

MecALAC

Backhoe Loaders
Sideshift



MecALAC



INSPIRING THE NEXT GENERATION

With almost 60 years' expertise in the design, development and manufacture of backhoe loaders, our world-renowned range is designed to deliver durability, versatility and productivity for the operator. Available in both centre mount and side shift variations, we have the perfect model for every application.

The dual functionality of our backhoe loaders combines the power of a wheel loader and the versatility of a compact excavator into one dynamic machine – productive, cost effective and flexible... enough to boost your bottom line!

Manufactured at our state-of-the-art production facility in the UK, we continue to innovate, setting new standards in compact construction.

KEY FEATURES

- High ground clearance to suit tough terrain
- Excellent operator visibility
- Ergonomically-designed controls
- Easy maintenance access
- Powerful hydraulics make light work of tough tasks
- Excellent lift capacity and bucket breakout force
- LED worklight for improved reliability and worksite illumination





THE TLB850: DESIGNED TO GET THE JOB DONE

Whether excavating, re-handling, transporting or driving, the TLB850 is an ideal addition to your backhoe fleet. Powered by a 70kw (94hp) charge air-cooled engine for smooth and efficient operation, the TLB850 balances power with efficiency for the perfect all-in-one machine solution.

Closed centre hydraulics ensure smooth, low effort control, making it ideally suited for both experienced and novice operators alike. Available with Stage IIIB (Tier 4 Interim) or Stage IIIA (Tier 3) engines, dependant on market, there's a perfect model for every application.



KEY MODEL DETAILS

Total operating weight (kg)	8230	Breakout force / Loader (daN)	4650
Overall width (mm)	2310	Lift capacity @ Max Height (kg)	3307
Turning circle (mm)	7900	Lift height / Loader (mm)	3615
Travel speed (km/h)	40	Max. reach (mm)	6670
Engine power (kW/hp)	70 / 94	Max. depth (mm)	5390
Pump Flow (l/min)	142	Tear-out force / Excavator (daN)	3540
Tearout force / Loader (daN)	4600	Break-out force / Excavator (daN)	6070



THE TLB870: EXCEPTIONAL COST EFFECTIVE PERFORMANCE

Modern, efficient and class-leading, the TLB870 has been specifically developed for the rental marketplace. Packed full of modern design features, the affordable loader is ideal for those looking towards a robust and reliable earthmoving solution.

The 55kw (74hp) Stage IIIB (Tier 4 final) engine meets emissions regulations without the use of DPFs or AdBlue, offering smooth power delivery and efficient operation. For non-compliant regions, a 70kw Stage IIIA (Tier 3) engine alternative can be specified.

An intelligent and efficient 'inloader' hydraulic system provides automatic control of the tandem gear pump to provide improvements in fuel efficiency and control, while best-in-class excavator dig depth, reach and dipper tear out finish an incredibly capable machine.



KEY MODEL DETAILS

Total operating weight (kg)	7695
Overall width (mm)	2310
Turning circle (mm)	7960
Travel speed (km/h)	39
Engine power (kW/hp)	55 / 74 (Stage IIIB)
Engine Power (kW/hp)	70 / 94 (Stage IIIA)
Hydraulic System	Open Centre
Pump Flow (l/min)	128

Tearout force / Loader (daN)	4600
Breakout force / Loader (daN)	4200
Lift capacity @ Max Height (kg)	3759
Lift height / Loader (mm)	3509
Max. reach (mm)	6995
Max. depth (mm)	5744
Tearout force / Excavator (daN)	4220
Breakout force / Excavator (daN)	6870



THE TLB890: EXTRA POWER, GREATER FLEXIBILITY

Designed for owner operators, the TLB890 delivers power, performance, an impressive reach and outstanding dig depth. Together, this ensures fast cycle times and greater operation economies.

With high breakout forces and lifting capabilities, the TLB890 backhoe loader is suited to a wide range of applications, including civil engineering, highway construction and maintenance, utilities and agriculture. Available with either a Stage IIIB (Tier 4 Interim) or Stage IIIA (Tier 3) 74.5kw (100hp) engine, the proven model retains a high residual value.



KEY MODEL DETAILS

Total operating weight (kg)	8775
Overall width (mm)	2386
Turning circle (mm)	7900
Travel speed (km/h)	40
Engine power (kW/hp)	74,5 / 100
Hydraulic System	Closed Centre
Pump Flow (l/min)	160
Tearout force / Loader (daN)	5110

Breakout force / Loader (daN)	5540
Lift capacity @ Max Height (kg)	3966
Lift height / Loader (mm)	3615
Max. reach (mm)	6950
Max. depth (mm)	5698
Tearout force / Excavator (daN)	4110
Breakout force / Excavator (daN)	6780



THE TLB990: EXCEPTIONAL COST EFFECTIVE PERFORMANCE

The TLB990 is designed for professionals who demand outstanding performance. Available with either a Stage IIIB (Tier 4 Interim) or Stage IIIA (Tier 3) 74.5kw (100hp) engine, our top-of-the-range loader is innovative, efficient and delivers impressive results.

Packed with new features and additions, including our four-wheel steering system and crab steer mode, the TLB990 has been centred around those in the driving seat, with productivity and ease of operation at the top of the priority list.



KEY MODEL DETAILS

Total operating weight (kg)	8765
Overall width (mm)	2386
Turning circle (mm)	7300
Travel speed (km/h)	39,5
Engine power (kW/hp)	74,5 / 100
Hydraulic System	Closed Centre
Pump Flow (l/min)	160
Tear-out force / Loader (daN)	5110

Break-out force / Loader (daN)	5540
Lift capacity @ Max Height (kg)	3966
Lift height / Loader (mm)	3671
Max. reach (mm)	6950
Max. depth (mm)	5640
Tearout force / Excavator (daN)	4110
Breakout force / Excavator (daN)	6780



THE RIGHT TOOLS FOR THE JOB

Alongside standard fittings, we offer a comprehensive range of attachments to make your backhoe the perfect tool for every job.

PALLET FORKS

- Safe working load at 500mm load centre – 2500kg
- Class 2B 100mm (4in) x 40mm (1.6in)
- Weight 228kg

HIGH-TIP BUCKET

- Heaped capacity of 0.97m³
- Dump height of 4100mm
- Weight 840kg

LOADER QUICK ATTACH

- Simple design
- Mechanical or hydraulic locking
- Picks up standard and 7-in-1 buckets

FARM FORK AND GRAPPLE

- 2290mm wide
- Perfect for handling manure and silage
- Can also be used in recycling applications

BROOM BUCKET

- Bucket capacity 0.58m³
- Max width 2750mm
- Max flow 76L/min
- Maximum pressure 207bar

7-IN-1 BUCKET

- Digging
- Loading
- Dozing
- Scraping
- Spreading
- Grabbing
- Lifting

HYDRAULIC BREAKER

- Powerful performance
- Max energy per blow 1100 Joules
- Blow rate 550-1100 per min
- Simple servicing

EXCAVATOR QUICK ATTACHES

- Hydraulic version enables bucket changing from the cab
- Picks up competitive buckets
- Mechanical version available



→ TECHNICAL DATA TLB850 STAGE IIIB/TIER 4I

BACKHOE DIMENSIONS*		Standard Dipper		Deep Dig Dipper	
		Retracted		Extended	
A	Dig depth	Maximum SAE	4371 mm [14'4"]	4371 mm [14'4"]	5390 mm [17'8"]
		2 ft Flat Bottom SAE	4324 mm [14'2"]	4324 mm [14'2"]	5344 mm [17'6"]
B	Reach – ground level to slew		5703 mm [18'9"]	5703 mm [18'9"]	6666 mm [21'10"]
C	Loading reach		2280 mm [7'6"]	2280 mm [7'6"]	3120 mm [10'3"]
D	Operating height		5211 mm [17'1"]	5211 mm [17'1"]	5794 mm [19'0"]
E	Loading height SAE		3615 mm [11'10"]	3635 mm [11'11"]	4215 mm [13'10"]
	Max dumping height		3465 mm [11'4"]	3465 mm [11'4"]	4044 mm [13'3"]
F	Straight wall dig depth		2685 mm [8'10"]	2685 mm [8'10"]	3635 mm [11'11"]
G	Bucket rotation degrees	Speed	194	196	196
		Power	164	166	166
Total sideshift			1178 mm [3'10"]	1178 mm [3'10"]	1178 mm [3'10"]
Stabiliser spread			2115 mm [6'11"]	2115 mm [6'11"]	2115 mm [6'11"]
Max. levelling angle degrees			8	8	8

*Includes standard 600mm HD bucket.

LOADER DIMENSIONS		Standard / 7in1 Bucket
N	Dump clearance – at 45°	2850 mm [9'4"]
O	Loader height	3369 mm [11'1"]
P	Hinge pin height	3615 mm [11'10"]
Q	Pin forward reach	315 mm [1'0"]
R	Reach at ground	1451 mm [4'9"]
S	Max. reach at full height	1186 mm [3'11"]
T	Reach at full height – at 45°	731 mm [2'5"]
U	Dig depth	156 mm [5"]
	Rollback at ground	50°
	Max. dump angle fully raised	47°
V	Overall operating height	4597 mm [15'0"]

BACKHOE PERFORMANCE		Standard Dipper		Deep Dig Dipper	
		Retracted		Extended	
		Standard Bucket HD Bucket			
Max Slew Torque kNm		25.32		25.32	
Dipper tearout kN [lbf] [SAE J49 Standard]		35.4 [7961] 35.4 [7961]		35.4 [7961] 35.4 [7961]	
Bucket tearout kN [lbf] [SAE J49 Standard]	Speed	52.9 [11897]		52.9 [11897] 52.9 [11897]	
	Power	-		- 60.1 [12516]	

LOADER PERFORMANCE	Standard Bucket	7 in 1 Bucket
Bucket breakout kN [lbf]	46.5 [10485]	44.8 [10097]
Arms breakout kN [lbf]	46.0 [10329]	42.3 [9597]
Lift capacity to full height kg [lb]	3307 [7291]	2977 [6563]

Loader specifications are stated in accordance with ISO 14397 and EN474 Part 4

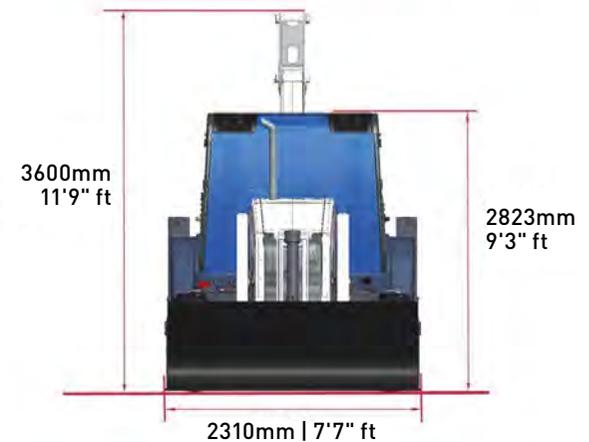


NOTE

METRIC MEASUREMENTS ARE THE CRITICAL VALUES

DIMENSIONS ARE TAKEN FROM T152021

- 1 Litre = 0.26417 US Liquid Gallons
- 1 Litre = 0.21997 Imperial Liquid Gallons



NOTE: IMAGE IS FOR REFERENCE PURPOSE ONLY

ENGINE

Perkins 1204E-E44TA	Wastegate turbocharger Charge air cooling Torque rise 32% Electronic fuel injection
Cylinders	4
Capacity	4.4 L (269 in ³)
Rated speed	2200 rpm
Gross power @ 2200 rpm cert.rating to UN/ECE R120	70 kW (93.8 hp*)
Derived net rating @ 2200 rpm to ISO/80/1269/EC	65.7 kW (88.1 hp*)
Max Torque @ 1400 rpm UN/ECE R120 80/1269/EC	400 Nm (295 lb.ft*) 377 Nm (278 lb.ft*)

*Nominal non-certified values.

