

# Steempro 2000

# **CARPET SOIL EXTRACTOR**



# SAFETY, OPERATION & MAINTENANCE INSTRUCTIONS

MODELS: SX2000 POWERFLO

SX2100 POWERMAX SX2700 POWERPLUS

- CAUTION READ THE INSTRUCTION MANUAL BEFORE USING THE APPLIANCE
- ORIGINAL INSTRUCTIONS
- MANUAL ALSO AVAILABLE ON LINE AT <u>WWW.PROCHEM.CO.UK</u>

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# **MACHINE DATA**

MODEL NO.	
SERIAL NO.	
DATE OF PURCHASE	
DISTRIBUTOR NAME	
DISTRIBUTOR TEL NO.	
MANUFACTURER CONTACT	Prochem Europe Ltd. Oakcroft Road, Chessington, Surrey KT9 1RH, UK Telephone: + 44 (0)20 8974 1515 Fax: + 44 (0)20 8974 1511 Email: sales@prochem.co.uk Website: www.prochem.co.uk

All information and specifications in this manual are current at the date of issue. However, because of Prochem Europe policy of continual product improvement, we reserve the right to make changes at any time without notice. Please note that this manual applies to all models and explains variations including accessories used. Therefore, you may find some explanations for variations and options not installed on your equipment.

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This product is marked according to the European Directive (2002/96/EC) on Waste Electrical and Electronic Equipment (WEEE).

The symbol on this product indicates that this product must not be disposed of with normal household waste. Please protect human health and the environment by disposing of this product responsibly in the correct manner.

For further information regarding the disposal, treatment, recycling and recovery of this product, please contact:

Prochem Europe Sales Department Telephone: +44 (0)20 8974 1515

Prochem Europe Ltd. EEE Producer Registration Number: WEE / AJ0044SY

European Directive (2011/65/EU) Restriction of use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS2).

This equipment does not contain more than the maximum permitted levels by weight of the following substances:

Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent Chromium (Cr (VI)), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE)



# MACHINE WARRANTY

**DATE EFFECTIVE: 1/7/15** 

As of the above date, this warranty supersedes all previous warranties and forms part of the contract of sale. Prochem Europe Ltd. (hereafter referred to as "Prochem") guarantees this machine to be free from defects in materials and workmanship for the relevant time period as shown below, and from the actual date of purchase by the user. Proof of the purchase date from a Prochem Authorised Distributor will be required for performance of this warranty.

THIS WARRANTY EXCLUDES NORMAL MAINTENANCE ITEMS, including but not limited to HOSES, FILTERS, O-RINGS, DIAPHRAGMS, VALVES, DRIVE BELTS, GASKETS, CARBON BRUSHES and damage to motors and other components as a result of failure to replace normal maintenance items. THIS LIST IS NOT EXHAUSTIVE.

#### To obtain performance of this warranty, contact the Prochem Authorised Distributor who supplied the product.

The Prochem Authorised Distributor is responsible as the selling agent for the provision of initial training in the correct use and application of the machine and approved chemicals. The distributor is also responsible for service maintenance and repairs during and after the warranty period and the administration of any warranty claims in conjunction with the Prochem Service Department. Failure of any of these provisions and responsibilities may invalidate the warranty and the authorised status of the distributor.

If Prochem receives notice of any defects during the warranty period, Prochem reserves the right to either repair, or replace components that prove to be defective. Goods must be returned before the warranty is approved. Goods sent out prior to the return of faulty items will be invoiced at current prices, subject to standard payment terms (see Prochem Standard Terms and Conditions of Sale). Replacement parts supplied under warranty will be guaranteed for the remainder of the original machine warranty and NOT from the date of installation. Spare parts supplied after expiry of machine warranty may be covered by a manufacturer's warranty, subject to inspection by Prochem Europe Ltd. and at its sole discretion. Normal maintenance items, however, are not covered. Replacement or credit of any returned parts will be at the discretion of the Prochem Service Department. Any subsequent refusal to accept their decision will serve to invalidate this warranty with immediate effect.

PROCHEM AUTHORISED DISTRIBUTORS are responsible for machine and accessories service back up during and after the warranty period. Prochem will furnish parts if the warranty is approved, but **DISTRIBUTORS** will be responsible for fitting, service, labour and related charges including travel, if applicable, and the cost of returning the machine or parts to Prochem. If any chargeable work is undertaken by Prochem for DISTRIBUTORS the labour, parts (if applicable) and return carriage will be charged at FULL LIST PRICE. If warranty is approved due to genuine manufacturing defect, then labour charges and carriage charges may be waived at Prochem's discretion.

Prochem may send replacement parts to customers supplied by a DISTRIBUTOR or directly by Prochem, subject to the same conditions of replacement and payment above. The customer, however, will be responsible for fitting, labour and the carriage costs of returning repaired parts. Alternatively, Prochem will undertake warranty work at Chessington, subject to the same conditions, but the customer will be responsible for all carriage charges.

Any of the following circumstances involving the machine will serve to invalidate this warranty:NORMAL WEAR, ACCIDENTS, USE OF THE MACHINE FOR A PURPOSE OTHER THAN THAT FOR WHICH IT WAS
INTENDED, INCORRECT MAINTENANCE, THE USE OF CHEMICALS OTHER THAN THOSE SUPPLIED OR APPROVED BY PROCHEM, INCORRECT INSUFFICIENT OR NON-USE OF DEFOAMER, EXPOSURE TO EXTREME TEMPERATURES OR CONDITIONS, INCORRECT INSTALLATION OR REPAIR & UNAUTHORISED INTERVENTION.

Liability is excluded for the following:-

All forms of damage and special damage founded in tort (apart from death and personal injury) and contract law including but not limited to consequential loss, loss of income and losses incurred in reliance of the contract; service, labour or third party charges and the cost of returning the machine or defective parts to Prochem or Prochem's Authorised Distributor. As against a person dealing as a consumer, this warranty creates specific rights in addition to any statutory rights, which are unaffected. As against a person dealing otherwise than as a consumer, however, this warranty excludes any implied term that the machine will correspond with a description or a product sample.

With the exception of some specific products which are labelled and intended to be used by a consumer, all equipment, machinery, accessories, products, services and advice supplied by Prochem is intended for professional and industrial use

Your Prochem unit is designed to give you many years of reliable service. If a problem should arise during or after the warranty period, contact the Prochem Authorised Distributor or the Prochem Service Department, for details of the services available. Only the original purchaser of the new equipment may seek performance of this warranty - these rights cannot be transferred to a third party.

Prochem Europe Ltd.

Oakcroft Road, Chessington, Surrey KT9 1RH, ENGLAND Telephone: + 44 (0)20 8974 1515 Fax: + 44 (0)20 8974 1511

Machine Warranty Issue 10 1/7/15

# **WARNING!**

#### Warning!

Machines shall not be used by children. Children should be supervised to ensure that they do not play with the appliance. This machine can be used by people with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the machine in a safe way and understand the hazards involved.

- Caution this machine is for indoor use only.
- Caution this machine shall be stored indoors only.

#### Warning!

This machine must be disconnected from the mains during cleaning or maintenance, when replacing any parts or converting the machine to another function.

#### Warning!

Do not allow the power cord to come into contact with the rotating brush.

• Caution under no circumstances should the machine be carried by or bumped up a flight of stairs using the handle, always empty the bucket before storage or transporting the machine.

# IMPORTANT SAFETY INSTRUCTIONS

# PLEASE READ THE FOLLOWING IMPORTANT SAFETY INSTRUCTIONS (!!) BEFORE ATTEMPTING TO USE THIS MACHINE. FAILURE TO OBSERVE THE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.

#### !! CAUTION

Read the instruction manual before using the appliance.

#### !! SOUND PRESSURE LEVEL

The sound pressure of this machine, when in use, does not exceed 85 dB (A).

#### !! APPLIANCE SUITABILITY

This appliance is suitable for commercial use, for example, in hotels, schools, hospitals, factories, shops, offices and rental businesses.

!! FOR MAINS POWERED APPLIANCES during cleaning and maintenance – the plug is to be removed from the outlet socket.

#### !! TRAINING

You must be trained in the operation of this machine before use. Please read this manual carefully and obtain operating instruction from your Prochem Distributor or authorised representative in the correct use of this equipment and suitable chemicals before attempting to clean.

#### !! REPAIRS

Should any repairs, including supply cord replacement be required, we recommend that the appliance be returned to an authorised dealer.

# !! ELECTRICAL CABLE INSPECTION & REPLACEMENT

This machine must be earthed while in use to protect the operator from electric shock. It is equipped with a sealed and approved EC three conductor cable and three-prong 13A plug. If the supply cord is damaged it must be replaced by a special cord or assembly available from the manufacturer or its service agent. During operation a hazard may occur when running the machine over the power supply cord. The power supply cord should be regularly inspected for signs of damage. If the power supply cord is damaged, it must be replaced.

#### !! RCD CIRCUIT BREAKER

In common with other household and commercial electrical equipment, an 'RCD' circuit breaker plug device is strongly recommended for this type of equipment.

#### !! EXTENSION CABLES

Avoid using extension cables with this machine. If an extension cable is used it should be of a suitable rating and no longer than 30 metres. Use only three wire CE approved extension cable with CE approved three-prong earthed plugs and three pole receptacles that accept the machine 13 amp plug.

!! DO NOT use a multiple adaptor socket to connect the machine and heating units or other devices to a single extension cable.

**!! DO NOT** stand the machine in water to operate such as during flood extraction.

SERIOUS INJURY OR DEATH MAY RESULT IF MACHINE IS IMMERSED IN WATER!

!! DO NOT pull the machine by the power cable or hoses.

!! DO NOT use this machine with or near flammable vapours. These machines can ignite flammable vapours such as fuels, solvents or thinners.

!! DO NOT operate the machine unless it is completely assembled.

!! DO NOT attempt repairs or maintenance unless you are suitably qualified or experienced. Repairs and maintenance should only be performed by qualified personnel and the machine should be tested for electrical safety before re-use.

!! SPRAY LIQUID ejection could be hazardous as a result of its temperature, pressure or chemical content.

!! IF FOAM or liquid comes from the exhaust switch off immediately.

!! ALWAYS disconnect machine from mains supply when left unattended, when emptying the waste container or cleaning the appliance.

!! WHEN CLEANING THE WASTE TANK use a broad spectrum disinfectant cleaning agent to prevent contamination from any infectious material.

# GENERAL DESCRIPTION OF APPLIANCE

The Steempro machines are hot water spray extraction machines that incorporate a solution and vacuum hose assembly and carpet cleaning tool.

The machines have a separate cleaning solution and waste water tank for the collection of dirty water.

