

UHL

UNIVERSAL HYDRAULICS LIMITED

Universal Earthmover Tyre Equipment



tyre handlers • bead breakers • hand pumps • footpumps • lifting jacks • air compressor units



Universal Hydraulics Limited



UHL
Headquarters
Chesterfield

introduction

The development of earthmover tyre tools

Since its establishment in 1975 Universal Hydraulics Ltd has been involved in the design and manufacture of equipment which enables the fitting and demounting of large earthmover tyres to be carried out with safety and ease.

A range of lifting jacks and bead breaking tools were originally developed to be powered from the existing hydraulic pump to the lorry mounted crane. This consisted of two 25 tonnes capacity lifting jacks, a pair of front tyre bead breaking rams and a small back bead breaking ram. These tools being operated from a five station control valve mounted on the side of the service vehicle.

Although this equipment is still readily available, a preference is now shown for the new extensive range of portable hydraulic hand tools which have been developed with flexibility and ease of operation in mind. These tools whilst performing exactly the same operation are much lighter and can be readily transferred from one service vehicle to another. The tools are operated from a separate hydraulic handpump or air driven oil footpump powered from the air supply of the service vehicle's compressor unit. A complete range of these tools are now available from a tractor/earthmover tool up to a giant 51" plus rim tyre bead breaker.

In addition to the tyre bead breaker tools, the Company has over the years developed a family of earthmover tyre manipulators. The machines will handle tyres from 24" to 57" rims, and can be fitted to various types of mobile equipment including lorry mounted cranes, fork lift trucks and wheeled loader vehicles. As a result of the experience gained over the years and ISO9000 certification, the Company now supplies tyre handling machines of extremely high specification to the Ministry of Defence and overseas markets.

Having developed such a comprehensive range of tyre handlers and associated equipment, we feel that producing this catalogue will greatly assist both existing and potential users of the equipment in selecting the appropriate tools to suit their particular application.

The Catalogue is divided into three sections.

Section one (RED)	Manually operated tyre removal tools.	(700bar)
Section two (BLUE)	Powered bead breaker rams and lifting jacks.	(250bar)
Section three (BLACK)	Tyre Handlers	

IMPORTANT NOTE!

Tools from the *RED* section are not interchangeable with tools from the *BLUE* section.



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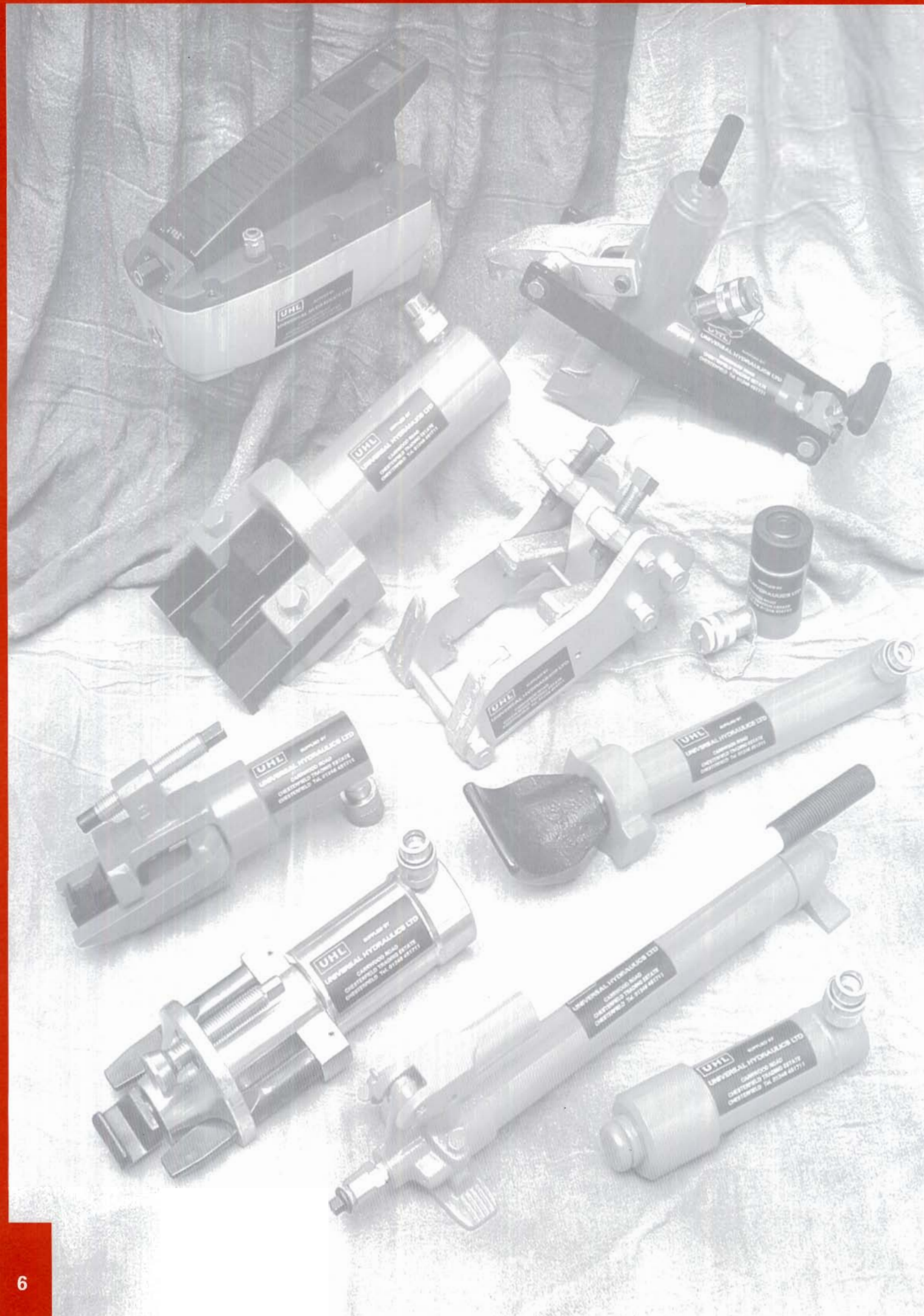


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Universal Manually Operated Tyre Removal Tools

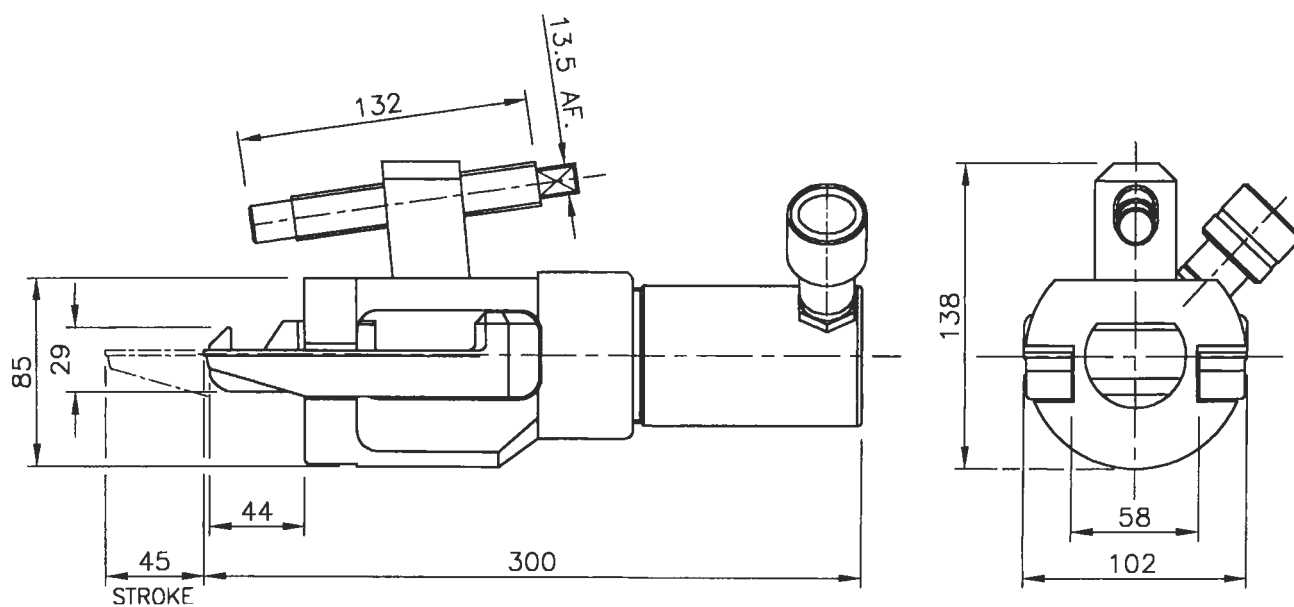


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bead breaking tools

code no.	description	working pressure	weight
HT1000MK3	standard bead breaker tool	700 bar	7.0kg

The HT1000MK3 tyre bead breaker is designed for 25" to 49" diameter earthmover wheels with 5 piece rims and pry bar slots. The unit is extremely light and portable.



description

The bead breaker can be operated from a standard hydraulic hand pump - HTHP, or with even less physical effort from an air/oil foot operated pump - UPF702.

The universal hose assembly with snap on type couplers is transferable between either pump unit.

operation

- Ensure that the tyre is fully deflated.
- Place the hook of the tool into a pry bar slot in the bead seat band.
- Adjust the hand screw to a position which will hold the tool perpendicular to the wheel face.
- Standing to one side of the tool, apply pressure, depressing the flange by approximately 20mm.
- If necessary release the pressure and re-adjust the tool, keeping it at right angles to the wheel at all times.
- A packing piece can now be inserted between the flange and the bead seat band.
- Continue this procedure in small increments around the circumference of the rim until the tyre bead is completely unseated.

Note

The pry bar slots are to be used only to push the flange back far enough to enable a hold on the bead seat band.

Spare Part

Seal Kit
Hook
Coupler

Code No.

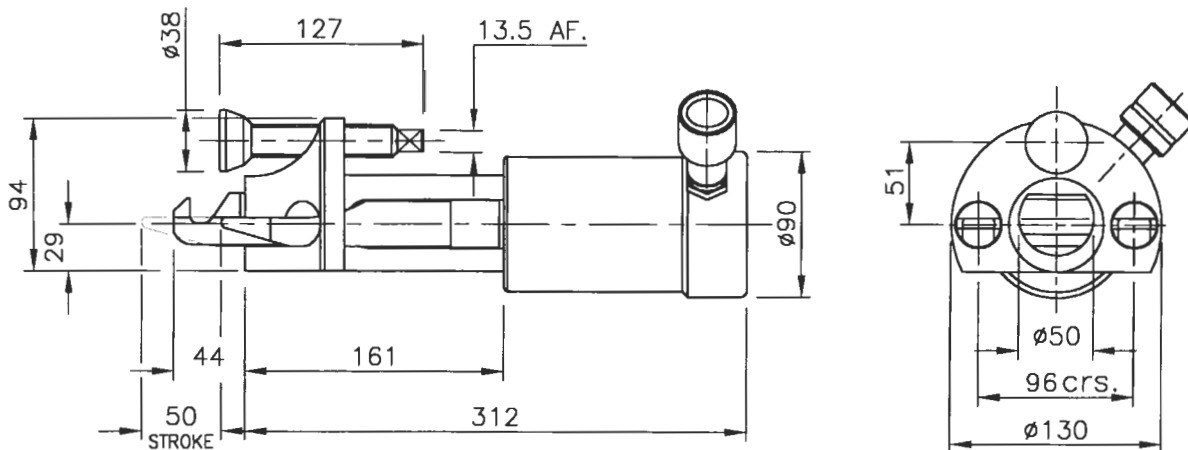
HT1000MK3-SK
HT1000MK3H
HTQRCF3



bead breaking tools

code no.	description	working pressure	weight
HT1500 C4	large bead breaker tool	700 bar	11.0kg

The HT1500C4 tyre bead breaker is designed for 25" to 51" diameter earthmover wheels with 5 piece rims and pry bar slots. The unit is capable of approximately 50% more force than similar bead breaker tools enabling a far greater range of tyres to be removed with minimum effort.



description

The bead breaker can be operated from a standard hydraulic hand pump - HTHP, or with even less physical effort from an air/oil foot operated pump - UPF702.

The universal hose assembly with snap on type couplers is transferable between either pump unit.

operation

- Ensure that the tyre is fully deflated.
- Place the hook of the tool into a pry bar slot in the bead seat band.
- Adjust the hand screw to a position which will hold the tool perpendicular to the wheel face.
- Standing to one side of the tool, apply pressure, depressing the flange by approximately 20mm.
- If necessary release the pressure and re-adjust the tool, keeping it at right angles to the wheel at all times.
- A packing piece can now be inserted between the flange and the bead seat band.
- Continue this procedure in small increments around the circumference of the rim until the tyre bead is completely unseated.

Note

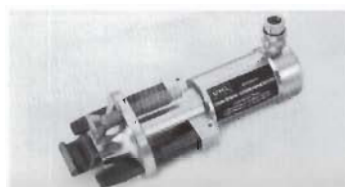
The pry bar slots are to be used only to push the flange back far enough to enable a hold on the bead seat band.

Spare Part

Seal Kit
Hook
Coupler
Short Prong (std)
Long Prong

Code No.

