



# TORNADO® CLEANING EQUIPMENT

## PRODUCT CATALOG

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**END-USERS!  
SEE YOUR LOCAL TORNADO DEALER TO BUY**

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## 3 EASY WAYS FOR TORNADO® DEALERS 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 your purchase order to  
**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 con-  
tact 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.

# Our Newest Products

See what we've added to  
our product line-up



## CK 14/1 BSE

Price, Performance, and  
Proven Durability

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## Deluxe CVD Upright Vacuums

Deluxe features. Unmatched  
performance

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## Pro Spotter

Power for the toughest  
stains

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## Recycling Extractors

Resource-saving cleaning  
technology



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## All-New Floorkeeper Scrubbers

Simplicity, innovation and unrivaled  
performance in every scrubber



**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.

PRODUCT SPECIFICATIONS	
Model	CK LW 13/1
Catalog Number	97130
MACHINE DIMENSIONS	
L X W X H	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 64 for warranty information.



### INNOVATIVE

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



### CONVENIENT ON/OFF SWITCH LOCATION

Ergonomic handle with easy to use switch and convenient cord lock.



### CONVENIENT

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



## 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

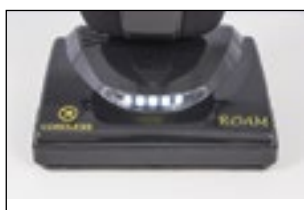
- Battery operation provides up to 50 minutes of run time
- 13" cleaning path
- LED headlight for better sight under objects
- Ultra light at 11 pounds for easy transport and portability
- Whisper-quiet at less than 70 dB
- Quick charge time at less than 2 hours
- Ergonomic handle design
- Simple on/off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

**Lightweight  
Cordless  
Vacuuming**



#### FRONT BUMPER PROTECTION

The CK LW 13/1 Roam features a front bumper to protect furniture.



#### LED HEADLIGHT

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



#### ERGONOMIC AND LIGHTWEIGHT

The ergonomic handle of the CK LW 13/1 Roam minimizes vibration as well as includes the on/off switch for simple, straightforward cleaning.



#### INTERCHANGEABLE BATTERY

For 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.

PRODUCT SPECIFICATIONS	
Model	CK LW 13/1 Roam
Catalog Number	97300
MACHINE DIMENSIONS	
L X W X H	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 AND ACCESSORIES	
Battery	C223-1800B
Charger	C223-2000
CleanBreeze Disposable Filter Bag (10 pack)	90039
Vacuum Belt	B014-0814B
Short Brush Strip	B013-0301B
Long Brush Strip	B013-0401B
Brush Strip Kit	9018362

See Page 64 for warranty information.

## 14-inch commercial upright vacuum with HEPA filter

**Affordably Priced  
to Reduce Vacuum  
Operating Costs!**

The **CK 14/1 Series** 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 Series** 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 Series** 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.

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 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.

With the option of on-board tools, the **CK 14/1 Pro's** powerful suction is ready at your fingertips for above-floor cleaning. The **CK 14/1 BSE** base model is perfect when all you need is standard carpet cleaning. The **CK 14/1 Series** 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.



CK 14/1 PRO

CK 14/1 BSE



### NEW ERGONOMIC HANDLE FOR SUPREME COMFORT

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



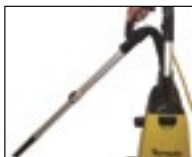
### INSTALLING THE FILTER IS A BREEZE

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.



### 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%!



### PRODUCT SPECIFICATIONS

Model	CK 14/1 Pro	CK 14/1 BSE
Catalog Number	98147	98145
Cleaning Path	14 in / 350 mm	14 in / 350 mm
Productivity per Hour	2,857 sq. ft. / 265 sq. m	2,857 sq. ft. / 265 sq. m
Airflow	120 cfm / 3.4 m3/h	120 cfm / 3.4 m3/h
Capacity	3.8 qt / 3.6 L	3.8 qt / 3.6 L
Sound Level	69.9 dB(A)	69.9 dB(A)
Filtration System	3-Stage, including HEPA cartridge Exhaust filter	3-Stage, including HEPA cartridge Exhaust filter
Vac Motor	1200 W / 10 A	1200 W / 10 A
Power Cord Length	50 ft / 15 m	50 ft / 15 m
Power	115v	115v
Weight	20.6 Lbs / 9.36 kg	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	12.5 in x 14.75 in. x 44 in 320 mm x 370 mm x 1120 mm

### REPLACEMENT ITEMS

HEPA Filter	90144	90144
Brush Belt	B014-0714	B014-0714
Crevice Tool	90142	90142
Dusting Brush	90143	90143
Brush Roll	33574	33574
Telescopic Wand	36000	36000
Vacuum Motor Intake Filter	90145	90145
CleanBreeze Bag (10 pack)	90141	90141

### OPTIONAL ITEMS

Paper Collection Bags (10 pack)	90147	90147
Foam Filter in Lieu of HEPA Filter	90146	90146

See Page 64 for warranty information.

## Effortless operation, versatility, ergonomic design, and quality performance



CV 30 12"



The CV 30 is CRI Gold level certified

The Tornado® **CV 30** is the most dependable single motor upright in its class. Some of the largest consumers of upright vacuums in the market helped us design this unit from the ground up. The Tornado® CV 30 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** the choice of cleaning professionals.

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.



### VERSATILITY

The Tornado® 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.



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

See Page 64 for warranty information. \*\* One bag included with unit.

## Deluxe Features. Unmatched Performance

Tornado's upright vacuums have always been the choice of commercial cleaners due to their quality, dependability and features. Now our new CVD upright vacuums have even more features to help you clean even better! These are the same vacuums that you've always known, but our redesigns have further improved the cleaning experience. With just the push of a button, flip of a latch, and tug of a cord, you will master all of the functions of these vacuums! For all day cleaning, you need a user-friendly vacuum that won't quit on you.

- CRI Gold Certification
- HEPA Certified Vacuums
- On-board Tools Standard
- Available in 12" and 15" Models
- Built to last with rugged design and construction



CVD 30 12"

CVD 38 15"



The CVD 30 is CRI Gold level certified

**Pigtail Cord**

Easy-change power cord

**Fingertip Switch**

Easier on/off switch



### 3-STAGE FILTRATION

The filtration system includes a disposable filter bag, an intake filter, and a HEPA filter cartridge.

Warranty: 2 Year Parts, 1 Year Labor \*\* One bag included with unit.



### Tool-less Brushroll removal

No tools needed to change brushroll

### PRODUCT SPECIFICATIONS

MODEL	CVD 30	CVD 38
Catalog Number	91430	91438

### MACHINE DIMENSIONS

Dimensions (L X W X H)	12.75" x 12" x 45"	12.75" x 15" x 45"
Net Weight	17.4 Lbs.	18 Lbs.
Shipping Weight	25 Lbs.	26 Lbs.
Recovery Bag Capacity	6 quarts	6 quarts

### DESIGN CHARACTERISTICS

Cord Type	40', 18 gauge, 3-wire SJT, safety yellow, extension cord	40', 18 gauge, 3-wire SJT, safety yellow, extension cord
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	102
Water Lift	81.5"	81.5"
Cleaning Productivity	2,239 ft <sup>2</sup> / hr	2,657 ft <sup>2</sup> / hr
Sound Level	67 dB	67 dB
Cleaning Path	12"	15"
Brush Design	Plastic Brush Roll	Plastic Brush Roll
Filtration System	3-Stage System	3-Stage System
On Board Tools	Yes	Yes

### MOTORS

Vacuum Motor	9 amps	9 amps
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### REPLACEMENT ITEMS

Crevice Tool	K69062400	K69062400
Upholstery/ Utility Tool	K69002330	K69002330
CleanBreeze Disposable Collection Bag (10 Pk)	K69043050	K69043050
Brush Roller	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 64 for warranty information.



## Deluxe Features. Unmatched Performance

### Deluxe Commercial Uprights



CVD 38 DUAL

CVD 48 DUAL

Tornado's upright vacuums have always been the choice of commercial cleaners due to their quality, dependability and features. Now our new CVD dual motor upright vacuums have even more features to help you clean even better! These are the same vacuums that you've always known, but our redesigns have further improved the cleaning experience. With just the push of a button, flip of a latch, and tug of a cord, you will master all of the functions of these vacuums! For all day cleaning, you need a user-friendly vacuum that won't quit on you.

- CRI Gold Certification
- HEPA Certified Vacuums
- On-board Tools Standard
- Available in 15" and 19" Models
- Built to last with rugged design and construction



#### 3-STAGE FILTRATION

The filtration system includes a disposable filter bag, an intake filter, and a HEPA filter cartridge.



#### FILTER INSTALLATION IS A BREEZE

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



#### CHANGEABLE ROLLER BRUSH

Requires no tools and allows hairs, threads, etc. to be removed quickly and easily.



