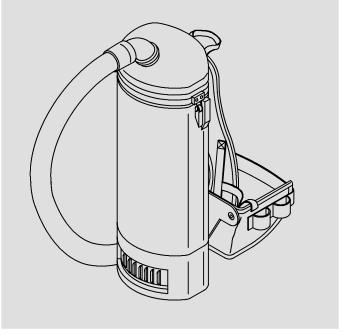


V-BP-10

Backpack Vacuum Cleaner

Operator and Parts Manual



Model Part No.: 1063946 - V-BP-10 (includes EZ Glide ™ Kit)





GENERAL INFORMATION

This manual is furnished with each new unit. It provides necessary operation and maintenance instructions and an illustrated parts list.

Read this manual completely and understand the machine before operating or servicing it.

This machine is intended for commercial use only. It is designed exclusively to pick up dirt, dry debris and dust in an indoor environment and is not constructed for any other use. The pick up of any type of fluid or dangerous/toxic materials is prohibited. Use only recommended accessories.

When ordering replacement parts use the Parts Lists section in this manual. Before ordering parts or supplies, be sure to have your machine model number and serial number handy. Parts and supplies may be ordered by phone or mail from any Authorized Service Center or Distributor.

This machine will provide excellent service. However, the best results will be obtained at minimum costs if:

- The machine is operated with reasonable care.
- The machine is maintained regularly per the machine care instructions provided.
- The machine is maintained with manufacturer supplied or equivalent parts.

UNCRATING MACHINE: Carefully check carton for signs of damage. Report damages at once to carrier.



PROTECT THE ENVIRONMENT

Please dispose of packaging materials and old machine components in an environmentally safe way according to local waste disposal regulations.

Always remember to recycle.

Tennant Company

PO Box 1452

Minneapolis, MN 55440 USA

Phone: (800) 553-8033 or (763) 513-2850

www.tennantco.com www.nobles.com

Specifications and parts are subject to change without notice.

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MACHINE DATA

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IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the followina:

READ ALL INSTRUCTIONS BEFORE USING THIS VACUUM CLEANER

MARNING - To reduce the risk of fire, explosion, electric shock, or injury:

- 1. Do not vacuum with a frayed, worn, or damaged cord.
- Do not vacuum liquids or expose the backpack vacuum to rain or water. 2.
- 3. Do not vacuum hazardous or toxic materials.
- Do not use to pick up flammable or hazardous materials.
- Do not leave the unit plugged in when it is not in use. Unplug it from the outlet when the unit is not in use and before servicing.
- Do not use outdoors or on wet surfaces.
- 7. Do not try to recover any liquid with this vacuum. This vacuum is for DRY RECOVERY only.
- Use only as described in this manual. Use only manufacturer's recommended attachments and replacement parts.
- To prevent electrical damage, use the recommended 50 foot/16 gauge extension cord provided. If you need to use a 100 foot cord, it must be 14 gauge or better. DO NOT use cords longer than 100 feet.
- 10. Do not use a damaged cord or plug. If the unit is not working as it should, or if it has been dropped, damaged, left outdoors, or exposed to water, return it to an authorized servicing dealer for inspection.
- 11. Do not pull or carry the vacuum by the cord or use the cord as a handle. Do not close a door on the cord or pull the cord around sharp edges or corners. Do not run over the cord. Keep the cord away from heated surfaces.
- 12. Do not pull on the cord to unplug. Grasp the plug at the outlet and pull.
- 13. Do not handle the plug or vacuum with wet hands.
- 14. Do not put any objects into openings. Keep hair, loose clothing, fingers, and all parts of the body away from openings and moving parts. Long hair should not hang over or near the unit.
- 15. Do not vacuum flammable or combustible materials or anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- 16. Empty the filter bag after every use and before storage. Some types of dust and debris may combust.
- 17. Turn off the unit before unplugging.
- 18. Connect commercial-rated units to properly grounded outlets only.
- 19. Use with care when cleaning stairs.
- 20. Do not allow to be used as a toy. Close attention is necessary when used by or near children.

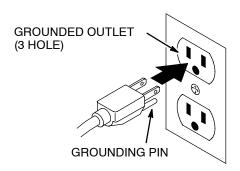
SAVE THESE INSTRUCTIONS - Violation of any of these instructions may void any and all warranties.

GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or breakdown, 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 plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

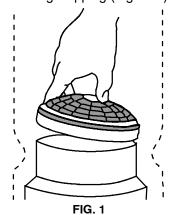
WARNING - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the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

This appliance is for use on a nominal 120-volt circuit and has a grounding attachment plug that looks like the plug illustrated in sketch. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance.

