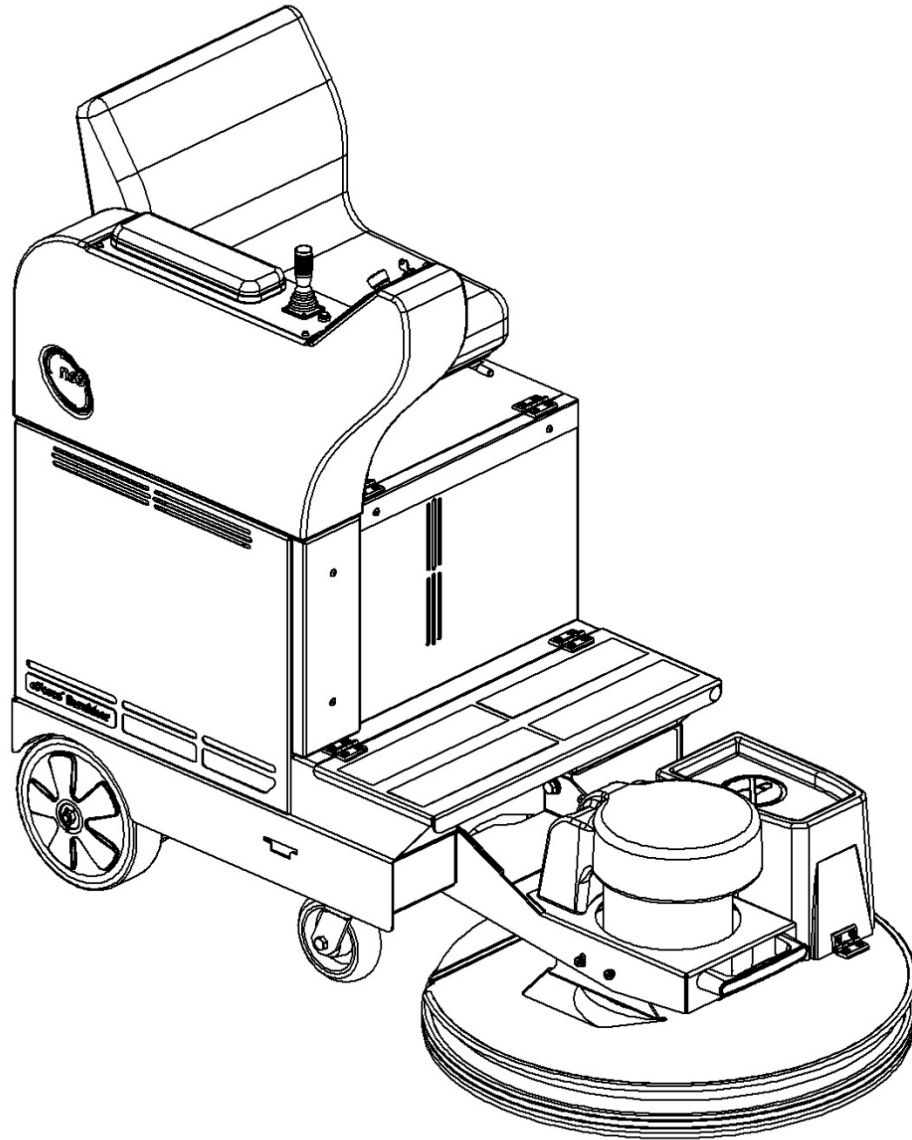


OPERATION MANUAL

# eForce™ Burnisher

## Original Instructions



# IMPORTANT SAFETY INSTRUCTIONS



**WARNING: Failure to observe these instructions can cause personal injury to the machine operator, and/or bystanders.**

## INTENDED USE

This machine is intended for commercial use, for example in hotels, schools, hospitals, factories, shops, offices and rental businesses.

This machine is intended for buffing and burnishing dry hard floors in an indoor environment only.

This machine is intended for dry use only.

This machine is not intended for spray burnishing.

This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.



**WARNING: Fire or explosion hazard.**

**NEVER** operate this machine in an explosive atmosphere for example near grain dust, flammable liquids or fumes, etc.).

**NEVER** use flammable liquids (for example gas, kerosene, solvents, or thinners, etc.) to clean or burnish floors.



**WARNING:** This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

## FOR SAFETY

- **ALWAYS** read and understand all instructions before operating or servicing this machine.
- **ALWAYS** use or service this machine **ONLY** as described in this manual.
- **ALWAYS** operate this machine sitting in the seat and always fasten the seat belt for safety.
- **NEVER** attempt to operate this machine unless you have been trained in its operation or allow an untrained person to operate this machine.
- **ALWAYS** ensure that bystanders, particularly children, are not endangered when operating this machine. **CAUTION:** This machine makes wide turns.
- **NEVER** leave the machine unattended without first turning off the key switch (O) and removing the key.
- **ALWAYS** turn off the key switch (O) when attaching or changing pads or opening any access panels.
- **ALWAYS** supervise children to ensure they do not play with the machine. This machine is not a toy.
- **NEVER** attempt to operate this machine on a grade/slope of 9% (5.14 degrees) or climb a ramp or incline of more than 13% (7.41 degrees).
- **ALWAYS** burnish dry hard floors going up and down inclines.
- **NEVER** burnish floors going across inclines.
- **NEVER** expose the machine to temperatures above 60° C (140° F) or below 0° C (32° F).
- **ALWAYS** be sure that any ramp is secured to the vehicle / pallet before attempting to load / unload.
- **ALWAYS** use extreme **caution** when operating the machine on a ramp or loading / unloading this machine into or out of a truck or trailer.
- **NEVER** use the machine on any surfaces that are wet, oily, or covered with cleaning chemicals including any ramps or inclines.
- **NEVER** stop or turn the machine on a ramp or incline.
- **ALWAYS** park or store this machine indoors in a dry, cool area away from any furnace, boiler, open flame, or other high heat source.
- **ALWAYS** use extreme **caution** when using this machine near stairs or open stairways.
- **ALWAYS** wear clean tennis shoes or “non-slip” shoes. Leather soled shoes will be extremely slippery.
- **ALWAYS** keep face, fingers, hair or any other body part or loose clothing away from any machine opening or moving part for example the revolving pad driver. **NEVER** attempt to operate this machine if it is not working properly or has been damaged in any way.
- **NEVER** disconnect or modify any switches or safety devices for example the circuit breaker or seat belt.
- **NEVER** drop or insert any object into any machine opening for example the battery compartment.
- **NEVER** operate this machine with any air opening blocked. Keep all air openings free of dust, lint, etc.
- **NEVER** pick up anything that is burning or smoking, for example cigarettes, matches or hot ashes.
- **NEVER** spray this machine with water or any liquids.
- **NEVER** allow the battery charging plug to get wet or a short may occur.
- **NEVER** operate this machine when the battery charger is plugged in.
- **NEVER** operate the machine outdoors or expose the machine to rain or snow.
- **NEVER** allow the machine to freeze.
- **NEVER** store any items on the machine.

**SAVE THESE INSTRUCTIONS**

# IMPORTANT SAFETY INSTRUCTIONS

## BATTERY POWERED EQUIPMENT



**WARNING:** Failure to observe these instructions can cause personal injury to machine operator or bystanders.



Read and understand all instructions before installing or charging batteries.



No smoking, open flames, or sparks while working with batteries.



Contains acid.  
Avoid contact



Poison. Causes severe burns. Avoid contact.



**WARNING:** Batteries emit hydrogen, which can cause fire or explosion. **NEVER** smoke, light a match, or cause a spark during operation or charging. **ALWAYS** charge in a well-ventilated area away from open flame.

### GENERAL

- **ALWAYS** read and understand all instructions before installing or charging batteries.
- **NEVER** attempt to install or charge batteries unless you have been trained to do so or allow an untrained person to install or charge batteries.
- **ALWAYS** remove all jewelry when working on or near the batteries and electrical system components.
- **ALWAYS** turn off all switches during installation and service.
- **ALWAYS** disconnect the battery disconnect before performing any service or repair. See
- **ALWAYS** wear eye protection, rubber gloves and protective clothing to avoid contact with battery acid.
- **NEVER** lay anything on top of batteries as arcing may occur.
- **IF CONTACT WITH BATTERY ACID OCCURS**, follow these instructions:
  - SKIN – rinse area with water.
  - EYES – Flush with water for 15 minutes.
  - INTERNAL – Drink water or milk. Follow with Milk of Magnesia, beaten egg or vegetable oil. Call a physician immediately.

### BATTERY INSTALLATION

- **ALWAYS** use an overhead hoist or two people to install batteries, as the batteries are heavy.
- **ALWAYS** disconnect battery pack from machine.
- **ALWAYS** position batteries as shown on the machine installation decal to maintain machine balance.
- **ALWAYS** connect batteries as shown on the machine installation decal to avoid shorting out the batteries and the electrical system.

