

RAINBOW ULTIMA



Ultimate Fleet Cleaning Power

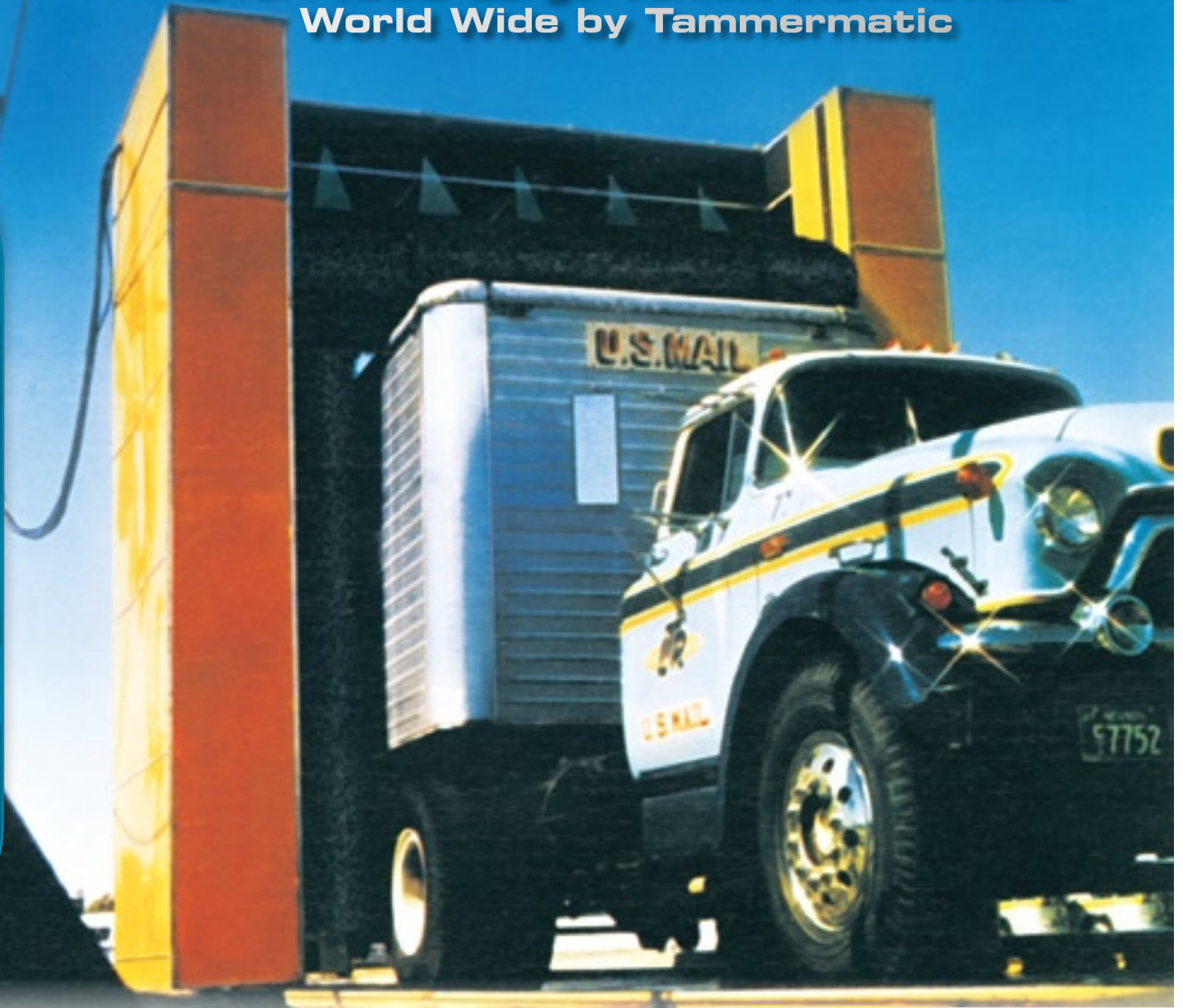


TAMMER*matic*

www.tammermatic.com

Vehicle Wash Systems with Decades of Global Experience and Know-How

Over 4000 Large Vehicle Installations World Wide by Tammermatic



Tammermatic is a well known pioneer in vehicle wash system development and the manufacturer of reliable and well performing fleet and car washers.