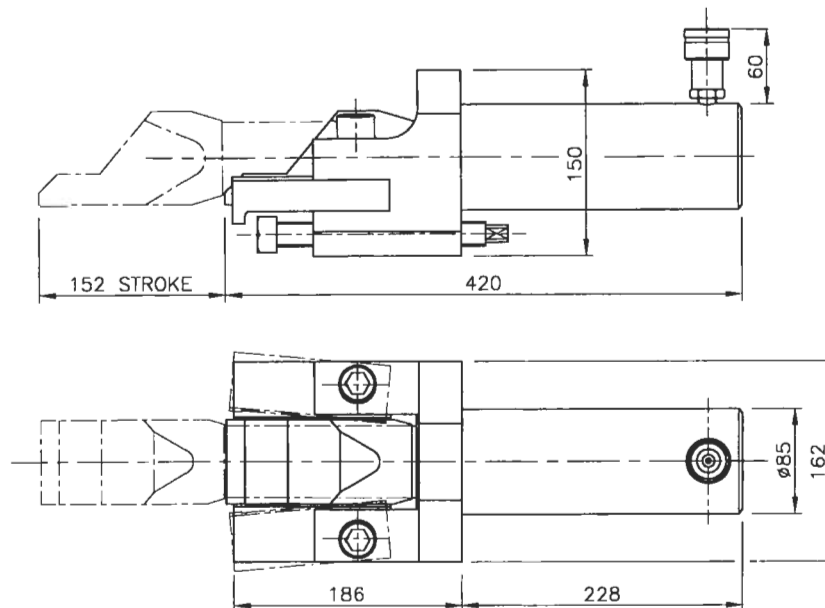
HT1500-SK
HT1000MK3H
HTQRCF3
HT1500C4FS
HT1500C4FL



bead breaking tools

code no.	description	working pressure	weight
HT2000	giant bead breaker tool	700 bar	21.5kg

The HT2000 tyre bead breaker is designed for 39" to 57" diameter earthmover wheels with 5 piece rims. The unit is capable of far more force than smaller bead breaker tools enabling far larger tyres to be removed with minimum effort.



description

The bead breaker is operated from an air/oil foot operated pump - UPF702, ensuring a smooth effortless operation from a normal 10 bar (145psi.) air line.

The universal hose can be supplied which will quickly snap on to the HT2000.

operation

- Ensure that the tyre is fully deflated.
- Place the hooks of the tool into a pry bar slot in the bead seat band.
- Adjust the hand screw to a position which will hold the tool perpendicular to the wheel face.
- Standing to one side of the tool, apply pressure, depressing the flange by approximately 20mm.
- If necessary release the pressure and re-adjust the tool, keeping it at right angles to the wheel at all times.
- A packing piece can now be inserted between the flange and the bead seat band.
- Continue this procedure in small increments around the circumference of the rim until the tyre bead is completely unseated.

Spare Part

Seal Kit
Hook
Coupler

Code No.

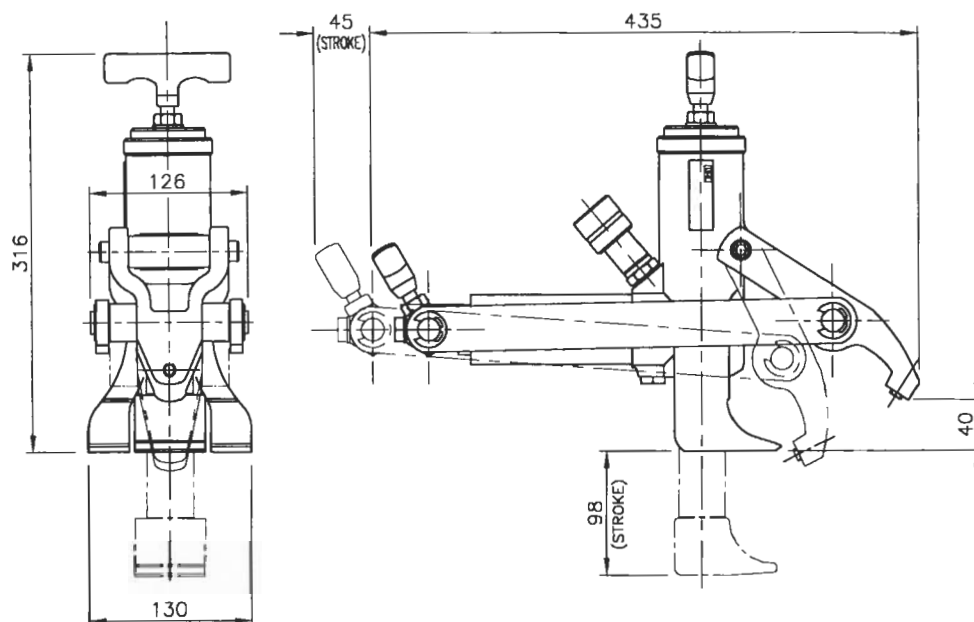
HT2000-SK
HT2000H
HTQRCF



bead breaking tools

code no.	description	working pressure	weight
HTTRAC	tractor/earthmover tool	700 bar	14.0kg

The HTTRAC tractor/earthmover tool is designed to efficiently break the bead on a wide range of tractor, truck and grader wheels with 3 piece rims.



description

This tractor tool can be operated from an air/oil foot operated pump - UPF702, ensuring a smooth effortless operation from a normal 10 bar (145psi.) air line.

A universal hose assembly with snap on type couplers can be supplied which will quickly snap on to the HTTRAC tool.

operation

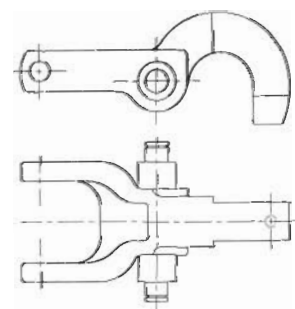
- Ensure that the tyre is fully deflated.
- Connect the HTTRAC bead breaker to the air/oil foot operated pump.
- Place the tool with the jaw above, and the foot below the wheel rim.
- On operation of the foot pump, the tool will automatically clamp onto the tyre rim.
- This action automatically advances the foot of the unit which breaks the tyre bead.
- On release of the foot operated pump the tool will fully retract.
- Continue this procedure in small increments around the circumference of the rim until the tyre bead is completely unseated.

SPARE PARTS

Seal Kit
Coupler
Hook (std)
Earthmover Hook

CODE No.

HTTRAC-SK
HTQRCF3
HTTRACTH
HTTRACEMH



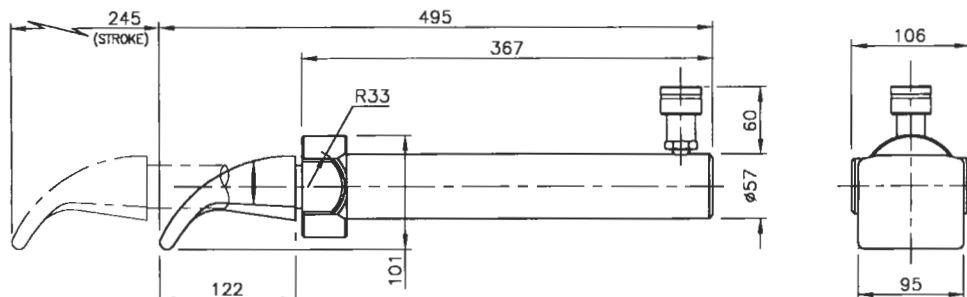
HTTRACEMH



bead breaking tools

code no.	description	working pressure	weight
HT100	bead breaker tool	700 bar	10.5kg

The HT100 bead breaker tool will efficiently break the bead on a wide range of tractor, truck and grader tyres, when used in conjunction with wheel mounting frame HTFA.



description

The bead breaker can be operated from a standard hydraulic hand pump - HTHP, or from an air/oil foot operated pump - UPF702, ensuring a smooth effortless operation from a normal 10 bar (145psi.) air line. A universal hose assembly can be supplied which will quickly snap on to the HT100 bead breaker tool.

Spare Part

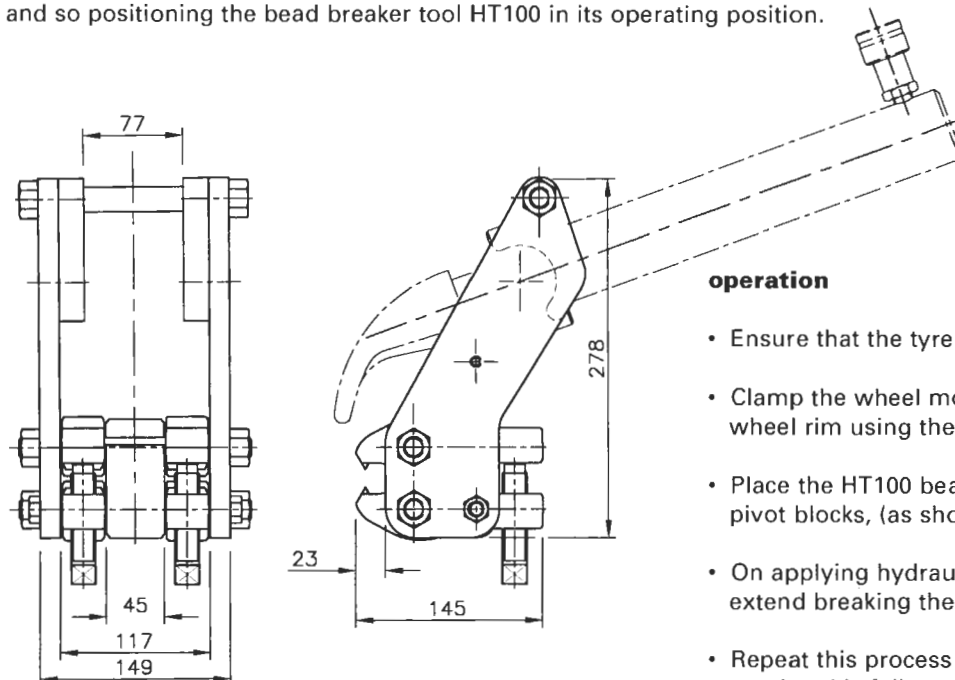
Seal Kit
Spade End Tool
Trunnion
Coupler

Code No.

HT100-SK
TRSET
HT100TR
HTQRCF

code no.	description	working pressure	weight
HTFA	wheel mounting frame	-	14.5kg

This frame is designed to be used by clamping on to the rim on a wide range of tractor, truck and grader wheels, and so positioning the bead breaker tool HT100 in its operating position.



operation

- Ensure that the tyre is fully deflated.
- Clamp the wheel mounting frame onto the wheel rim using the clamping screws.
- Place the HT100 bead breaker tool into the clevis pivot blocks, (as shown in sketch.)
- On applying hydraulic pressure the tool will extend breaking the tyre bead off the rim.
- Repeat this process around the wheel until the tyre bead is fully removed from the rim. It has been found that by using two mounting frames, on opposite sides of the wheel rim, the tyre can be removed much faster.

Note

An alternative frame is also available for thin rimmed wheels.

The mounting frame must not be used for lifting the wheel.



bead breaking tools

code no.	description	working pressure	output force	weight
HTBBR	back bead breaker ram	700 bar	10 tonne	2.5kg

This tool will efficiently break the back bead on a wide range of tractor, truck and grader tyres, whilst they remain on the vehicle.

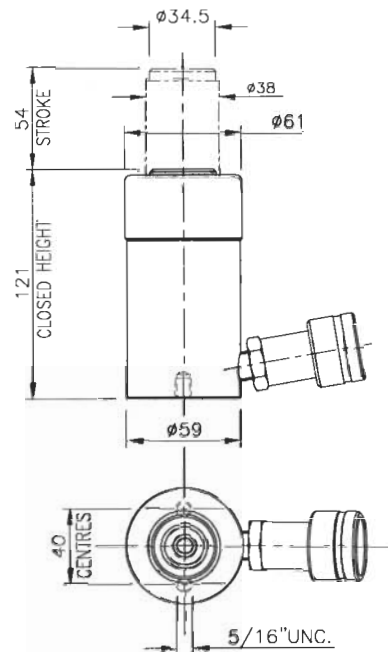
description

This back bead breaker can be operated from a hydraulic hand pump - HTHP, or with even less physical effort from an air/oil foot operated pump - UPF702, ensuring a smooth effortless operation from a normal 10 bar (145psi.) air line. The universal hose assembly with snap on type couplers is transferable between either pump unit and the HTBBR.

Back bead rams of alternative lengths are available.

Spare Part
Seal Kit
Coupler

Code No.
HTBBR-SK
HTQRCF



code no.	description	working pressure	output force	weight
HTSR	adjustable back bead breaker ram	700 bar	10 tonne	5.0kg

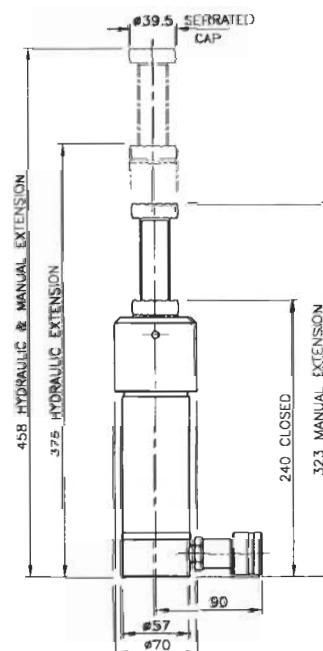
This ram is used to push off the rear rim flange on a wide range of tractor, truck and grader tyres. It can also be used in construction and heavy moving.

description

This unit can be operated from a hydraulic hand pump - HTHP, or with even less physical effort from an air/oil foot operated pump - UPF702, ensuring a smooth effortless operation from a normal 10 bar (145psi.) air line. A universal hose can be supplied which will quickly snap on to the HTSR screwed ram.

