



Brush Switch

- The brush switch is located on the left side of the control column and it turns the brush on and off.
- There is also a tilt switch in this circuit located under the brush head that only allows the brush to be turned on when the brush head is in the operating position.

Circuit Breaker

- There is one master circuit breaker located below the brush switch on the control column.

Brush Head



- The brush motor, Filter Bag and Flexiwall shield are located at the front of the machine.
- The bag connects directly to the Flexiwall shield and has a snap that retains the rear of the bag.

MAINTENANCE

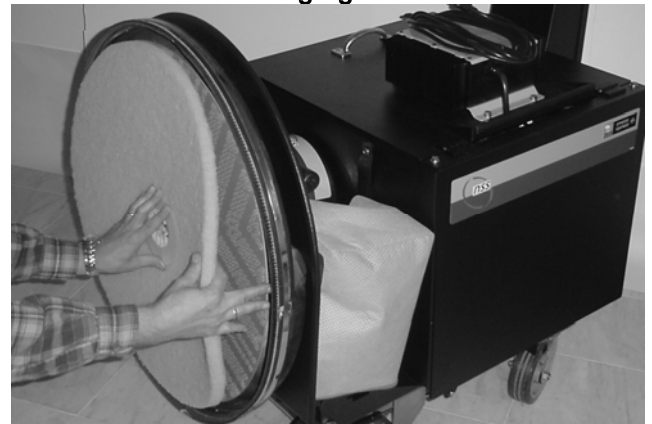
ALWAYS turn OFF all machine switches before performing any maintenance or repairs to any equipment.

Check the tension of the Drive Chain after the first 100 hrs of use and then every 90 days or 300 hours as needed. For the chain tightening instructions see the maintenance section called 90 Day Maintenance (300 Hours).

Daily Maintenance

Never leave the machine sit with a used pad installed. This can cause the pad driver to warp.

Pad Installation / Changing



There is a wide range of pads available for many different burnishing applications. Consult your local NSS authorized distributor for application recommendations.

- Lift the front of the machine up to the 90 degree position to view the pad driver and pad.
- Make sure that the correct pad (7/8" to 1") X 27" is being installed.
- Place the pad flat on the floor, and remove the center hole of the pad, step on the center of the pad to compress the edges around the center hole. This allows for easier installation of the pad centering cup.
- With the machine in the pad changing position, carefully center the pad on the driver.

Caution: Pads must be installed concentric (evenly aligned) with the outside edge of the pad driver. Failure to follow these precautions will cause excessive machine vibration, a reduction in pad life and produce unsatisfactory burnishing results.

- Place the pad grabber in the center hole of the pad.
- Holding the pad driver and pad, push on the pad grabber until the spring clip has clicked twice.

Caution: Failure to install the pad grabber tightly may allow the pad to be thrown from the driver.

Daily Maintenance (continued)



- Empty the filter bag daily or when it is approximately one-half (1/2) full.

Charging Batteries



- Recharge the batteries when indicated by the Battery Meter.
- Never let the batteries sit overnight after the machine has been run for 1hr or more since last recharge.
- **NEVER** let the electrolyte level fall below the tops of the plates. This will damage the batteries immediately, and void the warrantee.
- Check charger cord for exposed wires and damaged plugs before using.
- To recharge the batteries plug the charger cord into the charger located on top of the machine and then into an electrical outlet.
- When the cord is plugged into an outlet the machine will automatically become disabled.
- Charge the batteries with the cover open when possible to reduce heat build up in the batteries.
- **See charging instructions for more details.**



- **ALWAYS** wear eye protection, rubber gloves and protective clothing to avoid contact with battery acid when working around batteries.
- After charging batteries check the water level of each battery cell and add distilled water as required to level specified by battery manufacturer.
- Check and verify that all battery connections are clean and tight.
- Wipe machine down with a damp cloth.
- **NEVER** spray this machine with water or any liquids.
- **ALWAYS** Check the tilt switch for proper operation. With the master switch turned off, put the brush head into the pad change position. Turn the brush switch on then the master switch on, the machine should turn on.
- If the machine does not turn on and the battery meter is flashing a one, the tilt switch has failed. **DO NOT** use the machine until the tilt switch has been replaced.