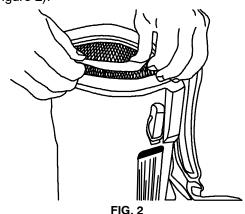


PREPARING THE VACUUM FOR OPERATION

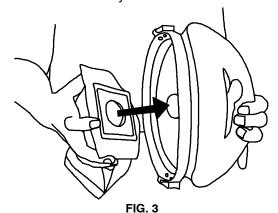
1. Unlatch and remove the top cap and pull out the cloth filter. Check to see that the dome filter has not shifted during shipping (Figure 1).



2. Reinstall the cloth filter, making sure that the lip of the filter completely covers the rim of the vacuum (Figure 2).



 Install a Micro filter (if there is not one already installed) by sliding the gasket of the Micro filter over the inlet on the inside of the top cap (Figure 3). Replace the cap, making sure that the latches catch correctly.



At the beginning of each shift, the filters should be checked. Empty or replace as necessary.

NOTE: Never use a Micro filter without the cloth filter.

- 4. Push the hose into the cap opening .
- 5. Twist the aluminum wand into the hose. Check hose cuffs at both ends to make sure that they are tight.
- 6. Loosen the shoulder straps and waist belt. In an open area, lift the vacuum by one shoulder strap and slide your free arm into the other strap (Figure 4).



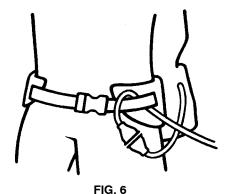
7. Fasten the waist belt snugly and make sure the weight is resting comfortably on your hips (Figure 5).



FIG. 5

WARNING: To reduce the risk of fire, electric shock or injury, do not pull or carry the vacuum by the cord or use the cord as a handle. Do not close door on cord or pull the cord around sharp edges or corners. Do not run over the cord. Keep the cord away from heated surfaces. Do not pull on the cord to unplug. Grasp the plug at the outlet and pull. Work within cord length to avoid stress and damage.

 Check the wear on the cord by the vacuum body and at the plug. Place the extension cord between the waist belt's strap and padded area to signal you if you have run out of cord while vacuuming (Figure 6).



9. To attach tools to a 1½" aluminum wand, LOOSEN the plastic nut at the end of the wand, insert the tool, and retighten the nut. To ensure the copper ring stays in place, NEVER remove the nut.

ELECTRICAL CORD CARE

NEVER stretch the cord tightly between the vacuum and the outlet. A cord that is stretched or pulled will not function properly and creates a danger.

After vacuuming, unplug the cord (at both ends of an extension cord) and wind it up loosely. DO NOT wind the cord up by wrapping it around your hand and elbow.

WARNING: To reduce the risk of fire, electric shock or injury, do not pull on the cord to unplug. Grasp the plug at the outlet and pull. Work within cord length to avoid stress and damage. Do not handle the plug or vacuum with wet hands.

PROPER STORAGE

When the vacuum is not in use, it should be stored in a dry place.

WARNING: To reduce the risk of fire, electric shock or injury, empty the filter bag after every use and before storage. Some types of dust and debris may combust.

PROPER VACUUMING MOTION FOR LARGE AREAS WITH DIRECT SUCTION TOOLS

- Begin with the wand parallel to your body.
- Draw the top of the wand in toward your waist and twist at the waist walking backward or forward (a side-to-side motion) (Figure 7).



3. The motion is similar to mopping and keeps the upper body and arms from tiring.

WARNING: DO NOT use machine to pick up flammable or combustible materials or anything that is burning or smoking, such as cigarettes, matches, or hot ashes.

ERGONOMICS

- The weight of the vacuum should be carried on the operator's hips and be evenly distributed.
- The padded waist belt or waist and shoulder straps are adjustable for a custom fit.
- The backpack vacuums have a ventilated backplate to keep the operator cool.
- The on/off switch is conveniently placed for easy access on the waist belt.

Use the proper attachments for the job. Tennant has attachments to perform most jobs without requiring that the operator bend over or get into difficult positions.

CARING FOR YOUR VACUUM

WARNING: To reduce the risk of fire, electric shock or injury unplug unit from wall outlet when not in use and before servicing.

- Every time you finish vacuuming, shake out the cloth and Micro filters.
- Each week, rinse, dry and return the foam/filter diffuser to the bottom of the vacuum below the motor.
- 3. After each shift, wipe the inside and outside of the vacuum with a household cleaning agent.

