

GALAXY 1500 HIGH-SPEED BURNISHER

IMPORTANT SAFETY INSTRUCTIONS



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



WARNING: Shock or electrocution hazard. **ALWAYS** unplug machine before performing any maintenance or service.



WARNING: Fire or explosion hazard. **NEVER** use with flammable or combustible materials, such as gasoline, kerosene, or other fuels or volatile solvents to clean floor. **NEVER** operate this machine in an explosive atmosphere (grain dust, flammable liquids or fumes, etc.)



WARNING: Shock or electrocution hazard. **NEVER** connect this machine to an electrical outlet that is not properly grounded.

INTENDED USE

NSS Burnishers are intended for commercial use, scrubbing, buffing and burnishing floors in an indoor, dry environment. NSS does not recommend using these machines for any other purpose.

FOR SAFETY

- **ALWAYS** read and understand all instructions before operating or servicing machine.
- **ALWAYS** use this machine **ONLY** as described in this manual.
- **NEVER** attempt to operate this machine unless you have been trained in its operation.
- **NEVER** allow an untrained person to operate this machine.
- **NEVER** operate this machine with the handle locked in the upright position.
- **NEVER** lock the switch lever in the "ON" position or attempt to defeat the automatic switch lock out. The lock out prevents accidental starting of the machine.
- **ALWAYS** unplug the machine when attaching pads or brushes.
- **NEVER** leave the machine plugged in to the electrical outlet when not in use.
- **NEVER** unplug the machine from an electrical outlet until after the machine is turned off.
- **NEVER** attempt to operate this machine if it is not working properly or has been damaged in any manner.
- **NEVER** disconnect or modify any switches or safety devices.
- **NEVER** operate this machine if the cord and/or plug has been damaged, broken, cut, abraded or taped.
- **ALWAYS** replace the entire cord when the cord or plug is damaged in any way.
- **NEVER** handle the machine, cord, or plug with wet hands.
- **NEVER** drop or insert any object into any machine opening.
- **NEVER** operate this machine with any air opening blocked. Keep all air openings free of dust, lint, hair, etc.
- **NEVER** pull or carry the machine by its electrical supply cord, use the cord as a handle, close a door on the cord, pull the cord around sharp edges or corners, expose to heated surfaces, run machine over cord, or set heavy or sharp objects on the cord.
- **NEVER** unplug by pulling on the cord. To unplug the cord from the outlet, grasp the plug, not the cord.
- **NEVER** allow this machine to be used as a toy. Close attention is necessary when used near children.
- **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 (revolving brush or pad driver).
- **NEVER** spray this machine with water or any liquids.
- **NEVER** operate the machine outdoors.
- **NEVER** expose the machine to rain, snow, or extreme temperatures.
- **ALWAYS** store this machine indoors in a dry, cool area.
- **NEVER** add weight to the machine. Remove all cord from the handle prior to operating

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

SAVE THESE INSTRUCTIONS



IMPORTANT SAFETY INSTRUCTIONS

GROUNDING OF ELECTRICAL EQUIPMENT



WARNING: Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the machine – if it will not fit the outlet; have a proper outlet installed by a qualified electrician.