#### 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	CVD 38 Dual	CVD 48 Dual
Catalog Number	91440	91442

### MACHINE DIMENSIONS

Dimensions (L X W X H)	12.75" x 15" x 45"	12.75" x 19" x 45"
Net Weight	21 Lbs.	21 Lbs.
Shipping Weight	25 Lbs.	26 Lbs.
Recovery Bag Capacity	6 quarts	6 quarts

### DESIGN CHARACTERISTICS

Cord Type	40', 18 gauge, 3-wire SJT, safety yellow, extension cord	40', 18 gauge, 3-wire SJT, safety yellow, extension cord
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	102
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	K69066440	K47624880
Hepa Filter Cartridge	K64147600	K64147600
Vac Motor Intake Filter	K57316110	K57316110

### OPTIONAL ITEMS

Foam Filter (Used In Lieu Of Hepa) (3 Pk)	K64147610	K64147610
Cloth Reusable Filter Bag	K69043010	K69043010
Paper Collection Bag (10 Pk)	K69042940	K69042940
Foam Filter Frame	K57316140	K57316140

See Page 64 for warranty information.

## 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.



PAC-VAC® 6 AND PAC-VAC® 10



### 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.



### ACCESSORIES

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

### PACKAGED COMPLETE

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



### 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 DIMENSIONS

L X W X H	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

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 ITEMS AND ACCESSORIES

Paper Collection Bags (Set of 10)	C352-2500	B352-7800
Outer Cloth Bag	C352-1400	C352-1500
HEPA Filter	B352-5200	B352-5200
Motor Exhaust Filter	B352-2400	B352-2400
Hose	J1005	J1005
Double Bend Wand	CT171-CS	CT171-CS
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. Stretch Hose	J1006	J1006
15" Sidewinder Kit	TK5W-15	TK5W-15
18" Sidewinder Kit	TK5W-18	TK5W-18

See Page 64 for warranty information.

## 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 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	
L X W X H	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	B352-5200
Motor Exhaust Filter	B352-2400
Stretch Hose	J1005
Double Bend Wand	CT171-CS
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	X1194A
OPTIONAL ITEMS	
Aluminum Telescoping Wand	CT170
Wand Adapter	J1007
2 ft. - 6 ft. Stretch Hose	J1006
15" Sidewinder Kit	TK5W-15
18" Sidewinder Kit	TK5W-18

See Page 64 for warranty information.



PAC-VAC® 6 ROAM



### 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-to-reach areas.



### 5-POINT ADJUSTABLE HARNESS

Ergonomically designed back support and 5-point 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 efficiency 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 tear-resistant 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.

**Great  
Alternative  
to Upright  
or Backpack  
Vacuums!**

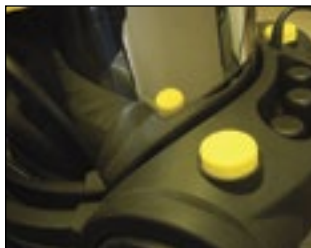


**TV2 SS CANISTER VACUUM**



### 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

<b>MODEL</b>	TV 2 SS
<b>Catalog Number</b>	93282
<b>Power</b>	115v
<b>Vac Motor</b>	1200 W
<b>Variable Airflow</b>	63-70 CFM
<b>Variable Waterlift</b>	72-80"
<b>Dust Bag Capacity</b>	2 Gal
<b>Hose Length</b>	8'
<b>Power Cord Length</b>	40'
<b>Dimensions (L x W x H)</b>	16" x 15" x 13"
<b>Variable Sound Level</b>	49-63 dbA
<b>Weight</b>	14 Lbs

### REPLACEMENT ITEMS AND ACCESSORIES

<b>CleanBreeze Filter Bag</b>	90025
<b>Hose</b>	90028
<b>Two-Piece Wand</b>	90027
<b>Floor Tool</b>	90029
<b>Crevice Tool</b>	90030
<b>Dusting Brush</b>	90031
<b>HEPA 12 Filter</b>	90036

See Page 64 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.



**CK 3030 WIDE-AREA VACUUM**

### 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.)	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

See Page 64 for warranty information.



### STORAGE MADE SIMPLE

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



### OPERATOR-FRIENDLY

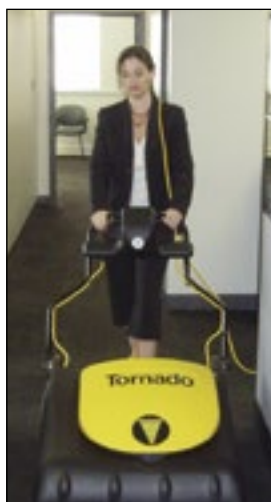
An ergonomically-designed handle with cushioned grips and safety switch are standard.

### 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.



### 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.

## 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 **Windshear™ 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.

**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

Choose 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.

### 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	115V	115V
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 64 for warranty information.



### 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, draperies, or just about anything you need to dry. These machines increase air flow, cleaning efficiency, safety, and minimize down-time in a room or large facility.



WINDSHEAR™ 3200



### VARIABLE SPEED SETTINGS

The Windshear™ 3200 Area Dryer has 3 different speed settings 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!

### SAFETY BLOWER MODEL

The safety model comes standard in bright safety yellow and includes a transport dolly and safety sign.



### PRODUCT SPECIFICATIONS

MODEL	WINDSHEAR™ 3200	WINDSHEAR™ 3200 SAFETY DRYER
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
Power	115	115
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 64 for warranty information.

## 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



WINDSHEAR™ SIDEDRAFT



### PRODUCT SPECIFICATIONS

MODEL	WINDSHEAR™ SIDEDRAFT
Catalog Number	98782
L X W X H	24" X 24" X 21"
Net Weight	37 Lbs
Power	115V
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

See Page 64 for warranty information.

### PROFESSIONAL FEATURES

Multiple position versatility for optimum drying.



### BUILT-IN GFCI OUTLET

A 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.



## 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 continuous 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



**WINDSHEAR™ DOWNDRAFT**

**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

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

See Page 64 for warranty information.

## Mobility, portability and uncompromised extracting power

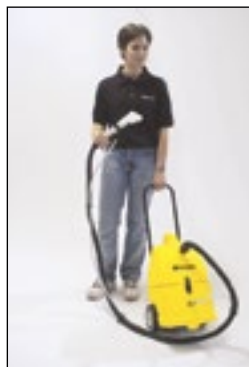


**PS 8220**

**PS 8220**  
(shown with optional handle)

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.



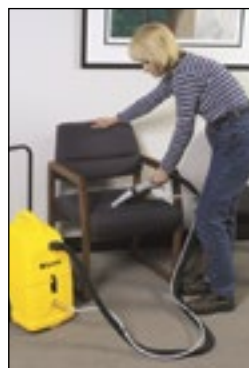
PRODUCT SPECIFICATIONS	
MODEL	PS Spotter
Catalog Number	98220
Power	115V
Solution	2 GAL
Recovery	2 GAL
Pump	55 PSI
Vacuum	94 CFM
Static Waterlift	84"
Motor	1.2 HP
Handle	Molded Lift-Grip
Transport	6" Wheels
Hose	8' Sol./Vac
Size	21" X 12.5" X 12.5"
Weight	20 Lbs
OPTIONAL ACCESSORIES/REPLACEMENT ITEMS	
8' Vac Pressure Hose**	95560
PS Dragwand with 8" Head	98347
18" Crevice Detailer	98342
4" Upholstery Tool	98343
6" Utility/Stair Tool	98344
Steel Transport Handle Kit	31215

### 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.

## Mobility, Versatility, and Deep Extraction Power



### PRO SPOTTER

Ships with stretch hose and 3" Combo Tool

The all-new Tornado Pro Spotter is portable, lightweight, and extremely powerful. It is perfect for touch-ups, spot removal between scheduled carpet cleanings, and those locations where bigger extractors just won't fit. You can use it to pick up small wet spills quickly and easily. The Pro Spotter takes the hassle out of cleaning spots before they become a major stain. The compact unit weighs only 36 pounds and can be effortlessly moved from one location to the next by extending the telescoping handle and tilting the unit back on its 5" transport wheels.

