

PRODUCT CATALOG

Nineteenth Edition



End-Users! See Your Local Tornado Dealers to Buy

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3 EASY WAYS FOR TORNADO® <u>DEALERS</u> TO PLACE AN ORDER:



By Internet:

Email your order to sales@tornadovac.com or directly to one of our Inside Sales Representatives



By Phone:

Call **1-800-VACUUMS** and ask for an Inside Sales Representative.



By Fax:

Fax over your purchase order to Fax # 817-551-6507 to the attention of our Inside Sales Department.

If you should have an inquiry regarding a current order you have with Tornado just call **1-800-VACUUMS** and ask for an Inside Sales Representative (Please have the order number available).

For product literature, specifications, performance data, the latest pricing, or your local Tornado Representative's contact information, just visit us on the web at:

www.tornadovac.com

When placing an order with Tornado please make available your:

- Company Name or Account number
- Purchase Order (PO) number
- Part number/s
- Shipping Address

This information will allow us to process your order quickly and efficiently.

Unplug.

CORDLESS
LIGHTWEIGHT
WHISPER-QUIET



THE PAC-VAC® 6 ROAM



THE CK LW 13/1 ROAM

The Tornado® Roam Series Designed to Deliver . . .

Enjoy the Tremendous Productivity Gains and Convenience Afforded by Cordless Operation.

Less is More. Cut the Cord.

- With almost one hour of run time in both of our Roam units, clean more square footage per hour than a corded unit.
- Stop waiting on batteries. Our Samsung Lithium Ion batteries charge in under two hours.
- Don't sacrifice comfort and safety for productivity. Not only do our Roam units meet ISSA standards for productivity, but they're also light weight, user friendly and eliminate STFs caused by power cords.
- Clean any facility, anytime. The Pac-Vac® 6 Roam and the CK LW 13/1 Roam operate under 70dBs.
- Cordless machines lower service costs since damaged power cords are one of the leading repairs on corded upright vacuums.



BR MW 13/1 BAT

Only 8 Pounds!

A perfect blend of durability, price and performance.

At only 8 pounds, the Tornado® **CK LW 13/1** has the power to deliver heavyweight commercial cleaning results with an incredible 160 CFM. Tackling even the toughest commercial cleaning tasks, the **CK LW 13/1** will not only maximize cleaning speed and results, it will help minimize on-the-job injuries due to its light weight.

Featuring dual fan technology for better cleaning, a huge top-loading filter bag, and a low-profile design that lays completely flat to reach underneath beds and other furniture, the **CK LW 13/1** has what it takes to get the job done. Built with tough polypropylene materials and aluminum, this vacuum will outlast other commercial lightweight vacuums of its kind.

The **CK LW 13/1** incorporates a motor exhaust filter for facilities that require containment of dust and fine particles. The result is improved indoor air quality (IAQ), while also ensuring maximum airflow, which is required for deep down carpet cleaning.

The 3-stage filtration system includes a unique, antimicrobial CleanBreeze disposable filter bag, a cloth outer filter bag, and a HEPA motor exhaust filter cartridge as standard. The disposable CleanBreeze collection filter is an intricate web of randomly spun polymer fibers capturing up to 60% more particles and allergens than conventional paper bags.



INNOVATIVEWooden brush roll with 10 mm non-crimped brushes and easy change belt.



CONVENIENT ON/OFF SWITCH LOCATIONErgonomic handle with easy to use switch and convenient cord lock.



CV	· ·	

Low profile lays completely flat to reach	
under beds and other furniture.	

PRODUCT SPECIFICATIONS		
Model	CK LW 13/1	
Catalog Number	97130	
MACHINE DIMENSIONS		
LXWXH	10" x 13.75" x 49"	
Net Weight	8 Lbs.	
Recovery Bag Capacity	432 cubic inches	
Cord Type / Length	50', 18 gauge, 3-wire SJT, Black	
DESIGN CHARACTERISTICS		
Cord Strain Relief	Yes	
Handle Design	Anodized aluminum, Injection-molded comfort grip	
Housing Bumper	Non-marking, front and side protection	
Easy Debris Access	Yes	
Belt Type / Design	Single, flat	
CLEANING SYSTEM		
CFM	160	
Cleaning Path	13" with edge cleaning	
Brush Roll	Wood core with 10 mm bristles	
Bag Types	Cloth / Microfiber / Paper	
Filtration System	3-Stage System	
Easy Access Throat / Hoses	Yes	
On Board Tools No		
MOTORS		
Vacuum Motor	1 hp/6 amps	
Sound Level	82 dB	
REPLACEMENT ITEMS AND	ACCESSORIES	
CleanBreeze Disposable Filter Bag (6 pack)	D211-5500	
Roller Bar for CK LW 13/1	B012-3000	
HEPA Filter Cartridge	B051-0700B	
Outer Cloth Bag	D431-0700	
Light	A350-0000	
Foam filter in lieu of HEPA exhaust filter	B015-0200	
Paper Collection Bag (6 pack)	259PB	
Belt	B014-0814B	
See Page 59 for warranty information.		

CONVENIENT

A highly portable vacuum that is revolutionizing the entire cleaning industry

With the **CK LW 13/1 Roam**, you have the ability to clean anywhere anytime. With a dB rating below 70, the **Roam** is extremely quiet allowing you to vacuum even noise sensitive facilities such as schools, hospitals, retail stores and more! In addition, the 13" cleaning path along with cordless operation gives you the ability to clean hard-to reach places with ease!

Features and Benefits of the CK LW 13/1 Roam

- Battery operation provides up to 50 minutes of run time
- 13" cleaning path
- · LED headlight for better sight under objects
- Ultra light at 11 pounds for easy transport and portability
- Whisper-quiet at less than 70 dB
- Quick charge time at less than 2 hours
- · Ergonomic handle design
- Simple on/off switch located on handle
- Can clean over 3,100 sqft of space on a single charge

PRODUCT SPECIFICATION:	S
Model	CK LW 13/1 Roam
Catalog Number	97300
MACHINE DIMENSIONS	
LXWXH	13"x 10"x 44.5"
Net Weight	11 Lbs.
Cleaning Path	13"
PERFORMANCE	
Motor	480 Watt
Filtration	Cleanbreeze Filter Bags
CFM	50-60
Productivity	3,177 sqft/charge
Decibel Rating	<70 dB(A)
BATTERY	
Power Source	44 V 2.9 Ah Lithium Ion Battery
Interchangeable Battery Pack	Yes
Run Time	Up to 50 minutes
Charge Time	<2 Hours
CONSTRUCTION	
Bottom Plate	Polycarbonate w/Squeegee
Brush Roll	Metal
Wheels	6 Rubber Wheels
Headlight	Ultra-Bright LED Headlight
Carry Handle	Yes
Auto Height Adjustment	Yes
REPLACEMENT ITEMS AN	D ACCESSORIES
Battery	C223-1800
Charger	C223-2000
CleanBreeze Disposable Filter Bag (10 pack)	90039
Vacuum Belt	B014-0814B

See Page 59 for warranty information.





FRONT BUMPER PROTECTIONThe CK LW 13/1 Roam features a front bumper to protect furniture.



Ultra-bright LED headlight provides users with the ability to see under tight, dark spaces.



ERGONOMIC AND LIGHTWEIGHTThe ergonomic handle of the CK LW
13/1 Roam minimizes vibration as well
as includes the on/off switch for simple,

straightforward cleaning.



INTERCHANGEABLE BATTERYFor quick, convenient productivity, the CK 13/1 LW Roam has interchangeable batteries, allowing you to swap your drained battery with a fully charged one so you can clean your space with minimal downtime.

14-inch commercial upright vacuum with HEPA filter.

The all new **CK 14/1 Pro** adds price, performance, and proven durability to Tornado's already impressive lineup of industry leading commercial upright carpet vacuums. Combining affordability, superior airflow, the benefits of an enclosed bag system, onboard tools, and a HEPA cartridge filter, the **CK 14/1 Pro** is a great combination of value and performance. LEED qualifying at less than 70 dbA, and the Carpet and Rug Institute (CRI) Seal of Approval, Silver Level, the **CK 14/1 Pro** features a 14 inch cleaning path. Constructed with extremely durable polypropylene and metal construction materials, the unit tackles tough cleaning tasks, with tested and certified performance.

With on-board tools, the **CK 14/1 Pro's** powerful suction is ready at your fingertips for above-floor cleaning. The **CK 14/1 Pro** is flexible, reliable, and perfect for use in a variety of indoor environments including hospitals, healthcare facilities, schools and universities, hotels, resorts, restaurants, commercial office buildings, retail stores and shopping malls, and more.

The three-stage filtration system includes a unique CleanBreeze disposable filter bag, an intake filter, and a HEPA filter cartridge as standard. The CleanBreeze filter is an intricate web of randomly spun polymer fibers capturing up to 60% more particles and allergens than conventional paper bags.

Equipped with a HEPA exhaust cartridge filter, the CK 14/1 Pro is designed to help contain fine particulate and dust, contributing to improving indoor air quality (IAQ) and reducing risks associated with the redistribution of potentially harmful particles and allergens.



CK 14/1 PRO



NEW ERGONOMIC HANDLE FOR SUPREME COMFORT

With an all-new design for unmatched comfort, the CK 14/1 Pro delivers highend performance, productivity and comfort at a modest price, reducing your operating costs.



PRODUCTIVITY SOARS WITH ON-BOARD TOOLS

Increase cleaning productivity and coverage with on-board crevice and upholstery tools. Plus, with the help of the wand you'll increase cleaning reach up to 30%!



INSTALLING THE FILTER IS A BREEZE

The CK 14/1 Pro comes standard with a HEPA Filter cartridge for added indoor air quality protection. The easy access location of the HEPA cartridge makes changing it a breeze, but we didn't stop there. Any operator will tell you that installing the collection filter bag without tearing them on most vacuums is a difficult task. Designed by professionals for professionals, the Tornado CK 14/1 Pro features a simple slide-in design, making torn collection filters a thing of the past.



PRODUCT SPECIFICATIONS		
Model	CK 14/1 Pro	
Catalog Number	98147	
Cleaning Path	14 in / 350 mm	
Productivity per Hour	2,857 sq. ft. / 265 sq. m	
Airflow	120 cfm / 3.4 m3/h	
Capacity	3.8 qt / 3.6 L	
Sound Level	69.9 dB(A)	
Filtration System	3-Stage, including HEPA cartridge Exhaust filter	
Vac Motor	1200 W / 10 A	
Power Cord Length	50 ft / 15 m	
Power	120 V / 60 Hz	
Weight	20.6 Lbs / 9.36 kg	
Dimensions (L x W x H) (in. / mm)	12.5 in x 14.75 in. x 44 in 320 mm x 370 mm x 1120 mm	
REPLACEMENT ITEMS		
HEPA Filter	90144	
Brush Belt	33561	
Crevice Tool	90142	
Dusting Brush	90143	
Roller Bar	33574	
Telescopic Wand	36000	
Vacuum Motor Intake Filter	90145	
CleanBreeze Bag (10 pack)	90141	
OPTIONAL ITEMS		
Paper Collection Bags (10 pack)	90147	
Foam Filter in Lieu of HEPA Filter 90146		
See Page 59 for warranty information.		

Effortless operation, versatility, innovative features, ergonomic design, and unmatched performance.

The Tornado® **CV 30 and CV 38** are the most distinctive single motor uprights in their class. Some of the largest consumers of upright vacuums in the market helped us design these units from the ground up. The Tornado® CV 30 and CV 38 provide effortless operation, versatility, innovative features, ergonomic design, quiet operation, and HEPA filtration. A lightweight handle, brush-assisted movement, on-board tools, quiet operation, and HEPA cartridge filter make the Tornado® **CV 30 and CV 38** the choice of cleaning professionals. And it's available in 12" and 15" models for all your cleaning needs.

The 3-stage filtration system includes a unique CleanBreeze disposable filter bag, an intake filter, and a HEPA filter cartridge all as standard. The CleanBreeze disposable filter is an intricate web of randomly spun polymer fibers capturing far more particles and allergens than conventional paper bags. Dust emissions are reduced up to 60% over traditional paper filters.





Both the CV 30 and CV 38 are CRI Gold level certified

PRODUCT SPECIFICAT	ONS	
Model	CV 30	CV 38
Catalog Number	91449	91451
MACHINE DIMENSION	5	
Dimensions (L X W X H)	12.75" X 12" X 45"	12.75" X 15" X 45
Weight	17.4 Lbs	18 Lbs
Recovery Bag Capacity	5.51 liter/1.72 gal	5.51 liter/1.72 gal
DESIGN CHARACTERIS	TICS	
CFM	102	102
Water Lift	81.5"	81.5"
Power Cord Type	40', 18 gauge, 3-wire SJT, safety yellow	40', 18 gauge, 3-w SJT, safety yellow
Sound Level	66 dB	66 dB
Vac Motor	9 AMP	9 AMP
STANDARD ACCESSOR	IES	
Crevice Tool	K69062400	K69062400
Upholstery/Utility Tool	K69002330	K69002330
CleanBreeze Disposable Collection Bag (10 pack)	K69043050**	K69043050**
Roller Bar	K69066410	K69066440
HEPA Filter Cartridge	K64147600	K64147600
Vacuum Motor Intake Filter	K57316110	K57316110
OPTIONAL ACCESSORI	ES	
Foam Filter in Lieu of HEPA Filter (3 pack)	K64147650	K64147650
Cloth Reusable Filter Bag	K69043010	K69043010
Paper Collection Bags (10 pack)	K69042940	K69042940
Foam Filter Frame	K57316140	K57316140

See Page 59 for warranty information.



VERSATILITY

The Tornado $^{\circ}$ CV 30 and CV 38 for use in many different environments including:

- · Hospitals and Healthcare Facilities
- Schools and Universities
- Hotels and Resorts
- Restaurants
- Commercial Office Buildings
- Retail Stores and Shopping Malls
- Industrial Facilities, large and small

EASY TO CLEAN

The vacuum hose and throat can be easily accessed to clean out debris that is trapped inside.





INSTALLING THE BAGS AND FILTERS IS A BREEZE

Any operator will tell you that installing filter bags without tearing them is difficult. The units feature a patented design making torn bags a thing of the past. Simply slide the bag in, turn a lever, and you're done.



1-800-VACUUMS WWW.TORNADOVAC.COM

^{**} One bag included with unit.





Tornado's **CV 38 and CV 48 Dual Motor** upright vacuums offer optimum power through increased rpms and brush speeds, tackling the most challenging cleaning environments. Individual vacuum and brush roll motors increase soil recovery, prolong brush-motor life, and improve carpet appearance and longevity. In addition, these units offer ergonomic operator comfort and whisper-quiet operation which is perfect for noise-sensitive facilities such as hotels, schools and libraries.

The filter system is designed to help contain fine particulate and dust, contributing towards improving indoor air quality and reducing the risk associated with the redistribution of potentially harmful particles and allergens.

The 3-stage filtration system includes a unique CleanBreeze disposable filter bag, an intake filter, and a HEPA filter cartridge all as standard. The CleanBreeze disposable filter is an intricate web of randomly spun polymer fibers that captures up to 60% more particles and allergens than conventional paper bags.

The **CV 38 Dual and CV 48 Dual** provide effortless operation, versatility, innovative features, ergonomic design, quiet operation, and HEPA filtration for use in many different industries including, healthcare, education, hospitality, retail and industrial facilities.





CHANGEABLE ROLLER BRUSHRequires no tools and allows hairs, threads, etc. to be removed quickly and easily.

3-STAGE FILTRATIONThe filtration system includes a disposable filter bag, an intake filter, and a HEPA filter cartridge.





Removal-system allows a nearly dust free filter bag change and opens with an easy to operate pivoted lever.



EASY TO CLEAN

The vacuum hose and throat can be easily accessed to clean out debris that is trapped inside.

LOW PROFILE

With a handle that lowers flat to the ground, the CV Dual vacuums reach areas under furniture comfortably.



PRODUCT SPECIFICATIONS			
MODEL	CV 38 DUAL	CV 48 DUAL	
Catalog Number	91415	91419	
MACHINE DIMENSION	IS		
Dimensions (L X W X H)	14" x 15" x 45"	14" x 19" x 45"	
Net Weight	21 Lbs.	21 Lbs.	
Shipping Weight	25 Lbs.	26 Lbs.	
Recovery Bag Capacity	6 quarts	6 quarts	
DESIGN CHARACTERIS	STICS		
Cord Type	40', 18 gauge, 3-wire SJT, safety yellow	40', 18 gauge, 3-wire SJT, safety yellow	
Cord Strain Relief	Yes	Yes	
Body Construction	Polypropylene	Polypropylene	
Handle Design	Ergonomic	Ergonomic	
Housing Bumper	Non-Marking	Non-Marking	
Easy Debris Access	Yes	Yes	
Belt Type / Design	Non-slip toothed	Non-slip toothed	
Standard Bag Type	CleanBreeze	CleanBreeze	
CLEANING SYSTEM			
CFM	102	100	
Water Lift	100"	97"	
Cleaning Productivity	3,433	4,085	
Sound Level	67 dB	67 dB	
Cleaning Path	15"	19"	
Brush Design	Plastic Brush Roll	Plastic Brush Roll	
Filtration System	3-Stage System	3-Stage System	
On Board Tools	Yes	Yes	
MOTORS			
Vacuum Motor	1.6 hp / 12 amps	1.3 hp / 8.3 amps	
Brush Motor	150 watts	150 watts	
REPLACEMENT ITEMS			
Crevice Tool	K69062400	K69062400	
Upholstery/ Utility Tool	K69002330	K69002330	
CleanBreeze Disposable Collection Bag (10 Pk)	K69043050	K69043050	
Brush Roller Bar (38, 48)	K69066440	K47624880	
Hepa Filter Cartridge	K64147600	K64147600	
Vac Motor Intake Filter	K57316110	K57316110	
OPTIONAL ITEMS			
Foam Filter (Used In Lieu Of Hepa) (3 Pk)	K64147650	K64147650	
Cloth Reusable Filter Bag	K69043010	K69043010	
Paper Collection Bag (10 Pk)	K69042940	K69042940	
Foam Filter Frame	K57316140	K57316140	
See Page 59 for warranty information			

See Page 59 for warranty information.



Outstanding clean-air performance, in a durable operator-friendly machine

If you are challenged with maintaining large carpeted areas, the 30" **CK 3030 Wide Area Vacuum** delivers unmatched vacuuming performance. High efficiency cleaning performance, clean-air filtration, and a host of operator-friendly features make this the perfect unit for malls, airports, hotels, convention centers, department stores, and hospitals.

The **CK 3030** delivers uncompromising cleaning power in a truly user friendly package. Two high-efficiency vac motors provide 224 cfm, while a four-stage clean-air filtration system removes the finest of particles.

The 1,170 rpm brush loosens deep down dirt and revives carpet pile that gets compressed in high traffic areas. Robustly designed and constructed of rotationally-molded plastic, the **CK 3030** stands up to the everyday rigors faced by today's cleaning and maintenance professional. Features include five-position brush height adjustment, stainless steel brush shoe, deadman's safety switch, and large rear wheels for effortless transport.

PRODUCT SPECIFICATIONS			
MODEL	CK 3030 WIDE-AREA VACUUM		
Catalog Number	93030		
MACHINE DIMENSIONS			
Base Dimensions (H X W X D)	20" X 30" X 36"		
Weight (Net/Shipping)	103 Lbs.		
Recovery Bag Capacity	51 Quarts / 1.6 Bushels		
Power Cord	75', 18 gauge, 3 wire, safety yellow		
DESIGN CHARACTERISTICS			
Base Construction	Rotationally-molded polyethylene		
Handle	Steel tubing, fully adjustable		
Rear Wheels	10" non-marking		
Front Wheels (Dia.)	(Dia.) 2" non-marking swivel casters		
CLEANING SYSTEM			
CFM	224 CFM		
Static Waterlift	30"		
Cleaning Path	30"		
Brush	4-row nylon brush		
Filtration	4-Stage System		
Brush Dimensions (W X Dia.)	28" X 3"		
Brush Speed	1,170 RPM		
Brush Height Adjustment	5 pile settings		
Drive Belt	6-groove, poly-v		
Overload Protection	15 amp reset breaker		
MOTORS			
Vac Motor (2)	1 HP, 115V/60 Hz		
Brush Motor .25hp / 186 watt			
REPLACEMENT FILTERS AND BAGS			
(Unit comes standard with each of the below items.)			
Disposable Paper Filter Bags	90701		
Outer Cloth Filter Bag	19816		
Vac. Motor Exhaust Filter (2 Required)	19834		
Clean-Air Exhaust Filter	19855		
Hepa Bag (10 Pk)	90701A		





STORAGE MADE SIMPLEThe CK 3030's handle folds down and the unit can be stood on end for storage.

EASE OF USE

The CK 3030 tackles large area vacuuming projects with ease. The handle can be adjusted for operator comfort. A 75-foot power cord minimizes interruptions for outlet changes.

BRUSH HEIGHT ADJUSTMENT

The CK 3030 has five pile height adjustment settings. The user may change settings with a simple foot pedal.





OPERATOR-FRIENDLY

An ergonomically-designed handle

FOUR STAGE CLEAN-AIR FILTRATION

Stage 1: Enclosed within the rotationally molded housing is a disposable paper filter bag, making disposal and replacement clean and efficient.

Stage 2: For added filtration Tornado^{*} used a bag-in-bag design. The paper filter is enclosed within a durable, reusable cloth filter bag.

Stage 3: Each of the two vac motors is fitted with an intake filter for a third stage of filtration.

Stage 4: A high-performance filter cartridge is located at the motor exhaust, ensuring clean-air performance.

The combined efficiency of these four stages of filtration delivers clean-air performance that will reward you with cleaner carpets and healthier environment.

Featuring a harness system designed by Deuter, the world's leader in professional hiking equipment

Partnering with Deuter, the world leader in hiking and mountain climbing backpacks, Tornado® has finally made backpack vacuuming practical. The marriage of Tornado's innovative vacuum technology with Deuter's state-of-the-art harness, results in a unit we're confident you'll agree is the most comfortable backpack vacuum on the market today!

Standard, closed-back backpack vacuums can result in heat buildup on the operator's back, which can cause discomfort and decrease cleaning productivity. The specially designed and patented Aircomfort System from Deuter with a 5-point adjustable harness and breathable back panel is truly a game-changer, keeping a layer of air between the operator and machine on Tornado's Pac-Vac® Series. The result? Operators are up to 25% cooler compared to a normal closed back system.

Tornado's Pac-Vac® 6 and 10 Aircomfort Backpack Vacuums provide users with a fast and cost-effective alternative to traditional upright vacuums. Designed for performance, superior operator comfort, and increased productivity, these super-quiet units eliminate the need for multiple machines for different surfaces. Carpet, hard floors, upholstery, and above head cleaning become a breeze to clean, with productivity reaching 7,000 or more square feet per hour.





ERGONOMIC

With the Vari-Quick system, users have the ability to adjust the unit to fit the exact length of their torso. There are also five points of adjustment for the harness straps, delivering a truly customized fit unmatched by other backpacks on the market.



Standard attachments include a crush-proof hose, double bend wand, carpet and floor tools, a dust brush, upholstery tool and crevice tool.





ACCESSORIES

Standard accessories are located on the belt for quick, hands-free convenient access. This facilitates above ground cleaning in hard-to-reach areas.



FOUR-STAGE FILTRATION

The filtration system includes a disposable filter bag, an intake filter, and a HEPA filter cartridge to meet the needs of facilities that are striving for improved indoor air quality (IAQ).

