

Competence in  
Ice & Solar Systems

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## Sport Ice Elektro 124



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## Operation Manual

The Sport Ice Elektro 124 is an ice resurfacing machine designed to be used on small ice surfaces. The machine has been designed to produce a high quality ice surface. The typical ice surface for this machine is approximately 650 square meters. It has the water capacity (380 liters) for almost ½ of a regular hockey ice surface.

*Note:*

*The machine has not been designed to function as a snow-plow machine. If you are using the machine on an outdoor rink, you must first remove any fresh snow accumulated on the ice surface before using the ice resurfacers.*

### Safe Operation

- 1) Keep all guards in place.
- 2) Only operate the machine when no one is on the ice surface.
- 3) No riders. Single operator only.
- 4) Make sure the floor/ice surface can safely support the machine.
- 5) Only drive the machine if you have been trained in the correct and safe operation of the machine.
- 6) Make sure the headlights, tail-light and horn are functional each time you use the machine.
- 7) Perform a “safety walk-around” on the machine every BEFORE you operate the machine.
- 8) Always park the machine in a secure place, set the parking brake and remove the key switch, when done.
- 9) Take care when turning, reduce your speed for sharp turns.
- 10) Always operate while sitting down in the operator’s seat.
- 11) Always have the “High-Power” switch turned off when the machine is not on the ice.

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## “Safety Walk-Around”

The “Safety Walk-Around” is an important activity performed each time the operator gets on the machine.

To perform the “Safety Walk-Around:”

- 1) Inspect the wheel lug nuts. Make sure that all 4 nuts on each wheel are in place and appear tight.
- 2) Look for loose tire studs or ice screws.
- 3) Make sure the floor plates are in place. Make sure that the electrical control cover (left of operator) is in place and bolted tight.
- 4) Make sure that the conditioner covers are in place before resurfacing.
- 5) Make sure that the chain guard on the vertical auger housing is in place.
- 6) Make sure that the upper and lower snow shields on the vertical auger are in place.
- 7) Make sure that the snow shield on the snow tank is in place and that the plastic window and guards are intact and in good condition.
- 8) Make sure that the control levers are in the OFF or NEUTRAL position.
- 9) Look for signs of oil leaking. Make sure the hydraulic hoses appear in good condition.
- 10) Look for loose nuts, bolts and other fasteners.
- 11) Look for debris in the path of the machine.
- 12) Look for people in the vicinity of the machine. Remain aware of their proximity to the machine.
- 13) Note if the water tank fill hose is inserted in the machine.
- 14) Note if the battery charger is connected to the machine’s batteries.
- 15) Make sure that the safety nameplates are visible.
- 16) Inspect the cutting blade position. Use caution around the blade.