Tammermatic has manufactured thousands of Rainbow fleet washers during the past decades. Deliveries have taken place to every continent.

Operators include post offices, transit and cargo companies, car and truck manufacturers, dairies, military bases, food and beverage manufacturers and several other enterprises.



Rainbow Ultima - Ultimate Cleaning Power for Regular and Irregular Fleets

The new Rainbow Ultima Fleet Washer presents state-of-the-art technology to the large vehicle cleaning industry and fulfills extensive needs in a variety of applications.

The top models combine advanced brushless and brush wash methods and clean all kinds of vehicles from cars to complex shaped tractors and trailers.

For buses and other box-shaped vehicles, which are washed on regular basis, a two-brush Ultima gantry is a prudent investment.

Cleaning a standard size bus with a two-brush cross-over wash takes less than two minutes.



After a chemical prewash the oscillating and pivoting high-pressure jets clean hard-to-brush shaped vehicles fast and effectively



Top Class Cleaning Power for Hard-to-Clean Shaped Vehicles



The Rainbow Ultima is equipped with prewash and high-pressure systems consisting of oscillating and profiling solid stream nozzle assemblies that have the best available cleaning power for tanker- and garbage trucks and other hard-to-clean shaped vehicles.

For standard application Ultima can be equipped with conventional flat high-pressure nozzles.

The Key Element High-Pressure Washing

Transportation vehicles have a larger number of areas beyond the reach of brushes.

Therefore it goes without saying that high-pressure washing plays a major role in large vehicle cleaning processes.

Additionally, the high-pressure water jets remove sand and other coarse particles, which could potentially scratch finishes of vehicles during the brush stage of the wash.

The Ultima range utilises both the conventional flat spray and advanced solid stream pattern techniques. The flat spray nozzles are for standard cleaning while solid stream nozzles are designed for more demanding applications.



Solid Stream Nozzles for Far-Reaching Cleaning Power

A flat spray pattern is ideal over short and medium distances. However, a solid stream spray pattern is more effective over greater cleaning distances.

Ultima machines feature high-pressure spray units with 3 parallel, solid stream nozzles. The water jets form a uniform impact area on the target surface.



Triple Coverage Sweeping Technique for Enhanced Cleaning

Vertically sweeping side jets clean the sides from sills to roof.

For enhanced cleaning, they oscillate up and down so that they overlap each other. Similarly, the high-pressure water jets on the rotary head oscillate sideways.

High-pressure water jets, from nozzles situated in the rotary head, clean the vertical and horizontal surfaces from bumper to bumper.

Rotational motions of the head, together with the lateral oscillating pattern, direct the far-reaching water jets into vehicle recesses that are beyond the reach of brushes.



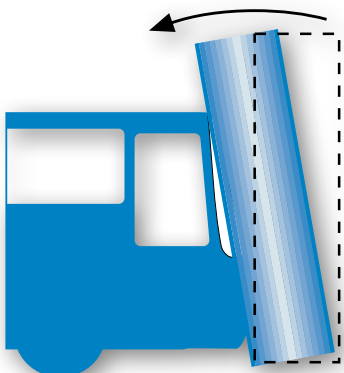
Bogey & Wheel Spray Banks



Bogey & Wheel spray banks provide extra cleaning power for lower vehicle areas.

Vertical front contour tilting action

An advanced brush inclination is an important feature in modern wash machines. The Tammermatic Rainbow Ultima's solution is to pneumatically control the brush inclination instead of the traditional power push & tilt method. This unique solution gives an excellent wash result as well as being safe for the large wind shield areas of modern vehicles.



