

24" Battery Sweeper

Model No:
614214-Tennant 3610
614213-Nobles Scout 24

Operator and Parts Manual

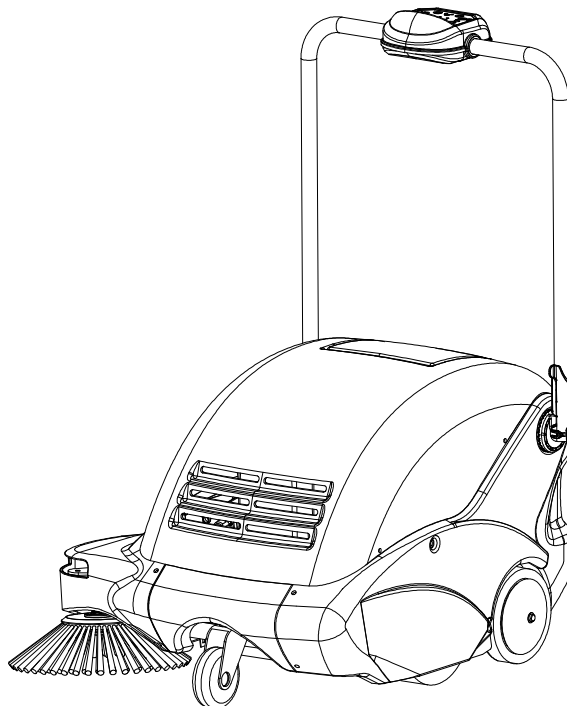
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614201
Rev. 00 (03-04)

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SAFETY PRECAUTIONS:

This machine is intended for commercial use only. It is designed to pick up dirt, dry debris and dust from dry hard floor or carpeted surfaces in an indoor environment. It is not constructed for any other use. The pick up of any type of liquid substance or dangerous/ toxic materials is prohibited.


All operators must read, understand and practice the following safety precautions.

The following warning alert symbol and the "FOR SAFETY" heading are used throughout this manual as indicated in their description:

 **WARNING:** To warn of hazards or unsafe practices which could result in severe personal injury or death.

FOR SAFETY: To identify actions which must be followed for safe operation of equipment.

Failure to follow these warnings may result in: personal injury, electrocution, electric shock, fire or explosion:

 **WARNING:** Do Not Operate Machine In Or Near Flammable Liquids, Vapors Or Combustible Dusts.

This machine is not equipped with explosion proof motors. The electric motors will spark upon start up and during operation which could cause a flash fire or explosion if machine is used in an area where flammable vapors/liquids or combustible dusts are present.

 **WARNING:** Do Not Pick Up Flammable Or Toxic Material, Burning Or Smoking Debris.

 **WARNING:** Do Not Charge Batteries With Damaged Power Cord. Do Not Modify Plug.

If the charger supply cord is damaged or broken, it must be replaced by the manufacturer or it's service agent or a similarly qualified person in order to avoid a hazard.

 **WARNING:** Disconnect Battery Cables and Unplug Charger Power Cord Before Servicing Machine.

 **WARNING:** Do Not Use Outdoors Or On Wet Surfaces. Do Not Expose To Rain. Store Indoors.

The following information signals potentially dangerous conditions to the operator or equipment:

FOR SAFETY:

1. **Do not operate machine:**
 - In flammable or explosive areas.
 - Unless trained and authorized.
 - Unless operation manual is read and understood.
 - If not in proper operating condition.
 - Without hopper and/or filters in place.
2. **Before starting machine:**
 - Make sure all safety devices are in place and operate properly.
3. **When using machine:**
 - Do not pick up burning or smoking debris, such as cigarettes, matches or hot ashes.
 - Do not operate in standing water.
 - Report machine damage or faulty operation immediately.
 - Go slow on inclines and slippery surfaces.
 - Do not leave unattended or on an unlevel surface.
 - Do not pick up cables, strings, wires or other similar material.
 - Make sure area is illuminated.
 - Never allow children to play on or around.
 - Do not transport riders or objects.
 - Wear a dust mask, protective glasses and gloves in dusty environments.
4. **Before leaving or servicing machine:**
 - Stop on level surface.
 - Turn off machine.
5. **When servicing machine:**
 - Avoid moving parts. Do not wear loose jackets, shirts, or sleeves.
 - Disconnect battery connection and charger plug before working on machine.

- Use manufacturer supplied or approved replacement parts.
- All repairs must be performed by a qualified service person.
- Do not modify the machine from its original design.

6. When transporting machine:

- Turn machine off.
- Get assistance when lifting machine.
- Use a recommended ramp when loading/unloading into/off truck or trailer.
- Use tie-down straps to secure machine to truck or trailer.

WARNING LABEL

The safety label appears on the machine in the location indicated. Replace label if it becomes damaged or illegible.

 **WARNING LABEL - Located on MACHINE COVER.**



TECHNICAL CHARACTERISTICS:

Description		
Width-including side brush	600mm	23,75"
Length-including side brush	730mm	28,75"
Height-including handle	950mm	37,5"
Machine height W/Handle folded	559mm	22"
Maximum sweeping width	650mm	25"
Weight	53Kg	115lbs
Hopper capacity (real)	9,3 Lt	1,25 Cu.ft
Run time	2h	
Filtering surface	0,95mq	10 sq.ft
Productivity Rate-Theoretical	1800mq/h	18000 sq.ft
Productivity Rate-Estimat\Actual	900 mq/h	9000 sq.ft
Total power consumption	360W/18A	360W/18A
Type of battery	Sealed maintenance free 42A/5h	
Noise level	61dba	

UNPACKING:

Unpack the machine carefully avoiding movements that can cause damage. Once the machine is unpacked, check the condition of its parts. In case the machine is broken in any of its parts, contact immediately our authorized dealer. For shipping and packaging purposes, some assembly is required. For correct assembling instructions, see machine preparation

Packaging contents:

- Machine
- Side brush
- Use and maintenance manual
- Maintenance free type battery
- 4mm hex wrench
- 20 amp spare fuse
- Charger cord

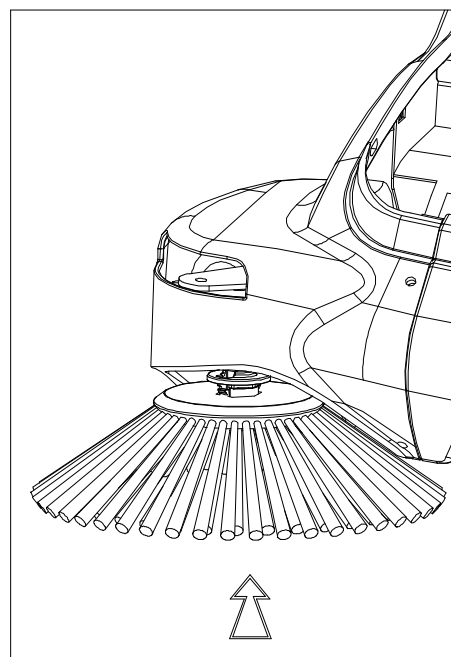
In the case anything of the above should be missing, contact immediately our authorized dealer.

