

ENGINE

Perkins naturally aspirated 1004.42 engine:

- 4 in-line cylinders.
- Compression ratio of 18.5:1.
- Bore 4.054in (103mm).
- Stroke 5in (127mm).
- Displacement 256 cu in (4.2 litres).
- Utilizes the latest advanced design technology for low fuel consumption, low noise, high torque and high power output for excellent performance and reliability.
- Emissions compliant to US EPA Stage 1.
- Two stage dry air cleaner.
- Key stop/start with thermostart feature.

Engine Power @2000 rpm	hp	68
Net	kW	51
Max Torque	lbft	202
@1200 rpm	Nm	273

Hp ratings per SAE J1349

AXLE LOAD RATINGS

		Front	Rear
Static	lb	30,305	25,000
	kg	13,750	11,343
SAE J43	lb	13,997	13,422
	kg	6,348	6,090

TRANSMISSION

Soft-shift Powershuttle transmission featuring large capacity, fully modulated, oil cooled hydraulic clutch packs, 4 speed fully synchromesh gearbox and single stage torque converter having a high 2.87:1 stall ratio for shock free transition of power, ensuring maximum traction and excellent bucket penetration.

- Direction changes solenoid operated via foot or hand controls.
- Conventional "H" pattern single gear lever.
- 4WD provided via a side mounted transmission drive pod, engaged on the move in all 4 gears via an instrument console mounted switch.
- Creeper gearbox is available as an option, with a 4:1 reduction (increases the machine overall wheel base by a nominal 6"/152mm)(Cab and platform only).

Travel speeds @2200 rpm with following tires:

Gear	16.9 x 24	
	mph	kph
1 st	3.4	5.4
2 nd	5.9	9.5
3 rd	12.1	19.5
4 th	17.5	28.2

Power take off:

Type	2 speed independent
Speed	540 rpm @ 1807 engine rpm 1000 rpm @ 1900 engine rpm
Shaft	Interchangeable 6 or 21 spline 1.375" (35 mm) diameter
Power	53 hp

BRAKES AND AXLES

- In-board, multi-plate wet disc on rear axle for fade free performance and a long life.
- Hydraulically actuated through self equalizing pedals to ensure straight line braking.
- Independent, split brake facility for full power turns.
- Large 347in² (2,235cm²) braking area.
- Tangentially mounted hydraulic slave cylinders activated via twin master

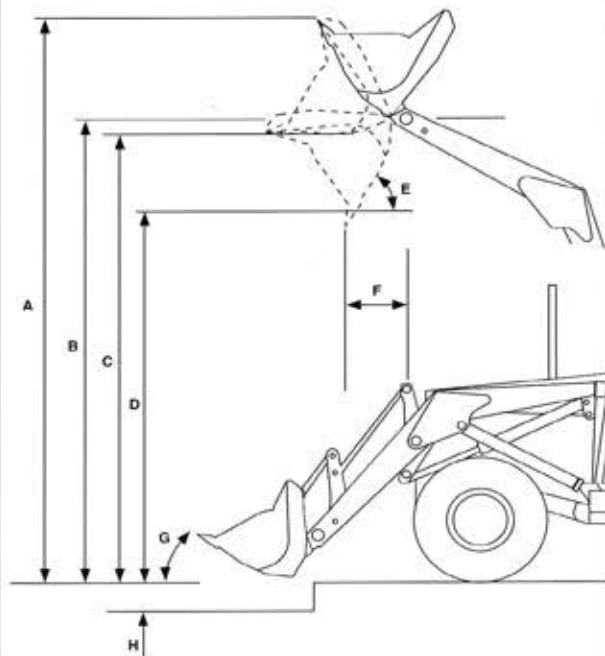
- cylinders for low effort operation.
- Conventional hand operated ratchet type parking brake lever working through balanced cable operating on main service brakes.
- Heavy duty outboard planetary final drive ensuring smooth effective transfer of the excellent tractive effort irrespective of ground conditions.
- Electro/hydraulic diff lock engaged by a dash mounted rocker switch for ease of operation.

- Commonized cast front axle beam for both 2WD and 4WD machines with 22° oscillation, ensuring maximum ground contact and traction in the most arduous conditions
- Exceptional 53° steer angle on 2WD (48° on 4WD) providing tight turning radius for superior maneuverability.

