Integrated Paving Concepts Inc.

SR-120 Regular Maintenance

To maintain you SR-120 in proper working order, it is recommended that you perform the following activities at the proper intervals.

Check Once a Month:

□Clean Heater Nozzles

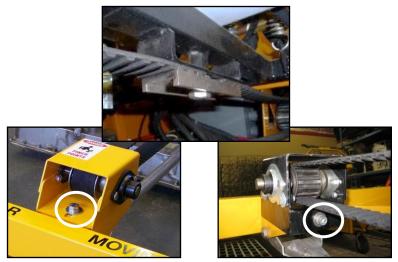
The heater nozzle injects the propane into the heater. Use the supplied tip cleaner or welding tip to clean out the orifice. To do this, apply compressed air into the hose going to the heater bank and run the tip cleaner in and out of the tip while air is blowing through.

DO NOT USE PROPANE; EXPLOSION HAZARD!



□Inspect Belt, Pulley and Bracket

Visually check the belt for any signs of wear and tear. Ensure proper amount of belt tension (belt should only have a slight sag) and tighten bolt.



□Check Hose Lines, Pipes and Manifolds for Leaks

Visually check all hoses, electrical lines, propane pipes, valves, regulators and manifolds for leaks or breaks.

Check Once a Month:

□Brake Adjustment

All tires should be maintained at 28 PSI (2 Bar) so that the unit will drive with ease. Especially during transport, ensure that the parking brake is engaged so that the front wheels do not move. The front 2 tires use a drum brake, so minimal adjustment in needed. However, it is important to check that the cable remains tight. If any adjustment needs to be made, it can be done so at the pulley located in the main body. The cable adjuster can be turned to be tightened or loosened.

Parking Brake Cable Adjuster:



□Heaters

Check for build up of dirt or asphalt on screens. If needed, use a pressure washer or air blower to clean. Heater must be dry before igniting.

□Drive Chain

Visually inspect chain tensioner arm, chain and sprockets for breakage or slippage. Ensure bolts and set screws are tight.

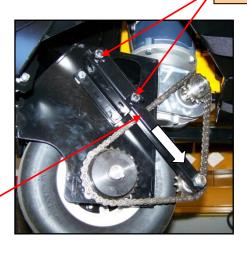
Chain Tensioner Arm

Proper Tire Pressure:





Set Screws

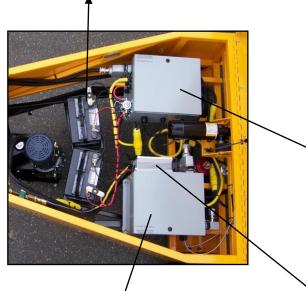


Check Once a Year:

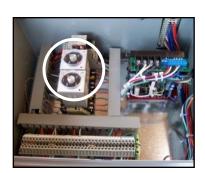
□Electrical

Check control box for any loose wires or degradation and tighten or replace if necessary. Inspect fuse and replace if necessary. Inspect all electrical lines, especially any pinch points at the cable whip, including proximity sensors, and tighten or repair as needed. Check batteries & charger for corrosion or excessive wear. Replace as needed.



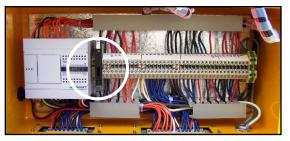


110VAC Box:

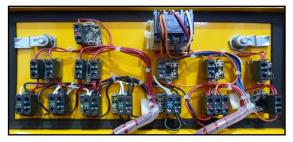


Check for loose wires or degradation; tighten or replace if necessary. Inspect relays and replace if corroded. Replace as needed. Plug in system and turn on. Ensure temperature controllers are set at 200° and red lights are on.

Inside Control Box:



Door:



12/24VDC Box:



Check for loose wires or degradation; tighten or replace if necessary. Inspect 3 fuses and replace if corroded.

