3 Technical Data

3.1 Engine

	Model TLB 740 S	Model TLB 844 S, 844	Model TLB 818 S, 818
Make and type	KIRLOSKAR 4R 1040 TC	KIRLOSKAR 4R 1040 TA	Perkins 1104C-44T
Displacement	4.6 liters	4.6 liters	4.4 litres
Number of cylinders	4	4	4
Bore and stroke (mm x mm)	105 x 120 mm	105 x 120 mm	105x127 mm
Injection system	Rotary	Rotary	Rotary
Air filter	Dry type–Two stage Restriction indicator	Dry type–Two stage Restriction indicator	Dry type–Two stage Restriction indicator
Oil filter	Screw-on cartridge, total flow type	Screw-on cartridge, total flow type	Screw-on cartridge, total flow type
Compression ratio	18:1	18:1	18.2:1
Gross standby	76 HP	90 HP	92 HP
ISO 9249 maximum torque	290 Nm @ 1320 rpm	355 Nm @ 1400 rpm	395 Nm @ 1400 rpm

3.2 Electrical System

Voltage ..... 12 volts
Ampre (single) ..... 12 volts (135 amp/h)
Alternator ..... Standard - 65 amp (Kirloskar)
Alternator ..... Standard-75 amp (Perkins)

3.3 CAB

Tinted safety glass – wide glazed surface giving total visibility (Only for AC Cabine).

Operator's seat with adjustable suspension.

3.4 Machine Weight

Maximum authorised weight ..... 7500 kg (16500 lb) - Side Shift
Maximum authorised weight ..... 6885 kg (151471 lb) - Center Mount

3.5 Transmission

Torque converter

Two phase, integrated with engine flywheel.

Stall ratio ..... 2.88:1 (Kirloskar)

Stall ratio ..... 3.01:1 (Perkins)

Gearbox

Type : Direction of travel control with 4 synchronised gears. 4 forward and 4 reverse gears. Electrical transmission cut-out using push button on the gear change lever.

Travel speed

Speeds in forward and reverse with engine speed at 2200 rpm.

Gear	kph	m.p.h.
1	5.41	3.36
2	8.71	5.41
3	19.91	12.37
4	40.06	24.88

3.6 Axle

(1) Fixed Rear Axle

Includes: Planetary reduction gears and oil immersed disc brakes.

(2) Oscillating Front Axle

3.7 Tyres Size

Location	Dimensions and type	Inflation pressure	
		kg/cm^2 bar	lbf/in^2
Front	12.5x18	4.4	65
Rear	16.9x28	2.4	35

3.8 Wheel Tightening Torque

Front wheel nuts..... 300 Nm (220 lbf ft)

Rear wheel nuts..... 600 Nm (440 lbf ft)

3.9 Brakes

(1) Service Brakes

Oil-immersed disc brakes mounted inboard, on the rear drive shafts. Hydraulic operation by brake pedal master cylinders, incorporating independent and compensating functions for site and highway use.

(2) Parking Or Emergency Brake

Hand-lever and cables operated through a totally separate mechanical system to directly operate a large calliper type disc brake.

3.10 Steering

Type..... Hydrostatic

Turning circle - Turning circles are the same for both 4WD and 2WD machines

Outside front wheels, no brakes..... 8.4 m (27' 7")

Outside front wheels, with brakes..... 7.2 m (23' 8")

Outside bucket, no brakes..... 11.1 m (36' 5")

Outside bucket, with brakes..... 10.0 m (32' 10")

3.11 Hydraulic System

(1) Pump TLB 844 S / 844 / 818 S / 818

Tandem Pump

Combined flow..... 145 L/min. at 2200 rpm and MRV at 225 bar.

First pump ..... 84 L/min. at 2200 rpm and MRV at 225 bar.

Second pump ..... 61 L/min. at 2200 rpm and MRV at 207 bar.

(2) Pump 740 S

Two crankshaft driven gear pumps

Combined flow..... 119 L/min. at 2200 rpm and MRV at 225 bar.

First pump ..... 76 L/min. at 2200 rpm and MRV at 225 bar.

Second pump ..... 43 L/min. at 2200 rpm and MRV at 190 bar.

(3) Loader Control Valve

Two spool open centre multi block valve, incorporating circuit relief valves for head and rod sides of bucket and main lift cylinders. Single lever operation of bucket and lift spools plus a third spool for attachments, such as clamshell bucket. An optional three spool open centre valve is available. Where fitted, the additional spool can be used for attachments, such as clamshell bucket.

(4) Backhoe Control Valve

The backhoe control valve is a open centre six spool multi block valve. The six spool valve controls the digging functions through two control levers. Circuit relief valves protect the boom, dipperstick, bucket, swing, and additional spool cab be use for extendable dipper stick and auxiliary circuits.

There are two additional levers for operating the stabilizer spools.

