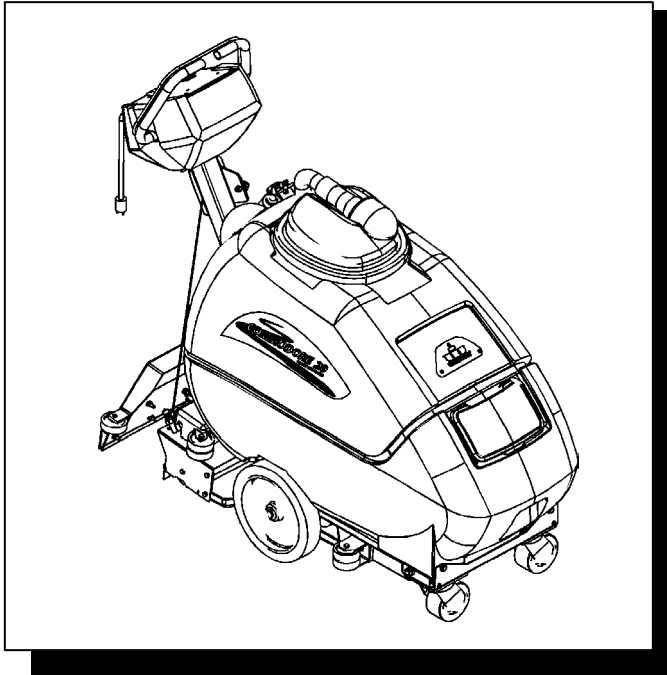


# COMMODORE 20

CARPET EXTRACTOR



## Operating Instructions

MODEL  
**CMD20**

POWER SOURCE  
115V ELECTRIC

**QUEST®** . . . for Continuous Improvement.  
Windsor's Quality Management System is Certified ISO 9001.

*Read instructions before operating the machine.  
Antes de usar la maquina lea atentamente el libro de instrucciones.  
Lire attentivement le mode d'emploi avant la mise en service de la machine.*

# TABLE OF CONTENTS

MODEL	_____
MODELO	_____
MODELE	_____
DATE OF PURCHASE	_____
FECHA DE COMPRA	_____
DATE D'ACHAT	_____
SERIAL NUMBER	_____
LAMINA DE NÚMERO DE SERIE	_____
NUMERO DE SERIE	_____
SALES REPRESENTATIVE #	_____
AGENTE DE VENTAS #	_____
REPRESENTANT #	_____
DEALER NAME	_____
NOMBRE DEL DISTRIBUIDOR	_____
NOMDU CONCESSIONNAIRE	_____

## Data Log/Table of Contents

Datos de la Máquina. Tabla de Contenidos  
 Registre d'informations/Table des Matières ..... 2

**Safety Instructions** ..... 3  
 Seguridad ..... 4  
 Sécurité ..... 5

**Grounding Instructions**  
 Instrucciones para la puesta a tierra  
 Instructions visant la mise à la terre ..... 6

**Controls** ..... 7  
 Mandos de Control ..... 8  
 Commandes de Fonctionnement ..... 9

**Operations**  
 Operación  
 Opération ..... 10

**Troubleshooting** ..... 16  
 D'epannage de la Machine ..... 17  
 Guia de Localización de Problemas ..... 18

## Wiring Diagram (115V)

Esquema Eléctrico (115V)  
 Schéma Électrique (115V) ..... 19

**Maintenance**  
 Mantenimiento  
 D'entretien ..... 20

**Technical Specifications**  
 Especificaciones Técnicas  
 Caractéristiques Techniques ..... 21

**Service Schedule** ..... 22

**Part List**  
 Lista de Piezas  
 Liste de Pièces ..... 24/43

**Warranty**  
 Garantía  
 Garantié ..... 45

## INSPECTION

Carefully unpack and inspect your machine for shipping damage. Each unit is operated and thoroughly inspected before shipping, and any damage is the responsibility of the carrier, who should be notified immediately.

## INSPECCION

Desempaque cuidadosamente e inspeccione su machine por daños de embarque. Cada unidad es operada y totalmente inspeccionada antes de embarcar, y cualquier daño es la responsabilidad de la compañía de embarque, a quien se le debería de notificar inmediatamente.

## INSPECTION

Déballer et inspecter votre machine soigneusement. Chaque machine est essayée et inspectée soigneusement avant d'être remise au transporteur. Tout est la responsabilité même du transporteur et c'est pour cela qu'il doit être notifié immédi

# 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 **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 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 control 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

# INTRUCCIONES IMPORTANTES PARA SU SEGURIDAD

Durante la utilización de un dispositivo eléctrico hay que tener en cuenta una serie de medidas básicas de precaución, que incluyen las siguientes



## **ADVERTENCIA:**

**Para reducir el riesgo de incendios, descargas eléctricas o lesiones:**

No deje nunca el aparato conectado a la red. Después de su uso, y antes de cualquier revisión o reparación, desconecte el aparato de la toma de corriente.

No usar nunca el aparato al aire libre.

Esta máquina está ideada para la limpieza exclusiva de moqueta.

No permita que se utilice el aparato como un juguete. Hay que prestar especial atención al utilizarlo en las cercanías de niños.

Utilizar el aparato solo como se describe en este manual. Emplear exclusivamente los accesorios recomendados por el fabricante. No poner en marcha el aparato con un cable eléctrico deteriorado. Si el aparato no funciona como debería, si se ha caído, dañado, si ha permanecido al aire libre o si se ha caído al agua, dirijase a un taller de servicio.

No tire del aparato ni lo transporte utilizando el cable eléctrico; no use el cable a modo de asa, ni cierre una puerta con el cable pillado; no tienda el cable en toro a aristas vivas o esquinas.

No pase con el aparato por encima del cable. Mantenga el cable siempre lejos de superficies calientes. No desconecte el enchufe de la red tirando del cable.

Para desconectar el aparato hay que tirar del enchufe, no del cable.

No maneje el enchufe ni el aparato con las manos húmedas.

No introduzca ningún objeto en las aberturas del aparato.

No utilice el aparato mientras esta bloqueada una de las aberturas; evite la penetración de polvo, hilachas, pelos o cualquier objeto que pueda inhibir la circulación del aire.

Mantenga su cabello, la ropa suelta, los dedos y todas las partes de su cuerpo alejadas de las aberturas y piezas en movimiento. No utilice el aspirador para recoger cuerpos en llamas o humeantes, tales como cigarrillos, cerillas o cenizas calientes.

No utilizar nunca el aspirador sin la bolsa y/o los filtros colocados en su lugar previsto.

Tenga especial cuidado al manejar la aspiradora en una escalera.

No utilice el aspirador para recoger líquidos inflamables o combustibles, tales como gasolina, ni maneje el aspirador en zonas donde pueda haber líquidos de este tipo.

Esta máquina sirve para uso comercial, por ejemplo, en hoteles, escuelas, hospitales, fábricas, talleres y oficinas, con fines de limpieza normal.

El mantenimiento y las reparaciones las debe hacer personal calificado.

Si sale espuma o líquido de la máquina, apáguela inmediatamente.

Esta máquina no es apropiada para recoger polvo nocivo para la salud.

## **CONSERVE ESTAS INSTRUCCIONES A MANO**

# IMPORTANTES MESURES DE SÉCURITÉ

Pour réduire les risques d'incendie, de choc électrique



## **AVERTISSEMENT:**

**L'utilisation d'un appareil électrique demande certaines précautions: LIRE TOUTES LES INSTRUCTIONS AVANT DE FAIRE FONCTIONNER (CET APPAREIL)**

Cet appareil ne doit être connecté qu'à des prises ayant une sortie de terre. Se reporter aux instructions de mise à la terre.

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

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

Cette machine est uniquement destinée à nettoyer les tapis.

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.

Mainenir les cheveux, les vêtements amples, les doigts et toutes les parties du corps à l'écart des ouvertures et des pièces mobiles.

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

Mettre toutes les commandes à la position ARRÊT avant de débrancher l'appareil. User de prudence lors du nettoyage des escaliers.

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 peut être utilisée aussi bien dans des établissements industriels et commerciaux tels qu'hôtels, écoles, hôpitaux, usines, ateliers et bureaux que dans des bâtiments à usage résidentiel.

L'entretien et les réparations doivent être effectués par du personnel qualifié.

Si de la mousse ou du liquide sort de la machine, arrêter celle-ci immédiatement.

Cette machine n'est pas conçue pour aspirer de la poussière insalubre.

## **CONSERVER CES INSTRUCTIONS**

# GROUNDING INSTRUCTIONS

## THIS PRODUCT IS FOR COMMERCIAL USE ONLY. ELECTRICAL:

In the USA this machine operates on a standard 15 amp 115 volt A.C. power circuit (129V nominal). 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.

### 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.

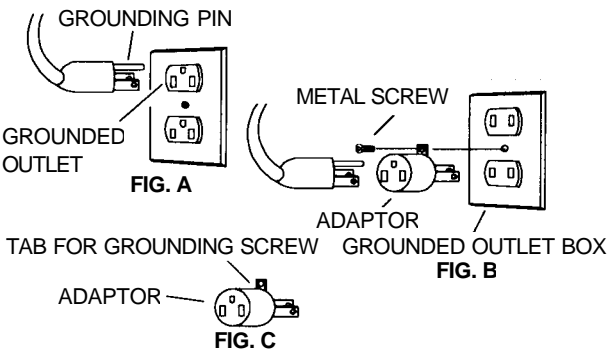
This appliance is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug in "Fig. A". A temporary adaptor that looks like the adaptor in "Fig. C" may be used to connect this plug to a 2-pole receptacle as shown in "Fig. B", if a properly grounded outlet is not available. 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 the like 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 electrical 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.**

### PROPER GROUNDING



**NOTE: In Canada, the use of a temporary adaptor is not permitted by the Canadian Electrical Code**

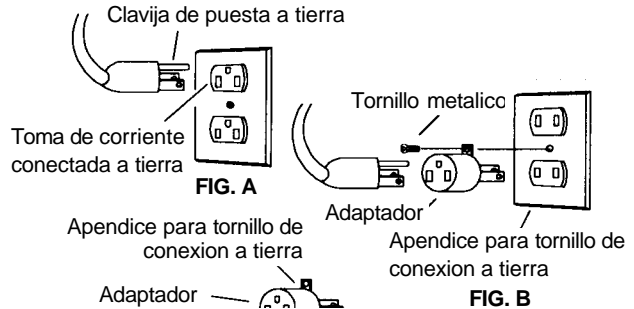
### INSTRUCCIONES PARA LA PUESTA A TIERRA:

Este dispositivo tiene que ser puesto debidamente a tierra. Si se produce una avería o rotura, la conexión a tierra constituye el camino de menor resistencia para la corriente eléctrica, reduciéndose el riesgo de descargas peligrosas. El aparato cuenta con un cable con conductor de puesta a tierra y un enchufe con clavija de puesta a tierra de acuerdo con las normas y ordenanzas locales.

## ADVERTENCIA:

Si se conecta de modo inadecuado el conductor

de puesta a tierra del aparato pueden producirse descargas eléctricas peligrosas para el usuario. En caso de dudas, pedir a un electricista debidamente cualificado o a un técnico del servicio postventa que verifique que la toma de corriente esta bien puesta a tierra. Si el enchufe suministrado con el aparato no se adapta a la toma de corriente disponible, no hay que modificar el enchufe, sino dirigirse a un electricista para que instale una toma corriente adecuada.



**AVERTENCIA: en Canada, la Canadian Electrical Code prohíbe el uso de adaptadores temporales.**

### INSTRUCTIONS VISANT LA MISE À LA TERRE:

Cet appareil doit être mis à la terre. En cas de défaillance ou de panne éventuelles, la mise à la terre fournit au courant un chemin de moindre résistance qui réduit le risque de choc électrique. Cet appareil est pourvu d'un cordon muni d'un conducteur de terre et d'une fiche avec broche de terre. La fiche doit être branchée dans une prise appropriée correctement installée et mise à la terre conformément aux règlements et ordonnances municipaux.

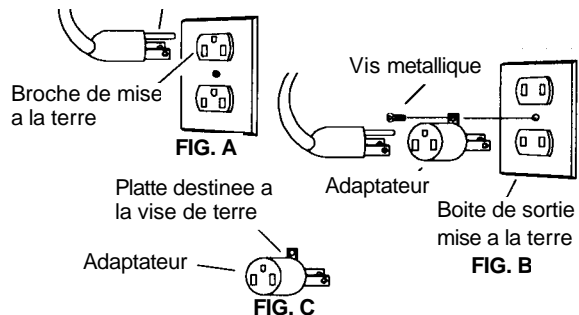
Un conducteur de terre cordé peut entraîner un risque de

## ADVERTISSEMENT:

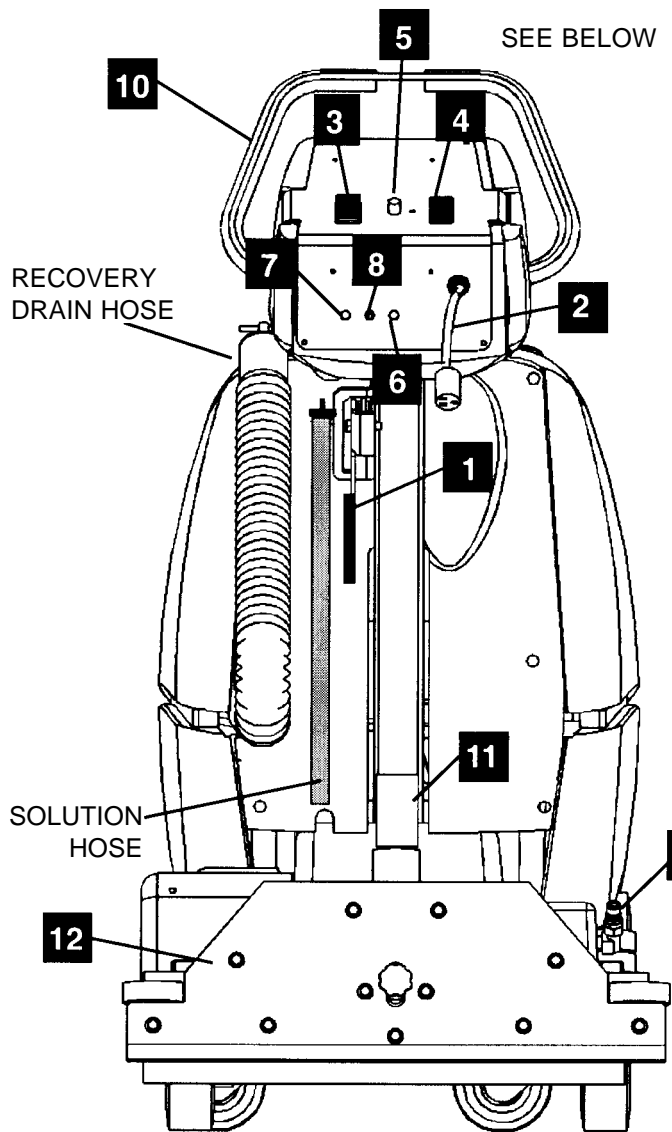
choc électrique. Consulter un électricien ou un technicien d'entretien qualifié si vous n'êtes pas certain que la prise est correctement mise à la terre. Ne pas modifier la fiche fournie avec l'appareil - si elle ne peut être insérée dans la prise, faire installer une prise adéquate par un électricien qualifié.

Prise de courant

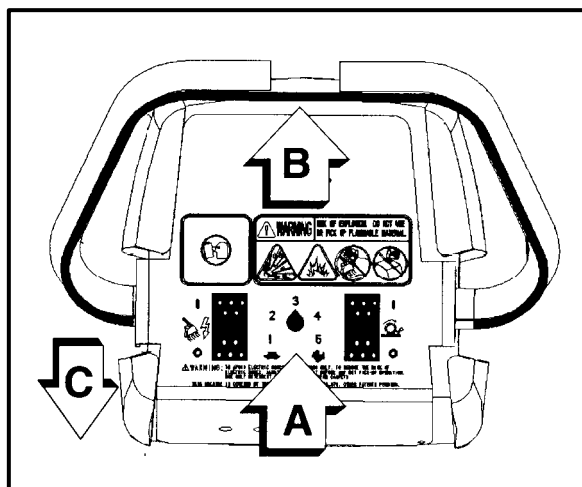
**NOTE: Au Canada, l'utilisation d'un adaptateur temporaire n'est pas autorisée par le Code canadien de l'électricité.**



## CONTROLS



1. **Brush/Vac Shoe Lift Lever** - Raises and lowers both brush and vac shoe.
2. **Electrical Cord**
3. **Main Power Switch** – Turns On and Off the vac motor/pump and machine.
4. **Brush/Solenoid Knob** – Enables the brush motor and solution spray (only when propelling).
5. **Speed Control Knob** – Adjusts the forward drive speed of the machine. (See Below)
6. **Drive Motor Circuit Breaker** – 6 amp, protects the drive motor mechanism.
7. **Vac Motor Circuit Breaker** – 15 amp, protect vacuum motor.
8. **Brush Motor Circuit Breaker** – 8 amp, protect brush motor.
9. **Solution Accessory Tool Hook-Up** – Used for various auxiliary cleaning tools.
10. **Main Handle**
11. **Vacuum Accessory Tool Hook-Up** – To use accessory tool, remove hose from vac shoe and attach to accessory tool adaptor. (pn#78211)
12. **Vac Shoe Assembly**

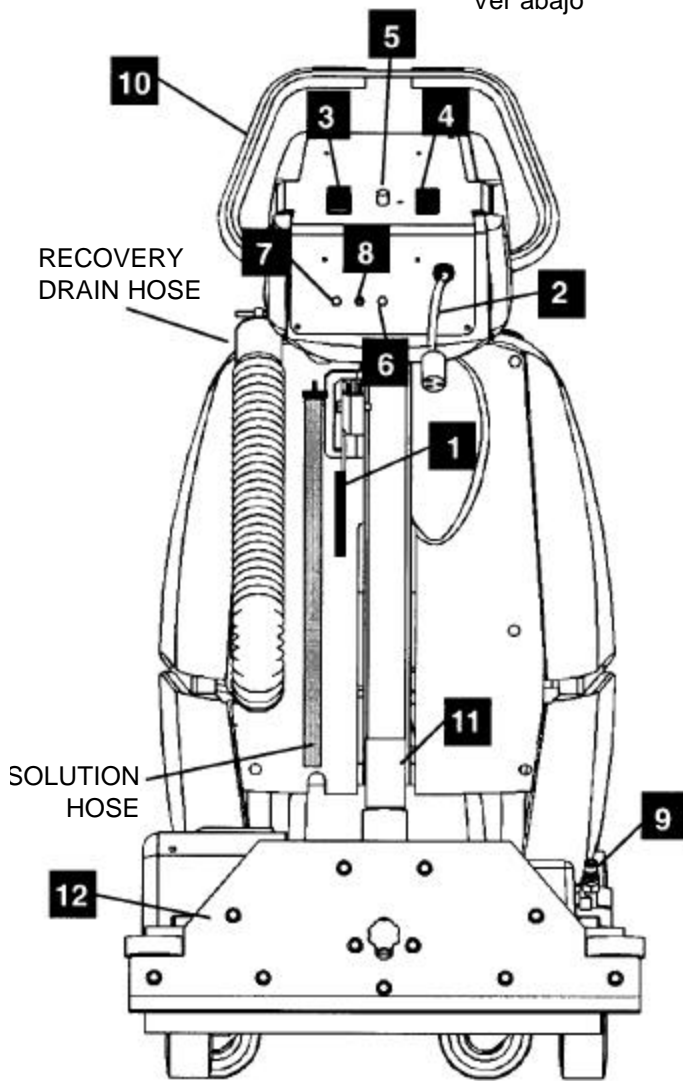


## DRIVE CONTROLS

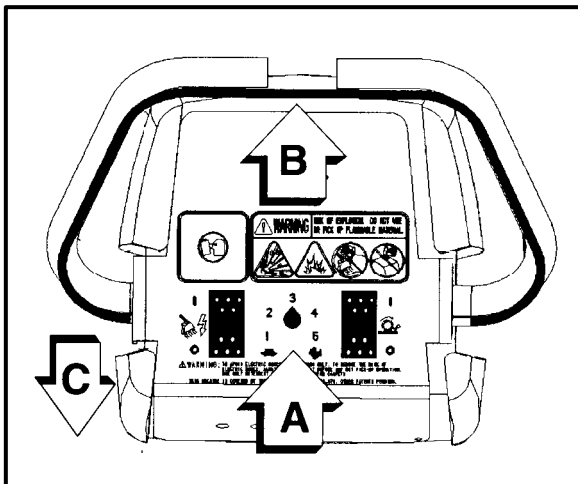
- A. The speed the machine will travel is regulated by the knob located on the center of control panel. Turn the knob to the right to increase the speed of the machine and to the left to decrease the speed of the machine.
- B. Squeezing the control lever will propel the machine forward at the selected speed. Machine will also engage the brush and spray if #4 is activated.
- C. To move the machine backwards release the control lever and then pull back on main handle (NOTE: The machine drive assembly is disengaged). Do not pull back on the control lever.

