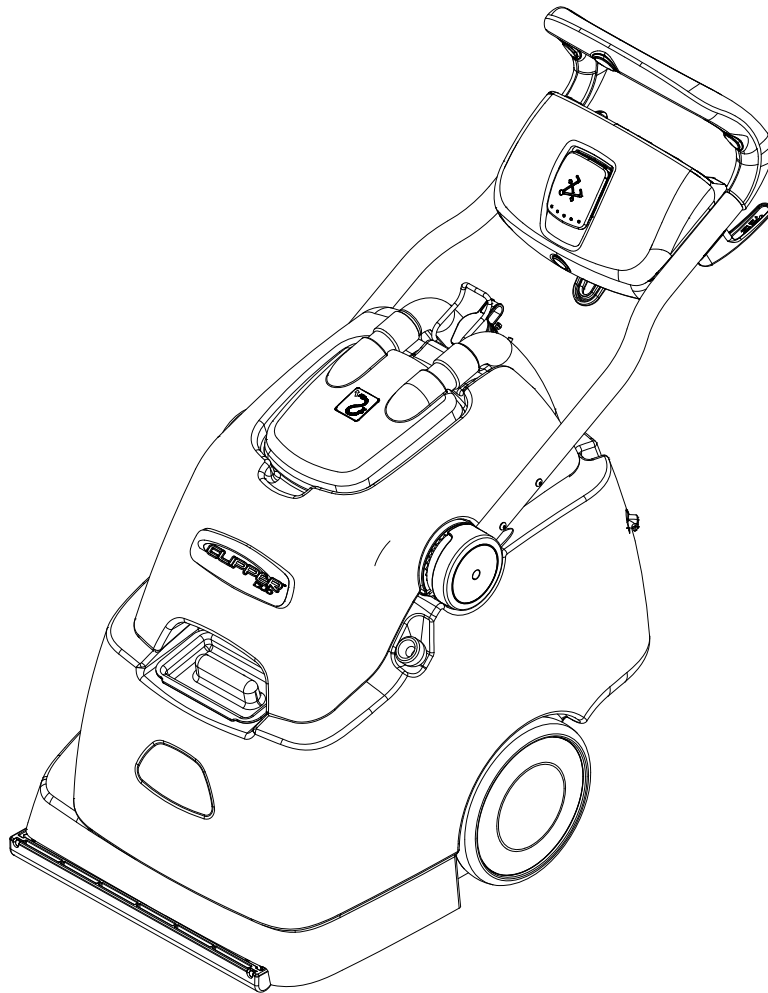


CLIPPER™ DUO

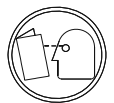


Carpet Extractor

Model: 10080480



Operating Instructions (ENG)



86302100-W
08/12/10

MACHINE DATA LOG/OVERVIEW

Model: _____

Date of Purchase: _____

Serial Number: _____

Sales Representative: _____

Address: _____

Phone Number: _____

Copyright 2006 Windsor Industries, Printed in USA

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.

TABLE OF CONTENTS

<i>Machine Data Log/Overview</i>	2
<i>Table Of Contents</i>	3

HOW TO USE THIS MANUAL

<i>How To Use This Manual</i>	1-1
-------------------------------------	-----

SAFETY

<i>Important Safety Instructions</i>	2-1
<i>Hazard Intensity Level</i>	2-2
<i>Grounding Instructions</i>	2-3
<i>Safety Label Location</i>	2-4

OPERATIONS

<i>Technical Specifications</i>	3-1
<i>How The Machine Works</i>	3-3
<i>Components</i>	3-4
<i>Controls</i>	3-5
<i>Filling Solution Tank</i>	3-6
<i>Pre-run Setup</i>	3-7
<i>Operating the Machine</i>	3-9
<i>Using the Hand Tool</i>	3-12

MAINTENANCE

<i>Service Schedule</i>	4-1
<i>Maintenance Components</i>	4-2
<i>Periodic, Daily & Regular Maintenance</i>	4-3
<i>Circuit Protection</i>	4-4
<i>Scrub Deck</i>	4-5
<i>Scrub Brushes</i>	4-6
<i>Vacuum</i>	4-7
<i>Machine Troubleshooting</i>	4-8

PARTS LIST & SERIAL NUMBERS

<i>Brush Deck</i>	5-1
<i>Brush Deck Motor</i>	5-3
<i>Brush Deck Mounting</i>	5-5
<i>Control Panel</i>	5-7
<i>Decal</i>	5-9
<i>Hand Tool</i>	5-11
<i>Handle</i>	5-13
<i>Handle Bracket</i>	5-15
<i>Handle Mounting</i>	5-17
<i>Handle Release Lever</i>	5-19
<i>Recovery Tank</i>	5-21
<i>Solution</i>	5-23
<i>Solution Tank</i>	5-25
<i>Vac Shoe</i>	5-29
<i>Vac Shoe Mounting</i>	5-31
<i>Vacuum</i>	5-33
<i>Wheel & Axle</i>	5-35
<i>Wiring Diagram</i>	5-37
<i>Suggested Spare Parts</i>	5-39
<i>Serial Numbers</i>	5-40
<i>Warranty</i>	

HOW TO USE THIS MANUAL

This manual contains the following sections:

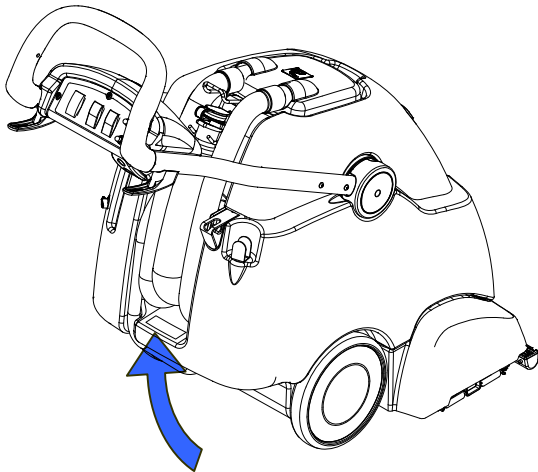
- HOW TO USE THIS MANUAL
- SAFETY
- OPERATIONS
- MAINTENANCE
- PARTS LIST

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 _____
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.



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

SAFETY

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



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.

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:

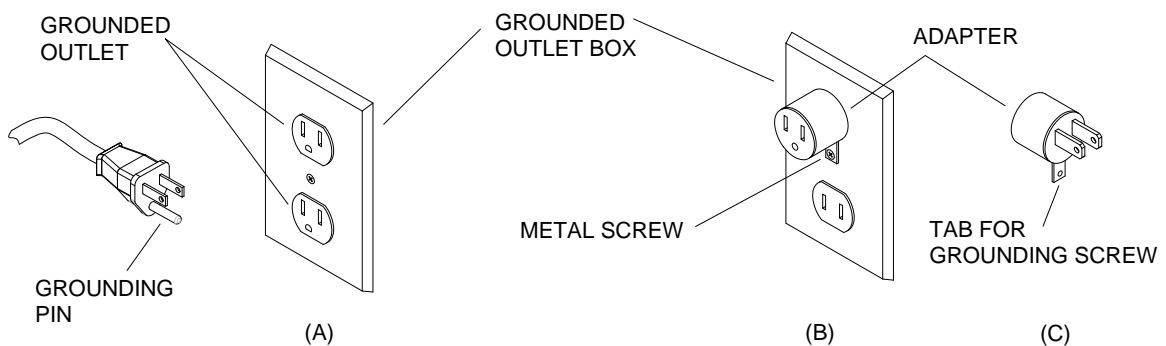
This appliance must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted 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:

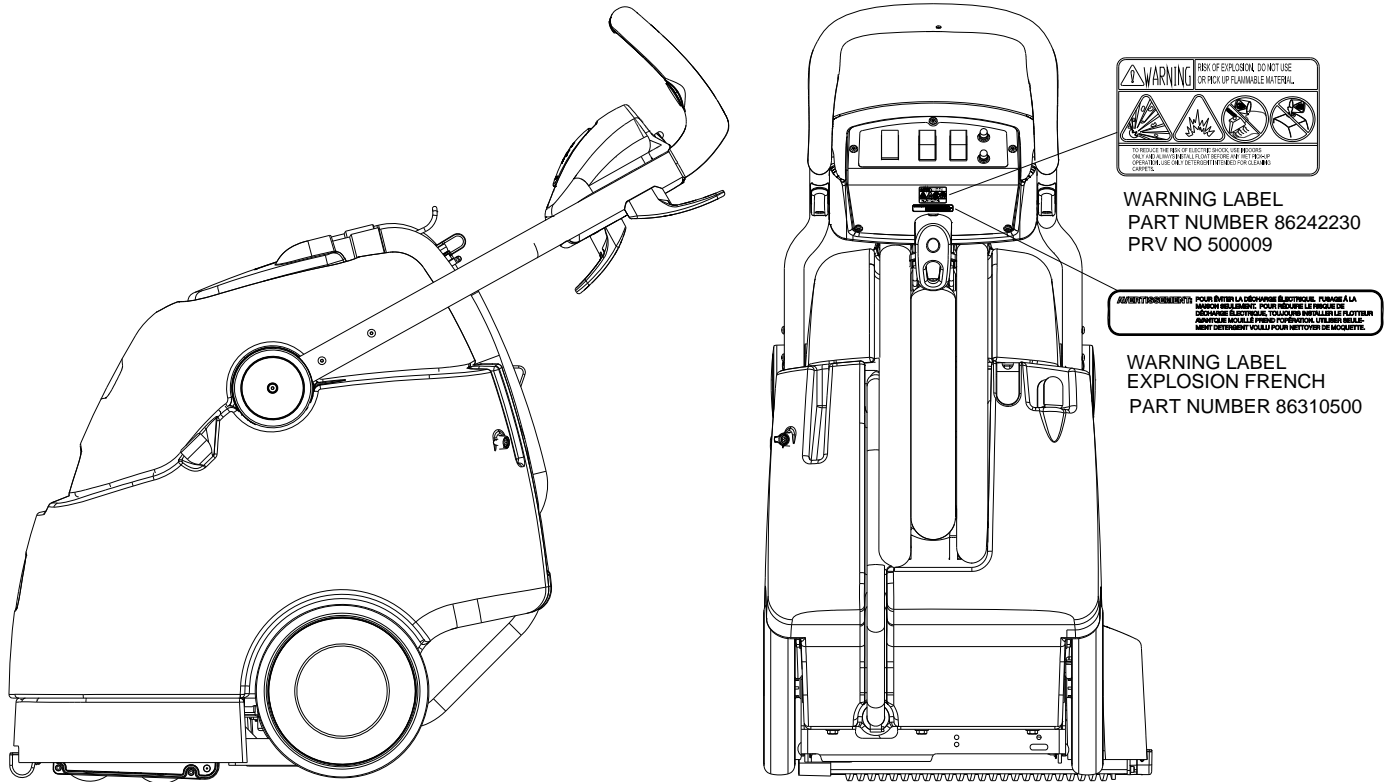
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.



SAFETY

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.



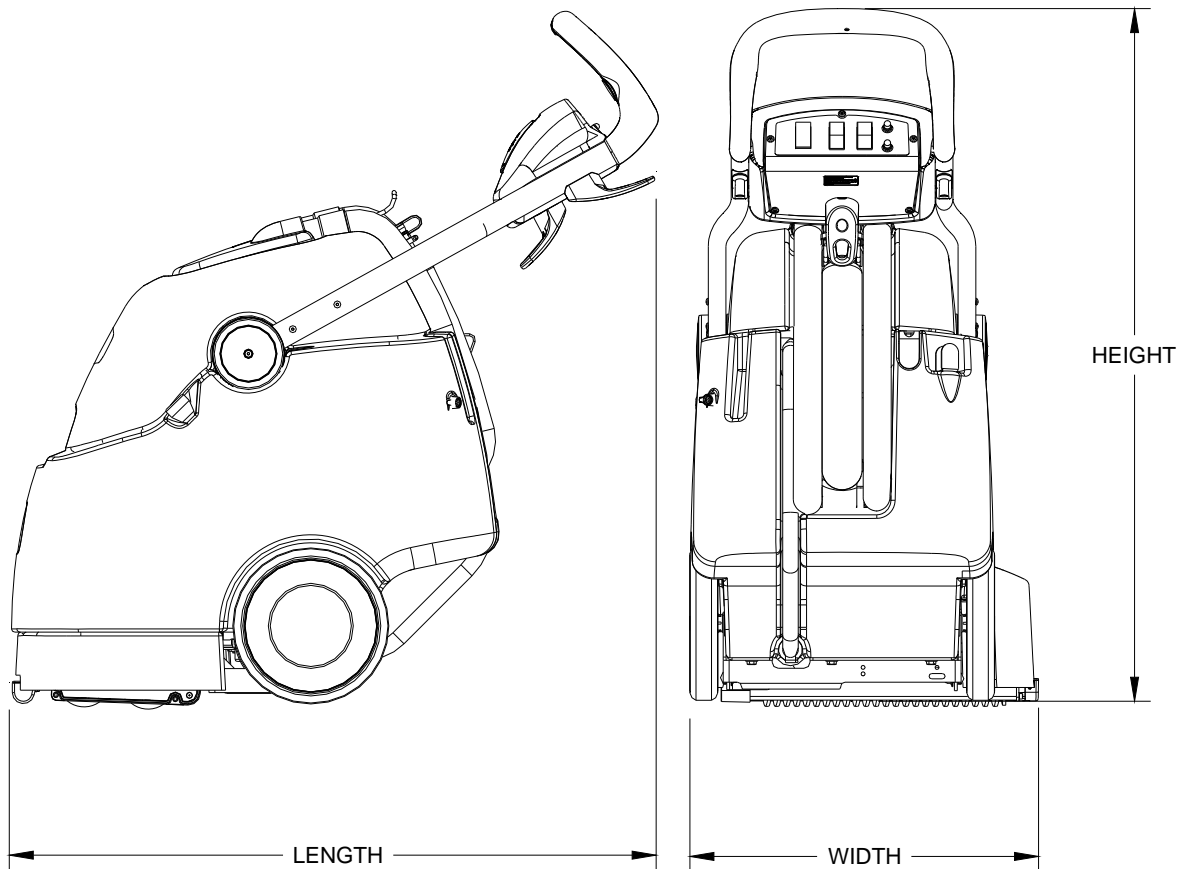
TECHNICAL SPECIFICATIONS

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)
Cleaning Rate	Interim – 10,560 ft ² /hr (981 m ² /hr) Restorative – 3,520 ft ² /hr (327 m ² /hr)
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

TECHNICAL SPECIFICATIONS

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.

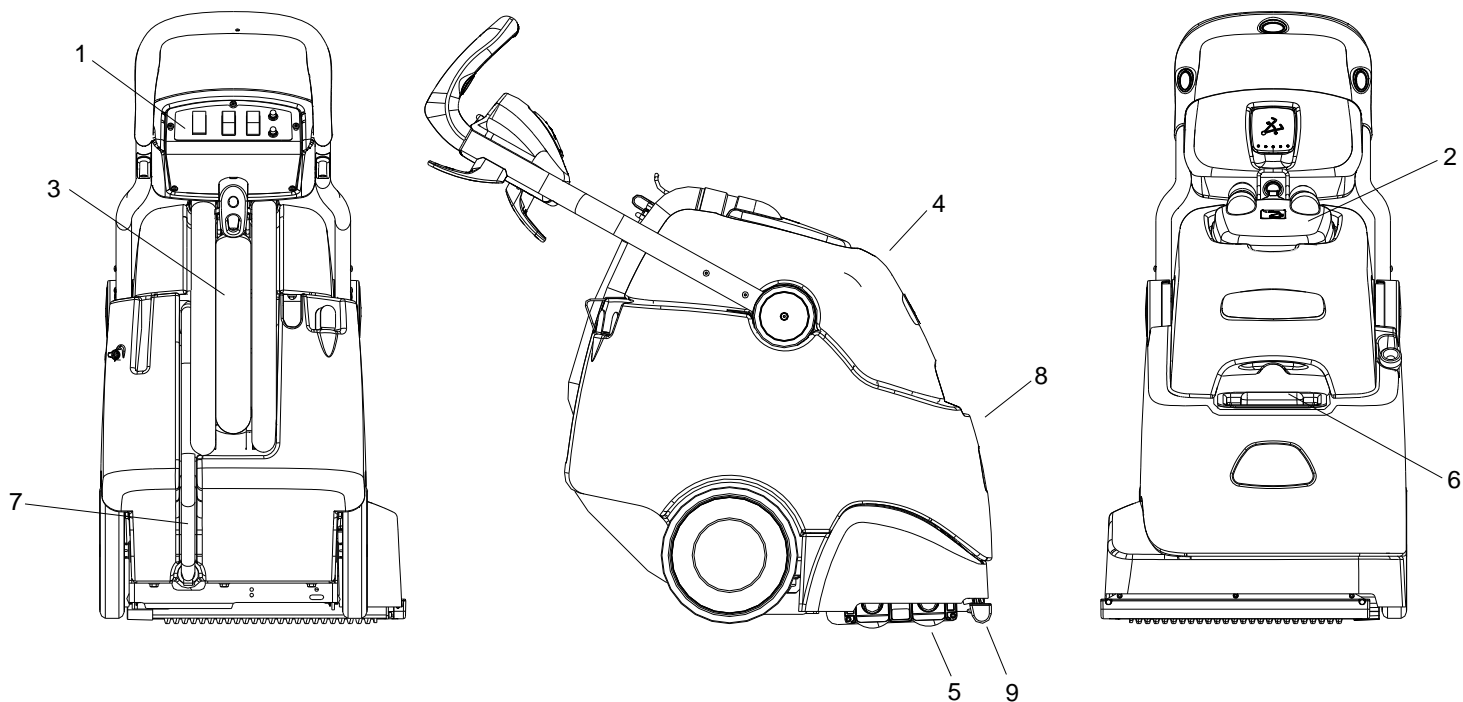
The function of the scrub system is to scrub the carpet, mix the cleaning solution with the soil and lift and groom the carpet pile. The scrub system consists of two cylindrical brushes, motor, and controls. The brushes scrub the carpet as the motor drives the brushes. The counter-rotating action of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

