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## 380B Tractor

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\* New Sections  
\*\* Revised Sections

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\* New Sections  
 \*\* Revised Sections

# **Section 1000**

## **GENERAL SPECIFICATIONS 85 Series Tractors**

## HAND SIGNALS

For communication under noise conditions and for special operations, a system of standard hand signals has been devised which can decrease time loss and prevent accidents.

### Start the Engine



Move arm in a circle at waist level.

### Stop the Engine



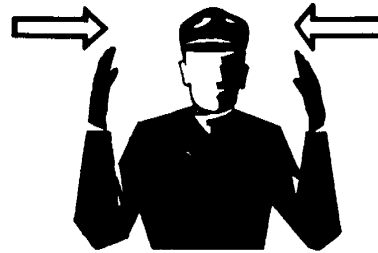
Move your right arm across your neck from left to right.

### Move Toward Me - Follow Me



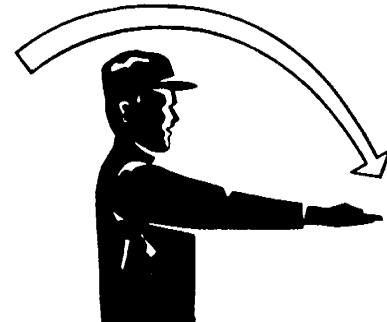
Look toward the person or vehicle you need to move. Hold one hand in front of you with the back of the hand toward the machine and move your arm from the elbow to the fingers backward and forward.

### This Far To Go



Put your hands in front of your face with the backs of your hands outward. Move your hands in or out as an indication of how far to go.

### Move Out



Face in the required direction of travel. Put your arm straight out behind you, then swing your arm over your head and forward until your arm is straight out in front of you with the back of your hand up.

**Come To Me**



(Can also be "Come to me because I need your assistance"). Lift your arm vertically over your head with the back of your hand to the rear and turn your arm in large horizontal circles.

**Raise Equipment**



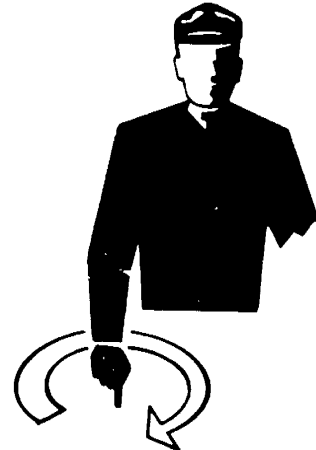
Point up with one finger and at the same time, move your hand in a circle at head level.

**Decrease Speed**



Put your arm out horizontally with the back of your hand up, then move your arm down about 45° minimum many times. Keep your arm straight and do not move your arm above your shoulder.

**Lower Equipment**



Point to the ground with one finger and at the same time move your hand in a circle.

**Increase Speed**



Lift your hand to shoulder level with your fingers closed. Move your closed hand fully up, then return to shoulder level. Do this quickly, many times.

**Stop**



Raise your hand fully up with the back of your hand to the rear. Keep this position until the signal is understood.

## SERIAL NUMBERS

Compiled in this manual are the operating and maintenance instructions for the 85 Series Agricultural Tractors

When in need of service parts always quote the tractor, transmission unit, and engine serial numbers, including prefix and suffix letters.

If information is required that is not available in this manual see the nearest authorized Case Dealer.

### Transmission Serial Number

EXAMPLE: 293805 BTY

The suffix letters, BTY denote the build of the unit.

The first letter denotes the type of drive train, B = fast speed transmission, A or D = slow speed transmission.

The second letter denotes the bevel gear ratio,  
T = 11:52, S = 14:51 and R = 12:53.

The third letter denotes the operating speeds for the PTO and the number of splines on the upper and lower shafts as shown below.

