

# STALLION 12 SC CARPET EXTRACTOR

## 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 to pick up flammable or combustible liquids, or any thing that is burning or smoking, such as cigarettes, matches or hot ashes.

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



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

### INTENDED USE

The Stallion 12 SC Carpet Extractor is intended for commercial use, cleaning and extracting floors, furniture, draperies and automobile interiors in an indoor environment. This machine is intended for Wet pickup only. 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** 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** operate this machine in standing water.
- **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 by or near children.
- **ALWAYS** keep face, fingers, hair or any other body part or loose clothing away from any machine opening or moving part.
- **ALWAYS** use extreme care when cleaning on stairs or when machine is placed on stairs.
- **NEVER** operate the machine without the filters in place.
- **ALWAYS** place this machine on a firm flat surface.
- **NEVER** use any attachments other than the manufacturers recommended attachments.
- **NEVER** spray this machine with water or any liquids.
- **NEVER** operate this machine outdoors.
- **NEVER** expose the machine to rain, snow, or extreme temperatures.
- **NEVER** use this machine for dry vacuuming.
- **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.**

**SAVE THESE INSTRUCTIONS**




# STALLION 12 SC CARPET EXTRACTOR

## IMPORTANTES INSTRUCTIONS DE SÉCURITÉ

Lisez toutes les instructions avant d'utiliser ou de réparer et faire l'entretien de l'appareil.

 **AVERTISSEMENT** : Danger de choc ou d'électrocution.

**TOUJOURS** débrancher l'appareil avant tout entretien ou réparation.


 **AVERTISSEMENT** : Danger de choc ou d'électrocution.

**NE JAMAIS** brancher cet appareil à une prise électrique qui n'est pas mise à la terre correctement. Voir les instructions de mise à la terre.

 **AVERTISSEMENT** : Danger d'incendie ou d'explosion.

**NE JAMAIS** utiliser pour ramasser des liquides inflammables ou combustibles ou toute autre chose qui brûle ou fume, comme des cigarettes, des allumettes ou des cendres chaudes.

**NE JAMAIS** faire fonctionner cet appareil dans un milieu explosif (poussière céréalière, liquides ou fumées inflammables, etc.)

 **AVERTISSEMENT** : Pour réduire le risque d'incendies, de choc électrique ou de blessures.

### UTILISATION PRÉVUE

L'extracteur de tapis Stallion 12 SC est un appareil à utilisation commerciale, pour nettoyer et extraire les planchers, les meubles, les tentures et l'intérieur des voitures dans un milieu intérieur. Cet appareil est réservé au ramassage humide. NSS ne recommande pas d'utiliser ces appareils à d'autres fins.

**En utilisant un appareil électrique, on doit suivre les précautions de bas, y compris ce qui suit:**

- **TOUJOURS** lire et comprendre toutes les instructions avant d'utiliser ou de réparer l'appareil.
- **TOUJOURS** utiliser l'appareil **SEULEMENT** selon la description dans ce manuel.
- **NE JAMAIS** essayer de faire fonctionner cet appareil à moins d'être formé pour son utilisation.
- **NE JAMAIS** permettre à une personne non formée de faire fonctionner cet appareil.
- **NE JAMAIS** laisser l'appareil branché dans la prise de courant lorsqu'il n'est pas utilisé.
- **NE JAMAIS** débrancher l'appareil de la prise de courant avant qu'il ne soit éteint.
- **SI** l'appareil ne fonctionne pas correctement, a été échappé, endommagé, laissé à l'extérieur ou échappé dans l'eau, retournez-le à un centre de service.
- **NE JAMAIS** faire fonctionner cet appareil dans de l'eau stagnante.
- **NE JAMAIS** débrancher ou modifier les interrupteurs ou les dispositifs de sécurité.
- **NE JAMAIS** faire fonctionner cet appareil si le cordon et / ou la fiche est endommagé(e), brisé(e), coupé(e), usé(e) ou scellé(e) avec un ruban adhésif.
- **TOUJOURS** remplacer tout le cordon lorsque ce dernier ou la fiche est endommagé(e) de quelque façon que ce soit.
- **NE JAMAIS** manipuler l'appareil, le cordon ou la fiche avec les mains mouillées.