ELECTRICAL SYSTEM

Wiring and connectors meet IP69 standard	
Maintenance free battery	
12 volt negative ground	
Battery isolator	
Jump start posts	
120 amp alternator	
Blade type fuses	
110 A/hr single battery with 920 CCA – EN Standard	
140 A/hr dual batteries with 1260 CCA – EN Standard	

CAPACITIES

	Ltrs (gals)
Fuel tank	140 (30.8)
Engine coolant	16.0 (3.5)
Engine oil (including filter)	8.5 (1.9)
Servo power synchro transmission	15.0 (3.3)
Synchro shuttle transmission	15.0 (3.3)
Rear axle (including final drives)	15.5 (3.4)
Front axle (including final drives)	9.5 (2.1)
Hydraulic tank	92.0 (20.4)

AXLES AND BRAKES

Outboard planetary final drives for easier servicing	
Foot operated differential lock with 100% lockup	
16° front axle oscillation to maintain maximum ground contact and traction	
High capacity outboard mounted wet disc brakes	
Self equalizing and self adjusting	
Selectable 2 or 4 wheel braking	

Axle Ratings	Max Static Loading	Max Dynamic Loading
Front kN (lb)	225 (50602)	90 (20259)
Rear kN (lb)	187.5 (42169)	75 (16867)

TURNING CIRCLES

	Over Tyres	Over Bucket
Without brakes m (ft)	7.9 (25'9")	10.6 (34'7")
With brakes m (ft)	7.0 (23'0")	9.7 (31'10")

TRANSMISSION

4 speed synchro shuttle gearbox				
Modulated forward and reverse clutch packs enable smooth direction changes				
De-clutch button on shift lever				
Direction control with neutral safety interlock				
Single stage torque converter with 3.01:1 stall ratio				

Tyres	Front:	12.5 x 18	12.5/80 x 18	12.5/80 x 18
	Rear:	18.4 x 26	16.9 x 28	16.9 x 28
Travel Speeds	Forward/Reverse Km/h (mph)			
1st	5.7 (3.6)	5.7 (3.5)	5.9 (3.7)	5.9 (3.7)
2nd	9.2 (5.7)	9.1 (5.7)	9.6 (5.9)	9.6 (5.9)
3rd	20.3 (12.6)	20.0 (12.4)	21.0 (13.0)	21.0 (13.0)
4th	40.5 (25.1)	40.0 (24.8)	41.0 (25.6)	41.0 (25.6)

4 speed servo power synchro				
Automatic and manual shifting				
Push button kickdown and kick up in 1st and 2nd gear				
Automatic shifting between 4th, 3rd and 2nd				
Single stage torque convertor with 3.01:1 stall ratio				

Tyres	Front:	12.5 x 18	12.5/80 x 18	12.5/80 x 18
	Rear:	18.4 x 26	16.9 x 28	16.9 x 28
Travel Speeds	Forward Km/h (mph)			
1st	5.7 (3.6)	5.7 (3.5)	5.9 (3.7)	5.9 (3.7)
2nd	9.2 (5.7)	9.1 (5.7)	9.6 (5.9)	9.6 (5.9)
3rd	20.3 (12.6)	20.0 (12.4)	21.0 (13.0)	21.0 (13.0)
4th	40.5 (25.1)	40.0 (24.8)	41.0 (25.6)	41.0 (25.6)
Travel Speeds	Reverse Km/h (mph)			
1st	5.7 (3.6)	5.7 (3.5)	5.9 (3.7)	5.9 (3.7)
2nd	9.2 (5.7)	9.1 (5.7)	9.6 (5.9)	9.6 (5.9)
3rd	20.3 (12.6)	20.0 (12.4)	21.0 (13.0)	21.0 (13.0)

HYDRAULIC SYSTEM

Tandem gear pumps with unloader valve	
Closed centre control valves	
Automatic or manually activated pump flows	
Power boost to match digging power and speed to application	
External oil level gauge	
Removable oil cooler	
125 micron suction strainer	
10 micron return line filter	
Main pump flow @ 2200 rpm L/min(gpm)	80 (17.7)
Secondary pump flow @ 2200 rpm L/min(gpm)	62 (13.7)
System main relief setting bar (psi)	250 (3625)
Unloader settings bar (psi)	207 (3000)

OPERATING WEIGHTS

Base Machine Weight*	8230 kg (18106 lbs)
Add/Delete	
7 in 1 multi-purpose	+ 330 kg (728 lbs)
7 in 1 multi-purpose fork kit	+ 150 kg (330 lbs)
Deep dig dipper	+ 265 kg (584 lbs)
Front counterweight	+ 42 kg (92 lbs)

*Base operating weight includes cab, standard loader bucket, standard dipper stick, 600 mm bucket, full fuel tank and 75 kg operator.

→ TECHNICAL DATA TLB850 STAGE IIIB/TIER 4I

TYRES

Front – Tractor Industrial 12.5/80 x 18 12 Ply Tubeless
Rear – Tractor Industrial 16.9 x 28 12 Ply Tubeless
Front – Super Traction Loader 12.5 x 18 10 Ply Tubeless
Rear – Tractor Industrial 16.9 x 30 14 Ply Tubeless
Front – Agricultural 12.5 x 18 10 Ply Tubeless
Rear – Agricultural 18.4 x 26 12 Ply Tubeless
Front – Industrial 16/70 x 20 14 Ply Tubeless
Rear – Industrial 16.9 x 30 14 Ply Tubeless
Front – Agricultural 405/70 x 20 14 Ply Tubeless
Rear – Agricultural 18.4 x 26 12 Ply Tubeless

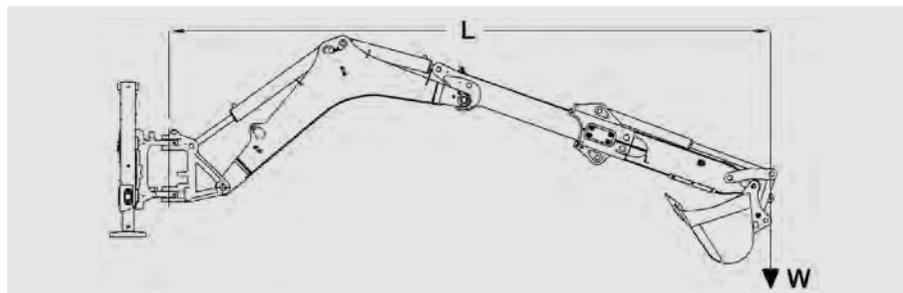
PALLET FORKS Standard / 7in1 Bucket

Fork length	1067 mm [3'6"]
Section width	80 mm [3"]
Assembly weight kg [lb]	150 [330]
Max. operating height	3097 mm [10'2"]
Reach at ground level	2660 mm [8'9"]
Reach at full height	2251 mm [7'5"]
S.W.L. at 500mm load centre kg [lb]	1000 [2204]

SIDESHIFT BACKHOE

(Load chart for Extending Dipperstick using boom cylinder for lifting)

	2.8 m	3.7 m	4.3 m	4.8 m	5.2 m	5.8 m
	1159kg	969kg	947kg	942kg	889kg	797kg
	1159kg	866kg	595kg	467kg	397kg	334kg
	889kg	537kg	366kg	281kg	234kg	195kg



Backhoe Configuration (Top to Bottom)

- Centrally located 'over end' lift capacity (within 45° either side of the machine centreline)
- Centrally located lift capacity through the full swing arc
- Fully offset lift capacity through the full swing arc

BACKHOE BUCKETS

	Width mm (ins)	Capacity m ³ (ft ³)	Weight Kg (lbs)
Standard trenching	305 [12]	0.074 [2.62]	99 [218]
	450 [18]	0.120 [4.25]	114 [251]
	600 [24]	0.177 [6.26]	136 [300]
Heavy duty	750 [30]	0.236 [8.32]	157 [346]
	900 [36]	0.296 [10.44]	178 [392]
	305 [12]	0.084 [2.96]	112 [247]
	450 [18]	0.140 [4.96]	128 [282]
	600 [24]	0.203 [7.15]	152 [335]
	750 [30]	0.266 [9.38]	174 [383]
Ditch cleaning	900 [36]	0.330 [11.66]	198 [436]
	1500 [60]	0.262 [9.2]	180 [397]
Trapezoidal	1800 [72]	0.317 [11.2]	204 [450]
	1200 [48]	0.258 [9.1]	146 [322]

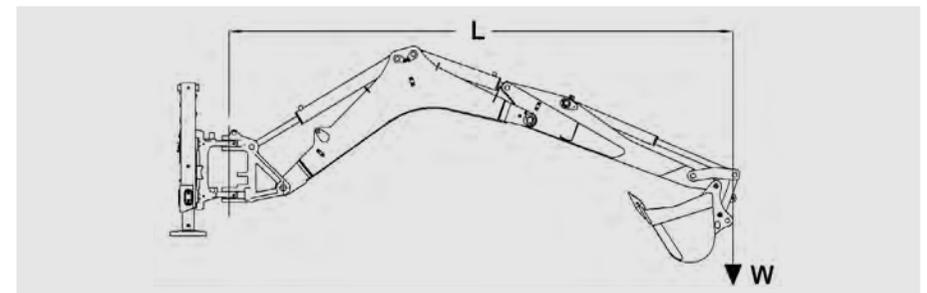
LOADER BUCKETS

	Standard Bucket	7 in 1 Bucket
Width	2311 mm [7'7"]	2311 mm [7'7"]
Capacity m ³ (yd ³)	1.0 [1.32]	1.0 [1.32]
Weight kg (lbs)	400 [880]	730 [1606]

