

SPECIFICATIONS

• EC210B LR

Description		Specification
Operating weight		23,220 kg
Bucket capacity: SAE / CECE		520 l / 450 l
Engine	Model	VOLVO D6D
	Type	4-stroke diesel engine with water cooling, direct injection and charged air cooler
	Flywheel horsepower: Net Gross	107 kW (145 ps / 143 hp) at 1,900 rpm
		119 kW (162 ps / 159 hp) at 1,900 rpm
	Max. torque	647 N·m at 1,425 rpm
Fuel tank capacity	350 l	
Hydraulic system	Type	Variable displacement axial piston pump x 2, Gear pump x 1
	System pressure	• 32.4 / 34.3 Mpa (330 / 350 kg/cm ²) • Arm-in, bucket: 27.0 Mpa (275 kg/cm ²)
	Max. flow rate	2 x 200 l/min
Performance	Swing speed	11.6 rpm
	Travel speed (1st / 2nd)	3.2 / 5.5 km/h
	Gradeability	35° (70%)
	Max. tractive effort	183 kN (18,700 kg)
	Ground pressure	36 kPa (0.37 kg/cm ²)
Counterweight		4,900 kg

• EC240B LR

Description		Specification
Operating weight		27,570 kg
Bucket capacity: SAE / CECE		520 l / 450 l
Engine	Model	VOLVO D7D
	Type	4-stroke diesel engine with water cooling, direct injection and charged air cooler
	Flywheel horsepower: Net Gross	125 kW (170 ps / 168 hp) at 2,000 rpm
		134 kW (182 ps / 180 hp) at 2,000 rpm
	Max. torque	735 N·m at 1,400 rpm
Fuel tank capacity	380 l	
Hydraulic system	Type	Variable displacement axial piston pump x 2, Gear pump x 1
	System pressure	• 31.4 / 34.3 Mpa (320 / 350 kg/cm ²) • Arm-in, bucket: 27.0 Mpa (275 kg/cm ²)
	Max. flow rate	2 x 230 l/min
Performance	Swing speed	11.4 rpm
	Travel speed (1st / 2nd)	3.2 / 5.5 km/h
	Gradeability	35° (70%)
	Max. tractive effort	209 kN (21,280 kg)
	Ground pressure	41 kPa (0.42 kg/cm ²)
Counterweight		6,600 kg

SPECIFICATIONS

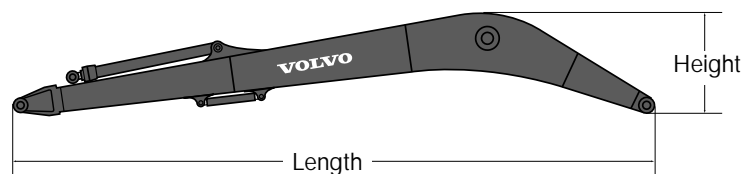
• EC290B LR

Description		Specification
Operating weight		31,600 kg
Bucket capacity: SAE / CECE		520 l / 450 l, 570 l / 500 l
Engine	Model	VOLVO D7D
	Type	4-stroke diesel engine with water cooling, direct injection and charged air cooler
	Flywheel horsepower: Net	143 kW (195 ps / 192 hp) at 1,900 rpm
	Gross	153 kW (208 ps / 205 hp) at 1,900 rpm
	Max. torque	940 N·m at 1,400 rpm
Fuel tank capacity		470 l
Hydraulic system	Type	Variable displacement axial piston pump x 2, Gear pump x 1
	System pressure	• 31.4 / 34.3 Mpa (320 / 350 kg/cm ²) • Bucket: 27.5 Mpa (280 kg/cm ²)
	Max. flow rate	2 x 250 l/min
Performance	Swing speed	10.2 rpm
	Travel speed (1st / 2nd)	3.3 / 5.2 km/h
	Gradeability	35° (70%)
	Max. tractive effort	231 kN (23,500 kg)
	Ground pressure	45 kPa (0.46 kg/cm ²)
Counterweight		7,150 kg

DIMENSIONS

• Boom

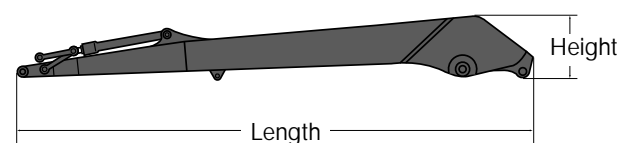
Description	EC210B LR	EC240B LR	EC290B LR
		8.85 m boom	10.2 m boom
Length	9,060 mm	10,410 mm	10,430 mm
Height	1,540 mm	1,550 mm	1,620 mm
Width	670 mm	730 mm	770 mm
Weight	2,330 kg	2,820 kg	3,400 kg



* Includes cylinder, pin and piping

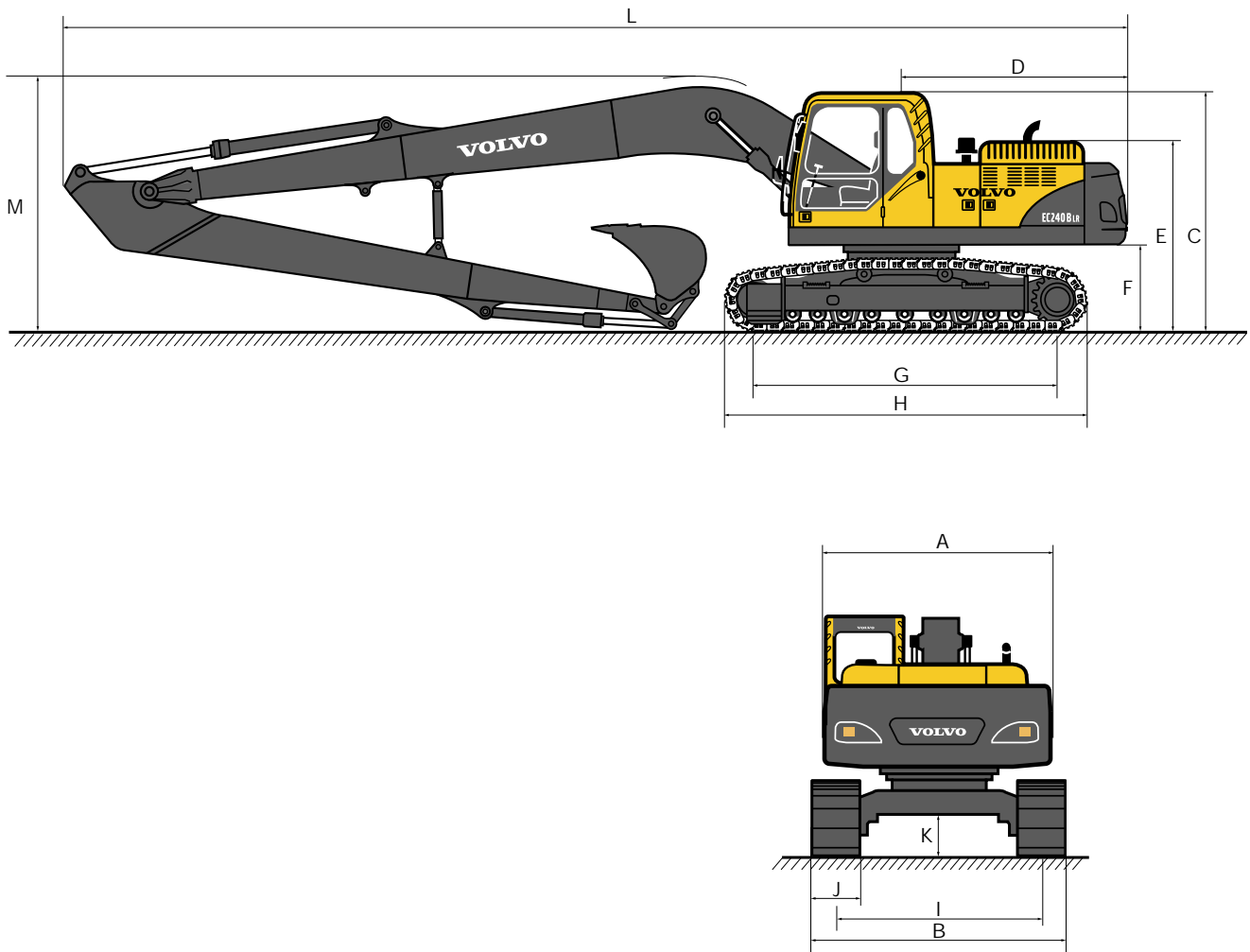
• Arm

Description	EC210B LR	EC240B LR	EC290B LR
		6.25 m arm	7.85 m arm
Length	7,310 mm	8,970 mm	9,060 mm
Height	870 mm	1,145 mm	1,065 mm
Width	350 mm	380 mm	545 mm
Weight	1,170 kg	1,520 kg	1,790 kg



* Includes cylinder, linkage and pin

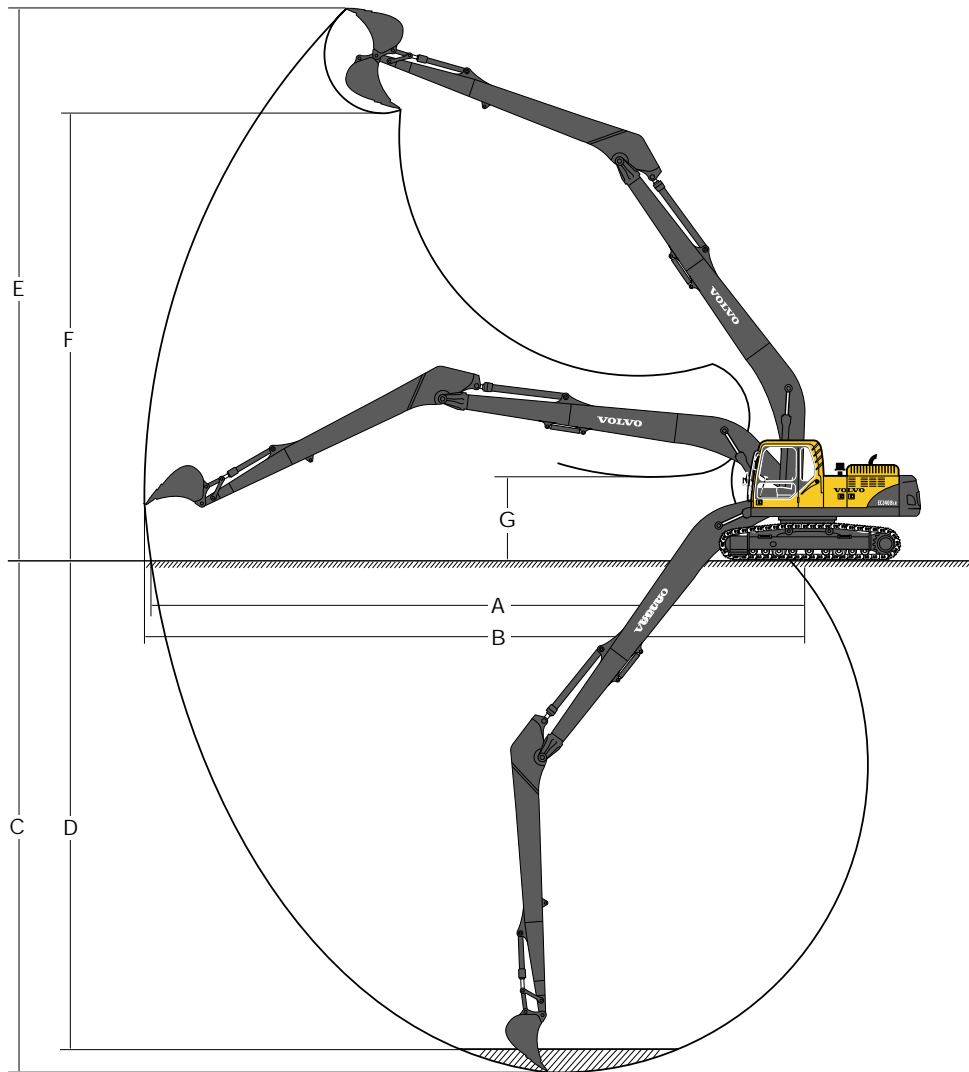
DIMENSIONS



Description	Unit	EC210B LR	EC240B LR	EC290B LR
A. Overall width of superstructure	mm	2,700	2,840	2,890
B. Overall width	mm	3,190	3,390	3,390
C. Overall height of cab	mm	2,930	2,990	3,030
D. Tail swing radius	mm	2,750	2,880	2,970
E. Overall height of engine hood	mm	2,330	2,390	2,435
F. Counterweight clearance *	mm	1,025	1,080	1,125
G. Tumbler length	mm	3,660	3,850	4,015
H. Track length	mm	4,460	4,650	4,870
I. Track gauge	mm	2,390	2,590	2,590
J. Shoe width	mm	800	800	800
K. Min. ground clearance *	mm	460	470	480
L. Overall length	mm	12,810	14,390	14,590
M. Overall height of boom	mm	3,150	3,170	3,340

* Without shoe grouser

WORKING RANGES & DIGGING FORCES



• Direct fit bucket

Description	Unit	EC210B LR	EC240B LR	EC290B LR
		8.85 m Boom / 6.25 m Arm	10.2 m Boom / 7.85 m Arm	10.2 m Boom / 7.9 m Arm
A. Max. digging reach	mm	15,810	18,310	18,600
B. Max. digging reach on ground	mm	15,710	18,210	18,490
C. Max. digging depth	mm	12,100	14,350	14,790
D. Max. digging depth (8° level)	mm	11,990	14,230	14,690
E. Max. vertical wall digging depth	mm	13,300	14,890	14,900
F. Max. cutting height	mm	10,950	12,580	12,570
G. Min. dumping height	mm	2,050	1,880	1,640



















• Digging forces with direct fit bucket

Description		Unit	EC210B LR	EC240B LR	EC290B LR
Bucket radius		mm	1,250	1,250	1,250
Breakout force-bucket	SAE	kN / kg	68.6 / 7,000	68.6 / 7,000	69.1 / 7,050
Breakout force-bucket	ISO	kN / kg	77.8 / 7,930	77.8 / 7,930	80.3 / 8,190
Tearout force-arm	SAE	kN / kg	44.1 / 4,500	44.1 / 4,500	64.2 / 6,550
Tearout force-arm	ISO	kN / kg	44.7 / 4,560	44.7 / 4,560	65.1 / 6,640
Rotation angle, bucket		deg	179	179	179


















LIFTING CAPACITY (At the arm and without bucket)

Note: For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick fit from the following values.

EC210B LR

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12 m		13.5 m		Max. reach				
																		Max. mm		
with 800 mm shoe 4,900 kg CWT boom 8.85 m + arm 6.25 m	12.0 m kg																*860	*860	10,290	
	10.5 m kg																	*790	*790	11,610
	9.0 m kg												*1,420	*1,420				*750	*750	12,610
	7.5 m kg										*2,110	*2,110	*2,000	1,960				*730	*730	13,370
	6.0 m kg										*2,260	*2,260	*2,200	1,900	*1,300	*1,300		*730	*730	13,920
	4.5 m kg									*2,660	*2,660	*2,460	2,340	*2,330	1,820	*1,760	1,430	*740	*740	14,290
	3.0 m kg	*5,920	*5,920	*4,320	*4,320	*3,500	*3,500	*3,010	2,830	*2,700	2,190	*2,480	1,730	*2,100	1,370			*760	*760	14,500
	1.5 m kg	*5,890	*5,890	*5,230	4,600	*4,060	3,400	*3,380	2,610	*2,950	2,050	*2,650	1,630	2,210	1,310			*810	*810	14,550
	0 m kg	*4,160	*4,160	*5,960	4,160	*4,550	3,110	*3,720	2,410	3,170	1,920	2,590	1,550	2,150	1,260			*870	*870	14,440
	-1.5 m kg	*4,160	*4,160	*6,420	3,890	4,910	2,900	3,800	2,270	3,060	1,810	2,520	1,480	2,110	1,210			*950	*950	14,170
	-3.0 m kg	*4,690	*4,690	6,600	3,760	4,770	2,780	3,700	2,170	2,980	1,740	2,470	1,430	*1,620	1,190			*1,070	*1,070	13,740
	-4.5 m kg	*5,480	*5,480	6,560	3,720	4,720	2,730	3,650	2,120	2,940	1,710	2,450	1,410					*1,250	1,250	13,110
	-6.0 m kg	*6,510	5,800	*6,470	3,760	4,730	2,740	3,650	2,120	2,950	1,720	*2,340	1,440					*1,510	1,400	12,270
	-7.5 m kg	*7,830	5,980	*6,060	3,870	4,800	2,810	3,710	2,180	3,020	1,780							*1,960	1,650	11,160
	-9.0 m kg	*6,870	6,250	*5,340	4,050	*4,270	2,940	*3,400	2,310									*2,900	2,110	9,690
	-10.5 m kg	*5,250	*5,250	*4,100	*4,100	*3,130	*3,130											*3,030	*3,030	7,650
-12.0 m kg																				

EC240B LR

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12 m		13.5 m		Max. reach				
																	Max. mm			
with 800 mm shoe 6,600 kg CWT boom 10.2 m + arm 7.85 m	12.0 m kg														*1,020	*1,020	*870	*870	13,700	
	10.5 m kg															*1,550	*1,550	*840	*840	14,700
	9.0 m kg															*1,870	*1,870	*820	*820	14,590
	7.5 m kg											*2,140	*2,140	*2,110	*2,110			*820	*820	16,100
	6.0 m kg											*2,310	*2,310	*2,220	2,150			*830	*830	16,550
	4.5 m kg										*2,700	*2,700	*2,510	*2,510	*2,360	2,050		*860	*860	16,850
	3.0 m kg	*6,930	*6,930	*5,020	*5,020	*4,020	*4,020	*3,420	*3,420	*3,020	3,020	*2,730	2,400	*2,530	1,930			*890	*890	17,020
	1.5 m kg	*5,130	*5,130	*6,130	*6,130	*4,710	4,560	*3,880	3,520	*3,340	2,780	*2,960	2,240	*2,690	1,820			*940	*940	17,050
	0 m kg	*3,500	*3,500	*7,020	5,490	*5,320	4,120	*4,300	3,220	*3,640	2,570	*3,190	2,090	2,780	1,710			*1,010	*1,010	16,940
	-1.5 m kg	*3,380	*3,380	*6,290	5,060	*5,780	3,790	*4,650	2,970	3,890	2,390	3,210	1,960	2,690	1,610			*1,100	1,090	16,710
	-3.0 m kg	*3,700	*3,700	*5,990	4,820	6,000	3,580	4,650	2,800	3,750	2,260	3,100	1,860	2,610	1,540			*1,220	1,110	16,330
	-4.5 m kg	*4,220	*4,220	*6,270	4,720	5,870	3,460	4,530	2,700	3,660	2,170	3,030	1,790	2,560	1,490			*1,380	1,170	15,790
	-6.0 m kg	*4,880	*4,880	*6,890	4,720	5,830	3,420	4,480	2,650	3,610	2,130	3,000	1,760	2,540	1,480			*1,610	1,260	15,090
	-7.5 m kg	*5,670	*5,670	*7,740	4,780	5,850	3,450	4,490	2,660	3,620	2,130	3,010	1,770	2,570	1,500			*1,950	1,400	14,190
	-9.0 m kg	*6,620	*6,620	*7,280	4,920	*5,840	3,530	4,560	2,720	3,670	2,190	3,060	1,820					*2,500	1,630	13,060
	-10.5 m kg	*7,790	*7,790	*6,570	5,130	*5,310	3,680	*4,380	2,840	*3,630	2,300							*3,110	2,010	11,630
-12.0 m kg	*6,940	*6,940	*5,490	5,420	*4,460	3,910	*3,610	3,040									*3,210	2,730	9,760	

- Notes:
- Machine in "Fine Mode-F" (Power Boost), for lifting capacities.
 - The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
 - Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
 - Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

STANDARD EQUIPMENT

Engine

Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler
3-stage air filter with indicator, and pre-cleaner
Air intake heater
Electric engine shut-off
Fuel filter and water separator
Coolant filter
Alternator, 80A

Electric / Electronic control system

Contronics:
– Advanced mode control system
– Self-diagnostic system
Machine status indication
Engine speed sensing power control
"Power Max" mode system
Automatic idling system
One-touch power boost
Automatic engine warm-up
Safety stop/start function

Adjustable monitor
Master switch
Engine restart prevention circuit
High capacity halogen lights:
– Frame mounted 2
– Boom mounted 2
Batteries:
– EC210B LR: 2 x 12 V / 150 Ah
– EC240B LR: 2 x 12 V / 200 Ah
– EC290B LR: 2 x 12 V / 200 Ah
Start motor, 24 V / 4.8 kW

Hydraulic system

Automatic hydraulic system:
– Summation system
– Boom priority
– Arm priority
– Swing priority
Boom and arm regeneration valves
Swing anti-rebound valves
Boom and arm holding valves
Multi-stage filtering system
Cylinder cushions
Cylinder contamination seals
Auxiliary hydraulic valve

Straight travel circuit
Automatic two-speed travel motors
Hydraulic oil, ISO VG 46

Superstructure

Access way with handrail
Tool storage area
Punched metal anti-slip plates
Full height counterweight

Cab and interior

Hydraulic dampening cab mounts
Adjustable operator seat and joystick control console
Flexible antenna
Hydraulic safety lock lever
Cab, all-weather sound suppressed, includes:
– Ashtray
– Cup holder
– Lighter
– Tinted glass
– Door locks
– Floor mat
– Horn

– Large storage area
– Pull-up type front window
– Removable lower windshield
– Seat belt
– Safety glass
– Windshield wiper with intermittent feature
– Stereo cassette radio
Anti-vandalism kit assembly preparation
Master ignition key

Undercarriage

Hydraulic track adjusters
Greased and sealed track chain
Track guards

Track shoes

800 mm track shoes with triple grousers

Service

Spare parts

ALTERNATIVE EQUIPMENT

Engine

Block heater, 120 V / 240 V
Fuel filler pump: 35 l/min,
50 l/min with automatic shut-off

Hydraulic system

Pilot-operated wrist control joysticks:
– Semi-long joysticks
– Control joystick, with 3 switches each
– Control joystick, with 5 switches each

Cab and interior

Seat:
– Fabric seat
– Fabric seat, with heater
– Fabric seat, with heater and air suspension

OPTIONAL EQUIPMENT (Standard in certain markets)

Engine

Diesel coolant heater
Oil bath pre-cleaner
Tropical cooling kit

Electric

Extra lamps:
– Cab-mounted 3, (front 2, rear 1)
– Counterweight-mounted 1
Overload warning device
Rotating warning beacon
Travel alarm

Hydraulic system

Hose rupture valve: boom, arm
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 32
Hydraulic oil, biodegradable 46

Superstructure

Undercover (heavy duty 4.5 mm)

Cab and interior

Air-conditioner, manual
Heater & air-conditioner, automatic
Falling object guard (FOG)
Cab mounted falling object protective structures (FOPS)
Rain shield, front
Sun shield, front, roof, rear
Sunlight protection, roof (steel)
Safety screen for front window
Lower wiper
Anti-vandalism kit
Specific key

Digging equipment

Long last bushing

Undercarriage

Full track guards
Undercover (heavy duty 10 mm)

Track shoes

900 mm track shoes with triple grousers

Service

Hand lamp
Spare parts
Tool kit:
– Full scale
– Daily maintenance

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

Construction Equipment

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