Opportunity Charging

Opportunity charging is charging the batteries when an opportunity presents itself, such as during breaks, and is done **in addition to a full charge cycle**.

Opportunity charging is recommended, as this extra charging time will help raise the operating voltage of the batteries, and will help ensure maximum runtime and cycle life.

See Monthly Maintenance and Operating Battery Charger Instructions for equalizing your batteries especially if you have been opportunity charging your machine.

Weekly Maintenance (Every 25 Hrs)

Verify all daily maintenance has been performed.



- Inspect the Flexiwall Shield for dents around the outside edge and cracks in the plastic.
- Check that the Brush and Retaining Band are properly installed.
- Remove dirt build up on the brush along the bottom of the Flexiwall Shield.
- A damaged Flexiwall Shield Assembly will greatly reduce dust control capabilities of the machine.

Monthly Maintenance (Every 100 Hrs)

Verify that all daily and weekly maintenance has been performed.

Equalize your batteries (Flooded only).

The batteries should be equalized once every 30 days for maximum battery runtime and life.

To equalize the batteries:

- Plug in the charger, and fully charge the batteries (until the green 100% LED is on continuously).
- Unplug the charger from the wall outlet, then plug it back in.
- The charger will run for 2hrs, holding the batteries at a constant voltage, and equalizing each cell.

THIS STEP IS ESPECIALLY IMPORTANT IF YOU PRACTICE OPPORTUNITY CHARGING.



- Check the Battery Tray Drain Hose for liquid level on a monthly basis.
- Spilled liquids from the battery compartment area are collected in a tray under the batteries. The tray can be drained using the hose at the right rear of the machine as shown above.
- **IMPORTANT:** Drain all liquids into an approved container and dispose of according to your local and federal regulations.

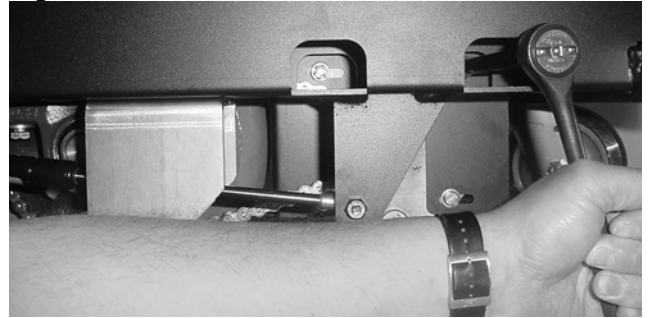


- Inspect the machine components for wear, loose fasteners, or damage. Pay special attention to all pivot points and moving parts.
- Call an authorized NSS service center for repairs.

90 Day Maintenance (Every 300 Hrs)

Verify that all daily, weekly and monthly maintenance has been performed.

Tighten Chain

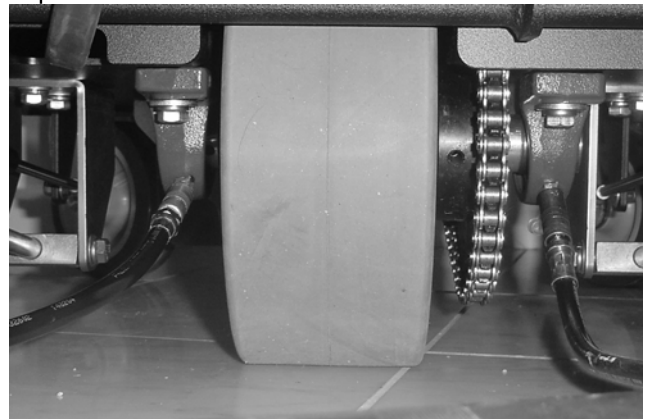


- Check the tension on the drive motor chain. If the chain has more than ½" deflection, tighten as needed.
- Access too the bolts for the drive motor are on the left side of the machine. There are two bolts on top which are accessed through the holes as shown in the picture above. There are also two bolts located below the frame. A total of four bolts.