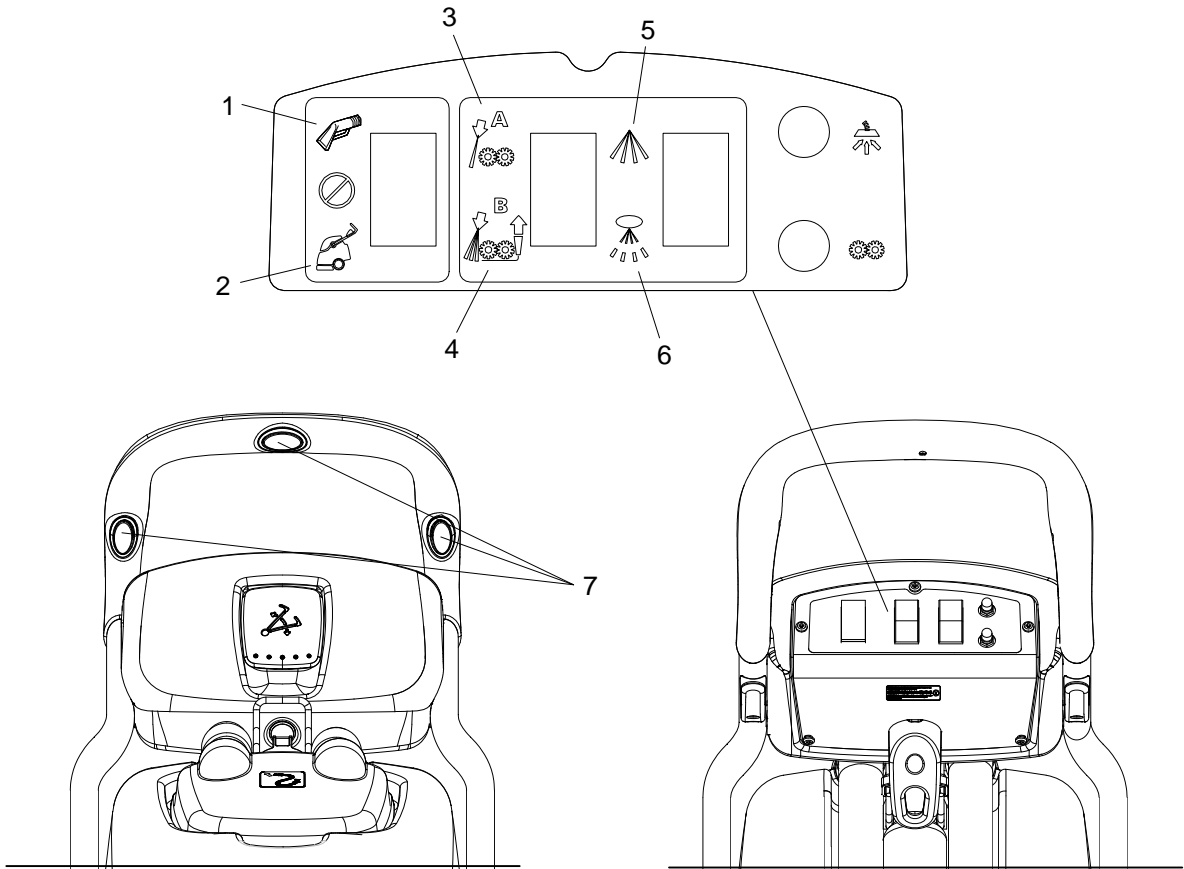
CAUTION: This appliance is not suitable for picking up hazardous dust.

OPERATIONS-COMPONENTS



1. Control Panel
2. Recovery Dome
3. Recovery Drain Hose
4. Recovery Tank
5. Scrub Deck

6. Solution Fill Cover
7. Solution Drain Hose
8. Solution Tank
9. Vacuum Shoe



- 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.

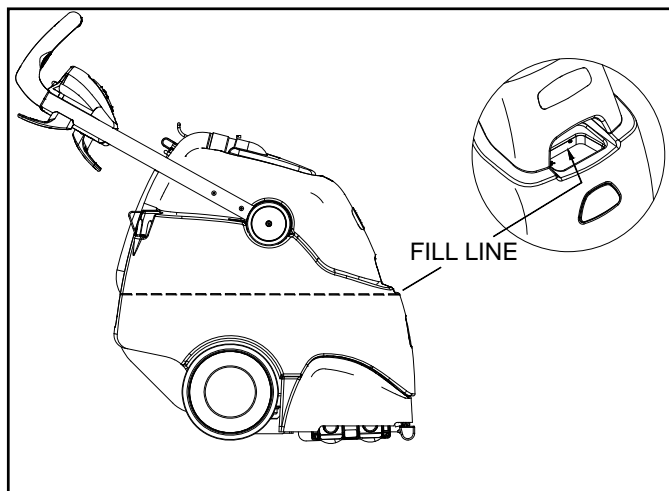
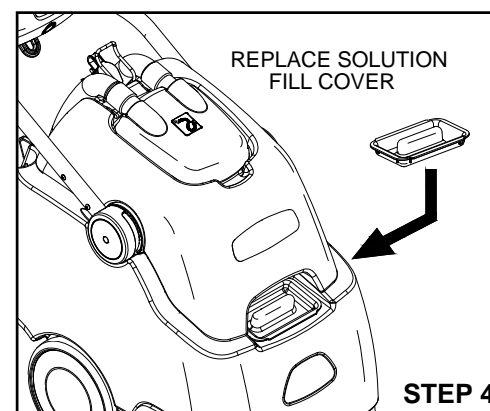
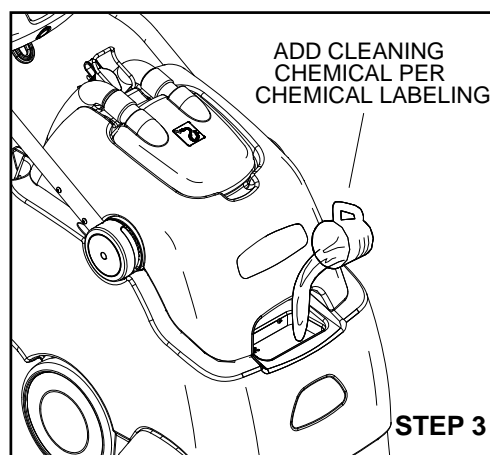
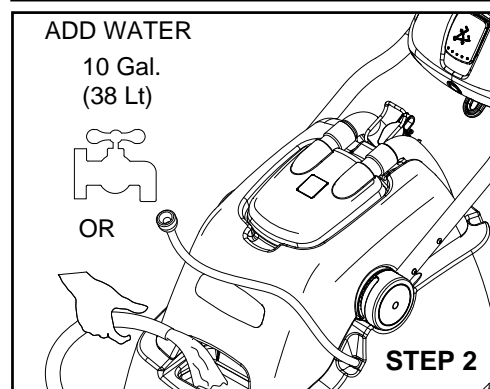
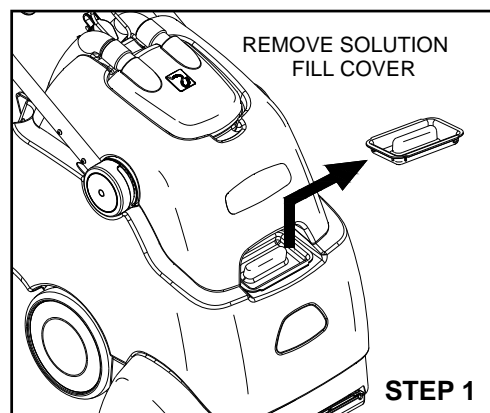
CHEMICALS

Suitable Chemicals

Alkalis
 Detergents
 Hydroxides
 Soaps
 Vinegar

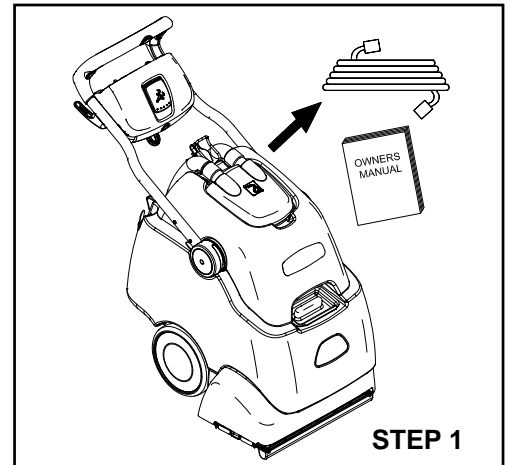
Non-Compatible Chemicals

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

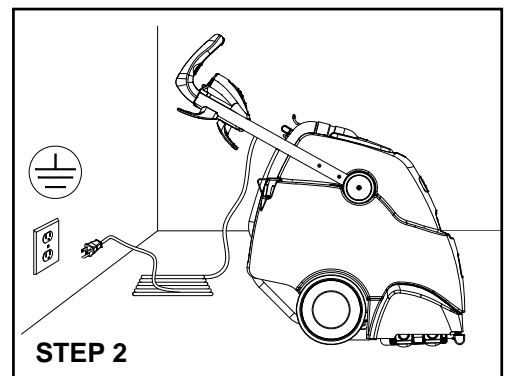


OPERATIONS-PRE RUN SETUP

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



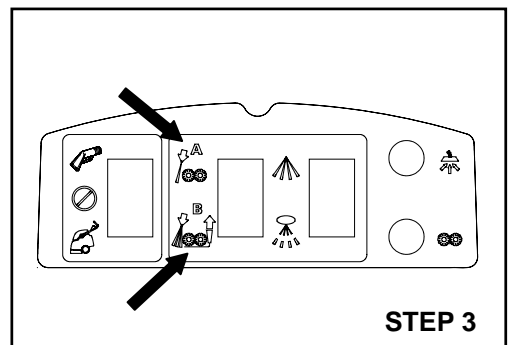
Plug cord into grounded outlet. **NOTE: Be sure dome is seated on recovery tank, and float shut-off is installed correctly.**



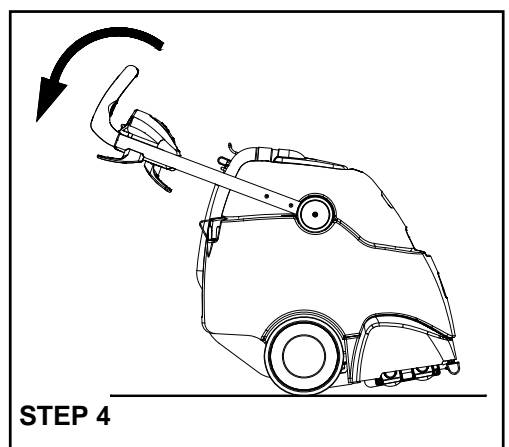
Switch the cleaning mode switch to the desired process.

A for the encapsulating Interim Carpet Cleaning Process.

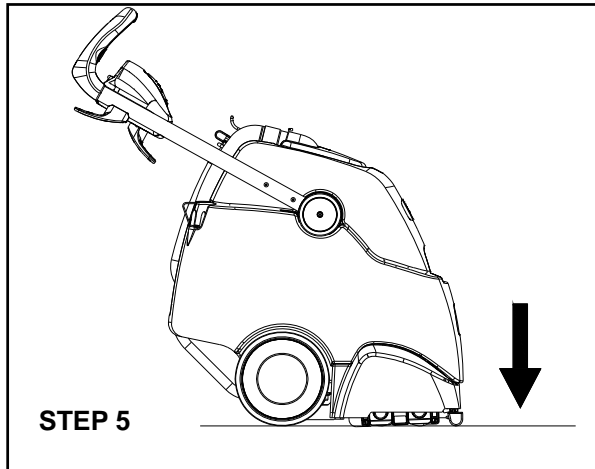
B for Deep Extraction.



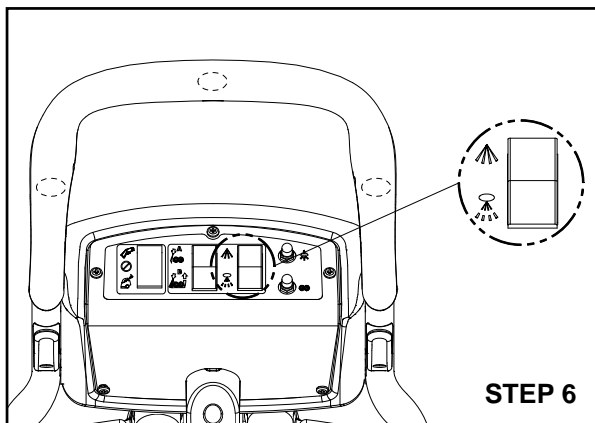
Adjust handle to comfortable operating position. Tip machine back by main handle to move to starting point.



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.

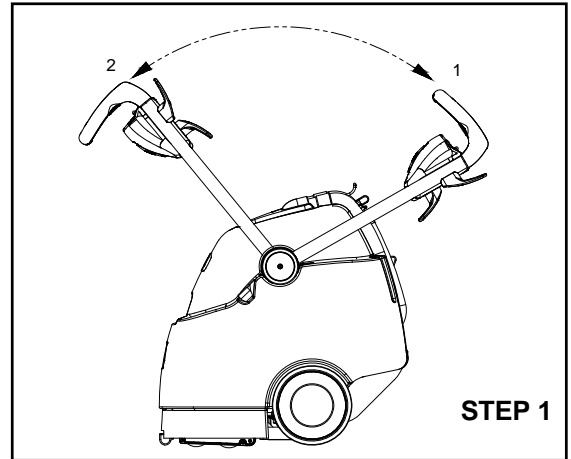
The intermittent setting requires the operator to hold any one of the three trigger switches in the “on” position with the fingers, and is typically used in small areas where short cleaning passes are made.

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.

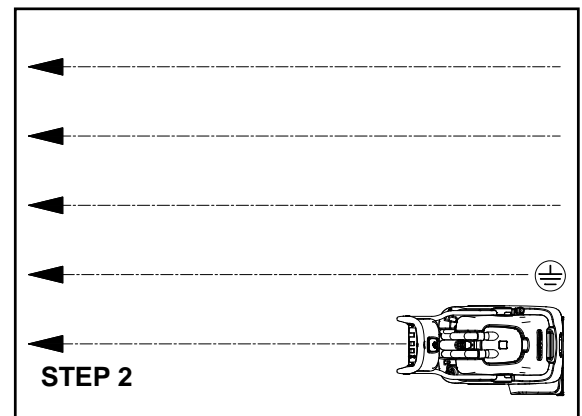
Place main switch in machine cleaning mode to start cleaning process.

OPERATIONS-OPERATING THE MACHINE

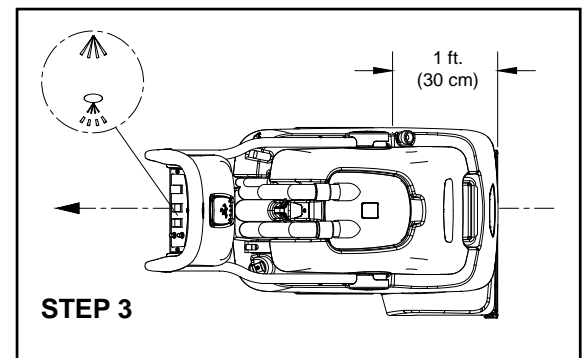
1. This machine can be operated in either direction. For smaller areas operate the machine by pulling rearward.
2. For larger unobstructed areas, flip the handle and use the machine's brush assisted propelling motion.



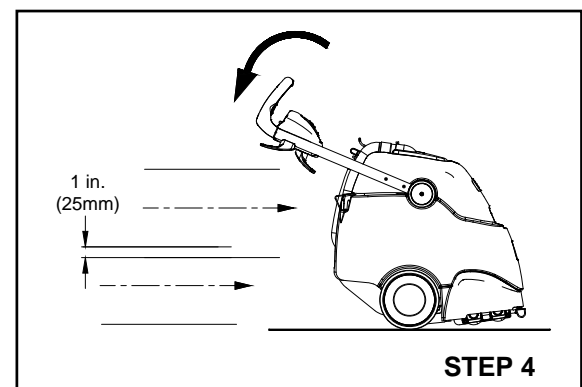
Start at wall closest to power outlet. For small areas, pull straight back without pushing down on handle.



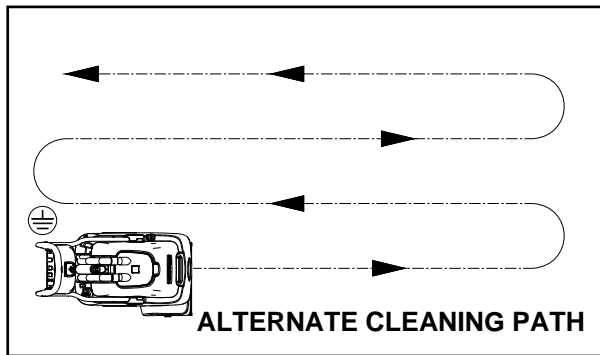
Release intermittent trigger switches or turn off continuous setting on solution switch approximately 1 foot before ending cleaning pass.



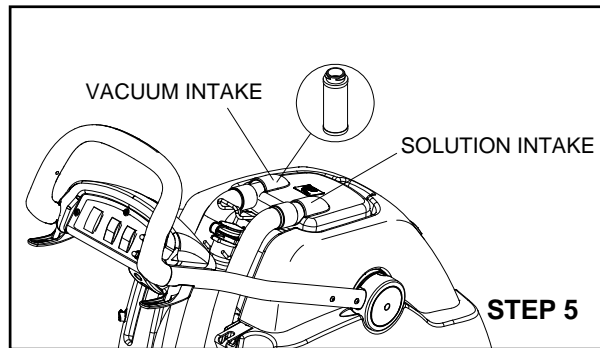
Push down on handle to raise vacuum shoe and brush before moving to the next cleaning pass. Overlap brush contact area approximately 1 inch.



OPERATIONS-OPERATING THE MACHINE

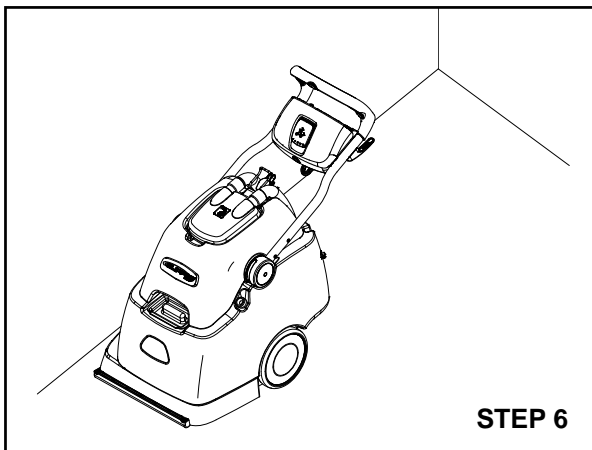


Start at wall closest to power outlet. For large areas flip handle and operate machine in parallel passes, overlapping brush path. Clean perimeter last.