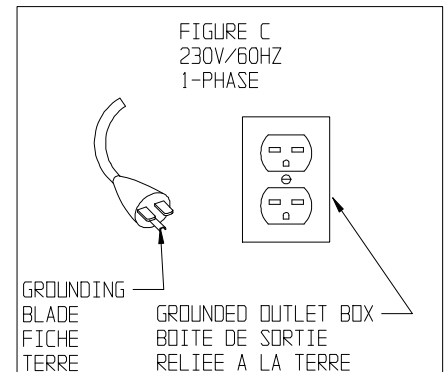
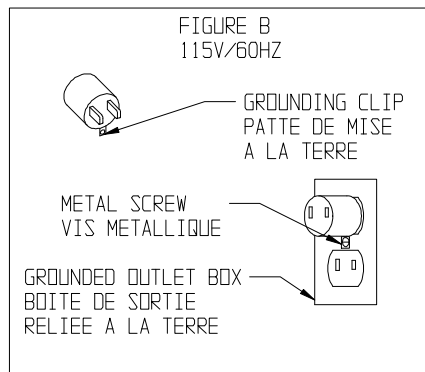
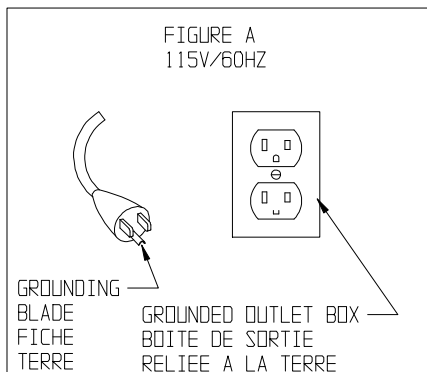
Always use a properly grounded 3-wire extension cord, which has male and female plugs. If 25 foot extension cords are used, the electrical carrying capacity should be no less than 14-3 ST. 50-foot extension cords no less than 12-3 ST.

GROUNDING INSTRUCTIONS

This machine shall be grounded while in use to protect the operator from electric shock. The machine is provided with a three-conductor cord and a three-contact grounding type attachment plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. The green conductor in the cord is the ground wire. Never connect this wire to other than the grounding pin of the attachment plug.

Check nameplate on the machine to be sure **voltage** and **cycle** stated is the same as the electrical outlet. Do not attempt to plug a 120 volt machine into a 240 volt outlet or a 240 volt machine into a 120 volt outlet. If the machine is provided with an attachment plug as shown in Figure A. below, it is intended for use on a nominal 120 volt circuit. If a properly grounded receptacle as shown in Figure A. is not available, an adapter may be installed as shown in Figure B. if the outlet box that houses the receptacle is grounded. Be sure to fasten the grounding tab (the green colored rigid ear, lug or the like extending from the adapter) with a metal faceplate screw.

If the machine is provided with an attachment plug as shown in Figure C., it is intended for use on a nominal 240 volt circuit. No adapter is available for this plug.



NOTE: In Canada, the use of a temporary adaptor is not permitted by Canadian electrical code.

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NOISE AND VIBRATION

NOISE

Galaxy 1500 Sound pressure level at Operator position. 65 dB(A)

VIBRATION

Galaxy 1500 Weighted RMS acceleration value (ISO 5349) 1.17 m/s²

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 local freight company to file a freight claim.

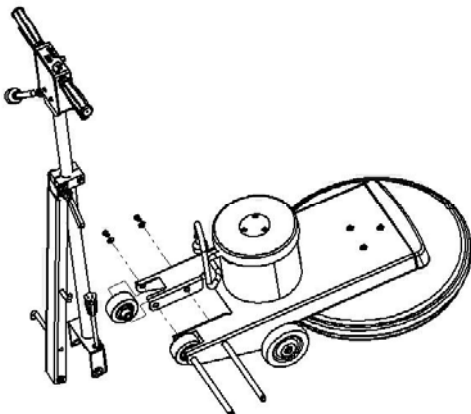
ASSEMBLY

- This machine is packed in two separate cartons, the handle assembly in one, base in the other.
- Since the Galaxy is available in a variety of voltages and frequencies, it is important to ensure that the correct handle is installed with the correct base. The base part number and the handle part number it goes with are stated on the nameplate affixed to the base motor. The part number of the handle assembly is noted on the part number decal affixed to the handle.

Correct combinations are as follows:

- 120 Volt Handle Assembly, part number 0395311 must be used with the following bases:
 - 0305631 20" 120V60HZ, 1.5 HP w/o Dust Ctrl
 - 0305641 20" 120V60HZ, 1.5 HP w/Dust Ctrl
- 240 Volt Handle Assembly, part number 0395701 must be used with the following bases:
 - 0305711 20" 230V60HZ, 1.5 HP w/o Dust Ctrl
 - 0305721 20" 230V60HZ, 1.5 HP w/Dust Ctrl

To assemble the machine, remove the two sections from their cartons, and perform the steps indicated on the supplied Assembly Poster.