Lubrication



- Lubricate the casters with an industrial grade bearing grease. Failure to lubricate casters will cause the machine to maneuver with difficulty and premature failure of the caster will result.



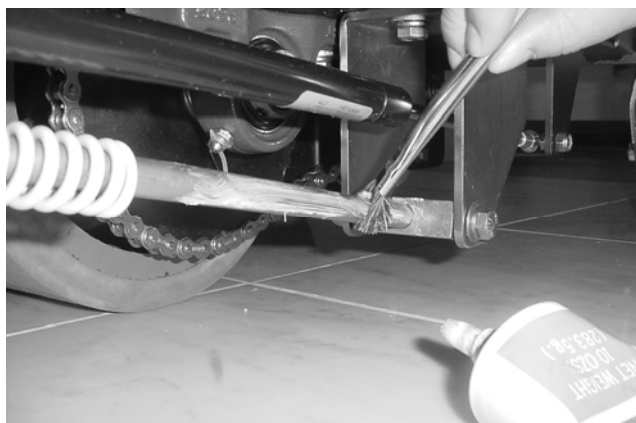
- Lubricate the drive wheel bearings with an industrial grade bearing grease. The zerk fittings

on the bearings can be accessed from the front of the machine.

- Failure to lubricate drive wheel bearings will cause the machine to maneuver with difficulty and premature failure of the bearings will result.



- Lube the drive motor chain with a small amount of grease using a brush. A chain spray can also be used.
- **NEVER** use your fingers to put the lube on the chain. **Serious injury may occur.**



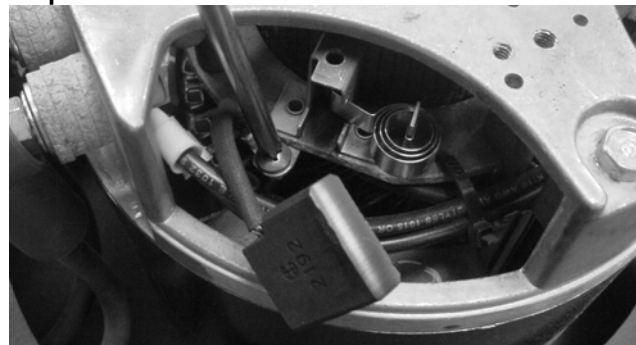
- Lubricate all moving parts as required with a small amount of grease.
- **DO NOT** lubricate the Gas Spring shaft, it does not require lubrication as it is self lubricating.

Every 6 Months (Every 600 Hours)

Call your Authorized NSS Distributor / Service Station to have the following services performed.

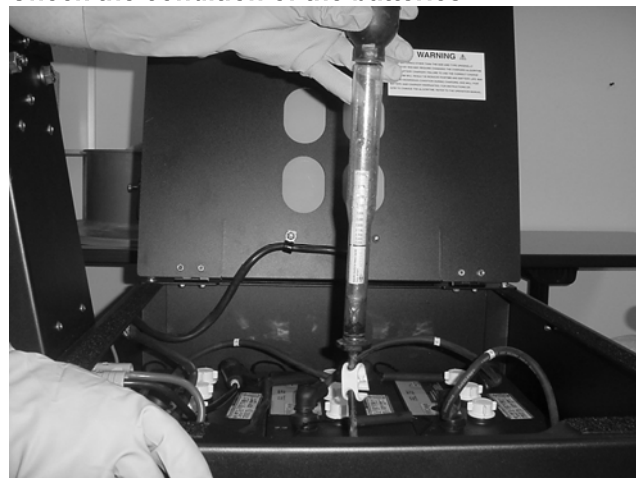
Verify that all daily, weekly, monthly and quarterly maintenance has been performed.

Inspect Brush Motor carbon brushes for wear.



- Using compressed air, blow the accumulated carbon brush dust out of the motor.
- Replace carbon brush when they measure $\frac{1}{2}$ " or less in length.
- Failure to replace carbon brushes will cause poor machine performance and possible motor damage.

