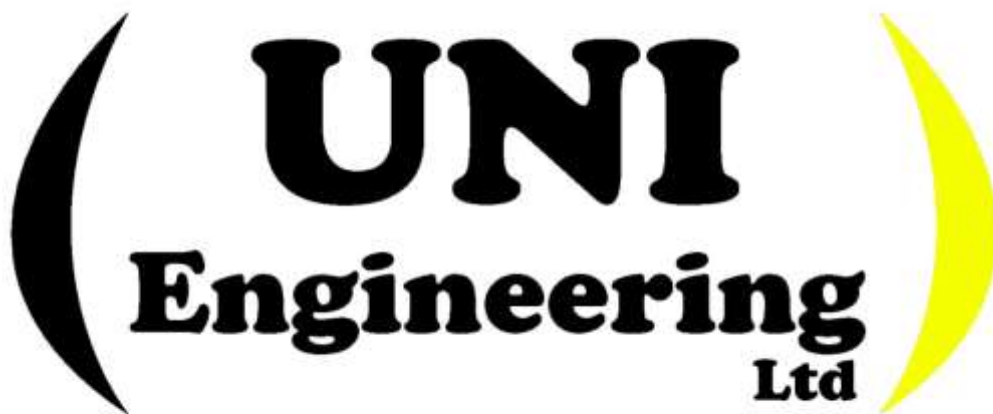


# **Operator's Manual & Parts Book**

*UNI Hydraulic Tip Trailers*

*16 Tonne Trailer*



***"Quality made affordable"***

**Manufactured by**

UNI Engineering Ltd

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## **Disclaimer**

Please be aware that as every endeavour has been made to compile all correct information for your selected machine, it is possible some information may be incomplete or missing.

UNI Engineering request that you treat this book as a guide only, and offer any assistance necessary to procure the information or part you may require.

If you have any queries, please contact the office of UNI Engineering Ltd on (07) 883 1050.

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## **Introduction**

Thank you for purchasing a UNI Engineering product. Here at UNI, our mission is to make top quality farm machinery, at an affordable price. We achieve this by sourcing only the best quality parts for our machinery and manufacturing it all ourselves in our workshop in Tirau, the heart of the Waikato.

Following the guidelines set out in this Operators Manual, will ensure you have a pleasant and trouble free experience with your UNI Product.

UNI Engineering Ltd is a dynamic company and looks to cater to all your needs. Any feedback you may have is welcomed, and can help us improve our products and services so they can ensure they perform to your expectations.

We strongly recommend you read through this Operators manual, before the first usage of your new machine. This will help eliminate any problems that may happen during set up.

## **Delivery**

Upon delivery of your new UNI machine, please check to make sure there is no delivery damage. If damage is present, please call our office immediately so we can offer a solution.

A Delivery slip will be present upon delivery. This is to ensure you, as the customer, understand our terms and conditions of delivery, as well as the agreed payment option.

## **Payment**

### ***'Pay on Delivery'***

A 20%, or other mutually agreed, deposit is required to confirm the order. Once deposit is received, manufacturing on machine begins. The balance is paid once the machine has been delivered and the customer has checked there is no 'delivery damage.' The machine remains property of UNI Engineering Ltd until full payment has been made.

### ***Finance***

Finance options are available at UNI Engineering Ltd and must be agreed upon at the time of purchase.

If a customer continues to use a UNI Product, and has broken the terms of payment, as agreed at time of purchase, UNI engineering Ltd reserves the right to charge additional hireage fees, collection costs or repossess machinery.

## **Warranty**

The machines designed and manufactured by UNI Engineering Ltd is warranted against faulty workmanship and defective materials for a period of 24 Months from date of delivery to the first user, with the exception of contractors or commercial users, where the warranty period is 12 Months. Such warranty is subject to the following conditions:

This warranty covers the repair or replacement of machinery sold by UNI Engineering Ltd from damages as a result of faulty workmanship or materials in such part or machinery. It does not extend to any other loss or damage to other property or persons.

Electronics or component parts on all UNI machinery not manufactured by UNI Engineering Ltd are subject to the warranty terms from its manufacturer.

No responsibility will be accepted for repairs made other than by UNI Engineering Ltd, without prior authorisation by UNI Engineering Ltd.

Warranty does not cover the following:

- a) Losses sustained through delay in delivery
- b) Travel expenses
- c) Damage caused by accident, misuse, neglect or when operated outside of conditions for which it was designed, or deemed appropriate by UNI Engineering Ltd.
- d) Any goods which have not received maintenance as set out in this book, as well as basic normal maintenance such as tightening bolts, nuts, hose connections and fittings and normal lubrication with the recommended lubricant.
- e) Any second hand goods or parts, or any other goods or parts not originally supplied by UNI Engineering Ltd.
- f) Any goods which has been on sold by the original purchaser

## **Procedure for claims**

- Stop using the machine immediately
- The loss or damage should be reported directly to UNI Engineering Ltd who will advise whether it is covered by the warranty and direct the purchaser accordingly as to what action is to be taken.
- Advise UNI Engineering Ltd the Serial number of machine.