U	=	555 r/min	6 splines upper shaft
V	=	1000 r/min	6 splines lower shaft
W	=	580 r/min	6 splines upper shaft
X	=	606 r/min	6 splines upper shaft
Y	=	611 r/min	6 splines upper shaft
Z	=	614 r/min	6 splines upper shaft

V denotes that only the lower PTO shaft is fitted, as for compressor drive. When applicable, dual speed installations are indicated by a fourth suffix letter D.

## GENERAL SPECIFICATIONS

Specifications for each machine are under individual headings which follow these GENERAL SPECIFICATIONS.

### Capacities

Fuel Tanks	UK Value	U.S. Value	Metric Value
XL Tractors .....	24.6 gal	29.6 gal	112 litres
Non XL Tractors .....	17 gal	20.3 gal	77 litre
2WD Transmission .....	7.5 gal	8.9 gal	34 litre
MFD Transmissions .....	8 gal	9.6 gal	36.5 litre

**NOTE:** *These capacities are only a guide to the quantities. Always use the dipstick or level plug to make sure that units are filled to the correct level.*

### Electrical System

Type of System .....	12 Volt, Negative ground		
Battery (Rating IEC/BS)			
Standard	Reserve Capacity .....		170 minute
Cold Cranking Amperes .....		420 ampere	
Heavy Duty	Reserve Capacity .....		170 minute
Cold Cranking Amperes .....		510 ampere	
Heavy Duty Plus	Reserve Capacity .....		220 minute
Cold Cranking Amperes .....		510 ampere	
Alternators			
XL Tractors .....			65 amp
Non XL Tractors .....			45 amp
North America with Simms Cab .....			75 amp

#### XL Tractors

Head Lamps (2) .....	12 Volt, 37.5/60 watt sealed beam or 40/45 watt British prefocus cap (export)		
Side Lamps (2) .....	12 Volt, 10 watt small bayonet cap		
Stop Lamps (2) .....	12 Volt, 21 watt small bayonet cap		
Tail Lamps (2) .....	12 Volt, 10 watt small bayonet cap		
Work Lamps .....	12 Volt, 55 watt Halogen		
Registration Number Plate Lamp .....	12 Volt, 10 watt small bayonet cap		
Direction Indicator Lamps (2) .....	12 Volt, 21 watt small bayonet cap		
Instrument Warning Lamps .....	12 Volt, 1.2 watt capless wedge		
Tachometer Lamp .....	12 Volt, 3 watt capless wedge		
Speedometer Lamp .....	12 Volt, 3 watt capless wedge		
Speed Decal Lamp .....	12 Volt, 1.5 watt capless wedge		

#### Non XL Tractors

Head Lamps .....	12 Volt, 37.5/60 watt sealed beam 40/45 watt British prefocus cap (export)		
Side Lamps (2) .....	12 Volt, 5 watt festoon		
Stop/Tail Lamps (2) .....	12 Volt, 21/5 watt small bayonet cap		
Work Lamp .....	12 Volt, 35 watt sealed beam		
Direction Indicator Lamps (2) .....	12 Volt, 21 watt small bayonet cap		
Registration Number Plate Lamp .....	12 Volt, 5 watt miniature center contact		
Instrument Warning Lamps .....	12 Volt, 3 watt capless wedge		
Tachometer Lamp .....	12 Volt, 3 watt capless wedge		
Speedometer Lamp .....	12 Volt, 3 watt capless wedge		
Panel Lamp .....	12 Volt, 5 watt festoon		





## Transmissions

### BASIC

Type ..... 4 Speed Synchronesh with High/Low Ranges and Reverse  
 Number of Gears ..... 8 Forward, 4 Reverse  
 Controls ..... 2 Levers

### OPTIONAL (Not 885/885XL)

Type ..... Forward/Reverse  
 Same as Synchronesh, plus a Hydraulically Operated Forward  
 and an Increased Speed Reverse  
 Number of Gears ..... 8 Forward, 8 Reverse  
 Controls ..... 3 Levers

### OPTIONAL

Type ..... 2 Speed Power Shift  
 Same as Synchronesh, Plus Hydraulically  
 Operated Speed Decrease in all Gears  
 Number of Gears ..... 16 Forward, 8 Reverse  
 Controls ..... 2 Levers and an Electrical Switch