Check the condition of the batteries.



- A battery may be checked using a Hydrometer to check the specific gravity (strength) of the acid in each cell. Variations in readings occur due to the chemical reaction taking place during use.
- Always check the specific gravity when the battery is fully charged.
- Replace batteries as needed.

Battery Installation:

- Turn off all switches. Disconnect battery pack from the machine.
- **ALWAYS** wear eye protection, rubber gloves and protective clothing to avoid contact with battery acid when installing batteries. See Battery Warnings on page 2.

**Repairs performed by an unauthorized company will void the machine warranty.
If you require assistance finding an authorized service center, contact NSS Enterprises.**



- Remove the side panel and top cover. There are two bolts (one in each corner) on top of the side panel and two nuts (one in each corner) at the bottom of the cover. Note that the nuts at the bottom are not visible from the side.



- The cover will still be attached to the side panel. Move them out of the way to install the Batteries.
- Batteries are heavy – **ALWAYS** use two people to install batteries into machine.
- Refer to wiring diagram located on the under side of the cover. Align batteries in compartment the same as the old batteries or as shown on diagram.
- Install battery cables the same as they were on the old batteries or as shown on wiring diagram located on the under side of the cover.
- **NSS** recommends replacing the battery cables when replacing batteries.
- Tighten bolts and hex nuts with a wrench.
- Install terminal boots over terminals to complete installation.

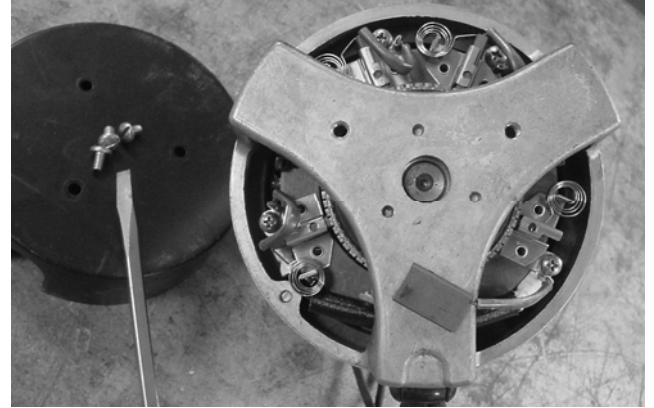
CAUTION: Do not short across two terminals with a wrench.

CAUTION: Loose or improper battery connections will cause battery or machine damage and possible personal injury.

Every 12 Months (Every 1200 Hours)

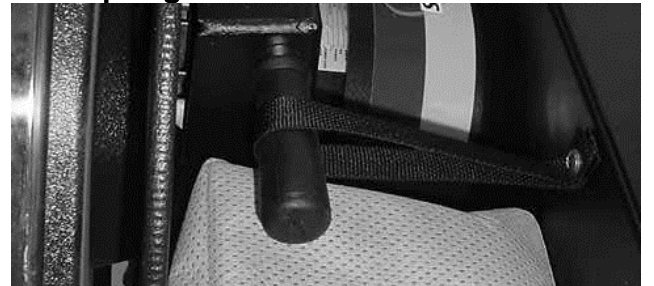
Call your Authorized NSS distributor / Service Station to have the following services performed. Verify that all daily, weekly, monthly and quarterly maintenance has been performed.

Inspect Drive Motor carbon brushes for wear.



- This will require removing the drive motor from the machine and should only be done by an authorized NSS Service Station.
- Using compressed air, blow the accumulated carbon brush dust out of the motor.
- Replace carbon brush when they measure $\frac{1}{2}$ " or less in length.
- Failure to replace carbon brushes will cause poor machine performance and possible motor damage.

Gas Spring Service



ALWAYS secure Brush Head in the pad change position using the strap provided before attempting any maintenance or repairs to the gas spring or coil spring assemblies.



- Remove the spring clip that secures the gas spring to the machine. Then pull the gas spring off of the ball stud. There is a clip and ball stud at each end.