

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 grain, 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 are pile surfaces made up of fibers standing on end like the pile of a rug.

Even though all fabrics are cleaned the same way, the following descriptions of the most common types of fabrics are 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 whole face, but are irregularly placed to leave parts of 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 of different colors 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. Pattern usually consists of small, lively figures or large motifs. Used most often for draperies and slip covers. Chintz cannot be cleaned because and 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 reversible 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 improved 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. Von Schrader 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 Von Schrader Leather Lather and Leather Lotion.

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

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 is 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 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 velet 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 rayou 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	Clesning Cautions
Cotton	Highly absorbent fiber	Stronger when wet than when dry
Herculon	Durable, almost completely stain-proof fiber with a low water absorbancy 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 Von Schrader Liquid Spot Remover or volatile solvent. Spot dry.

Foodstuffs 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 Von Schrader Liquid Spot Remover and blot dry. Repeat if necessary.

Paint, grease, gum, lipstick, crayon, tar: Carefully scrape up as much as possible. Blot with Von Schrader 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.

NOTE: Some spots can be difficult to remove with cleaning alone. Von Schrader offers a complete Professional Spot Removal Kit containing a variety of special spot removers.

Maintenance Procedures

IMPORTANT

Please Read Very Carefully

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

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 a reverse valve solenoid (which is located inside the power unit). If a problem occurs, check both the power unit and the 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 repairing.

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.

Removing Filter Housing

Remove hood, using a screwdriver
Loosen the two retaining
Screws and lift up.

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 Foam Generator

Leave all hoses attached
Unscrew retaining nut
Remove screen and rinse with warm water
Replace screen onto foam generator body
Screw retaining nut onto foam generator

Removing The Brush Unit

To remove the cleaning brushes:

Pull the inner brush off the center shaft
Pull the outer brush from the three drive lugs.

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

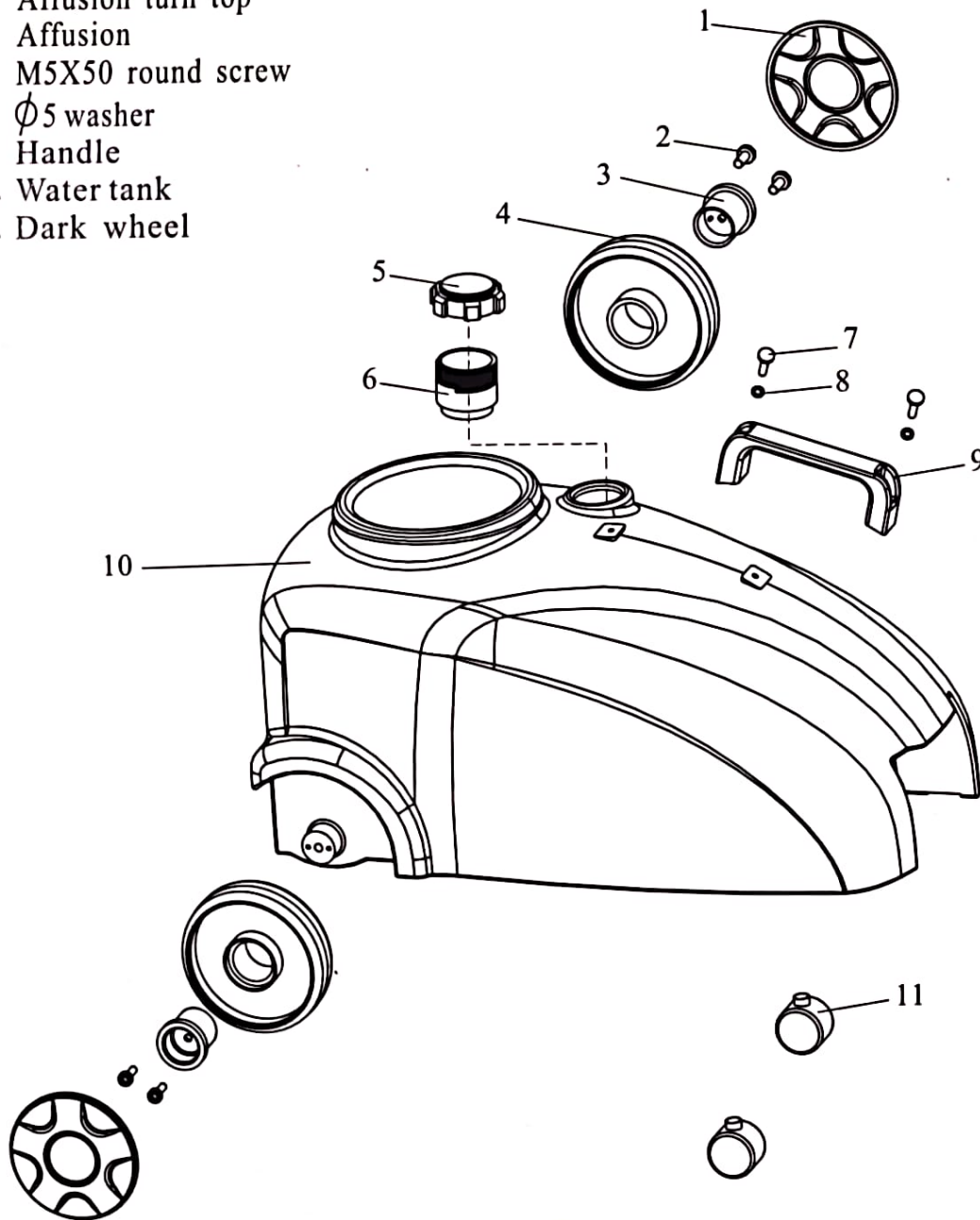
NOTE: Take care to keep foreign objects from contacting the brushes while storing or transporting the machine. Failure to protect the brushes may result in the bristles taking a distorted set.