Assure that all packaging material (plastics, carton, pallet, etc.) are collected and stored away from children.

MACHINE PREPARATION:

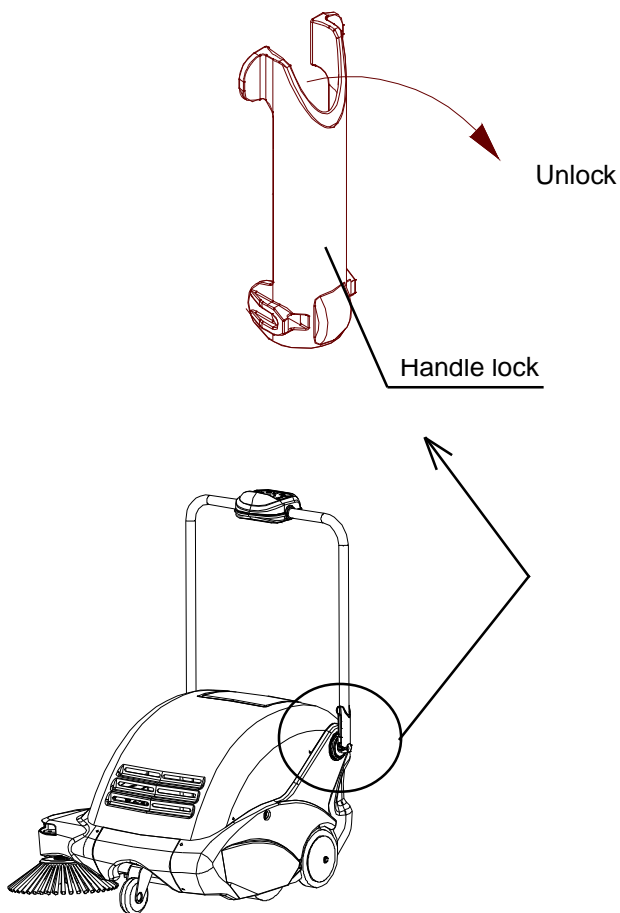
Side brush assembly:

-Raise the front part of the machine, slide the brush on to the shaft until it locks into place .



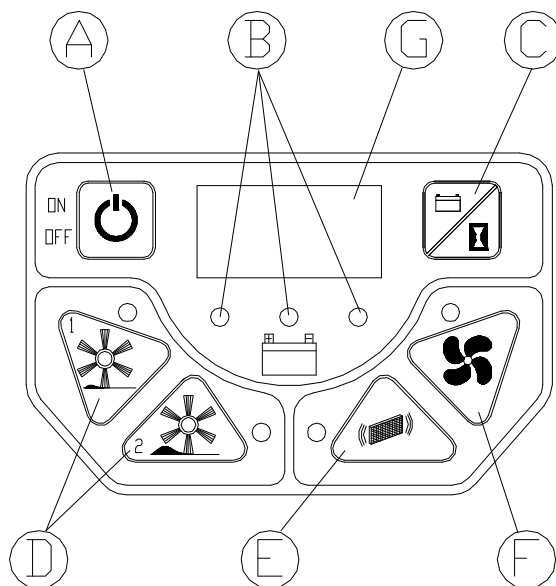
Handle assembly:

- Release the handle locks as shown
- Rotate handle into working height position
- Return handle lock to the locking position



MACHINE AND CONTROL PANEL COMPONENTS:

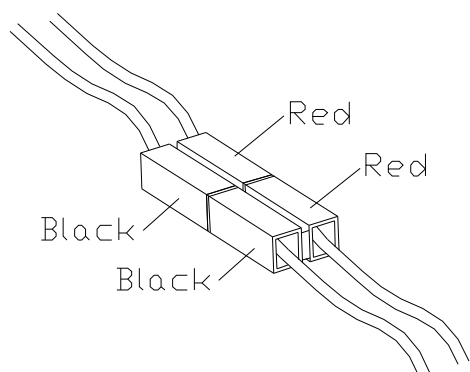
The machine is equipped with a simple panel control that controls all the operational functions of the machine.



- A) On-Off main switch of the machine
- B) Led indicator for battery charge
- C) Display switch
- D) On-Off sweeping mode switches 1 and 2
- E) Manual operating switch of the filter shaker
- F) Vacuum fan switch
- G) Numeric display

Connecting the Battery:

Remove the top cover to gain access to the battery using the 4 mm hex wrench provided.



- Locate the two Red/Black connectors.
- Align the colors of the connectors.
- Plug the two connector together.