## MANDOS DE CONTROL

Ver abajo



1. **Planca de la zapata del cepillo/Aspiradora** – Sube y baja el cepillo y la zapata de la aspiradora.
2. **Conexión electrónica.**
3. **Interruptor principal de la aspiradora** – Pone en marcha y desconecta el motor de la aspiradora y de la máquina.
4. **El interruptor del cepillo** – Pone en marcha y desconecta el motor del cepillo.
5. **Botón del control de velocidad** – (Ver adajo)
6. **Disyuntor del motor de accionamiento** – 6 amperios, protégé el motor de accionamiento.
7. **Disyuntor del motor de la aspiradora** – 15 amperios, protégé el motor de la aspiradora.
8. **Disyuntor del motor del cepillo** – 8 amperios, protégé el motor del cepillo.
9. **Puerto de conexión de la herramienta auxiliar** – Conecte el acoplador de latón al puerto de conexión en la herramienta auxiliar.
10. **Mango principal.**
11. **Conexión herramienta auxiliar** – Para usar la herramienta auxiliar, extraiga el tubo de la zapata de la aspiradora y acople la herramienta auxiliar (pn#78211).
12. **Boquilla de aspiración.**

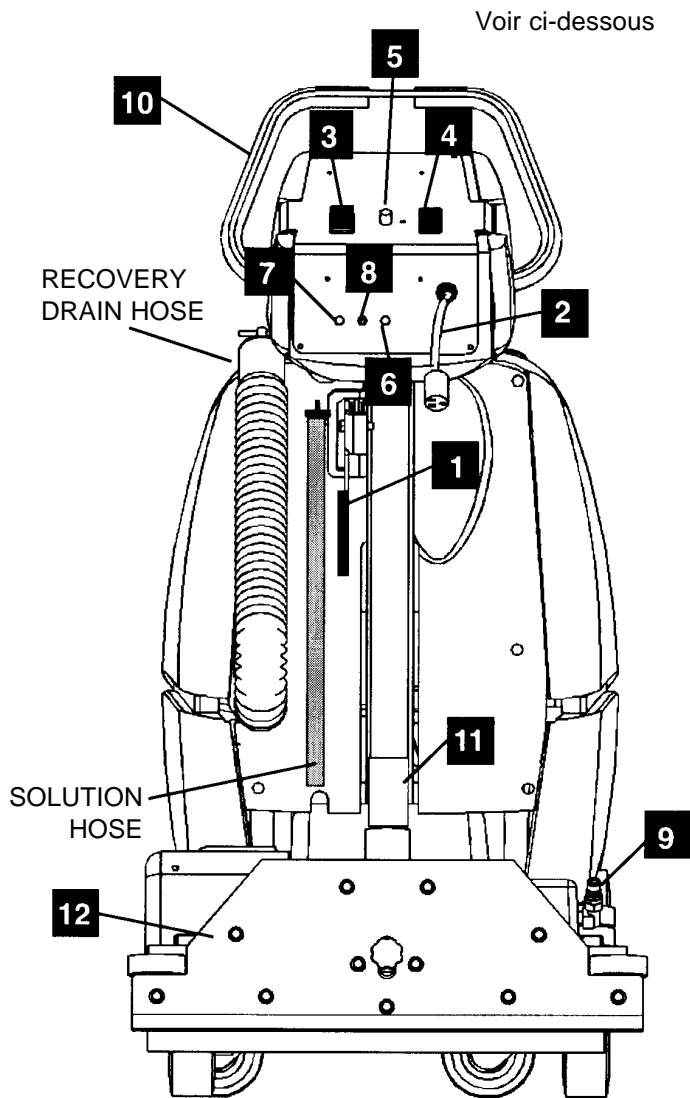


## MANDOS DE ACCIONAMIENTO

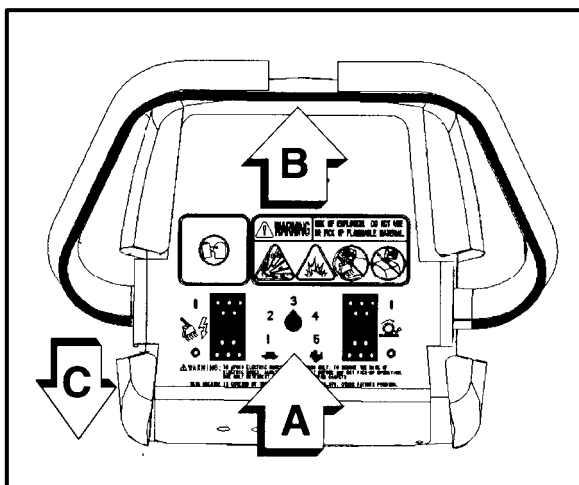
- A. La velocidad que conseguirá la máquina será regulada por medio del botón situado en el centro del panel de control. Gire el botón hacia la derecha para aumentar la velocidad o hacia la izquierda para disminuirla.
- B. Apretando la planca de control se impulsará la máquina hacia delante.
- C. Para mover la máquina hacia atrás, tire del mango principal hacia atrás.



## COMMANDES DÉ FONCTIONNEMENT



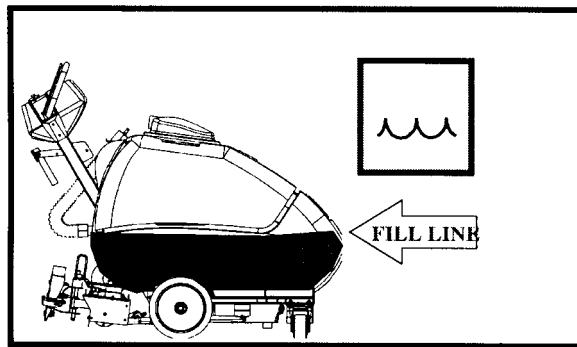
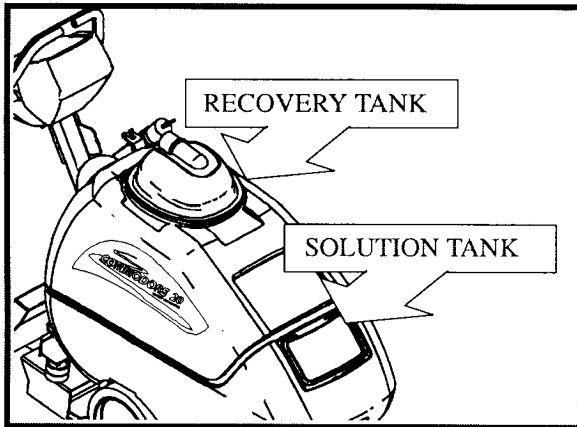
1. **Levier de la brosse/du sabot à aspiration** – Lève et abaisse la brosse et le sabot à aspiration.
2. **Connexion électrique.**
3. **Interrupteur principal/aspiration** – Met sous tension et hors tension la machine à aspiration et la machine.
4. **Interrupteur de la brosse** – Met sous tension et hors tension le moteur d'entraînement.
5. **Bouton de commande de vitesse** – (voir ci-dessous)
6. **Disjoncteur du moteur d'entraînement** – 6 A, protège le moteur d'entraînement.
7. **Disjoncteur du moteur de la brosse** – 15 A, protège le moteur à aspiration.
8. **Disjoncteur du moteur de la brosse** – 8 A, protège le moteur de la brosse.
9. **Port d'outil auxiliaire** – Connecte l'accouplement en laiton sur l'outil auxiliaire au port.
10. **Manche principal** – (Voir ci-dessous)
11. **Connexion d'outil auxiliaire** – Pour utiliser auxiliaire, retirer le tuyau du sabot d'aspiration et l'attacher à l'outil auxiliaire. (pn#78211)
12. **Entraînement**



## COMMANDES D'ENTRAÎNEMENT

- A. La vitesse de parcours de la machine est réglée par le bouton situé au centre du panneau de commande. Tourner le bouton vers la droite pour augmenter la vitesse ou vers la gauche pour diminuer la vitesse.
- B. Appuyer sur le levier de commande pour faire avancer la machine.
- C. Pour faire reculer la machine, tirer en arrière sur le manche principal.

# OPERATIONS



## FILLING THE CMD20

NOTE: Use clean bucket of water to fill solution tank.  
 NOTA: Llène el tanque de solución. (Utilice una de agua limpia.)  
 NOTE: Utiliser un seau propre remplir le réservoir de solution.

**DO NOT PUT DEFOAMER, SOLVENTS, SPOTTER OR PRESpray CHEMICALS IN THE SOLUTION TANK.**

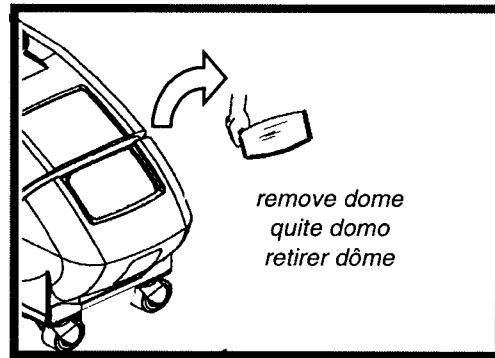
## CHEMICALS – QUIMICOS – CHIMIQUES

<u>Suitable Chemicals</u>	<u>Non-Compatible Chemicals</u>
<u>Quimicos Adecuados</u>	<u>Quimicos No Compatibles</u>
<u>Produits Chimiques Appropriés</u>	<u>Produits Chimiques Incompatibles</u>

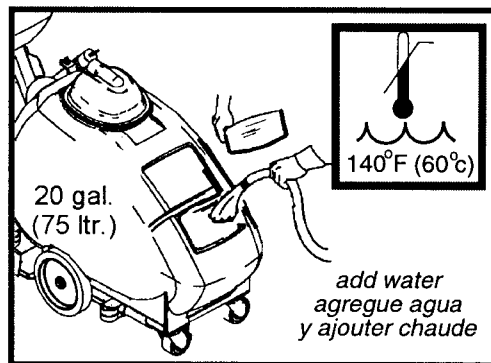
Alkalis  
 Detergents  
 Hydroxides  
 Soaps  
 Vinegar

Akdehydes  
 Aromatic Hydrocarbons  
 SP Butyls  
 Carbon Tetrachloride  
 Chlorox\*  
 Chlorinated Bleaches  
 Chlorinated Hydrocarbons  
 Lysol\*  
 Methyl Ethel Ketone (MEK)  
 Perchorethylene (perc)  
 Phenolics  
 Trichlorethylene

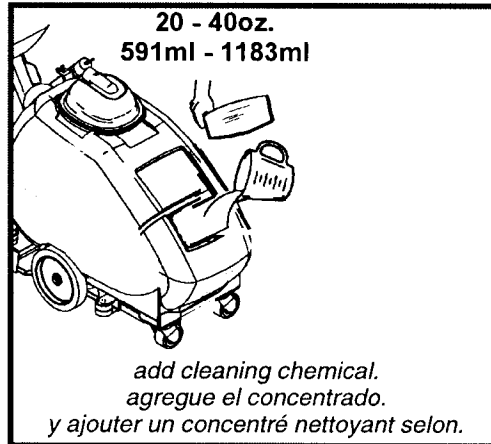
STEP 1



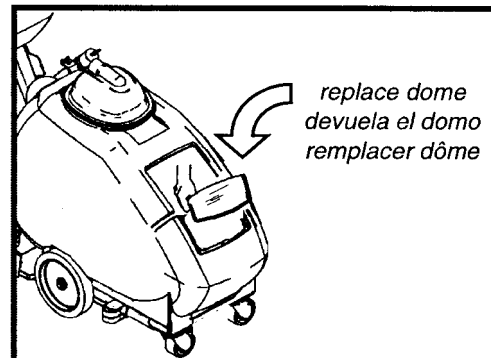
STEP 2



STEP 3



STEP 4

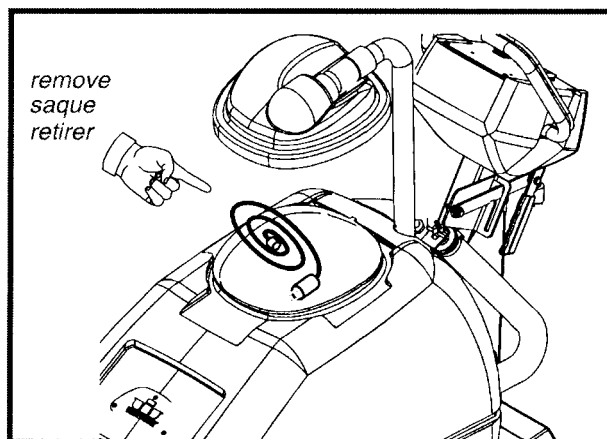


STEP  
1

Remove electrical cord from recovery tank.

Saque el cordón eléctrico del tanque de recuperación.

Retirer le câble du bac avant de la machine.

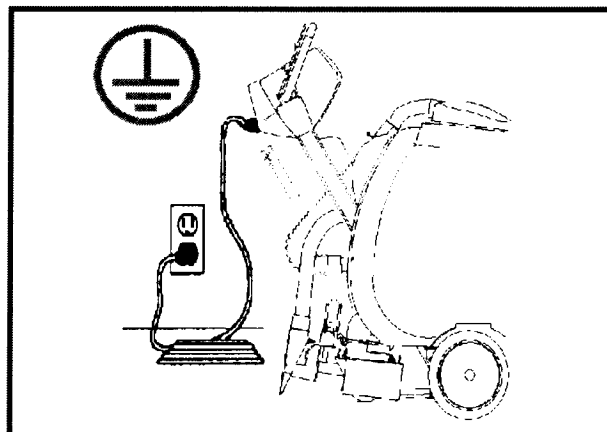


STEP  
2

Plug cord into grounded outlet.

Enchufe el cordón eléctrico a un toma corriente.

Brancher la machine à une prise avec terre.

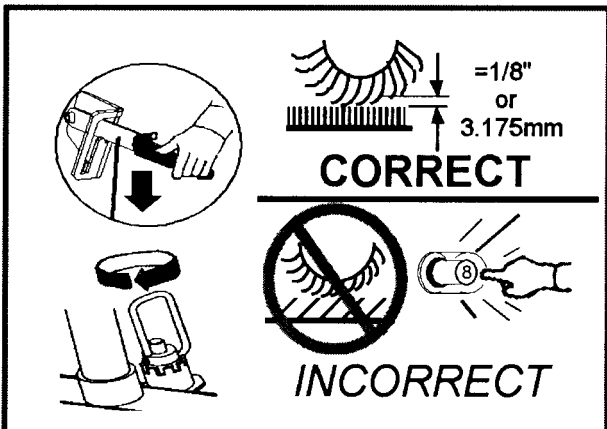


STEP  
3

Adjust brush to proper setting. (See page 15)  
Lower the brush.

Ajuste el cepillo al nivel correcto. (pagina 15)  
Bajar el escobón.

Régléer sa position de la brosse. (p. 15)  
Abaisser la brosse.

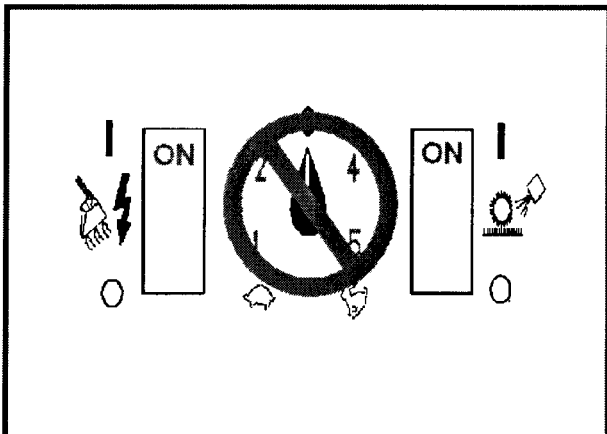


STEP  
4

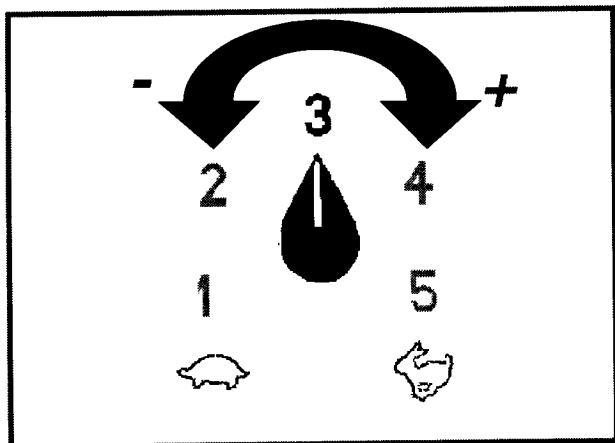
Turn Main Power/Brush Switch "ON" – "I"

Encienda el interruptor principal "ON" – "I"

Mettre la machine en marche "ON" – "I"



## OPERATION

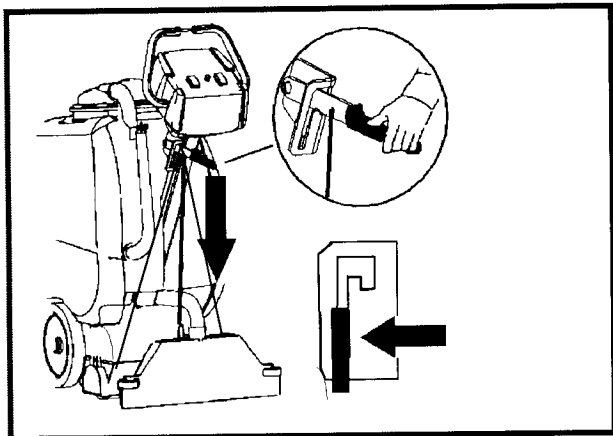


**STEP**  
**5**

Adjust speed control knob to desired speed.