Features and Benefits of the Pro Spotter:

- Patented 3" Combo Tool
- Expandable 2.5' to 10' vacuum and solution hose
- Heavy duty poly housing and quality workmanship
- 3.5 gallon solution tank and 2.5 gallon recovery tank
- 2 stage vacuum motor with 89" lift



### EASY TRANSPORT

The Pro Spotter comes standard with a telescoping handle for easy transport



### HAND TOOL

The durable, metal hand tool features an adjustable air inlet to provide the fastest drying time

PRODUCT SPECIFICATIONS	
MODEL	Pro Spotter
Catalog Number	98834
Solution Tank	3.5 GAL / 13.2 L
Recovery Tank	2.5 GAL / 9.5 L
Solution Pressure	55 PSI / 3.8 BAR
CFM	104
Waterlift	89 in / 226 cm
Vacuum Motor	2 stage
Hose Length	2.5 ft. to 10 ft. stretch hose
Power Cord Length	15 ft. / 5 m
Machine Dimensions (LxWxH)	13" x 22" x 23.5" / 34 cm x 56 cm x 60 cm
Weight	36 Lbs / 13 kg
OPTIONAL ACCESSORIES/REPLACEMENT ITEMS	
11" Rapid Recovery Wand	77000
3" Combination Hand Tool	77001
10' Stretch Hose	X9058

See Page 64 for warranty information.



### EXPANDABLE HOSE

2.5' to 10' vacuum and solution hose



## 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.



**MARATHON 350  
CARPET SPOTTER**



See Page 64 for warranty information.



### VERSATILE

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

### CONVENIENT

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



### EASE OF USE

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

### PRODUCT SPECIFICATIONS

<b>MODEL</b>	<b>MARATHON 350</b>
<b>Catalog Number</b>	98132

### MACHINE DIMENSIONS

<b>Dimensions (Lxwxh)</b>	21 In X 15 In X 17 In 533 Mm X 381 Mm X 432 Mm
<b>Net Weight</b>	22 Lbs. / 10 Kg
<b>Cord Length</b>	15 Ft / 5 M

### CLEANING SYSTEM

<b>Solution Tank</b>	1.5 Gal / 6 L
<b>Recovery Tank</b>	1.5 Gal / 6 L
<b>Waterlift</b>	79 In / 2,000 Mm
<b>Pump Pressure</b>	58 P.s.i / 4 Bar
<b>Sound Level</b>	79 Db (A)

### MOTOR

<b>Pump Motor</b>	50 W
<b>Vacuum Motor</b>	1,100 W / 9 amps

### REPLACEMENT ITEMS AND ACCESSORIES

<b>8' Vacuum Hose</b>	35306M-07
<b>Upholstery Tool</b>	35306M-06
<b>Floor Tool</b>	35306M-05
<b>Wand (2 pcs)</b>	3530PU-04
<b>Nylong Accessory Bag</b>	3530BJ-24

See Page 64 for warranty information.



## 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 unit 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.



MARATHON ROOM-MATE

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 CHARACTERISTICS	
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
Waterlift	117"
REPLACEMENT ITEMS	
50 ft. Vac / Solution Hose	X1213T
OPTIONAL ACCESSORIES	
12 in. Professional Wand	PFX-NS-T
Utility Hand Tool	98340
Crevice Detail Tool	98342
Upholstery Tool	98343

See Page 64 for warranty information.

\* Unit ships with wand and hose.



### 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

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



Marathon 2-100  
Marathon 2-200  
Marathon 2-400  
with Perfect Heat



### 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.

### EASE 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.



### SIMPLE ACCESS TO PUMP AND HEATER

For fast and easy maintenance and increased machine up-time, 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 Carpetrinsers 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 DIMENSIONS

L X W X H	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 CHARACTERISTICS

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-scutt soft rear / 3" swivel casters	8" non-scutt soft rear / 3" swivel casters	8" non-scutt 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 ACCESSORIES

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-HP
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
Power Cord	M1374	M1374 (x 2)	M1374 (x 2)

See Page 64 for warranty information.

\* Unit ships with hose.

## 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-manuever 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.



MINI-MARATHON 425

PRODUCT SPECIFICATIONS	
MODEL	MINI-MARATHON 425
Catalog Number	98150
MACHINE DIMENSIONS	
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 ACCESSORIES AND ATTACHMENTS	
8' Vacuum pressure hose	95560
20' Vacuum pressure hose	95569
PS Series drag wand with 8" head	98347
Standard Metal Hand Tool	98350

See Page 64 for warranty information.



### EASY ACCESS TO RECOVERY TANK

Wide 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



MARATHON 800

MARATHON 1200

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.



### 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.



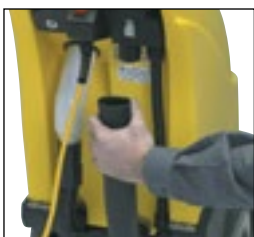
### PATENTED BLADDER DESIGN

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

### SERVICE-FRIENDLY

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!



### 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	115V
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
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### REPLACEMENT ITEMS

50 Ft Extension Cord 14-3 (For 98166, 98168)	M1352	M1352
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### 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

See Page 64 for warranty information.



## Rugged intelligent design, setting the standard 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 the 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 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.

PRODUCT SPECIFICATIONS	
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	98340
18" Crevice Detailer	98342
4" Upholstery Tool	98343
6" Utility/Stair Tool	98344
75 Ft Extention Cord 12-3	72314A
50 Ft Extention Cord 12-3	32217

See Page 64 for warranty information.



**MARATHON 2000**



### 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 CARPET EXTRACTION

An adjustable brush, 100 psi solution pump, and 22" vac shoe provide deep-down 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.

# Tornado extractors now with CFR Technology



## Innovative Cleaning Technology

Tornado with CFR (Continuous Flow Recycling) Technology is an environmentally preferred carpet cleaning system with patented technology that is radically different from other cleaning systems. This technology provides superior moisture controlled cleaning, faster drying times, and unmatched cleaning productivity. By investing in recycling extractors, users save time and money in the long run while also having cleaner facilities.

## Dramatically Increase Productivity

Carpet cleaning technicians spend most of their time emptying tanks or hauling water back and forth from the job site. This revolutionary, moisture-controlled recycling technology eliminates this wasted time. By recycling water through the four-level filtration system, these extractors use 1/7th of the water and chemical that traditional extractors consume.

## Moisture-Controlled Wand Technology

CFR technology incorporates moisture-controlled atomization within the extraction wand and hand-tools to provide another way to control and minimize water that comes in contact with the carpet. A Rapid Recovery Atomization process occurring within the wand recovers up to 50% more than traditional extraction tools, cleaning and recovering solution all in one step to ensure that moisture never rests on the carpet or backing. The atomized, high-speed cleaning solution works as an agitator, deep-cleaning the fibers without damaging the carpet, leaving carpets and backing far less saturated so they can dry quickly.

Traditional carpet extractors can leave behind excessive moisture during the extraction process that generates mold and mildew, damages carpet, and takes longer to dry. With this moisture-controlled technology, you reduce health and safety issues and the development of mold, bacteria and allergens in carpets to provide improved indoor air quality and less complications from allergy and asthma for building occupants.

## Superior flexibility, portability and filtration

The ECO 500 Series upright extractors equip carpet cleaning professionals with all of the tools required to achieve contractor-grade, deep-cleaning results. These ten and fifteen gallon workhorses are designed to meet a multitude of cleaning demands, and are equipped with advanced technology, high-efficiency air-watt motors for increased cleaning performance.

- Wheeled handle for easy loading
- Hinged tank design for easy access to internal components
- Front mounted drain hose for fast solution disposal
- Easy access to all filters for routine maintenance and cleaning
- Rear mounted control panel and power outlets feature sealed membrane switches
- Front mounted pressure gauge/adjustment knob to monitor cleaning performance



ECO 500

PRODUCT SPECIFICATIONS				
MODEL	ECO-500 AW	ECO-500 AWH	ECO-500 AW Plus	ECO-500 AWH Plus
Model info	Standard Unit	with Heat	Standard Unit	with Heat
Catalog Number (Kit)	98840	98844	98852	98854
Catalog Number (Unit Only)	98838	98842	98848	98846
Tank Size	10 gal. / 38 l	10 gal. / 38 l	15 gal. / 57 l	15 gal. / 57 l
Machine Dimensions (LxWxH)	29 in x 20 in x 35 in 74 cm x 51 cm x 89 cm	29 in x 20 in x 35 in 74 cm x 51 cm x 89 cm	29 in x 20 in x 40 in 74 cm x 51 cm x 102 cm	29 in x 20 in x 40 in 74 cm x 51 cm x 102 cm
Weight	86 lbs. / 39 kg	96 lbs. / 43 kg	88 lbs. / 40 kg	98 lbs. / 44 kg
Vacuum Motor	Single, 6.6 dia AW	Single, 6.6 dia AW	Single, 6.6 dia AW	Single, 6.6 dia AW
Peak Airwatts	673	673	673	673
CFM	141	141	141	141
Solution Pump (Adjustable p.s.i.)	500 p.s.i. / 34.5 BAR	500 p.s.i. / 34.5 BAR	500 p.s.i. / 34.5 BAR	500 p.s.i. / 34.5 BAR
Power	115v	115v	115v	115v
Power Cord	25 ft. detachable 8 m detachable	(2) 25 ft. detachable 8 m detachable	25 ft. detachable 8 m detachable	(2) 25 ft. detachable 8 m detachable
REPLACEMENT ITEMS AND OPTIONAL ACCESSORIES				
11" Rapid Recovery Wand 11" 2 Jet (type "R")	77000	77000	77000	77000
3" Combination Hand Tool	77001	77001	77001	77001
33' Flexible Hose	77002	77002	77002	77002

See Page 64 for warranty information.

