

RUSTLER 17T

Operation Manual



RUSTLER 17T CARPET EXTRACTOR

IMPORTANT SAFETY INSTRUCTIONS

**** SAVE THESE INSTRUCTIONS ****

**READ AND UNDERSTAND ALL INSTRUCTIONS
BEFORE OPERATING OR SERVICING MACHINE.**



THIS MACHINE IS INTENDED FOR COMMERCIAL USE ONLY



DANGER!

**Failure To Observe These Instructions Can Cause Electrical Burn,
Shock or Electrocution To Machine Operator or Bystanders.**

- **NEVER** attempt to service or perform maintenance functions while machine is plugged into electrical outlet.
- **NEVER** attempt to operate machine unless you have been trained in its operation.
- **NEVER** operate in standing water. **NEVER** expose to rain. **ALWAYS** store indoors.
- **NEVER** overfill recovery tank or allow water to enter vacuum. This will cause damage to the vacuum motor and possible electrocution.
- **NEVER** operate machine with a cut, abraded or taped cord.
- **NEVER** operate machine with a broken grounding blade on the plug.
- **ALWAYS** replace entire cord when cord or plug is damaged in any manner. See page 2 for Wiring Diagram.
- **NEVER** handle machine, cord or plug with wet hands.
- **NEVER** drop or insert any object into any machine opening.
- **ALWAYS** keep face, fingers, hair or any body part, or loose clothing away from any machine opening or moving part.
- **NEVER** attempt to service or perform maintenance functions while machine is plugged into electrical outlet.
- **NEVER** leave machine unattended when plugged in. Unplug machine from electrical outlet when not in use.
- **ALWAYS** turn machine off before unplugging from electrical outlet.
- **NEVER** operate machine in the presence of flammable or combustible liquid or fumes.
- **NEVER** disconnect solution hose while pump is running.
- **NEVER** use boiling water. Use hot tap water. Pump's seals and pressure hoses could be softened resulting in pump failure or exploding hoses.

WARNING!

**Failure To Observe These Instructions Can Cause Machine Damage and
Possible Injury to Machine Operator or Bystanders.**

When any electrical motor, switch, cord or plug service is required, maintenance should only be done by an authorized service station, an electrician or other qualified persons.

Never operate machine if it is not working properly, if it has been dropped, damaged, exposed to weather, or dropped into water. Return machine to service center for examination and repair.

Never operate machine with any air opening blocked. Keep all air openings free of dust, lint, hair and the like.

Always store machine indoors. Protect from rain or snow. Never spray top of machine with liquids.

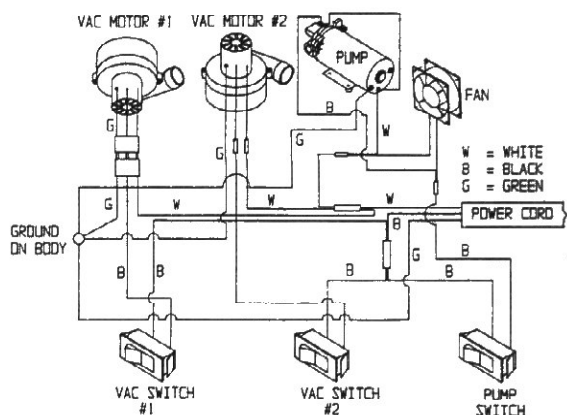
Do not pull or carry machine by electrical supply cord, use cord as a handle, close door on cord, pull cord around sharp edges or corners or expose to heated surfaces.

Never disconnect plug by pulling on cord. To disconnect from outlet grasp the plug, not the cord.

Always use a defoamer which will prevent a buildup of foam in the recovery tank. If a defoamer is not used, motor can be damaged from shampoo being pulled into the vacuum motor.



WARNING: DO NOT ATTEMPT MAINTENANCE OR REPAIRS BEFORE DISCONNECTING CORD FROM ELECTRICAL POWER SOURCE. READ ALL INSTRUCTIONS AND FOLLOW ALL ILLUSTRATIONS CAREFULLY.



GREEN ground wire must be attached to the motor ground and to the body to properly ground the entire machine.

FAILURE TO DO SO MAY CAUSE ELECTROCUTION due to improper connection of ground.