The machines can also be fitted with various accessories to convert the machine to an upholstery cleaning unit.

#### IMPORTANT OPERATING INSTRUCTIONS

PLEASE READ THE FOLLOWING IMPORTANT OPERATING INSTRUCTIONS (!) BEFORE ATTEMPTING TO USE THIS MACHINE. FAILURE TO OBSERVE THE INSTRUCTIONS MAY RESULT IN DAMAGE TO THE EQUIPMENT.

! DO NOT expose the machine to rain or freezing temperatures. Drain solution system and store indoors when not in use.

! DO NOT operate the machine without solution and waste tank filters.

! DO NOT use boiling water or temperature in excess of 76°C.

! DO NOT use chemicals in the machine other than those manufactured or recommended by Prochem Europe.

! DO NOT use the machine for dry vacuuming. The vacuum must only be used for wet extraction in conjunction with the spray system.

! DO NOT run the solution pump and/or heating unit dry. Always switch off and disconnect the machine and/or heating unit electrical supply when re-filling with solution.

! ALWAYS use a clean bucket to fill the solution tank.

! AFTER USE flush solution system and rinse the waste tank with clean water and remove loose fibres from the vacuum filter.

! ALWAYS observe directions and safety precautions on chemical products.

! ALWAYS pre-test carpet or fabric for colour fastness and suitability with ready-to-use cleaning solution before proceeding.

! ALWAYS use defoamer in the waste tank to control foaming from previous shampoo residues in the carpet.

! IF POWDERED CHEMICALS are used, always premix in a separate bucket before adding to solution tank. If not properly dissolved, powdered cleaning solution may result in damage to the solution pump.

! **USE ONLY** genuine replacement parts for this machine, supplied by an authorised Prochem Distributor.

! DO NOT use this machine for any purpose other than for its intended design function. Any deviation from its proper use or purpose and any consequential damage that may occur is the sole responsibility of the user.

! ALWAYS discharge soiled solution to a sewage drain linked to a sewage treatment facility.

! DO NOT discharge soiled solution into roadside storm drains.

! DO NOT use the drain valve to lift the machine which may result in damage to the drain valve or leakage from the drain valve mounting.

# GENERAL OPERATING INSTRUCTIONS

# BEFORE OPERATING THE MACHINE

Read the manual carefully and completely before attempting to operate the unit. This manual has important information for the use and safe operation of the machine and should be kept available at all times. This machine will ensure years of satisfactory service if operated and maintained according to recommendations in this manual. If additional help or information is needed, please contact your distributor or Prochem.

Prochem carpet soil extraction machines have been designed with the operator in mind. Provided you read the instructions relating to the care of your machine and follow them carefully and take advantage of the helpful hints and advice that we have passed on, you will achieve excellent cleaning results and very quickly pay for your investment. A detailed operational guide is given in the following sections, however, the following important points must be emphasised.

# FAILURE TO OBSERVE THESE INSTRUCTIONS MAY SERIOUSLY AFFECT THE PERFORMANCE OF THE MACHINE AND INVALIDATE THE WARRANTY

- Connection instructions The 220 240V AC models have been fitted with the appropriate EC type sealed power cable and 3 prong 13 amp plug for the UK market. Ensure the machine is connected to a 13 amp socket outlet having the same configuration as the plug. No adapter should be used with this machine. Any modification to the plug type may be dangerous and will void the warranty.
- This equipment is intended for commercial use only.
- The machine was designed for use on carpet and upholstery extraction applications as per instructions and recommendations written in this manual. Any deviation from its proper use or purpose and the consequential damage that may occur is the sole responsibility of the end user.
- Disconnect the power cord from outlet before servicing. Do not leave machine connected to an electrical outlet when unattended.
- Do not immerse or use this machine in standing water. Such use may cause electric shock.

- This equipment is not designed to handle or use combustible/volatile substances such as gasoline or kerosene, in, on, or near the machine. The use of such materials will cause an extreme hazardous condition.
- Use defoamer at all times to prevent damage to the vacuum motor(s).
- Do not use water in excess of 170°F (76°C).
- To prevent seal damage and chemical build-up to the pump system, run clean water through the solution lines after each days use.
- All repairs must be carried out by an authorised Prochem distributor.
- Repairs should only be carried out by a qualified person.
- Do not use replacement parts other than genuine manufacturer's parts as specified in the parts list.
- Do not use chemicals in the machine other than those supplied or approved by Prochem Europe limited.
- Do not use the machine as a 'dry' vacuum.
   Always pre-vacuum carpets thoroughly with a separate 'dry' vacuum cleaner.
- Keep the solution tank and filter clean. Always use a clean bucket to fill the solution tank.
- Clean the waste tank, vacuum filter and fall-out tube daily. Do not allow the vacuum shut-off filter to clog and do not restrict the free movement of the ball float (where fitted).
   Empty recovery tank regularly during use, do not wait for it to fill up and cut the vacuum motor out.
- Clean the drain valve regularly. Lubricate the valve shaft, slide and PVC elbow connection with suitable oil or maintenance spray. Do not drain the waste tank completely until the end of each job, as this will tend to clog the seal with debris and sediment.
- After use, flush through the pump, solution lines and waste tank with at least two gallons of hot water.
- Do not allow the machine, hoses or tools to freeze. Freezing may seriously damage the pump and fittings. Always drain solution and store indoors when not in use. When in transit during freezing weather, insulate and cover machine, wand and hoses. To prevent hose cuffs splitting in cold conditions, immerse them in warm water before use.

#### UNDERSTANDING YOUR SOIL EXTRACTOR

#### **OVERVIEW**

Extraction machines generally consist of two mechanical parts, a solution pump and fan type vacuum motor(s) - both operated by independent electrical switches located on the main housing. The pump forces a cleaning solution under pressure from a housing tank to the face fibre of the carpet via a solution feed hose and carpet wand. The carpet wand has a spray jet system that is compatible with the pressure from the pump and delivers just the right amount of solution to the carpet. The solution has a short amount of time to be forced into the fibres and emulsify the soil particles before it is extracted by the powerful suction of the vacuum motor. Because both these functions take place at the carpet wand, it will soon be realised that the speed at which the operator moves the wand is an important factor.

#### **RECOVERY SYSTEM**

The recovery tank has a built-in shut-off system that works on the principle of a rising ball. As the waste water or foam level rises and comes in contact with the ball (which in turn is secured in a filtered container) the ball floats and eventually is sucked into the aperture of the vacuum pipe and seals the air flow.

It is important to understand that shut-off devices where fitted are there to act as a *precautionary measure*. Care should be taken to *empty the recovery tank frequently and to use a defoamer* if heavy foam build-up occurs due to previous shampoo residue in the carpet. Emptying of the recovery tank is either by way of a positive drain valve or removable bucket. Where fitted, care should be exercised when opening the valve, particularly when the tank is full as the force of dirty water may overshoot the bucket. The drain valve should be cleaned and kept free of soil sediment regularly.

# Do not let the recovery tank overfill and cut out the vacuum motor.

At the same time do not completely empty the recovery tank until the job is finished as this may leave abrasive sediment in the drain valve rubbers. A suggested method is to drain 10 litres of dirty water regularly and at the same time refill with clean hot solution *using a separate bucket*. By using this technique, the solution tank is kept topped up and the recovery tank is always below warning level all in one journey.

 The filter in the recovery tank should be kept clean and this should be carried out at the end of each carpet cleaning session when cleaning out the recovery tank.

# When cleaning out the recovery tank, follow these steps -

Place an empty bucket under drain valve and open drain valve slowly. Empty tank and replace bucket leaving drain valve open. Rinse tank with at least 10 litres of hot water, or Prochem deodorising solution. If there is unused solution in solution tank, close drain valve, then switch on the vacuum. With the vacuum hose connected to recovery tank, place the open end of vacuum hose in the solution tank and extract all clean solution into recovery tank. Extract small amounts at a time using the hose cuff on the surface of the cleaning solution to avoid foaming and excessive ingestion into the recovery tank. This will clean the inside of vacuum hose as well as finally rinsing out the recovery tank. Remember to leave the vacuum running for a few minutes after you have extracted, as this will help dry out the hose and avoid dripping hoses. Alternatively use an open ended solution hose fitted with a quick connect to empty the solution tank using the pump.

# WARNING - Do not use extraction machines for dry vacuuming

The vacuum motor on your soil extractor is not protected by a dry dust filter. You should only use the vacuum in conjunction with the solution spray. Any pre-dry vacuuming operation should be carried out using a normal dry vacuum machine.

#### **SOLUTION SYSTEM**

The quick connectors on each end of the solution hose are connected to the machine and the carpet wand, completing the solution circuit from the solution tank via the pump to the wand head. The female connectors incorporate a pull-back release ring which houses steel ball bearings. These should be lubricated regularly otherwise connection may become difficult. The carpet wand heads are made from stainless steel. Do not attempt to use the carpet wand on hard floor surfaces or concrete, which may result in damage to the wand head.

- Always check that the filter in the solution tank is in good condition. Remember that the filter is there to protect the pump from dirt and fibres and it is a lot easier and cheaper to replace the filter than it is the pump!
- Always use a clean bucket when you replenish your solution tank. This help will prevent soil and sediment from entering the cleaning solution tank and pump system!

# **ACCESSORIES & CHEMICALS**

#### **ACCESSORIES**

#### **HEAT "N" RUN UNIT**

A solution heating unit, with separate power supply, which is available to fit onto the rear of the Steempro 2000 machine and link into the cleaning solution system. Refer to Heat 'N' Run manual for operation and safety of this unit.

! CAUTION- WHEN USING THE HEAT 'N' RUN UNIT ALWAYS USE THE HIGH PRESSURE SOLUTION HOSES SUPPLIED WITH THE STEEMPRO MACHINE.

#### STAINLESS STEEL UPHOLSTERY TOOL

A lightweight stainless steel cleaning tool that, with care, will not give the problems of the softer alloy materials or plastics, the rough edges of which could damage fine fabric. Suitable for use on all wet-cleanable fine fabrics with an ultra-fine spray tip to avoid over-wetting. This tool is essential for upholstery cleaning.

#### **CARPET & STAIR HAND TOOLS**

Larger and heavier hand tool designed for extraction cleaning stair carpeting, edges, small rugs and inaccessible areas. Also ideal for rinse extracting stains after treatment with an appropriate **Prochem** spotting agent. *These tools are NOT recommended for upholstery cleaning.* 

#### **VACUUM & SOLUTION HOSES (EXTENSION)**

Extension hose assemblies may be used provided they conform to the high pressure solution hose requirements of the Heat'n'Run unit (if fitted) and do not exceed the maximum recommended length for the vacuum configuration. The maximum recommended length of hose for single 3-stage vacuum models is 15m (50ft) and for dual 3-stage vacuums 30m (100ft).

