



Electronic Service Manuals

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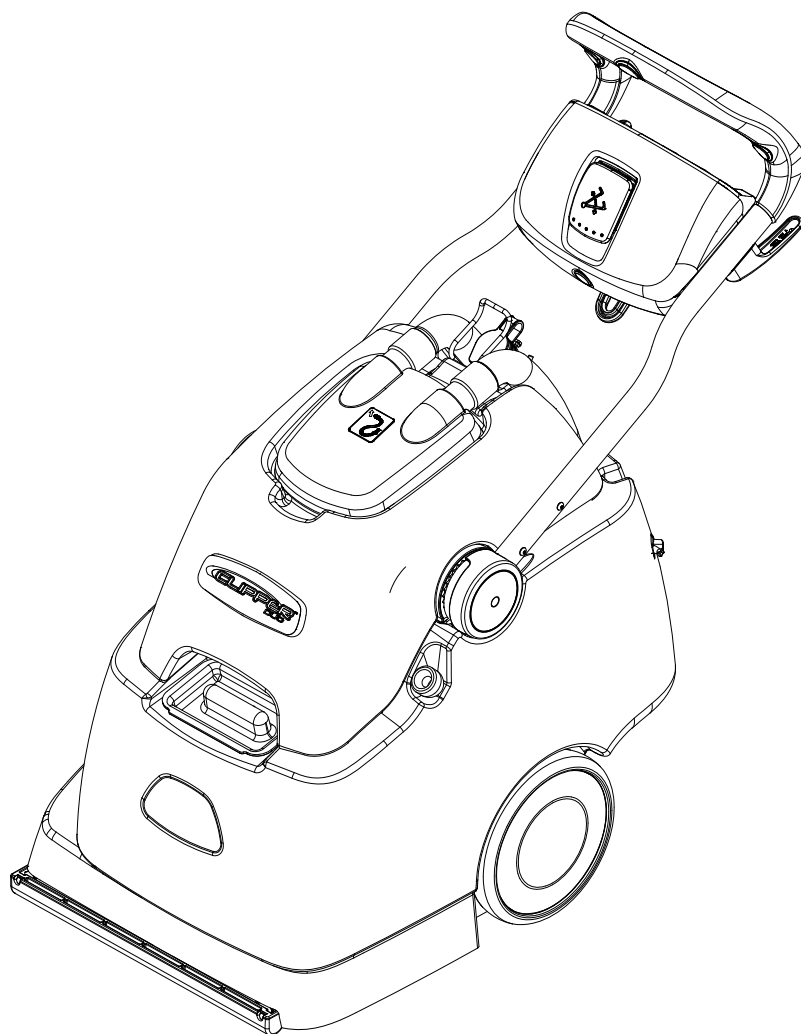
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Carpet Extractor

Operating Instructions (ENG)

MODELS: 10080480
CLPDU



Read these instructions before using the machine.



Machine Data Label

Model:	_____
Date of Purchase:	_____
Serial Number:	_____
Dealer:	_____
Address:	_____
Phone Number:	_____
Sales Representative:	_____

Overview

This carpet extractor is an electrical powered, portable carpet extractor intended for commercial use. The appliance sprays a cleaning solution onto the carpet agitates the wet carpet, and then extracts the soiled solution back into the unit's recovery tank. The appliance is fitted with and a hand tool for cleaning upholstery and stairs.

Warranty Registration

Thank you for purchasing a Windsor product. Warranty registration is quick and easy. Your registration will allow us to serve you better over the lifetime of the product.

To register your product go to :
www.windsorind.com/WarrantyRegistration.aspx

For customer assistance:
1-800-444-7654



Machine Data Label 2
 Overview 2
Table of Contents 3
How To Use This Manual 4

Safety

IMPORTANT SAFETY INSTRUCTIONS 5
 HAZARD INTENSITY LEVEL 7
 GROUNDING INSTRUCTIONS 9
 SAFETY LABEL LOCATION 10

Operations

Technical Specifications 11
 How This Machine Works 13
 Components 14
 Controls 15
 Filling The Solution Tank 16
 Pre Run Setup 17
 Operating The Machine 19
 Using The Hand Tool 22

Maintenance

Service Schedule 23
 Components 24
 24
 Periodic Maintenance 25
 Circuit Protection 26
 Scrub Deck 27
 Scrub Brush Replacement 28
 Vacuum Motor Carbon Brushes 29
 Troubleshooting 30

Parts

Brush Deck 32
 Brush Deck Motor 34
 Brush Deck Mounting 36
 Control Panel 38
 Decal 40
 Hand Tool 42
 Handle 44
 Handle Bracket 46
 Handle Mounting 48
 Handle Release Lever 50
 Recovery Tank 52
 Solution - From Serial Number (*6) 54
 Solution - Prior to Serial Number (*6) 56
 Solution - From Serial Number (*6) 58
 Solution - Prior to Serial number (*6) 60
 Solution Tank 62
 Vacuum Shoe 64
 Vacuum Shoe Mounting 66
 Vacuum 68
 Wheel & Axle 70
 Wiring Diagram 72
 Suggested Spare Parts 74
 Serial Numbers 75

How To Use This Manual

This manual contains the following sections:

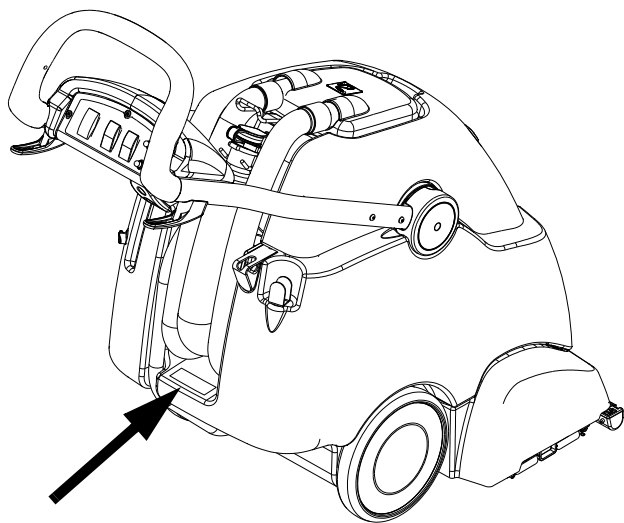
- HOW TO USE THIS MANUAL
- SAFETY
- OPERATIONS
- MAINTENANCE
- PARTS LIST

The HOW TO USE THIS MANUAL section will tell you how to find important information for ordering correct repair parts.

Parts may be ordered from authorized dealers. When placing an order for parts, the machine model and machine serial number are important. Refer to the MACHINE DATA box which is filled out during the installation of your machine. The MACHINE DATA box is located on the inside of the front cover of this manual.

Model:	_____
Date of Purchase:	_____
Serial Number:	_____
Dealer:	_____
Address:	_____
Phone Number:	_____
Sales Representative:	_____

The model and serial number of your machine are located where shown.



The SAFETY section contains important information regarding hazardous or unsafe practices of the machine. Levels of hazards are identified that could result in product damage, personal injury, or severe injury resulting in death.

The OPERATIONS section is to familiarize the operator with the operation and function of the machine.

The MAINTENANCE section contains preventive maintenance to keep the machine and its components in good working condition. They are listed in this general order:

- Periodic
- Daily/Regular
- Troubleshooting

The PARTS LIST section contains assembled parts illustrations and corresponding parts list. The parts lists include a number of columns of information:

- REF - column refers to the reference number on the parts illustration.
- PART NO. - column lists the part number for the part.
- PRV NO. - Reference number.
- QTY - column lists the quantity of the part used in that area of the machine.
- DESCRIPTION - column is a brief description of the part.
- SERIAL NO. FROM - If this column has an (*) and a Reference number, see the SERIAL NUMBERS page in the back of your manual. If column has two asterisk (**), call manufacturer for serial number. The serial number indicates the first machine the part number is applicable to. The main illustration shows the most current design of the machine. When a boxed illustration is shown, it displays the older design.
- NOTES - column for information not noted by the other columns.

NOTE: If a service or option kit is installed on your machine, be sure to keep the KIT INSTRUCTIONS which came with the kit. It contains replacement parts numbers needed for ordering future parts.

NOTE: The manual part number is located on the lower left corner of the front cover.

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precaution must always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.

This machine is for commercial use.

 WARNING: To reduce the risk of fire, electric shock, or injury:

Connect to a properly grounded outlet. See Grounding Instructions.

Do not leave the machine unattended. Unplug machine from outlet when not in use and before maintenance or service.

Use only indoors. Do not use outdoors or expose to rain.

Do not allow machine to be used as a toy. Close attention is necessary when used by or near children.

Use only as described in this manual. Use only manufacturer's recommended components and attachments.

Do not use damaged electrical cord or plug. Follow all instructions in this manual concerning grounding the machine. If the machine is not working properly, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.

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

Do not run machine over cord. Keep cord away from heated surfaces.

Do not unplug machine by pulling on cord. To unplug, grasp the electrical plug, not the electrical cord.

Do not handle the electrical plug or machine with wet hands.

Do not operate the machine with any openings blocked. Keep openings free of debris that may reduce airflow.

This machine is intended for cleaning carpet only.

Do not vacuum anything that is burning or smoking, such as cigarettes, matches, or hot ashes.

This machine is not suitable for picking up health endangering dust.

Turn off all controls before unplugging.

Machine can cause a fire when operating near flammable vapors or materials. Do not operate this machine near flammable fluids, dust or vapors.

This machine is suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices for more than normal housekeeping purposes.

Maintenance and repairs must be done by qualified personnel.

If foam or liquid comes out of machine, switch off immediately.

SAVE THESE INSTRUCTIONS

IMPORTANTES MESURES DE SÉCURITÉ

L'utilisation d'un appareil électrique demande certaines précautions:

LIRE TOUTES LES INSTRUCTIONS AVANT DE FAIRE FONCTIONNER (CET APPAREIL).

⚠ AVERTISSEMENT: Pour réduire les risques d'incendie, de choc électrique ou de blessure:

Cet appareil ne doit être connecté qu'à des prises ayant une sortie de terre.

Ne pas laisser l'appareil sans surveillance lorsqu'il est branché. Débrancher lorsque l'appareil n'est pas utilisé et avant l'entretien.

Pour réduire les risques de choc électrique, ne pas utiliser à l'extérieur et ne pas aspirer de matières humides.

Ne pas permettre aux enfants de jouer avec l'appareil. Une attention particulière est nécessaire lorsque l'appareil est utilisé par des enfants ou à proximité de ces derniers.

N'utiliser que conformément à cette notice avec les accessoires recommandés par le fabricant.

Ne pas utiliser si le cordon ou la fiche est endommagé. Retourner l'appareil à un atelier de réparation s'il ne fonctionne pas bien, s'il est tombé ou s'il a été endommagé, oublié à l'extérieur ou immergé.

Ne pas tirer, soulever ou traîner l'appareil par le cordon. Ne pas utiliser le cordon comme une poignée, le coincer dans l'embrasure d'une porte ou l'appuyer contre des arêtes vives ou des coins. Ne pas faire rouler l'appareil sur le cordon.

Garder le cordon à l'écart des surfaces chaudes.

Ne pas débrancher en tirant sur le cordon. Tirer plutôt la fiche.

Ne pas toucher la fiche ou l'appareil lorsque vos mains sont humides.

N'insérer aucun objet dans les ouvertures. Ne pas utiliser l'appareil lorsqu'une ouverture est bloquée. S'assurer que de la poussière, de la peluche, des cheveux ou d'autres matières ne réduisent pas le débit d'air.

Cette machine est destinée pour nettoyer tapis seulement.

Ne pas aspirer de matières en combustion ou qui dégagent de la fumée, comme des cigarettes, des allumettes ou des cendres chaudes.

Cette machine n'est pas adaptée au ramassage de poussières dangereuses.

Mettre toutes les commandes à la position ARRÊT avant de débrancher l'appareil.

Ne pas aspirer des liquides inflammables ou combustibles, comme de l'essence, et ne pas faire fonctionner dans des endroits où peuvent se trouver de tels liquides.

Cette machine est destinée à un usage commercial. Elle est recommandée davantage pour les domaines hôtelier, scolaire, hospitalier, industriel ou pour les bureaux, les chaînes de magasin, que pour un usage domestique normal.

L'entretien et les réparations de la machine doivent être effectués par un personnel qualifié.

Si de la mousse ou du liquide sort de la machine, la mettre hors tension immédiatement.

CONSERVER CES INSTRUCTIONS

The following symbols are used throughout this guide as indicated in their descriptions:

HAZARD INTENSITY LEVEL

There are three levels of hazard intensity identified by signal words -**WARNING** and **CAUTION** and **FOR SAFETY**. The level of hazard intensity is determined by the following definitions:

WARNING:

WARNING - Hazards or unsafe practices which COULD result in severe personal injury or death.

CAUTION:

CAUTION - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

FOR SAFETY: To Identify actions which must be followed for safe operation of equipment.

Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition. Following is information that signals some potentially dangerous conditions to the operator or the equipment. Read this information carefully. Know when these conditions can exist. Locate all safety devices on the machine. Please take the necessary steps to train the machine operating personnel.

FOR SAFETY:

DO NOT OPERATE MACHINE:

Unless Trained and Authorized.

Unless Operation Guide is Read and understood.

In Flammable or Explosive areas.

In areas with possible falling objects

WHEN SERVICING MACHINE:

Avoid moving parts. Do not wear loose clothing; jackets, shirts, or sleeves when working on the machine. Use Windsor approved replacement parts.

Les symboles ci-dessous sont utilisés à travers ce manuel comme illustré dans leurs descriptions :

DEGRÉS DE RISQUES EN CAS DE DANGER

Il existe trois degrés de risques identifiés par les termes signalétiques -**AVERTISSEMENT** et **ATTENTION** et **POUR VOTRE SÉCURITÉ**. Le degré de risque est défini de la manière suivante :

⚠ AVERTISSEMENT:

AVERTISSEMENT - Dangers ou méthodes dangereuses qui **POURRAIENT** provoquer de graves blessures ou entraîner la mort.

⚠ ATTENTION:

ATTENTION - Dangers ou méthodes dangereuses qui pourraient provoquer des blessures légères ou une détérioration du produit ou des biens immobiliers.

POUR VOTRE SÉCURITÉ : ce signe permet d'identifier les mesures de précaution à prendre pour assurer un bon fonctionnement du matériel.

Rendre compte immédiatement d'une défaillance ou d'une détérioration de la machine. Ne pas utiliser la machine si celle-ci ne fonctionne pas correctement. Lire soigneusement les informations ci-dessous signalant certains dangers potentiels pour l'opérateur de la machine. L'opérateur doit être absolument au courant de ces dangers potentiels. Localiser tous les dispositifs de sécurité sur la machine. Il est conseillé de prendre les mesures nécessaires pour former le personnel opérateur.

POUR VOTRE SÉCURITÉ :

NE PAS MANOEUVRER LA MACHINE :

Lorsqu'on n'est pas expérimenté ou qualifié.

Lorsque le guide d'utilisation n'est pas été lu ou compris.

Dans des zones inflammables ou explosives.

Dans des zones où des objets peuvent tomber.

LORS DE L'ENTRETIEN DE LA MACHINE :

Éviter les parties amovibles. Ne pas porter de vêtements amples, tels que des vestes, des chemises ou des vêtements avec manches lors de l'utilisation de la machine. Utiliser les pièces détachées Windsor homologuées.

GROUNDING INSTRUCTIONS

THIS PRODUCT IS FOR COMMERCIAL USE ONLY.

ELECTRICAL:

In the USA this machine operates on a standard 15 amp 120V, 60 hz, A.C. power circuit. The amp, hertz, and voltage are listed on the data label found on each machine. Using voltages above or below those indicated on the data label will cause serious damage to the motors.

EXTENSION CORDS:

If an extension cord is used, the wire size must be at least one size larger than the power cord on the machine, and must be limited to 50 feet (15.5m) in length.

GROUNDING INSTRUCTIONS:

This appliance must be grounded. If it should malfunction or break down, 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.

120 VOLT MODELS:

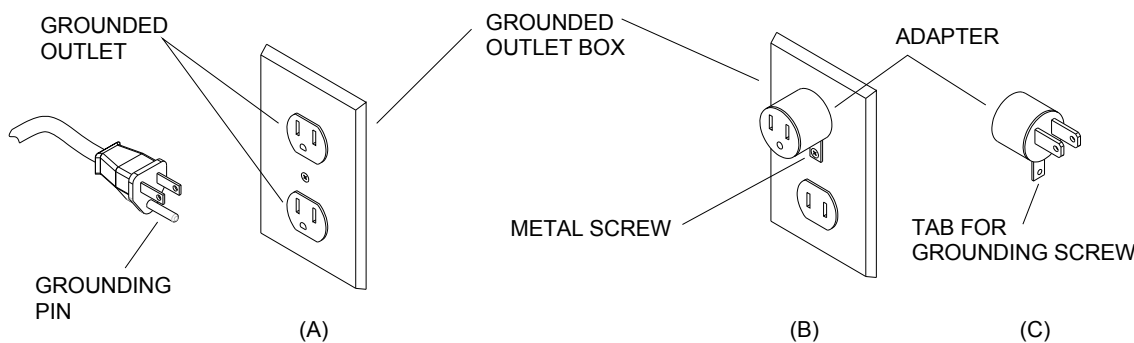
This appliance is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug in "Fig. A". A temporary adaptor that looks like the adaptor in "Fig. C" may be used to connect this plug to a 2-pole receptacle as shown in "Fig. B", if a properly grounded outlet is not available. The temporary adaptor should be used only until a properly grounded outlet (Fig. A) can be installed by a qualified electrician. The green colored rigid ear, lug, or wire extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by a metal screw.

⚠ 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.

⚠ AVERTISSEMENT:

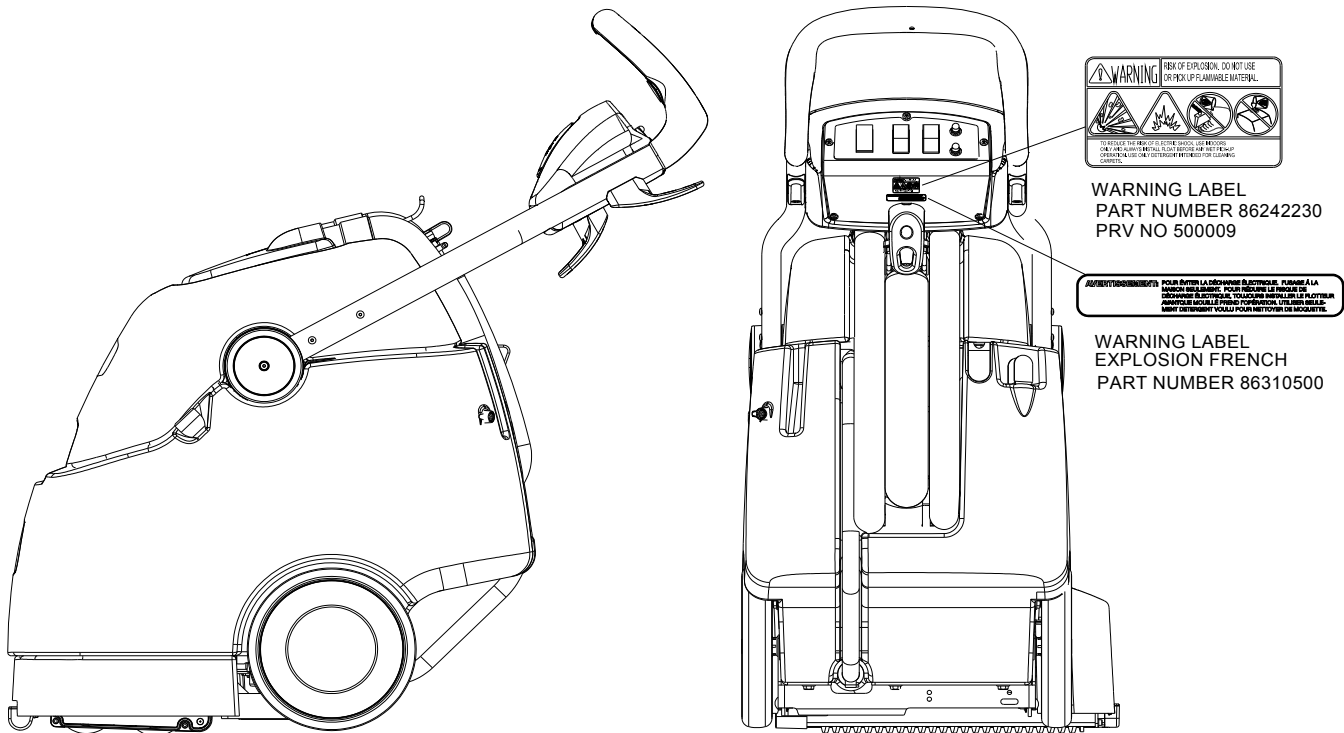
Le raccordement incorrect du conducteur de terre d'équipement peut entraîner des risques d'électrocution. Vérifiez auprès d'un électricien qualifié ou d'un responsable de l'entretien si vous avez quelque doute que ce soit quant au raccordement à la terre de votre prise murale. Ne modifiez pas la fiche fournie avec l'appareil : si elle ne correspond pas à la prise murale, faites installer une prise adéquate par un électricien qualifié.



SAFETY LABEL LOCATION

NOTE: These drawings indicate the location of safety labels on the machine. If at any time the labels become illegible, promptly replace them.

Les ÉTIQUETTES D'AVERTISSEMENT suivantes se trouvent sur votre unité de nettoyage. Ces étiquettes signalent les avertissements et mises en garde importantes qui doivent être suivis en tout temps. Le non respect des avertissements et mises en garde pourrait entraîner des dommages matériels, des blessures graves ou même la mort. Suivez attentivement ces instructions ! NE PAS retirer ces étiquettes. REMARQUE : Si, à tout moment, les étiquettes deviennent illisibles, remplacez-les rapidement.

