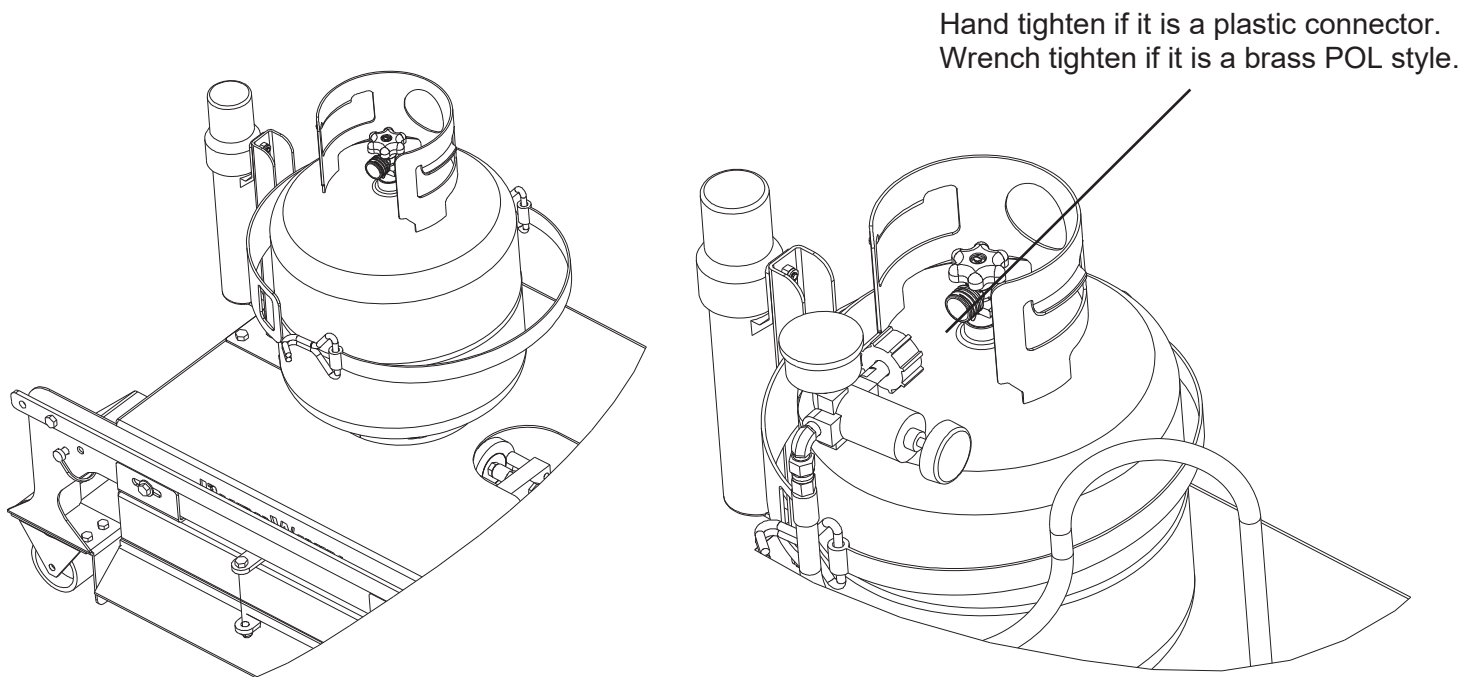


Intended Use: This machine is designed for heating the asphalt without burning the oils. The asphalt can be repaired or altered depending on the particular application.

⚠ WARNING: DO NOT OPERATE THE MACHINE IF A HOSE IS DAMAGED OR IF THERE IS A HOLE IN THE HEATER CARTRIDGE. WHEN CONNECTING YOUR PROPANE TANKS OBSERVE THE FOLLOWING PRECAUTIONS.

Tank Connection

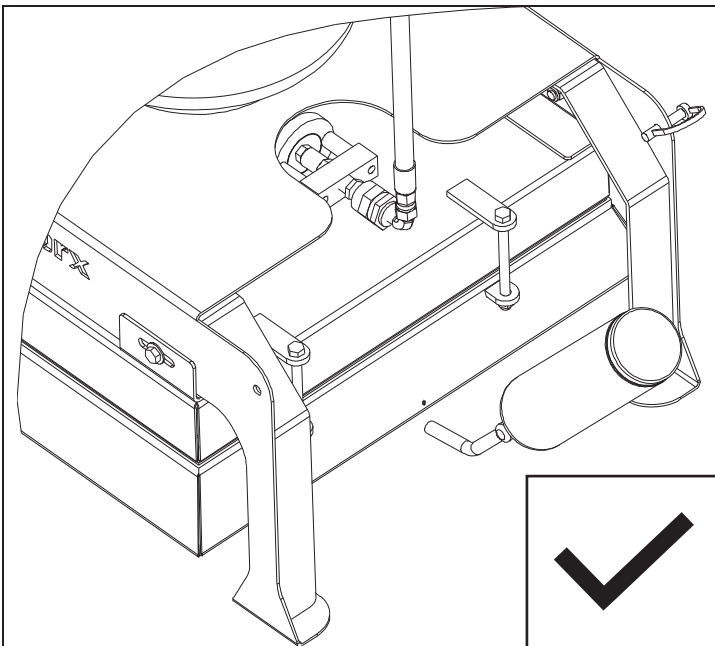
- 1) All connections must be made by a trained worker (check your local regulations).
- 2) Inspect the infrared heater, regulator and hoses for defects. Repair or replace any damaged parts.
 - Make sure all hoses and valve connections are clean.
- 3) Use proper fitting wrenches to make connections.
- 4) Check for any propane leaks using a soapy water solution.
- 5) Secure the propane cylinder with the supplied strap.



