

FOR SAFETY: When servicing machine, wear protective gloves and eye protection when handling batteries and battery cables. Avoid contact with battery acid.

4. Connect the charger's AC power supply cord to a properly grounded receptacle.
5. Connect the charger's DC cord to the machine's battery receptacle located under the recovery tank (Figure 23). Rest the recovery tank on the support stand to promote ventilation during charging.

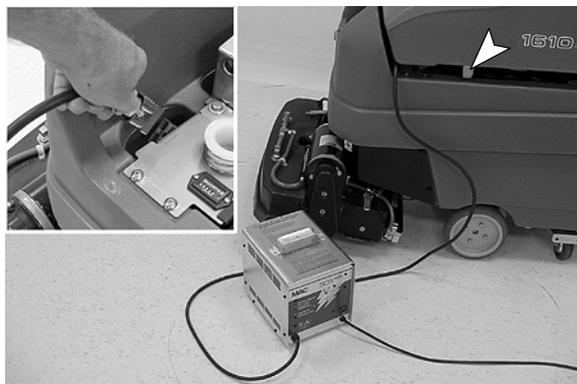


FIG. 23

6. The charger will automatically begin charging and shut off when fully charged.

NOTE: The machine will not operate once the battery charger is connected.

ATTENTION: Do not disconnect the charger's DC cord from the machine's receptacle when the charger is operating. Arcing may result. If the charger must be interrupted during charging, disconnect the AC power supply cord first.

⚠ WARNING: Fire Or Explosion Hazard. Batteries Emit Hydrogen Gas. Keep Sparks And Open Flame Away. Keep Battery Compartment Open When Charging.

7. After charging, check the electrolyte level (A) again. The level should be approximately 1 cm (3/8") from the bottom of the fill-port (B) (Figure 24). Add distilled water if needed. **DO NOT OVERFILL.**

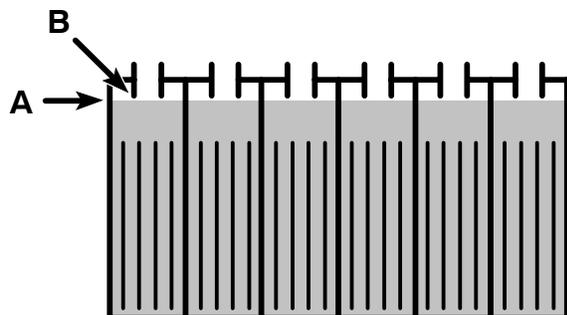


FIG. 24

MACHINE MAINTENANCE

To keep the machine in good working condition, simply follow the daily, weekly and monthly maintenance procedures.

FOR SAFETY: Before leaving or servicing machine, stop on level surface and turn off machine.

⚠ WARNING: Electrical Hazard. Disconnect Battery Cables Before Servicing Machine.

ATTENTION: Contact an Authorized Service Center for machine repairs. Machine repairs performed by other than an authorized person will void your warranty.

DAILY MAINTENANCE (After Every Use)

1. Drain and rinse out the recovery tank (Figure 25).



FIG. 25

2. Rinse off the float shut-off screen located in recovery tank (Figure 26).



FIG. 26

3. Drain and rinse out the solution tank.

OPERATION

- ReadySpace Cleaning: Remove the splash shroud and inspect the rollers for wear. If the gap between the two rollers is greater than 4mm (5/32") replace the rollers (Figure 27). Always replace rollers as a set.

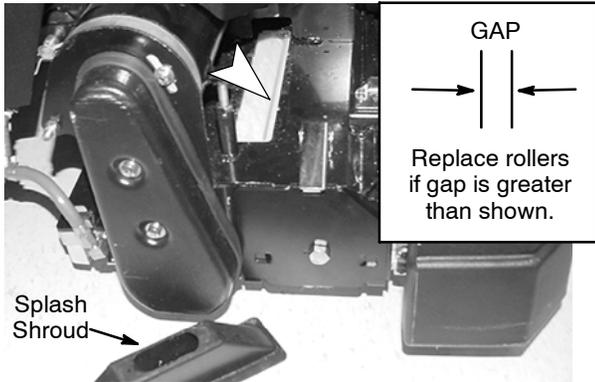


FIG. 27

- Clean the machine housing with an all purpose cleaner and damp cloth (Figure 28).