Establezca la velocidad utilizando el botan de control de velocidad.

Ajuster le bouton de contrôle de vitesse à la vitesse désirée.

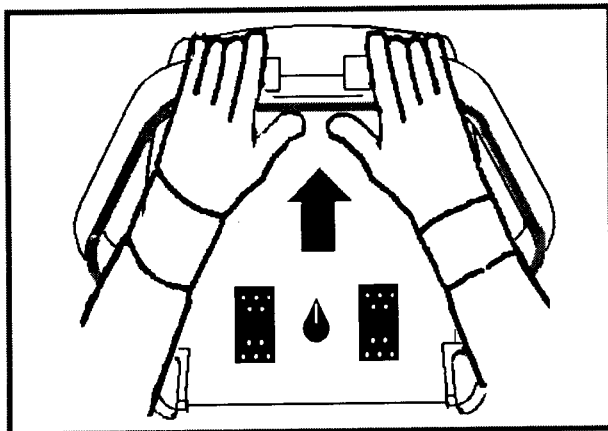


**STEP**  
**6**

Lower brush assembly to floor.

Baje el conjunto del cepillo suelo.

Abaisser l'assemblage de brosse au niveau de sol.

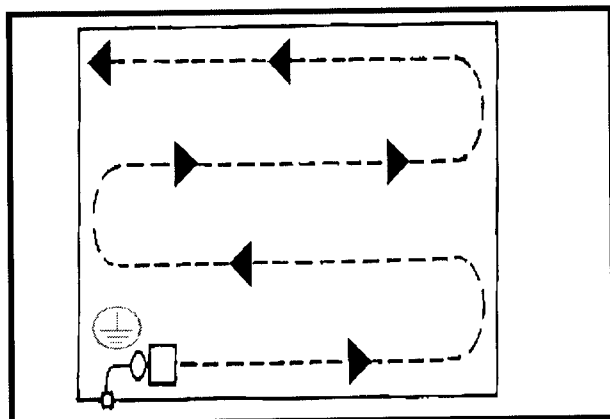


**STEP**  
**7**

Depress lever to propel machine forward, and to activate brush and spray.

Presionando una o las dos palancas de control, la máquina andará hacia delante a la velocidad seleccionada.

Appuyer sur le levier pour faire avancer la machine.



**STEP**  
**1**

### CLEANING PROCEDURE

Operate machine in parallel passes. Clean perimeter last.

Utilice la máquina en faces paralelas.

Utiliser la machine en passages parallèles.

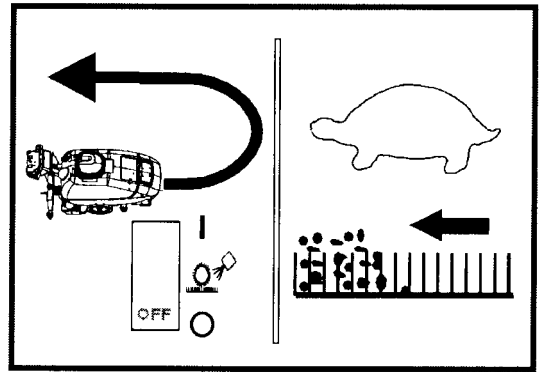
## CLEANING PROCEDURE

**STEP 2**

Turn "OFF" brush/solution switch in turns. Go slow over heavily soiled carpet.

"Desconecte" el botón de cepillo/solución en turnos. Vaya despacio sobre una moqueta muy sucia.

Mettre sur OFF l'interrupteur de brosse/solution tour à tour. Aller lentement sur du tapis très sale.



**CAUTION**

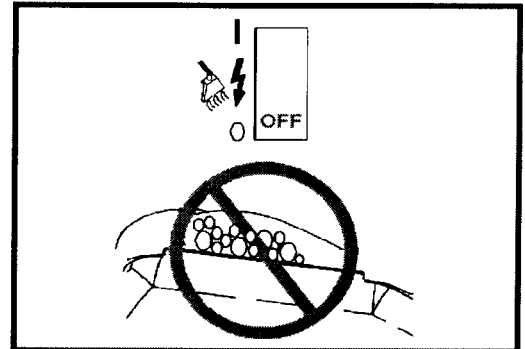
Foam! Turn off machine and add defoamer to recovery tank only.

**PRECAUCIÓN**

Si hay espuma excesiva, apague la máquina y agregue un agente despumante al tanque de recuperación.

**ATTENTION**

Mousse! Si de la mousse ou du liquide sort de la machine, Y ajouter un concentré qui ne fait pas de mousse.

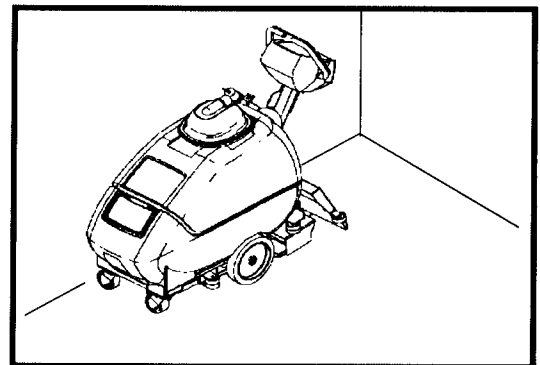


**STEP 3**

Use right side of machine for cleaning against walls.

Cuando utilice la máquina junto a las paredes, utilice el lado derecho de la máquina.

Utiliser le côté droit de la machine pour nettoyer contre les murs.

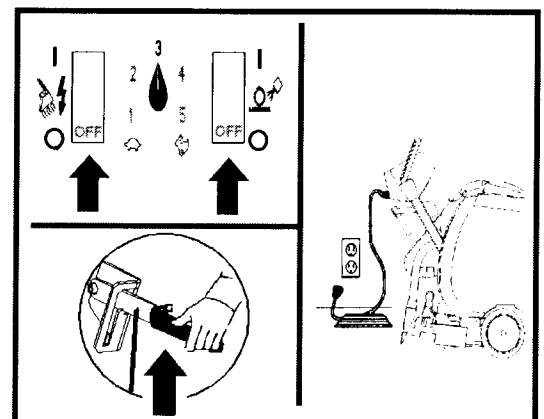


**STEP 4**

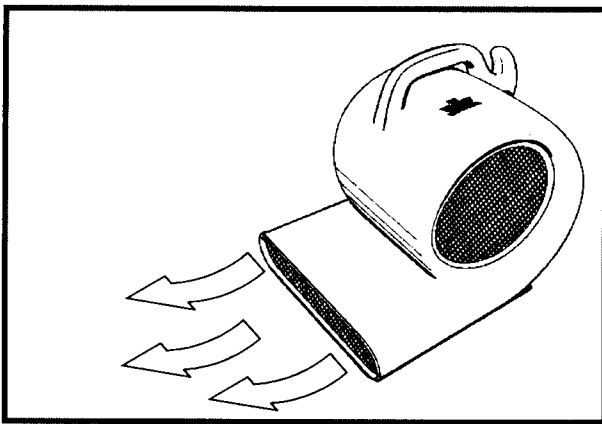
After cleaning, turn off all controls, raise brush assembly to storage position and carefully unplug machine.

Una vez limpiada, desconecte todos los mandos de control, alce el conjunto del cepillo a la posición de almacenaje, y desenchufe la máquina con cuidado.

Après le nettoyage, mettre hors fonction toutes les commandes, soulever l'assemblage de brosse à la position de garde et débrancher la machine avec soin.



## CLEANING PRODECURE

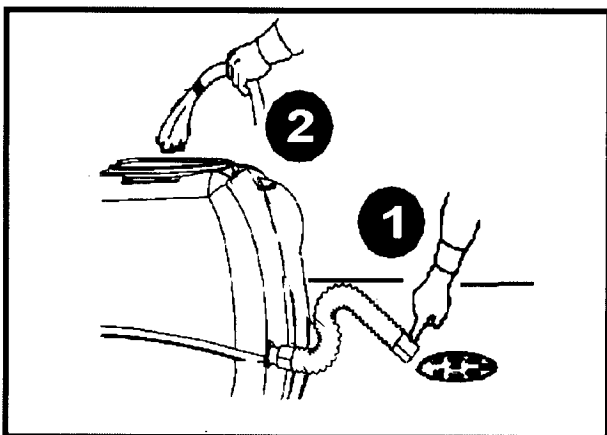


**STEP**  
**5**

To speed drying, use a WINDBLOWER™ fan.

Para secar la alfombrar mas rapido, utilice un abanico WINDBLOWER™.

Pour accélérer le séchage, utiliser un WINDBLOWER™.

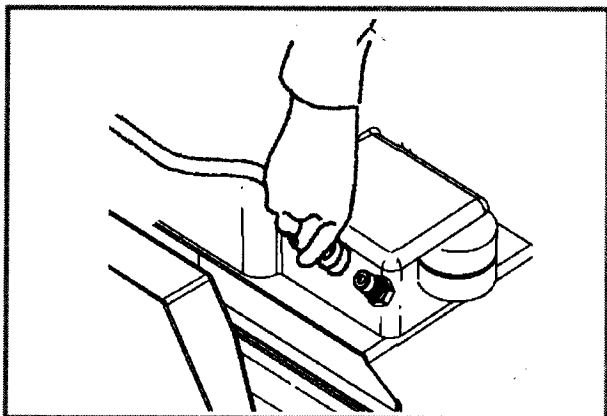


**STEP**  
**6**

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

Vacíe el depósito de recuperación soltando el tubo de residous, Utilice el tubo para limpiar el depósito de recuperación.

Vider l'éréservoir de récupération en relachant le tuyau de vidange. Utiliser le tuyau pour nettoyer le réservoir de récupération.



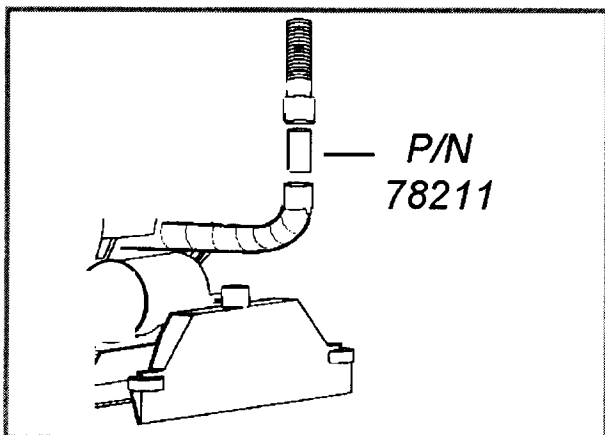
**STEP**  
**1**

### ACCESSORY TOOL USAGE

Insert collar over fitting.

Conecte la manguera de solución de la herramienta de accesorio al anillo de latón de desconectado rápida.

Attacher l'outil accessoire à la tétine de solution en cuivre à l'arrière en bas du chassis de machine.



**STEP**  
**2**

Insert adaptor into vac shoe hose, then insert accessory tool cuff onto adaptor.

Quite la manguera de la bonquilla de aspiración. Conecte la manguera de solución de la herramienta de accesorio a la manguera del tanque de recuperación.

Attacher l'outil accessoire.

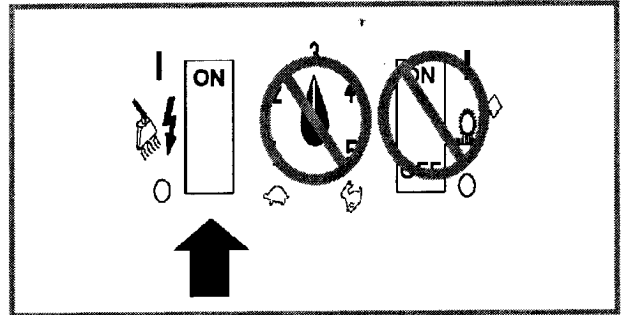
## ACCESSORY TOOL USAGE

Turn Main Power Switch "ON" – "I"

Encienda "I" el interruptor principal.

Mettre "I" la machine en marche

**STEP 3**

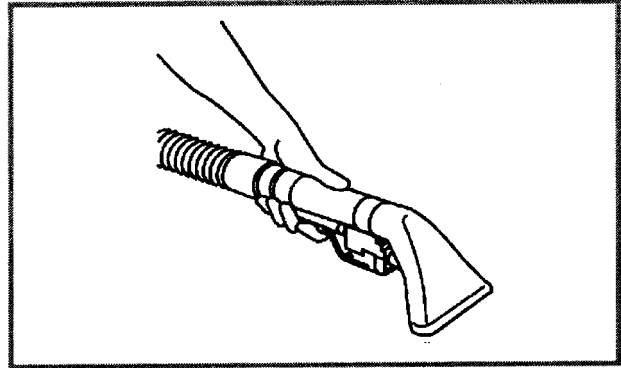


Squeeze handle on accessory tool to begin cleaning.

Para empezar a limpiar, apriete la palanca de solución.

Presser la gâchette afin de commencer la vaporisation.

**STEP 4**

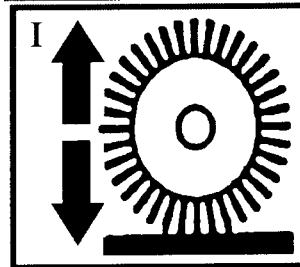


### BRUSH ADJUSTMENT

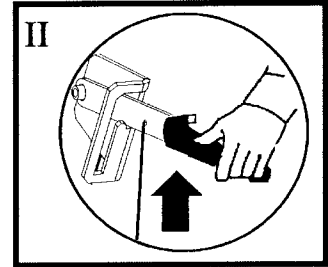
*NOTE: For good operation the brush must skim the carpet.*

*NOTA: Para un buen funcionamiento, el cepillo tiene que rozar el alfombra.*

*NOTE: Pour un bon fonctionnement, la brosse doit frôler le carpet.*

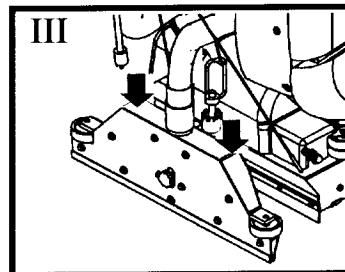
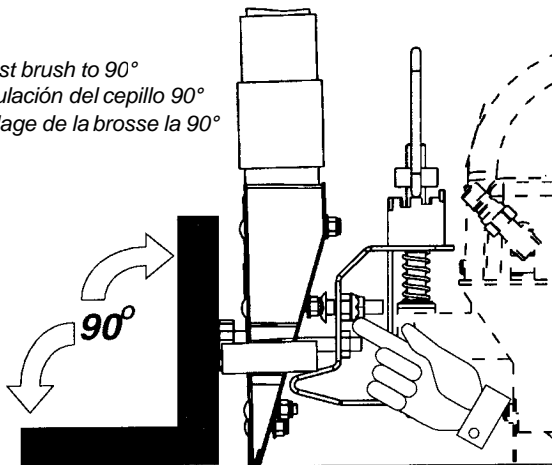


- To adjust the brush.
- Regulación del cepillo
- Réglage de la brosse

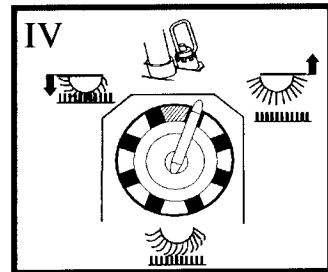


- Raise handle to "Storage position"
- Levante la palanca hacia la "Posición para almacenar"
- Soulever la brosse pour "Position de Garde"

Adjust brush to 90°  
Regulación del cepillo 90°  
Réglage de la brosse la 90°



- Push down on squeegee assembly
- Presione la boquilla de aspiración hacia abajo
- Pressent sur la entrainement



- Adjust brush to correct height for carpet.
- Ajuste el cepillo hacia la altura correcta de la alfombra.
- Régléer sa position de la brosse.

## TROUBLESHOOTING

PROBLEM.	CAUSE	SOLUTION
<b>No Power, Nothing Runs</b>	Is the cord plugged in.	Plug on cord.
	Circuit breaker tripped in building.	Reset breaker.
	Faulty switch.	Call for service.
	Faulty power cord or pigtail.	Call for service.
<b>Vacuum Motor Will Not Run</b>	Vacuum circuit breaker tripped.	Reset breaker.
	Faulty main vacuum switch.	Call for service.
	Loose wiring.	Call for service.
<b>Vacuum Motors Runs But Suction is Poor</b>	Faulty vac motor.	Call for service.
	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.
	Incorrect vac shoe angle.	Adjust as necessary.
	Recovery tank full/float ball stuck in the up position.	Drain and rinse recovery tank, free float ball.
	Clamp loose on vac motor.	Call for service.
<b>Poor or No Water Flow (Carpet is Streaky)</b>	Recovery tank inlet loose or gasket defective.	Call for service.
	Vac shut-off engaged.	Drain recovery tank.
	Solution filter clogged.	Drain solution tank and clean solution filter.
	Jets clogged or missing.	Clean using a vinegar/water solution or replace.
	Faulty solenoid.	Call for service.
<b>Brush Does Not Spin</b>	Propel lever not engaged.	Brush switch must be on and propel lever squeezed to activate spray.
	Brush switch on.	Turn on brush switch.
	Brush circuit breaker tripped.	Reset circuit breaker.
	Propel lever not engaged.	Propel lever must be squeezed to activate brush.
	Brush belt not broken.	Replace as necessary.
<b>Machine will Not Propel when Handles are Squeezed</b>	Faulty brush motor.	Call for service.
	Circuit breaker tripped.	Reset circuit breaker.
	Speed control knob set at zero.	Turn speed control knob between 1-5.
	Faulty speed control board.	Call for service.
<b>Solution/Brush turn on when brush switch engaged</b>	Faulty propel motor.	Call for service.
	Faulty micro switch.	Call for service.



