



## **Washworld Razor Install Guide**

**Car Wash Location:** Pit Stop Touchless, Milwaukee, Wisconsin

**Car Wash Type:** Washworld Razor Edge

**Nanobubble Generators (Domestic Water):**

- 1 x CRS538 on the suction end of the LP pump feeding the chemical panel
- 1 x CRS190 on the upper manifold/pitchfork
- 1 x CRS285 on the feed line to the RO

### **The Stacked Generator Installation Strategy**

In the installation featured in this case study, three Shaft Nanobubble Generators were placed at key stages of the Washworld Razor’s wash cycle:

#### **1. Equipment/Arch Feedline (1 x CRS538)**

- Infuses the water feeding the chemistry with trillions of nanobubbles, enhancing the chemical dispersion and effectiveness, helping break bonds between dirt and vehicle surfaces.
- One nanobubble generator is installed on each equipment line.

#### **2. Upper Manifold/Pitchfork/Trident (1 x CRS190)**

- Enhances mixing of chemistry
- Conditions the water, allowing jets to clean more effectively.
- Delivers quicker removal of bugs, bird droppings, and greasy road film.
- Results in brighter wheels, cleaner rocker panels, and improved coverage in hard-to-reach areas.

#### **3. Final Spot-Free Rinse (CRS285 on the RO Feed Line)**

- Installed before the pre-filter
- Protects RO membranes from biofilm and scale accumulation.
- Reduced water surface tension resulting in better “water break” so water sheets off car
- Leaves customers driving away with drier, shinier cars—without the need for additional chemical dryers.

## **Benefits for Operators**

Installing Shaft Nanobubble Generators transforms wash quality in ways your customers will notice immediately:

- **Higher Wash Quality** → improved ticket averages and repeat business.
- **Reduced Chemical Use** → lower operating costs without sacrificing performance.
- **Better Drying Performance** → less water spots, happier customers, more five-star reviews.
- **Long-Term Equipment Protection** → scale prevention reduces maintenance and downtime.

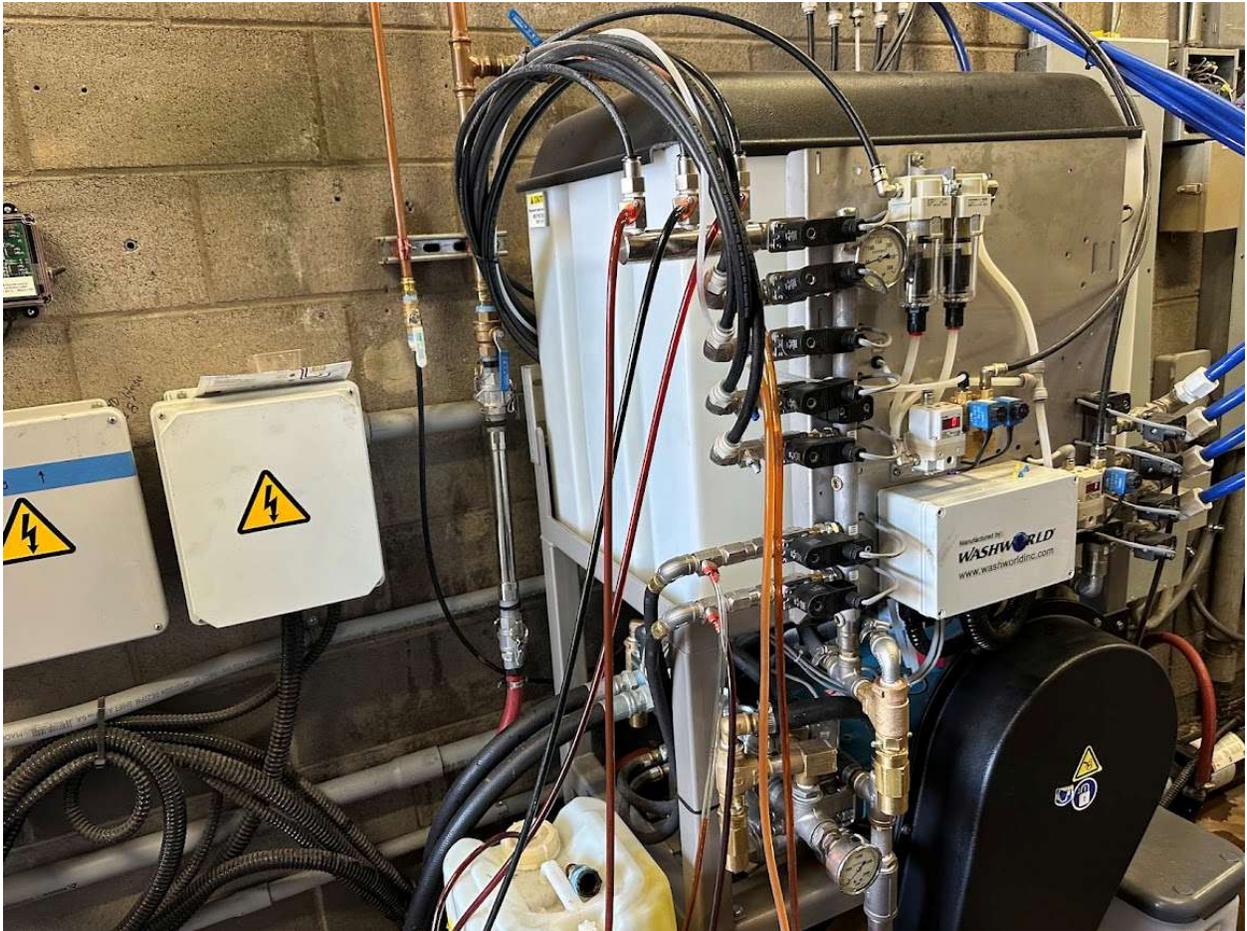
## **A Smarter Path to Premium Wash Results**

For operators of in-bay automatics like the Washworld Razor Edge, differentiation is everything. With competition increasing, the ability to consistently deliver a visibly better clean is what keeps customers loyal.

The Shaft Nanobubble Generator isn't just an upgrade—it's a competitive edge. By installing nanobubble generators at the right points in your wash process, you transform everyday water into a powerful cleaning and drying tool.

## Install Pictures

*CRS538 on LP Pump Feedline:*



*CRS190 on Upper Manifold/Pitchfork:*



*CRS285 on Feedline to RO Generator:*