## Foot Brakes

Type ..... Hydraulic, Self Adjusting, Oil Cooled Discs

	U.S Value	Metric Value
Disc Diameter	10 in	254 mm

## Hydraulic System

Type ..... Independent, with Fully Live  
 Hydraulic Pump in the Transmission  
 Operating Pressure ..... 175 kg/cm<sup>2</sup> (2500 lb/in<sup>2</sup>)

## Steering

Type ..... Hydrostatic  
 Turning Radius with Brake Assistance: ..... 2WD 132 in ..... 3352 mm  
 (with MFD engaged) MFD 146 in ..... 3708 mm  
 Turning Radius without Brake Assistance: ..... 2WD 151 in ..... 3835 mm  
 (with MFD engaged) MFD 171 in ..... 343 mm

## Differential Lock

Type ..... Mechanical Actuated by the Operators Right Foot

## Hitch system

Type of Sensing ..... Upper Link  
 Type of Control ..... Hand Lever  
 Type of Valve ..... Four-Position, Hold, Lift, Lower, and Float  
 Type of Draft Arms ..... Rigid, Swing Type, Manual Float Adjuster  
 Type of Hitch ..... 385and 485 ..... Three Point, Category one and Two  
 585, 685 and 885 ..... Three Point, Category Two  
 Quick Hitch Coupler (Available)

**385 SPECIFICATIONS****General**

Diesel Engine Model	D 155
Number of Cylinders	3
Firing Order	1-3-2
Engine Speeds	
Rated	2200 r/min
Low Idle	700 ± 50 r/min
Static Timing (BTDC)	10 Degrees

	U.S. Value	Metric Value
Bore	3.87 in	98.4 mm
Stroke	4.37 in	111.1 mm
Displacement	155 in <sup>3</sup>	2536 cm <sup>3</sup>
Valve Clearances (hot)		
Inlet	0.012 in	0.30 mm
Exhaust	0.012 in	0.30 mm

**Fuel System**

Injection Nozzle type	DLLA 150S 836
Nozzle Holder type	KBEL 84S 4/13

**Lubrication System**

Crankcase Capacity (including filter)	13.2 UK pints	2 U.S. gal	7.5 litre
Oil Pressure	40 to 60 PSI		275 to 414 kPa

**Cooling System**

Cooling System Capacity (including heater)	2.5 UK gal	3 U.S. gal	11.4 litre
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**Drawbar Heights**

Swinging Drawbar Top	13.9 in	353 mm
Automatic Hitch Drawbar	15.6 in	396 mm
Automatic Hitch Hook	13.2 in	335 mm

**Hydraulic System**

Pump Output at Rated Engine Speed of 2200 r/min		
with 27 Tooth Drive Gear	10 UK or 12 U.S. gal min	46 litre min
with 23 Tooth Drive Gear	12 UK or 14.4 U.S. gal min	54 litre min
with 21 Tooth Drive Gear	13 UK or 15.6 U.S. gal min	59 litre min
Maximum Lift Capacities		
Lower Links horizontal	3700 lb	1680 kg
Through range of 780 mm (31 in)	3100 lb	1400 kg
Lower Link Length	28.95 in	735 mm

## Maximum Static Loadings

Axles, Off Road Operation	U.S Value	Metric Value
2WD Front Axle, Straight, Deep Box		
at 1530 mm (60 in) Tread	6173 lb	2800 kg
at maximum tread	3527 lb	1600 kg
APL 330 MFD Axle, at 1694 mm (67 in) Tread	5732 lb	2600 kg
APL 330 MFD Axle, at Maximum Tread	4409 lb	2000 kg
Rear Axle, at 1530 mm (60 in) Tread	9259 lb	4200 kg
Rear Axle, at Maximum Tread	7054 lb	3200 kg
Drawbars		
Swinging and auto hitch drawbar	1000 lb	454 kg
Auto hitch hook	3000 lb	1361 kg

