Esprit The Dry Upholstery Cleaning System





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IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE WHEN USING AN ELECTRICAL APPLIANCE, BASIC PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING: **WARNING** — TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY:

- 1 Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
- 2 Use indoors only.
- 3 Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- 4 Use only as described in this manual. Use only manufacturer's recommended attachments.
- 5 Inspect cord for damage before each use. Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
- 6 Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
- 7 Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- 8 Do not handle plug or appliance with wet hands.
- 9 Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- 10 Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- 11 Turn off all controls before unplugging.
- 12 Use extra care when cleaning on stairs.
- 13 Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- 14 Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- 15 Do not use without filter bag in place.
- 16 Connect to a properly grounded outlet only. See grounding instructions.
- 17 Always turn off this appliance before connecting or disconnecting the upholstery cleaning head.
- 18 Do not immerse. Use only on carpet/upholstery moistened by cleaning process.
- 19 Upholstery cleaning head hose contains electrical wires. Do not use if damaged, cut, or punctured.
- 20 Have repairs made only by a qualified Esprit service center.
- 21 This unit is to be used only with Esprit cleaning products.
- 22 If foam or liquid discharges from the appliance during use, switch machine off immediately.
- 23 Do not use for picking up health endangering dust such as asbestos.

Grounding Instructions

IMPORTANT!

WARNING! Be sure the unit is properly grounded.

This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

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 appliance. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This appliance is for use on a nominal 120/230v circuit that has a grounding attachment plug that looks like the plug illustrated in Figure A. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance.

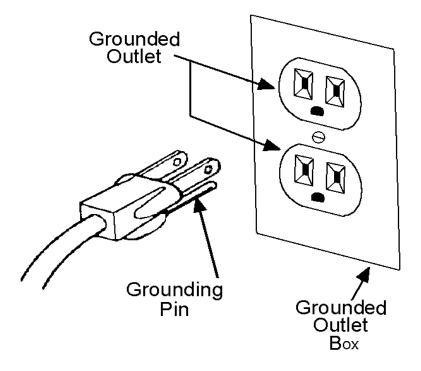


FIGURE A

Introduction

IMPORTANT!

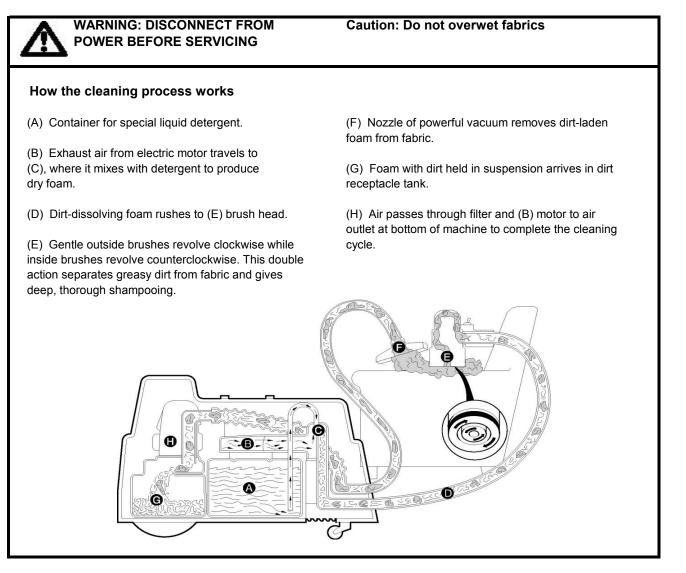
This is a commercial appliance, not intended for household use.

Your Esprit Upholstery Extraction Cleaning System is a precision piece of equipment. However, it will do the best job for you only if you understand it. Please read this book all the way through before you try to use your new system. Read it again, and work through each step to make sure you understand it. Keep this book in a safe place for future reference.

How It Works

The Esprit Upholstery Extraction Cleaning System will help you simply and easily clean both furniture and carpet. It uses standard electrical current, so all you have to do is plug the power cord into a properly grounded wall outlet.

The Esprit Upholstery Extraction Cleaning System is a high quality tool that meets professional upholstery cleaning standards. It will give you years of dependable service even under the most demanding conditions. It's easy to use and maintain, and you'll like its flexibility. Engineered by one of the world's leading producers of heavy-duty cleaning equipment, you'll also like its many handy features.



The Esprit Upholstery Extraction Cleaning System has been developed to give you a fast, economical method of upholstery cleaning. This versatile, portable machine has a number of unique features. A detergent solution is changed into a dry foam inside the main body of the machine, called the power unit.

This dry foam is forced by air pressure to the brush unit on which a switch is mounted to control the amount of foam desired. The foam is applied by two brushes, each rotating in opposite directions. The scrubbing action of the brushes on the fabric loosens the dirt.

The wet and dry vacuum system, which is built into the machine, is used to extract the dirty foam from the fabric, and to remove loose soil and dust prior to cleaning.

