

BM-VOLVO

LM 641 Allrounder

Increased power—increased driver comfort— increased capacity



BM-VOLVO LM 641

-a still better Allrounder

The prospects of the new LM 641 could hardly have been better. Experience and impressions gained from thousands of its highly rated predecessor, the LM 640, have formed the basis for the new model. Experience obtained from the most varied fields of application—in Britain, in Canada, in South America, in Asia, in Africa—experience which has now been transformed into the LM 641, an Allrounder that is even better than its excellent predecessor. The LM 641 has been given a still more rugged design throughout to match the improved performance offered by the new and more powerful diesel engine. Driver comfort has been increased. His safety as well. And maybe best of all—the LM 641 has retained the same superior versatility which characterizes all BM-VOLVO Allrounders and makes them truly profitable machines.

More powerful engine—A new 80-hp, 4-cylinder BM-VOLVO diesel with dynamic balancer for very smooth running.

Higher capacity—The increased engine power gives improved performance figures regarding tipping load/outreach, penetration power/bucket volume, and speed.

Comfort—More spacious cab with improved visibility, low noise level and very comfortable seat. Full power steering.

Long outreach and high lift—Loads high and far—a decisive advantage on many jobs.

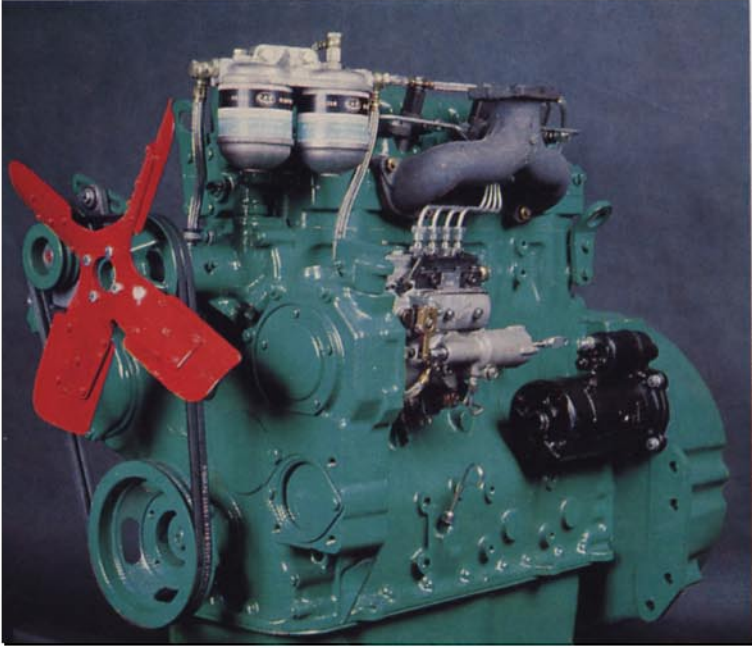
Safety—Safety cab as standard. Fully enclosed disc brakes. Safety start device.

Large wheels—Low ground pressure—high floatation, high traction—an advantage in soft and muddy ground conditions.

Versatility—The snap-on coupling enables attachments to be changed in a minute's time. Wide range of attachments—more than 70 different units.

Many extras as standard—Standard equipment embraces many items which are normally considered as extras.





More power!

The power source in the LM 641 is a completely new 4-cylinder BM-VOLVO diesel engine rated at 80 hp SAE at 2 300 rev/min. The engine has a displacement of 256.3 in³ (4.2 litres) and it is built for long life and rugged service. Replaceable wet cylinder liners, aluminium alloy pistons and a crankshaft supported by five hard-faced bearings ensure a high degree of wear resistance. The engine is equipped with a dynamic balancer which makes it run as smooth as a 6-cylinder engine. An automatic coldstarting device in the injection pump ensures easy starting at low temperatures. The dry air cleaner with built-in precleaning and pressure drop indicator guarantees a high filtering effect. The alternator ensures battery charging even at low engine speed.



Better driver comfort!

The LM 641 is standard-equipped with a crush-proof and highly comfortable cab. The noise level in the cab is low since it is very tight, well insulated and rubber suspended. The cab has increased width and headroom and the all-round visibility has been further improved by 12 % larger glazed areas. The door is held in position by a gas spring which ensures easy entering. The new seat has a wide range of adjustment so the driving position can be individually arranged. The steering operation is now also perfected by means of the new full power-steering system. The operation levers actuate a new hydraulic valve with integral lift and floating position stops.



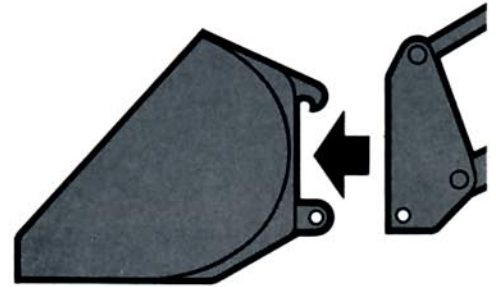
Increased capacity!