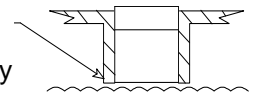
### BATTERY CHARGING

- **ALWAYS** read the instructions on charger carefully.
- **ALWAYS** use the NSS supplied charger with proper voltage rating.
- **ALWAYS** study battery manufacturers' specific precautions such as recommended rates of charge.
- **NEVER** charge a frozen battery.
- **ALWAYS** plug the charger into an earthed socket-outlet.
- **NEVER** touch uninsulated portion of output connector or uninsulated battery terminal.
- **ALWAYS** disconnect the AC supply before making or breaking the connections to the battery while charging.
- **NEVER** open or disassemble the battery charger.
- **NEVER** operate charger if the AC supply cord is damaged or if the charger has received a sharp blow, been dropped, or otherwise damaged in any way.

### FOR LEAD ACID BATTERIES ONLY

**Does not apply to gel or maintenance free batteries.**

- **ALWAYS** check to ensure the battery water level covers the battery plates before charging.
- **ALWAYS** check water level after charging and add only distilled water only if necessary to bring level to the bottom of the fill hole.
- **NEVER** overfill batteries as battery and machine damage may result.
- **ALWAYS** reattach caps to batteries. Do not charge with caps loose or removed.
- **ALWAYS** wipe any acid from the top of batteries using a soap solution.




**ALL REPAIR SERVICE MUST BE PERFORMED BY AN NSS AUTHORIZED DISTRIBUTOR/  
SERVICE STATION USING ONLY NSS ORIGINAL EQUIPMENT PARTS**

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# MACHINE INSPECTION

- Now that the machine is unpacked remember to recycle all packing materials.
- Inspect the machine for damage or missing components.  
If damage is found, contact the freight company to file a freight claim.

	<p><b>PROTECT THE ENVIRONMENT</b></p> <p>Please dispose of packaging materials and used machine components such as batteries in a safe environmentally way according to your local waste disposal regulations.</p> <p>Always remember to recycle.</p>
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## MACHINE COMPONENTS LIST

ITEM #	DESCRIPTION	FIGURE
1	JOYSTICK	1,2,4
2	ARMREST	1,2
3	HORN BUTTON	1,2
4	SNAP STUD FOR HEAD RETAINING STRAP	1
5	DRIVE WHEEL	1,2
6	CASTER	1,2
7	ATTACHMENT POINT FOR HEAD RETAINING STRAP	1
8	PAD MOTOR	1
9	HEAD LIFT HANDLE	1
10	FLEXIWALL SHIELD	1,4
11	FILTER MEDIA BAG COVER	1,2
12	PAD MOTOR COVER	1
13	FOOT PLATE	1
14	SEAT SLIDE ADJUSTMENT	1,2
15	KEY SWITCH	1,2
16	SEAT WITH SAFETY SWITCH	1,2,4
17	E-STOP SWITCH	1,2
18	SEAT BELT	2
19	WIRING DIAGRAM	2
20	9% INCLINE	2
21	CIRCUIT BREAKER	2
22	NAME PLATE	2
23	PROP 65 WARNING	2
24	FILTER MEDIA BAG	2
25	HEAD RETAINING STRAP	2
26	FLASHING WARNING LIGHT	1
27	BATTERY DISCONNECT	3
28	BATTERY CHARGING PLUG	3
29	BATTERY WARNING	3
30	SEAT PLATE LIFT HANDLE	3
31	PAD HOLDER	4
32	PAD	4
33	BATTERY TRAY DRAIN TUBING	5
34	BRAKE RELEASE LEVER	5
35	TUBING CONTROL VALVE	5
36	TOUCH PAD	2