FOR SAFETY: When servicing machine, do not power spray or hose off machine. Electrical malfunction may occur.



FIG. 28

- Recharge the batteries (Figure 29). See CHARGING BATTERIES.

NOTE: To prolong the battery life, ONLY recharge the batteries after a total of 30 minutes of use or more.

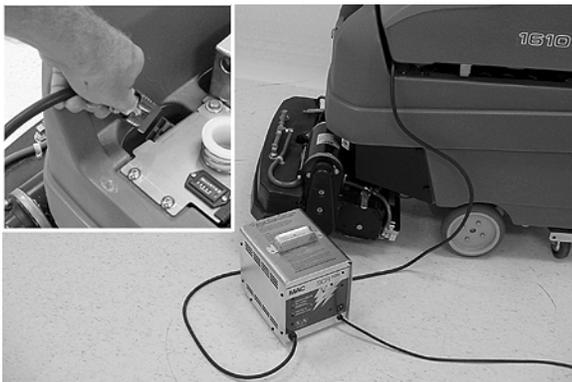


FIG. 29

WEEKLY MAINTENANCE (Every 10 Hours of Use)

- Flip the ReadySpace rollers end-for-end every 10 hours of use (Figure 30). The roller life is rated for at least 100 hours of use under normal cleaning conditions. If the gap between the two rollers is greater than 4mm (5/32") replace the rollers.

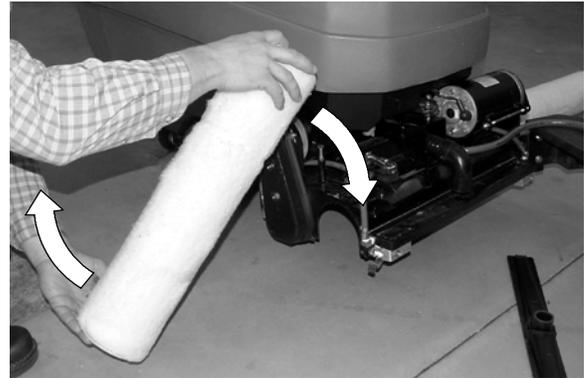


FIG. 30

- Remove any debris build-up from the underside of the scrub head (Figure 31).

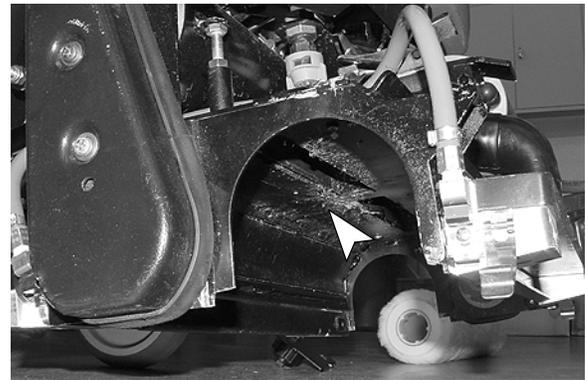


FIG. 31

- Remove the front and rear roller vacuum shoe covers and remove any debris (Figure 32).



FIG. 32

- Remove any entangled carpet fibers and debris from the brushes (Figure 33). Replace brushes if worn. To determine when to replace worn brushes observe the brush pressure meter.

If unable to adjust the pressure into the green zone this may be a good indication that the brushes should be replaced.

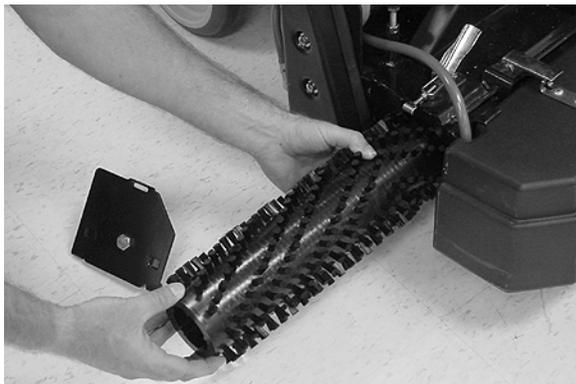


FIG. 33

5. Remove any debris lodged in the carpet extraction vacuum shoe (Figure 34).



FIG. 34

6. Inspect the spray tips for proper spray pattern (Figure 35). If spray pattern is obstructed, clean or replace the spray tips (See MONTHLY MAINTENANCE).



