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COMET
OFFICINE

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Product Information Guide

XIRAFFE

AERIAL PLATFORM

Officine Comet srl – Via Castelfranco, 46
S.Giovanni in Persiceto BO - ITALY
http: www.officinecomet.com

XIRAFFE AERIAL PLATFORM

XIRAFFE AERIAL PLATFORM – Semi Raised

4 Independently controlled spider type stabilising legs ensure unit is correctly and safely positioned prior to releasing the safety control locking devices to enable the platform to be raised.

Maximum Height = 12 metres
Maximum Horizontal Extension – 3 metres

When fully closed the Unit is very compact and gives a small profile so that it can easily be manoeuvred into small spaces.

Overall Width = 1.8 metres

Operation of the Stabiliser Legs

When the Unit is correctly positioned in the working place and handbrake applied the stabiliser system can only be operated as follows:

1. Turn the hydraulic system on by turning key clockwise (Fig 1)

Fig1

2. Each Stabiliser leg is controlled by a separate spool as shown in Fig. 2

No. 1 – Front Left Side
No. 2 – Rear Left Side
No. 3 – Rear Right Side
No. 4 – Front Right Side

Fig 2

3. Stabiliser Legs Safety Devices

Each leg has 2 safety devices

a) Position Sensor - A - Fig. 3

(ALL Must be extended)

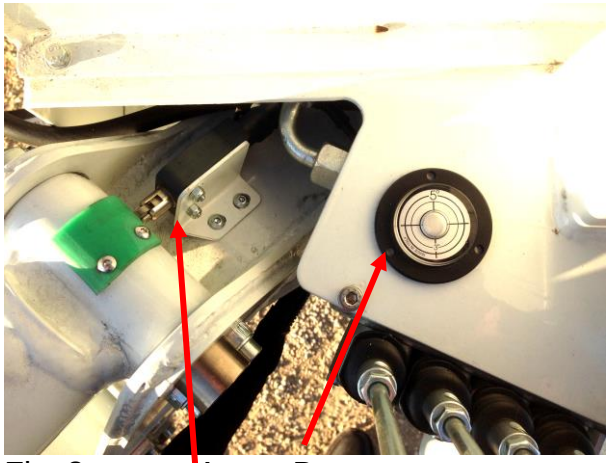


Fig. 3 A B

b) Pressure Sensor - A – Fig. 4

(ALL must be under load)

Fig 4 A

4. When ALL the legs are contacting the ground ensure all 4 legs are adjusted so the bubble sensor B- Fig. 3 is centrally positioned.

The 4 indicator lights on yellow control box next to the 4 spool valve levers become illuminated – GREEN - Fig. 5 A & B Turn Key Fig 5 to ON position.

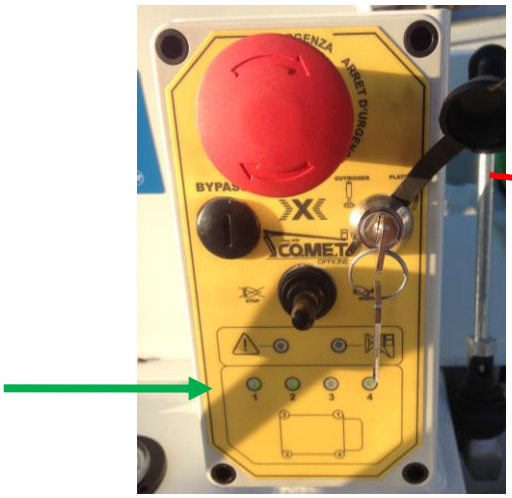


Fig 5 B

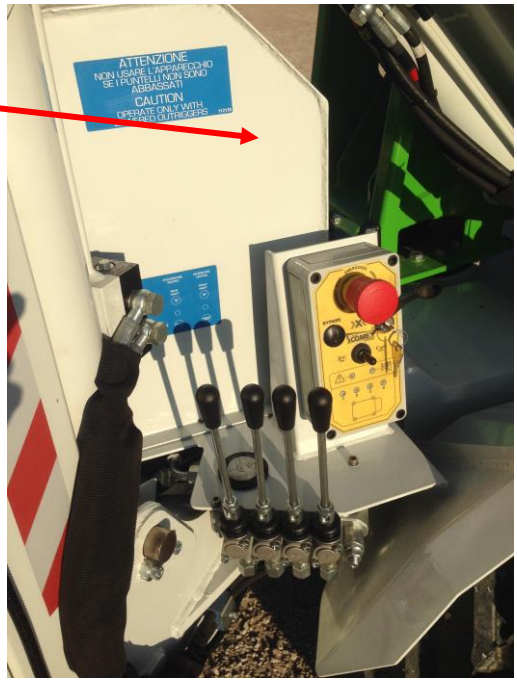


Fig 5A
When all Indicator lights are GREEN it is possible to turn on hydraulic system for platform.