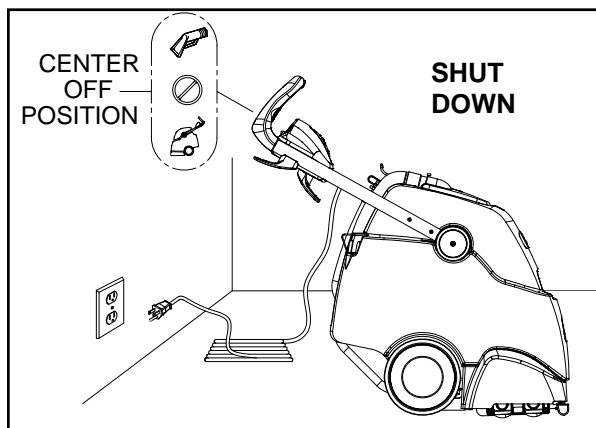


During operation, observe the following: This machine is equipped with clear dome to facilitate operator viewing of dirty solution and vacuum air flow.

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.



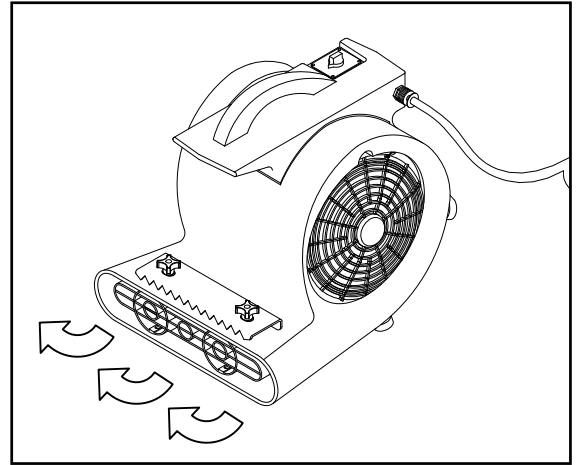
Use right side of machine for cleaning against walls.



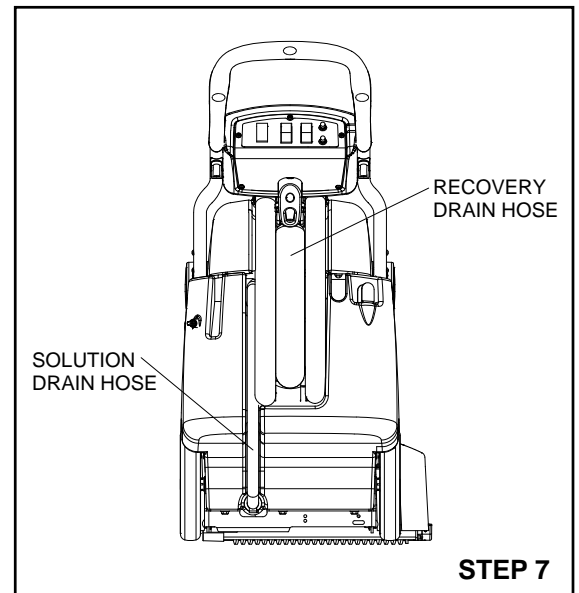
After cleaning, turn off all controls, and carefully unplug machine.

OPERATIONS-OPERATING THE MACHINE

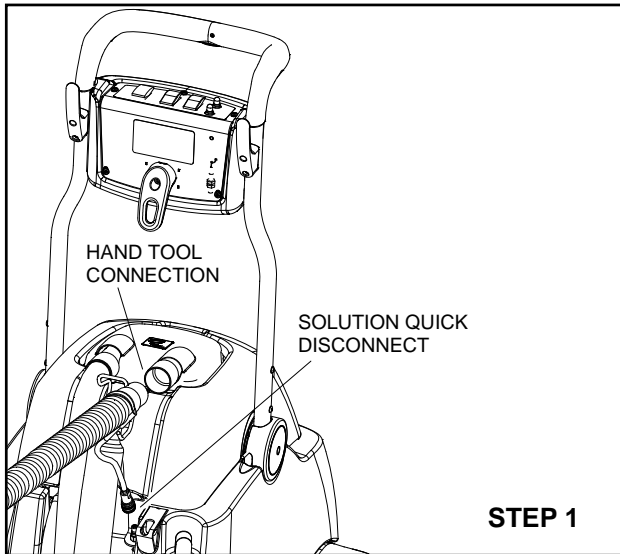
To speed drying, use a Windblower™ fan.



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.



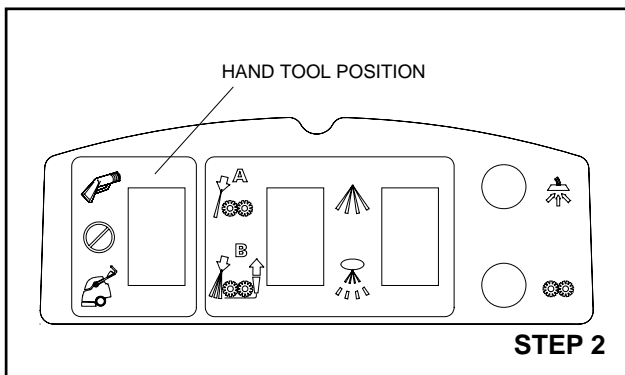
OPERATIONS-USING THE HAND TOOL



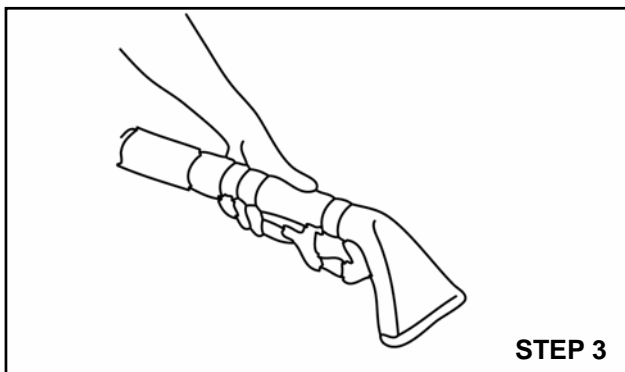
Use only acceptable accessory tools. See Optional Accessories section.

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.



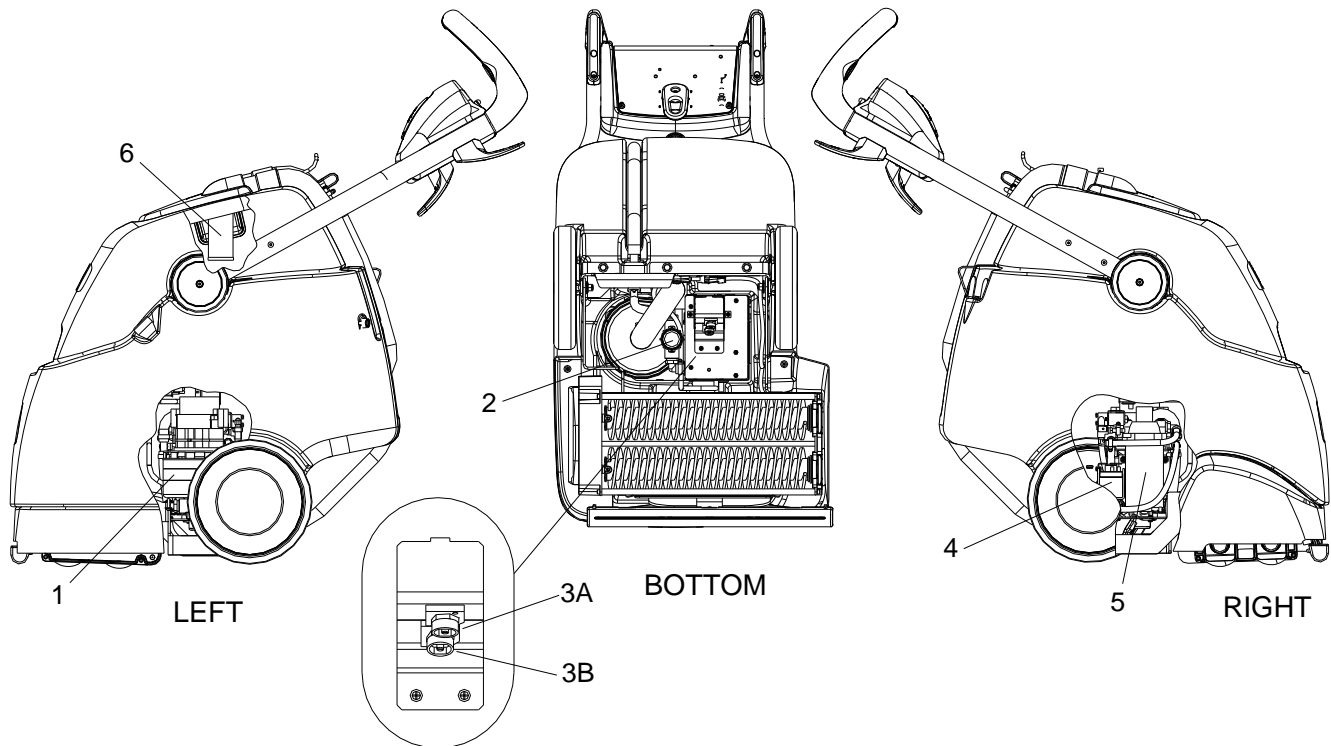
Squeeze handle on accessory tool to begin cleaning.

MAINTENANCE-SERVICE SCHEDULE

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	*		
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
- 2. Solution Strainer
- 3A. Spray Jet-Extraction
- 3B. Spray Jet-Interim

- 4. Interim Solution Pump
- 5. Main Solution Pump
- 6. Float Shut-off

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.

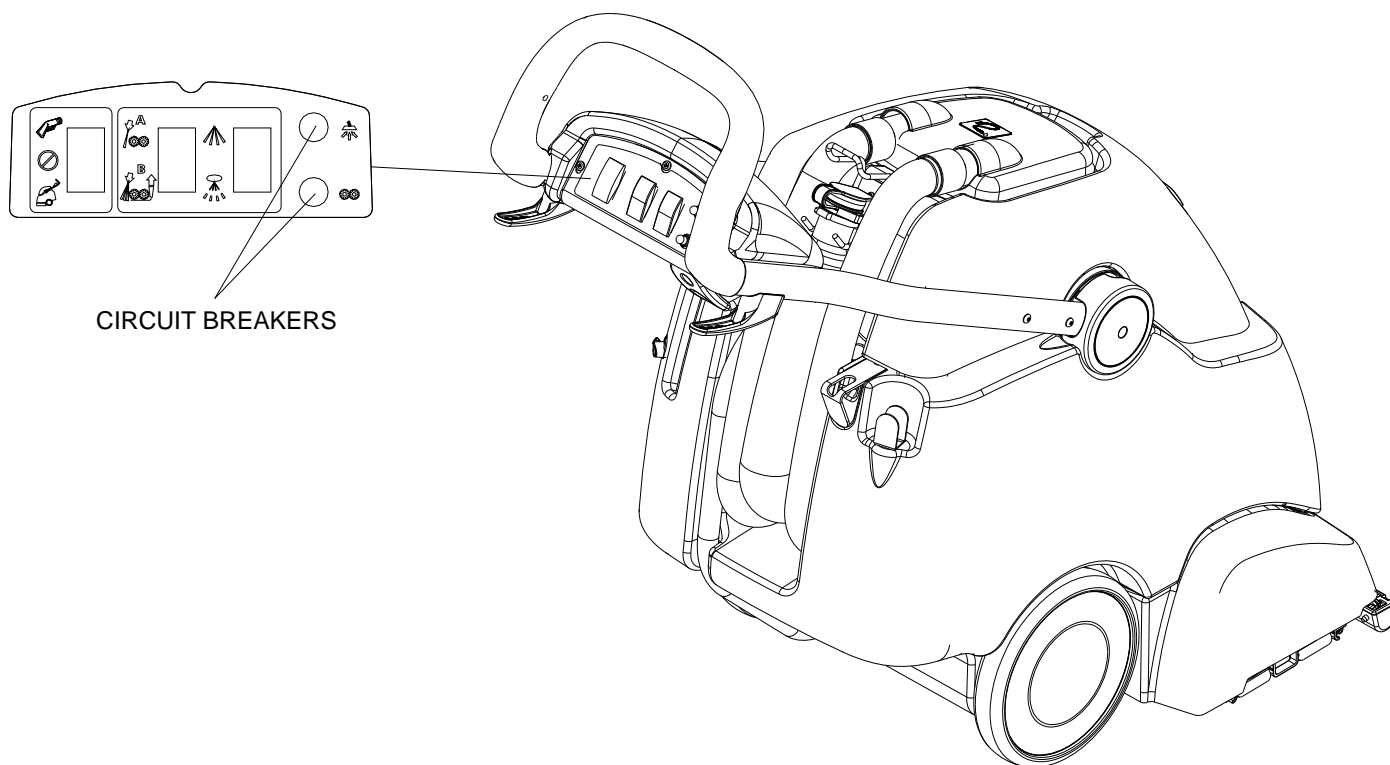
DAILY / REGULAR MAINTENANCE

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 vac 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.

MAINTENANCE-CIRCUIT PROTECTION



CIRCUIT BREAKERS

CIRCUIT BREAKERS

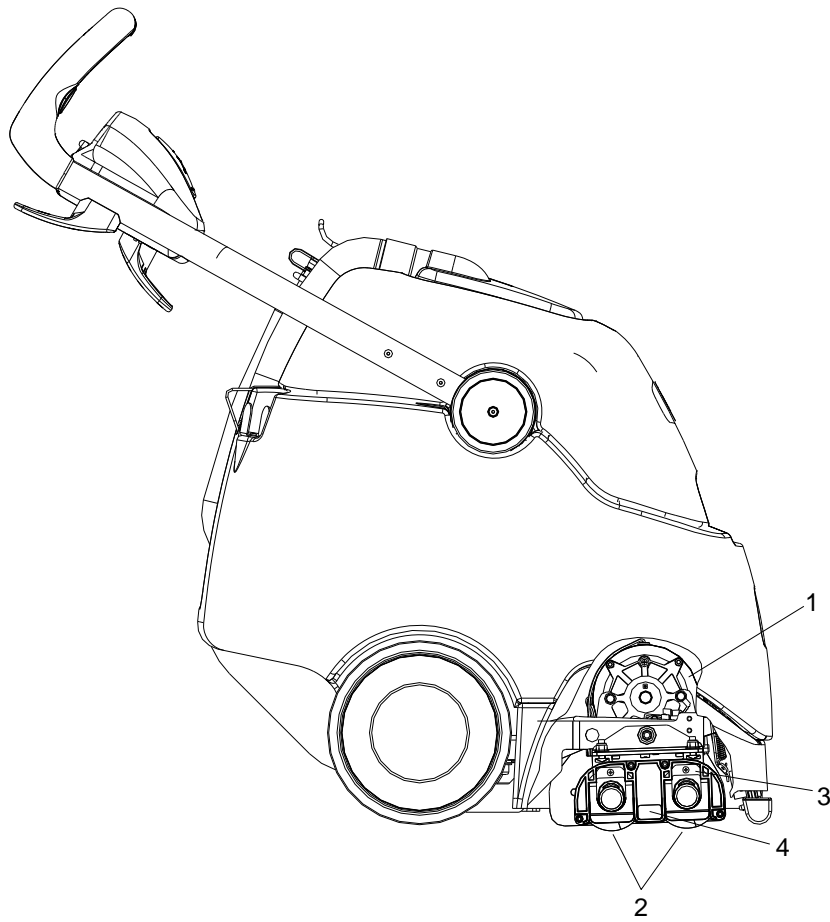
Circuit breakers interrupt the flow of power in the event of an electrical overload. When a circuit breaker is tripped, reset it by pressing the exposed button. If a circuit breaker continues to trip. The cause should be found and corrected.



15 Amp. Protects the vacuum motor.



8 Amp. Protects the brush motor.



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

MAINTENANCE-SCRUB DECK

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.

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.

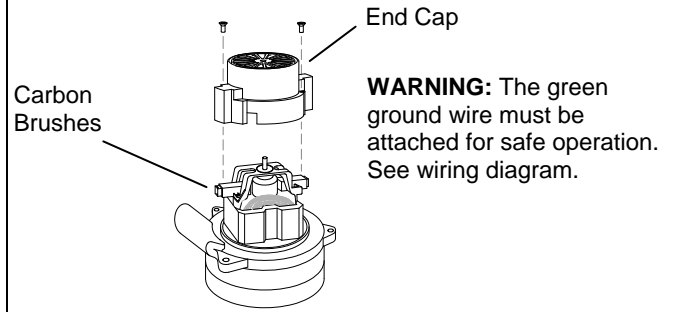
MAINTENANCE-VACUUM MOTOR

⚠ WARNING: ONLY QUALIFIED MAINTENANCE PERSONNEL ARE TO PERFORM THE FOLLOWING REPAIRS

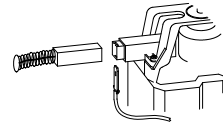
VACUUM MOTOR REPLACEMENT

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 Replacement

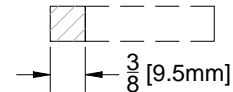


If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center.



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.



