



**DESIGNERS, MANUFACTURERS AND SUPPLIERS OF
AIRCRAFT GROUND SUPPORT EQUIPMENT**

PRM Transfer Vehicle / Ambulift ML6100T



TECHNICAL PROFILE

General

Equipment Type	Truck Mounted with Single Scissor Leg
Chassis Type	Any standard 4x2 truck chassis with allowable Gross Vehicle Weight (GVW) of up to 13t
Transmission	Manual/Semi- or Full Automatic (Choice of transmission dependant on chassis type)
Max. Speed	56mph / 80km/h
Wheel base	Approx. 5360mm
Passenger Capacity	6 Wheelchairs <u>or</u> 2 Stretchers (Accommodates 2 attendants with any of the above)

Specification Data		
Height Range		
Full Platform		3000mm – 6000mm
Half Platform		From 1400mm – 6000mm
Rear Loading		Passenger Tail lift with hand rails
Aircraft Type	For example	B737, A320 up to/including B777 & A340
Dimensions		
Vehicle	Excl. tail lift	Length - 8840mm
		Width - 2500mm
	Lowered	Height - 3800mm
Van Body	Internal	Length - 6500mm
		Width - 2400mm
		Height - 2190mm
Platform	Full	Length - 2270mm
		Width - 2400mm
	Half	Width - 900mm
	Extension	Length - 600mm
Platform Load	Fixed	800kgs
	Extension	400kgs
Payload		1,500kgs

1. Truck Subframe and Lifting System



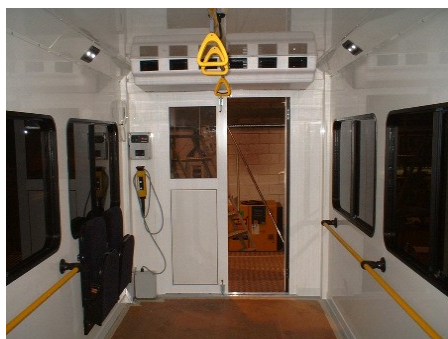
Steel Lifting System

- Steel construction to fix and guide lifting cabin
- Subframe holds hydraulic and electric appliances
- Single scissors lift with adequate payload capacity
- 2 hydraulic cylinders work between the scissors beams
- Safety-Prop to keep the body in position during maintenance work



Lifting System and Hydraulic Cylinders

2. Passenger Cabin



View of cabin front door (including 2 flip down seats, roof rail and air conditioning)



View of cabin (including 3 Single seats)

As Standard

- ✚ G.R.P. Insulated type walls (50mm thick)
- ✚ Front and rear doors, opening type
- ✚ Windows on each side, sliding type opening to allow for ventilation, with toughened tinted glass
- ✚ Adequate non-glare illumination in cabin
- ✚ Handrails on both sides of the cabin
- ✚ The box floor is constructed from GRP insulated panel with non slip floor covering
- ✚ Intercom system (Telephone) between driver station and cabin
- ✚ Unwin rail clamp fitted to floor on both sides
- ✚ Electric control panel located in cabin right corner at high level

As Options

- ✚ Thermoking 'Shuttleair S-40' Air Conditioning
- ✚ 'Webasto' Cabin Heater
- ✚ Side entry door
- ✚ Front and rear door size and type
- ✚ Seat type and quantity
- ✚ Carpet on cabin walls and ceiling
- ✚ Roof rail and bus handles
- ✚ Medicine/blanket cabinet & First Aid Kit

3 . Front Platform



Full Standard Platform without fixed canopy



Half Platform and Integrated Driver Cab with Van Body options



Manually extending Platform Handrails



Fold-in handrails

As Standard

- ✚ Full width – 2400mm
- ✚ Hydraulically operated
- ✚ Extending and retracting 600mm
- ✚ Swivel nose on platform for +/- 10 degrees misalignment to aircraft
- ✚ 1055mm high lockable manually extending handrails - sloping at 55degrees from the horizontal
- ✚ Fold-in handrails on full platform (picture below)
- ✚ Rubber bumper fitted to platform nosepiece and all other leading edges for aircraft protection
- ✚ Floor surface has a high traction (non-slip) covering
- ✚ Working light

As Options

- ✚ Half width platform – 900mm
- ✚ Traversing platform moving left and right
- ✚ Full width fixed canopy
- ✚ Ladder at front right hand side of vehicle for access to platform
- ✚ Transfer bridge (fixed in cabin)
- ✚ Integrated Driver Cab with Van Body (picture left hand side)

4. Rear Access and Passenger Tail lift



Rear view of ML6100T machine

As Standard

- ✚ Hydraulically controlled tail lift with folding safety rails and non-slip flooring
- ✚ Safe Weight Load of 1000kgs
- ✚ Capable of holding one wheelchair and one attendant
- ✚ Mechanism incorporates an emergency raise/lower system
- ✚ Working light

As Option

- ✚ Reversing camera



Standard 'Ratcliff' passenger tail lift



6. Vehicle Stability and Safety



2 hydraulic stabilizers at each side

- 4 hydraulically operated stabilizers incorporating Dual Pilot Operated Check Valves