FIG. 35

MONTHLY MAINTENANCE (Every 80 Hours of Use)

1. Remove the solution tank filter from underneath the machine and rinse out the screens. Make sure the solution tank is empty before removing filter (Figure 36).

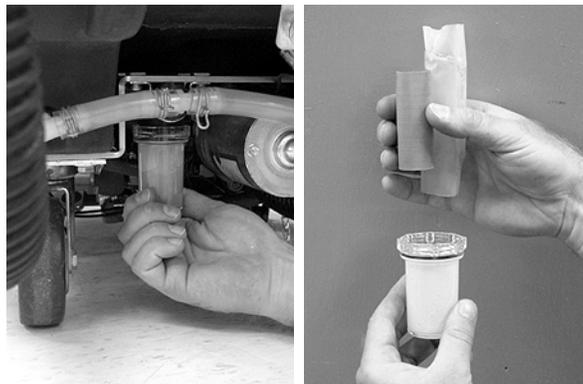


FIG. 36

2. Flush the plumbing system with an approved acetic acid solution to dissolve normal alkaline buildup. Follow procedure below:
 - a. Remove rollers/brushes from the machine.
 - b. Pour 11 liters (3 gal) of hot water into the solution tank, do not exceed 60°C (140°F).
 - c. Add the acetic acid solution according to the mixing directions on the bottle.

FOR SAFETY: When using machine, follow mixing and handling instructions on chemical containers.

- d. Place the machine in an area with a floor drain.
 - e. Block the wheels and turn the speed control knob to slowest setting.
 - f. Operate both cleaning technologies for one minute each over the floor drain.

NOTE: Rear vacuum shoe exchange is required to operate both ReadySpace and Restorative Extraction cleaning technologies.
 - g. Turn the key off and let the machine set overnight to allow the acetic acid solution to breakdown the alkaline buildup.
 - h. Next day, disperse the remaining acetic acid solution and rinse the solution system with 11 liters (3 gal) of clean water.
3. Remove the four quick-release spray tips from the scrub head (Figure 35). Turn spray tip caps counter-clockwise to remove. Soak the tips and screens in an acetic acid solution for up to six hours (Figure 37). Follow the mixing directions on the bottle. Do not use pointed objects to clean tips, damage will occur.

OPERATION

IMPORTANT: When replacing the spray tips, make sure to install the green spray tip assembly (tip #11002) above the ReadySpace rollers and the white spray tip assembly (tip #11005E) into the front bumper. *NOTE: The spray tip filter is not required for ReadySpace.*

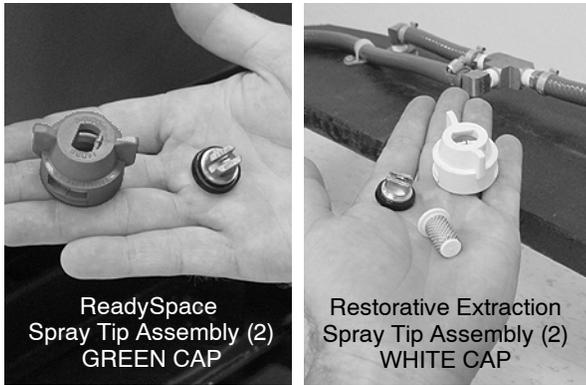


FIG. 37

Check the spray pattern direction after installing the spray tips. The ReadySpace spray tips should spray directly between the two rollers. The Restorative Extraction spray pattern should slightly overlap at a 3° angle (Figure 38).