SIDESHIFT BACKHOE

(Load Chart for Standard Dipperstick using boom cylinder for lifting)

	2.8 m	3.6 m	4.1 m	4.4 m	4.8 m
	1369kg	1335kg	1235kg	1130kg	1048kg
	1369kg	878kg	685kg	592kg	530kg
	877kg	577kg	457kg	398kg	360kg



Note

- Standard 600 mm [24"] bucket fitted, for larger buckets subtract difference in weight from stated lift capacity
- Figures stated are rated capacities, and are the lower of either the rated hydraulic lift capacity, or rated tipping load
- Figures in bold print are stability limited figures

Backhoe Loaders - Sideshift

→ STANDARD AND OPTIONAL EQUIPMENT

ENGINE (STAGE IIIB/TIER 4I)

Perkins 1204E-E44TA

- Electronic fuel injection
- Auto idle
- In line fuel filter
- Alternator and fan drive by polygroove belt with auto tensioner

Wastegate turbo and charge air cooled

Electric fuel pump

4 Glow plug starting aid

Horizontal spin on oil filter

Primary fuel filter with water separator

Vertical element secondary fuel filter

500 hour service period

Oil to water internal plate oil cooler

Engine gradeability fore/aft and side/side 30°

Anti-freeze rated to -37° C

Coolant expansion bottle

Gear driven water pump

Puller type 9 bladed cooling fan

Dual element Powercore air cleaner

ENGINE OPTIONS

Fan guard

DRIVE LINE

Synchro shuttle transmission 4F/4R speeds

Direction control with neutral safety interlock

Transmission de-clutch on gear and loader controls

Servo power synchro transmission 4F/3R speeds

Column mounted rotational control lever

Automatic shifting between 4th, 3rd and 2nd

Kick down 2/1 and Kick up 1/2

Torque convertor stall ratio 3.01:1

Removable transmission oil cooler

Vertical element oil filter

Foot operated electro/hydraulic differential lock

Outboard planetary final drive axles

Large capacity outboard oil immersed disc brakes

- 2 Kevlar friction discs (289 mm dia) per side
- Total friction area per side 1238 cm² (192 in²)

Brakes self adjusting and self equalising

Dual brake pedals with combined or independent use

Internal wet disc parking brake

- Max Parking Slope (unladen) 1:2
- Max Parking Slope (laden) 1:2.5

Hydrostatic steering with emergency manual operation

4WD standard

Selectable 2 and 4 wheel braking in all gears

Selectable 2 and 4WD

FRONT TYRE OPTIONS

Industrial 16/70 x 20 14 Ply Tubeless

Agricultural 405/70 x 20 14 Ply Tubeless

CAB AND CANOPY

ROPS/FOPS conform to ISO 3471/3449

Access from both sides

Self cleaning footsteps and large grab handles

Internal rear view mirror

Folding external rear view mirrors

2 cup holders

Coat hook

Tilt and telescopic steering wheel

Front and rear horn

Seat storage for operators manual

2" (51 mm) retractable seat belt

3 auxiliary 12 volt outlets

Cab with 2 door access

Partial door locking

Opening rear quarter windows

Full depth up and over rear window

Laminated windscreen

Tinted toughened safety glass

Front and rear screen washers and wipers

Standard fabric seat with mechanical suspension

Electronic rotary hand throttle incorporating auto idle

Heater (7.37 kW)

Lockable chilled storage box

Digital clock

Cell phone holder with power plug

Pre installation of wiring for radio

Internal noise level 78 dB(a)

12 audible and visual warning lamps

Engine hour meter

4 front and 4 rear LED worklights

3 gauges for engine oil temperature, fuel and rpm

2 external power sockets for beacon

CAB OPTIONS

Air conditioning (7.6 kW cooling)

Premium high back seat, heated with air suspension

3 in seat belt

Speedometer

LOADER

Mechanical - Hydraulic Anti-spill

Control lever with transmission and pump unload buttons

Single bucket cylinder

Bucket dump cylinder cushioning

Return to dig

Float position with positive hold

Bucket level indicator

Integral Loader arm safety bar

Standard bucket 1 m³ (1.32 yd³) with lifting eye

7 in 1 bucket 1 m³ (1.32 yd³) with lifting eye

Bucket teeth or bolt on reversible cutting edge

7 in 1 bucket control lever with dual function

OPTIONS

Pallet forks with safe working load of 1000 kgs

3rd hydraulic line with standard bucket

Hose burst valves

Ride control

Bucket tooth guard

Mechanical or hydraulic quick attach

BACKHOE

Curved style boom

Standard dipperstick

Outer slide "Deep Dig" dipperstick

Externally adjustable lubrication free wear pads (11)

Thumb cylinder mounting bracket incorporated

Replaceable serrated clamping plates

Electro/hydraulic dual transport lock

Externally adjustable stabiliser wear pads

SAE/ISO/diagonal 2 lever controls

Standard trenching buckets with reversible side cutters

OPTIONS

Stabiliser lock out valves

Boom and Dipper hose burst valves

Hydraulic and Mechanical quick attach

Two auxiliary circuits with single and double acting operation

HD buckets with power and speed positions

Object handling kit

Quick release rubber street pads

Pilot controls

Hydraulically operated thumb attachment

GENERAL POINTS

Heavy duty chassis construction

Lockable side mounted toolbox

Fully tilting engine hood

Front hard nose counterweight

Lifting eyes and tie downs (2 front and rear)

OPTIONS

Reverse warning alarm

Front fenders

2 extra front counterweights 42 kg (92 lbs) each

→ TECHNICAL DATA TLB870 TIER 4

BACKHOE DIMENSIONS*		Standard Dipper	Deep Dig Dipper	
			Retracted	Extended
A	Dig depth	Maximum SAE	4401 mm (14'5")	5744 mm (18'10")
		2 ft Flat Bottom SAE	4388 mm (14'4")	5731 mm (18'8")
B	Reach – ground level to slew		5725 mm (18'9")	6995 mm (22'11")
C	Loading reach		1740 mm (5'8")	2672 mm (8'9")
D	Operating height		5182 mm (17'0")	5782 mm (18'12")
E	Loading height SAE		3963 mm (13'0")	4939 mm (16'2")
	Max dumping height		3884 mm (12'9")	4859 mm (15'11")
F	Straight wall dig depth		2557 mm (8'5")	3714 mm (12'2")
G	Bucket rotation degrees	Speed	194	194
	Stabiliser spread		2290 mm (7'6")	2290 mm (7'6")
	Max. levelling angle degrees		6.2	6.2

*Includes standard 600mm HD bucket.

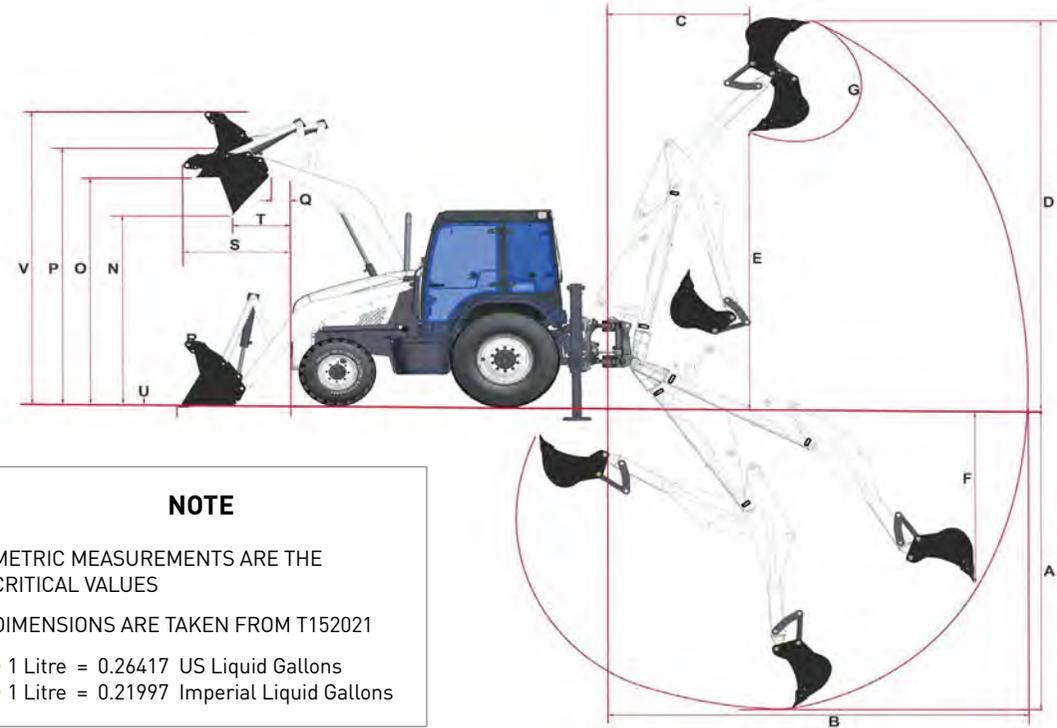
LOADER DIMENSIONS		Standard / 7in1 Bucket
N	Dump clearance – at 45°	2722 mm (8'11")
O	Loader height	3262 mm (10'8")
P	Hinge pin height	3509 mm (11'6")
Q	Pin forward reach	385 mm (1'3")
R	Reach at ground	1454 mm (4'9")
S	Max. reach at full height	1214 mm (3'12")
T	Reach at full height – at 45°	732 mm (2'5")
	Dig depth	134 mm (0'5")
U	Rollback at ground	42.4°
	Max. dump angle fully raised	49.6°
V	Overall operating height	4412 mm (14'6")

BACKHOE PERFORMANCE		Standard Dipper		Deep Dig Dipper	
				Retracted	Extended
		Standard Bucket HD Bucket			
	Max slew torque kNm (lbf-ft)	20.7 (15267)		20.7 (15267)	20.7 (15267)
	Dipper tearout kN (lbf) (SAE J49 Standard)	42.2 (9487) 42.2 (9487)	42.2 (9487) 42.2 (9487)	28.7 (6452) 28.7 (6452)	28.7 (6452) 28.7 (6452)
	Bucket tearout kN (lbf)	60 (13489) 60 (13489)	60 (13489) 60 (13489)	47 (10566) 47 (10566)	47 (10566) 47 (10566)
	Speed	N/A	N/A	54 (12140) 54 (12140)	54 (12140) 54 (12140)
	Power	68.7 (15444)	68.7 (15444)	68.7 (15444)	68.7 (15444)

LOADER PERFORMANCE		Standard Bucket
	Bucket breakout* kN (lbf)	42 (9441.98)
	Arms breakout* kN (lbf)	46(10341.2)
	Lift capacity to full height** kN (lbf)	3759.34 kg (8288)
	Rated operating capacity** kN (lbs)	2813.55 kg (6203)

*Loader specifications are stated in accordance with ISO 14397 and EN474 Part 4.