Spare Part
Seal Kit
Coupler

Code No.
HTSR-SK
HTQRCF



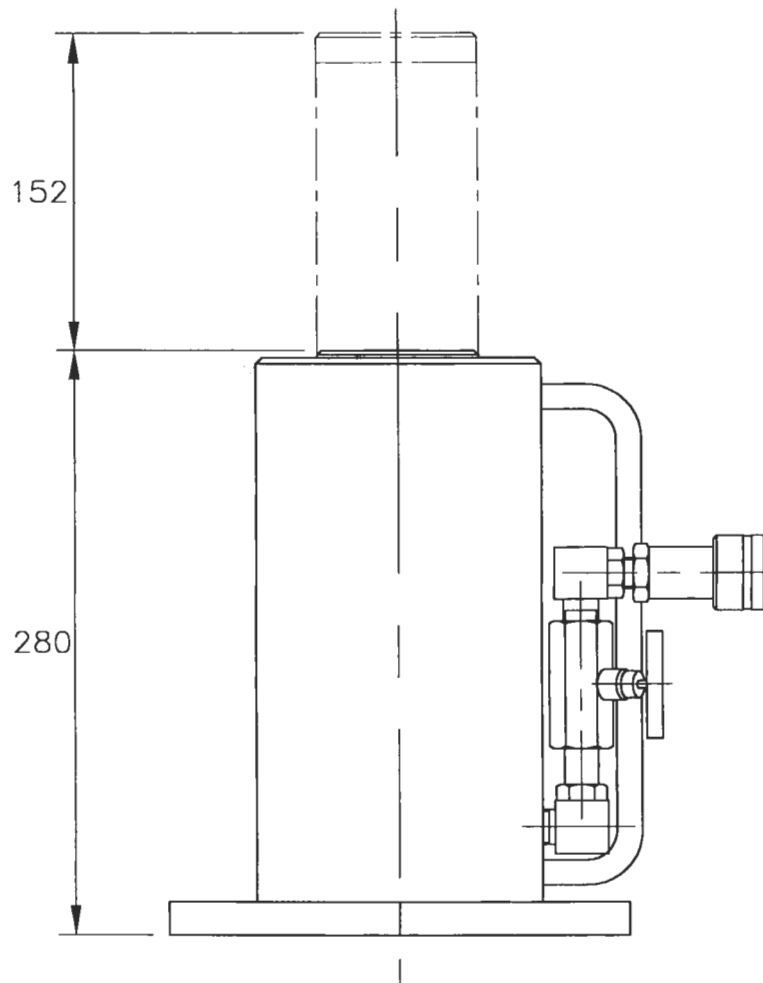
lifting jack

code no.	description	working pressure	output force	weight
HT50LJ	aluminum lifting jack	700 bar	55 tonne	14kg

This heavy duty jack is suitable for lifting most tractor, truck and grader vehicles when removing their wheels.

design features include:

- Large area base.
- Hardened steel top cap.
- Built-in anti falldown valve.



description

This unit can be powered from an air/oil foot operated pump - UPF702 ensuring a smooth effortless operation from a normal 10 bar (145psi) airline. A universal hose assembly with snap on type couplers can be supplied which will quickly snap on to the HT50LJ lifting jack.

SPARE PARTS

Seal kit
Coupler

CODE No.

HT50LJ-SK
HTQRCF



hydraulic hand pump

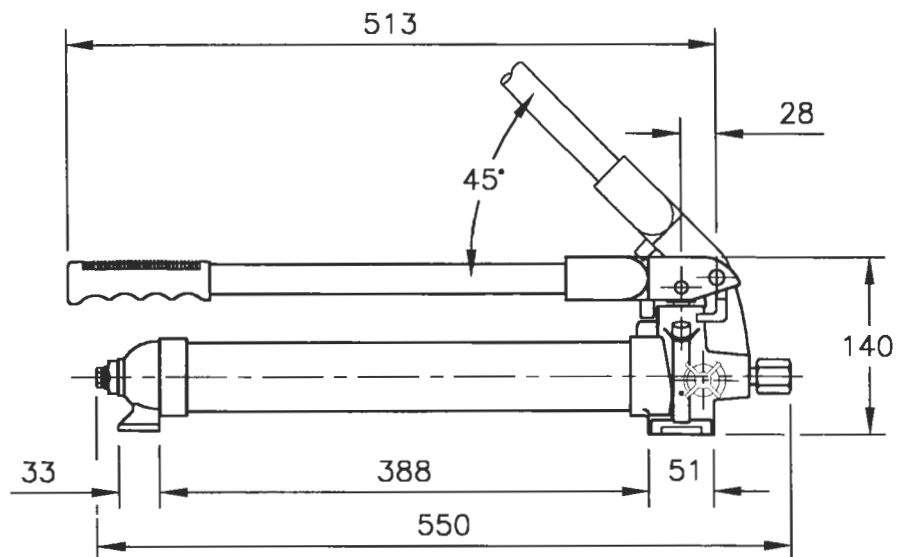
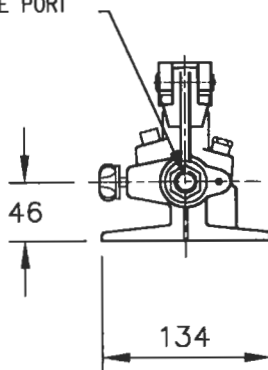
code no.	description	working pressure	weight
HTHP	hydraulic hand pump	700 bar	5.75kg

The HTHP is used for manually operating the HT range of back and front bead breaker tools as well as the HTSR screwed ram.

design features include

- Completely self contained for instant use.
- Compact portable unit.
- Maximum pressure pre-set relief valve.
- External load release valve.
- High pressure hose and quick release couplers are available as optional extras (see below).

3/8"NPT or 1/4"NPT
PRESSURE PORT



Technical Data.

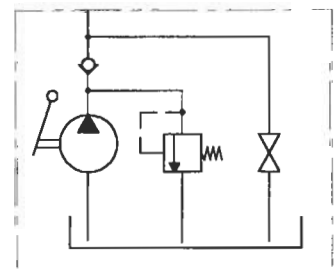
Max. Working Pressure	700 bar
Displacement	2.66 cc/Stroke
Oil Capacity (Useable)	750 (650)cc
Weight	5.75 Kg.
Max. Handle Force	60 Kg.

Spare Part

Seal Kit
Hose Assembly

Code No.

HTHP-SK
HT2MHA

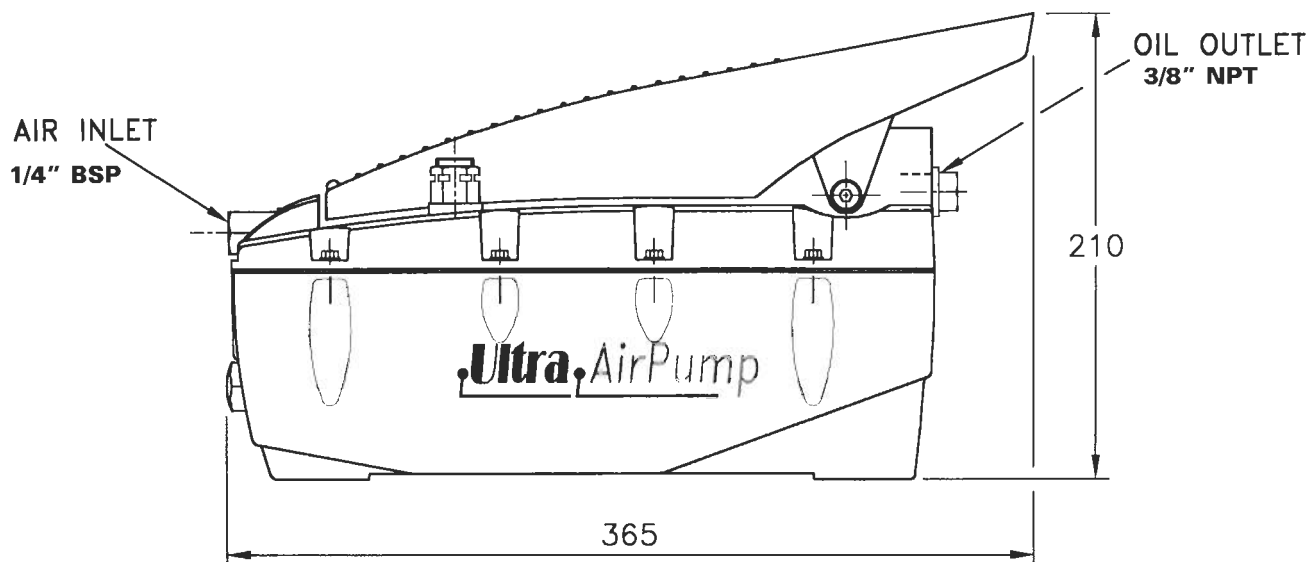


air / oil foot operated pump

code no.	description	working pressure	weight
UPF702	air/oil foot operated pump	700 bar	6.3kg

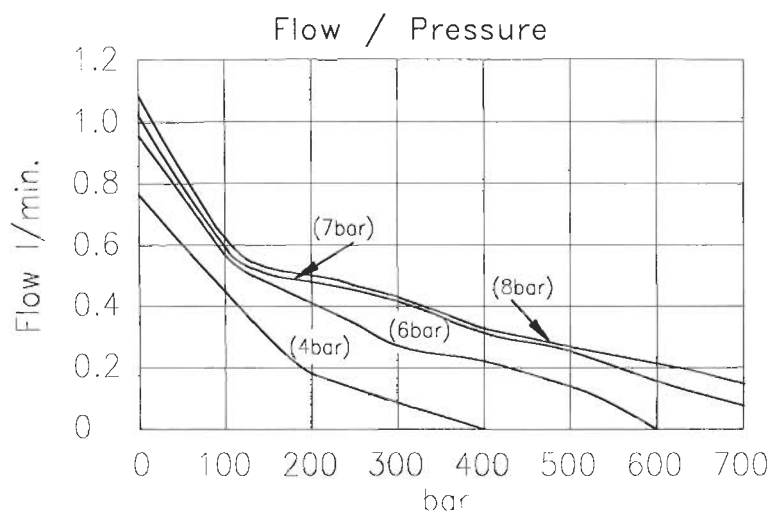
design features include

- Compact portable design
- Heavy duty construction
- Foot pedal operated



technical data

Pressure output700bar.
 Tank capacity2.5Ltr. (Larger version available)
 Connects to dry air supply of2.8 to 10 bar.
 Low noise75dba
 Weight6.3 kg.



accessories

spares for current breaker tools

TRSET

Spade End Tool to fit HT100

HT2MHA

High Pressure Hose Assembly

This hose is used to connect all manually operated tyre removal tools to hydraulic hand pump - HTHP, or air/oil foot operated pump - UPF702.

The hose assembly is 1.8 Metres (6 ft) long.

HT1000MK3H

Hook to fit HT1000MK3 & HT1500 tool

HT2000H

Hook to fit HT2000 tool

HTQRCM

3/8" NPT. Male Quick Release Coupling.

HTQRCF

3/8" NPT. Female Quick Release Coupling.

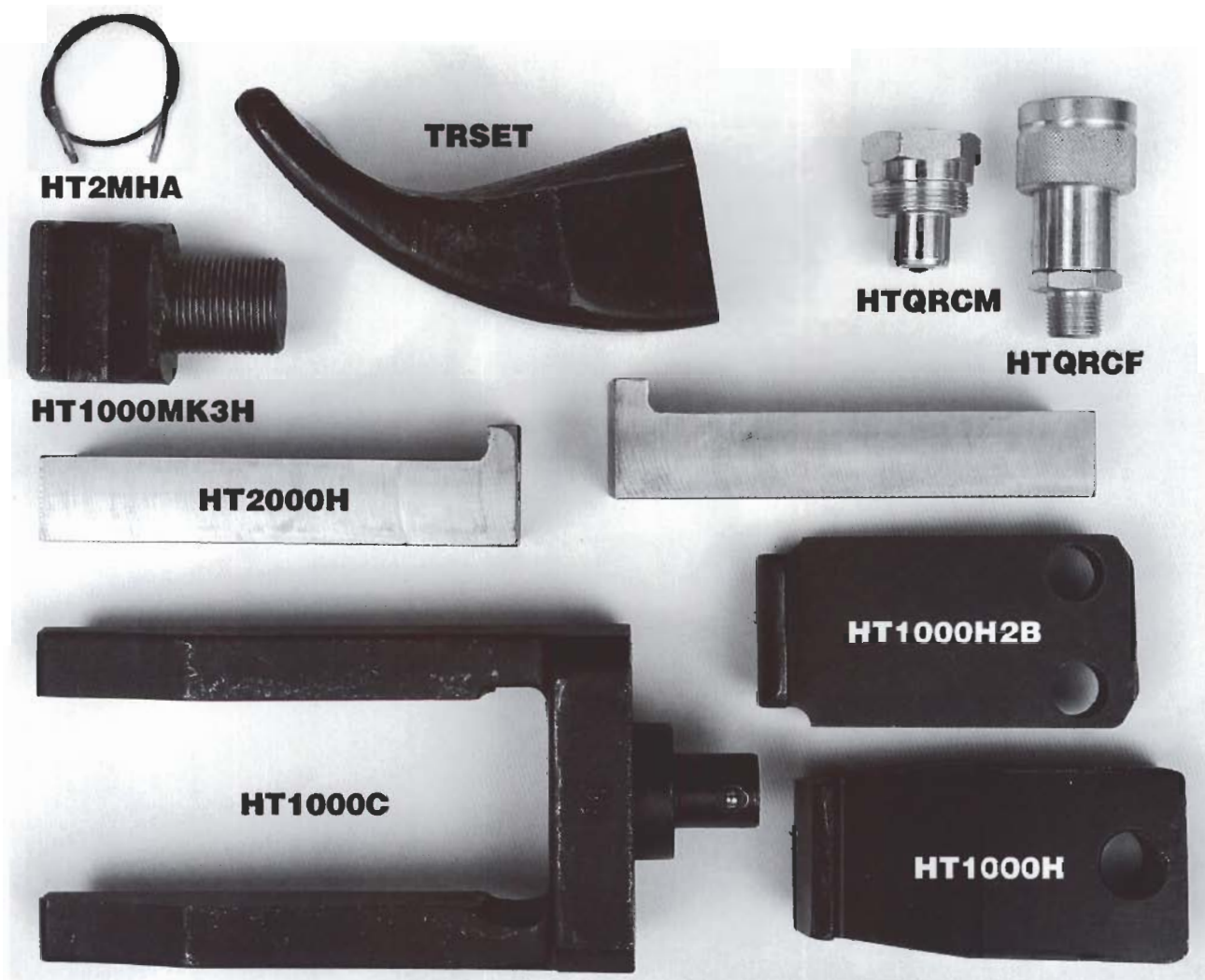
HTQRCM3

1/4" NPT. Male Quick Release Coupling.