The functions located on the control panel can be explained as follows:

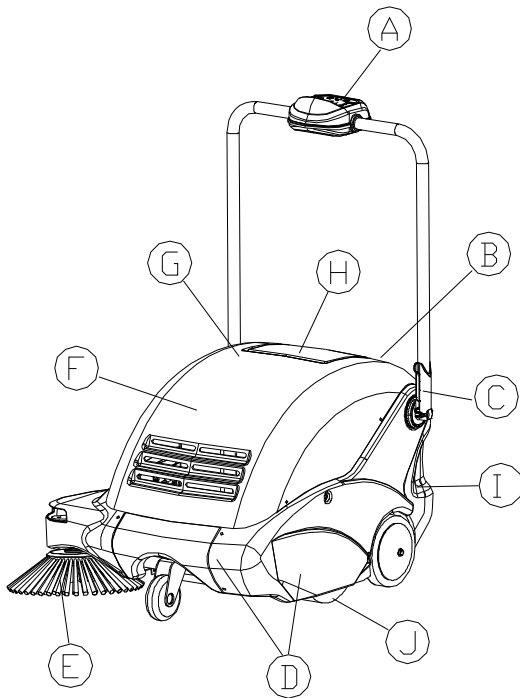
- A) Main switch to turn on and off the machine.
- B) Led indicator for battery charge. Green for when the machine is charged, red for when the machine is discharged and yellow for when the machine charge is in reserve or when the machine is being charged.
- C) Numeric display switch: pressing this switch, a part from seeing the machine voltage, the display indicates the working hours of the machine (pressing the switch once) and minutes (pressing the switch twice).
- D) On-Off sweeping mode switches 1 and 2: these two switches allow the machine to work with two separate sweeping mode: mode 1 for light debris collection and mode 2 for heavy debris collection.
- E) Manual operating switch of the filter shaker gives the possibility in shaking the filter at any time during work. This is to be intended as an addition to the automatic filter shaking that cycles every 3 minutes.
- F) Vacuum fan: the vacuum fan automatically activates when sweeping mode is on. Therefore the switch is used when the requirements are to switch off the vacuum fan during sweeping mode.
- G) Numeric display

USE OF THE ON-BOARD BATTERY CHARGER:

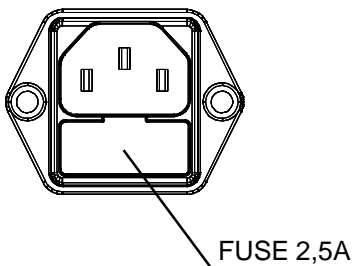
When the battery on the machine is discharged, the red led on the control panel illuminates and all functions of the machine will automatically stop: the operator must then turn off the machine and start the charging procedure by connecting the machine battery charger plug into an AC electrical outlet. (during charging the yellow led on the display will be lit): when the machine is fully charged the green led will be lit, the battery charger plug can be disconnected and the machine is ready for operation.

IMPORTANT NOTE: USING THE MACHINE BEFORE THE BATTERY HAS FULLY CHARGED AND A GREEN LIGHT DISPLAYED WILL REDUCE THE LIFE AND RUN TIME OF YOUR BATTERY AND VOID THE WARRANTY. The on-board charger is specifically designed for Sealed batteries.

NOTE: If during working mode the machine battery charger plug is connected, the machine will automatically stop all its functions. Such operation is forbidden.



- A) CONTROL PANEL
- B) CHARGER FUSE (2,5A)



- C) HANDLE LOCKS
- D) BUMPER
- E) SIDE BRUSH
- F) TOP COVER
- G) WARNING LABEL
- H) CHARGER CORD COMPARTMENT
- I) HOPPER
- J) BRUSH

STARTING OF THE MACHINE:

ATTENTION: the machine must be used only by authorized personal, DO NOT ABANDON the machine when switched on, do not use the machine for collecting liquid, turn the machine OFF before leaving the machine.

FOR SAFETY: DO NOT OPERATE MACHINE UNLESS OPERATION MANUAL IS READ AND UNDERSTOOD

To start the machine use the following procedures:

- Press the main ON/OFF button
 - Check that the green led is lit indicating a proper battery charge level
 - Select the appropriate sweeping mode
- ON/OFF sweeping mode button 1 - for light debris and smooth surfaces
- ON/OFF sweeping mode button 2 - for heavy debris and concrete, asphalt and carpeted surfaces. Notes: using sweeping mode 2 will reduce the maximum machine run time.

OPERATIONS TO MAKE FOR CORRECT USE:

After having followed all operations for starting the machine you are now ready to work with the machine as a sweeper. To achieve the maximum performance follow the procedures in this manual to avoid the risk of damaging the machine.

It is important:

- Not to use the machine for collecting wires, ropes, strings, water or other liquids .
- In the presence of large volume debris (paper, leaves, etc.) raise the front part of the machine by pushing down the handle bar. Shake the filter at the end of the working

session.

ATTENTION: This machine is not intended for wet surface sweeping. However, if you encounter a slightly damp environment (moisture buildup on the floor), it is required that you turn the vacuum fan switch off to prevent filter damage. Machine damage due to wet debris pickup is not covered under warranty.

ATTENTION: If the sweeper is lying inactive for a period longer than one month you must disconnect the red and black battery clips.

If the sweeper is lying inactive for a period longer than one week you should leave it connected to the electrical outlet.

WASTE HOPPER EMPTYING AND CLEANING:

Before proceeding in removing the hopper assure that the machine is turned off.

ATTENTION: WASTE DISPOSAL MUST BE DONE BY FOLLOWING THE LAWS IN FORCE.

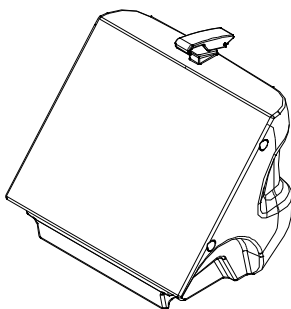
To clean the waste hopper proceed as follows:

- Release the hopper clamp by lifting and then pushing on the back of the clamp.
- Pull out the hopper by its handle
- Empty the hopper

To put back the hopper proceed as follows:

- Slide the hopper back into place
- Lower and press the hopper clamp to lock into place.

Note: It is recommended to clean the pre-filter daily. See cleaning and servicing the filter-page 7.



MACHINE MAINTENANCE:

All service performed should be completed by persons who understand the machine or an AUTHORIZED SERVICE CENTER. It is recommended that only authorized repair parts be used for service.