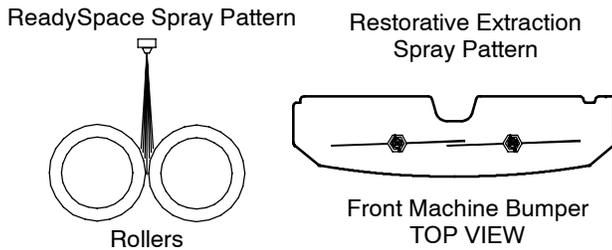


FIG. 38

4. Inspect the spray tip pattern in the two ReadySpace flush lines (4 spray tips). If tips are clogged, remove the flush lines and soak them in an acetic acid solution for up to six hours (Figure 39). Do not remove tips from flush lines.

NOTE: During ReadySpace operation the flush line spray tips will spray every 2½ minutes for 3 seconds.

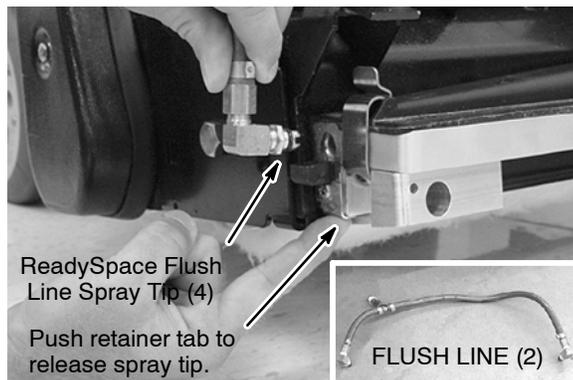


FIG. 39

5. Maintain the batteries (See BATTERY MAINTENANCE).
6. Lubricate the caster grease fittings with a water resistant grease (Figure 40).



FIG. 40

7. Lubricate all pivot points with silicone spray then coat with a water resistant grease to maintain smooth operation.
8. Check the machine for water leaks and loose nuts and bolts.
9. Periodically check the belt tension on the two brush motors. Tighten the belt if you're able to twist it beyond 90° at midpoint (Figure 41).

FOR SAFETY: When servicing machine, disconnect the battery connections.

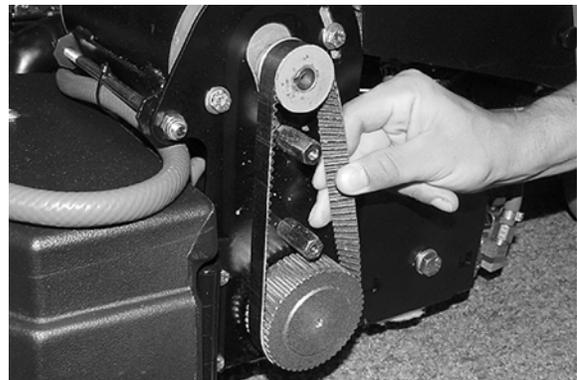


FIG. 41

MOTOR MAINTENANCE

Quarterly (Every 250 Hours) – Check the drive transaxle motor and vacuum motors for carbon brush wear. Replace carbon brushes when worn to a length of 10 mm (3/8”) or less.

Annually (Every 1000 Hours) – Check the brush motors for carbon brush wear. Replace carbon brushes when worn to a length of 10 mm (3/8”) or less.

Contact an Authorized Service Center for machine repairs.

FOR SAFETY: When servicing machine, all repairs must be performed by a qualified service person.

⚠ WARNING: Electrical Shock Hazard. Disconnect Battery Cables Before Servicing Machine.

BATTERY MAINTENANCE

⚠ WARNING: Fire Or Explosion Hazard. Batteries Emit Hydrogen Gas. Keep Sparks And Open Flame Away. Keep Battery Compartment Open When Charging.

FOR SAFETY: When servicing machine, wear protective gloves and eye protection when handling batteries and battery cables. Avoid contact with battery acid.

1. Check the specific gravity using a hydrometer to determine the charge level and the condition of the batteries (Figure 42). If one or more of the battery cells read lower than the other battery cells (0.050 or more), the cell is damaged, shorted, or is about to fail. Check the hydrometer readings against the following chart to determine the remaining battery charge level.

NOTE: Do not take readings immediately after adding distilled water. If the water and acid are not thoroughly mixed, the readings may not be accurate.