! CAUTION- WHEN USING THE HEAT 'N' RUN UNIT ALWAYS USE THE HIGH PRESSURE SOLUTION HOSES SUPPLIED FOR THE STEEMPRO MACHINE.

#### **CHEMICALS**

**Prochem** specialise in manufacturing chemical products for the soft furnishing cleaning industry, including carpets, floor coverings, upholstery fabrics and curtains. This section refers only to the basic **Prochem** chemicals for general on-site carpet cleaning using the hot water extraction method.

#### **S775 EXTRACTION PLUS**

A general use carpet cleaning formula containing a high concentration of low foaming detergents, builders and anti-resoiling agents for effective cleaning of synthetic and natural fibre carpets. S775 has an approximate pH of 9.5 and should be diluted with hot water at 10 ml. per litre (1 to 100).

#### **S709 MULTI PRO**

A concentrated pre-spotter and traffic lane cleaner for treating spots, stains and heavily soiled traffic areas prior to extraction cleaning. Dilute with warm water at 1 - 4 to 1 - 8 and apply by sprayer. For best results, brush into pile using **Prochem** carpet pile brush before following up with extraction cleaning process. S709 has a diluted pH of 10.5, therefore always pre-test fibres for colour fastness before use.

#### **B109 FIBRE & FABRIC RINSE**

A mild acidic concentrate for use as a cleaning/stabilising rinse to restore correct pH to the fibre. B109 will help to stabilise fugitive dyes and reduce the possibility of 'jute browning' caused by over-wetting or the use of alkaline cleaning solutions. B109 can be used in place of S775 in the extraction machine solution tank, or applied by sprayer after cleaning. Dilute 10 ml. per litre of warm water through your machine. B109 is normally only used when a dye test suggests the possibility of dye bleed or on light coloured carpets when JUTE is part of the construction and may cause BROWNING.

#### **S760 LIQUID DEFOAMER**

Always use S760 especially when foam problems from soapy residue left from previous shampoo cleaning are encountered. Mix 20 ml. of S760 with 500ml of cold water and add to vacuum hose and recovery tank. As you drain off to empty the recovered soiled solution, you simply add more S760 as necessary. Remember, it is only necessary to add S760 when extraction cleaning previously shampooed carpets, so always check the recovery tank for foam at the start of each job.

# STAIN REMOVERS, SPOTTERS, PROTECTORS & DEODORISERS

Speciality products such as those listed above are available from the **Prochem** range. Refer to the chemical section of the Product Catalogue for more details. Individual Product Safety Data Sheets on all products are available direct from **Prochem** or Authorised **Prochem** Distributors.

# OPERATING INSTRUCTIONS

#### **PUTTING INTO SERVICE**

Ensure all switches are in the off position.

Pour clean solution into the solution tank using a bucket with pouring lip. Do not overfill the solution tank.

Use only approved correctly diluted chemical (see chemical bottle label for correct dilution rates).

Connect the vacuum hose from the cleaning tool to the vacuum hose inlet on the recovery tank.

Connect the solution hose quick connector from the cleaning tool to the quick connector on the back of the machine. (Pull back outer sleeve on female connector and push fit onto male connector so that the outer sleeve snaps shut).

Make sure the drain valve is closed by pushing the T-handle all the way in.

Add defoamer solution (as per label instructions) to the waste tank.

When moving the machine from place to place use the handle and wheel using the 2 rear wheels and front castor wheels.

Only place the carpet wand or hand tool onto the area to be cleaned when in use.

The machine must be used in an upright condition on a flat and level surface

WARNING: FOR ALL UNITS FITTED WITH HEAT'N'RUN DO NOT TURN ON HEATER UNTIL PUMP IS PRIMED AND WATER IS RUNNING THROUGH CARPET WAND.

#### **OPERATING INSTRUCTIONS - CARPET WAND**

Important: Use only Prochem wands and hand tools with the Steempro 2000 equipment. They are designed to deliver and maintain the correct amount of solution and pressure when attached to the Steempro pump system. Use of other manufacturer's wands may cause over-wetting of carpet, damage to the pump system and lack of pressure.

Plug the machine into a suitable electrical outlet.

Turn on the vacuum and solution switches. Slowly pull the wand head towards you with the solution valve trigger engaged. Then make a pass forward and backward with the vacuum only (no spray) over the cleaned area to remove as much soil and solution as possible. Do not over-wet carpet! Make overlapping passes to prevent streaking.

On heavily soiled carpets, we strongly recommend using a pre-spray solution. If the carpet is heavily soiled, squeeze solution valve lever on the forward pass as well as backwards, allowing cleaning solution a few seconds longer to work prior to vacuuming.

When you run out of solution, turn off the pump. Attach the drain elbow on the drain valve. Place a bucket under the drain elbow and pull up the drain valve T-handle. Dirty solution will pour out until the tank is empty. Close the drain valve. Use a clean bucket when you refill the solution tank.

When the job is completed, turn the switches off and disconnect the vacuum and solution hoses from the carpet tool and the machine. Drain the recovery tank through the drain valve as before.

#### IMPORTANT INFORMATION FOR 150 PSI INDUCTION MOTOR PUMP FITTED TO STEEMPRO POWERMAX

In order to gain maximum life for this pump, users are advised to discharge the pressure in the solution system before starting or re-starting (after switching off) the pump. This can be done by opening the wand or hand tool trigger valve and discharging pressurised solution into a bucket

#### **CLEANING UPHOLSTERY**

CAUTION – WE STRONGLY RECOMMEND ATTENDING AN UPHOLSTERY CLEANING COURSE BEFORE ATTEMPTING TO CLEAN FABRIC UPHOLSTERY.

#### **General instructions**

Cleaning upholstery with success requires a good knowledge of the type of fabric to be worked on. Look for the cleaning instruction label sewn on the underside of the furniture for the recommended method of cleaning the fabric. If it calls for dry cleaning, do not attempt to clean with the wet extraction method. Otherwise, damage to the fabric could occur. Extraction works perfectly on most wet-cleanable fabrics including synthetic (acrylic) velvets.

Before proceeding, test the fabric for colour-fastness. Apply a small amount of ready-to-use cleaning solution on the fabric in an inconspicuous area. Wait for 2 to 3 minutes and blot the area with a white terry cloth towel. If no colour comes off onto the towel, the fabric should be safe to clean. If a little colour comes off, there is some risk of colours running when you clean. It may be possible to stabilise colours by cleaning with B109 Fibre & Fabric Rinse.

Prepare the machine in the same manner as for carpet (see preparing the machine) cleaning except attach the upholstery tool to the vacuum hose. Connect the solution hose. Pour warm water into the solution tank. Add recommended amount of cleaning concentrate into the solution tank. Turn on the vacuum and pump switches.

Clean with the upholstery tool using as little solution as possible. Make overlapping passes to prevent streaking. Go over the area you just cleaned without depressing the lever (vacuum only) and gauge the amount of moisture extracted for dryness. On heavily soiled areas like arm rests, pre-treat with a recommended pre-spray.

#### STORAGE AND TRANSPORTATION

The machine can be prepared for storage (indoors only), by ensuring the power cord is coiled and secured using the velcro strap provided.

The solution tank and waste tank are empty and clean.

The drain valve fitted to the waste tank is securely closed.

Transporting the machine to another site in a vehicle can be carried out if the previous conditions are met but the machine must be securely stowed.

If the machine is to be lifted into a vehicle two lifting points are supplied one being the handle recess on the front of the machine and the other the handle recess on the back of the machine.

Due to the weight of the machine it may require two people to lift it into any vehicle, or carry it upstairs.

**Caution**, under no circumstances should the machine be bumped up a flight of stairs using the handle, always empty the bucket before storage or transporting the machine.

#### **USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Operation of this machine requires the use of protective latex gloves. Please be aware that the chemicals may require specific PPE to be worn. This can be found on the Material Safety Data Sheet (MSDS) for that particular product.

# PRACTICAL CARPET CLEANING

At this stage you will have a reasonable knowledge of your cleaning machine and suitable chemicals to achieve the best results. If you have carpet cleaning background knowledge or you have attended a **Prochem Training Course**, you will also have an understanding of carpet construction, types of fibres and related problems. The following is a summary of the techniques using your **Prochem** Soil Extraction Machine.

#### Using the cleaning wand

The procedure for using the carpet wand will vary slightly from carpet to carpet depending on profile and soil content. The effect of using a lightweight wand as a scrub wand is to introduce a certain amount of mechanical agitation that undoubtedly helps to clean better by agitation of the pile fibres.

On the majority of normal soiled carpets no prespray cleaner will be necessary (except in problem areas) and a normal mix of 10 ml. S775 EXTRACTION PLUS per litre of hot water can be used. **Prochem** can advise you on the various alternative systems and methods that can be applied for varying soil conditions and carpet types. These are all referred to in the **Prochem Training Course Manual** that is supplied with the course.

#### PREPARATION & FINISHING PROCEDURE

Clear area of all small items and breakables then -

- 1. Dry vacuum (dust removal) open areas of carpet before moving furniture.
- Move all furniture to areas that you have just vacuumed.
- 3. Dry vacuum remainder of carpet and edges (optional depending on condition).
- Pre-spray heavily soiled areas and treat spots and stains.
- Clean carpet using cleaning method as described below and subject to dye bleed test being carried out.
- 6. Reset pile with carpet pile brush.
- Replace furniture in original position, placing Prochem waterproof carpet protectors under all legs and feet of furniture.
- Use Prochem foam blocks under PLINTH furniture to allow airflow.

When using the carpet soil extraction cleaning method, there are certain basic rules of operation to follow in order to achieve the best results and to avoid over-wetting the carpet. The following is an effective wand cleaning technique -

- 1. Switch on pump and vacuum.
- Starting at right hand corner, extend wand approximately 18" in front of operator to the base of the skirting board.
- Operate solution trigger to apply spray cleaning solution whilst simultaneously drawing back the wand toward the operator thus allowing the

- vacuum nozzle to extract the emulsified soil and excess moisture.
- The distance on this movement needs to be no more than 18". Release the solution trigger to stop spray.
- The wand is then pushed back over the same path giving the vacuum a second chance to retrieve more moisture.
- 6. DO NOT apply more solution during the vacuum only pass.
- The wand head is now moved far enough to the left so as just to cover the left-hand edge of the first cleaning pass and the procedure is repeated.
- 8. Spray and vacuum then on return pass, vacuum only.
- Carry out a total of 4 spray and vacuum passes overlapping each one by approximately 1".
- At this point the wand head is passed back over the area cleaned, using the <u>vacuum only</u> to recover excess moisture.
- 11. When sufficient carpet has been cleaned and vacuumed, the PILE can be reset using a Prochem Pile Brush lightly brushing the pile toward you as you move backwards.