# MACHINE COMPONENTS Figures 1 - 4

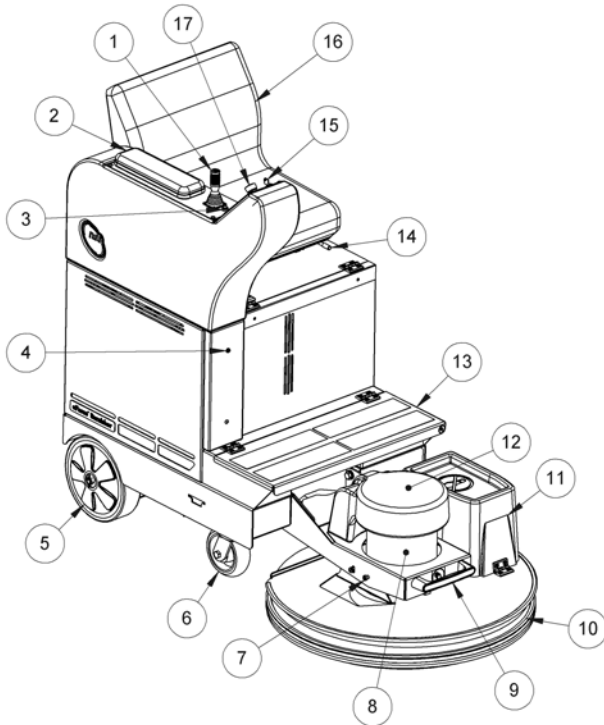


FIGURE 1

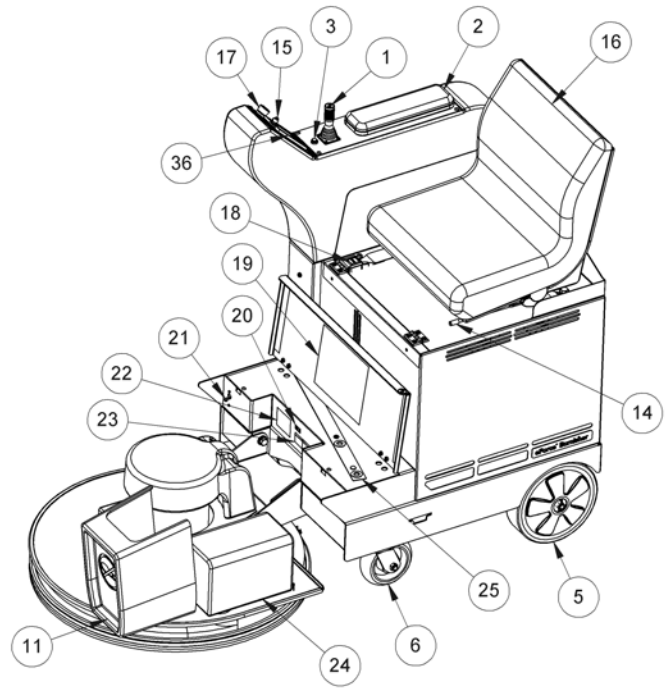


FIGURE 2

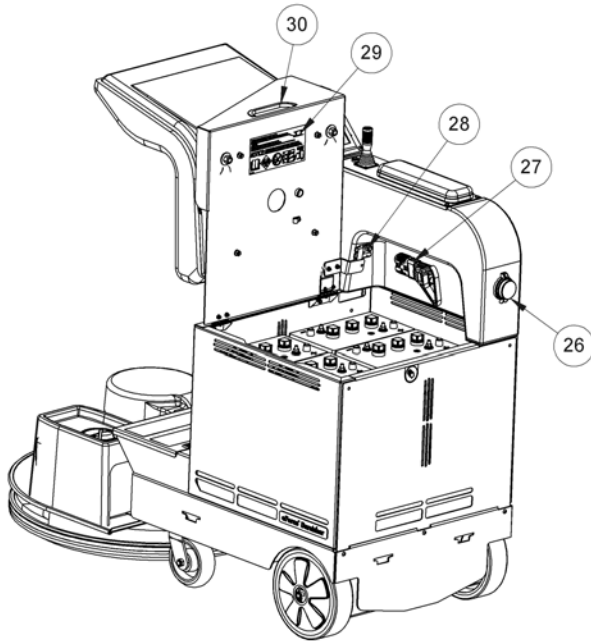


FIGURE 3

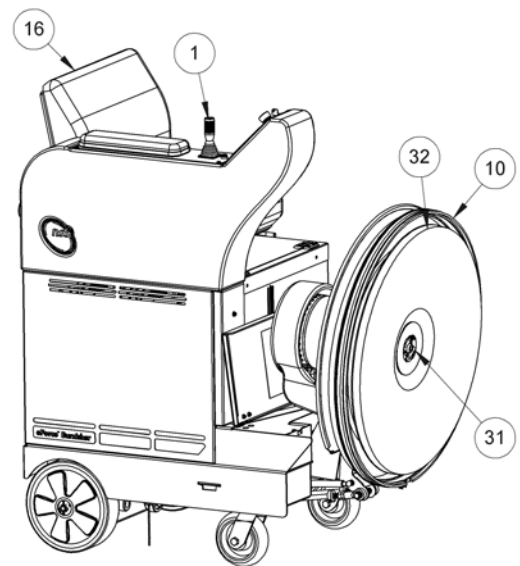


FIGURE 4

# MACHINE COMPONENTS Figures 5 - 6

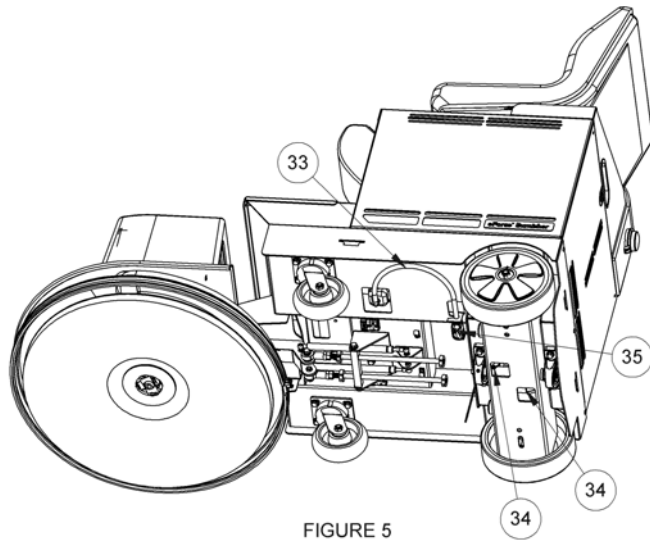
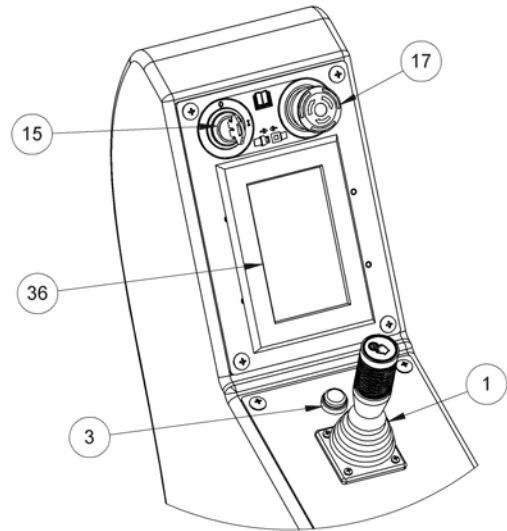


FIGURE 5



DETAIL A

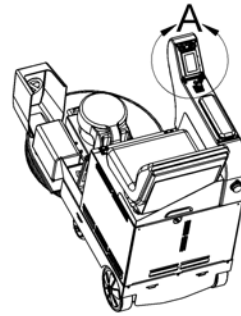


FIGURE 6

ITEM	DESCRIPTION
1	JOYSTICK
3	HORN
15	KEY SWITCH
17	E-STOP SWITCH
36	TOUCH PAD

## Joystick Control

- The joystick (Fig. 6 - Detail A - Item 1) controls the direction and speed of the machine.
- The joystick also activates the Brush Motor so it is only on when the machine is moving.
- The joystick has a safety feature that returns the joystick to the neutral position when the joystick is released.

## Horn

- The Horn Button (Fig. 6 - Detail A - Item 3) is located in front of the joystick. It is a momentary switch that activates the horn.

## Master Key Switch

- The Master Key Switch (Fig. 6 - Detail A - Item 15) is located on the top left side of the control panel and it turns the machine on and off.
- The control system will automatically turn the machine off if it sets idle for 10 minutes. Turned off the master and brush switch and then turn the master switch back on to restart.

## E-Stop Switch

- The red E-Stop Switch (Fig. 6 - Detail A - Item 17) is located on the top right side of the control panel and it turns off all power to the machine in the event of an emergency. The electromagnetic braking system will immediately engage.
- Only use this button in the event of an emergency. It is not intended for routine machine shut down and brake damage could occur.
- Twist the E-Stop and it will pop up and turn the machine on.

## Circuit Breaker

- There is one master circuit breaker (Fig. 2 Item 21) located below the foot plate.

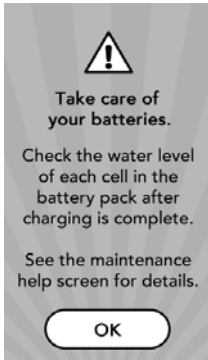
## Touch Pad Screens



**Splash Screen.** Stays on the screen for nominally two seconds and then switches to the next screen.



**Seat belt Screen.** Always wear your seat belt when using this machine. Push OK to continue to the next screen.



**Take care of your batteries screen.** Push OK to continue to the Main or Home screen.



### Main screen.

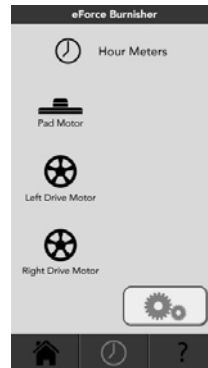
The service codes will be displayed under the wrench. The battery charge level is represented by the battery. As the battery is depleted, the number of colored bars on the battery meter decreases.

In the pad motor section, there is a button that turns on and off the pad motor. The amp meter correlates to the amp motor current. Always run in green area.

In the pad pressure section, there are three buttons. The current setting is indicated by displaying the button green.

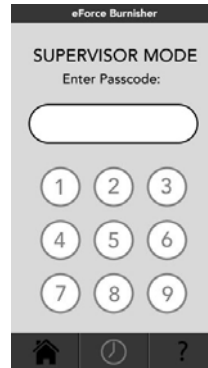
In the drive speed section, there are three buttons. The current setting is indicated by displaying the button green.

The buttons at the bottom are the navigation buttons Home, Clock and Help sections.



**Hour Meter screen.** This screen is accessed by touching the clock icon on the navigation bar at the bottom. There are three hour meters. The hour meter values will be displayed to the right of the icons.

Push the button with the gears on it to go to the Supervisor Mode access screen.



### Supervisor Mode Access screen.

Enter the Passcode 1911 to access the Supervisor Mode screen.



**Supervisor Mode screen.** The purpose of this screen is to turn off buttons not to be used by operators. When turned off the button will not appear on the Main screen. Green buttons will appear on the Main screen and grey buttons will be removed from the Main screen. After the selections are made push the save button. The Main screen will appear with the new settings.



**Help screen.** This screen is accessed by touching the help icon on the navigation bar at the bottom.

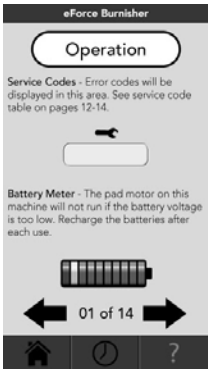
There are three buttons in the middle of the screen. The Safety button will take you to the Safety section, the Operation button will take you to the Operation section and the Maintenance button will take you to the Maintenance section.

The four buttons at the bottom are the language buttons. EN for English, ES for Spanish, FR for French, CN for Chinese.

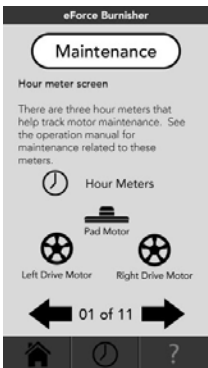




The Safety section appears after pushing the Safety button on the Help screen. There are 5 pages of information. To navigate through the pages push the arrow on the right for next page and the arrow on the left for previous page. Push the Safety button at the top to return to the Help screen. Push any button on the navigation bar to go to that screen.



The Operation section appears after pushing the Operation button on the Help screen. There are 14 pages of information. To navigate through the pages push the arrow on the right for next page and the arrow on the left for previous page. Push the Operation button at the top to return to the Help screen. Push any button on the navigation bar to go to that screen.



The Maintenance section appears after pushing the Maintenance button on the Help screen. There are 14 pages of information. To navigate through the pages push the arrow on the right for next page and the arrow on the left for previous page. Push the Operation button at the top to return to the Help screen. Push any button on the navigation bar to go to that screen or section.

## Pop Up Warnings



When the machine is turned on and any of the following four functions are out of place, a pop up warning will appear on the main Screen.



Pad motor in the up position. No power is supplied to the pad motor or the drive motors. The pad motor must be lowered before the machine will move. This icon will not appear when the pad motor is lowered.



The electric brakes are not engaged. No power is supplied to the pad motor or the drive motors. The electric brakes must be engaged before the machine will move. This icon will not appear when the electric brakes are engaged.

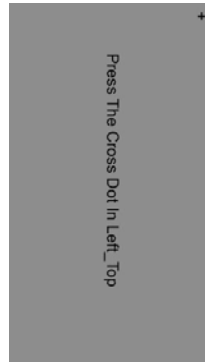


The joystick is not in the center position at start up. No power is supplied to the pad motor or the drive motors. The joystick must be in the center position before the machine will move. This icon will not appear when the joy stick is in the center position at start up.