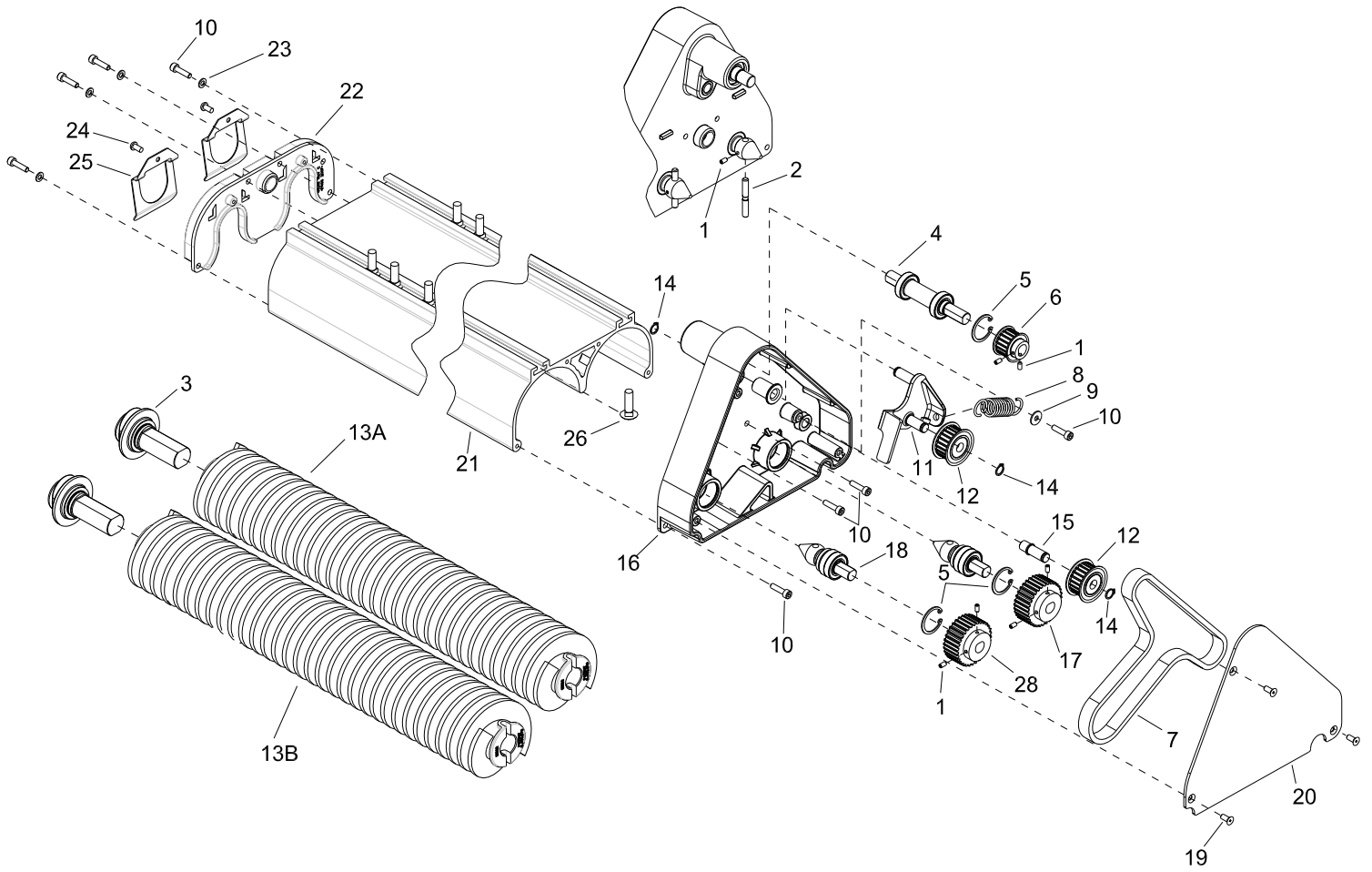
Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than $\frac{3}{8}$ " (9.5mm) long.

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 LIST

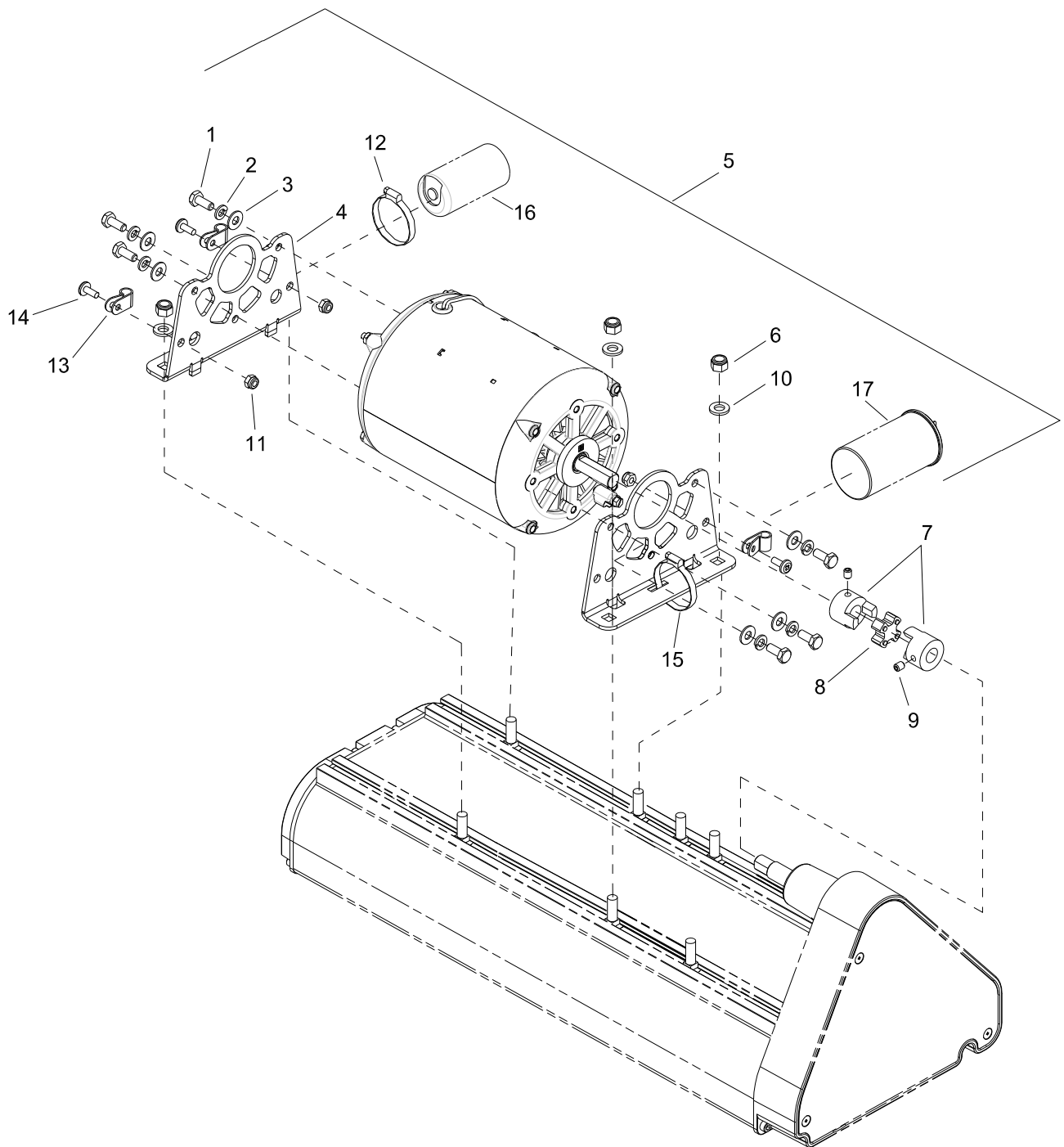
BRUSH DECK



BRUSH DECK

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86223780	70896	8	SCR, M4X8, SET, ISO4029,CP,BLK		
2	86224170	730410	2	SHAFT, 6.2MM BRUSH DRIVE		
3	86012800	-	2	SHAFT ASM, BRUSH END CAP		
4	86012810	-	1	SHAFT, ASM, DRIVE 16"		
5	86223520	67598	3	RING, 28MM INT SNAP PHOSPHATE		
6	86223310	64116	1	PULLEY, 5MM HTD, 18T, 12.7 ID		
7	86215250	11049	1	BELT, 2S 5MM HTD, 15W, 128T		
8	86224660	730393	1	SPRING, TENSIONER		
9	86173330	87513	1	WASHER, M5 FLAT, ISO7093 SS		
10	86014990	-	9	SCR, M5X20, SHCS ISO4762, SS		
11	86215870	140914	1	BRKT, TENSIONER ARM		
12	86012780	-	2	PULLEY ASM, 5MM HTD 22T		
13A	86216050	12530	1	BRUSH, EXTRACTOR 16"		
13B	86295520	-	1	BRUSH, EXTRACTOR 16" NATURAL		
14	86223490	67468	2	RING, 10MM EXT SNAP, DIN 471		
15	86224130	730394	1	SHAFT, TENSIONER		
16	86219380	41546	1	HOUSING, BRUSH DRIVE		
17	86294070	-	1	PULLEY, 36T 5MM HTD		
18	86012790	-	2	SHAFT ASM, BRUSH DRIVE		
19	86172970	70911	3	SCR, M5X12, PHLP FHMS, ISO7046, SS		
20	86222870	620103	1	PLATE, BRUSH DRIVE COVER		
21	86217780	32058	1	EXTRUSION, DUAL BRUSH 16"		
22	86219390	41548	1	HOUSING, BRUSH CLIP		
23	86173350	87515	4	WASHER, M5, FLAT, ISO7089,SS		
24	86172980	70912	2	SCR, KA50X10, PT OHS, WN14112, PLTD		
25	86224630	730380	2	SPRING, BRUSH CLIP		
26	86277130	70795	7	SCR, 5/16-18 X 1.00 CARRIAGE SS		
27	86215230	09161	1	BEARING, BRONZE FLANGED		
28	86294060	-	1	PULLEY, 30T 5MM HTD		

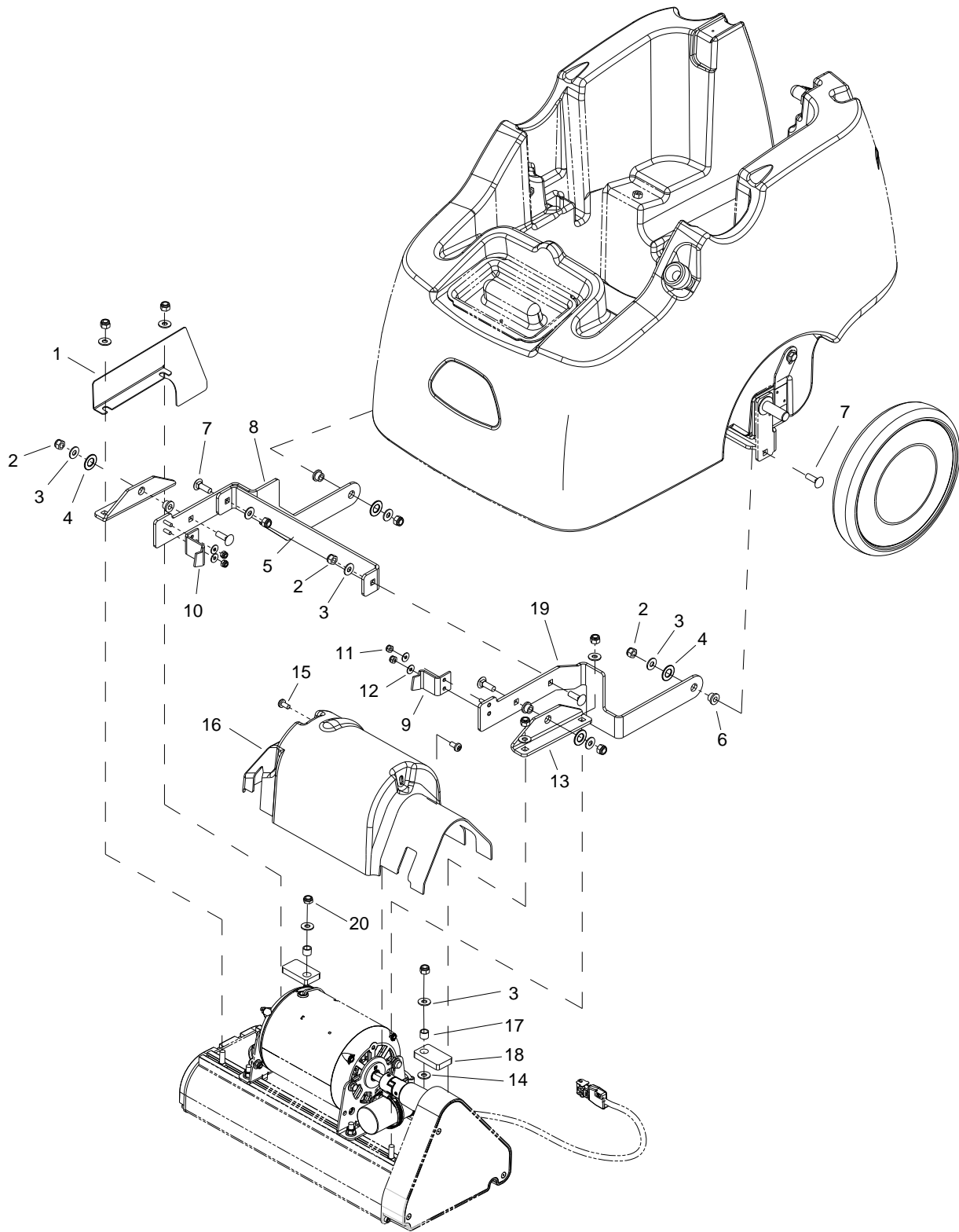
BRUSH DECK MOTOR



BRUSH DECK MOTOR

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86273750	70011	6	SCR, 1/4-20 X 5/8 HHCS SS		
2	86173340	87514	6	WASHER, SPLIT LOCK, 1/4 SS		
3	86010630	87013	6	WASHER, 1/4 ID X 5/8 OD SS		
4	86215880	140929	2	BRKT, MOTOR MOUNT		
5	86294490	-	1	BRUSH MOTOR ASM 115V		INCLUDES #4, 16,17
6	86222290	57308	3	NUT, 5/16-18 HEX NYLOCK SS		
7	86217250	22105	2	COUPLER, 1/2" JAW		
8	86217260	22106	1	COUPLER, SPIDER		
9	86172960	70910	2	SCR, SET, M6X8, SH, ISO4029,SS		
10	86225790	87504	3	WASHER, 5/16 X .63 SS		
11	86005640	57030	3	NUT, 10-32 HEX NYLOCK		
12	86002390	20063	1	CLAMP, 1.75" WORM GEAR X .312		
13	86198450	20005	3	CLAMP, 5/16 NYLON		
14	86276820	70740	3	SCR, 10-32 X 1/2 PTHMS BLK NP		
15	86216750	20098	1	CLAMP, WORM GEAR 40-64MM		
16	86332820	-	-	RUN CAPACITOR 25 UF		SERVICE
17	86332830	-	-	START CAPACITOR 150 UF		SERVICE

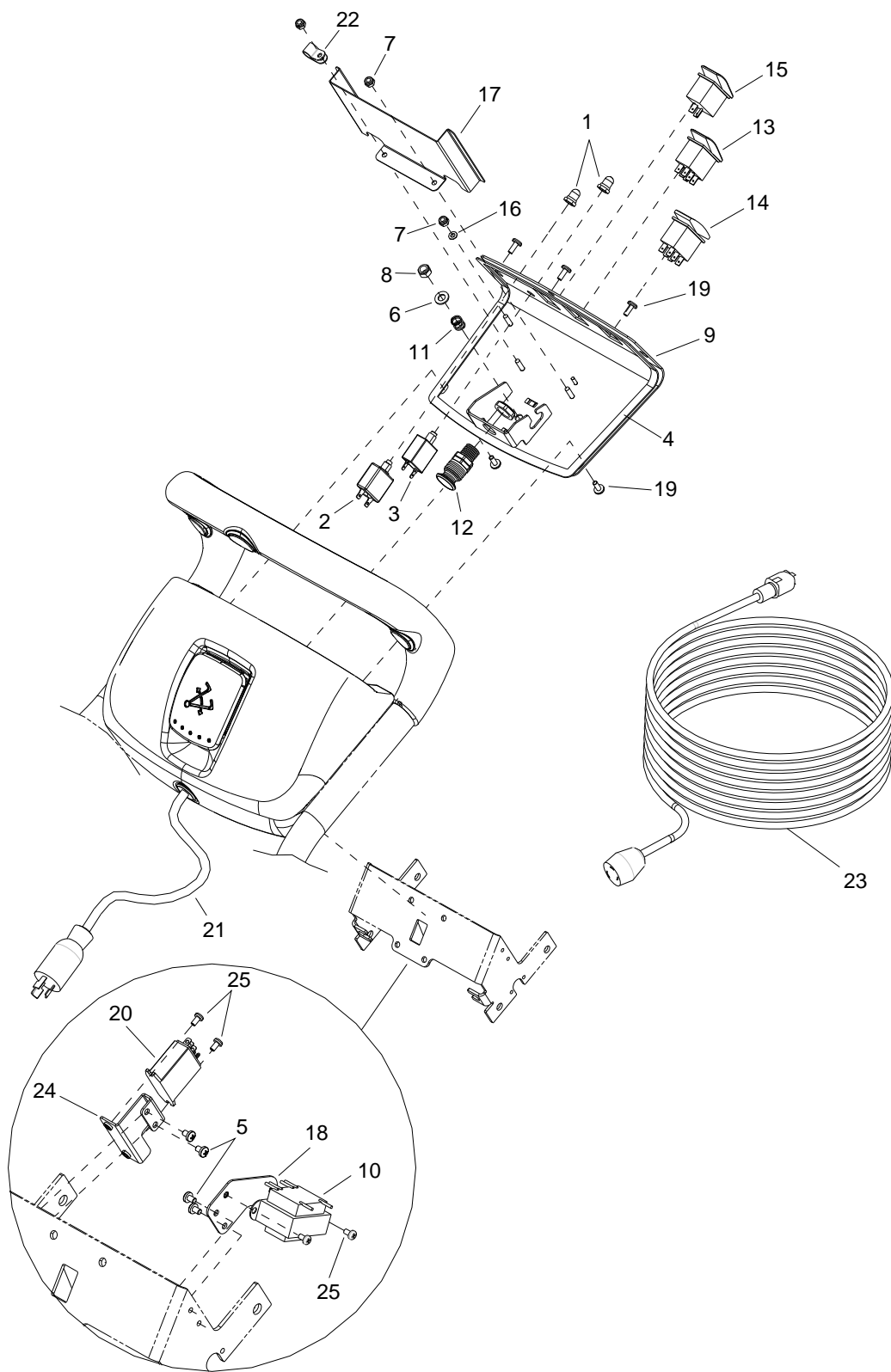
BRUSH DECK MOUNTING



BRUSH DECK MOUNTING

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86302710	-	1	DEFLECTOR, SPRAY		
2	86270830	57023	11	NUT, 5/16-18 HEX NYLOCK SS		
3	86010670	87029	13	WASHER, 5/16 FLAT SS		
4	86259410	87206	4	WASHER, THRUST .51 ID X 1 OD X .063		
5	86296450	-	1	BRKT, DECK ARM CROSSBAR		
6	86228990	09153	4	BEARING, FLNGD, .314 ID X .502 OD		
7	86277130	70795	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	57090	4	NUT, 10-32 HEX NYLOCK		
12	86010650	87018	4	WASHER, #10 X 9/16 OD		
13	86071800	141001	2	BRKT, BRUSH DECK PIVOT		
14	86225790	87504	1	WASHER, 5/16 X .63 SS C		
15	86006580	70085	2	SCR, 1/4-20 X 1/2 PPHMS SS DL		
16	86301870	-	1	COVER, BRUSH DECK MOTOR		
17	86008460	80102	2	SPACER, .500OD X .391ID X .400		
18	86296480	-	2	CUSHION, BRUSH DECK		
19	86295020	-	1	BRKT, DECK ARM LEFT		
20	86271840	57285	1	NUT, 5/16-18 HEX NYLOCK THIN SS		