PRODUCT SPECIFICATIONS			
Model	Pac-Vac® 6 Aircomfort	Pac-Vac® 10 Aircomfort	
Catalog Number	93012B	93014B	
MACHINE DIMENS	IONS		
LXWXH	7.5 in x 9.5 in x 20.5 in 19 cm x 24 cm x 52 cm	7.5 in x 9.5 in x 25.25 in 19 cm x 24 cm x 64 cm	
Net Weight	13 Lbs. / 6 kg	14 Lbs. / 6 kg.	
Recovery Bag Capacity	6 qt. / 5.69 l	10 qt. / 9.46 l	
Cord Type	Kettle Type	Kettle Type	
CLEANING SYSTEM	1		
Approvals	CRI Gold Level	CRI Gold Level	
Airflow	110 CFM / 3.11 m3/h	110 CFM / 3.11 m3/h	
Waterlift	110 in. / 279 cm	110 in. / 279 cm	
Productivity Per Hour	7,407 sq. feet per hour 688 sq. meters per hour	7,407 sq. feet per hour 688 sq. meters per hour	
Filtration System	4-Stage with HEPA cartridge	4-Stage with HEPA cartridge	
Sound Level	69.5 dB(A)	69.5 dB(A)	
MOTORS			
Vacuum Motor	8.5 A	8.5 A	
Power	120 V / 60 Hz	120 V / 60 Hz	
REPLACEMENT ITE	MS AND ACCESSO	DRIES	
Paper Collection Bags (Set of 10)	C352-2500	B352-7800	
Outer Cloth Bag	C352-1400	C352-1500	
HEPA Filter	B352-2401	B352-2401	
Motor Exhaust Filter	B352-2400	B352-2400	
Hose	J1006	J1006	
Double Bend Wand	CT171-C5	CT171-C5	
17" Crevice Tool	CT176	CT176	
5" Upholstery Tool	CT188	CT188	
3" Dusting Tool	CT184	CT184	
14" Easy Glide Carpet Tool	CT194	CT194	
14" Carpet Tool	B352-PF10	B352-PF10	
14" Hard Floor Tool	C352-PF20	C352-PF20	
OPTIONAL ITEMS			
Aluminum Telescoping Wand	CT170	CT170	
Wand Adapter	J1007	J1007	
Foam Exhaust Filter (in lieu of HEPA)	B352-5200	B352-5200	
2 ft 6 ft. Strech Hose	J1005	J1005	
15" Sidewinder Kit	TK5W-15	TK5W-15	
18" Sidewinder Kit	TK5W-18	TK5W-18	
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Taking speed and comfort to the next level

With the Pac-Vac® 6 Roam from Tornado® we are able to offer cleaning professionals something they have been looking for, a battery operated back pack vacuum with unrivaled comfort. No longer tied to a power cord, team members can clean larger spaces quicker and more efficiently than traditional back-pack vacuums.

Powered by Samsung® lithium-ion battery technology, the **Pac-Vac® 6 Roam:**

- Runs continuously for up to an hour on a single charge.
- Provides a color-coded display indicating the battery status.
- · Batteries can be easily changed without taking the unit off of the operators back.
- Allows for opportunity charging and provides a full charge in just 2 ½ hours!

The patented Aircomfort system includes: a lightweight, rounded frame and mesh back that creates a layer of flowing air between the wearer and the pack for ultimate cooling; a padded, contoured shoulder straps covered with wide airmesh, allowing the wearer's body to breathe; and an ergonomic and anatomically shaped stable hip fins and waist belt, proven to balance pack weight, setting the

wearer free to roam comfortably.			
PRODUCT SPECIFICATIONS			
MODEL	PAC-VAC® 6 ROAM		
Catalog Number	93016		
MACHINE DIMENSIONS			
LXWXH	7.5 in x 13 in x 20.5 in 19 cm x 33 cm x 52 cm		
Net Weight (with harness)	19 Lbs. / 9 kg		
Capacity	6 qt. / 5.69 l		
CLEANING SYSTEM			
Approvals	cETLus		
Airflow	70 CFM / 118 m3/h		
Waterlift	65 in. / 165 cm		
Productivity Per Hour	10,582 sq. feet per hour 982 sq. meters per hour		
Filtration System	4-Stage with HEPA cartridge		
Sound Level	63 dba		
MOTORS			
Vacuum Motor	13 A		
Power	36 V / 10.0 Ah		
REPLACEMENT ITEMS AND ACCESSORIES			
Paper Collection Bags (Set Of 10) C352-2500			
Outer Cloth Bag	C352-1400		
Hepa Filter	B352-2401		
Motor Exhaust Filter	B352-2400		
Hose	J1006		
Double Bend Wand	CT171		
17" Crevice Tool	CT176		
5" Upholstery Tool	CT188		
3" Dusting Tool	CT184		
14" Easy Glide Carpet Tool	CT194		
14" Carpet Tool	B352-PF10		
14" Hard Floor Tool	C352-PF20		
Lithium Battery	X1200		
Charger	X1194		
	OPTIONAL ITEMS		
Aluminum Telescoping Wand	CT170		
Wand Adapter Foam Exhaust Filter	J1007		
(in lieu of HEPA)	B352-5200		
2 ft 6 ft. Strech Hose	J1005		
15" Sidewinder Kit	TK5W-15		
18" Sidewinder Kit	TK5W-18		

See Page 59 for warranty information.





EASILY SWITCHED BATTERY

State-of-the-art lithium ion battery can be easily switched out without taking the backpack off



ACCESSORIES

Standard accessories are located on the belt for quick, hands-free convenient access. This facilitates above-ground cleaning in hard-toreach areas.



adjustable harness, designed by Deuter, the world's leader in professional hiking equipment.



PACKAGED COMPLETE

Standard attachments include a crush-proof hose, double bend wand, carpet and floor tools, a dust brush, upholstery tool and crevice tool.

MAXIMUM PRODUCTIVITY AND SAVINGS

Cleaning at over 10,000 square feet per hour and a battery run time of almost an hour not only maximizes work productivity, but shows huge savings!

VACUUM TYPE	DAILY VACUUM TIME (based upon ISSA 612 cleaning times)	ANNUAL LABOR COST (@ \$10/hour)
14" UPRIGHT	5.3 HOURS	\$13,860
Pac-Vac® 6 Aircomfort (CORDED)	2 HOURS	\$5,368
Pac-Vac® 6 Roam (Battery)	1.4 HOURS	\$3,740
ANNUAL SAVINGS OVER 14" UPRIGHT:		\$10,120

When power and effciency meets quiet operation, you get a canister vacuum that separates itself from the competition.

Powerful, compact, and efficient, the **TV 2 SS Dry Canister Vacuum** from Tornado® is the perfect alternative to upright or backpack vacuums. The **TV 2 SS** is designed to accommodate noise-sensitive environments such as hotels,restaurants, retail outlets, offices, schools, and applications where silent day cleaning is a necessity. With a sound level of 63 dB, at its highest, the **TV 2 SS** is whisper quiet in its operation. Lightweight, the **TV 2 SS** is highly maneuverable and can be lifted with ease. Its streamlined profile also makes storage a breeze.

The multi-stage filtration system incorporates a CleanBreeze microfiber filter bag, a permanent main filter and motor protection filter, plus a HEPA exhaust filter for optimum indoor air quality (IAQ). This standard HEPA filtration system helps improve IAQ by containing dust and fine particulate matter that causes discomfort for building occupants. The microber bags are made from a tearresistant material reducing the TV 2 SS's maintenance costs while improving run time.

A new, ergonomically designed handle provides the utmost comfort for the operator. The unit is light and easy to transport, and includes a large foot-operated on/off switch and incorporates a dedicated "parking spot" for the wand when not in use. When the job is complete, an integrated mount allows the user to store the power cord quickly and easily.





INNOVATIVE STORAGE

The TV 2 SS features a unique "parking spot for the wand when not in use. Simply place the wand in this convenient spot whenever downtime is involved.



EASY ACTIVATION

With operator comfort and convenience in mind, the TV 2 SS incorporates a large, easy to access on/off foot switch.



TOOLS AND WAND STORAGE

Easy tool and wand storage located on the back of the unit.



MAXIMUM POWER FILTRATION

The TV 2 SS incorporates a multi-stage filtration system that includes a three layer fleece filter bag, a permanent main filter, and motor protection filter plus a built in HEPA exhaust filter for optimum recovery.

PRODUCT SPECIFICATIONS		
MODEL	TV 2 SS	
Catalog Number	93282	
Voltage/Frequency	120/60	
Vac Motor	1200 W	
Variable Airflow	63-70 CFM	
Variable Waterlift	72-80"	
Dust Bag Capacity	2 Gal	
Hose Length	8'	
Power Cord Length	40'	
Dimensions (L x W x H)	16" x 15" x 13"	
Variable Sound Level	49-63 dbA	
Weight	14 Lbs	
REPLACEMENT ITEMS AND ACCESSORIES		
CleanBreeze Filter Bag	90025	
Hose w/ Single Bend Wand	90028	
Two-Piece Wand	90027	
Multi-surface Floor Tool	90029	
Crevice Tool	90030	
Dusting Brush	90031	
HEPA 12 Filter	90036	

Compact size, low amp draw and lightweight with new "Driven Air" technology for fast drying

When time is money, you get more drying productivity and profits with the new **Windshear™ Storm!** Utilizing all-new "Driven Air" technology, this compact unit is changing the blower/dryer market as we know it today. The **Windshear™ Storm** is dramatically lighter and smaller, offering high airflow volume with velocity of 3,400 feet per minute. What's more, with a compact and light "briefcase-style" profile and maximum running amps of only 2.8, this unit creates the perfect Storm of drying performance, size and affordability.

Available in standard or deluxe models, the upgraded version allows you to daisy chain up to five units on one circuit for energy-efficient drying, while reducing storage concerns in transport vehicles by stacking. Professional carpet cleaners and restoration professionals can take twice as many units to the job site, compared to traditional blowers. The **WindshearTM Storm** truly takes drying to a whole new level!

The **Windshear™ Storm** is made of durable poly materials for years of continuous use. Weighing up to 45% less than traditional blowers at just 17.75 pounds, the compact design delivers increased power in a lighter, slimmer profile and offers easier transport and storage.







PRODUCT SPECIFICATIONS		
MODEL	WINDSHEAR™ STORM	WINDSHEAR™ STORM DELUXE
Catalog Number	98778	98780
Dimensions (L X W X H)	22 in x 16.5 in x 11.5 in 56 cm x 42 cm x 29 cm	22 in x 16.5 in x 11.5 in 56 cm x 42 cm x 29 cm
Net Weight	17.75 Lbs. / 8 kg	18 Lbs. / 8.2 kg
Running AMPS	2.8 max	2.8 max
Power	120V	120V
Air Velocity	3,400 FPM	3,400 FPM
Air-Flow Direction	0° / 90°	0° / 5° / 90°
Kickstand	No	Yes
Daisy Chain Capable	No	Yes
Stackable	Yes	Yes
Power Cord	20 ft. / 6 m	20 ft. / 6 m

See Page 59 for warranty information.

Half the Size of a Traditional Blower!



WINDSHEAR™ STORM



MULTIPLE POSITION SETTINGS

If you're looking for greater drying flexibility, the deluxe unit can be placed horizontally, vertically, on its side against the wall, or at a 20 degree angle with the kick-stand, directing airflow exactly where you need it most. The standard model offers two operating positions.



DAISY-CHAINABLE

The deluxe model offers an integrated power outlet, enabling you to connect up to five air movers together at one time for whole-room drying in large spaces.

TWO MODELS AVAILABLE

Chose the standard model, or for even greater flexibility, opt for the addition of a kick-stand and circuit breaker to daisy chain up to five units together simultaneously.





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STACK TWICE AS MANY UNITS IN THE SAME SPACE

Now with the compact size of the Windshear Storm, you can store and transport twice as many blowers than before!

QUIETER THAN CONVENTIONAL AIR MOVERS

If noise is an issue, the Windshear Storm measures 66.5 dB at its lowest setting, and is perfect for noise-sensitive indoor environments such as schools, libraries, hospitals, hotels and more.

Delivering powerful air movement to dry your facility faster than ever before

The Tornado® **Windshear™ 3200 Dryer Series** is built with an injection molded polypropylene copolymer housing to withstand the harsh, everyday use of contract cleaners, restoration professionals and more. In addition, this material is much lighter than other molded housings making this unit not only durable, but lightweight as well. Due to its lightweight, durable construction, our fan will outlast other competitive models on the market today.

The Tornado® **Windshear™ 3200 Dryers** are built for power and speed. Equipped with a .6 HP motor, the units can produce 3758 FPM of air movement, beating out the competition and drying your facility faster!

The **Windshear™ 3200 Dryer Series** includes a standard model and a Safety Blower. The safety model comes standard in bright safety yellow and includes a transport dolly and safety sign that stands out in your space to ensure people know your floors are wet, ultimately helping to reduce the chance for personal injury from slip and falls.

The possibilities are endless with Tornado's® Windshear™ 3200 Dryer Series. With three different speed settings and operating positions, you can determine the correct air flow and velocity for maximum performance. Use the Windshear™ 3200 Series to dry carpets, rugs,door mats, hard floors, padding, cabinets, dry-wall, paint, closets, baseboards, attics, furniture, draperie s, or just about anything you need to dry. These machines increases air flow, cleaning efficiency, safety, and minimizes down-time in a room or large facility.



WINDSHEAR™ 3200



VARIABLE SPEED SETTINGS

The Windshear™ 3200 Area Dryer has 3 different speed setting that can be used to clean your facility any time of day. Whether you are in a noise sensitive area or are in a larger facility, each setting can cater to your space and the drying tasks that need to be done to quickly dry your space!









STACKABLE The Windshear

The Windshear™ 3200 is stackable, making for easy transport and storage.

PRODUCT SPECIFICATIONS		
MODEL	DEL WINDSHEAR™ 3200	
Catalog Number	98774	98786
Dimensions (L x W x H)	18.74" x 15.4" x 18.93"	18.74" x 15.4" x 18.93"
Weight	21.1 lbs	22.5 lbs
PERFORMANCE		
Motor (HP, Watt, Amp)	.6, 522, 4.35	.6, 522, 4.35
Voltage	120	120
Max Velocity (FPM)	3758	3758
CONSTRUCTION		
Housing Material	Injection Molded Polypropylene Copolymer	Injection Molded Polypropylene Copolymer
Speed	30 Lbs.	30 Lbs.
Power Cord Length	18.5′	18.5′

See Page 59 for warranty information.

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An Axial Fan at an affordable price.

Tornado's® **Windshear™ Sidedraft** is built with patented, rotationally molded material to withstand the harsh, everyday use of contract cleaners, restoration professionals and more. Due to its durable construction, the Sidedraft will outlast other competitive models on the market today.

The possibilities are endless with Tornado's® **Windshear™ Sidedraft**. You can use it to dry carpets, rugs, padding, subfloors, cabinets, dry-wall, paint, closets, baseboards, attics, furniture, draperies, or just about anything you need to dry. The **Windshear™ Sidedraft** increases air-flow, cleaning efficiency, safety, and minimizes down-time in a room or large facility. Also perfect as a box fan, the Sidedraft can be used for general cooling and air circulation in any commercial or industrial setting.

Key Features

- · 3000 CFM airflow
- · Six position versatility, 2 speed
- Plug up to 6 Sidedraft Dryers together into one 15 amp circuit
- Stack up to 5 high for efficient storage and transport





PROFESSIONAL FEATURES

Multiple position versatility for optimum drying.

PRODUCT SPECIFICATIONS		
MODEL	WINDSHEAR™ SIDEDRAFT	
Catalog Number	98782	
LXWXH	24" X 24" X 21"	
Net Weight	37 Lbs	
Power	115V/60 Hz	
Speeds	3	
Air-Flow (CFM)	3000+	
Air-Flow Direction	-15° / 0° / 15° / 90°	
Motor	.25 HP	
Housing	Polyethylene	
Handle	Molded In	
Stackable	Yes	
Power Cord	20' (18/3)	
OPTIONAL ITEMS AND ACCESSORIES		
Caster Kit	PDF5C	





BUILT-IN GFCI OUTLETA built-in GFCI outlet allows you to daisy chain up to 5 units together.



STACKABLE

The Windshear™ Sidedraft is stackable, making for easy transport and storage.

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Whole room drying innovation.

Dry an average size room in just minutes with the new Tornado® **Windshear™ Downdraft** drying technology. This new air mover from Tornado® pulls drier, warmer air from above, driving it down and out across the entire surface of the floor. One Downdraft will dry an entire room in as little as 15 minutes. Drying rooms one section at a time is a thing of the past with the **Windshear™ Downdraft**.

Angle adjustment is a built-in feature of the Downdraft. The unit's contours are designed to permit operation at four angles. You have the flexibility to place the Downdraft flat for drying floors or at 15,30, or 90-degree angles for drying walls or to provide general air circulation. What's more is the easy-to-see yellow housing helps identify potential physical hazards, such as falling or tripping, as recommended by ANSI Standards Z53.1.

Additional Key Features

- 6-blade precision pitched fan with high velocity motor for fast drying
- 3500 CFM 2 speed motor rated for continuos duty
- · Variable angle operation
- 360-degree directed air flow
- Built-in cord wrap
- · Durable and rugged design
- Stackable up to 4 high for easy transport and space-efficient storage
- Expandable transport handle and built in wheels for easy transportation come standard



Works in 15 minutes or less!











WHOLE ROOM DRYING IN JUST MINUTES
The Downdraft fan pulls warmer, drier air down from
the ceiling, blowing it across the entire floor for fast,
complete drying.

PRODUCT SPECIFICATIONS		
Model	WindShear™ Downdraft	
Catalog Number	98784	
LXWXH	22" x 18" x 23"	
Net Weight	52 Lbs.	
Power	115V/60 Hz	
Speeds	2	
Air-Flow (CFM)	2500 - 3500 CFM	
Air-Flow Direction	360 degree	
Motor	.25 HP	
Housing	Polyethylene	
Handle	Molded in / Telescoping	
Stackable	Yes	
Power Cord	20' (18/3)	
REPLACEMENT ITEMS AND OPTIONAL ACCESSORIES		
Caster Kit	PDF5C	
Optional Transport Cart	X8990N	

See Page 59 for warranty information.

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Mobility, portability and uncompromised extracting power.



SPECIFICATIONS

PS Spotter

115V / 60Hz

98220

2 GAL

55 PSI

94 CFM

1.2 HP

6" Wheels

8' Sol./Vac 21" X 12.5" X 12.5"

Weight 20 Lbs

OPTIONAL ACCESSORIES/REPLACEMENT ITEMS

95560

98347

98342

Molded Lift-Grip

From Tornado® comes one of the most effective weapons you can have in the war against spots. The **PS Series of Professional Spotters** features light, compact units that come complete with molded-in Lift Grip handle, transport wheels, quick-disconnect hose, and all-purpose clear-view utility tool. PS Spotters perform exceptionally well on carpets, automobile, boat and RV interiors, and upholstery.

With a compact design and quiet operation, the units are favorites in health care and educational facilities as well as commercial buildings, restaurants, and retail stores. The user simply sprays solution through the jet-spray pump and recovers the dirty solution through the included clear-view tool. A steel transport handle kit can be ordered as an optional accessory and is installed by the user.



MOBILITY AND PORTABILITY

The unit comes standard with a molded-in Lift Grip handle and fits easily in any car trunk or broom closet. The steel handle for pulling the unit from room to room or upstairs can be ordered as an option.



CONVENIENT OPERATION

The 2-gallon recovery tank lifts off for easy dumping when full. A large opening on the 2-gallon solution tank makes rinsing and refilling simple. Both units have a quick-disconnect valve for use with attachments.



VERSATILE

The PS Series is perfect for today's fiber-based office furniture, as well as auto interiors, carpeted stairs, and tight areas where walk-behind extractors can't go.



PS DRAGWAND

The PS dragwand and 8' vac pressure hose are optional attachments for added reach under furniture and other obstacles.

4 Opinoistery roof	90343
6" Utility/Stair Tool	98344
Steel Transport Handle Kit	31215

See Page 59 for warranty information.

8' Vac Pressure Hose**

18" Crevice Detailer

4" Uphalstory Tool

PS Dragwand with 8" Head

PRODUCT

Catalog Number

Model Name

Power

Solution

Recovery Pump

Vacuum

Motor

Handle

Size Weight

Transport Hose

Static Waterlift

^{** 95560} required for use with optional accessories.

Go-anywhere design, professional extraction performance

Tackle upholstery, staircases, drapes, and other challenging cleaning applications with the Marathon 350 spray extraction cleaner. Move from room to room with ease with this highly mobile electric unit. This compact unit is perfect for cleaning auto interiors and for spot cleaning office areas and retail sales floors. The unit can even handle your spray extraction needs for small carpeted areas. The **Marathon** 350 sprays solution deep down into carpet, dissolves dirt, and recovers the dirty solution with ease and efficiency.

With a compact design and quiet operation, the units are favorites with health care and educational facilities as well as commercial buildings, restaurants and retail stores. The user simply sprays solution through the jet-sprayed pump and recovers the dirty solution through the included clear-view tool.

The **Marathon 350's** solution tank has a filter for pump protection. The recovery tank doubles as a removable bucket that is easy to carry and dump when full. The Marathon 350 includes a spray suction hose, floor tool, and utility hand tool. Accessories are storable in the separate accessories holder, and two large transport wheels and two front castors allow the unit to smoothly follow the operator's movements during use.









The Marathon 350 is perfect for hotel rooms, offices, auto interiors and a variety of other applications.

EASE OF USE

Solution and recovery tanks are removable for easy transport and disposal.



CONVENIENT

A separate accessories holder and the unit's mobility are among several features that make for ease of operation.

PRODUCT SPECIFICATIONS		
MODEL	MARATHON 350	
Catalog Number	98132	
MACHINE DIMENSION	S	
Dimensions (Lxwxh)	21 In X 15 In X 17 In 533 Mm X 381 Mm X 432 Mm	
Net Weight	22 Lbs. / 10 Kg	
Cord Length	15 Ft / 5 M	
CLEANING SYSTEM		
Solution Tank	1.5 Gal / 6 L	
Recovery Tank	1.5 Gal / 6 L	
Waterlift	79 In / 2,000 Mm	
Pump Pressure	58 P.s.i / 4 Bar	
Sound Level	79 Db (A)	
MOTOR		
Pump Motor	50 W	
Vacuum Motor	1,100 W / 9 amps	
REPLACEMENT ITEMS AND ACCESSORIES		
8' Vacuum Hose	35306M-07	
Upholstery Tool 35306M-06		
Floor Tool	35306M-05	
Wand (2 pcs)	3530PU-04	
See Page 59 for warranty information.		

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Effortless operation and maximum productivity with tank-less operation

Designed specifically for use in apartments, hotel rooms, or similar applications, Tornado's **Room-Mate** portable carpet extractors are perfect for everything from interim maintenance to deep restoration cleaning. Whether you're a certified carpet technician, carpet cleaning specialist, or a member of the maintenance team, you will appreciate the smart features and convenience this units offers.

Constructed of durable rotationally molded polyethylene, this unit reflects Tornado's commitment to design standards that will endure the rigors of daily usage. This unit has a compact vertical design, allowing ease of storage, mobility and operation. With simple, user-friendly controls the Room-Mate can be operated with minimal training.

Without a built-in solution tank, Tornado's **Room-Mate** allows operators to use a bath tub, sink, or even a bucket as the solution / water source. With the unit designed to sit in place as a cleaning station, the operator is handling only the hose and wand as they clean, affording the convenience of a truck-mount, but in a portable unit.

Plus, the dump valve on the recovery tank is set to ADA height standards and allows the recovered solution to be drained in a standard toilet.

The **Room-Mate** gives operators the ability to quickly set-up, extract and move onto the next cleaning site with ease. Tank-less operation improves productivity and reduces costs.



PRODUCT SPECIFICATIONS		
MODEL: ROOM-MATE		
Part Number:	98262	
MACHINE DIMENSIONS		
Dimensions (L x W x H)	24 in x 19 in x 41 in 61 cm x 48 cm x 104 cm	
Weight	65 Lbs. / 29 kg	
Recovery Tank	13 gal / 49 l	
DESIGN CHARACTERIST	ICS	
Cord Type	14/3 Yellow	
Cord Length	20 ft. / 6 m	
Tank Construction Roto-mold		
Solution Hose Length 50 ft. / 15 m		
Peak Airwatts 673		
PSI 220		
Sound Level 67 dB(A)		
Vacuum Motor	Airwatt	
REPLACEMENT ITEMS		
50 ft. Vac / Solution Hose	X1213T	
OPTIONAL ACCESSORIES		
12 in. Professional Wand	98398	
Utility Hand Tool	98340	
Crevice Detail Tool 98342		
Upholstery Tool 98343		
Stair Tool	98344	
Standard Metal Hand Tool	98350	





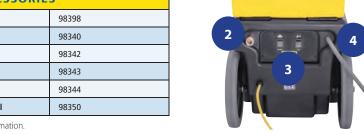
EASY SOLUTION DRAIN

The dump valve on the recovery tank is set to ADA height standards and allows the recovered solution to be drained in a standard toilet.