HTQRCF3

1/4" NPT. Female Quick Release Coupling.

These couplings interconnect all manually operated tyre removal tools, to the high pressure hose assembly.



spares for obsolete breaker tools

HT1000H2BHook to fit HT1000MK1 tool

HT1000HHook to fit HT1000MK2 tool

HT1000CClevis to fit HT1000MK2 tool



Universal Powered Bead Breaker Rams and Lifting Jacks

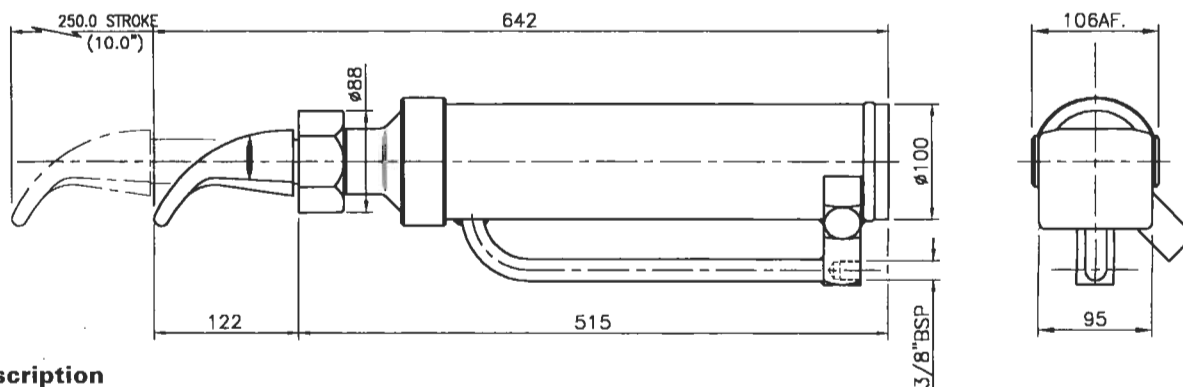


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Page 20	HTFA	Wheel Mounting Frame
Page 21	TRBBLP	Back Bead Breaker Ram
Page 22	TR6LJ	25 tonne Lifting Jack
Page 22	TR12LJ	25 tonne Lifting Jack
Page 23	TR50LJ	50 tonne Lifting Jack
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bead breaker ram

code no.	description	maximum pressure	output force	weight
TRFBLP	front bead breaker ram	250 bar	13 tonne	22.5kg

The TRFBLP front bead breaker ram will efficiently break the bead on a wide range of tractor, truck and grader tyres, when used in conjunction with wheel mounting frame HTFA.



description

The bead breaker can be operated from an existing PTO. pump unit, via a control valve mounted on the vehicle body. A universal hose is available which will quickly connect to the TRFBLP bead breaker tool, using either direct connection or a quick release coupling.

Spare Part

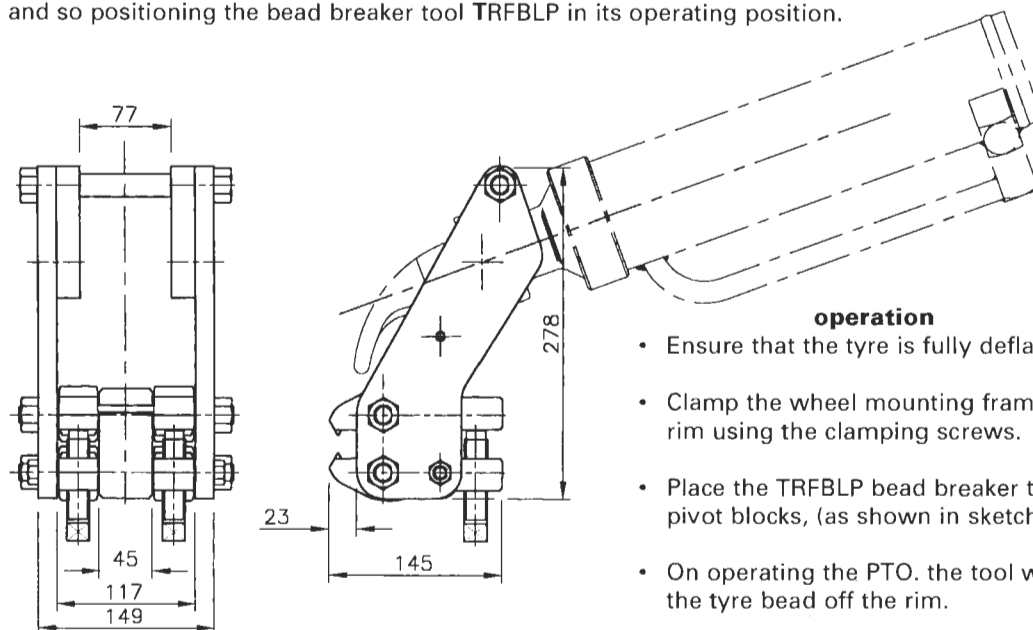
Seal Kit
Spade End Tool
Trunnion

Code No.

TRFBLP-SK
TRSET
HT100TR

code no.	description	working pressure	weight
HTFA	wheel mounting frame	-	14.5kg

This frame is designed to be used by clamping on to the rim on a wide range of tractor, truck and grader wheels, and so positioning the bead breaker tool TRFBLP in its operating position.



operation

- Ensure that the tyre is fully deflated.
- Clamp the wheel mounting frame onto the wheel rim using the clamping screws.
- Place the TRFBLP bead breaker tool into the clevis pivot blocks, (as shown in sketch.)
- On operating the PTO. the tool will extend breaking the tyre bead off the rim.
- Repeat this process around the wheel until the tyre bead is fully removed from the wheel rim. It has been found that by using two mounting frames, on opposite sides of the wheel rim, the tyre can be removed much faster.

Note

An alternative frame is also available for thin rimmed wheels.

The mounting frame must not be used for lifting the wheel.



bead breaker ram

code no.	description	maximum pressure	output force	weight
TRBBLP	back bead breaker ram	250 bar	13.4 tonne	5.5kg

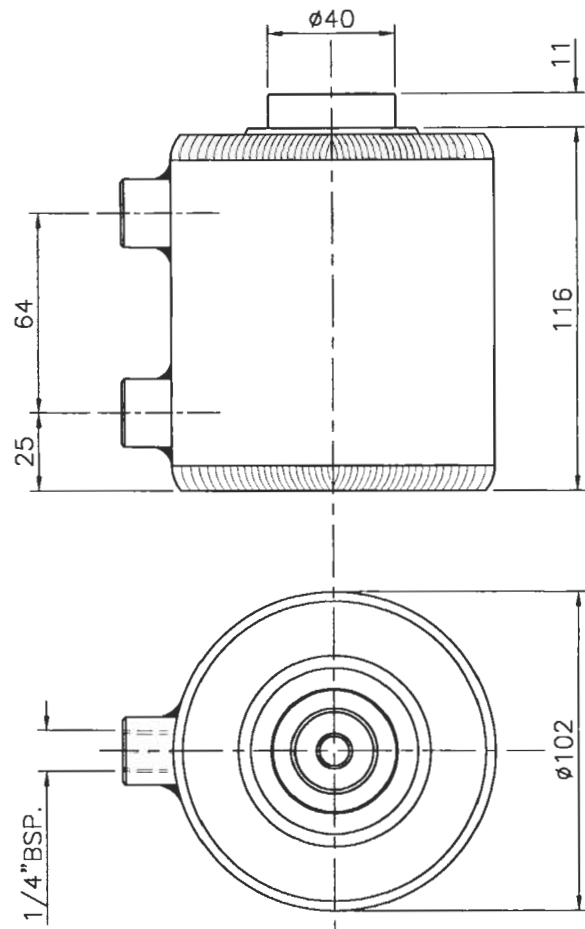
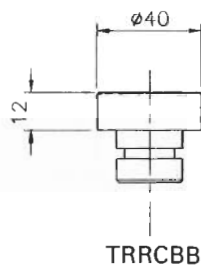
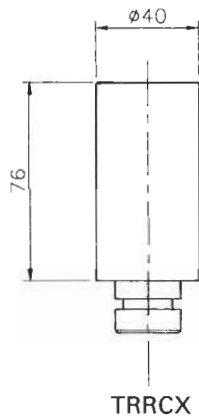
This tool will efficiently break the back bead on a wide range of tractor, truck and grader tyres whilst they remain on the vehicle.

description

This unit can be powered from a vehicles existing PTO. Pump unit, via a control valve mounted on the vehicle body. A universal hose is available which will quickly connect to the back bead breaker TRBBLP using either direct connection or a quick release coupling.

SPARE PART

	Code No.
Seal kit	Not available
Long ram head	TTRCX
Ram head	TTRCBB
(both ram heads supplied)	



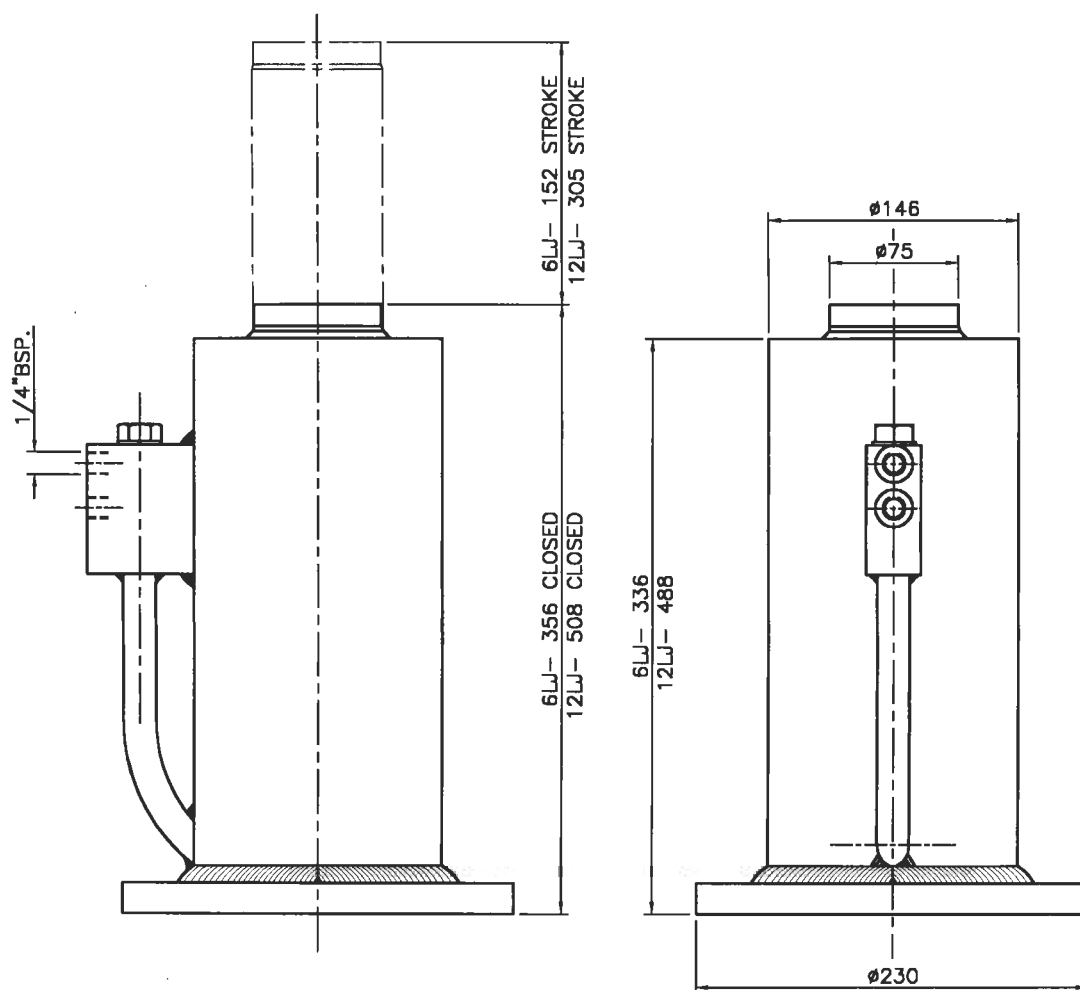
lifting jacks

code no.	description	maximum pressure	output force	weight
TR6LJ	lifting jack (152 stroke)	250 bar	25 tonne	37kg
TR12LJ	lifting jack (305 stroke)			48kg

These Medium Duty Jacks are suitable for lifting most tractor, truck and grader vehicles when removing their wheels.

design features include

- Large area base
- Hardened steel top cap
- Built in anti-fall down valve.



description

These units can be powered from a vehicles existing PTO. pump unit, via a control valve mounted on the vehicle body.