## Portable, Professional-Grade Moisture-Controlled Cleaning



**PRO500**

Our portable Pro 500 and Pro 750 upright extractors equip carpet cleaning professionals with all of the tools needed to achieve contractor-grade, deep cleaning results. These workhorse machines, designed to meet multiple cleaning demands, provide superior flexibility, portability, and tackles virtually any cleaning task including restorative carpet care, stairs, upholstery, fabric office partitions, and even hard surfaces with grouted tile.

- Wheeled handle for easy loading
- Hinged tank design for easy access to internal components
- Front mounted drain hose for fast solution disposal
- Easy access to all filters for routine maintenance and cleaning
- Rear mounted control panel and power outlets feature sealed membrane switches
- Front mounted pressure gauge/adjustment knob to monitor cleaning performance

PRODUCT SPECIFICATIONS				
MODEL	Pro 500	Perfect Pro 500	Pro 500 Ozone Assist	Pro750
Model info	Standard Unit	with Perfect Heat	with Ozone	with 750 p.s.i.
Catalog Number (Kit)	98822	98832	98828	98836
Catalog Number (Unit Only)	98820	98830	98826	98818
Tank Size	13 gal. / 49 l	13 gal. / 49 l	13 gal. / 49 l	13 gal. / 49 l
Machine Dimensions (LxWxH)	29 in x 41 in x 22 in 74 cm x 104 cm x 89 cm	29 in x 41 in x 22 in 74 cm x 104 cm x 89 cm	29 in x 41 in x 22 in 74 cm x 104 cm x 89 cm	29 in x 41 in x 22 in 74 cm x 104 cm x 89 cm
Weight	124 lbs. / 56 kg	124 lbs. / 56 kg	124 lbs. / 56 kg	128 lbs. / 58 kg
Vacuum Motor	Dual - 2 stage	Dual - 2 stage	Dual - 2 stage	One (1) - 3 stage
Waterlift	150 in / 381 cm	150 in / 381 cm	150 in / 381 cm	135 in / 343 cm
CFM	101	101	101	97
Solution Pump (Adjustable p.s.i.)	500 p.s.i. / 34.5 BAR	500 p.s.i. / 34.5 BAR	500 p.s.i. / 34.5 BAR	750 p.s.i. / 51.7 B AR
Power	115v	115v	115v	115v
Power Cord	25 ft. detachable 8 m detachable	Dual 25 ft. detachable Dual 8 m detachable	25 ft. detachable 8 m detachable	Dual 25 ft. detachable Dual 8 m detachable
REPLACEMENT ITEMS AND OPTIONAL ACCESSORIES				
11" Rapid Recovery Wand 11" 2 Jet (type "R")	77000	77000	77000	77000
3" Combination Hand Tool	77001	77001	77001	77001
33' Flexible Hose	77002	77002	77002	77002

See Page 64 for warranty information.



## Recycling, Moisture-Controlled Carpet Extractor

Carpet cleaning professionals, building service contractors, and in-house cleaning staff will appreciate the unique and innovative cleaning technology of Tornado's Cascade 20 carpet cleaning system. Delivering contractor-grade deep cleaning productivity that far surpasses other interim and restorative carpet cleaning methods, the Cascade 20 system utilizes healthier, sustainable cleaning science to reduce organic materials in the carpet to minimize odors and increase the health and safety of building occupants. Through a unique rapid recovery process that atomizes the carpet solution and controls moisture, the revolutionary, eco-friendly Cascade 20 system:

- Consumes less water and chemicals
- Minimizes the development of mold, fungus and allergens in carpets
- Delivers faster drying times so your space is clean, dry and ready in a fraction of the time of normal extraction
- Provides enhanced ergonomics with patented wand systems for those hard-to-reach places



CASCADE 20

PRODUCT SPECIFICATIONS		
MODEL	Cascade 20	Cascade 20 Ozone assist
Model info	Standard Unit	with Ozone
Catalog Number (Kit)	98858	98862
Catalog Number (Unit Only)	98856	98860
Tank Size	25 gal. / 95 l	25 gal. / 95 l
Machine Dimensions (LxWxH)	45 in x 24 in x 43 in 114 cm x 61 cm x 109 cm	45 in x 24 in x 43 in 114 cm x 61 cm x 109 cm
Weight	202 lbs. / 92 kg	202 lbs. / 92 kg
Vacuum Motor	One (1) - 3 Stage	One (1) - 3 Stage
Drive Motor	0.18 hp / 134 watts	0.18 hp / 134 watts
Speed (Variable)	0 - 114 ft per minute 0 - 34.7 m per minute	0 - 114 ft per minute 0 - 34.7 m per minute
Cleaning Path	20 in / 51 cm	20 in / 51 cm
Waterlift	130 in / 330 cm	130 in / 330 cm
CFM	92	92
Solution Pump (Adjustable p.s.i.)	400 p.s.i. / 27.6 BAR	400 p.s.i. / 27.6 BAR
Power	115 V	115 V
Power Cord	25 ft. detachable 8 m detachable	Dual 25 ft. detachable Dual 8 m detachable
REPLACEMENT ITEMS AND OPTIONAL ACCESSORIES		
11" Rapid Recovery Wand 11" 2 Jet (type "R")	77000	77000
3" Combination Hand Tool	77001	77001
33' Flexible Hose	77002	77002

See Page 64 for warranty information.



Rugged Design!

## Superior value, engineering and cleaning performance

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 for carpet.



### PRODUCT SPECIFICATIONS

MODEL	M 17" 175 RPM	M 20" 175 RPM
Catalog Number	97590	97595
MACHINE DIMENSIONS		
L X W X H	23" x 17" x 49"	26" x 20" x 49"
Net Weight	100 Lbs.	105 Lbs.
Motor Height	16"	16"
DESIGN CHARACTERISTICS		
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 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		
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 64 for warranty information.



### Rugged Design!

## 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		
L X W X H	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 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		
17" Pad Holder	TL16	N/A
20" Pad Holder	N/A	TL19
3 Gallon Solution Tank	FM91	FM91
Pad Retainer	F44P	F44P

See Page 64 for warranty information.



#### EASY ACCESS

One-piece motor housing features easy access.

#### EASY PAD CHANGE

Tilt up position allows easy access for changing pads.



#### SAFETY AND DURABILITY

Sturdy metal handle has safety lock-out features.

#### PATENTED DESIGN

Keeps motor running COOL, and provides a longer life.



#### RUGGED DESIGN

Triple planetary all steel gears for smooth power!

#### OPTIONAL ACCESSORIES

3 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.

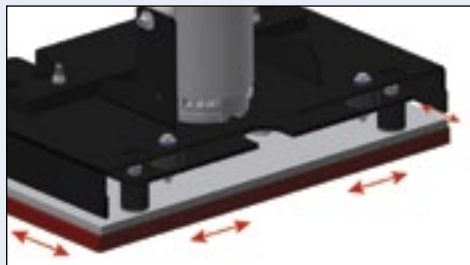
In a time when conserving resources is on the front of everyone's mind, the **OB 20** allows operators to strip a floor without the use of chemicals. This keeps not only your chemical costs down, but allows you to help meet growing environmental standards.

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 a minimum.

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 the market.



**OB 20**  
as shown with the optional weight kit  
and dust control kit\*\* (Catalog # 97602)



### 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 side-to-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 process.

### 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 SPECIFICATIONS

MODEL	OB 20
Catalogue Number	97600

### MACHINE DIMENSIONS

L x W x H	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 CHARACTERISTICS

Housing Construction	Epoxy Coated
Power System	115V Coded
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 ACCESSORIES

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 64 for warranty information.

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



## 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, self-adjusting 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.



**PATENTED DESIGN**  
Keeps motor running COOL,  
and provides a longer life.



### 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

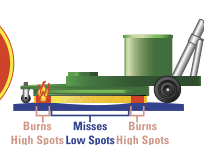
Floating handle provides great maneuverability with no "flutter" or pull.