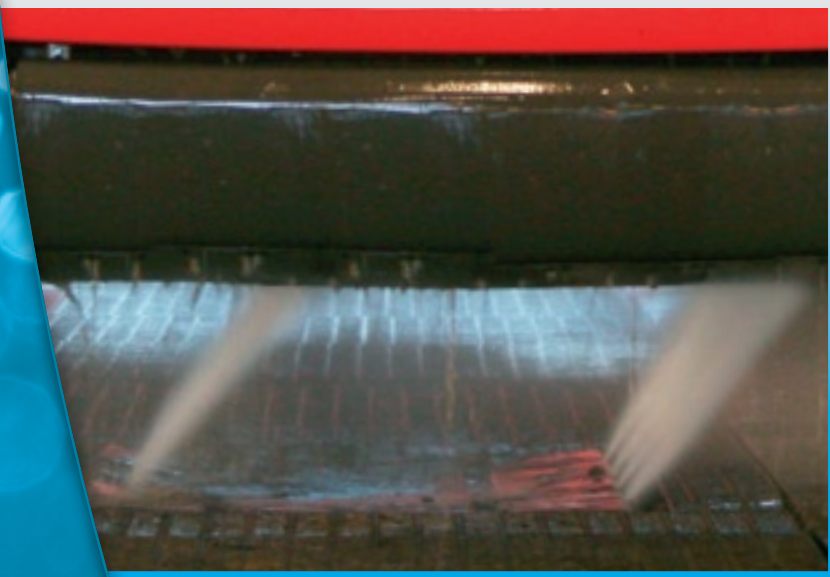
Vertical front contour tilting action



Chassis Washers for Dead-weight Removal



The power spray function of Bogey & Wheel spray banks can be executed together with general high-pressure applications as well as with brush cycles.



Ultima models can be equipped with a chassis washer with either a static or high-pressure oscillating nozzle assemblies.

The chassis washer is installed at the entrance end of the washbay. The cleaning cycle is executed when a vehicle moves over the spray-head while entering the washbay.

A chassis washer can be fed either with a separate multistage centrifugal pump (18.5 kW, 340 l/min, 20 bar) or with piston pumps (2 x 18.5 kW, 2 x 125 l/min, 75 bar).

If the gantry is equipped with a high pressure system no additional pump for the chassis wash is needed.

Ultimate Unparalleled Compatibility and Cleaning Power with Any Given Fleet



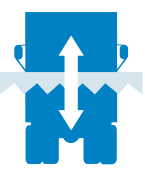





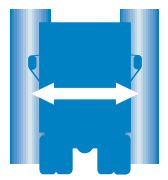

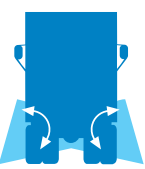
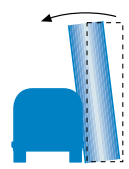
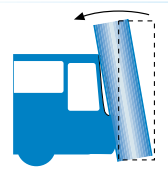
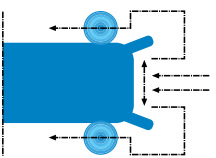
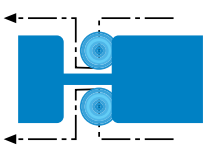
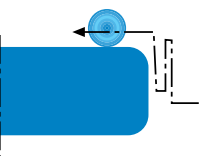
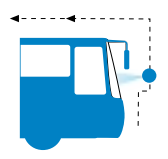
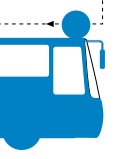
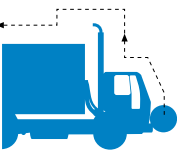
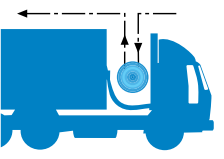
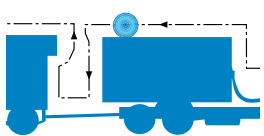
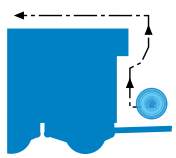
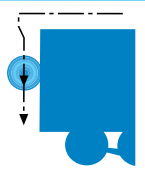
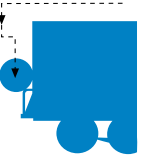




Automated cleaning of on-road vehicles can pose a challenge due to the various shapes and sizes of the fleets.