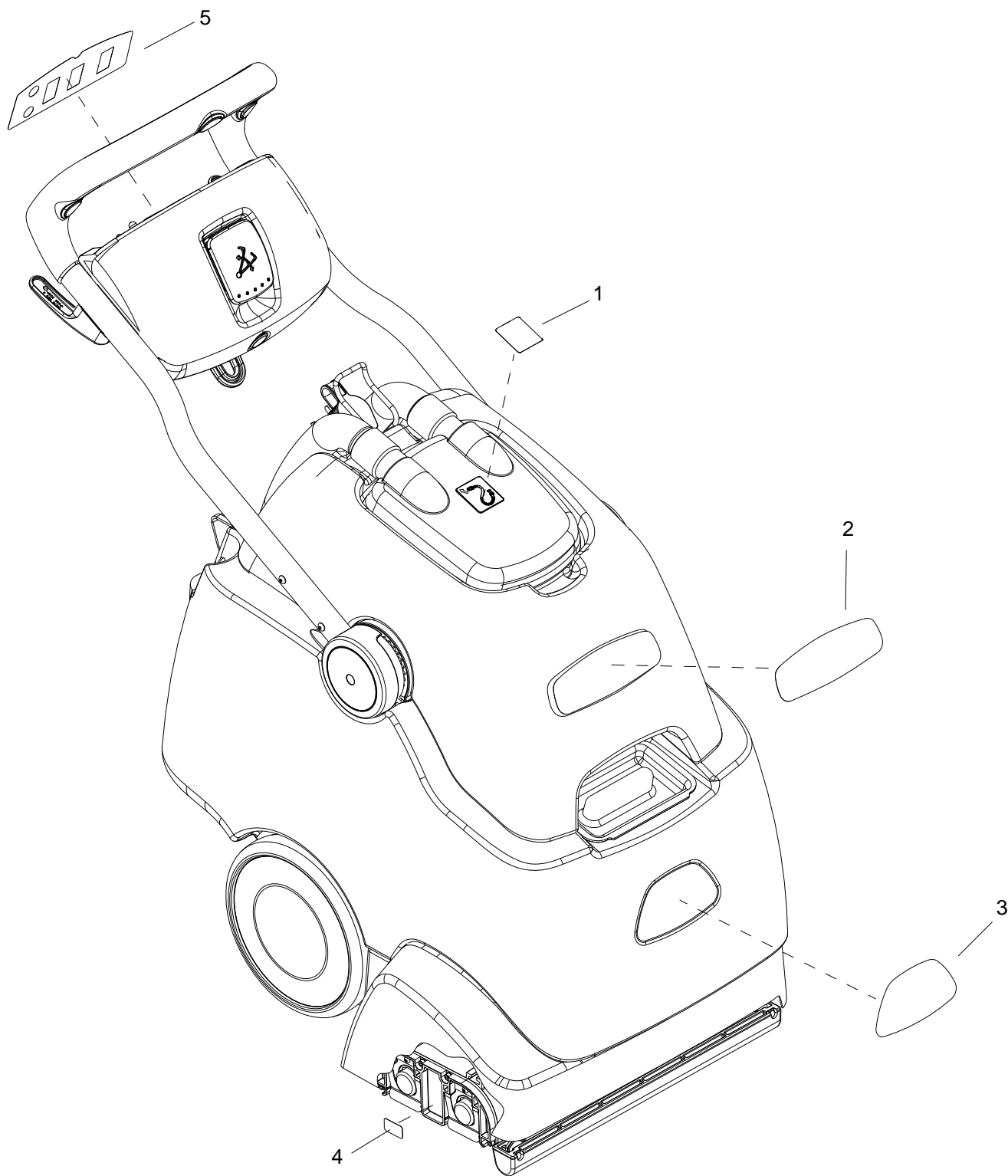
CONTROL PANEL



CONTROL PANEL

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86002010	14942	2	BOOT, 3/8 CIRCUIT BREAKER		
2	86001980	14700	1	BREAKER, 15A 250VAC 50VDC		
3	86215670	140839	1	BREAKER, 8A VDE CIRCUIT		
4	86308020	-	1	GASKET, HANDLE CTRL PNL		
5	86173030	70917	4	SCR, M4 X 6, PHMS, ISO7045, PL		
6	86173300	87495	1	WASHER, M8, FLAT ISO7089, SST		
7	86005640	57030	3	NUT, 10-32 HEX NYLOCK		
8	86172640	57507	1	NUT, M8, NYLOCK, ISO7040, SST		
9	86223010	62909	1	PLATE, CONTROL PANEL		
10	86301820	-	1	TRANSFORMER, 24V, 115V		
11	86224730	73939	1	SPRING, COMP, 12MM OD X 12.7MM		
12	86224930	730012	1	STRAIN RELIEF, 14/3 STRAIGHT		
13	86007130	72128	1	SWITCH, DPDT 2-POSITION ROCKER		
14	86007200	72162	1	SWITCH, DPDT3-POSITION ROCKER		
15	86007140	72130	1	SWITCH, SPST 2- POSITION ROCKER		
16	86010640	87016	1	WASHER, #10 LOCK EXT STAR SS		
17	86295700	-	1	BRKT, ELECTRICAL SEPARATOR		
18	86298820	-	1	BRKT, HANDLE TRANSFORMER		
19	86276820	70740	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	20054	1	CLAMP, 3/8 NYLON UL/CSA		
23	86234110	23086	1	CORD SET, 14/3 SJTW-A X 50' YLW		
24	86298810	-	1	BRKT, HANDLE RELAY		
25	86006620	70127	4	SCR, 6-32 X 1/4 PPHMS SS		

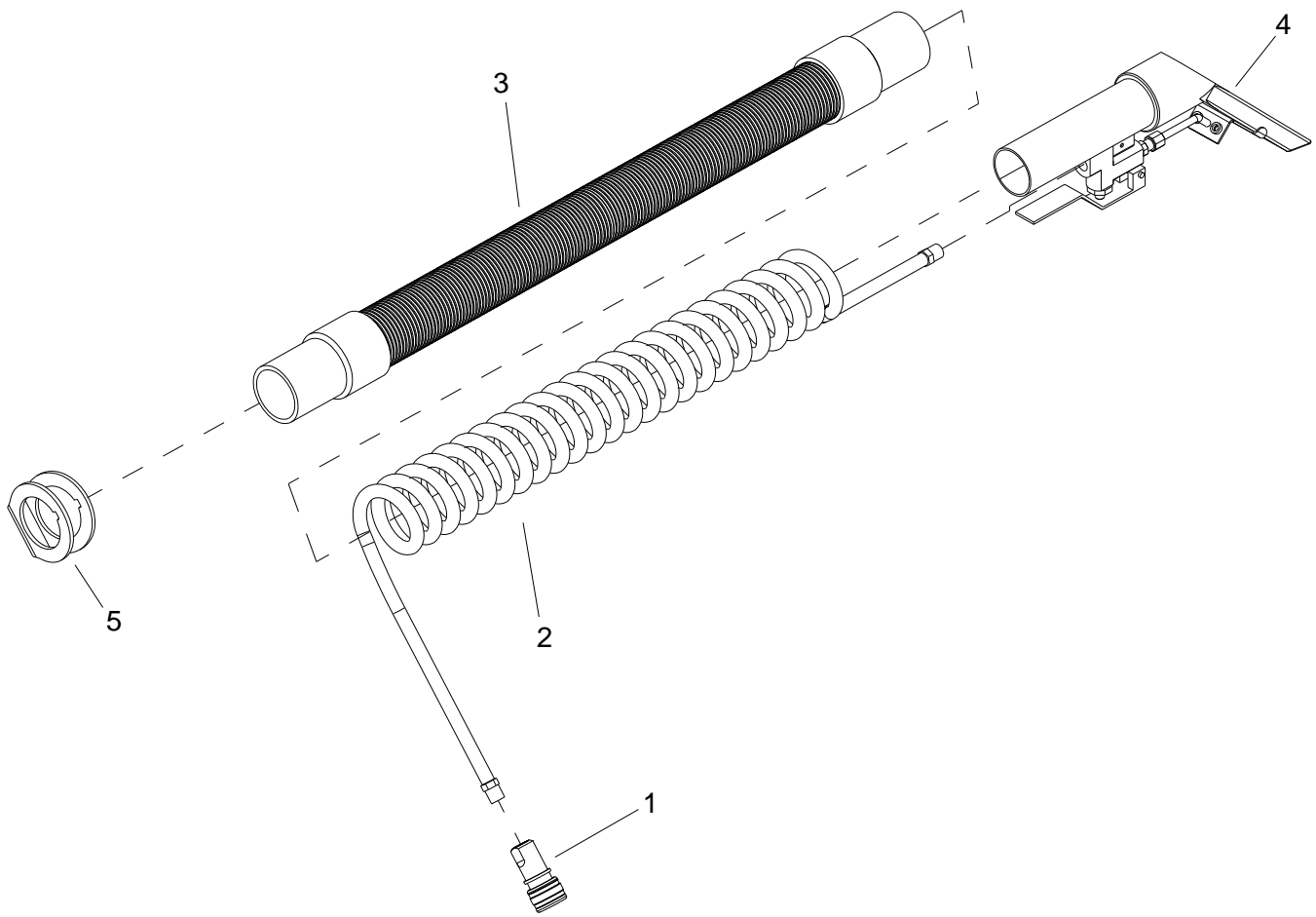
DECAL



DECAL

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86221470	501208	1	LABEL, ACCESSORY		
2	86244680	501205	1	LABEL, CLIPPER DUO		
3	86004970	50990	1	LABEL, WINDSOR LOGO DOMED		
4	86298670	-	1	LABEL, BRUSH INSTALL		
5	86295620	-	1	LABEL, CTRL PNL CLP DUO		

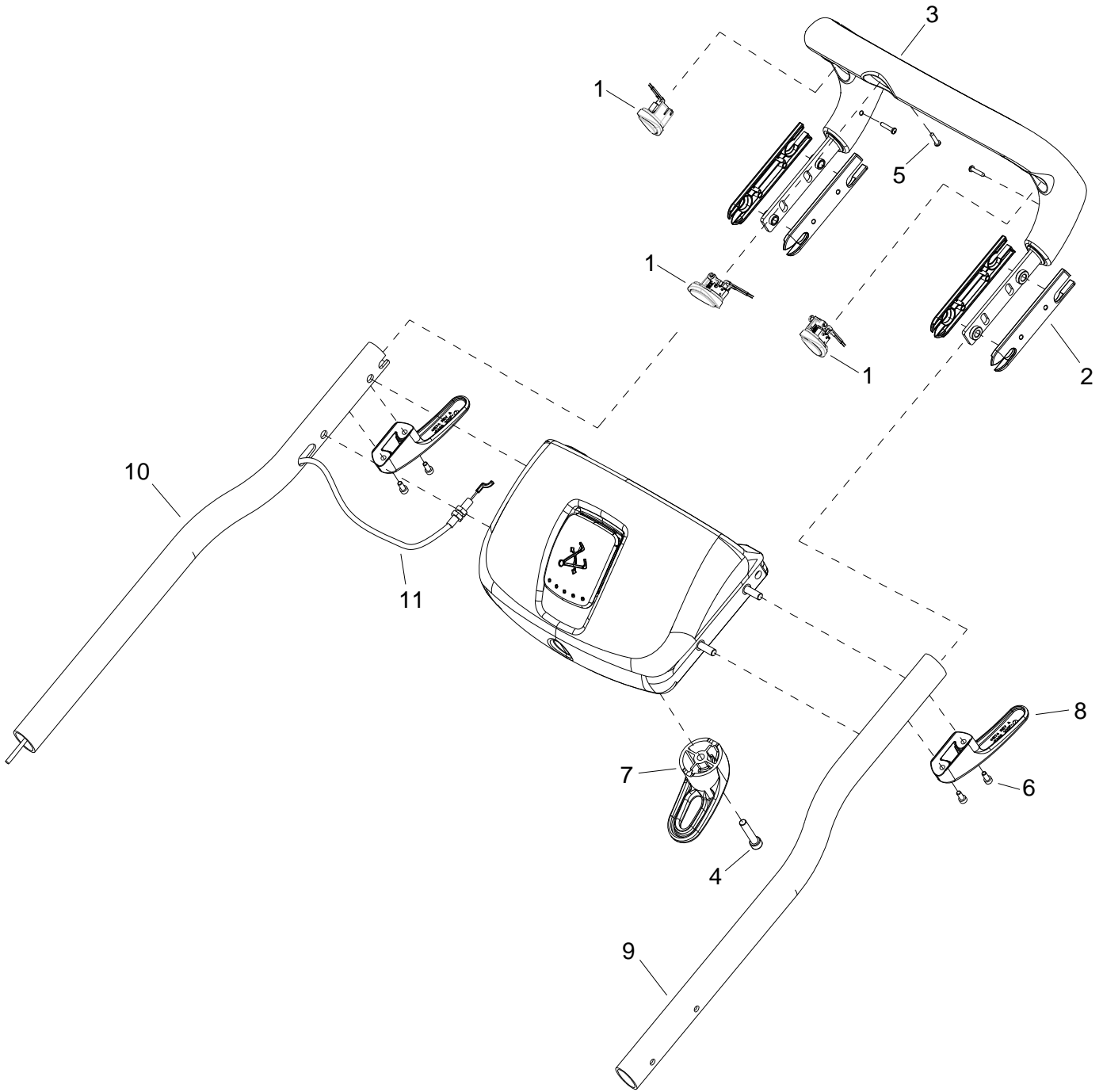
HAND TOOL



HAND TOOL

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86200810	270-11	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		

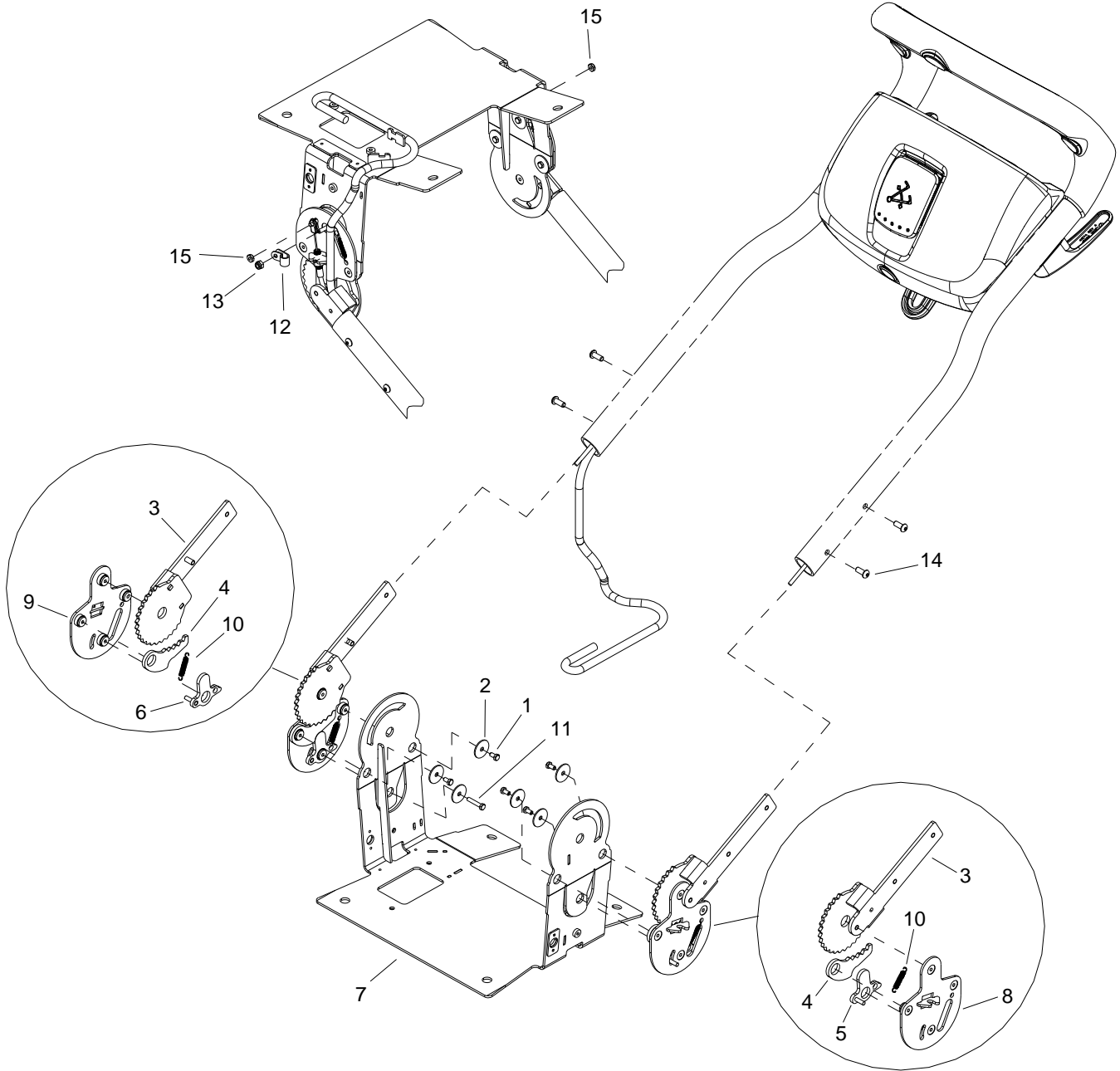
HANDLE



HANDLE

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86312730	-	3	SWITCH, HANDLE		
2	86224500	730417	4	SPACER, HANDLE EXTRUSION		
3	86218660	38353	1	HANDLE, GRIP		
4	86223830	70927	1	SCR, M8X40, SHCS, ISO 4762, SST		
5	86173000	70914	3	SCR, KA40X20, PT OVAL, WN1412, PL		
6	86293400	-	4	SCR, M5X12 SHCS GR 10.9 PLT		
7	86218960	41575	1	HOOK, UPPER, CORD		
8	86218950	41574	2	HOOK, LOWER, CORD		
9	86218640	38351	1	HANDLE, EXTRUSION, LEFT		
10	86218630	38350	1	HANDLE, EXTRUSION, RIGHT		
11	86216500	27019	2	CABLE - ACTUATION, HANDLE		

