

5. Connect the charger's DC cord into the machine's battery charge receptacle (Figure 41).

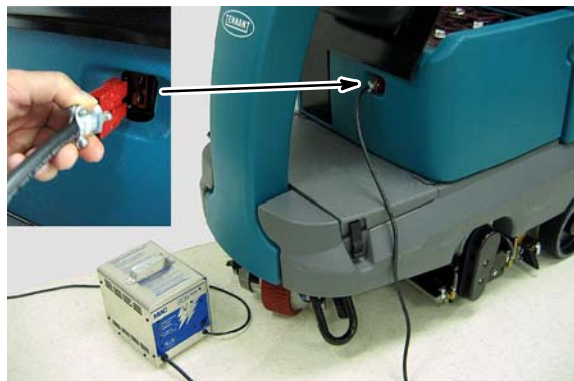


FIG. 41

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

**NOTE:** The machine will not operate when charging.

**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.

## MACHINE MAINTENANCE

To keep the machine in good working condition, perform the following maintenance procedures.

**FOR SAFETY:** Before leaving or servicing machine, stop on a 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.

## AFTER EVERY USE

1. Drain and rinse out the recovery tank (Figure 42).



FIG. 42

2. Rinse off the recovery tank float sensor (Figure 43).



FIG. 43

3. Clean the vacuum fan filter with low water pressure (Figure 44). Allow the filter to completely dry before reinstalling.



FIG. 44

## OPERATION

4. Drain the solution tank (Figure 45).



FIG. 45

5. Clean the front and back half of the solution tank. Clean the solution tank sensor and filter (Figure 46).



FIG. 46

6. Clean the outside surface of the machine with an all purpose cleaner and damp cloth (Figure 47).

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



FIG. 47

7. Recharge the batteries if the machine was used for at total of 30 minutes or more (Figure 48).

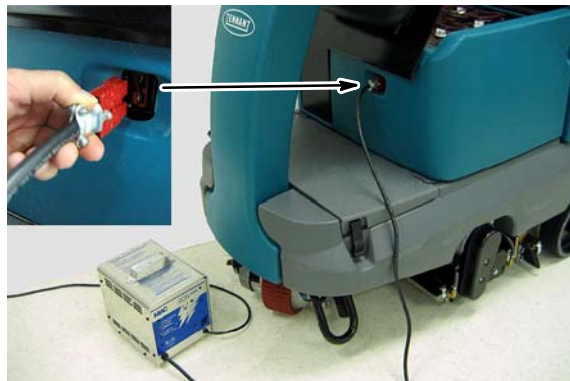


FIG. 48

### AFTER EVERY 10 HOURS OF USE

1. Flip the ReadySpace rollers end-for-end every 10 hours (Figure 49). Replace the rollers if an air gap is visible between the two rollers. The roller life is rated at 100 hours of use under normal cleaning conditions. Always replace rollers as a set.

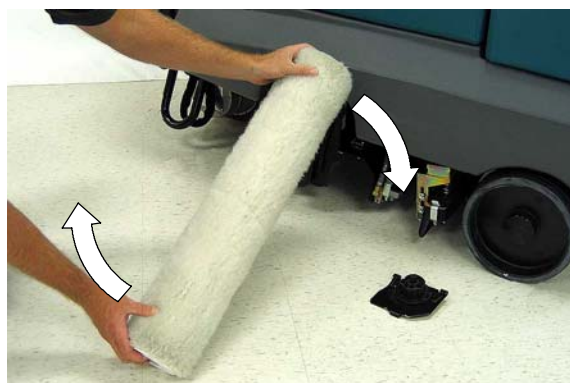


FIG. 49

2. Remove any entangled carpet fibers and debris from the extractor brushes (Figure 50). Replace the brushes if damaged or worn.



FIG. 50



3. Clean the underside of the scrub head and the idler plate (Figure 51).



FIG. 51

4. Remove the covers from the ReadySpace vacuum shoes and wipe out the debris build up (Figure 52). Remove the ReadySpace rollers and use a pointed object to clean vacuum shoe intake slot.

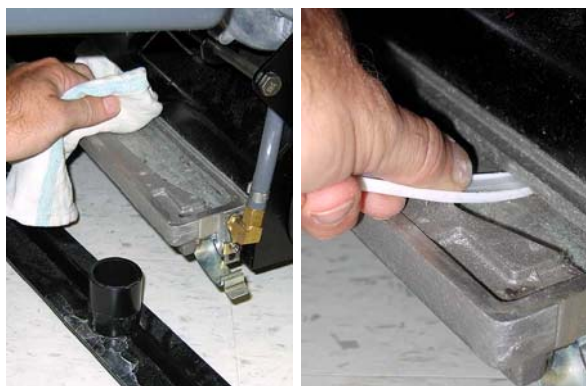


FIG. 52

5. Remove the extraction vacuum shoes and rinse out the debris buildup (Figure 53). Use a pointed object to clean the vacuum shoe intake slot. (See Figure 54 for Extraction Vacuum Shoe Removal.)