## Maximum Permitted Weights

For Road Operations		
2WD Front Axle	3086 lb	1400 kg
MFD Axle	3527 lb	1600 kg
Rear Axle	10 582 lb	4800 kg
Total Tractor Weight	12 125 lb	5500 kg

## Power Take Off

PTO r/min. at Rated Engine Speed of 2200 r/min	
Upper Shaft	614
Lower Shaft	1004
Engine Speed at 540 PTO r/min	
Upper Shaft	1936
Engine Speed at 1000 PTO r/min	
Lower Shaft	2190

## Mechanical Front Drive (M.F.D.)

Axle Type	ZF APL 330
Transfer Gearbox Operation	Mechanical Dog Clutch

## 485 SPECIFICATIONS

### General

Diesel Engine Model	.....	D 179
Number of Cylinders	.....	3
Firing Order	.....	1-3-2
Engine Speeds		
Rated	.....	2180 r/min
Low Idle	.....	750 ± 50 r/min
Static Timing (BTDC)	.....	14 Degrees

	U.S Value	Metric Value
Bore	..... 3.785 in	..... 98.4 mm
Stroke	..... 5.06 in	..... 128.5 mm
Displacement	..... 179 in <sup>3</sup>	..... 2934 cm <sup>3</sup>
Valve clearances (hot)		
Inlet	..... 0.012 in	..... 0.30 mm
Exhaust	..... 0.012 in	..... 0.30 mm

### Fuel System

Injection Nozzle Type	.....	DLLA 150S 836
Nozzle Holder Type	.....	KBEL 84S 4/13

### Lubrication System

Crankcase Capacity			
(including filter)	..... 13.2 UK pints	8 U.S qts	7.5 litre
Oil Pressure	..... 40 to 60 psi	.....	275 to 414 kPa

### Cooling System

Cooling Capacity			
(including heater)	..... 2.5 UK gal	3 U.S gal	11.4 litre

### Drawbar Heights

Swinging Drawbar Top	..... 13.9 in	..... 353 mm
Automatic Hitch Drawbar	..... 15.6 in	..... 96 mm
Automatic Hitch Hook	..... 13.2 in	..... 335 mm

### Hydraulic System

Pump Output at Rated Engine Speed of 2180 r/min			
With 27 Tooth Drive Gear	..... 10 UK or 12 US gal min	.....	46 litre min
With 23 Tooth Drive Gear	..... 12 UK or 14.4 US gal min	.....	54 litre min
With 21 Tooth Drive Gear	..... 13 UK or 15.6 US gal min	.....	59 litre min
Maximum Lift Capacities			
Lower Links Horizontal	..... 3 700 lb	.....	680 kg
Through Range of 780 mm (31 in)	..... 3 100 lb	.....	1400 kg
Lower Link Length	..... 28.95 in	.....	735 mm

## Maximum Static Loadings

	U.S Values	Metric Value
Axles, Off Road Operation		
2WD Front Axle, at 1530mm (60 in) Tread	6172 lb	2800 kg
2WD Front Axle, at Maximum tread	3527 lb	1600 kg
APL 325 MFD Axle, at 1694 mm (67 in) Tread	5732 lb	2600 kg
APL 325 MFD Axle, at Maximum tread	4409 lb	2000 kg
APL 330 MFD Axle, at 1694 mm (67 in) Tread	5732 lb	2600 kg
APL 330 MFD Axle, at Maximum tread	4409 lb	2000 kg
APL 335 MFD Axle, at 1694 mm (67 in) Tread	6084 lb	2760 kg
APL 335 MFD Axle, at Maximum Tread	4409 lb	2000 kg
Rear Axle, at 1530mm (60 in) tread	11 023 lb	5000 kg
Rear Axle, at Maximum Tread	7275 lb (3300 kg)	
<b>Drawbar</b>		
Swinging Drawbar and Automatic Hitch		
drawbar	1000 lb	454 kg
Automatic Hitch Hook	3000 lb	1361 kg