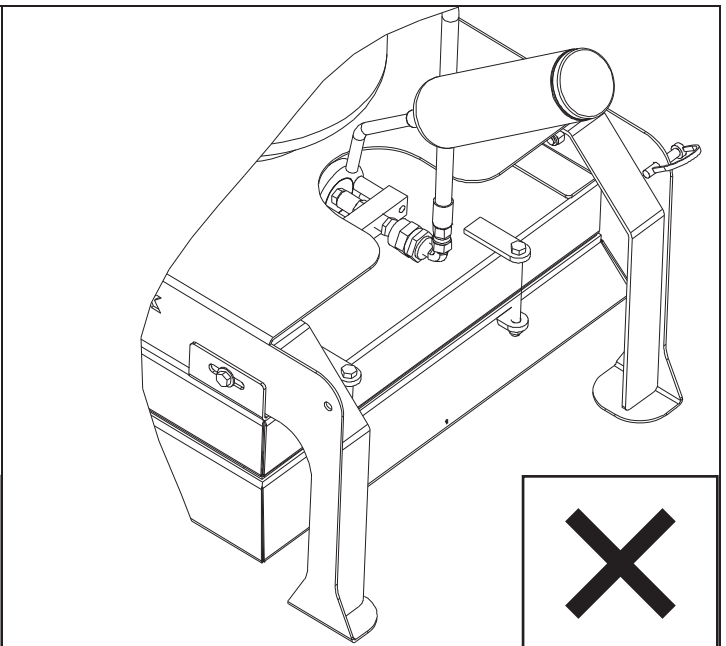
- **Operation Guide**

Lighting Procedure

- 1) Slowly open the cylinder valve and check for gas leaks when the hose line is full. When the infrared heater is in use the cylinder valve must be fully opened. Check for leaks with soapy water or leak detector.
- 2) Adjust regulator to 35 PSI (high fire).
- 3) Ignite the propane gas torch.
- 4) Place the torch tip underneath heater. Do not point the flame of the torch directly at the ceramic surface, this could damage the ceramic and reduce the life of the cartridge.



Place the tip of the torch underneath the skirt to light the heater.



⚠ Warning: Never attempt to light the heater at the orifice.

- 5) Adjust the regulator to desired pressure (10 psi to 35 psi).

Heating Procedure

- 1) Identify and mark areas to be repaired
- 2) Sweep area clean of stones and loose debris.
- 3) Place heat over area that needs repair.
- 4) Heat area that needs repair with the heater on high fire

Make sure that surface temperature of the asphalt never exceeds 150°C (300°F).

Note: Time required to soften asphalt to a depth of about 50.8 mm (2") will vary depending on the following:

A) Weather conditions

B) Type of asphalt mix (course or fine, ac content)

C) Starting temperature of asphalt

D) Dark surfaces absorb radiation better

E) Extraneous materials, (ie. Rubberized crack & sealant) are present in repair area

F) Surfaces lightness

- 5) When asphalt is workable to entire thickness of asphalt or to about 50.8 mm (2") move machine away from repair area.
- 6) Using an ice scraper, standard construction rake, rework scarify asphalt to eliminate all cracks, etc. from repaired area. Start by reworking at the edges of the patched areas. All edges should be straight and square to create uniform looking patches. Allow 2-3 inches of hot asphalt untouched in order to make the patch seamless with old asphalt.
- 7) Once the entire repair area has been reworked, an asphalt rejuvenation agent should be sprayed on the entire patched area at a rate of 1/10th of a litre per square metre and be thoroughly mixed into the repair areas using an asphalt rake or lute.
- 8) Fresh hot mix asphalt should be added as required to repair area, to compensate for voids to fill and level all depressions.
- 9) While the material is still hot, first compact the edges of the patch to ensure a seamless, smooth edge between the old and the new asphalt. Continue compacting inside area until satisfied density is delivered.
- 10) The newly patched area should be protected from traffic for a minimum two-hour period or until the asphalt has cooled sufficiently, so that use will not leave any marks.

Shut Off Procedure

- 1) Close propane tank valve while heater is running (to clear the lines of propane and so pressure gauge reaches zero).