A universal hose is available which will quickly connect to the Lifting Jack TR6LJ or TR12LJ using either direct connection or a quick release coupling.

SPARE PART

Ram Cap
Seal Kit

Code No.

TR25TRC
TR25T-SK

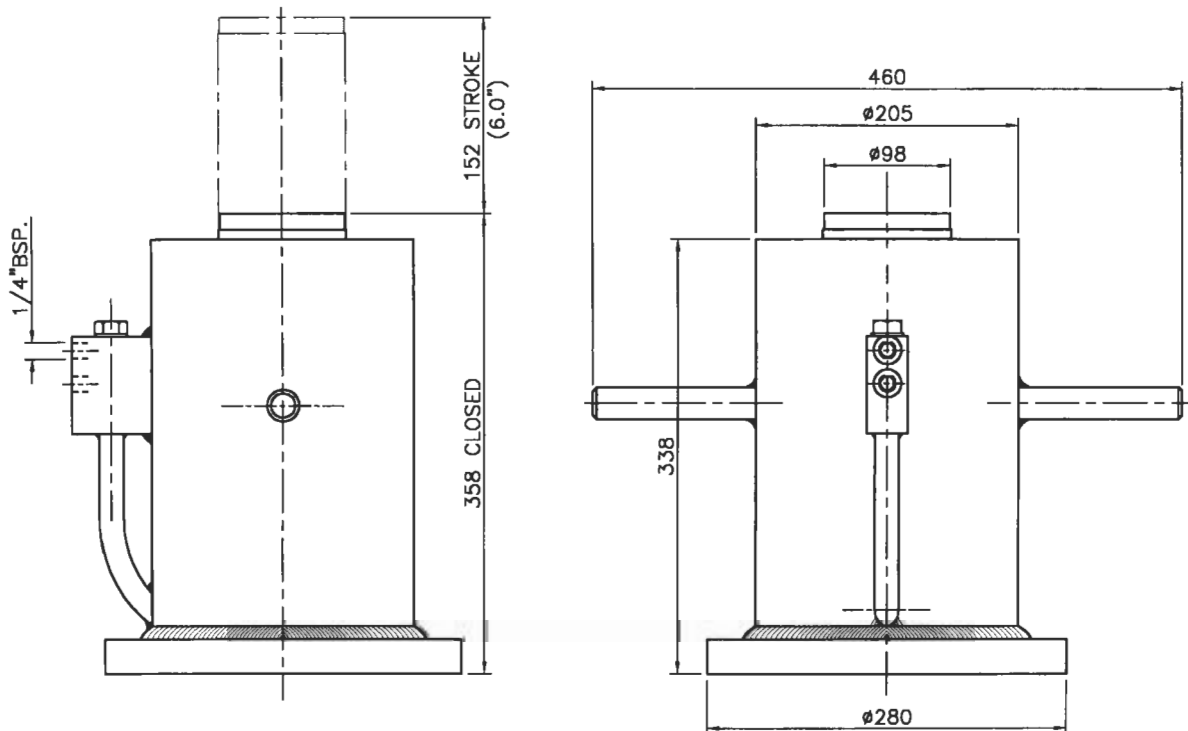


lifting jack

code no.	description	maximum pressure	output force	weight
TR50LJ	lifting jack	250 bar	52 tonne	78kg

This Heavy Duty Jack is suitable for lifting most tractor, truck and grader vehicles when removing their wheels.

- design features include**
- Large area base
 - Hardened steel top cap
 - Built in anti-fall down valve.



description

This unit can be powered from a vehicles existing PTO. Pump unit, via a control valve mounted on the vehicle body.

A universal hose is available which will quickly connect to the Lifting Jack TR50LJ using either direct connection or a quick release coupling.

SPARE PART

Ram Cap
Seal Kit

Code No.

TR50TRC
TR50T-SK

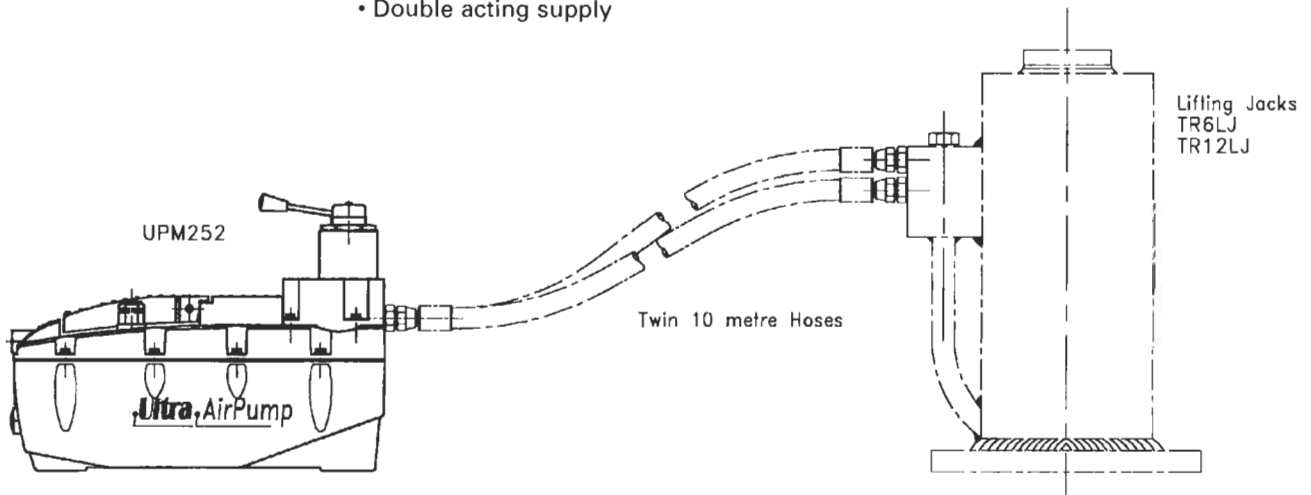


air/oil hand operated pump

code no.	description	maximum pressure	weight
UPM252	air/oil hand operated pump	250 bar	6.3kg

design features include

- Compact portable design.
- Heavy duty construction
- Foot & Hand control
- Double acting supply

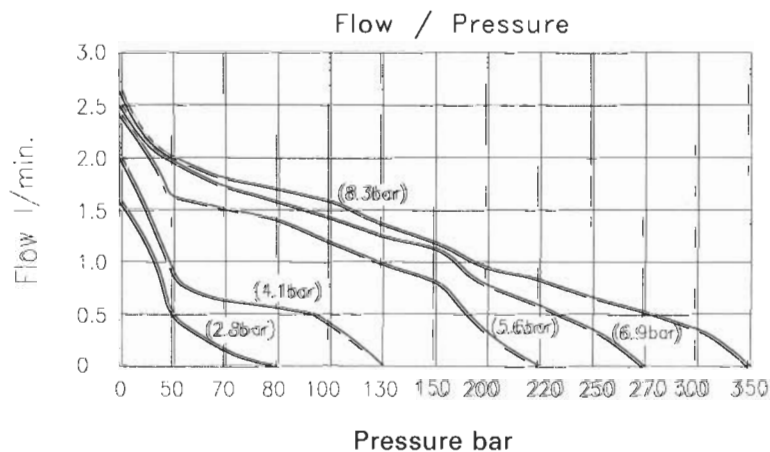


description

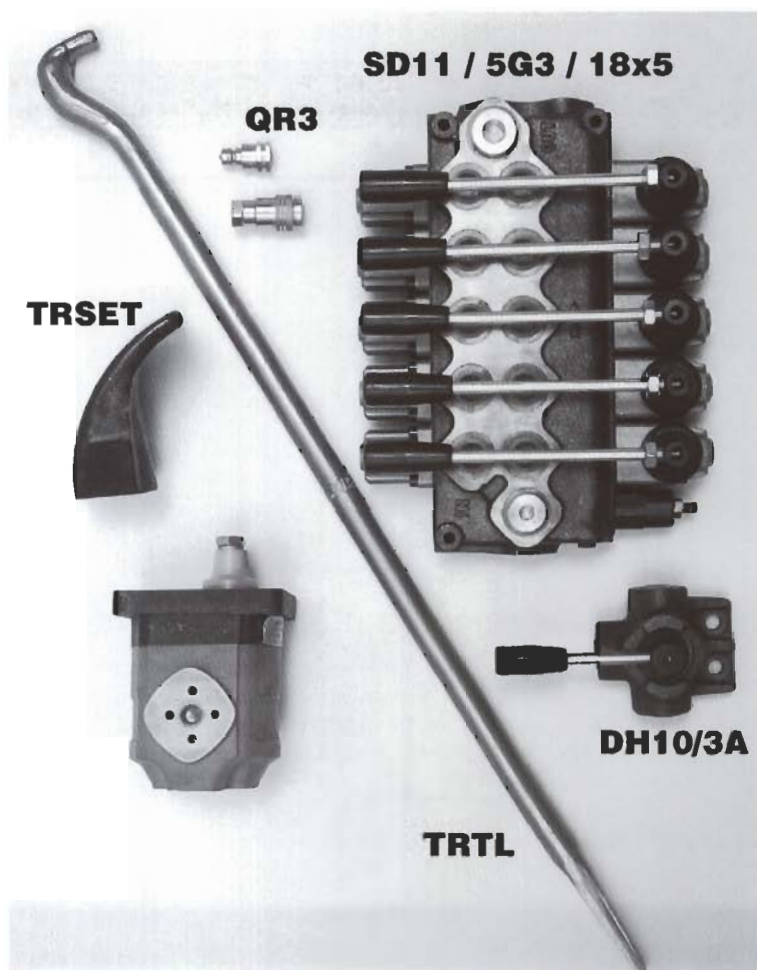
This air/oil foot & hand operated pump can be used to power the double acting hydraulic lifting jacks TR6LJ and TR12LJ, and will achieve a maximum lifting force of 30 tonne.

technical data

Working pressure250bar
 Tank capacity2.5ltr (Larger version available)
 Connects to dry air supply of.....2.8 to 10 bar
 Low noise.....75dba
 Weight6.3 kg



accessories



TR10MHA

High Pressure Hose Assemblies

These hoses are used to interconnect the bead breaker rams and lifting jacks to the control valve fed by the PTO. Pump.

Hose length10 Metres (32 ft) long.

Max. working pressure.....350 bar.

QR3

Quick Release Coupling

This coupling connects all powered bead breaker rams and lifting jacks to the high pressure hose assembly TR10MHA.

Max. working pressure.....330 bar.

TRSET

Spade End Tool

This spade end tool can be supplied to replace a broken or worn tool on the front bead breaker ram TRFBLP.

TRTL

Tyre Lever

These tyre levers are for manually removing the tyre off the wheel rim.

SD11/ 5G3/ 18x5

Five Station Control Valve

This valve will control the direction of hydraulic oil flowing to one or more of five different power tools. The valve can be mounted on the vehicle body in an appropriate position and connected to an existing PTO. pump unit without interference with the existing hydraulic system, and can make an additional five power outlets.

Max. working pressure250 bar

Valve weight16.5 kg.

DH10/3A

Diverter Valve

This valve will control the flow of hydraulic oil from the PTO. pump, allowing the oil flow to pass to an existing Hydraulic circuit, or to another auxiliary system.

The valve can be mounted on the vehicle body in an appropriate position and connected directly to the PTO. pump unit.

Max. Working pressure300 bar

Valve weight1.5 kg.