Replacement cords must be UL listed / CSA approved and be of the identical electrical specifications as the original equipment cord.

Check nameplate on machine to be sure voltage and cycle stated on nameplate is the same as voltage and cycle of electrical outlet. DO NOT attempt to plug a 115 volt machine into a 230 volt outlet or a 230 volt machine into a 115 volt outlet.

The grounding blade on the plug must remain **intact** if the machine is to be properly grounded when plugged in and operated. An ungrounded machine can cause **shock** to the operator. See Figure A.

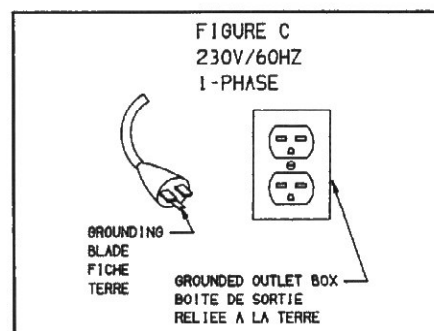
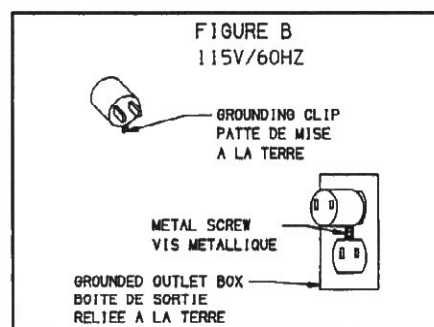
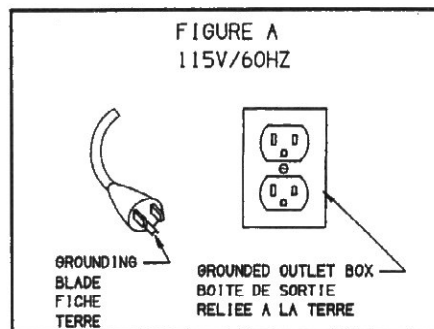
If connecting to an outlet that accepts only two blades use an adapter as in Figure B. **NEVER REMOVE THE GROUNDING BLADE.**

When grounding blade on plug is broken, it is preferable to replace the whole cord.

If you choose to replace 3-wire plug for 115V, use only U.L. Listed/CSA approved plug with rating of 125V, 15 amps (for 230V, use a 3-wire plug with a rating consistent with voltage and amps required.) Be sure that the green wire of the cord is connected to the green screw, and the black wire to gold screw of the replacement plug.

ALWAYS remember when replacing plug, that if the **grounding wire (green)** is connected to a **live terminal** at the **machine or plug**, the machine will become electrically charged and will result in electrical shock or electrocution.

If it is necessary to use the adapter shown in Figure B, the machine is only properly grounded if the adapter's green-colored clip is tied under screw that holds electrical outlet cover to the wall. A metal screw must be used.



NOTE: IN CANADA, THE USE OF A TEMPORARY ADAPTOR IS NOT PERMITTED BY CANADIAN ELECTRICAL CODE

NOTE: Au Canada, l'utilisation d'un adaptateur temporaire n'est pas autorisée par le Code canadien de l'électricité.

Always use a properly grounded 3-wire extension cord which has male and female plugs. Use only 14-3 ST or SO type extension cords for a total cord length up to 100 feet.

ASSEMBLY, OPERATION & MAINTENANCE INSTRUCTIONS

BASIC SAFETY PRECAUTIONS

- **Always** be sure to read and fully understand these safety, assembly, operating and maintenance instructions before attempting to operate this machine.
- **Never** allow anyone to operate this machine who has not been properly trained.
- **Refer** to the beginning of this book for the complete safety and electrical warnings.



figure 1

MACHINE INSPECTION

- Carefully unpack the Rustler 17T and recycle all packing materials.
- Inspect machine for damage or missing components. If damage is found, contact the local freight company to file a freight claim. (Figure 1)

MACHINE COMPONENTS

Solution Tank

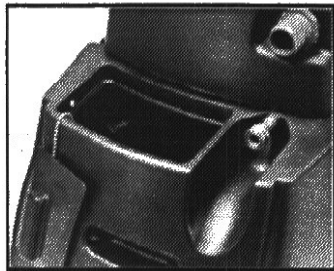


figure 2

The solution tank is the lower part of the machine body. The tank has a capacity of **17 gallons** and is filled by pouring the water and cleaning chemicals through the square opening at the top of this lower tank. (Figure 2)

