

BM-VOLVO

sugar-cane loader LM 641

1-ton grab capacity



The BM-VOLVO LM 641 sugar-cane loader is designed for high capacity and features a high-torque 80-hp BM-VOLVO diesel and 4-wheel drive with large wheels for minimum ground pressure and maximum tractive and floatation power. It loads high and fast both right and left with outstanding stability owing to the BM-VOLVO Stablematic system. The adjustable crane boom affords great flexibility in loading. Driver comfort is superior thanks to easy operation and a rubber-mounted cab ensuring a very low noise level. The pressurized cab is effectively dust-proofed. Built for operation round the clock — standard equipment includes 8 headlights powered by a 700-W alternator.

The LM 641 sugar-cane loader offers unsurpassed versatility the year round owing to its BM-VOLVO snap-on coupling and wide range of attachments — excavating units, buckets, angle-tine forks, dozer blades, rotary brooms, grabs, etc.

Advantages include:

- Hydraulic system with standard components — simpler maintenance and servicing.
- High hydraulic power despite low hydraulic pressure — 1 680 lbf/in² (120 kgf/cm²)
- Convenient operation — Torque Converter and Power-Shift transmission — eliminates clutch and shutdowns.
- 310 degree swing allows operator to pick up cane over a large area — automatic center- and 90 degree side stops cuts cycle time.
- Better compact load — knuckle boom allows grab to fit down in carrier.
- BM-VOLVO Stablematic — automatic hydraulic stabilizer permits loading to both sides without extra counter weights.
- Heavy Duty Push-piler with four long prongs which lift the cane from the ground with adjustable width and parallel hydraulic floating position. This exclusive feature prevents earth, stones, etc., from becoming mixed up with the sugar cane and also reduces waste.
- Outstanding driver comfort — reduces operator fatigue — increases capacity.
- Possibility of using BM-VOLVO attachments for cleaning and digging ditches.
- Several "optional extras" are included among the standard equipment and included in the basis price — ready to go.



Snap-on coupling on the loader attachment bracket and a comprehensive range of implements provides unsurpassed versatility.

Specification for the BM-VOLVO LM 641 sugar-cane loader

General data

Overall weight	20 000 lb (9 100 kg)
Wheel base	93 in (2.35 m)
Track, front	71 in (1.8 m)
Track, rear	71 in (1.8 m)
Ground clearance	14 in (0.35 m)
Fuel tank capacity	29 US gal (110 l)

Engine

BM-VOLVO 4-cyl., 4-stroke diesel engine with direct injection, type	D 42
Rating at 2 300 rev/min	80 hp SAE
Max. torque at a 300 rev/min	198 lbf ft (27.4 kgf m)
Displacement	256 in ³ (4.2 l)
Bore	4.1763 in (105.57 mm)
Stroke	4.72 in (120 mm)
Compression ratio	17.5:1
Air cleaner	Centrifugal separator with paper element.
	Pressure-drop indicator

Electric system

Voltage	24 V
Alternator	700 W
Starter	4 hp
Transistorized charging relay	
Starter safety lock	

Torque converter

Single-stage with 3.3:1 torque ratio

Power-Shift

Power-Shift with two speed ranges with 4 speeds forward and reverse

Speeds

Forward and reverse in miles/h (km/h)	
I	0—4.8 (0—7.7)
II	0—7.5 (0—12.0)
III	0—11.8 (0—19.0)
IV	0—18.6 (0—30.0)
Differential lock	

Tires

	Standard	Extra
Front	18.4—10/10	23.1—26/10
Rear	14.9—24/10	

Steering

Hydrastatic, type	Orbitrol
Turning radius	18 ft 5 in (5.6 m)

Brakes

Fully enclosed, hydraulically operated disc brakes
Parking brake

Hydraulic system

Hydraulic pump, type	Hamworthy
Capacity	38 US gal/min (145 l/min)
Working pressure (low-pressure system)	1 700 lbf/in ² (120 kgf/cm ²)
Oil volume (loader mechanism)	23 3/4 US gal 90 l)

Sugar-cane crane

Crane, type	BM-VOLVO 6000
Length of crane boom incl. adjustable extension	16 ft 4 in (5 m)
Max clearance under grab	18 ft (5.5 m)
Lift capacity	43 000 lbf ft (6 000 kgf m)
Swing angle, crane boom, right-hand side	120°
Swing angle, crane boom, left-hand side	190°
Swing angle, crane boom, total	310°
Cycle times — 2 200 lb (1 000 kg) load, including push-piling, when loading onto vehicles with a height of:	
6 ft 6 in (2 m)	approx. 20 s
10 ft (3 m)	approx. 25 s
13 ft (4 m)	approx. 30 s

Grab

Grip area	10 3/4 ft ² (1 m ²)
Grab opening	19 1/2 ft ² (1.8 m ²)

Push-piler

BM-VOLVO Push-piler adjustable for different row spacing	
Width	4 ft 6 in—6 ft (1.4—1.8 m)
	7 ft 10 in (2.4 m)

Bucket data*

Max. load-over height	9 ft 6 in (2.9 m)
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The manufacturer reserves the right to change specifications without prior notice.



Outreach at lift height of
6 ft 6 in (2 m): 4 ft 7 in (1.4 m)
Bucket capacities 1 1/4—4 yd³ (0.95—3.0 m³)
* Indicated data for rear tires without calcium chloride solution.

Cab ventilator

Pressurizing cab ventilator with two two-speed fans, air cleaners and 4 adjustable air intakes
Capacity 280 ft³/min (8 m³/min)

Standard equipment

Safety cab, spring-cushioned driver's seat, two-speed pressurizing ventilator with air cleaners, heater with fresh-air intake, windshield wipers, rearview mirror inside cab, twin headlights front and twin working lights rear, twin working lights for crane, side-mounted working lights, parking lights, tail and brake lights, turn signals, riding lights, flashing warning lights, horn, sun visor, hour meter, fuel gauge, alternator, warning lamp for hand brake, differential lock, steering brake, back-up warning signal, snap-on coupling on attachment bracket with mechanical locking, pipe set for 3rd hydraulic function, centrifugal separator with pressure-drop indicator, starter safety lock, heavy-duty towing hook for wagons, tinted roof windows.

Optional equipment

See BM-Volvo leaflet for Standard Attachments.



BOLINDER-MUNKTELL

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