NB It is very important to swivel operator's seat through 90° to provide clearance for hydraulic arm to lift off its transport sensor pad. Fig. 6 before operating the controls for the aerial platform.

To swivel seat stand on left side of vehicle and pull down on locking pin at rear for seat mounting frame and pull seat towards you.

Fig 6

For safety reasons there are 2 sets of hydraulic controls for the platform.

Normally the platform is operated by the worker in the platform basket operating the 4 spool valve levers. Fig 7

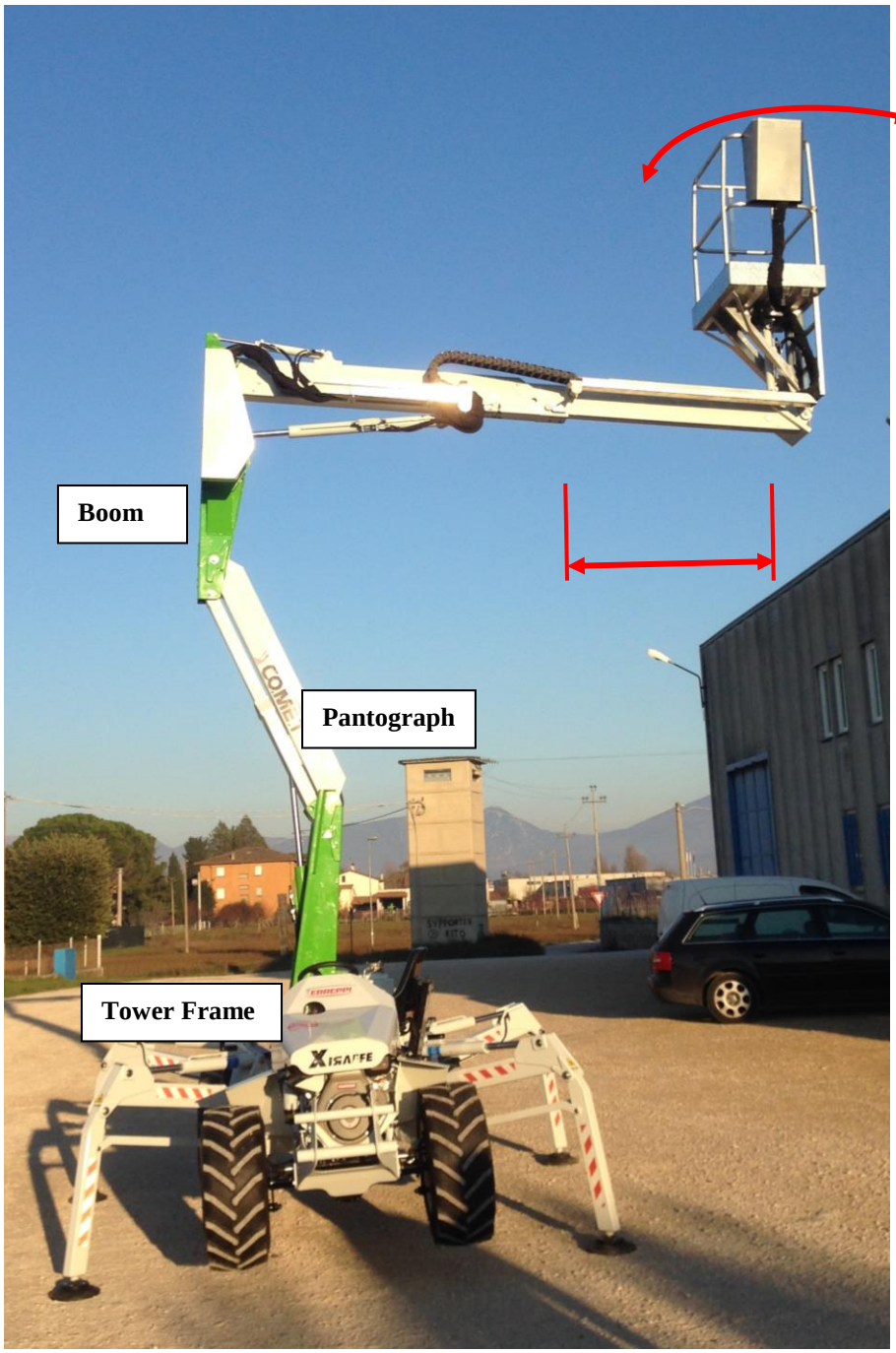
Fig 7

The 2nd set are located inside the base of the tower frame via a lockable access door Fig 8.

Inside is the switch over valve (arrowed Fig 8) which transfer the operation from control levers in platform basket to lower position at base of tower frame in Fig 8.

Fig 8

Aerial Platform



Basket Oscillation ± ? °

Basket Maximum Weight = ? kg (includes Operator)

Extension =

To ensure Stabiliser legs are fully loaded it is best to lift power unit off the ground.

Platform Lever Controls

a) Lower set at base of tower frame

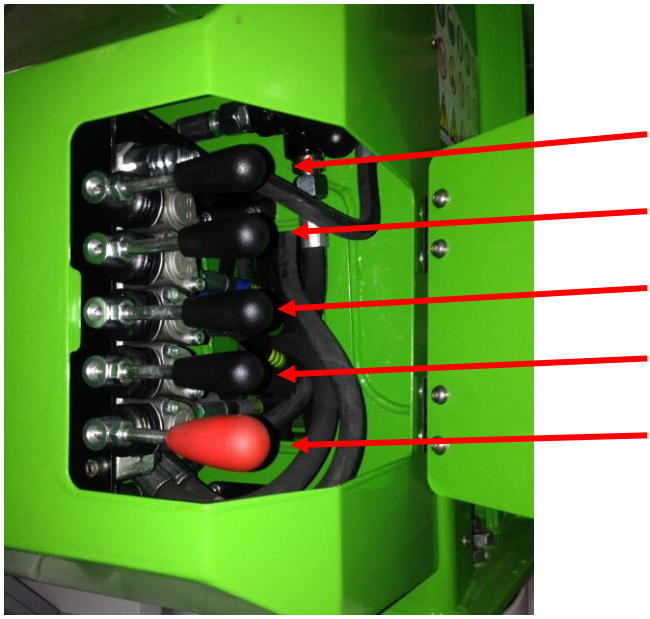


Fig 9

b) Basket Controls

Fig 10 **1 2 3 4**

1. BOOM raise/lower

2. Pantograph raise /lower

3. Telescopic Extend/Retract

4. Platform Rotation

NB. Basket Inclination can only be adjusted by valve - RED LEVER located in tower frame.