Recovery Tank

The recovery tank is the upper part of the machine body. (Figure 3) The tank has a capacity of **15 gallons**. During operation, the solution recovery hose



figure 3

cuff is connected to the intake tube at the front of this tank. The vacuum air is removed from the recovery tank by a hose connected to the bottom of the tank. The tank is closed by a round, 1/4 turn lid. Remove this lid to observe the inner stand tube, elbow and float mechanism. This elbow has a foam

sensitive float mechanism attached. (Figure 4) As the water level rises, the float ball will rise into the tube and shut off the air flow of the vacuum. It does not shut off the vacuum motor.

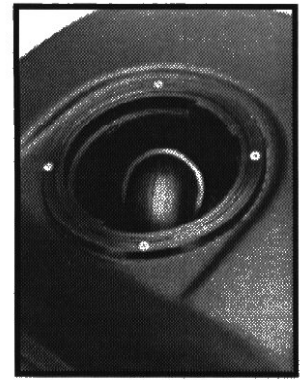


figure 4

Power Cord

The Rustler 17T is equipped with a grounded **25 foot** power cord.

Always plug the machine into a properly grounded electrical outlet of the correct voltage to avoid electrical shock. **Never** modify the cord or plug in any manner.

Control Panel

The operator control panel is located at the lower rear area of the machine. (Figure 5) This panel has three switches that control various machine functions:

- The upper rocker switch turns on and off the solution pump and the cooling fan at the same time.
- The lower rocker switches individually control the two vacuum motors. The vacuum motors may be operated together or independently.

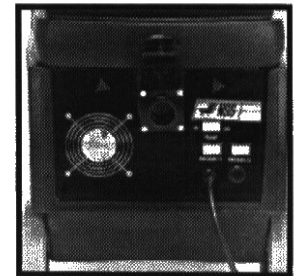


figure 5

Accessory Quick Connect

This is a female quick connection and is for use with various cleaning accessories. (Figure 6) It is located at the upper portion of the solution tank. 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.



figure 6

Accessory Cleaning Tools

NSS offers a number of specialized carpet cleaning tools for use with the Rustler 17T.

- A **12" wide** 3 jet wand for general carpet cleaning and confined areas.
- A **3" wide** single jet tool for cleaning upholstery.
- A **5" wide** single jet tool for cleaning stairs.
- A high pressure clean solution hose and a clear solution recovery hose.

MACHINE OPERATION

General Information

Always vacuum the carpet before extraction. You may also need to **pretreat** spots and traffic lanes before extraction. Refer to the chart at the end of these instructions for examples of types of stains. Consult your local distributor for procedures and more complete chemical advise.

You may apply the pretreat chemicals in a number of ways:

- Use a hand held spray bottle.
- Use a 2-3 gallon pump up container with a spray wand.
- Use the accessory 3 jet wand.

Caution - We recommend you always wear clean "tennis shoes" or "non-slip shoes" when working with a carpet extractor. Street shoes or rubber cushion sole shoes when wet will release absorbed dirt or grease onto the wet carpet and cause resoiling. Wet shoes can also cause the operator to slip and fall when walking from wet carpet to bare floors. Make sure you wipe your shoes dry before walking onto bare floors. Also, some carpet cleaning chemicals may affect bare floor finishes.

DAILY USE

The Rustler 17T is very maneuverable and is designed to clean as you work across the carpet with the machine moving behind you.

To prepare the solution tank:

- **Never** use water over 140°F (60°C). Excessively hot water will damage components such as the pump, valves and seals. Observe the carpet manufacturers cleaning instructions.
- Open the square tank lid. Put 1 to 2 gallons of clean water into the tank first to help dilute the chemicals and prevent excess sudsing.
- Dilute the cleaning chemicals according to the manufacturers instructions.
- Add the cleaning chemicals to the solution tank and fill with water as needed. (Figure 7)

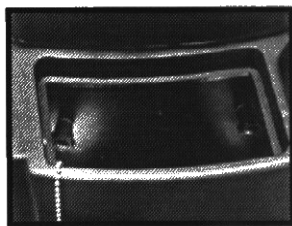


figure 7

To prepare the recovery tank:

- **Always** use a defoamer to protect the vacuum motor of this machine. **Every time** you fill the solution tank, we recommend that you add at least 4 to 6 ounces of defoamer chemical into the recovery tank.