**Based on basic machine configuration; cab, standard loader bucket, standard dipper stick, 24 in | 600 mm bucket, full fuel tank.

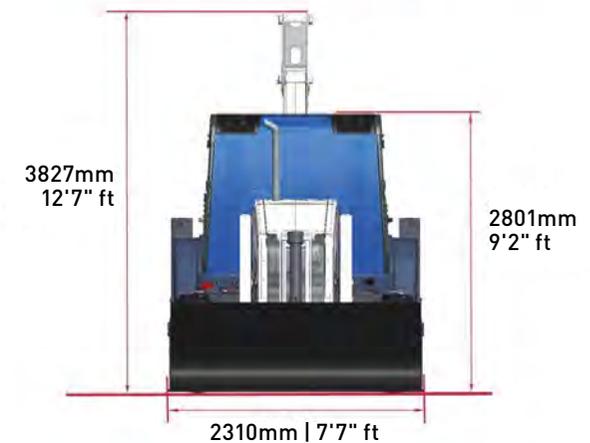


NOTE

METRIC MEASUREMENTS ARE THE CRITICAL VALUES

DIMENSIONS ARE TAKEN FROM T152021

- 1 Litre = 0.26417 US Liquid Gallons
- 1 Litre = 0.21997 Imperial Liquid Gallons



NOTE: IMAGE IS FOR REFERENCE PURPOSE ONLY

ENGINE

Deutz TCD 3.6 L4 (T4F)	Torque Rise 63% Electronic fuel injection
Cylinders	4
Capacity	3.6 L (220 in ³)
Rated speed	2200 rpm
Gross power @ 2200rpm Cert. rating to ISO 14396:2002	55.4 kW (74.3 hp)
Derived net rating @ 2200 rpm	51.9 kW* (69.6 hp*)
Max Torque @ 1400 rpm ISO 14396:2002	390 Nm (287.6 lbf)

*Nominal non-certified values.

ELECTRICAL SYSTEM

External wiring and connectors meet IP69k standard
Maintenance free battery
12 volt negative ground
Battery isolator
95 amp alternator
Blade type fuses
100 A/hr single battery with 830 CCA-EN Standard

CAPACITIES

	Ltrs (gals US / gals)
Fuel tank	140 (30.8 / 37.0)
Engine coolant	17 (4.5 / 3.7)
Engine oil (including filter)	8 (2.1 / 1.8)
Synchro shuttle transmission	20 (5.3 / 4.4)
Rear axle (including final drives)	15.5 (4.1 / 3.4)
Front axle (including final drives)	9.1 (2.4 / 2.0)
Hydraulic tank	52 (13.7 / 11.4)

AXLES AND BRAKES

Outboard planetary drives for easier servicing
Foot operated differential lock with 100% lockup
16° front axle oscillation to maintain maximum ground contact to aid traction
Power boosted inboard wet disc brakes
Self equalizing and self adjusting brakes
Selectable 2 or 4 wheel braking

Axle Ratings	Max Static Loading	Max Dynamic Loading
Front kN (lbf)	225 (50582)	90 (20233)
Rear kN (lbf)	187.5 (42152)	75 (16861)

TURNING CIRCLES

	Over Tyres	Over Bucket
Without brakes m (ft)	7.96 (26'11")	10.86 (35'8")
With brakes m (ft)	7.26 (23'10")	10.07 (33'0")

TRANSMISSION

4 Speed synchro shuttle gearbox	
Modulated forward and reverse clutch packs enable smooth direction changes	
De-clutch button on gear lever	
Direction control with neutral safety interlock	
Single stage torque converter with 3:01:1 stall ratio	
Tyres	Front: 12.5/80 x 18 12 PR TR-09 IND Rear: 16.9 x 28 12 PR TI-06 IND
Travel Speeds	Forward/Reverse Km/h (mph)
1st	5.8 (4)
2nd	9.3 (6)
3rd	19.9 (12)
4th	37.6 (23)

HYDRAULIC SYSTEM

Tandem gear pumps with inloader valve	
Open centre valves	
External oil level gauge	
125 micron suction strainer	
10 micron return line filter	
10 micron filler breather	
Main pump flow @ 2200 rpm L/min(gpm US / gpm)	83 (22 / 18)
Secondary pump flow @ 2200 rpm L/min(gpm US / gpm)	45 (12 / 10)
System main relief setting bar (psi)	250 (3626)

OPERATING WEIGHTS

Base Machine Weight*	7695 kg (16965 lbs)
Add/Delete	
Deep dig dipper	+ 217 kg (478 lbs)
ROPS frame	- 128 kg (282 lbs)
7 in 1 multi-purpose	+ 330 kg (728 lbs)
7 in 1 multi-purpose fork kit	+ 150 kg (330 lbs)
Front counterweight	+ 42 kg (92 lbs)

*Base operating weight includes cab, standard loader bucket, standard dipper sticker, 24 in | 600 mm bucket, full fuel tank, 75 kg operator.

→ TECHNICAL DATA TLB870 TIER 4

TYRES

Front – 16/70-20 14PR – Semi-industrial
Rear – 16.9-30 14PR – Semi-industrial

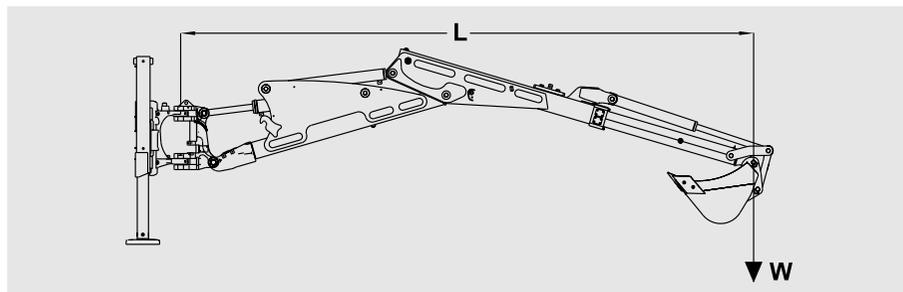
PALLET FORKS

	Standard / 7in1 Bucket
Fork length	1067 mm [3'6"]
Section width	80 mm [3"]
Assembly weight kg (lb)	150 (330)
Max. operating height	3097 mm [10'2"]
Reach at ground level	2660 mm [8'9"]
Reach at full height	2251 mm [7'5"]
S.W.L. at 500mm load centre kg (lb)	1000 (2204)

SIDESHIFT BACKHOE

(Load chart for Extending Dipperstick using boom cylinder for lifting)

	2.8m	4.1 m	4.7 m	5.2 m	5.8 m	6.1 m
	1269kg	1163kg	829kg	846kg	743kg	578kg
	1076kg	1163kg	829kg	334kg	265kg	562kg
	801kg	974kg	762kg	610kg	524kg	416kg



Backhoe Configuration (Top to Bottom)

- Centrally located 'over end' lift capacity (within 45° either side of the machine centreline)
- Centrally located lift capacity through the full swing arc
- Fully offset lift capacity through the full swing arc

BACKHOE BUCKETS

	Width mm (ins)	Capacity m ³ (ft ³)	Weight Kg (lbs)
Standard trenching	305 (12)	0.074 (2.62)	99 (218)
	450 (18)	0.120 (4.25)	114 (251)
	600 (24)	0.177 (6.26)	136 (300)
Heavy duty	750 (30)	0.236 (8.32)	157 (346)
	900 (36)	0.296 (10.44)	178 (392)
	305 (12)	0.084 (2.96)	112 (247)
	450 (18)	0.140 (4.96)	128 (282)
	600 (24)	0.203 (7.15)	152 (335)
	750 (30)	0.266 (9.38)	174 (383)
Ditch cleaning	900 (36)	0.330 (11.66)	198 (436)
	1500 (60)	0.262 (9.2)	180 (397)
	1800 (72)	0.317 (11.2)	204 (450)
Trapezoidal	1200 (48)	0.258 (9.1)	146 (322)

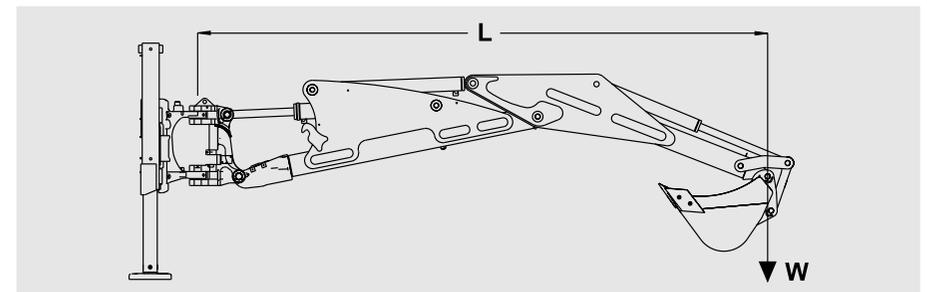
LOADER BUCKETS

	Standard Bucket	7 in 1 Bucket
Width	2311 mm [7'7"]	2311 mm [7'7"]
Capacity m ³ (yd ³)	1.0 (1.32)	1.0 (1.32)
Weight kg (lbs)	400 (880)	730 (1606)

SIDESHIFT BACKHOE

(Load Chart for Standard Dipperstick using boom cylinder for lifting)

	3.2 m	3.8 m	4.3 m	4.6 m	5.0 m
	1117kg	1319kg	1153kg	1058kg	979kg
	1151kg	1335kg	1207kg	1067kg	956kg
	803kg	981kg	819kg	732kg	665kg



Note

- Standard 600 mm [24"] bucket fitted, for larger buckets subtract difference in weight from stated lift capacity
- Figures stated are rated capacities, and are the lower of either the rated hydraulic lift capacity, or rated tipping load
- Figures in bold print are stability limited figures