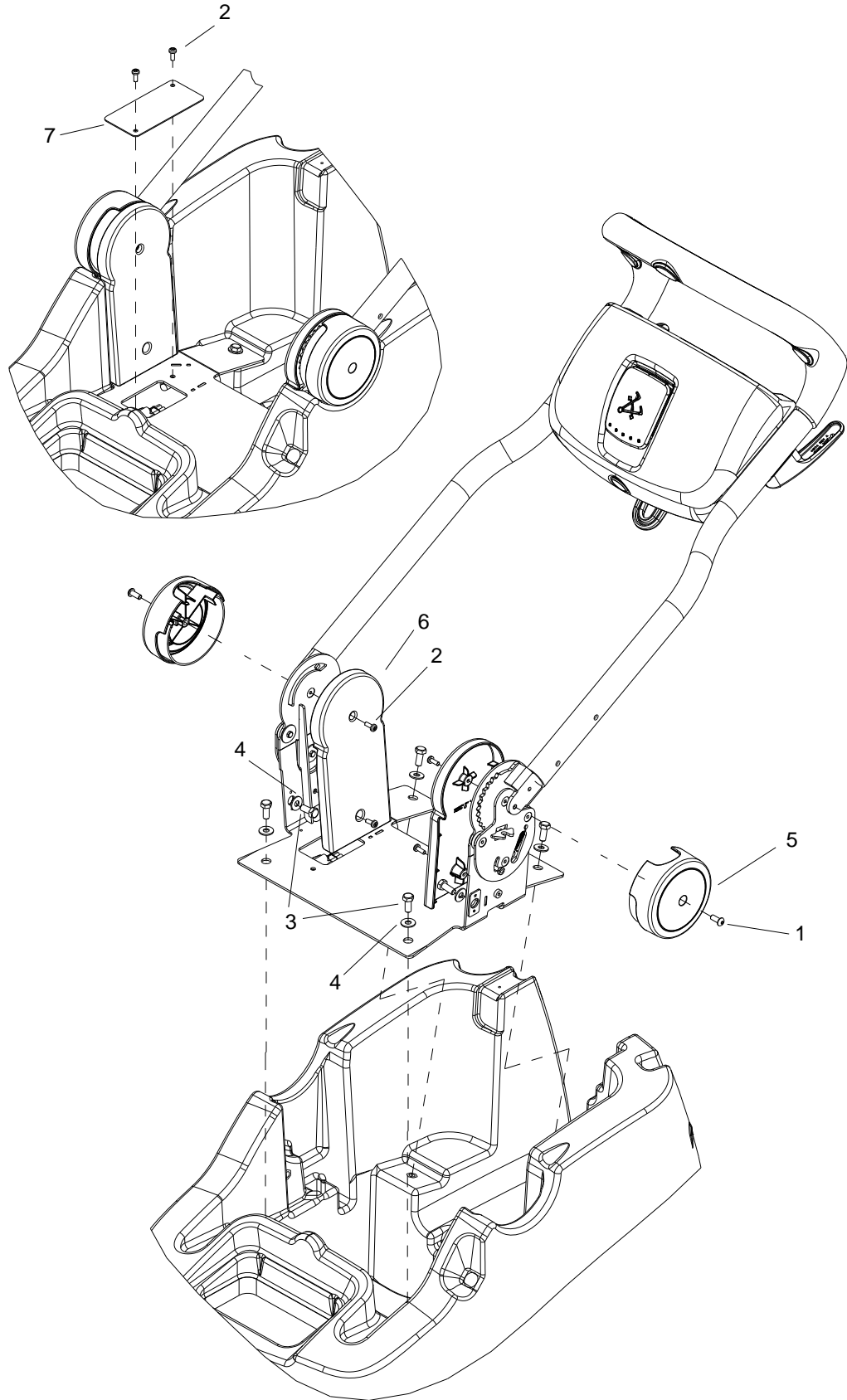
HANDLE BRACKET



HANDLE BRACKET

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86276800	70734	5	SCR, 10-32 X 3/8 HHMS SS		
2	86279170	87093	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	20054	1	CLAMP, 3/8 NYLON UL/CSA		
13	86005640	57030	1	NUT, 10-32 HEX NYLOCK		
14	86274400	70194	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



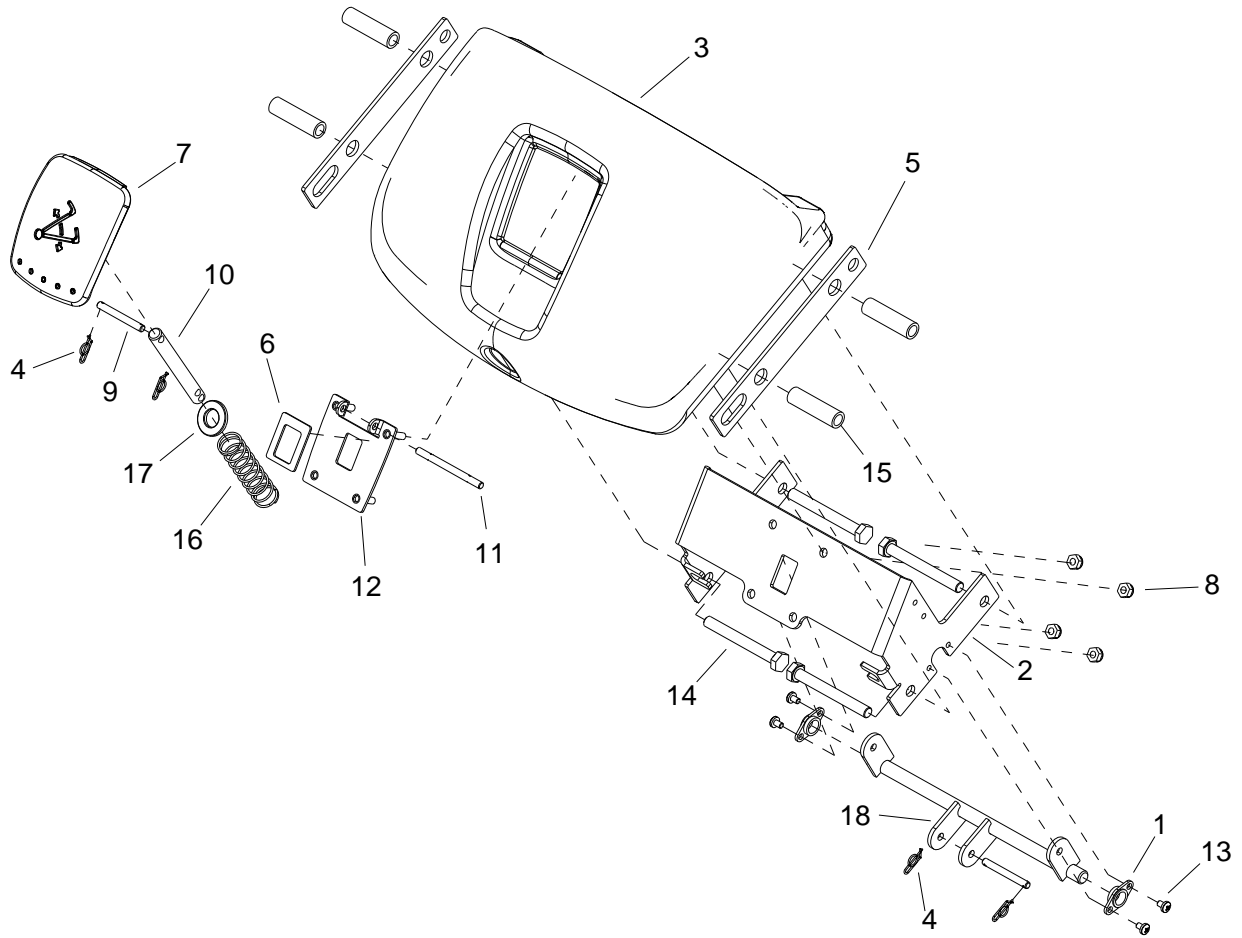
HANDLE MOUNTING

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86274400	70194	2	SCR, 1/4-20 X 5/8 BHCS		
2	86006950	70532	6	SCR, 10-32 X 1/2 PPHMS BLK NP		
3	86276490	70670	6	SCR, 5/16-18 X 5/8 HHCS SS		
4	86010670	87029	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		

*SEE SERIAL NUMBER PAGE

**CALL MANUFACTURER FOR SERIAL NUMBER

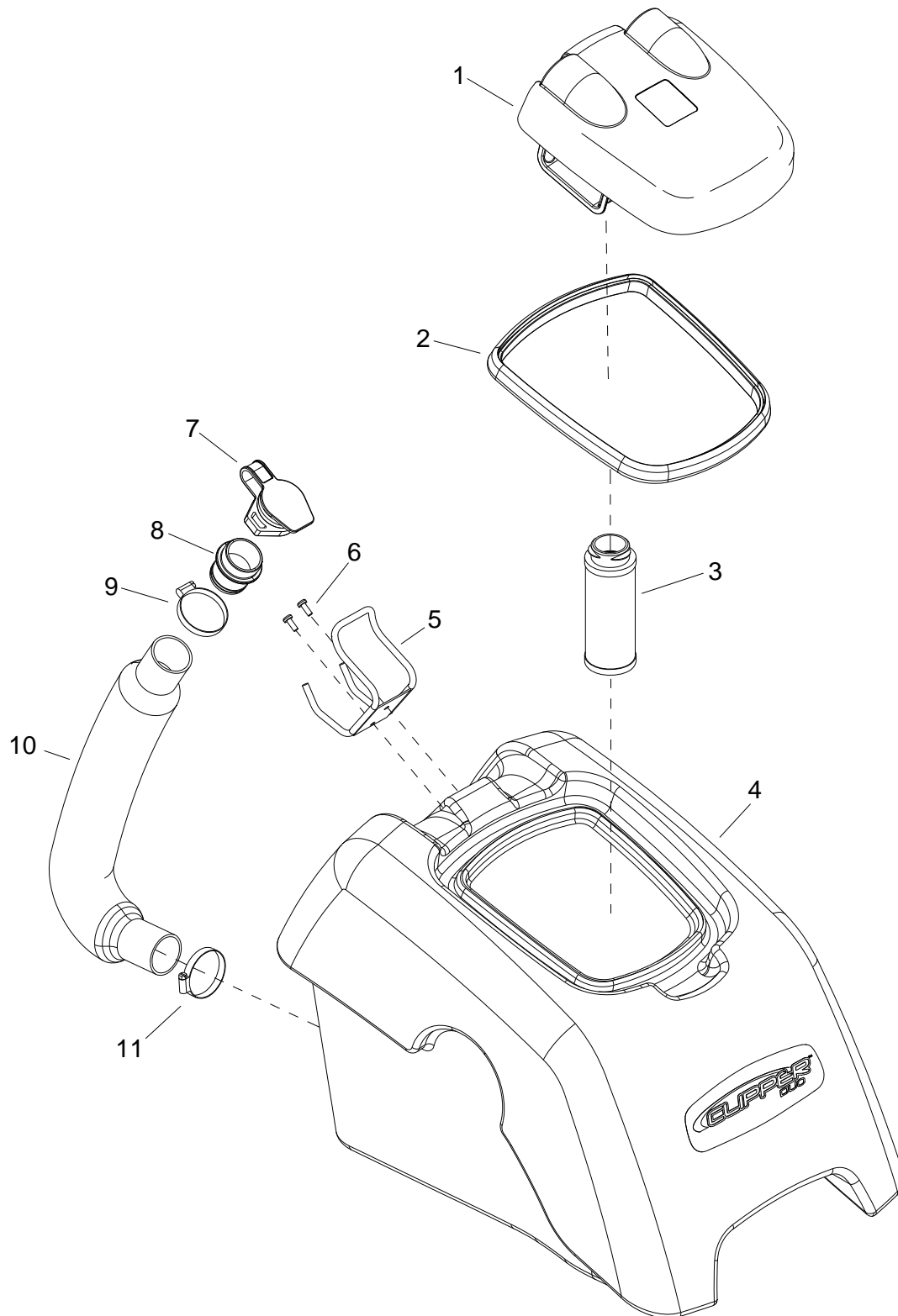
HANDLE RELEASE LEVER



HANDLE RELEASE LEVER

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86215240	140971	2	BEARING, FLANGE, 10M ID		
2	86215630	14878	1	BRACKET, LEVER, CONSOLE		
3	86216870	27973	1	CONSOLE, HANDLE		
4	86008650	80604	4	COTTER, 14" RING		
5	86218190	35371	2	GASKET, CONSOLE, TUBE		
6	86218020	35024	1	GASKET, LEVER, HANDLE		
7	86221730	51053	1	LEVER, PIVOT HANDLE		
8	86222280	57307	4	NUT, 10-32 HEX NYLOCK SS		
9	86295820	-	2	PIN, LEVER SHAFT		
10	86221840	14833	1	PIN, LINKAGE		
11	86222550	66138	1	PIN, PIVOT, LEVER		
12	86222990	62891	1	PLATE, PIVOT, LEVER		
13	86173030	70917	4	SCR, M4 X 6, PHMS, ISO7045, PL		
14	86293370	-	4	SCR, M8X70, HHCS, GR 10.9 PLT		
15	86224540	73588	4	SPACER, 8.5 ID X 45L		
16	86254970	730304	1	SPRING, COMP 18MM OD X 83 X 2		
17	86259400	87205	1	WASHER, THRUST .51 ID X 1 ODBRO		
18	86225950	89284	1	WELDMENT, PIVOT SHAFT, LEVER		

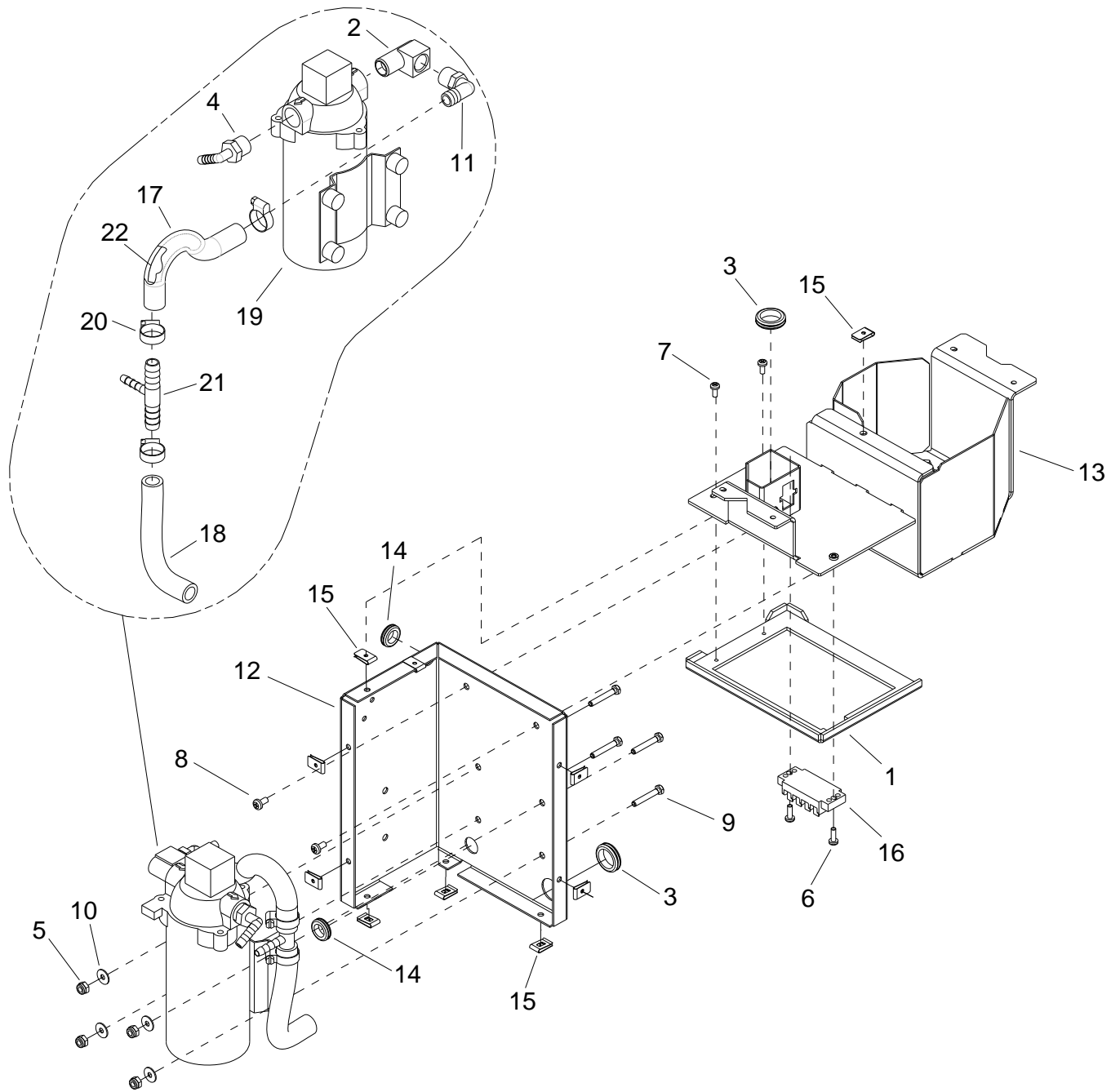
RECOVERY TANK



RECOVERY TANK

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86217680	28068	1	DOME, 2 HOSE		
2	86218180	35370	1	GASKET, DOME		
3	86003630	34351	1	FLOAT SHUT-OFF		
4	86299180	-	1	TANK, RECVRY, DK GRAY (TRIMMED)		
5	86297250	-	1	HOOK, WIREFORM, HANDTOOL		
6	86006950	70532	2	SCR, 10-32 X 1/2 PPHMS BLK NP		
7	86004500	41390	1	HOSE, CAP		
8	86004510	41391	1	HOSE, INSERT		
9	86002400	20064	1	CLAMP, 2.0" WORM GEAR X .312W		
10	86296640	-	1	HOSE, 1.5 X 19.0 DRAIN		
11	86233140	20041	1	CLAMP, 2.0" WORM GEAR		