### Conventional Burnishers

Edge of Pad Cuts the Floor Finish at High Spots

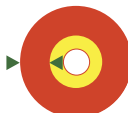


Limits the Burnishing Path to a small section of the pad



### Tornado Burnishers

Full, Flexible & Self Adjusting Pad Contact



### PRODUCT SPECIFICATIONS

MODEL	BRUTE FORCE 1600 GLAZER	BRUTE FORCE 2000 GLAZER	BRUTE FORCE 2000 GLAZER
Catalog Number	98458B	98482B	98486

### MACHINE DIMENSIONS

L X W X H	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 CHARACTERISTICS

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
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### REPLACEMENT ITEMS AND ACCESSORIES

Pad Retainer For All Glazer Models	F44P	F44P	F44P
Pad Holder	919DP	919DP	919DP
Dust Filter	N/A	N/A	19069

See Page 64 for warranty information.

## 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 preferred features will meet any LEED-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!

**Perfect for  
Day Cleaning!**



**BATTERY GLAZER 17**



### ON-BOARD CHARGER

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



### SIMPLE BATTERY INDICATOR

Battery charge indicator allows the operator to know exactly run time is left.



### COMPACT STORAGE

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



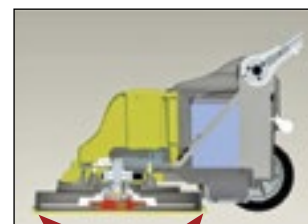
### HEALTHY IAQ

Dust control feature on this unit to ensure healthier indoor air quality (IAQ).



### ECO-FRIENDLY BATTERIES

Rechargeable, maintenance free batteries with an on board charger.



### DUST CONTROL

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

PRODUCT SPECIFICATIONS	
MODEL	BATTERY GLAZER 17
Catalog Number	98494
MACHINE DIMENSIONS	
L x W x H	26" x 18" x 39"
Net Weight	141 Lbs.
DESIGN CHARACTERISTICS	
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

See Page 64 for warranty information.

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

Tornado's **2500 B Clean-Air Glazer** is the industry's premiere burnishing machine, 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. This unit comes with maintenance-free, sealed traction-drive.

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.



2500 B CLEAN-AIR GLAZER W/ TRACTION DRIVE



### EASY OPERATION

Speed 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 W/ TRACTION DRIVE
Catalog Number	98499
Pad Size	20"
Glazing Speed	2500 rpm
Pad Pressure	Adj. to 30 Lbs.
Drive Power	.5 HP
P.m. Motor	2.5 HP/36V
Size (L X W X H)	48" X 22" X 37"
Weight W/Batteries	585 Lbs
Traction Drive	Standard
Digital Controls	Standard

### REPLACEMENT PARTS AND ACCESSORIES

Dust-Free Filter Replacement (2 Required)	19069
Dust-Skirt Shroud Assembly	31152
Pad Retainer	90599

See Page 64 for warranty information.



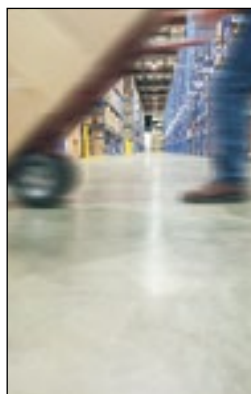
28" KAWASAKI  
PROGLAZER®

24" KAWASAKI  
PROGLAZER®

## 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.



\*\* Performance statistics or claims contained in this brochure are estimates. Actual results may vary based upon conditions of the application and surface being cleaned.

### 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.

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	PB119
OPTIONAL ACCESSORIES (ALL UNITS INCLUDE ONE STEEL TANK AND ONE OF EACH FILTER)		
Bonnet Filter	33887	33887
Carburetor Filter	99550	99550
Oil Filter	99553	99553
Clutch**	30714	30714
Steel Propane Tank W/Gauge	30396	30396

See Page 64 for warranty information. \*\* Factory-installed options.



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

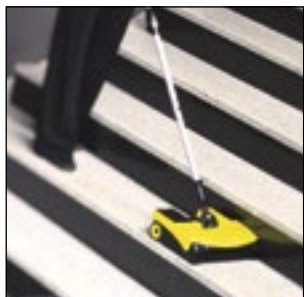
Having a dependable sweeper is crucial for your business, so it only makes sense to have a superior, easy to use sweeper. The battery operated, motorized **EB 30 Mini-Sweeper** from Tornado is a unit that can easily tackle your sweeping needs. At 56 dBA (lower than the volume level of normal conversation), the EB 30 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 6 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** comes with a removable 7.2-volt rechargeable Li-Ion battery, and a single battery charger that provides a full charge in about 3 hours. As an option, you can purchase a 50-minute quick-charger. When a quick charger is combined 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 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**; quicker than a vacuum cleaner, more effective than a broom.



### CHANGEABLE ROLLER BRUSH

Requires no tools and allows hairs, threads, etc. to be removed quickly and easily



### FLEXIBLE, UNIVERSAL JOINT

Handle articulates, providing superior maneuverability



### EASY TO REMOVE DUSTPAN

Provides convenient rear access with large capacity



### EASILY INSTALLED BATTERY

Changing batteries is a breeze

**Quicker than a Vacuum Cleaner.**

**More Effective Than a Broom.**



**EB 30 MINI-SWEEPER**

### PRODUCT SPECIFICATIONS

MODEL	EB30/1
CATALOG NUMBER	93222
Charging Time	3 hours
Working Width	12"
Container Capacity	.26 Gallons
Noise Level	56 dBA
Weight	6.2 Lbs.
Dimensions	9.8" x 11.8" x 43.3"

### STANDARD ACCESSORIES

Roller Brush (Black)	K47624000
Battery	K96540290
Charger / Battery Kit	K46540310

### OPTIONAL ACCESSORIES

Red Stiff Roller Brush	K47624010
Quick Charger	K46540310

See Page 64 for warranty information.

## 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.

**Sweeps up to  
28,000 sq. ft. per hour!**



**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 ft <sup>2</sup> /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

See Page 64 for warranty information.



### 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.

### EASE OF USE

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.



### 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!**



SWB 26/8

The Tornado **SWB 26/8 Battery Sweeper** moves effortlessly between carpet and hard floors. In any application where a wide-area corded vacuum isn't practical, the **SWB 26/8 Walk-Behind Battery Sweeper** is the perfect solution. Faster and quieter than wide-area vacuums, the **SWB 26/8** is perfect for schools, hospitals, airports, commercial office buildings, theaters, retail, stores, casinos, sports facilities, and arenas. With a 26" wide cleaning path and easy maneuverability, the **SWB 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.



### 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 plastic.



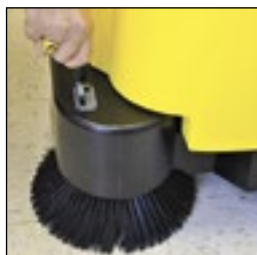
### EASY ACCESS

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.

### 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 <sup>2</sup> Per Hr. / M <sup>2</sup> Per Hr.)	26,000 ft <sup>2</sup> per hr. 2,400 m <sup>2</sup> 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
<b>STANDARD ACCESSORIES AND REPLACEMENT ITEMS</b>	
Main Broom	39122
Sidebrush	39167
Filter	90100

See Page 64 for warranty information.



## The BR 13/1 Family of Compact Automatic Scrubbers



The Family of BR 13/1 Scrubbers are easier on the indoor environment and make cleaning so simple, it is actually enjoyable. In-house facility managers, building engineers, housekeepers and BSCs will appreciate the BR 13/1 Scrubber's superior flexibility, advanced productivity and reduced environmental impact. Where high quality floor cleaning performance, ease of use and durability are called for, the BR 13/1 Family of Scrubbers are the most versatile and effective answer for any hard or soft floor surface.

### Low-Moisture Cleaning with Cylindrical Brush

Environmentally preferred, the BR 13/1 Scrubbers offer one of the best cleaning options — cylindrical brush technology. The use of cylindrical brush technology uses 30% less water, delivering 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 uneven surfaces such as quarry tile, paver bricks, and raised rubber disc flooring. The BR 13/1 Family of Scrubbers can also be used for cleaning escalators and moving walkways. For even greater flexibility, the units can be used on commercial-grade carpeting and entrance matting in conjunction with low-moisture, carpet mill approved encapsulation carpet cleaning. Producing minimal impact on the environment, waste is reduced as cylindrical brushes far outlast rotary pads, using on average one set of brushes for every 100 floor pads.