## Maximum Permitted Weights

For Road Operations		
2WD Front Axle, Straight Deep Box	3086 lb	1400 kg
MFD Axles	3527 lb	1600 kg
Rear Axle	10 582 lb	4800 kg
Total Tractor Weight	12 125 lb	5500 kg

## Power Take Off

PTO r/min. at Rated Engine Speed		
Upper Shaft		614
Lower Shaft		1004
Engine Speed at 540 PTO r/min		
Upper Shaft		1936
Engine Speed at 1000 PTO r/min		
Lower Shaft		2190

## Mechanical Front Drive (M.F.D.)

### XL Tractors

Axle Type (Standard)	ZF APL 325
(Optional)	ZF APL 330
(Heavy Duty)	ZF APL 335

Transfer Gearbox Operation ..... Multiplate Clutch  
 Electrical/Hydraulic Disengagement  
 Engaged by Spring Pressure

### Non XL Tractors

Axle Type (Standard)	ZF APL 330
Transfer Gearbox Operation	Mechanical Dog Clutch

**585 SPECIFICATIONS****General**

Diesel Engine Model	.....	D 206
Number of Cylinders	.....	4
Firing Order	.....	1-3-4-2
Engine Speeds		
Rated	.....	2 300 r/min
Low Idle	.....	750 ± 50 r/min
Static Timing (BTDC)	.....	12 Degrees

	U.S Values	Metric Values
Stroke	4.38 in	111 mm
Bore	3.875 in	98.4 mm
Displacement	206 in <sup>3</sup>	3 382 cm <sup>3</sup>
Valve clearances (HOT)		
Inlet	0.012 in	0.30 mm
Exhaust	0.012 in	0.30 mm

**Fuel System**

Injection Nozzle Type	.....	DLLA 150S 836
Nozzle Holder Type	.....	KBEL 84S 4/13

**Lubrication System**

Crankcase Capacity (including filter)	16.2 UK pints	2.5 U.S gal	9.5 litre
Oil Pressure	40 to 60 psi		275 to 414 kPa

**Cooling System**

Cooling system capacity (including Heater)	24 UK pints	13.7 litre
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**Drawbar Heights**

XL Tractors		
Swinging Drawbar Top	15.75 in	400 mm
Automatic Hitch Drawbar	19.3 in	490 mm
Automatic Hitch Hook	6 in	406 mm
Non XL Tractors		
Swinging Drawbar Top	16 in	406 mm
Automatic Hitch Drawbar	18 in	451 mm
Automatic Hitch Hook	15 in	386 mm

**Hydraulic System**

Pump Output at Rated Engine Speed of 2300 r/min		
With 27 tooth drive gear	10.6 UK or 12.7 U.S gal min	48.5 litre min
With 23 tooth drive gear	12.6 UK or 15.1 U.S gal min	57.2 litre min
With 21 tooth drive gear	13.7 UK or 16.4 U.S gal min	62.5 litre min
With 20 tooth drive gear	14.4 UK or 17.3 U.S gal min	65.6 litre min
Lift capacity lower links horizontal		
With assistor ram	4 400 lb	2 000 kg
Through range of 27 in (680 mm)	5 250 lb	2 380 kg
Lower link length	3 600 lb	1 633 kg
Lower link length	33 in	839 mm

## Maximum Static Loadings

Axles, Off Road Operation	U.S Value	Metric Value
2WD Front Axle, at 1530mm (60 in) Tread	6172 lb	2800 kg
2WD Front Axle, at Maximum Tread	3527 lb	1600 kg
APL 325 MFD Axle, at 1694 mm (67 in) Tread	5732 lb	2600 kg
APL 325 MFD Axle, at Maximum Tread	4409 lb	2000 kg
APL 330 MFD Axle, at 1694 mm (67 in) Tread	5732 lb	2600 kg
APL 330 MFD Axle, at Maximum Tread	4409 lb	2000 kg
APL 335 MFD Axle, at 1694 mm (67 in) Tread	6084 lb	2760 kg
APL 335 MFD Axle, at Maximum Tread	4409 lb	2000 kg
Rear Axle, at 1530mm (60 in) Tread	11 023 lb	5000 kg
Rear Axle, at Maximum tread	7275 lb	3300 kg
<b>Drawbars</b>		
<b>Swinging Drawbar and Automatic Hitch</b>		
Drawbar	2000 lb	908 kg
Automatic Hitch Hook	4000 lb	1841 kg