The vacuum is of a powerful 2-stage fan design. One universal motor in the power unit drives the vacuum and also makes the foam. A unique permanent magnet motor in the brush unit drives the cleaning brushes.

IMPORTANT NOTE: Save all the shipping

containers and inner packing material in which your Esprit Upholstery Extraction Cleaning System arrived. You will want to use them if it is ever necessary to ship your machine.

Power Supply

The power unit is available with two power supplies: 120 volts AC or 230 volts AC.

The brush unit's permanent magnet motor is driven by 24 volt DC current supplied by the power unit.

System Overview

Detergent Solution

The detergent capacity of the Upholstery Extraction Cleaning System is two U.S. gallons (7.6 liters). Prepare Blue Label Carpet and Upholstery Detergent by mixing 4-6 oz. of detergent per gallon of water. Improper use or dilution may cause damage to surfaces and increased risk of health effects.

Caution: Avoid contact with eyes. (S25 Should eye contact occur, flush thoroughly with water. If irritation persists, consult physician. Not flammable. Personal Protective Equipment (PPE not required. Non-hazardous per OSHA and EU guidelines when used as directed.

Disposal: Empty packaging may be recycled or landfilled in accordance with local regulations. Waste solutions typically must be disposed of in the sewer or in a wastewater treatment facility; please check your local regulations.

Always Test For Color Fastness First!

Identify a place where the fabric is exposed to wear and sunlight. The dye on some upholstery fabrics will begin to break down faster when subjected to these conditions. While the back of a chair may not show deterioration after cleaning, the front may fade because of this fact.

Wet a white cloth with detergent solution.

Rub the cloth on each color of the fabric. If any color rubs off on the cloth, it indicates that the colors in the fabric are not fast. **Do not attempt to clean a fabric that fails this fastness test!**

NOTE: Some fabrics may stand two or three cleanings, but will fade or "bleed" on the third or fourth cleaning. It is good professional practice to always make the fastness test even if you have successfully cleaned the fabrics in the past.

Important: Upholstery liquid detergent will not harm any color that is fast to water, but you may occasionally come across a very low grade or poor quality fabric which is not even color fast to water alone. **Do not attempt to clean such fabrics!**

Set Up / Cleaning Procedures

The Esprit Upholstery Extraction Cleaning System offers an attractive alternative to outdated wet upholstery cleaning systems. With it, no liquid touches the fabric, just a soft, gentle dry foam that separates the dirt from the fabric, then is removed immediately.

The odorless detergent used in this process is actually beneficial to fabrics. No dirt attracting soaps or toxic dry cleaning fluids are used, and furniture is ready for use immediately after cleaning.

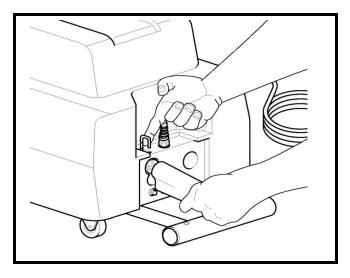
Brushes

Take care to keep foreign objects from contacting the brushes while storing or transporting the machine. Failure to protect the brushes may result in the bristles taking a distorted set.

Preparation and Setup

Insert foam connector. The foam connector goes into the panel on the front of the power unit. Take care to align the electrical connections on this unit. Lift the connector and it will lock in place with a soft "snap". To remove connector, lift the U-shaped latch located on the top of the panel and pull out the connector. The following figure shows the panel with all connections inserted.

Insert vacuum hose coupling. Insert the vacuum hose in the panel.



Power cord. The machine is supplied with a 30-foot (9m) power cord. The cord is attached to the center of the front panel. The cord can be conveniently stored by wrapping tightly around upper half of the hood.

Fill the detergent tank. Unscrew the detergent tank cap on the top of the power unit hood. Using the filling funnel, pour no more than two U.S. gallons (7.6 liters) of diluted detergent into the tank. The tank is full when detergent reaches the bottom of the filler tube. **DO NOT OVER-FILL.** Replace the cap tightly to insure proper foam generation.

Add Liquidator solution to recovery tank.

 Remove hood - using a screwdriver, loosen the two retaining screws and lift up.
Remove filter housing - unlatch filter housing and pull straight back.

3) Mix defoamer solution by adding 1 teaspoon of liquidator concentrate along with 1/4 cup of water into the recovery tank.

4) Replace filter housing and hood.

Controls. On the top of the power unit is the main power switch. Make sure that the brush unit switch is OFF before activating the main power switch. The vacuum, foam, and brushes are remotely controlled by the switch on the brush unit. You may use the vacuum when the brush unit is in either the OFF or ON position. **DO NOT** vacuum when the brush unit is in the FOAM position because the same air used to vacuum is also being used to make foam. Using the vacuum while generating foam will restrict air flow and result in reduced foam output.

The brush unit runs in either the ON (dry) or FOAM position. You may switch back and forth freely from one setting to the other to control the amount of foam being produced.

A unique design forces the foam to flow around the motor case inside the brush unit. This circulation helps keep the foam warm and cools the motor.

