




STALLION 8 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: 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

The Stallion 8 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 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** 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.
- **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 8 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 : Ce produit contient un chimique connu à l'état de Californie pour causer les défauts de cancer et naissance ou l'autre mal reproducteur.



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

UTILISATION PRÉVUE

L'extracteur de tapis Stallion 8 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

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 l'appareil – si elle n'entre pas dans la prise, faire installer une prise appropriée par un électricien qualifié.

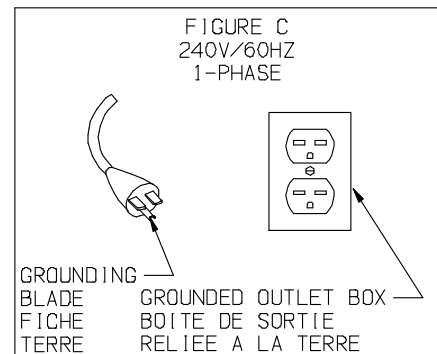
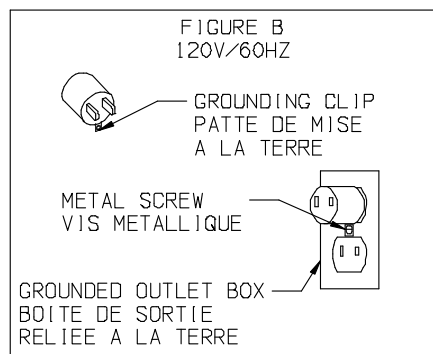
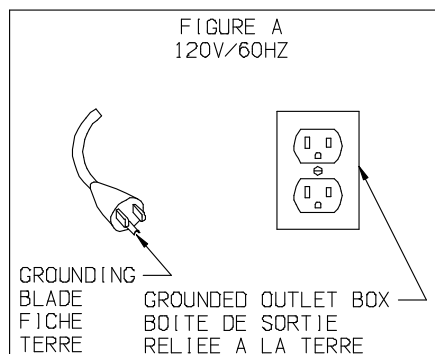
Toujours utiliser une rallonge à 3 fils mise à la terre et à prises mâle et femelle. Si vous utilisez une rallonge de 25 pieds, la capacité électrique de transport doit être d'au moins 14-3 ST., les rallonges de 50 pieds d'au moins 12-3 ST.

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. Il n'y a aucun adaptateur disponible pour cette fiche.



REMARQUE : Au Canada, l'utilisation d'un adaptateur temporaire est interdite par le code d'électricité canadien.

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CONSERVER CES INSTRUCTIONS



NOISE AND VIBRATION

NOISE

Sound pressure level at Operator position 77dB(A)

VIBRATION

Weighted RMS acceleration value (ISO 5349) .358 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.

MACHINE COMPONENTS

Solution Tank

The solution tank is the lower part of the machine body. It has a capacity of **8 Gallons (30 liters)**.

Recovery Tank

The recovery tank is the upper part of the machine body. The tank has a capacity of **8 gallons (30 liters)**.

Control Panel

The operator control panel is located at the upper rear area of the machine. This panel has components that control various machine functions:

- The left rocker switch turns both the solution pump and vacuum motor on and off.
- The right rocker switch turns the brush motor on and off.
- The red square switch in the center of the panel allows the liquid to be sprayed onto the carpet. Push and hold the switch to start spraying liquid, release the switch to stop.
- The circuit breaker on the right protects the brush motor.

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 left side of the machine to clean against the wall. The brush head assembly is operated by a simple foot lever mechanism.

- **To lower** the assembly to the floor, tap the lever with your toe.
- **To raise** the assembly from the floor, simply step on the lever.
- The brush head assembly includes the Spray Bar with three Spray Tips. The spray tips can be removed with just a quarter of a turn in either direction and does not require tools.
- This machine can be tipped back in order to access the spray tips, with the recovery tank empty, lower the handle toward the floor.

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.

Float Screen Assembly

Vacuum air is removed from the tank by the white elbow on the right side of the clear dome. This elbow has a foam sensitive float mechanism attached.

- As the water level rises, the float ball will rise into the tube and shut off the airflow of the vacuum.
- It does **not** shut off the vacuum motor.
- Stop the machine and empty the Recovery tank.