No operator in seat. No power is supplied to the pad motor or the drive motors. The operator must be in the seat before the machine will move. This icon will not appear when the operator is in the seat.

## Touch Screen Calibration



Tap on any screen with two fingers very quickly until a beep is heard and the touch screen turns blue. The first blue screen will read "Press The Cross Dot Left\_Top". Tap the +. The next blue screen will read "Press The Cross Dot Right\_Top". Tap the +. The next blue screen will read "Press The Cross Dot Right\_Bottom". Tap the +. The touch screen will be calibrated and return to the last screen you were on.

# MACHINE SET UP

## Connecting Battery Pack to Machine

When the machine is shipped with batteries, the machine will arrive with the battery pack disconnected from the machine.



- Lift up on the back of the seat plate to expose the battery pack. See Fig. 3 Item 30.
- Connect the cable with the Anderson connector from the battery pack into the Anderson connector mounted to the inside of the control panel. See Fig. 3 Item 27.

## For machines shipped without batteries

- See Battery Installation in the Maintenance Section later in this manual.

## Raising and Lowering the Pad

- The Foot Plate (Fig. 1 Item 13) must be in the up position to raise the pad head into the pad change position. See Fig. 4.
- Move the front of the machine from/to pad changing position or operating position by grasping the handle (Fig. 1 Item 4) on the front and moving it to the desired position.

## Pad Installation / Changing

See daily maintenance for Pad Installation and Changing.

## Empty and Clean Filter Bag

See daily maintenance for Filter Bag maintenance.

## Seat Slide Adjustment

- Grasp the lever (Item 14) on the left side of the seat (Item 16) and move it towards the outside of the machine to move the seat.
- Position the seat in a comfortable operating position and release the lever to lock the seat in place.

## Seat Belt

- The seat belt on the left side of the seat is retractable and the seat belt on the right side is stationary. (Item 18)
- Grasp the left side and pull out and fasten into the right side.
- Push the button to release.

# MACHINE OPERATION

## Floor Preparation

- Make sure the floor has adequate floor finish. Burnishing results will be poor if the floor finish is in poor condition.
- Dust mop and scrub the floor before burnishing.
- Check that floor surface is clean and dry.

## Pre-Operation Check List

- Be sure you understand the operator controls and their functions. See the Machine Components and Touch pad sections of this manual.
- Make sure all safety devices and machine controls are working correctly.
- Check that the battery pack is connected to the machine.
- Check that a new or clean pad is installed.
- Check that the filter bag is clean, zipped all the way up and installed properly.

## Operating the Machine

- Step onto the machine from the right side and sit in the seat.
- Adjust the seat to a comfortable operating position.
- Fasten the seat belt.
- Turn the key switch to the ON (I) position. Wait until you hear a click, and the Fasten the Seat Belt screen is shown. Push OK and the Battery Screen is shown. Push Ok and the main screen will appear.

### Main Screen



The service codes will be displayed under the wrench. The battery charge level is represented by the battery. As the battery is depleted, the number of colored bars on the battery meter decreases.

In the pad motor section, there is a button that turns on and off the pad motor. The amp meter correlates to the amp motor current. Always run in green area.

In the pad pressure section, there are three buttons. The current setting is indicated by displaying the button green.

In the drive speed section, there are three buttons. The current setting is indicated by displaying the button green.

The buttons at the bottom are the navigation buttons Home, Clock and Help sections.

- Check that the battery meter is reading in the high or green range. The machine should be put on charge if not in the high range. See Daily Maintenance, Charge the Batteries for more information.

- Turn on brush switch located in the Pad Motor Section of the main screen.
- Select pad pressure. The pad pressure will be set on low when the machine is first turned on. **Always** start in low pressure and add pressure as necessary.
- Select the desired burnishing or drive speed. The drive speed will be on low when the machine is first turned on. NSS recommends using slow or medium speed for burnishing. High speed is for transporting the machine only.

### Burnishing the floor



- Move the joystick forward to activate the Pad and Drive Motors. **Note:** The further the joystick is moved from center the faster the machine will go. **Always** move the joystick slowly to avoid sudden machine movements.
- To maneuver the machine, point the joystick in the desired direction.
- Drive the machine at a speed that produces your desired burnishing results. **Note:** It is possible to drive too fast and reduce the machines performance.
- Drive the machine in a straight path and overlap the burnishing path by a few inches.
- Avoid any floor fixtures or uneven floor transitions that may damage the pad, pad driver or dust skirt.
- Avoid bumping the machine into posts or walls.
- For heavily scuffed floors reduce the speed to ensure optimum burnishing performance.
- Pay attention to the AMP meter in the Pad Motor section of the Main screen. **Always** run the pad motor in the middle of the green area. **Never** run in the red area.
- Bring the machine to a complete stop before getting off. Operator injury and or machine damage could occur.
- Always remove the key when leaving the machine unattended.



**CAUTION:** This Machine must be moving at all times when the pad is rotating or the floor may be damaged.

## MAINTENANCE



**ALWAYS** turn OFF the Key Switch and remove the key before performing any maintenance or repairs to this machine.



**FOR SAFETY:** When servicing equipment, wear appropriate personal protection equipment as needed.



**FOR SAFETY:** When servicing batteries, wear appropriate personal protection equipment as needed. Avoid contact with battery acid.



### If contact with battery acid occurs:

- **Skin** – Rinse with cold water for 15 minutes.
- **Eyes** – Flush with cold water for 15 minutes.
- **Internal** – Drink lots of water or milk. Seek medical attention immediately.

## Daily Maintenance

### Charge the Batteries



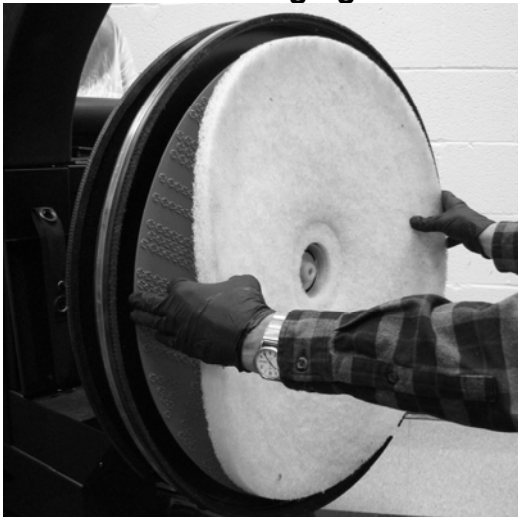
- Park the machine in a well ventilated area.
- Recharge the batteries every day or when indicated by the Battery Meter.
- **NEVER** let the batteries sit overnight after the machine has been run for 1hr or more.
- **NEVER** let the electrolyte level fall below the tops of the plates. This will damage the batteries immediately, and void the warranty.
- Check charger cords for exposed wires and damaged plugs before using.
- To recharge the batteries, connect the charger cord with the Anderson connector into the Anderson connector on the machine under the seat plate.
- Plug the battery charger into an electrical outlet.
- Charge the batteries with the Seat Plate open.
- **Important:** It can take up to 16 hours to charge the batteries. Be sure to allow plenty of time for charging to avoid damaging your batteries.
- **See charging instructions for more details.**

## Empty and Clean Filter Bag



- Tilt the filter bag cover forward to expose the filter bag. (See Fig 2 Item 11.)
- Remove the filter bag. (See Fig 2 Item 24.)
- Empty the filter bag daily or when it is approximately one-half (1/2) full.

## 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.

- Park the machine on a level surface.
- 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 (15/16" to 1" [22mm to 25.4mm]) X 27" [68.6 cm] is being installed.
- Remove the center hole of the pad and place the pad flat on the floor. 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 and push on the pad grabber until the spring clip has clicked twice.



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



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

## Weekly Maintenance (Every 25 Hrs)

Verify all daily maintenance has been performed.

## Check the water level in batteries



- Check the water level in each of the three cells in each battery 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.

## Inspect Flexiwall shield



- 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).

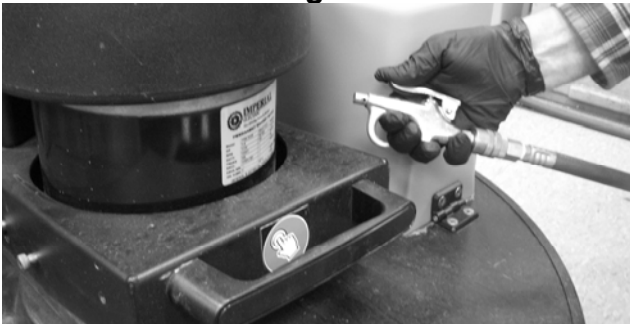


The batteries should be equalized once every 30 days for maximum battery runtime and life.