SPECIFICATION WITH STANDARD TIRES

Dimensions	2WD		4WD	
	in	mm	in	mm
A Overall operating height	160.6	4079	161.8	4110
B Max. hinge pin height	131	3327	132.3	3360
C Loadover height	120.6	3063	121.8	3094
D Dump clearance @ 45°	103.3	2624	103.3	2654
E Dump angle	50°		50°	
F Dump reach @ 45°	28	711	28	711
G Roll back angle	48°		48°	
H Digging depth	4.6	117	3.4	86
I Wheelbase	81.4	2068	81.4	2068
J Min. ground clearance	11.4	290	11.4	290
K Overall length				
- Tractor less loader	123	3124	124.4	3160
- Tractor loader	183	4548	183	4648
L Height over exhaust	93.6	2377	93.6	2377
M Height over steer wheel				
- Footstep model	67.6	1717	67.9	1717
- Cab / Platform	71.8	1824	71.8	1824
N Height over operator compartment				
- Footstep model	94	2388	94	2388
- Cab / Platform	94	2388	94	2388
O Track				
- Front	67.2	1706	62.5	1587
- Rear	62.8	1594	62.8	1594
P Overall width	80	2032	80	2032

DIMENSIONS



ALL DIMENSIONS BASED ON 16.9 X 2
 LONG WHEEL BASE ADD 6IN (152MM)

CYLINDER DATA

		Beam	Bucket	Steering
Bore	ins (mm)	3.15 (80)	2.56 (65)	2.48 (63)
Rod	ins (mm)	1.77 (45)	1.57 (40)	0.98 (25)
Stroke	ins (mm)	29.49 (749)	19.37 (492)	8.98 (228)

STEERING WITH STANDARD TIRES

Equipped with full hydrostatic steering for low operator effort, with manual override when engine is idle or stationary.

2WD and 4WD turning circles:

		Between Walls	Between Curbs
Without brakes			
2wd	ins (m)	383 (9.75)	282 (7.15)
4wd	ins (m)	452 (11.47)	341 (8.66)
With brakes			
2wd	ins (m)	374 (9.5)	272 (6.9)
4wd	ins (m)	422 (10.72)	311 (7.9)

Figures above are for short wheel base.

Tractors with long base add:
 15" (380 mm) - 4WD M/cs
 16" (406 mm) - 2WD M/cs

Add/delete the following

2WD axle and driveshaft	- 529 lb	(24)
Multi-purpose bucket	+ 573 lb	(26)

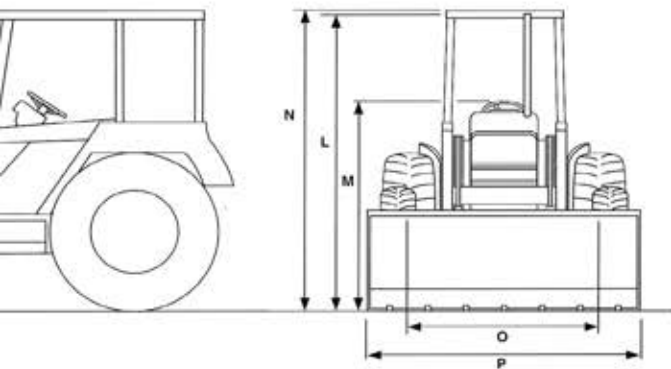
Unladen counterweight box		
- 3 point linkage	+ 573 lb	(26)
- Fixed	+ 463 lb	(21)

Ballast (Required for CWT box)		
- 3 point linkage	+ 2,073 lb	(+92)
- Fixed	+ 2,138 lb	(+97)
28" inner wheel weights	+1,636 lb	(74)

BU

	Width
Standard	80 ins (2032)
Multi-Purpose	80 ins (2032)

IONS - WEIGHT



4 REAR TIRES AND SHORT WHEEL BASE, FOR
TO ALL HORIZONTAL DIMENSIONS

ing weights to the base machine

kg)	24" inner wheel weights	+1,024 lb	(464 kg)
kg)	24" outer wheel weights	+454 lb	(206 kg)
Multipurpose bucket			
kg)	1.0yd ³ (0.76m ³)	+ 639 lb	(290 kg)
kg)	0.95yd ³ (0.72m ³)	+ 573 lb	(260 kg)
	0.9yd ³ (0.69m ³)	+ 510 lb	(230 kg)
Standard loader bucket			
kg)	1.05yd ³ (0.80m ³)	- 36 lb	(-16 kg)
kg)	1.0yd ³ (0.76m ³)	- 70 lb	(-32 kg)