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Left Side Machine View

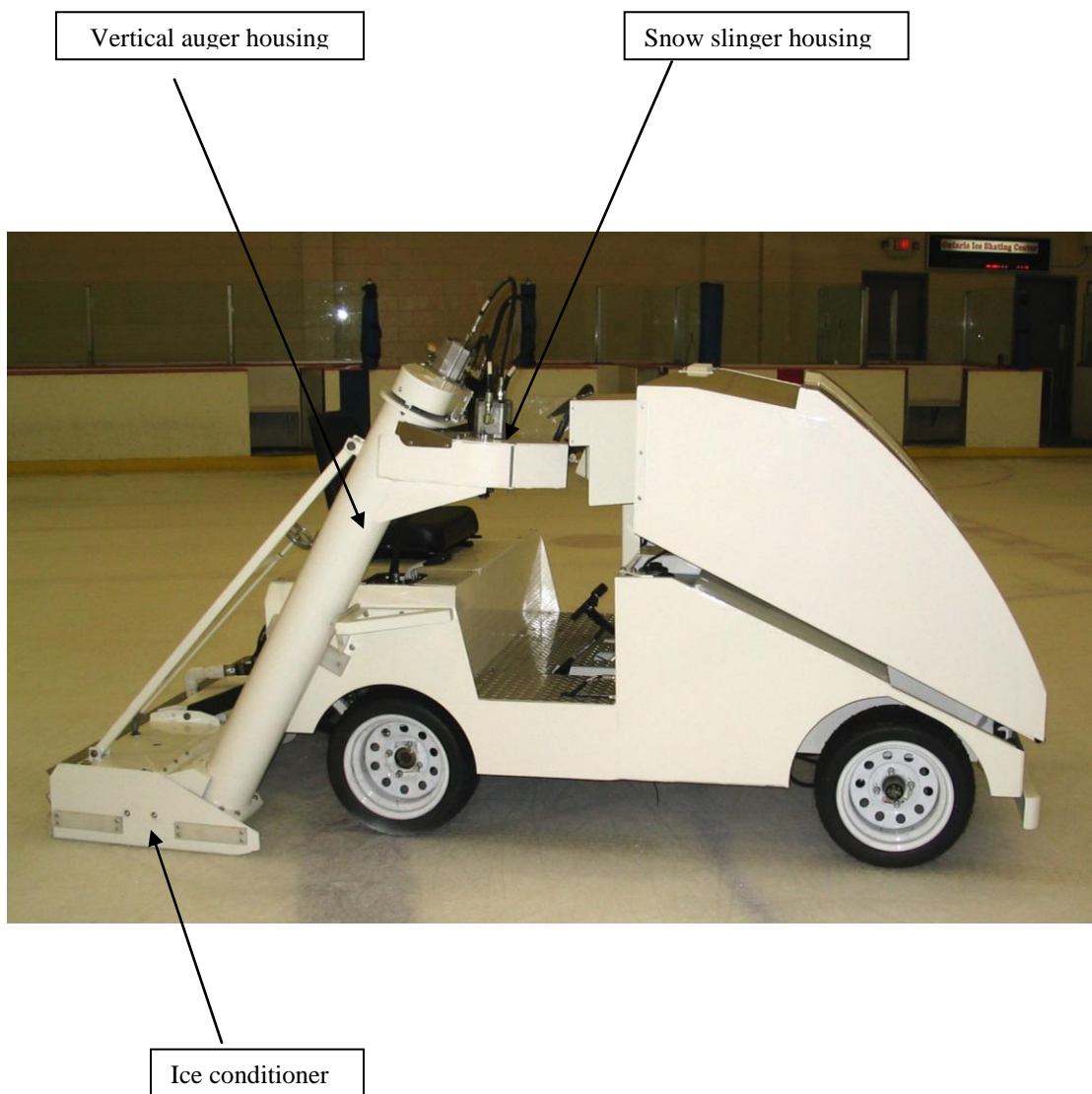


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*Right Side Machine View*



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Rear Machine View



Lift bar  
cylinder

Water pipe

Towel bar

Ice conditioner

Vertical auger housing

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Snow shield

Water fill port

Accelerator pedal

Water valve control rod

Parking brake (top portion of brake pedal). To apply; push down on pedal, then rocker top section. To release; push on lower section of pedal.