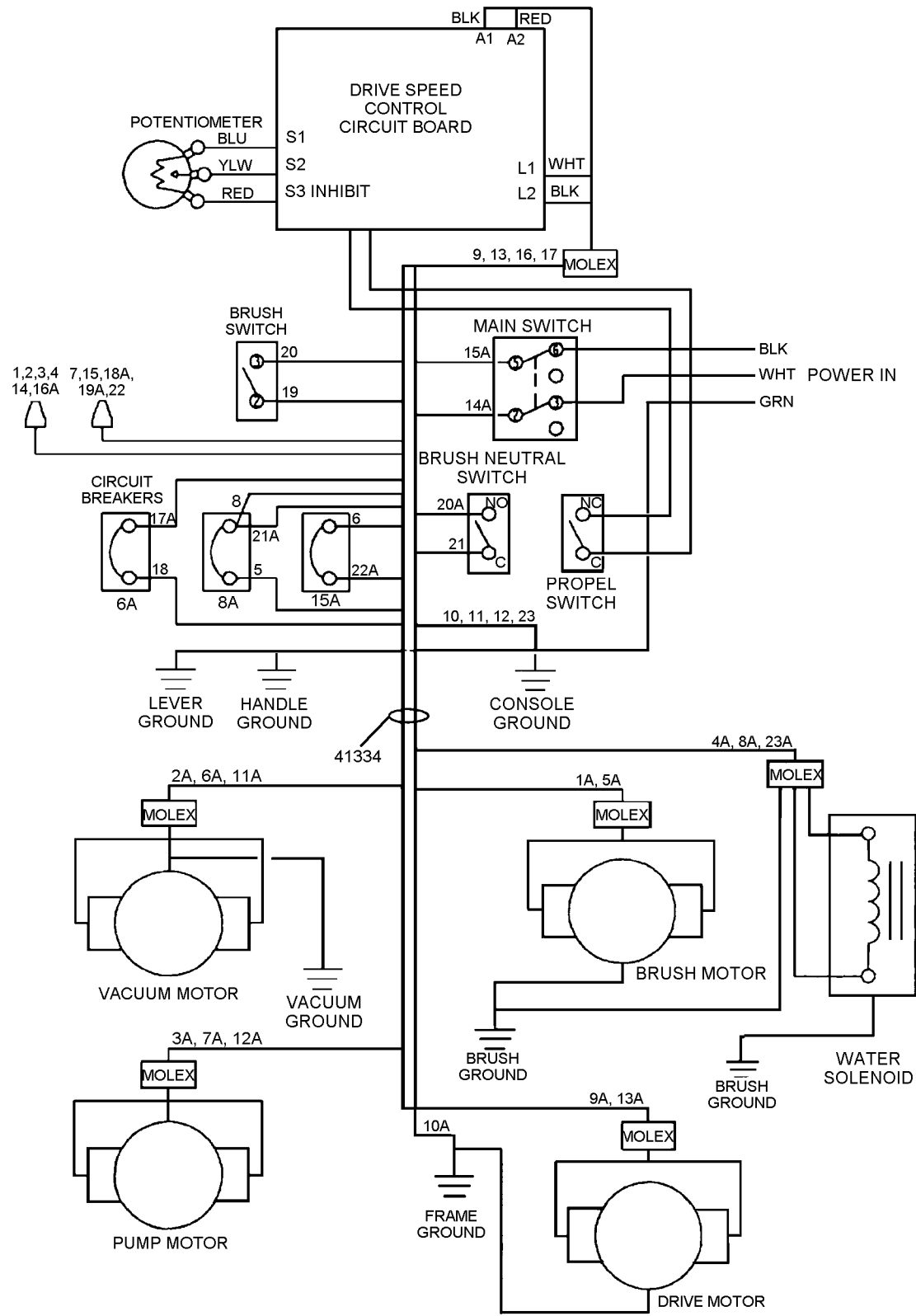
## GUIA DE LOCALIZACIÓN DE PROBLEMAS

PROBLEMA.	CAUSE	SOLUTION
<b>No hay energía, nada funciona.</b>	Está el cable enchufado.	Enchufe el cable.
	Interruptor defectuoso.	Llame para servicio.
	Cable de potencia o cable flexible de conexión defectuoso.	Llame para servicio.
	Disyuntor desconectado en el edificio.	Reajuste el disyuntor.
<b>El motor de la aspiradora no funciona.</b>	Disyuntor de la aspiradora desconectado.	Reajuste el disyuntor.
	Interruptor principal de la aspiradora defectuoso.	Llame para servicio.
	Instalación suelta.	Compruebe o liame para servicio.
	Motor de aspiradora defectuoso.	Llame para servicio.
<b>El motor de la aspiradora funciona pero la succión es insuficiente.</b>	Restos depositados en la zapata de la aspiradora.	Extraiga los restos de la zapata de la aspiradora.
	Junta de la capa protectora defectuosa o perdida.	Cámbielo o repárelo según sea necesario.
	Tubo de la aspiradora rajado o manguito del tubo suelto.	Cámbielo o repárelo según sea necesario.
	Junta de la placa de la zapata de la aspiradora defectuosa.	Cámbielo o repárelo según sea necesario.
	El depósito de recuperación está lleno/la bola flotante está atrapada en la posición superior.	Vacíe el depósito de recuperación libre la bola flotante.
	Abrazadera suelta en el motor de la aspiradora.	Llame para servicio.
	Tubo de entrada del depósito de recuperación suelto o junta defectuosa.	Llame para servicio.
<b>Flujo de agua insuficiente o ninguno (Moqueta es uniforme).</b>	Filtro de solución atascado.	Vacíe el depósito de la solución y limpie el filtro de la solución.
	Chorros atascados o no hay.	Limpie usando una solución de vinagre y agua o cámbielo.
	Solenoides defectuosos.	Llame para servicio.
	Palanca de impulsión sin conectar.	El interruptor del cepillo debe estar conectado y la palanca de impulsión apretada para activar el rociado.
<b>El cepillo no gira</b>	El interruptor del cepillo está conectado.	Conecte el interruptor del cepillo.
	El disyuntor del cepillo está desconectado.	Reajuste el disyuntor.
	Palanca de impulsión sin conectar.	Palanca de impulsión debe estar apretada para activar el cepillo.
	Correa del cepillo rota.	Cámbielo o repárelo según sea necesario.
	Motor del cepillo defectuoso.	Llame para servicio.
<b>Máquina no impulsa cuando los mangos están apretados.</b>	Disyuntor desconectado.	Reajuste el disyuntor.
	Botón de control de velocidad programado a cero.	Gire el botón de control de velocidad hasta fijarlo entre 1 y 4.
	Cuadro de control de velocidad defectuoso.	Llame para servicio.

## D'EPANNAGE DE LA MACHINE

PROBLEME.	CAUSE	SOLUTION	
<b>Aucune alimentation, rein ne fonctionne.</b>	Le cordon est-il branché.	Brancher le cordon.	
	L'interrupteur est défectueux.	Appeler le service.	
	Le cordon d'alimentation ou la queue de cochon est défectueuse.	Appeler le service.	
	Le disjoncteur est déclenché dans le bâtiment.	Réarmer le disjoncteur.	
<b>Le moteur d'aspiration ne fonctionne pas.</b>	Le disjoncteur du circuit d'aspiration est déclenché.	Réarmer le disjoncteur.	
	L'interrupteur d'aspiration principal est défectueux.	Appeler le service.	
	Les câbles sont lâches.	Vérifier ou appeler le service.	
	Le moteur d'aspiration est défectueux.	Appeler le service.	
<b>Le moteur d'aspiration fonctionne mais la succion</b>	Il y a des débris dans le sabot d'aspiration.	Retirer les débris du sabot d'aspiration.	
	Le joint du dôme est défectueux ou manquant.	Remplacer ou réparer comme voulu.	
	Le tuyau d'aspiration est fendu ou le manchon du tuyau est desserré.	Remplacer ou réparer comme voulu.	
	Le joint de la plaque du sabot d'aspiration est défectueux.	Remplacer ou réparer comme voulu.	
	Le réservoir de récupération est plein/le flotteur est coincé en haut.	Vider le réservoir de récupération.	
	L'attache du moteur d'aspiration est desserrée.	Appeler le service.	
	L'entrée du réservoir de récupération est lâche ou le joint est défectueux.	Appeler le service.	
	<b>Le débit d'eau est faible ou non existant (le tapis a des traînees).</b>	Le filtre de solution est colmaté.	Vider le réservoir de solution et nettoyer le filtre.
		Le jet est colmaté ou manque.	Nettoyer avec de l'eau et du vinaigre ou remplacer.
		Le solénoïde est défectueux.	Appeler le service.
Le levier de propulsion n'est pas engagé.		L'interrupteur de la brosse doit être en marche et le levier de propulsion appuyé pour activer le jet.	
<b>Le brosse ne tourne pas.</b>	L'interrupteur de brosse est en fonction.	Mettre en fonction l'interrupteur de la brosse.	
	Le disjoncteur de la brosse est déclenché.	Réarmer le disjoncteur.	
	Le levier de propulsion n'est pas engagé.	Le levier de propulsion doit être pressé pour activer la brosse.	
	La courroie de la brosse est cassée.	Remplacer ou réparer comme voulu.	
	Le moteur de la brosse est défectueux.	Appeler le service.	
<b>La machine ne vent pas tourner lorsque les manches sont pressés.</b>	Le disjoncteur est déclenché.	Réarmer le disjoncteur.	
	Le bouton de commande vitesse est mis sur zéro.	Tourner le bouton de commande de vitesse entre 1 et 4.	
	La carte de commande de vitesse est défectueuse.	Appeler le service.	

# WIRING DIAGRAM (115V)



# GROUNDING INSTRUCTIONS

## 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. Because the electrical cable must be well insulated and cable connector screw kept tight. 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

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

1. Empty unused cleaning solution from the solution tank.
2. Inspect and clean filter screen in solution tank.
3. Flush pumping system with 4 or 7 liters of clean, hot water.
4. 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.
5. Check for and remove any lint or debris around vac shoe.
6. Check spray jets for full spray pattern.
7. Remove lint and dirt build-up from brush and housing.

*NOTE: Always store machine with brush in "Store" position.*

## MANTENIMIENTO PERIODICO

Dos veces al mes limpie pasando una solución de vinagre (un litro de vinagre en un galón de agua caliente) o con una solución contra el teñido (mezclado como se indica) por el extractor. Esto ayudará a prevenir la acumulación de residuos alcalinos en el sistema.

Inspeccione periódicamente todos los cables eléctricos, filtros, y conexiones en su máquina. Debido a que el cable eléctrico a veces quedará en contacto con la alfombra mojada el cable tiene que estar bien aislado y los tornillos conectores del cable deben de estar apretados. Si el aislamiento del cable está roto o gastado repárelo o repóngalo inmediatamente. No se arriesga con incendios eléctricos o el shock.

## MANTENIMIENTO DIARO/REGULAR

Antes de hacer cualquier ajuste o reparación a la máquina, desconecte el enchufe de su fuente eléctrica.

1. Vacíe la solución de limpiar no utilizada del tanque de solución.
2. Inspeccione y limpie el cedazo de filtración en el tanque de solución.
3. Limpie el sistema de bombeo con 4 a 7 litros de agua caliente limpia.
4. Vacíe y limpie el tanque de recuperación con agua limpia.
5. Verifique diariamente que las puntas rociadoras están dispensando en su patrón completo.
6. Verifique y quite cualquier residuo o hilos del zapato de la aspiradora.
7. Quite hilos y suciedad que pueda acumular en el cepillo y caja.

## ENTRETIEN PERIODIQUE

Deux fois par mois nettoyer au vinaigre blanc (1 litre de vinaigre pour 3 litres d'eau chaude) ou bien une solution qui empêche le fonçage (mélangé ainsi qu'expliqué) à travers l'extracteur. Cela empêchera une accumulation de résidus alcalins dans le système. Si les jets vaporisateurs sont bouchés, enlever les bouts des jets, les laver complètement avec du vinaigre et sécher avec un jet d'air sous pression.

*REMARQUE: Ne pas utiliser d'aiguilles, de fils de fer ect... Pour nettoyer les jets, puisque cela détruirait le motif de vaporisation.*

Les cables, filtres, connexions sur votre machine, les tuyaux éfilochés ou fissurés devraient être réparés ou remplacés pour éviter la perte d'aspiration ou de pression de la solution. Puisque le cable électrique va être sur la moquette mouillée à certains moments, Le cable doit être bien isolé et les vis du connecteur de cable doivent être bien serrées. Si l'isolant du cable est éfiloché ou cassé, réparer et remplacer immédiatement. Ne pas prendre de chances avec un incendie électrique ou une décharge.

## ENTRETIEN JOURNALIER

Avant d'effectuer toutes mises au point ou réparations sur la machine, débrancher le cable électrique de la prise de courant.

1. Vider le reste de la solution nettoyante.
2. Inspecter et nettoyer l'écran filtre de la solution.
3. Nettoyer le système de pompage avec 4 à 7 litres d'eau propre et chaude.
4. Rincer le réservoir de récupération avec de l'eau propre.
5. Enlever toutes peluches et débris autour de la brosse et de l'assemblage d'aspiration.
6. Vérifier les jets de vaporisation et nettoyer la valve solénoïde, si nécessaire.

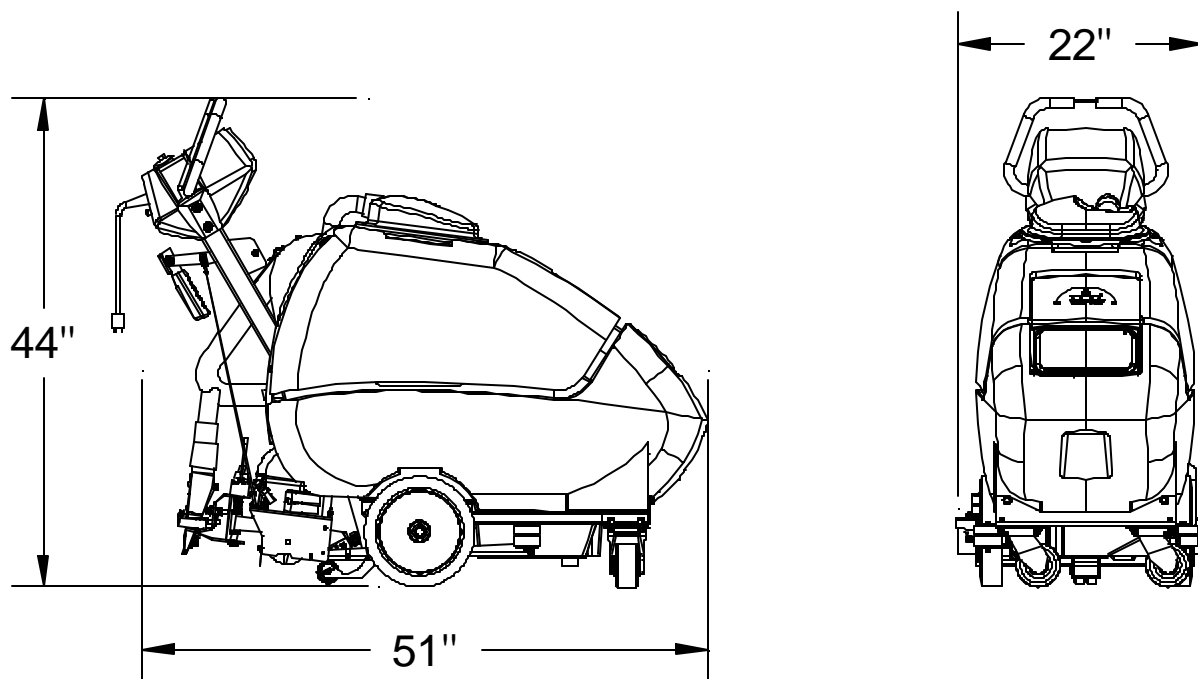
*REMARQUE: Toujours ranger la machine avec la brosse en position de repos, "store".*

## TECHNICAL SPECIFICATIONS

ITEM	MEASURE
Electrical	115 V, 15 A, 60 HZ
Electric Propelling Motor	(1) -1/4 hp DC (186 watts) with variable speed forward.
Drive system	Transaxle unit variable speed Operating Speed: 0-100 ft/min (30m/min)
Electric Vacuum Motor	(1) - 3 stage, 1 hp 99 cfm (2.80m <sup>3</sup> /min.)
Brush	(1) 18" (45.8 cm)
Solution Pump	100 psi (6.9 bars), diaphragm style, demand pump
Solution Capacity	20 gallons (75 ltr)
Recovery Capacity	20 gallons (75 ltr)
Brush Speed	1000 RPM
Vacuum Shoe	22" (56 cm) wide, cast urethane floating and pivoting.
Wheels: Front: (2) Rear: (2)	4" dia. (10 cm) wheels by 2.5" 10" dia. (25 cm) wheels by 2"
Weight	215 lbs. (98kg)
Length	51" (130 cm)
Height	44" (111 cm)
Width	22" (56 cm)
Solution Spray	2 quick change jets
Power Cable	75' (23m) (12 gauge)