Fig 12

Aerial Platform

Fig 11

When fully closed

Nominal Dimensions;

Overall Width = 1800 mm (5.9 ft)

Overall Height = 2300 mm (7.5 ft)

Overal Length = 3900 mm (12.8ft)

When Fully Raised

Nominal Dimensions:

Height to base of platform Basket =

Overall Height =

Overall Working Width =

Overall Length

and control switch cannot be turned to OFF position.
See Fig 5

Working Basket

Fig 13
New photo with legs extended

NB Access to Basket must be when Aerial platform is in fully closed position. Fig 13.

(controls will only operate when stabiliser legs are extended correctly.)

Floating Access Bar

Access Steps

TRANSPORT SAFETY FEATURES

Pantograph Sensor

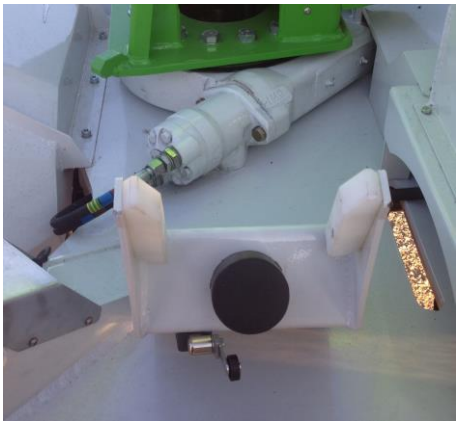


Fig 14

Pantograph must be fully lowered into transport support and micro switch lever moved sufficiently to trigger safety device. If not the ALARM is ON

Platform Basket Sensor

Fig 15

If Platform Basket not fully correctly positioned sensor is not triggered and warning Alarm is ON and control switch cannot be turned to off position. See Fig 5

POWER UNIT
ENGINE

Model Yanmar L100-N6 Series

Fig 16

Single cylinder – 435 cc
Diesel fuel
Air cooled
Dry Air Filter
Electric Starter with battery
Mounted on rubber silent-blocks

Plastic Fuel Tank – 11 litres – with strainer, Large Fuel filter/ water trap removes 99.9% of water. Gravity fuel feed to injection pump.