CONVENIENT CONTROLS

- 1. Vac Hose Attachment
- 2. Solution Hose Attachment
- 3. Control Panel
- 4. Solution Line Attachment



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Power, efficiency, mobility and value in a portable extractor.





EASY TO TRANSPORT

The dolly-type design makes transporting a breeze. With large non-marking rubberized wheels and durable front-mounted swivel castors the units can be easily transported from one job to another or taken up a flight of stairs.

FASE OF USE

The control panel and hose hook-ups are conveniently located at the top of each model. All switches are fitted with molded vinyl covers to protect them from moisture.



SMART DESIGN

The recovery and solution tanks are both accessed at the top of the units and feature large openings for ease of fill and rinsing. The recovery tank features a float that cuts off suction when the tank reaches capacity to protect the vac motors. The large center-pull drain valve is located at the rear of the unit which allows rapid removal of soiled solution into a floor drain or bucket



For fast and easy maintenance and increased machine uptime, the clam shell design allows quick access to the pump and heater





Whether you're a certified carpet technician or a carpet cleaning specialist, you will appreciate the features of Tornado's® complete line of professional grade portable carpet extractors designed for daily, interim or deep restoration cleaning. The **Marathon** Carpetrinser Upright Extractors are available in 100 p.s.i. without heat, 200 p.s.i. with heat and 400 p.s.i. with Perfect Heat.

Constructed of durable rotationally molded polyethylene, these units reflect Tornado's® commitment to design standards that will endure the rigors of daily usage. Because of their compact vertical design, ease of storage, mobility and operation, Tornado® **Marathon Upright Extractors** are well-suited for use by in-house cleaning crews, carpet technicians, contractors, schools, hotels, and restaurants. All models are lightweight with a low-center-of-gravity and include user-friendly, waist-high control switches to accommodate operators of all sizes.

All three powerful units are designed with 13 gallon solution and 11 gallon recovery tanks and twin, 2-stage 1.6 hp vacuum motors that generate anywhere between 107" to 160" of static waterlift, delivering faster dry-times and a safer, drier indoor environment. Tornado's® innovative design features a hinged, clam shell design that allows easy access to the pump and heater for simple maintenance and increased machine up-time.

With the highest portable temperatures in the industry, Tornado's® patented Perfect Heat[™] technology takes advantage of the heat generated by the vacuum motors to heat the water and solution for deep cleaning.

PRODUCT SPECIFICATIONS			
MODEL	MARATHON 2-100	MARATHON 2-200	MARATHON 2-400
Catalog Number	98250	98252H	98255PH
MACHINE DIMENS	IONS		
LXWXH	34.5" x 22" x 45"	34.5" x 22" x 45"	34.5" x 22" x 45"
Net Weight	108 Lbs.	108 Lbs.	110 Lbs.
Solution Tank	13 gallon	13 gallon	13 gallon
Recovery Tank	11 gallon	11 gallon	11 gallon
Cord	Pig Tail	Pig Tail	Pig Tail
DESIGN CHARACT	ERISTICS		
Body Construction	Polyethylene	Polyethylene	Polyethylene
Sol. / Vac. Hose	1.5" x 20' Hose	1.5" x 20' Hose	1.5" x 20' Hose
Wheel Dimensions	8" non-scuff soft rear / 3" swivel casters	8" non-scuff soft rear / 3" swivel casters	8" non-scuff soft rear / 3" swivel casters
Transport Handle	Standard	Standard	Standard
Dump System	Hose on back of unit	Hose on back of unit	Hose on back of unit
Corrosion Proof Components	* MEK type front and rear wheel *PE material	* MEK type front and rear wheel *PE material	* MEK type front and rear wheel *PE material
CLEANING SYSTEM			
Vacuum Head Type	Sound insulated	Sound insulated	Sound insulated
CFM	97	97	97
Water Lift	150"	150"	150"
PSI	100	50-200	50-400
MOTORS			
Motor Type	Dual 2-stage 1.6 HP	Dual 2-stage 1.6 HP	Dual 2-stage 1.6 HP
Sound Level	82 dB	82 dB	82 dB
OPTIONAL ACCESS	ORIES		
12" Deluxe Drag Wand for 100 PSI or more	98397	N/A	N/A
12" Professional Drag Wand for 101 PSI or more	N/A	98398	98398
20' Vac Hose	1504WDSI	1504WDSI	1504WDSI for 2-400 p.s.i.+
Standard Utility Hand Tool	98340	98340	98340
Crevice Detailer Extraction Tool	98342	98342	98342
Upholstery Hand Tool	98343	98343	98343
Utility Stair Tool	98344	98344	98344
Standard Metal Hand Tool	98350	98350	98350

Quiet, lightweight self-contained carpet extractor to clean small areas faster and easier.

Whether you are a certified carpet technician or a residential home owner, Tornado's® **Mini-Marathon 425** delivers professional carpet cleaning results in a small, easy-to-use package. You can productively clean and freshen up your carpet surfaces in less time with this powerful, lightweight and easy-to-maneuver four gallon extractor.

Made of rugged rotationally molded polyethylene tanks and frame, the **Mini-Marathon 425** is built to withstand the rigors of harsh cleaning environments in both commercial and residential settings. With a 2-stage, 1.6 hp motor, the Mini-Marathon delivers a powerful 112 CFM and 107" waterlift.

You can add optional hoses and hand tools to the Mini-Marathon , ideal for cleaning upholstery, stairs, car interiors, boats and just about any small space.

The **Mini-Marathon 425** is easy to use, featuring a lift-off recovery tank for trouble-free emptying and rinsing. The 4.25 solution and 4 gallon recovery tank are the perfect sizes for cleaning small carpeted areas or for use in the home. For enhanced operator comfort, the handle is fully adjustable to fit the height of the operator and provides simple one-button solution activation. The handle also folds over the machine for compact storage and easy transport in any type of vehicle. What's more, the **Mini-Marathon 425** has large 8" non-marking wheels for easy transport and maneuverability and can be used in a variety of environments including: Commercial buildings, hospitals, residential homes or buildings, automobiles, and more.



PRODUCT SPECIFICATIONS		
MODEL	MINI-MARATHON 425	
Catalog Number	98150	
MACHINE DIMENSION	S	
Size (L x W x H)	22.75" x 13.25" x 40.25"	
Storage Size (H x W x D)	27.75 x 13.25" x 22.75"	
Net Weight	68 Lbs.	
Extension Cord	20'	
CLEANING SYSTEM		
Solution/Recovery Tank	4.25 / 4 gal.	
Tank Construction	Rotationally molded polyethylene	
CFM	112	
Waterlift	107	
Cleaning Path	13"	
Brush Width	10"	
Brush Speed	1800 RPM	
Pump	60 psi	
MOTOR		
Vacuum Motor	1.6 HP - 2 stages (1200 watts)	
OPTIONAL ACCESSOR	ES AND ATTACHMENTS	
8' Vacuum pressure hose	95560	
20' Vacuum pressure hose	95569A	
PS Series drag wand with 8" head	98347	
Standard Utility Hand Tool	98340	
Standard Metal Hand Tool	98350	
Sae Page 50 for warranty information		







EASY ACCESS TO RECOVERY TANKWide opening and easy-pour access to the tank makes cleaning the machine a breeze!



SITE TUBE

The site tube at the rear of the machine allows the operator to easily see how much clean water/solution remains. The tube also allows for easy evacuation of any remaining unused water/solution.



PRE-FILTER SCREEN

Pre-filter screen provides enhanced protection with a filtration rate at 75 microns, protecting the machine from debris and clogs.

An award-winning patented design, setting new standards for the industry in carpet extraction.



From their numerous design and engineering awards to their performance on carpets across the world, the **Marathon 800 and 1200** portable, self-contained carpet extractors are a tried-and-true industry favorite. These brush-assisted units lay solution in the carpet, agitate with a cleaning brush, and vacuum-recover the resulting dirty water thoroughly in one pass.

Choose from the **Marathon 800** (8-gallon solution tank and 10-gallon recovery tank) and the **Marathon 1200** (12-gallon solution tank and 14-gallon recovery tank).

These electric units utilize a patented internal bladder design that maintains optimal brush pressure throughout operation regardless of solution level. This bladder design requires less space and allows a sleeker exterior with improved sight lines for the operator. A 2 h.p. vac motor, 900 rpm brush speed, and 100 psi solution pump combine for maximum extraction power. A variety of optional accessories and attachments can be used for flexibility.



EASY-VIEW SOLUTION AND RECOVERY TANKS

Clear tank lids permit monitoring of solution and recovery levels. Molded-in finger-grips allow quick removal and replacement of covers for refilling or cleaning the tanks.



PATENTED BLADDER DESIGN

The Marathon bladder system maintains a constant level of brush pressure for optimal extracting performance at all fluid levels.



The Marathon 800 and 1200 are easily accessible for service and maintenance operations by qualified personnel.

The Marathons employ a unique water delivery system minimizing complexity and virtually eliminating the need for tools to service. Their state-of-the-art engineering is what separates these units from the competition!



VERSATILE AND EASY TO USE

Whether used in an office or classroom, hallway or lobby, the Marathon 800 and 1200 leave behind clean carpets. The unit was designed with ease of use in mind and is an operator favorite.

CONVENIENT DRAIN SYSTEM

The solution drain hose is located at the rear of the unit for easy access.





PRODUCT SPECIFICATIONS				
MODEL	MARATHON 800	MARATHON 1200		
Catalog Number	98166	98168		
MACHINE DIMENSIONS				
Size (H X W X D)	36" X 20" X 38.5"	36" X 20" X 38.5"		
Weight	100 Lbs	100 Lbs		
Extension Cord	50′	50′		
CLEANING SYSTEM				
Power (Also Available In 230V Configurations)	115V / 60Hz	115V / 60Hz		
Coverage Per Filling	600 sq. ft.	900 sq. ft.		
Supply Capacity	8 GAL	12 GAL		
Recovery Capacity	10 GAL	14 GAL		
Solution Pump	100 PSI	100 PSI		
Solution Flow	1.1 GPM	1.1 GPM		
Vacuum	99 CFM	99 CFM		
Static Waterlift	117"	117"		
Brush Speed	900 RPM	900 RPM		
Brush Size	17"	17"		
MOTOR				
Vacuum Motor	2 Hp	2 Hp		
REPLACEMENT ITEMS				
50 Ft Extension Cord 14-3 (For 98166, 98168)	32217	32217		
OPTIONAL ACCESSORIES				
12" Drag Wand (2 jets)	98397	98397		
Utility Stair Tool	98344	98344		
Upholstery Hand Tool	98343	98343		
20' Vac/Pressure Hose For Optional Tools	95567A	95567A		
Crevice Detailer Extraction Tool	98342	98342		
Standard Metal Hand Tool	98350	98350		
Standard Utility Hand Tool	98340	98340		
75 Ft Extension Cord	72314A	72314A		

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Rugged intelligent design, setting new standards for self-propelled carpet extractors.

Coming from Tornado, the innovative leader in carpet care is a carpet extractor with features, performance, and a price that are quite simply unsurpassed by the competition. This 20-gallon, self-propelled, forward-operation unit sets a new standard among self-contained carpet extractors. This rotationally-molded unit truly stands up to the rigors of daily use. Its 22" recovery shoe, 20-gallon solution tank, and 20-gallon recovery tank clean in the forward mode and handle large area extraction jobs with ease and efficiency.

The all new variable solution pump allows the operator to control the flow of solution to the carpet. Clean light or heavy soak, it's up to you. A 100 psi solution pump penetrates carpets deep-down and a three-stage vac motor with 135" waterlift ensures optimal cleaning performance. A sealed transaxle drive system, two large wheels, and twin front swivel casters provide easy transport over even the heaviest of carpet. The **Marathon 2000** can cover up to 8,500 sq. ft. per hour, has variable, operator-controlled speed, and comes complete with a 22" vac shoe, pre-spray wand, and detachable 75-foot power cord.

* Productivity based on ISSA Standard Cleaning times. Actual productivity may vary.

MODEL MARATHON 2000 Catalog Number 98190 MACHINE DIMENSIONS Size (L X W X H) 51" X 22" X 38" Weight 190 Lbs Power Cord 75 Ft Detachable CLEANING SYSTEM Solution Capacity 20 Gal Recovery Capacity 20 Gal Brush Size 19" Cleaning Rate (Sq. Ft. / Hour)* 4,193 Adjustable Brush Yes Vac Shoe Size 22" Brush Motor 1/4 Hp Cfm/Waterlift 95/135" Variable Solution Pump Psi 100 Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed Yes / Variable MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98342 4" Upholstery Tool 98344 75 Ft Extension Cord 12-3 72314A 50 Ft Extension Cord 12-3 32217			
Catalog Number MACHINE DIMENSIONS Size (L X W X H) 51" X 22" X 38" Weight 190 Lbs Power Cord 75 Ft Detachable CLEANING SYSTEM Solution Capacity 20 Gal Recovery Capacity Brush Size 19" Cleaning Rate (Sq. Ft. / Hour)* 4,193 Adjustable Brush Yes Vac Shoe Size 22" Brush Motor 1/4 Hp Cfm/Waterlift 95/135" Variable Solution Pump Psi 100 Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose Standard Utility Tool 18" Crevice Detailer 4" Upholstery Tool 6" Utility/Stair Tool 75 Ft Extension Cord 12-3 72314A	PRODUCT SPECIFICATIONS		
MACHINE DIMENSIONS Size (L X W X H) Size (L X W X H) Power Cord 75 Ft Detachable CLEANING SYSTEM Solution Capacity Recovery Capacity Brush Size 19" Cleaning Rate (Sq. Ft. / Hour)* Adjustable Brush Vac Shoe Size Brush Motor Cfm/Waterlift 95/135" Variable Solution Pump Psi Jets 4 Drive System Drive Motor 1/4 Hp Self-Propelled And Speed MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 20' Vac Pressure Hose Sealed Transavle 98342 4" Upholstery Tool 98344 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	MODEL	MARATHON 2000	
Size (L X W X H) Weight 190 Lbs Power Cord 75 Ft Detachable CLEANING SYSTEM Solution Capacity 20 Gal Recovery Capacity Brush Size 19" Cleaning Rate (Sq. Ft. / Hour)* 4,193 Adjustable Brush Yes Vac Shoe Size 22" Brush Motor 1/4 Hp Cfm/Waterlift 95/135" Variable Solution Pump Psi Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 20' Vac Pressure Hose Sealed 98342 4" Upholstery Tool 98344 6" Utility/Stair Tool 98344 72314A	Catalog Number	98190	
Weight 190 Lbs Power Cord 75 Ft Detachable CLEANING SYSTEM Solution Capacity 20 Gal Recovery Capacity 20 Gal Brush Size 19" Cleaning Rate (Sq. Ft. / Hour)* 4,193 Adjustable Brush Yes Vac Shoe Size 22" Brush Motor 1/4 Hp Cfm/Waterlift 95/135" Variable Solution Pump Psi 100 Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed Yes / Variable MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98344 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3	MACHINE DIMENSIONS		
Power Cord CLEANING SYSTEM Solution Capacity Recovery Capacity Brush Size Cleaning Rate (Sq. Ft. / Hour)* Adjustable Brush Ves Vac Shoe Size Brush Motor Cfm/Waterlift Variable Solution Pump Psi Jets Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 298347 20' Vac Pressure Hose Standard Utility Tool 18" Crevice Detailer 4" Upholstery Tool 98344 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	Size (L X W X H)	51" X 22" X 38"	
CLEANING SYSTEM Solution Capacity Recovery Capacity Brush Size Cleaning Rate (Sq. Ft. / Hour)* Adjustable Brush Vac Shoe Size Brush Motor Cfm/Waterlift 95/135" Variable Solution Pump Psi Jets Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed MOTOR 3 Stage Vac Motor OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 298397 20' Vac Pressure Hose Standard Utility Tool 18" Crevice Detailer 4" Upholstery Tool 98344 6" Utility/Stair Tool 72314A	Weight	190 Lbs	
Solution Capacity Recovery Capacity 20 Gal Brush Size 19" Cleaning Rate (Sq. Ft. / Hour)* Adjustable Brush Yes Vac Shoe Size 22" Brush Motor 1/4 Hp Cfm/Waterlift 95/135" Variable Solution Pump Psi Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose Standard Utility Tool 18" Crevice Detailer 4" Upholstery Tool 98344 6" Utility/Stair Tool 72314A	Power Cord	75 Ft Detachable	
Recovery Capacity Brush Size Cleaning Rate (Sq. Ft. / Hour)* Adjustable Brush Yes Vac Shoe Size 22" Brush Motor 1/4 Hp Cfm/Waterlift 95/135" Variable Solution Pump Psi Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose Standard Utility Tool 18" Crevice Detailer 4" Upholstery Tool 98344 6" Utility/Stair Tool 72314A	CLEANING SYSTEM		
Brush Size Cleaning Rate (Sq. Ft. / Hour)* Adjustable Brush Yes Vac Shoe Size Brush Motor 1/4 Hp Cfm/Waterlift 95/135" Variable Solution Pump Psi 100 Jets Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose Standard Utility Tool 18" Crevice Detailer 4,193 4,193 4,193 4,193 4,193 44 45 46" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	Solution Capacity	20 Gal	
Cleaning Rate (Sq. Ft. / Hour)* Adjustable Brush Yes Vac Shoe Size 22" Brush Motor Cfm/Waterlift 95/135" Variable Solution Pump Psi Jets Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose Standard Utility Tool 18" Crevice Detailer 4,193 4,193 4,193 4,193 4,193 4 4 Pp 95/135" 4 4 4 4 4 4 4 4 4 4 4 4 4	Recovery Capacity	20 Gal	
Adjustable Brush Vac Shoe Size 22" Brush Motor 1/4 Hp Cfm/Waterlift 95/135" Variable Solution Pump Psi 100 Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed Yes / Variable MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 4" Upholstery Tool 98344 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3	Brush Size	19"	
Vac Shoe Size 22" Brush Motor 1/4 Hp Cfm/Waterlift 95/135" Variable Solution Pump Psi 100 Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed Yes / Variable MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98343 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	Cleaning Rate (Sq. Ft. / Hour)*	4,193	
Brush Motor 1/4 Hp Cfm/Waterlift 95/135" Variable Solution Pump Psi 100 Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed Yes / Variable MOTOR 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98344 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	Adjustable Brush	Yes	
Cfm/Waterlift 95/135" Variable Solution Pump Psi 100 Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed Yes / Variable MOTOR 2 Hp 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98343 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	Vac Shoe Size	22"	
Variable Solution Pump Psi 100 Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed Yes / Variable MOTOR 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98344 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	Brush Motor	1/4 Hp	
Jets 4 Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed Yes / Variable	Cfm/Waterlift	95/135"	
Drive System Sealed Transaxle Drive Motor 1/4 Hp Self-Propelled And Speed Yes / Variable MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 18" Crevice Detailer 4" Upholstery Tool 98342 4" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	Variable Solution Pump Psi	100	
Drive Motor 1/4 Hp Self-Propelled And Speed Yes / Variable MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98343 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	Jets	4	
Self-Propelled And Speed MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 18" Crevice Detailer 4" Upholstery Tool 98342 4" Upholstery Tool 98344 75 Ft Extension Cord 12-3 72314A	Drive System	Sealed Transaxle	
MOTOR 3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98343 6" Utility/Stair Tool 75 Ft Extension Cord 12-3 72314A	Drive Motor	1/4 Hp	
3 Stage Vac Motor 2 Hp OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98343 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	Self-Propelled And Speed	Yes / Variable	
OPTIONAL ACCESSORIES AND ATTACHMENTS 12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98343 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	MOTOR		
12" Deluxe Wand 98397 20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98343 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	3 Stage Vac Motor	2 Hp	
20' Vac Pressure Hose 95567 Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98343 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	OPTIONAL ACCESSORIES AND A	ATTACHMENTS	
Standard Utility Tool 98340 18" Crevice Detailer 98342 4" Upholstery Tool 98343 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	12" Deluxe Wand	98397	
18" Crevice Detailer 98342 4" Upholstery Tool 98343 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	20' Vac Pressure Hose	95567	
4" Upholstery Tool 98343 6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	Standard Utility Tool	98340	
6" Utility/Stair Tool 98344 75 Ft Extension Cord 12-3 72314A	18" Crevice Detailer	98342	
75 Ft Extension Cord 12-3 72314A	4" Upholstery Tool	98343	
	6" Utility/Stair Tool	98344	
50 Ft Extension Cord 12-3 32217	75 Ft Extension Cord 12-3	72314A	
	50 Ft Extension Cord 12-3	32217	

See Page 59 for warranty information.





SERVICE-FRIENDLY

The Marathon 2000 is easily and quickly accessible for service and maintenance operations.

PROFESSIONAL DESIGN

A 22" vac shoe, easy-access drain hoses, and detachable 75-foot power cord are standard features on the Marathon 2000.



HIGH-PERFORMANCE CAR-PET EXTRACTION

An adjustable brush, 100 psi solution pump, and 22" vac shoe provide deepdown cleaning in one pass.





QUICK-FILL SOLUTION TANK

The 20-gallon solution tank permits long periods

of uninterrupted operation between refills.

LARGE-CAPACITY RECOVERY

A 20-gallon recovery tank has a clear cover for monitoring the tank level. The cover is sealed with a heavy-duty gasket for optimal recovery performance.

BUILT-IN SPRAY WAND

The unit comes standard with a pre-spray hose and wand for handling edges, corners, and spotting operations.



OPERATOR-FRIENDLY

A simple, easy-to-use control panel allows the operator to control speed, solution, and recovery functions. The handle continues Tornado's excellence in ergonomic design and commitment to operator comfort.



Certain environments can exact a heavy toll on even the most ruggedly designed cleaning equipment. Tornado's® M Series of Floor Machines have it all when it comes to heavy-duty applications including rolled steel bases with non-marking soft bumper guards, a triple planetary gear system, and cast aluminum Start Guard I handle for safety, added strength and operator comfort. The M Series features our heavy-duty, dual-capacitor, 1.5 HP motor with a high torque configuration and low-amp draw for the ultimate in power.

From daily polishing to heavy scrubbing or stripping, the M Series of Floor Machines from Tornado® have what it takes for the cleaning and maintenance professional. These units will increase your cleaning team's efficiency and minimize equipment downtime, all at a price that runs circles around the competition.

M 17" 175 RPM FLOOR MACHINE M 20" 175 RPM FLOOR MACHINE



VARIABLE HEIGHT An adjustable cam-lever allows height to be set at the operator's comfort level.





SOLUTION TANK This optional accessory permits the dispensing of solution onto hard floors or carpets. Solution can be released at variable rates for scrubbing or bonnet cleaning.

SMART DESIGN

The Start Guard I handle is built of cast aluminum for added strength and has cushioned rubber grips to reduce operator fatigue.