**SIDE VIEW**

**FRONT VIEW**



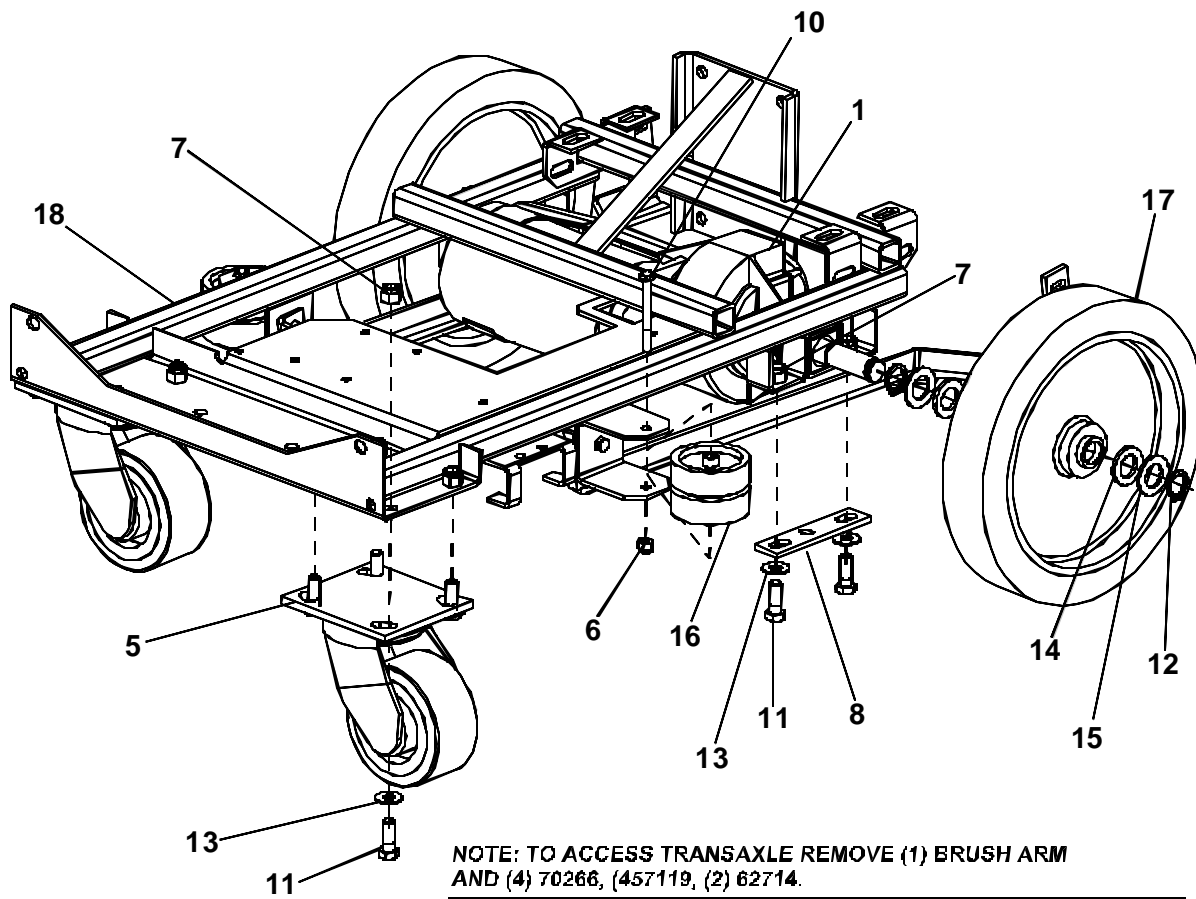
# MAINTENANCE

## SERVICE SCHEDULE

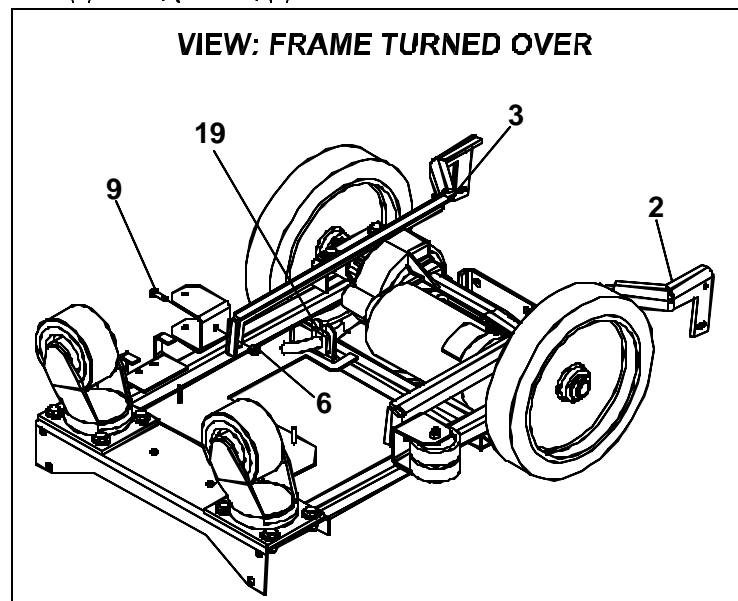
MAINTENANCE	DAILY	WEEKLY	QUARTERLY
Check machine for cord damage	*		
Check recovery dome and gasket for damage and cleanliness	*		
Check brush – should be clean with no lint or strings attached	*		
Inspect vac shoe for blockage; remove fibers with coat hanger, etc.	*		
Check hoses for wear, blockages, or damage	*		
Check handles, switches, and knobs for damage	*		
Check vac motor intake filter and clean	*		
Run one gallon of water through system	*		
Clean out recovery tank and check float valve to make sure it moves freely	*		
Clean out solution tank and remove and clean vacuum intake screen	*		
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 vacuum intake screen for damage; replace if necessary		*	
Check pump pressure; observe spray pattern and check with gauge if necessary		*	
Check and clean solution screen		*	
Check belts for wear and replace as necessary		*	
Check brush for wear; ensure bristles are not damaged		*	
Check cables for fraying		*	
Check the spray bar (manifold) for damage; replace if broken or bent		*	
Check condition of vac shoe and frame for damage		*	
Check overall performance of machine		*	
Check vac motor carbon brushes			*

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# FRAME ASSEMBLY



NOTE: TO ACCESS TRANSAXLE REMOVE (1) BRUSH ARM AND (4) 70266, (457119, (2) 62714.

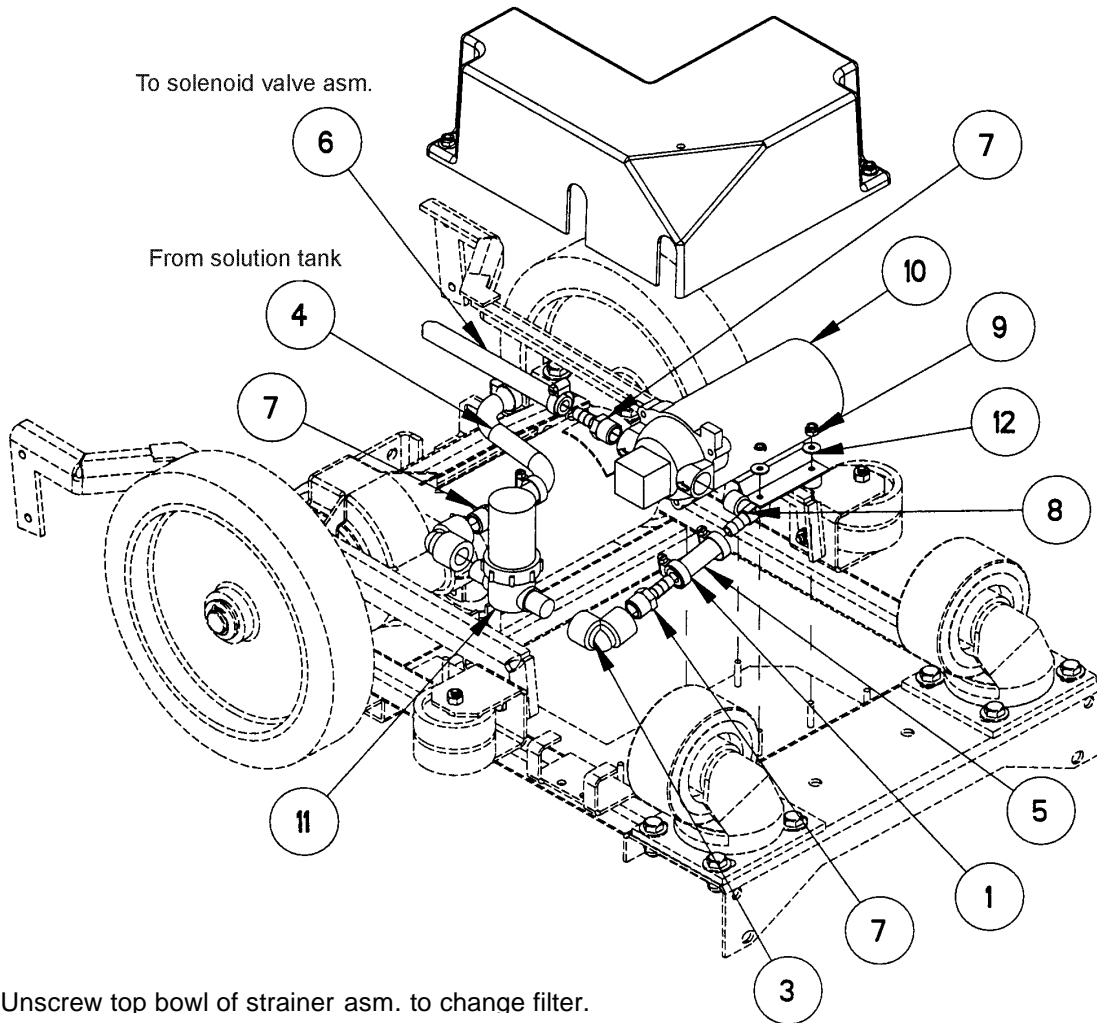




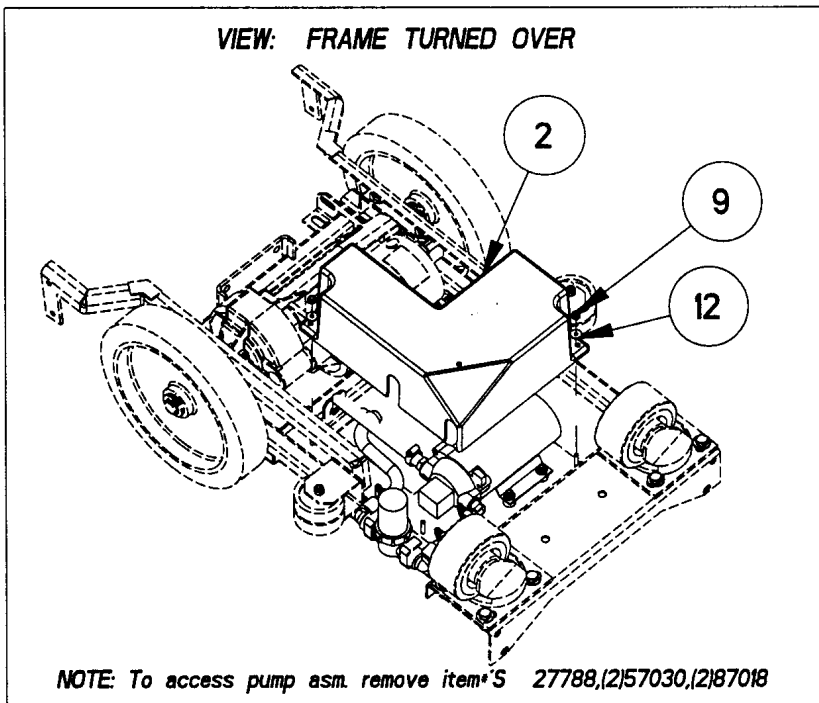
## FRAME ASSEMBLY PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	05120	1	TRANSAXLE, 90VDC .13 HP		
-	140593	-	BRUSH SET, TRANSAXLE 05120 CCL		SERVICE ONLY
2	05130	1	ARM, BRUSH HOUSING RIGHT		
3	05131	1	ARM, BRUSH HOUSING LEFT		
4	OPEN	-	-		
5	18041	2	CASTER, 4 DIA X 2W X 3.56 R		
6	57047	4	NUT, 1/4-20 HEX NYLOCK		
7	57119	12	NUT, 3/8-16 HEX NYLOCK		
8	62714	2	PLATE, DRIVE AXLE		
9	70015	2	SCR, 1/4-20 X 3/4 HHCS SS		
10	70017	2	SCR, 1/4-20 X 2.50 HHCS SS		
11	70266	12	SCR, 3/8-16 X 1.00 HHCS GR5		
12	80623	4	RING, 3/4 RETAINING HD SH		
13	87003	12	WASHER, 3/8 X 7/8 FLAT SS		
14	87156	4	WASHER, 3/4 X 1.25 NYL		
15	87173	4	WASHER, .77 X 1.31 FLAT SS		
16	89051	4	WHEEL, VAC SHOE		
17	89161	2	WHEEL ASM, CMD20		
18	891371	1	FRAME , WELDMENT		
19	730175	1	STRAIN RELIEF, 18/3 STR .75		

# PUMP ASSEMBLY



Note: Unscrew top bowl of strainer asm. to change filter.

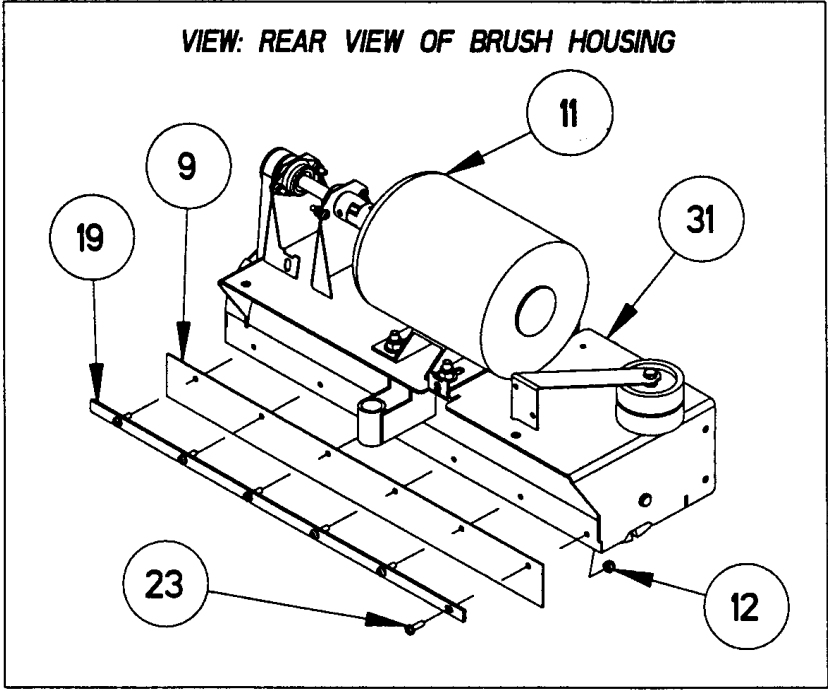
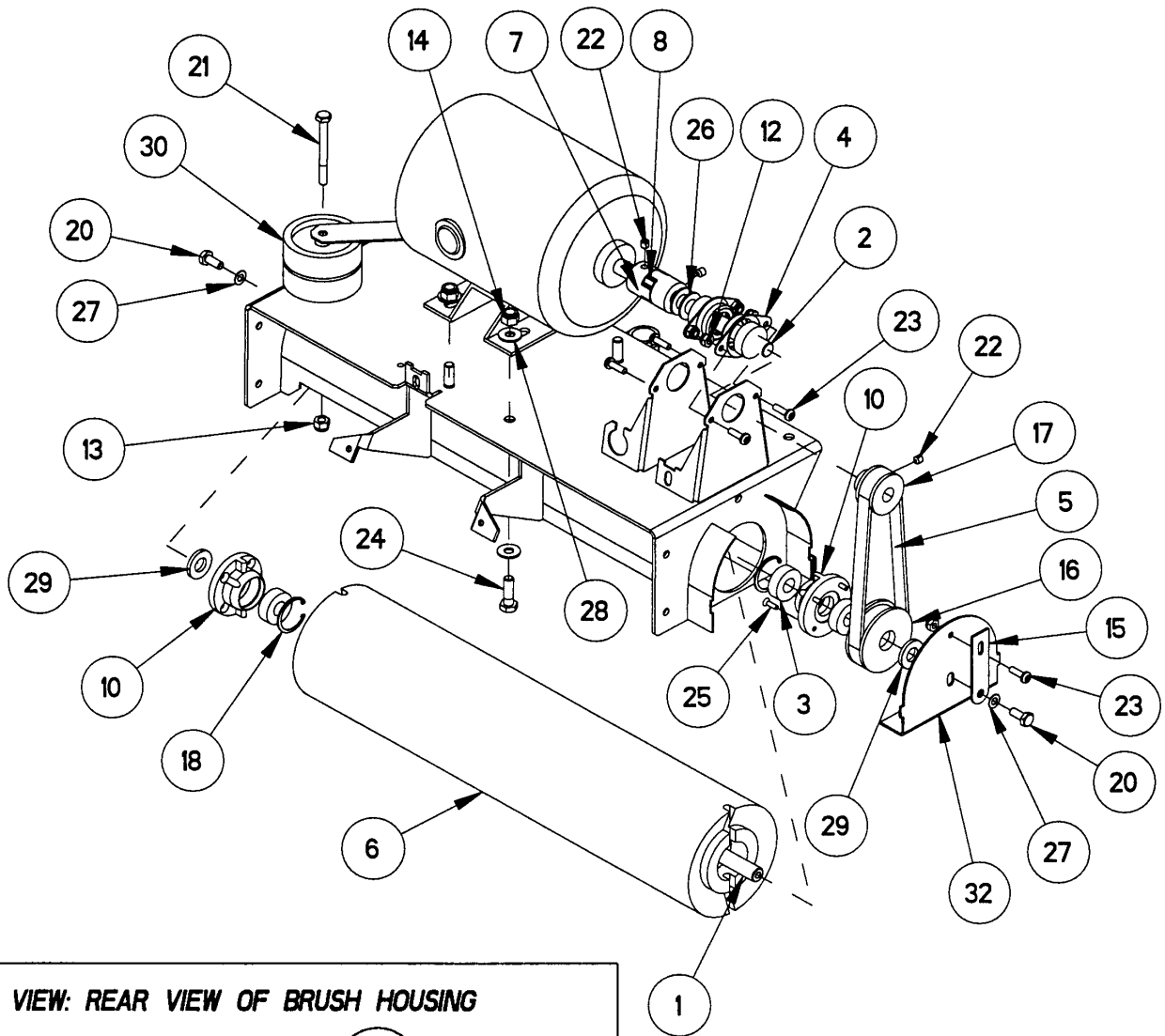


## PUMP ASSEMBLY PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	20042	5	CLAMP, 3/8 WORM GEAR		
2	27788	1	COVER, PUMP CMD20		
3	31068	2	ELBOW, 3/8 FPT PVC SCH 80		
4	39282	1	HOSE, 3/8 WIRE BOUND X 7		
5	39486	1	HOSE, 3/8 NYLOBRAID X 2		
6	39502	1	HOSE, 3/8 NYLOBRAID X 33		
7	40010	3	HOSEBARB, 3/8MPT X 3/8		
8	40034	1	HOSEBARB, 3/8MPT X 3/8 90 BRASS		
9	57030	6	NUT, 10-32 HEX NYLOCK		
10	65167	1	PUMP, 115V 100PSI BYPASS		
11	73836	1	STRAINER, DEEP 3/8 NPT 80 MESH		
12	87018	6	WASHER, #10 X 9/16 FLAT		

PART NO.	DESCRIPTION	Parts Included
65170	PUMP ASSEMBLY, CMD20	(1) 65167 W/MOLEX CONN.
73839	SCREEN, 80 MESH STRAINER DEEP	