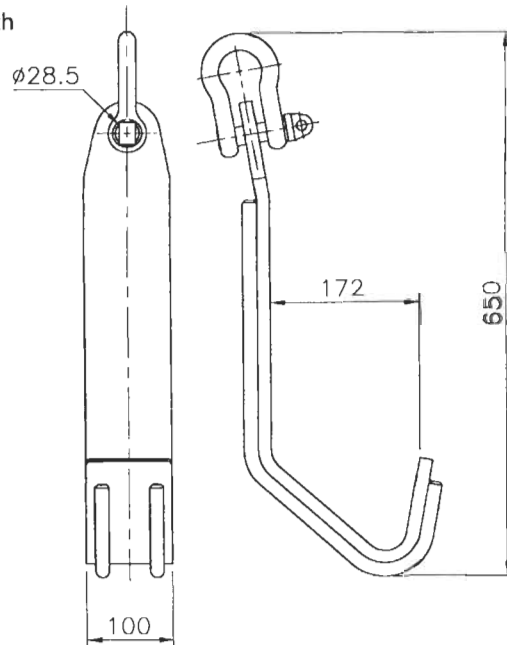
PTO. Pumps

We can supply PTO. pumps to suit various vehicles. (details on request.)

tyre lifting hooks

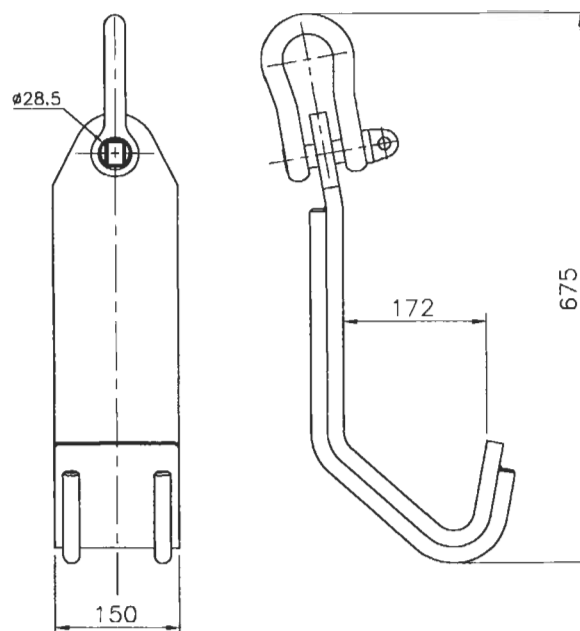
code no.	description	working pressure	weight
HT2LH	2 tonne lifting hook	-	12.0kg

These hooks are used for lifting tractor, truck and grader tyres with either a jib or overhead crane



code no.	description	working pressure	weight
HT4LH	4 tonne lifting hook	-	21.5kg

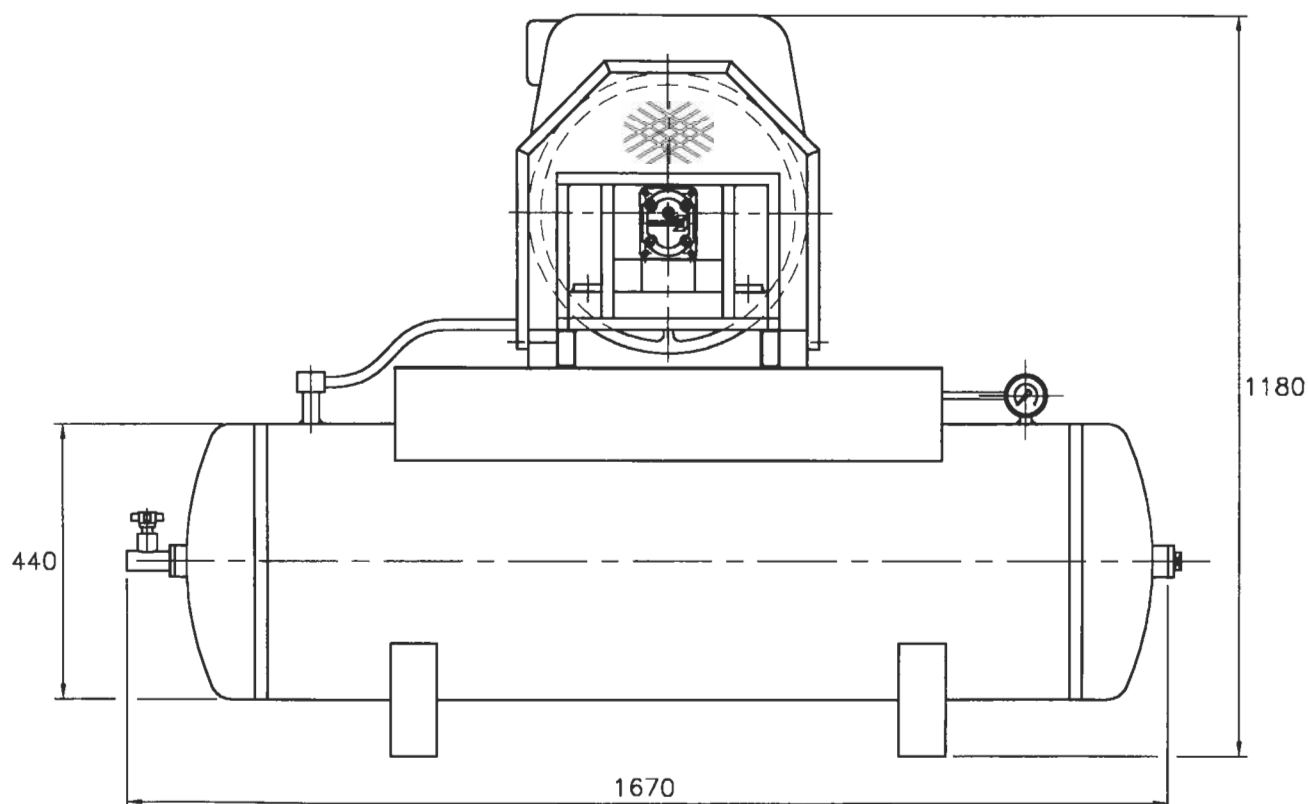
Both these hooks are supplied complete with test certificate



air compressor

code no.	description	Max. hydraulic supply pressure	Max. pneumatic output pressure	weight
TRC42	hydraulically powered compressor	200 bar	10 bar	200kg

This compressor is powered from the vehicles PTO. Pump unit, via a **built in** hydraulic motor. The compressed air is stored in a receiver, and is ready to be used to **inflate** tyres and power the air/oil foot operated pump UPF702, which in turn can power any manually operated tyre removal tool.



description

The compressor has twin cast iron cylinders, extra deep fins and fan cooling to maintain a lower operating temperature and drier air, giving longer life with greater efficiency.

The unit has a large capacity air receiver with an adjustable pressure unloader valve to divert compressed air to atmosphere when the receiver has reached operating pressure allowing the compressor to run off load.

As an optional extra there is a 20 metre long air inflation hose which allows connection to the air/oil foot operated pumps UPF702 and UPM252.

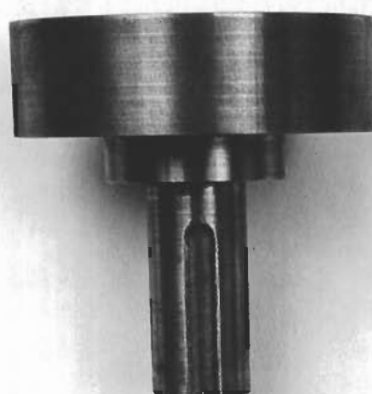
technical details

Compressor Displacement1130 LPM.
 Receiver Volume250 Litres
 Max. Outlet Pressure10bar (150 psi.)



compressor drive coupling

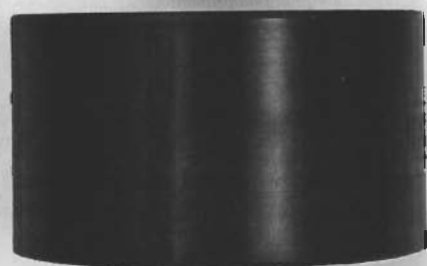
TRCFDS



TRCSC



TRCBS



TRCTC



TRCFDS

Compressor flanged drive shaft

This flange is screwed to the compressor flywheel and has a shaft which fits into the drive coupling bore.

TRCSC

Drive coupling half

This splined coupling half is bored to fit the flanged drive shaft.

TRCBS

Coupling sleeve

The coupling sleeve connects both coupling halves by means of an internal spline.

TRCTC

Motor coupling half

This splined coupling half is bored to fit the hydraulic motor tapered drive shaft.

Universal Tyre Handlers



Page 31	UHL2400	Crane mounted Tyre Handler
Page 32	UHL2700	Crane mounted Tyre Handler
Page 33	UHL3700	Crane mounted Tyre Handler
Page 34, 35	UHL2700FLT	Fork Truck mounted Tyre Handler
Page 36, 37	UHL1500	Crane mounted Tyre Handler
Page 38, 39	UHL2950	Tractor mounted Tyre Handler

tyre handlers

UHL2400

UHL2700

UHL3700

Commercial crane mounted tyre handlers

These tyre handlers can be fitted to most lorry mounted cranes having a minimum capacity of either 6, 13 or 35 tonne metres.

Minimum modification is required to the crane structure and can be carried out by Universal Hydraulics Ltd.



safety in operation

Safety is a prime consideration in the design and operation of all UHL tyre handlers.

Hydraulic lock valves are incorporated within the handler preventing the release of the tyre in the event of pipe or hose failure. A separate pressure relief valve is also fitted to the rotate service, ensuring no overloading can be applied to either clamping arm or crane jib.

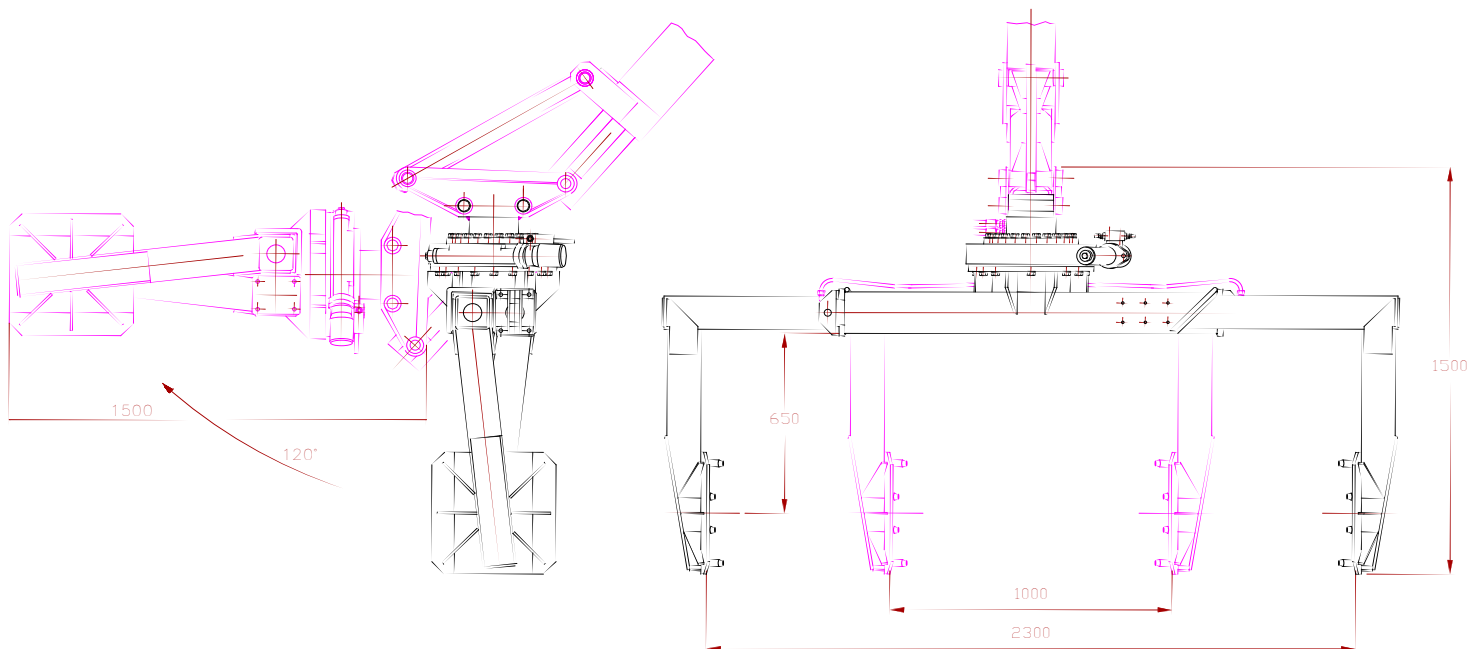
Positive and accurate rotation of the tyre is achieved by a precision rack and pinion slewing system which will not allow override of the tyre whilst rotating.

tyre handlers

UHL2405

Crane mounted Tyre handler

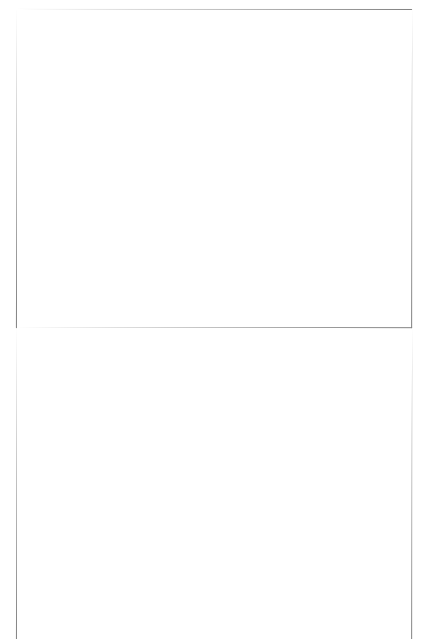
This tyre handler can be fitted to most lorry mounted cranes having a minimum capacity of 6 tonne metres.



Operation

Model UHL2405 requires two separate services at the jib end of the crane, terminating in 'snap on' type connectors between crane and handler. The tilting of the tyre is achieved by extension of the crane jib.

