSO DAMAGE TO THE MACHINE OR TO OTHER PROPERTY.**

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UNPACKING

After you have received your machine and signed that the shipping carton and product look to be in sound condition, open the carton and inspect closer for possible freight damage if you have already signed for your machine, and do find said damage contact Amazing Machinery as soon as possible. Check to see that all ordered parts are present and still in new condition. Start by removing the box and bands. Next remove the pressure washer from the pallet. Never start a new machine until you have checked the fluid levels. Oil can spill during shipping this does not represent damage.

Be certain you have inspected all packaging very well before discarding. Small parts may shake loose during shipping and be unnoticeable in or around large pieces of the packing material.

NOTICE

Information in this operator's manual is subject to change without notice.

AMAZING MACHINERY SHALL NOT BE LIABLE FOR TECHNICAL OR EDITORIAL ERRORS OR OMISSIONS CONTAINED HEREIN. This operator's manual contains information protected by copyright. No part of this operator's manual may be photocopied or reproduced in any form without prior written consent from AMAZING MACHINERY.

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SAFETY INSTRUCTIONS

READ THIS FIRST! FAILURE TO READ AND OBSERVE ALL WARNING STATEMENTS COULD RESULT IN SEVERE BODILY INJURY OR DEATH, POSSIBLE INJURY TO OTHER PERSONS, DAMAGE TO MACHINE OR OTHER PROPERTY.

- This machine should not be operated in areas where open flames are not permitted.
- Do not store or use combustible materials on or near this machine.
- Do not operate this machine while under the influence of alcohol, drugs or while fatigued.



DO NOT STORE COMBUSTIBLE MATERIALS (GASOLINE, DIESEL OR OTHER PETROLEUM PRODUCTS) NEAR PRESSURE WASHER WHILE OPERATING.



FILL FUEL TANKS IN OPEN AREA AWAY FROM OPEN FLAMES OR SPARKS. USE ONLY CLEAN FUEL VOID OF WATER AND CONTAMINATES.



FAILURE TO MAINTAIN HEAT EXCHANGER COIL MAY RESULT IN A STEAM EXPLOSION WHICH MAY CAUSE SERIOUS INJURY OR DEATH.



MAKE SURE ALL SWITCHES ARE IN THE OFF POSITION BEFORE STARTING MACHINE.

SAFETY INSTRUCTIONS

- Do not direct discharge stream at yourself or others. Risk of injection or injury may occur. This product should only be operated by trained personnel.
- Do not operate this machine without wearing protective eye wear.
- Do not tie back or block trigger gun in OPEN position.
- Do not operate this machine in areas with poor or no ventilation. This machine requires air for combustion and flue gas evacuation. See specifications for required volume for your model.
- Do not overreach or stand on an unstable support while operating this machine. Maintain good footing and balance.
- Do not permit this machine to run while unattended or for extended periods of time with trigger gun closed. Damage to pump may occur.
- Do not operate this machine in an unsafe manner or around unsupervised children. Keep all other personnel clear while operating this machine.
- Do not service this machine without disconnecting power supply and shutting off gas source. This machine is equipped with a manual shutoff valve.
- Do not alter original factory settings prior to operating this machine. Risk of injury to yourself or other persons may occur.
- Do not remove hoses, guns, nozzles or any components while this machine is still hot or while it is running.
- Do not operate machine with service covers removed.
- Do not attempt to service this machine before reading the service manual.
- Do not operate this machine without knowing how to stop and bleed water pressures. Know all controls before using this machine.
- Do not spray caustic, acids or abrasive fluids through this machine.
- Do not permit lime and scale buildup to occur in the heat exchanger coil.
- Do not permit water to freeze inside this machine. Risk of coil, pump and plumbing damage may occur.
- Use only recommended AMAZING MACHINERY™ parts when servicing this machine.
- AMAZING MACHINERY™ will not be held liable for any unauthorized modifications made to this machine.

OPERATING INSTRUCTIONS



MAKE SURE ALL SWITCHES ARE IN THE OFF POSITION BEFORE STARTING MACHINE.

STARTING THE MACHINE

- Read this manual before starting this machine.
- Protective eye wear and clothing is required during operation of this machine.

CONNECTING YOUR NEW HOT BOX

To connect your pressure washer to this hot box, start by attaching a jumper hose (not included) to the high pressure out port of the pressure washer. Next connect the other end of the jumper hose to the in port of the hot box. The final step is to attach your pressure washer hose with gun and wand to the out port of the hot.