→ STANDARD AND OPTIONAL EQUIPMENT

ENGINE

Deutz 3.6TCD L4 (Tier 4 Final)
Diesel oxidation catalyst (DOC)
Wastegate turbo and charge air cooled
Electric fuel pump
Common rail fuel injection
4 glow plug starting aid
Horizontal spin on oil filter
Primary fuel filter with water separator
Vertical element secondary fuel filter
500hr service period
Oil to air/water plate type oil cooler
Engine gradeability fore/aft and side/side of 30°
Anti-freeze rated to -37°C
Coolant Header Tank
Alternator, Fan and water pump drive by Multi V Belt
Puller type 6 blade cooling fan
Dual element powercore air cleaner
Stainless steel exhaust stack

DRIVE LINE

Synchro shuttle transmission 4F/4R speeds
Direction control with neutral safety interlock
Transmission de-clutch on gear and loader controls
Torque converter stall ratio 3.01:1
Easy clean transmission oil cooler
Vertical element oil filter
Foot operated electro/hydraulic differential lock
Outboard planetary final drive axles
Large capacity outboard oil immersed disc brakes - 3 kevlar friction discs per side
Brakes self adjusting and self equalising
Dual brake pedals with combined or independent use
Internal wet disc parking brake - max parking slope (unladen) 1:2 - Laden 1:2.5
Hydrostatic steering with emergency manual operation
4wd standard
Selectable 2 and 4 wheel braking in all gears
Selectable 2 and 4wd

CAB AND CANOPY

Cab with 2 door access
ROPS/FOPS conform to ISO3471/3449
Access from both sides
Self cleaning footsteps and large grab handles
Internal rear view mirror
Folding external rear view mirrors
2 cup holders
Coat hook
Tilt adjustable steering wheel
Side console mounted horn switch
Seat storage for operators manual
2in (51mm) retractable seat belt
1 auxiliary 12 volt outlet
Opening rear quarter windows with internal operation
Full depth up and over rear window
Laminated windscreen
Tinted toughened safety glass
Front and rear screen washer and wipers
Fabric seat with mechanical suspension
Cab heater (7.37kw)
Front side lights with direction indicators
Internal noise level 78dB (a)
Digital gauge for warning lights, fuel level, engine temperature, RPM and machine hours.
4 front and 4 rear worklights
2 external power points for beacons

CAB OPTIONS

3inch seat belt
Steering wheel spinner
Air conditioning (7.6kw cooling)

LOADER

Hydro-Mechanical Self leveling
Control lever with transmission disconnect button
Single bucket cylinder
Bucket cylinder cushioning
Return to dig
Float position with positive hold
Bucket level indicator
Integral loader arm safety bar
Standard 1m³ bucket with lifting eye
Bucket teeth or bolt on reversible cutting edge

OPTIONS

7in1 1m³ bucket with lifting eye
3rd hydraulic line with standard bucket
Pallet forks with safe working load of 1000kg
Ride control
Loader bucket return to dig
Bucket tooth guard
Hose burst valves
Mechanical Quick Attach

BACKHOE

Straight Style Boom
Standard dippestick
Inner slide "deep dig" dipperstick
Externally adjustable lubrication free wear pads
Dual transport lock - Cable operated
Servo Excavator Controls
ISO/SAE pattern change switch

OPTIONS

Mechanical quick attach
Auxiliary hydraulics with single and double acting operation
Stab leg lock out valves
Boom and Dipper hose burst valves
Object Handling Kit
Standard trenching buckets with reversible side cutters
Quick release rubber street pads

GENERAL POINTS

Heavy duty chassis construction
Lockable side mounted toolbox
Fully tilting engine hood
Lifting eyes and tie downs (2 front and rear)
18" front and 28" rear Mitas Tyres
Tandem gear pump with 'Inloader' hydraulic system

OPTIONS

Front Fenders
Cold start kit
Reverse Alarm
Front hard nose counterweight

→ TECHNICAL DATA TLB890 STAGE IIIB/TIER 4I

BACKHOE DIMENSIONS*		Standard Dipper		Deep Dig Dipper	
		Retracted		Extended	
A	Dig depth	4498 mm [14'9"]	4498 mm [14'9"]	5698 mm [18'8"]	5698 mm [18'8"]
	Maximum SAE 2 ft Flat Bottom SAE	4448 mm [14'7"]	4448 mm [14'7"]	5612 mm [18'5"]	5612 mm [18'5"]
B	Reach – ground level to slew	5877 mm [19'3"]	5877 mm [19'3"]	6950 mm [22'10"]	6950 mm [22'10"]
C	Loading reach	2274 mm [7'6"]	2274 mm [7'6"]	3293 mm [10'10"]	3293 mm [10'10"]
D	Operating height	5509 mm [18'1"]	5509 mm [18'1"]	6143 mm [20'2"]	6143 mm [20'2"]
E	Loading height SAE	3855 mm [12'8"]	3855 mm [12'8"]	4489 mm [14'9"]	4489 mm [14'9"]
	Max dumping height	3791 mm [12'5"]	3791 mm [12'5"]	4424 mm [14'6"]	4424 mm [14'6"]
F	Bucket rotation degrees	Speed	197	197	197
		Power	166	166	166
Total sideshift		1178 mm [3'10"]	1178 mm [3'10"]	1178 mm [3'10"]	1178 mm [3'10"]
Stabiliser spread		2115 mm [6'11"]	2115 mm [6'11"]	2115 mm [6'11"]	2115 mm [6'11"]
Max. levelling angle degrees		8	8	8	8

LOADER DIMENSIONS		Standard / 7in1 Bucket	
N	Dump clearance – at 45°	2850 mm [9'4"]	
O	Loader height	3369 mm [11'1"]	
P	Hinge pin height	3615 mm [11'10"]	
Q	Pin forward reach	315 mm [1'0"]	
R	Reach at ground	1451 mm [4'9"]	
S	Max. reach at full height	1186 mm [3'11"]	
T	Reach at full height – at 45°	731 mm [2'5"]	
U	Dig depth	156 mm [6"]	
	Rollback at ground	50°	
V	Max. dump angle fully raised	47°	
	Overall operating height	4682 mm [15'4"]	

BACKHOE PERFORMANCE		Standard Dipper		Deep Dig Dipper	
		Retracted		Extended	
		Standard Bucket HD Bucket	Standard Bucket HD Bucket	Standard Bucket HD Bucket	Standard Bucket HD Bucket
Max Slew Torque kNm		27.8		27.8	
Dipper tearout kN (lbf) (SAE J49 Standard)		41.1 (9240) 41.1 (9240)		41.1 (9240) 41.1 (9240)	
Bucket tearout kN (lbf) (SAE J49 Standard)		Speed Power	60.3 (13556) 60.3 (13556) – 67.8 (15242)	60.3 (13556) 60.3 (13556) – 67.8 (15242)	60.3 (13556) 60.3 (13556) – 67.8 (15242)

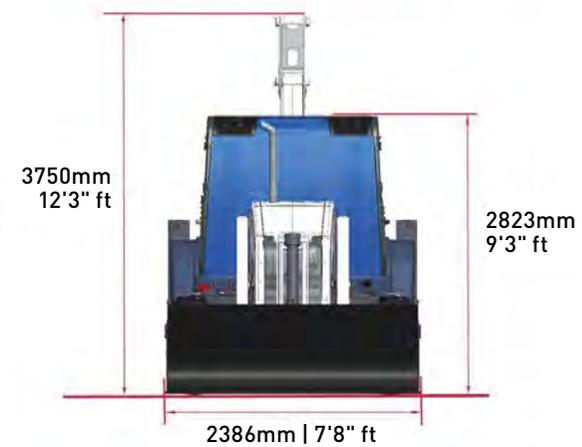
LOADER PERFORMANCE		Standard Bucket		7 in 1 Bucket	
Bucket breakout kN (lbf)		55.4 (12454)		53.7 (12072)	
Arms breakout kN (lbf)		51.1 (11487)		47.8 (10746)	
Rated operating capacity (ISO 14397) kg (lb)		3503 (7722)		3166 (6980)	
Full height kg (lb)		3966 (8744)		3629 (8000)	

Loader specifications are stated in accordance with ISO 14397 and EN474 Part 4



NOTE
METRIC MEASUREMENTS ARE THE CRITICAL VALUES
DIMENSIONS ARE TAKEN FROM T152021

- 1 Litre = 0.26417 US Liquid Gallons
- 1 Litre = 0.21997 Imperial Liquid Gallons



NOTE: IMAGE IS FOR REFERENCE PURPOSE ONLY

ENGINE

Perkins 1204E-E44TA	Wastegate turbocharger Charge air cooling Torque rise 32% Electronic fuel injection
Cylinders	4
Capacity	4.4 L (269 in ³)
Rated speed	2200 rpm
Gross power @ 2200 rpm cert. rating to UN/ECE R120	74.5 kW (100 hp*)
Derived net rating @ 2200 rpm to ISO/80/1269/EC	69.9 kW (93.7 hp*)
Max Torque @ 1400 rpm UN/ECE R120 80/1269/EC	450 Nm (332 lb.ft*) 423 Nm (312 lb.ft*)

*Nominal non-certified values.

ELECTRICAL SYSTEM

Wiring and connectors meet IP69 standard	
Maintenance free battery	
12 volt negative ground	
Battery isolator	
Jump start posts	
120 amp alternator	
Blade type fuses	
110 A/hr single battery with 920 CCA – EN Standard	
140 A/hr dual batteries with 1260 CCA – EN Standard	

CAPACITIES

	Ltrs (gals)
Fuel tank	140 (30.8)
Engine coolant	16.0 (3.5)
Engine oil (including filter)	8.5 (1.9)
Servo power synchro transmission	15.0 (3.3)
Synchro shuttle transmission	15.0 (3.3)
Rear axle (including final drives)	15.5 (3.4)
Front axle (including final drives)	9.5 (2.1)
Hydraulic tank	92.0 (20.4)

AXLES AND BRAKES

Outboard planetary final drives for easier servicing	
Foot operated differential lock with 100% lockup	
16° front axle oscillation to maintain maximum ground contact and traction	
High capacity outboard mounted wet disc brakes	
Self equalizing and self adjusting	
Internal wet disc parking brake	
Selectable 2 or 4 wheel braking	

Axle Ratings	Max Static Loading	Max Dynamic Loading
Front kN (lb)	225 (50582)	90 (20259)
Rear kN (lb)	187.5 (42152)	75 (16867)

TURNING CIRCLES

	Over Tyres	Over Bucket
Without brakes m (ft)	7.9 (25'9")	10.6 (34'7")
With brakes m (ft)	7.0 (23'0")	9.7 (31'10")

TRANSMISSION

4 speed synchro shuttle gearbox			
Modulated forward and reverse clutch packs enable smooth direction changes			
De-clutch button on shift lever			
Direction control with neutral safety interlock			
Single stage torque converter with 3.01:1 stall ratio			