Large twin element dry air filter

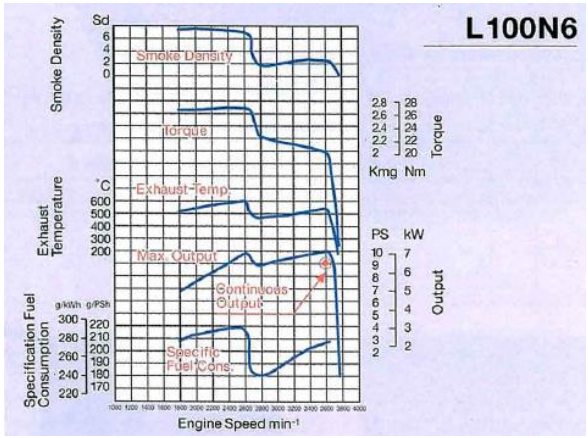


Fig 17

Modern light weight design meeting all the latest environmental and pollution regulations

Very high fuel efficiency while producing power and has an excellent torque reserve. Fig. 17

Easy to maintain - with **fuel + air fi**lter replacement **every 2,000 hour** and oil filter changed every 800 hours

TRANSMISSION UNIT

NB. Always refill fuel tank in the evening

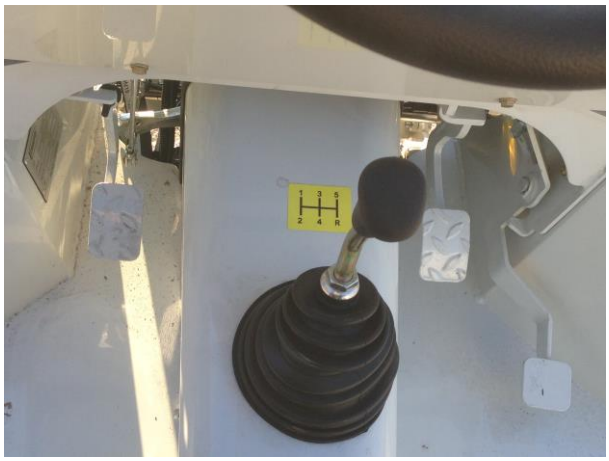


Fig 18

'Auto style' Clutch – single plate – dry 160mm Φ mechanically operated by foot pedal.

Synchromesh

5 forward and 1 reverse

Propeller Drive shaft to reduction unit via flexible coupling.

REDUCTION UNIT

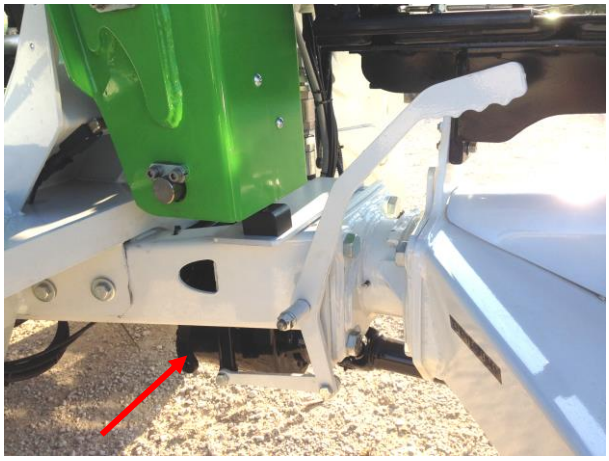


Fig 19

Following reductions are available:

Ratio = 2.45 – Single Range to give nominal maximum speed of 20 kph. Constant mesh engagement.

Optional – Single Slow speed for hill climbing with Min. 1.5 to Max 21 kph available – On Special Request.

