

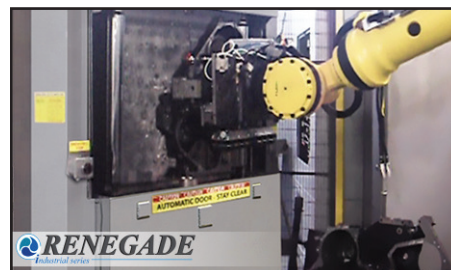
## PARTS WASHERS FOR PRODUCTION PROCESS CLEANING



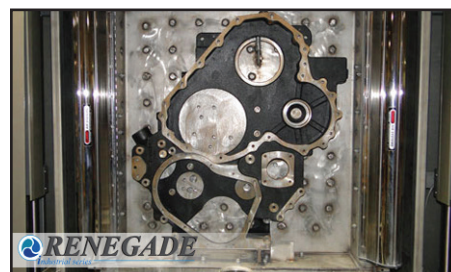
### Front Load Parts Washer with Automatic Vertical Door and Custom Fixture



#### COMPONENT HIGHLIGHTS



Automatic Vertical Door accommodates robotic part loading and extraction to integrate production process.



Custom Fixture with Directional Spray Nozzle Assembly



Control Panel



Filter Assembly

#### DESCRIPTION

**Upgrade your production process cell cleaning operation with the Renegade I-Series FL WD Vertical Door Parts Washer.** The heavy duty pump motor provides excellent efficiency for high production, repetitive cleaning operations. Discover the difference and learn when Renegade I-Series custom parts washers are the wise choice when configured for your production cell. Performance benefits include larger capacities, increased automation and integration of components. Renegade engineers and sales representatives listen to your special cleaning challenges to design the system that will meet or exceed your clean specification or stringent warranty requirements.

#### KEY FEATURES AND BENEFITS

- Large, 12.1" Touch Screen PLC/HMI Controls:
  - 7-day Timer for Heating and Skimming
  - Cycle Times Display
  - Low Water Warnings
  - Preset Maintenance Cycles
  - Preset Wash Cycles
  - Temperature Display
  - Touch Control for Jog Turntable
  - Touch Control for Start & End Cycle
  - Debug Mode to Individually Control Pumps, Valves, Heaters, & more
- Wash Zone Dimensions and Load Capacity Custom Configured as Required by Part
- Maximum Heater Temperature: 185°

- Custom Directional Spray Nozzle Assembly
- Heavy Duty Stainless Steel Construction
- ACT (Average Cycle Time) 10 minutes\*
- Automatic Low Water Level Shut Down
- Oil Skimmer with Programmable 7-day Timer
- Washer Door Safety Switch

#### WASH CYCLE

- 25 HP Heavy Duty Wash Cycle Pump; 450 GPM @ 60 PSI; 302 Gal. Sump Capacity; Heater: 460/3ph 24 KW Heater

#### DRY CYCLE

- 20 HP Heated Blow Dryer Using 24 KW Heaters

Machine Dimensions:  
164" H (Door Closed) x 73" W x 125" D  
Shipping Weight: 1750 lbs.

I-Series FL WD Vertical Door Rev. 07-2016 \*Estimated average range. Cycle times will vary depending on production cell operations, part size, part shape, part weight, and product supply. Subject to changes and modifications without notice.



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## UPGRADE TO RENEGADE I-SERIES PARTS WASHERS FOR PRODUCTION PROCESS CLEANING

### INDUSTRIAL APPLICATIONS

Aviation and Aircraft Parts Cleaning

Fabrication Parts Cleaning

Industrial Parts Cleaning

Machine Shop

Large Casting CNC Machining Facilities

Production Engine Shops

Production Machining Facilities

Remanufacturing Facilities

Transmission Machine Shops

Transportation Production Centers

### DISCOVER THE DIFFERENCE: CUSTOM PARTS WASHERS ARE THE IDEAL UPGRADE FOR YOUR PRODUCTION CELL

Manufactured by Service Line, Inc. since 1996, Renegade designs and manufactures parts washers for unique industrial process cleaning applications. With an extensive archive of successful machines, choose from our automatic top load or front load systems configured for your application.