- **NE JAMAIS** laisser tomber ou insérer un objet dans toute ouverture de l'appareil.
- **NE JAMAIS** faire fonctionner cet appareil lorsqu'une ouverture d'air est bloquée. Garder toutes les ouvertures d'air libres de poussières, peluche, cheveux, etc.
- **NE JAMAIS** tirer ou porter l'appareil par son cordon électrique, utiliser le cordon comme poignée, fermer une porte sur le cordon, tirer le cordon autour de bords ou coins tranchants, exposer à des surfaces chauffées, faire passer l'appareil sur le cordon, ou déposer des objets lourds ou tranchants sur le cordon.
- **NE JAMAIS** débrancher en tirant le cordon. Pour débrancher le cordon de la prise, agripper la fiche non pas le cordon.
- **NE JAMAIS** laisser cet appareil servir de jouet. Attention tout particulièrement lorsque l'appareil est utilisé par ou près d'enfants.
- **TOUJOURS** garder le visage, les doigts, les cheveux ou toute autre partie du corps ou vêtements amples loin de toute ouverture de l'appareil ou pièce mobile.
- **TOUJOURS** utiliser l'appareil prudemment en nettoyant les escaliers ou lorsque l'appareil lui-même est sur l'escalier.
- **NE JAMAIS** faire fonctionner l'appareil sans que les filtres ne soient en place..
- **TOUJOURS** placer cet appareil sur une surface ferme et à plat.
- **NE JAMAIS** utiliser d'accessoires autres que ceux recommandés par le fabricant.
- **NE JAMAIS** pulvériser cet appareil d'eau ou d'autres liquides.
- **NE JAMAIS** faire fonctionner l'appareil à l'extérieur.
- **NE JAMAIS** exposer l'appareil à la pluie, à la neige ou à des températures extrêmes.
- **TOUJOURS** ranger cet appareil à l'intérieur dans un endroit sec et frais.

**TOUTES LES RÉPARATIONS DOIVENT ÊTRE EFFECTUÉES PAR UN DISTRIBUTEUR / STATION SERVICE AUTORISÉ(E) NSS UTILISANT SEULEMENT DES PIÈCES ORIGINALES NSS.**

## CONSERVER CES 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.

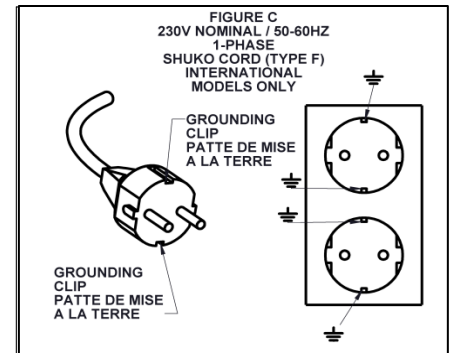
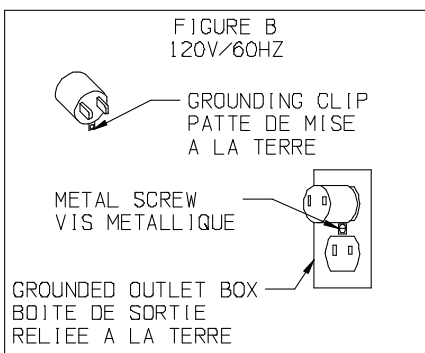
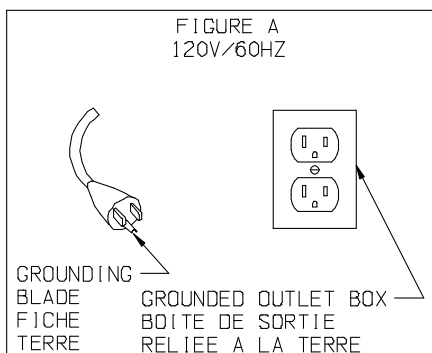
Always use a properly grounded 3-wire extension cord no less than 12-3 ST, which has male and female plugs.