## Maximum Permitted Weights

<b>For Road Operations</b>		
2WD Front Axle	3086 lb	1400 kg
MFD Axle	3527 lb	1600 kg
Rear Axle	10 582 lb	4800 kg
Total Tractor Weight	12 125 lb	5500 kg

## Power Take Off

<b>PTO r/min at rated engine speed</b>	
Upper shaft	580
Lower shaft	1050
<b>Engine Speed at 540 PTO r/min</b>	
Upper Shaft	2140
<b>Engine Speed at 1000 PTO r/min</b>	
Lower Shaft	2190

## Mechanical Front Drive (M.F.D.)

### XL Tractors

Axle Type (Standard)	ZF APL 325
(Optional)	ZF APL 330
(Heavy Duty)	ZF APL 335

Transfer Gearbox Operation ..... Multiplate Clutch  
 Electrical/Hydraulic Disengagement  
 Engaged by Spring Pressure

### Non XL Tractors

Axle Type (Standard)	ZF APL 330
Transfer Gearbox Operation	Mechanical Dog Clutch

**685 SPECIFICATIONS****General**

Diesel Engine Model	.....	D 239
Number of Cylinders	.....	4
Firing Order	.....	1-3-4-2
Engine Speeds		
Rated	.....	2300 r/min
Low Idle	.....	700 ± 50 r/min
Static Timing (BTDC)	.....	16 Degrees

	U.S Value	Metric Value
Bore	..... 3.875	..... 98 mm
Stroke	..... 5.06 in	..... 128.5 mm
Displacement	..... 239 in <sup>3</sup>	..... 3911 cm <sup>3</sup>
Valve Clearances (hot)		
Inlet	..... 0.012 in	..... 0.30 mm
Exhaust	..... 0.012 in	..... 0.30 mm

**Fuel System**

Injection Nozzle Type	.....	DLLA 150S 815
Nozzle Holder Type	.....	KBEL 84S 4/13

**Lubrication System**

Crank Case Capacity			
(including filter) <sup>1</sup>	..... 6.2 UK pints	2.5 U.S gal	9.5 litres
Oil Pressure	..... 40 to 60 psi	.....	275 to 414 kPa

**Cooling System**

Cooling system capacity		
(including Heater)	..... 24 pints	..... 13.7 litres

**Drawbar Heights**

Swinging Drawbar Top (XL Tractor)	..... 17 in	..... 428 mm
Swinging Drawbar Top (Non XL Tractor)	..... 15 in	..... 393 mm
Automatic Hitch Drawbar	..... 19.3 in	..... 490 mm
Automatic Hitch Hook	..... 16 in	..... 406 mm

**Hydraulic System**

Pump Output at Rated Engine Speed of 2300 r/min		
With 27 Tooth Drive Gear	..... 10.6 UK or 12.7 U.S gal min	..... 48.5 litre min
With 23 Tooth Drive Gear	..... 12.6 UK or 15.1 U.S gal min	..... 57.2 litre min
With 20 Tooth Drive Gear	..... 14.4 UK or 16.4 U.S gal min	..... 65.6 litre min
Lift capacity with lower links horizontal	..... 4400 lb	..... 2000 kg
With assistor ram	..... 5250 lb	..... 2380 kg
Through range of 27 in (680 mm)	..... 3600 lb	..... 1633 kg
Lower Link Length (XL Tractor)	..... 33 in	..... 839 mm
Lower Link Length (Non XL Tractor)	..... 32 in	..... 813 mm