Under the hood is a reversing switch to change the direction of rotation of the cleaning brushes. Changing the direction of rotation at the beginning of each day (or after 8 hours of running time) helps keep the cleaning brushes from taking a "set" in one direction, and will greatly increase the life of the carbon brushes in the brush unit motor.

CAUTION: Do not reverse brush unit rotation while the brush unit motor is running. Doing so may demagnetize the permanent magnets in the brush motor.

Note that the brush unit side handle offers added control and helps reduce operator fatigue. It can be mounted on either the right or left side of the brush unit. Simply remove outer access cap.

Use waterproof mats. Use waterproof mats to protect the floor from moisture which may build up during cleaning.

Prevacuum the fabric. Always vacuum the fabric well before cleaning to remove all loose dust and dirt. Brushes and combs can help loosen soil.

Cleaning With Your Esprit

Turn the power unit switch to the ON position.

Turn the brush unit switch to the FOAM position.

Apply foam to about 3 sq.ft. (.3 sq.m.) of fabric (about the size of a cushion) and brush the area with the brush unit. Use both horizontal and vertical motions. Let the brush unit do the scrubbing while you slowly guide it.

NOTE: Excessive foam does not aid in cleaning. If an excessive amount of foam starts to build up, simply place the brush unit switch to the ON position. You will be able to easily regulate the amount of foam by moving the brush unit switch back and forth between the ON and FOAM positions.

On heavily soiled areas you do not have to apply more pressure to the brush unit. The revolving action of the brushes is enough to clean the fabric. The foam alone may not do the job. Applying a prespray such as Prelim will help. Follow the directions for use as printed on the container. Use of Prelim will greatly reduce the scrubbing required to remove heavily soiled areas Don't leave the foam on the fabric for more than 2 to 3 minutes, including brushing time.

NOTE: Heavier fabrics will withstand more brushing than will delicate fabrics.

Apply foam for no longer than 30 seconds.

Excessive heat from operating the brush unit in the "FOAM" position for too long can result in damage to the air valve/solenoid assembly. Adequate cooling will be achieved by brushing in the foam in the "ON" position then switch the brush unit to "OFF" and vacuum the fabric thoroughly.

NOTE: It is very important to have the brush unit switch in the OFF position when vacuuming because the strength of the vacuum is greatly decreased when the brush unit is running.

As you are learning the cleaning technique, especially during your first few cleaning jobs, check frequently for wetting of the filter bag. When this bag gets wet it allows liquid into fans and the motor, which will in time ruin the motor bearings. The bag will get wet if you are using improper cleaning technique. If the filter bag is getting wet, brush the foam more before vacuuming, or use less foam.

With good technique, dust and dirt will collect on the filter bag with little or no foam buildup in the recovery tank. If the bag has been wetted during cleaning, remove the filter housing from the machine and run the power unit motor for 1 minute to clean out foam and liquid. Rinse the filter bag, shake out excess water, and replace.

Drying Time

We recommend allowing furniture to dry completely before use. Fabrics vary in drying time, and will take from 2 to 10 hours to dry. Factors affecting drying time include the type of fabric, relative humidity, and air circulation.

Cleaning Sofas

The average three cushion sofa can be cleaned in less than 1 hour. Follow these steps:

Tip the sofa forward so you can clean its back side while standing upright rather than while bending or kneeling. Because the back of the sofa receives minimal soil, you will be able to clean larger sections at one time.

Clean the arms and sides of the sofa next.

Clean the front and top surfaces next.

Any fringe or apron bordering the bottom of the sofa can be held with one hand and cleaned while holding the brush unit in your other hand.

Clean the cushions last. Place them on top of the waterproof mat and clean the outside edges along with either the top or bottom. Vacuum the foam, turn the cushion over, then clean the opposite side. The brush unit's light weight allows you to control the cushion with one hand while cleaning it with the brush unit in your other hand.

Cleaning Chairs

A large upholstered lounge chair can be cleaned in 15 minutes or less.

If practical, tip the chair forward so it will support itself on its arms. This allows you to clean its back side while standing upright rather than while bending or kneeling. Because the back of the chair receives minimal soil, you will be able to clean larger sections at one time.

Place the chair on its side on the waterproof mat, allowing you to work from a standing position. Clean one side, then turn the chair and clean the other side.

Turn the chair upright and clean the front and top surfaces next.

Any fringe or apron bordering the bottom of the chair can be held with one hand and cleaned while holding the brush unit in your other hand.

Clean the cushion(s) last. Place them on top of the waterproof mat and clean the outside edges along with either the top or bottom. Vacuum the foam, turn the cushion over, then clean the opposite side. The brush unit's light weight allows you to control the cushion with one hand while cleaning it with the brush unit in your other hand.

Velvets

While all colorfast fabrics are cleaned alike, velvets require thorough brushing with a clean nap brush for best results.

Identify the direction of the lay of the pile before cleaning.