DISC BRUSHES

The M Series can be fitted with an assortment of optional scrub brushes for a variety of applications on hard floors, from scrubbing to stripping. A shampoo brush can be used

PRODUCT SPECIFICATIONS		
MODEL	M 17" 175 RPM	M 20" 175 RPM
Catalog Number	97590	97595
MACHINE DIME	NSIONS	
LXWXH	23" x 17" x 49"	26" x 20" x 49"
Net Weight	100 Lbs.	105 Lbs.
Motor Height	16"	16"
DESIGN CHARAC	CTERISTICS	
Housing Construction	Rolled Steel	Rolled Steel
Power System	115V	115V
Wheel Type / Dimensions	5" Non-Marking Self Lubricating	5" Non-Marking Self Lubricating
Handle Design / Safety	Cast aluminum Start Guard I	Cast aluminum Start Guard I
CLEANING SYST	EM	
Brush Design / Type	Rotary Disc	Rotary Disc
Rotary Diameter	17"	20"
Disc RPM	175	175
Solution Tank	3 gal. (optional)	3 gal. (optional)
Cleaning Path	17"	20"
MOTORS		
Machine motor	1.5 HP	1.5 HP
REPLACEMENT	ITEMS	
Pad Retainers	F44P	F44P
17" Pad Holder	TL16	NA
20" Pad Holder	NA	TL19
OPTIONAL ITEMS AND ACCESSORIES		
Poly Scrub Brush	98118	98538
Shampoo Brush	94717	94917
4 Gallon Solution Tank	FM90P	FM90P
See Page 50 for warranty information		



Value, high-performance and smooth operation.

Certain environments can exact a heavy toll on even the most ruggedly designed cleaning equipment. Tornado's® **Brute Force Series** has it all when it comes to heavy-duty applications and are built for years of

trouble-free operation and long-lasting performance.

Our patented, non-conductive one piece rotationally molded body is designed to absorb the torque and vibration normally felt when operating a floor machine. The one piece base and motor housing ensures that wires and capacitors are completely enclosed, enhancing the machine's durability, longevity and safety. These units are so ruggedly built, they out weigh most metal machines in the industry today.

All **Brute Force Series** rotary floor machines have a triple planetary gear system for years of trouble-free use and a 1.5 HP motor to handle the most demanding jobs. Available in both 17" and 20" models, Tornado's® **Brute Force Series of Floor Machines** are establishing the new benchmark for performance and quality in the commercial cleaning industry.

From daily polishing to heavy scrubbing or stripping, the **Brute Force Series** from Tornado* has what it takes for the cleaning and maintenance professional. These units will maximize cleaning efficiency, minimize equipment downtime and are offered at a price that runs circles around the competition.

17" 175 RPM FLOOR MACHINE 20" 175 RPM FLOOR MACHINE

PRODUCT SPECIFICATIONS			
MODEL	BRUTE FORCE 17" FLOOR MACHINE	BRUTE FORCE 20" FLOOR MACHINE	
Catalog Number	97562B	97564B	
MACHINE DIMENSIONS			
LXWXH	31" X 20.5" X 44.5"	31" X 20.5" X 44.5"	
Net Weight	103.5 lbs.	104.5 lbs.	
Motor Height	19.5"	19.5"	
DESIGN CHARACT	DESIGN CHARACTERISTICS		
Housing Construction	High Density Polyethylene	High Density Polyethylene	
Power System	115V	115V	
Wheel Type / Dimensions	5" Non-Marking-Self Lubricating	5" Non-Marking-Self Lubricating	
Handle Design / Safety	All Metal, Positive Lock	All Metal, Positive Lock	
CLEANING SYSTEM			
Brush Design / Type	Rotary Disc	Rotary Disc	
Rotary Diameter	17"	20"	
Disc RPM	175	175	
Solution Tank	3 gal. (Optional)	3 gal. (Optional)	
Cleaning Path	17"	20"	
MOTORS			
Machine motor	1.5 HP	1.5 HP	
REPLACEMENT ITEMS AND ACCESSORIES			
Pad Holder	TL16	TL19	
3 Gallon Solution Tank	F91P	F91P	
Pad Retainer	F44P	F44P	





EASY PAD CHANGETilt up position allows easy access for changing pads.



PATENTED DESIGNKeeps motor running COOL, and provides a longer life.



RUGGED DESIGNTriple planetary all steel gears for smooth power!



EASY ACCESSOne-piece motor housing features easy access.



SAFETY AND DURABILITYSturdy metal handle has safety lock-out features.



OPTIONAL ACCESSORIES3 gallon solution tank attaches for solution dispensing.

A new generation of floor machines that strips floors without the use of chemicals

The **OB 20** from Tornado takes traditional floor machine operation to the next generation. This unit moves away from the traditional disc style to a square pad with high-end features including a durable \(\frac{3}{4} \) inch thick epoxy coated steel frame, 180 Lbs. of down pressure, 3,530 RPM running speed and an extremely low decibel level the. All of this allows our **OB 20** to excel at cleaning multiple hard floor types in a wide range of cleaning applications.

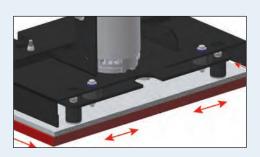
In a time when conserving resources is on the front of everyone's mind, the **OB 20** allows operators to strip a floor without the use of chemicals. This keeps not only your chemical costs down, but allows you to help meet growing environmental standards.

Adding the optional weight kit and vacuum system helps you increase the productivity of your stripping process while simultaneously protecting the health of building occupants. With a handle mounted vacuum, the active dust control system keeps the dust and small debris created during the stripping process contained within the cleaning path. The multiple layers of filtrations, including a HEPA cartridge, ensure that harmful dust is kept to

Don't limit yourself to one task with one machine, use one machine for all of your different cleaning tasks! Simply by switching out the pads the **OB 20** can be used for a variety of different cleaning tasks including standard cleaning, surface prep, stripping, polishing and buffing. The **OB 20** features various optional kits to augment the already impressive machine and ensure a best clean possible. These kits will range from weight, dust control, and even a solution tank, making the **OB 20** one of the most versatile floor machines on



OB 20 as shown with the optional weight kit and dust control kit**



HOW DOES ORBITAL SCRUBBING WORK?

Orbital floor cleaning machines have pads that vibrate at high speeds of between 2,250 and 3,500 RPMs, which greatly increases efficiency and provides a more concentrated cleaning

Rather than having a pad that turns in one direction like a rotary machine, the orbital machine cleans forward, backward, and sideto-side all at the same time.

Orbital scrubbers use specialized "surface prep" pads and small amounts of water to do a one-pass, chemical-free finish removal

WHAT ARE THE BENEFITS OF ORBITAL SCRUBBING?

The square shape of orbital machines makes edge work and detail work easier and more efficient.

With the design and operation speed the unit you eliminate the need for chemicals in the stripping process, providing cost savings and a more sustainable method of cleaning.

Chemical free stripping helps to provide increased worker safety with a decreased risk of slips and falls, as well as removing the requirement of cleaning with and disposing of harmful stripping chemicals. Labor costs can also be reduced versus traditional floor stripping methods.



PRODUCT SPECIFICATION	NS
MODEL	OB 20
Cataloge Number	97600
MACHINE DIMENSIONS	
LxWxH	20 in x 20 in x 46 in / 51 cm x 51 cm x 117 cm
Net Weight	180 Lbs/82 kg (w/weight kit)
DESIGN CHARACTERIST	ICS
Housing Construction	Epoxy Coated
Power System	115V Corded
Handle Design/Safety	Welded w/Safety Interlock Triggers
Sound Level	<64 dBA
CLEANING SYSTEM	
Brush Type	Orbital
RPM	3530
Cleaning Path	20"/51cm
Dust Control System (Optional)	1.5 gal/6 qt Vacuum w/HEPA Filtration
PAD DRIVE SYSTEM	
Horsepower	1.5 HP/1118 Watts
Motor Type	182TCZ Continuous duty TENV
Head/Pad Dimensions	20 in x 14 in/51cm x 36cm
Productivity per Hour	7,920 f2/736 m2 at 1 MPH (scrubbing) / 3,960 f2/368 m2 at .5 MPH (finish removal)
OPTIONAL ACCESSORIE	5
Maroon Surface Prep Pad (case of 10)	97699
Black, Stripping Pad (case of 5)	97698
Red, Buffing and Cleaning Pad (case of 5)	97697
White, Polishing Pad (case of 5)	97696
40 lb Weight Kit	90048
Dust Control Kit	90047
Solution Tank Kit	90052
Polishing Pad (case of 5)	97696
Buffing & Cleaning Pad (case of 5)	97697
Stripping Pad (case of 5)	97698
Surface Prep Pad (case of 10)	97699
See Page 50 for warranty information	

See Page 59 for warranty information..

^{**}Dust control kit includes a dust skirt which is not shown in the above picture



Compact, powerful and eco-friendly. A breakthrough cleaning alternative.

Imagine an environmentally-preferred, compact, lightweight floor machine with 650 rpm of cleaning power. Even better, imagine a machine that utilizes cuttingedge cylindrical brush technology to tackle floor surfaces from tile and cement to paver bricks, raised rubber disc, quarry tile, and other challenging applications. Add a solution tank, collapsible handle, and contact pressure six times greater than that of a single disc machine and you have the BR Vario II, the latest in commercial floor machine technology.

A unique feature of the **BR Vario II** is that it can strip and scrub without the normal slinging of water seen in traditional rotary floor machines. The BR Vario II provides unmatched speed and efficiency for large areas, while allowing close edge cleaning along walls and other obstacles. The BR Vario II's handle turns 90 degrees allowing the operator multi-dimensional cleaning performance in all directions: left, right, forwards, and backwards.

Tornado's **BR Vario II** cylindrical brush machine is designed for environmental sustainability. The use of cylindrical brushes conserves natural resources including water, solution and source materials. This unit is perfect for use in any facility with porous, or uneven hard floor cleaning challenges such as hospitals, schools, resorts, restaurants, retail shops, and much more. Cylindrical brush technology delivers low moisture deep scrubbing through concentrated brush speeds of 650 RPM — over six times higher than the speed of comparable rotary brush automatic scrubbers, digging deeper into uneven flooring surfaces to remove dirt that a disc unit can't reach. Cylindrical brushes also provide 4-6 times more contact pressure than rotary brush scrubbing, handling any flat or structured floor surface with ease.

BR VARIO II	
PRODUCT SPECIFICATIONS	
MODEL	BR VARIO II
Catalog Number	97607
MACHINE DIMENSIONS	
LxWxH	20" X 19" X 6.7"
Net Weight	58 Lbs.
Shipping Weight	69 Lbs.
DESIGN CHARACTERISTICS	
Housing construction	Polypropylene
Wheel Type/Dimensions	Removable 7" wheels
Handle Design	Ergonomic Plastic
Cord Type	14/3 50'
Cord Strain Relief	Yes
CLEANING SYSTEM	
Brush Type	Cylindrical
Disc RPM	650 RPM
Cleaning Path	16"
MOTORS	
Brush Motor	1.5 HP
Power	120V
REPLACEMENT ITEMS	
50 Ft. Extension Cord (14-3 Gauge)	32217
OPTIONAL ITEMS	
Soft Scrub Brush (2 Req.)	K47622500
Medium Scrub Brush (2 Req.)	K47622490
Hi-Low Grout (2 Req.)	K47622510
Grit Heavy Scrub Brush (2 Req.)	K47622520
Horse Hair Brushes (2 Req.)	K47622740
Cylindrical Pad Shaft (2 Req.)	K47622280
20-Pc. Light Scrub/Polishing Pack (2 Packs Req.)	K63694530
20-Pc. Heavy Scrubbing Pad Pack (2 Packs Req.)	K63694510
20-Pc. Extra Heavy Scrubbing Pad Pack (2 Packs Req.)	K63694520
20-Pc. Polishing Pad Pack (2 Packs Req.)	K636993880
Micro Fiber Roller (2 required)	K41140040



MULTI-DIMENSIONAL CLEANING The handle of the BR Vario II can be

unlocked, pivoted up to 90 degrees, and re-locked, allowing cleaning in all directions.



NEW TRANSPORT WHEEL STORAGE

Large non-marking wheels make transport easy. Wheels are conveniently stowed on the handle during cleaning



CONVENIENT

The unit folds down for easy transport and storage.



CYLINDRICAL BRUSHES OR PADS

A variety of cylindrical brushes are available for high performance on structured flooring. The unit can be fitted with a unique roller shaft that accepts individual pads. Each pad can be changed if damaged without the need to replace an entire single pad.

See Page 59 for warranty information...

1-800-VACUUMS WWW.TORNADOVAC.COM

The ultimate value and choice in high-speed burnishing power.

Tornado's® **Brute Force Series** of High-Speed electric burnishers are expertly balanced for ideal pad-to-floor pressure and sustained RPMs. Unlike other burnishers, you get total pad-to-floor contact, which means greater efficiency, speed and overall cost-savings. The Brute Force Series of High Speed Glazers™ provide excellence in design, operator comfort, and unsurpassed burnishing performance.

The Tornado® **Brute Force Series** of commercial high speed Glazers™ offer a specially patented design combined with precision balanced weight distribution which eliminates the need for a compensating center or front mount caster. This unique design provides full pad-to-floor contact, resulting in a smooth, even gloss. Tornado's® Glazers™ provide exceptionally smooth operation with a flexible, selfadjusting pad driver that burnish uneven surface areas easily and efficiently.

The Brute Force Series feature a unique, one piece rotationally molded housing designed to absorb the torque and vibration normally felt when operating a high speed. They also boast a one piece all metal tube and switch housing which improves operator control and safety. Ruggedly built for years of trouble-free operation, they make it easy to restore and maintain hard floor surfaces.

With a 20" burnishing path, flex pad holder, lock-in retainer, 1.5 HP motor, and Tornado's® one piece all metal tube and switch housing, the **Brute Force Series** of High-Speed Glazer's™ can handle the most demanding of floor care needs. The Brute Force Glazer Series is offered in 3 models, including a new and convenient 2000 rpm version featuring "Dust Control" that meets LEED and CIMS-GB standards by controlling dust generated by the burnishing process. To top it off, we offer these machines at unmatched price points, making the Brute Force Series of burnishers a must-have for any cleaning professional.



2000 RPM DUST **CONTROL GLAZER**



DESIGNED TO PROTECT

Easy access to motor and internal components. The completely enclosed motor means lasting durability and quick access for maintenance purposes.

FLOATING HANDLE

Floating handle provides great maneuverability with no "flutter" or pull.



PATENTED DESIGN

Keeps motor running COOL, and provides a longer life.



Conventional Burnishers

Edge of Pad Cuts at High Spots









Full, Flexible &



Pad Contact
A

PRODUCT SPECIFICATIONS			
MODEL	BRUTE FORCE 1600 GLAZER	BRUTE FORCE 2000 GLAZER	BRUTE FORCE 2000 GLAZER
Catalog Number	98458B	98482B	98486
MACHINE DIME	NSIONS		
LXWXH	35.5" X 23" X 44.5"	35.5" X 23" X 44.5"	35.5" X 23" X 44.5"
Net Weight	89 Lbs.	89 Lbs.	89 Lbs.
Motor Height	22"	22"	22"
DESIGN CHARAC	CTERISTICS		
Housing Construction	High Density Polyethylene	High Density Polyethylene	High Density Polyethylene
Power System	PM DC Rectified Motor	PM DC Rectified Motor	PM DC Rectified Motor
Wheel Type / Dimensions	4" Non-Marking Self Lubricating	4" Non-Marking Self Lubricating	4" Non-Marking Self Lubricating
Handle Design / Safety	All Metal, Positive Lock	All Metal, Positive Lock	All Metal, Positive Lock
CLEANING SYSTEM			
Brush Design / Type	Rotary Disc	Rotary Disc	Rotary Disc
Rotary Diameter	20"	20"	20"
Disc RPM	1600	2000	2000
Disc Pressure	15 Lbs.	16 Lbs.	16 Lbs.
Cleaning Path	20"	20"	20"
Dust-Free	No	No	Yes
MOTORS			
Machine motor	1.5 HP	1.5 HP	1.5 HP
REPLACEMENT ITEMS AND ACCESSORIES			
Pad Retainer For All Glazer Models	F44P	F44P	F44P
Pad Holder	919DP	919DP	919DP

A battery operated ultra high-speed burnisher makes daytime cleaning a breeze.

The **Battery Glazer 17** floor machine from Tornado® is a one of a kind burnisher that operates on AGM batteries instead of a standard power cord. Delivering two hours of run time, the **Battery Glazer 17** greatly increases your cleaning productivity, saving you time and money. In order to recharge, simply plug the on-board charger into the wall and you are done in no time!

The **Battery Glazer 17** has minimal impact on the environment and comes standard with rechargeable, maintenance-free batteries with an on-board charger. The **Battery Glazer 17**'s environmentally prefered features will meet any LEEDS–EB standard in your work place or facility. Tornado® has also included a dust control feature on this unit that will also pick up any dust or small dirt particles in its path, to ensure healthier indoor air quality (IAQ).

Operating at an incredibly low 59 dBA, the **Battery Glazer 17** is so quiet, you barely notice it running. The silent operating decibel level makes this unit perfect for day time cleaning in hospitals, hotels or any facility where noise sensitivity is an issue.

Anyone on your cleaning staff will appreciate the **Battery Glazer 17** thanks to its superior smooth maneuverability. Unlike other traditional burnishers, this unit operates with a simple push, allowing the operator full and total control.

Cleaning more than 7,500 sq. ft. per hour, the **Battery Glazer 17** will increase your cleaning productivity. With a two hour runtime, you clean 15,000 sq. ft. on just one battery charge. Need to get under countertops and maneuver in small healthcare or retail settings? The **Battery Glazer 17** is the perfect solution for you!

PRODUCT SPECIFICATIONS		
MODEL	BATTERY GLAZER 17	
Catalog Number	98494	
MACHINE DIMENSIONS		
LxWxH	26" x 18" x 39"	
Net Weight	141 Lbs.	
DESIGN CHARACTERIS	TICS	
Housing construction	Polypropylene	
Power System	Sealed Batteries	
CLEANING SYSTEM		
Brush Design / Type	Rotary Disc	
Rotary Diameter	17"	
Disc RPM	1500	
Disc Pressure	6 Lbs.	
Integrated Filtration System	Dust Control System	
Cleaning Path	17"	
Sound Level	59 dB	
MOTORS		
Motor Horse Power (HP)	0.6	
REPLACEMENT ITEMS		
Pad Retainer	90600	
OPTIONAL ITEMS		
Optional Spray Kit	90602	





ON-BOARD CHARGERThe built-in on-board battery charger is so simple to use and delivers two hours of run time per charge.



SIMPLE BATTERY INDICATORBattery charge indicator allows the operator to know exactly run time is left.



COMPACT STORAGEEasy storage with collapsible handle and transport wheel on back on the unit.



HEALTHY IAQDust control feature on this unit to ensure healthier indoor air quality (IAO).



ECO-FRIENDLY BATTERIESRechargeable, maintenance free batteries with an on board charger.



Integrated dust control system is in constant contact with the floor during operation dramatically reducing airborne dust and contaminants.

The ultimate in high-speed burnishers, clean-air performance, durable, easy to use, and long-lasting

Tornado's **2500 B Series of Clean-Air Glazers** are the industry's premiere burnishing machines, boasting 2500 rpm of burnishing speed, rugged roto-molded housing, adjustable pad pressure, and a high-strength steel linkage mounted with a 2.5 HP motor. Simple to use and even easier to maintain, the 2500 B far outperforms the competition's comparable units. Available with an optional maintenance-free, sealed traction-drive model.

The sloped battery housing is designed with operator sight-lines in mind, allowing an unobstructed view of approaching obstacles. Safety switches prevent operation when the cover housing is removed or the pad holder raised. The units come complete with batteries, charger, and 20" pad holder.

Best yet, the **2500 B is a "Clean-Air"** machine. Twin filters allow virtually dust-free burnishing, a significant factor when operating in sensitive environments such as schools, healthcare facilities, and retail stores. The filters are easy to remove for when the need to wash or replace them arises.





EASY OPERATIONSpeed and direction can be changed during operation via an easy-to-use, dual-function control knob.



CLEAN-AIR FILTRATION The 2500 B has a clean-air filtering system that allows dust free operation, an important consideration when working in an area with IAQ (indoor

air quality) concerns.



CONVENIENT

The double-walled, roto-molded battery cover housing is durable and easy to remove for battery maintenance.

A COMPLETE PACKAGE

The unit comes standard with batteries, charger, and pad holder.

SMART DESIGN

The unit's sleek profile and contoured housing provide optimal sight lines for safe operation and an unobstructed view of the burnishing path.



EASE OF USE

The 2500 B tips back and rests on a specially-designed rear bumper. This permits easy pad holder access, pad replacement, and filter maintenance.

PRODUCT SPECIFICATIONS		
MODEL	2500 B	2500 B W/ TRACTION DRIVE
Catalog Number	98498	98499
Pad Size	20"	20"
Glazing Speed	2500 rpm	2500 rpm
Pad Pressure	Adj. to 30 Lbs.	Adj. to 30 Lbs.
Drive Power	N/A	.5 HP
P.m. Motor	2.5 HP/36V	2.5 HP/36V
Size (L X W X H)	48" X 22" X 37"	48" X 22" X 37"
Weight W/Batteries	565 Lbs	585 Lbs
Traction Drive	N/A	Standard
Digital Controls	Standard	Standard
REPLACEMENT PARTS AND ACCESSORIES		
Dust-Free Filter Replacement (2 Required)	19069	19069
Dust-Skirt Shroud Assembly	31152	31152
Pad Retainer	90599	90599
Can Dana FO for warrant violarmetica	•	



PRODUCT SPECIFICATIONS MODEL 24" PROGLAZER® 17HP 28" PROGLAZER® 17HP **Catalog Number** 97570T 97575T Engine 603 CC V Twin 603 CC V Twin Pad Deck Size 24" 28" Min. Brush/Pad Speed 1850 RPM 1880 RPM **Handle Position** Fixed Fixed **Hour Meter** Standard Standard REPLACEMENT ITEMS **Pad Retainer** PB119 **OPTIONAL ACCESSORIES** Of Each Filter) **Bonnet Filter** 33887 33887 Carburetor Filter 99550 99550 Oil Filter 99553 99553 Clutch** 30714 30714 Steel Propane Tank 30396 30396

Built to last, ruggedly constructed, with 1850 RPM burnishing power.

Some facilities and cleaning applications demand more than what electric and battery units can provide, and, when it comes to maintaining a high gloss appearance for large floor areas, controlling costs is key. Speed and efficiency are an absolute must. Tornado's® Kawasaki ProGlazer Propane-Powered Floor Machines have it all when it comes to meeting maintenance demands while making the most of your investment in floor care equipment. Our ProGlazer® propane burnishers set new standards for quality and performance in the floor maintenance industry. Ease of operation, durability, and reliability make these units the propane-powered cleaning product of choice for floor care professionals.

With 1850 RPM at your fingertips, as well as all units featuring the latest in engine technology from Kawasaki, ensuring maximum operational efficiency while maintaining exceptionally high standards in emission control. These premium engines provide superior levels of power for any burnishing job while offering reduced noise and vibration for added operator comfort and minimizes disruption to others in the area. In addition to a rugged cast aluminum deck, all units come complete with burnishing pad, ready-to-fill painted steel propane tank, and 12V battery/key start.

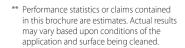


POWERFUL AND VERSATILE

Tornado's propane burnishers are found in educational, retail, and professional contracting applications where high gloss floors are a requirement of floor cleaning and maintenance programs.

EFFICIENT

These burnishers offer a quick return on your investment with high productivity and ease of service. A 24" unit can cover up to 32,000 sq.ft. per hour, while the 28" machine increases coverage to 48,000 sq.ft. per hour**. Meanwhile, a maintenance-free drive system and bearing assembly make these units extremely reliable and make service hassle-free. With the quick change fuel tank allowing nearly continuous operation, even the smaller model (24") can out perform six workers each using a 20" traditional low-speed floor machine.





PROFESSIONAL QUALITY

The units feature a Kawasaki 603 CC V Twin engine. They are available in 24" and 28" models. Electronic shut-off and low oil pressure shut-off are standard features on these units. Rugged and virtually maintenance free, our propane burnishers have excellent oil control, high torque, and cold starting capacity.

ENVIRONMENTALLY FRIENDLY

The engines are EPA and C.A.R.B. approved.

SAFETY

The machines are built with a catalytic converter to help reduce emissions.



DISC PADS

The propanes can be fitted with appropriate pads for all high-speed operations.

See Page 59 for warranty information.
** Factory-installed options.

The battery-powered electric broom for flexible, interim cleaning.