The speed at which the wand head is drawn back on the cleaning stroke is usually governed by the degree of soiling, for example, the slower the cleaning stroke the deeper the penetration of cleaning solution. The same effect, however, can be achieved by several quicker passes and not allowing the cleaning solution to penetrate too far all at once, and at the same time, using the movement of the wand to agitate the cleaning solution which does help to produce a better cleaning result.

The choice of technique is left to you, but it must be pointed out that when using the slow technique, there is a danger of wetting down to the backing of the carpet and thereby risking a shrinkage problem. Certainly, on all light to moderately soiled areas of carpet, the wand movement should be fairly fast to avoid over-wetting and extended drying out. Remember that in the early stages of getting used to your extractor, it is far better to re-clean a patchily cleaned carpet than to have a bad shrinkage problem on your hands. You will be surprised how quickly you will master the cleaning techniques.

If you have under-estimated the degree of soiling in a carpet, you can always revert to one of the heavy soil cleaning operations such as pre-spraying with S709 MULTI PRO.

NEVER FORGET - a few extra minutes spent on preparation and pre-treatment can save you hours on a return visit.

# GENERAL MAINTENANCE

All Prochem machines are engineered and built to require a minimum of maintenance. But like any machine, it does require some care to keep it in optimum working condition. Careful attention to these maintenance instructions will give you maximum operating performance and will increase the life expectancy of the machine.

To ensure a trouble-free machine, we strongly advise the following preventative maintenance.

#### **DAILY MAINTENANCE**

The following should be carried out at the end of each carpet cleaning session.

#### **POWER CABLE & PLUG**

Check the condition of the power cable and plug. Make sure all wires are correctly located and tightly connected. If damaged, the power cable and plug assembly must be replaced.

#### DO NOT ATTEMPT REPAIR.

Instruction for replacement of power cable with combined plug (all machines)

#### !! CAUTION - ONLY QUALIFIED MAINTENANCE PERSONNEL SHOULD ATTEMPT THE FOLLOWING REPAIR

Should the power cable require replacement, please follow the instructions below.

- The replacement cable and plug shall be of the same specification as the original Prochem part number BE4901 (3 core 1.5mm with 13Amp sealed plug unit)
- Ensure that machine is disconnected from electrical supply and open electrical housing by means of tool required.
- Disconnect the live (brown), neutral (blue) and earth (green/yellow) wires from the cable terminal block by means of unscrewing the terminal block wire clamp screws.
- Release the outer cable clamp next to the terminal block by unscrewing the two securing screws, then unscrew the outer cable gland to release the cable which can then be pulled out of the cable gland assembly.
- Insert the new cable through the gland, then secure and clamp the outer cable by means of tightening the outer cable gland and the two securing screws next to the terminal block.
- Connect the live (brown), neutral (blue) and earth (green/yellow) wires to the cable entry gland terminal block by means of inserting the wire conductors into the terminal block as follows:-

The conductor of the wire coloured brown shall be connected to the terminal marked (L), the conductor of the wire coloured blue shall be connected to the terminal marked (N) and the conductor of the wire coloured green and yellow shall be connected to the terminal marked with the Earth symbol thus -

7. Ensure that all connections are secure and close machine electrical housing and secure with tool required.

#### **SOLUTION TANK**

Flush the solution tank and pump through with 10 litres of hot water. Check the **filter** and clean if necessary. If damaged or compressed, unscrew the **filter** and re-shape or replace as necessary. **DO NOT** store hand tools, cables or hoses in the solution tank as this may damage the filter.

#### **RECOVERY TANK**

Flush through with clean water and thoroughly clean the vacuum filter. Remove soil and lint build-up inside the filter screen in the recovery tank. Lint should be cleaned off so that airflow is not impeded. Check that the ball float moves freely within the filter housing. If fitted, clean the drain valve using a small soft brush to clear any debris or sediment from the drain valve seal. Lubricate the drain valve shaft, slide and elbow connection with a suitable oil or maintenance spray. Check the waste tank lid seal and also make sure the inlet elbow inside the waste tank is tight and pointing away from the vacuum shut-off filter.

#### WAND, HAND TOOLS AND HOSES

Inspect the carpet wand and hand tool for sharp edges or damage (if accidentally dropped). Check the **spray jets** for debris, correct alignment and spray pattern. Clean if necessary using **only** a soft bristle brush - **DO NOT use metal or wire.** Rinse the **vacuum hose** with hot water to prevent soil build-up.

# Check all nuts and bolts and tighten if necessary

Pay particular attention to the handle, base-plate and wheel axle shaft securing bolts.

Always keep the machine clean inside and out.

# WARNING! FREEZING PROTECTION

If your extraction machine is exposed to freezing weather with solution in the components, the solution will **FREEZE** and in most cases **SERIOUSLY DAMAGE** the machine. To avoid damage, consider the following in the winter season. When the machine is not in use, store it in a **heated building**. This is particularly important in the case of the **WAND** and **HAND TOOL**, which are fitted with brass valves. To avoid freezing between jobs, pump out all the cleaning solution from the machine, wand and hand tool and make sure the wand and hand tool are insulated from the vehicle floor (wrap in a blanket or tarpaulin).

#### **WEEKLY MAINTENANCE**

At least once a week, inspect the internal components, solution fittings and electrical connections. Check for signs of **fluid leakage** and tighten or replace fittings as necessary. Make sure all **electrical connections** and **cables** are in place.

#### Solution Lines and Fittings

Flush the machine with a solution of 1 part water with 20 parts B109 Fibre & Fabric Rinse in order to neutralise the alkaline residue left by the cleaning solution.

#### Quick connect coupler

Spray with WD-40 or equivalent lubricant to prevent coupler from sticking.

#### Drain Valve

Apply light oil on gate seals. If machine has to be stored, leave the gate valve open.

#### **SOLUTION PUMP**

!! CAUTION - ONLY QUALIFIED MAINTENANCE PERSONNEL SHOULD ATTEMPT THE FOLLOWING REPAIRS

A diaphragm type pump is fitted to the Steempro models and requires little maintenance other than occasional inspection of the pump head to check for any fluid leakage. The following components should be inspected and cleaned, or replaced as necessary. See parts illustration in this manual for further reference.

- CHECK VALVE ASSEMBLY
- DIAPHRAGM
- CAM DRIVE BEARING
- MOTOR BRUSHES (100PSI ONLY)

The pump should be checked for motor brush wear every 6 months for normal usage and every 3 months for heavy usage.

The 150psi induction pump is not fitted with motor brushes and requires no maintenance. In the event of a reduction in operating pressure, leakage or pump failure, refer to the 'Fault Finding Guide' and contact your **Prochem** Distributor.

#### VACUUM MOTOR

!! CAUTION - ONLY QUALIFIED MAINTENANCE PERSONNEL SHOULD ATTEMPT THE FOLLOWING REPAIRS

The vacuum motor is lubricated for life - no additional lubrication is required. The only other maintenance that may be required is changing the motor brushes. This should only be carried out by an individual with THOROUGH knowledge of electric motors.

The brushes should be changed before the brush wears to within 3/8" of the brass holder.

With heavy usage we recommend that the brushes be checked every 3 months. The recommended inspection period for normal usage is at least every 6 months. The estimated brush life is approximately 400 to 450 hours, but inspection and replacement should take place at least every 350 hours to prevent the possibility that brush wear may cause damage to the vacuum motor.

On re-assembly, the lead wires must be kept away from the rotating parts and the motor frame. Always ensure that the green earth wire is re-connected to the vacuum motor body to ensure safe operation. To achieve maximum life, the brushes should be seated on the commutator before full voltage is applied. Do this by applying 50% of the rated voltage for thirty minutes. In the event of electrical or mechanical failure, refer to the General Fault Finding Guide page in this manual and contact your Prochem Distributor. Although some service parts are available, we recommend that defective vacuums be replaced.

# GENERAL FAULT FINDING GUIDE

#### CAUTION - Repairs should only be carried out by a QUALIFIED AND FULLY TRAINED PERSON!

#### **NO POWER**

With both vacuum and pump switches in the 'on' position, the vacuum and pump will not run.

#### **PROBABLE CAUSES**

Defective power cord Blown plug fuse

House or building circuit breaker tripped

#### **CORRECTIVE ACTION**

Replace power cord Replace fuse

Re-set breaker switch

**CORRECTIVE ACTION** 

Check and correct wiring

Replace switch

Replace

#### **NO VACUUM**

With the vacuum switch in the 'on' position, the vacuum will not run.

#### **PROBABLE CAUSES**

Vacuum switch defective Vacuum motor defective

#### Loose wire connections

LOSS OF VACUUM

While the unit is running, there is a loss of suction at the cleaning tool.

#### **PROBABLE CAUSES**

Hole in vacuum hose

Disconnected or damaged internal hose

Waste tank lid seal defective Vacuum hose obstructed Vacuum filter clogged Drain valve open (if fitted)

Vacuum motor defective

#### **CORRECTIVE ACTION**

Repair or replace hose

Repair replace or reconnect hose

Replace lid seal

Locate and clear obstruction Remove, clean and replace

Close drain valve Replace vacuum motor

#### NO PUMP PRESSURE

With the pump switch in the 'on' position, the pump will not run.

#### **PROBABLE CAUSES**

Defective pump switch

Defective internal by-pass or check valve Defective pump motor or worn brushes Seized motor shaft or cam bearing

Loose wire connections

Defective pump pressure switch (100psi model)

Defective rectifier

#### **CORRECTIVE ACTION**

Replace switch Inspect and replace

Replace pump, brushes or brush endbell

Replace or lubricate bearing Check and correct wiring Replace pump pressure switch

Replace rectifier

#### LOW PUMP PRESSURE

With the pump motor running the spray from the cleaning wand is below normal.