PREVENTATIVE MAINTENANCE

ATTENTION: The following information is for use by qualified service personnel only and is to provide guidance for troubleshooting and maintenance.

WARNING: To reduce the risk of fire, electric shock or injury unplug unit from wall outlet when not in use and before servicing.

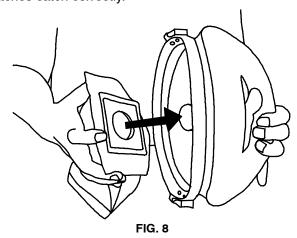
- UNPLUG the vacuum when working on the motor or any electrical part.
- CHECK the condition of all electrical cords before each use.
- Have a qualified service person at an authorized Service Dealer CHECK the carbon brushes on the motor every six months and replace any brush worn down to 1/2" in length.
- DO NOT lubricate the motor; it is equipped with sealed bearings.

FILTER MAINTENANCE

WARNING: To reduce the risk of fire, electric shock or injury unplug unit from wall outlet when not in use and before servicing.

- Check the Micro filter EACH and EVERY time you start and finish vacuuming. A clogged and dirty filter restricts airflow and results in reduced suction and overheating.
- While vacuuming stop every two hours or as needed to check the Micro filter. Replace with new Micro filter when necessary.

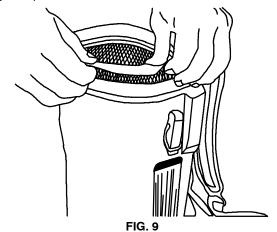
To install a Micro filter, slide the gasket of the Micro filter over the inlet on the inside of the top cap (Figure 8), then replace the cap, making sure that the latches catch correctly.



NOTE: Lift both Micro filter and cloth filter out at the same time to avoid ripping the Micro filter, especially if it is full.

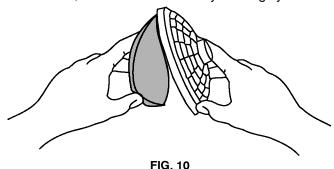
3. Once a month (or more often if necessary) hand or machine wash the cloth filter and let it LINE DRY. (Do not put it in the dryer).

When reinstalling the cloth filter, be sure the lip of the filter completely covers the rim of the vacuum (Figure 9).



7

- Once a month (or more often if necessary) clean the dome filter, located inside the vacuum underneath the Micro and cloth filters
 - a. Pull the top piece of the dome filter off and remove the foam media (Figure 10). Shake it out, rinse it and let it air dry thoroughly.



- Before the next use, return the foam media to its place. Replace with new foam media if necessary.
- Firmly snap the top piece of the dome filter into place.

NOTE: If using a high filtration disc in place of the foam media, check it every 2-3 weeks. When the disc becomes discolored, replace it with a new disc. The life of the high filtration disc will depend greatly on the use and care of the Micro filter and cloth filter.

RECOMMENDED STOCK ITEMS

Refer to Parts List section for recommended stock items. Stock Items are clearly identified with a bullet preceding the parts description. See example below:

	$-$ /\		
Ref.	Part No.	Description	Qty.
1	701103	ASM.,STANDPIPE	1
2	180613	◆FLOAT, SHUTOFF	1
3	230187	NIPPLE	1
4	101714	◆GASKET	1
5	210240	NUT, FLANGED	1