Having a dependable sweeper is crucial for your business, so it only makes sense to have a superior, easy to use sweeper. The battery operated, motorized **EB 30 Mini-Sweeper Roam** from Tornado is a unit that can easily tackle your sweeping needs. At 56 dBa (lower than the volume level of normal conversation), the EB 30 Roam can successfully be used in hotels, restaurants, retail stores, dressing rooms, movie theaters, cafeterias, waiting rooms, and building lobbies where quiet operation is a necessity.

At 12"wide, it has a nicely sized cleaning path while remaining maneuverable. At just a shade over 5 pounds, it's extremely lightweight, thereby lessening operator fatigue and allowing it to be taken just about anywhere. The handle is adjustable with an ergonomic grip, and it can also be locked into an upright position for easy storage.

The **EB 30 Mini-Sweeper Roam** comes with a removable 7.2-volt rechargeable Li-lon battery and power plug adapter charger that provides a full charge in about 3 hours. As an option, you can purchase battery and power plug adapter kit. With multiple batteries, you'll get the ability to clean in a virtually continuous manner.

The powerful brush head sweeps debris into an easily removable 1-liter (0.26-gallon) bin. Finally, its polypropylene base with built-in injection molded rubber bumper makes the EB 30 incredibly durable.

Make sweeping chores quick and quiet with the **EB 30 Mini-Sweeper Roam**; quicker than a vacuum cleaner, more effective than a broom.





CHANGEABLE ROLLER BRUSHRequires no tools and allows hairs, threads, etc. to be removed quickly and easily



EASY TO REMOVE DUSTPANProvides convenient rear access with large capacity



FLEXIBLE, UNIVERSAL JOINT Handle articulates, providing superior maneuverability



EASILY INSTALLED BATTERYChanging batteries is a breeze



PRODUCT SPECIFICATIONS		
EB30/1		
93220		
12 hours		
12"		
.26 Gallons		
56 dBa		
4.4 Lbs.		
9.8" x 11.8" x 43.3"		
STANDARD ACCESSORIES		
K47624000		
K46542590		
K66466700		
OPTIONAL ACCESSORIES		
K47624010		
K46540310		

Superior sweeping performance and value in a compact, light weight design.

Clean hallways, workshops, retail shops, warehouses and sidewalks up to ten times faster with the Tornado® **SWM 31/9 Manual Sweeper.** Pick up everything including metal shavings, nails, paper, leaves, and even packaging material. Light and compact, you can move from area to area with ease with this highly mobile unit.

The **SWM 31/9** offers outstanding sweeping performance through the use of a main roller brush that is driven by both wheels, ensuring effective cleaning during right or left-hand turns. Effective indoors and outdoors, this compact unit easily sweeps hard-to-reach areas such as curbs, corners and crevices with the help of a durable side-broom, and offers a convenient hopper-grip handle for portability and emptying debris. The ergonomic handle suits operators of all sizes

You can expect years of service from the **SWM 31/9 Manual Sweeper** thanks to its tough polyethylene hopper and base, which are made to resist dents and cracks. The unit features a large 9 gallon hopper that easily collects dirt and debris, is simple to remove and empty, and has an ergonomic handle. The side brush arm is swivel-mounted and can be easily disengaged.



SWM 31/9 MANUAL SWEEPER



VERSATILE

The SWM 31/9 can be used in small warehouses, machine shops, workshops, gas stations, retail stores, sidewalks, for indoor or outdoor areas including parking lots.



PRODUCT SPECIFICATIONS		
MODEL	SWM 31/9 MANUAL SWEEPER	
Catalog number	96190	
Drive	Manual forward and reverse belt drive system	
Sweeping system	Single Brush and Side Brush	
Cleaning Path	31 in / 79 cm	
Capacity	9 gal. / 40 lit	
Work Rating (in ft2/h)	Up to 28,000 sqft/hr @ 2.5mph / 2,600 sq. mtr/hr @4kph	
Dimensions (L x W x H)	31.5 in x 28.5 in x 40 in / 80 cm x 72 cm x 102 cm	
Weight	57 Lbs. / 26 kg	
STANDARD ACCESSORIES (Included with unit)		
Main Brush Kit	552180067	
Side Brush	923783	





This easy-to-push manual sweeper is hard working, lightweight and fast, delivering up to 28,000 sq. ft. per hour of sweeping productivity! And the variable height adjustment allows for efficient cleaning on a variety of terrains.

EASE OF USE



UNIQUE SIDE BROOM

The side broom sweeps dirt out of corners and away from walls, directly into the cleaning path of the main brooms, which then flips up debris into the large 9 gallon hopper.

GO-ANYWHERE CONVENIENCE

With large, rear mounted wheels, this unit will go anywhere easily and can even climb steps. A fold-up handle makes this unit perfect for small, compact storage spaces.

Fast, efficient sweeping for hard and soft floors **Eco-Friendly Sealed Batteries!** Tornado **SWB 26/8**





INDOOR AND OUTDOOR USE

Ideal for sweeping indoors and outdoors, the SWB 26/8 Battery Sweeper easily picks up debris including paper, dust, sand, popcorn, packaging material, tags, clips and



EASY ACCESS

Gain easy access to batteries and motor. Includes rechargeable, maintenance-free AGM batteries with on-board charger



WASTE CONTAINER

Rugged, corrosion-proof 9-gallon 40 liters debris bin has handle for easy dumping

UNIQUE SIDE BRUSH

The side brush sweeps dirt out of corners and away from walls, directly into the cleaning path of the main broom.



26/8 picks up all types of debris even hard-to-pick-up items such as

sand, popcorn, packaging material, tags, and clips.

What's more, you can move easily from carpeted spaces onto hard floors without changing the broom with this super-flexible unit, resulting in maximum cleaning efficiency. As an added bonus, since the Tornado **SWB 26/8** is bag-less and collects into a hopper, you're not spending money on bags, while also avoiding downtime.

The **SWB 26/8 Walk-Behind Sweeper** is ideal for cleaning areas both large and small, running on eco-friendly, sealed AGM 24-volt-batteries which eliminates the worry of tripping over a power cord. The SWB 26/8 offers a convenient on-board battery charger, plus whisper-quiet operation that is perfect for day-cleaning on any floor type.

The SWB 26/8 uses overthrow sweeping technology to guarantee optimum utilization of waste container capacity. The main broom has chevron bristles and is height-adjustable for professional sweeping results on all kinds of surfaces with a variety of debris. The side-mounted brush is protected by a bump guard and is raised and lowered easily by the hand controls. A high-efficiency filter and dust control system reduces dust for improved air quality.

PRODUCT SPECIFICATIONS		
MODEL	SWB 26/8	
Catalog Number	96210	
Batteries	24 V	
Cleaning Path	26 in / 66 cm	
Capacity	9 gal / 40 liters	
Dust Control	Filter	
Filtration	Single-stage filtration	
Work Rating (Ft ² Per Hr. / M ² Per Hr.)	26,000 ft ² per hr. 2,400 m ² per hr.	
Dimensions (L X W X H)(In./Cm)	32 in x 28 in x 24 in 80 cm x 70 cm x 60 cm	
Sound Level	67 dB (A)	
Weight (With Batteries)	124 Lbs. / 56 kg	
STANDARD ACCESSORIES AND REPLACEMENT ITEMS		
Main Broom	39122	
Sidebrush	39167	
Filter	90100	

Low-moisture, multi-purpose floor cleaning machine for a healthier and safer indoor environment.

Environmentally preferred, the **BR 13/1 Scrubbers** offer the latest cleaning innovation — cylindrical brush technology. The use of cylindrical brush technology reduces water consumption by 30% thanks to a low-moisture cleaning design and deep scrubbing through concentrated brush speeds of 650 RPMs — over three times higher than the speed of comparable rotary brush automatic scrubbers. Cylindrical brushes provide 4-6 times more contact pressure than rotary brush scrubbing, handling any flat floor surface with ease, as well as structured surfaces such as quarry tile, paver bricks, and raised rubber disc flooring. These scrubbers can also be used for cleaning escalators and moving walkways. For even greater flexibility, the BR 13/1 Scrubbers can be used on entrance matting and commercial-grade carpeting in conjunction with low-moisture, carpet mill approved encapsulation carpet cleaning. Producing minimal impact to the environment, waste is minimized as cylindrical brushes far outlast rotary pads, using on average one set of brushes for every 100 floor pads. Less time is spent on pad replacement and maintenance, dramatically increasing worker productivity, safety, and cleaning speed.

The **BR 13/1 BAT Roam** runs on sealed, maintenance free, Lithium-Iron Phosphate (LifePO4) batteries. There are many types of Lithium-Iron (cobalt, magnesium, polymer, etc.) batteries on the market. The **BR 13/1 BAT Roam** uses the latest, most advanced, lithium technology on the market today.

These batteries not only meet LEED EB Green Building Standards, they also: deliver up to 2,000 charging cycles to boost productivity, stay cooler than other batteries on the market, can be rapidly recharged, have an extremely low self discharge rate, and do not suffer from "thermal runaway".

MODEL	BR 13/1 MW	BR 13/1 BAT
Catalog Number	99410	99412
Machine Dimensions (LxWxH)	15 x 17 x 44 in / 38 x 44 x 111 cm	15 x 17 x 44 in / 38 x 44 x 111 cm
Net Weight	55 Lbs. / 25 kg.	49 Lbs. / 22 kg.
Solution / Recovery Tank	1 gal / .4 gal. 4 liters / 1.5 liters	1 gal / .4 gal. 4 liters / 1.5 liters
DESIGN CHARACTERIS	STICS	
Tank construction	Polyethylene	Polyethylene
Brush Type	2, counter-rotating cylindrical	2, counter-rotating cylindrical
Brush Width	12 in / 30 cm	12 in / 30 cm
Brush RPM	650 rpm	400 rpm
Cleaning Path	13 in / 33 cm	13 in / 33 cm
Cleaning Rate	3,775 sq. ft./hr. 351 sq. m/hr.	3,775 sq. ft./hr. 351 sq. m/hr.
Sound Level	69 db (A)	66 db (A)
Cord Length	40 ft. / 12 m	N/A
Brush Motor	1 hp / 600 W	.4 hp / 300 W
Charger	N/A	On-Board
Battery Voltage	N/A	24 V
REPLACEMENT ITEMS	AND ACCESSORI	ES
Standard Brush	33855	33855
Soft Brush	33856	33856
Hard Brush	33857	33857
Escalator Brush	33859	33859
Carpet Brush	33926	33926
Side Brush	33858	33858
Transport Trolley	05-3395-0500	05-3395-0500
Battery	N/A	33936
Charger	N/A	33937

See Page 59 for warranty information.







DUAL CLEANING APPLICATIONS

Excellent results on both hard and soft floor coverings including vinyl tile, hardwood, concrete, short nap commercial carpeting, diamond plate, quarry tile, brick, slate, mosaic, studded rubber, granite, marble, rubber floors, and even escalators! For eco-friendly encapsulation carpet cleaning, cylindrical brushes "lift" and revitalize the carpet fibers, while low-moisture solution atomization minimizes the moisture, allergens and bacteria in carpets.



TRANSPORT EASILYFor fast and simple transport, an optional trolley is available.





OPTIONAL SIDE BRUSH

Providing superior edge-cleaning capability, optional side-brushes are available to widen your cleaning path even further, delivering access to tight-corners and hard-to-reach spaces.

SOLUTION ATOMIZATION

Cleaning solution is atomized into a fine mist and dispersed through the cylindrical brushes, so less moisture is consumed during the hard floor or carpet cleaning process.

Powerful, automatic floor scrubbing in a compact package.



The **BR 16/3** puts the power of automatic scrubbing in a compact package ready for virtually any hard floor surface. This corded electric unit, operates in forward and reverse with a 16" scrubbing path at 660 RPMs. Cleaning approximately 3,200 square feet per hour, your small and congested spaces are clean, healthy and ready for use in no time.

The **BR 16/3** comes standard with brushes, allowing you to replace your standard floor cleaning methods out of the box. Tornado® also offers a wide selection of versatile brushes allowing the **BR 16/3** to clean multiple hard floor types including ceramic tile, quarry tile, paver brick, raised rubber disc floors and other challenging surfaces

Tornado's **BR 16/3** cylindrical brush machine is designed for environmental sustainability. The use of cylindrical brushes conserves natural resources including water, solution and source materials. Cylindrical brush technology delivers low moisture deep-clean scrubbing through concentrated brush speeds of 660 RPMs — three times faster than the speed of comparable rotary brush automatic scrubbers, digging deeper into uneven flooring surfaces to remove dirt that a disc unit can't reach. Cylindrical brushes also provide 4-6 times more contact pressure than rotary brush scrubbing, handling any flat or structured floor surface with ease.



PROFESSIONAL PERFORMANCEBrush pressure adjustment allows variable contact pressure with the floor surface.



SIMPLE TO USERemovable solution and recovery tanks are easily emptied, rinsed, and re-filled.



CYLINDRICAL BRUSHESThe BR 16/3 unit comes standard with brushes for daily cleaning operations. A variety of brushes are available for high performance on structured flooring.



VERSATILE AND COMPACTThe BR 16/3 takes automatic scrubbing technology into confined areas where bigger units can't go.

MODEL BR 16/3 Catalog Number 99406	
Catalog Number 99406	
MACHINE DIMENSIONS	
Dimensions (L X W X H) 21 in x 19 in 520 mm x 47	x 15 in 70 mm x 380 mm
Net Weight 67 Lbs. / 33 k	kg.
Solution Tank 3 gal / 10 l	
Recovery Tank 3 gal / 10 l	
CLEANING SYSTEMS	
Productivity 3200 f ² per h	our 300 m² per hour
Brush Type Cylindrical	
Brush Width 16 in / 400 m	nm
Brush Rpm 660 RPM	
Cleaning Path 16 in / 400 m	nm
Sound Level	71 dB (A)
MOTOR	
Brush Motor 1.5 HP / 1100	0 W / 14 A
Vacuum Motor 0.67 HP / 500	0 W / 4 A
REPLACEMENT ITEMS	
Soft Scrub Brush (2 Req.) K47622500	
Squeegee Set (2 Included) K47773230	
50 Ft. Extension Cord (14-3 Gauge) 32217	
OPTIONAL ACCESSORIES	
Oil Resistant Squeegee Set (2 Req.) K47773220	
Medium Scrub Brush (2 Req.) K47622490	
Hi-Low Grout (2 Req.) K47622510	
Grit Heavy Scrub Brush (2 Req.) K47622520	
Horse Hair Brushes (2 Req.) K47622740	
Cylindrical Pad Shaft (2 Req.) K47622280	
20-Pc. Light Scrub/Polishing Pack (2 Packs Req.) K63694530	
20-Pc. Heavy Scrubbing Pad Pack (2 Packs Req.) K63694510	
20-Pc. Extra Heavy Scrubbing Pad Pack (2 Packs Req.) K63694520	
20-Pc. Polishing Pad Pack (2 Packs Req.) K636993880	

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World-class scrubber delivering versatility and enhanced productivity.

Designed to scrub hard-to-clean areas where a traditional mop and bucket are used, the new, eco-friendly **BD 14/4** battery operated scrubber from Tornado® is compact, powerful, versatile and perfect for small or confined spaces. Cleaning approximately 11,300 square feet per hour, your small and congested spaces are clean, dry, healthy and safe in no time.

The **BD 14/4's** low-moisture design includes an integrated parabolic squeegee system, mounted just 1" behind the pad. Solution is contained within the cleaning path and instantly recovered, even around 180 degree turns! Floors are left amazingly dry, avoiding touch-up work that is often required on competitive models.

Say goodbye to corded electric units that can cause trips and falls. The **BD 14/4's** eco-friendly, maintenance-free AGM battery eliminates the danger of a power cord and periodic maintenance. What's more, the ergonomic handle minimizes worker fatigue and injuries.

PRODUCT SPECIFICATIONS		
MODEL	BD 14/4	
Part Number	99414	
MACHINE DIMENSIONS		
Dimensions (Lxwxh)	38" X 15" X 22"	
Net Weight (W/O Batteries)	132 Lbs.	
Shipping Weight	185 Lbs.	
Solution Tank	3.5 Gal.	
Recovery Tank	4 Gal.	
Squeegee Width	16"	
DESIGN CHARACTERISTICS	5	
Tank Construction	Polyethylene	
CLEANING SYSTEM		
Productivity	13,342 (Sq. Ft. Per Hour)	
Brush Type	Disc	
Brush Width	14"	
Brush Rpm	180	
Cleaning Path	14"	
Sound Level	69 Db	
MOTOR		
Vacuum Motor	0.8 Hp	
Brush Motor	0.3 Hp	
BATTERY		
Voltage	24	
REPLACEMENT ITEMS		
Standard Poly Scrub Brush	48903020	
Rear Squeegee	48410070	
Front Squeegee	48410090	
OPTIONAL ITEMS		
Soft Poly Scrub Brush	48903010	
Medium Poly Scrub Brush	48903030	
5-Mix Brush	48903050	
Rear Squeegee	48410060	
Front Squeegee	48410010	
Linatex Rear Squeegee	48410080	
13" Pad Holder Green Center Lock	48803030	







FITS IN NARROW SPACESNow clean narrow, congested isles or stalls

with this compact unit. The 14" cleaning path and adjustable, collapsible handle makes getting under partitions and counters so easy.



EASY ACCESS TO TANKS AND BATTERIES

For easy maintenance, and access to batteries, simply remove the solution tank for filling and dumping purposes.



COMPACT LOW-PROFILE

This highly maneuverable unit reaches difficult areas previously cleaned by a mop and bucket. With an adjustable handle, the unit fits operators of any height.

REDUCE TRAINING TIME

The unit is so simple to use, you'll save time and money by reducing training time required for your staff. With an ergonomic handle and control system plus easy-to-fill, empty and remove tanks, the BD 14/4 delivers easy and safe operation.



COMPACT STORAGE

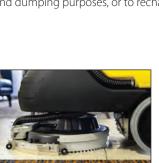
The collapsible handle and wheels on the back of the unit make storage easy. Stand on end to store in small closets or spaces.

World-class scrubber delivering versatility and enhanced productivity.

Designed to scrub and dry underneath countertops and small, hard-to-reach areas where a mop is traditionally used, the **BD 17/6 Compact Scrubber** is battery operated and designed to easily tackle these hard-to-clean areas. The BD 17/6's design includes a 180 degree rotating integrated parabolic squeegee system. This squeegee is mounted just 1" behind the pad to allow for immediate solution pick-up going both forwards and backwards. Pairing that with a 6 gallon solution and recovery tank, this machine makes your most difficult cleaning tasks no problem at all!

The **BD 17/6's** eco-friendly, maintenance-free AGM battery provides long run-times, eliminating the danger of a power cord, and reduces periodic maintenance. What's more, the ergonomic handle is adjustable to accommodate a variety of user-heights, and minimizes worker fatigue and injuries as a result.

Maintenance and access to the brush deck and squeegee on the **BD 17/6** is simple! When the unit is upright in storage position, your staff can easily access the brush deck and squeegee to check parts to ensure they are in top working condition. What's more, you have easy access to the tanks and batteries by simply removing the solution tank for filling and dumping purposes, or to recharge the 24 Volt AGM batteries.



REDUCE TRAINING TIME

The unit is so simple to use, you'll save time and money by reducing training time required for your staff. With an ergonomic handle and control system plus easy-to-fill, empty and remove tanks, the BD 17/6 delivers easy and safe operation.



FITS IN NARROW SPACES

Now clean narrow, congested isles or stalls with this compact unit. The 17" cleaning path and adjustable, collapsible handle makes getting under partitions and counters so easy!



COMPACT LOW-PROFILE

This highly maneuverable unit reaches difficult areas previously cleaned by a mop and bucket. With an adjustable handle, the unit fits operators of any height.



EASY ACCESS TO TANKS AND BATTERIES

For easy maintenance, and access to batteries, simply remove the solution tank for filling and dumping purposes.



DRODUCT CRECIFICATIONS			
PRODUCT SPECIFICATIONS			
MODEL	BD 17/6		
Part Number	99617		
MACHINE DIMENSIONS			
Dimensions (Lxwxh)	31 in x 24 in x 21 in 793 mm x 603 mm x 518 mm		
Net Weight	191 Lbs. / 86.5 kg		
Solution Tank	6 gal.		
Recovery Tank	6 gal.		
Squeegee Width	20 in / 510 mm		
DESIGN CHARACTERISTIC	S		
Tank Construction	Polyethylene		
CLEANING SYSTEM			
Productivity (Per Hour)	16,200 sq. ft. / 1,505 sq. m		
Brush Type	Disc		
Brush Width	17 in / 430 mm		
Brush Rpm	190		
Cleaning Path	17 in / 430 mm		
Sound Level	less than 70 dB		
MOTOR			
Vacuum Motor	340 W / 14 amp		
Brush Motor	340 W / 14 amp		
BATTERY			
Voltage	24		
REPLACEMENT ITEMS			
Standard Scrub Brush	48903120		
Rear Squeegee	48413040		
Front Squeegee	48413030		
OPTIONAL ITEMS			
Medium Poly Scrub Brush	48903130		
5-Mix Brush	48903150		
Grit Scrub Brush	48903140		
Front Squeegee	48413030		
Rear Squeegee	48413040		
Rear Squeegee Para	48413050		
17" Pad Holder	48803050		



PRODUCT SPECIFICATIONS				
MODEL*	BR 18/11	BD 20/11		
Catalog Number	99685	99680		
MACHINE DIMENSIONS				
LXWXH	43" X 21" X 41"	43" X 21" X 41"		
Net Weight	157 Lbs.	157 Lbs.		
Solution / Recovery Tank	11 gal. / 12 gal.	11 gal. / 12 gal.		
Squeegee Width	31"	31"		
DESIGN CHARACTERISTI	CS			
Tank Construction	Polyethylene	Polyethylene		
CLEANING SYSTEM				
Brush Type	Cylindrical	Disk		
Brush Width	18"	20"		
Brush RPM	1,300	182		
Brush Pressure	50 Lbs.	50 Lbs.		
Cleaning Path	18"	20"		
PRODUCTIVITY				
Cleaning Rate (Sq. Ft Per Hour)	17,969	18,830		
MOTORS				
Vacuum Motor	.6 hp	.6 hp		
Brush Motor	.8 hp	.8 hp		
Sound Level	66 dB	66 dB		
BATTERY				
Voltage	24	24		
REPLACEMENT ITEMS				
20" Pad Holder	NA	48802020		
Soft Scrub Brush (2 required)	K57621720	NA		
Reg Scrub Brush	NA	48902050		
Standard - Rear Squeegee	48903120	48405010		
Standard - Front Squeegee	48405020	48405020		
OPTIONAL ITEMS				
Super Soft Scrub Brush (2 required)	48901230			
Soft Scrub Brush		48902010		
Scrub Brush (2 required)	K57620080			
Med Scrub Brush		48902030		
Grit Scrub Brush	K57621710	48902040		
5 mix Brush		48902060		
Hi-Low Grout Brush (2 required)	K57621700			
Pad holder w/ center lock		48802010		
Oil Resistant - Rear Squeegee (before seial#: 10003331. N/A for 20/11T)	48401040	48401040		
Rear Squeegee	48405030	48405030		
Oil Resistant - Rear Squeegee (after serial#: 10003331)	48405040	48405040		

See Page 59 for warranty information * Also available in traction model.

World-class scrubbers delivering leading edge innovation, durability, and versatility.

The **BR and BD Small Walk-behind Scrubber Family** is perfect for smaller spaces and is offered in your choice of disc or cylindrical brush for hard floor scrubbing. These small scrubbers meet rigorous global user standards for durability and productivity, offering enhanced features, benefits and a sleek look that clearly outmatches the competition.

Designed for environmental sustainability, these units conserve water, solution and source materials, and also operate at a whisper-quiet 67 dB, which is perfect for use in noise-sensitive facilities such as hospitals, schools, libraries, restaurants, and more. The BR 18/11 features cylindrical brush technology which delivers low moisture deep scrubbing through concentrated brush speeds of 1300 RPM, and provides 4-6 times more contact pressure than rotary brush scrubbing, handling any flat floor surface with ease, as well as structured surfaces such as quarry tile, paver bricks, and raised rubber disc flooring.

