

RAZOR®



RAZOR® TOUCH-FREE VEHICLE WASH SYSTEM

Washworld's best selling Razor® has earned the reputation of a proven system for its quality, dependability and longevity. Stainless steel throughout, Razor is built to last, no matter the conditions, no matter the part of the world your wash site is located. With an emphasis on simplicity of use and reduced maintenance, Razor combines all of the great features for which Washworld is known. For a bigger return on investment, it's time to join the Razor Revolution!



WASHWORLD®

2222 American Blvd. | DePere, WI 54115
920.338.9278 | 888.315.7253
www.washworldinc.com

THE RAZOR® ADVANTAGE

STAINLESS STEEL

Without a doubt, the most durable material for use in a car wash. When other manufacturers are using cheaper, less durable materials in their machines, Washworld refuses to compromise on quality and uses stainless steel throughout the Razor wash system.



Stainless Steel



Drive Motion Technology

ADVANCED DRIVE MOTION TECHNOLOGY

Razor's belt drive utilizes multiple variable frequency drive technology with a simple design that reduces downtime. It eliminates the need for tires and inner tubes and overhead cross brace and swivel and reduces weight.

ENERGY CHAIN

Razor's revolutionary cable carrier protects moving cables and hoses from abrasion and entanglement. E-Chain also provides controlled bend radius of cables and hoses to prevent pinching or kinking. E-Chain's non-metallic construction ensures quiet performance, longer cable life, and extended supply line life.



Energy Chain

VISORCLEAN

Stainless steel v-jet nozzles are strategically placed on the spray arch to clean even the hardest of places...under the rear window visor!



QUICKER RETURN ON INVESTMENT

Energy efficient motors save on operating costs. Reduced rolling resistance results in improved efficiency. No wasted product, reduced water consumption, increase through put, and lower operating costs all add up to a higher and faster return on investment.

SUPERIOR CLEANING ABILITY

Razor's VS²® provides exceptional cleaning by consistently measuring front, rear and both sides of vehicles to maintain the optimum distance between the arch and the vehicle for most effective cleaning. Smooth radial wash motion ensures complete vehicle coverage.

EYE CATCHING LED'S

For can't miss customer attraction, brilliant LED lights illuminate Razor. These striking long lasting LEDs are standard on all Razor wash systems.



VOICE PROMPTS

Your customers will never need to guess what to do next with Razor's voice prompts. Audible instructions and information are linked to Razor's instructional signage. Standard on Razor, the voice prompt is in English, however is customizable for other languages.

WASHVIEW® HMI ON-SITE & WASHVIEW® HMI REMOTE

Washworld's exclusive software allows you to access Razor from anywhere using your PC or laptop. Turn functions on or off, view wash counts, create or change wash events in real time, and so much more. The revolutionary design of our optional Washview Mobile features the same cutting edge technologies as Washview Remote with the additional ability to receive e-mail or text message alerts from anywhere in the world using your Tablet or Smart Phone.



WASHVIEW
— HMI ON SITE



WASHVIEW
— HMI MOBILE

ALL OF WASHWORLD'S BEST FEATURES IN ONE SYSTEM

OPEN INVITING WASH BAY

Your customers will appreciate the wide open feel of the wash bay. Razor's VS² is a safe, simple and reliable vehicle positioning system which provides your customers with a friendly, open wash bay without guide rails, floor treadles or T-bars. To increase customer comfort Razor utilizes bay guide reflector system to outline vehicle travel, day or night.



VIRTUAL ATTENDANT[®]

Washworld's patented Virtual Attendant technology enables the Razor to maneuver around obstacles such as wide mirrors, rear mounted bike racks and extended trailer hitches which often render other washes inoperable. Virtual Attendant automatically compensates for the obstacle thereby allowing the wash to be completed. This means no down time, no attendant and no more trips to the site to reset the wash! Best of all...it's standard on every Razor wash!



FOAM 'N FLOW[®]

More show, more shine, more revenue with Washworld's Foam 'n Flow application system now available on Razor! Fully LED lit, Foam 'n Flow can be used with any Camuba, hot wax, polish, and conditioning products on the market. Currently an option on the Washworld Razor, Foam 'n Flow is available as a retro-fit for existing equipment.



REDUCED MAINTENANCE

Sealed gearboxes eliminate the need for oil changes. Reduced weight and less motion equal less wear and tear. High quality premium components and materials withstand harsh wash bay conditions for longer life.