# Set up and operating instructions

## Installation

- Connect Trailer to the Tractor. Ensure you use a recognised hitch pin with a safety clip to hook trailed implements on behind trailer.
- Plug hydraulic hose/s into Tractor. Check there are no hydraulic leaks in the hoses and fittings
- Be sure that the tractor is the correct size in relation to the tractor. The tractor should be of greater or equal weight than the combined weight of the load and the trailer.

## Machine Maintenance

### Important maintenance after first usage:

As with all brand new machinery, there are certain checks you need to undertake after first usage, such as the following:

- Retighten wheel nuts. Paint on the wheel studs will crack after first usage and may cause wheel nuts to loosen.
- Check the PSI level on all wheels. (Check parts section of this Manual to see more details on the wheel, specific to your machine.

### Regular maintenance:

- Regular lubrication is essential and should be greased, on average every three months. (Diagrams on next page). On a UNI Tip Trailer, there are 6 grease nipples which need to be checked. Four on the axle and two in the rear pivot hinges.
- There are also two grease nipples on the hydraulic ram saddle and one on the swivel tow eye. The side wind jack should be greased every three months as well (See diagram next page)
- Axle hubs should be greased half yearly.
- Wheel nuts and Tyre pressure should be checked each time maintenance is performed on the machine. Eg- Make sure wheel nuts are tight and tyres are at the correct PSI

# Machine Maintenance (Cont)

## Grease Points



Pivot Hinges



Hydraulic ram saddle



To Grease Jack, use a 10mm Spanner to remove nyloc nut and bolt. Remove cap and grease gears inside.



Swivel Tow Eye Grease nipple



Shown above are the grease nipples on the axle. There is one grease nipple in each of the two collars and one in each of the two walking beams.

## General Safety

To ensure the safety of yourself and others, please read the following safety precautions below.

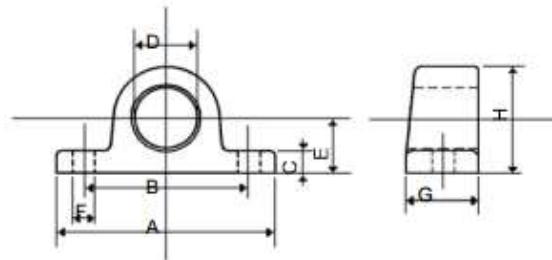
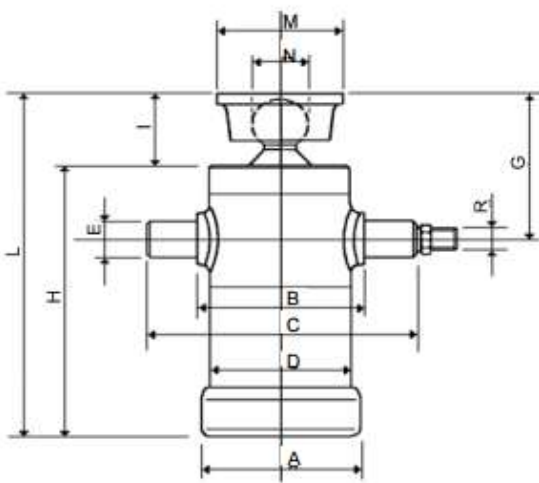
<b>Hazard</b>	<b>Potential risk source</b>	<b>Safety measure</b>
Entanglement / trapping	Hydraulic Tip Ram	NEVER start machinery while either yourself, or something else, is inside or on the machine! Always wear proper protective clothing. Loose attire can easily be snagged by rotating machinery.
Entanglement / trapping	Hydraulic Tip Ram	If Machine jams during usage. NEVER attempt to service the machine while it is still running!
Damage to fingers and/or eyes through high pressure fluid ejection	Hydraulic oil pressure leaks	Release all hydraulic pressure from implements before commencing service.
Crushing or trapping	Movement between tractor and machine	Stay clear of machine while it is in use.
Instability under varying conditions	Machine Roll over	When pulling trailed implements or loads, be sure to use a tractor of greater or equal weight than the combined weight of the load and the machine.
Accident or damage due to incorrect use of machinery.	Untrained users operating machine.	Ensure person operating the machine has been trained and is competent in driving both the tractor and the machine.
Fire	Under certain hot or dry conditions, or extreme fire risk days, a fire can ignite.	Carry a suitable fire extinguisher.



