

TSU3000 & 4500

Toilet Service Units

Technical Specification



The Mallaghan TSU3000 & TSU4500 Toilet Service Trucks have been specifically designed to service the lavatory tank of all aircraft types based on the vacuum evacuation principle.

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



Chassis and Technical Data

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

Engine: Diesel – Euro 3, 4, 5 or 6 depending on chassis and destination

Capacity: TSU3000: waste tank, approx. 2000L & water tank, approx. 1000L

TSU4500: waste tank, approx. 3000L & water tank, approx. 1500L

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.
- Bolted square access lids for each tank to allow for cleaning and inspection.
- Vacuum waste extraction system via rotary lobe roots blower.
- 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
- Water tank level gauge
- 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

- 24V 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 at rear of driver cab & beacon on top of drivers' cab



Hydraulics

- Chassis gearbox mounted PTO pump
- Hydraulic pump
- Hydraulic oil tank c/w
 - sight level gauge,
 - shut off valve,
 - magnetic drain plug,
 - 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 when lift basket is raised (Optional)
- 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

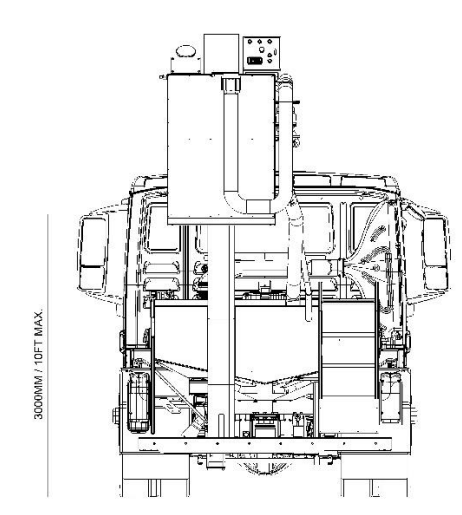
- Operating and maintenance manual in English language as soft copy and hard copy
- Electric & hydraulic schematics provided
- Label kit in English
- Machine colour in plain white to match chassis
- All fabricated parts are shot blasted and treated against rust with two coats each of long-life primer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

Standard Rear Configuration without Lift Basket

- Rear compartment with roller shutter and access steps to top of tank
- Hinged side access doors both sides
- Rear bumper step
- 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 with Lift Basket

- Lift basket (Optional item) and rear compartment with hinged access door RHS
- Rear bumper step
- Control panel & 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 lift basket



Rear basket with lifting height of 3m

Rear Configuration with Lift Basket & Insulated Tank

- Lift Basket (Optional item) centred and rear compartments with hinged access doors on both sides
- Rear bumper step
- Control panel & 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 or on/off switch
- Hose reel located in rear compartment



Waste / Water Tank Assembly

- Graepel Surface
- Various water filling point couplings
- Water tank overflow anti-spillage valve
- Breakaway coupling for water supply
- Quick release man lid 500mm diameter
- Dosage system including additional tank for disinfecting fluid
- Dual water pressure system (21psi and 50psi)
- Gravity flow waste system
- Retractable handrails on top of the tank

Options and Accessories

Chassis and General Assembly

- Hydraulic lift basket for operating up to 3m above ground level
- 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
- 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
- Day-time diesel fuel heater for hot air circulation around tanks
- Night-time fuel heater for hot air circulation around tanks via mains electricity
- Hydraulic operated knife gate waste dump valve
- Manual operated knife gate valve for water drain
- NATO/Anderson jump start socket
- Battery charger
- Various heated elements e.g. in hydraulic tank