Option:
PTO On/Off mechanism
Output shaft speed is proportional to the transmission gear selection (like Ground Speed PTO)

Provides:

2 or 4 wd engagement – white lever

Vehicle Speeds

Gear	Single Reduction Unit - 2.45	Slow Speed Reduction Unit – 2.0
1	2.00	4.10
2	3.80	7.88
3	5.80	11.87
4	7.58	15.51
5	9.45	19.32
Rev	2.15	4.40

Fitted with 29/12.50-15 flotation tyres

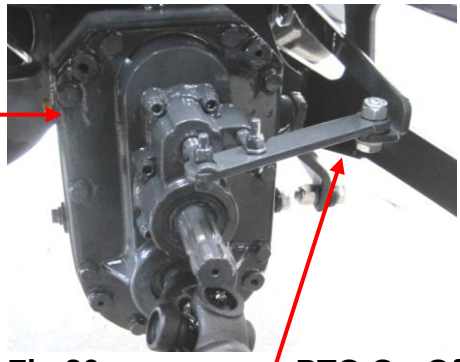


Fig 20 PTO On-Off Lever

REAR AXLE

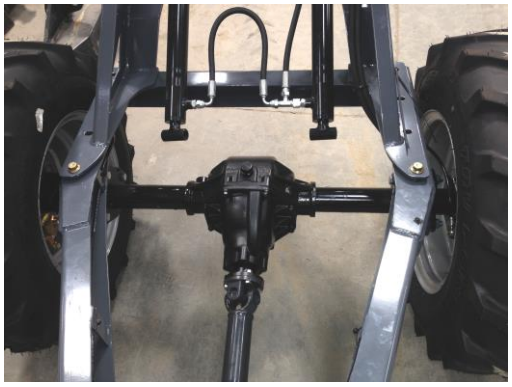


Fig 21

Crown Wheel and centrally positioned Pinion mounted on steel Differential housing with 4 satellites and taper roller bearings.

“Floating” truck style 28mm diameter half shafts.

Driveline fully sealed with double lip seal and 2x O-Rings. Wheel hub supported

sealed double tapered bearings – 2 Ton capacity!

pedal and pull on the red lever. To release just press on brake pedal.

SUSPENSION

Fig 22 Rear Suspension

Both front and rear chassis frames directly mounted to the axles by “variable load” silent rubber blocks.
Twin silent blocks are fitted to front axle and **triple** to rear axle.

Additional suspension is achieved from the low pressure (circa 12-14 psi) flotation wheels and tyres.

CENTRAL OSCILLATION

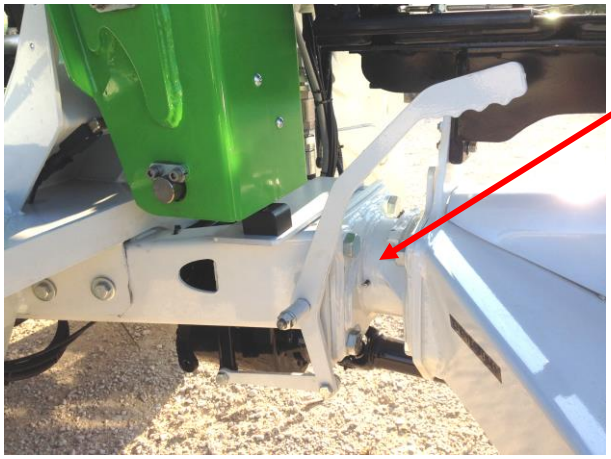


Fig 23

The front and rear chassis frames are bolted to the central pivot, which allows both front and rear frames to oscillate independently to better maintain four wheel contact with the ground to maximise the traction.

± 15 º Oscillation

BRAKES

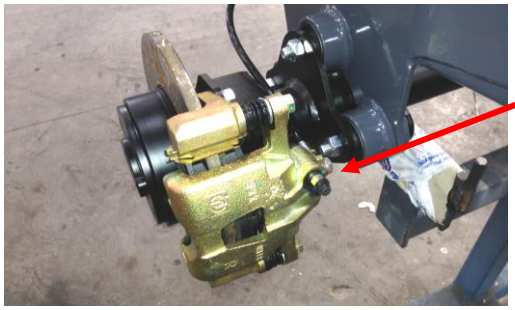


Fig 24

Hydraulically **Disc** brakes on **front and rear axles** operated by single foot pedal.

Parking brake lever located on right side of the instrument panel below the steering wheel. To operate press on the brake pedal and pull on the red lever. To release just press on brake pedal.