Accessory quick connect option

This connection is located at the lower **right side** of the machine next to the wheel.

- To insert the solution hose push the outer collar back and insert the hose fitting fully. Release the collar to secure the hose in place.

PREPARING THE MACHINE

Preparing the Solution and Recovery tanks:

- **Never** use water over 140°F (60°C).
- Excessively hot water will damage components such as the pump, valves, and seals. Observe the carpet manufacturer's cleaning instructions.
- Make sure the black drain hose from the Recovery tank is securely closed to keep fluids from draining out. To close push the hose securely into the metal holding plug.
- 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.
- **Always** use a defoamer in the Recovery tank to protect the vacuum motor of this machine.
- Every time the solution tank is filled, add 4 to 6 ounces (125 to 188 milliliters) of defoamer to the Recovery tank.
- Fit the two clear vacuum hoses onto the white elbows of the clear dome.
- Make sure the clear dome and gasket fits securely on the recovery tank for an air-tight seal. The vacuum motor will pull the dome down (creating a 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.

NOTE: Some models may have a direct-wired power cord.

Cleanout Hose

This 4-foot (1.2 meter) hose is supplied with this machine; it is used to suction water from the clean solution tank into the recovery tank.

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.

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 square, intermittent switch to apply the chemical.
- Plug the machine into an appropriate wall outlet.
- Lower the brush.
- Extract the perimeter of the room first, move the vac shoe as close to the wall or baseboard as possible. Use the **left 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.

- Push and hold the red, square switch to start spraying and begin moving backwards. About 12 to 18" (30 to 46 cm) before your stopping point, release the square 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 forward to start the next path, **overlap 2" (5 cm)** for best results. Continue cleaning the entire area in this method.
- As you clean, keep an eye on the liquid level in the recovery tank. Empty the recovery tank as needed during operation.

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 lower right 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 **left side** of the dome and insert one end of the recovery hose into the dome. 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 bar or an accessory too.

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 odors.

- The solution tank can be emptied by: spraying the liquid out through the spray bar, or using the clean-out hose.
- To use the clean-out hose remove the machine's recovery hose, from the **left** elbow of the clear dome. Replace it with one end of the cleanout hose.
- Remove the mesh filter from the front of the solution tank and place the other end of the clean-out hose in to the solution tank.
- Turn on the vacuum motor and suction all of the liquid into the recovery tank.
- The recovery tank is emptied through a large rubber hose at the back of the machine. Remove the plug and drain the liquids according to your local EPA regulations.
- Rinse the tank clean of all debris. Position the clear dome offset on the recovery tank to allow for air-drying and prevent odor build up.
- Remove any residue from the screen and float ball to ensure proper operation. Replace float assembly in recovery tank.
- Store in a dry area.
- Store with brush assembly up.
- 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 fine mesh filter in the bottom of the solution tank.
- 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.
- 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 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 From Spray Tips.	Spray nozzle tips plugged.	Disassemble and clean.
	Solution tank empty.	Refill.
	Pump failed.	Repair or replace as required.
	Defective pump seal.	Replace pump.
	Incorrect spray nozzles.	Install correct spray nozzles.
Uneven Spray Nozzle Pattern.	Spray nozzles plugged.	Clean or replace.
	Nozzle gasket obstruction.	Replace gasket.
	Incorrect spray nozzles.	Install correct spray nozzles.
	Worn solution pump.	Repair or replace as required.
	Solenoid valve clogged.	Bleed air lock from system.
No Solution From Spray Tips On Accessory Wand.	Spray nozzle tips plugged.	Disassemble and clean.
	Incorrect spray nozzles.	Install correct spray nozzles.
	Solution tank empty.	Refill.
	Pump failed.	Repair or replace as required.
	Defective pump seal.	Replace pump.
	Kinked solution hose.	Straighten hose.
	Check quick-disconnect fitting.	Reconnect fitting onto machine.
Poor Water Pickup.	Screen and float ball assembly is clogged.	Remove and clean screen.
	Recovery tank lid not sealing.	Replace or tighten lid.
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.
Brush Motor Will Not Operate.	Low voltage.	Test wall outlet.
	Overloaded circuit breaker.	Circuit breaker reset. Unplug other electrical items on same circuit.



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