### To equalize the batteries:

- Plug in the charger, and fully charge the batteries.
- Unplug the charger from the wall outlet, then plug it back in.
- The charger will run holding the batteries at a constant voltage, and equalizing each cell.

## Clean the Burnishing Head and Motor



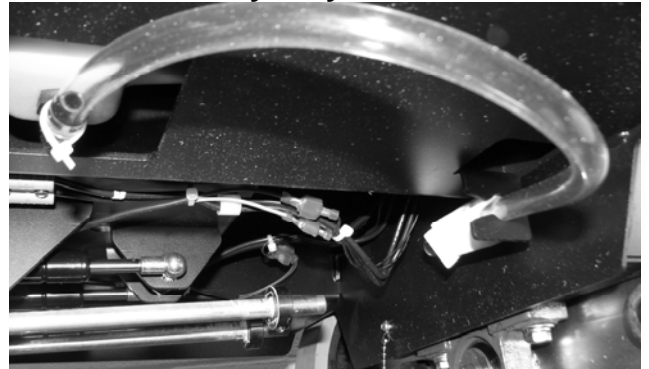
- With compressed air, blow any dust and buildup from the burnishing head and motor.
- Maximum air pressure 100 PSI.
- Wipe down with damp cloth.

## Inspect the machine



- 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.

## Drain the Battery Tray



- Check the Battery Tray Drain Hose located under the machine 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 under the machine as shown above.
- **IMPORTANT:** Drain all liquids into an approved container and dispose of according to your local and federal regulations.

## 90 Day Maintenance (Every 300 Hrs)

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

### Lubrication



- Lubricate the caster swivels with an industrial grade bearing grease. Failure to lubricate casters will cause the machine to maneuver with difficulty. The caster wheel has a sealed bearing and does not need to be greased.



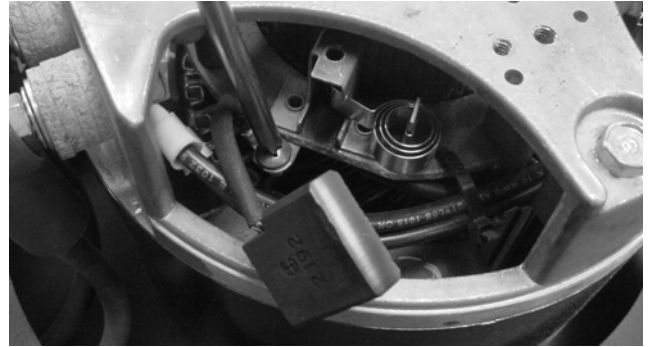
- Lubricate all moving parts as required with a small amount of grease.
- **DO NOT** lubricate the Gas Spring shaft, it does not require lubrication as it is self-lubricating.

## 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  $\frac{1}{2}$ " [12.7mm] or less in length.
- Failure to replace carbon brushes will cause poor machine performance and possible motor damage.

**Check the condition of the batteries.**



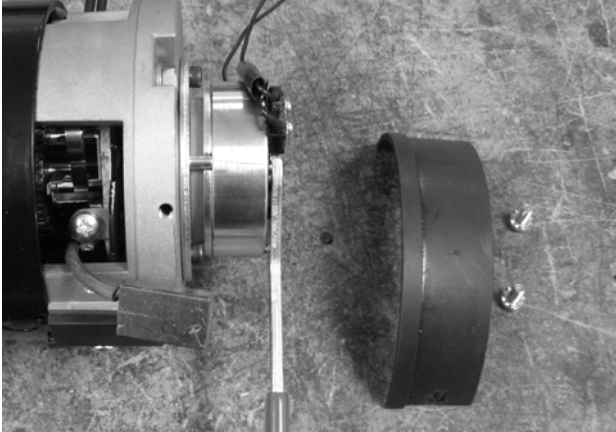
- A battery may be checked using a Hydrometer to check the specific gravity (strength) of the acid in each cell. Variations in readings occur due to the chemical reaction taking place during use.
- Always check the specific gravity when the battery is fully charged.
- Replace batteries as needed.



## Every 12 Months (Every 1200 Hours)

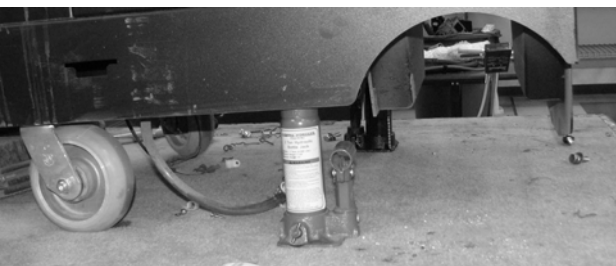
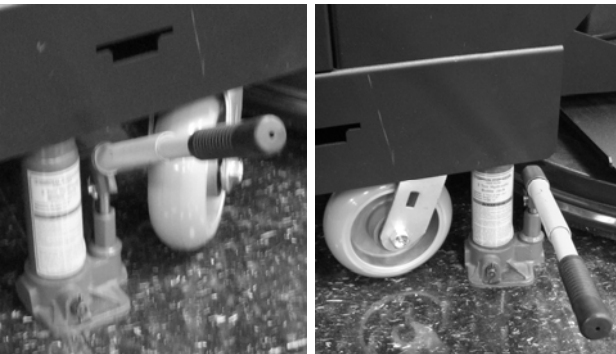
Call your Authorized NSS distributor / Service Station to have the following services performed. Verify that all daily, weekly, monthly and quarterly maintenance has been performed.

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  $\frac{1}{2}$ " [12.7mm] or less in length.
- Failure to replace carbon brushes will cause poor machine performance and possible motor damage.

## Machine Jacking



Use the jacking locations as shown in the pictures above. Use a jack and or jacks capable of supporting the weight of the machine. Position the machine on a flat level surface and block the wheels. Two jacks are required for rear wheel removal, one on each side.

## 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.



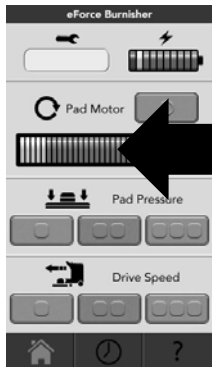
- Place one end of the gas spring against a hard surface and push on it. If you can compress it, it must be replaced. If you cannot compress it, it is most likely OK.

## Pad Pressure Adjustment

The NSS eForce Burnisher is preset at the factory for medium duty applications. It can be tuned to your specific application for optimum performance.


**ONLY an authorized NSS Service Station should perform this adjustment.**

**Tools required for Pad pressure adjustment**  
1) 3/4 open end wrench



Set the pad pressure in the middle of the amp meter

### Checking the Pad Motor Amperage

- First install a new pad on the pad driver.  
 **Caution:** Checking the Amps with a used pad will cause the machine to have high amps when a new pad is installed.
- Lower the Pad Motor into the operating position.
- Turn on the Pad Motor switch and leave the Pad Pressure on the low setting.
- While running the machine, read the amp meter in the Pad Motor section on the Main screen. The amp meter should be reading in the middle of the green area of the amp meter.

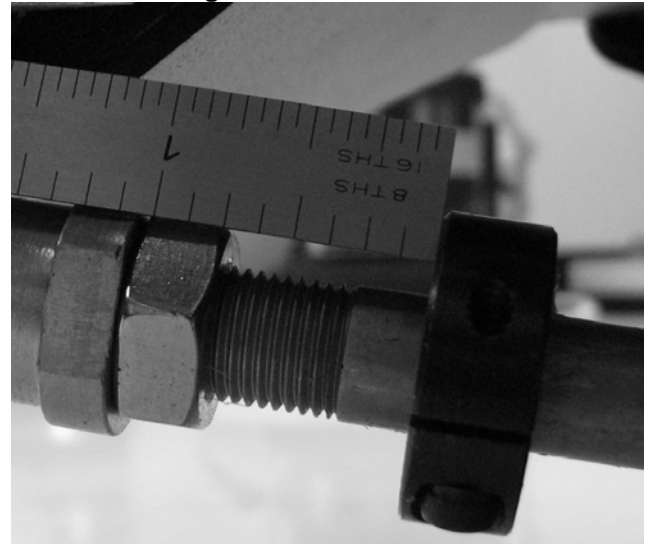


**If adjustment is required, follow these instructions.**

- It will be easier to access the lock nut and spring guide rod assembly with the machine in the pad change position.

- First loosen the lock nut on the spring guide. With the lock nut loose, the spring guide rod assembly will be easily turned by grasping the set collar on the spring guide rod.
- Turn the spring rod guide assembly 1/2 to 1 turn at a time. A little adjustment goes a long way.
- Thread the spring guide rod assembly out of the ball joint to decrease the pad pressure. Thread the spring guide rod assembly into the ball joint to increase the pad pressure.
- Every time an adjustment is made check the amps. This may require a few tries to get the Pad Pressure where it should be.
- After the adjustment is made tighten the lock nut and redo the test. If it has not changed the process is complete.