Our small walk-behind scrubbers feature a tough, no-hassle, quick-change parabolic squeegee system delivering 100% solution recovery — even on 180 degree turns. Constructed with a tough roto-molded polyethylene body, you'll get years of maximum performance and reliability, while experiencing minimal machine down-time.



BD 20/11



EASY TO CLEANQuick release recovery tank lid for easy tank rinsing and filling.



VACUUM MOTOR PROTECTION
Automatic recovery tank float shut off
device to avoid foam and water from

damaging vacuum motors.



ON-BOARD CHARGERThe BR 18/11 cylindrical brush scrubber comes standard with a built-in on-board charger to ensure quick and easy



PARABOLIC SQUEEGEE

Heavy duty assembly featuring a four-sided rear blade with quick release lever to facilitate squeegee changes in 10 seconds or less!

This ensures a lower cost of ownership.



SILENT SUPERVISORErgonomic handle and easy-to-read control panel displays battery run time and charge indicator, maximizing your team's cleaning efficiency and protecting your investment.

The EZ Floorkeeper® Series: Value, performance, and one of the industry's most popular walk-behind scrubbers.

Each of the units in the **EZ Floorkeeper® Series** of automatic scrubbers are perfect for a wide range of flooring services from tile, linoleum and rubberized surfaces to marble and concrete. Ruggedly constructed with rotationally-molded plastic, these machines are a fundamental component in a hard-floor maintenance program. In a single pass, an **EZ Floorkeeper®** lays solution, scrubs, and recovers dirty water, leaving a clean, dry floor behind. Thanks to their quiet operation, compact size, and front-mounted warning light, they can be used in any setting where customers are shopping.

Tornado* EZs are in use worldwide in retail store chains, grocery stores, and discount stores. EZs are also appropriate for commercial and healthcare applications as well as detail cleaning projects in industrial facilities.

EZ Floorkeepers® are available in a 20" brush-assisted model, a 20" traction drive unit, and a 24" traction drive unit. All units feature 200 rpm brush speed, 3-stage vac motor, speed control, 13-gallon solution tank and 13-gallon recovery tank. All models come standard with swing squeegee, pad holder, batteries, and charger.



COMMON SENSE FEATURES A see-through lid on the recovery tank allows the operator to monitor recovery tank level for



PROFESSIONAL PERFORMANCE

The EZs leave behind a clean, dry floor. Easy-to-use controls make the unit an operator favorite the world over.



BUILT-IN CHARGER

built-in battery charger on back of unit allows for quick charging when the unit is not in operation, or opportunity charging when unit is resting between jobs.



THE EZ TRACTION DRIVE: QUIET, POWERFUL, RELIABLE OPERATION

The 20" EZ-TD and the 24" EZ-TD feature a traction drive system for the unit's forward motion. The traction drive is a sealed gear unit, a significant reduction in part number compared to competitive units. The traction drive requires no maintenance, has no lube points, and is extremely quiet.



SERVICE MADE SIMPLE

The battery compartment is easily accessible for maintenance and service operations by qualified personnel.



PRODUCT SPECIFICATIONS			
MODEL	20" EZ BRUSH DRIVE	20" EZ TRACTION DRIVE	24" EZ TRACTION DRIVE
Catalog Number	99105B	99125B	99130
MACHINE DIMEN	SIONS		
Dimensions (L X W X H)	49" X 22" X 37"	49" X 22" X 37"	53" X 28" X 37"
Weight W/Out Batteries	151 Lbs	166 Lbs	172 Lbs
Solution Tank	13 Gal	13 Gal	13 Gal
Recovery Tank	13 Gal	13 Gal	13 Gal
CLEANING SYSTI	M		
Cleaning Path	20"	20"	24"
Swing Squeegee	28"	28"	32"
Brush/Pad Size	20"	20"	24"
Brush/Pad Speed	200 Rpm	200 Rpm	200 Rpm
Brush/Pad Pressure	67 Lbs	65-85 Lbs	72 Lbs
Cfm	65	65	65
Waterlift	71"	71"	71"
MOTORS			
3-Stage Vac Motor	.75 Hp	.75 Hp	.75 Hp
Brush Motor	1.0 Hp	1.0 Hp	1.0 Hp
Drive	Brush Assist	Traction Drive	Traction Drive
Forward Speed	0 To 150 Fpm	0 To 200 Fpm	0 To 200 Fpm
Reverse Speed	N/A	150 Fpm	150 Fpm
BATTERY			
Voltage	24 V System	24 V System	24 V System
REPLACEMENT ITEMS			
Pad Holder (1 Included W/ Unit)	99262	99262	99272
Squeegee Replacement Kit	18709	18709	18710
OPTIONAL ACCESSORIES AND ATTACHMENTS			
Poly Scrub Brush (1 Req.)	99260	99260	99270
Grit Brush (1 Required)	99263	99263	N/A
1.5" Wet Attachment Set	90676	90676	90676

World-class scrubbers delivering leading edge innovation, durability, and versatility.

Tornado's **BR 22/14T and BD 26/14 Medium Walk-Behind Scrubbers** are designed for use in moderately spaced interiors, and deliver world class scrubbing performance, amazing durability, and environmental sustainability. With Tornado's world class medium walk-behind auto scrubbers, you'll get enhanced cleaning performance, drier floors and increased building and occupant safety.

Rigorously tested in the field, the BR and BD family of medium walk-behind scrubbers are constructed with a tough rotomold polyethylene body, ensuring years of maximum performance and reliability. Service downtime is significantly reduced with its wide-open design for fast and easy access to tanks, batteries and motor. When it comes to longevity, Tornado's BR and BD medium walk-behind scrubbers come standard with a 10 year warranty on the body and tanks for years of hassle-free use and reliability.

The environmentally preferred BR units offer cylindrical brush technology which delivers low moisture cleaning design and deep scrubbing through concentrated brush speeds of 1300 RPM—over six times higher than the speed of comparable rotary brush automatic scrubbers. Cylindrical brushes provide 4-6 times more contact pressure than rotary brush scrubbing, handling flat and structured floor surface with ease. Source reduction and environmental waste are minimized as cylindrical brushes far outlast rotary pads, using on average, one set of brushes for every 100 floor pads. This also means increased worker productivity, safety, cleaning speed, and significantly less time spent on pad replacement and maintenance.

PRODUCT SPECIFICATIONS			
MODEL	BR 22/14T	BD 26/14	
Catalog Number	99695T	99720	
MACHINE DIMENSIONS			
LXWXH	50" X 24" X 42"	53" X 28" X 42"	
Net Weight	223 Lbs.	244 Lbs.	
Solution / Recovery Tank	14 / 15 gal.	14 / 15 gal.	
Squeegee Width	33"	33"	
DESIGN CHARACTERIST	ICS		
Tank Construction	Polyethylene	Polyethylene	
CLEANING SYSTEM			
Brush Type	Cylindrical	Twin Disk	
Brush Width	22"	26"	
Brush RPM	1300	345	
Brush Pressure	79 Lbs.	110 Lbs. max.	
Cleaning Path	22"	26"	
PRODUCTIVITY			
Cleaning Rate (Sq. Ft Per Hour)	22,000	29,225	
MOTORS			
Vacuum Motor	.6 hp	.8 hp	
Brush Motor	.6 hp	1.0 hp	
Traction Drive	Yes	Yes	
Sound Level	67 dB	67 dB	
BATTERY			
Voltage	24	24	
On-Board Charger	Yes	Yes	
REPLACEMENT AND OP	TIONAL ITEMS		
Standard Rear Squeegee	48402010	48402010	
Poly/Oil Resistant Front Squeegee	48402020	48402020	
Oil Resistant Rear Squeegee	48402040	48402040	
Extra Soft Scrub Brush (2 required)	48902140	NA	
13 " Pad Holder (2 required)	NA	48803030	
Soft Scrub Brush (2 Req.)	K57622970	NA	
Medium Scrub Brush (2 Req.)	K57623480	NA	
13"Medium Scrub Brush (2 Req.)	NA	48903020	
Grit Scrub Brush (2 req.) K57623000 NA			
13" Grit Scrub Brush (2 req.)	NA	48903040	
Soft Scrub Brush (2 req.)	K57622970	NA	
Hi-Low Grout Brush (2 req.)	K57622980	NA	





DISC PADS AND BRUSHES

The BD units come standard with pad holders. When used with the appropriate pad, this is the ideal solution to daily maintenance cleaning. The BD machines can be fitted with a variety of optional scrub brushes, a time-proven solution for smooth floors.



EASY MAINTENANCE

A sturdy hood strut keeps lid open during maintenance, allowing easy access to batteries, vacuum motors and hoses.



QUICK BRUSH CHANGE

Deck shroud peals back allowing easy access to change brushes.



ON-BOARD CHARGER

The BR 22/14T cylindrical brush scrubber comes standard with a built-in on-board charger to ensure quick and easy charging.



CYLINDRICAL BRUSHES

The BR unit comes standard with white brushes for daily cleaning operations. A variety of brushes are available for high performance on structured flooring.



MANUAL LEVERS FOR GREATER RELIABILITY

Our walk-behind models feature long lasting, all-manual levers that raise and lower decks.

World-class scrubber delivering superior productivity and durablity

Tornado's **BD 28/20** walk-behind scrubber offers world class scrubbing with a narrow profile and wide cleaning path. This unit is perfect for use in grocery stores, retail facilities, hospitals, and warehouses. The **BD 28/20** lays down cleaning solution, scrubs, then vacuums away dirty solution, leaving floors clean and dry in just one pass, even around 180 degree turns. Clean over 29,493 square feet per hour while increasing your building's occupant health and safety.

Rigorously tested in the field, the **BD 28/20** walk-behind scrubber is constructed with a tough roto-mold polyethylene body, ensuring years of maximum performance and reliability. Service down-time is significantly reduced with its wide open clam shell design for fast and easy access to tanks, batteries and motor. For application flexibility and easy maintenance, there are no tools required when changing disc brushes. When it comes to longevity, Tornado's **BD 28/20** walk-behind scrubber will outlast the competition, and comes standard with a 10 year warranty on the body and tanks for years of hassle-free use and reliability.

Meet LEED EB Green Building Standards with the **BD 28/20** optional eco-friendly, maintenance-free AGM batteries. With Tornado's eco-friendly AGM batteries, you can say good-bye to dangerous battery maintenance, risk of work-related injury, and hello to increased worker safety. This also results in increased worker productivity and reduced machine down time.



QUICK PAD CHANGE

Deck shroud peals back for easy access to change disc pads.



PARABOLIC SQUEEGEE

The parabolic squeegee ensures 100% solution recovery, even around 180 degree turns. Heavy duty assembly features a four-sided rear blade with quick-release lever to facilitate squeegee changes in just 10 seconds or less!



DISC PADS AND BRUSHES

The BD 28/20 comes standard with pad holders. When used with the appropriate pad, this is the ideal solution to daily maintenance cleaning. The unit can be fitted with a variety of optional scrub brushes, a time-proven solution for smooth floors.



PRODUCT SPECIFICATIONS		
MODEL	BD 28/20	
Part Number	99728	
MACHINE DIMENSIONS		
Dimensions (Lxwxh)	59 in x 30 in x 41 in / 1490 mm x 760 mm x 1045 mm	
Net Weight (W/O Batteries)	320 Lbs. / 145 kg.	
Solution Tank	20 gal / 75 l	
Recovery Tank	22 gal / 85 l	
Squeegee Width	33 in / 835 mm	
DESIGN CHARACTERISTIC	S	
Tank Construction	Polyethylene	
CLEANING SYSTEM		
Productivity	29,493 f2 per hour 2,740 m2 per hour	
Brush Type	Disc	
Brush/Pad Diameter (2 Brushes)	2 x 14 in / 2 x 355 mm	
Brush Rpm	160	
Brush/Pad Pressure	up to 110 Lbs. / 50 kg.	
Cleaning Path	28 in / 685 mm	
Maximum Speed2.5 miles per hour / 4 km per hour		
MOTOR		
Vacuum Motor	570 Watts / 23.75 Amps	
Brush Motor	700 Watts / 29 Amps	
Traction Motor	300 Watts / 12.5 Amps	
BATTERY		
Battery	24 v	
REPLACEMENT ITEMS		
13" Pad Holder (2 Required)	48803030	
Standard Rear Squeegee	48406190	
Standard Front Squeegee	48406210	
OPTIONAL ITEMS		
14" Poly Scrub Brush .6 (2 Required)	48914030	
14" Poly Scrub Brush .9 (2 Required)	48914040	
Tynex Scrub Brush (2 Required)	48914050	
5 Mix Brush (2 Required)	48914060	
See Page 59 for warranty information		

World-class scrubber delivering superior productivity,

durability and improved health

Tornado's new BD 32/26 walk-behind scrubber offers world class scrubbing, a wide cleaning path and large capacity solution and recovery tanks. This unit is perfect for use in grocery stores, retail facilities, hospitals, and warehouses. The BD 32/26 lays down cleaning solution, scrubs, then vacuums away dirty solution, leaving floors clean and dry in just one pass, even around 180 degree turns. Clean over 32,300 square feet per hour while increasing your building's occupant health and safety.

Rigorously tested in the field, the BD 32/26 walk-behind scrubber is constructed with a tough roto-molded polyethylene body, ensuring years of maximum performance and reliability. Service down-time is significantly reduced with its wide-open clam shell design for fast and easy access to tanks, batteries and motor. For application flexibility and easy maintenance, there are no tools required when changing disc brushes. When it comes to longevity, Tornado's BD 32/26 walk-behind scrubber will outlast the competition, and comes standard with a 10 year warranty on the body and tanks for years of hassle-free use and reliability.

The BD 32/26 improves the health of your facility by offering a choice of traditional wet or eco-friendly, maintenance-free AGM batteries. With Tornado's eco-friendly AGM batteries, you can say good-bye to dangerous battery maintenance that can lead to a work-related injury, and hello to increased worker safety. This also results in increased worker productivity and cleaning speed. With a sound level of only 67 dB, the BD 32/26 can clean any space quietly. Less noise results in reduced distractions and ensures improved working conditions for your staff

PRODUCT SPECIFICATIONS		
MODEL	BD 32/26	
Part Number	99732	
MACHINE DIMENSIONS		
Dimensions (Lxwxh)	66 in x 29 in x 47 in 1676 mm x 737 mm x 1194 mm	
Net Weight (W/O Batteries)	700 Lbs./318 kg	
Shipping Weight	800 Lbs./ 363 kg	
Solution Tank	26 gal. /98 I	
Recovery Tank	28 gal. / 110 i	
Squeegee Width	39 in / 99 mm	
DESIGN CHARACTERIST	ICS	
Tank Construction	Polyethylene	
CLEANING SYSTEM		
Productivity (Ft ² Per Hour)	32,280 f ² /hr / 2999 m ² /hr	
Brush Type	Disc	
Brush Width (2 Brushes)	16 in / 406 mm	
Brush Rpm	190	
Brush Pressure	up to 133 Lbs. / 60 kg	
Cleaning Path	32 in / 813 mm	
Sound Level	67 dB	
MOTOR		
Vacuum Motor	0.8 hp / 588 Watts	
Brush Motor	1.1 hp / 809 Watts	
BATTERY		
Battery	24 v	
REPLACEMENT ITEMS		
16" Pad Holder (2 Required)	48803050	
Standard Rear Squeegee	48406100	
Standard Front Squeegee	48403020	

See Page 59 for warranty information





DISC PADS AND BRUSHES

The BD 32/26 comes standard with pad holders. When used with the appropriate pad, this is the ideal solution for daily maintenance cleaning. The unit can be fitted with a variety of optional scrub brushes, all of which are a time-proven solution for smooth floors



EASY MAINTENANCE

A locking hood strut keeps the lid open during maintenance for safe and easy access to batteries, vacuum motors and hoses. The clam shell design allows the batteries to breathe during the charging process, preventing moisture and corrosion build-up of the battery posts.



SILENT SUPERVISOR

Ergonomic handle and easy-to-read control panel displays battery run time and charge indicator, maximizing your team's cleaning efficiency and protecting your investment.



QUICK PAD CHANGE

Deck shroud peals back for easy access to change disc pads.



The parabolic squeegee ensures 100% solution recovery, even around 180 degree turns. Heavy duty assembly features a four-sided rear blade with quick-release lever to facilitate squeegee changes in just 10 seconds or less!







COMPACT LOW-PROFILE

This highly maneuverable unit reaches difficult areas previously cleaned by larger ride-on scrubbers.



EASY ACCESS TO TANKS AND BATTERIES

For easy maintenance, gain access to batteries by simply lifting the seat.

DISC PADS AND BRUSHES

The BD units come standard with pad holders. When used with the appropriate pad, this is the ideal solution to daily maintenance cleaning. The BD machines can be fitted with a variety of optional scrub brushes, a time-proven solution for smooth floors.





Easy-to-read control panel displays battery run time and charge indicator, maximizing your team's cleaning efficiency and protecting your investment.



CYLINDRICAL BRUSHES

The BR unit comes standard with brushes for daily cleaning operations. A variety of brushes are available for high performance on structured flooring.

Note: Brushes shown above are examples.

Actual brushes colors may vary.

World-class scrubbers delivering increased productivity, durability, health and safety.

Maintain and renew hard floor surfaces faster than ever before. Tornado's **BD 26/27 and BR 28/27 Ride-on Automatic Scrubbers** increase cleaning productivity in areas where walk-behind scrubbers were used in the past, thanks to their compact footprint and great maneuverability. The **BD 26/27 and BR 28/27** are the perfect units for supermarkets, schools, health care, warehouses, and more. Operating at an incredibly low 69 dB the units are also perfect for daytime cleaning needs.

For effortless operation, Tornado's ride-on **BD 26/27 and BR 28/27** offers an automatic mode which starts all of the necessary operations of the scrubber once turned on. This system constantly controls the operation parameters to guarantee longer runtime and reliability. When an operator places the unit in reverse the unit intuitively retracts the squeegee. The **BD 26/27 and BR 28/27** are paramount units in Tornado's family of scrubbers, which are recognized throughout the industry as market leaders and world-class products!

Tornado's **BD 26/27 and BR 28/27 Ride-on Automatic Scrubbers** are perfect for use in many different environments including:

- Supermarkets
- Warehouses
- Schools
- Health Clubs
- · Hospitals, and more.

PRODUCT SPECIFICATIONS			
MODEL	BD 26/27	BR 28/27	
Part Number	99772	99775	
MACHINE DIMENSION	1 *****	33113	
		60" 24" 50"	
Dimensions (Lxwxh)	62" x 28" x 52"	62" x 31" x 52"	
Net Weight (W/O Batteries)	573 Lbs.	578 Lbs.	
Shipping Weight	672 Lbs.	677 Lbs.	
Solution Tank	27 gal.	27 gal.	
Recovery Tank	27 gal.	28 gal.	
Squeegee Width	33"	38.5"	
DESIGN CHARACTERIS	STICS	T.	
Tank Construction	Polyethylene	Polyethylene	
CLEANING SYSTEM			
Productivity	35,508 (Ft2 Per Hour)	37,673 (Ft2 Per Hour)	
Brush Type	Disc	Cylindrical	
Brush Width	26"	28"	
Brush Rpm	190	785	
Brush Pressure	132 Lbs. max	320 Lbs. max	
Cleaning Path	26"	28"	
Sound Level	69 dB	69 dB	
MOTOR			
Vacuum Motor	580 W	580 W	
Brush Motor	650 W	two 600 W	
BATTERY			
Battery	24 v	24 v	
REPLACEMENT ITEMS			
13" Pad Holder	48803030	N/A	
Standard Front Squeegee	48408020	48408020	
Standard Rear Squeegee	48408010	48408010	
Poly Scrub Brush	N/A	48906020	
OPTIONAL ITEMS			
Extra Soft Scrub Brush	N/A	48906100	
Medium Scrub Brush	N/A	48906060	
Hi-Low Scrub Brush	N/A	48906040	
Grit Scrub Brush	N/A	48906080	
13" Medium Scrub Brush	48903020	N/A	
13" Grit Scrub Brush	48903040	N/A	
See Page 59 for warranty information.			

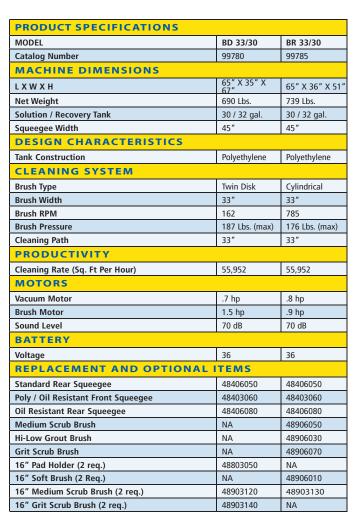
World-class ride-on automatic scrubbers — attractive design, advanced engineering, unsurpassed performance.

Renew hard floor surfaces in large, unobstructed spaces faster than ever before. Tornado's ride-on automatic scrubbers increase cleaning productivity in areas including supermarkets, manufacturing plants, airports, exhibit halls and much more.

For effortless operation, Tornado's **Ride-On BR/BD 33/30** units offer an automatic mode which will start all necessary operations of the scrubber once it is turned on. This system also gradually starts all of the motors and constantly controls the operation parameters to guarantee longer run-time and reliability. When in reverse, this machine also includes an automatic squeegee retraction feature.

Features of the BR 33/30 and BD 33/30

- Both units have a 33" cleaning path
- BR unit comes standard with a stainless steel pre-sweep function
- · 30 gallon solution tank
- · Automatic operation control mode
- · Automatic squeegee retraction when in reverse
- · Steering radius of only 6 feet for maneuvering tight corners
- · Simple operator interface
- Exceptionally durable Roto-molded polyethylene construction
- · Ergonomic design
- Multiple brush pressure settings













PARABOLIC SQUEEGEE

Heavy duty assembly featuring a four-sided rear blade with quick release lever to facilitate squeegee changes in 10 seconds or less! This ensures a lower cost of ownership.



CYLINDRICAL BRUSHES

The BR unit comes standard with white brushes for daily cleaning operations. A variety of brushes are available for high performance on structured flooring.

Note: Brushes shown above are examples. Actual brush colors may vary.

QUICK BRUSH CHANGE

Deck shroud peals back allowing easy access to change brushes.



SAFETY FEATURES:

To ensure worker safety, the machine includes a roll-bar for greater operator protection.



DISC PADS AND BRUSHES

The BD unit comes standard with pad holders. When used with the appropriate pad, this is the ideal solution to daily maintenance cleaning. The BD machine can be fitted with a variety of optional scrub brushes, a time-proven solution for smooth floors.

Heavy-duty design, advanced engineering and unsurpassed performance

Tornado's new **BD 40/66 and BR 40/66** ride-on scrubbers not only further extends our auto-scrubber offering, but is designed to meet the toughest cleaning applications. Available in disc and cylindrical options, with 66 gallon solution tanks and heavy-duty body design these scrubbers have numerous features to solve your toughest cleaning challenges.

For effortless operation, Tornado's ride-on **BD 40/66 and BR 40/66** units offer an automatic mode which will start all necessary operations of the scrubber. This system gradually starts all of the motors and constantly controls the operation parameters to guarantee longer run-time and reliability. When in reverse, this machine includes an automatic squeegee retraction feature.

The environmentally preferred **BR 40/66** offers the latest modern enhancement—cylindrical brush technology. Cylindrical brushes provide 4-6 times more contact pressure than rotary brush scrubbing, handling any flat floor surface with ease, as well as structured surfaces such as quarry tile, paver bricks, and raised rubber disc flooring. Source reduction and environmental waste are minimized as cylindrical brushes far outlast rotary pads, using, on average, one set of brushes for every 100 floor pads. This also means increased worker productivity, safety, cleaning speed, and significantly less time spent on pad replacement and maintenance.





DUAL-VACUUM MOTORSThese units incorporates dual-vacuum motors to ensure complete solution recovery.



AUTOMATIC MODEAutomatic mode starts all necessary operations of the scrubber once the gas pedal is pressed, making operation effortless.



LARGE CLEAN OUTA large evacuation plate ensure operators can easily clean out the recovery tank.