A straight forward basic brush wash with or without prewash is an adequate method for vehicles with regular shapes.

The cleaning of vehicles with irregular shapes requires contouring of brushes and movable spray banks that have to be performed at optimum distance from surfaces to be cleaned.

The control system of the Ultima - the most advanced in the industry - produces unparalleled contouring accuracy. It offers a wide range of selectable and built-in program elements, contouring modes and functional features, which facilitate customising the wash programs to suit all the needs of the fleet in question.

Program elements, contouring modes and functional features

 <p>Prewash application from lower spray banks</p>	 <p>Prewash application from upper and lower spray banks</p>	 <p>Prewash application from contouring rotary head</p>	 <p>Prewash application with two different chemicals or with one chemical with two different strengths</p>
 <p>High-pressure application from lower spray banks</p>	 <p>High-pressure application from bogie & wheel spray banks</p>	 <p>High-pressure application from contouring rotary head</p>	 <p>High-pressure application from upper and lower spray banks</p>
 <p>Wraparound 2-brush wash</p>	 <p>3-brush wash with contouring top brush and wraparound side brushes</p>	 <p>Oscillating under carriage wash</p>	 <p>Vertical side contour-tilting action for vans and other small vehicles</p>
 <p>Vertical front contour tilting action</p>	 <p>Front mirror override mode for side brush trajectories</p>	 <p>Adjustable draw bar limit for side brushes</p>	 <p>Side brush cross-over wash - performed with both brushes</p>
 <p>Automatic front mirror override mode for rotary head trajectory</p>	 <p>Front mirror override mode for top brush trajectory</p>	 <p>Pre-programmed override sequence for rotary head and top brush</p>	 <p>Automatic arctic gap sensing feature</p>
 <p>Two settings for top brush lower limit and arctic level</p>	 <p>Top brush - back-off feature</p>	 <p>Top brush - intensified rear wash / back-on feature</p>	 <p>Adjustable load platform limit for top brush</p>
 <p>Small vehicle mode: effects to brush pressure and top brush lower limit settings</p>	 <p>Full contouring mode for rotary head and top brush</p>	 <p>Full override mode for rotary head and top brush</p>	 <p>Open top and flat bed vehicle mode for rotary head and top brush</p>

Features and High-lights

- Overhead front and rear panels
- Primed and epoxy painted frame structure
- AC inverter driven lift motors
- Wraparound side brushes
- Vertical front contour-tilting action
- Profiling top brush
- Stainless steel splash shields
- Stainless steel housing for gantry motor control panel
- Bright LED positioning display
- Motor-starters for brushes with soft-start feature
- Touch-sensitive safety-flaps
- AC inverter driven gantry travel motors
- Centralized lubrication system
- Derailing locks

Prewash arches

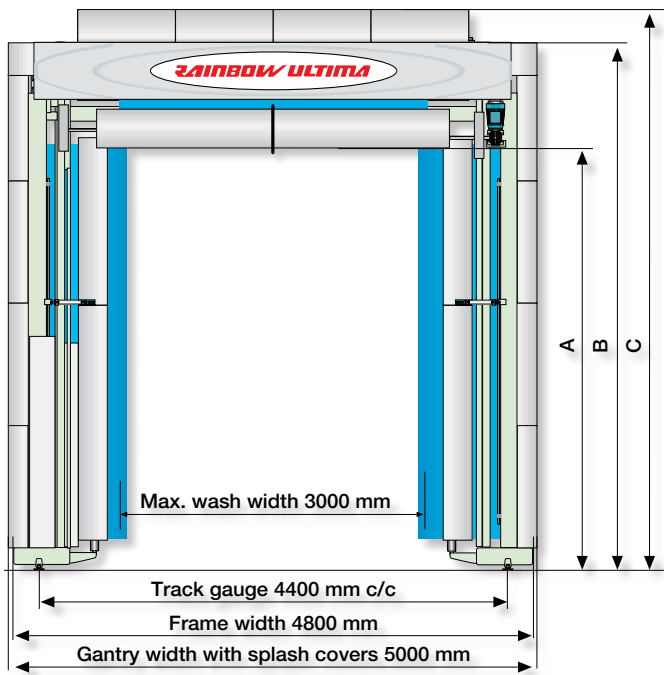
- Vertical full height pivoting solid spray banks
- Vertical full height pivoting and divided spray banks
- Vertical partial height pivoting spray banks for intensified treatment of vehicles lower areas
- Horizontal spray banks placed on contour profiling rotary head

