



# Advanced Total Aircraft Wash System

## Hydroblaster ATAWS/GHO

Built to meet UL1776, CSA and CE certifications

### GENERAL SPECIFICATIONS AND USE

This is fully self-contained ATAWS (Advanced Total Aircraft Wash System) and is the complete integration of Hydro Engineering's AWS, Aircraft Wash System and TEWS, Turbine Engine Wash System. Designed for aircraft wash, flight line ground support decontamination and cleaning in the aircraft wash system (AWS) operating mode. In the turbine engine wash system (TEWS) operation, the system is designed for dual engine washing on dual engine aircraft.



The following airframes and engines have been certified for TEWS operations;

- UH-60, T-700 & T-701D engines
- AH-64, T701D engines
- CH-47, T55-L-712 & 714 engines
- OH-58D, 250-C30R/3 engines

GENERAL-MIM-2006-004 Authorized Equipment for Water Wash and Rinse of Army Helicopter Engines

### ENGINE:

- Diesel engine (Tier IV Final Compliant)
- 6 gallon fuel tank
- Isolation mounted base plate mounted on 3/8" plate steel
- 12 volt electric starting system with key switch
- Spiral cell battery
- High energy charging system capable provides power to the engine, battery and burner system

### PUMP:

- Dual gun operation with operator controlled variable pressure wands
- Each gun produces 5 GPM when in dual gun operation
- Factory preset system pressure to meet;
  - General-MIM-2005-005 Proper Low Pressure Cleaning of Army Rotary Wing Aircraft
  - TM1-1500-344-23 Cleaning & Corrosion Control, Volume II, Aircraft 15 Apr 09, CH 1 31 Mar 10
- 4 main bearing, oil bath, hardened steel crank shaft
- Industrial triplex ceramic plunger pump
- Oil level eye and dipstick for maintenance
- Belt drive
- Pressure safety relief valve
- Foaming soap application during wash operation can be operated with cold or hot water
- Air compressor and surge tank for bleed band closure during TEWS operation

1. Specifications are effective 2020 2. Specifications are subject to change without notice



Certified Systems Available



**INSTANTANEOUS WATER HEATER:**

- Modulating stabilized water heater coil rated 140 degrees
- Water heater is thermostatically controlled from 0 to 140 degrees and stabilized to maintain + or – 2 degrees of requested temperature
- Horizontal draft full steel housing
- 12 volt burner system (no separate generator used to power the burner)
- Set to not exceed 140 degrees F
- On-demand auto ignition electronic pilot and flame monitor
- Forced air system with fuel solenoid control valve and spin on fuel filter
- Temperature high limit switch
- Burner control assure constant temperatures
- 6 gallon fuel tank

**CONTROLS:**

- Complete control panels for both AWS and TEWS operation which includes engine start/stop, adjustable temperature control, hour meter, wash/rinse selection
- A fully hinged and locking steel enclosure features cross flow air ducting into and out of enclosure to cool components to manufactures specifications
- An air purge system is incorporated along with an antifreeze recirculation system to maintain freeze protection. ATAWS is also designed to operate as an De-Icing system as required

**SAFETY:**

- Fully integrated design includes aircraft wash system with foaming soap system, turbine engine wash system with CH-47 bleed band closure ability
- Electric trailer brakes standard on front and rear axle
- Manual park brake, lever controlled
- Non adjustable operational parameters when in TEWS operation. All pressures and flows are factory set
- Flow and/or pressure switches
- High temperature by-pass valve
- Flow or pressure actuated unloader valve
- 2 each trigger shut-off guns with variable pressure wands in AWS operation
- Over pressure relief valve
- Safety burst disk
- Both AWS and TEWS are authorized by AGSE for use on U.S. Army aircraft
- TEWS fluid performance is 2.5 GPM @ 45 PSI

**INTEGRATED TRAILER:**

- Control panel for aircraft wash system (AWS) operation
- Control panel for turbine engine wash system (TEWS) operation
- Constructed of 8” formed steel trailer frame, 3/16” steel plate
- Dual 3500 lb. axles for 7000 GVW
- Extended leaf springs for soft ride
- Adjustable height lunette eye hitch
- Trailer wiring; MS75020-1 (NATO 24 volt wiring)
- Full size spare tire and wheel mounted on welded formed steel bracket

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Certified Systems Available



- 525 gallon UV protected poly water tank integrated and mounted on 8" formed channel frame
- Dump valve and fittings, all plumbed to control panel
- 2 each 30-gallon soap tanks mounted on formed steel channel. (soap & gas path cleaner)
- 5 each hose reels. Two for foaming soap and hot and cold rinse hoses, one for inlet water supply, pre-spray soap, and TEWS fluid delivery
- 4 corner tie downs

#### **SPRAY AND AIR HANDLING SYSTEM:**

- 2 each 50' 3/8 inch high-pressure hoses mounted on hose reels
- 2 each 50' 3/8" foaming soap application hose mounted on hose reel
  - Foaming wand and nozzle
- 50' 1/2" pre-spray soap hose, mounted on hose reel (AWS)
- 50' 1/4" air delivery hose with connectors (TEWS)
- 50' 5/8" rubber inlet water hose mounted on hose reel (AWS)
- 50' 3/8" water/gas path cleaner hose mounted on hose reel and connectors (TEWS)
- Variable pressure control at the wand with fixed 40 degree nozzles
- 2 each approved hot section harness, wash probes, compressor wash adapter and manifold
- Storage for TEWS probes, dual engine wash operation hoses, air vacuum

#### **DIMENSIONS**

- 190" long x 89" wide x 78.5" high (ships in sea-land container)
- Tongue Weight: 598 LBS
- Axle Weight: 2480 LBS
- Total Weight: 3078 LBS

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