SOLUTION

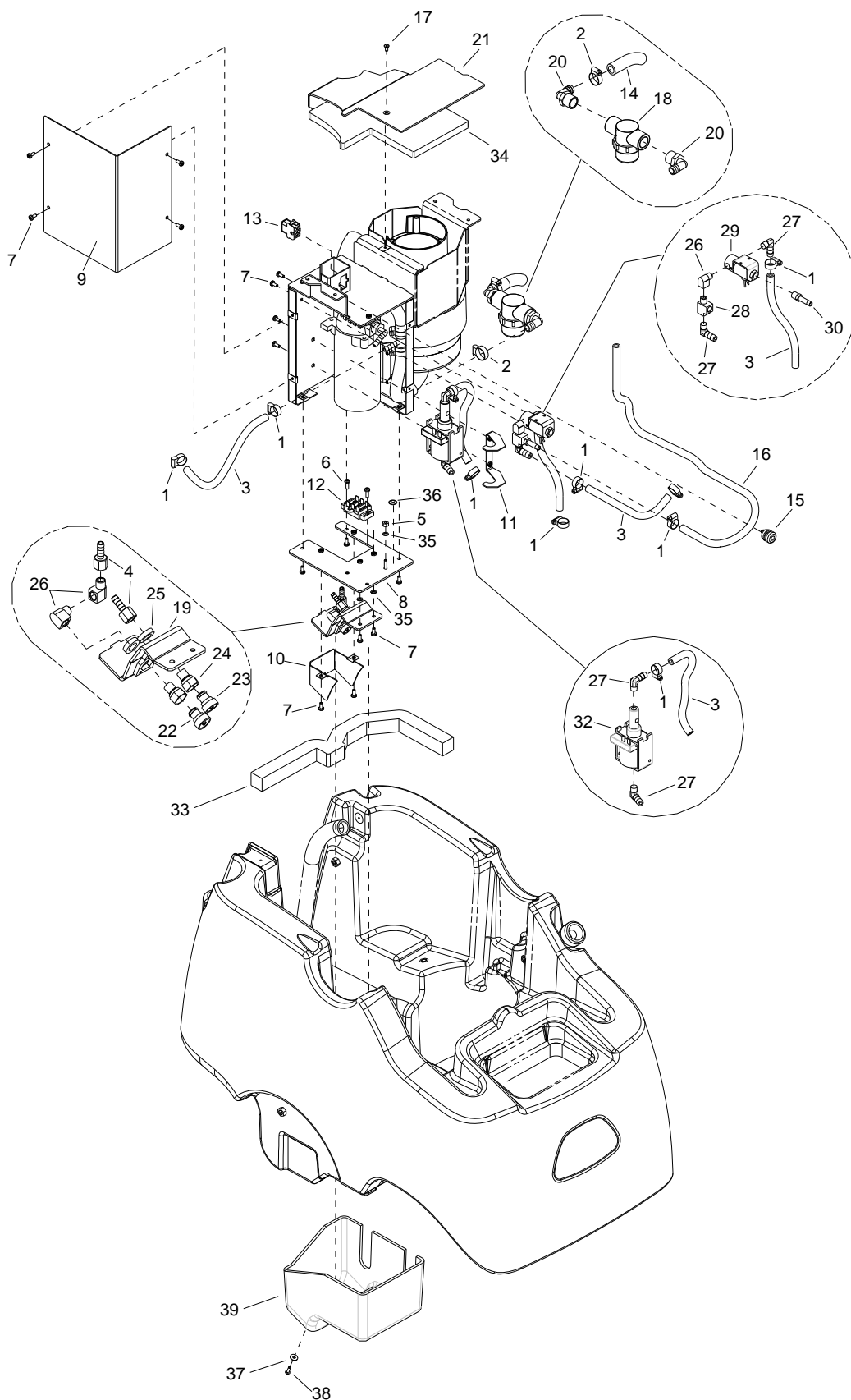


SOLUTION

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86308240	-	1	GASKET, SOLUTION ASSY		
2	86197420	31026	1	ELBOW, 3/8 NPT STREET		
3	86218360	36244	2	GROMMET, 3/4 ID X 7/8 GROOVE		
4	86200280	250-12	1	HOSEBARB, 3/8 MPT X 1/4 90D		
5	86005640	57030	4	NUT, 10-32 HEX NYLOCK		
6	86273930	70051	2	SCR, 8-32 X 1/2 PPHMS		
7	86006520	70052	2	SCR, 8-32 X 3/8 PPHMS SS		
8	86274290	70162	2	SCR, 10-32 X 3/8 PPHMS SS		
9	86298840	-	4	SCR, 10-32 X 1 HHMS PLTD		
10	86010650	87018	4	WASHER, #10 X 9/16 OD		
11	86197940	40027	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	-	10	NUT, SPEED, #8-32		
16	86299120	-	1	TERMINAL STRIP, 4-POS, .25		
17	86281100	39274	1	HOSE, 1/2ID WIRE BOUND X 7"		
18	86281980	39549	1	HOSE, 1/2D WIRE BOUND X 5"		
19	86298070	-	1	ASSY, PUMP, 110V		
20	86233150	20042	3	CLAMP, 3/8 HOSE (D-SLOT)		
21	86240530	40098	1	HOSEBARB, 1/2 X 1/4 X 1/2, TEE		
22	86296210	-	1	HOSE, 1/4 ID NYLOBRAID X 3.5"		

*SEE SERIAL NUMBER PAGE.

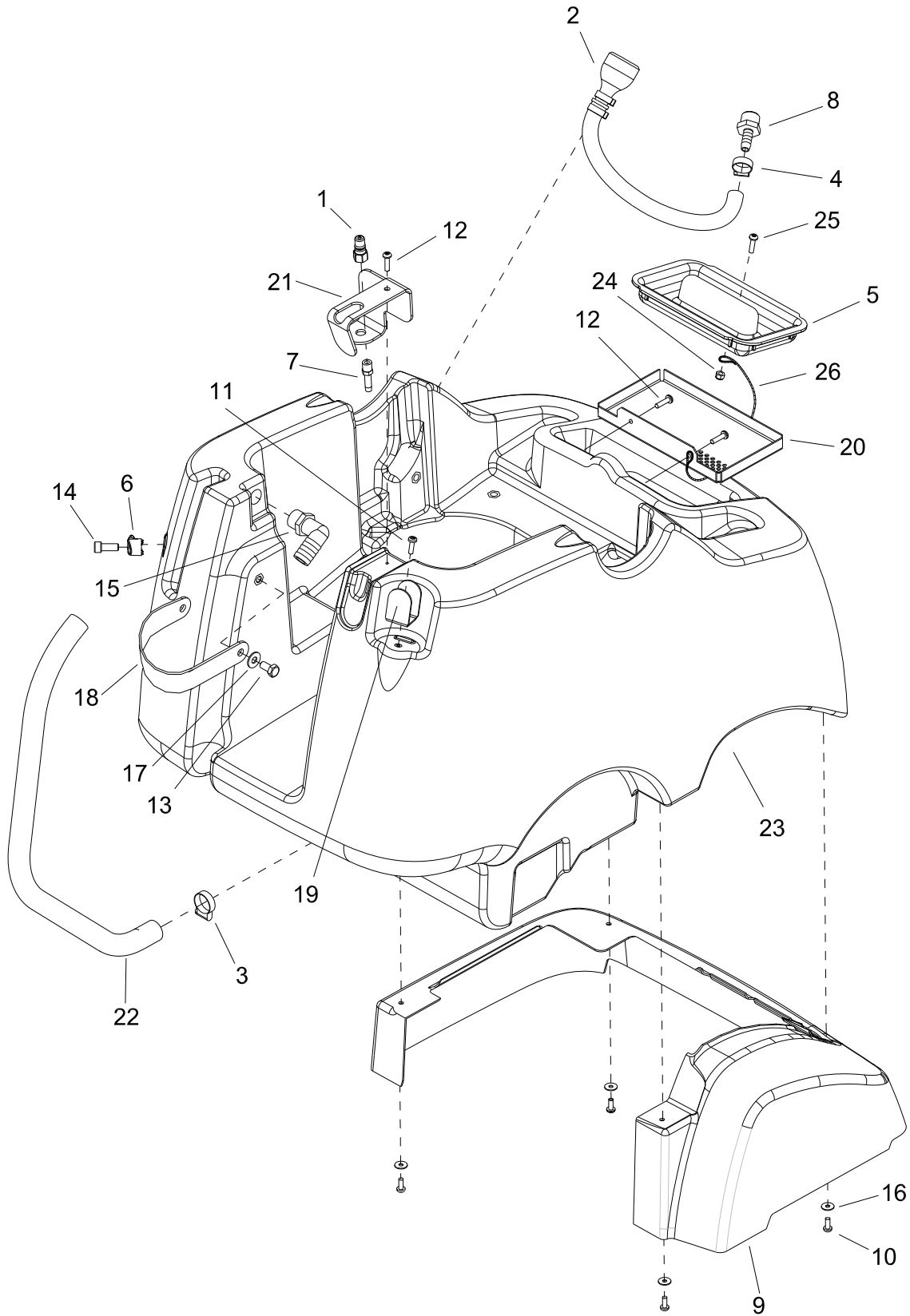
SOLUTION



SOLUTION

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86233090	20016	9	CLAMP, 1/4 ID HOSE		
2	86233150	20042	2	CLAMP, 3/8 HOSE (D-SLOT)		
3	86281060	39265	4	HOSE, 1/4 ID NYLOBRD X 8"		
4	86197640	40064	2	HOSEBARB, 1/8" FPT X 1/4"		
5	86270780	57008	1	NUT, 8-32 HEX		
6	86273930	70051	2	SCR, 8-32 X 1/2 PPHMS		
7	86006520	70052	15	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	39549	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" PFHMS PLT		
18	86256090	730262	1	STRAINER, 1/2 NPT 80 MESH		
19	86298090	-	1	ASSY, NOZZLE MOUNT		
20	86001530	40039	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	44067	2	JET BODY, MINI PROMAX BODY		
25	86010820	87192	2	WASHER, 7/16 X 3/4 X .19 RUBBER		
26	86197400	31022	3	ELBOW, 1/8NPT STREET		
27	86240610	44104	4	HOSEBARB, 1/8 MPT X 1/4H 90D		
28	86197750	78161	1	TEE, 1/8 NPT STREET RUN		
29	86297290	-	1	VALVE, SOLENOID, 120VAC, 1/8 NPT		
30	86197520	40011	1	HOSEBARB, 1/8MPT X 1/4 DL		
31	OPEN	-	-	-		
32	86201110	250-78	1	PUMP, 110/120 60 HZ FLOJET		
33	86302620	-	1	FOAM, 1 X 1 X 18		
34	86302640	-	1	FOAM, SOLN ASM LID		
35	86010640	87016	3	WASHER, #10 LOCK EXT STAR SS		
36	86245040	50279	1	LABEL, GROUND SYMBOL		
37	86010650	87018	1	WASHER #10 X 9/16 OD		
38	86006800	70361	1	SCR, 10-32 X 1/2 PHTR PLT		
39	86310230	-	1	COVER, SOLN ASM, LOWER, TRIM		

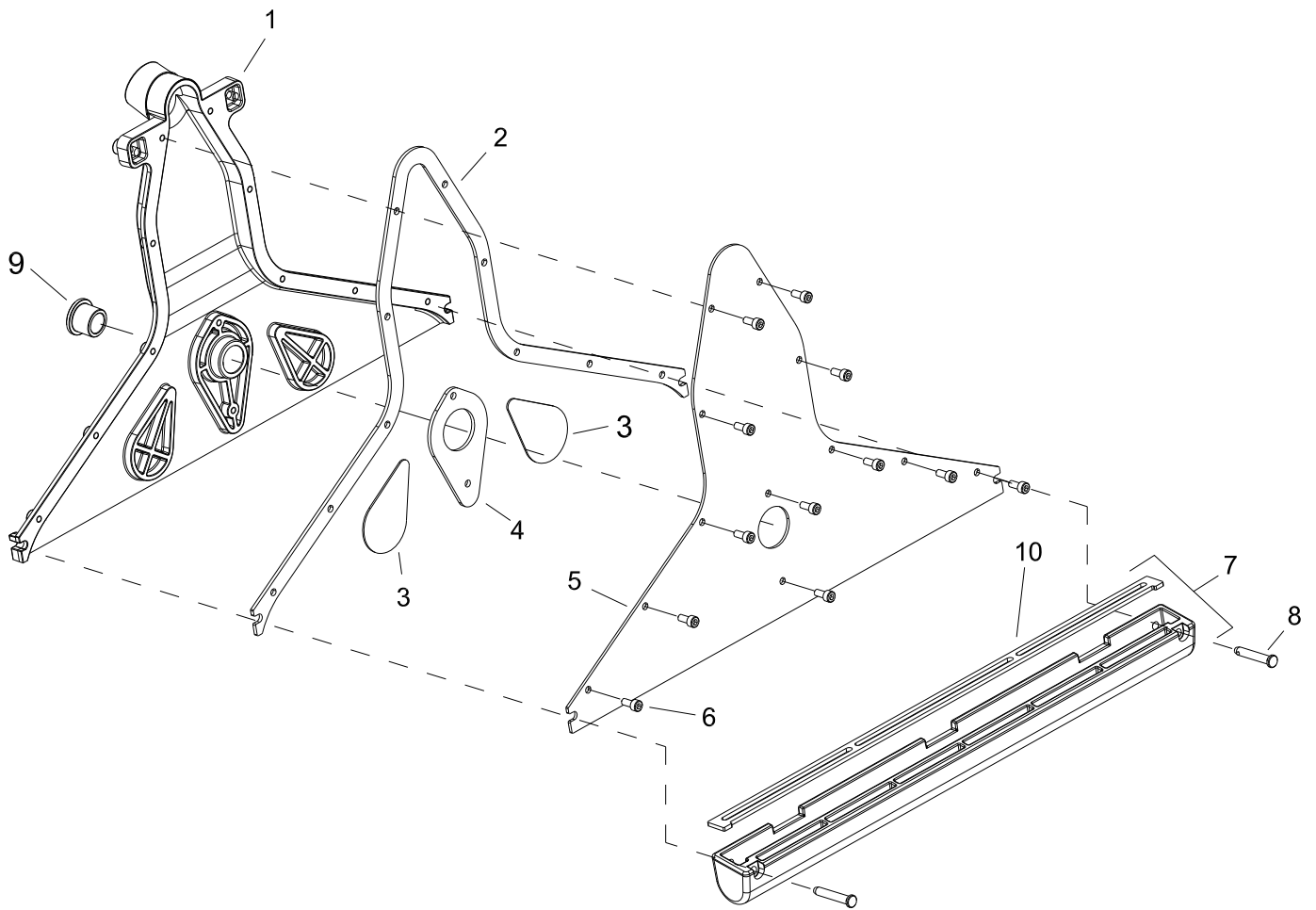
SOLUTION TANK



SOLUTION TANK

EF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86200820	270-11A	1	NIPPLE, 1/8FPT QD ,MALE BRASS		
2	86260690	02130	1	HOSE ASM, FCT ADPTR X 60" NBRD		
3	86233110	20018	1	CLAMP, 1.0" WORM GEAR		
4	86233090	20016	1	CALMP 1/4 ID HOSE		
5	86234790	27827	1	COVER, CLP SOLUTION		
6	86238460	36259	1	HOOK, STRAP		
7	86197520	40011	1	HOSEBARB, 1/8MPT X 1/4 DL		
8	86197920	40023	1	HOSEBARB, 1/2MPT X 3/8 NYL DL		
9	86301930	-	1	SHROUD, FRONT		
10	86006860	70403	4	SCR, #10 X 1/2 PPHST TYPE B SS		
11	86276160	70604	1	SCR, 10-32 X 5/8 PPHMS BLK		
12	86276290	70626	3	SCR, #10 X 3/4 PPHST HI-LO BLK		
13	86276490	70670	1	SCR, 5/16-18 X 5/8 HHCS SS		
14	86277050	70782	1	SCR, 5/16-18 X 3/4 SHCS SS		
15	86240790	82358	1	HOSEBARB, 1/2MPT X 3/4 90D		
16	86010650	87018	4	WASHER, #10 X 9/16 OD		
17	86010670	87029	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	86301780	-	1	TANK, SOLUITON, TRIMMED		
24	86270920	57049	1	NUT, 6-32 HEX NYLOCK SS		
25	86273950	70056	1	SCR, 6-32 X 1/2 PPHMS		
26	86246080	51368	1	LANYARD, 18.0 W/LOOP & EYE		