Troubleshooting

Trouble	Probable Cause	Solution
No foam/low volume of foam	Improper detergent solution mixture	Empty detergent tank and mix new solution per package instructions.
	Hard water	In areas with hard water, use a softening agent such as Calgon at the rate of about 1/2 cup per gallon (30ml per liter).
	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 necessary.
	Faulty solenoid	Replace solenoid (refer to Parts List(s)/Wiring Diagrams) or send unit out for service.
Base Unit does not run	Faulty switch on brush unit	Replace switch (refer to Parts List(s)/wiring Diagrams) or send unit out for service.
	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.

PARTS LIST(S)/WIRING DIAGRAMS

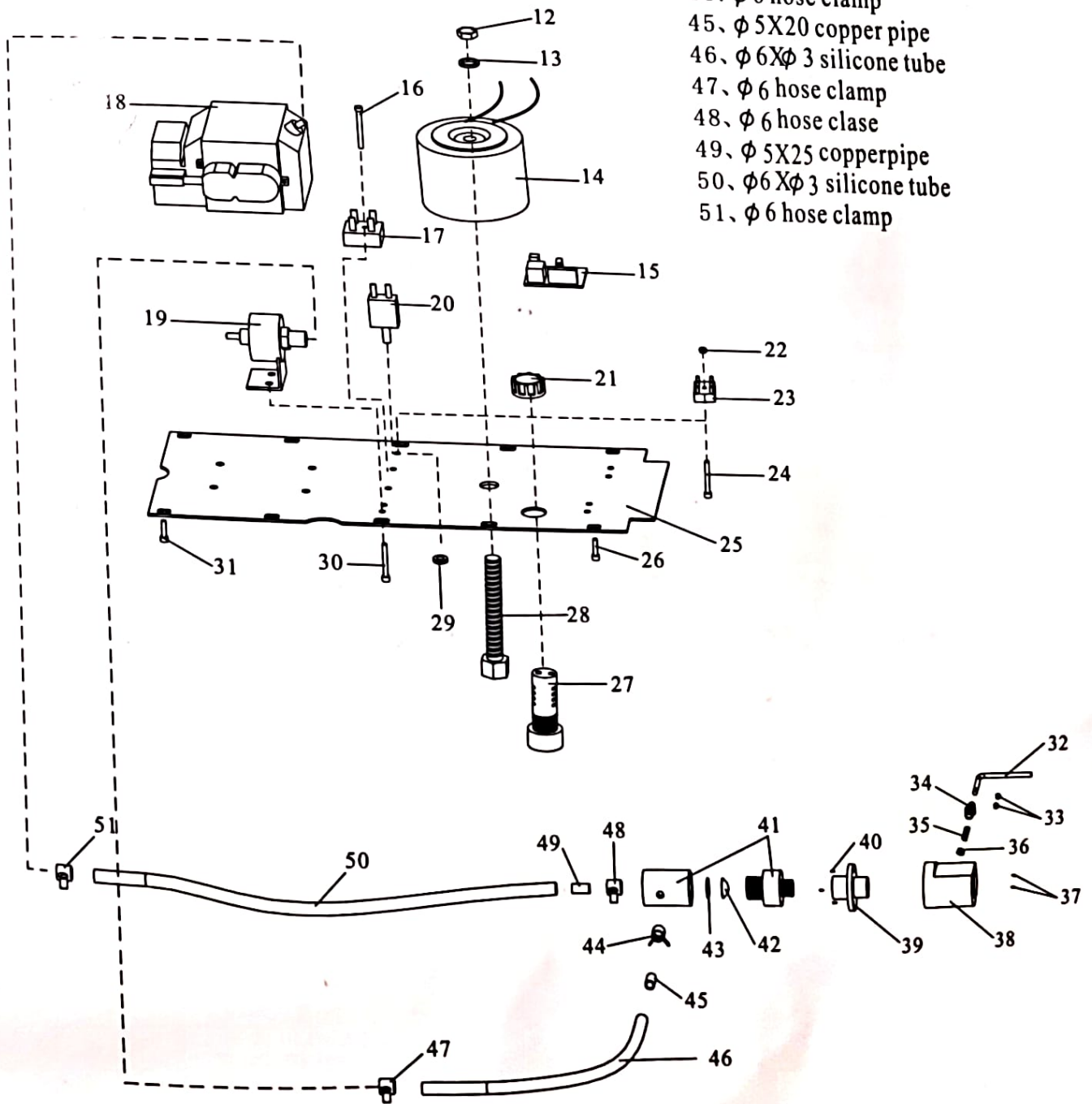
- 1、 Barrel fcank corerboard
- 2、 M5X10 round screw
- 3、 Barrel axes
- 4、 Barrel trailing wheel
- 5、 Affusion turn top
- 6、 Affusion
- 7、 M5X50 round screw
- 8、 $\phi 5$ washer
- 9、 Handle
- 10、 Water tank
- 11、 Dark wheel