Note: A jumper hose is required to transfer the high pressure water from your pressure washer to the hot box.

POWER REQUIREMENTS

12Volt HBS12V-60 This unit requires a 12v Power source to operate. You will want to connect this machine to the battery of a vehicle so that the vehicles charging system will recharge your battery. (Your vehicle will need to remain running for the duration of the use of the hot box.) You may use just a 12V Deep Cycle battery on its own; however it will only hold a strong enough charge to operate the hot box for only about an hour.

115Volt HBS115-60 This unit requires a 115V electrical receptacle with a clear 20amp breaker or a generator to produce 115V @ 16.5amps.

PROPANE HBSLP50 This unit does not require an external power source. See lighting instructions below.

LIGHTING A PROPANE FIRED HOT BOX

To fire the HBSLP50, with vertical propane tanks installed and turned on, locate the control box under the coil, you will find a thermostat knob and a control knob; turn the control knob to the pilot light position. Depress and hold the red glow plug button, click the igniter for spark to ignite the pilot light. Once the Pilot light is lit continue to hold the red glow plug button for a period of 1 minute. At the end of the minute you will be able to release the button and the pilot light should remain light, once the pilot light stays on switch the control knob to the heat position. When the trigger is pulled the flow of water will activate the burner and when the trigger is released the burner will stop.

MAINTENANCE INSTRUCTIONS



FAILURE TO MAINTAIN HEAT EXCHANGER COIL MAY RESULT IN A STEAM EXPLOSION WHICH MAY CAUSE SERIOUS INJURY OR DEATH.

HEAT EXCHANGER COILS

- Hard water conditions may eventually cause clogging in the heat exchanger. If so it may be necessary to descale coil, since scale deposits will compromise the heating efficiency and produce an unsafe condition.
- Scale buildup from certain detergents may eventually clog up the heat exchanger coil causing an unsafe condition. Use only AMAZING MACHINERY™ recommended detergents for better cleaning efficiency.

COIL DESCALING:

- Mix in a 5 gallon pail, one pound of deliming powder for every gallon of water used.
- Attach one end of a 4-6 foot length of rubber hose to the water intake connector and insert the other end into the thoroughly mixed deliming solution.
- Remove the trigger gun from the high pressure hose and place the hose end into the mixed deliming solution.
- Turn pump motor switch "ON", allowing even water flow from the pickup hose in the deliming solution through the pump, plumbing, coil and hose, returning back to the solution container. **DO NOT TURN THE BURNER ON.**
- Continue to circulate solution for as long as it takes to clear the build-up (may require multiple treatments).
- Re-install the trigger gun. Flush the system with clean water.

MOVING, STORAGE

- Protect machine from freezing temperatures by storing in heated area.

WINTERIZING

With your pressure washer attached to the hot box including the hose, gun, and wand, connect a piece of garden hose with only the male end attached to the inlet of the pressure washer about three feet long. Using a funnel allow antifreeze windshield washer fluid to flow through your machine and out through the hot box, you will need to pull you rope start slowly so not to allow the machine to start but still circulate the fluid thoroughly. Your trigger gun will need to be open.

OIL BURNER AIR BAND ADJUSTMENT

AMAZING MACHINERY® sets oil burners at sea level. Air bands may need adjustment at higher elevations to offer enhanced performance of the burner and extended life of the machine.



IF BLACK OR WHITE SMOKE VENTS FROM EXHAUST PORT UPON STARTING EQUIPMENT, DISCONTINUE USE AND ADJUST AIR BANDS BEFORE RESTARTING.

Adjustment of burner is done with pump motor and burner switches "ON". Loosen locking screw on air band, then close band until black smoke vents up exhaust vent. Take careful note of air band position when black smoke is first noticed. Slowly open air band until white smoke vents, then turn air band halfway back to where black smoke was first noted. Tighten air band locking screw. See figure 5.

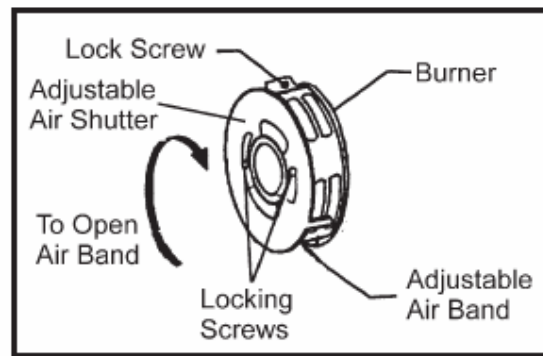


Figure 5

SETTING THE PRESSURE RELIEF VALVE

NOTE: You may need to set the pressure relief valve on this hot box. This will need to be down if you notice water discharge from the unit on the initial start up of the machine.