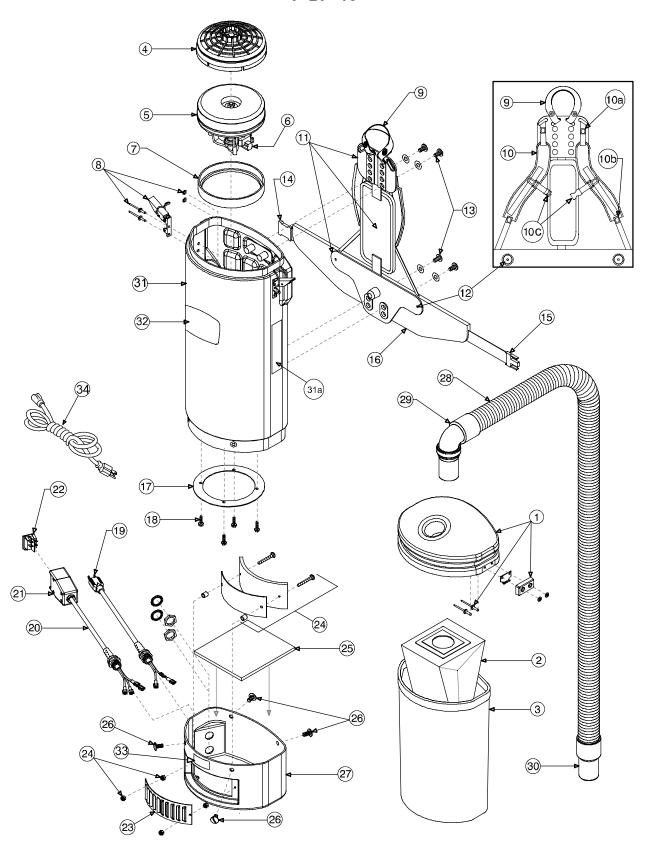
TROUBLESHOOTING

- 1. If the vacuum will not operate, check:
 - a. The power supply cord at the wall outlet.
 - b. The power supply cord at the vacuum.
 - c. That the switch is in the "on" position and functioning properly.
- If the pigtail (18" power cord) is getting warm, check to see that the extension cord does not exceed a length of 50 feet at 16 gauge or 100 feet at 14 gauge. Longer cords will overheat and damage the vacuum.
- 3. If the exhaust that comes out of the bottom of the vacuum is warmer than usual, check and/or clean all four filters.
- 4. If the power switch fails, check the circuit breaker. If that is not the problem, see an authorized servicing dealer.
- 5. If loss of suction occurs:
 - a. Check that debris is not plugging the hose, wand, and/or floor tool.
 - b. Check and/or clean both micro and cloth filters
 - Check that the hose cuffs are fitting tightly on the hose and are not cracked.
 - d. Check that the cap is properly attached to the body.

SPECIFICATIONS

MODEL	V-BP-10
DIMENSIONS	10 in/254 mm W x 25 in/635 mm H x 8 in/203 mm D
WEIGHT	11.5 lb / 5.2 kg
VACUUM MOTOR	120V/60Hz, 1.8 hp / 1.34 kW, 1 stage
WATER LIFT	100 in / 254cm
AIRFLOW	150 cfm / 4.2 m ³ /h
FILTRATION	99.79% @ .3 microns with optional high filtration media disc
PRODUCTIVITY	10,000 ft ² / 929m ² /hr.
VACUUM BAG CAPACITY	9.8 qt / 10.7 L
POWER CORD LENGTH	50 ft / 15m
VACUUM HOSE LENGTH	5 ft / 1.5m
CONSTRUCTION	Polyethylene
SOUND LEVEL	70dB(A)

V-BP-10



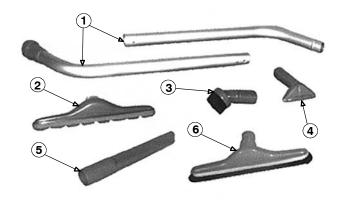
V-BP-10

REF	PART #	DESCRIPTION	QTY.
1	1064562	COVER ASSY [V-BP-10]	1
2	613020	BAG, FLTR, PAPER [10 PACK]	1
3	613021	FILTER, CLOTH, MICRO	1
4	612357	FILTER, DOME [W/ FOAM MEDIA]	1
i '	612358	FILTER, FOAM [MEDIA DOME]	1
,	612359	DISC, HI FILTRATION, 2-PACK (OPTIONAL)	1
5	612370	MOTOR, VACUUM, 120VAC, 1340WATT [SUPERCV]	1
6	612367	BRUSH SET, CARBON [F/1340W MOTOR, SUPERCV]	1
7	612309	SEAL, MOTOR	1
8	613061	HANDLE, W/ RIVET AND WASHER SET	1
9	613054	HANDLE, CARRY W/ RIVET AND WASHER SET	1
10	613055	STRAP ASSY, SHOULDER [W/ STERNUM STRAP]	1
10a	612327	BUCKLE, ADJUSTMENT, SHOULDER STRAP, TOP	1
10b	612328	BUCKLE, ADJUSTMENT, SHOULDER STRAP, BTM	1
10c	9005106	BUCKLE, TOP, MAL & FEM	1
11	613024	PLATE ASSY, BACK [2 PC]	1
12	612330	KIT, BARREL NUT CONNECTION SET	1
13	612331	BACKPLATE KIT, BLK	1
14	612332	HANGER, KEEPER [WAIST BELT]	1
15	612333	LATCH, WAIST BELT	1
16	612334	BELT [WAIST]	1
,	613022	PLATE, BACK, COMPLT [2 PC]	1