# Parts section

## 6 Stage Multi Ram

# RAISED TRUNNION CYLINDER



SUPPORTS FOR CRADLES AND CYLINDERS									
Size	A	B	C	D	E	F	G	H	Kg
Ø 35	130	95	12	Ø 35.5	30	13	40	56	0.9
Ø 40	140	108	15	Ø 40.5	33	15	45	66	1.2
Ø 45	140	108	15	Ø 45.5	33	15	45	66	1.2
Ø 50	150	116	15	Ø 50.5	36	15	45	71	1.4

CUS Multi-Stage Cylinder	Stroke mm	No of Stages	EXTENSIONS Diameter in mm							Capacity (100 Bar in Kg)	Dimensions of cylinders in mm											Weight kg	Capacity Lt
			46	61	76	91	107	127	146		A	B	C	D	E	G	H	I	L	M	N		
170-04-80	1700	4		O	O	O	O		8000	145	150	230	127	40	155	505	80	585	115	55	1/2"	45	11.3
215-05-120	2150	5			O	O	O	O	12000	195	200	290	168	50	200	530	80	610	115	55	3/4"	71	25.1
260-06-100	2600	6			O	O	O	O	10000	195	200	290	168	50	200	535	80	615	115	55	3/4"	81	26.9

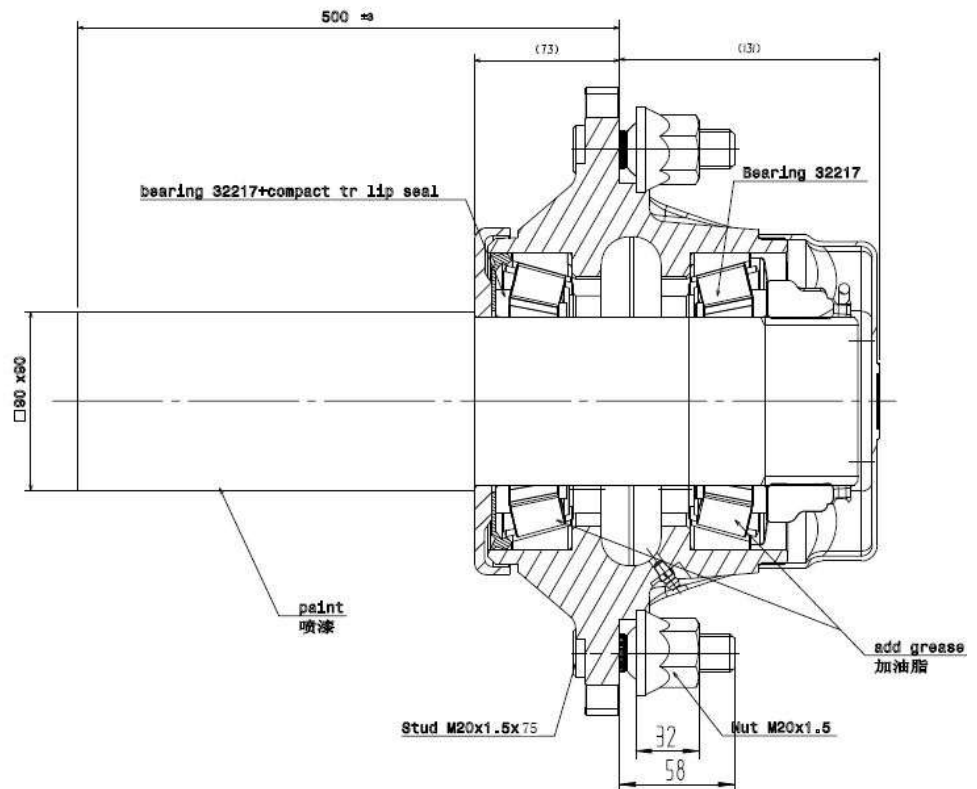
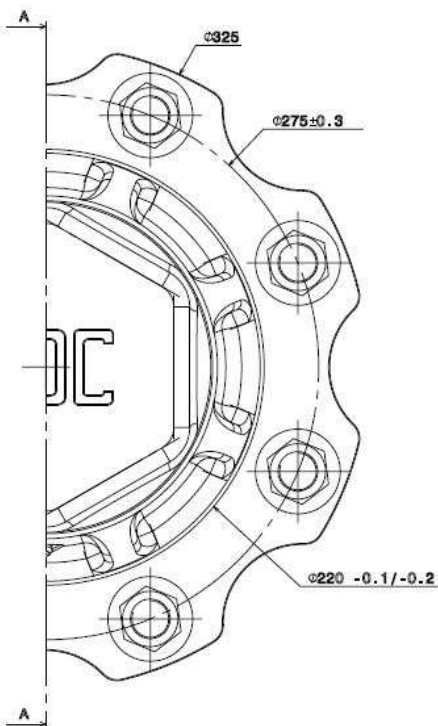
## Wheel and Stub axles