FLEX PASS[®] SYSTEM

Also standard on the Razor is Washworld's Flex Pass system. This stainless steel, angled flood style pod and overhead 6 nozzle stainless steel manifold delivery system applies up to eight different applications to the entire vehicle (top, sides, front and rear), each product can be applied to the vehicle in a single pass. Anything that can be put through the arch, can be put through the Flex Pass. The angled flood style pod and overhead manifold provide a more accurate and complete product application and rinse. Applications can be programmed from front to rear or rear to front to minimize machine movement. This speeds up the wash process to increase the through put of cars, which in turn translates into greater profits for you. Speeds are adjustable individually in both directions. Since the arch does not rotate around the car, it results in a substantial savings in time as well as reduced product cost.



TRI-COLOR FOAM

There is simply no better Tri-Color Foam application available! Washworld's Tri-Color Foam features completely adjustable nozzles for coverage the way you want it, where you want it. Foaming heads can be positioned individually allowing unlimited flexibility.



TRI-COLOR FOAM - FREEZE PROTECTION

Finally, a cost effective means of protecting your Tri-Color Foam system utilizing heat and weep capabilities to prevent freezing without the typical extreme water usage of other systems.

BUG A'SALT[™]

Washworld is launching an all out war on bugs and salt residue with our extra step vehicle preparation Bug A'Salt. This unique concentrated attack targets bugs and salt film which leaves vehicles cleaner and your customers happier.



STANDARD FEATURES

In-Bay Wall Mount System - Stainless Steel

- Stainless steel travel rails (27' 4" overall length)
- Floor mounted blue reflectors for visual guidance
- Wash bay stop/backup loading eye wall mounting kit - Standard bays
- Wash bay stop/backup loading eye pedestal mounting kit - Free standing frame or non-standard bays

Overhead Carriage and Trolley Frame - Laser Cut Stainless Steel

- Variable frequency controlled belt drive carriage and trolley movement
- Stainless steel contouring spray arch with variable frequency control
- VS²® (Vehicle Sizing System)
- Virtual Attendant® - Maneuvers around wide mirrors and trailer hitches
- Spray arch cover - Rotationally molded polyethylene composite material
- Replaceable nozzle protector - 2.0lb cross linked polyethylene foam
- Stainless steel carriage, totally enclosed climate proof motors and gearboxes with precise movement and minimal rolling resistance
- Energy chain - No festoon, overhead cross brace or overhead swivel
- Flex Pass® carriage manifold
- Triple pass technology for optimal front and rear cleaning
- Bug A'Salt™ technology for additional seasonal cleaning
- Arch mirror detailing - Arch will turn to clean and rinse side mirrors
- Attention grabbing blue LED highlighting the Razor® entrance cover

Undercarriage and Rocker Panel Blaster - Stainless Steel

- (3) Stainless steel nozzles on the undercarriage and (4) on each rocker panel blaster

Solution Delivery System - Powder Coated Carbon Steel Pump Station

- Cat 3535 Pump/25 HP E-series high efficiency ODP motor
- Variable flow and pressure with water conservation system
- High flow multiple stage solution delivery pump system
- Composite direct injection/No drift chemical metering system
- 3 Separate pre-soak application system
- 2 High pressure sealant/Drying agent applications
- 1 Low pressure drying agent/Protectant application
- Dual inlet low pressure source selection (hot and cold)

Ultimate Control Cabinet

- Electrical control panel 208VAC (soft start and stop variable frequency motor controls on carriage, trolley and arch)
- Washview® Remote access with alert system via modem connection
- Washview® control interface (complete programming flexibility)
- Complete on-site programming and diagnostic capability through the HMI
- Wash activation buy up compatibility
- Comprehensive integrated security system
- In-bay voice module to communicate Razor® actions to customer
- Wireless router and wireless hand held operator eliminates joystick box



OPTIONAL FEATURES

Razor® System Options

- 30 HP on-board drying system with three 10 HP producers
- 30 HP on-board drying system with four 7.5 HP producers
- 45 HP on-board drying system with three 15 HP producers
- 40 HP on-board drying system with four 10 HP producers
- In-bay horizontal pump station with composite covers and fiberglass in-bay ultimate control cabinet option
- UCC power conversion kit (converts standard UCC for use with 240 VAC 3 phase 60 Hz incoming power supply)
- Free standing frame (stainless steel or painted)