# BRUSH ASSEMBLY



*Note: To access brush/pulley asm. remove:  
70011 (1), 87025 (2), 140277 (1).*

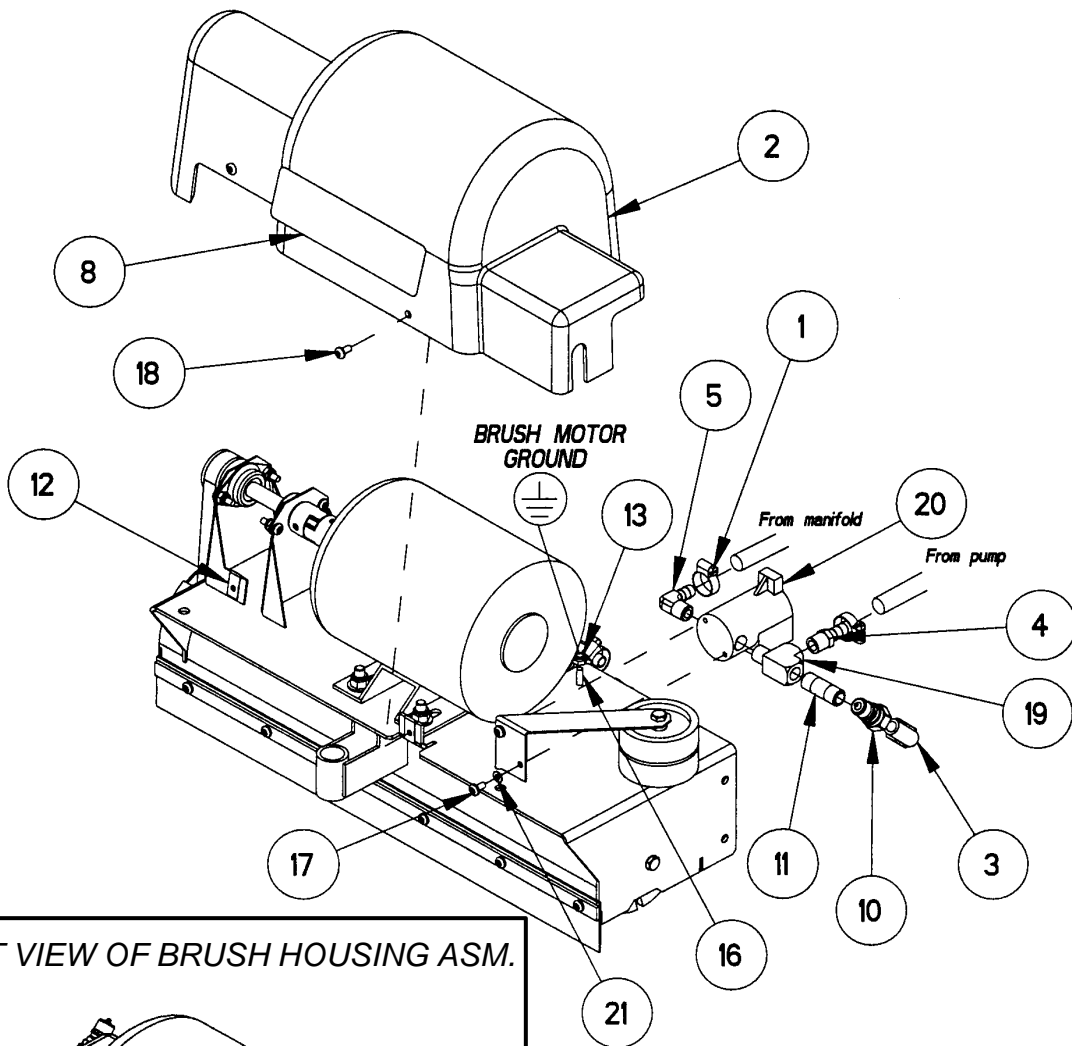
## BRUSH ASSEMBLY PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	03100	1	AXLE, .5 X 19.5 X 1/4-20		
2	03101	1	AXLE, .50 X 4.34 W/FLATS		
3	09019	5	BEARING, 1.125 OD X .500 ID X .375		
4	09055	2	BEARING, FLANGE		
5	11043	1	BELT, TIMING .375P 16.5 PL .5W		
6	12023	1	BRUSH, 18L X 4.5 OD		
7	22087	2	COUPLER, 1/2 JAW		
8	22088	1	COUPLER, SPIDER		
9	36188	1	GUARD, SPLASH		
10	42069	2	IDLER, BRUSH QUICK-CHANGE END		
11	53093	1	MOTOR, 115V 1/3 HP W/O T/O		
12	57030	11	NUT, 10-32 HEX NYLOCK		
13	57047	1	NUT, 1/4-20 HEX NYLOCK		
14	57113	4	NUT, 5/16-18 HEX NYLOCK		
15	62747	1	PLATE, BELT ADJUSTMENT		
16	64094	1	PULLEY, TIMING 2.029 PD X .375P		
17	64095	1	PULLEY, TIMING .375 10T .51D		
18	67093	2	RING, 1.13 RETAINING HO		
19	67395	1	RETAINER, SPLASH GUARD		
20	70011	2	SCR, 1/4-20 X 5/8 HHCS SS		
21	70017	1	SCR, 1/4-20 X 2.50 HHCS SS		
22	70124	3	SCR, 1/4-20 X 1/4 SSSCU		
23	70160	11	SCR, 10-32 X 5/8 PPHMS		
24	70302	4	SCR, 5/16-18 X 1.00 HHCS GR5		
25	70448	4	SCR, 6-32 X 1/2 PFHMS PLTD		
26	80613	2	WASHER, .506 X .94 NYL		
27	87025	2	WASHER, 1/4 EXT STAR SS		
28	87029	8	WASHER, 5/16 X 3/4 SS		
29	87183	2	WASHER, 1/2 X 1.00 NYL		
30	89051	2	WHEEL, CMD VAC SHOE		
31	89134	1	WELDMENT, BRUSH HOUSING		
32	140277	1	BRKT, RUSH HOUSING END CAP		

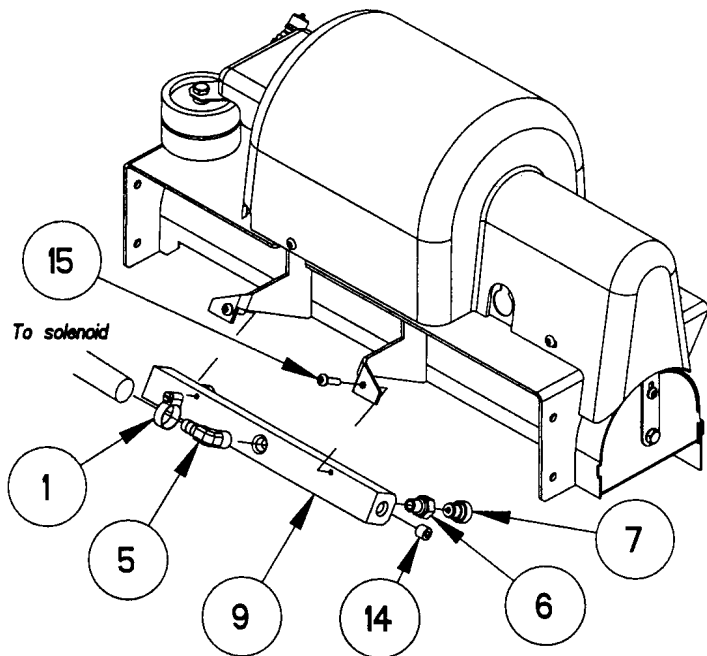
## SERVICE PARTS LIST

PART NO.	DESCRIPTION	PARTS INCLUDED
42072	IDLER, ASSEMBLY, BRUSH CMD20	09019 (1), 42069 (1), 67093 (1)
53635	MOTOR ASSEMBLY, BRUSH CMD20	53093 (1) W/MOLEX CONN.
64097	PULLEY ASSEMBLY, BRUSH CMD20	67093 (1), 70448 (4), 09019 (2)
		42069 (1), 64095 (1)

# SOLENOID AND MANIFOLD ASSEMBLIES



VIEW: FRONT VIEW OF BRUSH HOUSING ASM.



NOTE: to remove manifold asm remove item # 70114 (2).

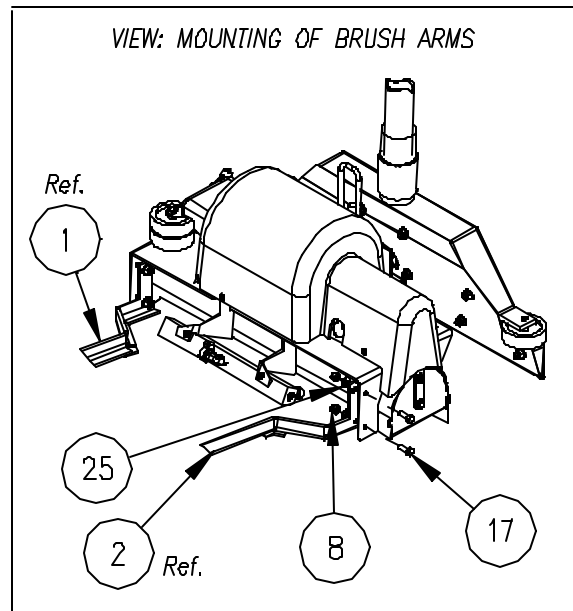
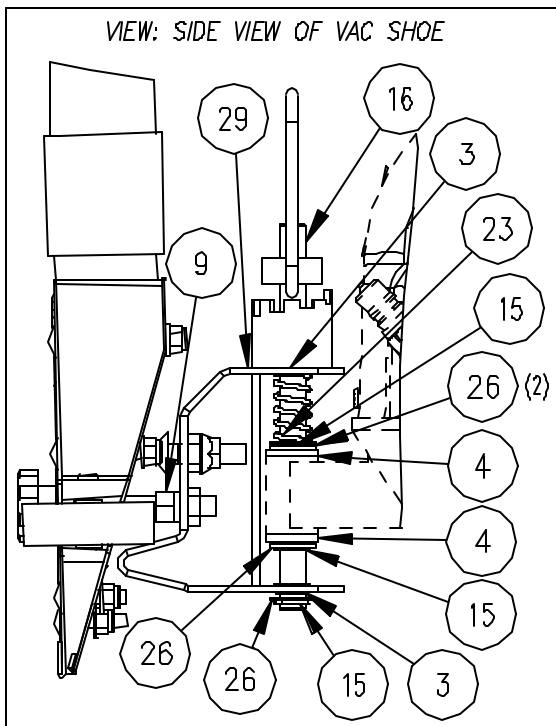
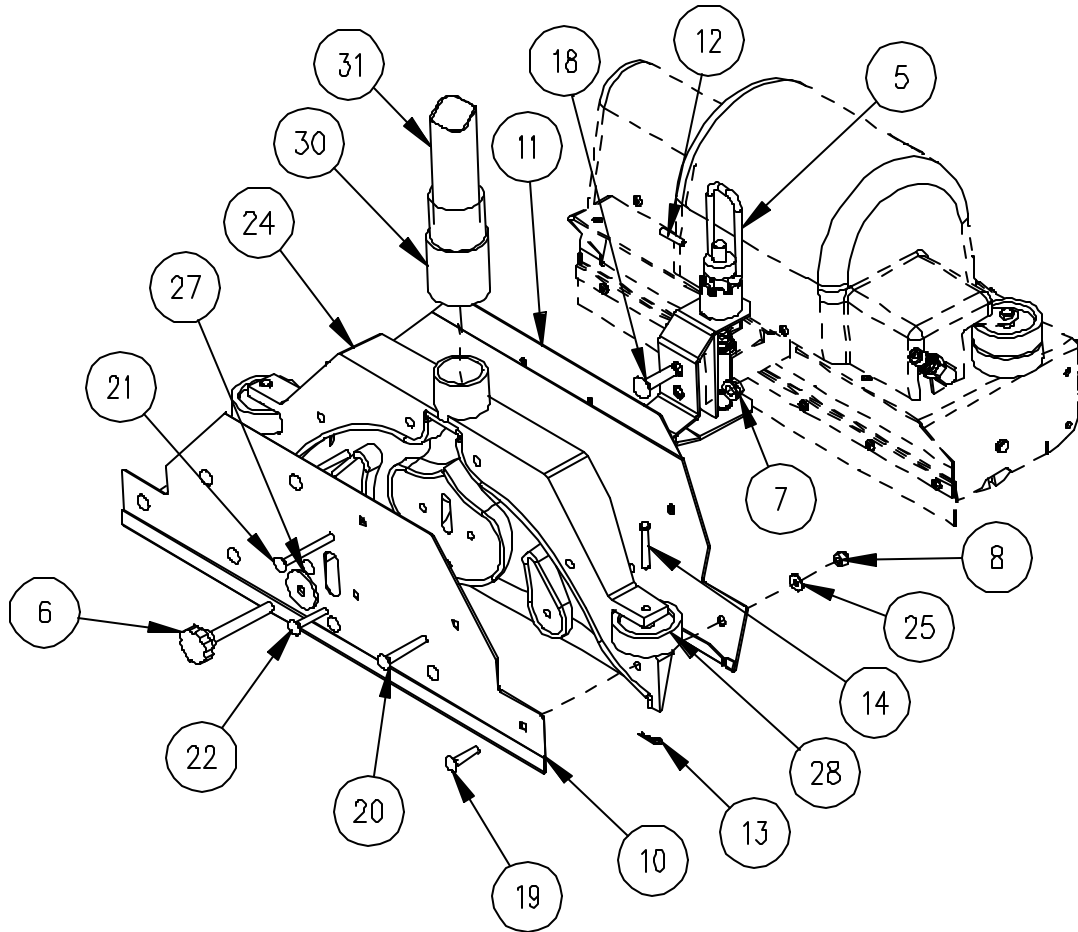
## SOLENOID AND MANIFOLD ASSEMBLIES PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	20042	3	CLAMP, 3/8 WORM GEAR		
2	27775	1	COVER, BRUSH MOTOR		
3	31016	1	ELBOW, 1/4 NPT, STREET		
4	40014	1	HOSEBARB, 1/4 MPT 3/8		
5	40033	2	HOSEBARB, 1/4 MPT X 3/8H 90 DEG		
6	44067	2	JET, MINI PROMAX BODY		
7	44068	2	JET, MINI PROMAX 9504		
8	50947	1	LABEL, ADJ INSTRUCTION		
9	54165	1	MANIFOLD, CMD20		
10	56012	1	NIPPLE, 1/4 FPT QD		
11	56023	1	NIPPLE, 1/4 X 1.5		
12	57028	4	NUT, 10-24 TINNERMAN		
13	57030	1	NUT, 10-32 HEX NYLOCK		
14	66095	2	PLUG, 1/8 MPT HEX BRASS		
15	70114	2	SCR, #10 X 3/4 PHST TYPE B		
16	70160	1	SCR, 10-32 X 5/8 PPHMS		
17	70162	2	SCR, 10-32 X 3/8 PPHMS SS		
18	70406	4	SCR, #10 X 3/8 PHSM TYPE B BLK		
19	78308	1	TEE, 1/4 STREET		
20	84168	1	VALVE, 120V 110 PSI SOLENOID		
21	87016	3	WASHER, #10 EXT STAR SS		

### SERVICE PARTS

PART NO.	DESCRIPTION	PARTS INCLUDED
84157	SOLENOID ASSEMBLY	84168(1) W/MOLEX CONN.
54168	MANIFOLD ASSEMBLY, CMD20	54165 (1), 44067 (2), 44068 (2), 66095 (2), 40033 (1)

# VACUUM SHOE ASSEMBLY



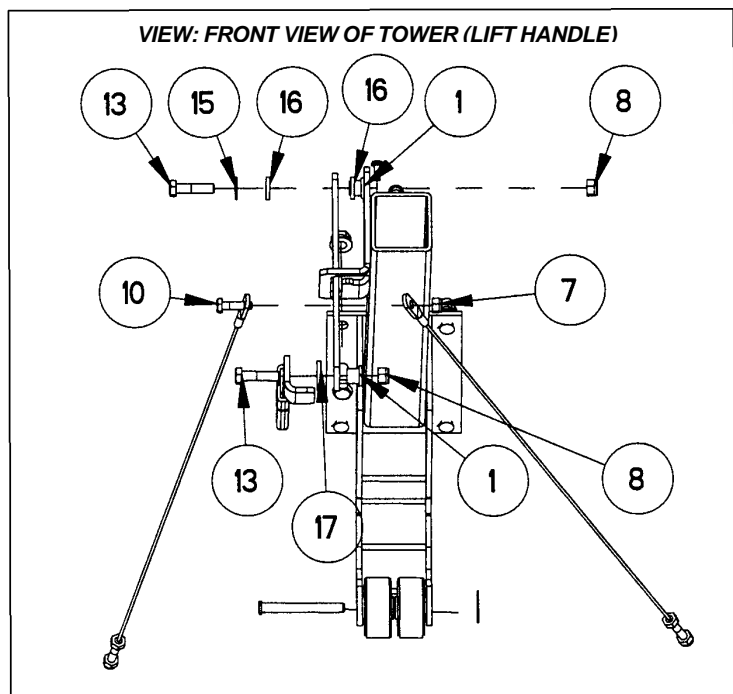
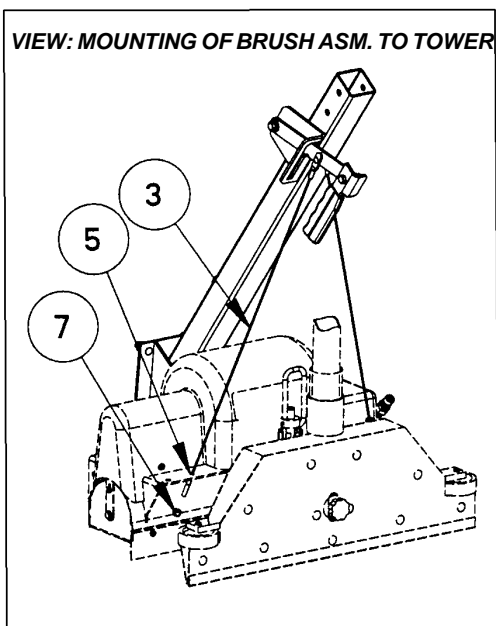
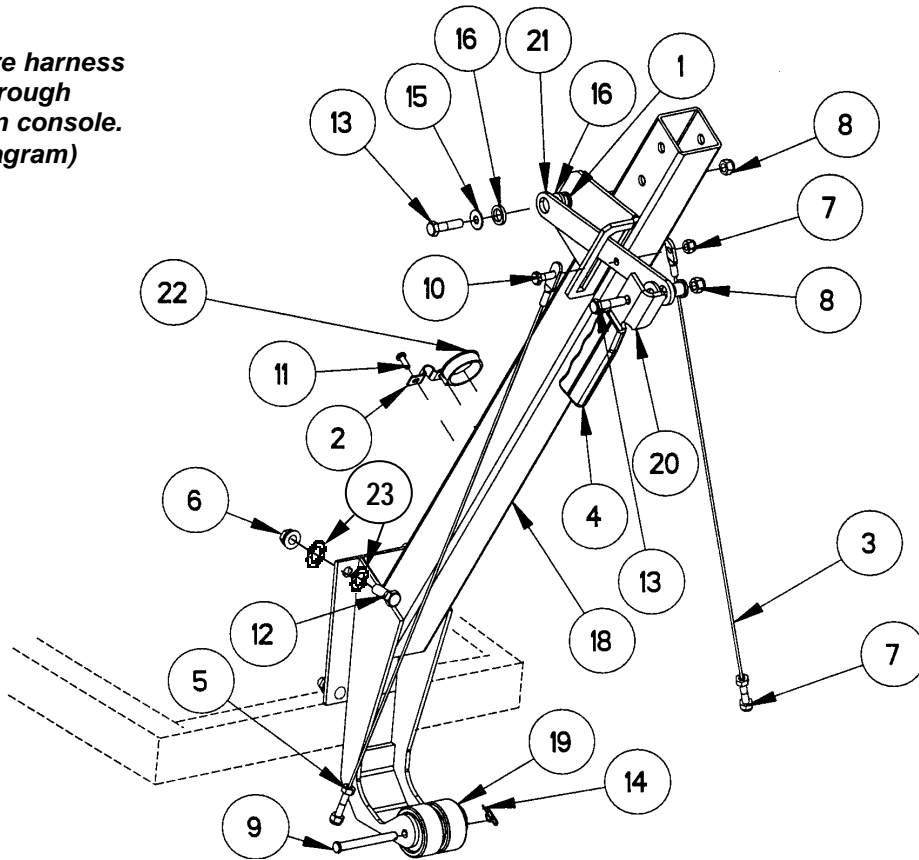