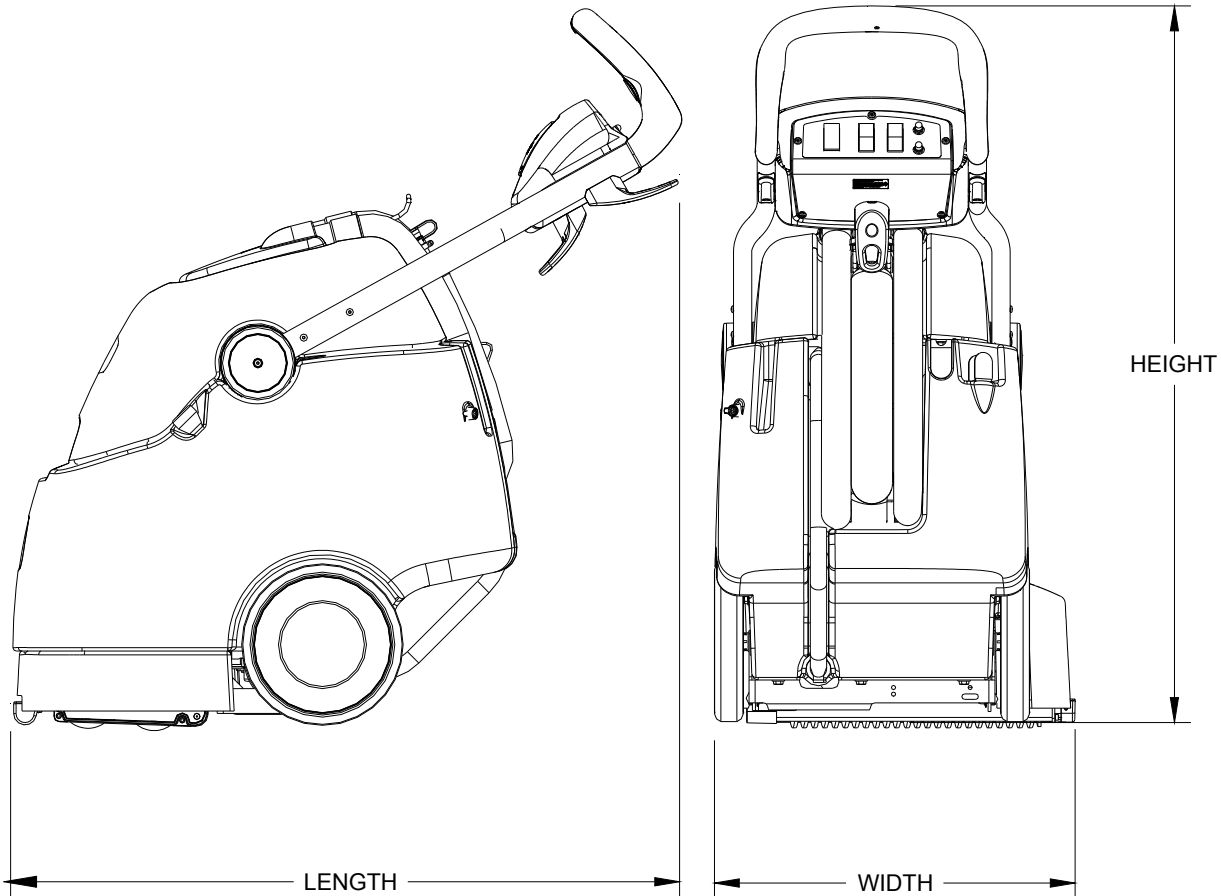


Technical Specifications

ITEM	DIMENSION/CAPACITY
Construction	Steel chassis with rotationally molded polyethylene tanks
Vacuum Motor	Three stage, bypass, 1.5 hp (1,119 watts), 100 cfm (2.8m ³ /min), 120" (3050 mm) waterlift
Solution Pump	100 psi (7 bar) - Restorative 50 psi (3.5 bar) - Interim
Brush Motor	1/2 hp (604 watts) AC with circuit breaker protection
Brushes	2 x 16" (406 mm), ABS core, Perform Alert™ bristle spiral pattern
Cleaning Path	16" (40.6 cm)
Flow Rate	Interim - 0.09 gpm (0.37 lpm) Restorative - 1.0 gpm (37.8 lpm)
Solution Spray	Interim - One quick-disconnect jet Restorative - One quick-disconnect jet
Solution Tanks	10 gallons (37.8 l)
Recovery Tank	10 gallons (37.8 l)
Vacuum Shoe	18" (458 mm) wide, cast aluminum
Wheels	10" (254 mm) non-marking rubber
Power Cable	50' (15 m) detachable
Weight	166 lbs (75.3 kg) with cord

Operations

ITEM	MEASURE
Height	43 inches (1092 mm)
Length	40.5 inches (1029 mm)
Width	22 inches (559 mm)
Width of scrub path	16 inches (406 mm)



Special Notes:

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with appliance.

The sound pressure level at the operator's ear was measured to be 73.7 dBA. This was a nearfield, broad-band measurement taken in a typical industrial environment on a tile floor. This appliance contains no possible source of impact noise. The instantaneous sound pressure level is below 63 Pa.

The weighted root mean square acceleration at the operator's arms was measured to be below 2.5m/s^2 . This was a tri-axial, third-octave-band measurement made during normal operation on a composite tile floor. The measurement and related calculations were made in accordance with ISO 5349-1.

How This Machine Works

This carpet extractor is an electrical powered, portable carpet extractor intended for commercial use. The appliance sprays a cleaning solution onto the carpet agitates the wet carpet, and then extracts the soiled solution back into the unit's recovery tank. The appliance is fitted with and a hand tool for cleaning upholstery and stairs.

The machine is designed to maintain your carpet using the Encapsulating Interim Carpet Cleaning Process. By using the Interim Carpet Maintainer in conjunction with Windsor Red Carpet Encapsulating Interim Cleaning (W450-4) or Encapsulating Interim Cleaning with Carpet Protection (W455-4) chemical solution, you can perform a regular light cleaning and grooming of your carpet very quickly, and have the carpet dry and ready for traffic within 30 minutes.

The machine is also designed to restore your carpet using carpet extraction chemicals. The machine is designed to apply cleaning solution onto carpeted floor, scrub the carpet with two counter-rotating brushes, and then vacuum the soiled water back into the recovery tank.

The machine's primary systems are the solution system, scrub system, recovery system and operator control system.

The function of the solution system is to store mixed solution and deliver solution to the appropriate spray jet. The solution system consists of the solution tank, strainer, extraction pump and interim pump, solenoid valve, spray jets, accessory hand tool, and controls. The solution tank stores solution until it is delivered through the strainer to the appropriate pump. The solenoid valve allows flow from the extraction pump to the extraction nozzle or stops flow at the extraction nozzle so that the accessory hand tool can be used. The interim pump provides flow directly to the interim nozzle. The strainer protects the pump from debris. The solution pumps control the cleaning solution flow.

The function of the scrub system is to scrub the carpet, mix the cleaning solution with the soil and lift and groom the carpet pile. The scrub system consists of two cylindrical brushes, motor, and controls. The brushes scrub the carpet as the motor drives the brushes. The counter-rotating action of the brushes grooms the carpet pile.

The function of the recovery system is to vacuum the soiled water back into the recovery tank. The recovery system consists of the vacuum shoe, vacuum motor, float ball filter, recovery tank and controls. The vacuum shoe extracts the dirty solution from the carpet as the machine moves forward. The vacuum motor provides suction to draw the dirty solution off the floor and into the recovery tank. The float ball filter protects the vacuum fan from debris and foam. The recovery tank stores the dirty solution.

The function of the operator control system is to allow the operator to select the desired function to perform.

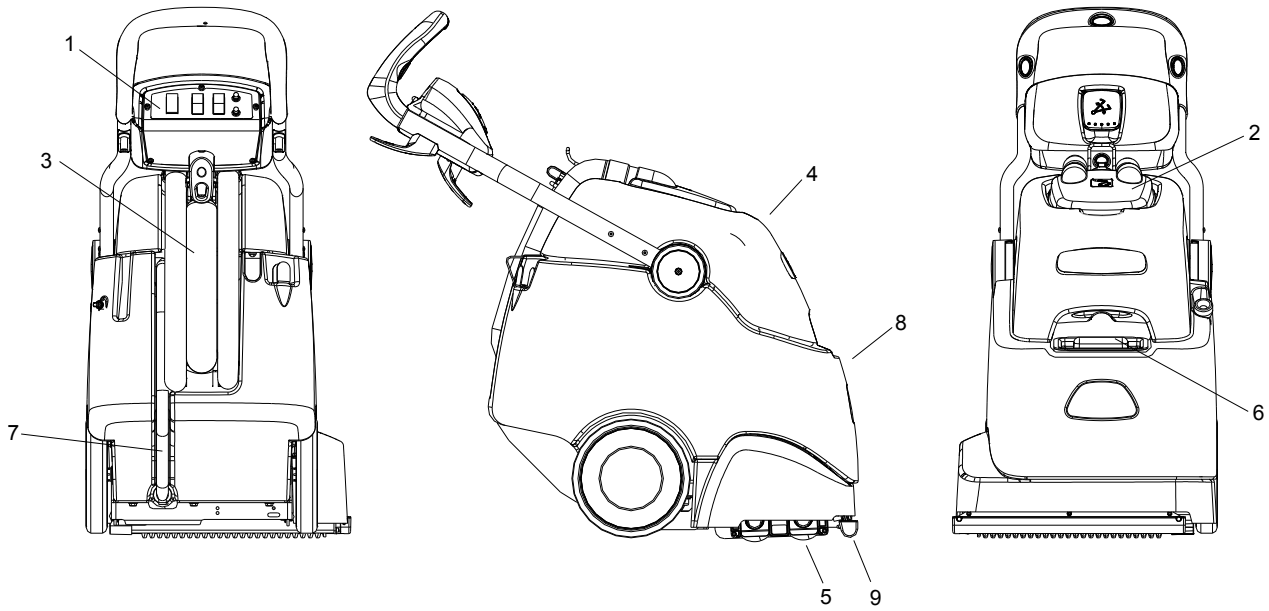
CAUTION:

This appliance is not suitable for picking up hazardous dust.

ATTENTION:

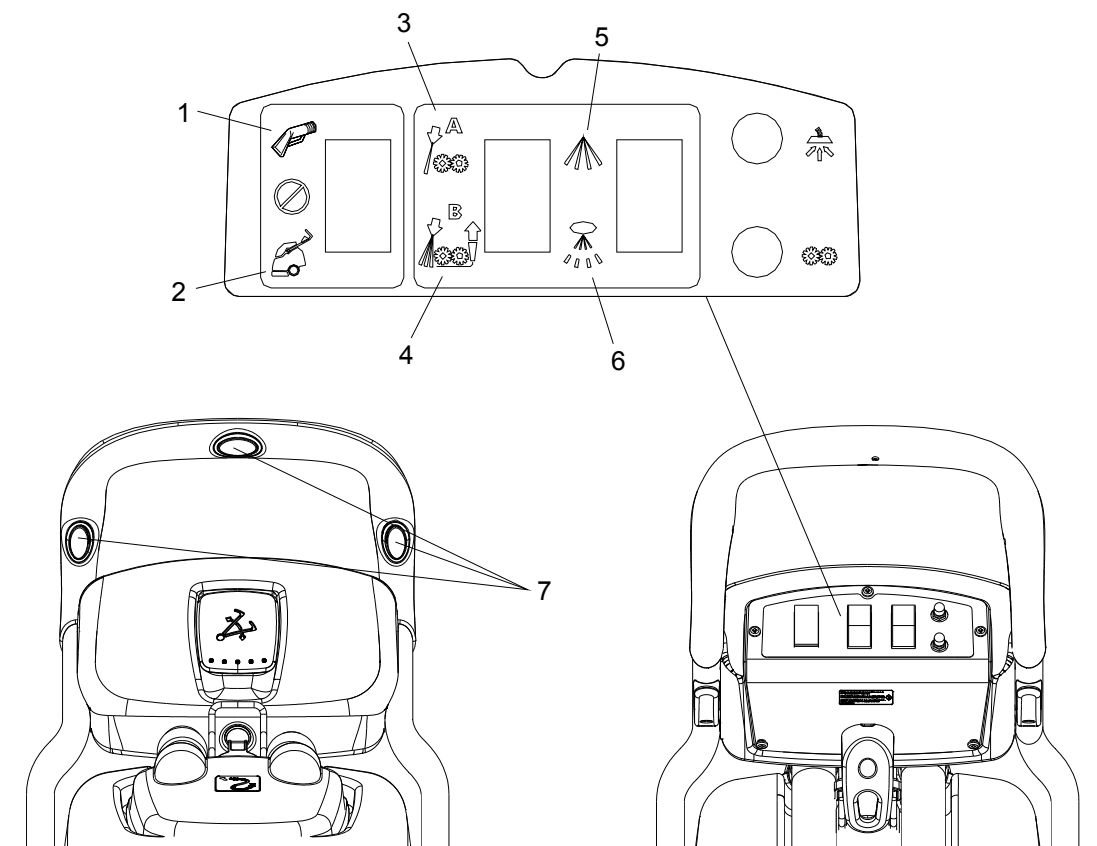
Cet appareil n'est pas conçu pour aspirer des poussières dangereuses.

Components



- | | |
|------------------------|------------------------|
| 1. Control Panel | 6. Solution Fill Cover |
| 2. Recovery Dome | 7. Solution Drain Hose |
| 3. Recovery Drain Hose | 8. Solution Tank |
| 4. Recovery Tank | 9. Vacuum Shoe |
| 5. Scrub Deck | |

Controls



- 1. Hand Tool Switch
- 2. Main Switch
- 3. Light Cleaning
- 4. Deep Cleaning

- 5. Continuous Spray
- 6. Intermittent Spray
- 7. Intermittent Spray Buttons

Operations

Filling The Solution Tank

**Do not put defoamer, solvents, spotter or prespray chemicals in the solution tank.
Do not allow water to spill into vacuum motor inlet.
Dry spills from top of solution tank.**

Use only the suitable chemicals listed below. Using incompatible chemicals will damage the machine. Damages of this type are not covered under warranty. Carefully read ingredients on manufacturer's label before using any product in this machine.

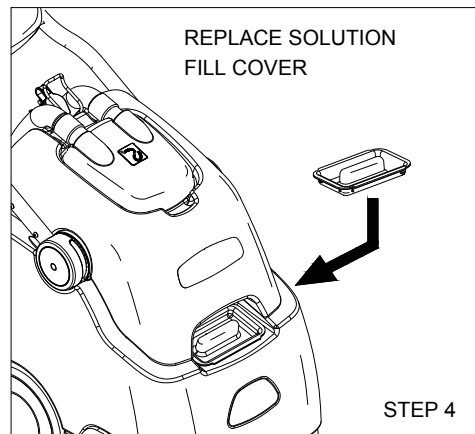
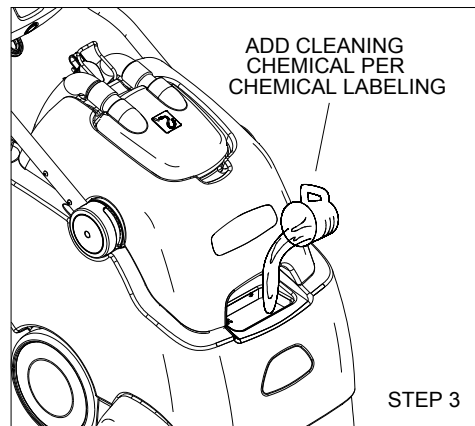
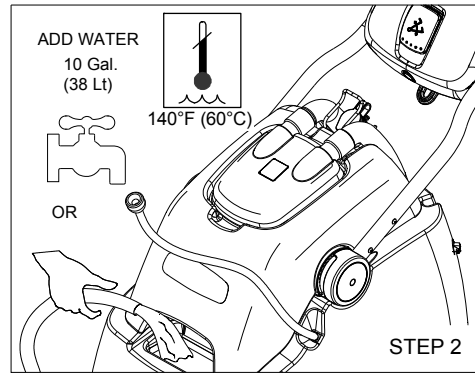
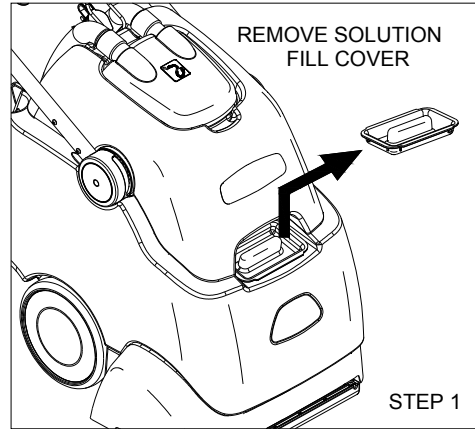
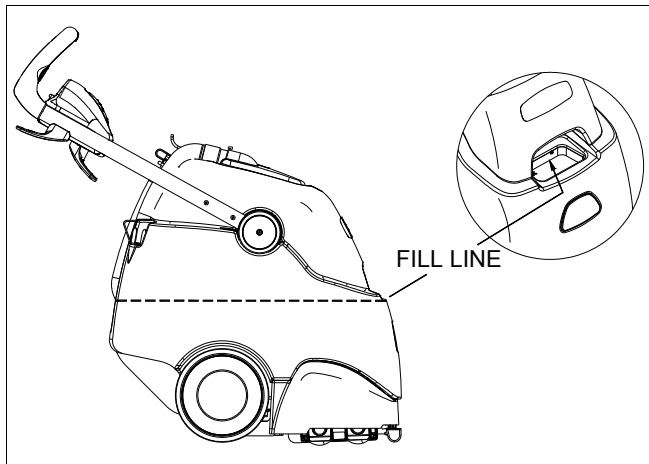
CHEMICALS

Suitable Chemicals

Alkalis
Detergents
Hydroxides
Soaps
Vinegar

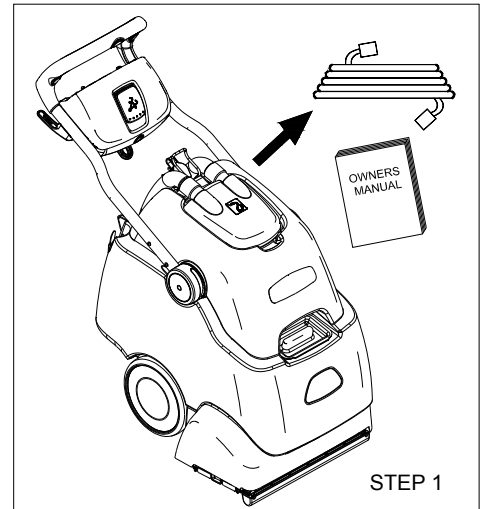
Non-Compatible Chemicals

Aldehydes
Aromatic Hydrocarbons
SP Butyls
Carbon Tetrachloride Clorox*
Chlorinated Bleaches
Chlorinated Hydrocarbons
Lysol*
Methyl Ethel Ketone (MEK)
Perchlorethylene (perc)
Phenolics
Trichlorethylene
D-Limonene

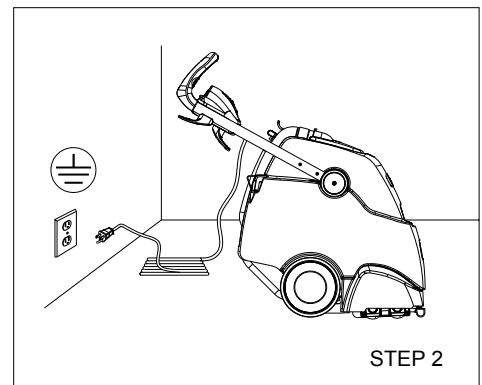


Pre Run Setup

Remove electrical cord and literature from recovery tank. Fill solution tank (see filling instructions).



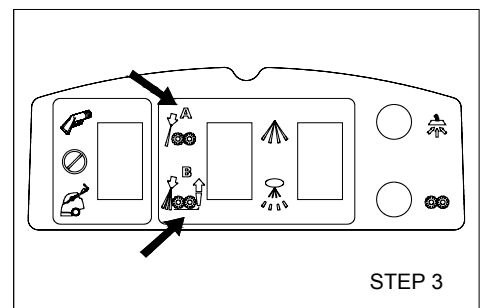
Plug cord into grounded outlet. *NOTE: Be sure dome is seated on recovery tank, and float shut-off is installed correctly.*



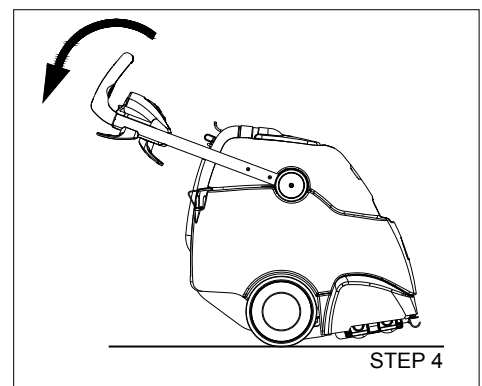
Switch the cleaning mode switch to the desired process.

A for the encapsulating Interim Carpet Cleaning Process.

B for Deep Extraction.

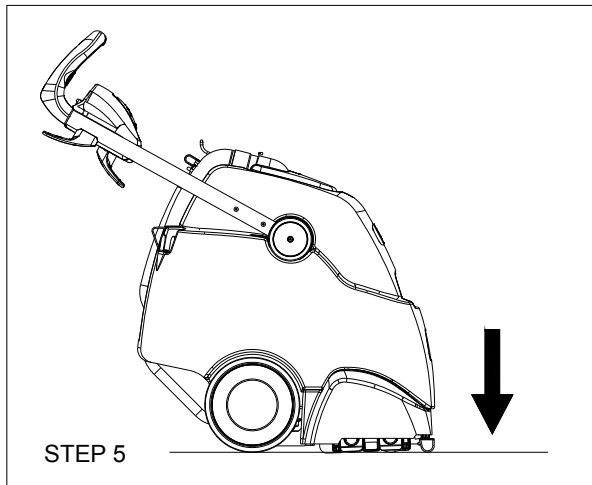


Adjust handle to comfortable operating position. Tip machine back by main handle to move to starting point.

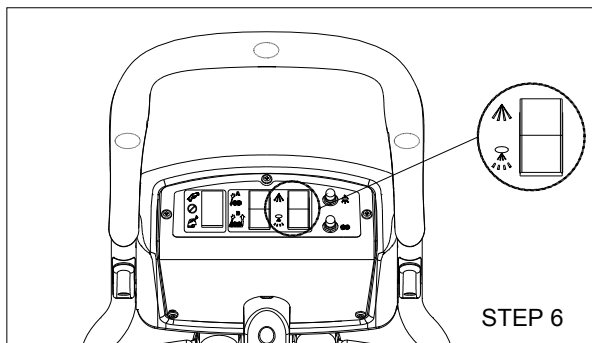


Operations

Pre Run Setup



Lower machine to floor.



Select continuous setting to start solution spray or select intermittent setting to enable use of trigger switches to start solution spray.

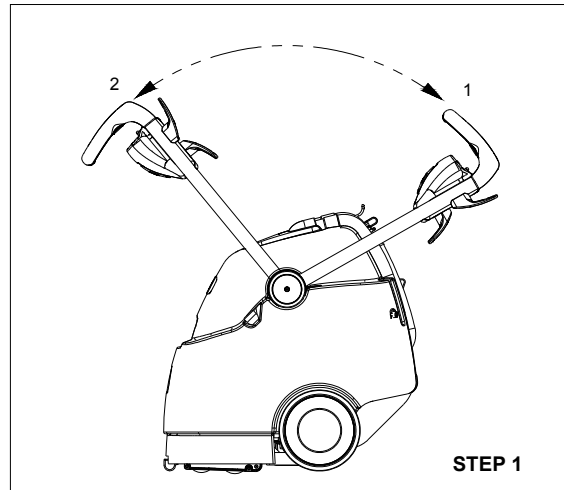
The intermittent setting requires the operator to hold any one of the three trigger switches in the "on" position with the fingers, and is typically used in small areas where short cleaning passes are made.

The continuous setting allows the operator to set the switch in the "on" position with one touch, and is typically used in large areas where long cleaning passes are made.