1. Remove the hex screws and washers from the left end of the two handle shafts located at the rear of the base, and slide the shafts out far enough to clear the center opening in the frame. Note that the 2 rear wheels are installed on the rear-most shaft.
 2. Position the handle in the base, inline with the holes for the forward-most handle shaft, and push the shaft thru the base and the handle bushings. Re-install the washers and screw.
 3. Position the lower holes of the handle brace inline with the holes for the rear-most shaft, and re-install the shaft along with the rear wheel and spacers. Re-install the washers and screw.
 4. Plug the handle cord and the motor cord together, cover with plastic tube cover.
- See the Assembly Poster for more detailed instructions.

OPERATION

Installing the Pad

Make sure machine is unplugged before proceeding.

- Lock handle in the upright position.
- Tilt the machine back until the handle is resting on the floor and the underside of the machine is exposed.
- Remove the center lock by squeezing the wire spring clip. Center the pad on the driver. Position the center lock in the center of the pad then push on the center lock until you hear the wire spring click into place. If possible, press the center lock further until a second click is heard.

Starting the Machine

These machines are equipped with a system to prevent accidental starting that consists of a mechanical lockout on the front of the machine handle, which must be activated before the machine will start. To start the machine:

- First, check to see that the dead man, or switch lever lockout, located at the top and center of the handle is in the “OFF” (up) position and not stuck or malfunctioning in the “ON” (down) position before plugging the machine in.
- Plug the machine in.
- Grip the handles with both hands.
- Push down on the lock-out with the thumb of one hand, and with the other hand squeeze the switch lever.

CAUTION: The machine will start operating when the switch lever is squeezed.

Running the Machine

- Floors should be dust mopped to remove surface litter and damp mopped to remove grit (preferably scrubbed with an auto-scrubber), otherwise the buffer will anneal dirt into the finish.

- Start at a point nearest the electrical outlet and walk as far as the cord will let you travel. Make a 180-degree turn **away** from the cord and walk the machine in a path parallel to the first pass, slightly overlapping the preceding path.
- Never buff in one location for more than 5 seconds, or scoring of the floor finish or tile may result.
- Without letting go of the handle, release the switch levers to stop machine.

CAUTION: Machine pad will continue to rotate a few seconds after the switch lever is released.

Applications

Operations you **can** perform with these machines:

- High speed buffing/polishing
- Spray buffing
- Use any thick pad of any type
- Damp stripping

Operations you **cannot** perform with these machines:

- Wet scrubbing (flooded floor)
- Carpet shampooing
- Operating with weights added

Utilize more aggressive pads, such as the NSS "Blue" pad to help remove scuffing and surface soiling.

Important Tips for Buffing

Floor Pads – Polishing

The selection of which floor pad to use is contingent upon several factors, including hardness of the floor finish being used, the color of the floor tile (light or dark) and the general frequency of dust mopping, wet cleaning, and high speed buffing. Given these variables, choosing the WRONG pad can lead to FAR LESS than optimum results. For example, if a swirling or smearing effect appears while buffing, the pad being used is too abrasive or dirty. A new, clean pad or a softer pad is necessary to attain a uniform level of high gloss. If you are unsure as to which pad is correct for a particular situation, consult your NSS distributor.

Floor Pads – Spray Buff/Restorer Products

When spray buffing or using a restorer or top-dressing type material, the pad must be a more aggressive material than, for instance, a white super speed polish pad, to remove residue and haze left by the mopped-on or sprayed-on material.

Cleaning Procedures

Spray Cleaning: Do not over use spray buffing or spray cleaning. Many times, floors can be just polished to achieve maximum results. Over-use of the spray buff material and the failure to change pads when dirty can limit the effectiveness. Spray clean only severely marked, high traffic areas.