INTEGRATED BUMPER Integrated bumper keeps walls and other sensitive areas from being damaged.

PRODUCT SPECIFI	CATIONS	
MODEL	BD 40/66	BR 40/66
Catalog Number	99790	99795
MACHINE DIMENS	SIONS	
LXWXH	80 in x 41 in x 77 in 203 cm x 104 cm x 196 cm	80 in x 46 in x 77 in 203 cm x 117 cm x 196 cm
Unit Weight (W/O Batteries)	1,323 Lbs. / 600 kg	1,477 Lbs. / 670 kg
Solution Tank	62 gal / 235 l	62 gal / 235 l
Recovery Tank	66 gal / 250 l	66 gal / 250 l
Squeegee Width	51 in / 130 cm	51 in / 130 cm
CLEANING SYSTE	M	
Brush Type	Disc	Cylindrical
Cleaning Path	40 in / 102 cm	40 in / 102 cm
Brush Rpm	162	933
Brush Pressure	353 Lbs. / 160 kg max	243 Lbs. / 110 kg
PRODUCTIVITY		
Cleaning Rate	75,347 sq. ft. per hour 7,000 sg. m per hour	75,347 sq. ft. per hour 7,000 sq. m per hour
MOTORS		
Traction Motor	33 A / 1,200 W	33 A / 1,200 W
/acuum Motor (Dual)	16 A / 570 W	16 A / 570 W
Brush Motor	42 A / 1,500 W	42 A / 1,500 W
BATTERY		
/oltage	36 V	36 V
REPLACEMENT IT	EMS	
Pad Holder	48802010	N/A
Standard Front Brush	N/A	48907050
Standard Rear Brush	N/A	48907060
Standard Front Squeegee	48407130	48407020
Standard Rear Squeegee	48407120	48407010
OPTIONAL ITEMS		
Medium Brush	N/A	48907070
Grit Brush	N/A	48907080
Side Brush	N/A	48907100
Standard Brush	48902050	N/A
Medium Brush	48902030	N/A
Grit Brush	48902040	N/A
5-Mix Brush	48902060	N/A
Linatex Rear Squeegee	48407140	48407030
Pu Rear Squeegee	48407160	48407040

A complete range of wet-dry vacuums, designed to work in any environment and tackle any cleaning challenge.

Tornado's **Taskforce® Series of Wet/Dry Vacuums** are some of the toughest, most versatile, and cost-effective tank vacuums on the market. Available in your choice of either a polyethylene or stainless steel body and in sizes ranging from ten, fifteen, seventeen and twenty gallon capacities, these vacuums offer a 1.61 HP vac motor and generate 114 cfm and 90" of waterlift. The **Taskforce®** series effectively handles general dry debris pick up in commercial environments, as well as liquids such as water, scrubbing solutions, and stripping solutions. These vacuums are perfect not only for general maintenance and cleaning, but also to manage soil and moisture in high-traffic areas, and can be paired with floor machines and other mopping and scrubbing operations as well.

The **Taskforce**® series comes complete with an attachment and accessory set, including hose, wand, carpet tool, squeegee tool, crevice tool, and dusting tool. The swivel hose connector allows 360-degree hose rotation, letting you move the vacuum without fear of disconnects. The tools and accessories can be used for a variety of applications and debris types.

You can count on Tornado's wet-dry vacuums to get the job done, whether being used for construction site clean-up, around the shop, or for emergency wet pickup around busy entryways. Tornado has been proudly producing world-class vacuums since 1927, and as always, our wet-dry vacuums stand for quality and superior durability.



Great

Value!

1.TASKFORCE®	10 (94234)
2.TASKFORCE®	17 (94230)
3.TASKFORCE®	15 (94232)
4. TASKFORCE®	20 (94236)





hose, two-piece wand, hard floor tool, squeegee attachment, dust brush and crevice tool.

PACKAGED COMPLETE Standard attachments include a crush proof

CONVENIENTDispose of waste water easily with the tip-and-pour tank.





WASHABLE FILTER
The filter is easily removed from the float cage for washing and re-use.

MODEL	TASKFORCE® 10	TASKFORCE® 15	TASKFORCE® 17	TASKFORCE® 20 TROT-MOP
Catalog Number	94234	94232	94230	94236
MACHINE DIMI	ENSIONS			
LXWXH	19ln X 16ln X 28ln 48Cm X 41Cm X 71Cm	28ln X 21ln X 37 ln 71Cm X 53Cm X 94Cm	24in x 18in x 36in 61cm x 46cm x 91cm	22in x 24in x 38in** 56cm x 61cm x 97cm*
Net Weight	29 Lbs / 13 Kg	52 Lbs / 24 Kg	36 Lbs / 16 kg	63 Lbs / 29 kg
Tank Size	10 Gal / 38 Liters	15 Gal / 57 Liters	17 gal / 64 liters	20 gal / 76 liters
Wet Working Capacity	5 Gal / 19 Liters	10 Gal / 38 Liters	12 gal / 45 liters	15 gal / 57 liters
Cord Length	30 Ft / 9 M	30 Ft / 9 M	30 ft / 9 m	30 ft / 9 m
DESIGN CHARA	ACTERISTICS			
Body Construction	Polyethylene	18 Gauge Stainless Steel	Polyethylene	18 Gauge Stainless Steel
Hose	1.5" X 10' Hose With Swivel Connector/ Cuff Lock	1.5" X 10' Hose With Swivel Connector/ Cuff Lock	1.5" x 10' Hose with swivel connector/ cuff lock	1.5" x 10' Hose with swivel connector/cuff lock
Wheel Dimension	7" Non-Scuff Soft Rear / 3" Swivel Casters	8" Non-Scuff Soft Rear / 3" Swivel Casters	7" non-scuff soft rear / 3" swivel casters	9.5" non-scuff rear
Dump System	Lift-And-Pour Tank	Tilt-And-Pour Tank	Rear drain hose	Tilt-and-Pour tank
CLEANING SYS	TEM			
Cfm	114	114	114	114
Water Lift	90"	90"	90"	90"
Filtration	Cloth Filter For Dry Recovery	Cloth Filter For Dry Recovery	Cloth filter for dry recovery	Cloth filter for dry recovery
MOTORS				
Motor Type	One-2 Stage Motor	One-2 Stage Motor	One-2 stage motor	One-2 stage motor
Motor Power	120 V / 1200 Watts	120 V / 1200 Watts	120 V / 1200 watts	120 V / 1200 watts
Motor Hp	1.6 Hp	1.6 Hp	1.6 hp	1.6 hp
REPLACEMENT	ITEMS AND A	CCESSORIES		
Paper Filter	WD36	WD36	WD36	WD36
Filter Assembly	WD3	WD3	WD3	WD3
Extension Wand	WD29	WD29	WD29	WD29
Brush Nozzle Assembly	WD112	WD112	WD112	WD112
Crevice Tool	WD32	WD32	WD32	WD32
Round Brush	WD33	WD33	WD33	WD33
Front Mount Squeegee	N/A	FM100	FM100H	FM100 standard
Squeegee Nozzle Assembly	WD30A	WD30A	WD30A	WD30A
Hose Assembly	WD25	WD25	WD25	WD25

See Page 59 for warranty information.

^{**} Dimensions with handle and Trot-Mop: 36 in x 26 in x 38 in / 91 cm x 66 cm x 97 cm

Simultaneous wet and dry recovery, with a rugged design

that withstands demanding applications.

It's simple physics. Recovering heavier debris efficiently requires increased airflow when using a vacuum. The **Taskforce® External Filter Wet/Dry Vacuum** creates powerful air flow beyond that found in traditional wet/dry vacuums. As a result, the unit is perfect for maintenance departments and industrial applications where the recovery of heavier debris is an everyday part of the job. Dry wall dust, sawdust, cement dust, water, and powder are no match for its recovery power. This electric unit can be easily moved from the tool shop to the factory floor or building site or other places where rapid pick-up of heavy debris is a must.

The Taskforce® External Filter Wet/Dry Vacuum can recover wet and dry material without the need to stop and change or clean an internal filter. That means added efficiency, reduced work stoppage, and no more guesswork when it comes to choosing the right filter for debris recovery. A 2.25 HP powerhead with 184 CFM of airflow is fitted on a 16-gallon T-Lite thermoplastic tank. The tank is crack and corrosion resistant and sits on a convenient tip-and-pour carrier with four wheels for easy transport. An external filter comes standard with the unit. A true 2" intake can be fitted with 1.5" and 2" hoses and attachments. A wide selection of optional tools and attachments (see below) are available for a variety of applications.





MOBILE

4" front swivel casters and 10" rear wheels permit easy transport, stability and control regardless of how full the tank is.



POWERFUL

A 2.25 HP powerhead provides the needed power to tackle many aggressive industrial vacuuming applications. The powerhead is fitted on the tank cover with a locking collar. It can easily be removed for service, transport, or blowing



OPERATOR-FRIENDLY

The tip-and-pour tank and carrier makes transport and disposal of a full tank easy and hassle-free. A tool caddy is mounted on the back for optional tools and attachments, spray bottles, and other cleaning supplies.

SIMPLE AND EFFECTIVE

The unit can be broken down easily. Shown here: The 16-gallon T-Lite thermoplastic tank and the detachable 2.25 HP powerhead. The powerhead can be removed from the cover and used separately with an optional blowing nozzle for air blowing/sweeping. A large poly external filter comes standard with the unit as well.



PRODUCT SPECIFICATIONS			
MODEL	TASKFORCE® EXTERNAL FILTER VAC		
Catalog Number	98995		
Vac Hp	2.25		
Power Cord	14/3 50' long		
Cfm	184		
Waterlift	51"		
T-Lite Tank	16 gal		
Wet/Dry Capacity	12 gal/1.3 bshl.		
Filter Area	1268 Sq. In.		
Size (L X W X H)	24" X 20" X 38"		
Weight	65 Lbs.		
STANDARD ACCESSORIES AND F	REPLACEMENT PARTS		
(Included with unit)			
External Filter	90377		
OPTIONAL ACCESSORIES AND ATTACHMENTS			
Liquid Shut-Off For External Filter Vacs	90573		
Blowing Nozzle	90010		
1.5" Wet/Dry Industrial Tank Vac Attachment Set	90660*		
*90660 Includes All Of The Following, Which May Also Be Ordered Individually:			
15' X 1.5" Urethane Static Conductive Hose W/ Sleeve 90688			
Double-Curved 1.5" Wand	90286		
14" X 1.5" Squeegee Floor Tool	90644		
14" X 1.5" Fiber Floor Tool	90642		
18" X 1.5" Round Nozzle	90414		
See Page 59 for warranty information.			

See Page 59 for warranty information.

*This is the recommended attachment set for this unit. Other sets may be used and are found in the Tornado" Buyers Guide.

EXTERNAL FILTER VAC APPLICATION PERFORMANCE GUIDE				
(★ = Excellent; ✓ = Good)				
WATER	/	POWDER	*	
CUTTING OIL	*	ULTRA FINE POWDER	*	
MACHINE OIL	1	SAND	/	
LIGHT SOLID DEBRIS	*	OIL DRY	/	
HEAVY SOLID DEBRIS	1	METAL SHAVINGS	,	
SAWDUST	*	AND CHIPS	V	

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Simultaneous wet and dry recovery, powered by compressed air for maximum performance.

Powered by compressed air, the **Taskforce® External Filter Air Vacuum** creates waterlift substantially beyond that found in traditional wet/dry vacuums. The unit is ideal for heavy-duty applications requiring extremely aggressive suction power. This machine is perfect for rapid high-volume recovery of wet material, and with its external filter, can recover dry material as well.

From the tool shop to the factory floor, this unit handles such challenges as water, oil, powder, metal shavings, oil, and a variety of other common types of debris in an industrial environment. In addition, the **Taskforce®** can recover wet and dry material without the need to stop and change or clean an internal filter.

That means minimal stoppages and no more operator guesswork on choosing the right filter for the right application. It should be noted that an air compressor, airline, and line couplings are required for operation and are not available from Tornado*.

For the 95953, the priority is power. A patented Venturi powerhead with incredible 242" waterlift is fitted on a 18-gallon stainless tank. Furthermore, the machine has no moving parts and is spark-free. The tank sits on a convenient tip-and-pour carrier with four wheels for easy transport. An external filter comes standard with the unit. A wide selection of optional tools and attachments are available for a variety of applications.

PRODUCT SPECIFICATIONS	
MODEL	TASKFORCE® EXTERNAL FILTER AIR VAC
Catalog Number	95953
Venturi Powerhead (Cfm W/2" Orifice)	83
Waterlift	242"
Stainless Tank	18 gal
Wet/Dry Capacity	14 gal/1.5 bshl.
Filter Area	1268 Sq. In.
Compressor Line Cfm	47@ 90 PSI
Size (L X W X H)	24" X 20" X 41"
Weight	54 Lbs.
STANDARD ACCESSORIES AND	REPLACEMENT PARTS
(Included with unit)	
External Poly Filter	90377
Support Rod	95996
OPTIONAL ACCESSORIES AND A	ATTACHMENTS
Liquid Shut-Off For External Filter Vacs	90573
1.5" Wet/Dry Industrial Tank Vac Attachment Set	90660*
**90660 Includes all of the following, which may also	be ordered individually:
15' X 1.5" Urethane Static Conductive Hose W/ Sleeve	90688
Double-Curved 1.5" Wand	90286
14" X 1.5" Squeegee Floor Tool	90644
14" X 1.5" Fiber Floor Tool	90642
18" X 1.5" Round Nozzle	90414

APPLICATION PERFORMANCE WITH RECOMMENDED AIR JET**			
Water	3/16"		
Cutting Oil	3/16"		
Machine Oil	7/32"		
HEAVY OIL	1/4"		
SOLVENT	3/16"		
Powder	3/16"		

**Unit ships standard with 3/16" jet installed in the Venturi powerhead. 7/32" and 1/4" jets are supplied in the unit and can be installed by the user. Larger jets increase performance in recovery of heavier materials, although the smallest air jet possible to do the job is strongly recommended to conserve plant air.

REQUIRED FOR OPERATION (NOT available from Tornado*)

Minimum Recommended Air Compressor	15 HP
Recommended Air Line	1/2" Diameter
Recommended Line Couplings	Straight-thru
Required Air Line Psi For Light Debris	30-60*
Required Air Line Psi For Heavy Debris	60-100*

This is the recommended attachment set for this unit. Other sets may be used and are found in the Tornado' Buyers Guide.



95953 EXTERNAL FILTER AIR VAC



VERSATILE

The 95953 can be fitted with a number of tools and attachments to suit a host of applications. The intake is a true 2" and can be fitted with 1.5" or 2" hoses and attachments.



OPERATIONAL REQUIREMENTS

The unit comes equipped with fitting and in-line pressure gauge. Air compressor, air line, and line couplings are required for operation. A minimum 15-HP air compressor system is required that can maintain 30 to 60 psi at the vacuum gauge (with the vacuum valve open) for light wet/dry recovery and 60 psi to 100 psi for maximum pick-up power for materials such as heavy liquids, slurries, sludge, and heavy debris.



CONVENIENT AND HASSLE-FREE

The tip-and-pour function makes debris disposal simple for the operator. A built-in tool caddy in the back of the machine holds attachments, spray bottles, or other cleaning supplies.



When HEPA filtration is a must, order the air powered Critical Filter model 98624. The Taskforce Air-Powered CFV comes standard with a 5-stage HEPA filtration system providing the ultimate in environmental waste pick up.

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Compact and portable, with uncompromised HEPA filtration

The **Taskforce® CFV** vacuums from Tornado® proves that power and performance need not be sacrificed for portability and ease-of-operation. Four-stage HEPA filtration takes dry debris recovery to new levels for situations where the containment of recovered dry debris is critical. **The Taskforce® CFVs** are excellent for applications ranging from health care, abatement and industrial. These units employ a multi-stage filtration process and uses a certified HEPA filter to capture particles down to .03 microns, resulting in a 99.97% efficiency rating. This makes Tornado's **Taskforce® CFV** vacuums the answer for containing environmental waste in accordance with strict safety standards, such as the Renovation, Repair and Painting (RRP) Lead Safe Program.

The **Taskforce® CFV** Vacuums are available in 10 and 17 gallon sizes, meeting the needs of any size job. When it comes to critical filtration recovery, Tornado has you covered!

The **Taskforce® CFV** series comes complete with an attachment and accessory set, including hose, wand, floor tool, crevice tool, and dusting tool. The swivel hose connector allows 360-degree hose rotation, letting you move the vacuum without fear of disconnects. The tools and accessories can be used for a variety of applications and debris types to meet all of your cleaning needs.



FOUR-STAGE FILIKATION
The (A) paper collection bag, (B) primary paper filter, (C) cloth
filter, and (D) main certified HEPA filter comprise a four-stage
filtration process for the Taskforce® CFV Vacuums.



PRODUCT SPECIFICATIONS			
MODEL	TASKFORCE® CFV 10	TASKFORCE® CFV 17	
Catalog Number	97060	97090	
MACHINE DIMENSION	IS		
Dimensions (L X W X H) (In / Cm)	19" x 16" x 28" 48cm x 41cm x 71 cm	24 in x 18 in x 36 in 61 cm x 46 cm x 91 cm	
Net Weight	31 Lbs. / 14 kg	35 Lbs. / 16 kg	
Tank Size	10 gal / 38 l	17 gal / 64 l	
Cord Length	30 ft / 9 m	30 ft / 9 m	
CLEANING SYSTEM			
Cfm	114	114	
Waterlift	90 inches	90 inches	
Filtration	4 Stage filtration with certified HEPA filter	4 Stage filtration with certified HEPA filter	
MOTORS			
Motor Type	One-two stage motor	One-two stage motor	
Motor Power	115 V / 10 Amps	115 V / 10 Amps	
REPLACEMENT ITEMS	AND ACCESSOI	RIES	
Collection Bag (3 Pack)	90032	90034	
Paper Bag (12 Pack)	98588	90353	
Cloth Bag (1 Pack)	98595	98596	
Hepa Filter (1 Pack)	90616	90621	
Wand	WD29	WD29	
Crevice Tool	WD32	WD32	
Round Brush	WD33	WD33	
Floor Tool	WD112	WD112	
10' Hose	WD25YLW	WD25YLW	

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High-speed bulk recovery, with 55-gallon steel drums for industrial applications.

It is a simple principle: the higher the CFM a vacuum generates, the better suited it is for recovering dry debris and bulk material. Tornado's® electric powered jumbo vacuum systems are designed to face the rigors of industrial applications. The Single Electric Jumbo has a 2.25 HP powerhead mounted on a steel, rolled-top 55-gallon drum. An external poly bag is mounted on a support rod and serves as a final filter. The majority of the debris, including small particles, is actually recovered in the steel drum. The Dual Electric has an additional powerhead for added CFM and two external poly filter bags.

Both the Single and the Dual Electric Jumbo come standard with a drum and a four-wheeled steel dolly with a convenient transport handle.

Electric Jumbo Vac Systems are appropriate for use in recovering heavy solid debris such as metal shavings, chips, sand, sawdust, and powder. The units are also effective in recovering water and cutting oil. A liquid shut-off float can be added to either unit. Attachment sets are required for operation and are sold separately.





95960 DUAL ELECTRIC JUMBO

Features an additional 2.25 HF powerhead and poly bag for recovery of heavier debris such as heavy machine oil and metal shavings and



The 55-gallon, rolled-top, ribbed steel drum is superior to plastic or stainless steel tanks for heavy duty applications. The drum also features an industrial gate valve for easily draining liquids.

MOBILE

Despite their size and power, Tornado® Jumbo vacs are highly portable, thanks to a standard four-wheeled dolly



CFM VS. WATERLIFT

Many competitive vacuum systems use waterlift as the primary measure of effectiveness and power. In a heavy industrial application, however, such vacs may lack sufficient airflow (measured as cubic feet per minute, or CFM) to meet requirements. A unit's CFM tells the true story of its capability in bulk recovery environments. With high-levels of airflow (up to 340 CFM on the Dual Jumbo), a Tornado® Electric Jumbo Vac System is ideal for rapid, efficient high-volume debris recovery.

ELECTRIC JUMBO WET/DRY APPLICATION GUIDE

(★ = Excellent; ✓ = Good)

MODEL	SE JUMBO	DE JUMBO
Catalog Number	95954	95960
Water	1	✓
Cutting Oil	*	*
Machine Oil	/	*
Heavy Machine Oil		/
Light Solid Debris	*	*
Heavy Solid Debris	/	*
Sawdust	*	*
Powder	*	*
Ultra Fine Powder	*	*
Sand	1	*
Oil Dry	1	*
Metal Shavings And Chips	1	*

PRODUCT SPECIFICATIONS			
MODEL	SE JUMBO	DE JUMBO	
Catalog Number	95954	95960	
MACHINE DIMENSI	ONS		
LXWXH	24"x 25"x 72"	24"x 25"x 72"	
Net Weight	162 Lbs.	182 Lbs.	
Shipping Weight	173 Lbs.	202 Lbs.	
Recovery Tank	55 gal.	55 gal.	
DESIGN CHARACTE	RISTICS		
Body Construction	Double Reinforced Steel	Double Reinforced Steel	
Dump System	Drain Valve	Drain Valve	
CLEANING SYSTEM			
Vacuum Head Type	Sngl. Electric Air	Dbl. Electric Air	
Cfm	184 (2")	243 (2") / 340 (3")	
Static Water Lift	51"	51"	
Effective Horizontal Reach	30'	50'	
Sound Level	83 dB	85 dB	
MOTORS			
Number Of Powerheads	One	Two	
REPLACEMENT ITEM	ΛS		
55-Gallon Drum	95944	95944	
Large Poly Filter	90378 (1 req.)	90378 (2 req.)	
Support Rods	98049 (1 Req.)	98049 (2 Req.)	
4-Wheel Dolly	98088	98088	
Adapter	90331	90332	
See Page 59 for warranty informatio	n		

See Page 59 for warranty information.

OPTIONAL ITEMS AND ACCESSORIES FOR SINGLE ELECTRIC JUMBO

Muffler*	90447
Liquid Shut-Off Float	90569
1.5" Wet/Dry Attachment Set W/Static Hose	90637**
1.5" X 15' Neoprene Hose	90191
90637 Includes The Below Items.	
1.5" X 15' Urethane Static Conductive Hose W/O Sleeve	90688
Double Curved 1.5" Wand	90286
14" X 1.5" Squeegee Floor Tool	90240
14" X 1.5" Fibre Floor Tool	90242
18" X 1.5" Round Nozzle	90414
1.5" Hose Adapter	90331

OPTIONAL ITEMS AND ACCESSOR FOR DUAL ELECTRIC JUMBO	IES
Muffler*	90447
Liquid Shut-Off Float (2 Req.)	90569
2" Wet/Dry Attachment Set W/Poly Hose	90633**
2" X 16' Neoprene Hose	90324
90633 Includes The Below Items.	
2" X 10' Urethane Poly Hose W/O Sleeve***	90312
2" Double Curved Wand	90327
12" X 2" Floor Gulper Tool	90320
22" X 2" Squeegee Floor Tool	90317
18" X 2" Round Nozzle	90444
2" Hose Adapter	90332

- Eliminates need for external filter in wet pick-up. Should not be used for dry recovery. Other attachment sets are also available in the Tornado® Buyers Guide.
- Please note: poly hoses are not oil resistant. When recovering oils, and additional Neoprene hose, which is oil and abrasive resistant, should be purchased.

Simultaneous bulk wet and dry recovery, powered by compressed air for maximum performance.

Powered by compressed air, the External Filter Wet/Dry Jumbo Air Vacuums create waterlift substantially beyond that found in traditional wet/dry vacuums. These units are designed for industrial applications requiring extremely aggressive pick-up power. The main role of these machines are for rapid, high-volume recovery of wet and dry debris. Available units are Single, Dual, and Quad Air Jumbos.

From the assembly line to the tool shop, these units handle challenges such as water, oil, solvent, and a variety of other common types of debris in an industrial environment. In addition, the units can recover wet and dry material without the need to stop and

change/clean an internal filter. That means minimal stoppages and the elimination of operator guesswork on choosing the right filter for the right application. It should be noted that an air compressor, airline, and line couplings are required for operation and are not available from Tornado®.