Tyres	Front:	16/70 x 12	16/70 x 12	16/70 x 12
	Rear:	18.4 x 26	16.9 x 28	16.9 x 30
Travel Speeds	Forward/Reverse Km/h (mph)			
1st	5.7 (3.6)	5.7 (3.5)	5.9 (3.7)	5.9 (3.7)
2nd	9.2 (5.7)	9.1 (5.7)	9.6 (5.9)	9.6 (5.9)
3rd	20.3 (12.6)	20.0 (12.4)	21.0 (13.0)	21.0 (13.0)
4th	40.5 (25.1)	40.0 (24.8)	41.0 (25.6)	41.0 (25.6)

4 speed servo power synchro			
Automatic and manual shifting			
Push button kickdown and kick up in 1st and 2nd gear			
Automatic shifting between 4th, 3rd and 2nd			
Single stage torque convertor with 3.01:1 stall ratio			

Tyres	Front:	16/70 x 12	116/70 x 12	16/70 x 12
	Rear:	18.4 x 26	18.4 x 26	16.9 x 30
Travel Speeds	Forward Km/h (mph)			
1st	5.7 (3.6)	5.7 (3.5)	5.9 (3.7)	5.9 (3.7)
2nd	9.2 (5.7)	9.1 (5.7)	9.6 (5.9)	9.6 (5.9)
3rd	20.3 (12.6)	20.0 (12.4)	21.0 (13.0)	21.0 (13.0)
4th	40.5 (25.1)	40.0 (24.8)	41.0 (25.6)	41.0 (25.6)
Travel Speeds	Reverse Km/h (mph)			
1st	5.7 (3.6)	5.7 (3.5)	5.9 (3.7)	5.9 (3.7)
2nd	9.2 (5.7)	9.1 (5.7)	9.6 (5.9)	9.6 (5.9)
3rd	20.3 (12.6)	20.0 (12.4)	21.0 (13.0)	21.0 (13.0)

HYDRAULIC SYSTEM

Tandem Gear Pumps with unloader valve on mechanical excavator control	
Variable piston pump on servo excavator control	
Closed centre control valves	
Automatic or manually activated pump flows	
Power Boost to match digging power and speed to application	
External oil level gauge	
Removable oil cooler	
125 micron suction strainer	
10 micron return line filter	
Main pump flow @ 2200 rpm L/min(gpm)	80 (17.7)
Secondary pump flow @ 2200 rpm L/min(gpm)	80 (17.7)
Single variable piston pump @ 2200 rpm L/min(gpm)	164 (36)
System main relief setting bar (psi)	250 (3625)
Unloader settings bar (psi)	207 (3000)

OPERATING WEIGHTS

Base Machine Weight*	8433 kg (18592 lbs)
Add/Delete	
7 in 1 multi-purpose (1.2 m ³)	+ 337 kg (743 lbs)
7 in 1 multi-purpose fork kit	+ 150 kg (330 lbs)
Deep dig dipper	+ 235 kg (518 lbs)

*Base operating weight includes cab, standard loader bucket, standard dipper stick, 600 mm bucket, full fuel tank and 75 kg operator.

→ TECHNICAL DATA TLB890 STAGE IIIB/TIER 4I

TYRES

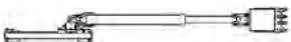
Front – 16/70-20 14PR – Semi-industrial
 Rear – 16.9-30 14PR – Semi-industrial
 Front – 405/70 20 14PR – Semi-agricultural
 Rear – 18.4-26 12PR – Semi-agricultural
 Front – 400/70-20 TL 149A8 – Multi-purpose
 Rear – 420/80-30 TL 155A8 – Multi-purpose
 Front – 400/70-20 TL 149A8 – Multi-purpose
 Rear – 480/80-26 TL 160A8 – Multi-purpose
 Front – 400/70-20 TL 149A8 – Multi-purpose
 Rear – 440/80-28 TL 156A8 – Multi-purpose

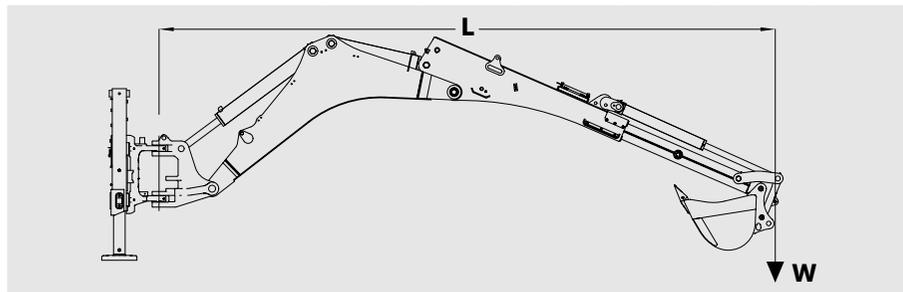
PALLET FORKS

	Standard / 7in1 Bucket
Fork length	1067 mm [3'6"]
Section width	80 mm [3"]
Assembly weight kg [lb]	150 [330]
Max. operating height	3097 mm [10'2"]
Reach at ground level	2660 mm [8'9"]
Reach at full height	2251 mm [7'5"]
S.W.L. at 500mm load centre kg [lb]	1000 [2204]

SIDESHIFT BACKHOE

(Load chart for Extending Dipperstick using boom cylinder for lifting)

	3.2 m	4.1 m	4.7 m	5.2 m	5.8 m	6.1 m
	1106kg	1033kg	931kg	846kg	743kg	717kg
	1038kg	578kg	417kg	334kg	265kg	255kg
	442kg	213kg	127kg	83kg	50kg	48kg



Backhoe Configuration (Top to Bottom)

- Centrally located 'over end' lift capacity (within 45° either side of the machine centreline)
- Centrally located lift capacity through the full swing arc
- Fully offset lift capacity through the full swing arc

BACKHOE BUCKETS

	Width mm (ins)	Capacity m ³ (ft ³)	Weight Kg (lbs)
Standard trenching	305 [12]	0.074 [2.62]	99 [218]
	450 [18]	0.120 [4.25]	114 [251]
	600 [24]	0.177 [6.26]	136 [300]
Heavy duty	750 [30]	0.236 [8.32]	157 [346]
	900 [36]	0.296 [10.44]	178 [392]
	305 [12]	0.084 [2.96]	112 [247]
	450 [18]	0.140 [4.96]	128 [282]
	600 [24]	0.203 [7.15]	152 [335]
	750 [30]	0.266 [9.38]	174 [383]
Ditch cleaning	900 [36]	0.330 [11.66]	198 [436]
	1500 [60]	0.262 [9.2]	180 [397]
Trapezoidal	1800 [72]	0.317 [11.2]	204 [450]
	1200 [48]	0.258 [9.1]	146 [322]

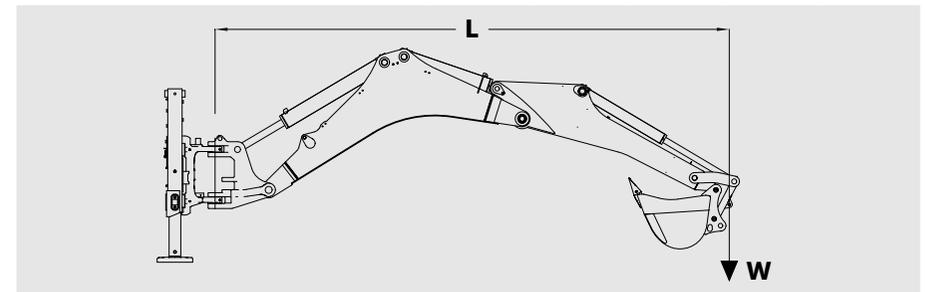
LOADER BUCKETS

	Standard Bucket	7 in 1 Bucket
Width	2386 mm [7'8"]	2386 mm [7'8"]
Capacity m ³ (yd ³)	1.2 [1.57]	1.2 [1.57]
Weight kg (lbs)	430 [948]	430 [948]

SIDESHIFT BACKHOE

(Load Chart for Standard Dipperstick using boom cylinder for lifting)

	3.2 m	3.8 m	4.3 m	4.6 m	5.0 m
	1368kg	1366kg	1221kg	1126kg	1052kg
	1214kg	820kg	658kg	576kg	524kg
	614kg	414kg	327kg	284kg	262kg



Note

- Standard 600 mm [24"] bucket fitted, for larger buckets subtract difference in weight from stated lift capacity
- Figures stated are rated capacities, and are the lower of either the rated hydraulic lift capacity, or rated tipping load
- Figures in bold print are stability limited figures

→ STANDARD AND OPTIONAL EQUIPMENT

ENGINE (STAGE IIIB/TIER 4I)

Perkins 1204E-E44TA
 Wastegate turbo and charge air cooled
 Electric fuel pump
 Electronic fuel injection
 Auto Idle
 4 Glow plug starting aid
 Horizontal spin on oil filter
 Primary fuel filter with water separator
 Vertical element secondary fuel filter
 In line fuel filter
 500 hour service period
 Oil to water internal plate oil cooler
 Engine gradeability fore/aft and side/side 30°
 Anti-freeze rated to -37° C
 Coolant header tank
 Alternator and fan drive by polygroove belt with auto tensioner
 Gear driven water pump
 Puller type 9 bladed cooling fan
 Dual element Powercore air cleaner
 Stainless steel after treatment and exhaust stack

ENGINE OPTIONS

Fan guard

DRIVE LINE

Synchro shuttle transmission 4F/4R speeds
 Direction control with neutral safety interlock
 Transmission de-clutch on gear and loader controls
 Servo power synchro transmission 4F/3R speeds
 Column mounted rotational control lever
 Automatic shifting between 4th, 3rd and 2nd
 Kick down 2/1 and Kick up 1/2
 Torque Converter stall ratio 3.01:1
 Removable transmission oil cooler
 Vertical element oil filter
 Foot operated electro/hydraulic differential lock
 Outboard Planetary final drive axles
 Large capacity outboard oil immersed disc brakes

- 2 Kevlar friction discs (289 mm dia) per side
- Total friction area per side 1238 cm² (192 in²)

Brakes self adjusting and self equalising

Dual brake pedals with combined or independent use

Internal wet disc parking brake

- Max Parking Slope (unladen) 1:2

- Max Parking Slope (laden) 1:2.5

Hydrostatic steering with emergency manual operation.