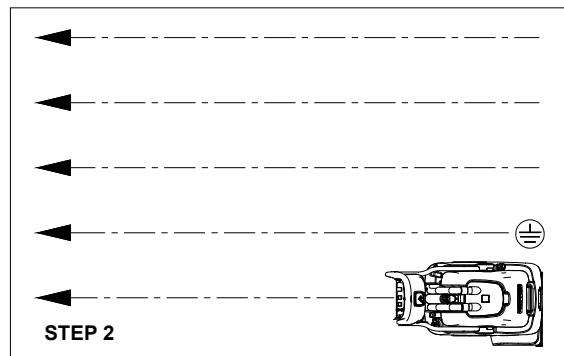
Place main switch in machine cleaning mode to start cleaning process.

Operating The Machine

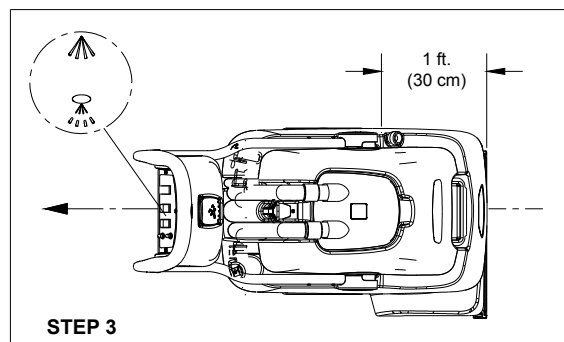
1. This machine can be operated in either direction. For smaller areas operate the machine by pulling rearward.
2. For larger unobstructed areas, flip the handle and use the machine's brush assisted propelling motion.



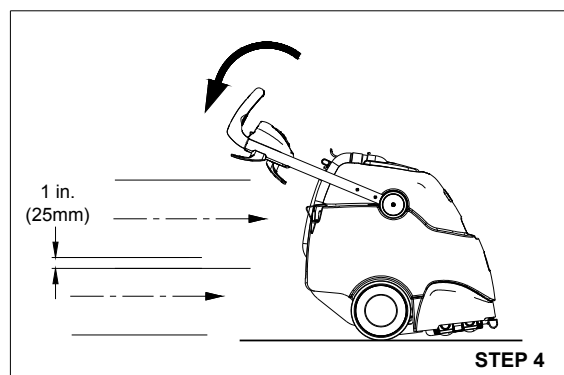
Start at wall closest to power outlet. For small areas, pull straight back without pushing down on handle.



Release intermittent trigger switches or turn off continuous setting on solution switch approximately 1 foot before ending cleaning pass.

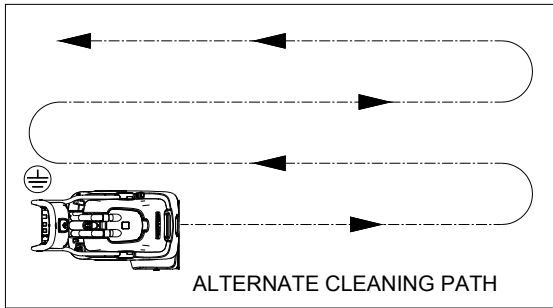


Push down on handle to raise vacuum shoe and brush before moving to the next cleaning pass. Overlap brush contact area approximately 1 inch.

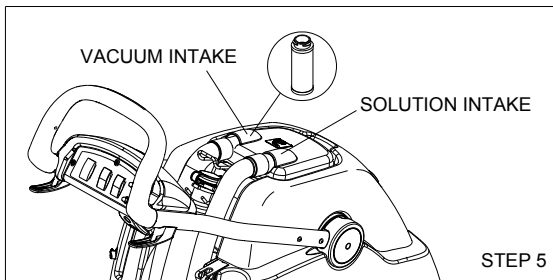


Operations

Operating The Machine

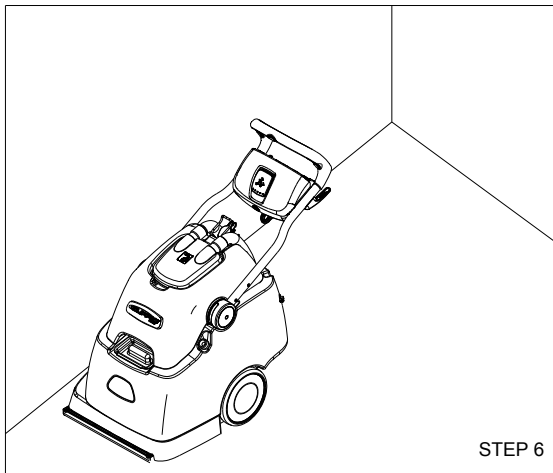


Start at wall closest to power outlet. For large areas flip handle and operate machine in parallel passes, overlapping brush path. Clean perimeter last.

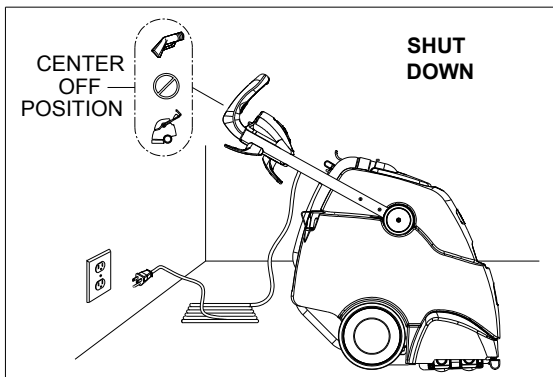


During operation, observe the following: This machine is equipped with clear dome to facilitate operator viewing of dirty solution and vacuum air flow.

During operation, observe the vacuum intake. Large amounts of water or foam entering the vacuum system can damage the vacuum motor. If you notice either condition, shut down the machine immediately. Empty recovery tank and/or add defoamer to recovery tank.

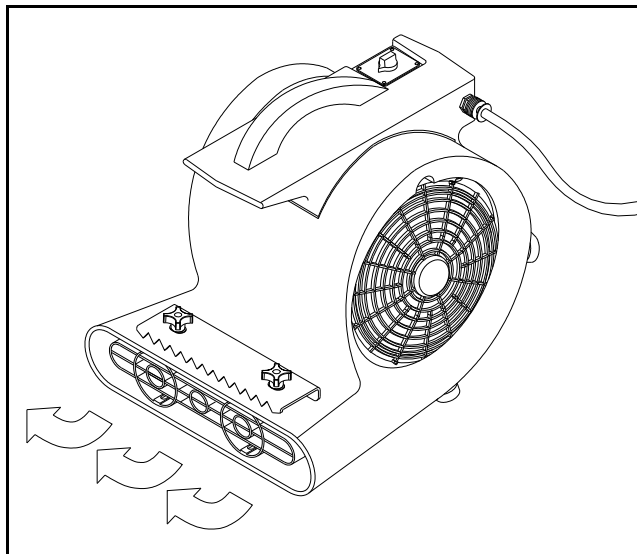


Use right side of machine for cleaning against walls.

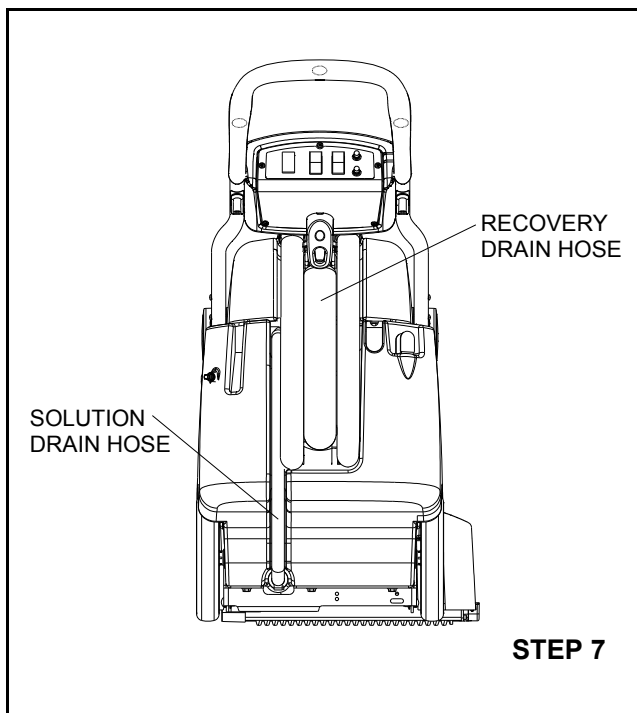


After cleaning, turn off all controls, and carefully unplug machine.

To speed drying, use a Windblower™ fan.

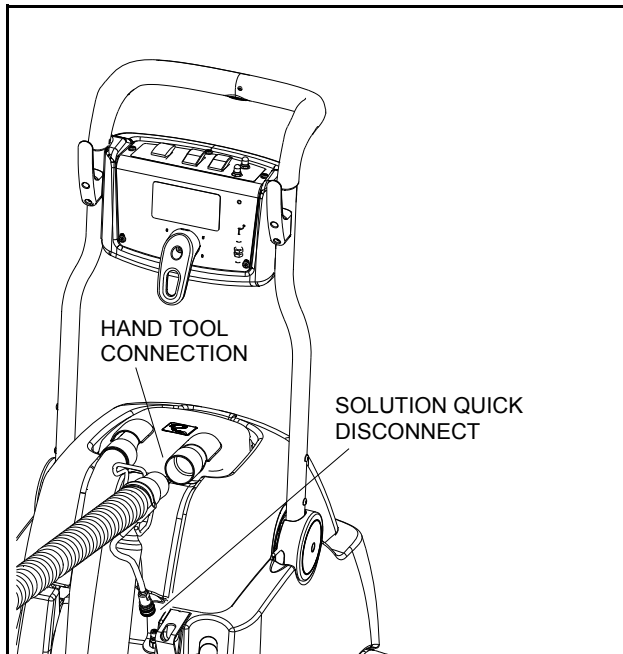


Empty recovery tank by releasing recovery drain hose. Use a hose with cold water to clean out the recovery tank. Also drain solution tank after each use.



Operations

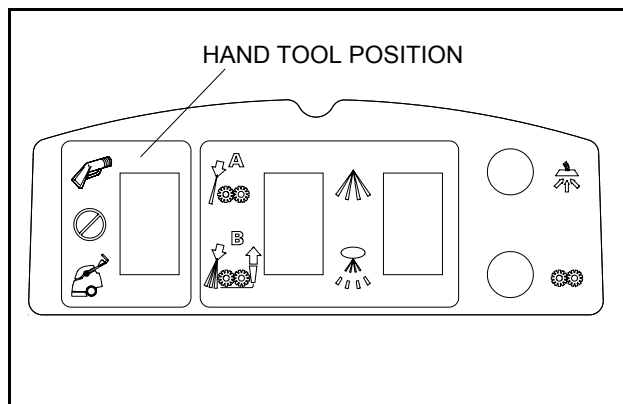
Using The Hand Tool



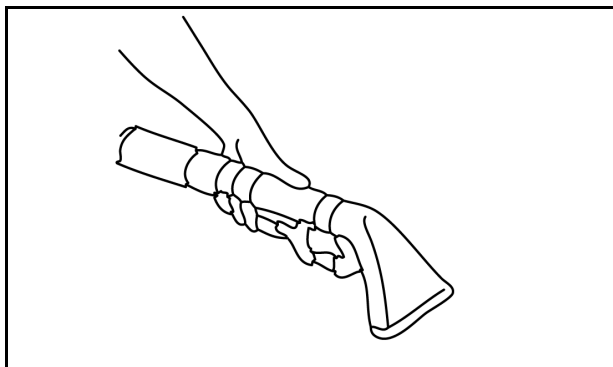
Use only acceptable accessory tools. See Optional Accessories section.

To connect solution hose pull back collar and insert over machine mounted fitting, then release collar to lock into place. Solution connection can remain connected at all times.

Disconnect vacuum hose and connect the hand tool to hand tool connection as shown.



Select hand tool switch.



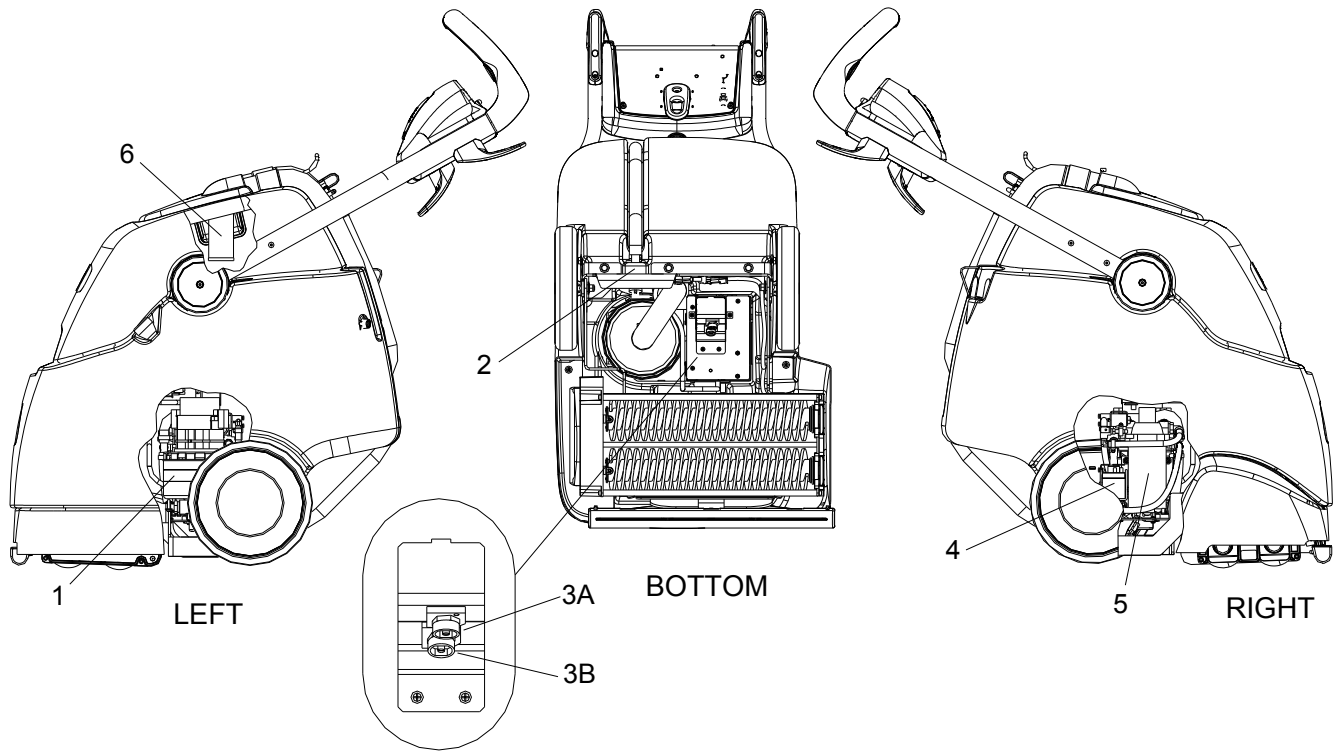
Squeeze handle on accessory tool to begin cleaning.

Service Schedule

MAINTENANCE	DAILY	WEEKLY	QUARTERLY
Check machine for cord damage	*		
Check recovery dome and gasket for damage and cleanliness	*		
Check brushes - should be clean with no lint or strings attached	*		
Remove bearing cap from end of brush. Clean bearing and cap.	*		
Inspect vac shoe for blockage; remove fibers with coat hanger, etc.	*		
Check hoses for wear, blockages, or damage	*		
Check handles, switches, and knobs for damage	*		
Run one gallon of water through solution system	*		
Clean out recovery tank, clean float screen and check float valve to make sure it moves freely	*		
Clean out solution	*		
Clean outside of all tanks and check for damage	*		
Run vac motor for at least one minute to allow motor to dry	*		
Store with dome off tank to allow the tank to dry	*		
Check all bearings for noise		*	
Check all gaskets for wear and leakage		*	
Check pump pressure; observe spray pattern and check with gauge if necessary		*	
Check and clean solution screen		*	
Check brush for wear; ensure bristles are not damaged		*	
Check condition of vac shoe and frame for damage		*	
Check overall performance of machine		*	
Check vac motor carbon brushes			*
Check belts for wear and replace as necessary			*
Check cables for fraying			*

Maintenance

Components



- | | |
|--|--------------------------|
| 1. Vacuum Motor | 4. Interim Solution Pump |
| 2. Solution Strainer (Inside Tank Fitting) | 5. Main Solution Pump |
| 3A. Spray Jet-Extraction | 6. Float Shut-off |
| 3B. Spray Jet-Interim | |

Periodic Maintenance

Twice a month, flush a white vinegar solution (One quart vinegar to two gallons of water) or anti-browning solution (mixed as directed) through the extractor. This will prevent build-up of alkaline residue in the system. If spray jets become clogged, remove the spray tips, wash them thoroughly, and blow-dry.

NOTE: Do not use pins, wire, etc. to clean nozzles as this could destroy spray pattern.

Periodically inspect all hoses, electrical cables and connections on your machine. Frayed or cracked hoses should be repaired or replaced to eliminate vacuum or solution pressure loss. If the cable insulation is broken or frayed, repair or replace it immediately. Don't take chances with electrical fire or shock.

Daily / Regular Maintenance

NOTE: Before making any adjustments or repairs to the machine, disconnect the power cord from electrical source

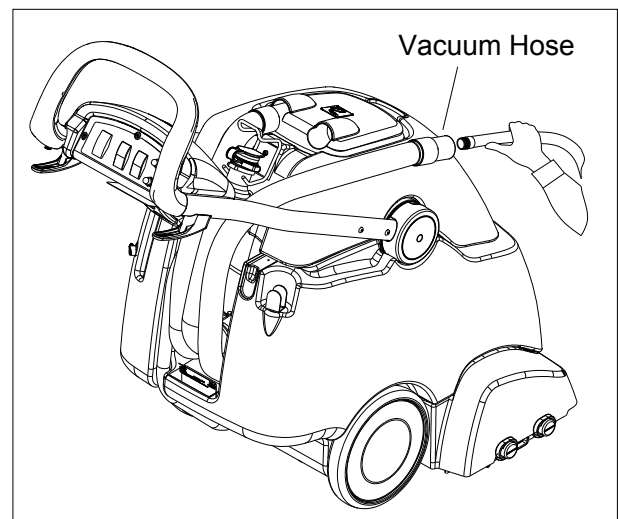
1. Empty unused cleaning solution from the solution tank.
2. Flush pumping system with 4 or 7 liters of clean, hot water.

3. After each use, rinse tank with fresh water. Periodically inspect the recovery tank and decontaminate if necessary, using a Hospital Grade Virucide or a 1-10 bleach to water solution. Waste water should be disposed of properly.
4. Check for and remove any lint or debris around vacuum shoe.
5. Check spray jets for full spray pattern.
6. Remove lint and dirt build-up from brush and housing.
7. Check float and shut-off screen and clean as necessary.

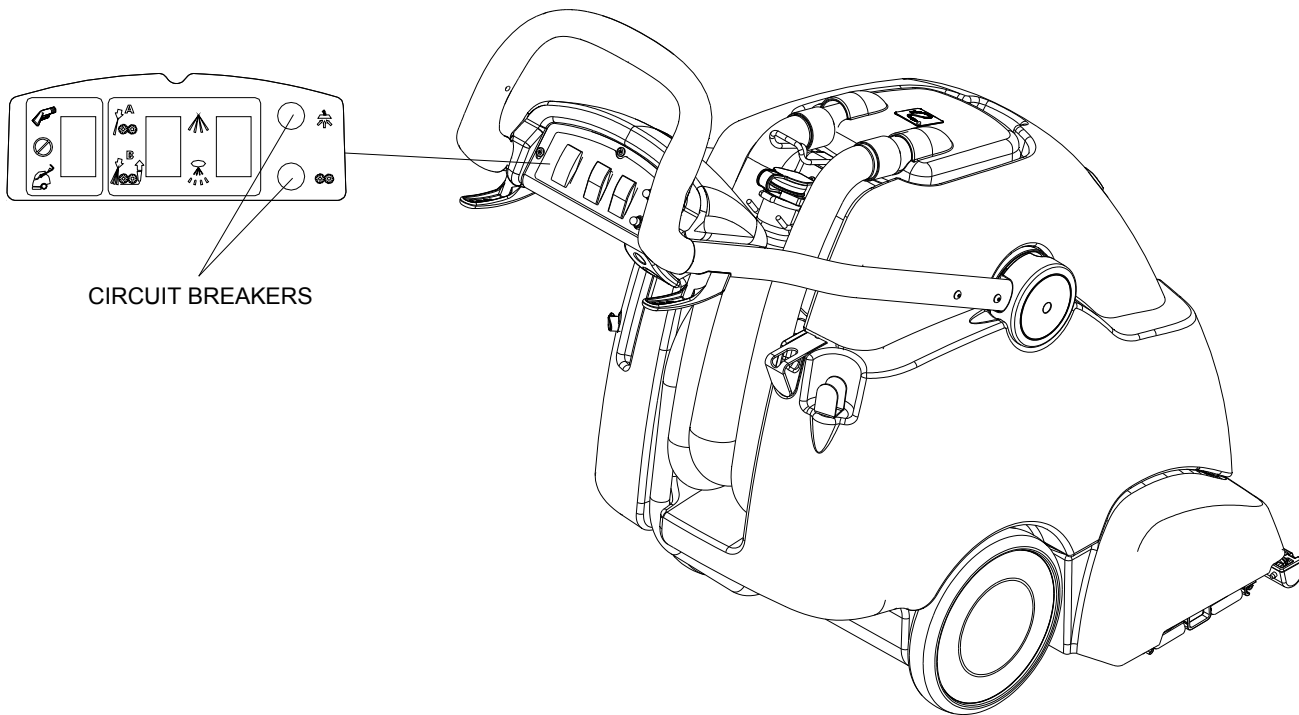
Vacuum Shoe and Hose

NOTE: Vacuum Shoe and hose flush should be done daily after use. Place machine over drainage area before beginning.

1. Remove vacuum hose from dome.
2. Insert water hose into vacuum hose.
3. With water pressure on high, rinse out hose and vacuum shoe. Water should flow freely from vacuum shoe.



Circuit Protection



CIRCUIT BREAKERS

Circuit Breakers

Circuit breakers interrupt the flow of power in the event of an electrical overload. When a circuit breaker is tripped, reset it by pressing the exposed button. If a circuit breaker continues to trip. The cause should be found and corrected.