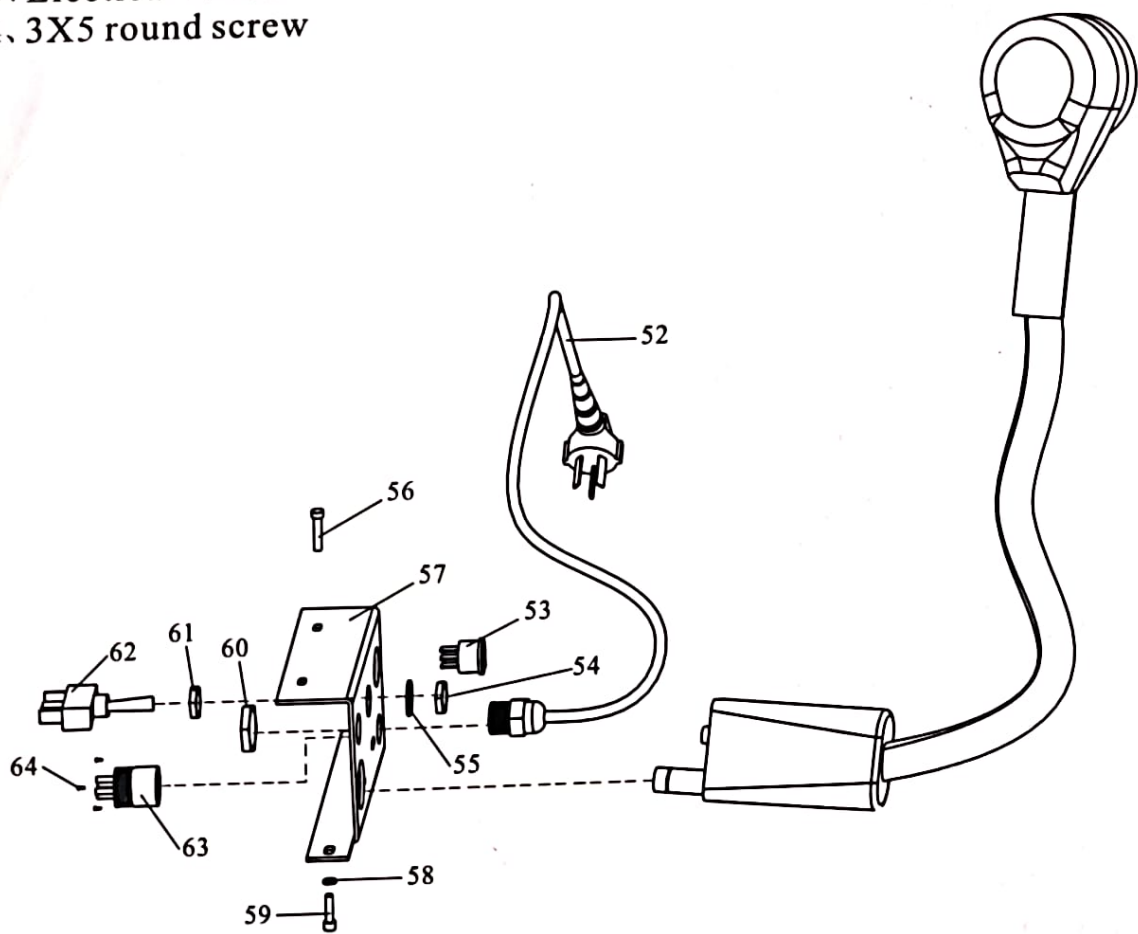
- 12, M8 Nut
- 13, ϕ hatch washer
- 14, Transformer
- 15, Relay circuit
- 16, 4X20 round screw
- 17, Selenium rectifier
- 18, Air pump
- 19, Water pump
- 20, 10A switch (over loading)

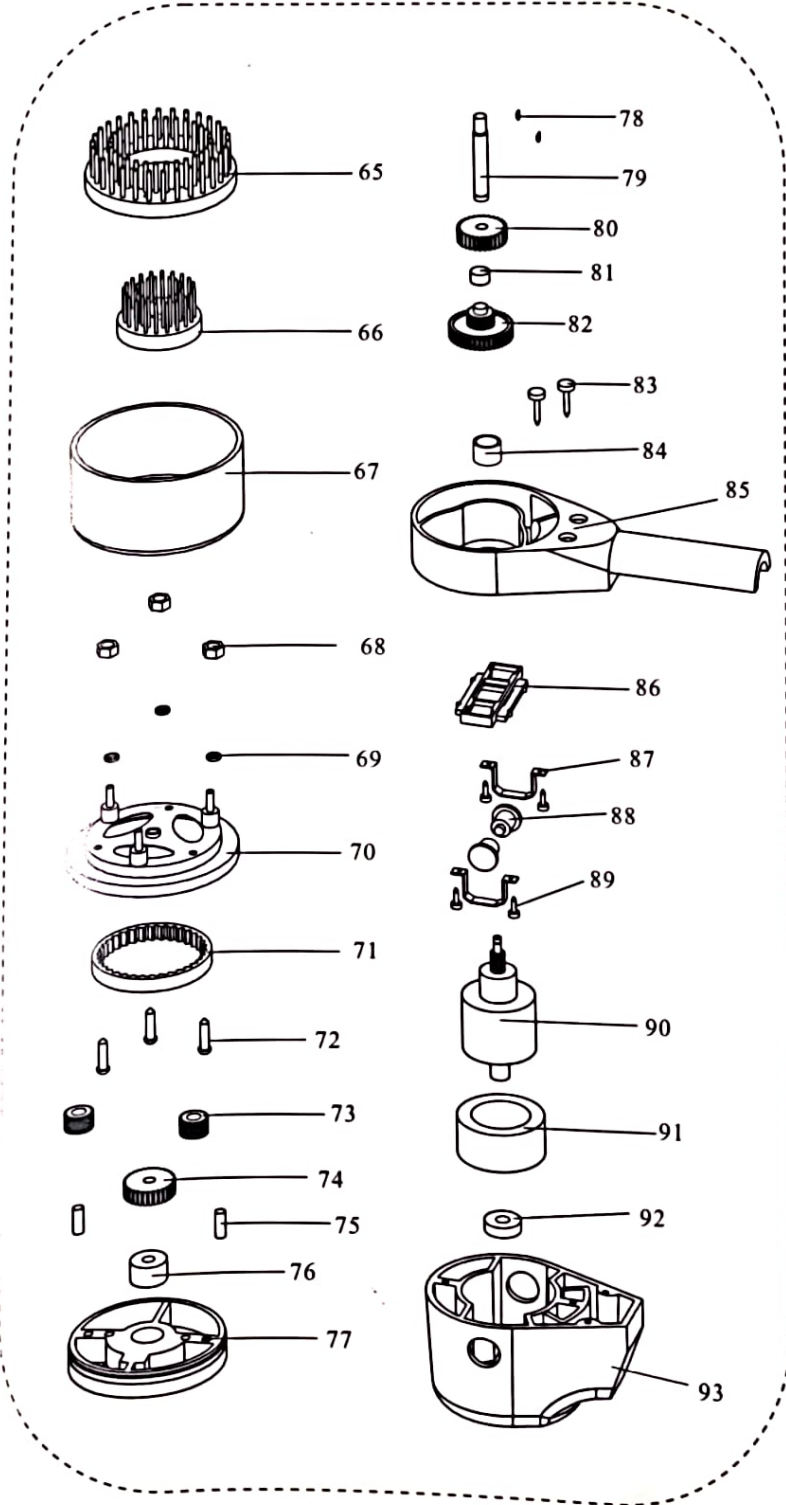
- 21, Buzzer nut
- 22, M3 locknut
- 23, Rectifier
- 24, 3X20 round screw
- 25, Motherboard
- 26, 5X10 round screw
- 27, Buzzer
- 28, 8X70 Six angle out side scotew
- 29, Nut
- 30, 4X10 round screw
- 31, 5X10 round screw