To set the pressure relief valve, locate the in port of the hot box; there will be a "T" in the line. The pressure relief valve is located on this "T". In the end of the pressure relief valve you will see an Alan set screw. Connect your pressure washer as suggested and start it to get water flowing through the hot box. Do not turn on the burner. With your trigger gun and wand in one hand and the correct size Alan key in the other inserted into the slot. Begin turning the set screw clock wise until the water stops flowing from the pressure relief valve. Once the water has stopped flowing open and close your trigger gun a few times to adjust for peak pressures. If you notice water shoot out again give the set screw a quarter of a turn and check again.

WARRANTY

MANUFACTURER LIMITED WARRANTY

ENGINES

Honda GC Series Engines; ONE Year from date of purchase Honda will repair or replace any manufacturer defect at their expense. To be handled directly by Honda Service Centers. See owners manual for details.

Honda GX Series Engines; TWO years from date of purchase Honda will repair or replace any manufacturer defect at their expense. To be handled by Honda Service Centers. See owners Manual for details.

Vanguard Series Engines; TWO years from date of purchase Briggs and Stratton will repair or replace any manufacturer defect at their expense. To be handled by Briggs and Stratton Service Centers. See owners Manual for details.

Robin Series Engines; TWO years from date of purchase Robin/Subaru will repair or replace any manufacturer defect at their expense. To be handled by Robin/Subaru Service Centers. See owners Manual for details.

Yanmar Diesel Engines; TWO years from date of purchase Yanmar will repair or replace any manufacturer defect at their expense. To be handled by Yanmar Service Centers. See owners Manual for details.

ELECTRIC MOTORS

Marathon and Baldor brand electric motors have a manufacture limited warranty of one year from purchase date to repair or replace the motor, at their options, any manufacturing defects.

The limited warranty does not include damage from low voltage or amperage use, high voltage or amperage use, water, or any other operator incurred damage.

PUMPS

Pump manufacturers offer a "one and five" limited warranty on tri-plex ceramic plunger type pumps, from date of purchase.

The body, head and power train of the pump is warranted for 5 years from date of purchase against manufacturer defects. See owners manual for details.

The valves, packings and "o"rings are warranted for one year from date of purchase against manufacturer defects. See owners manual for details.

Pump manufacturers offer a one year limited warranty on Axial Type pumps from date of purchase. See owners manual for details.

NOTE - Over Heated Pumps void all warranties.

WARRANTY

MANUFACTURER LIMITED WARRANTY - continued

ACCESSORY PARTS

Including, but not limited to; unloader valve, thermal relief valve, reels, easy start valve, chemical injector, rotating nozzles, spray tips, spray guns, wand extensions, telescoping wands, ball valves, sand injectors, quick couplers, high pressure hose, ground fault interrupter; all burner electronics and wiring, flow switches, diesel fuel injectors are warranted for repair or replacement by Equipment Manufacturer for a period of 90 days from date of purchase.

Including, but not limited to; Surface Cleaners, Becket or Wayne Burners, Burner Fans and Heater Coils warranted against manufacture defects for repair or replacement by Equipment Manufacturer for a period of one (1) year from date of purchase.

Including, but not limited to; Cart or Frame warranted against manufacture defects for repair or replacement by Equipment Manufacturer for a period of one (1) year from date of purchase.

LIMITATION OF LIABILITY

Amazing Machinery and Equipment Manufacturer liability for special, incidental, or consequential damages is expressly disclaimed. In no event shall any liability exceed the purchase price of the product in question.

The warranty contained herein is in lieu of all other warranties express or implied, including any implied warranty of fitness for particular purpose.

NOTE - It is understood that a manufacturers limited warranty pertains to equipment used in it's prescribed manner, without abuse, and does not include wear and tear.

NOTE - All freight charges incurred on warranty situations are the responsibility of the customer.

Specifications, Warranties and Pricing are subject to change without notice.

*Refund does not include shipping/handling fees. No refund will be given for installation kits. Customer is responsible for lost or misdirected packages. It is recommended that the customer insure the package for its full retail value. This warranty does not cover or include any damage as a result of acts of God, improper installation, alteration, negligence or abuse.