- Close and secure the round lid on the tank. (Figure 4)

To prepare the accessories:

- Select the correct tool for the job to be performed (see Accessory Cleaning Tools).
- Connect the solution hose to the quick connect on the solution tank and on the tool. (Figure 8)
- Connect the recovery hose to the intake tube of the recovery tank and the tube of the tool. (Figure 6)

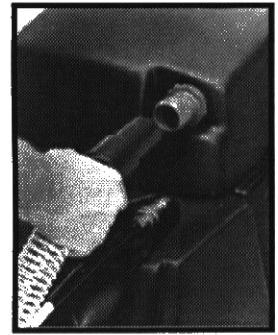


figure 8

Begin cleaning the carpet in the following manner:

- Plug machine into a proper wall outlet.
- Turn on upper rocker switch for pump and cooling fan.
- Turn on lower rocker switches for both vacuum motors.
- Squeeze and hold the spray lever to start spraying and begin moving backwards. About 4 inches before your stopping point, release the spray lever 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.
- Extract the perimeter of the room first to get as close as possible to the baseboard. Move the spray wand vac shoe as close to the wall as possible.
- Work your way across the room in rows, always working away from the machine and the cord. Move forward to start the next path and **overlap 2"** for best results.
- Continue cleaning the entire area in this method. On an extremely dirty carpet you may want to cover the entire carpet twice with cleaning paths at right angles to each other.
- The slower the cleaning pass, the more dirt that is removed from the carpet. Do not apply water more than twice in one area to prevent excess wetting. Overwetting can damage the carpet and the underlying floor.
- As you clean, keep an eye on the liquid level in the recovery tank. Empty the recovery tank as needed during operation. For obvious ecological concerns, **do not** dispose of these liquids outdoors or into a public sewer system.

Accessory Cleaning

The Rustler 17T can be equipped with two specialized optional cleaning tools:

- A compact **3" wide** single jet tool for cleaning upholstery.
- A large **5" wide** single jet tool for cleaning carpeted stairs.
- A high pressure clean solution hose and a clear solution recovery hose.

To begin cleaning the upholstery or stairs:

- Prepare the solution / recovery tanks and accessories as you would for carpet cleaning.
- Squeeze and hold the spray lever to start spraying and begin moving backwards. About 2 inches before your stopping point, release the spray lever to stop spraying and continue moving backwards to recover all of the solution you have just applied.
- The slower the cleaning pass, the more dirt that is removed from the carpet. Do not apply water more than twice in one area to prevent excess wetting. **Do not overwet.** Overwetting can damage any upholstery or fabric.
- As you clean, the recovery tank will fill up and you will need to empty it as previously described in recovery tank section. For obvious ecological concerns, **do not** dispose of these liquids outdoors or into a public sewer system. Always add a defoamer chemical to the recovery tank before you continue cleaning.

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 properly starting the solution flow again, you must prime the pump. To prime the solution pump:

- Refill the clean solution tank.
- Disconnect any accessory tool that may be in use.
- Turn on the solution pump switch.
- Depress and hold 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 accessory or floor cleaning operation.
- The solution pump *will not prime* through the spray bar or an accessory tool.

DAILY MAINTENANCE

At the completion of every use you must perform these simple procedures to ensure proper machine

operation and cleaning performance.

- Empty all liquids from the solution tank by spraying out through the three jet wand.
- Empty all liquids from the recovery tank by lifting the "T" handle of the gate valve at the back of the tank. For obvious ecological concerns, **do not** dispose of these liquids outdoors or into a public sewer system.
- Flush clean solution tank. Pour one gallon of a 25% solution of vinegar and warm water into the tank, turn on the pump switch, squeeze the lever handle on the three jet wand. Spray until all of the solution has run through the pump and spray tips to remove chemical residue. Failure to flush the solution system will result in poor spray patterns and less effective machine operation.
- Disconnect machine power cord from wall outlet.
- Rinse clean the recovery tank with clear water. Leave the tank lid on the recovery tank open to allow for air drying and prevention of odor buildup.