- 32, 7-lockpin
- 33, ϕ 5 Hatch washer
- 34, ϕ 10 Straight in
- 35, ϕ 5 Spring
- 36, ϕ 8X5X2.5 Copper sheathing
- 37, M3X10 screw
- 38, Exhalene siphon seat
- 39, Exhalent siphon
- 40, M3X10 screw
- 41, Air cucurrent connection
- 42, Bubble mesh
- 43, 20x17x1.5 O-cushion rubber
- 44, ϕ 6 hose clamp
- 45, ϕ 5X20 copper pipe
- 46, ϕ 6X ϕ 3 silicone tube
- 47, ϕ 6 hose clamp
- 48, ϕ 6 hose clase
- 49, ϕ 5X25 copperpipe
- 50, ϕ 6 X ϕ 3 silicone tube
- 51, ϕ 6 hose clamp



- 52、3X0.75mm power line
- 53、Onoff(green)
- 54、M12-nut
- 55、 $\phi 12$ Pion
- 56、4X10 round screw
- 57、Faceplate
- 58、 $\phi 5$ Pion
- 59、5X10 round screw
- 60、Pg9-nut
- 61、M12-nut
- 62、On-off
- 63、Electical outlet
- 64、3X5 round screw





- 65 Big hair brush
- 66 Small hair brush
- 67 Jacket
- 68 M3 locknut
- 69 $\varnothing 3 \times 6 \times 0.5$ pion
- 70 Brush yoke
- 71 E-bistrique gear wheel
- 72 M3X15 screw
- 73 C-bistrique gear wheel
- 74 D-bistrique gear wheel
- 75 Gear wheel shaft
- 76 R8 axletree
- 77 C-bistrique aluminium-Dos shell
- 78 Semi-circle key
- 79 Gear wheel shaft
- 80 B-bustrique gear wheel
- 81 M66 axletree
- 82 A-bistrique gear wheel
- 83 M4X25 screw
- 84 R6 axletree
- 85 B-bistrique aluminium-Dos shell
- 86 carbon brush bracket
- 87 Carbon brush bracket
- 88 carbonbrush
- 89 M4X10 round screw
- 90 Rotor
- 91 permanent magnetism stator
- 92 6000 axleeree
- 93 brstrique alumium-Dos shell