Brush the pile with the nap brush as soon as the foam is vacuumed from one section. Brush gently but thoroughly, so the pile lays all in the same direction as it did before cleaning.

If you fail to brush velvets well they will tend to mat down and appear rough. This is especially true of antique velvets.

Use an inexpensive blow hair dryer to shorten drying time.

Haitian Cotton

Haitian cotton presents a unique cleaning challenge. Use our specially developed detergent concentrate especially for Haitian Cotton. Refer to the Accessories & Supplies section elsewhere in this manual for more information.

Cleaning Fabric Covered Wall Dividers

Many commercial and industrial offices are divided into areas by fabric covered vertical panels. These panels are ideally suited to cleaning with the Esprit Upholstery Extraction Cleaning System's dry foam and light brush action. Here's how:

Starting at the bottom of the panel, apply foam over sections about 2 sq.ft. (.2 sq.m.).

Vacuum quickly. Allowing foam to set very briefly prevents fabric from becoming overly damp and speeds drying.

For best results, always work from bottom to top.

Auto Interiors

The Esprit Upholstery Extraction Cleaning System safely, quickly, and conveniently cleans all fabrics used in automobile interiors. These include velours, woven fabrics, prints, textured patterns, and even leather.

The Esprit Upholstery Extraction Cleaning System's innovative design allows you to use the compact, easily handled brush head and vacuum nozzle even in hard to reach locations, while the power unit remains out of the way outside the vehicle.

Leather

Use our specially developed Leather Lather and Leather Lotion, products formulated to effectively clean all types of smooth, finished leather furniture and vehicle interiors. Refer to the Accessories & Supplies section elsewhere in this manual for more information.

Tips for Professional Cleaners

Cleaning Tips

You can use a portable blow-type hair dryer to speed drying time. Such a hair dryer will prove especially useful on velvet materials.

Be sure to point out worn spots or faded colors to your customer before beginning cleaning. Such spots will be more noticeable after cleaning is complete.

When cleaning fabrics with heavy soiling in localized areas, clean the dirtiest areas first, then start over and clean the entire piece. This results in the soiled areas being cleaned twice with a short drying time in between always prespray first with "Prelim".

Special Considerations

Synthetics of all kinds or blends of different fibers can present special challenges. It is therefore difficult to promise that you will be able to remove every spot on a piece of upholstery. Additional pre-spotting treatment may be necessary in some cases.

Carefully inspect and test all upholstery before cleaning.

Ask the following important questions before starting:

- * How old is the furniture?
- * Has it ever been cleaned, either professionally or by a home method?
- * In what type of fabric is it covered?

* Where is the piece kept and what are the soiling conditions there? (Soiling conditions in a cafeteria or office location will be different than those in most living rooms, for example.)

* Is the furniture subject to heavy smoke, grease, or sunlight?

* Is the piece located near a radiator or heat vent?

Check the pieces to be cleaned for unreported problems. Record all rips, tears, snags, missing buttons, or warn areas. Record all existing damage and discuss your findings with your customer.

Vacuum the upholstery against the lay of the nap. Use a crevice tool if needed. Be careful not to loosen buttons.

Test for color fastness and shrinkage.

If the fabric fails the color fastness test, notify the customer that the piece cannot be cleaned without the risk of damage. If the customer wishes to have you clean the piece despite the risk of damage, obtain approval in writing before starting work.

Never give an estimate over the phone.

Don't forget about other services you can offer, such as mattress cleaning, R.Vs, boats, trailers and other unique cleaning opportunities.

Fabrics

Identifying Fabrics

Fabrics are classified in two ways: by weave and pattern, or by the origin of the fiber (for example, natural or man-made). For cleaning purposes it is the second classification system that is most important.

The basic types of weaves or patterns are plain, twill, and satin. Weaves can also be classified as flat or pile.

Flat fabrics have a flat surface formed by weaving yarns at right angles to one another. Velvets and mohair have a surface made up of fibers standing on end like the pile of a rug.

Even though most fabrics are cleaned the same way, the following descriptions of the most common types of fabrics may be helpful.

Artificial leather - Fabric coated with nitrocellulose and embossed, then colored to look like leather. This can be cleaned the same as cloth. Use a leather dressing after cleaning.

Boucle - A rather flat looking material with a surface made up of yarns with knots and spirals. No regular pattern. Surface yarns do not cover the entire face, but are irregularly placed to leave parts of the surface open. A flat fabric made of wool, cotton, rayon, or a blend.

Brocade - A figured material in which the design is woven in relief against a foundation of a different weave. Whereas damask has a very flat pattern, brocade has a slightly raised or "embossed" pattern. This is produced by using yarns of different colors or by exposing contrasting surfaces of the same color yarns. A flat fabric originally woven of gold and silver silk threads, but now made of silk, cotton, rayon, or a combination of cotton and rayon in various colors.

Brocatel or Brocatelle - Similar to brocade, but the pattern stands out in high relief and is much more noticeable above the surface than in brocade. Pattern has a "blistered" appearance. The blistered areas have a double back. This is a flat pattern.