#### **PROBABLE CAUSES**

Solution tank filter clogged Suction leak at pump inlet Pressure leak at pump outlet Quick connect defective

Spray tip worn, clogged or incorrectly positioned

Spray tip non-drip valve seized

Diaphragm split (leak from pump head)

Broken by-pass springs Worn by-pass poppets

Check valve assembly defective or clogged Worn cam drive bearing (excessive noise) Low motor speed due to partially seized bearings

Clogged spray-tip filters

Pressure regulator incorrectly set or lost prime

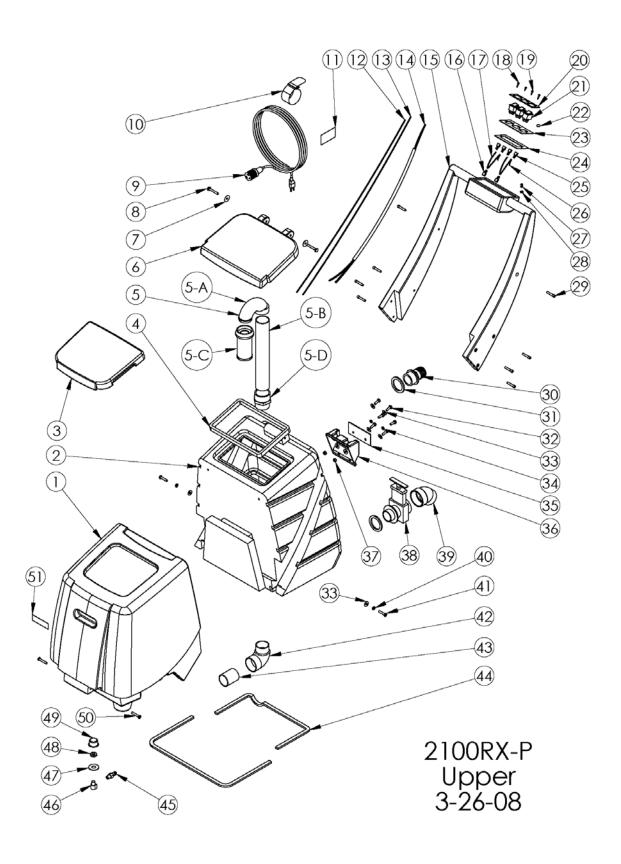
#### **CORRECTIVE ACTION**

Clean as necessary Locate leak and repair Locate leak and repair Replace quick connect Replace, clean or re-position Dismantle and lubricate Replace diaphragm Replace springs Replace poppets

Clean or replace check valve assembly

Replace drive bearing Lubricate or replace bearings Clean or replace spray tip filters Re-set pressure regulator or re-prime

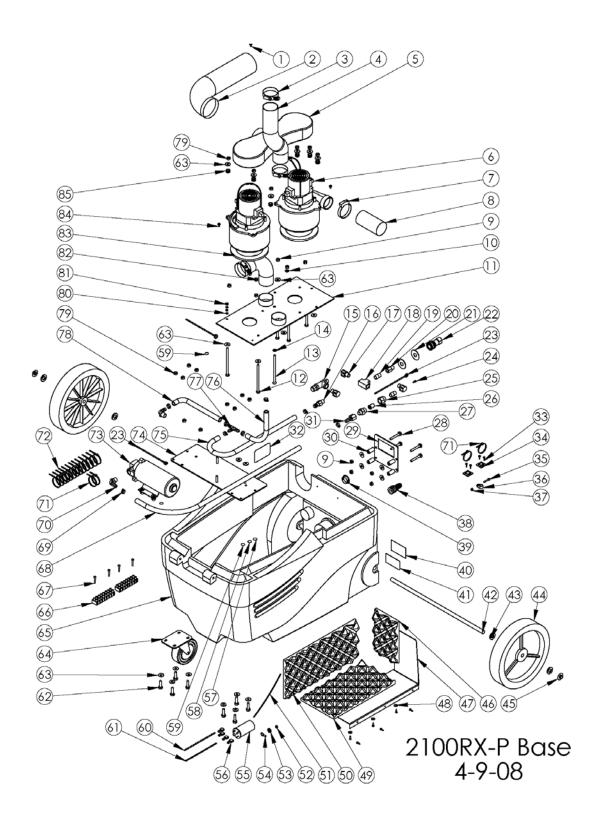
# PARTS DIAGRAM SX2000 / SX2100 UPPER



# PARTS LIST SX2000 / SX2100 UPPER

REF.	STOCK CODE	PART NO.	DESCRIPTION	QTY
1	E11787-P	F11787-P	SOLUTION TANK	1
2	E11870	F11788	RECOVERY TANK	1
3	E11791	F11791	LID, SOLUTION TANK	1
4	E11124	E11124	GASKET, RECOVERY TANK	1
5	5B, 5C, 5D	12904A	STAND PIPE ASSEMBLY	1
5A	Part of 5C	K11965	ELBOW, 180 DEG. FLOAT BALL	1
5B	E00919	K00672	PVC PIPE, 1.5 X 12 IN, SCH 40 WHT	1
5C	E10989A	10989-2A	FLOAT BALL SCREEN	1
5D	E00913-P	K00741	ADAPTER	1
6	E11785	F11785	LID, RECOVERY TANK	1
7	JE00233	C12039	WASHER ¼ X 1 SS	2
8	E02322	C02322	BOLT ¼ X 20	2
9	BE4901	B02218-1	POWER CORD 25FT & 13A PLUG SET 220-240V CE	1
10	E11177	C11177	VELCRO STRAP	1
11		H02548-2	LABEL IMPORTANT CORD	1
12		B00185-30	WIRE 73"	1
13		B00185-40	WIRE 73"	1
14	E010314	B010314	WIRE HARNESS	1
15	E11786B-NL	F-11786-B-NL	HANDLE	1
16		B00177	TERMINAL LUG 0.25 X 0.032 16-14 AWG FULLY INSULATED	2
17		B00185-40	WIRE BLACK 5"	1
18	E00295-1	C00295-1	SCREW NO.10 ¾" BLACK PHILLIPS	2
19		C00293	SCREW NO.8 ½" BLACK PHILLIPS	2
20		D11168	COVER SWITCHPLATE	1
21	E02211-1	B02211-1	ROCKER SWITCH, GREEN ILLUMINATED 230V 16A	3
22		H10911	LABEL EARTH SYMBOL	1
23	E010284	D010284	SWITCHPLATE	1
24	E010453	E010453	GASKET, SWITCHPLATE	1
25		B00177-1	TERMINAL LUG 0.25 X 0.032	4
26		B00185-30	WIRE WHITE 5"	1
27		C02315	LOCK WASHER NO.10 SS	2
28		C00264	NUT 10-32	1
29	E11141	C11141	SCREW, ALLEN HEAD 10-24 X 1.25"	8
30	E00665-1	K00665-1	HOSE ADAPTOR 1.5" BLACK	1
30A	EN00666		ELBOW 90 DEGREE 1.5" (NOT SHOWN)	1
30B	BS5201		FALL-OUT TUBE (NOT SHOWN)	1
31	KP00427	E00427	GASKET, ADAPTOR & DRAIN VALVE 2"	2
32	E00314-1	C00313	HEX BOLT 1/4 X 20 X 3/4	6
33	JE00233	C00233	WASHER FLAT 1/4"	8
34	E010000	C02312	LOCK WASHER 1/4" INT STAR	2
35	E010283	D010283	PLATE, HEATER MOUNTING	1
36	IE00004	F11804	HEATER MOUNT	1
37	JE00261	C00261	NUT ¼ X 20 HEX	2
38	EN00711	K00711	DRAIN VALVE (INCL HANDLE)	1
38A 38B	E00711RK E00711-2	K00711-1	SEAL, DRAIN VALVE (NOT SHOWN) HANDLE DRAIN VALVE (SPARE)	2
39	EN00710	K00710	ELBOW DRAIN VLAVE	1
40	JE00254	C00254	LOCK WASHER 1/4" SPLIT	2
40	E02294	C00254 C02294	SCREW ¼ X 20 X 1.25	2
41	E02294 E11185	K11185	ELBOW 1 ½" PVC	1
43	E00672-1	K00672-1	PVC PIPE 1.5" X 2.25" SCH 40 WHITE	1
43	E11129	E11129	GASKET BASE 5FT	1
45	CH00060	A00060	3/8 BARB X ¼ MP BRASS	1
45	E00052	A00052	BRASS ELBOW 1/4 M-F	1
47	JE00052	C11244	WASHER ½" PLATED	1
48	E00124	A00124	HEX NUT 1/4 MPT BRASS	1
49	EH00373	D00373	SOLUTION FILTER 1/4"	1
50	E11143	C11143	1/4 X 20 X 1.5" SS PAN HEAD SS PHILLIPS	2
51	L11140	S11179	NON-SKID TAPE 1" ROLL	1
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# PARTS DIAGRAM SX2000 / SX2100 BASE