Wash Options

- Tri-Color foam system
- Tri-Color foam system with cold climate protection (heated pods & weep)
- Foam 'n Flow® application system
- Medium pressure RO pump (13 GPM @ 110 psi) includes wall mount bracket and motor starter
- Cold climate package (heat for VS²® sensors, carriage and rail travel surfaces, belt drive system, weep for spray arch, U/C and Flex Pass®)
- Cold climate/Weep only for spray arch, U/C and Flex Pass®
- Cold climate package for in-bay pump stand (heat for VS²® sensors, carriage and rail travel surfaces, belt drive system, weep for spray arch, U/C and Flex Pass®)
- Primary HS/MOBILE - High speed DSL or cable internet connection capability, includes software for PC
- Secondary HS/MOBILE - Additional high speed DSL or cable internet connection at same location for multi-bay sites
- Reclaim adapter (plumbing inlet & controls for external reclaim system)
- Water heater, on demand, direct vent, tank-less, natural gas (wall mount)
- Water heater, 12kw high capacity electric, stainless steel tank (wall mount)
- Power Tower Wheel Cleaner® - 3 or 6 rotating nozzles per tower (pair)
- Custom voice option for in-bay voice module
- Through wall stainless steel bulkhead manifold - For electrical and plumbing from mechanical room to wash bay
- Dual port injector system - To replace single injector for low pressure application (order per injector)
- Premium door controls
- Ultimate door controls - Includes eyes (above ground eyes for existing sites)

Custom Signage Options

Water Treatment Equipment

Drying System Options

© 2018 Washworld, Inc.

WALL MOUNT WASH BAY DIMENSIONS*

	OPTIONS	PREFERRED	*MINIMUM	MAXIMUM
HEIGHT	(All rail options) 13' 4" - 16' 8" Bay Widths 16' 9" - 18' 0" Bay Widths	12' (3658mm) 12' (3658mm)	10' 8" (3251mm) 11' 4" (3454mm)	N/A
WIDTH	27' 4" Rails (8331mm) (Standard) 30' 4" Rails (9246mm) (OBD) 25' 4" Rails (7722mm) (Optional)	15' (4572mm)	13' 4" (4064mm)	18' (5486mm)
LENGTH	25' 4" Rails (7722mm) (Optional) 27' 4" Rails (8331mm) no dryer	28' (8534mm) 30' (9144mm)	25' 10" (7874mm) 27' 10" (8484mm)	N/A
LENGTH	27' 4" Rails (8331mm) Razor® and Dryer w/Covers	42' (12802mm)	31' 4" (9550mm)	N/A
LENGTH	30' 4" Rails w/On-Board Dryer (9246mm)	42' (12802mm)	31' 4" (9550mm)	N/A

FREE STANDING FRAME DIMENSIONS*

	OPTIONS	PREFERRED	*MINIMUM	MAXIMUM
HEIGHT	27' 4" Rails (8331mm) (Standard) 30' 4" Rails (9246mm) (OBD) 25' 4" Rails (7722mm) (Optional)	12' (3658mm)	11' 9" (3581mm)	N/A
WIDTH	27' 4" Rails (8331mm) (Standard) 30' 4" Rails (9246mm) (OBD) 25' 4" Rails (7722mm) (Optional)	15' (4572mm)	14' 4" (4369mm)	N/A
LENGTH	25' 4" Rails (7722mm) (Optional) 27' 4" (8331mm) no dryer	28' (8534mm) 30' (9144mm)	25' 10" (7874mm) 27' 10" (8484mm)	N/A
LENGTH	27' 4" Rails (8331mm) Razor® and Dryer w/Covers	42' (12802mm)	31' 4" (9550mm)	N/A
LENGTH	30' 4" Rails w/On-Board Dryer (9246mm)	42' (12802mm)	31' 4" (9550mm)	N/A

*NOTE: Minimum dimensions are from nearest inside obstructions entrance to exit i.e. door tracks, counterweights, etc. Add in additional length for these items.

RAZOR® UTILITY REQUIREMENTS

Air:100 PSI @ 11 SCFM (6.89 bars @ 311 l/m) includes optional Tri-Color foam

Water:25 GPM @ 35 PSI (94.61/m @ 2.4 bars) minimum at pump

Electrical:208/230 VAC / 3 PH (with neutral (4-wire) ground

*NOTE: For voltage option other than the standard 208/230 VAC, 3PH, 60Hz contact Washworld.

Note: Specifications Subject to Change Without Notice. The decibel level of the dryer (measured at 1.6 meters from the floor and 1 meter from the surface) is 94dB. The decibel level of the pump station (measured at 1.6 meters from the floor and 1 meter from the surface) is 94dB. Decibel levels are impacted by surrounding materials and conditions and will vary.