### Fall back setting 😊

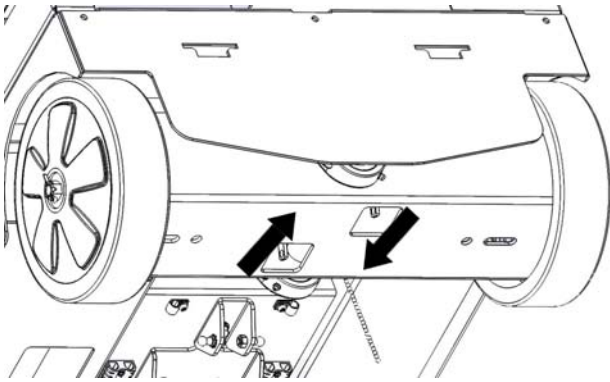


If your machine has come totally out of adjustment, or you need to replace the Spring Rod Guide Assembly you may need to start from the beginning.

- The factory starting setting for the pad pressure is 3/4 of an inch [19mm] from the set collar to the lock nut.
- From this setting, proceed with the Pad Pressure Adjusted.



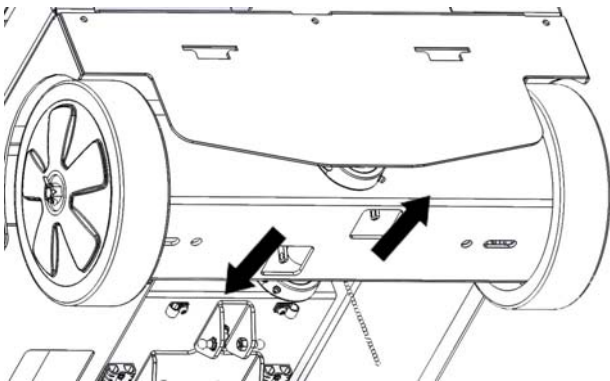
## Pushing Machine/Parking Brake



In the event the eForce Burnisher needs to be pushed, the brakes need to be released. At the rear of the machine, reach under the drive motor mount and find two openings. In the left opening, reach inside and pull the lever back. In the right opening, push the lever forward. Now the machine can be pushed.



If the operator tries to drive the machine with the brakes disengaged the machine will not move. The brake icon will appear in the pad motor section of the main screen along with a 3A code in the service box.



To engage the brakes, push the lever forward in the left opening, pull the lever back in the right opening. Turn the machine off then back on the clear the service code. The machine is now ready for use.

## Storing Machine

The following steps should be taken when storing the machine for extended periods of time.

- Park the machine on a flat level surface.
- Park the machine in a cool, dry area. Do not expose to rain. Store indoors.
- Raise the burnishing head into the pad change position.
- Remove the batteries, or charge them every three months.

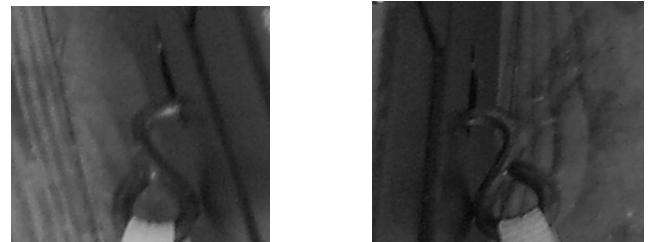
## Transporting the Machine

When transporting the machine by use of trailer or truck, carefully follow the loading and tie down procedures:

- Raise the burnishing head to the transport position and secure the strap. **Caution:** Be sure the pad motor is in the off position before moving the machine. The pad motor can run in this position.
- Load the machine using a ramp that can support the weight of the machine and operator. **Caution:** Do not attempt to climb a ramp or incline that exceeds a 13% (7.41 degrees) grade level. A winch must be used when incline exceeds a 13% grade level.

Ramp Length in Feet	1	5	6	7	8	9	10
Ramp Length in Inches	12	60	72	84	96	108	120
Trailer Height in Inches	1.55	7.75	9.3	10.85	12.4	13.95	15.5

- Once loaded, turn off the key switch.
- Block the rear wheels front and back.



- Secure the front and back of the machine with tie down straps. Put the tie down straps in the pallet bracket holes on each side and run them forward to prevent the machine from twisting in transit.



- From the rear of the machine, run one tie down strap around the machine just above the foot plate and back behind the machine. This will prevent the machine from moving forward and backward during transit.

## Battery Installation



**FOR SAFETY:** When servicing batteries, wear appropriate personal protection equipment as needed. Avoid contact with battery acid.



- Turn off all switches. Disconnect battery pack from the machine.



- Remove the rear panel.
- There are two nuts (one in each corner) on top of the rear panel inside the battery compartment and three screws at the outside bottom of the cover.
- Tip the cover back and then lift up on an angle.



- Batteries are heavy – **ALWAYS** use two people to install batteries into machine.
- Refer to wiring diagram located on the underside of the seat plate. 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. **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.

## Battery charger



The battery charger supplied with this machine is capable of charging lead acid batteries from 350 to 435 ah capacity.

Your machine may have been ordered with batteries installed at the NSS factory. The standard battery type, normally supplied by NSS, is the Flooded (wet) cell lead acid battery. AGM sealed batteries may also be available at customer request.

Flooded (wet) batteries can be easily identified by the removable cell caps. Removing the caps allows inspection of the liquid electrolyte (sulfuric acid) level in each cell.

AGM (Absorbed Glass Mat) batteries are sealed, maintenance free batteries. They do not have cell caps intended for removal. Look for “**AGM**” printed on the tops or sides of the batteries.

Gel (gelled electrolyte) batteries are not recommended for use with this machine.

## Operating the Battery Charger

The battery charger is fully automatic. Simply plug the charger into a suitable wall outlet, and the charger will charge the batteries. The amp meter on the right side will start with high amp output and drop to 0 when complete.

A bubbling, or boiling sound coming from the batteries during the last few hours of the charge is normal. The batteries may be warm, but not too hot to touch.

### Equalizing the 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.
- Unplug the charger from the wall outlet, then plug it back in.

The charger will run holding the batteries at a constant voltage, and equalizing each cell.

### 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**. This extra charging time will help raise the operating voltage of the batteries, and will help ensure maximum runtime and cycle life.

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

### Battery Replacement Notes

- Entire Pack.
  - It is always recommended to replace all batteries in the pack at the same time.
- Replacing just one or two batteries out of the pack can lead to the following:
  - Overcharging the new, or the remaining original, batteries.
  - Undercharging the new, or remaining original, batteries.
  - Over discharging either the new or the remaining original batteries.
- If you wish to only replace some of the batteries in the pack, follow these steps for best results:
  - Replacement batteries must always be of the same battery manufacturer, model and amp-hour rating, as the remaining batteries in the pack.
  - Never mix batteries from different manufacturers in the same pack.
  - Fully charge both the new battery, and the remaining original batteries. (s.g. = 1.265 minimum, use a hydrometer)

- Use a replacement battery that is close to the same age as the remaining original ones.
- Do not run the machine as long for about 20 cycles. For example, if you used to get 3 hrs. run time, only run it for 2 hrs., and then charge the batteries completely.
- Opportunity charge whenever possible.
- Equalize after 30 days (**Flooded only**).
- The above steps will provide the best opportunity for the new battery(s) to join the pack.

### Battery Do's and Don'ts:

- a. You do not have to fully discharge the batteries before charging. They do not have a "memory".
- b. Plug the charger in anytime the machine is not in use.
- c. **NEVER** let the electrolyte level fall below the tops of the plates (flooded cell batteries). This will damage your batteries almost immediately, and void the battery warranty. They can tell if this happened.
- d. **NEVER** refill the batteries with well or tap water (flooded cell batteries).
- e. **NEVER** overfill the batteries (flooded cell batteries).
- f. **NEVER** let the batteries sit discharged overnight (or between shifts).
- g. **ALWAYS** check the electrolyte level about every 3 or 4 charge/discharge cycles **BEFORE CHARGING**.
- h. **ALWAYS** refill the batteries with distilled water (if needed) **AFTER CHARGING**.
- i. **ALWAYS** fully recharge the batteries after use.
- j. **ALWAYS** equalize the batteries (**Flooded only**) every 30 days.
- k. **NEVER OVER DISCHARGE!**
- l. **NEVER** charge GEL batteries.

### If contact with battery acid occurs:

- **Skin** – Rinse with cold water for 15 minutes.
- **Eyes** – Flush with cold water for 15 minutes.
- **Internal** – Drink lots of water or milk. Seek medical attention immediately.