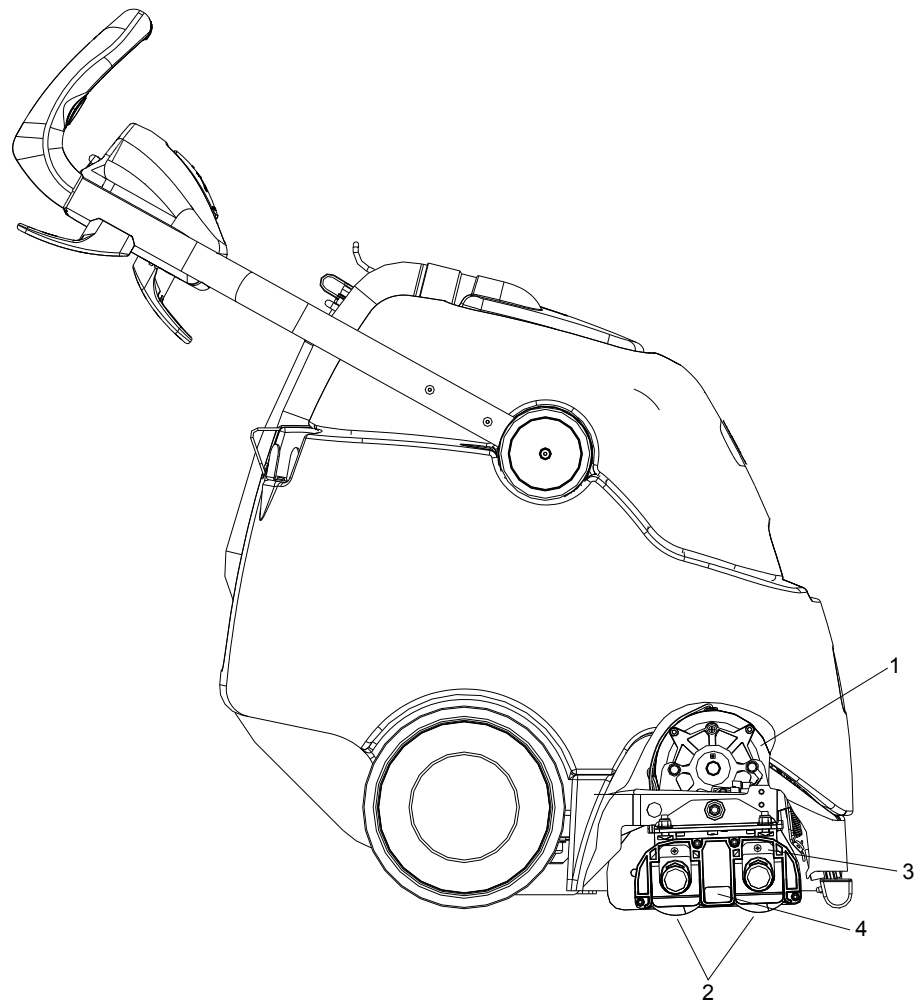


15 Amp. Protects the vacuum motor.



8 Amp. Protects the brush motor.

Scrub Deck



1. *Scrub Brush Motor*
2. *Scrub Brushes*
3. *Retaining Clip*
4. *Brush Installation Decal*

Maintenance

Scrub Head

The dual cylindrical scrub head is designed to scrub chemical into the carpet. The two counter rotating brushes raise the pile of the carpet, giving it a lush groomed appearance.

The rear brush is the stiffer brush and is intended to scrub deeper and help propel the machine. It can be identified by its black color.

The front brush is the softer brush and is intended to lift and groom the carpet pile. It can be identified by the white bristles.

Maintenance

Scrub brushes should be replaced as a set when bristle length wears to height of yellow Perform Alert™ bristles.

Scrub Brush Removal

The scrub brushes are removed from the right side of the machine.

1. Disconnect all power and unplug machine.
2. Tip the machine back.
3. Pull out on the bottom of the retaining clip.
4. The brush assembly and end cap should drop down. Then pull the brush down far enough to clear the bottom of the housing.
5. Pull brush out with a rocking motion to free brush from drive hub.

Bearing Cleaning

1. Remove bearing cap from end of brush.
2. Clean cap and bearings.

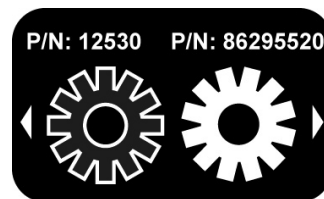


Scrub Brush Replacement

NOTE: See brush placement decal on brush deck. (Black brush to rear of machine and white brush to front of machine).

⚠ WARNING:

Only use the brushes provided with the appliance or those specified in the instructions manual. The use of other brushes may impair safety.



1. Lift the drive side of the brush and push it onto drive hub until a positive stop is felt. The brush cannot be installed until the brush is fully seated on the drive hub.
2. Pull out on the bottom of the retaining clip.
3. Line up the end cap with the flats to each side.
4. Slide brush up into the retaining clip until it clicks in place.

⚠ WARNING:

Only qualified maintenance personnel are to perform the following repairs

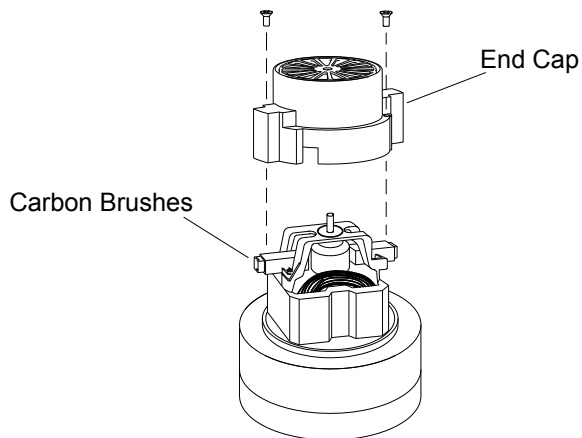
⚠ AVERTISSIMENT:

Seul le personnel d'entretien qualifié peut effectuer des réparations.

Vacuum Motor Replacement

1. Turn off all switches and unplug machine.
2. Remove recovery tank.
3. Remove handle mounting assembly and set aside.
4. Disconnect and remove the solution/vacuum frame assembly through the top of the machine.
5. Remove the vacuum motor to service brushes.
6. Reverse process to install vacuum motor.

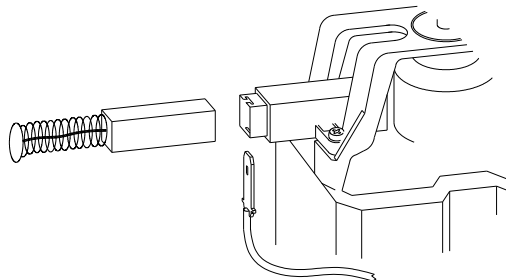
Vacuum Motor Carbon Brushes



⚠ WARNING:

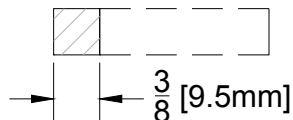
The green ground wire must be attached for safe operation. See wiring diagram.

If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center.



Important:

These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.



Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than $\frac{3}{8}$ " (9.5mm) long.

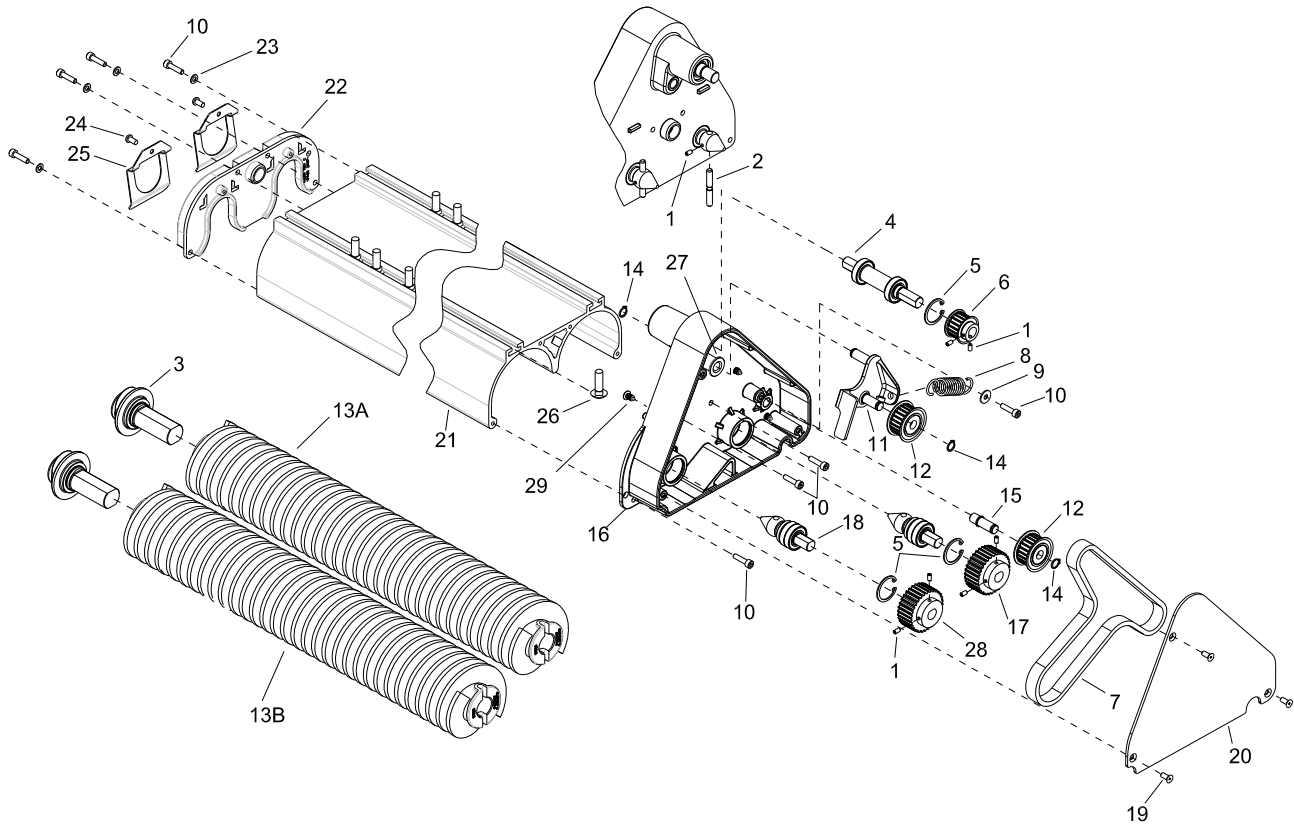
Maintenance

Troubleshooting

PROBLEM	CAUSE	SOLUTION
No Power, Nothing Runs	Is the cord plugged in.	Plug in cord.
	Circuit breaker tripped in building.	Reset breaker.
	Faulty switch.	Call for service.
	Faulty power cord or pigtail.	Call for service.
Vacuum Motor Will Not Run	Vacuum circuit breaker tripped.	Reset breaker.
	Faulty main vacuum switch.	Call for service.
	Loose wiring.	Call for service.
	Faulty vac motor.	Call for service.
Vacuum Motor Runs But Suction Is Poor	Debris lodged in vac shoe.	Remove debris from vac shoe.
	Dome gasket defective or missing.	Replace as necessary.
	Vacuum hose cracked or hose cuff loose.	Replace or repair as necessary.
	Recovery tank full / float ball stuck in the up position.	Turn off vac motor. Drain and rinse recovery tank.
Poor Or No Water Flow (Carpet Is Streaky)	Pump switch in intermittent position.	Turn to continuous or use buttons on handle
	Jets clogged or missing.	Clean using a vinegar /water solution or replace.
	Solution filter clogged.	Drain solution tank and clean solution filter.
	Faulty solenoid.	Call for service.
Brush Does Not Spin	Main switch off or in hand tool mode.	Turn main switch to machine mode.
	Brush circuit breaker tripped.	Reset circuit breaker.
	Brush belt broken.	Replace as necessary.
	Faulty brush motor.	Call for service.

PARTS

Brush Deck

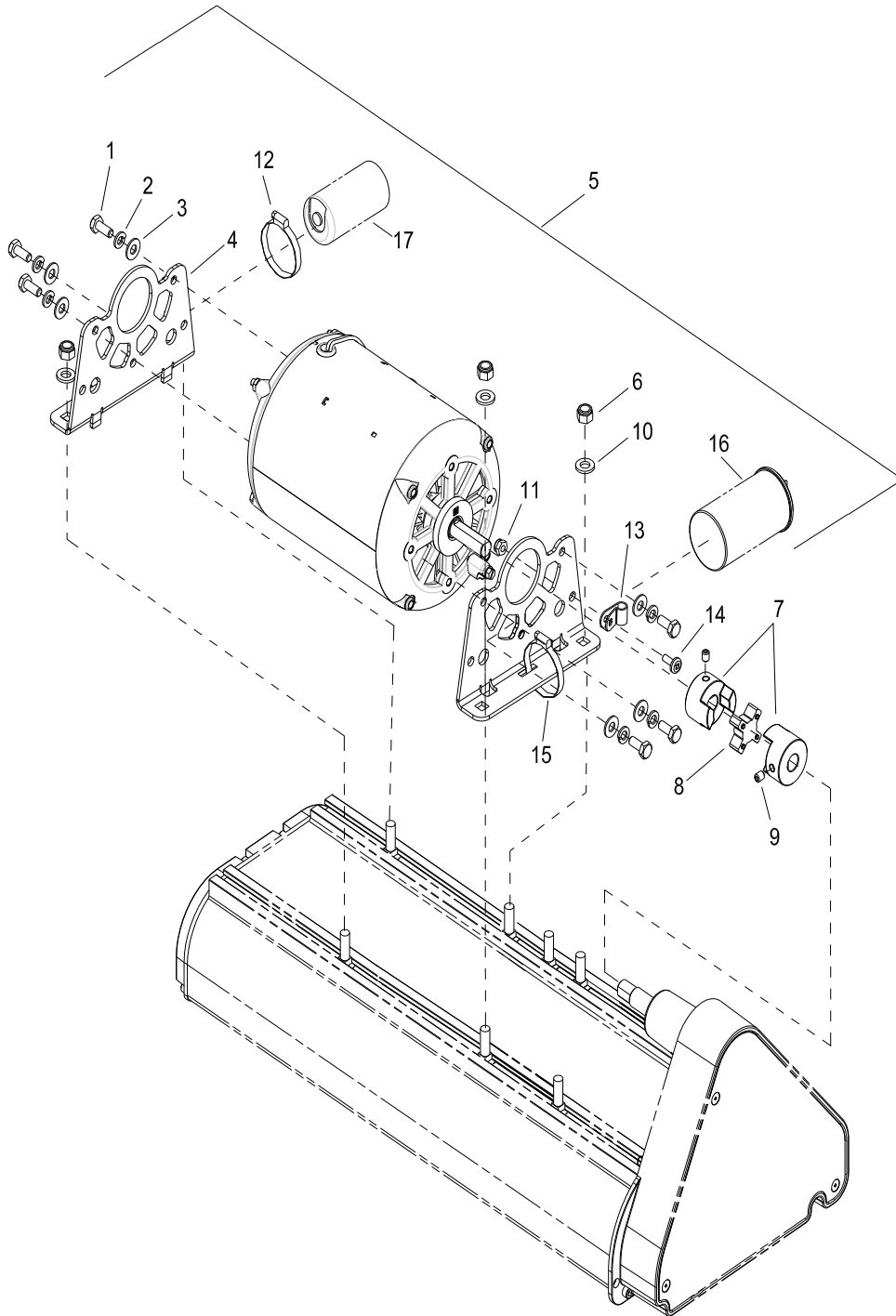


REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86223780	8	SCR, M4X8, SET, ISO4029,CP,BLK		
2	86224170	2	SHAFT, 6.2MM BRUSH DRIVE		
3	86373070	2	ASM, BRUSH END, NON-DRIVE	*(5)	
4	86012810	1	SHAFT, ASM, DRIVE 16"		
5	86223520	3	RING, 28MM INT SNAP PHOSPHATE		
6	86223310	1	PULLEY, 5MM HTD, 18T, 12.7 ID		
7	86215250	1	BELT, 2S 5MM HTD, 15W, 128T		
8	86224660	1	SPRING, TENSIONER		
9	86173330	1	WASHER, M5 FLAT, ISO7093 SS		
10	86014990	9	SCR, M5X20, SHCS ISO4762, SS		
11	86215870	1	BRKT, TENSIONER ARM		
12	86012780	2	PULLEY ASM, 5MM HTD 22T		
13A	86216050	1	BRUSH, EXTRACTOR 16"		
13B	86295520	1	BRUSH, EXTRACTOR 16" NATURAL		
14	86223490	2	RING, 10MM EXT SNAP, DIN 471		
15	86224130	1	SHAFT, TENSIONER		
16	86343870	1	HOUSING ASM, BRUSH DRIVE	**	
17	86294070	1	PULLEY, 36T 5MM HTD		
18	86012790	2	SHAFT ASM, BRUSH DRIVE		
19	86172970	3	SCR, M5X12, PHLP FHMS, ISO7046, SS		
20	86222870	1	PLATE, BRUSH DRIVE COVER		
21	86217780	1	EXTRUSION, DUAL BRUSH 16"		
22	86219390	1	HOUSING, BRUSH CLIP		
23	86173350	4	WASHER, M5, FLAT, ISO7089,SS		
24	86172980	2	SCR, KA50X10, PT OHS, WN14112, PLTD		
25	86224630	2	SPRING, BRUSH CLIP		
26	86277130	7	SCR, 5/16-18 X 1.00 CARRIAGE SS		
27	86215230	1	BEARING, BRONZE FLANGED		
28	86294060	1	PULLEY, 30T 5MM HTD		
29	86350490	3	PLUG, HOLE, 5MM DIA X 12 MM L		

*SEE SERIAL NUMBER PAGE.

**CALL MANUFACTURER FOR SERIAL NUMBER

Brush Deck Motor

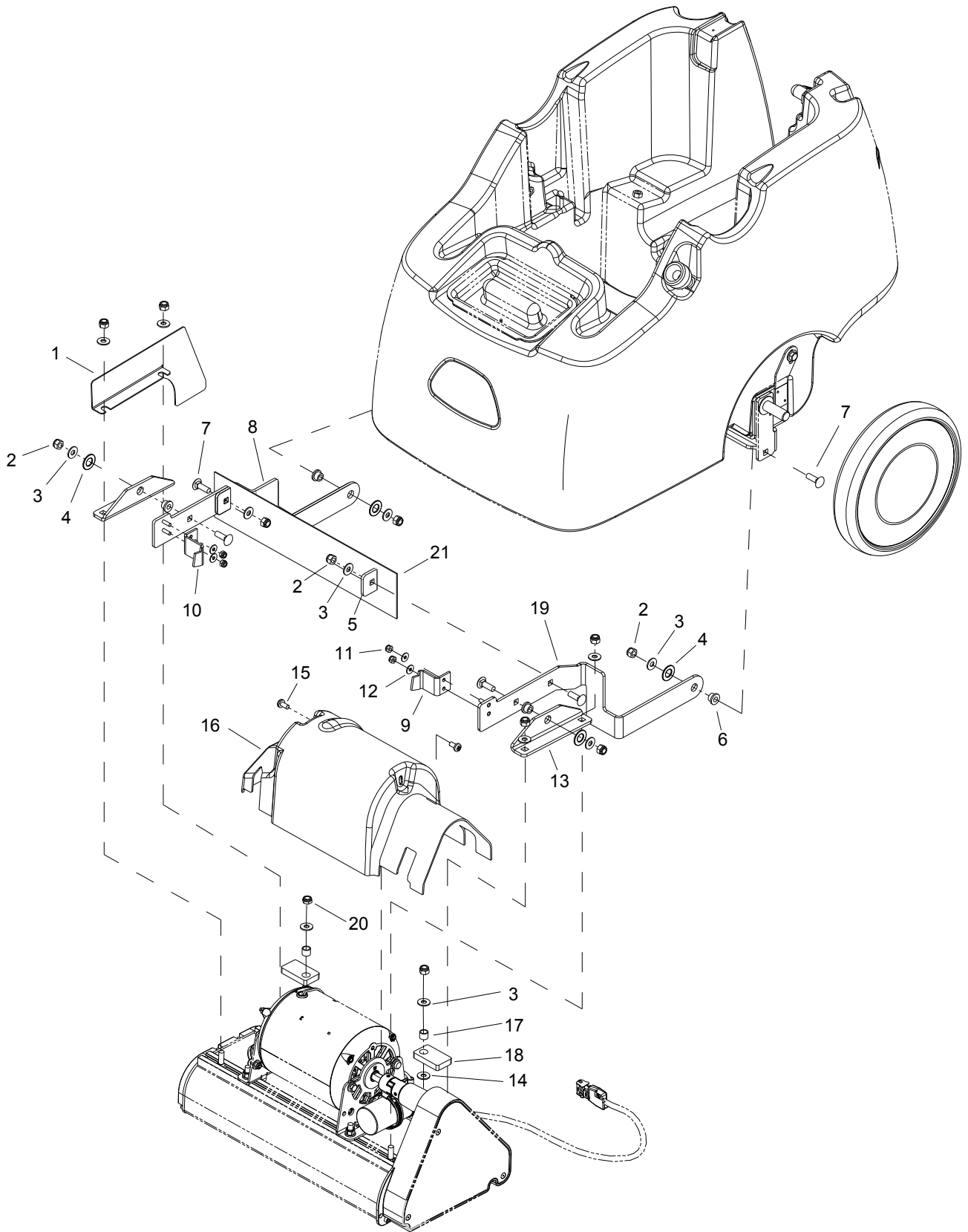


REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86273750	6	SCR, 1/4-20 X 5/8 HHCS SS		
2	86173340	6	WASHER, SPLIT LOCK, 1/4 SS		
3	86010630	6	WASHER, 1/4 ID X 5/8 OD SS		
4	86215880	2	BRKT, MOTOR MOUNT		
5	86294490	1	BRUSH MOTOR ASM 115V		INCLUDES #4, 16,17
6	86222290	3	NUT, 5/16-18 HEX NYLOCK SS		
7	86346070	2	COUPLER, 2-JAW, 35MM	*(2)	WAS 86217250 INCLUDES #9
8	86234600	1	COUPLER, SPIDER	*(2)	WAS 86217260
9	86172960	2	SCR, SET, M6X8, SH, ISO4029,SS		
10	86225790	3	WASHER, 5/16 X .63 SS		
11	86005640	1	NUT, 10-32 HEX NYLOCK		
12	86002390	1	CLAMP, 1.75" WORM GEAR X .312		
13	86198450	1	CLAMP, 5/16 NYLON		
14	86276820	1	SCR, 10-32 X 1/2 PTHMS BLK NP		
15	86216750	1	CLAMP, WORM GEAR 40-64MM		
16	86332820	-	RUN CAPACITOR 25 UF		SERVICE
17	86332830	-	START CAPACITOR 150 UF		SERVICE

*SEE SERIAL NUMBER PAGE.

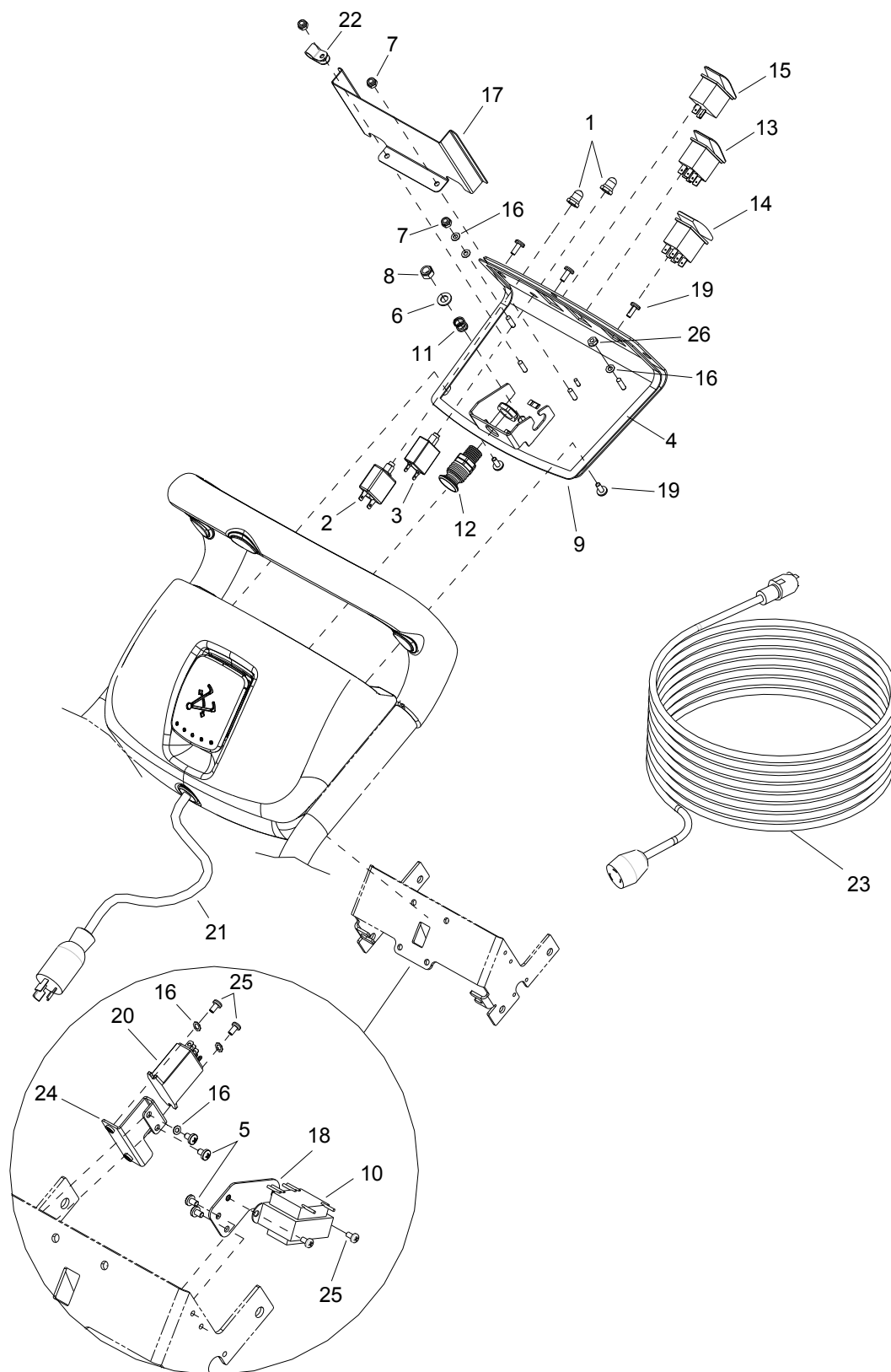
**CALL MANUFACTURER FOR SERIAL NUMBER.

Brush Deck Mounting

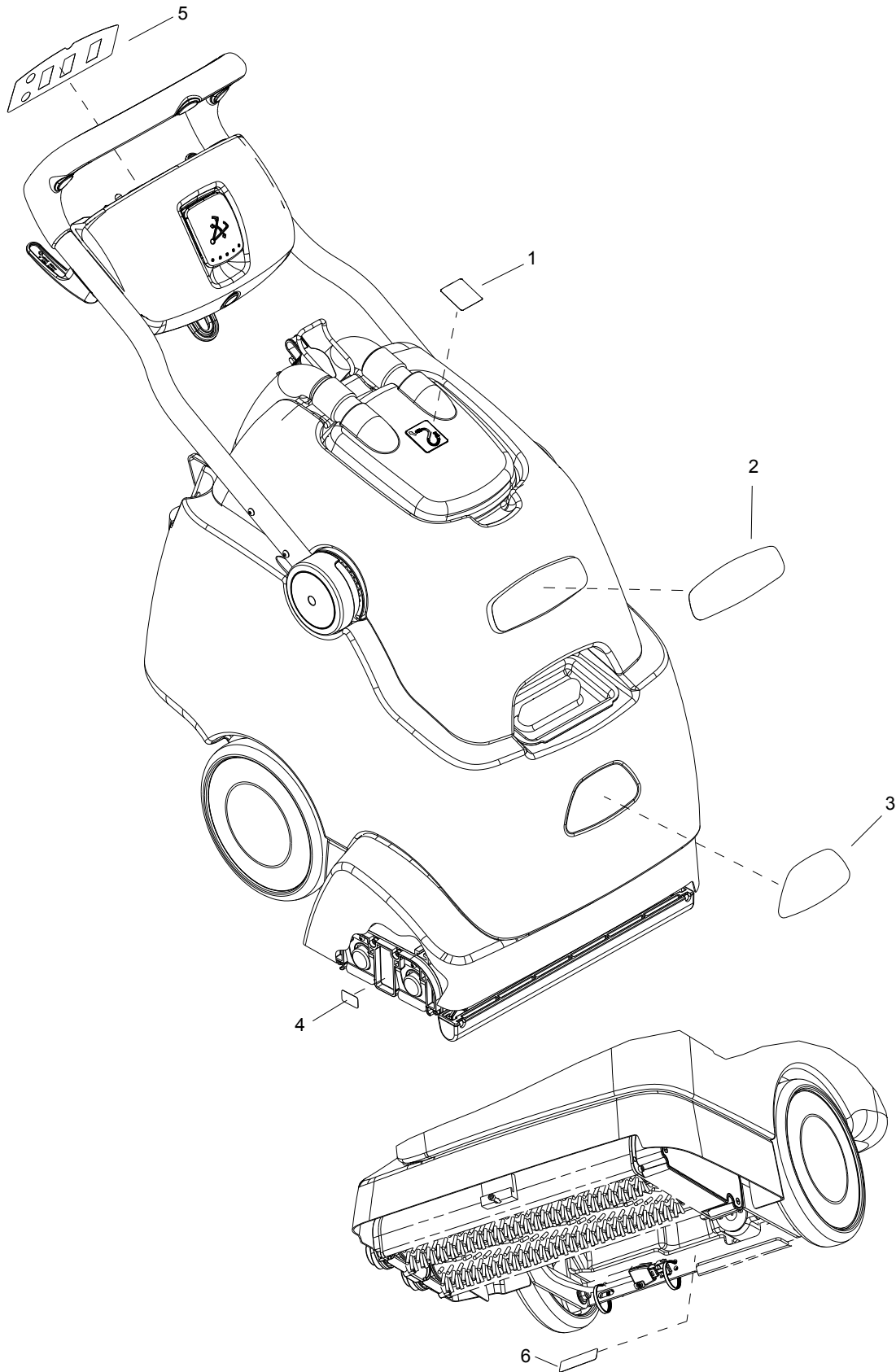


REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86302710	1	DEFLECTOR, SPRAY		
2	86270830	11	NUT, 5/16-18 HEX NYLOCK SS		
3	86010670	13	WASHER, 5/16 FLAT SS		
4	86259410	4	WASHER, THRUST .51 ID X 1 OD X .063		
5	86296450	1	BRKT, DECK ARM CROSSBAR		
6	86228990	4	BEARING, FLNGD, .314 ID X .502 OD		
7	86277130	8	SCR, 5/16-18 X 1.00 CARRIAGE SS		
8	86295010	1	BRKT, DECK ARM RIGHT		
9	86294940	1	BRKT, LEFT DECK HANGER		
10	86294950	1	BRKT, RIGHT DECK HANGER		
11	86270990	4	NUT, 10-32 HEX NYLOCK		
12	86010650	4	WASHER, #10 X 9/16 OD		
13	86071800	2	BRKT, BRUSH DECK PIVOT		
14	86225790	1	WASHER, 5/16 X .63 SS C		
15	86006580	2	SCR, 1/4-20 X 1/2 PPHMS SS DL		
16	86395270	1	COVER, BRUSH DECK MOTOR		
17	86008460	2	SPACER, .500OD X .391ID X .400		
18	86296480	2	CUSHION, BRUSH DECK		
19	86295020	1	BRKT, DECK ARM LEFT		
20	86271840	1	NUT, 5/16-18 HEX NYLOCK THIN SS		
21	86361560	1	GUARD, SPLASH		

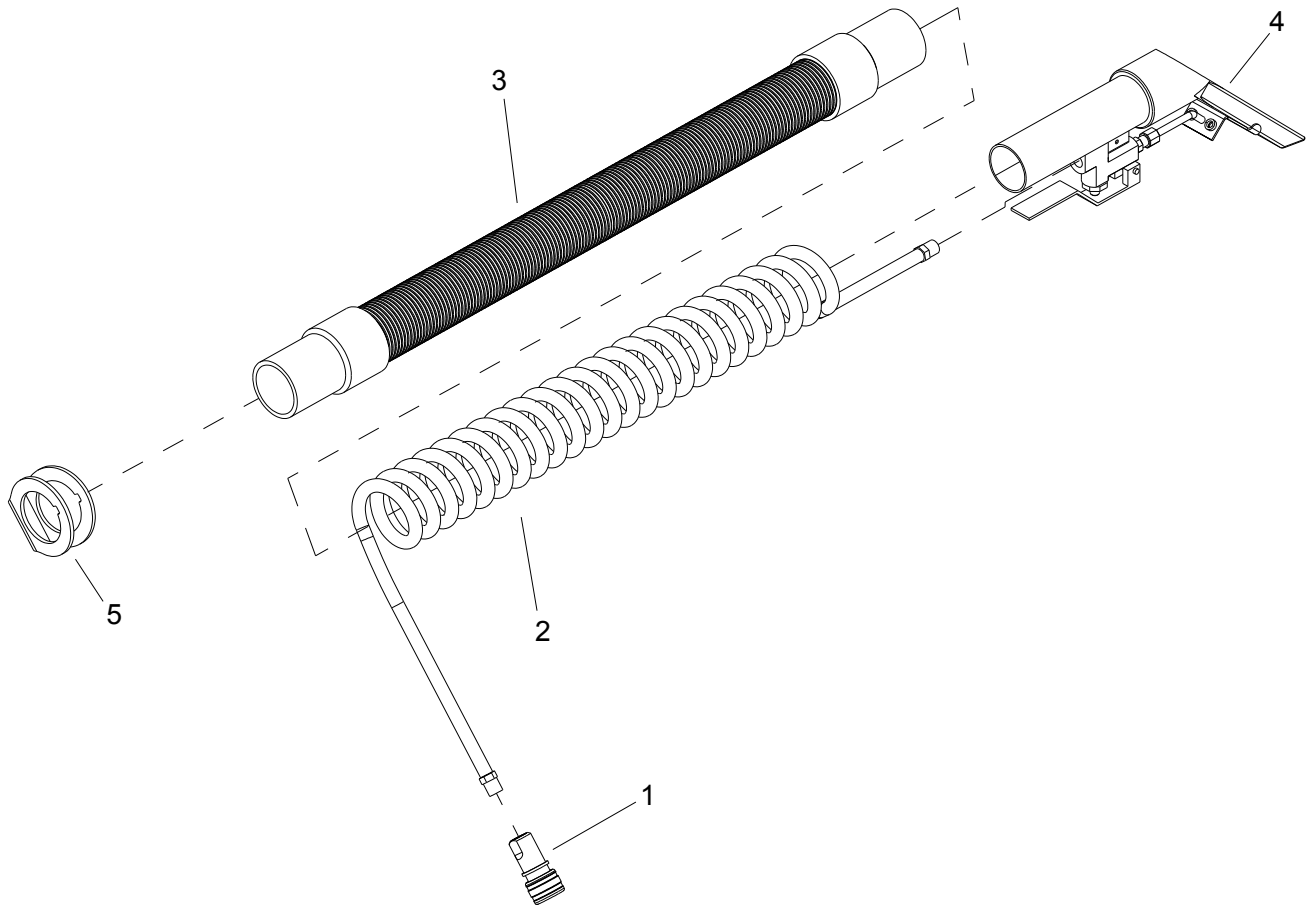
Control Panel



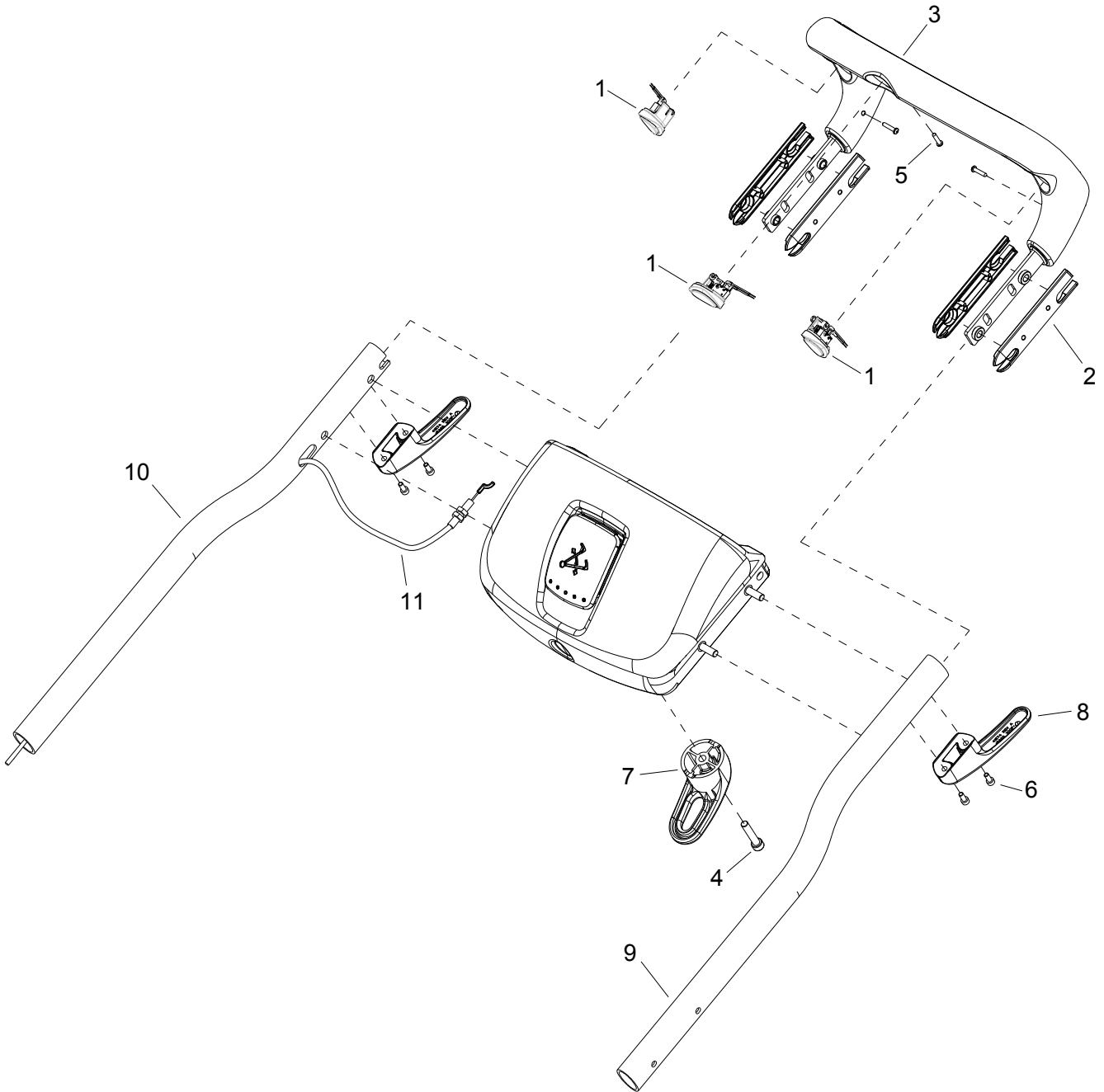
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86002010	2	BOOT, 3/8 CIRCUIT BREAKER		
2	86001980	1	BREAKER, 15A 250VAC 50VDC		
3	86215670	1	BREAKER, 8A VDE CIRCUIT		
4	86308020	1	GASKET, HANDLE CTRL PNL		
5	86173030	4	SCR, M4 X 6, PHMS, ISO7045, PL		
6	86173300	1	WASHER, M8, FLAT ISO7089, SST		
7	86005640	3	NUT, 10-32 HEX NYLOCK		
8	86172640	1	NUT, M8, NYLOCK, ISO7040, SST		
9	86223010	1	PLATE, CONTROL PANEL		
10	86301820	1	TRANSFORMER, 24V, 115V		
11	86224730	1	SPRING, COMP, 12MM OD X 12.7MM		
12	86224930	1	STRAIN RELIEF, 14/3 STRAIGHT		
13	86007130	1	SWITCH DPDT 2-POSITION ROCKER		
14	86007200	1	SWITCH, DPDT3-POSITION ROCKER		
15	86007140	1	SWITCH, SPST 2- POSITION ROCKER		
16	86010640	6	WASHER, #10 LOCK EXT STAR SS		
17	86295700	1	BRKT, ELECTRICAL SEPARATOR		
18	86391130	1	BRKT, HANDLE TRANSFORMER		
19	86276820	5	SCR, 10-32 X 1/2 PTHMS BLK NP		
20	86298690	1	RELAY, 24VAC		
21	86297750	1	CORD ASM, 14/3 X 22 PGTL		
22	86233170	1	CLAMP, 3/8 NYLON UL/CSA		
23	86234110	1	CORD SET, 14/3 SJTW-A X 50' YLW		
24	86391120	1	BRKT, HANDLE RELAY		
25	86006620	4	SCR, 6-32 X 1/4 PPHMS SS		
26	86005700	1	NUT 10-32 W/STAR WASHER PLTD		



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86221470	1	LABEL, ACCESSORY		
2	86244680	1	LABEL, CLIPPER DUO		
3	86004970	1	LABEL, WINDSOR LOGO DOMED		
4	86298670	1	LABEL, BRUSH INSTALL		
5	86295620	1	LABEL, CTRL PNL CLP DUO		
6	86390460	1	LABEL, STRAINER, CLP DUO		

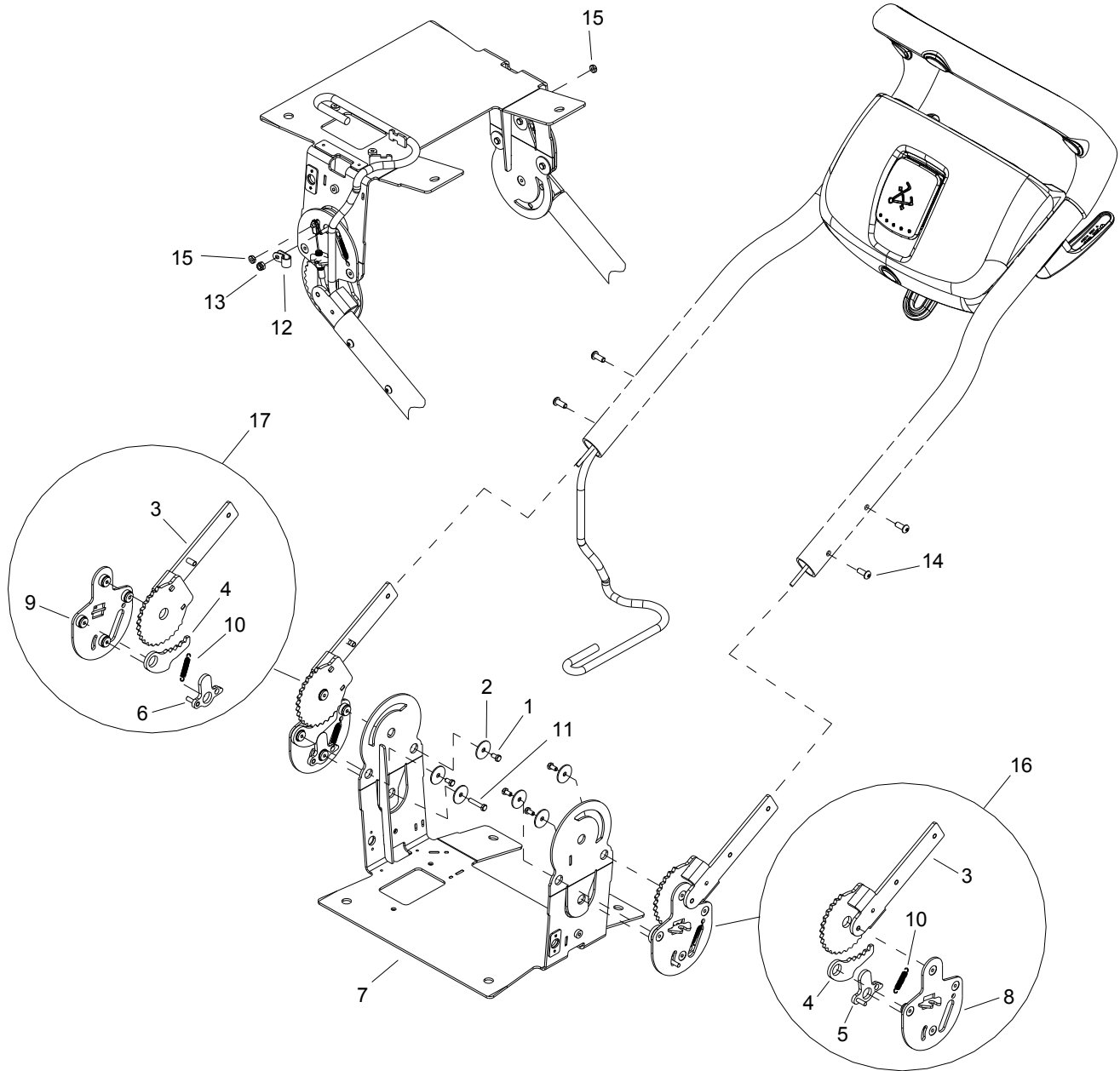


REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86200810	1	NIPPLE, 1/8 FPT QD FEM BRASS		
2	86293280	1	HOSE, 1/4" RETRACTABLE		
3	86293290	1	HOSE ASM, 38.1 X 711 BLK VAC		
4	86293500	1	HANDTOOL ASM		
5	86293750	1	RETAINER, SOLUTION HOSE		