FIG. 53

## Extraction Vacuum Shoe Removal (Figure 54):

- a. With the scrub head in the up position, remove the two down pressure springs. Lower the scrub head after removing springs.
- b. Disconnect the vacuum hose.
- c. Pull the two mounting pins
- d. Remove shoe from scrub head.

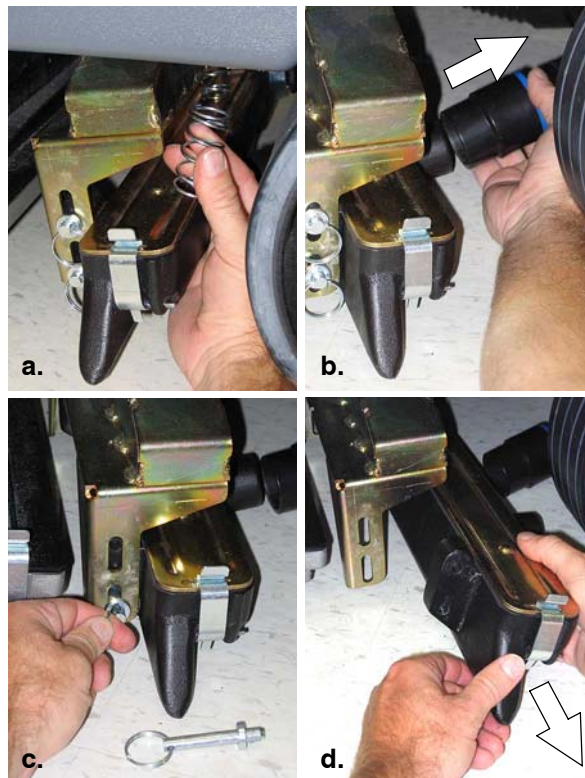


FIG. 54

# OPERATION

## AFTER EVERY 80 HOURS OF USE

1. Empty the solution tank and remove the solution tank filter from under the machine and rinse out the screen (Figure 55).



FIG. 55

2. Remove the two Restorative Extraction spray nozzles and soak the tips and screens in an acetic acid solution (Figure 56). Use a plastic bristle brush to clean clogged spray tips. Do not use a pointed object to clean tips, damage will occur.



FIG. 56

When replacing the extraction spray nozzles, turn the cap until it clicks into position. The position of the spray nozzles is set at a 3° angle (Figure 57).

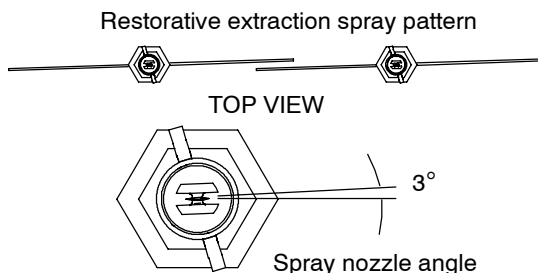


FIG. 57

3. Remove the two ReadySpace spray nozzles and soak the tips in an acetic acid solution (Figure 58). Use a plastic bristle brush to clean clogged spray tips. Do not use pointed objects to clean tips, damage will occur.



ReadySpace Spray Nozzle  
GREEN CAP / TIP #11002 p/n 575283000

FIG. 58

When replacing the ReadySpace spray nozzles, turn the cap until it clicks into position. The position of the spray nozzles is set to spray directly between the two rollers (Figure 59).

ReadySpace Spray Pattern

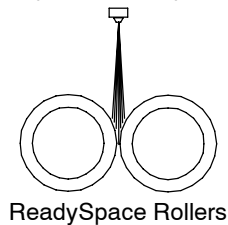
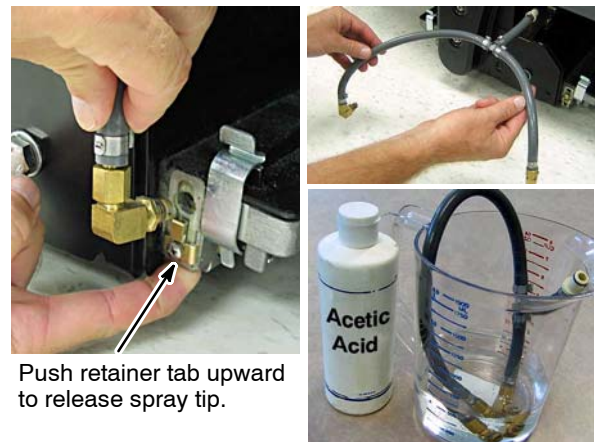


FIG. 59

4. Remove the two ReadySpace vacuum shoe flush lines and soak them in an acetic acid solution (Figure 60). Do not remove the tips from the flush lines.