Technical Specifications.		
Operating range	Min.	1000mm.
	Max.	2220mm.
Tyre size handled	Min.	12.00 x 24
	Max.	24.00 x 35
Safe working load		1.0 Tonnes.
Rotation		360°
Rotation Speed		6.0 RPM Maximum
Tilt angle		120°
Working pressure	Min.	180 Bar.
	Max.	250 Bar.
Clamping method		Horizontal Telescopic
Clamping lock		Pilot operated Check valve
Handler tilt		By boom arm extension
Weight of Handler		480 Kg.
Recommended Crane minimum.		6 Tonne metre

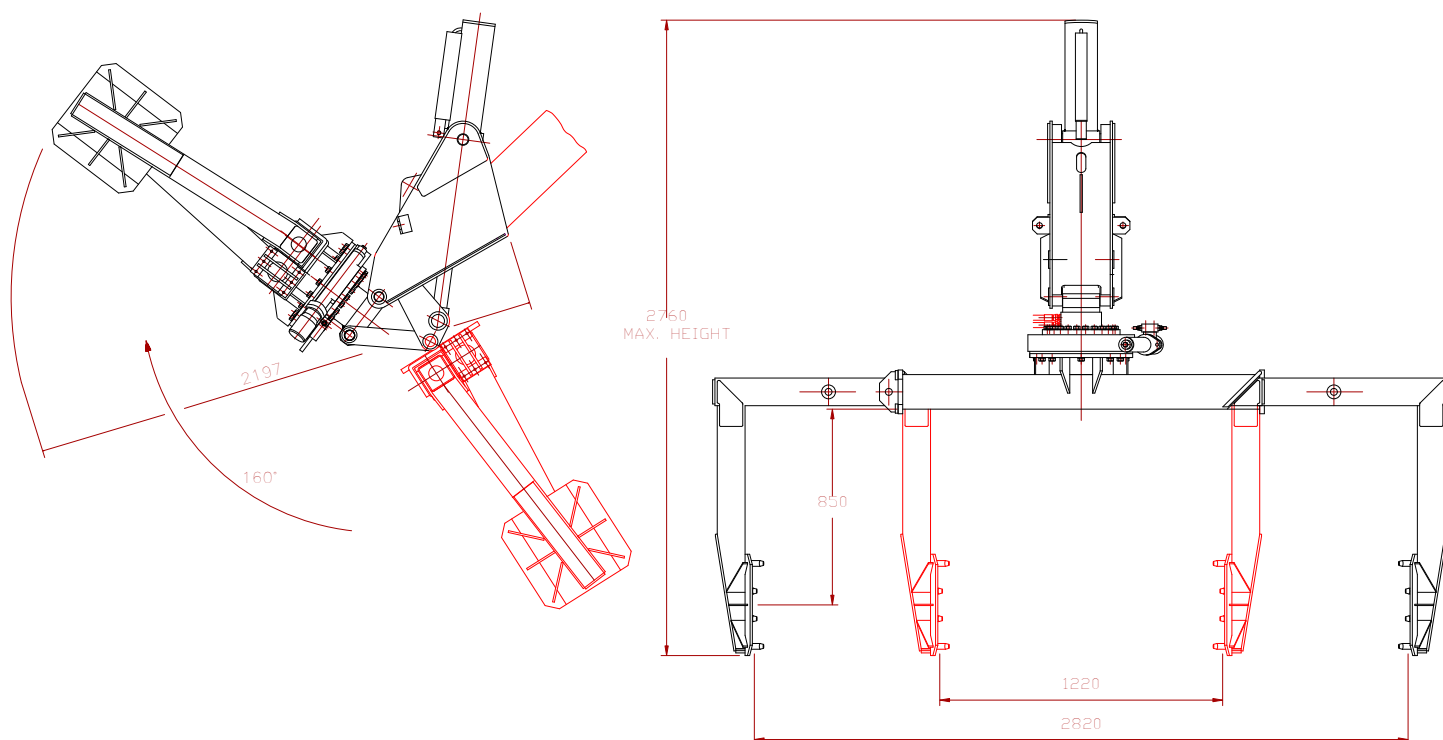


tyre handlers

UHL2705

Crane mounted Tyre handler

This tyre handler can be fitted to most lorry mounted cranes having a minimum capacity of 13 tonne metres.



Operation

Model UHL2705 requires three separate services at the jib, with respective operating levers at the crane base. This model achieves all motions, ie. tilt, clamp and rotate totally independent of the actual crane operation.

Note. Customer to supply manual stub boom 1.5 metre minimum.

Technical Specifications.

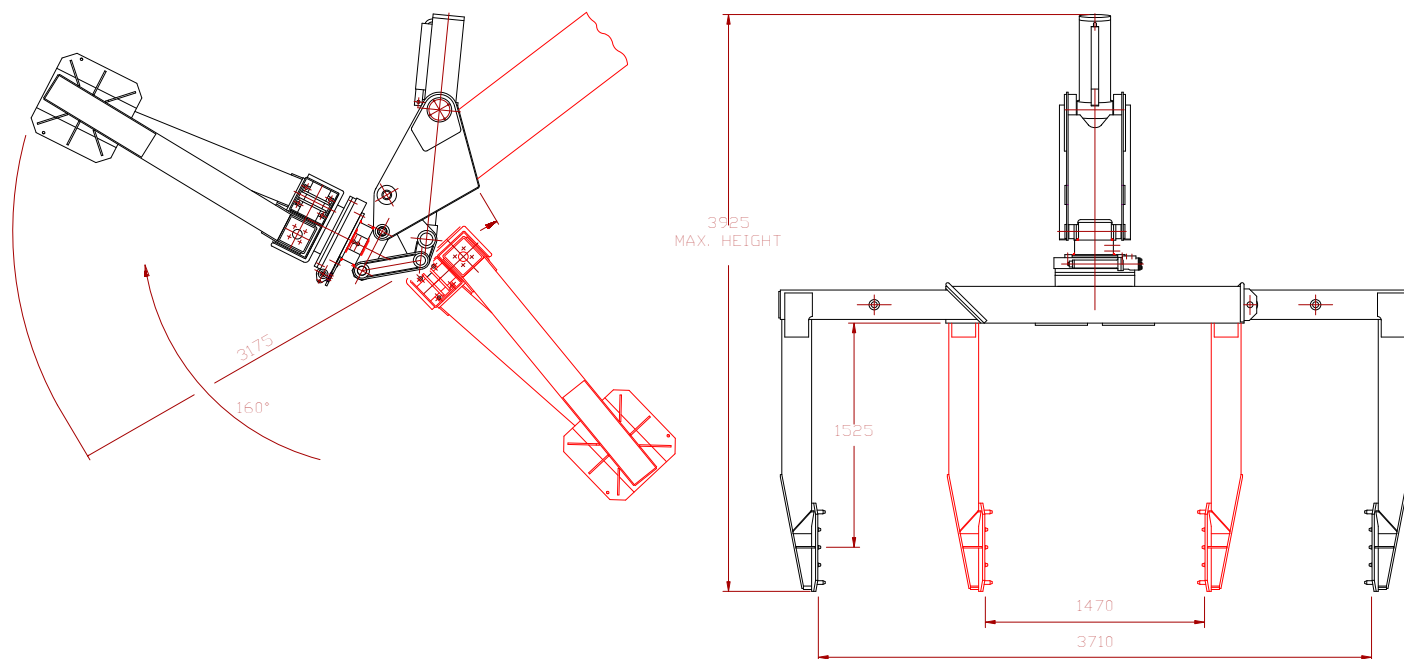
Operating range	Min.	1220mm.
	Max.	2700mm.
Tyre size handled	Min.	17.50 x 25
	Max.	27.00 x 49
Safe working load		2.5 Tonnes.
Rotation		360°
Rotation Speed		5.5 RPM Maximum
Tilt angle		160°
Working pressure	Min.	180 Bar.
	Max.	250 Bar.
Clamping method		Horizontal Telescopic
Clamping lock		Pilot operated Check valve
Handler tilt		Integral tilt ram c/w hose burst valve
Weight of Handler		750 Kg.
Recommended Crane minimum		13 Tonne metre

tyre handlers

UHL3705

Crane mounted Tyre handler

This tyre handler can be fitted to most lorry mounted cranes having a minimum capacity of 35 tonne metre.



Operation

Model UHL3705 requires three separate services at the jib, with respective operating levers at the crane base. This model achieves all motions, ie. tilt, clamp, and rotate totally independent of the actual crane operation.

Note. Customer to supply manual stub boom 2 metres minimum length.

Technical Specifications.		
Operating range	Min.	1560mm.
	Max.	3700mm.
Tyre size handled	Min.	18.00 x 25
	Max.	37.00 x 57
Safe working load		4.5 Tonnes.
Rotation		360°
Rotation Speed		1.75 RPM Maximum
Tilt angle		160°
Working pressure	Min.	180 Bar.
	Max.	250 Bar.
Clamping method		Horizontal Telescopic
Clamping lock		Pilot operated Check valve
Handler tilt		Integral tilt ram c/w hose burst valve
Weight of Handler		1800 Kg.
Recommended Crane minimum		35 Tonne metre

tyre handlers

UHL2700FLT

Fork lift truck mounted tyre handler

This tyre handler has been designed to adapt easily to fit the appropriate size fork lift truck, facilitating tyres up to and including the 2700 x 49 size.

Maximum capacity 2500 kg.

Side shift motion is offered as an optional extra. The unit is of extremely robust construction and is fully supported by comprehensive spares and after sales service.

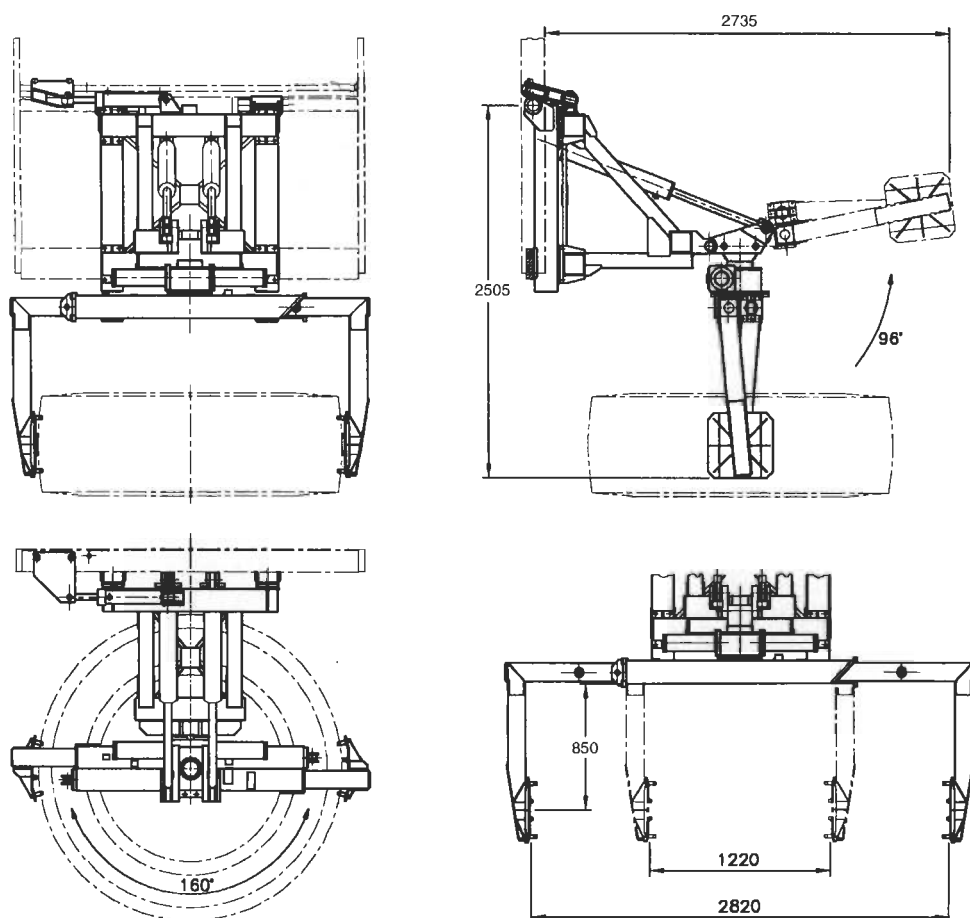


operation

The handler is powered by a pair of PTO. feed pipes on the truck carriage via diverter valves built into the handler construction. The handler is controlled from the vehicle cab utilising the PTO. lever in conjunction with a small electronic control console supplied with the handler.

The handler achieves all motions ie. Tilt, Clamp, Rotate and Sideshift (when fitted) totally independent of the vehicle operation.

tyre handlers



UHL 2700FLT technical specification

Operating range	Min.	1220mm
	Max.	2700mm
Tyre size handled	Min.	17.50 x 25
	Max.	27.00 x 49
Safe working load		2.5 Tonne
Rotation		160 deg.
Tilt angle		96 deg.
Working pressure	Min.	180 bar
	Max.	250bar
Clamping method		Horizontal Telescopic
Clamping lock		Pilot operated check valve
Handler tilt		Integral tilt rams c/w c/balance valve
Side shift		150 - 350mm (depends on host vehicle)
Weight of handler		1100 kg.
Recommended Fork Truck		15 Tonne @ 600mm Minimum



tyre handlers

UHL1500

Crane mounted tyre handler

This tyre handler was initially produced to be fitted to the C.A.L.M. crane on the Leyland 4 tonne vehicle it can easily be adapted to fit any suitable lorry mounted crane.