## VACUUM SHOE ASSEMBLY PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	05130	1	ARM, BRUSH HOUSING RIGHT		
2	05131	1	ARM, BRUSH HOUSING LEFT		
3	09025	2	BEARING, 1/2 NYLINER SI		
4	14593	2	BRUSH, BRZ FLG. .50 X.75 X.75		
5	27784	1	COLLAR ASM, HEIGHT ADJUSTMENT		
6	48071	1	KNOB, 1.38 OD X 3/8-16 X 3.00		
7	57032	1	NUT, 3/8-16 HEX FLG		
8	57047	15	NUT, 1/4-20 HEX NYLOCK		
9	57119	1	NUT, 3/8-16 HEX NYLOCK		
10	62660	1	PLATE, VAC		
11	62664	1	PLATE, VAC TRAP		
12	66205	1	PIN, ROLL 3/16 X 1.13		
13	66219	2	PIN, COTTER HAIR .059 X 1		
14	66231	2	PIN, CLEVIS 1/4 X 1.75		
15	67132	3	RING, 1/2 RETAINING HD SH		
16	67374	1	ROD, VAC PIVOT		
17	70015	4	SCR, 1/4-20 X 3/4 HHCS SS		
18	70624	1	SCR, 3/8-16 X 1.5 CARRIAGE PLTD		
19	70634	5	SCR, 1/4-20 X 1.25 CARRIAGE		
20	70635	2	SCR, 1/4-20 X 2.0 CARRIAGE		
21	70636	2	SCR, 1/4-20 X 2.5 CARRIAGE		
22	70637	2	SCR, 1/4-20 X 1.5 CARRIAGE		
23	73907	1	SPRING, COMP .550ID X .720OD X .085W		
24	85036	1	VACUUM SHOE, INSERT		
25	87013	15	WASHER, 1/4 X 5/8 FLAT SS		
26	87136	4	WASHER, .52 X 88 FLAT		
27	87167	4	WASHER, .39 X 1.50 FLAT		
28	89051	2	WHEEL, CMD VAC SHOE		
29	140294	1	BRKT, VACSHOE ADJUST WELDMENT		
30	27814	1	CUFF, BLK VAC HOSE		
31	39492	1	HOSE, 1.5 BLUE VAC X 30		

# LIFT LEVER AND LOWER TOWER ASM.

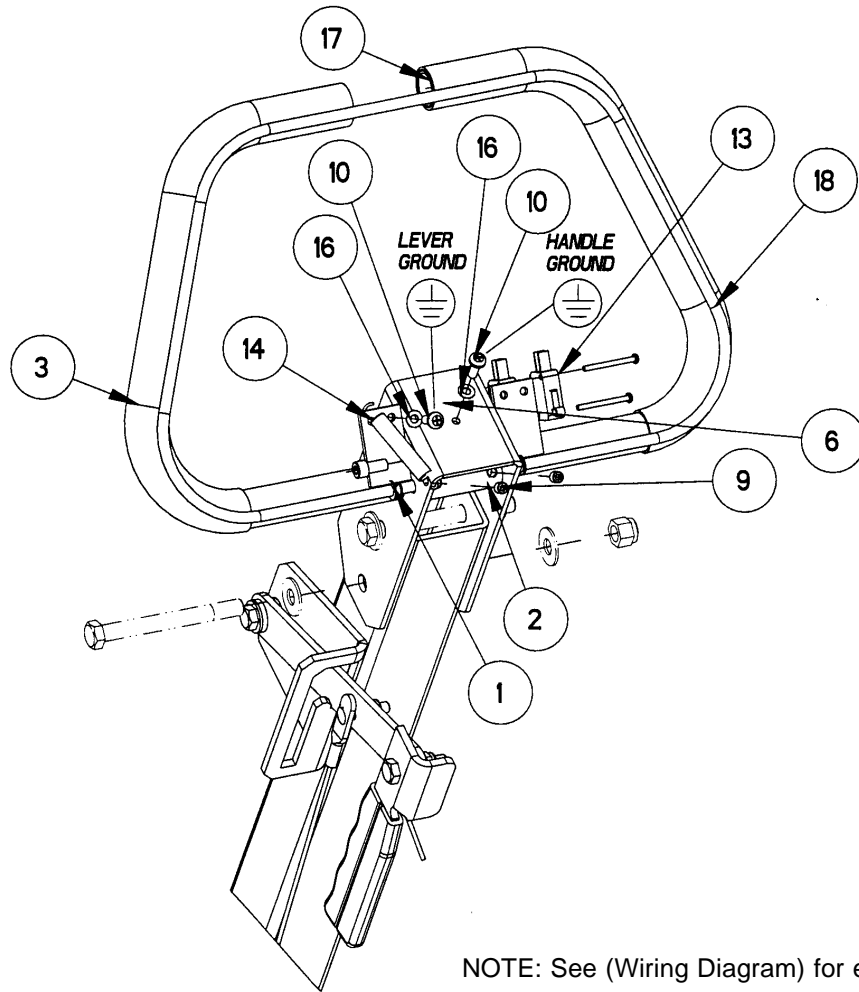
**NOTE:** Main wire harness from motors through bushing to main console.  
(Ref. Wiring Diagram)



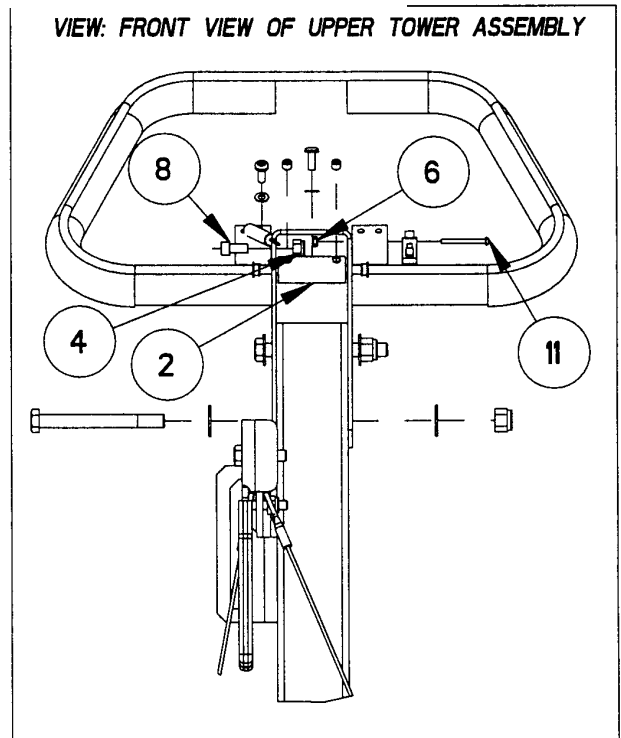
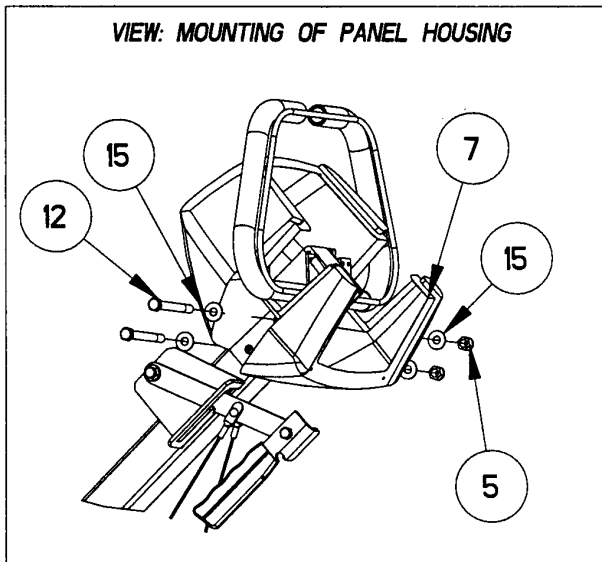
## LIFT LEVER AND LOWER TOWER ASM. PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	09124	2	BEARING, FLANGED .313ID X .052OD		
2	20086	1	CLAMP, CORD		
3	27776	2	CABLE, 25.25 1/4 EYE X 1/4 STUD		
4	36133	1	GRIP, 3/16 X 1.0 FLAT BAR		
5	57006	2	NUT, 1/4-20 HEX		
6	57032	4	NUT, 3/8-16 HEX FLG		
7	57047	3	NUT, 1/4-20 HEX NYLOCK		
8	57113	2	NUT, 5/16-18 HEX NYLOCK		
9	66268	1	PIN, CLEVIS 5/16 X 2.75		
10	70018	1	SCR, 1/4-20 X 1.00 HHCS SS		
11	70187	2	SCR, 10-24 X 1/2 PHTC -F-		
12	70266	4	SCR, 3/8-16 X 1.00 HHCS GR5		
13	70325	2	SCR, 5/16-18 X 1.25 HHCS GR5		
14	80605	1	COTTER, 5/16 RING		
15	87029	1	WASHER, 5/16 X 3/4 SS		
16	87140	2	WASHER, WAVE 1/2 ID X 3/4 D X .125		
17	87183	1	WASHER, 1/2 X 1.00 NYL		
18	89128	1	WELDMENT, POST LOWER CONTROL		
19	89147	2	WHEEL, 2 OD X .31 ID X .88 W PLASTIC		
20	140286	1	BRKT, LIFT LEVER HANDLE		
21	140287	1	BRKT, LIFT LEVER BASE		
22	140317	1	BUSHING, 1.5 HOLE SNAP		
23	87024	8	WASHER, 3/8 STAR		

# UPPER TOWER ASSEMBLY



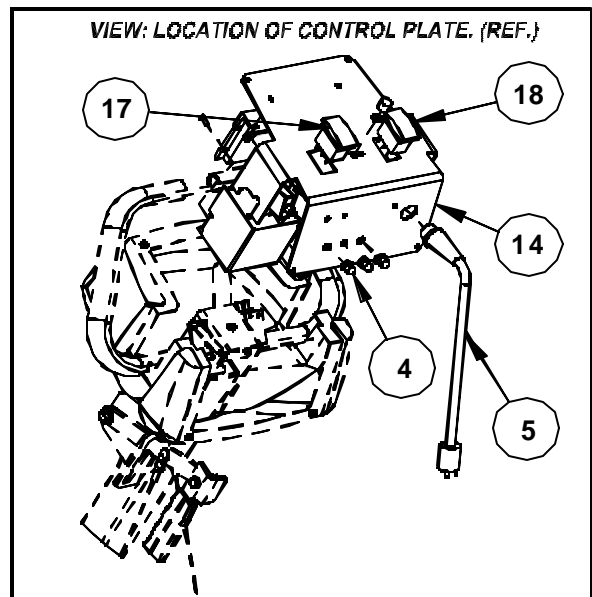
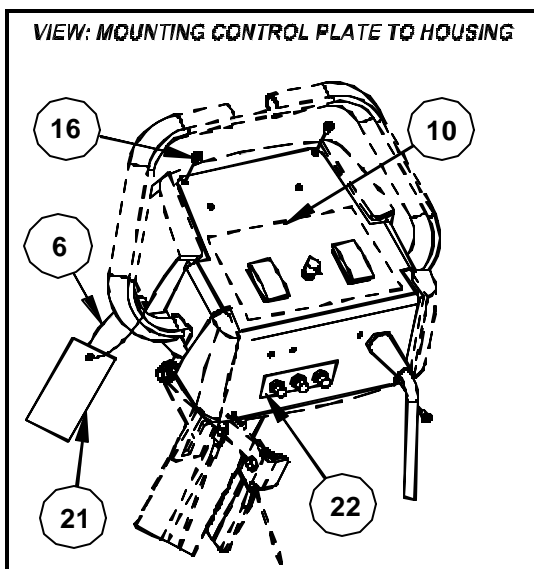
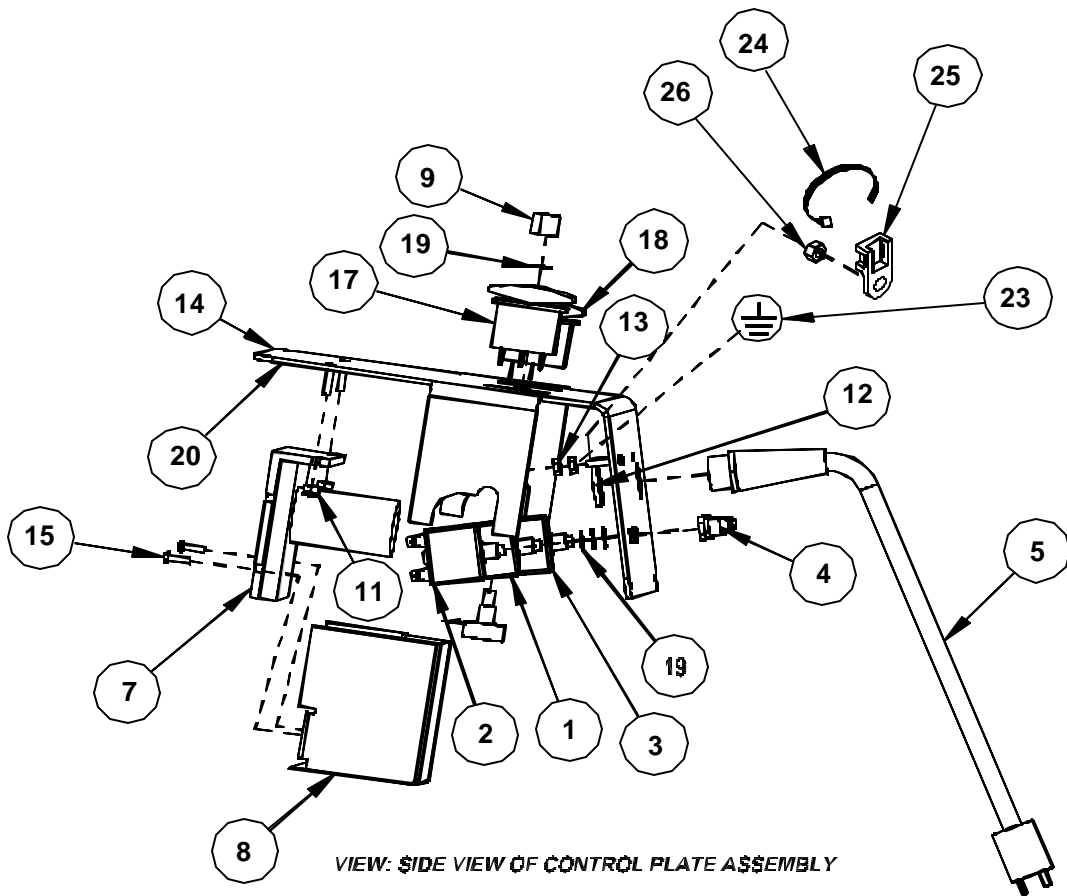
NOTE: See (Wiring Diagram) for electrical wiring layout.



## UPPER TOWER ASSEMBLY PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	09128	2	BEARING, 1/4 NYLINER SI		
2	27779	1	COLLAR, .75ODX .281 IDX 1.875		
3	36046	2	GRIP, .8131IDX .085WX13.0L PVC		
4	57047	1	NUT, 1/4-20 HEX NYLCK		
5	57119	2	NUT, 3/8-16 HEX NYLCK		
6	57163	2	NUT, 4-40 HEX W/ STAR		
7	61346	1	PANEL, CMD20 CONTROL		
8	70094	1	SCR, 1/4-20 X 1/2 SHCS		
9	70124	2	SCR, 1/4-20 X 1/4 SSSCU		
10	70187	2	SCR, 10-24 X 1/2 PHTC -F-		
11	70401	2	SCR, 4-40 X 1.25 PPHMS		
12	70554	2	SCR, 3/8-16 X 3.50 HHCS GR5		
13	72157	2	SWITCH, 10A ROLLER MINI		
14	73210	1	SPRING, EXT .36D X 1.5L X .058W		
15	87003	4	WASHER, 3/8 X 7/8 FLAT SS		
16	87016	2	WASHER, #10 EXT STAR SS		
17	89133	1	HANDLE, CMD20 WELDMENT		
18	89138	1	WELDMENT, PROPEL CONTROL		

# CONTROL PANEL ASSEMBLY

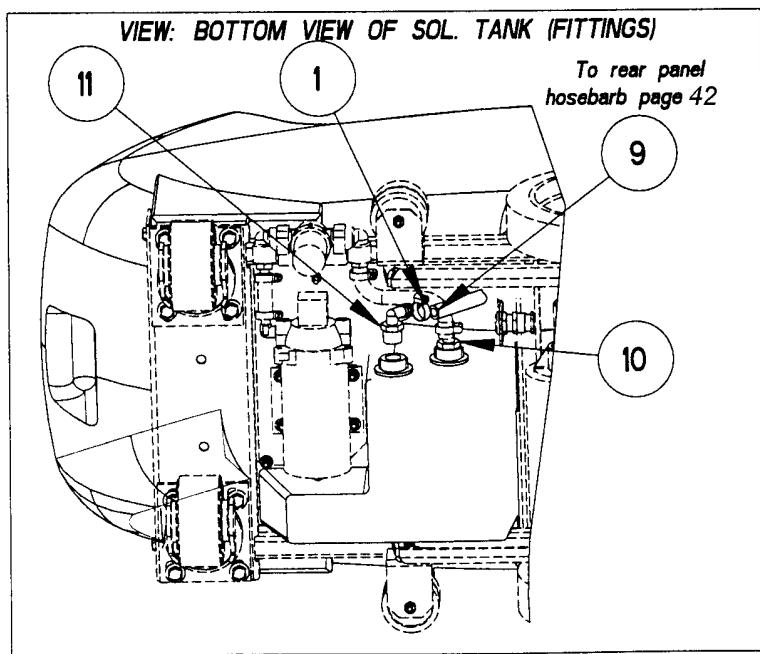
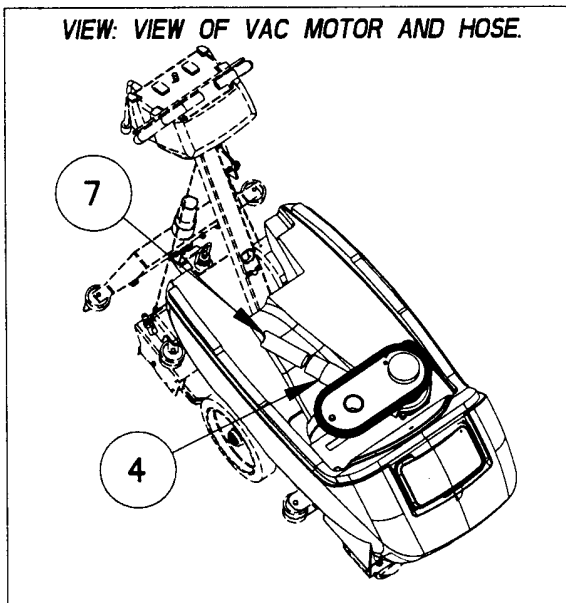
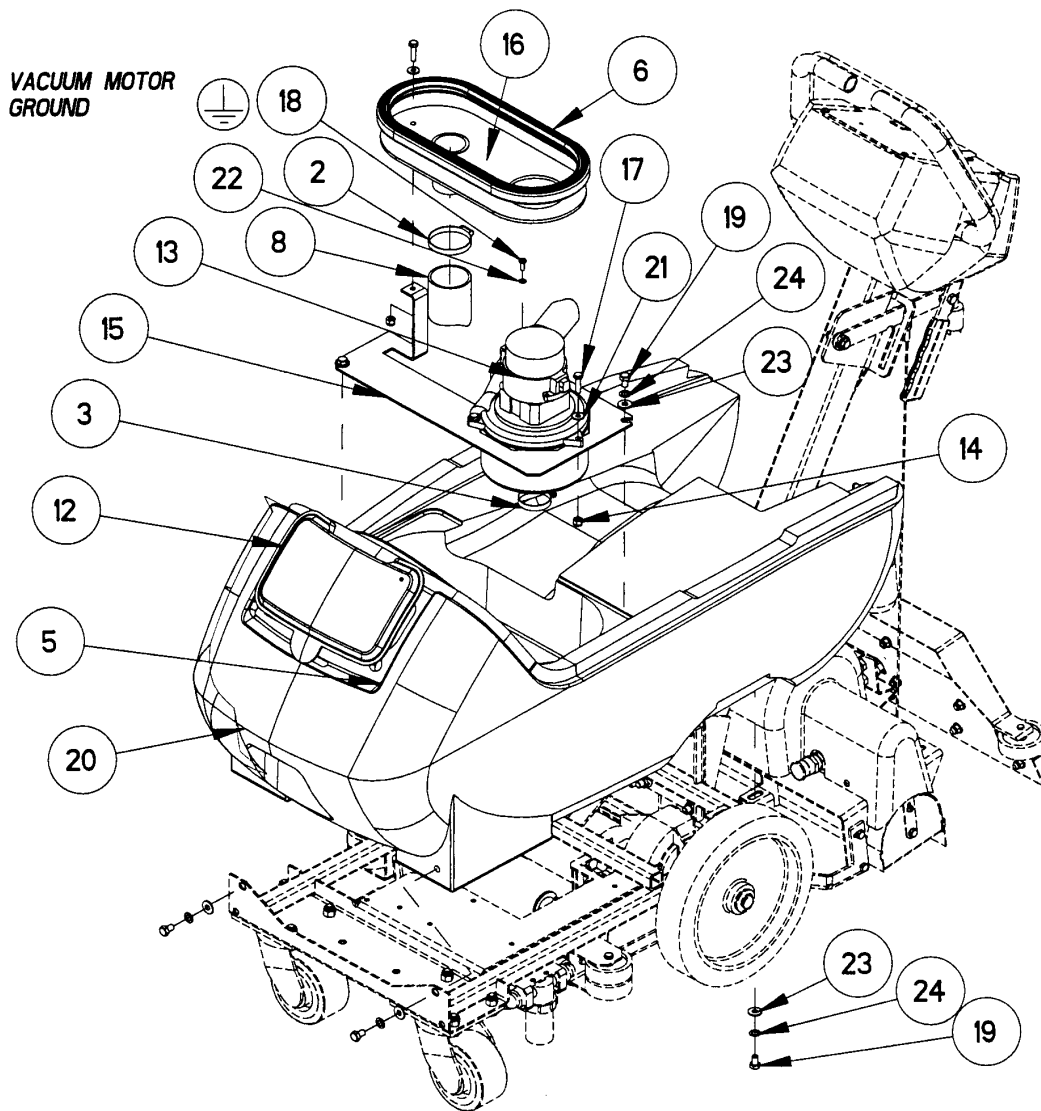