### Sealed, Maintenance Free Battery Option

The BR 13/1 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 Roam uses the latest, most advanced, lithium technology on the market today. These batteries not only meet LEED EB Green Building Standards, Lithium-Iron Phosphate batteries also:

- Deliver up to 2,000 charging cycles to boost productivity
- Stay cooler than other battery technology on the market
- Can be rapidly recharged
- Have an extremely low self discharge rate
- Provide a virtually flat discharge curve, which means maximum power is available until fully discharged (no "voltage sag" as with lead acid batteries)
- Do not suffer from "thermal runaway"

**Less moisture,  
mold, bacteria  
and allergens**



BR 13/1 MW

BR 13/1 ROAM



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

### BROAD RANGE FLORE CARE APPLICATIONS

BRUSH / PAD TYPE	DAILY CLEANING	DEEP SCRUB	SPORTS FLOOR	TEXTURED	EPOXY / RUBBER	WOOD FLOORS	GROUT	ESCALATOR	CONCRETE	COMMERCIAL CARPET	MARBLE OR GRANITE	VINYL
Standard	x		x	x	x	x	x		x			x
Hard		x			x				x			
Soft	x		x	x	x	x	x			x	x	x
Escalator								x				
Side	x	x	x	x	x	x	x		x	x	x	x



### 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.

### PRODUCT SPECIFICATIONS

MODEL	BR 13/1 MW	BR 13/1 ROAM
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 CHARACTERISTICS

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	External
Battery Voltage	N/A	24 V

### REPLACEMENT ITEMS AND ACCESSORIES

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 Cable	N/A	33937
Charger	N/A	90-0588-0000

See Page 64 for warranty information.



### TRANSPORT EASILY

For 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.



#### PROFESSIONAL PERFORMANCE

Brush pressure adjustment allows variable contact pressure with the floor surface.



#### SIMPLE TO USE

Removable solution and recovery tanks are easily emptied, rinsed, and re-filled.



#### CYLINDRICAL BRUSHES

The 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 COMPACT

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

## 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.

### PRODUCT SPECIFICATIONS

MODEL	BR 16/3
Catalog Number	99406

### MACHINE DIMENSIONS

Dimensions (L X W X H)	21 in x 19 in x 15 in 520 mm x 470 mm x 380 mm
Net Weight	67 Lbs. / 33 kg.
Solution Tank	3 gal / 10 l
Recovery Tank	3 gal / 10 l

### CLEANING SYSTEMS

Productivity	3200 f <sup>2</sup> per hour 300 m <sup>2</sup> per hour
Brush Type	Cylindrical
Brush Width	16 in / 400 mm
Brush Rpm	660 RPM
Cleaning Path	16 in / 400 mm
Sound Level	71 dB (A)

### MOTOR

Brush Motor	1.5 HP / 1100 W / 14 A
Vacuum Motor	0.67 HP / 500 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.)	K63693880

See Page 64 for warranty information.

## 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	
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 V
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

See Page 64 for warranty information.

**Great for  
Hard-to-Reach  
Areas!**



**BD 14/4 COMPACT AUTO-SCRUBBER**



### FITS IN NARROW SPACES

Now clean narrow, congested aisles 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.



## Compact scrubber with premium features and superior results

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.



### 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.

### FITS IN NARROW SPACES

Now clean narrow, congested aisles or stalls with this compact unit. The 17" 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.

Great for  
Hard-to-Reach  
Areas!



BD 17/6 COMPACT  
AUTO-SCRUBBER

180° Rotating  
Squeegee!

### 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 CHARACTERISTICS

Tank Construction	Polyethylene
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### 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 V
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### 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

See Page 64 for warranty information.



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

Designed for environmental sustainability, the BR 18/11 conserves 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.



BR 18/11



### ON-BOARD CHARGER

The BR 18/11 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.



### EASY TO CLEAN

Quick release recovery tank lid for easy tank rinsing and filling.



### 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.



### VACUUM MOTOR PROTECTION

Automatic recovery tank float shut off device to avoid foam and water from damaging vacuum motors.



### 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.

### PRODUCT SPECIFICATIONS

MODEL	BR 18/11
Catalog Number	99685

### MACHINE DIMENSIONS

L X W X H	43" X 21" X 41"
Net Weight	157 Lbs.
Solution / Recovery Tank	11 gal. / 12 gal.
Squeegee Width	31"

### DESIGN CHARACTERISTICS

Tank Construction	Polyethylene
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### CLEANING SYSTEM

Brush Type	Cylindrical
Brush Width	18"
Brush RPM	1,300
Brush Pressure	50 Lbs.
Cleaning Path	18"

### PRODUCTIVITY

Cleaning Rate (Sq. Ft Per Hour)	17,969
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### MOTORS

Vacuum Motor	.6 hp
Brush Motor	.8 hp
Sound Level	66 dB

### BATTERY

Voltage	24 V
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### REPLACEMENT ITEMS

Super Soft Scrub Brush (2 required)	48901230
Medium Scrub Brush	
Rear Squeegee	48903120

### OPTIONAL ITEMS

Super Soft Scrub Brush (2 required)	48901230
Medium Hard Scrub Brush (2 required)	K57620080
Grit Scrub Brush	K57621710
Hi-Low Grout Brush (2 required)	K57621700
Oil Resistant - Rear Squeegee (before serial#: 10003331. N/A for 20/11T)	48401040
Rear Squeegee	48405030
Oil Resistant - Rear Squeegee (after serial#: 10003331)	48405040

See Page 64 for warranty information.

# Introducing the Redesigned Floorkeeper Scrubber Series



## Created 1965. Perfected 2019.

Tornado's Floorkeeper scrubbers have been a trusted name in the industry since 1965, and our latest redesign improves the operator's experience from top to bottom. American made with all-steel frames and dent-proof rotomolded tanks and shroud, these scrubbers are built for the long haul.

Tornado has a variety of configurations with disk and orbital models that can tackle any cleaning task. Our orbital scrubbers feature industry-leading adjustable down pressure and isolator warranty (5 years or 5,000 hours). Operators will appreciate the low 63 dBA sound level and complete solution recovery on 180 degree turns. Use and care has never been easier with ergonomic, user-friendly controls, onboard instructions, and a QR code link to manuals and training videos.



### HYDRALERT™ BATTERY PROTECTION SYSTEM

Our patented system detects low water levels and audibly alerts operators, protecting your batteries and saving thousands of dollars over the life of your scrubber (optional accessory on any Floorkeeper model)



### SIMPLIFIED TRAINING & OPERATION

Onboard instructions and access to videos/manuals, plus simplified operator controls for an easy user experience



### ADJUSTABLE DOWN PRESSURE

Change orbital pad pressure to transition between daily cleaning and chemical-free removal of the toughest floor finishes



### IMPROVED TANK DESIGN

Redesigned tanks have wider access for full cleaning, gross debris filter cup, Bromine tank treatment system to stop odors (22 gallon units only), and built-in tie-down points for easier transportation

## Best-in-class orbital down pressure



FKS28 ORBITAL

FKS20 ORBITAL

### Benefits of the FKS Orbital Scrubbers:

- Best-in-class orbital down pressure for chemical-free finish removal and daily cleaning
- Industry-leading isolator warranty – 5 years or 5,000 hours
- Minimize training time with user-friendly controls and onboard instructions
- Complete solution recovery on 180 degree turns reduces slip and fall risks
- Audible battery protection (optional feature) alerts operators and extends battery life
- Made in the USA and rigorously tested for your toughest jobs
- Built in squeegee hanger (22 gallon only)



PRODUCT SPECIFICATIONS		
Model	FKS20 Orbital	FKS28 Orbital
Catalog Number	99120ORB	99128ORB
SOLUTION DELIVERY SYSTEM		
Solution Capacity	11 gallons / 42 liters	22 gallons / 83 liters
Solution Control	0-.5 gpm / 0-1.9 lpm, variable knob adjustment	0-.55 gpm / 0-2.1 lpm, variable knob adjustment
SCRUBBING SYSTEM		
Cleaning Path Width	20 in. / 510 mm	28 in. / 711 mm
Pad Size	20 x 14 in / 510 x 356 mm	28 x 14 in / 711 x 356 mm
Productivity (per hour) Theoretical Max	23,800 ft <sup>2</sup> / 2,211 m <sup>2</sup>	30,800 ft <sup>2</sup> / 2,861 m <sup>2</sup>
BRUSH DRIVE SYSTEM		
Motor Power	1 hp / 750 W	1 hp / 750 W
Motor Speed	2,200 rpm	2,200 rpm
Pressure	75 & 100 lb / 34 & 45 kg	70, 110 & 160 lb / 32, 50 & 73 kg
RECOVERY SYSTEM		
Tank Capacity	13 gallons / 49 liters (2 gallons / 7.6 liters demisting chamber)	25 gallons / 95 liters (3 gallons / 11.4 liters demisting chamber)
Vacuum Motor	.56 hp / 380 W	.7 hp / 522 W
Vacuum Motor Water-Lift / CFM	48 in / 122 cm 66 cfm / 1.9 cmm	71 in / 180 cm 71 cfm / 2.0 cmm
DRIVE SYSTEM		
Drive Type	Transaxle	Transaxle
Motor Power	.25 hp / 187 W	.5 hp / 373 W
BATTERY & CHARGING SYSTEM		
System Voltage	24	24
MISC PRODUCT SPECIFICATIONS		
Length	L 45 in. x W 21 in. x H 43 in. L 114 cm x W 53cm. x H 109cm	L 52 in. x W 28 in. x H 44 in. L 132 cm x W 71 cm x H 112cm
Construction	Rotationally molded polyethylene tanks, powder coated steel frame	Rotationally molded polyethylene tanks, powder coated steel frame

See Page 64 for warranty information.