4WD standard

Selectable 2 and 4 wheel braking

CAB AND CANOPY

ROPS/FOPS conform to ISO 3471/3449

Self cleaning footsteps and large grab handles

Internal rear view mirror

Folding external rear view mirrors

2 cup holders

Coat hook

Tilt and Telescopic steering wheel

Front and rear horn

Seat storage for operators manual

2 in (51 mm) retractable seat belt

3 auxiliary 12 volt outlets

Cab with 2 door access

Partial door locking

Opening rear quarter windows with internal operation

Full depth up and over rear window

Laminated windscreen

Tinted toughened safety glass

Front and rear screen washers and wipers

Standard fabric seat with mechanical suspension

Rotary hand throttle incorporating auto idle

Heater (7.37 kW)

Lockable chilled storage box

Digital clock

Cell phone holder with power plug

Pre installation of wiring for radio

Internal noise level 78 dB(a)

12 audible and visual warning lamps

Engine hour meter

4 front and 4 rear LED worklights

3 Gauges for engine oil temperature, fuel and rpm

2 external power sockets for beacon

CAB OPTIONS

Air conditioning (7.6 kW cooling)

Automatic Temperature Control

Premium high back seat, heated with air suspension

3 in seat belt

Speedometer

LOADER

Mechanical - Hydraulic Anti-spill

Multifunctional control lever

Single bucket cylinder

Bucket cylinder cushioning

Return to dig

Float position with positive hold

Bucket level indicator

Integral Loader arm safety bar

Standard bucket 1.2 m³ with lifting eye

7 in 1 bucket 1.2 m³ with lifting eye

Bucket teeth or bolt on reversible cutting edge

7 in 1 bucket operation by thumb slider control

OPTIONS

Pallet forks with safe working load of 1000 kgs

3rd hydraulic line with standard bucket

Hose burst valves

Ride control

Bucket tooth guard

Mechanical or hydraulic quick attach

BACKHOE

Curved style boom

Standard dipperstick

Inner slide "Deep Dig" dipperstick

Externally adjustable lubrication free wear pads (8)

Electro/hydraulic dual transport lock

Externally adjustable stabiliser wear pads

SAE/ISO/Diagonal 2 lever controls

Standard trenching buckets with reversible side cutters

OPTIONS

Stabiliser lock out valves

Boom and Dipper hose burst valves

Hydraulic and Mechanical quick attach

Two auxilliary circuits with single and double acting operation

HD buckets with power and speed positions

Object handling kit

Quick release rubber street pads

GENERAL POINTS

Heavy duty chassis construction

Lockable side mounted toolbox

Fully tilting engine hood

Front hard nose counterweight

Lifting eyes and Tie downs (2 front and rear)

Tandem gear pump hydraulics with mechanically operated

Backhoe controls

Variable flow hydraulics with pilot operated

Backhoe controls

Pilot controls with constant flow feature

OPTIONS

Reverse Warning Alarm

Front Fenders

Premium Brand Tyres

→ TECHNICAL DATA TLB990 STAGE IIIB/TIER 4I

BACKHOE DIMENSIONS*		Standard Dipper		Deep Dig Dipper	
		Retracted		Extended	
A	Dig depth	4442 mm [14'7"]	4442 mm [14'7"]	5642 mm [18'6"]	
	Maximum SAE	4392 mm [14'5"]	4392 mm [14'5"]	5556 mm [18'3"]	
B	Reach – ground level to slew	5877 mm [19'3"]	5877 mm [19'3"]	6950 mm [22'10"]	
	2 ft Flat Bottom SAE	2274 mm [7'6"]	2274 mm [7'6"]	3293 mm [10'10"]	
C	Loading reach	5509 mm [18'3"]	5509 mm [18'3"]	6199 mm [20'4"]	
D	Operating height	3911 mm [12'10"]	3911 mm [12'10"]	4545 mm [14'11"]	
E	Loading height SAE	3847 mm [12'7"]	3847 mm [12'7"]	4480 mm [14'8"]	
	Max dumping height				
F	Bucket rotation degrees	Speed	197	197	197
		Power	166	166	166
Total sideshift		1178 mm [3'10"]	1178 mm [3'10"]	1178 mm [3'10"]	
Stabiliser spread		2115 mm [6'11"]	2115 mm [6'11"]	2115 mm [6'11"]	
Max. levelling angle degrees		8	8	8	

LOADER DIMENSIONS		Standard / 7in1 Bucket	
N	Dump clearance – at 45°		2906 mm [9'6"]
O	Loader height		3425 mm [11'3"]
P	Hinge pin height		3671 mm [12'0"]
Q	Pin forward reach		315 mm [1'0"]
R	Reach at ground		1451 mm [4'9"]
S	Max. reach at full height		1186 mm [3'11"]
T	Reach at full height – at 45°		731 mm [2'5"]
U	Dig depth		100 mm [4"]
V	Rollback at ground		50°
	Max. dump angle fully raised		47°
V	Overall operating height		4738 mm [15'6"]

BACKHOE PERFORMANCE		Standard Dipper		Deep Dig Dipper	
		Retracted		Extended	
		Standard Bucket HD Bucket	Standard Bucket HD Bucket	Standard Bucket HD Bucket	Standard Bucket HD Bucket
Max Slew Torque kNm		27.8		27.8	
Dipper tearout kN (lbf) (SAE J49 Standard)		41.1 (9240) 41.1 (9240)		41.1 (9240) 41.1 (9240)	
Bucket tearout kN (lbf) (SAE J49 Standard)		Speed Power	60.3 (13556) 60.3 (13556) – 67.8 (15242)	60.3 (13556) 60.3 (13556) – 67.8 (15242)	60.3 (13556) 60.3 (13556) – 67.8 (15242)

LOADER PERFORMANCE		Standard Bucket		7 in 1 Bucket	
Bucket breakout kN (lbf)		55.4 (12454)		53.7 (12072)	
Arms breakout kN (lbf)		51.1 (11487)		47.8 (10746)	
Rated operating capacity (ISO 14397) kg (lb)		3503 (7722)		3166 (6980)	
Full height kg (lb)		3966 (8744)		3629 (8000)	

Loader specifications are stated in accordance with ISO 14397 and EN474 Part 4

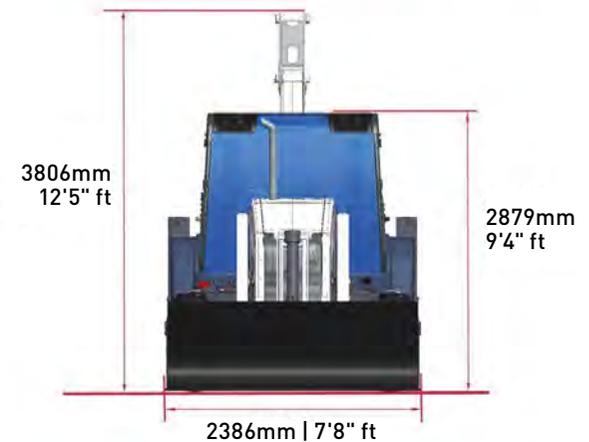


NOTE

METRIC MEASUREMENTS ARE THE CRITICAL VALUES

DIMENSIONS ARE TAKEN FROM T152021

- 1 Litre = 0.26417 US Liquid Gallons
- 1 Litre = 0.21997 Imperial Liquid Gallons



NOTE: IMAGE IS FOR REFERENCE PURPOSE ONLY

ENGINE

Perkins 1204E-E44TA	Wastegate turbocharger Charge air cooling Torque rise 39% Electronic fuel injection
Cylinders	4
Capacity	4.4 L (269 in ³)
Rated speed	2200 rpm
Gross power @ 2200 rpm cert. rating to UN/ECE R120	74.5 kW (100 hp*)
Derived net rating @ 2200 rpm to ISO/80/1269/EC	69.9 kW (93.7 hp*)
Max Torque @ 1400 rpm UN/ECE R120 80/1269/EC	450 Nm (332 lb.ft*) 423 Nm (312 lb.ft*)

*Nominal non-certified values.

ELECTRICAL SYSTEM

Wiring and connectors meet IP69 standard
Maintenance free battery
12 volt negative ground
Battery Isolator
Jump start posts
120 amp alternator
Blade type fuses
110 A/hr single battery with 920 CCA - EN Standard
140 A/hr dual batteries with 1260 CCA - EN Standard

CAPACITIES

	Ltrs (gals)
Fuel tank	140 (30.8)
Engine coolant	16.0 (3.5)
Engine oil (including filter)	8.5 (1.9)
Servo power synchro transmission	15.0 (3.3)
Rear axle (including final drives)	14.5 (3.19)
Front axle (including final drives)	7.5 (1.65)
Rear reduction axle (each)	1.5 (0.33)
Front reduction axle (each)	1.0 (0.22)
Hydraulic tank	92.0 (20.4)

AXLES AND BRAKES

Outboard planetary final drives for easier servicing		
Foot operated differential lock with 100% lockup		
16° front axle oscillation to maintain maximum ground contact and traction		
Self equalizing and self adjusting		
Internal wet disc parking brake		
Selectable 2 or 4 wheel braking		
Selectable 2 or 4 wheel braking		
Axle Ratings	Max Static Loading	Max Dynamic Loading
Front kN (lb)	225 (50582)	90 (20233)
Rear kN (lb)	275 (61822)	105 (23605)

TURNING CIRCLES

	Over Tyres	Over Bucket
2 wheel steer	11.4 (37'4")	13.1 (42'10")
4 wheel steer	7.3 (23'10")	9.3 (30'5")
With brakes m (ft)	6.7 (21'10")	8.8 (28'9")

TRANSMISSION

4 speed synchro shuttle gearbox	
Modulated forward and reverse clutch packs enable smooth direction changes	
De-clutch button on shift lever	
Direction control with neutral safety interlock	
Single stage torque converter with 3.01:1 stall ratio	
Tyres	Front: 16.9 x 24 Rear: 16.9 x 24
Travel Speeds	Forward Km/h (mph)
1st	6.2 (3.8)
2nd	10.0 (6.2)
3rd	21.7 (13.5)
4th	39.5 (27.1)
Travel Speeds	Reverse Km/h (mph)
1st	6.2 (3.8)
2nd	10.0 (6.2)
3rd	21.7 (13.5)

HYDRAULIC SYSTEM

Tandem Gear Pumps with unloader valve on mechanical excavator control	
Variable piston pump on servo excavator control	
Closed centre control valves	
Automatic or manually activated pump flows	
Power Boost to match digging power and speed to application	
External oil level gauge	
Removable oil cooler	
125 micron suction strainer	
10 micron return line filter	
Main pump flow @ 2200 rpm L/min(gpm)	80 (17.7)
Secondary pump flow @ 2200 rpm L/min(gpm)	80 (17.7)
Single variable piston pump @ 2200 rpm L/min(gpm)	164 (36)
System main relief setting bar (psi)	250 (3625)
Unloader settings bar (psi) (Gear pump only)	207 (3000)