## 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 a grounded 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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# IMPORTANTES INSTRUCTIONS DE SÉCURITÉ

## MISE À LA TERRE DE L'ÉQUIPEMENT ÉLECTRIQUE



**AVERTISSEMENT:** Toute mauvaise connexion de l'appareil-conducteur de mise à la terre peut mener à un risque de choc électrique. Vérifier auprès d'un électricien ou d'un réparateur qualifié si vous avez des doutes quant à la mise à la terre appropriée de la prise. Ne pas modifier la fiche fournie avec la machine. Si la sortie n'est pas adapté pour une utilisation sécuritaire ; avoir une bonne sortie installée par un électricien qualifié.

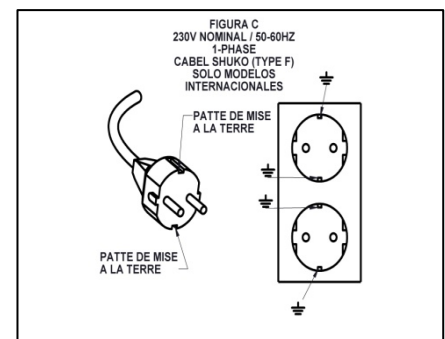
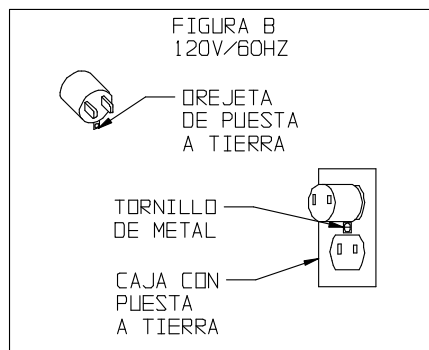
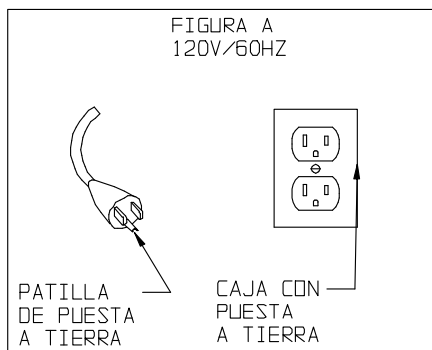
Toujours utiliser une rallonge à 3 fils mise à la terre et à prises mâle et femelle.

## INSTRUCTIONS DE MISE À LA TERRE

Cet appareil doit être mis à la terre lorsqu'il est en marche pour protéger l'opérateur de tout choc électrique. L'appareil est fourni avec un cordon à 3 conducteurs et une fiche de branchement masse à trois contacts. La fiche doit être branchée dans une prise appropriée, installée et mise à la terre correctement selon tous les codes et ordonnances locaux. Le conducteur vert du cordon est le fil de masse. Ne jamais brancher ce fil à autre chose que la broche de masse de la fiche de branchement.

Vérifier la plaque signalétique de l'appareil pour être certain que la **tension** et le **cycle** indiqués sont les mêmes que la prise électrique. Ne pas essayer de brancher un appareil de 120 volts à une prise de 240 volts ou un appareil de 240 volts à une prise de 120 volts. Si l'appareil est fourni avec une fiche de branchement tel qu'indiqué dans la figure A. plus bas, il doit donc être utilisé avec un circuit nominal de 120 volts. S'il n'y a pas de prise mise à la terre telle qu'indiqué dans la figure A. disponible, on peut installer un adaptateur tel qu'indiqué dans la figure B. si la boîte à prises est mise à la terre. S'assurer d'attacher la patte de mise à la terre (boucle, cosse rigide de couleur verte ou quelque chose de semblable sortant de l'adaptateur) avec une vis de plaque signalétique de métal.

Si l'appareil est fourni avec une fiche de branchement tel qu'indiqué dans la figure C., il doit donc être utilisé avec un circuit nominal de 240 volts. Modifications du prise ou le rallonge a d'autres types de prises doit se faire en conformité avec les règlements du pays.



REMARQUE : Au Canada, l'utilisation d'un rallonge temporaire peut être interdite par le code canadien de l'électricité.