Chintz - A printed cotton fabric that is quite often glazed. The base fabric is a simple flat weave, usually a sheeting. Printed pattern usually consists of small, lively figures or large motifs. Used most often for draperies and slip covers. **Chintz cannot be cleaned because any moisture removes the glaze**.

Corduroy - Characterized by a definite corded or ribbed appearance. While corduroy resembles a velvet fabric, it is a flat weave. The corded or ribbed effect is produced by floating an extra set of filling yarns over the surface, then cutting these yarns so they stand up like tufts. These tufts are then teased, singed, and brushed. Corduroy is generally made of cotton or mercerized cotton.

Crash - A simple, flat weave characterized by a surface of coarse yarns woven in an uneven texture. Made of cotton or linen, sometimes combined with jute.

Damask - Material with reversible pattern which changes color on the reverse side. Whereas the pattern of a brocade is raised, the pattern in a damask is very flat. Linen table cloths are characteristic of the damask weave. Upholstery damasks are made of silk, cotton, linen, wool, rayon, mercerized cotton, singly or in combination. High quality damasks are very tightly woven.

Embossed fabrics - These can be either flat fabrics or velvets. Flat fabrics and various weaves are embossed by running them between engraved rollers. Plain velvets of mohair, rayon, or cotton are sometimes embossed, then sheared and brushed to bring up the pressed pile to form a design. **Frieze velvet -** A plain frieze velvet has a solid surface of loops extending upright from the base of the fabric. Differs from a plain cut velvet in that the upright yarns are turned back into the base of the fabric to form loops instead of being cut to form erect yarns. A cut and uncut frieze velvet is a combination of plain cut and frieze velvets in that some of the surface yarns are looped, while others have been cut to stand erect. Many interesting patterns are developed in this way. Woven on special wire looms with Jacquard attachments.

Plain frieze velvets, cut, and uncut frieze velvets are attractive and durable. They are made of mohair, cotton, rayon, silk, linen, and wool, singly or in combination.

Fur fabric - A general class of high pile velvets made to resemble animal fur. The effect is obtained by printing or cutting. Suitable for modern furniture. Mohair, alpaca, and tussah (wild) silk are used for the pile.

Hair cloth - A stiff fabric woven with horse hair. Often combined with other fibers, and used for period furniture. Sometimes has small designs.

Haitian cotton - A fabric woven from imported cotton to include tan or brownish seed pods as part of the texture and color. When cleaned conventionally, these nubby spots tend to bleed unless special precautions are taken. Our Haitian Cotton Detergent (C1635) greatly reduces the risk of damage.

Homespun - A flat fabric, very loosely woven and made of rough, coarse yarns. Generally made of cotton or a combination of cotton and jute. Machine reproductions of fabrics originally made by hand for clothing, but using heavier yarns.

Jacquard - Woven velvet or flat fabrics that are patterned. Because of the nature of the pattern, they cannot be produced on plain looms. The patterns of Jacquard fabrics are sometimes quite elaborate and complicated. **Leather -** Processed hides can be cleaned safely with our Leather Lather and Leather Lotion.

Matelasse - Woven flat fabric of the brocade type. In matelasse the design looks "quilted" rather than "embossed".

Pile fabrics - Three dimensional velvet fabrics with an extra set of yarns woven at right angles to the base to form an erect surface. The upright yarns can be mohair, wool, cotton, silk, mercerized cotton, linen, or rayon. Rich looking and durable.

Plush - Velvet pile fabrics with a rather open pile surface over 1/8 inch (3.2mm) high. In most instances, modern, low pile velvets have replaced plushes.

Print - Print is a general term to describe flat or velvet fabrics having a printed pattern.

Ratine - A flat tapestry weave material with a characteristic surface made of nubbed or knotted yarns loosely woven to give a bumpy appearance.

Satin - A very lustrous flat fabric usually made of silk with a cotton back in plain, damask, or brocade weave. Sometimes mercerized cotton or rayon is used instead of silk.

Serge - A flat fabric woven with a twill (diagonal) weave. May be wool, cotton,or linen.

Taffeta - A fine, closely woven flat fabric with a smooth surface. Made with backing and filling yarns of the same thickness, giving a very even appearance. Woven of silk or rayon and cotton.

Tapestry - A flat fabric that is usually figured and multi-colored. Woven on a Jacquard loom. Made of different types of colored yarns, singly or in combination. Originally made by hand with bobbins worked from the wrong side. In a machine-made tapestry, the wrong side is smooth. In a handmade fabric it is shiny. **Velour -** The word velour is French for velvet. This is a general name for velvet fabrics with a pile of cotton, rayon, or silk. Used for draperies. Usually called velvet when applied to upholstery fabrics.

Velvet - General name for fabrics with a pile surface or "third dimension" made up of erect yarns woven at right angles to the base. Pile height is less than 1/8 inch (3.2mm).