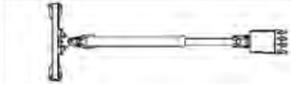
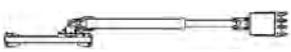
OPERATING WEIGHTS

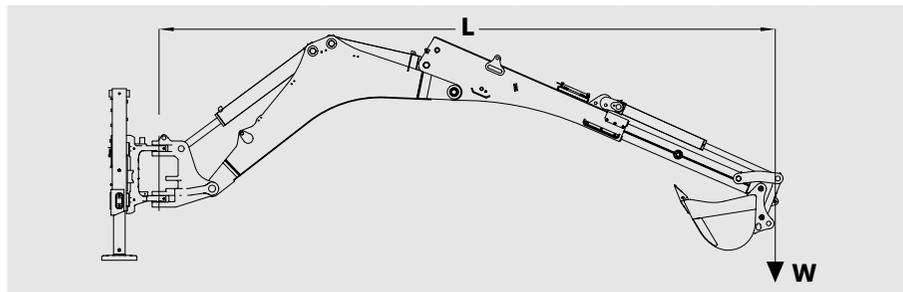
Base Machine Weight*	8428 kg (18581 lbs)
Add/Delete	
7 in 1 multi-purpose (1.2m ³)	+ 337 kg (743 lbs)
7 in 1 multi-purpose fork kit	+ 150 kg (330 lbs)
Deep dig dipper	+ 235 kg (584 lbs)

* Base operating weight includes cab, standard loader bucket, standard dipper stick, 600 mm bucket, full fuel tank and 75 kg operator.

→ TECHNICAL DATA TLB990 STAGE IIIB/TIER 4I

TYRES	
Michelin 440/80 R24 TL 161A8/161B IND XMCL	
Michelin 440/80-24 TL 168A8 Power CL	
Goodyear 440/80 R24 IND R4 IT530 Radial	
Nokian 440/80 R24	
Continental 445/70 R24 MPT70	
Mitas 16.9 x 24 12P TI-04 IND	
PALLET FORKS	
	Standard / 7in1 Bucket
Fork length	1067 mm (3'6")
Section width	80 mm (3")
Assembly weight kg (lb)	150 (330)
Max. operating height	3097 mm (10'2")
Reach at ground level	2660 mm (8'9")
Reach at full height	2251 mm (7'5")
S.W.L. at 500mm load centre kg (lb)	1000 (2204)

SIDESHIFT BACKHOE (Load chart for Extending Dipperstick using boom cylinder for lifting)	3.2 m	4.1 m	4.7 m	5.2 m	5.8 m	6.1 m
	1106kg	1033kg	931kg	846kg	743kg	717kg
	1038kg	578kg	417kg	334kg	265kg	255kg
	442kg	213kg	127kg	83kg	50kg	48kg

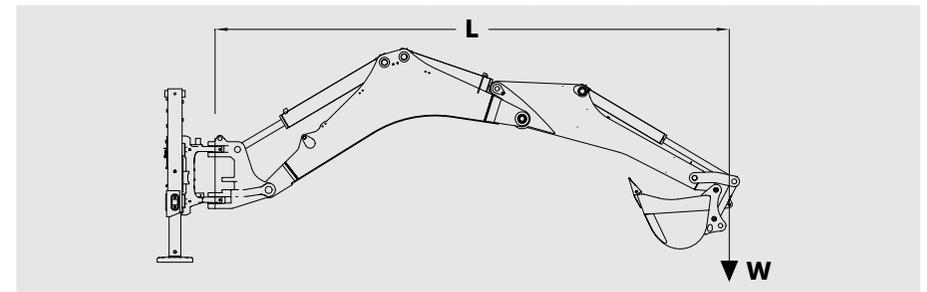


Backhoe Configuration (Top to Bottom)

- Centrally located 'over end' lift capacity (within 45° either side of the machine centreline)
- Centrally located lift capacity through the full swing arc
- Fully offset lift capacity through the full swing arc

BACKHOE BUCKETS	Width mm (ins)	Capacity m³ (ft³)	Weight Kg (lbs)
Standard trenching	305 (12)	0.074 (2.62)	99 (218)
	450 (18)	0.120 (4.25)	114 (251)
	600 (24)	0.177 (6.26)	136 (300)
Heavy duty	750 (30)	0.236 (8.32)	157 (346)
	900 (36)	0.296 (10.44)	178 (392)
	305 (12)	0.084 (2.96)	112 (247)
	450 (18)	0.140 (4.96)	128 (282)
	600 (24)	0.203 (7.15)	152 (335)
	750 (30)	0.266 (9.38)	174 (383)
Ditch cleaning	900 (36)	0.330 (11.66)	198 (436)
	1500 (60)	0.262 (9.2)	180 (397)
Trapezoidal	1800 (72)	0.317 (11.2)	204 (450)
	1200 (48)	0.258 (9.1)	146 (322)
LOADER BUCKETS	Standard Bucket	7 in 1 Bucket	
Width	2386 mm (7'8")	2386 mm (7'8")	
Capacity m³ (yd³)	1.2 (1.57)	1.2 (1.57)	
Weight kg (lbs)	430 (948)	767 (1691)	

SIDESHIFT BACKHOE (Load Chart for Standard Dipperstick using boom cylinder for lifting)	3.2 m	3.8 m	4.3 m	4.6 m	5.0 m
	1368kg	1366kg	1221kg	1126kg	1052kg
	1214kg	820kg	658kg	576kg	524kg
	614kg	414kg	327kg	284kg	262kg



Note

- Standard 600 mm [24"] bucket fitted, for larger buckets subtract difference in weight from stated lift capacity
- Figures stated are rated capacities, and are the lower of either the rated hydraulic lift capacity, or rated tipping load
- Figures in bold print are stability limited figures

→ STANDARD AND OPTIONAL EQUIPMENT

ENGINE (STAGE IIIB/TIER 4I)

Perkins 1204E-E44TA
Wastegate turbo and charge air cooled
Electric fuel pump
Electronic fuel injection
Auto Idle
4 Glow plug starting aid
Horizontal spin on oil filter
Primary fuel filter with water separator
Vertical element secondary fuel filter
In line fuel filter
500 hour service period
Oil to water internal plate oil cooler
Engine gradeability fore/aft and side/ side 30°
Anti-freeze rated to -37° C
Coolant header tank
Alternator and fan drive by polygroove belt with auto tensioner
Gear driven water pump
Puller type 9 bladed cooling fan
Dual element Powercore air cleaner
Stainless steel after treatment and exhaust stack

ENGINE OPTIONS

Fan guard

DRIVE LINE

Direction control with neutral safety interlock
Servo power synchro transmission 4F/3R speeds
Column mounted rotational control lever
Automatic shifting between 4th, 3rd and 2nd
Kick down 2/1 and Kick up 1/2
Torque Converter stall ratio 3.01:1
Removable transmission oil cooler
Vertical element oil filter
Foot operated electro/hydraulic differential lock
Outboard Planetary final drive axles
Large capacity inboard oil immersed disc brakes
<ul style="list-style-type: none"> • 3 Kevlar friction discs (222 mm dia) per side • Total friction area per side 1070 cm² (166 in²)
Brakes self adjusting and self equalising
Dual brake pedals with combined or independent use

Internal wet disc parking brake
<ul style="list-style-type: none"> • Max Parking Slope (unladen) 1:2 • Max Parking Slope (laden) 1:2.5
Hydrostatic steering with emergency manual operation.
4WD standard
Selectable 2 and 4 wheel braking in all gears
Selectable 2WD and 4WD
2 wheel steering
4 wheel steering
Crab steering

CAB AND CANOPY

ROPS/FOPS conform to ISO 3471/3449
Self cleaning footsteps and large grab handles
Internal rear view mirror
Folding external rear view mirrors
2 cup holders
Coat hook
Tilt and Telescopic steering wheel
Front and rear horn
Seat storage for operators manual
2 in (51 mm) retractable seat belt
3 auxiliary 12 volt outlets
Cab with 2 door access
Partial door locking
Opening rear quarter windows with internal operation
Full depth up and over rear window
Laminated windscreen
Tinted toughened safety glass
Front and rear screen washers and wipers
Standard fabric seat with mechanical suspension
Heater (7.37 kW)
Lockable chilled storage box
Digital clock
Cell phone holder with power plug
Pre installation of wiring for radio
Internal noise level 78 dB(a)
12 audible and visual warning lamps
Engine hour meter
4 front and 4 rear LED worklights
3 Gauges for engine oil temperature, fuel and rpm
2 external power sockets for beacon

CAB OPTIONS

Air conditioning (7.6 kW cooling)
Automatic Temperature Control
Premium high back seat, heated with air suspension
3 in seat belt
Speedometer

LOADER

Mechanical - Hydraulic Anti-spill
Multifunctional control lever
Single bucket cylinder
Bucket cylinder cushioning
Return to dig
Float position with positive hold
Bucket level indicator
Integral Loader arm safety bar
Standard bucket 1.2 m ³ with lifting eye
7 in 1 bucket 1.2 m ³ with lifting eye
Bucket teeth or bolt on reversible cutting edge
7 in 1 bucket operation by thumb slider control

OPTIONS

Pallet forks with safe working load of 1000 kgs
3rd hydraulic line with standard bucket
Hose burst valves
Ride control
Bucket tooth guard
Mechanical or hydraulic quick attach

BACKHOE

Curved style boom
Standard dipperstick
Inner slide "Deep Dig" dipperstick
Externally adjustable lubrication free wear pads (8)
Electro/hydraulic dual transport lock
Externally adjustable stabiliser wear pads
SAE/ISO/Diagonal 2 lever controls
Standard trenching buckets with reversible side cutters

OPTIONS

Stabiliser lock out valves
Boom and Dipper hose burst valves

Hydraulic and Mechanical quick attach
Two auxiliary circuits with single and double acting operation
HD buckets with power and speed positions
Object handling kit
Quick release rubber street pads

GENERAL POINTS

Heavy duty chassis construction
Lockable side mounted toolbox
Fully tilting engine hood
Front hard nose counterweight
Lifting eyes and Tie downs (2 front and rear)
Tandem gear pump hydraulics with mechanically operated
Backhoe controls
Variable flow hydraulics with pilot operated
Backhoe controls
Pilot controls with constant flow feature

OPTIONS

Reverse Warning Alarm
Front Fenders
Premium Brand Tyres



Mecalac



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