CKET DATA

	Capacity	Weight
mm)	0.95 yd ³ (0.72 m ³)	679lb (308 kg)
mm)	0.90 yd ³ (0.69 m ³)	1259lb (571 kg)

CAPACITIES

	US Gals	Litres
Fuel Tank	28	102
Engine oil (inc. filter)	1.9	7
Engine coolant	4.8	17.5
Rear axle (inc. steering)	14.3	52
Hydraulic system	15.1	55

TIRES (Standard)

	Front	Rear
2WD	11L x 16	16.9 x 24
4WD	12/9.75 x 16.5	16.9 x 24

4 WD MACHINE WEIGHT

Configuration	640
Tractor loader with standard loader bucket, auxiliary hydraulics, standard tires, all levels full, less operator	10365 lb (4700 kg)

PERFORMANCE DATA

Max lift capacity to full height	5,510 lb	(2,500 kg)
Breakout force	8,838 lb	(4,010 kg)
Cycle times		
Beams:		
Raise	secs	4.3
Lower (power down)	secs	3.4
Lower (in float)	secs	5.5
Bucket:		
Crowd @ full height	secs	1.5
Dump	secs	1.1

ELECTRICS (Rops Model)

- Single battery 12 volt electrical system with 55 amp alternator and engine thermostart.
- Optional twin battery.
- Sealed connectors against water and dirt ingress.
- 4 main power fuses & 13 independent fuses.
- Low maintenance batteries with 840 amp cold start capacity.
- Optional key actuated battery isolation switch.

EQUIPMENT

LOADER	STANDARD ALL MODELS	PLATFORM MODELS
Heavy duty industrial loader with mechanical self levelling and single lever operation of beam raise/lower, float, crowd and dump. Third spool standard for operating multipurpose bucket or other attachments. Equipped with loader beam safety strut.	Naturally aspirated engine with Powershuttle transmission, hydrostatic steering, heavy duty drive axle with outboard epicyclics, inboard wet brakes and electro/hydraulic differential lock. Full instrumentation, suspension seat and ergonomic control layout.	Deglazed safety cab for hot climates, fitted with twin front and rear work lights rear view mirror, and full road lighting. Hand operated forward/reverse direction control with left foot braking and right foot throttle control. Access from left hand side. Right hand emergency exit only.
OPTIONS	GLAZED CAB MODELS	FOOTSTEP MODELS
<ul style="list-style-type: none"> Fixed cwt box recommended ballast 2130lb (970kg). 3 pt linkage cwt box (recommended ballast 2273lb (920kg)). Multi-purpose loader bucket. Swinging drawbar. Stabilizer chains. Wheel weights. Rotating beacon. Battery isolation switch. Loader attachment quick attach. Creeper gearbox (Cab and platform). Auxiliary hydraulics (Footstep only). 	2 door deluxe heated safety cab with twin front and rear work lights, front rear wash/wipe, hinged opening rear window, rear view mirrors and full road lighting. Hand operated forward/reverse direction control with left foot braking and right foot throttle control. Access from left hand side Right hand emergency exit only.	4 post rops canopy fitted with twin front and rear worklights. Foot operated forward/reverse direction controls, suspension seat with turntable. For a comprehensive list of optional features and options refer to your local distributor.

HYDRAULIC SYSTEMS

Loader	
Pump type	Single gear pump.
Flow	29.7 US gals/min (108 litres/min).
Pressure	2,750 psi (190 bar).
Filtration	Full flow 125 micron suction strainer with 13 micron full flow return line filter element.
Tractor (3 point hitch)	
Pump type	4 piston scotch yoke.
Flow	7.4 US gals/min (27 litres/min) @2200 rpm.
Pressure	3000 psi (207 bar).
Functions	Draft, position, response and constant pumping.
Max lift capacity @ lower link ends horizontal	4,764 lbs (2,161 kg).
Auxiliary Hydraulics	
Pump type	Single Gear Pump.
Flow	10.45 US gals/min (38 litres/min).
Pressure	2,475 psi (170 bar).

Fermec reserves the right to change specifications without notice. Illustrations shown and described may include optional equipment, accessories or product specifications which may vary from country to country. See your local agent for details.

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