

BM-VOLVO

LM 846



**articulated heavy-duty
loader with
"go anywhere" mobility**

BM-VOLVO LM 846

The BM-VOLVO LM 846 — an articulated, 4-wheel drive loader. It combines the traditional features of BM-VOLVO loaders — high capacity, versatility, manoeuvrability and reliability — with the advantages of articulated steering.

The LM 846 is a loader in the 10-ton class, carefully designed for operations under the most arduous conditions. It has a spacious safety cab offering superior driver comfort. Powerful engine, large wheels and rugged dimensions for tough jobs.

"Go anywhere"
mobility

Large wheels which always track
Four-wheel drive
Articulated steering
Differential lock on front axle
Powerful Volvo D 50 B engine, 120 hp "SAE"
Rear axle oscillation 20 in (0.5 m)
Ground clearance 20 in (0.5 m)
Tight turning radius 16 ft 1 in (4.9 m)
Long wheel base ensures high travelling speed without spillage



*An all-round loader –
due to a
comprehensive range
of attachments*

Many different standard buckets available for all kinds of materials and jobs
You just choose the right bucket for your own specific conditions, for 100% utilization
Attachment bracket as optional for rapid changes between attachments

*Long outreach –
high lift*

Rugged loader unit providing high break-out force
"Open and clean" design means good visibility and reduced risk of damage
Long outreach — high lift mean faster working cycles
Good bucket angles, max. tipping angle 70°
Few bearing points

*Outstanding driver
comfort*

Rubber-mounted cab fitted on rear frame
Thorough insulation
Low noise level, below the international N 85 curve
Generous space for the driver
Effective heating and ventilation
Excellent visibility through wrap-around windscreen
Windscreen wipers front and rear
Fast, convenient gear shifts

*Safe in every
respect*

Impact-tested cab
Dual-circuit, four-wheel brakes
Hydrostatic steering
Starting only in neutral
Flashing warning signals
Rear-view mirrors, sun visor
Excellent road-holding owing to long wheel base
High-efficiency defroster



Specification BM-VOLVO LM 846

Engine

| | |
|--|--|
| Volvo 6-cylinder, 4-stroke, direct injection diesel, type | D 50 B |
| Max. rating | 120 hp "SAE" |
| Max. torque at 1600 rev/min | 275 lbf ft (38.1 kgf m) |
| Displacement | 313 in ³ (5.13 litres) |
| Bore | 3.75 in (95.25 mm) |
| Stroke | 4.72 in (120 mm) |
| Compression ratio | 17:1 |
| Air cleaner | Centrifugal separator with dry filter element, pressure drop indicator |

Electrics

| | |
|-------------------------------|-------|
| Voltage | 24 V |
| Alternator | 700 W |
| Starter | 4 hp |
| Transistorized charging relay | |
| Safety start device | |

Torque converter

Single stage, single phase with 3.3:1 stall ratio

Transmission

Full power-shift in two ranges with four forward and four reverse speeds

Speeds

| | |
|---------------------------------------|--|
| Forward and reverse in miles/h (km/h) | |
| I 0—4.4 (0—7) | |
| II 0—6.9 (0—11) | |
| III 0—11.8 (0—19) | |
| IV 0—18.6 (0—30) | |

Tyres

| | |
|-----------------------|------------|
| Standard: front | 20.5—25/12 |
| rear | 20.5—25/12 |

Steering

| | |
|---|------------------------|
| Hydrostatic system | |
| Angular deflection to both sides | 40° |
| Turning radius | 16 ft 1 in (4.90 m) |

Brakes

Hydro-pneumatic, 2-circuit safety system with drum brakes on all wheels
Parking brake

Hydraulics

| | |
|---|---|
| Hydraulic pump, type | Hamworthy |
| Capacity | 48 Imp. gal/min (220 l/min) |
| Working pressure (low pres- sure system) | 1 700 lbf/in ² (120 kgf/cm ²) |
| Oil capacity | 28.5 Imp. gal (130 litres) |
| Lifting cylinders, bore × stroke | 5×37½ in (130×950 mm) |
| Tipping cylinders, bore × stroke | 4¼×19¼ in (110×490 mm) |

General data

| | |
|--|-----------------------------|
| Total weight with bucket | 22 060 lb (10 000 kg) |
| Total weight with attachment bracket and bucket | 22 500 lb (10 200 kg) |
| Wheel base | 8 ft 10 in (2.70 m) |
| Track front and rear | 5 ft 7 in (1.90 m) |
| Ground clearance | 1 ft 8 in (0.50 m) |
| Total width | 7 ft 10 in (2.50 m) |
| Fuel tank capacity | 43 Imp. gal (195 litres) |

Operating data*

| | |
|---|---|
| Max. lifting height under tipped bucket | 9 ft 8 in (2.95 m) |
| Max. outreach at a height of 6½ ft (2 metres) | 5 ft 6 in (1.64 m) |
| Tipping load, SAE, straight/ angled machine at an out- reach of 6½ ft (2 metres) from front wheel centre | 13 800/12 150 lb (6 250/5 500 kg) |
| Bucket capacities | 2¼ yd ³ — 6½ yd ³ (1.7 m ³ — 5.0 m ³) |

* The capacity figures are based on rear tyres without calcium chloride solution.