## CONTROL PANEL ASSEMBLY PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	14668	1	BREAKER, 8A 250VAC, 50VDC		
2	14700	1	BREAKER, 15A 250VAC, 50VDC		
3	14832	1	BREAKER, 6A VDE		
4	14942	3	BOOT, 3/8 CIRCUIT BREAKER		
5	23675	1	CORD ASM, 13/13 PIGIT X 22 YELLOW		
6	27417	1	CORD, 99807 1/8 X 12		
7	27774	1	CONTROL PROPEL BOARD 115/240V		
8	27795	1	COVER, PROPEL BOARD		
9	48043	1	KNOB, SPEED CONTROL		
10	500234	1	LABEL, CONTROL PANEL P/L		
11	57026	2	NUT, 8-32 HEX NYLCK		
12	57040	1	NUT, 1/2 NPT CONDUIT		
13	57106	2	NUT, 8-32 HEX W/STAR		
14	62666	1	PLATE, CONTROL PANEL		
15	70219	2	SCR, #6 X 1/2 SHT MTL BLK		
16	70406	4	SCR, #10 X 3/8 PHSM TYPE B BLK		
17	72128	1	SWITCH, DPDT 2-POSITION ROCKER		
18	72130	1	SWITCH, SPST 2-POSITION ROCKER		
19	87100	4	WASHER, 3/8 INT STAR		
20	99843	2.8 FT	GASKET, 1/8 X 1/2 1SDA FOAM BLK		
21	50931	1	CARD, INTRUCTION P/L		
22	500079	1	LABEL, CIRCUIT BREAKER		
23	50279	1	LABEL, GROUND SYMBOL		
24	27049	1	CABLE TIE 7"		
25	05153	1	ANCHOR , CABLE TIE #8 MOUNT		
26	57049	1	NUT, 6-32 HEX NYLOCK		

NOTE: Some items may only be purchased as an assembly.  
PLEASE CONTACT YOUR WINDSOR SERVICE REPRESENTATIVE.

# SOLUTION TANK ASSEMBLY





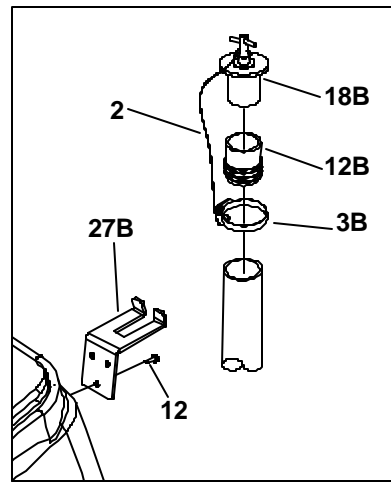
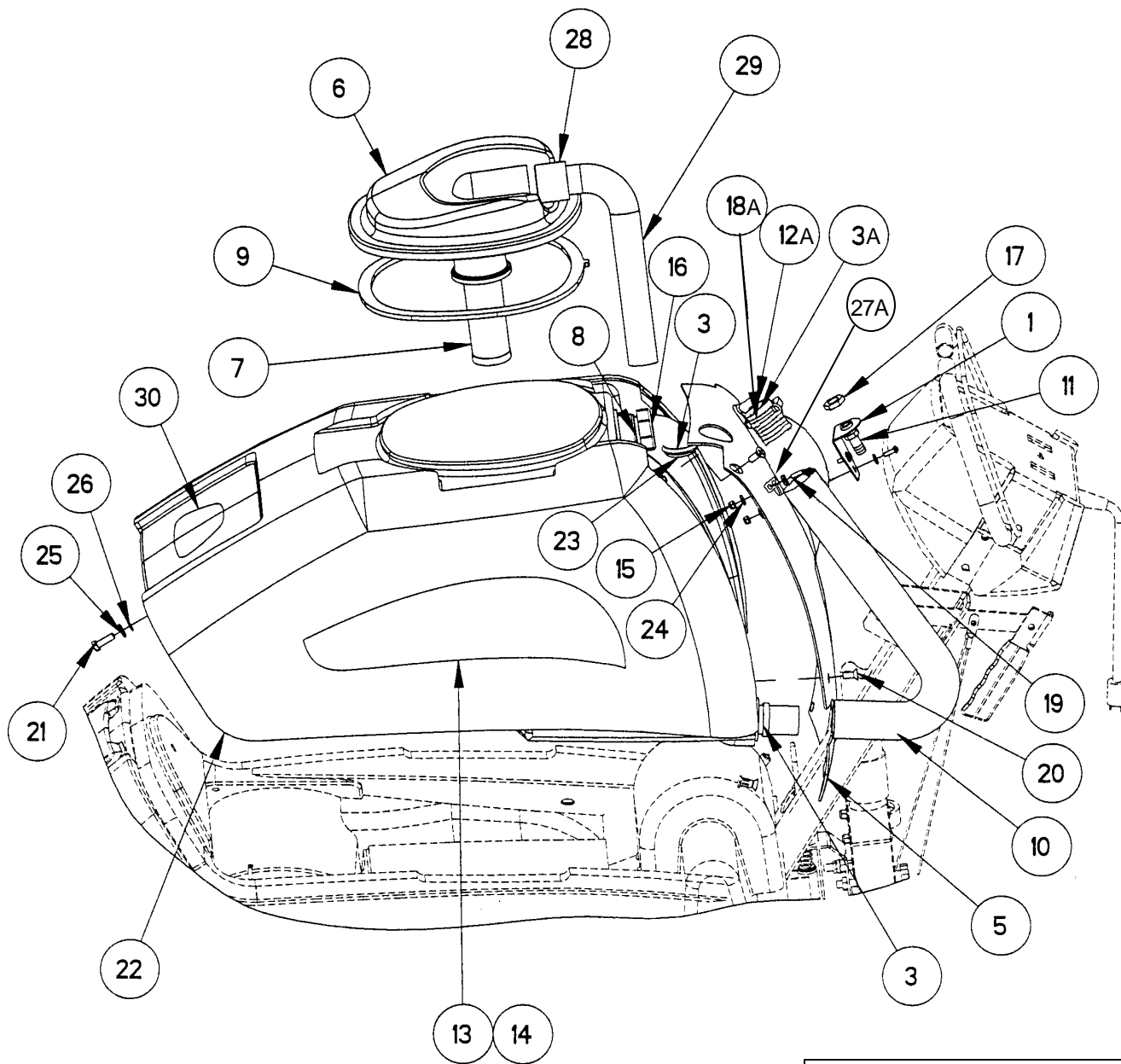
## SOLUTION TANK ASSEMBLY PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	20042	1	CLAMP, 3/8 WORM GEAR		
2	20046	2	CLAMP, 2.25 WORM GEAR		
3	20063	1	CLAMP, 1.75 WORM GEAR X .312		
4	27814	1	CUFF, BLK VAC HOSE		
5	27417	1	CORD, 99807 1/8 X 12		
6	35226	1	GASKET, DOME 9 ID X 30.75 L		
7	39337	1	HOSE, 1.5 BLUE VAC X 24		
8	39239	1	HOSE, 2IN VAC X 20IN		
9	39503	1	HOSE, DRAIN X 44IN		
10	40023	1	HOSEBARB, 1/2MPT X 3/8 NYLON		
11	40039	1	HOSEBARB, 1/2MPT X 1/2 HOSE 90		
12	51296	1	LID, SOLUTION TANK CMD20		
13	53134	1	VAC MOTOR, 115V 5.7 3ST TD TB		
14	57047	4	NUT, 1/4-20 HEX NYLOCK		
15	62691	1	PLATE, CMD20 VAC MTR		
16	62754	1	PLATE, VAC MOTOR COOLING		
17	70018	4	SCR, 1/4-20 X 1.00 HHCS SS		
18	70187	1	SCR, 10-24 X 1/2 PHTC -F-		
19	70375	6	SCR, 5/16-18 X 1/2 HHCS GR5		
20	75243	1	TANK, SOLUTION CMD20		
21	87013	4	WASHER, 1/4 X 5/8 FLAT SS		
22	87016	1	WASHER, #10 EXT STAR SS		
23	87029	6	WASHER, 5/16 X 3/4 SS		
24	87067	6	WASHER, 5/16 INT STAR		

### SERVICE PARTS

PART NO.	DESCRIPTION	PARTS INCLUDED
53787	VAC MOTOR ASSEMBLY, CMD20	53134 (1) W/MOLEX CONN.
14445	BRUSH SET, VAC MOTOR CMD20	

# RECOVERY TANK ASSEMBLY



## RECOVERY TANK ASSEMBLY PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	14665	1	BRKT, PT17 SIGHT TUBE		
2	27670	1	CORD, DRAIN PLUG		
3A	20063	3	CLAMP, 1.75 WORM GEAR X .312	1000083433	
3B	20002	1	CLAMP, 2.0" NYLON RATCHET		
4	OPEN	-	-		
5	27765	1	COVER, CMD20 REAR		
6	28057	1	DOME, CMD20		
7	34329	1	FLOAT BALL, VAC SHUT OFF		
8	35219	1	GASKET, 1-1/2 COMPRESSION		
9	35221	1	GASKET, CMD20 DOME		
10	39472	1	HOSE, 1.5 X 24.0 DRAIN		
11	40013	1	HOSEBARB, 3/8MPT X 1/2HOSE		
12A	41391	1	HOSE, INSERT	1000083433	
12B	40019	1	HOSEBARB, 1.5 DOUBLE MCHD		
13	50911	1	LABEL, CMD20 RIGHT		
14	59012	1	LABEL, CMD20 LEFT		
15	57030	4	NUT, 10-32 HEX NYLCK		
16	57033	1	NUT , 1.5 SLIP JOINT		
17	57044	1	NUT, 3/8 NPT HEX BRASS		
18A	41390	1	HOSE,CAP	1000083433	
18B	66227	1	PLUG, DRAIN HOSE		
19	70160	4	SCR, 10-32 X 5/8 PPHMS		
20	70274	6	SCR, 5/16-18 X 3/4 FHMS BLK OX		
21	70302	1	SCR, 5/16-18 X 1.00 HHCS GR5		
22	75244	1	TANK, RECOVERY CMD 20		
23	78390	1	TUBE, 1.5 WASTE		
24	87018	8	WASHER, #10 X 9/16 FLAT		
25	87029	1	WASHER, 5/16 X 3/4 SS		
26	87067	1	WASHER, 5/16 INT STAR		
27A	140408	1	BRKT, HOSE HOOK	1000083433	
27B	140133	1	BRKT, RECOVERY HOSE MTG		
28	27759	1	CUFF, HOSE 1.5" BLK A 2126		
29	39524	1	HOSE, 1.5 BLK VAC X 52"		
30	50990	1	LABEL, WINDSOR LABEL DOMED		

### SERVICE PARTS LIST

PART NO.	DESCRIPTION	PARTS INCLUDED
28059	DOME ASSEMBLY, CMD20	(1) 28057, (1) 35221, (1) 34329

# NOTES



# WINDSOR INDUSTRIES

## New Machine Warranty

### Limited Warranty

Windsor Industries, Inc. warrants new machines against defects in material and workmanship under normal use and service to the original purchaser. Any statutory implied warranties, including any warranty of merchantability or fitness for a particular purpose, are expressly limited to the duration of this written warranty. Windsor will not be liable for any other damages, including but not limited to indirect or special consequential damages arising out of or in connection with the furnishing, performance, use or inability to use the machine. This remedy shall be the exclusive remedy of the buyer. The warranty period is subject to the conditions stated below.

### 6 / 3 / 1 Warranty: 6 Years Polyethylene (PE) Housings, 3 Years Parts, and 1 Year Service Labor

Subject to conditions outlined below, Windsor Industries warrants rotationally molded PE housings and parts on all of its machines to be free from defects in material and workmanship, under normal use and service for six (6) years to the original owner.

Under this warranty we guarantee the performance of non-polyethylene parts and components to be free from defects and for up to three (3) years to the original end user. Parts replaced or repaired under this warranty are guaranteed for the remainder of the original warranty period. (See table below)

Service labor charges are covered for up to one (1) year from the date of purchase through authorized Windsor service provider. No travel coverage is extended for cord-electric models. See table below for each general product model warranty coverage.

Product	PE Housing & Parts	Non- PE Parts	Service Labor	Travel
Rider Scrubbers	6 years	3 years	1 years	6 Months
Rider Sweepers	6 years	1 year	1 years	6 Months
Walk Behind Scrubbers	6 years	3 years	1 years	6 Months
Walk Behind Sweepers	6 years	1 year	1 years	6 Months
Extractors	6 years	3 years	1 years	-
Polishers / Elec. Burnishers / GH	6 years	3 years	1 years	-
Wide Areas Vacuums	6 years	3 years	1 years	-
VacPak Vacuums	6 years	1 year	1 year	-
Air Movers / Dri-matic / TITAN™	1 year	1 year	1 year	-
Propane Burnishers / Strippers	-	2 year	1 year	-
Tracer/Flex Sweepers/Scrubbers	6 years	2 year	6 months	90 days

VERSAMATIC®	Brush motor, Vacuum motor, Belts – 3 years	All other parts – 1 year
SENSOR®	Vacuum motor, Belts – 2 years	All other parts – 1 year

### Product exceptions and Exclusions:

- Extractor brush motors, pump motors, **ALL** PC boards and electronics, **ALL** Vacuum motors (other than VERSAMATIC® and SENSOR®), **ALL** pumps, and FLEXSOL™ diaphragms carry a one (1) year parts and service labor warranty.
- The Onan® engines have three (3) year manufacturer’s warranty. The Honda® and Kawasaki® engines have two (2) year manufacturer’s warranty. **NOTE:** The engine warranty is administered through the engine manufacturer and must be repaired at an authorized service center.

Normal wear items and accessories including, but not limited to, belts, brushes, capacitors, carbon brushes, casters, clutches, cords, filters, finishes, gaskets, hoses, light bulbs, rectifiers, switches, squeegees, bearings, pulleys, relays, actuating cables, wheels, tires, propane tanks, and batteries will be warranted for manufacturing defects for 90-days from the purchase date.

The warranty commences on the purchase date by the original end user from an authorized Windsor agent, subject to proof of purchase. The Machine Registration Card must be completed and returned immediately at the time of purchase. If proof of purchase cannot be identified, the warranty start date is 90 days after the date of sale to an authorized Windsor distributor. Parts replaced or repaired under warranty are guaranteed for the remainder of the original warranty period.



## WINDSOR INDUSTRIES New Machine Warranty

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### **90 Day Warranty Extension Available**

Upon receipt of the Machine Registration Card, Windsor will extend by 90 days, from the date of purchase, all items included under the one-year provision. This applies only to one-year items and does not include 90-day wear items.

### **This Warranty Shall Not Apply To:**

1. Any product that has been subject to abuse, misuse, neglect or unauthorized alteration (including the use of incompatible or corrosive chemicals or overloading of capacity).
2. Products that have experienced shipping or freight damage.
3. Repairs necessary to correct any failure due to improper pre-delivery service and inspection by the selling dealer.
4. Excessive time for cleaning units in preparation for repair.
5. Any repairs resulting from poor initial service work or improper diagnosis.
6. Tune-up parts such as plugs, plug wires and condensers.
7. Any design alterations performed by an organization not authorized or specified by Windsor.
8. Battery and charger warranties are handled directly with the manufacturer (Trojan® batteries and Lester® chargers).
9. High-pressure washing.
10. Electrical components exposed to moisture.

If difficulty develops during the warranty period, contact the authorized Windsor agent from whom the product was purchased. Windsor Industries, Inc. may elect to require the return of components to validate a claim. Any defective part to be returned must be shipped freight prepaid to an authorized Windsor Distributor/Service Center or to the Windsor factory.

### **Use Of Parts Not Approved By Windsor Industries, Inc. Will Void All Warranties**

This warranty is valid only for all products sold after July 1, 1995. A product sold before that date shall be covered by the limited warranty in effect at the date of sale to the original purchaser.