

BM·VOLVO

LOADER LM 640

4-wheel drive — compact — snappy — unmatched versatility





Super floatation and traction keep the machine going

Exceptionally large front wheels—together with 4-wheel drive, super floatation and traction give an excellent performance when ground conditions are poor. When loading, 60—70 % of the machine's total weight is on the front wheels which gives a tremendous traction. This fact gives possibility of increased loading capacity without slippage. **Big tires mean greater contact area which results in better floatation.**

The LM 640 is also equipped with a rugged positive differential lock.

BM-VOLVO LM 640 features a torque converter and Power-Shift gearbox, providing automatic in the go shifting with one single selector lever covering forward and reverse speeds.



Generous reach — high lift!



Look at the LM 640 in action! There is no problem to lift materials over wide platforms or to load highsided trucks—11' 5 $\frac{3}{4}$ " (3.50 m) lift height. This fact means easy and

fast loading. The long forward reach eliminates the risk of bumping the truck when discharging the load and it enables the operator to decrease the cycle time.



The BM-VOLVO LM 640 is an easily maneuvered, 4-wheel drive loader with torque converter and power shift transmission. Large wheels and tractive power to spare get the LM 640 going places even under poor ground conditions. This loader therefore stands out in its class as a real all-rounder

for non-major earth-moving jobs, loading and general-service work.

The compact, snappy design of the LM 640 makes it very versatile. It can be combined with many kinds of attachments to cover a very wide range of needs in materials handling and allied fields.

An all-rounder!

Nimble handling, snap-on coupling for attachments and basic design that provides long outreach and good lifting height are typical characteristics of BM-VOLVO loaders that have permitted the development of a range of attachments unmatched in the loader field.

The LM 640 can exploit the entire range—some 70 attachments in all—and together with excellent keep-going ability this makes it a true all-rounder, capable of efficient performance in widely differing work.



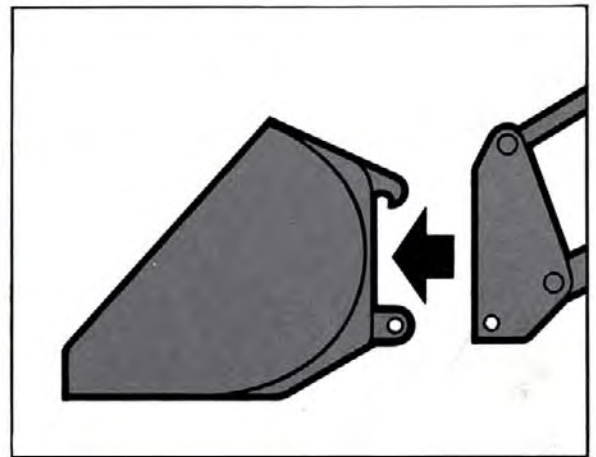


Snap-On-Coupling!

All attachments can be changed by the operator in a minute thanks to the design of the attachment frame with BM-VOLVO Snap-On-Coupling. Quick switching of attachments also means that the machine can change jobs frequently.

In many cases the BM-VOLVO loaders can do a bigger machine's job due to the snappy changing of attachments. Take buckets f.e. which often have to be used in materials of various density and compaction. With the BM-VOLVO Snap-On-Coupling you can change quickly to the right size and shape of bucket for maximum utilization and best economy.

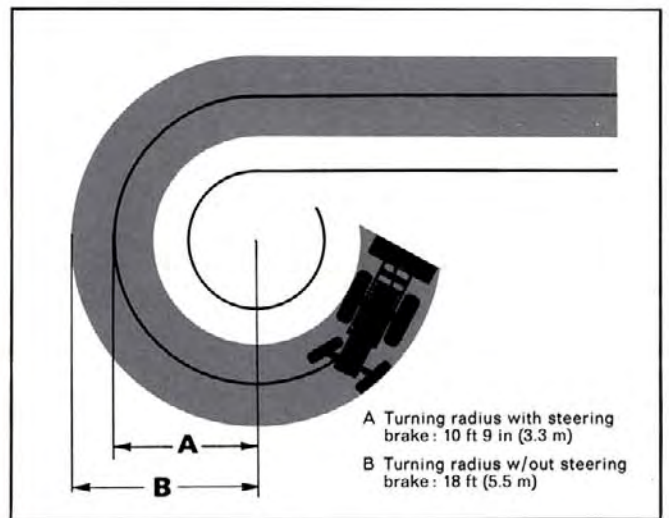
The LM 640 can also be equipped with an attachment frame with Hydraulic-Snap-On-Locking, which means changing attachments without leaving the cab.



Good visibility – comfort – safety – tight turning!

The sturdy safety tested cab is designed to provide good visibility, maximum comfort and full control of the attachments in all positions. The controls are easy to reach and designed for natural non-tiring operation. The cab is further equipped with safety glass, side sliding, grill guarded ventilator windows, rear ventilator window, dual speed ventilation fan for warm weather and heater for cold. There is a roof emergency exit. The comfortable seat is adjustable

and is equipped with shock absorber and tension spring. Entrance is through a large front door which is equipped with hydraulic lockout when opened. Tight turning radius—only 18' (5.5 m)—means short working cycles and high work output. The exceptionally short turning radius in combination with the long wheel base ensures an excellent maneuverability, ease of handling, high capacity and a safe, smooth ride.





Reliable, fuel saving engine!

The BM-VOLVO LM 640 is powered by a tough 4-cycle 3-cylinder direct injection BM-VOLVO diesel with proven long life, low fuel consumption and reliability. The design of the combustion chamber, recessed in the piston crown, results in optimum combustion of the fuel-air mixture and assists in achieving the high performance and clean exhaust that are distinctive features of BM-VOLVO diesels.