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



Push retainer tab upward to release spray tip.

FIG. 60



5. Flush the plumbing system with an acetic acid solution to dissolve normal alkaline buildup. This procedure requires the machine to sit overnight.
  - a. Remove rollers/brushes from the scrub head.
  - b. Pour 3 gal / 11 L of hot water into the solution tank. Do not exceed 140°F / 60°C.
  - c. Add the acetic acid solution according to the mixing directions on the bottle.

**FOR SAFETY: When using chemicals follow mixing and handling instructions on chemical containers.**

- d. Place the machine in an area with a floor drain.
  - e. Operate both cleaning technologies for one minute each.
  - f. Turn the key off and let the machine sit overnight to allow the acetic acid solution to breakdown the alkaline buildup.
  - g. Next day, disperse the remaining acetic acid solution and rinse the solution system with 11 liters (3 gal) of clean water.
6. Check the belt tension on the two brush motors. Tighten the belt if able to twist it more than 90° at midpoint (Figure 61).

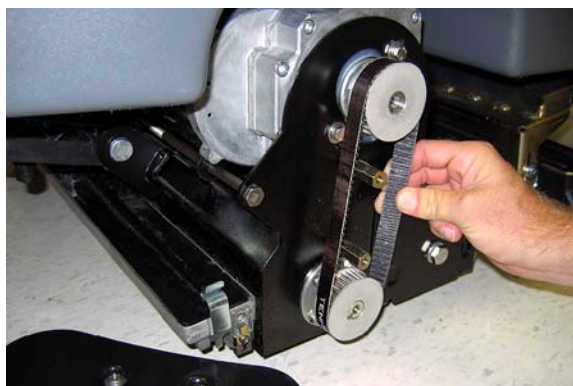


FIG. 61

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

7. Clean the batteries and check the fluid levels (See BATTERY MAINTENANCE).
8. Check for loose or worn battery cables. Replace if worn.
9. Lubricate all pivot points with a water resistant grease.
10. Check the machine for water leaks.
11. Check the machine for loose nuts and bolts.

## MOTOR MAINTENANCE

**Contact an Authorized Tennant Service Center for carbon brush replacement.**

Replace the carbon brushes as directed.

Carbon Brush Replacement	Hours
Propel Motor	750
Vacuum Motors	
Brush Motors	1000

**⚠ WARNING: Electrical 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 batteries, wear protective gloves and eye protection. Avoid contact with battery acid.**

To prolong the life of the batteries only recharge the batteries if the machine is used for a total of 30 minutes or more. Never leave batteries discharged for lengthy periods.

1. Check battery fluid levels before and after charging. The fluid should be at the level shown (Figure 62). Add distilled water if low. **DO NOT OVERFILL.** The fluid will expand and may overflow when charging.



### CORRECT BATTERY FLUID LEVEL:

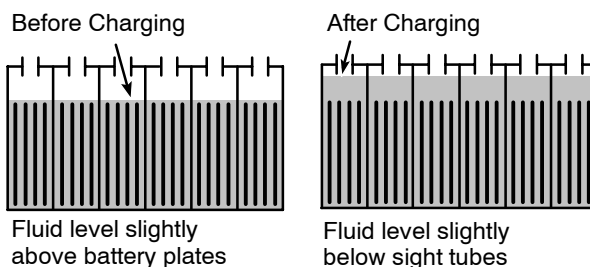


FIG. 62

## OPERATION

2. Clean the batteries and terminals to prevent battery corrosion. Use a scrub brush with a mixture of baking soda and water (Figure 63).

**ATTENTION:** Do not allow the baking soda solution to enter the batteries.



FIG. 63

3. Check for loose or worn battery cables. Replace if worn.

### PRIMING SOLUTION SYSTEM

To prime the machine's solution system, operate the ReadySpace technology for approximately one minute (Figure 64). Once primed, the machine can be used for restorative extraction cleaning.

If the solution system is completely dry or if you notice center streaking when restorative extraction cleaning, the solution system must be primed.



FIG. 64

## MACHINE JACKING

Use the designated jacking locations for jacking up the machine (Figure 65). Empty the recovery and solution tanks before jacking. Use a jack capable of supporting the weight of the machine. Position the machine on a flat, level surface and block the tires before jacking.

**FOR SAFETY:** When servicing machine, jack machine up at designated locations only. Use jack or hoist that will support machine weight. Block machine up with jack stands.



FIG. 65

## PUSHING, TOWING, AND TRANSPORTING MACHINE

### PUSHING OR TOWING THE MACHINE

Before attempting to push or tow the machine, the brake must be disengaged. To disengage the brake, insert a small standard screwdriver between the electronic brake lever and the hub (Figure 66).

**FOR SAFETY:** When brake is disengaged, do not push or tow the machine on inclines.

**FOR SAFETY:** When brake is disengaged, do not operate machine.



FIG. 66