FOR SAFETY: When servicing the machine disconnect the battery connection and battery charger plug before working on the machine

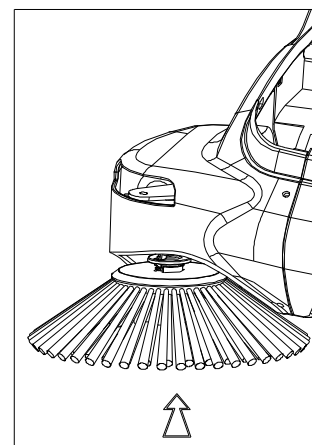
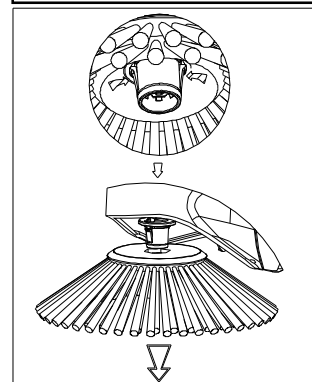
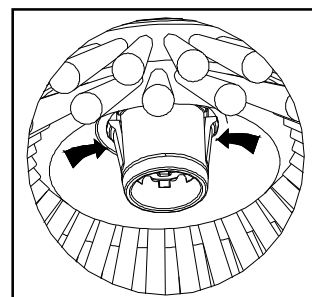
MAINTENANCE CHECK LIST	On delivery					
	Daily	Every 10 hours	Every 20 hours	Every 50 hours	Every 100 hours	
The belts for slackening						x
The tightness of nuts and screws					x	
The brushes for wear					x	
The gaskets for wear and leakages			x			
If all the functions are in working order	x	x	x	x	x	x
Empty hopper		x				
Remove and shake pre-filter		x				
Check main filter				x		

SIDE BRUSH REPLACEMENT:

Raise the front part of the machine.

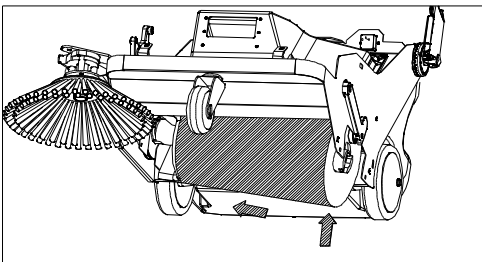
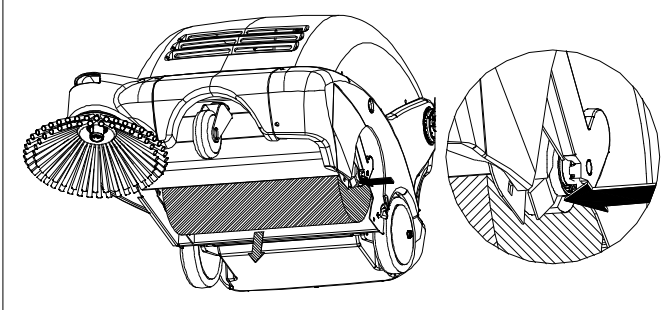
Press in the 2 tabs (indicated by the arrows) and pull off the brushes.

Slide the new brush until it locks into place.



MAIN BRUSH REPLACEMENT:

- Tilt the machine backwards until the handle is touching the ground and the main brush is easily reached.
- Manually turn the brush until a black button is seen on the right hand side of the brush core.
- Press the button and push to dis-engage the brush.
- Insert the new brush following the guide.



CLEANING AND SERVICING THE FILTERS:

The filters are very important components of the machine and essential for correct operation. Proper filter maintenance will allow you to obtain the best performance from your machine.

Pre-Filter

Clean Daily

- 1) Remove the debris hopper to access the pre-filter
- 2) Release the two metal retaining clip arms that secure the pre-filter in place. Hinge the retaining clip arms outward and remove the pre-filter.
- 3) Shake the pre-filter into a debris receptacle.
- 4) Replace the pre-filter and secure with retainer clips.

Main Filter

The Main filter can be cleaned in any of the following three ways:

- 1) by means of the automatic filter shaker:

During operation, the machine will automatically activate the filter shaker every 3 minutes.

- 2) by means of manually activating the filter shaker:

Just a simple command is needed to keep the filter in perfect working order: press the button marked 'E' and hold it down for a few seconds. Repeat this operation 4 or 5 times. Remember that the cleaner the filter, the better the results of your cleaning session. It is recommended to carry this

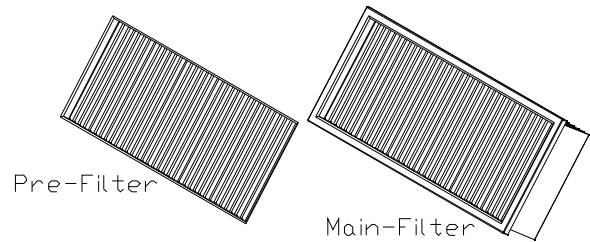
operation out at the end of each work cycle.

NOTE: dusty environments

If you are using the machine in a dusty environment it is a good idea to use the manual filter shaker more frequently.

- 3) by manually cleaning the filter:

Manually clean the filter when the filter shaker is not enough to keep the filter clean and/or every 20 hours of work. Before carrying out any kind of *procedure* on the machine, make sure it is turned off and that all functions are deactivated



- 1) Remove the rear hopper

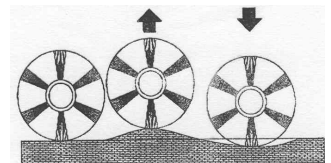
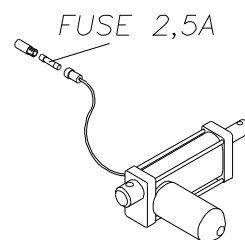
- 2) Take the filter out

- 3) Blow compressed air into the side of the filter (at a pressure of 87 psi at the most). **Safety glasses required**

- 4) Reinstall the filters and the rear hopper.

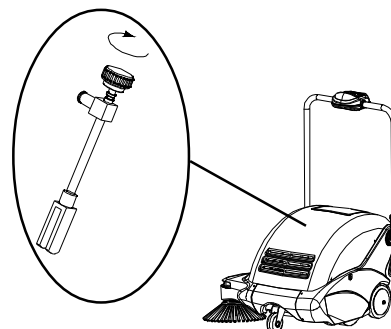
ACTUATOR FUNCTION:

The system allows the brush to immediately and constantly follow all types of surfaces, self adjust to surfaces and self adjust for main/side brush wear through out the life of the brushes



ADJUSTING THE SIDE BRUSH :

To adjust the side brush, remove the top cover, and turn adjusting handle in the direction required.



