

MAXI-DRIVE ENGINEERING

PARTS PRICES CONT.

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<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>RETAIL</u>
3.5 kilo PTODMH	HYDRAULIC PTO	552.00
4 kilo TD5WDL	DRIVE LINE	841.00
4 kilo 300WDL	DRIVE LINE	841.00
7 kilo PTOCDFR	PTO, REAR&FORWARD	890.00
PTOCDFH	HYD.PTO	1248.00
6 kilo PTOCDF	PTO STANDARD	860.00
3.5 kilo 40 PH 05	CROSS PUMP	378.00
" 40 PH 10	CROSS PUMP	413.00
40 PH 12	CROSS PUMP	432.00
4 kilo 40 PH 18	CROSS PUMP	483.00
MDEDBX4	DROP BOXES	
	4WH/L STEER	POA

AIRMAIL is \$50.00 for 2 kilo + 8.00 for every $\frac{1}{2}$ kilo over 2 kilos.

Economy air is \$38.00 for 2 kilo + 6.00 for every $\frac{1}{2}$ kilo over 2 kilos.

AIRFreight. is \$15.00 per kilo plus \$95.00 documentation.

Prices are subject to change without notification

PRICES ARE PLUS 10 % GST IF APPLICABLE

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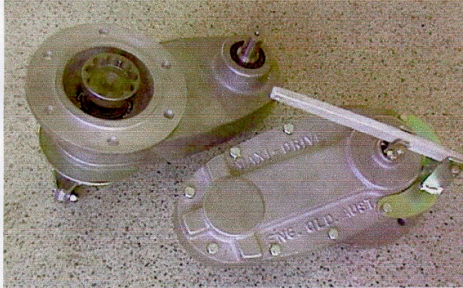
All customs clearances ect to be paid by you.

MAXI-DRIVE ENGINEERING AUSTRALIA

POWER TAKE-OFF UNIT For the Land Rover LT230 Transfer Case

This Power Take-Off unit to suit the Land Rover LT230 transfer case is manufactured by Maxi-Drive Eng in three configurations.

Part No. PTOCDF Standard — forward pointing 3/4 shaft with keyway
Part No. PTOCDFR Optional — forward and rear pointing 3/4" shaft



Standard version



Typical installation

Standard version has forward pointing 3/4" shaft to accept standard industrial universal joint for drive line to front mounted mechanical power winch. These PTO units mount almost horizontally with the drive line passing over the left hand transmission mount. This keeps everything up out of harms way.

Optional version (not shown) is fitted with a double ended shaft allowing drive to be taken to the rear if required using 3/4" drive line.

On Land Rovers engagement of the unit is by a simple pull rod extending through the heel board. The knob is pulled forward to engage
Range Rovers and Discoverys require cable operation.

This is a chain drive type unit using 14 and 16 tooth sprockets to give a 12% speed increase.

Rating is approximately 30 hp (22kw)

Both shafts are supported on ball bearings

Selector shaft is of stainless steel and lever and links aluminium. Pivot bolts also stainless.

Unit is lubricated by oil from the transfer case.

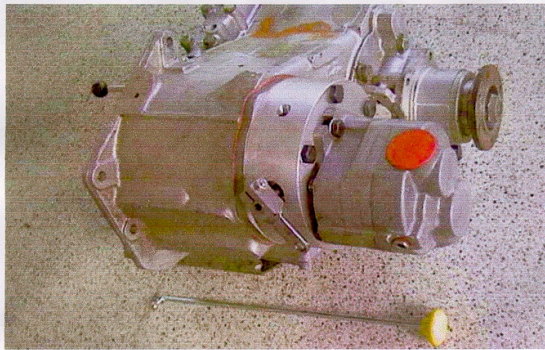
 **MAXI-DRIVE
ENGINEERING**
*Malcolm Story - Tel: (07) 5530 3934
Fax: (07) 5530 3932*
4 Ryecroft Street, Carrara, Qld. 4211. Australia.
Manufacturers of: - Maxi-Drive Lockable Differentials
- Replacement Parts
- Aluminium Bull Bars - Tanks
- High Strength Axle Shafts
FOR THE LANDROVER RANGE OF VEHICLES
• Machine Jobbing Work
A Division of Kay Four Wheel Drive Pty Ltd

MAXI-DRIVE ENGINEERING AUSTRALIA

HYDRAULIC PUMP POWER TAKE OFF

Direct Mounted to the LT 230 transfer case
Applicable to Disco , Defender etc and Range Rover with LT230 T/Case

Part No. PTODMH



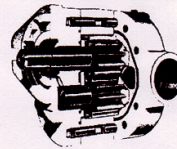
This is a very simple and economic way to provide hydraulic power for any number of purposes. Particularly suitable to improve the performance and line speed of the hydraulic winches which are normally powered by the vehicle's power steering hydraulic system. It is also adequate for heavy duty hydraulic winches.