Fig 25

POWER TAKE OFF

Fig 26

STEERING SYSTEM

Fig 27

The Xiraffe is fitted with a Hydrostatic steering system. The hydraulic Pump,which is located between the engine and the clutch and constantly drive by a cog toothed belt supplies oil for the steering (priority) and Aerial Platform.

Hydraulic Oil is supplied from the Oil reservoir mounted on the left hand side of the aerial platform. Fig. 28

Capacity = ? Litres

PTO style output shaft is available for driving air compressor/ generators to power accessories.on the rear of the Reduction Unit.

PTO output shaft – standard 6 spline - (as used on 540 rpm implements) Category 0

PTO shaft speeds are synchronised to the forward vehicle speed.
Speeds – refer to Chart Page ?

Fig 28

The ergonomic steering wheel is directly connected to the steering valve which operates the which supplies pressurised oil to the hydrostatic steering cylinder.

The Hydrostatic Cylinder is located just behind the front bumper/engine guard (easily accessible for servicing) Fig 29

The steering arms connect the Hydrostatic Cylinder to the support brackets bolted to the wheel hubs. Fig 29

Support Bracket

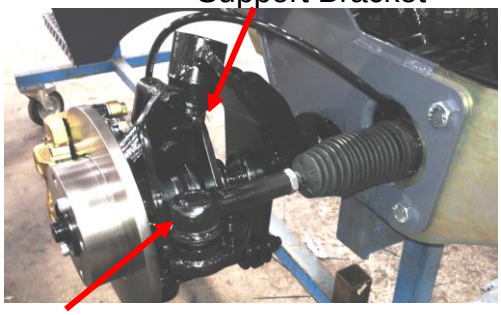


Fig 29

Steering Arm

OPERATOR'S PLATFORM

Fig 30

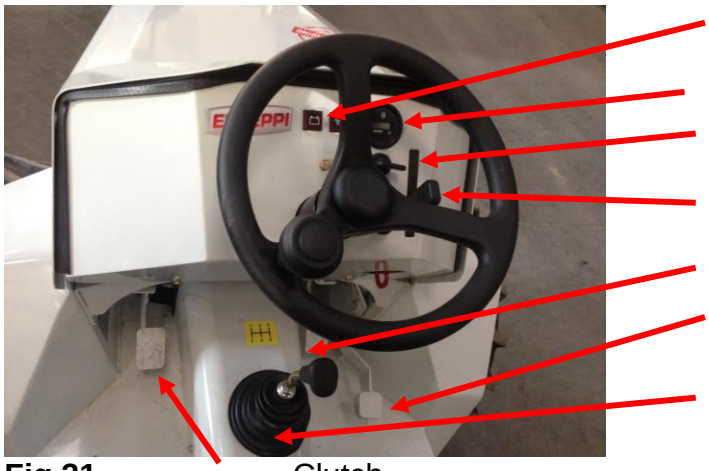


Fig 31 Clutch

Fig 32

Ergonomic steering wheel

Controls within easy reach of Driver

Spacious Area for Driver, Pedals/Levers are ergonomically positioned for easy use.

Parking Brake operates on Foot Brake pedal

Weather proof Suspension seat with Fore & aft adjustment

Warning Lights

Hourmeter
Key Start

Hand Throttle

Brake
Foot Throttle

FULL Synchromesh transmission lever
5 Forward – 1 Rev

GROUND CLEARANCE

Minimum Ground Clearance = 265 mm

WHEELS AND TYRES

Flotation = 29/12.5 – 15 Agricultural tread pattern

Other sizes, Tread patterns are available on request.

Fig 33 Valve Protection

REAR TOW HITCH

Is standard for towing trailer with accessories/tools etc.

DIMENSIONS AND WEIGHTS

Description	Buffalo Mk 2
In Transport Position	
Total Length	
Wheel Base	
Front Track Width	
Rear Track Width	
Overall Width – Front	
Overall Width – Rear	
Hub to Hub - Front	**1,133 mm**
Hub to Hub – Rear	**1,187 mm**
Front Overhang	**560 mm**
Rear Overhang	725 mm
Min. Ground Clearance	265 mm
Turning Radius	**5,000 mm**
Max. Height of Basket Floor	1,870 mm
Min. Loading Height	**1,050 mm**
	1,215 mm
	1,220 mm