CONTROL PANEL DISPLAY CODES:

Safety code	Cause	Actions to take
C22	Short circuit brush protection: stops all functions	Reset by turning OFF the machine and starting again
C14	Dissipater at high temperature. Activates if temperature is over 194° F	The machine resets when temperature lowers under 176° F
FS0	Worn brushes	Replace brush
Yellow led lit	Battery in reserve	Machine continues to work. Only a warning that the battery is near discharge
Red led flashes	Battery discharged	Machine stops all functions Turn off machine and charge the battery
P1.X	Sweeping mode 1 button programming activated	See programming
P2.X	Sweeping mode 2 button programming activated	See programming
SF.X	Filter shaker program setting activated	See programming

X = A VALUE FROM “0” TO “9”

PROGRAMMING:

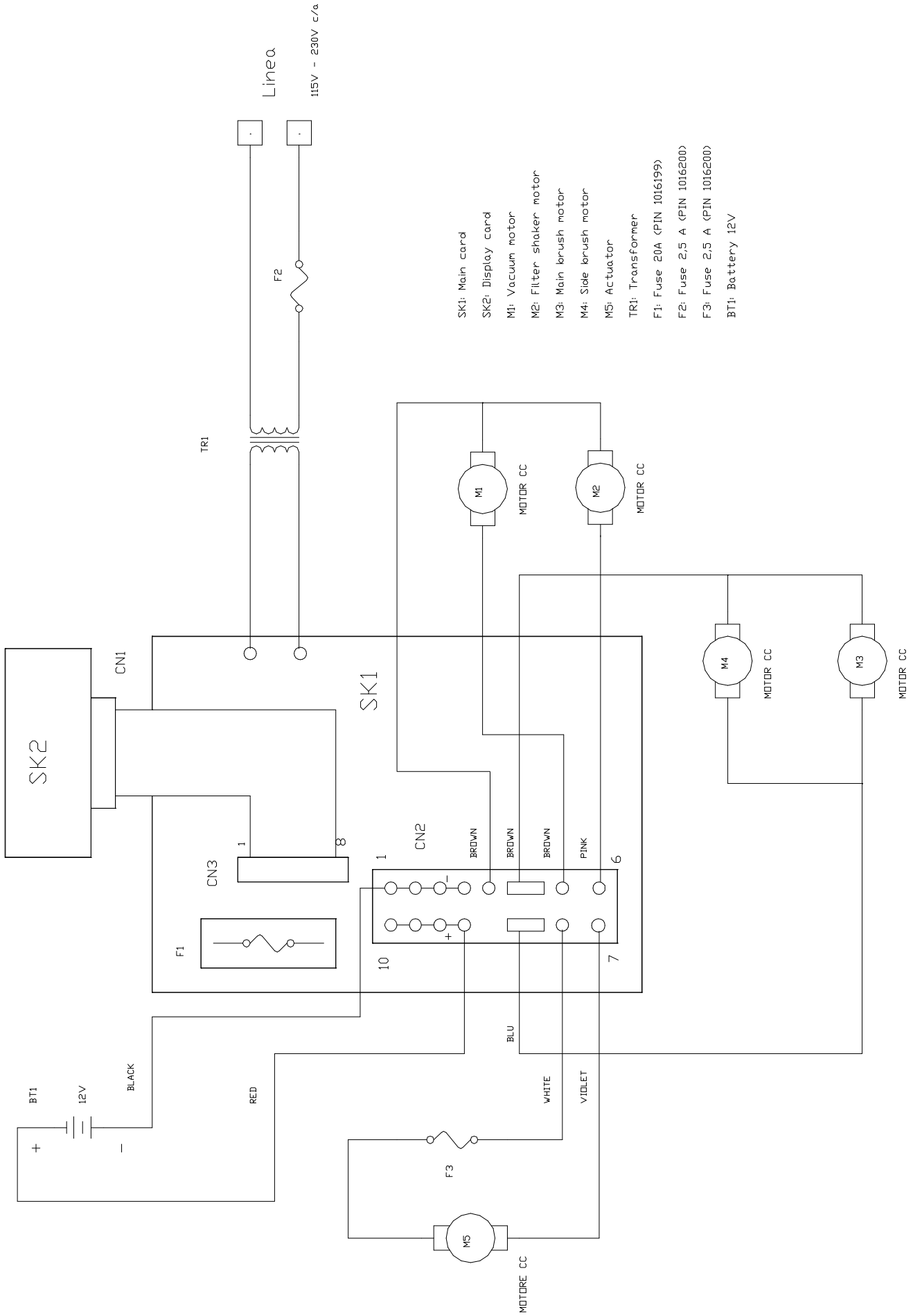
Your machine is factory programmed for optimum performance. It does not require further programming. However, if you encounter one of the following codes; P1.x, P2.x or SF.x (x= a value from 0 to 9), use the following programming instructions to reset your display. Operating the machine in a setting other than the factory setting may cause machine failure. Machine damage due to improper programming will void your warranty.

PROGRAMMING INSTRUCTIONS:

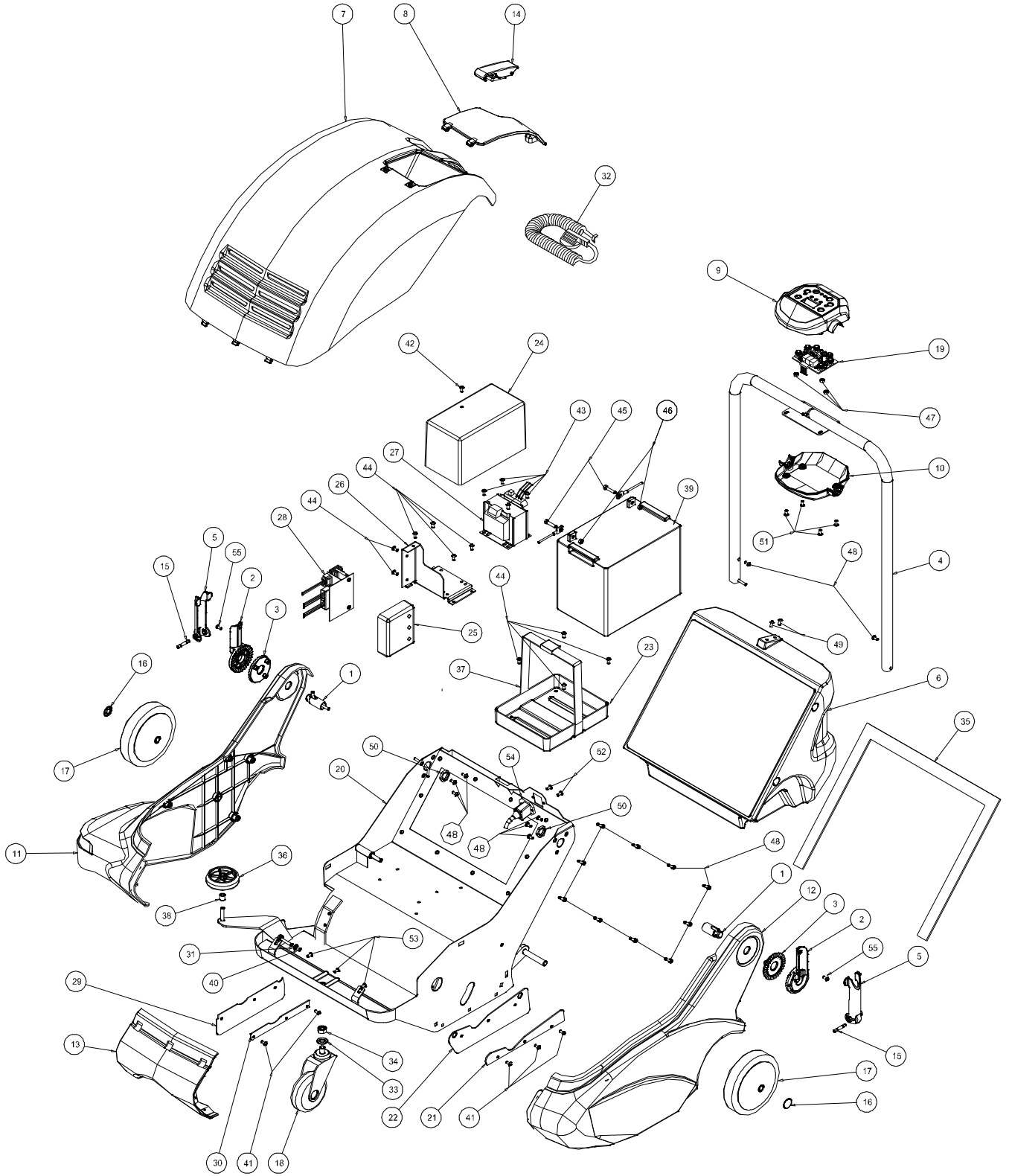
If your display reads P1.0 , P2.1 or SF.3 simply turn the main power off and back on again to reset display (these are the factory programmed settings). If your display reads a value greater than stated above (ex. P1."5" , P2."7" , SF."9") continue to follow the instructions as described below.

To reprogram the machine to the factory settings, turn the main power ON and press and hold the display switch button (battery/time symbols) down for at least 3 seconds. P1.x will appear on the display. The P1 value should read "0" (ex. P1.0). If the value is greater than "0", press the vacuum fan button until the display reads P1.0. Press the display switch button again to advance to the next code. The P2.x value should read "1" (ex. P2.1). Press the vacuum fan button to properly set. Press the display switch one more time to advance to the last code. This code should read SF.3. If the value is not "3", press the filter shaker button until the display reads SF.3. To exist the programming mode, turn machine off.

ELECTRICAL SCHEMATIC:



CHASSIS GROUP



CHASSIS GROUP

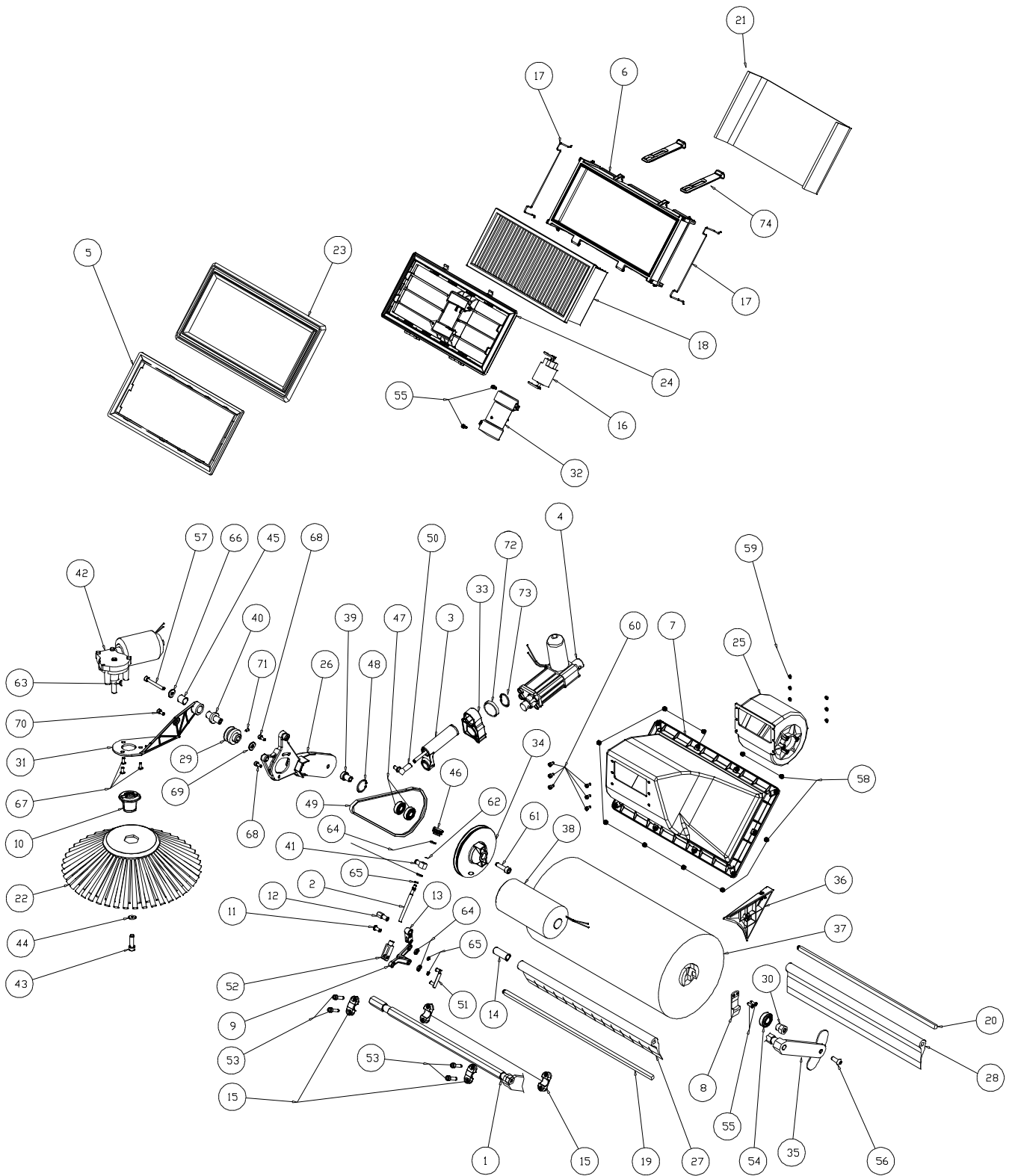
Ref	Part. No	Description	Qty
1	1016161	PIN, HANDLE, ROTATION	2
2	1016162	CLAMP, SERRATED, HANDLE LOCK	2
3	1016163	PAD, SERRATED, HANDLE LOCK	2
4	1016142	HANDLE, TUBE, W/GRIP	1
5	1016165	LEVER, LOCK, HANDLE	2
6	1016166	HOPPER	1
7	1016167	COVER, NOBLES, TOP W/WARNING LABEL	1
7	1016168	COVER, TENNANT, TOP W/WARNING LABEL	1
8	1016169	DOOR, TENNNAT	1
8	1016170	DOOR, NOBLES	1
9	1016172	PANEL, TOUCH, HOUSING TOP	1
10	1016173	HOUSING, CONTROL, BOTTOM	1
11	1016174	PANEL, RIGHT SIDE	1
12	1016175	PANEL, LEFT SIDE	1
13	1016176	COVER, FRONT	1
14	1016177	LATCH, HOPPER	1
15	1016178	PIN, LEVER, HANDLE	2
16	1016179	CLIP	2
17	1016180	WHEEL, REAR	2
18	1016181	CASTER, FRONT	1
19	1016182	● CONTROL, TOUCH, BOARD	1
20	1016183	FRAME, SCOUT 24 / 3610	1
21	1016184	PLATE, SKIRT, LEFT SIDE	1
22	1016185	● SKIRT, LEFT SIDE	1
23	1016186	TRAY, BATTERY	1
24	1016187	COVER, ELECTRONICS	1
25	1016188	COVER, CONTROL BOARD	1
26	1016189	BRACKET, ELECTRONICS	1
27	1016190	● TRANSFORMER	1
28	1016191	● CONTROL BOARD	1
29	1016192	● SKIRT, RIGHT SIDE	1
30	1016193	PLATE, SKIRT, RIGHT SIDE	1
31	1016206	WASHER, 6x12, UNI 6592, ZB	1