The tyre handler can also be adapted to meet Ministry of Defence standards and specifications.

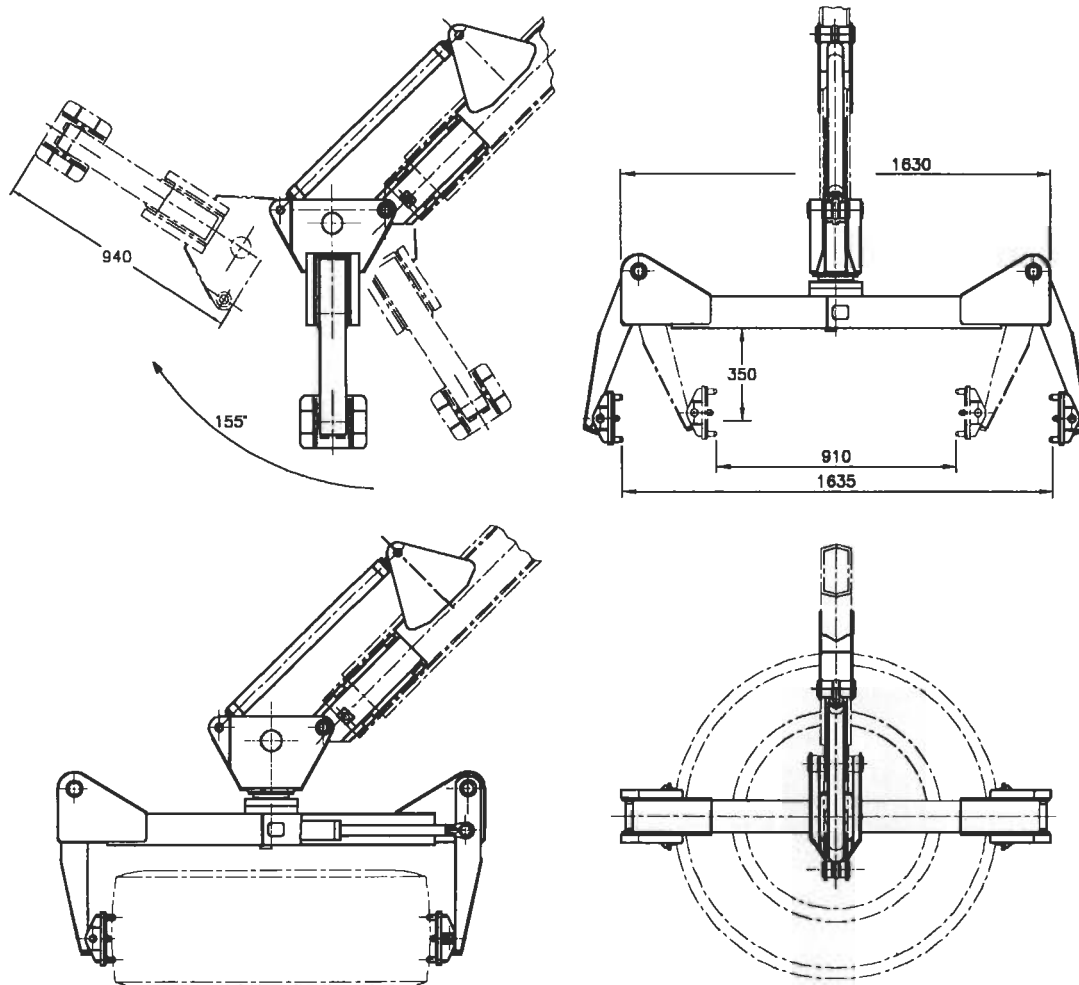


operation

The equipment is operated from a portable electronic control console via the existing hydraulic circuit of the crane. Whilst held in a hydraulically fail safe clamped condition the tyre and wheel can be manipulated in two separate modes of movement ie. Rotate and Tilt.

The unit is of extremely robust construction and is fully supported by a comprehensive spares and after sales service.

tyre handlers



UHL1500 technical specification

Operating range	Min.	1050mm
	Max.	1600mm
Tyre size handled	Min.	18 R 22.5
	Max.	20.5 R 25
Safe working load		400kg
Rotation		90°/Side (Total 180°)
Tilt angle		155°
Working pressure	Min.	140 bar
	Max.	250bar
Clamping method		Swinging arms
Clamping lock		Pilot operated check valve
Handler tilt		By boom arm extension
Oil flow required	Min.	5.0 lpm
	Max.	40 lpm
Weight of handler		200kg.
Recommended crane		4 tonne metre



tyre handlers

UHL2950

Wheeled loader tyre handler

This tyre and wheel changer has been designed and manufactured to meet Ministry of Defence standards and specifications.

Initially produced to suit the quick hitch attachment of the Volvo 4400 medium wheeled tractor, it can easily be adapted to fit any suitable loading shovel or fork lift truck.

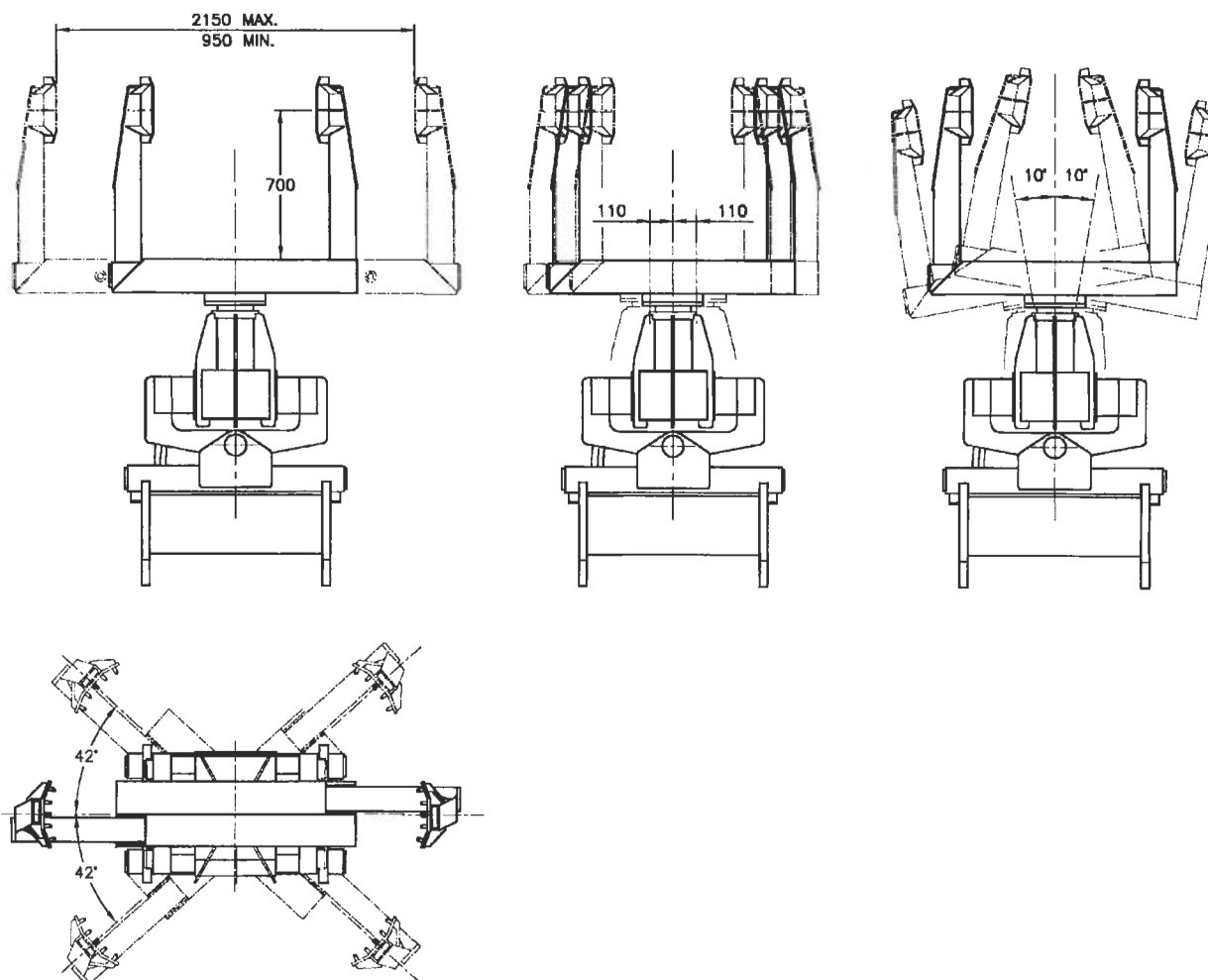


operation

The equipment is operated from a portable electronic control console within the vehicle cab via the existing hydraulic circuit of the vehicle. Whilst held in a hydraulically fail safe clamped condition the tyre and wheel can be manipulated in three separate modes of movement ie. Rotate, Pivot and Sideshift.

The unit is of extremely robust construction and is fully supported by a comprehensive spares and after sales service.

tyre handlers



UHL 2950 technical specification

Operating range	Min.	950mm
	Max.	2150mm
Tyre size handled	Min.	9 x 20
	Max.	29.5 x 29
Safe working load		2.5 tonne.
Rotation		42 deg. per side (Total 84deg.)
Tilt angle		As host vehicle tilt angle
Side Shift		110mm per either side of centre
Horizontal pivot		10 deg. per either side of centre
Working pressure	Min.	105 bar
	Max.	250 bar
Clamping method		Telescopic arms
Clamping lock		Pilot operated check valve
Handler tilt		As host vehicle tilt mechanism
Weight of handler		1300 kg.
Recommended vehicle		Details on request



notes















notes



notes





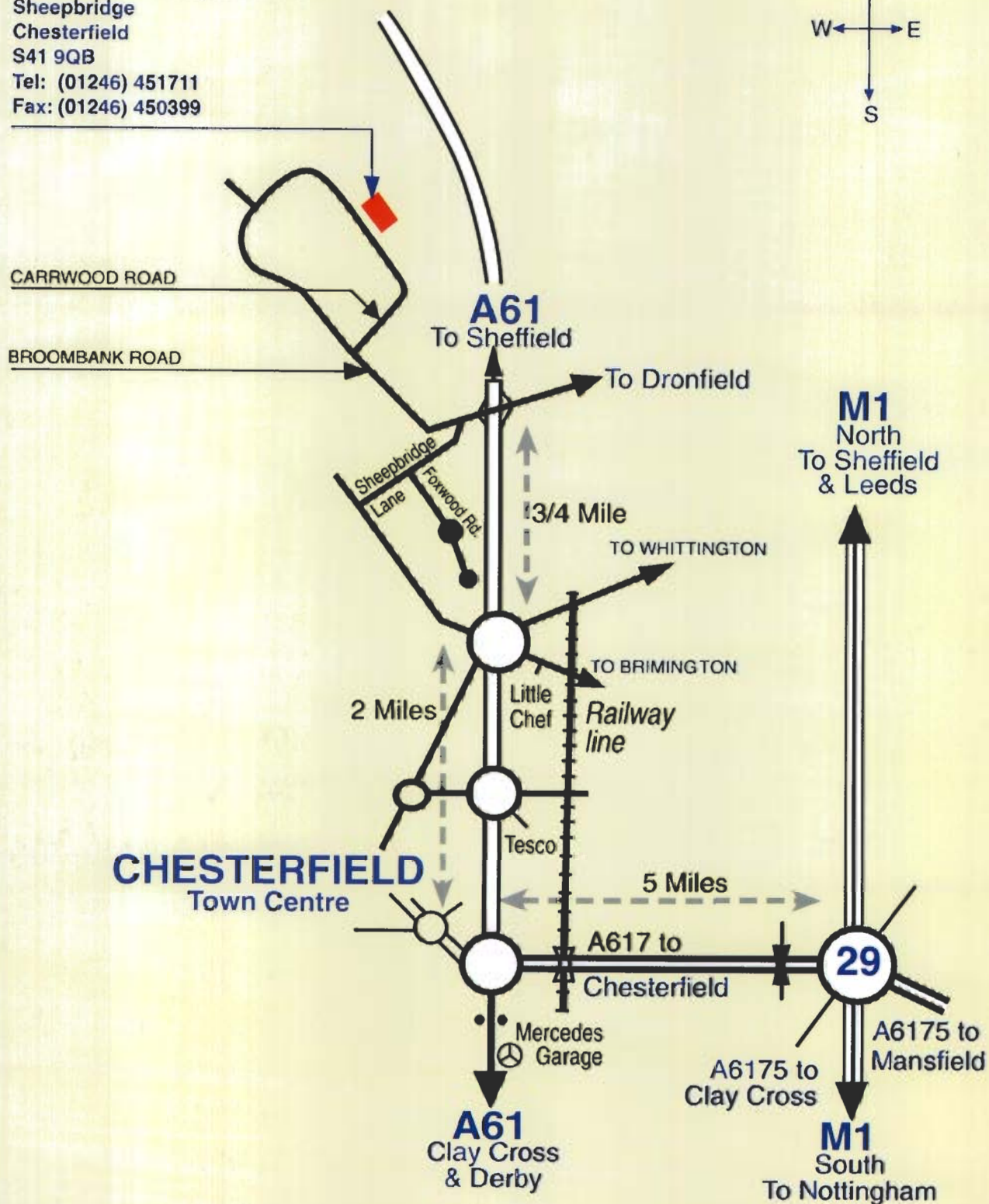














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