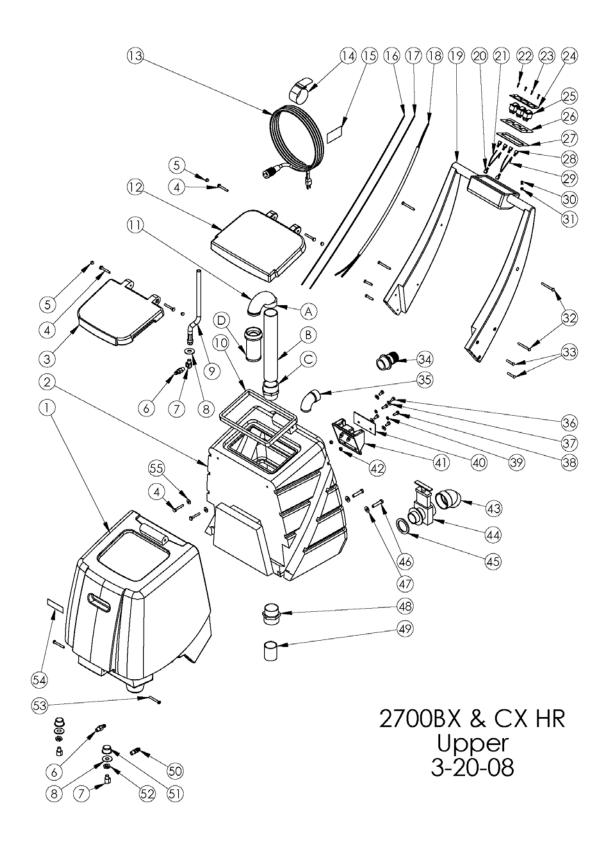


# PARTS LIST SX2000 / SX2100 BASE

REF.	STOCK CODE	PART NO.	DESCRIPTION	QTY
1	JE00295	C00297	SCREW,#8 X .25 IN, PAN HEAD	1
2	E11863	J11863	HOSE, 3 IN	1
3	TT00639	J00639	SCREW CLAMP, 1.63 - 2.43IN.	3
4	E00618	J00618	VACUUM HOSE, 2IN GREY, WIRE, 22 IN LG	1
5	E11178-BLK	F11178-BLK	INTERCOOLER, GALAXY, BLACK	1
6	LA4501E	117196-00	VACUUM MOTOR 230V 5.7" 3-STAGE W/CHOKE COIL	
			SX2000 POWERFLO	1
	F00050	100057	SX2100 POWERMAX	2
7	E00659	J00657	HOSE CLAMP, 2 IN SLDPRT	1
8 9	E00618 JE00261	J00618 C00261	VACUUM HOSE, 2 IN GREY, WIRE, 4 IN LG NUT, .25-20, HEX	10
10	JE00261 JE00254	C00251	LOCK WASHER, 1-4IN SPLIT	10
11	JE00254	D11134-1	PLATE, VACUUM BASE W-STUD	1
12	E11189	C11189	SCREW, 1-4 X 20 X 4.5 IN, HEX	5
13	E00285	C11516	SCREW, 1-4 X 20 X 4.5 IN, FLAT HEAD, PHILLIPS	1
14	200200	C02312	LOCKWASHER, .25 IN., INTERNAL STAR	1
15	E11314	G11314	PRESSURE REGULATOR, 140 PSI	1
16	CH00060	A00060	3/8 BARB X ¼ MP, BRASS	1
17	E00052	A00052	.25 X .375 M-F 90 DEG BRASS	3
18	E00161	A00161	TEE, .25 FP, BRASS	1
19	CH00111	A00111	NIPPLE, .25 IN	2
20	CH00121	A00121	FITTING, .25 MP X .25 FP, BRASS	1
21	JE00255	C11244	WASHER, .56 X 1.5 X .05 (Alternative PC000058)	2
22	GU00102	A00102	QD, .25F X .25FP, BRASS	1
23	RS4924	B11150	GROUND WIRE1.5MM GRN/YEL	3
24		C00302	RIVET, #41 SS	1
25	E00097-A	A00097A	CAP, INLINE FILTER	1
26	E00094E	A00094E	CHECK VALVE, NO STRAINER	1
27	DE4906	A00094C	CHECK VALVE BODY	1
28	E02322	C02322	HEX BOLT,1-4 X 20 X 1.75 IN	4
29	E010379	D010379	HEATER MOUNTING PLATE	1 1
30	E00061	C11440 A00061	SPACER, HEATER MOUNTING PLATE  3-8 BARB X 1-4FP, BRASS	1
32	E02564-2	H02564-2	LABEL, CAUTION, MOTOR HOUSING	1
33	L02304-2	C00293	#8 X .5IN PAN, BLACK SMS, PHILLIPS	10
34	RS00192	B00192	MOUNT, NYLON TIE	2
35	1.000.02	C02321	8-32 X .88 PAN HEAD	1
36	E02200	B02200	CABLE CLAMP, 1202AC	1
37		C00280	HEX NUT, 8-32 BLACK ZINC	1
38	E11199	B11199	STRAIN RELIEF, PIGTAIL	1
39	E10510	K10510	PLUG, 1.25 IN, BLACK	1
40		H03545	COVER, SERIAL # LABEL	1
41	E00565-13	H00565-13	LABEL, SERIAL NUMBER,CE	1
42	E11170	D11170	AXLE	1
43	E00240	C00240	WASHER, SHOULDER, NYLON	4
44	E010313	G11767	WHEEL, 10 IN	2
45	E02305	C02305	CAP NUT, .5IN PUSH-ON	2
46	F44.400	E11431	FOAM, 7 X 4.5 IN	1
47	E11432	D11432	COVER, MUFFLER	1
48	E03251	C03251 E11429	WASHER, .187 ID, BACKUP	3
49 50	E11429 E11430	E11429 E11430	FOAM, 12 X 6.5 IN FOAM, 14 X 6.5 IN	1 1
50	RS4924	B00185-61	WIRE, 16GA, GRN-YEL, DNO	1 1
51	1704374	C90011	HEX NUT, METRIC, 8MM X 1.25	1 1
53	JE00251	C00251	LOCKWASHER, .31, SPLIT	1
54	RS4910	B00182	RING TERMINAL, .375 CENTRE	1
55	E90001A	B90001	FILTER, EMI-RFI, 250 VAC	1
56	RS4906	B00177	TERMINAL LUG, FEMALE, QD, .25 X .032, 16-14 AWG	4
57	10.000	H10914	LABEL, NEUTRAL	1
58		H10913	LABEL, LIVE	1
59		H10911	LABEL, EARTH SYMBOL	3
60	RS4918		WIRE, 1.5MM BLUE 6 IN	1
61	RS4919		WIRE, 1.5MM BROWN 6 IN	1
62	E00314-1	C00314-1	HEX BOLT, 1-4 X 20 X 1IN	8
63	JE00233	C00233	WASHER, FLAT, .25 IN	26

64	E03518	G03518	CASTER, 4 IN	2
65	E11789	F11789	BASE	1
66	E11308	B11308	TERMINAL BLOCK, 8 POLE	2
67	E11165	C11165	SCREW, # 8 X 1 IN, PAN, BLACK	4
68	E00613	J00613B	SOLUTION HOSE, .375 IN, BLACK X 32	1
69	RS5217	000010B	SCREW CLAMP 13 – 20MM	8
70	FJ00054	A00054	ELBOW, 90, .375MP X .375B, NYLON	2
71	RS4907	B00191	NYLON TIE. 11IN BLACK	4
72	RS00190	B00191	NYLON TIE, 4IN	13
73	PC809147	8090-945-270	PUMP 120PSI BY-PASS 230V (SX2000)	1
, ,	E11764-2	0000 040 210	PUMP 150PSI BY-PASS INDUCTION 230V (SX2100)	
74	E11194	D11194	PUMP PLATE	1
75	E00613	J00613B	SOLUTION HOSE, .375 X 26 IN, BLACK	1
76	E11154	J11154	SOLUTION HOSE, .375 X 10 IN, WIRE REINFORCED	1
77	E11243	A11243	TEE, .375B X .375B X .375B, NYLON	1
78	E11154	J11154	SOLUTION HOSE, .375 X 6 IN, WIRE REINFORCED	1
79	JE00273	C00273	LOCKNUT, 1-4 X 20, NYLON, SS	16
80		C02315	LOCKWASHER, #10 INT. STR, SS	3
81		C00264	NUT, 10-32	1
82	E00618	J00618	VACUUM HOSE, 2 IN GREY, WIRE, 7 IN LG	1
83	PC807110	E11169	GASKET, VAC MOTOR	2
84		C00284	SCREW, 10-32 X .375 GROUND	2
85	E00449	E00449	GROMMET	6
			ITEMS NOT SHOWN	
-	PF00616		VACUUM HOSE 1 ½"	
			SX2000 POWERFLO (FT)	15
			SX2100 POWERMAX (FT)	25
-	PR3005E-H		VACUUM & HP SOLUTION HOSE ASSEMBLY 25FT	1
	PF00625		HOSE CUFF 1 ½"	2
-	E5006		HP SOLUTION HOSE ASSEMBLY 15FT (SX2000)	1
-	E5001		HP SOLUTION HOSE ASSEMBLY 25FT (SX2100)	1
-	PR250		PRIME HOSE	1
-	AC2540-HP		VACUUM & SOLUTION HOSE ASSEMBLY	
	PR3005E-H		EXTENSION VACUUM & SOLUTION HOSE ASSEMBLY	
	BS5201		FALL-OUT TUBE (WASTE TANK INLET MODIFICATION)	

