

TSU1000

Toilet Service Unit

Technical Specification



The Mallaghan TSU1000 Toilet Service Truck has been specifically designed to service the lavatory tanks of aircraft based on the principle of vacuum extraction.

Note: All images in this document are included for reference purposes only.



Chassis and Technical Data

Make & Model: MAN, Iveco & others upon request*

Engine: Diesel – Euro 5 or 6 depending on chassis and destination

Capacity: TSU1000: waste tank: approx. 700L & water tank: approx. 300L

Water flow: up to 90 l/min

Water pressure: 2.75 bar (40 psi)

Vacuum pressure: -9" HG

Note: Chassis GVW is depending on extent of winterisation and selected options



Waste / Water Tank Assembly

- Stainless steel (304 grade) tank construction with baffles
- Rubber mounting points between tank and chassis to absorb impacts and vibration
- Tread plate covering top of tank & access ladder to tank top
- Bolted square access lid to allow for cleaning and inspection
- Vacuum waste extraction system via rotary lobe roots blower
- Maximum waste level cut off valve (whale valve)
- Waste and water tank level gauges
- 100mm steel wired vacuum waste hose with aircraft connector
- Handle operated waste dump valve 100mm diameter
- Spray bar system inside waste tank for flushing
- Cam-lock water filling point coupling
- Calibrated water flow meter
- Bronze pedestal flexible impeller water pump
- 25mm flexible water delivery hose on spring rewind hose reel
- Appropriate aircraft service connector on water supply hose
- Lever operated drain valve 50mm diameter

Electrics

- 12V DC relay system
- PTO hour meter
- Battery isolator
- Reverse buzzer
- Emergency stop located on dash and rear compartment
- Low water level sensor in tank
- Low water indicator light and alarm in drivers' cab
- LED work light fitted rear of driver cab
- LED beacon on top of driver's cab

Hydraulics

- Hydraulic pump
- Hydraulic oil tank c/w
 - - sight level gauge,
 - - shut off valve,
 - - magnetic drain plug,
 - - filtration system (return line filter & suction strainers)
- High pressure filter
- Steel reinforced hydraulic hosing



Safety Interlocks

- Cannot drive truck while PTO is engaged
- Cannot operate water pump when water level is low
- Cannot drive truck unless waste hose is stowed (Optional)
- Cannot drive truck unless water hose is stowed (Optional)
- Cannot drive truck with mains stand-by plug connected (Optional)

Manuals, Painting and Decals

- Operating and maintenance manual in English language as soft copy and hard copy
- Electric & hydraulic schematics provided
- Label kit in English
- Machine colour in plain white to match chassis
- All fabricated parts are shot blasted and treated against rust with two coats each of long-life primer and topcoat PU paint

Standard Rear Configuration

- Rear compartment with roller shutter door
- Hinged side access door
- Rear bumper steps with handrail
- Digital water meter with zero reset function
- Water and vacuum pressure gauge
- Water supply and spray bar via manual actuated ball valves
- Hose reel located in compartment

Rear Configuration (Winterised)

- Rear compartment with hinged access doors
- Hinged side access door
- Rear bumper step
- Digital water meter with zero reset function
- Water and vacuum pressure gauge
- Spray bar via manual actuated ball valve
- Water supply via manual actuated ball valve
- Hose reel located in rear compartment





Waste / Water Tank Assembly

- Storz, Albany or Todo water filling point couplings
- Water tank overflow anti-spillage valve
- Breakaway coupling for water supply hose
- Quick release man lid, 500mm diameter
- Detergent dosage system including additional tank for disinfecting fluid
- Dual water pressure system (21/50psi)
- Gravity flow waste system
- Retractable handrails around the top of the tank

Options and Accessories

Chassis and General Assembly

- Reverse camera and monitor in driver cab
- Digital waste / water fluid level indication in driver cab
- Wiper fitted to rear driver cab window
- Rubber check straps fitted to driver cab doors
- Brigade distance sensor system for front and/or rear bumper
- Wheel chocks, with or without storage holder
- Supply and fitting of customer logos



Winterisation

- Insulated waste / water tanks
- Eberspaecher day-time diesel fuel heater for hot air circulation around tanks
- Night-time fuel heater for hot air circulation around tanks via mains electricity
- Residual water drain-back via vacuum pump
- Manual operated knife gate waste dump valve & water drain valve
- NATO/Anderson jump start socket & Battery charger
- Heated element in hydraulic tank
- Heated couplings for waste / water connectors