The increased engine power together with the increased operating weight result in increased lift capacity, increased bucket volume, higher penetration power and better manoeuvrability. Wheel dimensioning follows the characteristic principle of the BM-VOLVO Allrounders—the sizes of the wheels are adapted to the weight distribution of the loader. Extra large front wheels ensure maximum tractive power and floatation. The large rear-wheel deflection of the BM-VOLVO LM 641 gives a tight turning radius.



Superior versatility!

All BM-VOLVO Allrounders have one feature in common—superior versatility owing to a range of over 70 different attachments and the snap-on coupling. Switches from one attachment to another can be completed in a minute. A BM-VOLVO Allrounder need never stand idle. It can be utilized effectively the year round, and it can do its job with the correct attachment for every application.



Specifications BM-VOLVO LM 641

Engine

BM-VOLVO 4-cylinder, 4-stroke diesel engine with direct injection, type D 42
 Hp rating at 2 300 rev/min 80 hp SAE
 Max. torque at 1300 rev/min 198 lbf ft (27.4 kgf m)
 Displacement 256.3 in³ (4.2 litres)
 Bore 4.155 in (105.57 mm)
 Stroke 4.33 in (120 mm)
 Compression ratio 17.5:1
 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—4.8 (0—7.7) III 0—11.8 (0—19.0)
 II 0—7.5 (0—12.0) IV 0—18.6 (0—30.0)
 Differential lock

Tyres

Standard: front 16.9—30/14
 rear 12.4—24/12

Steering

Full power steering, type Orbitrol
 Turning radius 18 ft 5 in (5.6 m)

Brakes

Hydraulic disc brakes, fully enclosed
 Parking brake

Hydraulics

Hydraulic pump, type Hamworthy
 Capacity 32 Imp.gal/min (145 l/min)
 Working pressure (low pressure system) 1422 lbf/in² (100 kgf/cm²)
 Oil tank capacity 19.8 Imp.gal (90 l)
 Lifting cylinders, bore×stroke 3.94×35.32 in (100×897 mm)
 Tipping cylinders, bore×stroke 4.33×13.27 in (110×337 mm)

Operating data

Max. lifting height under tipped bucket 9 ft 6 in (2.90 m)
 Outreach at a height of 6 ft 6 in (2 metres) 4 ft 7 in (1.40 m)
 Capacity, basic bucket 1¼ yd³

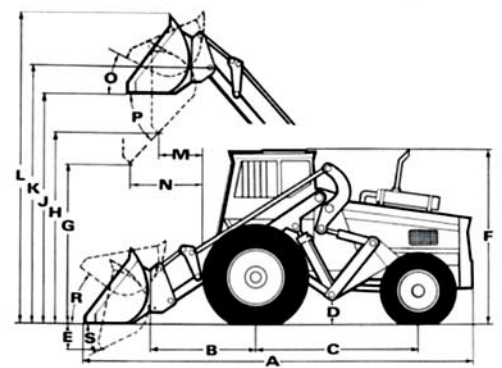
General data

Total weight with bucket 17,000 lb (7,700 kg)
 Wheel base 7 ft 8 in (2.35 m)
 Track, front 5 ft 9 in (1.76 m)
 rear 5 ft 5 in (1.70 m)
 Ground clearance 1 ft 2 in (0.35 m)
 Fuel tank capacity 8 24 Imp.gal (110 litres)

Standard equipment

Safety cab, spring-cushioned seat, heater with fresh air intake, windscreen wipers, rearview mirror in cab, twin headlights front and twin working lights rear, parking lights, tail and brake lights, direction indicators, position lights, flashing warning lights, horn, sun visor, engine hour recorder, fuel gauge, alternator, parking brake indicator light, differential lock, steering brake, snap-on attachment bracket with mechanical locking, pipe set for 3rd hydraulic function, dry air filter with pressure drop indicator, neutral start ignition switch.

Dimensions



A	18' 1¼"	(5550 mm)	K	12' 7½"	(3850 mm)
B	4' 9"	(1450 mm)	L	15' 5½"	(4700 mm)
C	7' 8½"	(2350 mm)	M	2' 6"	(750 mm)
D	1' 1¼"	(350 mm)	N	4' 7"	(1400 mm)
E	2' 5"	(710 mm)	O	41°	
F	8' 7¼"	(2640 mm)	P	45°	
G	6' 6¾"	(2000 mm)	R	42°	
H	9' 6"	(2900 mm)	S	42°	
J	11' 9¼"	(3600 mm)			

Optionals

Socket for trailer, snap-on attachment bracket with hydraulic locking, rotating flashing beacon, front working light, industrial towing hook, air-compressor for trailer brake system, outlet for trailer brake, tyre pump, spark arrester, safety belt, floatation tyres, heavy duty tyres, belly guards.

Specifications and design are subject to alteration without prior notice.



BOLINDER-MUNKTELL

—a member of the Volvo Corporation,
 Eskilstuna, Sweden

Nr 2189 GB

4. 10.70 Ljungföretagen, Örebro