32	1016540	● CORD CHARGING 120V	1
33	1016208	WASHER, 15x24, UNI 6592	1
34	1016209	NUT, M12, DIN985, ZB	1
35	1016194	● GASKET, HOPPER	1
36	1016195	WHEEL, BUMPER	1
37	1016196	STRAP, BATTERY	1
38	1016197	SPACER	1
39	1016203	● BATTERY, 12V 42AH, MAINTENANCE FREE	1
40	1016210	RING, RETAINING, D.6, UNI7435	1
41	1016211	SCREW, 4x16, UNI 9707	6
42	1016212	SCREW, 4x12, UNI 5937, ZB	1
43	1016213	SCREW, 4x16, UNI 7687	4
44	1016212	SCREW, 4x12, UNI 5937, ZB	8
45	1016215	SCREW, 6x18, UNI 5937, ZB	2
46	1016216	NUT, M6, UNI 5588, ZB	2
47	1016217	NUT, M4, UNI 5588, ZB	3
48	1016218	SCREW	18
49	1016219	SCREW	2
50	1016497	Nut	2
51	1016221	SCREW, 5x16, UNI5739	4
52	1016222	SCREW	2
53	1016223	SCREW, 6x16, iso 7380, ZB	3
54	1016498	CHARGER WIRE HARNESS AND PLUG	1
55	1016207	SCREW	2
N/S	1016199	● FUSE, 20AMP, MAIN CARD	1
N/S	1016200	● FUSE, 2.5AMP, CHARGER & ACTUATOR	2
N/S	611909	LABEL, NOBLES	1
N/S	611922	LABEL, TENNANT	1
N/S	614204	LABEL, SCOUT 24	2
N/S	614203	LABEL, 3610	2
N/S	614202	LABEL, WARNING, SCOUT 24 / 3610	1
N/S	1016202	HARNESS, BATTERY	1

N/S = NOT SHOWN

● RECOMMENDED STOCK ITEMS

BRUSH AND FILTER GROUP



BRUSH AND FILTER GROUP

Ref.	Part. No	Description	Qty
1	1016230	SHAFT, DRIVE, MAIN BRUSH	1
2	1016231	ROD, ADJUSTER	1
3	1016232	GUIDE, ACTUATOR	1
4	1016233	● ACTUATOR	1
5	1016234	PLATE, FRAME, FILTER	1
6	1016235	FRAME, FILTER	1
7	1016236	HOUSING, BLOWER	1
8	1016237	RETAINER, LOCKING, MAIN BRUSH	1
9	1016238	ARM, DRIVING, SIDE BRUSH	1
10	1016394	HUB, SIDE BRUSH, DRIVE	1
11	1016239	PIN	1
12	1016240	PIN, ARM, DRIVING	1
13	1016241	ROD, CONNECTING	1
14	1016242	SPACER, SKIRT	1
15	1016243	SUPPORT, SHAFT, MAIN BRUSH DRIVE	2
16	1016244	● MOTOR, SHAKER	1
17	1016245	● RETAINER, FILTER, FRAME	2
18	1016246	● FILTER, PAPER, FLUTED	1
19	1016247	PIN, HOLDER, FRONT SKIRT	1
20	1016248	PIN, HOLDER, REAR SKIRT	1
21	1016249	● FILTER, PRE-FILTER	1
22	1016250	● BRUSH, SIDE	1
23	1016251	● GASKET, FILTER	1
24	1016252	FRAME, SHAKER	1
25	1016253	● BLOWER, FAN, MOTOR	1
26	1016254	ARM, BRUSH, MAIN	1
27	1016255	● SKIRT, FRONT	1
28	1016256	● SKIRT, REAR	1
29	1016257	PULLEY	1
30	1016258	PIN, BRUSH, MAIN	1
31	1016259	ARM, BRUSH, SIDE	1
32	1016260	COVER, MOTOR, SHAKER	1
33	1016261	SPRING, GUIDE	1
34	1016262	PULLEY	1
35	1016263	ARM, BRUSH, MAIN	1
36	1016264	CONVEYOR	1