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## CONSERVER CES INSTRUCTIONS



## NOISE AND VIBRATION

### NOISE

Sound pressure level at Operator position 77dB(A)

## MACHINE INSPECTION

- After 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.
- **Note:** this machine is shipped with antifreeze in the solution line system to protect the pump and valves from freezing during transport and storage. Before you use the machine, rinse the solution line system with clean water (See Preparing the Machine).

## MACHINE COMPONENTS

### Solution Tank

The solution tank is the lower part of the machine body. It has a capacity of **12 Gallons (45 liters)**.

### Recovery Pails

The (2) recovery pails are the upper part of the machine body. The pails each have a capacity of **6 gallons (23 liters)**.

### Control Panel

The operator control panel is located on the handle of the machine. This panel has components that control various machine functions:

- The left rocker switch turns the vacuum motor on and off.
- The right rocker switch turns the brush motor on and off.
- The middle rocker switch controls the pump.
- The carpet spray switch (located below the left grip handle) allows the liquid to be sprayed onto the carpet. Press and hold the switch to start spraying the liquid, release the switch to stop.
- The circuit breaker on the right side of the handle protects the brush motor.

### Cleaning Solution Flow Rate Valve

This machine has a two position valve located on the lower rear panel that will allow the operator to use less cleaning chemical for light duty applications.

- The low flow position provides a 38% reduction in the cleaning solution consumption.
- The high flow position provides full capacity solution application.

### Brush Head Assembly

This machine has a floating brush head assembly that adapts to the different carpet pile heights. The brush head is offset to the right side of the machine to clean against the wall.

- The brush head assembly includes the Spray Bar.
- Two brass spray jets provide a cleaning pattern over the full width of the brush head.

### Vacuum Shoe

The 16" (41 cm) wide vacuum shoe is located at the front of the machine. As the machine moves backward the vacuum shoe pulls the liquid out of the carpet.

### Accessory hose option

- Remove the 2" hose adapter connection from the machine.
- Attach the 1 1/2" hose assembly with adapter plate to the vacuum lid inlet.
- Pull back female quick disconnect sleeve on the hose and convert to the male plug on the back of the machine.



## PREPARING THE MACHINE

### Preparing the Solution and Recovery tanks:

- **Never** use water over 140°F (60°C).
- Before initial use, purge the antifreeze used for shipping from the solution line system using clean water only. Flush the system out completely.
- Excessively hot water will damage components such as the pump, valves, and seals. Observe the carpet manufacturer's cleaning instructions.
- Make sure the solution indicator tube is securely clipped in the upright position to keep fluids from draining out.
- Put 1 to 2 gallons (4 to 8 liters) of water in the solution tank first to help dilute the chemicals and prevent excess sudsing. Dilute the cleaning chemicals according to the manufacturer's instructions.
- Fill the tank by pouring the water and cleaning chemicals through the mesh filter that covers the opening at the front of the solution tank.
- Ensure Recovery pails are in position.
- **Always** use a defoamer in the Recovery pails to protect the vacuum motor of this machine.
- Every time the solution tank is filled, add 2 to 3 ounces (60 to 90 milliliters) of defoamer to each Recovery pail.
- Make sure the vacuum lid fits securely to the recovery pails for an air-tight seal. The vacuum motor will pull the lid down (creating suction) during use.

### Connect the Power Cord

This machine is equipped with a twist lock power cord.

- Align the three electrical contacts, push the contacts together and turn one of the plugs 1/8 of a turn to lock the two plugs in place. This will prevent the machine from disconnecting during use.

### Brush motor circuit breaker

If the brush becomes over loaded by deep pile carpet, hair, strings or an obstruction the motor will draw too much current and the circuit breaker will trip.

## MACHINE OPERATION

This machine is very maneuverable and is designed to clean as you **pull backwards** across the carpet. When moving forward, always push down on the handle to raise the front of the machine up and move on all four wheels.