An aluminium adapter plate, containing the dog clutch mechanism, allows a commercial "CROSS" brand hydraulic pump to be mounted directly onto the PTO aperture of the LT230 transfer case. Engagement is by the lever on the side which moves through 90o and can be positioned any where on the shaft to suit. Defender applications use the simple pull rod shown which passes through the heel board. Disco use a cable for actuation.

Below are extracts from the "CROSS" catalogue. These specifications are for a given pump speed ; which relates to engine speed with the main gearbox in fourth gear.

Overall length of PTO & smallest pump (40P005) is 165 mm. With 40P010 it is 172 mm. With largest pump ,188mm
 Rated continuous pressure 3000 psi (207 bar)

CROSS GEAR PUMPS/MOTORS						40 SERIES
PERFORMANCE DATA — PUMPS: GPM/RPM						
RPM	1000	1500	2000	2500	3000	
MODEL	GPM	GPM	GPM	GPM	GPM	
40P005	1.7	2.6	3.5	4.3	5.2	
40P007	2.8	4.1	5.5	6.9	8.3	
40P010	3.7	6.5	7.4	9.2	11.0	
40P012	4.9	7.3	9.7	12.1	14.6	
40P015	5.8	8.8	11.7	14.6	17.5	
40P018	7.0	10.5	14.0	17.5		



DISPLACEMENT SIZES

0.50	0.75	1.00	1.25	1.50	1.80	cu.in./Rev.
8.2	12.3	16.4	20.5	24.6	29.5	cc/Rev.

The CROSS Series 40 gear pumps/motors feature a gear tooth design that provides more displacement within a given package size. The gear tooth design and pressure balanced loading plates provide for a high volumetric and overall efficiency while operating at a low noise level. Available in 6 sizes, with displacements from 0.50 to 1.80 cubic inches per revolution, this compact unit as a pump can deliver up to 17.5 US. gpm. in a space less than 5" x 5 1/4" x 5 1/4".

Formula for calculating pump / motor requirements
 For HP required to drive pump multiply flow (gpm) by pressure (psi) and divide by 1714
 For Hydraulic Motor size in cu.in./rev multiply torque required (ft. lbs) by 88 and divide by pressure (psi)

PTO adapter made by MAXI-DRIVE ENG AUST
 4 Ryecroft Street CARRARA Qld. 4211
 Ph - 0755303934 Fax - 0755303932 E.Mail - MAXIDRIVE@big pond.com.au

CROSS pumps etc are made by "Cross Manufacturing — USA"

MAXI-DRIVE ENGINEERING AUST.

HYDRAULIC PUMPS WHICH CAN BE COUPLED TO EITHER
 MAXI-DRIVE ENG PTO units ie:-
 Chain Drive multi purpose type LT230PTO or
 Direct Coupled Hydraulic Only

NEW



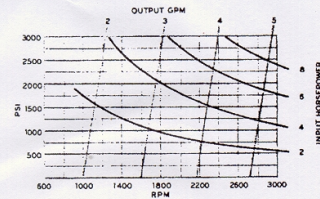
CROSS GEAR PUMPS/MOTORS

40
 SERIES

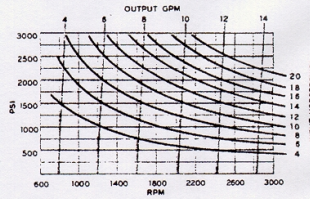
GEAR PUMP - DELIVERY CHARACTERISTICS

TYPICAL PERFORMANCE DATA

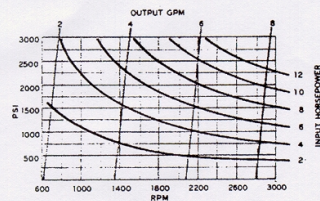
MODEL 40P005



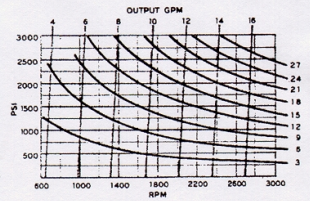
MODEL 40P012



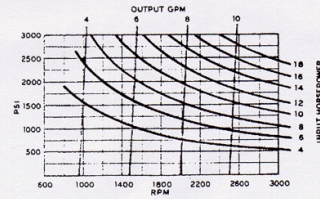
MODEL 40P007



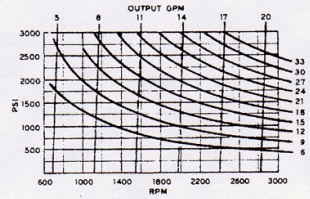
MODEL 40P015



MODEL 40P010



MODEL 40P018



MAXI-DRIVE ENGINEERING

Defender 300 tdi PTO winch drive line kit

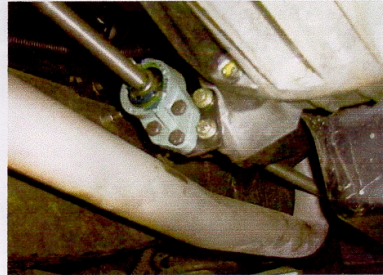
Part No. 300WDL

For use with Maxi-Drive Eng LT230 Power Take Off unit to drive front winch.