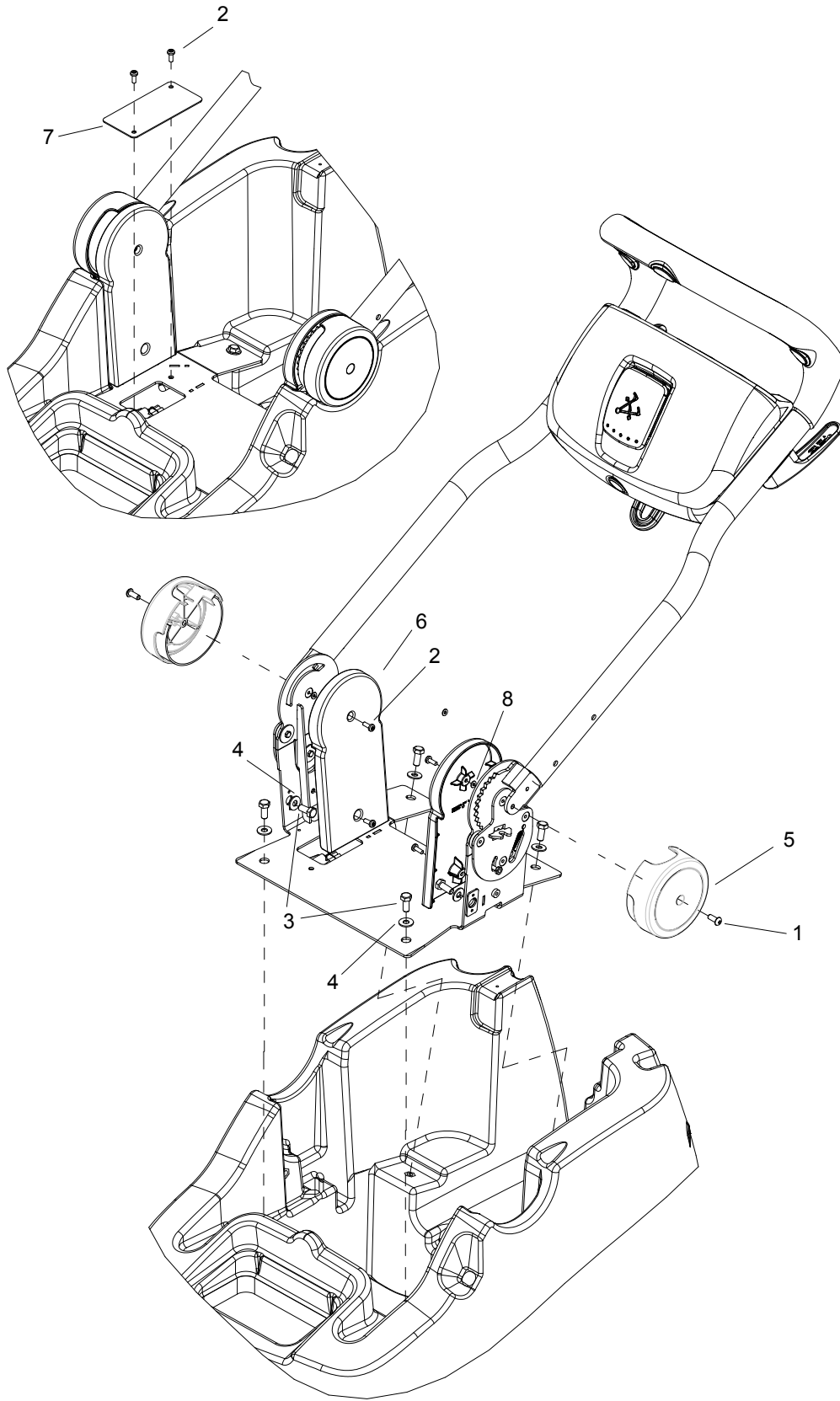
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86312730	3	SWITCH, HANDLE		
2	86224500	4	SPACER, HANDLE EXTRUSION		
3	86218660	1	HANDLE, GRIP		
4	86223830	1	SCR, M8X40, SHCS, ISO 4762, SST		
5	86173000	3	SCR, KA40X20, PT OVAL, WN1412, PL		
6	86293400	4	SCR, M5X12 SHCS GR 10.9 PLT		
7	86218960	1	HOOK, UPPER, CORD		
8	86218950	2	HOOK, LOWER, CORD		
9	86218640	1	HANDLE, EXTRUSION, LEFT		
10	86218630	1	HANDLE, EXTRUSION, RIGHT		
11	86216500	2	CABLE - ACTUATION, HANDLE		

Handle Bracket



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86276800	5	SCR, 10-32 X 3/8 HHMS SS		
2	86279170	6	WASHER, #10 X 1.0 FLAT		
3	86296830	2	BRKT, HANDLE PIVOT		
4	86296860	2	PLATE, HANDLE PIVOT LATCH		
5	86296880	1	LEVER, HANDLE RELEASE LEFT		
6	86296890	1	LEVER, HANDLE RELEASE RIGHT		
7	86296920	1	BRKT, HANDLE TANK MOUNT		
8	86296970	1	MECHANISM MOUNT, LEFT		
9	86296980	1	MECHANISM MOUNT, RIGHT		
10	86302860	2	SPRING, EXT .25D X 1.13L X .031W		
11	86298840	1	SCR, 10.32 X 1.0 HHMS PLT		
12	86233170	1	CLAMP, 3/8 NYLON UL/CSA		
13	86005640	1	NUT, 10-32 HEX NYLOCK		
14	86274400	4	SCR, 1/4-20 X 5/8 BHCS		
15	86298830	2	NUT, 10-32 LOCK DT 1/8 THK PLT		
16	86312160	1	KIT HANDLE PIVOT LEFT		INCLUDES #3,4,5,8 AND 10
17	86324360	1	KIT HANDLE PIVOT RIGHT		INCLUDES #3,4,6,9 AND 10

Handle Mounting

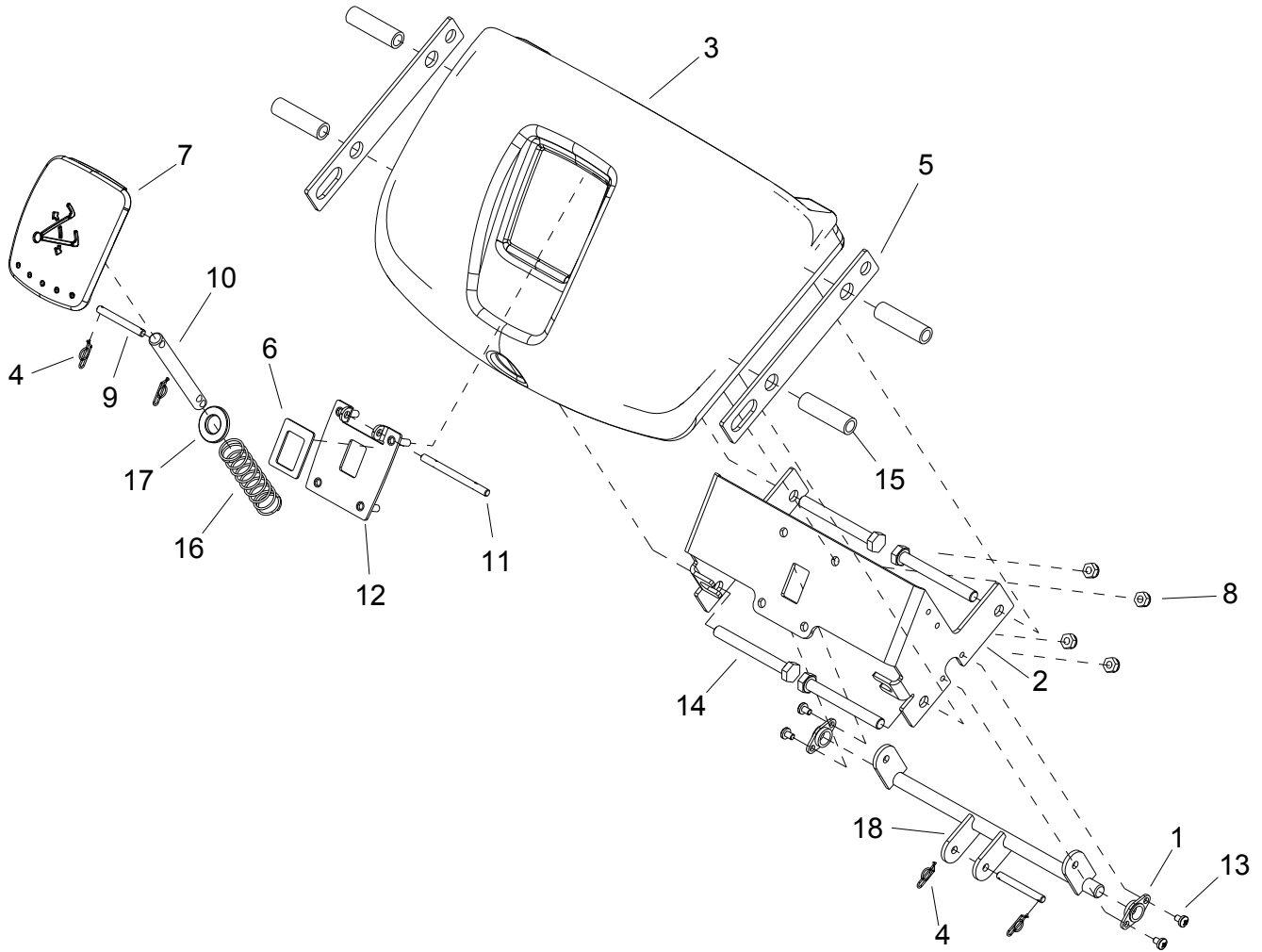


REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86274400	2	SCR, 1/4-20 X 5/8 BHCS		
2	86006950	6	SCR, 10-32 X 1/2 PPHMS BLK NP		
3	86276490	6	SCR, 5/16-18 X 5/8 HHCS SS		
4	86010670	6	WASHER, 5/16 FLAT SS		
5	86345230	2	CAP, BRUSH ASM, CLP DUO	**	
6	86295770	2	CAP, HANDLE, INNER		
7	86297220	1	PANEL, CONN. ACCESS		
8	86379640	2	WASHER, NYL, RETAINING, #10, .03 THK	*(4)	

*SEE SERIAL NUMBER PAGE

**CALL MANUFACTURER FOR SERIAL NUMBER

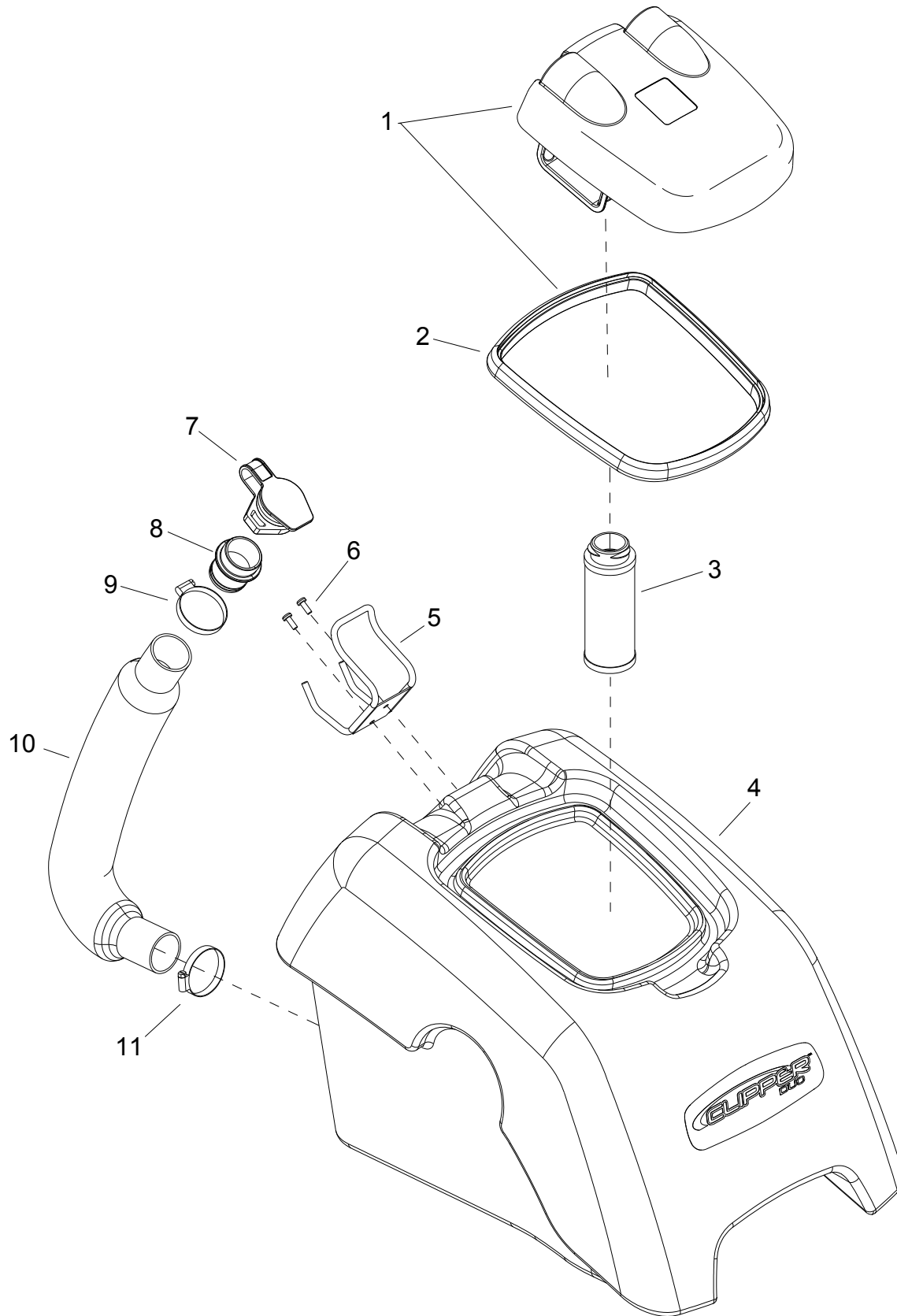
Handle Release Lever



Handle Release Lever

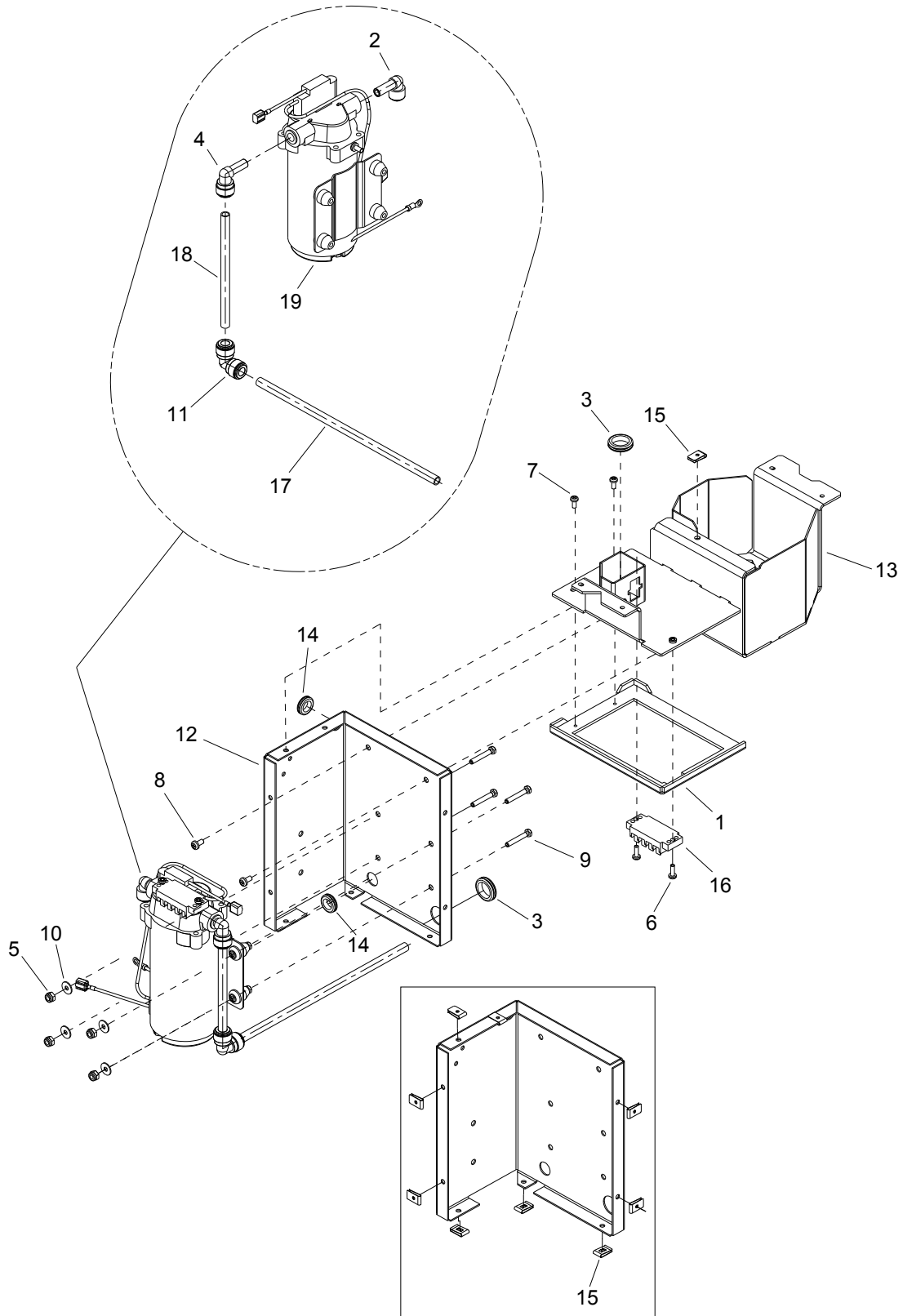
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86215240	2	BEARING, FLANGE, 10M ID		
2	86215630	1	BRACKET, LEVER, CONSOLE		
3	86216870	1	CONSOLE, HANDLE		
4	86008650	4	COTTER, 14" RING		
5	86218190	2	GASKET, CONSOLE, TUBE		
6	86218020	1	GASKET, LEVER, HANDLE		
7	86221730	1	LEVER, PIVOT HANDLE		
8	86222280	4	NUT, 10-32 HEX NYLOCK SS		
9	86295820	2	PIN, LEVER SHAFT		
10	86221840	1	PIN, LINKAGE		
11	86222550	1	PIN, PIVOT, LEVER		
12	86222990	1	PLATE, PIVOT, LEVER		
13	86173030	4	SCR, M4 X 6, PHMS, ISO7045, PL		
14	86293370	4	SCR, M8X70, HHCS, GR 10.9 PLT		
15	86224540	4	SPACER, 8.5 ID X 45L		
16	86254970	1	SPRING, COMP 18MM OD X 83 X 2		
17	86259400	1	WASHER, THRUST .51 ID X 1 ODBRO		
18	86225950	1	WELDMENT, PIVOT SHAFT, LEVER		

Recovery Tank



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86293520	1	DOME ASM, CLIPPER DUO		COMPLETE W/ GASKET
2	86218180	1	GASKET, DOME		
3	86003630	1	FLOAT SHUT-OFF		
4	86299180	1	TANK, RECVRY, DK GRAY (TRIMMED)		
5	86297250	1	HOOK, WIREFORM, HANDTOOL		
6	86006950	2	SCR, 10-32 X 1/2 PPHMS BLK NP		
7	86004500	1	HOSE, CAP		
8	86004510	1	HOSE, INSERT		
9	86002400	1	CLAMP, 2.0" WORM GEAR X .312W		
10	86296640	1	HOSE, 1.5 X 19.0 DRAIN		
11	86233140	1	CLAMP, 2.0" WORM GEAR		

Solution - From Serial Number (*6)

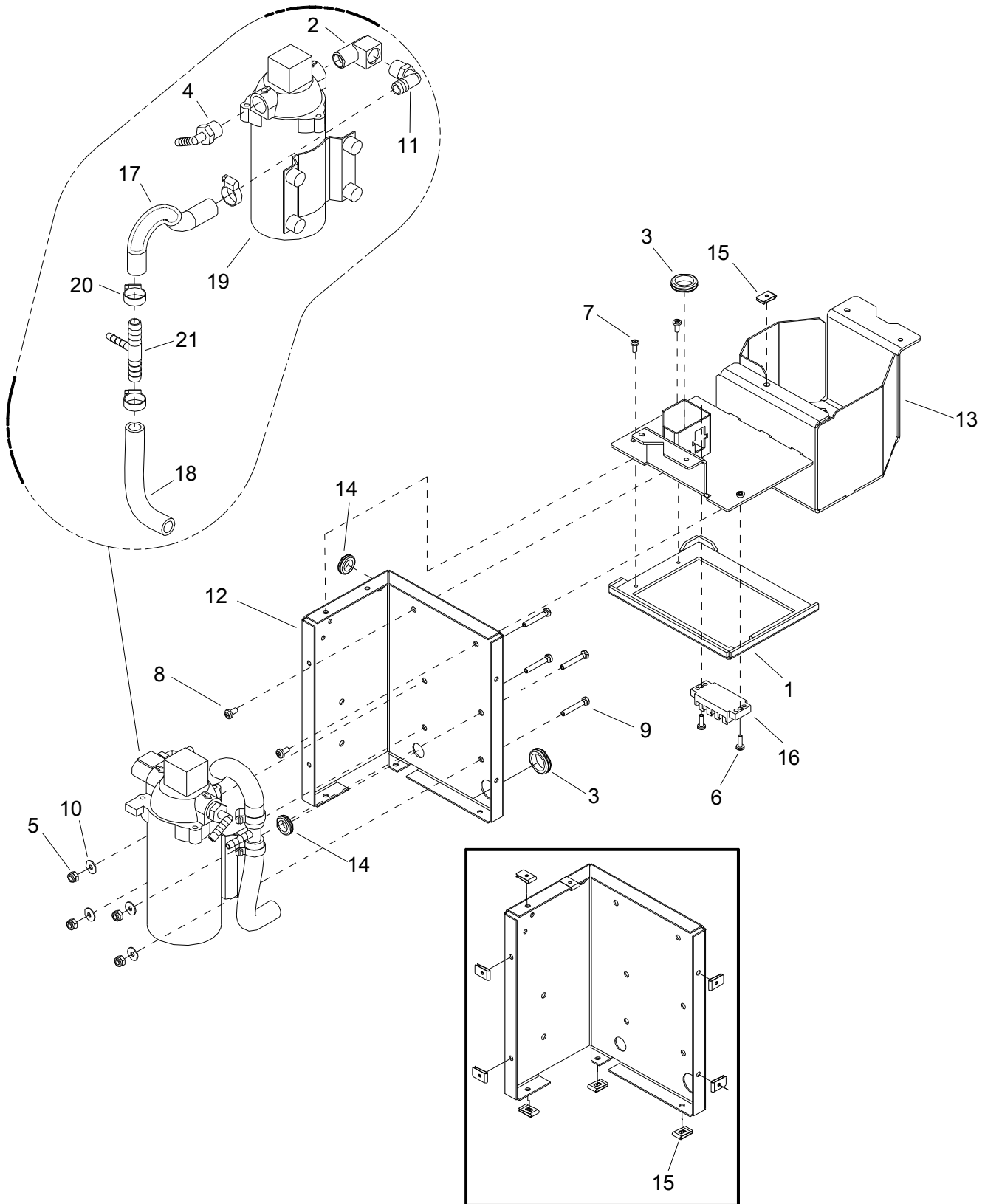


Solution - From Serial Number (*6)

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86308240	1	GASKET, SOLUTION ASSY		
2	86367130	1	ELBOW, JG, 3/8 STEM X 1/4 TUBE		
3	86218360	2	GROMMET, 3/4 ID X 7/8 GROOVE		
4	86367120	1	ELBOW, JG, 3/8 STEM X 3/8 TUBE		
5	86005640	4	NUT 10-32 HEX NYLOCK		
6	86273930	2	SCREW 8-32 X 1/2 PPHMS		
7	86006790	2	SCREW 10-32 X 3/8 HHTR W/STAR		
8	86274290	2	SCREW, 10-32 X .375 PHPNHMS SS		
9	86298840	4	SCR, 10-32 X 1.0 HHMS PLT		
10	86010650	4	WASHER #10 X 9/16 OD		
11	86367640	1	ELBOW, UNION, JG, 3/8 TUBE		
12	86294700	1	BRKT, SOLUTION ASSY		
13	86294720	1	ASSY, FRAME, SOLUTION		
14	86297930	2	GROMMET, .50ID X .06		
15	86298120	1	NUT, SPEED, #8-32		
16	86299120	1	TERMINAL STRIP, 4-POS, .25		
17	86390430	1	TUBE, NYL 3/8 X 10.75"LG		
18	86004350	1	HOSE 3/8ID NYL11 YLW X 5.75"		
19	86364240	1	PUMP, 115V 120PSI SW W/INTERNAL BY PASS		

*SEE SERIAL NUMBER PAGE.