**Maximum Static Loadings**

	U.S Value	Metric Value
Axles Off Road Operation		
2WD Front Axle, at 1530mm (60 in) Tread	6172 lb	2800 kg
2WD Front Axle, at Maximum Tread	3527 lb	1600 kg
330 MFD Axle, at 1694mm (67 in) Tread	5732 lb	2600 kg
330 MFD Axle, at Maximum tread	4409 lb	2000 kg
335 MFD Axle, at 1694mm (67 in) Tread	6084 lb	2760 kg
335 MFD Axle, at Maximum Tread	4409 lb	2000 kg
Rear Axle, at 1530mm (60 in) Tread	11 023 lb	5000 kg
Rear Axle, at Maximum Tread	7275 lb	3300 kg
Drawbars		
Swinging and Auto Hitch Drawbar	2000 lb	908 kg
Auto Hitch Hook	5000 lb	2270 kg

**Maximum Permitted Weights**

For Road Operations		
2 WD Front Axle	3086 lb	1400 kg
MFD Axle	3527 lb	1600 kg
Rear Axle	10 582 lb	4800 kg
Total Tractor Weight	12 125 lb	5500 kg

**Power Take Off**

PTO r/min at rated engine speed	
Upper Shaft	580
Lower Shaft	1050
Engine Speed at 540 PTO r/min	
Upper Shaft	2140
Engine Speed at 1000 PTO r/min	
Lower Shaft	2190

**Mechanical Front Drive (M.F.D.)**

Axle Type (Standard)	ZF APL 330
(Heavy Duty)	ZF APL 335
Transfer Gearbox Operation	Multiplate Clutch Electrical/Hydraulic Disengagement Engaged by Spring Pressure

**885 SPECIFICATIONS****General**

Diesel Engine Model	.....	D 268
Number of Cylinders	.....	4
Firing Order	.....	1-3-4-2
Engine Speeds		
Rated	.....	2400 r/min
Low Idle	.....	700 ± 50 r/min
Static Timing (BTDC)	.....	16 Degrees

	U.S Value	Metric Value
Bore	..... .3.937 in	..... 100 mm
Stroke	..... 5.51 in	..... 140 mm
Displacement	..... .268 in <sup>3</sup>	..... .4389 cm <sup>3</sup>
Valve Clearances (hot)		
Inlet	..... .0.012 in	..... .0.30 mm
Exhaust	..... 0.012 in	..... .0.30 mm

**Fuel System**

Injection Nozzle Type	.....	DLLA 150S 815
Nozzle Holder Type	.....	KBEL 84S 4/13

**Lubrication System**

Crankcase Capacity (including filter)	..... 16.2 UK pints	2.5 U.S gal	9.5 litre
Oil Pressure	..... .40 to 60 psi	.....	275 to 414 kPa

**Cooling System**

Cooling System Capacity (including Heater)	..... 24 UK pints	2.5 U.S gal	13.7 litre
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**Drawbar Heights**

Swinging Drawbar Top	..... 18 in	..... 454 mm
Automatic Hitch Drawbar	..... 20.7 in	..... 525 mm
Automatic Hitch Hook	..... 17.1 in	..... 434 mm

**Power Take Off**

PTO rev/min at Rated Engine Speed		
Upper Shaft	.....	606
Lower Shaft	.....	1096
Engine Speed at 540 PTO r/min		
Upper Shaft	.....	2140
Engine Speed at 1000 PTO r/min		
Lower Shaft	.....	2190