### Normal Cleaning

- **Always** vacuum the carpet with a vacuum cleaner before extraction.
- We recommend you wear clean tennis shoes or non-slip shoes when working with a carpet extractor. Street shoes or rubber cushion soled shoes when wet will release absorbed dirt or grease onto the wet carpet and cause re-soiling.
- You may need to **pre-treat** spots and heavy traffic lanes before extraction. Refer to the "Common Stains and Cleaning Treatments" chart for examples of types of stains and the solution used to treat the stain.
  - Soak up excess liquids with a towel.
  - Test cleaner on a small inconspicuous area to make sure it will not damage the carpet fibers.
  - Apply appropriate spotter, following directions on the container.
- You may apply the pre-treat chemicals in a number of ways:
  - Use a hand held spray bottle.
  - Use a 2 - 3 gallon (7 - 8 liter) pump up container with a spray wand.
  - Use the machine spray bar, by tilting the machine backwards slightly away from the carpet. Press and hold the carpet spray switch (located below the left handle grip) to apply the chemical.
- Plug the machine into an appropriate wall outlet.
- Turn on the Vacuum, Pump, and Brush switches.
- Extract the perimeter of the room first, move the vacuum shoe as close to the wall or baseboard as possible. Use the **right side** of the machine to clean against the wall for best results.
- Start on one side of the room and work your way across the room in rows, always working away from the cord.
- Lift up on the handle grips to ensure that the vacuum shoe rests on the carpet.

- Press and hold the carpet spray switch to start spraying and begin moving backwards. About 6" (15 cm) before your stopping point, release the carpet spray switch to stop spraying, and continue moving backwards to recover all of the solution you have just applied. This will prevent leaving an excessively wet spot in the carpet. Move machine forward on all four wheels to start the next path, **overlap 2" (5 cm)** for best results. Continue cleaning the entire area in this method.
- Monitor the solution level using the solution indicator tube on the back left of the machine.

**NOTE:** If dirty solution does not appear through the vacuum lid, check:

- The vacuum lid is properly seated on the recovery pails.
- The machine's vacuum shoe is touching the carpet in working mode.
- The solution tank is not empty.

**NOTE:** If foam appears on the vacuum lid, **turn the Vacuum switch off immediately** and add more defoamer to the recovery pails to dissolve the foam or empty the recovery pails.

- As you clean, keep an eye on the liquid level in the recovery pails. Empty the recovery pails as needed during operation.
- When the solution tank runs empty, turn off the vacuum, pump, and brush switches. Empty the recovery pails and rinse thoroughly. Repeat the procedures on Preparing the Machine as required.

**Do not apply water more than twice in one area to prevent excess wetting.**

- Over-wetting can damage the carpet and the underlying floor.
- If the brush becomes over loaded by deep pile carpet, hair, strings, or an obstruction the motor will draw too much current and the circuit breaker will trip.
- Unplug the machine, check for debris, and remove it.
- Push down on the circuit breaker to reset it and resume operation.

### SPECIAL CLEANING

This machine may be used to perform special cleaning jobs other than "normal" scrubbing.

#### Double Scrubbing

This procedure provides deeper cleaning on heavily soiled floors.

- Double scrub by making a second pass over the carpet with only the brush turned on. Then, make a third pass with the solution pump, vacuum and brush on to remove the most dirt. Make an additional vacuum pass to dry the carpet as much as possible.
- The slower the cleaning pass, the more dwell time, increasing the amount of dirt that is removed from the carpet.

## OPTION - ACCESSORY CLEANING

### Preparing the Accessories:

- Select the correct tool for the job to be performed.
- Connect the solution hose to the quick connect at the back, lower left side of the machine and on the tool.
- To connect a tool, pull back on the collar of the quick connect, insert one end of the solution hose fitting and push it in until it locks. Attach the other end of the solution hose to the tool in the same manner.
- Remove the machine hose from the **right side** of the vacuum lid and insert one end of the recovery hose into the lid. Attach the other end of the hose to the accessory tool.

### Cleaning upholstery, stairs or confined areas:

- Prepare the solution / recovery tanks as you would for normal carpet cleaning.
- To begin cleaning, turn on the rocker switch for the solution pump and vac motor only. When you squeeze the trigger of the accessory tool it will spray the cleaning solution, release the trigger to stop the spray.