HP arches

- Vertical full height pivoting solid spray banks - flat spray nozzles
- Vertical full height pivoting and divided spray banks - solid stream nozzles
- Bogey & wheel spray banks - solid stream nozzles to complete the full height oscillating solid stream system
- Horizontal spray banks placed on contour profiling rotary head - available with flat or solid stream HP nozzles.



Dimensions and Service Connections



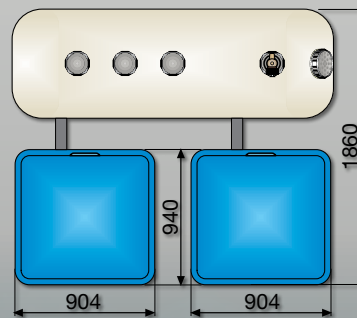
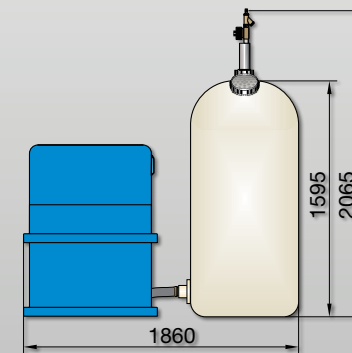
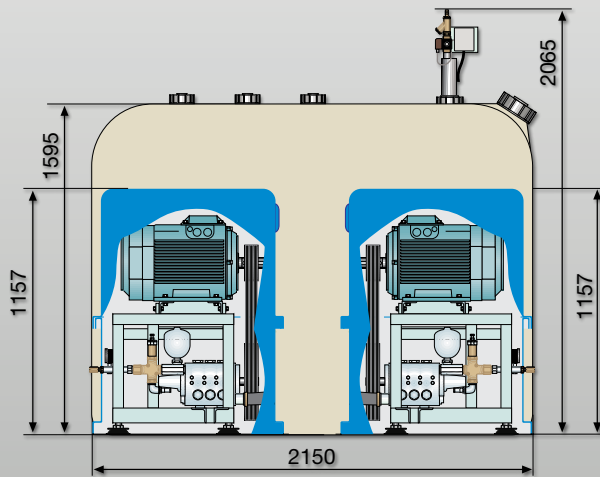
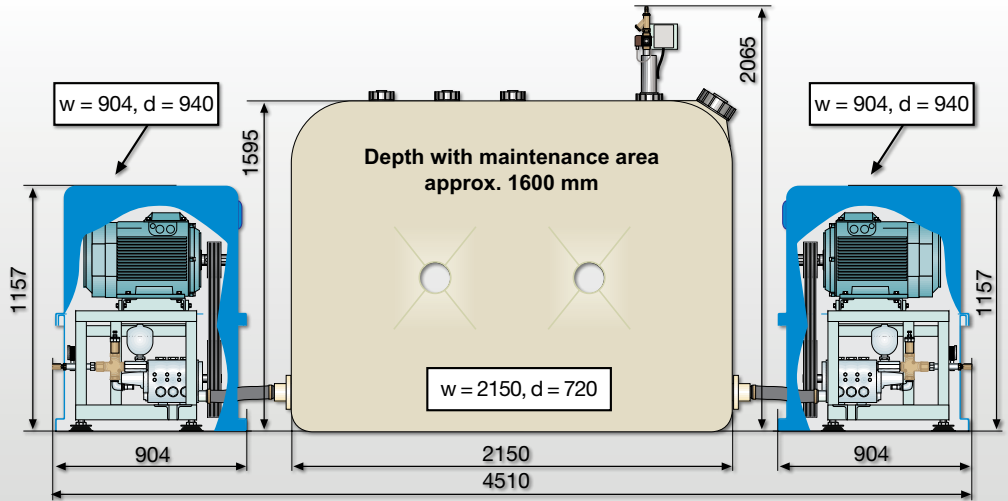
Basic 3-Brush version				
A = Wash height / mm	4200	4500	4800	5100
B = Frame height / mm	5200	5500	5800	6100
C = Total height / mm	5500	5800	6100	6400
Washbay min. height / mm	5600	5800	6200	6500
Without top splash shield total and washbay heights are reduced by 300 mm.				
Washbay length: vehicle + 6000 mm (safety distances 2 x 500 mm included). Min. washbay width 5400 mm.				
Power supply 3NPE 50 Hz, 400 V Rated power: 10.5 kW, Back-up fuses: 3 x 35 A				
Water supply: DN 25, 3.5 bar, 150 l/min				
Compressed air supply: DN10, 6-8 bar				