FIG. 42

SPECIFIC GRAVITY at 27° C (80° F)	BATTERY CHARGE
1.265	100% CHARGED
1.223	75% CHARGED
1.185	50% CHARGED
1.148	25% CHARGED
1.110	DISCHARGED

NOTE: If the readings are taken when the battery electrolyte is any temperature other than 27° C (80° F), the reading must be temperature corrected. Add or subtract to the specific gravity reading 0.004, 4 points, for each 6° C (43° F) above or below 27° C (80° F).

2. Always follow proper charging instructions (See CHARGING BATTERIES).
3. Check the electrolyte level (A) in each battery cell **after charging batteries**. The level should be approximately 1 cm (3/8”) from the bottom of the fill-port (B). Add distilled water if needed (Figure 43). **DO NOT OVERFILL.**

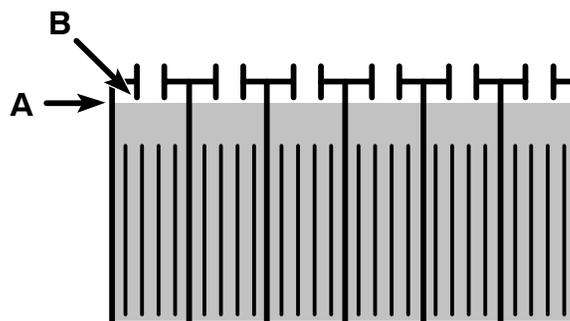


FIG. 43

4. Keep the battery tops clean to prevent battery corrosion.

OPERATION

To clean batteries:

FOR SAFETY: When servicing machine, wear protective gloves and eye protection when handling batteries and battery cables. Avoid contact with battery acid.

- a. Mix a strong solution of baking soda and water (Figure 44).



FIG. 44

- b. Brush the solution sparingly over the battery tops and cable connectors.

NOTE: Do not allow baking soda solution to enter battery cells.

- c. Use a wire brush to clean the battery terminals and cable connectors.
- d. After cleaning, apply a light coating of non-metallic grease or protective spray on the cable connections to prevent battery corrosion.

5. Check for loose or worn cables. Replace if worn.

PRIMING SOLUTION SYSTEM

The following instructions are for priming the restorative extraction solution system. The ReadySpace solution system has an automatic priming process.

Priming the restorative extraction solution system is only required if the solution tank runs dry or if center streaking occurs while cleaning.

To Prime the Solution System:

Priming Hose (p/n 700141) required. Must be purchased separately.

1. Connect the priming hose to the accessory tool solution hose coupler (Figure 45).
2. For machines equipped with a solution switch press the switch to the on position.
3. Turn the key on and rotate the control grips for approximately 10 seconds.

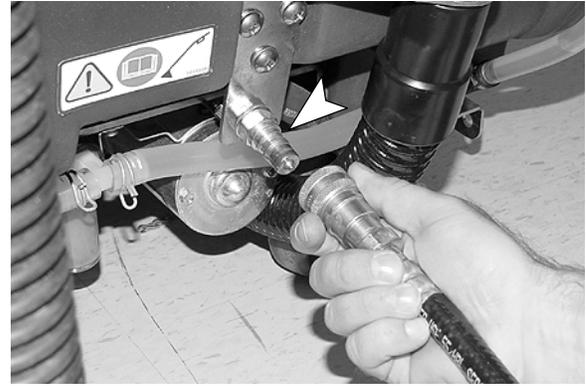


FIG. 45

MACHINE JACKING

Use the designated location under the solution tank for jacking up the machine. Use a piece of wood to distribute the machine weight load (Figure 46).

Position the machine on a flat level surface and block machine tires before jacking up the machine.



FIG. 46

FOR SAFETY: When servicing machine, jack machine up at designated locations only. Block machine up with jack stands.

TRANSPORTING MACHINE

When transporting the machine by use of trailer or truck, be certain to follow tie-down procedures below:

FOR SAFETY: When using machine, go slow on inclines and slippery surfaces.

1. Raise the scrub head to the transport position.
2. Load the machine using a recommended loading ramp.
3. Position the front of the machine up against the front of the trailer or truck. Once machine is positioned, lower the scrub head and turn key off.