Simple where it should be,  
smart when it counts



FKS20 DISK

FKS24 DISK

#### Benefits of the FKS Disk Scrubbers:

- Minimize training time with user-friendly controls and onboard instructions
- 20" available in brush and traction drive models
- Complete solution recovery on 180 degree turns reduces slip and fall risks
- Audible battery protection (optional feature) alerts operators and extends battery life
- Made in the USA and rigorously tested for your toughest jobs

PRODUCT SPECIFICATIONS			
Model	FKS20B Brush Assist	FKS20 Disk	FKS24
Catalog Number	99120B	99120D	99124D
SOLUTION DELIVERY SYSTEM			
Solution Capacity	11 gallons / 42 liters	11 gallons / 42 liters	11 gallons / 42 liters
Standard Control	0-.5 gpm / 0-1.9 lpm, variable knob adjustment	0-.5 gpm / 0-1.9 lpm, variable knob adjustment	0-.5 gpm / 0-1.9 lpm, variable knob adjustment
SCRUBBING SYSTEM			
Cleaning Path Width	20 in. / 510 mm	20 in. / 510 mm	24 in. / 610 mm
Pad Size	20 in. / 510 mm	20 in. / 510 mm	(2) 12 in. / 305 mm
Productivity (per hour) Theoretical Max	23,800 ft <sup>2</sup> / 2,211 m <sup>2</sup>	23,800 ft <sup>2</sup> / 2,211 m <sup>2</sup>	26,400 ft <sup>2</sup> / 2,453 m <sup>2</sup>
BRUSH DRIVE SYSTEM			
Brush Motor Power	.75 hp / 560 W	.75 hp / 560 W	1 hp / 750 W
Brush rpm	220 rpm	220 rpm	360 rpm
Brush/Pad Pressure	60 & 90 lbs. / 27 & 41 kg	60 & 90 lbs. / 27 & 41 kg	60 & 90 lbs. / 27 & 41 kg
Brush/Pad Attachment/Removal	Auto on	Auto on	Auto on
RECOVERY SYSTEM			
Tank Capacity	13 gallons / 49 liters (2 gallons / 7.6 liters demisting chamber)	13 gallons / 49 liters (2 gallons / 7.6 liters demisting chamber)	13 gallons / 49 liters (2 gallons / 7.6 liters demisting chamber)
Vacuum Motor Power	.56 hp / 380 W	.56 hp / 380 W	.56 hp / 380 W
Vacuum Motor Water-Lift/CFM	48 in. / 122 cm 66 cfm / 1.9 cmm	48 in. / 122 cm 66 cfm / 1.9 cmm	48 in. / 122 cm 66 cfm / 1.9 cmm
DRIVE SYSTEM			
Type	Pad Assist	Transaxle Drive	Transaxle Drive
Motor Horsepower	n/a	.25 hp / 187 W	.25 hp / 187 W
BATTERY & CHARGING SYSTEM			
System Voltage	24 V	24 V	24 V
MISC PRODUCT SPECIFICATIONS			
LxWxH	L 50 in. x W 21 in. x H 43 in. L 127 cm x W 53 cm x H 109 cm	L 50 in. x W 21 in. x H 43 in. L 127 cm x W 53 cm x H 109 cm	L 48 in. x W 26 in. x H 43 in. L 122 cm x W 66 cm x H 109 cm
Construction	Rotationally molded polyethylene tanks, powder coated steel frame	Rotationally molded polyethylene tanks, powder coated steel frame	Rotationally molded polyethylene tanks, powder coated steel frame

See Page 64 for warranty information.



## Premium down pressure performance



FKS28 DISK

FKS32 DISK

### Benefits of the FKS Large Disk Scrubbers:

- Minimize training time with user-friendly controls and onboard instructions
- Odor-stopping tank treatment system kills bacteria and leaves tanks smelling fresh
- Complete solution recovery on 180 degree turns reduces slip and fall risks
- Audible battery protection (optional feature) alerts operators and extends battery life
- Made in the USA and rigorously tested for your toughest jobs
- Built in squeezee hanger

PRODUCT SPECIFICATIONS		
Model	FKS28 Disk	FKS32 Disk
Catalog Number	99128D	99132D
SOLUTION DELIVERY SYSTEM		
Solution Capacity	22 gal / 83 l	22 gal / 83 l
Solution Control	0-.55 gpm / 0-2.1 lpm Variable, knob adjustment	0-.55 gpm / 0-2.1 lpm Variable, knob adjustment
SCRUBBING SYSTEM		
Cleaning Path	28 in / 711 mm	32 in / 813 mm
Pad/brush Size	(2) 14 in / 356 mm disks	(2) 16 in / 406 mm disks
Productivity (per hour) Theoretical Max	30,800 ft <sup>2</sup> / 2,861 m <sup>2</sup>	35,200 ft <sup>2</sup> / 3,270 m <sup>2</sup>
BRUSH DRIVE SYSTEM		
Brush Motor Horsepower	(2) 1.0 hp / 750 W	(2) 1.0 hp / 750 W
Brush rpm	300 rpm	300 rpm
Brush/Pad Pressure	70, 110 & 150 lb / 32, 50 & 68 kg	70, 110 & 150 lb / 32, 50 & 68 kg
Brush/Pad Attachment/Removal	Automatic on	Automatic on
RECOVERY SYSTEM		
Tank Capacity	25 gal / 95 l (3 gal / 11.4 l demisting chamber)	25 gal / 95 l (3 gal / 11.4 l demisting chamber)
Vacuum Motor Power	.7 hp / 522 W	.7 hp / 522 W
Vac Motor Water-Lift/CFM	71 in / 180 cm 71 cfm / 2.0 cmm	71 in / 180 cm 71 cfm / 2.0 cmm
DRIVE SYSTEM		
Drive Type	Transaxle drive	Transaxle drive
Motor Horsepower	.5 hp / 373 W	.5 hp / 373 W
BATTERY SYSTEM		
System Voltage	24 V	24 V
MACHINE SPECIFICATIONS		
LxWxH	L 56 in x W 30 in x H 44 in L 142 cm x W 76 cm x H 112 cm	L 58 in x W 34 in x H 44 in L 147 cm x W 86 cm x H 112 cm

See Page 64 for warranty information.

## 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 DIMENSIONS

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 CHARACTERISTICS

Tank Construction	Polyethylene	Polyethylene
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### 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
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### REPLACEMENT ITEMS

13" Pad Holder	48803030	N/A
Standard Front Squeegee	48408020	48403020
Standard Rear Squeegee	48408010	48406100
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 64 for warranty information.

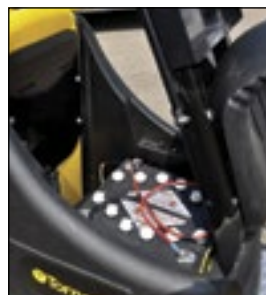


BD 26/27



### 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.



### SILENT SUPERVISOR

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

### 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.



### 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 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



BR 33/30



PRODUCT SPECIFICATIONS		
MODEL	BD 33/30	BR 33/30
Catalog Number	99780	99785
MACHINE DIMENSIONS		
L X W X H	65" X 36" X 51"	65" X 36" X 51"
Height with rollbar	67"	51"
Net Weight	690 Lbs.	739 Lbs.
Solution / Recovery Tank	30 / 32 gal.	30 / 32 gal.
Squeegee Width	45"	45"
DESIGN CHARACTERISTICS		
Tank Construction	Polyethylene	Polyethylene
CLEANING SYSTEM		
Brush Type	Twin Disk	Cylindrical
Brush Width	33"	33"
Brush RPM	162	785
Brush Pressure	187 Lbs. (max)	176 Lbs. (max)
Cleaning Path	33"	33"
PRODUCTIVITY		
Cleaning Rate (Sq. Ft Per Hour)	55,952	55,952
MOTORS		
Vacuum Motor	.7 hp	.8 hp
Brush Motor	1.5 hp	.9 hp
Sound Level	70 dB	70 dB
BATTERY		
Voltage	36 V	36 V
REPLACEMENT AND OPTIONAL ITEMS		
Standard Rear Squeegee	48406100	48406100
Poly / Oil Resistant Front Squeegee	48403110	48403110
Oil Resistant Rear Squeegee	48406030	48406030
Medium Scrub Brush	NA	48906050
Hi-Low Grout Brush	NA	48906030
Grit Scrub Brush	NA	48906070
16" Pad Holder (2 req.)	48803050	N/A
16" Soft Brush (2 req.)	48903120	N/A
16" Medium Scrub Brush (2 req.)	48903130	N/A
16" 5 Mil Grit Scrub Brush (2 req.)	48903150	N/A

See Page 64 for warranty information.



