The 641 is a 4-wheel drive, handy all-round loader featuring torque converter and Power-Shift gearbox. The loader has very fine performance characteristics as a result of a new 80-hp engine and rugged design throughout with axles, side arms and hydraulic cylinders of ample dimensions.

The driver's cab is spacious and easy to enter. Low noise level owing to careful insulation and effective cab suspension.

Hydrostatic steering for reliable and easy handling.

Its excellent off-road performance and versatility make the VOLVO BM 641 an efficient and economical loader for the most varied tasks.
Characteristic features of the VOLVO BM loaders are their nimbleness, the snap-on coupling and the design of the side arms which provides both long outreach and high lift. These properties have enabled the development of a range of attachments which is unique for loaders.

The 641 can utilize the entire range of attachments—approx. 70 different units—and in combination with its excellent off-road performance this makes it a truly all-round loader which effectively handles the most diversified jobs.

Attachment changes in less than a minute are made possible by the snap-on coupling of the attachment bracket—an exclusive design feature which enables the VOLVO BM loader to satisfy such a wide range of requirements. The fast attachment changes also mean that the loader can easily shift from one task to another—important for full utilization.

The 641 can also be fitted with a hydraulic snap-on coupling controlled from the driver's seat.

The 641 operates with ease on loose and slippery ground. It features 4-wheel drive and large wheels providing a large contact area and low specific ground pressure. The loader also incorporates a rugged differential lock.
outreach...

The VOLVO BM 641 has a robust loader unit of special design which combines long outreach with high lift. The linkage system ensures parallel side-arm action and good bucket angles. The open design with no obscuring hydraulic cylinder provides excellent visibility for perfect control of the attachment in all positions.

Lift
Maximum lift under attachment pivot is all of 151.6 in (3.85 m) and under tipped bucket (45°) 116.1 in (2.95 m) — excellent values which enable the 641 to load onto high haulage vehicles rapidly and easily and to reach high up in service work on building sites.

Outreach
Its long outreach enables the 641 to fill its bucket without the front tyres having to run into the material being loaded. This eliminates unnecessary wheel-spin and tyre wear. The driver can concentrate fully on the positioning of the load, since the outreach will generally eliminate the risk of running into the vehicle being loaded. The long outreach also makes it possible to load into wide lorries from one side.
The driver’s cab on the 641 is a carefully designed, safe and comfortable work station. It has been approved according to international standards. Wide foot steps and a door which is held in position by a gas-spring make it easy to climb in and out the cab.

Low noise level
The extreme airtightness, careful insulation and rubber suspension of the cab ensure a low noise level. A contributing factor is also the uncommonly vibrationless running of the new engine.

Heating and ventilation
The heater has a high capacity and is installed beneath the driver’s seat—a position which provides for a very uniform and effective radiation of the hot air. There are two fan speeds. Opening side and rear windows and a safety hatch in the roof enable individual adjustment of the ventilation.

Excellent driver comfort
The cab is carefully appointed and very spacious. The driving position is restful with correctly positioned controls and instruments and hydrostatic steering for exact, finger-tip control. Large glazed areas provide excellent all-round visibility and full control of the attachment in all positions.

Driver’s seat
The seat is covered with nylon pile which breathes. It is adjustable vertically and for leg-room. The firmness of its suspension and the back-rest rake are also adjustable to provide the best individual seating position.
engine...

The 641 is powered by a completely new 4-cylinder, direct-injection VOLVO BM diesel engine developing 80 hp SAE at 2,300 rev/min. The engine has a displacement of 256.3 in³ (4.2 litres) and a maximum torque of 188.2 lb ft (27.4 kgf m) at 1,300 rev/min. Wet replaceable cylinder liners, aluminium alloy pistons and a crankshaft carried in five case-hardened bearings provide a high degree of wear resistance. The exceptionally vibrationless running of the engine is due to a special balancing mechanism. The injection pump is fitted with an automatic cold starting device. The air filter is composed of a dry filter and a centrifugal separator with a high filtering effect. An alternator guarantees battery charging even at low engine speeds.

Specifications VOLVO BM 641

<table>
<thead>
<tr>
<th>Engine</th>
<th>Hydraulics</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLVO BM 4-cylinder, 4-stroke diesel engine with direct injection, type D42</td>
<td>Hydraulic pump, type Hemworthy</td>
</tr>
<tr>
<td>Hp rating at 2,300 rev/min 80 hp SAE</td>
<td>32 lmp gal/min (145 l/min)</td>
</tr>
<tr>
<td>Max. torque at 1,300 rev/min 198 lb ft (27.4 kgf m)</td>
<td>Working pressure (low pressure system) 1422 lbf/in² (100 kg/m²)</td>
</tr>
<tr>
<td>Displacement 256.3 in³ (4.2 litres)</td>
<td>Oil tank capacity 19.8 lmp gal (90 l)</td>
</tr>
<tr>
<td>Bore 4.155 in (105.57 mm)</td>
<td>Lifting cylinders, bore x stroke 3.94 x 35.32 in (100 x 897 mm)</td>
</tr>
<tr>
<td>Stroke 4.33 in (110 mm)</td>
<td>Tipping cylinders, bore x stroke 4.33 x 13.27 in (110 x 337 mm)</td>
</tr>
<tr>
<td>Compression ratio 17.5:1</td>
<td></td>
</tr>
<tr>
<td>Air cleaner Centrifugal separator with dry filter element, pressure drop indicator</td>
<td></td>
</tr>
</tbody>
</table>

Electrics

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

Safety start device

Torque converter

Single-stage, single-phase with 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) |
| II | 0—7.5 (0—12.0) |
| III | 0—11.8 (0—19.0) |
| 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 14 ft 5 in (5.6 m)

Brakes

Hydraulic disc brakes, fully enclosed

Parking brake

Dimensions

A 19° 15° (560 mm) K 12° 17° (490 mm)
B 4° 9° (1450 mm) L 12° 5° (1470 mm)
C 7° 8° (2350 mm) M 5° 6° (750 mm)
D 1° 1' 6" (560 mm) N 4° 7° (1460 mm)
E 2° 5° (710 mm) O 4° 11°
P 4° 7' 5" (360 mm) Q 4° 11°
R 6° 6' 5" (2000 mm)
S 11° 9' 5" (3000 mm)

Options

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, flotation tyres, heavy duty tyres, belly guards.

Specifications and design are subject to alteration without prior notice.
VOLVO BM 641

effective, 4-wheel drive all-round loader

- Versatile owing to the snap-on coupling on the attachment bracket which enables attachment changes in a minute. Wide range of attachments—approx. 70 different units.
- Comfortable, safe driver's cab with a low noise level. Excellent visibility, heating and ventilation. Very comfortable seat.
- Carefully designed loader unit combining long outreach with high lift. Parallel side-arm action and good bucket angles.
- Large wheels give a low ground pressure—an advantage on ground with poor bearing capacity. Small angle of climb over obstacles. Rugged differential lock as standard. Unbeatable on difficult ground.
- Torque converter and Power-Shift gearbox—easy, fast gear shifts without use of a clutch pedal.
- Automatic increase in torque as resistance increases.
- 80-hp 4-cyl. VOLVO BM diesel engine. A balancing mechanism ensures virtually vibrationless running.
- 4-wheel drive keeps the loader on the move over loose and slippery ground. Planetary gears in the wheel hubs.

VOLVO BM

VOLVO BM AB ESKILSTUNA SWEDEN