- **Do not apply water more than twice in one area to prevent excess wetting.**
- Over-wetting can damage upholstery and / or fabric.

### Priming the Solution Pump

During normal use the clean solution tank may run dry. This will allow air to enter the pump and solution lines. Air in the solution lines will prevent the pump from working properly, you must prime the pump.

- Refill the solution tank.
- Disconnect any accessory tool that may be in use.

**CAUTION** - place machine near a floor drain prior to the next step.

- Turn on the solution pump switch.
- Depress the center pin in the accessory quick connect for 60 - 90 seconds (minimum). The pump will spray air and solution out until all of the air has been forced from the solution lines. When all of the air has been expelled you may resume your cleaning operation.

**NOTE:** The solution pump will not prime through the spray jets or an accessory tool.



## MACHINE MAINTENANCE

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

**Always turn OFF all machine switches before performing any maintenance.**

### DAILY MAINTENANCE

At the end of the day empty all liquids from both the solution and recovery tanks. Rinse both tanks with clean water to prevent chemical residue build up, allow to air dry to prevent orders.

- Coil power cord onto the cord wrap.
- Remove dirt and/or lint build-up inside the vacuum lid filter screen.
- Clean the solution line filter.
- Wash the vacuum lid with a soap solution to prevent dirt from accumulating on the surface. To avoid scratching, use of a soft cloth is recommended.
- The solution tank can be emptied by: spraying the liquid out through the spray bar, or using the solution indicator tube.
- To use the solution indicator tube, unclip from the machine handle and place the end into a recovery pail.
- The recovery pails are emptied by lifting up the vacuum lid and removing the pails from the machine by using their handles. Drain the liquids according to your local EPA regulations.
- Rinse the solution tank clean of all debris.
- Store in a dry area.
- Lean the machine back on all four wheels during storage or when it's not in use to prevent brush distortion.
- Check the drain hose for damage.
- Remove the spray tips (1/4 turn) from the spray bar and put them in a glass or plastic container with a solution of 25% vinegar and water overnight to remove any chemical residue.
- Unplug the machine and inspect the brush assembly (paying special attention to the ends of the rollers) for buildup of carpet fibers, hair or other materials.

- Remove all debris from the brush. Failure to remove this material can overload to the circuit breaker, jam and break the belt, obstruct and damage the bearings, or burn out the brush drive motor.

### Weekly Maintenance (25 Hours)

- Verify all daily and weekly maintenance has been performed.
- Flush clean solution tank and hoses with a mixture of 8 ounces (250 milliliters) white vinegar to one-gallon (4 liter) warm water.
- Remove and clean the filter solutions screen by rinsing under running tap water. If the screen is clogged with soap, soak in vinegar solution and brush clean.
- Check the vacuum lid screens for any debris or obstruction. Clean by rinsing under running tap water. If the screen is clogged with soap, soak in vinegar solution and brush clean.
- Check the vacuum shoe for any debris or obstruction such as carpet fibers. Carefully remove any debris to ensure the best air-flow and liquid recovery.
- Apply a lubricant (WD-40 or equivalent) to the quick disconnect coupler to help prevent sticking.
- Repair or replace any worn or damaged components as needed.

### Mandatory Periodic Maintenance

It is **mandatory** that the following maintenance procedure be performed at the described interval. Failure to perform this procedure may result in poor machine performance, machine component damage and failure. This procedure should be performed by an NSS authorized distributor or service center. Repairs performed by an unauthorized company will void the machine warranty. If you require assistance finding an authorized service center, please contact NSS Enterprises, Inc.

After every **750 hours** of operation

- Inspect the vacuum motor carbon brushes for wear. Replace the vacuum motor carbon brushes when they are 7/16in. (11mm) in length.
- Check the belt for wear and tightness.