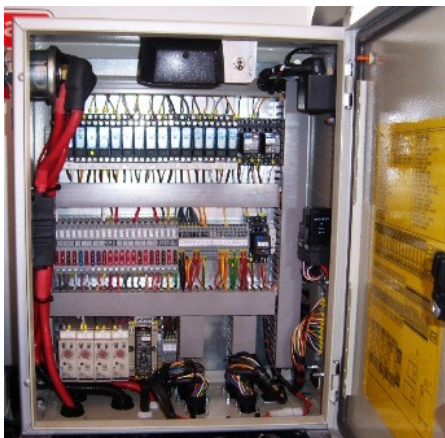
The vehicle can be used in its highest position at wind speed of up to 40knots / 74km/h

Detailed 'Vehicle Safety Features' are listed in Appendix 1

7. Electrics

24 Volt DC negative earth

The following standard components are incorporated in the vehicle:



Mallaghan Sample Electric Fuse Box

- ✚ External Lucas type amber flashing beacon
- ✚ Lighting in passenger cabin
- ✚ External durite spotlights/working lights sited above front and rear doors
- ✚ Reverse camera (optional)
- ✚ Audible warning device to warn when cabin is lowered/raised and when vehicle is in reverse
- ✚ Electrical emergency appliance
- ✚ All road lighting fitted to R.T.A. standard.
- ✚ Hour meter which gives engine running time
- ✚ Battery isolator

8. Hydraulics and Control Panels

The following main hydraulic components are used to manufacture the machine:

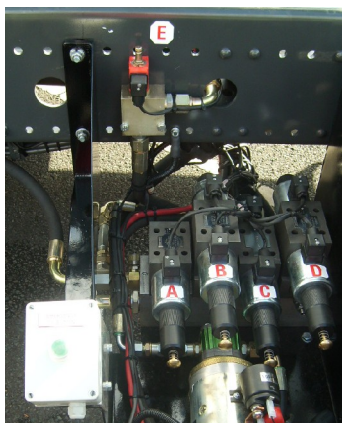
- ✚ PTO
- ✚ Hydraulic tank and pumps
- ✚ Hydraulic filtration and valves
- ✚ 4 stabilizers
- ✚ 2 lifting cylinders
- ✚ Emergency hand pump



Standard Driver's Cab Dash including Control Panel

The control switches incorporated in the vehicle will be square D, and Telemechanique type

- ✚ Full operators panel in the driver cab
- ✚ Control panels sited at front door of the cabin, with cabin raise/lower, platform extend/retract and emergency stop controls
- ✚ Tail lift controls at rear of passenger cabin



Hydraulic Valves with manual override

9. BS EN Standard

Mallaghan Engineering can herewith declare that this product is being manufactured in order to comply with the current British/European Standard EN 12312 – 14 2006 (Disabled/incapacitated passenger boarding vehicles).

10. Miscellaneous

Mallaghan Ltd offers the following standard services:

PAINT FINISH

All fabricated items will be shot blasted, and treated against rust with long life primer

All the equipment will receive Two (2) coats of undercoat Paint

The equipment will receive Two (2) coats of finish Paint to the customer's specification as advised.

FIRE EXTINGUISHER

A 2.0 Kg BCF Fire Extinguisher is supplied and mounted in a prominent position

SPARE WHEEL

One (1) spare wheel will be supplied.

TESTS

Mallaghan Engineering Limited will carry out full functional tests prior to dispatch.

INSPECTIONS

Pre-delivery tests and inspections can be arranged between the customer and Mallaghan Engineering Limited.

MANUALS

Supplied with the unit will be 2 sets of manuals to include the following;

- 1) Operation 2) Maintenance 3) Electrical Circuits 4) Hydraulic Circuits 5) Illustrated parts list
- 6) Chassis Manual

SPARE PARTS

Mallaghan guarantee to supply spare parts for a minimum period of 15 year.

Owen Mc Kenna

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Export Sales Manager

Mallaghan Engineering Ltd

Appendix 1

Safety Features

Special attention will be paid to the safety aspects of this machine:

1. Pressure relief valves are fitted to all hydraulic circuits.
2. Safety 'check valves' are installed at the ports of the twin hydraulic lift cylinders of the cabin and stabilizers.
3. Body will not lift unless stabilizers are fully extended. **(I1)**
4. Stabilizers will not rise until cabin is fully lowered. **(I2)**
5. Vehicle will not drive until stabilizers are fully retracted. **(I3)**
6. Vehicle will not drive if PTO is still engaged. **(I4)**
7. Body will not rise if passenger cabin doors are open (Proximity Switch)
8. Safety props on scissor legs for maintenance
9. Reversing lights are fitted.
10. Intermittent sounding horn when in reverse mode or cabin is lowering.
11. Intermittent sounding horn when stabilizers are extended.
12. Flashing Amber beacon fitted to the highest point of the vehicle.
13. Emergency stop buttons 5 no (red mushroom type) fitted in 1) operators cabin control console and on 2/3) control panels within passenger cabin and 4/5) each side of the chassis.
14. Emergency cabin lower/stabilizer raise capability in case of mechanical or electrical failure.
15. Control panel in van body fully sealed and protected.
16. Warning lights to indicate all necessary functions
17. Pictographs used where possible and all replenishment points clearly marked
18. Hazard points all marked with suitable warnings
19. Reversing Camera (Option)
20. Side Compartment door could allow access to and from cabin

I = Interlock