37	1016265	● BRUSH, MAIN, W/LOCKING RETAINER	1
38	1016266	● MOTOR, BRUSH, MAIN	1
39	1016267	PIN, PULLEY	1
40	1016268	PIN, ROTATION	1
41	1016269	JOINT, ARTICULATED, ADJUSTOR ROD	1
42	1016270	● MOTOR, BRUSH, SIDE	1
43	1016271	SCREW, 4x16, UNI5739	1
44	1016279	WASHER, D.4x16	1
45	1016280	WASHER, GLYCODUR GLY.PG 14-16-15 F	1
46	1016272	KNOB	1
47	1016273	BEARING, 6001-2RS1-SKF	2
48	1016274	RING, SNAP	1
49	1016275	● BELT, BRUSH, W/INSTRUCTIONS	1
50	1016276	JOINT, BALL	1
51	1016277	ARM	1
52	1016278	LINK	1
53	1016281	SCREW, 6x20, UNI 5931	4
54	1016282	BEARING, 6002RS	1
55	1016283	SCREW, 3.9x13, UNI 6954	4
56	1016284	SCREW, 8x16, ISO 7380	1
57	1016285	SCREW, 6x50, UNI 5931	1
58	1016286	NUT, M5	10
59	1016287	NUT, M4	6
60	1016212	SCREW, 4x12, UNI 5739	6
61	1016289	SCREW, 8x35, UNI5931	1
62	1016290	O-RING 4.8x8,1x1,78	1
63	1016291	KEY 3x3,7 UNI 6606	1
64	1016206	WASHER , 6x12, UNI 6592, ZB	4
65	1016210	SEEGER	3
66	1016294	WASHER, D6x24	1
67	1016295	SCREW, 6x16	1
68	1016296	SCREW, 5x12	3
69	1016297	WASHER 0,3	1
70	1016296	SCREW, 5x12	1
71	1016299	SCREW 4x8	1
72	1016300	SPACER	1
73	1016301	RING, RETAINING	1
74	1016198	● LATCH, RUBBER, FILTER	2

N/S = NOT SHOWN

● RECOMMENDED STOCK ITEMS

U.S. AND CANADIAN NEW MACHINE WARRANTY POLICY

Our Commitment to Customer Satisfaction

The warranty terms outlined below are in lieu of any other warranties, either expressed or implied, including any implied warranty of merchantability, fitness for a particular purpose or otherwise. Under no circumstances will seller be liable for any loss, damage, expense or consequential damages arising in connection with the use or inability to use, these products.

This warranty does not apply to damage or defect caused by accident, misuse, negligence, abuse, fire or to any Tennant/Nobles product that has been serviced by anyone other than an authorized Nobles/Tennant service representative. Housings or parts that have become damaged as a result of improper use of the machine are excluded from this warranty. Refer to Owner's Manual for proper machine use and maintenance. Parts that are expected to wear from normal use and, therefore, are not covered under the parts warranty include: batteries (warranty prorated for one year); bearings; belts; brushes; filters; squeagees; switches; and tires.

This warranty commences on the date of purchase of the product by the original end user from an authorized Tennant/Nobles sales representative, subject to proof of purchase. **A Machine Installation/Warranty Report form included with the Owner's Manual must be completed and returned immediately at the time of purchase.** If proof of purchase date is unavailable, the warranty begins 90 days after the sale of the product to an authorized Tennant/Nobles dealer.

10-3-3 Warranty* for Non-Rider Models

- Subject to the conditions outlined above, Tennant warrants the rotationally-molded polyethylene housings and parts on all of its machines to be free from defects in materials and workmanship, under normal use and service for ten (10) years to the original end user.

- Under this warranty, Tennant guarantees the performance of non-polyethylene parts and components on Tennant/Nobles models to be free from defects for up to three (3) years or 2,500 hours of operation, whichever comes first, to the original end user. Parts replaced or repaired under this warranty are guaranteed for the remainder of the original warranty period.

- Labor charges are covered for three (3) full years (includes polyethylene and non-polyethylene parts) from the date of purchase for Tennant/Nobles products, provided an authorized Tennant/Nobles service provider is used for repair. Travel is covered for (3) months for battery walk-behind models. No travel coverage is extended for cord-electric models.

10-2-6 Warranty* for Rider Models

- Subject to the conditions outlined above, Tennant warrants the rotationally-molded polyethylene housings and parts on its rider models to be free from defects in materials and workmanship under normal use and service for ten (10) years to the original end user.

- Under this warranty, we guarantee the performance of non-polyethylene parts and components on rider models to be free from defects for up to two (2) years or 1,000 hours of operation, whichever comes first, to the original end user. Parts replaced or repaired under this warranty are guaranteed for the remainder of the original warranty period.

- Travel and labor charges are covered for six (6) months from date of installation. Tennant will, at its option, provide travel (maximum of 3 hours) and labor for repair, or pay for outside repair service in accordance with Tennant Company's flat rate schedule for certain warranty repairs.

***Product Exceptions and Exclusions:** A one year warranty is extended to the original end user against manufacturing defects and workmanship on non-wear components for these machines: model 1000 and Anser portable spotters; model 3200, TV1200, Pathmaker, 3220 and Viper vacuums; 3400, Tidy-Vac dry canister vacuums; model 3090 backpack vacuum; 110, 3610, 3620, Scout 24, 27, and 28 sweepers; model 200, and Cyclone dryers; and the TrailBlazer Series. The warranty for the 2100, 2120, 2130, 2140, 2150, 2260, and 2270 floor machines is three (3) years on parts and three (3) years labor. Battery chargers and all accessories are warranted for one year.

Date Purchased:	_____
Model Number:	_____
Serial Number:	_____

Please make sure to record this information. This information will be necessary for future warranty claims.

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