WEEKLY MAINTENANCE

- Check the spray wand vacuum shoe for any debris or obstructions such as carpet fibers. Carefully remove any debris to ensure the best airflow and liquid recovery.
- Remove spray tips from wand and soak in a 25% solution of vinegar and warm water to break down chemical and water mineral deposits that can clog the spray tips.

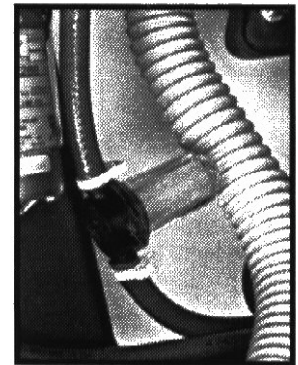


figure 9

- Empty all liquids from the solution and recovery tanks.
- Sanitize the recovery tank to help prevent bacteria and odor buildup.
- Tilt the machine back onto the floor to expose the bottom of the machine and the clear plastic *solution filter screen assembly*. (Figure 9)
- Inspect the solution filter screen assembly for buildup of dirt or contamination.
- Access the filter screen by turning the cover 1/8 turn counterclockwise to remove. Clean the filter screen by rinsing with clear water. Replace the screen and clear cover.
- Inspect entire machine and accessories for worn or damaged components. Repair or replace components as required.

ROUTINE MAINTENANCE

- After 750 hours of machine operation the vacuum motor carbon brushes must be inspected for wear by an NSS authorized service center. Failure to inspect motor carbon brushes for wear can result in poor machine performance and a reduction of motor service life. (*Figures 10, 11*)

REPAIR SERVICE

Repair service for this machine must be performed by an NSS authorized service center.

Repair service performed by unauthorized service companies will void the machine warranty coverage.

If you need assistance finding an authorized service center, please contact NSS factory headquarters at (419) 531-2121.



figure 10

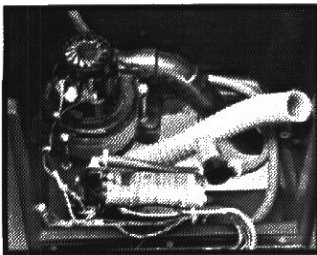


figure 11

COMMON STAINS AND CLEANING TREATMENTS

TREATMENT METHODS

First: Remove excess material by blotting to absorb liquids or by scraping with a dull edge (butter knife).

Second: Clean the remaining stain as directed by the chart. Always follow directions on the container. Apply cleaning material directly to stain (avoid overwetting the carpet or upholstery), then remove the loosened stain material with a white absorbent cloth or tissue.

Third: When the carpet is dry, gently brush the carpet pile to restore appearance.

NOTE: 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 first on an inconspicuous area.

Stain Type

Asphalt
Beer
Berry stain
Bleach
Blood (dried)
Blood (wet)
Butter
Catsup or Mustard
Chewing gum
Chocolate
Coffee
Cola drink
Creme de Menthe (green)
Egg (raw)
Food dye
Furniture dye or polish
Gravy
Lipstick
Mascara
Milk
Orange drink
Shoe polish
Tea
Tomato juice
Urine
Vomit
Wine

Treatment Material

Volatile solvent/detergent
Liquid detergent, White vinegar
Liquid detergent, Ammonia 3-6%, Water
Liquid detergent, Water
Warm detergent, Ammonia 3-6%, Water
Liquid detergent, Water
Volatile solvent
Liquid detergent
Volatile solvent
Liquid detergent, Ammonia water
Detergent, White vinegar, Volatile solvent
Liquid detergent
Liquid detergent
Liquid detergent
Liquid detergent, Water
Paint/Oil/Grease remover, Detergent
Liquid detergent
Paint/Oil/Grease remover
Paint remover, Volatile solvent, Detergent, Water
Liquid detergent
Liquid detergent, Water
Heated iron into clean towel, Volatile solvent
Liquid detergent
Liquid detergent
Liquid detergent, Water
Warm detergent, Water, White vinegar
Liquid detergent, Ammonia 3-6%, Water, Vinegar



THE NATIONAL SUPER SERVICE COMPANY

3115 FRENCHMENS ROAD, TOLEDO, OHIO 43607-2958

PHONE (419) 531-2121 • FAX (419) 531-3761