## TROUBLE SHOOTING CHART

Problem	Cause	Solution
Machine will not turn on.	Battery pack is not plugged into machine.	Open the battery cover and plug the battery pack into the machine.
	Battery charger is plugged into AC outlet.	Unplug the battery charger.
	The 2 amp fuse is missing or blown.	Replace 2 amp fuse.
	Circuit breaker is tripped.	Reset circuit breaker.
Brush motor will not run or stopped running.	Current over load of brush motor has exceeded set parameters in control system.	Turn off all switches and then turn on the master switch to reset the control system. If the problem continues check battery meter for fault code F42.
	Tilt switch failure.	Check tilt switch operation. Replace tilt switch if test failed.
	Carbon Brushes worn or not making contact.	Have an authorized NSS Service Station check carbon brushes and replace if necessary.
Brush motor will not turn off when joystick is in neutral.	The potentiometers are set on the threshold of neutral or potentiometer has failed.	Have an authorized NSS Service Station reset the potentiometer to neutral or replace joystick.
Machine vibrates.	Pad not centered or torn.	Center pad. Change torn and worn pad.
Low Run Time	Damaged or defective battery or battery pack.	Have an authorized NSS Service Station check the batteries and replace as necessary.
	Batteries are not fully charged	Charge batteries until the charge cycle is complete.
	Running machine with pad pressure too high.	Reduce pad pressure when running pad motor.
Battery charger will not turn on.	Battery charger cord damaged.	Check for cord damage and replace if necessary. DO NOT try to repair it.
	Connection not made between battery charger and battery pack.	Check connections at battery pack for corrosion and loose or broken wires.
	The battery charger is damaged.	Have an authorized NSS Service Station check and replace if necessary. DO NOT try to repair it.
Pad will not stay in the pad change position.	Weak or missing gas spring(s).	Check and replace if necessary.
Pad will turn on in the pad changing position.	Tilt switch failure.	Replace tilt switch as necessary.
Circuit breaker trips.	Spray Buffing.	DO NOT spray buff.
	Pad pressure too heavy.	Check gas springs for failure and replace as necessary.
	Pad pressure collars out of adjustment.	Readjust pad pressure collars as required by your burnishing conditions.
Front of machine does not move down to the floor when turned on.	Spring guides sticking in slides.	Check spring guides for proper operation. Replace if bent. Lubricate if necessary. Loosen bolts in spring guide mounting bracket, it will self-align, retighten bolts.

## TROUBLE SHOOTING CHART

Problem	Cause	Solution
Fault code 12 appears in service code box.	Internal programmable parameter data is corrupt.	Turn machine off and then on. If problem continues call for service.
Fault code 2D appears in service code box.	Low battery protect.	Check your batteries volts, wire connections and water. Repair as needed. Charge batteries. If problem continues call for service.
Fault code 21 appears in service code box.	Low battery charge.	Check your batteries connections and water. Repair as needed. Charge batteries. If problem continues call for service.
Fault code 22 appears in service code box.	High battery protect	Turn machine off and let stand for 1 hr to allow the batteries to cool.
Fault code 23 appears in service code box.	Internal temperature of controller has exceeded the set parameters.	Turn machine off and let control system cool off. If problem continues call for service.
Fault code 26 appears in service code box.	Precharge failure when controller is turned on causing an internal controller fault.	Turn machine off and then on. Check your batteries volts, connections and water. Replace or repair as needed. If problem continues call for service.
Fault code 29 appears in service code box.	Bad null current drive. Internal control system check failure.	Check wiring. Turn machine off and then on. If problem continues call for service.
Fault code 2A appears in service code box.	Bad Null current brush. Internal control system check failure.	Check wiring. Turn machine off and then on. If problem continues call for service.
Fault code 32 appears in service code box.	Solenoid welded. Caused by wiring short circuit in contactor wiring or contactor coil. Internal control system check failure.	Check wiring and solenoid. Turn machine off and then on. If problem continues call for service.
Fault code 33 appears in service code box.	Solenoid did not close. Caused by wiring short circuit in contactor wiring or contactor coil. Internal control system check failure.	Check wiring and solenoid. Turn machine off and then on. If problem continues call for service.
Fault code 37 appears in service code box.	Throttle fault. Internal control system check failure.	Check joystick and wiring. Turn machine off and then on. If problem continues call for service.
Fault code 3A appears in service code box.	Brake fault. Internal control system check failure.	Turn on brakes then turn machine off and then on. If problem continues call for service.
Fault code F42 appears in service code box.	Stalled motor. The brush motor or a drive motor is exceeding the current limit set in the controller.	Check the gas springs for wear. Check the brush pressure set collars for proper adjustment. Check brakes. Turn machine off and then on. If problem continues call for service.
Fault code 44, 4C, 45, 59, 60 appears in service code box.	Caused by wiring short circuit in drive wiring or shorted drive motor. Carbon brushes need service.	Check wiring and drive motor for short circuit. Correct problem if found. Check carbon brushes. If problem continues call authorized NSS Service Station for service.
Fault code 4D, 46, 61 appears in service code box.	Caused by wiring short circuit in brush wiring or shorted brush motor. Carbon brushes need service.	Check wiring and brush motor for short circuit. Check carbon brushes. Correct problem if found. If problem continues call for service.
Fault code 58 appears in service code box.	The deceleration of the brush motor or drive motor exceeded set parameters. Example: Tried to slow down or stop on too steep a hill.	Turn machine off and then on. If problem continues call authorized NSS Service Station for service.
Fault code 62 appears in service code box.	Wired incorrectly. Internal control system failure.	Check wiring. Turn machine off and then on. If problem continues call for service.
Fault code 63 appears in service code box.	Caused by wiring short circuit in contactor wiring or contactor coil.	Check wiring and contactor for short circuit. Correct problem if found. If problem continues call for service.

# SPECIFICATIONS

## Machine Dimensions/Capacities/Performance

MODEL	eForce Burnisher
Length	62 in (157 cm)
Width	30 in (76 cm)
Height	48.5 in (123 cm)
Weight	368 lb (167 kg)
Weight with batteries	1,100 lb (499 kg)
GVWR	1300 lb (590 kg)
Cleaning path width	27 in (686 mm)
Productivity rate (max.)	35,640 ft <sup>2</sup> /hr (3,311 m <sup>2</sup> /hr)
Burnishing speeds (2 standard settings)	Low: 150 fpm (45.7 mpm) Med: 175 fpm (53.3 mpm)
Transport speed (max.)	Fwd: 435 fpm (8 Kpmh) Rev: 240 fpm (4.4 Kpmh)
Aisle turn (min.)	65 in (165.1 cm)
Burnishing Grade level (max.)	Burnishing: 9%
Transport Grade level (max.)	Transport: 13%,
Propel motors (2)	36 V, 7 A, .25 hp (.37 kW)
Pad motor	36 V, 100 A, 3.6 hp (2.7 kW)
Pad Pressure	Low: 60 lb (20.4 Kg) Med: 75 lb (29.5 Kg) High: 90 lb (38.5 Kg)
Pad speed	Low: 1600 RPM Med: 1650 RPM High: 1700 RPM
HEPA filtration	95% @0.3 micron / CFM 22.5
Dust bag capacity	1.9 gal (7.2 l)
Machine Voltage	36 VDC
Battery capacity	Six 6V, 430 Ah Wet / lead acid (std.), Six 6V, 390 Ah AGM (opt.)
Total power consumption	120A / 4.3 kw nominal
Run time (max.)	3.0 hours
Battery charger	120 VAC, 60 Hz, Output 36VDC, 36 A 220/240 VAC, 50/60 Hz Output 36 VDC, 40 A
Protection grade	IPX3
Sound pressure level	68 dB(A)
Ambient operating temperature	Min: +14°F (-10°C) Max: +122°F (+50°C)

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





# EC DECLARATION OF CONFORMITY



(FR) DECLARATION DE CONFORMITÉ (ES) DECLARACIÓN DE CONFORMIDAD (DE) KONFORMITÄTSERKLÄRUNG (NL) VERKLARING VAN OVEREENSTEMMING (P) DECLARAÇÃO DE CONFORMIDADE (SV) DEKLARATION OM ÖVERENSSTÄMMELSE (DK) OVERENSSTEMMELSESRERKLÆRING (N) KONFORMITETSERKLÆRING (FIN) VAATIMUSTENMUKAISUUSVAKUUTUS (GR) ΑΗΑΓΗΗ ΕΝΑΡΜΟΝΙΖΗ

NSS ENTERPRISES, INC 3115 FRENCHMANS ROAD TOLEDO OHIO U.S.A. 43607 - 2958 PHONE 419/531-2121

Authorized Technical Documentation Representative; Mark Bevington, NSS ENTERPRISES, INC. Unit 7 Pinfold Business Park, 55 Nottingham Road, Stapleford, Nottingham, NG9 8AD

