SANDROID

Model # SD-100

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Safety precautions

- Personal Safety
    - Eye protection - Always use appropriate and approved safety glasses, goggles, and or face shield when operating the Sandroid. Never point the Sandroid gun assembly at anyone. Never point the Sandroid gun and nozzle assembly at your face.
    - Ear protection - Always use appropriate and approved hearing protection when operating the Sandroid.
    - Respiratory protection - Always use appropriate and approved respiratory protection for dust particles when operating the Sandroid.
    - Skin Protection - Always wear appropriate clothing to cover your skin while operating the Sandroid. Always wear gloves to protect your hands.
- General Safety Precautions
    - Gun / Nozzle - When not in use disconnect air hose from gun to eliminate accidental media blasting of unintended objects, body parts, or persons.
    - Electrical - Always disconnect electrical supply from the Sandroid before performing any maintenance or service on the unit.

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Initial Assembly

1. Filling the Sandroid with blasting media

    1. Remove the four bolts that attach the head to the body assembly.

    2. Carefully lift the head off of the body assembly, be cautious not to damage the filters that are attached to the underside of the head.

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3. Remove the debris bucket from inside of the Sandroid body.

4. Pour the blast media into the Sandroid through the debris screen.

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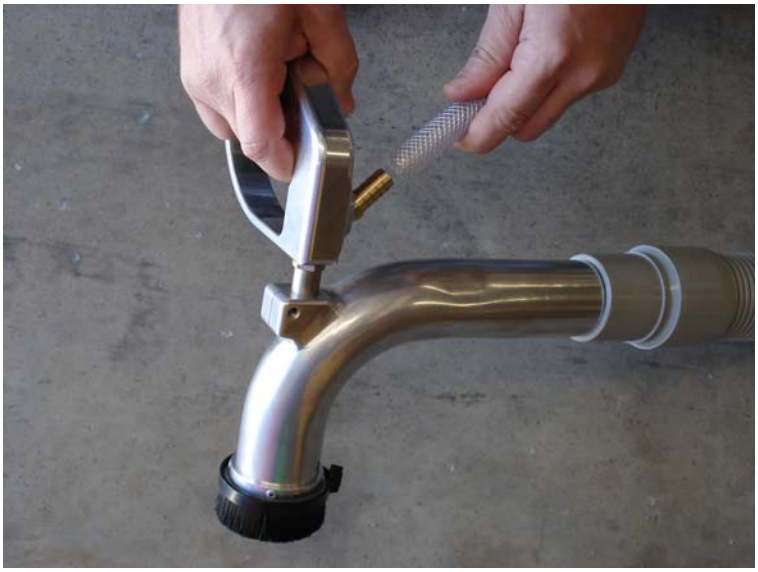
2. Attaching vacuum hose and gun assembly
    1. Attach one end of the vacuum hose on the vacuum inlet of the Sandroid.

    2. Attach the vacuum hose, air hose and the blast media feed hose to the gun and vacuum nozzle assembly.



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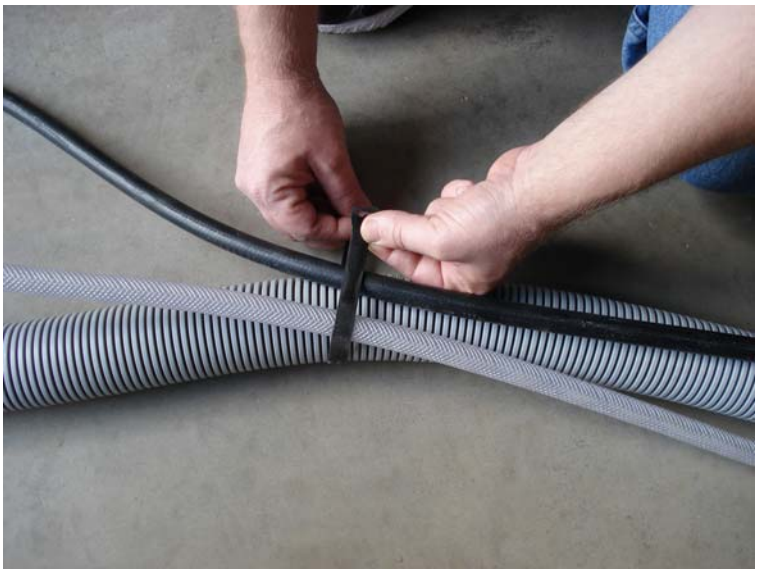
3. Attach the blast media feed hose and air hose to the vacuum hose using the Velcro straps.