## COMMON STAINS AND CLEANING TREATMENTS

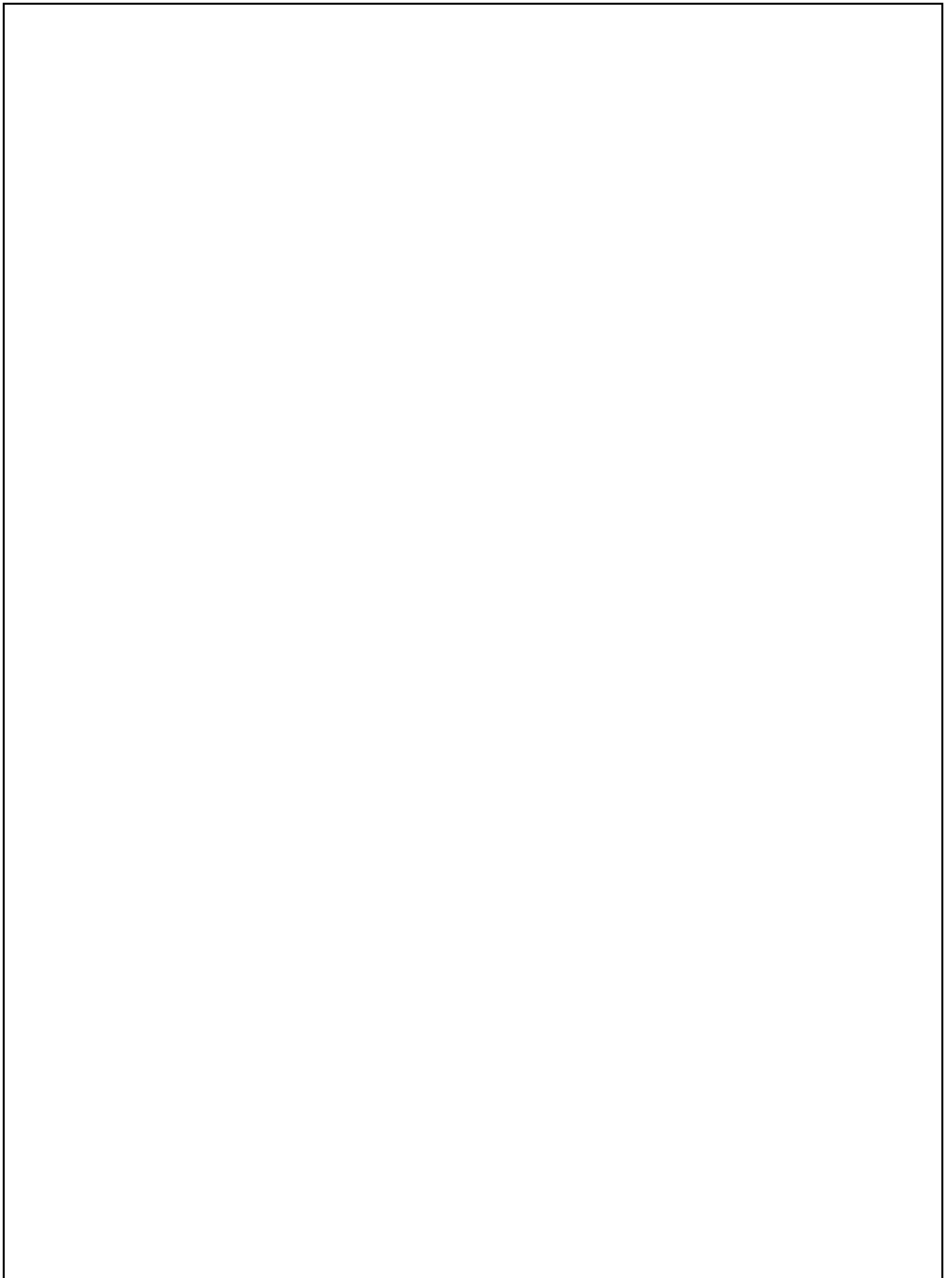
### TREATMENT METHODS

- Remove excess material; if the stain is liquid blot excess liquids with a dry cloth or paper towel, if the material is a solid remove it by scraping it with a dull edge (butter knife).
- Clean the remaining stain as directed by the chart below. Always follow the directions on the container. Apply the cleaning material directly to the stain (avoid over wetting the carpet or upholstery). Remove the loosened stain material with a white absorbent cloth, tissue, or paper towel.
- When the carpet is dry, gently brush the carpet pile to restore its appearance.
- Treat unknown stains with a volatile solvent first and follow with other agents as required. If you are uncertain of the effect of the cleaning agent on the carpet fiber or dye, test on an inconspicuous area first.