Surface yarns are silk, cotton, or rayon. Mohair velvet is velvet with a surface of mohair yarns. Cotton velvet is velvet with a surface of cotton yarns. Rayon velvet is velvet with a surface of rayon yarns, and so on.

Velveteen - A low-priced cotton flat fabric with a false pile made with an extra set of filling yarns which are cut and brushed to simulate a pile. Made the same way as corduroy, but the surface is not ribbed.

Common Upholstery Fabrics and Fibers

Fabric Type	Characteristics	Cleaning Cautions
Cotton	Highly absorbent fiber	Stronger when wet than when dry
Herculon	Durable, almost completely stain- proof fiber with a low water absorb- bancy rate, and excellent fastness	If backed with latex, use caution when spotting
Linen	Very strong, highly absorbent natural fiber	Highly absorbent synthetic fiber with excellent fastness
Nylon	Extremely strong, durable synthetic that cleans and dries easily	Few, if any, serious disadvantages
Rayon	Highly absorbent synthetic fiber with excellent fastness	If overwet, dyes have a tendency to brown
Silk	Extremely strong natural fiber	Sheen may be lost in cleaning Acid cleaners or spotters must be thoroughly removed with rinsing.
Wool	Very strong natural fiber that is moderately absorbent	Whites may brown if overwet
Velvet	Not a fiber, but a weave	May be composed of many different fibers so prior testing is essential

Spot & Stain Removal

For best results, spots and stains should be removed before they dry and become "set". The older they are, the harder they are to remove.

Caution: Never use chlorine bleach in any solution to clean rayon or rayon blends.

Oily Materials such as butter, grease, oil, hand cream, or ball point pen ink: Remove excess materials by blotting liquids and scraping up solids. Apply volatile solvent. Dry the fabric by blotting; repeat with cleaning fluid if necessary. Blot dry and brush pile.

Oily foodstuffs and animal matter, coffee, tea, milk, gravy, chocolate, salad dressing, ice cream, sauces, eggs, or vomit: Remove excess materials by blotting liquids and scraping up solids. Apply detergent/vinegar/water solution (described later in this section). Blot dry and apply Liquid Spot Remover or volatile solvent. Spot dry.

Blood: Blot with **cold** water. Sponge with cold water and Blue Label Upholstery Detergent solution. Blot again with cold water. Repeat if necessary.

CAUTION: Using warm or hot water on blood will "set" the stain.

Foods such as starches, sugars, mustard, candy, drinks, fruit stains; washable ink; urine: Blot up liquids and scrape up solids. Apply Detergent/ Vinegar/Water solution (described later in this section). Blot dry. Apply Liquid Spot Remover and blot dry. Repeat if necessary.

Paint, grease, gum, lipstick, crayon, tar: Carefully scrape up as much as possible. Blot with Liquid G.I.T.G.O. Work from the edge toward the center of the spot. Change blotting cloth often to avoid resoiling. Allow to dry and vacuum.

Caution: Never rub, as doing so will cause the spot or stain to spread.

Detergent/Vinegar/Water solution: Prepare 1 teaspoonful of Blue Label Carpet and Upholstery Liquid Detergent Concentrate by mixing it with a small amount of hot water, then stirring it vigorously to a syrup-like consistency. Add to one quart (950ml) warm water. Then add 1 teaspoonful white vinegar and stir.

Accessories & Supplies

C214 Low pH Detergent for Upholstery Cleaning

A low pH detergent concentrate formulated for professional Dry Foam Extraction cleaning of wool, cotton, natural fibers, and upholstery fabrics. Antiresoil characteristics are built into this detergent.

C1635 Haitian Cotton Detergent

An extremely dry foam detergent to safely clean Haitian Cotton or other fine fabrics without causing bleeding or browning.

C1639 Fabric Protector with DuPont Teflon®

A fluorochemical-based spray to provide protection against dirt, grease, and stains from spills on upholstery and other fabrics. Safe for all colorfast material.

C1768 Leather Cleaning Combo Pack

Contains Leather Later/Leather Lotion and handy application mitt.

C873 Odor Exploder

Odor exploder will neutralize the disagreeable odors from pets, saturated stale food odors, smoke odor after fires, furnace backups, smoky fireplaces, and odors caused by mold or mildew, as well as by bacterial growth. This is not a masking agent, but an odor counteracter.

C1767 Leather Lather

Leather Lather has been pH balanced and formulated to effectively clean all types of smooth, finished leather furniture and vehicle interiors.

C1769 Leather Lotion

Leather Lotion safely strengthens, preserves, and nourishes fine leather. It is a rich, creamy liquid that is specially formulated for smooth, finished leather upholstery.

C1951 Liquidator

Breaks down recovered solution from foam to liquid in the recovery tank.

C1659 Prelim Pre-Spray Concentrate

Pre-spray to loosen stubborn dirt, expecially in heavy use areas.

S12L Spot Remover

Specially formulated to remove stubborn spots including grease, gum, drinks, pet accidents and blood. Can be used on oil and water based stains.