REF	PART #	DESCRIPTION	QTY.
17	613062	PLATE, MOUNT, MOTOR	1
18	612346	RING KIT, CMPR	1
19	613025	• CORD, 16GA/3, 018.0L, W/ GRIP	1
20	612340	VR, CORD KIT, W/ SWITCH BOX [QUARTER]	1
	612338	SWITCH, CORD [W/CRIMPS QUARTERVAC, 120V]	1
21	612342	BOX, SWITCH [W/ VELCRO AND SCREWS]	1
22	612316	SWITCH, ON-OFF [DP]	1
23	613063	PLATE, LOUVER, EXHAUST	1
24	613064	SOUND/EXHAUST ASSY	1
25	613065	INSULATOR, ACSTC, FELT, LRG	1
26	613066	SCREW KIT, CAP, BOTTOM	1
27	1064564	CAP, BOTTOM [V-BP-10]	1
28	613068	HOSE, W/ CUFF [STATIC DISSIPATING]	1
29	613069	CUFF, W/ SWIVEL, BLK, REPLMT	1
30	612323	CUFF, HOSE, SWIVEL, BLK, 1.50, REPLMT	1
31	1064563	HOUSING, BAG [V-BP-10]	1
31a	1065058	LABEL, WARNING [EN]	1
31a	1065059	LABEL, WARNING [ES]	1
32	1060464	LABEL, LOGO, 05.0L DUAL [TENNANT/NOBLES]	1
33	1065004	LABEL, HEPA	1
34	612718	CORD, EXTN, 50FT, YEL, W/ WRAP	1

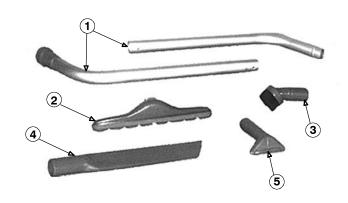
[•] RECOMMENDED STOCK ITEMS

RESTAURANT VAC TOOL KIT



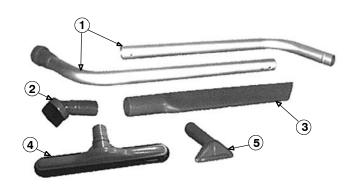
	REF	REF PART # DESCRIPTION		QTY.
•	V	612575	TOOL KIT, VACUUM, 1.5D [RESTAURANT]	1
4	1	612596	TOOL, WAND, 1.5 X 56.0, ALM [2PC 2-BEND]	1
4	2	612600	TOOL, FLOOR, 1.5X14.0 [W/ SCALLOPS]	1
4	3	612582	VR, TOOL, BRUSH, DUST, 1.50D W/ REDUCER	1
4	4	612586	TOOL, 1.50, 5.0 [UPHOLSTERY]	1
	5	612578	TOOL, 1.50ID X 11.0L [CREVICE]	1
4	6	612604	TOOL, FLOOR, 1.5X14.0 [HARDFLOOR W/ NYL]	1

COMMERCIAL VAC TOOL KIT



R	EF	PART #	DESCRIPTION	QTY.
∇		612576	TOOL KIT, VACUUM, 1.5D [COMMERCIAL]	1
•	1	612596	TOOL, WAND, 1.5 X 56.0, ALM [2PC 2-BEND]	1
•	2	612600	TOOL, FLOOR, 1.5X14.0 [W/ SCALLOPS]	1
•	3	612582	VR, TOOL, BRUSH, DUST, 1.50D W/ REDUCER	1
A	4	612579	TOOL, 1.50ID X 17.0L [CREVICE]	1
A	5	612586	TOOL, 1.50, 5.0 [UPHOLSTERY]	1

E-Z GLIDE™ COMMERCIAL VAC TOOL KIT



REI	F	PART #	DESCRIPTION	QTY.
∇		612283	TOOL KIT, VACUUM, 1.5D [E-Z GLIDE]	1
•	1	612596	TOOL, WAND, 1.5 X 56.0, ALM [2PC 2-BEND]	1
A 2	2	612582	VR, TOOL, BRUSH, DUST, 1.50D W/REDUCER	1
A :	3	612579	TOOL, 1.50ID X 17.0L [CREVICE]	1
A '	4	612603	TOOL, FLOOR, 1.5X14.0 [E-Z GLIDE W/ NYL]	1
A !	5	612586	TOOL, 1.50, 5.0 [UPHOLSTERY]	1