### 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.



### SAFETY FEATURES:

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

### QUICK BRUSH CHANGE

Deck shroud peels back allowing easy access to change brushes.



### 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.



### DISC PADS AND BRUSHES

The BD machine can be fitted with a variety of optional scrub brushes, a time-proven solution for smooth floors.



## 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.



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

PRODUCT SPECIFICATIONS				
MODEL	TASKFORCE® 10	TASKFORCE® 15	TASKFORCE® 17	TASKFORCE® 20 TROT-MOP™
Catalog Number	94234	94232	94230	94236
MACHINE DIMENSIONS				
L X W X H	19in X 16in X 28in 48cm X 41cm X 71cm	28in X 21in X 37 in 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 CHARACTERISTICS				
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 SYSTEM				
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 ACCESSORIES				
Paper Filter	WD36	WD36	WD36	WD36
Filter Assembly	WD3	WD3	WD3	WD4
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	FM200 standard
Squeegee Nozzle Assembly	WD30A	WD30A	WD30A	WD30A
Hose Assembly	WD25	WD25	WD25	WD25



### CONVENIENT

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



### PACKAGED COMPLETE

Standard attachments include a crush proof hose, two-piece wand, hard floor tool, squeegee attachment, dust brush and crevice tool.

### WASHABLE FILTER

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



See Page 64 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.



EXTERNAL FILTER VAC



### 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 applications.



### 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 REPLACEMENT PARTS (Included with unit)

External Filter	90377
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### 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:	
1.5" X 15' Urethane Static Conductive Hose W/ O Sleeve	90684
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 64 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	✓	SAND	✓
LIGHT SOLID DEBRIS	★	OIL DRY	✓
HEAVY SOLID DEBRIS	✓	METAL SHAVINGS AND CHIPS	✓
SAWDUST	★		

## 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.



**95953 EXTERNAL  
FILTER AIR VAC**

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 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:	
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

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.

See Page 64 for warranty information.



### 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.

## 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) 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.



TASKFORCE® CFV 17

TASKFORCE® CFV 10



### CERTIFIED HEPA FILTER

A certified HEPA filter captures particles down to 0.3 microns with 99.97% efficiency.



### PACKAGED COMPLETE

Standard attachments include a hose, two-piece wand, floor tool, dust brush and crevice tool.



### FOUR-STAGE FILTRATION

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 DIMENSIONS		
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 ACCESSORIES		
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	WD31	WD31
10' Hose	WD25YLW	WD25YLW

See Page 64 for warranty information.



## 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.



**DUAL ELECTRIC JUMBO**

**SINGLE ELECTRIC JUMBO**



### 95960 DUAL ELECTRIC JUMBO

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



### 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	✓	✓
Cutting Oil	★	★
Machine Oil	✓	★
Heavy Machine Oil		✓
Light Solid Debris	★	★
Heavy Solid Debris	✓	★
Sawdust	★	★
Powder	★	★
Ultra Fine Powder	★	★
Sand	✓	★
Oil Dry	✓	★
Metal Shavings And Chips	✓	★

### PRODUCT SPECIFICATIONS

MODEL	SE JUMBO	DE JUMBO
Catalog Number	95954	95960

### MACHINE DIMENSIONS

L X W X H	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 CHARACTERISTICS

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
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### REPLACEMENT ITEMS

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 64 for warranty information.

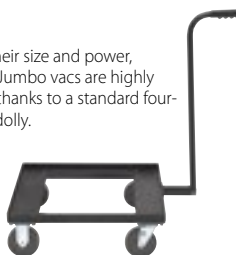
Does not ship with attachments

### 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 easily draining liquids.

### MOBILE

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



### 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	90644
14" X 1.5" Fibre Floor Tool	90642
18" X 1.5" Round Nozzle	90414
1.5" Hose Adapter	90331

### OPTIONAL ITEMS AND ACCESSORIES FOR DUAL ELECTRIC JUMBO

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.

### DUAL AIR JUMBO

#### 95962 DUAL AIR JUMBO EXTERNAL FILTER WET/DRY VACUUM

The unit includes drum, two powerheads, 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®

## SINGLE AIR JUMBO EXTERNAL FILTER WET/ DRY VACUUM APPLICATION GUIDE

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

## 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	✓		1/4"
General Debris	✓		3/16"
Sawdust	✓		3/16"
Powder	✓		3/16"
Sand	✓		7/32"
Metal Grindings And Chips		✓	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.

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

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

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 (4 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 64 for warranty information.

Does not ship with attachments

## 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
Liquid Shutoff Float	90569

\* 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
15" X 2" Neoprene Hose W/ Molded-in Cuff, No Sleeve	90324	90324

\* 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



### QUAD WET JUMBO AIR

#### 98450 INTERNAL QUAD 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.

### 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.

### 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 REPLACEMENT COMPONENT 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 OPERATION (NOT AVAILABLE FROM 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 64 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 units 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 here.



### 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.

### MOBILE

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		✓	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	✓		1/4"

\* 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 smallest 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.



**Integrated Vacuum  
for Increased  
Escalator Safety!**



### PRODUCT SPECIFICATIONS

MODEL	BR 460 ESC
Catalog Number	96180
CFM	188"

### 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)	05-4096-0000
Paper Collection Bags (10 Pack) 1.3 gal / 5 liter	02-4372-0000

### OPTIONAL ITEMS AND ACCESSORIES

Tynex Brush Set (left and right)	05-4097-0000
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See Page 64 for warranty information.



### EASE OF USE

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.



### ROTATING BRUSHES

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



### MULTIPLE BRUSHES

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





## 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.



### 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>



#### VERSATILITY

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



#### CONVENIENCE

Power cord and accessories are stored on-board 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.



#### ACCESSORY STORAGE

The unit comes with a mesh storage bag for additional accessories

#### PRODUCT SPECIFICATIONS

MODEL	VS4
Catalog Number	97102
<b>MACHINE DIMENSIONS</b>	
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 CHARACTERISTICS

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 ACCESSORIES

Steam Hose And Gun	K43220390
Extension Tubes	K41270240
Hand Tool	K51303490
Long Detail Nozzle	K41304310
Short Detail Nozzle	K28842810
Brass Bristle Brush Set (3 Pack)	K28630750
Round Detail Nylon Brush (4 Pack)	K28630580

See Page 64 for warranty information.

## Destroy the source of odor

Tornado® Ozone Generator odor neutralizer attacks odor causing bacteria and molecules and leaves pure fresh oxygen in its place. The large-capacity unit is ideal for commercial use. It is excellent for smoke damage, mold, mildew, pet odor and other sources of odor commonly found in building maintenance and refurbishing. The Ozone Generator will minimize odor in any indoor location, including basements, kitchens, bathrooms and more. It also provides rapid deodorizing for hotel/motel rooms, meeting rooms, used cars and boats. The unit requires no routine maintenance and is effective for areas up to 60,000 cubic feet

### How it works

Ozone occurs naturally in the environment. The most common exposure to ozone occurs when there is a thunder storm; the fresh smell you notice is from the ozone released during the storm. The Tornado® System creates ozone by exposing oxygen in the atmosphere to high-density ceramic and stainless steel electrodes. When the oxygen in the air comes in contact with the electrodes, it brings the oxygen molecules (O<sub>2</sub>) together to form ozone (O<sub>3</sub>). The O-Z unit injects the ozone into the air. When the ozone is introduced, it disperses and mixes with the air.

Benefits of the Ozone Generator:

- Eliminates smoke, pet odor, mold mildew and more
- Effective for areas up to 60,000 cubic ft
- Tested and proven to maintain proper activated oxygen levels
- Quickly deodorizes hotel/motel, hospital and meeting rooms
- No plates or UV tubes to maintain



**OZONE GENERATOR**



#### 12-HOUR TIMER

12-hour timer with power supply overload protection



#### POWERFUL FAN / POWER SUPPLY

Has a 100 CFM fan with ball bearings for extended service life



#### EASY STORAGE/TRANSPORTING

Durable poly housings stack for easy storage or transporting.

PRODUCT SPECIFICATIONS	
MODEL	Ozone Generator
Catalog Number	77011
Dimensions (L X W X H)	12" x 11" x 12" 30 cm x 28 cm x 30 cm
Weight	7.3 Lbs. / 3.3 kg
Air Movement	1 .5 grams per hour
Timer	12 hour
Power Cord	5 ft. grounded / 2 m grounded
CFM	100
Max Effectiveness	60,000 cubic ft. / 1,699 cubic m
Electrodes	Gas-filled arc module

See Page 64 for warranty information.

# 2019 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



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