**Maximum Static Loadings**

	U.S Value	Metric Value
Axles Off Road Operations		
2WD Front Axle, at 1530 mm (60 in) Tread	6172 lb	2800 kg
2WD Front Axle, at Maximum Tread	3527 lb	1600 kg
APL330 MFD Axle, at 1694 mm (67 in) Tread	5732 lb	2600 kg
APL330 MFD Axle, at Maximum Tread	4409 lb	2000 kg
APL335 MFD Axle, at 1694 mm (67 in) Tread	6084 lb	2760 kg
APL335 MFD Axle, at Maximum Tread	4409 lb	2000 kg
Rear Axle, at 1530 mm (60 in) Tread	11 023 lb	5000 kg
Rear Axle, at Maximum Tread	7275 lb	3300 kg
Drawbars		
Swinging and Auto 2000 lb	908 kg	
Auto Hitch	5000 lb	2270 kg

**Maximum Permitted Weights**

For Road Operations		
Front Axle 2WD	3086 lb	1400 kg
Front Axle MFD	3527 lb	1600 kg
Rear Axle	10 582 lb	4800 kg
Total Tractor Weight	12 125 lb	5500 kg

**Hydraulic System**

Pump Output at Rated Engine Speed of 2400 r/min		
With 27 Tooth Drive Gear	11 UK or 13.2 U.S gal min	50.8 litre min
With 23 Tooth Drive Gear	13 UK or 15.6 U.S gal min	59.5 litre min
With 20 Tooth Drive Gear	15 UK or 18 U.S gal min	68.6 litre min
Lift Capacity with Lower links horizontal		
	4400 lb	2000 kg
With assister ram		
	5250 lb	2380 kg
Through range of 680 mm (27 in)		
	3600 lb	1633 kg
With assister ram		
	4800 lb	2180 kg
Lower link length (XL Tractor)	33 in	839 mm
Lower link length (Non XL Tractor)	32 in	813 mm

**Mechanical Front Drive (M.F.D.)**

Axle Type (Standard)	ZF APL 330
(Heavy Duty)	ZF APL 335
Transfer Gearbox Operation	Multiplate Clutch Electrical/Hydraulic Disengagement Engaged by Spring Pressure

## TRAVEL SPEEDS

### 385 2WD Tractor with AR Type Transmission

See Tractor Serial Numbers for type of transmission fitted. Speeds are calculated with engine operating at the rated speed of 2200 r/min.

To convert the speeds in the chart to speeds relevant to 540 PTO r/min (upper shaft) multiply by 0.880.

PS = Power Shift DD = Direct Drive

REAR TIRE SIZE		12.4-32 and 14.9-28		12.4-36	
RADIUS INDEX		640 mm (25.2 in)		690 mm (27.1 in)	
GEAR		PS	DD	PS	DD
LOW 1	K.P.H.	2.13	2.57	2.30	2.77
	M.P.H.	1.32	1.59	1.42	1.72
LOW 2	K.P.H.	2.93	3.54	3.16	3.82
	M.P.H.	1.82	2.19	1.96	2.37
LOW 3	K.P.H.	4.20	5.07	4.53	5.47
	M.P.H.	2.60	3.15	2.81	3.39
LOW 4	K.P.H.	5.69	6.86	6.13	7.40
	M.P.H.	3.53	4.26	3.80	4.59
HIGH 1	K.P.H.	6.93	8.36	7.47	9.01
	M.P.H.	4.30	5.19	4.64	5.59
HIGH 2	K.P.H.	9.52	11.48	10.26	12.38
	M.P.H.	5.91	7.13	6.37	7.69
HIGH 3	K.P.H.	13.65	16.47	14.72	17.76
	M.P.H.	8.48	10.23	9.14	11.03
HIGH 4	K.P.H.	18.46	22.27	19.90	24.01
	M.P.H.	11.47	13.83	12.36	14.91
REV 1	K.P.H.	3.20	3.86	3.45	4.16
	M.P.H.	1.98	2.39	2.14	2.58
REV 2	K.P.H.	4.40	5.31	4.74	5.72
	M.P.H.	2.73	1.43	2.94	3.55
REV 3	K.P.H.	6.31	7.61	6.80	8.20
	M.P.H.	3.92	4.72	4.22	5.95
REV 4	K.P.H.	8.53	10.29	9.20	11.09
	M.P.H.	5.30	6.39	5.71	6.89

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