Contact the Renegade Team if your parameters for custom design production process cleaning include one or more of the following parameters:

- Achieve Consistent Clean Specification Requirements
- Difficult Cleaning Challenges Such as Blind Holes, Tapped Holes, Delicate Features, Etc.
- Expanded Height, Length, Diameter, Or Weight - Available as Specified
- Lower Production Cycle Times
- High Pressure Requirements
- Multi-Stage Wash Rinse Dry
- Parts Washer Detergent Considerations or Requirements for Items to be Cleaned: De-Foaming, Rust Preventative, Solvent-Free, Environmental Concerns, or Health Concerns.
- Special Fixtures
- Special Proprietary Parts Cleaning and More
- Zero Contamination Requirements

The Renegade team will conduct a thorough analysis of your parts cleaning requirement and will create a special order system for your budget. Upgrade to Renegade Industrial Series.

### RENEGADE I-SERIES CUSTOM COMPONENT UPGRADES FOR ENHANCED FUNCTIONALITY

- Automatic Doors
- Closed Loop Rinsing Cycle
- Custom Blowers
- Custom Hot or Cold Air Quick-Dry to Prevent Flash Rusting
- Custom Parts Fixtures
- Door Interlock Safety Switch
- Filtration Systems with Finer Reduction Efficiencies to Comply with Stringent Cleanliness Specifications
- Gas Heat
- Heated Drying Cycle
- Heater Capacity Range
- Hot Water Rinse Applications
- Increased Load Capacities
- Large 12" HMI
- Light Curtains for Safety
- Oil Coalescent
- Overhead Jib Crane
- Part Tumbling Baskets
- PLC Integration of New Parts Washer To Existing Production Cell
- Power Exhaust Vent
- Pump Capacity Options
- Rinse to Drain Cycle
- Robotic Load Systems
- Rotary Part Fixture System
- Safe Touch Heat Shielding
- Specialized Gantry Cleaning Platforms for Heavy Parts That Require Special Access to The Washing Platform
- Spray Bar "Home" Positioning
- Stainless Steel Infrastructure for No-Rust Durability
- Targeted Drying
- Two-Tiered Turntables

### I-SERIES FL WD VERTICAL DOOR SYSTEM CUSTOMER GOALS

#### VERSATILITY

- Custom Nozzle Spray Assembly and Custom Fixtures for Thorough Complex Part Cleaning
- Advanced automation through PLC and HMI.

#### COST REDUCTION

- Automated process reducing labor cost.
- Efficiently keeps part in one system.
- Cleaned parts are more prepared for finishing.

#### INCREASE PRODUCTIVITY

- Accommodates automated robotic part loading to integrate with production process cleaning cell.
- Quickly and efficiently clean a high volume of parts with the shortest lead time between production and final end-user installation.
- Effective process throughput improvement from reduction in human intervention.

### RENEGADE PARTS WASHER DETERGENT

Renegade's history of providing parts washer solutions also includes a wide variety of **soaps and detergents** for use in parts washer systems. Renegade's experience in the industry led to the development of special non-solvent based surfactants that are both environmentally safe and health conscious for your employees.

Use Renegade low-foaming detergents to remove grease, soil, paint, corrosion, oil, and other contamination from parts' surfaces. Choose from manual or automatic detergents, degreasers, additives and hand cleaners. **Learn more and order now, call 800-774-7900 or go to Renegade at [www.partwasher.net](http://www.partwasher.net).**

### RENEGADE PARTS WASHER HARDWARE AND SUPPLIES

As a full service parts washer solution provider, Renegade supports the maintenance and performance of your parts washer with a wide range of parts and supplies such as filter cartridges, baskets, brushes, and hoses. **Learn more and order now, call 800-774-7900 or go to Renegade at [www.partwasher.net](http://www.partwasher.net).**

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