# **PARTS DIAGRAM SX2700 UPPER**

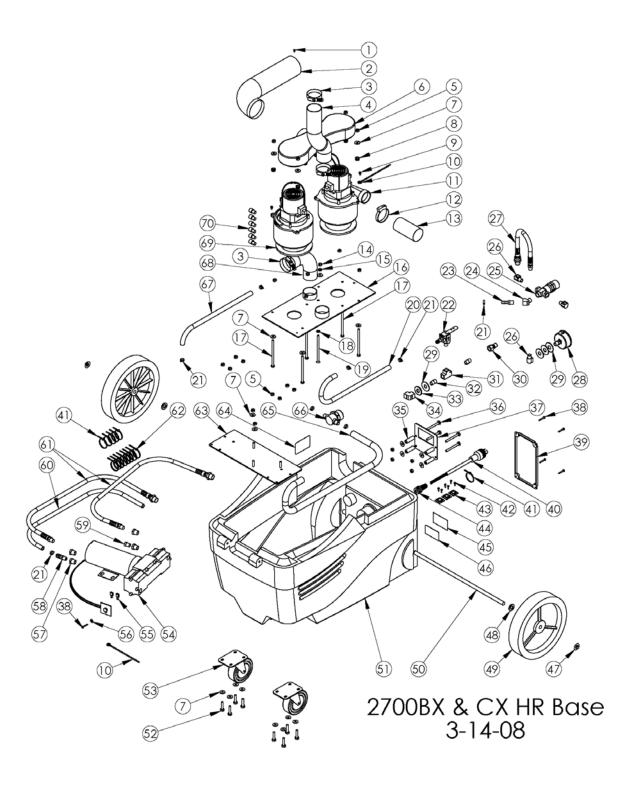


# **PARTS LIST SX2700 UPPER**

REF.	STOCK CODE	PART NO.	DESCRIPTION	QTY
1	E11787-1	F11787-1	SOLUTION TANK	1
2	E11788-1	F11788-1	RECOVERY TANK	1
3	E11791-1	F11791-1	LID, SOLUTION TANK	1
4	E11167	C11167	SCREW ¼ - 20 X ¾ SS	6
5	E02714	K02714	PLUG 0.500	4
6	CH00060	A00060	3/8 BARB X ¼ MP BRASS	2
7	E00052	A00052	90 ELBOW 1/4 M-F	3
8	JE00255	C11244	WASHER ½" PLATED	3
9	E44000	00580-16.5	HOSE ASSY. 16.5" X 1/4"	1
10	E11836	E11836	LID GASKET	1
11		12905A	STAND PIPE ASSY	1
11A 11B	E00919	K11965 K00672	ELBOW 180 (Comes with E10989-A)  PVC PIPE 1 ½" X 14 ¾" SCH 40 WHITE	1 1
11C	E00919-P	K00672 K00741	PIPE ADAPTER 1 ½" SCH 40 WHITE	1
11D	E10989A	10989-2A	FLOAT BALL SCREEN	1
12	E11785-1	F11785-1	LID, RECOVERY	1
13	BE4901	B11769	POWER CORD 25FT & 13A PLUG SET 220-240V CE	1
14	E11177	C11177	VELCRO STRAP	1
15	L11177	H02548-2	LABEL, IMPORTANT CORD	1
16		B00185-30	WIRE 73"	1
17		B00185-40	WIRE 73"	1
18	E010314	B010314	WIRE HARNESS	1
19	E11786-1	F11786-1	HANDLE	1
20		B00177	TERMINAL LUG 0.25 X 0.032 16-14 AWG FULLY INSULATED	2
21		B00185-40	WIRE 10" 14 GA BLACK UL1015	1
22	E00295-1	C00295-1	SCREW NO.10 3/4" BLACK PHILLIPS	2
23		C00293	SCREW NO.8 ½" BLACK PHILLIPS	2
24		D11168	COVER, SWITCHPLATE	1
25	E02211-1	B02211-1	ROCKER SWITCH ILLUMINATED GREEN 230V 16A	3
26	E010284	D010284	SWITCHPLATE	1
27	E010453	D010453	GASKET, SWITCHPLATE	1
28		B00177-1	TERMINAL LUG 0.25 X 0.032	4
29		B00185-30	WIRE WHITE 5"	1
30		C02315	LOCK WASHER NO.10 SS	2
31	F00000 4	C00264	NUT 10-32	1
32	E00288-1	C00288-1	SCREW ¼ - 20 X 2 ¼" C/S	4
33 34	E00288 E00665-1	C00288 K00665-1	SCREW ¼ - 20 X 1 ½" C/S HOSE ADAPTER 1 ½" BLACK	1
35	EN00666	K00666	ELBOW 90 1 ½" WHITE	1
36	E00314-1	C00314-1	HEX BOLT ¼ X 20 X 1" ZINC	4
37	JE00233	C00314-1	1/4 FLAT WASHER	6
38	E00314-1	C00233	HEX BOLT ¼ X 20 X ¾ SS	2
39	2003141	C02312	1/4 LOCK WASHER INT STAR	2
40	E010283	D010283	PLATE, HEATER MOUNT	1
41	20.0200	F11804	HEATER MOUNT	1
42	JE00261	C00261	NUT ¼ - 20 HEX	2
43	EN00710	K00710	ELBOW, DRAIN VALVE	1
44	EN00711	K00711	DRAIN VALVE (INCL HANDLE)	1
44A	E00711RK		SEAL DRAIN VALVE (NOT SHOWN)	2
44B	E00711-2		HANDLE DRAIN VALVE (SPARE)	1
45	KP00427	E11128	GASKET DRAIN VALVE	1
46	E12110	C12110	HEX BOLT 3/8" - 16 X 1 3/4"	2
47	E11540	C11540	WASHER 3/8"	2
48	E00913-P	K00741	PIPE ADAPTER 1 ½" WHITE PVC	1
49	E00672-1	K00672-1	PVC PIPE 1 ½" X 2 ¼" SCH 40 WHITE	1
50	CH00060	A90004	0.5" BARB X ¼ MP BRASS	1
51	EH00373	D00373	INLET FILTER	2
52	E00124	A00124	HEX NUT ¼ NPT BRASS	2
53	E00288-1	C11144	SCREW ¼ - 20 X 2" SS	2
54	E00440.4	S11179	NON-SKID TAPE 1" ROLL	1
55	E00448-1	C00238	WASHER 5/8 NEO STEEL SS	2

# PARTS DIAGRAM SX2700 BASE

**Important** - Solution system parts shown in diagram below are for 500psi unit only. Please refer to page 19 SX2000 / SX2100 base diagram for solution parts for 220 psi units, page 26 for solution system brasswork and page 32 for SX2700 220 psi pump.

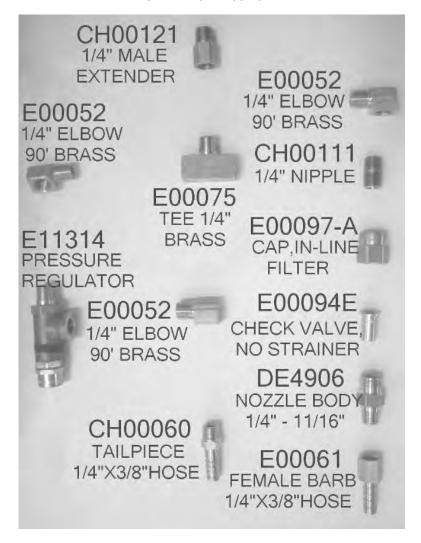


# **PARTS LIST SX2700 BASE**

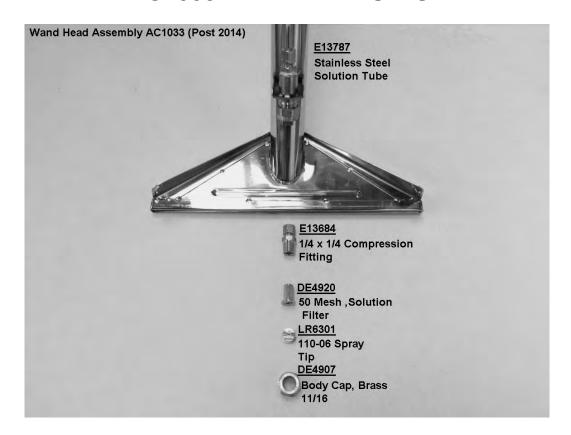
REF.	STOCK CODE	PART NO.	DESCRIPTION	QTY
1		C00297	SCREW,#8 X .25 IN, PAN HEAD	1
2		J11863	HOSE, 3 IN	1
3	TT00639	J00639	SCREW CLAMP, 1.63 - 2.43IN.	3
4	E00618	J00618	VACUUM HOSE, 2IN GREY, WIRE, 22 IN LG	1
5	JE00273	C00273	LOCK NUT 1/2-20 NYLON SS	16
6	E11178-BLK	F11178-BLK	INTERCOOLER, GALAXY, BLACK	1
7	JE00233	C00233	FLAT WASHER ¼"	26
<u>8</u> 9	E00449	E00449	GROMMET SCREW 10-32 X 0.375 EARTH	6
10	RS4924	C00284 B11150	EARTH WIRE GREEN / YELLOW 1.5MM	2
11	LA4501E	117196-00	VACUUM MOTOR 230V 5.7" 3-STAGE W/CHOKE COIL	2
12	E00657	J00657	HOSE CLAMP 2" SLDPRT	1
13	E00618	J00618	VACUUM HOSE 2" WIRE 4"	1
14	JE00261	C00261	NUT ¼ - 20 HEX	10
15	JE00254	C00254	LOCK WASHER 1/4 SPLIT	1
16	E11134	D11134	VAC PLATE	1
17	E11189	C11189	SCREW ¼ - 20 X 4 ½" HEX	5
18		C02312	LOCK WASHER ¼ INT STAR	1
19	E00285	C11516	SCREW ¼ - 20 X 4 ½" FLAT HEAD PHILLIPS	1
20	E11154	J11154	SOLUTION HOSE 3/8 X 31" WIRED	1
21		J11508	SCREW CLAMP NO.6 0.43" TO 0.875"	8
22	CHOOSE	G11904	POWER PRIME (SX2750)  3/8 BARB X ¼ MP, BRASS	1 1
23	CH00060 E00053	A00060 A00053	45 ELBOW BRASS ¼ MP X ¼ FP	1
25	E00033	A00055	PRESSURE REGULATOR (300PSI)	1
26	E00052	A00052	90 ELBOW BRASS ¼ MP X ¼ FP	3
27	200002	00580-13	HOSE ASSY 13" X 1/4" HP	1
28	E00516-3	G00516-3	PRESSURE GAUGE 0 – 600PSI (SX2750)	1
29	JE00255	C11244	WASHER, .56 X 1.5 X .05	4
30	GU00104	A00104	MALE QUICK CONNECT 1/4" BRASS	1
31	E00161	A00161	TEE BRASS ¼ FP	1
32	CH00111	A00111	1/4 NIPPLE BRASS	2
33	PC000058	C00232	FLAT WASHER ½" (JE00255)	1
34	<b>=</b>	A00154	90 ELBOW BRASS ¼ NPT X ¼ NPT	1
35	E10691	K10691	PVC PIPE ¼" X 1 ½" SCH 80	4
36 37	E00319	C02291	SCREW ¼ - 20 X 2 ½"  HEATER MOUNTING PLATE	4
38	E10379 E11165	D10379 C11165	SCREW NO.8 X 1" PAN BLACK	5
39	LITIOS	F11790-1	COVER, HEATER TUNNEL	1
40		B11779	STUB 12-3 SJTW YELLOW	1
41	RS4907	B00191	NYLON TIE 11"	6
42		C00293	SCREW NO.8 X ½" PAN BLACK SMS PHILLIPS	6
43	RS00192	B00192	CABLE TIE HOLDER	3
44	E11199	B11199	CABLE STRAIN RELIEF	1
45		H03545	COVER, SERIAL LABEL	1
46	E00565-13	H00565-5	SERIAL LABEL	1
47	E02305-1	C02305	CAP NUT ½" PUSH-ON	2
48	E00240	C00240	SHOULDER WASHER NYLON	2
49	E010313	G11767	WHEEL 10"	2
50 51	E11170 E11789-1	D11170 F11789-1	AXLE BASE	1
52	E02310	C02310	HEX BOLT ¼ -20 X 1 ¼"	8
53	E03518	G03518	CASTER WHEEL 4"	2
54	E13639-1	300010	PUMP 220PSI BY-PASS 230V	1
55	RS4906	B00177	TERMINAL LUG, FEMALE, QD, .25 X .032, 16-14 AWG	2
56	E03251	C03251	WASHER 3/16"	1
57	E00168	A00168	BRASS BUSHING 3/8M X 1/4"F	4
58		A90004	BARB, BRASS ½" X ¼" M	1
59		A00155	MALE PLUG ¼" NYLON	1
60		J11933	HOSE, ½" POLYWIRE PVC 32"	1
61	B00046-	J00632	PULSE HOSE PUMP QD 42"	2
62	RS00190	B00190	NYLON TIE 4"	8
63	F00F64 0	D13128	PUMP PLATE 500PSI (SX2750)	1
64	E02564-2	H02564-2	WARNING LABEL – ELECTRIC SHOCK	1

65		J11933	HOSE, ½" POLYWIRE PVC 30"	1
66		K11935	STRAINER IN-LINE 0.5"	1
67	E11154	J11154	SOLUTION HOSE 3/8" X 27" WIRE REINFORCED	1
68	E00618	J00618	VACUUM HOSE 2" WIRE X 7"	1
69	PC807110	E11169	GASKET VAC MOTOR	2
70		B00179-2	CLOSED END CONNECTOR 16-3	6
-	PR250		PRIME HOSE	1
-	AC2540-HP		VACUUM & SOLUTION HOSE ASSEMBLY	
	PR3005E-H		EXTENSION VACUUM & SOLUTION HOSE ASSEMBLY	
	BS5201		FALL-OUT TUBE (WASTE TANK INLET MODIFICATION)	