**Be careful not to over tighten the straps as it will pinch the hose and restrict the volume of blast media.

4. After connecting the air line check the adjustment of the air regulator to allow sufficient air flow (80-110 PSI).

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Sandroid operation

1. Put on all appropriate safety equipment.
2. After plugging in the Sandroid, press the "reset" button on the GFCI.
3. Switch the vacuum motors on (the switch will illuminate when on).
3. Attach the air supply to the Sandroid gun assembly and begin blasting.

- Blasting designs
    - Single template designs - Stand on the template to keep it from moving. Hold the Sandroid gun so that the brushes on the nozzle are touching the template. Pull the trigger and move the Sandroid gun assembly continuously to blast away the stain, sealer, or concrete. Remember that the nozzle (where the blast media comes out) is in the center of the vacuum tube.

When you have finished blasting the image, remove the template and use the vacuum to collect any loose blast media. Be careful not to vacuum up any foreign debris as it may potentially clog the sand feed system of the Sandroid.

    - Double template designs - Blasting a double template design is identical to a single template design except when you have finished with template number one remove it and vacuum up any loose blast media, then align the second template over the image. The second template will serve to remove the bridges in the image that the first template left behind.

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- Purging the vacuum filters

    - After a period of use the Sandroid may begin to lose suction due to fine concrete dust particles being collected by the filters. To purge the dust from the filters turn off both motors, attach your compressor air hose to the quick connect fitting on the underside of the head of the Sandroid. Open the valve which leads into the Sandroid head. This action activates the filter shaker which will knock the accumulated concrete dust off of the filters into the debris bucket.

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Routine Maintenance

- Refilling blasting media
    - Remove the four bolts that attach the head to the body assembly.

    - Carefully lift the head off of the body assembly, be cautious not to damage the filters that are attached to the underside of the head.

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- Remove the debris bucket from inside of the Sandroid body.

- Pour the blast media into the Sandroid through the debris screen.

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- Oiling the gun valve
  - After every two hours of use and each time before the Sandroid is put away, put three drops of air tool oil in to the quick connection on the Sandroid gun. After disconnecting the blast media feed hose reattach the air hose, then press the trigger on and off rapidly 10 times. This will distribute air tool oil into the moving components of the gun which will allow the parts to move freely and extend the working life of the tool.

- Inspecting the blast nozzle for wear
  - After every five hours of use, remove the blast nozzle from the Sandroid gun and inspect for wear. The nozzle must be replaced prior to the side wall being worn completely through.

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- Inspecting hoses
  - After every five hours of use inspect all hoses for wear and replace as necessary.

- Emptying debris bucket and debris screen
  - Remove the four bolts that attach the head to the body assembly.

  - Carefully lift the head off of the body assembly, be cautious not to damage the filters that are attached to the underside of the head.

- Remove the debris bucket from inside of the Sandroid body and properly dispose of the contents.

- Remove the debris screen from inside of the Sandroid body and properly dispose of the contents.

Trouble Shooting

- Blast media is not coming out while blasting
    - Out of media – Refill with more blasting media.
    - Closed siphon valve - Open siphon valve.
    - Wet blast media – Drain the tanks on your compressor and consider installing a water separator on your compressor.
    - Kink or clog in blast media feed hose.
    - Check the adjustment of the air regulator to allow sufficient air flow (80-110 PSI).

- Loss of vacuum suction
    - Clog in hose – Disconnect vacuum hose and remove obstruction.
    - Kink in Hose
    - Vacuum filters dirty – Purge the vacuum filters.

- Slow to blast
    - Epoxy / Urethane Coatings - some sealers and coatings can be very slow to blast away.
    - Polymerized overlayments - some polymerized overlayments can be very flexible, it will take more time to blast the overlayment because it tends to compress rather than erode.
    - Deep penetrating stain - some stains can penetrate very deeply. One example is black RAC stain (reactive acid chemical stain) can penetrate 1/8th inch deep in porous concrete.
    - Extremely hard concrete - Very hard or extremely well toweled concrete slabs will be slower to be blasted away.
    - Inadequate compressor / air pressure - An underpowered compressor will not be able to provide enough pressurized air for continuous operation of the Sandroid. Allow the compressor to fully pressurize, then blast in short durations to allow the compressor to re-pressurize.

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Replacement Parts

Part Number	Description
SD-101	Blast Media
SD-102	Blast Nozzle
SD-103	Gun and Vacuum Tube Assembly
SD-104	Vacuum Hose
SD-105	Vacuum Filter Assembly
SD-106	Velcro Quick Tie Straps
18008	Vacuum Motor Switch
43007	Vacuum Motor
SC-165	GFCI Assembly
43009	Front Caster
43008	Rear Pneumatic Tire
43004	Debris Screen
43006	Debris Bucket

Technical Help

For technical information and assistance please e-mail tech@engraveacrete.com, or call 1-800-884-2114