For a Tornado[®] jumbo vac system, the priority is power and capacity. Patented Venturi powerheads with incredible waterlift are fitted on a 55-gallon steel drum. The drum sits on a four-wheel steel dolly for easy transport. Large external filters and support rods come standard with the unit. A wide selection of optional tools and attachments are available for a variety of applications.



SINGLE AIR JUMBO

95955 SINGLE AIR JUMBO **EXTERNAL FILTER WET/DRY VACUUM**

The unit comes packaged complete with drum, powerhead, filter, support rod, and dolly. This unit is appropriate for water, cutting oil, machine oil, solvent, and powder.

two filters, two support rods, and a dolly. It is intended for recovery of heavy oil, paint stripper, sawdust, powder, sand, and general plant debris.

QUAD AIR JUMBO

98451 QUAD AIR JUMBO **EXTERNAL FILTER WET/DRY VACUUM**

This model is packaged standard with drum, four powerheads, two filters, two support rods, and a dolly. The Quad Air Jumbo is suitable for heavy oils and sludges as well as shot and slag. This is one of the most powerful portable vacuums available in the industry today. This unit is intended for large manufacturing facilities and heavy industrial plants that can handle the compressed air requirements necessary to run this unit.



UNCOMPROMISING POWER

The External Air Jumbos utilize Venturi powerheads that generate powerful waterlift. Liquid shut-off floats come standard with the quad vac, shown here. Floats can be ordered as an option on the Single and Dual.



OPERATIONAL REQUIREMENTS

The units come equipped with the fitting and in-line pressure gauge like that pictured here. Simply connect your airline to this fitting to begin operating the vacuum. An air compressor, airline, and line couplings are required for operation.

*Not available from Tornado®

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SINGLE AIR JUMBO EXTERNAL FILTER WET/ DRY VACUUM APPLICATION GUIDE

DEBRIS/MATERIAL	EXCELLENT PERFORMANCE	GOOD PERFORMANCE	RECOMMENDED AIR JET*
Water	1		3/16"
Cutting Oil	1		3/16"
Machine Oil	1		7/32"
Heavy Oil		1	1/4"
Solvent	1		3/16"
Powder		✓	3/16"

The unit is shipped standard with a 3/16" jet installed in the Venturi powerhead. A 7/32" and a 1/4" jet are supplied with the unit and can be installed by the user. These larger jets are used to increase performance for the recovery of heavier materials although the smallest air jet possible to do the job is strongly recommended to conserve plant air.

QUAD AIR JUMBO EXTERNAL FILTER WET/DRY **VACUUM APPLICATION GUIDE**

DEBRIS/MATERIAL	EXCELLENT PERFORMANCE	GOOD PERFORMANCE	RECOMMENDED AIR JET*
Heavy Oils	✓		7/32"
Sludge	1		1/4"
Iron Dust And Chips	\		1/4"
Sand Blasting Recovery	✓		1/4"
Pellet Recovery	1		3/16"
Shot Blast	1		1/4"
Slag And Scale	✓		1/4"

The unit is shipped standard with a 1/4" jet installed in the Venturi powerhead. A 3/16" and a 7/32" jet are supplied with the unit and can be installed by the user. The larger jet is used to increase performance for the recovery of heavier materials. als although the smallest air jet possible to do the job is strongly recommended to conserve plant air.

DUAL AIR JUMBO EXTERNAL FILTER WET/DRY VACUUM APPLICATION GUIDE

DEBRIS/MATERIAL	EXCELLENT PERFORMANCE	GOOD PERFORMANCE	RECOMMENDED AIR JET*
Machine Oil	✓		3/16"
Heavy Oil	✓		7/32"
Paint Stripper	1		1/4"
General Debris	1		3/16"
Sawdust	✓		3/16"
Powder	1		3/16"
Sand	1		7/32"
Metal Grindings And Chips		1	7/32"

The unit is shipped standard with a 3/16" jet installed in the Venturi powerhead. A 7/32" and a 1/4" jet are supplied in the unit and can be installed by the user. The larger jet is used to increase performance for the recovery of heavier materials although the smallest air jet possible to do the job is strongly recommended to conserve plant air.

SINGLE AIR JUMBO

A minimum 15-HP air compressor system is required that can maintain 30 to 60 psi at the vacuum gauge (with the vacuum valve open) for light wet/dry recovery and 60 psi to 100 psi for maximum pick-up power for materials such as heavy liquids, slurries, sludge, and heavy debris.

DUAL AIR JUMBO

A minimum 25-HP air compressor system is required that can maintain 30 to 60 psi at the vacuum gauge (with the vacuum valve open) for light wet/dry recovery and 60 psi to 90 psi for maximum pick-up power for materials such as heavy liquids, slurries, sludge, and heavy debris.

QUAD AIR JUMBO

A minimum 50-HP air compressor system is required that can maintain 50 to 75 psi at the vacuum gauge (with the vacuum valve open) for general wet/dry recovery and 75 psi to 100 psi for maximum pick-up power for materials such as heavy liquids, slurries, sludge, and heavy debris.

PRODUCT SPECIFICATIONS				
MODEL	SINGLE AIR JUMBO VACUUM	DUAL AIR JUMBO VACUUM	QUAD AIR JUMBO VACUUM	
Catalog Number	95955	95962	98451	
Venturi Powerheads/Cfm	One/82	Two/160	Four/258	
Waterlift	242"	239"	200"	
Steel Tank	55 Gal.	55 Gal.	55 Gal.	
Vertical Lift/Horizontal Reach	15'/30'	25'/50'	50'/100'	
Poly External Filters	One	Two	Two	
Filter Area	1874 sq. in.	3748 sq. in.	3748 sq. in.	
STANDARD REPLAC	EMENT CON	IPONENT PA	ARTS	
55-Gallon Drum	95944	95944	95944	
Large Poly Filter	90378 (1 Req.)	90378 (2 Req.)	90488 (2 Req.)	
Support Rod	98049 (1)	98049 (2)	98049 (2)	
4-Wheel Dolly	98088	98088	98088	
Adapter	90331 (1.5")	90332 (2")	90332 (2")	
Liquid Shut-Off Float	90569	90569 (2 req.)	90569 (2 req.)	
REQUIRED FOR OPERATION (Not Available From Tornado*)				
Minimum Recommended Air Compressor	15 HP	25 HP	50 HP	
Recommended Airline	1/2" Diameter	3/4" Diameter	1" Diameter	
Recommended Line Couplings	Straight-Thru	Straight-Thru	Straight-Thru	
Required Air Line	30-60*	30-60*	50-75*	
Required Air Line Psi For Light Debris	60-100*	60-90*	75-100*	

Measured at the vacuum air line gauge with valve open and unit operating.

^{*}See Page 59 for warranty information..

OPTIONAL ITEMS AND ACCESSORIES FOR SINGLE AIR JUMBO VAC		
Catalog Number	95955	
1.5" Wet/Dry Attachment	90637*	
90637 Includes The Below Items.		
1.5" X 15' Urethane Static Conductive Hose W/O Sleeve	90688	
Double Curved 1.5" Wand	90286	
14" X 1.5" Squeegee Tool	90644	
14" X 1.5" Floor Tool	90642	
18" X 1.5" Round Nozzle	90414	
1.5" Hose Adapter	90331	

Other attachment sets are also available in the Tornado® Buyers Guide.

OPTIONAL ITEMS AND ACCESSORIES FOR DUAL AND QUAD ELECTRIC JUMBO			
Catalog Number	95962	98451	
2" Wet/Dry Attachment Set	90633**	90633**	
90633 Includes The Below Items.			
2" X 10' Urethane Poly Hose W/O Sleeve***	90312	90312	
2" Aluminum Wand	90327	90327	
12" X 2" Floor Gulper Tool W/ Brass Shoes	90320	90320	
22" X 2" Squeegee Floor Tool	90317	90317	
18" X 2" Round Nozzle	90444	90444	
2" Jumbo Hose Adapter	90332	90332	

Other attachment sets are also available in the Tornado® Buyers Guide. Note: Poly hoses are not oil resistant. When recovering oils, an additional Neoprene hose, which is oil and abrasive resistant, should be purchased.



RUGGED

The 55-gallon, rolled-top, ribbed steel drum is superior to plastic or stainless steel tanks for heavy duty applications. The drum also features an industrial gate valve for ease in emptying liquids.

MOBILE

Despite their size and power, Tornado® Jumbo vacs are highly portable, thanks to a standard four-wheeled dolly.



Aggressive recovery, powered by compressed air for maximum performance.



DUAL WET JUMBO AIR

95961 INTERNAL DUAL WET JUMBO AIR VACUUM

The unit comes packaged complete with drum, two internal Venturi powerheads, and dolly. This unit is appropriate for machine oil, heavy oil, and ink

98450 INTERNAL OUAD **AIR JUMBO VACUUM**

The unit includes drum, four internal Venturi powerheads, and dolly. It is intended for the recovery of heavy oils and industrial sludge. This is one of the most powerful portable vacuums available in the industry today. This unit is intended for large manufacturing facilities and heavy industrial plants that can handle the compressed air requirements necessary to run this unit.

PRODUCT SPECIFICATIONS			
MODEL	DUAL WET-ONLY JUMBO AIR VACUUM	QUAD WET-ONLY JUMBO AIR VACUUM	
Catalog Number	95961	98450	
Venturi Powerheads/Cfm	Two	Four	
Cfm (2" Orifice)	160	258	
Waterlift	242"	200"	
Steel Tank	55 Gal.	55 Gal.	
Vertical Lift/Horizontal Reach	25'/50'	50'/100'	
STANDARD REPLACEM	ENT COMPONE	NT PARTS	
55-Gallon Drum	95944	95944	
Liquid Shut-Offs	90569 (2 Included)	90569 (4 Included)	
4-Wheel Dolly	98088	98088	
2" Hose Adapter	90332	90332	
REQUIRED FOR OPERA	TION (NOT available f	rom Tornado®)	
Minimum Recommended Air Compressor	25 HP	50 HP	
Recommended Airline	3/4" Diameter	1" Diameter	
Recommended Line Couplings	Straight-Thru	Straight-Thru	
Required Air Line	30-60**	50-75**	
Required Air Line Psi For Light Debris	60-100**	100**	
OPTIONAL ITEMS AND	ACCESSORIES		
2" Wet/Dry Attachment Set	90633***	90633***	
90633 Includes The Below Items.			
2" X 10' Urethane Polyhose***	90312•••*	90312•••*	
2" Aluminum Wand	90327	90327	
12" X 2" Floor Gulper Tool W/ Brass Shoes	90320	90320	
22" X 2" Aluminum Squeegee Floor Tool	90317	90317	
18" X 2" Round Nozzle	90444	90444	
2" Hose Adapter	90332	90332	

See Page 59 for warranty information.

- Measured at the vacuum air line gauge with valve open and unit operating. Other attachment sets are also available in the Tornado® Buyers Guide.
- **** Note: Poly hoses are not oil resistant. When recovering oils, an additional Neoprene hose, which is oil and abrasive resistant, should be purchased.

Powered by compressed air, the Internal Wet Jumbo Air Vacuums create waterlift substantially beyond that found in traditional wet vacuums. The units are designed for wet recovery applications requiring extremely aggressive pick-up power. The main role of these machines are for rapid, high-volume recovery of liquids. Available units are Dual and Quad Air Jumbos.

From the assembly line to the tool shop, these unitss handle challenges such as heavy oil, machine oil, ink, sludge, and a variety of other common types of liquid debris in an industrial environment. It should be noted that an air compressor, airline, and line couplings are required for operation and are not available from Tornado®.

For a Tornado® jumbo vac system, the priority is power and capacity. Patented Venturi powerheads with incredible waterlift are fitted on a ribbed, 55-gallon steel drum. The drum sits on a four-wheel steel dolly for easy transport. A wide selection of optional tools and attachments are available for a variety of applications.



UNCOMPROMISING POWER

The Internal Air Jumbos utilize Venturi powerheads that generate powerful waterlift. Liquid shut-off floats come standard with the quad vac, shown



OPERATIONAL REQUIREMENTS

The units come equipped with the fitting and in-line pressure gauge like that pictured here. Simply connect your airline to this fitting to ready the vacuum for operation. An air compressor, airline, and line couplings are required for operation.

not offered from Tornado



RUGGED

The 55-gallon, rolled-top, ribbed steel drum is superior to plastic or stainless steel tanks for heavy duty applications. The drum also features an industrial gate valve for ease in emptying liquids.



Despite their size and power, Tornado® Jumbo vacs are highly portable, thanks to a four-wheeled dolly, included standard.



DUAL AIR JUMBO WET-ONLY INTERNAL VACUUM APPLICATION GUIDE

DEBRIS/MATERIAL	EXCELLENT PERFORMANCE	GOOD PERFORMANCE	RECOMMENDED AIR JET*
Machine Oil	✓		3/16"
Heavy Oil	✓		7/32"
Ink	✓		1/4"
Sludge		1	7/32"

The unit is shipped standard with a 3/16" jet installed in the Venturi powerhead. A 7/32" and 1/4" jets are supplied in the unit and can be installed by the user. These larger jets are used to increase performance for the recovery of heavier materials although the smallest air jet possible to do the job is strongly recommended to conserve plant air.

QUAD AIR JUMBO WET-ONLY INTERNAL VACUUM APPLICATION GUIDE

DEBRIS/MATERIAL	EXCELLENT PERFORMANCE	GOOD PERFORMANCE	RECOMMENDED AIR JET*
Heavy Oils	✓		1/4"
Sludge	1		1/4"

The unit is shipped standard with a 1/4" jet installed in the Venturi powerhead. A 3/16" and 7/32" jet is supplied in the unit and can be installed by the user. The 1/4" jet is used to increase performance for the recovery of heavier materials although the smalle st air jet possible to do the job is strongly recommended to conserve plant air.

Superior escalator cleaning combined with simple operation

The Tornado® BR 460 ESC Escalator Cleaner delivers fast, thorough cleaning results in an easy to operate design. Ideal for airports, shopping malls, retail stores, subway stations and hotels, the **BR 460 ESC** incorporates an integrated vacuum motor, ensuring that dust and heavier debris is moved off of treads and into the vacuum bag. Furthermore, with multiple brush types available you can tackle even the toughest of cleaning challenges.

The BR 460 ESC is very easy to use and requires minimal training for increased efficiency. The unit features powerful rotating brushes for fast, effective cleaning, automatic brush height adjustment for uniform performance, and easy to change disposable bags.

The **BR 460 ESC** offers your choice of nylon or Tynex brushes to suit your unique cleaning requirements, making brush changing quick and easy.



PRODUCT SPECIFICATIONS		
MODEL	BR 460 ESC	
Catalog Number	96180	
MACHINE DIMENSIONS		
Dimensions (L X W X H)	38 in x 18 in x 9 in 89 cm x 46 cm x 23 cm	
Net Weight	97 Lbs. / 44 kg.	
Power Cord Length	50 ft. / 15 m	
CLEANING SYSTEMS		
Productivity (24" - 36" Stair)	1,800 stairs per hour	
Productivity (37"+ Stair)	1,200 stairs per hour	
Brush Type	Cylindrical	
Brush Width	18 in / 46 cm	
Brush Rpm	290 RPM	
Sound Level	60 dB (A)	
Bag Capacity	1.3 gal / 5 liter	
MOTOR/POWER		
Motor	0.3 hp	
Voltage	150 V/60 Hz	
REPLACEMENT ITEMS		
Nylon Brush Set (left and right)	90080	
OPTIONAL ITEMS AND	ACCESSORIES	
Tynex Brush Set (left and right)	90081	

See Page 59 for warranty information.





ROTATING BRUSHES

Featuring powerful rotating brushes which loosen any dirt, stains or grime to deliver escalators that are clean and safe for pedestrians.



Easy to change disposable paper bags.

TWIN VACUUM MOTORS

The unit features twin vacuum motors which instantly suck up the dirt, leaving the escalator surface clean and ready for use.



MULTIPLE BRUSHES

Nylon brushes for routine cleaning and Tynex brushes for aggressive cleaning.



1-800-VACUUMS WWW.TORNADOVAC.COM

Chemical-free, deep steam cleaning without harsh detergents

The **VS4** is a compact and robust steam cleaner which offers outstanding power and sanitizing benefits. Optimal cleaning results are achieved thanks to 87 P.S.I. of steam pressure which helps remove dirt from hard-to-reach, close quarter areas. Continuously variable steam volume control and the VapoHydro function (continuous regulation of the water-steam ratio) means the machine can adapt perfectly to any cleaning task. The water tank can be refilled at any time, and when the water reaches the steam tank it rapidly heats up to ensure uninterrupted operation of the VS4. The temperature indicator clearly highlights the operating range by including a highlighted range area in green; once the yellow temperature needle is in the green highlighted range, the **VS4** will be ready for use! The **VS4** is extremely versatile since it can clean without the use of chemicals, and it comes with two floor nozzles (for abrasive and hygienic cleaning). Also included is a dedicated wand storage area, an integrated compartment for additional accessories, and a cord hook which all contribute to saving space so you can conveniently store the **VS4** when not in use.



VERSATILITY

The VS4 is appropriate for showers, medical equipment, kitchen fixtures, and more



CONVENIENCE

Power cord and accessories are stored onboard the unit. A handle and transport wheels make the unit mobile from job to job.

CONTINUOUS FILL FEATURE

The control panel has an improved design from earlier models that allows for easy refilling and steam control.







Attacks Bed Bugs with Chemical-Free Steam!

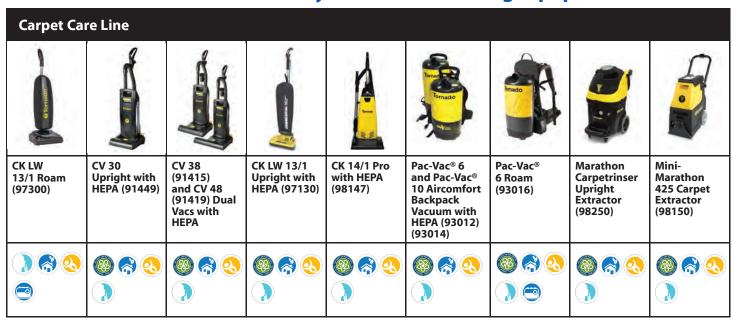


Download the FREE White Paper Effective Treatment of Bed Bug Infestations at http://tornadovac.com/knowledge/ whitepapers.aspx

PRODUCT SPECIFICATIONS			
MODEL	VS4		
Catalog Number	97102		
MACHINE DIMENSIONS			
Dimensions (L X W X H)	18.5" x 12.5" x 11" 475 mm x 320 mm x 275 mm		
Weight	17.6 Lbs. / 8 kg		
Steam Tank	0.6 gal / 2.4 l		
Reserve Tank	0.5 gal / 2 l		
DESIGN CHARACTERIS	TICS		
Power	120 V / 60Hz		
Max Pressure	87 psi / 0.6 MPa		
Max Temperature	293° F / 145° C		
Steam Quantity	2.6 oz per minute 75 g per minute		
STANDARD ACCESSOR	IES		
Steam Hose And Gun	K43220390		
Extension Tubes	K41270240		
Hand Tool	K51303490		
Long Detail Nozzle	K41304310		
Short Detail Nozzle	K28842810		
Power Nozzle	K28842820		
Floor Nozzle	K41304330		
Brass Bristle Brush Set (3 Pack)	K28630750		

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Tornado's Line of Enviromentally Preferred Cleaning Equipment







LEGEND	
CRI Certified	8
Solution Control	
Eco Batteries	(2)
Air Quality	
Increased Safety	
Whisper-Quiet	



ECO-Friendly AGM Batteries vs. Wet Acid-Cell Batteries?

Say good-bye to batteries containing sulfuric acid which requires maintenance by your staff, and hello to increased worker safety, productivity and facility health!

Tornado® auto scrubbers are available in your choice of traditional flooded (wet) batteries or new, eco-friendly EV Dry Cell, maintenance-free batteries.

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1-800-VACUUMS WWW.TORNADOVAC.COM





The Windshear™ 3200 Dryer
Fast and Powerful Area Dryer

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2017 Warranty Statement

Long Term Buyer Protection Limited Warranty

Tornado Industries, LLC. (Tornado®) warrants to the end/user customer that the Tornado® product(s) will be free from defects in material and workmanship for the duration(s) described below. This limited warranty DOES NOT cover machines and/or components subject to normal wear and tear, damage that occurs in shipping, failures resulting from modification, accident, unsuitable operating environment, misuse, abuse, neglect, or improper maintenance by you. For full details, contact your Authorized Tornado Distributor, Service Center, or the Tornado Technical Service Department. Tornado sales and service representatives are not authorized to waive or alter the terms of this warranty, or to increase the obligations of Tornado under the warranty.

10 Years*

Plastic water tanks and Rotationally-molded bodies

2 Years*

Parts on all Tornado cleaning equipment

1 Year*

Labor on all Tornado cleaning equipment

1 Year

Warranty on batteries, one year prorated

All battery warranties are handled directly by the battery manufacturer, on a one year prorated basis

Terms subject to change without notice

- 1. Except all Windshears™ Blowers, Storm, TV2SS, Side and Downdraft, Insulation Blowers, CV 30, CV 38, CK14/1 PRO, CK 14/2 PRO, SWM 31/9, CK LW13/1, CK LW 13/1 ROAM, CV 38/48 Dual, PV6, PV10, PV6 ROAM, Wall Mount Vacuum and all chargers are warranted for 1 (one) year for both parts and labor.
- 2. All non-wear item parts purchased after warranty expiration are warranted for 90 days.
- 3. Warranty starts from the date of sale to the consumer or, at Tornado's discretion, 6 months after the dealer purchased the unit from Tornado, whichever comes first.
- 4. The EB 30 is warranted for a period of 90 days for both parts and labor.
- 5. The warranty on engines used on propane powered equipment is limited to motor manufacturer's warranty.
- 6. Ride-on Scrubbers are warranted for 24 months, parts, 6 months labor or 1,000 hours, whichever occurs first.



Note:

Tornado, The Latest Dirt, Floorkeeper, Carpetkeeper, Carpetrinser, Carpetrinser/Dryer, Headmaster, Taskforce, PAC-VAC, T-Lite, Glazer, Windshear, Max-Vac and Trot-Mop are trademarks of Tornado Industries

Website: www.tornadovac.com

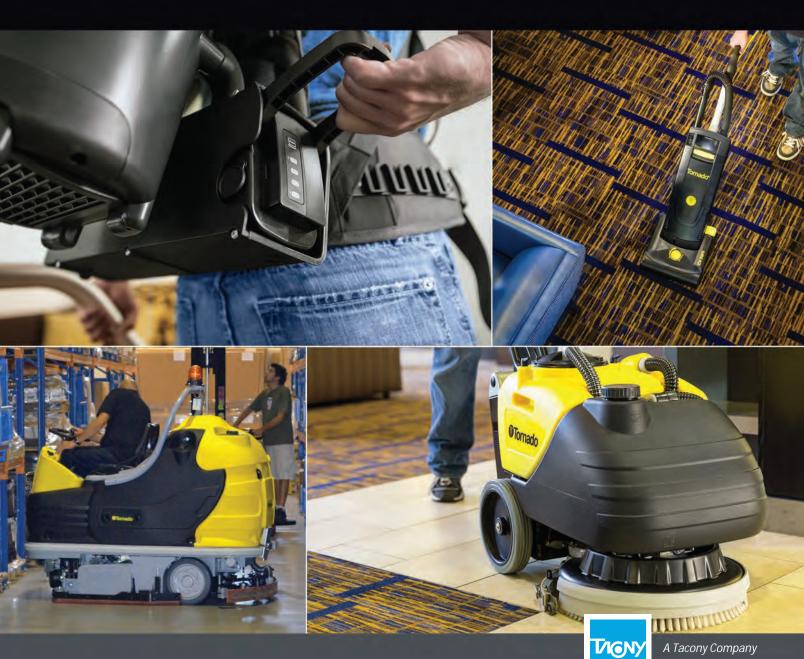
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