Basic 2-Brush version				
A = Wash height / mm	4200	4500	4800	5100
B = Frame height / mm	4900	5200	5500	5800
C = Total height / mm	4900	5200	5500	5800
Washbay min. height / mm	5000	5300	5600	5900
Washbay length: vehicle + 5500 mm (safety distances 2 x 500mm included). Min. washbay width 5400 mm.				
Power supply 3NPE 50 Hz, 400 V Rated power: 9 kW, Back-up fuses: 3 x 35 A				
Water supply: DN25, 3.5 bar, 150 l/min				
Compressed air supply: DN10, 6-8 bar				

3-Brush version with 18.5 kW & 20 bar HP-pump				
A = Wash height / mm	4200	4500	4800	5100
B = Frame height / mm	5200	5500	5800	6100
C = Total height / mm	5500	5800	6100	6400
Washbay min. height / mm	5600	5800	6200	6500
Without top splash shield total and washbay heights are reduced by 300 mm.				
Washbay length: vehicle + 6000 mm (safety distances 2 x 500 mm included). Min. washbay width: 5400 mm w/o top HP arch, w/ HP top arch min. washbay length is vehicle + 7500 mm.				
Power supply 3NPE 50 Hz, 400 V Rated power: 29 kW, Back-up fuses: 3 x 80 A				
Water supply: DN50, 3.5 bar, 300 l/min				
Compressed air supply: DN10, 6-8 bar				

2-Brush version with 18.5 kW & 20 bar HP-pump				
A = Wash height / mm	4200	4500	4800	5100
B = Frame height / mm	4900	5200	5500	5800
C = Total height / mm	4900	5200	5500	5800
Washbay min. height / mm	5000	5300	5600	5900
Washbay length: vehicle + 5500 mm (safety distances 2 x 500mm included). Min. washbay width 5400 mm.				
Power supply 3NPE 50 Hz, 400 V Rated power: 27 kW, Back-up fuses: 3 x 63 A				
Water supply; DN50, 3.5 bar, 300 l/min				
Compressed air supply: DN10, 6-8 bar				

3-Brush version with 2 x 18.5 kW & 70 bar HP-pump				
A = Wash height / mm	4200	4500	4800	5100
B = Frame height / mm	5200	5500	5800	6100
C = Total height / mm	5500	5800	6100	6400
Washbay min. height / mm	5600	5800	6200	6500
Without top splash shield total and washbay heights are reduced by 300 mm.				
Washbay length: vehicle + 6000 mm (safety distances 2 x 500 mm included). Min. washbay width: 5400 mm w/o top HP arch, w/ HP top arch min. washbay length is vehicle + 7500 mm.				
Power supply 3NPE 50 Hz, 400 V Rated power: 46 kW, Back-up fuses: 3 x 100 A				
Water supply: DN50, 3.5 bar, 300 l/min				
Compressed air supply: DN10, 6-8 bar				



Pumpstation dimensions

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