### Multistar Rim + Tyre Assy: 550/45-22.5

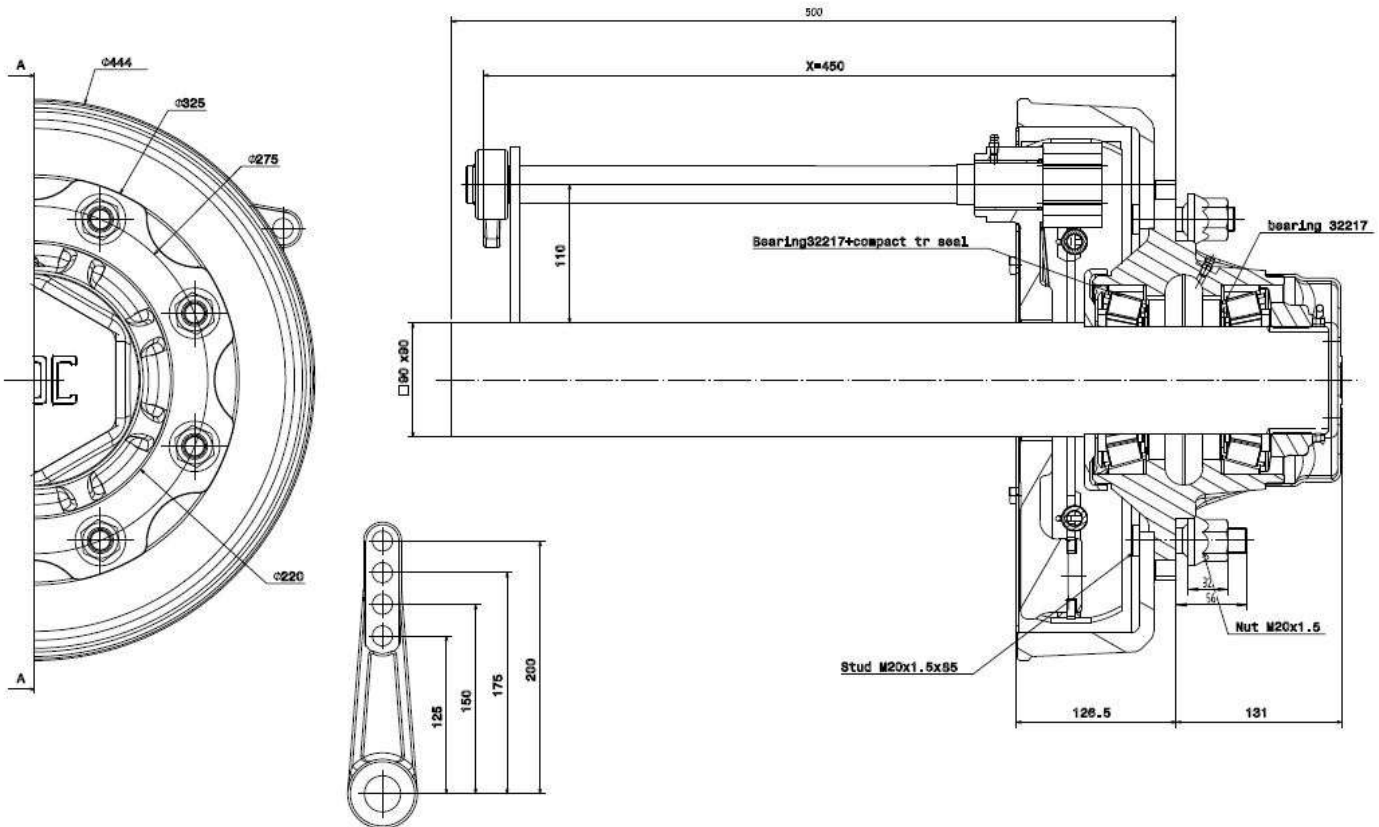
Tread Pattern	AW
Load Capacity	4375kg @ 40km
Ply Capacity	16
Tyre pressure	36 PSI
Height	1080mm
Width	545mm
Rim	16"
Wheel colour	Silver

### Monroc 90 sq Stub axle – Non braked



Square	90
Bearings	32217 & 32217
Centre hole	220mm
Stud PDC	275
Carrying capacity	9630kg @ 40 km/h
Seal	32217 BRG TR Lip Seal
Hub cap	165mm

### Monroc 90 sq Stub axle braked



Square	90
Bearings	32217 & 32217
Centre hole	220mm
Stud PDC	275
Carrying capacity	9630kg @ 40 km/h
Seal	32217 BRG TR Lip Seal
Hub cap	165mm
Drum size	400x80