∇ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

TURBO FLOOR TOOL



REF	PART#	DESCRIPTION	QTY.
1	612607	BRUSH KIT, TURBO, W/ WAND, 1.25 11INCH	1

JETSWEEP™ FLOOR TOOL



REF	PART #	DESCRIPTION	QTY.
1	612648	TOOL, FLOOR, 1.5 X 20[JET SWP NYL BRUSH]	1

North American Commercial Limited Warranty

MODEL	Rotationally Molded	<u>Parts</u>	<u>Labor</u>	<u>Travel</u>	<u>Hourmeter</u>
	<u>Components</u>			90 days (No travel on cord-electric	
All non-rider machines except those listed below	10 years	3 years	3 years	models, 3540, battery Typhoon or V-WD-16B)	2500
T7, R14, Speed Scrub Rider, Strive Rider	10 years	3 years	3 years	90 days	1500
7100 ¹ , EZ Rlder HP ¹	10 years	3 years	2 years	6 months	2000
6100, 7100 ² , EZ Rider HP ²	10 years	2 years	6 months	6 months	1000
1000, 3220, Anser, Viper, EX-SPOT-2, V-HDU-14	10 years	1 year	1 year	None	N/A
V5, 3400, 3200, 110, 3610, 3620, S8, 3090, 3110 ³ , 3120 ³ , 250, Tidy-Vac, TV-1200, Pathmaker, Scout 27, Scout 24, Scout 28, Cyclone, Ultraglide ³ , V-CAN-5, SW-27P, SW-24, SW-28, Blower, V-BP-5, V-BP-6, V-BP-10, V-SMU-14 ⁴ , V-DMU-15 ⁴	1 year	1 year	1 year	None (Except 3610, 3620, S8, Scout 24, Scout 28, SW-24 and SW-28 for 90 days)	N/A

¹ For machines shipped from Tennant Company on or after 2/1/2008

NEW MACHINE WARRANTY

Tennant Company warrants to the original purchaser, for the above-stated periods (whichever occurs first), that machines will be free from defects in workmanship and material, provided that machines are installed, operated, and maintained in accordance with Tennant Company's written manuals or other instructions.

This warranty does not apply to damage or failure caused by accident, freight damage, misuse, negligence, abuse, improper repair, or maintenance of the machines. Please refer to Operator Manual for proper machine operation and maintenance instructions.

The warranty period begins on the installation date at the end-user site. A Machine Installation/Warranty Report form included with Operator's Manual must be completed and returned immediately at the time of purchase. If proof of purchase is unavailable, the warranty begins ninety (90) days after original sale to an Authorized Tennant dealer.

Demonstrator machines purchased from Tennant Company carry the same warranty as a new machine.

LABOR AND TRAVEL WARRANTY

Tennant Company will, at its option, provide labor and travel or pay for outside repair for the above-stated periods.

PARTS WARRANTY

Parts replaced or repaired under this warranty are guaranteed for the remainder of the warranty period. The parts warranty on batteries is pro-rated for one (1) year from the Tennant Company shipping date. Consumable parts, expected to wear from normal use, are not covered under the parts warranty. These consumable parts include, but are not limited to: belts, drive chains, brushes, pad drivers, filters, squeegees, tires [pro-rated for one (1) year on rider machines], skirts, hand grips, battery cables, power cords, cord restraints, external hoses, vacuum bags, fuses and carbon brushes. Battery chargers and accessories are warranted for one (1) year.

REPAIR PARTS WARRANTY

After the warranty period expires, repair parts supplied by Tennant Company are warranted against defects for the period of ninety (90) days. The repair parts warranty only covers parts, not labor or travel.

SERVICE LABOR WARRANTY

Labor and travel performed by a Tennant Company service representative are warranted for thirty (30) days from the date the repairs are completed. This policy does not cover work performed by any service company other than Tennant Company, and is restricted to the specific repair operation or component for which a claim is made.

DISCLAIMER

TENNANT COMPANY EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. TENNANT SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER DIRECT OR INDIRECT, INCLUDING, BUT NOT LIMITED TO, BUYER'S LOSS OF MATERIAL OR PROFITS, INCREASED EXPENSE OF OPERATION, BODILY INJURY, LOSS OF USE OF PROPERTY OR DOWNTIME.

Tennant Company reserves the right to change its warranty policy without notice.

Tennant Company • P.O. Box 1452 • Minneapolis, MN 55440-1452 USA • (800) 553-8033 • (763) 513-2850

² For machines shipped from Tennant Company prior to 2/1/2008

³Three (3) year limited warranty on electric motors

⁴Two (2) year limited warranty on electric motors