STAIN TYPE	TREATMENT MATERIAL
Asphalt	Volatile solvent / detergent
Beer	Liquid detergent, White vinegar
Berry Stain	Liquid detergent, Ammonia 3 - 6%, Water
Bleach	Liquid detergent, Water
Blood (dried)	Warm detergent, Ammonia 3 - 6%, Water
Blood (wet)	Liquid detergent, Water
Butter	Volatile solvent
Catsup or Mustard	Liquid detergent
Chewing Gum	Volatile solvent
Chocolate	Liquid detergent, Ammonia 3-6%, Water
Coffee	Detergent, White vinegar, Volatile solvent
Cola Drink	Liquid detergent
Crème de Menthe (green)	Liquid detergent
Egg (raw)	Liquid detergent
Food Dye	Liquid detergent, Water
Furniture Dye Polish	Paint/Oil/Grease remover, Detergent
Gravy	Liquid detergent
Lipstick	Paint / Oil / Grease remover,
Mascara	Paint remover, Volatile solvent, Detergent, Water
Milk	Liquid detergent
Orange Drink	Liquid detergent, Water
Shoe Polish	Heated iron into clean towel, Volatile solvent
Tea	Liquid detergent
Tomato Juice	Liquid detergent
Urine	Liquid detergent, Water
Vomit	Warm detergent, Water, White vinegar
Wine	Liquid detergent, Ammonia 3 - 6%, Water, Vinegar

## TROUBLESHOOTING

Symptom	Cause	Solution
No Solution or Uneven Spray Pattern From Spray Tips or Accessory Tool.	Spray nozzle tips plugged.	Disassemble and clean.
	Solution tank empty.	Refill.
	Pump failed.	Repair or replace as required.
	Defective pump seal.	Replace pump.
	Debris in check valve.	Clear obstruction.
	Nozzle gasket obstruction.	Replace gasket.
	Incorrect spray nozzles.	Install correct spray nozzles.
	Solenoid valve clogged.	Bleed air lock from system.
	Worn pump bearing (excessive noise).	Repair or replace as required.
	Punctured pump diaphragm.	Replace diaphragm.
	Accumulated dirt on solution intake screen.	Clean or replace.
	Accumulation of debris inside pump and plumbing.	Disassemble and clean.
Defective rectifier.	Replace rectifier.	
Carpet Spray is Off but Solution Still Drips.	Debris in solenoid.	Clean or replace.
Poor Water Pickup.	Vacuum lid not sealing.	Replace or tighten lid.
	Loose vacuum hose, vacuum connection.	Tighten connection.
	Accumulated dirt on lid screen.	Clean lid screen.
	Worn vacuum lid gasket.	Replace gasket.
	Lint & dirt build-up on suction head/brush chamber.	Clean suction head/brush chamber.
	Defective vacuum hose.	Replace vacuum hose.
	Loose connection to vacuum motor.	Tighten connection.
Pump Runs But Has Little Or No Output.	Internal pump parts worn.	Rebuild pump head or replace.
	Pump air locked.	Bleed air lock from system.
	Solenoid valve will not open.	Replace solenoid valve.
	Solution tank filter plugged.	Clear or replace.
Pump Motor Will Not Run.	Motor shorted out	Replace motor.
	Faulty pressure switch.	Replace pressure switch.
	Faulty pump switch / wiring.	Repair or replace.
	Damaged power cord.	Replace power cord.
	Extension cord inadequate.	Remove extension cord.
No Electrical Power.	Low voltage.	Test wall outlet.
	Overloaded circuit breaker.	Circuit breaker reset. Unplug other electrical items on same circuit.
Motor Runs but Brush Won't Spin	Defective power cord.	Replace power cord.
	Loose belt.	Tighten belt.
Floating Brush Won't Move Up and Down.	Debris inside the slide block guide.	Disassemble and clear obstruction.





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