Solution - Prior to Serial Number (*6)

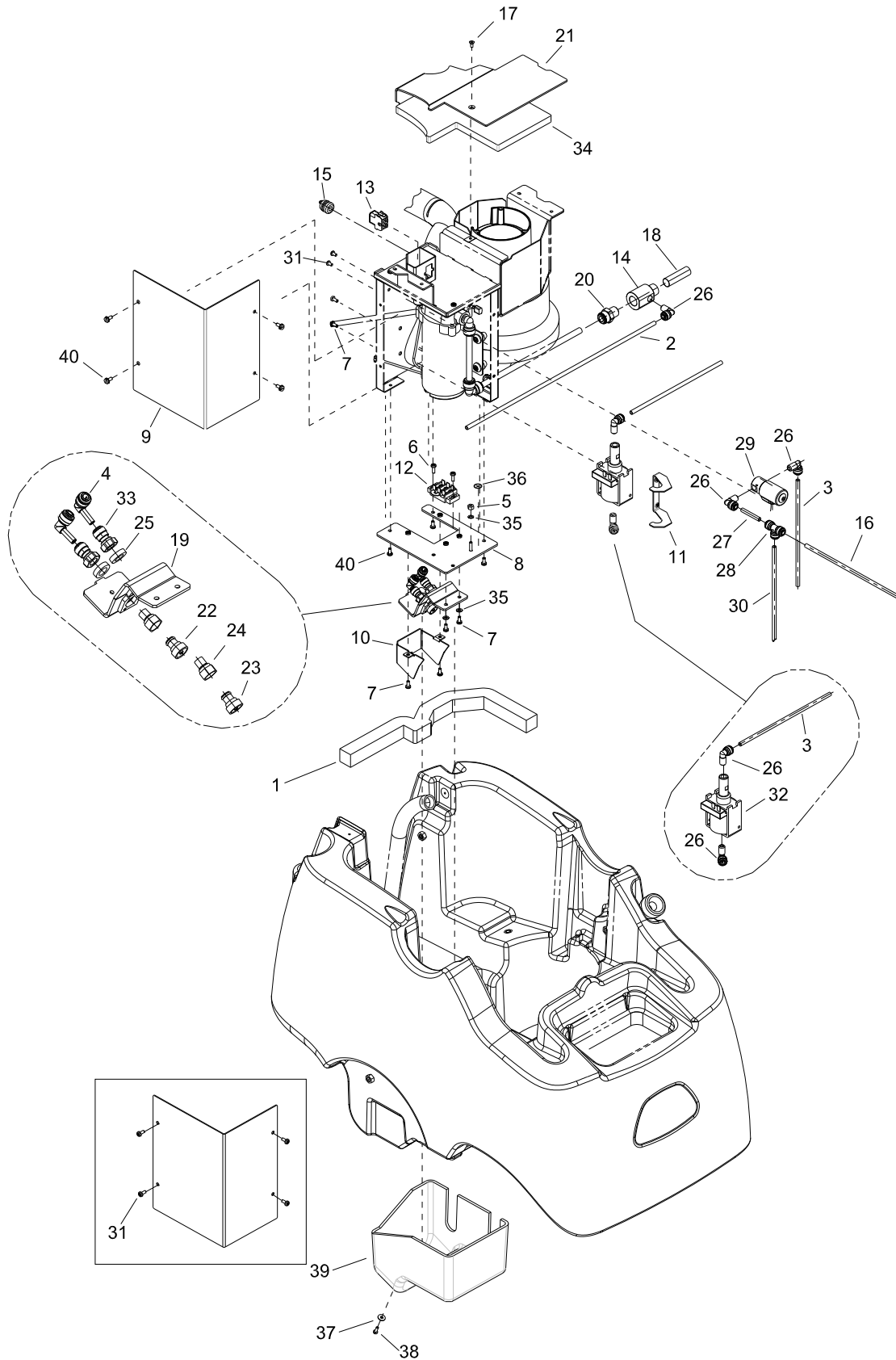


Solution - Prior to Serial Number (*6)

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86308240	1	GASKET, SOLUTION ASSY		
2	86197420	1	ELBOW, 3/8NPT STREET		
3	86218360	2	GROMMET, 3/4 ID X 7/8 GROOVE		
4	86200280	1	HOSEBARB, 3/8 MPT X 1/4 90D		
5	86005640	4	NUT 10-32 HEX NYLOCK		
6	86273930	2	SCREW 8-32 X 1/2 PPHMS		
7	86006790	2	SCREW 10-32 X 3/8 HHTR W/STAR		
8	86274290	2	SCREW, 10-32 X .375 PHPNHMS SS		
9	86298840	4	SCR, 10-32 X 1.0 HHMS PLT		
10	86010650	4	WASHER #10 X 9/16 OD		
11	86197940	1	HOSEBARB, 3/8MPTX1/2 90D DL		
12	86294700	1	BRKT, SOLUTION ASSY		
13	86294720	1	ASSY, FRAME, SOLUTION		
14	86297930	4	GROMMET, .50ID X .06		
15	86298120	1	NUT, SPEED, #8-32		
16	86299120	1	TERMINAL STRIP, 4-POS, .25		
17	86358710	1	HOSE ASSEMBLY, CLP DUO		
18	86281980	1	HOSE, 1/2ID WIRE BOUND X 5"		
19	86298070	1	ASSY, PUMP 110V		
20	86233150	3	CLAMP, 3/8 HOSE (D-SLOT)		
21	86240530	1	HOSEBARB, 1/2 X 1/4 X 1/2, TEE		

*SEE SERIAL NUMBER PAGE.

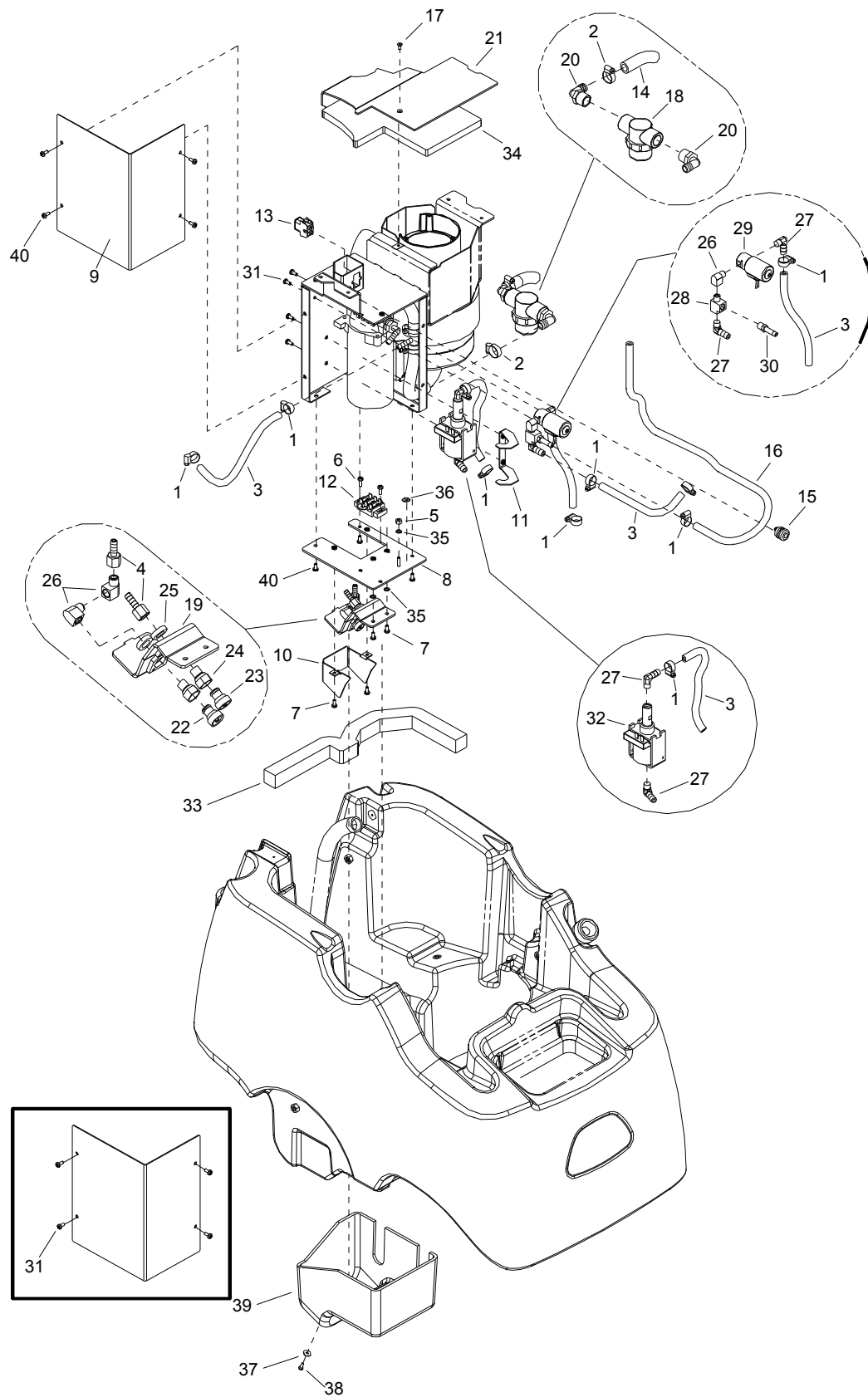
Solution - From Serial Number (*6)



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86302620	1	FOAM, 1 X 1 X 20		
2	86390450	1	TUBE, NYL 1/4 X 17.5"LG		
3	86367210	2	TUBE, NYL, 1/4 X 8.38 LG		
4	86367150	2	ELBOW, JG, 1/4 STEM X 1/4 TUBE		
5	86270780	1	NUT, 8-32 HEX		
6	86273930	2	SCR, 8-32 X 1/2 PPHMS		
7	86006520	6	SCR, 8-32 X 3/8 PPHMS SS		
8	86295050	1	PLATE, BOTTOM		
9	86295060	1	COVER, SIDE		
10	86297210	1	COVER, NOZZLE MOUNT		
11	86297850	1	CLAMP, SOLENOID PUMP		
12	86297890	1	TERMINAL STRIP, 3-POS, .25		
13	86299330	1	HARNESS, HANDLE CONNECTOR		
14	86390380	1	ADAPTER, 1/2MPT X 3/8FPT X 1/8FPT		
15	86300310	1	BUSHING, STRAIN RELIEF		
16	86367220	1	TUBE, NYL, 1/4 X 20 LG		
17	86310710	1	SCR, 8-32 X 1/2" PFHMS PLT		
18	86390390	1	STRAINER, 80MESH SCREEN CYL		
19	86298090	1	ASSY, NOZZLE MOUNT		
20	86390400	1	CONNECTOR, JG, 3/8MPT X 3/8 TUBE		
21	86297230	1	BAFFLE, ACOUSTIC		
22	86297440	1	JET, PROMAX, 11008		
23	86012550	1	JET, PROMAX, 11001		
24	86004570	2	JET BODY, MINI PROMAX BODY		
25	86010820	2	WASHER, 7/16 X 3/4 X .19 RUBBER		
26	86367160	5	ELBOW, FIXED, JG, 1/4 TUBE X 1/8 MPT		
27	86373360	2	TUBE, NYL, 1/4 X 1.63 LG		
28	86367170	1	TEE, UNION, JG, 1/4 TUBE		
29	86297290	1	VALVE, SOLENOID, 120VAC, 1/8 NPT		
30	86373350	1	TUBE, NYL, 1/4 X 32 LG		
31	86353090	2	SCR, 8-32 X 5/16 PPHMS SS		
32	86201110	1	PUMP, 110/120 60 HZ FLOJET		
33	86367180	2	ADAPTER, FML, 1/4 TUBE X 1/8 FPT		
34	86302640	1	FOAM, SOLN ASM LID		
35	86010640	3	WASHER, #10 LOCK EXT STAR SS		
36	86245040	1	LABEL, GROUND SYMBOL		
37	86010650	1	WASHER #10 X 9/16 OD		
38	86006800	1	SCR, 10-32 X 1/2 PHTR PLT		
39	86395250	1	COVER, SOLN ASM, LOWER, TRIM		
40	86006790	7	SCREW 10-32 X 3/8 HHTR W/STAR	*(3)	

*SEE SERIAL NUMBER PAGE.

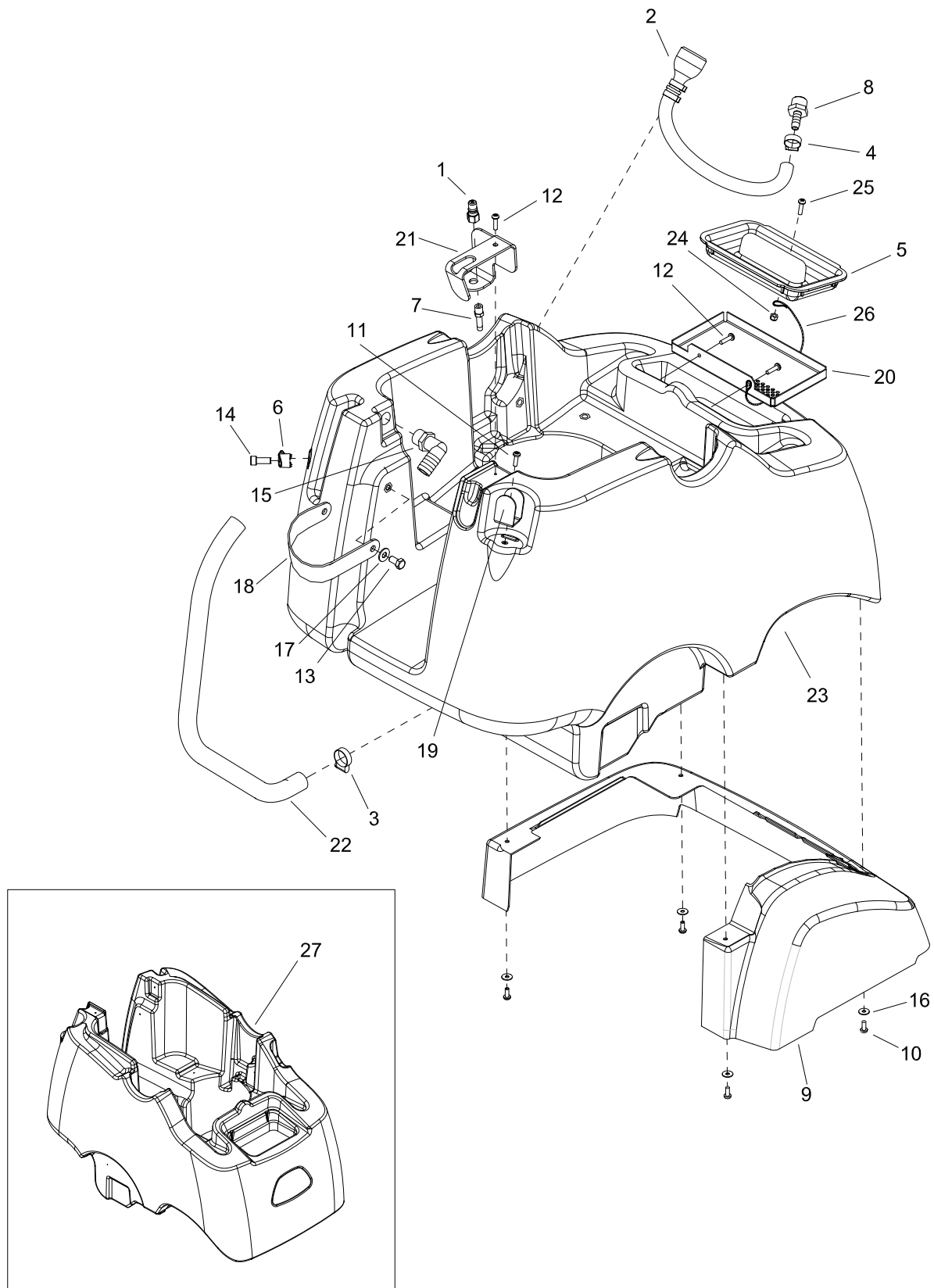
Solution - Prior to Serial number (*6)



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86233090	9	CLAMP, 1/4 ID HOSE		
2	86233150	2	CLAMP, 3/8 HOSE (D-SLOT)		
3	86281060	4	HOSE, 1/4ID NYLOBRD X 8"		
4	86197640	2	HOSEBARB, 1/8" FPT X 1/4"		
5	86270780	1	NUT, 8-32 HEX		
6	86273930	2	SCR, 8-32 X 1/2 PPHMS		
7	86006520	6	SCR, 8-32 X 3/8 PPHMS SS		
8	86295050	1	PLATE, BOTTOM		
9	86295060	1	COVER, SIDE		
10	86297210	1	COVER, NOZZLE MOUNT		
11	86297850	1	CLAMP, SOLENOID PUMP		
12	86297890	1	TERMINAL STRIP, 3-POS, .25		
13	86299330	1	HARNESS, HANDLE CONNECTOR		
14	86281980	1	HOSE, 1/2ID WIRE BOUND X 5"		
15	86300310	1	BUSHING, STRAIN RELIEF		
16	86301050	1	HOSE, 1/4 ID NYLOBRD X 27"		
17	86310710	1	SCR, 8-32 X 1/2" PPHMS PLT		
18	86256090	1	STRAINER, 1/2 FPT 80 MESH		
19	86298090	1	ASSY, NOZZLE MOUNT		
20	86001530	2	HOSEBARB, 1/2MPT X 1/2 HOSE 90		
21	86297230	1	BAFFLE, ACOUSTIC		
22	86297440	1	JET, PROMAX, 11008		
23	86012550	1	JET, PROMAX, 11001		
24	86004570	2	JET BODY, MINI PROMAX BODY		
25	86010820	2	WASHER, 7/16 X 3/4 X .19 RUBBER		
26	86197400	3	ELBOW, 1/8NPT STREET		
27	86240610	4	HOSEBARB, 1/8MPT X 1/4H 90D		
28	86197750	1	TEE, 1/8 NPT STREET RUN		
29	86297290	1	VALVE, SOLENOID, 120VAC, 1/8 NPT		
30	86197520	1	HOSEBARB 1/8MPT X 1/4 DL		
31	86353090	2	SCR, 8-32 X 5/16 PPHMS SS		
32	86201110	1	PUMP, 110/120 60 HZ FLOJET		
33	86302620	1	FOAM, 1 X 1 X 20		
34	86302640	1	FOAM, SOLN ASM LID		
35	86010640	3	WASHER, #10 LOCK EXT STAR SS		
36	86245040	1	LABEL, GROUND SYMBOL		
37	86010650	1	WASHER #10 X 9/16 OD		
38	86006800	1	SCR, 10-32 X 1/2 PHTR PLT		
39	86395250	1	COVER, SOLN ASM, LOWER, TRIM		
40	86006790	7	SCREW 10-32 X 3/8 HHTR W/STAR	*(3)	

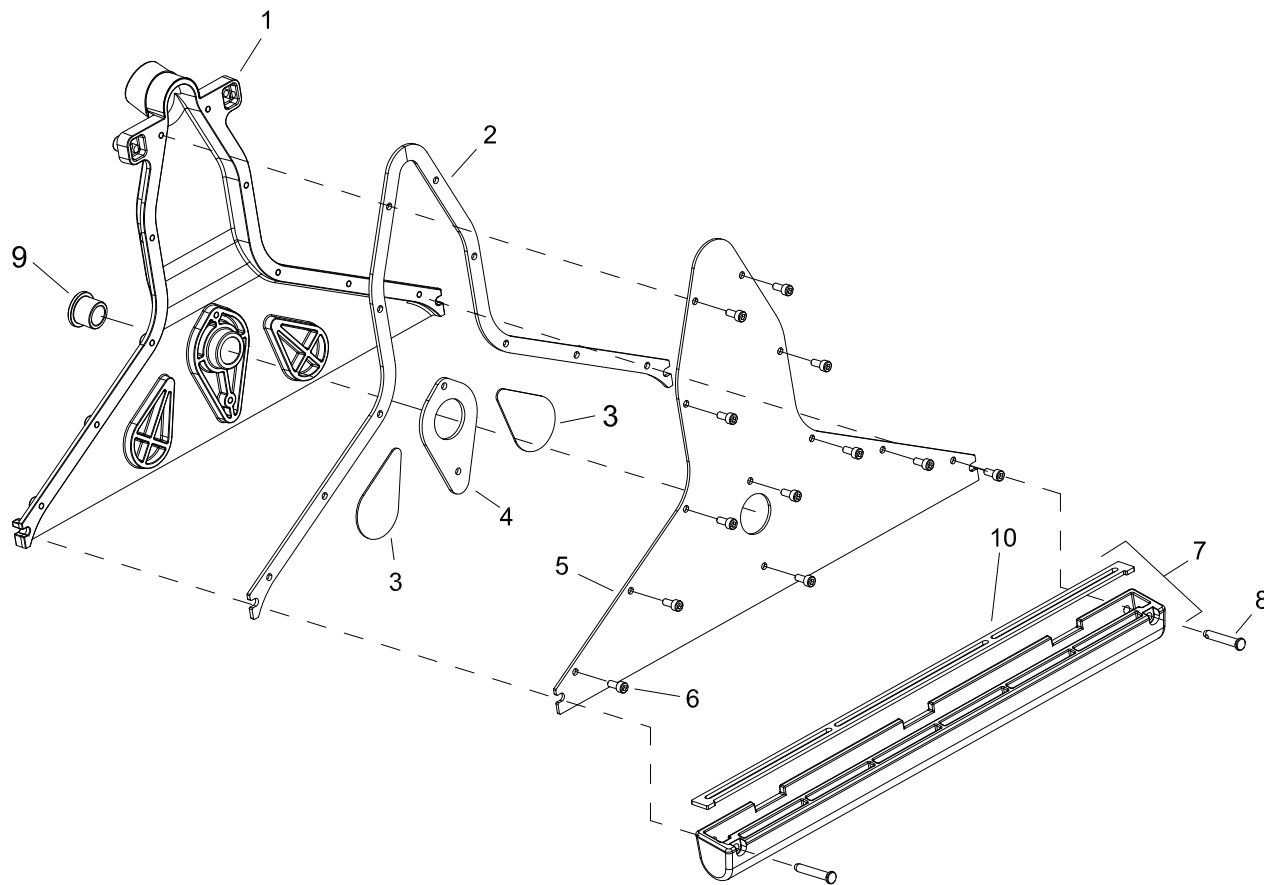
*SEE SERIAL NUMBER PAGE.