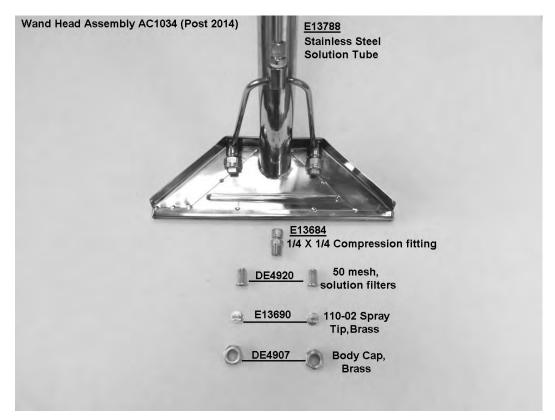
#### STEEMPRO BRASSWORK



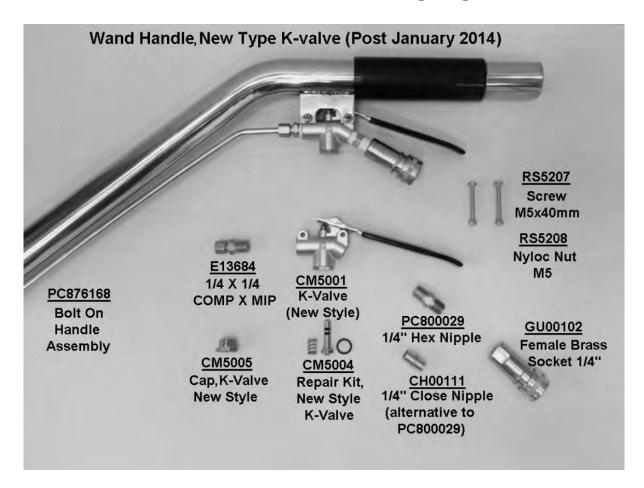
# **AC1033 WAND PARTS LIST**



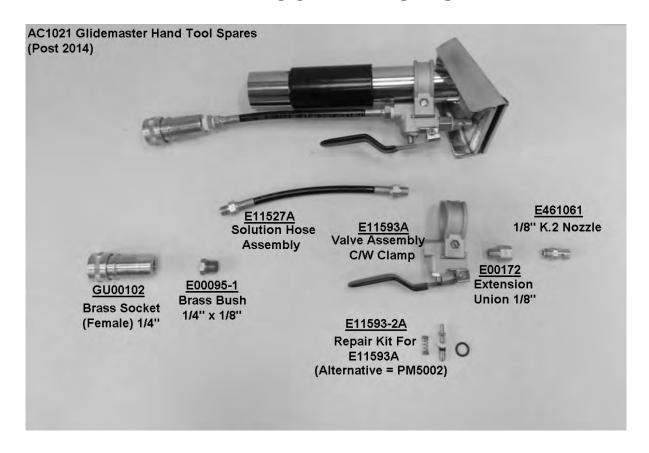
# **AC1034 WAND PARTS LIST**



# WAND HANDLE PARTS LIST

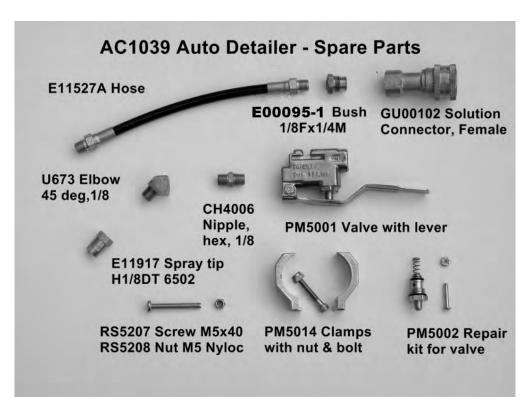


# HAND TOOL PARTS LIST



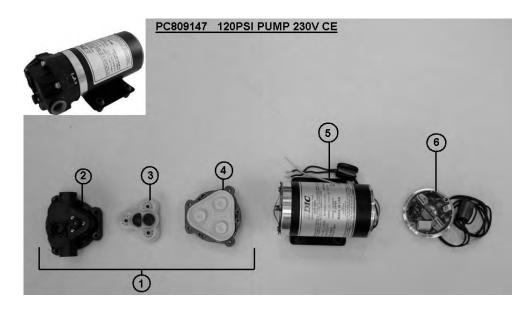






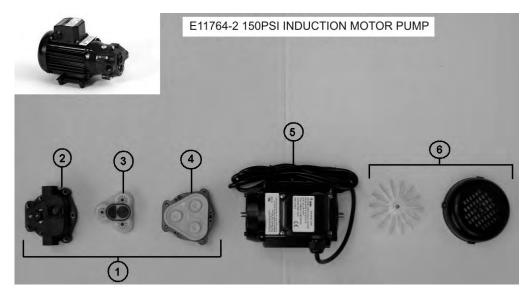
# **PUMP PARTS LIST**

# **STEEMPRO POWERFLO**



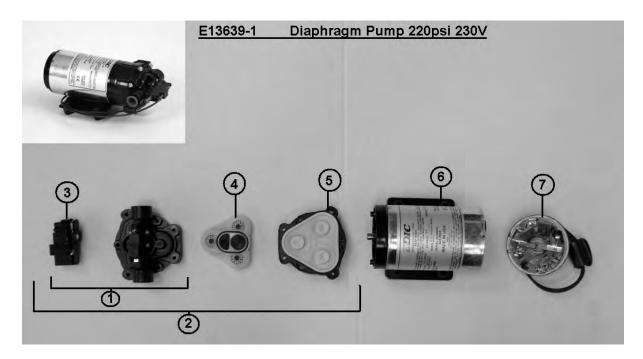
REF.	STOCK CODE	PART NO.	DESCRIPTION	QTY
1	E11162	G11162	150PSI PUMP HEAD ASSEMBLY	1
2	E11764UHA	G11764-1-UHA	UPPER HOUSING(FOR E11162)	1
3	E11764VHA	G11764-1-VHA	VALVE REPAIR KIT	1
4	E11764LHA	G11764-1-LHA	DIAPHRAGM AND DRIVE BEARING ASSY	1
5			MOTOR 230V AC	1
6	E11764EBK	G11764-1-EBK	CARBON BRUSH KIT	1

# **STEEMPRO POWERMAX**



REF	STOCK CODE	PART NO	DESCRIPTION	QTY
1	E11162	G11162	150PSI PUMP HEAD	1
2	E11764UHA	G11764-1-UHA	UPPER HOUSING(FOR E11162)	1
3	E11764VHA	G11764-1-VHA	VALVE REPAIR KIT	1
4	E11764LHA	G11764-1-LHA	DIAPHRAGM AND DRIVE BEARING ASSY	1
5	SH5212	SF07-030	MOTOR 230VAC, INDUCTION	1
6	SH5213	SF12-0002	FAN / END COVER FOR INDUCTION MOTOR	1

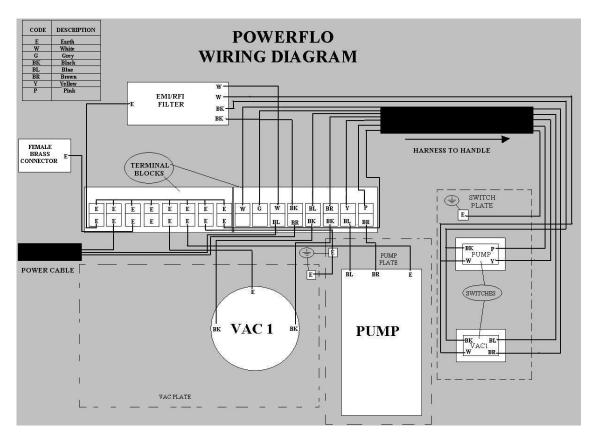
# **STEEMPRO POWERPLUS**

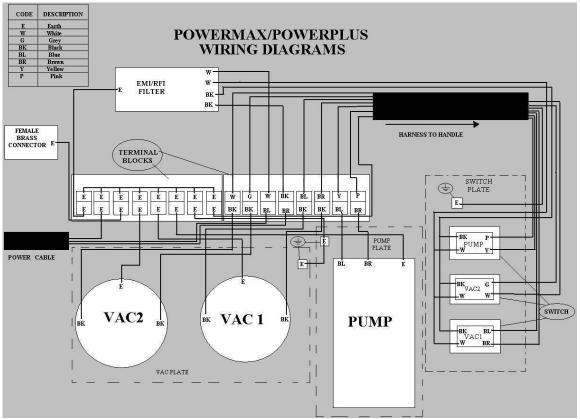


REF	STOCK CODE	PART NO	DESCRIPTION	QTY
1	E136391UHA	E13639-1-UHA	UPPER HOUSING , PRESSURE SWITCH INCLUDED	1
2	E136391PHK	G13639-1-PHK	PUMP HEAD KIT FOR E13639-1	1
3	E136391PSW	G13639-1-PSW	PRESSURE SWITCH KIT FOR E13639-1	1
4	E136391VHA	G13639-1-VHA	VALVE HOUSING ASSEMBLY FOR E13639-1	1
5	E136391LHA	E13639-1-LHA	DIAPHRAGM AND DRIVE BEARING	1
6			230V AC MOTOR	1
7	E136391REA	G13639-1-REA	REAR END BELL ASSEMBLY FOR E13639-1	1

# **WIRING DIAGRAMS**

MODELS SX2000, SX2100, SX2700 220 - 240V 50Hz





# **DECLARATION OF CONFORMITY**

We:
Prochem Europe Ltd.,
Oakcroft Road,
Chessington,
Surrey, KT9 1RH
UK
(Importer / EC Responsible Person)

E.D.I.C 1753, Blake Avenue, Los Angeles, California, 90031-1006 USA (Manufacturer)

Declare that the product(s):

Type(s): STEEMPRO 2000

Model(s): SX2000 / SX2100 / SX2700

Description: CARPET CLEANING MACHINES 220 - 240V 50 Hz

Have been manufactured in conformity with the following standards and specifications:

BS EN 60335-1 BS EN 60335-2-68 EN 55014-1 EN 55014-2 BS EN 61000-3-2 BS EN 61000-3-3 BS EN 50366

And comply with the requirements of (as amended):

2006/95/EC Low Voltage (LVD) Directive

2004/108/EC Electromagnetic Compatibility (EMC) Directive

A Technical file is held by Prochem Europe Ltd.

Certificate of compliance and test reports have been issued by:

SGS United Kingdom Ltd. Unit 10, Bowburn South Industrial Estate Bowburn, Durham DH6 5AD

Signed

(For and on behalf of the Importer / EC Responsible Person)

Name: J Hattersley

Position: Equipment Product Manager

Place of Issue: Chessington UK

Date of Issue: 1/9/2011