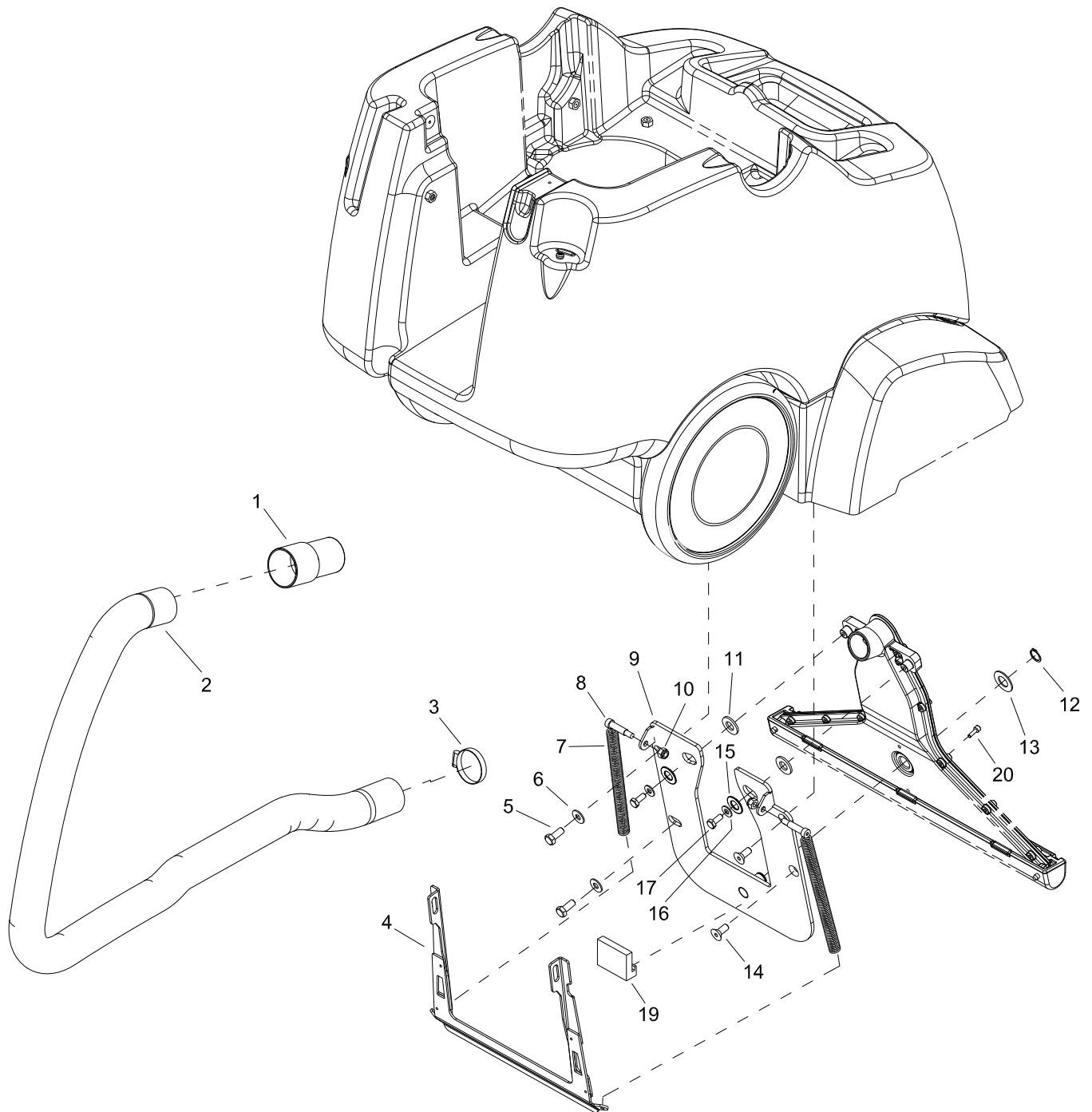
VAC SHOE



VAC SHOE

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86225650	85087	1	VACUUM SHOE, 18"		
2	86218110	35363	1	GASKET, 18" VAC SHOE OUTER		
3	86218270	35380	2	GASKET, 18 " VAC SHOE SIDE		
4	86218260	35379	1	GASKET, 18" VAC SHOE CENTER		
5	86223230	85089	1	PLATE, 18" VACUUM SHOE		
6	86172950	70909	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		

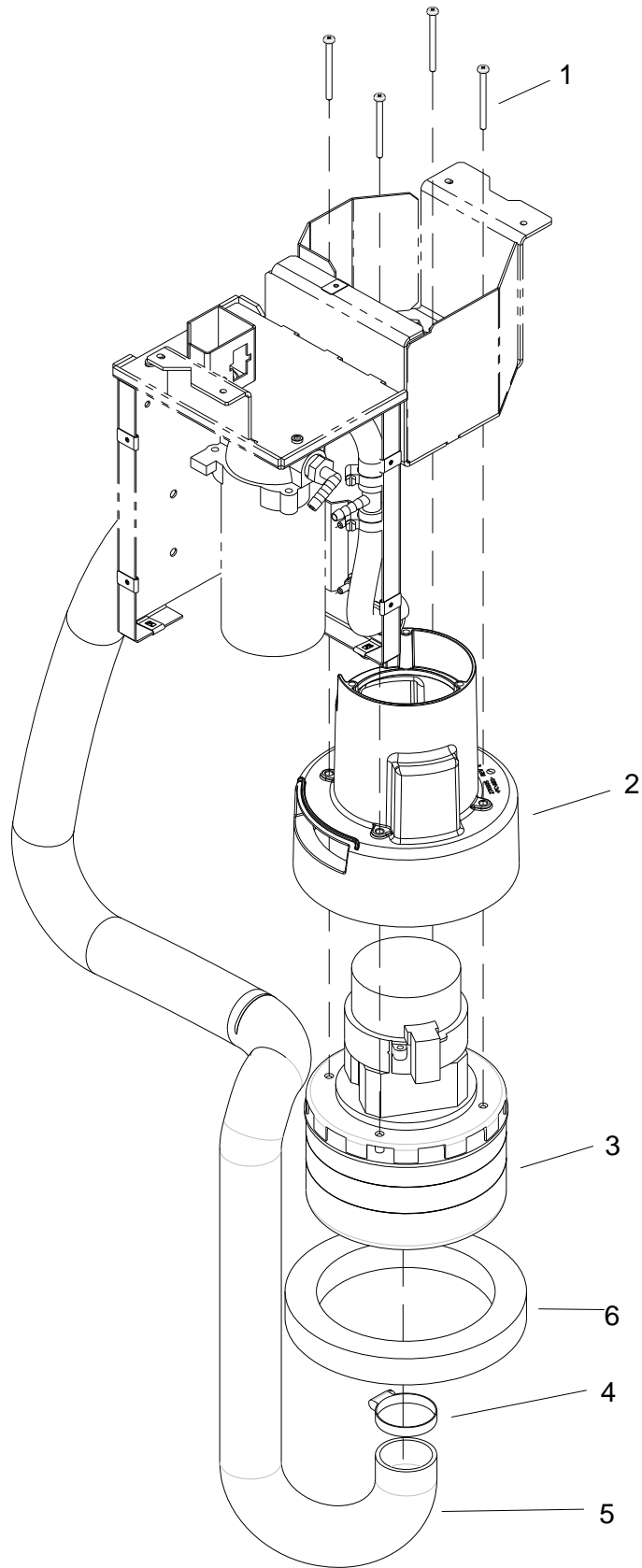
VAC SHOE MOUNTING



VAC SHOE MOUNTING

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86003010	27759	1	CUFF. HOSE 1.5" BLK A 2161		
2	86004290	39491	1	HOSE, 1.5 BLK VAC X 45"		
3	86002390	20063	1	CLAMP, 1.75" WORM GEAR X .312		
4	86297470	-	1	ASM, TRAVEL LIMITER		
5	86276490	70670	2	SCR, 5/16-18 X 5/8 HHCS SS		
6	86010670	87029	2	WASHER, 5/16 FLAT SS		
7	86295030	-	2	SPRING, EXT .562D X 6.0L X .072W		
8	86278280	70350	2	SHOULDER BOLT		
9	86296510	-	1	BRKT ASM, VAC SHOE MOUNT		
10	86005810	57245	2	NUT, 1/4-20 HEX NYLOCK SS		
11	86259420	87232	2	WASHER, THRUST .51 ID X 1 ODBRO		
12	86272750	67010	1	RING, 5/8 EXTERNAL SNAP		
13	86010730	87088	1	WASHER, 5/8		
14	86298080	-	2	SCR, 5/16-18 X 3/4 FHSC SS		
15	86259410	87206	2	WASHER, THRUST .51 ID X 1 OD X .063		
16	86010630	87013	2	WASHER, 1/4 ID X 5/8 OD SS		
17	86273750	70011	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		

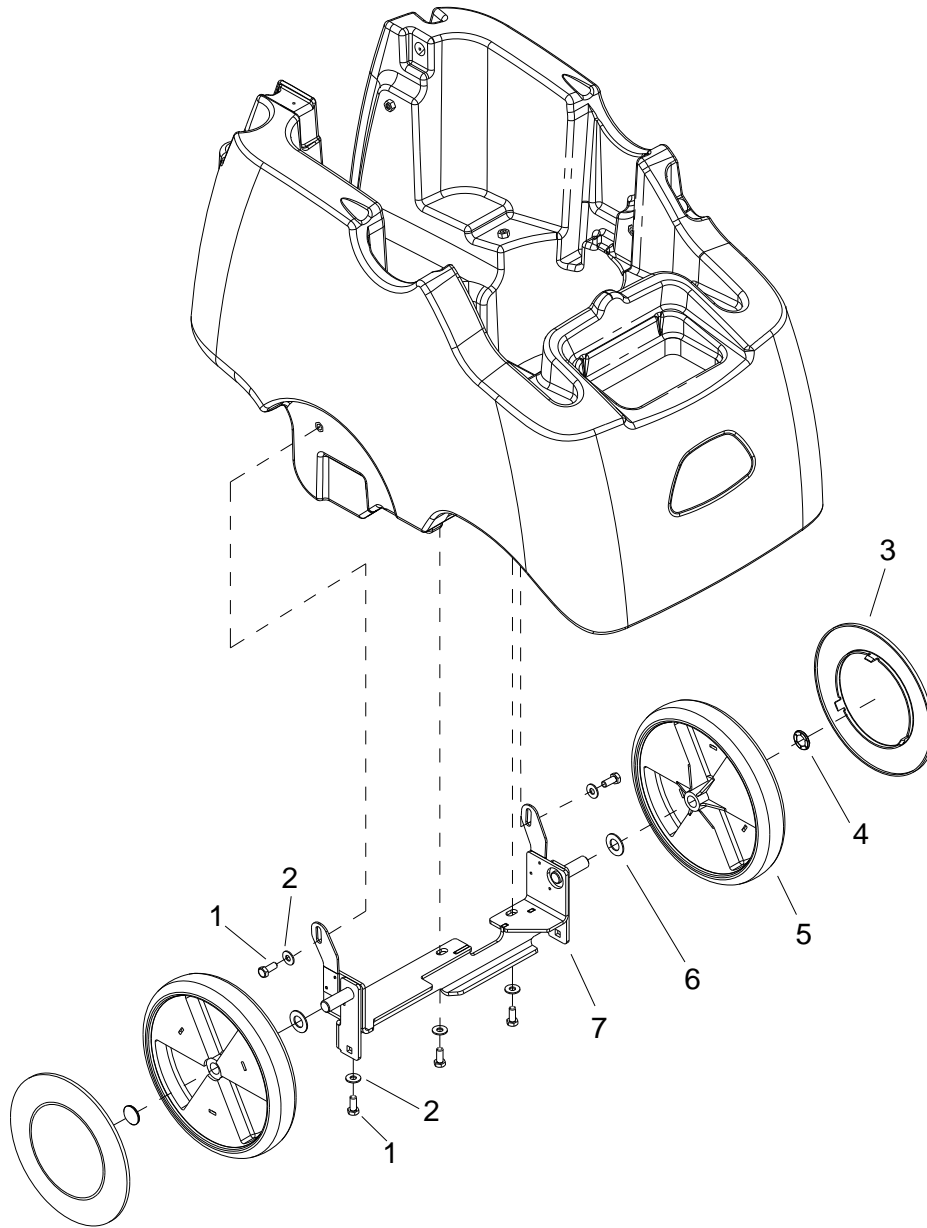
VACUUM



VACUUM

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86300300	-	4	SCR, #8 X 2" PPHSMS		
2	86217480	270805	1	COVER, VAC MOTOR		
3	86299250	-	1	ASSY, VAC MOTOR		
4	86002390	20063	1	CLAMP, 1.75" WORM GEAR X .312		
5	86004290	39491	1	HOSE, 1.5 BLK VAC X 45"		
6	86302620	-	1	FOAM, 1 X 1 X 18		

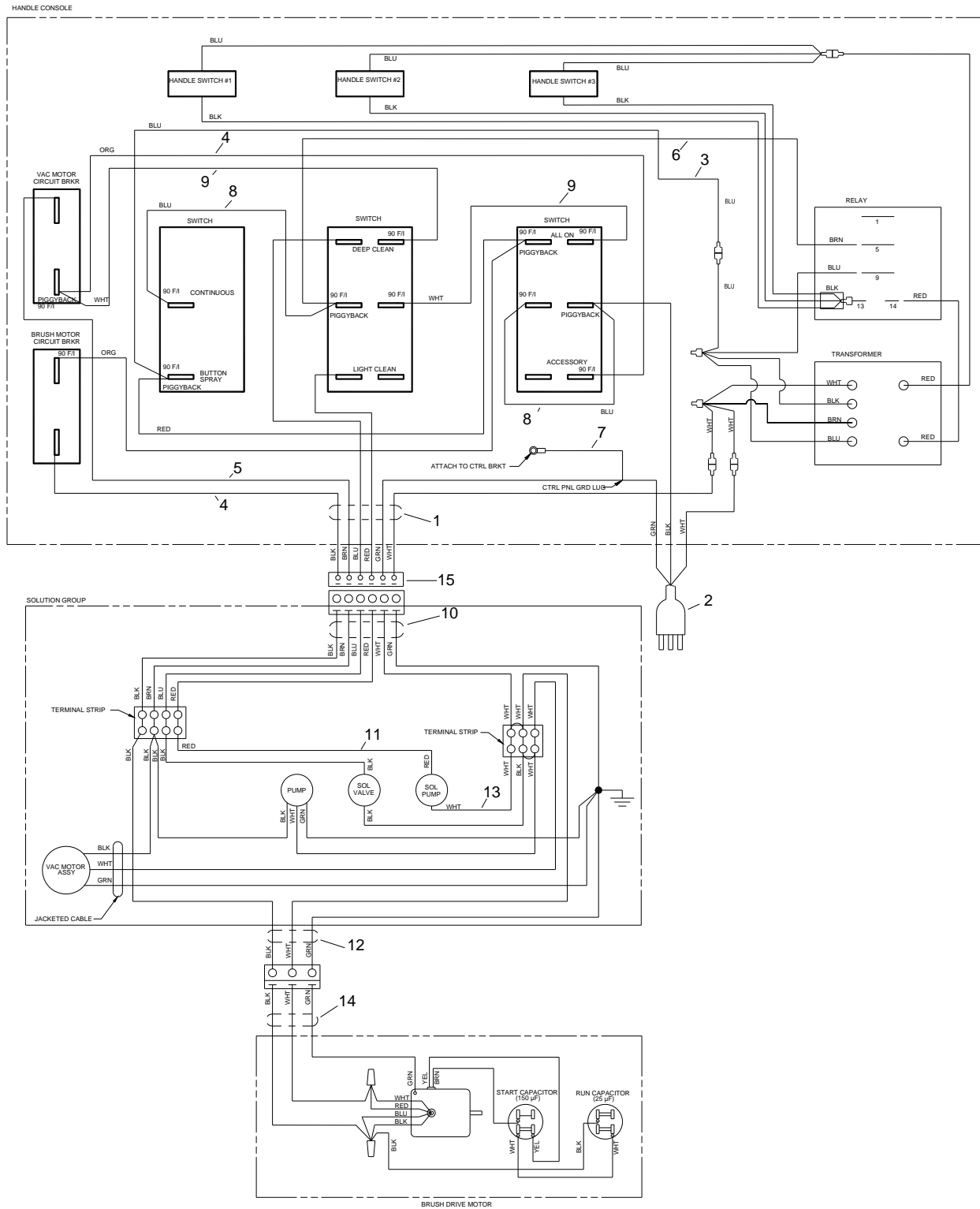
WHEEL & AXLE



WHEEL & AXLE

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86276490	70670	5	SCR, 5/16-18 X 5/8 HHCS SS		
2	86010670	87029	5	WASHER, 5/16 FLAT SS		
3	86219480	41567	2	HUBCAP, 9.75" WHEEL		
4	86001660	41236	2	HUBCAP, 5/8" SHAFT		
5	86226050	89279	2	WHEEL, 9.75" X 1.5"		
6	86010730	87088	2	WASHER, 5/8 ID X 1.18 X .06 SS		
7	86294920	-	1	AXLE ASM, CLIPPER DUO		

WIRING DIAGRAM



WIRING DIAGRAM

REF	PART NO.	PRV 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	88205	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.	PRV NO.	DESCRIPTION	SERIAL NO. FROM	NOTES:
86215250	11049	BELT, 2S 5MM HTD, 15W, 128T		
86216050	12530	BRUSH, EXTRACTOR 16"		
86295520	-	BRUSH, EXTRACTOR 16" NATURAL		
86002010	14942	BOOT, 3/8 CIRCUIT BREAKER		
86001980	14700	BREAKER, 15A 250VAC 50VDC		
86215670	140839	BREAKER, 8A VDE CIRCUIT		
86218290	35382	GASKET, CONSOLE, HANDLE		
86007130	72128	SWITCH, DPDT 2-POSITION ROCKER		
86007200	72162	SWITCH, DPDT3-POSITION ROCKER		
86007140	72130	SWITCH, SPST 2- POSITION ROCKER		
86218180	35370	GASKET, DOME		
86003630	34351	FLOAT SHUT-OFF		
86299250	-	ASSY, VAC MOTOR		
86298070	-	ASSY, PUMP 110V		
86297440	-	JET, PROMAX, 11008		
86012550	-	JET, PROMAX, 11001		
86201110	250-78	PUMP, 110/120 60 HZ FLOJET		
86234790	27827	COVER, CLP SOLUTION		
86256090	730262	STRAINER, 1/2 FPT 80 MESH		
86004570	44067	JET BODY, MINI PROMAX BODY		
86293170	-	WIPER ASM 18"		
86297870	-	ASM, INTERIM SWITCH		ALSO ORDER 76064L (QTY 1) & 86298890 (QTY 1) TERMINALS

SERIAL NUMBERS

REF. NO.	MODEL: SERIAL #
1	10080480: 10080480000338

NOTES: