

## VOLVO SKID STEER LOADER

# MC90

- (64 kW) **86 hp 4-cylinder diesel engine**
- (907 kg) **2,000 lb operating capacity**
- (3281 kg) **7,233 lb operating weight**
- Superior breakout force and axle torque
- Powerful (68 lpm) **17.9 gpm** hydraulic pump to run optional attachments
- Optional (104 lpm) **27.6 gpm** hydraulic pump for high flow attachments
- Forward tilting ROPS/FOPS cab allows quick and easy access to engine/drive train
- Swing out rear door, hinged engine cover, lift out floor panel
- Welded unitized frame, modular axles, corrosion-resistant lift arm and tilt pins
- Adjustable drive chains
- Lubed-for-life universal joint for efficient engine-to-transmission power transfer
- Extra wide operator compartment
- Easy entrance and exit
- Easy-to-read gauge/warning light panel
- Conventional hand and foot controls standard; optional hands only controls
- Quick-Attach system for most attachments

## The MC90 in detail

### Engine

Make/Model	Perkins 1004.42
Cylinders	4
Fuel type	Diesel
Displacement	(4,2 l) <b>258 cu in</b>
Cooling system	Liquid cooled
Horsepower	
Gross @ 2400 rpm	(64 kW) <b>86 hp</b>
Peak torque	.....(300 Nm) <b>221 ft-lb @ 1400 rpm</b>
Bore	.....(103 mm) <b>4.1 in</b>
Stroke	.....(127 mm) <b>5.0 in</b>
Speeds:	
Fast, no load (max)	.....2,450 rpm
Rated	.....2,400 rpm
Idle, no load (min)	.....1,150 rpm

### Electrical system

Alternator	..... 55 amp
Battery	.....950 CCA
System protection	.....40 amp circuit breaker
Starter	.....(2,8 kW) <b>12V</b>

### Drivetrain

Type (pumps)	..... (46 cc/rev) <b>2.8 in<sup>3</sup>/rev</b> displacement
Type (motors)	..... (494 cc/rev) <b>30 in<sup>3</sup>/rev</b> displacement
Axle torque	..... (6684 Nm) <b>4,930 ft-lb</b>
Axle diameter	..... (4,8 cm) <b>1.9 in</b>
Chain size	..... .80 HV
Parking brakes	.....pin lock

### Hydraulic system

Lift Cylinders	
Bore	..... (7,0 cm) <b>2.8 in</b>
Stroke	..... (80,6 cm) <b>31.8 in</b>
Rod size	..... (4,1 cm) <b>1.6 in</b>
Tilt Cylinders	
Bore	..... (7,6 cm) <b>3.0 in</b>
Stroke	..... (45,4cm) <b>17.9 in</b>
Rod size	..... (3,8 cm) <b>1.5 in</b>
Pump flow @ rated rpm	..... (68 lpm) <b>17.9 gpm</b>
High pump flow @ rated rpm	..... (164 lpm) <b>27.6 gpm</b>
Relief pressure (max.)	..... (18615 kpa) <b>2,700 psi</b>

### Service fill capacities

Cooling system	..... (15,5 l) <b>4.1 gal</b>
Engine crankcase (with filter)	..... (10,4 l) <b>11 qt</b>
Fuel tank	..... (85 l) <b>22.5 gal</b>
Hydraulic system	..... (64 l) <b>16.9 gal</b>
Chain case	..... (8,7 l) <b>2.3 gal</b>

### Performance

Rated operating capacity	..... (907 kg) <b>2,000 lb</b>
Tipping capacity	..... (1814 kg) <b>4,000 lb</b>
Approx. operating weight (SAE)	..... (3281 kg) <b>7,233 lb</b>
Travel speed	..... (0-10,5 km/h) <b>0-6.5 mph</b>

### Breakout force:

SAE tilt breakout force	..... (26060 N) <b>5,858 lbf</b>
SAE lift breakout force	..... (16630 N) <b>3,739 lbf</b>

### Cycle times:

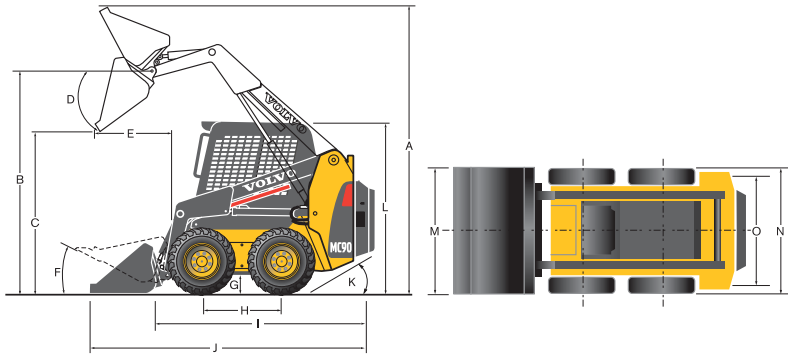
Lift raising time	.....5.4 sec
Lift lowering time	.....3.6 sec
Tilt dumping time	.....3.4 sec
Tilt rollback time	.....2.7 sec

### SAE Rated equipment:

Full fuel tank	(75 kg) <b>165 lb</b> operator
(1829 mm) <b>72"</b> dirt bucket	
12.00 x 16.5 – 10-ply HD tires	

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# Specifications



- A. Overall operating height  
(with dirt bucket [1829 mm 72"]) . . . . (3978 mm) **156.6"**
- B. Height to hinge pin . . . . . (3075 mm) **121.1"**
- C. Dump height . . . . . (2394 mm) **94.3"**
- D. Dump angle . . . . . **37°**
- E. Dump reach . . . . . (625 mm) **24.6"**
- F. Maximum roll back . . . . . **28°**
- G. Ground clearance . . . . . (188 mm) **7.4"**
- H. Wheelbase . . . . . (1070 mm) **42.1"**
- I. Overall length (less bucket) . . . . . (2746 mm) **108.1"**
- J. Overall length (with dirt bucket) . . . . . (3479 mm) **137.0"**
- K. Angle of departure . . . . . **26°**
- L. Overall height . . . . . (2058 mm) **81.0"**
- M. Bucket width . . . . . (1829 mm) **72.0"**
- N. Over tire width (less bucket)  
12.00 x 16.5 tires . . . . . (1826 mm) **71.9"**
- O. Tread width . . . . . (1515 mm) **59.6"**

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Data according to bucket type		72" Dirt Bucket	72" Landscape Bucket	72" Landscape Bucket w/teeth	80" Dirt Bucket	80" Landscape Bucket	80" Landscape Bucket w/teeth
Width	cm	183	183	183	203	203	203
	in	72	72	72	80	80	80
SAE Heaped cap	m <sup>3</sup>	0,494	0,55	0,55	0,56	0,61	0,61
	ft <sup>3</sup>	17.5	19.3	19.3	19.7	21.7	21.7
SAE Struck cap	m <sup>3</sup>	0,378	0,41	0,41	0,42	0,46	0,46
	ft <sup>3</sup>	13.4	14.5	14.5	15	16.1	16.1
Weight	kg	221	228	244	233	244	262
	lb	486	503	538	514	538	578

### STANDARD EQUIPMENT

#### Engine

Dual element air cleaner  
(2,8 kW) **12 Volt** starter  
55 amp alternator  
Quick cycle engine preheat

#### Electrical

12 Volt 950 CCA battery  
Engine start/stop key switch  
Fuel gauge  
Hourmeter  
Two front and one rear work light  
Battery shutoff switch  
Warning system:  
Air filter restriction, alternator, hydraulic filter restriction, hydraulic oil temperature  
Warning light with audible alarm:  
Engine water temperature, engine oil pressure and hydraulic oil temperature

#### Transmission

Two servo-controlled variable displacement piston pumps mounted in tandem  
Two fixed displacement high torque motors

#### Hydraulic

Lift arm mounted auxiliary hydraulics with standard flat face couplers (ISO 16028)  
10 micron hydraulic oil filter

#### Safety

Lift arm support strut  
Electric lift and tilt hydraulic lockouts  
Back-up alarm  
Mechanical park lock  
Emergency exit rear window  
Horn  
Rear and top door props

#### Cab

Adjustable seat with 2" retractable seat belt  
Operator restraint bar  
Dual travel/steering levers  
Tilt forward ROPS/FOPS cab  
12 Volt outlet

#### Other

Lockable doors and covers  
Quick-Attach mounting frame  
Lockable fuel cap

### OPTIONAL EQUIPMENT

#### Engine

Engine air intake pre-cleaner  
Engine block heater (600 watt)  
Catalytic muffler  
Spark arresting muffler

#### Cab

Top window  
Hand only controls  
3" retractable seat belt

#### Hydraulic

Hydraulic reservoir heater (450 watt)  
High flow hydraulics  
Hydraulic self level (lift only)

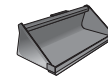
#### Electrical

Rotating beacon light

#### Tires

33.00 x 15.5 x 16.5 - 12-ply super wide flotation tire  
8.00 x 16 non-pneumatic solid tire  
12.00 x 16.5 - 10-ply heavy duty tire (rated)

### ATTACHMENTS



Buckets



Pallet forks



Tracks

For details on the full range of Volvo attachments please contact your local Volvo dealer.

*All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and designs without prior notice. The illustrations do not necessarily show the standard version of the machine.*

# VOLVO

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