Standard equipment

Safety cab, spring-cushioned seat, heater with fresh air intake, defroster, windscreen wipers front and rear, external rearview mirrors, twin headlights front and twin working lights rear, parking lights, front working light, tail and brake lights, direction indicators, flashing warning lamps, horn, sun visor, engine hour recorder, fuel gauge, electric cigarette lighter, ashtray, storage tray, socket for inspection lamp, socket for trailer, alternator, warning lamp for parking brake, automatic differential lock, compressor e.g. for tyre pumping, dry air filter with indicator, bucket indicator, safety start device.

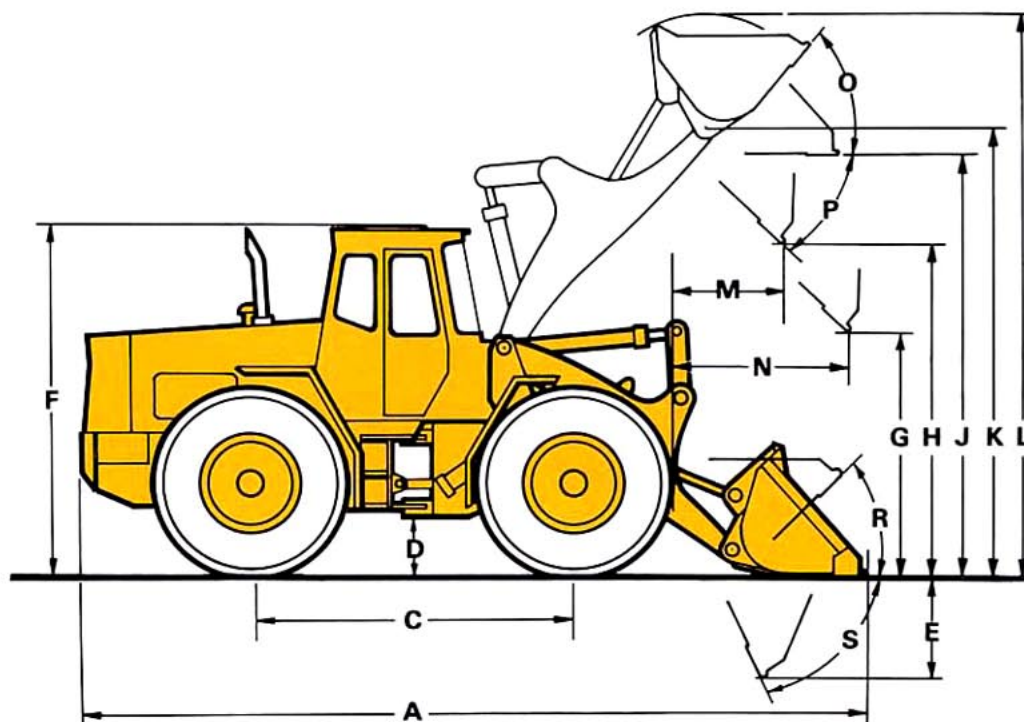
Optionals

Snap-on attachment bracket with mechanical or hydraulic locking, adapter for complete range of attachments, tubing for 3rd hydraulic function, tubing and change-over valve for 4th hydraulic function, rotating flashing beacon, industrial towing hook, electric engine heater, outlet for trailer brake, tyre pumping unit, safety belt, grill guard for headlights, heavy duty tyres, wrap-around windscreen with tinted glass.

Specifications and design are subject to alteration without prior notice.

Dimensions

| | |
|---------|-------------------|
| A | 21' 4" (6500 mm) |
| C | 8' 10" (2700 mm) |
| D | 1' 8" (500 mm) |
| E | 1' 10" (770 mm) |
| F | 9' 10" (3000 mm) |
| G | 6' 7" (2000 mm) |
| H | 9' 8" (2950 mm) |
| J | 11' 10" (3620 mm) |
| K | 12' 7" (3830 mm) |
| L | 14' 5" (4400 mm) |
| M | 3' 4" (1030 mm) |
| N | 5' 3" (1600 mm) |
| O | 46° |
| P | 48° |
| R | 41° |
| S | 56° |



BOLINDER-MUNKTELL

— a member of the Volvo Corporation,
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