Battery Charger:



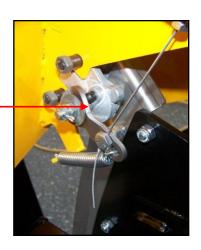
Inspect battery charger for corrosion or excessive wear. Inspect 2 fuses and replace as needed.

Check Once a Year:

□Tilt Brake

Inspect tilt break and cable line. Ensure all bolts are tight, rotor is clean and caliper pads are properly adjusted.

Caliper



□Mechanical

Visually inspect rails, hinges, limit switch brackets, toggle clamps, feet, wing winches, pulleys, cables and cable whip for any signs of wear. Replace as needed. Lubricate front wheel bearings (remove rubber cap with a flat head screwdriver), front wheel axel, drive wheel, thrust bearing and shaft, chain and hose whip as needed.

Lubrication Points:









Thrust Bearing and Shaft:



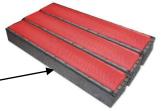
Undo the ½" bolt at the top of the shaft and jack the uni-frame up half way and apply grease to the shaft and enough will fall into the bearing.

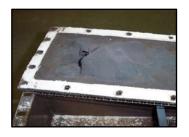
□Screen Heat Test

Run SR-120 a few passes to warm-up. Tilt back so that all of the wheels are on the ground, and prop front end up. Turn heaters on, let cycle 4-6 times and inspect. All 12 heaters should be glowing with the same heat intensity – a red-orange glow. If not, it is possible that the inside screen and/or the ceramic gasket is damaged (below right) and must be replaced. While the screen is off, inspect welds/deflector plate/mixing bell and replace if damaged or corroded.









Heater Nozzle Removal and Cleaning:









- 1. Disconnect the braided hose (or stainless tube on earlier machines) using an 11/16" wrench.
- 2. Use a 9/16" ratchet to remove the heater from the frame.
- 3. Use a 3/4" wrench to loosen the backing nut on the elbow. One turn is all that is needed.
- 4. Unscrew the whole nozzle / elbow assembly to remove it.
- 5. Using the tip cleaner or a welding tip, clean the nozzle and dislodge any debris.
- 6. Then blow compressed air <u>through the nozzle</u> to remove all debris from the elbow.





While everything is disassembled use compressed air to blow out the hoses, pipes and manifolds. When fully reassembled, blow in compressed air through propane hose on steering arm and apply soapy water to connections to **make sure there are no leaks**. Tighten any leaky fittings. Next, follow the same process with the 4 propane quick connecters on carriage.

Heater Nozzles need to be replaced every 2 years due to the possibility of internal metal corrosion.

Check Once a Year:

□Check Gauges

With heaters running, ensure gauges are working properly. If pressure is too high it can send in too much gas to the heater box, and can cause "flashbacks". 1st stage regulator – 50 psi; 3rd stage regulator – 6-7 psi.

1st Stage:



3rd Stage:



□Thermocouples & Pilot Lights

Inspect lines & pinch points. Ensure that the pilot lights are as close as possible to the heaters. This reduces the likelihood of damage to the pilot. Straighten and realign any bent parts. To ensure proper flame, clean pilot light tube of any asphalt debris.



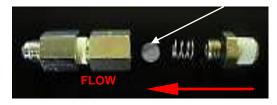
☐ Heaters & Propane System

Inspect hose lines, pipes and manifolds; repair or replace as needed. Check that all the nuts and bolts around the perimeter of each heater are tightened. When tightening, ensure that the ceramic gasket around the perimeter is sealed.



Inline Filter Assemblies:





All SR-120's have been built with 12 Inline Filter Assemblies that filter out any debris which can cause blockage of the heater nozzles. These filters can be cleaned by simply disconnecting the stainless steel braided hose, opening the screen assembly, cleaning it out and reinstalling.

Integrated Paving Concepts Inc. is committed to providing the best possible after-market service. If you require parts or service, or have any other questions please call IPC Support at 1-800-688-5652 or +001 604 574-7510 outside North America. Visit www.integratedpaving.com for technical documents and support.