MACHINE/MACCHINA/MAQUINA/BEZEICHNUNG DER MASCHINE/MAQUINA/MASKIN/KONE/ MASKINE/MHXANH:  
**FLOOR POLISHER**

TYPE/TIPO/MASCHINENTYP/TYYPPY/ ΤΥΠΟΣ: **eForce Burnisher**

SERIAL NR./NR. DI SERIE/N° DE SERIE/N°. DE SERIE/MASCHINEN-Nr./SERIENUMMER/N°. DE SÉRIE/ SERIENR./SARJANUMERO/AP. ΣΕΙΡΑΣ: **10xxxx15 - 52xxxx16**

(EN) NSS ENTERPRISES, INC. declares that the machine specified above fulfills all relevant provisions of the following Directives and Standards:

(IT) NSS Enterprises, Inc. Dichiaro che il macchinario di cui sopra soddisfa tutte le pertinenti disposizioni delle seguenti direttive e standard:

(FR) NSS ENTREPRISES, INC déclare que la machine indiquée ci-dessus satisfait a toutes les dispositions pertinentes des directives et des normes suivantes :

(ES) NSS ENTERPRISES, Inc. Declara que el equipo especificado anteriormente cumple con todas las disposiciones pertinentes de las directivas y normas siguientes:

(DE) NSS ENTERPRISES, INC erklärt, dass die Maschine oben angegebenen alle einschlägigen Bestimmungen der folgenden Richtlinien und Normen erfüllt:

(NL) NSS Enterprises, Inc verklaart dat de machine hierboven aangegeven alle relevante bepalingen van de volgende richtlijnen en normen voldoet:

(PT) NSS ENTERPRISES, INC declara que a máquina especificada acima cumpre todas as disposições pertinentes das directivas e padrões a seguir:

(SW) NSS Enterprises, Inc. Instyrar att maskinen anges ovan uppfyller alla relevanta bestämmelser i följande direktiv och standarder:

(FI) NSS Enterprises, Inc. Vakuuttaa, että laite edellä täytetty kaikki asiaankuuluvat määrätykset seuraavien direktiivien ja standardien:

(DK) NSS Enterprises, Inc. Erklærer, at maskinen er angivet ovenfor opfylder alle relevante bestemmelser i følgende direktiver og standarder:

(NO) NSS Enterprises, Inc. erklærer at maskinen er angitt ovenfor oppfyller alle relevante bestemmelser i følgende direktiver og standarder:

(GR) NSS Enterprises, Inc δηλώνει ότι η μηχανή που περιγράφεται ανωτέρω πληροί όλες τις σχετικές διατάξεις των ακόλουθων οδηγιών και προτύπων:

EU Directives/directive UE/directives de l'UE/Directivas de la UE/EU-Richtlinien/EU-richtlijnen/directivas de UE/EU-direktiv/EU-direktiviiv/EU-direktivar/EU-direktivar/οδηγίες της Ε.Ε.:

**2006/42/EC Machinery Directive 2004/108/EC EMC Directive 2002/44/EC Vibration Directive**

Harmonized Standards/ Standard armonizzati/ normas harmonizadas/ Normas armonizadas/ Harmoniserte Normen/ geharmoniseerde normen/ normas harmonizadas/ harmoniserte standarder/ yhdenmukaistetut standardit/ harmoniserte standarder/ harmoniserte standarder/ εναρμονισμένα Πρότυπα:

**EN12100-1, EN12100-2, ISO11201, EN55012, IEC61000-6-2, EN60335-2-72, ISO2631-1, ISO5349-1/-2, EN62233**

This declaration shall cease to be valid if modifications are made to the machine without our approval./ Questa dichiarazione non è più valida in caso di modifiche apportate alla macchina senza il nostro consenso./ Cette déclaration cessera d'être valable si des modifications sont apportées à la machine sans notre accord./ Esta declaración dejará de ser válida si se realizan modificaciones en la máquina sin nuestra aprobación./ Diese Erklärung gilt nicht mehr gültig sein, wenn Änderungen an der Maschine ohne unsere Zustimmung vorgenommen wurden./ Deze verklaring verliest haar geldigheid wanneer wijzigingen worden aangebracht aan de machine zonder onze goedkeuring./ Esta declaração deixará de ser válida se as modificações são feitas para o aparelho sem a nossa aprovação./ Denne erklæring skal opphøre å gjelde om endringer gøres på maskinen uten vårt godkjenning./ Tämä ilmoitus lakkaa olemasta voimassa, jos tehdään muutoksia koneeseen ilman meidän hyväksyntää./ Denne erklæring opphører med at være gyldige, hvis der foretages ændringer på maskinen uden vores godkendelse./ Denne erklæringen skal opphøre å være gyldig dersom modifikasjoner på maskinen uten vårt samtykke./ Η δήλωση αυτή παύει να ισχύει, αν έχουν γίνει τροποποιήσεις στο μηχάνημα χωρίς την έγκρισή μας.

It is ensured through internal measures that series-production units conform at all times to the requirements of current EU Directives and relevant standards./ Si è assicurata da misure interne che serie units di produzione sono conformi in ogni momento alle esigenze delle attuali direttive CE e alle normative applicate./ Elle est assurée par des mesures internes que les séries unités de production sont conformes en tout temps aux exigences des directives européennes et les normes actuelles pertinentes./ Se garantiza a través de medidas internas que las unidades de producción en serie ajustarse en todo momento a las necesidades de las actuales directivas de la UE y las normas pertinentes./ Es ist durch interne Maßnahmen, die Serien-Geräte entsprechen jederzeit den Anforderungen der aktuellen EU-Richtlinien und den angewandten Normen entsprechen./ Het wordt gewaarborgd door interne maatregelen die serie-productie-eenheden te allen tijde te voldoen aan de eisen van de huidige EU-richtlijnen en relevante normen./ É assegurado através de medidas internas que as unidades de produção em série conformam em todos os momentos com os requisitos das Directivas actuais da UE e padrões relevantes./ Det sikrertilts gjennom interne tiltak som seriestillverkede enheterna overensstemmer alltid med kravene i gjeldende EU-direktiv og relevante standarder./ Se on varmistettu sisäisillä toimenpiteillä että sarjatuotantoyksiköt täyttävät aina vaatimukset nykyisten EU-direktiivien ja asiaankuuluvien standardit./ Det sikres gjennom interne foranstaltninger, som serie-produksjonsenheder oppfyller til enhver tid til kravene i de nevnte EU-direktiver og relevante standarder./ Det er sikret gjennom interne tiltak som serierproduserte enhetene samsvare til enhver tid til kravene i gjeldende EU-direktiver og relevante standarder./ Διασφαλίζεται μέσω εσωτερικών μέτρων που μελούς παραγωγής μονάδες συμμορφώνονται ανά πάσα στιγμή με τις απαιτήσεις των ισχυουσών οδηγιών της ΕΕ και των σχετικών προτύπων.

Toledo, Ohio USA 3-31-2015

President, NSS ENTERPRISES, Inc.

Mark Bevington

# Safety Warnings



**READ AND UNDERSTAND THIS MANUAL BEFORE USING MACHINE**



**For Safety: wear protective gloves.**



**For Safety: wear eye protection.**



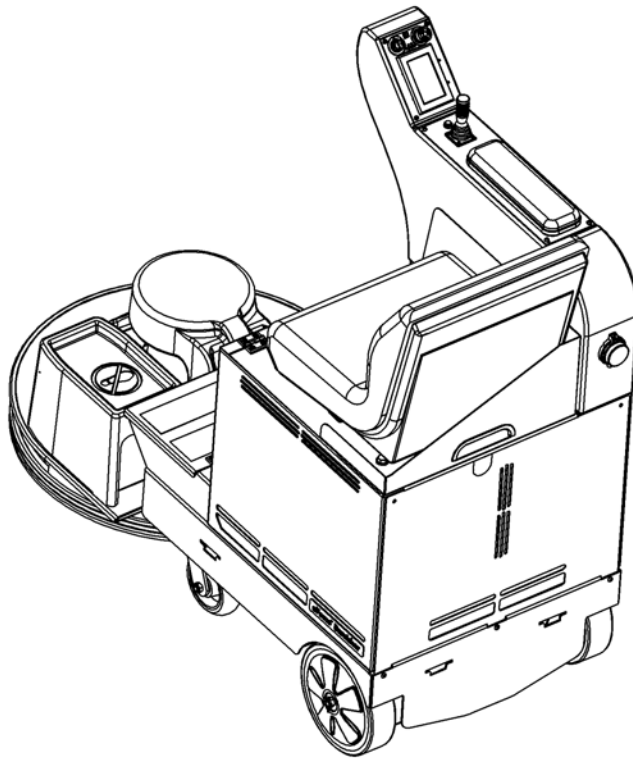
**For Safety: wear protective dust mask.**



**Warning**



**Caution**



**NSS® Enterprises, Inc.**

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