D90A Spot Brush

Features a wood handle that is 7 by 1.5 inches $(17.8 \times 3.8 \text{ cm})$ with soft natural bristles covering 2.5 by 1.25 inches $(6.3 \times 3.2 \text{ cm})$.

D91B Nap Brush

Has a wood handle that is 9 by 1.5 inches (22.9 x 3.2 cm) and a brush area 6 by 1.25 inches (15.2 x 3.2 cm) filled with soft, natural bristles.

U1910 Velvet Brush

Nylon-bristled hand tool for grooming fabrics such as velvet and velour.

D110C Waterproof Mat

3 x 4 ft durable, woven plastic mat for use under the Esprit machine to protect your work area

Sprayer

Convenient quart (32 oz.) capacity sprayer for application of Prelim Pre-Spray or Odor Exploder

D92D Graduated Cup

Quart size (32 oz.) plastic measuring container with molded pour spout.

U1902 Tote Bag

Ideal for accessories used with the Esprit Upholstery Machine.

Maintenance Procedures

Please Read Very Carefully

CAUTION: Always disconnect the machine from electrical supply when working on it.

This section has been prepared by the Racine Industries Repair Department. It is made available for use by others with no liability accepted for user safety or damage to equipment resulting from its use.

For additional information regarding troubleshooting and repair of this equipment, please contact Racine Industries.

Brush Unit

The brush unit is a slave of the power unit, which supplies its low voltage direct current supply. The brush unit contains its own control switch for motor and the air valve solenoid (which is located inside the power unit). If a problem should occur, check both the power unit and brush unit to locate the cause.

CAUTION: Demagnetization of the brush unit motor may occur if the reversing switch on the power unit is moved while the brush unit is running. A significant increase in the "no load" speed of the brush unit motor, along with a reduction in torque, will indicate that this has happened. If this happens, then the unit should be sent to the factory for repair.

At normal operating temperatures, the brush unit motor runs at about 9,000 RPM and the center brush drive shaft turns at 740 RPM. If demagnetization has occurred, the motor speed will increase to about 12,000 RPM, and the drive shaft to 1,000 RPM.

CAUTION: In cold weather, brush units which have been exposed to below freezing temperatures for an hour or more should be brought to room temperature before use. This will minimize the possibility of damage to the permanent magnet field.

Remove Power Unit Hood

Using a screw driver loosen the two screws on the hoods handle and pull up.

Filter Housing/Recovery Tank

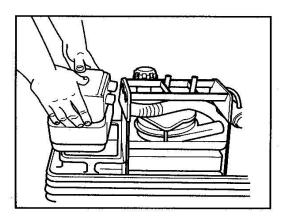
Installing Filter Housing

Place filter bag assembly into filter bag housing.

Set filter bag and housing assembly onto bottom recovery tank. Place palms of hands onto top of filter housing and push down and forward until the nozzles of the filter housing snap into the sockets on the frame assembly.

Removing Filter Housing

Push down and pull filter housing straight back (see illustration below)

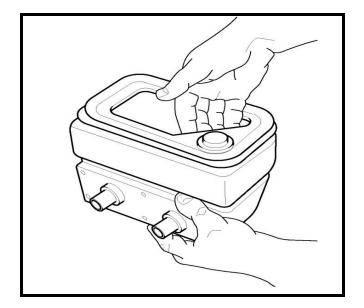


Cleaning The Filter Bag

Never operate your Esprit Upholstery Extraction Cleaning System without first making sure the cloth filter is in place. Running the machine without the cloth filter may ruin the power unit motor. Keep the filter bag clean.

The filter bag and frame are held in place in the housing by a rubber grommet on the frame which fits over a metal tube. To remove the frame assembly:

Pull out on the frame at a point adjacent to the tube (see figure below).



Clean the filter bag thoroughly by turning it inside out and brushing it clean.

Wash the filter occasionally to remove built up soil.

Note: Keep filter bag from becoming wet during use. Wetting of the bag can allow liquid into fans and motor, which over time will ruin the motor bearings. A wet bag is the result of improper cleaning technique. If the filter bag is getting wet, do more brushing of the foam on the fabric before vacuuming or use less foam.

Remove any liquid from the recovery tank before transporting the machine. The filter could get wet without doing this. A good cleaning technique will result in dust and dirt collecting on the filter bag with little or no foam in the recovery tank.

The large volume of air passing through the unique vacuum system breaks down and dries the dirty foam on its way to the recovery tank.

If Filter Bag Should Get Wet

Shake out excess water.

Run power unit motor for one minute to dry bag.

Cleaning The Recovery Tank

Clean the recovery tank after each use or every 3 to 4 hours during continuous cleaning. To do so:

Remove hood.

Remove filter housing.

Lift recovery tank from machine.

Clean thoroughly with fresh water.

If you are going to continue to use machine, add defoamer solution to recovery tank per label instructions (about 1/2 cup liquidator solution should be added to tank after each emptying.)

Install cover.