Solenoid valves operate the side shift clamp, (side shift backhoe) and optional digger bucket quick attach.

A separate foot pedal is used to operate a spool for the optional extendable dipperstick or auxiliary circuit. A solenoid operated changeover valve is used to divert hydraulic flow to either the extendable dipper stick or the auxiliary spool.

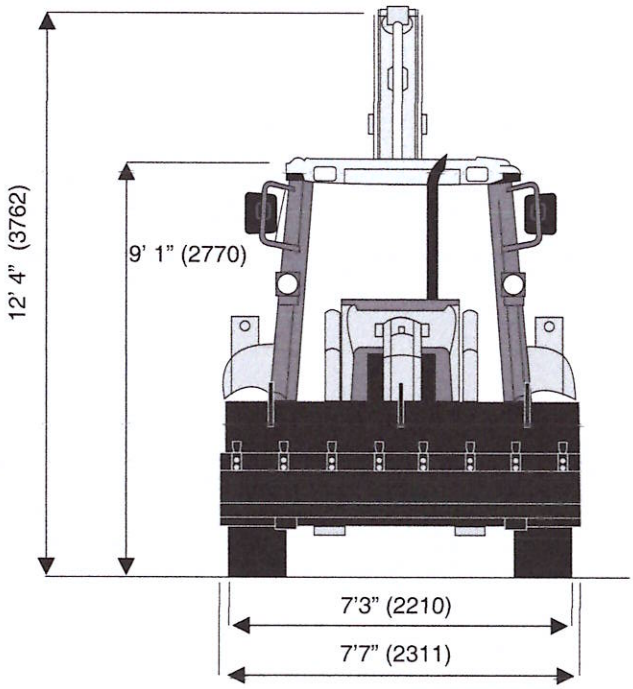
(5) Filtration

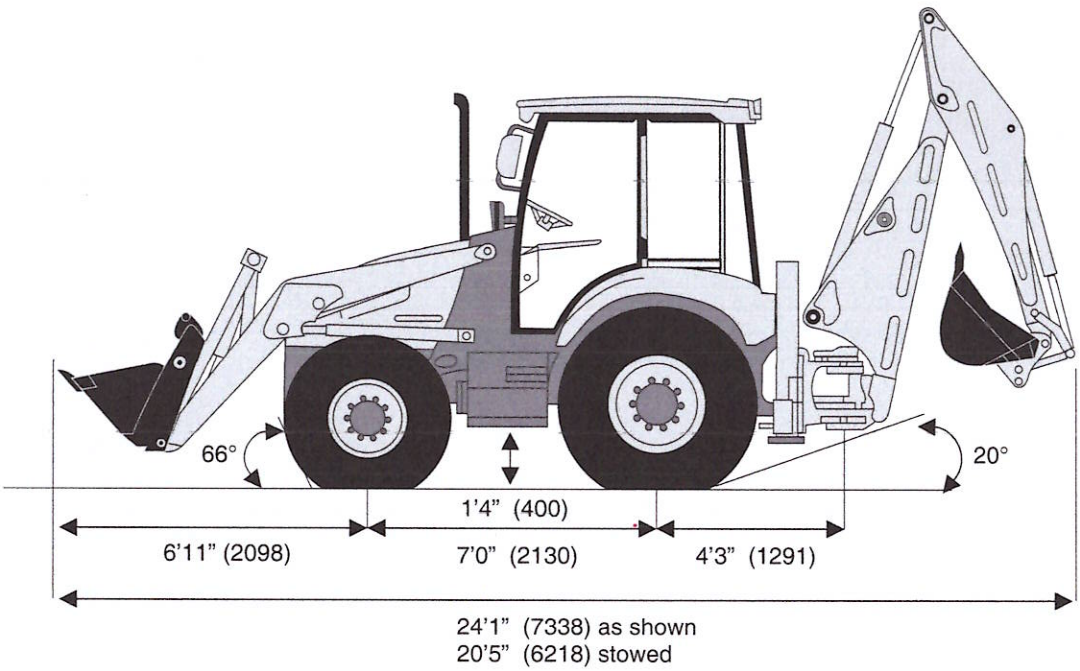
On return circuit, by spin on type filter.

3.12 Capacities

Transmission	15 ltr.
Cooling System	16.5 ltr.
Fuel tank TLB 844 S / 844 / 818 S / 818 / 740 S	145 ltr.
Hydraulic reservoir	90 ltr.
Engine Kirloskar (with filter)	11.5 ltr.
Engine Perkins (with filter)	9.1 ltr.
Front drive axle	8 ltr.
Front axle reduction gear (each)	1.0 ltr.
Rear axle	14.5 ltr.
Rear axle reduction gear (each)	1.5 ltr.

3.13 General Dimensions





Note : Some dimensions will differ according to different tyre sizes, tyre pressures and loader bucket specifications