The engine is of a heavy-duty, well-tested design. In combination with the torque converter, the engine delivers tremendous traction and makes the most of its power potential.

Specification LM 640

Engine

BM-VOLVO, 4-cycle Diesel, direct injection, Type 1113 A LH
 Max. HP-rating at 2200 RPM 69 hp SAE
 Max. torque at 1500 RPM 181 ft.lb/25 kgm
 Number of cylinders .. 3
 Bore and stroke 4 3/8" x 5 1/8"
 (111.12 x 130.0 mm)
 Piston displacement 230.7 cu. in
 (3.78 lt)

Torque converter

Twin Disc single stage ..
 Stall ratio 3.3:1

Transmission

Full Power Shift in all forward and reverse speeds.
 Single lever covers all forward and reverse speeds within high and low ranges.

Speeds:

Low Range: Forward and reverse	m.p.h.	km/h
I	4.0	6.5
II	6.5	10.5

High Range: Forward and reverse

III	11.3	18.2
IV	18.4	29.6

Differential

Manually operated differential lock.

Tires

Front 16.9—30/10
 Rear 12.4—24/10

Steering

Rear wheels, hydraulic power steering
 Turning radius 18' (5.5 m)

Brakes

Service disc brakes, fully enclosed double-faced.

Hydraulic system

Hydraulic pump Hamworthy Hydreco
 Output at 2200 r.p.m. ... 37 US/30.8 Imp. gal/min (140 l/min)
 Relief valve opening 1280 PSI pressure (90 kg/sq. cm)
 Lift cylinders: 3 15/16" D x 2' 11 5/16"
 Tilting cylinders: 3 15/16" D x 1' 1 15/16"
 Hydraulic hoses for cylinders All one size 3/4" x 1' 7 3/4"

Operating data

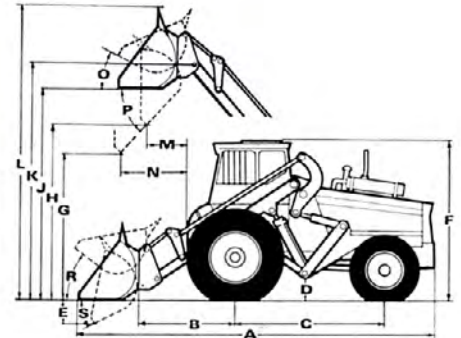
Tipping load SAE 6400 lb (2900 kg) at 4' 7" (140 cm) reach to tires and 7' 1" (216 cm) to wheel center
 Carrying capacity 6610 lb (3000 kg)
 Bucket capacities 1 1/4—4 cu. yd. (0.7—3.0 cu. m)
 Reach at 6' 6 3/4" (2 m) height, approx. 4' 7" (1.4 m)
 Max. clearance under dumped bucket 9' 6" (2.9 m)

Operating weight

Incg. bucket 14550 lb (6600 kg)

Dimensions

A	..... 17' 8"	(5400 mm)
B	..... 4' 10 1/4"	(1480 mm)
C	..... 7' 6 1/2"	(2300 mm)
D	..... 1' 1"	(330 mm)
E	..... 1' 1 1/2"	(600 mm)
F	..... 8' 3 1/4"	(2520 mm)
G	..... 6' 6 3/4"	(2000 mm)
H	..... 9' 6"	(2900 mm)
J	..... 11' 5 3/4"	(3500 mm)
K	..... 12' 7 1/2"	(3850 mm)
L	..... 14' 9 1/2"	(4510 mm)
M	..... 2' 3/4"	(630 mm)
N	..... 4' 7"	(1400 mm)
O	..... 43°	
P	..... 43°	
R	..... 42°	
S	..... 41°	



Operating dimensions

Wheelbase 7' 6 1/2" (2.3 m)
 Tread 5' 8 1/2" (1.74 m)
 Max. width (less bucket) 6' 11" (2.15 m)
 Ground clearance 13" (0.33 m)

Standard equipment

Safety tested, comfortable cab with rubber mat, safety glass, side sliding ventilator windows, rear ventilator window, roof emergency exit, inside rearview mirror, engine-hour meter, sun visor, fuel gauge, 460 W alternator, three-spool hydraulic control complete with tubing and controls, direction indicator lights, dual elec. windshield wipers, fresh air ventilation and heating unit, hydraulic power steering, steering brakes, differential lock, twin headlights at both front and rear, tail lights, parking lights, position lights, electric plug for trailer, horn, safety grille, cab light, tail reflectors, microswitch.

Optional equipment

4th hydraulic section with tubing set and separate control lever for 4th valve section or combined control for 3rd and 4th functions, complete hydraulic tubing set for trailer dumping, engine preheater of 750 W immersion type, complete brakekit for trailers, industrial towing hook, rotating flashing beacon, extra working lights, GN suspension for driver's seat, safety belts, attachment frame with hydraulic snap-on-coupling.

The manufacturers reserve the right to change specification and details without notice.



BM-VOLVO LM 640 ***universal loader***

- Nimble, easily maneuvered
- 4-wheel drive, no bogging down
- Large wheels give low ground pressure, good floatation
- Solidly built, reliable engine
- Torque converter multiplies torque as load increases
- Power-Shift transmission for fast, easy changing
- Snap-on coupling, attachments changed in a minute by the operator
- Wide range of attachments—about 70 types
- Comfortable cab offers good visibility, heating, ventilation and security
- Tight turning radius, fast working cycles in confined spaces
- Easy servicing, all daily inspection points readily accessible



BOLINDER-MUNKTELL

— member of the Volvo Corporation
Eskilstuna, Sweden