FRONT BEARING is attached to the left side of the engine block with an angle bracket.

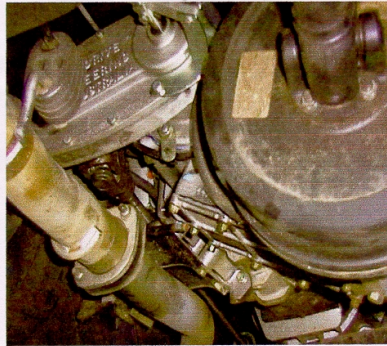
The universal joint visible and forward of the bearing is the joint with the extra length boss and long keyway to accommodate engine movement.



REAR BEARING is attached to the left side of the bellhousing with a simple flat plate.

Notice the drive shaft passes between the engine and the exhaust. Both support bearings being attached to the engine.

There is NO alteration to exhaust position with this set-up.



PTO unit fitted to rear of the LT230 transfer case. Notice the PTO is almost horizontal with the drive shaft passing over the left transmission mount thereby keeping everything up and out of harms way. All uni joints are accessible for greasing.

Control rod [just visible above unit] passes through left heel board adjacent to gearbox tunnel.

Exhaust mount has to be relocated to crossmember app 150mm back.

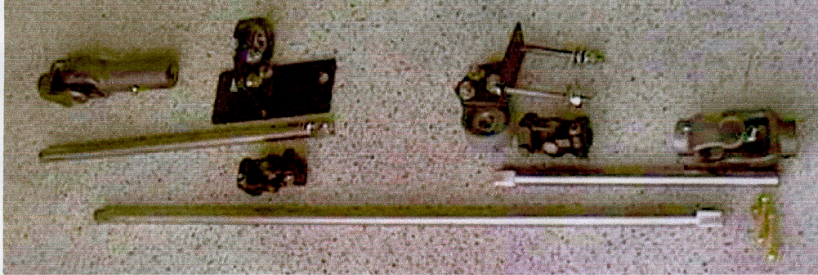
The drive line from PTO to the winch is reasonably straight avoiding high angles on the four universal joints used. This allows high speed operation without vibration

ptodldef

MAXI-DRIVE ENGINEERING
Defender TD5 PTO winch drive line kit

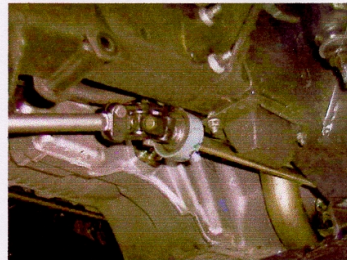
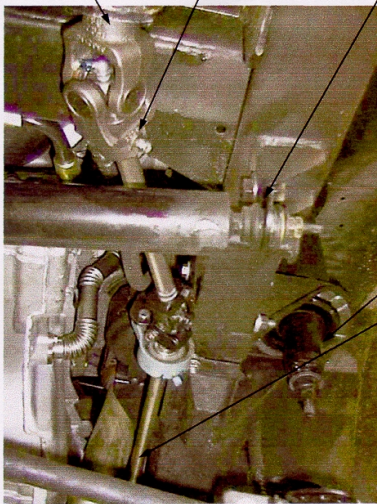
For use with Maxi-Drive Eng LT230 Power Take Off Unit to drive front winch

Part No. TD5WDL



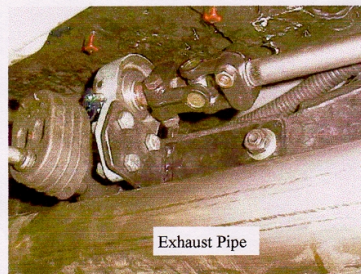
Industrial 3/4" slip yoke uni joint fitted to PTO. This uni allows for engine to chassis movement. Rear bearing bracket attaches to chassis with bolts securing cross member. Front bearing bracket attaches to chassis through L/H S/Box holes. 2 splined uni joints (Rover steering shaft unies NRC7704), Industrial 3/4" uni for connection to winch & location of brass shear pin. Spare shear pins. Three shafts are of **Stainless Steel** to avoid rusting of slip joint and shear pin joint. Splined and keyed as required. Front shaft is longer than required and to be cut to suit position of winch.

Winch connection Brass Shear bolt S/Damper lowered with plate bolted to original mount



Front bearing and uni joint

L/H Coil spring removed for purpose of photos
 S/S Shaft passes between exhaust and chassis



Exhaust Pipe

Rear bearing and uni joint. Bracket shares cross member fixing bolts.

Drive line viewed from the front. Front shaft is cut to suit position of winch. Uni joint and shaft then drilled 1/4" for brass shear bolt. The 2 x 1/4" brass metal thread bolt & nyloc nut are easy to replace in the bush. (unlike the riveted ones)