Solution Tank



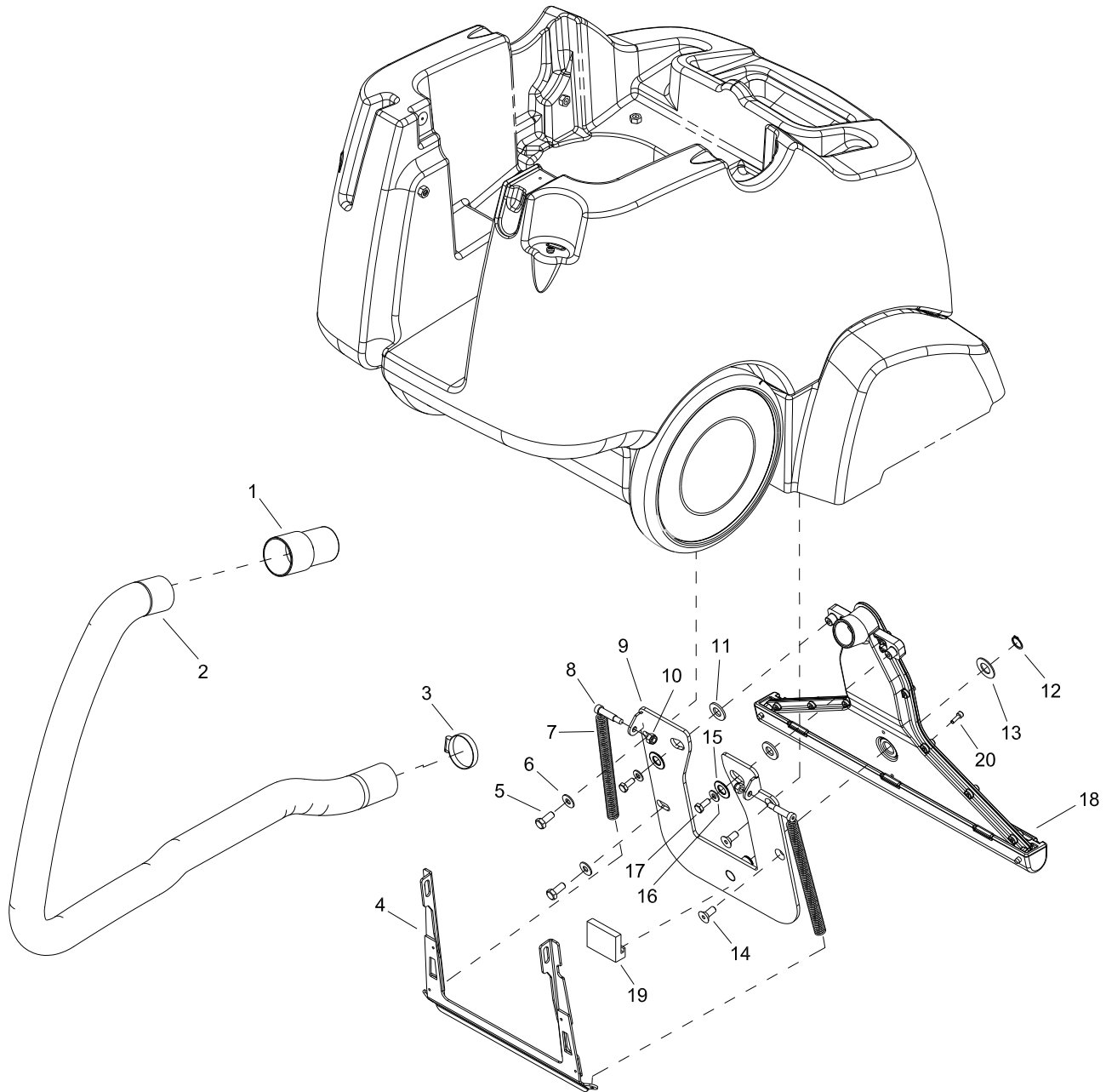
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86200820	1	NIPPLE, 1/8FPT QD ,MALE BRASS		
2	86260690	1	HOSE ASM, FCT ADPTR X 60" NBRD		
3	86233110	1	CLAMP, 1.0" WORM GEAR		
4	86233090	1	CALMP 1/4 ID HOSE		
5	86234790	1	COVER, CLP SOLUTION		
6	86238460	1	HOOK, STRAP		
7	86373610	1	CONNECTOR, JG, 1/4 TUBE X 1/8 MNPT	(*6)	
8	86197920	1	HOSEBARB, 1/2MPT X 3/8 NYL DL		
9	86395260	1	SHROUD, FRONT		
10	86006860	4	SCR, #10 X 1/2 PPHST TYPE B SS		
11	86276160	1	SCR, 10-32 X 5/8 PPHMS BLK		
12	86276290	3	SCR, #10 X 3/4 PPHST HI-LO BLK		
13	86276490	1	SCR, 5/16-18 X 5/8 HHCS SS		
14	86277050	1	SCR, 5/16-18 X 3/4 SHCS SS		
15	86240790	1	HOSEBARB, 1/2MPT X 3/4 90D		
16	86010650	4	WASHER, #10 X 9/16 OD		
17	86010670	1	WASHER, 5/16 FLAT SS		
18	86297620	1	STRAP, HAND TOOL		
19	86297990	1	BRKT, HANDTOOL HOSE		
20	86299390	1	BAFFLE, FILL PORT		
21	86299530	1	BRKT, BOTTLE & QD MOUNT		
22	86299590	1	HOSE, 3/4ID X .12W CLR X 25"		
23	86390420	1	TANK, SOLN, TRIM (BLUE)	(*6)	
24	86270920	1	NUT, 6-32 HEX NYLOCK SS		
25	86273950	1	SCR, 6-32 X 1/2 PPHMS		
26	86246080	1	LANYARD, 18.0 W/LOOP & EYE		
27	86301780	1	TANK, SOLN,TRIM (BLUE)	(*6)	

* SEE SERIAL NUMBER PAGE



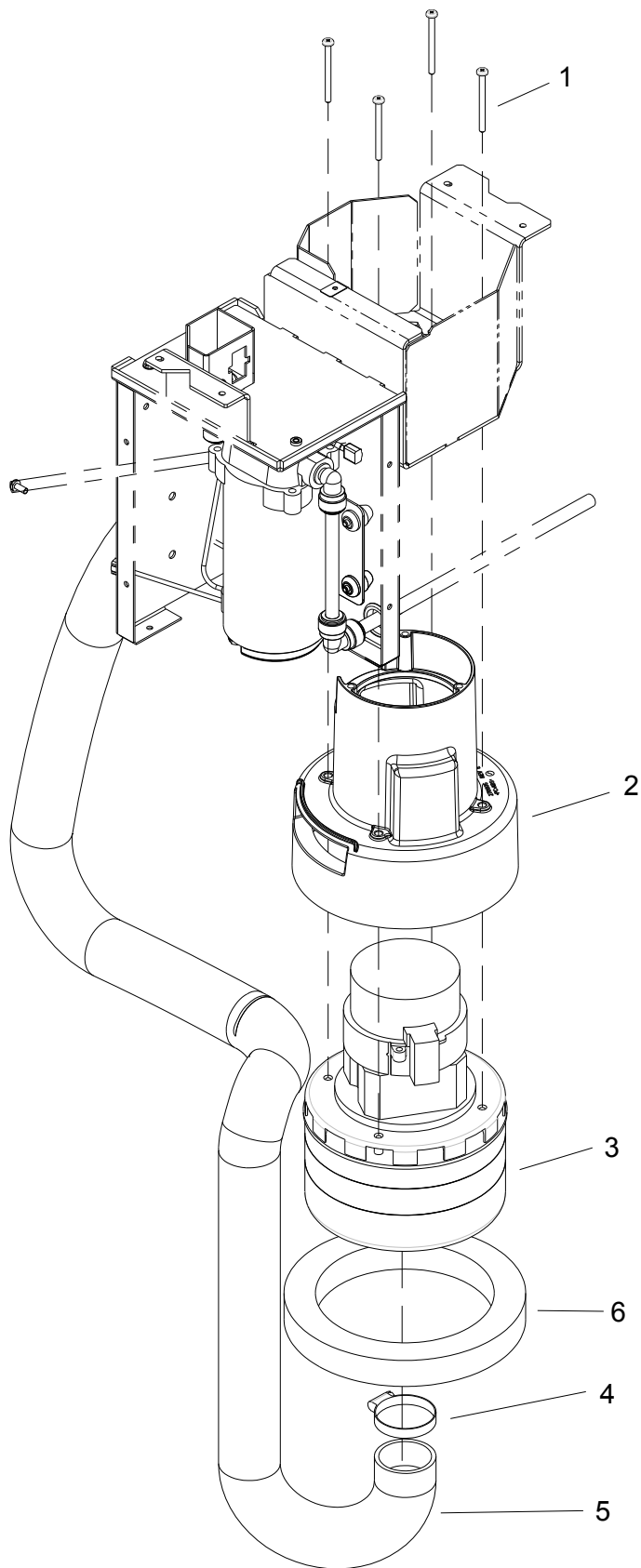
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86225650	1	VACUUM SHOE, 18"		
2	86218110	1	GASKET, 18" VAC SHOE OUTER		(TWO HALVES)
3	86218270	2	GASKET, 18 " VAC SHOE SIDE		
4	86218260	1	GASKET, 18" VAC SHOE CENTER		
5	86223230	1	PLATE, 18" VACUUM SHOE		
6	86172950	12	SCR, M5X12, SHCS, ISO4762, SS		
7	86293170	1	WIPER ASM 18"		
8	86293190	2	PIN, CLEVIS		
9	86293180	1	BEARING, BRONZE FLANGED		
10	86218250	1	GASKET 18" WIPER		

Vacuum Shoe Mounting



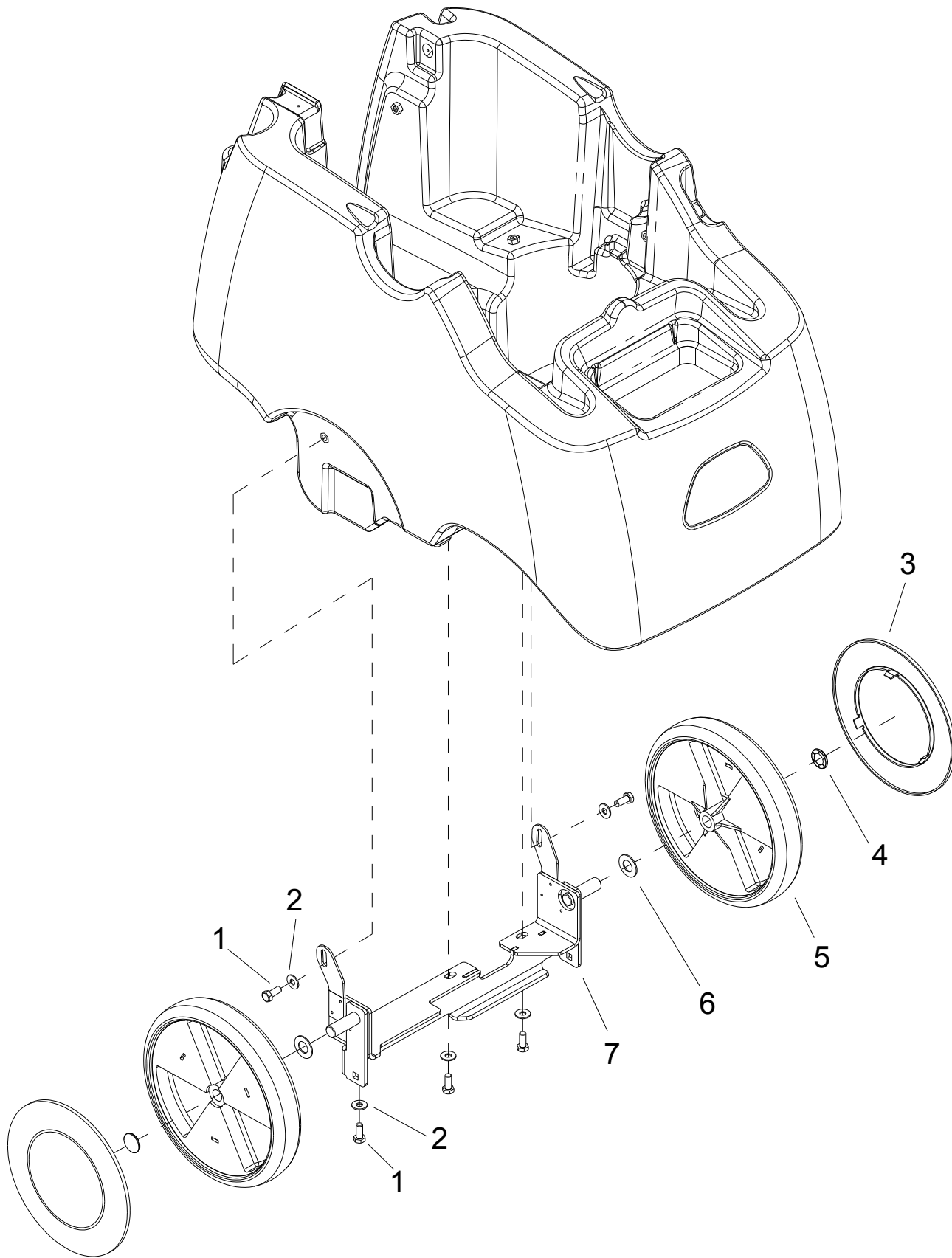
Vacuum Shoe Mounting

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86003010	1	CUFF, HOSE 1.5" BLK A 2161		
2	86004290	1	HOSE, 1.5 BLK VAC X 45"		
3	86002390	1	CLAMP, 1.75" WORM GEAR X .312		
4	86297470	1	ASM, TRAVEL LIMITER		
5	86276490	2	SCR, 5/16-18 X 5/8 HHCS SS		
6	86010670	2	WASHER, 5/16 FLAT SS		
7	86295030	2	SPRING, EXT .562D X 6.0L X .072W		
8	86278280	2	SHOULDER BOLT		
9	86296510	1	BRKT ASM, VAC SHOE MOUNT		
10	86005810	2	NUT, 1/4-20 HEX NYLOCK SS		
11	86259420	2	WASHER, THRUST .51 ID X 1 ODBRO		
12	86272750	1	RING, 5/8 EXTERNAL SNAP		
13	86010730	1	WASHER, 5/8		
14	86298080	2	SCR, 5/16-18 X 3/4 FHSC SS		
15	86259410	2	WASHER, THRUST .51 ID X 1 OD X .063		
16	86010630	2	WASHER, 1/4 ID X 5/8 OD SS		
17	86273750	2	SCR, 1/4-20 X 5/8 HHCS SS		
18	86293160	2	VAC SHOE ASM 18"		
19	86300340	1	BLOCK, DECK LINKAGE		
20	86014990	1	SCR, M5X20, SHCS, ISO4762, SS		



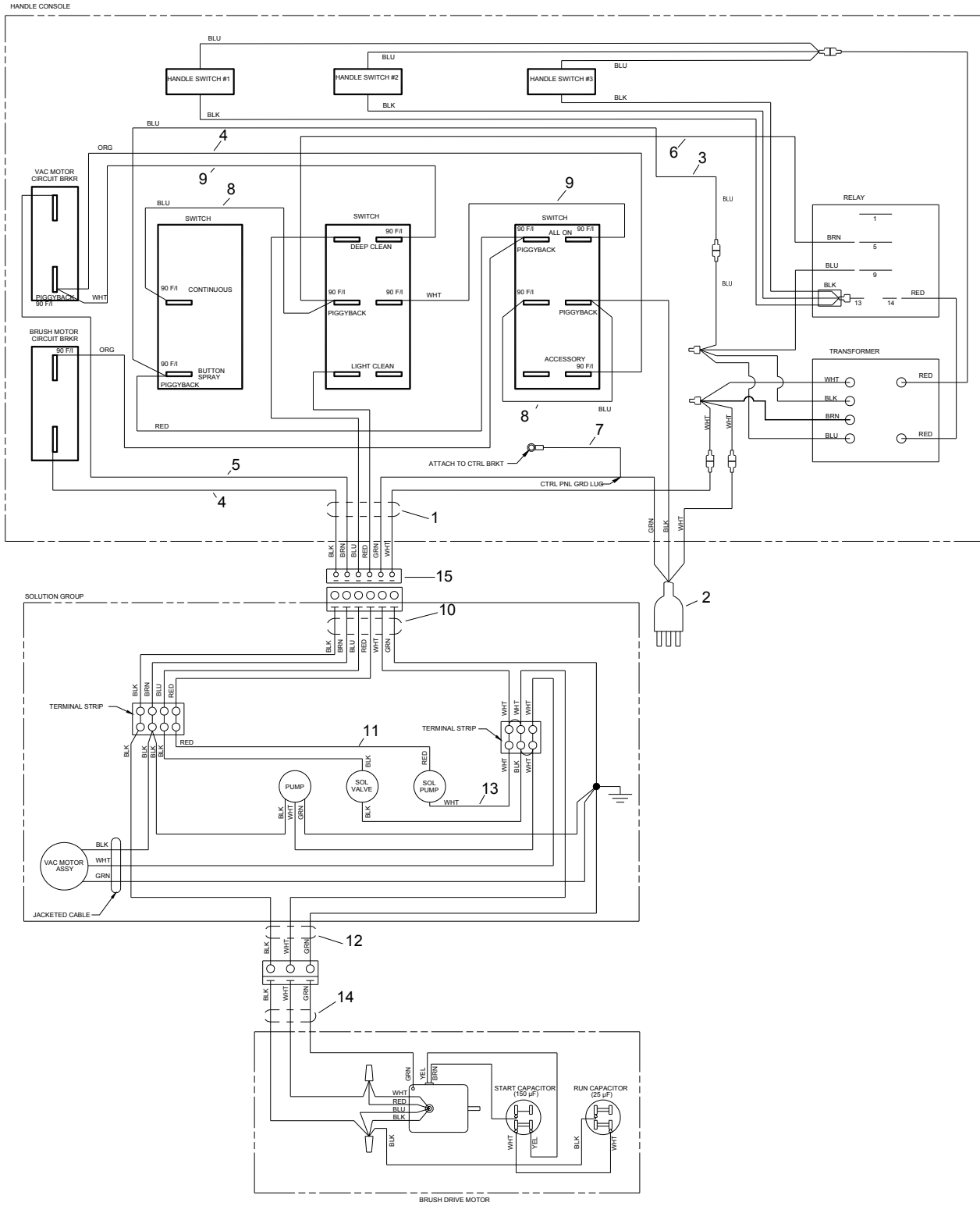
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86300300	4	SCR, #8 X 2" PPHSMS		
2	86217480	1	COVER, VAC MOTOR		
3	86299250	1	ASSY, VAC MOTOR		
4	86002390	1	CLAMP, 1.75" WORM GEAR X .312		
5	86004290	1	HOSE, 1.5 BLK VAC X 45"		
6	86302620	1	FOAM, 1 X 1 X 20		

Wheel & Axle



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86276490	5	SCR, 5/16-18 X 5/8 HHCS SS		
2	86010670	5	WASHER, 5/16 FLAT SS		
3	86219480	2	HUBCAP, 9.75" WHEEL		
4	86001660	2	HUBCAP, 5/8" SHAFT		
5	86226050	2	WHEEL, 9.75" X 1.5"		
6	86010730	2	WASHER, 5/8 ID X 1.18 X .06 SS		
7	86294920	1	AXLE ASM, CLIPPER DUO		

Wiring Diagram



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86296060	1	HARNESS, HANDLE		
2	86297750	1	CORD ASM, 14/3 X 22 PGTL		
3	86298180	1	WIRE, 540MM BLU/18 76046XSTRIP		
4	86296010	2	WIRE, 240MM ORG/18 76031X76046		
5	86296020	1	WIRE, 150MM RED/18 76031X76046		
6	86295980	1	WIRE, 605MM BRN/18 76046X76047L		
7	86268210	1	WIRE, 15" GRN/18 76008 X 76008		
8	86295990	2	WIRE, 80MM BLU/18 76031X76046		
9	86296000	2	WIRE, 150MM WHT/18 76046X6046		
10	86299330	1	HARNESS, HANDLE CONNECTOR		
11	86299370	1	WIRE, 10"WHT/14 76029 X 76029		
12	86299340	1	HARNESS, BRUSH DECK		
13	86299360	1	WIRE, 10" RED/14 76029 X 76029		
14	86294220	1	BRUSH DECK WIRING HARNESS		
15	86312170	1	HANDLE HARNESS CONNECTOR		

Suggested Spare Parts

PART NO.	DESCRIPTION	SERIAL NO. FROM	NOTES
86215250	BELT, 2S 5MM HTD, 15W, 128T		
86216050	BRUSH, EXTRACTOR 16"		
86295520	BRUSH, EXTRACTOR 16" NATURAL		
86002010	BOOT, 3/8 CIRCUIT BREAKER		
86001980	BREAKER, 15A 250VAC 50VDC		
86215670	BREAKER, 8A VDE CIRCUIT		
86218290	GASKET, CONSOLE, HANDLE		
86348660	SWITCH, 2-POSN, BRUSH		
86007200	SWITCH, DPDT3-POSITION ROCKER		
86007140	SWITCH, SPST 2- POSITION ROCKER		
86218180	GASKET, DOME		
86003630	FLOAT SHUT-OFF		
86299250	ASSY, VAC MOTOR		
86298070	ASSY, PUMP 110V		
86297440	JET, PROMAX, 11008		
86012550	JET, PROMAX, 11001		
86201110	PUMP, 110/120 60 HZ FLOJET		
86234790	COVER, CLP SOLUTION		
86256090	STRAINER, 1/2 FPT 80 MESH		
86004570	JET BODY, MINI PROMAX BODY		
86293170	WIPER ASM 18"		
86297870	ASM, INTERIM SWITCH		ALSO ORDER 86266250 (QTY 1) & 86298890 (QTY 1) TERMINALS

REF. NO.	MODEL: SERIAL #
1	10080480000338
2	10080480002261
3	10080480002570
4	10080480004917
5	10080480005381
6	10080480005163

Notes:
