OPERATION MANUAL

NSS STANDARD-SPEED FLOOR MACHINES

IMPORTANT SAFETY INSTRUCTIONS

Read all instructions before using or servicing machine.

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

WARNING: Shock or electrocution hazard.

NEVER connect this machine to an

electrical outlet that is not properly

grounded. See grounding instructions.

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.

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

WARNING: To reduce the risk of fire, electric shock, or injury:

INTENDED USE

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

When Using An Electrical Appliance, Basic Precautions Should Always Be Followed, Including The Following:

- 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** operate this machine with the handle loose.
- **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.
- If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.

- **NEVER** disconnect or modify any switches or safety devices (circuit breaker).
- **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 it's 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 by or near children.
- ALWAYS wear clean tennis shoes or "non-slip" shoes. Leather soled shoes will be extremely slippery when wet.
- 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.

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

NSS Standard Speed Floor Machines, Orig. 10-02 Rev H 07-14 9095950

ORIGINAL 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 outlet is not suitable for safe use; have a proper outlet installed by a qualified electrician.

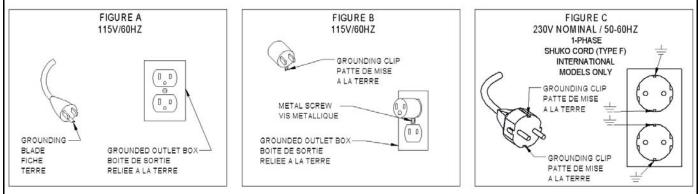
Always use a properly grounded 3-wire extension cord, which has male and female plugs. If 25 foot extension cords are used, the electrical carrying capacity should be no less than 14-3 ST. 50-foot extension cords no less than 12-3 ST.

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. Changes to the attachment plug or use of adaptors to other plug types must be done in accordance with local regulations.



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

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SAVE THESE INSTRUCTIONS

NOISE AND VIBRATION

NOISE	
Mustang 300 DS Sound pressure	75 dB(A)
level at Operator position.	
Mustang Floor Machine Sound pressure level at Operator position.	70 dB(A)
Thoroughbred Sound pressure level at Operator position. <u>VIBRATION</u>	68 dB(A)
Mustang 300 DS Weighted RMS acceleration value (ISO 5349)	1.99 m/s ²
Mustang Floor Weighted RMS acceleration value (ISO 5349)	.988 m/s²
Thoroughbred Weighted RMS acceleration value (ISO 5349)	1.79 m/s ²

ASSEMBLY

• This machine is packed to enable the user to simply remove it from the carton, attach the pad or brush, plug in the machine and be ready to operate.

OPERATION

Preparing the Machine for Use

- With the handle locked in the upright position, tilt the machine back, exposing the underside of the machine.
- Attach the brush or pad driver to the lugs on the gearbox by rotating the pad driver or brush counterclockwise.
- To adjust the handle position, put the machine into an upright position, resting the pad or brush on the floor. Lift the handle lock (the black grip near the base of the handle) to allow the handle to move freely. Adjust the handle to a comfortable operating position (just below belt height), then push the locking lever down with your foot to lock the handle in this position. Should the lock lever not tighten securely to the handle tube, see "Lock Lever Adjustment" in the Maintenance section of this manual.
- Always 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 in machine.
- Plug the cord into the wall outlet.

Running the Machine

• To start the machine, grip the handles with both hands and raise the handle slightly to balance the machine. Then push down on the lockout 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.

- **Raise** the handle slightly to propel the machine to the right, **Lower** the handle slightly to propel the machine to the left.
- Begin operating the machine at a point closest to an electrical outlet, then working away from the outlet. This will prevent running over the electrical cord.

Stopping the Machine

• WITHOUT LETTING GO OF THE HANDLE, release the switch levers to stop the machine.

CAUTION: This machine will continue to rotate for 1-2 seconds once the switch levers are released. When the machine comes to a complete stop, **UNPLUG THE MACHINE.**

- Release the handle lock, raise the handle to an upright position, and lock the handle.
- Tilt the machine back and remove the pad driver or brush by rotating it clockwise.
- ALWAYS remove the pad driver or brush when the machine is not in operation. The pad driver or brush should be hung on a peg, or laid flat on its back.
- **NEVER** store a pad driver or brush with the bristles down. This will ruin the balance of the pad driver or brush, which will cause the machine to wobble.

SURFACE CONSIDERATIONS

Brush or Pad Driver

Select the appropriate brush or pad driver and pad for the type of floor to be scrubbed or polished, and the operation being performed.

Carpet

When scrubbing carpeting with a brush, pad or bonnet mop, the carpet must stay wet enough to lubricate the brush, pad, or bonnet mop, otherwise overload of the motor will result.

Marble, Concrete, or Terrazzo

Optional weights may be used (on Thoroughbred models only) to increase the pressure on the floor (See the accessories page included in the Illustrated Parts List for details). The first weight must be bolted on to the machine. Additional weights can then be added by simply slipping them onto the pins of the first weight then securing them with the wing nuts.

Overload

For Thoroughbred and Mustang models, attention must be given to ensure the motor is not run in an overload condition.

- Listen to the motor when starting and during operation. Within 1 2 seconds from starting the sound of the motor will change as the motor switches from "start winding" to "run winding".
- During operation if the sound of the motor switches back to the "start winding" sound, this is an indication that the motor has been overloaded. **STOP IMMEDIATELY.**
- Check the machine over to find the source of the overload and correct the problem.
- Overload may be caused by one or more of the following:
 - o Too much weight.
 - The floor is not wet enough.
 - o Too much spray buff.
 - o Incorrect brush or pad size.
 - o Pad is too worn and needs to be changed.
 - \circ Too high or too low voltage (the voltage must be \pm 10% of the rating on the nameplate).
 - Use of too long, too small of gage, or too many extension cords.

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

- Remove pad driver or brush from the machine. Rinse and allow to air dry. Failure to remove the pad driver or brush may cause damage to the pad or brush, causing the machine to wobble or vibrate excessively.
- Wipe off all of the plated and polished areas 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 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. Contact an NSS authorized service center.
- Check the dead man switch and throttle levers for proper action.

Monthly Maintenance

• Lubricate the tube handle clamp area monthly with a thin film of grease to allow ease of adjustment.

- Check the wheels for wear or damage. Replace if needed.
- Apply a small amount of spray lubricant to the axle. 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.
- Check the Lock Lever to ensure it securely locks to the handle tube. If the clamp force is insufficient to keep the handle from moving, perform the Lock Lever Adjustment as follows:

Thoroughbred:

- Loosen the two set screws that hold the lock lever bolt in position.
- With the lock lever in a horizontal position, tighten the bolt counterclockwise until the bolt is snug against the tube clamp.
- Tighten the set screws and test the machine. <u>DO</u> NOT OVER TIGHTEN.

Mustangs / Mavericks:

• Tighten the nut opposite side of the lever.

Yearly Maintenance

• Disassemble the top of the motor to inspect the "stationary switch" for electrical pitting and carbon build-up. Clean or replace stationary switch as needed.

TROUBLE SHOOTING

CAUSE

SYMPTOM

Motor runs intermitten

Motor not running.

Motor slow speed only

Motor runs / pad does

Wall breaker blows.

Machine wobbles or b

Machine vibrates / buzzes

Worn motor bearings. Wheels loose on axle.

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.

SOLUTION

Replace motor bearings.

Shim wheels tight on axle.

ntly.	Loose wire. Broken or damaged cord. Bad handle switch.	Check all wire connections. Replace cord. Test continuity - replace.
	Loose wires. Broken or damaged cord. Bad handle switch. Blown capacitor. Burned stationary switch. Shortened windings.	Check all wire connections. Replace cord. Test continuity - replace. Replace capacitor. Replace stationary switch. Replace stator with frame.
ly.	Bad Capacitor. Motor stuck in start winding.	Check capacitor. Check stationary switch.
s not turn.	Broken odum coupling in Gearbox.	Replace odum coupling in Gearbox.
	Excessive load on circuit. Pad / brush over loaded. Under sized extension cord. Improper use.	Check total load on circuit. Check / change procedures. Replace / remove extension cord. Consult distributor.
bounces	Warped / damaged pad driver or brush.	Replace pad driver / brush.
	Pad not centered.	Center pad.



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) OVERENSSTEMMELSESERKLÆRING (N) KONFORMITETSERKLÆRING (FIN) VAATIMUSTENMUKAISUUSVAKUUTUS (GR) ΔΗΛΩΣΗ ENAPMONISHΣ

CE

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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 MACHINE

TYPE/TIPO/MASCHINENTYP/TYYPPI/ TYΠΟΣ: MAVERICK 300, THOROUGHBRED, MUSTANG, MUSTANG DS, GALAXY, GALAXY DS

(EN) NSS ENTERPRISES, INC. declares that the machine specified above fulfills all relevant provisions of the following Directives and Standards: (IT) NSS Enterprises, Inc. Dichiara 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 à 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. Intygar att maskinen anges ovan uppfyller alla relevanta bestämmelser i fõljande direktiv och standarder:
(FI) NSS Enterprises, Inc. Vakuuttaa, että laite edellä täyttää kaikki asiaankuuluvat määräykset seuraavien direktiiven ja standarder:
(DK) NSS Enterprises, Inc. Erklærer, at maskinen er angitet ovenfor opfyller alle relevante bestemmelser i fölgende direktiver og standarder:
(NO) NSS Enterprises, Inc. erklærer at maskinen er angitt ovenfor opfyller alle relevante bestemmelser i fölgende direktiver og standarder:
(OR) NSS Enterprises, Inc. öŋ λόνει ότι η μηχανή που περιγράφεται ανωτέρω πληροί όλες τις σχετικές διατάξεις των ακόλουθων οδηγιών και

(ατό που Σπατρήμες, πο σηλωτεί στι η μηχανή που περιγραφείαι ανώτερω πρηροι όπος τος όχει πες διατάζεις των ακολοσοών συηγε προτόπων:

 $EU \ Directives / directive uE / directives de \ l^UE / Directivas de \ la \ UE / EU - Richtlinien / EU - richtlijnen / directivas da \ UE / EU - direktiv / EU - direktive /$

2006/42/EC Machinery Directive 2004/108/EC EMC Directive 2002/44/EC Vibration Directive Harmonized Standards/ Standard armonizzati/ normes harmonisées/ Normas armonizadas/ Harmonisierte Normen/ geharmoniseerde normen/ normas harmonizadas/ harmoniserade standarder/ yhdenmukaistettujen standardien/ harmoniserede standarder/ harmoniserte standarder/ εναρμονισμένα Πρότυτα:

EN12100-1, EN12100-2, ISO11201, EN55014-1, EN55014-2, EN60335-2-67, ISO2631-1, ISO5349-1/-2, IEC61000-3-2/-3-3, 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 machina 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 gùltig sein, wenn Änderungen an der Maschine ohne unsere Zustimmung vorgenommen werden./ Deze verklaring verliest haar geldigheid wanneer wijzigingen worden angebracht aan de machine zonder onze goedkeuring./ Esta declaração deixará de ser válido se as modificações são feitas para o aparelho sem a nossa aprovação./ Denna förklaring skall upphöra att gålla om ändringar görs på maskinen utan vårt godkännande./ Tämä ilmoitus lakkaa olemasta voimassa, jos tehdãan muutoksia koneeseen ilman meidän hyväksyntää./ Denne erklæring ophører 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/ H 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 unità 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 såkerställs genom interna åtgärder som serietillverkade enheterna överensstämmer alltid med kraven i gällande EU-direktivi och relevanta standarder./ Se on varmistettu sisäisä toimenpieitä että sarja-tuotantoyksikőt täyttävät aina vaatimuksiin nykyisten EU-direktivien ja asiaankuuluvat standardit./ Det sikres gennem interne foranstaltninger, som serie-produktion senheder opfylder til enhver tid til kravene i de nuværende EU-direktiver og relevante standarder / Δuασφαλίζεται μέσω εσωτεμκών μέτρων που μάζικής παραγωγής μωνάδες συμμορφώνονται ανά πάσα στιγμή με τις απατήσεις των ισχυουσών οδηγιών της ΕΕ



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