Restorers: Many floor treatments, when used as directed, can clean, protect, and beautify tile floors. When combined with a good foundation of finish and regular maintenance, the luster can be maintained and overall cleaning productivity improved. Floor treatment is sprayed or mopped on and then buffed. All

treatments tested by NSS have responded best to high speed buffing as compared to slower speed machines.

Damp Stripping: (Non-Dust Control versions only) Wet or flood stripping should never be performed with high-speed machines, as uncontrolled splattering will result. Damp stripping of smaller constricted areas, however, can be performed quite successfully. Use a moderately abrasive floor pad and a strong solution of neutral cleaner or a weak solution of non-ammoniated stripper.

MAINTENANCE

Routine maintenance is critical to ensure proper machine operation and cleaning performance. Perform all maintenance procedures as follows:

Always unplug machine before performing any maintenance. See front page for warnings.

Daily Maintenance

- Wipe off the entire machine with a clean cloth.
- Check the cord for any breaks in the wire. Breaks would most likely occur near the plug and near the handle. Also check the ground pin for breakage. If any breaks are found, the cord should be replaced immediately.
- Inspect the handle tube and handle clamp mechanism for wear, damage, obstructions or any build-up that may hinder easy movement of the handle. If the handle will not move with the handle lock in the up position, do not force movement. Adjust by tightening or loosening the nut opposite the clamp handle as required to ensure free movement when the clamp is unlocked, and that it clamps tight when the clamp is locked.
- Check the dead man switch and throttle levers for proper action.

Monthly Maintenance

- Check the wheels for wear or damage. Replace if needed.
- Apply a small amount of spray lubricant to the axles. This will allow the wheels to roll freely.
- Check for loose bolts that hold the motor and gearbox to the base of the machine. Tighten if needed.
- Inspect the motor for accumulation of dirt in the vents of the motor. If vents are blocked the motor will over heat and fail. Clean out the dirt with a vacuum or with forced air.
- Inspect the handle tube and handle clamp mechanism for wear, damage, obstructions or any build-up that may hinder easy movement of the handle. If the handle will not move with the handle lock in the up position, do not force movement. Adjust by tightening or loosening the nut opposite the clamp handle as required to ensure free movement when the clamp is unlocked, and that it clamps tight when the clamp is locked.
- Inspect and adjust belt tension, being careful not to over-tighten the belt which will lead to motor damage.

Yearly Maintenance

- Disassemble the top of the motor to inspect the brushes for wear. Brushes should be replaced when they are worn to 3/8" length, typically after 1000 hours of use.

TROUBLESHOOTING

SYMPTOM	CAUSE	SOLUTION
Motor runs intermittently.	Loose wire. Broken or damaged cord. Bad handle switch.	Check all wire connections. Replace cord. Test continuity - replace.
Motor not running.	Loose wires. Broken or damaged cord. Bad handle switch. Blown rectifier. Shorted armature.	Check all wire connections. Replace cord. Test continuity – replace. Replace rectifier. Replace armature.
Motor slow speed only.	Worn carbon brushes. Shorted armature.	Replace carbon brushes. Replace armature.
Motor runs / pad does not turn (Charger 1500 and Mustang 1500 only).	Broken or loose belt.	Replace or tighten belt.
Wall breaker blows.	Excessive load on circuit. Pad / brush over loaded. Under sized extension cord. Improper use.	Check total load on circuit. Change pad and/or procedures. Replace / remove extension cord. Consult distributor.
Machine wobbles or bounces.	Warped / damaged pad driver / brush. Pad not centered. Wheels worn.	Replace pad driver / brush. Center pad. Replace wheels.
Machine vibrates / buzzes.	Worn motor bearings. Wheels loose on axle.	Replace motor bearings. Shim wheels tight on axle or replace.
Handle Clamp slips	Clamp bolt out of adjustment	Tighten nut 1/16-1/8 turn at a time.

Authorized Repair Service

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

Notes:



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