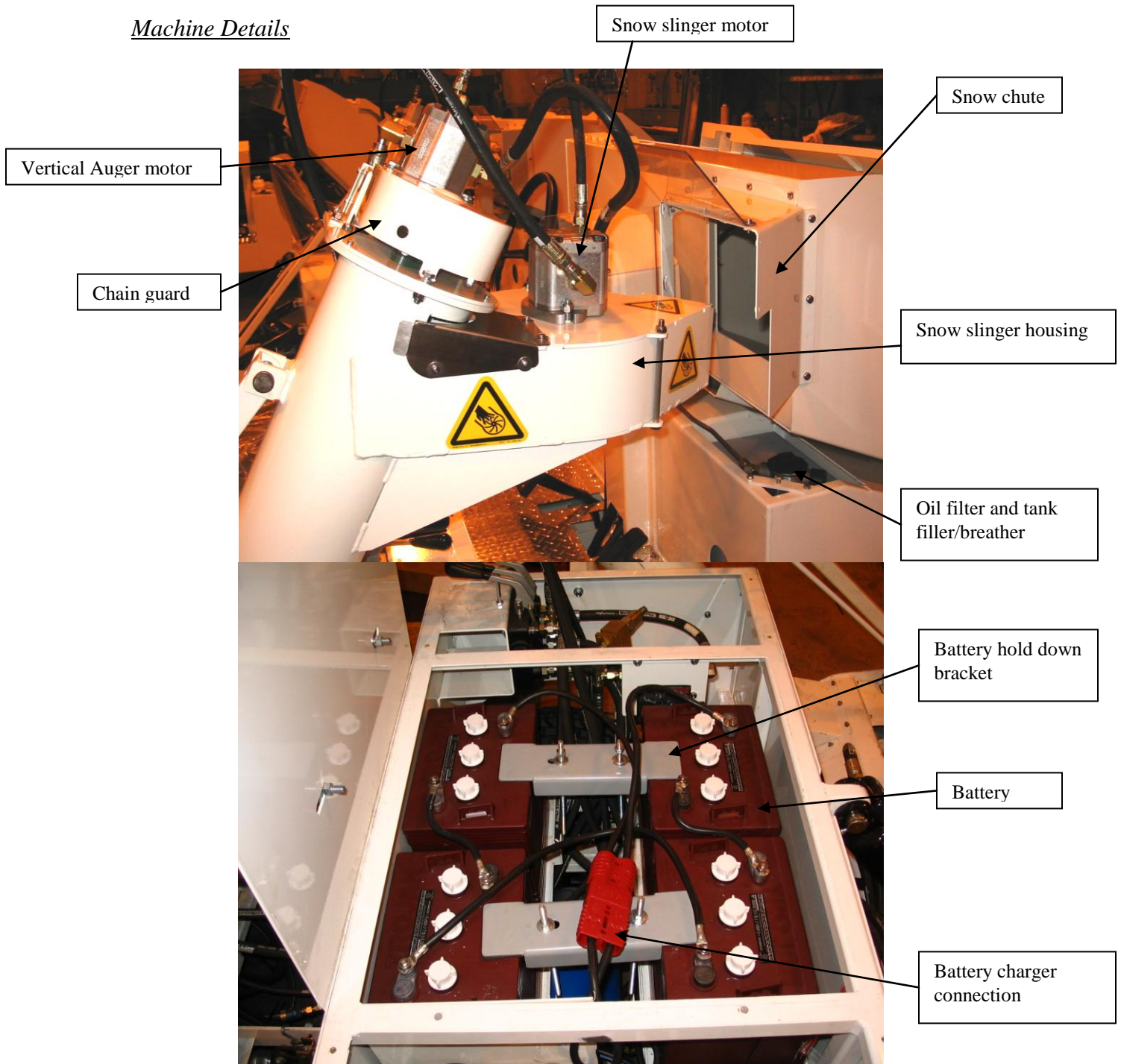
Brake pedal

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*Machine Details*





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*Snow Shield and slinger housing details*

Snow Shield

Snow shield guards



Snow Slinger housing

**DANGER!**  
Do not place hand or fingers near the exhaust chute.

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## Machine Operation

Before going on the ice

- 1) Perform the “Safety Walk-Around.”
- 2) Start the machine in the following manner:
  - a. The directional “Forward/Reverse” switch must be in neutral.
  - b. The accelerator pedal (and switch) must be open (not depressed).
  - c. Make sure the “High Power” switch is turned OFF.
  - d. Turn the key switch to the right one position. Wait two seconds for the traction control to energize.
  - e. Turn off the key switch. Immediately turn the key switch back on, this will allow the pump control to energize. (You will hear the pump motor start).
  - f. Raise the conditioner/vertical auger housing to it’s full height.
  - g. Remove the parking brake by pushing on the center of the brake pedal.
  - h. Select a drive direction (forward or reverse).
  - i. Push on the accelerator pedal. The machine will begin to move. Vary the machine’s ground speed as needed.
  - j. Drive, brake and turn in a smooth manner.
- 3) To stop the machine:
  - a. Slow and stop in a smooth manner using the brake pedal.
    - i. Note: machine “plugging” will also help slow the machine.
  - b. Turn off the “High Power” switch.
  - c. Lower the conditioner onto wood blocks
  - d. Turn off the key switch.
  - e. Set the parking brake by pushing on the top portion of the brake pedal (marked as “Parking Brake”).
  - f. Remove the key switch.

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## To get ready to Resurface:

- 1) Make sure the batteries are properly charged.
- 2) Fill the water tank.
- 3) Place the towel bar in the lower position on the conditioner.

## To Resurface:

- 4) Safely drive onto the ice surface
- 5) With the machine moving slowing forward, lower the conditioner completely.
- 6) Turn on the “High Power” switch. You will hear the pump motor speed up.
- 7) Turn on the augers and snow slinger by pulling up on the center control lever.
- 8) Turn on the ice making water valve and regulate the water as needed.
- 9) Adjust the ice shaving blade as needed.
- 10) You can view the snow transfer into the snow tank via the snow shield windows.
- 11) Drive as smoothly as possible and at a consistent speed. Try not to drive fast and then slow, as this will affect the snow transfer system and the water delivery.  
Overlap the conditioner to the previous lap by approximately 150 mm or 6 inches.
- 12) At the end of the resurfacing:
  - a. Turn off the water
  - b. Turn off the augers and snow slinger.
  - c. Raise the conditioner completely.
  - d. Turn off the “High Power” switch.
  - e. Slowing drive off the ice. Watch out for pedestrians and other vehicles.
  - f. Dump the snow from the snow tank.

## After the resurfacing:

- 13) Wash out the conditioner to remove snow and ice.
- 14) Refill the water tank.
- 15) Note the battery state of charger. Charge as needed.
- 16) Lower the conditioner onto wood blocks.
- 17) Place the towel in the upper location on the conditioner.

## **Operator Controls**

The machine has the following operator controls:

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- Steering wheel
- Horn switch
- headlight/taillight switch
- “High Power” switch
- Dash display
  - Battery Discharge Indicator (BDI)
  - Fault codes
  - Hourmeter
- Directional switch (Forward/Reverse)
- Key switch
- Water control rod
- Control levers for machine functions
  - Conditioner up/down
  - Augers on/off
  - Dump tank up/down

Dash Display  
-Battery Discharge Indicator  
-Fault codes  
-Hourmeter



Directional Switch

Key Switch

Steering wheel

Horn switch

Headlight switch

High Power switch