

HOT SHOT 2800

Operation and Safety Manual

Revision 1.0

Congratulations!

You have made a good decision to purchase **a Hot Shot 2800** Heat Lance and we know you won't be disappointed!

Your new **Hot Shot 2800** is designed <u>only</u> for its intended use, and that is to prepare cracks in asphalt pavement for permanent sealer.

Please read and follow these operation and safety precautions before using your new equipment.

Upon unpacking your new equipment, please inspect it for damage or missing parts.

The equipment is ran and tested before you receive it, so the engine and compressor have already had oil added. <u>Do Not add oil until you have checked the level.</u> Follow the manufactures instructions included with your equipment.

We recommend periodic maintenance for your new equipment. Keep all fluids topped off, check belt for tightness, and check for any loose or missing parts. **Do not operate unit if fluids are low, hoses are loose or the unit has any damaged or missing parts!**

Before start-up:

Make sure all hoses are attached, and unit has clean gasoline and propane in tanks.

By following these instructions, you will have you new equipment for many years to come.

Operation

- 1. Attach the Lance Hose to the lance wand using the quick connect (if your unit uses a quick connect). On later models, disconnects are not used.
- 2. Check all fluids (Follow the engine and compressor manufactures instructions.)
- 3. Always wear Ear and Eye protection when using this equipment!
- 4. After engine warms a few seconds, push throttle lever all the way over to open position. Be careful not to bend throttle lever.
- 5. **SLOWLY** open propane valve on top of bottle. Quick opening will cause excess flow valve to shut.
- 6. Point the lance away and in a safe direction and push the piezo igniter repeatedly until you hear a loud "Pop", which means that the wand is lit. Even though we run and test the unit before it leaves our facility, you may need to adjust the regulator. To adjust the regulator, Slowly move the knob in or out in ¹/₄" increments while continuing to press the igniter.
- 7. THE WAND IS VERY HOT DURING OPERATION EVEN THOUGH THE BARRELL IS NOT RED! USE EXTREME CAUTION!!
- 8. You will hear a "Hissing" from the wand barrel, which signifies that the unit is lit.
- 9. Allow the wand to heat for approximately three minutes, and then it may be necessary to lean the fuel mixture. To do this, slowly turn the regulator knob counterclockwise decreasing the amount of fuel to the lance. This will take some practice. The more you use the lance, the better you will get at this adjustment.
- 10. The stainless barrel should be orange from the tip to half way up the barrel. Adjust the regulator (decrease fuel) if the Barrel glows more than ¹/₂ way up the barrel. Do not allow orange glow past ¹/₂-way up barrel!
- 11. When finished, shut off propane completely, and allow engine to run a few minutes to purge excess propane and cool barrel.
- 12. Turn off engine and place lance into lance holster.

Trouble Shooting

Problem: The wand will not light:

This is usually always caused by an out of balance fuel to air mixture. Make sure engine is running at high speed, throttle lever should be all the way over to hit the stop, slowly crack valve on bottle and open one turn.

Press igniter while adjusting regulator in or out, turning no more than $\frac{1}{4}$ turn at a time. Regulator knob will be approximately $\frac{1}{2}$ " out when unit is lit.

Problem: Regulator adjustment will not light wand:

Remove spark plug and lay it on lance, push Piezo and look for spark. If no spark occurs, check plug gap to 1/8 ", replace spark plug or Piezo as required.

Problem: Wand won't stay lit or regulator needs constant adjustment:

Check belt for tightness, ¹/₂" of play is normal.

Check stop on throttle lever stop and make sure it is not bent; engine running too fast will cause this condition. Throttle is factory set at 2800 RPM.

Check that stop nut is locked on regulator knob, lock nut down to keep knob from vibrating in or out.

Problem: Wont light in cold weather:

In cool weather and during prolonged run periods, the bottle may freeze-up. This will cause below normal propane pressure and unit will not stay lit. We recommend you carry another bottle with you, keeping your stored bottle at 70 degrees, trade bottles as necessary.

Problem: None of the above work:

Only after trying everything above, and after the wand cools, disassemble the barrel, remove the 6" stainless nipple from lance pipe and check orifice mixer for debris. Assemble **exactly** as taken apart.

Maintenance & Safety

Periodic maintenance should be performed to insure your new equipment is always ready to perform at its best. This will include:

- Maintaining oil level in compressor. (See owner's manual) We recommend Castrol 30 WT Non-detergent oil.
- Maintaining oil level in engine. (See owner's manual) We recommend Castrol GTX 10W30
- Keeping air filters on compressor and engine clean.
- Keeping belt tight.
- Checking all hardware for loose parts, and fittings tight.
- Checking all hoses for wear and tear. Replace as necessary.
- Do not operate the Hot Shot 2800 if it has damaged or missing parts, or not running properly as bodily injury or Death can occur!

The operator must be a responsible adult, and familiar with this equipment! Safety Eye Protection, Ear Protection and Protective clothing must be worn while operating the Hot Shot 2800.

Using your Heat Lance

After the heat Lance has warmed for several minutes, attach the pull rod and holding the lance in one hand, use the pull rod to pull the lance behind you while pointing the lance at the asphalt crack you are cleaning.

Hold the lance tip at a 45 degree angle, approximately 2" from the crack and move slowly blowing the debris AWAY from people and vehicles.

The amount of debris and the size of the crack will determine how fast you will move the heat lance.

With practice you will find that you will become very efficient in cleaning asphalt cracks with your heat lance.

New crack sealer should be applied while the crack is still hot for optimal adhesion.