Flushing / Emptying Detergent Tank

The detergent tank should be emptied after each use.

Remove detergent tank cap on top of unit.

Remove tank drain cap on bottom of machine. (Important - empty tank over a floor drain or in a sink.)

Flush tank with fresh warm water.

DO NOT vacuum this water through the recovery system.

Cleaning The Vacuum Hose

Remove hose from machine

Allow hose to dry thoroughly

Tap along sides of hose to loosen dirt

Shake out dirt and debris

Rinse thoroughly with clear water

Allow to dry, then replace on machine **DO NOT run motor to dry hose**

Cleaning the foam generator

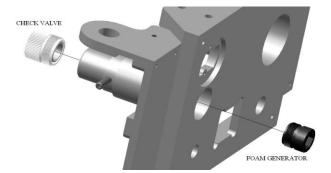
Using supplied tool, remove foam generator.

Do not disassemble foam generator.

Rinse with warm water

Screw Foam Generator back into panel using supplied tool.

NOTE: Spare foam generator is located in supplied tool.



Cleaning the Check Valve

Remove air hose from control panel

Unscrew Check Valve from panel

Do not disassemble check valve

Rinse Check Valve in warm water

Screw Check Valve back into panel **NOTE:** Take care to not cross thread

Reattach air hose to control panel

Removing The Brush Unit

To remove the cleaning brushes:

Pull the inner brush off the center shaft

Pull the outer brush evenly from the three drive lugs.

Reassamble by replacing the outer brushes first, then the inner brushes

NOTE: Take care to keep foreign objects from contacting the brushes while storing or transporting the machine. Failure to protect the brushes may result in the bristles taking a distorted set.

Cleaning The Air Intake Screen

Keeping the intake screen clean allows the motor to run cooler and more efficiently.

To clean the screen:

Empty the detergent and recovery tanks

Turn the unit on it's side

Looking up from the bottom of the machine, the screen is located in the middle of the detergent tank.

Using the supplied brush, or vacuum, gently clean the screen being careful not to push too hard on the screen.



Replacing Carbon Brushes - Brush Unit

If the brush unit motor slows down or begins to run erratically, inspect the carbon brushes for wear.

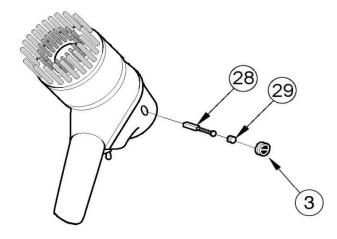
Remove the access cap (#3) from the outer brush unit cover.

Remove the inner access cap (#29) from the brush unit housing.

Remove the carbon brush (#28) from the holder. **Caution:** Note the position of the bracket holding the carbon brush for reinstallation

Inspect the carbon brush and if the carbon is below 1/2", a new carbon brush should be installed.

Reinstall the carbon brush by compressing the spring and thread the inner access cap back into place.



Power Cord Care

Inspect cord for damage before each use. While in use, do not pull or carry by the cord. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.

When cord is not in use, wrap tightly around the upper half of the hood.

Troubleshooting

Trouble	Probable Cause	Solution
Low vacuum suction	Hoses improperly connected	Check and tighten hose clamp.
	Filter housing improperly positioned	Check and adjust position of filter housing.
	Filter bag clogged with dirt and lint	Clean filter bag.
	Hoses clogged with dirt and lint	Clean hoses.
	Low supply voltage	Check power supply and correct if necessary
No foam/low volume of foam	Improper detergent solution mixture	Empty detergent tank and mix new solution per package instructions.
	Hard water	Mix detergent at 6 oz. concentrate to 1 gal. c water.
	Cap not sealed or broken on detergent tank	Check detergent tank cap and replace if necessary.
	Vacuum hose restricted	Make sure vacuum hose nozzle opening is not plugged.
	Two-channel hose kinked or improperly connected	Check for kinks or improper connection and correct if necessary.
	Foam generator plugged	Disassemble foam generator and clean.
	Low supply voltage	Check power supply and correct if necessar
	Faulty solenoid	Replace solenoid (refer to Parts List(s)/Wirir Diagrams) or send unit out for service.
	Faulty switch on brush unit	Replace switch (refer to Parts List(s)/Wiring Diagrams) or send unit out for service.
Base Unit does not run	Bad main switch	Replace main switch.
	Bad motor	Replace motor.
	Supply cord damaged or disconnected	Check connection; if necessary replace cord
	Bad wall outlet	Use different outlet
	Loose or faulty electrical connection	Tighten connection or repair wiring.
Brush unit does not run	Unit not properly connected to base unit	Check connection; if necessary reconnect to base unit.
	Faulty transformer	Replace transformer.
	Faulty rectifier	Replace rectifier.
	Blown fuse	Replace fuse.
	Faulty switch on brush unit	Replace switch.
	Faulty wiring on brush unit	Replace wiring.
	Carbon brushes worn	Replace carbon brushes

EspritTM

The Dry Upholstery Cleaning System

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